FINAL

GROUNDWATER SAMPLING REPORT
FIRST QUARTER 2014

FTMM-22, FTMM-53 and FTMM-68

FORT MONMOUTH, OCEANPORT, MONMOUTH COUNTY, NEW JERSEY

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FINAL
GROUNDWATER SAMPLING REPORT
FIRST QUARTER 2014

Project Title:	**Remedial Investigation/Feasibility Study/Decision Documents, Fort Monmouth, Oceanport, Monmouth County, New Jersey**
Client Name:	**U.S. Army Engineering & Support Center, Huntsville (USAESCH)**
Contract Name:	**Remedial Investigation/Feasibility Study/Decision Documents, Fort Monmouth, Oceanport, Monmouth County, New Jersey**
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TABLE OF CONTENTS

List of Tables ii
List of Figures ii
List of Appendices ii
List of Acronyms iii
1.0 INTRODUCTION 1-1
1.1 PURPOSE AND SCOPE 1-1
1.2 REPORT ORGANIZATION 1-1
2.0 GROUNDWATER SAMPLING PROGRAM 2-1
2.1 INTRODUCTION 2-1
2.2 SUMMARY OF FIELD AND LABORATORY WORK 2-1
2.2.1 Water Level Measurements 2-1
2.2.2 Monitoring Well Assessment 2-1
2.2.3 Groundwater Sampling 2-1
2.2.4 QA/QC Sampling 2-2
2.3 DEVIATIONS FROM QAPP AND SAP 2-2
2.4 USABILITY OF LABORATORY ANALYTICAL DATA 2-2
3.0 APPLICABLE REMEDIAL STANDARDS 3-1
3.1 ANOMALOUS RESULTS 3-1
4.0 REFERENCES 4-1

LIST OF TABLES

Table 1 Summary of Monitoring Wells at Selected FTMM Sites
Table 2 Groundwater Sampling Summary
Table 3 Groundwater Sampling Deviations

LIST OF FIGURES

Figure 1 Fort Monmouth Location
Figure 2 Main Post Layout and FTMM-53, FTMM-68 Locations
Figure 3 Charles Wood Area Layout and FTMM-22 Location

LIST OF APPENDICES

Appendix A FTMM-22: Former Wastewater Treatment Lime Pit (CWA-1)
Appendix B FTMM-53: Former Gas Station at Building 699
Appendix C FTMM-68: Former Dry Cleaners UST at Building 700
Appendix D Data Validation and Data Verification Summary Reports
Appendix E Laboratory Analytical Reports (CD)

LIST OF ACRONYMS

ACRONYM	DEFINITION
Accutest	Accutest Laboratories
BRAC	Base Realignment and Closure
CWA	Charles Wood Area
DOD	Department of Defense
ELAP	Environmental Laboratory Accreditation Program
FTMM	Fort Monmouth
FS	Feasibility Study
FSPM	Field Sampling Procedures Manual
GWQS	Ground Water Quality Standards
HASP	Health and Safety Plan
LFPS	Low-Flow Purging and Sampling
MCL	Maximum Contaminant Level
MP	Main Post
MTBE	methyl tert-butyl ether
NELAP	National Environmental Laboratory Accreditation Program
NJDEP	New Jersey Department of Environmental Protection
Parsons	Parsons Government Services, Inc.
PDB	Passive Diffusion Bag
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RI	Remedial Investigation
QSM	Quality Systems Manual
SAP	Sampling Analysis Plan
TCL	Target Compound List
TO	Task Order
TRSR	Technical Requirements for Site Remediation
USAESCH	United States Army Engineering & Support Center, Huntsville
USEPA	United States Environmental Protection Agency
VOC + TICs	Volatile Organic Compound and tentatively identified compounds
WERS	Worldwide Environmental Restoration Services

1.0 INTRODUCTION

This report presents the results for the Groundwater Sampling First Quarter 2014 Event performed at three sites within Fort Monmouth (FTMM) by Parsons Government Services, Inc. (Parsons) to support the Remedial Investigation (RI), Feasibility Study (FS), and Decision Documents project at FTMM, Oceanport, Monmouth County, New Jersey. The three sites are as follows:

1. FTMM-22 Former Wastewater Treatment Lime Pit (CWA-1);
2. FTMM-53 Former Gas Station at Building 699, and
3. FTMM-68 Former Dry Cleaners UST at Building 700.

The work was conducted under the Worldwide Environmental Restoration Services (WERS) contract number W912DY-09-D-0062 of the United States Army Engineering & Support Center, Huntsville (USAESCH).

The activities discussed within this report were conducted in accordance with:

- New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E); and
- New Jersey Field Sampling Procedures Manual (FSPM) (February 2006).

1.1 PURPOSE AND SCOPE

Groundwater sampling was conducted in January through March 2014 and the sampling program is consistent with the recommendations for quarterly sampling made in the Baseline Groundwater Sampling Report (August 2013).

1.2 REPORT ORGANIZATION

This Groundwater Sampling First Quarter 2014 Report includes the following sections:

- Section 1 provides an introduction and organization to the report;
- Section 2 presents general information on the 2014 first quarter groundwater sampling event, a description of any significant deviations or events that may have impacted results, and the usability of laboratory analytical data;
- Section 3 provides the applicable remedial standards for FTMM;
- Section 4 presents the references used in preparation of this report;
- Appendices A through C provide the groundwater analytical results first quarter 2014;
- Appendix D provides a memorandum regarding data validation for the 2014 first quarter sampling event; and
- Appendix E provides the laboratory analytical package, which is included on a CD.

2.0 GROUNDWATER SAMPLING PROGRAM

2.1 INTRODUCTION

The work performed for the groundwater sampling program was conducted as outlined in the project's Sampling and Analysis Plan (SAP) dated March 2013, and Health and Safety Plan (HASP) dated February 2013. The groundwater sampling event included measurements of the depth to water in all wells at the three FTMM sites and the collection of groundwater samples from 14 selected monitoring wells at the three sites, consistent with previous quarterly groundwater sampling programs. The monitoring wells are located at three sites within two areas of FTMM, the Main Post (MP) area and Charles Wood Area (CWA). The three sites are as follows: FTMM-22, FTMM-53 and FTMM-68. A summary of the total number wells at each site and the number of wells sampled for this quarterly event is provided in **Table 1**. The locations of FTMM and the three sites discussed in this report are provided in **Figure 1**, **Figure 2**, and **Figure 3**.

The subsections below provide a description of the general activities conducted to complete the quarterly event. Further details regarding groundwater sampling activities and results for each individual site are provided in **Appendices A** through **C**.

2.2 SUMMARY OF FIELD AND LABORATORY WORK

2.2.1 Water Level Measurements

On January 21 and March 12 of 2014, depth-to-water measurements were made in all monitoring wells at the three FTMM sites prior to initiating groundwater sampling activities. The measurements were obtained with an electronic oil water interface meter from the top of the inner casing of the well. The meter was decontaminated in accordance with the SAP. Water level measurements were used to prepare the groundwater elevation maps, and confirm the previously determined groundwater flow directions.

2.2.2 Monitoring Well Assessment

During depth-to-water measurement in the monitoring wells, the condition of each monitoring well was assessed. Wells were visually inspected for physical damage, obstructions, or the presence of pump tubing in the well casing. The depth to the bottom of each monitoring well was also gauged and compared to the installed depth, in order to determine the presence of sediment build up in the well. The condition of the monitoring wells at each of the three FTMM sites is presented in Section 2.0 of the individual site appendices (A, B, and C).

2.2.3 Groundwater Sampling

Groundwater samples were collected from 14 monitoring wells on January 21, March 12, and March 31, 2014 using either low-flow purging and sampling (LFPS) or passive diffusion bag (PDB) sampling methodology. NJDEP approved the use of PDB sampling in a letter dated July, 29, 2013 at FTMM-22 and FTMM-68., and at the time FTMM-53 was not approved for PBDs because of the past presence of MTBE in groundwater. However, the 2013 baseline groundwater sampling demonstrated that MTBE was no longer present in the wells or detected at very low concentrations (just above the detection limit) on the site, so this site was deemed eligible for sampling using PDBs. Groundwater sampling by PDB was conducted in accordance with the

FSPM and the SAP. PDBs were filled with laboratory-grade de-ionized water, deployed in monitoring wells and allowed to equilibrate for a minimum of two weeks prior to retrieving and collecting groundwater samples. Groundwater sampling activities using both LFPS and PDBs were performed in accordance with the NJDEP FSPM (NJDEP 2009), the USEPA Low-Stress Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells (USEPA 2010) (if applicable), and the SAP. Vertical profiling of well screens for each fully saturated five foot interval was performed, where required, during the quarterly sampling program. If vertical profiling had previously been performed on a particular well it was not repeated.

A groundwater sampling summary, including the Site name, well ID, laboratory analysis, sampling method, and the sample date, is presented in **Table 2**.

ALS Environmental of Rochester, NY served as the primary analytical laboratory for the 2014 first quarter groundwater sampling event. Samples were shipped to ALS via FedEx. Accutest Laboratories of Dayton, NJ served as the quality assurance (QA) laboratory. Five percent of groundwater samples collected were "split" and submitted to both ALS Environmental and Accutest as per the SAP. Both ALS and Accutest are DOD ELAP and NELAP certified laboratories, following the project specifications of the DOD QSM Version 4.1 or the latest version.

Purge water generated during the groundwater sampling was passed through portable granular activated carbon buckets and discharged to the ground surface adjacent to the well sampled. Groundwater sampling pump tubing was left in its respective monitoring well for re-use in future sample events.

2.2.4 QA/QC Sampling

Quality Assurance/Quality Control (QA/QC) samples were collected in accordance with the NJDEP FSPM and the Quality Assurance Project Plan (QAPP), which is included as part of the SAP.

2.3 DEVIATIONS FROM QAPP AND SAP

Deviations from the SAP are summarized in **Table 3**. There were no significant deviations that could have adversely affected the sampling procedures or the results of the groundwater sampling presented in this report.

2.4 USABILITY OF LABORATORY ANALYTICAL DATA

A Level IV validation was performed on one analytical data set collected during the 2014 first quarter groundwater sampling event. A verification was performed on the remaining data sets. Consistent with the project QAPP, the validation for long term monitoring data includes a minimum of 1 report per sampling event or 33% of the data throughout the project, whichever is less. The data submitted by the laboratory has been reviewed and validated as per the SAP and was found to be usable for the purposes of this project. The Data Validation and the Data Verification Summary Reports are provided in **Appendix D** and complete laboratory analytical reports for the groundwater samples collected for this quarterly event are provided in **Appendix E** (on CD).

3.0 APPLICABLE REMEDIAL STANDARDS

For this the FTMM sites, groundwater results were compared to NJDEP Ground Water Quality Standards (GWQS) for Class IIA waters and the USEPA Maximum Contaminant Levels (MCLs) for Chemical Contaminants at Superfund Sites for Tap Water. Analytical results for each site are provided in the respective appendices.

3.1 ANOMALOUS RESULTS

An anomaly is an exceedance of the applicable standard or criteria that is not attributable to background concentrations and/or Site contamination. It typically succeeds and precedes non-exceedance sample results and is not representative of historical data for that location. Anomalies can be caused by sample equipment, laboratory equipment, seasonal changes, etc. No anomalous results were reported during this quarterly sampling event.

4.0 REFERENCES

New Jersey Department of Environmental Protection. *Field Sampling Procedures Manual*, August 2005, Revised April 2009.

New Jersey Department of Environmental Protection. *Letter from Ms. Linda Range, Bureau of Case Management, to Ms. Wanda Green, BRAC Environmental Coordinator at Fort Monmouth.* May 2012.

New Jersey Department of Environmental Protection. *Technical Requirements for Site Remediation*, July 2013.

Parsons. *Accident Prevention Plan*. February 2013.

Parsons. *Sampling and Analysis Plan for Remedial Investigation/Feasibility Study/Decision Documents*. March 2013.

Parsons, *Baseline Groundwater Sampling Report (August 2013),* March 2014.

USEPA, *List of Contaminants and their (mcls).* Retrieved from USEPA Drinking Water Contaminants, website: http://water.epa.gov/drink/contaminants/#List. June 2013

TABLES

Table 1 Summary of Monitoring Wells at Selected FTMM Sites
Table 2 Groundwater Sampling Summary
Table 3 Groundwater Sampling Deviations

Table 1
Summary of Monitoring Wells at Selected FTMM Sites
Groundwater Sampling Report - First Quarter 2014 FTMM-22, FTMM-53 and FTMM-68
Fort Monmouth, New Jersey

Site	Area	Total Number of Wells	Number of Wells Sampled in 1st Quarter 2014
FTMM-22: Former Wastewater Treatment Lime Pit (CWA-1)	CW	17	4
FTMM-53: Former Gas Station at Building 699	MP	14	8
FTMM-68: Former Dry Cleaners UST at Building 700	MP	2	2
Totals:		33	14

Notes:
1) MP - Main Post
2) CW - Charles Wood

Table 2
Groundwater Sampling Summary
Groundwater Sampling Report - First Quarter 2014 FTMM-22, FTMM-53 and FTMM-68
Fort Monmouth, New Jersey

Site / Well ID	Analytical Analysis	Sampling Method	Sample Date
FTMM-22: Former Wastewater Treatment Lime Pit (CWA-1)			
CW1MW27	VOCs & TICs-EPA Method 8260C	LFPS	1/24/2014
CW1MW29			1/24/2014
CW1MW31			1/24/2014
CW1MW281			1/24/2014
FTMM-53: Former Gas Station at Building 699			
699MW01	VOCs & TICs-EPA Method 8260C	LFPS and PDB	3/12/14, 3/30/14
699MW04			3/12/14, 3/30/14
699MW06			3/12/14, 3/30/14
699MW09			3/12/14, 3/30/14
699MW16			3/12/14, 3/30/14
699RW03			3/12/14, 3/30/14
699RW05			3/12/14, 3/30/14
699RW11			3/12/14, 3/30/14
FTMM-68: Former Dry Cleaners UST at Building 700			
565MW01	VOCs & TICs-EPA Method 8260C	PDB	3/30/2014
565MW01D			3/30/2014

Notes:
1) LFPS = Low-Flow Purging and Sampling
2) PDB = Passive Diffusion Bag
3) VOCs = Volatle Organic Compounds
4) TICs = Tentatively Identified Compounds

Table 3
Groundwater Sampling Deviations
Groundwater Sampling Report - First Quarter 2014 FTMM-22, FTMM-53 and FTMM-68
Fort Monmouth, New Jersey

Well	Site	Sampling Method	Deviation/Comments
N/A	N/A	N/A	None

Notes:
1) N/A = not applicable
2) LFPS = Low-Flow Purging and Sampling
3) PDB = Passive Diffusion Bag

FIGURES

Figure 1 Fort Monmouth Location
Figure 2 Main Post Layout and FTMM-53, FTMM-68 Locations
Figure 3 Charles Wood Area Layout and FTMM-22 Location

Legend

Installation Boundary

Site Description:
Fort Monmouth
Main Post & Charles Wood Area
Monmouth County, NJ
Longitude: 74˚ 2' 33.39" W
Latitude: 40˚ 18' 49.33" N
Longitude and Latitude represent the center point of Main Post.

N

1 inch = 2,500 feet

0 0.5 1 Miles

Source: ESRI online imagery; ESRI Data and Maps, 2011.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
Fort Monmouth Location	
CREATED BY: TS	REVIEWED BY: ME
DATE: May 2014	FIGURE NUMBER: Figure 1
PROJECT NUMBER: 748810.03000	FILE: Figure1_Location.mxd

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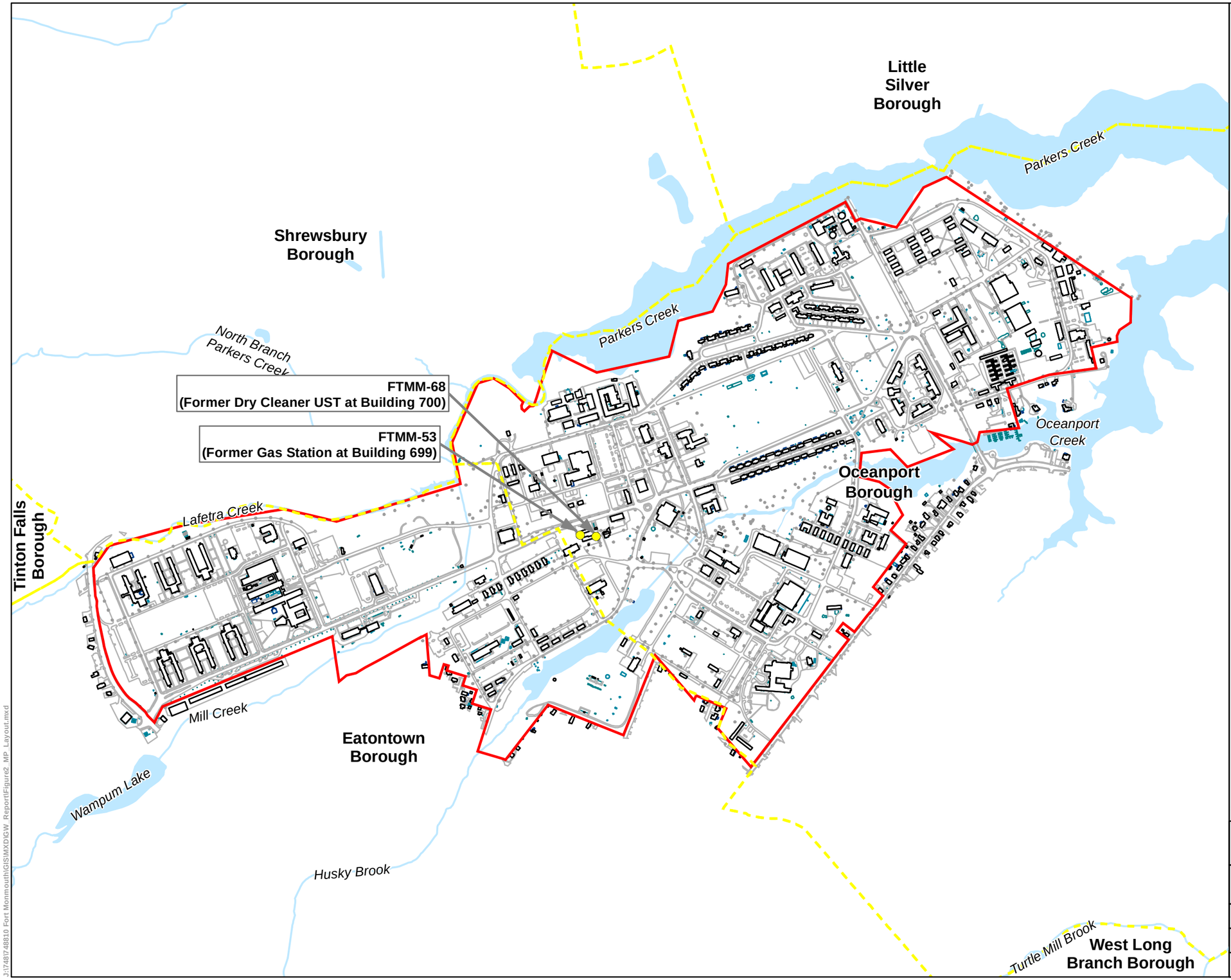

Legend

- Surface Water Feature
- Municipal Boundary
- Installation Boundary

N

1 inch = 1,000 feet

0 250 500 1,000 1,500 2,000 2,500 Feet

Source: FTMM Supplied CAD, 2013; ESRI Data and Maps, 2011; USGS NHD, 2012.

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**
Main Post Layout and FTMM-53, FTMM-68 locations	
CREATED BY: TS	REVIEWED BY: ME
DATE: August 2014	FIGURE NUMBER: Figure 2
PROJECT NUMBER: 748810.02040	FILE: Figure2_MP_Layout.mxd

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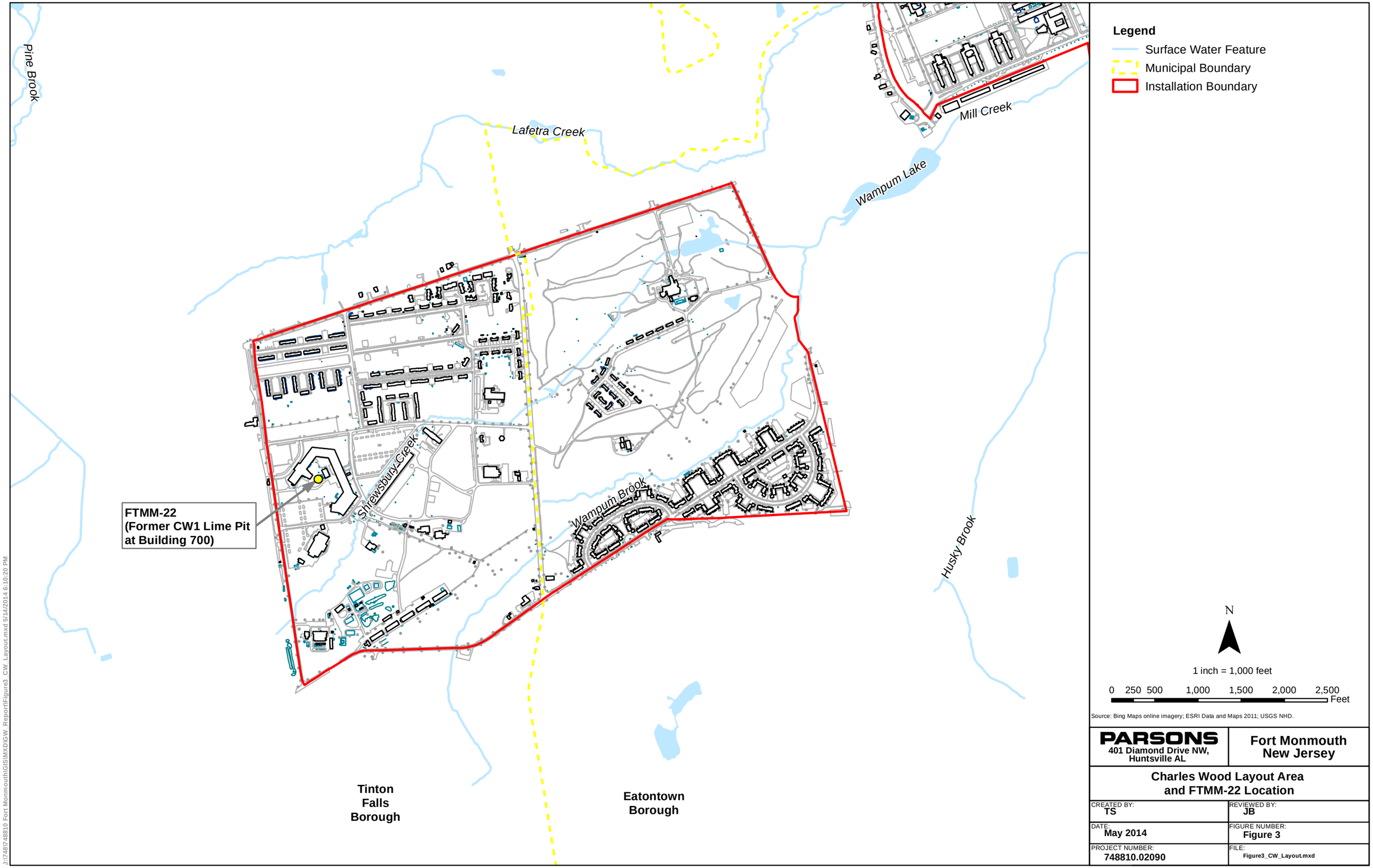

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Huntsville AL

Fort Monmouth
New Jersey

Charles Wood Layout Area and FTMM-22 Location

CREATED BY: TS	REVIEWED BY: JB
DATE: May 2014	FIGURE NUMBER: Figure 3
PROJECT NUMBER: 748810.02090	FILE: Figure3_CW_Layout.mxd

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APPENDICES

Appendix A FTMM-22: Former Wastewater Treatment Lime Pit (CWA-1)
Appendix B FTMM-53: Former Gas Station at Building 699
Appendix C FTMM-68: Former Dry Cleaners UST at Building 700
Appendix D Data Validation Memorandum
Appendix E Laboratory Analytical Results (CD)

APPENDIX A

FTMM-22: FORMER WASTEWATER TREATMENT LIME PIT (CWA-1)

APPENDIX A: FTMM-22 Former Wastewater Treatment Lime Pit (CWA-1)

TABLE OF CONTENTS

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT A-1
2.0 GROUNDWATER SAMPLING..... A-1
3.0 GROUNDWATER RESULTS FIRST QUARTER 2014 ..... A-1

LIST OF TABLES

Table No.	Title
1	Groundwater Gauging Data and Elevations (January 21, 2014)
2	Groundwater Analytical Results First Quarter 2014

LIST OF FIGURES

Figure No.	Title
1	Layout of FTMM-22 (Former Wastewater Treatment Lime Pit [CWA-1])
2	FTMM-22 Shallow Groundwater Contours January 21, 2014
3	FTMM-22 Deep Groundwater Contours January 21, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-22 were gauged on January 21, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 48.52 (CW1MW39) to 52.10 (CW1MW27) feet above mean sea level (amsl). The interpreted shallow and deep groundwater flow directions are to the east, as shown in **Figures 2 and 3**, respectively.

During the groundwater gauging, the physical condition of FTMM-22 monitoring wells was assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from four monitoring wells located at the FTMM-22 as part of the 2014 first quarter groundwater sampling event. The quarterly groundwater sampling program included measuring the depth to groundwater in all FTMM-22 monitoring wells prior to sampling and collection of groundwater samples using low-flow purging and sampling (LFPS) methodology, as per the March 2013 Sampling Analysis Plan (SAP), in four selected wells. Groundwater samples were collected on January 24, 2014. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the NJDEP Field Sampling Procedures Manual (FSPM) and the SAP. Field blanks, duplicates, matrix spike, matrix spike duplicate and QA split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed LFPS field sheets for each well sampled can be found in **Attachment A**.

3.0 GROUNDWATER RESULTS FIRST QUARTER 2014

Several VOCs were detected in groundwater during this quarterly event. Trichloroethene (TCE) was detected in FTMM-22 monitoring wells CW1MW29, CW1MW31, and CW1MW281 above its NJDEP GWQS of 1 µg/L. Five other VOCs were detected in groundwater but all detections for these VOCs were below their respective NJDEP GWQS. Groundwater analytical results from samples collected during the 2014 First Quarter Groundwater Sampling Event are presented in **Table 2**.

TABLES

Table 1 Groundwater Gauging Data and Elevations (January 21, 2014)

Table 2 Groundwater Analytical Results First Quarter 2014

Table 1
Groundwater Gauging Data and Elevations (January 21, 2014)
FTMM-22 Former Wastewater Treatment Lime Pit (CWA-1)
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft TOC)	Gauged Depth to Bottom (ft TOC)	Calculated Groundwater Elevation (ft)
Shallow Monitoring Wells													
CW1MW26	12/19/1994	29-32590	532932.46	607087.71	15.00	5.00	10.00	60.81	942	0.0	9.03	17	51.78
CW1MW27	12/19/1994	29-32591	532942.54	607079.91	15.00	5.00	10.00	60.85	944	0.0	8.84	17	52.01
CW1MW28	12/19/1994	29-32592	532962.81	607087.57	15.00	5.00	10.00	59.09	949	0.0	7.15	14.84	51.94
CW1MW29	12/19/1994	29-32593	532952.80	607110.86	15.00	5.00	10.00	58.40	855	0.0	6.71	14.7	51.69
CW1MW30	7/13/2000	29-43188	532932.46	607094.40	17.00	7.00	10.00	61.93	953	0.0	10.16	14.7	51.77
CW1MW31	7/17/2000	29-43189	532952.95	607141.85	19.00	4.00	15.00	61.47	857	0.0	10.14	21.25	51.33
CW1MW32	7/17/2000	29-43190	532953.17	607188.33	22.00	7.00	15.00	62.18	917	0.0	11.31	22	50.87
CW1MW33	7/17/2000	29-43191	532902.61	607196.32	20.00	5.00	15.00	62.27	924	0.0	10.91	23.5	51.36
CW1MW34	7/17/2000	29-43192	533014.20	607257.78	20.00	5.00	15.00	58.63	938	0.0	8.74	19.68	49.89
CW1MW35	7/18/2000	29-43193	532973.91	607296.71	20.00	5.00	15.00	58.09	930	0.0	8.47	16.7	49.62
CW1MW36	7/18/2000	29-43194	533014.49	607319.77	20.00	5.00	15.00	58.70	938	0.0	9.23	16.57	49.47
CW1MW37	7/18/2000	29-43195	532953.85	607335.55	20.00	5.00	15.00	59.21	934	0.0	8.05	13.65	51.16
CW1MW282	5/2/1996	29-35313	533064.25	607141.33	16.00	6.00	10.00	60.29	914	0.0	8.93	18.05	51.36
CW1MW291	5/3/1996	29-35314	532993.64	607188.15	16.00	6.00	10.00	62.21	921	0.0	11.37	15.3	50.84
CW1RW01	4/17/2001	29-44633	532952.77	607103.11	23.00	5.00	18.00	58.37	1002	0.0	6.7	20	51.67
CW1RW02	1/4/2002	29-45955	532962.81	607087.57	23.50	8.50	15.00	58.75	1006	0.0	6.99	22.42	51.76
Deep Monitoring Wells													
CW1MW25	10/12/2010	E201010535	533033.51	607133.86	48.00	38.00	10.00	61.82	908	0.0	12.86	50	48.96
CW1MW38	7/11/2000	29-43186	532922.20	607056.76	50.00	30.00	20.00	61.93	956	0.0	12.54	51.83	49.39
CW1MW39	7/10/2000	29-43185	533064.22	607133.58	48.00	28.00	20.00	61.51	912	0.0	12.99	49.75	48.52
CW1MW40	7/14/2000	29-43187	532973.22	607149.50	50.00	30.00	20.00	62.35	902	0.0	13.6	49	48.75
CW1MW281	5/2/1996	29-35312	532962.89	607103.06	41.00	31.00	10.00	58.20	840	0.0	9.09	39.8	49.11

Notes:
1) The synoptic round of water levels in the wells was collected on January 21, 2014.
2) ft = feet
3) bgs = below ground surface
4) ppm = parts per million (of VOCs)
5) TOC = Top of Casing
6) Elevation = feet above mean sea level
7) - information not available

Table 2
Groundwater Analytical Results First Quarter 2014
FTMM-22 - Former Wastewater Treatment Lime Pit (CWA-1)
Fort Monmouth, New Jersey

SAMPLE ID:			STANDARDS VALUES		FTMM-22-GW-CW1MW27-11.9		FTMM-22-GW-CW1MW29-10.9		FTMM-22-GW-CW1MW31-13		FTMM-22-GW-CW1MW131-13*		FTMM-22-GW-CW1MW31-18.7		FTMM-22-GW-CW1MW281-33.5		FTMM-22-GW-CW1MW281-38.5	
DATE SAMPLED:			NJDEP GWQS[1]	USEPA Drinking Water MCL[2]	24-Jan-2014		24-Jan-2014		24-Jan-2014		24-Jan-2014		24-Jan-2014		24-Jan-2014		24-Jan-2014	
LAB SAMPLE ID:					R1400634-005		R1400611-017		R1400634-001		R1400634-002		R1400634-003		R1400611-014		R1400611-015	
SAMPLE METHOD:					LFPS		LFPS		LFPS		LFPS		LFPS		LFPS		LFPS	
SAMPLE DEPTH (ft bgs):					11.9		10.9		13		13		18.7		33.5		38.5	
	CAS No.	Unit																
Volatile Organics - SW8260C																		
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1-Trichloroethane	71-55-6	µg/L	30	200	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloroethane	79-00-5	µg/L	3	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethane	75-34-3	µg/L	50	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethene	75-35-4	µg/L	1	7	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloropropene	563-58-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichlorobenzene	87-61-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichloropropane	96-18-4	µg/L	0.03	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,4-Trichlorobenzene	120-82-1	µg/L	9	70	1.0	U	**0.41**	J	**0.30**	J	**0.32**	J	**0.37**	J	1.0	U	1.0	U
1,2,4-Trimethylbenzene	95-63-6	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.02	0.2	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromoethane (EDB)	106-93-4	µg/L	0.03	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichlorobenzene	95-50-1	µg/L	600	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloroethane	107-06-2	µg/L	2	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloropropane	78-87-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3,5-Trimethylbenzene	108-67-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-Dichlorobenzene	541-73-1	µg/L	600	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-Dichloropropane	142-28-9	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	106-46-7	µg/L	75	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2,2-Dichloropropane	594-20-7	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-Butanone (MEK)	78-93-3	µg/L	300	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-Chlorotoluene	95-49-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-Hexanone	591-78-6	µg/L	300 [4]	NLE	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
4-Chlorotoluene	106-43-4	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Acetone	67-64-1	µg/L	6,000	NLE	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Benzene	71-43-2	µg/L	1	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromobenzene	108-86-1	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromochloromethane	74-97-5	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromodichloromethane	75-27-4	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromoform	75-25-2	µg/L	4	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromomethane	74-83-9	µg/L	10	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Carbon tetrachloride	56-23-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorobenzene	108-90-7	µg/L	50	100	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroethane	75-00-3	µg/L	5 [3]	NLE	1.0	U	**0.33**	J	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroform	67-66-3	µg/L	70	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloromethane	74-87-3	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,2-Dichloroethene	156-59-2	µg/L	70	70	1.0	U	**6.5**		**2.9**	J	**2.7**	J	**2.6**	J	**2.6**	J	**2.4**	J
cis-1,3-Dichloropropene	10061-01-5	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dibromochloromethane	124-48-1	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dichlorodifluoromethane (Freon 12)	75-71-8	µg/L	1,000	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Ethylbenzene	100-41-4	µg/L	700	700	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Hexachlorobutadiene	87-68-3	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	98-82-8	µg/L	700	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methylene chloride	75-09-2	µg/L	3	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methyl-tert-butyl ether (MTBE)	1634-04-4	µg/L	70	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Naphthalene	91-20-3	µg/L	300	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
n-Butylbenzene	104-51-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
n-Propylbenzene	103-65-1	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
p-Isopropyltoluene	99-87-6	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
sec-Butylbenzene	135-98-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Styrene	100-42-5	µg/L	100	100	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
tert-Butylbenzene	98-06-6	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Tetrachloroethene (PCE)	127-18-4	µg/L	1	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Toluene	108-88-3	µg/L	600	1,000	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,2-Dichloroethene	156-60-5	µg/L	100	100	1.0	U	**0.99**	J	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,3-Dichloropropene	10061-02-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichloroethene (TCE)	79-01-6	µg/L	1	5	**0.45**	J	**7.4**		**5.1**		**5.2**		**5.2**		**8.9**		**8.6**	
Trichlorofluoromethane (Freon 11)	75-69-4	µg/L	2,000	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Vinyl chloride	75-01-4	µg/L	1	200	1.0	U	**0.78**	J	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Xylene (Total)	1330-20-7	µg/L	1,000	10,000	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U

QA NOTES AND DATA QUALIFIERS:

(NO CODE) - Confirmed identification.
U - Analyte was not detected above the indicated limit of detection (LOD).
J - Analyte detected, estimated concentration.
* - Field duplicate of sample on left.
Detections are bolded.
Detections above the NJDEP GWQS are highlighted.
For detections above the USEPA MCL, the cell border is bolded.
- Not available
LFPS - low flow purge and sample
PDB - passive diffusion bag

NOTES:

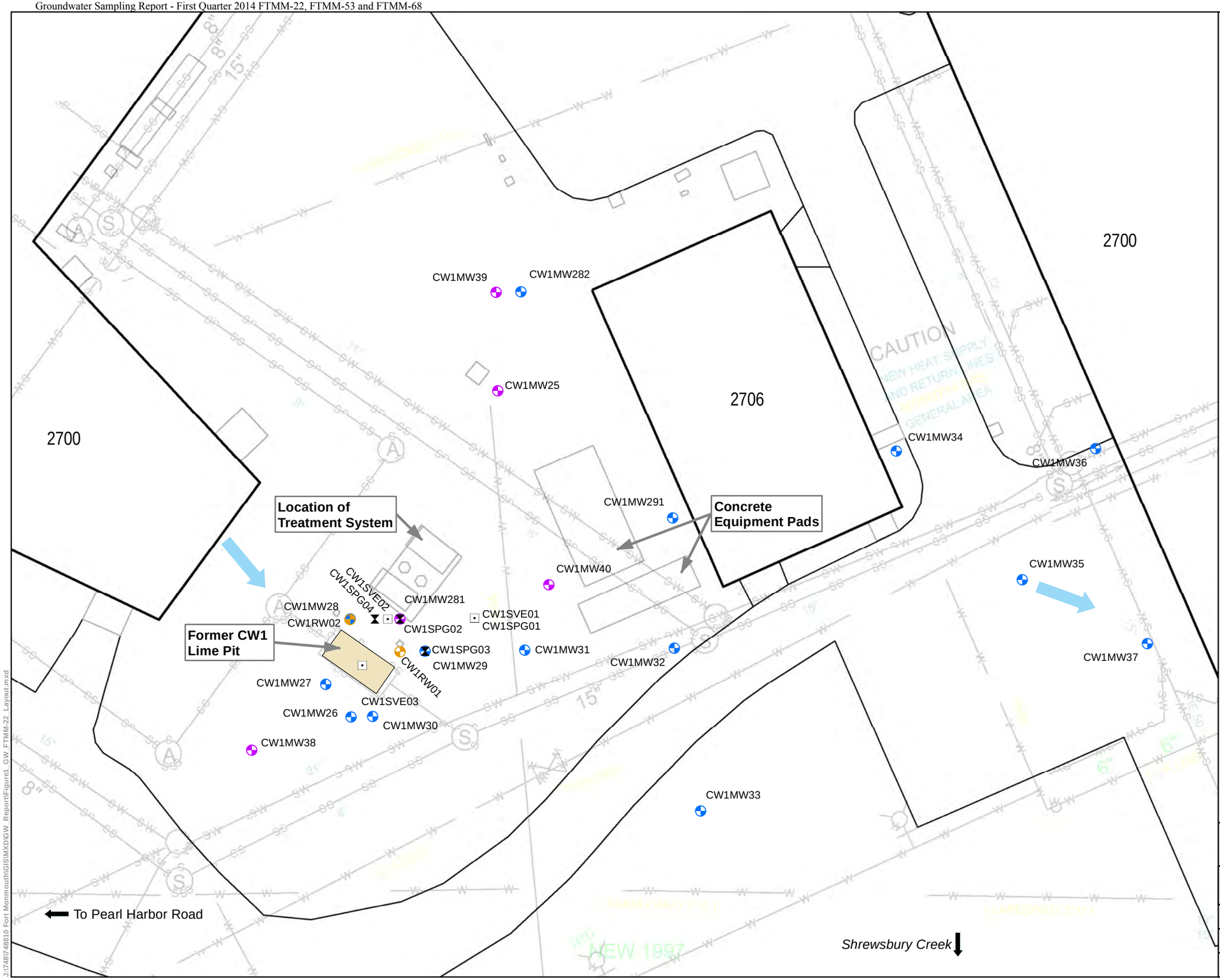
[1] New Jersey Department of Environmental Protection Ground Water Quality Standards Specific Ground Water Quality Criteria - Class IIA and Practical Quantitation Levels. (http://www.state.nj.us/dep/wms/bwqsa/Appendix_Table_1.htm).
[2] USEPA 2012 Edition of the Drinking Water Standards and Health Advisories, Spring 2012. (http://water.epa.gov/action/advisories/drinking/upload/dwstandards2012.pdf).
[3] Interim generic groundwater quality criteria.
[4] Interim specific groundwater quality criteria.
NLE - No screening level established.

FIGURES

Figure 1 Layout of FTMM-22 (Former Wastewater Treatment Lime Pit [CWA-1])

Figure 2 FTMM-22 Shallow Groundwater Contours January 21, 2014

Figure 3 FTMM-22 Deep Groundwater Contours January 21, 2014



Legend

- Shallow Monitoring Well
- Deep Monitoring Well
- Recovery Well
- Air Sparge Well
- SVE Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Former CW1 Lime Pit
- Estimated Groundwater Flow Direction

N

1 inch = 30 feet

0 12.5 25 50 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

Layout of FTMM-22
Former Wastewater Treatment Lime Pit (CWA-1)

CREATED BY: TS	REVIEWED BY: ME
DATE: May 2014	FIGURE NUMBER: Figure 1
PROJECT NUMBER: 748810.03000	FILE: Figure1_GW_FTMM-22_Layout.mxd

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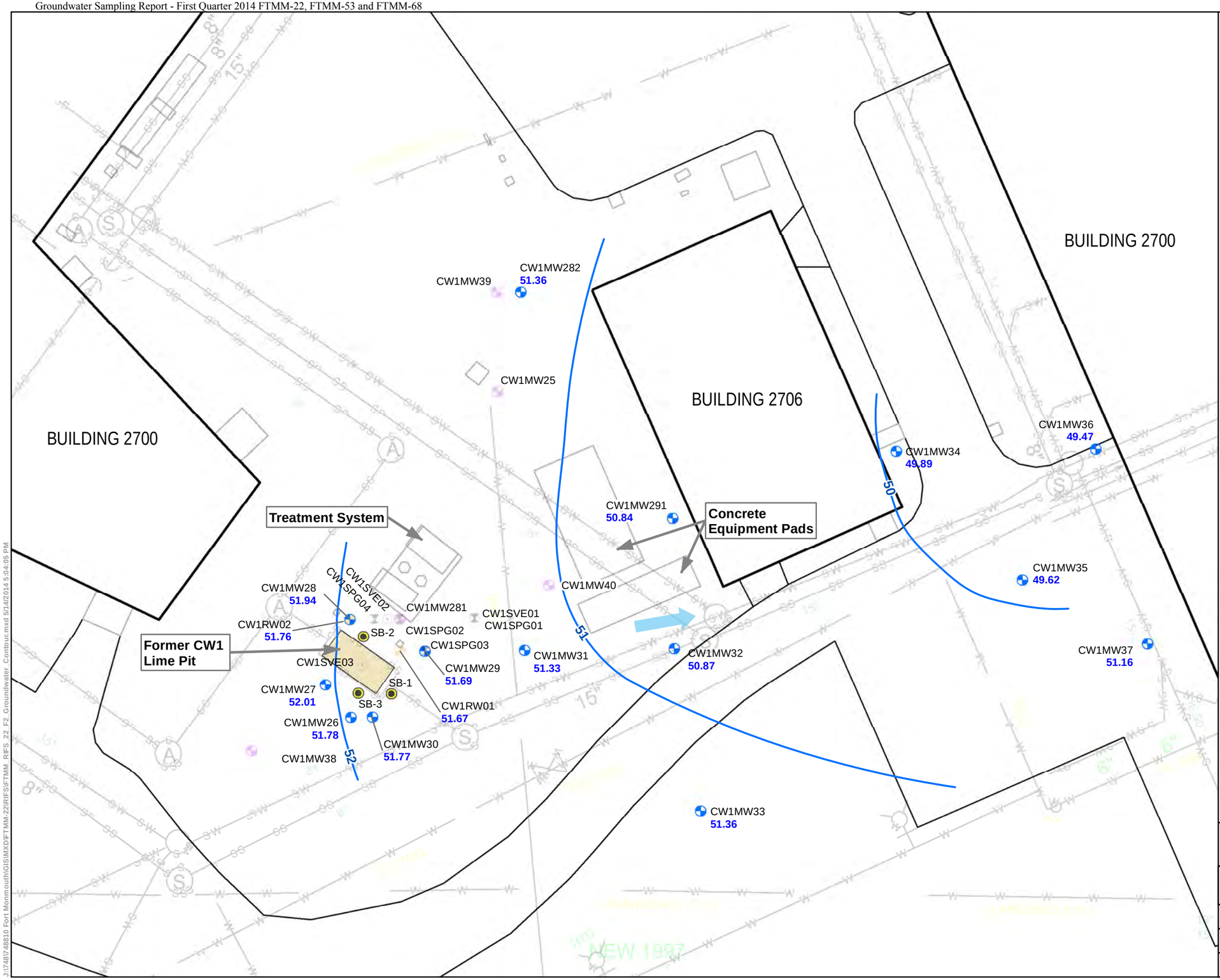

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PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-22 Shallow Groundwater Contours January 21, 2014	
CREATED BY: TS	REVIEWED BY: JB
DATE: May 2014	FIGURE NUMBER: Figure 2
PROJECT NUMBER: 748810.03000	FILE: FTMM_RIFS_22_F2_Groundwater_Contour.mxd

BUILDING 2700

BUILDING 2706

BUILDING 2700

CW1MW282

CW1MW39
48.52

CW1MW25
48.96

CW1MW34

CW1MW36

Treatment System

CW1MW291

Concrete
Equipment Pads

CW1MW35

CW1SVE02
CW1SPG04

CW1MW281
49.11

CW1MW40
48.75

CW1MW28
CW1RW02

CW1SVE01
CW1SPG01

CW1SPG02

Former CW1
Lime Pit

CW1SPG03

CW1MW31

CW1MW37

CW1SVE03

CW1MW29

CW1MW32

CW1RW01

CW1MW27

CW1MW26

CW1MW30

CW1MW38
49.39

CW1MW33

NEW 1997

Legend

- Groundwater Contour
- Shallow Monitoring Well
- Deep Monitoring Well, 48.52 groundwater elevation in feet above mean sea level
- Recovery Well
- Air Sparge Well
- SVE
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Former CW1 Lime Pit
- Approximate Groundwater Flow Direction

N

1 inch = 30 feet

0 12.5 25 50 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**
FTMM-22 **Deep Groundwater Contours** **January 21, 2014**	
CREATED BY: **TS**	REVIEWED BY: **JB**
DATE: **May 2014**	FIGURE NUMBER: **Figure 3**
PROJECT NUMBER: **748810.03000**	FILE: FTMM_RIFS_22_F3_Deep_Groundwater_Contour.mxd

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ATTACHMENTS

Attachment A LFPS Field Sheets

ATTACHMENT A
LFPS FIELD SHEETS

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS

CLIENT: FTMM

WELL #: GWMW 27

PROJECT: FTMM-22 - QUARTERLY GW SAMPLING

AOC # (AREA): FTMM-22

SCREENED INTERVAL (TOC): 5-15

WELL DIAMETER (In.): 4"

WELL PERMIT #: 29-32591

DATE: 1/24/14

SAMPLING PERSONNEL NAME: A. DiLonne

SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	(4)	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): PID MALFUNCTION

WELL DEPTH (TOC): 16.98

FEET OF WATER IN WELL (ft): 5.03

FEET OF SATURATED SCREEN (ft): 6.05

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 8.95

PUMP INTAKE DEPTH (ft below TOC): 11.9

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1337	X		4.40	NA	0.393	NA	231.6	NA	8.81	NA	0.0	NA	10.36	NA	100	9.00
1342	X		4.35	0.05	0.393	0.000	258.5	7.2	8.55	0.26	0.0	0.0	11.13	0.77	100	9.00
1347	X		4.35	0.00	0.394	0.001	293.2	4.4	8.54	0.01	0.0	0.0	11.22	0.11	100	9.00
1352	X		4.36	0.01	0.394	0.000	295.5	2.3	8.47	0.07	0.0	0.0	11.22	0.00	100	9.00
1357	X		4.35	0.01	0.393	0.001	296.8	1.3	8.46	0.01	0.0	0.0	11.11	0.11	100	9.00
1402	X		4.36	0.01	0.393	0.000	298.0	1.2	8.39	0.07	0.0	0.0	11.24	0.13	100	9.00
1407	X		4.36	0.00	0.395	0.002	299.9	1.9	8.33	0.06	0.0	0.0	11.14	0.10	100	9.00
1412	X	X	4.36	0.00	0.396	0.001	300.0	0.1	8.31	0.02	0.0	0.0	11.17	0.03	100	9.00
	NP	X														

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FTMM	WELL #: CWIMW27

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" Bladder Pump

SAMPLE NAME (ID): FTMM-22-GW-CWIMW27-11.9

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
8260C	1412	(3) 40 mL VOA	CLEAR	0.0	

QAIQC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

INVESTIGATION DERIVED WASTE (IDW): GW DISCHARGED TO GROUND THRU GAC BUCKET.

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: FTMM | WELL # : CW1MW29

PROJECT: FTMM-22 Quarterly GW Sampling | WELL PERMIT #: 29-32593

AOC # (AREA): FTMM-22 | DATE: 1/24/2014

SCREENED INTERVAL (TOC): 5 - 15 | SAMPLING PERSONNEL NAME: C. Watson

WELL DIAMETER (in.): 4 | SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	(4)	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): PID MALFUNCTION | FEET OF SATURATED SCREEN (ft): 8-18

WELL DEPTH (TOC): 15 | DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 6.82

FEET OF WATER IN WELL (ft): 8-18 | PUMP INTAKE DEPTH (ft below TOC): 14

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1245	X		7.26	NA	0.645	NA	60.1	NA	4.36	NA	20.0	NA	10.22	NA	175	6.86
1250	X		6.98	0.28	0.643	0.002	79.4	19.3	3.49	0.87	20.1	0.1	10.36	0.14	175	6.86
1255	X		6.97	0.11	0.646	0.003	83.1	3.7	3.18	0.31	19.8	0.3	10.70	0.34	175	6.87
1300	X		6.95	0.02	0.645	0.001	83.2	0.1	3.23	0.05	19.9	0.0	10.64	0.06	175	6.87
1305	X		6.95	0.00	0.645	0.000	84.0	0.8	3.18	0.05	19.9	0.0	10.57	0.13	175	6.87
1310	X		6.84	0.01	0.645	0.000	84.2	0.2	3.17	0.01	19.8	0.1	10.47	0.04	175	6.87
1315	X		6.84	0.00	0.645	0.000	84.3	0.1	3.18	0.01	19.7	0.0	10.45	0.02	175	6.87
1320		X	6.84	0.00	0.645	0.000	84.5	0.2	3.18	0.00	19.8	0.1	10.43	0.02	175	6.87

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FTMM	WELL #: CWIMW 29

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" BLADDER PUMP

SAMPLE NAME (ID): FTMM-22-GW-CWIMW29-11

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
8260C	1720	(3) 40 mL VOA	CLEAR	19.8	

QA\QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

INVESTIGATION DERIVED WASTE (IDW): PURGED INTO GAC BUCKET.

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: FTMM | WELL #: CW1 MW31

PROJECT: FTMM-22 QUARTERLY GW SAMPLING | WELL PERMIT #: 29-43189

AOC # (AREA): FTMM - 22 | DATE:

SCREENED INTERVAL (TOC): 6.51 - 21.51 | SAMPLING PERSONNEL NAME: A. Delaune

WELL DIAMETER (In.): 4" | SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	(4)	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): PID MALFUNCTION | FEET OF SATURATED SCREEN (ft): 11.26

WELL DEPTH (TOC): 21.51 | DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 10.25

FEET OF WATER IN WELL (ft): 11.26 | PUMP INTAKE DEPTH (ft below TOC): 13.0

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1045	X		7.22	NA	0.577	NA	194.1	NA	3.45	NA	0.7	NA	9.12	NA	100	10.36
1050	X		5.13	2.09	0.584	0.013	197.2	3.1	3.55	0.10	1.3	0.6	10.43	1.31	100	10.31
1055	X		4.51	0.32	0.575	0.009	202.3	5.1	3.13	0.42	0.0	1.3	10.58	0.45	100	10.31
1100	X		4.73	0.04	0.569	0.006	207.5	5.2	2.98	0.15	0.0	0.0	11.07	0.49	100	10.31
1105	X		4.65	0.08	0.565	0.004	214.6	7.1	2.99	0.01	0.0	0.0	11.16	0.09	100	10.31
1110	X		4.65	0.0	0.560	0.005	218.8	4.2	3.00	0.01	0.0	0.0	11.03	0.13	100	10.31
1115	X		4.64	0.01	0.564	0.000	222.1	3.3	3.02	0.02	0.0	0.0	11.13	0.10	100	10.31
1120		X	4.65	0.01	0.560	0.004	227.1	6.0	3.06	0.04	0.0	0.0	11.13	0.0	100	10.31

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FTMM	WELL # : CWIMW31

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" BLADDER PUMP.

SAMPLE NAME (ID): FTMM-22-GW-CWIMW31-13

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
8260 C	1120	(5) 40mL VOA	CLEAR	C.C	5 SETS TOTAL (PARENT, DUP, MS, MSD, QA SPLIT)

QAIQC SAMPLES:

DUPLICATE SAMPLE COLLECTED: (YES) or NO

DUPLICATE SAMPLE NAME (ID): FTMM-22-FD

MS/MSD SAMPLE COLLECTED: YES or NO

MS / MSD SAMPLE NAME (ID): FTMM-22-GW-CWIMW31-13MS
FTMM-22-GW-CWIMW31-13MSP

PURGING AND SAMPLING COMMENTS:

FTMM-22-GW-CWIMW31-13QA (ACCUTEST)

INVESTIGATION DERIVED WASTE (IDW): DURYEA H2O THRU GAC BUCKET

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: FTMM | WELL #: CW1MW31

PROJECT: FTMM-22 Quarterly GW Sampling | WELL PERMIT #: 1/24/14 AD 29-43189

AOC # (AREA): FTMM-22 | DATE: 1/24/14

SCREENED INTERVAL (TOC): 6.51 - 21.51 | SAMPLING PERSONNEL NAME: A. DiLonno

WELL DIAMETER (in.): 4 | SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	(4)	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): PID MALFUNCTION | FEET OF SATURATED SCREEN (ft): 11.26

WELL DEPTH (TOC): 21.51 | DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 10

FEET OF WATER IN WELL (ft): 11.26 | PUMP INTAKE DEPTH (ft below TOC): 18.7

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1230	X		4.75	NA	0.320	NA	243.0	NA	10.95	NA	0.0	NA	9.03	NA	100	10.26
1235	X		4.72	0.03	0.583	0.263	246.7	1.7	6.93	4.02	0.0	0.0	8.75	0.28	100	10.26
1240	X		4.62	0.10	0.570	0.013	254.6	7.9	2.54	4.39	0.0	0.0	10.59	2.14	100	10.26
1245	X		4.62	0.0	0.577	0.007	255.0	0.4	2.22	0.32	24.3	24.3 AD	12.08	1.19	100	10.26
1250	X		4.56	0.06	0.578	0.001	260.0	5.0	2.17	0.05	22.9	1.4 AD	11.74	0.34	100	10.26
1255	X		4.58	0.02	0.580	0.002	264.3	4.3	2.28	0.09	20.3	2.6 AD	11.82	0.08	100	10.26
1300	X		4.58	0.0	0.582	0.002	268.2	3.9	2.06	0.02	19.8	0.5 AD	11.85	0.03	100	10.26
1305	X		4.58	0.0	0.583	0.001	271.0	3.0	2.03	0.03	19.1	0.7 AD	11.85	0.0	100	10.26
1310		X	4.58	0.0	0.584	0.001	276.0	5.0	2.01	0.02	19.0	0.1 AD	11.80	0.05	100	10.26

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FTMM	WELL #: CW1 MW 31

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" Bladder Pump

SAMPLE NAME (ID): FTMM-22-GW-CW1MW31-18.7

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
8260C	1310	(3) 40mL VOA	Clear	19.0	

QA/QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

INVESTIGATION DERIVED WASTE (IDW): PURGED INTO GAC BUCKET

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FTMM	WELL #: CWI MW 237

PROJECT: FTMM-22 R4
AOC # (AREA): FTMM-22
SCREENED INTERVAL (TOC): 31 - 41
WELL DIAMETER (in.): 4

WELL PERMIT #: 29-35312
DATE: 1/24/2014
SAMPLING PERSONNEL NAME: C. WATSON
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): PID MALFUNCTION
WELL DEPTH (TOC): 41
FEET OF WATER IN WELL (ft): 31.82

FEET OF SATURATED SCREEN (ft): 10
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 9.18
PUMP INTAKE DEPTH (ft below TOC): 33.5

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1415	X		5.48	NA	1.295	NA	12.4	NA	0.72	NA	5.3	NA	12.35	NA	200	9.20
1420	X		5.36	0.12	1.317	0.022	14.0	1.6	0.43	0.29	8.0	0.3	12.79	0.40	160	9.29
1425	X		5.36	0.00	1.326	0.009	12.9	1.1	0.41	0.02	5.4	0.4	13.06	0.27	160	9.36
1430	X		5.35	0.01	1.332	0.004	11.2	1.7	0.40	0.01	3.2	0.2 0.6 brn	12.95	0.11	160	9.30
1435	X		5.35	0.00	1.331	0.001	11.0	0.2	0.41	0.01	2.8	0.4 0.2 brn	12.92	0.03	160	9.36
1440	X		5.35	0.00	1.330	0.000	10.9	0.1	0.41	0.00	2.6	0.2	12.90	0.02	160	9.36
1445		X	5.35	0.00	1.330	0.000	10.9	0.0	0.40	0.01	2.5	0.1	12.89	0.01	160	9.38

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FTMM	WELL #: CWIMW281

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" BLADDER PUMP

SAMPLE NAME (ID): FTMM-22-GW-CWIMW281-33.5

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
8260C	1445	(3) 40mL VOA	CLEAR	8.5	

QA\QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

INVESTIGATION DERIVED WASTE (IDW): PURGED TO GROUND THRU GAC BUCKET

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: FTMM | WELL #: CWI MW281

PROJECT: FTMM- 22 R1

AOC # (AREA): FTMM 22

SCREENED INTERVAL (TOC): 31 – 41

WELL DIAMETER (In.): 4

WELL PERMIT #: 29-35312

DATE: 1/24/2014

SAMPLING PERSONNEL NAME: C. WATSON

SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	(4)	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): PID MALFUNCTION

WELL DEPTH (TOC): 41

FEET OF WATER IN WELL (ft): 31.71

FEET OF SATURATED SCREEN (ft): 10

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 9.29

PUMP INTAKE DEPTH (ft below TOC): 38.5

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1500	X		5.36	NA	1.315	NA	16.6	NA	0.41	NA	7.7	NA	12.51	NA	160	9.29
1505	X		5.35	0.01	1.315	0.004	14.3	2.3	0.29	0.12	7.6	0.1	12.85	0.02	160	9.29
1510	X		5.35	0.00	1.88	0.017	9.7	4.6	0.30	0.01	7.7	0.1	12.91	0.06	160	9.29
1515	X		5.35	0.00	1.299	0.001	9.5	0.2	0.30	0.00	7.8	0.1	12.92	0.01	160	9.29
1520	X		5.76	0.01	1.298	0.001	9.8	0.3	0.29	0.01	7.6	0.2	12.93	0.01	160	9.29
1525	X		5.36	0.06	1.299	0.001	9.6	0.2	0.29	0.00	7.7	0.1	12.91	0.02	160	9.29
1530	X		5.36	0.00	1.299	0.000	9.8	0.2	0.30	0.01	7.7	0.0	12.92	0.01	160	9.29
1535		X	5.36	0.00	1.299	0.000	9.0	0.0	0.32	0.02	7.9	0.0	12.92	0.00	160	9.29

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: FMM | WELL #: CW1MW287

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" BLADDER PUMP

SAMPLE NAME (ID): FMM-22-GW-CW1MW287-38.5

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOCs	1535	(3) 40mL VOA	CLEAR	7.7.	

QA/QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

INVESTIGATION DERIVED WASTE (IDW): GW PURGED TO GROUND THRU GAC BUCKET.

Date:									
Volume Transfered to Drum:									
Drum Number:									

APPENDIX B

FTMM-53: FORMER GAS STATION AT BUILDING 699

APPENDIX B:
FTMM-53 Former Gas Station at Building 699

TABLE OF CONTENTS

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT B-1
2.0 GROUNDWATER SAMPLING.....B-1
3.0 GROUNDWATER RESULTS FIRST QUARTER 2014 .....B-2

LIST OF TABLES

Table No.	Title
1	Groundwater Gauging Data and Elevations (March 12, 2014)
2	PDB Sampling Summary
3	Groundwater Analytical Results First Quarter 2014

LIST OF FIGURES

Figure No.	Title
1	Layout of FTMM-53 Former Gas Station at Building 699
2	FTMM-53 Groundwater Contours March 12, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	LFPS Field Sheets and NJDEP PDB Checklists

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within the FTMM-53 site were gauged on March 12, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1.** Groundwater elevations in monitoring wells ranged from 9.20 (699RW11) to 14.12 (616MW01) feet above mean sea level (amsl) and the interpreted groundwater flow direction is to the southeast (**Figure 2**).

During the groundwater gauging, the physical condition of FTMM-53 monitoring wells was assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater sampling was conducted at eight monitoring wells, located in FTMM-53 as part of the 2014 first quarter groundwater sampling event. The groundwater sampling program included measuring the depths to water in all monitoring wells at FTMM-53 and sample collection in selected wells using low flow purging and sampling (LFPS) methodology and passive diffusion bags (PDBs) methodology consistent with the March 2013 Sampling and Analysis Plan (SAP). LFPS sampling was conducted on March 12, 2014. PDBs were deployed March 13, 2014 and samples were retrieved on March 31, 2014. NJDEP approved the use of PDB sampling in a letter dated July 29, 2013, however at the time PDB bags were not approved for FTMM-53 due to historical detections of methyl-tert-Butyl-ether (MTBE) above the NJDEP GWQS. Recent results from the 2013 baseline sampling event showed that MTBE was detected in one sample just over the method detection limit (at well 699MW09). To determine if MTBE is still a compound of concern at the site, LFPS methods were used to collect groundwater samples for a second round. Then PDBs were deployed to vertically profile all sampled wells, immediately after the LFPS samples were collected. A PDB sampling summary is provided in **Table 2**. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the NJDEP Field Sampling Procedures Manual (FSPM) and the SAP. Field blanks, duplicates, matrix spike, matrix spike duplicate and QA split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed LFPS records and NJDEP PDB checklists for each well sampled are provided in **Attachment A**.

FTMM-53 monitoring wells were vertically profiled with PDB bags as part of the 2014 first quarter groundwater sampling event. The profiling consisted of collecting one groundwater sample for every five feet of fully saturated well screen. For the majority of the wells, two samples were collected along a 10-foot saturated well screen, however, there were two wells were one profile sample was collected. **Table 2** presents the PDB vertical profile information. This vertical profiling was used to determine the extent of chemical stratification within the water column. Groundwater analytical results from these samples were evaluated to determine the sampling interval that will continue to be targeted during future sampling events at each monitoring well. **Table 3** depicts the analytical results for wells that were vertically profiled.

Based on these results, the target sampling intervals will be the depths that exhibiting the highest concentrations. For wells in which no analytes were detected in any interval sampled, groundwater samples will be collected from the mid-point of the full saturated screen in future sampling events.

3.0 GROUNDWATER RESULTS FIRST QUARTER 2014

Several VOCs were detected in groundwater during this quarterly event. Benzene was detected in FTMM-53 monitoring wells 699RW03, 699RW05 and 699RW11 above its NJDEP GWQS of 1 µg/L. 1,2,4-trimethylbenzene (699RW03, 699WR05), 1,3,5–trimethylbenzene (699RW05) and total xylenes (699RW05) were detected in exceedance of their respective NJDEP GWQS. Groundwater analytical detections from samples collected during the 2014 first quarter groundwater sampling event are presented in **Table 3**.

TABLES

Table 1 Groundwater Gauging Data and Elevations (March 12, 2014)

Table 2 PDB Sampling Summary

Table 3 Groundwater Analytical Results First Quarter 2014

Table 1
Groundwater Gauging Data and Elevations (March 12, 2014)
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

Site/Well ID	Intallation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft TOC)	Gauged Depth to Bottom (ft TOC)	Calculated Groundwater Elevation (ft)
616MW01	8/17/1995	29-33760	539282.814	618630.807	14.00	4.00	10.00	17.64	0919	0	3.52	16.55	14.12
699MW01	11/2/1989	29-23677-1	539094.956	618689.924	15.00	2.00	13.00	14.48	0948	0	3.05	13.38	11.43
699MW02	11/2/1989	29-23678-9	539212.459	618724.121	17.00	2.00	15.00	15.13	0908	0	3.06	16.60	12.07
699MW03	11/2/1989	29-23679	539127.360	618797.755	15.00	1.50	13.50	15.80	1019	0	3.29	12.1	12.51
699MW04	11/2/1989	29-23680-7	539111.313	618732.386	20.00	2.00	18.00	15.03	0930	0	3.35	17.35	11.68
699MW05	11/30/1989	29-23808	539142.503	618894.896	15.00	3.00	12.00	13.22	1027	0	3.38	14.91	9.84
699MW06	12/1/1989	29-23809-1	539071.235	618810.053	15.00	2.00	13.00	16.75	1009	0	5.31	14.96	11.44
699MW08	12/1/1989	29-23811	539060.005	618593.218	15.00	2.00	13.00	14.88	0952	0	3.35	13.40	11.53
699MW09	5/1/1990	29-24639	538950.010	618849.406	15.00	2.00	13.00	14.70	1035	0	3.31	12.20	11.39
699MW12	10/14/1992	29-28907	538918.899	618702.388	15.00	5.00	10.00	15.50	1040	0	3.46	14.80	12.04
699MW15	8/17/1995	29-33753	539404.555	618692.152	13.50	3.50	10.00	15.70	0914	0	3.06	13.95	12.64
699MW16	8/17/1995	29-33757	538859.181	618896.350	13.50	3.50	10.00	15.27	1038	0	3.84	14.07	11.43
699RW03	10/26/2000	29-43891	539070.639	618693.863	20.00	5.00	15.00	14.87	1003	0	3.38	17.78	11.49
699RW04	10/26/2000	29-43892	538969.453	618694.382	19.00	4.00	15.00	15.38	1044	0	4.08	15.05	11.30
699RW05	9/18/2007	29-56509	539121.709	618786.556	15.00	4.50	10.00	13.91	1014	0	2.36	12.30	11.55
699RW11	5/20/1992	29-28031	539063.440	618770.989	20.00	5.00	15.00	13.13	1005	0	3.93	17.1	9.20
600MW01	7/8/1994	29-30968	539100.480	618593.011	15.00	2.00	13.00	15.27	0958	0	3.00	4.35	12.27

Notes:
1) The synoptic round of water levels in the wells was collected on March 12, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) DTW = depth to water (measured from the top of well casing)
4) DTB = depth to bottom of well (measured from the top of well casing)
5) TOC = Top of Casing
6) ft. AMSL = feet above mean sea level

Table 2
PDB Sampling Summary
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

Site/Well ID	Depth (ft)	Screen Length (ft)	Screen Interval (ft)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft) TOC	Gauged DTB (ft) TOC	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Interval 1 (ft. below TOC)	PDB Interval 2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
699MW01	15.00	13.00	2-15	14.48	3/12/14	1223	0	3.14	16.55	11.34	11.86	7.5	12.5	3/13/2014	1223	3/31/2014	1030
699MW04	20.00	18.00	2-20	15.03	3/12/14	1242	0	3.27	17.35	11.76	14.08	6.85	13.85	3/13/2014	1242	3/31/2014	1045
699MW06	15.00	13.00	2-15	16.75	3/12/14	1135	0	5.26	14.96	11.49	9.70	10.2	N/A	3/13/2014	1135	3/31/2014	1110
699MW09	15.00	13.00	2-15	14.70	3/12/14	1055	0	3.46	12.2	11.24	8.74	7.76	N/A	3/13/2014	1055	3/31/2014	1136
699MW16	13.50	10.00	3.50-13.5	15.27	3/12/14	1105	0	2.92	14.07	12.35	10.58	6.5	11.5	3/13/2014	1105	3/31/2014	1145
699RW03	20.00	15.00	5-20	14.87	3/12/14	1233	0	3.62	17.78	11.25	14.16	8.2	14.59	3/13/2014	1233	3/31/2014	1010
699RW05	15.00	10.00	5-15	13.91	3/12/14	1153	0	2.41	12.3	11.50	9.89	4.8	9.8	3/13/2014	1153	3/31/2014	1150
699RW11	20.00	15.00	5-20	13.13	3/12/14	1112	0	4.18	17.1	8.95	12.92	8.03	14.08	3/13/2014	1112	3/31/2014	1050

Notes:
1) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
2) DTW = depth to water (measured from the top of well casing)
3) DTB = depth to bottom of well (measured from the top of well casing)
4) TOC= Top of Casing
5) ft. AMSL = feet above mean sea level
6) LFPS = Low-Flow Purging and Sampling
7) PDB = Passive Diffusion Bag
8) N/A = not applicable

Table 3
Groundwater Analytical Results First Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

SAMPLE ID:	STANDARDS VALUES				FTMM-53-GW-699MW01-10.55		FTMM-53-GW-699MW101-10.5*		FTMM-53-GW-699MW01-7.5		FTMM-53-GW-699MW01-12.5		FTMM-53-GW-699MW04-10.3		FTMM-53-GW-699MW04-6.85		FTMM-53-GW-699MW04-13.85		FTMM-53-GW-699MW06-10		FTMM-53-GW-699MW06-10.20	
DATE SAMPLED:			NJDEP GWQS[1]	USEPA Drinking Water MCL[2]	12-Mar-2014		12-Mar-2014		31-Mar-2014		31-Mar-2014		12-Mar-2014		31-Mar-2014		31-Mar-2014		12-Mar-2014		31-Mar-2014	
LAB SAMPLE ID:					R1401764-002		R1401764-003		R1402225-013		R1402225-011		R1401764-011		R1402225-009		R1402225-014		R1401764-006		R1402225-007	
SAMPLE METHO:					LFPS		LFPS		PDB		PDB		LFPS		PDB		PDB		LFPS		PDB	
SAMPLE DEPTH (ft bgs):					10.55		10.5		7.5		12.5		10.3		6.85		13.85		10		10.2	
	CAS No.	Unit																				
Volatile Organics - SW8260C																						
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1-Trichloroethane	71-55-6	µg/L	30	200	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloroethane	79-00-5	µg/L	3	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethane	75-34-3	µg/L	50	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethene	75-35-4	µg/L	1	7	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloropropene	563-58-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichlorobenzene	87-61-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichloropropane	96-18-4	µg/L	0.03	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,4-Trichlorobenzene	120-82-1	µg/L	9	70	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.26**	J
1,2,4-Trimethylbenzene	95-63-6	µg/L	100 [3]	NLE	**0.31**	J	**0.26**	J	1.0	U	1.0	U	1.0	U	**2.3**	J	**1.9**	J	**0.80**	J	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.02	0.2	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromoethane (EDB)	106-93-4	µg/L	0.03	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichlorobenzene	95-50-1	µg/L	600	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloroethane	107-06-2	µg/L	2	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloropropane	78-87-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3,5-Trimethylbenzene	108-67-8	µg/L	100 [3]	NLE	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	**0.99**	J	**0.78**	J	1.0	U	1.0	U
1,3-Dichlorobenzene	541-73-1	µg/L	600	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-Dichloropropane	142-28-9	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	106-46-7	µg/L	75	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2,2-Dichloropropane	594-20-7	µg/L	100 [3]	NLE	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-Butanone (MEK)	78-93-3	µg/L	300	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-Chlorotoluene	95-49-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-Hexanone	591-78-6	µg/L	300 [4]	NLE	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
4-Chlorotoluene	106-43-4	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Acetone	67-64-1	µg/L	6,000	NLE	5.0	U	5.0	U	5.0	U	5.0	U	**1.5**	J	5.0	U	5.0	U	5.0	U	**2.2**	J
Benzene	71-43-2	µg/L	1	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.23**	J	**0.23**	J	1.0	U	1.0	U
Bromobenzene	108-86-1	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromochloromethane	74-97-5	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromodichloromethane	75-27-4	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromoform	75-25-2	µg/L	4	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromomethane	74-83-9	µg/L	10	NLE	1.0	U	1.0	U	1.0	U	**0.32**	BJ	1.0	U	**0.47**	BJ	**0.33**	BJ	1.0	U	**0.43**	BJ
Carbon tetrachloride	56-23-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorobenzene	108-90-7	µg/L	50	100	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroethane	75-00-3	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroform	67-66-3	µg/L	70	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloromethane	74-87-3	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,2-Dichloroethene	156-59-2	µg/L	70	70	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,3-Dichloropropene	10061-01-5	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dibromochloromethane	124-48-1	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dichlorodifluoromethane (Freon 12)	75-71-8	µg/L	1,000	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Ethylbenzene	100-41-4	µg/L	700	700	**0.55**	J	**0.59**	J	1.0	U	1.0	U	1.0	U	**1.1**	J	**0.87**	J	**1.5**	J	1.0	U
Hexachlorobutadiene	87-68-3	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	98-82-8	µg/L	700	NLE	**0.25**	J	**0.28**	J	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.23**	J	1.0	U
Methylene chloride	75-09-2	µg/L	3	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methyl-tert-butyl ether (MTBE)	1634-04-4	µg/L	70	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Naphthalene	91-20-3	µg/L	300	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.52**	J	**1.5**	J	**0.23**	BJ	1.0	U
n-Butylbenzene	104-51-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
n-Propylbenzene	103-65-1	µg/L	100 [3]	NLE	**0.42**	J	**0.43**	J	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.24**	J	1.0	U
p-Isopropyltoluene	99-87-6	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
sec-Butylbenzene	135-98-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Styrene	100-42-5	µg/L	100	100	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
tert-Butylbenzene	98-06-6	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Tetrachloroethene (PCE)	127-18-4	µg/L	1	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Toluene	108-88-3	µg/L	600	1,000	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,2-Dichloroethene	156-60-5	µg/L	100	100	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,3-Dichloropropene	10061-02-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichloroethene (TCE)	79-01-6	µg/L	1	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichlorofluoromethane (Freon 11)	75-69-4	µg/L	2,000	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Vinyl chloride	75-01-4	µg/L	1	200	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Xylene (Total)	1330-20-7	µg/L	1,000	10,000	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	**5.9**	J	**5.4**	J	**1.5**	J	3.0	U

Table 3
Groundwater Analytical Results First Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

SAMPLE ID:			STANDARDS VALUES		FTMM-53-GW-699MW01-10.55	FTMM-53-GW-699MW101-10.5*	FTMM-53-GW-699MW01-7.5	FTMM-53-GW-699MW01-12.5	FTMM-53-GW-699MW04-10.3	FTMM-53-GW-699MW04-6.85	FTMM-53-GW-699MW04-13.85	FTMM-53-GW-699MW06-10	FTMM-53-GW-699MW06-10.20
DATE SAMPLED:			NJDEP GWQS[1]	USEPA Drinking Water MCL[2]	12-Mar-2014	12-Mar-2014	31-Mar-2014	31-Mar-2014	12-Mar-2014	31-Mar-2014	31-Mar-2014	12-Mar-2014	31-Mar-2014
LAB SAMPLE ID:					R1401764-002	R1401764-003	R1402225-013	R1402225-011	R1401764-011	R1402225-009	R1402225-014	R1401764-006	R1402225-007
SAMPLE METHO:					LFPS	LFPS	PDB	PDB	LFPS	PDB	PDB	LFPS	PDB
SAMPLE DEPTH (ft bgs):					10.55	10.5	7.5	12.5	10.3	6.85	13.85	10	10.2
	CAS No.	Unit											
VOC - TICs													
1,2,3,5-Tetramethylbenzene	527-53-7	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1,2,3-Trimethylbenzene	526-73-8	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1,2,4,5-Tetramethylbenzene	95-93-2	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1,4-Dimethyl-2-ethylbenzene	1758-88-9	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1-Ethenyl-2-methylbenzene	611-15-4	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1-Ethyl-2-methylbenzene	611-14-3	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1-Ethyl-3-methylbenzene	620-14-4	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1-Ethyl-4-methylbenzene	622-96-8	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1-Methyl-2-(1-methylethyl)benzene	527-84-4	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1-Methyl-3-(1-methylethyl)benzene	535-77-3	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
1-Methyl-indan	767-58-8	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
2,3-Dihydro-1,6-dimethyl-1H-indene	17059-48-2	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
2,3-Dihydro-1-methyl-indene	27133-93-3	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
2,3-Dihydro-4-methyl-1H-indene	824-22-6	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
2,3-Dimethylbutane	79-29-8	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
2,3-Dimethylpentane	565-59-3	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
2-Ethenyl-1,4-dimethylbenzene	2039-89-6	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
2-Methylbutane	78-78-4	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
2-Methylpentane	107-83-5	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
3-Methylpentane	96-14-0	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Benzene, (2-methyl-1-propenyl)-	768-49-0	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Benzene, 1,2,3,4-tetramethyl-	488-23-3	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Benzene, 2-propenyl-	300-57-2	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Benzene, 4-ethyl-1 ,2-dimethyl-	934-80-5	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Cyclohexane	110-82-7	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Cyclohexane, methyl-	108-87-2	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Cyclopentane, 1,3-Dimethyl, cis-	2532-58-3	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Indane	496-11-7	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Methylcyclopentane	96-37-7	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Pentane	109-66-0	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
Pentane, 2,3,3-trimethyl-	560-21-4	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
TIC-01 - Unknown	NA	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
TIC-02 - Unknown	NA	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
TIC-03 - Unknown	NA	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
TIC-04 - Unknown	NA	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-
TIC-05 - Unknown	NA	µg/L	500 [5]	NLE	-	-	-	-	-	-	-	-	-

QA NOTES AND DATA QUALIFIERS:

(NO CODE) - Confirmed identification.
U - Analyte was not detected above the indicated limit of detection (LOD).
J - Analyte detected, estimated concentration.
JN - Tentatively identified compound, estimated concentration.
UJ - Analyte not detected, reported LOD may be inaccurate or imprecise.
B - The analyte was found in an associated blank at concentration above one half the LOQ, as well as in the sample.
BJ - Analyte detected, estimated concentration. Analyte also found in an associated blank at concentration above one half the LOQ.
* - Field duplicate of sample on left.
Detections are bolded.
Detections above the NJDEP GWQS are highlighted.
For Detections above the USEPA MCL, the cell border is bolded.
- Not available
LFPS - low flow purge and sample
PDB - passive diffusion bag

NOTES:

Protection Ground Water Quality Standards
Specific Ground Water Quality
Water Standards and Health Advisories,
Spring 2012.
[3] Interim generic groundwater quality criteria.
[4] Interim specific groundwater quality criteria.
[5] Interim generic groundwater quality criteria for Synthetic Organic Chemicals defined as non-carcinogens.
NLE - No screening level established.

Table 3
Groundwater Analytical Results First Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

SAMPLE ID:			STANDARDS VALUES		FTMM-53-GW-699MW09-8		FTMM-53-GW-699MW09-7.70		FTMM-53-GW-699MW16-8.5		FTMM-53-GW-699MW16-6.5		FTMM-53-GW-699MW16-11.5		FTMM-53-GW-699RW03-11.4		FTMM-53-GW-699RW03-8.20		FTMM-53-GW-699RW03-14.59		FTMM-53-GW-699RW05-8.6		FTMM-53-GW-699RW05-4.8	
DATE SAMPLED:			NJDEP GWQS[1]	USEPA Drinking Water MCL[2]	12-Mar-2014		31-Mar-2014		12-Mar-2014		31-Mar-2014		31-Mar-2014		12-Mar-2014		31-Mar-2014		31-Mar-2014		12-Mar-2014		31-Mar-2014	
LAB SAMPLE ID:					R1401764-004		R1402225-004		R1401764-005		R1402225-008		R1402225-005		R1401764-001		R1402225-020		R1402225-012		R1401764-007		R1402225-006	
SAMPLE METHO:					LFPS		PDB		LFPS		PDB		PDB		LFPS		PDB		PDB		LFPS		PDB	
SAMPLE DEPTH (ft bgs):					8		7.7		8.5		6.5		11.5		11.4		8.2		14.59		8.6		4.8	
	CAS No.	Unit																						
Volatile Organics - SW8260C																								
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,1,1-Trichloroethane	71-55-6	µg/L	30	200	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	µg/L	3	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,1-Dichloroethane	75-34-3	µg/L	50	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,1-Dichloroethene	75-35-4	µg/L	1	7	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,1-Dichloropropene	563-58-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,2,3-Trichlorobenzene	87-61-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,2,3-Trichloropropane	96-18-4	µg/L	0.03	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,2,4-Trichlorobenzene	120-82-1	µg/L	9	70	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.27**	J	1.0	U	5.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**130**		**110**		**120**		**790**		**150**	
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.02	0.2	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,2-Dibromoethane (EDB)	106-93-4	µg/L	0.03	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,2-Dichlorobenzene	95-50-1	µg/L	600	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,2-Dichloroethane	107-06-2	µg/L	2	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,2-Dichloropropane	78-87-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**32**		**16**		**17**		**160**		**30**	
1,3-Dichlorobenzene	541-73-1	µg/L	600	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,3-Dichloropropane	142-28-9	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
1,4-Dichlorobenzene	106-46-7	µg/L	75	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
2,2-Dichloropropane	594-20-7	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
2-Butanone (MEK)	78-93-3	µg/L	300	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
2-Chlorotoluene	95-49-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
2-Hexanone	591-78-6	µg/L	300 [4]	NLE	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	25	U	10	U
4-Chlorotoluene	106-43-4	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Acetone	67-64-1	µg/L	6,000	NLE	5.0	U	**1.5**	J	5.0	U	**1.4**	J	**1.7**	J	5.0	U	5.0	U	5.0	U	25	U	10	U
Benzene	71-43-2	µg/L	1	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**4.8**	J	**3.5**	J	**3.7**	J	**7.2**	J	**2.8**	J
Bromobenzene	108-86-1	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Bromochloromethane	74-97-5	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Bromodichloromethane	75-27-4	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Bromoform	75-25-2	µg/L	4	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Bromomethane	74-83-9	µg/L	10	NLE	1.0	U	**0.34**	BJ	1.0	U	1.0	U	**0.34**	BJ	1.0	U	**0.33**	BJ	1.0	U	5.0	U	2.0	U
Carbon tetrachloride	56-23-5	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Chlorobenzene	108-90-7	µg/L	50	100	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Chloroethane	75-00-3	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.47**	J	1.0	U	1.0	U	**1.6**	J	2.0	U
Chloroform	67-66-3	µg/L	70	NLE	1.0	U	**0.25**	BJ	**5.2**		**7.7**		**8.0**	B	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Chloromethane	74-87-3	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.29**	J	1.0	U	1.0	U	5.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	µg/L	70	70	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
cis-1,3-Dichloropropene	10061-01-5	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Dibromochloromethane	124-48-1	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Dichlorodifluoromethane (Freon 12)	75-71-8	µg/L	1,000	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Ethylbenzene	100-41-4	µg/L	700	700	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**50**		**46**		**49**		**700**		**150**	
Hexachlorobutadiene	87-68-3	µg/L	1	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Isopropylbenzene	98-82-8	µg/L	700	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**21**		**13**		**14**		**52**		**7.4**	J
Methylene chloride	75-09-2	µg/L	3	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Methyl-tert-butyl ether (MTBE)	1634-04-4	µg/L	70	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Naphthalene	91-20-3	µg/L	300	NLE	**0.26**	BJ	1.0	U	1.0	U	1.0	U	1.0	U	**29**		**15**		**19**		**270**		**60**	
n-Butylbenzene	104-51-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**12**		1.0	U	1.0	U	5.0	U	2.0	U
n-Propylbenzene	103-65-1	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**34**		**16**		**18**		**100**		**8.9**	J
p-Isopropyltoluene	99-87-6	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**3.2**	J	**0.80**	J	**0.91**	J	**3.7**	J	2.0	U
sec-Butylbenzene	135-98-8	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**7.4**		**1.6**	J	**1.9**	J	**6.3**	J	2.0	U
Styrene	100-42-5	µg/L	100	100	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
tert-Butylbenzene	98-06-6	µg/L	100 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**0.68**	J	**0.29**	J	**0.26**	J	5.0	U	2.0	U
Tetrachloroethene (PCE)	127-18-4	µg/L	1	5	1.0	U	1.0	U	**0.90**	J	**0.34**	J	**0.47**	J	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Toluene	108-88-3	µg/L	600	1,000	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	**1.7**	J	**1.3**	BJ	**1.4**	BJ	**23**	J	**7.1**	BJ
trans-1,2-Dichloroethene	156-60-5	µg/L	100	100	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
trans-1,3-Dichloropropene	10061-02-6	µg/L	5 [3]	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Trichloroethene (TCE)	79-01-6	µg/L	1	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Trichlorofluoromethane (Freon 11)	75-69-4	µg/L	2,000	NLE	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Vinyl chloride	75-01-4	µg/L	1	200	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.0	U	2.0	U
Xylene (Total)	1330-20-7	µg/L	1,000	10,000	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	**160**		**140**		**140**		**2,400**		**720**	

Table 3
Groundwater Analytical Results First Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

SAMPLE ID:			STANDARDS VALUES		FTMM-53-GW-699MW09-8		FTMM-53-GW-699MW09-7.70		FTMM-53-GW-699MW16-8.5		FTMM-53-GW-699MW16-6.5		FTMM-53-GW-699MW16-11.5		FTMM-53-GW-699RW03-11.4		FTMM-53-GW-699RW03-8.20		FTMM-53-GW-699RW03-14.59		FTMM-53-GW-699RW05-8.6		FTMM-53-GW-699RW05-4.8	
DATE SAMPLED:			NJDEP GWQS[1]	USEPA Drinking Water MCL[2]	12-Mar-2014		31-Mar-2014		12-Mar-2014		31-Mar-2014		31-Mar-2014		12-Mar-2014		31-Mar-2014		31-Mar-2014		12-Mar-2014		31-Mar-2014	
LAB SAMPLE ID:					R1401764-004		R1402225-004		R1401764-005		R1402225-008		R1402225-005		R1401764-001		R1402225-020		R1402225-012		R1401764-007		R1402225-006	
SAMPLE METHO:					LFPS		PDB		LFPS		PDB		PDB		LFPS		PDB		PDB		LFPS		PDB	
SAMPLE DEPTH (ft bgs):					8		7.7		8.5		6.5		11.5		11.4		8.2		14.59		8.6		4.8	
	CAS No.	Unit																						
VOC - TICs																								
1,2,3,5-Tetramethylbenzene	527-53-7	µg/L	500 [5]	NLE	-		-		-		-		-		**41.5**	JN	**8.5**	JN	-		**41.5**	JN	-	
1,2,3-Trimethylbenzene	526-73-8	µg/L	500 [5]	NLE	-		-		-		-		-		**85.5**	JN	**51.3**	JN	**53.5**	JN	**249.6**	JN	**67.2**	JN
1,2,4,5-Tetramethylbenzene	95-93-2	µg/L	500 [5]	NLE	-		-		-		-		-		-		**7.3**	JN	**8.0**	JN	**44.6**	JN	-	
1,4-Dimethyl-2-ethylbenzene	1758-88-9	µg/L	500 [5]	NLE	-		-		-		-		-		**35.7**	JN	**8.0**	JN	**8.9**	JN	**44.2**	JN	-	
1-Ethenyl-2-methylbenzene	611-15-4	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		**43.9**	JN	-		-	
1-Ethyl-2-methylbenzene	611-14-3	µg/L	500 [5]	NLE	-		-		-		-		-		**63.5**	JN	**56.6**	JN	**38.9**	JN	**264.9**	JN	**60**	JN
1-Ethyl-3-methylbenzene	620-14-4	µg/L	500 [5]	NLE	-		-		-		-		-		**35.3**	JN	-		-		**365.3**	JN	**58.8**	JN
1-Ethyl-4-methylbenzene	622-96-8	µg/L	500 [5]	NLE	-		-		-		-		-		**93.0**	JN	**36.1**	JN	**22.5**	JN	-		-	
1-Methyl-2-(1-methylethyl)benzene	527-84-4	µg/L	500 [5]	NLE	-		-		-		-		-		**22.3**	JN	**6.9**	JN	-		**69.0**	JN	-	
1-Methyl-3-(1-methylethyl)benzene	535-77-3	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		**7.7**	JN			-	
1-Methyl-indan	767-58-8	µg/L	500 [5]	NLE	-		-		-		-		-		-		**17.2**	JN	-		**77.0**	JN	-	
2,3-Dihydro-1,6-dimethyl-1H-indene	17059-48-2	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		-				-	
2,3-Dihydro-1-methyl-indene	27133-93-3	µg/L	500 [5]	NLE	-		-		-		-		-		**47.6**	JN	**13.0**	JN	**19.4**	JN	**32.1**	JN	**12.8**	JN
2,3-Dihydro-4-methyl-1H-indene	824-22-6	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		-				-	
2,3-Dimethylbutane	79-29-8	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		**7.7**	JN			-	
2,3-Dimethylpentane	565-59-3	µg/L	500 [5]	NLE	-		-		-		-		-		**26.8**	JN	-		-		**34.9**	JN	-	
2-Ethenyl-1,4-dimethylbenzene	2039-89-6	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		**13.9**	JN	-		-	
2-Methylbutane	78-78-4	µg/L	500 [5]	NLE	-		-		-		-		-		-		**17.4**	JN	**18.6**	JN	-		-	
2-Methylpentane	107-83-5	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		-		**159.4**	JN	**14.6**	JN
3-Methylpentane	96-14-0	µg/L	500 [5]	NLE	-		-		-		-		-		**27.7**	JN	**7.6**	JN	**9.4**	JN	**97.8**	JN	-	
Benzene, (2-methyl-1-propenyl)-	768-49-0	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		-		**47.9**	JN	-	
Benzene, 1,2,3,4-tetramethyl-	488-23-3	µg/L	500 [5]	NLE	-		-		-		-		-		**51.4**	JN	-		**9.2**	JN	-		-	
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		**8.3**	JN	-		-	
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		**5.9**	JN	-		-	
Benzene, 2-propenyl-	300-57-2	µg/L	500 [5]	NLE	-		-		-		-		-		-		**41.2**	JN	-		-		-	
Benzene, 4-ethyl-1 ,2-dimethyl-	934-80-5	µg/L	500 [5]	NLE	-		-		-		-		-		**34.4**	JN	**7.4**	JN	-		**60.8**	JN	-	
Cyclohexane	110-82-7	µg/L	500 [5]	NLE	-		-		-		-		-		-		**16.7**	JN	-		-		-	
Cyclohexane, methyl-	108-87-2	µg/L	500 [5]	NLE	-		-		-		-		-		**24.7**	JN	-		-		**52.2**	JN	-	
Cyclopentane, 1,3-Dimethyl, cis-	2532-58-3	µg/L	500 [5]	NLE	-		-		-		-		-		**15.5**	JN	-		-		-		-	
Indane	496-11-7	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		-		-		**83.5**	JN
Methylcyclopentane	96-37-7	µg/L	500 [5]	NLE	-		-		-		-		-		**25.6**	JN	-		**19.1**	JN	**257.7**	JN	**48.7**	JN
Pentane	109-66-0	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		**5.3**	JN	**65**	JN	**15**	JN
Pentane, 2,3,3-trimethyl-	560-21-4	µg/L	500 [5]	NLE	-		-		-		-		-		**17.1**	JN	-		-		-		-	
TIC-01 - Unknown	NA	µg/L	500 [5]	NLE	-		-		-		-		-		**72.7**	J	**6.8**	J	**61.8**	JN	**280.7**	J	**35.5**	J
TIC-02 - Unknown	NA	µg/L	500 [5]	NLE	-		-		-		-		-		**46.0**	J	-		-		**60.8**	J	**21.7**	J
TIC-03 - Unknown	NA	µg/L	500 [5]	NLE	-		-		-		-		-		**19.3**	J	-		-		**32.6**	J	-	
TIC-04 - Unknown	NA	µg/L	500 [5]	NLE	-		-		-		-		-		**27.4**	J	-		-		-		-	
TIC-05 - Unknown	NA	µg/L	500 [5]	NLE	-		-		-		-		-		-		-		-		-		-	

QA NOTES AND DATA QUALIFIERS:

(NO CODE) - Confirmed identification.
U - Analyte was not detected above the indicated limit of detection (LOD).
J - Analyte detected, estimated concentration.
JN - Tentatively identified compound, estimated concentration.
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B - The analyte was found in an associated blank at concentration above one half the LOQ, as well as in the sample.
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* - Field duplicate of sample on left.
Detections are bolded.
Detections above the NJDEP GWQS are highlighted.
For Detections above the USEPA MCL, the cell border is bolded.
- Not available
LFPS - low flow purge and sample
PDB - passive diffusion bag

NOTES:
Protection Ground Water Quality Standards
Specific Ground Water Quality
Water Standards and Health Advisories,
Spring 2012.
[3] Interim generic groundwater quality criteria.
[4] Interim specific groundwater quality criteria.
[5] Interim generic groundwater quality criteria for Synthetic Organic Chemicals defined as non-carcinogens.
NLE - No screening level established.

Table 3
Groundwater Analytical Results First Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

SAMPLE ID:			STANDARDS VALUES		FTMM-53-GW-699RW05-9.80		FTMM-53-GW-699RW11-11.1		FTMM-53-GW-699RW11-8.03		FTMM-53-GW-699RW11-14.08	
DATE SAMPLED:			NJDEP GWQS[1]	USEPA Drinking Water MCL[2]	31-Mar-2014		12-Mar-2014		31-Mar-2014		31-Mar-2014	
LAB SAMPLE ID:					R1402225-015		R1401764-010		R1402225-018		R1402225-019	
SAMPLE METHO:					PDB		LFPS		PDB		PDB	
SAMPLE DEPTH (ft bgs):					9.8		11.1		8.03		14.08	
	CAS No.	Unit										
Volatile Organics - SW8260C												
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	1	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,1,1-Trichloroethane	71-55-6	µg/L	30	200	2.5	U	1.0	U	1.0	U	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloroethane	79-00-5	µg/L	3	5	2.5	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethane	75-34-3	µg/L	50	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethene	75-35-4	µg/L	1	7	2.5	U	1.0	U	1.0	U	1.0	U
1,1-Dichloropropene	563-58-6	µg/L	5 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichlorobenzene	87-61-6	µg/L	5 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichloropropane	96-18-4	µg/L	0.03	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,2,4-Trichlorobenzene	120-82-1	µg/L	9	70	2.5	U	1.0	U	1.0	U	1.0	U
1,2,4-Trimethylbenzene	95-63-6	µg/L	100 [3]	NLE	**130**		**0.24**	J	1.0	U	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.02	0.2	2.5	U	1.0	U	1.0	U	1.0	U
1,2-Dibromoethane (EDB)	106-93-4	µg/L	0.03	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,2-Dichlorobenzene	95-50-1	µg/L	600	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,2-Dichloroethane	107-06-2	µg/L	2	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,2-Dichloropropane	78-87-5	µg/L	1	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,3,5-Trimethylbenzene	108-67-8	µg/L	100 [3]	NLE	**23**		1.0	U	1.0	U	1.0	U
1,3-Dichlorobenzene	541-73-1	µg/L	600	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,3-Dichloropropane	142-28-9	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	106-46-7	µg/L	75	NLE	2.5	U	1.0	U	1.0	U	1.0	U
2,2-Dichloropropane	594-20-7	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
2-Butanone (MEK)	78-93-3	µg/L	300	NLE	2.5	U	1.0	U	1.0	U	1.0	U
2-Chlorotoluene	95-49-8	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
2-Hexanone	591-78-6	µg/L	300 [4]	NLE	13	U	5.0	U	5.0	U	5.0	U
4-Chlorotoluene	106-43-4	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Acetone	67-64-1	µg/L	6,000	NLE	13	U	5.0	U	5.0	U	5.0	U
Benzene	71-43-2	µg/L	1	5	**3.1**	J	**11**		**6.5**		**6.5**	
Bromobenzene	108-86-1	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Bromochloromethane	74-97-5	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Bromodichloromethane	75-27-4	µg/L	1	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Bromoform	75-25-2	µg/L	4	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Bromomethane	74-83-9	µg/L	10	NLE	**0.88**	BJ	1.0	U	**0.29**	BJ	**0.35**	BJ
Carbon tetrachloride	56-23-5	µg/L	1	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Chlorobenzene	108-90-7	µg/L	50	100	2.5	U	1.0	U	1.0	U	1.0	U
Chloroethane	75-00-3	µg/L	5 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Chloroform	67-66-3	µg/L	70	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Chloromethane	74-87-3	µg/L	100 [3]	NLE	2.5	U	**0.23**	J	1.0	U	1.0	U
cis-1,2-Dichloroethene	156-59-2	µg/L	70	70	2.5	U	1.0	U	1.0	U	1.0	U
cis-1,3-Dichloropropene	10061-01-5	µg/L	5 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Dibromochloromethane	124-48-1	µg/L	1	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Dichlorodifluoromethane (Freon 12)	75-71-8	µg/L	1,000	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Ethylbenzene	100-41-4	µg/L	700	700	**160**		**0.45**	J	**0.25**	J	**0.26**	J
Hexachlorobutadiene	87-68-3	µg/L	1	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	98-82-8	µg/L	700	NLE	**8.1**	J	**8.9**		**1.2**	J	**1.2**	J
Methylene chloride	75-09-2	µg/L	3	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Methyl-tert-butyl ether (MTBE)	1634-04-4	µg/L	70	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Naphthalene	91-20-3	µg/L	300	NLE	**54**		**1.5**	BJ	**0.75**	J	**0.61**	J
n-Butylbenzene	104-51-8	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
n-Propylbenzene	103-65-1	µg/L	100 [3]	NLE	**9.7**	J	**9.4**		**0.68**	J	**0.71**	J
p-Isopropyltoluene	99-87-6	µg/L	100 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
sec-Butylbenzene	135-98-8	µg/L	100 [3]	NLE	2.5	U	**1.6**	J	1.0	U	1.0	U
Styrene	100-42-5	µg/L	100	100	2.5	U	1.0	U	1.0	U	1.0	U
tert-Butylbenzene	98-06-6	µg/L	100 [3]	NLE	2.5	U	**0.36**	J	1.0	U	1.0	U
Tetrachloroethene (PCE)	127-18-4	µg/L	1	5	**0.80**	J	1.0	U	1.0	U	1.0	U
Toluene	108-88-3	µg/L	600	1,000	**7.0**	J	**0.37**	J	**0.36**	BJ	**0.30**	BJ
trans-1,2-Dichloroethene	156-60-5	µg/L	100	100	2.5	U	1.0	U	1.0	U	1.0	U
trans-1,3-Dichloropropene	10061-02-6	µg/L	5 [3]	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Trichloroethene (TCE)	79-01-6	µg/L	1	5	2.5	U	1.0	U	1.0	U	1.0	U
Trichlorofluoromethane (Freon 11)	75-69-4	µg/L	2,000	NLE	2.5	U	1.0	U	1.0	U	1.0	U
Vinyl chloride	75-01-4	µg/L	1	200	2.5	U	1.0	U	1.0	U	1.0	U
Xylene (Total)	1330-20-7	µg/L	1,000	10,000	**660**		**0.45**	J	**0.35**	J	**0.33**	J

Table 3
Groundwater Analytical Results First Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

SAMPLE ID:			STANDARDS VALUES		FTMM-53-GW-699RW05-9.80		FTMM-53-GW-699RW11-11.1		FTMM-53-GW-699RW11-8.03	FTMM-53-GW-699RW11-14.08
DATE SAMPLED:			NJDEP GWQS[1]	USEPA Drinking Water MCL[2]	31-Mar-2014		12-Mar-2014		31-Mar-2014	31-Mar-2014
LAB SAMPLE ID:					R1402225-015		R1401764-010		R1402225-018	R1402225-019
SAMPLE METHO:					PDB		LFPS		PDB	PDB
SAMPLE DEPTH (ft bgs):					9.8		11.1		8.03	14.08
	CAS No.	Unit								
VOC - TICs										
1,2,3,5-Tetramethylbenzene	527-53-7	µg/L	500 [5]	NLE	-		-		-	-
1,2,3-Trimethylbenzene	526-73-8	µg/L	500 [5]	NLE	**55.1**	JN	-		-	-
1,2,4,5-Tetramethylbenzene	95-93-2	µg/L	500 [5]	NLE	-		**6.8**	JN	-	-
1,4-Dimethyl-2-ethylbenzene	1758-88-9	µg/L	500 [5]	NLE	-		-		-	-
1-Ethenyl-2-methylbenzene	611-15-4	µg/L	500 [5]	NLE	-		-		-	-
1-Ethyl-2-methylbenzene	611-14-3	µg/L	500 [5]	NLE	**54.9**	JN	-		-	-
1-Ethyl-3-methylbenzene	620-14-4	µg/L	500 [5]	NLE			-		-	-
1-Ethyl-4-methylbenzene	622-96-8	µg/L	500 [5]	NLE	**58.4**	JN	-		-	-
1-Methyl-2-(1-methylethyl)benzene	527-84-4	µg/L	500 [5]	NLE	-		-		-	-
1-Methyl-3-(1-methylethyl)benzene	535-77-3	µg/L	500 [5]	NLE	-		-		-	-
1-Methyl-indan	767-58-8	µg/L	500 [5]	NLE	-		-		-	-
2,3-Dihydro-1,6-dimethyl-1H-indene	17059-48-2	µg/L	500 [5]	NLE	-		**5.1**	JN	-	-
2,3-Dihydro-1-methyl-indene	27133-93-3	µg/L	500 [5]	NLE	-		**17.1**	JN	-	-
2,3-Dihydro-4-methyl-1H-indene	824-22-6	µg/L	500 [5]	NLE	-		**7.3**	JN	-	-
2,3-Dimethylbutane	79-29-8	µg/L	500 [5]	NLE	-		**17.8**	JN	-	-
2,3-Dimethylpentane	565-59-3	µg/L	500 [5]	NLE	-		**14.3**	JN	-	-
2-Ethenyl-1,4-dimethylbenzene	2039-89-6	µg/L	500 [5]	NLE	-		-		-	-
2-Methylbutane	78-78-4	µg/L	500 [5]	NLE	**33.5**	JN	-		-	-
2-Methylpentane	107-83-5	µg/L	500 [5]	NLE	**14.2**	JN	-		-	-
3-Methylpentane	96-14-0	µg/L	500 [5]	NLE	-		**12.3**	JN	-	-
Benzene, (2-methyl-1-propenyl)-	768-49-0	µg/L	500 [5]	NLE	-		-		-	-
Benzene, 1,2,3,4-tetramethyl-	488-23-3	µg/L	500 [5]	NLE	-		-		-	-
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	µg/L	500 [5]	NLE	-		-		-	-
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	µg/L	500 [5]	NLE	-		-		-	-
Benzene, 2-propenyl-	300-57-2	µg/L	500 [5]	NLE	-		-		-	-
Benzene, 4-ethyl-1 ,2-dimethyl-	934-80-5	µg/L	500 [5]	NLE	-		-		-	-
Cyclohexane	110-82-7	µg/L	500 [5]	NLE	-		-		-	-
Cyclohexane, methyl-	108-87-2	µg/L	500 [5]	NLE	-		-		-	-
Cyclopentane, 1,3-Dimethyl, cis-	2532-58-3	µg/L	500 [5]	NLE	-		-		-	-
Indane	496-11-7	µg/L	500 [5]	NLE	**72.9**	JN	-		-	-
Methylcyclopentane	96-37-7	µg/L	500 [5]	NLE	**46.8**	JN	-		-	-
Pentane	109-66-0	µg/L	500 [5]	NLE	**13.6**	JN	-		-	-
Pentane, 2,3,3-trimethyl-	560-21-4	µg/L	500 [5]	NLE	-		-		-	-
TIC-01 - Unknown	NA	µg/L	500 [5]	NLE	**20.0**	J	**12.5**	J	-	-
TIC-02 - Unknown	NA	µg/L	500 [5]	NLE	-		**5.7**	J	-	-
TIC-03 - Unknown	NA	µg/L	500 [5]	NLE	-		**9.8**	J	-	-
TIC-04 - Unknown	NA	µg/L	500 [5]	NLE	-		**7.3**	J	-	-
TIC-05 - Unknown	NA	µg/L	500 [5]	NLE	-		**6.9**	J	-	-

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* - Field duplicate of sample on left.
Detections are bolded.
Detections above the NJDEP GWQS are highlighted.
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LFPS - low flow purge and sample
PDB - passive diffusion bag

NOTES:
Protection Ground Water Quality Standards
Specific Ground Water Quality
Water Standards and Health Advisories,
Spring 2012.
[3] Interim generic groundwater quality criteria.
[4] Interim specific groundwater quality criteria.
[5] Interim generic groundwater quality criteria for Synthetic Organic Chemicals defined as non-carcinogens.
NLE - No screening level established.

FIGURES

Figure 1 Layout of FTMM-53 (Former Gas Station at Building 699)

Figure 2 FTMM-53 Groundwater Contours March 12, 2014

699MW15
616MW01
699MW02
699SP04
Saltzman Avenue
699SP10
699VP11
699MW05
699RW02
699MW03
699SP09
699MW13
699RW05
699MW04
699VP10
600MW01
699MW01
699RW01
Former Gasoline USTs (Estimated)
699SP05
699RW03
699SP01
699SP07
699SP03
699SP06
699MW14
699MW06
699SP08
699MW08
699RW11
CANOPY
Former Gasoline USTs (Estimated)
Fuel Dispenser Islands
708
(FTMM-68)
699MW07
565MW01
565MW01D
699
(FTMM-53)
699RW04
699SP02
699MW09
699MW12
699MW16

Legend

- Shallow Monitoring Well
- Deep Monitoring Well
- Vapor Monitoring Well
- Recovery Well
- Air Sparge Well
- Municipal Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line

N

1 inch = 60 feet

0 12.5 25 50 75 100 Feet

Source: FTMM Supplied CAD

J:\748\748810 Fort Monmouth\GIS\MXD\GW_Report\Figure1_GW_FTMM-53_Layout.mxd

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
Layout of FTMM-53 Former Gas Station at Building 699	
CREATED BY: TS	REVIEWED BY: ME
DATE: May 2014	FIGURE NUMBER: Figure 1
PROJECT NUMBER: 748810.01000	FILE: Figure1_GW_FTMM-53_Layout.mxd

699MW15
12.64

616MW01
14.12

699MW02
12.07

699SP04

Saltzman Avenue

699SP10

699VP11

699MW03
12.51

699SP09

699RW05
11.55

699VP10

699MW05
9.84

699RW02

699MW04
11.68

699MW13

600MW01
12.27

699MW01
11.43

699RW01

699RW03
11.49

699SP05

699SP01

699MW06
11.44

699SP07

699SP08

699SP03

699SP06

699MW14

699MW08
11.53

699RW11
9.20

CANOPY

Former Gasoline USTs (Estimated)

Former Gasoline USTs (Estimated)

Fuel Dispenser Islands

699MW07

708
(FTMM-68)

565MW01
565MW01D

699
(FTMM-53)

699RW04
11.30

699SP02

699MW09
11.39

699MW12
12.04

699MW16
11.43

14

13

12

11

10

11

12

Legend

- Groundwater Contour
- Shallow Monitoring Well
- Deep Monitoring Well
- Vapor Monitoring Well
- Recovery Well
- Air Sparge Well
- Municipal Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Estimated Groundwater Flow Direction

Note: Fluid levels in monitoring wells 699MW03 and 699RW11 were considered anomalous compared to fluid levels at neighboring wells.

N

1 inch = 60 feet

0 12.5 25 50 75 100 Feet

Source: FTMM Supplied CAD

J:\748\748810 Fort Monmouth\GIS\MXD\GW_Report\Figure2_GW_FTMM-53_GW_Contours.mxd

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-53 Groundwater Contours March 12, 2014	
CREATED BY: TS	REVIEWED BY: ME
DATE: May 2014	FIGURE NUMBER: Figure 2
PROJECT NUMBER: 748810.03000	FILE: Figure2_GW_FTMM-53_GW_Contours.mxd

ATTACHMENTS

Attachment A LFPS Field Sheets and NJDEP PDB Checklists

ATTACHMENT A
LFPS FIELD SHEETS AND NJDEP PDB CHECKLISTS

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** USACE | **WELL #:** 699MW01

PROJECT: Fort Monmouth 2814 Q1 Groundwater Sampling
AOC # (AREA): FTMM-53
SCREENED INTERVAL (TOC): 2-15
WELL DIAMETER (in.): 2"

WELL PERMIT #: 29-23677-1
DATE: 5/12/14
SAMPLING PERSONNEL NAME: Zoher Levy
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0
WELL DEPTH (TOC): 15.55
FEET OF WATER IN WELL (ft): 12.03
FEET OF SATURATED SCREEN (ft): 12.03
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 3.52
PUMP INTAKE DEPTH (ft below TOC): 10.55

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1155	X		7.61	NA	0.159	NA	98.9	NA	9.22	NA	55.3	NA	11.22	NA	~100	3.55
1200	X		7.08	0.53	0.159	0	123.6	24.7	8.73	.49	163.2	107.9	10.93	.27	~100	3.56
1205	X		7.01	.07	0.160	.001	138	14.4	9.87	1.14	41.5	121.7	11.22	.27	~100	3.56
1210	X		6.99	.02	0.160	0	144	6	7.07	2.8	37.2	4.3	11.25	.03	~100	3.56
1215	X		6.93	.06	0.161	.001	147.2	3.2	7.03	.04	39.1	1.9	11.28	.03	~100	3.57
1220	X		6.9	.03	0.161	0	151	3.8	6.96	.07	23.5	15.6	11.43	.15	~100	3.59
1225	X		6.87	.03	0.161	0	153.2	2.2	7.0	.04	30.3	6.8	11.52	.09	~100	3.59
1230		X	6.84	.03	0.161	0	155	1.8	7.09	.09	31.4	1.1	11.33	.19	~100	3.61

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: USACE | WELL #: 699 MW01

SAMPLING INFORMATION

SAMPLING DEVICE: Bladder Pump

SAMPLE NAME (ID): FTMM-53-GW-699MW01-10.55, QA, MS, MSD, Dup (FTMM-53-GW-699MW001-10.5 & 1245

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOCs+TICs	1230	3x VOAs	Clear		NA

QA/QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: (YES) or NO

DUPLICATE SAMPLE NAME (ID): See Sample ID

MS/MSD SAMPLE COLLECTED: (YES) or NO

MS / MSD SAMPLE NAME (ID): See Sample ID

PURGING AND SAMPLING COMMENTS:

Sampled at 1230

INVESTIGATION DERIVED WASTE (IDW): Purge water fed through Carbon buckets.

Date:								
Volume Transferred to Drum:								
Drum Number:								

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** USACE | **WELL #:** 849MW09

PROJECT: Fort Monmouth 2014 Q1 Groundwater Sampling
AOC # (AREA): FTMM-53
SCREENED INTERVAL (TOC): 3'-15'
WELL DIAMETER (in.): 4
WELL PERMIT #: 29-24639
DATE: 3/12/14
SAMPLING PERSONNEL NAME: Nick Loizos
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 12.30
FEET OF WATER IN WELL (ft): 9.03
FEET OF SATURATED SCREEN (ft): 9.03
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 3.27
PUMP INTAKE DEPTH (ft below TOC): 8

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1135	X		4.75	NA	.274	NA	276.0	NA	9.15	NA	15.3	NA	9.46	NA	100	3.44
1140	X		4.14	.61	.273	.001	322.4	44.4	8.29	.86	13.0	2.3	9.75	.71	100	3.46
1145	X		4.04	.10	.272	.001	340.3	17.9	8.11	.18	12.4	.6	9.80	.45	100	3.46
1150	X		4.04	0	.272	0	354.0	13.7	8.04	.07	10.4	2	9.37	.17	100	3.44
1155	X		4.04	0	.272	0	356.1	4.1	7.99	.05	9.4	1	9.40	.03	100	3.44
1200	X		4.03	.01	.273	.001	360.4	2.3	7.94	.05	9.0	.4	9.44	.04	100	3.43
1205		X	4.03	0	.273	0	363.1	2.7	7.94	0	9.3	.3	9.38	.06	100	3.45

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: USACE	WELL #: 699MW09

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" Bladder Pump

SAMPLE NAME (ID): FTMM-53-GW-699MW09-S

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOCs	1205	3 x VOA	clear	9.3	

QA/QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

- Water purged into carbon-filtered 5 gallon bucket
- Sampled @ 1205

INVESTIGATION DERIVED WASTE (IDW):

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT: USACE** | **WELL #: 699MW04**

PROJECT: Fort Monmouth 2014 Q1 Groundwater Sampling
AOC # (AREA): FTMM-53
SCREENED INTERVAL (TOC): 2-20
WELL DIAMETER (in.): 4"

WELL PERMIT #: 21-23680-7
DATE: 3/12/14
SAMPLING PERSONNEL NAME: Zohar Lavy
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0
WELL DEPTH (TOC): 17.35
FEET OF WATER IN WELL (ft): 14.11
FEET OF SATURATED SCREEN (ft): 14.11
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 3.24
PUMP INTAKE DEPTH (ft below TOC): 10.3

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1520	X		5.91	NA	0.627	NA	63.1	NA	4.64	NA	19.7	NA	11.08	NA	~150	3.29
1525	X		5.70	.21	0.628	.001	75.1	12	4.13	0.51	16.4	3.3	11.54	.46	~150	3.29
1530	X		5.66	.04	0.628	0	83.4	8.3	4.7	0.57	18.5	2.1	11.8	0.26	~150	3.29
1535	X		5.67	.01	0.628	0	94.1	10.7	5.48	0.78	19	0.5	12.13	.33	~150	3.29
1540	X		5.66	.01	0.629	.001	99.8	5.7	5.6	0.12	22.7	3.7	12.27	.14	~150	3.29
1545	X		5.69	.01	0.628	.001	105	5.2	6.1	.5	25.5	2.8	12.51	.24	~150	3.29
1550	X		5.69	0	0.628	0	109.5	4.5	6.5	.4	23.6	1.9	12.6	.09	~150	3.29
1555		X	5.69	0	0.629	0	113	3.5	6.82	.32	25.6	2	12.52	.09	~150	3.29

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: USACE | WELL #: 699MW04

SAMPLING INFORMATION

SAMPLING DEVICE: Bladder

SAMPLE NAME (ID): FTHM-53-GW-699MW04-10.3

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOCs + TICs	1555	3 x VOAs	Clear		

QA\QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

INVESTIGATION DERIVED WASTE (IDW): Purge water fed into Carbon bucket

Date:								
Volume Transfered to Drum:								
Drum Number:								

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** USACE | **WELL #:** 699MWOC

PROJECT: Fort Monmouth 2014 Q1 Groundwater Sampling
AOC # (AREA): 53
SCREENED INTERVAL (TOC): 2'-15'
WELL DIAMETER (In.): 4

WELL PERMIT #: 29-23809-1
DATE: 3/12/14
SAMPLING PERSONNEL NAME: Nick Loizos
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 14.85
FEET OF WATER IN WELL (ft): 9.59
FEET OF SATURATED SCREEN (ft): 9.59
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 5.26
PUMP INTAKE DEPTH (ft below TOC): 10.0

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1345	X		5.86	NA	.147	NA	210.4	NA	8.68	NA	50.5	NA	10.90	NA	150	5.35
1350	X		5.83	.03	.147	0	203.8	6.6	7.84	.76	60.7	10.2	9.86	1.54	150	5.40
1355	X		5.88	.05	.146	.001	201.8	2	7.51	.33	55.8	4.9	9.80	.46	150	5.42
1400	X		5.91	.03	.145	.001	197.8	4	7.67	.16	40.3	14.9	9.08	.28	100	5.43
1405	X		5.93	.02	.145	0	194.4	3.4	7.64	.03	40.2	.1	9.15	.07	100	5.42
1410	X	X	5.94	.01	.145	0	192.7	1.7	7.64	0	41.0	.8	9.11	.04	100	5.42

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: USACE	WELL #: 699MW06

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" Bladder Pump

SAMPLE NAME (ID): RIMM-53-GW-699MW06-10

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOCs	1410	3x VOA	clear	91.0	

QA/QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

- purged water into carbon-filtered 5 gallon bucket
- sample collected @ 1410

INVESTIGATION DERIVED WASTE (IDW):

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: USACE | WELL #: 699MW16

PROJECT: Fort Monmouth 2014 Q1 Groundwater Sampling

AOC # (AREA): 53

SCREENED INTERVAL (TOC): 3.5' - 13.5'

WELL DIAMETER (in.): 4

WELL PERMIT #: 29 - 33757

DATE: 3/12/14

SAMPLING PERSONNEL NAME: Dick Loizos

SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 13.95

FEET OF WATER IN WELL (ft): 11.15

FEET OF SATURATED SCREEN (ft): 10.0

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 2.80

PUMP INTAKE DEPTH (ft below TOC): 8.5'

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1235	X		4.12	NA	.197	NA	363.4	NA	7.00	NA	0.0	NA	10.43	NA	150	2.84
1240	X		4.03	.09	.191	.006	361.3	17.9	4.34	2.66	0.0	0	10.14	.29	100	2.84
1245	X		4.02	.01	.191	0	369.2	7.9	3.78	.56	0.0	0	9.67	.45	100	2.83
1250	X		4.02	0	.190	.001	373.0	3.8	3.56	.22	0.0	0	9.47	.22	100	2.84
1255	X		4.01	.01	.189	.001	375.1	2.1	3.50	.06	0.0	0	9.46	.01	100	2.84
1300	X	X	4.00	.01	189	0	375.3	.2	3.51	.01	0.0	0	9.49	.03	100	2.83

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: USACE	WELL #: 649 MW16

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" Bladder Pump

SAMPLE NAME (ID): SIMM-23-GW-649MW16-20.5

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOCs	1300	3x VOA	clear	0	

QA\QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

- Water purged into carbon-filtered 5 gallon bucket.
- Sample collected @ 1300

INVESTIGATION DERIVED WASTE (IDW):

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** USACE | **WELL #:** 699 RW11

PROJECT: Fort Monmouth 2014 Q1 Groundwater Sampling
AOC # (AREA): FTMM-53
SCREENED INTERVAL (TOC): 5-20
WELL DIAMETER (in.): 11"

WELL PERMIT #: 29-28031
DATE: 3/12/14
SAMPLING PERSONNEL NAME: Zohar Lavy
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0
WELL DEPTH (TOC): 17.1
FEET OF WATER IN WELL (ft): 13.3

FEET OF SATURATED SCREEN (ft): 12.1
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 3.8
PUMP INTAKE DEPTH (ft below TOC): 11.1

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1435	X		6.57	NA	0.440	NA	45.8	NA	3.18	NA	55.8	NA	10.33	NA	~150	3.85
1440	X		6.6	.03	0.432	.008	43.5	2.3	1.31	1.87	53.6	2.2	10.01	.32	~150	3.87
1445	X		6.56	.04	0.428	.004	34.7	8.8	0.46	0.85	39	14.6	9.83	.18	~150	3.88
1450	X		6.59	.03	0.428	0	26.4	8.3	0.34	0.12	33.4	5.6	9.8	.03	~150	3.89
1455	X		6.58	.01	0.427	.001	24.8	1.6	0.32	.02	27.7	5.7	9.78	.02	~150	3.91
1500	X		6.6	.02	0.427	0	22.9	1.9	0.3	.02	20.7	7	9.74	.04	~150	3.93
1505	X		6.63	.03	0.427	0	19.5	3.4	0.31	.01	19.2	1.5	9.74	0	~150	3.95
1510		X	6.63	0	0.426	.001	16.9	2.6	0.31	0	17.5	1.7	9.78	.04	~150	3.97

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** USACE | **WELL #:** 699RW11

SAMPLING INFORMATION

SAMPLING DEVICE: Bladder

SAMPLE NAME (ID): FTMM-S3-GW-699RW11-11.1

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOCs + TICs	1510	3x VOAs	Clear	17.5	MA (2L) Slight HC odor

QA/QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

Sampled @ 1510

INVESTIGATION DERIVED WASTE (IDW): Purge water fed into Carbon bucket

Date:								
Volume Transfered to Drum:								
Drum Number:								

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT: USACE** | **WELL #: 6149CW03**

PROJECT: Fort Monmouth 2014 Q1 Groundwater Sampling
AOC # (AREA): FTMM-53
SCREENED INTERVAL (TOC): 5 - 20
WELL DIAMETER (in.): 6"

WELL PERMIT #: 29-43891
DATE: 3/12/14
SAMPLING PERSONNEL NAME: Zachar Lang
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0
WELL DEPTH (TOC): 17.76
FEET OF WATER IN WELL (ft): 14.43
FEET OF SATURATED SCREEN (ft): 12.76
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 3.35
PUMP INTAKE DEPTH (ft below TOC): 11.4

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1320	X		6.38	NA	0.979	NA	159.4	NA	3.94	NA	236.6	NA	12.23	NA	~100	3.39
1325	X		6.0	.38	1.034	0.055	134.2	25.2	1.37	2.57	265	26.4	11.63	0.6	~100	3.45
1330	X		5.91	.08	1.047	.013	106	28.2	0.86	.51	168	97	11.35	.28	~100	3.49
1335	X		5.88	.03	1.047	0	88.3	17.7	0.73	.13	138	30	11.24	.11	~100	3.51
1340	X		5.87	.01	1.048	.001	82.1	6.2	0.7	.03	77	61	11.19	.05	~100	3.53
1345	X		5.87	0	1.048	0	78.5	3.6	0.68	.02	61.6	8.4	11.17	.02	~100	3.54
1350	X		5.87	0	1.048	0	76.8	1.7	0.65	.03	51.4	10.2	11.25	.08	~100	3.56
1355		X	5.87	.0	1.048	.0	75.9	.9	0.62	.03	47.1	4.3	11.26	.01	~100	3.57

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: USACE	WELL # : 699RW03

SAMPLING INFORMATION

SAMPLING DEVICE: Bladder

SAMPLE NAME (ID): FTMM-53-GW-699RW03-11.4

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOAs + TICs	1355	5 x VOAs	Clear	47.1	NA

QA\QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

Sampled at 1355

INVESTIGATION DERIVED WASTE (IDW): Purge water fed through carbon bucket

Date:									
Volume Transfered to Drum:									
Drum Number:									

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** USACE | **WELL #:** 699MW05

PROJECT: Fort Monmouth 2014 Q1 Groundwater Sampling

AOC # (AREA): 53

SCREENED INTERVAL (TOC): 5'-15'

WELL DIAMETER (in.): 6

WELL PERMIT #: 29-56509

DATE: 3/18/14

SAMPLING PERSONNEL NAME: Nick Lotzo

SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.6

WELL DEPTH (TOC): 17.20

FEET OF WATER IN WELL (ft): 9.90

FEET OF SATURATED SCREEN (ft): 7.20

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 7.30

PUMP INTAKE DEPTH (ft below TOC): 8.60

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1440	X		6.18	NA	.302	NA	-52.0	NA	5.93	NA	46.5	NA	10.47	NA	150	7.33
1445	X		6.13	.05	.307	.005	-73.4	21.4	3.54	2.39	34.2	12.3	9.93	.54	150	7.44
1450	X		6.13	0	.307	0	-76.5	5.1	2.97	.57	25.5	8.7	9.93	0	125	7.45
1455	X		6.13	0	.306	.001	-83.0	4.5	2.58	.39	24.3	1.2	10.11	.18	125	7.46
1500	X		6.14	.01	.307	.001	-84.0	1	2.33	.25	22.4	1.9	10.18	.01	125	7.49
1505	X		6.14	0	.307	0	-84.4	.4	2.30	.03	19.5	2.9	10.05	.07	125	7.50
1510	X		6.12	.02	.306	.001	-84.0	.4	2.32	.02	16.3	3.2	9.91	.14	125	7.49
1515	X		6.13	.01	.306	0	-84.1	.1	2.32	0	15.8	0.5	9.98	.07	125	7.51
1520	X	X	6.14	.01	.306	0	-84.3	.2	2.34	.02	16.1	0.3	9.93	.05	125	7.51

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: USACE	WELL #: 699RW05

SAMPLING INFORMATION

SAMPLING DEVICE: 1.75" Bladder Pump

SAMPLE NAME (ID): FTMM-53-GW-699RW05-8.6

SAMPLE PARAMETER	TIME	CONTAINER	COLOR	TURBIDITY	COMMENTS
VOCs	1520	3x VOA	Clear	16.1	

QA/QC SAMPLES:

DUPLICATE SAMPLE COLLECTED: YES or (NO)

DUPLICATE SAMPLE NAME (ID): _____

MS/MSD SAMPLE COLLECTED: YES or (NO)

MS / MSD SAMPLE NAME (ID): _____

PURGING AND SAMPLING COMMENTS:

- purge water into carbon filtered 5 gallon bucket
- collect sample @ 1520

INVESTIGATION DERIVED WASTE (IDW):

Date:									
Volume Transfered to Drum:									
Drum Number:									

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699MW01
4. Well Permit Number: 29-23677-1

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☒Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 0.8

9 Total Well Depth (fbgs): 16.55

10 Screened interval/open hole (fbgs): 2-15

11 Well Casing: Diameter 4" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 3/13/14 Time: 1223

15. Depth to Ground Water: Depth to ground water at time of deployment 3.14

16. Date and Time of Retrieval: Date: 3/21/14 Time: 1030

17. Depth to Ground Water: Depth to ground water at time of retrieval 2.63

18. Type of Deployment Line Used: Diameter: 5/16" Material: Poly

19. Material and Mass (oz.) of PDBS Weight: Stainless Steel 20oz

20. Type of PDBS Used: ☐Lab Filled (Modified Trip Blank must be taken at time of deployment) ☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.) (stainless steel recommended)

21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled L

22. Position of PDBS Weight: ☒Attached to bottom of PDBS and suspended in well ☒Attached to bottom of deployment line and suspended in well ☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS): 1st PDBS 7.5 2nd PDBS 12.5 3rd PDBS ____ 4th PDBS ____ 5th PDBS ____ 6th PDBS ____ 7th PDBS ____ 8th PDBS ____

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification? ☒No, this well is being profiled during this sampling round ☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well? ☒No, flow testing has not been conducted in this well ☒Yes, flow testing of this well was conducted. Date of testing: _____ Type of flow meter used: _____ Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp 20°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician: Name(s) and Company (please print clearly)

Name	Company
Zahy Lary	Parsons
Nick Loizos	Parsons

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-C3
3. Well Designation: 699MW04
4. Well Permit Number: 29-23680-7

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☒Stick Up ☒Flush Mount

7. Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 3.25'

9 Total Well Depth (fbgs): 17.35

10. Screened interval/open hole (fbgs): 2-20

11 Well Casing: Diameter 4" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12. Well Screen (or open hole diameter): Diameter 4" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 3/13/14 Time: 1242

15. Depth to Ground Water: Depth to ground water at time of deployment 3.49

16. Date and Time of Retrieval: Date: 3/31/14 Time: 1045

17. Depth to Ground Water: Depth to ground water at time of retrieval 2.47

18. Type of Deployment Line Used: Diameter: 3/16" Material: Poly

19 Material and Mass (oz.) of PDBS Weight: Stainless Steel 20 oz (stainless steel recommended)

20. Type of PDBS Used: ☐Lab Filled (Modified Trip Blank must be taken at time of deployment) ☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled ✓

22. Position of PDBS Weight: ☒Attached to bottom of PDBS and suspended in well ☒Attached to bottom of deployment line and suspended in well ☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS): 1st PDBS 6.85 2nd PDBS 13.85 3rd PDBS — 4th PDBS —; 5th PDBS — 6th PDBS — 7th PDBS — 8th PDBS —

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification? ☒No, this well is being profiled during this sampling round ☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well? ☒No, flow testing has not been conducted in this well ☐Yes, flow testing of this well was conducted. Date of testing: _____ Type of flow meter used: _____ Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 20°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28. Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Zohar Lavy	Parsons
Nick Loizos	Parsons

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699MW06
4. Well Permit Number: 29-23809-1
5. Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other
6. Well Surface Finish: ☒Stick Up ☐~~Flush Mount~~ 2'
7. Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____
8. **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.
   Distance between measuring point and ground surface (ft.) 1.5'
9. Total Well Depth (fbgs): 14.96
10. Screened interval/open hole (fbgs): 2-15
11. Well Casing: Diameter 4" Material ☒PVC ☐Carbon Steel ☐Stainless Steel
12. Well Screen (or open hole diameter): Diameter 4" Material ☒PVC ☐Carbon Steel ☐Stainless Steel
13. Screen Size (slot): Screen Slot Size 0.02
14. Date and Time of Deployment: Date: 3/13/14 Time: 1135
15. Depth to Ground Water: Depth to ground water at time of deployment 5.53
16. Date and Time of Retrieval: Date: 3/31/14 Time: 1110
17. Depth to Ground Water: Depth to ground water at time of retrieval 4.20
18. Type of Deployment Line Used: Diameter: 3/16" Material: Poly
19. Material and Mass (oz.) of PDBS Weight: Stainless Steel 20 oz (stainless steel recommended)
20. Type of PDBS Used:
    ☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
    ☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled ✓
22. Position of PDBS Weight:
    ☒Attached to bottom of PDBS and suspended in well
    ☒Attached to bottom of deployment line and suspended in well
    ☐Attached to bottom of deployment line and resting on bottom of well (preferred)
23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS):
    1st PDBS 10.20 | 2nd PDBS | 3rd PDBS | 4th PDBS
    5th PDBS | 6th PDBS | 7th PDBS | 8th PDBS
24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
    ☒No, this well is being profiled during this sampling round
    ☐Yes, this well was profiled already. Date when well was profiled: _____
25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
    ☒No, flow testing has not been conducted in this well
    ☐Yes, flow testing of this well was conducted. Date of testing: _____
    Type of flow meter used: _____
    Measurements taken every _____ feet [Please Attach Results]
26. Weather Conditions During Deployment: Temp. 20oF Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing
27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing
28. Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Zohar Levy	Parsons
Nick Loizos	Parsons

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699MW09
4. Well Permit Number: 29-20639

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☒Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) -3.75

9 Total Well Depth (fbgs): 12.2

10 Screened interval/open hole (fbgs): 2-15

11 Well Casing: Diameter: 4" Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4" Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 3/13/14 Time: 1055

15. Depth to Ground Water: Depth to ground water at time of deployment 3.46'

16. Date and Time of Retrieval: Date: 3/31/14 Time: 1136 1145 1170

17. Depth to Ground Water: Depth to ground water at time of retrieval 4.10 0.461.10

18. Type of Deployment Line Used: Diameter: 3/16" Material: Poly

19 Material and Mass (oz.) of PDBS Weight: Stainless Steel 20 oz (stainless steal recommended)

20 Type of PDBS Used: ☐Lab Filled (Modified Trip Blank must be taken at time of deployment) ☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 16 Diameter (in.) 1.5 Filled ✓

22 Position of PDBS Weight: ☒Attached to bottom of PDBS and suspended in well ☒Attached to bottom of deployment line and suspended in well ☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS): 1st PDBS 7.76 2nd PDBS — 3rd PDBS — 4th PDBS —

5th PDBS — 6th PDBS — 7th PDBS — 8th PDBS —

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☒No, this well is being profiled during this sampling round
☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☒No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 20°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Zohar Lavy	Parsons
Nick Loizos	Parsons

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-C7
3. Well Designation: 699MW16
4. Well Permit Number: 21-33757

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☒Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 87/12"

9 Total Well Depth (fbgs): 14.07

10. Screened interval/open hole (fbgs): 3.5-13.5

11 Well Casing: Diameter 4" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 9" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 3/13/14 Time: 1105

15. Depth to Ground Water: Depth to ground water at time of deployment 2.92

16. Date and Time of Retrieval: Date: 3/20/14 Time: 1145

17. Depth to Ground Water: Depth to ground water at time of retrieval 0.46

18. Type of Deployment Line Used: Diameter: 7/16" Material: Poly

19 Material and Mass (oz.) of PDBS Weight: Stainless Steel 20 oz (stainless steel recommended)

20. Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22. Position of PDBS Weight:
☒Attached to bottom of PDBS and suspended in well
☒Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS):
1st PDBS 6.50 2nd PDBS 11.50 3rd PDBS _____ 4th PDBS _____
5th PDBS _____ 6th PDBS _____ 7th PDBS _____ 8th PDBS _____

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☒No, this well is being profiled during this sampling round
☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☒No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 20°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 6-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28. Field Sampling Technician: Name(s) and Company (please print clearly)

Name	Company
Zachary Levy	Parsons
Nick Lotzos	Parsons

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699(507
4. Well Permit Number: 29-03891

5 Type of Well: ☐Monitoring ☒Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☒Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 11.5'

9 Total Well Depth (fbgs): 17.78

10 Screened interval/open hole (fbgs): 5-20

11 Well Casing: Diameter 6" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 6" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 3/12/14 Time: 1233

15. Depth to Ground Water: Depth to ground water at time of deployment 3.62

16. Date and Time of Retrieval: Date: 3/31/14 Time: 10:0

17. Depth to Ground Water: Depth to ground water at time of retrieval 1.48

18. Type of Deployment Line Used: Diameter: 3/16" Material: Poly

19. Material and Mass (oz.) of PDBS Weight: Stainless Steel 20 oz (stainless steel recommended)

20. Type of PDBS Used: ☐Lab Filled (Modified Trip Blank must be taken at time of deployment) ☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled ✓

22. Position of PDBS Weight: ☒Attached to bottom of PDBS and suspended in well ☒Attached to bottom of deployment line and suspended in well ☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS): 1st PDBS 8.20 2nd PDBS 14.59 3rd PDBS ____ 4th PDBS ____ 5th PDBS ____ 6th PDBS ____ 7th PDBS ____ 8th PDBS ____

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification? ☒No, this well is being profiled during this sampling round ☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well? ☒No, flow testing has not been conducted in this well ☐Yes, flow testing of this well was conducted. Date of testing: _____ Type of flow meter used: _____ Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 20°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28. Field Sampling Technician: Name(s) and Company (please print clearly)

Name	Company
Zohar Levy	Parsons
Nick Loizos	Parsons

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699 RW05
4. Well Permit Number: 29-56509

5 Type of Well: ☐Monitoring ☒Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☒Flush Mount

7 Location of Measuring Point: ☐Top of Casing ☐Other (specify) _____

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 14.25"

9 Total Well Depth (fbgs): 12.3

10 Screened interval/open hole (fbgs): 4.3-15

11 Well Casing: Diameter 6" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 6" Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 3/12/14 Time: 1153

15. Depth to Ground Water: Depth to ground water at time of deployment 4.41

16. Date and Time of Retrieval: Date: 3/21/14 Time: 1140

17. Depth to Ground Water: Depth to ground water at time of retrieval 1.12

18. Type of Deployment Line Used: Diameter: 3/16" Material: Poly

19. Material and Mass (oz.) of PDBS Weight: Stainless Steel 20 oz

20. Type of PDBS Used: ☐Lab Filled (Modified Trip Blank must be taken at time of deployment) ☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.) (stainless steel recommended)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled ✓

22 Position of PDBS Weight: ☒Attached to bottom of PDBS and suspended in well ☒Attached to bottom of deployment line and suspended in well ☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS): 1st PDBS 9.80 2nd PDBS 8.80 3rd PDBS ____ 4th PDBS ____ 5th PDBS ____ 6th PDBS ____ 7th PDBS ____ 8th PDBS ____

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☒No, this well is being profiled during this sampling round
☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☒No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 20°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28. Field Sampling Technician, Name(s) and Company (please print clearly)

Name	Company
Zahor Lary	Parsons
Nick Loizos	Parsons

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699RW11
4. Well Permit Number: 29-28031

5 Type of Well: ☐Monitoring ☒Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish. ☐Stick Up ☒Flush Mount

7 Location of Measuring Point ☐Top of Casing ☐Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head

Distance between measuring point and ground surface (ft.) 5.75"

9 Total Well Depth (fbgs) 17.10

10 Screened interval/open hole (fbgs) 5-20

11 Well Casing Diameter: 11" Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter) Diameter: NA Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot) Screen Slot Size 0.02

14. Date and Time of Deployment Date: 3/12/14 Time: 1142

15. Depth to Ground Water Depth to ground water at time of deployment 4.18

16. Date and Time of Retrieval Date: 3/31/14 Time: 1050

17. Depth to Ground Water Depth to ground water at time of retrieval 3.03

18. Type of Deployment Line Used Diameter: 3/16" Material: Poly

19. Material and Mass (oz.) of PDBS Weight Stainless Steel 20 oz (stainless steel recommended)

20 Type of PDBS Used ☐Lab Filled (Modified Trip Blank must be taken at time of deployment)

☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight

☒Attached to bottom of PDBS and suspended in well

☒Attached to bottom of deployment line and suspended in well

☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
8.03	13.08	—	—
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**
—	—	—	—

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?

☒No, this well is being profiled during this sampling round

☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?

☒No, flow testing has not been conducted in this well

☐Yes, flow testing of this well was conducted. Date of testing: _____

Type of flow meter used: _____

Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment Temp. 20°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28. Field Sampling Technician: Name(s) and Company (please print clearly)

Name	Company
Zohar Lavi	Parsons
Nick Lotos	Parsons

APPENDIX C

FTMM-68: FORMER DRY CLEANERS UST AT BUILDING 700

APPENDIX C:
FTMM-68 Former Dry Cleaners UST at Building 700

TABLE OF CONTENTS

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT C-1
2.0 GROUNDWATER SAMPLING..... C-1
3.0 GROUNDWATER RESULTS – FIRST QUARTER 2014 ..... C-1

LIST OF TABLES

Table No.	Title
1	Groundwater Gauging Data and Elevations (March 13, 2014)
2	PDB Sampling Summary
3	Groundwater Analytical Results First Quarter 2014

LIST OF FIGURES

Figure No.	Title
1	Layout of FTMM-68 (Former Dry Cleaners UST at Building 700)

LIST OF ATTACHMENTS

Attachment	Title
A	NJDEP PDB Checklists

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-68 were gauged on March 13, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. The depth to groundwater measured from the top of well casing in monitoring wells 565MW01 and 565MW01D was 6.45 and 7.24 feet, respectively. Well details, including the top of well casing elevation, could not be confirmed at the time of this report writing and therefore groundwater elevation could not be calculated. Groundwater is expected to flow towards the southeast based on groundwater elevations calculated in nearby monitoring wells at FTMM-53.

Additionally, monitoring wells were inspected for their physical condition during the groundwater gauging. FTMM-68 monitoring wells were found to be in good condition upon inspection.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from two monitoring wells located within FTMM-68 as part of the 2014 first quarter groundwater sampling event. The groundwater sampling program included measuring the depth to groundwater in all FTMM-68 monitoring wells prior to sampling and collection of groundwater samples using passive diffusion bags (PDBs) methodology as per the March 2013 Sampling and Analysis Plan (SAP) from two wells. PDBs were deployed in FTMM-68 monitoring wells on March 13, 2014 and samples were retrieved on March 31, 2014. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method SW8260C. A PDB sampling summary is provided in **Table 2**.

The samples were collected in accordance with the NJDEP Field Sampling Procedures Manual (FSPM) and the SAP. Field blanks, duplicates, matrix spike, matrix spike duplicate and QA split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed NJDEP PDB checklists for each well sampled can be found in **Attachment A**.

3.0 GROUNDWATER RESULTS – FIRST QUARTER 2014

Five chlorinated VOCs were detected in groundwater during this quarterly event. Groundwater analytical detections from samples collected during the 2014 first quarter groundwater sampling event are presented in **Table 3**. 1,1 DCE, Cis-1,2-DCE, PCE, TCE, and vinyl chloride were detected in exceedance of their respective NJDEP GWQS in FTMM-68 monitoring well 565MW01. Additionally, Cis-1,2-DCE, PCE, TCE and vinyl chloride were detected in 565MW01D exceeding their respective NJDEP GWQS.

TABLES

Table 1 Groundwater Gauging Data and Elevations (March 13, 2014)

Table 2 PDB Sampling Summary

Table 3 Groundwater Analytical Results – First Quarter 2014

Table 1
Groundwater Gauging Data and Elevations (March 13, 2014)
FTMM-68 Former UST at Dry Cleaners at Building 700
Fort Monmouth, New Jersey

Site/Well ID	Intallation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft TOC)	Gauged Depth to Bottom (ft TOC)	Calculated Groundwater Elevation
565MW01	8/16/2011	-	-	-	15	5	10	-	1004	0	6.45	17.2	-
565MW01D	8/16/2011	-	-	-	23	18	5	-	1010	0	7.24	25.45	-

Notes:
1) The synoptic round of water levels in the wells was collected on March 13, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) DTW = depth to water (measured from the top of well casing)
4) DTB = depth to bottom of well (measured from the top of well casing)
5) TOC = Top of Casing
6) ft. AMSL = feet above means sea level
7) - information not availible
6) ft. AMSL = feet above mean sea level

Table 2
PDB Sampling Summary
FTMM-68 Former UST at Dry Cleaners at Building 700
Fort Monmouth, New Jersey

Site	Depth (ft)	Screen Length (ft)	Screen Interval (ft)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft) TOC	Gauged DTB (ft) TOC	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Interval 1 (ft. below TOC)	PDB Interval 2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
565MW01	15.00	10.00	5-15	N/A	3/13/14	1004	0	6.45	17.2	N/A	8.55	11.99	N/R	3/13/2014	1004	3/31/2014	1220
565MW01D	23.00	5.00	18-23	N/A	3/13/14	1010	0	7.24	25.45	N/A	5.00	22.31	N/R	3/13/2014	1010	3/31/2014	1225

Notes:
Information on well permit number, X and Y coordinates, depth, screen length, and TOC elevation were provided by FTMM in a table in June 2013.
DTW = depth to water (measured from the top of well casing)
DTB = depth to bottom of well (measured from the top of well casing)
TOC= Top of Casing
ft. AMSL = feet above means sea level
LFPS = low flow purging and sampling
PDB = Passive Diffusion Bag
N/A = not available
N/R = not relevant

Table 3
Groundwater Analytical Results - First Quarter 2014
FTMM-68 - Former Dry Cleaners UST at Building 700
Fort Monmouth, New Jersey

	SAMPLE ID:		STANDARDS VALUES		FTMM-68-GW-565MW01-11.99		FTMM-68-GW-565MW01D-22.31		FTMM-68-GW-565MW101D-22.31*	
	DATE SAMPLED:		NJDEP GWQS[1]	USEPA Drinking Water MCL[2]	31-Mar-2014		31-Mar-2014		31-Mar-2014	
	LAB SAMPLE ID:				R1402225-016		R1402225-010		R1402225-017	
	SAMPLE METHOD:				PDB		PDB		PDB	
	SAMPLE DEPTH (ft bgs):				11.99		22.31		22.31	
	CAS No.	Unit								
Volatile Organics - SW8260C										
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	1	NLE	2.5	U	1.0	U	10	U
1,1,1-Trichloroethane	71-55-6	µg/L	30	200	2.5	U	1.0	U	10	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	NLE	2.5	U	1.0	U	10	U
1,1,2-Trichloroethane	79-00-5	µg/L	3	5	2.5	U	1.0	U	10	U
1,1-Dichloroethane	75-34-3	µg/L	50	NLE	2.5	U	1.0	U	10	U
1,1-Dichloroethene	75-35-4	µg/L	1	7	**2.0**	J	**0.67**	J	10	U
1,1-Dichloropropene	563-58-6	µg/L	5 [3]	NLE	2.5	U	1.0	U	10	U
1,2,3-Trichlorobenzene	87-61-6	µg/L	5 [3]	NLE	2.5	U	1.0	U	10	U
1,2,3-Trichloropropane	96-18-4	µg/L	0.03	NLE	2.5	U	1.0	U	10	U
1,2,4-Trichlorobenzene	120-82-1	µg/L	9	70	2.5	U	1.0	U	10	U
1,2,4-Trimethylbenzene	95-63-6	µg/L	100 [3]	NLE	**0.83**	J	1.0	U	**4.6**	J
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.02	0.2	2.5	U	1.0	U	10	U
1,2-Dibromoethane (EDB)	106-93-4	µg/L	0.03	NLE	2.5	U	1.0	U	10	U
1,2-Dichlorobenzene	95-50-1	µg/L	600	NLE	2.5	U	1.0	U	10	U
1,2-Dichloroethane	107-06-2	µg/L	2	NLE	2.5	U	1.0	U	10	U
1,2-Dichloropropane	78-87-5	µg/L	1	NLE	2.5	U	1.0	U	10	U
1,3,5-Trimethylbenzene	108-67-8	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
1,3-Dichlorobenzene	541-73-1	µg/L	600	NLE	2.5	U	1.0	U	10	U
1,3-Dichloropropane	142-28-9	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
1,4-Dichlorobenzene	106-46-7	µg/L	75	NLE	2.5	U	1.0	U	10	U
2,2-Dichloropropane	594-20-7	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
2-Butanone (MEK)	78-93-3	µg/L	300	NLE	2.5	U	1.0	U	10	U
2-Chlorotoluene	95-49-8	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
2-Hexanone	591-78-6	µg/L	300 [4]	NLE	13	U	5.0	U	50	U
4-Chlorotoluene	106-43-4	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
Acetone	67-64-1	µg/L	6,000	NLE	13	U	**1.5**	J	50	U
Benzene	71-43-2	µg/L	1	5	2.5	U	1.0	U	10	U
Bromobenzene	108-86-1	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
Bromochloromethane	74-97-5	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
Bromodichloromethane	75-27-4	µg/L	1	NLE	2.5	U	1.0	U	10	U
Bromoform	75-25-2	µg/L	4	NLE	2.5	U	1.0	U	10	U
Bromomethane	74-83-9	µg/L	10	NLE	2.5	U	**0.33**	BJ	10	U
Carbon tetrachloride	56-23-5	µg/L	1	NLE	2.5	U	1.0	U	10	U
Chlorobenzene	108-90-7	µg/L	50	100	2.5	U	1.0	U	10	U
Chloroethane	75-00-3	µg/L	5 [3]	NLE	2.5	U	1.0	U	10	U
Chloroform	67-66-3	µg/L	70	NLE	**0.85**	BJ	1.0	U	**2.7**	BJ
Chloromethane	74-87-3	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
cis-1,2-Dichloroethene	156-59-2	µg/L	70	70	**270**		**140**		**120**	
cis-1,3-Dichloropropene	10061-01-5	µg/L	5 [3]	NLE	2.5	U	1.0	U	10	U
Dibromochloromethane	124-48-1	µg/L	1	NLE	2.5	U	1.0	U	10	U
Dichlorodifluoromethane (Freon 12)	75-71-8	µg/L	1,000	NLE	2.5	U	1.0	U	10	U
Ethylbenzene	100-41-4	µg/L	700	700	2.5	U	1.0	U	10	U
Hexachlorobutadiene	87-68-3	µg/L	1	NLE	2.5	U	1.0	U	10	U
Isopropylbenzene	98-82-8	µg/L	700	NLE	2.5	U	1.0	U	10	U
Methylene chloride	75-09-2	µg/L	3	NLE	2.5	U	1.0	U	10	U
Methyl-tert-butyl ether (MTBE)	1634-04-4	µg/L	70	NLE	2.5	U	1.0	U	10	U
Naphthalene	91-20-3	µg/L	300	NLE	**4.8**	J	1.0	U	**12**	J
n-Butylbenzene	104-51-8	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
n-Propylbenzene	103-65-1	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
p-Isopropyltoluene	99-87-6	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
sec-Butylbenzene	135-98-8	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
Styrene	100-42-5	µg/L	100	100	2.5	U	1.0	U	10	U
tert-Butylbenzene	98-06-6	µg/L	100 [3]	NLE	2.5	U	1.0	U	10	U
Tetrachloroethene (PCE)	127-18-4	µg/L	1	5	**440**		**1,500**		**1,500**	
Toluene	108-88-3	µg/L	600	1,000	2.5	U	1.0	U	10	U
trans-1,2-Dichloroethene	156-60-5	µg/L	100	100	**1.9**	J	**1.4**	J	10	U
trans-1,3-Dichloropropene	10061-02-6	µg/L	5 [3]	NLE	2.5	U	1.0	U	10	U
Trichloroethene (TCE)	79-01-6	µg/L	1	5	**230**		**110**		**96**	
Trichlorofluoromethane (Freon 11)	75-69-4	µg/L	2,000	NLE	2.5	U	1.0	U	10	U
Vinyl chloride	75-01-4	µg/L	1	200	**18**		**6.1**		**5.5**	J
Xylene (Total)	1330-20-7	µg/L	1,000	10,000	**0.58**	J	3.0	U	30	U

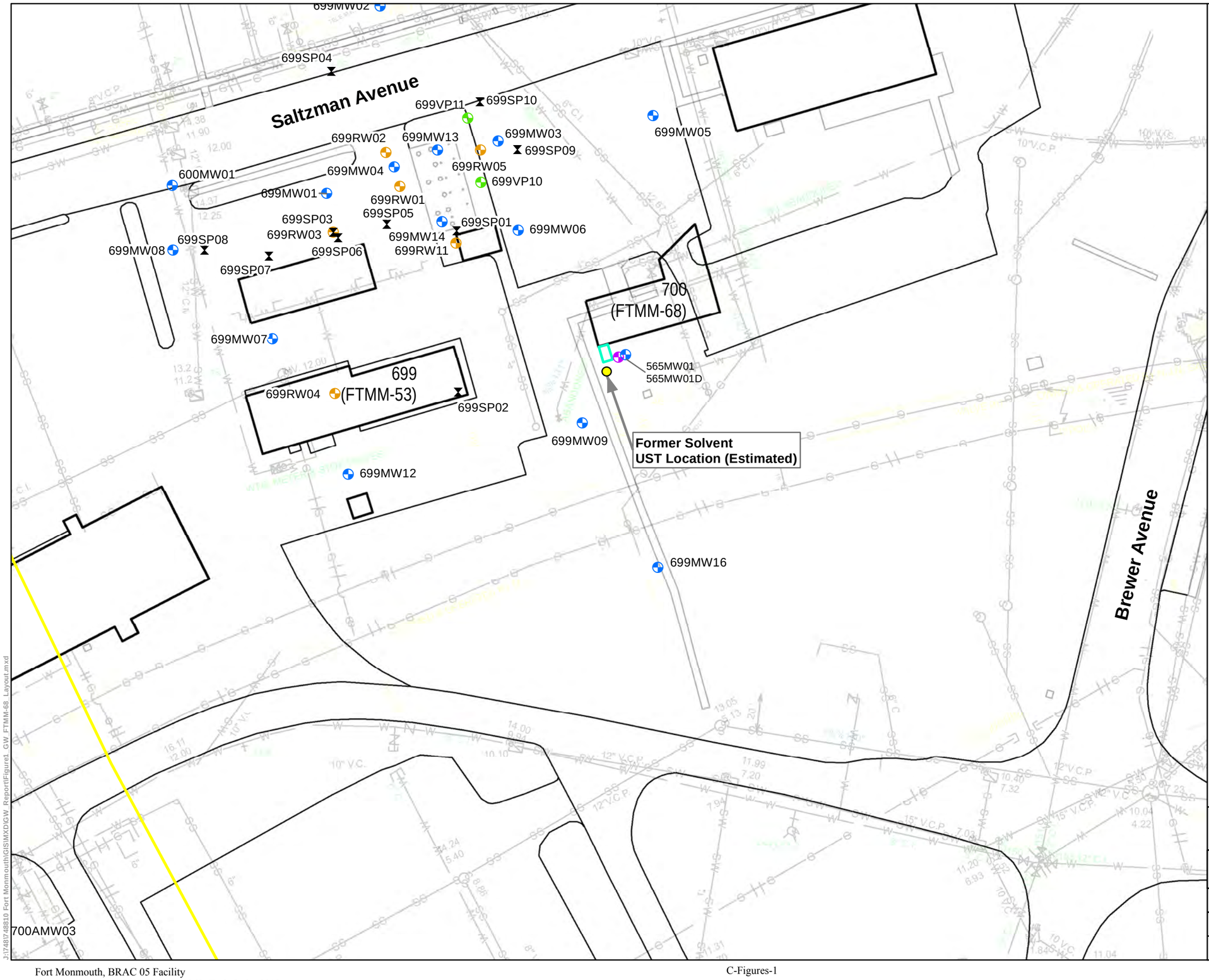
QA NOTES AND DATA QUALIFIERS:

(NO CODE) - Confirmed identification.
U - Analyte was not detected above the indicated limit of detection (LOD).
J - Analyte detected, estimated concentration.
BJ - Analyte detected, estimated concentration. Analyte also found in an associated blank at concentration above one half the LOQ.
* - Field duplicate of sample on left.
Detections are bolded.
Detections above the NJDEP GWQS are highlighted.
For Detections above the USEPA MCL, the cell border is bolded.
- Not available
LFPS - low flow purge and sample
PDB - passive diffusion bag

NOTES:
[1] New Jersey Department of Environmental Protection Ground Water Quality Standards Specific Ground Water Quality Criteria - Class IIA and Practical Quantitation Levels. (http://www.state.nj.us/dep/wms/bwqsa/Appendix_Table_1.htm).
[2] USEPA 2012 Edition of the Drinking Water Standards and Health Advisories, Spring 2012. (http://water.epa.gov/action/advisories/drinking/upload/dwstandards2012.pdf).
[3] Interim generic groundwater quality criteria.
[4] Interim specific groundwater quality criteria.

FIGURES

Figure 1 Layout of FTMM-68 Former Dry Cleaners UST at Building 700



J:\748\748810 Fort Monmouth\GIS\MXD\GW_Report\Figure1_GW_FTMM-68_Layout.mxd

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
Layout of FTMM-68 Former Dry Cleaners UST at Building 700	
CREATED BY: TS	REVIEWED BY: ME
DATE: May 2014	FIGURE NUMBER: Figure 1
PROJECT NUMBER: 748810.03000	FILE: Figure1_GW_FTMM-68_Layout.mxd

ATTACHMENTS

Attachment A NJDEP PDB Checklists

ATTACHMENT A
NJDEP PDB CHECKLISTS

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-68
3. Well Designation: S65MW01
4. Well Permit Number:

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☒Stick Up ☐Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify)

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) +1.79

9 Total Well Depth (fbgs): 17.1

10 Screened interval/open hole (fbgs): 6.79-16.79

11 Well Casing: Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 3/13/14 Time: 1004

15. Depth to Ground Water: Depth to ground water at time of deployment 6.45

16. Date and Time of Retrieval: Date: 3/31/13 Time: 1220

17. Depth to Ground Water: Depth to ground water at time of retrieval 4.16

18. Type of Deployment Line Used: Diameter: 3/16" Material: Poly

19 Material and Mass (oz.) of PDBS Weight: Stainless Steel 20 oz

20 Type of PDBS Used: ☐Lab Filled (Modified Trip Blank must be taken at time of deployment) (stainless steel recommended)

☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled ✓

22 Position of PDBS Weight:

☒Attached to bottom of PDBS and suspended in well

☐Attached to bottom of deployment line and suspended in well

☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS):

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
11.99			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?

☐No, this well is being profiled during this sampling round

☒Yes, this well was profiled already. Date when well was profiled: 8/29/13

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?

☒No, flow testing has not been conducted in this well

☐Yes, flow testing of this well was conducted. Date of testing:

Type of flow meter used:

Measurements taken every feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 21°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician: Name(s) and Company (please print clearly)

Name	Company
Zohar Levy	Parsons
Nick Lizos	Parsons

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-68
3. Well Designation: S65MW01D
4. Well Permit Number:

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☒Stick Up ☐Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify)

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.): 1.81

9 Total Well Depth (fbgs): 25.35

10 Screened interval/open hole (fbgs): 19.81-24.81

11 Well Casing: Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14 Date and Time of Deployment: Date: 3/13/14 Time: 1010

15 Depth to Ground Water: Depth to ground water at time of deployment 7.24

16 Date and Time of Retrieval: Date: 3/21/14 Time: 1225

17 Depth to Ground Water: Depth to ground water at time of retrieval 5.98

18 Type of Deployment Line Used: Diameter: 3/16" Material: Poly

19 Material and Mass (oz.) of PDBS Weight: Stainless Steel 200Z (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled

22 Position of PDBS Weight:
☒Attached to bottom of PDBS and suspended in well
☒Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS):

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
22.31			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☒Yes, this well was profiled already. Date when well was profiled: 8/29/13

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☒No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing:
Type of flow meter used:
Measurements taken every feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 20°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 ☒Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Zohar Lavy	Parsons
Nick Lozos	Parsons

APPENDIX D

DATA VALIDATION AND DATA VERIFICATION SUMMARY REPORTS

DATA VALIDATION SUMMARY REPORT

for samples collected from

FORT MONMOUTH

OCEANPORT, NEW JERSEY

Data Validation by: Sandra de las Fuentes

Date: April 25, 2014

Parsons - Austin

INTRODUCTION

The following data validation summary report covers water samples and the associated field quality control (QC) samples collected from Fort Monmouth in Oceanport, New Jersey on January 24, 2014. Samples were logged in under the following Sample Delivery Group (SDG):

R1400634

The samples in this SDG were analyzed for volatile organic compounds (VOCs) plus tentatively identified compounds (TICs). The field QC samples collected in included a field duplicate (FD) sample and a matrix spike/matrix spike duplicate (MS/MSD) pair. The following table details the samples included in these SDGs and the associated parameters.

All samples were collected by Parsons and shipped to ALS Environmental in Rochester, New York. There was one cooler shipped and was received by the laboratory at a temperature of 2.6°C, which was within the 2-6°C range recommended by the project-specific UFP-QAPP.

The laboratory is DOD ELAP and NELAP certified. All samples were prepared and analyzed following the procedures outlined in the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2, and the procedures outlined in the Standard Subcontract and the project-specific Uniform Federal Policy for Quality Assurance Project Plan (UFP-QAPP).

SAMPLE IDs AND REQUESTED PARAMETERS

Sample ID	SDG	Matrix	VOCs, plus TICS	Comments
FTMM-22-GW-CW1MW31-13	R1400634	W	X	MS/MSD
FTMM-22-GW-CW1MW131-13	R1400634	W	X	FD of FTMM-22-GW-CW1MW31-13
FTMM-22-GW-CW1MW31-18.7	R1400634	W	X	
FTMM-22-GW-CW1MW27-11.9	R1400634	W	X	

W = Water

Note: A trip blank (FTMM-22-TB1; collected 1/24/14) and an equipment blank (FTMM-22-EB2-GW) were associates with the samples above and reported in another SDG (R1400611) associated with the remedial investigation sampling event. The TB was non-detect for all analytes. Although there were detections noted in the EB, none of these analytes were detected in the associate samples above; therefore no qualifiers were required.

EXTRACTION AND ANALYTICAL METHODS:

PARAMETER	MATRIX	EXTRACTION METHOD	ANALYTICAL METHOD	UNITS	DRY WT. VS. WET WT
VOCs	W	5030	8260C	µg/L	NA

EVALUATION CRITERIA

The data submitted by the laboratory has been validated following the guidelines outlined in the project-specific UFP-QAPP. A "Level IV" validation was performed and the information reviewed in the data packages included sample results; field and laboratory quality control results; calibrations; case narratives; raw data; cooler receipt forms; and chain-of-custody (COC) forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the UFP-QAPP were met.

The precision criterion for the relative percent difference (RPD) of the field duplicate samples is RPD $\leq$ 40 for water, as per the project-specific UFP-QAPP.

VOLATILE ORGANIC COMPOUNDS

General

The VOC portion of this SDG consisted of four water samples, including one field duplicate sample. The samples were collected on January 24, 2014 and were analyzed for the full list of VOCs plus TICs as specified in the project-specific UFP-QAPP.

The VOCs analyses were performed according to USEPA SW846 Method 8260C. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

There were no TICs detected in any of the samples in this SDG.

The samples for VOCs were analyzed in two batches (#378753 and #378884) under a single ICAL. It should be noted that only the project MS and MSD were included in batch #378884. All analyses were performed undiluted.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS, the MS/MSD samples, and the surrogate spikes.

Both LCSs were analyzed for VOCs, one for each batch. All LCS recoveries were within acceptance criteria.

The MS/MSD and surrogate spikes were within acceptance criteria.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentrations. Precision was further evaluated by comparing the field duplicate analyte results.

All MS/MSD RPDs were within acceptance criteria.

All target VOCs were non-detect above the Limit of Quantitation (LOQ) in both the parent and field duplicate samples in all pairs, except as follows:

Parent	SDG	Analyte	Parent (µg/kg)	FD (µg/kg)	RPD	Criteria
FTMM-22-GW-CW1MW31-13	R1400634	Trichloroethene	5.1	5.2	1.9	RPD ≤ 40

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and

- Examining the laboratory blank for cross contamination of samples during sample analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All SSV criteria were met.
- GC/MS tuning criteria for BFB were within QC criteria for all batches.
- All CCV criteria were met.
- All internal standard (IS) criteria were met.
- All manual integrations performed by the laboratory were reviewed and verified.
- The MDLs were compliant with the requirements of the DOD QSM Version 4.2.

Two method blanks were analyzed for VOCs. Both method blanks had detections less than one-half the LOQs, as required by the project-specific UFP-QAPP, therefore no corrective action was required. Both of the associated method blanks contained low concentrations (less than 1.0 µg/L) of 1,2,4-trichlorobenzene, hexachlorobutadiene, and naphthalene and one method blank also contained a low concentration of bromomethane. All of these listed analytes had reported LOQs of 5.0 µg/L. At the time of sample analyses, ALS did not consider any of these analytes as common laboratory contaminants.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All VOC results for the samples in this SDG were considered usable. The completeness for the VOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

COMPARABILITY

All data was generated using contract-specific standard methods and reported with known data quality, type of analysis, units, etc.

DATA USABILITY

The purpose of this data validation report is to ensure the integrity and reliability of analytical laboratory data. The data quality is evaluated based on precision, accuracy, representativeness, comparability, and completeness (PARCC) characteristics of the data. The validated data indicated that the laboratory correctly performed the analyses. Based on the data quality assessment, none of the data were qualified as rejected.

All data in this SDG are considered usable for the purposes of this project. All sample LODs and LOQs met the requirements listed in the project QAPP. All Method Quality Objectives have been met.

DATA VERIFICATION SUMMARY REPORT

for samples collected from

FORT MONMOUTH

OCEANPORT, NEW JERSEY

Data Verification by: Sandra de las Fuentes

Date: April 25, 2014

Parsons - Austin

INTRODUCTION

The following data verification summary report covers water samples and the associated field quality control (QC) samples collected from Fort Monmouth in Oceanport, New Jersey over a two week period from March 12 and March 31, 2014. Samples were logged in under the following Sample Delivery Groups (SDGs):

R1401764 and R1402225

This verification report covers all of the analyses in the SDGs listed above. A separate validation report was completed for all analyses in R14000634.

The samples in these SDGs were analyzed for volatile organic compounds (VOCs) plus tentatively identified compounds (TICs). The table below lists all QC samples, including parent and field duplicate (FD) pairs, matrix spike/matrix spike duplicate (MS/MSD) pairs, equipment blanks, trip blanks and the source blank.

All samples were collected by Parsons and shipped to ALS Environmental in Rochester, New York in two coolers. All coolers were received by the laboratory at temperatures of 4.8°C and 2.4°C, which were within the 2-6°C range recommended by the project-specific UFP-QAPP.

The laboratory is DOD ELAP and NELAP certified. All samples were prepared and analyzed following the procedures outlined in the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2, and the procedures outlined in the Standard Subcontract and the project-specific Uniform Federal Policy for Quality Assurance Project Plan (UFP-QAPP).

QC IDENTIFICATION TABLE:

Sample ID	SDG	Matrix	VOCs, plus TICS	Comments
FTMM-53-GW-699R03-11.4	R1401764	W	X	
FTMM-53-GW-699MW01-10.55	R1401764	W	X	MS/MSD
FTMM-53-GW-699MW101-10.5	R1401764	W	X	FD of FTMM-53-GW-699MW01-10.55
FTMM-53-GW-699-MW09-8	R1401764	W	X	
FTMM-53-GW-699MW16-8.5	R1401764	W	X	
FTMM-53-GW-699MW06-10	R1401764	W	X	
FTMM-53-GW-699RW05-8.6	R1401764	W	X	
FTMM-TB031214	R1401764	W	X	Trip Blank for 031214
FTMM-EB031214	R1401764	W	X	Equipment Blank 031214
FTMM-53-GW-699RW11-11.1	R1401764	W	X	
FTMM-53-GW-699MW04-10.3	R1401764	W	X	
FTMM-DI-03312014	R1402225	W	X	DI water
FTMM-53-EB-03312014	R1402225	W	X	Equipment Blank 033114
FTMM-TB-03312014	R1402225	W	X	Trip Blank 033104
FTMM-53-GW-699MW09-7.70	R1402225	W	X	
FTMM-53-GW-699MW16-11.5	R1402225	W	X	
FTMM-53-GW-699RW05-4.8	R1402225	W	X	
FTMM-53-GW-699MW06-10.20	R1402225	W	X	MS/MSD
FTMM-53-GW-699MW16-6.5	R1402225	W	X	
FTMM-53-GW-699MW04-6.85	R1402225	W	X	
FTMM-68-GW-565MW01D-22.31	R1402225	W	X	
FTMM-53-GW-699MW01-12.5	R1402225	W	X	
FTMM-53-GW-699RW03-14.59	R1402225	W	X	
FTMM-53-GW-699MW01-7.5	R1402225	W	X	
FTMM-53-GW-699MW04-13.85	R1402225	W	X	
FTMM-53-GW-699RW05-9.80	R1402225	W	X	
FTMM-68-GW-565MW01-11.99	R1402225	W	X	
FTMM-68-GW-565MW101D-22.31	R1402225	W	X	FD of FTMM-68-GW-565MW01D-22.31
FTMM-53-GW-699RW11-8.03	R1402225	W	X	
FTMM-53-GW-699RW11-14.08	R1402225	W	X	
FTMM-53-GW-699RW03-8.20	R1402225	W	X	

W = Water

EXTRACTION AND ANALYTICAL METHODS:

PARAMETER	MATRIX	EXTRACTION METHOD	ANALYTICAL METHOD	UNITS	DRY WT. VS. WET WT
VOCs	W	5030	8260C	µg/L	NA

EVALUATION CRITERIA

The data submitted by the laboratory has been verified following the guidelines outlined in the project-specific UFP-QAPP. A verification was performed and the information reviewed in the data packages included sample results; field and laboratory quality control results; case narratives; cooler receipt forms; and chain-of-custody (COC) forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the UFP-QAPP were met.

This verification report discusses only the non-compliant QC issues that required qualifying the data. All other QC not detailed in this report was either compliant or did not require flagging (i.e. high biased QC associated with non-detected results).

The precision criterion for the relative percent difference (RPD) of the field duplicate samples is RPD $\leq$ 40 for water, as per the project-specific UFP-QAPP.

VOLATILE ORGANIC COMPOUNDS

General

The VOCs analyses were performed according to USEPA SW846 Method 8260C. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

All analyses were performed undiluted, except as follows:

FTMM-53-GW-699RW03-11.4 at 2x for trichloroethene only;

FTMM-68-GW-565MW01D-22.31 at 10x trichloroethene only;

FTMM-68-GW-565MW101D-22.31 at 10x for all VOCs;

FTMM-68-GW-565MW01-11.99 at 2.5x for all VOCs;

FTMM-53-GW-699RW05-4.8 at 2x for all VOCs;

FTMM-53-GW-699RW05-9.80 at 2.5x for all VOCs.

There were TICs detected in several of the samples in both of these SDGs.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCSs, the MS/MSD samples, and the surrogate spikes.

All LCS recoveries were within acceptance criteria, except as follows:

LCS ID	SDG	Analyte	%R	Criteria
RQ1402375-03	R1401764	1,2,3-Trichlorobenzene	129	75-125

The non-compliant LCS analyte did not require flagging since there were no associated samples with detections and the recovery was only slightly high (less than 5%).

The MS/MSD recoveries were within acceptance criteria, except for the following:

Parent Sample	SDG	Analyte	MS %R	MSD %R	Criteria
FTMM-53-GW-699MW01-10.5	R1401764	1,3,5-Trimethylbenzene	74	72	75-130
		2,2-Dichloropropane	65	67	70-135

The non-compliant analytes were flagged "UJ" as estimated in the parent sample due to the possible low bias demonstrated by the MS/MSD pair.

All surrogate spike recoveries were within acceptance criteria for VOCs.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentrations. Precision was further evaluated by comparing the field duplicate analyte results.

All MS/MSD RPDs were within acceptance criteria.

All target VOCs were non-detect above the Limit of Quantitation (LOQ) in both the parent and field duplicate sample, except as follows:

Parent	SDG	Analyte	Parent (µg/L)	FD (µg/L)	RPD	Criteria
FTMM-68-GW-565MW01D-22.31	R1402225	Tetrachloroethene	1500	1500	0	
		Trichloroethene	97	96	1	RPD ≤ 40
		Cis-1,2-Dichloroethene	120	120	0	

It should be noted that both parent and FD samples were diluted at 10x and shown above for comparison (precision) purposes only. The final data used the parent sample results for all analytes from the undiluted analyses and only used the tetrachloroethene result from the 10x dilution. The field duplicate was only analyzed at a 10x dilution.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and
- Examining the laboratory blank for cross contamination of samples during sample analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All SSV criteria were met.
- GC/MS tuning criteria for BFB were within QC criteria for all batches.
- All CCV criteria were met, with the following exceptions:

Inst #, CCV Date	SDG	Analyte	%R	Criteria
R-MS-12, 3/19/14 12:39	R1401764	2-Hexanone	120.8	80-120%

No qualifiers were required since there were no detections for 2-hexanone in the associated samples.

- All internal standard (IS) criteria were met.
- All manual integrations performed by the laboratory were reviewed and verified.
- The MDLs were compliant with the requirements of the DOD QSM Version 4.2.

There were method blanks, trip blanks, equipment blanks and a DI water blank analyzed for VOCs. See below for details.

Method Blanks:

All of the associated method blanks contained low concentrations (less than 1.1 µg/L) of one or more of the following analytes: 1,2,4-trichlorobenzene, hexachlorobutadiene, bromomethane, and naphthalene. All of these analytes had reported LOQs of 5.0 µg/L. Since the contamination noted above was less than one-half the LOQ, as required by the project-specific QAPP, no corrective action was required. At the time of sample analyses, ALS did not consider any of these analytes as common laboratory contaminants. Trip Blanks:

There were no detections above the MDL in FTMM-TB03312014. FTMM-TB0312014 had detections as follows:

TB ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
FTMM-TB031214	1,2,4-Trichlorobenzene	0.28J	5.0
	Hexachlorobutadiene	0.68J	5.0
	Naphthalene	0.21J	5.0

The only associated samples (collected on the same day as the TB) that required flagging due to having analyte concentrations less than 10x the contamination of the TB were as follows:

FTMM-53-GW-699MW09-8 for Naphthalene
FTMM-53-GW-699MW06-10 for Naphthalene
FTMM-53-GW-699RW11-11.1 for Naphthalene

These naphthalene results were “B” flagged in the parent samples.

Equipment Blanks:

There were no detections above the MDL in FTMM-EB031214. FTMM-EB0312014 had detections as follows:

TB ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
FTMM-EB03312014	Bromomethane	0.40J	5.0

The only associated samples (collected on the same day as the EB) that required flagging due to having analyte concentrations less than 10x the contamination of the EB were as follows:

FTMM-53-GW-699MW09-7.70
FTMM-53-GW-699MW16-11.5
FTMM-53-GW-699MW06-10.20
FTMM-53-GW-699MW04-6.85
FTMM-68-GW-565MW01D-22.31
FTMM-53-GW-699MW01-12.5
FTMM-53-GW-699MW04-13.85
FTMM-53-GW-699RW05-9.80
FTMM-53-GW-699RW11-8.03
FTMM-53-GW-699RW11-14.08
FTMM-53-GW-699RW03-8.20

These bromomethane results were "B" flagged in the parent samples.

DI Water Blank:

The DI water blank, FTMM-DI-03312014 (SDG R1402225) was non-detect for all target analytes, except for the following:

Blank ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
FTMM-DI-03312014	Chlorobenzene	0.30J	5.0
	Chloroform	2.8J	5.0
	Toluene	0.72J	5.0

The only associated samples (collected on the same day as the DI water) that required flagging due to having analyte concentrations less than 10x the contamination of the DI water were as follows:

FTMM-53-GW-699MW09-7.70 for chloroform
FTMM-53-GW-699MW16-11.5 for chloroform
FTMM-53-GW-699RW05-4.8 for toluene
FTMM-53-GW-699RW03-14.59 for toluene
FTMM-68-GW-565MW101D-22.31 for chloroform
FTMM-68-GW-565MW01-11.9 for chloroform
FTMM-53-GW-699RW11-8.03 for toluene
FTMM-53-GW-699RW11-14.08 for toluene
FTMM-53-GW-699RW03-8.20 for toluene

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All VOC results for the samples in this SDG were considered usable. The completeness for the VOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

COMPARABILITY

All data was generated using contract-specific standard methods and reported with known data quality, type of analysis, units, etc.

DATA USABILITY

The purpose of this data validation report is to ensure the integrity and reliability of analytical laboratory data. The data quality is evaluated based on precision, accuracy, representativeness, comparability, and completeness (PARCC) characteristics of the data. The validated data indicated that the laboratory correctly performed the analyses. Based on the data quality assessment, none of the data were qualified as rejected.

All data in this SDG are considered usable for the purposes of this project. All sample LODs and LOQs met the requirements listed in the project QAPP. All Method Quality Objectives have been met.

APPENDIX E

LABORATORY ANALYTICAL RESULTS

(Appendix E is included separately on the CD of this Report)

New Jersey ACCUTEST LABORATORIES

02/05/14

Technical Report for

Parsons Engineering Science

Fort Monmouth, Oceanport, Monmouth County, NJ

W912DY-09-D-0062 TSK 0012 PROJ NO. 36985 Project#748810-02090

Accutest Job Number: JB58468

Sampling Date: 01/24/14

Report to:

Parsons Engineering Science

sandra.delasfuentes@parsons.com

ATTN: Sandra de las Fuentes

Total number of pages in report: **785**

NELAP ACCREDITED TNI LABORATORY

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: Matt Cordova 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: JB58468-1: FTMM-22-SS-SB3-6.5-7-QA 7
4.2: JB58468-2: FTMM-22-GW-CW1MW31-13.5-QA 10
4.3: JB58468-3: FTMM-22-TB2 13
Section 5: Misc. Forms 16
5.1: Chain of Custody 17
5.2: Sample Tracking Chronicle 20
5.3: Internal Chain of Custody 21
Section 6: GC/MS Volatiles - QC Data Summaries 22
6.1: Method Blank Summary 23
6.2: Blank Spike Summary 29
6.3: Matrix Spike Summary 34
6.4: Matrix Spike/Matrix Spike Duplicate Summary 37
6.5: Duplicate Summary 39
6.6: Instrument Performance Checks (BFB) 41
6.7: Internal Standard Area Summaries 45
6.8: Surrogate Recovery Summaries 47
6.9: Initial and Continuing Calibration Summaries 49
Section 7: GC/MS Volatiles - Raw Data 71
7.1: Samples 72
7.2: Method Blanks 91
7.3: Blank Spikes 103
7.4: Matrix Spike/Matrix Spike Duplicates 111
7.5: Duplicates 123
7.6: Instrument Performance Checks (BFB) 125
7.7: Initial and Continuing Calibarations 133
7.8: Instrument Run Logs 776
Section 8: General Chemistry - QC Data Summaries 782
8.1: Percent Solids Raw Data Summary 783
Section 9: Misc. Raw Data 784
9.1: VOA Soil Prep Log 785

Accutest LabLink@777833 15:35 05-Feb-2014

Sample Summary

Parsons Engineering Science

Job No: JB58468

Fort Monmouth, Oceanport, Monmouth County, NJ
Project No: W912DY-09-D-0062 TSK 0012 PROJ NO. 36985 Project#748810-02090

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB58468-1	01/24/14	08:45	CW	01/24/14	SO	Soil	FTMM-22-SS-SB3-6.5-7-QA
JB58468-2	01/24/14	11:20	CW	01/24/14	AQ	Ground Water	FTMM-22-GW-CW1MW31-13.5-QA
JB58468-3	01/24/14	11:20	CW	01/24/14	AQ	Trip Blank Water	FTMM-22-TB2

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

2

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Parsons Engineering Science **Job No** JB58468

Site: Fort Monmouth, Oceanport,Monmouth County,NJ **Report Date** 2/5/2014 2:15:47 PM

On 01/24/2014, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 3 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB58468 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: AQ **Batch ID:** V3D4110

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB58428-6MS, JB58428-6MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Dichlorodifluoromethane are outside control limits.
- V3D4110-BS for Dichlorodifluoromethane: High percent recoveries and no associated positive found in the QC batch.

Matrix: SO **Batch ID:** VY6198

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB58847-9DUP, JB58885-1MS were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Trichloroethene are outside control limits. Outside control limits due to matrix interference.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN98567

- 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

Wednesday, February 05, 2014 **Page 1 of 1**

Summary of Hits

Job Number: JB58468
Account: Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Collected: 01/24/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JB58468-1	**FTMM-22-SS-SB3-6.5-7-QA**					
Methylene chloride		0.0018 J	0.0038	0.0015	mg/kg	SW846 8260B
JB58468-2	**FTMM-22-GW-CW1MW31-13.5-QA**					
cis-1,2-Dichloroethene		2.4	1.0	0.50	ug/l	SW846 8260B
Trichloroethene		5.3	1.0	0.50	ug/l	SW846 8260B
JB58468-3	**FTMM-22-TB2**					
No hits reported in this sample.						

New Jersey ACCUTEST LABORATORIES

4

Sample Results

Report of Analysis

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID: FTMM-22-SS-SB3-6.5-7-QA
Lab Sample ID: JB58468-1
Matrix: SO - Soil
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 01/24/14
Date Received: 01/24/14
Percent Solids: 85.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y143031.D	1	01/31/14	PS	n/a	n/a	VY6198
Run #2							

	Initial Weight
Run #1	7.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	0.0038 U	0.0076	0.0038	mg/kg	
71-43-2	Benzene	0.00038 U	0.00076	0.00038	mg/kg	
108-86-1	Bromobenzene	0.00076 U	0.0038	0.00076	mg/kg	
74-97-5	Bromochloromethane	0.0015 U	0.0038	0.0015	mg/kg	
75-27-4	Bromodichloromethane	0.00076 U	0.0038	0.00076	mg/kg	
75-25-2	Bromoform	0.0015 U	0.0038	0.0015	mg/kg	
74-83-9	Bromomethane	0.0015 U	0.0038	0.0015	mg/kg	
78-93-3	2-Butanone (MEK)	0.0038 U	0.0076	0.0038	mg/kg	
104-51-8	n-Butylbenzene	0.00076 U	0.0038	0.00076	mg/kg	
135-98-8	sec-Butylbenzene	0.00038 U	0.0038	0.00038	mg/kg	
98-06-6	tert-Butylbenzene	0.00038 U	0.0038	0.00038	mg/kg	
56-23-5	Carbon tetrachloride	0.0015 U	0.0038	0.0015	mg/kg	
108-90-7	Chlorobenzene	0.00076 U	0.0038	0.00076	mg/kg	
75-00-3	Chloroethane	0.0015 U	0.0038	0.0015	mg/kg	
67-66-3	Chloroform	0.00038 U	0.0038	0.00038	mg/kg	
74-87-3	Chloromethane	0.0015 U	0.0038	0.0015	mg/kg	
95-49-8	o-Chlorotoluene	0.00076 U	0.0038	0.00076	mg/kg	
106-43-4	p-Chlorotoluene	0.00038 U	0.0038	0.00038	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0038 U	0.0076	0.0038	mg/kg	
124-48-1	Dibromochloromethane	0.00076 U	0.0038	0.00076	mg/kg	
106-93-4	1,2-Dibromoethane	0.00076 U	0.00076	0.00076	mg/kg	
95-50-1	1,2-Dichlorobenzene	0.00076 U	0.0038	0.00076	mg/kg	
541-73-1	1,3-Dichlorobenzene	0.00038 U	0.0038	0.00038	mg/kg	
106-46-7	1,4-Dichlorobenzene	0.00076 U	0.0038	0.00076	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0015 U	0.0038	0.0015	mg/kg	
75-34-3	1,1-Dichloroethane	0.00076 U	0.0038	0.00076	mg/kg	
107-06-2	1,2-Dichloroethane	0.00076 U	0.00076	0.00076	mg/kg	
75-35-4	1,1-Dichloroethene	0.00076 U	0.0038	0.00076	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0015 U	0.0038	0.0015	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.00076 U	0.0038	0.00076	mg/kg	
78-87-5	1,2-Dichloropropane	0.00076 U	0.0038	0.00076	mg/kg	
142-28-9	1,3-Dichloropropane	0.00076 U	0.0038	0.00076	mg/kg	

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID:	FTMM-22-SS-SB3-6.5-7-QA		
Lab Sample ID:	JB58468-1	**Date Sampled:**	01/24/14
Matrix:	SO - Soil	**Date Received:**	01/24/14
Method:	SW846 8260B	**Percent Solids:**	85.2
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.00076 U	0.0038	0.00076	mg/kg	
563-58-6	1,1-Dichloropropene	0.00076 U	0.0038	0.00076	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00076 U	0.0038	0.00076	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.0015 U	0.0038	0.0015	mg/kg	
100-41-4	Ethylbenzene	0.00038 U	0.00076	0.00038	mg/kg	
87-68-3	Hexachlorobutadiene	0.0015 U	0.0038	0.0015	mg/kg	
591-78-6	2-Hexanone	0.0015 U	0.0038	0.0015	mg/kg	
98-82-8	Isopropylbenzene	0.00038 U	0.0038	0.00038	mg/kg	
99-87-6	p-Isopropyltoluene	0.00076 U	0.0038	0.00076	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00038 U	0.00076	0.00038	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	0.0015 U	0.0038	0.0015	mg/kg	
75-09-2	Methylene chloride	0.0018	0.0038	0.0015	mg/kg	J
91-20-3	Naphthalene	0.0038 U	0.0038	0.0038	mg/kg	
103-65-1	n-Propylbenzene	0.00038 U	0.0038	0.00038	mg/kg	
100-42-5	Styrene	0.00076 U	0.0038	0.00076	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.00076 U	0.0038	0.00076	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.00076 U	0.0038	0.00076	mg/kg	
127-18-4	Tetrachloroethene	0.00076 U	0.0038	0.00076	mg/kg	
108-88-3	Toluene	0.00076 U	0.00076	0.00076	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.00076 U	0.0038	0.00076	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00076 U	0.0038	0.00076	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.00076 U	0.0038	0.00076	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0015 U	0.0038	0.0015	mg/kg	
79-01-6	Trichloroethene	0.00076 U	0.0038	0.00076	mg/kg	
75-69-4	Trichlorofluoromethane	0.00076 U	0.0038	0.00076	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0015 U	0.0038	0.0015	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.0015 U	0.0038	0.0015	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00076 U	0.0038	0.00076	mg/kg	
75-01-4	Vinyl chloride	0.0015 U	0.0038	0.0015	mg/kg	
	m,p-Xylene	0.00038 U	0.00076	0.00038	mg/kg	
95-47-6	o-Xylene	0.00038 U	0.00076	0.00038	mg/kg	
1330-20-7	Xylene (total)	0.00014 U	0.00076	0.00014 [a]	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		59-130%
17060-07-0	1,2-Dichloroethane-D4	94%		65-123%
2037-26-5	Toluene-D8	104%		80-124%
460-00-4	4-Bromofluorobenzene	99%		71-132%

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID:	FTMM-22-SS-SB3-6.5-7-QA		
Lab Sample ID:	JB58468-1	**Date Sampled:**	01/24/14
Matrix:	SO - Soil	**Date Received:**	01/24/14
Method:	SW846 8260B	**Percent Solids:**	85.2
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

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

(a) Value reported is laboratory DL (MDL).

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID: FTMM-22-GW-CW1MW31-13.5-QA
Lab Sample ID: JB58468-2
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 01/24/14
Date Received: 01/24/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D95412.D	1	01/28/14	NM	n/a	n/a	V3D4110
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-86-1	Bromobenzene	0.50 U	5.0	0.50	ug/l	
74-97-5	Bromochloromethane	1.0 U	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	4.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	1.0 U	1.0	1.0	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	1.0 U	1.0	1.0	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	1.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U	10	5.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.4	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	5.0	0.50	ug/l	

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID:	FTMM-22-GW-CW1MW31-13.5-QA		
Lab Sample ID:	JB58468-2	**Date Sampled:**	01/24/14
Matrix:	AQ - Ground Water	**Date Received:**	01/24/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	5.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	5.0	0.50	ug/l	
591-78-6	2-Hexanone	5.0 U	5.0	5.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	2.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	5.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U	5.0	5.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	5.0	0.50	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	5.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	1.0 U	1.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	5.3	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	5.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	2.0 U	5.0	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.19 U	1.0	0.19 [a]	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		79-117%
17060-07-0	1,2-Dichloroethane-D4	101%		72-123%
2037-26-5	Toluene-D8	98%		82-118%
460-00-4	4-Bromofluorobenzene	93%		75-118%

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID:	FTMM-22-GW-CW1MW31-13.5-QA		
Lab Sample ID:	JB58468-2	**Date Sampled:**	01/24/14
Matrix:	AQ - Ground Water	**Date Received:**	01/24/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

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

(a) Value reported is laboratory DL (MDL).

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID: FTMM-22-TB2
Lab Sample ID: JB58468-3
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 01/24/14
Date Received: 01/24/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D95413.D	1	01/28/14	NM	n/a	n/a	V3D4110
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-86-1	Bromobenzene	0.50 U	5.0	0.50	ug/l	
74-97-5	Bromochloromethane	1.0 U	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	4.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	1.0 U	1.0	1.0	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	1.0 U	1.0	1.0	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	1.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U	10	5.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	5.0	0.50	ug/l	

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID:	FTMM-22-TB2		
Lab Sample ID:	JB58468-3	**Date Sampled:**	01/24/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	5.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	5.0	0.50	ug/l	
591-78-6	2-Hexanone	5.0 U	5.0	5.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	2.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	5.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U	5.0	5.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	5.0	0.50	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	5.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	1.0 U	1.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	5.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	2.0 U	5.0	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.19 U	1.0	0.19 [a]	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		79-117%
17060-07-0	1,2-Dichloroethane-D4	102%		72-123%
2037-26-5	Toluene-D8	98%		82-118%
460-00-4	4-Bromofluorobenzene	94%		75-118%

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

Accutest LabLink@777833 15:35 05-Feb-2014

Report of Analysis

Client Sample ID:	FTMM-22-TB2		
Lab Sample ID:	JB58468-3	**Date Sampled:**	01/24/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

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

(a) Value reported is laboratory DL (MDL).

U = Not detected LOD - Limit of Detection
LOQ = Limit of Quantitation
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

New Jersey ACCUTEST LABORATORIES

5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

ACCUTEST LABORATORIES

SLL
GW
WTB

CHAIN OF CUSTODY

PAGE 1 OF 1 2

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

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # JB58468

Client / Reporting Information

Company Name: PARSONS
Street Address: 200 COTTONTAIL LN.
City: SOMERSET State: NJ Zip: 08873
Project Contact: SANDRA.DELAFUENTE@PARSONS.COM E-mail:
Phone #: 617-449-1573 Fax #:
Sampler(s) Name(s): C.WATSON, A.DIANNO Phone #: 732-757-5485

Project Information

Project Name: FTMM-22 R1 (FORT MONMOUTH)
Street: OCEANPORT AVE
City: OCEANPORT State: NJ
Project #: 748810-02096
Client Purchase Order #: W912DY-09-D-0062
Project Manager: CHRIS GREENE

Billing Information (If different from Report to)

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

Requested Analysis (see TEST CODE sheet)

TCL VOCs + TICs

Matrix Codes

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	FTMM-22-SS-583-6.5-7-GA	35/1625	1/24/13	0845	MB	S	3							X		1901
2	FTMM-22-GW-CWMW31-13.5-18.5	GA N/A	11	1120	AD	G	3	X								1904
3	FTMM-22-TB2	N/A	11	—	MB	G	1	X								1912
																1199

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

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

AS PER SOW

Emergency & Rush T/A data available VIA Lablink

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 EDS.17
- Other AS PER SOW

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

Comments / Special Instructions

D.I. slurry VOC vials frozen storage
Date: ___ Time: ___ Initials: ___

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		1/24/14 1600	1 #35	2 #35	5PM	2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time: 1-24-14	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable: On Ice: X Cooler Temp: 3.0

3B 8W3

JB58468: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB58468 **Client:** PARSONS **Project:** FTMM - 22RI (FORT MONMOUTH)

Date / Time Received: 1/24/2014 1700 **Delivery Method:** Other Courier **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (3/3); 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:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No, Coolers	1		

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

Sample Integrity - Documentation	Y	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	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 -1 Only 1 dl rec'd with field kit. 2nd DI to be created in lab.
-2 voc's rec'd with 1 label onb outside of bag. Individual vials not labeled.

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB58468: Chain of Custody
Page 2 of 3

Sample Receipt Summary - Problem Resolution

Accutest Job Number: JB58468

CSR: M Cordova **Response Date:** 1/27/2014

Response: 1- Utilize DI bottle recived from the field . Sample made in lab not to be used unless you check with project manager (MC)
2- Go by outside label

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

JB58468: Chain of Custody
Page 3 of 3

Accutest Laboratories

Internal Sample Tracking Chronicle

Parsons Engineering Science

Job No: JB58468

Fort Monmouth, Oceanport, Monmouth County, NJ
Project No: W912DY-09-D-0062 TSK 0012 PROJ NO. 36985 Project#748810-02090

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB58468-1	Collected: 24-JAN-14 08:45 By: CW		Received: 24-JAN-14 By: AS			
FTMM-22-SS-SB3-6.5-7-QA						
JB58468-1	SM2540 G-97	28-JAN-14 16:30	GL			%SOL
JB58468-1	SW846 8260B	31-JAN-14 16:43	PS			V8260SL
JB58468-2	Collected: 24-JAN-14 11:20 By: CW		Received: 24-JAN-14 By: AS			
FTMM-22-GW-CW1MW31-13.5-QA						
JB58468-2	SW846 8260B	28-JAN-14 20:43	NM			V8260SL
JB58468-3	Collected: 24-JAN-14 11:20 By: CW		Received: 24-JAN-14 By: AS			
FTMM-22-TB2						
JB58468-3	SW846 8260B	28-JAN-14 21:10	NM			V8260SL

Accutest Internal Chain of Custody

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Received: 01/24/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB58468-1.1	Secured Storage	Alfredo Crespo	01/28/14 07:29	Retrieve from Storage
JB58468-1.1	Alfredo Crespo	Secured Staging Area	01/28/14 07:29	Return to Storage
JB58468-1.1	Secured Staging Area	Beatrice Marcelino	01/28/14 09:21	Retrieve from Storage
JB58468-1.1	Beatrice Marcelino	Secured Storage	01/28/14 10:56	Return to Storage
JB58468-1.1	Secured Storage	Gianinna Luisi	01/28/14 15:18	Retrieve from Storage
JB58468-1.1	Gianinna Luisi	Secured Storage	01/28/14 16:23	Return to Storage
JB58468-1.3	Secured Storage	Frank Zhu	01/25/14 10:00	Retrieve from Storage
JB58468-1.3	Frank Zhu	Secured Storage	01/25/14 10:01	Return to Storage
JB58468-1.3	Secured Storage	Prashant Shukla	01/31/14 17:22	Retrieve from Storage
JB58468-1.3	Prashant Shukla	GCMSY	01/31/14 17:22	Load on Instrument
JB58468-1.3	GCMSY	Prashant Shukla	02/02/14 12:11	Unload from Instrument
JB58468-1.3	Prashant Shukla	Secured Storage	02/02/14 12:11	Return to Storage
JB58468-1.4	Secured Storage	Prashant Shukla	01/31/14 16:16	Retrieve from Storage
JB58468-1.4	Prashant Shukla	GCMSY	01/31/14 16:16	Load on Instrument
JB58468-1.4	GCMSY	Prashant Shukla	02/02/14 12:11	Unload from Instrument
JB58468-1.4	Prashant Shukla	Secured Storage	02/02/14 12:11	Return to Storage

New Jersey ACCUTEST LABORATORIES

6

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: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4110-MB	3D95403.D	1	01/28/14	NM	n/a	n/a	V3D4110

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

JB58468-2, JB58468-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4110-MB	3D95403.D	1	01/28/14	NM	n/a	n/a	V3D4110

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

JB58468-2, JB58468-3

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.42	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.32	ug/l	
100-42-5	Styrene	ND	5.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	79-117%
17060-07-0	1,2-Dichloroethane-D4	100%	72-123%
2037-26-5	Toluene-D8	98%	82-118%
460-00-4	4-Bromofluorobenzene	94%	75-118%

Method Blank Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4110-MB	3D95403.D	1	01/28/14	NM	n/a	n/a	V3D4110

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

JB58468-2, JB58468-3

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

Method Blank Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY6198-MB	Y143018.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.6	ug/kg	
71-43-2	Benzene	ND	1.0	0.13	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.28	ug/kg	
75-25-2	Bromoform	ND	5.0	0.26	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.4	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.96	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.18	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.25	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.20	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.25	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.34	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.22	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.13	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.24	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.55	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.31	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.0	0.29	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.44	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.36	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.23	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.27	ug/kg	

Method Blank Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY6198-MB	Y143018.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.29	ug/kg	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.15	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.19	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	1.7	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.18	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.17	ug/kg	
100-42-5	Styrene	ND	5.0	0.23	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.45	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.34	ug/kg	
127-18-4	Tetrachloroethene	ND	5.0	0.41	ug/kg	
108-88-3	Toluene	ND	1.0	0.14	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.21	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.18	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.82	ug/kg	
79-01-6	Trichloroethene	ND	5.0	0.35	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	2.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.16	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.22	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.34	ug/kg	
	m,p-Xylene	ND	1.0	0.48	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.18	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	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	99%	71-132%

Method Blank Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY6198-MB	Y143018.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

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

Blank Spike Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4110-BS	3D95404.D	5	01/28/14	NM	n/a	n/a	V3D4110

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

JB58468-2, JB58468-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	250	281	112	49-153
71-43-2	Benzene	250	248	99	80-119
108-86-1	Bromobenzene	250	267	107	80-122
74-97-5	Bromochloromethane	250	278	111	84-123
75-27-4	Bromodichloromethane	250	277	111	83-127
75-25-2	Bromoform	250	292	117	71-133
74-83-9	Bromomethane	250	275	110	62-143
78-93-3	2-Butanone (MEK)	250	280	112	64-136
104-51-8	n-Butylbenzene	250	273	109	79-128
135-98-8	sec-Butylbenzene	250	267	107	79-125
98-06-6	tert-Butylbenzene	250	274	110	78-128
56-23-5	Carbon tetrachloride	250	318	127	78-138
108-90-7	Chlorobenzene	250	265	106	83-118
75-00-3	Chloroethane	250	272	109	67-143
67-66-3	Chloroform	250	268	107	81-124
74-87-3	Chloromethane	250	275	110	56-146
95-49-8	o-Chlorotoluene	250	268	107	80-124
106-43-4	p-Chlorotoluene	250	265	106	79-121
96-12-8	1,2-Dibromo-3-chloropropane	250	295	118	63-137
124-48-1	Dibromochloromethane	250	287	115	79-125
106-93-4	1,2-Dibromoethane	250	264	106	79-122
95-50-1	1,2-Dichlorobenzene	250	264	106	81-120
541-73-1	1,3-Dichlorobenzene	250	264	106	81-120
106-46-7	1,4-Dichlorobenzene	250	259	104	81-117
75-71-8	Dichlorodifluoromethane	250	386	154* [a]	43-143
75-34-3	1,1-Dichloroethane	250	250	100	80-129
107-06-2	1,2-Dichloroethane	250	291	116	75-133
75-35-4	1,1-Dichloroethene	250	259	104	74-127
156-59-2	cis-1,2-Dichloroethene	250	248	99	79-123
156-60-5	trans-1,2-Dichloroethene	250	248	99	75-123
78-87-5	1,2-Dichloropropane	250	247	99	80-125
142-28-9	1,3-Dichloropropane	250	253	101	80-119
594-20-7	2,2-Dichloropropane	250	259	104	53-140
563-58-6	1,1-Dichloropropene	250	253	101	79-125
10061-01-5	cis-1,3-Dichloropropene	250	234	94	76-118
10061-02-6	trans-1,3-Dichloropropene	250	263	105	79-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4110-BS	3D95404.D	5	01/28/14	NM	n/a	n/a	V3D4110

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

JB58468-2, JB58468-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	250	259	104	82-119
87-68-3	Hexachlorobutadiene	250	308	123	66-137
591-78-6	2-Hexanone	250	263	105	60-136
98-82-8	Isopropylbenzene	250	269	108	77-127
99-87-6	p-Isopropyltoluene	250	282	113	82-128
1634-04-4	Methyl Tert Butyl Ether	500	498	100	75-122
108-10-1	4-Methyl-2-pentanone(MIBK)	250	263	105	67-133
75-09-2	Methylene chloride	250	247	99	74-123
91-20-3	Naphthalene	250	292	117	62-133
103-65-1	n-Propylbenzene	250	270	108	80-128
100-42-5	Styrene	250	263	105	80-120
630-20-6	1,1,1,2-Tetrachloroethane	250	276	110	81-123
79-34-5	1,1,2,2-Tetrachloroethane	250	235	94	69-125
127-18-4	Tetrachloroethene	250	284	114	73-134
108-88-3	Toluene	250	257	103	82-120
87-61-6	1,2,3-Trichlorobenzene	250	303	121	63-138
120-82-1	1,2,4-Trichlorobenzene	250	297	119	74-136
71-55-6	1,1,1-Trichloroethane	250	294	118	80-131
79-00-5	1,1,2-Trichloroethane	250	259	104	79-124
79-01-6	Trichloroethene	250	267	107	84-126
75-69-4	Trichlorofluoromethane	250	303	121	67-145
96-18-4	1,2,3-Trichloropropane	250	281	112	70-130
95-63-6	1,2,4-Trimethylbenzene	250	274	110	81-123
108-67-8	1,3,5-Trimethylbenzene	250	269	108	79-124
75-01-4	Vinyl chloride	250	281	112	57-132
	m,p-Xylene	500	527	105	81-119
95-47-6	o-Xylene	250	259	104	82-120
1330-20-7	Xylene (total)	750	786	105	82-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	79-117%
17060-07-0	1,2-Dichloroethane-D4	103%	72-123%
2037-26-5	Toluene-D8	99%	82-118%
460-00-4	4-Bromofluorobenzene	93%	75-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4110-BS	3D95404.D	5	01/28/14	NM	n/a	n/a	V3D4110

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

JB58468-2, JB58468-3

(a) High percent recoveries and no associated positive found in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY6198-BS	Y143019.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	52.2	104	50-156
71-43-2	Benzene	50	48.2	96	77-121
108-86-1	Bromobenzene	50	44.5	89	76-119
74-97-5	Bromochloromethane	50	56.1	112	77-127
75-27-4	Bromodichloromethane	50	53.7	107	77-131
75-25-2	Bromoform	50	51.2	102	73-136
74-83-9	Bromomethane	50	59.6	119	61-144
78-93-3	2-Butanone (MEK)	50	55.1	110	63-144
104-51-8	n-Butylbenzene	50	47.9	96	68-126
135-98-8	sec-Butylbenzene	50	44.5	89	71-123
98-06-6	tert-Butylbenzene	50	43.1	86	72-122
56-23-5	Carbon tetrachloride	50	51.9	104	71-142
108-90-7	Chlorobenzene	50	45.7	91	77-118
75-00-3	Chloroethane	50	58.4	117	65-140
67-66-3	Chloroform	50	55.1	110	75-126
74-87-3	Chloromethane	50	48.3	97	58-143
95-49-8	o-Chlorotoluene	50	44.7	89	74-120
106-43-4	p-Chlorotoluene	50	44.2	88	70-119
96-12-8	1,2-Dibromo-3-chloropropane	50	48.7	97	66-136
124-48-1	Dibromochloromethane	50	50.4	101	75-129
106-93-4	1,2-Dibromoethane	50	50.4	101	77-125
95-50-1	1,2-Dichlorobenzene	50	44.7	89	76-117
541-73-1	1,3-Dichlorobenzene	50	43.7	87	75-118
106-46-7	1,4-Dichlorobenzene	50	43.7	87	73-116
75-71-8	Dichlorodifluoromethane	50	63.1	126	43-137
75-34-3	1,1-Dichloroethane	50	53.6	107	76-130
107-06-2	1,2-Dichloroethane	50	55.4	111	68-139
75-35-4	1,1-Dichloroethene	50	54.0	108	71-130
156-59-2	cis-1,2-Dichloroethene	50	52.6	105	74-123
156-60-5	trans-1,2-Dichloroethene	50	52.3	105	73-124
78-87-5	1,2-Dichloropropane	50	50.0	100	76-126
142-28-9	1,3-Dichloropropane	50	47.9	96	75-123
594-20-7	2,2-Dichloropropane	50	54.5	109	57-139
563-58-6	1,1-Dichloropropene	50	47.6	95	75-125
10061-01-5	cis-1,3-Dichloropropene	50	49.9	100	73-120
10061-02-6	trans-1,3-Dichloropropene	50	56.5	113	74-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY6198-BS	Y143019.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
100-41-4	Ethylbenzene	50	46.2	92	75-119
87-68-3	Hexachlorobutadiene	50	42.9	86	67-133
591-78-6	2-Hexanone	50	54.6	109	65-139
98-82-8	Isopropylbenzene	50	43.3	87	72-123
99-87-6	p-Isopropyltoluene	50	45.5	91	74-126
1634-04-4	Methyl Tert Butyl Ether	100	105	105	69-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	53.6	107	70-136
75-09-2	Methylene chloride	50	48.8	98	67-128
91-20-3	Naphthalene	50	46.5	93	61-138
103-65-1	n-Propylbenzene	50	48.0	96	72-126
100-42-5	Styrene	50	50.2	100	76-120
630-20-6	1,1,1,2-Tetrachloroethane	50	47.2	94	76-124
79-34-5	1,1,2,2-Tetrachloroethane	50	46.0	92	66-124
127-18-4	Tetrachloroethene	50	44.8	90	71-130
108-88-3	Toluene	50	51.0	102	76-119
87-61-6	1,2,3-Trichlorobenzene	50	46.8	94	67-134
120-82-1	1,2,4-Trichlorobenzene	50	47.1	94	70-135
71-55-6	1,1,1-Trichloroethane	50	55.5	111	75-132
79-00-5	1,1,2-Trichloroethane	50	55.5	111	77-127
79-01-6	Trichloroethene	50	50.4	101	81-125
75-69-4	Trichlorofluoromethane	50	56.2	112	60-142
96-18-4	1,2,3-Trichloropropane	50	48.0	96	72-126
95-63-6	1,2,4-Trimethylbenzene	50	46.7	93	73-121
108-67-8	1,3,5-Trimethylbenzene	50	44.0	88	71-122
75-01-4	Vinyl chloride	50	50.2	100	57-130
	m,p-Xylene	100	94.0	94	76-119
95-47-6	o-Xylene	50	47.3	95	75-119
1330-20-7	Xylene (total)	150	141	94	76-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	59-130%
17060-07-0	1,2-Dichloroethane-D4	103%	65-123%
2037-26-5	Toluene-D8	106%	80-124%
460-00-4	4-Bromofluorobenzene	94%	71-132%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB58885-1MS	Y143029.D	1	01/31/14	PS	n/a	n/a	VY6198
JB58885-1	Y143021.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

CAS No.	Compound	JB58885-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	10.7		51.4	58.7	93	10-184
71-43-2	Benzene	0.47	J	51.4	49.9	96	40-133
108-86-1	Bromobenzene	ND		51.4	44.3	86	29-136
74-97-5	Bromochloromethane	ND		51.4	45.3	88	49-128
75-27-4	Bromodichloromethane	ND		51.4	48.1	94	42-135
75-25-2	Bromoform	ND		51.4	38.3	74	35-137
74-83-9	Bromomethane	ND		51.4	45.9	89	26-144
78-93-3	2-Butanone (MEK)	ND		51.4	45.6	89	20-165
104-51-8	n-Butylbenzene	ND		51.4	54.8	107	10-151
135-98-8	sec-Butylbenzene	ND		51.4	50.9	99	13-148
98-06-6	tert-Butylbenzene	ND		51.4	48.9	95	19-144
56-23-5	Carbon tetrachloride	ND		51.4	54.7	106	35-149
108-90-7	Chlorobenzene	ND		51.4	46.5	90	32-135
75-00-3	Chloroethane	ND		51.4	54.8	107	32-143
67-66-3	Chloroform	ND		51.4	52.2	102	46-132
74-87-3	Chloromethane	ND		51.4	43.9	85	35-140
95-49-8	o-Chlorotoluene	ND		51.4	48.2	94	24-141
106-43-4	p-Chlorotoluene	ND		51.4	47.0	91	20-139
96-12-8	1,2-Dibromo-3-chloropropane	ND		51.4	32.5	63	22-141
124-48-1	Dibromochloromethane	ND		51.4	42.5	83	41-133
106-93-4	1,2-Dibromoethane	ND		51.4	40.0	78	42-130
95-50-1	1,2-Dichlorobenzene	ND		51.4	42.2	82	20-138
541-73-1	1,3-Dichlorobenzene	ND		51.4	44.0	86	18-140
106-46-7	1,4-Dichlorobenzene	ND		51.4	42.8	83	18-139
75-71-8	Dichlorodifluoromethane	ND		51.4	56.6	110	23-158
75-34-3	1,1-Dichloroethane	ND		51.4	50.4	98	45-136
107-06-2	1,2-Dichloroethane	ND		51.4	44.9	87	46-132
75-35-4	1,1-Dichloroethene	ND		51.4	57.1	111	33-147
156-59-2	cis-1,2-Dichloroethene	ND		51.4	49.2	96	40-132
156-60-5	trans-1,2-Dichloroethene	ND		51.4	53.5	104	37-136
78-87-5	1,2-Dichloropropane	ND		51.4	45.1	88	45-132
142-28-9	1,3-Dichloropropane	ND		51.4	40.5	79	43-127
594-20-7	2,2-Dichloropropane	ND		51.4	54.8	107	28-140
563-58-6	1,1-Dichloropropene	ND		51.4	53.6	104	34-142
10061-01-5	cis-1,3-Dichloropropene	ND		51.4	46.1	90	38-133
10061-02-6	trans-1,3-Dichloropropene	ND		51.4	45.3	88	35-134

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB58885-1MS	Y143029.D	1	01/31/14	PS	n/a	n/a	VY6198
JB58885-1	Y143021.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

CAS No.	Compound	JB58885-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
100-41-4	Ethylbenzene	ND		51.4	51.4	100	27-139
87-68-3	Hexachlorobutadiene	ND		51.4	41.5	81	10-164
591-78-6	2-Hexanone	ND		51.4	37.4	73	20-157
98-82-8	Isopropylbenzene	0.93	J	51.4	54.3	104	24-143
99-87-6	p-Isopropyltoluene	ND		51.4	49.8	97	13-147
1634-04-4	Methyl Tert Butyl Ether	4.6		51.4	46.3	81	43-131
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		51.4	31.7	62	34-138
75-09-2	Methylene chloride	ND		51.4	43.0	84	40-131
91-20-3	Naphthalene	ND		51.4	34.3	67	10-159
103-65-1	n-Propylbenzene	2.6	J	51.4	64.1	120	16-147
100-42-5	Styrene	ND		51.4	48.7	95	25-141
630-20-6	1,1,1,2-Tetrachloroethane	ND		51.4	47.0	91	41-134
79-34-5	1,1,2,2-Tetrachloroethane	ND		51.4	ND	0* [a]	32-130
127-18-4	Tetrachloroethene	ND		51.4	94.7	184* [a]	16-182
108-88-3	Toluene	ND		51.4	51.1	99	32-137
87-61-6	1,2,3-Trichlorobenzene	ND		51.4	37.8	74	10-157
120-82-1	1,2,4-Trichlorobenzene	ND		51.4	40.7	79	10-158
71-55-6	1,1,1-Trichloroethane	ND		51.4	56.2	109	41-143
79-00-5	1,1,2-Trichloroethane	ND		51.4	41.5	81	37-134
79-01-6	Trichloroethene	ND		51.4	103	200* [a]	26-161
75-69-4	Trichlorofluoromethane	ND		51.4	55.9	109	25-160
96-18-4	1,2,3-Trichloropropane	ND		51.4	37.0	72	40-129
95-63-6	1,2,4-Trimethylbenzene	ND		51.4	49.5	96	14-147
108-67-8	1,3,5-Trimethylbenzene	ND		51.4	49.6	96	18-145
75-01-4	Vinyl chloride	ND		51.4	50.3	98	36-144
	m,p-Xylene	ND		103	101	98	23-142
95-47-6	o-Xylene	ND		51.4	50.1	97	27-139
1330-20-7	Xylene (total)	ND		154	151	98	25-140

CAS No.	Surrogate Recoveries	MS	JB58885-1	Limits
1868-53-7	Dibromofluoromethane	82%	95%	59-130%
17060-07-0	1,2-Dichloroethane-D4	78%	95%	65-123%
2037-26-5	Toluene-D8	105%	105%	80-124%
460-00-4	4-Bromofluorobenzene	95%	99%	71-132%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB58885-1MS	Y143029.D	1	01/31/14	PS	n/a	n/a	VY6198
JB58885-1	Y143021.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB58428-6MS	3D95405.D	5	01/28/14	NM	n/a	n/a	V3D4110
JB58428-6MSD	3D95406.D	5	01/28/14	NM	n/a	n/a	V3D4110
JB58428-6	3D95420.D	5	01/29/14	NM	n/a	n/a	V3D4110

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

JB58468-2, JB58468-3

CAS No.	Compound	JB58428-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	269	108	288	115	7	45-157/19
71-43-2	Benzene	2.7	J	250	248	98	253	100	2	49-138/12
108-86-1	Bromobenzene	ND		250	259	104	265	106	2	71-130/13
74-97-5	Bromochloromethane	ND		250	277	111	277	111	0	75-130/12
75-27-4	Bromodichloromethane	ND		250	290	116	289	116	0	73-132/13
75-25-2	Bromoform	ND		250	284	114	284	114	0	61-138/13
74-83-9	Bromomethane	ND		250	272	109	270	108	1	49-146/18
78-93-3	2-Butanone (MEK)	ND		250	275	110	282	113	3	58-144/14
104-51-8	n-Butylbenzene	ND		250	291	116	294	118	1	61-140/14
135-98-8	sec-Butylbenzene	ND		250	268	107	270	108	1	61-137/14
98-06-6	tert-Butylbenzene	ND		250	254	102	259	104	2	63-137/14
56-23-5	Carbon tetrachloride	ND		250	299	120	288	115	4	57-147/16
108-90-7	Chlorobenzene	26.9		250	287	104	288	104	0	69-129/12
75-00-3	Chloroethane	ND		250	253	101	246	98	3	52-145/17
67-66-3	Chloroform	ND		250	262	105	261	104	0	68-131/13
74-87-3	Chloromethane	ND		250	252	101	234	94	7	43-145/17
95-49-8	o-Chlorotoluene	ND		250	257	103	264	106	3	67-132/13
106-43-4	p-Chlorotoluene	ND		250	257	103	262	105	2	67-130/13
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	291	116	289	116	1	58-143/14
124-48-1	Dibromochloromethane	ND		250	282	113	278	111	1	71-131/12
106-93-4	1,2-Dibromoethane	ND		250	261	104	264	106	1	72-130/12
95-50-1	1,2-Dichlorobenzene	8.4		250	263	102	265	103	1	71-128/12
541-73-1	1,3-Dichlorobenzene	ND		250	256	102	258	103	1	70-128/13
106-46-7	1,4-Dichlorobenzene	7.6		250	257	100	260	101	1	70-126/12
75-71-8	Dichlorodifluoromethane	ND		250	296	118	276	110	7	35-161/21
75-34-3	1,1-Dichloroethane	ND		250	244	98	246	98	1	64-136/14
107-06-2	1,2-Dichloroethane	ND		250	284	114	272	109	4	69-138/12
75-35-4	1,1-Dichloroethene	ND		250	257	103	252	101	2	50-141/17
156-59-2	cis-1,2-Dichloroethene	ND		250	250	100	254	102	2	60-135/13
156-60-5	trans-1,2-Dichloroethene	ND		250	251	100	253	101	1	58-134/15
78-87-5	1,2-Dichloropropane	ND		250	236	94	245	98	4	69-132/12
142-28-9	1,3-Dichloropropane	ND		250	252	101	255	102	1	72-126/12
594-20-7	2,2-Dichloropropane	ND		250	280	112	272	109	3	48-143/16
563-58-6	1,1-Dichloropropene	ND		250	260	104	260	104	0	59-139/15
10061-01-5	cis-1,3-Dichloropropene	ND		250	257	103	256	102	0	73-129/13
10061-02-6	trans-1,3-Dichloropropene	ND		250	267	107	262	105	2	72-129/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB58428-6MS	3D95405.D	5	01/28/14	NM	n/a	n/a	V3D4110
JB58428-6MSD	3D95406.D	5	01/28/14	NM	n/a	n/a	V3D4110
JB58428-6	3D95420.D	5	01/29/14	NM	n/a	n/a	V3D4110

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

JB58468-2, JB58468-3

CAS No.	Compound	JB58428-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	12.5		250	267	102	265	101	1	48-139/13
87-68-3	Hexachlorobutadiene	ND		250	211	84	200	80	5	50-144/16
591-78-6	2-Hexanone	ND		250	287	115	289	116	1	55-146/15
98-82-8	Isopropylbenzene	97.2		250	362	106	371	110	2	61-138/14
99-87-6	p-Isopropyltoluene	ND		250	263	105	265	106	1	63-135/14
1634-04-4	Methyl Tert Butyl Ether	ND		250	251	100	248	99	1	63-134/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		250	276	110	285	114	3	62-144/13
75-09-2	Methylene chloride	ND		250	249	100	254	102	2	64-131/13
91-20-3	Naphthalene	ND		250	287	115	280	112	2	50-149/15
103-65-1	n-Propylbenzene	158		250	431	109	442	114	3	57-140/14
100-42-5	Styrene	ND		250	259	104	262	105	1	62-133/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	278	111	275	110	1	71-130/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	240	96	252	101	5	65-134/12
127-18-4	Tetrachloroethene	ND		250	269	108	269	108	0	53-144/15
108-88-3	Toluene	2.8	J	250	256	101	257	102	0	54-138/13
87-61-6	1,2,3-Trichlorobenzene	ND		250	265	106	260	104	2	55-142/15
120-82-1	1,2,4-Trichlorobenzene	ND		250	265	106	258	103	3	64-138/14
71-55-6	1,1,1-Trichloroethane	ND		250	282	113	270	108	4	60-143/15
79-00-5	1,1,2-Trichloroethane	ND		250	263	105	262	105	0	71-130/12
79-01-6	Trichloroethene	ND		250	270	108	271	108	0	59-140/14
75-69-4	Trichlorofluoromethane	ND		250	286	114	273	109	5	50-158/20
96-18-4	1,2,3-Trichloropropane	ND		250	293	117	289	116	1	64-138/12
95-63-6	1,2,4-Trimethylbenzene	ND		250	252	101	253	101	0	51-140/13
108-67-8	1,3,5-Trimethylbenzene	ND		250	255	102	259	104	2	58-138/14
75-01-4	Vinyl chloride	ND		250	279	112	272	109	3	41-151/18
	m,p-Xylene	9.7		500	525	103	522	102	1	49-138/13
95-47-6	o-Xylene	4.8	J	250	264	104	262	103	1	59-134/12
1330-20-7	Xylene (total)	14.5		750	788	103	784	103	1	53-136/12

CAS No.	Surrogate Recoveries	MS	MSD	JB58428-6	Limits
1868-53-7	Dibromofluoromethane	99%	99%	100%	79-117%
17060-07-0	1,2-Dichloroethane-D4	103%	98%	100%	72-123%
2037-26-5	Toluene-D8	100%	100%	98%	82-118%
460-00-4	4-Bromofluorobenzene	90%	91%	91%	75-118%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB58847-9DUP	Y143036.D	1	01/31/14	PS	n/a	n/a	VY6198
JB58847-9	Y143035.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

CAS No.	Compound	JB58847-9 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	40
71-43-2	Benzene	ND		ND		nc	23
108-86-1	Bromobenzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	14
104-51-8	n-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
98-06-6	tert-Butylbenzene	ND		ND		nc	30
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	11
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	15
74-87-3	Chloromethane	ND		ND		nc	30
95-49-8	o-Chlorotoluene	ND		ND		nc	30
106-43-4	p-Chlorotoluene	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	13
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
142-28-9	1,3-Dichloropropane	ND		ND		nc	30
594-20-7	2,2-Dichloropropane	ND		ND		nc	30
563-58-6	1,1-Dichloropropene	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB58847-9DUP	Y143036.D	1	01/31/14	PS	n/a	n/a	VY6198
JB58847-9	Y143035.D	1	01/31/14	PS	n/a	n/a	VY6198

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

JB58468-1

CAS No.	Compound	JB58847-9 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
100-41-4	Ethylbenzene	ND		ND		nc	16
87-68-3	Hexachlorobutadiene	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30
98-82-8	Isopropylbenzene	ND		ND		nc	12
99-87-6	p-Isopropyltoluene	ND		ND		nc	10
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	47
91-20-3	Naphthalene	ND		ND		nc	13
103-65-1	n-Propylbenzene	ND		ND		nc	13
100-42-5	Styrene	ND		ND		nc	30
630-20-6	1,1,1,2-Tetrachloroethane	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	24
108-88-3	Toluene	ND		ND		nc	24
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	12
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	ND		ND		nc	15
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
96-18-4	1,2,3-Trichloropropane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	12
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	10
75-01-4	Vinyl chloride	ND		ND		nc	30
	m,p-Xylene	ND		ND		nc	23
95-47-6	o-Xylene	ND		ND		nc	22
1330-20-7	Xylene (total)	ND		ND		nc	22

CAS No.	Surrogate Recoveries	DUP	JB58847-9	Limits
1868-53-7	Dibromofluoromethane	101%	102%	59-130%
17060-07-0	1,2-Dichloroethane-D4	95%	94%	65-123%
2037-26-5	Toluene-D8	104%	104%	80-124%
460-00-4	4-Bromofluorobenzene	101%	102%	71-132%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample:	V3D4058-BFB	**Injection Date:**	12/18/13
Lab File ID:	3D94188.D	**Injection Time:**	12:55
Instrument ID:	GCMS3D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8872	16.2		Pass
75	30.0 - 60.0% of mass 95	23557	43.0		Pass
95	Base peak, 100% relative abundance	54818	100.0		Pass
96	5.0 - 9.0% of mass 95	3632	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	56050	102.2		Pass
175	5.0 - 9.0% of mass 174	4297	7.84	(7.67) [a]	Pass
176	95.0 - 101.0% of mass 174	55024	100.4	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	3572	6.52	(6.49) [b]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D4058-IC4058	3D94189.D	12/18/13	13:24	00:29	Initial cal 0.5
ZZZZZZ	3D94189A.D	12/18/13	13:24	00:29	(unrelated sample)
V3D4058-IC4058	3D94190.D	12/18/13	13:51	00:56	Initial cal 1
ZZZZZZ	3D94190A.D	12/18/13	13:51	00:56	(unrelated sample)
V3D4058-IC4058	3D94191.D	12/18/13	14:18	01:23	Initial cal 2
V3D4058-IC4058	3D94192.D	12/18/13	14:45	01:50	Initial cal 5
V3D4058-IC4058	3D94193.D	12/18/13	15:12	02:17	Initial cal 10
V3D4058-IC4058	3D94194.D	12/18/13	15:39	02:44	Initial cal 20
V3D4058-ICC4058	3D94195.D	12/18/13	16:06	03:11	Initial cal 50
V3D4058-IC4058	3D94196.D	12/18/13	16:33	03:38	Initial cal 100
V3D4058-IC4058	3D94197.D	12/18/13	17:00	04:05	Initial cal 200
V3D4058-ICV4058	3D94199.D	12/18/13	17:54	04:59	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V3D4110-BFB
Lab File ID: 3D95399.D
Instrument ID: GCMS3D
Injection Date: 01/28/14
Injection Time: 14:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8634	16.9		Pass
75	30.0 - 60.0% of mass 95	22250	43.7		Pass
95	Base peak, 100% relative abundance	50968	100.0		Pass
96	5.0 - 9.0% of mass 95	3411	6.69		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	53984	105.9		Pass
175	5.0 - 9.0% of mass 174	4129	8.10	(7.65) [a]	Pass
176	95.0 - 101.0% of mass 174	52805	103.6	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	3350	6.57	(6.34) [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
V3D4110-CC4058	3D95400.D	01/28/14	14:50	00:39	Continuing cal 20
V3D4110-MB	3D95403.D	01/28/14	16:41	02:30	Method Blank
V3D4110-BS	3D95404.D	01/28/14	17:08	02:57	Blank Spike
JB58428-6MS	3D95405.D	01/28/14	17:35	03:24	Matrix Spike
JB58428-6MSD	3D95406.D	01/28/14	18:02	03:51	Matrix Spike Duplicate
ZZZZZZ	3D95408.D	01/28/14	18:56	04:45	(unrelated sample)
ZZZZZZ	3D95409.D	01/28/14	19:23	05:12	(unrelated sample)
ZZZZZZ	3D95410.D	01/28/14	19:49	05:38	(unrelated sample)
ZZZZZZ	3D95411.D	01/28/14	20:16	06:05	(unrelated sample)
JB58468-2	3D95412.D	01/28/14	20:43	06:32	FTMM-22-GW-CW1MW31-13.5-QA
JB58468-3	3D95413.D	01/28/14	21:10	06:59	FTMM-22-TB2
ZZZZZZ	3D95415.D	01/28/14	22:04	07:53	(unrelated sample)
ZZZZZZ	3D95416.D	01/28/14	22:31	08:20	(unrelated sample)
ZZZZZZ	3D95417.D	01/28/14	22:58	08:47	(unrelated sample)
ZZZZZZ	3D95419.D	01/28/14	23:52	09:41	(unrelated sample)
JB58428-6	3D95420.D	01/29/14	00:19	10:08	(used for QC only; not part of job JB58468)
ZZZZZZ	3D95422.D	01/29/14	01:12	11:01	(unrelated sample)
ZZZZZZ	3D95424.D	01/29/14	02:06	11:55	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: VY6161-BFB
Lab File ID: Y142283.D
Instrument ID: GCMSY
Injection Date: 01/07/14
Injection Time: 11:34

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8018	16.7		Pass
75	30.0 - 60.0% of mass 95	21330	44.4		Pass
95	Base peak, 100% relative abundance	48048	100.0		Pass
96	5.0 - 9.0% of mass 95	3099	6.45		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	46464	96.7		Pass
175	5.0 - 9.0% of mass 174	3836	7.98	(8.26) [a]	Pass
176	95.0 - 101.0% of mass 174	45128	93.9	(97.1) [a]	Pass
177	5.0 - 9.0% of mass 176	2941	6.12	(6.52) [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
VY6161-IC6161	Y142284.D	01/07/14	12:08	00:34	Initial cal 20
VY6161-IC6161	Y142285.D	01/07/14	12:37	01:03	Initial cal 10
VY6161-IC6161	Y142286.D	01/07/14	13:06	01:32	Initial cal 5
VY6161-IC6161	Y142287.D	01/07/14	13:35	02:01	Initial cal 2
VY6161-IC6161	Y142288.D	01/07/14	14:04	02:30	Initial cal 1
VY6161-IC6161	Y142289.D	01/07/14	14:33	02:59	Initial cal 0.5
VY6161-ICC6161	Y142290.D	01/07/14	15:02	03:28	Initial cal 50
VY6161-IC6161	Y142291.D	01/07/14	15:31	03:57	Initial cal 100
VY6161-IC6161	Y142292.D	01/07/14	16:00	04:26	Initial cal 200
VY6161-ICV6161	Y142295.D	01/07/14	17:27	05:53	Initial cal verification 50
VY6162-MB1	Y142297.D	01/07/14	18:35	07:01	Method Blank
ZZZZZZ	Y142298.D	01/07/14	19:04	07:30	(unrelated sample)
ZZZZZZ	Y142299.D	01/07/14	19:33	07:59	(unrelated sample)
ZZZZZZ	Y142300.D	01/07/14	20:02	08:28	(unrelated sample)
ZZZZZZ	Y142301.D	01/07/14	20:31	08:57	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: VY6198-BFB
Lab File ID: Y143016.D
Instrument ID: GCMSY
Injection Date: 01/31/14
Injection Time: 08:43

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8178	18.0		Pass
75	30.0 - 60.0% of mass 95	20922	46.1		Pass
95	Base peak, 100% relative abundance	45365	100.0		Pass
96	5.0 - 9.0% of mass 95	3142	6.93		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	40112	88.4		Pass
175	5.0 - 9.0% of mass 174	3206	7.07	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	39338	86.7	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	2628	5.79	(6.68) [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
VY6198-CC6161	Y143017.D	01/31/14	09:23	00:40	Continuing cal 20
VY6198-MB	Y143018.D	01/31/14	10:00	01:17	Method Blank
VY6198-BS	Y143019.D	01/31/14	10:38	01:55	Blank Spike
ZZZZZZ	Y143020.D	01/31/14	11:27	02:44	(unrelated sample)
JB58885-1	Y143021.D	01/31/14	11:55	03:12	(used for QC only; not part of job JB58468)
ZZZZZZ	Y143022.D	01/31/14	12:24	03:41	(unrelated sample)
ZZZZZZ	Y143023.D	01/31/14	12:53	04:10	(unrelated sample)
ZZZZZZ	Y143024.D	01/31/14	13:22	04:39	(unrelated sample)
ZZZZZZ	Y143025.D	01/31/14	13:51	05:08	(unrelated sample)
ZZZZZZ	Y143026.D	01/31/14	14:19	05:36	(unrelated sample)
ZZZZZZ	Y143028.D	01/31/14	15:16	06:33	(unrelated sample)
JB58885-1MS	Y143029.D	01/31/14	15:45	07:02	Matrix Spike
JB58468-1	Y143031.D	01/31/14	16:43	08:00	FTMM-22-SS-SB3-6.5-7-QA
ZZZZZZ	Y143032.D	01/31/14	17:12	08:29	(unrelated sample)
ZZZZZZ	Y143034.D	01/31/14	18:10	09:27	(unrelated sample)
JB58847-9	Y143035.D	01/31/14	18:39	09:56	(used for QC only; not part of job JB58468)
JB58847-9DUP	Y143036.D	01/31/14	19:08	10:25	Duplicate
ZZZZZZ	Y143037.D	01/31/14	19:37	10:54	(unrelated sample)
ZZZZZZ	Y143038.D	01/31/14	20:06	11:23	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Check Std:	V3D4110-CC4058	**Injection Date:**	01/28/14
Lab File ID:	3D95400.D	**Injection Time:**	14:50
Instrument ID:	GCMS3D	**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	78306	7.24	190518	9.48	255333	10.40	207461	13.55	123104	15.86
Upper Limit [a]	156612	7.74	381036	9.98	510666	10.90	414922	14.05	246208	16.36
Lower Limit [b]	39153	6.74	95259	8.98	127667	9.90	103731	13.05	61552	15.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3D4110-MB	74372	7.24	184154	9.48	243339	10.40	196819	13.55	116390	15.86
V3D4110-BS	69260	7.24	173040	9.47	233693	10.40	194116	13.55	114522	15.86
JB58428-6MS	76499	7.24	181452	9.47	244061	10.40	202300	13.55	122155	15.86
JB58428-6MSD	87311	7.24	205922	9.48	277327	10.40	227150	13.55	131956	15.86
ZZZZZZ	85733	7.23	215099	9.48	285069	10.40	229506	13.55	132667	15.86
ZZZZZZ	82593	7.24	208383	9.47	276905	10.40	224871	13.55	131466	15.85
ZZZZZZ	78525	7.24	200767	9.48	266302	10.40	215994	13.55	128444	15.86
ZZZZZZ	73593	7.25	191487	9.48	256294	10.40	206356	13.55	122656	15.86
JB58468-2	75902	7.24	184967	9.48	245960	10.40	200973	13.56	117813	15.86
JB58468-3	67676	7.24	175576	9.48	232207	10.40	191465	13.56	112903	15.86
ZZZZZZ	68081	7.24	166357	9.48	221308	10.40	181535	13.55	108581	15.86
ZZZZZZ	68472	7.23	161102	9.48	213053	10.40	175769	13.55	104629	15.86
ZZZZZZ	65176	7.23	157896	9.48	206655	10.40	172272	13.55	106164	15.86
ZZZZZZ	76330	7.23	194229	9.47	254978	10.40	207885	13.55	123067	15.86
JB58428-6	76077	7.24	188283	9.48	247148	10.40	198550	13.55	119110	15.86
ZZZZZZ	80249	7.24	202723	9.47	272150	10.40	220639	13.55	129226	15.86
ZZZZZZ	77655	7.24	195509	9.48	261364	10.40	211135	13.55	123987	15.86

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: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Check Std:	VY6198-CC6161	**Injection Date:**	01/31/14
Lab File ID:	Y143017.D	**Injection Time:**	09:23
Instrument ID:	GCMSY	**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	52486	7.65	145819	9.81	217485	10.72	196970	13.81	100561	16.09
Upper Limit [a]	104972	8.15	291638	10.31	434970	11.22	393940	14.31	201122	16.59
Lower Limit [b]	26243	7.15	72910	9.31	108743	10.22	98485	13.31	50281	15.59

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VY6198-MB	50384	7.65	141439	9.81	211409	10.72	189358	13.81	86845	16.09
VY6198-BS	55184	7.65	138047	9.81	206860	10.72	193786	13.81	102062	16.08
ZZZZZZ	59395	7.65	155019	9.81	229825	10.72	204329	13.81	92098	16.09
JB58885-1	55280	7.65	156269	9.82	229421	10.73	204780	13.81	94070	16.09
ZZZZZZ	58939	7.65	150390	9.82	223355	10.73	194949	13.81	83015	16.09
ZZZZZZ	53128	7.65	155959	9.82	231745	10.73	208520	13.81	94398	16.09
ZZZZZZ	48220	7.65	154368	9.82	230051	10.73	206945	13.81	92751	16.09
ZZZZZZ	52539	7.65	148680	9.82	224834	10.73	203272	13.81	93991	16.09
ZZZZZZ	49650	7.65	155000	9.82	229915	10.73	205638	13.81	92532	16.09
ZZZZZZ	44002	7.65	155289	9.82	228076	10.73	202274	13.81	91617	16.09
JB58885-1MS	27548	7.66	142410	9.82	203362	10.73	176080	13.81	87155	16.09
JB58468-1	48486	7.66	157154	9.82	233831	10.73	207975	13.81	94814	16.09
ZZZZZZ	52324	7.65	155475	9.82	231945	10.73	206938	13.81	92965	16.09
ZZZZZZ	46940	7.65	152915	9.82	228147	10.73	201536	13.81	89609	16.09
JB58847-9	50346	7.65	149167	9.82	221969	10.73	198434	13.81	86785	16.09
JB58847-9DUP	49574	7.65	151268	9.82	225924	10.73	200829	13.81	87865	16.09
ZZZZZZ	51419	7.66	151586	9.82	225860	10.73	203686	13.81	93072	16.09
ZZZZZZ	40884	7.66	150342	9.82	225024	10.73	201013	13.81	90552	16.09

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: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JB58468-2	3D95412.D	97.0	101.0	98.0	93.0
JB58468-3	3D95413.D	98.0	102.0	98.0	94.0
JB58428-6MS	3D95405.D	99.0	103.0	100.0	90.0
JB58428-6MSD	3D95406.D	99.0	98.0	100.0	91.0
V3D4110-BS	3D95404.D	99.0	103.0	99.0	93.0
V3D4110-MB	3D95403.D	97.0	100.0	98.0	94.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-117%
S2 = 1,2-Dichloroethane-D4	72-123%
S3 = Toluene-D8	82-118%
S4 = 4-Bromofluorobenzene	75-118%

Volatile Surrogate Recovery Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

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
JB58468-1	Y143031.D	101.0	94.0	104.0	99.0
JB58847-9DUP	Y143036.D	101.0	95.0	104.0	101.0
JB58885-1MS	Y143029.D	82.0	78.0	105.0	95.0
VY6198-BS	Y143019.D	106.0	103.0	106.0	94.0
VY6198-MB	Y143018.D	103.0	98.0	104.0	99.0

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: JB58468 **Sample:** V3D4058-ICC4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D94195.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Response Factor Report MS3D

Method : C:\MSDCHEM\1\METHODS\M3D4058.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

Calibration Files
5 =3D94192.D 0.5 =3D94189.D 2 =3D94191.D 50 =3D94195.D
100 =3D94196.D 1 =3D94190.D 200 =3D94197.D 20 =3D94194.D
10 =3D94193.D =

Compound	5	0.5	2	50	100	1	200	20	10	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------										
2) 1,4-dioxane	0.082	0.084	0.092	0.094	0.093	0.098	0.082			0.089	7.55
3) tertiary butyl alcohol	1.118	1.214	1.069	1.048	1.025	1.139	1.065			1.097	5.93
4) I pentafluorobenzene	----------ISTD----------										
5) FREON 115										0.000#	-1.00
6) FREON 152A										0.000#	-1.00
7) chlorotrifluoroethene										0.000#	-1.00
8) chlorodifluoromethane	0.368	0.369	0.396	0.396	0.321	0.401	0.401	0.388		0.380	7.17
9) dichlorodifluoromethane	0.467	0.386	0.467	0.506	0.490	0.436	0.503	0.505	0.459	0.469	8.38
10) chloromethane	0.563	0.612	0.595	0.576	0.582	0.614	0.601	0.565	0.541	0.583	4.21
11) vinyl chloride	0.555	0.479	0.564	0.567	0.578	0.553	0.611	0.557	0.526	0.554	6.52
12) bromomethane	0.381	0.381	0.397	0.386	0.381	0.373	0.365	0.383	0.371	0.380	2.46
13) chloroethane	0.261	0.212	0.275	0.269	0.263	0.264	0.260	0.270	0.265	0.260	7.10
14) 1,3-butadiene	0.289	0.245	0.302	0.328	0.313	0.277	0.333	0.314	0.294	0.300	9.14
15) vinyl bromide	0.319	0.319	0.348	0.338	0.275	0.353	0.335	0.330		0.327	7.45
16) trichlorofluoromethane	0.594	0.559	0.626	0.611	0.598	0.591	0.621	0.608	0.566	0.597	3.84
17) pentane										0.000#	-1.00
18) ethyl ether	0.212	0.177	0.214	0.213	0.216	0.191	0.216	0.215	0.221	0.208	6.97
19) freon 123a										0.000#	-1.00
20) FREON 123										0.000#	-1.00
21) acrolein	0.085	0.076	0.089	0.083	0.080	0.088	0.082	0.087	0.081	0.083	5.10
22) 1,1-dichloroethene	0.574	0.538	0.596	0.588	0.576	0.596	0.587	0.580	0.589	0.581	3.06
23) acetone											

Initial Calibration Summary

Job Number: JB58468 **Sample:** V3D4058-ICC4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D94195.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

	0.024		0.032	0.032		0.033	0.033	0.031	0.031	10.52
24)	allyl chloride										
	0.235	0.226	0.228	0.229	0.228	0.225	0.223	0.228	0.228	1.56
25)	acetonitrile										
	0.036	0.041	0.035	0.035	0.038	0.036	0.037	0.037	0.037	5.75
26)	acetaldehyde										
									0.000#	-1.00
27)	iodomethane										
	0.779	0.784	0.818	0.788	0.778	0.843	0.791	0.773	0.798	0.795	2.84
28)	iso-butyl alcohol										
	0.012	0.015	0.013	0.013	0.012	0.013	0.015	0.013	0.013	8.11
29)	carbon disulfide										
	1.409	1.473	1.475	1.407	1.394	1.562	1.438	1.390	1.407	1.439	3.88
30)	methylene chloride										
	0.444	0.442	0.452	0.429	0.431	0.454	0.432	0.432	0.441	0.440	2.10
31)	methyl acetate										
	0.060		0.065	0.068		0.068	0.065	0.060	0.064	5.53
32)	methyl tert butyl ether										
	1.234	1.291	1.242	1.194	1.186	1.313	1.191	1.206	1.239	1.233	3.64
33)	trans-1,2-dichloroethene										
	0.580	0.552	0.584	0.574	0.574	0.631	0.578	0.580	0.582	0.582	3.60
34)	di-isopropyl ether										
	1.322	1.532	1.345	1.336	1.341	1.281	1.356	1.349	1.320	1.354	5.21
35)	ethyl tert-butyl ether										
	1.245		1.247	1.268	1.283	1.109	1.293	1.287	1.262	1.249	4.75
36)	2-butanone										
	0.036		0.043	0.046		0.045	0.046	0.040	0.043	9.29
37)	1,1-dichloroethane										
	0.723	0.763	0.735	0.707	0.710	0.734	0.713	0.711	0.722	0.724	2.45
38)	chloroprene										
	0.529	0.511	0.522	0.549	0.551	0.452	0.565	0.552	0.525	0.529	6.32
39)	acrylonitrile										
	0.152	0.130	0.143	0.152	0.154	0.146	0.152	0.157	0.154	0.149	5.61
40)	vinyl acetate										
	0.053		0.067	0.070		0.071	0.068	0.060	0.065	11.00
41)	ethyl acetate										
	0.049		0.053	0.055		0.055	0.057	0.048	0.053	6.36
42)	2,2-dichloropropane										
	0.574	0.638	0.605	0.566	0.551	0.679	0.552	0.565	0.588	0.591	7.31
43)	cis-1,2-dichloroethene										
	0.698	0.709	0.735	0.702	0.699	0.715	0.706	0.706	0.722	0.710	1.69
44)	propionitrile										
	0.058	0.051	0.055	0.057	0.059	0.052	0.059	0.059	0.057	0.056	5.24
45)	methyl acrylate										
	0.404	0.398	0.428	0.440	0.330	0.439	0.442	0.434	0.414	9.13
46)	bromochloromethane										
	0.227	0.198	0.236	0.236	0.237	0.218	0.238	0.233	0.238	0.229	5.84
47)	tetrahydrofuran										
	0.136	0.128	0.134	0.137	0.125	0.133	0.141	0.138	0.134	3.82
48)	chloroform										
	0.694	0.711	0.699	0.690	0.689	0.746	0.696	0.689	0.698	0.701	2.59
49)	Tert-Butyl Formate										
	0.366	0.356	0.381	0.388	0.337	0.390	0.391	0.383	0.374	5.19
50)	dibromofluoromethane (s)										
	0.383	0.401	0.389	0.393	0.434	0.395	0.388	0.393	0.397	4.01
51)	1,2-dichloroethane-d4 (s)										
	0.398	0.426	0.394	0.393	0.448	0.390	0.392	0.410	0.407	5.09
52)	freon 113										
	0.262	0.278	0.304	0.294	0.208	0.311	0.296	0.271	0.278	11.84
53)	methacrylonitrile										

Initial Calibration Summary

Job Number: JB58468 **Sample:** V3D4058-ICC4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D94195.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
           0.239 0.236 0.232 0.242 0.249 0.235 0.248 0.247 0.250   0.242    2.78
54)  1,1,1-trichloroethane
           0.606 0.607 0.617 0.604 0.596 0.610 0.608 0.605 0.613   0.607    0.95
55)  tert amyl alcohol
                                                                   0.000#  -1.00
56)  2,2,4-Trimethylpentane
           1.271 1.497 1.409 1.558 1.515 1.162 1.623 1.523 1.341   1.433   10.44
57)  tert-amyl methyl ether
           1.257       1.274 1.260 1.264 1.164 1.275 1.295 1.254   1.255    3.12

58) I   1,4-difluorobenzene   ----------------ISTD--------------------
59)  epichlorohydrin
           0.027       0.025 0.027 0.028 0.022 0.028 0.030 0.026   0.027    8.92
60)  n-butyl alcohol
           0.007       0.007 0.007 0.008 0.007 0.008 0.008 0.007   0.007#   8.10
61)  cyclohexane
           0.415 0.426 0.446 0.436 0.422 0.450 0.443 0.422 0.429   0.432    2.81
62)  carbon tetrachloride
           0.397 0.370 0.393 0.402 0.392 0.401 0.400 0.390 0.403   0.394    2.59
63)  1,1-dichloropropene
           0.387 0.374 0.390 0.384 0.388 0.400 0.392 0.388 0.395   0.389    1.87
64)  hexane
           0.273       0.320 0.340 0.327       0.349 0.341 0.300   0.321    8.36
65)  benzene
           1.178 1.218 1.218 1.175 1.181 1.269 1.199 1.184 1.208   1.203    2.47
66)  heptane
           0.165       0.181 0.205 0.199       0.213 0.203 0.170   0.191    9.70
67)  isopropyl acetate
           0.532       0.534 0.529 0.539 0.472 0.548 0.571 0.552   0.535    5.36
68)  1,2-dichloroethane
           0.362 0.364 0.348 0.352 0.351 0.367 0.351 0.358 0.367   0.358    2.09
69)  trichloroethene
           0.293 0.308 0.286 0.294 0.296 0.317 0.303 0.291 0.293   0.298    3.26
70)  ethyl acrylate
           0.328       0.297 0.357 0.358 0.296 0.364 0.353 0.337   0.336    8.06
71)  tert amyl ethyl ether
                                                                   0.000#  -1.00
72)  2-nitropropane
           0.109       0.105 0.103 0.104       0.103 0.108 0.105   0.105    2.25
73)  2-chloroethyl vinyl ether
           0.189       0.181 0.190 0.194 0.173 0.193 0.204 0.189   0.189    4.84
74)  methyl methacrylate
           0.430 0.426 0.419 0.421 0.437 0.447 0.427 0.443 0.425   0.431    2.25
75)  1,2-dichloropropane
           0.297 0.297 0.291 0.295 0.298 0.287 0.302 0.297 0.298   0.296    1.41
76)  methylcyclohexane
           0.407 0.432 0.450 0.471 0.456 0.377 0.488 0.470 0.423   0.442    7.95
77)  dibromomethane
           0.189 0.176 0.182 0.187 0.189 0.187 0.188 0.187 0.188   0.186    2.32
78)  bromodichloromethane
           0.369 0.372 0.383 0.384 0.391 0.364 0.393 0.381 0.379   0.380    2.60
79)  cis-1,3-dichloropropene
           0.461 0.481 0.466 0.472 0.479 0.478 0.485 0.471 0.469   0.474    1.69
80)  toluene-d8 (s)
           0.974       0.989 0.977 0.991       1.018 0.990 0.975   0.988    1.54
81)  4-methyl-2-pentanone
           0.106       0.085 0.109 0.112       0.114 0.113 0.105   0.106    9.27
82)  toluene
           0.677 0.685 0.682 0.703 0.709 0.719 0.727 0.707 0.711   0.702    2.47
83)  3-methyl-1-butanol
```

Initial Calibration Summary

Job Number: JB58468 **Sample:** V3D4058-ICC4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D94195.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

	0.007	0.008	0.007	0.007	0.007	0.006	0.007	0.008	0.006	0.007#	8.65
84) trans-1,3-dichloropropene											
	0.406	0.465	0.379	0.420	0.428	0.410	0.430	0.425	0.421	0.421	5.41
85) ethyl methacrylate											
	0.325	0.311	0.304	0.348	0.360	0.308	0.365	0.350	0.348	0.336	7.04
86) 1,1,2-trichloroethane											
	0.215	0.199	0.199	0.217	0.221	0.226	0.223	0.219	0.222	0.215	4.66
87) 2-hexanone											
	0.090		0.078	0.094	0.099		0.101	0.097	0.094	0.093	8.24
88) I chlorobenzene-d5	----------ISTD----------										
89) tetrachloroethene											
	0.398	0.418	0.411	0.413	0.416	0.388	0.412	0.405	0.413	0.408	2.40
90) 1,3-dichloropropane											
	0.465	0.489	0.475	0.476	0.488	0.502	0.473	0.489	0.495	0.484	2.48
91) butyl acetate											
	0.194		0.208	0.204	0.210		0.210	0.225	0.206	0.208	4.48
92) 3,3-Dimethyl-1-Butanol											
	0.033		0.034	0.031	0.032	0.036	0.034	0.035	0.029	0.033	7.11
93) dibromochloromethane											
	0.369	0.402	0.372	0.394	0.408	0.389	0.398	0.393	0.388	0.390	3.28
94) 1,2-dibromoethane											
	0.327	0.316	0.316	0.328	0.337	0.341	0.328	0.331	0.332	0.328	2.51
95) n-Butyl Ether											
										0.000#	-1.00
96) chlorobenzene											
	0.933	0.955	0.909	0.929	0.946	0.976	0.941	0.928	0.932	0.939	2.03
97) 1,1,1,2-tetrachloroethane											
	0.360	0.397	0.357	0.372	0.373	0.371	0.369	0.369	0.368	0.371	3.02
98) ethylbenzene											
	1.504	1.638	1.525	1.532	1.553	1.582	1.551	1.526	1.537	1.550	2.55
99) m,p-xylene											
	0.586	0.605	0.584	0.597	0.604	0.609	0.604	0.600	0.610	0.600	1.58
100) o-xylene											
	0.583	0.649	0.590	0.600	0.611	0.601	0.612	0.600	0.600	0.605	3.10
101) styrene											
	0.954	0.989	0.935	1.017	1.041	0.988	1.044	0.995	0.999	0.996	3.63
102) Butyl Acrylate											
										0.000#	-1.00
103) bromoform											
	0.288	0.307	0.277	0.297	0.310	0.285	0.307	0.295	0.284	0.294	4.08
104) I 1,4-dichlorobenzene-d	----------ISTD----------										
105) isopropylbenzene											
	2.552	2.804	2.465	2.694	2.678	2.651	2.709	2.641	2.628	2.647	3.64
106) 4-bromofluorobenzene (s)											
	0.745		0.829	0.717	0.725		0.732	0.725	0.773	0.749	5.29
107) bromobenzene											
	0.745	0.802	0.731	0.762	0.775	0.802	0.777	0.764	0.775	0.770	3.05
108) cyclohexanone											
	0.027		0.031	0.028	0.033	0.032	0.028	0.028	0.029	0.030	7.62
109) 1,1,2,2-tetrachloroethane											
	0.761	0.910	0.738	0.744	0.757	0.874	0.742	0.758	0.746	0.781	8.16
110) trans-1,4-dichloro-2-butene											
	0.159		0.171	0.175	0.180	0.169	0.172	0.175	0.179	0.172	3.75
111) 1,2,3-trichloropropane											
	0.173	0.187	0.163	0.173	0.177	0.152	0.171	0.179	0.175	0.172	5.79
112) n-propylbenzene											
	2.944	3.185	2.851	2.987	2.990	3.011	3.023	2.978	2.997	2.996	2.91
113) 4-Ethyltoluene											

Initial Calibration Summary

Job Number: JB58468 **Sample:** V3D4058-ICC4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D94195.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
            0.527 0.480 0.538 0.572 0.570 0.567 0.574 0.557 0.554   0.549    5.51
114)  2-chlorotoluene
            0.639 0.675 0.622 0.666 0.665 0.694 0.666 0.652 0.669   0.661    3.14
115)  4-chlorotoluene
            0.633 0.676 0.636 0.674 0.676 0.701 0.685 0.663 0.671   0.668    3.27
116)  1,3,5-trimethylbenzene
            2.131 2.345 2.072 2.250 2.266 2.319 2.317 2.196 2.244   2.238    4.06
117)  tert-butylbenzene
            1.815 2.155 1.804 1.958 1.967 1.936 1.990 1.902 1.926   1.939    5.33
118)  pentachloroethane
            0.494 0.525 0.472 0.535 0.538 0.540 0.543 0.510 0.521   0.520    4.61
119)  1,2,4-trimethylbenzene
            2.116 2.320 2.051 2.240 2.249 2.260 2.311 2.202 2.199   2.217    3.95
120)  sec-butylbenzene
            2.786 3.143 2.783 2.991 2.986 2.962 3.056 2.930 2.938   2.953    3.92
121)  1,3-dichlorobenzene
            1.398 1.606 1.383 1.443 1.464 1.483 1.479 1.423 1.437   1.457    4.49
122)  p-isopropyltoluene
            2.329 2.567 2.302 2.487 2.520 2.490 2.580 2.475 2.484   2.471    3.87
123)  1,4-dichlorobenzene
            1.440 1.744 1.433 1.465 1.498 1.585 1.511 1.464 1.486   1.514    6.43
124)  1,2-dichlorobenzene
            1.419 1.633 1.397 1.453 1.480 1.605 1.473 1.450 1.465   1.486    5.38
125)  1,4-Diethylbenzene
            2.329 2.567 2.302 2.487 2.520 2.490 2.580 2.475 2.484   2.471    3.87
126)  n-butylbenzene
            1.191 1.301 1.155 1.281 1.308 1.218 1.337 1.274 1.277   1.260    4.73
127)  1,2,4,5-Tetramethylbenzene
            2.329 2.567 2.302 2.487 2.520 2.490 2.580 2.475 2.484   2.471    3.87
128)  1,2-dibromo-3-chloropropane
            0.191       0.164 0.184 0.187 0.177 0.175 0.190 0.184   0.181    5.04
129)  1,3,5-trichlorobenzene
            1.345 1.524 1.268 1.345 1.364 1.458 1.285 1.335 1.346   1.363    5.90
130)  1,2,4-trichlorobenzene
            1.232       1.163 1.289 1.261 1.336 1.135 1.283 1.268   1.246    5.37
131)  hexachlorobutadiene
            0.640 0.708 0.593 0.690 0.675 0.704 0.635 0.682 0.677   0.667    5.62
132)  naphthalene
            2.608       2.413 2.628 2.489 2.949 2.183 2.690 2.643   2.575    8.67
133)  1,2,3-trichlorobenzene
            1.176 1.262 1.093 1.175 1.071 1.303 0.919 1.179 1.163   1.149    9.77
134)  hexachloroethane
            0.485 0.570 0.465 0.537 0.547 0.507 0.552 0.521 0.519   0.523    6.41
135)  Benzyl chloride
            1.347       1.424 1.398 1.404 1.376 1.401 1.495 1.379   1.403    3.12
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M3D4058.M         Thu Dec 19 12:37:46 2013   3D
```

Initial Calibration Verification

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V3D4058-ICV4058
Lab FileID: 3D94199.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D94199.D Vial: 12
Acq On : 18 Dec 2013 5:54 pm Operator: katteric
Sample : icv4058-50 Inst : MS3D
Misc : MS59846,V3D4058,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D4058.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Thu Dec 19 12:22:47 2013
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
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	108	0.00	7.24
2		1,4-dioxane	0.089	0.092	-3.4	108	0.00	11.12
3	M	tertiary butyl alcohol	1.097	1.070	2.5	108	0.00	7.36
4	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	9.48
5		FREON 115		----------NA----------				
6		FREON 152A		----------NA----------				
7		chlorotrifluoroethene		----------NA----------				
8		chlorodifluoromethane	0.380	0.342	10.0	91	-0.01	3.87
9		dichlorodifluoromethane	0.469	0.490	-4.5	102	-0.01	3.85
10		chloromethane	0.583	0.568	2.6	104	0.00	4.20
11		vinyl chloride	0.554	0.568	-2.5	106	0.00	4.44
12		bromomethane	0.380	0.382	-0.5	104	0.00	5.11
13		chloroethane	0.260	0.265	-1.9	104	0.00	5.28
14		1,3-butadiene	0.300	0.321	-7.0	103	0.00	4.50
15		vinyl bromide	0.327	0.338	-3.4	102	0.00	5.63
16		trichlorofluoromethane	0.597	0.602	-0.8	104	-0.02	5.72
17		pentane		----------NA----------				
18		ethyl ether	0.208	0.235	-13.0	116	0.00	6.14
19		freon 123a		----------NA----------				
20		FREON 123		----------NA----------				
21		acrolein	0.083	0.086	-3.6	108	0.00	6.41
22		1,1-dichloroethene	0.581	0.575	1.0	103	0.00	6.56
23		acetone	0.031	0.035	-12.9	116	-0.01	6.62
24		allyl chloride	0.228	0.235	-3.1	109	0.00	7.10
25		acetonitrile		----------NA----------				
26	m	acetaldehyde		----------NA----------				
27		iodomethane	0.795	0.780	1.9	104	0.00	6.85
28		iso-butyl alcohol	0.013	0.013	0.0	110	0.00	9.77
29		carbon disulfide	1.439	1.407	2.2	105	0.00	6.97
30		methylene chloride	0.440	0.432	1.8	106	0.00	7.30
31		methyl acetate	0.064	0.065	-1.6	105	0.00	7.08
32		methyl tert butyl ether	1.233	1.190	3.5	105	0.00	7.60
33		trans-1,2-dichloroethene	0.582	0.561	3.6	103	0.00	7.66
34		di-isopropyl ether	1.354	1.306	3.5	103	0.00	8.19
35		ethyl tert-butyl ether	1.249	1.269	-1.6	105	0.00	8.66
36		2-butanone	0.043	0.048	-11.6	117	0.00	8.93
37	M	1,1-dichloroethane	0.724	0.711	1.8	106	0.00	8.24
38		chloroprene	0.529	0.532	-0.6	102	0.00	8.33
39		acrylonitrile	0.149	0.157	-5.4	109	0.00	7.63
40		vinyl acetate	0.065	0.072	-10.8	114	0.00	8.21
41		ethyl acetate	0.053	0.057	-7.5	113	0.00	8.94

Initial Calibration Verification

Job Number: JB58468 **Sample:** V3D4058-ICV4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D94199.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

42		2,2-dichloropropane	0.591	0.525	11.2	98	0.00	8.96
43		cis-1,2-dichloroethene	0.710	0.688	3.1	103	0.00	8.97
44		propionitrile	0.056	0.062	-10.7	116	0.00	9.05
45		methyl acrylate	0.414	0.454	-9.7	112	0.00	9.03
46		bromochloromethane	0.229	0.237	-3.5	106	0.00	9.29
47		tetrahydrofuran	0.134	0.142	-6.0	112	0.00	9.32
48		chloroform	0.701	0.681	2.9	104	0.00	9.34
49		Tert-Butyl Formate	0.374	0.408	-9.1	113	0.00	9.36
50	S	dibromofluoromethane (s)	0.397	0.385	3.0	104	0.00	9.54
51	S	1,2-dichloroethane-d4 (s)	0.407	0.387	4.9	104	0.00	9.97
52		freon 113	0.278	0.328	-18.0	114	0.00	6.52
53		methacrylonitrile	0.242	0.253	-4.5	110	0.00	9.23
54		1,1,1-trichloroethane	0.607	0.580	4.4	101	0.00	9.59
55		tert amyl alcohol		----------NA----------				
56		2,2,4-Trimethylpentane	1.433	1.447	-1.0	98	0.00	10.01
57		tert-amyl methyl ether	1.255	1.272	-1.4	106	0.00	10.05
58	I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.01	10.41
59		epichlorohydrin	0.027	0.028	-3.7	107	0.00	11.67
60		n-butyl alcohol	0.007	0.008#	-14.3	113	0.00	10.53
61	M	cyclohexane	0.432	0.434	-0.5	105	0.00	9.65
62		carbon tetrachloride	0.394	0.384	2.5	100	0.00	9.79
63		1,1-dichloropropene	0.389	0.365	6.2	100	0.00	9.76
64		hexane	0.321	0.338	-5.3	104	0.00	7.95
65	M	benzene	1.203	1.185	1.5	106	0.00	10.03
66		heptane	0.191	0.195	-2.1	100	0.01	10.19
67		isopropyl acetate	0.535	0.598	-11.8	119	0.00	9.94
68		1,2-dichloroethane	0.358	0.351	2.0	105	0.00	10.05
69		trichloroethene	0.298	0.295	1.0	106	0.00	10.75
70		ethyl acrylate	0.336	0.368	-9.5	108	0.01	10.75
71		tert amyl ethyl ether		----------NA----------				
72		2-nitropropane	0.105	0.104	1.0	106	0.00	11.53
73		2-chloroethyl vinyl ether	0.189	0.189	0.0	104	0.00	11.54
74		methyl methacrylate	0.431	0.442	-2.6	110	0.01	11.01
75		1,2-dichloropropane	0.296	0.301	-1.7	107	0.00	11.01
76		methylcyclohexane	0.442	0.483	-9.3	108	0.00	10.95
77		dibromomethane	0.186	0.193	-3.8	108	0.01	11.18
78		bromodichloromethane	0.380	0.384	-1.1	105	0.00	11.31
79		cis-1,3-dichloropropene	0.474	0.439	7.4	98	0.01	11.76
80	S	toluene-d8 (s)	0.988	0.977	1.1	105	0.01	12.05
81		4-methyl-2-pentanone	0.106	0.117	-10.4	113	0.00	11.85
82		toluene	0.702	0.696	0.9	104	0.01	12.12
83		3-methyl-1-butanol	0.007	0.007#	0.0	110	0.00	11.87
84		trans-1,3-dichloropropene	0.421	0.417	1.0	104	0.01	12.32
85		ethyl methacrylate	0.336	0.356	-6.0	107	0.00	12.30
86		1,1,2-trichloroethane	0.215	0.226	-5.1	110	0.01	12.54
87		2-hexanone	0.093	0.102	-9.7	114	0.00	12.70
88	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	13.56
89		tetrachloroethene	0.408	0.409	-0.2	103	0.01	12.70
90		1,3-dichloropropane	0.484	0.491	-1.4	107	0.00	12.72
91		butyl acetate	0.208	0.217	-4.3	111	0.00	12.77
92		3,3-Dimethyl-1-Butanol	0.033	0.034	-3.0	114	0.00	12.87
93		dibromochloromethane	0.390	0.401	-2.8	106	0.00	12.99
94		1,2-dibromoethane	0.328	0.337	-2.7	107	0.00	13.13
95		n-Butyl Ether		----------NA----------				
96		chlorobenzene	0.939	0.935	0.4	105	0.00	13.59
97		1,1,1,2-tetrachloroethane	0.371	0.360	3.0	101	0.00	13.65
98		ethylbenzene	1.550	1.516	2.2	103	0.00	13.64
99		m,p-xylene	0.600	0.597	0.5	104	0.00	13.74

Initial Calibration Verification

Job Number: JB58468 **Sample:** V3D4058-ICV4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D94199.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

100		o-xylene	0.605	0.596	1.5	103	0.00	14.16
101		styrene	0.996	1.020	-2.4	104	0.00	14.17
102		Butyl Acrylate		----------NA----------				
103		bromoform	0.294	0.307	-4.4	108	0.00	14.44
104	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	15.86
105		isopropylbenzene	2.647	2.657	-0.4	103	0.01	14.50
106	S	4-bromofluorobenzene (s)	0.749	0.729	2.7	106	0.00	14.71
107		bromobenzene	0.770	0.766	0.5	104	0.00	14.90
108		cyclohexanone	0.030	0.030	0.0	112	0.01	14.68
109		1,1,2,2-tetrachloroethane	0.781	0.761	2.6	106	0.00	14.82
110		trans-1,4-dichloro-2-bute	0.172	0.182	-5.8	108	0.00	14.86
111		1,2,3-trichloropropane	0.172	0.178	-3.5	107	0.00	14.89
112		n-propylbenzene	2.996	3.056	-2.0	106	0.00	14.90
113		4-Ethyltoluene		----------NA----------				
114		2-chlorotoluene	0.661	0.656	0.8	102	0.00	15.06
115		4-chlorotoluene	0.668	0.658	1.5	102	0.00	15.16
116		1,3,5-trimethylbenzene	2.238	2.212	1.2	102	0.00	15.06
117		tert-butylbenzene	1.939	1.929	0.5	102	0.00	15.40
118		pentachloroethane	0.520	0.529	-1.7	103	0.00	15.49
119		1,2,4-trimethylbenzene	2.217	2.253	-1.6	105	0.00	15.45
120		sec-butylbenzene	2.953	2.909	1.5	101	0.00	15.62
121		1,3-dichlorobenzene	1.457	1.434	1.6	103	0.00	15.81
122		p-isopropyltoluene	2.471	2.513	-1.7	105	0.00	15.73
123		1,4-dichlorobenzene	1.514	1.473	2.7	105	0.00	15.89
124		1,2-dichlorobenzene	1.486	1.466	1.3	105	0.00	16.27
125		1,4-Diethylbenzene		----------NA----------				
126		n-butylbenzene	1.260	1.286	-2.1	104	0.00	16.14
127		1,2,4,5-Tetramethylbenzen		----------NA----------				
128		1,2-dibromo-3-chloropropa	0.181	0.195	-7.7	110	0.00	17.00
129		1,3,5-trichlorobenzene	1.363	1.397	-2.5	108	0.00	17.16
130		1,2,4-trichlorobenzene	1.246	1.306	-4.8	105	0.00	17.73
131		hexachlorobutadiene	0.667	0.684	-2.5	103	0.00	17.82
132		naphthalene	2.575	2.737	-6.3	108	0.00	17.97
133		1,2,3-trichlorobenzene	1.149	1.204	-4.8	107	0.00	18.18
134		hexachloroethane	0.523	0.529	-1.1	103	0.00	16.51
135		Benzyl chloride	1.403	1.514	-7.9	113	0.00	16.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D94195.D M3D4058.M Thu Dec 19 12:38:04 2013 3D

Continuing Calibration Summary

Job Number: JB58468 **Sample:** V3D4110-CC4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95400.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D\v3d4110\3D95400.D Vial: 2
Acq On : 28 Jan 2014 2:50 pm Operator: nickm1
Sample : cc4058-20 Inst : MS3D
Misc : MS62219,V3D4110,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D4058.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Thu Jan 02 11:24:09 2014
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
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	107	0.00	7.24
2		1,4-dioxane	0.089	0.104	-16.9	114	0.00	11.12
3	M	tertiary butyl alcohol	1.097	1.088	0.8	103	0.00	7.37
4	I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	9.48
5		FREON 115		----------NA----------				
6		FREON 152A		----------NA----------				
7		chlorotrifluoroethene		----------NA----------				
8		chlorodifluoromethane	0.380	0.393	-3.4	105	0.01	3.89
9		dichlorodifluoromethane	0.469	0.570	-21.5#	121	0.01	3.87
10		chloromethane	0.583	0.606	-3.9	115	0.01	4.21
11		vinyl chloride	0.554	0.632	-14.1	122	0.01	4.46
12		bromomethane	0.380	0.432	-13.7	121	0.02	5.12
13		chloroethane	0.260	0.268	-3.1	106	0.00	5.29
14		1,3-butadiene		----------NA----------				
15		vinyl bromide		----------NA----------				
16		trichlorofluoromethane	0.597	0.696	-16.6	123	0.00	5.74
17		pentane		----------NA----------				
18		ethyl ether	0.208	0.213	-2.4	106	0.01	6.15
19		freon 123a		----------NA----------				
20		FREON 123		----------NA----------				
21		acrolein	0.083	0.073	12.0	90	0.01	6.42
22		1,1-dichloroethene	0.581	0.592	-1.9	109	0.00	6.57
23		acetone	0.031	0.031	0.0	102	0.00	6.63
24		allyl chloride	0.228	0.228	0.0	110	0.00	7.10
25		acetonitrile	0.037	0.034	8.1	99	0.01	7.09
26	m	acetaldehyde		----------NA----------				
27		iodomethane	0.795	0.851	-7.0	118	0.00	6.86
28		iso-butyl alcohol	0.013	0.013	0.0	93	0.00	9.77
29		carbon disulfide	1.439	1.401	2.6	108	0.00	6.98
30		methylene chloride	0.440	0.437	0.7	108	0.00	7.30
31		methyl acetate	0.064	0.065	-1.6	107	0.00	7.09
32		methyl tert butyl ether	1.233	1.239	-0.5	110	0.00	7.61
33		trans-1,2-dichloroethene	0.582	0.588	-1.0	109	0.01	7.67
34		di-isopropyl ether	1.354	1.174	13.3	93	0.00	8.19
35		ethyl tert-butyl ether	1.249	1.208	3.3	101	0.00	8.66
36		2-butanone	0.043	0.046	-7.0	107	0.00	8.94
37	M	1,1-dichloroethane	0.724	0.711	1.8	107	0.01	8.24
38		chloroprene	0.529	0.555	-4.9	108	0.00	8.34
39		acrylonitrile	0.149	0.150	-0.7	102	0.00	7.63
40		vinyl acetate	0.065	0.062	4.6	99	0.00	8.21
41		ethyl acetate	0.053	0.048	9.4	91	0.00	8.95

Continuing Calibration Summary

Job Number: JB58468 **Sample:** V3D4110-CC4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95400.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

42		2,2-dichloropropane	0.591	0.610	-3.2	116	0.00	8.97
43		cis-1,2-dichloroethene	0.710	0.710	0.0	108	0.00	8.97
44		propionitrile	0.056	0.060	-7.1	108	0.00	9.05
45		methyl acrylate	0.414	0.419	-1.2	102	0.00	9.03
46		bromochloromethane	0.229	0.258	-12.7	118	0.00	9.29
47		tetrahydrofuran	0.134	0.132	1.5	100	0.01	9.32
48		chloroform	0.701	0.739	-5.4	115	0.00	9.34
49		Tert-Butyl Formate	0.374	0.347	7.2	95	0.01	9.37
50	S	dibromofluoromethane (s)	0.397	0.396	0.3	109	0.00	9.54
51	S	1,2-dichloroethane-d4 (s)	0.407	0.408	-0.2	111	0.00	9.96
52		freon 113	0.278	0.339	-21.9#	123	0.00	6.53
53		methacrylonitrile	0.242	0.229	5.4	99	0.00	9.23
54		1,1,1-trichloroethane	0.607	0.661	-8.9	117	0.00	9.59
55		tert amyl alcohol		----------NA----------				
56		2,2,4-Trimethylpentane	1.433	1.395	2.7	98	0.00	10.01
57		tert-amyl methyl ether	1.255	1.206	3.9	100	0.00	10.05
58	I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00	10.40
59		epichlorohydrin	0.027	0.027	0.0	97	0.00	11.66
60		n-butyl alcohol	0.007	0.008#	-14.3	97	0.00	10.52
61	M	cyclohexane	0.432	0.462	-6.9	116	0.00	9.65
62		carbon tetrachloride	0.394	0.470	-19.3	127	0.00	9.79
63		1,1-dichloropropene	0.389	0.410	-5.4	112	0.00	9.77
64		hexane	0.321	0.304	5.3	94	0.00	7.95
65	M	benzene	1.203	1.188	1.2	106	0.00	10.03
66		heptane	0.191	0.183	4.2	95	0.01	10.19
67		isopropyl acetate	0.535	0.506	5.4	94	0.00	9.94
68		1,2-dichloroethane	0.358	0.401	-12.0	118	0.00	10.05
69		trichloroethene	0.298	0.311	-4.4	113	0.00	10.74
70		ethyl acrylate		----------NA----------				
71		tert amyl ethyl ether		----------NA----------				
72		2-nitropropane	0.105	0.111	-5.7	108	0.00	11.53
73		2-chloroethyl vinyl ether	0.189	0.187	1.1	97	0.00	11.54
74		methyl methacrylate	0.431	0.420	2.6	100	0.00	11.01
75		1,2-dichloropropane	0.296	0.280	5.4	99	0.00	11.01
76		methylcyclohexane	0.442	0.475	-7.5	107	0.00	10.95
77		dibromomethane	0.186	0.205	-10.2	115	0.00	11.18
78		bromodichloromethane	0.380	0.407	-7.1	113	0.00	11.31
79		cis-1,3-dichloropropene	0.474	0.460	3.0	103	0.00	11.76
80	S	toluene-d8 (s)	0.988	0.964	2.4	103	0.00	12.04
81		4-methyl-2-pentanone	0.106	0.108	-1.9	101	0.00	11.85
82		toluene	0.702	0.699	0.4	104	0.00	12.12
83		3-methyl-1-butanol	0.007	0.007#	0.0	98	0.00	11.86
84		trans-1,3-dichloropropene	0.421	0.430	-2.1	107	0.00	12.32
85		ethyl methacrylate	0.336	0.340	-1.2	102	0.00	12.30
86		1,1,2-trichloroethane	0.215	0.214	0.5	103	0.00	12.53
87		2-hexanone	0.093	0.093	0.0	102	0.00	12.70
88	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	13.55
89		tetrachloroethene	0.408	0.451	-10.5	115	0.00	12.70
90		1,3-dichloropropane	0.484	0.496	-2.5	104	0.00	12.71
91		butyl acetate	0.208	0.204	1.9	93	0.00	12.77
92		3,3-Dimethyl-1-Butanol	0.033	0.032	3.0	94	0.00	12.87
93		dibromochloromethane	0.390	0.424	-8.7	111	0.00	12.98
94		1,2-dibromoethane	0.328	0.349	-6.4	109	0.00	13.13
95		n-Butyl Ether		----------NA----------				
96		chlorobenzene	0.939	0.975	-3.8	108	0.00	13.58
97		1,1,1,2-tetrachloroethane	0.371	0.405	-9.2	113	0.00	13.65
98		ethylbenzene	1.550	1.582	-2.1	107	0.00	13.64
99		m,p-xylene	0.600	0.621	-3.5	107	0.00	13.74

Continuing Calibration Summary

Job Number: JB58468 **Sample:** V3D4110-CC4058
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95400.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

100		o-xylene	0.605	0.622	-2.8	107	0.00	14.16
101		styrene	0.996	1.007	-1.1	104	0.00	14.17
102		Butyl Acrylate		----------NA----------				
103		bromoform	0.294	0.325	-10.5	114	0.00	14.44
104	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	15.86
105		isopropylbenzene	2.647	2.747	-3.8	109	0.00	14.50
106	S	4-bromofluorobenzene (s)	0.749	0.691	7.7	100	0.00	14.71
107		bromobenzene	0.770	0.802	-4.2	110	0.00	14.90
108		cyclohexanone	0.030	0.020	33.3#	74	0.00	14.67
109		1,1,2,2-tetrachloroethane	0.781	0.747	4.4	103	0.00	14.81
110		trans-1,4-dichloro-2-bute	0.172	0.127	26.2#	76	0.00	14.85
111		1,2,3-trichloropropane	0.172	0.191	-11.0	112	0.00	14.89
112		n-propylbenzene	2.996	2.962	1.1	104	0.00	14.90
113		4-Ethyltoluene		----------NA----------				
114		2-chlorotoluene	0.661	0.696	-5.3	112	0.00	15.06
115		4-chlorotoluene	0.668	0.692	-3.6	109	0.00	15.16
116		1,3,5-trimethylbenzene	2.238	2.324	-3.8	111	0.00	15.05
117		tert-butylbenzene	1.939	2.011	-3.7	111	0.00	15.40
118		pentachloroethane	0.520	0.552	-6.2	113	0.00	15.49
119		1,2,4-trimethylbenzene	2.217	2.262	-2.0	107	0.00	15.45
120		sec-butylbenzene	2.953	3.022	-2.3	108	0.00	15.61
121		1,3-dichlorobenzene	1.457	1.494	-2.5	110	0.00	15.81
122		p-isopropyltoluene	2.471	2.598	-5.1	110	0.00	15.73
123		1,4-dichlorobenzene	1.514	1.513	0.1	108	0.00	15.88
124		1,2-dichlorobenzene	1.486	1.510	-1.6	109	0.00	16.27
125		1,4-Diethylbenzene		----------NA----------				
126		n-butylbenzene	1.260	1.275	-1.2	105	0.00	16.13
127		1,2,4,5-Tetramethylbenzen		----------NA----------				
128		1,2-dibromo-3-chloropropa	0.181	0.202	-11.6	111	0.00	17.00
129		1,3,5-trichlorobenzene	1.363	1.471	-7.9	115	0.00	17.16
130		1,2,4-trichlorobenzene	1.246	1.411	-13.2	115	0.00	17.73
131		hexachlorobutadiene	0.667	0.748	-12.1	115	0.00	17.82
132		naphthalene	2.575	2.994	-16.3	116	0.00	17.97
133		1,2,3-trichlorobenzene	1.149	1.335	-16.2	118	0.00	18.18
134		hexachloroethane	0.523	0.548	-4.8	110	0.00	16.51
135		Benzyl chloride	1.403	1.291	8.0	90	0.00	16.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D94194.D M3D4058.M Wed Jan 29 13:21:18 2014 RPT1

Initial Calibration Summary

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Sample: VY6161-ICC6161
Lab FileID: Y142290.D

Response Factor Report MSY

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Tue Jan 07 16:29:02 2014
Response via : Initial Calibration

Calibration Files
5 =Y142286.D 10 =Y142285.D 0.5 =Y142289.D 50 =Y142290.D
100 =Y142291.D 1 =Y142288.D 200 =Y142292.D 20 =Y142284.D
2 =Y142287.D =

Compound	5	10	0.5	50	100	1	200	20	2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------										
2) 1,4-dioxane	0.119	0.109		0.129	0.127		0.119	0.114	0.110	0.118	6.65
3) tertiary butyl alcohol	1.366	1.277		1.364	1.290	1.537	1.226	1.305	1.303	1.333	7.05
4) isobutyl alcohol	0.458	0.344		0.411	0.396		0.383	0.368		0.393	9.99
5) I pentafluorobenzene	----------ISTD----------										
6) propene										0.000	-1.00
7) freon 141b										0.000	-1.00
8) freon 142b										0.000	-1.00
9) freon 143a										0.000	-1.00
10) freon 114										0.000	-1.00
11) chlorodifluoromethane	0.366	0.303		0.318	0.305		0.286	0.331	0.346	0.322	8.57
12) dichlorodifluoromethane	0.436	0.382		0.396	0.378	0.401	0.354	0.402	0.425	0.397	6.57
13) chloromethane	0.636	0.565		0.557	0.556		0.513	0.569	0.689	0.584	10.09
14) vinyl chloride	0.542	0.477	0.470	0.482	0.467	0.540	0.439	0.484	0.567	0.497	8.56
15) 1,3-butadiene	1.071	0.834		0.842	0.964	0.880	0.811	0.874	0.965	0.905	9.69
16) bromomethane	0.421	0.375		0.355	0.345		0.292	0.360		0.358	11.67
17) chloroethane	0.274	0.245	0.258	0.249	0.244	0.247	0.229	0.244	0.279	0.252	6.27
18) Vinyl Bromide	0.358	0.292		0.297		0.299	0.343	0.300	0.323	0.316	8.17
19) trichlorofluoromethane	0.581	0.504		0.530	0.506	0.592	0.479	0.535	0.586	0.539	7.94
20) ethyl ether	0.235	0.249		0.247	0.246	0.193	0.232	0.236	0.237	0.234	7.64
21) 2-chloropropane	0.167	0.150		0.156	0.149		0.139	0.145	0.173	0.154	7.88
22) acrolein	0.090	0.069		0.075		0.070	0.077	0.073	0.074	0.075	9.05
23) 1,1-dichloroethene											

Initial Calibration Summary

Job Number: JB58468 **Sample:** VY6161-ICC6161
Account: PESNJP Parsons Engineering Science **Lab FileID:** Y142290.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
          0.588 0.534 0.542 0.537 0.525 0.504 0.491 0.534 0.588   0.538    6.11
24)  acetone
          0.140 0.132       0.114 0.101       0.097 0.121         0.117   14.42
25)  allyl chloride
          0.223 0.226       0.223 0.221       0.213 0.218         0.221    2.07
26)  acetonitrile
                0.029       0.032 0.031       0.029 0.031         0.031    4.38
27)  iodomethane
          0.749 0.737 0.748 0.737 0.729 0.647 0.683 0.695 0.779   0.723    5.56
28)  carbon disulfide
          1.323 1.252 1.423 1.246 1.210 1.228 1.137 1.199 1.411   1.270    7.62
29)  1-chloropropane
          1.065 0.831       0.705 0.664       0.614 0.717         0.766   21.32
           ----- Linear regression -----  Coefficient =  0.9985
             Response Ratio = 0.06380 + 0.60600 *A

30)  methylene chloride
          0.686 0.658       0.628 0.616       0.570 0.599 0.792   0.650   11.30
31)  methyl acetate
          0.055 0.056       0.062 0.063       0.059 0.059         0.059    5.24
32)  methyl tert butyl ether
          1.201 1.208 1.263 1.226 1.213 1.126 1.132 1.137 1.195   1.189    4.00
33)  trans-1,2-dichloroethene
          0.604 0.587 0.575 0.585 0.571 0.569 0.535 0.563 0.618   0.578    4.18
34)  di-isopropyl ether
          1.578 1.419 1.612 1.536 1.531 1.511 1.444 1.463 1.489   1.509    4.16
35)  ethyl tert-butyl ether
          1.389 1.241 1.357 1.359 1.353 1.315 1.281 1.299 1.251   1.316    3.95
36)  2-butanone
                0.042       0.046 0.046       0.043 0.044         0.044    4.07
37)  1,1-dichloroethane
          0.785 0.780 0.834 0.773 0.760 0.737 0.708 0.739 0.780   0.766    4.72
38)  chloroprene
          0.600 0.511 0.547 0.556 0.541 0.518 0.514 0.542 0.577   0.545    5.46
39)  acrylonitrile
          0.135 0.135       0.137 0.136 0.112 0.126 0.130 0.118   0.129    7.18
40)  vinyl acetate
                0.046       0.065 0.067       0.065 0.059         0.060   13.79
41)  ethyl acetate
          0.056 0.050       0.056 0.055       0.057 0.057         0.055    4.92
42)  2,2-dichloropropane
          0.581 0.545 0.593 0.545 0.528 0.568 0.498 0.529 0.591   0.553    5.83
43)  cis-1,2-dichloroethene
          0.490 0.486 0.548 0.493 0.486 0.469 0.460 0.469 0.501   0.489    5.28
44)  propionitrile
          0.050 0.051       0.056 0.054 0.037 0.050 0.053 0.044   0.049   12.83
45)  bromochloromethane
          0.313 0.319 0.315 0.322 0.322 0.254 0.303 0.303 0.328   0.309    7.28
46)  tetrahydrofuran
          0.049 0.052       0.054 0.052       0.049 0.053         0.052    3.56
47)  chloroform
          0.783 0.761 0.850 0.772 0.760 0.750 0.717 0.727 0.790   0.768    5.07
48)  tert-Butyl Formate
          0.223 0.206       0.265 0.278       0.275 0.243 0.201   0.242   13.40
49)  dibromofluoromethane (s)
          0.502 0.429       0.425 0.429       0.403 0.438 0.558   0.455   12.08
50)  1,2-dichloroethane-d4 (s)
          0.533 0.458       0.449 0.448       0.419 0.469 0.575   0.479   11.50
51)  freon 113
          0.360 0.238       0.255 0.244       0.227 0.258         0.264   18.36
```

Initial Calibration Summary

Job Number: JB58468 **Sample:** VY6161-ICC6161
Account: PESNJP Parsons Engineering Science **Lab FileID:** Y142290.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
            ----- Linear regression -----  Coefficient =  0.9985
              Response Ratio = 0.01620 + 0.22610 *A

52)  methacrylonitrile
          0.142 0.148       0.159 0.160       0.149 0.148 0.126   0.147    7.84
53)  1,1,1-trichloroethane
          0.621 0.577 0.637 0.584 0.567 0.549 0.535 0.567 0.628   0.585    6.15
54)  Cyclohexane
          0.585 0.546 0.629 0.543 0.521 0.533 0.489 0.536 0.586   0.552    7.54
55)  2,2,4-trimethylpentane
          1.668 1.346 1.601 1.398 1.362 1.518 1.276 1.452 1.500   1.458    8.69
56)  tert-amyl methyl ether
          1.371 1.196 1.536 1.303 1.314 1.316 1.242 1.246 1.180   1.300    8.27

57) I   1,4-difluorobenzene   ----------------ISTD--------------------
58)  epichlorohydrin
          0.025 0.024       0.026 0.026       0.024 0.025 0.020   0.024    8.07
59)  n-butyl alcohol
          0.008 0.007       0.009 0.009       0.008 0.008 0.007   0.008   10.98
60)  carbon tetrachloride
          0.399 0.375 0.406 0.379 0.368 0.356 0.350 0.372 0.401   0.378    5.27
61)  1,1-dichloropropene
          0.403 0.394 0.394 0.388 0.377 0.394 0.359 0.387 0.408   0.389    3.70
62)  hexane
          0.412 0.330       0.330 0.315       0.302 0.349 0.420   0.351   13.35
63)  Tert Amyl Alcohol
          0.017 0.016       0.016 0.016       0.015 0.017 0.018   0.016    6.46
64)  benzene
          1.315 1.299 1.434 1.277 1.267 1.250 1.203 1.224 1.337   1.290    5.34
65)  heptane
          0.240 0.197 0.213 0.205 0.198 0.226 0.187 0.216 0.234   0.213    8.38
66)  isopropyl acetate
          0.116 0.102       0.119 0.119       0.115 0.123 0.098   0.113    8.37
67)  1,2-dichloroethane
          0.389 0.395 0.362 0.397 0.395 0.373 0.370 0.380 0.374   0.382    3.37
68)  trichloroethene
          0.326 0.314 0.321 0.310 0.304 0.289 0.290 0.303 0.328   0.309    4.67
69)  ethyl acrylate
          0.307 0.294       0.354 0.364       0.356 0.346 0.264   0.326   11.66
70)  2-nitropropane
          0.086 0.082       0.086 0.083       0.077 0.085 0.090   0.084    4.78
71)  2-chloroethyl vinyl ether
          0.079 0.072       0.089 0.092       0.092 0.083 0.064   0.082   13.15
72)  methyl methacrylate
          0.180 0.190       0.203 0.202       0.192 0.194         0.194    4.38
73)  1,2-dichloropropane
          0.331 0.336 0.374 0.340 0.334 0.320 0.318 0.320 0.335   0.334    5.09
74)  methylcyclohexane
          0.494 0.395 0.455 0.413 0.401 0.437 0.385 0.431 0.447   0.429    8.03
75)  Tert-amyl ethyl ether
          0.761 0.747 0.743 0.786 0.778 0.809 0.749 0.771 0.766   0.768    2.76
76)  dibromomethane
          0.187 0.187 0.151 0.193 0.193 0.164 0.182 0.183 0.191   0.181    7.99
77)  bromodichloromethane
          0.423 0.433 0.400 0.444 0.443 0.387 0.424 0.419 0.423   0.422    4.43
78)  cis-1,3-dichloropropene
          0.503 0.522 0.448 0.538 0.541 0.460 0.516 0.509 0.503   0.504    6.31
79)  toluene-d8 (s)
          1.372 1.179       1.093 1.087       1.025 1.140         1.149   10.53
80)  4-methyl-2-pentanone
```

Initial Calibration Summary

Job Number: JB58468 **Sample:** VY6161-ICC6161
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Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
           0.109 0.108       0.117 0.115       0.107 0.111 0.096   0.109    6.37
 81)  toluene
           1.346 1.308 1.390 1.300 1.285 1.258 1.229 1.256 1.350   1.303    3.99
 82)  3-methyl-1-butanol
           0.007 0.006       0.008 0.008       0.007 0.007         0.007    6.77
 83)  trans-1,3-dichloropropene
           0.421 0.437 0.381 0.463 0.467 0.372 0.448 0.432 0.403   0.425    7.96
 84)  ethyl methacrylate
           0.321 0.338 0.262 0.374 0.382 0.267 0.363 0.343 0.294   0.327   13.60
 85)  1,1,2-trichloroethane
           0.226 0.231 0.221 0.237 0.237 0.210 0.223 0.229 0.225   0.227    3.68
 86)  2-hexanone
           0.090 0.094       0.112 0.111       0.107 0.105         0.103    8.96

 87) I   chlorobenzene-d5      ----------------ISTD--------------------
 88)  tetrachloroethene
           0.451 0.423 0.425 0.410 0.402 0.394 0.382 0.413 0.447   0.416    5.50
 89)  1,3-dichloropropane
           0.522 0.533 0.510 0.536 0.528 0.484 0.499 0.517 0.537   0.519    3.49
 90)  butyl acetate
           0.215 0.193       0.222 0.225       0.213 0.220 0.170   0.208    9.64
 91)  dibromochloromethane
           0.395 0.413 0.347 0.421 0.425 0.340 0.406 0.402 0.378   0.392    7.84
 92)  1,2-dibromoethane
           0.310 0.318 0.279 0.336 0.335 0.261 0.316 0.324 0.299   0.309    8.19
 93)  3,3-Dimethyl-1-Butanol
           0.031 0.028       0.033 0.033       0.031 0.032 0.025   0.030    9.69
 94)  chlorobenzene
           1.042 1.047 1.145 1.028 1.019 1.037 0.967 1.000 1.097   1.043    5.02
 95)  1,1,1,2-tetrachloroethane
           0.384 0.388 0.369 0.385 0.387 0.330 0.367 0.371 0.386   0.374    4.93
 96)  ethylbenzene
           1.730 1.698 1.791 1.661 1.638 1.607 1.568 1.605 1.785   1.676    4.79
 97)  m,p-xylene
           0.666 0.654 0.647 0.641 0.638 0.626 0.606 0.625 0.660   0.641    2.98
 98)  o-xylene
           1.345 1.360 1.342 1.343 1.339 1.278 1.267 1.302 1.379   1.328    2.84
 99)  styrene
           0.996 1.048 0.960 1.097 1.112 0.881 1.056 1.020 0.992   1.018    7.02
100)  bromoform
           0.267 0.267 0.244 0.279 0.283 0.216 0.270 0.266 0.233   0.258    8.67

101) I   1,4-dichlorobenzene-d ----------------ISTD--------------------
102)  isopropylbenzene
           3.335 3.220 3.516 3.091 3.053 3.154 2.933 3.071 3.460   3.204    6.14
103)  4-bromofluorobenzene (s)
           1.216 1.024       0.926 0.943       0.887 0.986         0.997   11.76
104)  cis-1,4-dichloro-2-butene
                                                                   0.000   -1.00
105)  bromobenzene
           0.965 0.962 0.980 0.940 0.935 0.906 0.889 0.916 0.931   0.936    3.16
106)  cyclohexanone
           0.058 0.098       0.077 0.071       0.082 0.090         0.079   17.76
            ----- Linear regression -----  Coefficient =  0.9945
              Response Ratio = -0.01824 + 0.08054 *A

107)  1,1,2,2-tetrachloroethane
           0.869 0.887 0.905 0.846 0.839 0.802 0.788 0.842 0.852   0.848    4.37
108)  trans-1,4-dichloro-2-butene
           0.152 0.177       0.195 0.202       0.194 0.185 0.158   0.180   10.66
```

Initial Calibration Summary

Job Number: JB58468 **Sample:** VY6161-ICC6161
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Project: Fort Monmouth, Oceanport,Monmouth County,NJ

109)	1,2,3-trichloropropane										
	0.201	0.206	0.200	0.197	0.178	0.185	0.202	0.196	0.196		4.91
110)	n-propylbenzene										
	3.814	3.642	3.746	3.542	3.513	3.624	3.364	3.468	3.888	3.622	4.70
111)	4-Ethyltoluene										
	3.153	3.036	3.330	2.927	2.892	3.283	2.887	3.026	3.355	3.099	6.06
112)	2-chlorotoluene										
	0.845	0.834	0.848	0.783	0.782	0.787	0.738	0.780	0.886	0.809	5.72
113)	4-chlorotoluene										
	2.450	2.407	2.684	2.292	2.296	2.392	2.172	2.234	2.556	2.387	6.76
114)	1,3,5-trimethylbenzene										
	2.764	2.723	2.718	2.646	2.626	2.720	2.390	2.612	2.913	2.679	5.26
115)	tert-butylbenzene										
	2.384	2.260	2.406	2.139	2.132	2.251	2.021	2.144	2.446	2.243	6.51
116)	pentachloroethane										
	0.580	0.607	0.599	0.577	0.585	0.529	0.554	0.569	0.598	0.578	4.24
117)	1,2,4-trimethylbenzene										
	2.643	2.619	2.682	2.570	2.543	2.487	2.433	2.512	2.751	2.582	3.91
118)	sec-butylbenzene										
	3.564	3.399	3.591	3.223	3.189	3.241	3.025	3.246	3.662	3.349	6.46
119)	1,3-dichlorobenzene										
	1.680	1.701	1.886	1.646	1.653	1.737	1.556	1.612	1.759	1.692	5.65
120)	p-isopropyltoluene										
	2.872	2.815	2.841	2.702	2.700	2.758	2.542	2.672	2.903	2.756	4.15
121)	1,4-dichlorobenzene										
	1.695	1.716	1.993	1.653	1.664	1.798	1.552	1.600	1.814	1.721	7.70
122)	1,2-dichlorobenzene										
	1.601	1.649	1.698	1.559	1.573	1.546	1.464	1.526	1.724	1.593	5.26
123)	n-butylbenzene										
	2.641	2.502	2.406	2.421	2.487	2.281	2.390	2.675	2.475		5.30
124)	p-Diethylbenzene										
	1.641	1.579	1.619	1.582	1.594	1.689	1.511	1.642	1.690	1.616	3.53
125)	1,2-dibromo-3-chloropropane										
	0.143	0.151	0.148	0.152	0.103	0.142	0.151	0.135	0.141		11.53
126)	1,3,5-Trichlorobenzene										
	1.291	1.304	1.206	1.242	1.269	1.293	1.156	1.236	1.314	1.257	4.13
127)	1,2,4-trichlorobenzene										
	1.036	1.024	0.909	1.057	1.099	0.938	0.997	1.020	0.996	1.008	5.74
128)	1,2,4,5-tetramethylbenzene										
	2.513	2.451	2.469	2.510	2.565	2.696	2.403	2.531	2.549	2.521	3.29
129)	hexachlorobutadiene										
	0.743	0.702	0.660	0.649	0.655	0.734	0.594	0.675	0.765	0.686	7.93
130)	naphthalene										
	1.863	1.941	1.766	2.061	2.148	1.693	1.989	1.949	1.850	1.918	7.41
131)	1,2,3-trichlorobenzene										
	0.931	0.963	0.897	0.971	0.990	0.905	0.879	0.944	0.918	0.933	3.96
132)	hexachloroethane										
	0.562	0.541	0.520	0.533	0.542	0.495	0.520	0.521	0.546	0.531	3.64
133)	Benzyl chloride										
	1.240	1.144	1.164	1.289	1.328	1.159	1.281	1.269	1.077	1.217	6.88

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

MY6161.M Wed Jan 08 15:59:24 2014 RPT1

Initial Calibration Verification

Job Number: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: VY6161-ICV6161
Lab FileID: Y142295.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\Y142295.D Vial: 13
Acq On : 7 Jan 2014 5:27 pm Operator: prashans
Sample : ICV6161-50 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 15:57:45 2014
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	97	0.00	7.65
2		1,4-dioxane	0.118	0.134	-13.6	101	0.00	11.45
3		tertiary butyl alcohol	1.333	1.341	-0.6	95	0.00	7.77
4		isobutyl alcohol	0.393	0.406	-3.3	96	0.00	10.13
5	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	9.81
6		propene		----------NA----------				
7		freon 141b		----------NA----------				
8		freon 142b		----------NA----------				
9		freon 143a		----------NA----------				
10		freon 114		----------NA----------				
11		chlorodifluoromethane	0.322	0.274	14.9	94	0.00	4.23
12		dichlorodifluoromethane	0.397	0.357	10.1	98	-0.01	4.20
13		chloromethane	0.584	0.542	7.2	106	0.00	4.57
14		vinyl chloride	0.497	0.454	8.7	103	0.00	4.81
15		1,3-butadiene	0.905	0.746	17.6	97	0.00	4.87
16		bromomethane	0.358	0.354	1.1	109	0.02	5.50
17		chloroethane	0.252	0.241	4.4	106	0.00	5.66
18		Vinyl Bromide	0.316	0.280	11.4	103	0.00	6.02
19		trichlorofluoromethane	0.539	0.483	10.4	99	0.01	6.11
20		ethyl ether	0.234	0.241	-3.0	106	0.01	6.52
21		2-chloropropane	0.154	0.144	6.5	101	0.00	6.73
22		acrolein	0.075	0.068	9.3	99	0.01	6.83
23		1,1-dichloroethene	0.538	0.511	5.0	104	0.00	6.95
24		acetone	0.117	0.098	16.2	94	0.00	7.04
25		allyl chloride	0.221	0.223	-0.9	109	0.00	7.48
26		acetonitrile	0.031	0.029	6.5	99	0.00	7.52
27		iodomethane	0.723	0.739	-2.2	109	0.00	7.24
28		carbon disulfide	1.270	1.191	6.2	104	0.00	7.36
		----------	True	Calc.	% Drift	----------		
29		1-chloropropane	50.000	49.287	1.4	102	0.00	7.69
		----------	AvgRF	CCRF	% Dev	----------		
30		methylene chloride	0.650	0.609	6.3	106	0.00	7.69
31		methyl acetate	0.059	0.054	8.5	95	0.01	7.48
32		methyl tert butyl ether	1.189	1.138	4.3	101	0.00	7.97
33		trans-1,2-dichloroethene	0.578	0.571	1.2	106	0.00	8.03
34		di-isopropyl ether	1.509	1.465	2.9	104	0.00	8.53
35		ethyl tert-butyl ether	1.316	1.301	1.1	104	0.00	8.98
36		2-butanone	0.044	0.041	6.8	99	0.00	9.32
37		1,1-dichloroethane	0.766	0.762	0.5	107	0.00	8.60

Initial Calibration Verification

Job Number: JB58468 **Sample:** VY6161-ICV6161
Account: PESNJP Parsons Engineering Science **Lab FileID:** Y142295.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

			True	Calc.	% Drift			
38		chloroprene	0.545	0.490	10.1	96	0.00	8.69
39		acrylonitrile	0.129	0.125	3.1	99	0.00	8.05
40		vinyl acetate	0.060	0.067	-11.7	113	0.00	8.58
41		ethyl acetate	0.055	0.057	-3.6	110	0.00	9.30
42		2,2-dichloropropane	0.553	0.513	7.2	103	0.00	9.32
43		cis-1,2-dichloroethene	0.489	0.492	-0.6	109	0.00	9.33
44		propionitrile	0.049	0.050	-2.0	98	0.00	9.45
45		bromochloromethane	0.309	0.317	-2.6	107	0.00	9.65
46		tetrahydrofuran	0.052	0.050	3.8	101	0.00	9.67
47		chloroform	0.768	0.761	0.9	107	0.00	9.69
48		tert-Butyl Formate	0.242	0.254	-5.0	104	0.00	9.71
49	S	dibromofluoromethane (s)	0.455	0.425	6.6	109	0.00	9.89
50	S	1,2-dichloroethane-d4 (s)	0.479	0.432	9.8	105	0.00	10.31
			True	Calc.	% Drift			
51		freon 113	50.000	50.873	-1.7	105	0.00	6.90
			AvgRF	CCRF	% Dev			
52		methacrylonitrile	0.147	0.150	-2.0	103	0.00	9.60
53		1,1,1-trichloroethane	0.585	0.553	5.5	103	0.00	9.92
54		Cyclohexane	0.552	0.499	9.6	100	0.00	9.96
55		2,2,4-trimethylpentane	1.458	1.230	15.6	96	0.00	10.30
56		tert-amyl methyl ether	1.300	1.258	3.2	105	0.00	10.36
57	I	1,4-difluorobenzene	1.000	1.000	0.0	108	0.00	10.73
58		epichlorohydrin	0.024	0.022	8.3	92	0.00	11.99
59		n-butyl alcohol	0.008	0.008	0.0	95	0.00	10.87
60		carbon tetrachloride	0.378	0.358	5.3	102	0.00	10.11
61		1,1-dichloropropene	0.389	0.374	3.9	104	0.00	10.09
62		hexane	0.351	0.281	19.9	92	0.00	8.27
63		Tert Amyl Alcohol	0.016	0.015	6.3	97	0.00	10.24
64		benzene	1.290	1.280	0.8	108	0.00	10.36
65		heptane	0.213	0.176	17.4	93	0.00	10.47
66		isopropyl acetate	0.113	0.113	0.0	102	0.00	10.27
67		1,2-dichloroethane	0.382	0.385	-0.8	105	0.00	10.40
68		trichloroethene	0.309	0.307	0.6	107	0.00	11.06
69		ethyl acrylate	0.326	0.332	-1.8	101	0.00	11.06
70		2-nitropropane	0.084	0.077	8.3	97	0.00	11.86
71		2-chloroethyl vinyl ether	0.082	0.079	3.7	96	0.00	11.84
72		methyl methacrylate	0.194	0.192	1.0	102	0.00	11.31
73		1,2-dichloropropane	0.334	0.334	0.0	106	0.00	11.33
74		methylcyclohexane	0.429	0.385	10.3	101	0.00	11.24
75		Tert-amyl ethyl ether	0.768	0.781	-1.7	107	0.00	11.17
76		dibromomethane	0.181	0.188	-3.9	105	0.00	11.50
77		bromodichloromethane	0.422	0.441	-4.5	107	0.00	11.62
78		cis-1,3-dichloropropene	0.504	0.532	-5.6	107	0.00	12.06
79	S	toluene-d8 (s)	1.149	1.102	4.1	109	0.00	12.32
80		4-methyl-2-pentanone	0.109	0.109	0.0	101	0.00	12.14
81		toluene	1.303	1.306	-0.2	109	0.00	12.39
82		3-methyl-1-butanol	0.007	0.007	0.0	97	0.00	12.16
83		trans-1,3-dichloropropene	0.425	0.454	-6.8	106	0.00	12.61
84		ethyl methacrylate	0.327	0.358	-9.5	103	0.00	12.57
85		1,1,2-trichloroethane	0.227	0.233	-2.6	106	0.00	12.82
86		2-hexanone	0.103	0.103	0.0	100	0.00	12.98
87	I	chlorobenzene-d5	1.000	1.000	0.0	107	0.00	13.81
88		tetrachloroethene	0.416	0.403	3.1	105	0.00	12.95
89		1,3-dichloropropane	0.519	0.525	-1.2	105	0.00	13.00
90		butyl acetate	0.208	0.212	-1.9	102	0.00	13.02
91		dibromochloromethane	0.392	0.420	-7.1	107	0.00	13.26

Initial Calibration Verification

Job Number: JB58468 **Sample:** VY6161-ICV6161
Account: PESNJP Parsons Engineering Science **Lab FileID:** Y142295.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

92		1,2-dibromoethane	0.309	0.332	-7.4	105	0.00	13.41
93		3,3-Dimethyl-1-Butanol	0.030	0.030	0.0	97	0.00	13.14
94		chlorobenzene	1.043	1.046	-0.3	109	0.00	13.84
95		1,1,1,2-tetrachloroethane	0.374	0.394	-5.3	109	0.00	13.90
96		ethylbenzene	1.676	1.674	0.1	108	0.00	13.88
97		m,p-xylene	0.641	0.651	-1.6	108	0.00	13.97
98		o-xylene	1.328	1.361	-2.5	108	0.00	14.39
99		styrene	1.018	1.123	-10.3	109	0.00	14.41
100		bromoform	0.258	0.275	-6.6	105	0.00	14.70
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	16.09
102		isopropylbenzene	3.204	3.179	0.8	107	0.00	14.72
103	S	4-bromofluorobenzene (s)	0.997	0.970	2.7	109	0.00	14.94
104		cis-1,4-dichloro-2-butene		----------NA----------				
105		bromobenzene	0.936	0.966	-3.2	107	0.00	15.14
		----------	True	Calc.	% Drift	----------		
106		cyclohexanone	500.000	460.805	7.8	98	0.00	14.93
		----------	AvgRF	CCRF	% Dev	----------		
107		1,1,2,2-tetrachloroethane	0.848	0.844	0.5	104	0.00	15.06
108		trans-1,4-dichloro-2-bute	0.180	0.188	-4.4	100	0.00	15.10
109		1,2,3-trichloropropane	0.196	0.194	1.0	101	0.00	15.14
110		n-propylbenzene	3.622	3.603	0.5	106	0.00	15.12
111		4-Ethyltoluene	3.099	3.019	2.6	108	0.00	15.22
112		2-chlorotoluene	0.809	0.822	-1.6	110	0.00	15.28
113		4-chlorotoluene	2.387	2.361	1.1	108	0.00	15.38
114		1,3,5-trimethylbenzene	2.679	2.712	-1.2	107	0.00	15.27
115		tert-butylbenzene	2.243	2.183	2.7	106	0.00	15.61
116		pentachloroethane	0.578	0.604	-4.5	109	0.00	15.72
117		1,2,4-trimethylbenzene	2.582	2.666	-3.3	108	0.00	15.66
118		sec-butylbenzene	3.349	3.264	2.5	106	0.00	15.82
119		1,3-dichlorobenzene	1.692	1.696	-0.2	108	0.00	16.03
120		p-isopropyltoluene	2.756	2.770	-0.5	107	0.00	15.94
121		1,4-dichlorobenzene	1.721	1.692	1.7	107	0.00	16.11
122		1,2-dichlorobenzene	1.593	1.605	-0.8	107	0.00	16.51
123		n-butylbenzene	2.475	2.446	1.2	106	0.00	16.34
124		p-Diethylbenzene	1.616	1.615	0.1	107	0.00	16.31
125		1,2-dibromo-3-chloropropa	0.141	0.141	0.0	99	0.00	17.29
126		1,3,5-Trichlorobenzene	1.257	1.269	-1.0	107	0.00	17.44
127		1,2,4-trichlorobenzene	1.008	1.070	-6.2	106	0.00	18.09
128		1,2,4,5-tetramethylbenzen	2.521	2.608	-3.5	108	0.00	17.10
129		hexachlorobutadiene	0.686	0.655	4.5	105	0.00	18.17
130		naphthalene	1.918	2.050	-6.9	104	0.00	18.38
131		1,2,3-trichlorobenzene	0.933	0.972	-4.2	105	0.00	18.63
132		hexachloroethane	0.531	0.551	-3.8	108	0.00	16.74
133		Benzyl chloride	1.217	1.244	-2.2	101	0.00	16.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y142290.D MY6161.M Wed Jan 08 17:14:06 2014 RPT1

6.9.5

6

Continuing Calibration Summary

Job Number: JB58468 **Sample:** VY6198-CC6161
Account: PESNJP Parsons Engineering Science **Lab FileID:** Y143017.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\Y143017.D Vial: 2
Acq On : 31 Jan 2014 9:23 am Operator: prashans
Sample : CC6161-20 Inst : MSY
Misc : MS62262,VY6198,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 15:57:45 2014
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	96	0.00	7.65
2	1,4-dioxane	0.118	0.118	0.0	99	0.00	11.45
3	tertiary butyl alcohol	1.333	1.290	3.2	95	0.00	7.76
4	isobutyl alcohol	0.393	0.353	10.2	92	0.00	10.13
5 I	pentafluorobenzene	1.000	1.000	0.0	93	0.00	9.81
6	propene		----------NA----------				
7	freon 141b		----------NA----------				
8	freon 142b		----------NA----------				
9	freon 143a		----------NA----------				
10	freon 114		----------NA----------				
11	chlorodifluoromethane	0.322	0.390	-21.1#	110	0.01	4.24
12	dichlorodifluoromethane	0.397	0.451	-13.6	105	0.00	4.22
13	chloromethane	0.584	0.553	5.3	91	0.00	4.57
14	vinyl chloride	0.497	0.514	-3.4	99	0.00	4.81
15	1,3-butadiene		----------NA----------				
16	bromomethane	0.358	0.366	-2.2	95	0.01	5.49
17	chloroethane	0.252	0.289	-14.7	110	0.00	5.66
18	Vinyl Bromide		----------NA----------				
19	trichlorofluoromethane	0.539	0.606	-12.4	105	0.00	6.11
20	ethyl ether	0.234	0.232	0.9	91	0.02	6.52
21	2-chloropropane	0.154	0.149	3.2	95	0.00	6.73
22	acrolein	0.075	0.050	33.3#	63	0.02	6.84
23	1,1-dichloroethene	0.538	0.615	-14.3	107	0.00	6.95
24	acetone	0.117	0.135	-15.4	104	0.00	7.05
25	allyl chloride	0.221	0.230	-4.1	99	0.00	7.48
26	acetonitrile	0.031	0.031	0.0	94	0.00	7.52
27	iodomethane	0.723	0.775	-7.2	104	0.00	7.25
28	carbon disulfide	1.270	1.362	-7.2	106	0.00	7.36
	----------	True	Calc.	% Drift	----------		
29	1-chloropropane	20.000	21.873	-9.4	107	0.01	7.70
	----------	AvgRF	CCRF	% Dev	----------		
30	methylene chloride	0.650	0.638	1.8	99	0.00	7.69
31	methyl acetate	0.059	0.060	-1.7	95	0.00	7.48
32	methyl tert butyl ether	1.189	1.222	-2.8	100	0.00	7.96
33	trans-1,2-dichloroethene	0.578	0.638	-10.4	106	0.00	8.03
34	di-isopropyl ether	1.509	1.429	5.3	91	0.00	8.53
35	ethyl tert-butyl ether	1.316	1.364	-3.6	98	0.00	8.99
36	2-butanone	0.044	0.048	-9.1	101	0.01	9.32
37	1,1-dichloroethane	0.766	0.823	-7.4	104	0.00	8.60

Continuing Calibration Summary

Job Number: JB58468 **Sample:** VY6198-CC6161
Account: PESNJP Parsons Engineering Science **Lab FileID:** Y143017.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

			True	Calc.	% Drift			
38		chloroprene	0.545	0.610	-11.9	105	0.00	8.69
39		acrylonitrile	0.129	0.123	4.7	88	0.01	8.06
40		vinyl acetate	0.060	0.061	-1.7	95	0.00	8.58
41		ethyl acetate	0.055	0.053	3.6	87	0.00	9.30
42		2,2-dichloropropane	0.553	0.641	-15.9	113	0.00	9.31
43		cis-1,2-dichloroethene	0.489	0.516	-5.5	103	0.00	9.33
44		propionitrile	0.049	0.050	-2.0	88	0.00	9.45
45		bromochloromethane	0.309	0.342	-10.7	105	0.00	9.64
46		tetrahydrofuran	0.052	0.054	-3.8	95	0.00	9.68
47		chloroform	0.768	0.850	-10.7	109	0.00	9.69
48		tert-Butyl Formate	0.242	0.248	-2.5	95	0.00	9.71
49	S	dibromofluoromethane (s)	0.455	0.466	-2.4	99	0.00	9.89
50	S	1,2-dichloroethane-d4 (s)	0.479	0.478	0.2	95	0.00	10.31
			True	Calc.	% Drift			
51		freon 113	20.000	22.001	-10.0	105	0.00	6.90
			AvgRF	CCRF	% Dev			
52		methacrylonitrile	0.147	0.149	-1.4	94	0.00	9.61
53		1,1,1-trichloroethane	0.585	0.675	-15.4	111	0.00	9.92
54		Cyclohexane	0.552	0.599	-8.5	104	0.00	9.97
55		2,2,4-trimethylpentane	1.458	1.576	-8.1	101	0.00	10.30
56		tert-amyl methyl ether	1.300	1.324	-1.8	99	0.00	10.36
57	I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	10.72
58		epichlorohydrin	0.024	0.024	0.0	97	0.00	11.99
59		n-butyl alcohol	0.008	0.007	12.5	89	0.00	10.87
60		carbon tetrachloride	0.378	0.411	-8.7	113	0.00	10.10
61		1,1-dichloropropene	0.389	0.405	-4.1	107	0.00	10.09
62		hexane	0.351	0.328	6.6	96	0.00	8.27
63		Tert Amyl Alcohol		----------NA----------				
64		benzene	1.290	1.260	2.3	105	0.00	10.36
65		heptane	0.213	0.207	2.8	98	0.00	10.47
66		isopropyl acetate	0.113	0.111	1.8	92	0.00	10.27
67		1,2-dichloroethane	0.382	0.412	-7.9	110	0.00	10.40
68		trichloroethene	0.309	0.321	-3.9	108	0.00	11.05
69		ethyl acrylate		----------NA----------				
70		2-nitropropane	0.084	0.089	-6.0	108	0.00	11.85
71		2-chloroethyl vinyl ether	0.082	0.100	-22.0#	122	0.00	11.84
72		methyl methacrylate	0.194	0.176	9.3	93	0.00	11.32
73		1,2-dichloropropane	0.334	0.320	4.2	102	0.00	11.33
74		methylcyclohexane	0.429	0.442	-3.0	104	0.00	11.23
75		Tert-amyl ethyl ether		----------NA----------				
76		dibromomethane	0.181	0.194	-7.2	108	0.00	11.50
77		bromodichloromethane	0.422	0.447	-5.9	109	0.00	11.62
78		cis-1,3-dichloropropene	0.504	0.519	-3.0	104	0.00	12.06
79	S	toluene-d8 (s)	1.149	1.209	-5.2	108	0.00	12.32
80		4-methyl-2-pentanone	0.109	0.106	2.8	97	0.00	12.14
81		toluene	1.303	1.341	-2.9	109	0.00	12.39
82		3-methyl-1-butanol	0.007	0.007	0.0	94	0.00	12.16
83		trans-1,3-dichloropropene	0.425	0.463	-8.9	109	0.00	12.61
84		ethyl methacrylate	0.327	0.338	-3.4	100	0.00	12.56
85		1,1,2-trichloroethane	0.227	0.241	-6.2	108	0.00	12.82
86		2-hexanone	0.103	0.098	4.9	95	0.00	12.98
87	I	chlorobenzene-d5	1.000	1.000	0.0	113	0.00	13.81
88		tetrachloroethene	0.416	0.401	3.6	110	0.00	12.95
89		1,3-dichloropropane	0.519	0.500	3.7	109	0.00	13.00
90		butyl acetate	0.208	0.186	10.6	95	0.00	13.02
91		dibromochloromethane	0.392	0.382	2.6	107	0.00	13.25

Continuing Calibration Summary

Job Number: JB58468 **Sample:** VY6198-CC6161
Account: PESNJP Parsons Engineering Science **Lab FileID:** Y143017.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

92		1,2-dibromoethane	0.309	0.305	1.3	107	0.00	13.41
93		3,3-Dimethyl-1-Butanol	0.030	0.026	13.3	95	0.00	13.14
94		chlorobenzene	1.043	0.981	5.9	111	0.00	13.84
95		1,1,1,2-tetrachloroethane	0.374	0.363	2.9	111	0.00	13.89
96		ethylbenzene	1.676	1.629	2.8	115	0.00	13.87
97		m,p-xylene	0.641	0.623	2.8	113	0.00	13.97
98		o-xylene	1.328	1.299	2.2	113	0.00	14.39
99		styrene	1.018	0.986	3.1	109	0.00	14.41
100		bromoform	0.258	0.248	3.9	106	0.00	14.70
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	117	0.00	16.09
102		isopropylbenzene	3.204	3.002	6.3	114	0.00	14.72
103	S	4-bromofluorobenzene (s)	0.997	0.933	6.4	111	0.00	14.94
104		cis-1,4-dichloro-2-butene		----------NA----------				
105		bromobenzene	0.936	0.861	8.0	110	0.00	15.14
		----------	True	Calc.	% Drift	----------		
106		cyclohexanone	200.000	272.870	-36.4#	137	0.00	14.93
		----------	AvgRF	CCRF	% Dev	----------		
107		1,1,2,2-tetrachloroethane	0.848	0.832	1.9	116	0.00	15.05
108		trans-1,4-dichloro-2-bute	0.180	0.172	4.4	108	0.00	15.10
109		1,2,3-trichloropropane	0.196	0.189	3.6	109	0.00	15.13
110		n-propylbenzene	3.622	3.556	1.8	120	0.00	15.12
111		4-Ethyltoluene		----------NA----------				
112		2-chlorotoluene	0.809	0.771	4.7	116	0.00	15.28
113		4-chlorotoluene	2.387	2.217	7.1	116	0.00	15.38
114		1,3,5-trimethylbenzene	2.679	2.529	5.6	113	0.00	15.26
115		tert-butylbenzene	2.243	2.097	6.5	114	0.00	15.61
116		pentachloroethane	0.578	0.532	8.0	109	0.00	15.71
117		1,2,4-trimethylbenzene	2.582	2.468	4.4	115	0.00	15.65
118		sec-butylbenzene	3.349	3.258	2.7	117	0.00	15.82
119		1,3-dichlorobenzene	1.692	1.529	9.6	111	0.00	16.03
120		p-isopropyltoluene	2.756	2.628	4.6	115	0.00	15.93
121		1,4-dichlorobenzene	1.721	1.554	9.7	114	0.00	16.11
122		1,2-dichlorobenzene	1.593	1.459	8.4	112	0.00	16.51
123		n-butylbenzene	2.475	2.470	0.2	121	0.00	16.34
124		p-Diethylbenzene		----------NA----------				
125		1,2-dibromo-3-chloropropa	0.141	0.131	7.1	101	0.00	17.29
126		1,3,5-Trichlorobenzene	1.257	1.188	5.5	112	0.00	17.44
127		1,2,4-trichlorobenzene	1.008	0.929	7.8	106	0.00	18.09
128		1,2,4,5-tetramethylbenzen		----------NA----------				
129		hexachlorobutadiene	0.686	0.645	6.0	112	0.00	18.17
130		naphthalene	1.918	1.679	12.5	101	0.00	18.37
131		1,2,3-trichlorobenzene	0.933	0.847	9.2	105	0.00	18.63
132		hexachloroethane	0.531	0.548	-3.2	123	0.00	16.74
133		Benzyl chloride	1.217	1.206	0.9	111	0.00	16.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y142284.D MY6161.M Mon Feb 03 17:27:46 2014 RPT1

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143031.D
Acq On : 31 Jan 2014 4:43 pm
Operator : prashans
Sample : JB58468-1
Misc : MS62181,VY6198,7.7,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 03 17:41:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.66	65	48486	500.00	ug/L	0.00
5) pentafluorobenzene	9.82	168	157154	50.00	ug/L	0.00
57) 1,4-difluorobenzene	10.73	114	233831	50.00	ug/L	0.00
87) chlorobenzene-d5	13.81	117	207975	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.09	152	94814	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	9.90	113	72133	50.44	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 100.88%			
50) 1,2-dichloroethane-d4 (s)	10.32	65	70376	46.78	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 93.56%			
79) toluene-d8 (s)	12.32	98	278852	51.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 103.76%			
103) 4-bromofluorobenzene (s)	14.94	95	93675	49.56	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 99.12%			
Target Compounds						Qvalue
30) methylene chloride	7.69	49	4875	2.39	ug/L	94

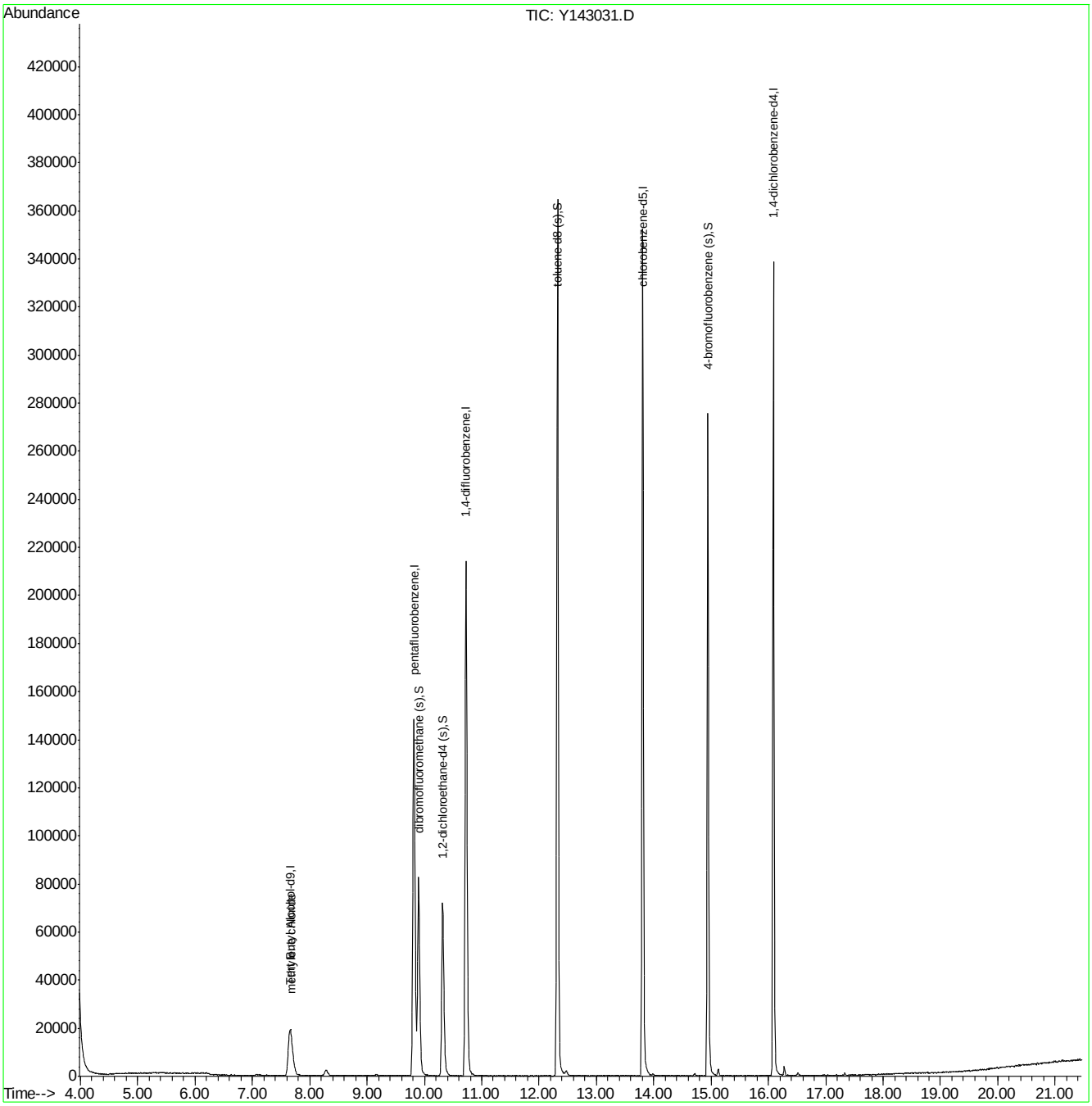
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MY6161.M Mon Feb 03 17:52:07 2014 RPT1 Page: 1

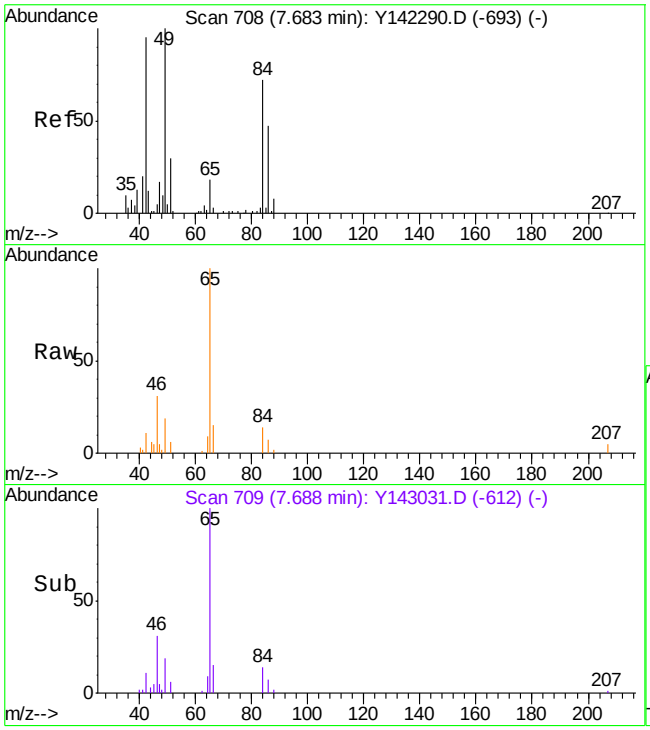
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143031.D
Acq On : 31 Jan 2014 4:43 pm
Operator : prashans
Sample : JB58468-1
Misc : MS62181,VY6198,7.7,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 03 17:41:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration



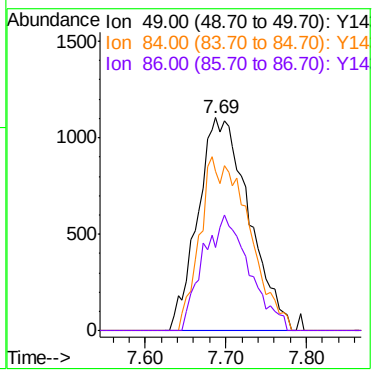
MY6161.M Mon Feb 03 17:52:07 2014 RPT1 Page: 2



#30
methylene chloride
Concen: 2.39 ug/L
RT: 7.69 min Scan# 709
Delta R.T. 0.01 min
Lab File: Y143031.D
Acq: 31 Jan 2014 4:43 pm

Tgt Ion: 49 Resp: 4875

Ion	Ratio	Lower	Upper
49	100		
84	75.0	50.7	94.1
86	39.3	32.6	60.5



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143031.D
Acq On : 31 Jan 2014 4:43 pm
Operator : prashans
Sample : JB58468-1
Misc : MS62181,VY6198,7.7,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 318 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\MY6161.M
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.565	110	112	115	rVB3	361	330	0.05%	0.009%
2	4.602	115	119	121	rBV	391	438	0.06%	0.011%
3	4.707	135	139	142	rBB3	246	355	0.05%	0.009%
4	4.832	162	163	174	rBV4	350	770	0.11%	0.020%
5	5.052	202	205	211	rVB3	379	649	0.09%	0.017%
6	5.627	314	315	320	rBV3	329	441	0.06%	0.011%
7	5.716	330	332	335	rBV3	382	354	0.05%	0.009%
8	5.737	335	336	341	rBV	419	404	0.06%	0.010%
9	5.789	341	346	351	rVV4	405	513	0.07%	0.013%
10	5.857	357	359	362	rVB3	495	384	0.05%	0.010%
11	5.878	362	363	369	rBV3	317	415	0.06%	0.011%
12	5.941	373	375	382	rVB4	345	569	0.08%	0.015%
13	5.998	382	386	387	rBV3	334	420	0.06%	0.011%
14	6.108	403	407	409	rBV3	373	435	0.06%	0.011%
15	6.140	409	413	417	rVV3	481	874	0.12%	0.023%
16	6.176	417	420	448	rVB5	1170	4763	0.67%	0.123%
17	6.328	448	449	457	rBV3	169	356	0.05%	0.009%
18	6.772	530	534	538	rVB2	240	396	0.06%	0.010%
19	6.820	538	543	546	rBV	198	355	0.05%	0.009%
20	7.065	581	590	592	rBV2	369	809	0.11%	0.021%
21	7.081	592	593	601	rVB3	351	623	0.09%	0.016%
22	7.128	601	602	608	rBV3	196	322	0.05%	0.008%
23	7.411	650	656	662	rVB2	184	368	0.05%	0.010%
24	7.662	686	704	735	rBV3	19286	102005	14.39%	2.637%
25	8.138	790	795	797	rBV2	271	370	0.05%	0.010%
26	8.279	810	822	842	rVB7	2339	8012	1.13%	0.207%
27	8.446	847	854	857	rVB3	210	404	0.06%	0.010%
28	8.514	857	867	871	rBV2	209	466	0.07%	0.012%
29	8.551	871	874	880	rBV	228	337	0.05%	0.009%
30	8.765	912	915	923	rBV3	220	352	0.05%	0.009%
31	9.069	968	973	979	rVB3	216	426	0.06%	0.011%
32	9.157	984	990	998	rVB2	534	1328	0.19%	0.034%
33	9.382	1027	1033	1037	rVB2	314	442	0.06%	0.011%
34	9.816	1104	1116	1125	rBV	148341	403792	56.95%	10.437%

MY6161.M Mon Feb 03 17:44:04 2014 RPT1 Page: 1

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143031.D
Acq On : 31 Jan 2014 4:43 pm
Operator : prashans
Sample : JB58468-1
Misc : MS62181,VY6198,7.7,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 318 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\MY6161.M
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

35	9.900	1125	1132	1157	rVB	82396	233381	32.92%	6.033%
36	10.068	1163	1164	1167	rVB	450	367	0.05%	0.009%
37	10.104	1167	1171	1173	rBV2	315	390	0.06%	0.010%
38	10.319	1201	1212	1244	rBV	72002	192587	27.16%	4.978%
39	10.727	1275	1290	1317	rBV	214103	512015	72.22%	13.235%
40	11.067	1349	1355	1360	rBV4	438	838	0.12%	0.022%
41	12.322	1579	1595	1618	rBV	364685	708982	100.00%	18.326%
42	12.468	1618	1623	1636	rVB4	2152	5875	0.83%	0.152%
43	13.655	1849	1850	1856	rVB2	243	362	0.05%	0.009%
44	13.807	1869	1879	1906	rBV	352516	622256	87.77%	16.084%
45	13.980	1910	1912	1921	rVB3	675	1075	0.15%	0.028%
46	14.079	1928	1931	1936	rVB3	244	419	0.06%	0.011%
47	14.314	1972	1976	1983	rVB2	209	342	0.05%	0.009%
48	14.398	1987	1992	1995	rVV2	381	444	0.06%	0.011%
49	14.430	1995	1998	2003	rVB2	257	388	0.05%	0.010%
50	14.717	2044	2053	2062	rBV6	964	1950	0.28%	0.050%
51	14.942	2086	2096	2126	rBV	275576	459917	64.87%	11.888%
52	15.130	2126	2132	2142	rVV4	2771	5057	0.71%	0.131%
53	15.204	2142	2146	2151	rVB	217	334	0.05%	0.009%
54	15.266	2156	2158	2165	rVB2	234	382	0.05%	0.010%
55	15.397	2178	2183	2189	rVB3	312	497	0.07%	0.013%
56	15.502	2199	2203	2213	rBV	224	468	0.07%	0.012%
57	15.669	2229	2235	2240	rVB3	321	639	0.09%	0.017%
58	15.836	2257	2267	2269	rBV3	356	810	0.11%	0.021%
59	15.941	2279	2287	2292	rVB3	229	415	0.06%	0.011%
60	16.088	2307	2315	2343	rBV	338461	556587	78.51%	14.387%
61	16.276	2343	2351	2358	rVB3	3633	5733	0.81%	0.148%
62	16.516	2388	2397	2404	rBV3	1284	2754	0.39%	0.071%
63	17.332	2549	2553	2564	rVB2	959	1386	0.20%	0.036%
64	17.453	2569	2576	2581	rBV2	358	711	0.10%	0.018%
65	17.589	2598	2602	2606	rVB2	335	431	0.06%	0.011%
66	17.808	2642	2644	2647	rBV	344	364	0.05%	0.009%
67	17.923	2660	2666	2669	rBV	542	572	0.08%	0.015%
68	18.007	2679	2682	2685	rVB2	269	326	0.05%	0.008%
69	18.394	2748	2756	2761	rBV5	539	1232	0.17%	0.032%
70	18.425	2761	2762	2765	rBV3	446	322	0.05%	0.008%
71	18.488	2770	2774	2780	rBV5	385	787	0.11%	0.020%

MY6161.M Mon Feb 03 17:44:04 2014 RPT1 Page: 2

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143031.D
Acq On : 31 Jan 2014 4:43 pm
Operator : prashans
Sample : JB58468-1
Misc : MS62181,VY6198,7.7,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 318 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\MY6161.M
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

72	18.561	2784	2788	2790	rVV3	412	497	0.07%	0.013%
73	18.603	2793	2796	2799	rVB4	363	473	0.07%	0.012%
74	18.645	2799	2804	2807	rBV4	536	859	0.12%	0.022%
75	18.697	2807	2814	2815	rVB5	364	687	0.10%	0.018%
76	18.828	2838	2839	2848	rBV5	513	1160	0.16%	0.030%
77	18.880	2848	2849	2854	rBV3	375	469	0.07%	0.012%
78	18.959	2859	2864	2869	rBV4	477	875	0.12%	0.023%
79	19.016	2870	2875	2876	rVB3	342	379	0.05%	0.010%
80	19.043	2878	2880	2887	rBV4	329	647	0.09%	0.017%
81	19.210	2907	2912	2916	rBV4	383	525	0.07%	0.014%
82	19.325	2929	2934	2941	rBV6	462	988	0.14%	0.026%
83	19.372	2941	2943	2947	rVB3	528	559	0.08%	0.014%
84	19.414	2947	2951	2957	rBV5	687	1435	0.20%	0.037%
85	19.874	3035	3039	3041	rBV3	665	767	0.11%	0.020%
86	20.591	3174	3176	3190	rVB8	625	1823	0.26%	0.047%
87	20.685	3192	3194	3199	rBV5	993	1276	0.18%	0.033%
88	21.422	3334	3335	3338	rBV3	663	598	0.08%	0.015%

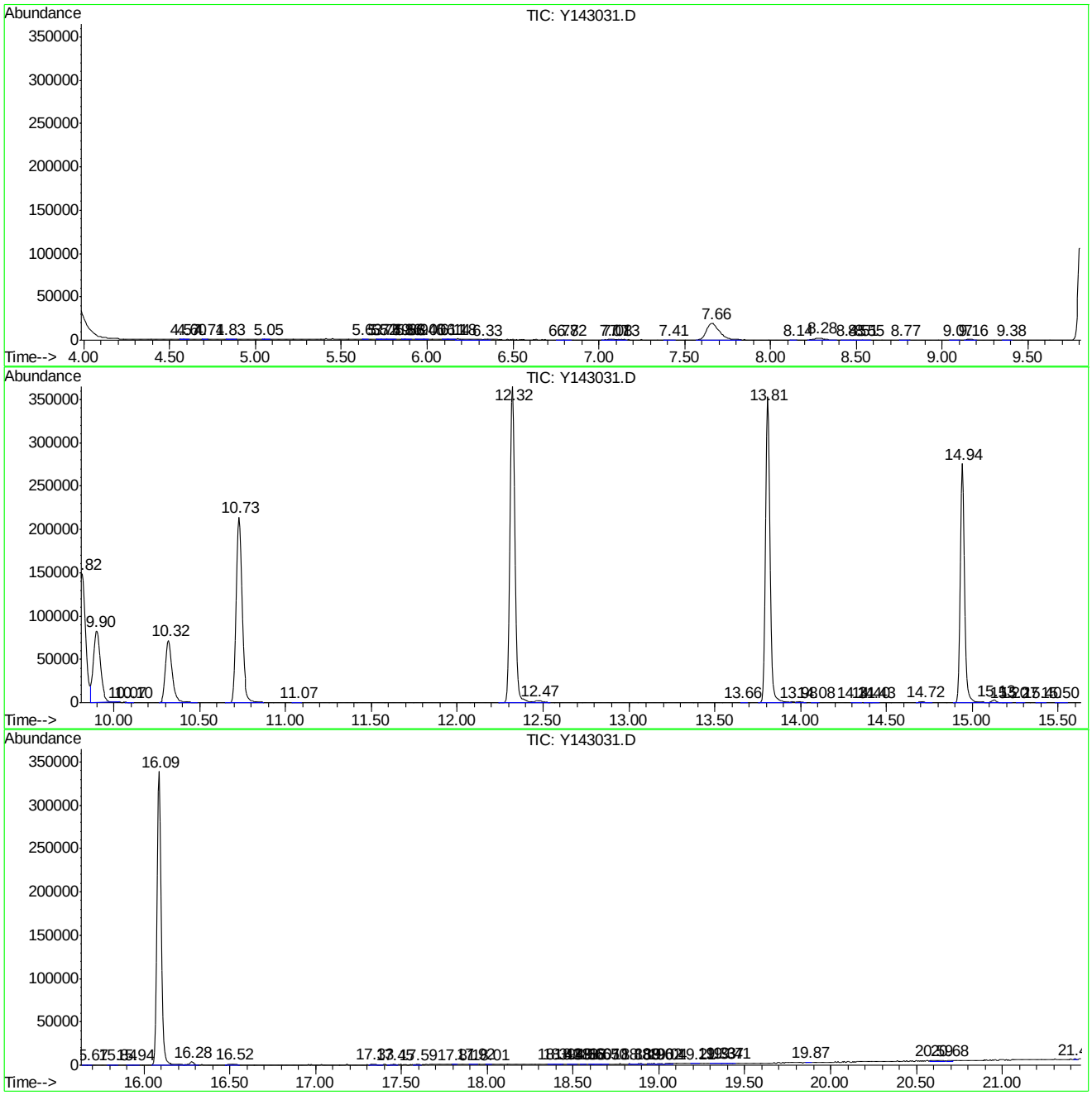
Sum of corrected areas: 3868689

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143031.D
Acq On : 31 Jan 2014 4:43 pm
Operator : prashans
Sample : JB58468-1
Misc : MS62181,VY6198,7.7,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143031.D
Acq On : 31 Jan 2014 4:43 pm
Operator : prashans
Sample : JB58468-1
Misc : MS62181,VY6198,7.7,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

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

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95412.D
Acq On : 28 Jan 2014 8:43 pm
Operator : nickm1
Sample : jb58468-2
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 29 12:08:43 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

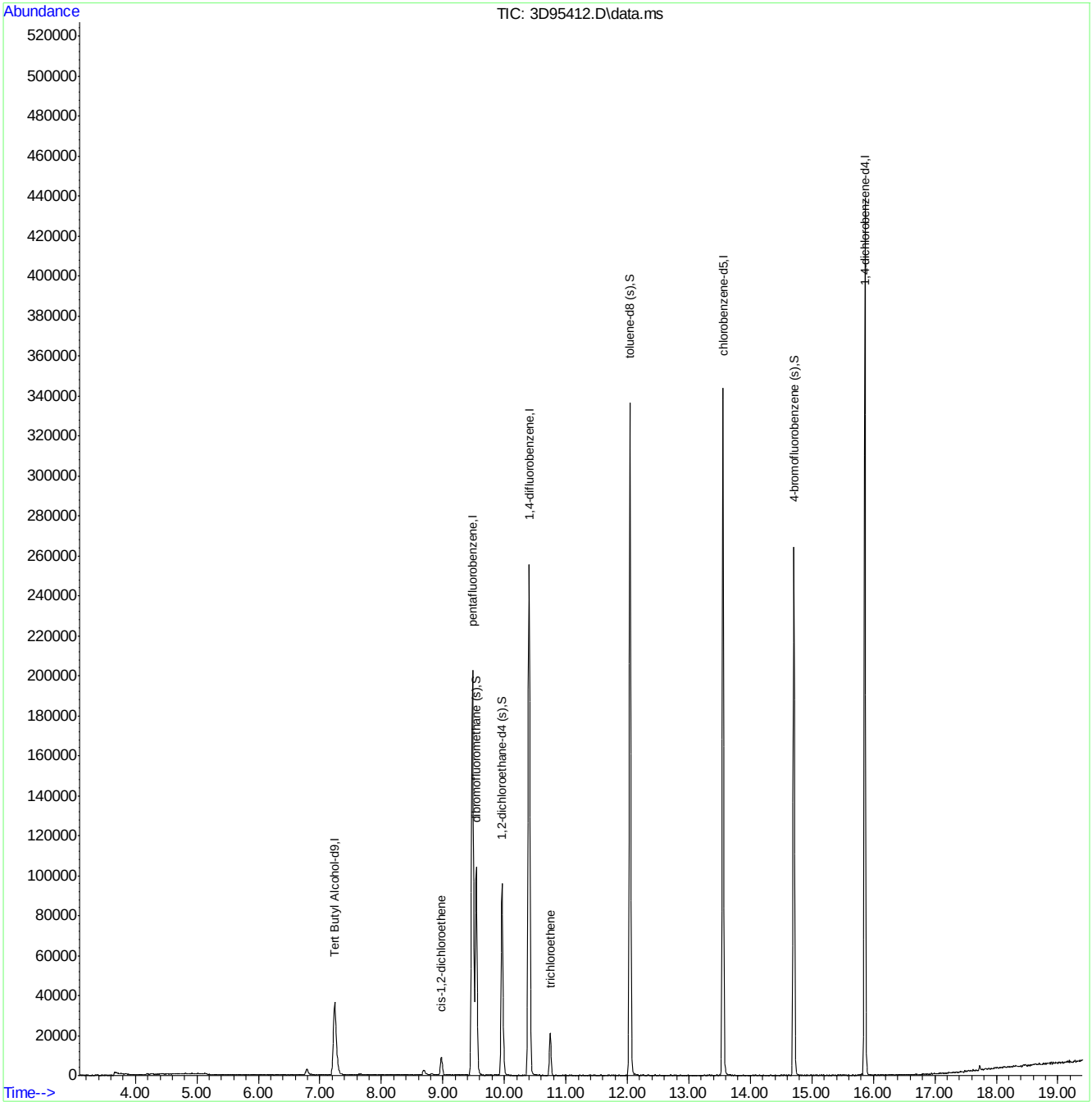
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.239	65	75902	500.00	ug/L	0.00
4) pentafluorobenzene	9.483	168	184967	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.401	114	245960	50.00	ug/L	0.00
88) chlorobenzene-d5	13.557	117	200973	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.864	152	117813	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.541	113	70995	48.32	ug/L	0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 96.64%			
51) 1,2-dichloroethane-d4 (s)	9.960	65	76223	50.68	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 101.36%			
80) toluene-d8 (s)	12.042	98	237005	48.79	ug/L	0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 97.58%			
106) 4-bromofluorobenzene (s)	14.705	95	82416	46.68	ug/L	0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 93.36%			
Target Compounds						Qvalue
43) cis-1,2-dichloroethene	8.975	61	6327	2.41	ug/L	77
69) trichloroethene	10.747	95	7812	5.33	ug/L	94

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

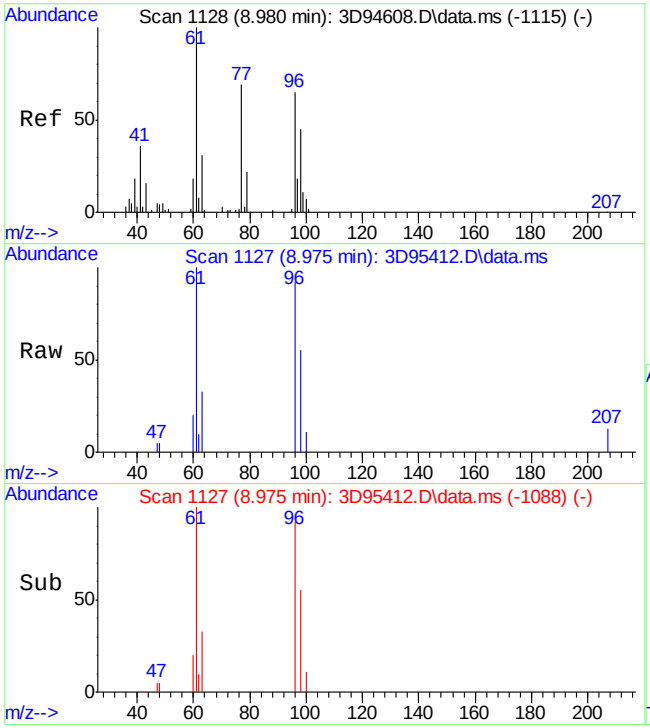
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95412.D
Acq On : 28 Jan 2014 8:43 pm
Operator : nickm1
Sample : jb58468-2
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 29 12:08:43 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration



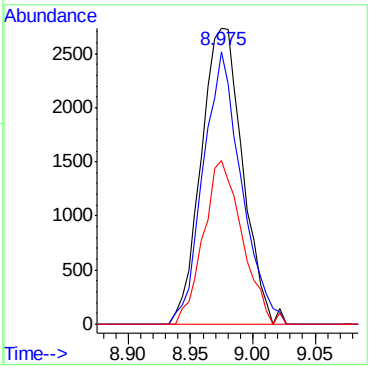
M3D4058.M Wed Jan 29 13:18:57 2014 RPT1 Page: 2

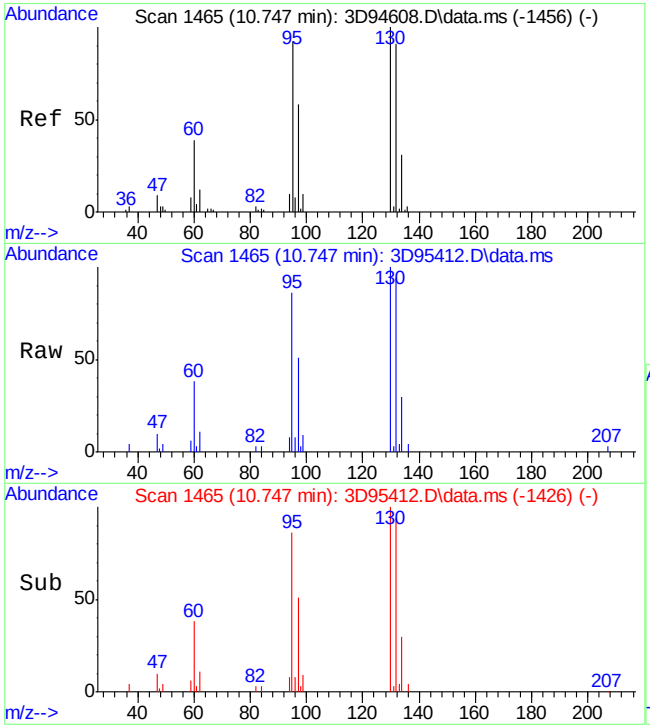


#43
cis-1,2-dichloroethene
Concen: 2.41 ug/L
RT: 8.975 min Scan# 1127
Delta R.T. 0.005 min
Lab File: 3D95412.D
Acq: 28 Jan 2014 8:43 pm

Tgt Ion: 61 Resp: 6327

Ion	Ratio	Lower	Upper
61	100		
96	92.2	39.3	99.3
98	55.2	14.9	74.9

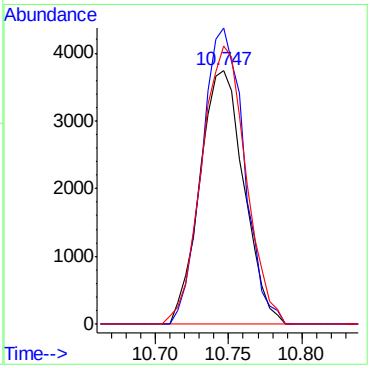




#69
trichloroethene
Concen: 5.33 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.005 min
Lab File: 3D95412.D
Acq: 28 Jan 2014 8:43 pm

Tgt Ion: 95 Resp: 7812

Ion	Ratio	Lower	Upper
95	100		
130	116.6	78.9	138.9
132	109.6	75.1	135.1



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95412.D
Acq On : 28 Jan 2014 8:43 pm
Operator : nickm1
Sample : jb58468-2
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D95412.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.658	111	113	125	rBV	1596	5850	0.89%	0.150%
2	6.783	701	709	717	rBV	2897	7433	1.13%	0.190%
3	7.239	785	796	825	rVB3	36479	128760	19.60%	3.295%
4	7.659	872	876	882	rBV2	776	1478	0.22%	0.038%
5	8.697	1067	1074	1087	rVB2	2233	6076	0.92%	0.155%
6	8.817	1090	1097	1101	rBV2	674	1503	0.23%	0.038%
7	8.975	1118	1127	1139	rVB	9102	19931	3.03%	0.510%
8	9.483	1212	1224	1230	rBV	202328	458923	69.85%	11.743%
9	9.541	1230	1235	1249	rVB	103640	226249	34.44%	5.789%
10	9.960	1306	1315	1328	rBV	95870	203696	31.00%	5.212%
11	10.401	1389	1399	1411	rBV	255689	520400	79.21%	13.316%
12	10.747	1456	1465	1476	rBV2	21218	42882	6.53%	1.097%
13	12.042	1704	1712	1725	rBV	336260	603306	91.82%	15.438%
14	13.552	1992	2000	2016	rBV	343903	572680	87.16%	14.654%
15	14.705	2211	2220	2233	rBV	264626	426322	64.89%	10.909%
16	15.864	2433	2441	2451	rBV	438798	657020	100.00%	16.812%
17	17.227	2698	2701	2713	rBV4	608	2132	0.32%	0.055%
18	17.489	2748	2751	2752	rBV3	1201	1007	0.15%	0.026%
19	17.730	2793	2797	2810	rBV8	2810	5814	0.88%	0.149%
20	17.825	2810	2815	2822	rVV7	566	1533	0.23%	0.039%
21	17.987	2843	2846	2855	rVB6	616	1215	0.18%	0.031%
22	18.071	2855	2862	2869	rBV7	729	1675	0.25%	0.043%
23	18.475	2936	2939	2943	rVB4	932	1111	0.17%	0.028%
24	18.873	3001	3015	3016	rBV8	1024	2675	0.41%	0.068%
25	18.894	3016	3019	3022	rVB4	1258	1342	0.20%	0.034%
26	18.926	3022	3025	3028	rBV4	1261	1479	0.23%	0.038%
27	19.036	3045	3046	3056	rVB5	1112	1884	0.29%	0.048%
28	19.198	3075	3077	3087	rBV7	695	1306	0.20%	0.033%
29	19.282	3087	3093	3101	rBV7	1049	2284	0.35%	0.058%

Sum of corrected areas: 3907966

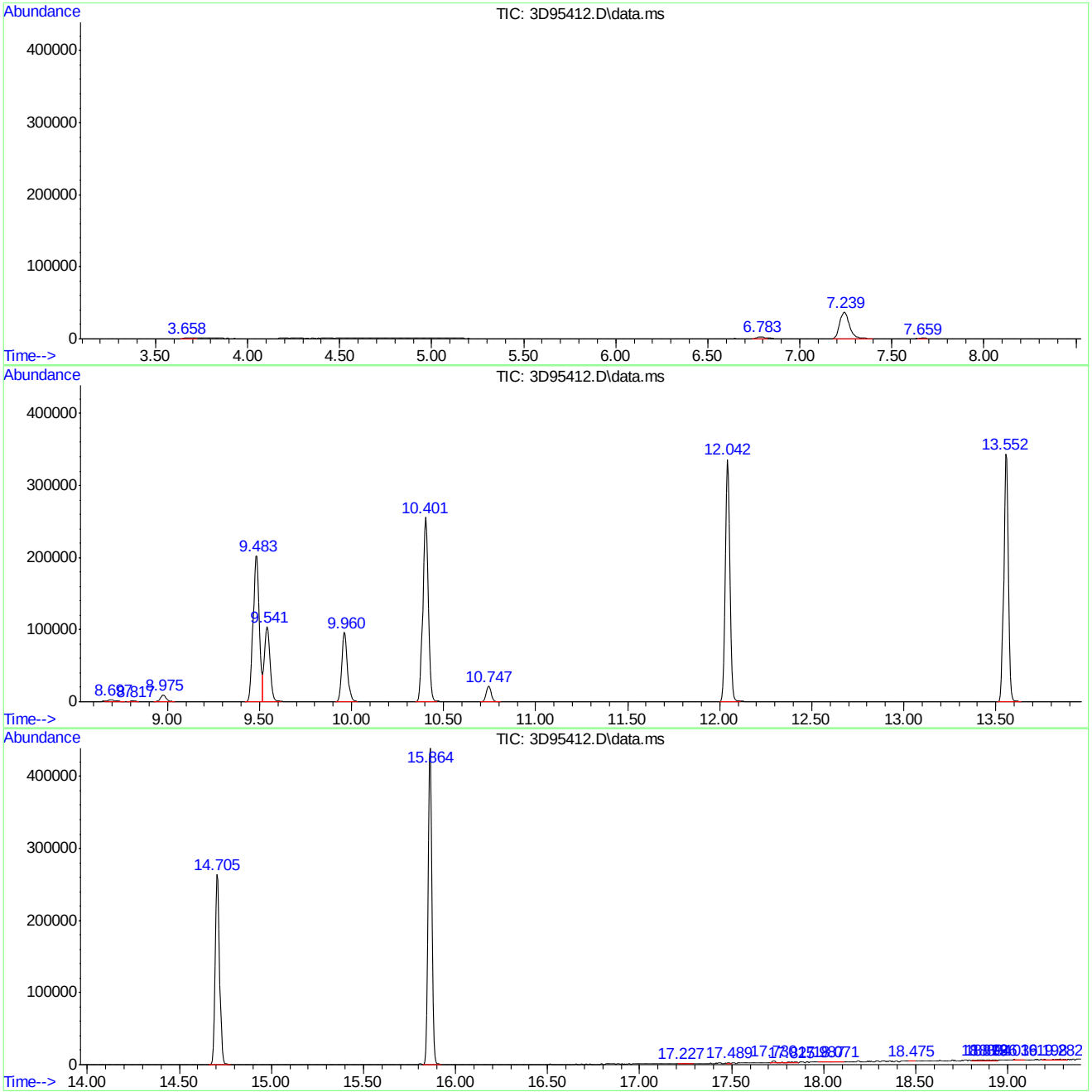
M3D4058.M Wed Jan 29 12:09:51 2014 RPT1 Page: 1

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95412.D
Acq On : 28 Jan 2014 8:43 pm
Operator : nickm1
Sample : jb58468-2
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95412.D
Acq On : 28 Jan 2014 8:43 pm
Operator : nickm1
Sample : jb58468-2
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95413.D
Acq On : 28 Jan 2014 9:10 pm
Operator : nickm1
Sample : jb58468-3
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 29 12:09:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

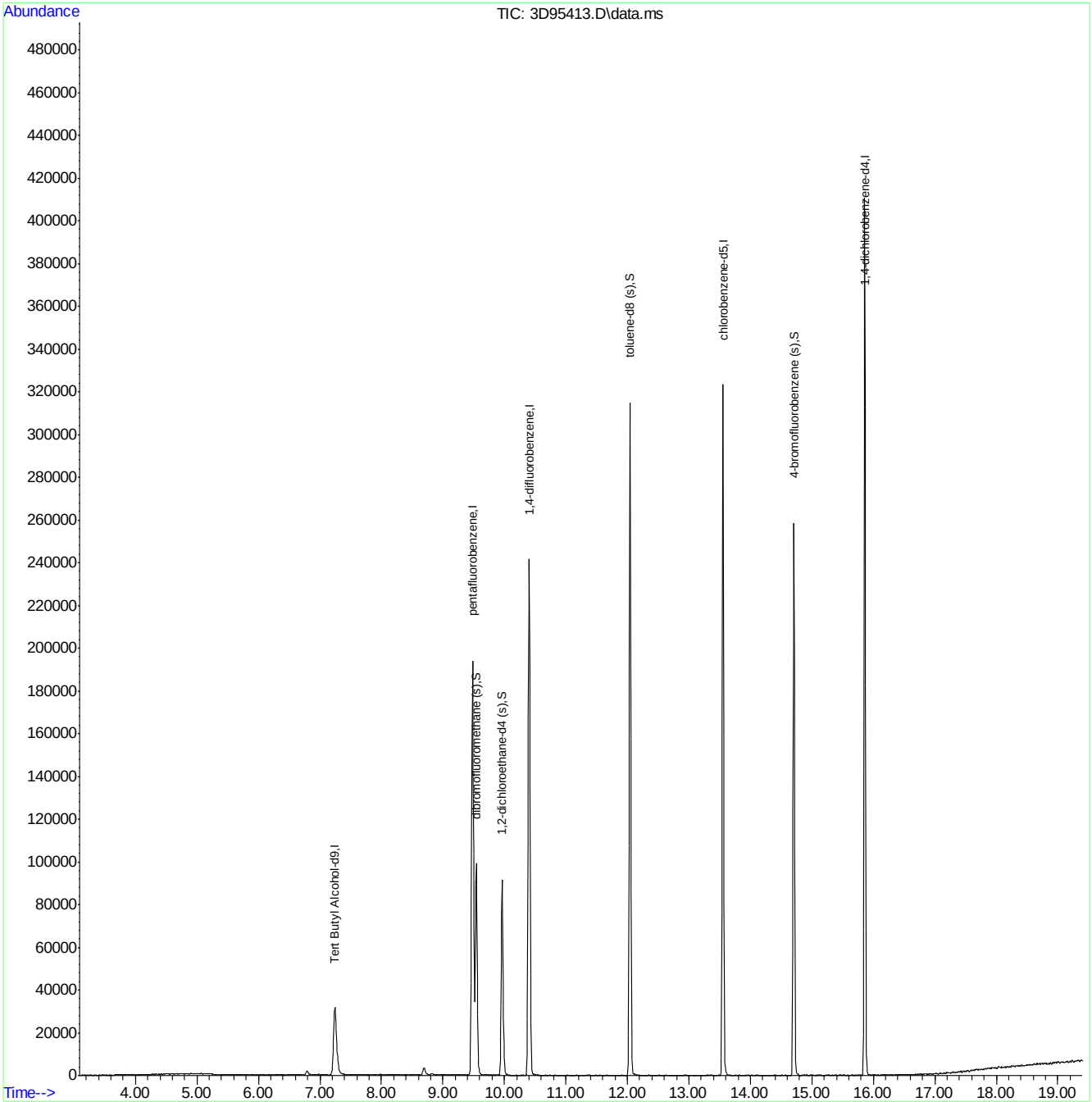
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.239	65	67676	500.00	ug/L	0.00
4) pentafluorobenzene	9.483	168	175576	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.401	114	232207	50.00	ug/L	0.00
88) chlorobenzene-d5	13.557	117	191465	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.864	152	112903	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.541	113	68194	48.90	ug/L	0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 97.80%			
51) 1,2-dichloroethane-d4 (s)	9.965	65	72873	51.04	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 102.08%			
80) toluene-d8 (s)	12.042	98	225062	49.07	ug/L	0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 98.14%			
106) 4-bromofluorobenzene (s)	14.705	95	79193	46.80	ug/L	0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 93.60%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95413.D
Acq On : 28 Jan 2014 9:10 pm
Operator : nickm1
Sample : jb58468-3
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 29 12:09:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95413.D
Acq On : 28 Jan 2014 9:10 pm
Operator : nickm1
Sample : jb58468-3
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D95413.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.788	703	710	716	rBV3	1801	4569	0.73%	0.125%
2	7.244	782	797	818	rBV2	31651	115290	18.30%	3.143%
3	8.691	1066	1073	1082	rBV2	2772	6919	1.10%	0.189%
4	9.483	1213	1224	1230	rBV	193928	434436	68.94%	11.843%
5	9.541	1230	1235	1254	rVB	98924	221352	35.13%	6.034%
6	9.965	1307	1316	1330	rBV	91601	194287	30.83%	5.296%
7	10.401	1390	1399	1413	rBV	241418	494197	78.42%	13.472%
8	12.042	1704	1712	1730	rBV	314942	572223	90.80%	15.599%
9	13.557	1993	2001	2015	rBV	323475	550514	87.36%	15.007%
10	14.705	2212	2220	2234	rBV	258597	409179	64.93%	11.154%
11	15.859	2433	2440	2451	rBV	410549	630172	100.00%	17.178%
12	17.447	2741	2743	2747	rBV5	879	1035	0.16%	0.028%
13	17.583	2764	2769	2773	rBV6	905	1253	0.20%	0.034%
14	17.851	2819	2820	2831	rBV6	575	1594	0.25%	0.043%
15	17.987	2834	2846	2851	rVB9	624	1989	0.32%	0.054%
16	18.040	2851	2856	2858	rBV5	1106	1568	0.25%	0.043%
17	18.082	2863	2864	2875	rVV5	798	1374	0.22%	0.037%
18	18.281	2893	2902	2909	rBV7	867	2258	0.36%	0.062%
19	18.323	2909	2910	2918	rBV7	619	1347	0.21%	0.037%
20	18.517	2934	2947	2948	rBV5	759	2216	0.35%	0.060%
21	18.658	2972	2974	2979	rBV4	1069	1025	0.16%	0.028%
22	18.711	2979	2984	2989	rBV5	1029	1539	0.24%	0.042%
23	18.868	3006	3014	3024	rBV8	1006	3035	0.48%	0.083%
24	18.973	3028	3034	3038	rVV8	881	2103	0.33%	0.057%
25	19.004	3038	3040	3046	rVV6	964	1494	0.24%	0.041%
26	19.062	3046	3051	3069	rVV6	1031	4747	0.75%	0.129%
27	19.235	3069	3084	3093	rVV9	1095	3527	0.56%	0.096%
28	19.340	3093	3104	3107	rVB6	954	3169	0.50%	0.086%

Sum of corrected areas: 3668411

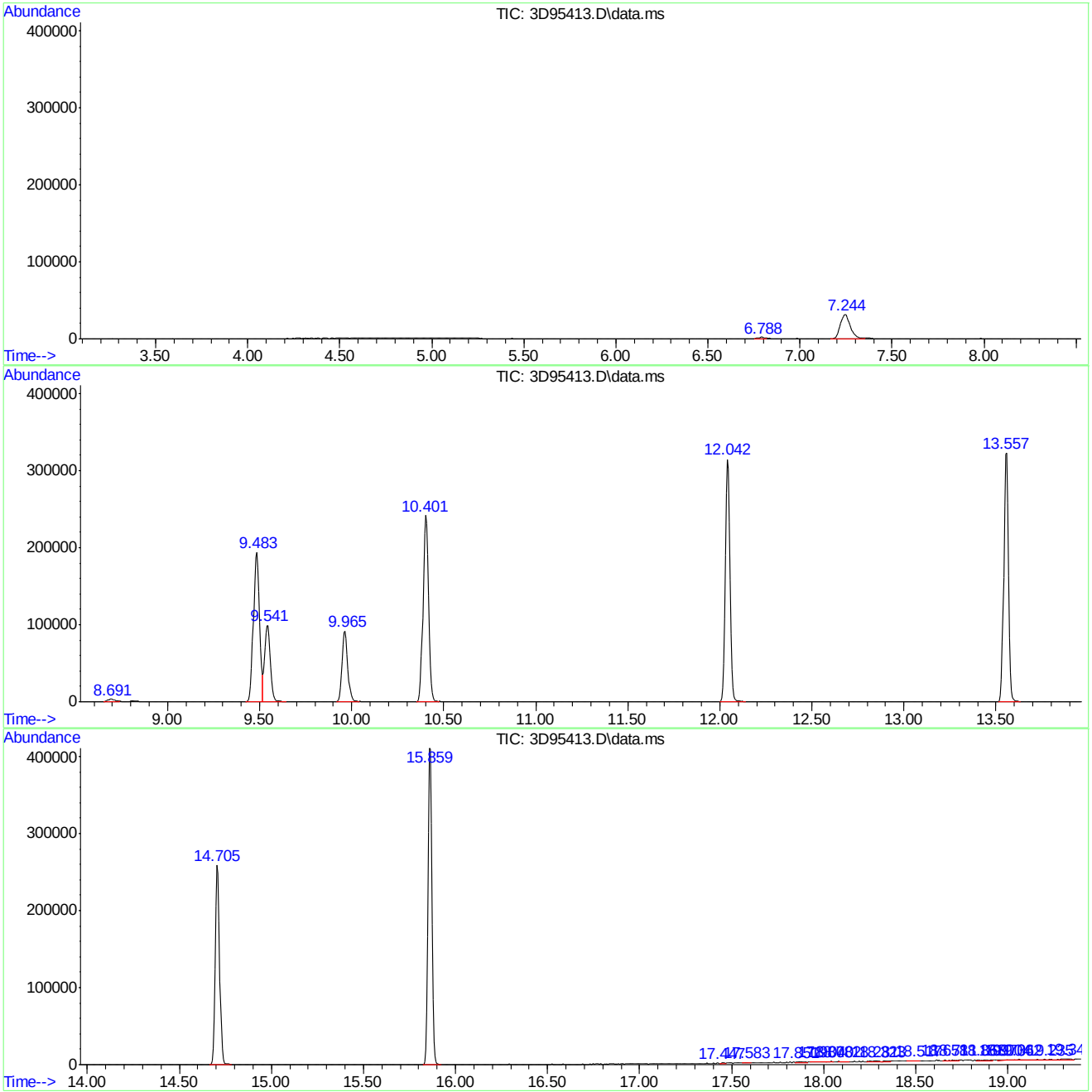
M3D4058.M Wed Jan 29 12:09:54 2014 RPT1 Page: 1

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95413.D
Acq On : 28 Jan 2014 9:10 pm
Operator : nickm1
Sample : jb58468-3
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95413.D
Acq On : 28 Jan 2014 9:10 pm
Operator : nickm1
Sample : jb58468-3
Misc : MS62192,V3D4110,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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

No Library Search Compounds Detected
****

3D95413.D: JB58468-3, FTMM-22-TB2 (TIC Search), page 3 of 3
90 of 785
ACCUTEST LABORATORIES
JB58468
7.T.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95403.D
Acq On : 28 Jan 2014 4:41 pm
Operator : nickm1
Sample : mb
Misc : MS62219,V3D4110,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 29 11:57:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Jan 02 11:24:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.239	65	74372	500.00	ug/L	0.00
4) pentafluorobenzene	9.478	168	184154	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.401	114	243339	50.00	ug/L	0.00
88) chlorobenzene-d5	13.552	117	196819	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.864	152	116390	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.541	113	70877	48.45	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 96.90%			
51) 1,2-dichloroethane-d4 (s)	9.960	65	75162	50.19	ug/L	0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 100.38%			
80) toluene-d8 (s)	12.042	98	235126	48.92	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.84%			
106) 4-bromofluorobenzene (s)	14.705	95	81945	46.98	ug/L	0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 93.96%			

Target Compounds Qvalue

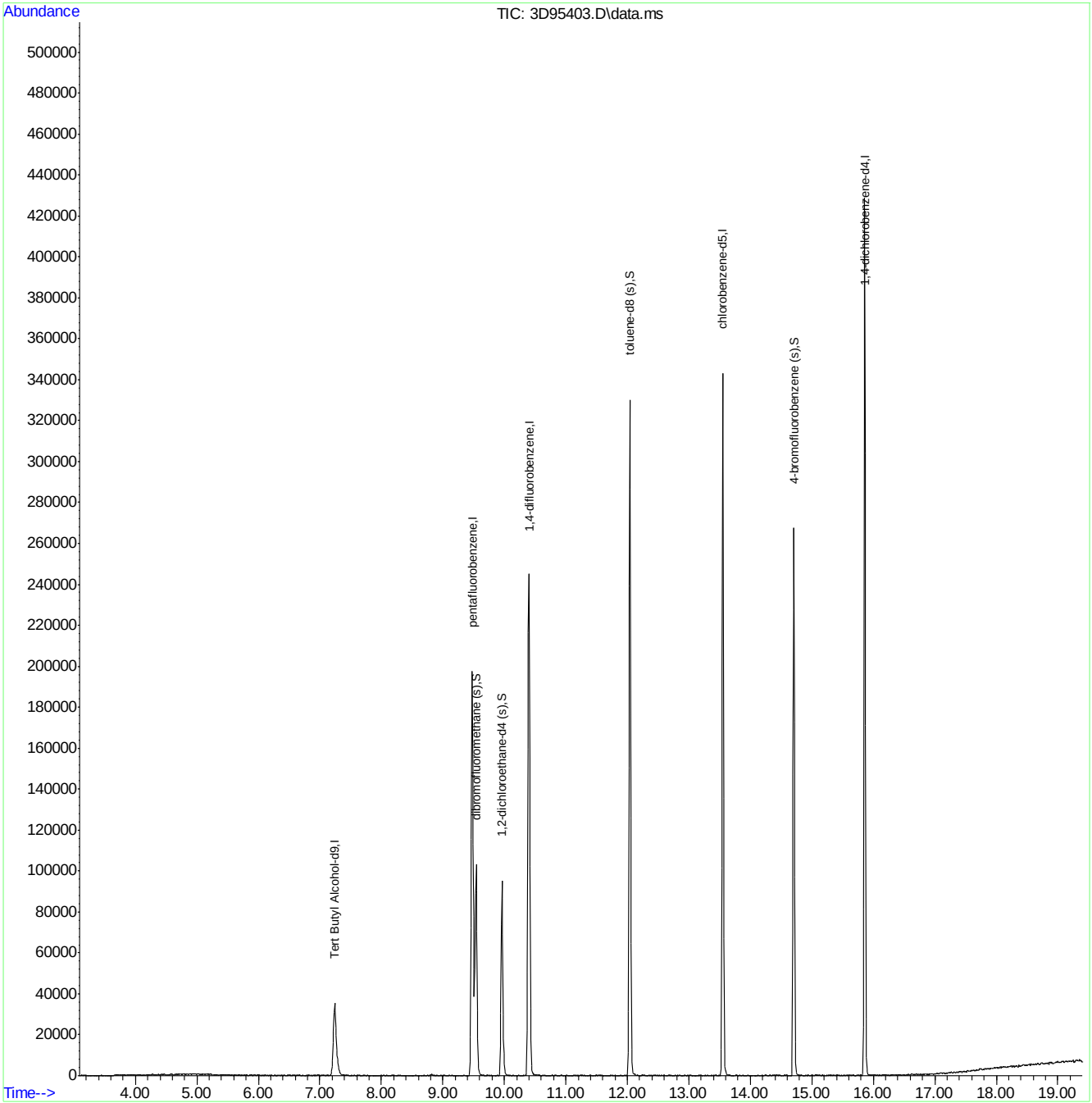
(#) = qualifier out of range (m) = manual integration (+) = signals summed

M3D4058.M Wed Jan 29 13:01:17 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95403.D
Acq On : 28 Jan 2014 4:41 pm
Operator : nickm1
Sample : mb
Misc : MS62219,V3D4110,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 29 11:57:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Jan 02 11:24:09 2014
Response via : Initial Calibration



M3D4058.M Wed Jan 29 13:01:17 2014 RPT1 Page: 2

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95403.D
Acq On : 28 Jan 2014 4:41 pm
Operator : nickm1
Sample : mb
Misc : MS62219,V3D4110,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D95403.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.239	783	796	821	rBV2	35316	128195	19.77%	3.388%
2	8.817	1091	1097	1104	rBB3	800	1851	0.29%	0.049%
3	9.478	1212	1223	1229	rBV	197569	446180	68.80%	11.792%
4	9.541	1229	1235	1249	rVB	102837	232401	35.84%	6.142%
5	9.960	1306	1315	1329	rBV	95069	200310	30.89%	5.294%
6	10.395	1389	1398	1417	rBV	245340	518369	79.94%	13.699%
7	12.042	1703	1712	1724	rBV	330255	596861	92.04%	15.774%
8	13.552	1992	2000	2020	rVB	342961	564945	87.12%	14.930%
9	14.705	2213	2220	2236	rVB	267504	419018	64.62%	11.074%
10	15.859	2433	2440	2455	rVB	428563	648478	100.00%	17.138%
11	17.080	2669	2673	2681	rBV3	516	1312	0.20%	0.035%
12	17.862	2811	2822	2824	rBV7	1044	2988	0.46%	0.079%
13	17.945	2828	2838	2840	rVV7	529	1518	0.23%	0.040%
14	18.129	2864	2873	2884	rBV9	961	3003	0.46%	0.079%
15	18.223	2884	2891	2892	rBV6	827	1930	0.30%	0.051%
16	18.800	2985	3001	3003	rBV7	840	3236	0.50%	0.086%
17	18.863	3012	3013	3018	rBV4	1170	1642	0.25%	0.043%
18	19.094	3048	3057	3059	rVB5	1078	2607	0.40%	0.069%
19	19.151	3059	3068	3070	rBV6	1005	2278	0.35%	0.060%
20	19.172	3070	3072	3084	rVV7	770	1709	0.26%	0.045%
21	19.251	3084	3087	3088	rVB3	1577	1193	0.18%	0.032%
22	19.272	3088	3091	3092	rBV3	1095	1080	0.17%	0.029%
23	19.303	3092	3097	3105	rBV8	1009	2769	0.43%	0.073%

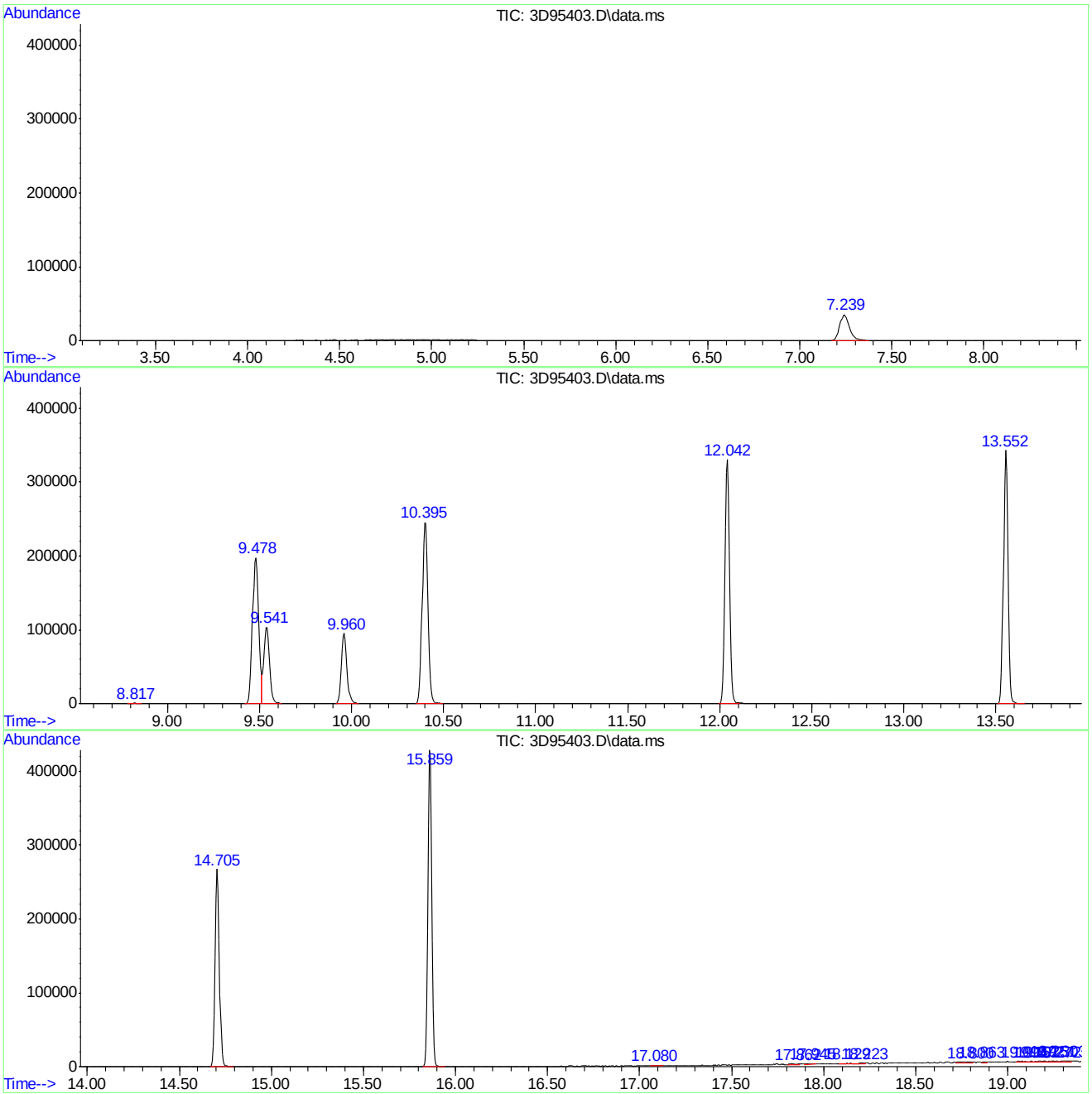
Sum of corrected areas: 3783873

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95403.D
Acq On : 28 Jan 2014 4:41 pm
Operator : nickm1
Sample : mb
Misc : MS62219,V3D4110,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95403.D
Acq On : 28 Jan 2014 4:41 pm
Operator : nickm1
Sample : mb
Misc : MS62219,V3D4110,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143018.D
Acq On : 31 Jan 2014 10:00 am
Operator : prashans
Sample : MB
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 03 17:30:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	50384	500.00	ug/L	0.00
5) pentafluorobenzene	9.81	168	141439	50.00	ug/L	0.00
57) 1,4-difluorobenzene	10.72	114	211409	50.00	ug/L	0.00
87) chlorobenzene-d5	13.81	117	189358	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.09	152	86845	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	9.90	113	66162	51.41	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 102.82%			
50) 1,2-dichloroethane-d4 (s)	10.31	65	66534	49.14	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 98.28%			
79) toluene-d8 (s)	12.32	98	253168	52.10	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 104.20%			
103) 4-bromofluorobenzene (s)	14.94	95	85358	49.30	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 98.60%			

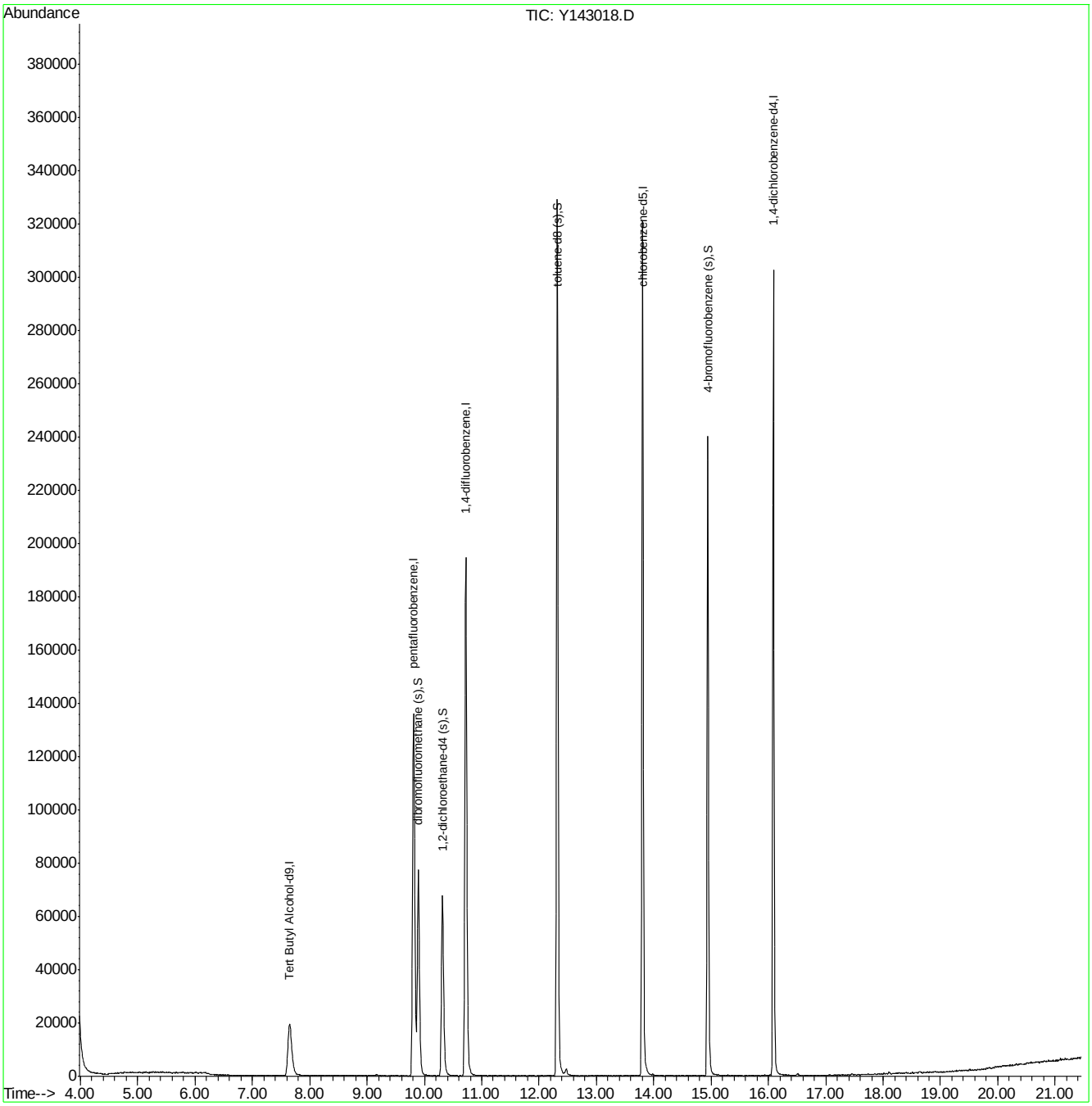
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143018.D
Acq On : 31 Jan 2014 10:00 am
Operator : prashans
Sample : MB
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 03 17:30:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration



MY6161.M Mon Feb 03 17:50:17 2014 RPT1 Page: 2

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143018.D
Acq On : 31 Jan 2014 10:00 am
Operator : prashans
Sample : MB
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 318 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\MY6161.M
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.304	60	62	82	rVB2	395	909	0.14%	0.026%
2	4.487	93	97	98	rBV2	350	328	0.05%	0.009%
3	4.555	108	110	115	rVB2	333	440	0.07%	0.013%
4	4.613	118	121	125	rBV3	347	475	0.07%	0.014%
5	4.712	134	140	143	rBV4	424	851	0.13%	0.024%
6	4.827	156	162	166	rBV3	330	638	0.10%	0.018%
7	4.869	168	170	174	rVV2	484	464	0.07%	0.013%
8	4.905	174	177	179	rVB4	393	381	0.06%	0.011%
9	4.963	179	188	190	rBV4	280	685	0.11%	0.020%
10	5.115	211	217	219	rBV2	484	760	0.12%	0.022%
11	5.130	219	220	225	rVB3	498	459	0.07%	0.013%
12	5.235	237	240	242	rBV2	414	359	0.06%	0.010%
13	5.277	243	248	251	rVV3	343	540	0.08%	0.015%
14	5.303	251	253	260	rBV4	453	745	0.12%	0.021%
15	5.449	279	281	290	rBV4	378	738	0.12%	0.021%
16	5.878	358	363	365	rVB3	305	366	0.06%	0.010%
17	5.894	365	366	373	rBV3	327	392	0.06%	0.011%
18	5.983	381	383	388	rBV3	362	573	0.09%	0.016%
19	6.077	397	401	404	rBV2	287	340	0.05%	0.010%
20	6.140	409	413	426	rVB3	473	1552	0.24%	0.044%
21	6.631	505	507	516	rVB3	193	435	0.07%	0.012%
22	7.489	666	671	677	rBV3	188	412	0.06%	0.012%
23	7.651	686	702	731	rBV2	19123	90666	14.14%	2.583%
24	8.917	936	944	945	rVB3	190	373	0.06%	0.011%
25	8.948	945	950	953	rBV2	212	400	0.06%	0.011%
26	9.058	964	971	975	rBV2	249	496	0.08%	0.014%
27	9.163	980	991	998	rVB5	416	1154	0.18%	0.033%
28	9.811	1102	1115	1124	rBV	136146	363276	56.65%	10.348%
29	9.895	1124	1131	1153	rVV	77588	217630	33.93%	6.200%
30	10.015	1153	1154	1159	rVV2	447	642	0.10%	0.018%
31	10.052	1159	1161	1168	rVB3	390	588	0.09%	0.017%
32	10.314	1199	1211	1238	rBV	67667	180979	28.22%	5.155%
33	10.721	1276	1289	1317	rBV	194585	465834	72.64%	13.270%
34	11.082	1350	1358	1362	rVB3	253	539	0.08%	0.015%

MY6161.M Mon Feb 03 17:30:46 2014 RPT1 Page: 1

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143018.D
Acq On : 31 Jan 2014 10:00 am
Operator : prashans
Sample : MB
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 318 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\MY6161.M
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

35	12.317	1585	1594	1616	rBV	329112	641320	100.00%	18.269%
36	12.468	1616	1623	1638	rVV3	2577	8065	1.26%	0.230%
37	12.568	1638	1642	1648	rVB3	262	342	0.05%	0.010%
38	13.525	1820	1825	1828	rVB	209	331	0.05%	0.009%
39	13.666	1849	1852	1858	rBV2	210	389	0.06%	0.011%
40	13.807	1870	1879	1909	rBV	320728	568040	88.57%	16.182%
41	13.980	1909	1912	1921	rVB2	675	1031	0.16%	0.029%
42	14.309	1969	1975	1982	rVB2	131	372	0.06%	0.011%
43	14.712	2047	2052	2062	rVB3	236	556	0.09%	0.016%
44	14.942	2087	2096	2127	rBV	239999	419677	65.44%	11.955%
45	15.120	2127	2130	2139	rVB4	501	1094	0.17%	0.031%
46	15.293	2155	2163	2170	rVB4	380	805	0.13%	0.023%
47	15.361	2170	2176	2178	rVV2	242	341	0.05%	0.010%
48	15.403	2178	2184	2189	rVB3	292	538	0.08%	0.015%
49	15.612	2220	2224	2228	rVB3	296	387	0.06%	0.011%
50	15.669	2230	2235	2238	rBV3	306	448	0.07%	0.013%
51	15.821	2259	2264	2270	rVB	233	399	0.06%	0.011%
52	15.884	2270	2276	2282	rBV2	196	369	0.06%	0.011%
53	15.936	2282	2286	2294	rBV3	404	682	0.11%	0.019%
54	16.035	2299	2305	2307	rBV	631	621	0.10%	0.018%
55	16.088	2307	2315	2339	rBV	302460	505527	78.83%	14.401%
56	16.354	2362	2366	2369	rBV	304	353	0.06%	0.010%
57	16.506	2386	2395	2403	rBV2	785	1716	0.27%	0.049%
58	16.904	2466	2471	2473	rBV2	212	324	0.05%	0.009%
59	17.275	2537	2542	2545	rVB3	199	331	0.05%	0.009%
60	17.312	2545	2549	2554	rBV2	276	432	0.07%	0.012%
61	17.448	2571	2575	2584	rBV5	577	1140	0.18%	0.032%
62	17.505	2584	2586	2591	rBV2	252	411	0.06%	0.012%
63	17.735	2622	2630	2632	rBV2	332	490	0.08%	0.014%
64	17.824	2642	2647	2648	rBV4	307	401	0.06%	0.011%
65	17.903	2658	2662	2667	rBV3	255	493	0.08%	0.014%
66	18.012	2677	2683	2687	rVB3	472	657	0.10%	0.019%
67	18.096	2695	2699	2707	rBV4	709	1031	0.16%	0.029%
68	18.175	2708	2714	2717	rBV2	288	508	0.08%	0.014%
69	18.264	2730	2731	2740	rBV4	398	789	0.12%	0.022%
70	18.394	2750	2756	2761	rBV6	451	1079	0.17%	0.031%
71	18.504	2775	2777	2779	rVB3	556	347	0.05%	0.010%

MY6161.M Mon Feb 03 17:30:46 2014 RPT1 Page: 2

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143018.D
Acq On : 31 Jan 2014 10:00 am
Operator : prashans
Sample : MB
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 318 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\MY6161.M
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

72	18.567	2783	2789	2790	rBV4	314	539	0.08%	0.015%
73	18.635	2796	2802	2808	rBV5	796	1772	0.28%	0.050%
74	18.698	2811	2814	2815	rBV2	488	455	0.07%	0.013%
75	18.807	2834	2835	2839	rVB3	465	435	0.07%	0.012%
76	18.860	2843	2845	2850	rVV5	435	523	0.08%	0.015%
77	18.902	2851	2853	2860	rVB6	430	720	0.11%	0.021%
78	19.163	2902	2903	2913	rVB4	313	793	0.12%	0.023%
79	19.404	2946	2949	2951	rBV2	436	346	0.05%	0.010%
80	19.503	2966	2968	2970	rBV3	566	381	0.06%	0.011%
81	19.519	2970	2971	2976	rVV3	466	392	0.06%	0.011%
82	19.550	2976	2977	2981	rVB3	449	359	0.06%	0.010%
83	19.623	2981	2991	2993	rBV4	412	987	0.15%	0.028%
84	19.712	3006	3008	3015	rVB5	479	913	0.14%	0.026%
85	19.765	3015	3018	3020	rBV3	538	617	0.10%	0.018%
86	19.806	3022	3026	3029	rBV5	689	1184	0.18%	0.034%
87	19.921	3043	3048	3050	rBV3	544	769	0.12%	0.022%
88	19.953	3052	3054	3058	rBV4	506	687	0.11%	0.020%
89	20.084	3075	3079	3081	rBV3	782	920	0.14%	0.026%
90	20.371	3132	3134	3136	rBV3	581	376	0.06%	0.011%

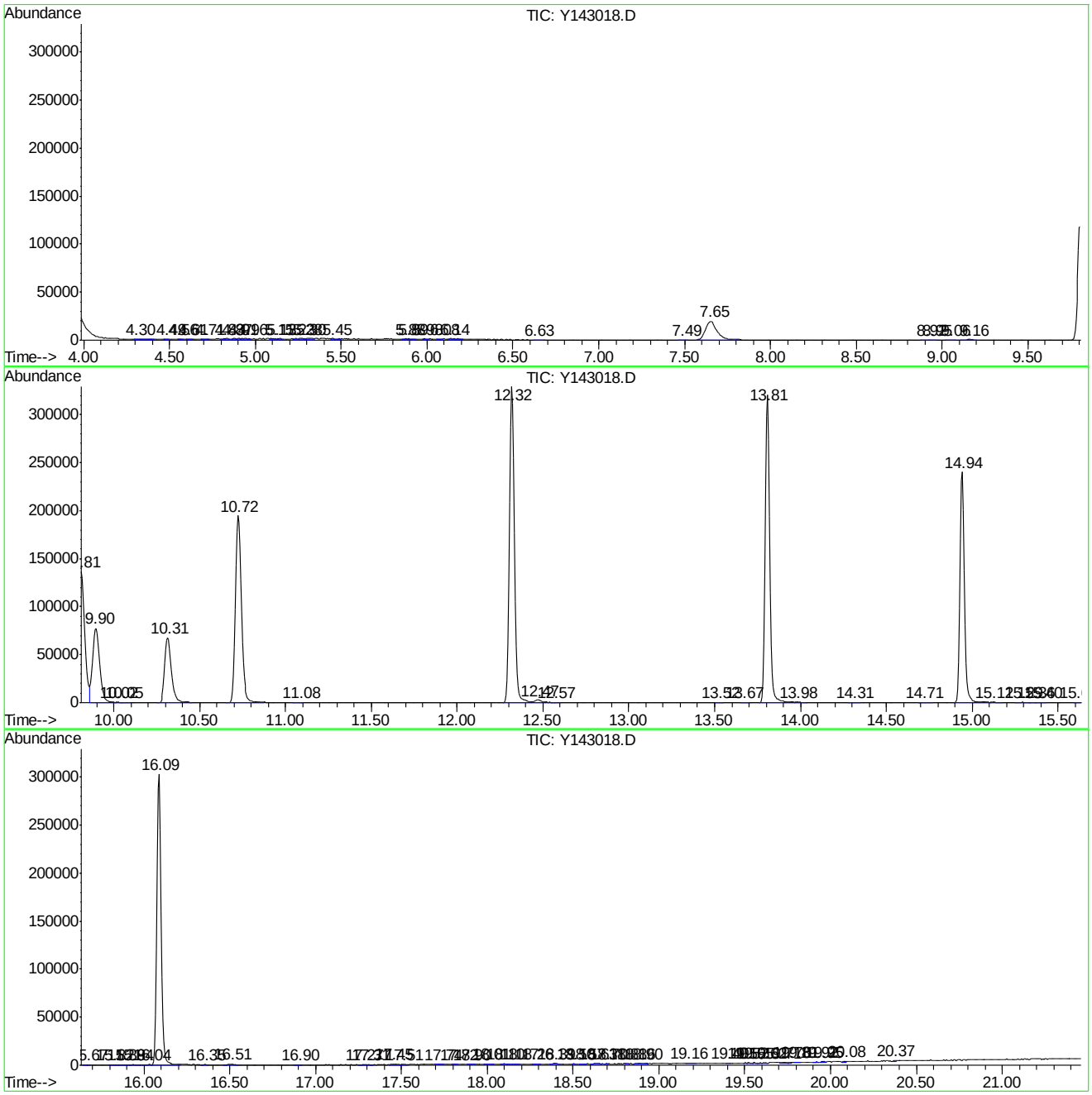
Sum of corrected areas: 3510423

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143018.D
Acq On : 31 Jan 2014 10:00 am
Operator : prashans
Sample : MB
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



ACCUTEST LABORATORIES JB58468

Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143018.D
Acq On : 31 Jan 2014 10:00 am
Operator : prashans
Sample : MB
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

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

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95404.D
Acq On : 28 Jan 2014 5:08 pm
Operator : nickm1
Sample : bs
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 29 11:57:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.239	65	69260	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	173040	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.395	114	233693	50.00	ug/L		0.00
88) chlorobenzene-d5	13.552	117	194116	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.859	152	114522	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.536	113	68225	49.63	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 99.26%				
51) 1,2-dichloroethane-d4 (s)	9.955	65	72689	51.66	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 103.32%				
80) toluene-d8 (s)	12.042	98	228544	49.51	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 99.02%				
106) 4-bromofluorobenzene (s)	14.705	95	79659	46.41	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 92.82%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.119	88	19005	1537.73	ug/L		93
3) tertiary butyl alcohol	7.360	59	37704	248.17	ug/L		97
8) chlorodifluoromethane	3.884	51	79243	60.25	ug/L		95
9) dichlorodifluoromethane	3.868	85	125305	77.23	ug/L		96
10) chloromethane	4.214	50	110852	54.92	ug/L		99
11) vinyl chloride	4.466	62	107855	56.21	ug/L		97
12) bromomethane	5.105	94	72215	54.94	ug/L		100
13) chloroethane	5.278	64	48934	54.39	ug/L		97
16) trichlorofluoromethane	5.740	101	125381	60.68	ug/L		100
18) ethyl ether	6.138	74	38263	53.09	ug/L		95
21) acrolein	6.406	56	117948	408.48	ug/L		99
22) 1,1-dichloroethene	6.563	61	103995	51.76	ug/L		99
23) acetone	6.626	58	5988	56.21	ug/L		92
24) allyl chloride	7.103	76	40347	51.20	ug/L	#	79
25) acetonitrile	7.071	40	59322	464.40	ug/L	#	65
27) iodomethane	6.851	142	145415	52.87	ug/L		96
28) iso-butyl alcohol	9.766	41	21905	481.91	ug/L		94
29) carbon disulfide	6.972	76	234922	47.16	ug/L		99
30) methylene chloride	7.297	84	75260	49.47	ug/L		92
31) methyl acetate	7.077	74	10154	45.60	ug/L		92
32) methyl tert butyl ether	7.601	73	424904	99.59	ug/L		97
33) trans-1,2-dichloroethene	7.659	61	99741	49.55	ug/L		98
34) di-isopropyl ether	8.188	45	205002	43.76	ug/L		90
35) ethyl tert-butyl ether	8.655	59	216524	50.09	ug/L		97
36) 2-butanone	8.927	72	8255	55.91	ug/L		66
37) 1,1-dichloroethane	8.230	63	125498	50.07	ug/L		98
38) chloroprene	8.330	53	92817	50.75	ug/L		97
39) acrylonitrile	7.627	53	126401	245.25	ug/L		98
40) vinyl acetate	8.214	86	12073	53.91	ug/L		67
41) ethyl acetate	8.943	45	8415	45.90	ug/L	#	53
42) 2,2-dichloropropane	8.959	77	106036	51.85	ug/L		97
43) cis-1,2-dichloroethene	8.964	61	121821	49.55	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95404.D
Acq On : 28 Jan 2014 5:08 pm
Operator : nickm1
Sample : bs
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 29 11:57:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	propionitrile	9.043	54	99482	510.45	ug/L	84
45)	methyl acrylate	9.027	55	71877	50.12	ug/L	99
46)	bromochloromethane	9.279	128	44000	55.53	ug/L	93
47)	tetrahydrofuran	9.305	42	22462	48.40	ug/L	96
48)	chloroform	9.336	83	130349	53.70	ug/L	99
49)	Tert-Butyl Formate	9.357	59	63745	49.27	ug/L	96
52)	freon 113	6.526	151	63192	65.71	ug/L	95
53)	methacrylonitrile	9.221	41	40776	48.69	ug/L	99
54)	1,1,1-trichloroethane	9.583	97	123537	58.77	ug/L	98
56)	2,2,4-Trimethylpentane	10.002	57	233499	47.07	ug/L	96
57)	tert-amyl methyl ether	10.044	73	216255	49.78	ug/L	99
59)	epichlorohydrin	11.664	57	27202	219.24	ug/L	97
60)	n-butyl alcohol	10.521	56	88231	2554.12	ug/L	98
61)	cyclohexane	9.646	84	107651	53.31	ug/L	94
62)	carbon tetrachloride	9.782	117	117034	63.54	ug/L	98
63)	1,1-dichloropropene	9.756	75	91929	50.61	ug/L	99
65)	benzene	10.023	78	278688	49.56	ug/L	99
66)	heptane	10.175	57	39554	44.34	ug/L	94
67)	isopropyl acetate	9.939	43	126766	50.73	ug/L	98
68)	1,2-dichloroethane	10.049	62	97230	58.17	ug/L	98
69)	trichloroethene	10.741	95	74215	53.32	ug/L	96
72)	2-nitropropane	11.528	41	27340	55.59	ug/L	98
73)	2-chloroethyl vinyl ether	11.533	63	203163	229.96	ug/L	97
74)	methyl methacrylate	11.004	41	104462	51.91	ug/L	99
75)	1,2-dichloropropane	11.009	63	68321	49.44	ug/L	89
76)	methylcyclohexane	10.951	83	120183	58.21	ug/L	96
77)	dibromomethane	11.177	93	48177	55.40	ug/L	91
78)	bromodichloromethane	11.303	83	98131	55.30	ug/L	99
79)	cis-1,3-dichloropropene	11.753	75	103374	46.71	ug/L	95
81)	4-methyl-2-pentanone	11.848	58	26149	52.64	ug/L	99
82)	toluene	12.115	92	168701	51.39	ug/L	98
83)	3-methyl-1-butanol	11.864	70	34620	1060.35	ug/L	92
84)	trans-1,3-dichloropropene	12.320	75	103553	52.69	ug/L	97
85)	ethyl methacrylate	12.299	69	80123	51.10	ug/L	97
86)	1,1,2-trichloroethane	12.535	83	52151	51.78	ug/L	97
87)	2-hexanone	12.697	58	22896	52.66	ug/L	93
89)	tetrachloroethene	12.697	166	89972	56.78	ug/L	98
90)	1,3-dichloropropane	12.713	76	94896	50.55	ug/L	100
91)	butyl acetate	12.765	56	38074	47.09	ug/L	92
92)	3,3-Dimethyl-1-Butanol	12.870	57	60362	470.59	ug/L	96
93)	dibromochloromethane	12.980	129	86880	57.34	ug/L	97
94)	1,2-dibromoethane	13.127	107	67363	52.84	ug/L	98
96)	chlorobenzene	13.583	112	192818	52.91	ug/L	100
97)	1,1,1,2-tetrachloroethane	13.646	131	79313	55.11	ug/L	96
98)	ethylbenzene	13.636	91	311940	51.85	ug/L	100
99)	m,p-xylene	13.741	106	245454	105.38	ug/L	98
100)	o-xylene	14.155	106	121842	51.87	ug/L	100
101)	styrene	14.170	104	203381	52.60	ug/L	100
103)	bromoform	14.443	173	66773	58.42	ug/L	98
105)	isopropylbenzene	14.496	105	326151	53.80	ug/L	99

M3D4058.M Wed Jan 29 13:01:20 2014 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95404.D
Acq On : 28 Jan 2014 5:08 pm
Operator : nickm1
Sample : bs
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 29 11:57:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

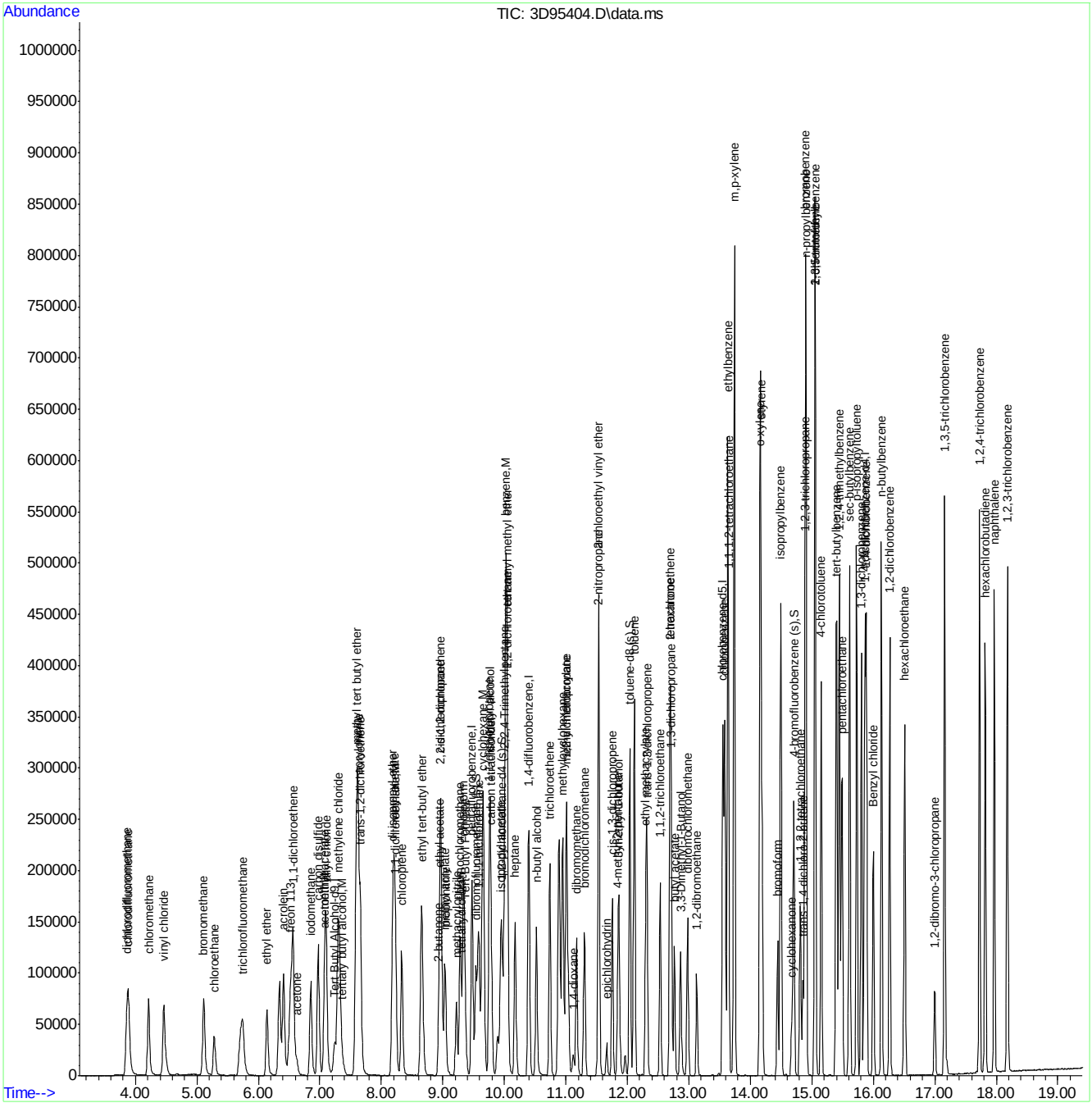
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) bromobenzene	14.899	156	94320	53.46	ug/L	99
108) cyclohexanone	14.674	55	21320	313.77	ug/L	94
109) 1,1,2,2-tetrachloroethane	14.810	83	84230	47.08	ug/L	99
110) trans-1,4-dichloro-2-b...	14.857	53	17081	43.25	ug/L	95
111) 1,2,3-trichloropropane	14.889	110	22137	56.14	ug/L	97
112) n-propylbenzene	14.904	91	370887	54.04	ug/L	98
114) 2-chlorotoluene	15.057	126	81029	53.53	ug/L	98
115) 4-chlorotoluene	15.151	126	81137	53.01	ug/L	99
116) 1,3,5-trimethylbenzene	15.051	105	275653	53.78	ug/L	98
117) tert-butylbenzene	15.403	119	243196	54.75	ug/L	99
118) pentachloroethane	15.492	167	67487	56.68	ug/L	99
119) 1,2,4-trimethylbenzene	15.445	105	277925	54.74	ug/L	98
120) sec-butylbenzene	15.612	105	361258	53.42	ug/L	99
121) 1,3-dichlorobenzene	15.806	146	176138	52.77	ug/L	99
122) p-isopropyltoluene	15.728	119	318979	56.37	ug/L	99
123) 1,4-dichlorobenzene	15.885	146	179794	51.84	ug/L	98
124) 1,2-dichlorobenzene	16.268	146	179444	52.71	ug/L	100
126) n-butylbenzene	16.131	92	157426	54.54	ug/L	98
128) 1,2-dibromo-3-chloropr...	17.002	157	24507	58.96	ug/L	95
129) 1,3,5-trichlorobenzene	17.159	180	181537	58.14	ug/L	99
130) 1,2,4-trichlorobenzene	17.725	180	169691	59.47	ug/L	98
131) hexachlorobutadiene	17.820	225	94012	61.53	ug/L	97
132) naphthalene	17.966	128	344424	58.39	ug/L	99
133) 1,2,3-trichlorobenzene	18.181	180	159564	60.64	ug/L	100
134) hexachloroethane	16.509	119	66984	55.96	ug/L	98
135) Benzyl chloride	16.000	91	148585	46.24	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95404.D
Acq On : 28 Jan 2014 5:08 pm
Operator : nickm1
Sample : bs
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 29 11:57:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration



M3D4058.M Wed Jan 29 13:01:20 2014 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143019.D
Acq On : 31 Jan 2014 10:38 am
Operator : prashans
Sample : BS
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 03 17:31:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	55184	500.00	ug/L		0.00
5) pentafluorobenzene	9.81	168	138047	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.72	114	206860	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	193786	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.08	152	102062	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.89	113	66724	53.12	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 106.24%				
50) 1,2-dichloroethane-d4 (s)	10.31	65	67845	51.34	ug/L		0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 102.68%				
79) toluene-d8 (s)	12.32	98	252276	53.06	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 106.12%				
103) 4-bromofluorobenzene (s)	14.94	95	95190	46.79	ug/L		0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 93.58%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.44	88	16114	1235.75	ug/L		97
3) tertiary butyl alcohol	7.76	59	32914	223.65	ug/L		90
4) isobutyl alcohol	10.12	41	19412	447.42	ug/L	#	94
11) chlorodifluoromethane	4.24	51	45048	50.68	ug/L		93
12) dichlorodifluoromethane	4.23	85	69117	63.08	ug/L		97
13) chloromethane	4.57	50	77863	48.33	ug/L		100
14) vinyl chloride	4.82	62	68761	50.15	ug/L		99
16) bromomethane	5.50	94	58865	59.55	ug/L		98
17) chloroethane	5.67	64	40652	58.42	ug/L		96
19) trichlorofluoromethane	6.11	101	83646	56.18	ug/L		96
20) ethyl ether	6.51	74	35962	55.60	ug/L		95
21) 2-chloropropane	6.74	63	22388	52.62	ug/L		94
22) acrolein	6.82	56	101072	485.88	ug/L		98
23) 1,1-dichloroethene	6.94	61	80309	54.05	ug/L		99
24) acetone	7.05	43	16933	52.21	ug/L		100
25) allyl chloride	7.36	76	209303	343.53	ug/L	#	1
26) acetonitrile	7.52	40	43370	513.18	ug/L		93
27) iodomethane	7.25	142	105147	52.70	ug/L		96
28) carbon disulfide	7.36	76	209303	59.70	ug/L		99
29) 1-chloropropane	7.69	42	103635	56.68	ug/L		100
30) methylene chloride	7.69	49	87560	48.80	ug/L		97
31) methyl acetate	7.48	74	7901	48.42	ug/L		93
32) methyl tert butyl ether	7.96	73	343034	104.50	ug/L		98
33) trans-1,2-dichloroethene	8.03	61	83448	52.26	ug/L		99
34) di-isopropyl ether	8.53	45	200224	48.05	ug/L		96
35) ethyl tert-butyl ether	8.99	59	191136	52.60	ug/L		98
36) 2-butanone	9.31	72	6715	55.14	ug/L		80
37) 1,1-dichloroethane	8.60	63	113501	53.65	ug/L		99
38) chloroprene	8.69	53	72378	48.10	ug/L		99
39) acrylonitrile	8.05	53	91208	256.67	ug/L		98
40) vinyl acetate	8.58	86	9815	58.91	ug/L		96
41) ethyl acetate	9.30	45	8166	53.59	ug/L		64
42) 2,2-dichloropropane	9.31	77	83306	54.53	ug/L		98

MY6161.M Mon Feb 03 17:50:17 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143019.D
Acq On : 31 Jan 2014 10:38 am
Operator : prashans
Sample : BS
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 03 17:31:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) cis-1,2-dichloroethene	9.33	96	71012	52.60	ug/L		98
44) propionitrile	9.44	54	77179	567.25	ug/L		96
45) bromochloromethane	9.64	130	47841	56.08	ug/L		96
46) tetrahydrofuran	9.67	72	7860	55.25	ug/L		91
47) chloroform	9.69	83	116732	55.07	ug/L		98
48) tert-Butyl Formate	9.71	59	40483	60.67	ug/L		97
51) freon 113	6.89	151	36373	54.68	ug/L		98
52) methacrylonitrile	9.61	67	22845	56.14	ug/L		93
53) 1,1,1-trichloroethane	9.92	97	89723	55.54	ug/L		99
54) Cyclohexane	9.96	84	78533	51.52	ug/L	#	27
55) 2,2,4-trimethylpentane	10.30	57	187628	46.62	ug/L		97
56) tert-amyl methyl ether	10.36	73	189339	52.74	ug/L		100
58) epichlorohydrin	11.99	57	23859	236.03	ug/L		96
59) n-butyl alcohol	10.86	56	86892	2606.98	ug/L		99
60) carbon tetrachloride	10.10	117	81305	51.93	ug/L		99
61) 1,1-dichloropropene	10.09	75	76726	47.62	ug/L		97
62) hexane	8.27	57	51984	35.77	ug/L		96
64) benzene	10.36	78	257372	48.24	ug/L		98
65) heptane	10.46	57	37376	42.45	ug/L		96
66) isopropyl acetate	10.27	61	22719	48.52	ug/L		99
67) 1,2-dichloroethane	10.40	62	87541	55.43	ug/L		97
68) trichloroethene	11.05	95	64462	50.35	ug/L		95
70) 2-nitropropane	11.85	41	19707	56.68	ug/L	#	73
71) 2-chloroethyl vinyl ether	11.84	63	105686	313.05	ug/L		99
72) methyl methacrylate	11.31	69	41073	51.30	ug/L		95
73) 1,2-dichloropropane	11.33	63	69092	49.96	ug/L		97
74) methylcyclohexane	11.23	83	88833	50.09	ug/L		96
76) dibromomethane	11.50	93	41826	55.79	ug/L		94
77) bromodichloromethane	11.62	83	93661	53.65	ug/L		97
78) cis-1,3-dichloropropene	12.05	75	104155	49.91	ug/L		100
80) 4-methyl-2-pentanone	12.14	58	24118	53.59	ug/L		96
81) toluene	12.39	91	274614	50.96	ug/L		98
82) 3-methyl-1-butanol	12.16	70	32983	1083.11	ug/L		96
83) trans-1,3-dichloropropene	12.60	75	99377	56.54	ug/L		98
84) ethyl methacrylate	12.57	69	75409	55.72	ug/L		96
85) 1,1,2-trichloroethane	12.82	83	52024	55.52	ug/L		99
86) 2-hexanone	12.97	58	23266	54.61	ug/L		96
88) tetrachloroethene	12.95	166	72251	44.77	ug/L		96
89) 1,3-dichloropropane	13.00	76	96329	47.92	ug/L		98
90) butyl acetate	13.02	56	37883	46.95	ug/L		95
91) dibromochloromethane	13.26	129	76556	50.40	ug/L		98
92) 1,2-dibromoethane	13.41	107	60305	50.41	ug/L		95
93) 3,3-Dimethyl-1-Butanol	13.13	57	56386	480.13	ug/L		97
94) chlorobenzene	13.83	112	184783	45.73	ug/L		100
95) 1,1,1,2-tetrachloroethane	13.90	131	68446	47.19	ug/L		98
96) ethylbenzene	13.87	91	300179	46.22	ug/L		98
97) m,p-xylene	13.97	106	233345	93.99	ug/L		100
98) o-xylene	14.39	91	243588	47.32	ug/L		99
99) styrene	14.40	104	198267	50.25	ug/L		97
100) bromoform	14.70	173	51223	51.15	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143019.D
Acq On : 31 Jan 2014 10:38 am
Operator : prashans
Sample : BS
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 03 17:31:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

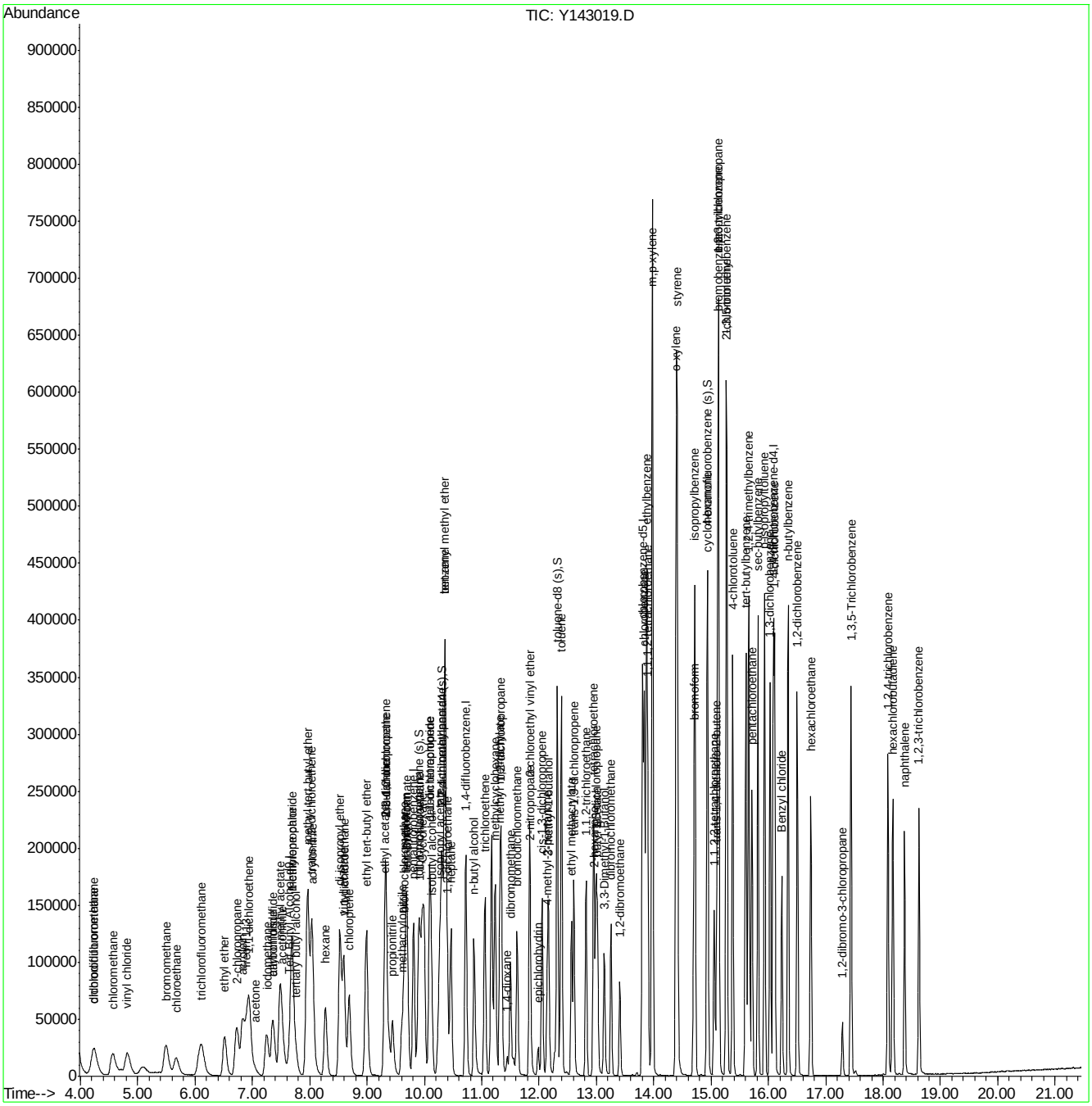
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) isopropylbenzene	14.72	105	283179	43.30	ug/L	99
105) bromobenzene	15.14	156	85113	44.55	ug/L	99
106) cyclohexanone	14.93	55	92506	574.01	ug/L	97
107) 1,1,2,2-tetrachloroethane	15.06	83	79695	46.05	ug/L	97
108) trans-1,4-dichloro-2-buten	15.09	53	19590	53.20	ug/L	97
109) 1,2,3-trichloropropane	15.13	110	19153	47.99	ug/L	96
110) n-propylbenzene	15.12	91	354703	47.97	ug/L	100
112) 2-chlorotoluene	15.28	126	73767	44.66	ug/L	92
113) 4-chlorotoluene	15.38	91	215546	44.24	ug/L	99
114) 1,3,5-trimethylbenzene	15.26	105	240747	44.02	ug/L	99
115) tert-butylbenzene	15.61	119	197091	43.05	ug/L	97
116) pentachloroethane	15.71	167	54114	45.91	ug/L	98
117) 1,2,4-trimethylbenzene	15.65	105	245898	46.65	ug/L	99
118) sec-butylbenzene	15.82	105	304373	44.53	ug/L	98
119) 1,3-dichlorobenzene	16.03	146	150933	43.70	ug/L	99
120) p-isopropyltoluene	15.93	119	256188	45.54	ug/L	98
121) 1,4-dichlorobenzene	16.11	146	153427	43.69	ug/L	98
122) 1,2-dichlorobenzene	16.51	146	145481	44.73	ug/L	99
123) n-butylbenzene	16.34	91	241830	47.86	ug/L	98
125) 1,2-dibromo-3-chloropropan	17.29	157	13972	48.68	ug/L	99
126) 1,3,5-Trichlorobenzene	17.44	180	120192	46.85	ug/L	100
127) 1,2,4-trichlorobenzene	18.08	180	96891	47.08	ug/L	98
129) hexachlorobutadiene	18.17	225	60113	42.91	ug/L	95
130) naphthalene	18.37	128	182214	46.55	ug/L	100
131) 1,2,3-trichlorobenzene	18.62	180	89183	46.83	ug/L	97
132) hexachloroethane	16.74	119	52010	47.97	ug/L	97
133) Benzyl chloride	16.23	91	130378	52.49	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143019.D
Acq On : 31 Jan 2014 10:38 am
Operator : prashans
Sample : BS
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 03 17:31:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration



MY6161.M Mon Feb 03 17:50:18 2014 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95405.D
Acq On : 28 Jan 2014 5:35 pm
Operator : nickm1
Sample : jb58428-6ms
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 29 11:58:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.244	65	76499	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	181452	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.395	114	244061	50.00	ug/L		0.00
88) chlorobenzene-d5	13.552	117	202300	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.859	152	122155	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.535	113	71358	49.51	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 99.02%				
51) 1,2-dichloroethane-d4 (s)	9.955	65	76160	51.62	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 103.24%				
80) toluene-d8 (s)	12.036	98	240261	49.84	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 99.68%				
106) 4-bromofluorobenzene (s)	14.705	95	82217	44.91	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 89.82%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	18996	1391.56	ug/L		76
3) tertiary butyl alcohol	7.360	59	41245	245.79	ug/L		91
8) chlorodifluoromethane	3.883	51	73196	53.07	ug/L		96
9) dichlorodifluoromethane	3.862	85	100619	59.14	ug/L		99
10) chloromethane	4.209	50	106843	50.48	ug/L		100
11) vinyl chloride	4.460	62	112196	55.76	ug/L		98
12) bromomethane	5.105	94	74950	54.38	ug/L		100
13) chloroethane	5.278	64	47659	50.52	ug/L		99
16) trichlorofluoromethane	5.734	101	124103	57.27	ug/L		99
18) ethyl ether	6.138	74	38193	50.53	ug/L		95
21) acrolein	6.405	56	123143	406.70	ug/L		99
22) 1,1-dichloroethene	6.563	61	108360	51.43	ug/L		99
23) acetone	6.620	58	6002	53.73	ug/L		90
24) allyl chloride	7.097	76	40978	49.59	ug/L	#	78
25) acetonitrile	7.071	40	59645	445.28	ug/L	#	74
27) iodomethane	6.851	142	150656	52.24	ug/L		96
28) iso-butyl alcohol	9.766	41	21347	447.86	ug/L		95
29) carbon disulfide	6.966	76	251008	48.05	ug/L		98
30) methylene chloride	7.291	84	79346	49.74	ug/L		96
31) methyl acetate	7.082	74	11768	50.40	ug/L	#	89
32) methyl tert butyl ether	7.601	73	224306	50.14	ug/L		72
33) trans-1,2-dichloroethene	7.658	61	106017	50.22	ug/L		98
34) di-isopropyl ether	8.188	45	215092	43.78	ug/L		85
35) ethyl tert-butyl ether	8.655	59	224540	49.53	ug/L		99
36) 2-butanone	8.927	72	8503	54.92	ug/L		71
37) 1,1-dichloroethane	8.225	63	128060	48.73	ug/L		98
38) chloroprene	8.330	53	104280	54.37	ug/L		96
39) acrylonitrile	7.622	53	131028	242.45	ug/L		98
40) vinyl acetate	8.209	86	11979	51.01	ug/L		81
41) ethyl acetate	8.938	45	8808	45.82	ug/L		91
42) 2,2-dichloropropane	8.964	77	119989	55.95	ug/L		98
43) cis-1,2-dichloroethene	8.964	61	128640	49.90	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95405.D
Acq On : 28 Jan 2014 5:35 pm
Operator : nickm1
Sample : jb58428-6ms
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 29 11:58:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) propionitrile	9.037	54	101546	496.89	ug/L		94
45) methyl acrylate	9.022	55	74818	49.75	ug/L		97
46) bromochloromethane	9.279	128	46075	55.45	ug/L		88
47) tetrahydrofuran	9.305	42	22513	46.26	ug/L		80
48) chloroform	9.336	83	133561	52.47	ug/L		99
49) Tert-Butyl Formate	9.352	59	58012	42.76	ug/L		94
52) freon 113	6.526	151	59920	59.42	ug/L		93
53) methacrylonitrile	9.216	41	45279	51.56	ug/L		95
54) 1,1,1-trichloroethane	9.577	97	124369	56.42	ug/L		97
56) 2,2,4-Trimethylpentane	10.002	57	284212	54.64	ug/L		82
57) tert-amyl methyl ether	10.044	73	223237	49.01	ug/L		95
59) epichlorohydrin	11.654	57	83130	641.53	ug/L		80
60) n-butyl alcohol	10.516	56	91287	2530.32	ug/L		98
61) cyclohexane	9.640	84	163402	77.48	ug/L		94
62) carbon tetrachloride	9.777	117	115158	59.86	ug/L		96
63) 1,1-dichloropropene	9.756	75	98685	52.02	ug/L		99
64) hexane	7.942	57	74882	47.72	ug/L		99
65) benzene	10.023	78	291367	49.61	ug/L		99
66) heptane	10.170	57	48120	51.66	ug/L	#	71
67) isopropyl acetate	9.934	43	138745	53.16	ug/L		97
68) 1,2-dichloroethane	10.044	62	99328	56.90	ug/L		98
69) trichloroethene	10.736	95	78416	53.94	ug/L		98
72) 2-nitropropane	11.517	41	28693	55.87	ug/L		98
74) methyl methacrylate	11.004	41	104013	49.49	ug/L		97
75) 1,2-dichloropropane	11.009	63	68216	47.27	ug/L		93
76) methylcyclohexane	10.946	83	421738	195.59	ug/L		96
77) dibromomethane	11.171	93	48246	53.12	ug/L		91
78) bromodichloromethane	11.297	83	107625	58.08	ug/L		99
79) cis-1,3-dichloropropene	11.748	75	118703	51.35	ug/L		98
81) 4-methyl-2-pentanone	11.842	58	28596	55.12	ug/L		97
82) toluene	12.110	92	175203	51.10	ug/L		96
83) 3-methyl-1-butanol	11.863	70	51203	1501.64	ug/L	#	86
84) trans-1,3-dichloropropene	12.314	75	109449	53.32	ug/L		97
85) ethyl methacrylate	12.293	69	90877	55.49	ug/L		99
86) 1,1,2-trichloroethane	12.529	83	55379	52.65	ug/L		95
87) 2-hexanone	12.692	58	26061	57.39	ug/L		86
89) tetrachloroethene	12.692	166	88786	53.76	ug/L		98
90) 1,3-dichloropropane	12.713	76	98542	50.36	ug/L		99
91) butyl acetate	12.765	56	45173	53.61	ug/L		99
92) 3,3-Dimethyl-1-Butanol	12.865	57	78431	586.73	ug/L	#	78
93) dibromochloromethane	12.975	129	89064	56.40	ug/L		98
94) 1,2-dibromoethane	13.127	107	69340	52.19	ug/L		99
96) chlorobenzene	13.583	112	218024	57.40	ug/L		99
97) 1,1,1,2-tetrachloroethane	13.641	131	83373	55.59	ug/L		96
98) ethylbenzene	13.630	91	334517	53.35	ug/L		99
99) m,p-xylene	13.735	106	254710	104.93	ug/L		99
100) o-xylene	14.155	106	129120	52.74	ug/L		99
101) styrene	14.170	104	208428	51.73	ug/L		100
103) bromoform	14.438	173	67730	56.86	ug/L		98
105) isopropylbenzene	14.495	105	468690	72.48	ug/L		99

M3D4058.M Wed Jan 29 13:01:23 2014 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95405.D
Acq On : 28 Jan 2014 5:35 pm
Operator : nickm1
Sample : jb58428-6ms
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 29 11:58:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

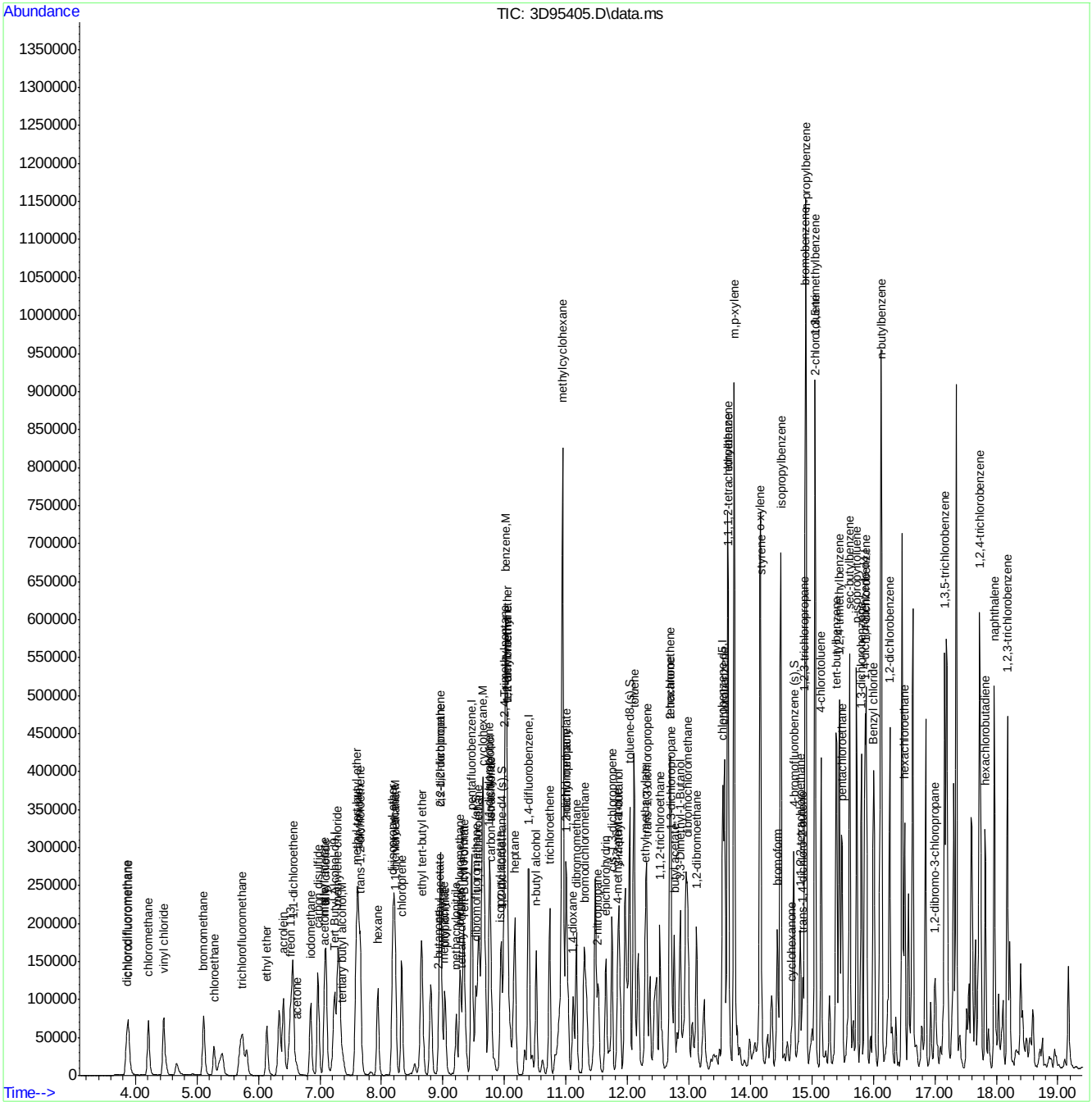
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) bromobenzene	14.899	156	97467	51.79	ug/L		97
108) cyclohexanone	14.668	55	22764	314.08	ug/L		91
109) 1,1,2,2-tetrachloroethane	14.810	83	91754	48.08	ug/L		99
110) trans-1,4-dichloro-2-b...	14.852	53	18998	45.09	ug/L		90
111) 1,2,3-trichloropropane	14.883	110	24633	58.57	ug/L		89
112) n-propylbenzene	14.904	91	631724	86.30	ug/L		97
114) 2-chlorotoluene	15.056	126	83077	51.45	ug/L		95
115) 4-chlorotoluene	15.151	126	83970	51.43	ug/L		98
116) 1,3,5-trimethylbenzene	15.051	105	278588	50.95	ug/L		99
117) tert-butylbenzene	15.397	119	240354	50.73	ug/L		99
118) pentachloroethane	15.492	167	70207	55.28	ug/L		98
119) 1,2,4-trimethylbenzene	15.444	105	272492	50.32	ug/L		99
120) sec-butylbenzene	15.612	105	386986	53.65	ug/L		100
121) 1,3-dichlorobenzene	15.806	146	181970	51.11	ug/L		97
122) p-isopropyltoluene	15.727	119	317257	52.56	ug/L		99
123) 1,4-dichlorobenzene	15.885	146	189875	51.33	ug/L		99
124) 1,2-dichlorobenzene	16.267	146	190723	52.52	ug/L		100
126) n-butylbenzene	16.131	92	179381	58.26	ug/L		93
128) 1,2-dibromo-3-chloropr...	17.002	157	25772	58.13	ug/L		97
129) 1,3,5-trichlorobenzene	17.159	180	166805	50.08	ug/L		99
130) 1,2,4-trichlorobenzene	17.725	180	161528	53.07	ug/L		98
131) hexachlorobutadiene	17.819	225	68883	42.27	ug/L		97
132) naphthalene	17.966	128	360811	57.35	ug/L		99
133) 1,2,3-trichlorobenzene	18.181	180	148944	53.07	ug/L		99
134) hexachloroethane	16.509	119	46842	36.69	ug/L	#	65
135) Benzyl chloride	16.000	91	205737	60.03	ug/L		96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95405.D
Acq On : 28 Jan 2014 5:35 pm
Operator : nickm1
Sample : jb58428-6ms
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 29 11:58:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration



M3D4058.M Wed Jan 29 13:01:23 2014 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95406.D
Acq On : 28 Jan 2014 6:02 pm
Operator : nickm1
Sample : jb58428-6msd
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 29 11:59:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.239	65	87311	500.00	ug/L		0.00
4) pentafluorobenzene	9.478	168	205922	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.395	114	277327	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	227150	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.859	152	131956	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.536	113	80762	49.37	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 98.74%				
51) 1,2-dichloroethane-d4 (s)	9.955	65	81905	48.91	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 97.82%				
80) toluene-d8 (s)	12.036	98	273602	49.95	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 99.90%				
106) 4-bromofluorobenzene (s)	14.700	95	90427	45.72	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 91.44%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.119	88	22270	1429.38	ug/L	#	72
3) tertiary butyl alcohol	7.360	59	46927	245.02	ug/L		93
8) chlorodifluoromethane	3.884	51	77262	49.36	ug/L		95
9) dichlorodifluoromethane	3.857	85	106713	55.27	ug/L		98
10) chloromethane	4.209	50	112327	46.77	ug/L		100
11) vinyl chloride	4.460	62	124384	54.47	ug/L		99
12) bromomethane	5.105	94	84608	54.09	ug/L		99
13) chloroethane	5.278	64	52745	49.27	ug/L		99
16) trichlorofluoromethane	5.734	101	134448	54.67	ug/L		97
18) ethyl ether	6.138	74	43970	51.27	ug/L		97
21) acrolein	6.405	56	144641	420.93	ug/L		99
22) 1,1-dichloroethene	6.563	61	120617	50.45	ug/L		98
23) acetone	6.626	58	7290	57.50	ug/L		87
24) allyl chloride	7.098	76	46316	49.39	ug/L	#	82
25) acetonitrile	7.077	40	69546	457.50	ug/L		91
27) iodomethane	6.846	142	172640	52.75	ug/L		98
28) iso-butyl alcohol	9.771	41	22895	423.26	ug/L		98
29) carbon disulfide	6.966	76	290349	48.98	ug/L		99
30) methylene chloride	7.291	84	91799	50.71	ug/L		95
31) methyl acetate	7.077	74	13521	51.03	ug/L		93
32) methyl tert butyl ether	7.601	73	251993	49.63	ug/L		69
33) trans-1,2-dichloroethene	7.659	61	121185	50.59	ug/L		97
34) di-isopropyl ether	8.188	45	251694	45.15	ug/L		86
35) ethyl tert-butyl ether	8.655	59	256667	49.89	ug/L		98
36) 2-butanone	8.922	72	9920	56.46	ug/L		70
37) 1,1-dichloroethane	8.225	63	147018	49.29	ug/L		99
38) chloroprene	8.330	53	118522	54.45	ug/L		98
39) acrylonitrile	7.627	53	154384	251.72	ug/L		96
40) vinyl acetate	8.214	86	13716	51.46	ug/L		58
41) ethyl acetate	8.943	45	10508	48.16	ug/L	#	49
42) 2,2-dichloropropane	8.964	77	132282	54.36	ug/L		99
43) cis-1,2-dichloroethene	8.964	61	148438	50.74	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95406.D
Acq On : 28 Jan 2014 6:02 pm
Operator : nickm1
Sample : jb58428-6msd
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 29 11:59:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	propionitrile	9.037	54	118410	510.56	ug/L		100
45)	methyl acrylate	9.022	55	87657	51.36	ug/L		95
46)	bromochloromethane	9.279	128	52161	55.32	ug/L		88
47)	tetrahydrofuran	9.305	42	26593	48.15	ug/L		80
48)	chloroform	9.336	83	150809	52.21	ug/L		99
49)	Tert-Butyl Formate	9.357	59	62813	40.80	ug/L		95
52)	freon 113	6.526	151	69836	61.02	ug/L		89
53)	methacrylonitrile	9.216	41	52380	52.56	ug/L		98
54)	1,1,1-trichloroethane	9.577	97	135315	54.09	ug/L		99
56)	2,2,4-Trimethylpentane	10.007	57	327185	55.43	ug/L		83
57)	tert-amyl methyl ether	10.044	73	256865	49.69	ug/L		95
59)	epichlorohydrin	11.659	57	91112	618.79	ug/L		81
60)	n-butyl alcohol	10.521	56	107807	2629.78	ug/L		99
61)	cyclohexane	9.646	84	190722	79.58	ug/L		95
62)	carbon tetrachloride	9.782	117	125780	57.54	ug/L		99
63)	1,1-dichloropropene	9.756	75	112293	52.10	ug/L		98
64)	hexane	7.942	57	87855	49.27	ug/L		99
65)	benzene	10.023	78	338017	50.65	ug/L		98
66)	heptane	10.175	57	56315	53.20	ug/L	#	74
67)	isopropyl acetate	9.939	43	158252	53.36	ug/L		98
68)	1,2-dichloroethane	10.049	62	107780	54.33	ug/L		98
69)	trichloroethene	10.736	95	89652	54.28	ug/L		98
72)	2-nitropropane	11.523	41	27993	47.96	ug/L		97
74)	methyl methacrylate	11.004	41	113955	47.72	ug/L		97
75)	1,2-dichloropropane	11.009	63	80379	49.02	ug/L		95
76)	methylcyclohexane	10.951	83	487692	199.05	ug/L		96
77)	dibromomethane	11.171	93	54872	53.17	ug/L		97
78)	bromodichloromethane	11.302	83	121569	57.73	ug/L		97
79)	cis-1,3-dichloropropene	11.753	75	134222	51.10	ug/L		99
81)	4-methyl-2-pentanone	11.842	58	33588	56.97	ug/L		99
82)	toluene	12.110	92	200245	51.40	ug/L		97
83)	3-methyl-1-butanol	11.863	70	59081	1524.84	ug/L	#	85
84)	trans-1,3-dichloropropene	12.314	75	122008	52.31	ug/L		96
85)	ethyl methacrylate	12.299	69	103912	55.84	ug/L		96
86)	1,1,2-trichloroethane	12.529	83	62541	52.32	ug/L		96
87)	2-hexanone	12.692	58	29779	57.71	ug/L		95
89)	tetrachloroethene	12.692	166	99863	53.85	ug/L		98
90)	1,3-dichloropropane	12.713	76	111977	50.97	ug/L		100
91)	butyl acetate	12.760	56	52183	55.15	ug/L		94
92)	3,3-Dimethyl-1-Butanol	12.860	57	92737	617.85	ug/L	#	81
93)	dibromochloromethane	12.975	129	98421	55.51	ug/L		98
94)	1,2-dibromoethane	13.127	107	78715	52.77	ug/L		99
96)	chlorobenzene	13.578	112	245654	57.60	ug/L		100
97)	1,1,1,2-tetrachloroethane	13.641	131	92664	55.03	ug/L		99
98)	ethylbenzene	13.630	91	373461	53.05	ug/L		100
99)	m,p-xylene	13.735	106	284456	104.36	ug/L		100
100)	o-xylene	14.155	106	143940	52.37	ug/L		95
101)	styrene	14.165	104	236891	52.36	ug/L		99
103)	bromoform	14.438	173	75989	56.81	ug/L		98
105)	isopropylbenzene	14.490	105	517730	74.12	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95406.D
Acq On : 28 Jan 2014 6:02 pm
Operator : nickm1
Sample : jb58428-6msd
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 29 11:59:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

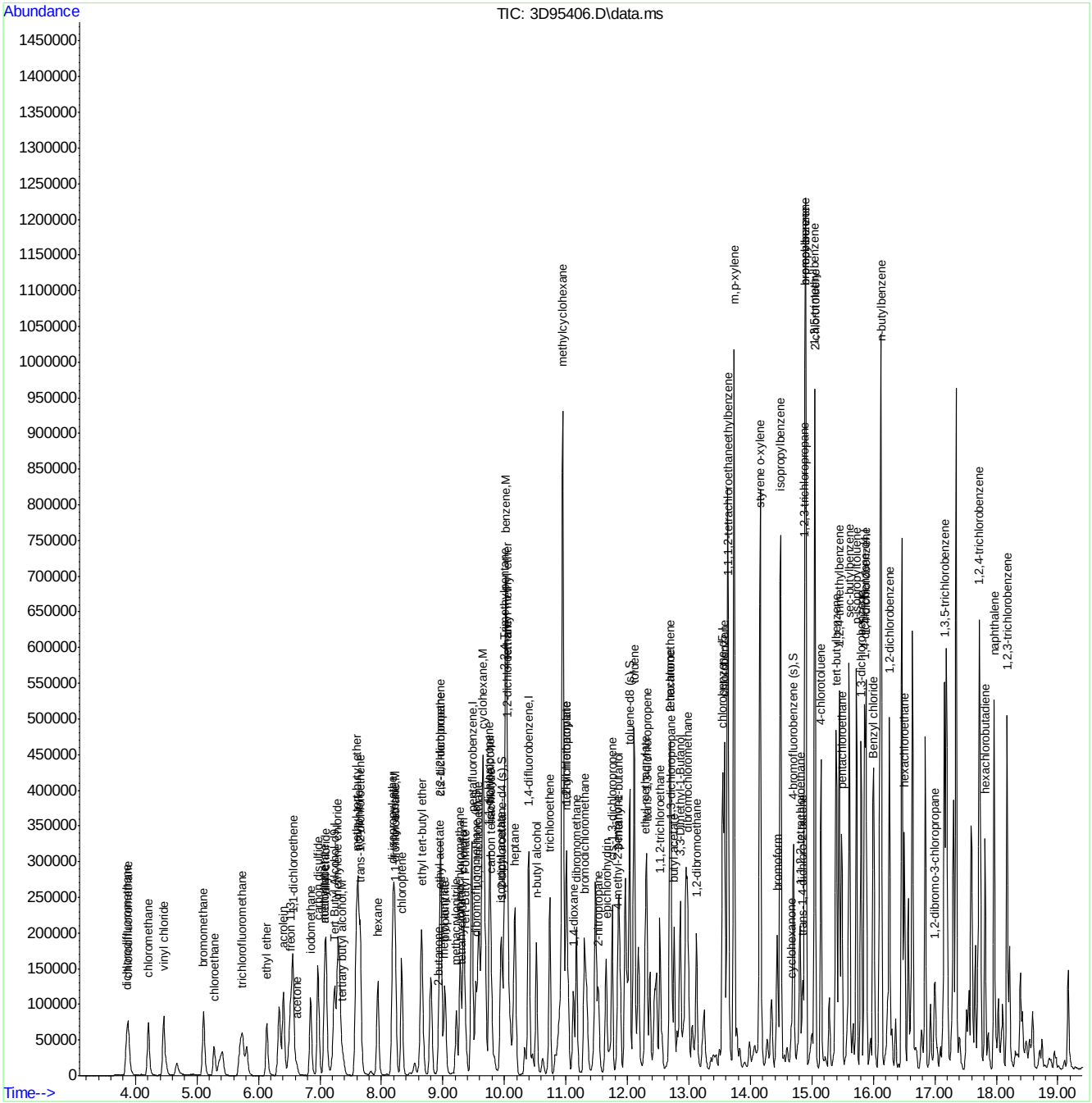
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) bromobenzene	14.894	156	107572	52.92	ug/L		96
108) cyclohexanone	14.668	55	24742	316.02	ug/L		89
109) 1,1,2,2-tetrachloroethane	14.810	83	103719	50.32	ug/L		100
110) trans-1,4-dichloro-2-b...	14.847	53	19649	43.17	ug/L		96
111) 1,2,3-trichloropropane	14.883	110	26240	57.75	ug/L		93
112) n-propylbenzene	14.899	91	698448	88.32	ug/L		99
114) 2-chlorotoluene	15.051	126	91959	52.72	ug/L		97
115) 4-chlorotoluene	15.151	126	92310	52.34	ug/L		93
116) 1,3,5-trimethylbenzene	15.046	105	305865	51.79	ug/L		99
117) tert-butylbenzene	15.397	119	264748	51.73	ug/L		99
118) pentachloroethane	15.486	167	76554	55.80	ug/L		99
119) 1,2,4-trimethylbenzene	15.444	105	296543	50.69	ug/L		100
120) sec-butylbenzene	15.607	105	421272	54.06	ug/L		99
121) 1,3-dichlorobenzene	15.801	146	198620	51.64	ug/L		99
122) p-isopropyltoluene	15.728	119	345209	52.94	ug/L		100
123) 1,4-dichlorobenzene	15.880	146	208066	52.07	ug/L		100
124) 1,2-dichlorobenzene	16.262	146	207744	52.96	ug/L		100
126) n-butylbenzene	16.126	92	195628	58.82	ug/L		94
128) 1,2-dibromo-3-chloropr...	16.996	157	27641	57.71	ug/L		96
129) 1,3,5-trichlorobenzene	17.159	180	176496	49.06	ug/L		98
130) 1,2,4-trichlorobenzene	17.720	180	169926	51.68	ug/L		98
131) hexachlorobutadiene	17.814	225	70432	40.01	ug/L		96
132) naphthalene	17.966	128	380877	56.04	ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	157633	51.99	ug/L		97
134) hexachloroethane	16.504	119	51988	37.69	ug/L	#	70
135) Benzyl chloride	15.995	91	219598	59.31	ug/L		97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95406.D
Acq On : 28 Jan 2014 6:02 pm
Operator : nickm1
Sample : jb58428-6msd
Misc : MS62219,V3D4110,w,,,,5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 29 11:59:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143029.D
Acq On : 31 Jan 2014 3:45 pm
Operator : prashans
Sample : JB58885-1MS
Misc : MS62412,VY6198,5.5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 03 17:41:19 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.66	65	27548	500.00	ug/L	0.00
5) pentafluorobenzene	9.82	168	142410	50.00	ug/L	0.00
57) 1,4-difluorobenzene	10.73	114	203362	50.00	ug/L	0.00
87) chlorobenzene-d5	13.81	117	176080	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.09	152	87155	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	9.90	113	52902	40.83	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 81.66%			
50) 1,2-dichloroethane-d4 (s)	10.32	65	53342	39.13	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 78.26%			
79) toluene-d8 (s)	12.32	98	244581	52.32	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 104.64%			
103) 4-bromofluorobenzene (s)	14.94	95	82601	47.54	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 95.08%			
Target Compounds						Qvalue
2) 1,4-dioxane	11.45	88	7572	1163.22	ug/L	96
3) tertiary butyl alcohol	7.77	59	19816	269.73	ug/L	73
4) isobutyl alcohol	10.14	41	9566	441.67	ug/L #	87
11) chlorodifluoromethane	4.23	51	55880	60.94	ug/L	97
12) dichlorodifluoromethane	4.23	85	62203	55.03	ug/L	94
13) chloromethane	4.57	50	70885	42.65	ug/L	95
14) vinyl chloride	4.82	62	69121	48.87	ug/L	99
16) bromomethane	5.50	94	45518	44.64	ug/L	96
17) chloroethane	5.67	64	38252	53.28	ug/L	99
19) trichlorofluoromethane	6.10	101	83548	54.39	ug/L	98
20) ethyl ether	6.51	74	25496	38.21	ug/L	95
21) 2-chloropropane	6.74	63	19843	45.21	ug/L	96
22) acrolein	6.84	56	7806	36.38	ug/L	99
23) 1,1-dichloroethene	6.95	61	85051	55.49	ug/L	99
24) acetone	7.06	43	19086	57.05	ug/L	98
25) allyl chloride	7.48	76	29389	46.76	ug/L	83
26) acetonitrile	7.52	40	27851	319.45	ug/L #	52
27) iodomethane	7.25	142	100392	48.77	ug/L	96
28) carbon disulfide	7.35	76	186659	51.61	ug/L	97
29) 1-chloropropane	7.70	42	101120	53.32	ug/L	99
30) methylene chloride	7.68	49	77368	41.80	ug/L	96
31) methyl acetate	7.49	74	1305	7.75	ug/L	99
32) methyl tert butyl ether	7.97	73	152534	45.04	ug/L	92
33) trans-1,2-dichloroethene	8.03	61	85770	52.06	ug/L	98
34) di-isopropyl ether	8.53	45	174423	40.58	ug/L	96
35) ethyl tert-butyl ether	8.99	59	155833	41.57	ug/L	99
36) 2-butanone	9.32	72	5568	44.32	ug/L #	1
37) 1,1-dichloroethane	8.60	63	106954	49.00	ug/L	97
38) chloroprene	8.69	53	82721	53.29	ug/L	98
39) acrylonitrile	8.06	53	54493	148.65	ug/L	98
41) ethyl acetate	9.31	45	1979	12.59	ug/L #	1
42) 2,2-dichloropropane	9.31	77	84038	53.32	ug/L	98
43) cis-1,2-dichloroethene	9.34	96	66630	47.84	ug/L	100

MY6161.M Mon Feb 03 17:50:18 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143029.D
Acq On : 31 Jan 2014 3:45 pm
Operator : prashans
Sample : JB58885-1MS
Misc : MS62412,VY6198,5.5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 03 17:41:19 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) propionitrile	9.46	54	41845	298.13	ug/L		98
45) bromochloromethane	9.65	130	38730	44.01	ug/L		93
46) tetrahydrofuran	9.67	72	4724	32.19	ug/L	#	83
47) chloroform	9.69	83	110991	50.76	ug/L		98
48) tert-Butyl Formate	9.93	59	1168	1.70	ug/L	#	1
51) freon 113	6.90	151	37303	54.34	ug/L		91
52) methacrylonitrile	9.61	67	14677	34.96	ug/L		99
53) 1,1,1-trichloroethane	9.92	97	91029	54.63	ug/L		100
54) Cyclohexane	9.97	84	82340	52.37	ug/L		99
55) 2,2,4-trimethylpentane	10.30	57	189834	45.72	ug/L		95
56) tert-amyl methyl ether	10.36	73	145151	39.19	ug/L		100
58) epichlorohydrin	11.99	57	14038	141.26	ug/L		95
59) n-butyl alcohol	10.87	56	38918	1187.72	ug/L		99
60) carbon tetrachloride	10.11	117	81886	53.20	ug/L		93
61) 1,1-dichloropropene	10.09	75	82630	52.17	ug/L		100
62) hexane	8.27	57	62915	44.03	ug/L		98
64) benzene	10.36	78	254557	48.53	ug/L		99
65) heptane	10.47	57	37289	43.08	ug/L		95
66) isopropyl acetate	10.27	61	11558	25.11	ug/L	#	32
67) 1,2-dichloroethane	10.41	62	67821	43.68	ug/L		98
68) trichloroethene	11.06	95	126031	100.14	ug/L		97
70) 2-nitropropane	11.84	41	2840	8.31	ug/L	#	1
71) 2-chloroethyl vinyl ether	11.84	63	67794	204.26	ug/L		99
72) methyl methacrylate	11.32	69	13032	16.56	ug/L	#	28
73) 1,2-dichloropropane	11.33	63	59583	43.83	ug/L		99
74) methylcyclohexane	11.24	83	88135	50.56	ug/L		99
76) dibromomethane	11.51	93	30706	41.66	ug/L		92
77) bromodichloromethane	11.62	83	80237	46.75	ug/L		98
78) cis-1,3-dichloropropene	12.06	75	92057	44.87	ug/L		99
80) 4-methyl-2-pentanone	12.14	58	13632	30.81	ug/L		90
81) toluene	12.39	91	263188	49.68	ug/L		98
82) 3-methyl-1-butanol	12.17	70	17229	575.50	ug/L		92
83) trans-1,3-dichloropropene	12.61	75	76183	44.09	ug/L		99
84) ethyl methacrylate	12.57	69	37396	28.11	ug/L		99
85) 1,1,2-trichloroethane	12.82	83	37179	40.36	ug/L		99
86) 2-hexanone	12.98	58	15215	36.33	ug/L		97
88) tetrachloroethene	12.95	166	135009	92.08	ug/L		96
89) 1,3-dichloropropane	13.00	76	71944	39.39	ug/L		98
90) butyl acetate	13.03	56	11346	15.48	ug/L		96
91) dibromochloromethane	13.26	129	57086	41.36	ug/L		99
92) 1,2-dibromoethane	13.41	107	42272	38.89	ug/L		93
93) 3,3-Dimethyl-1-Butanol	13.14	57	27269	255.54	ug/L		94
94) chlorobenzene	13.84	112	165940	45.20	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.90	131	60251	45.72	ug/L		98
96) ethylbenzene	13.88	91	294823	49.96	ug/L		98
97) m,p-xylene	13.97	106	221776	98.32	ug/L		98
98) o-xylene	14.39	91	227947	48.73	ug/L		97
99) styrene	14.41	104	169675	47.33	ug/L		99
100) bromoform	14.70	173	33849	37.20	ug/L		98
102) isopropylbenzene	14.72	105	294642	52.76	ug/L		98

MY6161.M Mon Feb 03 17:50:18 2014 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143029.D
Acq On : 31 Jan 2014 3:45 pm
Operator : prashans
Sample : JB58885-1MS
Misc : MS62412,VY6198,5.5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 03 17:41:19 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

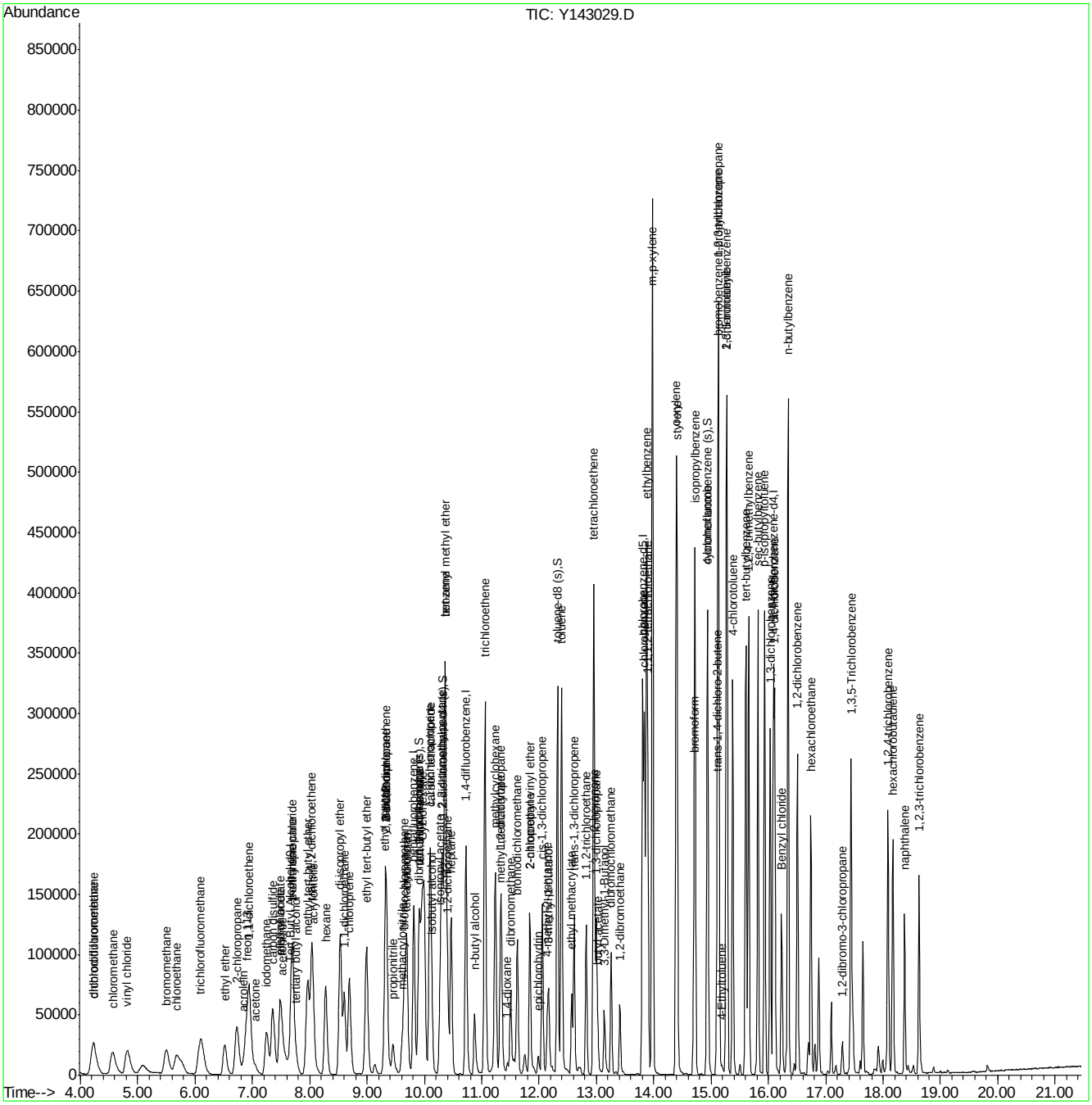
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
105) bromobenzene	15.14	156	70344	43.11	ug/L		95
106) cyclohexanone	14.93	55	82394	598.22	ug/L		97
108) trans-1,4-dichloro-2-buten	15.10	53	11977	38.09	ug/L		94
109) 1,2,3-trichloropropane	15.13	110	12278	36.02	ug/L		97
110) n-propylbenzene	15.12	91	393515	62.32	ug/L		99
111) 4-Ethyltoluene	15.19	105	1131	0.21	ug/L	#	60
112) 2-chlorotoluene	15.28	126	66067	46.84	ug/L		90
113) 4-chlorotoluene	15.38	91	190212	45.72	ug/L		99
114) 1,3,5-trimethylbenzene	15.27	105	225165	48.22	ug/L		98
115) tert-butylbenzene	15.61	119	185901	47.56	ug/L		98
117) 1,2,4-trimethylbenzene	15.65	105	216516	48.10	ug/L		99
118) sec-butylbenzene	15.82	105	289205	49.54	ug/L		98
119) 1,3-dichlorobenzene	16.03	146	126101	42.75	ug/L		99
120) p-isopropyltoluene	15.94	119	232677	48.43	ug/L		99
121) 1,4-dichlorobenzene	16.11	146	124758	41.60	ug/L		99
122) 1,2-dichlorobenzene	16.51	146	113861	40.99	ug/L		99
123) n-butylbenzene	16.34	91	229811	53.26	ug/L		95
125) 1,2-dibromo-3-chloropropan	17.29	157	7751	31.62	ug/L		98
126) 1,3,5-Trichlorobenzene	17.44	180	92127	42.05	ug/L		99
127) 1,2,4-trichlorobenzene	18.08	180	69499	39.54	ug/L		99
129) hexachlorobutadiene	18.17	225	48270	40.35	ug/L		95
130) naphthalene	18.37	128	111409	33.33	ug/L		99
131) 1,2,3-trichlorobenzene	18.63	180	59699	36.71	ug/L		99
132) hexachloroethane	16.74	119	46659	50.39	ug/L		96
133) Benzyl chloride	16.23	91	80107	37.77	ug/L		96

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143029.D
Acq On : 31 Jan 2014 3:45 pm
Operator : prashans
Sample : JB58885-1MS
Misc : MS62412,VY6198,5.5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 03 17:41:19 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration



MY6161.M Mon Feb 03 17:50:19 2014 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143036.D
Acq On : 31 Jan 2014 7:08 pm
Operator : prashans
Sample : JB58847-9DUP
Misc : MS62429,VY6198,6.1,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 03 17:48:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	49574	500.00	ug/L	0.00
5) pentafluorobenzene	9.82	168	151268	50.00	ug/L	0.00
57) 1,4-difluorobenzene	10.73	114	225924	50.00	ug/L	0.00
87) chlorobenzene-d5	13.81	117	200829	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.09	152	87865	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	9.90	113	69405	50.43	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 100.86%			
50) 1,2-dichloroethane-d4 (s)	10.32	65	68537	47.33	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 94.66%			
79) toluene-d8 (s)	12.32	98	268937	51.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 103.58%			
103) 4-bromofluorobenzene (s)	14.94	95	88873	50.74	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 101.48%			

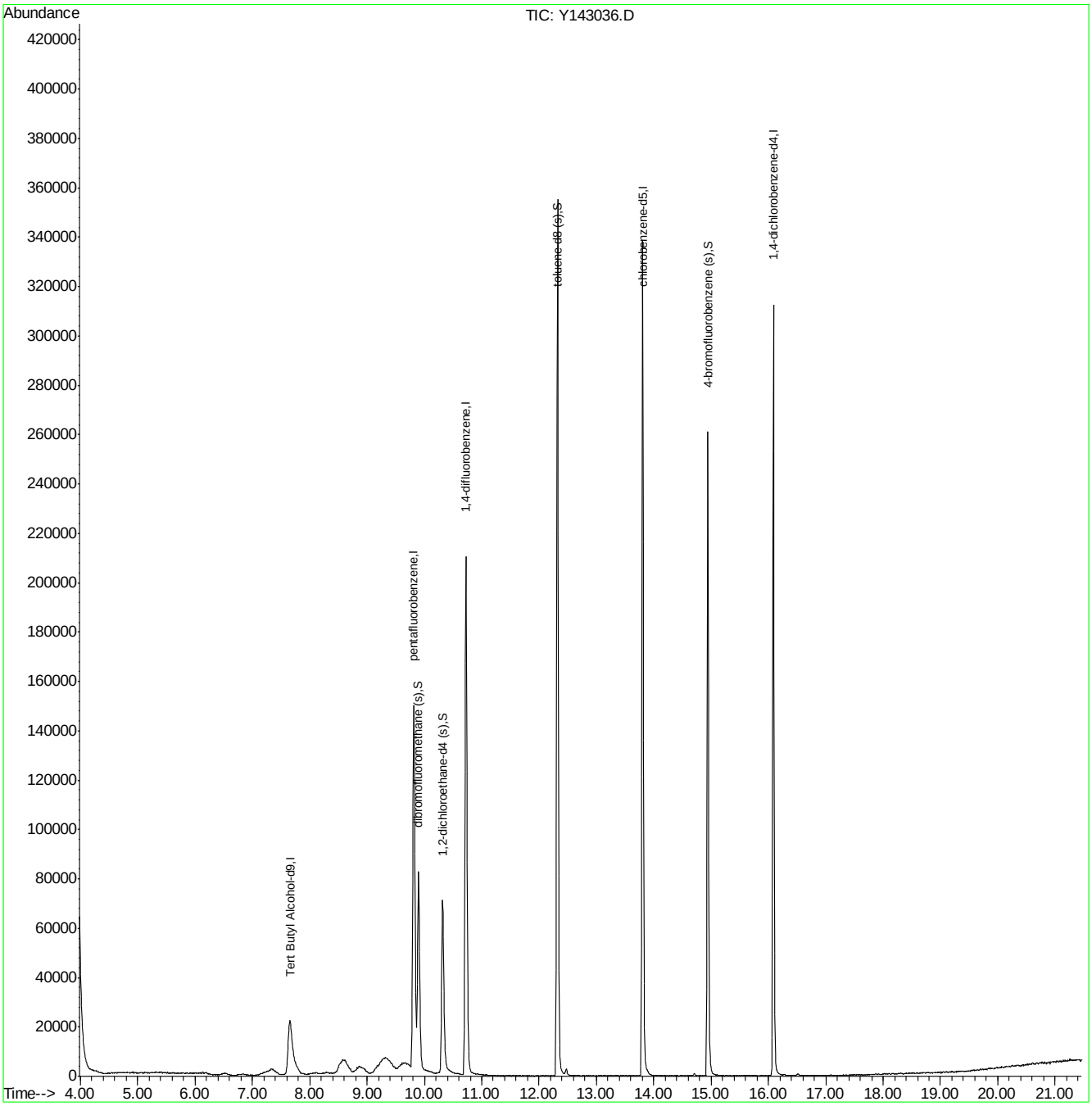
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143036.D
Acq On : 31 Jan 2014 7:08 pm
Operator : prashans
Sample : JB58847-9DUP
Misc : MS62429,VY6198,6.1,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 03 17:48:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

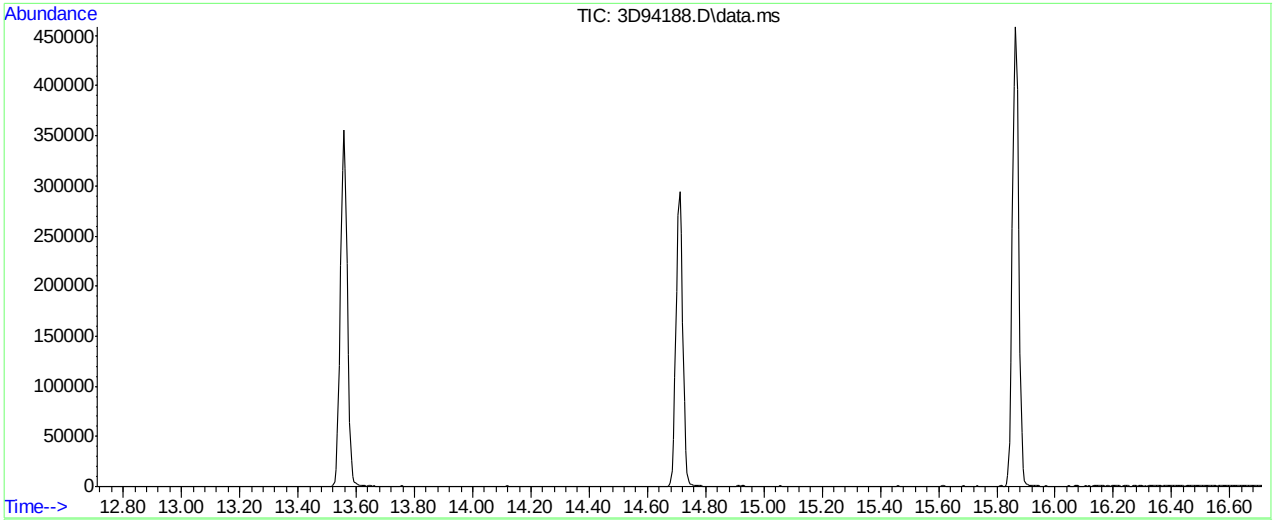


MY6161.M Mon Feb 03 17:52:10 2014 RPT1 Page: 2

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\3D\3D94188.D Vial: 1
Acq On : 18 Dec 2013 12:55 pm Operator: katteric
Sample : bfb Inst : MS3D
Misc : MS59846,V3D4058,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D4058.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um



AutoFind: Scans 2220, 2221, 2222; Background Corrected with Scan 2211

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.2	8872	PASS
75	95	30	60	43.0	23557	PASS
95	95	100	100	100.0	54818	PASS
96	95	5	9	6.6	3632	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	102.2	56050	PASS
175	174	5	9	7.7	4297	PASS
176	174	95	101	98.2	55024	PASS
177	176	5	9	6.5	3572	PASS

3D94188.D M3D4058.M Fri Dec 20 17:30:44 2013 RPT1

Average of 14.705 to 14.716 min.: 3D94188.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	433	52.00	93	69.05	4658	80.95	992
37.10	2327	55.05	82	70.05	308	81.90	193
38.10	2026	56.00	584	72.05	242	87.00	2934
39.05	825	57.05	1191	73.05	2040	88.00	2807
44.00	165	60.00	424	74.05	7647	90.90	178
45.05	397	61.05	2041	75.10	23557	92.00	1245
47.00	768	62.05	1983	76.05	2041	93.05	2077
48.05	297	63.05	1353	77.00	347	94.05	5672
49.10	1960	64.05	129	77.95	267	95.10	54818
50.10	8872	67.15	158	78.95	948	96.05	3632
51.10	2725	68.00	4707	79.95	290	96.90	36

Average of 14.705 to 14.716 min.: 3D94188.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.95	166	140.95	390	207.00	4		
105.90	179	142.95	406				
115.90	157	147.85	131				
116.85	273	154.95	149				
117.90	152	156.90	73				
118.90	213	172.10	36				
127.90	180	174.00	56050				
129.00	37	175.00	4297				
129.90	173	176.00	55024				
130.90	35	176.95	3572				
136.95	75	177.95	79				

SW-846 Method 8260

```
Data File : C:\msdchem\1\DATA\3D\v3d4110\3D95399.D       Vial: 1
Acq On    : 28 Jan 2014   2:11 pm                    Operator: nickm1
Sample    : bfb                                      Inst    : MS3D
Misc      : MS62219,V3D4109,w,,,,1                   Multiplr: 1.00
MS Integration Params: rteint.p

Method   : C:\MSDCHEM\1\METHODS\M3D4058.M (RTE Integrator)
Title    : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
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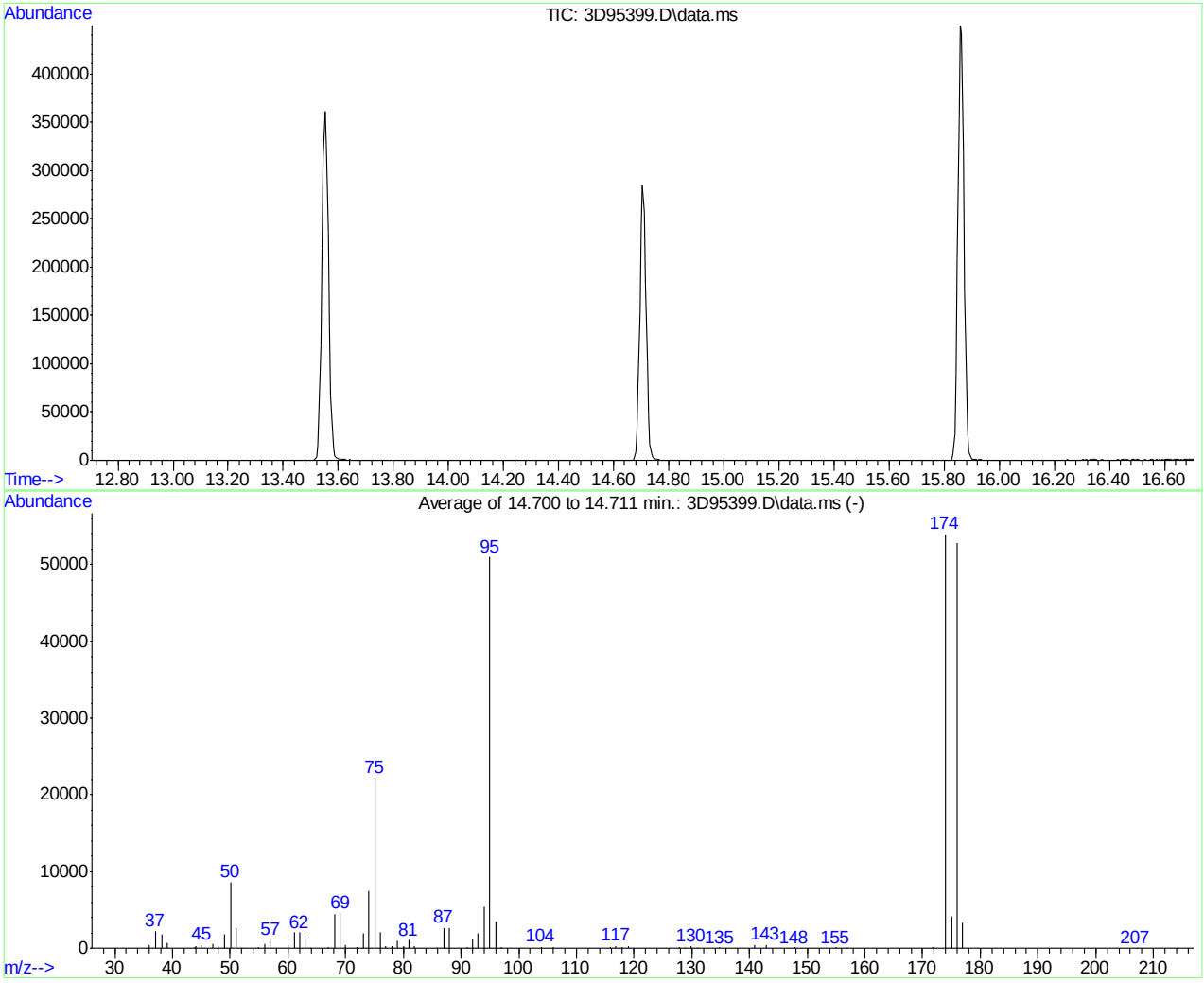


AutoFind: Scans 2219, 2220, 2221; Background Corrected with Scan 2211

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	8634	PASS
75	95	30	60	43.7	22250	PASS
95	95	100	100	100.0	50968	PASS
96	95	5	9	6.7	3411	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	105.9	53984	PASS
175	174	5	9	7.6	4129	PASS
176	174	95	101	97.8	52805	PASS
177	176	5	9	6.3	3350	PASS

3D95399.D M3D4058.M Wed Jan 29 11:55:38 2014 RPT1

Average of 14.700 to 14.711 min.: 3D95399.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	409	51.10	2563	68.05	4455	80.00	327
37.05	2246	52.00	51	69.05	4615	80.95	1089
38.10	1825	54.95	123	70.00	387	81.90	222
39.05	749	56.05	582	72.05	211	85.80	42
43.90	101	57.00	1156	73.00	1921	87.00	2655
44.10	227	59.95	403	74.05	7504	87.95	2579
45.05	428	61.05	2029	75.05	22250	91.00	183
47.05	580	62.05	2041	76.05	2097	92.00	1314
48.00	306	63.05	1416	77.00	298	93.00	1901
49.05	1788	63.90	39	77.95	212	94.05	5437
50.10	8634	67.00	146	78.95	1022	95.00	50968

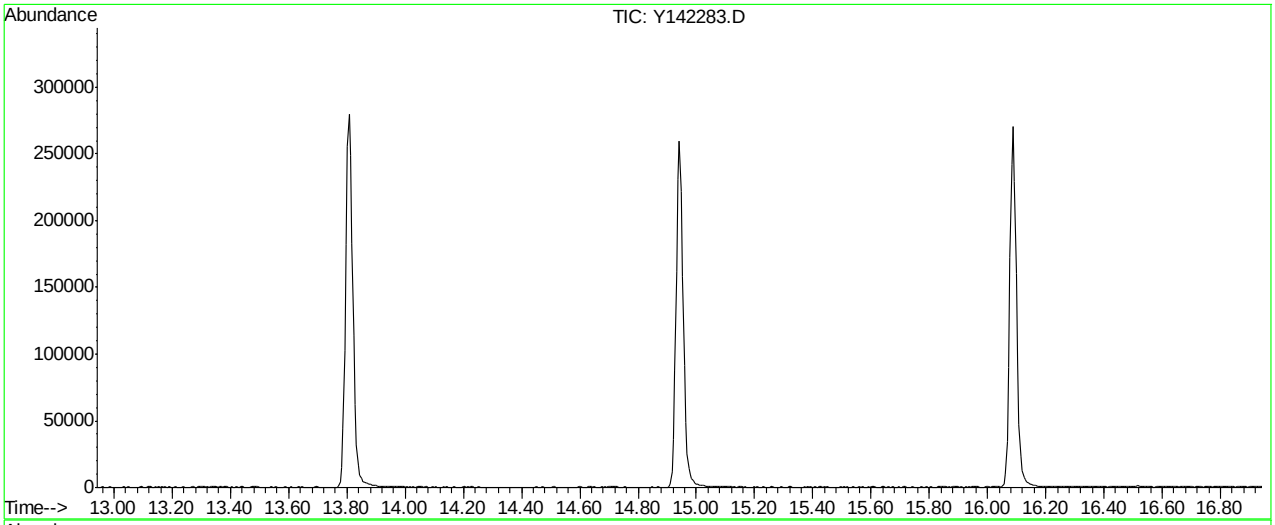
Average of 14.700 to 14.711 min.: 3D95399.D\data.ms
bfb
Modified:subtracted

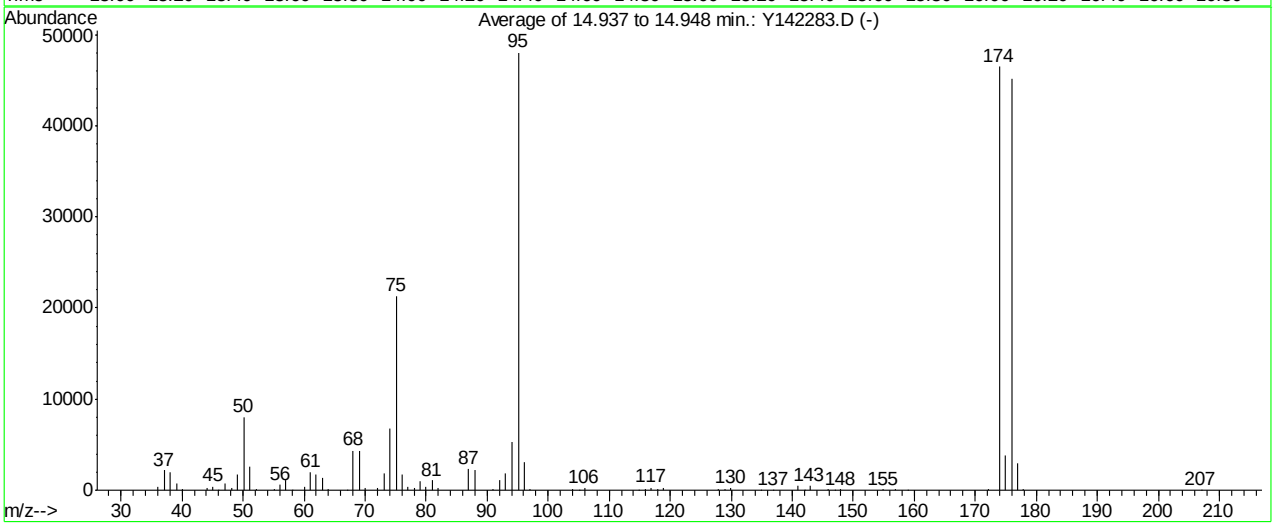
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	3411	130.90	37	176.95	3350		
96.90	88	134.85	84	177.90	41		
103.90	191	140.90	414	206.95	36		
105.95	184	142.90	489				
115.90	103	147.85	125				
116.90	307	155.00	118				
117.95	148	156.90	34				
118.95	216	171.80	81				
127.85	187	173.95	53984				
128.80	35	175.00	4129				
129.90	213	175.90	52805				

SW-846 Method 8260

Data File : C:\MSDCHEM\1\DATA\Y142283.D Vial: 1
Acq On : 7 Jan 2014 11:34 am Operator: prashans
Sample : BFB Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2095, 2096, 2097; Background Corrected with Scan 2086

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	8018	PASS
75	95	30	60	44.4	21330	PASS
95	95	100	100	100.0	48048	PASS
96	95	5	9	6.4	3099	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	96.7	46464	PASS
175	174	5	9	8.3	3836	PASS
176	174	95	101	97.1	45128	PASS
177	176	5	9	6.5	2941	PASS

Y142283.D MY6161.M Tue Jan 07 17:53:54 2014 RPT1

Average of 14.937 to 14.948 min.: Y142283.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	362	50.10	8018	64.00	140	78.10	214
37.10	2180	51.10	2601	67.00	65	78.95	989
38.10	1952	52.10	78	68.05	4312	80.00	337
39.10	729	55.05	174	69.10	4293	80.95	1094
40.05	116	56.05	602	70.05	311	81.95	229
44.05	245	57.05	1100	72.05	254	87.00	2295
45.05	377	58.00	26	73.10	1898	88.00	2262
46.00	25	60.10	352	74.10	6784	90.95	149
47.10	718	61.05	1986	75.10	21330	92.05	1098
48.10	287	62.00	1773	76.10	1727	93.05	1793
49.10	1701	63.10	1413	77.00	315	94.10	5321

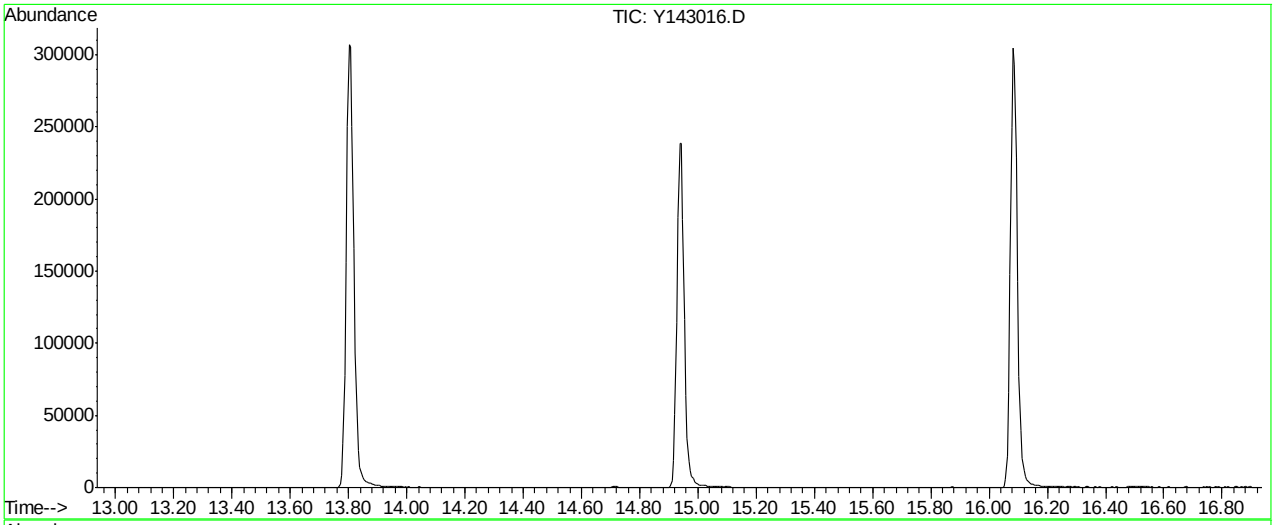
Average of 14.937 to 14.948 min.: Y142283.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.10	48048	127.90	151	154.95	117		
96.10	3099	128.95	92	156.95	101		
97.05	93	129.95	199	158.90	33		
103.95	182	134.80	64	172.10	159		
105.10	53	136.90	30	174.00	46464		
105.95	196	140.95	471	175.00	3836		
114.90	52	142.00	25	176.00	45128		
115.95	140	142.90	488	177.00	2941		
116.95	268	145.95	97	177.90	89		
117.95	158	146.90	28	207.00	25		
118.95	267	147.95	116				

SW-846 Method 8260

Data File : C:\MSDCHEM\1\DATA\Y143016.D Vial: 1
Acq On : 31 Jan 2014 8:43 am Operator: prashans
Sample : BFB Inst : MSY
Misc : MS62262,VY6198,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2094, 2095, 2096; Background Corrected with Scan 2086

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	8178	PASS
75	95	30	60	46.1	20922	PASS
95	95	100	100	100.0	45365	PASS
96	95	5	9	6.9	3142	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	88.4	40112	PASS
175	174	5	9	8.0	3206	PASS
176	174	95	101	98.1	39338	PASS
177	176	5	9	6.7	2628	PASS

Y143016.D MY6161.M Mon Feb 03 17:26:57 2014 RPT1

Average of 14.932 to 14.942 min.: Y143016.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	375	51.10	2634	68.00	4245	80.00	321
37.10	2051	52.05	110	69.10	4462	80.95	1085
38.10	1823	55.05	124	70.05	317	81.95	261
39.10	715	56.05	629	72.10	251	86.05	85
40.05	25	57.10	1097	73.00	1921	87.00	2341
44.00	241	60.05	371	74.05	6981	88.00	2231
45.10	381	61.05	1986	75.10	20922	90.95	154
47.05	598	62.10	1984	76.05	1795	92.00	1225
48.05	273	63.05	1403	77.00	322	93.05	1751
49.10	1830	64.05	126	78.00	229	94.10	4837
50.10	8178	67.05	86	78.95	1149	95.05	45365

Average of 14.932 to 14.942 min.: Y143016.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	3142	128.80	26	158.80	25		
97.05	94	129.90	162	160.90	54		
103.90	180	130.80	32	171.80	48		
104.95	56	134.95	67	171.95	95		
105.95	158	140.90	410	174.00	40112		
107.00	28	142.90	412	175.00	3206		
115.95	171	145.90	34	176.00	39338		
116.90	257	146.90	25	176.95	2628		
117.95	167	147.95	117	177.90	59		
118.90	206	154.95	83				
127.95	139	156.90	28				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94189.D
Acq On : 18 Dec 2013 1:24 pm
Operator : katteric
Sample : ic4058-0.5
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 12:29:36 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.244	65	78516	500.00	ug/L	0.00
4) pentafluorobenzene	9.483	168	188309	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.406	114	256340	50.00	ug/L	0.01
88) chlorobenzene-d5	13.557	117	210475	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.864	152	124131	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	0.000	113	0d	0.00	ug/L	
Spiked Amount 50.000	Range 80 - 119		Recovery =	0.00%#		
51) 1,2-dichloroethane-d4 (s)	0.000	65	0d	0.00	ug/L	
Spiked Amount 50.000	Range 74 - 122		Recovery =	0.00%#		
80) toluene-d8 (s)	0.000	98	0d	0.00	ug/L	
Spiked Amount 50.000	Range 80 - 120		Recovery =	0.00%#		
106) 4-bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 76 - 116		Recovery =	0.00%#		

Target Compounds						Qvalue
9) dichlorodifluoromethane	3.868	85	727	0.41	ug/L #	50
10) chloromethane	4.203	50	1152	0.52	ug/L	92
11) vinyl chloride	4.445	62	902	0.43	ug/L	94
12) bromomethane	5.110	94	718	0.50	ug/L	91
13) chloroethane	5.294	64	400	0.41	ug/L #	46
14) 1,3-butadiene	4.513	54	461	0.41	ug/L #	77
16) trichlorofluoromethane	5.719	101	1052	0.47	ug/L	87
18) ethyl ether	6.164	74	333	0.42	ug/L #	77
21) acrolein	6.426	56	1431	4.55	ug/L	98
22) 1,1-dichloroethene	6.573	61	1013	0.46	ug/L	99
27) iodomethane	6.872	142	1476	0.49	ug/L	74
29) carbon disulfide	6.982	76	2774	0.51	ug/L	97
30) methylene chloride	7.307	84	833	0.50	ug/L	96
32) methyl tert butyl ether	7.617	73	2431	0.52	ug/L	94
33) trans-1,2-dichloroethene	7.674	61	1039	0.47	ug/L	96
34) di-isopropyl ether	8.204	45	2885	0.57	ug/L	84
37) 1,1-dichloroethane	8.251	63	1436	0.53	ug/L	90
38) chloroprene	8.345	53	962	0.48	ug/L	83
39) acrylonitrile	7.653	53	1221	2.18	ug/L	87
42) 2,2-dichloropropane	8.969	77	1202	0.54	ug/L	96
43) cis-1,2-dichloroethene	8.980	61	1335	0.50	ug/L	94
44) propionitrile	9.074	54	964	4.55	ug/L	95
46) bromochloromethane	9.300	128	373	0.43	ug/L	87
48) chloroform	9.342	83	1338	0.51	ug/L	99
53) methacrylonitrile	9.237	41	444	0.49	ug/L	64
54) 1,1,1-trichloroethane	9.598	97	1143	0.50	ug/L	91
56) 2,2,4-Trimethylpentane	10.007	57	2819	0.52	ug/L	93
61) cyclohexane	9.661	84	1091	0.49	ug/L	95
62) carbon tetrachloride	9.798	117	948	0.47	ug/L	95
63) 1,1-dichloropropene	9.766	75	959	0.48	ug/L	97
65) benzene	10.039	78	3121	0.51	ug/L	97
68) 1,2-dichloroethane	10.065	62	933	0.51	ug/L	83
69) trichloroethene	10.747	95	789	0.52	ug/L #	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94189.D
Acq On : 18 Dec 2013 1:24 pm
Operator : katteric
Sample : ic4058-0.5
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 12:29:36 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

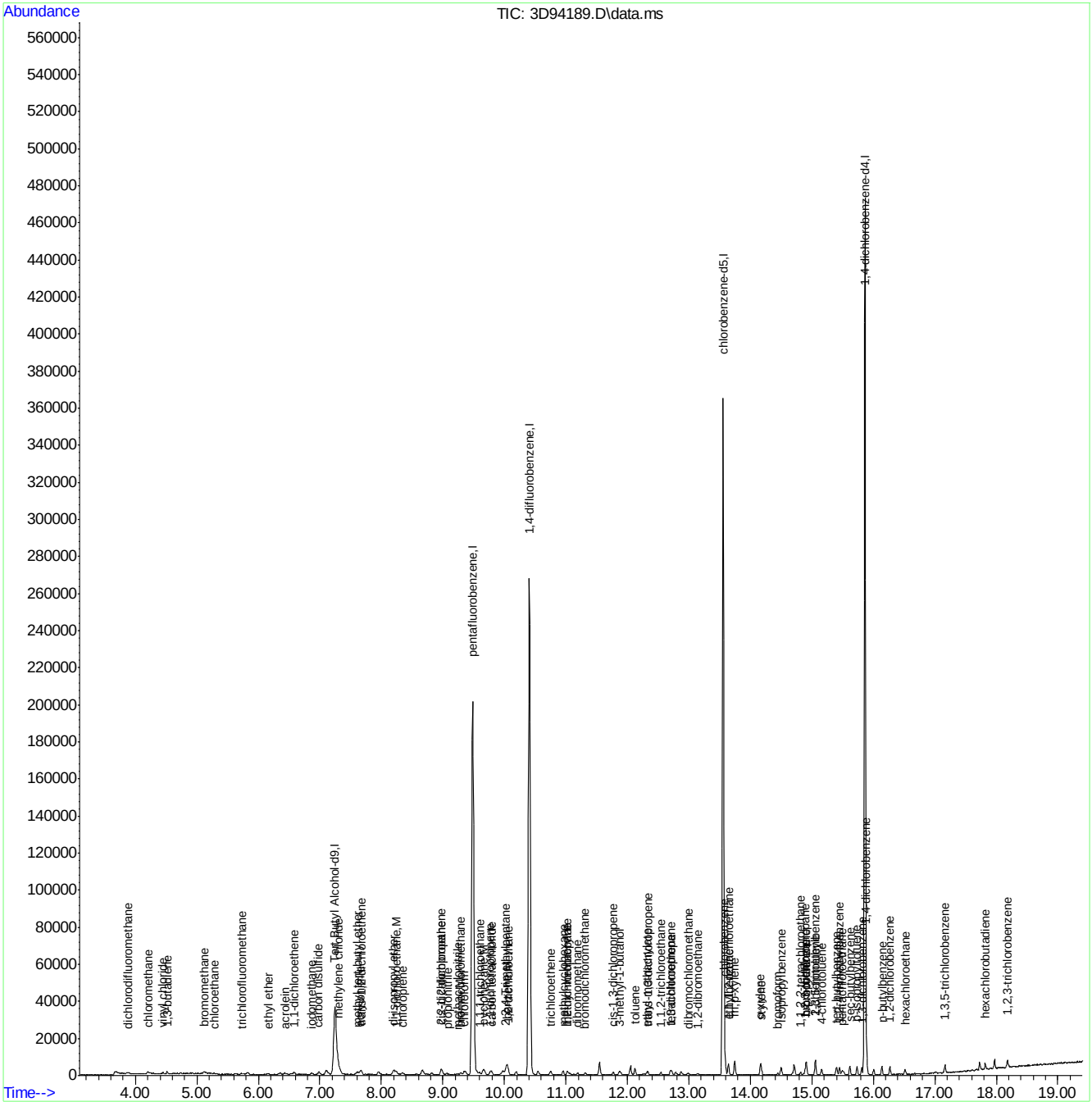
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) methyl methacrylate	11.019	41	1093	0.50	ug/L	84
75) 1,2-dichloropropane	11.025	63	761	0.50	ug/L	83
76) methylcyclohexane	10.962	83	1108	0.49	ug/L	80
77) dibromomethane	11.187	93	452	0.47	ug/L	87
78) bromodichloromethane	11.313	83	954	0.49	ug/L	91
79) cis-1,3-dichloropropene	11.769	75	1233	0.51	ug/L	90
82) toluene	12.120	92	1756	0.49	ug/L	95
83) 3-methyl-1-butanol	11.874	70	394	11.00	ug/L	81
84) trans-1,3-dichloropropene	12.335	75	1191	0.55	ug/L	92
85) ethyl methacrylate	12.320	69	797	0.46	ug/L	86
86) 1,1,2-trichloroethane	12.545	83	509	0.46	ug/L	94
89) tetrachloroethene	12.697	166	879	0.51	ug/L	90
90) 1,3-dichloropropane	12.718	76	1029	0.51	ug/L	84
93) dibromochloromethane	12.991	129	846	0.51	ug/L	98
94) 1,2-dibromoethane	13.138	107	666	0.48	ug/L	77
96) chlorobenzene	13.588	112	2011	0.51	ug/L	97
97) 1,1,1,2-tetrachloroethane	13.646	131	835	0.54	ug/L	91
98) ethylbenzene	13.641	91	3447	0.53	ug/L	92
99) m,p-xylene	13.746	106	2548	1.01	ug/L	89
100) o-xylene	14.160	106	1366	0.54	ug/L	94
101) styrene	14.181	104	2081	0.50	ug/L	89
103) bromoform	14.448	173	647	0.52	ug/L	91
105) isopropylbenzene	14.501	105	3481	0.53	ug/L	94
107) bromobenzene	14.910	156	996	0.52	ug/L	96
109) 1,1,2,2-tetrachloroethane	14.821	83	1129	0.58	ug/L	86
111) 1,2,3-trichloropropane	14.894	110	232	0.54	ug/L	91
112) n-propylbenzene	14.910	91	3954	0.53	ug/L	97
114) 2-chlorotoluene	15.056	126	838	0.51	ug/L	87
115) 4-chlorotoluene	15.161	126	839	0.51	ug/L	85
116) 1,3,5-trimethylbenzene	15.056	105	2911	0.52	ug/L	96
117) tert-butylbenzene	15.403	119	2675	0.56	ug/L	98
118) pentachloroethane	15.492	167	652	0.51	ug/L	92
119) 1,2,4-trimethylbenzene	15.455	105	2880	0.52	ug/L	90
120) sec-butylbenzene	15.617	105	3901	0.53	ug/L	94
121) 1,3-dichlorobenzene	15.811	146	1994	0.55	ug/L	99
122) p-isopropyltoluene	15.733	119	3187	0.52	ug/L	96
123) 1,4-dichlorobenzene	15.890	146	2165	0.58	ug/L	97
124) 1,2-dichlorobenzene	16.273	146	2027	0.55	ug/L	96
126) n-butylbenzene	16.137	92	1615	0.52	ug/L	86
129) 1,3,5-trichlorobenzene	17.164	180	1892	0.56	ug/L	98
131) hexachlorobutadiene	17.820	225	879	0.53	ug/L	86
133) 1,2,3-trichlorobenzene	18.187	180	1566	0.55	ug/L	99
134) hexachloroethane	16.514	119	708	0.55	ug/L	90

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

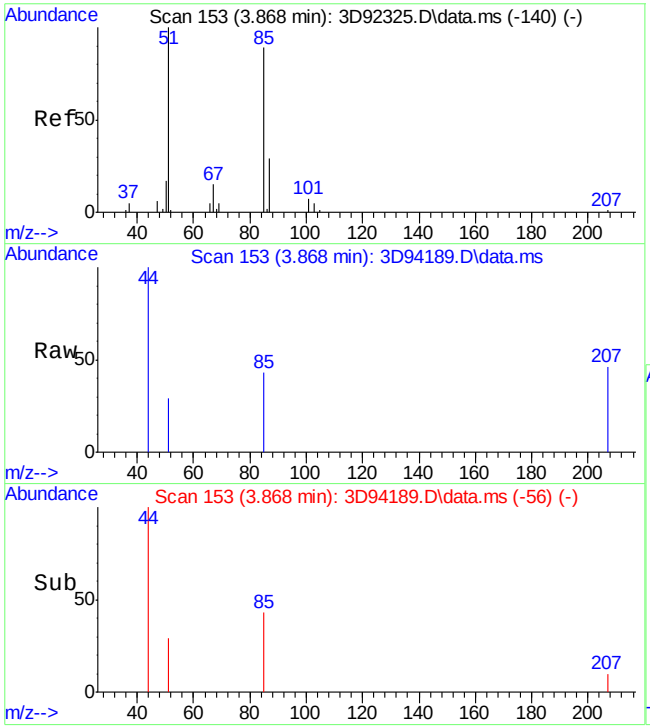
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94189.D
Acq On : 18 Dec 2013 1:24 pm
Operator : katteric
Sample : ic4058-0.5
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 12:29:36 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration



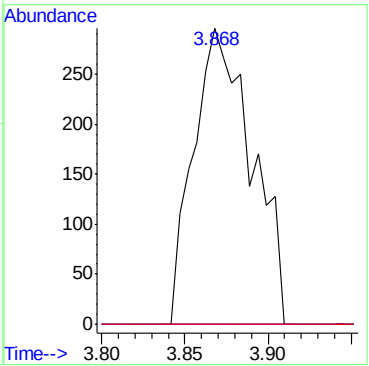
M3D4058.M Thu Dec 19 12:36:36 2013 3D Page: 3

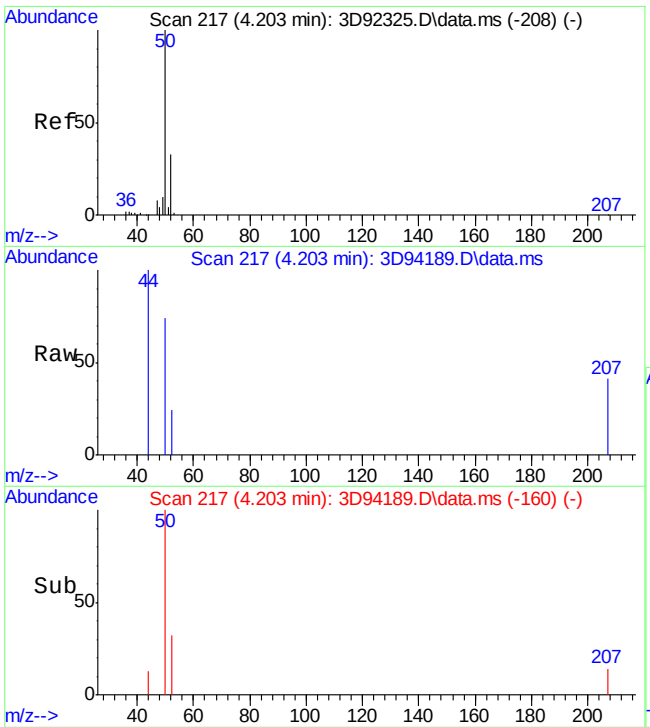


#9
dichlorodifluoromethane
Concen: 0.41 ug/L
RT: 3.868 min Scan# 153
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 85 Resp: 727

Ion	Ratio	Lower	Upper
85	100		
87	0.0	1.5	61.5#
101	0.0	0.0	39.0

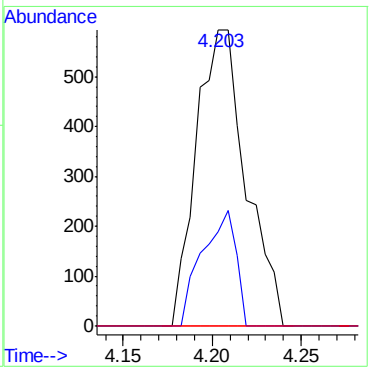




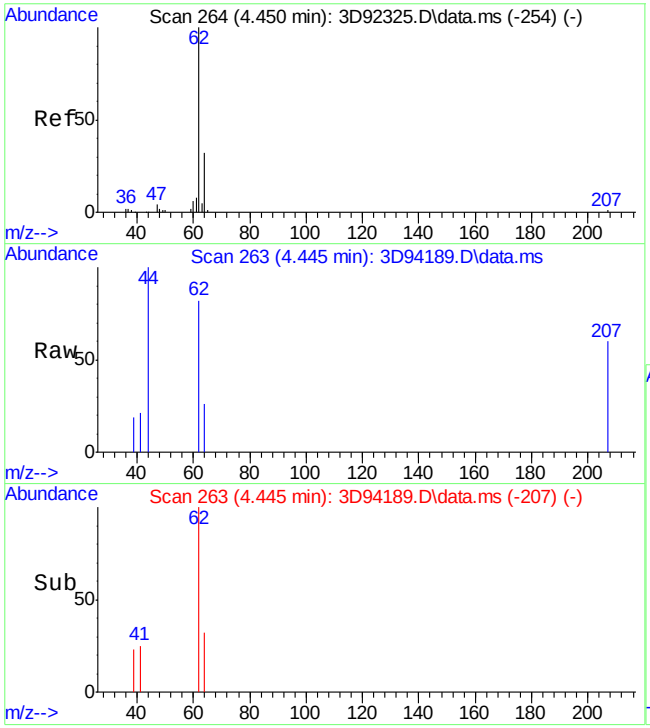
#10
chloromethane
Concen: 0.52 ug/L
RT: 4.203 min Scan# 217
Delta R.T. 0.000 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 50 Resp: 1152

Ion	Ratio	Lower	Upper
50	100		
52	32.0	2.9	62.9
49	0.0	0.0	40.5



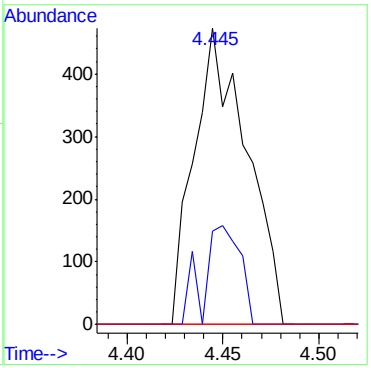
3D94189.D M3D4058.M Thu Dec 19 12:36:36 2013 3D Page 4

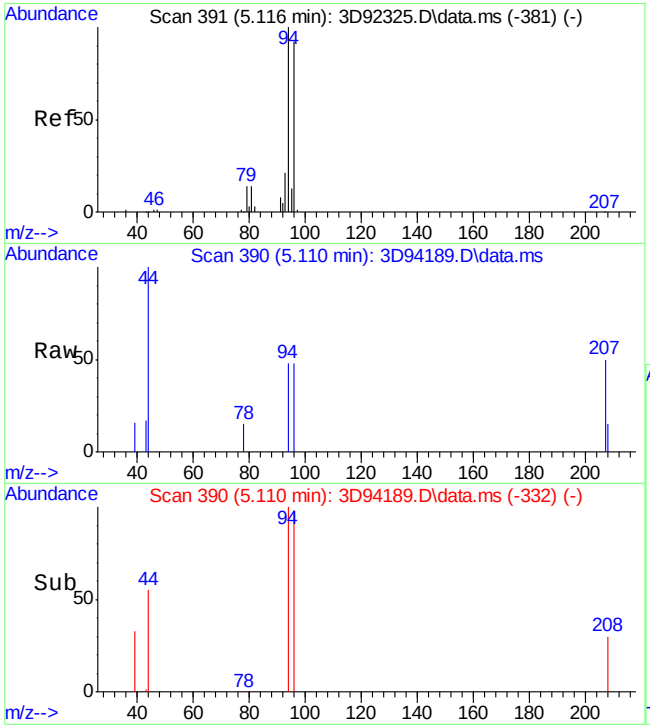


#11
vinyl chloride
Concen: 0.43 ug/L
RT: 4.445 min Scan# 263
Delta R.T. -0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 62 Resp: 902

Ion	Ratio	Lower	Upper
62	100		
64	31.5	2.3	62.3
61	0.0	0.0	38.3

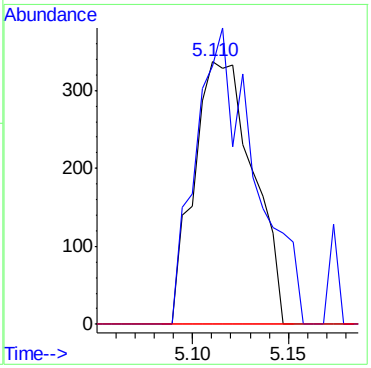


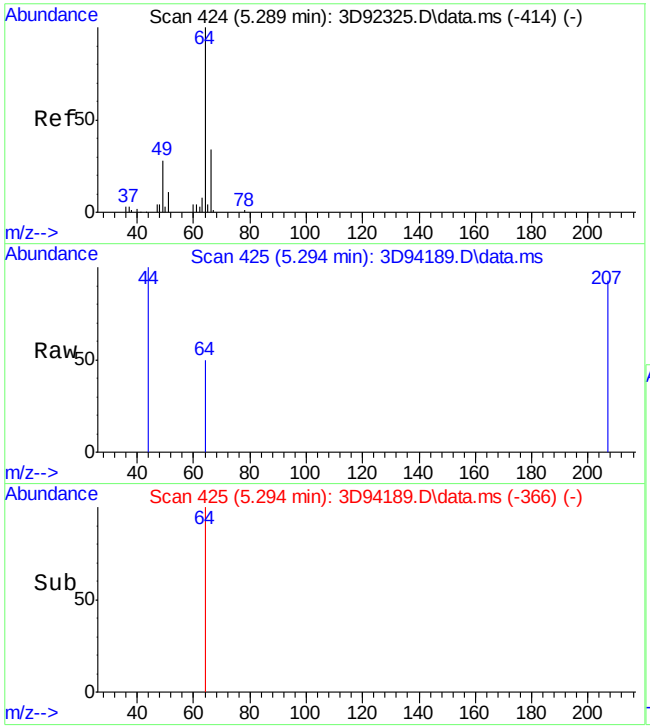


#12
bromomethane
Concen: 0.50 ug/L
RT: 5.110 min Scan# 390
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 94 Resp: 718

Ion	Ratio	Lower	Upper
94	100		
96	98.2	63.5	123.5
95	0.0	0.0	45.2

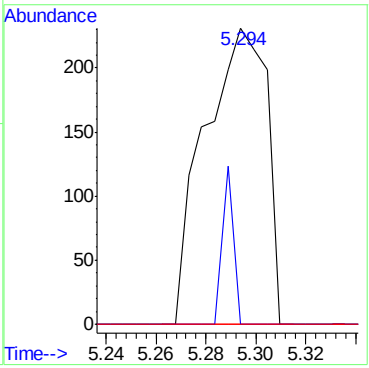


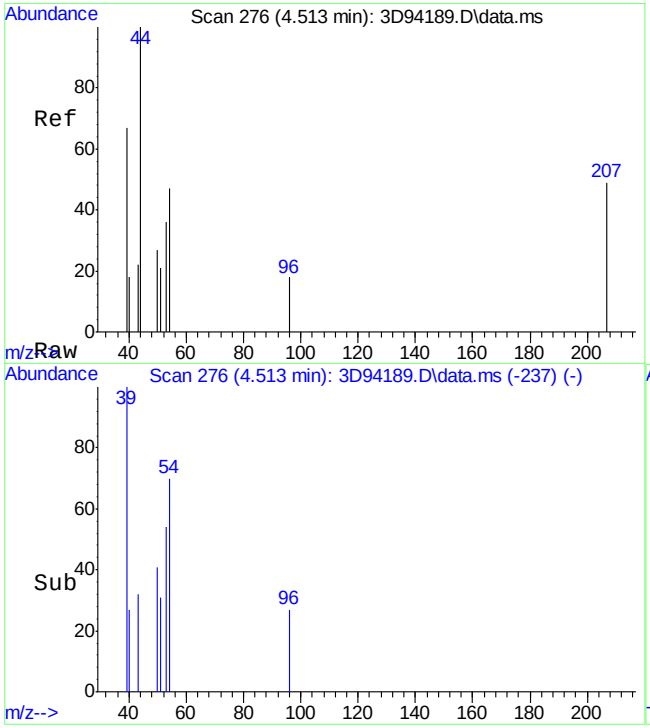


#13
chloroethane
Concen: 0.41 ug/L
RT: 5.294 min Scan# 425
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 64 Resp: 400

Ion	Ratio	Lower	Upper
64	100		
66	0.0	1.6	61.6#
49	0.0	0.0	56.3

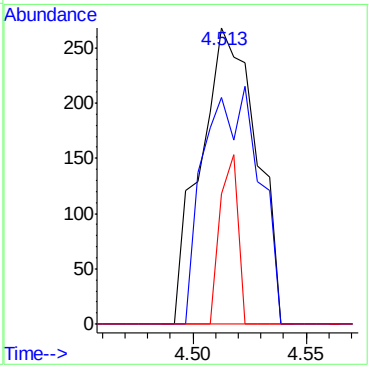


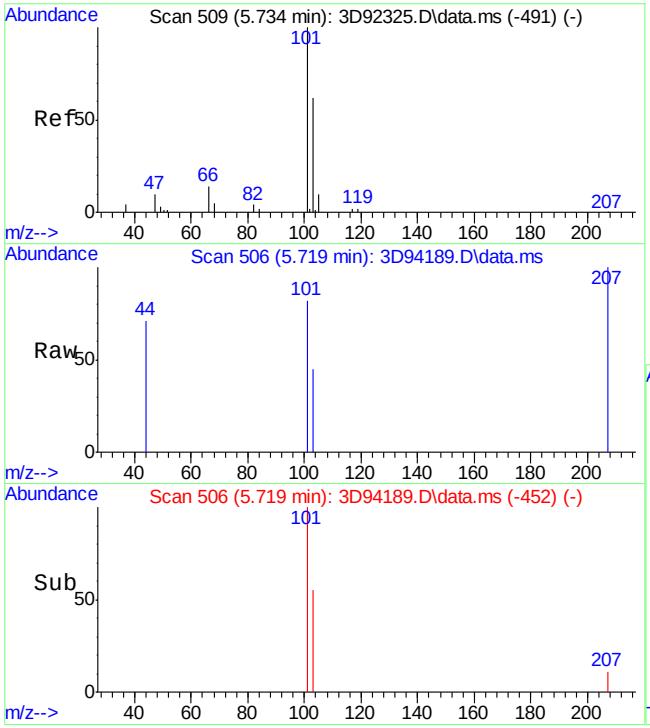


#14
1,3-butadiene
Concen: 0.41 ug/L
RT: 4.513 min Scan# 276
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 54 Resp: 461

Ion	Ratio	Lower	Upper
54	100		
53	78.5	56.5	84.7
51	0.0	23.2	34.8#

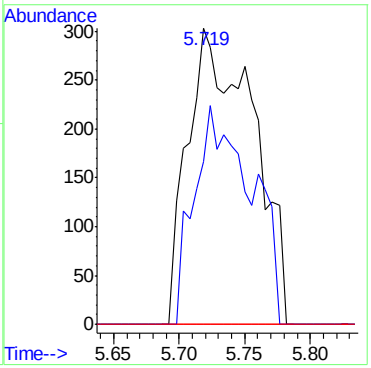


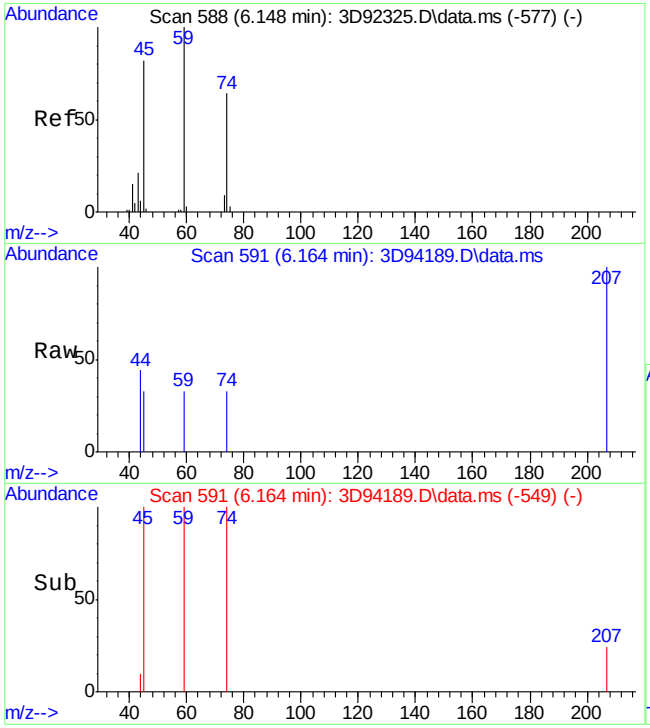


#16
trichlorofluoromethane
Concen: 0.47 ug/L
RT: 5.719 min Scan# 506
Delta R.T. -0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:101 Resp: 1052

Ion	Ratio	Lower	Upper
101	100		
103	55.1	33.8	93.8
105	0.0	0.0	40.4

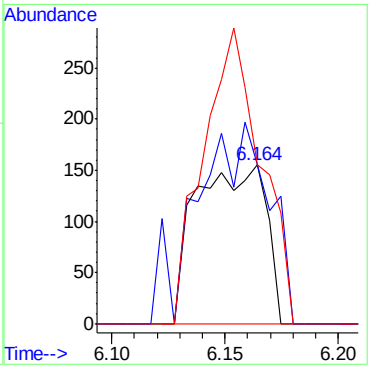


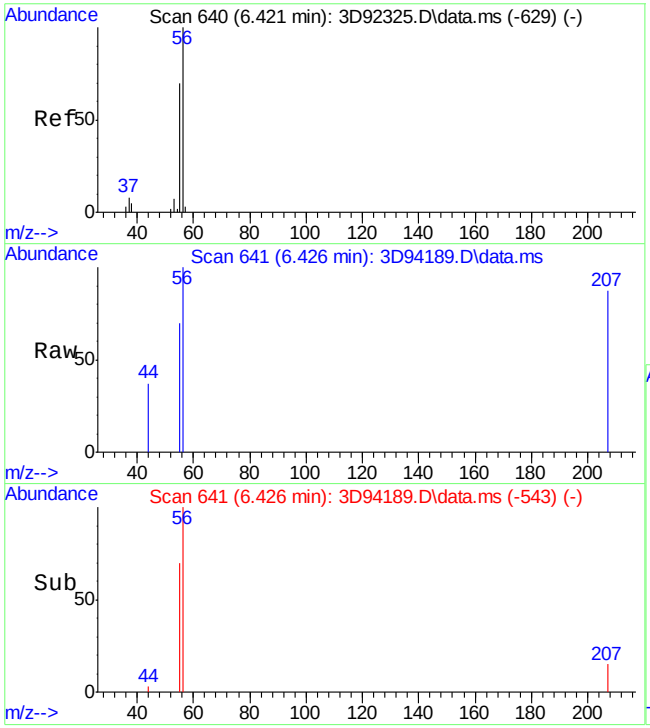


#18
ethyl ether
Concen: 0.42 ug/L
RT: 6.164 min Scan# 591
Delta R.T. 0.021 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 74 Resp: 333

Ion	Ratio	Lower	Upper
74	100		
45	100.0	81.7	141.7
59	100.0	110.6	170.6#

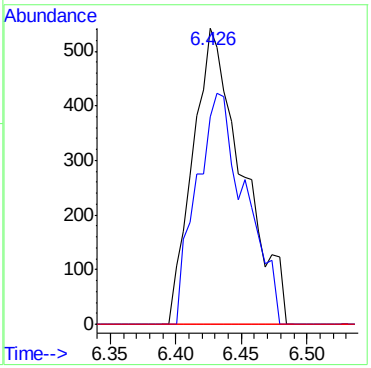


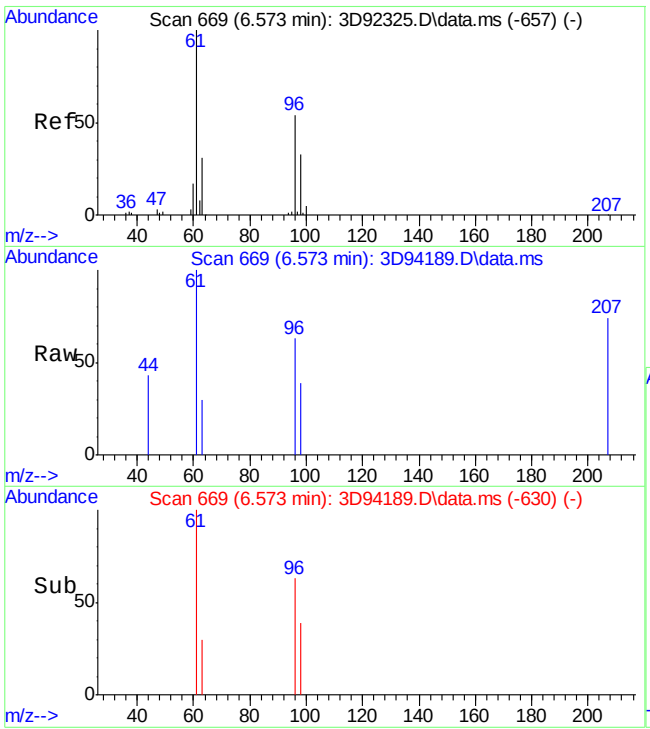


#21
acrolein
Concen: 4.55 ug/L
RT: 6.426 min Scan# 641
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 56 Resp: 1431

Ion	Ratio	Lower	Upper
56	100		
55	70.3	40.8	100.8
53	0.0	0.0	37.0

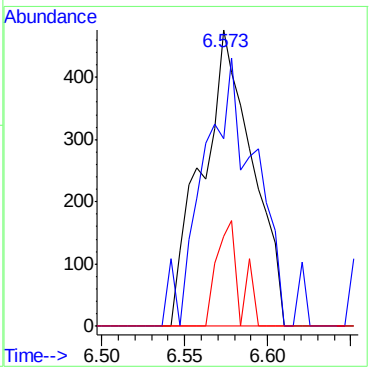


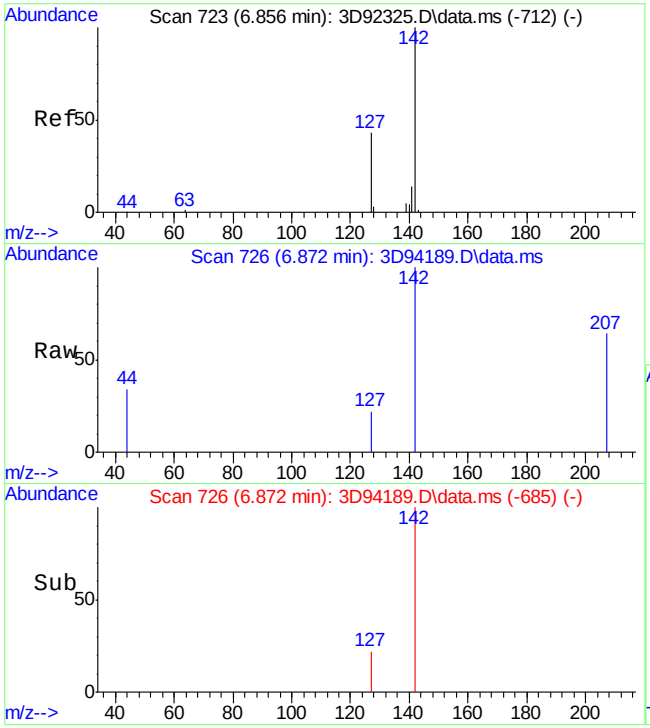


#22
1,1-dichloroethene
Concen: 0.46 ug/L
RT: 6.573 min Scan# 669
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 61 Resp: 1013

Ion	Ratio	Lower	Upper
61	100		
96	63.4	33.6	93.6
63	30.5	1.8	61.8

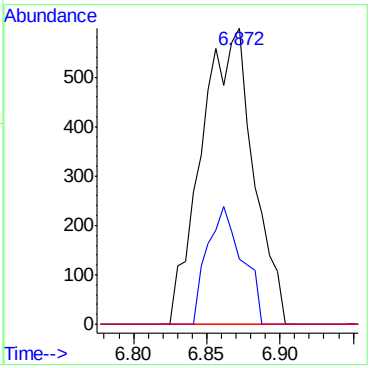


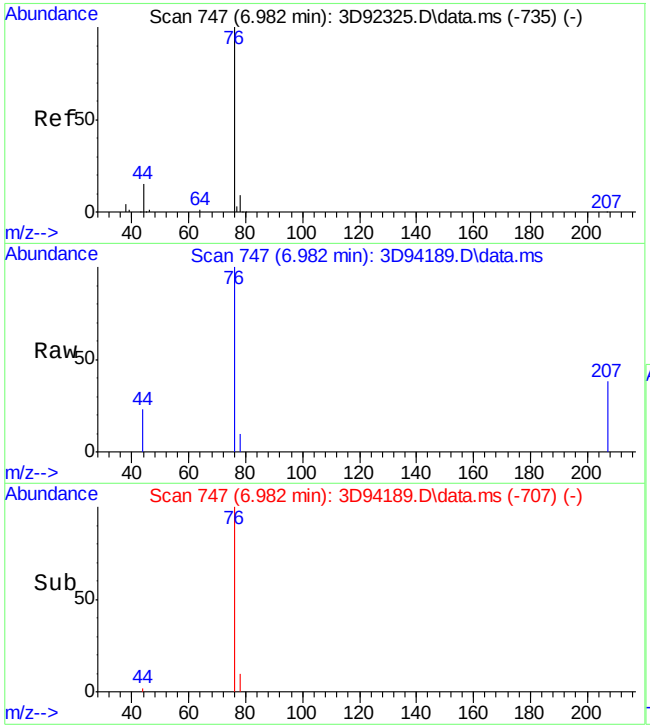


#27
iodomethane
Concen: 0.49 ug/L
RT: 6.872 min Scan# 726
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:142 Resp: 1476

Ion	Ratio	Lower	Upper
142	100		
127	22.0	5.6	65.6
141	0.0	0.0	44.2

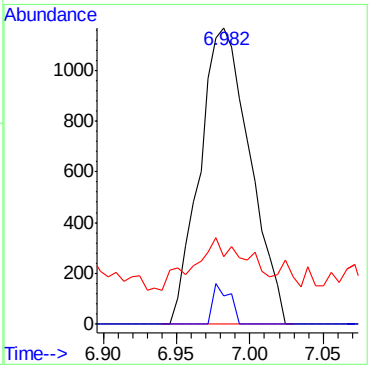


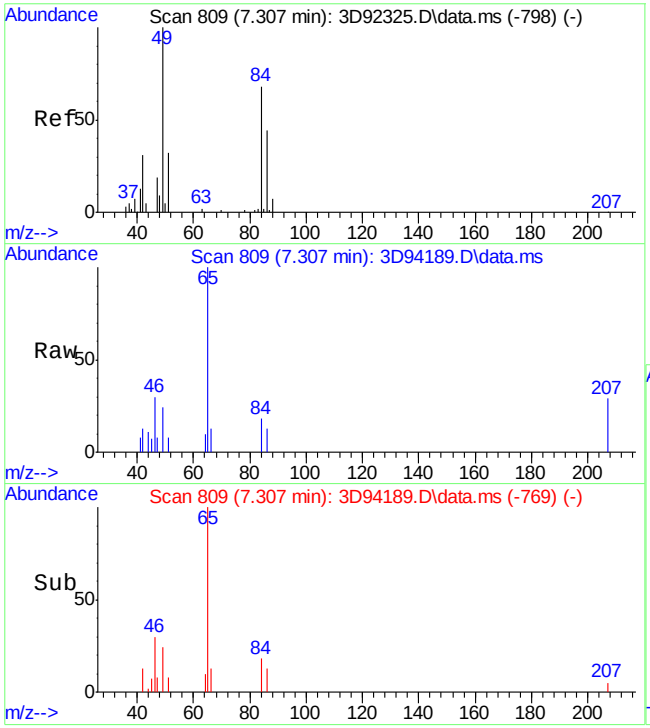


#29
carbon disulfide
Concen: 0.51 ug/L
RT: 6.982 min Scan# 747
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 76 Resp: 2774

Ion	Ratio	Lower	Upper
76	100		
78	9.5	0.0	39.1
44	9.0	0.0	40.9

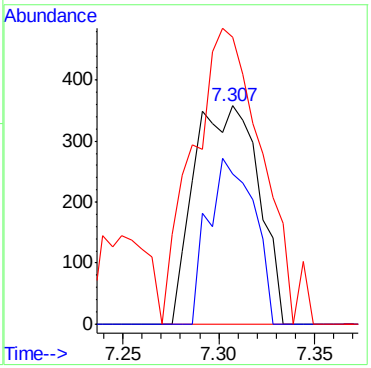


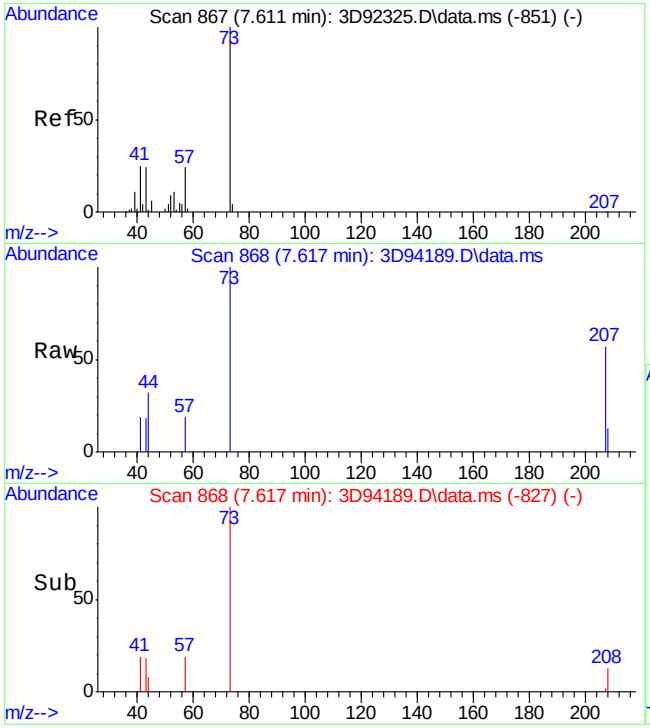


#30
methylene chloride
Concen: 0.50 ug/L
RT: 7.307 min Scan# 809
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 84 Resp: 833

Ion	Ratio	Lower	Upper
84	100		
86	68.7	45.1	83.7
49	131.3	89.7	166.7

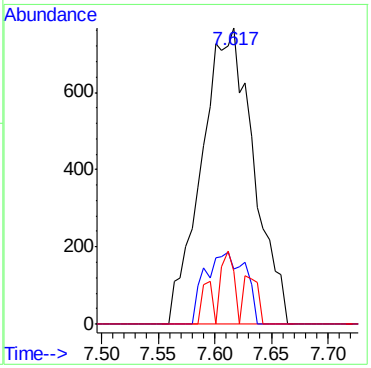




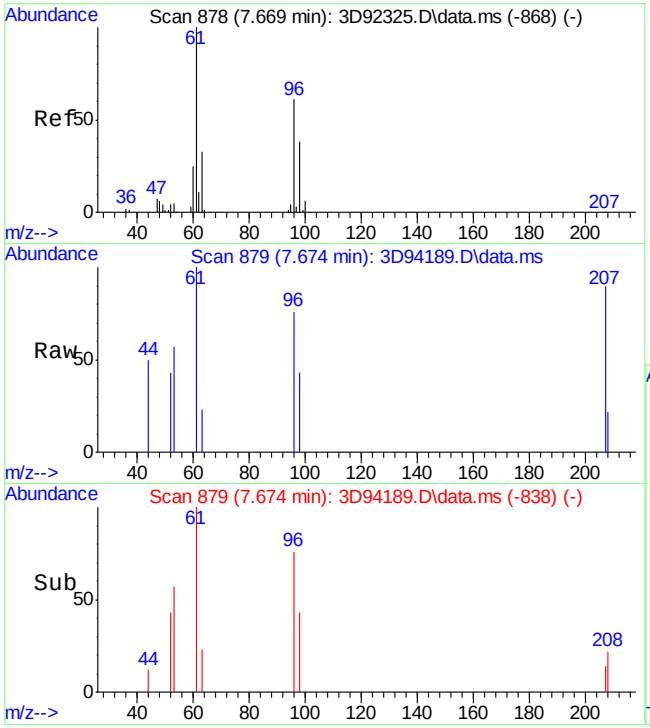
#32
methyl tert butyl ether
Concen: 0.52 ug/L
RT: 7.617 min Scan# 868
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 73 Resp: 2431

Ion	Ratio	Lower	Upper
73	100		
57	18.8	0.0	52.4
43	17.9	0.0	49.7



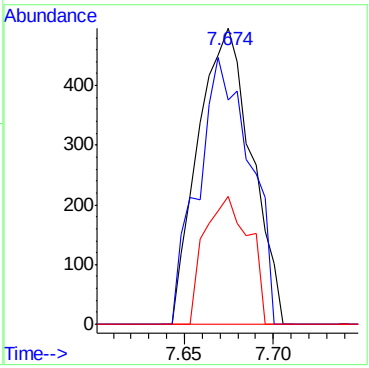
3D94189.D M3D4058.M Thu Dec 19 12:36:37 2013 3D Page 10

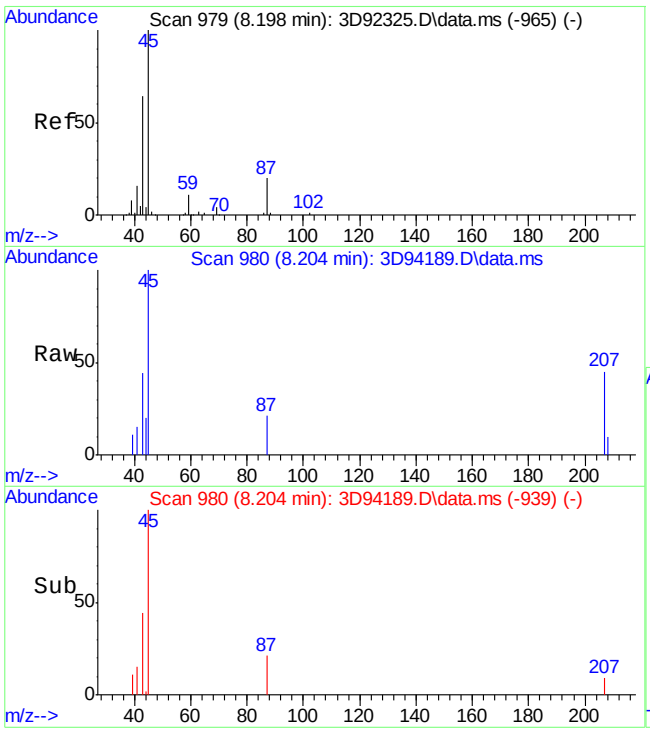


#33
trans-1,2-dichloroethene
Concen: 0.47 ug/L
RT: 7.674 min Scan# 879
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 61 Resp: 1039

Ion	Ratio	Lower	Upper
61	100		
96	75.6	50.0	92.8
98	43.3	31.0	57.6

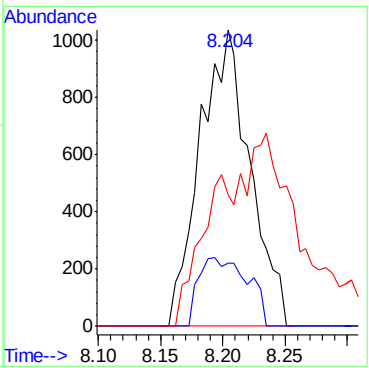


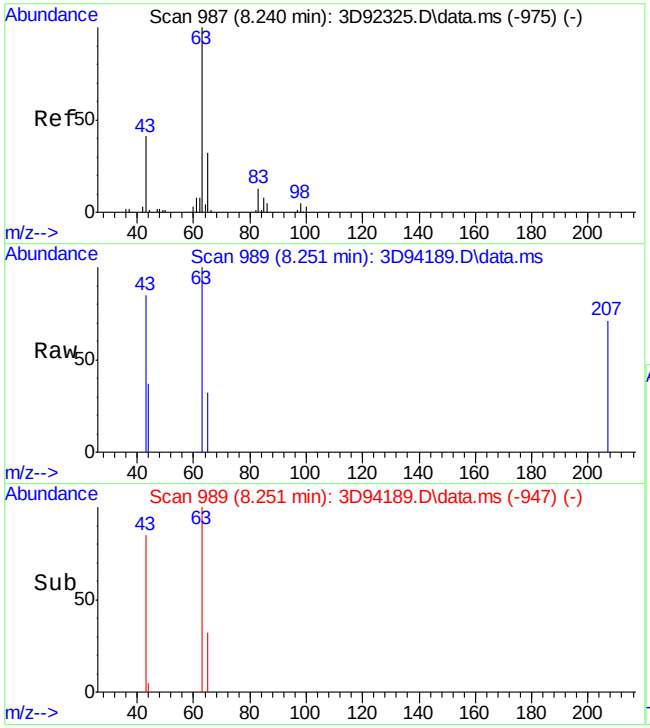


#34
di-isopropyl ether
Concen: 0.57 ug/L
RT: 8.204 min Scan# 980
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 45 Resp: 2885

Ion	Ratio	Lower	Upper
45	100		
87	21.4	0.0	54.3
43	44.2	29.5	89.5

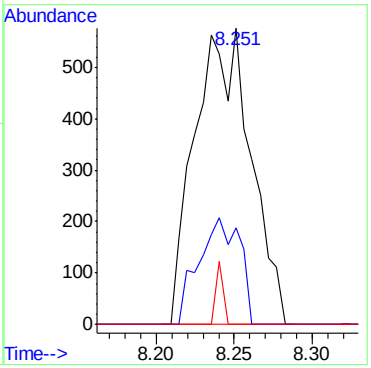


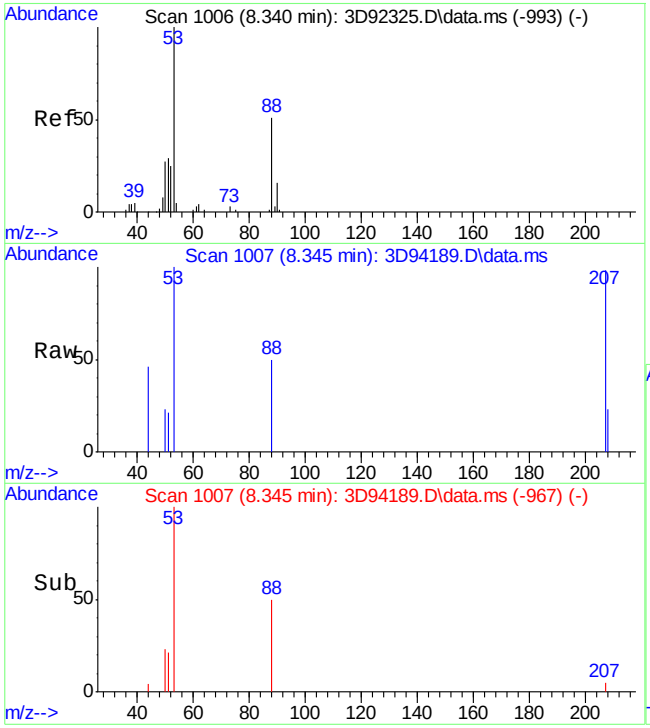


#37
1,1-dichloroethane
Concen: 0.53 ug/L
RT: 8.251 min Scan# 989
Delta R.T. 0.021 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 63 Resp: 1436

Ion	Ratio	Lower	Upper
63	100		
65	32.5	2.0	62.0
83	0.0	0.0	43.2

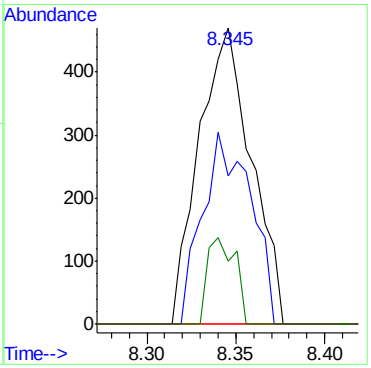




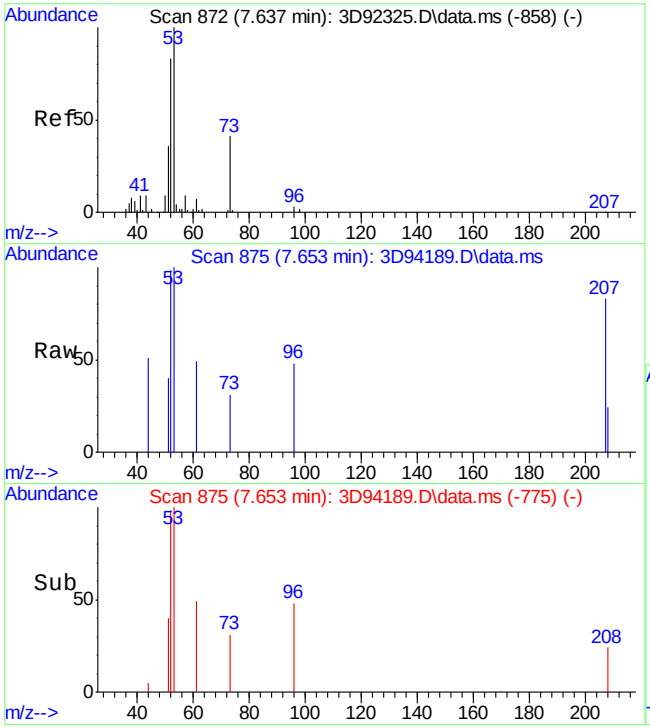
#38
chloroprene
Concen: 0.48 ug/L
RT: 8.345 min Scan# 1007
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 53 Resp: 962

Ion	Ratio	Lower	Upper
53	100		
88	50.0	28.5	88.5
90	0.0	0.0	49.6
51	21.3	0.0	55.5



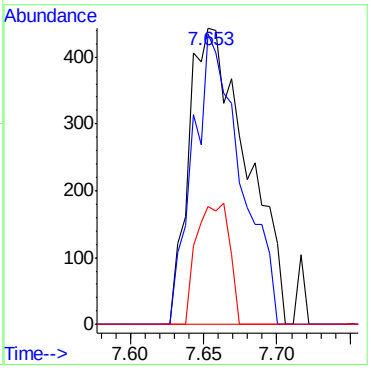
3D94189.D M3D4058.M Thu Dec 19 12:36:37 2013 3D Page 12

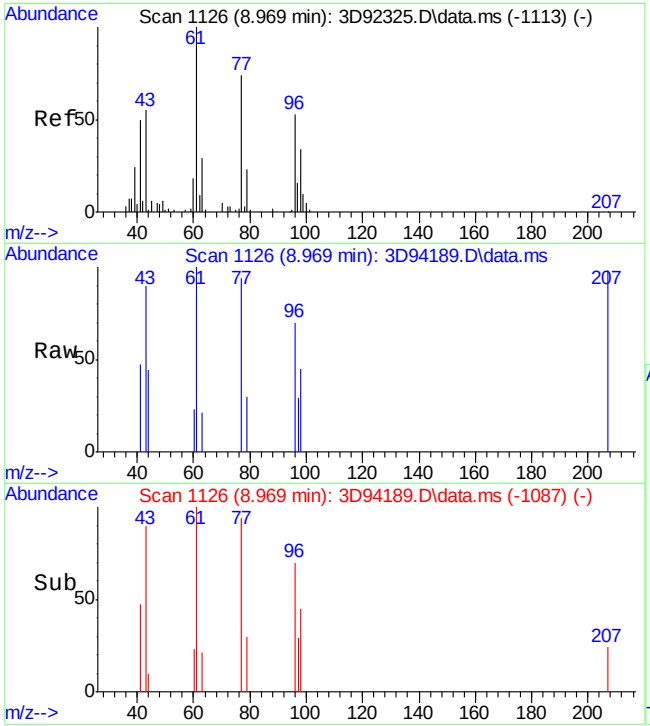


#39
acrylonitrile
Concen: 2.18 ug/L
RT: 7.653 min Scan# 875
Delta R.T. 0.026 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 53 Resp: 1221

Ion	Ratio	Lower	Upper
53	100		
52	98.0	54.6	114.6
51	40.0	5.6	65.6

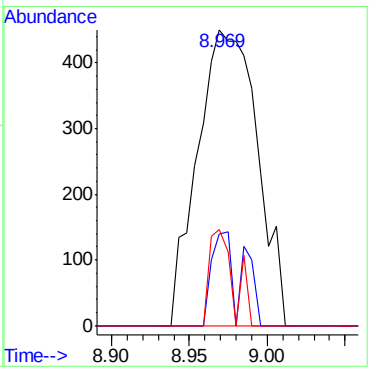




#42
2,2-dichloropropane
Concen: 0.54 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

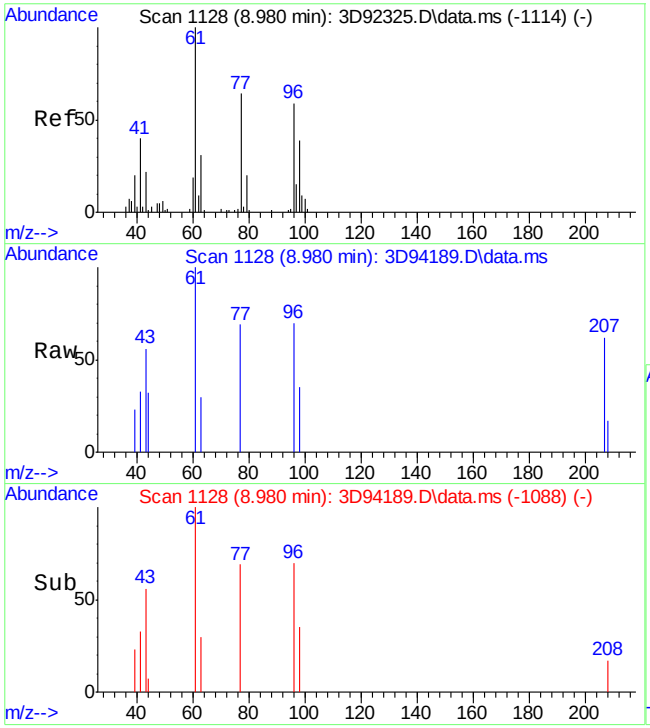
Tgt Ion: 77 Resp: 1202

Ion	Ratio	Lower	Upper
77	100		
97	30.9	0.0	56.7
79	32.4	2.2	62.2



7.7.1

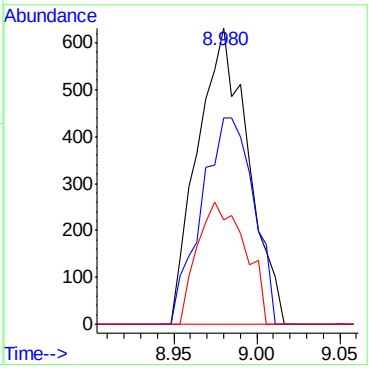
7

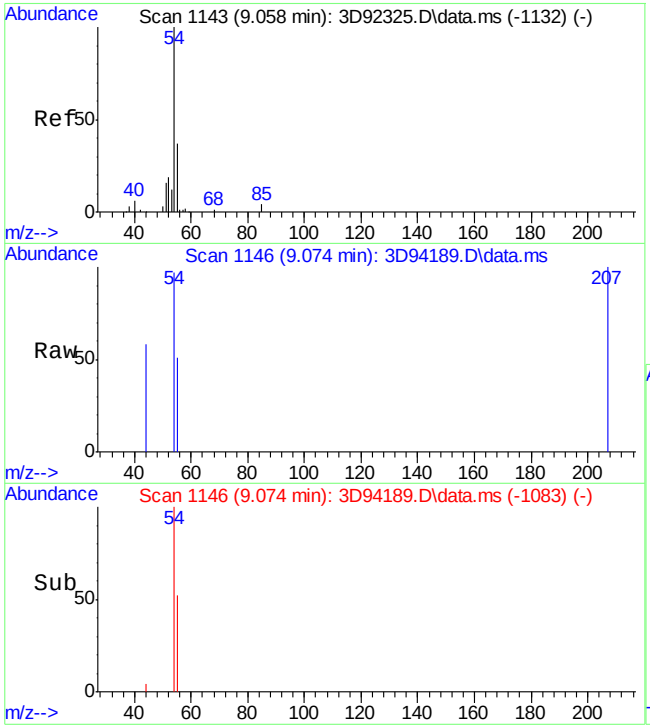


#43
cis-1,2-dichloroethene
Concen: 0.50 ug/L
RT: 8.980 min Scan# 1128
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 61 Resp: 1335

Ion	Ratio	Lower	Upper
61	100		
96	69.9	39.3	99.3
98	35.3	14.9	74.9

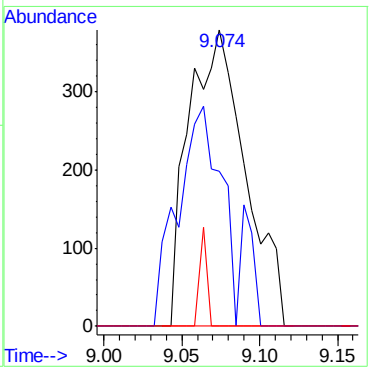




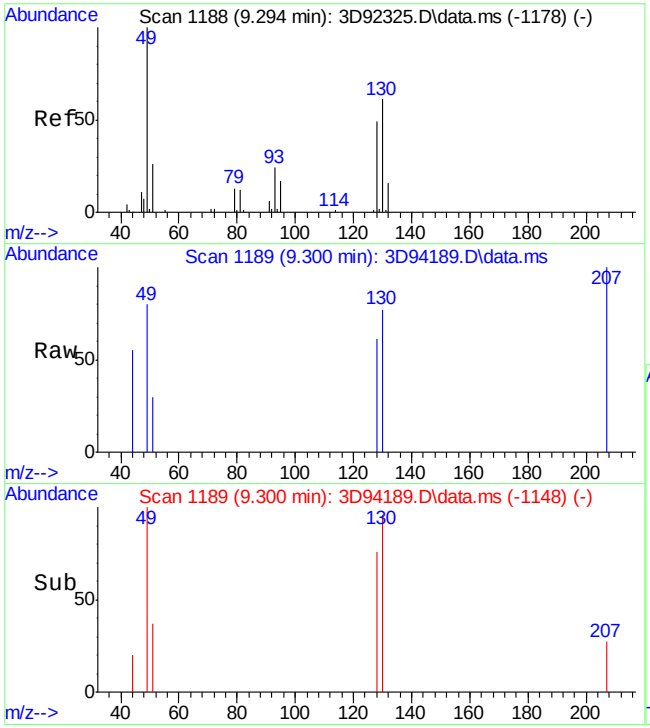
#44
propionitrile
Concen: 4.55 ug/L
RT: 9.074 min Scan# 1146
Delta R.T. 0.032 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 54 Resp: 964

Ion	Ratio	Lower	Upper
54	100		
55	52.2	19.2	79.2
40	0.0	0.0	35.1



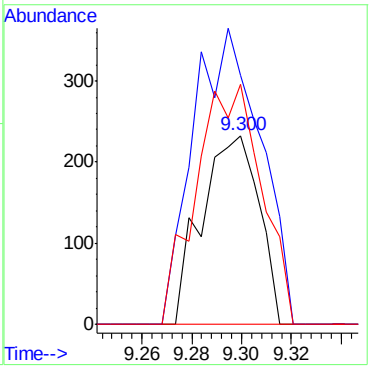
3D94189.D M3D4058.M Thu Dec 19 12:36:37 2013 3D Page 14

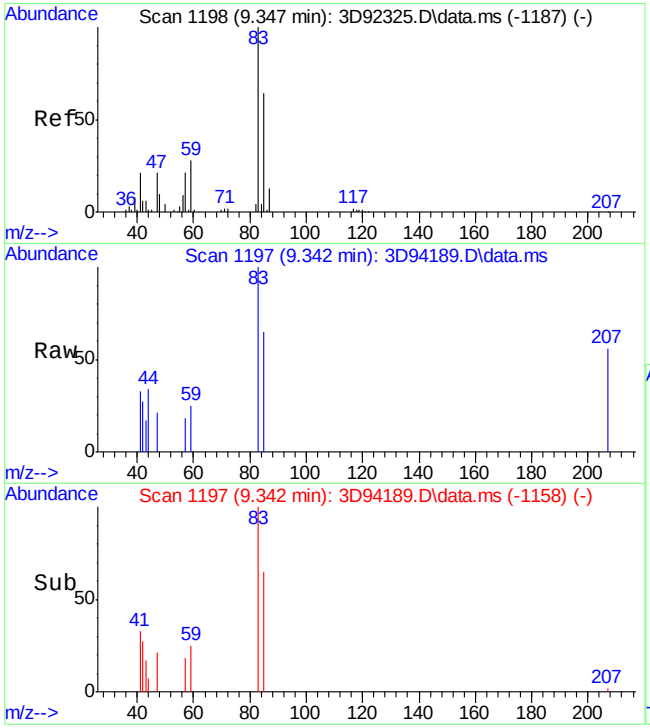


#46
bromochloromethane
Concen: 0.43 ug/L
RT: 9.300 min Scan# 1189
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:128 Resp: 373

Ion	Ratio	Lower	Upper
128	100		
49	131.8	125.6	185.6
130	127.0	103.9	163.9

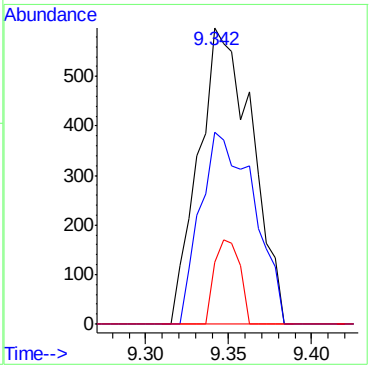


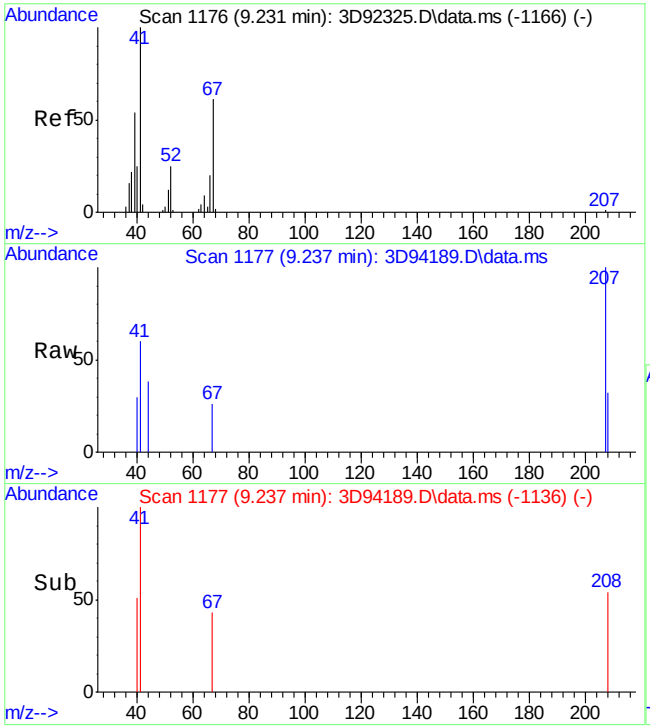


#48
chloroform
Concen: 0.51 ug/L
RT: 9.342 min Scan# 1197
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 83 Resp: 1338

Ion	Ratio	Lower	Upper
83	100		
85	64.9	34.8	94.8
47	20.9	0.0	53.3

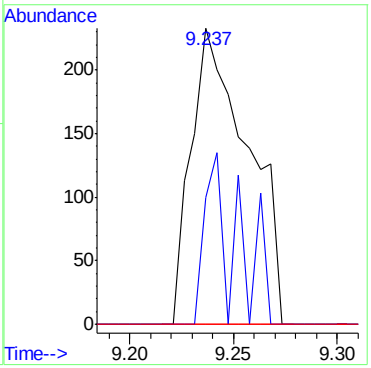


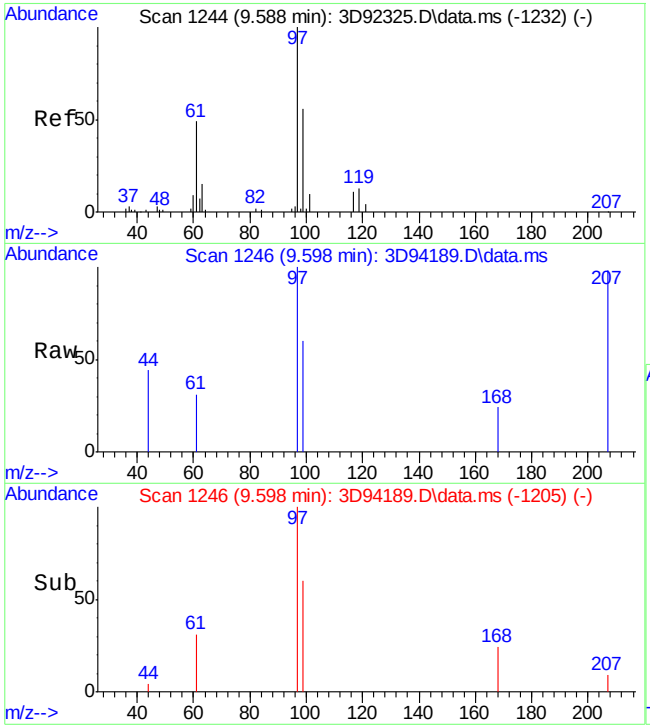


#53
methacrylonitrile
Concen: 0.49 ug/L
RT: 9.237 min Scan# 1177
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 41 Resp: 444

Ion	Ratio	Lower	Upper
41	100		
67	42.9	39.6	99.6
66	0.0	0.0	53.3

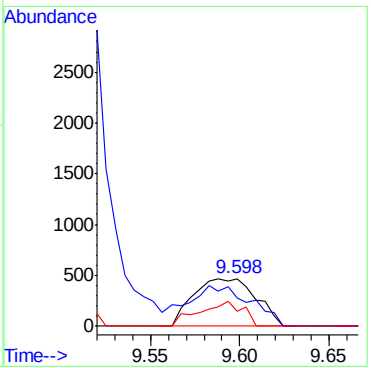


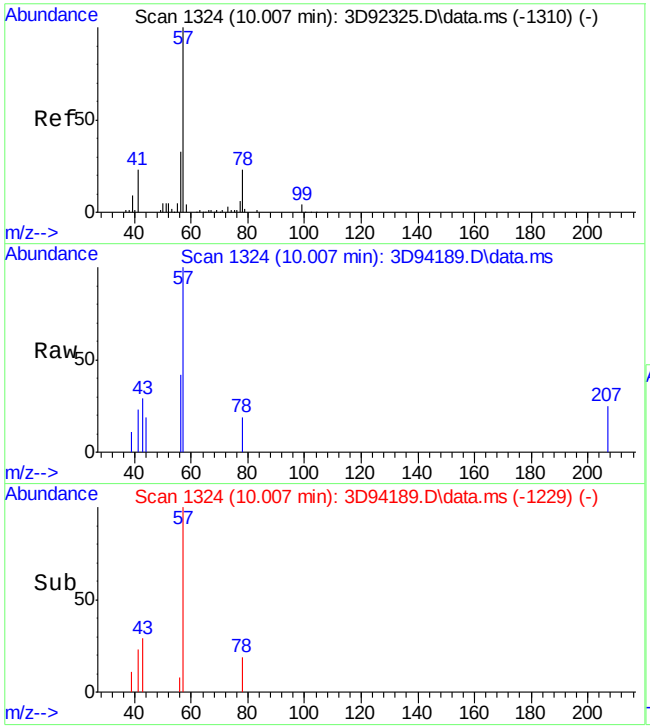


#54
1,1,1-trichloroethane
Concen: 0.50 ug/L
RT: 9.598 min Scan# 1246
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 97 Resp: 1143

Ion	Ratio	Lower	Upper
97	100		
99	60.0	33.6	93.6
61	31.2	11.5	71.5

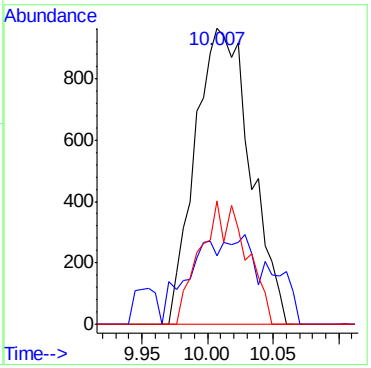


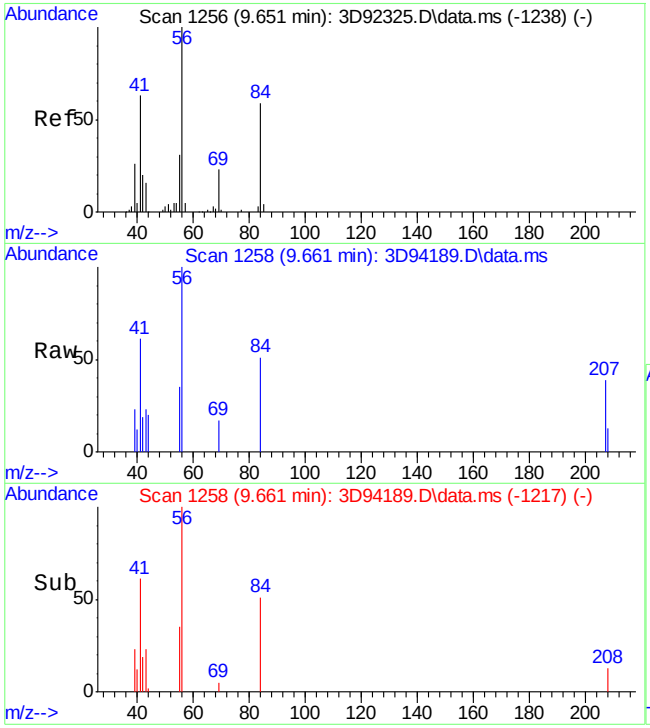


#56
2,2,4-Trimethylpentane
Concen: 0.52 ug/L
RT: 10.007 min Scan# 1324
Delta R.T. 0.000 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 57 Resp: 2819

Ion	Ratio	Lower	Upper
57	100		
41	42.0	4.1	64.1
56	34.5	4.4	64.4

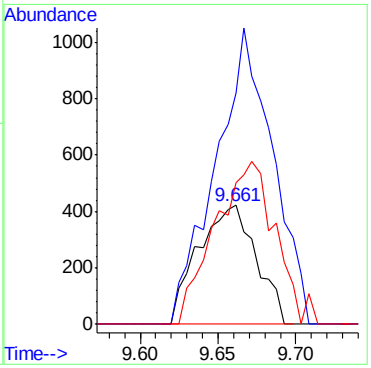


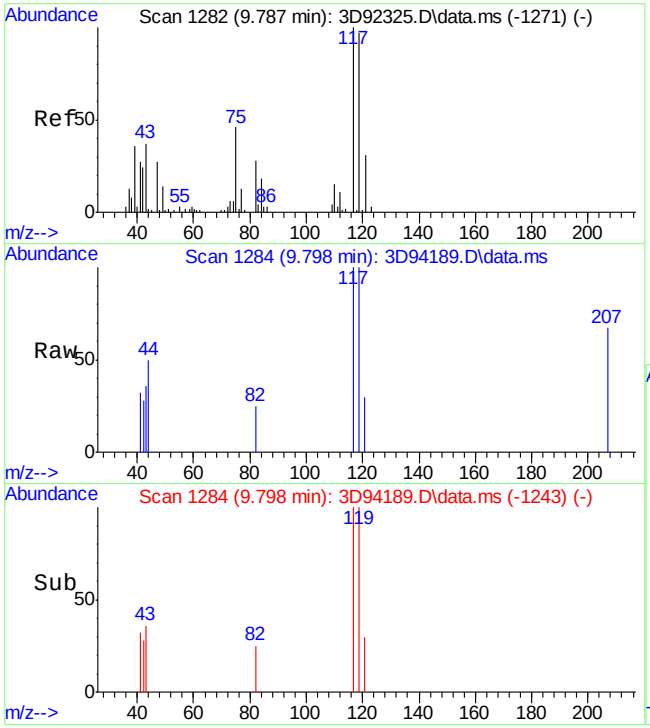


#61
cyclohexane
Concen: 0.49 ug/L
RT: 9.661 min Scan# 1258
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 84 Resp: 1091

Ion	Ratio	Lower	Upper
84	100		
56	247.2	208.4	268.4
41	142.7	105.8	165.8

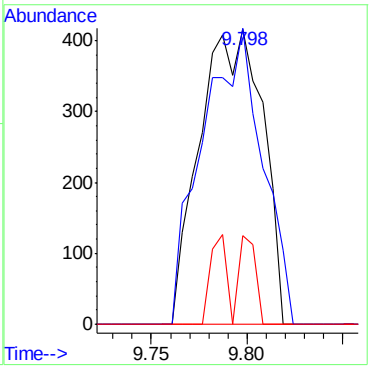


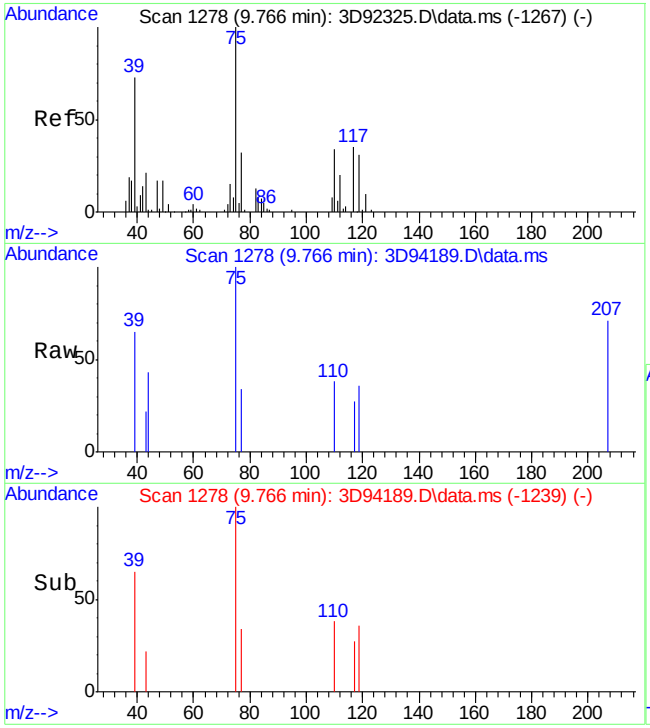


#62
carbon tetrachloride
Concen: 0.47 ug/L
RT: 9.798 min Scan# 1284
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:117 Resp: 948

Ion	Ratio	Lower	Upper
117	100		
119	100.5	64.5	124.5
121	30.0	1.7	61.7

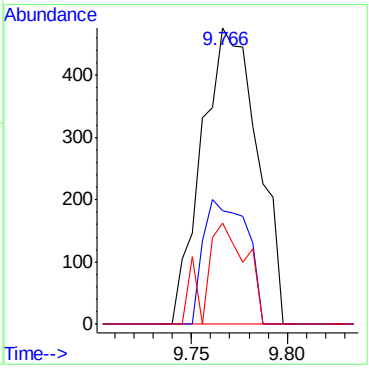




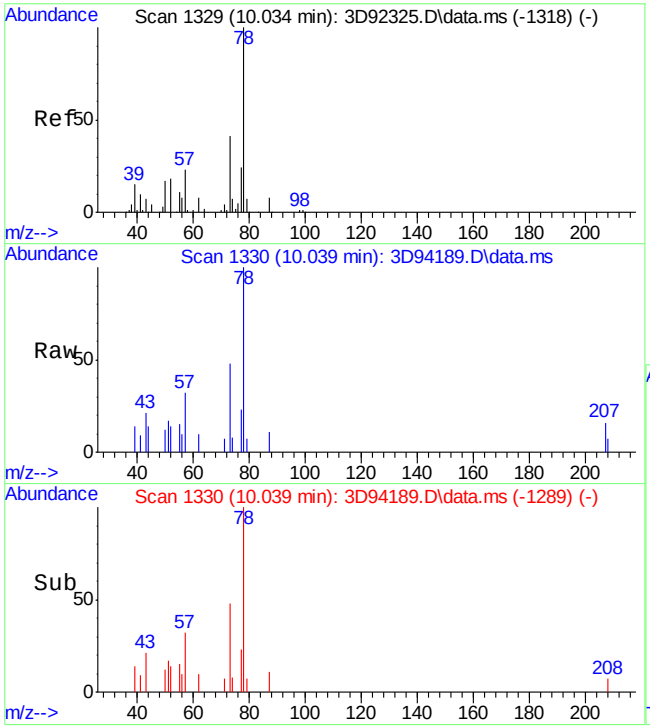
#63
1,1-dichloropropene
Concen: 0.48 ug/L
RT: 9.766 min Scan# 1278
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 75 Resp: 959

Ion	Ratio	Lower	Upper
75	100		
110	38.2	8.3	68.3
77	34.2	0.4	60.4



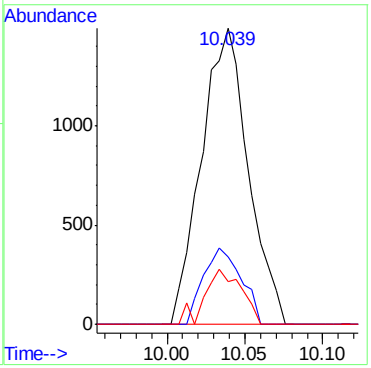
3D94189.D M3D4058.M Thu Dec 19 12:36:37 2013 3D Page 18

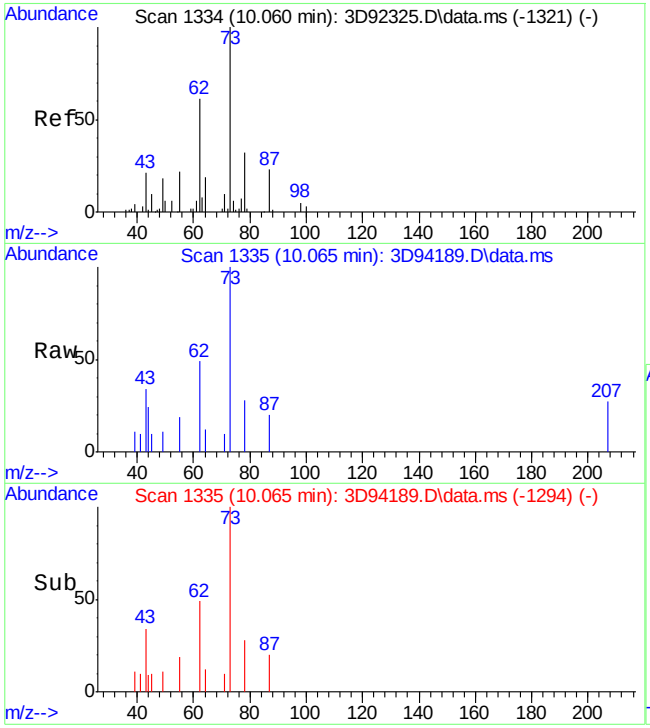


#65
benzene
Concen: 0.51 ug/L
RT: 10.039 min Scan# 1330
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 78 Resp: 3121

Ion	Ratio	Lower	Upper
78	100		
77	22.7	0.0	53.8
52	14.4	0.0	45.9

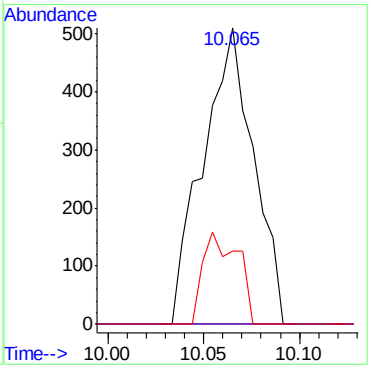


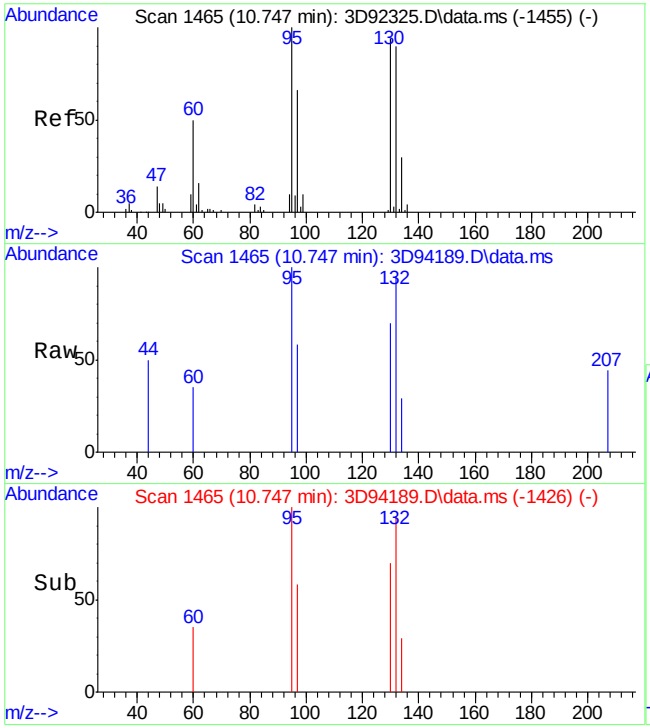


#68
1,2-dichloroethane
Concen: 0.51 ug/L
RT: 10.065 min Scan# 1335
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 62 Resp: 933

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	40.2
64	24.7	2.5	62.5

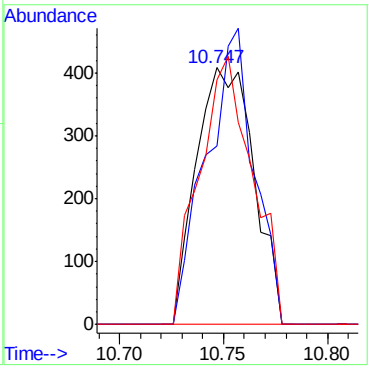


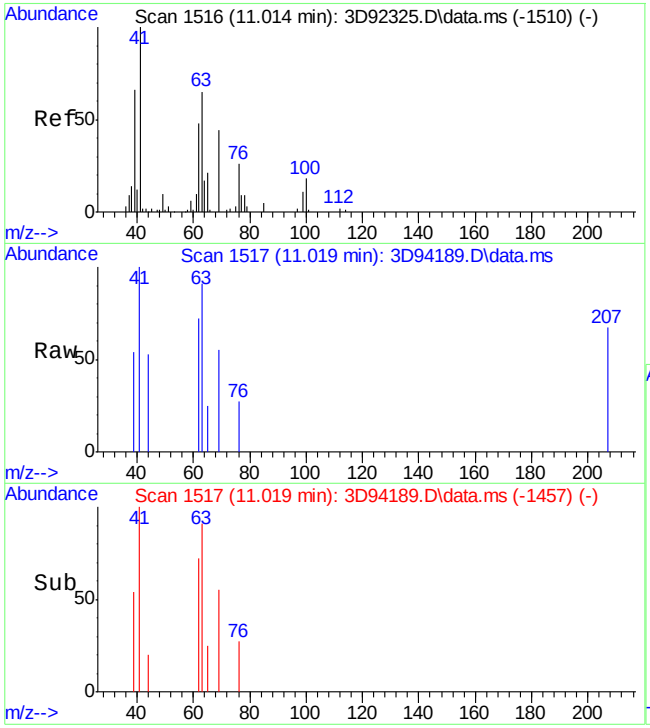


#69
trichloroethene
Concen: 0.52 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 95 Resp: 789

Ion	Ratio	Lower	Upper
95	100		
130	69.6	78.9	138.9#
132	95.3	75.1	135.1

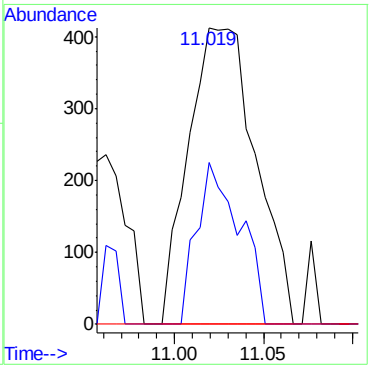


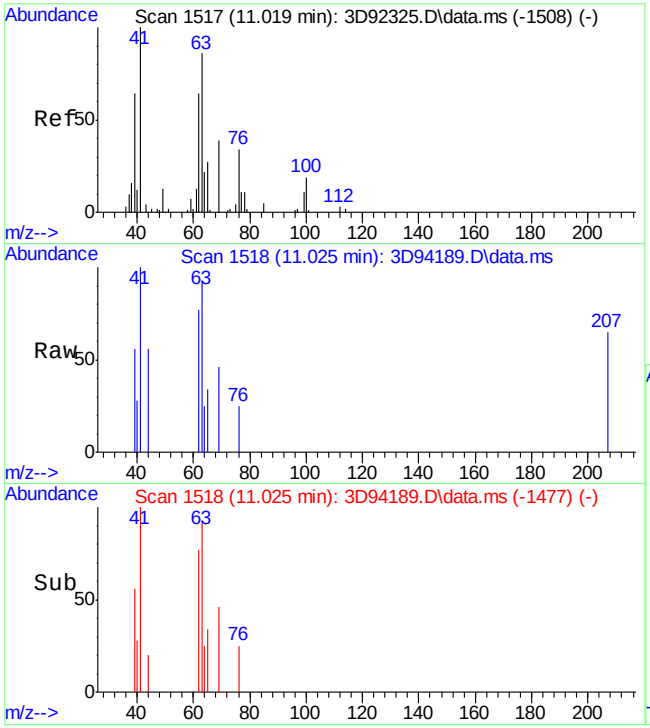


#74
methyl methacrylate
Concen: 0.50 ug/L
RT: 11.019 min Scan# 1517
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 41 Resp: 1093

Ion	Ratio	Lower	Upper
41	100		
69	54.6	21.5	81.5
100	0.0	0.0	50.7

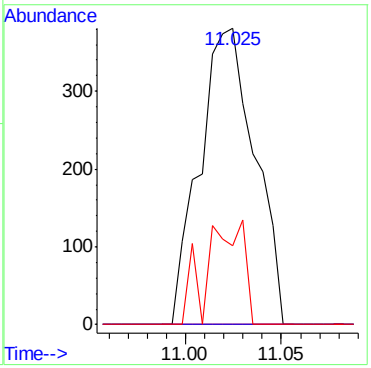


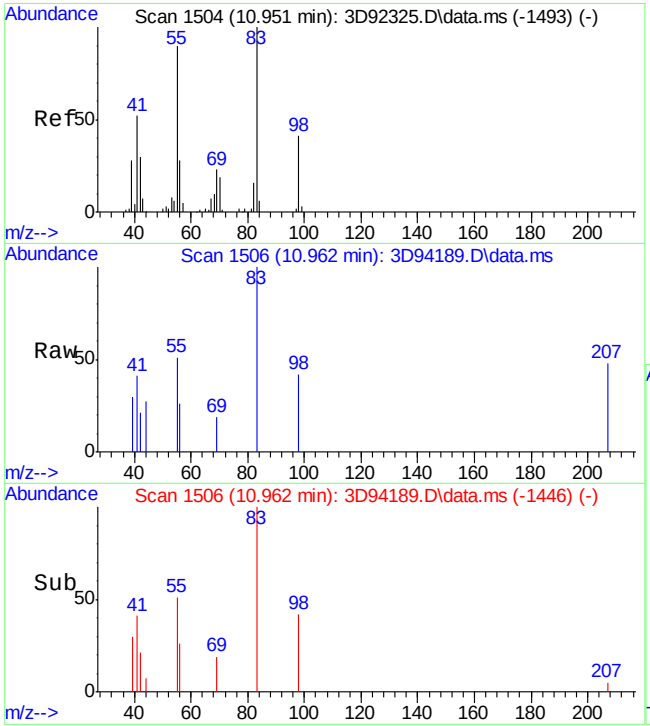


#75
1,2-dichloropropane
Concen: 0.50 ug/L
RT: 11.025 min Scan# 1518
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 63 Resp: 761

Ion	Ratio	Lower	Upper
63	100		
112	0.0	0.0	33.7
76	26.5	7.1	67.1

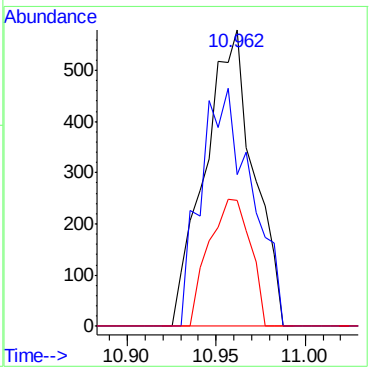


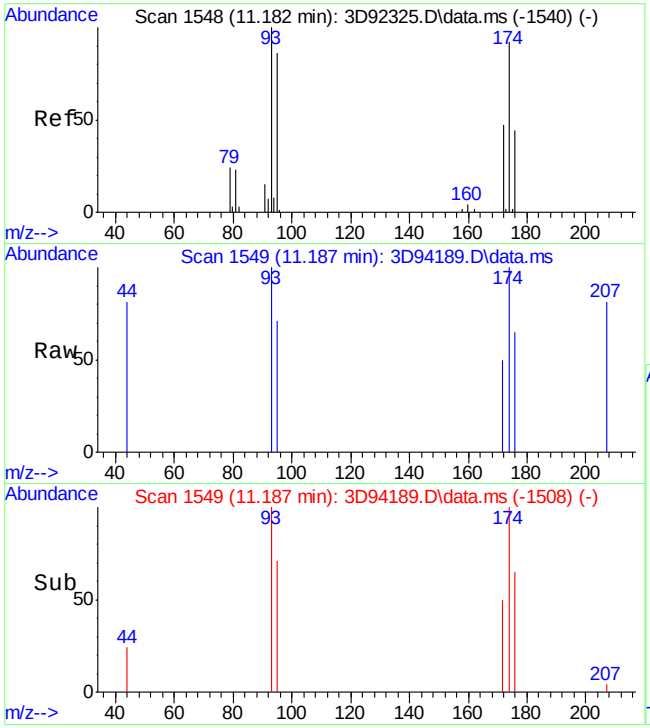


#76
methylcyclohexane
Concen: 0.49 ug/L
RT: 10.962 min Scan# 1506
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 83 Resp: 1108

Ion	Ratio	Lower	Upper
83	100		
55	51.1	48.6	108.6
98	42.5	12.6	72.6

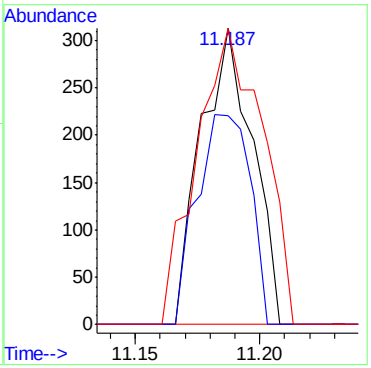


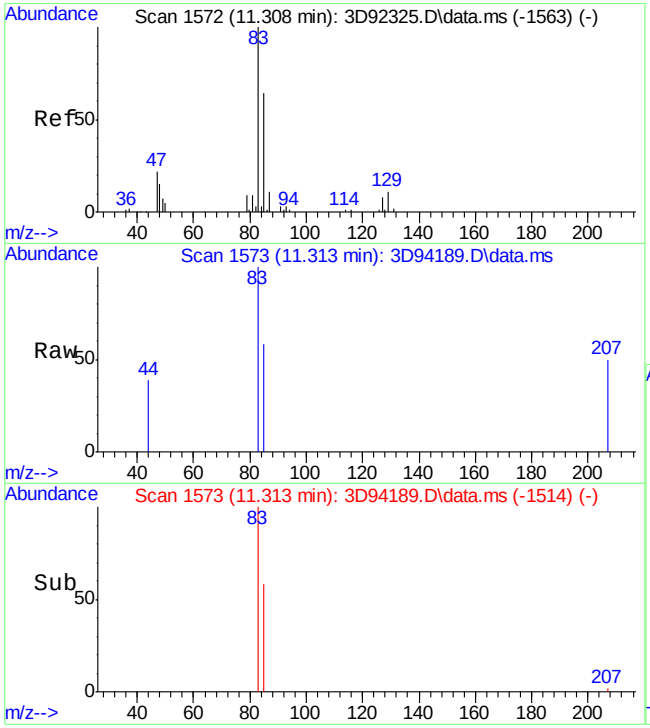


#77
dibromomethane
Concen: 0.47 ug/L
RT: 11.187 min Scan# 1549
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 93 Resp: 452

Ion	Ratio	Lower	Upper
93	100		
95	70.6	51.7	111.7
174	100.0	84.5	144.5

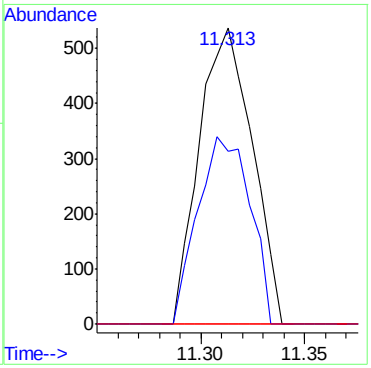


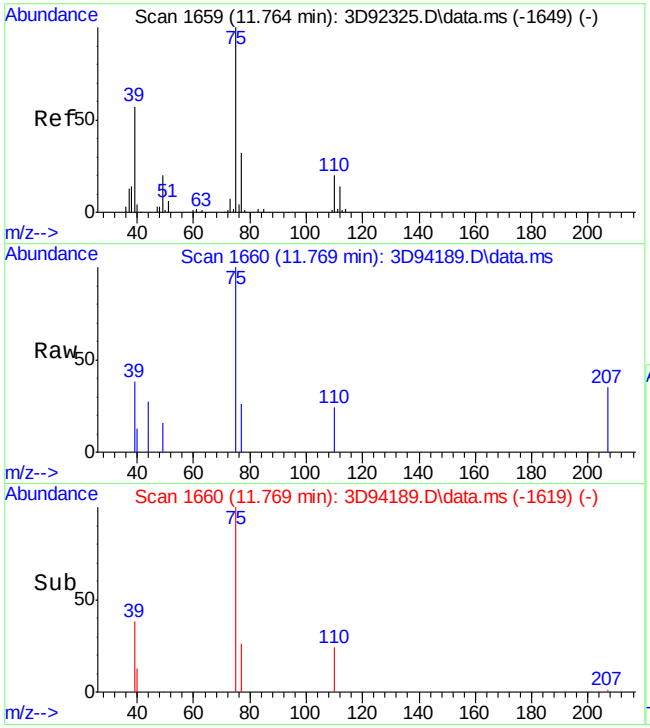


#78
bromodichloromethane
Concen: 0.49 ug/L
RT: 11.313 min Scan# 1573
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 83 Resp: 954

Ion	Ratio	Lower	Upper
83	100		
85	58.3	33.4	93.4
127	0.0	0.0	39.1

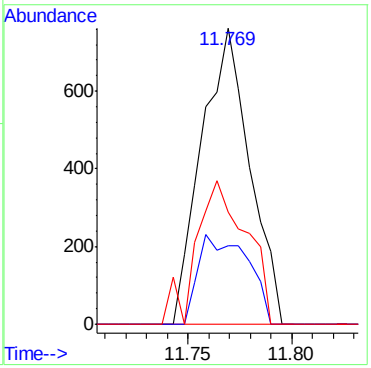


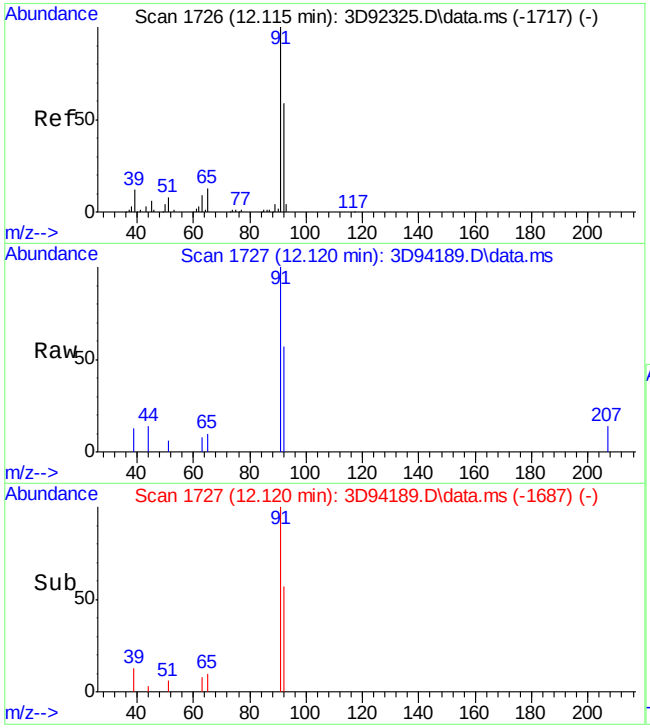


#79
cis-1,3-dichloropropene
Concen: 0.51 ug/L
RT: 11.769 min Scan# 1660
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 75 Resp: 1233

Ion	Ratio	Lower	Upper
75	100		
77	26.4	1.7	61.7
39	38.1	14.6	74.6

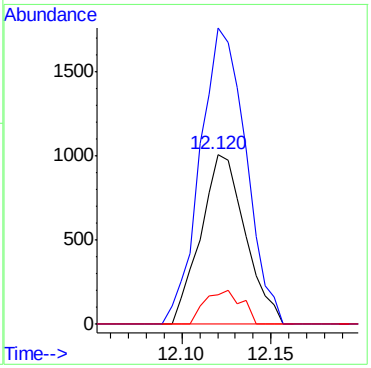


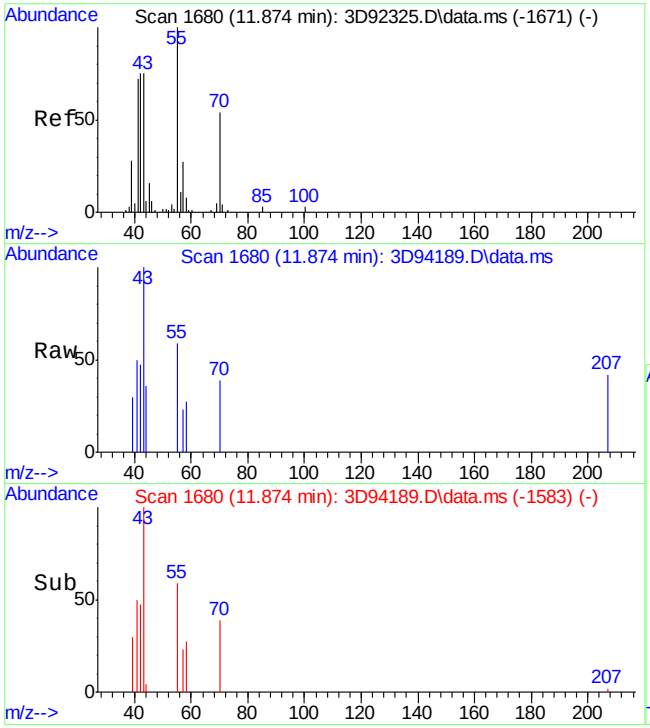


#82
toluene
Concen: 0.49 ug/L
RT: 12.120 min Scan# 1727
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 92 Resp: 1756

Ion	Ratio	Lower	Upper
92	100		
91	174.7	137.1	197.1
65	17.2	0.0	48.7

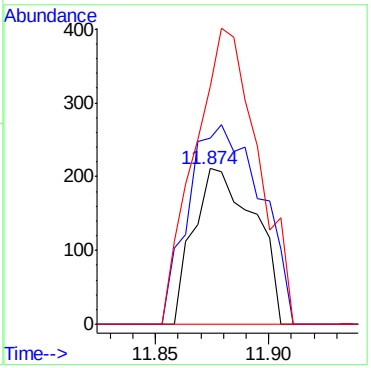


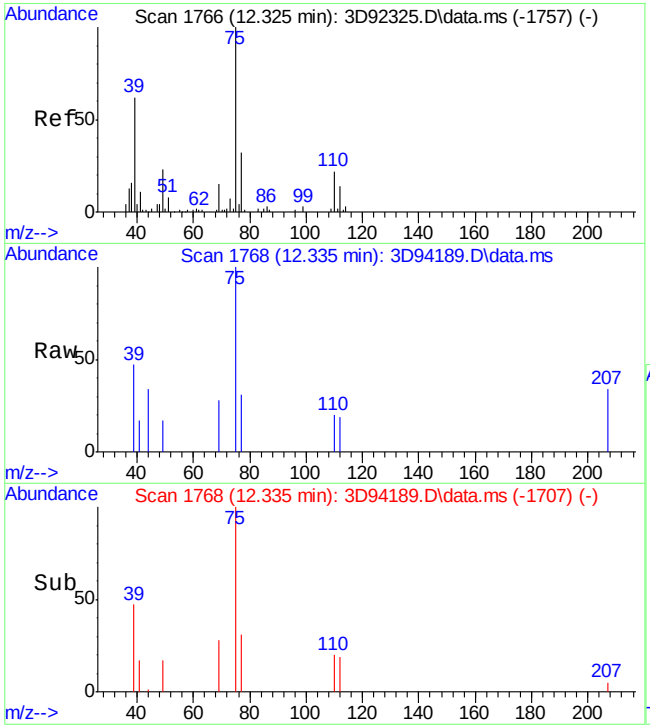


#83
3-methyl-1-butanol
Concen: 11.00 ug/L
RT: 11.874 min Scan# 1680
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 70 Resp: 394

Ion	Ratio	Lower	Upper
70	100		
42	152.5	102.8	162.8
55	198.2	140.8	200.8

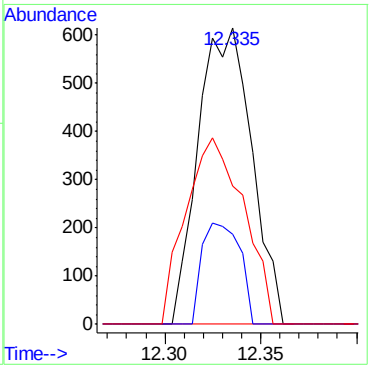


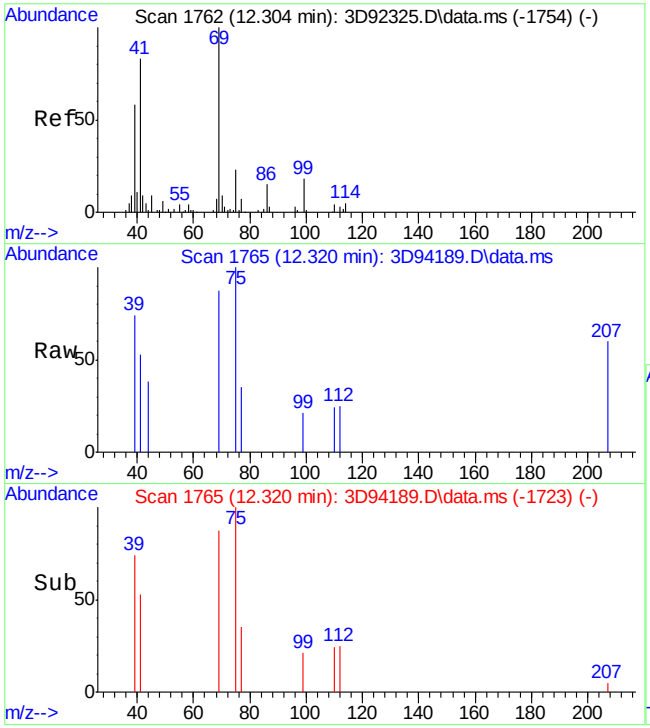


#84
trans-1,3-dichloropropene
Concen: 0.55 ug/L
RT: 12.335 min Scan# 1768
Delta R.T. 0.021 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 75 Resp: 1191

Ion	Ratio	Lower	Upper
75	100		
77	30.6	2.0	62.0
39	46.5	24.5	84.5

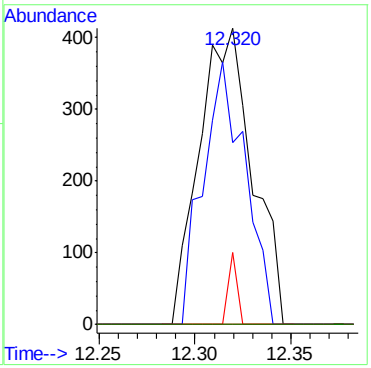


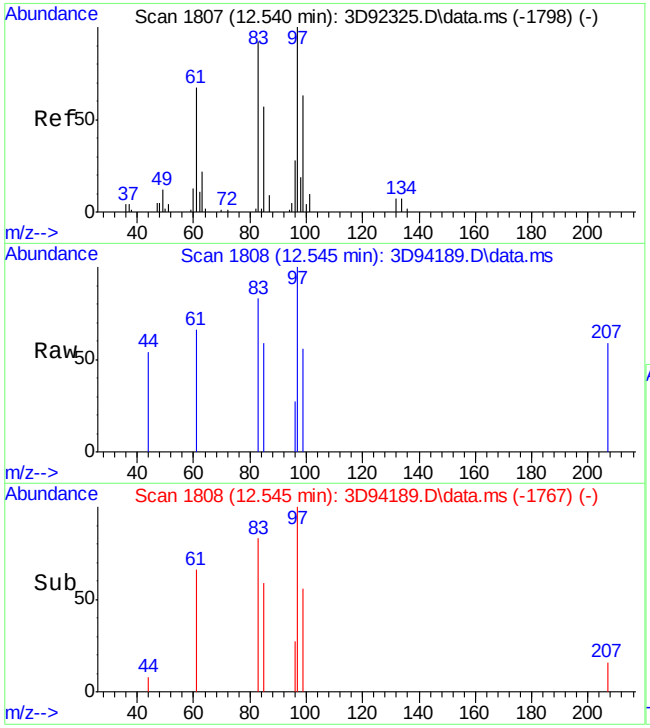


#85
ethyl methacrylate
Concen: 0.46 ug/L
RT: 12.320 min Scan# 1765
Delta R.T. 0.021 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 69 Resp: 797

Ion	Ratio	Lower	Upper
69	100		
41	61.3	40.4	100.4
99	24.5	0.0	50.5
86	0.0	0.0	45.2

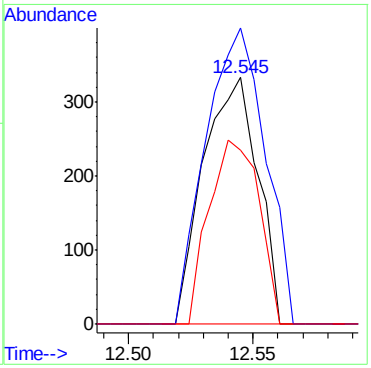


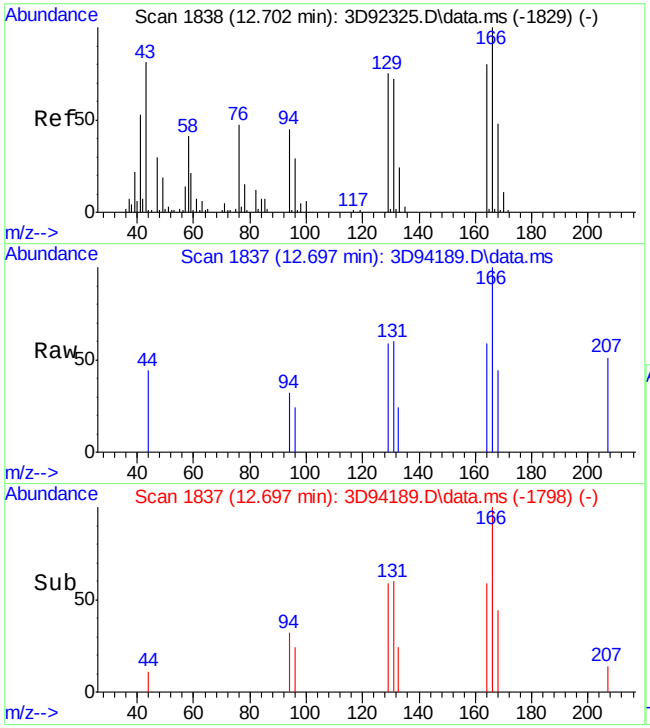


#86
1,1,2-trichloroethane
Concen: 0.46 ug/L
RT: 12.545 min Scan# 1808
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 83 Resp: 509

Ion	Ratio	Lower	Upper
83	100		
97	120.1	84.6	144.6
85	70.6	35.4	95.4

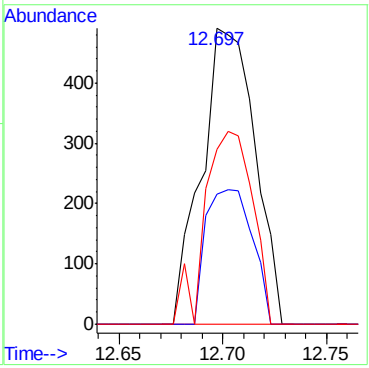


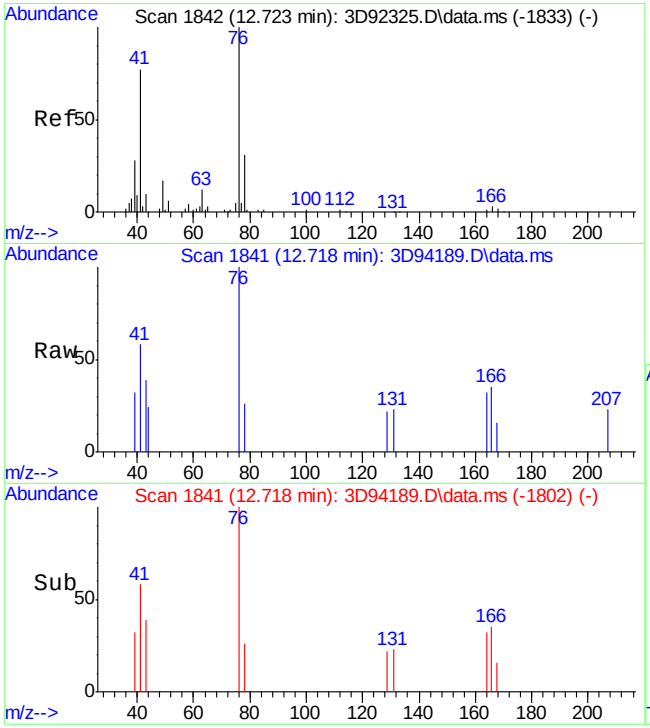


#89
tetrachloroethene
Concen: 0.51 ug/L
RT: 12.697 min Scan# 1837
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:166 Resp: 879

Ion	Ratio	Lower	Upper
166	100		
168	44.0	19.9	79.9
129	59.3	38.6	98.6

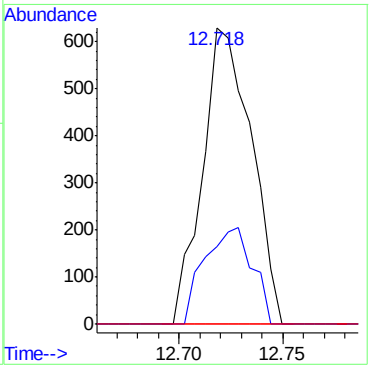




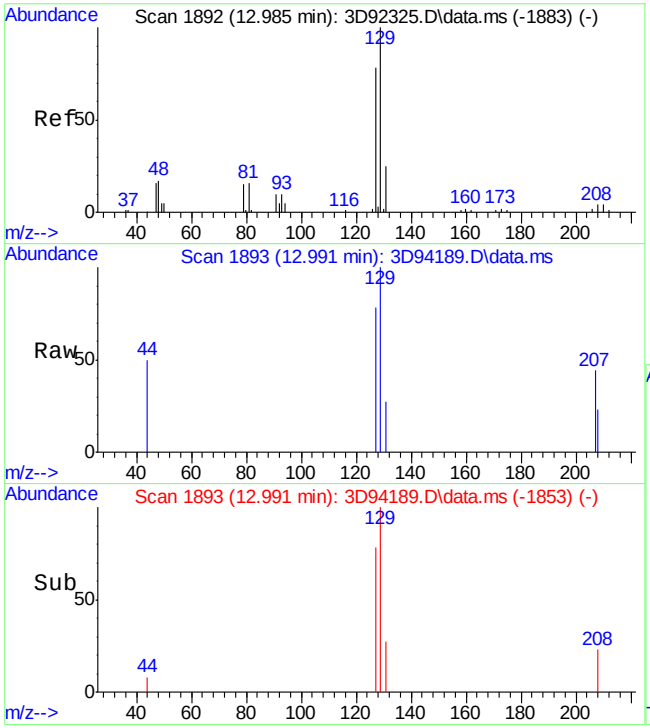
#90
1,3-dichloropropane
Concen: 0.51 ug/L
RT: 12.718 min Scan# 1841
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 76 Resp: 1029

Ion	Ratio	Lower	Upper
76	100		
78	26.2	2.6	62.6
63	0.0	0.0	41.3



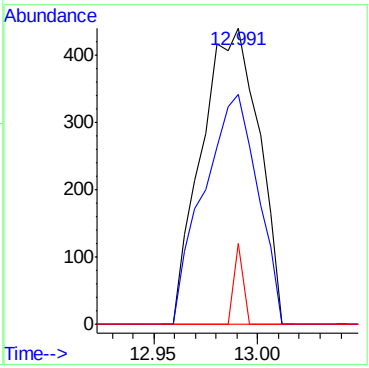
3D94189.D M3D4058.M Thu Dec 19 12:36:38 2013 3D Page 26

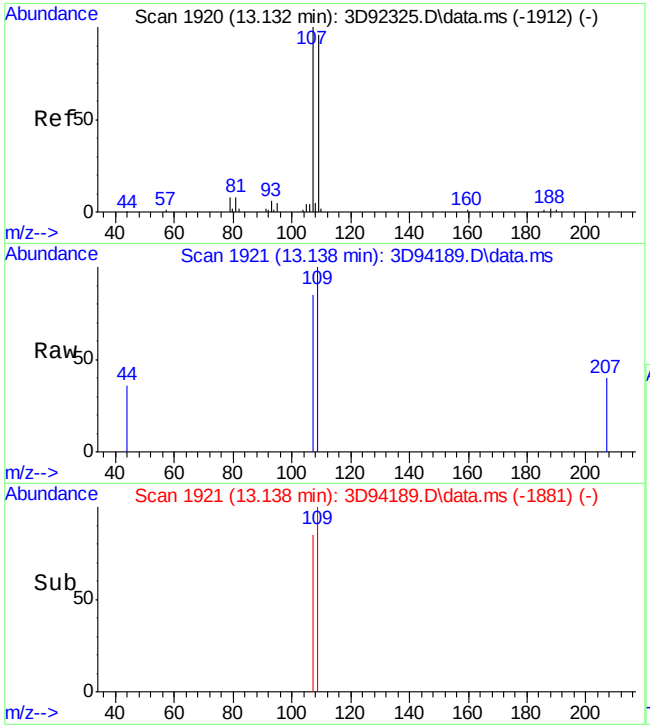


#93
dibromochloromethane
Concen: 0.51 ug/L
RT: 12.991 min Scan# 1893
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:129 Resp: 846

Ion	Ratio	Lower	Upper
129	100		
127	77.5	48.3	108.3
131	27.3	0.0	54.2

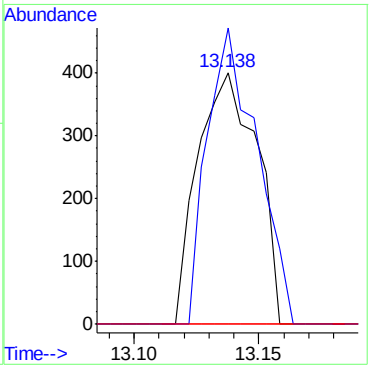




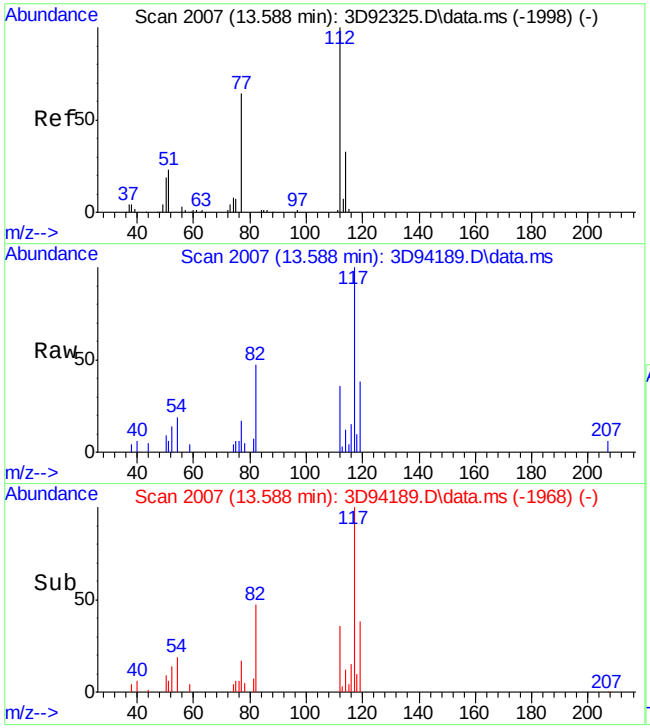
#94
1,2-dibromoethane
Concen: 0.48 ug/L
RT: 13.138 min Scan# 1921
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:107 Resp: 666

Ion	Ratio	Lower	Upper
107	100		
109	117.7	65.3	125.3
188	0.0	0.0	33.4



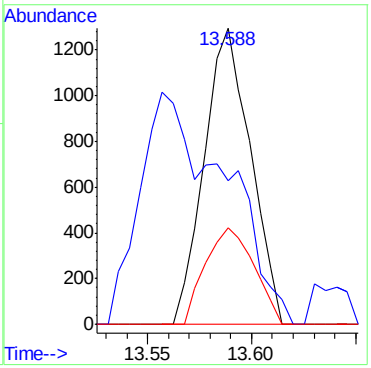
3D94189.D M3D4058.M Thu Dec 19 12:36:38 2013 3D Page 27

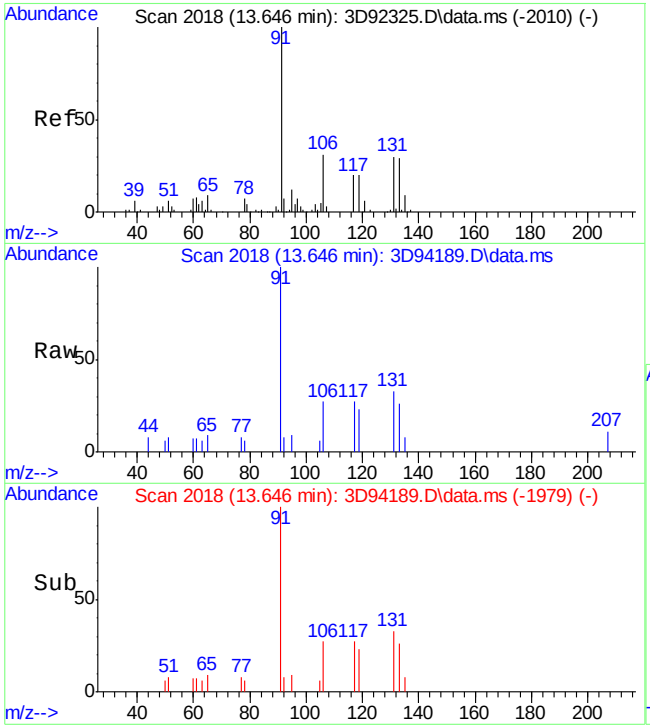


#96
chlorobenzene
Concen: 0.51 ug/L
RT: 13.588 min Scan# 2007
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:112 Resp: 2011

Ion	Ratio	Lower	Upper
112	100		
77	48.6	22.5	82.5
114	32.6	2.5	62.5

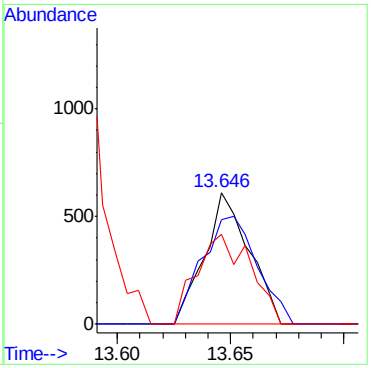


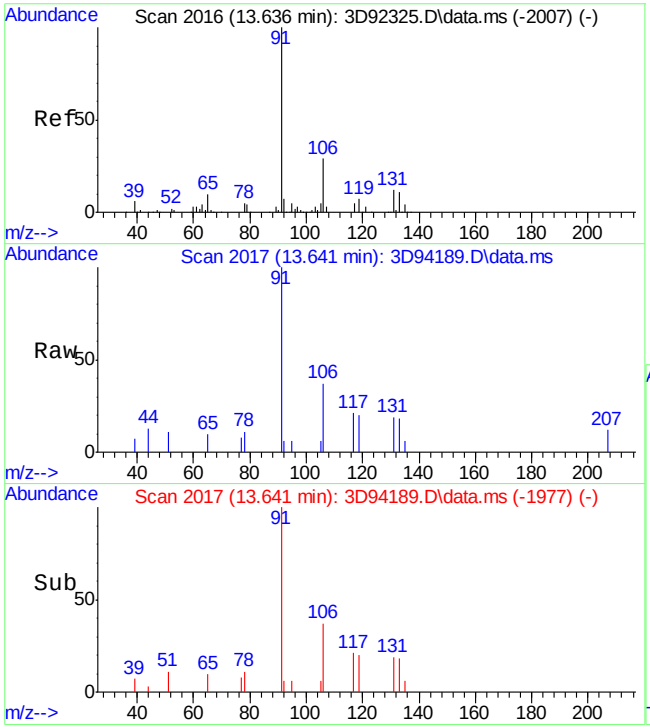


#97
1,1,1,2-tetrachloroethane
Concen: 0.54 ug/L
RT: 13.646 min Scan# 2018
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:131 Resp: 835

Ion	Ratio	Lower	Upper
131	100		
133	79.2	63.6	123.6
119	68.6	37.5	97.5

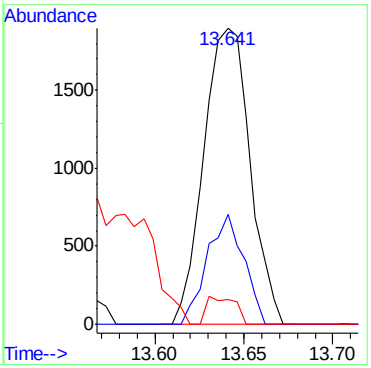


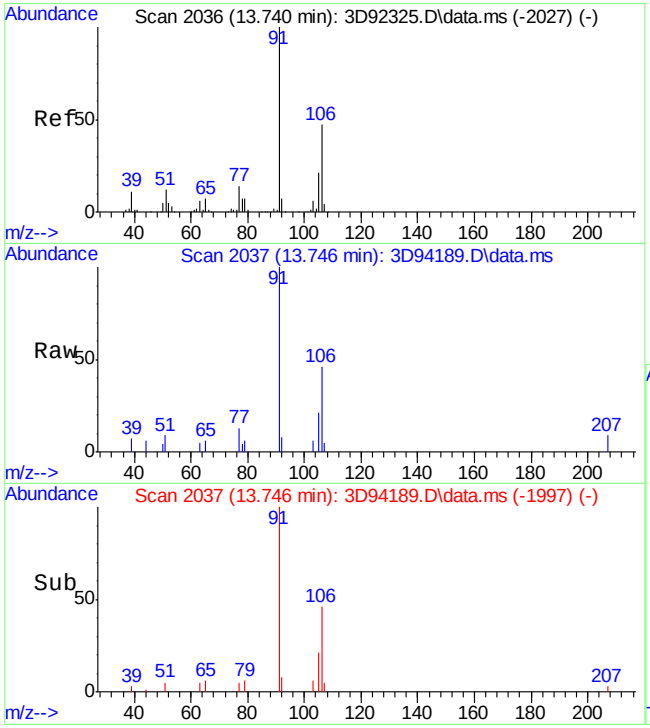


#98
ethylbenzene
Concen: 0.53 ug/L
RT: 13.641 min Scan# 2017
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 91 Resp: 3447

Ion	Ratio	Lower	Upper
91	100		
106	37.0	1.2	61.2
77	8.4	0.0	38.2

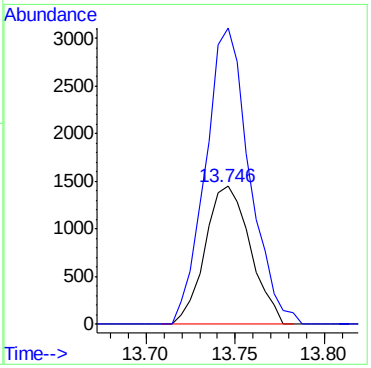




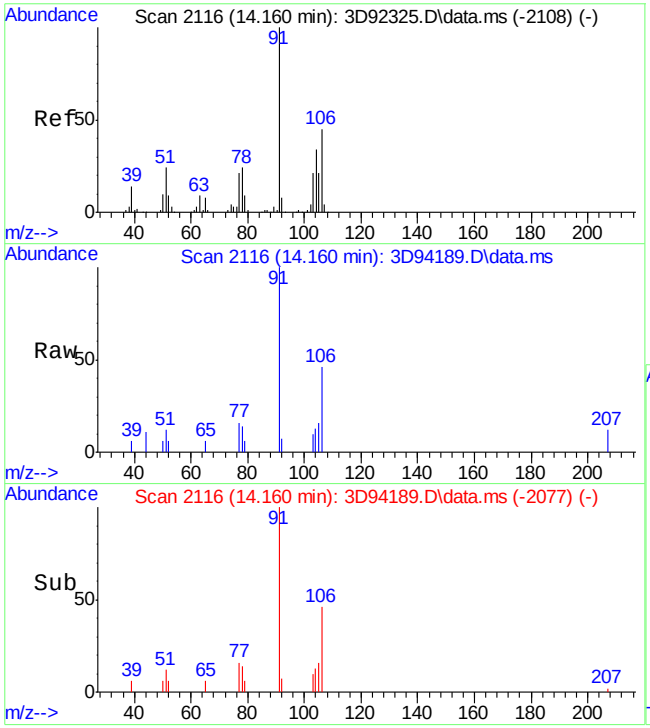
#99
m,p-xylene
Concen: 1.01 ug/L
RT: 13.746 min Scan# 2037
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:106 Resp: 2548

Ion	Ratio	Lower	Upper
106	100		
91	215.2	139.0	258.2



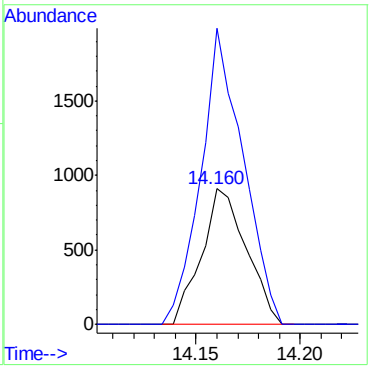
3D94189.D M3D4058.M Thu Dec 19 12:36:38 2013 3D Page 29

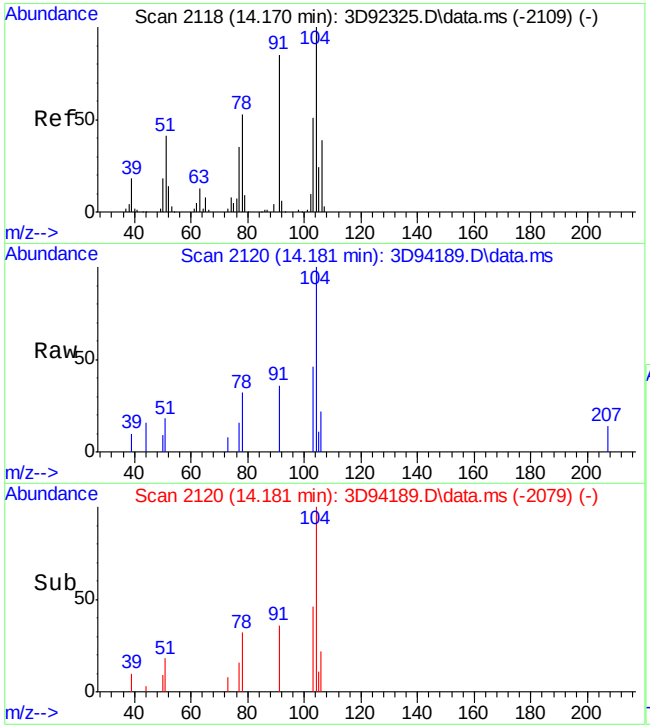


#100
o-xylene
Concen: 0.54 ug/L
RT: 14.160 min Scan# 2116
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:106 Resp: 1366

Ion	Ratio	Lower	Upper
106	100		
91	218.6	146.5	272.1

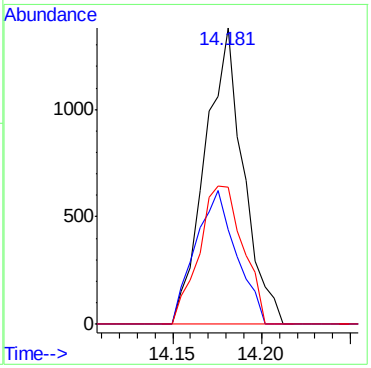


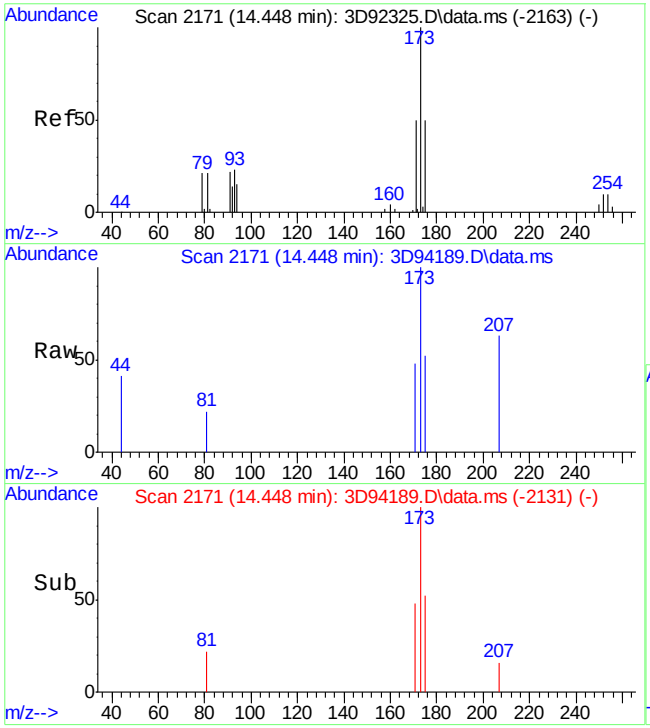


#101
styrene
Concen: 0.50 ug/L
RT: 14.181 min Scan# 2120
Delta R.T. 0.016 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:104 Resp: 2081

Ion	Ratio	Lower	Upper
104	100		
78	32.0	12.8	72.8
103	46.2	20.3	80.3

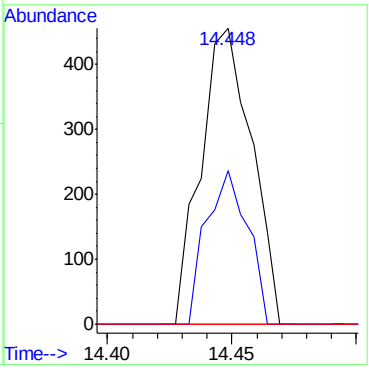


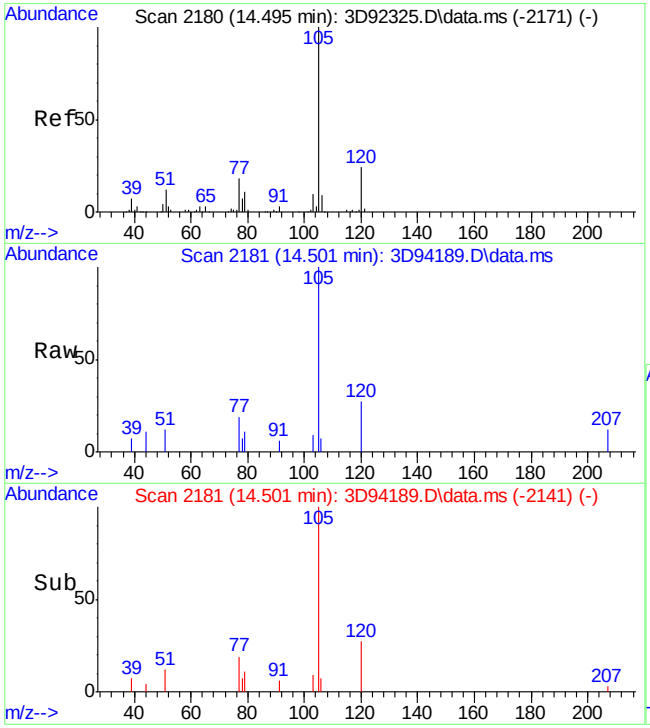


#103
bromoform
Concen: 0.52 ug/L
RT: 14.448 min Scan# 2171
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:173 Resp: 647

Ion	Ratio	Lower	Upper
173	100		
175	51.8	18.6	78.6
254	0.0	0.0	41.1

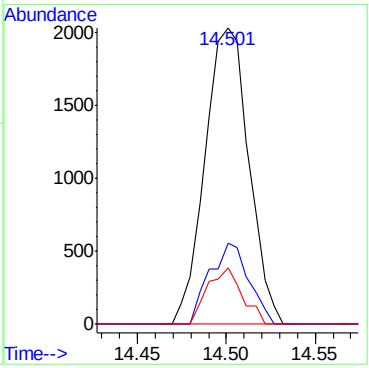


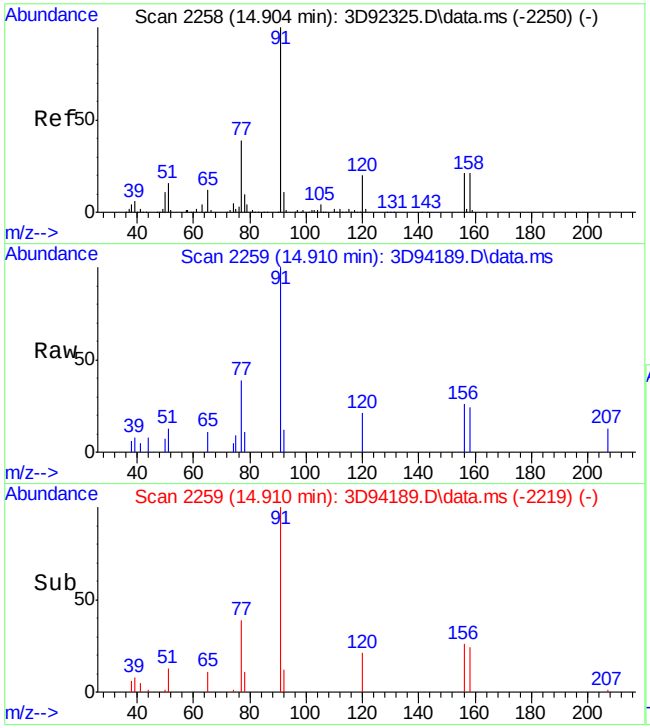


#105
isopropylbenzene
Concen: 0.53 ug/L
RT: 14.501 min Scan# 2181
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:105 Resp: 3481

Ion	Ratio	Lower	Upper
105	100		
120	27.3	0.0	55.8
77	19.1	0.0	44.4

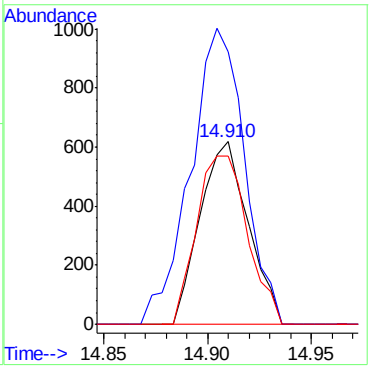


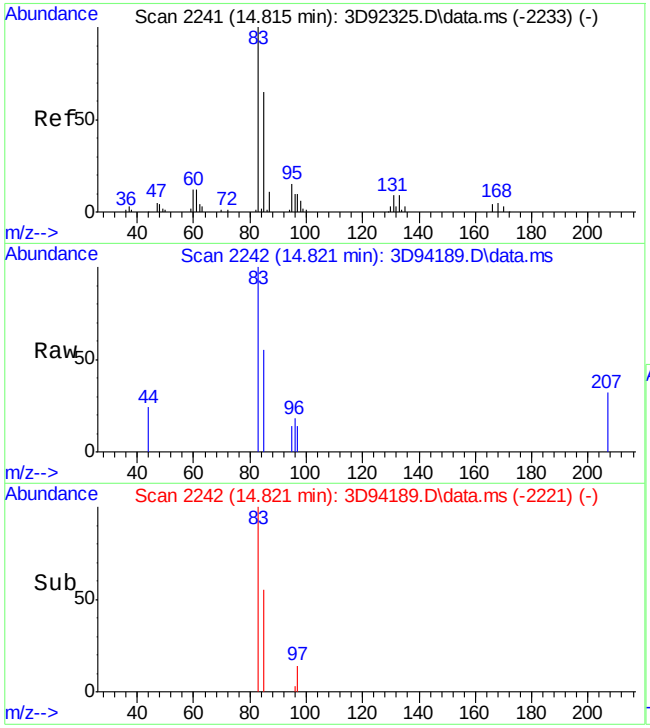


#107
bromobenzene
Concen: 0.52 ug/L
RT: 14.910 min Scan# 2259
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:156 Resp: 996

Ion	Ratio	Lower	Upper
156	100		
77	149.5	115.4	175.4
158	92.4	67.8	127.8

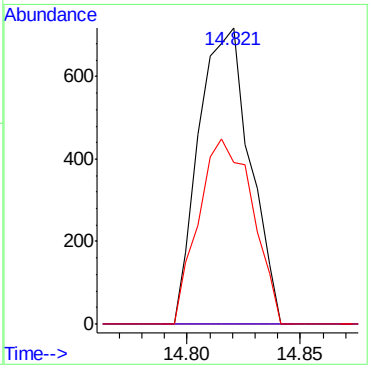


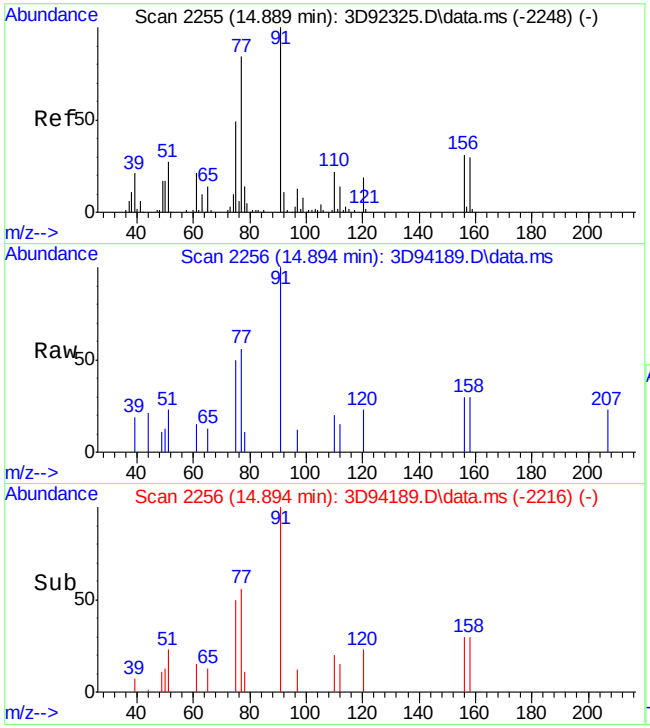


#109
1,1,2,2-tetrachloroethane
Concen: 0.58 ug/L
RT: 14.821 min Scan# 2242
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 83 Resp: 1129

Ion	Ratio	Lower	Upper
83	100		
131	0.0	0.0	40.2
85	54.6	33.4	93.4

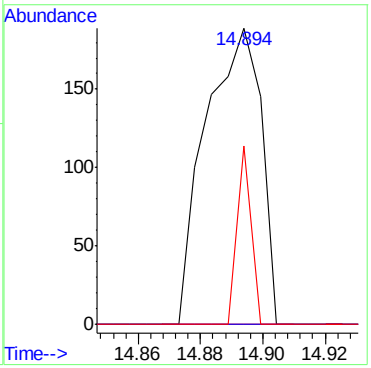


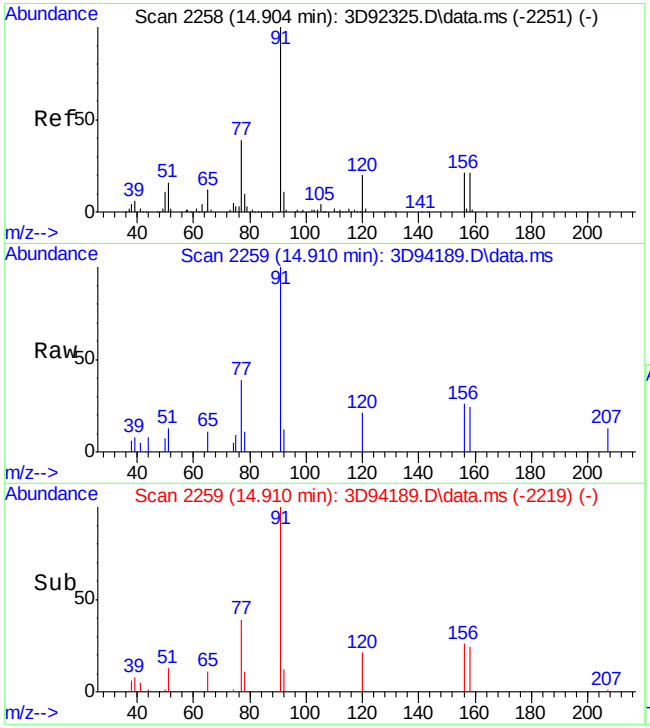


#111
1,2,3-trichloropropane
Concen: 0.54 ug/L
RT: 14.894 min Scan# 2256
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:110 Resp: 232

Ion	Ratio	Lower	Upper
110	100		
111	0.0	0.0	39.5
97	60.3	25.8	85.8

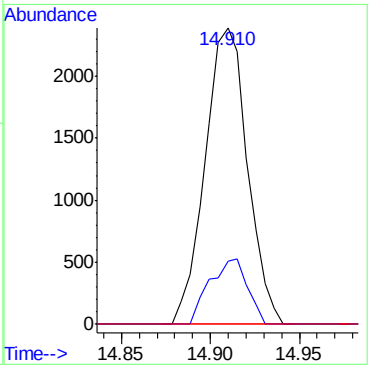


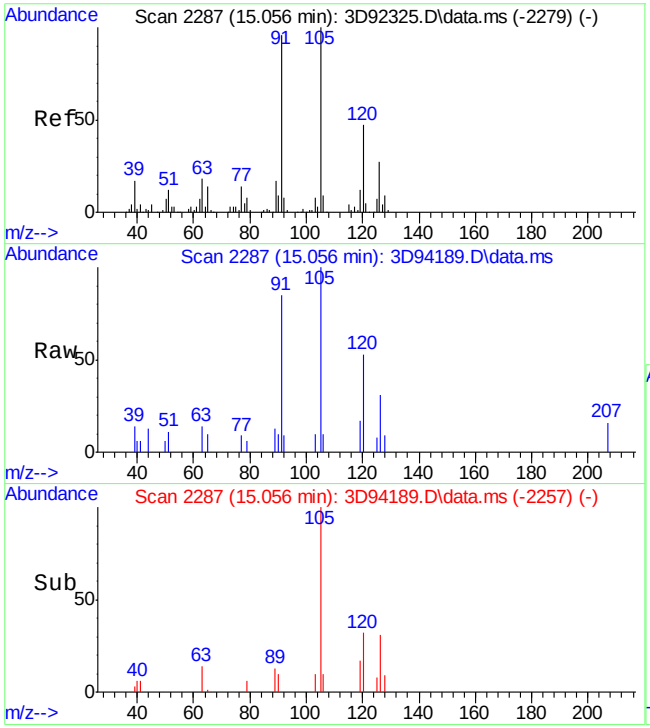


#112
n-propylbenzene
Concen: 0.53 ug/L
RT: 14.910 min Scan# 2259
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 91 Resp: 3954

Ion	Ratio	Lower	Upper
91	100		
120	21.4	0.0	52.2
105	0.0	0.0	33.7

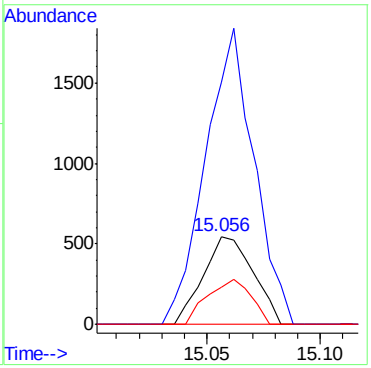


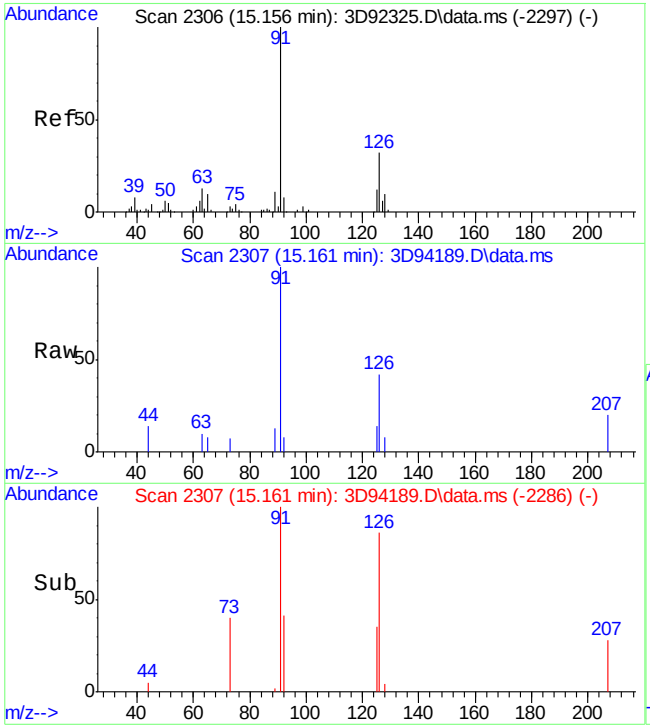


#114
2-chlorotoluene
Concen: 0.51 ug/L
RT: 15.056 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:126 Resp: 838

Ion	Ratio	Lower	Upper
126	100		
91	275.8	272.2	332.2
89	42.3	21.0	81.0

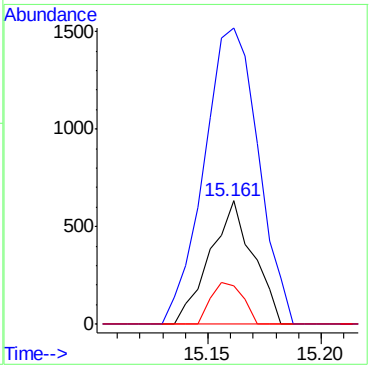




#115
4-chlorotoluene
Concen: 0.51 ug/L
RT: 15.161 min Scan# 2307
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:126 Resp: 839

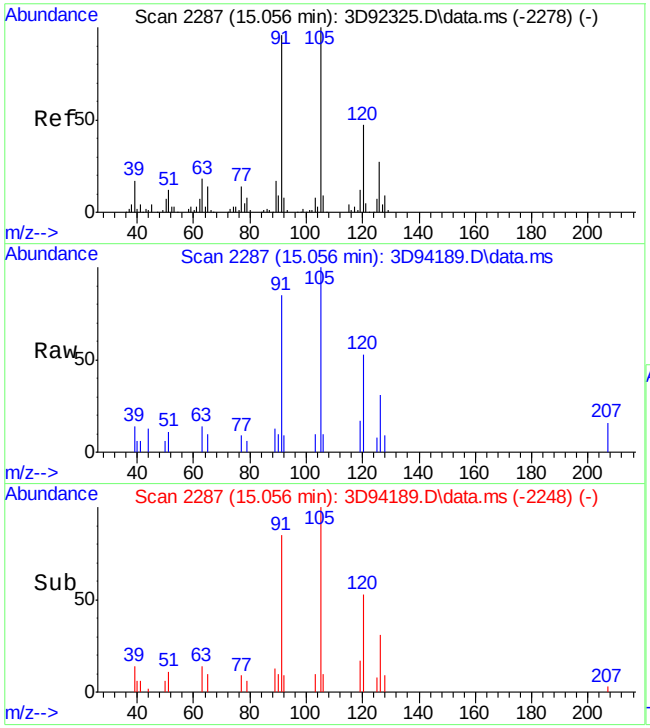
Ion	Ratio	Lower	Upper
126	100		
91	240.7	240.5	300.5
89	30.9	0.0	58.4



7.7.1

7

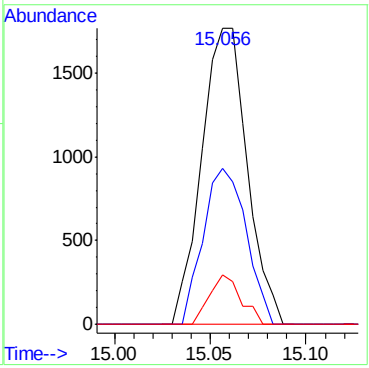
3D94189.D M3D4058.M Thu Dec 19 12:36:38 2013 3D Page 34

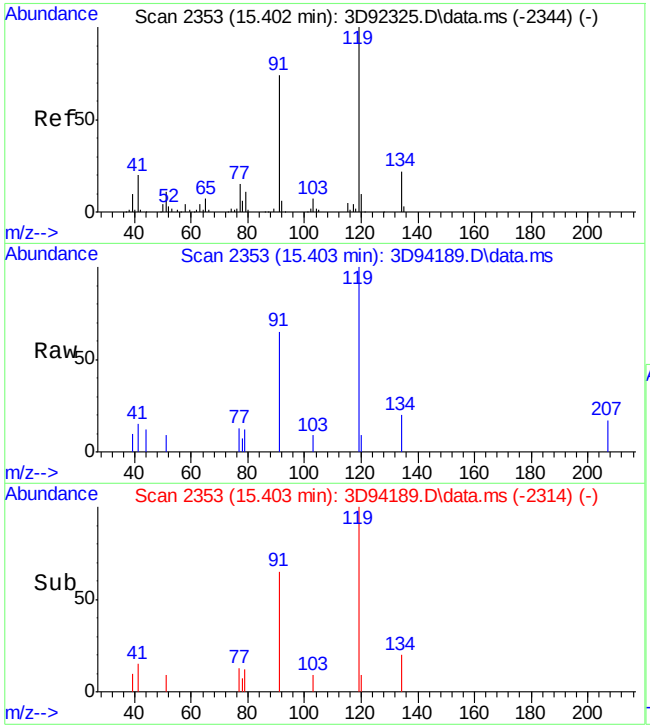


#116
1,3,5-trimethylbenzene
Concen: 0.52 ug/L
RT: 15.056 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:105 Resp: 2911

Ion	Ratio	Lower	Upper
105	100		
120	52.8	21.2	81.2
119	16.7	0.0	43.0

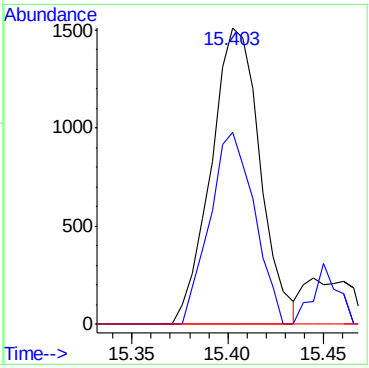


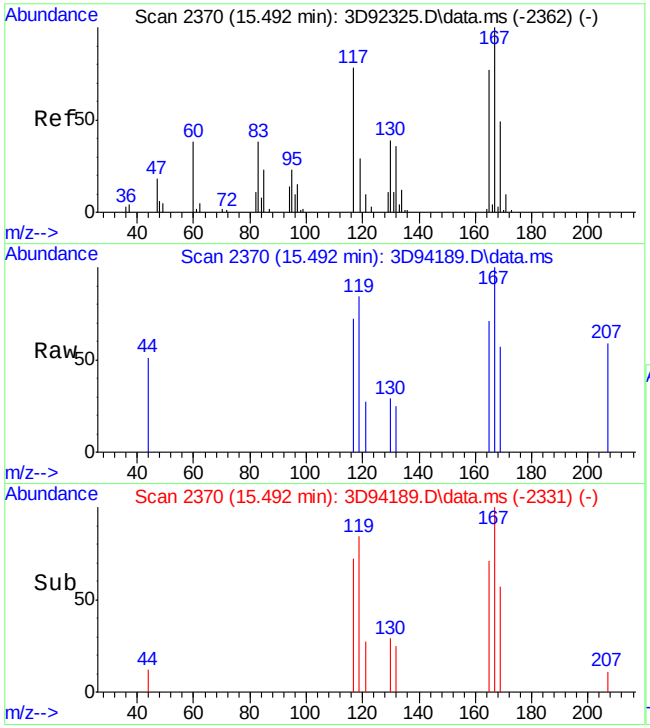


#117
tert-butylbenzene
Concen: 0.56 ug/L
RT: 15.403 min Scan# 2353
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:119 Resp: 2675

Ion	Ratio	Lower	Upper
119	100		
91	65.0	33.7	93.7
117	0.0	0.0	33.4

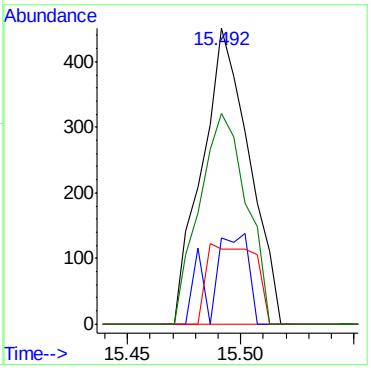


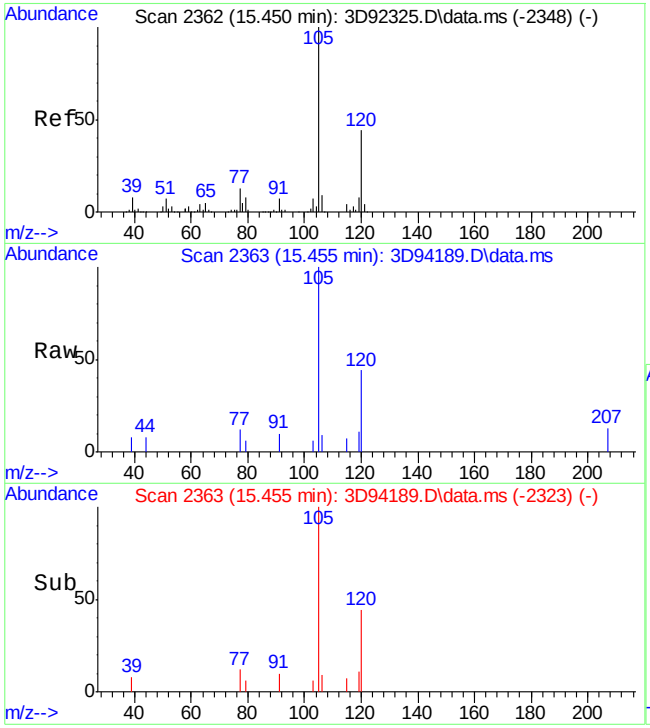


#118
pentachloroethane
Concen: 0.51 ug/L
RT: 15.492 min Scan# 2370
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:167 Resp: 652

Ion	Ratio	Lower	Upper
167	100		
130	29.0	1.5	61.5
132	25.5	0.0	58.9
165	71.2	50.0	110.0

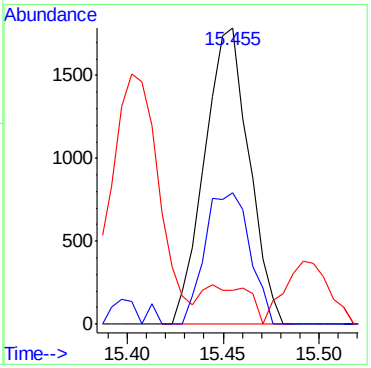




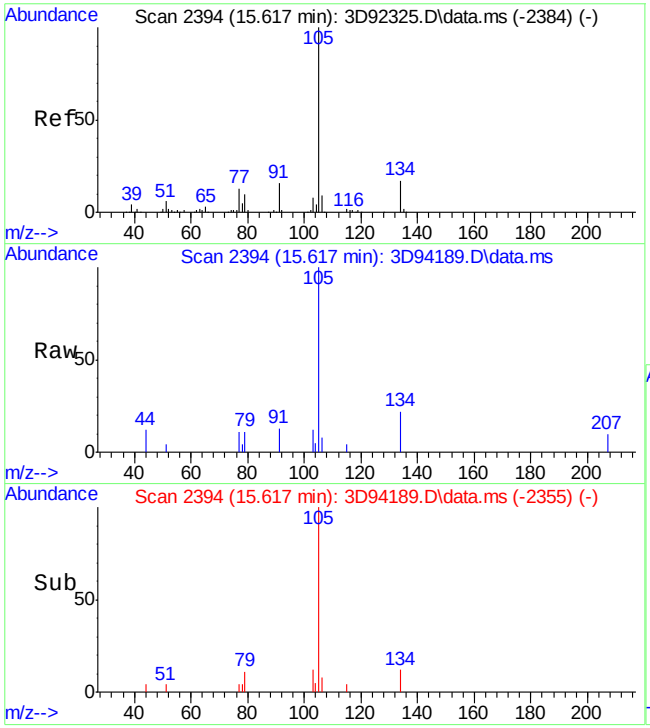
#119
1,2,4-trimethylbenzene
Concen: 0.52 ug/L
RT: 15.455 min Scan# 2363
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:105 Resp: 2880

Ion	Ratio	Lower	Upper
105	100		
120	44.4	17.4	77.4
119	0.0	0.0	42.0



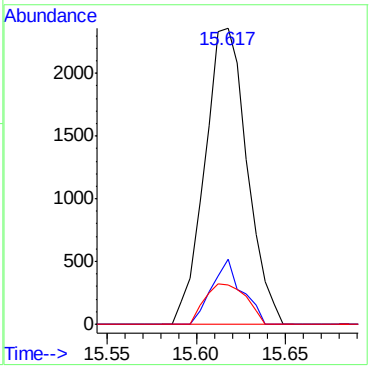
3D94189.D M3D4058.M Thu Dec 19 12:36:38 2013 3D Page 36

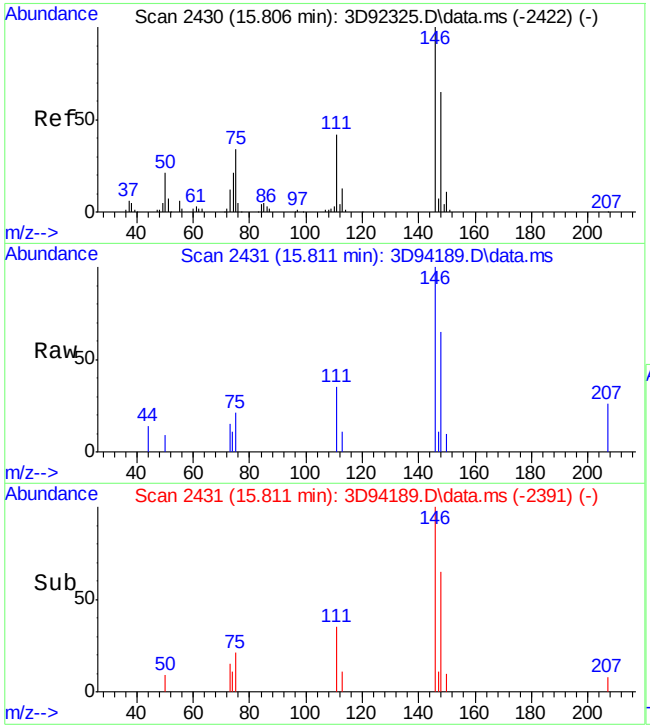


#120
sec-butylbenzene
Concen: 0.53 ug/L
RT: 15.617 min Scan# 2394
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:105 Resp: 3901

Ion	Ratio	Lower	Upper
105	100		
134	22.1	0.0	48.2
91	13.4	0.0	44.6

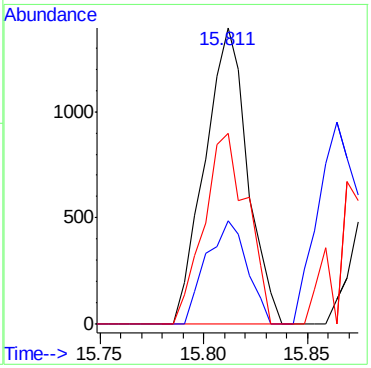




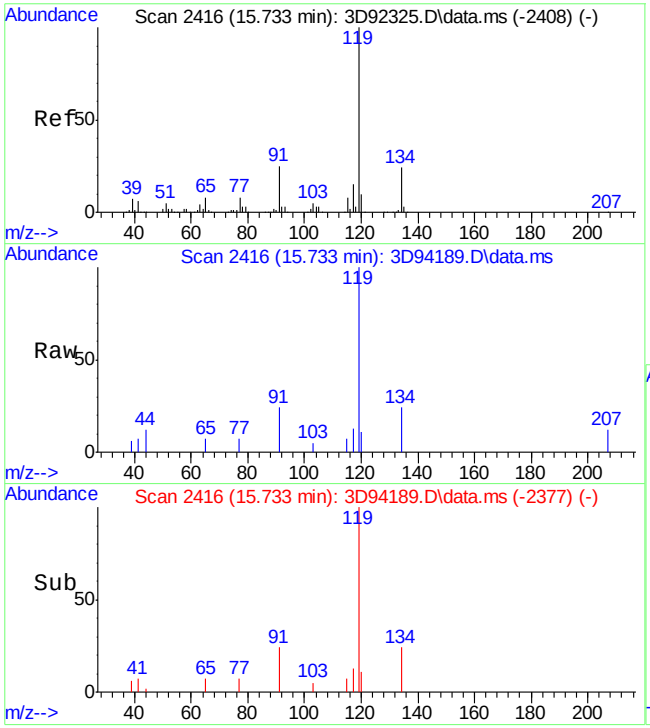
#121
1,3-dichlorobenzene
Concen: 0.55 ug/L
RT: 15.811 min Scan# 2431
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:146 Resp: 1994

Ion	Ratio	Lower	Upper
146	100		
111	34.7	5.6	65.6
148	64.6	34.0	94.0



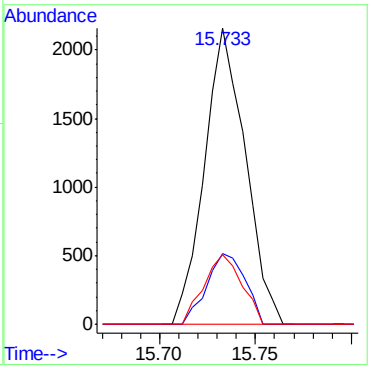
3D94189.D M3D4058.M Thu Dec 19 12:36:38 2013 3D Page 37

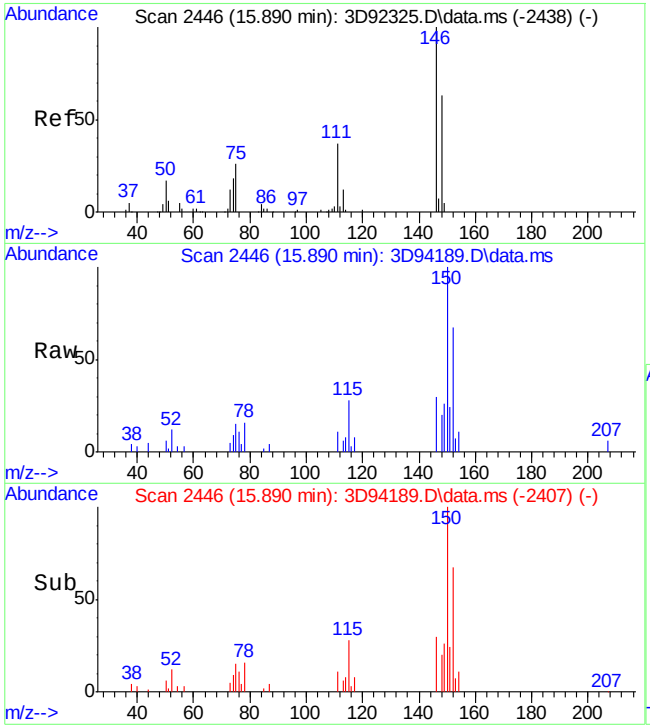


#122
p-isopropyltoluene
Concen: 0.52 ug/L
RT: 15.733 min Scan# 2416
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:119 Resp: 3187

Ion	Ratio	Lower	Upper
119	100		
134	23.9	0.0	55.4
91	23.7	0.0	51.1

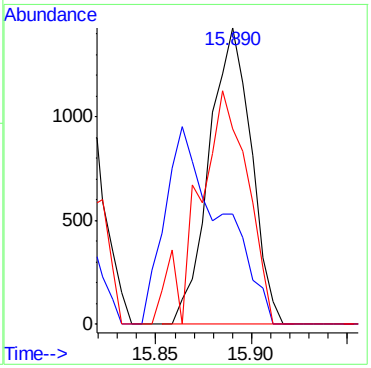




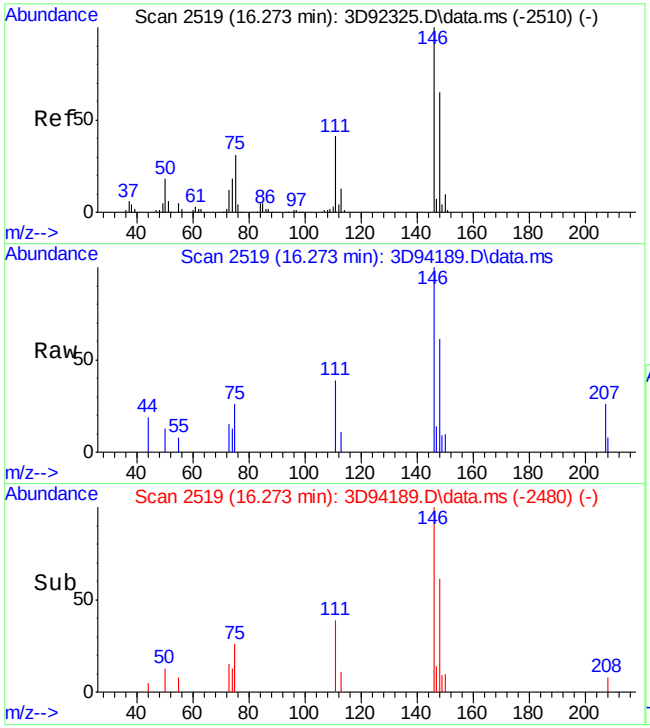
#123
1,4-dichlorobenzene
Concen: 0.58 ug/L
RT: 15.890 min Scan# 2446
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:146 Resp: 2165

Ion	Ratio	Lower	Upper
146	100		
111	37.0	4.2	64.2
148	65.9	34.3	94.3



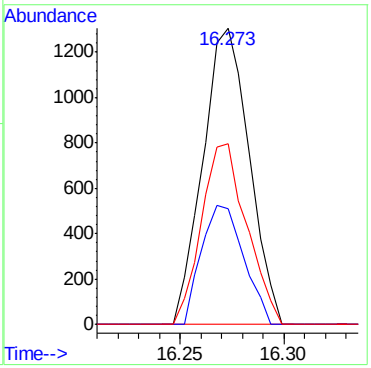
3D94189.D M3D4058.M Thu Dec 19 12:36:39 2013 3D Page 38

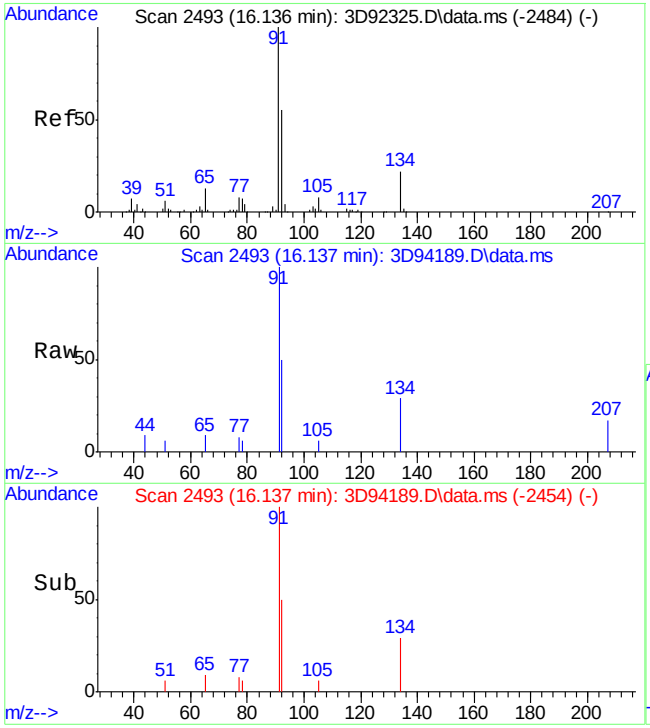


#124
1,2-dichlorobenzene
Concen: 0.55 ug/L
RT: 16.273 min Scan# 2519
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:146 Resp: 2027

Ion	Ratio	Lower	Upper
146	100		
111	38.9	6.4	66.4
148	60.9	34.3	94.3

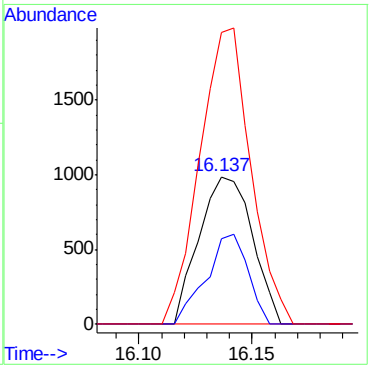




#126
n-butylbenzene
Concen: 0.52 ug/L
RT: 16.137 min Scan# 2493
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion: 92 Resp: 1615

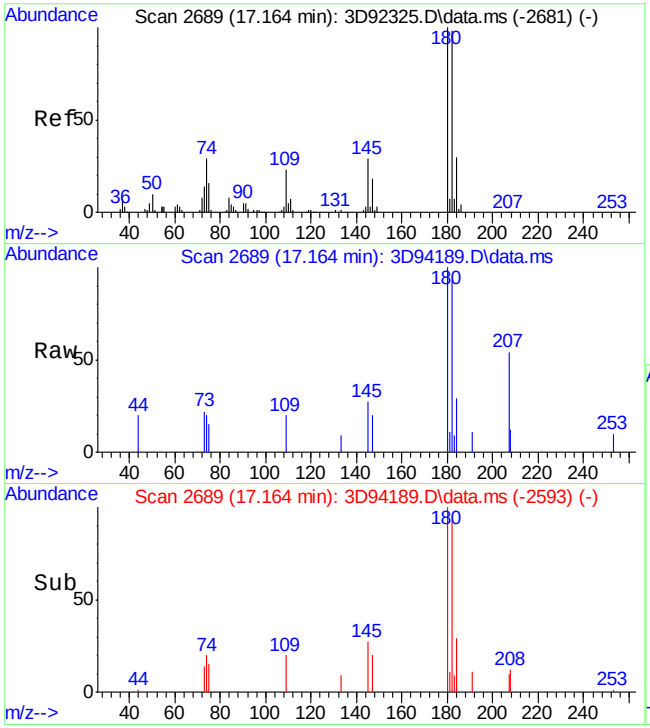
Ion	Ratio	Lower	Upper
92	100		
134	57.9	15.5	75.5
91	198.4	150.4	210.4



7.7.1

7

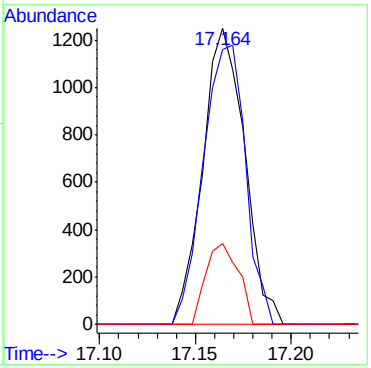
3D94189.D M3D4058.M Thu Dec 19 12:36:39 2013 3D Page 39

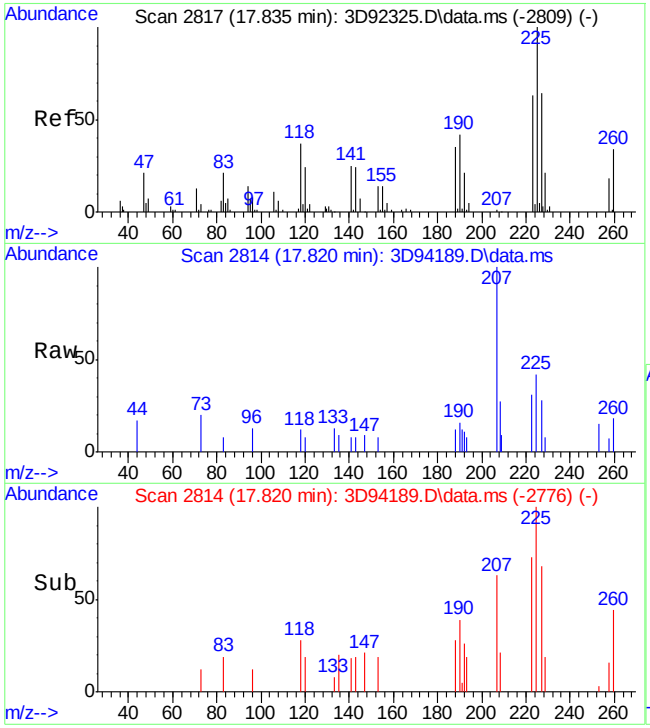


#129
1,3,5-trichlorobenzene
Concen: 0.56 ug/L
RT: 17.164 min Scan# 2689
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:180 Resp: 1892

Ion	Ratio	Lower	Upper
180	100		
182	94.9	65.4	125.4
145	21.2	0.0	55.6

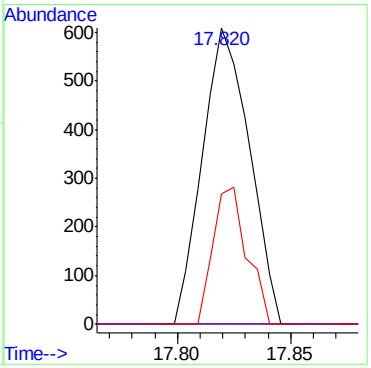


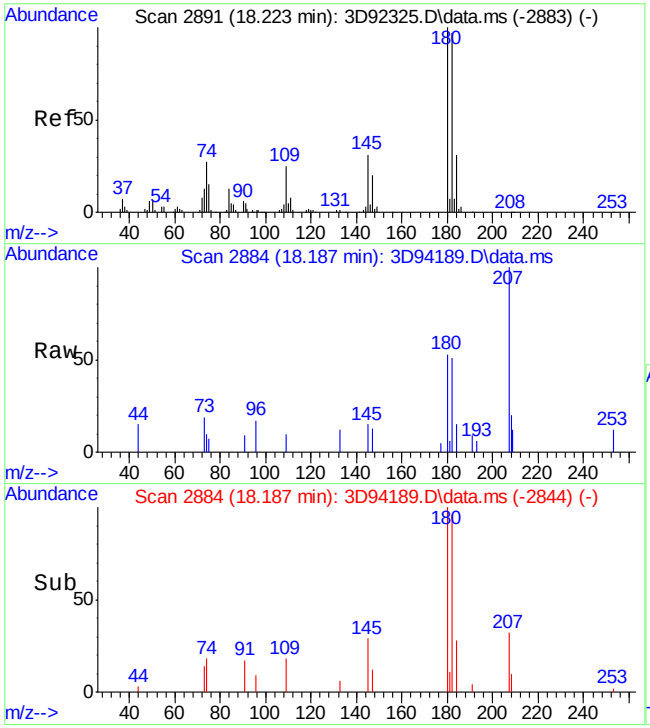


#131
hexachlorobutadiene
Concen: 0.53 ug/L
RT: 17.820 min Scan# 2814
Delta R.T. 0.000 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:225 Resp: 879

Ion	Ratio	Lower	Upper
225	100		
259	0.0	0.0	31.1
260	44.2	5.9	65.9

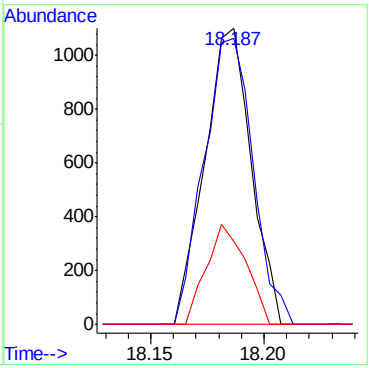


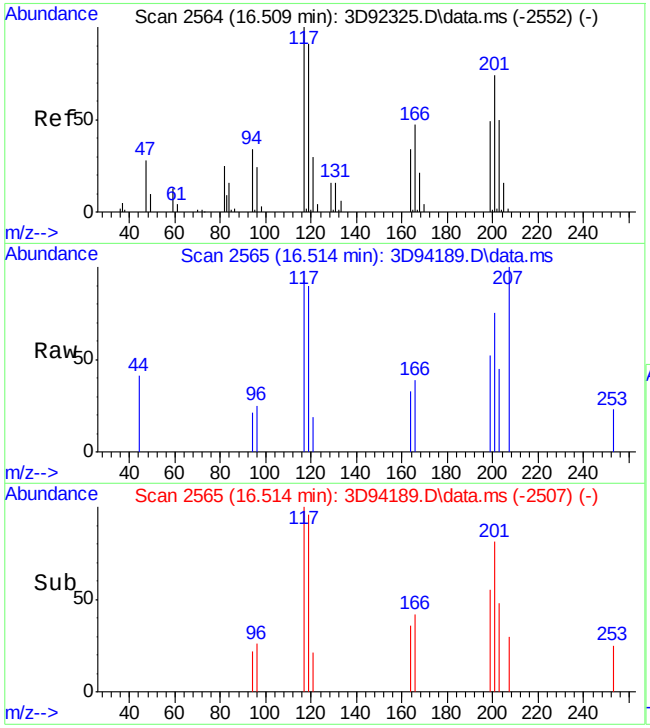


#133
1,2,3-trichlorobenzene
Concen: 0.55 ug/L
RT: 18.187 min Scan# 2884
Delta R.T. 0.011 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:180 Resp: 1566

Ion	Ratio	Lower	Upper
180	100		
182	96.5	67.0	127.0
184	28.2	0.3	60.3

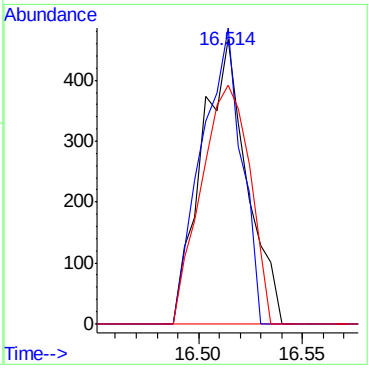




#134
hexachloroethane
Concen: 0.55 ug/L
RT: 16.514 min Scan# 2565
Delta R.T. 0.005 min
Lab File: 3D94189.D
Acq: 18 Dec 2013 1:24 pm

Tgt Ion:119 Resp: 708

Ion	Ratio	Lower	Upper
119	100		
117	91.7	72.2	132.2
201	90.3	70.2	130.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94190.D
Acq On : 18 Dec 2013 1:51 pm
Operator : katteric
Sample : ic4058-1
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 19 12:29:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.250	65	68953	500.00	ug/L		0.00
4) pentafluorobenzene	9.483	168	184106	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.406	114	250792	50.00	ug/L		0.01
88) chlorobenzene-d5	13.557	117	202529	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.864	152	119784	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.546	113	1599	1.09	ug/L		0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 2.18%#				
51) 1,2-dichloroethane-d4 (s)	9.966	65	1650	1.10	ug/L		0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 2.20%#				
80) toluene-d8 (s)	0.000	98	0d	0.00	ug/L		
Spiked Amount 50.000	Range 80 - 120		Recovery = 0.00%#				
106) 4-bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L		
Spiked Amount 50.000	Range 76 - 116		Recovery = 0.00%#				
Target Compounds							Qvalue
8) chlorodifluoromethane	3.878	51	1182	0.84	ug/L		66
9) dichlorodifluoromethane	3.868	85	1606	0.93	ug/L		88
10) chloromethane	4.204	50	2260	1.05	ug/L		92
11) vinyl chloride	4.455	62	2035	1.00	ug/L		91
12) bromomethane	5.111	94	1374	0.98	ug/L		80
13) chloroethane	5.289	64	972	1.02	ug/L		72
14) 1,3-butadiene	4.513	54	1021	0.93	ug/L		94
15) vinyl bromide	5.635	106	1012	0.84	ug/L	#	92
16) trichlorofluoromethane	5.724	101	2175	0.99	ug/L		96
18) ethyl ether	6.154	74	702	0.92	ug/L		97
21) acrolein	6.416	56	323539	1053.13	ug/L		99
22) 1,1-dichloroethene	6.573	61	2194	1.03	ug/L		96
24) allyl chloride	7.113	76	839	1.00	ug/L		91
25) acetonitrile	7.108	40	1414	10.40	ug/L	#	54
27) iodomethane	6.862	142	3105	1.06	ug/L		97
28) iso-butyl alcohol	9.777	41	438	9.06	ug/L	#	69
29) carbon disulfide	6.982	76	5752	1.09	ug/L		91
30) methylene chloride	7.313	84	1671	1.03	ug/L		94
32) methyl tert butyl ether	7.606	73	4835	1.07	ug/L		90
33) trans-1,2-dichloroethene	7.669	61	2325	1.09	ug/L		90
34) di-isopropyl ether	8.199	45	4718	0.95	ug/L		80
35) ethyl tert-butyl ether	8.660	59	4084	0.89	ug/L		95
37) 1,1-dichloroethane	8.246	63	2704	1.01	ug/L		98
38) chloroprene	8.340	53	1666	0.86	ug/L		98
39) acrylonitrile	7.653	53	2687	4.90	ug/L		82
42) 2,2-dichloropropane	8.975	77	2501	1.15	ug/L		90
43) cis-1,2-dichloroethene	8.980	61	2634	1.01	ug/L		94
44) propionitrile	9.064	54	1919	9.25	ug/L		94
45) methyl acrylate	9.059	55	1216	0.80	ug/L		66
46) bromochloromethane	9.294	128	801	0.95	ug/L		93
47) tetrahydrofuran	9.326	42	462	0.94	ug/L	#	38
48) chloroform	9.342	83	2748	1.06	ug/L		93
49) Tert-Butyl Formate	9.363	59	1240	0.90	ug/L	#	83

M3D4058.M Thu Dec 19 12:36:40 2013 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94190.D
Acq On : 18 Dec 2013 1:51 pm
Operator : katteric
Sample : ic4058-1
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 19 12:29:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) freon 113	6.516	151	765	0.75	ug/L		73
53) methacrylonitrile	9.242	41	865	0.97	ug/L		79
54) 1,1,1-trichloroethane	9.588	97	2246	1.00	ug/L		92
56) 2,2,4-Trimethylpentane	10.013	57	4279	0.81	ug/L		91
57) tert-amyl methyl ether	10.055	73	4285	0.93	ug/L		92
59) epichlorohydrin	11.675	57	552	4.15	ug/L		56
60) n-butyl alcohol	10.542	56	1635	44.10	ug/L		97
61) cyclohexane	9.662	84	2258	1.04	ug/L		98
62) carbon tetrachloride	9.793	117	2012	1.02	ug/L		95
63) 1,1-dichloropropene	9.766	75	2007	1.03	ug/L		91
65) benzene	10.034	78	6364	1.05	ug/L		97
67) isopropyl acetate	9.955	43	2368	0.88	ug/L		89
68) 1,2-dichloroethane	10.060	62	1839	1.03	ug/L		85
69) trichloroethene	10.747	95	1591	1.07	ug/L		92
70) ethyl acrylate	10.757	55	1485	0.88	ug/L	#	78
73) 2-chloroethyl vinyl ether	11.549	63	4336	4.57	ug/L		92
74) methyl methacrylate	11.019	41	2241	1.04	ug/L		81
75) 1,2-dichloropropane	11.019	63	1441	0.97	ug/L		94
76) methylcyclohexane	10.951	83	1893	0.85	ug/L		99
77) dibromomethane	11.187	93	940	1.01	ug/L		91
78) bromodichloromethane	11.308	83	1825	0.96	ug/L		87
79) cis-1,3-dichloropropene	11.764	75	2399	1.01	ug/L		98
82) toluene	12.121	92	3608	1.02	ug/L		99
83) 3-methyl-1-butanol	11.879	70	599	17.10	ug/L		90
84) trans-1,3-dichloropropene	12.330	75	2058	0.98	ug/L		93
85) ethyl methacrylate	12.309	69	1544	0.92	ug/L		96
86) 1,1,2-trichloroethane	12.545	83	1134	1.05	ug/L		84
89) tetrachloroethene	12.702	166	1570	0.95	ug/L		91
90) 1,3-dichloropropane	12.723	76	2035	1.04	ug/L		96
92) 3,3-Dimethyl-1-Butanol	12.876	57	1467	10.96	ug/L	#	95
93) dibromochloromethane	12.986	129	1575	1.00	ug/L		99
94) 1,2-dibromoethane	13.138	107	1381	1.04	ug/L		86
96) chlorobenzene	13.589	112	3955	1.04	ug/L		89
97) 1,1,1,2-tetrachloroethane	13.646	131	1503	1.00	ug/L		97
98) ethylbenzene	13.641	91	6407	1.02	ug/L		98
99) m,p-xylene	13.746	106	4937	2.03	ug/L		95
100) o-xylene	14.165	106	2433	0.99	ug/L		93
101) styrene	14.181	104	4002	0.99	ug/L		90
103) bromoform	14.443	173	1154	0.97	ug/L		92
105) isopropylbenzene	14.501	105	6352	1.00	ug/L		99
107) bromobenzene	14.905	156	1921	1.04	ug/L		89
108) cyclohexanone	14.690	55	776	10.92	ug/L		82
109) 1,1,2,2-tetrachloroethane	14.815	83	2093	1.12	ug/L		98
110) trans-1,4-dichloro-2-b...	14.852	53	406	0.98	ug/L	#	77
111) 1,2,3-trichloropropane	14.894	110	364	0.88	ug/L	#	50
112) n-propylbenzene	14.910	91	7214	1.00	ug/L		99
114) 2-chlorotoluene	15.057	126	1662	1.05	ug/L	#	82
115) 4-chlorotoluene	15.156	126	1679	1.05	ug/L		99
116) 1,3,5-trimethylbenzene	15.057	105	5556	1.04	ug/L		98
117) tert-butylbenzene	15.403	119	4637	1.00	ug/L		97

M3D4058.M Thu Dec 19 12:36:40 2013 3D Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94190.D
Acq On : 18 Dec 2013 1:51 pm
Operator : katteric
Sample : ic4058-1
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 19 12:29:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

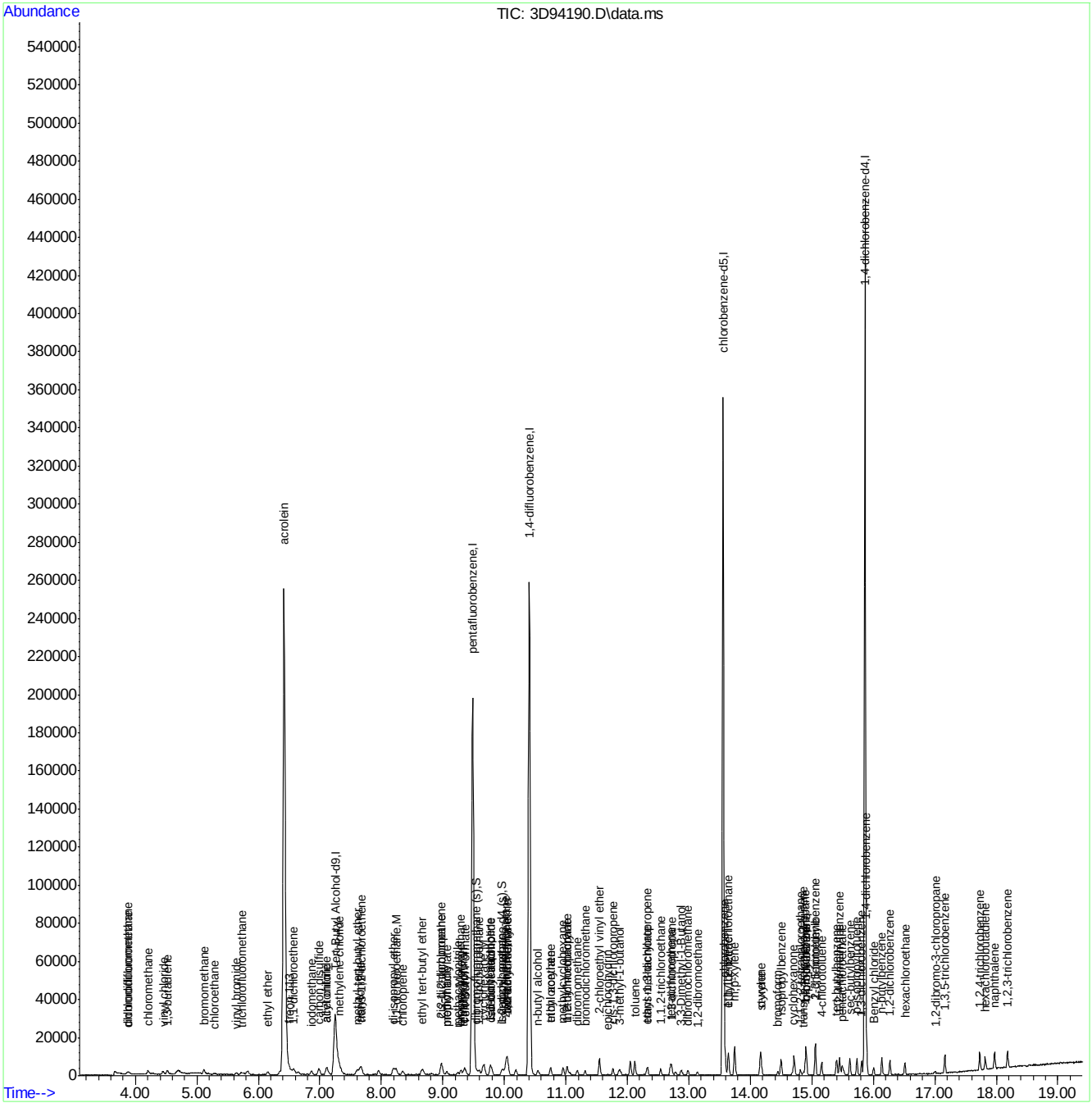
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) pentachloroethane	15.492	167	1294	1.04	ug/L	85
119) 1,2,4-trimethylbenzene	15.450	105	5414	1.02	ug/L	92
120) sec-butylbenzene	15.612	105	7096	1.00	ug/L	93
121) 1,3-dichlorobenzene	15.812	146	3552	1.02	ug/L	99
122) p-isopropyltoluene	15.733	119	5966	1.01	ug/L	93
123) 1,4-dichlorobenzene	15.890	146	3797	1.05	ug/L	98
124) 1,2-dichlorobenzene	16.273	146	3846	1.08	ug/L	97
126) n-butylbenzene	16.137	92	2919	0.97	ug/L	86
128) 1,2-dibromo-3-chloropr...	17.002	157	424	0.98	ug/L	91
129) 1,3,5-trichlorobenzene	17.164	180	3492	1.07	ug/L	98
130) 1,2,4-trichlorobenzene	17.731	180	3201	1.07	ug/L	97
131) hexachlorobutadiene	17.820	225	1687	1.06	ug/L	89
132) naphthalene	17.972	128	7064	1.14	ug/L	98
133) 1,2,3-trichlorobenzene	18.187	180	3121	1.13	ug/L	91
134) hexachloroethane	16.514	119	1215	0.97	ug/L	100
135) Benzyl chloride	16.006	91	3297	0.98	ug/L	97

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

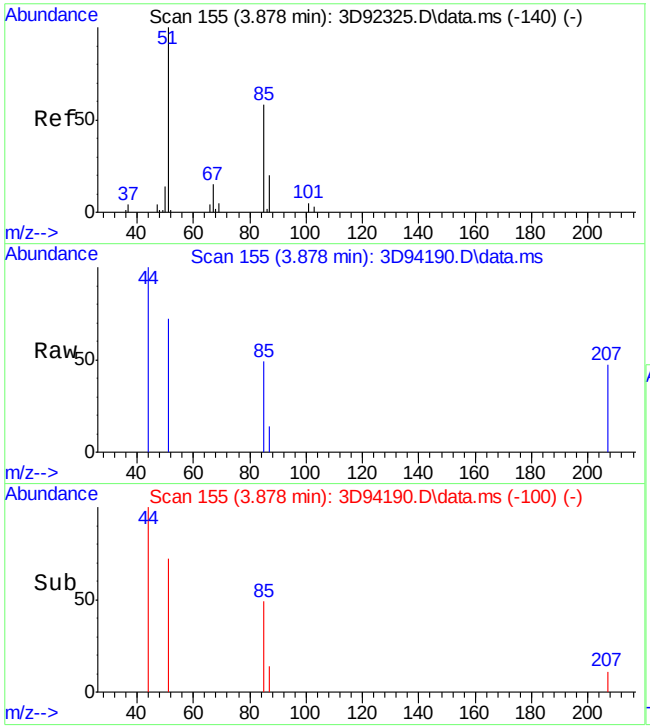
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94190.D
Acq On : 18 Dec 2013 1:51 pm
Operator : katteric
Sample : ic4058-1
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 19 12:29:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration



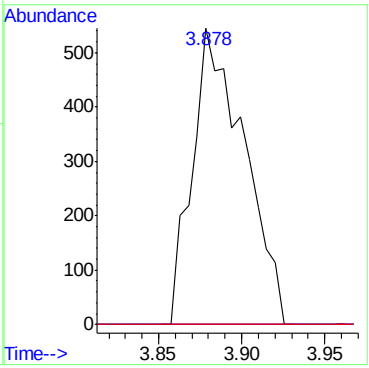
M3D4058.M Thu Dec 19 12:36:40 2013 3D Page: 4

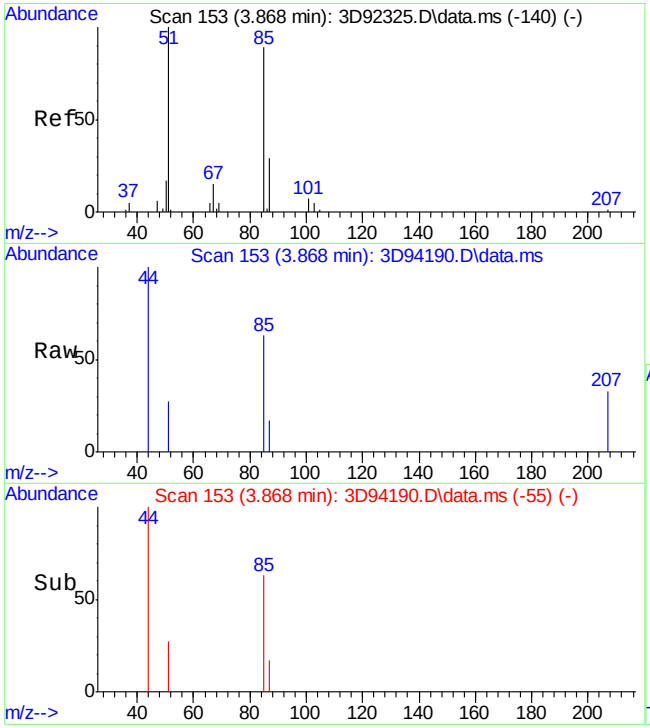


#8
chlorodifluoromethane
Concen: 0.84 ug/L
RT: 3.878 min Scan# 155
Delta R.T. -0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 51 Resp: 1182

Ion	Ratio	Lower	Upper
51	100		
67	0.0	0.0	44.9
50	0.0	0.0	42.2

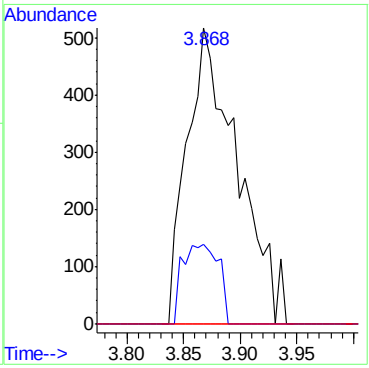


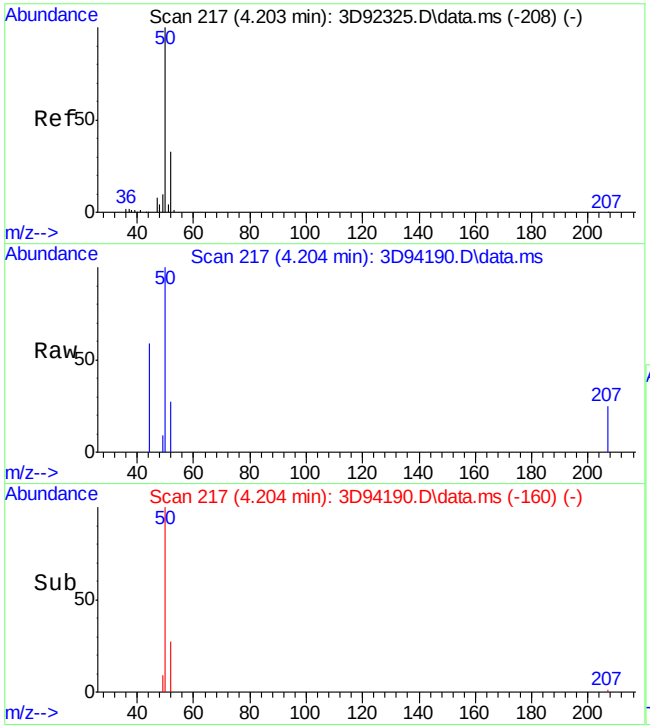


#9
dichlorodifluoromethane
Concen: 0.93 ug/L
RT: 3.868 min Scan# 153
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 85 Resp: 1606

Ion	Ratio	Lower	Upper
85	100		
87	26.7	1.5	61.5
101	0.0	0.0	39.0

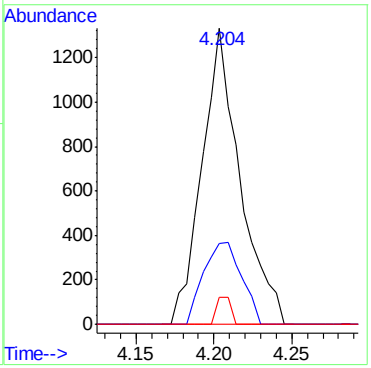


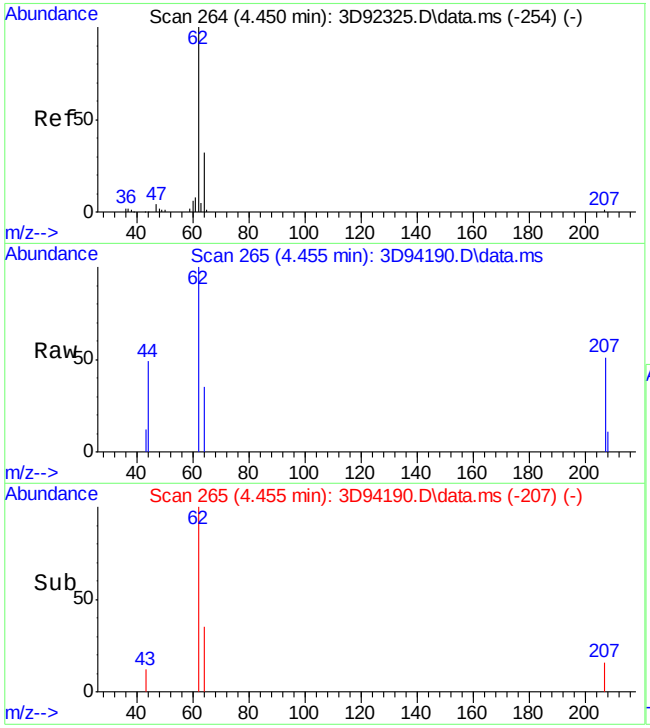


#10
chloromethane
Concen: 1.05 ug/L
RT: 4.204 min Scan# 217
Delta R.T. 0.000 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 50 Resp: 2260

Ion	Ratio	Lower	Upper
50	100		
52	27.5	2.9	62.9
49	9.2	0.0	40.5

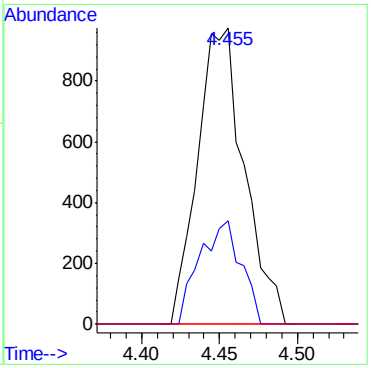


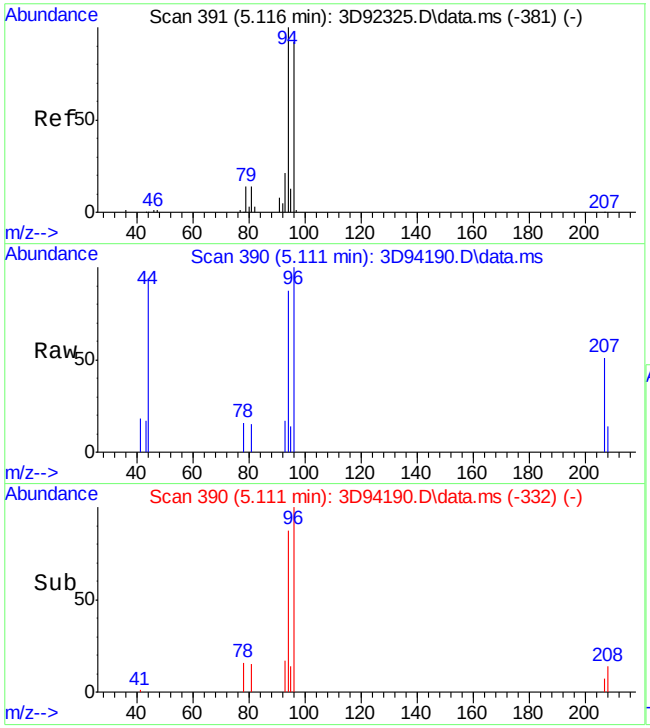


#11
vinyl chloride
Concen: 1.00 ug/L
RT: 4.455 min Scan# 265
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 62 Resp: 2035

Ion	Ratio	Lower	Upper
62	100		
64	35.0	2.3	62.3
61	0.0	0.0	38.3

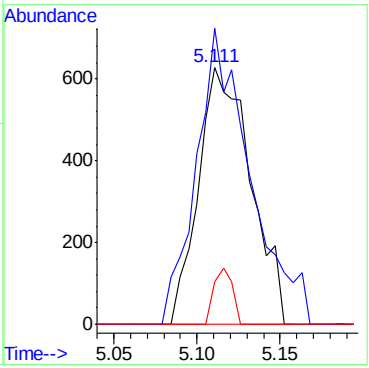


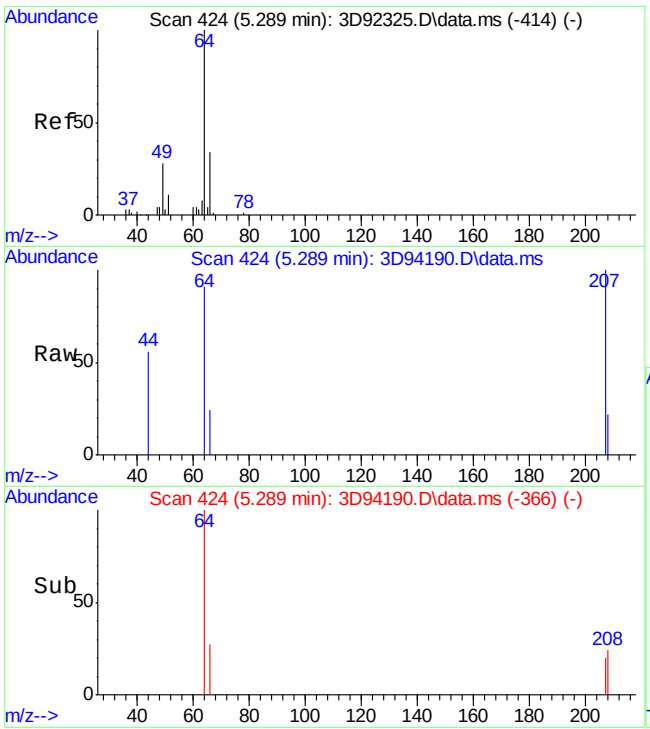


#12
bromomethane
Concen: 0.98 ug/L
RT: 5.111 min Scan# 390
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 94 Resp: 1374

Ion	Ratio	Lower	Upper
94	100		
96	115.1	63.5	123.5
95	16.4	0.0	45.2

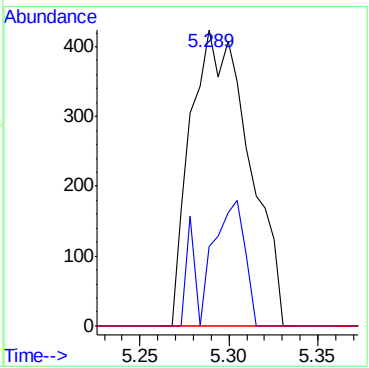


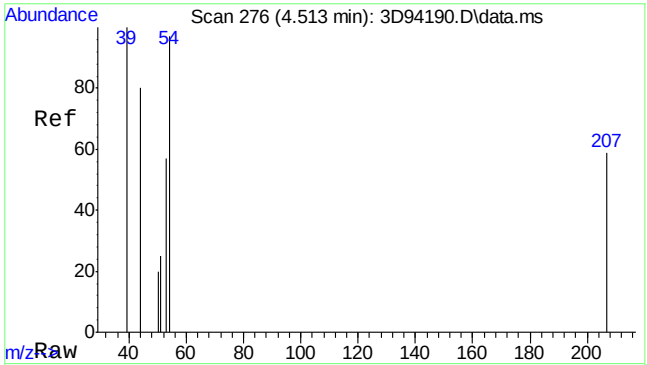


#13
chloroethane
Concen: 1.02 ug/L
RT: 5.289 min Scan# 424
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 64 Resp: 972

Ion	Ratio	Lower	Upper
64	100		
66	26.9	1.6	61.6
49	0.0	0.0	56.3

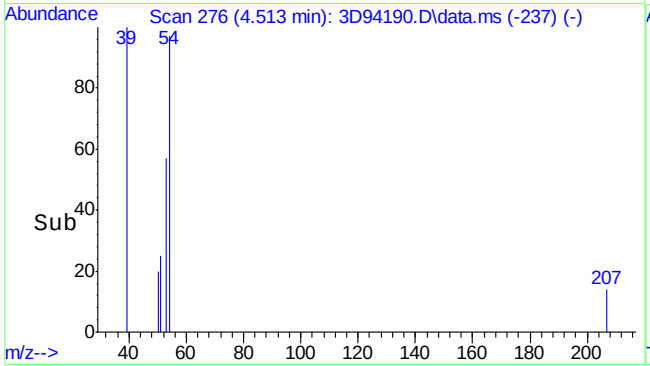


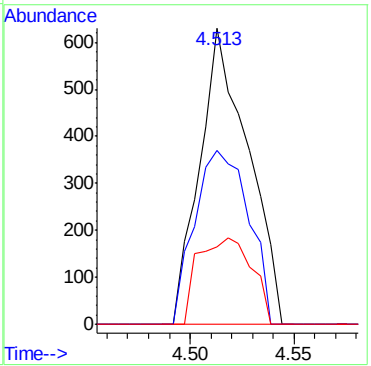


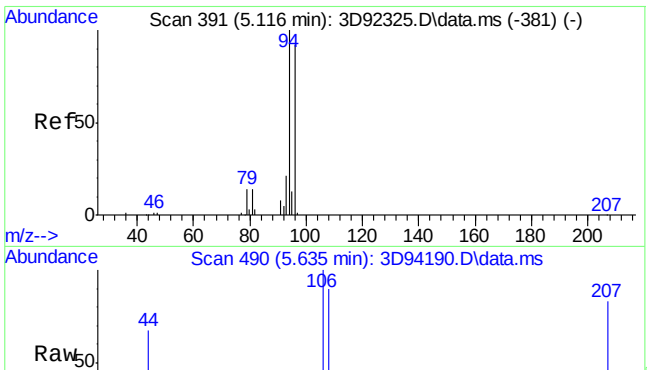
#14
1,3-butadiene
Concen: 0.93 ug/L
RT: 4.513 min Scan# 276
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 54 Resp: 1021

Ion	Ratio	Lower	Upper
54	100		
53	65.5	56.5	84.7
51	32.4	23.2	34.8



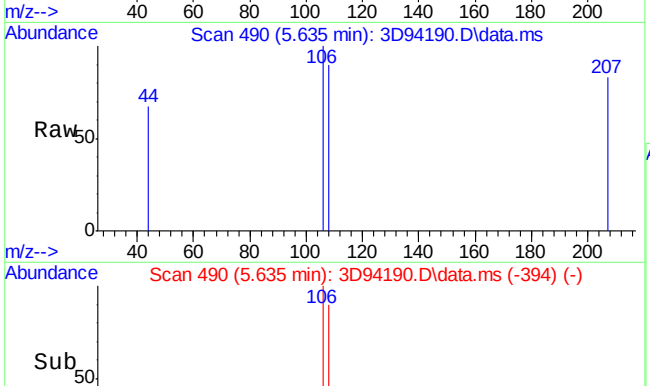


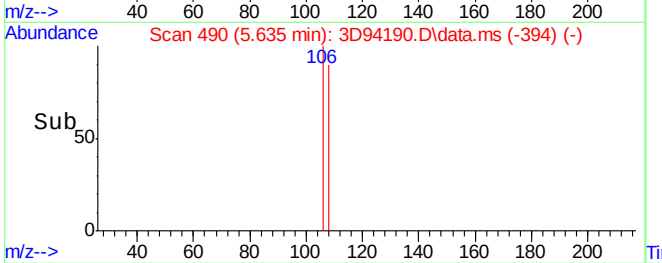


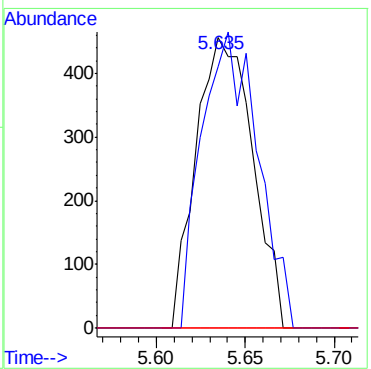
#15
vinyl bromide
Concen: 0.84 ug/L
RT: 5.635 min Scan# 490
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

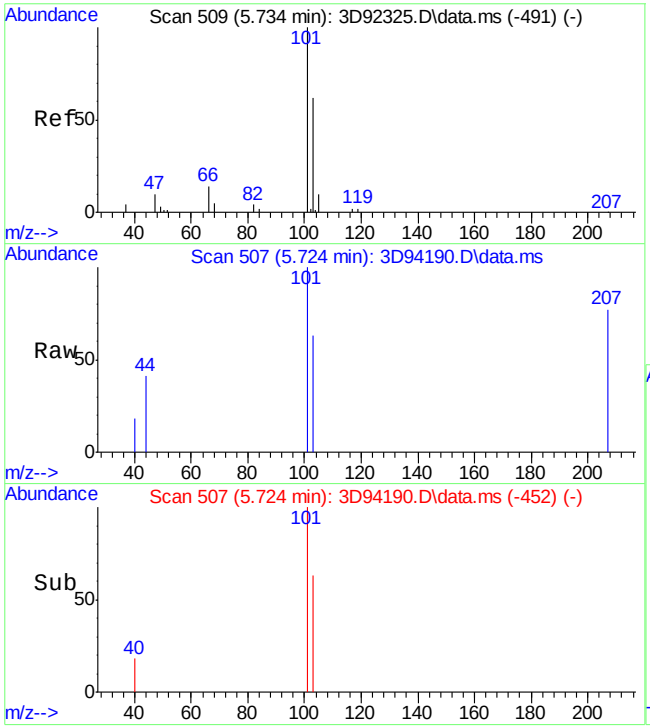
Tgt Ion:106 Resp: 1012

Ion	Ratio	Lower	Upper
106	100		
108	100.5	64.9	124.9
81	0.0	0.0	41.0





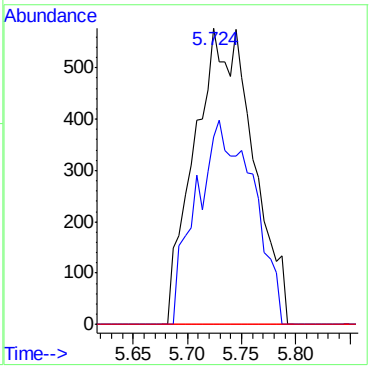


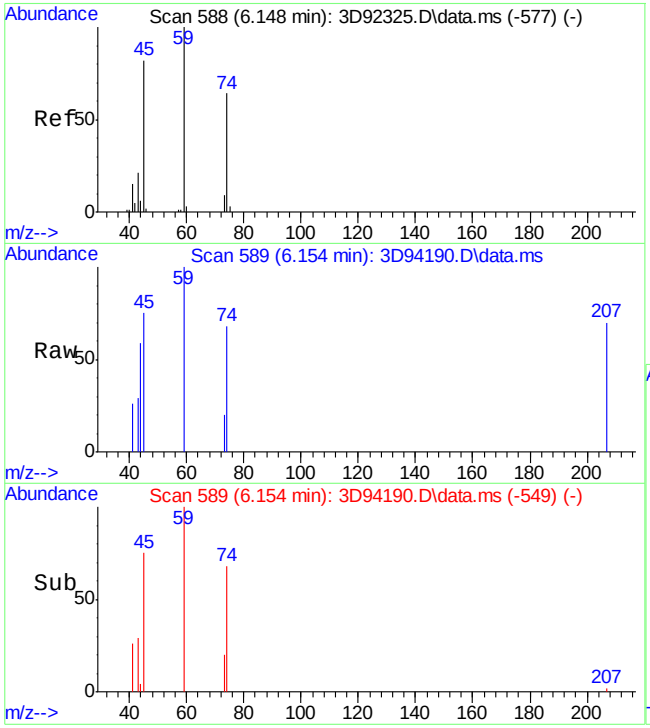


#16
trichlorofluoromethane
Concen: 0.99 ug/L
RT: 5.724 min Scan# 507
Delta R.T. -0.010 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:101 Resp: 2175

Ion	Ratio	Lower	Upper
101	100		
103	63.4	33.8	93.8
105	0.0	0.0	40.4

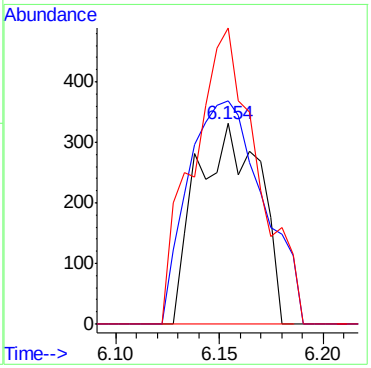


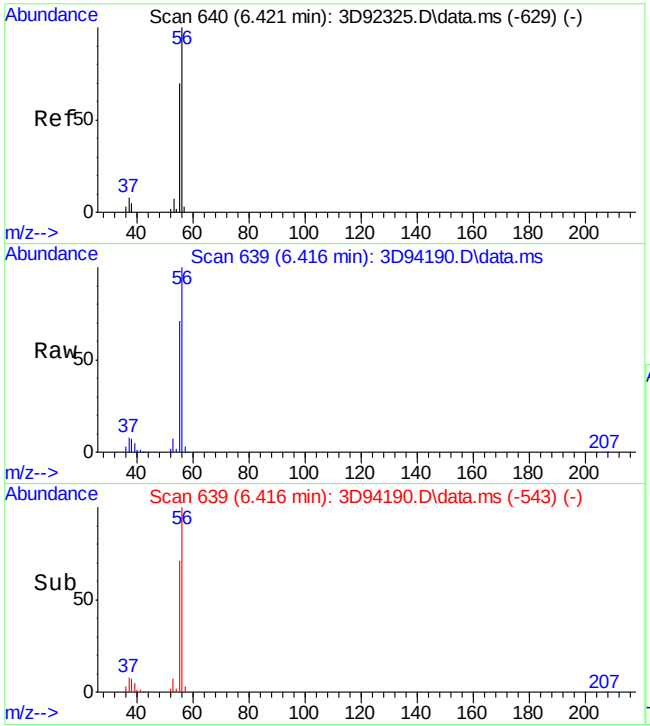


#18
ethyl ether
Concen: 0.92 ug/L
RT: 6.154 min Scan# 589
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 74 Resp: 702

Ion	Ratio	Lower	Upper
74	100		
45	111.5	81.7	141.7
59	147.7	110.6	170.6

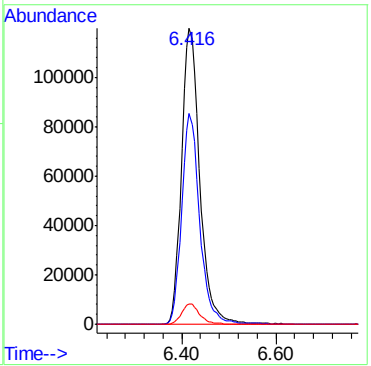


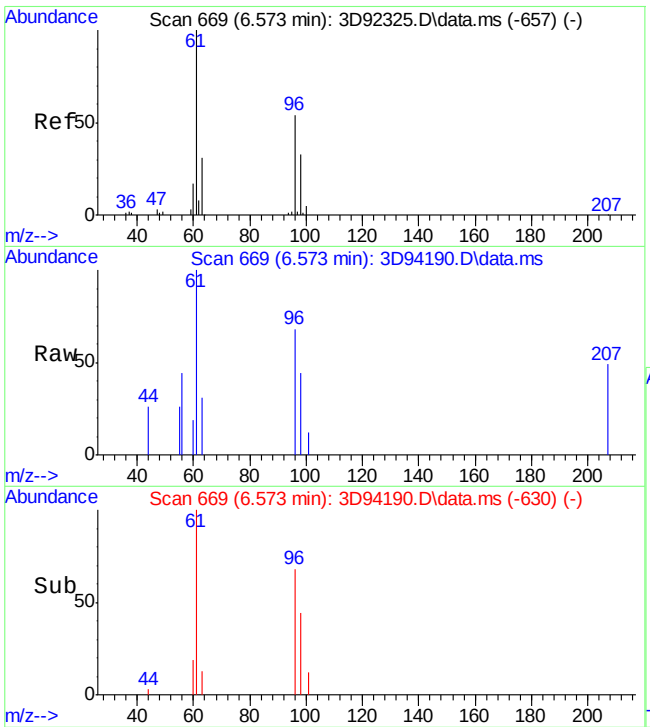


#21
acrolein
Concen: 1053.13 ug/L
RT: 6.416 min Scan# 639
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 56 Resp: 323539

Ion	Ratio	Lower	Upper
56	100		
55	71.4	40.8	100.8
53	6.7	0.0	37.0

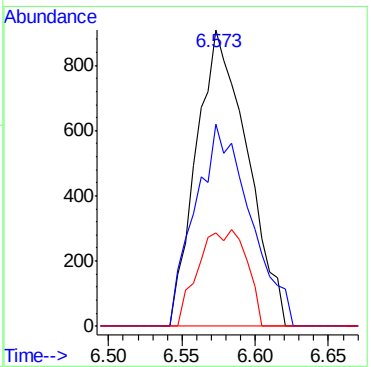


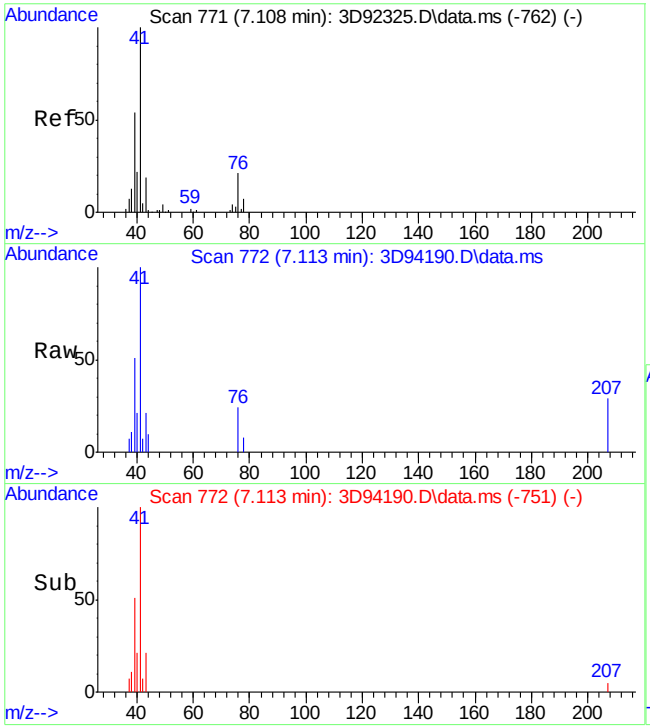


#22
1,1-dichloroethene
Concen: 1.03 ug/L
RT: 6.573 min Scan# 669
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 61 Resp: 2194

Ion	Ratio	Lower	Upper
61	100		
96	68.1	33.6	93.6
63	31.5	1.8	61.8

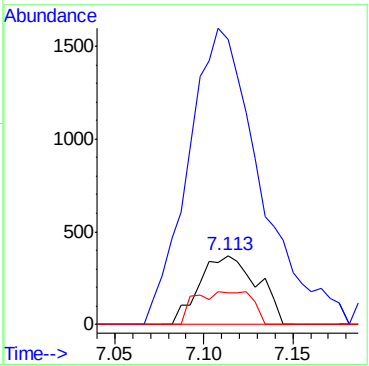


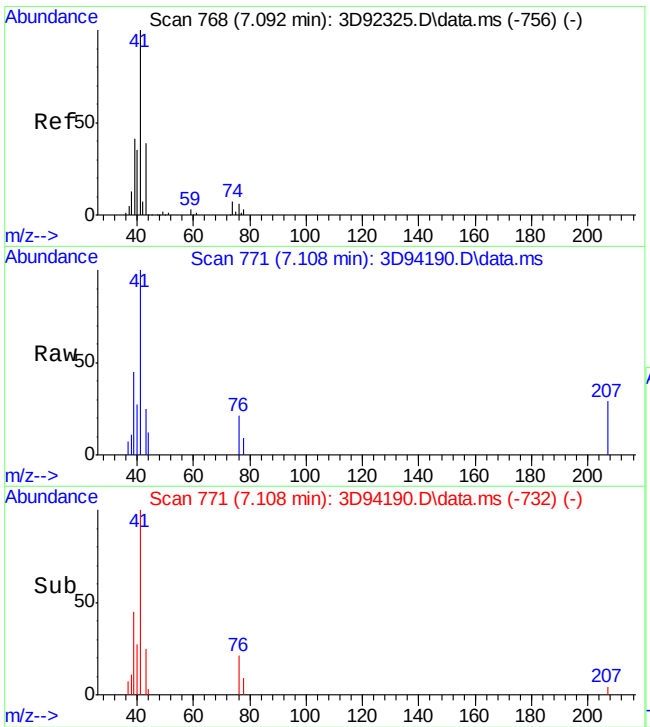


#24
allyl chloride
Concen: 1.00 ug/L
RT: 7.113 min Scan# 772
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 76 Resp: 839

Ion	Ratio	Lower	Upper
76	100		
41	345.6	336.7	396.7
38	46.1	14.5	74.5

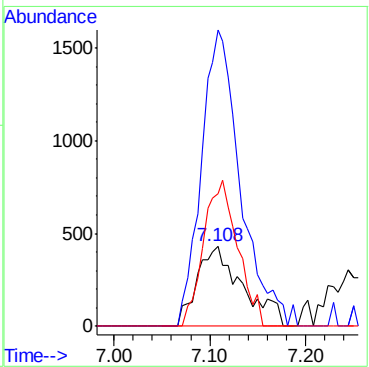


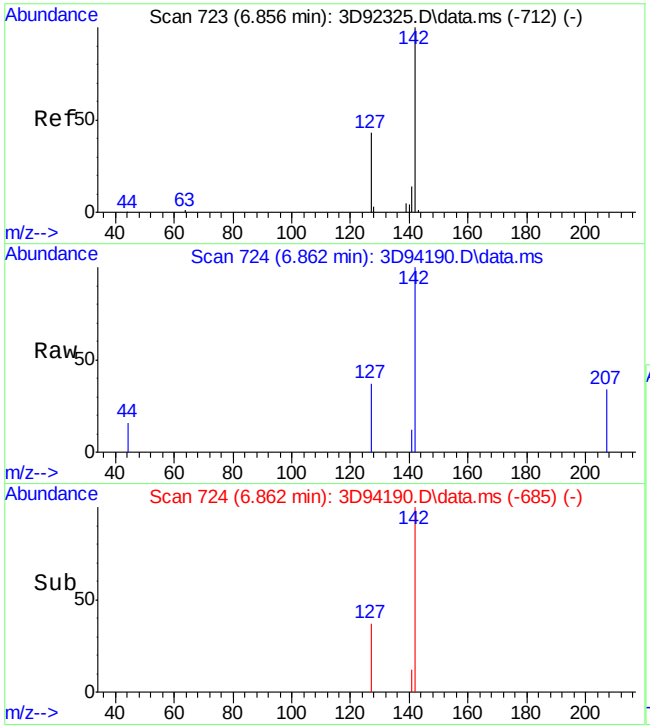


#25
acetonitrile
Concen: 10.40 ug/L
RT: 7.108 min Scan# 771
Delta R.T. 0.026 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 40 Resp: 1414

Ion	Ratio	Lower	Upper
40	100		
41	371.0	259.7	319.7#
39	166.1	79.2	139.2#

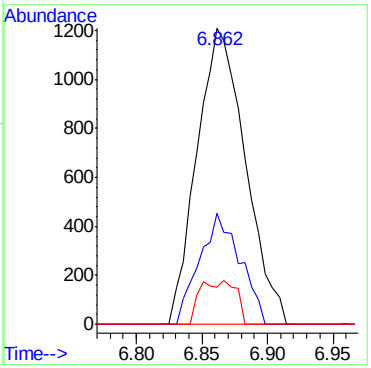


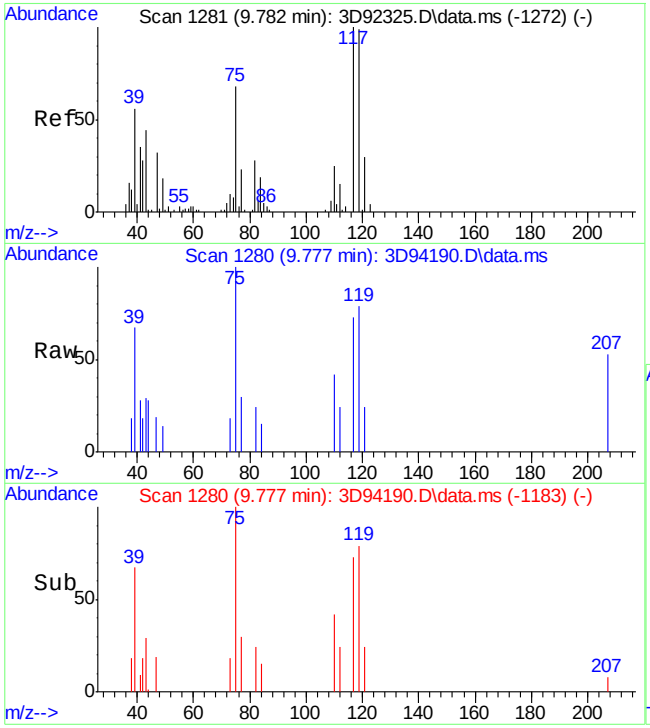


#27
iodomethane
Concen: 1.06 ug/L
RT: 6.862 min Scan# 724
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:142 Resp: 3105

Ion	Ratio	Lower	Upper
142	100		
127	37.4	5.6	65.6
141	12.4	0.0	44.2

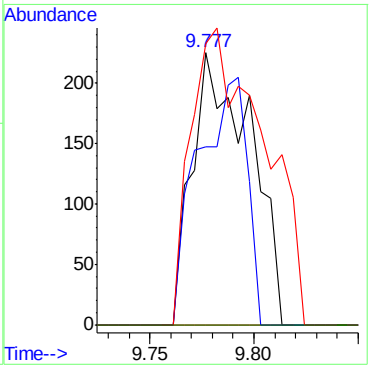


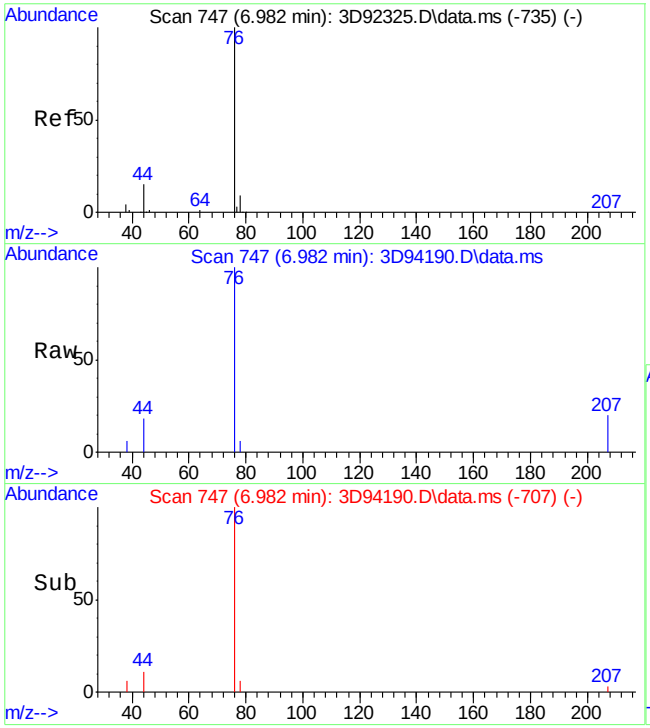


#28
iso-butyl alcohol
Concen: 9.06 ug/L
RT: 9.777 min Scan# 1280
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 41 Resp: 438

Ion	Ratio	Lower	Upper
41	100		
42	65.0	57.2	117.2
43	103.1	105.0	165.0#
74	0.0	8.4	68.4#

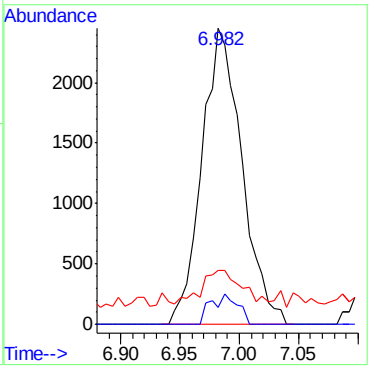


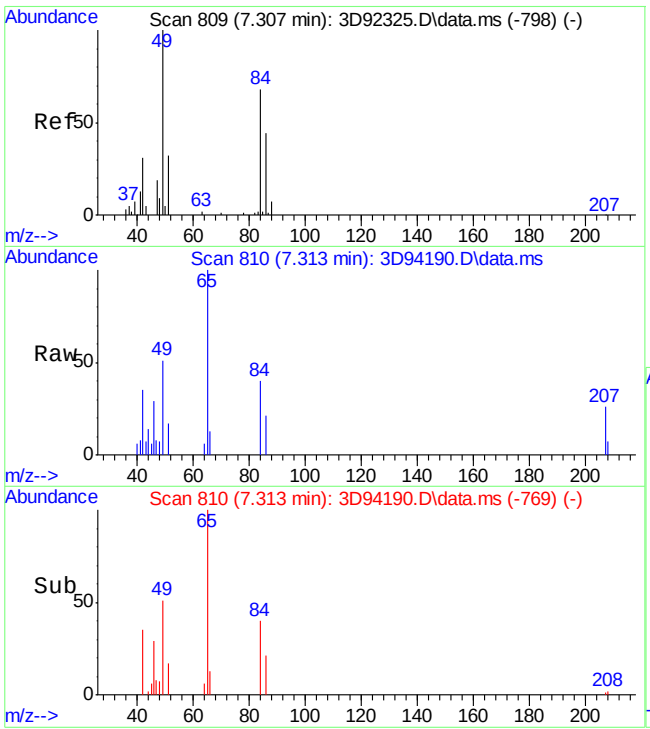


#29
carbon disulfide
Concen: 1.09 ug/L
RT: 6.982 min Scan# 747
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 76 Resp: 5752

Ion	Ratio	Lower	Upper
76	100		
78	5.7	0.0	39.1
44	7.6	0.0	40.9

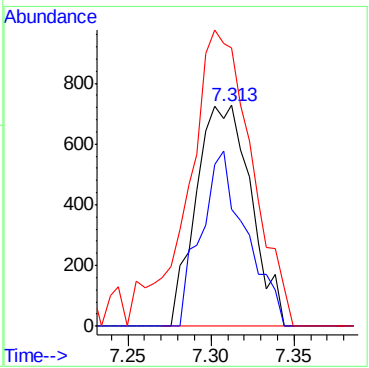


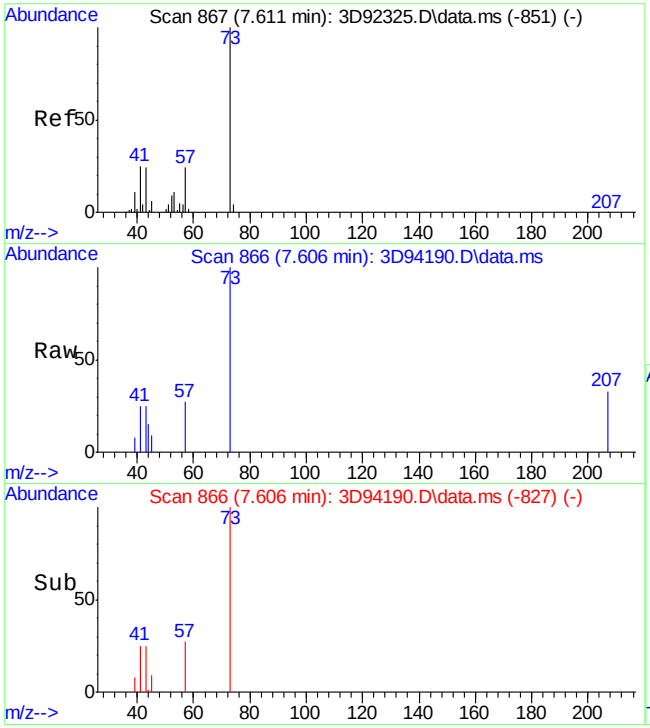


#30
methylene chloride
Concen: 1.03 ug/L
RT: 7.313 min Scan# 810
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 84 Resp: 1671

Ion	Ratio	Lower	Upper
84	100		
86	53.0	45.1	83.7
49	126.0	89.7	166.7

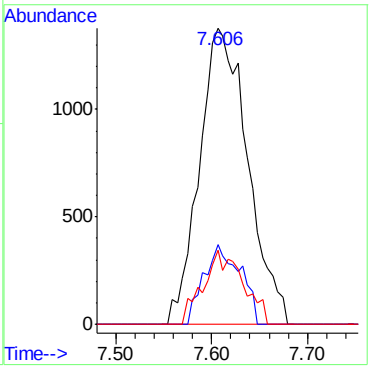


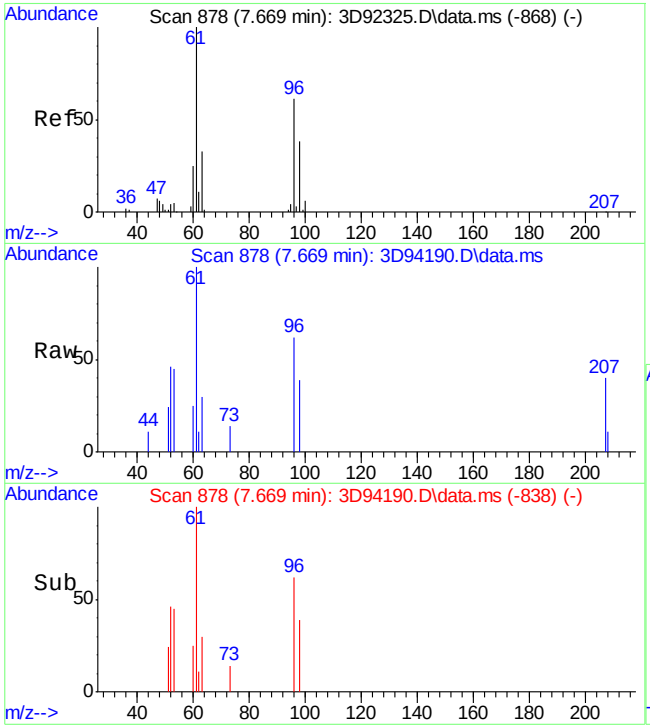


#32
methyl tert butyl ether
Concen: 1.07 ug/L
RT: 7.606 min Scan# 866
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 73 Resp: 4835

Ion	Ratio	Lower	Upper
73	100		
57	26.9	0.0	52.4
43	25.0	0.0	49.7

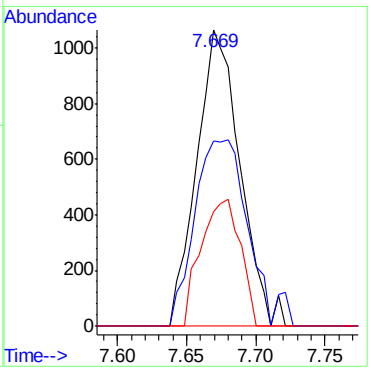


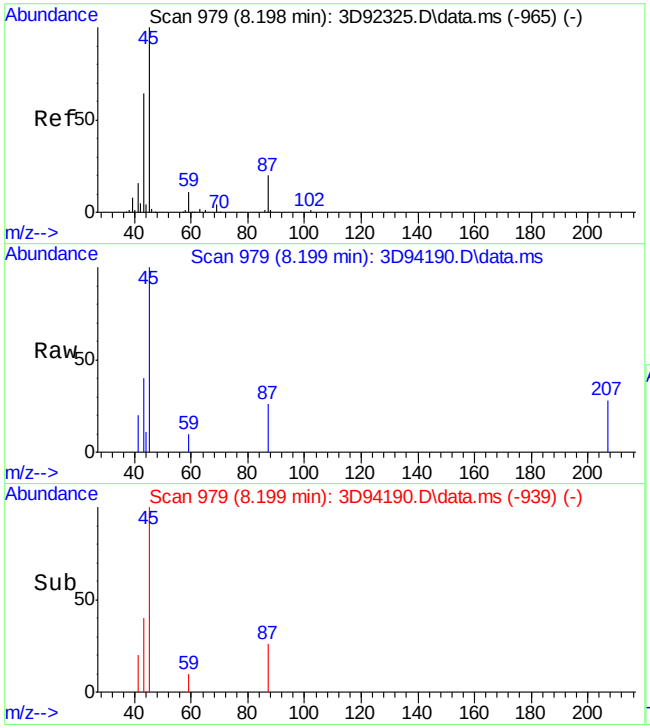


#33
trans-1,2-dichloroethene
Concen: 1.09 ug/L
RT: 7.669 min Scan# 878
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 61 Resp: 2325

Ion	Ratio	Lower	Upper
61	100		
96	62.4	50.0	92.8
98	38.7	31.0	57.6

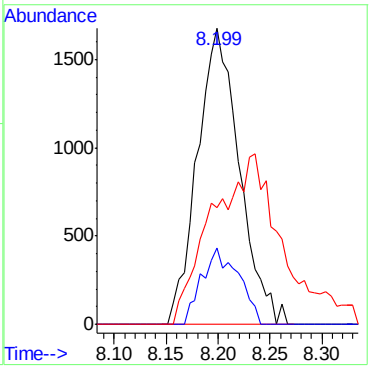


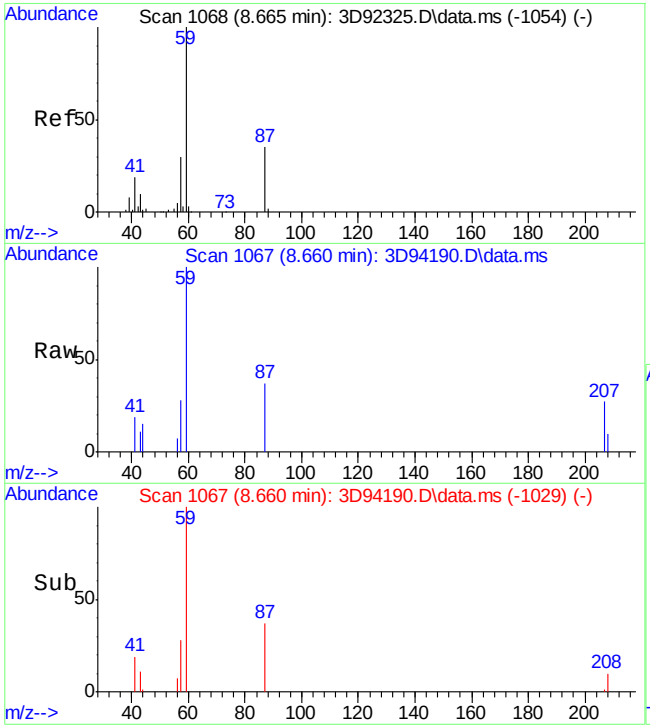


#34
di-isopropyl ether
Concen: 0.95 ug/L
RT: 8.199 min Scan# 979
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 45 Resp: 4718

Ion	Ratio	Lower	Upper
45	100		
87	25.9	0.0	54.3
43	39.6	29.5	89.5

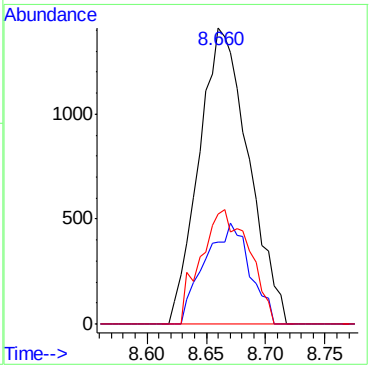


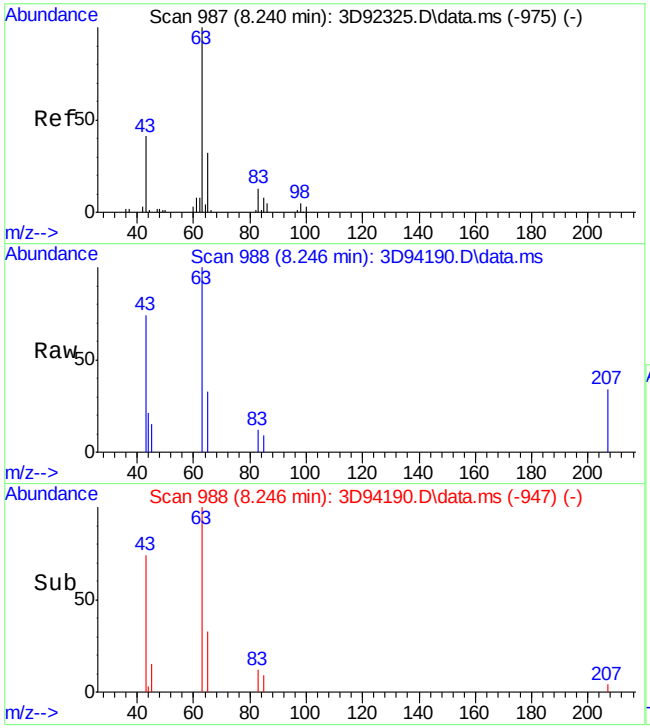


#35
ethyl tert-butyl ether
Concen: 0.89 ug/L
RT: 8.660 min Scan# 1067
Delta R.T. 0.000 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 59 Resp: 4084

Ion	Ratio	Lower	Upper
59	100		
57	27.6	1.9	61.9
87	37.3	8.8	68.8

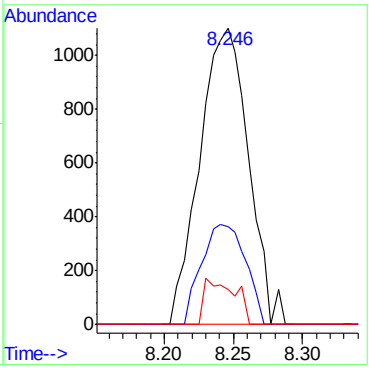


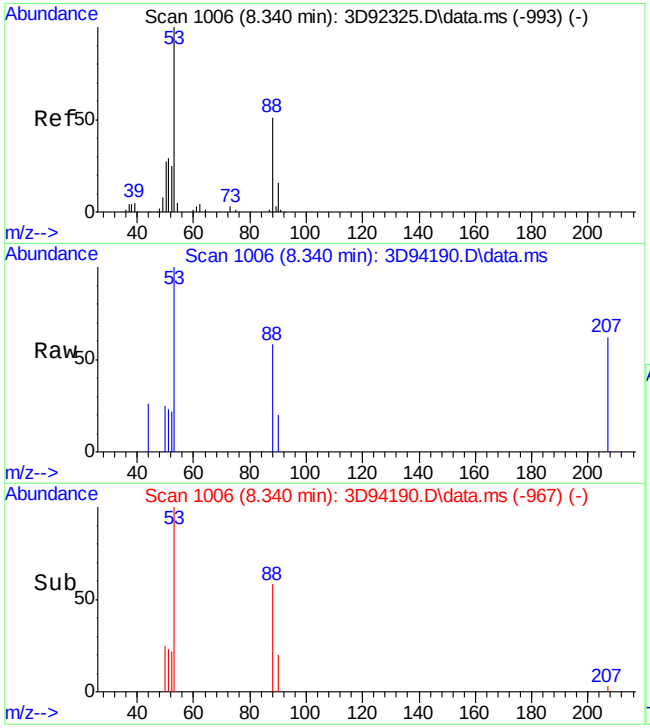


#37
1,1-dichloroethane
Concen: 1.01 ug/L
RT: 8.246 min Scan# 988
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 63 Resp: 2704

Ion	Ratio	Lower	Upper
63	100		
65	32.9	2.0	62.0
83	11.8	0.0	43.2

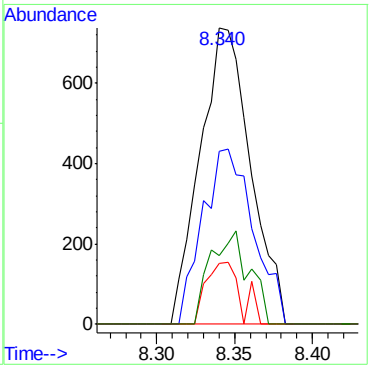


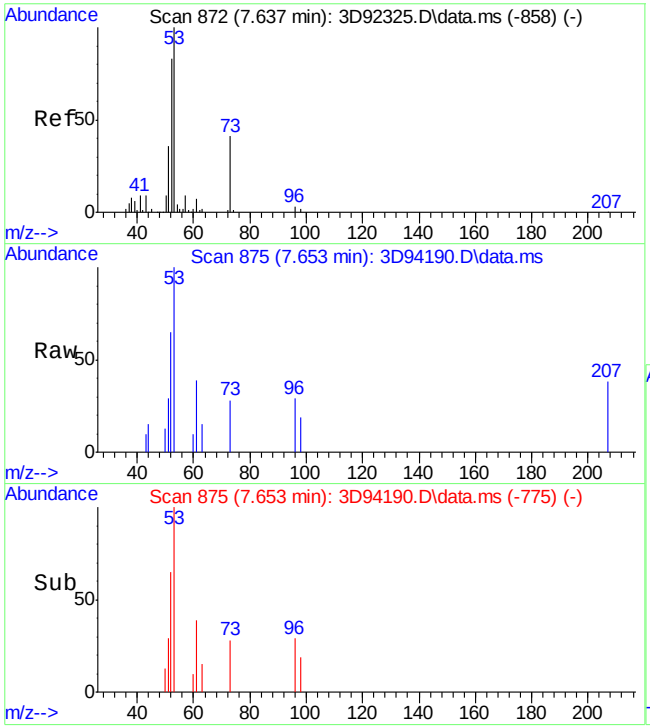


#38
chloroprene
Concen: 0.86 ug/L
RT: 8.340 min Scan# 1006
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 53 Resp: 1666

Ion	Ratio	Lower	Upper
53	100		
88	58.3	28.5	88.5
90	20.5	0.0	49.6
51	23.2	0.0	55.5

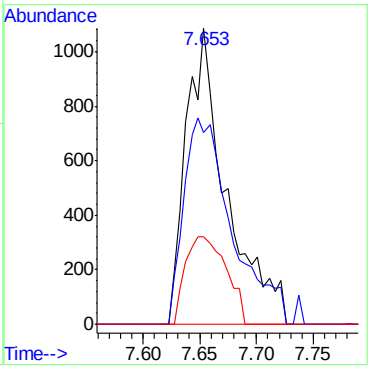


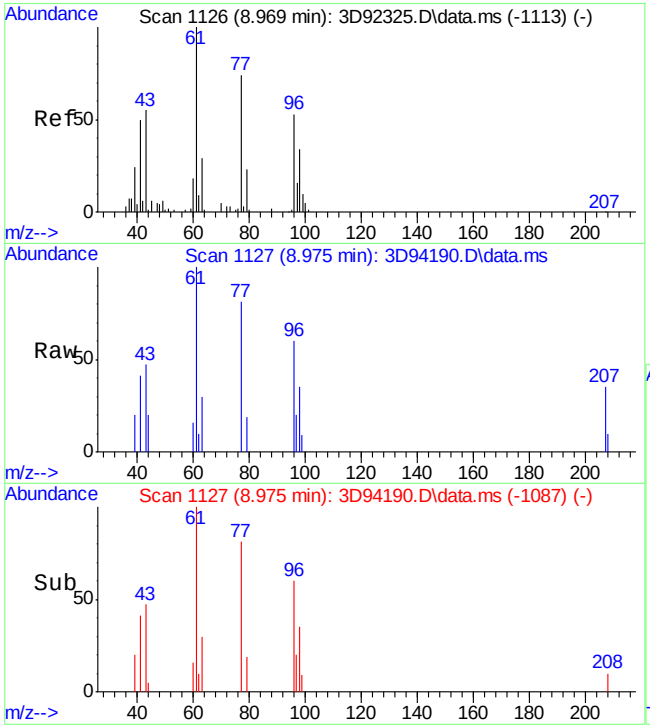


#39
acrylonitrile
Concen: 4.90 ug/L
RT: 7.653 min Scan# 875
Delta R.T. 0.026 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 53 Resp: 2687

Ion	Ratio	Lower	Upper
53	100		
52	64.7	54.6	114.6
51	29.5	5.6	65.6

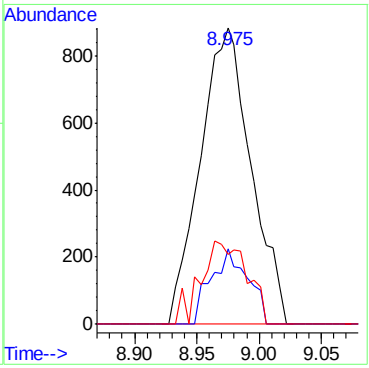




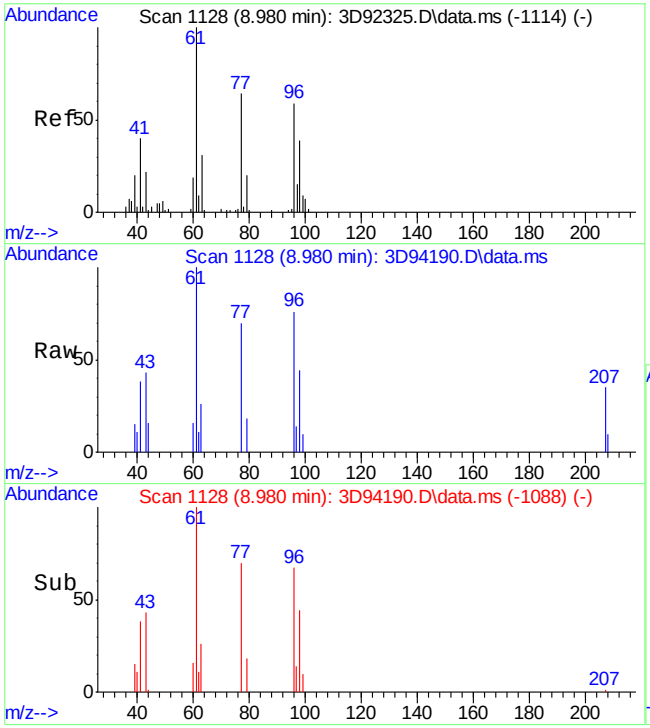
#42
2,2-dichloropropane
Concen: 1.15 ug/L
RT: 8.975 min Scan# 1127
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 77 Resp: 2501

Ion	Ratio	Lower	Upper
77	100		
97	25.3	0.0	56.7
79	23.3	2.2	62.2



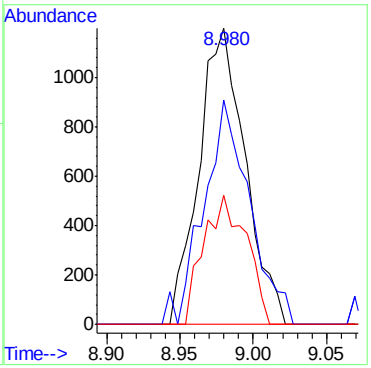
3D94190.D M3D4058.M Thu Dec 19 12:36:41 2013 3D Page 17

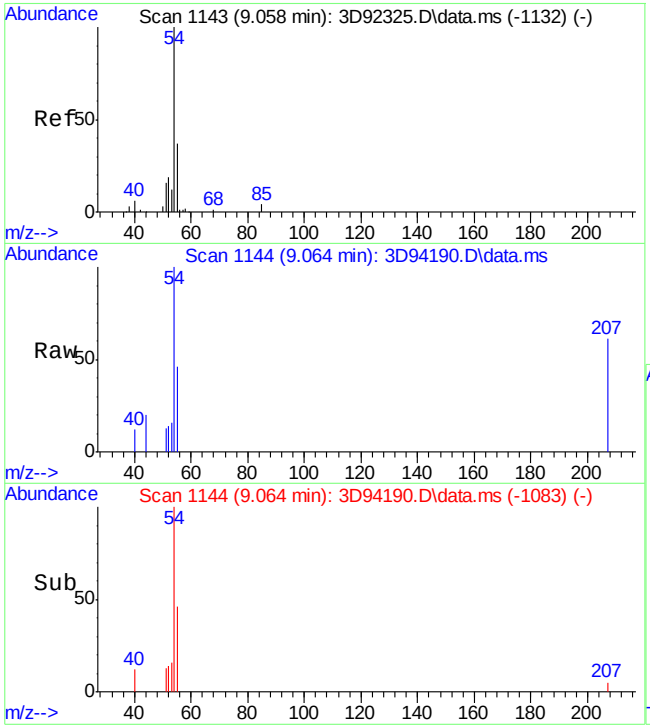


#43
cis-1,2-dichloroethene
Concen: 1.01 ug/L
RT: 8.980 min Scan# 1128
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 61 Resp: 2634

Ion	Ratio	Lower	Upper
61	100		
96	75.8	39.3	99.3
98	43.5	14.9	74.9

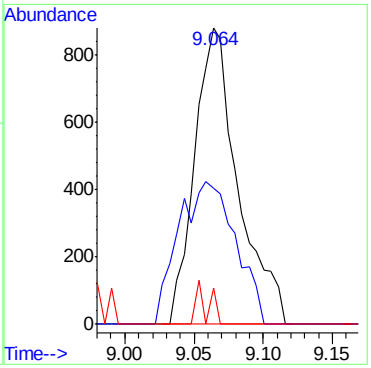


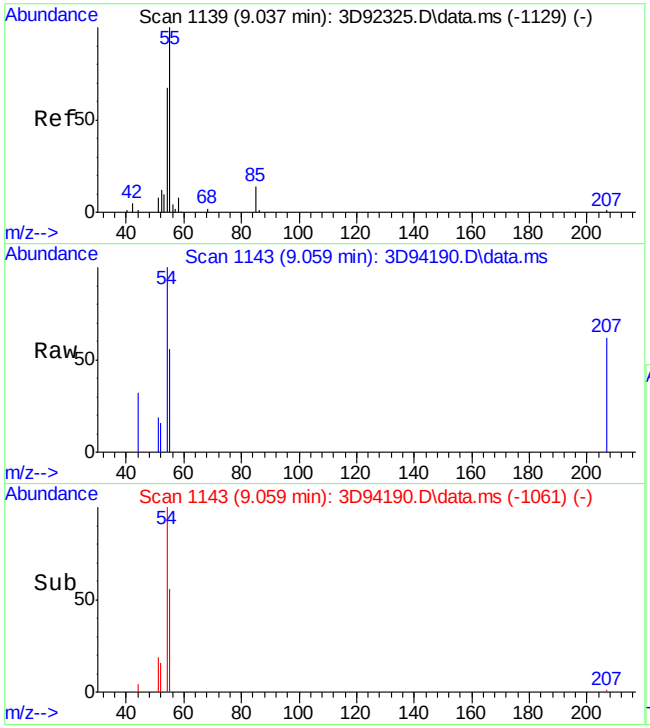


#44
propionitrile
Concen: 9.25 ug/L
RT: 9.064 min Scan# 1144
Delta R.T. 0.021 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 54 Resp: 1919

Ion	Ratio	Lower	Upper
54	100		
55	46.0	19.2	79.2
40	12.2	0.0	35.1

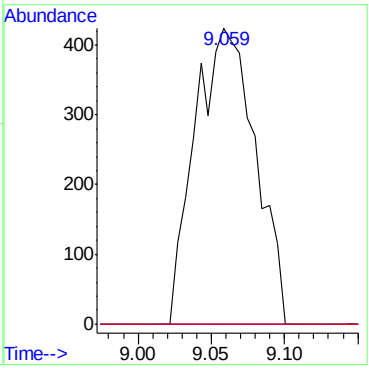


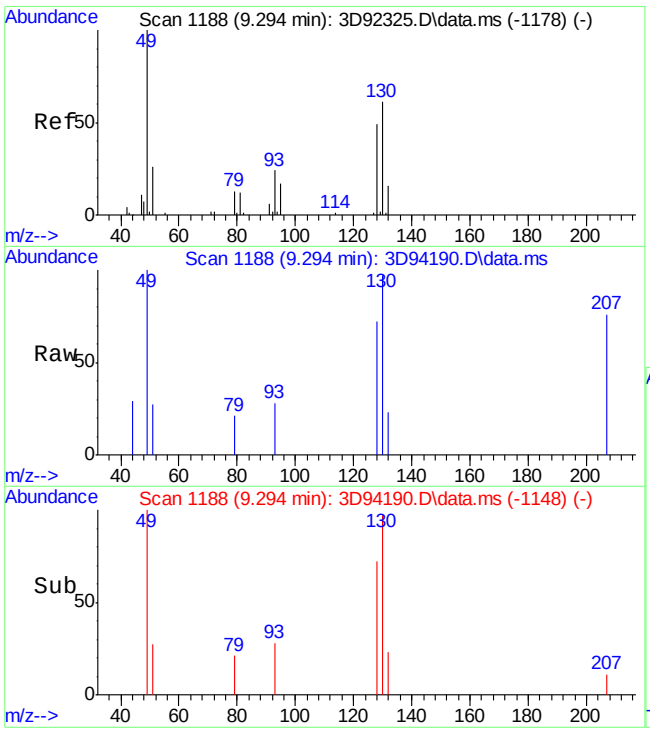


#45
methyl acrylate
Concen: 0.80 ug/L
RT: 9.059 min Scan# 1143
Delta R.T. 0.032 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 55 Resp: 1216

Ion	Ratio	Lower	Upper
55	100		
85	0.0	0.0	46.5
58	0.0	0.0	38.9

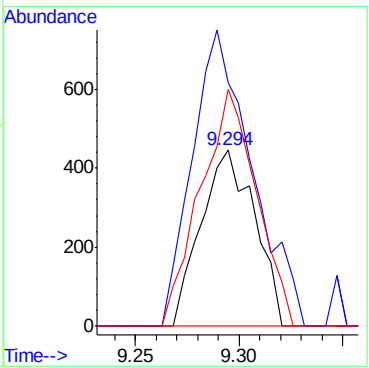


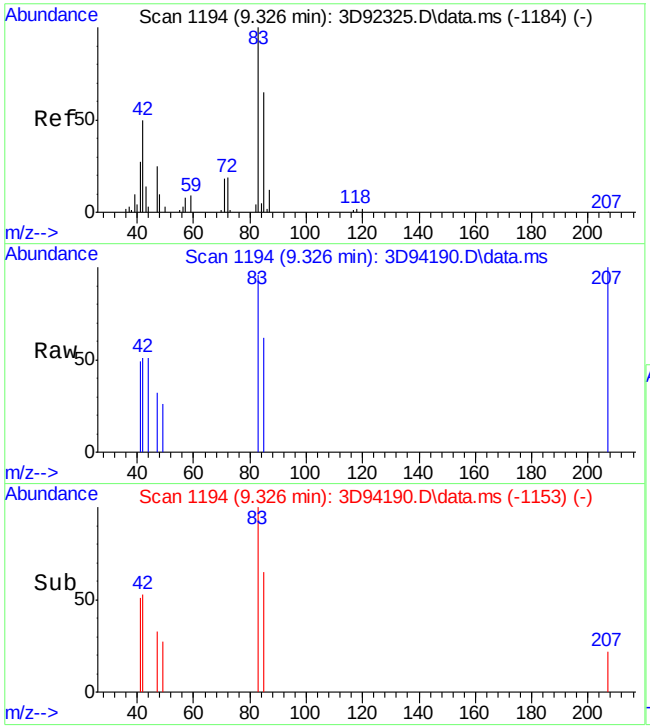


#46
bromochloromethane
Concen: 0.95 ug/L
RT: 9.294 min Scan# 1188
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:128 Resp: 801

Ion	Ratio	Lower	Upper
128	100		
49	138.3	125.6	185.6
130	134.8	103.9	163.9

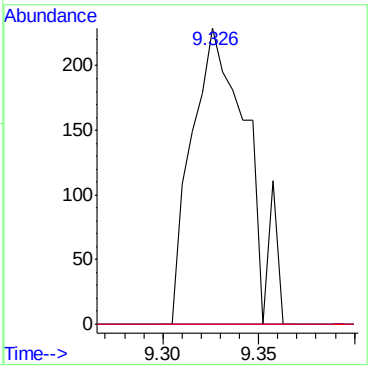


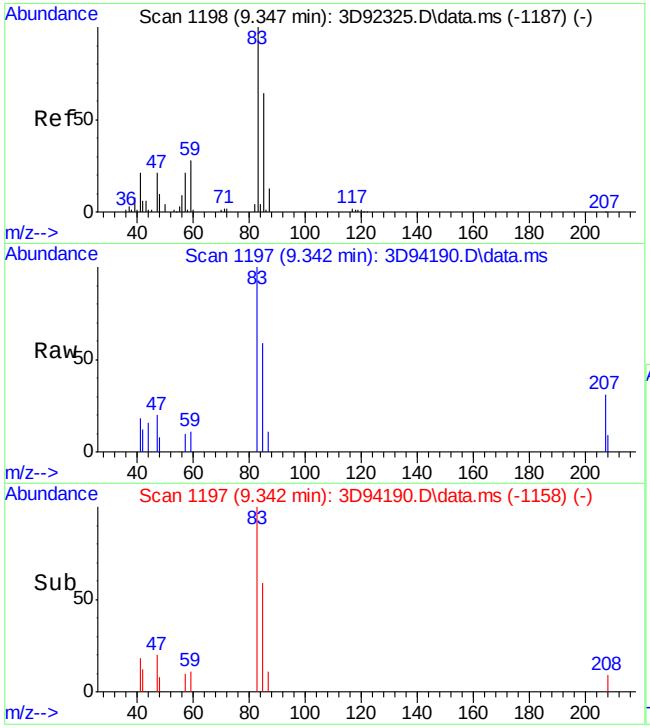


#47
tetrahydrofuran
Concen: 0.94 ug/L
RT: 9.326 min Scan# 1194
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 42 Resp: 462

Ion	Ratio	Lower	Upper
42	100		
72	0.0	8.3	68.3#
71	0.0	6.0	66.0#

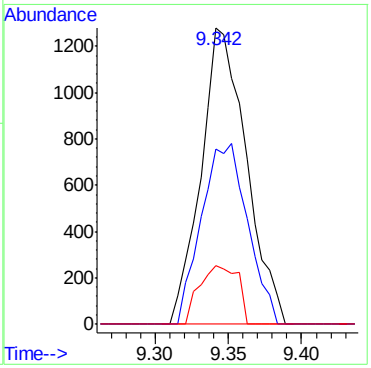


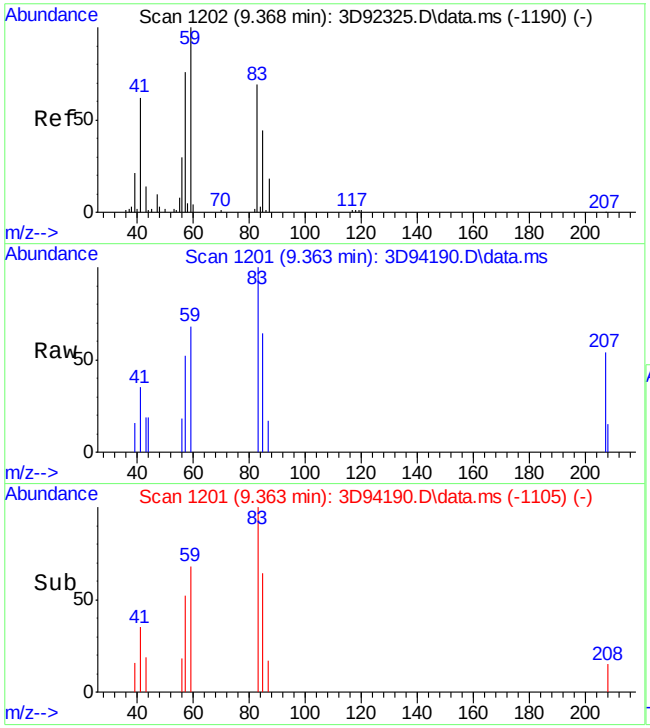


#48
chloroform
Concen: 1.06 ug/L
RT: 9.342 min Scan# 1197
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 83 Resp: 2748

Ion	Ratio	Lower	Upper
83	100		
85	59.0	34.8	94.8
47	19.6	0.0	53.3

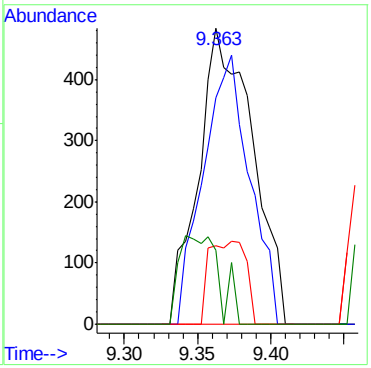


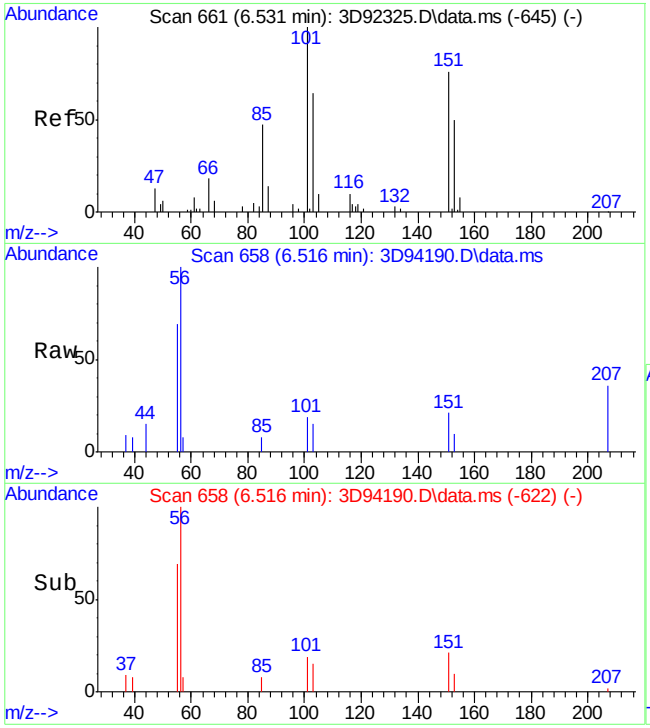


#49
Tert-Butyl Formate
Concen: 0.90 ug/L
RT: 9.363 min Scan# 1201
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 59 Resp: 1240

Ion	Ratio	Lower	Upper
59	100		
57	77.9	64.5	96.7
56	19.0	21.6	32.4#
87	0.0	24.9	37.3#

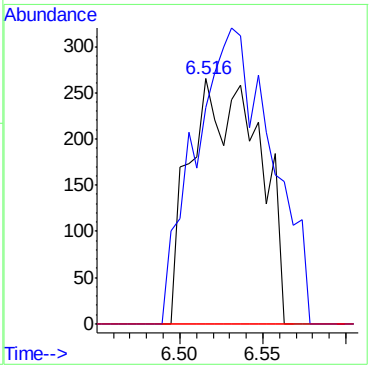


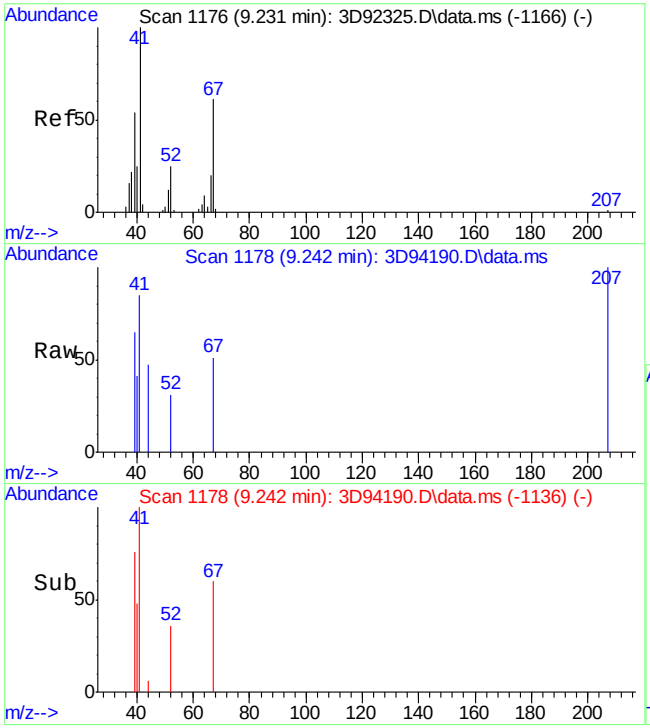


#52
freon 113
Concen: 0.75 ug/L
RT: 6.516 min Scan# 658
Delta R.T. -0.010 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:151 Resp: 765

Ion	Ratio	Lower	Upper
151	100		
101	88.3	87.2	147.2
116	0.0	0.0	41.5

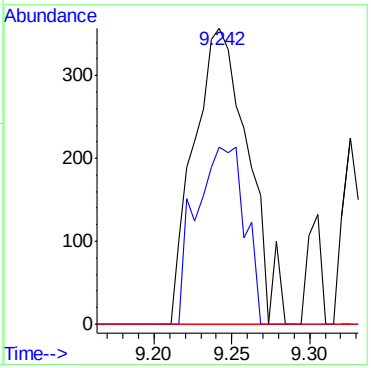


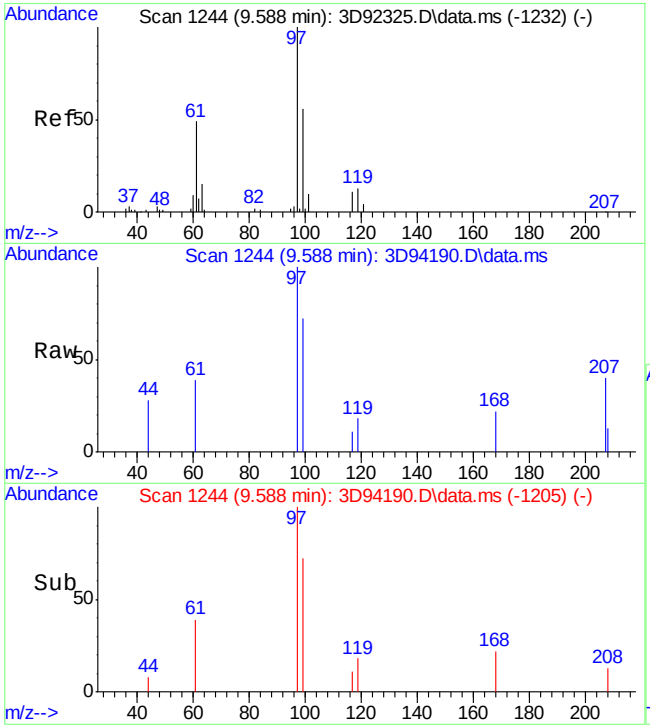


#53
methacrylonitrile
Concen: 0.97 ug/L
RT: 9.242 min Scan# 1178
Delta R.T. 0.021 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 41 Resp: 865

Ion	Ratio	Lower	Upper
41	100		
67	59.7	39.6	99.6
66	0.0	0.0	53.3

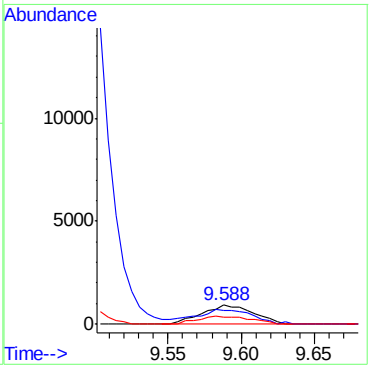




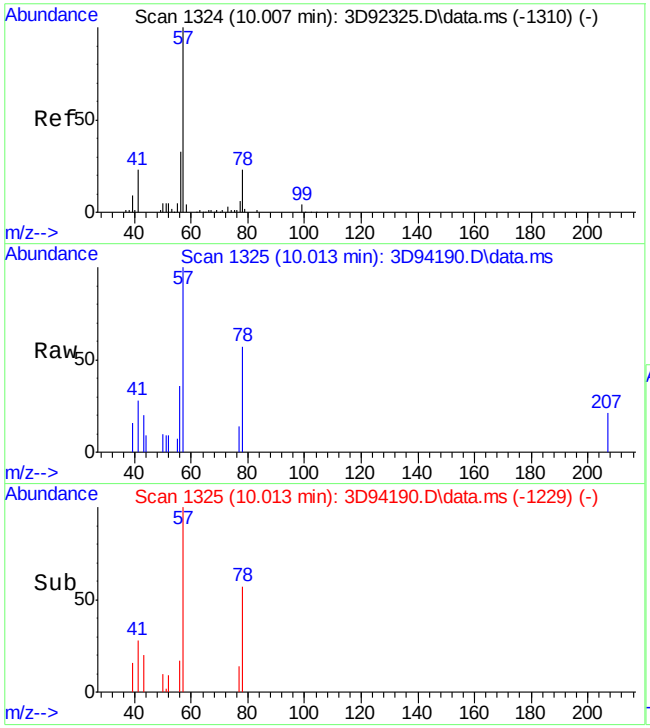
#54
1,1,1-trichloroethane
Concen: 1.00 ug/L
RT: 9.588 min Scan# 1244
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 97 Resp: 2246

Ion	Ratio	Lower	Upper
97	100		
99	71.9	33.6	93.6
61	38.5	11.5	71.5



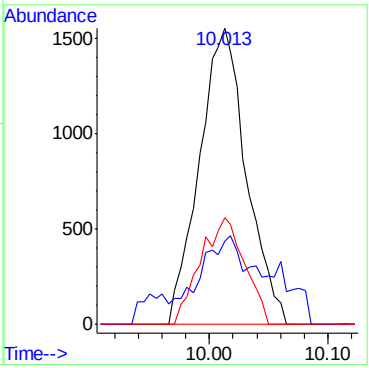
3D94190.D M3D4058.M Thu Dec 19 12:36:41 2013 3D Page 22

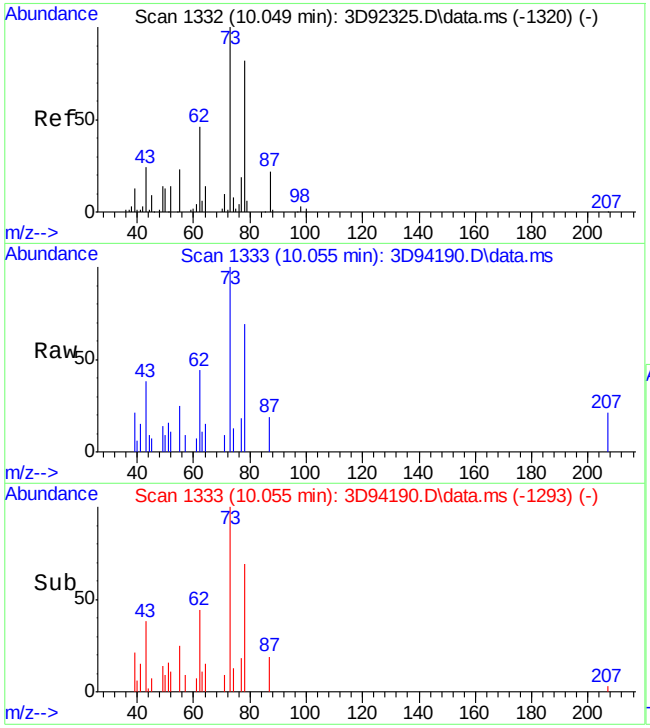


#56
2,2,4-Trimethylpentane
Concen: 0.81 ug/L
RT: 10.013 min Scan# 1325
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 57 Resp: 4279

Ion	Ratio	Lower	Upper
57	100		
41	43.9	4.1	64.1
56	33.7	4.4	64.4

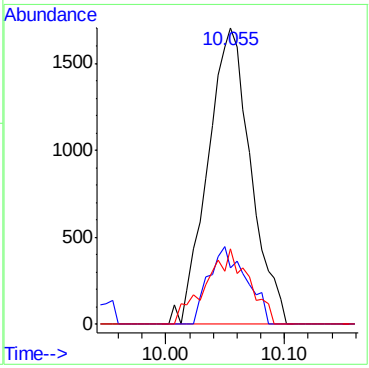




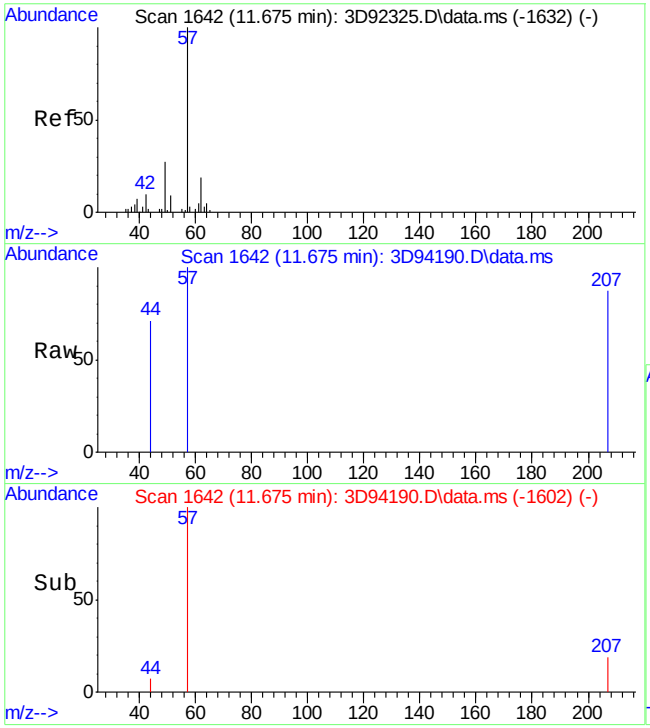
#57
tert-amyl methyl ether
Concen: 0.93 ug/L
RT: 10.055 min Scan# 1333
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 73 Resp: 4285

Ion	Ratio	Lower	Upper
73	100		
87	19.0	0.0	52.9
55	25.4	0.0	51.2



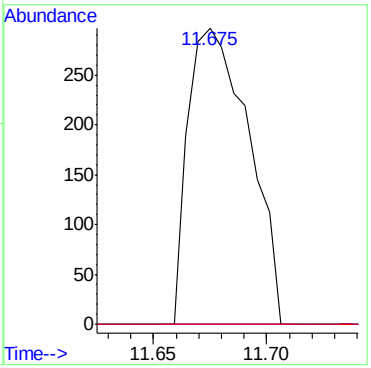
3D94190.D M3D4058.M Thu Dec 19 12:36:42 2013 3D Page 23

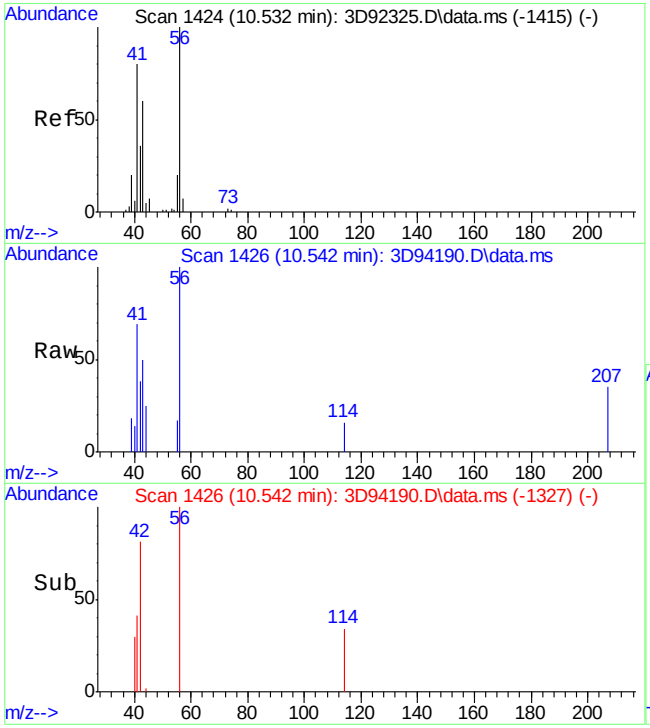


#59
epichlorohydrin
Concen: 4.15 ug/L
RT: 11.675 min Scan# 1642
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 57 Resp: 552

Ion	Ratio	Lower	Upper
57	100		
49	0.0	0.0	55.7
42	0.0	0.0	39.6

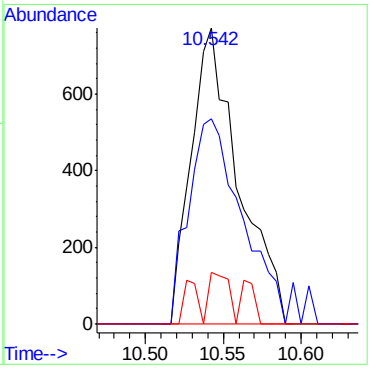


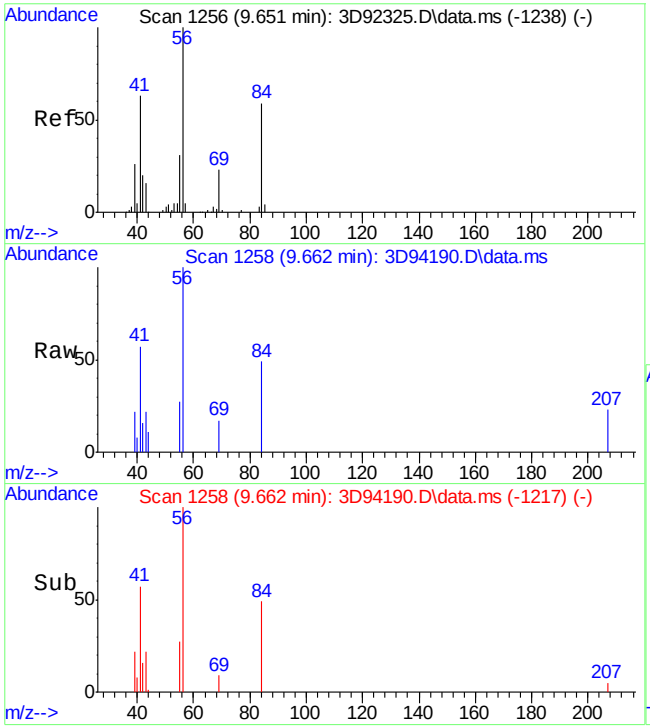


#60
n-butyl alcohol
Concen: 44.10 ug/L
RT: 10.542 min Scan# 1426
Delta R.T. 0.021 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 56 Resp: 1635

Ion	Ratio	Lower	Upper
56	100		
41	69.3	42.2	102.2
55	17.4	0.0	48.4

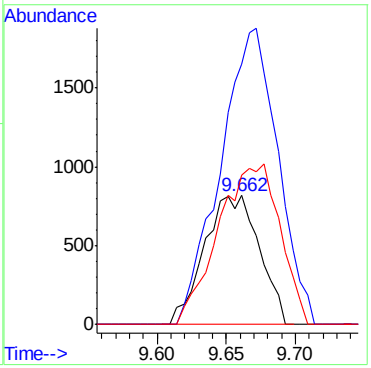


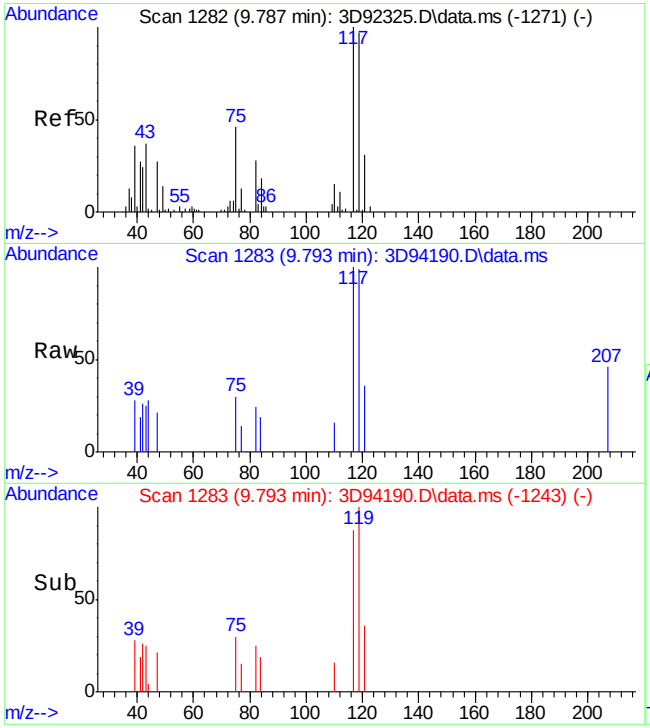


#61
cyclohexane
Concen: 1.04 ug/L
RT: 9.662 min Scan# 1258
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 84 Resp: 2258

Ion	Ratio	Lower	Upper
84	100		
56	240.3	208.4	268.4
41	139.5	105.8	165.8

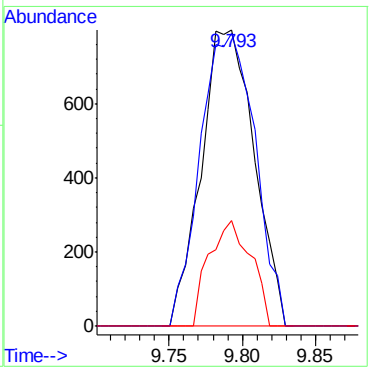


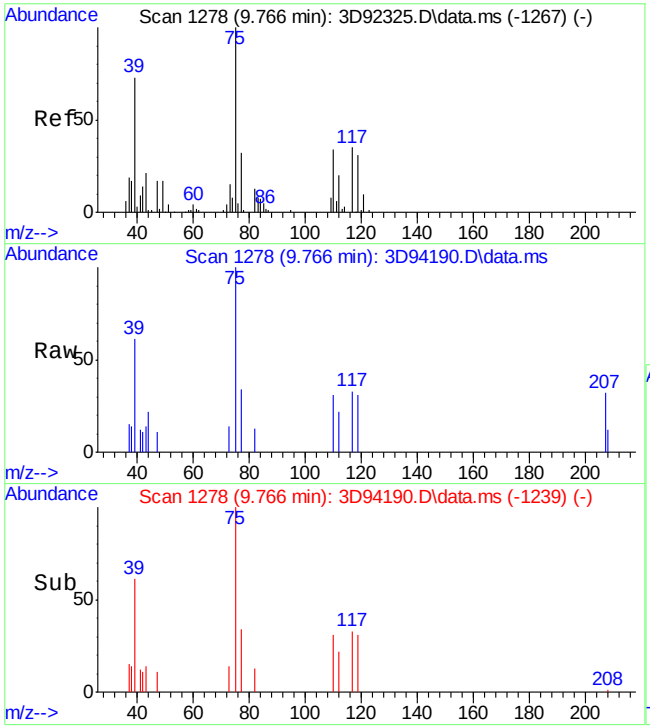


#62
carbon tetrachloride
Concen: 1.02 ug/L
RT: 9.793 min Scan# 1283
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:117 Resp: 2012

Ion	Ratio	Lower	Upper
117	100		
119	98.9	64.5	124.5
121	35.5	1.7	61.7

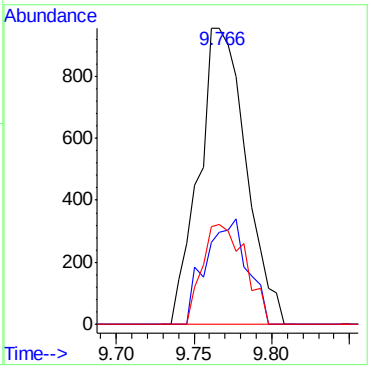


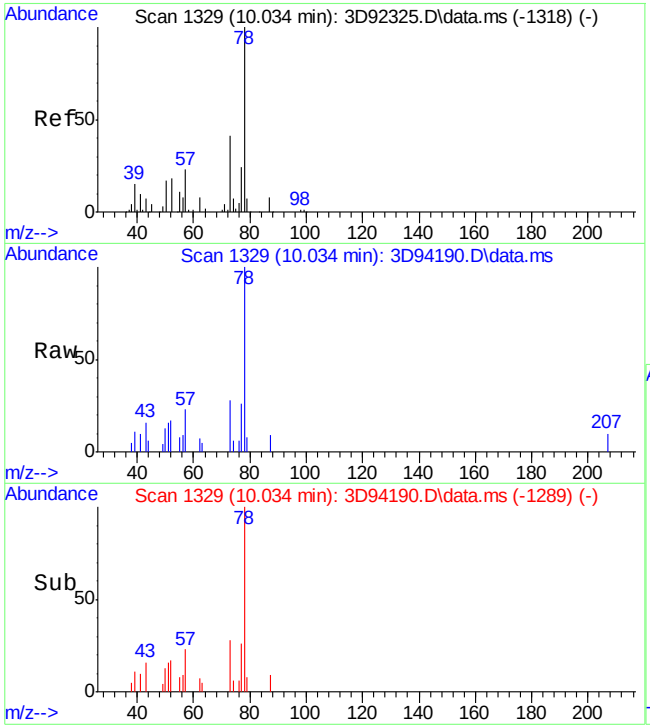


#63
1,1-dichloropropene
Concen: 1.03 ug/L
RT: 9.766 min Scan# 1278
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 75 Resp: 2007

Ion	Ratio	Lower	Upper
75	100		
110	31.1	8.3	68.3
77	33.7	0.4	60.4

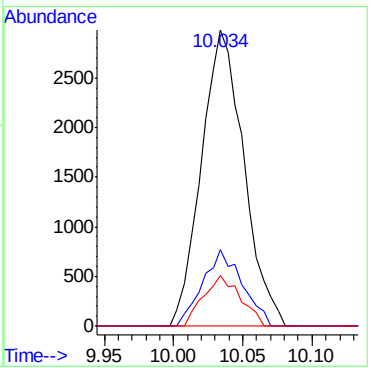


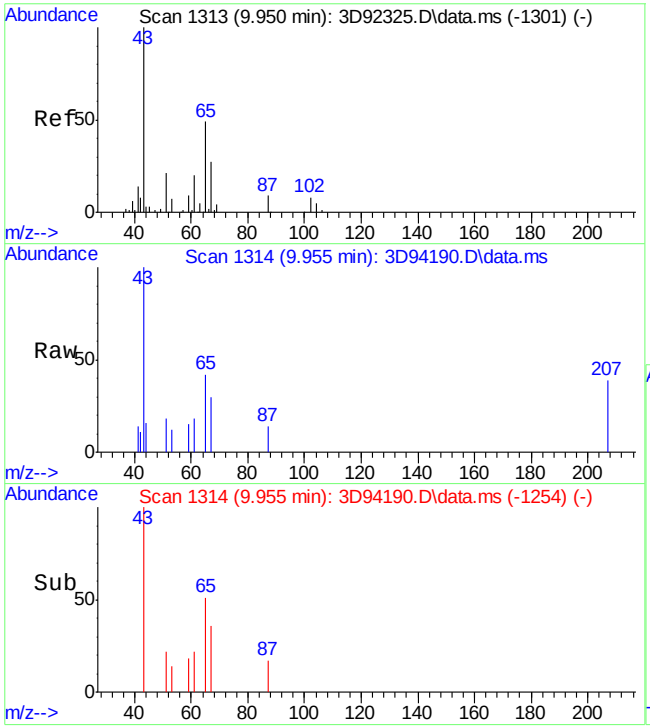


#65
benzene
Concen: 1.05 ug/L
RT: 10.034 min Scan# 1329
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 78 Resp: 6364

Ion	Ratio	Lower	Upper
78	100		
77	25.7	0.0	53.8
52	17.0	0.0	45.9

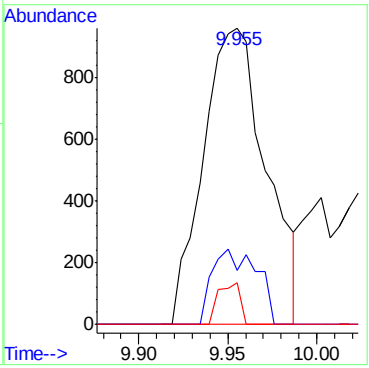


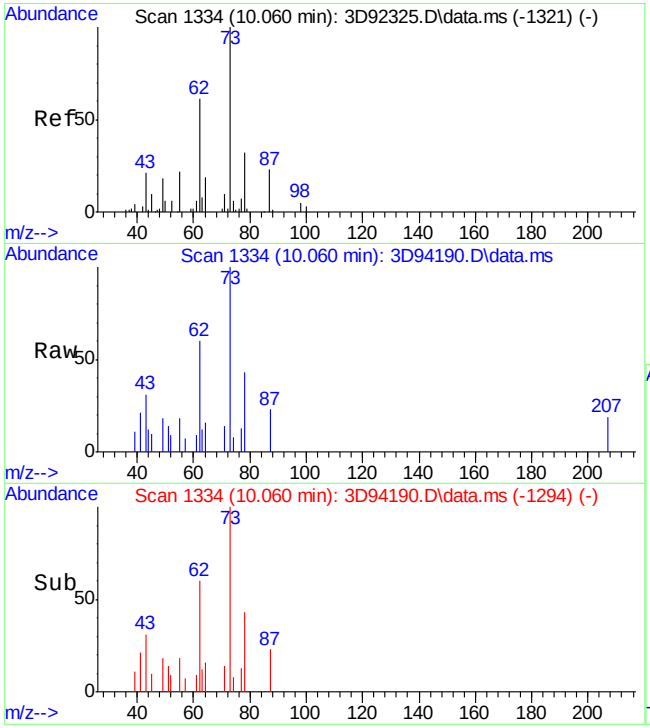


#67
isopropyl acetate
Concen: 0.88 ug/L
RT: 9.955 min Scan# 1314
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 43 Resp: 2368

Ion	Ratio	Lower	Upper
43	100		
61	17.9	0.0	52.1
87	4.8	0.0	40.9

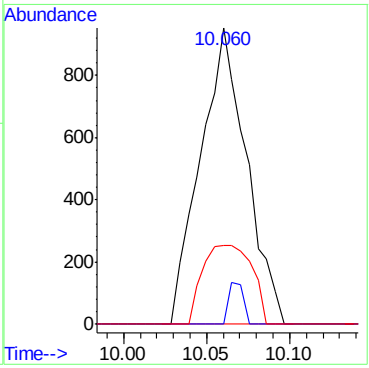


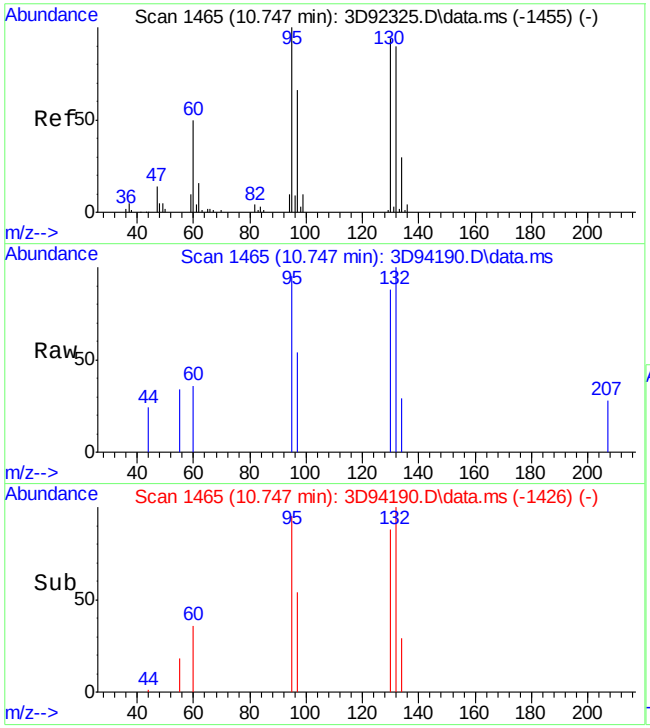


#68
1,2-dichloroethane
Concen: 1.03 ug/L
RT: 10.060 min Scan# 1334
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 62 Resp: 1839

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	40.2
64	26.5	2.5	62.5

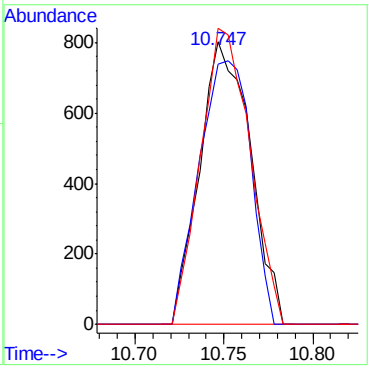


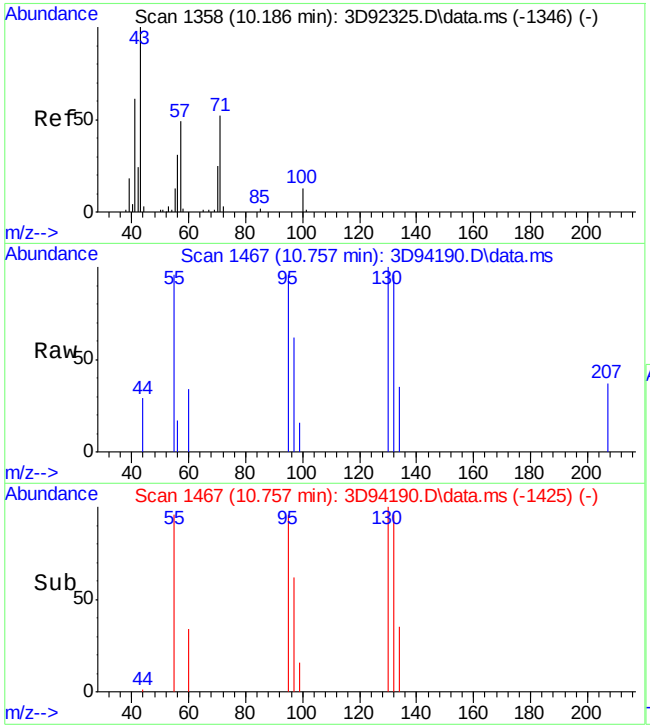


#69
trichloroethene
Concen: 1.07 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 95 Resp: 1591

Ion	Ratio	Lower	Upper
95	100		
130	92.2	78.9	138.9
132	104.7	75.1	135.1

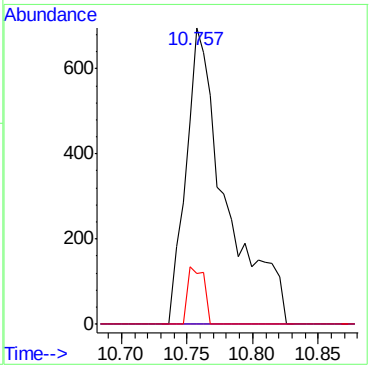


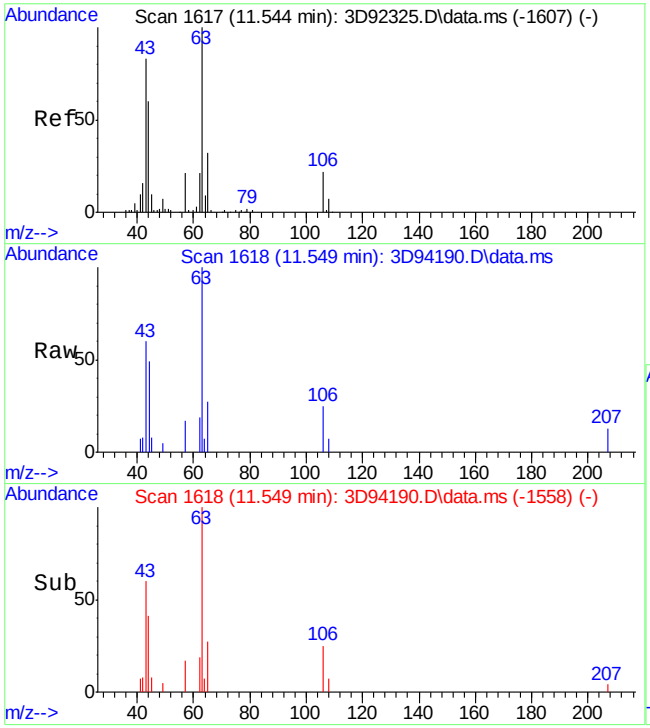


#70
ethyl acrylate
Concen: 0.88 ug/L
RT: 10.757 min Scan# 1467
Delta R.T. 0.021 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 55 Resp: 1485

Ion	Ratio	Lower	Upper
55	100		
45	0.0	7.8	11.6#
99	7.9	12.9	19.3#

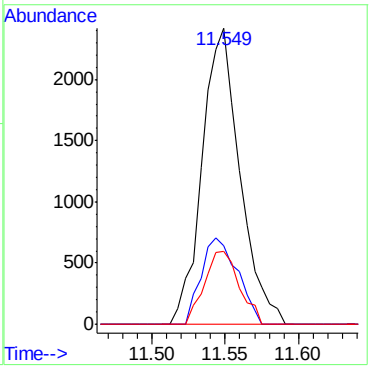


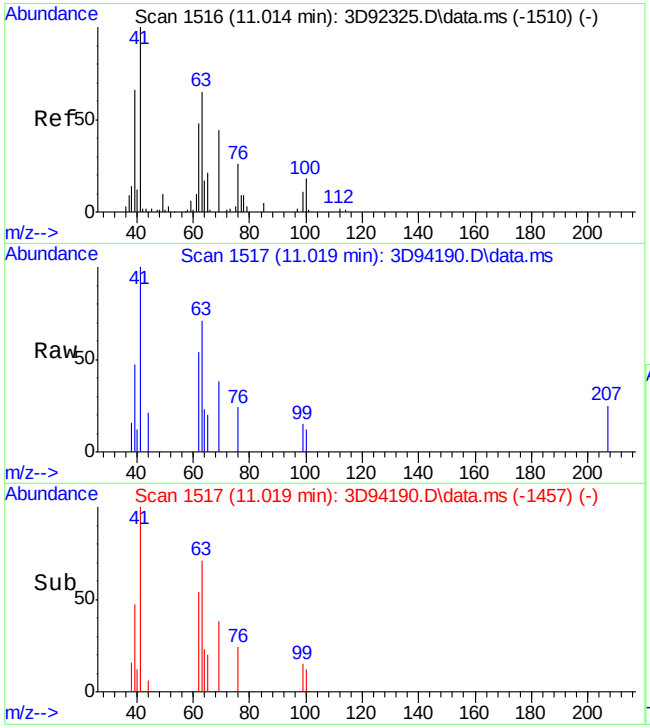


#73
2-chloroethyl vinyl ether
Concen: 4.57 ug/L
RT: 11.549 min Scan# 1618
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 63 Resp: 4336

Ion	Ratio	Lower	Upper
63	100		
65	26.6	3.0	63.0
106	24.7	0.0	56.6

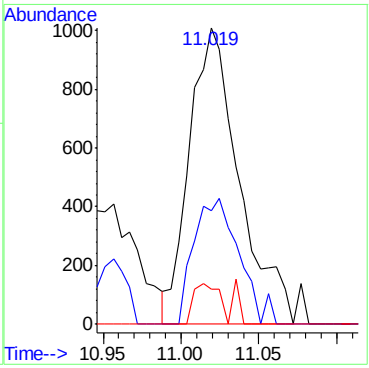


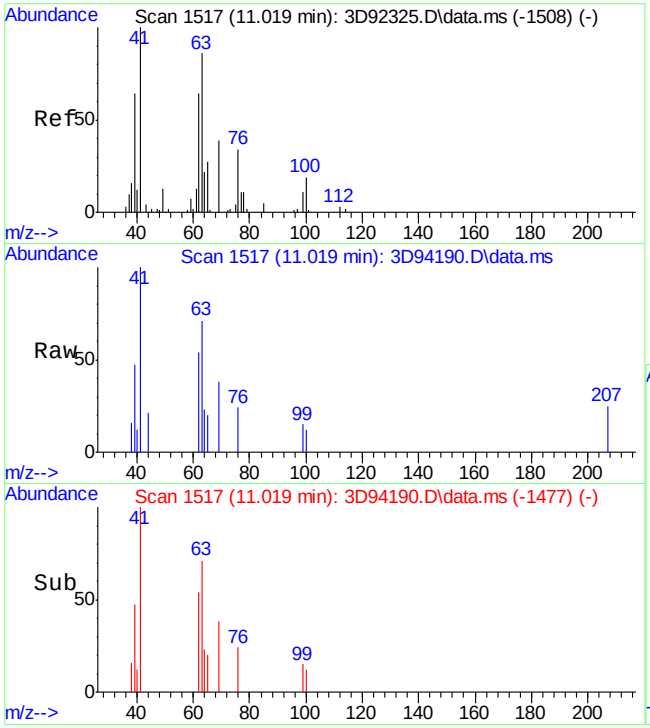


#74
methyl methacrylate
Concen: 1.04 ug/L
RT: 11.019 min Scan# 1517
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 41 Resp: 2241

Ion	Ratio	Lower	Upper
41	100		
69	38.4	21.5	81.5
100	11.8	0.0	50.7

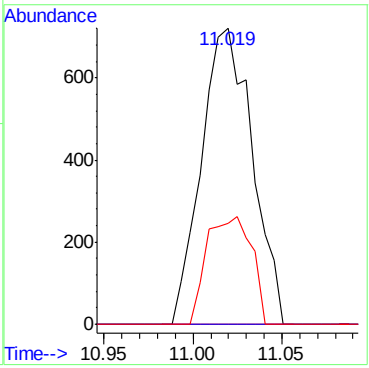


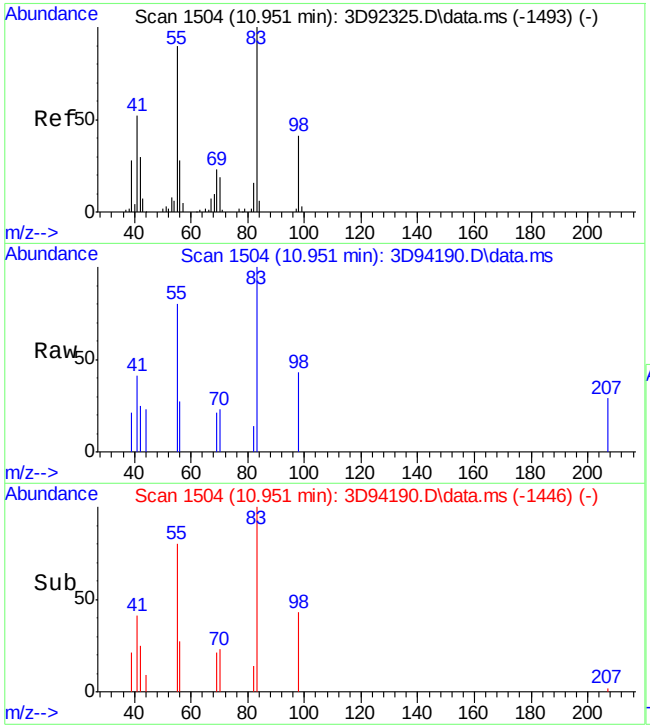


#75
1,2-dichloropropane
Concen: 0.97 ug/L
RT: 11.019 min Scan# 1517
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 63 Resp: 1441

Ion	Ratio	Lower	Upper
63	100		
112	0.0	0.0	33.7
76	34.0	7.1	67.1

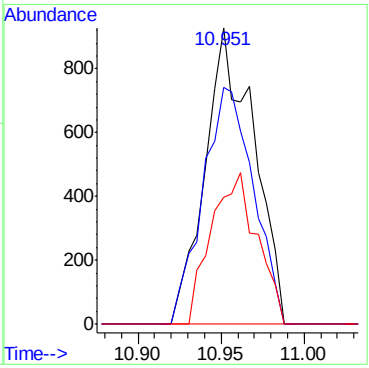


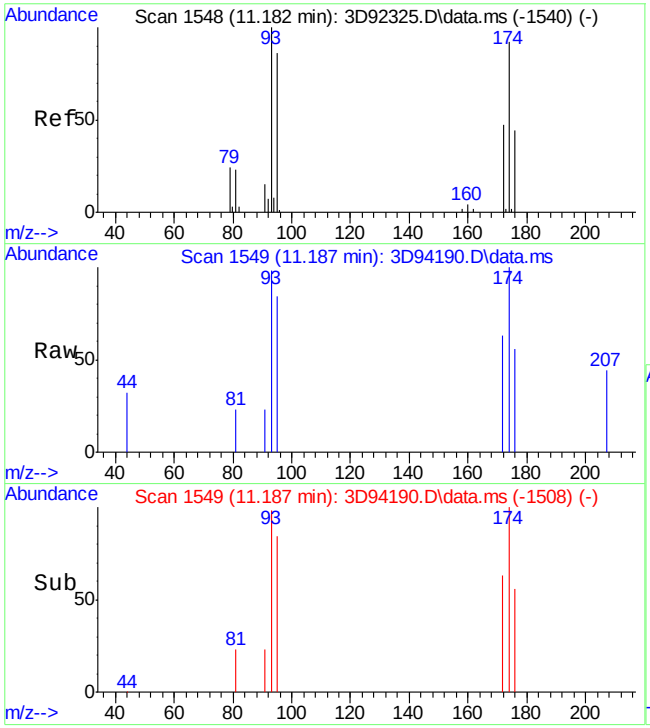


#76
methylcyclohexane
Concen: 0.85 ug/L
RT: 10.951 min Scan# 1504
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 83 Resp: 1893

Ion	Ratio	Lower	Upper
83	100		
55	80.0	48.6	108.6
98	42.7	12.6	72.6

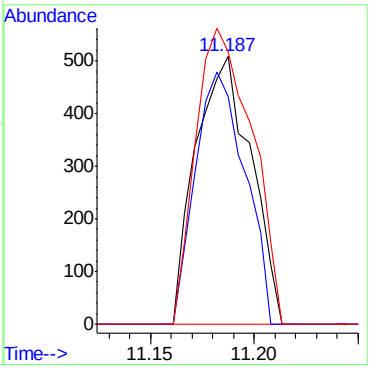


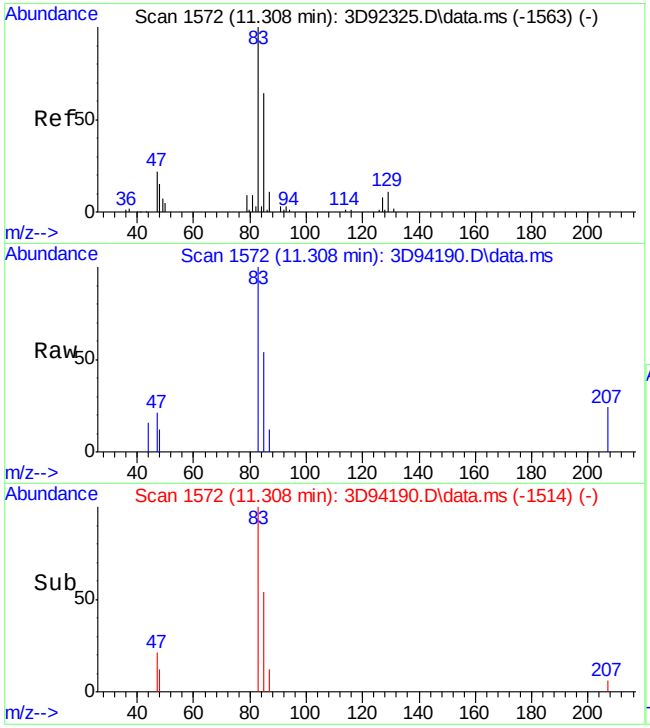


#77
dibromomethane
Concen: 1.01 ug/L
RT: 11.187 min Scan# 1549
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 93 Resp: 940

Ion	Ratio	Lower	Upper
93	100		
95	85.1	51.7	111.7
174	101.6	84.5	144.5

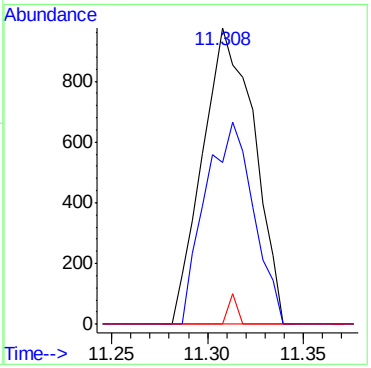


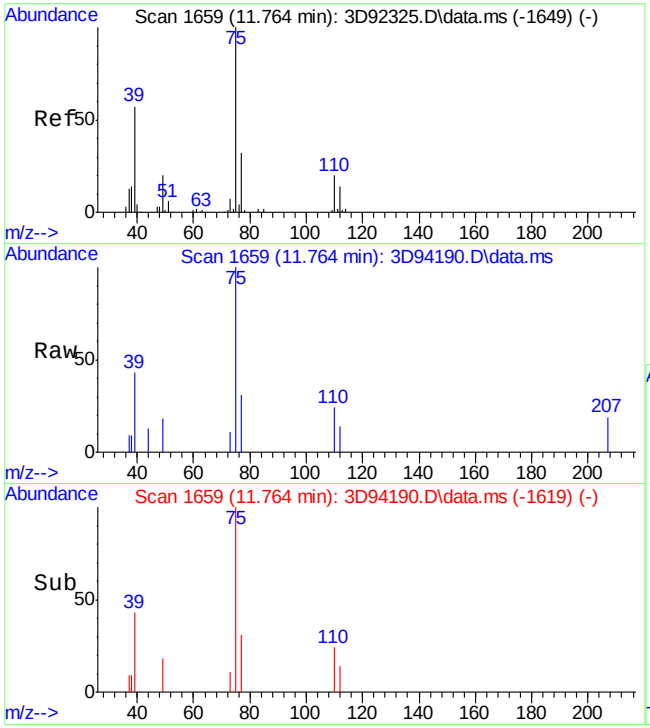


#78
bromodichloromethane
Concen: 0.96 ug/L
RT: 11.308 min Scan# 1572
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 83 Resp: 1825

Ion	Ratio	Lower	Upper
83	100		
85	54.4	33.4	93.4
127	0.0	0.0	39.1

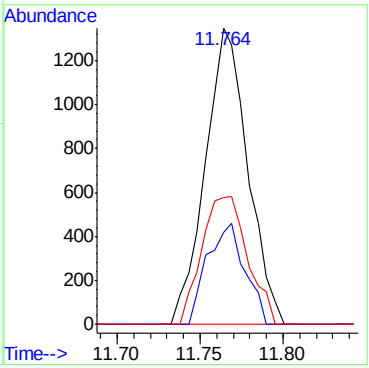


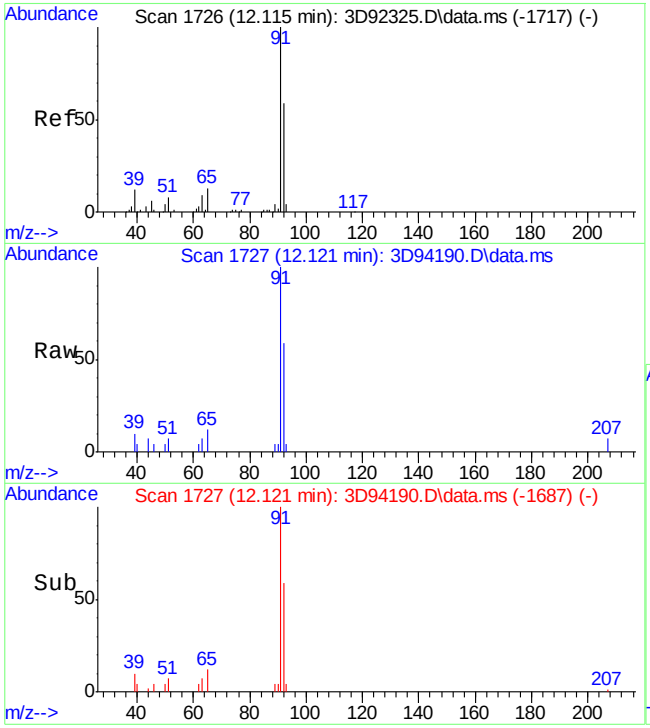


#79
cis-1,3-dichloropropene
Concen: 1.01 ug/L
RT: 11.764 min Scan# 1659
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 75 Resp: 2399

Ion	Ratio	Lower	Upper
75	100		
77	31.0	1.7	61.7
39	42.8	14.6	74.6

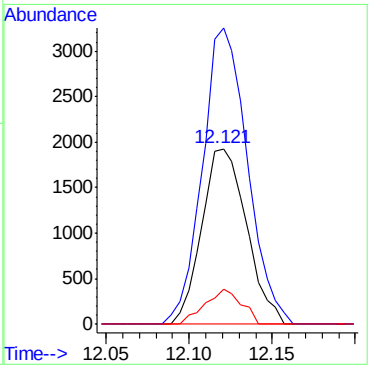




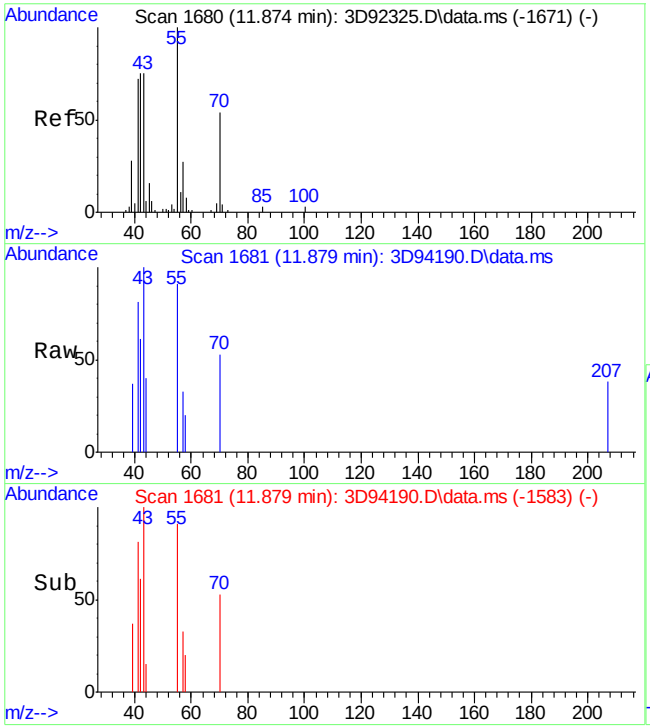
#82
toluene
Concen: 1.02 ug/L
RT: 12.121 min Scan# 1727
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 92 Resp: 3608

Ion	Ratio	Lower	Upper
92	100		
91	168.8	137.1	197.1
65	20.0	0.0	48.7



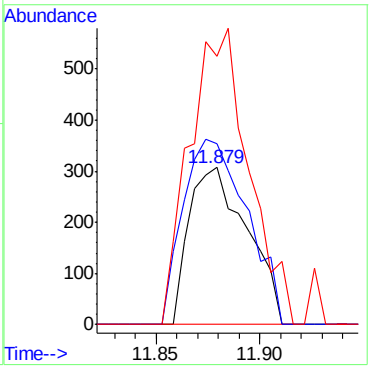
3D94190.D M3D4058.M Thu Dec 19 12:36:43 2013 3D Page 32

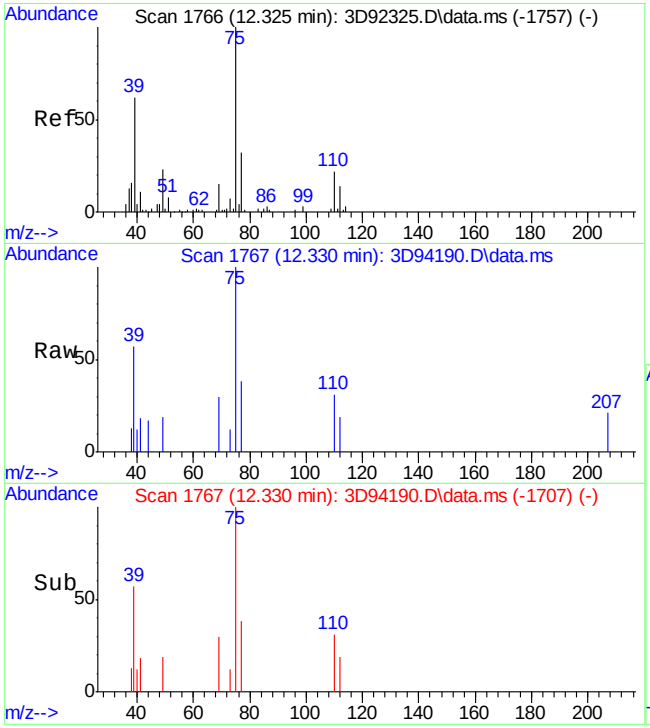


#83
3-methyl-1-butanol
Concen: 17.10 ug/L
RT: 11.879 min Scan# 1681
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 70 Resp: 599

Ion	Ratio	Lower	Upper
70	100		
42	129.0	102.8	162.8
55	191.8	140.8	200.8

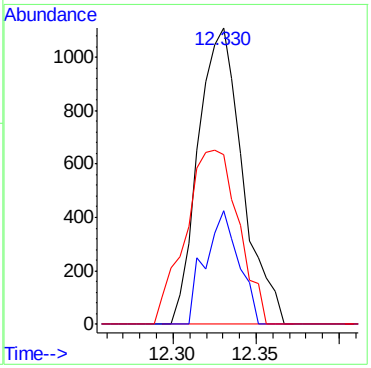


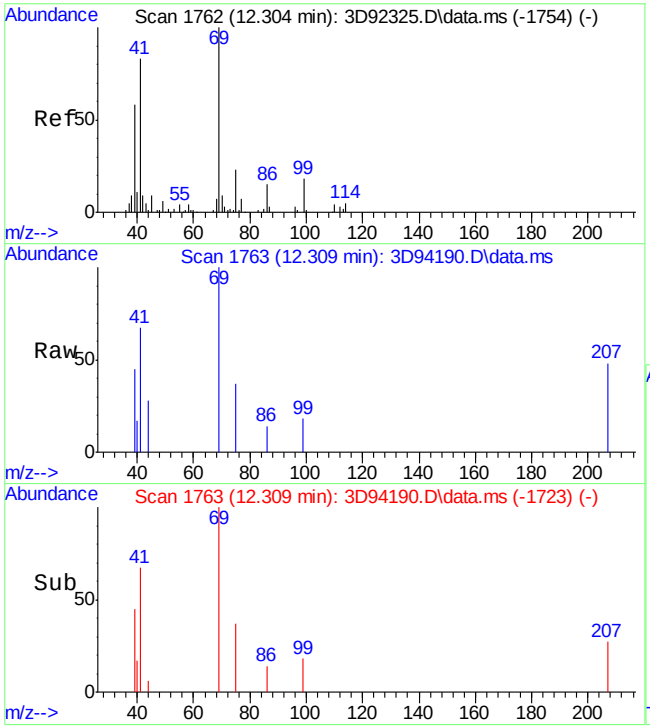


#84
trans-1,3-dichloropropene
Concen: 0.98 ug/L
RT: 12.330 min Scan# 1767
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 75 Resp: 2058

Ion	Ratio	Lower	Upper
75	100		
77	38.4	2.0	62.0
39	57.4	24.5	84.5

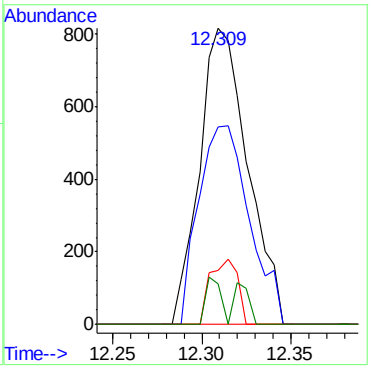


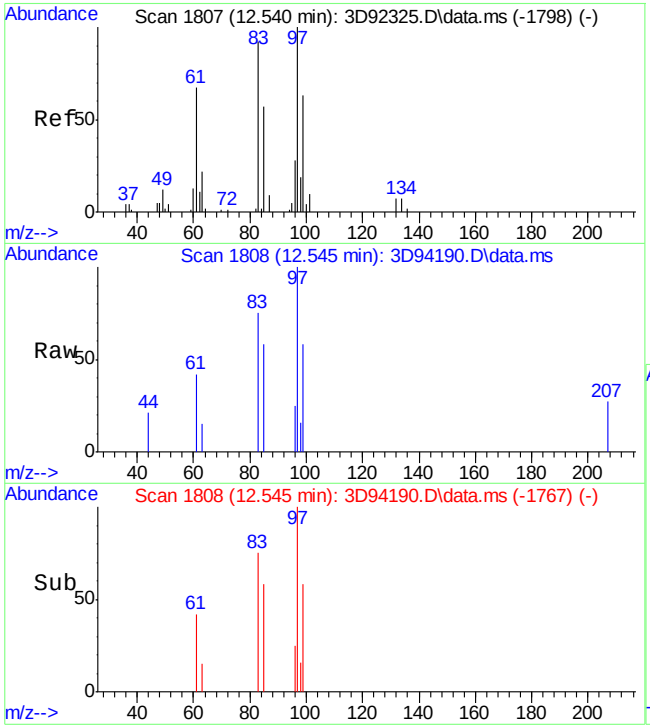


#85
ethyl methacrylate
Concen: 0.92 ug/L
RT: 12.309 min Scan# 1763
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 69 Resp: 1544

Ion	Ratio	Lower	Upper
69	100		
41	66.8	40.4	100.4
99	18.1	0.0	50.5
86	13.8	0.0	45.2

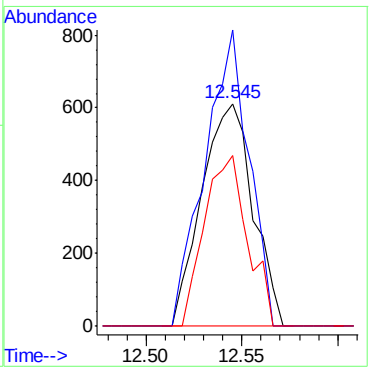


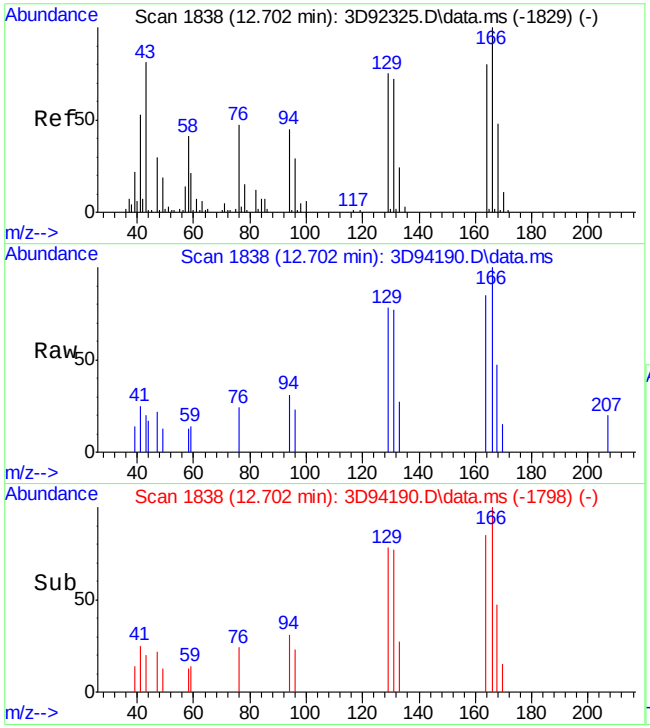


#86
1,1,2-trichloroethane
Concen: 1.05 ug/L
RT: 12.545 min Scan# 1808
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 83 Resp: 1134

Ion	Ratio	Lower	Upper
83	100		
97	133.2	84.6	144.6
85	76.8	35.4	95.4

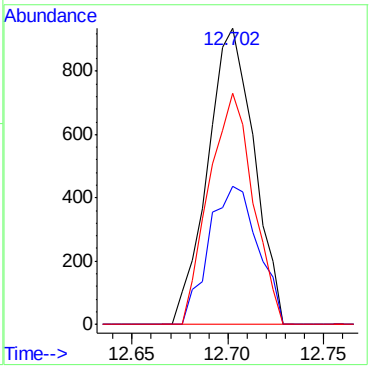


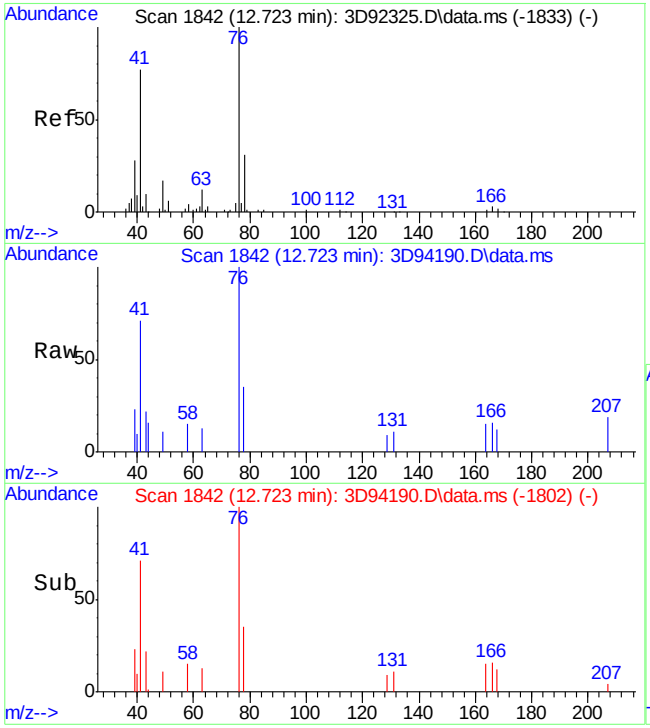


#89
tetrachloroethene
Concen: 0.95 ug/L
RT: 12.702 min Scan# 1838
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:166 Resp: 1570

Ion	Ratio	Lower	Upper
166	100		
168	46.7	19.9	79.9
129	78.1	38.6	98.6

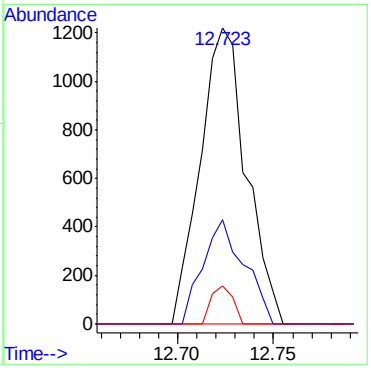




#90
1,3-dichloropropane
Concen: 1.04 ug/L
RT: 12.723 min Scan# 1842
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 76 Resp: 2035

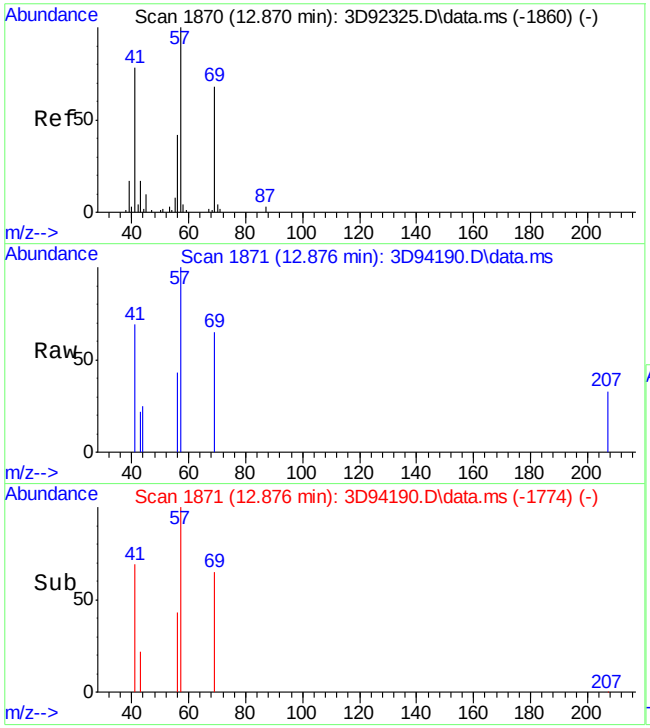
Ion	Ratio	Lower	Upper
76	100		
78	35.1	2.6	62.6
63	12.9	0.0	41.3



7.7.2

7

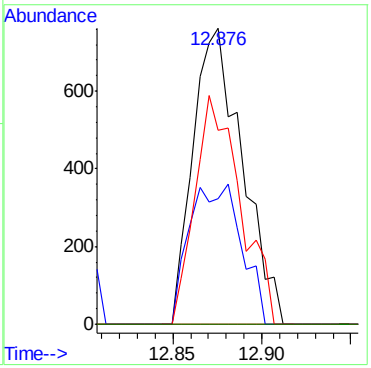
3D94190.D M3D4058.M Thu Dec 19 12:36:43 2013 3D Page 35

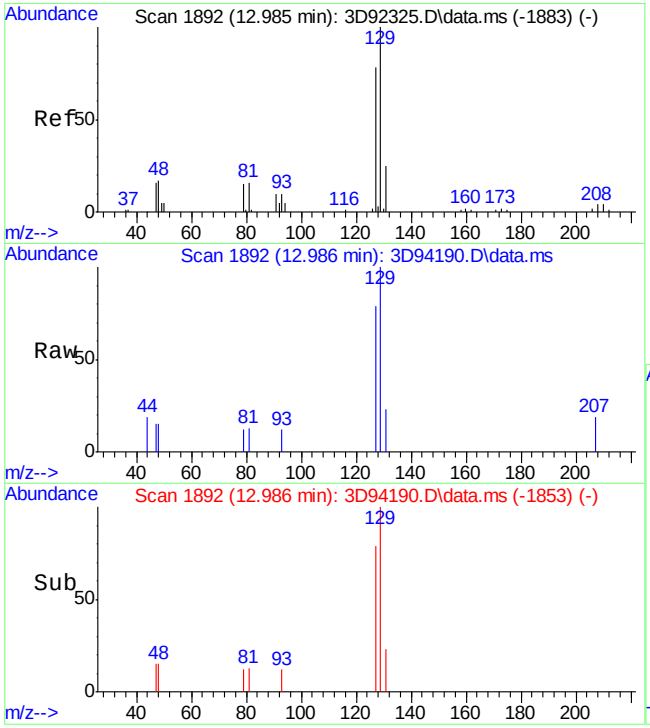


#92
3,3-Dimethyl-1-Butanol
Concen: 10.96 ug/L
RT: 12.876 min Scan# 1871
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 57 Resp: 1467

Ion	Ratio	Lower	Upper
57	100		
56	49.7	35.8	53.6
69	71.2	59.3	88.9
87	0.0	2.7	4.1#

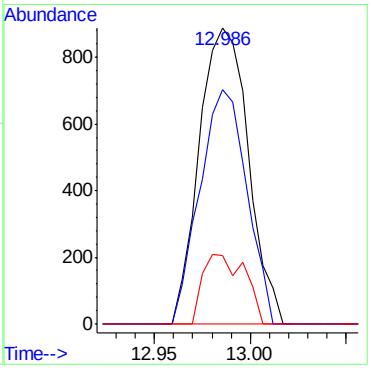


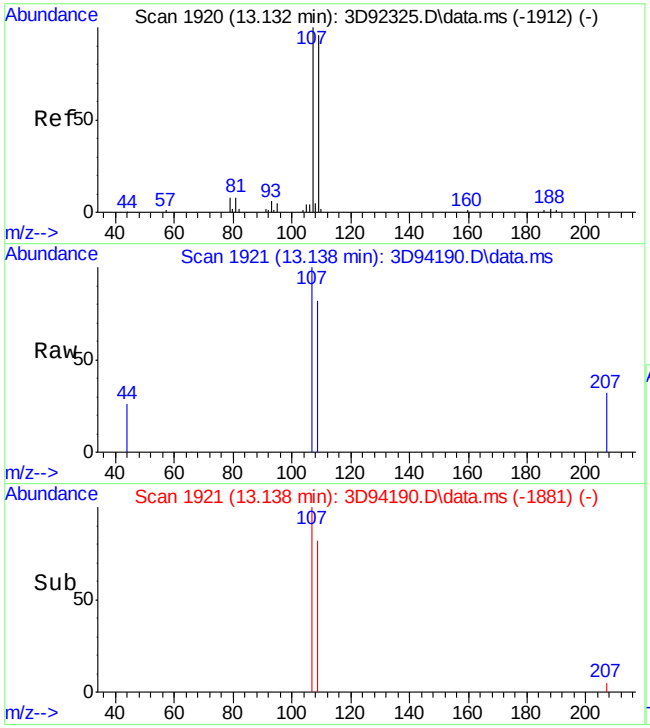


#93
dibromochloromethane
Concen: 1.00 ug/L
RT: 12.986 min Scan# 1892
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:129 Resp: 1575

Ion	Ratio	Lower	Upper
129	100		
127	79.3	48.3	108.3
131	23.0	0.0	54.2

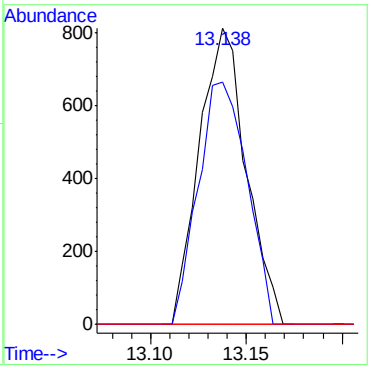


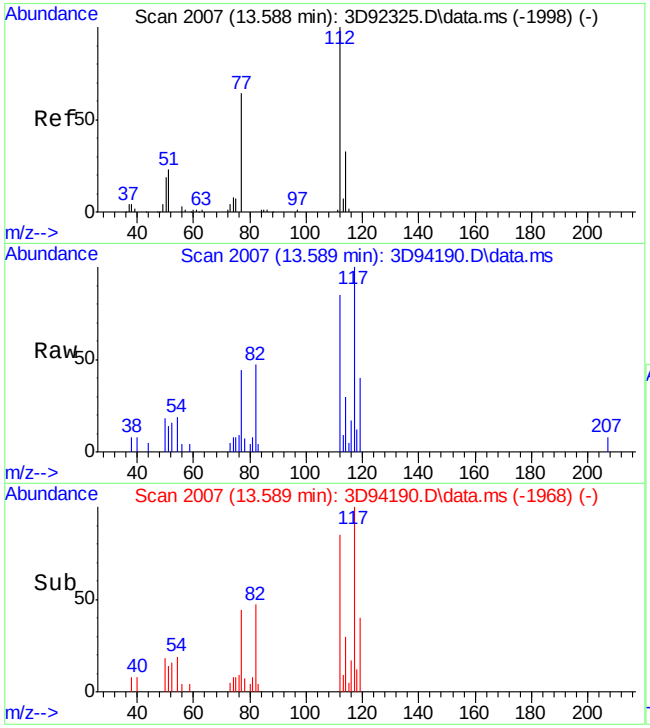


#94
1,2-dibromoethane
Concen: 1.04 ug/L
RT: 13.138 min Scan# 1921
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:107 Resp: 1381

Ion	Ratio	Lower	Upper
107	100		
109	82.0	65.3	125.3
188	0.0	0.0	33.4

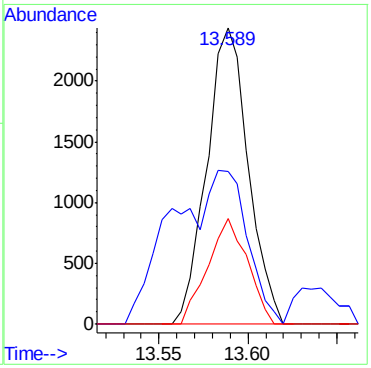


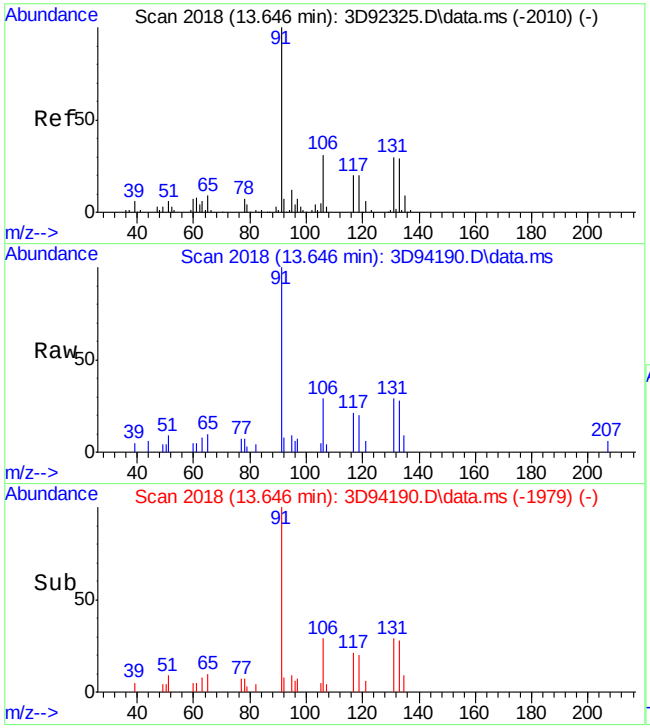


#96
chlorobenzene
Concen: 1.04 ug/L
RT: 13.589 min Scan# 2007
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:112 Resp: 3955

Ion	Ratio	Lower	Upper
112	100		
77	42.9	22.5	82.5
114	35.7	2.5	62.5

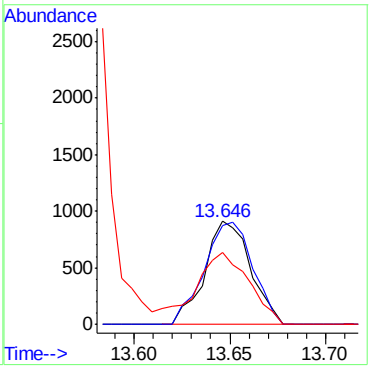


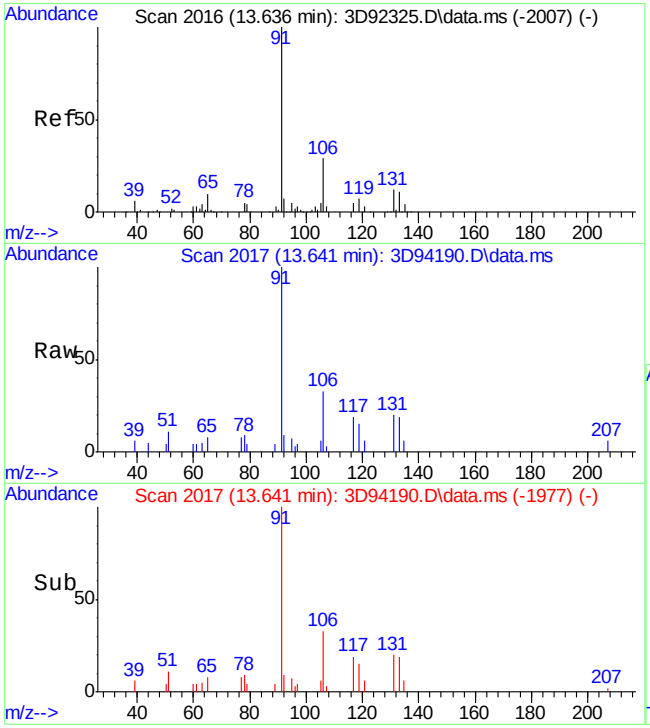


#97
1,1,1,2-tetrachloroethane
Concen: 1.00 ug/L
RT: 13.646 min Scan# 2018
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:131 Resp: 1503

Ion	Ratio	Lower	Upper
131	100		
133	95.5	63.6	123.6
119	70.3	37.5	97.5

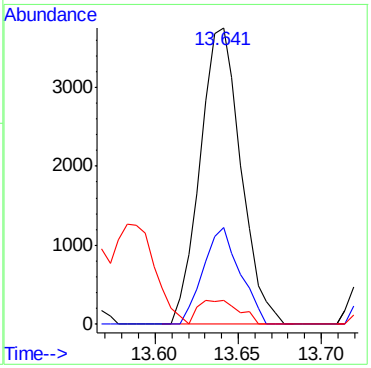


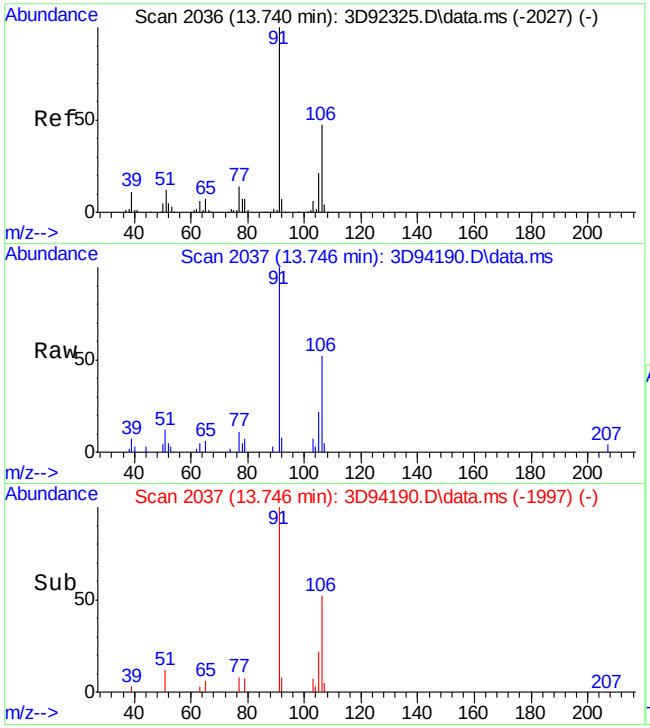


#98
ethylbenzene
Concen: 1.02 ug/L
RT: 13.641 min Scan# 2017
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 91 Resp: 6407

Ion	Ratio	Lower	Upper
91	100		
106	32.6	1.2	61.2
77	7.9	0.0	38.2

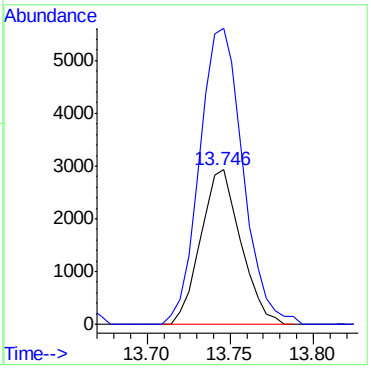


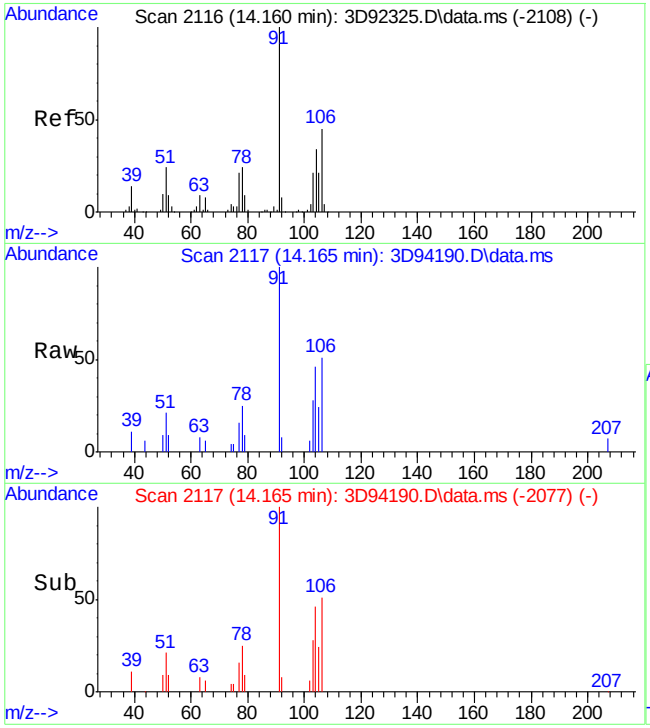


#99
m,p-xylene
Concen: 2.03 ug/L
RT: 13.746 min Scan# 2037
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:106 Resp: 4937

Ion	Ratio	Lower	Upper
106	100		
91	191.7	139.0	258.2

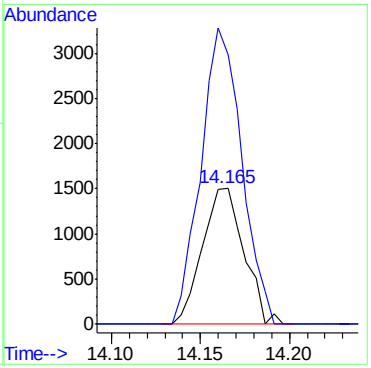


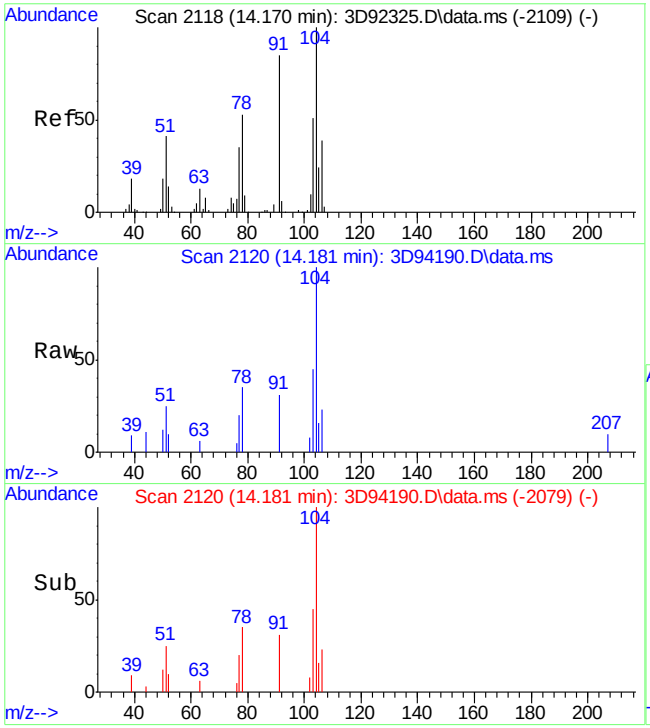


#100
o-xylene
Concen: 0.99 ug/L
RT: 14.165 min Scan# 2117
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:106 Resp: 2433

Ion	Ratio	Lower	Upper
106	100		
91	197.7	146.5	272.1

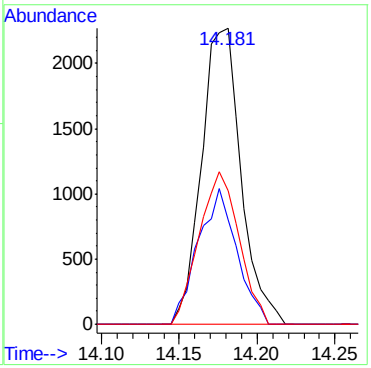


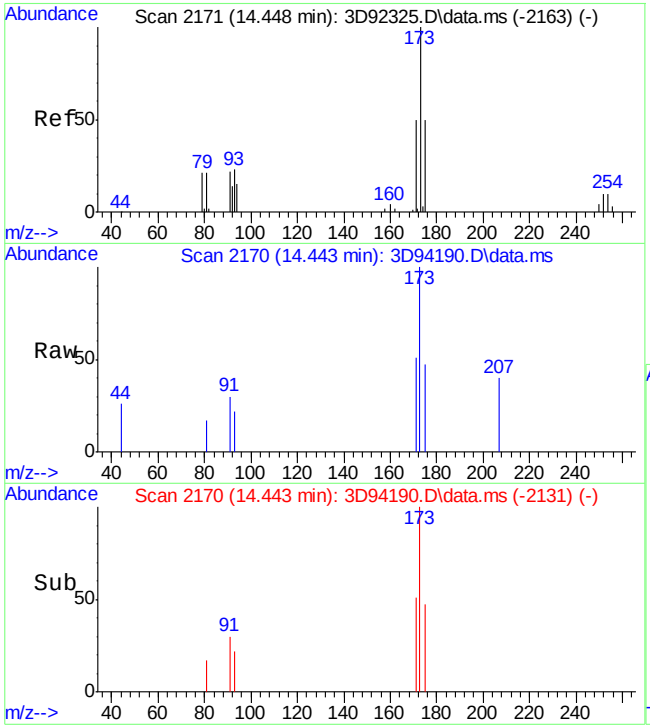


#101
styrene
Concen: 0.99 ug/L
RT: 14.181 min Scan# 2120
Delta R.T. 0.016 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:104 Resp: 4002

Ion	Ratio	Lower	Upper
104	100		
78	35.3	12.8	72.8
103	45.0	20.3	80.3

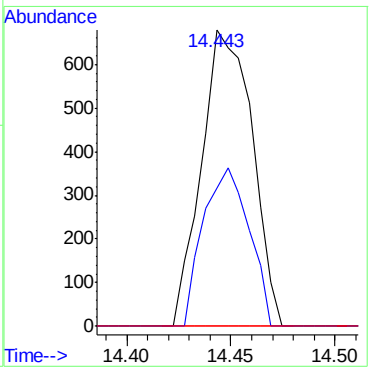


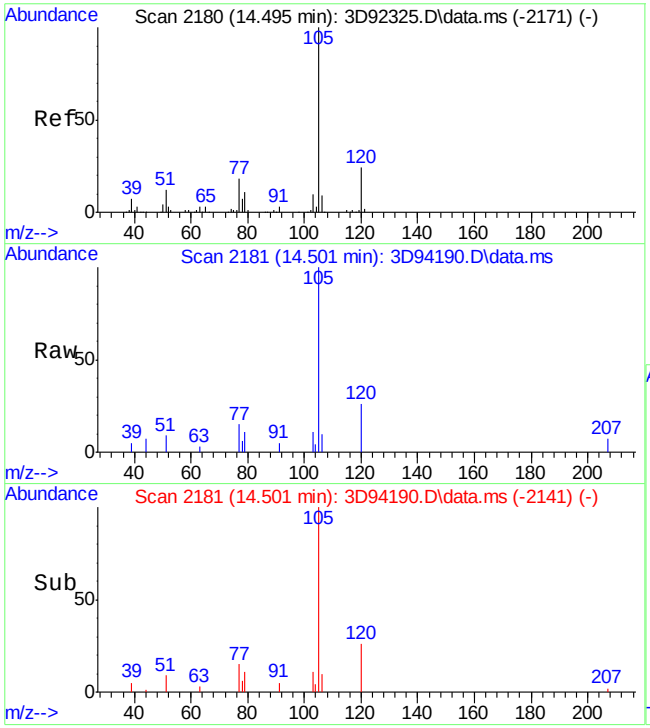


#103
bromoform
Concen: 0.97 ug/L
RT: 14.443 min Scan# 2170
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:173 Resp: 1154

Ion	Ratio	Lower	Upper
173	100		
175	46.7	18.6	78.6
254	0.0	0.0	41.1

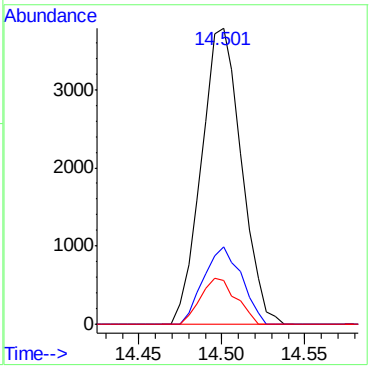


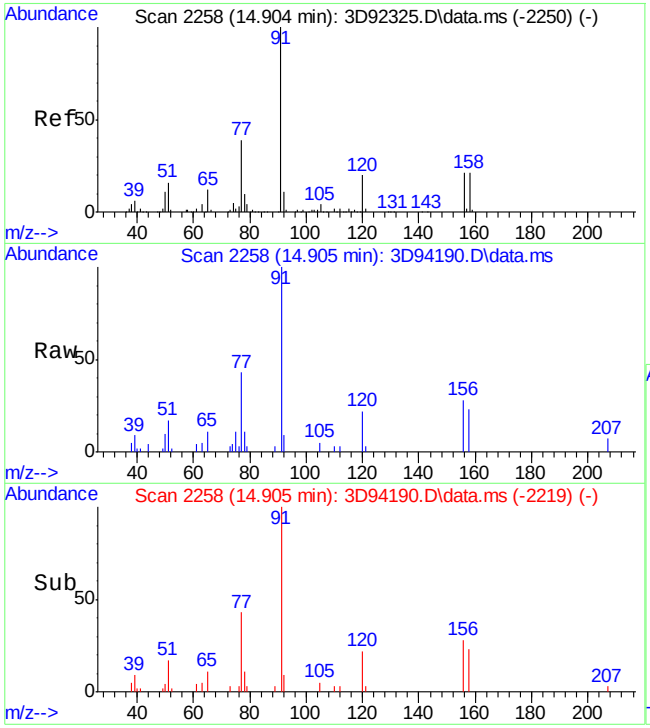


#105
isopropylbenzene
Concen: 1.00 ug/L
RT: 14.501 min Scan# 2181
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:105 Resp: 6352

Ion	Ratio	Lower	Upper
105	100		
120	26.3	0.0	55.8
77	14.8	0.0	44.4

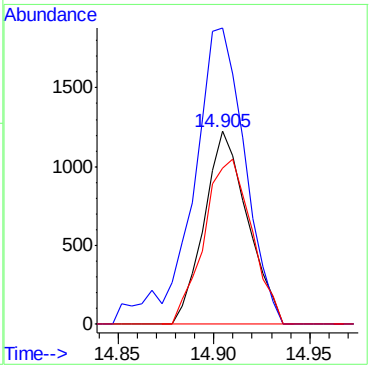




#107
bromobenzene
Concen: 1.04 ug/L
RT: 14.905 min Scan# 2258
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:156 Resp: 1921

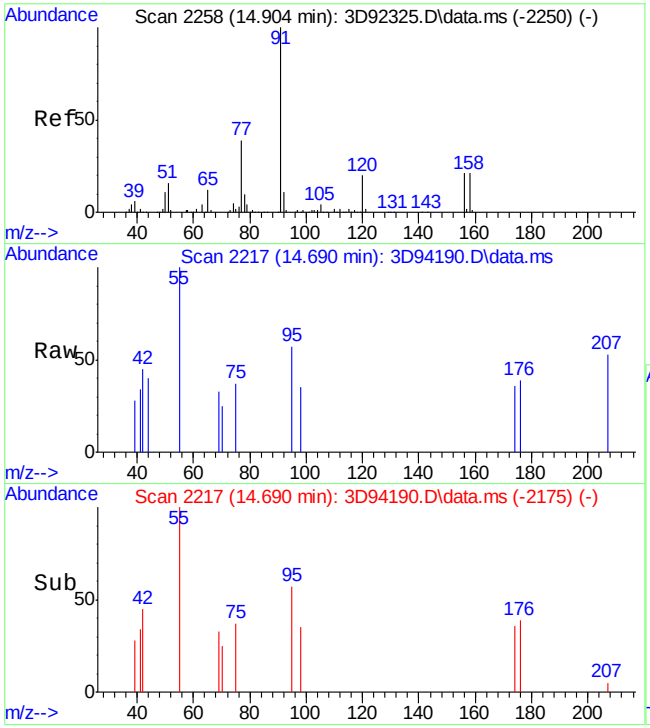
Ion	Ratio	Lower	Upper
156	100		
77	153.7	115.4	175.4
158	80.9	67.8	127.8



7.7.2

7

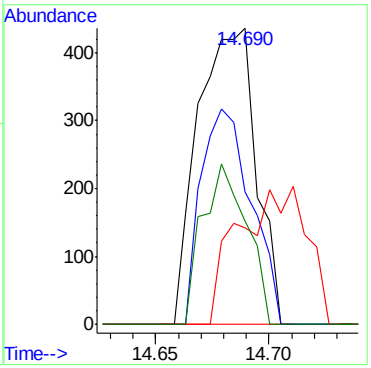
3D94190.D M3D4058.M Thu Dec 19 12:36:43 2013 3D Page 41

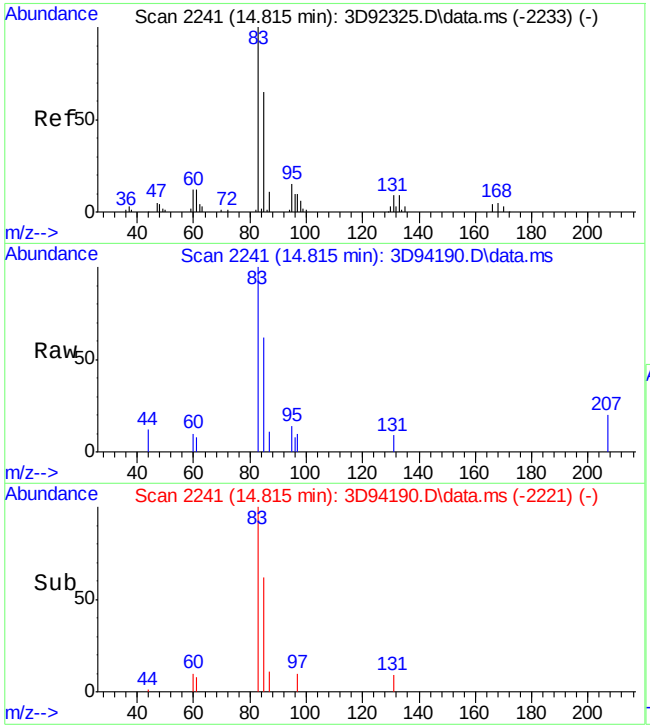


#108
cyclohexanone
Concen: 10.92 ug/L
RT: 14.690 min Scan# 2217
Delta R.T. 0.021 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 55 Resp: 776

Ion	Ratio	Lower	Upper
55	100		
42	44.7	35.5	95.5
69	32.8	1.0	61.0
98	34.9	15.1	75.1

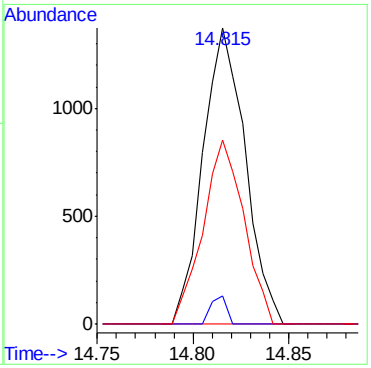


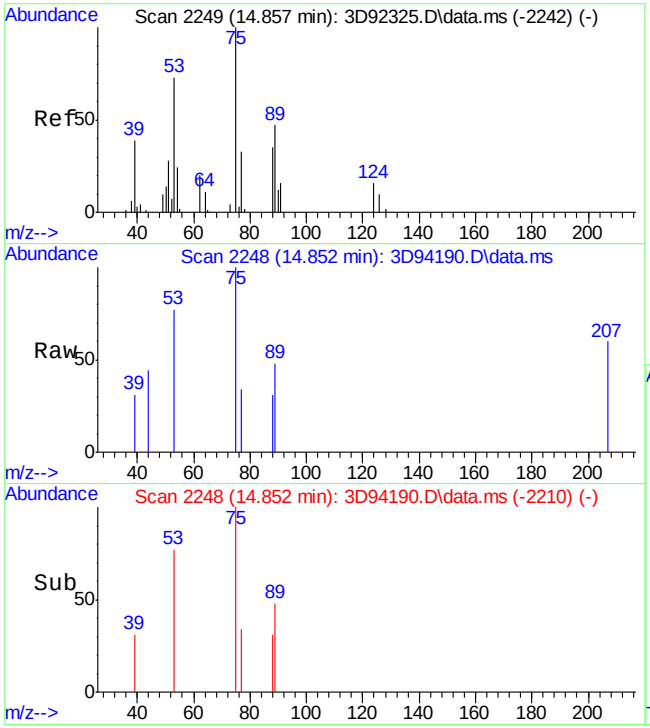


#109
1,1,2,2-tetrachloroethane
Concen: 1.12 ug/L
RT: 14.815 min Scan# 2241
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 83 Resp: 2093

Ion	Ratio	Lower	Upper
83	100		
131	9.4	0.0	40.2
85	62.2	33.4	93.4

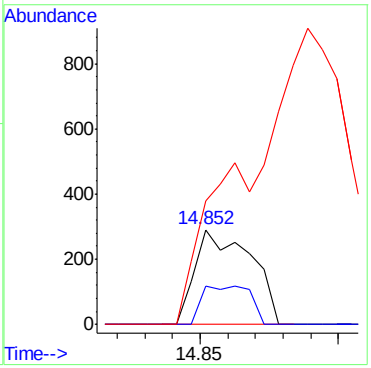


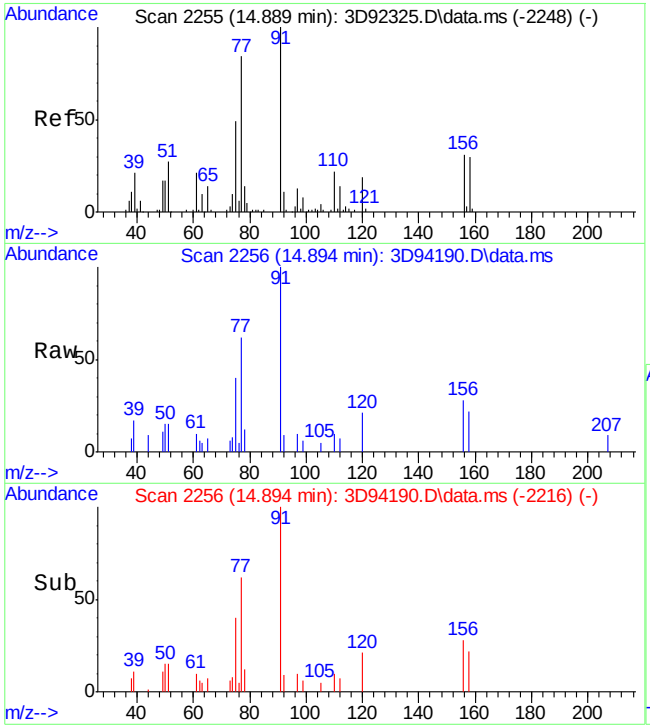


#110
trans-1,4-dichloro-2-butene
Concen: 0.98 ug/L
RT: 14.852 min Scan# 2248
Delta R.T. 0.000 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 53 Resp: 406

Ion	Ratio	Lower	Upper
53	100		
88	41.0	27.1	87.1
75	130.7	132.8	192.8#

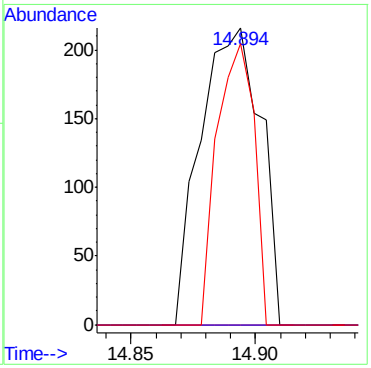


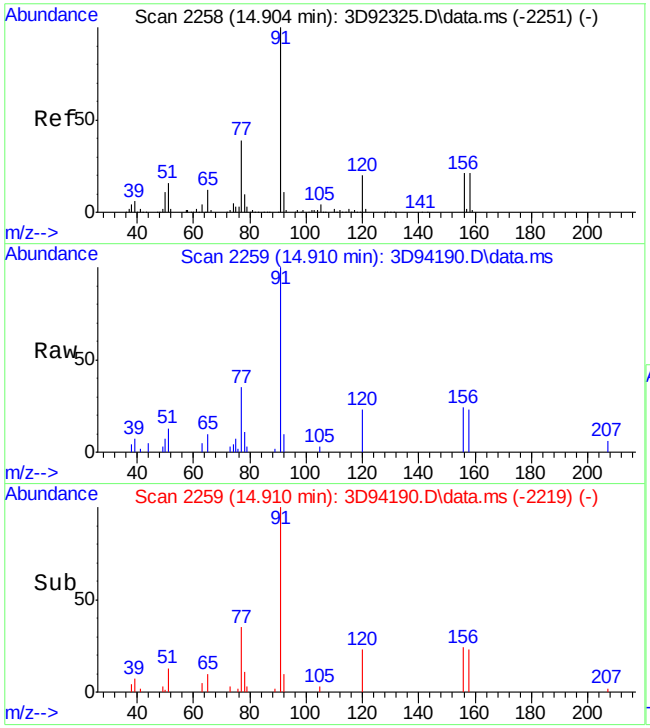


#111
1,2,3-trichloropropane
Concen: 0.88 ug/L
RT: 14.894 min Scan# 2256
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:110 Resp: 364

Ion	Ratio	Lower	Upper
110	100		
111	0.0	0.0	39.5
97	94.9	25.8	85.8#

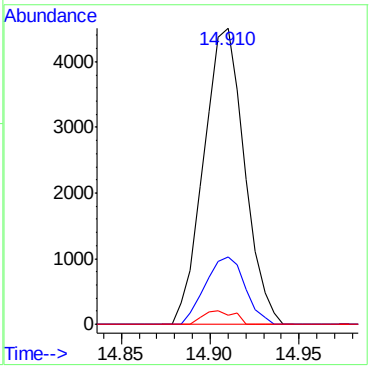


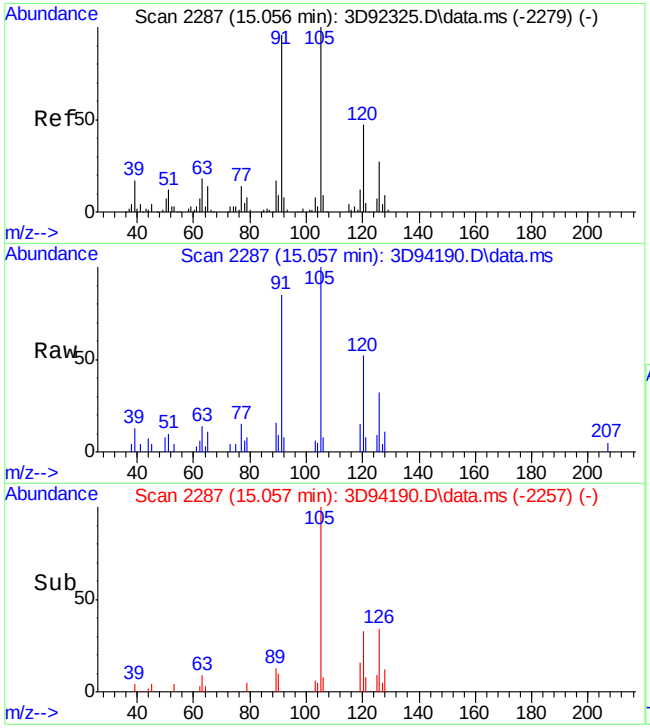


#112
n-propylbenzene
Concen: 1.00 ug/L
RT: 14.910 min Scan# 2259
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 91 Resp: 7214

Ion	Ratio	Lower	Upper
91	100		
120	22.8	0.0	52.2
105	3.0	0.0	33.7

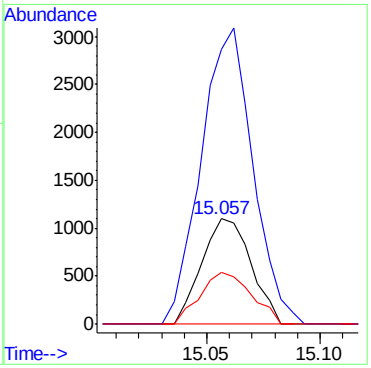


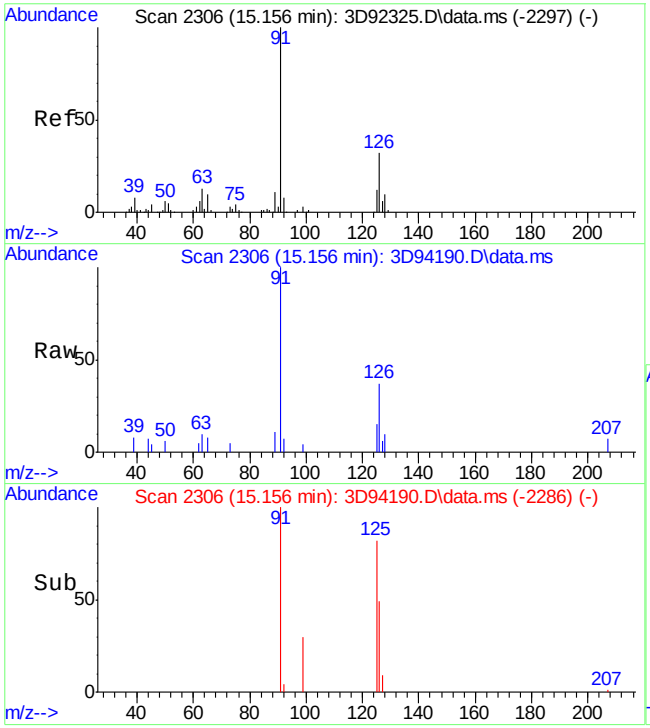


#114
2-chlorotoluene
Concen: 1.05 ug/L
RT: 15.057 min Scan# 2287
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:126 Resp: 1662

Ion	Ratio	Lower	Upper
126	100		
91	261.4	272.2	332.2#
89	49.4	21.0	81.0

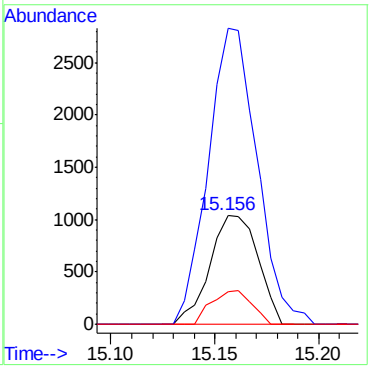


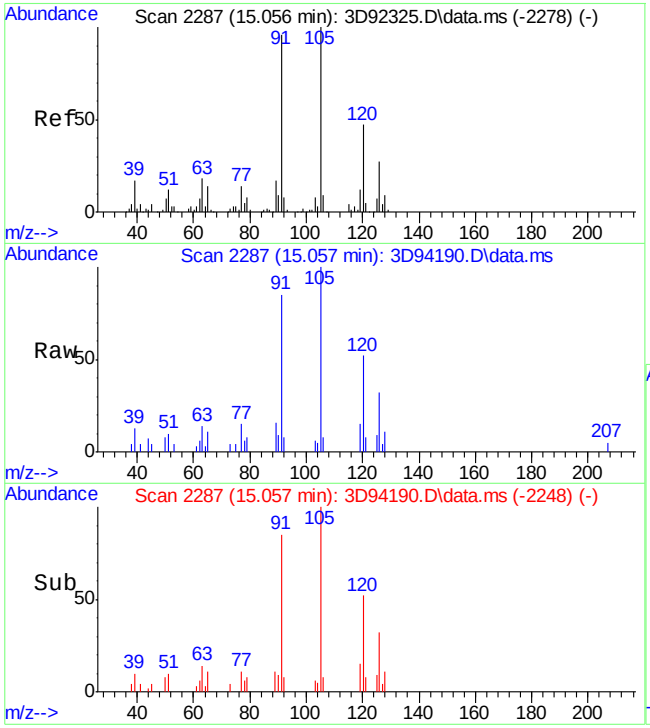


#115
4-chlorotoluene
Concen: 1.05 ug/L
RT: 15.156 min Scan# 2306
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:126 Resp: 1679

Ion	Ratio	Lower	Upper
126	100		
91	271.0	240.5	300.5
89	30.0	0.0	58.4

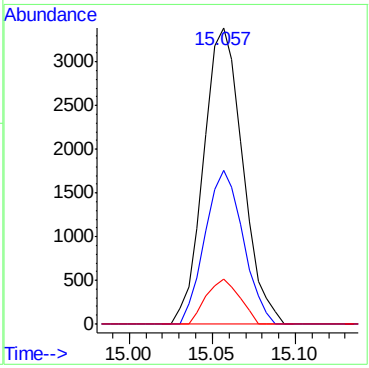


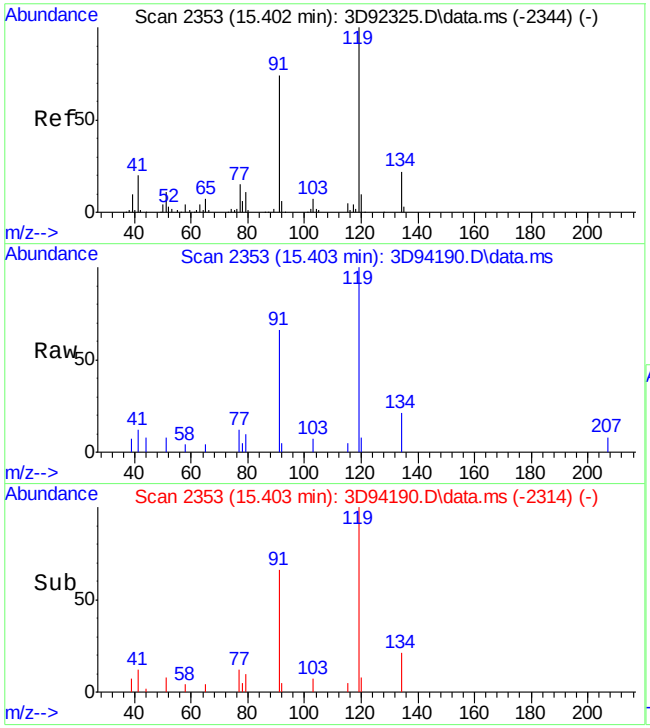


#116
1,3,5-trimethylbenzene
Concen: 1.04 ug/L
RT: 15.057 min Scan# 2287
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:105 Resp: 5556

Ion	Ratio	Lower	Upper
105	100		
120	52.1	21.2	81.2
119	15.3	0.0	43.0

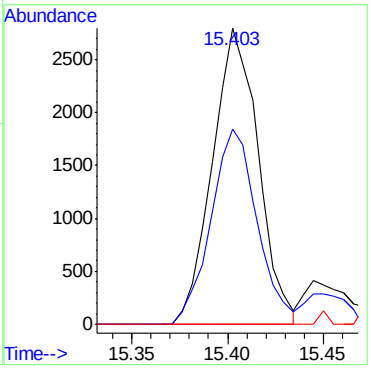


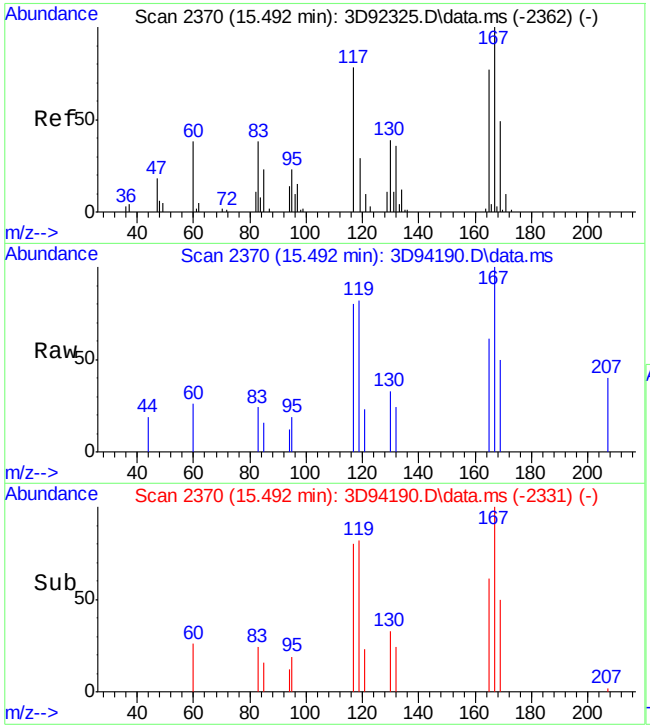


#117
tert-butylbenzene
Concen: 1.00 ug/L
RT: 15.403 min Scan# 2353
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:119 Resp: 4637

Ion	Ratio	Lower	Upper
119	100		
91	65.9	33.7	93.7
117	0.0	0.0	33.4

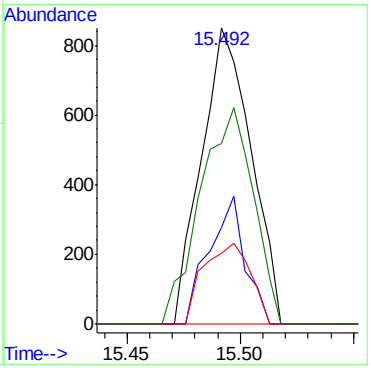


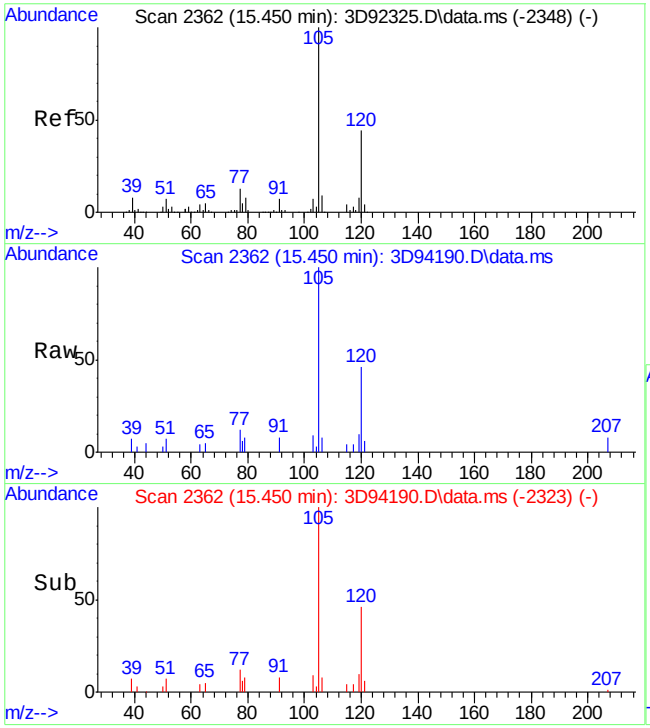


#118
pentachloroethane
Concen: 1.04 ug/L
RT: 15.492 min Scan# 2370
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:167 Resp: 1294

Ion	Ratio	Lower	Upper
167	100		
130	32.7	1.5	61.5
132	23.8	0.0	58.9
165	61.1	50.0	110.0

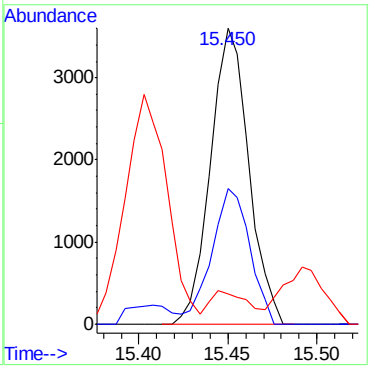


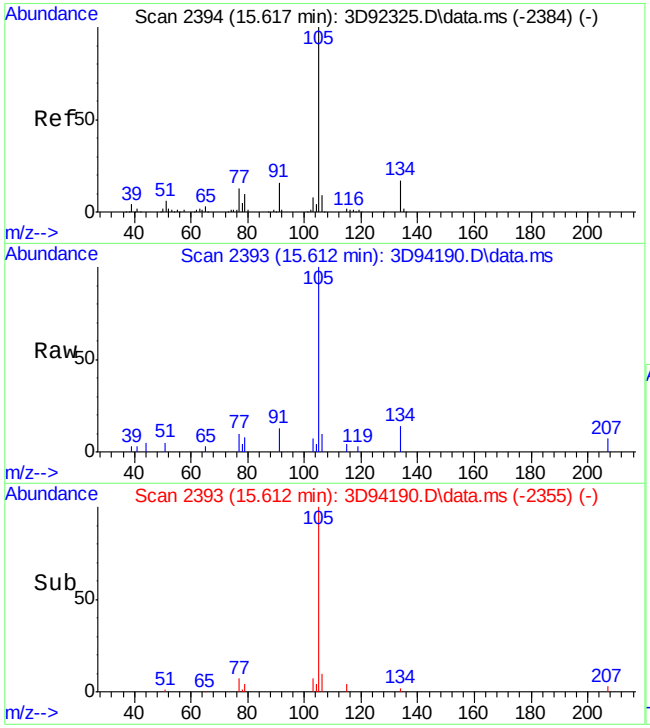


#119
1,2,4-trimethylbenzene
Concen: 1.02 ug/L
RT: 15.450 min Scan# 2362
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:105 Resp: 5414

Ion	Ratio	Lower	Upper
105	100		
120	45.7	17.4	77.4
119	0.0	0.0	42.0

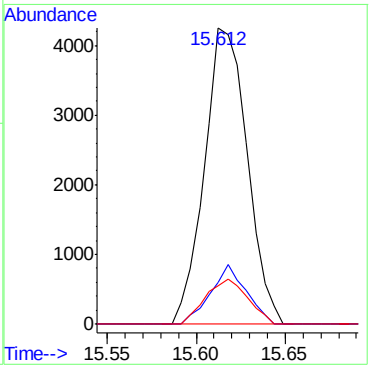




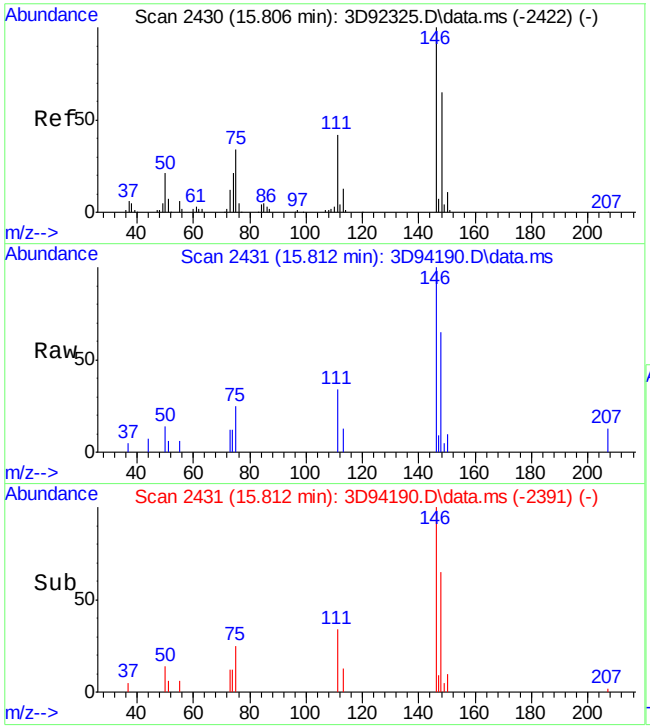
#120
sec-butylbenzene
Concen: 1.00 ug/L
RT: 15.612 min Scan# 2393
Delta R.T. 0.000 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:105 Resp: 7096

Ion	Ratio	Lower	Upper
105	100		
134	14.2	0.0	48.2
91	13.0	0.0	44.6



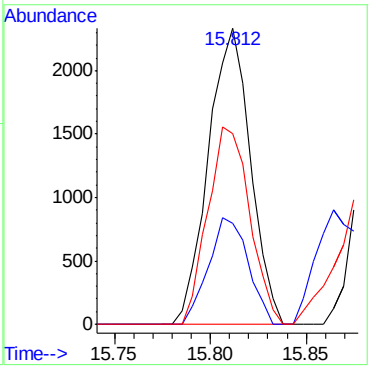
3D94190.D M3D4058.M Thu Dec 19 12:36:44 2013 3D Page 47

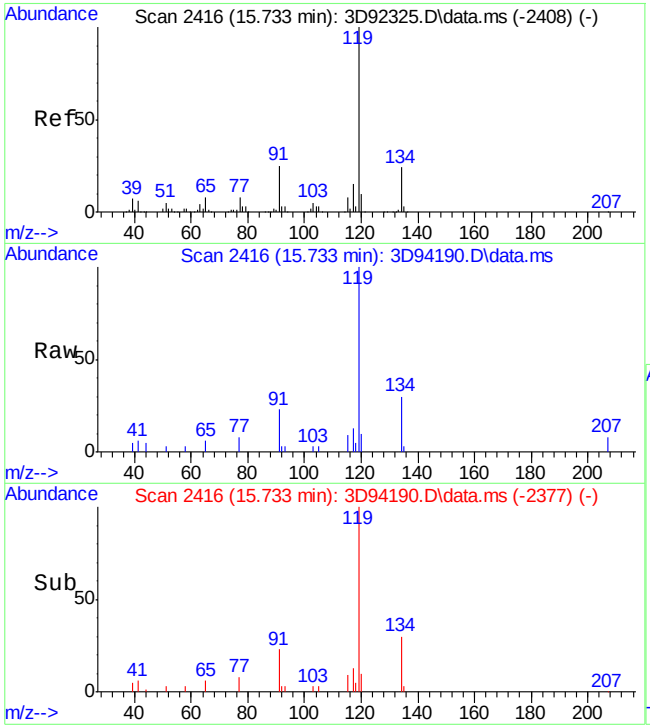


#121
1,3-dichlorobenzene
Concen: 1.02 ug/L
RT: 15.812 min Scan# 2431
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:146 Resp: 3552

Ion	Ratio	Lower	Upper
146	100		
111	34.2	5.6	65.6
148	64.6	34.0	94.0

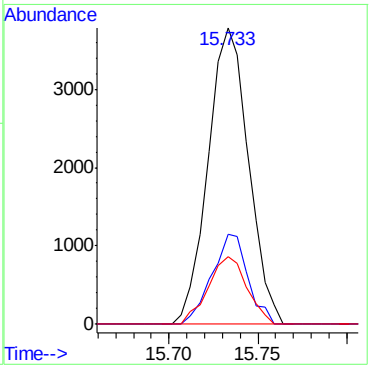


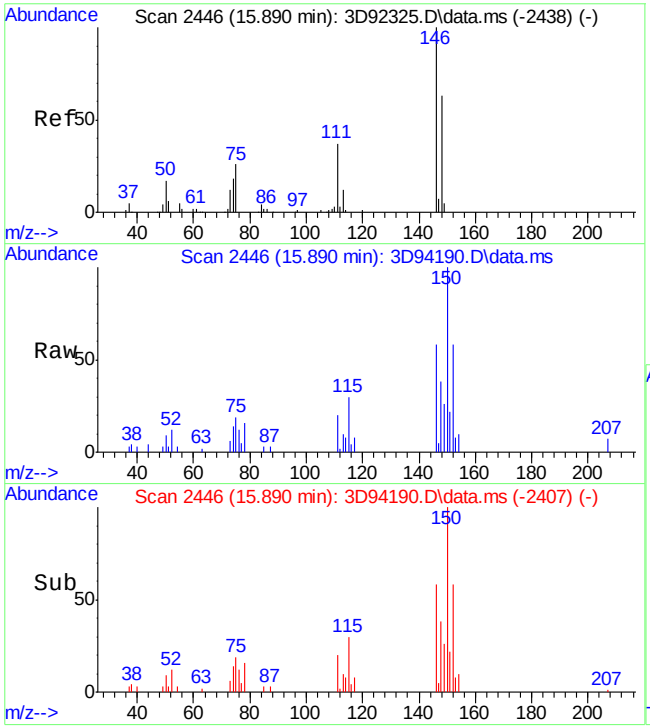


#122
p-isopropyltoluene
Concen: 1.01 ug/L
RT: 15.733 min Scan# 2416
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:119 Resp: 5966

Ion	Ratio	Lower	Upper
119	100		
134	30.4	0.0	55.4
91	22.6	0.0	51.1

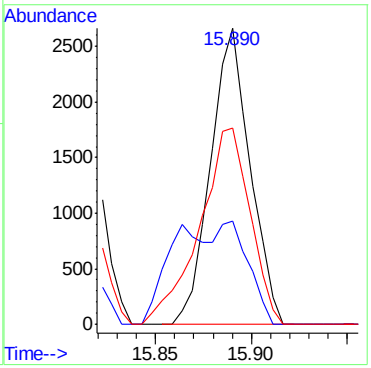


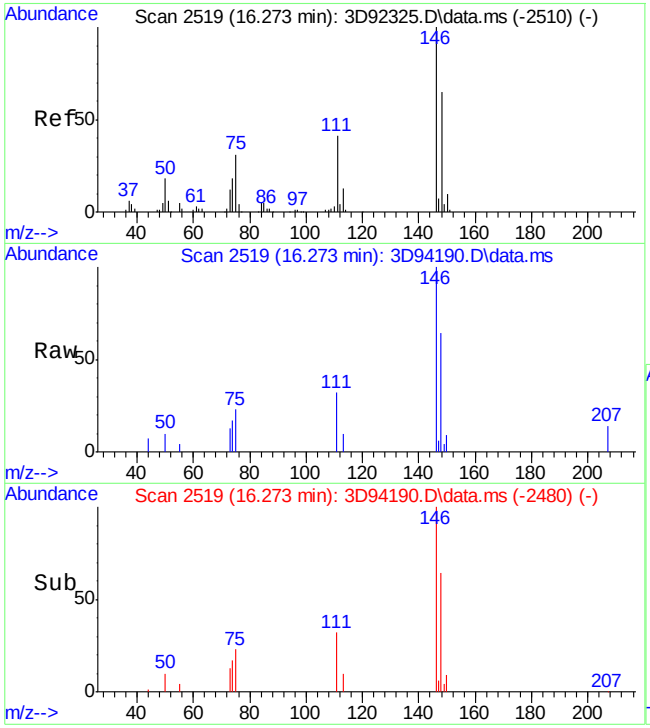


#123
1,4-dichlorobenzene
Concen: 1.05 ug/L
RT: 15.890 min Scan# 2446
Delta R.T. 0.005 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:146 Resp: 3797

Ion	Ratio	Lower	Upper
146	100		
111	34.9	4.2	64.2
148	66.4	34.3	94.3

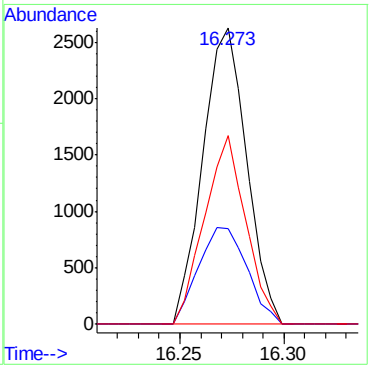


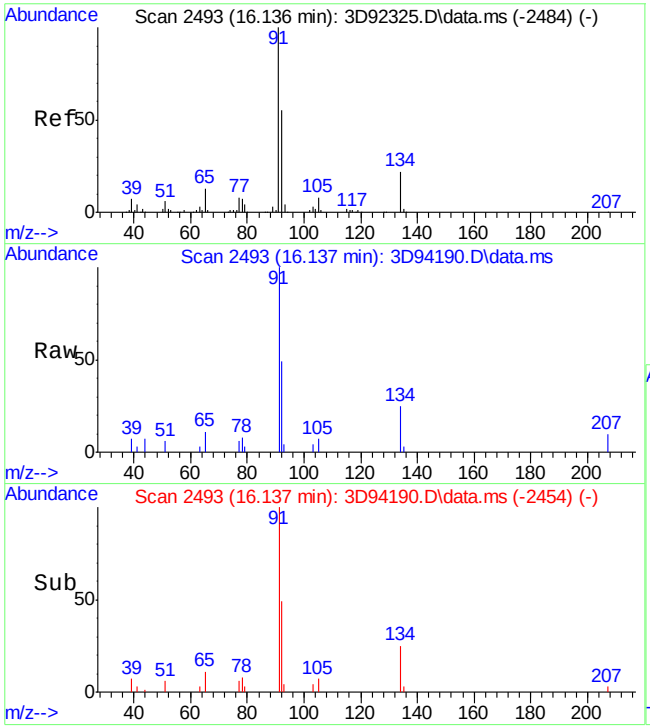


#124
1,2-dichlorobenzene
Concen: 1.08 ug/L
RT: 16.273 min Scan# 2519
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:146 Resp: 3846

Ion	Ratio	Lower	Upper
146	100		
111	32.1	6.4	66.4
148	63.6	34.3	94.3

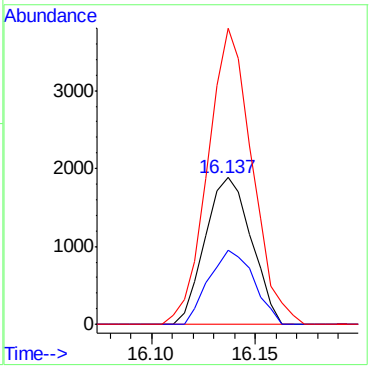


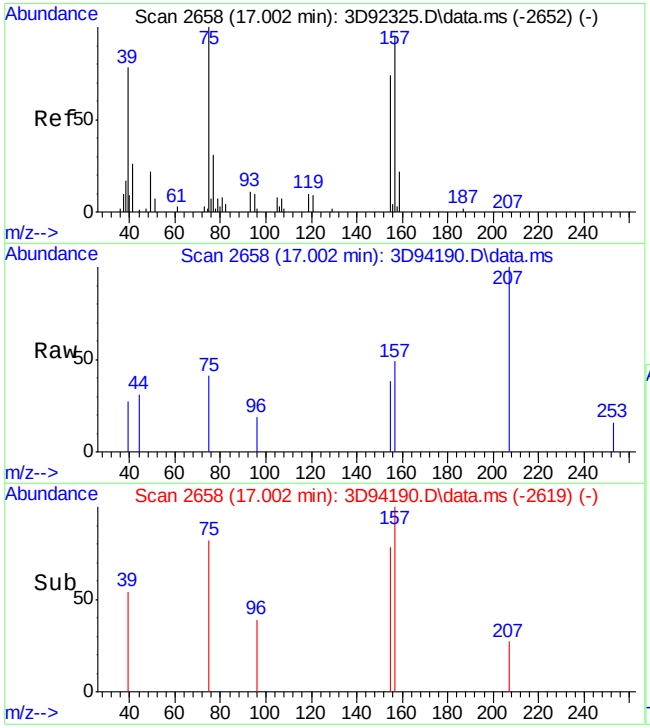


#126
n-butylbenzene
Concen: 0.97 ug/L
RT: 16.137 min Scan# 2493
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 92 Resp: 2919

Ion	Ratio	Lower	Upper
92	100		
134	50.3	15.5	75.5
91	202.1	150.4	210.4

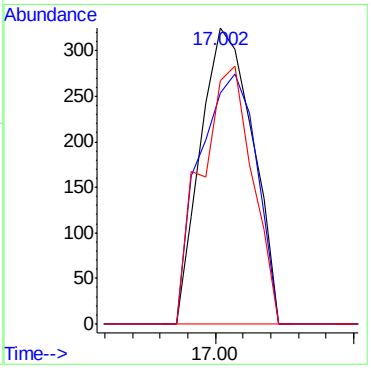


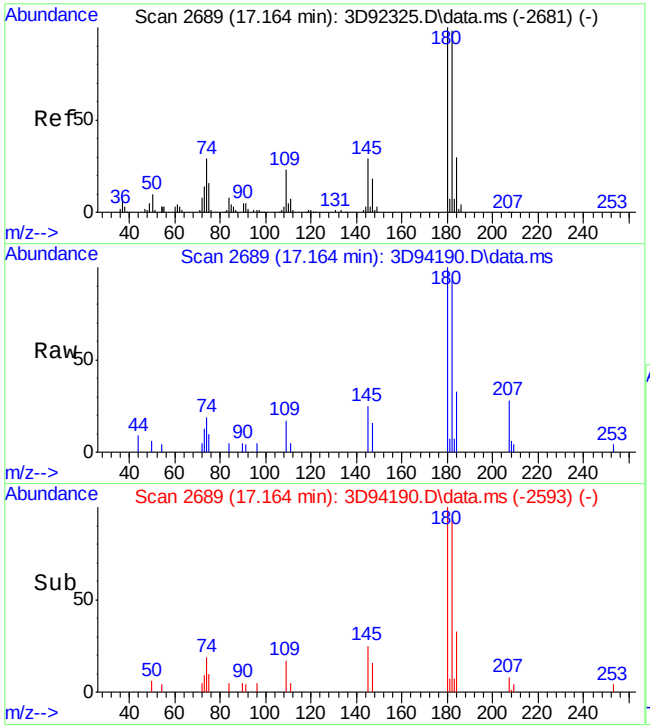


#128
1,2-dibromo-3-chloropropane
Concen: 0.98 ug/L
RT: 17.002 min Scan# 2658
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:157 Resp: 424

Ion	Ratio	Lower	Upper
157	100		
155	77.8	43.7	103.7
75	82.2	41.6	101.6

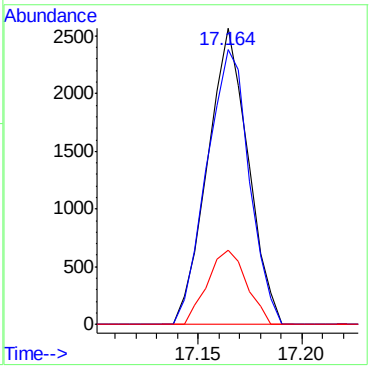


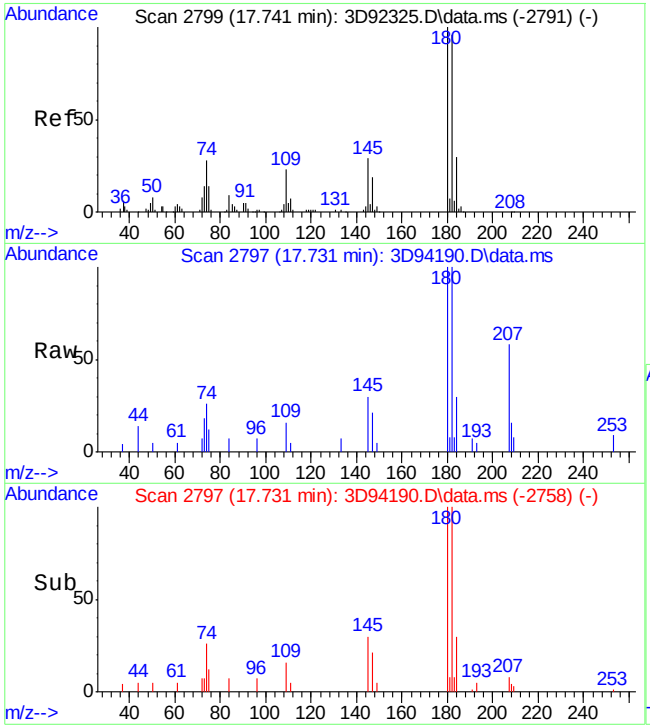


#129
1,3,5-trichlorobenzene
Concen: 1.07 ug/L
RT: 17.164 min Scan# 2689
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:180 Resp: 3492

Ion	Ratio	Lower	Upper
180	100		
182	96.8	65.4	125.4
145	24.1	0.0	55.6

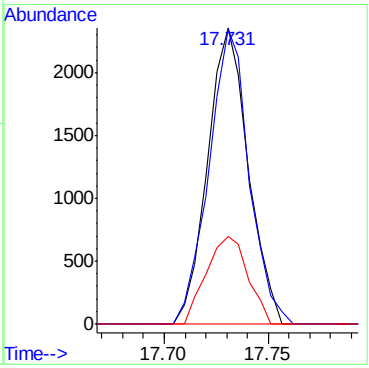


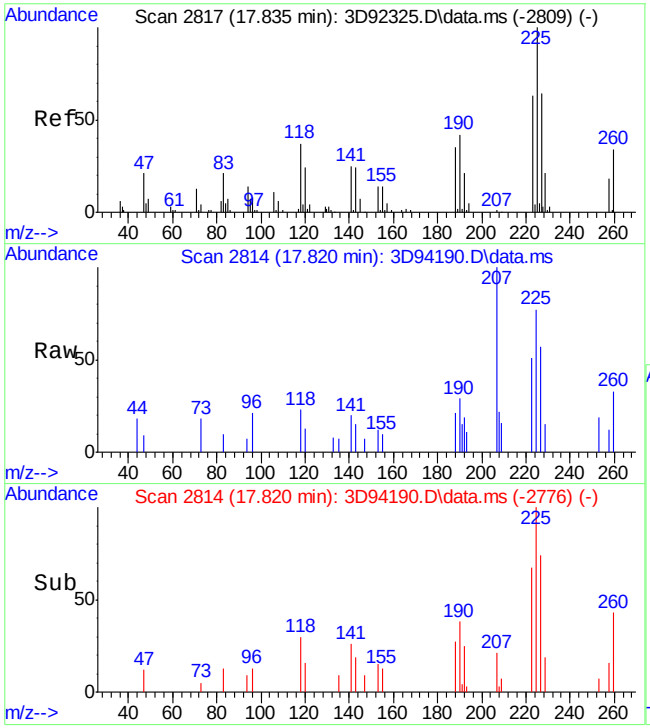


#130
1,2,4-trichlorobenzene
Concen: 1.07 ug/L
RT: 17.731 min Scan# 2797
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:180 Resp: 3201

Ion	Ratio	Lower	Upper
180	100		
182	99.6	66.4	126.4
184	29.6	1.3	61.3

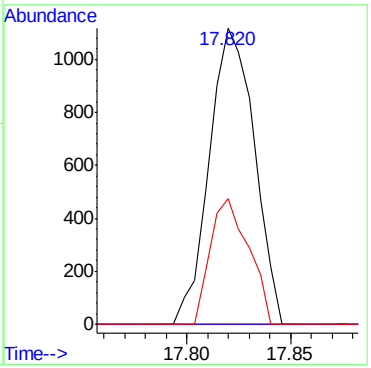


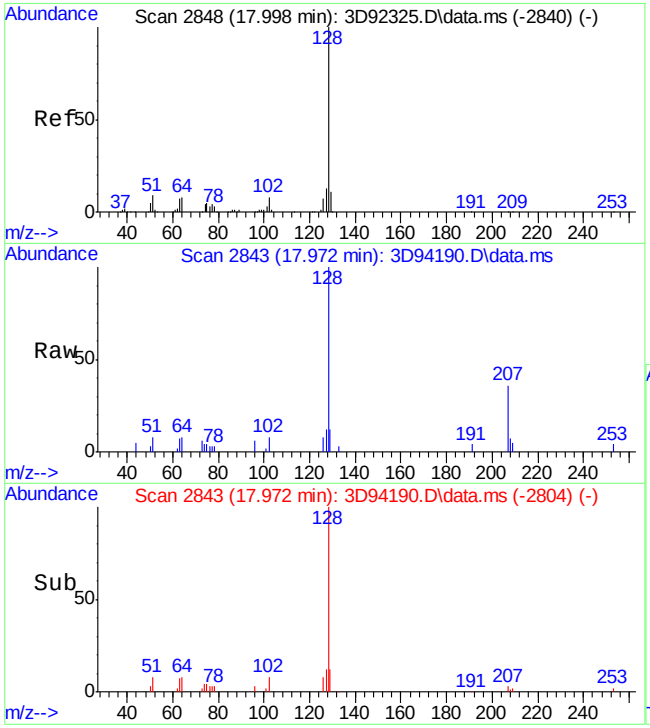


#131
hexachlorobutadiene
Concen: 1.06 ug/L
RT: 17.820 min Scan# 2814
Delta R.T. 0.000 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:225 Resp: 1687

Ion	Ratio	Lower	Upper
225	100		
259	0.0	0.0	31.1
260	42.6	5.9	65.9

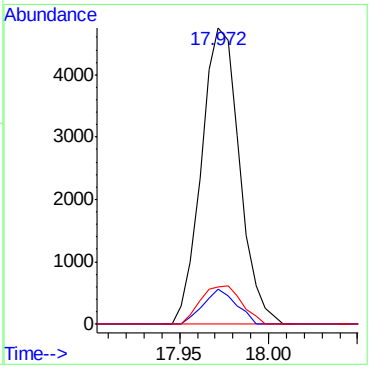


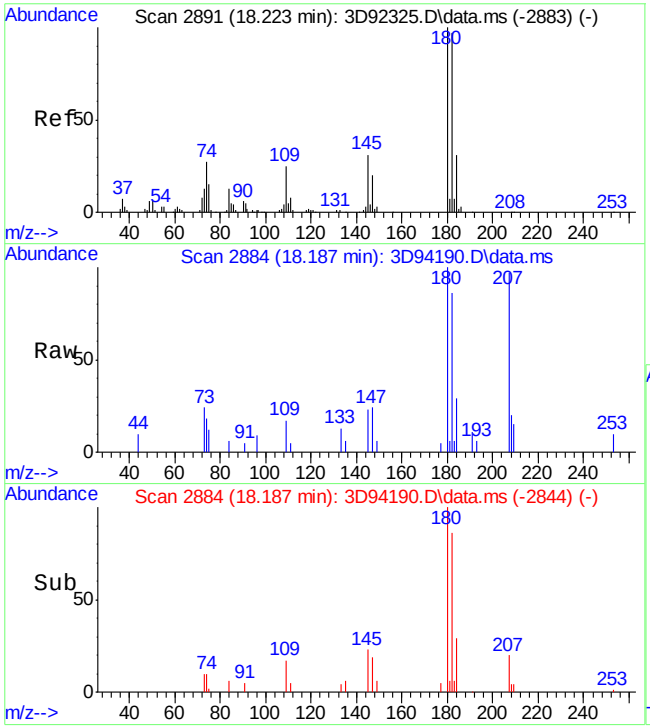


#132
naphthalene
Concen: 1.14 ug/L
RT: 17.972 min Scan# 2843
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:128 Resp: 7064

Ion	Ratio	Lower	Upper
128	100		
129	11.6	0.0	40.9
127	12.4	0.0	43.2

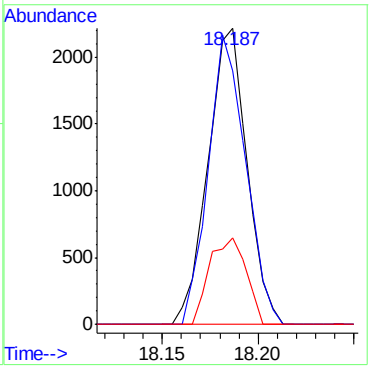


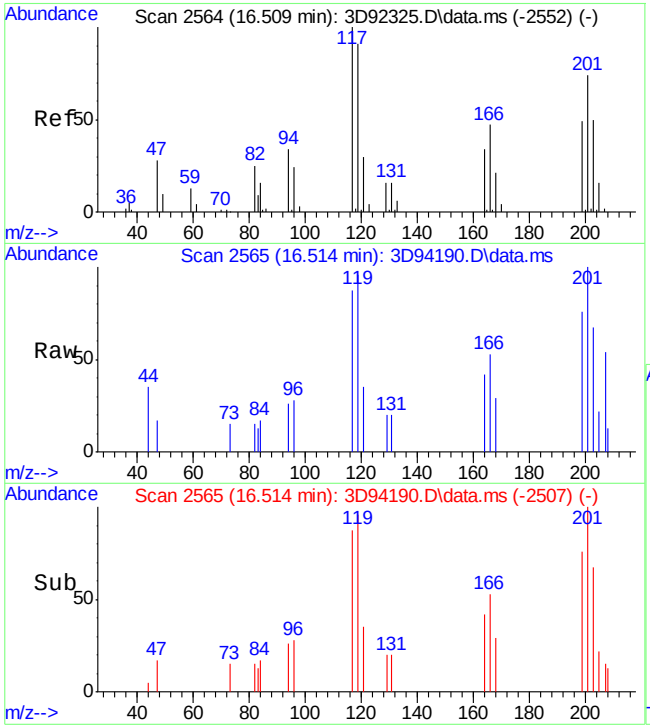


#133
1,2,3-trichlorobenzene
Concen: 1.13 ug/L
RT: 18.187 min Scan# 2884
Delta R.T. 0.011 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:180 Resp: 3121

Ion	Ratio	Lower	Upper
180	100		
182	85.7	67.0	127.0
184	29.3	0.3	60.3

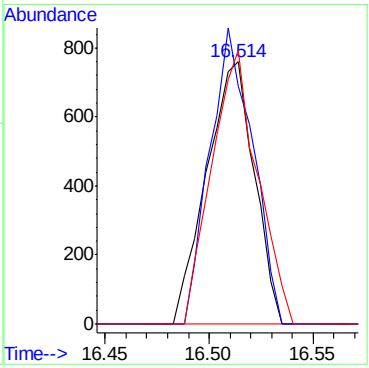


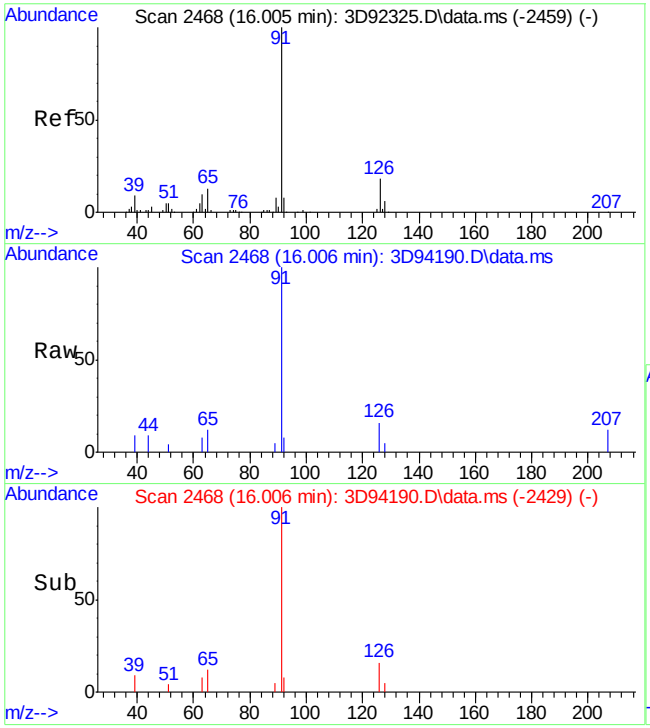


#134
hexachloroethane
Concen: 0.97 ug/L
RT: 16.514 min Scan# 2565
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion:119 Resp: 1215

Ion	Ratio	Lower	Upper
119	100		
117	101.3	72.2	132.2
201	100.2	70.2	130.2

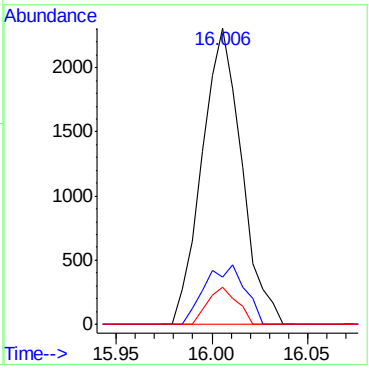




#135
Benzyl chloride
Concen: 0.98 ug/L
RT: 16.006 min Scan# 2468
Delta R.T. 0.006 min
Lab File: 3D94190.D
Acq: 18 Dec 2013 1:51 pm

Tgt Ion: 91 Resp: 3297

Ion	Ratio	Lower	Upper
91	100		
126	20.2	0.0	51.4
65	9.3	0.0	41.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94191.D
Acq On : 18 Dec 2013 2:18 pm
Operator : katteric
Sample : ic4058-2
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 12:28:54 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 10:47:36 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.250	65	69275	500.00	ug/L		0.01
4) pentafluorobenzene	9.483	168	178039	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.401	114	243057	50.00	ug/L		0.00
88) chlorobenzene-d5	13.557	117	197434	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.864	152	119020	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.541	113	2859	1.98	ug/L		0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 3.96%#				
51) 1,2-dichloroethane-d4 (s)	9.965	65	3037	2.05	ug/L		0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 4.10%#				
80) toluene-d8 (s)	12.047	98	9612	1.94	ug/L		0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 3.88%#				
106) 4-bromofluorobenzene (s)	14.710	95	3945	2.23	ug/L		0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 4.46%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.119	88	579	45.61	ug/L	#	72
3) tertiary butyl alcohol	7.365	59	1682	11.55	ug/L		93
8) chlorodifluoromethane	3.884	51	2627	2.05	ug/L		85
9) dichlorodifluoromethane	3.878	85	3326	2.13	ug/L		92
10) chloromethane	4.198	50	4240	2.15	ug/L		98
11) vinyl chloride	4.445	62	4017	2.11	ug/L		95
12) bromomethane	5.110	94	2830	2.20	ug/L		96
13) chloroethane	5.283	64	1961	2.16	ug/L		96
14) 1,3-butadiene	4.507	54	2151	1.87	ug/L		96
15) vinyl bromide	5.629	106	2272	1.87	ug/L		94
16) trichlorofluoromethane	5.729	101	4455	2.32	ug/L		93
18) ethyl ether	6.149	74	1521	2.01	ug/L	#	77
21) acrolein	6.411	56	637287	2008.91	ug/L		98
22) 1,1-dichloroethene	6.568	61	4248	2.06	ug/L		94
24) allyl chloride	7.103	76	1608	2.00	ug/L		95
25) acetonitrile	7.087	40	2942	22.29	ug/L	#	85
27) iodomethane	6.862	142	5825	2.13	ug/L		98
28) iso-butyl alcohol	9.777	41	1060	21.74	ug/L	#	74
29) carbon disulfide	6.982	76	10501	2.15	ug/L		99
30) methylene chloride	7.302	84	3217	2.05	ug/L		96
32) methyl tert butyl ether	7.611	73	8843	1.15	ug/L		98
33) trans-1,2-dichloroethene	7.669	61	4159	2.03	ug/L		97
34) di-isopropyl ether	8.193	45	9581	2.03	ug/L		81
35) ethyl tert-butyl ether	8.665	59	8878	2.01	ug/L		95
37) 1,1-dichloroethane	8.235	63	5236	2.00	ug/L		97
38) chloroprene	8.340	53	3721	2.03	ug/L		95
39) acrylonitrile	7.643	53	5101	9.39	ug/L		92
42) 2,2-dichloropropane	8.969	77	4307	2.33	ug/L		96
43) cis-1,2-dichloroethene	8.980	61	5236	2.12	ug/L		89
44) propionitrile	9.053	54	3916	18.87	ug/L		96
45) methyl acrylate	9.043	55	2835	1.83	ug/L		87
46) bromochloromethane	9.294	128	1678	2.00	ug/L		97
47) tetrahydrofuran	9.326	42	914	1.86	ug/L		79

M3D4058.M Thu Dec 19 12:36:45 2013 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94191.D
Acq On : 18 Dec 2013 2:18 pm
Operator : katteric
Sample : ic4058-2
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 12:28:54 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 10:47:36 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) chloroform	9.342	83	4980	2.03	ug/L		97
49) Tert-Butyl Formate	9.363	59	2533	1.89	ug/L		98
52) freon 113	6.531	151	1983	2.14	ug/L		94
53) methacrylonitrile	9.242	41	1654	1.84	ug/L		79
54) 1,1,1-trichloroethane	9.583	97	4392	2.07	ug/L		94
56) 2,2,4-Trimethylpentane	10.007	57	10036	2.13	ug/L		94
57) tert-amyl methyl ether	10.049	73	9072	2.11	ug/L		99
59) epichlorohydrin	11.675	57	1194	9.26	ug/L		89
60) n-butyl alcohol	10.537	56	3624	96.17	ug/L		95
61) cyclohexane	9.646	84	4336	2.16	ug/L		96
62) carbon tetrachloride	9.782	117	3820	2.10	ug/L		88
63) 1,1-dichloropropene	9.761	75	3792	2.07	ug/L		93
64) hexane	7.952	57	3107	2.13	ug/L		93
65) benzene	10.034	78	11837	2.06	ug/L		98
66) heptane	10.180	57	1758	2.16	ug/L		94
67) isopropyl acetate	9.950	43	5196	2.01	ug/L		95
68) 1,2-dichloroethane	10.055	62	3381	1.92	ug/L		89
69) trichloroethene	10.747	95	2779	1.98	ug/L		94
70) ethyl acrylate	10.747	55	2890	1.76	ug/L	#	93
72) 2-nitropropane	11.538	41	1021	1.98	ug/L		95
73) 2-chloroethyl vinyl ether	11.538	63	8780	9.67	ug/L		98
74) methyl methacrylate	11.014	41	4071	1.92	ug/L		96
75) 1,2-dichloropropane	11.014	63	2829	1.93	ug/L		87
76) methylcyclohexane	10.951	83	4378	2.18	ug/L		94
77) dibromomethane	11.182	93	1766	1.94	ug/L		96
78) bromodichloromethane	11.308	83	3720	2.05	ug/L		98
79) cis-1,3-dichloropropene	11.759	75	4528	2.04	ug/L		96
81) 4-methyl-2-pentanone	11.848	58	829	1.60	ug/L	#	55
82) toluene	12.115	92	6627	1.98	ug/L		93
83) 3-methyl-1-butanol	11.874	70	1306	37.60	ug/L		96
84) trans-1,3-dichloropropene	12.325	75	3685	1.83	ug/L		96
85) ethyl methacrylate	12.304	69	2959	1.81	ug/L		87
86) 1,1,2-trichloroethane	12.535	83	1935	1.87	ug/L		95
87) 2-hexanone	12.708	58	755	1.60	ug/L		94
89) tetrachloroethene	12.697	166	3248	2.11	ug/L		95
90) 1,3-dichloropropane	12.718	76	3752	2.01	ug/L		99
91) butyl acetate	12.776	56	1642	2.04	ug/L		89
92) 3,3-Dimethyl-1-Butanol	12.870	57	2694	20.51	ug/L	#	98
93) dibromochloromethane	12.985	129	2938	1.99	ug/L		96
94) 1,2-dibromoethane	13.137	107	2495	1.95	ug/L		98
96) chlorobenzene	13.588	112	7181	2.00	ug/L		90
97) 1,1,1,2-tetrachloroethane	13.651	131	2820	1.94	ug/L		91
98) ethylbenzene	13.636	91	12046	1.99	ug/L		98
99) m,p-xylene	13.740	106	9219	4.04	ug/L		100
100) o-xylene	14.160	106	4663	1.97	ug/L		96
101) styrene	14.176	104	7386	1.89	ug/L		97
103) bromoform	14.443	173	2185	1.93	ug/L		97
105) isopropylbenzene	14.501	105	11736	1.91	ug/L		98
107) bromobenzene	14.904	156	3481	1.96	ug/L		89
108) cyclohexanone	14.679	55	1462	23.99	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94191.D
Acq On : 18 Dec 2013 2:18 pm
Operator : katteric
Sample : ic4058-2
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 12:28:54 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 10:47:36 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
109) 1,1,2,2-tetrachloroethane	14.815	83	3515	1.99 ug/L	93
110) trans-1,4-dichloro-2-b...	14.857	53	816	2.05 ug/L	83
111) 1,2,3-trichloropropane	14.889	110	776	1.97 ug/L	86
112) n-propylbenzene	14.904	91	13574	2.04 ug/L	99
114) 2-chlorotoluene	15.062	126	2963	2.00 ug/L	91
115) 4-chlorotoluene	15.161	126	3028	2.01 ug/L	90
116) 1,3,5-trimethylbenzene	15.056	105	9866	1.94 ug/L	99
117) tert-butylbenzene	15.403	119	8589	1.99 ug/L	97
118) pentachloroethane	15.497	167	2246	1.88 ug/L	96
119) 1,2,4-trimethylbenzene	15.450	105	9766	1.95 ug/L	93
120) sec-butylbenzene	15.617	105	13247	2.04 ug/L	96
121) 1,3-dichlorobenzene	15.806	146	6586	2.02 ug/L	98
122) p-isopropyltoluene	15.733	119	10961	1.98 ug/L	98
123) 1,4-dichlorobenzene	15.890	146	6822	2.01 ug/L	96
124) 1,2-dichlorobenzene	16.273	146	6653	2.04 ug/L	97
126) n-butylbenzene	16.137	92	5500	1.98 ug/L	99
128) 1,2-dibromo-3-chloropr...	17.002	157	779	1.85 ug/L	88
129) 1,3,5-trichlorobenzene	17.164	180	6035	2.02 ug/L	99
130) 1,2,4-trichlorobenzene	17.730	180	5538	1.97 ug/L	97
131) hexachlorobutadiene	17.825	225	2822	1.94 ug/L	99
132) naphthalene	17.972	128	11489	1.99 ug/L	99
133) 1,2,3-trichlorobenzene	18.181	180	5204	1.99 ug/L	96
134) hexachloroethane	16.509	119	2212	1.91 ug/L	96
135) Benzyl chloride	16.005	91	6781	2.39 ug/L	98

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

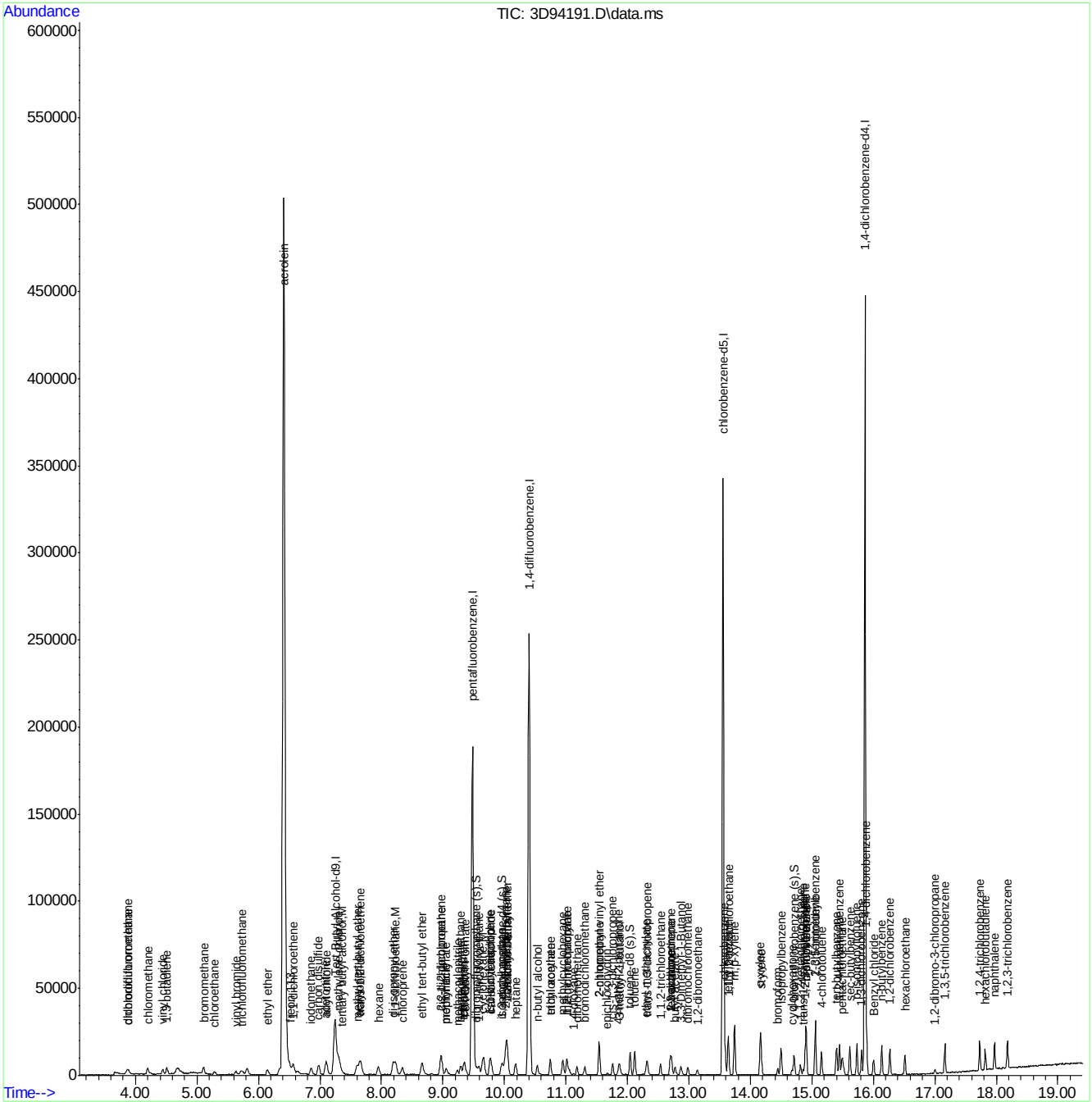
7.7.3

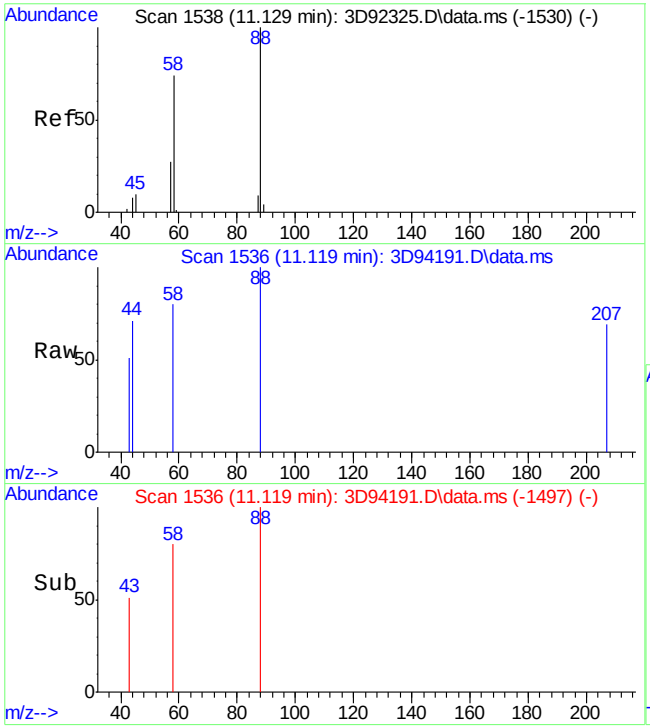
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94191.D
Acq On : 18 Dec 2013 2:18 pm
Operator : katteric
Sample : ic4058-2
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 12:28:54 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 10:47:36 2013
Response via : Initial Calibration

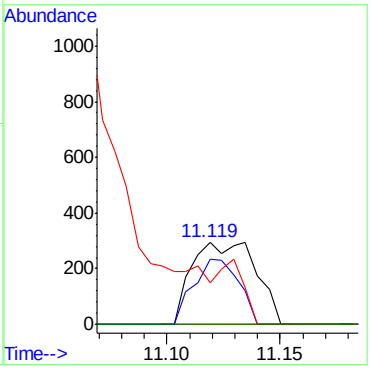


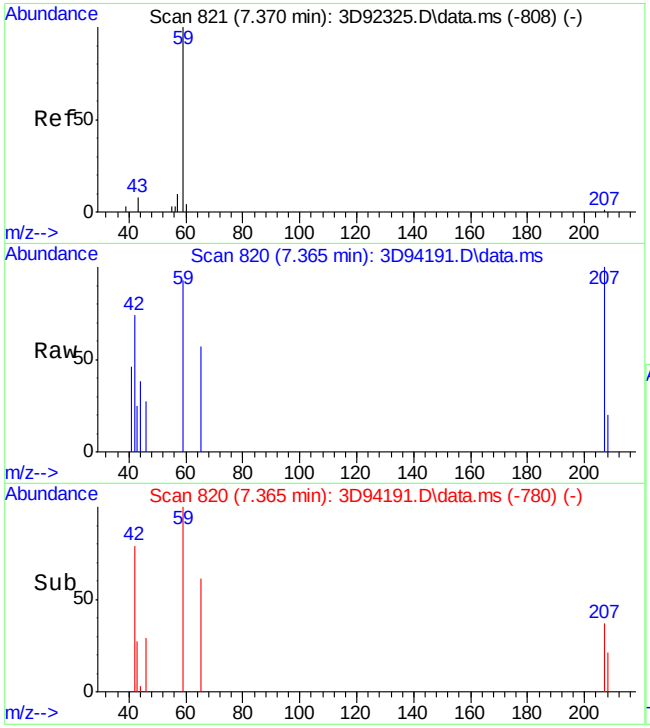


#2
1,4-dioxane
Concen: 45.61 ug/L
RT: 11.119 min Scan# 1536
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 88 Resp: 579

Ion	Ratio	Lower	Upper
88	100		
58	56.3	33.2	93.2
43	0.0	1.5	61.5#
57	0.0	0.0	50.6

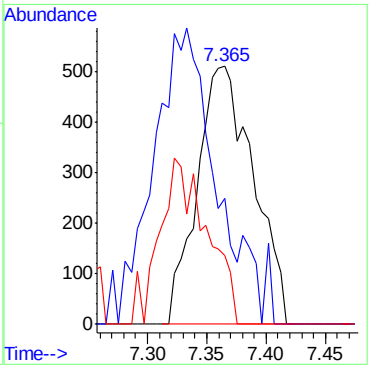


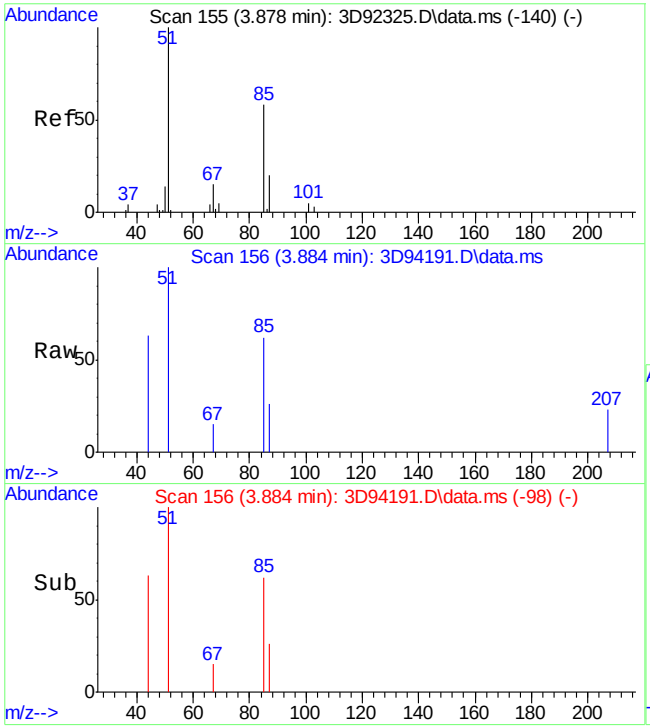


#3
tertiary butyl alcohol
Concen: 11.55 ug/L
RT: 7.365 min Scan# 820
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 59 Resp: 1682

Ion	Ratio	Lower	Upper
59	100		
41	48.8	13.6	73.6
43	26.6	0.0	53.7

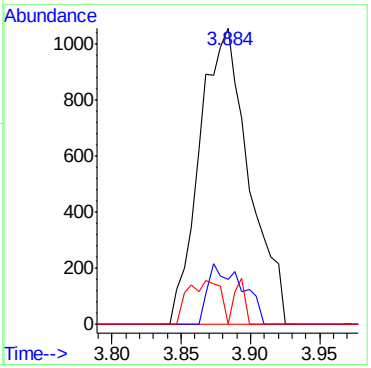


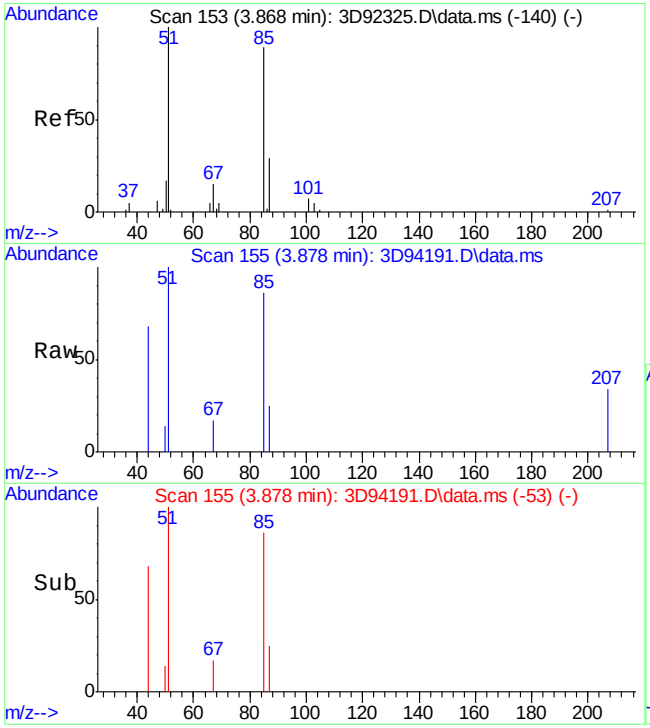


#8
chlorodifluoromethane
Concen: 2.05 ug/L
RT: 3.884 min Scan# 156
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 51 Resp: 2627

Ion	Ratio	Lower	Upper
51	100		
67	15.0	0.0	44.7
50	0.0	0.0	42.3

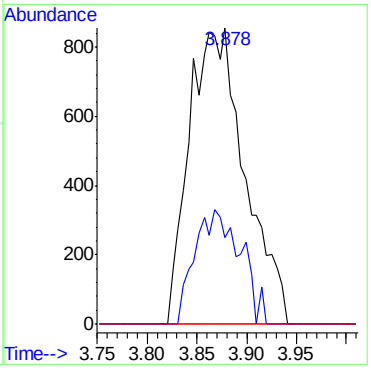




#9
dichlorodifluoromethane
Concen: 2.13 ug/L
RT: 3.878 min Scan# 155
Delta R.T. 0.026 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 85 Resp: 3326

Ion	Ratio	Lower	Upper
85	100		
87	29.1	1.6	61.6
101	0.0	0.0	38.1



7.7.3

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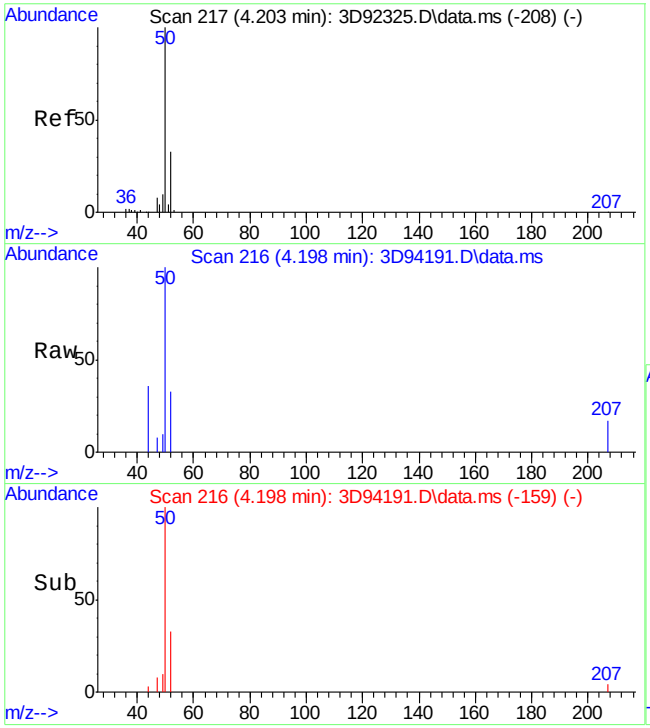
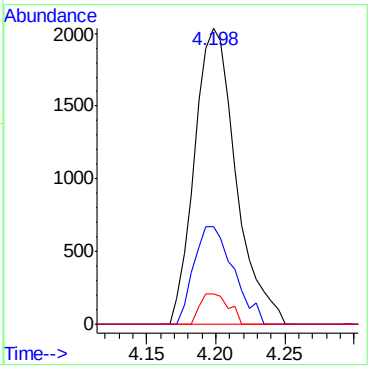
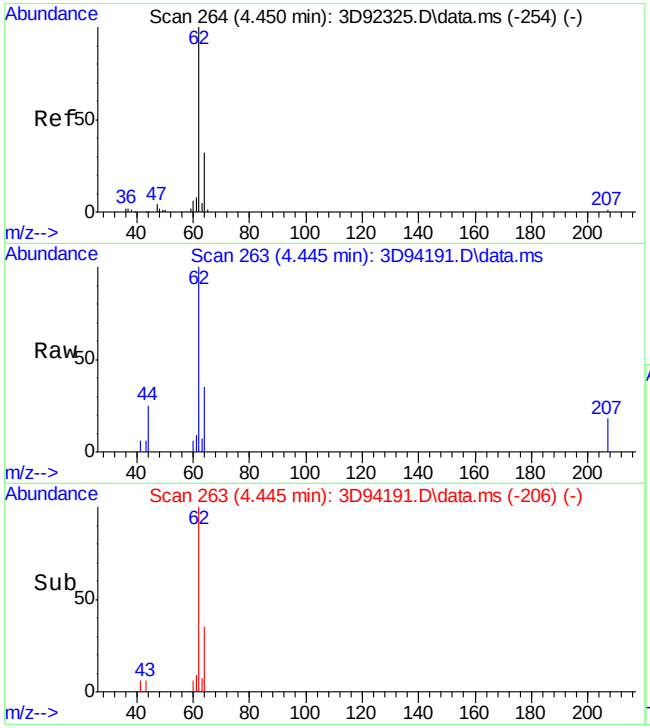


#10
chloromethane
Concen: 2.15 ug/L
RT: 4.198 min Scan# 216
Delta R.T. -0.000 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 50 Resp: 4240

Ion	Ratio	Lower	Upper
50	100		
52	33.0	1.8	61.8
49	10.3	0.0	39.9

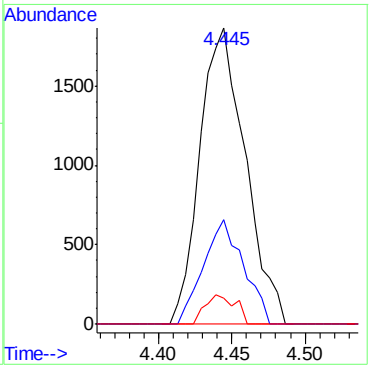


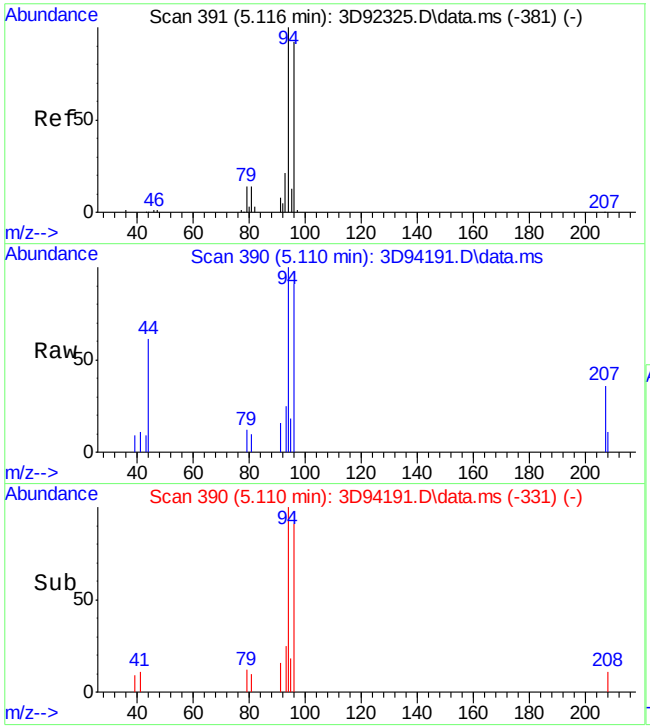


#11
vinyl chloride
Concen: 2.11 ug/L
RT: 4.445 min Scan# 263
Delta R.T. 0.001 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 62 Resp: 4017

Ion	Ratio	Lower	Upper
62	100		
64	35.1	2.0	62.0
61	8.8	0.0	39.1

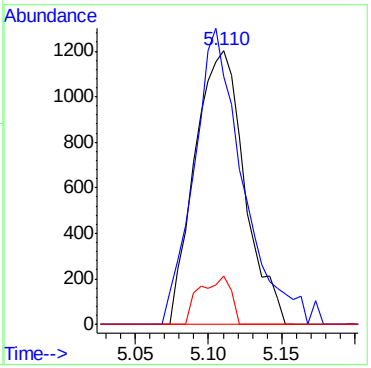


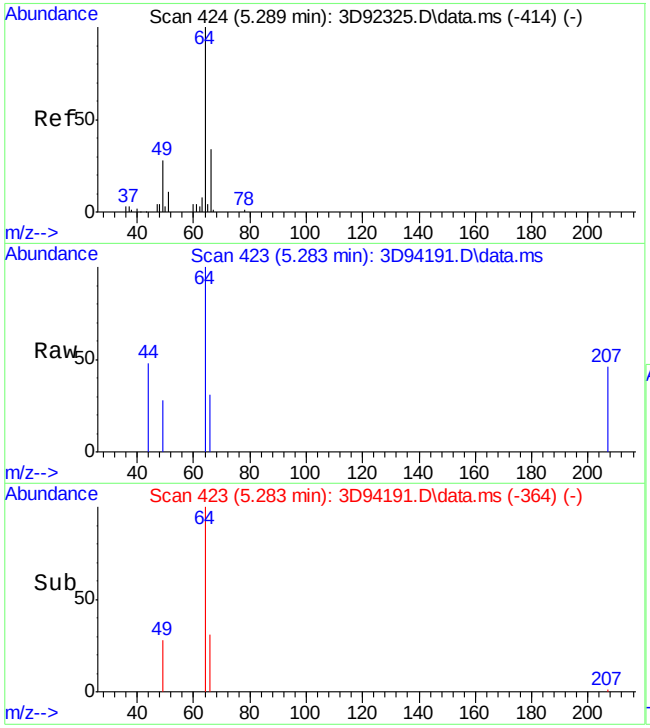


#12
bromomethane
Concen: 2.20 ug/L
RT: 5.110 min Scan# 390
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 94 Resp: 2830

Ion	Ratio	Lower	Upper
94	100		
96	90.5	63.8	123.8
95	17.8	0.0	43.9

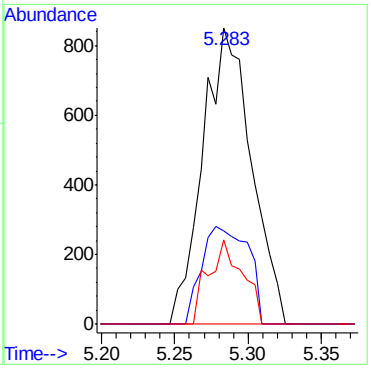




#13
chloroethane
Concen: 2.16 ug/L
RT: 5.283 min Scan# 423
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 64 Resp: 1961

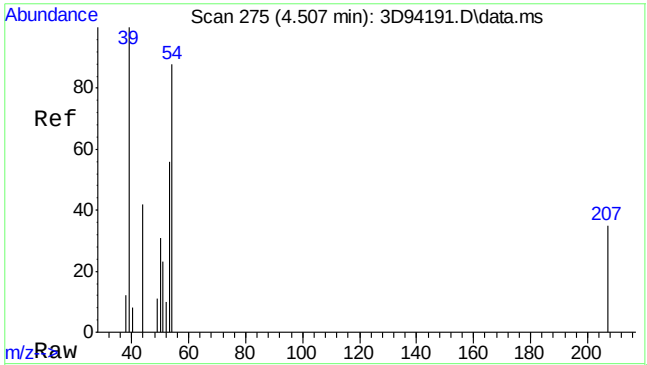
Ion	Ratio	Lower	Upper
64	100		
66	31.5	4.0	64.0
49	28.4	0.0	57.1

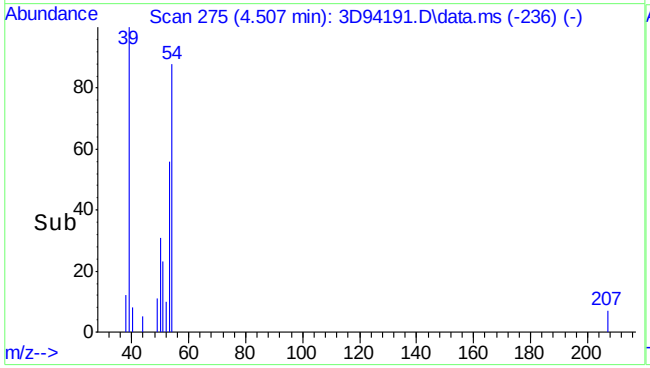


7.7.3

7

3D94191.D M3D4058.M Thu Dec 19 12:36:45 2013 3D Page 8

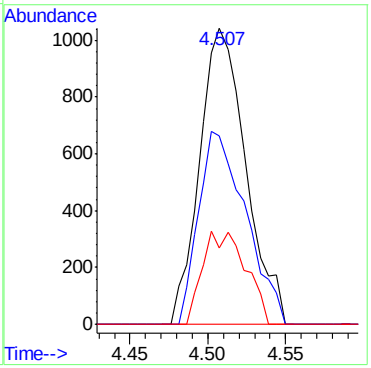


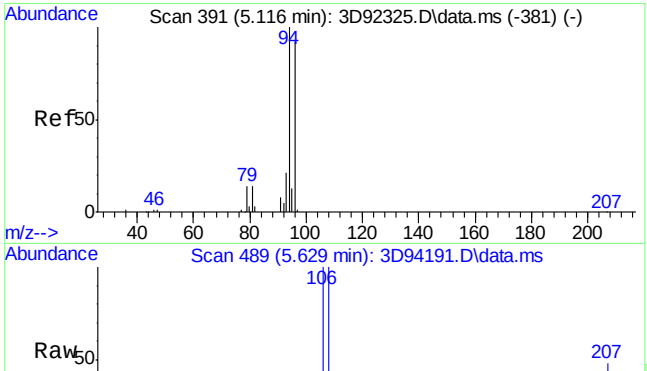


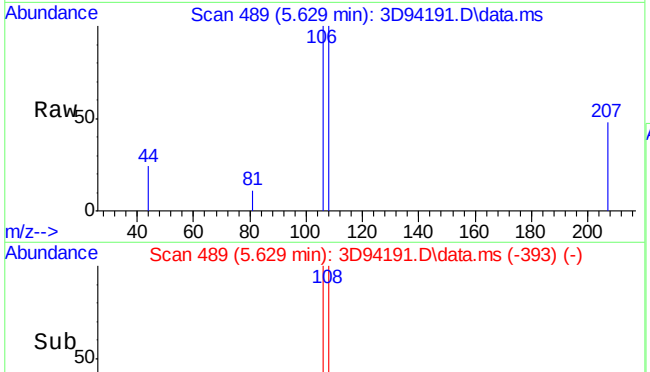
#14
1,3-butadiene
Concen: 1.87 ug/L
RT: 4.507 min Scan# 275
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

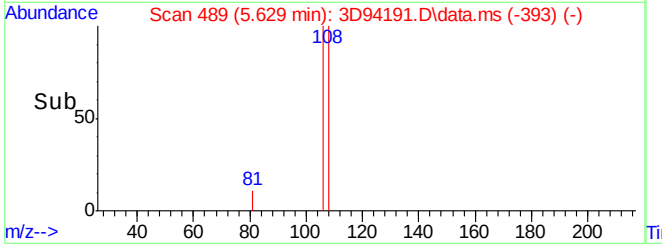
Tgt Ion: 54 Resp: 2151

Ion	Ratio	Lower	Upper
54	100		
53	66.4	56.6	85.0
51	29.3	23.8	35.8





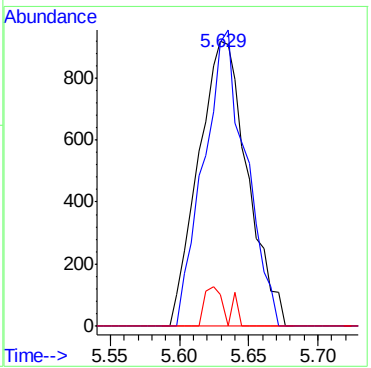


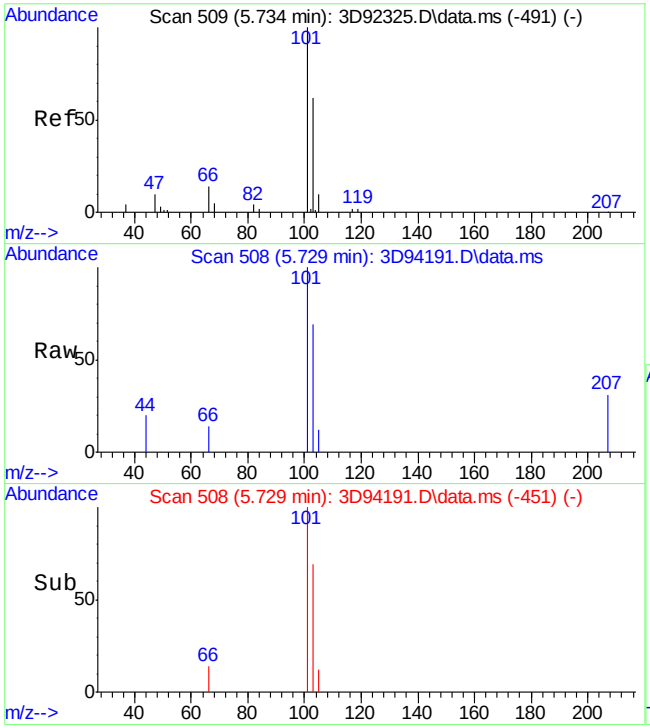


#15
vinyl bromide
Concen: 1.87 ug/L
RT: 5.629 min Scan# 489
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:106 Resp: 2272

Ion	Ratio	Lower	Upper
106	100		
108	89.1	64.3	124.3
81	6.3	0.0	40.6

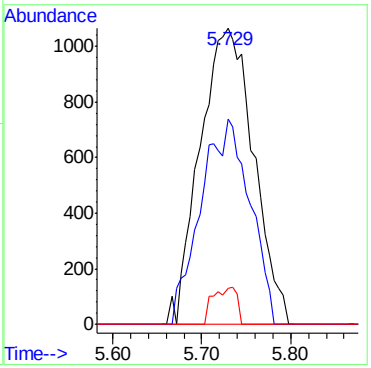


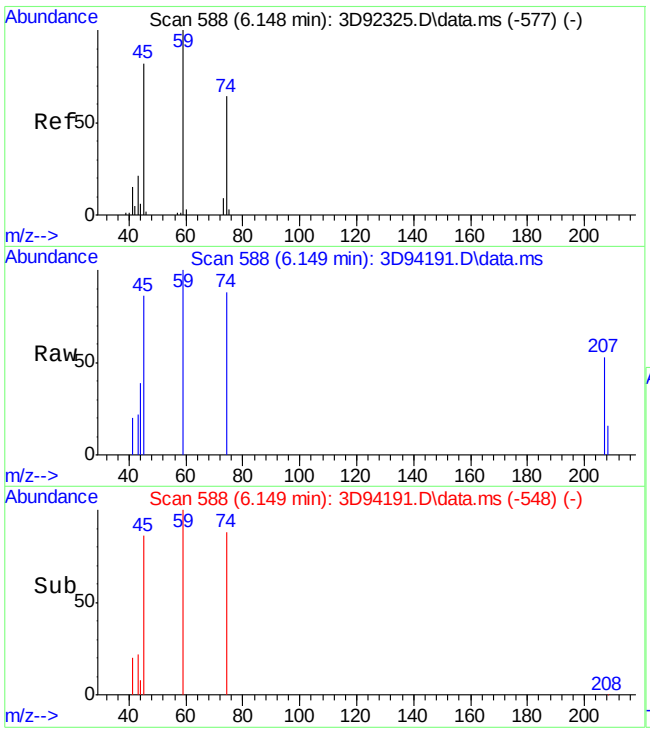


#16
trichlorofluoromethane
Concen: 2.32 ug/L
RT: 5.729 min Scan# 508
Delta R.T. -0.000 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:101 Resp: 4455

Ion	Ratio	Lower	Upper
101	100		
103	69.3	33.7	93.7
105	12.1	0.0	40.4

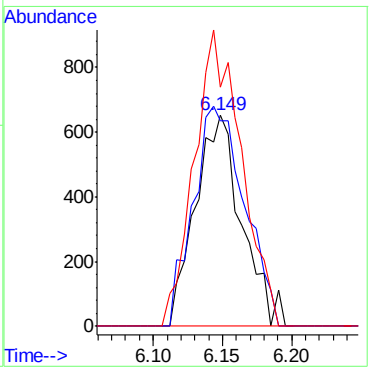


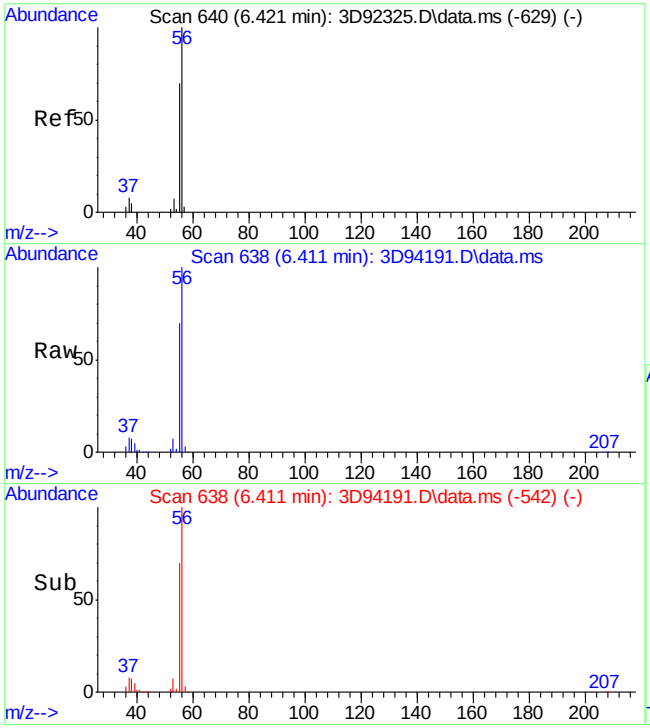


#18
ethyl ether
Concen: 2.01 ug/L
RT: 6.149 min Scan# 588
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 74 Resp: 1521

Ion	Ratio	Lower	Upper
74	100		
45	97.5	84.3	144.3
59	113.5	120.2	180.2#

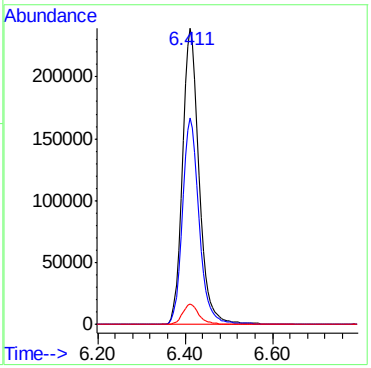


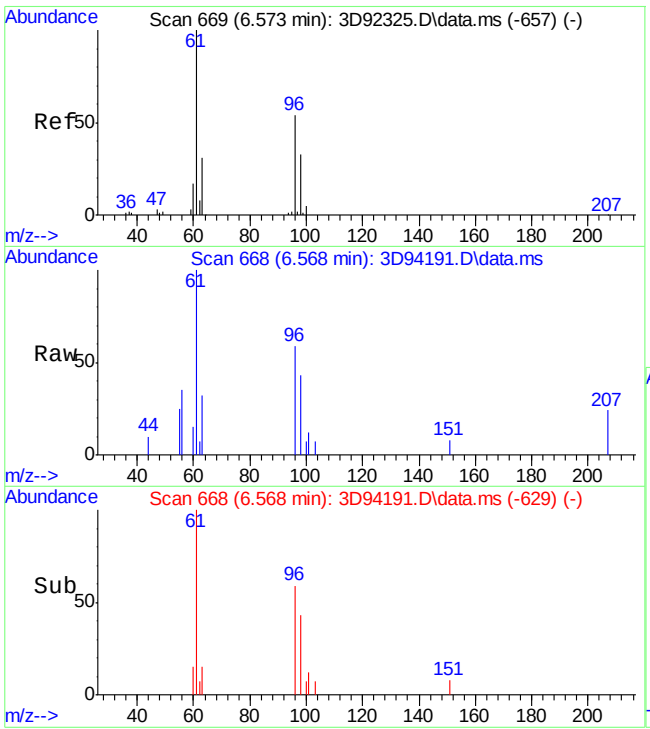


#21
acrolein
Concen: 2008.91 ug/L
RT: 6.411 min Scan# 638
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 56 Resp: 637287

Ion	Ratio	Lower	Upper
56	100		
55	69.6	41.4	101.4
53	6.8	0.0	37.0

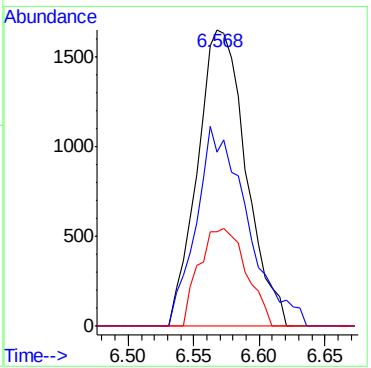


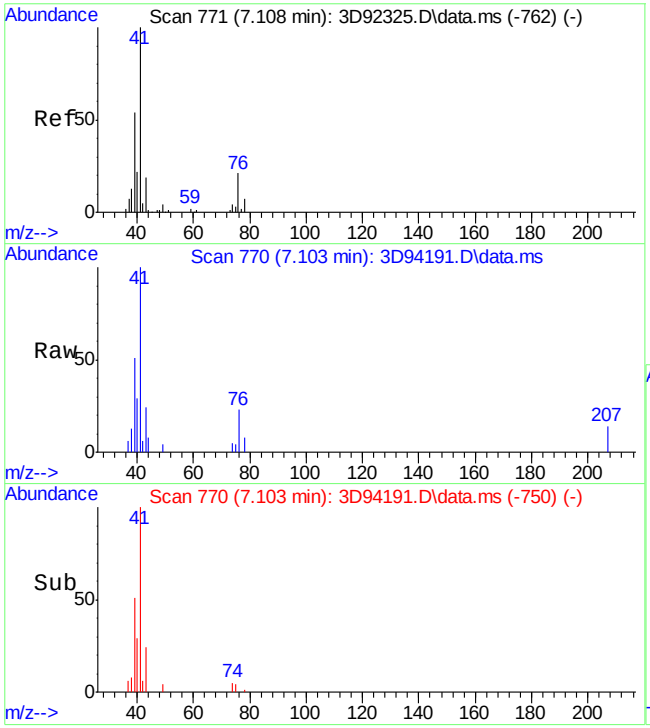


#22
1,1-dichloroethene
Concen: 2.06 ug/L
RT: 6.568 min Scan# 668
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 61 Resp: 4248

Ion	Ratio	Lower	Upper
61	100		
96	58.6	35.0	95.0
63	31.7	2.3	62.3

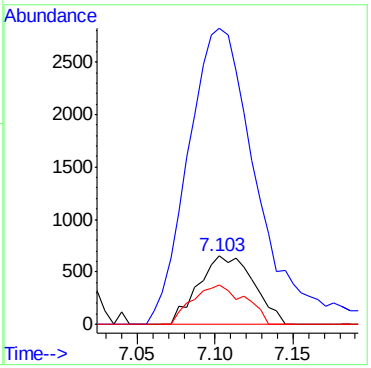


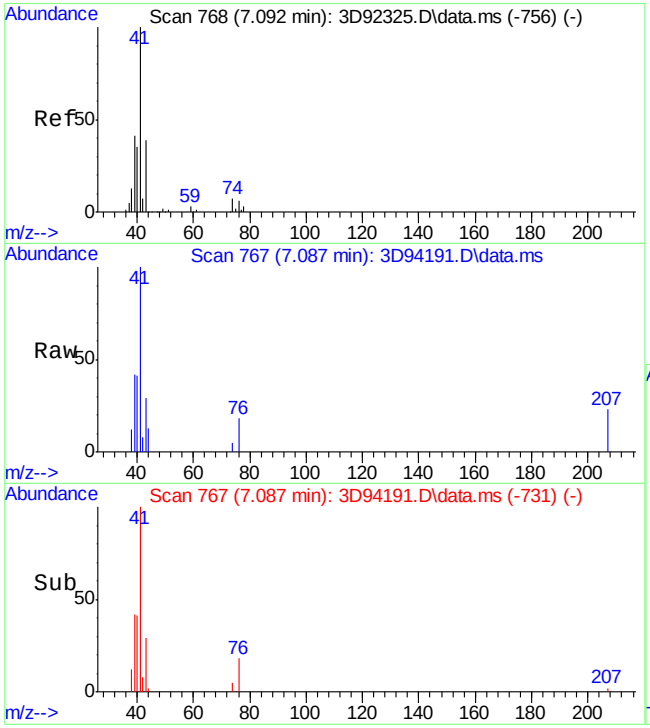


#24
allyl chloride
Concen: 2.00 ug/L
RT: 7.103 min Scan# 770
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 76 Resp: 1608

Ion	Ratio	Lower	Upper
76	100		
41	389.1	352.2	412.2
38	57.3	13.8	73.8

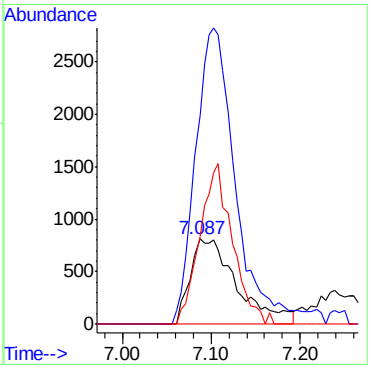


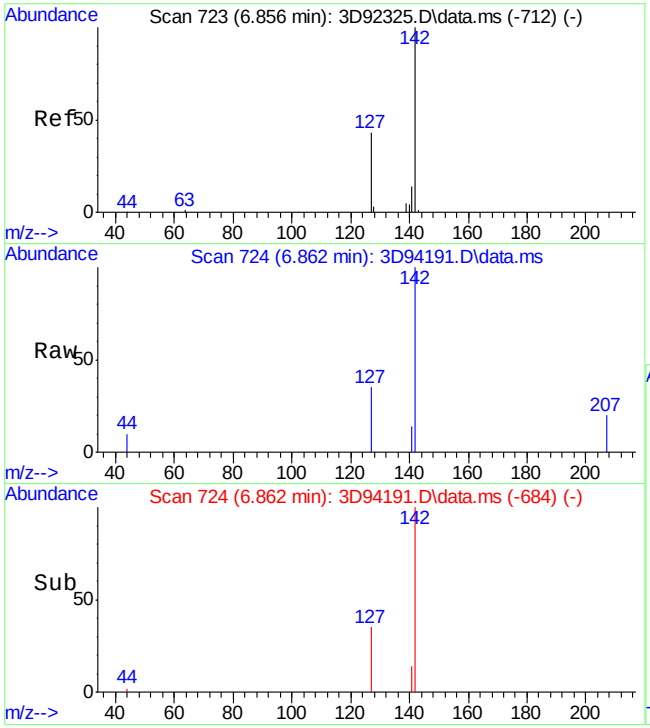


#25
acetonitrile
Concen: 22.29 ug/L
RT: 7.087 min Scan# 767
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 40 Resp: 2942

Ion	Ratio	Lower	Upper
40	100		
41	244.9	246.1	306.1#
39	103.1	62.7	122.7

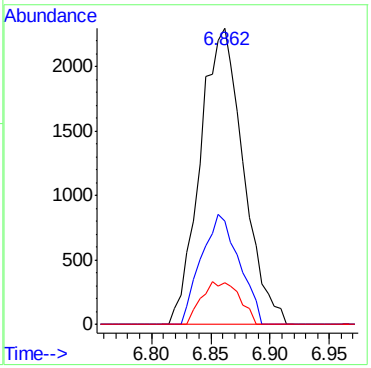


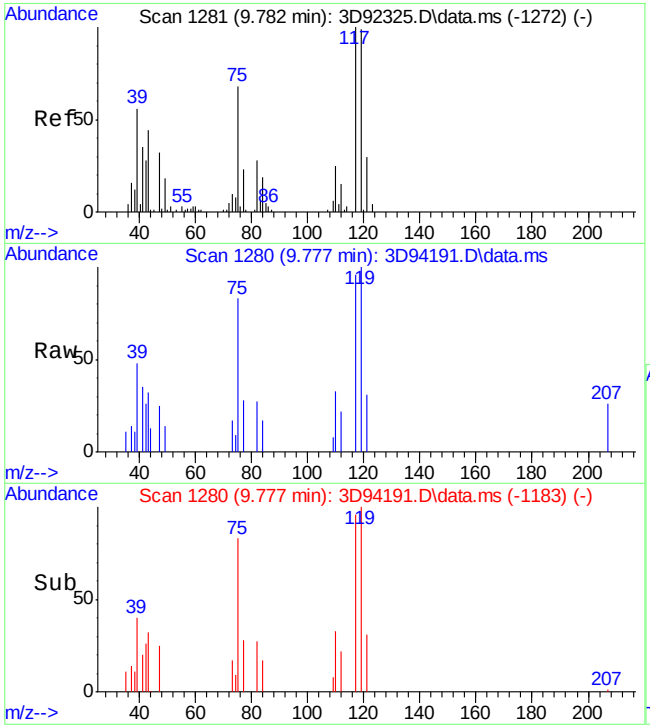


#27
iodomethane
Concen: 2.13 ug/L
RT: 6.862 min Scan# 724
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:142 Resp: 5825

Ion	Ratio	Lower	Upper
142	100		
127	34.9	6.0	66.0
141	14.1	0.0	44.5

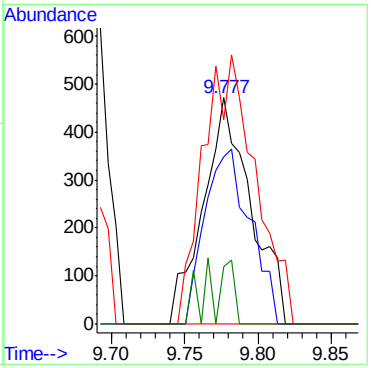




#28
iso-butyl alcohol
Concen: 21.74 ug/L
RT: 9.777 min Scan# 1280
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 41 Resp: 1060

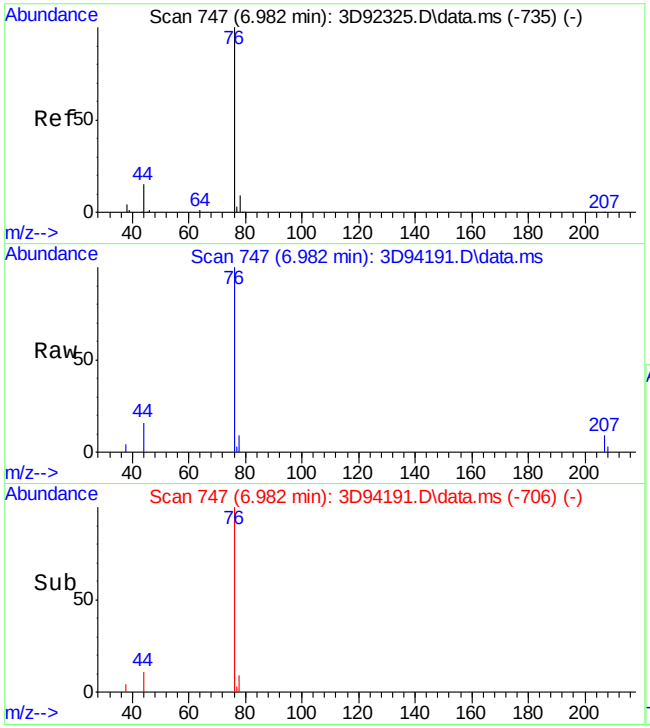
Ion	Ratio	Lower	Upper
41	100		
42	73.9	56.4	116.4
43	90.4	104.5	164.5#
74	25.5	4.6	64.6



7.7.3

7

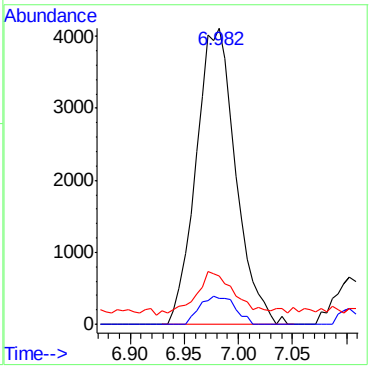
3D94191.D M3D4058.M Thu Dec 19 12:36:46 2013 3D Page 13

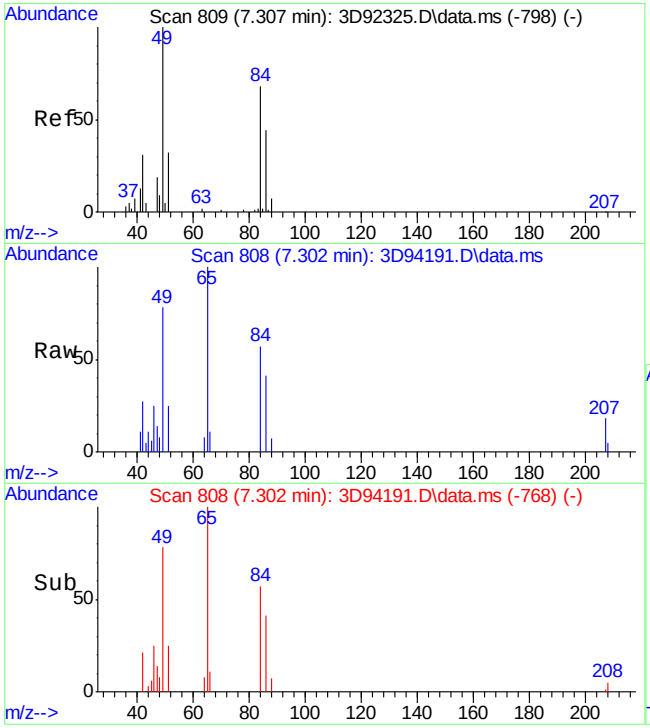


#29
carbon disulfide
Concen: 2.15 ug/L
RT: 6.982 min Scan# 747
Delta R.T. 0.016 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 76 Resp: 10501

Ion	Ratio	Lower	Upper
76	100		
78	8.7	0.0	39.2
44	11.4	0.0	41.2

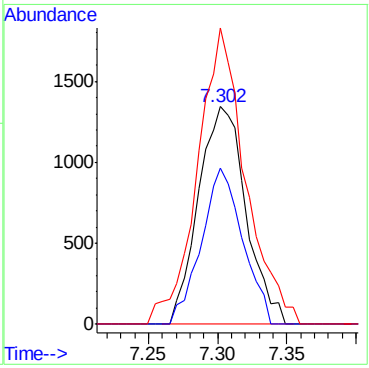




#30
methylene chloride
Concen: 2.05 ug/L
RT: 7.302 min Scan# 808
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

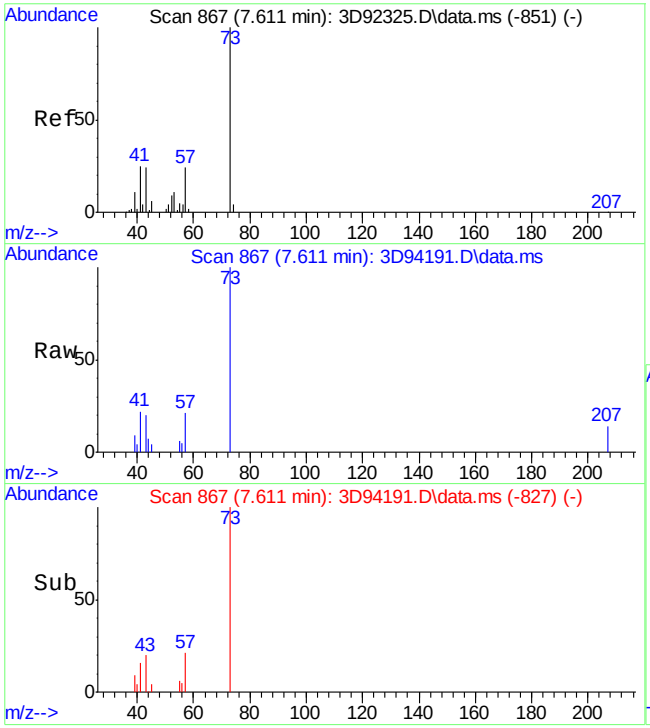
Tgt Ion: 84 Resp: 3217

Ion	Ratio	Lower	Upper
84	100		
86	71.7	46.3	86.1
49	128.3	91.4	169.8



7.7.3

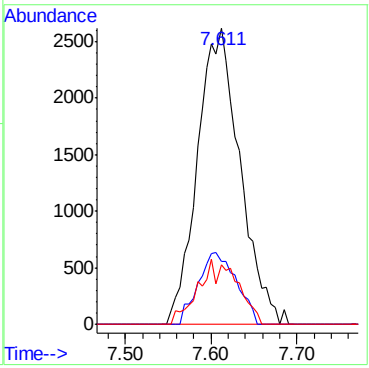
7

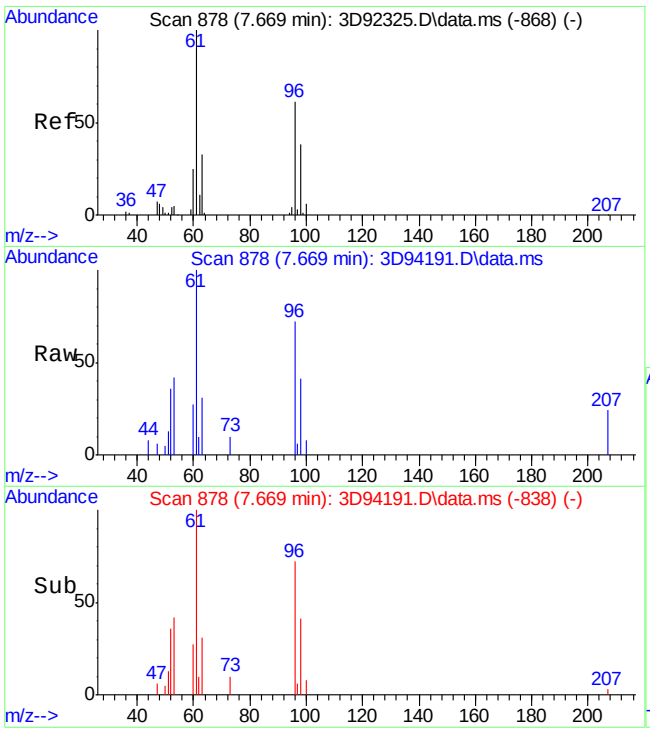


#32
methyl tert butyl ether
Concen: 1.15 ug/L
RT: 7.611 min Scan# 867
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 73 Resp: 8843

Ion	Ratio	Lower	Upper
73	100		
57	21.2	0.0	52.5
43	20.2	0.0	49.9

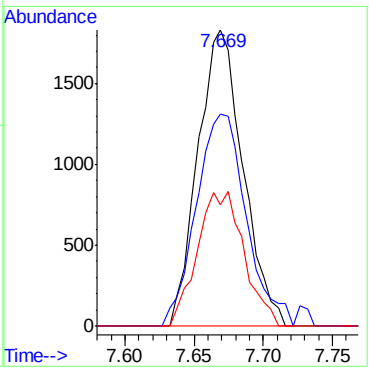


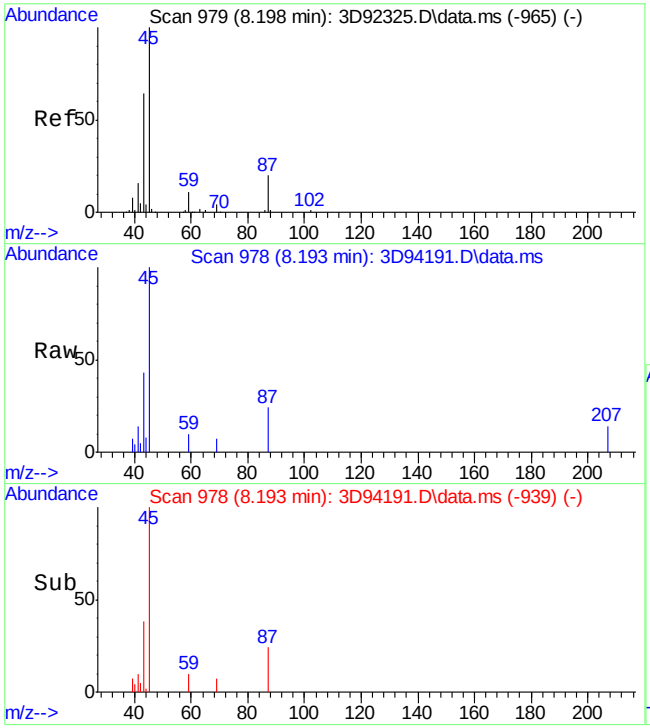


#33
trans-1,2-dichloroethene
Concen: 2.03 ug/L
RT: 7.669 min Scan# 878
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 61 Resp: 4159

Ion	Ratio	Lower	Upper
61	100		
96	71.7	49.6	92.0
98	40.9	31.6	58.8

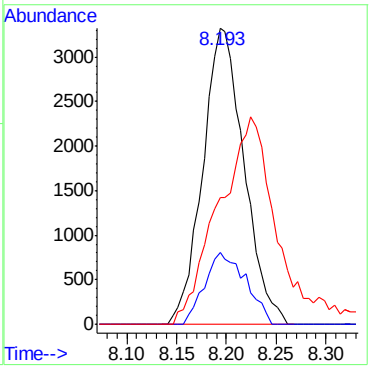


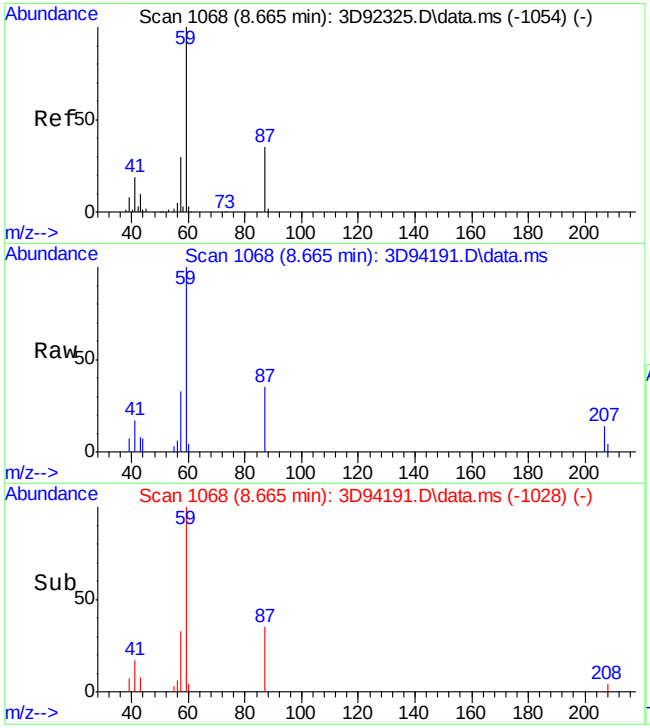


#34
di-isopropyl ether
Concen: 2.03 ug/L
RT: 8.193 min Scan# 978
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 45 Resp: 9581

Ion	Ratio	Lower	Upper
45	100		
87	24.3	0.0	53.7
43	42.8	33.1	93.1

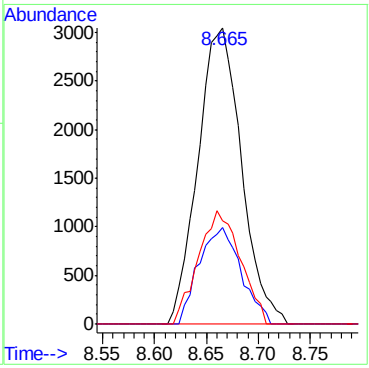


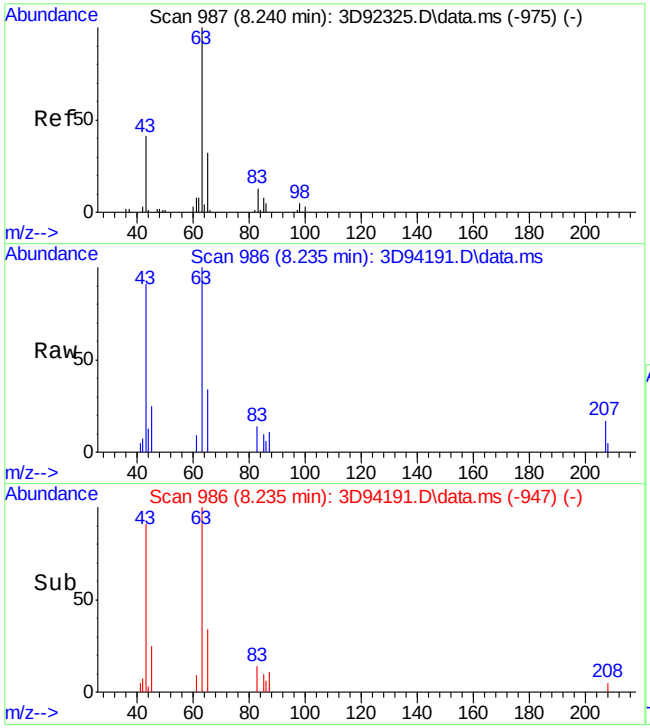


#35
ethyl tert-butyl ether
Concen: 2.01 ug/L
RT: 8.665 min Scan# 1068
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 59 Resp: 8878

Ion	Ratio	Lower	Upper
59	100		
57	32.7	1.0	61.0
87	35.0	8.7	68.7

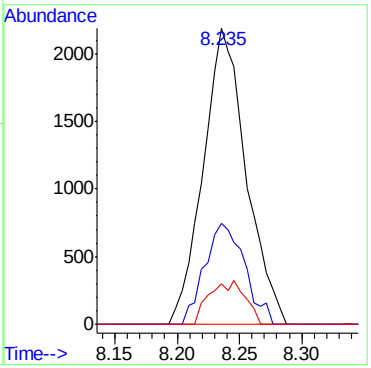


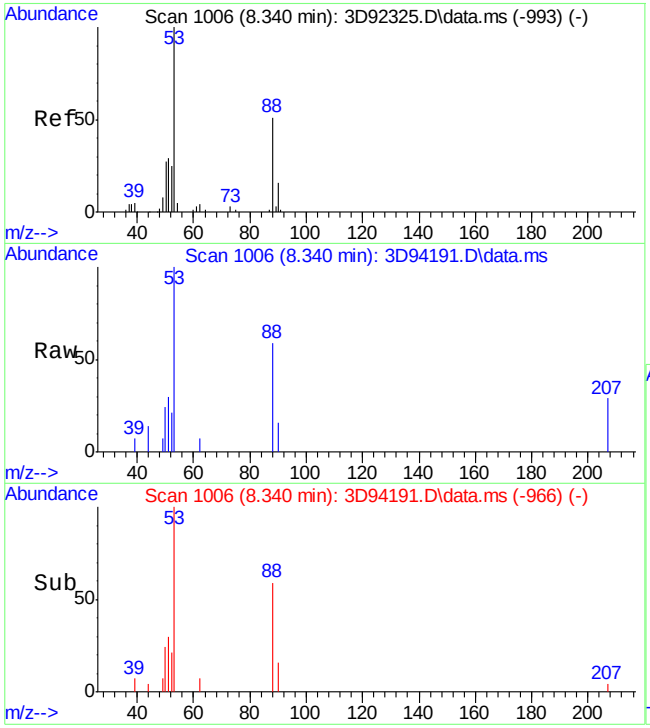


#37
1,1-dichloroethane
Concen: 2.00 ug/L
RT: 8.235 min Scan# 986
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 63 Resp: 5236

Ion	Ratio	Lower	Upper
63	100		
65	34.0	1.9	61.9
83	13.7	0.0	43.2

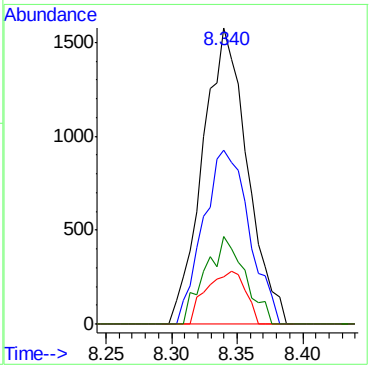




#38
chloroprene
Concen: 2.03 ug/L
RT: 8.340 min Scan# 1006
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

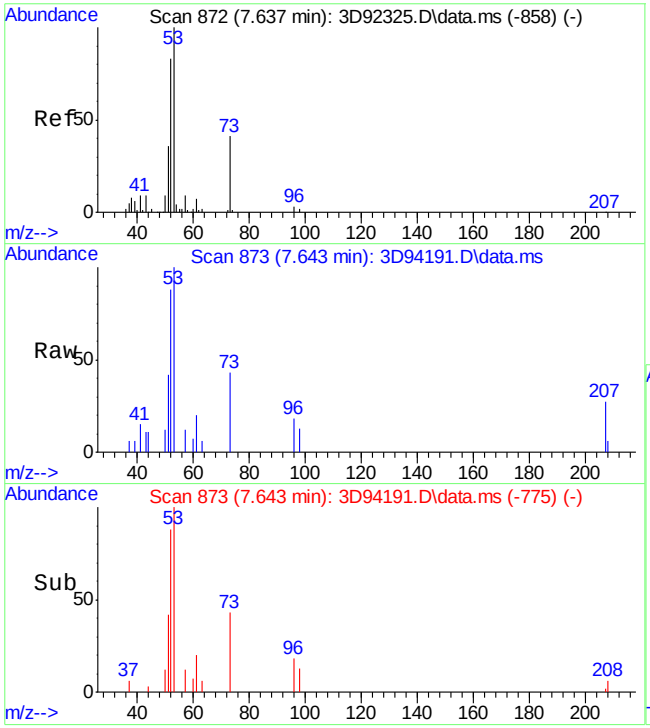
Tgt Ion: 53 Resp: 3721

Ion	Ratio	Lower	Upper
53	100		
88	58.6	31.0	91.0
90	16.0	0.0	49.8
51	29.7	0.0	56.5



7.7.3
7

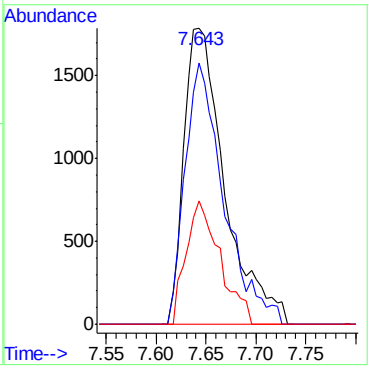
3D94191.D M3D4058.M Thu Dec 19 12:36:46 2013 3D Page 17

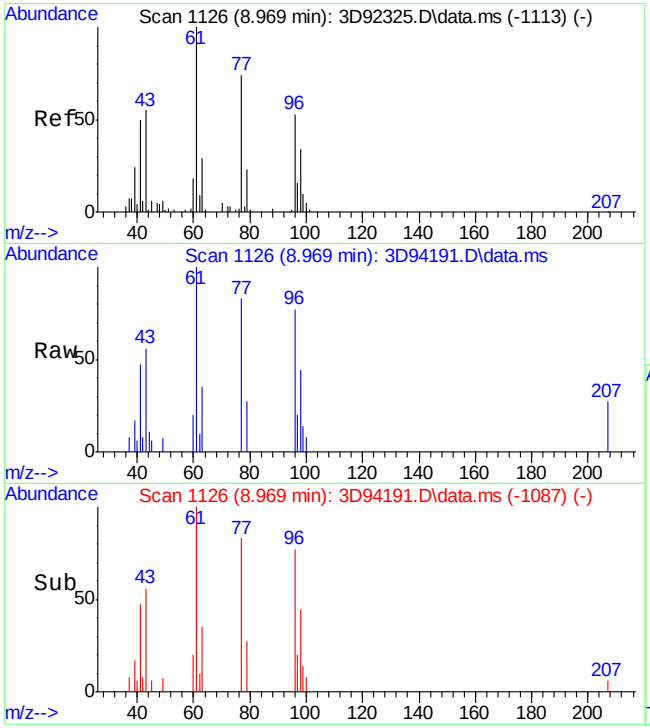


#39
acrylonitrile
Concen: 9.39 ug/L
RT: 7.643 min Scan# 873
Delta R.T. 0.016 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 53 Resp: 5101

Ion	Ratio	Lower	Upper
53	100		
52	88.3	52.8	112.8
51	41.8	3.9	63.9

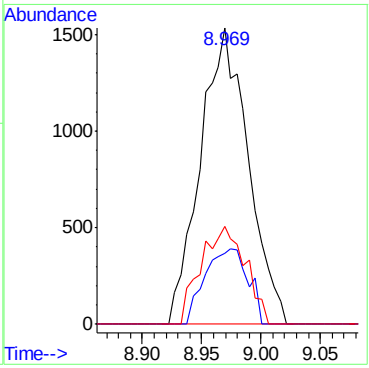




#42
2,2-dichloropropane
Concen: 2.33 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

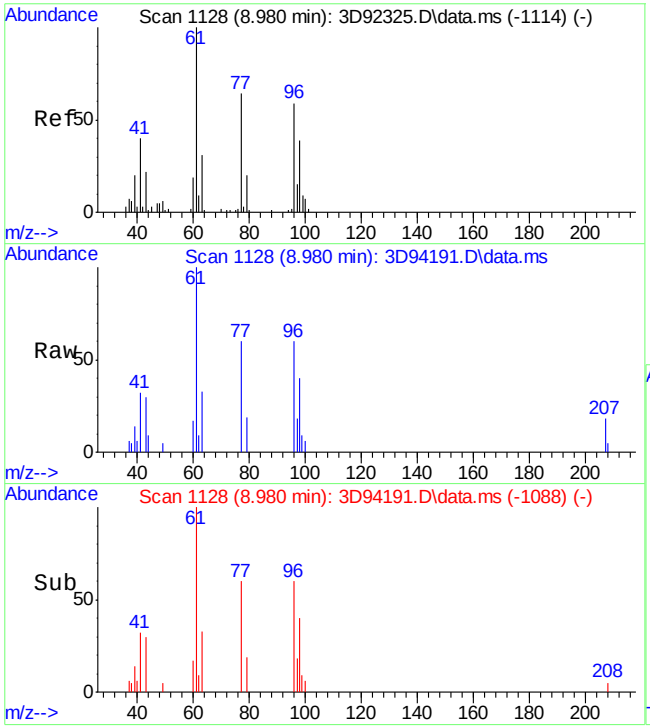
Tgt Ion: 77 Resp: 4307

Ion	Ratio	Lower	Upper
77	100		
97	23.7	0.0	56.8
79	32.9	2.1	62.1



7.7.3

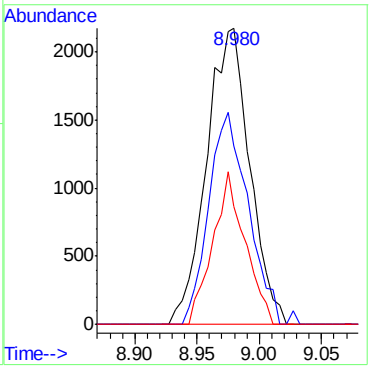
7

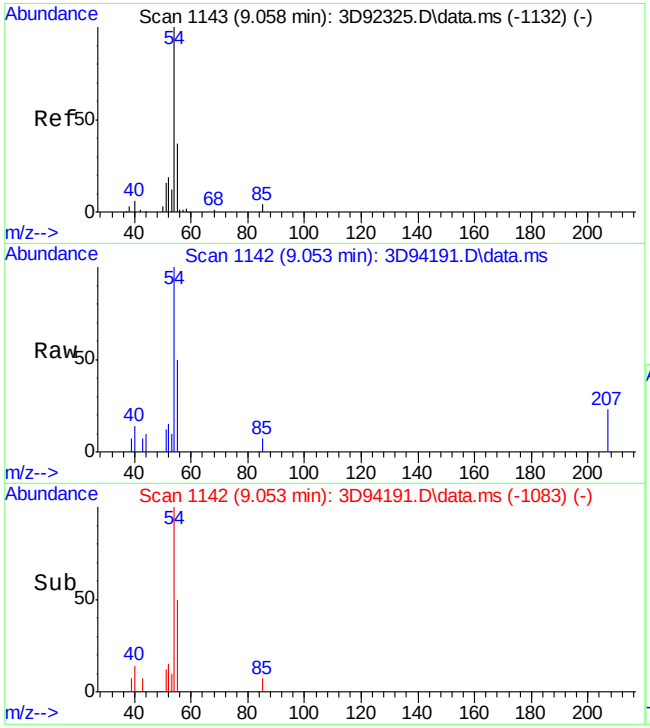


#43
cis-1,2-dichloroethene
Concen: 2.12 ug/L
RT: 8.980 min Scan# 1128
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 61 Resp: 5236

Ion	Ratio	Lower	Upper
61	100		
96	60.4	40.7	100.7
98	39.6	16.0	76.0

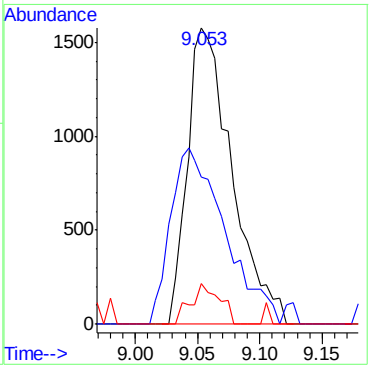




#44
propionitrile
Concen: 18.87 ug/L
RT: 9.053 min Scan# 1142
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 54 Resp: 3916

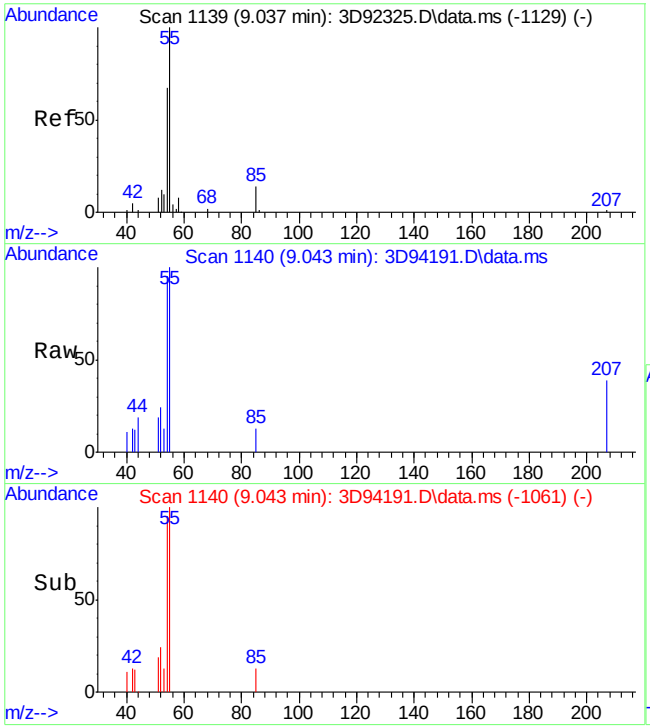
Ion	Ratio	Lower	Upper
54	100		
55	42.4	13.0	73.0
40	13.6	0.0	35.2



7.7.3

7

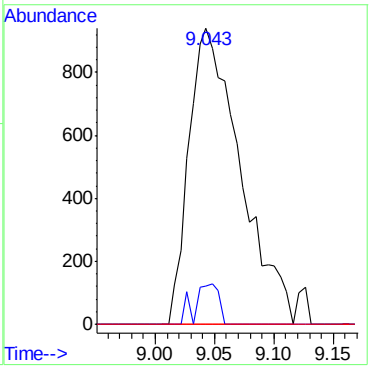
3D94191.D M3D4058.M Thu Dec 19 12:36:46 2013 3D Page 19

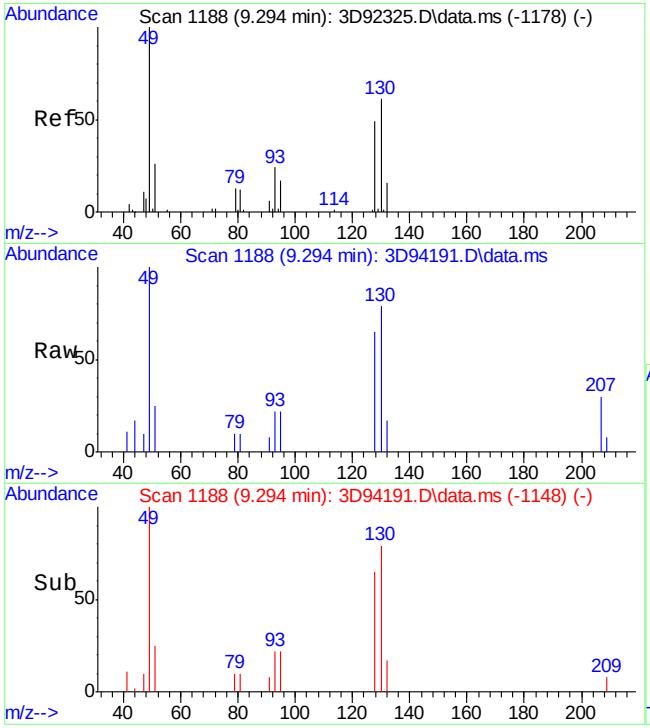


#45
methyl acrylate
Concen: 1.83 ug/L
RT: 9.043 min Scan# 1140
Delta R.T. 0.016 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 55 Resp: 2835

Ion	Ratio	Lower	Upper
55	100		
85	12.8	0.0	46.2
58	0.0	0.0	38.5

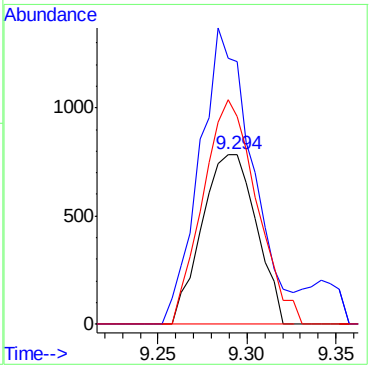


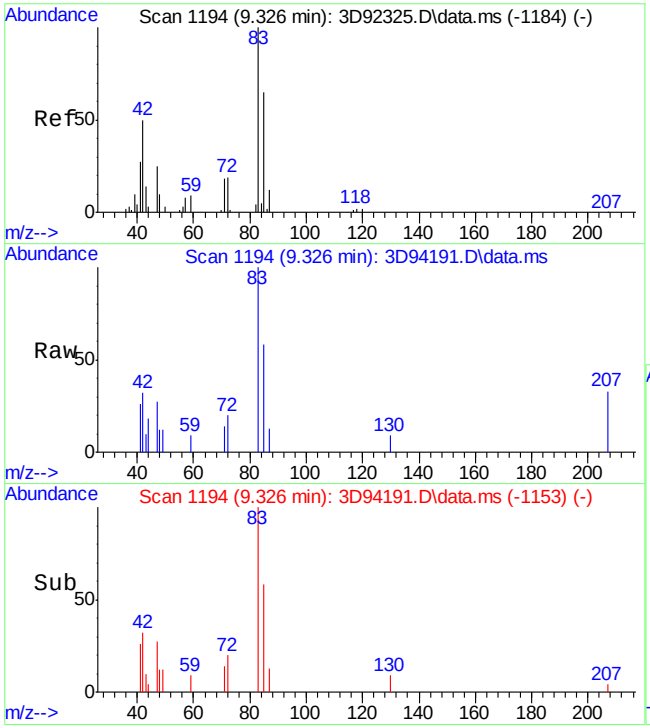


#46
bromochloromethane
Concen: 2.00 ug/L
RT: 9.294 min Scan# 1188
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:128 Resp: 1678

Ion	Ratio	Lower	Upper
128	100		
49	154.8	124.8	184.8
130	122.3	100.2	160.2

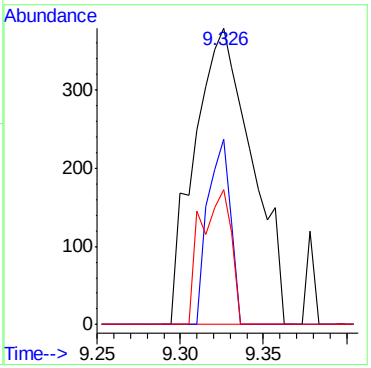


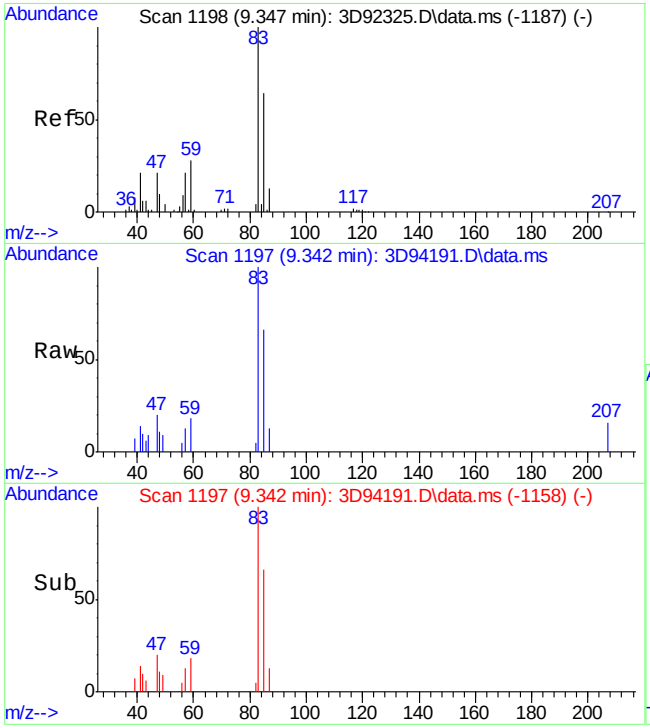


#47
tetrahydrofuran
Concen: 1.86 ug/L
RT: 9.326 min Scan# 1194
Delta R.T. 0.016 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 42 Resp: 914

Ion	Ratio	Lower	Upper
42	100		
72	24.7	8.2	68.2
71	24.1	5.6	65.6

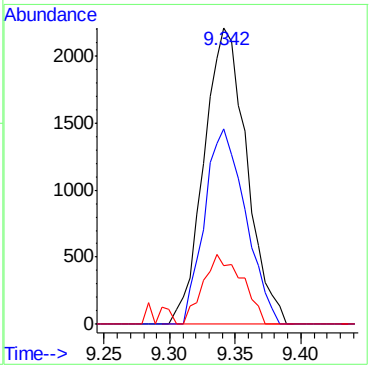


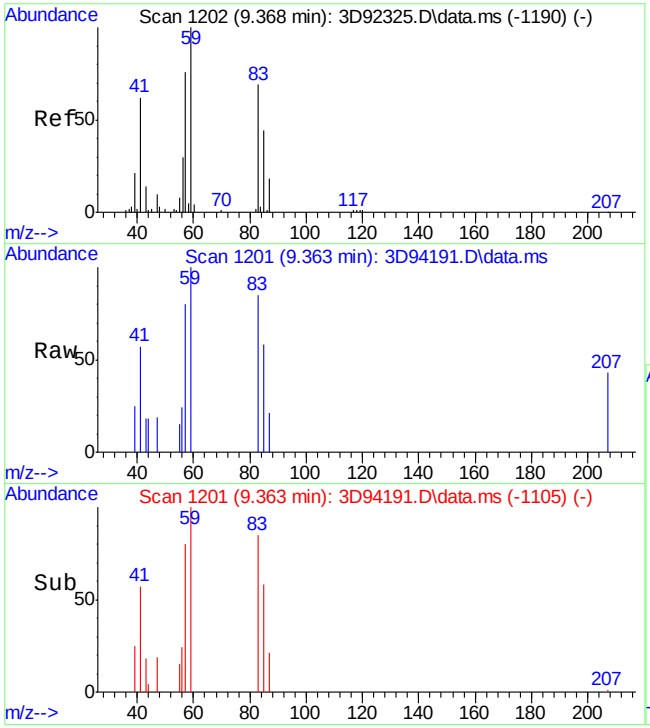


#48
chloroform
Concen: 2.03 ug/L
RT: 9.342 min Scan# 1197
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 83 Resp: 4980

Ion	Ratio	Lower	Upper
83	100		
85	66.1	33.8	93.8
47	19.9	0.0	52.3

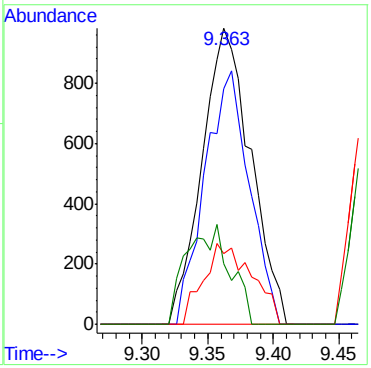


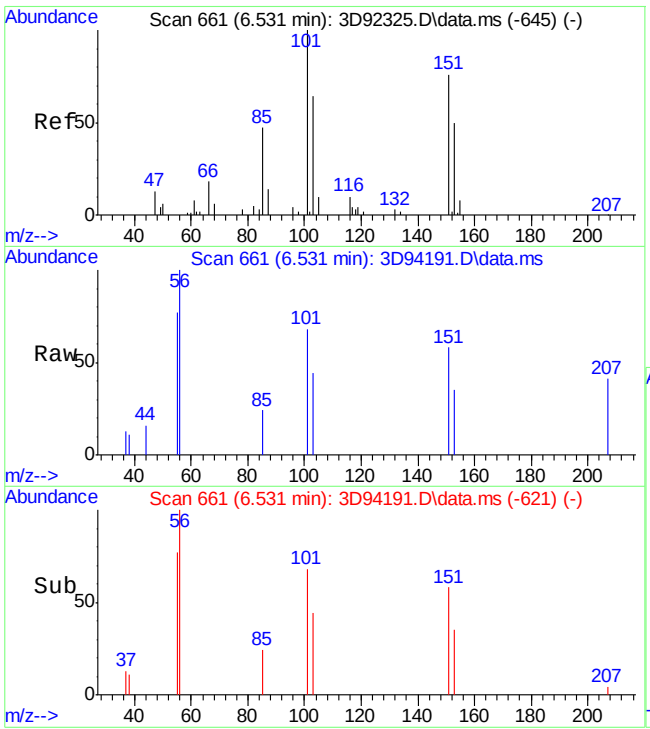


#49
Tert-Butyl Formate
Concen: 1.89 ug/L
RT: 9.363 min Scan# 1201
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 59 Resp: 2533

Ion	Ratio	Lower	Upper
59	100		
57	78.1	64.6	97.0
56	27.2	22.2	33.2
87	30.0	25.0	37.4

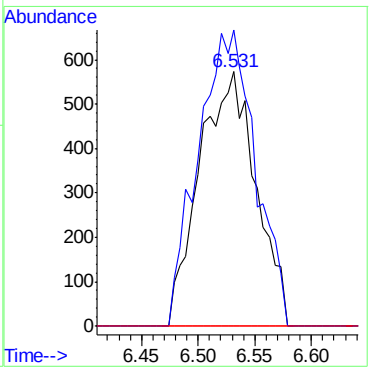


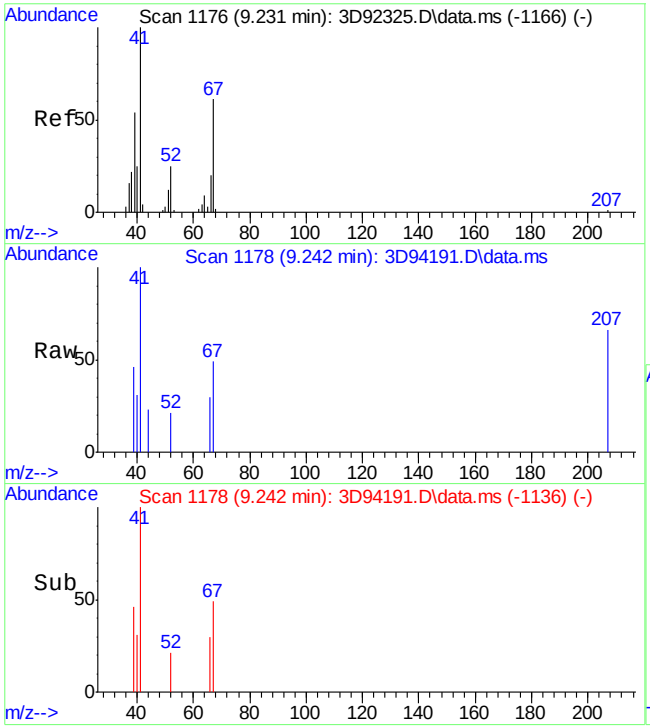


#52
freon 113
Concen: 2.14 ug/L
RT: 6.531 min Scan# 661
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:151 Resp: 1983

Ion	Ratio	Lower	Upper
151	100		
101	116.4	82.2	142.2
116	0.0	0.0	39.5

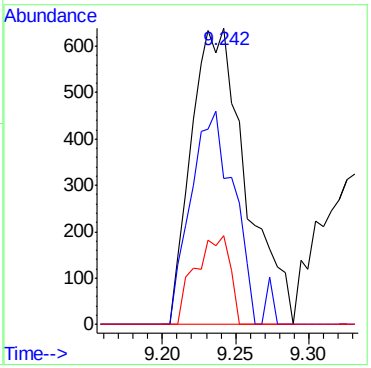


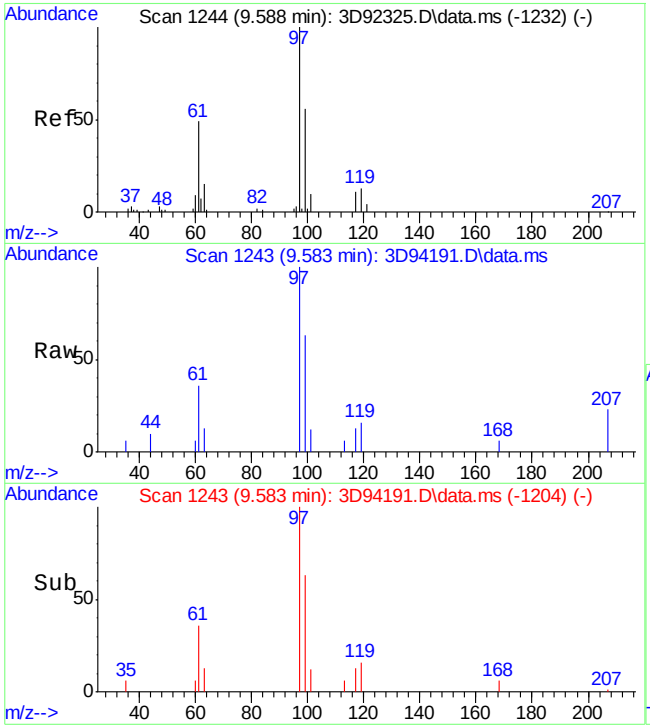


#53
methacrylonitrile
Concen: 1.84 ug/L
RT: 9.242 min Scan# 1178
Delta R.T. 0.022 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 41 Resp: 1654

Ion	Ratio	Lower	Upper
41	100		
67	49.5	38.3	98.3
66	29.9	0.0	52.9

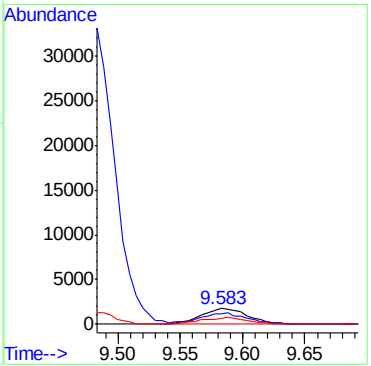




#54
1,1,1-trichloroethane
Concen: 2.07 ug/L
RT: 9.583 min Scan# 1243
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

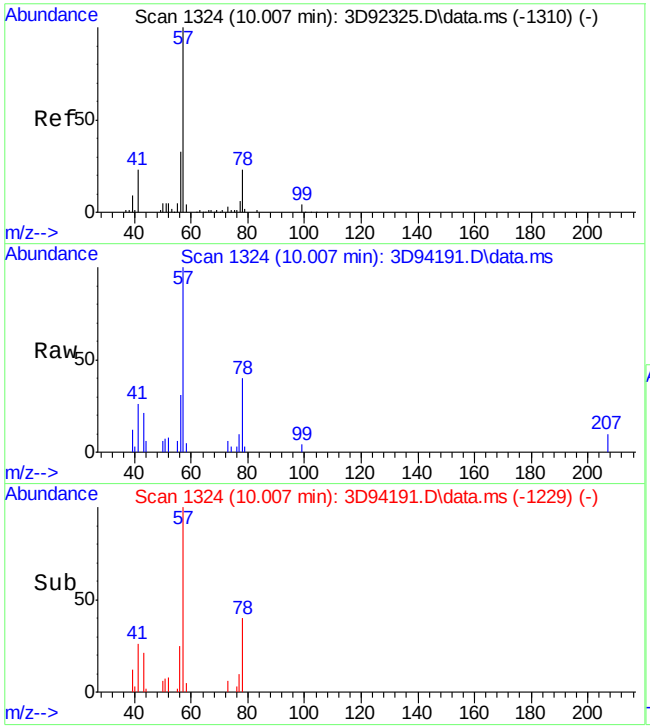
Tgt Ion: 97 Resp: 4392

Ion	Ratio	Lower	Upper
97	100		
99	63.0	36.0	96.0
61	36.1	11.8	71.8



7.7.3

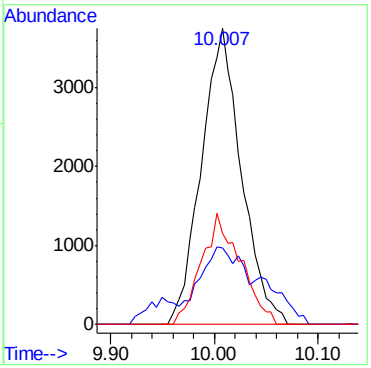
7

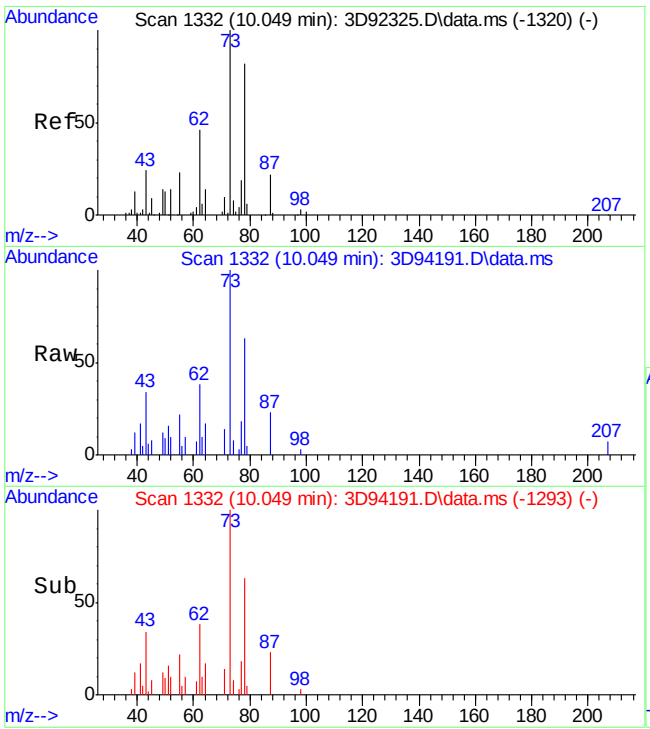


#56
2,2,4-Trimethylpentane
Concen: 2.13 ug/L
RT: 10.007 min Scan# 1324
Delta R.T. 0.000 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 57 Resp: 10036

Ion	Ratio	Lower	Upper
57	100		
41	39.5	4.5	64.5
56	36.5	4.3	64.3

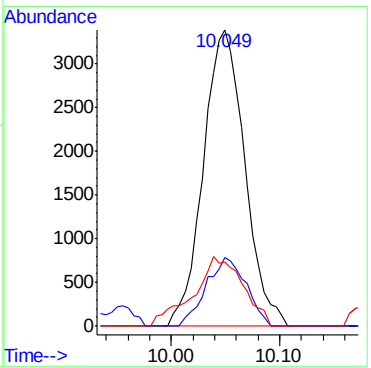




#57
tert-amyl methyl ether
Concen: 2.11 ug/L
RT: 10.049 min Scan# 1332
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 73 Resp: 9072

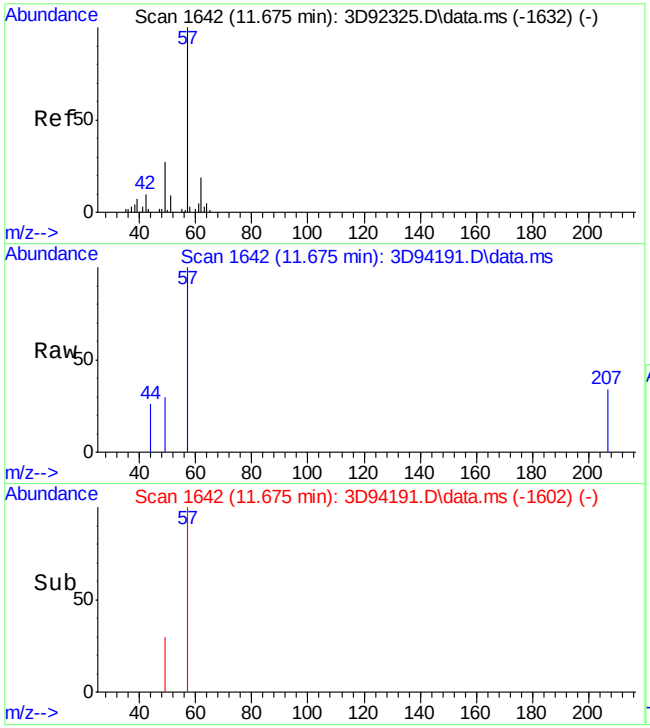
Ion	Ratio	Lower	Upper
73	100		
87	23.3	0.0	53.3
55	21.7	0.0	52.5



7.7.3

7

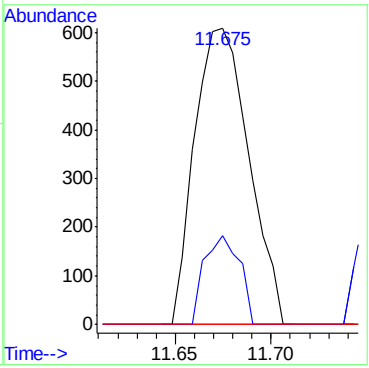
3D94191.D M3D4058.M Thu Dec 19 12:36:47 2013 3D Page 24

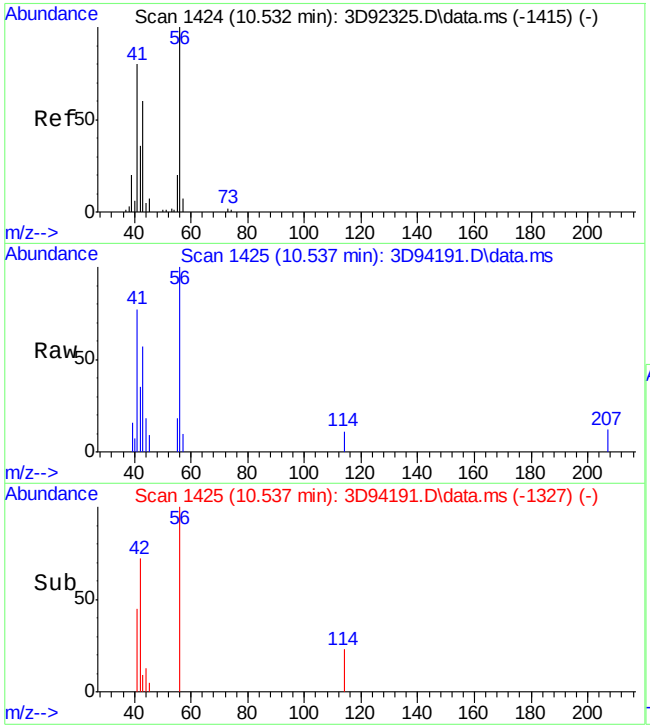


#59
epichlorohydrin
Concen: 9.26 ug/L
RT: 11.675 min Scan# 1642
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 57 Resp: 1194

Ion	Ratio	Lower	Upper
57	100		
49	29.9	0.0	55.9
42	0.0	0.0	37.7

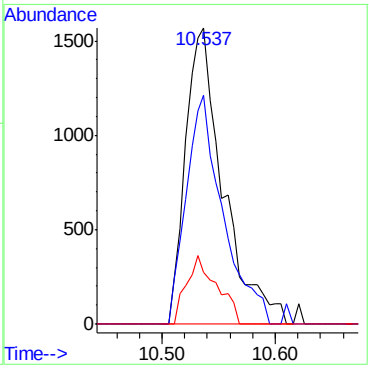


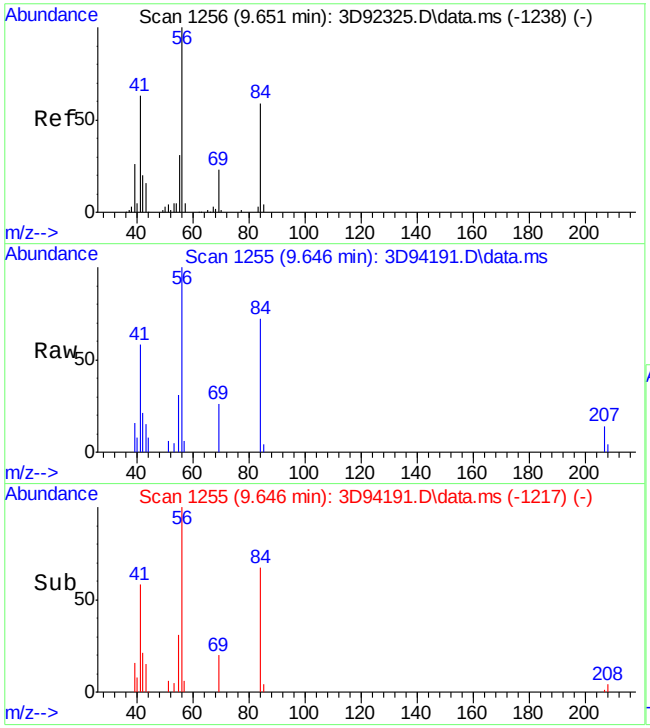


#60
n-butyl alcohol
Concen: 96.17 ug/L
RT: 10.537 min Scan# 1425
Delta R.T. 0.016 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 56 Resp: 3624

Ion	Ratio	Lower	Upper
56	100		
41	77.2	42.4	102.4
55	17.5	0.0	48.3

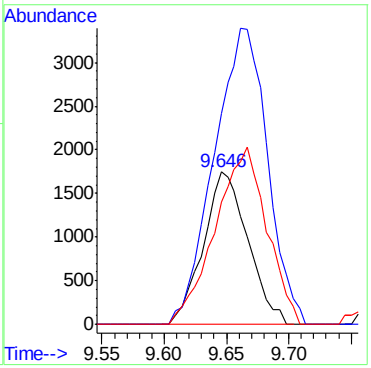


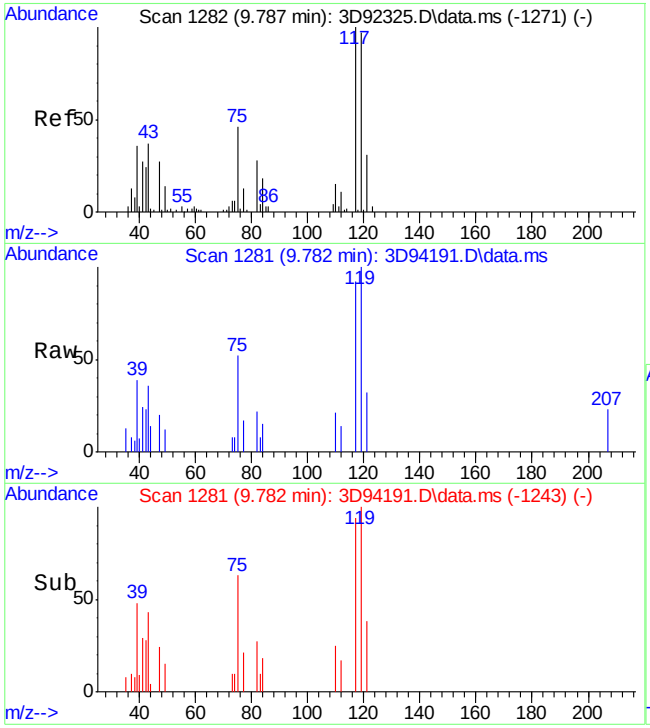


#61
cyclohexane
Concen: 2.16 ug/L
RT: 9.646 min Scan# 1255
Delta R.T. 0.001 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 84 Resp: 4336

Ion	Ratio	Lower	Upper
84	100		
56	233.5	210.2	270.2
41	134.5	108.6	168.6

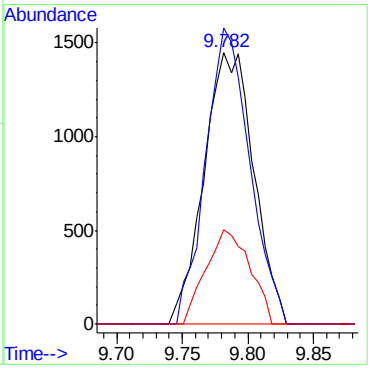


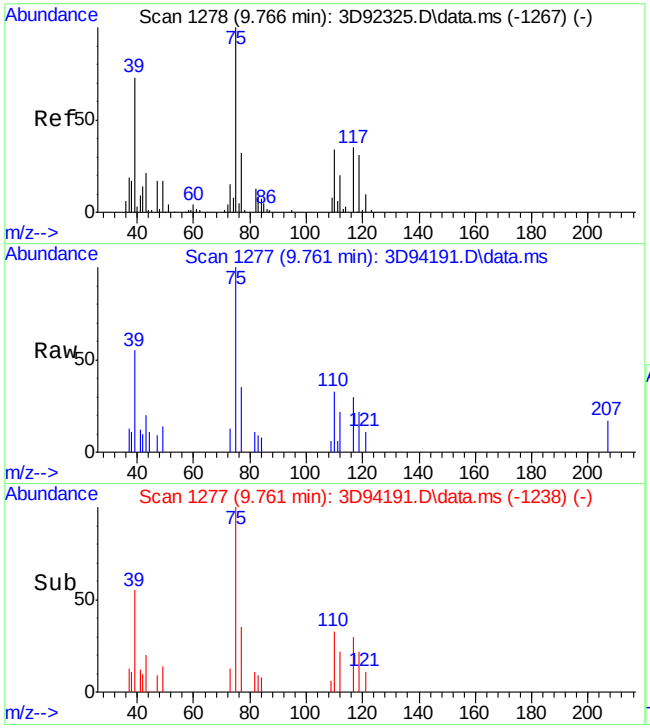


#62
carbon tetrachloride
Concen: 2.10 ug/L
RT: 9.782 min Scan# 1281
Delta R.T. -0.000 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:117 Resp: 3820

Ion	Ratio	Lower	Upper
117	100		
119	108.9	65.7	125.7
121	34.5	0.9	60.9

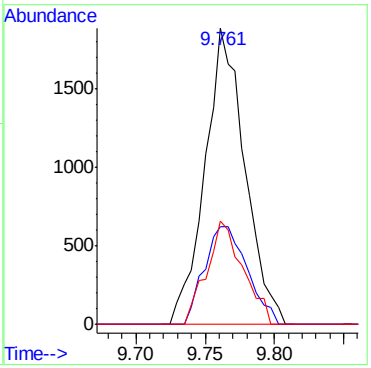


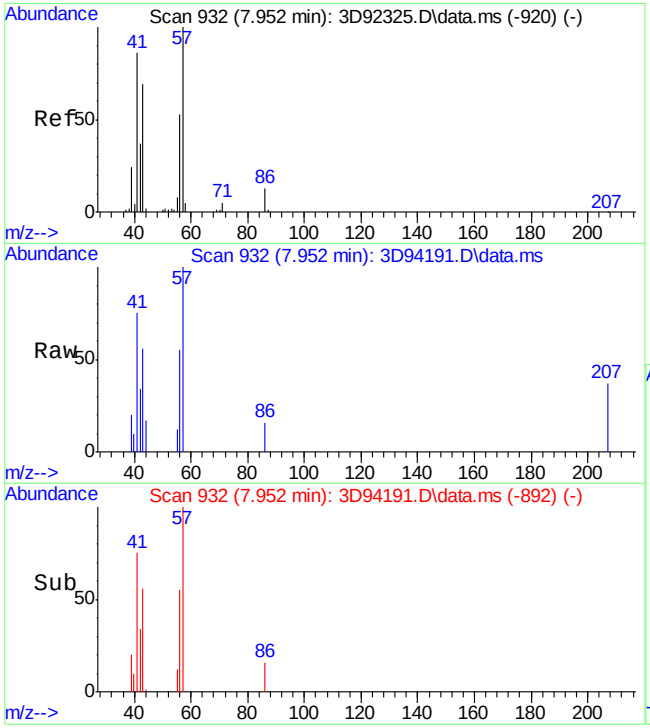


#63
1,1-dichloropropene
Concen: 2.07 ug/L
RT: 9.761 min Scan# 1277
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 75 Resp: 3792

Ion	Ratio	Lower	Upper
75	100		
110	32.9	7.6	67.6
77	35.0	1.7	61.7

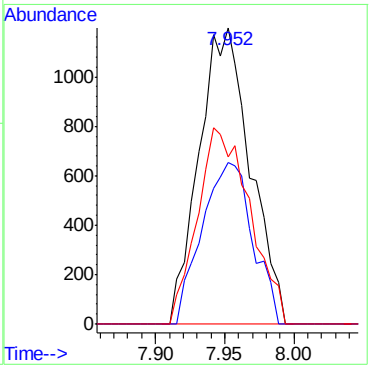




#64
hexane
Concen: 2.13 ug/L
RT: 7.952 min Scan# 932
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

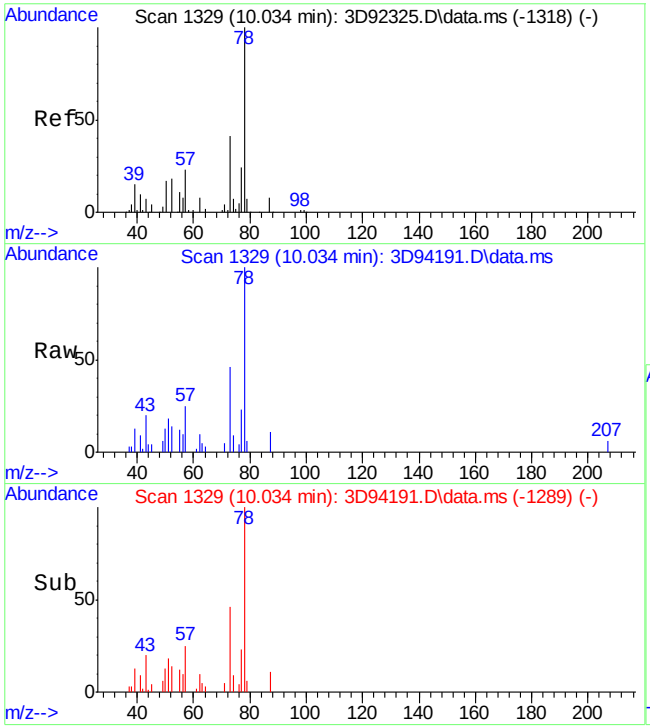
Tgt Ion: 57 Resp: 3107

Ion	Ratio	Lower	Upper
57	100		
56	54.5	22.9	82.9
43	56.4	35.4	95.4



7.7.3

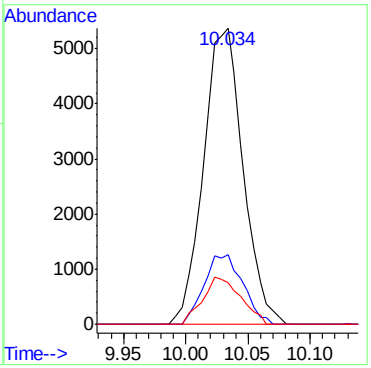
7

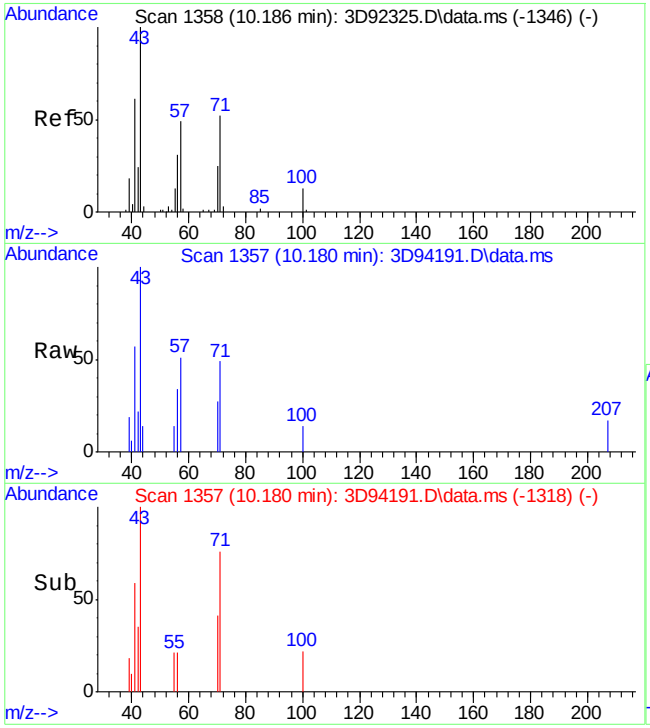


#65
benzene
Concen: 2.06 ug/L
RT: 10.034 min Scan# 1329
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 78 Resp: 11837

Ion	Ratio	Lower	Upper
78	100		
77	23.4	0.0	53.5
52	14.2	0.0	45.7

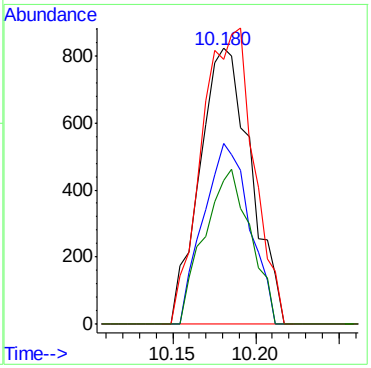




#66
heptane
Concen: 2.16 ug/L
RT: 10.180 min Scan# 1357
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 57 Resp: 1758

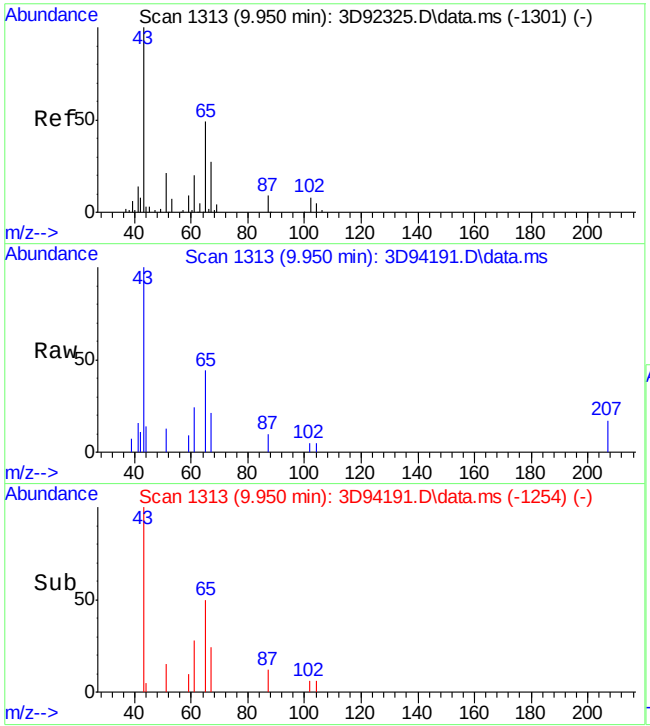
Ion	Ratio	Lower	Upper
57	100		
56	65.5	31.5	91.5
71	95.8	75.2	135.2
70	51.9	21.4	81.4



7.7.3

7

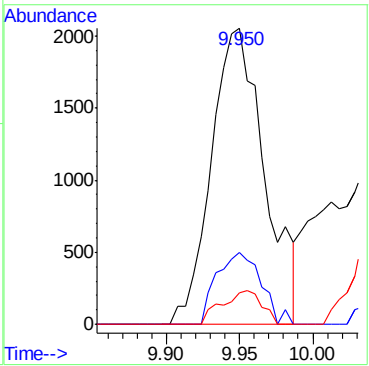
3D94191.D M3D4058.M Thu Dec 19 12:36:47 2013 3D Page 28

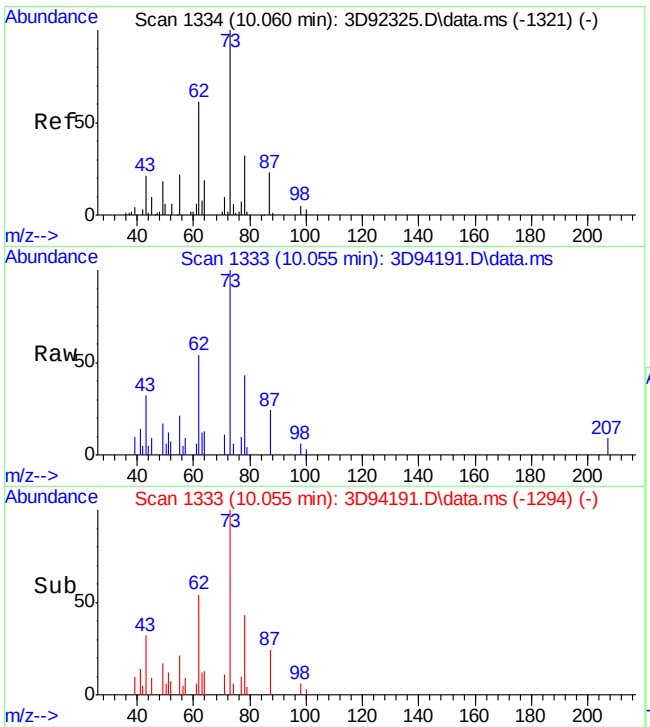


#67
isopropyl acetate
Concen: 2.01 ug/L
RT: 9.950 min Scan# 1313
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 43 Resp: 5196

Ion	Ratio	Lower	Upper
43	100		
61	20.2	0.0	52.4
87	8.5	0.0	40.7

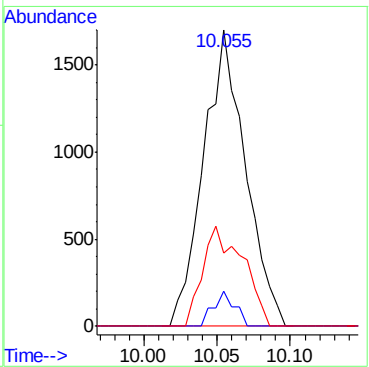




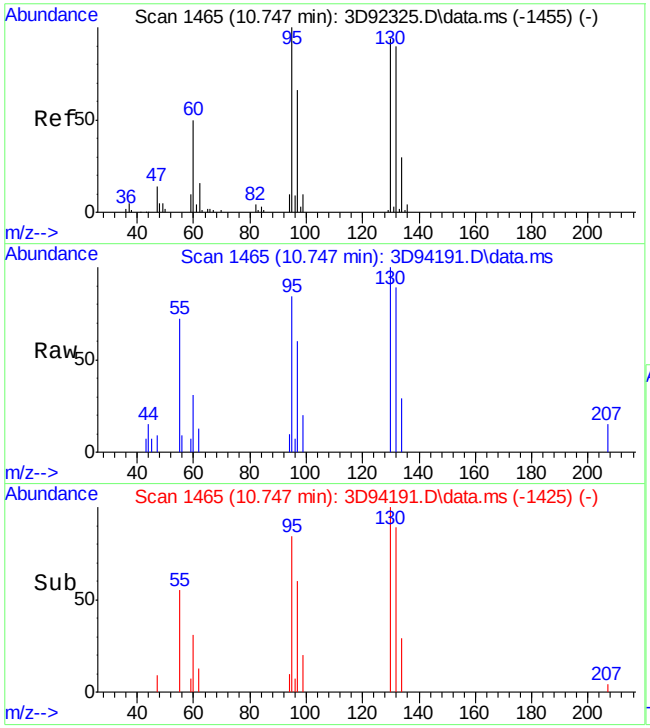
#68
1,2-dichloroethane
Concen: 1.92 ug/L
RT: 10.055 min Scan# 1333
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 62 Resp: 3381

Ion	Ratio	Lower	Upper
62	100		
98	11.9	0.0	40.3
64	24.8	2.1	62.1



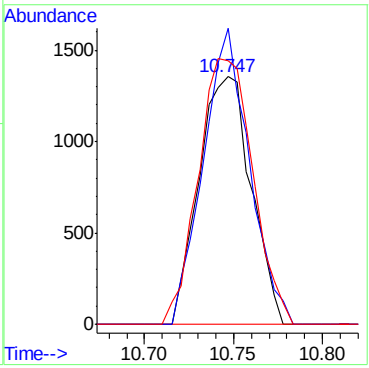
3D94191.D M3D4058.M Thu Dec 19 12:36:47 2013 3D Page 29

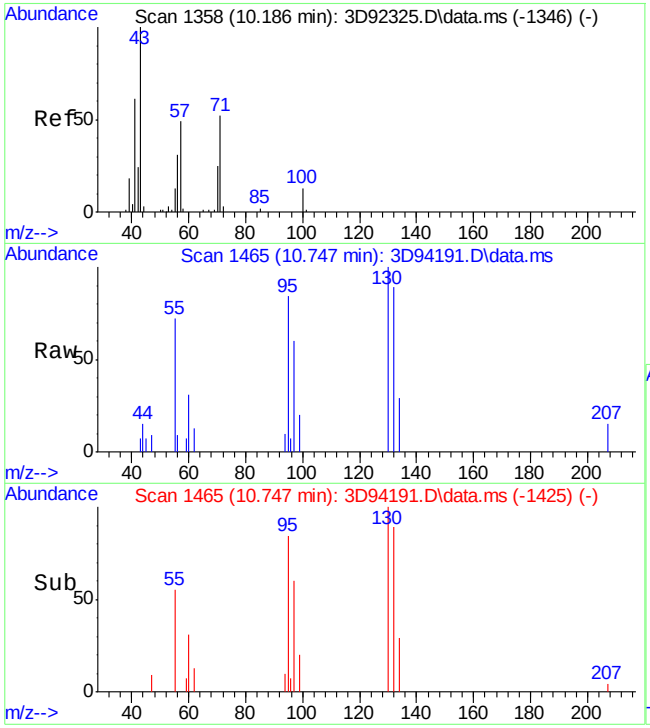


#69
trichloroethene
Concen: 1.98 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 95 Resp: 2779

Ion	Ratio	Lower	Upper
95	100		
130	119.6	78.2	138.2
132	106.6	75.0	135.0

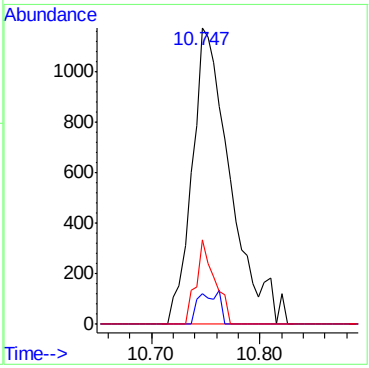




#70
ethyl acrylate
Concen: 1.76 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 55 Resp: 2890

Ion	Ratio	Lower	Upper
55	100		
45	6.1	7.6	11.4#
99	14.0	13.3	19.9



7.7.3

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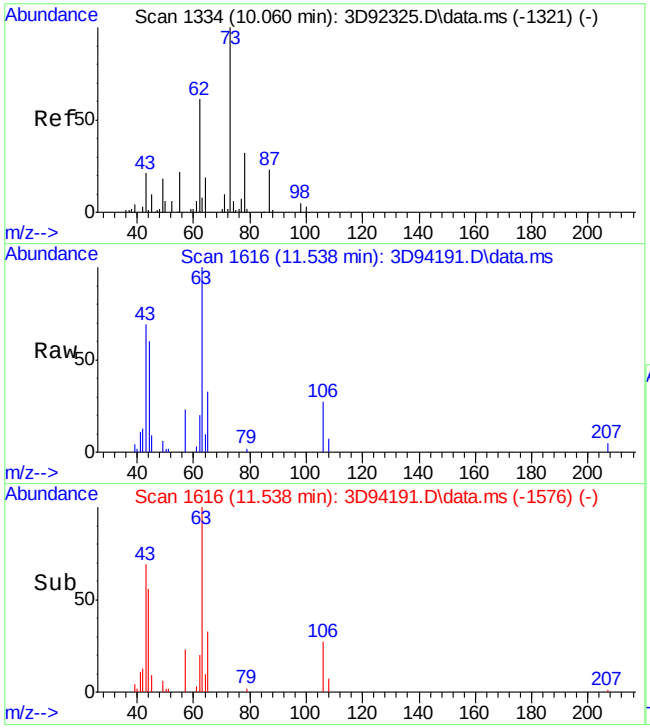
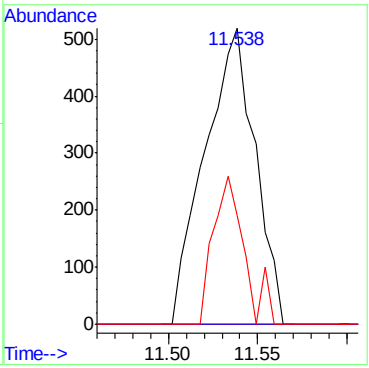
3D94191.D M3D4058.M Thu Dec 19 12:36:47 2013 3D Page 30

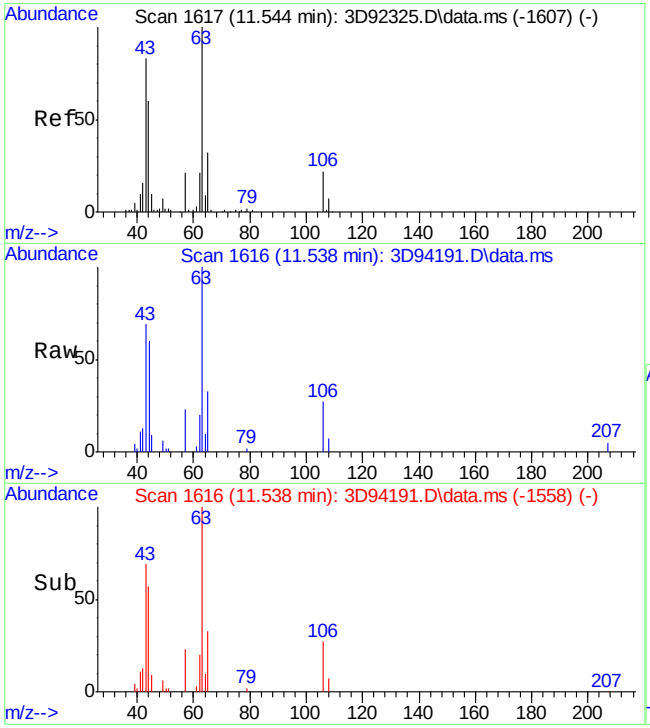


#72
2-nitropropane
Concen: 1.98 ug/L
RT: 11.538 min Scan# 1616
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 41 Resp: 1021

Ion	Ratio	Lower	Upper
41	100		
46	0.0	0.0	35.0
39	36.6	8.6	68.6

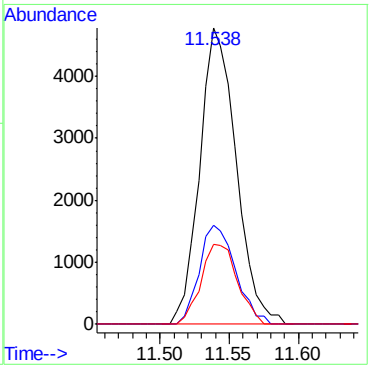


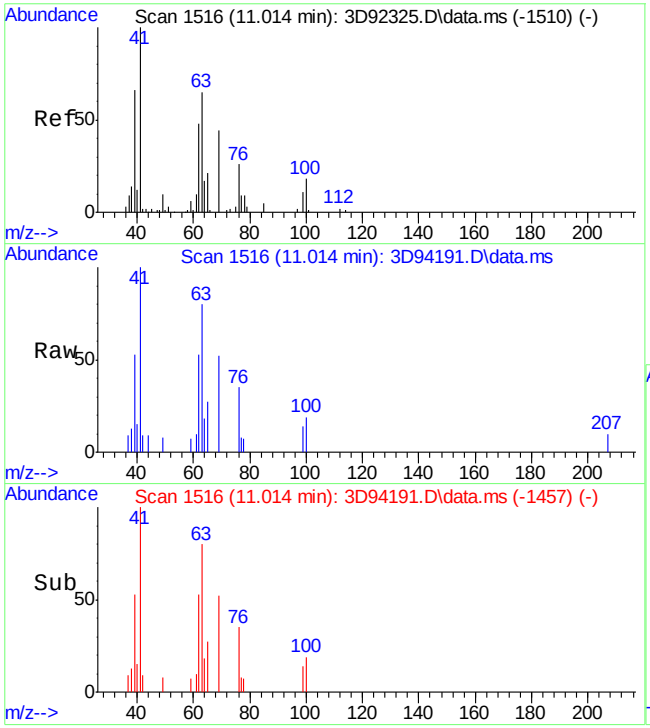


#73
2-chloroethyl vinyl ether
Concen: 9.67 ug/L
RT: 11.538 min Scan# 1616
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 63 Resp: 8780

Ion	Ratio	Lower	Upper
63	100		
65	33.5	2.2	62.2
106	26.8	0.0	56.3

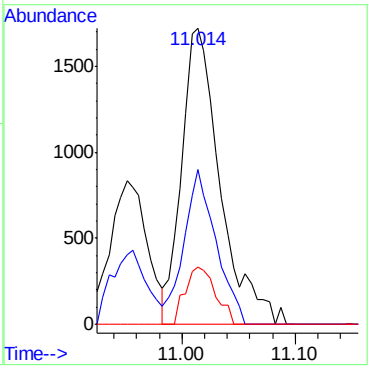


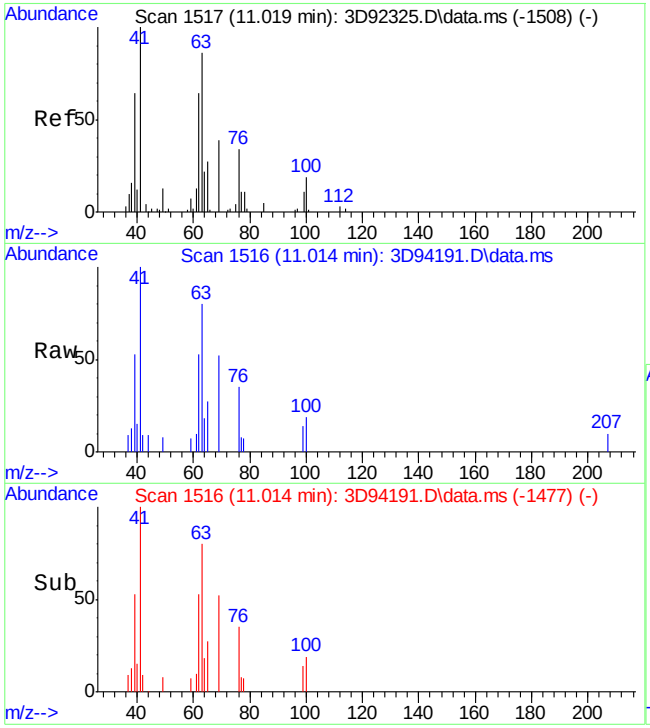


#74
methyl methacrylate
Concen: 1.92 ug/L
RT: 11.014 min Scan# 1516
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 41 Resp: 4071

Ion	Ratio	Lower	Upper
41	100		
69	52.4	19.9	79.9
100	19.2	0.0	51.2

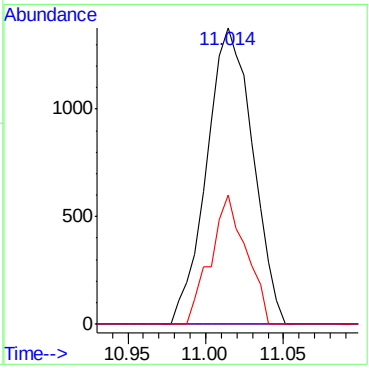




#75
1,2-dichloropropane
Concen: 1.93 ug/L
RT: 11.014 min Scan# 1516
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 63 Resp: 2829

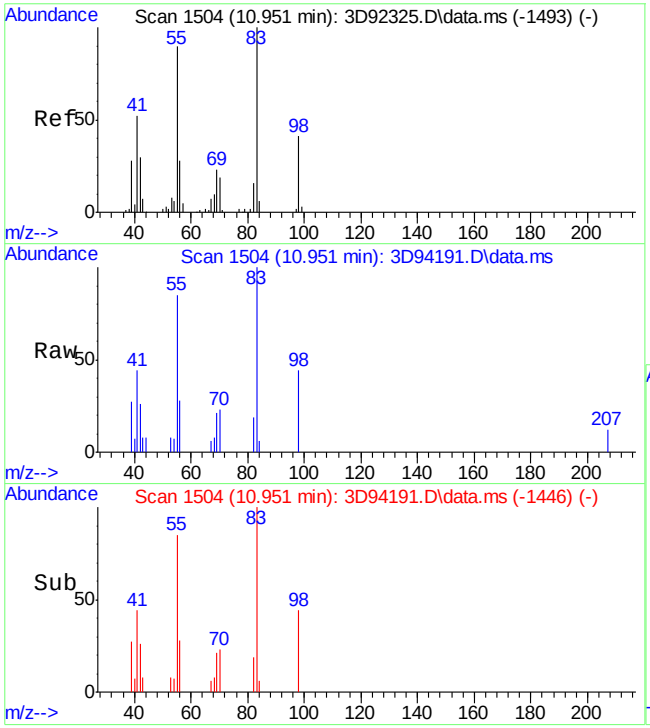
Ion	Ratio	Lower	Upper
63	100		
112	0.0	0.0	33.7
76	43.6	6.0	66.0



7.7.3

7

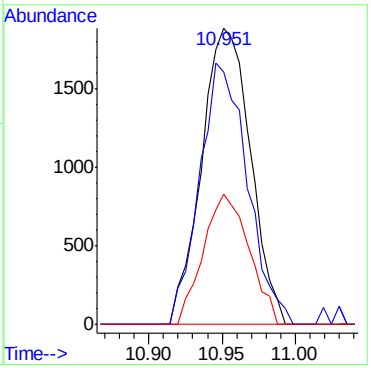
3D94191.D M3D4058.M Thu Dec 19 12:36:47 2013 3D Page 32

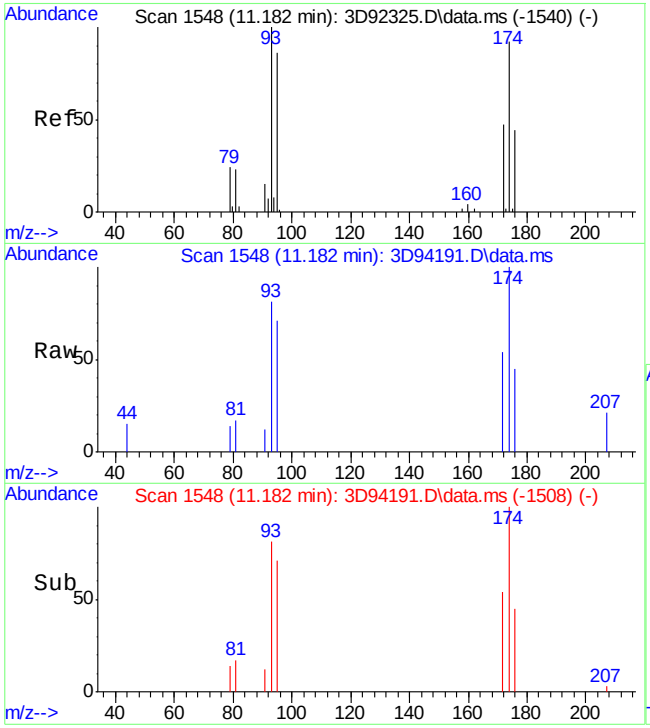


#76
methylcyclohexane
Concen: 2.18 ug/L
RT: 10.951 min Scan# 1504
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 83 Resp: 4378

Ion	Ratio	Lower	Upper
83	100		
55	85.4	49.4	109.4
98	43.8	10.6	70.6

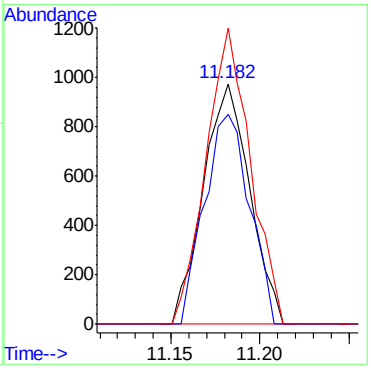




#77
dibromomethane
Concen: 1.94 ug/L
RT: 11.182 min Scan# 1548
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

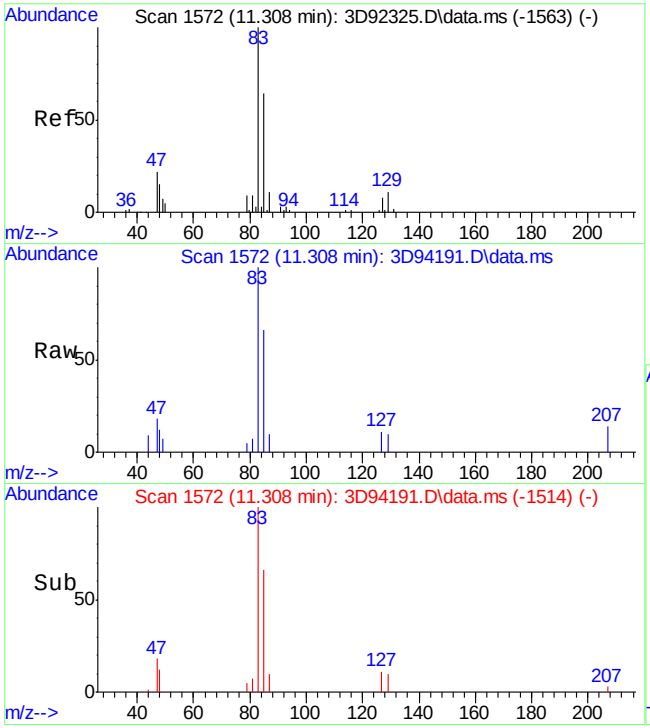
Tgt Ion: 93 Resp: 1766

Ion	Ratio	Lower	Upper
93	100		
95	87.2	53.0	113.0
174	123.2	88.8	148.8



7.7.3

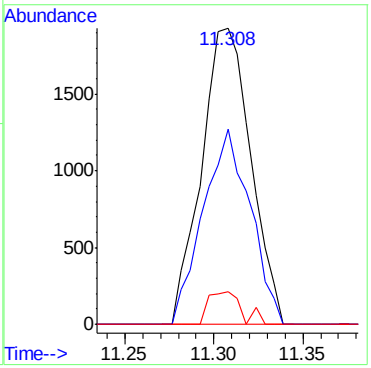
7

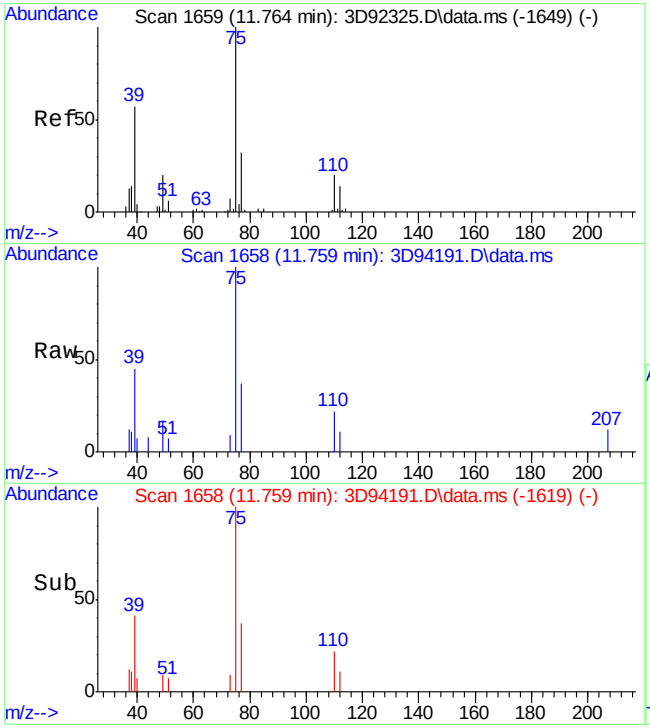


#78
bromodichloromethane
Concen: 2.05 ug/L
RT: 11.308 min Scan# 1572
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 83 Resp: 3720

Ion	Ratio	Lower	Upper
83	100		
85	66.1	34.7	94.7
127	10.9	0.0	39.6

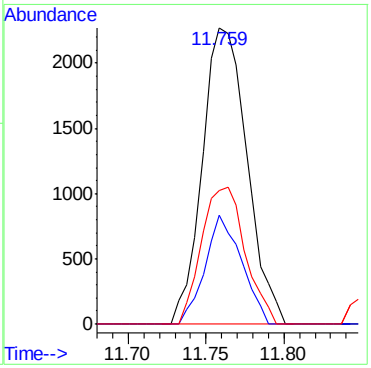


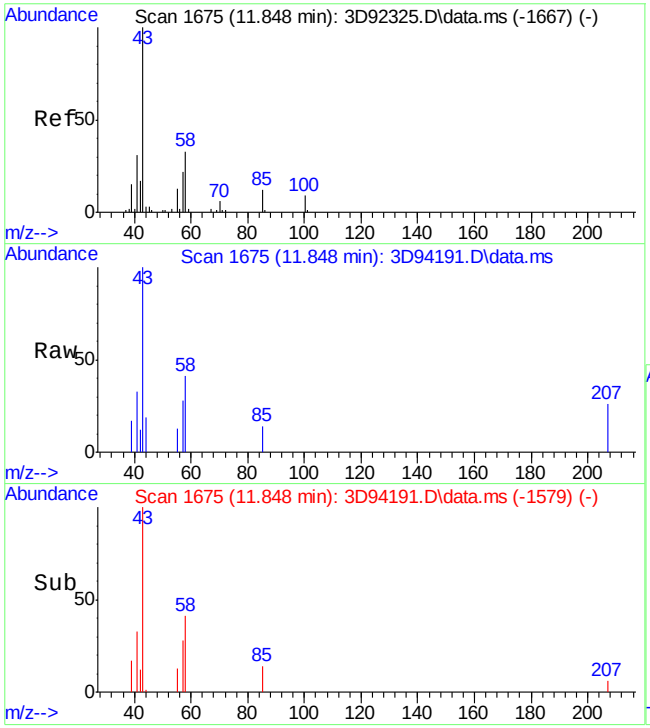


#79
cis-1,3-dichloropropene
Concen: 2.04 ug/L
RT: 11.759 min Scan# 1658
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 75 Resp: 4528

Ion	Ratio	Lower	Upper
75	100		
77	36.8	1.8	61.8
39	45.1	15.6	75.6

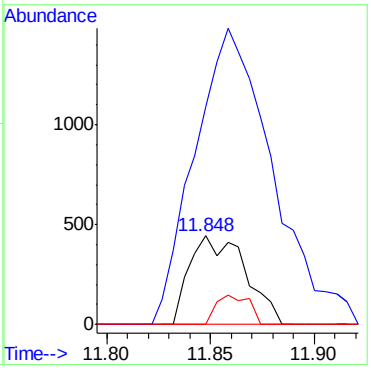


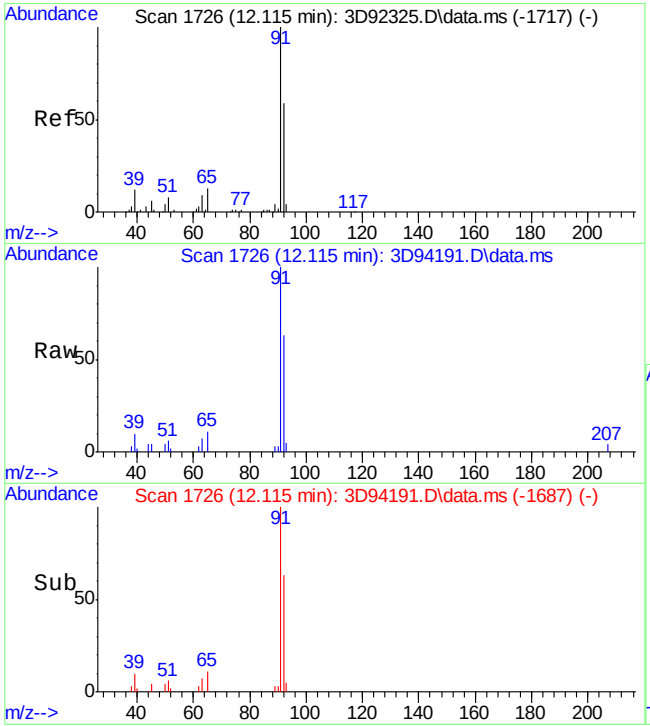


#81
4-methyl-2-pentanone
Concen: 1.60 ug/L
RT: 11.848 min Scan# 1675
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 58 Resp: 829

Ion	Ratio	Lower	Upper
58	100		
43	467.6	333.6	393.6#
100	19.2	1.6	61.6

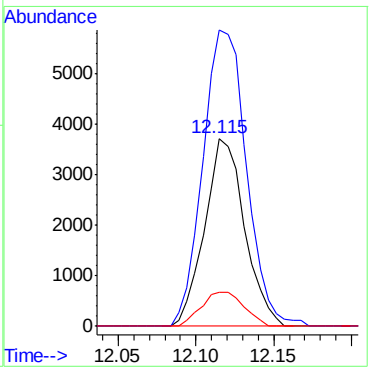


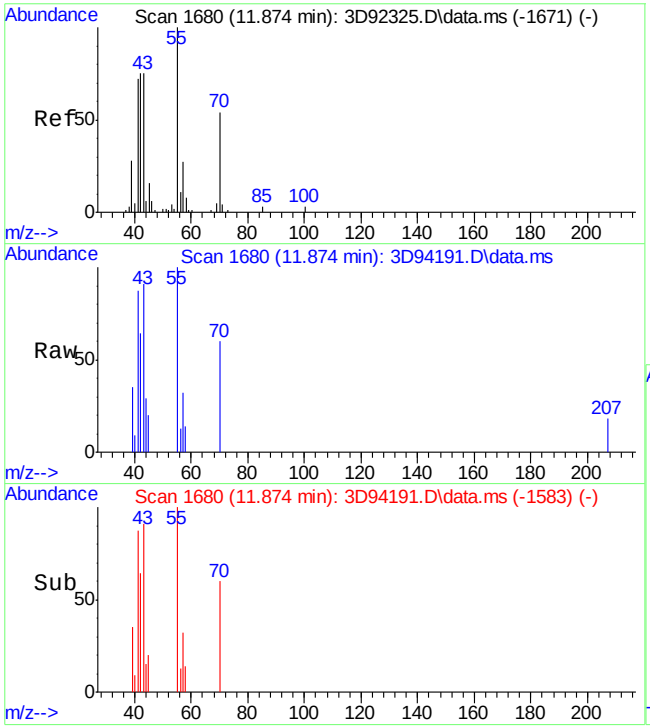


#82
toluene
Concen: 1.98 ug/L
RT: 12.115 min Scan# 1726
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 92 Resp: 6627

Ion	Ratio	Lower	Upper
92	100		
91	157.8	137.9	197.9
65	18.0	0.0	48.1

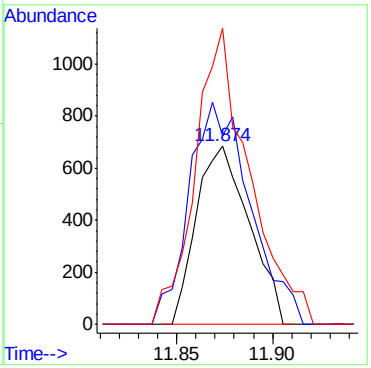


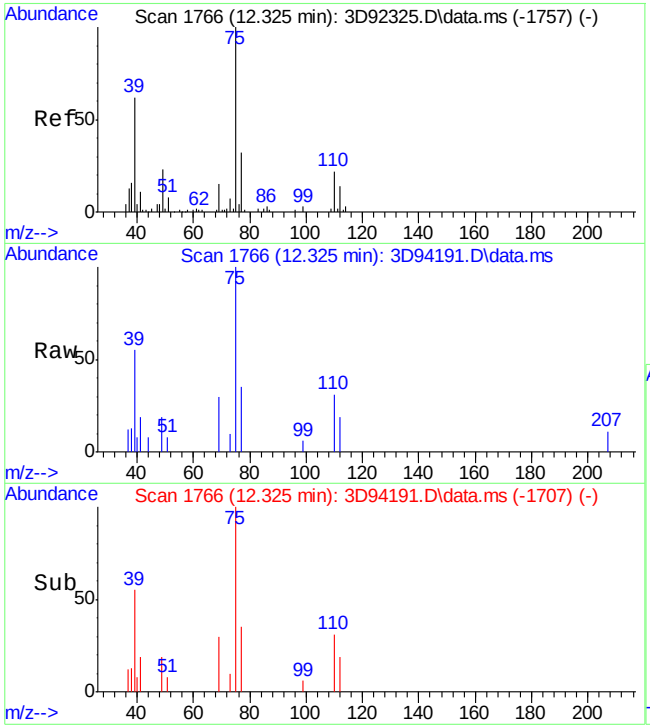


#83
3-methyl-1-butanol
Concen: 37.60 ug/L
RT: 11.874 min Scan# 1680
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 70 Resp: 1306

Ion	Ratio	Lower	Upper
70	100		
42	144.8	102.8	162.8
55	171.0	141.0	201.0

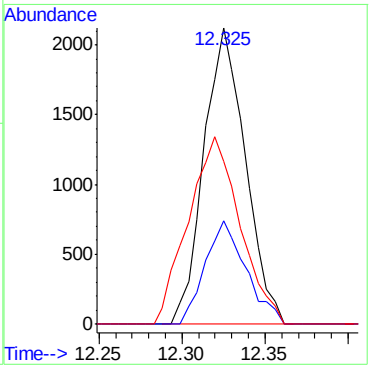


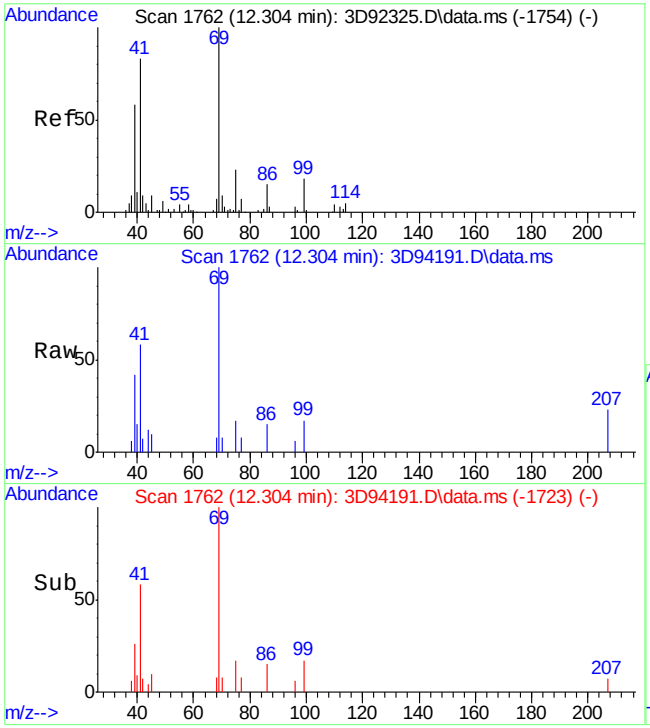


#84
trans-1,3-dichloropropene
Concen: 1.83 ug/L
RT: 12.325 min Scan# 1766
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 75 Resp: 3685

Ion	Ratio	Lower	Upper
75	100		
77	34.7	1.6	61.6
39	54.8	22.9	82.9

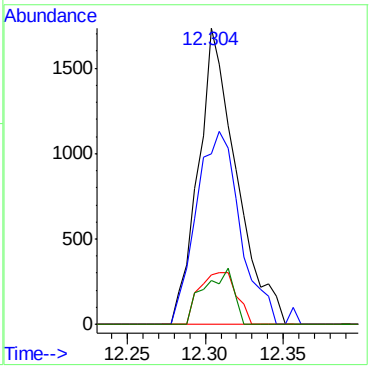


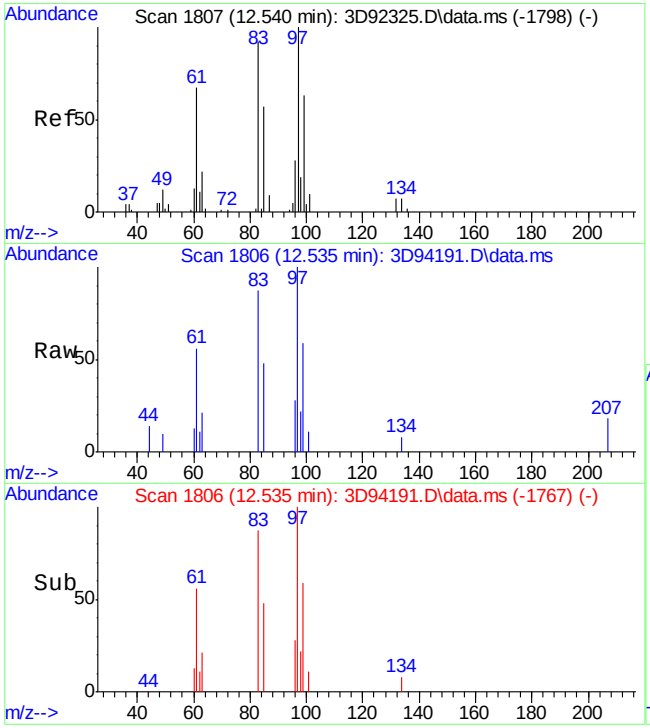


#85
ethyl methacrylate
Concen: 1.81 ug/L
RT: 12.304 min Scan# 1762
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 69 Resp: 2959

Ion	Ratio	Lower	Upper
69	100		
41	57.8	41.9	101.9
99	16.6	0.0	49.8
86	14.6	0.0	47.1

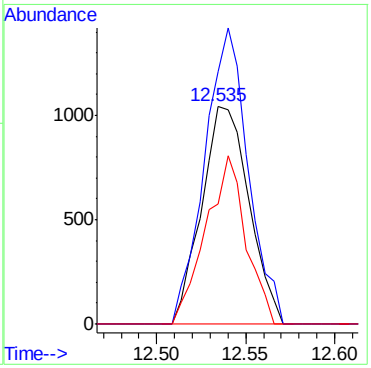


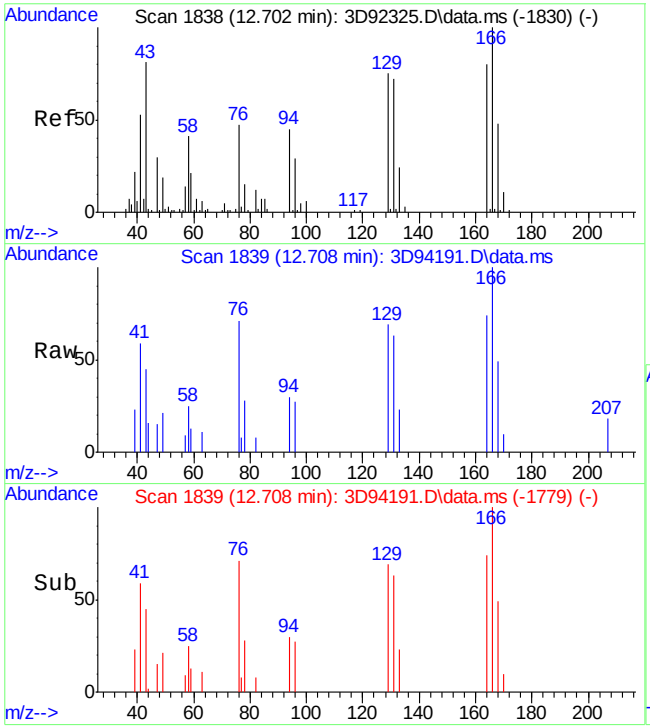


#86
1,1,2-trichloroethane
Concen: 1.87 ug/L
RT: 12.535 min Scan# 1806
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 83 Resp: 1935

Ion	Ratio	Lower	Upper
83	100		
97	115.5	87.9	147.9
85	55.1	33.9	93.9

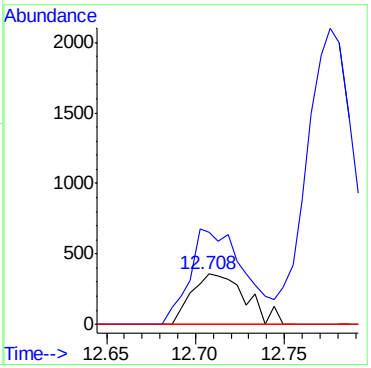


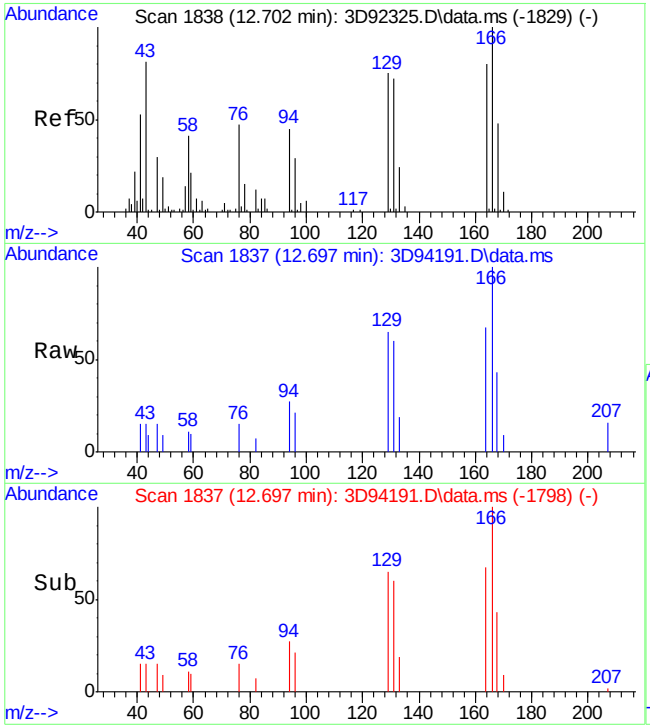


#87
2-hexanone
Concen: 1.60 ug/L
RT: 12.708 min Scan# 1839
Delta R.T. 0.017 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 58 Resp: 755

Ion	Ratio	Lower	Upper
58	100		
43	183.2	149.9	209.9
100	0.0	0.0	49.9

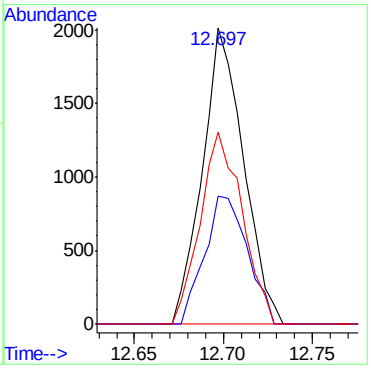




#89
tetrachloroethene
Concen: 2.11 ug/L
RT: 12.697 min Scan# 1837
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:166 Resp: 3248

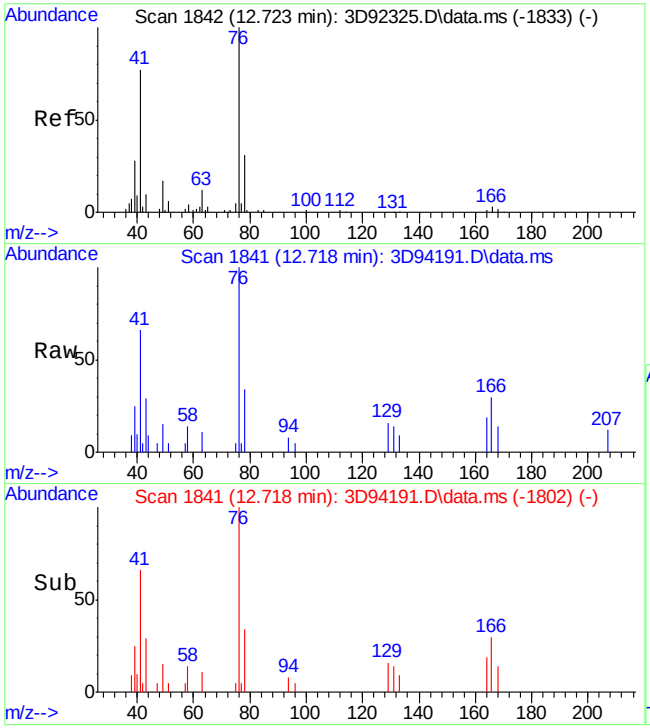
Ion	Ratio	Lower	Upper
166	100		
168	43.3	18.1	78.1
129	65.0	38.2	98.2



7.7.3

7

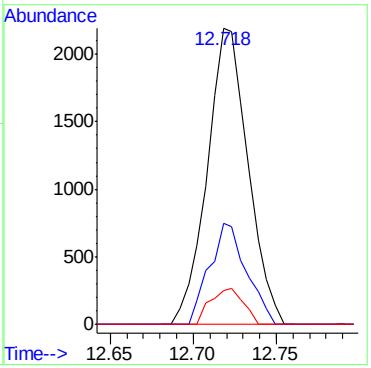
3D94191.D M3D4058.M Thu Dec 19 12:36:48 2013 3D Page 38

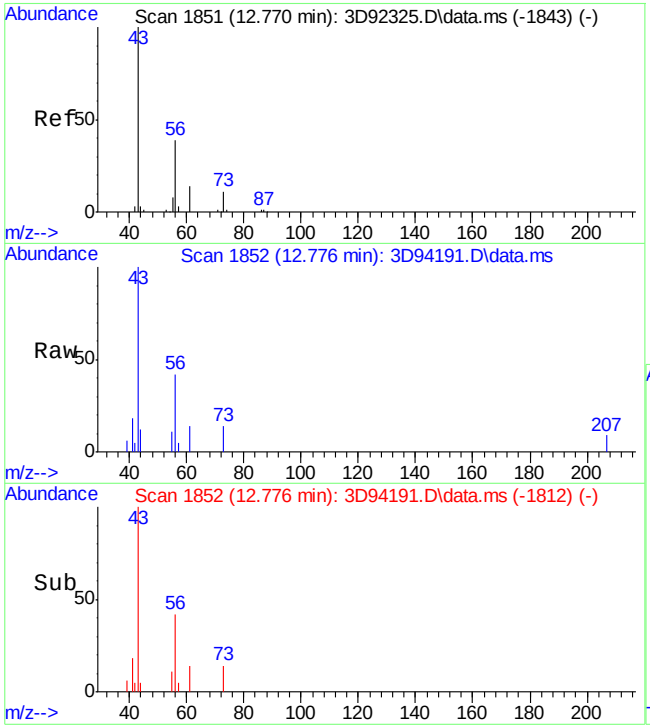


#90
1,3-dichloropropane
Concen: 2.01 ug/L
RT: 12.718 min Scan# 1841
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 76 Resp: 3752

Ion	Ratio	Lower	Upper
76	100		
78	34.0	4.3	64.3
63	11.4	0.0	41.6

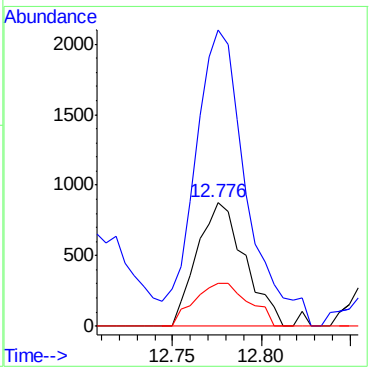




#91
butyl acetate
Concen: 2.04 ug/L
RT: 12.776 min Scan# 1852
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 56 Resp: 1642

Ion	Ratio	Lower	Upper
56	100		
43	219.5	209.3	269.3
73	34.2	2.1	62.1



7.7.3

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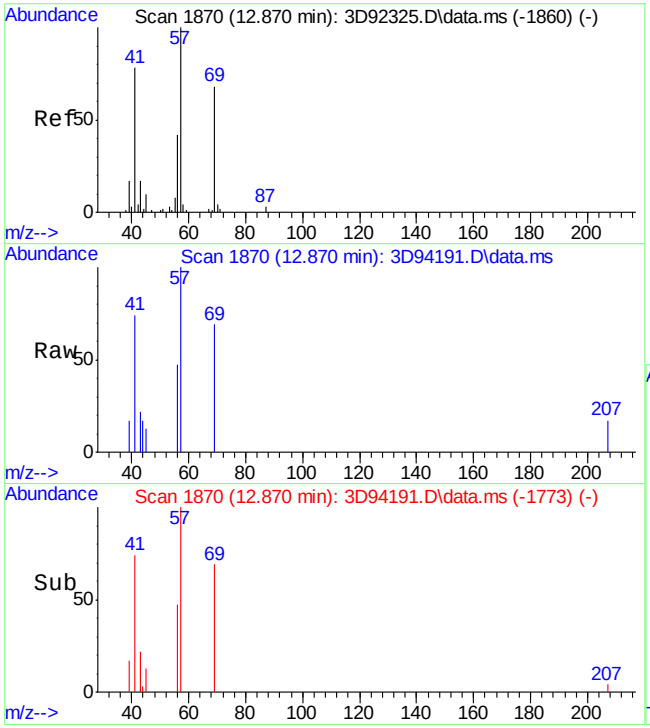
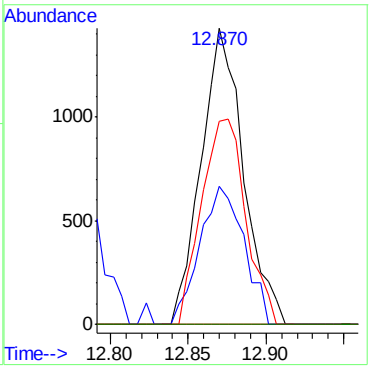
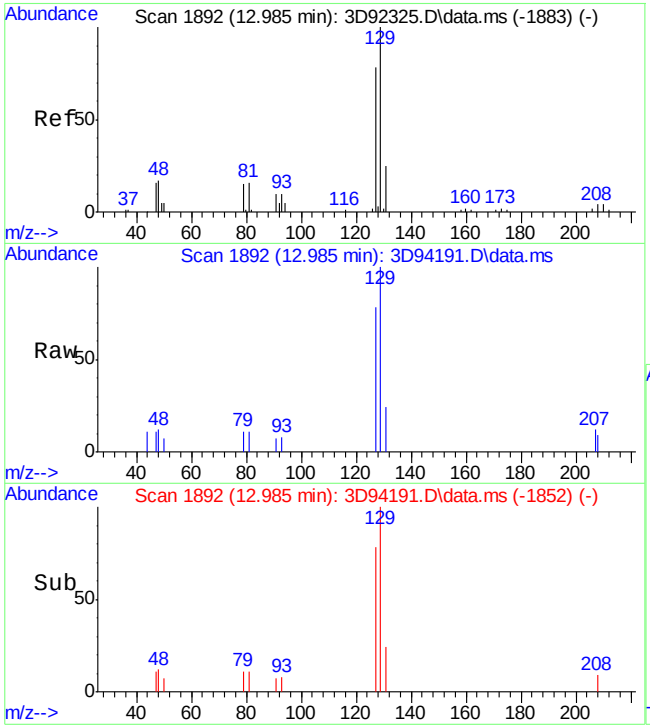


#92
3,3-Dimethyl-1-Butanol
Concen: 20.51 ug/L
RT: 12.870 min Scan# 1870
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 57 Resp: 2694

Ion	Ratio	Lower	Upper
57	100		
56	48.6	36.2	54.2
69	72.4	58.1	87.1
87	0.0	2.5	3.7#

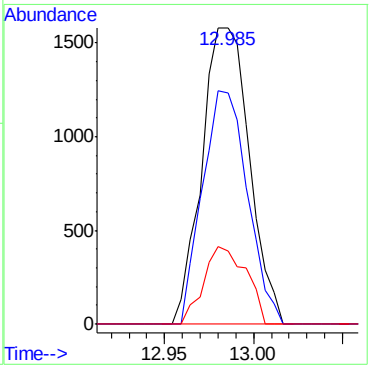


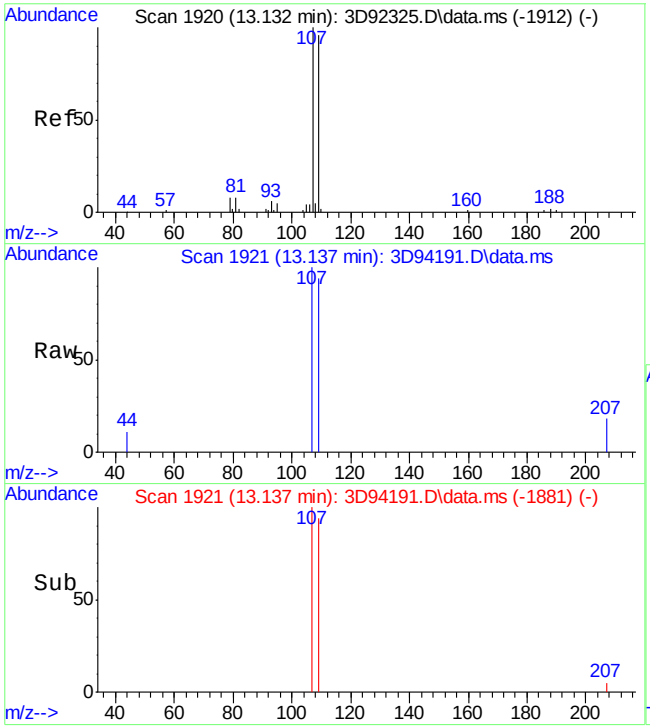


#93
dibromochloromethane
Concen: 1.99 ug/L
RT: 12.985 min Scan# 1892
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:129 Resp: 2938

Ion	Ratio	Lower	Upper
129	100		
127	78.2	44.5	104.5
131	24.5	0.0	53.5

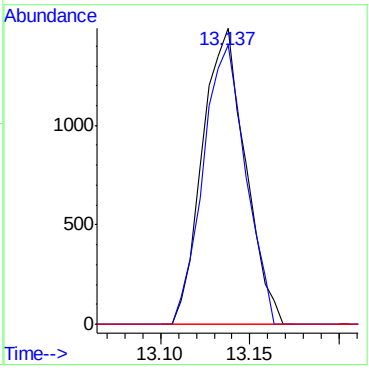


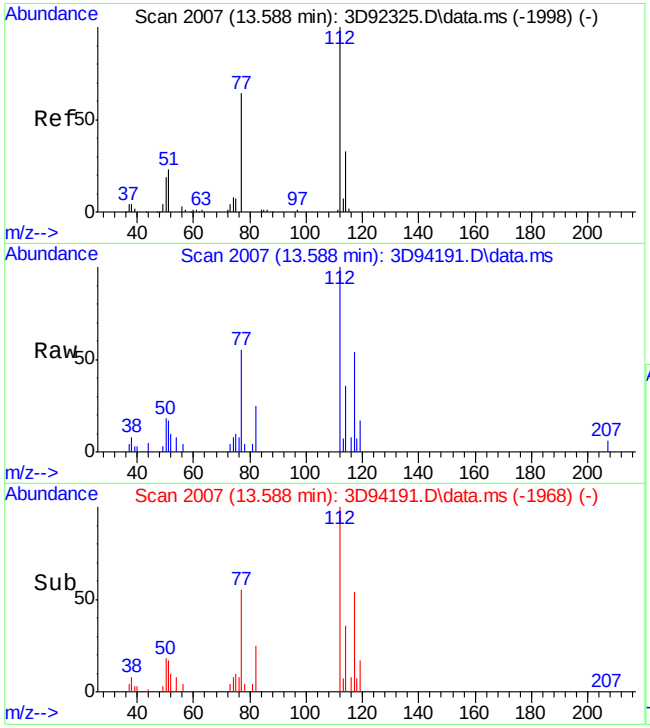


#94
1,2-dibromoethane
Concen: 1.95 ug/L
RT: 13.137 min Scan# 1921
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:107 Resp: 2495

Ion	Ratio	Lower	Upper
107	100		
109	94.2	62.5	122.5
188	0.0	0.0	33.2

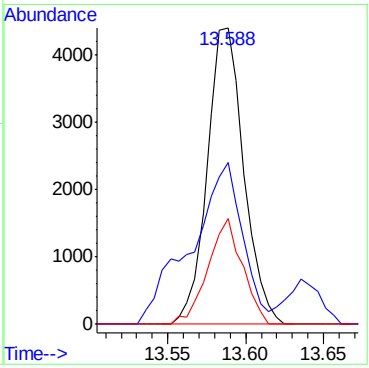


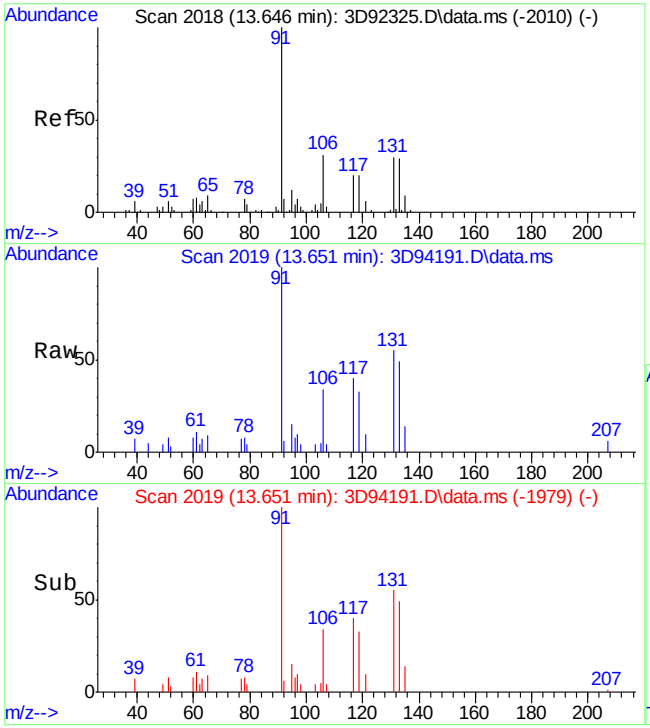


#96
chlorobenzene
Concen: 2.00 ug/L
RT: 13.588 min Scan# 2007
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:112 Resp: 7181

Ion	Ratio	Lower	Upper
112	100		
77	43.5	22.2	82.2
114	35.5	2.5	62.5

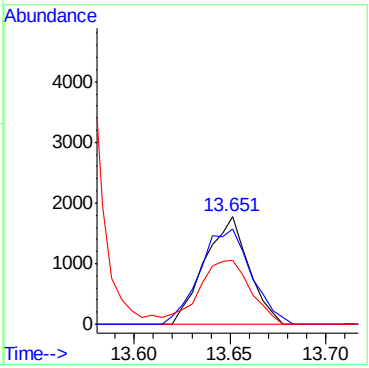


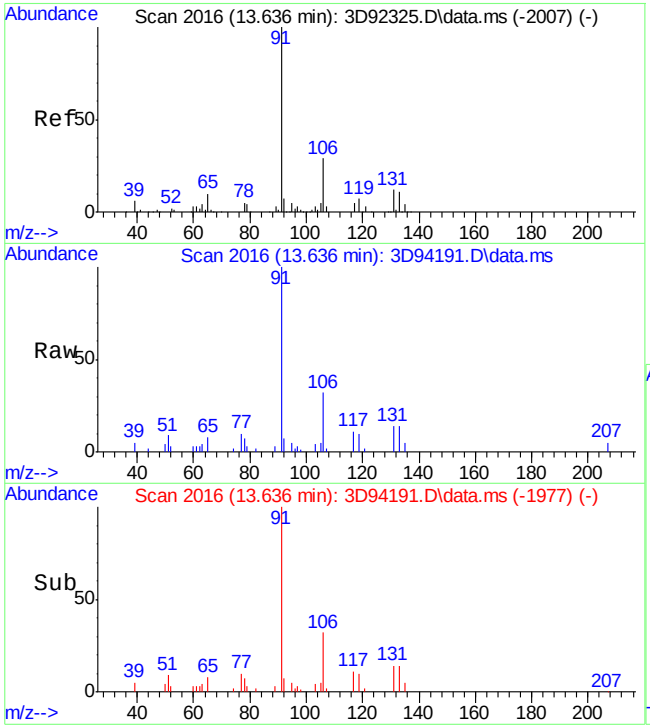


#97
1,1,1,2-tetrachloroethane
Concen: 1.94 ug/L
RT: 13.651 min Scan# 2019
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:131 Resp: 2820

Ion	Ratio	Lower	Upper
131	100		
133	88.5	66.0	126.0
119	59.7	38.3	98.3

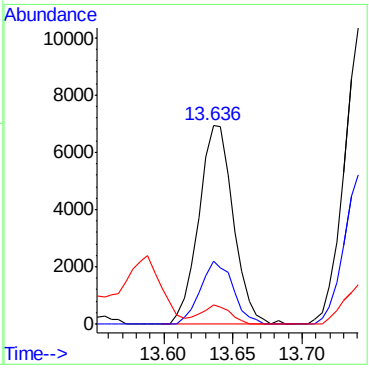


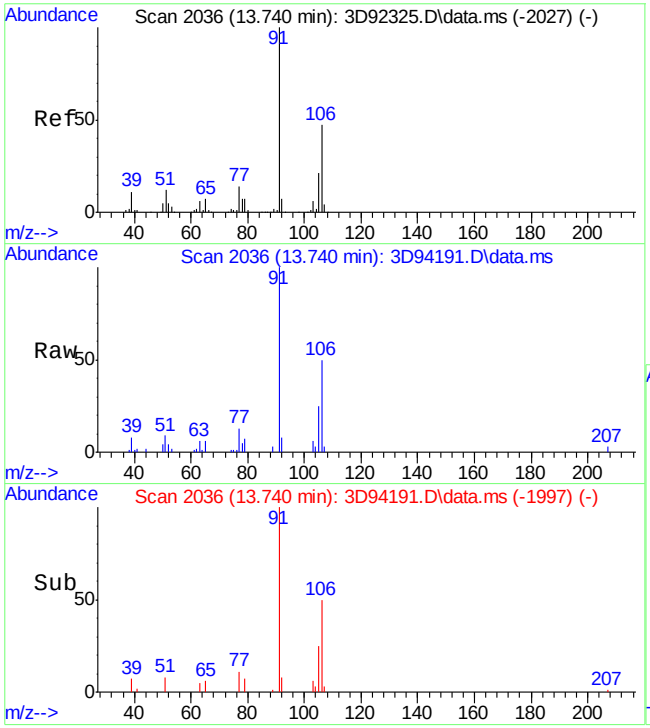


#98
ethylbenzene
Concen: 1.99 ug/L
RT: 13.636 min Scan# 2016
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 91 Resp: 12046

Ion	Ratio	Lower	Upper
91	100		
106	31.7	1.1	61.1
77	9.7	0.0	38.1

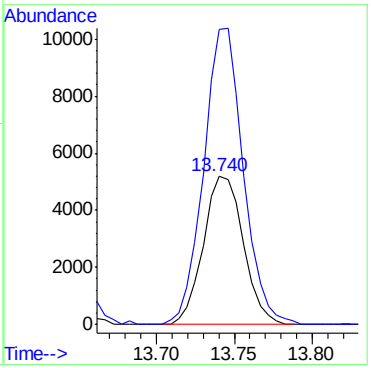


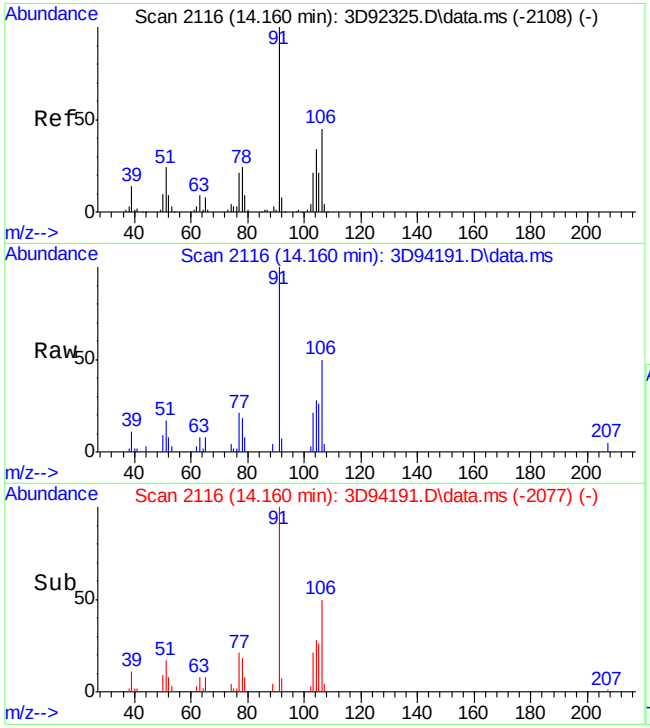


#99
m,p-xylene
Concen: 4.04 ug/L
RT: 13.740 min Scan# 2036
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:106 Resp: 9219

Ion	Ratio	Lower	Upper
106	100		
91	198.3	138.8	257.8

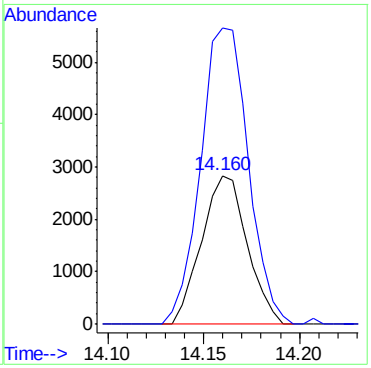




#100
o-xylene
Concen: 1.97 ug/L
RT: 14.160 min Scan# 2116
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:106 Resp: 4663

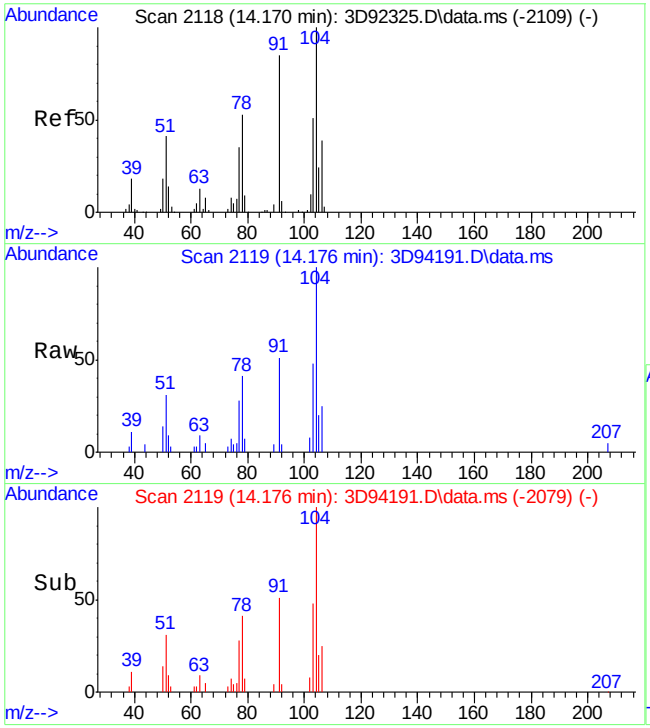
Ion	Ratio	Lower	Upper
106	100		
91	199.4	144.1	267.7



7.7.3

7

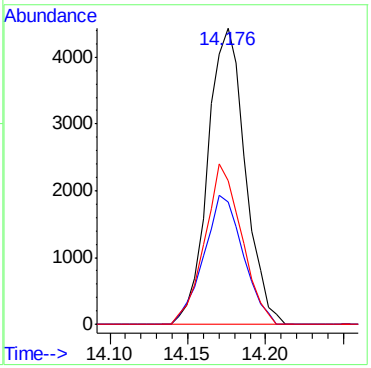
3D94191.D M3D4058.M Thu Dec 19 12:36:48 2013 3D Page 43

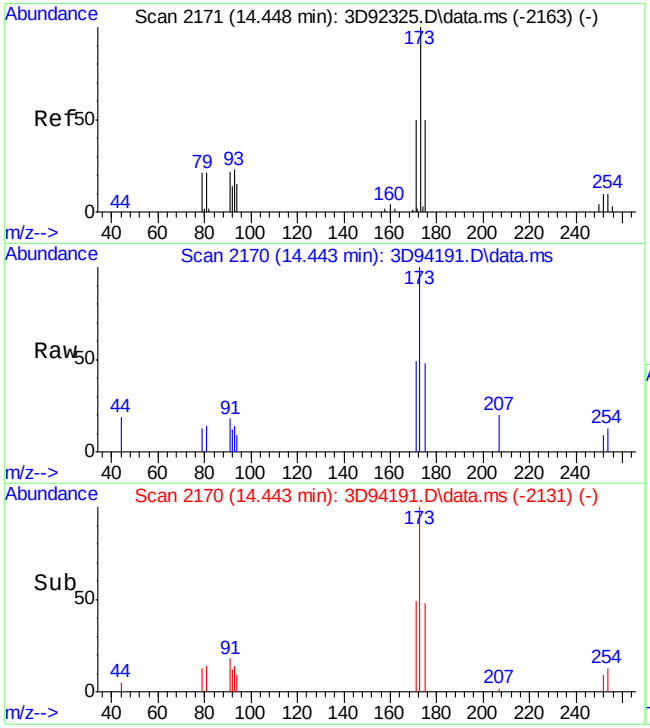


#101
styrene
Concen: 1.89 ug/L
RT: 14.176 min Scan# 2119
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:104 Resp: 7386

Ion	Ratio	Lower	Upper
104	100		
78	41.2	14.3	74.3
103	48.4	20.0	80.0

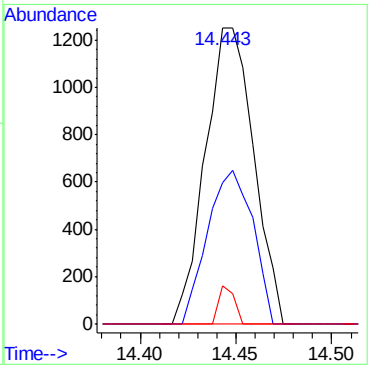




#103
bromoform
Concen: 1.93 ug/L
RT: 14.443 min Scan# 2170
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:173 Resp: 2185

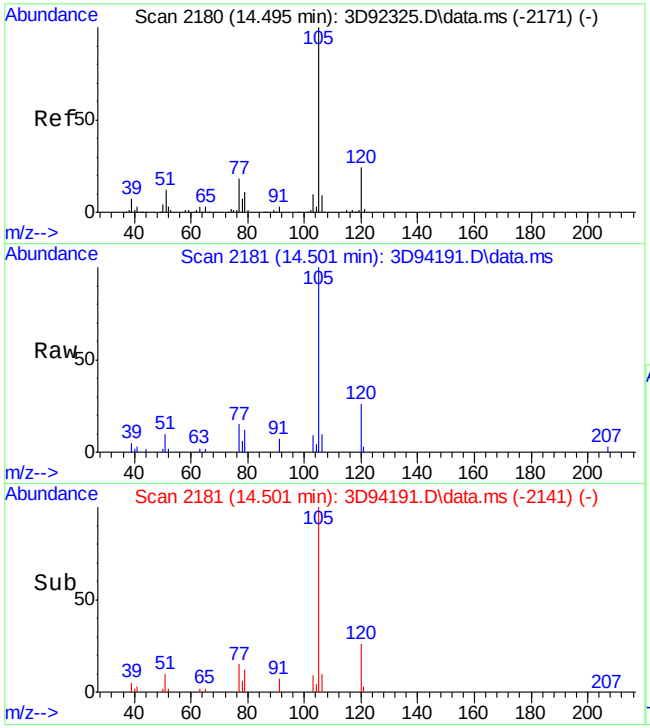
Ion	Ratio	Lower	Upper
173	100		
175	47.6	19.4	79.4
254	12.9	0.0	40.9



7.7.3

7

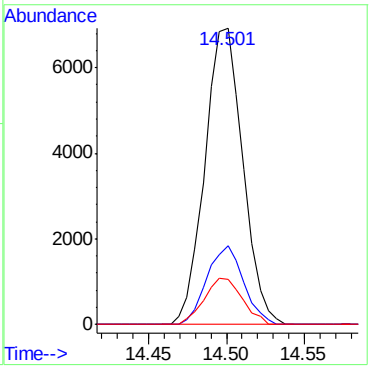
3D94191.D M3D4058.M Thu Dec 19 12:36:48 2013 3D Page 44

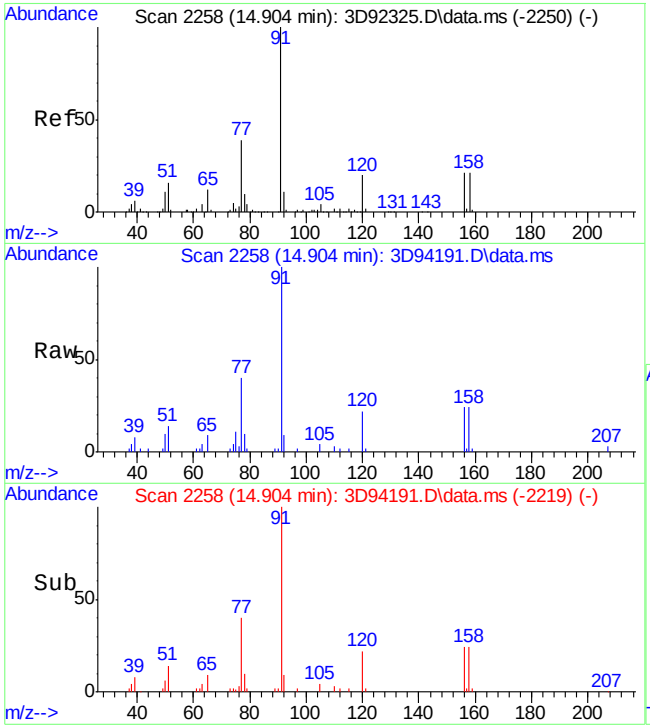


#105
isopropylbenzene
Concen: 1.91 ug/L
RT: 14.501 min Scan# 2181
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:105 Resp: 11736

Ion	Ratio	Lower	Upper
105	100		
120	26.5	0.0	55.5
77	15.3	0.0	44.1

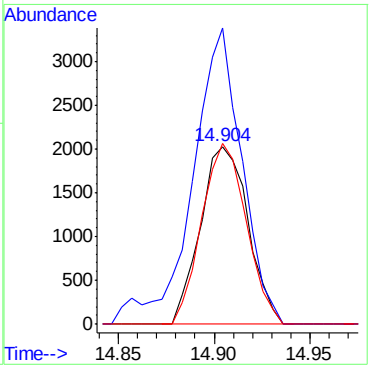




#107
bromobenzene
Concen: 1.96 ug/L
RT: 14.904 min Scan# 2258
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

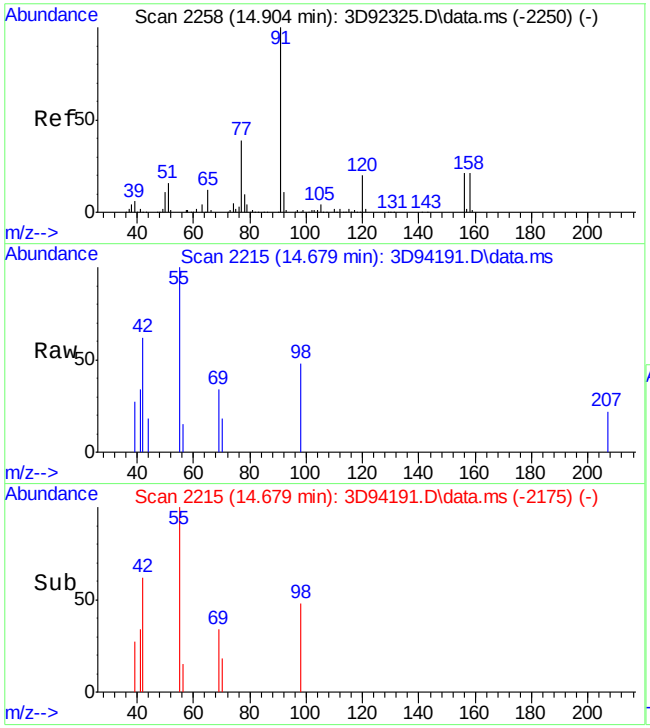
Tgt Ion:156 Resp: 3481

Ion	Ratio	Lower	Upper
156	100		
77	167.0	117.2	177.2
158	101.6	67.0	127.0



7.7.3

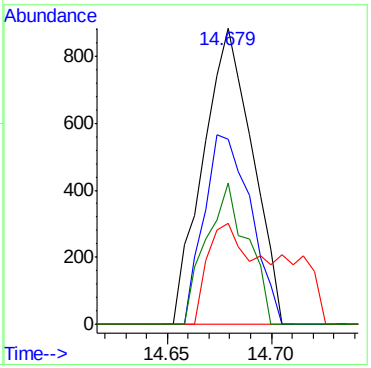
7

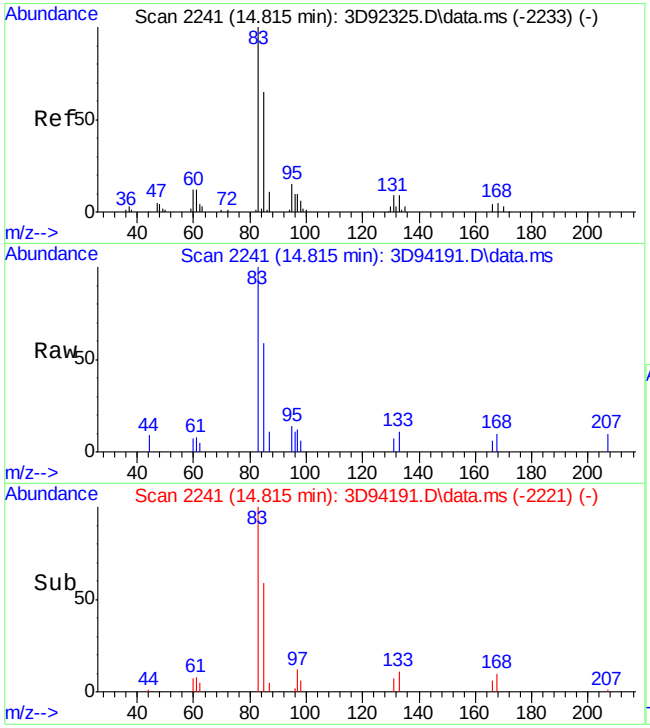


#108
cyclohexanone
Concen: 23.99 ug/L
RT: 14.679 min Scan# 2215
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 55 Resp: 1462

Ion	Ratio	Lower	Upper
55	100		
42	62.4	37.1	97.1
69	34.2	0.7	60.7
98	47.6	15.4	75.4

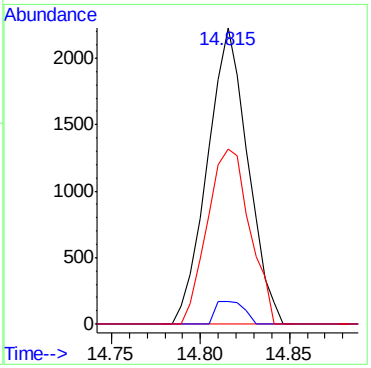


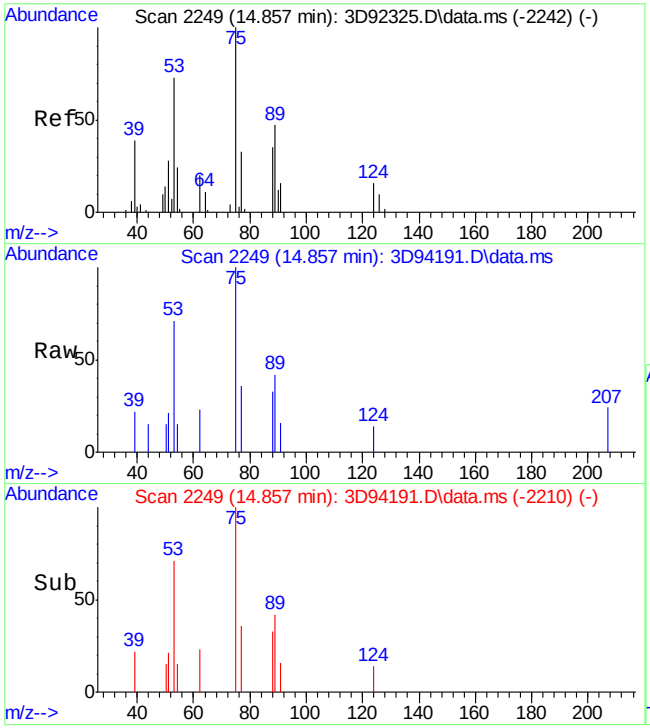


#109
1,1,2,2-tetrachloroethane
Concen: 1.99 ug/L
RT: 14.815 min Scan# 2241
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 83 Resp: 3515

Ion	Ratio	Lower	Upper
83	100		
131	7.5	0.0	39.8
85	59.1	35.0	95.0

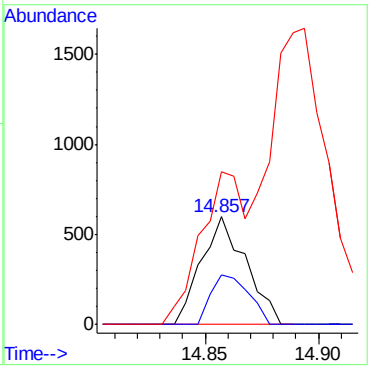


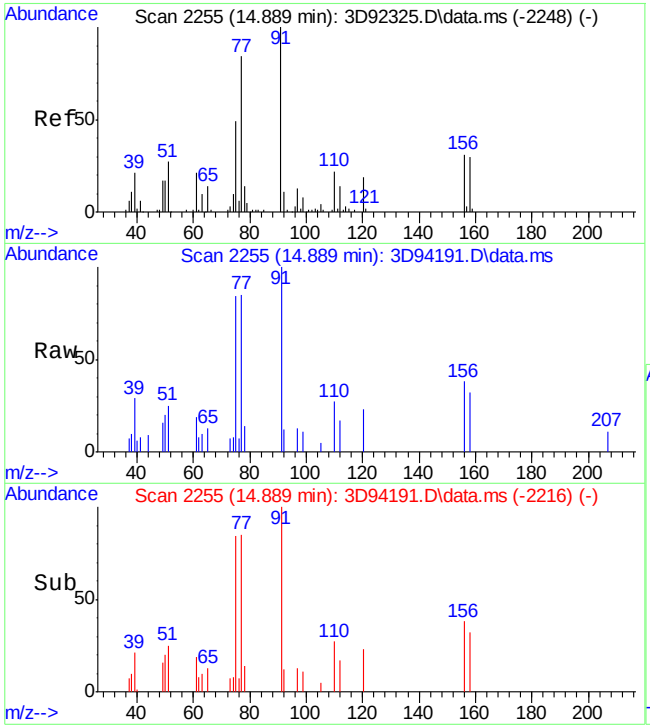


#110
trans-1,4-dichloro-2-butene
Concen: 2.05 ug/L
RT: 14.857 min Scan# 2249
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 53 Resp: 816

Ion	Ratio	Lower	Upper
53	100		
88	46.1	25.8	85.8
75	141.8	136.3	196.3

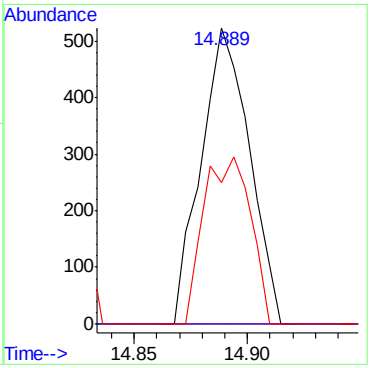


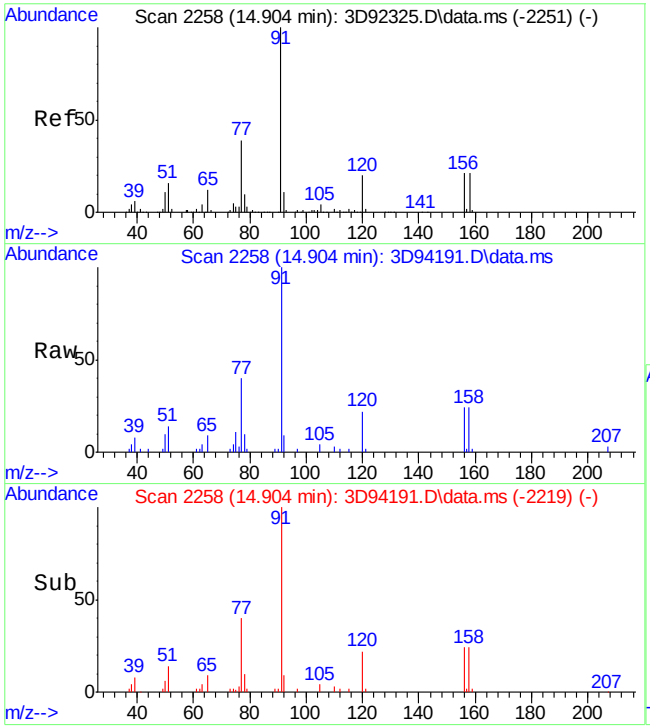


#111
1,2,3-trichloropropane
Concen: 1.97 ug/L
RT: 14.889 min Scan# 2255
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:110 Resp: 776

Ion	Ratio	Lower	Upper
110	100		
111	0.0	0.0	39.8
97	47.6	25.9	85.9

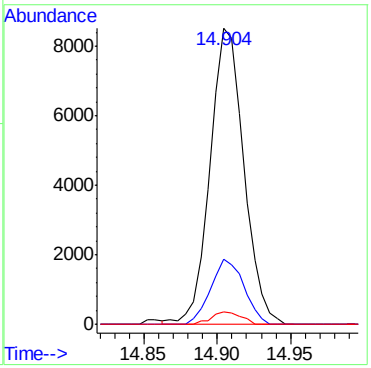


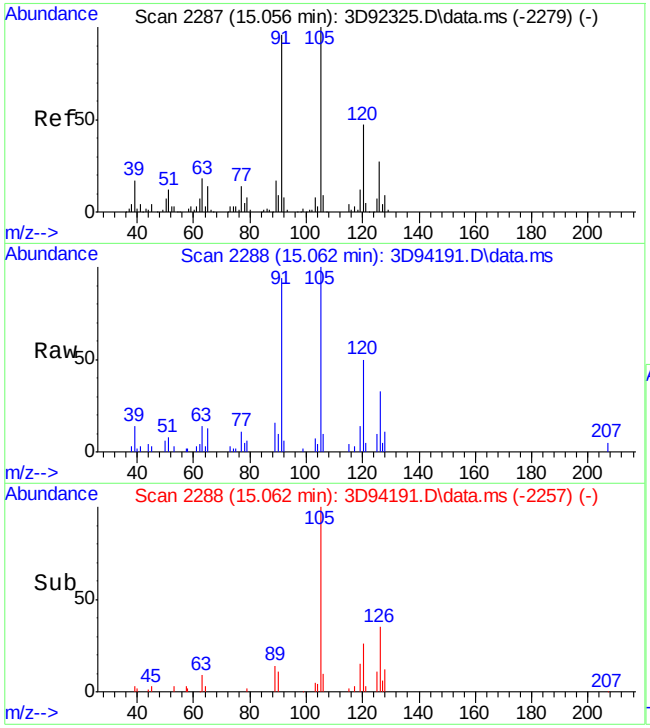


#112
n-propylbenzene
Concen: 2.04 ug/L
RT: 14.904 min Scan# 2258
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 91 Resp: 13574

Ion	Ratio	Lower	Upper
91	100		
120	22.2	0.0	52.3
105	4.4	0.0	33.7

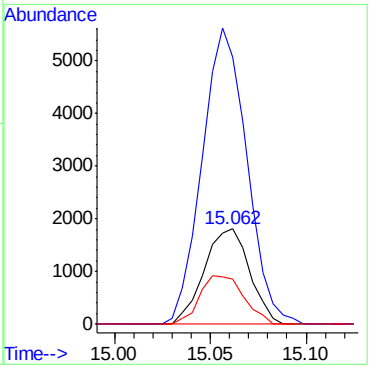


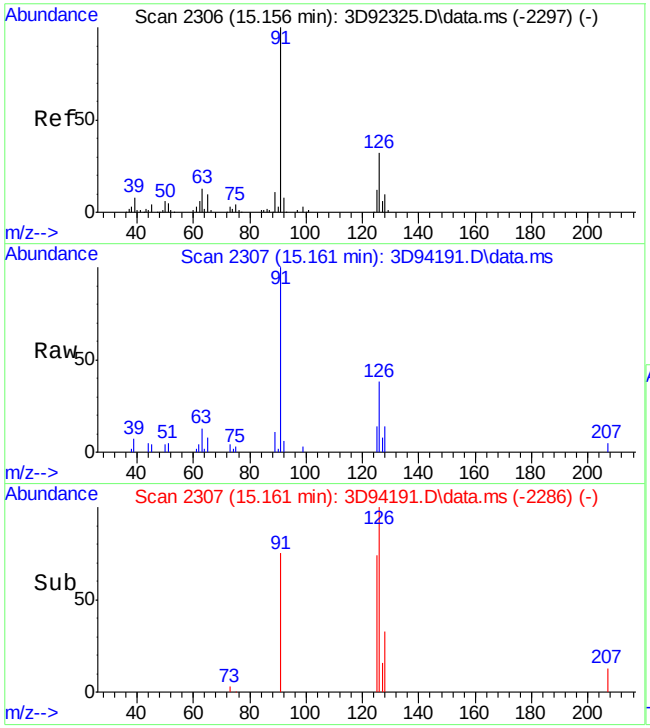


#114
2-chlorotoluene
Concen: 2.00 ug/L
RT: 15.062 min Scan# 2288
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:126 Resp: 2963

Ion	Ratio	Lower	Upper
126	100		
91	281.4	271.2	331.2
89	46.8	19.8	79.8

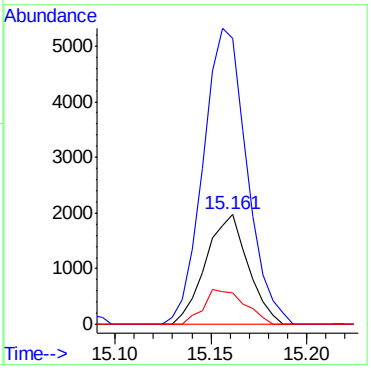


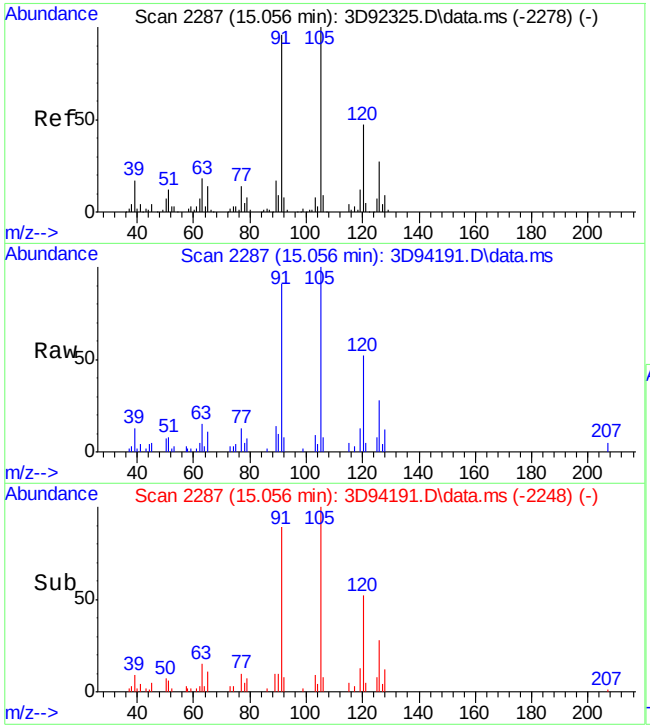


#115
4-chlorotoluene
Concen: 2.01 ug/L
RT: 15.161 min Scan# 2307
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:126 Resp: 3028

Ion	Ratio	Lower	Upper
126	100		
91	260.0	249.9	309.9
89	28.4	0.0	58.8

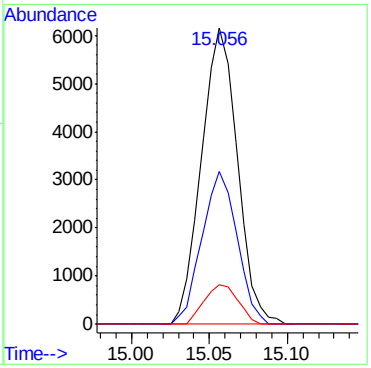


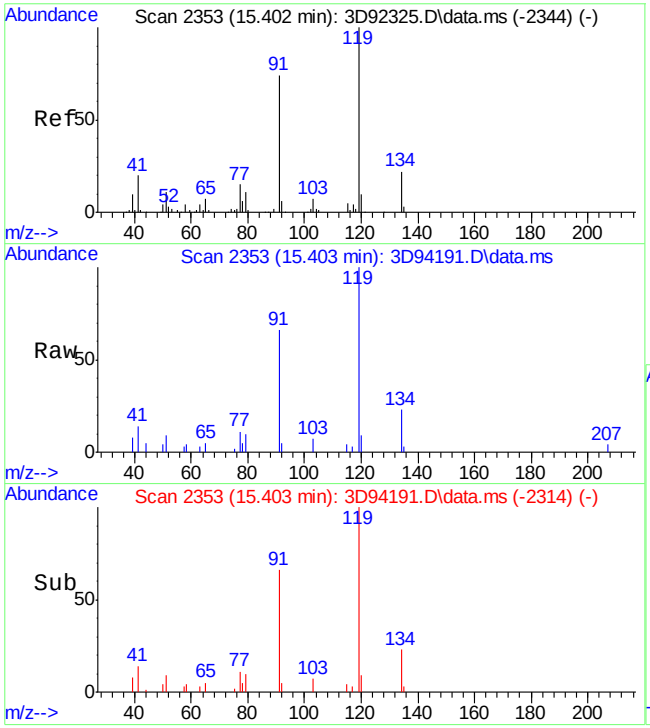


#116
1,3,5-trimethylbenzene
Concen: 1.94 ug/L
RT: 15.056 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:105 Resp: 9866

Ion	Ratio	Lower	Upper
105	100		
120	51.6	21.1	81.1
119	13.2	0.0	43.2

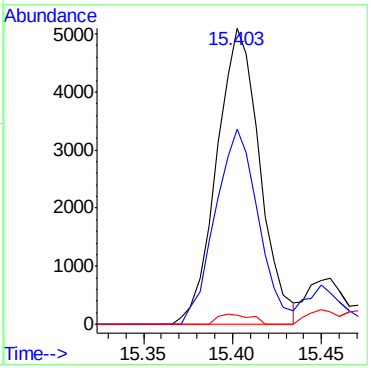


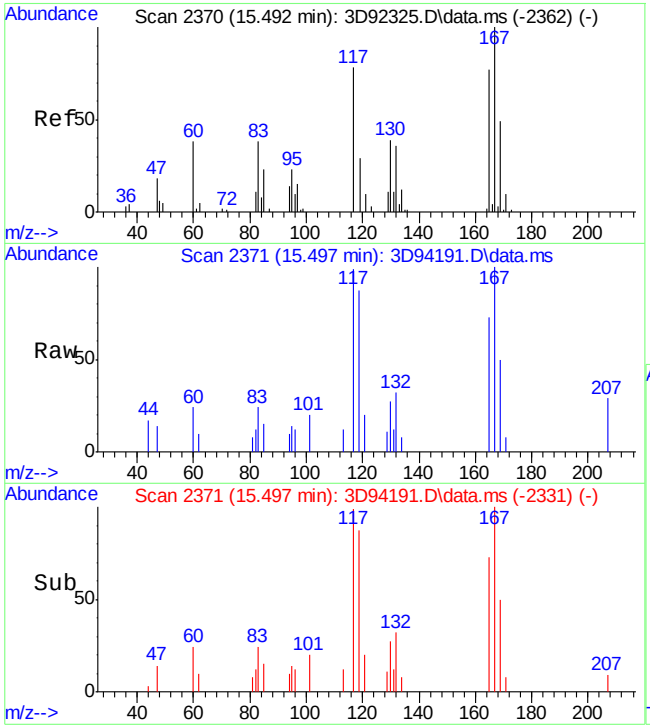


#117
tert-butylbenzene
Concen: 1.99 ug/L
RT: 15.403 min Scan# 2353
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:119 Resp: 8589

Ion	Ratio	Lower	Upper
119	100		
91	66.0	33.7	93.7
117	3.2	0.0	33.3

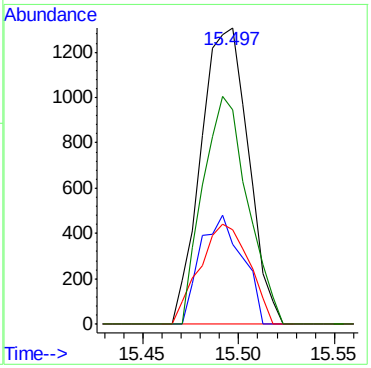




#118
pentachloroethane
Concen: 1.88 ug/L
RT: 15.497 min Scan# 2371
Delta R.T. 0.011 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:167 Resp: 2246

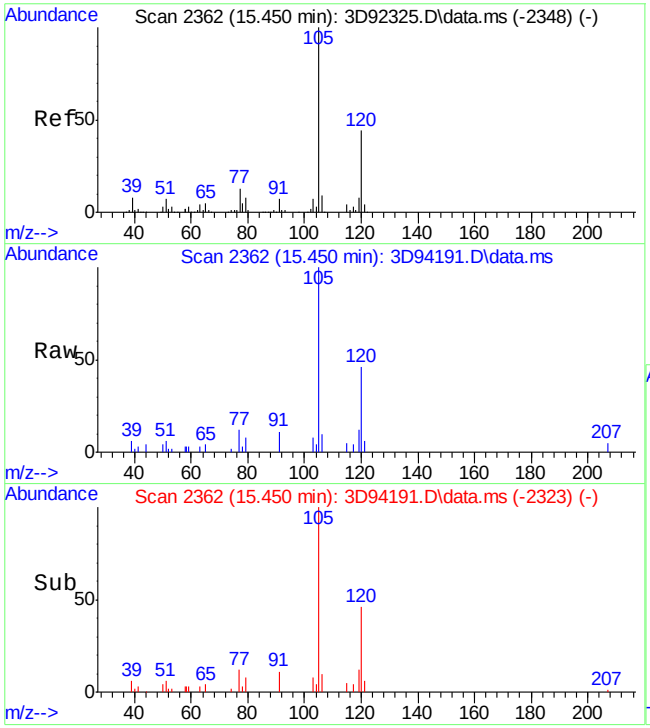
Ion	Ratio	Lower	Upper
167	100		
130	26.9	0.1	60.1
132	31.8	0.5	60.5
165	72.5	46.5	106.5



7.7.3

7

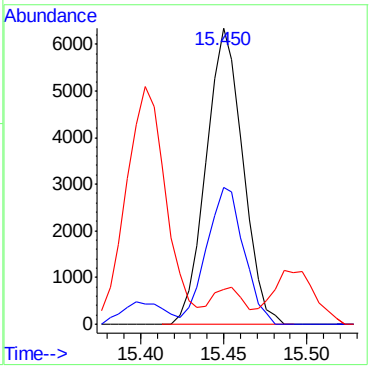
3D94191.D M3D4058.M Thu Dec 19 12:36:49 2013 3D Page 50

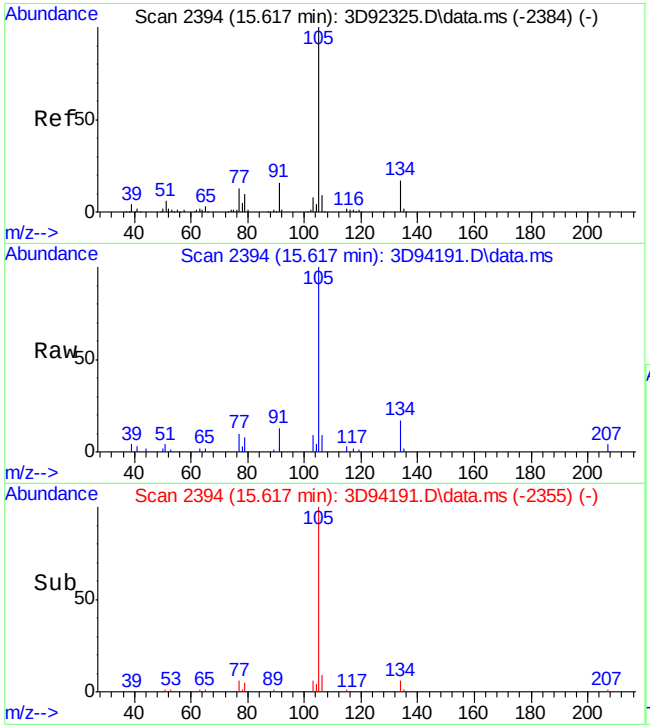


#119
1,2,4-trimethylbenzene
Concen: 1.95 ug/L
RT: 15.450 min Scan# 2362
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:105 Resp: 9766

Ion	Ratio	Lower	Upper
105	100		
120	46.4	16.8	76.8
119	0.0	0.0	42.6

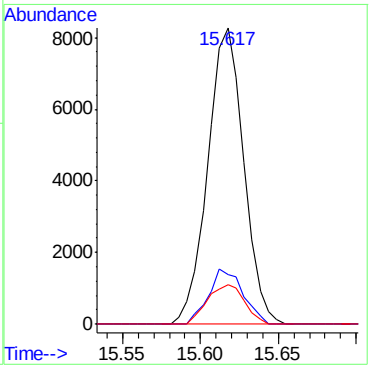




#120
sec-butylbenzene
Concen: 2.04 ug/L
RT: 15.617 min Scan# 2394
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:105 Resp: 13247

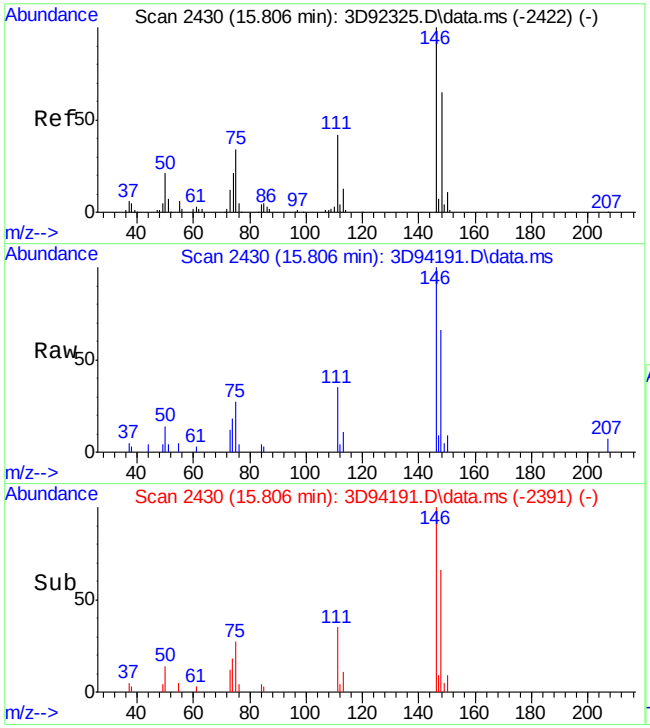
Ion	Ratio	Lower	Upper
105	100		
134	16.9	0.0	48.5
91	13.1	0.0	44.8



7.7.3

7

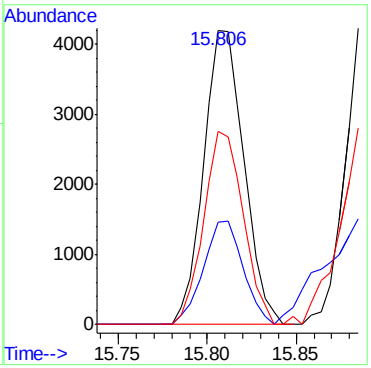
3D94191.D M3D4058.M Thu Dec 19 12:36:49 2013 3D Page 51

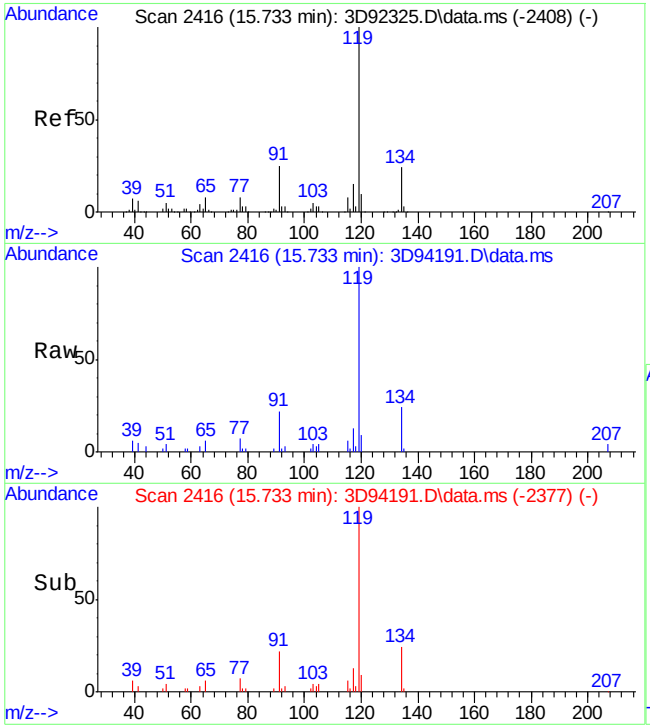


#121
1,3-dichlorobenzene
Concen: 2.02 ug/L
RT: 15.806 min Scan# 2430
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:146 Resp: 6586

Ion	Ratio	Lower	Upper
146	100		
111	34.7	6.0	66.0
148	65.7	34.2	94.2

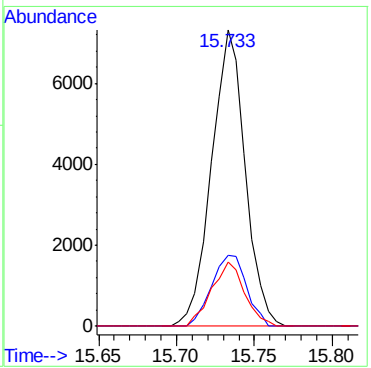




#122
p-isopropyltoluene
Concen: 1.98 ug/L
RT: 15.733 min Scan# 2416
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

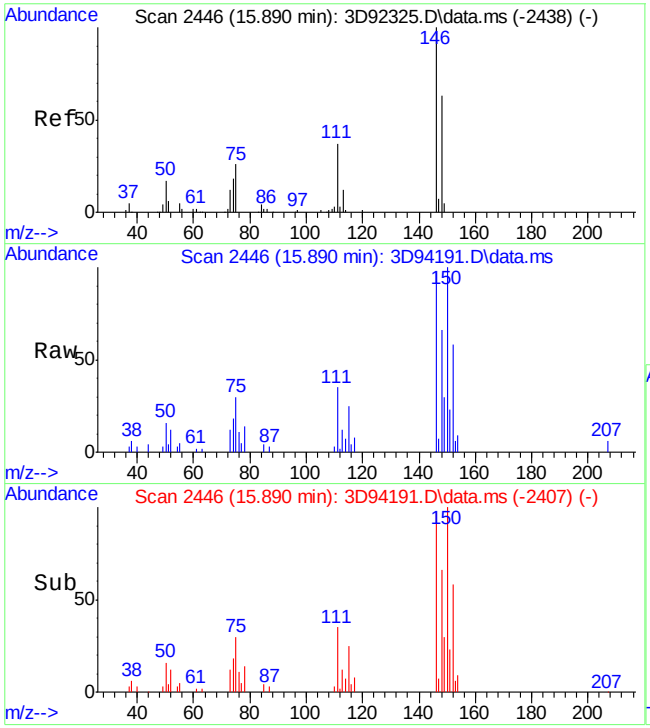
Tgt Ion:119 Resp: 10961

Ion	Ratio	Lower	Upper
119	100		
134	23.9	0.0	55.3
91	21.8	0.0	51.2



7.7.3
7

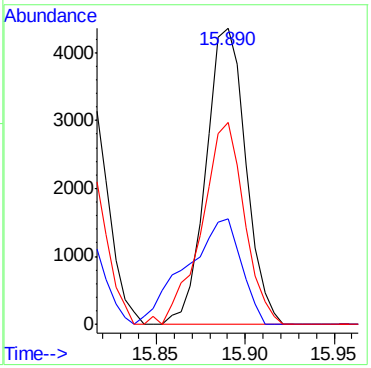
3D94191.D M3D4058.M Thu Dec 19 12:36:49 2013 3D Page 52

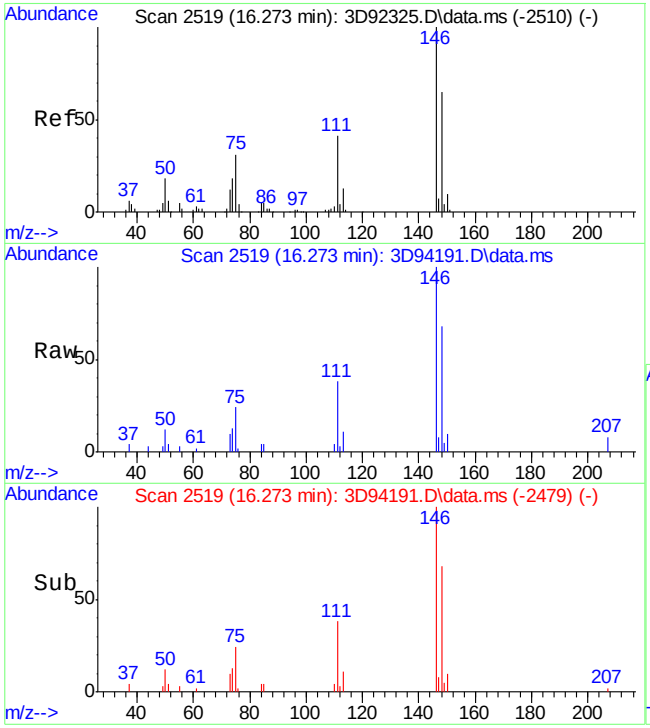


#123
1,4-dichlorobenzene
Concen: 2.01 ug/L
RT: 15.890 min Scan# 2446
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:146 Resp: 6822

Ion	Ratio	Lower	Upper
146	100		
111	35.5	4.9	64.9
148	68.3	34.4	94.4

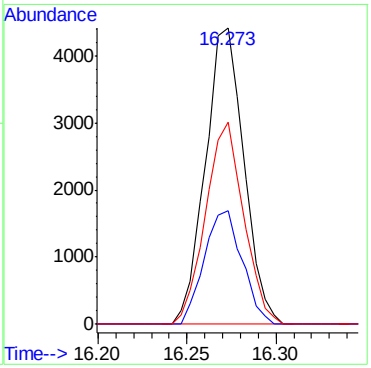


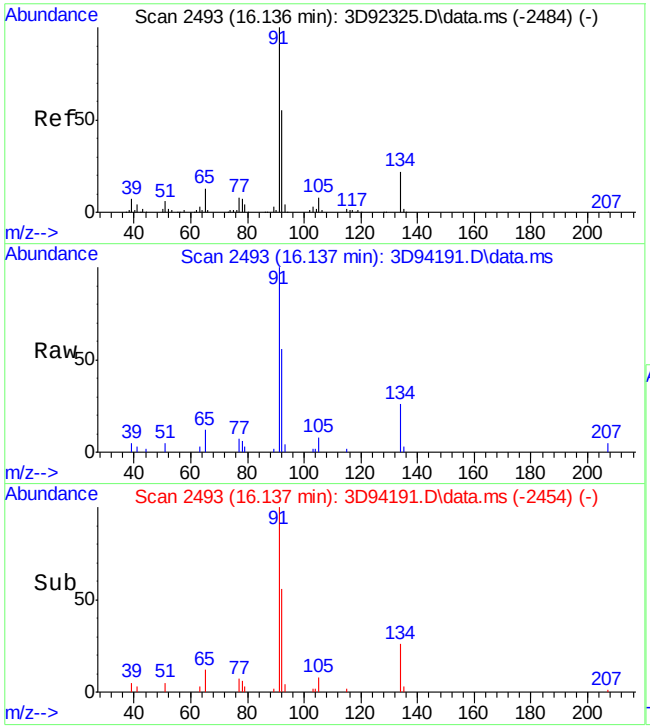


#124
1,2-dichlorobenzene
Concen: 2.04 ug/L
RT: 16.273 min Scan# 2519
Delta R.T. 0.010 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:146 Resp: 6653

Ion	Ratio	Lower	Upper
146	100		
111	38.4	8.3	68.3
148	68.2	34.4	94.4

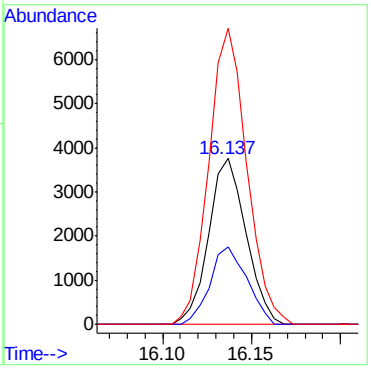


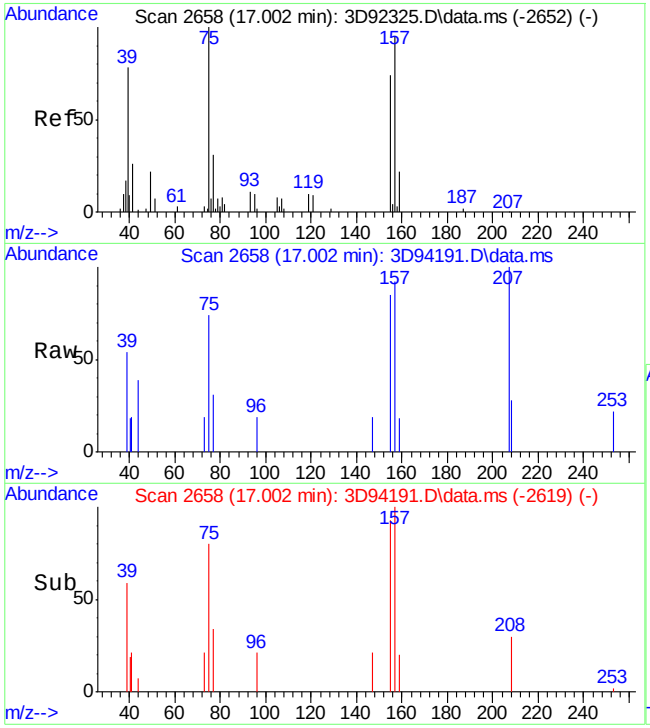


#126
n-butylbenzene
Concen: 1.98 ug/L
RT: 16.137 min Scan# 2493
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 92 Resp: 5500

Ion	Ratio	Lower	Upper
92	100		
134	46.8	15.0	75.0
91	178.4	148.5	208.5

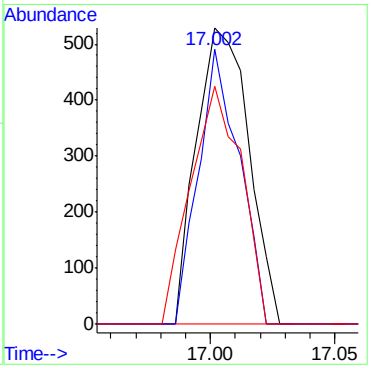


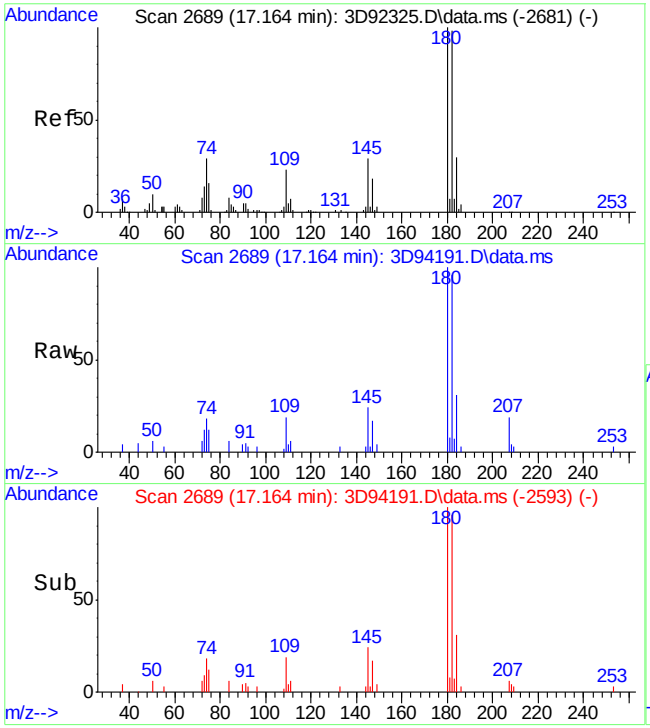


#128
1,2-dibromo-3-chloropropane
Concen: 1.85 ug/L
RT: 17.002 min Scan# 2658
Delta R.T. 0.006 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:157 Resp: 779

Ion	Ratio	Lower	Upper
157	100		
155	92.6	47.2	107.2
75	80.3	45.0	105.0

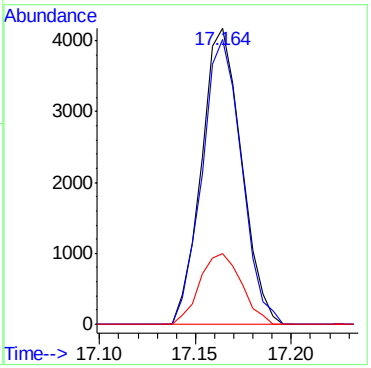


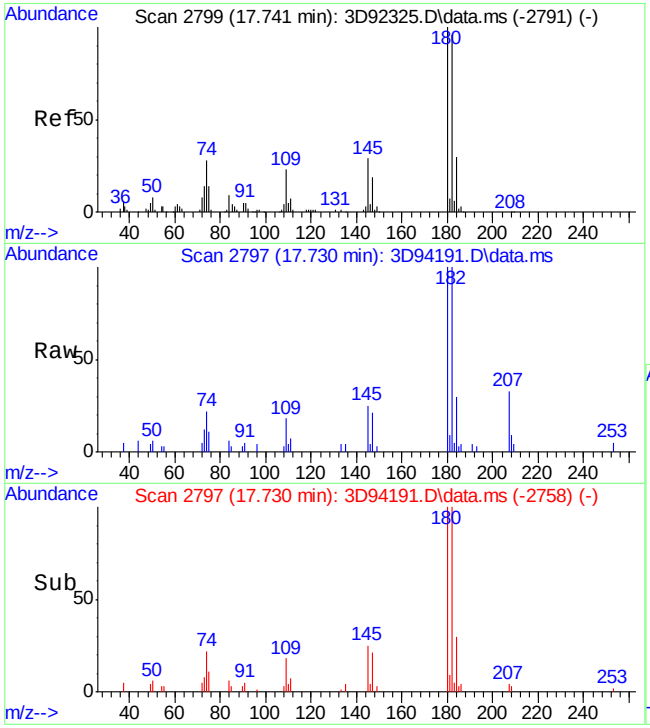


#129
1,3,5-trichlorobenzene
Concen: 2.02 ug/L
RT: 17.164 min Scan# 2689
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:180 Resp: 6035

Ion	Ratio	Lower	Upper
180	100		
182	95.2	66.4	126.4
145	25.1	0.0	55.5

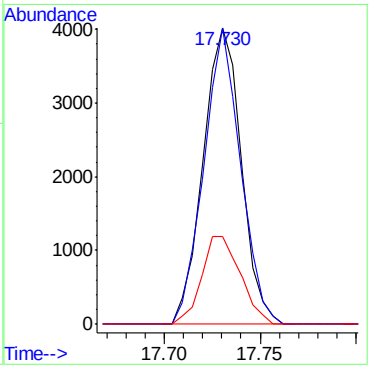


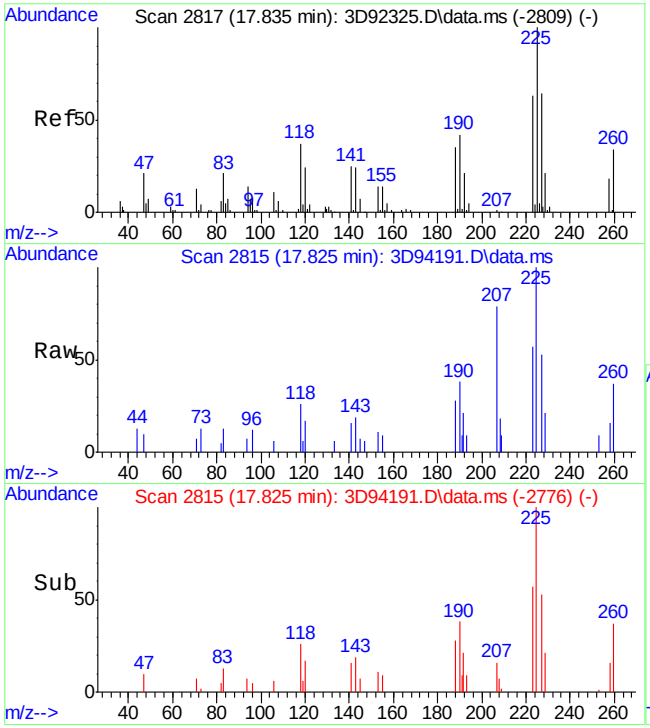


#130
1,2,4-trichlorobenzene
Concen: 1.97 ug/L
RT: 17.730 min Scan# 2797
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:180 Resp: 5538

Ion	Ratio	Lower	Upper
180	100		
182	99.8	67.0	127.0
184	29.5	1.3	61.3

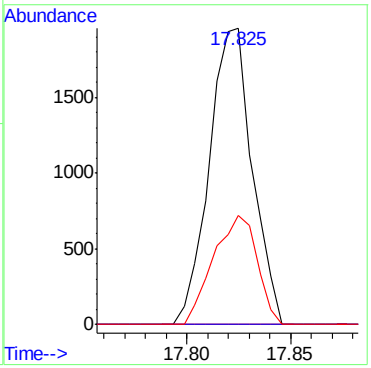


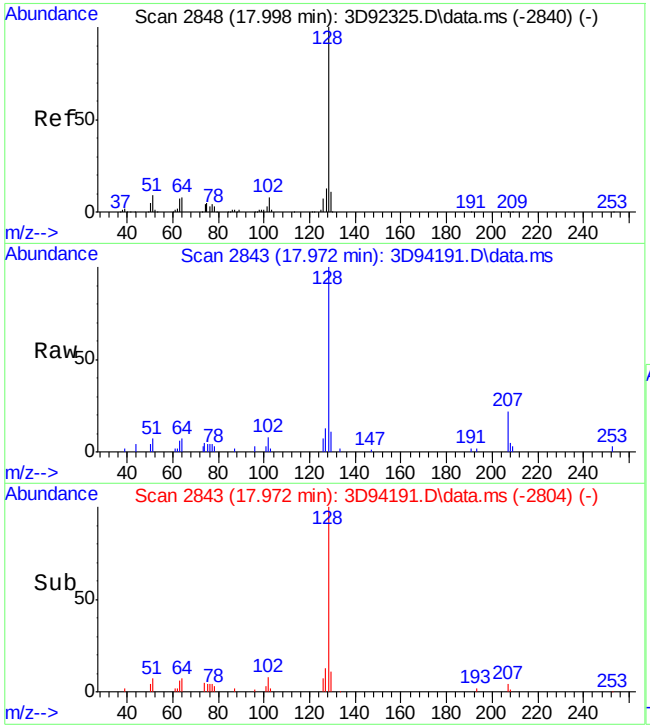


#131
hexachlorobutadiene
Concen: 1.94 ug/L
RT: 17.825 min Scan# 2815
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:225 Resp: 2822

Ion	Ratio	Lower	Upper
225	100		
259	0.0	0.0	31.3
260	36.7	6.4	66.4

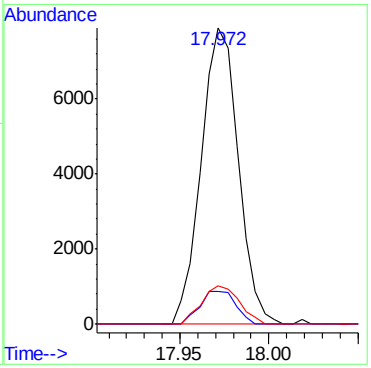


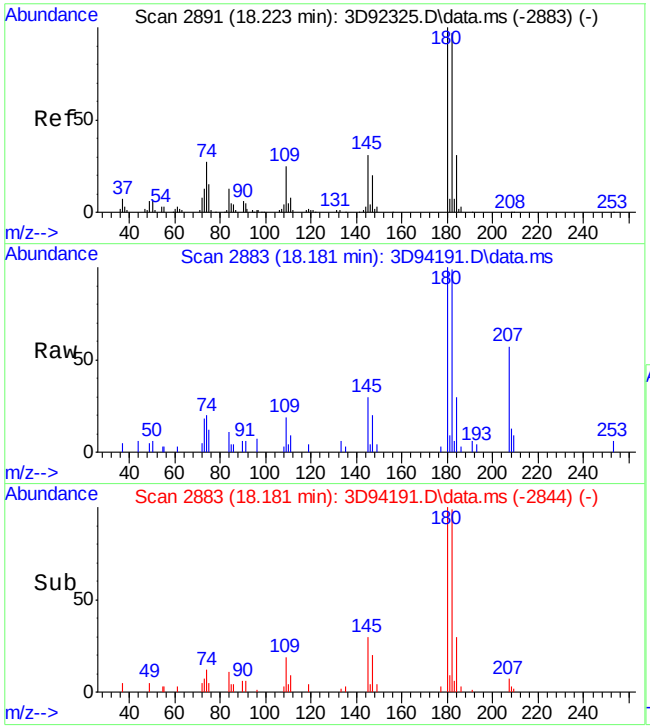


#132
naphthalene
Concen: 1.99 ug/L
RT: 17.972 min Scan# 2843
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:128 Resp: 11489

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	41.0
127	12.9	0.0	42.6

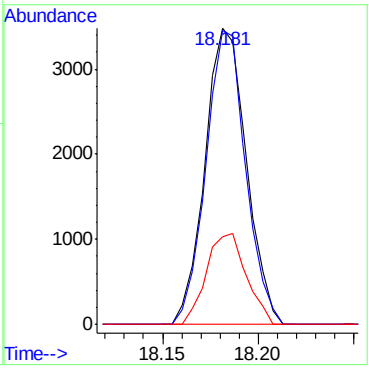


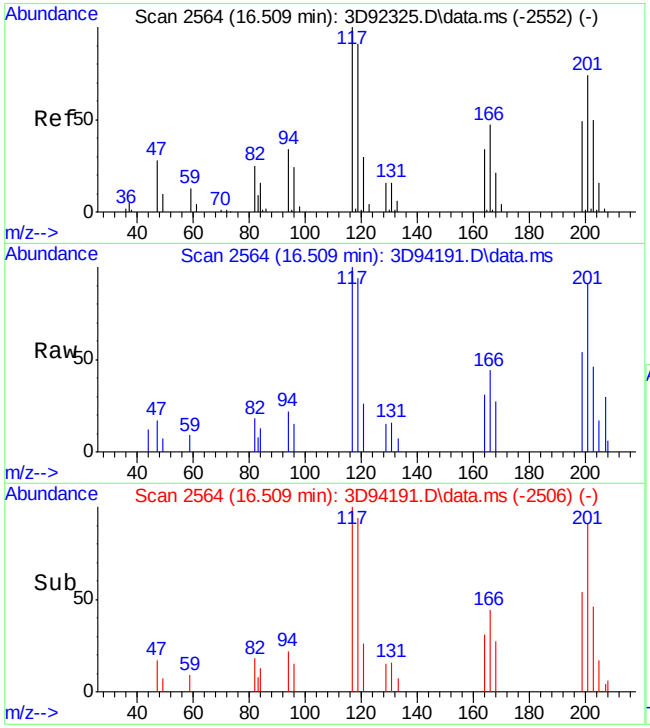


#133
1,2,3-trichlorobenzene
Concen: 1.99 ug/L
RT: 18.181 min Scan# 2883
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:180 Resp: 5204

Ion	Ratio	Lower	Upper
180	100		
182	99.2	64.7	124.7
184	29.8	0.4	60.4

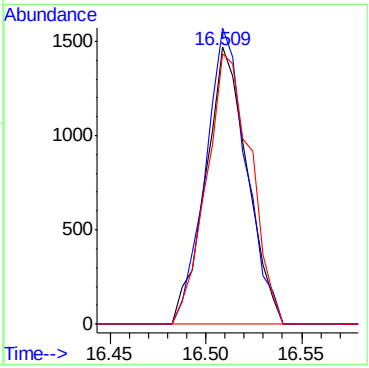


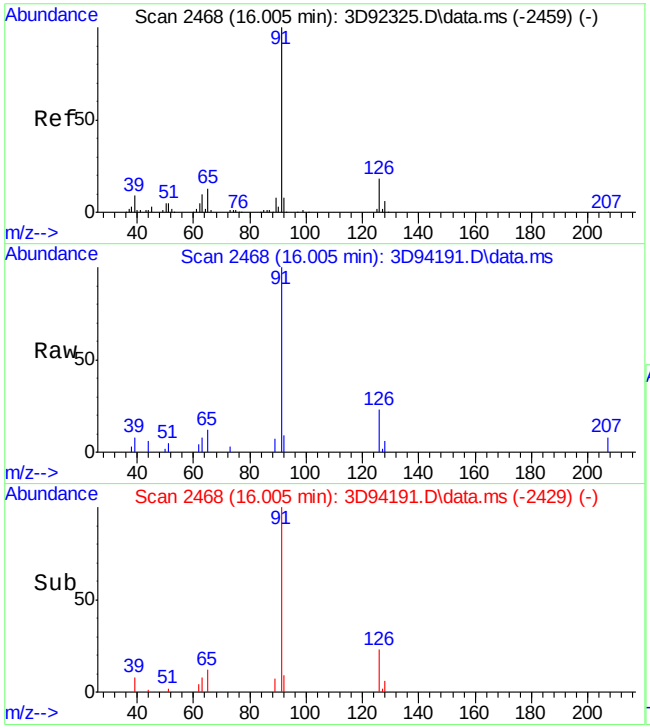


#134
hexachloroethane
Concen: 1.91 ug/L
RT: 16.509 min Scan# 2564
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion:119 Resp: 2212

Ion	Ratio	Lower	Upper
119	100		
117	104.4	71.1	131.1
201	103.3	69.2	129.2

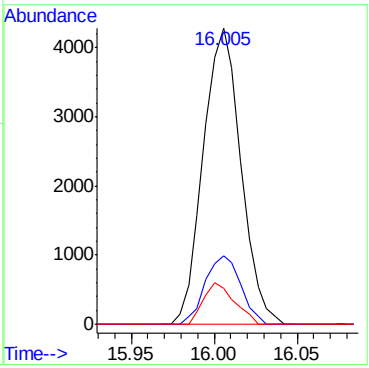




#135
Benzyl chloride
Concen: 2.39 ug/L
RT: 16.005 min Scan# 2468
Delta R.T. 0.005 min
Lab File: 3D94191.D
Acq: 18 Dec 2013 2:18 pm

Tgt Ion: 91 Resp: 6781

Ion	Ratio	Lower	Upper
91	100		
126	21.9	0.0	50.9
65	11.5	0.0	41.0



7.7.3

7

3D94191.D M3D4058.M Thu Dec 19 12:36:49 2013 3D Page 58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94192.D
Acq On : 18 Dec 2013 2:45 pm
Operator : katteric
Sample : ic4058-5
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 19 12:29:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 10:47:36 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.244	65	67726	500.00	ug/L		0.00
4) pentafluorobenzene	9.483	168	177596	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.406	114	241243	50.00	ug/L		0.01
88) chlorobenzene-d5	13.557	117	199390	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.864	152	117794	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.546	113	6809	4.74	ug/L		0.01
Spiked Amount 50.000	Range 80 - 119		Recovery = 9.48%#				
51) 1,2-dichloroethane-d4 (s)	9.966	65	7070	4.78	ug/L		0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 9.56%#				
80) toluene-d8 (s)	12.047	98	23488	4.78	ug/L		0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 9.56%#				
106) 4-bromofluorobenzene (s)	14.711	95	8774	5.00	ug/L		0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 10.00%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.130	88	1386	111.69	ug/L	#	83
3) tertiary butyl alcohol	7.370	59	3786	26.60	ug/L		87
8) chlorodifluoromethane	3.884	51	6542	5.11	ug/L		98
9) dichlorodifluoromethane	3.868	85	8298	5.32	ug/L		98
10) chloromethane	4.204	50	10004	5.10	ug/L		97
11) vinyl chloride	4.445	62	9864	5.19	ug/L		97
12) bromomethane	5.116	94	6763	5.27	ug/L		96
13) chloroethane	5.289	64	4639	5.12	ug/L		95
14) 1,3-butadiene	4.513	54	5136	4.48	ug/L		96
15) vinyl bromide	5.635	106	5673	4.68	ug/L		97
16) trichlorofluoromethane	5.740	101	10555	5.51	ug/L		99
18) ethyl ether	6.143	74	3771	4.99	ug/L		84
21) acrolein	6.421	56	15089	47.68	ug/L		100
22) 1,1-dichloroethene	6.579	61	10199	4.96	ug/L		99
23) acetone	6.642	58	433	3.76	ug/L	#	71
24) allyl chloride	7.113	76	4170	5.20	ug/L		92
25) acetonitrile	7.098	40	6451	49.01	ug/L	#	66
27) iodomethane	6.867	142	13833	5.07	ug/L		98
28) iso-butyl alcohol	9.777	41	2194	45.11	ug/L		92
29) carbon disulfide	6.982	76	25017	5.13	ug/L		100
30) methylene chloride	7.302	84	7878	5.04	ug/L		94
31) methyl acetate	7.098	74	1072	4.57	ug/L		97
32) methyl tert butyl ether	7.612	73	21918	4.30	ug/L		97
33) trans-1,2-dichloroethene	7.669	61	10300	5.03	ug/L		97
34) di-isopropyl ether	8.199	45	23479	4.99	ug/L		86
35) ethyl tert-butyl ether	8.665	59	22105	5.03	ug/L		98
36) 2-butanone	8.959	72	639	4.11	ug/L	#	53
37) 1,1-dichloroethane	8.241	63	12848	4.92	ug/L		99
38) chloroprene	8.346	53	9399	5.15	ug/L		94
39) acrylonitrile	7.643	53	13528	24.96	ug/L		98
40) vinyl acetate	8.230	86	935	3.90	ug/L		31
41) ethyl acetate	8.959	45	875	4.49	ug/L	#	21
42) 2,2-dichloropropane	8.969	77	10200	5.53	ug/L		99

M3D4058.M Thu Dec 19 12:36:50 2013 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94192.D
Acq On : 18 Dec 2013 2:45 pm
Operator : katteric
Sample : ic4058-5
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 19 12:29:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 10:47:36 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) cis-1,2-dichloroethene	8.980	61	12397	5.03	ug/L		99
44) propionitrile	9.053	54	10301	49.76	ug/L		89
45) methyl acrylate	9.043	55	7182	4.66	ug/L		96
46) bromochloromethane	9.294	128	4034	4.81	ug/L		96
47) tetrahydrofuran	9.326	42	2417	4.93	ug/L		97
48) chloroform	9.347	83	12325	5.03	ug/L		99
49) Tert-Butyl Formate	9.368	59	6496	4.87	ug/L		99
52) freon 113	6.531	151	4645	5.02	ug/L		98
53) methacrylonitrile	9.237	41	4244	4.74	ug/L		92
54) 1,1,1-trichloroethane	9.588	97	10769	5.09	ug/L		97
56) 2,2,4-Trimethylpentane	10.008	57	22578	4.81	ug/L		98
57) tert-amyl methyl ether	10.055	73	22319	5.20	ug/L		98
59) epichlorohydrin	11.675	57	3260	25.47	ug/L		99
60) n-butyl alcohol	10.532	56	8725	233.28	ug/L		98
61) cyclohexane	9.656	84	10023	5.03	ug/L		98
62) carbon tetrachloride	9.787	117	9572	5.30	ug/L		97
63) 1,1-dichloropropene	9.766	75	9327	5.14	ug/L		99
64) hexane	7.952	57	6594	4.55	ug/L		93
65) benzene	10.034	78	28416	4.98	ug/L		98
66) heptane	10.186	57	3989	4.93	ug/L		94
67) isopropyl acetate	9.945	43	12845	5.00	ug/L		98
68) 1,2-dichloroethane	10.055	62	8743	5.01	ug/L		96
69) trichloroethene	10.747	95	7060	5.08	ug/L		95
70) ethyl acrylate	10.752	55	7911	4.86	ug/L		99
72) 2-nitropropane	11.533	41	2633	5.15	ug/L		92
73) 2-chloroethyl vinyl ether	11.544	63	22796	25.31	ug/L		96
74) methyl methacrylate	11.019	41	10363	4.92	ug/L		91
75) 1,2-dichloropropane	11.019	63	7164	4.92	ug/L		99
76) methylcyclohexane	10.957	83	9828	4.94	ug/L		93
77) dibromomethane	11.187	93	4569	5.05	ug/L		96
78) bromodichloromethane	11.308	83	8899	4.93	ug/L		100
79) cis-1,3-dichloropropene	11.764	75	11111	5.04	ug/L		100
81) 4-methyl-2-pentanone	11.853	58	2565	4.98	ug/L		94
82) toluene	12.121	92	16340	4.92	ug/L		99
83) 3-methyl-1-butanol	11.874	70	3325	96.44	ug/L		94
84) trans-1,3-dichloropropene	12.325	75	9805	4.90	ug/L		98
85) ethyl methacrylate	12.309	69	7842	4.82	ug/L		96
86) 1,1,2-trichloroethane	12.535	83	5175	5.04	ug/L		98
87) 2-hexanone	12.702	58	2160	4.60	ug/L		94
89) tetrachloroethene	12.702	166	7934	5.11	ug/L		92
90) 1,3-dichloropropane	12.718	76	9279	4.92	ug/L		96
91) butyl acetate	12.771	56	3864	4.76	ug/L		96
92) 3,3-Dimethyl-1-Butanol	12.870	57	6508	49.06	ug/L	#	99
93) dibromochloromethane	12.986	129	7363	4.95	ug/L		97
94) 1,2-dibromoethane	13.138	107	6518	5.05	ug/L		98
96) chlorobenzene	13.589	112	18602	5.13	ug/L		94
97) 1,1,1,2-tetrachloroethane	13.646	131	7177	4.89	ug/L		97
98) ethylbenzene	13.636	91	29997	4.91	ug/L		98
99) m,p-xylene	13.741	106	23372	10.15	ug/L		99
100) o-xylene	14.160	106	11622	4.85	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94192.D
Acq On : 18 Dec 2013 2:45 pm
Operator : katteric
Sample : ic4058-5
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 19 12:29:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 10:47:36 2013
Response via : Initial Calibration

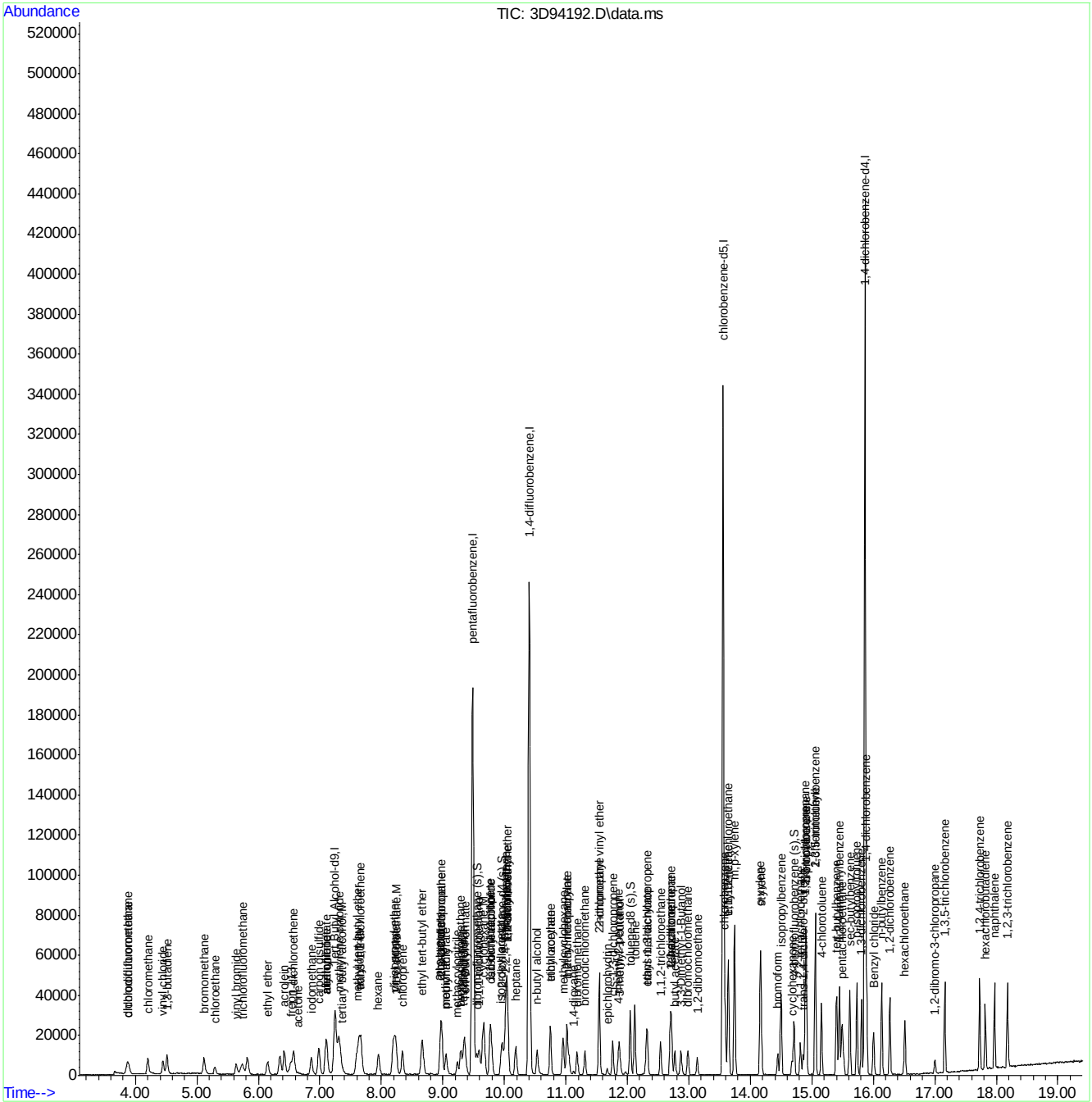
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) styrene	14.176	104	19016	4.82	ug/L	98
103) bromoform	14.448	173	5740	5.02	ug/L	97
105) isopropylbenzene	14.501	105	30059	4.95	ug/L	97
107) bromobenzene	14.905	156	8772	4.99	ug/L	95
108) cyclohexanone	14.674	55	3187	49.65	ug/L	93
109) 1,1,2,2-tetrachloroethane	14.815	83	8959	5.13	ug/L	97
110) trans-1,4-dichloro-2-b...	14.857	53	1872	4.76	ug/L	98
111) 1,2,3-trichloropropane	14.894	110	2033	5.20	ug/L	92
112) n-propylbenzene	14.905	91	34681	5.26	ug/L	99
114) 2-chlorotoluene	15.057	126	7525	5.13	ug/L	96
115) 4-chlorotoluene	15.156	126	7456	4.99	ug/L	92
116) 1,3,5-trimethylbenzene	15.057	105	25104	5.00	ug/L	99
117) tert-butylbenzene	15.403	119	21383	5.00	ug/L	98
118) pentachloroethane	15.492	167	5822	4.92	ug/L	96
119) 1,2,4-trimethylbenzene	15.450	105	24922	5.04	ug/L	91
120) sec-butylbenzene	15.618	105	32814	5.10	ug/L	99
121) 1,3-dichlorobenzene	15.806	146	16463	5.10	ug/L	98
122) p-isopropyltoluene	15.733	119	27438	5.02	ug/L	99
123) 1,4-dichlorobenzene	15.890	146	16966	5.06	ug/L	99
124) 1,2-dichlorobenzene	16.273	146	16714	5.18	ug/L	98
126) n-butylbenzene	16.137	92	14026	5.10	ug/L	97
128) 1,2-dibromo-3-chloropr...	17.002	157	2246	5.38	ug/L	100
129) 1,3,5-trichlorobenzene	17.164	180	15840	5.35	ug/L	98
130) 1,2,4-trichlorobenzene	17.731	180	14508	5.21	ug/L	99
131) hexachlorobutadiene	17.820	225	7534	5.23	ug/L	99
132) naphthalene	17.972	128	30721	5.38	ug/L	99
133) 1,2,3-trichlorobenzene	18.181	180	13847	5.34	ug/L	98
134) hexachloroethane	16.509	119	5718	4.99	ug/L	99
135) Benzyl chloride	16.006	91	15865	5.65	ug/L	99

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

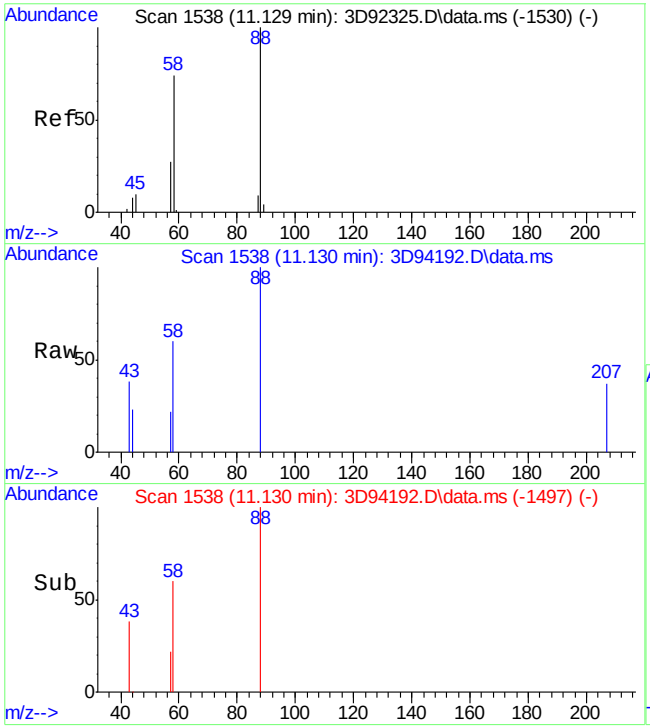
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94192.D
Acq On : 18 Dec 2013 2:45 pm
Operator : katteric
Sample : ic4058-5
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 19 12:29:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 10:47:36 2013
Response via : Initial Calibration



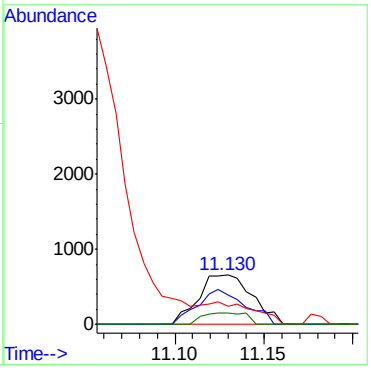
M3D4058.M Thu Dec 19 12:36:51 2013 3D Page: 4

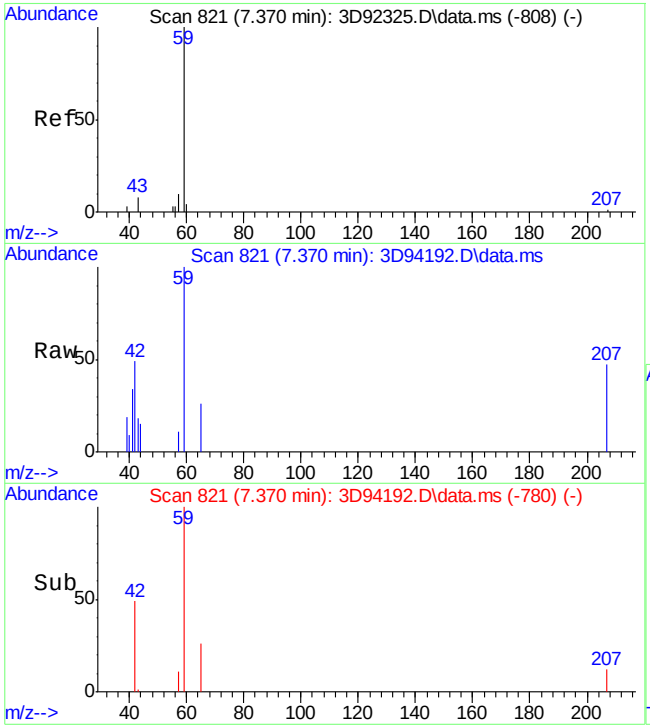


#2
1,4-dioxane
Concen: 111.69 ug/L
RT: 11.130 min Scan# 1538
Delta R.T. 0.017 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 88 Resp: 1386

Ion	Ratio	Lower	Upper
88	100		
58	62.0	33.2	93.2
43	0.0	1.5	61.5#
57	18.7	0.0	50.6

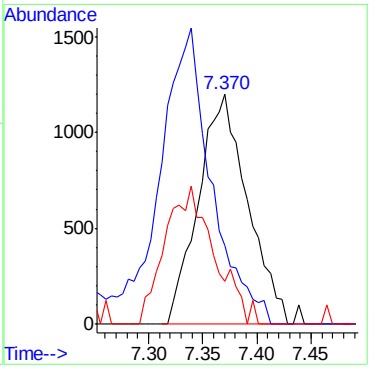


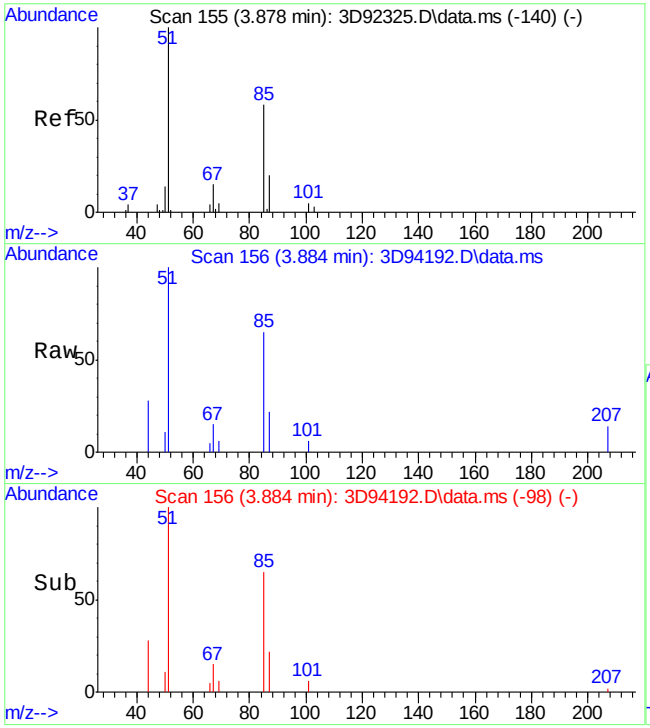


#3
tertiary butyl alcohol
Concen: 26.60 ug/L
RT: 7.370 min Scan# 821
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 59 Resp: 3786

Ion	Ratio	Lower	Upper
59	100		
41	34.2	13.6	73.6
43	18.5	0.0	53.7

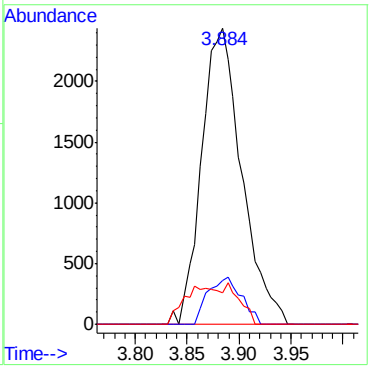


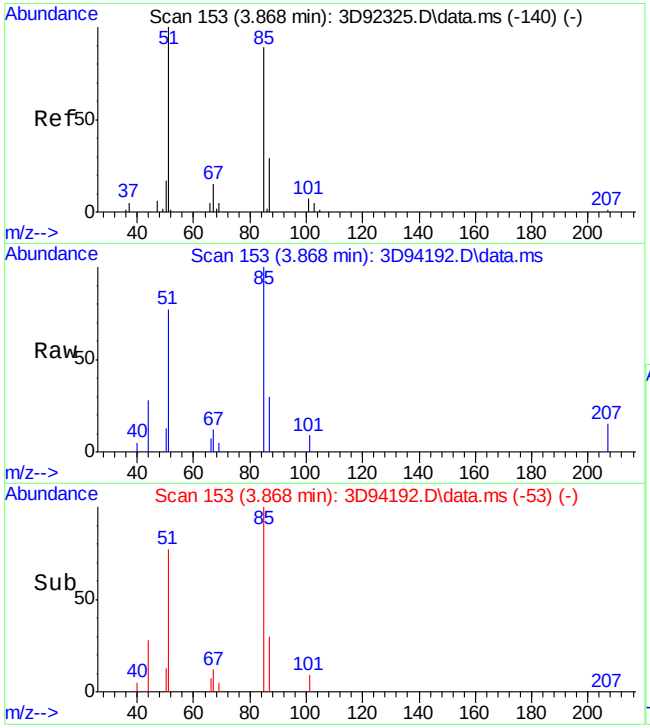


#8
chlorodifluoromethane
Concen: 5.11 ug/L
RT: 3.884 min Scan# 156
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 51 Resp: 6542

Ion	Ratio	Lower	Upper
51	100		
67	14.8	0.0	44.7
50	10.7	0.0	42.3

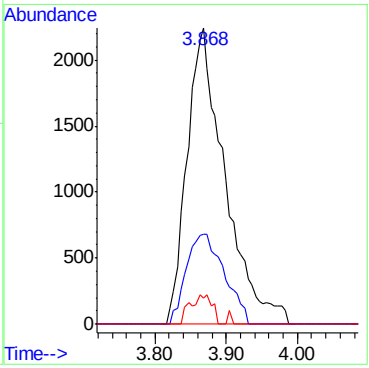


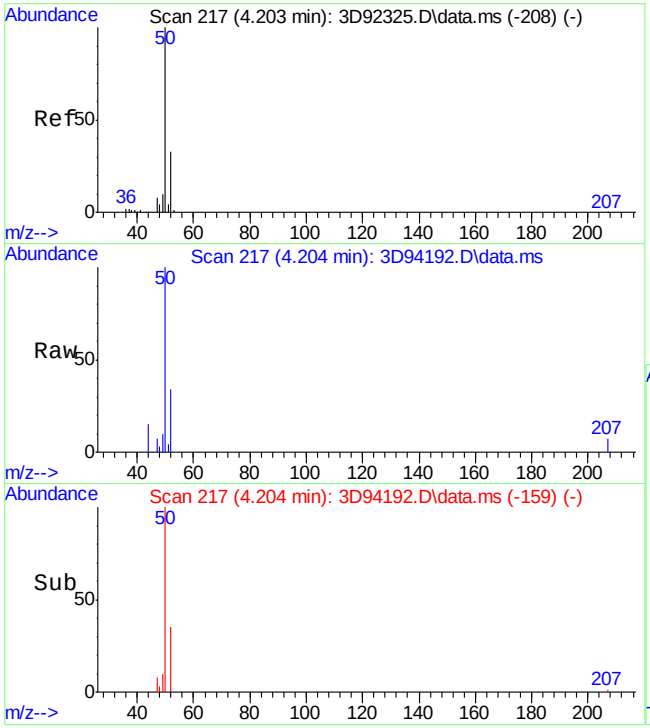


#9
dichlorodifluoromethane
Concen: 5.32 ug/L
RT: 3.868 min Scan# 153
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 85 Resp: 8298

Ion	Ratio	Lower	Upper
85	100		
87	30.4	1.6	61.6
101	8.9	0.0	38.1

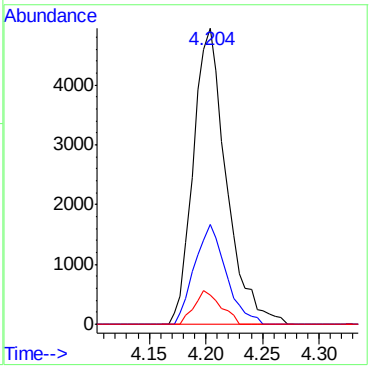


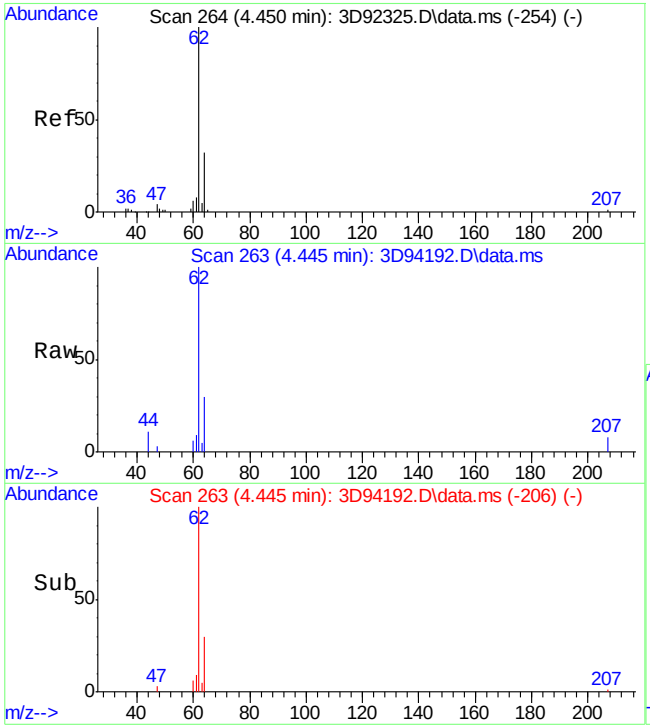


#10
chloromethane
Concen: 5.10 ug/L
RT: 4.204 min Scan# 217
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 50 Resp: 10004

Ion	Ratio	Lower	Upper
50	100		
52	33.6	1.8	61.8
49	9.7	0.0	39.9

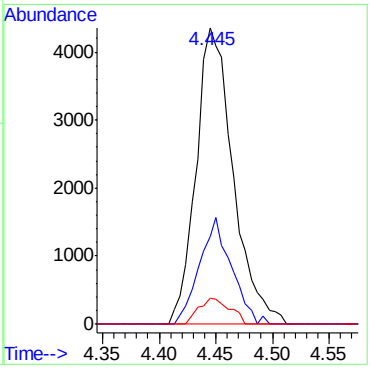


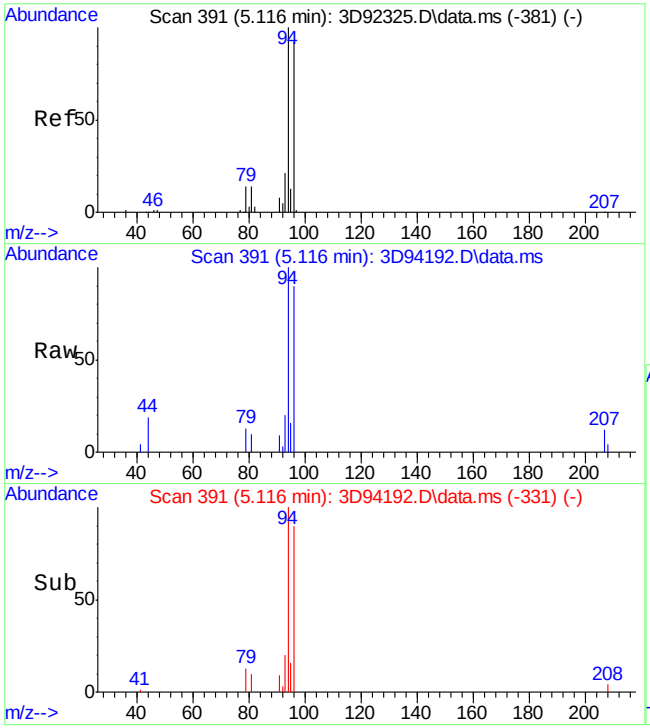


#11
vinyl chloride
Concen: 5.19 ug/L
RT: 4.445 min Scan# 263
Delta R.T. 0.001 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 62 Resp: 9864

Ion	Ratio	Lower	Upper
62	100		
64	29.6	2.0	62.0
61	8.9	0.0	39.1

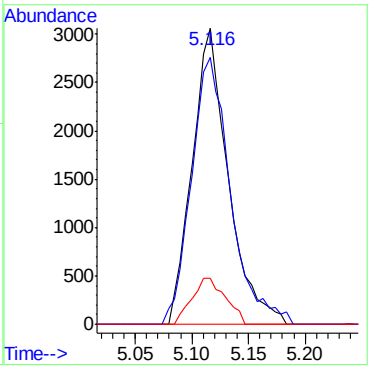


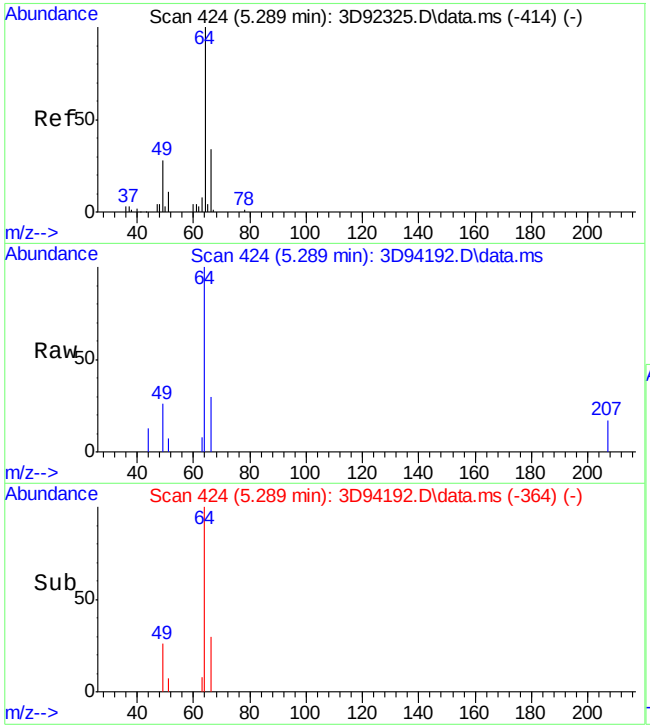


#12
bromomethane
Concen: 5.27 ug/L
RT: 5.116 min Scan# 391
Delta R.T. 0.017 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 94 Resp: 6763

Ion	Ratio	Lower	Upper
94	100		
96	90.0	63.8	123.8
95	15.5	0.0	43.9

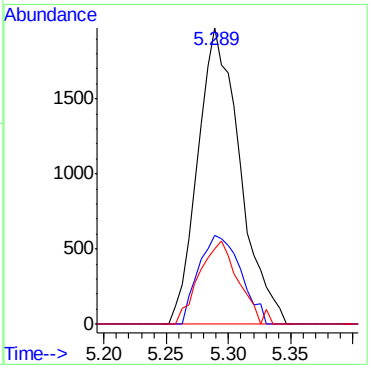


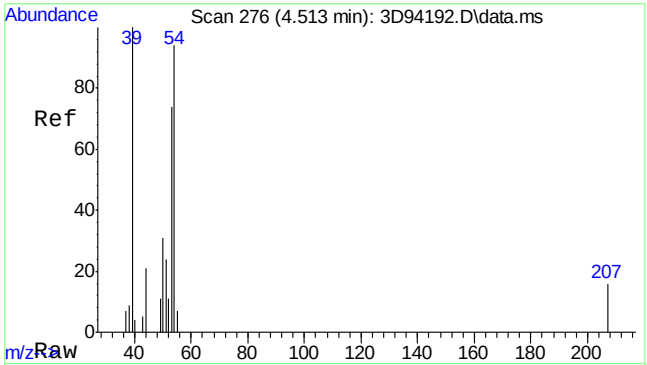


#13
chloroethane
Concen: 5.12 ug/L
RT: 5.289 min Scan# 424
Delta R.T. 0.017 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 64 Resp: 4639

Ion	Ratio	Lower	Upper
64	100		
66	30.0	4.0	64.0
49	25.6	0.0	57.1

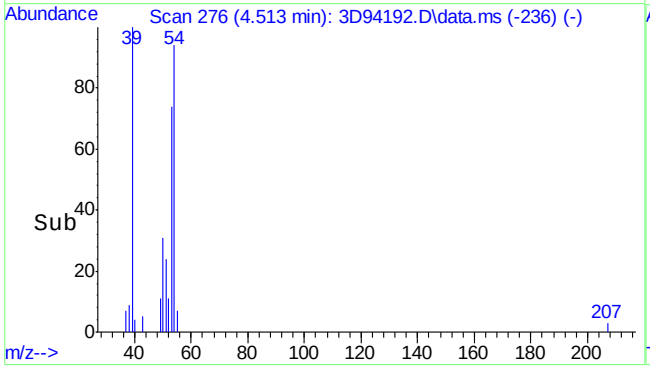


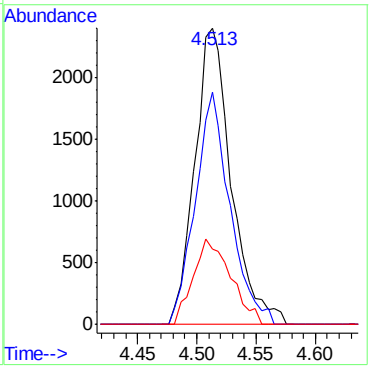


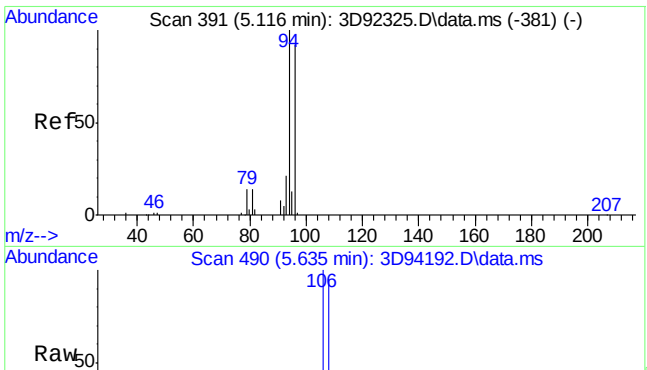
#14
1,3-butadiene
Concen: 4.48 ug/L
RT: 4.513 min Scan# 276
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 54 Resp: 5136

Ion	Ratio	Lower	Upper
54	100		
53	74.9	56.6	85.0
51	29.5	23.8	35.8



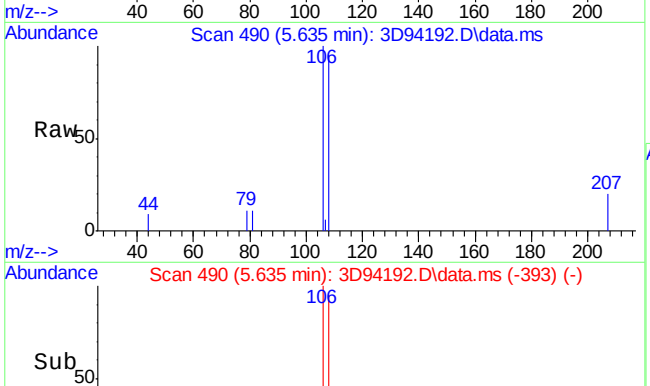


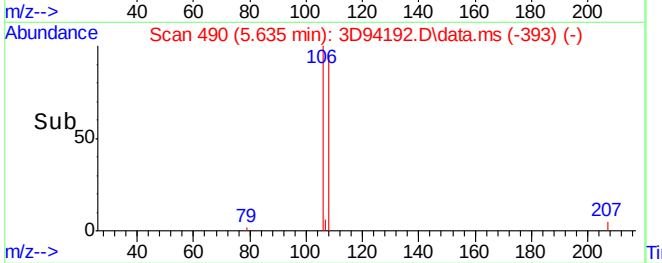


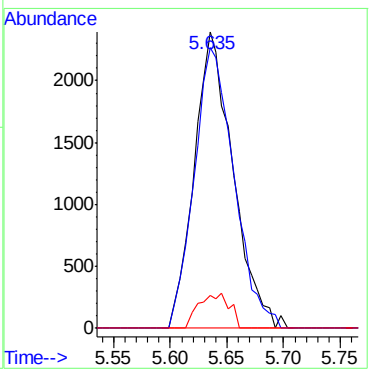
#15
vinyl bromide
Concen: 4.68 ug/L
RT: 5.635 min Scan# 490
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

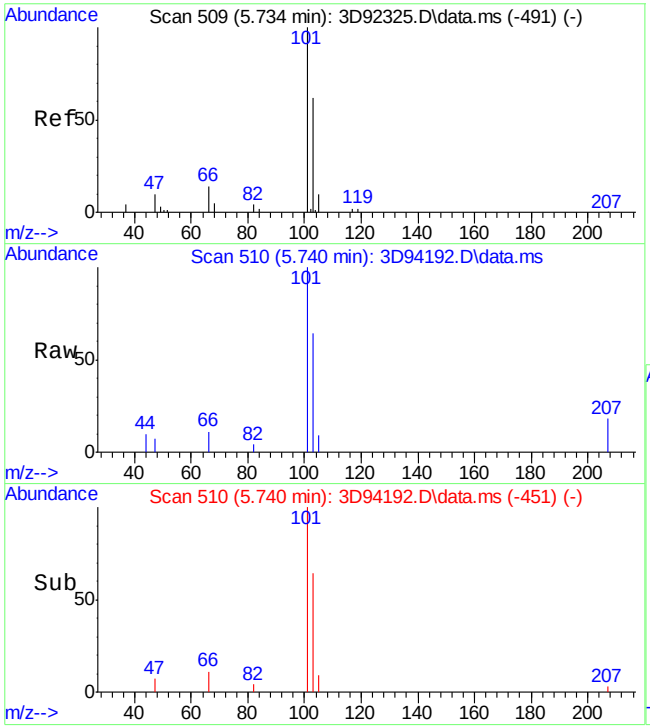
Tgt Ion:106 Resp: 5673

Ion	Ratio	Lower	Upper
106	100		
108	97.5	64.3	124.3
81	9.2	0.0	40.6





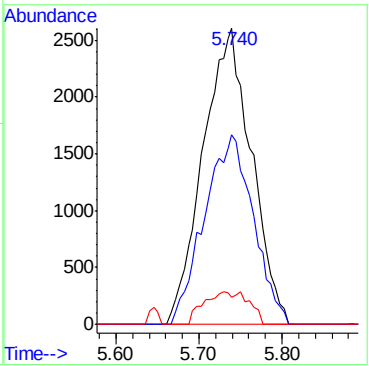


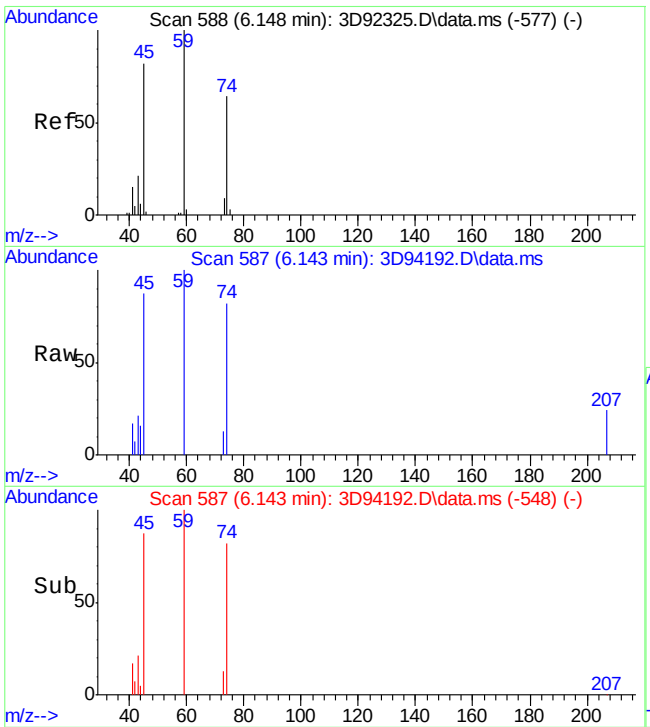


#16
trichlorofluoromethane
Concen: 5.51 ug/L
RT: 5.740 min Scan# 510
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:101 Resp: 10555

Ion	Ratio	Lower	Upper
101	100		
103	64.1	33.7	93.7
105	9.0	0.0	40.4

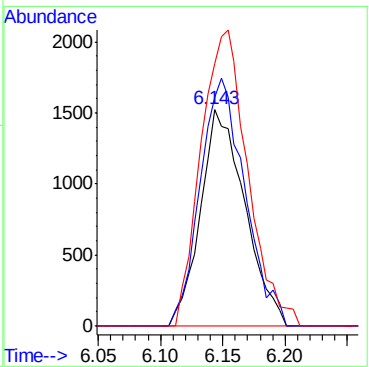


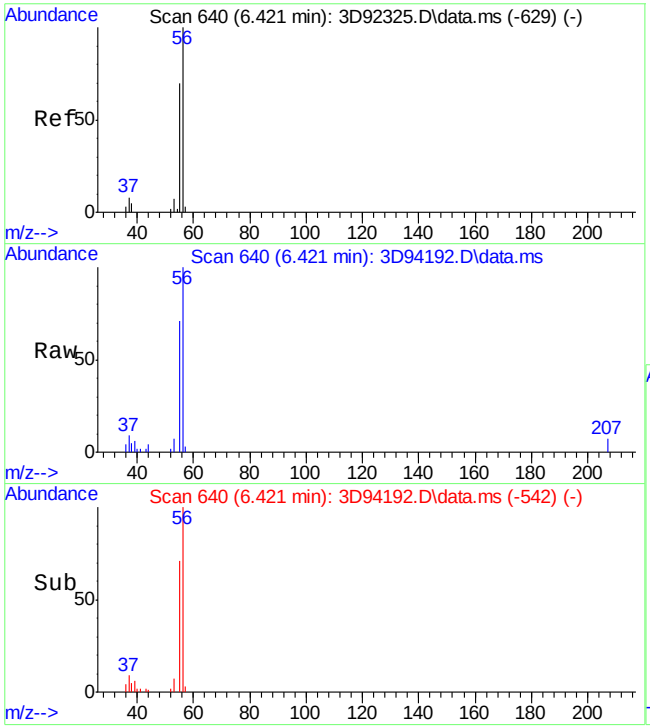


#18
ethyl ether
Concen: 4.99 ug/L
RT: 6.143 min Scan# 587
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 74 Resp: 3771

Ion	Ratio	Lower	Upper
74	100		
45	105.6	84.3	144.3
59	121.4	120.2	180.2

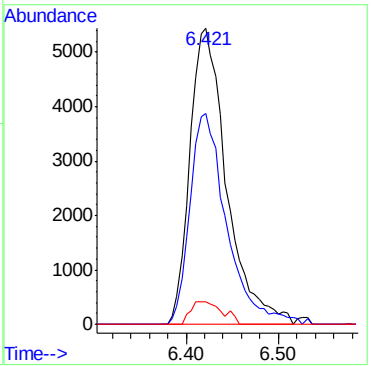


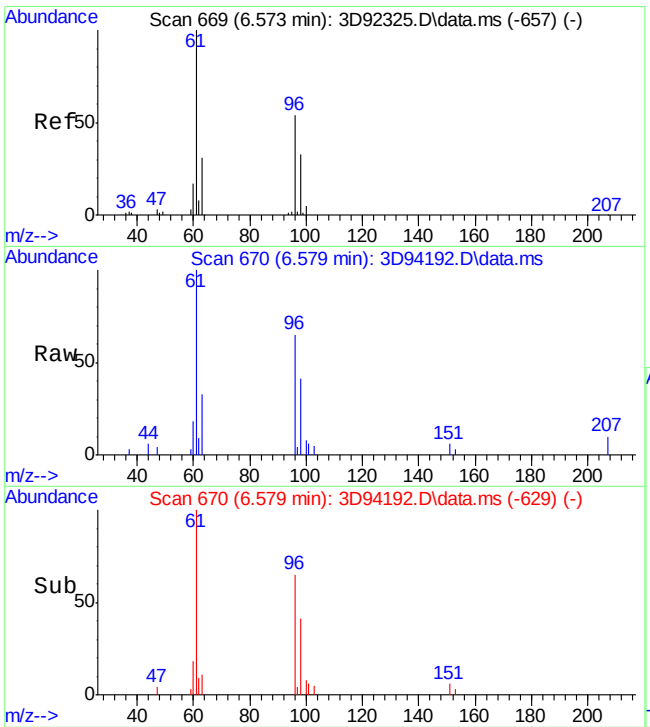


#21
acrolein
Concen: 47.68 ug/L
RT: 6.421 min Scan# 640
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 56 Resp: 15089

Ion	Ratio	Lower	Upper
56	100		
55	71.3	41.4	101.4
53	7.5	0.0	37.0

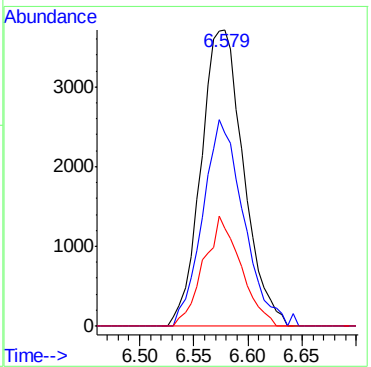


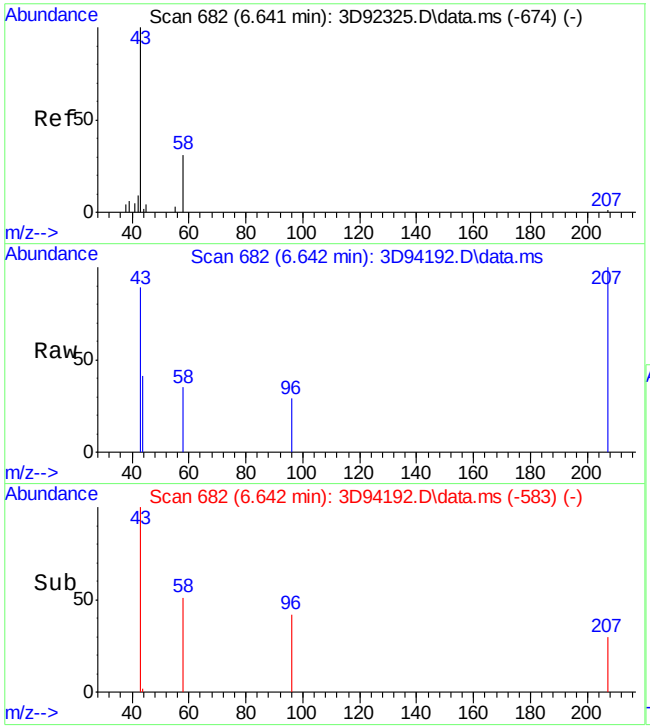


#22
1,1-dichloroethene
Concen: 4.96 ug/L
RT: 6.579 min Scan# 670
Delta R.T. 0.017 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 61 Resp: 10199

Ion	Ratio	Lower	Upper
61	100		
96	65.3	35.0	95.0
63	32.9	2.3	62.3

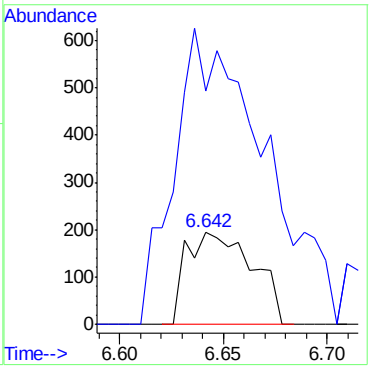


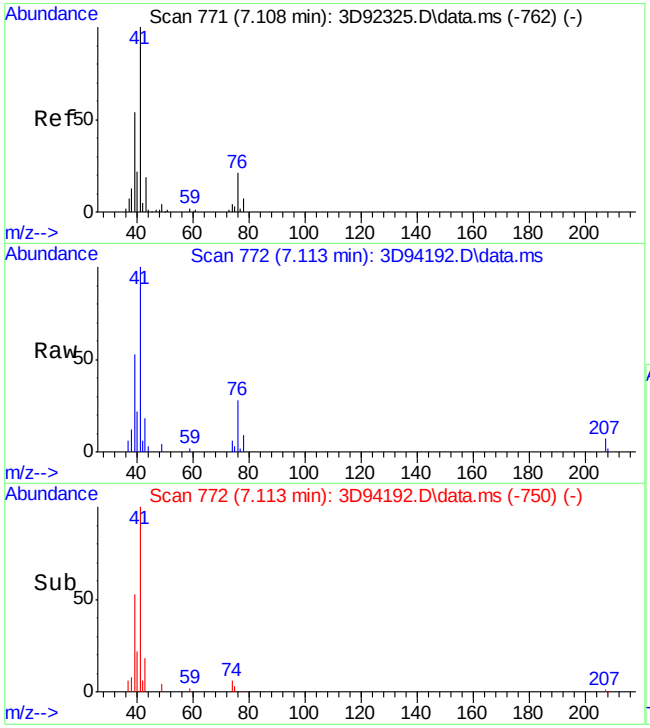


#23
acetone
Concen: 3.76 ug/L
RT: 6.642 min Scan# 682
Delta R.T. 0.022 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 58 Resp: 433

Ion	Ratio	Lower	Upper
58	100		
43	253.3	281.3	341.3#

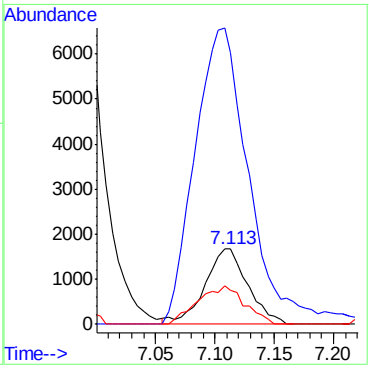


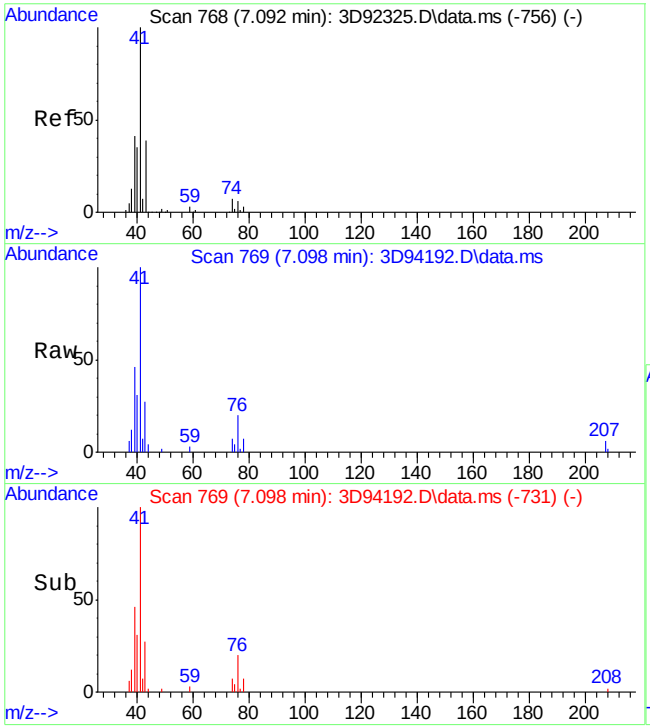


#24
allyl chloride
Concen: 5.20 ug/L
RT: 7.113 min Scan# 772
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 76 Resp: 4170

Ion	Ratio	Lower	Upper
76	100		
41	362.1	352.2	412.2
38	44.3	13.8	73.8

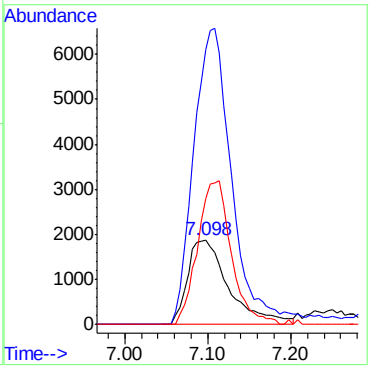


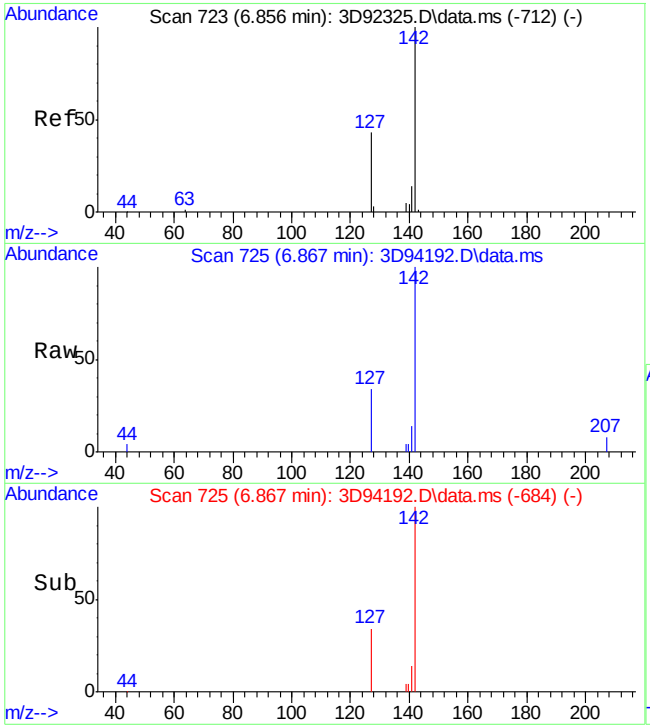


#25
acetonitrile
Concen: 49.01 ug/L
RT: 7.098 min Scan# 769
Delta R.T. 0.021 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 40 Resp: 6451

Ion	Ratio	Lower	Upper
40	100		
41	324.9	246.1	306.1#
39	148.4	62.7	122.7#

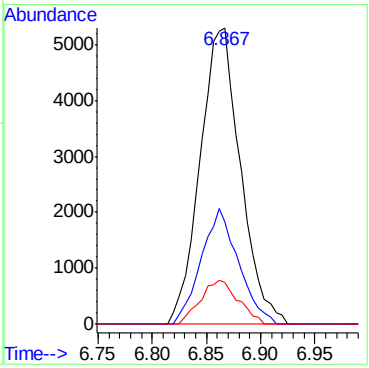




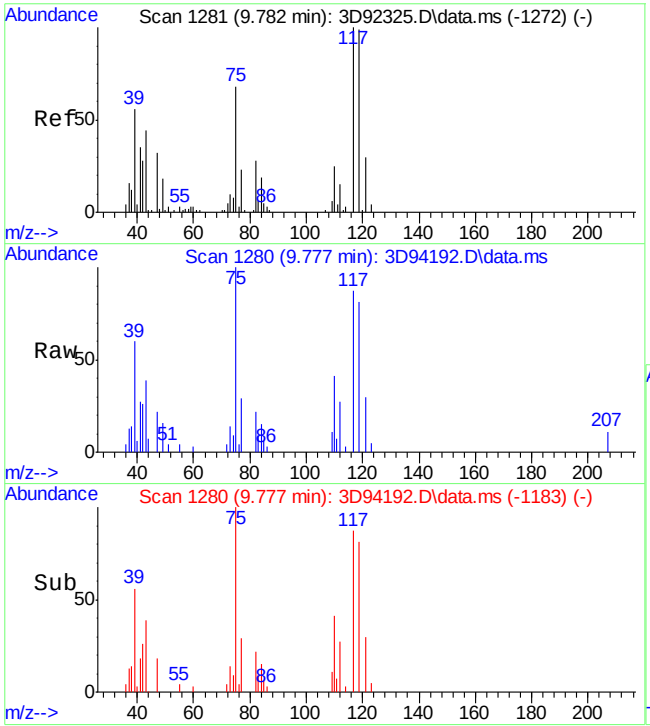
#27
iodomethane
Concen: 5.07 ug/L
RT: 6.867 min Scan# 725
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:142 Resp: 13833

Ion	Ratio	Lower	Upper
142	100		
127	34.4	6.0	66.0
141	14.2	0.0	44.5



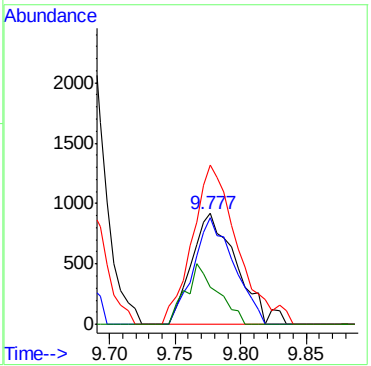
3D94192.D M3D4058.M Thu Dec 19 12:36:51 2013 3D Page 13

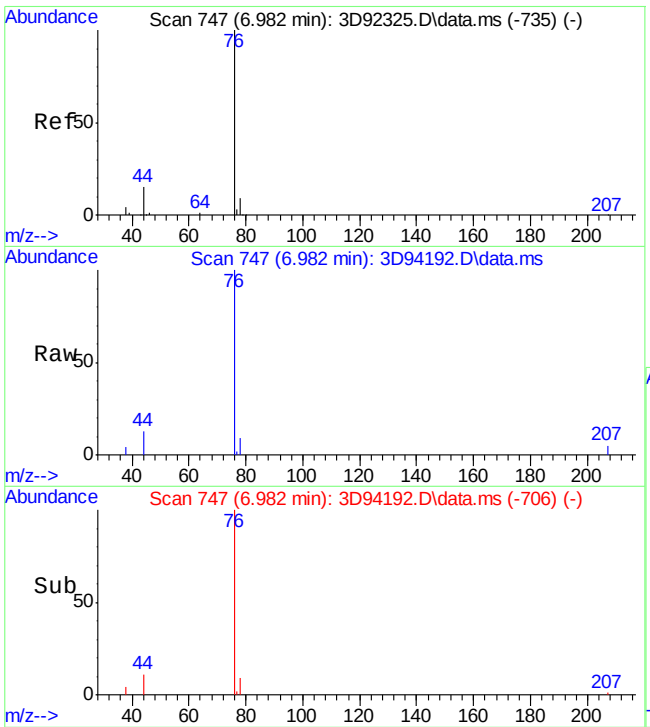


#28
iso-butyl alcohol
Concen: 45.11 ug/L
RT: 9.777 min Scan# 1280
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 41 Resp: 2194

Ion	Ratio	Lower	Upper
41	100		
42	95.8	56.4	116.4
43	143.8	104.5	164.5
74	33.0	4.6	64.6

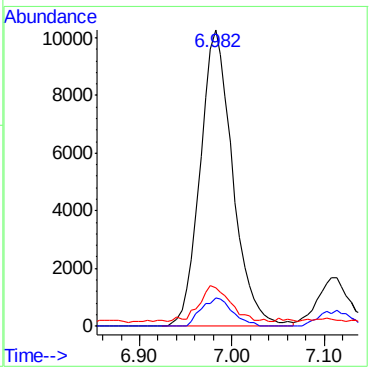


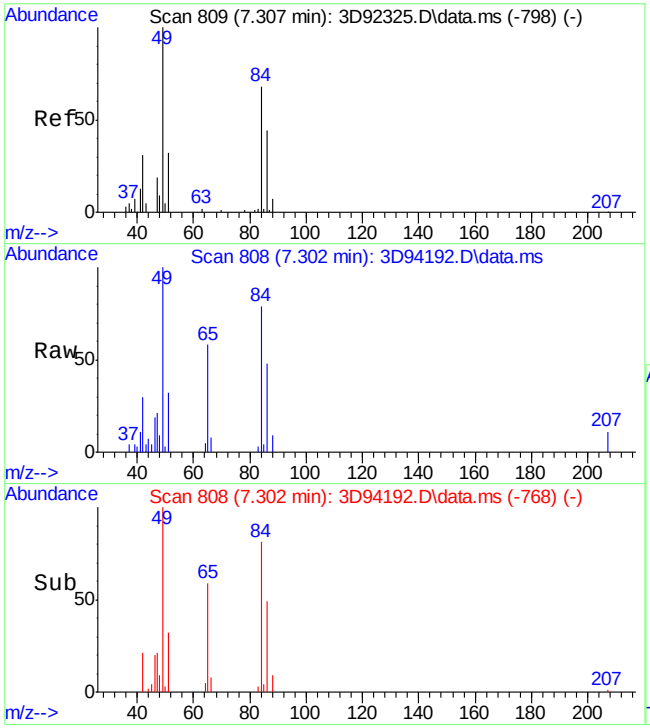


#29
carbon disulfide
Concen: 5.13 ug/L
RT: 6.982 min Scan# 747
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 76 Resp: 25017

Ion	Ratio	Lower	Upper
76	100		
78	9.5	0.0	39.2
44	11.3	0.0	41.2

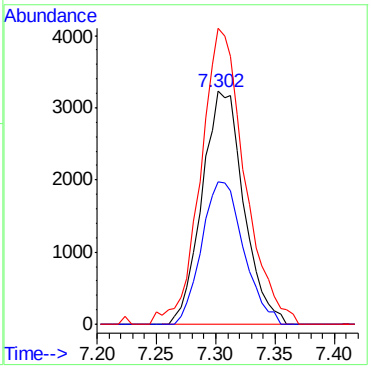


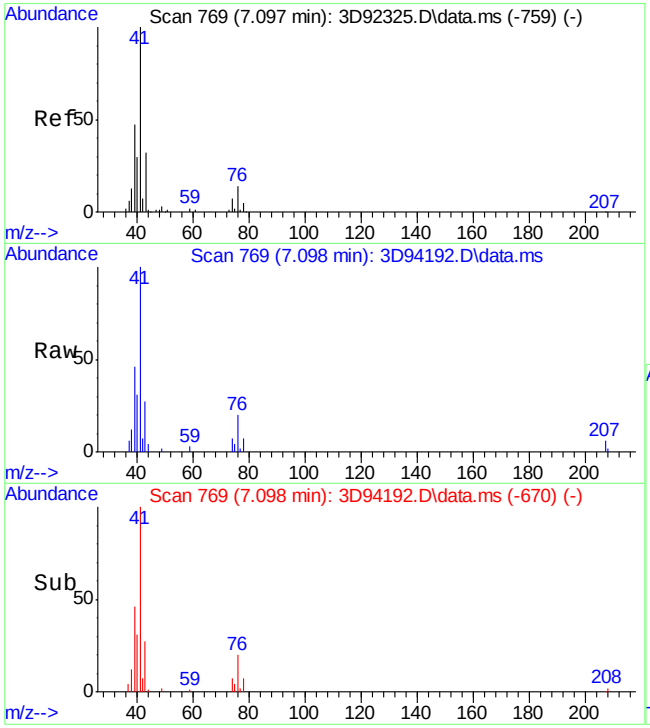


#30
methylene chloride
Concen: 5.04 ug/L
RT: 7.302 min Scan# 808
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 84 Resp: 7878

Ion	Ratio	Lower	Upper
84	100		
86	61.0	46.3	86.1
49	123.3	91.4	169.8

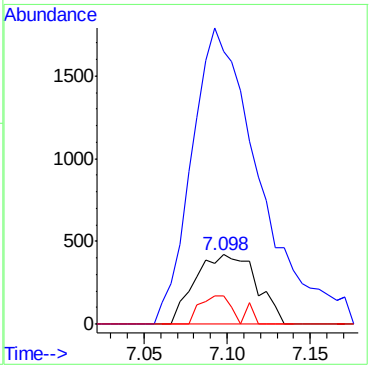


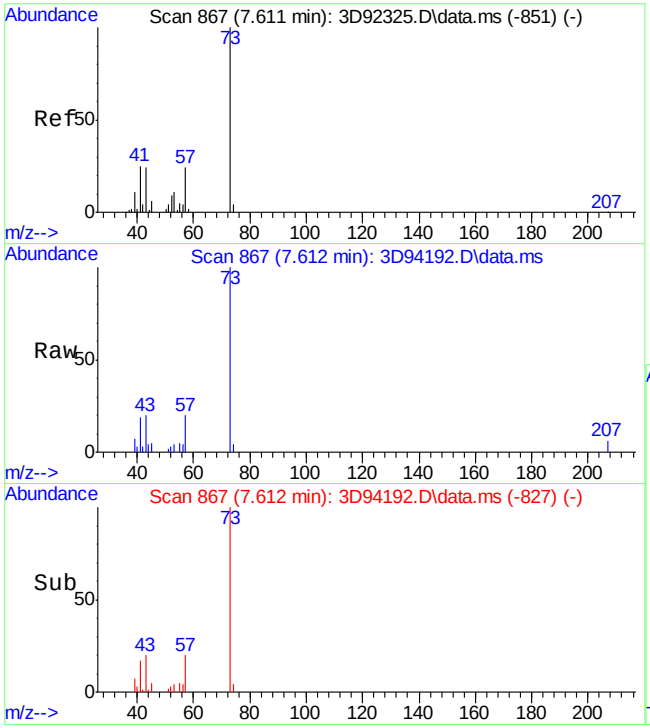


#31
methyl acetate
Concen: 4.57 ug/L
RT: 7.098 min Scan# 769
Delta R.T. 0.017 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 74 Resp: 1072

Ion	Ratio	Lower	Upper
74	100		
43	475.9	443.2	503.2
59	20.1	3.6	63.6

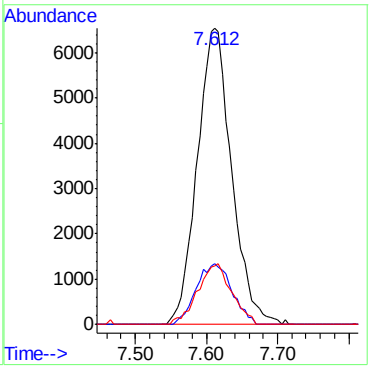


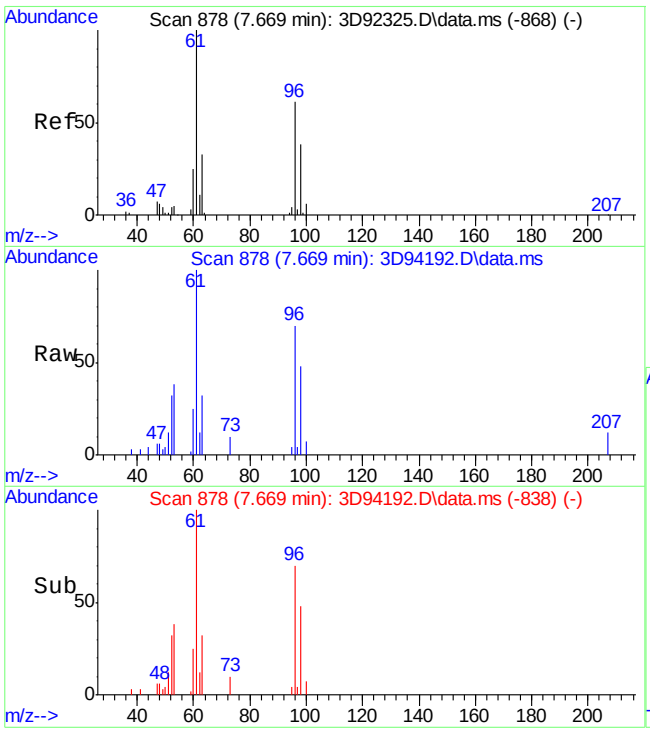


#32
methyl tert butyl ether
Concen: 4.30 ug/L
RT: 7.612 min Scan# 867
Delta R.T. 0.012 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 73 Resp: 21918

Ion	Ratio	Lower	Upper
73	100		
57	20.4	0.0	52.5
43	19.8	0.0	49.9

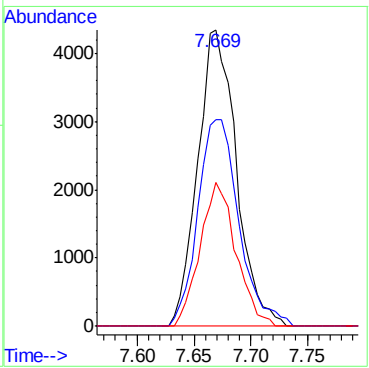


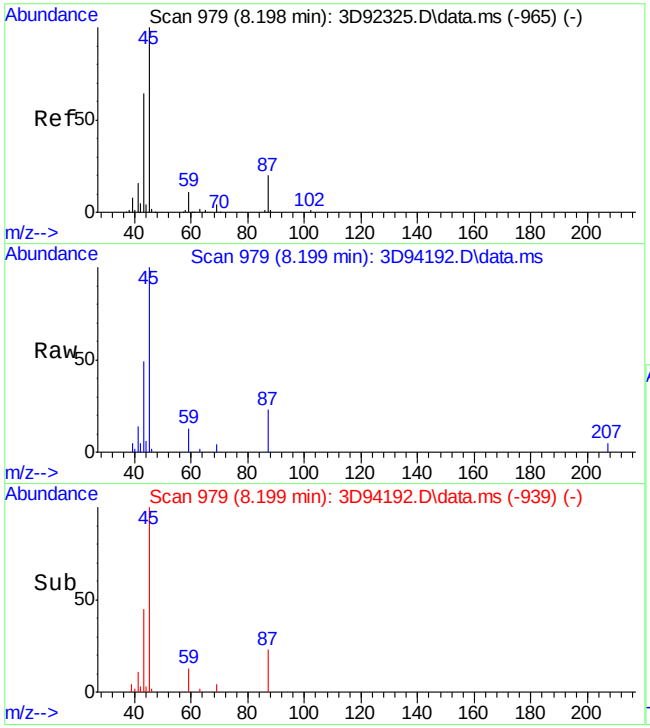


#33
trans-1,2-dichloroethene
Concen: 5.03 ug/L
RT: 7.669 min Scan# 878
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 61 Resp: 10300

Ion	Ratio	Lower	Upper
61	100		
96	69.9	49.6	92.0
98	48.4	31.6	58.8

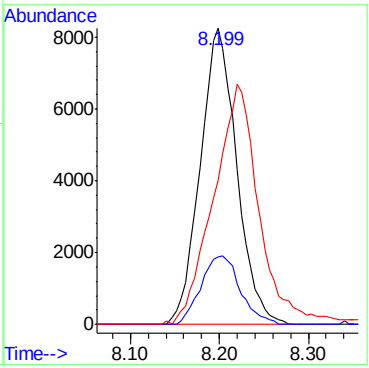


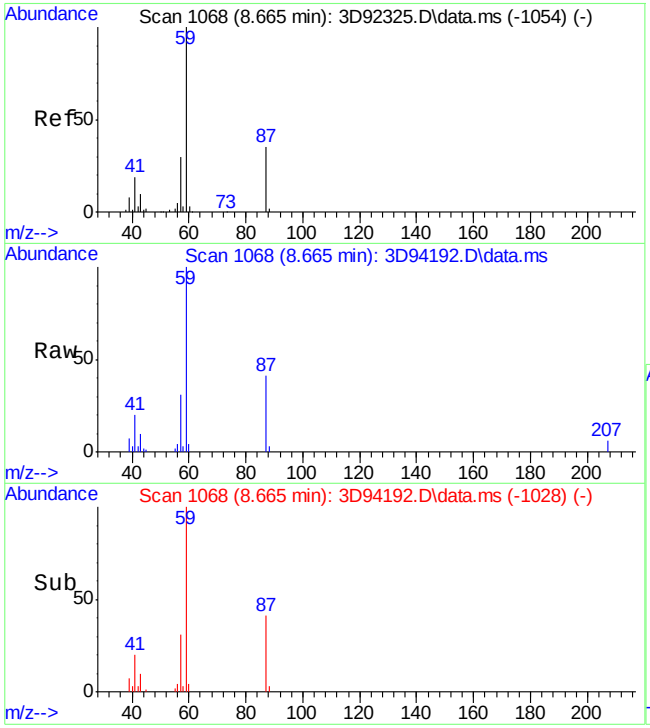


#34
di-isopropyl ether
Concen: 4.99 ug/L
RT: 8.199 min Scan# 979
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 45 Resp: 23479

Ion	Ratio	Lower	Upper
45	100		
87	22.9	0.0	53.7
43	48.6	33.1	93.1

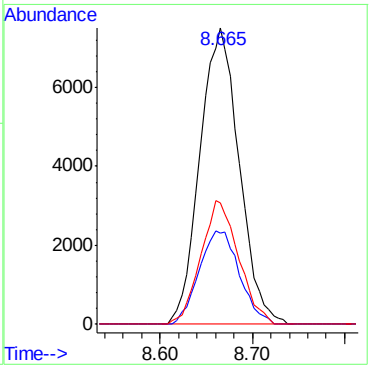


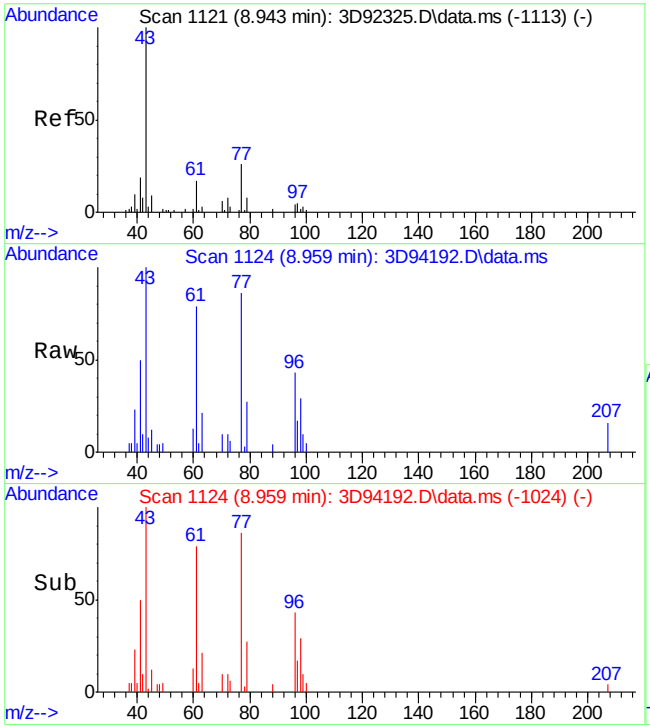


#35
ethyl tert-butyl ether
Concen: 5.03 ug/L
RT: 8.665 min Scan# 1068
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 59 Resp: 22105

Ion	Ratio	Lower	Upper
59	100		
57	30.8	1.0	61.0
87	40.8	8.7	68.7

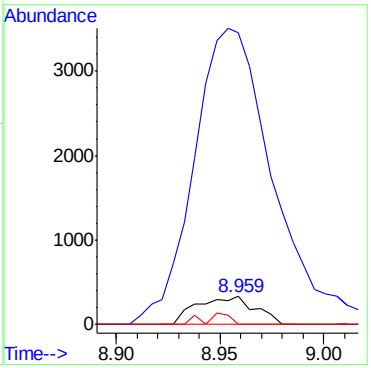


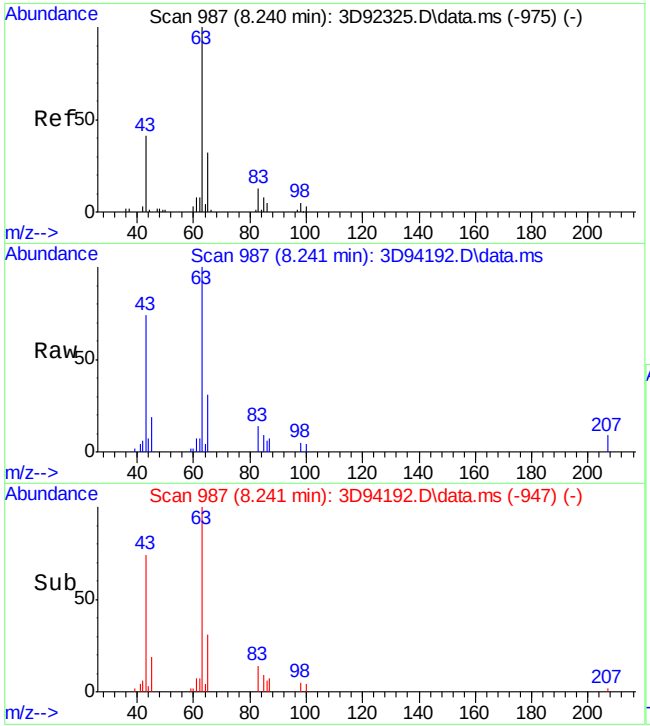


#36
2-butanone
Concen: 4.11 ug/L
RT: 8.959 min Scan# 1124
Delta R.T. 0.026 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 72 Resp: 639

Ion	Ratio	Lower	Upper
72	100		
43	1456.5	849.2	1577.2
57	17.4	20.6	38.2#

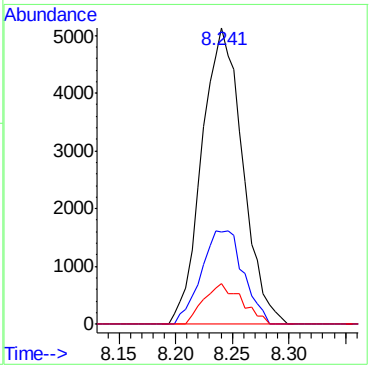


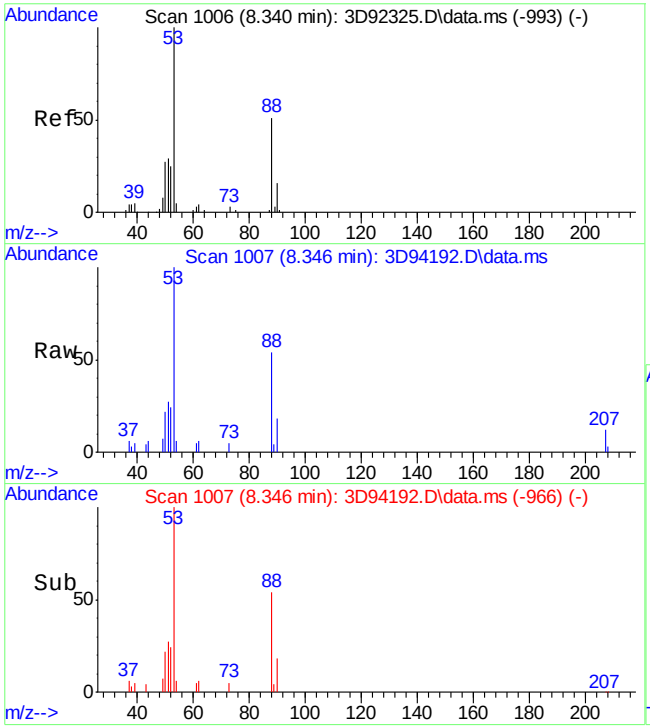


#37
1,1-dichloroethane
Concen: 4.92 ug/L
RT: 8.241 min Scan# 987
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 63 Resp: 12848

Ion	Ratio	Lower	Upper
63	100		
65	31.2	1.9	61.9
83	13.7	0.0	43.2

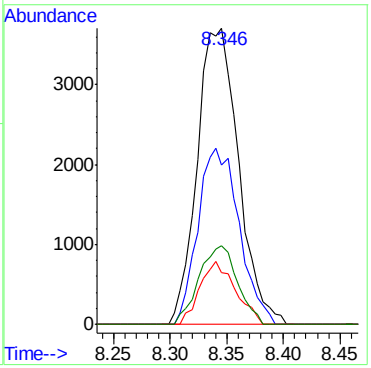


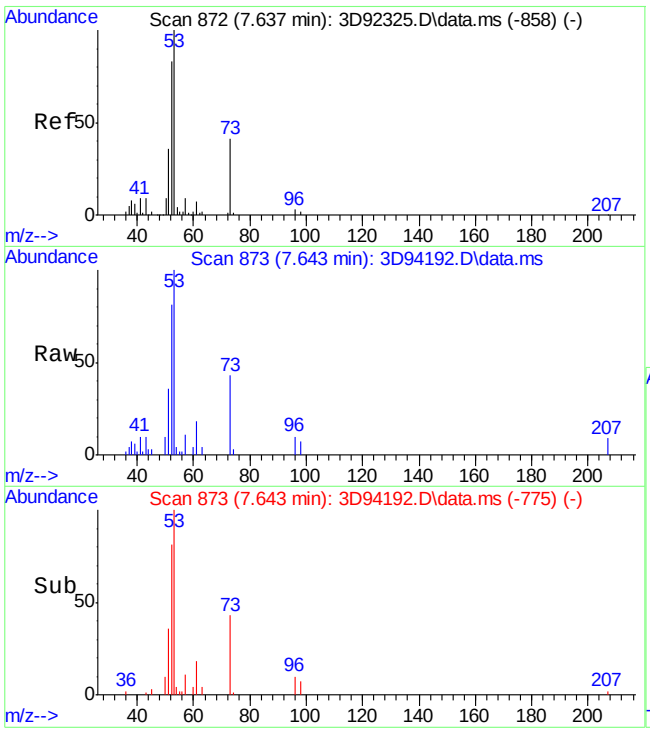


#38
chloroprene
Concen: 5.15 ug/L
RT: 8.346 min Scan# 1007
Delta R.T. 0.017 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 53 Resp: 9399

Ion	Ratio	Lower	Upper
53	100		
88	54.0	31.0	91.0
90	17.6	0.0	49.8
51	26.6	0.0	56.5

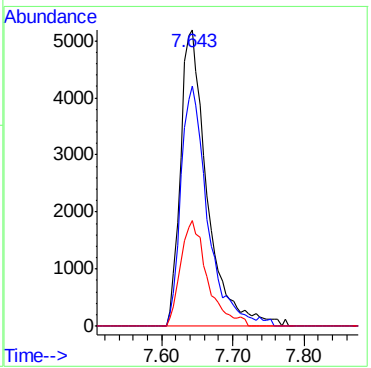


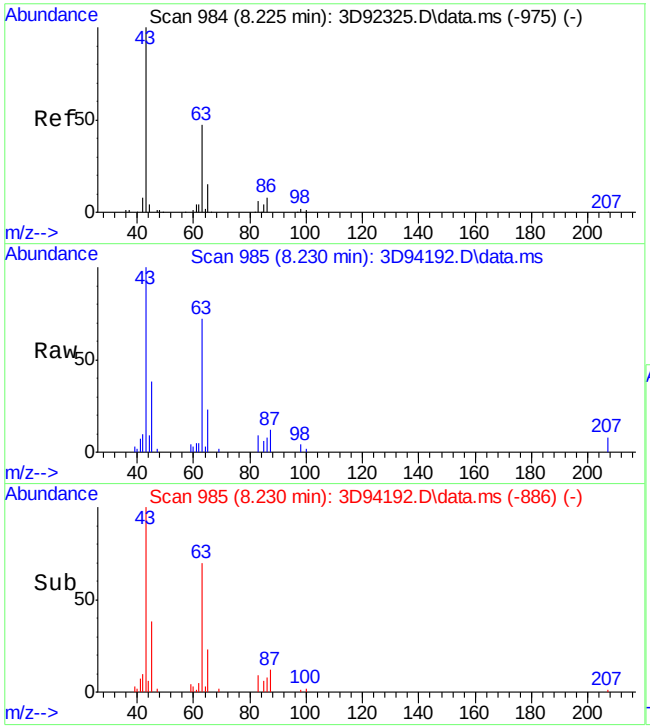


#39
acrylonitrile
Concen: 24.96 ug/L
RT: 7.643 min Scan# 873
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 53 Resp: 13528

Ion	Ratio	Lower	Upper
53	100		
52	80.9	52.8	112.8
51	35.7	3.9	63.9

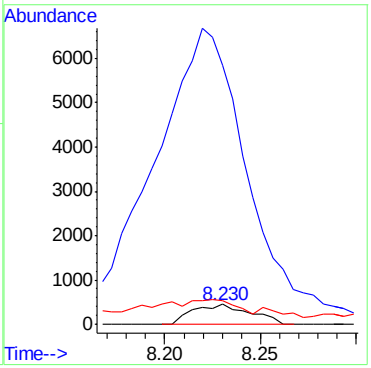


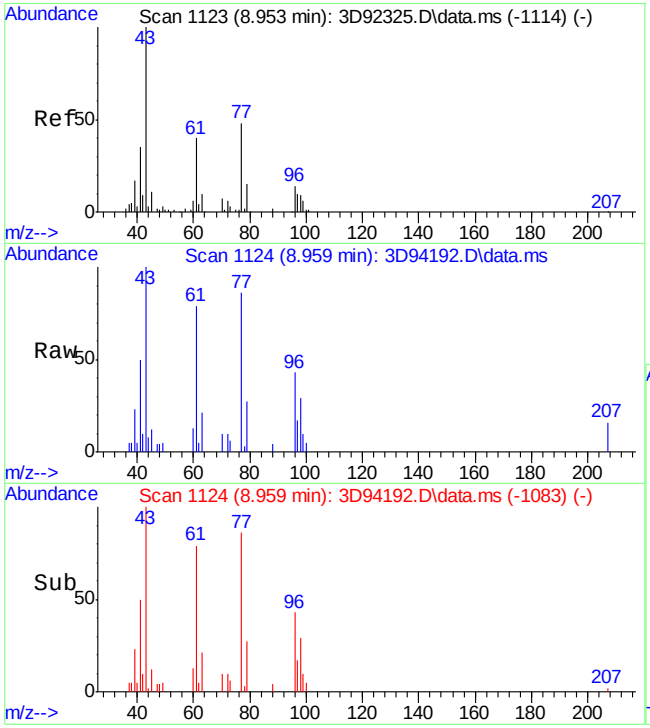


#40
vinyl acetate
Concen: 3.90 ug/L
RT: 8.230 min Scan# 985
Delta R.T. 0.021 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 86 Resp: 935

Ion	Ratio	Lower	Upper
86	100		
43	1129.8	1099.0	2041.0
44	59.7	58.9	109.5

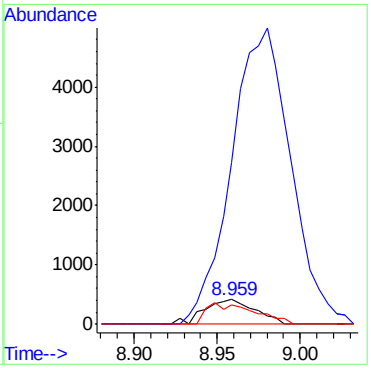




#41
ethyl acetate
Concen: 4.49 ug/L
RT: 8.959 min Scan# 1124
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 45 Resp: 875

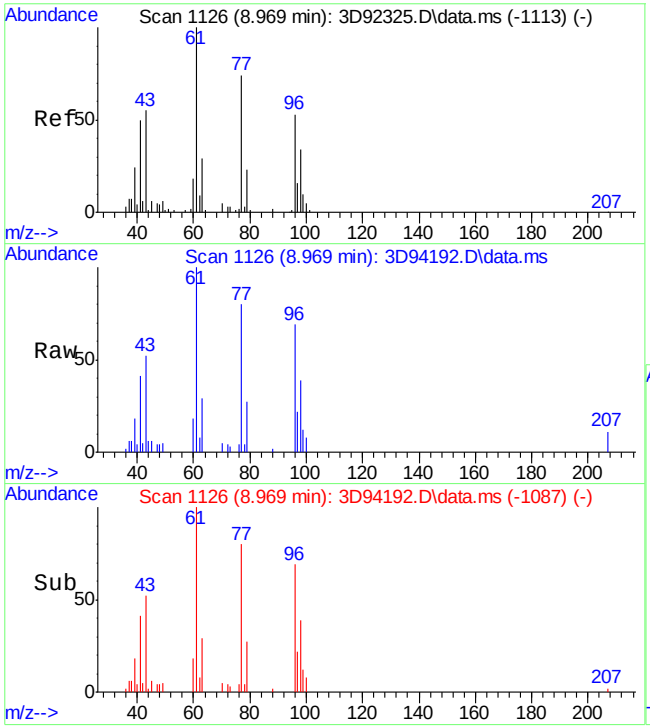
Ion	Ratio	Lower	Upper
45	100		
61	657.1	298.5	554.5#
70	79.5	58.8	109.2



7.7.4

7

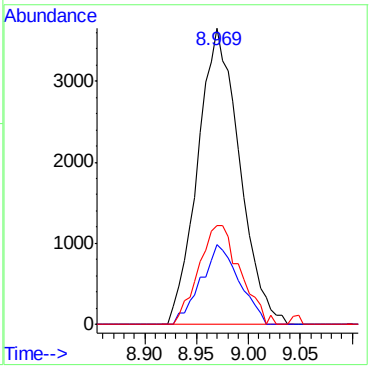
3D94192.D M3D4058.M Thu Dec 19 12:36:52 2013 3D Page 20

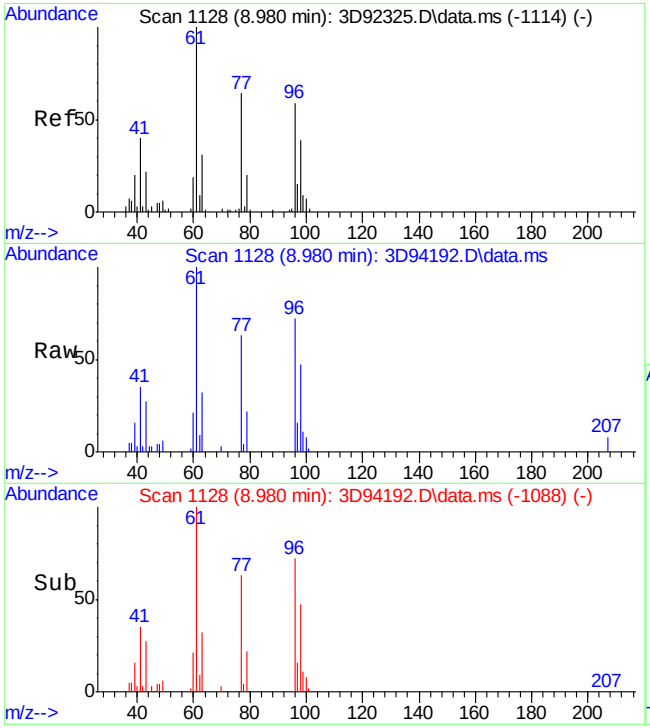


#42
2,2-dichloropropane
Concen: 5.53 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 77 Resp: 10200

Ion	Ratio	Lower	Upper
77	100		
97	27.0	0.0	56.8
79	33.3	2.1	62.1

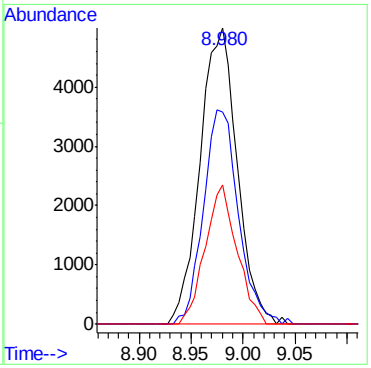


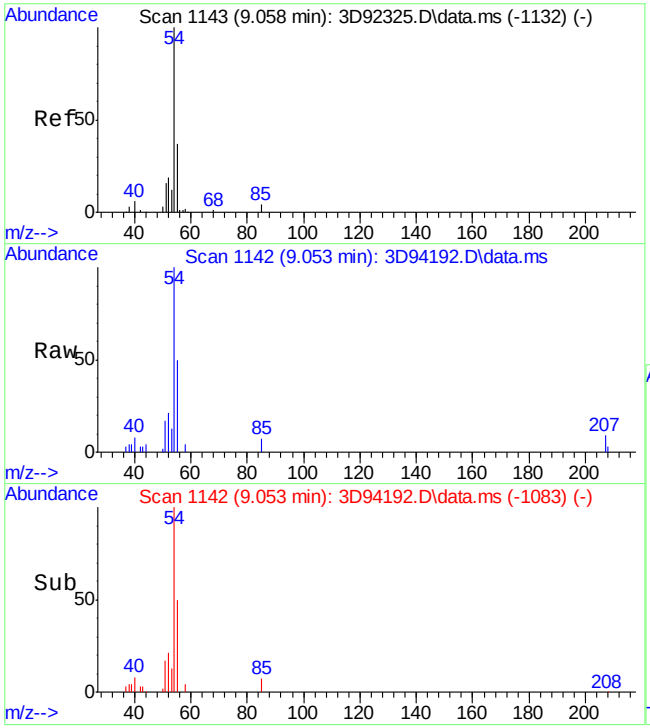


#43
cis-1,2-dichloroethene
Concen: 5.03 ug/L
RT: 8.980 min Scan# 1128
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 61 Resp: 12397

Ion	Ratio	Lower	Upper
61	100		
96	71.8	40.7	100.7
98	46.9	16.0	76.0

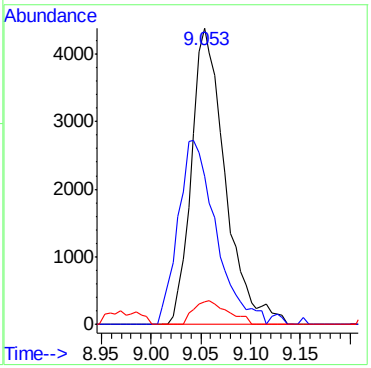


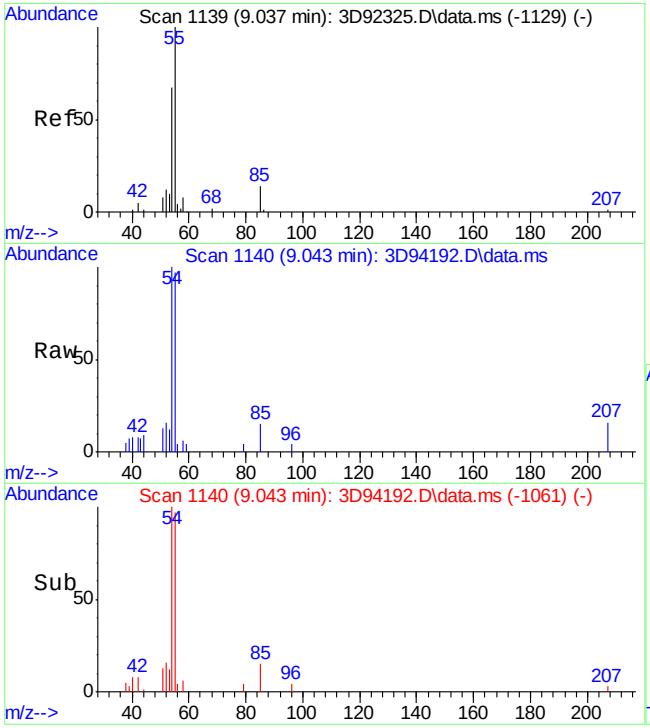


#44
propionitrile
Concen: 49.76 ug/L
RT: 9.053 min Scan# 1142
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 54 Resp: 10301

Ion	Ratio	Lower	Upper
54	100		
55	50.1	13.0	73.0
40	7.6	0.0	35.2

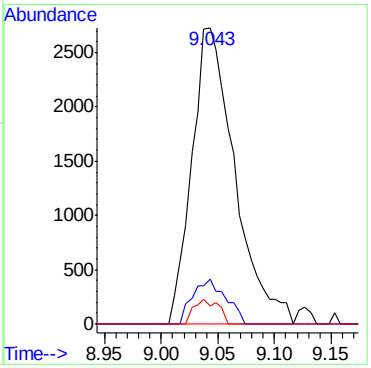


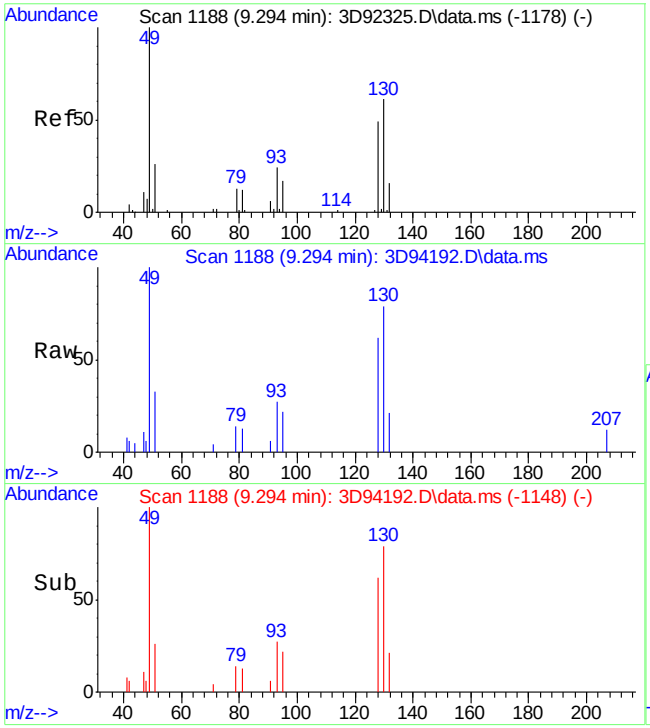


#45
methyl acrylate
Concen: 4.66 ug/L
RT: 9.043 min Scan# 1140
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 55 Resp: 7182

Ion	Ratio	Lower	Upper
55	100		
85	15.2	0.0	46.2
58	6.2	0.0	38.5

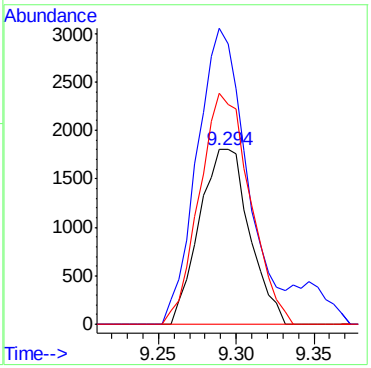


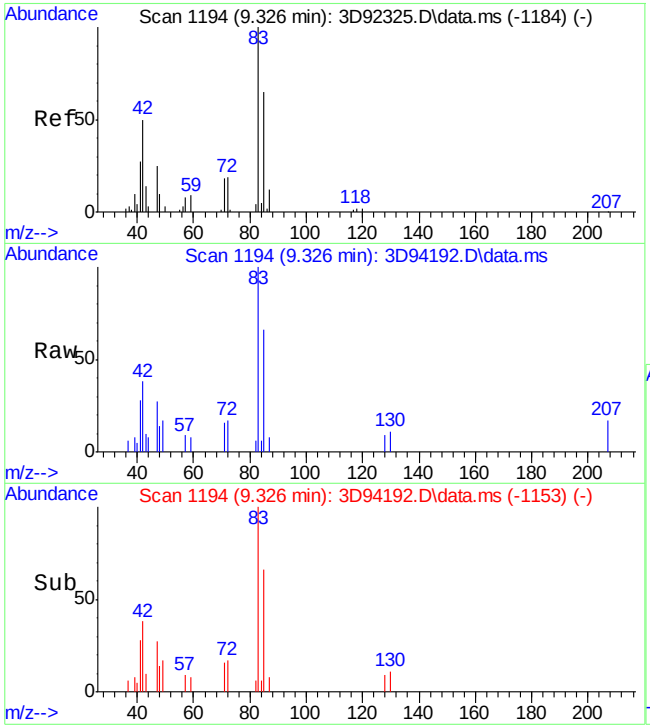


#46
bromochloromethane
Concen: 4.81 ug/L
RT: 9.294 min Scan# 1188
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:128 Resp: 4034

Ion	Ratio	Lower	Upper
128	100		
49	160.1	124.8	184.8
130	125.8	100.2	160.2

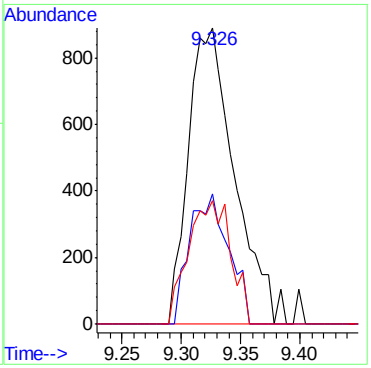




#47
tetrahydrofuran
Concen: 4.93 ug/L
RT: 9.326 min Scan# 1194
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 42 Resp: 2417

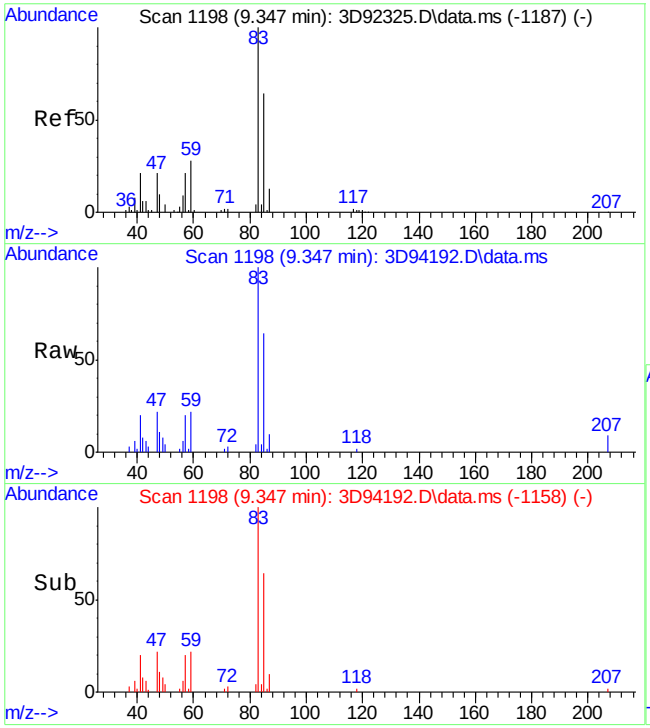
Ion	Ratio	Lower	Upper
42	100		
72	36.9	8.2	68.2
71	38.0	5.6	65.6



7.7.4

7

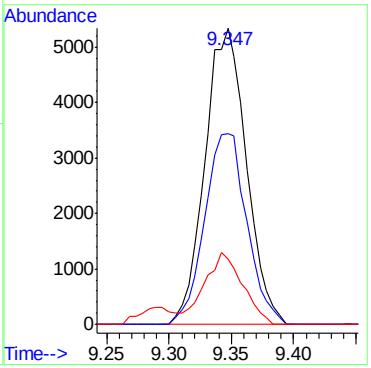
3D94192.D M3D4058.M Thu Dec 19 12:36:52 2013 3D Page 23

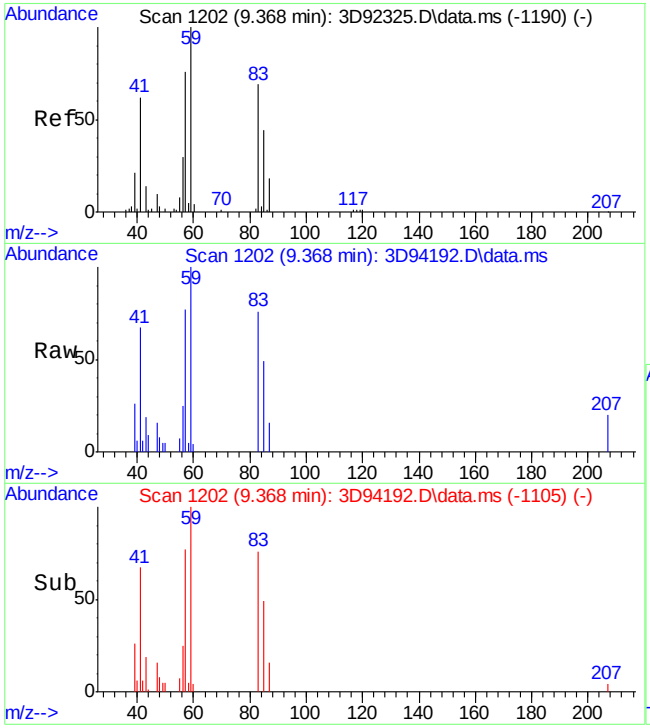


#48
chloroform
Concen: 5.03 ug/L
RT: 9.347 min Scan# 1198
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 83 Resp: 12325

Ion	Ratio	Lower	Upper
83	100		
85	64.5	33.8	93.8
47	22.0	0.0	52.3

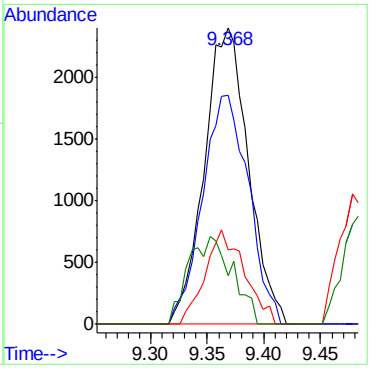


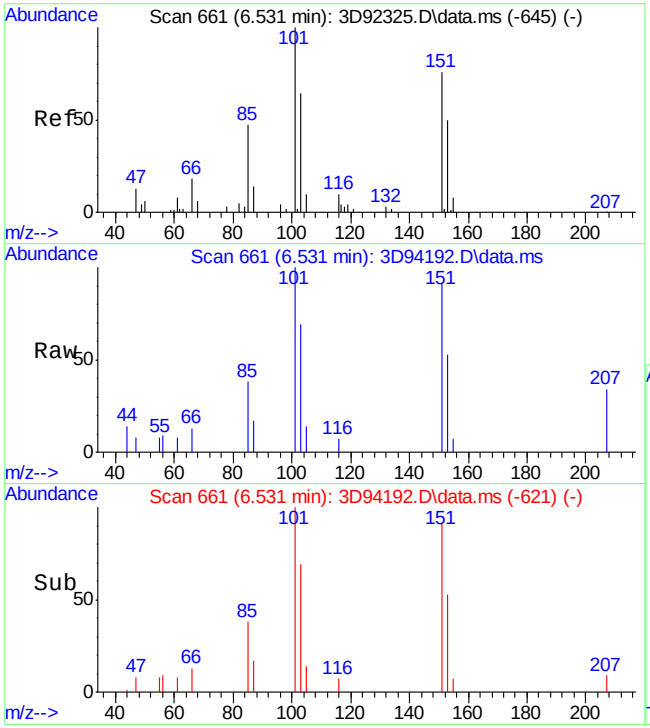


#49
Tert-Butyl Formate
Concen: 4.87 ug/L
RT: 9.368 min Scan# 1202
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 59 Resp: 6496

Ion	Ratio	Lower	Upper
59	100		
57	80.4	64.6	97.0
56	28.1	22.2	33.2
87	29.5	25.0	37.4

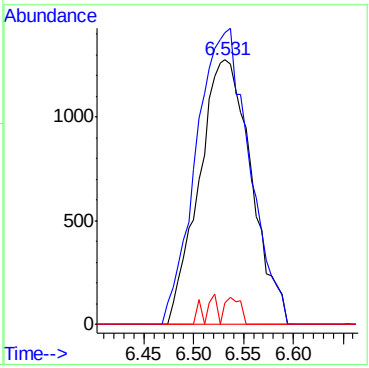


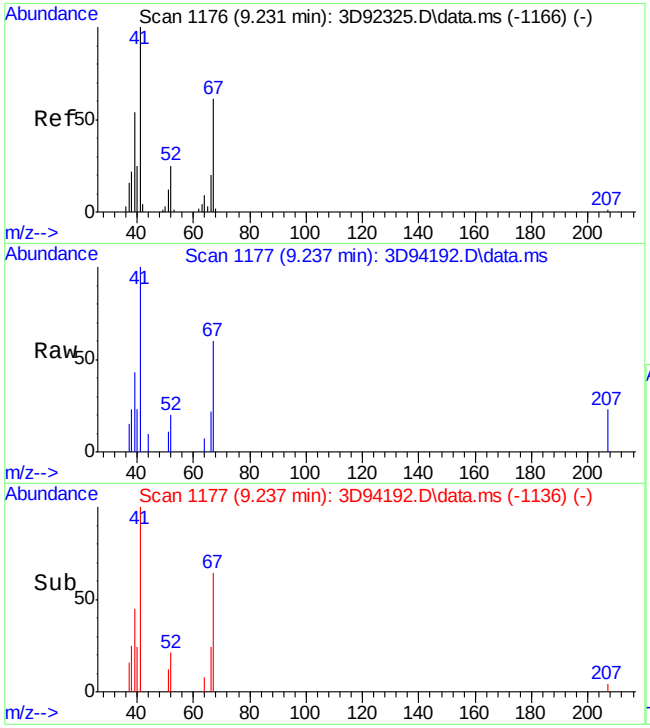


#52
freon 113
Concen: 5.02 ug/L
RT: 6.531 min Scan# 661
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:151 Resp: 4645

Ion	Ratio	Lower	Upper
151	100		
101	110.3	82.2	142.2
116	7.9	0.0	39.5

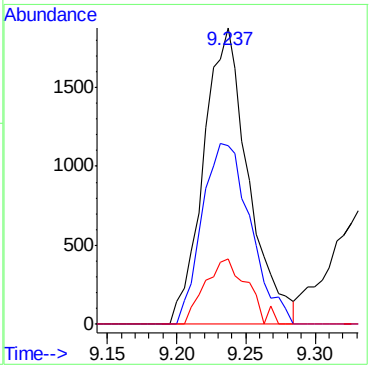


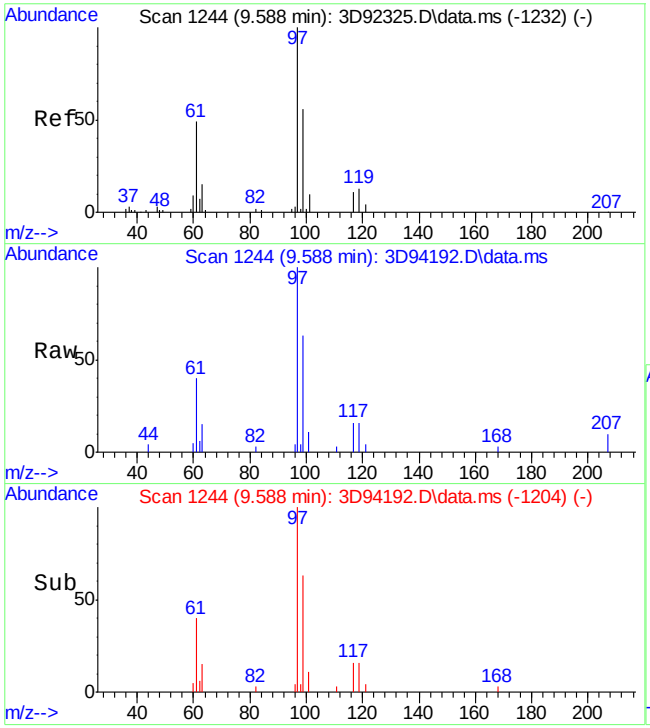


#53
methacrylonitrile
Concen: 4.74 ug/L
RT: 9.237 min Scan# 1177
Delta R.T. 0.017 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 41 Resp: 4244

Ion	Ratio	Lower	Upper
41	100		
67	60.2	38.3	98.3
66	22.2	0.0	52.9

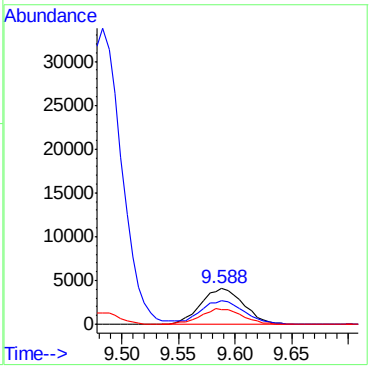


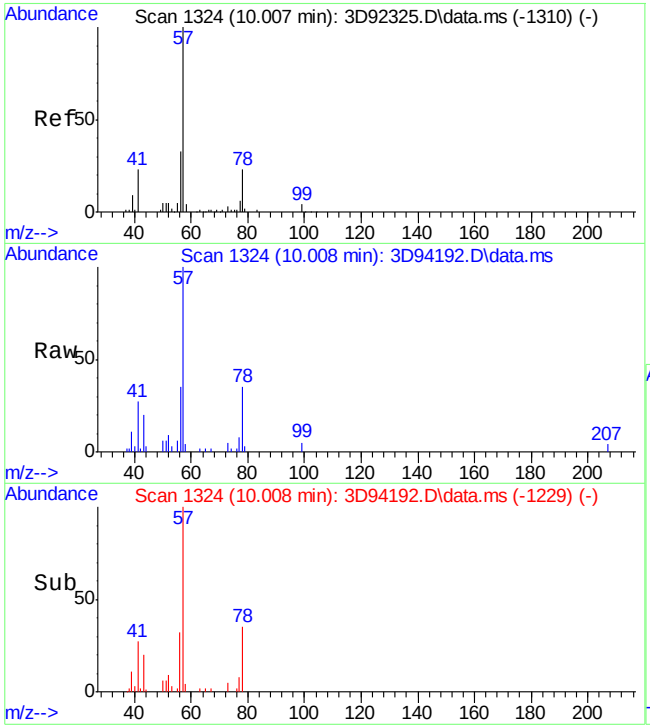


#54
1,1,1-trichloroethane
Concen: 5.09 ug/L
RT: 9.588 min Scan# 1244
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 97 Resp: 10769

Ion	Ratio	Lower	Upper
97	100		
99	63.5	36.0	96.0
61	40.3	11.8	71.8

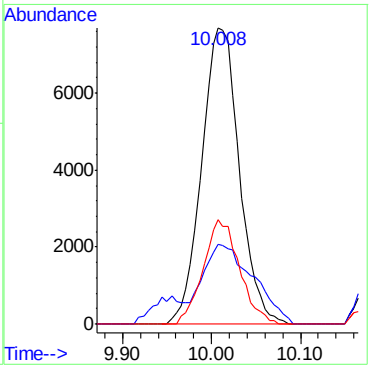


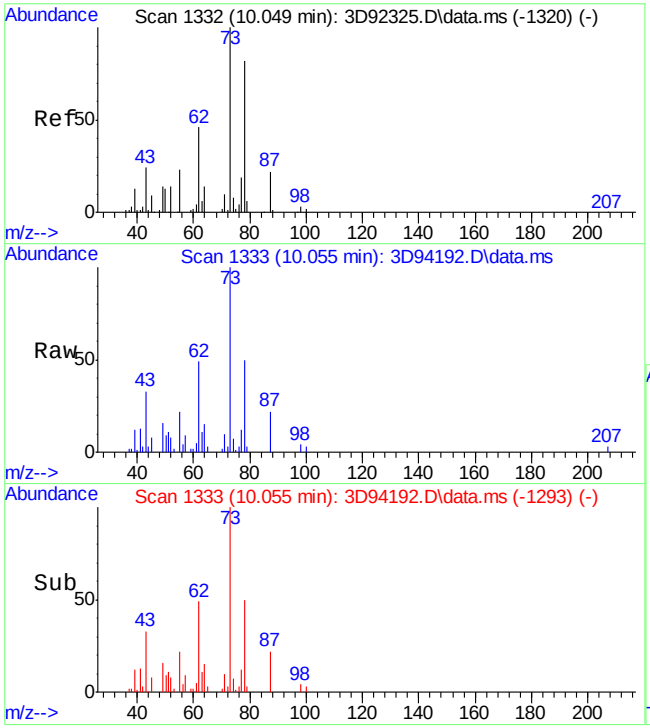


#56
2,2,4-Trimethylpentane
Concen: 4.81 ug/L
RT: 10.008 min Scan# 1324
Delta R.T. 0.001 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 57 Resp: 22578

Ion	Ratio	Lower	Upper
57	100		
41	36.4	4.5	64.5
56	33.9	4.3	64.3

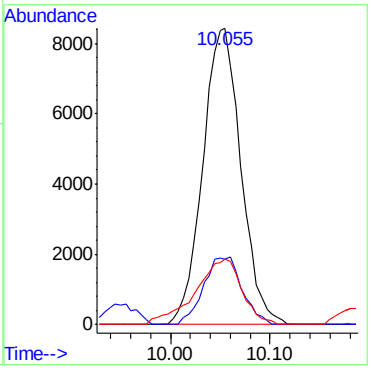


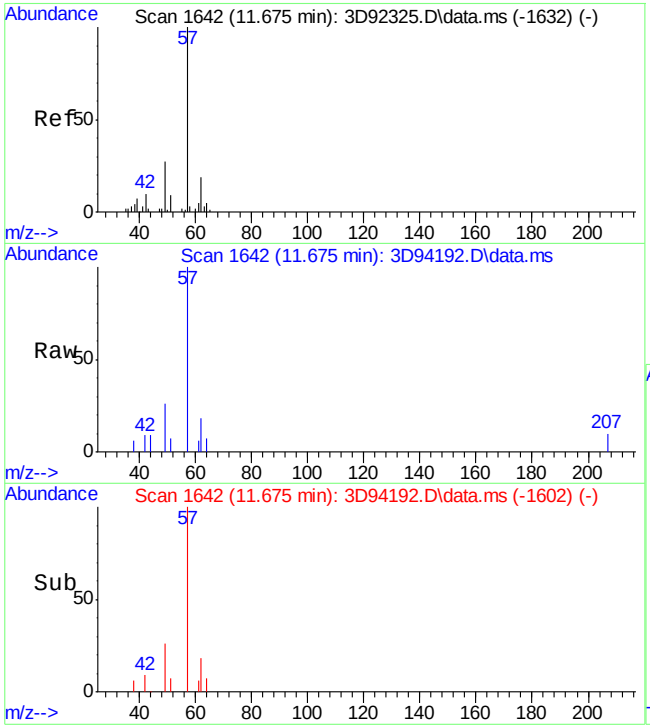


#57
tert-amyl methyl ether
Concen: 5.20 ug/L
RT: 10.055 min Scan# 1333
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 73 Resp: 22319

Ion	Ratio	Lower	Upper
73	100		
87	22.0	0.0	53.3
55	21.8	0.0	52.5

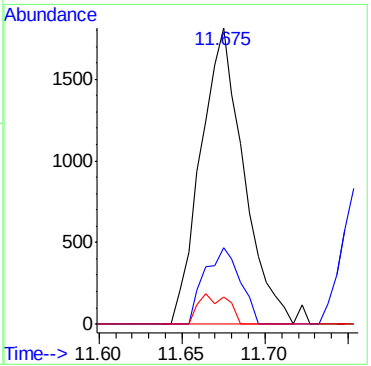


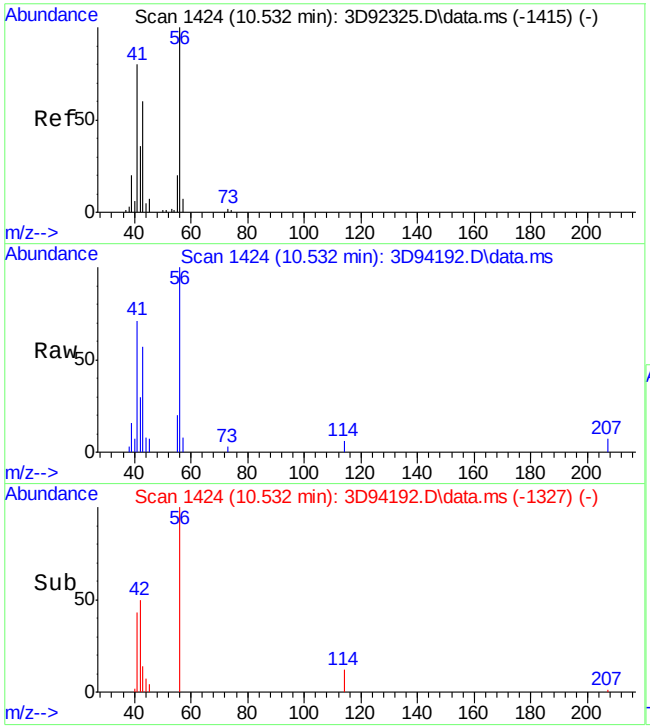


#59
epichlorohydrin
Concen: 25.47 ug/L
RT: 11.675 min Scan# 1642
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 57 Resp: 3260

Ion	Ratio	Lower	Upper
57	100		
49	25.8	0.0	55.9
42	9.0	0.0	37.7

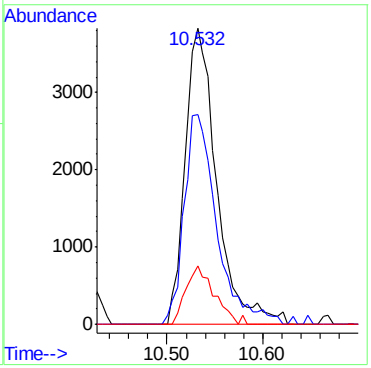


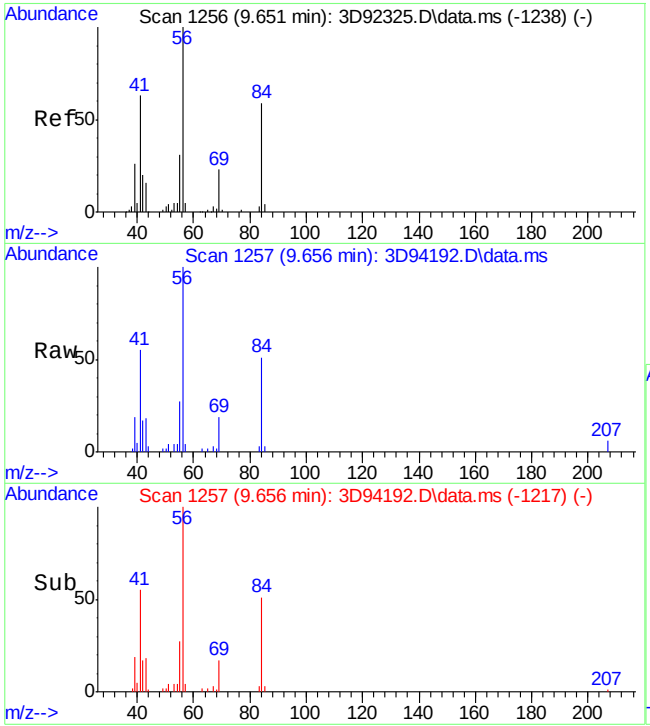


#60
n-butyl alcohol
Concen: 233.28 ug/L
RT: 10.532 min Scan# 1424
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 56 Resp: 8725

Ion	Ratio	Lower	Upper
56	100		
41	71.0	42.4	102.4
55	19.6	0.0	48.3

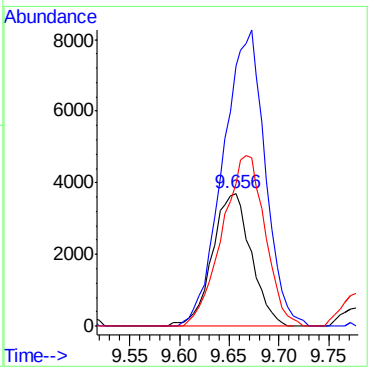


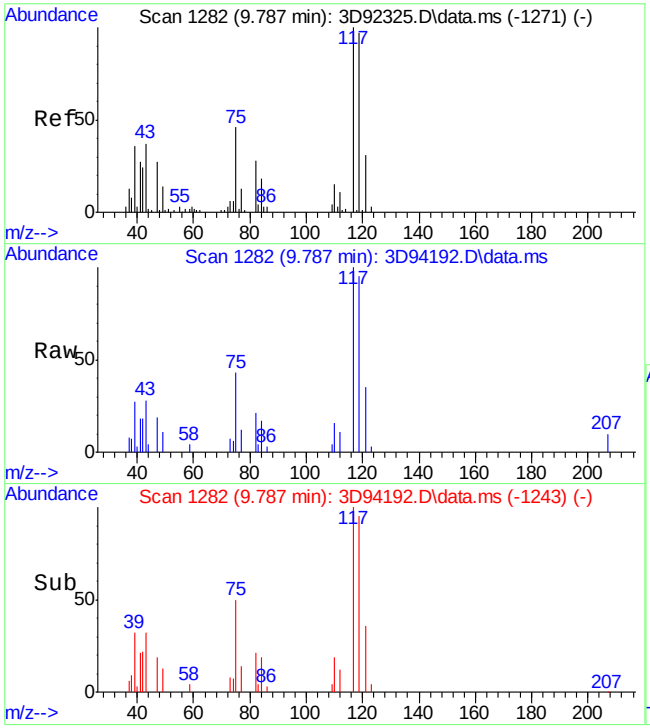


#61
cyclohexane
Concen: 5.03 ug/L
RT: 9.656 min Scan# 1257
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 84 Resp: 10023

Ion	Ratio	Lower	Upper
84	100		
56	243.8	210.2	270.2
41	142.2	108.6	168.6

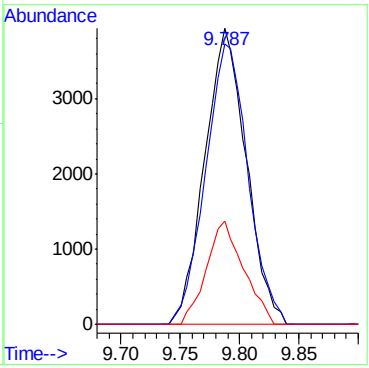


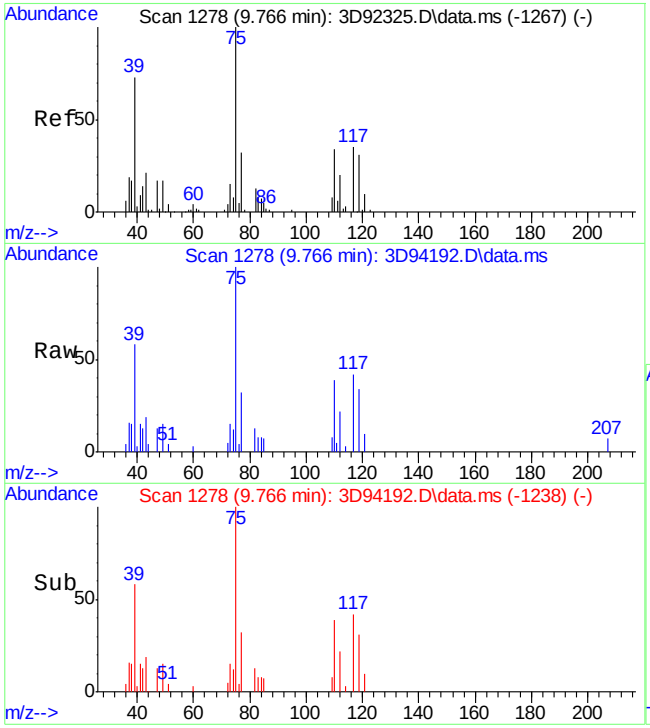


#62
carbon tetrachloride
Concen: 5.30 ug/L
RT: 9.787 min Scan# 1282
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:117 Resp: 9572

Ion	Ratio	Lower	Upper
117	100		
119	94.7	65.7	125.7
121	35.0	0.9	60.9

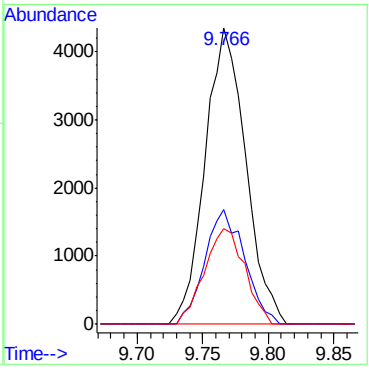




#63
1,1-dichloropropene
Concen: 5.14 ug/L
RT: 9.766 min Scan# 1278
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

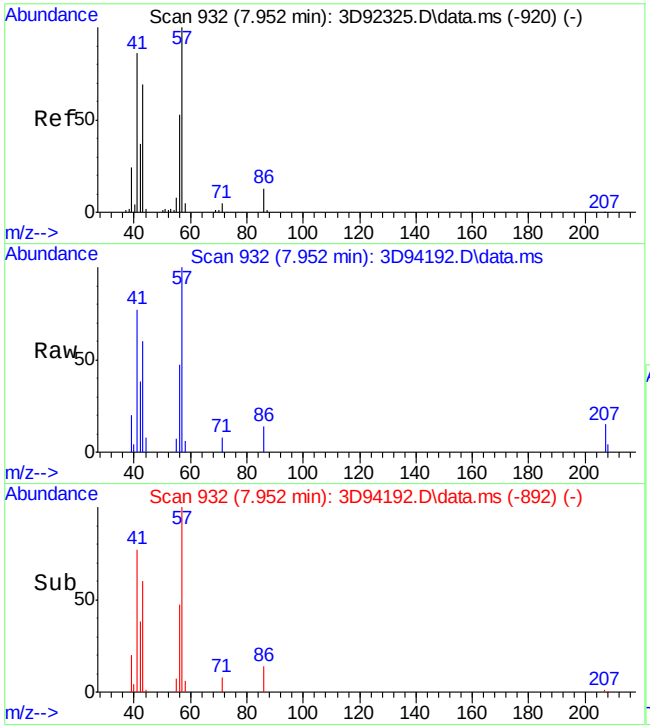
Tgt Ion: 75 Resp: 9327

Ion	Ratio	Lower	Upper
75	100		
110	38.7	7.6	67.6
77	32.0	1.7	61.7



7.7.4

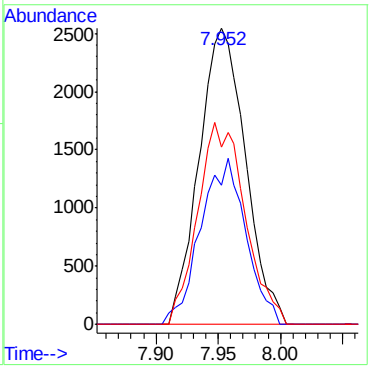
7

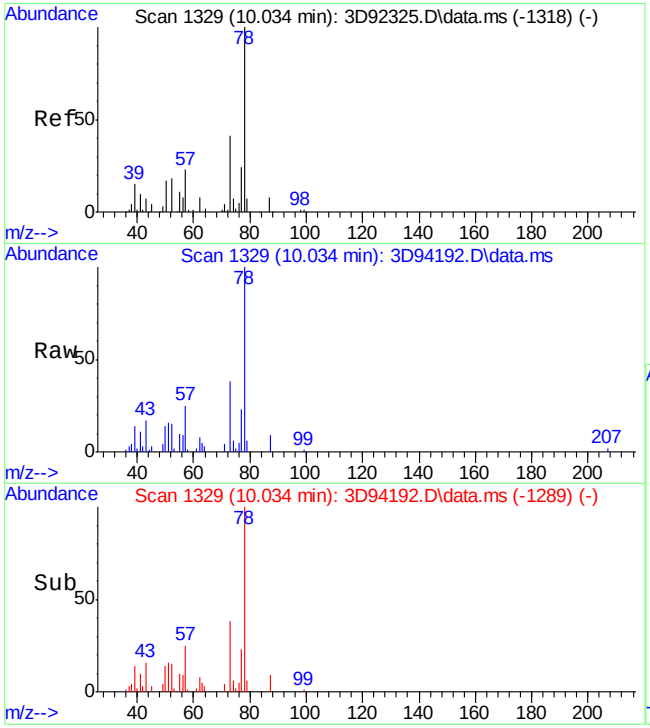


#64
hexane
Concen: 4.55 ug/L
RT: 7.952 min Scan# 932
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 57 Resp: 6594

Ion	Ratio	Lower	Upper
57	100		
56	47.2	22.9	82.9
43	60.0	35.4	95.4

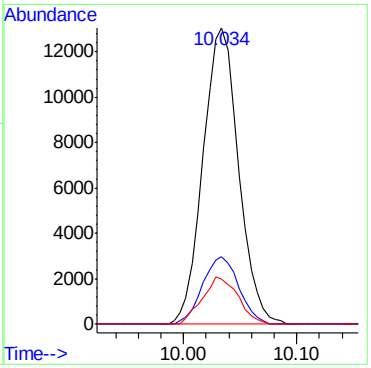


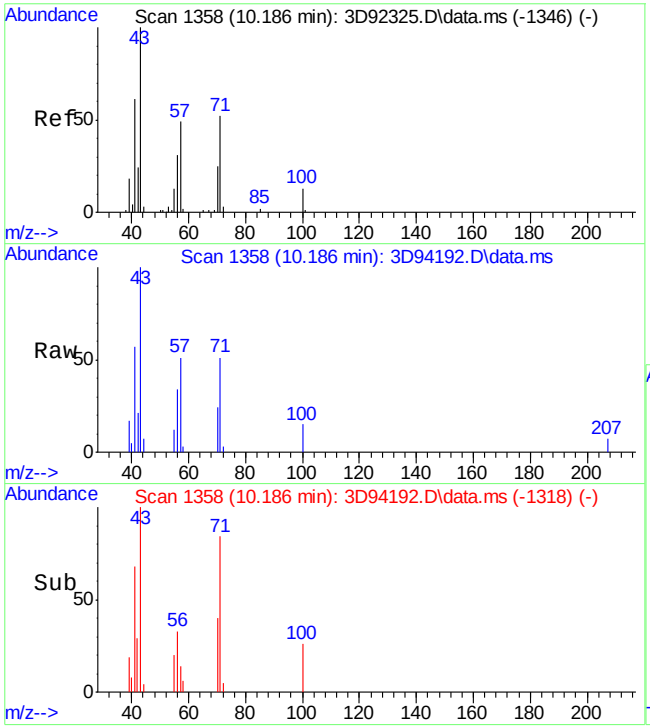


#65
benzene
Concen: 4.98 ug/L
RT: 10.034 min Scan# 1329
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 78 Resp: 28416

Ion	Ratio	Lower	Upper
78	100		
77	22.8	0.0	53.5
52	15.0	0.0	45.7

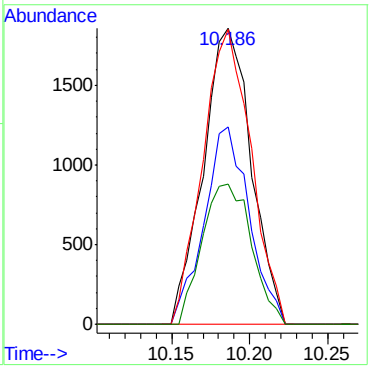


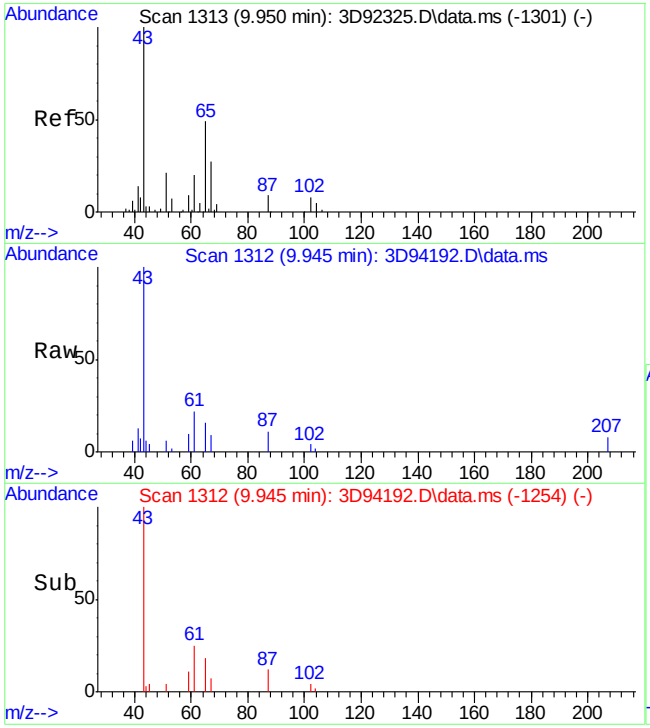


#66
heptane
Concen: 4.93 ug/L
RT: 10.186 min Scan# 1358
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 57 Resp: 3989

Ion	Ratio	Lower	Upper
57	100		
56	66.6	31.5	91.5
71	99.5	75.2	135.2
70	47.4	21.4	81.4

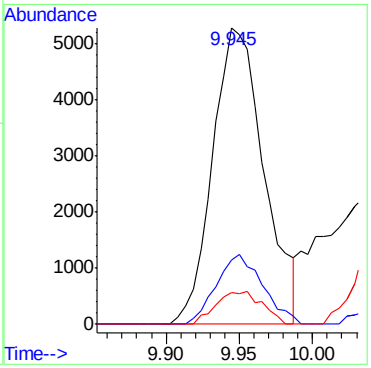


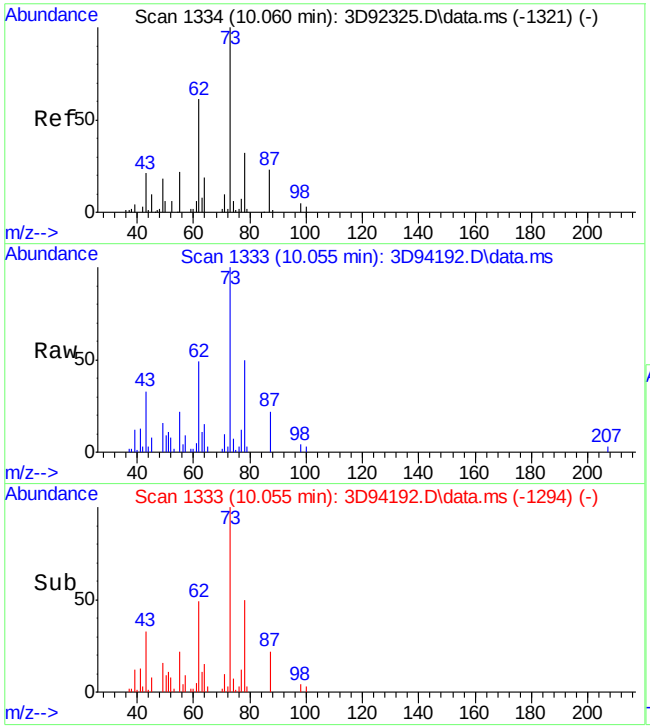


#67
isopropyl acetate
Concen: 5.00 ug/L
RT: 9.945 min Scan# 1312
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 43 Resp: 12845

Ion	Ratio	Lower	Upper
43	100		
61	21.1	0.0	52.4
87	9.9	0.0	40.7

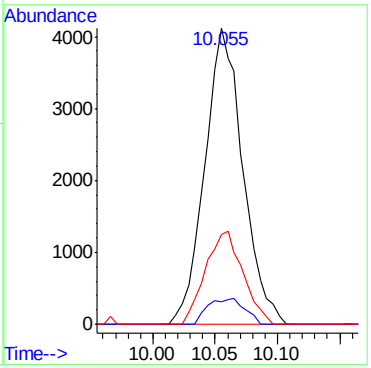


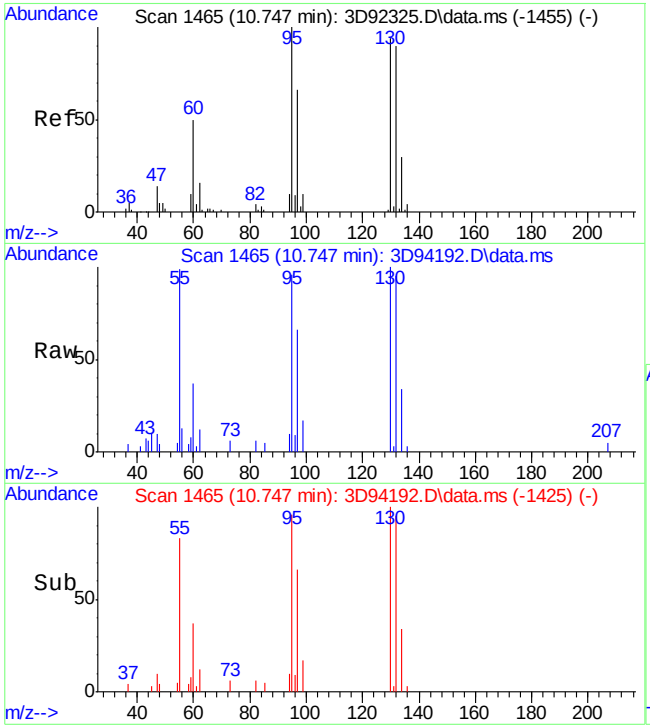


#68
1,2-dichloroethane
Concen: 5.01 ug/L
RT: 10.055 min Scan# 1333
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 62 Resp: 8743

Ion	Ratio	Lower	Upper
62	100		
98	7.6	0.0	40.3
64	30.4	2.1	62.1

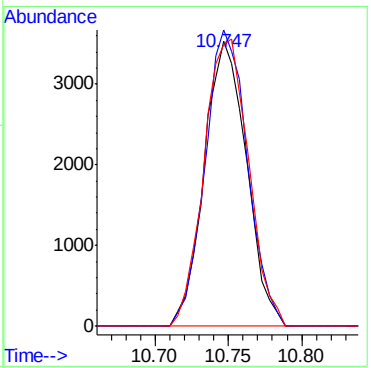


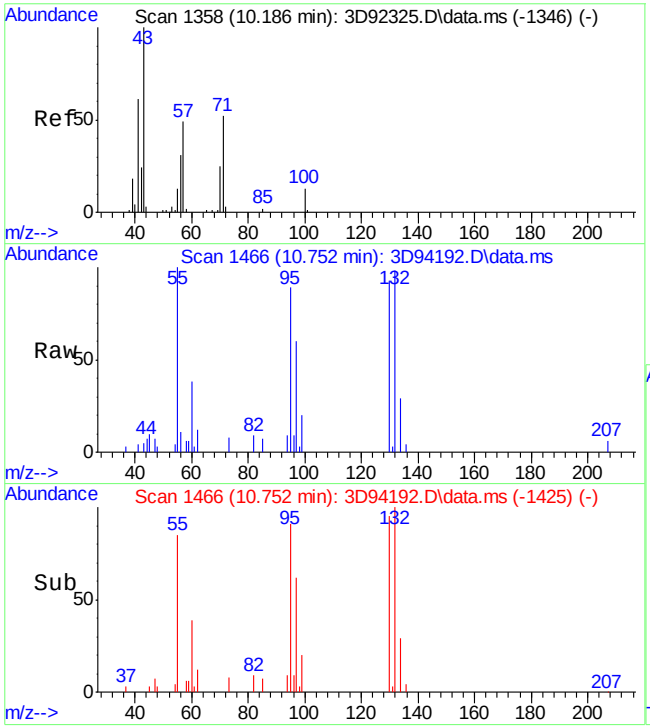


#69
trichloroethene
Concen: 5.08 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 95 Resp: 7060

Ion	Ratio	Lower	Upper
95	100		
130	103.9	78.2	138.2
132	98.8	75.0	135.0

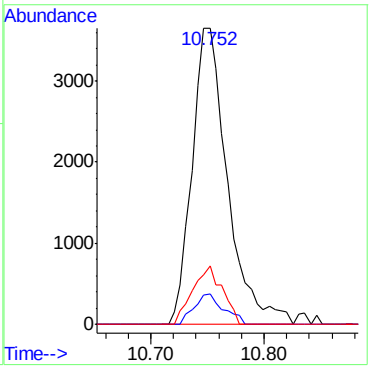


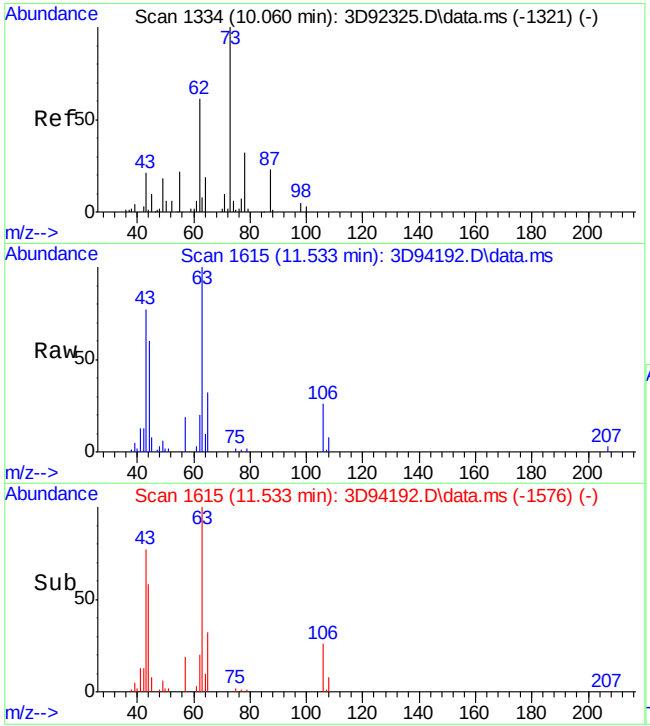


#70
ethyl acrylate
Concen: 4.86 ug/L
RT: 10.752 min Scan# 1466
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 55 Resp: 7911

Ion	Ratio	Lower	Upper
55	100		
45	8.5	7.6	11.4
99	16.4	13.3	19.9

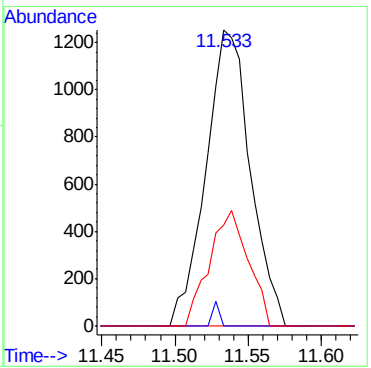


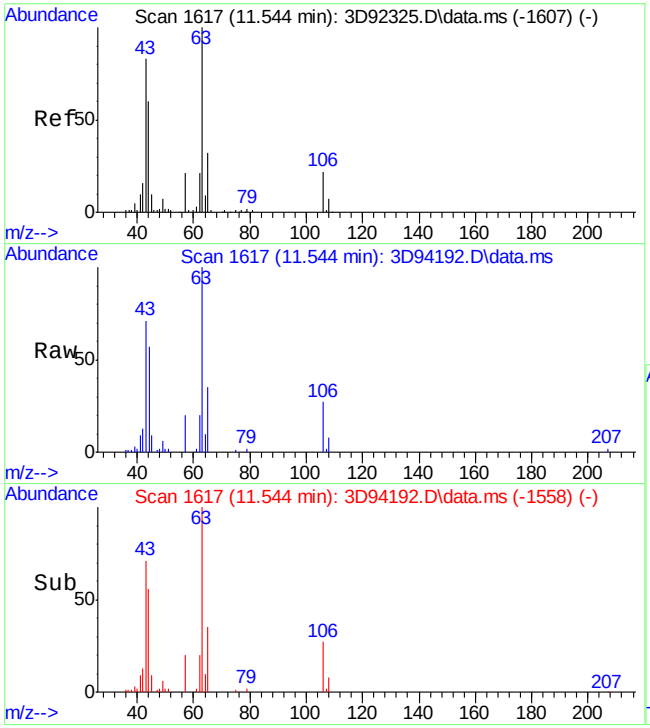


#72
2-nitropropane
Concen: 5.15 ug/L
RT: 11.533 min Scan# 1615
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 41 Resp: 2633

Ion	Ratio	Lower	Upper
41	100		
46	0.0	0.0	35.0
39	34.2	8.6	68.6

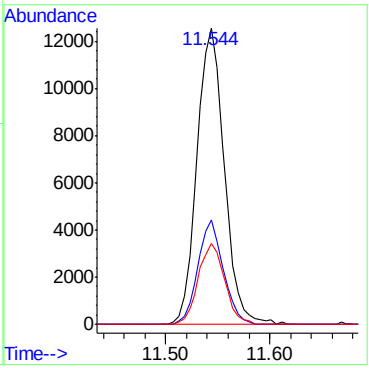


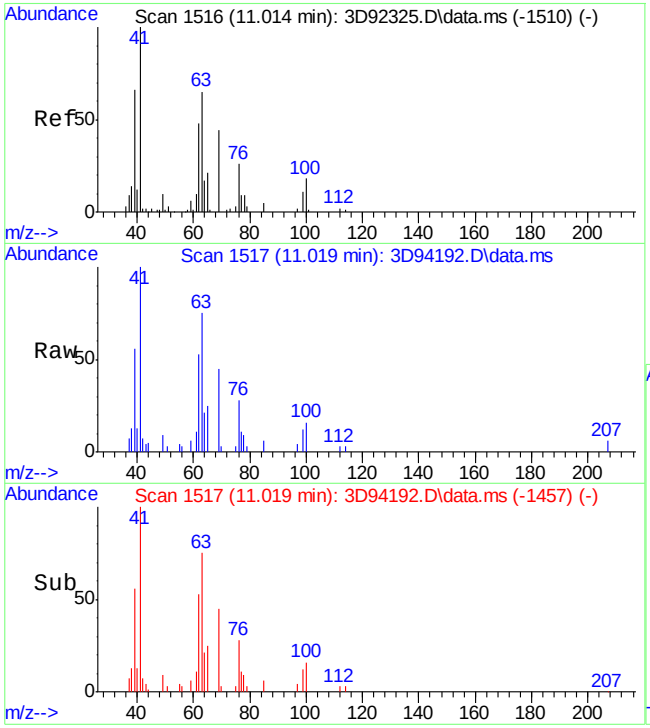


#73
2-chloroethyl vinyl ether
Concen: 25.31 ug/L
RT: 11.544 min Scan# 1617
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 63 Resp: 22796

Ion	Ratio	Lower	Upper
63	100		
65	35.3	2.2	62.2
106	27.3	0.0	56.3

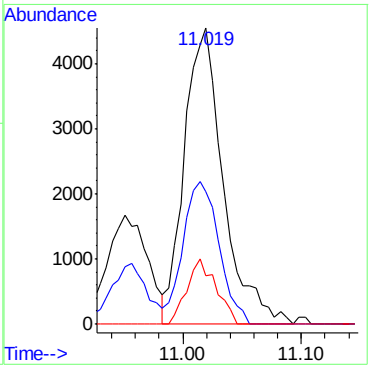


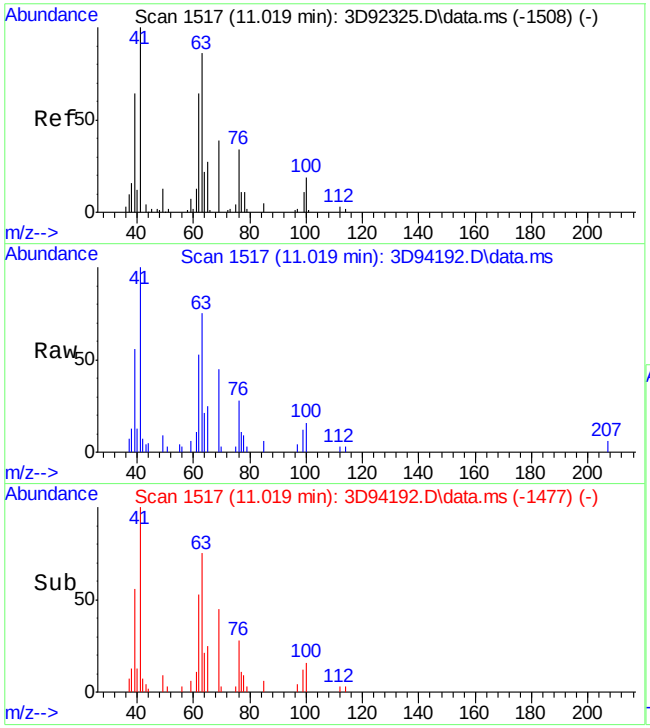


#74
methyl methacrylate
Concen: 4.92 ug/L
RT: 11.019 min Scan# 1517
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 41 Resp: 10363

Ion	Ratio	Lower	Upper
41	100		
69	44.6	19.9	79.9
100	16.2	0.0	51.2

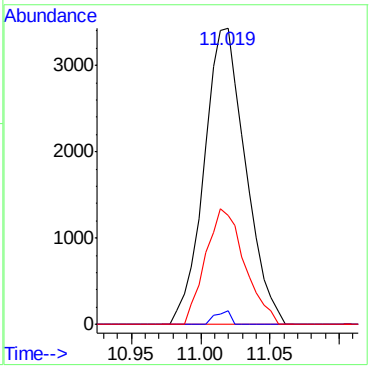


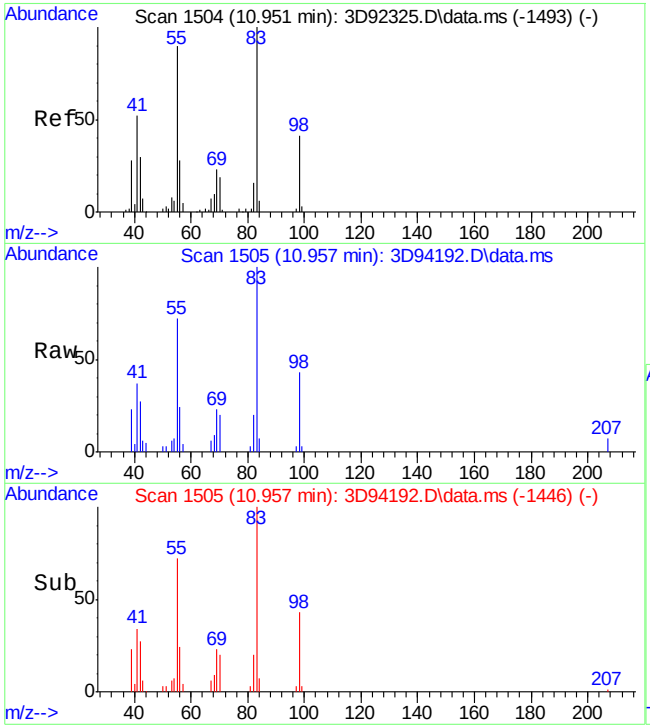


#75
1,2-dichloropropane
Concen: 4.92 ug/L
RT: 11.019 min Scan# 1517
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 63 Resp: 7164

Ion	Ratio	Lower	Upper
63	100		
112	4.5	0.0	33.7
76	36.7	6.0	66.0

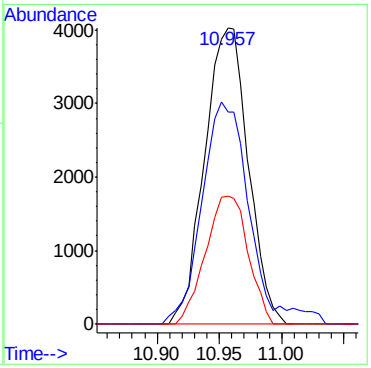




#76
methylcyclohexane
Concen: 4.94 ug/L
RT: 10.957 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 83 Resp: 9828

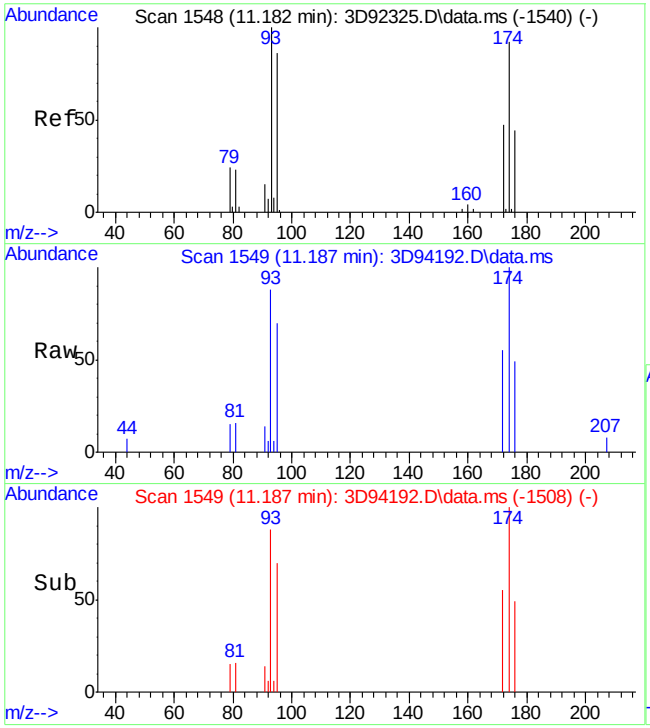
Ion	Ratio	Lower	Upper
83	100		
55	71.7	49.4	109.4
98	43.2	10.6	70.6



7.7.4

7

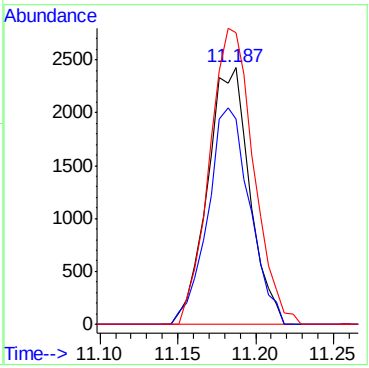
3D94192.D M3D4058.M Thu Dec 19 12:36:53 2013 3D Page 35

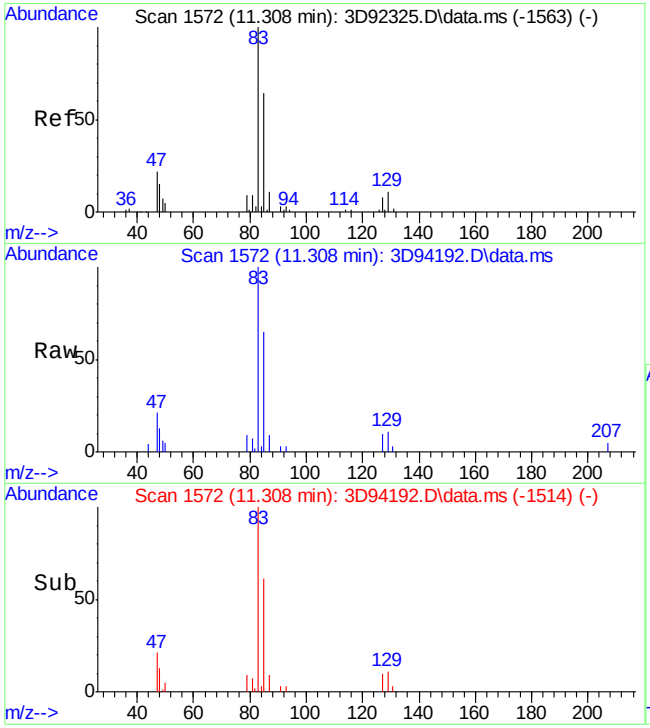


#77
dibromomethane
Concen: 5.05 ug/L
RT: 11.187 min Scan# 1549
Delta R.T. 0.016 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 93 Resp: 4569

Ion	Ratio	Lower	Upper
93	100		
95	79.6	53.0	113.0
174	113.3	88.8	148.8

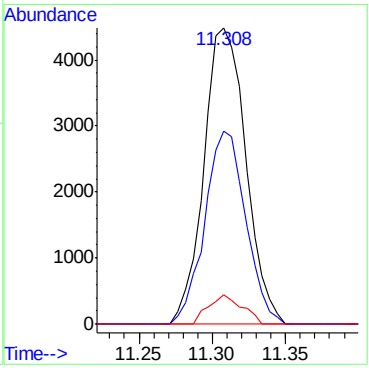


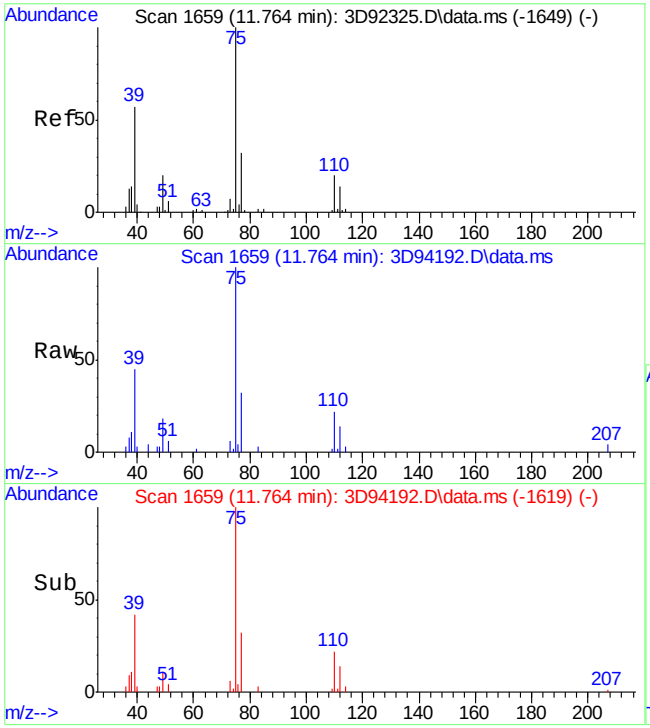


#78
bromodichloromethane
Concen: 4.93 ug/L
RT: 11.308 min Scan# 1572
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 83 Resp: 8899

Ion	Ratio	Lower	Upper
83	100		
85	65.1	34.7	94.7
127	9.7	0.0	39.6

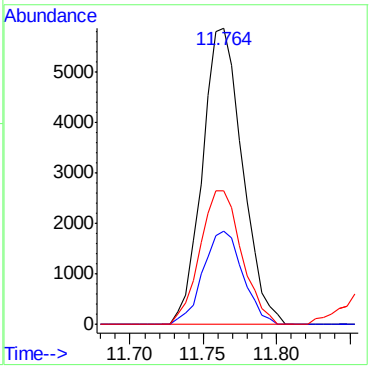


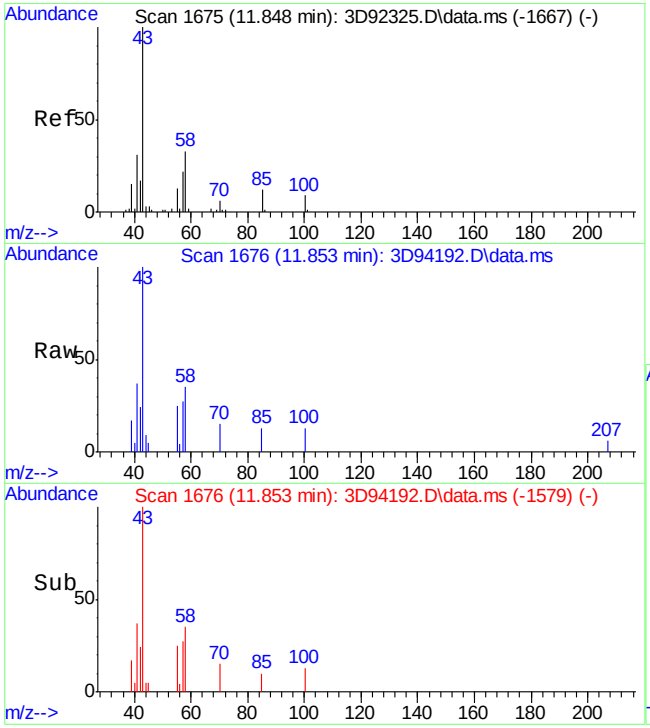


#79
cis-1,3-dichloropropene
Concen: 5.04 ug/L
RT: 11.764 min Scan# 1659
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 75 Resp: 11111

Ion	Ratio	Lower	Upper
75	100		
77	31.6	1.8	61.8
39	45.3	15.6	75.6

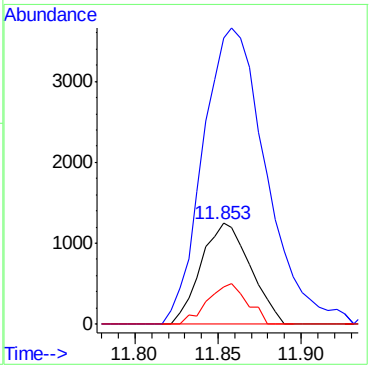


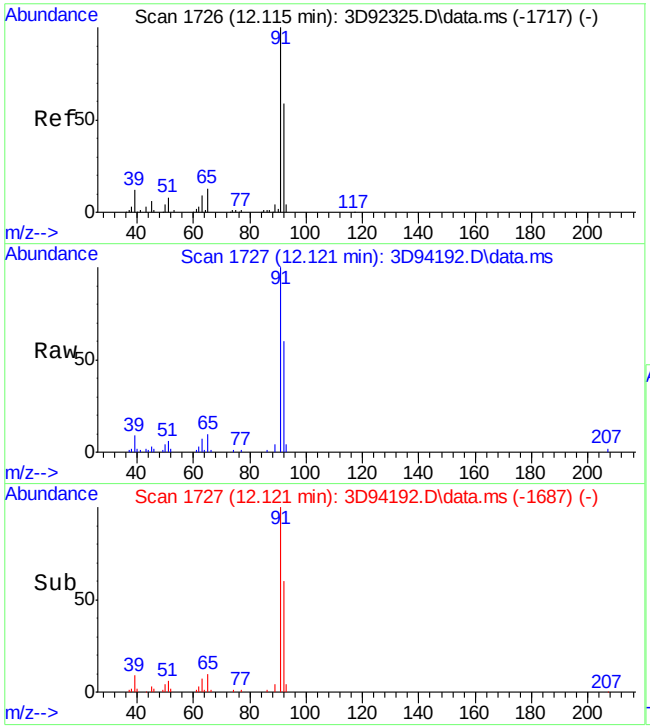


#81
4-methyl-2-pentanone
Concen: 4.98 ug/L
RT: 11.853 min Scan# 1676
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 58 Resp: 2565

Ion	Ratio	Lower	Upper
58	100		
43	378.2	333.6	393.6
100	32.2	1.6	61.6

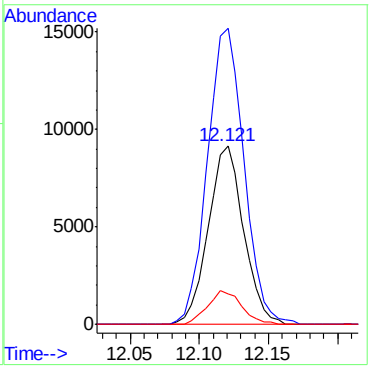


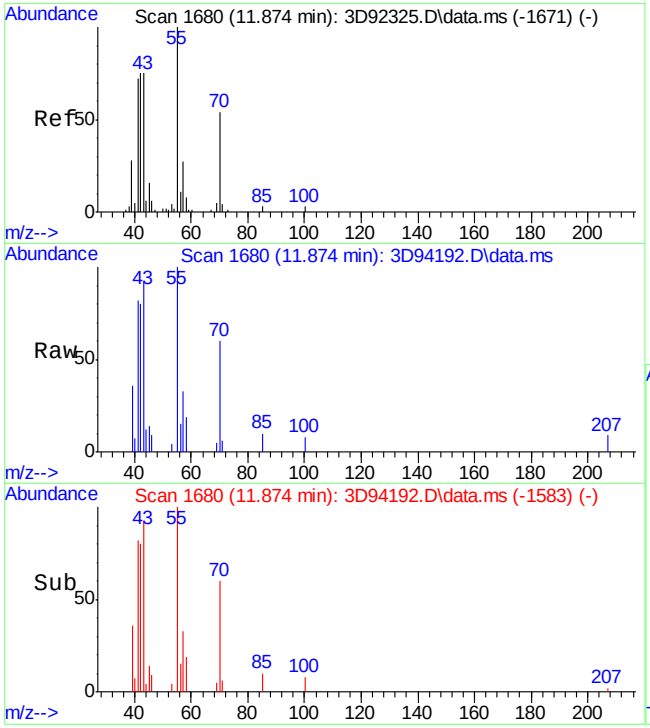


#82
toluene
Concen: 4.92 ug/L
RT: 12.121 min Scan# 1727
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 92 Resp: 16340

Ion	Ratio	Lower	Upper
92	100		
91	166.4	137.9	197.9
65	17.2	0.0	48.1

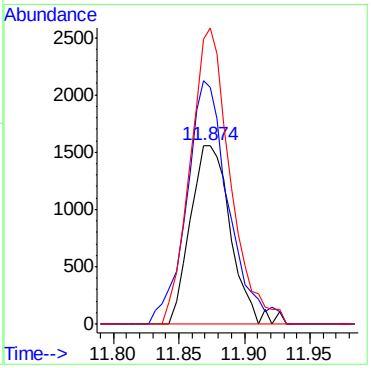


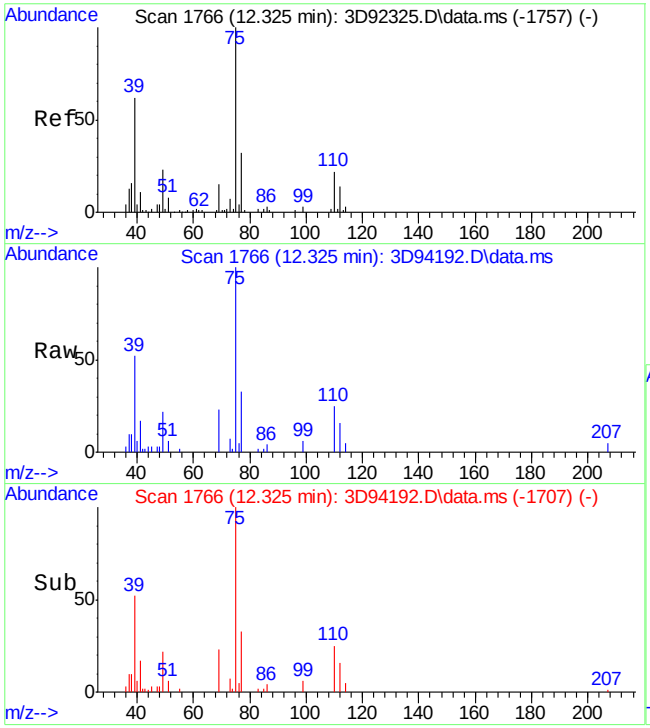


#83
3-methyl-1-butanol
Concen: 96.44 ug/L
RT: 11.874 min Scan# 1680
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 70 Resp: 3325

Ion	Ratio	Lower	Upper
70	100		
42	142.2	102.8	162.8
55	165.1	141.0	201.0

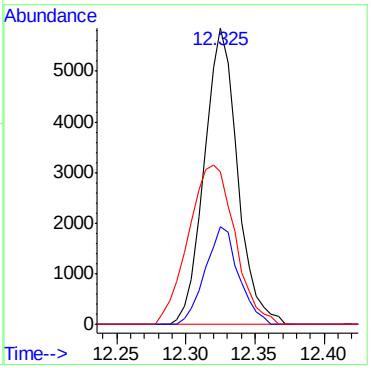


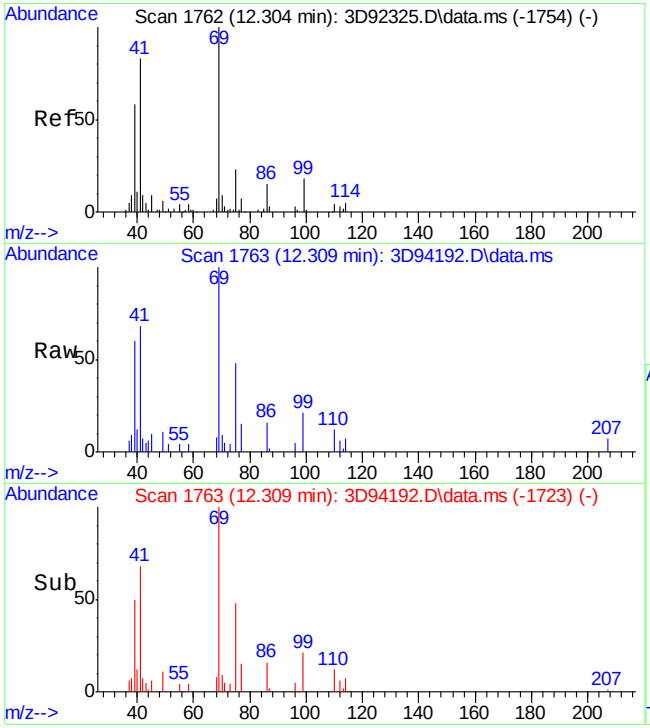


#84
trans-1,3-dichloropropene
Concen: 4.90 ug/L
RT: 12.325 min Scan# 1766
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 75 Resp: 9805

Ion	Ratio	Lower	Upper
75	100		
77	32.8	1.6	61.6
39	51.7	22.9	82.9

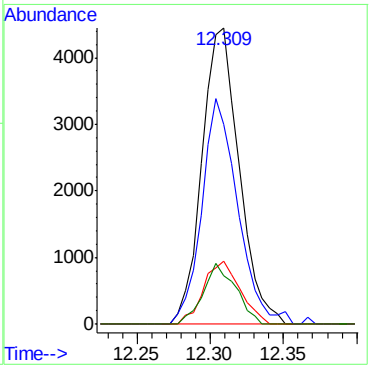


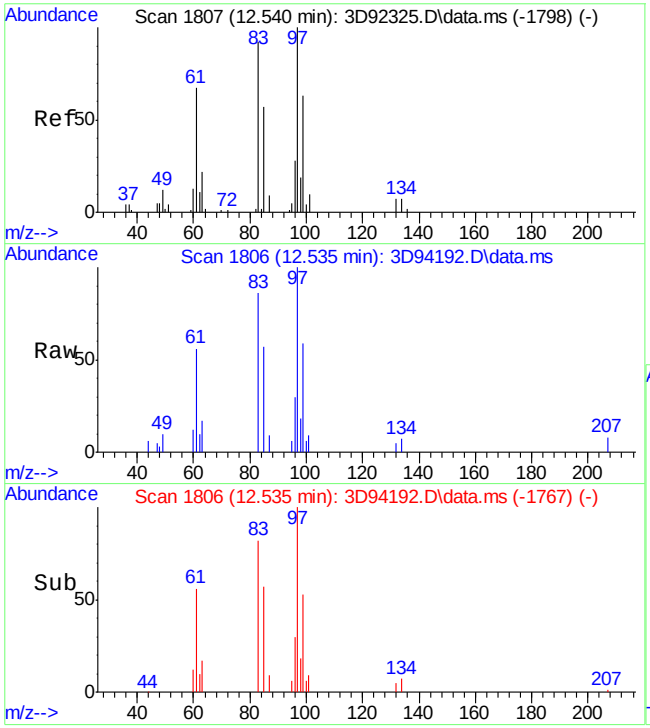


#85
ethyl methacrylate
Concen: 4.82 ug/L
RT: 12.309 min Scan# 1763
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 69 Resp: 7842

Ion	Ratio	Lower	Upper
69	100		
41	67.5	41.9	101.9
99	21.1	0.0	49.8
86	16.3	0.0	47.1

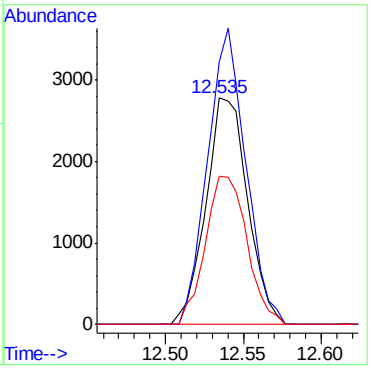


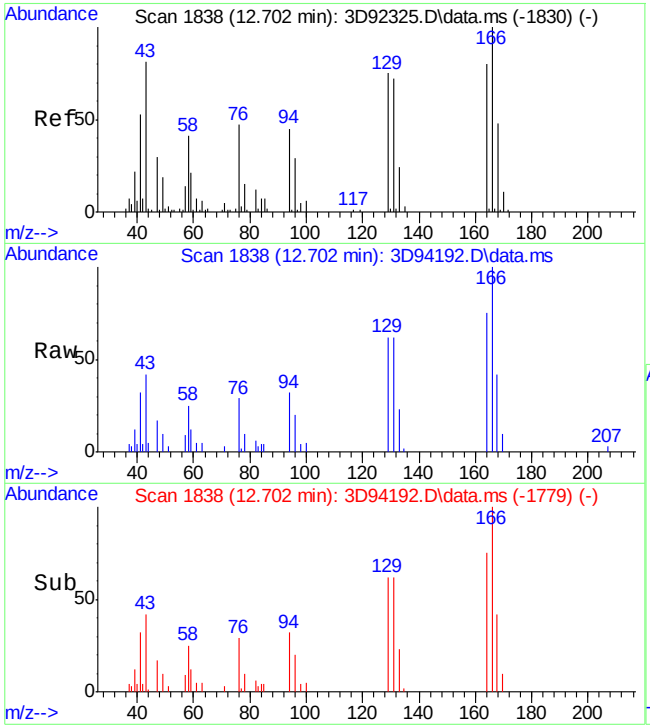


#86
1,1,2-trichloroethane
Concen: 5.04 ug/L
RT: 12.535 min Scan# 1806
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 83 Resp: 5175

Ion	Ratio	Lower	Upper
83	100		
97	116.0	87.9	147.9
85	65.8	33.9	93.9

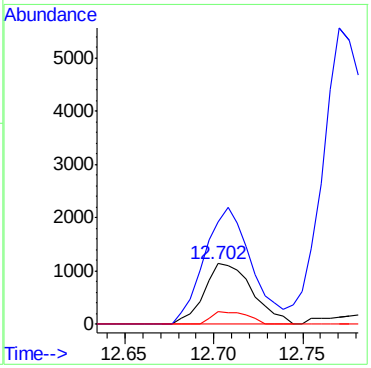




#87
2-hexanone
Concen: 4.60 ug/L
RT: 12.702 min Scan# 1838
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 58 Resp: 2160

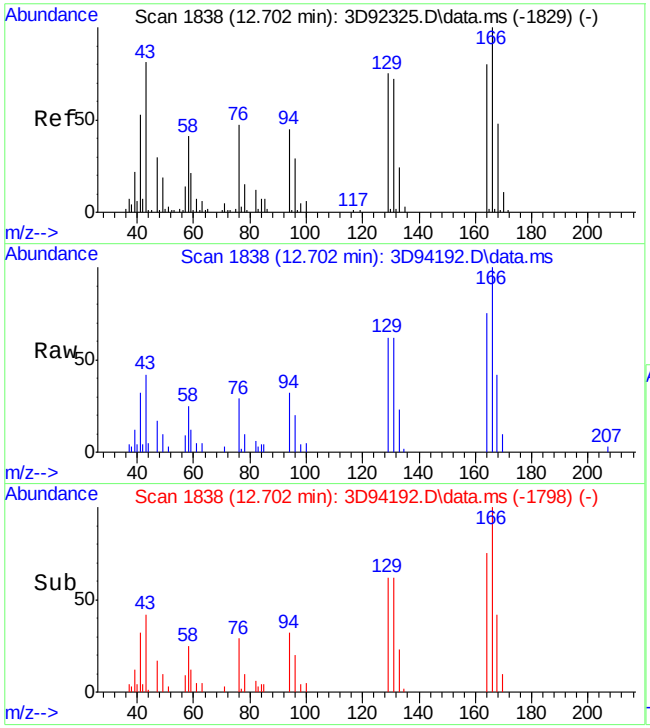
Ion	Ratio	Lower	Upper
58	100		
43	170.4	149.9	209.9
100	21.0	0.0	49.9



7.7.4

7

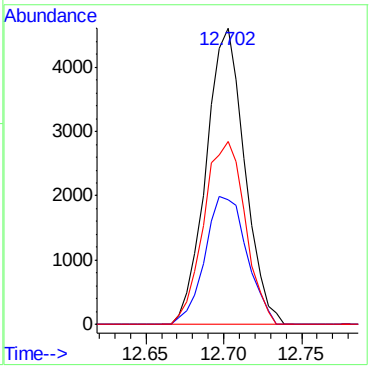
3D94192.D M3D4058.M Thu Dec 19 12:36:53 2013 3D Page 40

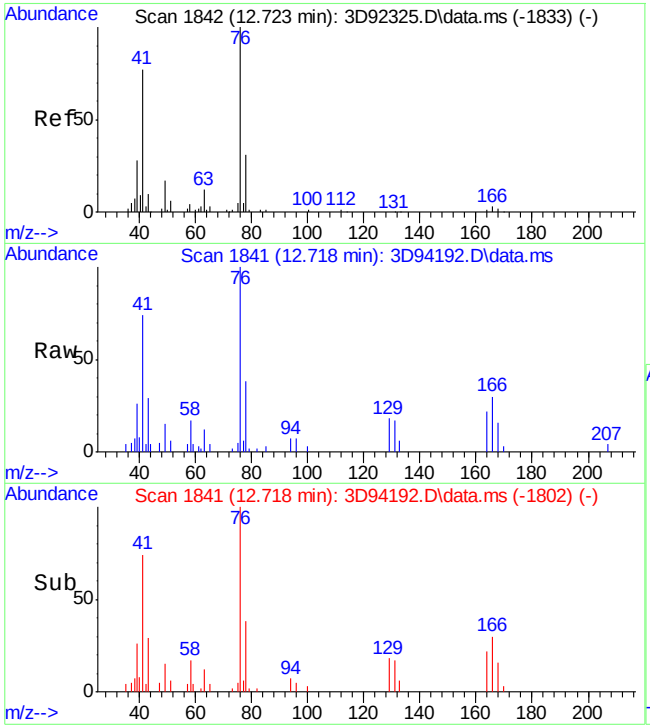


#89
tetrachloroethene
Concen: 5.11 ug/L
RT: 12.702 min Scan# 1838
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:166 Resp: 7934

Ion	Ratio	Lower	Upper
166	100		
168	42.0	18.1	78.1
129	61.6	38.2	98.2

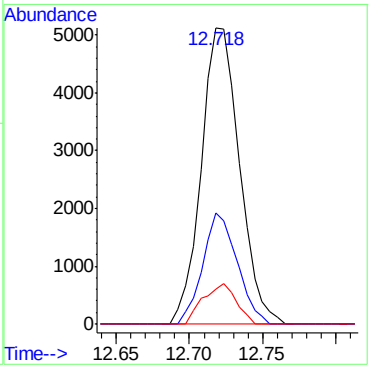


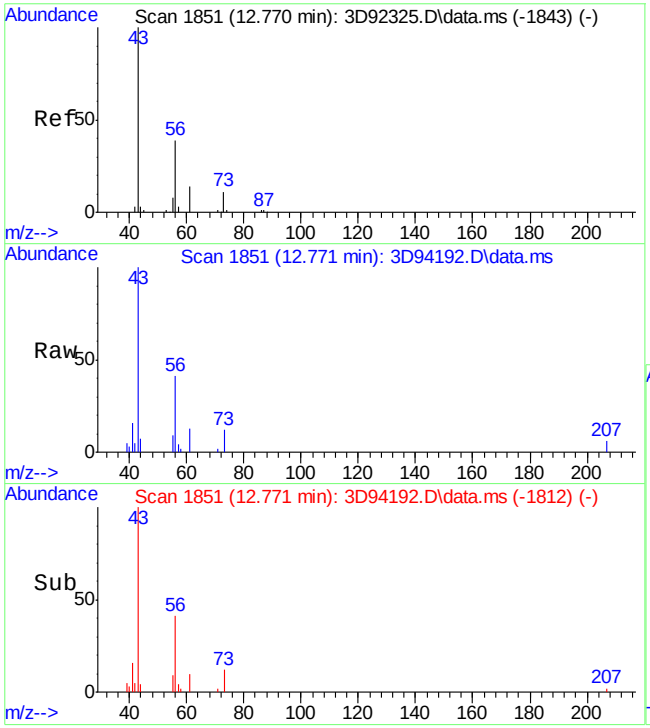


#90
1,3-dichloropropane
Concen: 4.92 ug/L
RT: 12.718 min Scan# 1841
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 76 Resp: 9279

Ion	Ratio	Lower	Upper
76	100		
78	37.6	4.3	64.3
63	11.9	0.0	41.6

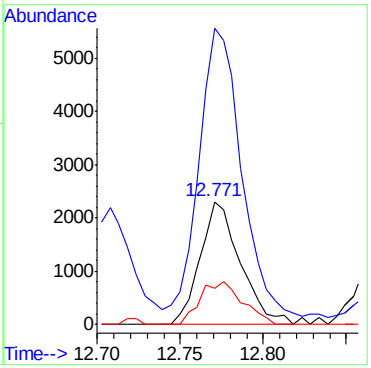


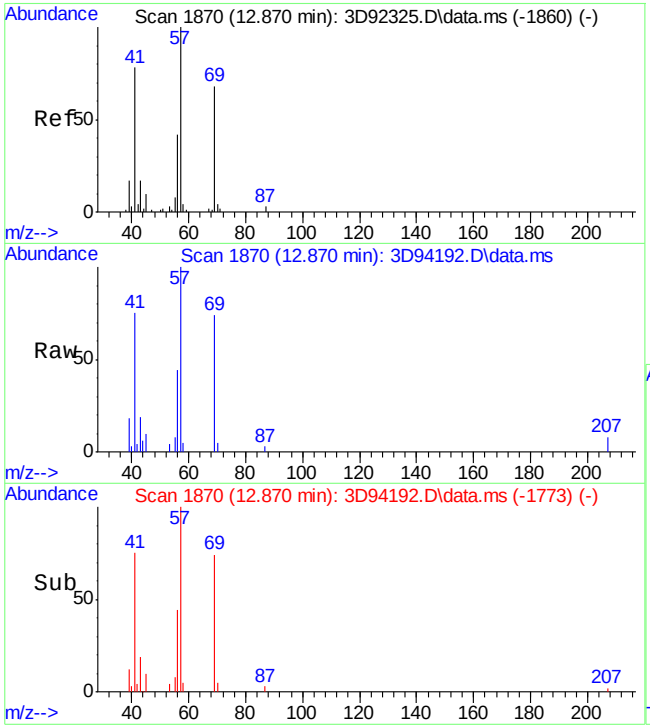


#91
butyl acetate
Concen: 4.76 ug/L
RT: 12.771 min Scan# 1851
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 56 Resp: 3864

Ion	Ratio	Lower	Upper
56	100		
43	232.1	209.3	269.3
73	29.2	2.1	62.1

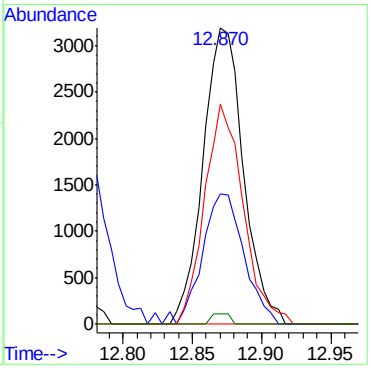


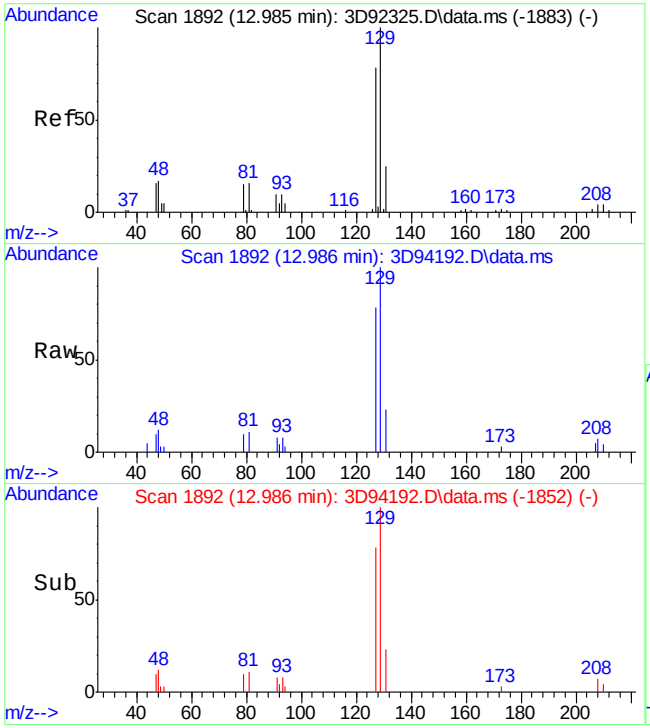


#92
3,3-Dimethyl-1-Butanol
Concen: 49.06 ug/L
RT: 12.870 min Scan# 1870
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 57 Resp: 6508

Ion	Ratio	Lower	Upper
57	100		
56	45.5	36.2	54.2
69	71.3	58.1	87.1
87	1.6	2.5	3.7#

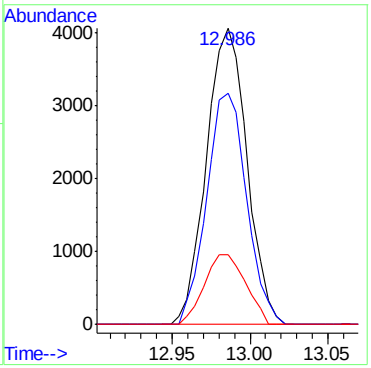


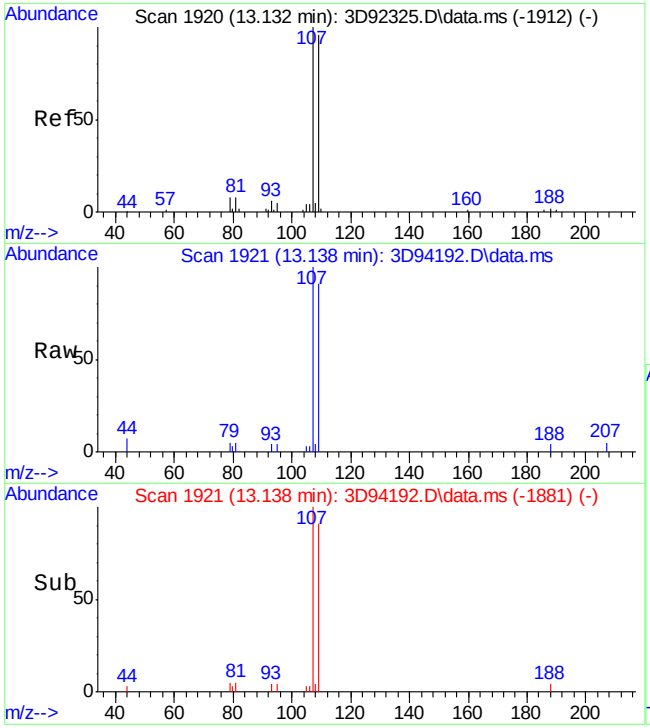


#93
dibromochloromethane
Concen: 4.95 ug/L
RT: 12.986 min Scan# 1892
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:129 Resp: 7363

Ion	Ratio	Lower	Upper
129	100		
127	78.0	44.5	104.5
131	23.4	0.0	53.5

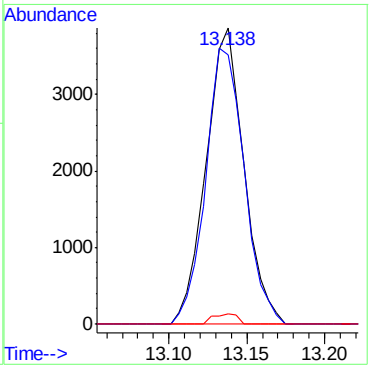


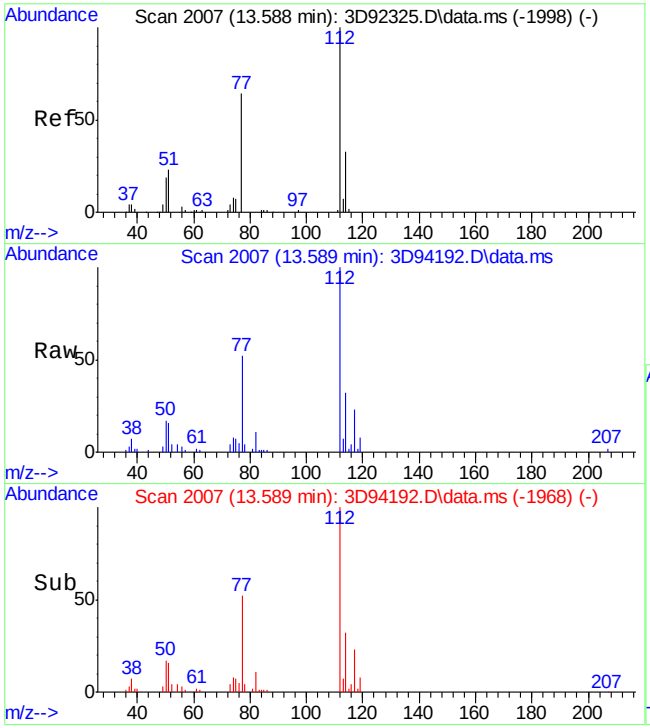


#94
1,2-dibromoethane
Concen: 5.05 ug/L
RT: 13.138 min Scan# 1921
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:107 Resp: 6518

Ion	Ratio	Lower	Upper
107	100		
109	90.8	62.5	122.5
188	3.6	0.0	33.2

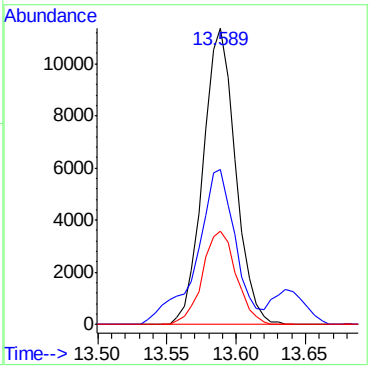


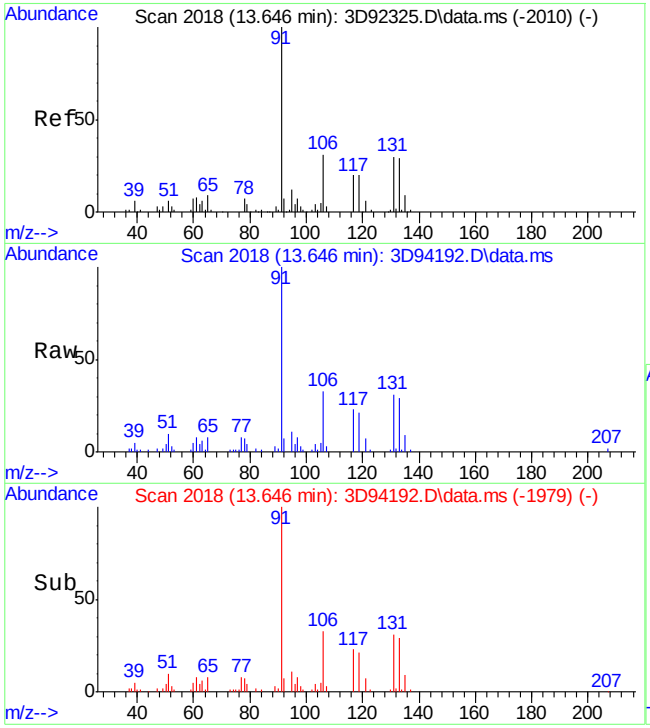


#96
chlorobenzene
Concen: 5.13 ug/L
RT: 13.589 min Scan# 2007
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:112 Resp: 18602

Ion	Ratio	Lower	Upper
112	100		
77	46.0	22.2	82.2
114	31.6	2.5	62.5

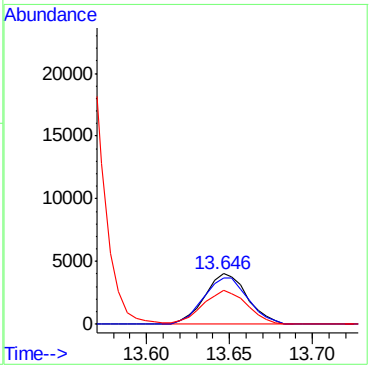


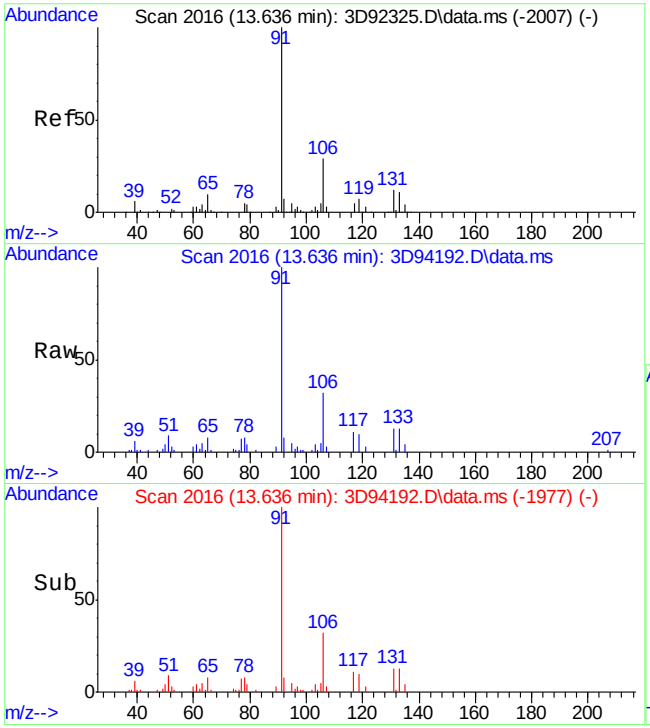


#97
1,1,1,2-tetrachloroethane
Concen: 4.89 ug/L
RT: 13.646 min Scan# 2018
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:131 Resp: 7177

Ion	Ratio	Lower	Upper
131	100		
133	91.5	66.0	126.0
119	67.0	38.3	98.3

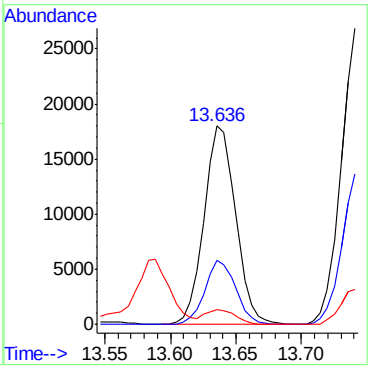


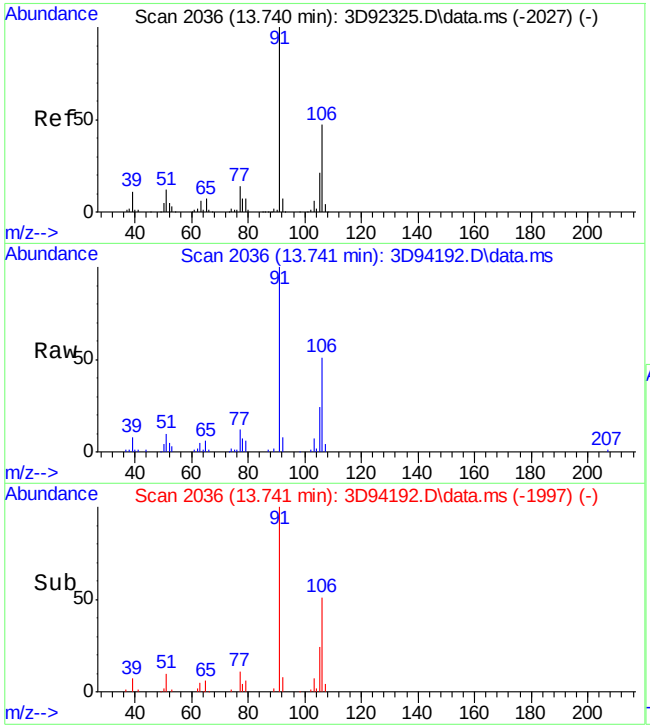


#98
ethylbenzene
Concen: 4.91 ug/L
RT: 13.636 min Scan# 2016
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 91 Resp: 29997

Ion	Ratio	Lower	Upper
91	100		
106	32.3	1.1	61.1
77	7.4	0.0	38.1

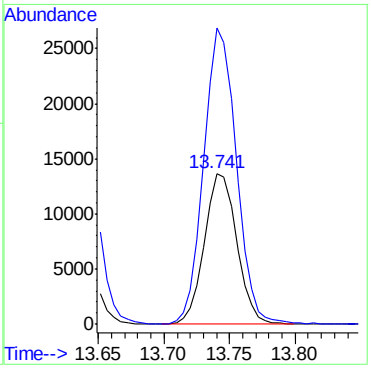


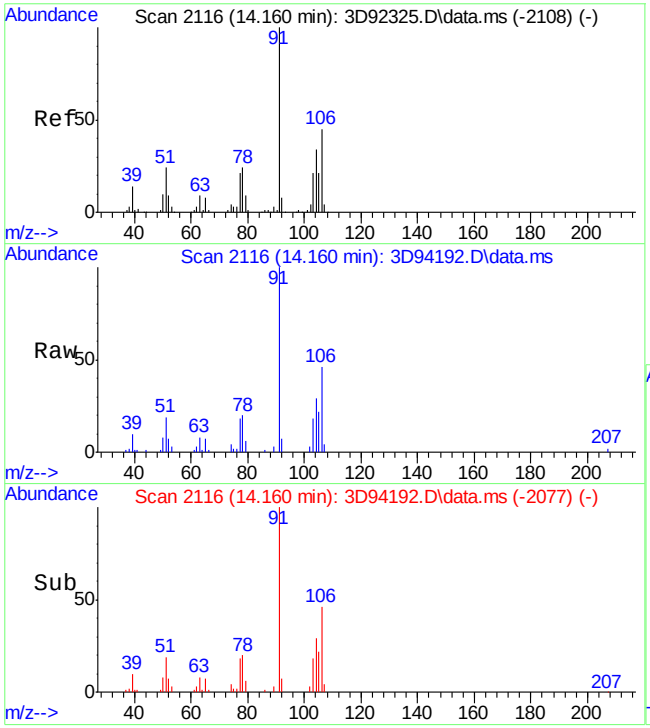


#99
m,p-xylene
Concen: 10.15 ug/L
RT: 13.741 min Scan# 2036
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:106 Resp: 23372

Ion	Ratio	Lower	Upper
106	100		
91	196.7	138.8	257.8

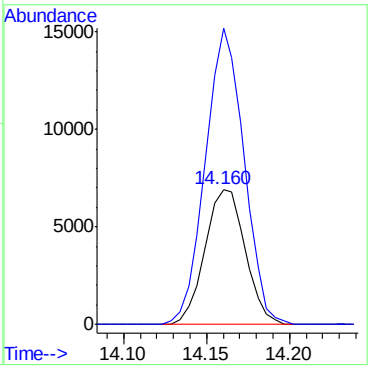


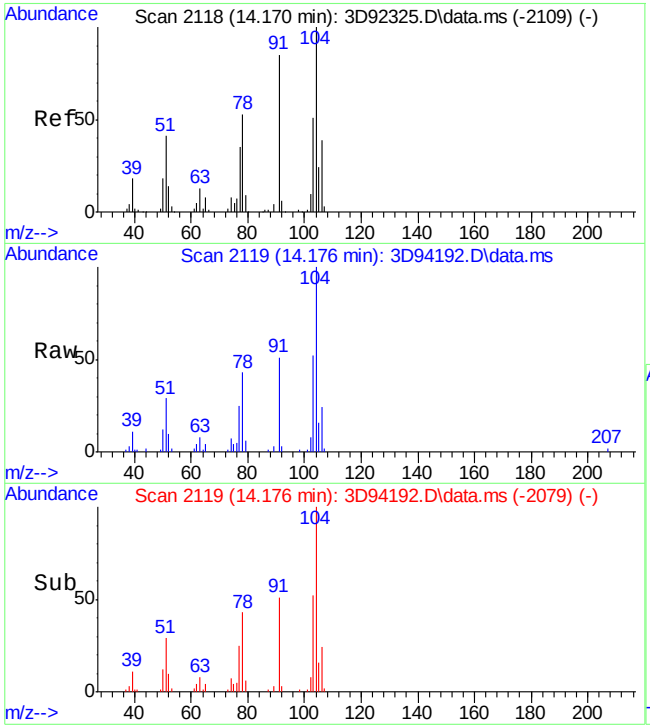


#100
o-xylene
Concen: 4.85 ug/L
RT: 14.160 min Scan# 2116
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:106 Resp: 11622

Ion	Ratio	Lower	Upper
106	100		
91	219.4	144.1	267.7

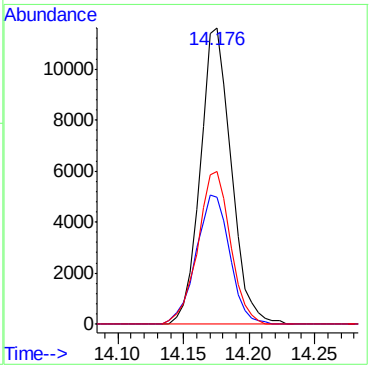




#101
styrene
Concen: 4.82 ug/L
RT: 14.176 min Scan# 2119
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:104 Resp: 19016

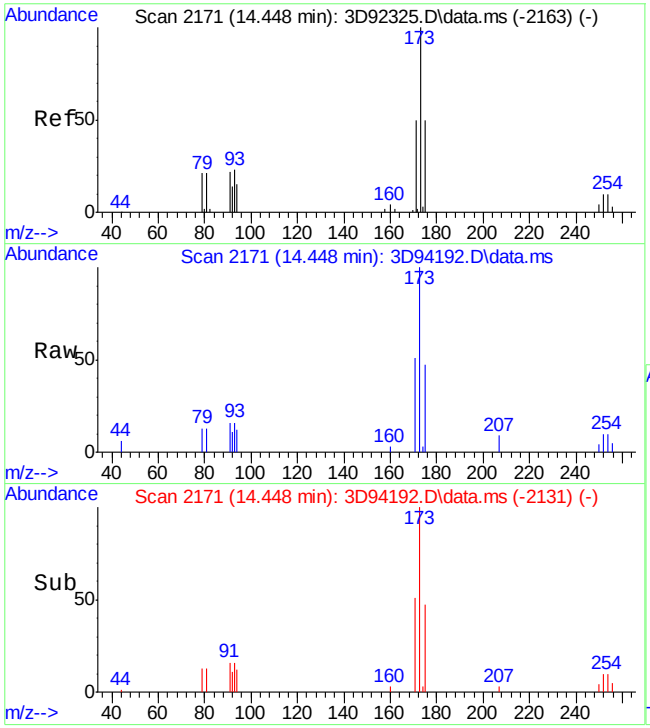
Ion	Ratio	Lower	Upper
104	100		
78	42.8	14.3	74.3
103	51.7	20.0	80.0



7.7.4

7

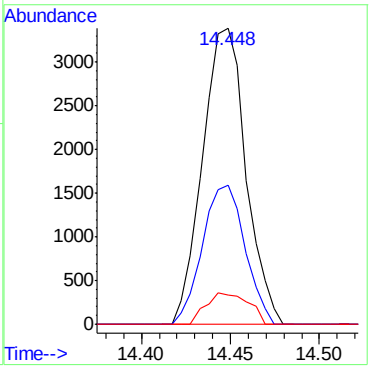
3D94192.D M3D4058.M Thu Dec 19 12:36:54 2013 3D Page 46

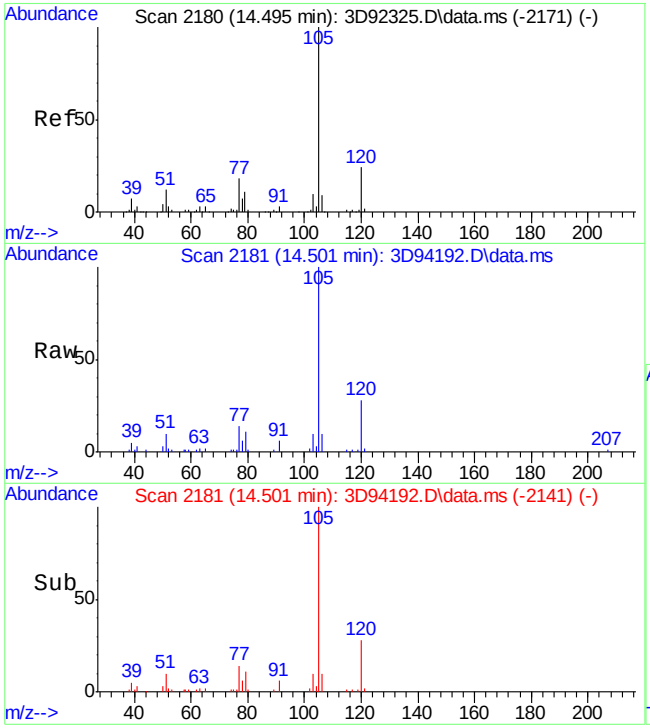


#103
bromoform
Concen: 5.02 ug/L
RT: 14.448 min Scan# 2171
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:173 Resp: 5740

Ion	Ratio	Lower	Upper
173	100		
175	46.9	19.4	79.4
254	10.0	0.0	40.9

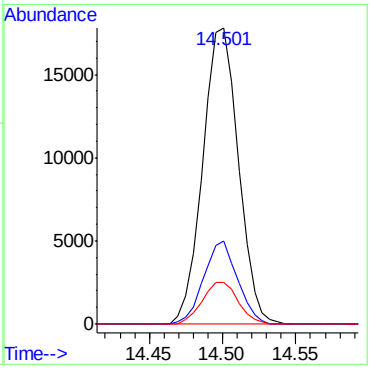


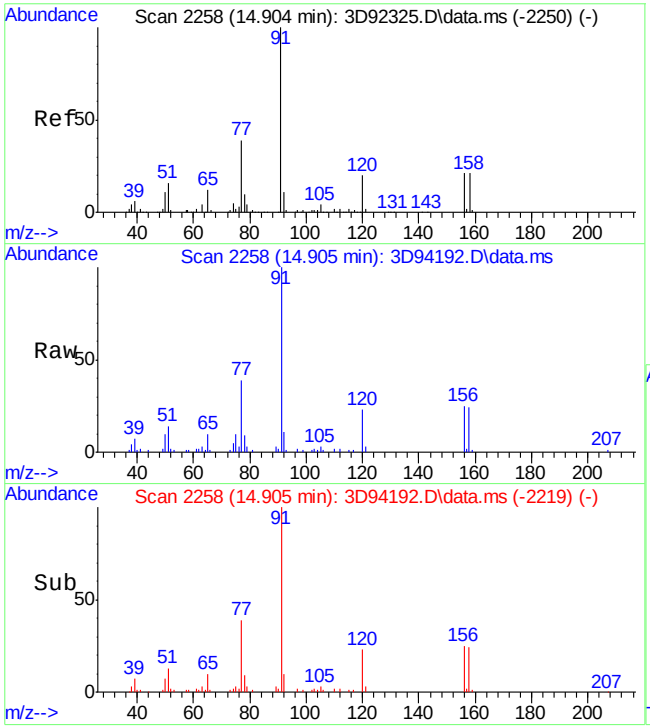


#105
isopropylbenzene
Concen: 4.95 ug/L
RT: 14.501 min Scan# 2181
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:105 Resp: 30059

Ion	Ratio	Lower	Upper
105	100		
120	28.0	0.0	55.5
77	14.2	0.0	44.1

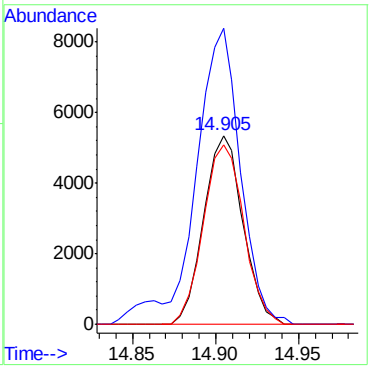


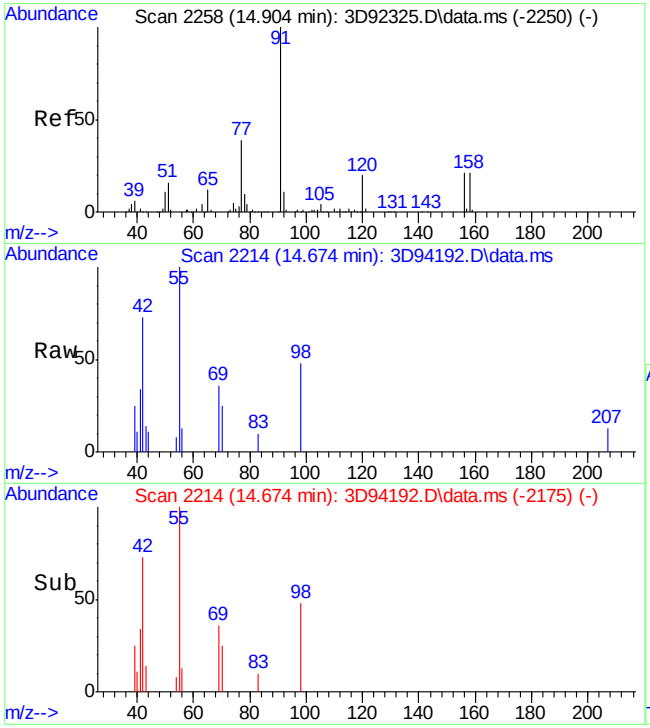


#107
bromobenzene
Concen: 4.99 ug/L
RT: 14.905 min Scan# 2258
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:156 Resp: 8772

Ion	Ratio	Lower	Upper
156	100		
77	156.7	117.2	177.2
158	95.0	67.0	127.0

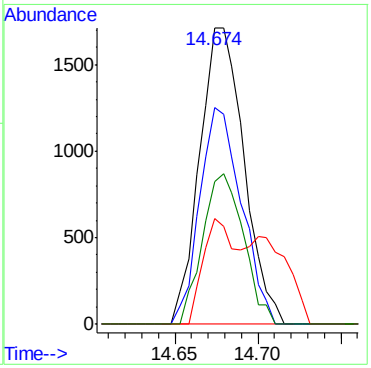




#108
cyclohexanone
Concen: 49.65 ug/L
RT: 14.674 min Scan# 2214
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 55 Resp: 3187

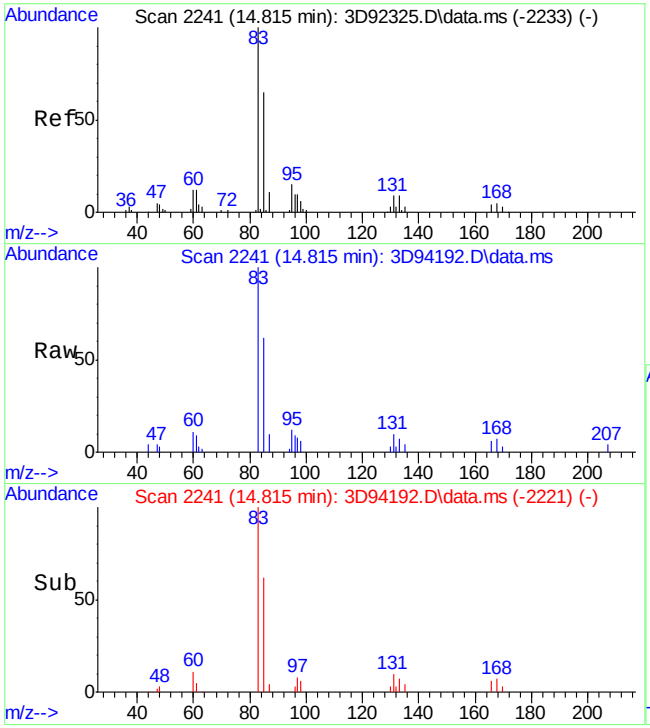
Ion	Ratio	Lower	Upper
55	100		
42	73.2	37.1	97.1
69	35.7	0.7	60.7
98	48.3	15.4	75.4



7.7.4

7

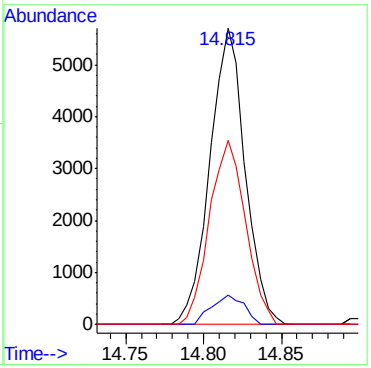
3D94192.D M3D4058.M Thu Dec 19 12:36:54 2013 3D Page 48

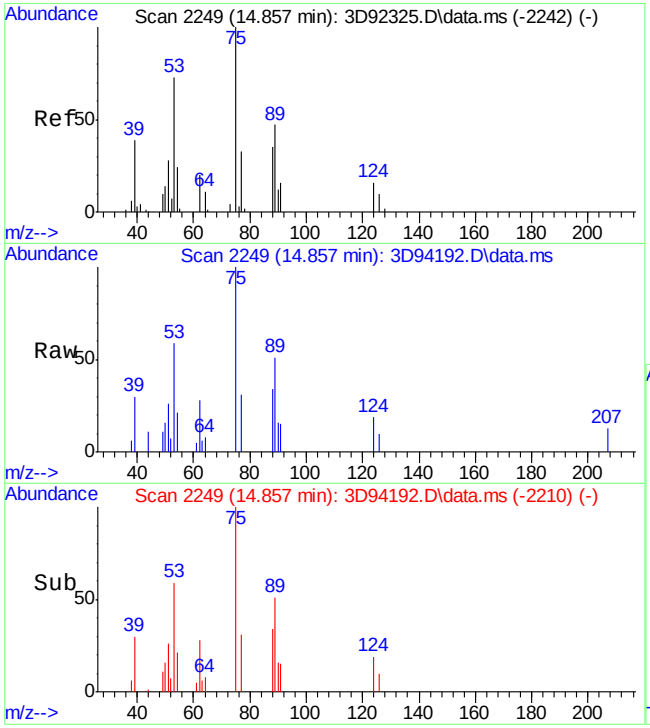


#109
1,1,2,2-tetrachloroethane
Concen: 5.13 ug/L
RT: 14.815 min Scan# 2241
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 83 Resp: 8959

Ion	Ratio	Lower	Upper
83	100		
131	9.8	0.0	39.8
85	62.3	35.0	95.0

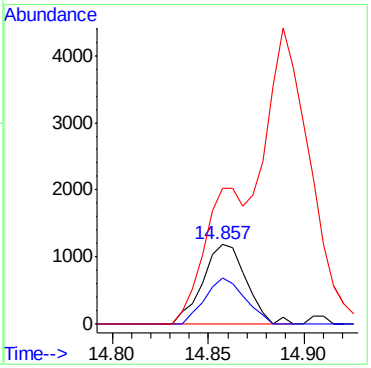




#110
trans-1,4-dichloro-2-butene
Concen: 4.76 ug/L
RT: 14.857 min Scan# 2249
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

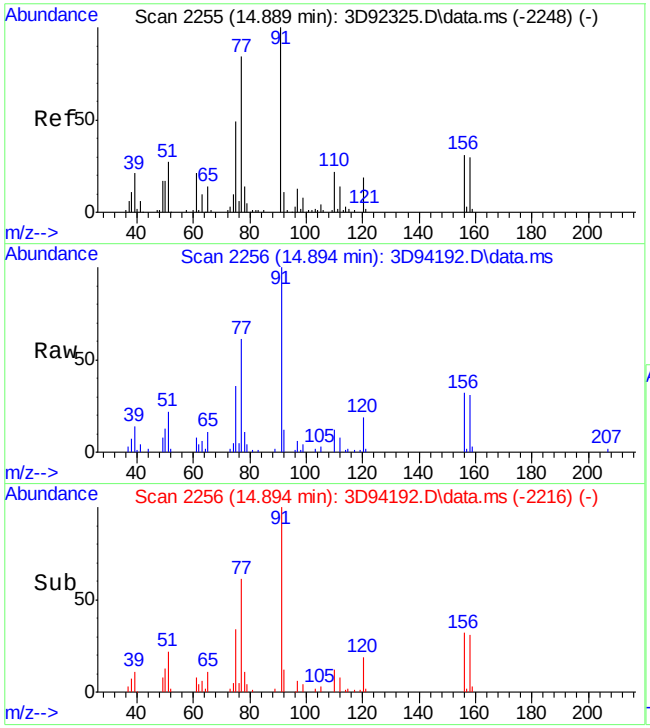
Tgt Ion: 53 Resp: 1872

Ion	Ratio	Lower	Upper
53	100		
88	57.1	25.8	85.8
75	169.5	136.3	196.3



7.7.4

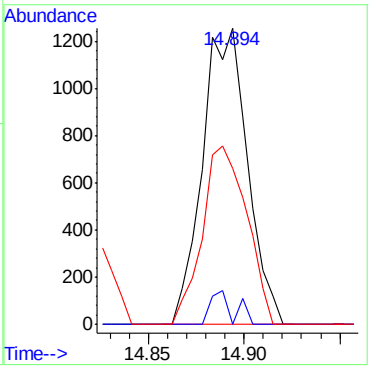
7

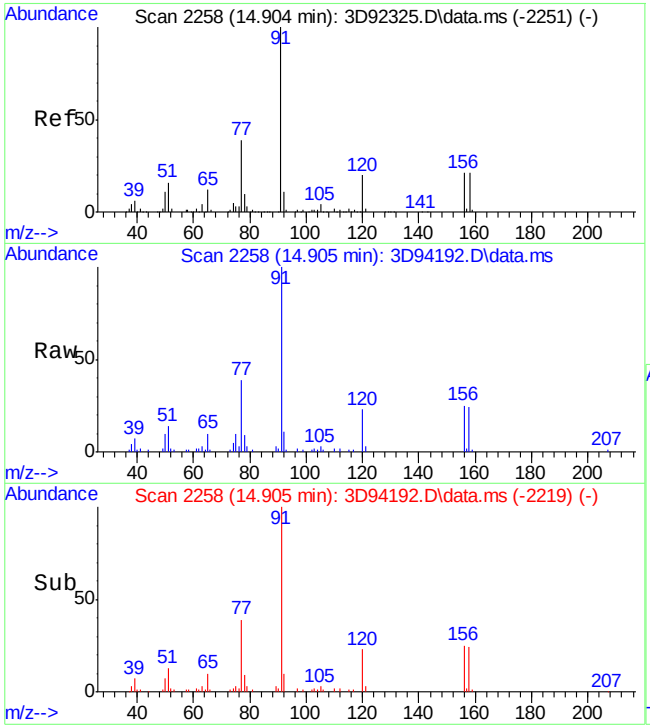


#111
1,2,3-trichloropropane
Concen: 5.20 ug/L
RT: 14.894 min Scan# 2256
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:110 Resp: 2033

Ion	Ratio	Lower	Upper
110	100		
111	0.0	0.0	39.8
97	52.6	25.9	85.9

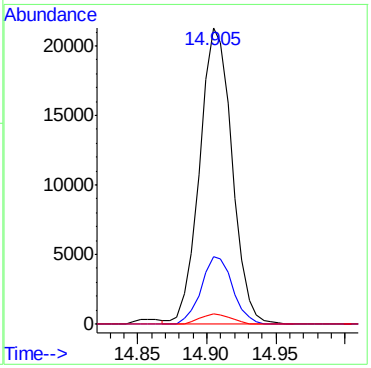


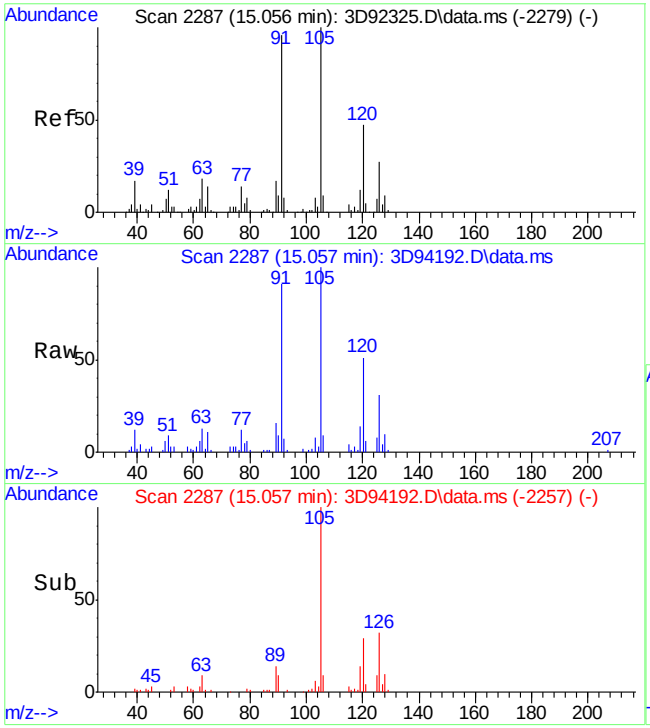


#112
n-propylbenzene
Concen: 5.26 ug/L
RT: 14.905 min Scan# 2258
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 91 Resp: 34681

Ion	Ratio	Lower	Upper
91	100		
120	22.9	0.0	52.3
105	3.5	0.0	33.7

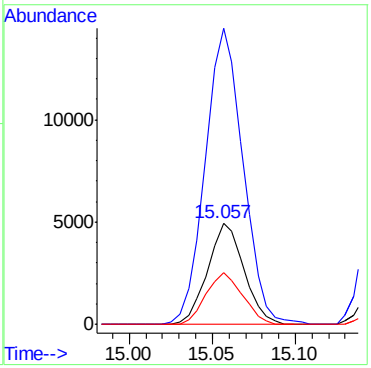


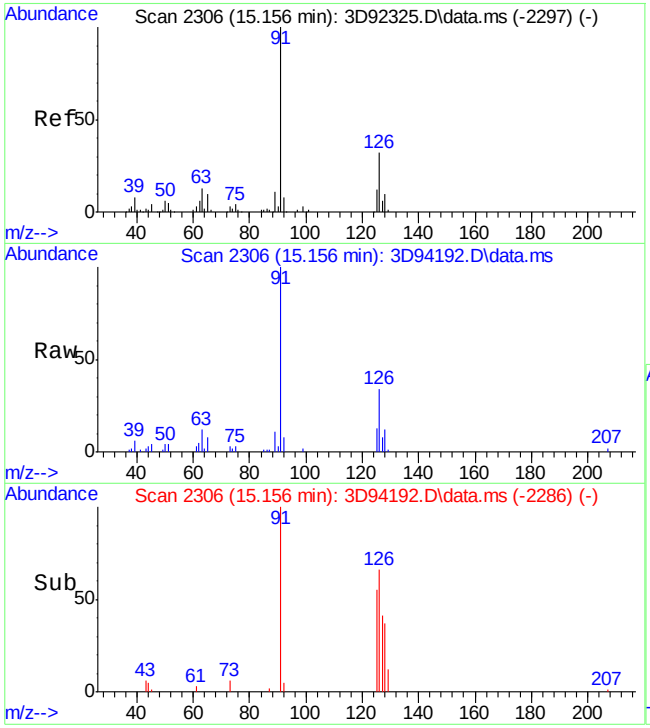


#114
2-chlorotoluene
Concen: 5.13 ug/L
RT: 15.057 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:126 Resp: 7525

Ion	Ratio	Lower	Upper
126	100		
91	291.7	271.2	331.2
89	51.4	19.8	79.8

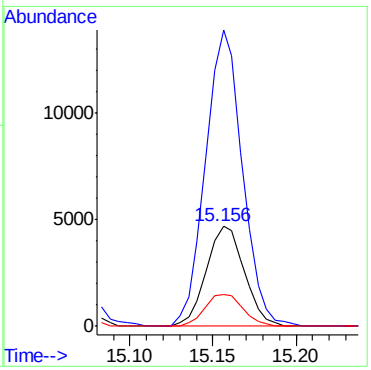


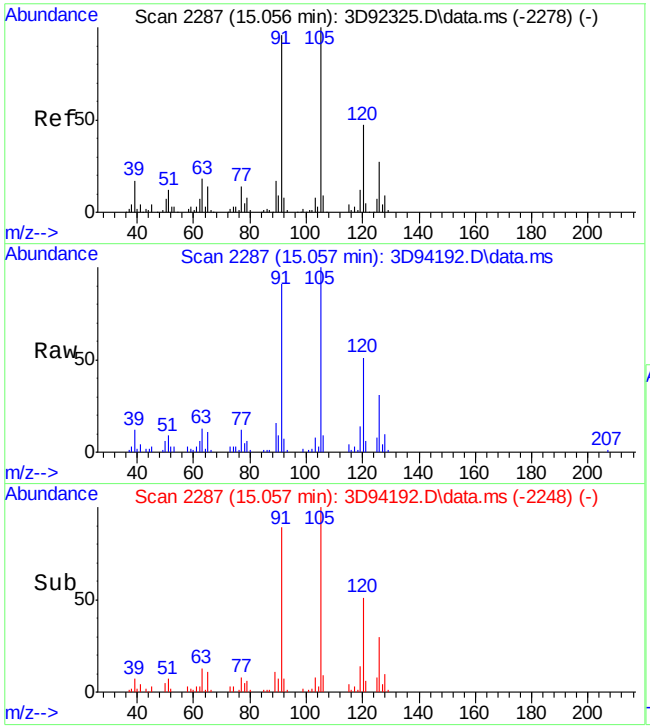


#115
4-chlorotoluene
Concen: 4.99 ug/L
RT: 15.156 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:126 Resp: 7456

Ion	Ratio	Lower	Upper
126	100		
91	295.0	249.9	309.9
89	31.6	0.0	58.8

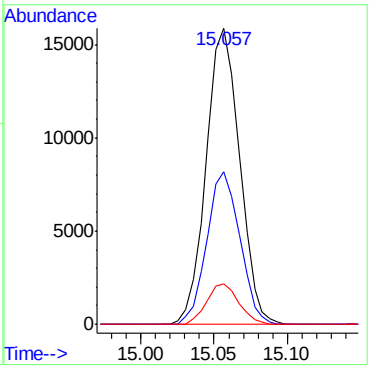


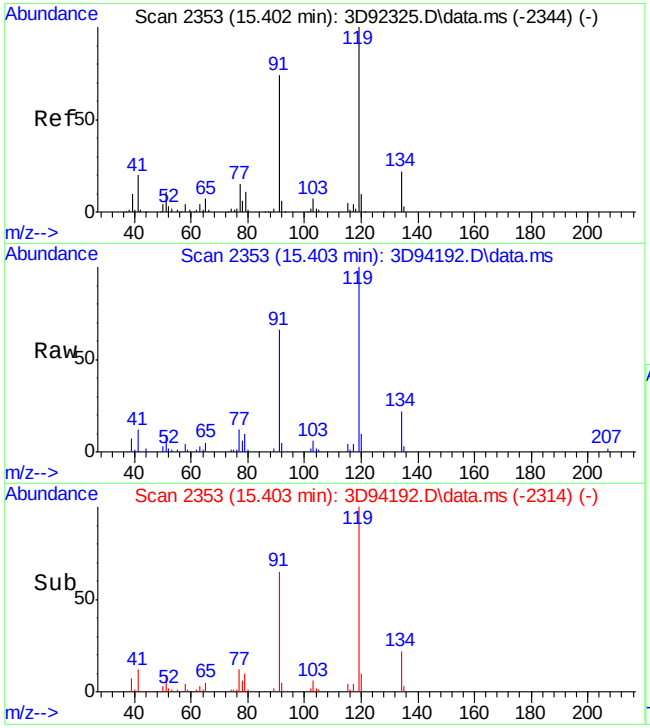


#116
1,3,5-trimethylbenzene
Concen: 5.00 ug/L
RT: 15.057 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:105 Resp: 25104

Ion	Ratio	Lower	Upper
105	100		
120	51.4	21.1	81.1
119	13.9	0.0	43.2

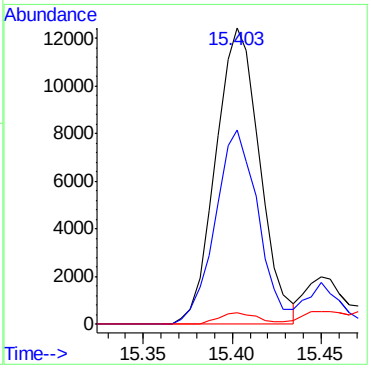


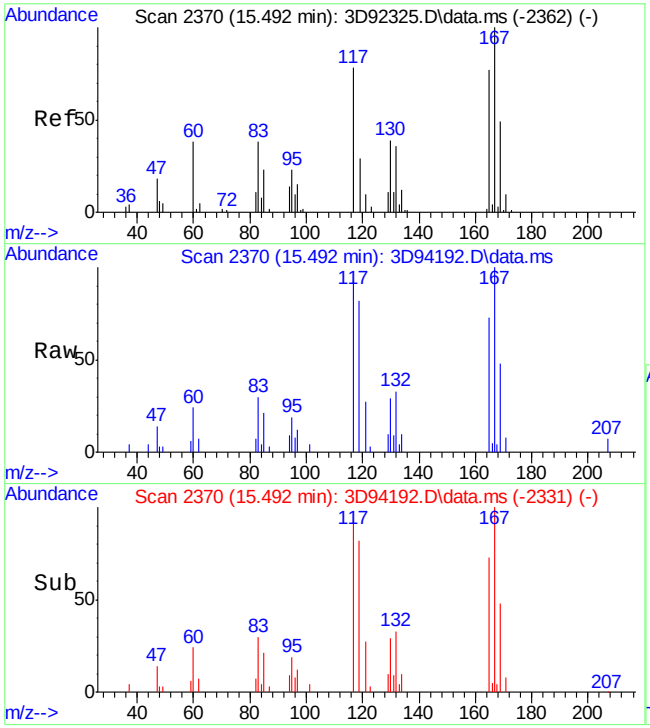


#117
tert-butylbenzene
Concen: 5.00 ug/L
RT: 15.403 min Scan# 2353
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:119 Resp: 21383

Ion	Ratio	Lower	Upper
119	100		
91	65.5	33.7	93.7
117	3.7	0.0	33.3

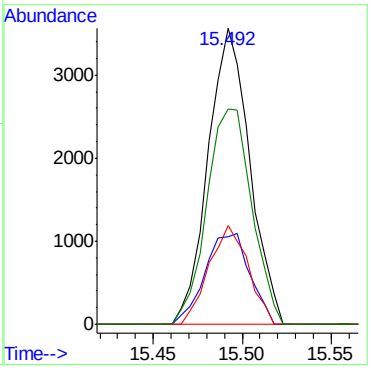


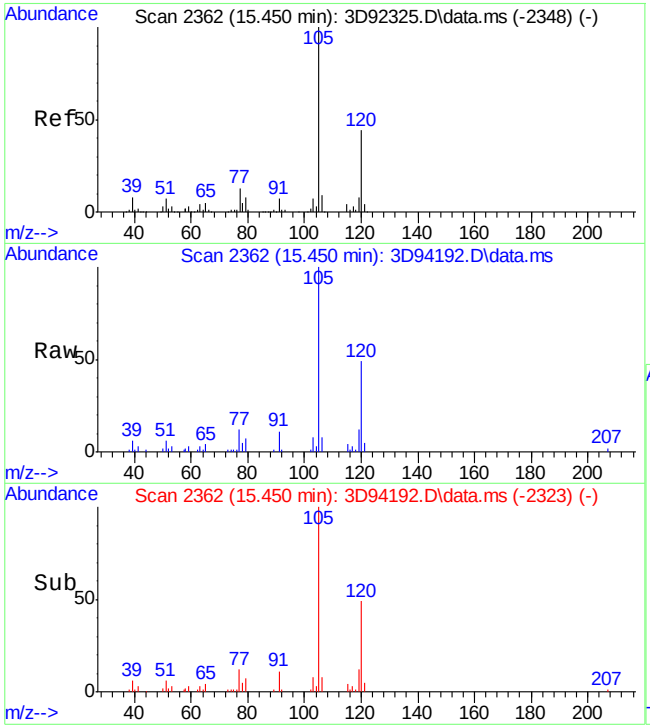


#118
pentachloroethane
Concen: 4.92 ug/L
RT: 15.492 min Scan# 2370
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:167 Resp: 5822

Ion	Ratio	Lower	Upper
167	100		
130	29.5	0.1	60.1
132	33.2	0.5	60.5
165	72.7	46.5	106.5

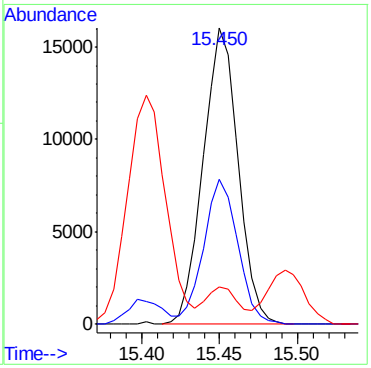


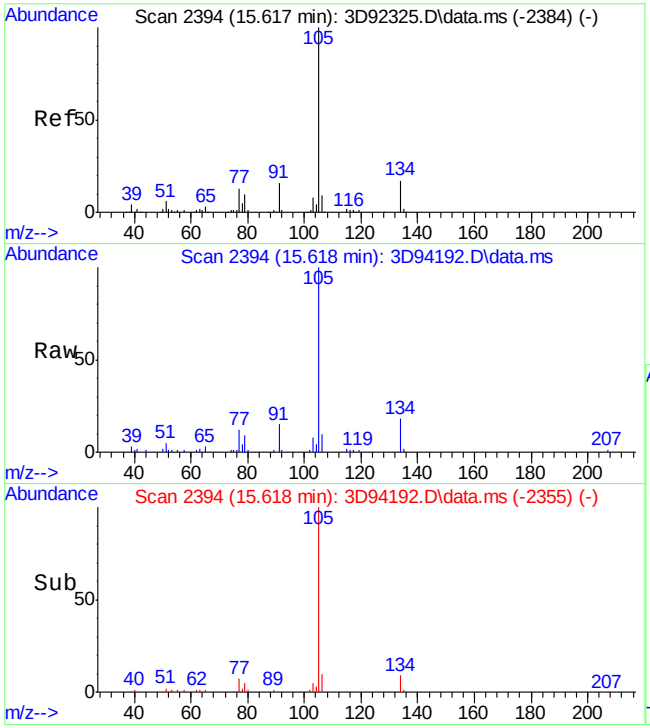


#119
1,2,4-trimethylbenzene
Concen: 5.04 ug/L
RT: 15.450 min Scan# 2362
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:105 Resp: 24922

Ion	Ratio	Lower	Upper
105	100		
120	48.8	16.8	76.8
119	0.0	0.0	42.6

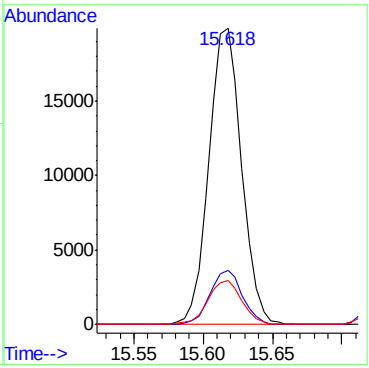


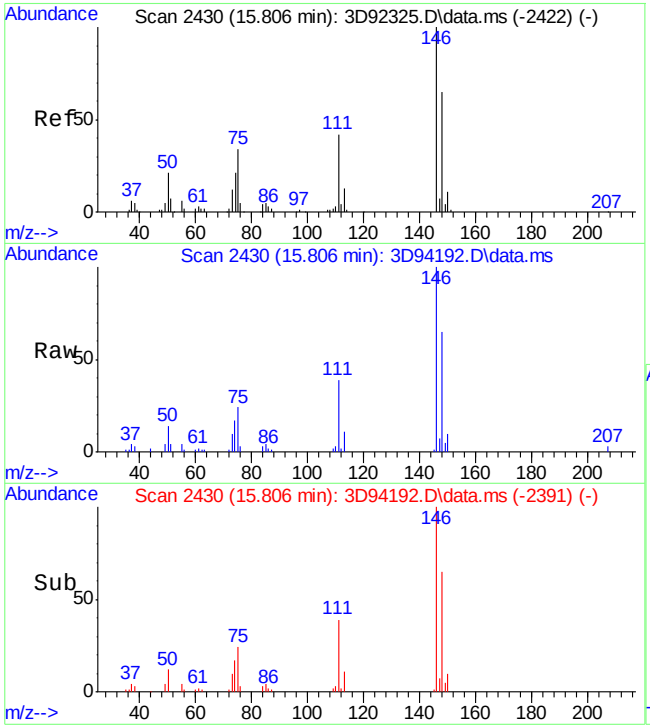


#120
sec-butylbenzene
Concen: 5.10 ug/L
RT: 15.618 min Scan# 2394
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:105 Resp: 32814

Ion	Ratio	Lower	Upper
105	100		
134	18.2	0.0	48.5
91	14.6	0.0	44.8

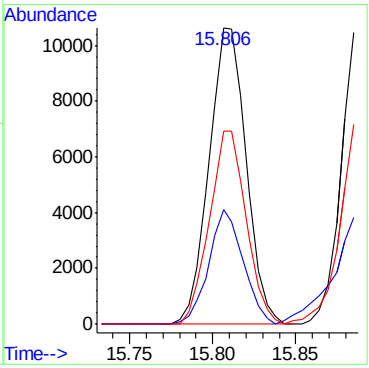


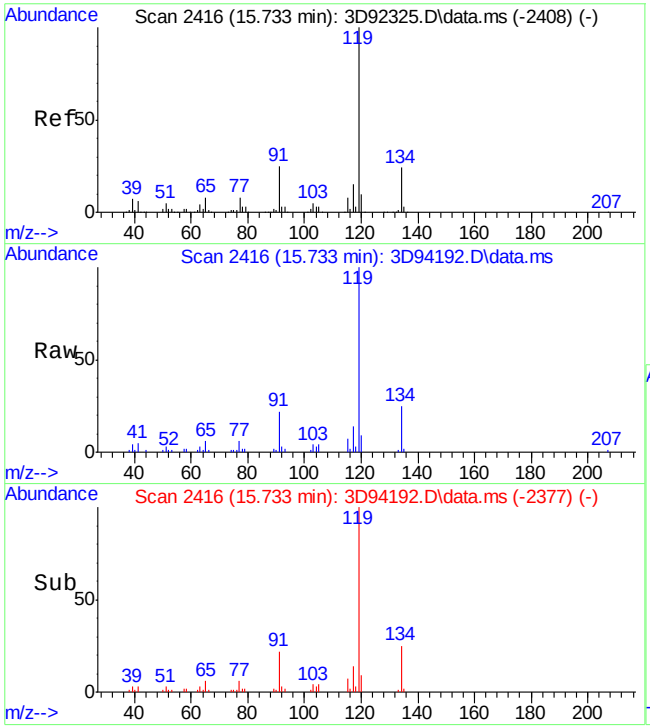


#121
1,3-dichlorobenzene
Concen: 5.10 ug/L
RT: 15.806 min Scan# 2430
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:146 Resp: 16463

Ion	Ratio	Lower	Upper
146	100		
111	38.5	6.0	66.0
148	65.3	34.2	94.2

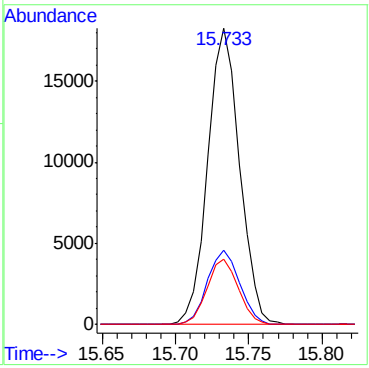


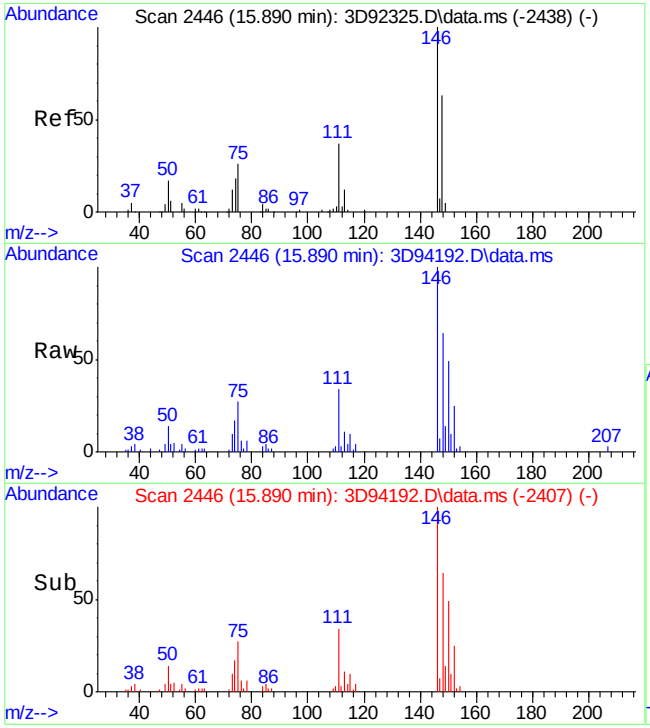


#122
p-isopropyltoluene
Concen: 5.02 ug/L
RT: 15.733 min Scan# 2416
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:119 Resp: 27438

Ion	Ratio	Lower	Upper
119	100		
134	24.9	0.0	55.3
91	21.9	0.0	51.2

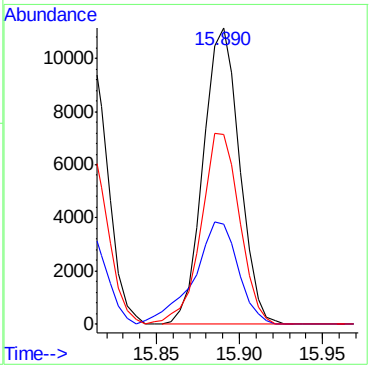


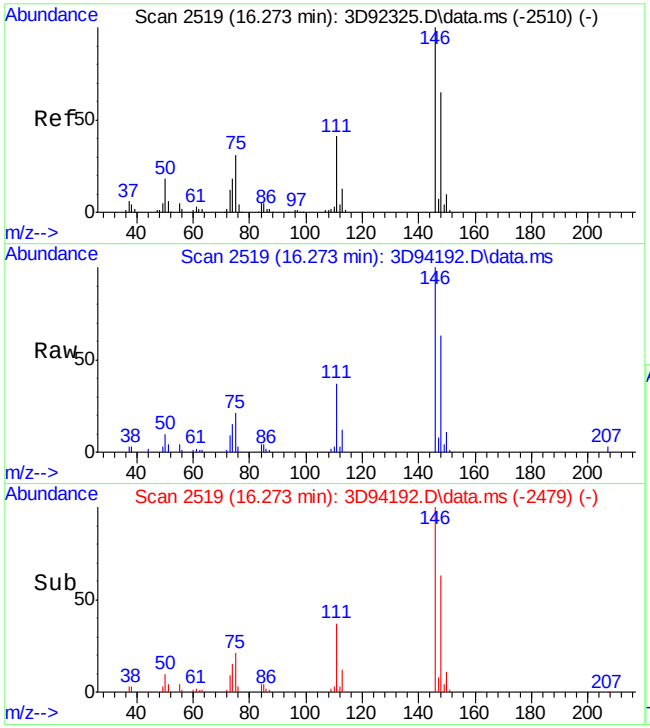


#123
1,4-dichlorobenzene
Concen: 5.06 ug/L
RT: 15.890 min Scan# 2446
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:146 Resp: 16966

Ion	Ratio	Lower	Upper
146	100		
111	33.7	4.9	64.9
148	63.9	34.4	94.4

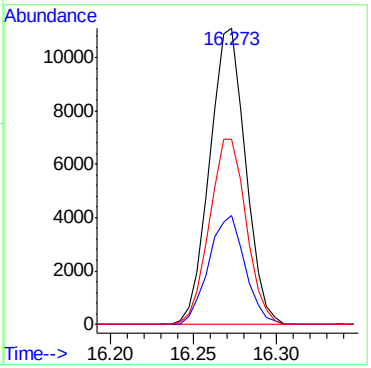


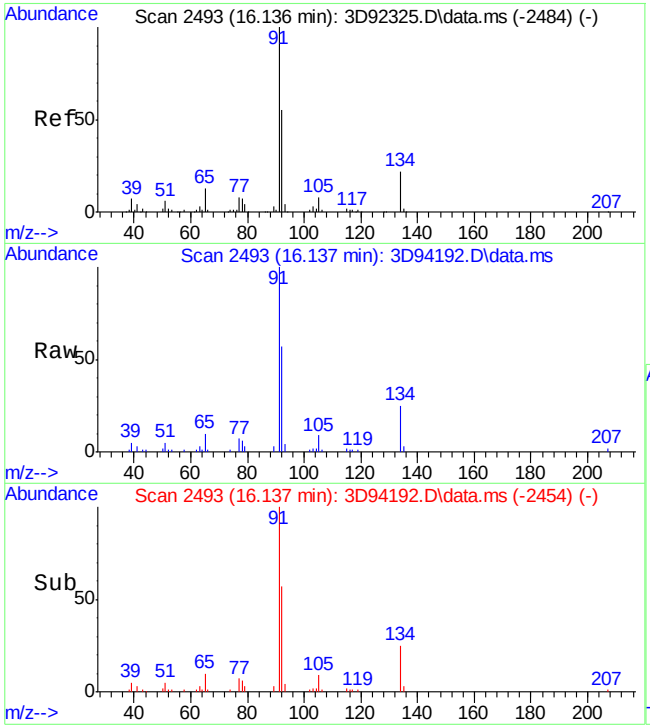


#124
1,2-dichlorobenzene
Concen: 5.18 ug/L
RT: 16.273 min Scan# 2519
Delta R.T. 0.011 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:146 Resp: 16714

Ion	Ratio	Lower	Upper
146	100		
111	36.8	8.3	68.3
148	62.5	34.4	94.4

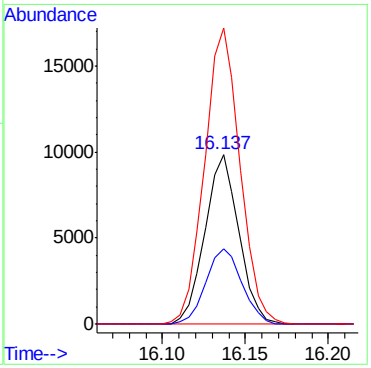


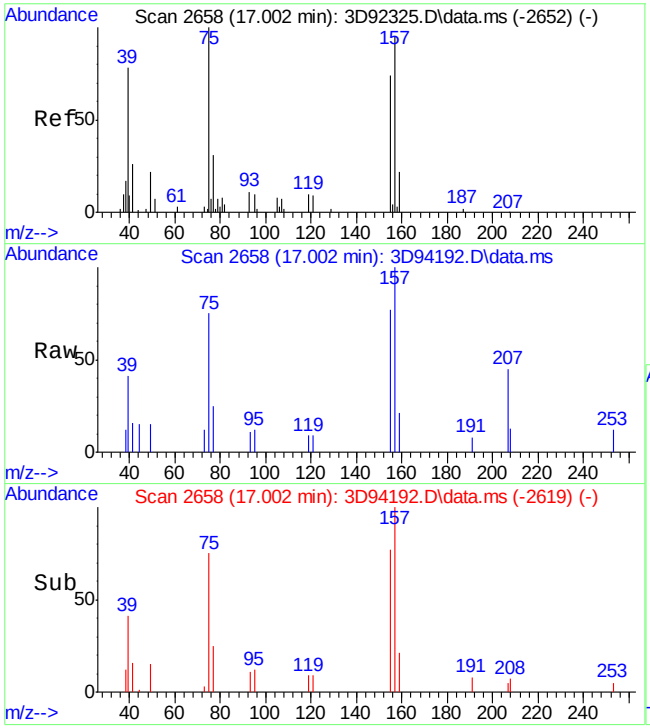


#126
n-butylbenzene
Concen: 5.10 ug/L
RT: 16.137 min Scan# 2493
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 92 Resp: 14026

Ion	Ratio	Lower	Upper
92	100		
134	44.5	15.0	75.0
91	174.3	148.5	208.5

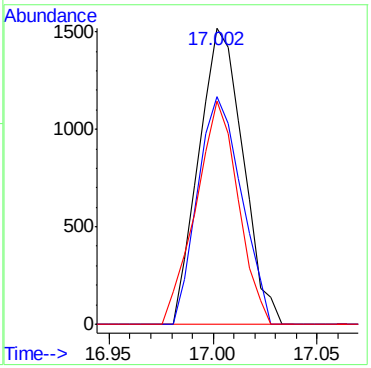


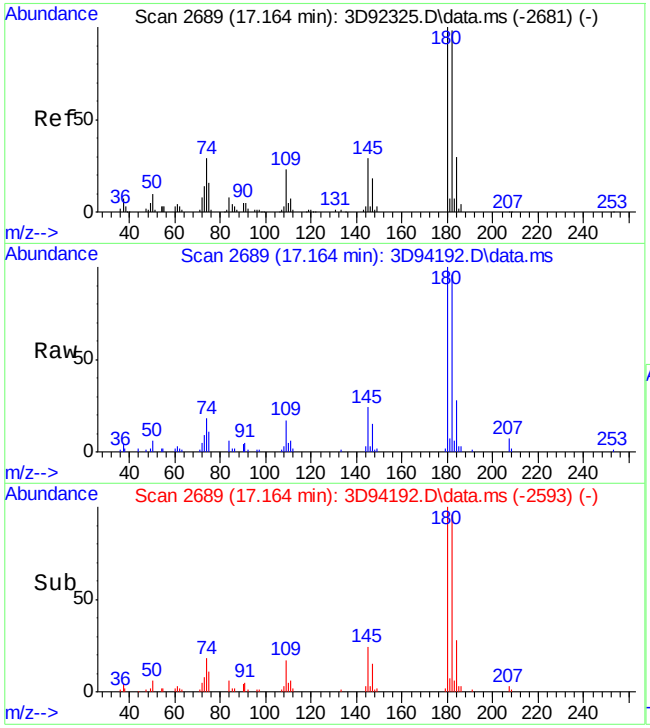


#128
1,2-dibromo-3-chloropropane
Concen: 5.38 ug/L
RT: 17.002 min Scan# 2658
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:157 Resp: 2246

Ion	Ratio	Lower	Upper
157	100		
155	76.9	47.2	107.2
75	75.5	45.0	105.0

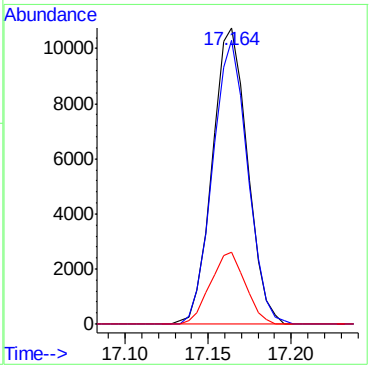


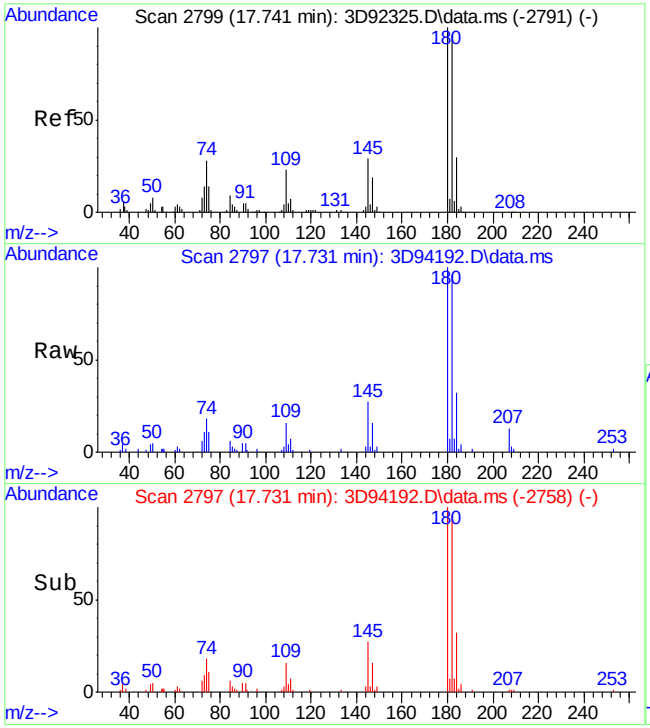


#129
1,3,5-trichlorobenzene
Concen: 5.35 ug/L
RT: 17.164 min Scan# 2689
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:180 Resp: 15840

Ion	Ratio	Lower	Upper
180	100		
182	95.2	66.4	126.4
145	24.1	0.0	55.5

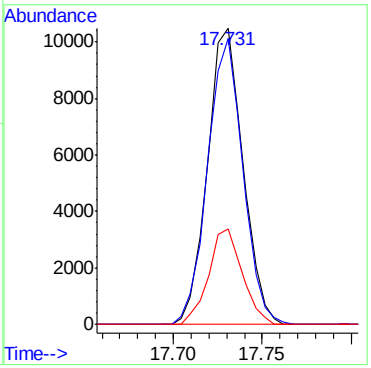


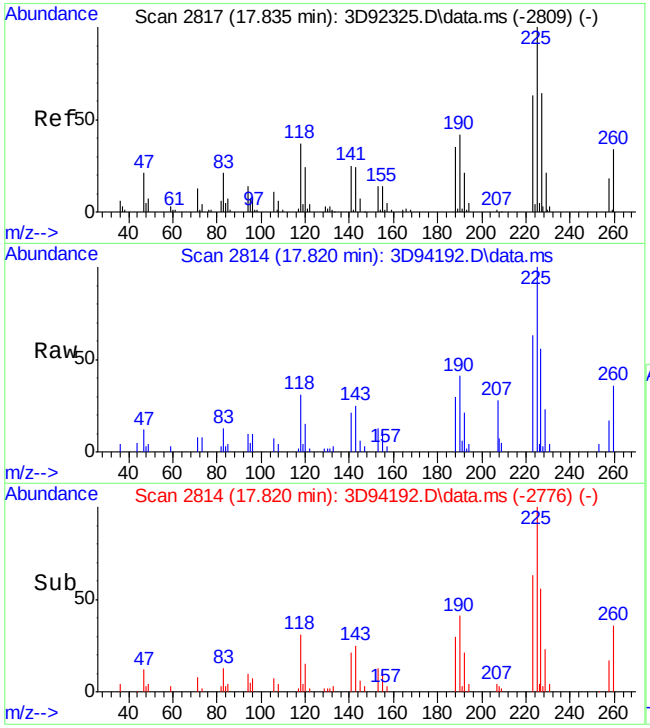


#130
1,2,4-trichlorobenzene
Concen: 5.21 ug/L
RT: 17.731 min Scan# 2797
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:180 Resp: 14508

Ion	Ratio	Lower	Upper
180	100		
182	96.5	67.0	127.0
184	32.2	1.3	61.3

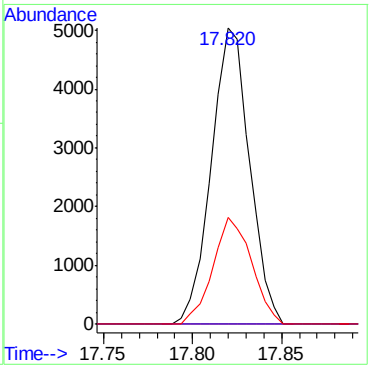


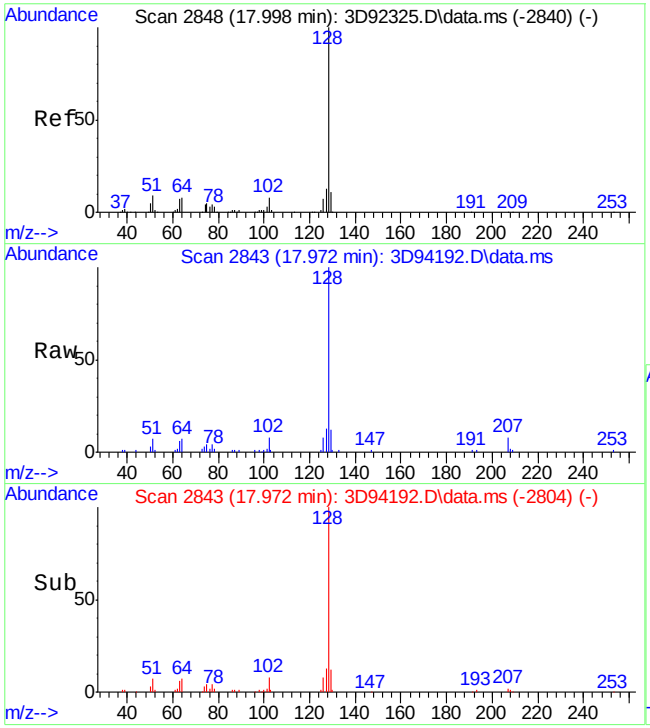


#131
hexachlorobutadiene
Concen: 5.23 ug/L
RT: 17.820 min Scan# 2814
Delta R.T. 0.000 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:225 Resp: 7534

Ion	Ratio	Lower	Upper
225	100		
259	0.0	0.0	31.3
260	36.0	6.4	66.4

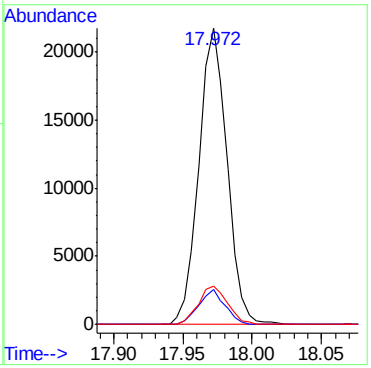


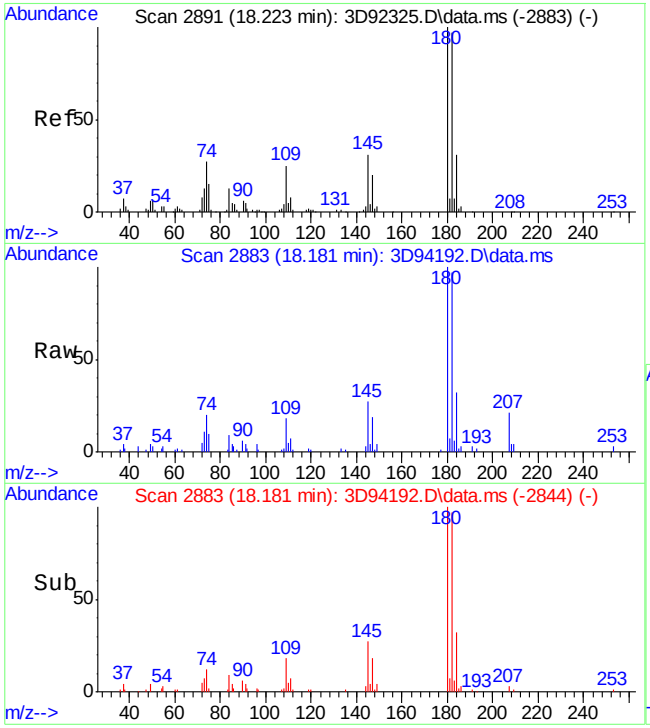


#132
naphthalene
Concen: 5.38 ug/L
RT: 17.972 min Scan# 2843
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:128 Resp: 30721

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	41.0
127	12.9	0.0	42.6

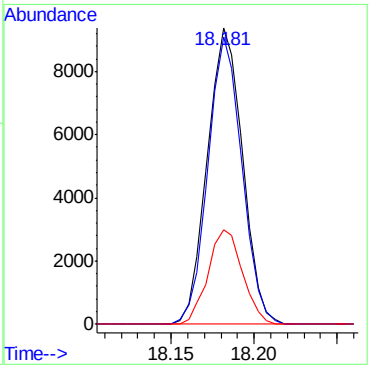


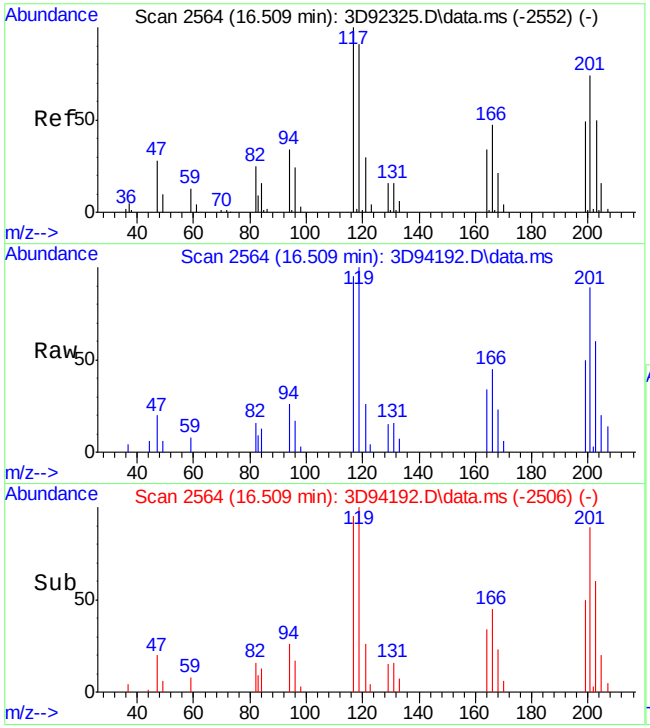


#133
1,2,3-trichlorobenzene
Concen: 5.34 ug/L
RT: 18.181 min Scan# 2883
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:180 Resp: 13847

Ion	Ratio	Lower	Upper
180	100		
182	96.8	64.7	124.7
184	31.8	0.4	60.4

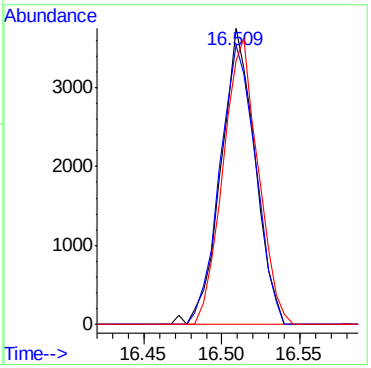


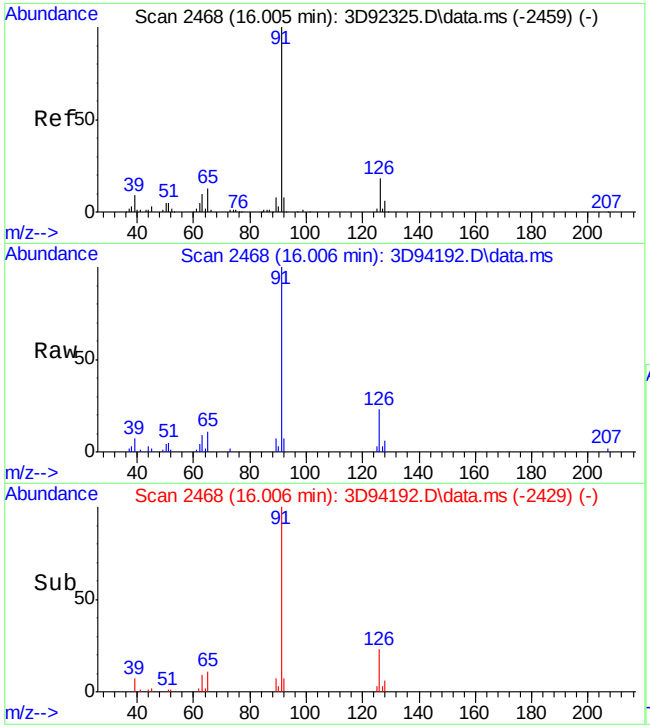


#134
hexachloroethane
Concen: 4.99 ug/L
RT: 16.509 min Scan# 2564
Delta R.T. 0.005 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion:119 Resp: 5718

Ion	Ratio	Lower	Upper
119	100		
117	99.4	71.1	131.1
201	99.2	69.2	129.2

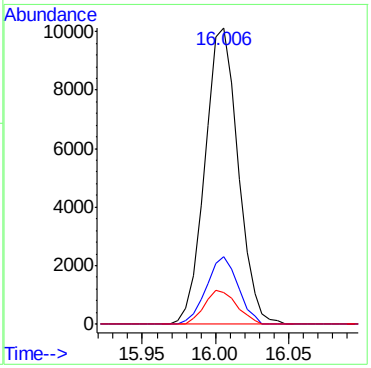




#135
Benzyl chloride
Concen: 5.65 ug/L
RT: 16.006 min Scan# 2468
Delta R.T. 0.006 min
Lab File: 3D94192.D
Acq: 18 Dec 2013 2:45 pm

Tgt Ion: 91 Resp: 15865

Ion	Ratio	Lower	Upper
91	100		
126	21.6	0.0	50.9
65	11.0	0.0	41.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94193.D
Acq On : 18 Dec 2013 3:12 pm
Operator : katteric
Sample : ic4058-10
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 19 12:30:54 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.244	65	67492	500.00	ug/L		0.00
4) pentafluorobenzene	9.483	168	177462	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.401	114	243034	50.00	ug/L		0.00
88) chlorobenzene-d5	13.557	117	200372	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.864	152	116748	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.546	113	13958	9.68	ug/L		0.01
Spiked Amount 50.000	Range 80 - 119		Recovery = 19.36%#				
51) 1,2-dichloroethane-d4 (s)	9.966	65	14546	9.66	ug/L		0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 19.32%#				
80) toluene-d8 (s)	12.047	98	47390	9.94	ug/L		0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 19.88%#				
106) 4-bromofluorobenzene (s)	14.711	95	18053	9.83	ug/L		0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 19.66%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.130	88	2754	246.65	ug/L		94
3) tertiary butyl alcohol	7.365	59	7186	45.66	ug/L		91
8) chlorodifluoromethane	3.884	51	13769	11.38	ug/L		99
9) dichlorodifluoromethane	3.857	85	16276	10.44	ug/L		98
10) chloromethane	4.204	50	19196	9.07	ug/L		97
11) vinyl chloride	4.445	62	18682	9.79	ug/L		99
12) bromomethane	5.111	94	13161	9.68	ug/L		97
13) chloroethane	5.284	64	9398	10.46	ug/L		92
14) 1,3-butadiene	4.508	54	10434	10.56	ug/L		99
15) vinyl bromide	5.635	106	11714	10.84	ug/L		100
16) trichlorofluoromethane	5.734	101	20089	9.56	ug/L		98
17) pentane	5.818	43	17968	9.42	ug/L	#	100
18) ethyl ether	6.143	74	7835	11.13	ug/L		94
21) acrolein	6.416	56	28742	95.75	ug/L		96
22) 1,1-dichloroethene	6.568	61	20905	10.22	ug/L		94
23) acetone	6.647	58	1086	12.55	ug/L	#	78
24) allyl chloride	7.113	76	8098	9.94	ug/L	#	82
25) acetonitrile	7.082	40	13099	95.42	ug/L	#	76
27) iodomethane	6.856	142	28314	9.90	ug/L		97
28) iso-butyl alcohol	9.777	41	4696	101.43	ug/L		87
29) carbon disulfide	6.977	76	49935	9.51	ug/L		97
30) methylene chloride	7.302	84	15645	9.84	ug/L		97
31) methyl acetate	7.092	74	2116	9.88	ug/L		89
32) methyl tert butyl ether	7.601	73	43976	9.76	ug/L		98
33) trans-1,2-dichloroethene	7.669	61	20655	9.92	ug/L		96
34) di-isopropyl ether	8.199	45	46860	9.64	ug/L		99
35) ethyl tert-butyl ether	8.660	59	44799	10.52	ug/L		97
36) 2-butanone	8.948	72	1425	11.16	ug/L		72
37) 1,1-dichloroethane	8.235	63	25609	9.76	ug/L		98
38) chloroprene	8.340	53	18636	10.42	ug/L		97
39) acrylonitrile	7.638	53	27284	53.83	ug/L		97
40) vinyl acetate	8.225	86	2122	11.36	ug/L	#	62
41) ethyl acetate	8.954	45	1721	9.84	ug/L	#	54

M3D4058.M Thu Dec 19 12:36:56 2013 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94193.D
Acq On : 18 Dec 2013 3:12 pm
Operator : katteric
Sample : ic4058-10
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 19 12:30:54 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 2,2-dichloropropane	8.969	77	20858	9.42	ug/L	99
43) cis-1,2-dichloroethene	8.969	61	25621	10.10	ug/L	91
44) propionitrile	9.053	54	20223	105.37	ug/L	91
45) methyl acrylate	9.043	55	15387	11.48	ug/L	97
46) bromochloromethane	9.289	128	8453	10.85	ug/L	97
47) tetrahydrofuran	9.326	42	4890	10.60	ug/L	98
48) chloroform	9.347	83	24790	9.80	ug/L	100
49) Tert-Butyl Formate	9.363	59	13599	10.86	ug/L	99
52) freon 113	6.516	151	9602	10.85	ug/L	100
53) methacrylonitrile	9.232	41	8856	10.60	ug/L	94
54) 1,1,1-trichloroethane	9.588	97	21743	10.04	ug/L	95
56) 2,2,4-Trimethylpentane	10.008	57	47594	10.05	ug/L	98
57) tert-amyl methyl ether	10.050	73	44510	10.18	ug/L	97
59) epichlorohydrin	11.670	57	6368	53.40	ug/L	98
60) n-butyl alcohol	10.532	56	16449	478.71	ug/L	98
61) cyclohexane	9.651	84	20871	9.89	ug/L	100
62) carbon tetrachloride	9.787	117	19586	10.33	ug/L	98
63) 1,1-dichloropropene	9.766	75	19176	10.18	ug/L	99
64) hexane	7.947	57	14565	10.55	ug/L	98
65) benzene	10.034	78	58727	9.90	ug/L	98
66) heptane	10.181	57	8281	9.97	ug/L	93
67) isopropyl acetate	9.945	43	26807	10.75	ug/L	98
68) 1,2-dichloroethane	10.055	62	17820	10.18	ug/L	99
69) trichloroethene	10.747	95	14262	9.75	ug/L	98
70) ethyl acrylate	10.747	55	16377	10.97	ug/L	99
72) 2-nitropropane	11.533	41	5098	9.79	ug/L	89
73) 2-chloroethyl vinyl ether	11.539	63	46044	52.38	ug/L	98
74) methyl methacrylate	11.014	41	20665	9.88	ug/L	97
75) 1,2-dichloropropane	11.014	63	14467	10.16	ug/L	100
76) methylcyclohexane	10.951	83	20547	10.14	ug/L	96
77) dibromomethane	11.182	93	9140	10.24	ug/L	99
78) bromodichloromethane	11.308	83	18420	10.19	ug/L	94
79) cis-1,3-dichloropropene	11.764	75	22779	9.94	ug/L	99
81) 4-methyl-2-pentanone	11.853	58	5103	11.44	ug/L	97
82) toluene	12.121	92	34572	10.30	ug/L	99
83) 3-methyl-1-butanol	11.869	70	6237	188.26	ug/L	98
84) trans-1,3-dichloropropene	12.320	75	20484	10.15	ug/L	96
85) ethyl methacrylate	12.304	69	16911	11.15	ug/L	99
86) 1,1,2-trichloroethane	12.535	83	10776	10.58	ug/L	97
87) 2-hexanone	12.702	58	4568	11.90	ug/L	87
89) tetrachloroethene	12.697	166	16558	10.24	ug/L	96
90) 1,3-dichloropropane	12.718	76	19851	10.26	ug/L	94
91) butyl acetate	12.771	56	8259	10.98	ug/L	96
92) 3,3-Dimethyl-1-Butanol	12.870	57	11641	84.63	ug/L	96
93) dibromochloromethane	12.986	129	15531	10.12	ug/L	97
94) 1,2-dibromoethane	13.132	107	13297	10.21	ug/L	93
96) chlorobenzene	13.589	112	37340	9.88	ug/L	98
97) 1,1,1,2-tetrachloroethane	13.646	131	14746	9.91	ug/L	98
98) ethylbenzene	13.636	91	61608	9.84	ug/L	99
99) m,p-xylene	13.741	106	48882	20.46	ug/L	100

M3D4058.M Thu Dec 19 12:36:56 2013 3D Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94193.D
Acq On : 18 Dec 2013 3:12 pm
Operator : katteric
Sample : ic4058-10
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 19 12:30:54 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

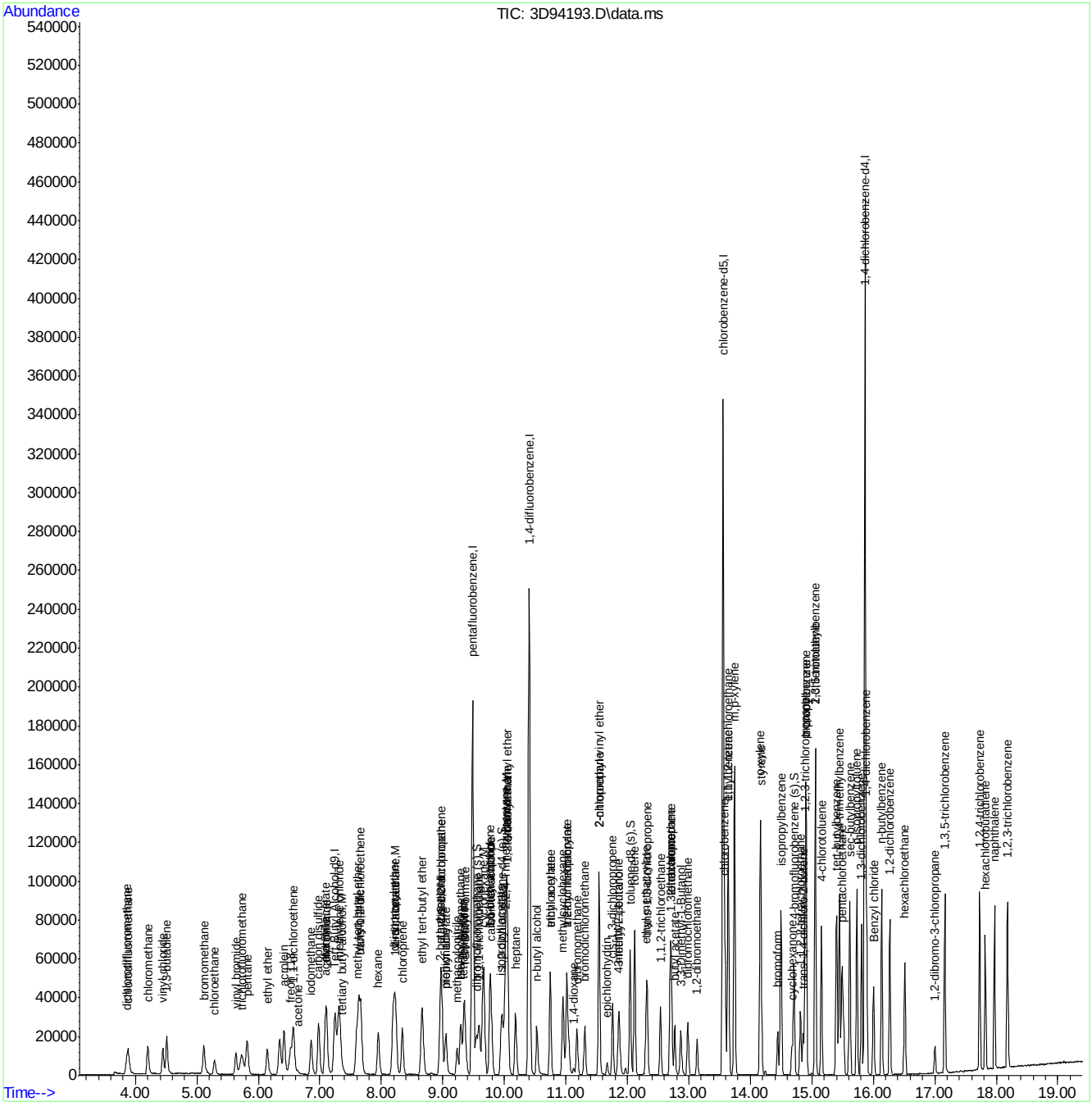
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) o-xylene	14.160	106	24047	9.91	ug/L	96
101) styrene	14.176	104	40040	10.34	ug/L	97
103) bromoform	14.443	173	11369	9.81	ug/L	99
105) isopropylbenzene	14.496	105	61370	10.04	ug/L	99
107) bromobenzene	14.905	156	18099	10.07	ug/L	95
108) cyclohexanone	14.679	55	6859	97.75	ug/L	93
109) 1,1,2,2-tetrachloroethane	14.815	83	17416	9.09	ug/L	99
110) trans-1,4-dichloro-2-b...	14.857	53	4171	10.72	ug/L	93
111) 1,2,3-trichloropropane	14.889	110	4086	10.38	ug/L	88
112) n-propylbenzene	14.905	91	69982	10.00	ug/L	98
114) 2-chlorotoluene	15.057	126	15612	10.17	ug/L	99
115) 4-chlorotoluene	15.156	126	15662	10.14	ug/L	99
116) 1,3,5-trimethylbenzene	15.057	105	52393	10.12	ug/L	98
117) tert-butylbenzene	15.403	119	44970	9.99	ug/L	99
118) pentachloroethane	15.492	167	12170	10.26	ug/L	96
119) 1,2,4-trimethylbenzene	15.450	105	51355	10.06	ug/L	92
120) sec-butylbenzene	15.618	105	68610	10.07	ug/L	98
121) 1,3-dichlorobenzene	15.806	146	33562	9.79	ug/L	100
122) p-isopropyltoluene	15.733	119	57997	10.25	ug/L	98
123) 1,4-dichlorobenzene	15.890	146	34707	9.59	ug/L	97
124) 1,2-dichlorobenzene	16.268	146	34214	9.68	ug/L	98
126) n-butylbenzene	16.137	92	29818	10.50	ug/L	99
128) 1,2-dibromo-3-chloropr...	17.002	157	4307	10.42	ug/L	96
129) 1,3,5-trichlorobenzene	17.164	180	31420	9.62	ug/L	99
130) 1,2,4-trichlorobenzene	17.731	180	29617	10.20	ug/L	98
131) hexachlorobutadiene	17.820	225	15812	10.24	ug/L	99
132) naphthalene	17.972	128	61705	9.95	ug/L	99
133) 1,2,3-trichlorobenzene	18.181	180	27150	9.62	ug/L	95
134) hexachloroethane	16.509	119	12113	10.23	ug/L	99
135) Benzyl chloride	16.006	91	32189	9.97	ug/L	100

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

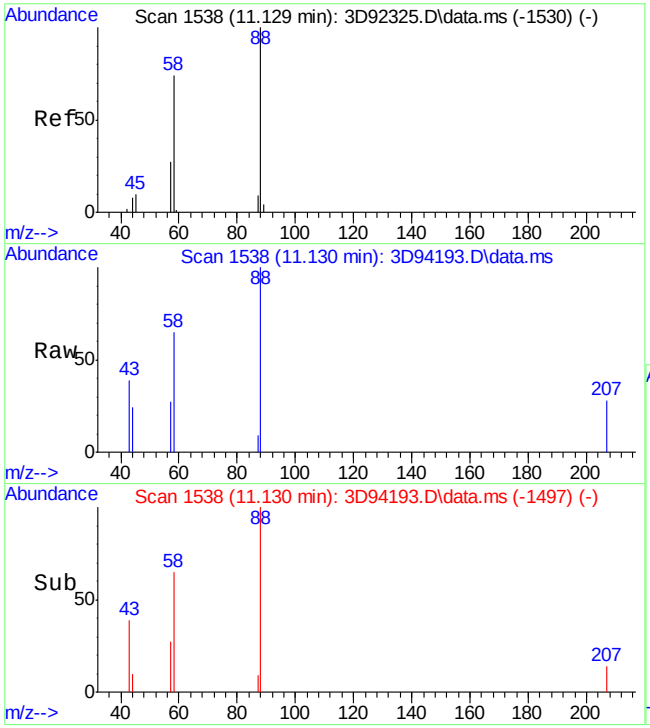
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94193.D
Acq On : 18 Dec 2013 3:12 pm
Operator : katteric
Sample : ic4058-10
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 19 12:30:54 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration



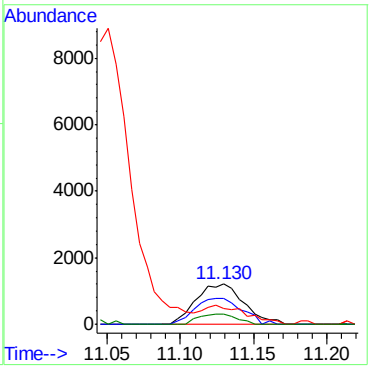
M3D4058.M Thu Dec 19 12:36:56 2013 3D Page: 4

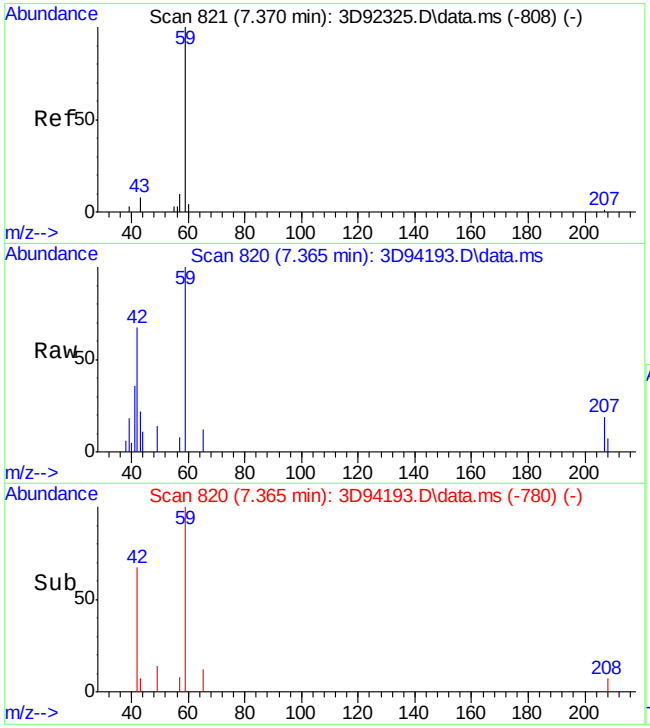


#2
1,4-dioxane
Concen: 246.65 ug/L
RT: 11.130 min Scan# 1538
Delta R.T. 0.017 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 88 Resp: 2754

Ion	Ratio	Lower	Upper
88	100		
58	63.5	33.2	93.2
43	42.9	1.5	61.5
57	20.7	0.0	50.6

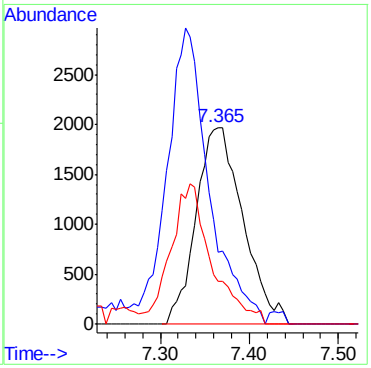




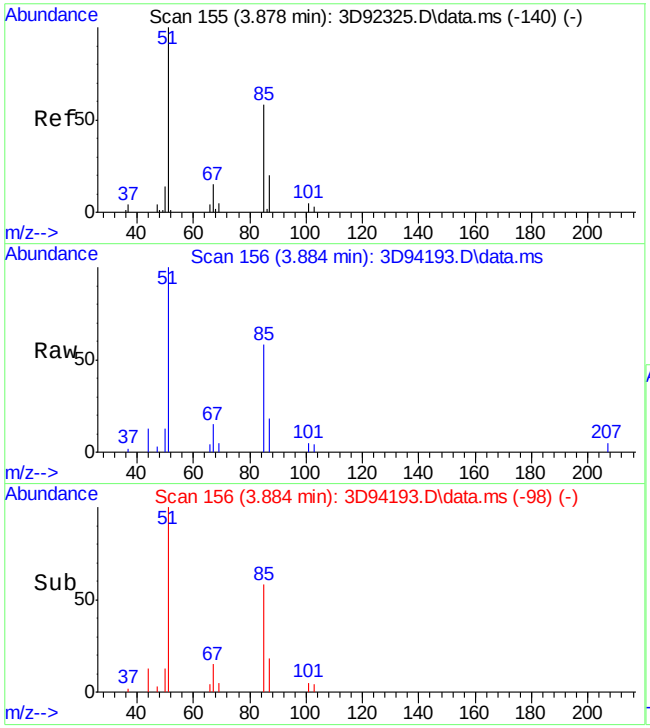
#3
tertiary butyl alcohol
Concen: 45.66 ug/L
RT: 7.365 min Scan# 820
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 59 Resp: 7186

Ion	Ratio	Lower	Upper
59	100		
41	36.5	13.6	73.6
43	21.7	0.0	53.7



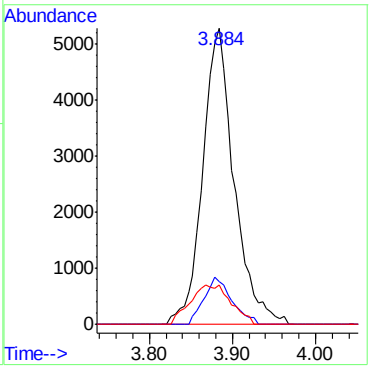
3D94193.D M3D4058.M Thu Dec 19 12:36:56 2013 3D Page 5

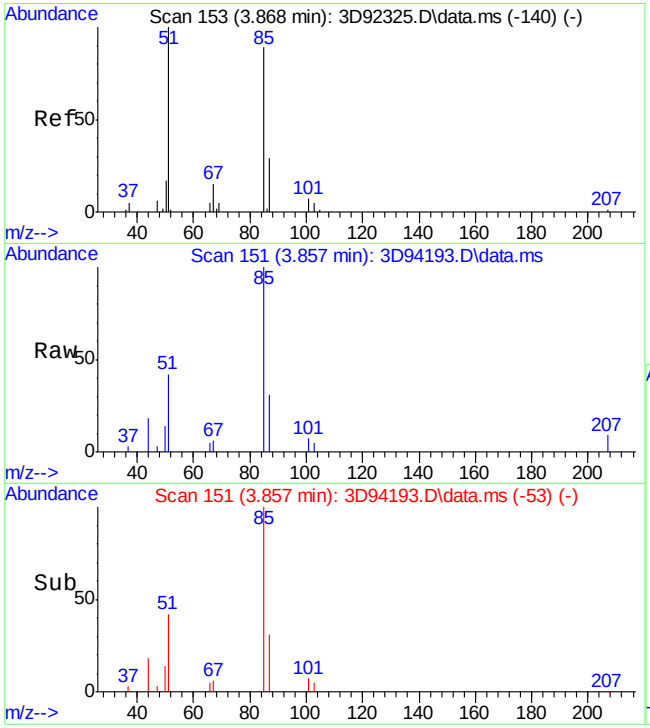


#8
chlorodifluoromethane
Concen: 11.38 ug/L
RT: 3.884 min Scan# 156
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 51 Resp: 13769

Ion	Ratio	Lower	Upper
51	100		
67	14.6	0.0	44.7
50	13.2	0.0	42.3

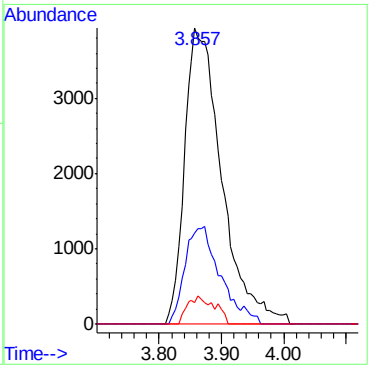


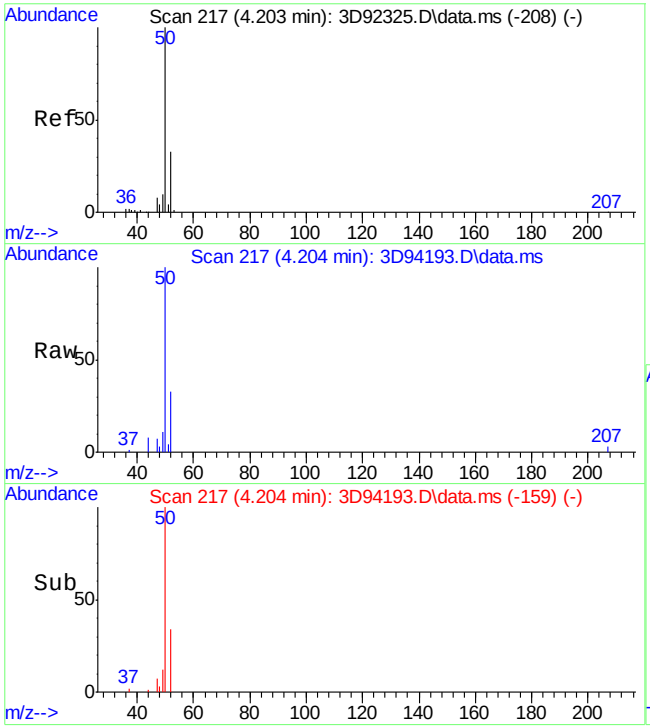


#9
dichlorodifluoromethane
Concen: 10.44 ug/L
RT: 3.857 min Scan# 151
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 85 Resp: 16276

Ion	Ratio	Lower	Upper
85	100		
87	30.8	1.6	61.6
101	7.3	0.0	38.1

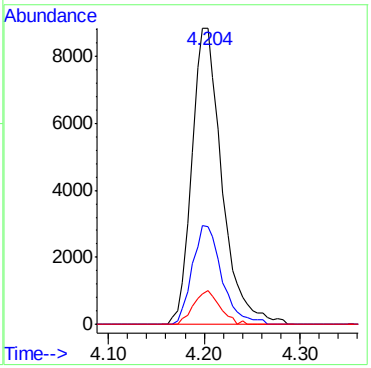


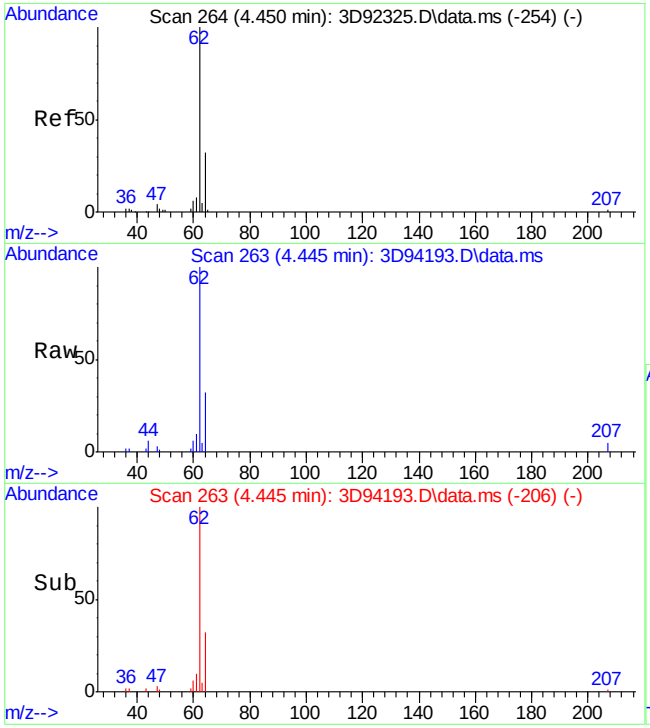


#10
chloromethane
Concen: 9.07 ug/L
RT: 4.204 min Scan# 217
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 50 Resp: 19196

Ion	Ratio	Lower	Upper
50	100		
52	33.1	1.8	61.8
49	11.2	0.0	39.9

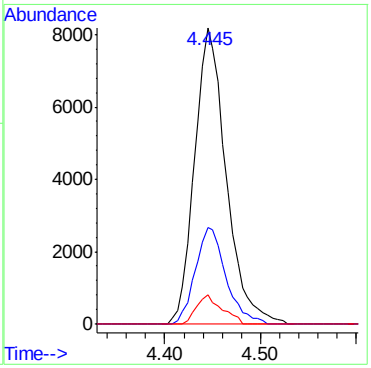


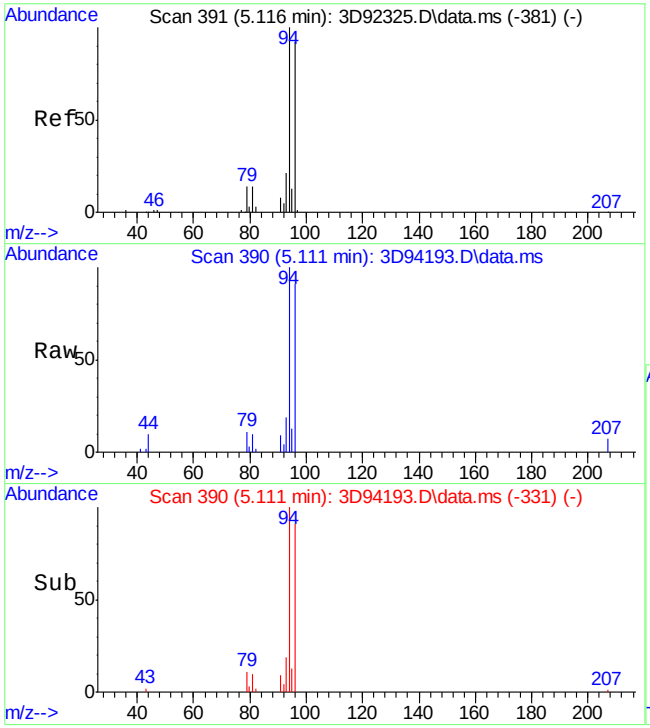


#11
vinyl chloride
Concen: 9.79 ug/L
RT: 4.445 min Scan# 263
Delta R.T. 0.001 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 62 Resp: 18682

Ion	Ratio	Lower	Upper
62	100		
64	32.5	2.0	62.0
61	9.9	0.0	39.1

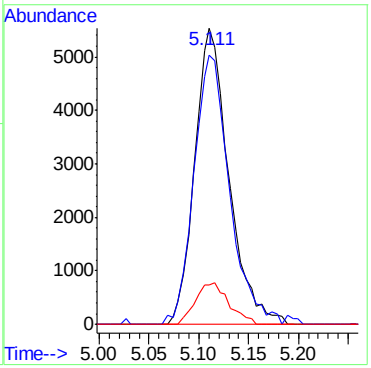


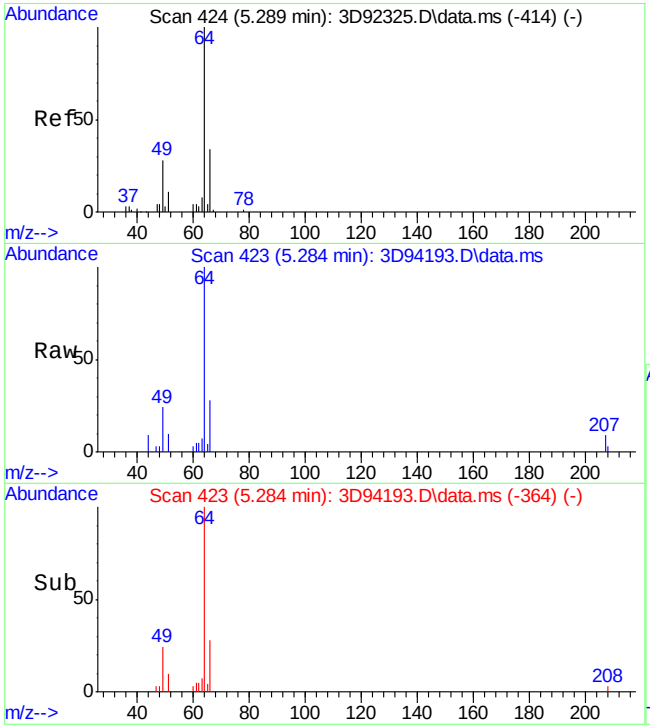


#12
bromomethane
Concen: 9.68 ug/L
RT: 5.111 min Scan# 390
Delta R.T. 0.012 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 94 Resp: 13161

Ion	Ratio	Lower	Upper
94	100		
96	90.9	63.8	123.8
95	13.5	0.0	43.9

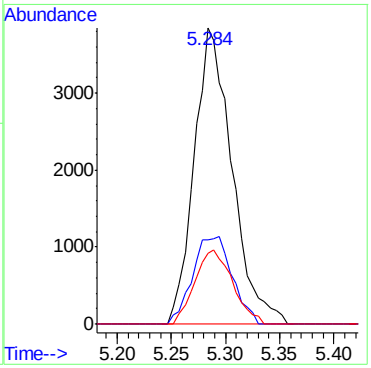




#13
chloroethane
Concen: 10.46 ug/L
RT: 5.284 min Scan# 423
Delta R.T. 0.012 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 64 Resp: 9398

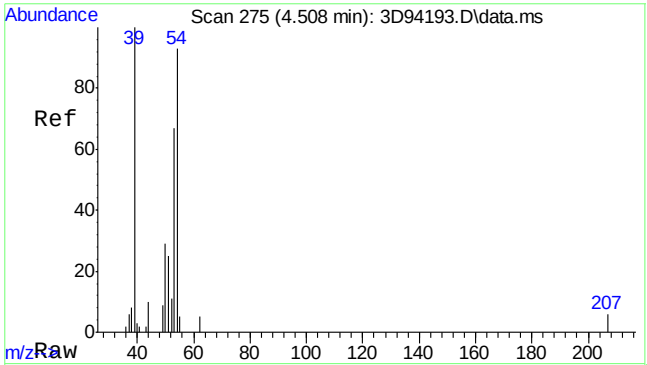
Ion	Ratio	Lower	Upper
64	100		
66	28.3	4.0	64.0
49	23.8	0.0	57.1



7.7.5

7

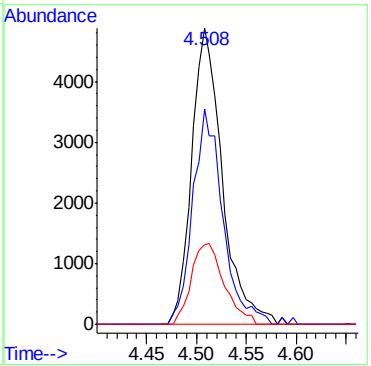
3D94193.D M3D4058.M Thu Dec 19 12:36:57 2013 3D Page 8

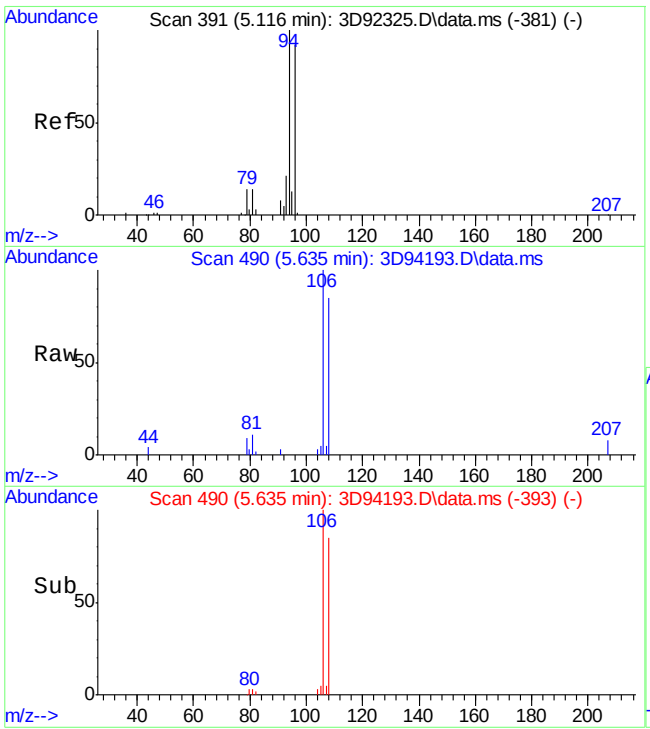


#14
1,3-butadiene
Concen: 10.56 ug/L
RT: 4.508 min Scan# 275
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 54 Resp: 10434

Ion	Ratio	Lower	Upper
54	100		
53	71.2	56.6	85.0
51	29.2	23.8	35.8

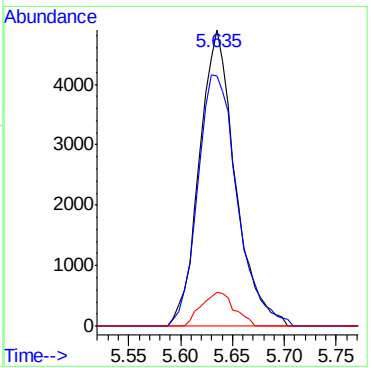


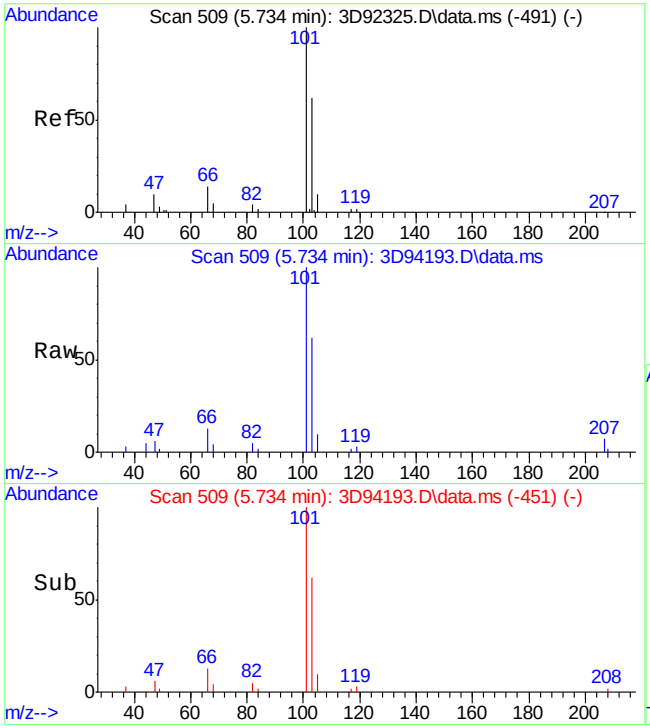


#15
vinyl bromide
Concen: 10.84 ug/L
RT: 5.635 min Scan# 490
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:106 Resp: 11714

Ion	Ratio	Lower	Upper
106	100		
108	93.9	64.3	124.3
81	10.4	0.0	40.6

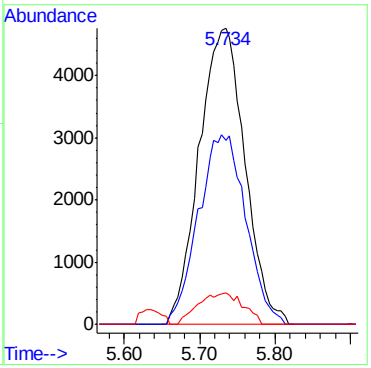


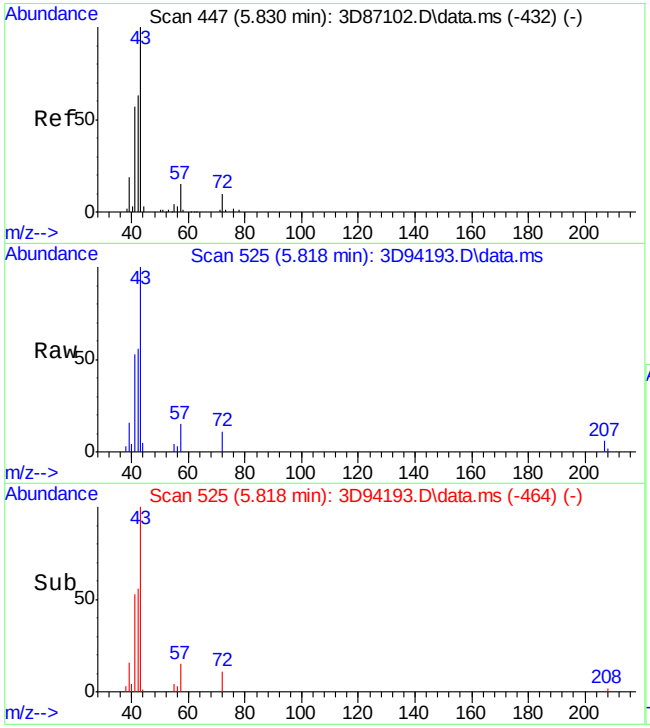


#16
trichlorofluoromethane
Concen: 9.56 ug/L
RT: 5.734 min Scan# 509
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:101 Resp: 20089

Ion	Ratio	Lower	Upper
101	100		
103	62.3	33.7	93.7
105	10.5	0.0	40.4

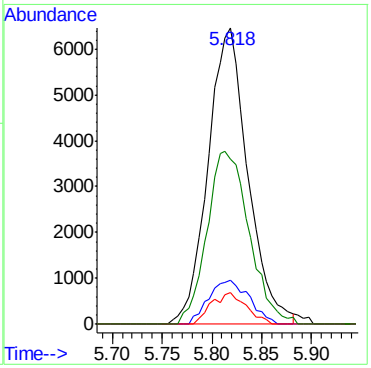


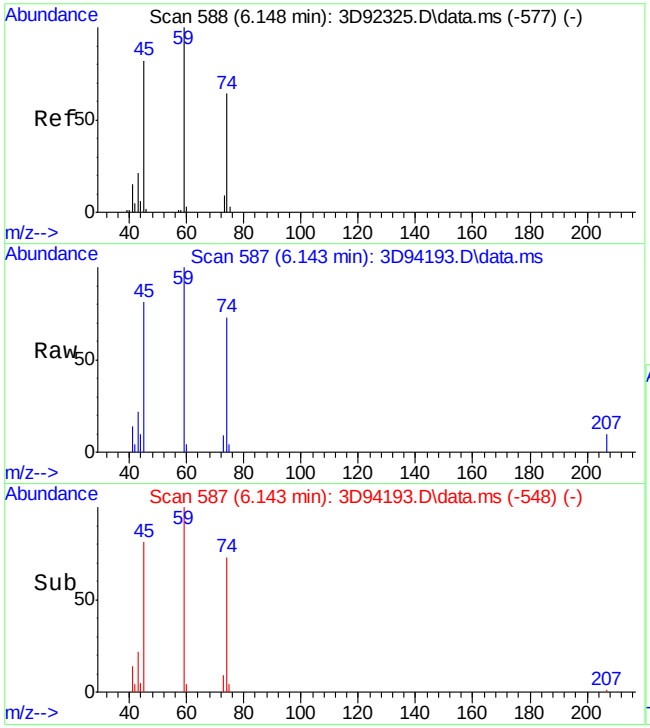


#17
pentane
Concen: 9.42 ug/L
RT: 5.818 min Scan# 525
Delta R.T. 0.121 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 43 Resp: 17968

Ion	Ratio	Lower	Upper
43	100		
57	14.8	0.0	30.0
72	10.8	0.0	30.0
42	55.9	0.0	30.0#

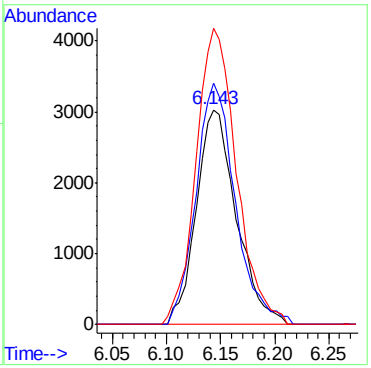


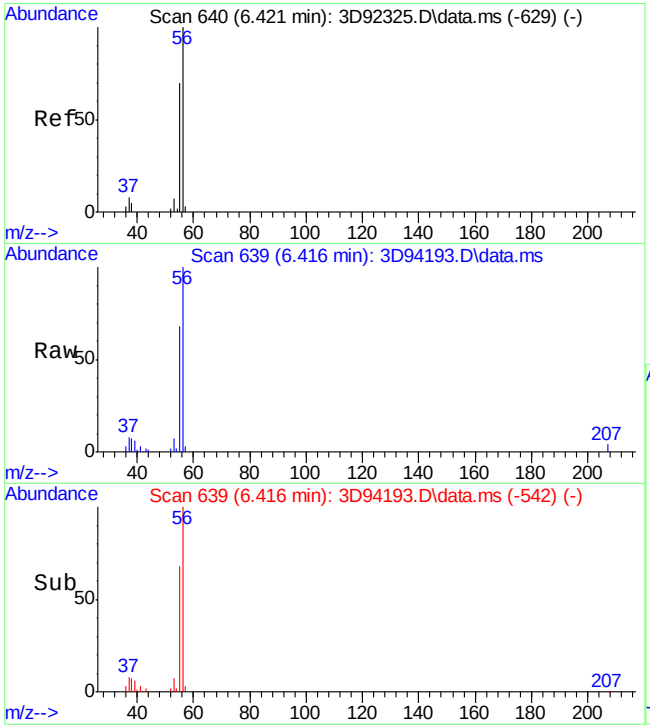


#18
ethyl ether
Concen: 11.13 ug/L
RT: 6.143 min Scan# 587
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 74 Resp: 7835

Ion	Ratio	Lower	Upper
74	100		
45	112.1	84.3	144.3
59	137.9	120.2	180.2

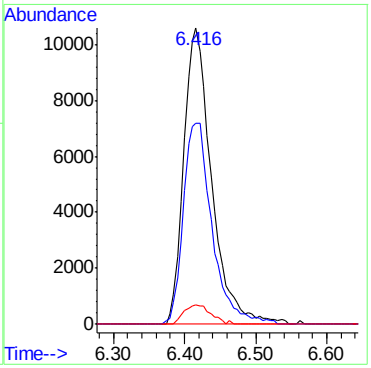




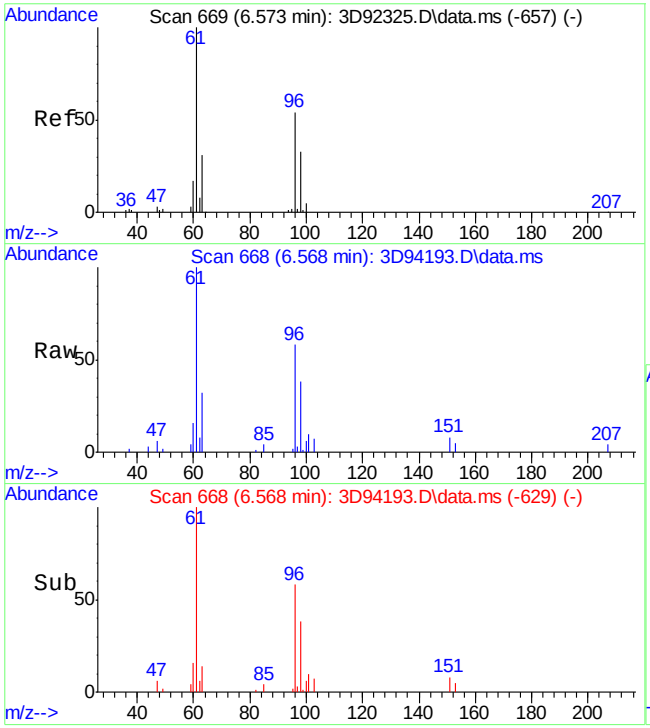
#21
acrolein
Concen: 95.75 ug/L
RT: 6.416 min Scan# 639
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 56 Resp: 28742

Ion	Ratio	Lower	Upper
56	100		
55	67.8	41.4	101.4
53	6.5	0.0	37.0



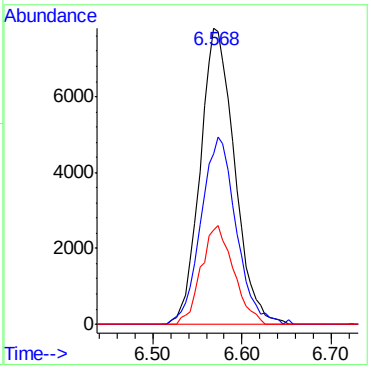
3D94193.D M3D4058.M Thu Dec 19 12:36:57 2013 3D Page 11

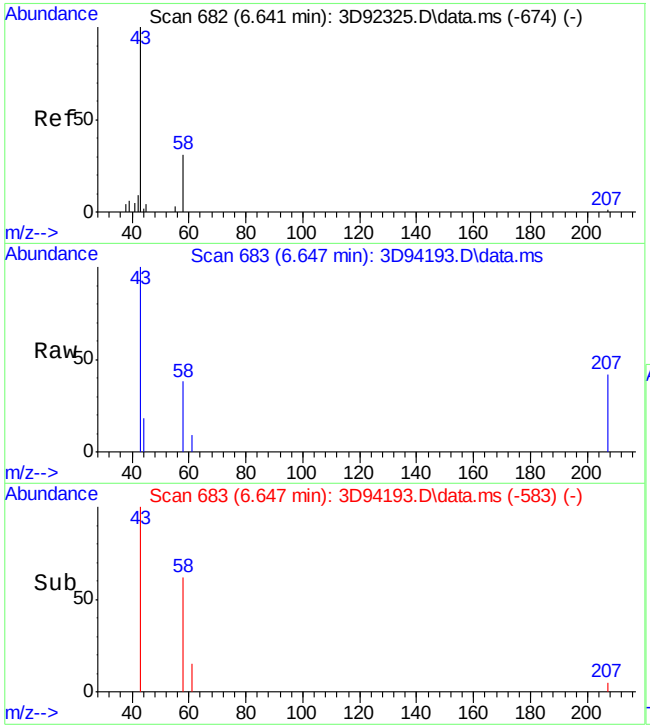


#22
1,1-dichloroethene
Concen: 10.22 ug/L
RT: 6.568 min Scan# 668
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 61 Resp: 20905

Ion	Ratio	Lower	Upper
61	100		
96	57.6	35.0	95.0
63	32.0	2.3	62.3

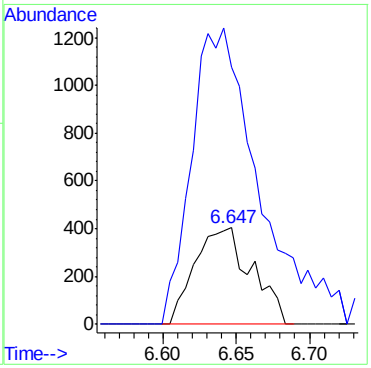


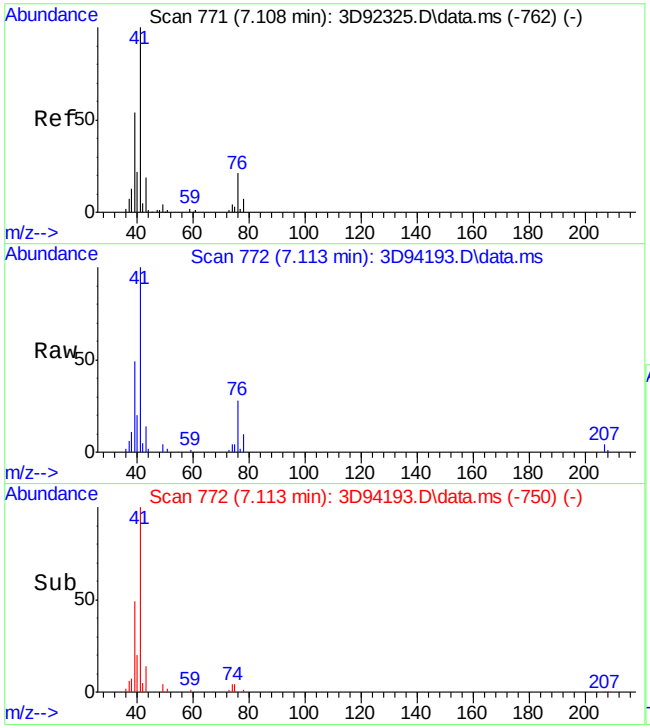


#23
acetone
Concen: 12.55 ug/L
RT: 6.647 min Scan# 683
Delta R.T. 0.027 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 58 Resp: 1086

Ion	Ratio	Lower	Upper
58	100		
43	266.3	281.3	341.3#

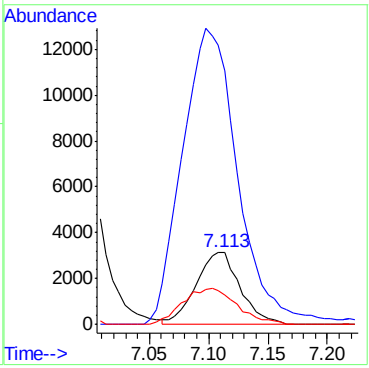


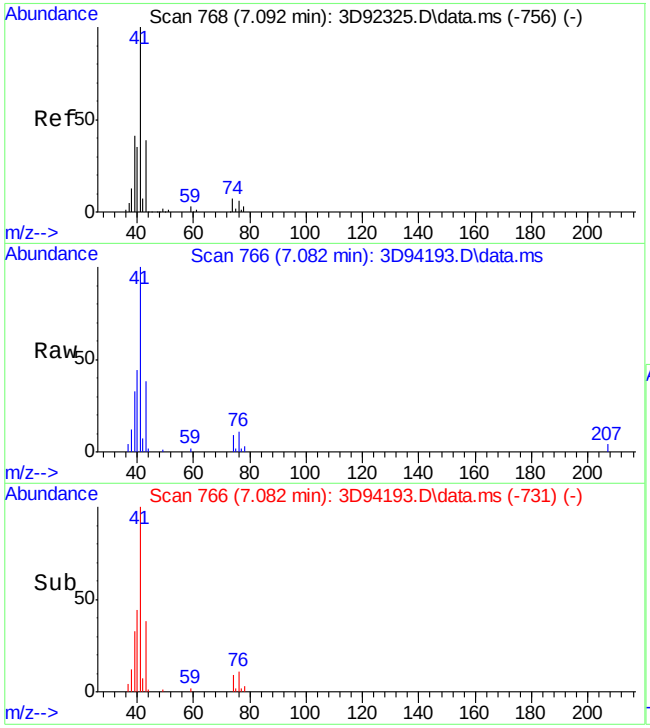


#24
allyl chloride
Concen: 9.94 ug/L
RT: 7.113 min Scan# 772
Delta R.T. 0.016 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 76 Resp: 8098

Ion	Ratio	Lower	Upper
76	100		
41	336.4	352.2	412.2#
38	40.3	13.8	73.8

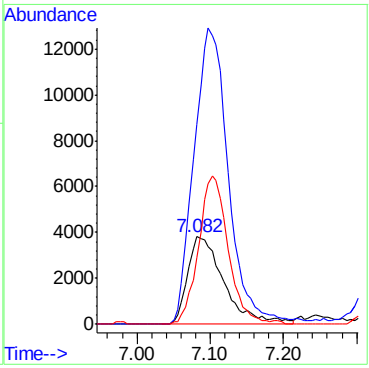




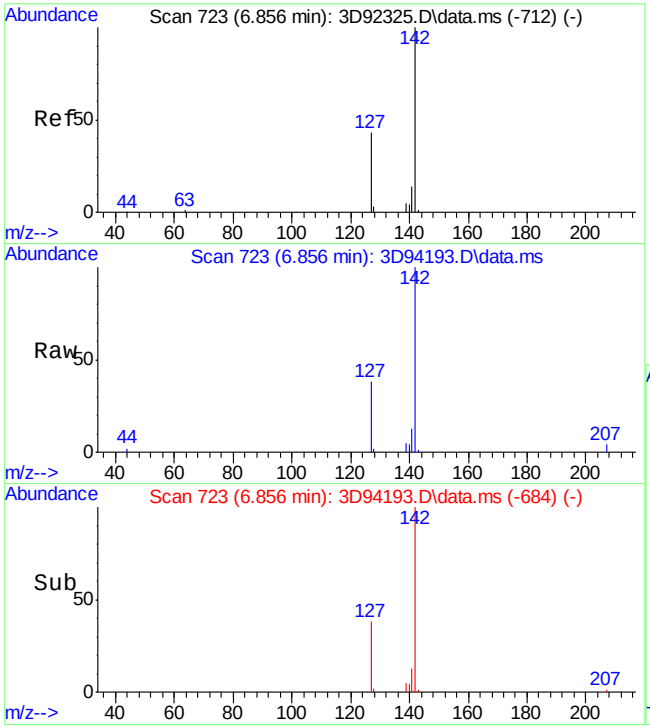
#25
acetonitrile
Concen: 95.42 ug/L
RT: 7.082 min Scan# 766
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 40 Resp: 13099

Ion	Ratio	Lower	Upper
40	100		
41	227.6	246.1	306.1#
39	75.4	62.7	122.7



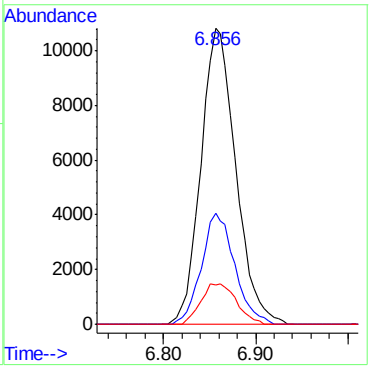
3D94193.D M3D4058.M Thu Dec 19 12:36:57 2013 3D Page 13

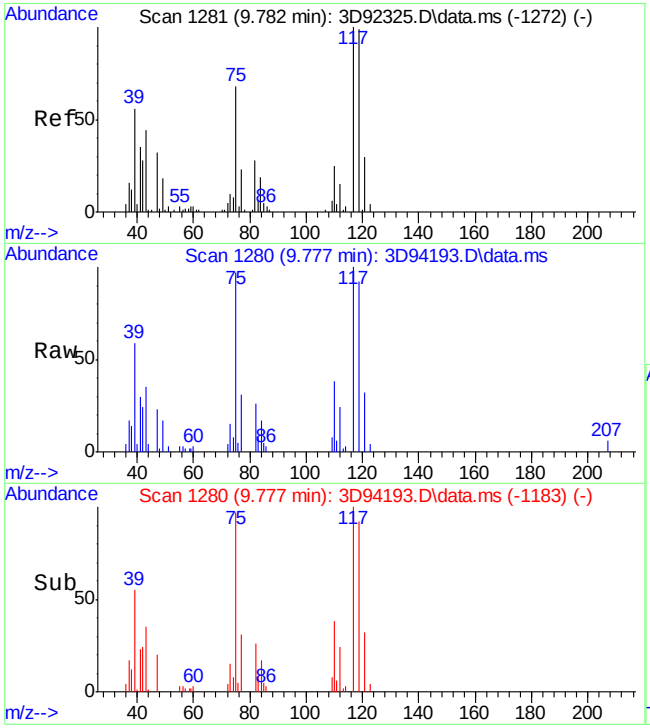


#27
iodomethane
Concen: 9.90 ug/L
RT: 6.856 min Scan# 723
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:142 Resp: 28314

Ion	Ratio	Lower	Upper
142	100		
127	37.7	6.0	66.0
141	13.4	0.0	44.5

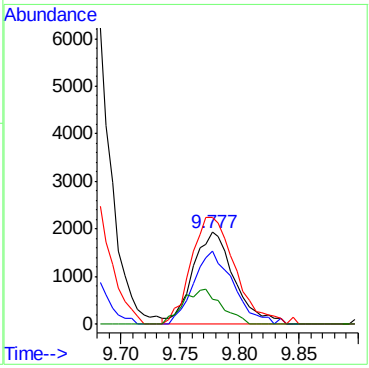




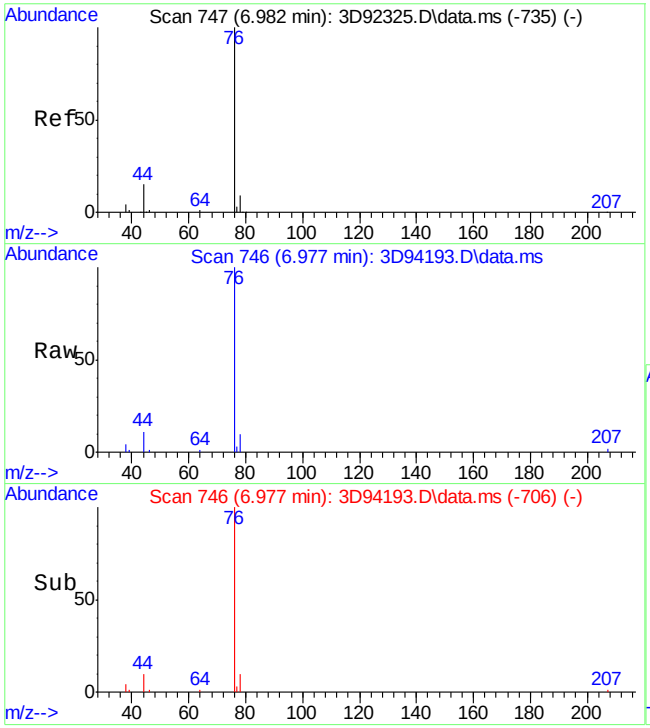
#28
iso-butyl alcohol
Concen: 101.43 ug/L
RT: 9.777 min Scan# 1280
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 41 Resp: 4696

Ion	Ratio	Lower	Upper
41	100		
42	79.8	56.4	116.4
43	115.5	104.5	164.5
74	27.4	4.6	64.6



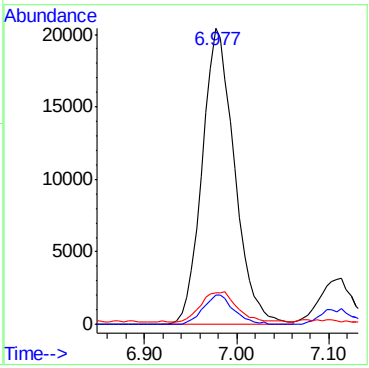
3D94193.D M3D4058.M Thu Dec 19 12:36:57 2013 3D Page 14

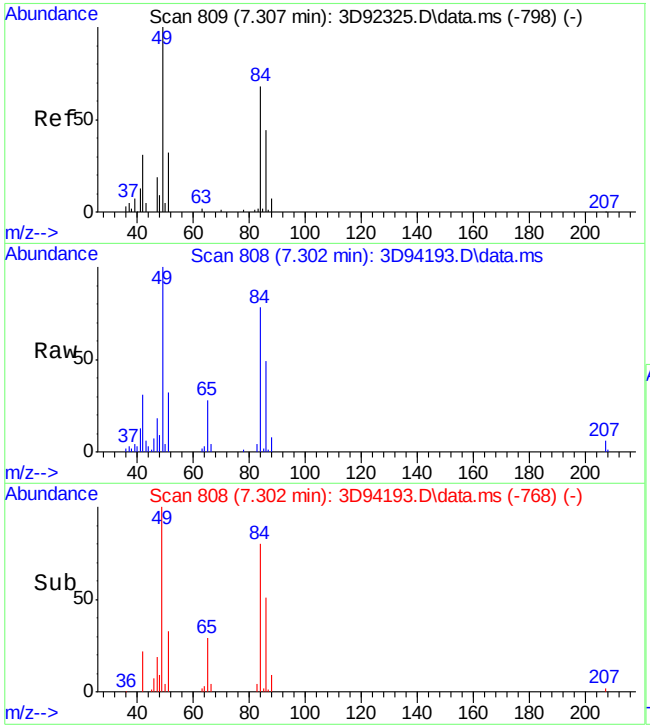


#29
carbon disulfide
Concen: 9.51 ug/L
RT: 6.977 min Scan# 746
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 76 Resp: 49935

Ion	Ratio	Lower	Upper
76	100		
78	10.1	0.0	39.2
44	9.8	0.0	41.2

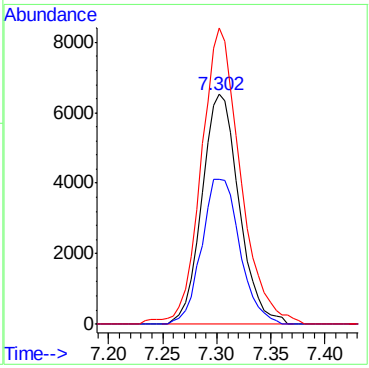


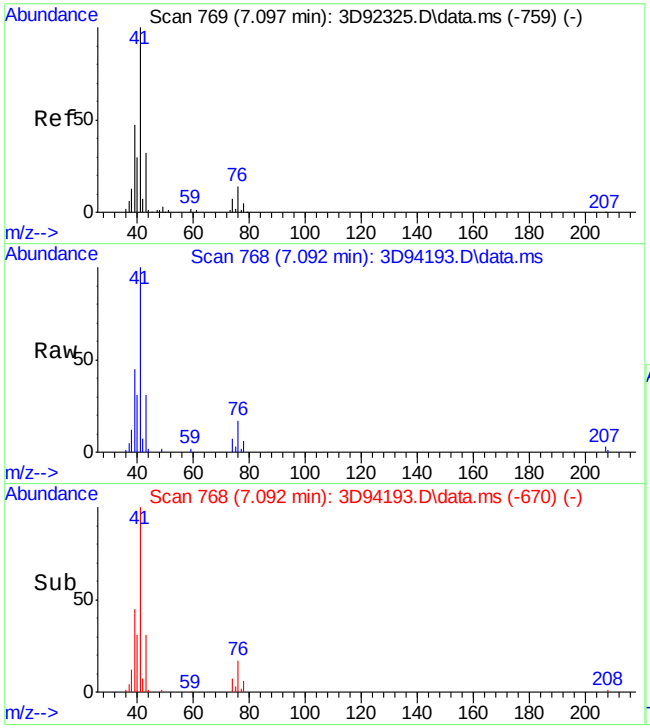


#30
methylene chloride
Concen: 9.84 ug/L
RT: 7.302 min Scan# 808
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 84 Resp: 15645

Ion	Ratio	Lower	Upper
84	100		
86	63.2	46.3	86.1
49	127.0	91.4	169.8

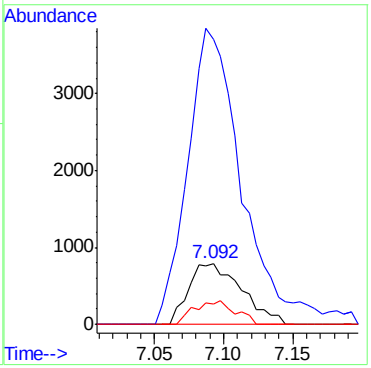


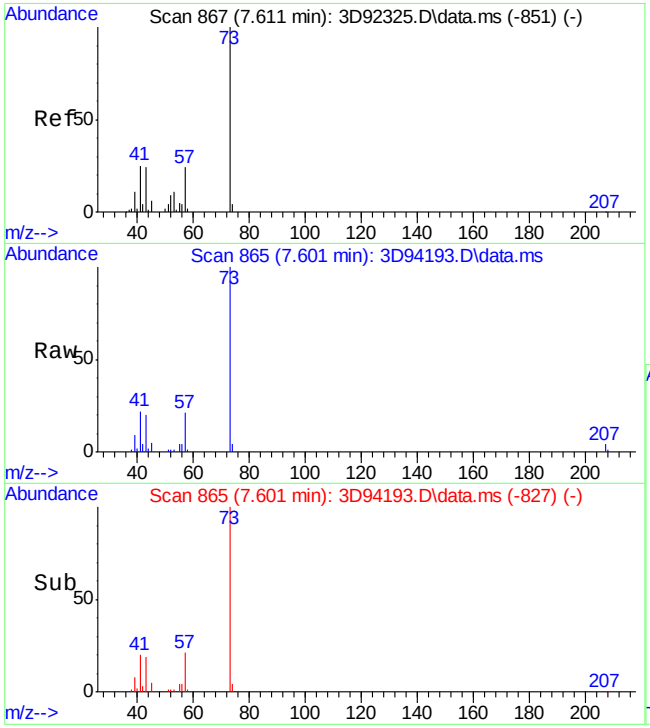


#31
methyl acetate
Concen: 9.88 ug/L
RT: 7.092 min Scan# 768
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 74 Resp: 2116

Ion	Ratio	Lower	Upper
74	100		
43	502.6	443.2	503.2
59	29.7	3.6	63.6

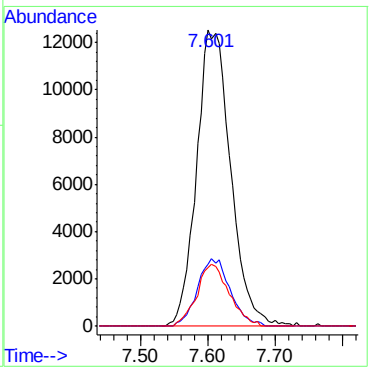


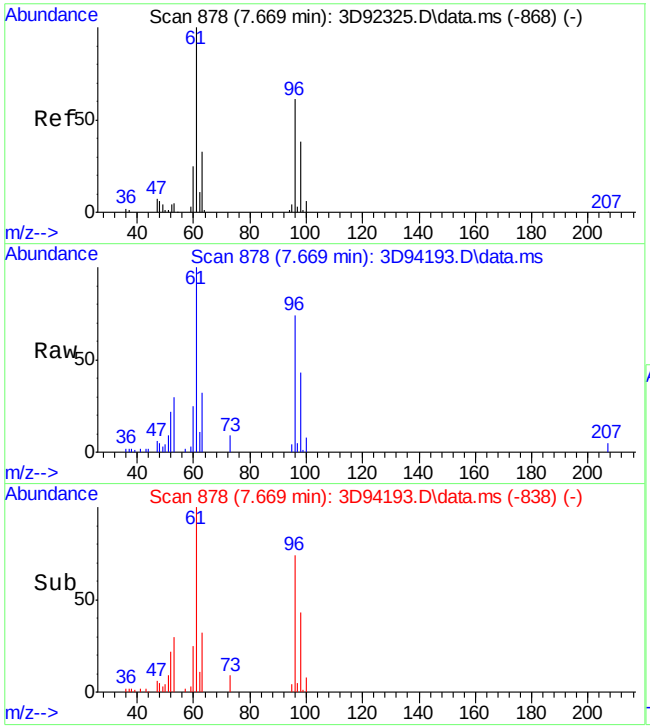


#32
methyl tert butyl ether
Concen: 9.76 ug/L
RT: 7.601 min Scan# 865
Delta R.T. 0.001 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 73 Resp: 43976

Ion	Ratio	Lower	Upper
73	100		
57	20.9	0.0	52.5
43	19.7	0.0	49.9

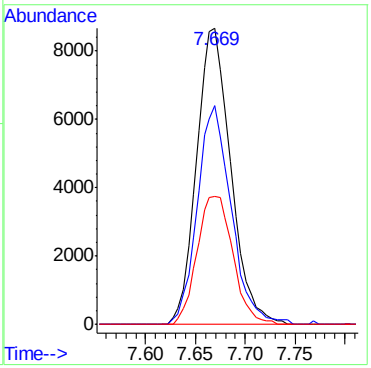


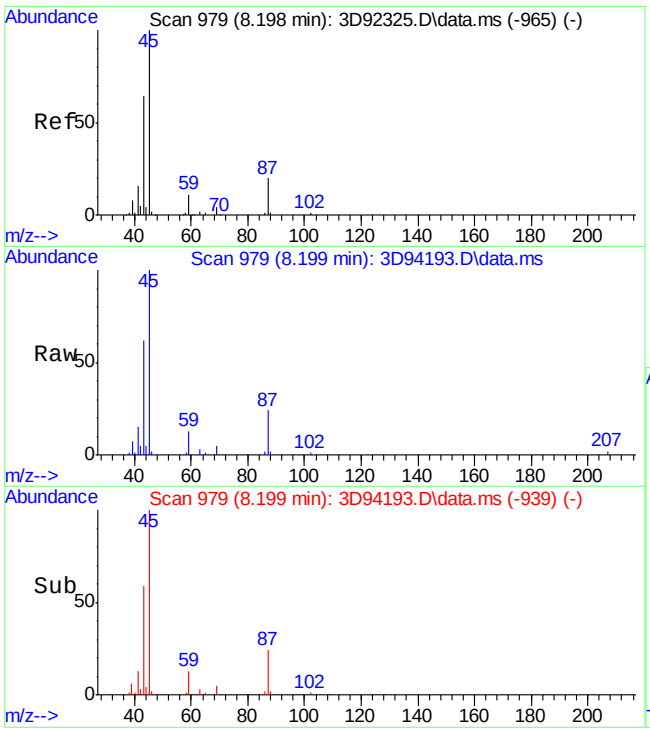


#33
trans-1,2-dichloroethene
Concen: 9.92 ug/L
RT: 7.669 min Scan# 878
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 61 Resp: 20655

Ion	Ratio	Lower	Upper
61	100		
96	74.0	49.6	92.0
98	43.3	31.6	58.8

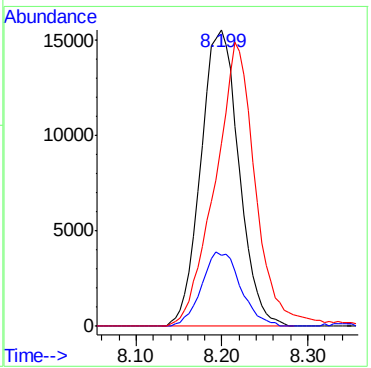


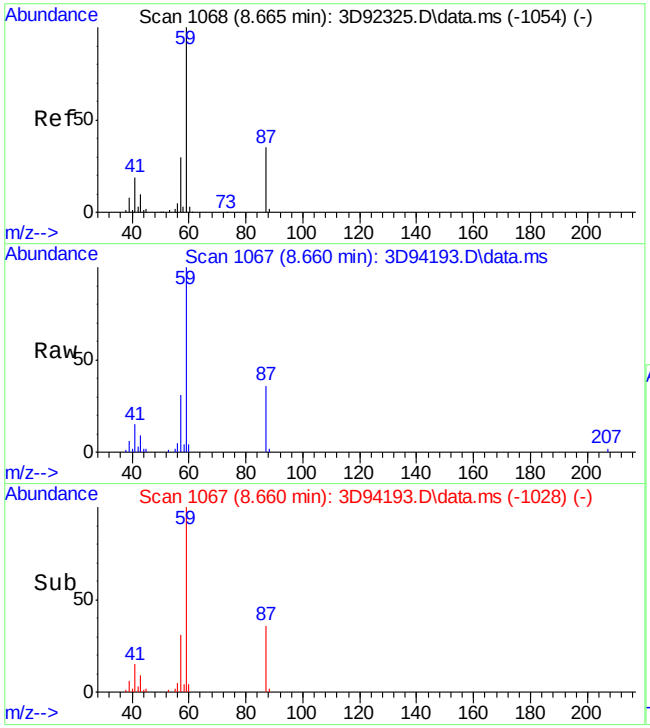


#34
di-isopropyl ether
Concen: 9.64 ug/L
RT: 8.199 min Scan# 979
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 45 Resp: 46860

Ion	Ratio	Lower	Upper
45	100		
87	24.1	0.0	53.7
43	61.8	33.1	93.1

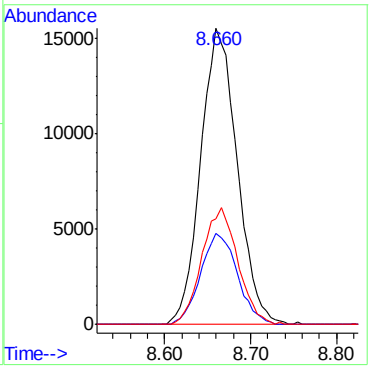


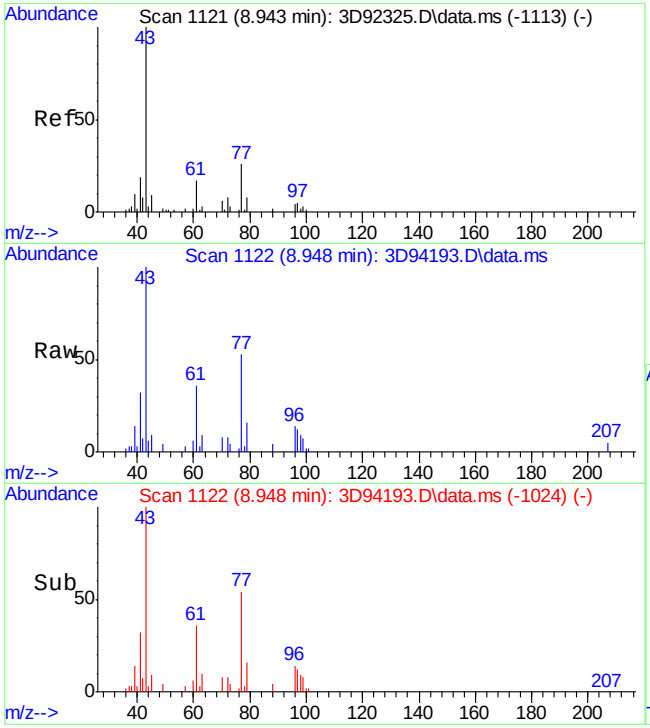


#35
ethyl tert-butyl ether
Concen: 10.52 ug/L
RT: 8.660 min Scan# 1067
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 59 Resp: 44799

Ion	Ratio	Lower	Upper
59	100		
57	30.9	1.0	61.0
87	35.7	8.7	68.7

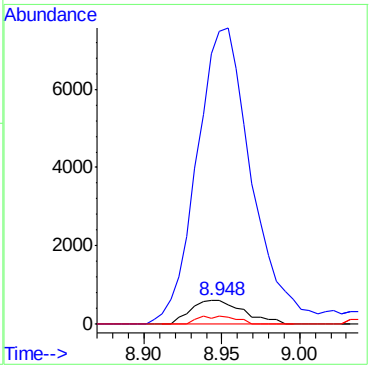




#36
2-butanone
Concen: 11.16 ug/L
RT: 8.948 min Scan# 1122
Delta R.T. 0.016 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 72 Resp: 1425

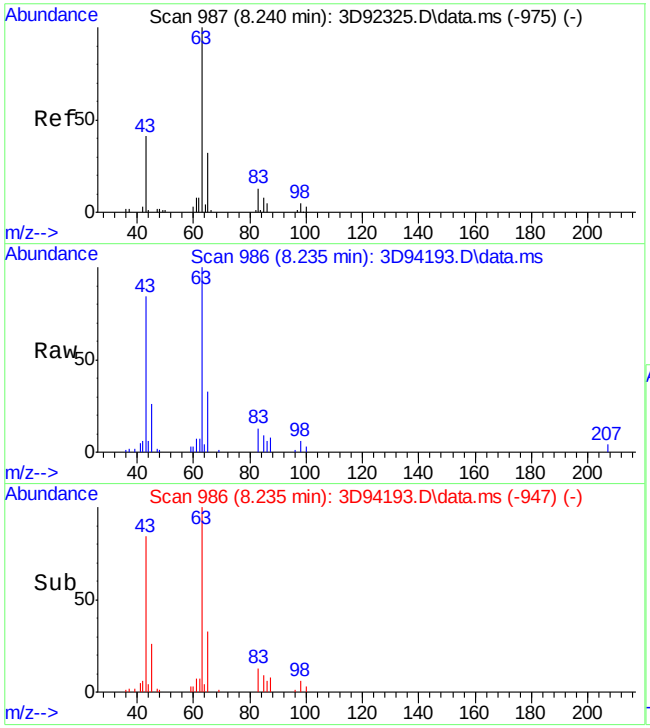
Ion	Ratio	Lower	Upper
72	100		
43	1356.4	849.2	1577.2
57	24.1	20.6	38.2



7.7.5

7

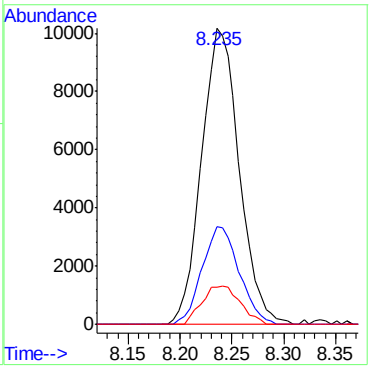
3D94193.D M3D4058.M Thu Dec 19 12:36:57 2013 3D Page 18

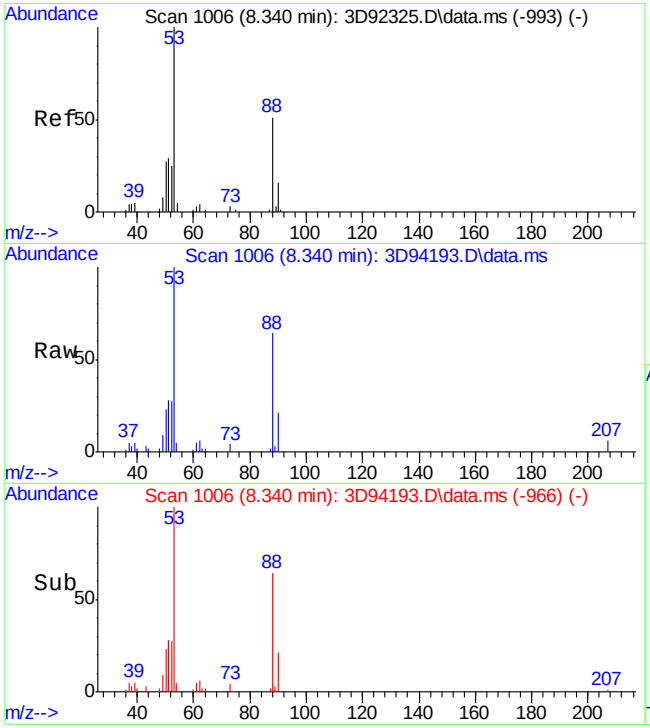


#37
1,1-dichloroethane
Concen: 9.76 ug/L
RT: 8.235 min Scan# 986
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 63 Resp: 25609

Ion	Ratio	Lower	Upper
63	100		
65	33.2	1.9	61.9
83	12.7	0.0	43.2

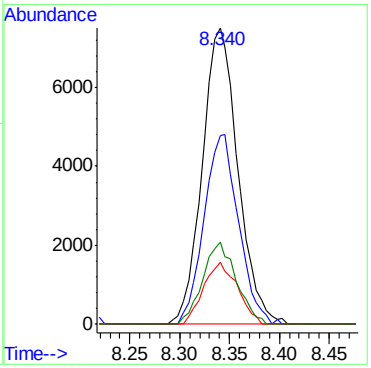




#38
chloroprene
Concen: 10.42 ug/L
RT: 8.340 min Scan# 1006
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 53 Resp: 18636

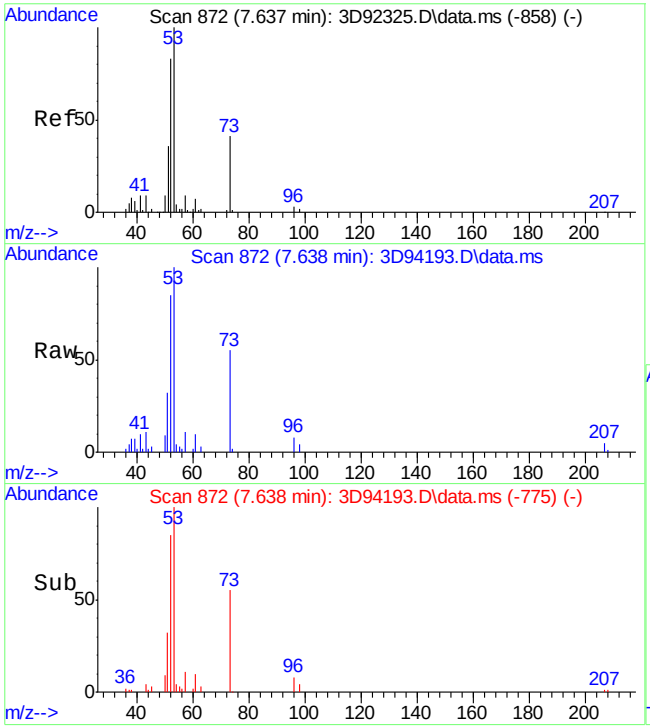
Ion	Ratio	Lower	Upper
53	100		
88	63.5	31.0	91.0
90	20.7	0.0	49.8
51	27.6	0.0	56.5



7.7.5

7

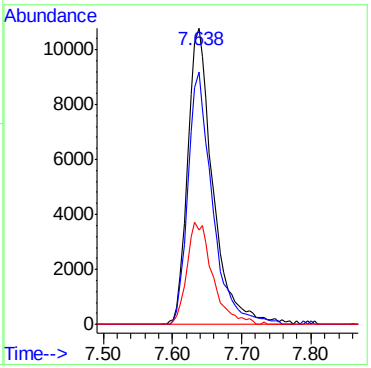
3D94193.D M3D4058.M Thu Dec 19 12:36:57 2013 3D Page 19

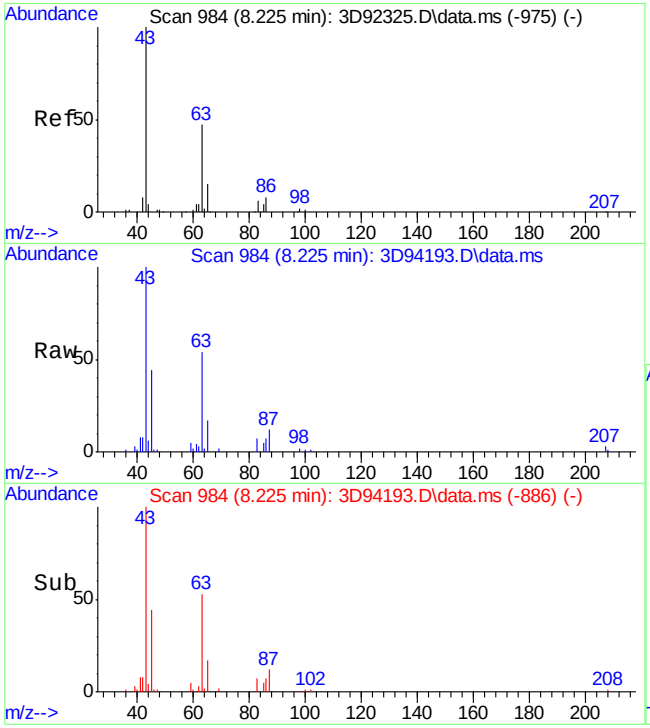


#39
acrylonitrile
Concen: 53.83 ug/L
RT: 7.638 min Scan# 872
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 53 Resp: 27284

Ion	Ratio	Lower	Upper
53	100		
52	85.3	52.8	112.8
51	31.8	3.9	63.9

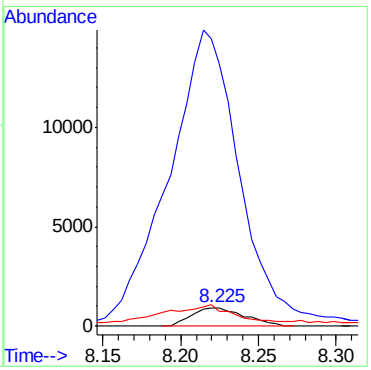


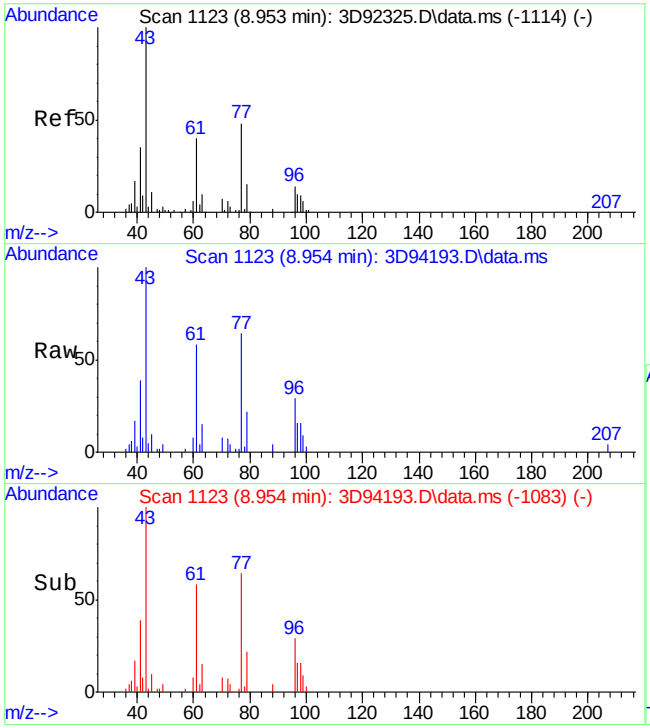


#40
vinyl acetate
Concen: 11.36 ug/L
RT: 8.225 min Scan# 984
Delta R.T. 0.016 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 86 Resp: 2122

Ion	Ratio	Lower	Upper
86	100		
43	1333.8	1099.0	2041.0
44	52.2	58.9	109.5#

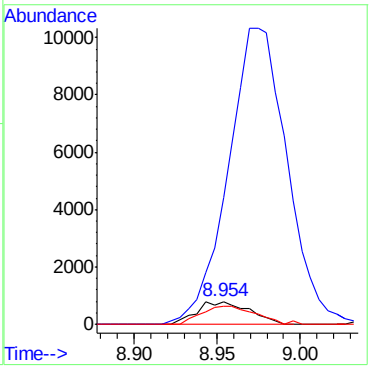


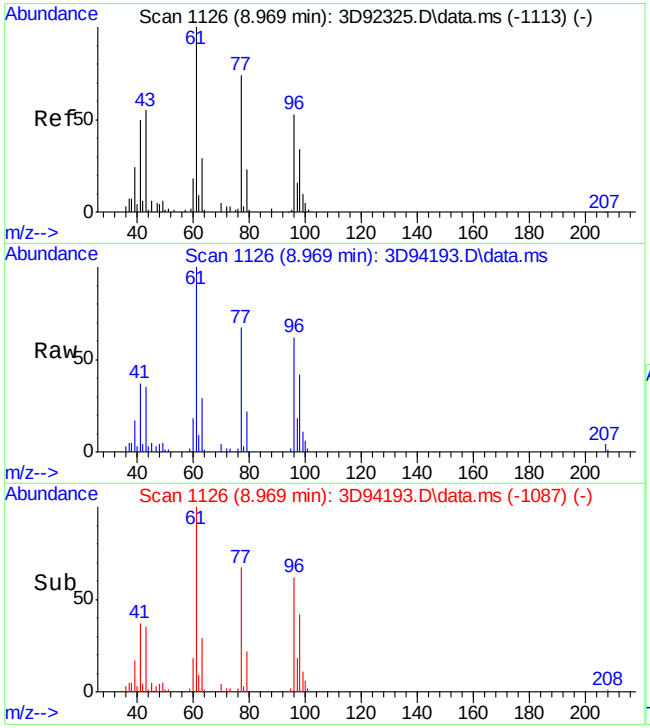


#41
ethyl acetate
Concen: 9.84 ug/L
RT: 8.954 min Scan# 1123
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 45 Resp: 1721

Ion	Ratio	Lower	Upper
45	100		
61	559.9	298.5	554.5#
70	78.3	58.8	109.2

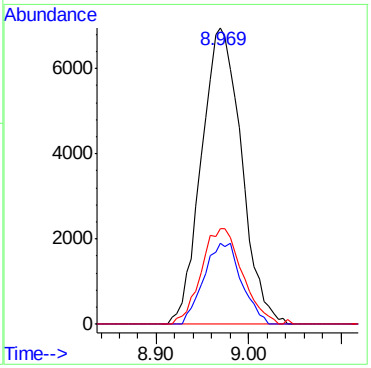


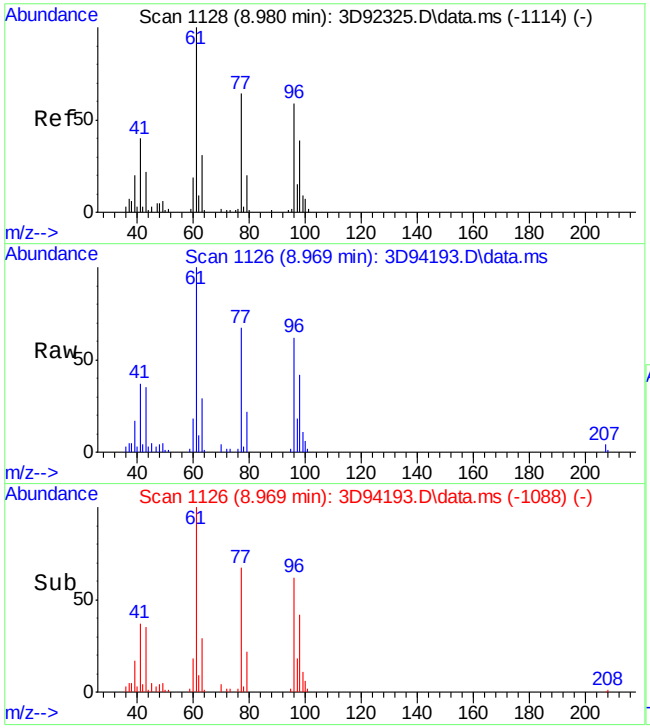


#42
2,2-dichloropropane
Concen: 9.42 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 77 Resp: 20858

Ion	Ratio	Lower	Upper
77	100		
97	27.2	0.0	56.8
79	32.4	2.1	62.1

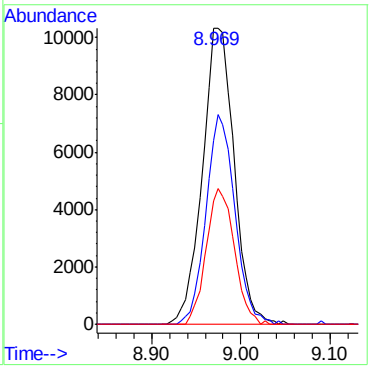


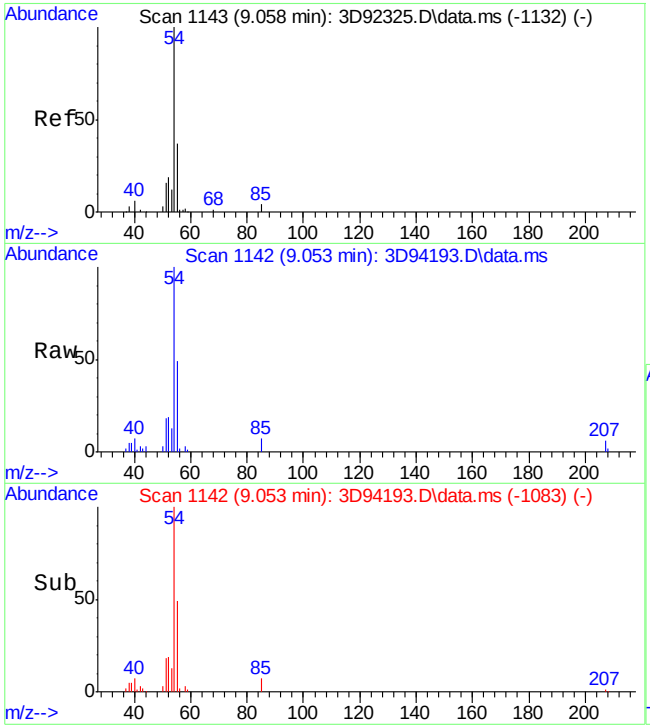


#43
cis-1,2-dichloroethene
Concen: 10.10 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.000 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 61 Resp: 25621

Ion	Ratio	Lower	Upper
61	100		
96	62.3	40.7	100.7
98	41.6	16.0	76.0

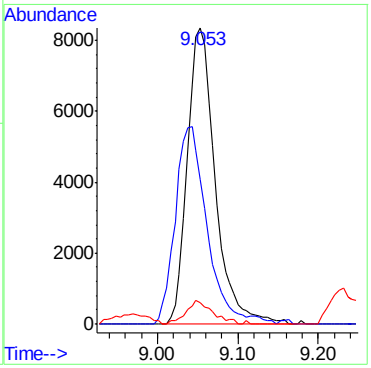




#44
propionitrile
Concen: 105.37 ug/L
RT: 9.053 min Scan# 1142
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

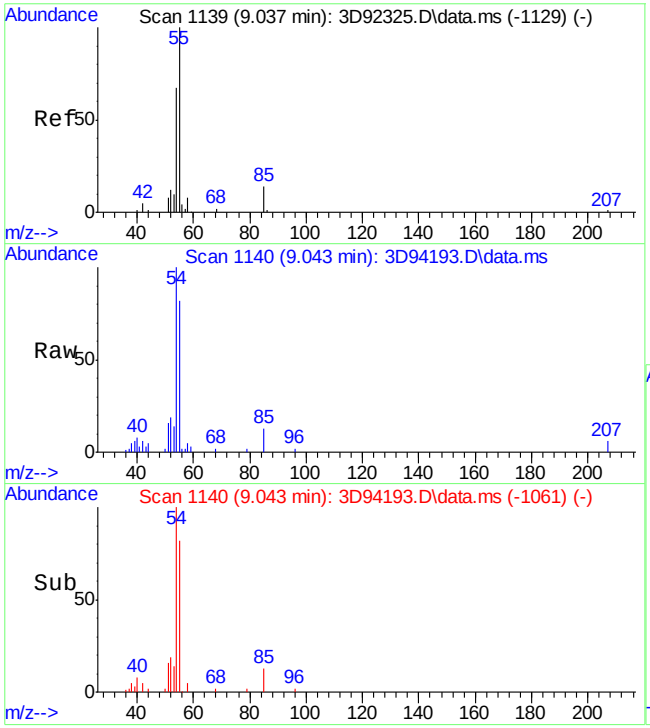
Tgt Ion: 54 Resp: 20223

Ion	Ratio	Lower	Upper
54	100		
55	48.9	13.0	73.0
40	7.3	0.0	35.2



7.7.5

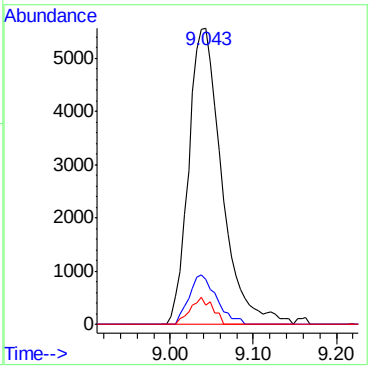
7

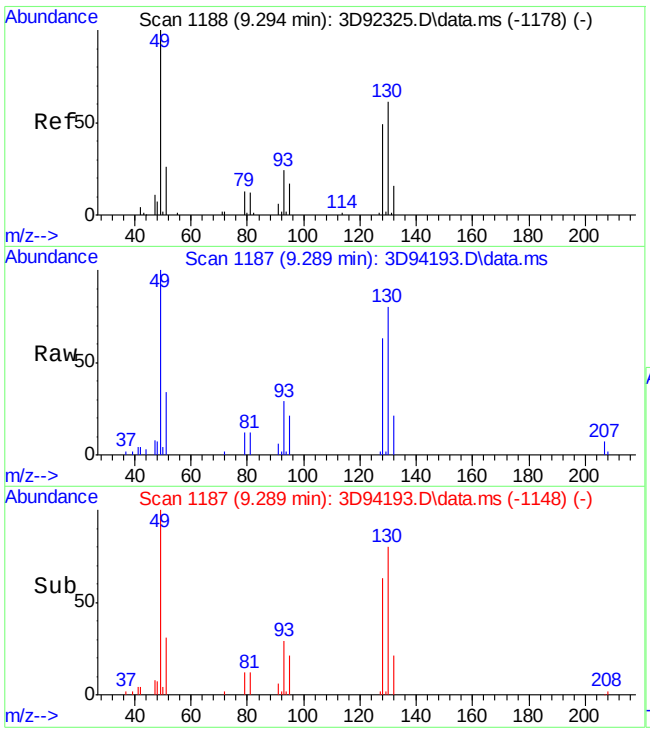


#45
methyl acrylate
Concen: 11.48 ug/L
RT: 9.043 min Scan# 1140
Delta R.T. 0.016 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 55 Resp: 15387

Ion	Ratio	Lower	Upper
55	100		
85	15.4	0.0	46.2
58	6.4	0.0	38.5

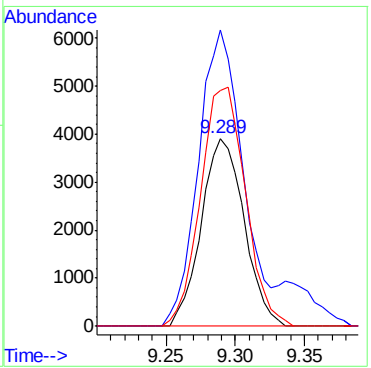


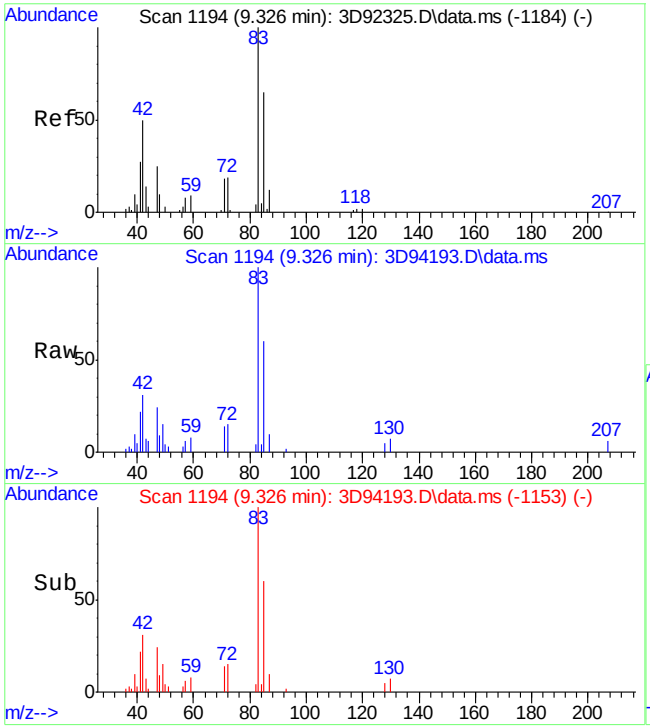


#46
bromochloromethane
Concen: 10.85 ug/L
RT: 9.289 min Scan# 1187
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:128 Resp: 8453

Ion	Ratio	Lower	Upper
128	100		
49	157.7	124.8	184.8
130	125.6	100.2	160.2

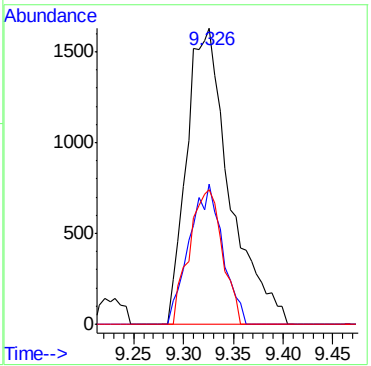


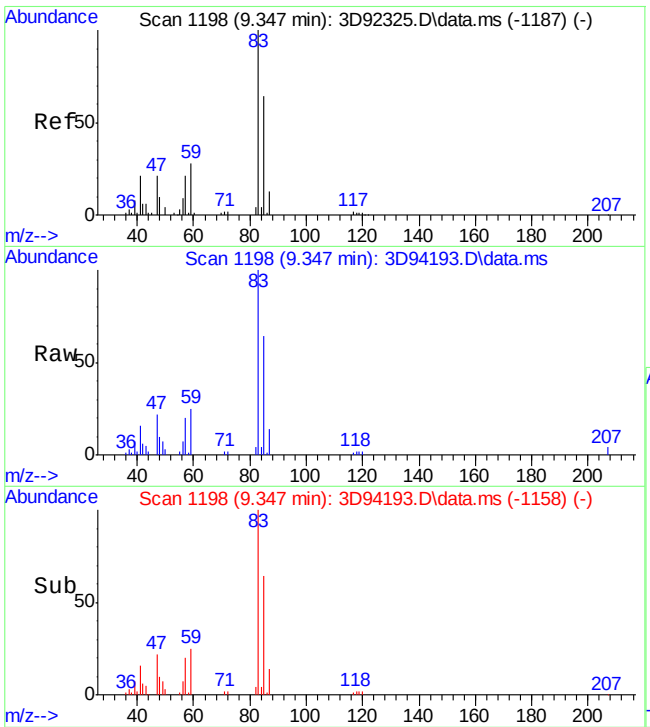


#47
tetrahydrofuran
Concen: 10.60 ug/L
RT: 9.326 min Scan# 1194
Delta R.T. 0.016 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 42 Resp: 4890

Ion	Ratio	Lower	Upper
42	100		
72	36.6	8.2	68.2
71	34.6	5.6	65.6

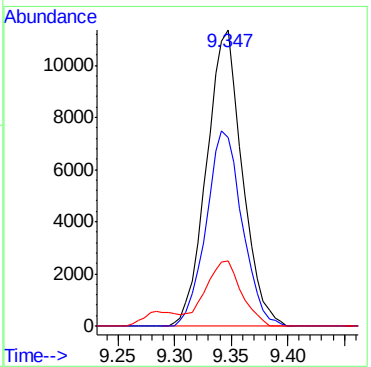


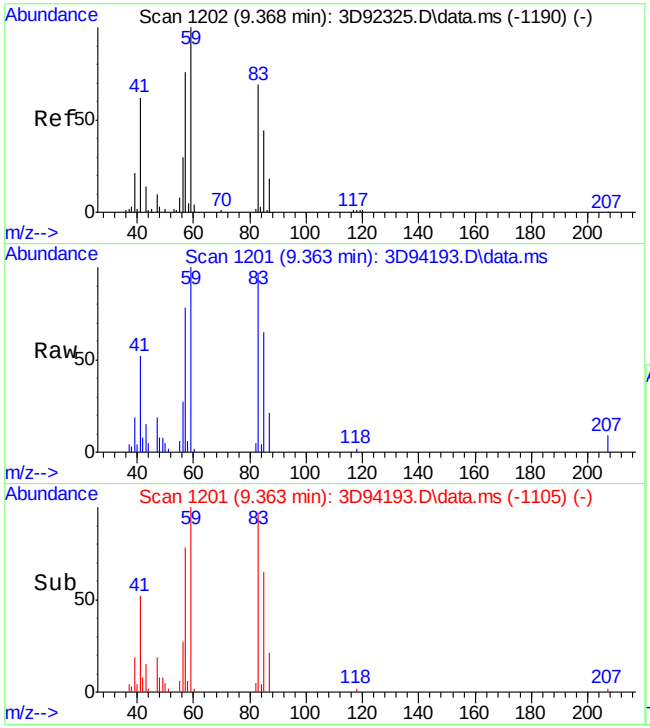


#48
chloroform
Concen: 9.80 ug/L
RT: 9.347 min Scan# 1198
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 83 Resp: 24790

Ion	Ratio	Lower	Upper
83	100		
85	63.6	33.8	93.8
47	22.2	0.0	52.3

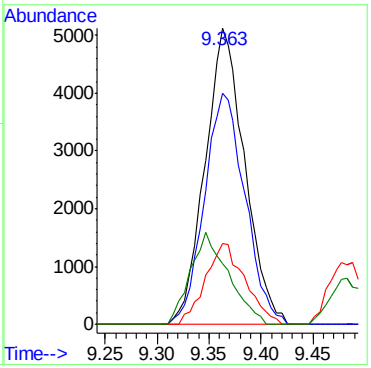


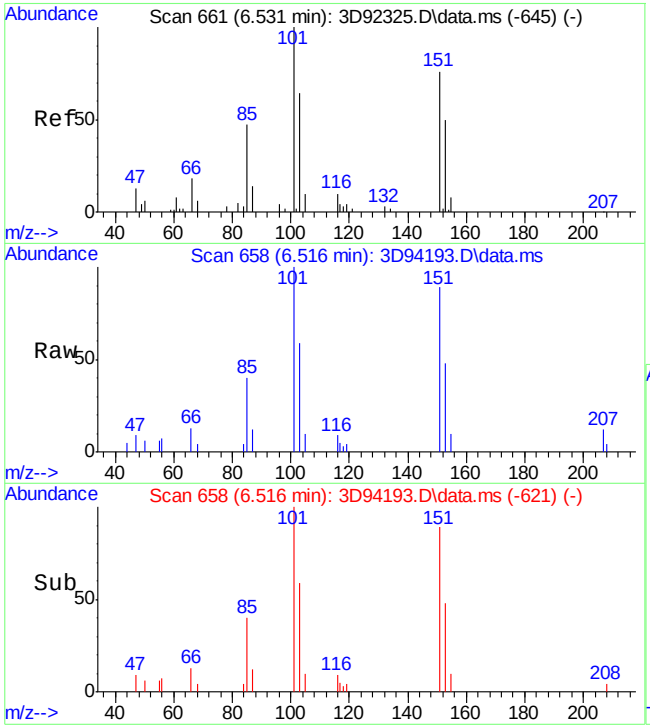


#49
Tert-Butyl Formate
Concen: 10.86 ug/L
RT: 9.363 min Scan# 1201
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 59 Resp: 13599

Ion	Ratio	Lower	Upper
59	100		
57	80.0	64.6	97.0
56	27.2	22.2	33.2
87	29.9	25.0	37.4

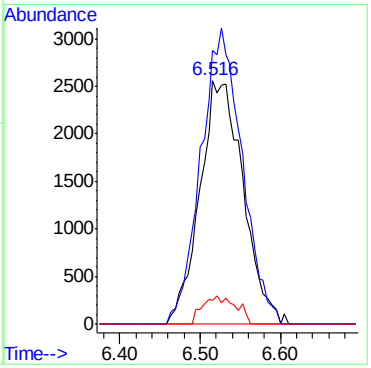




#52
freon 113
Concen: 10.85 ug/L
RT: 6.516 min Scan# 658
Delta R.T. -0.004 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

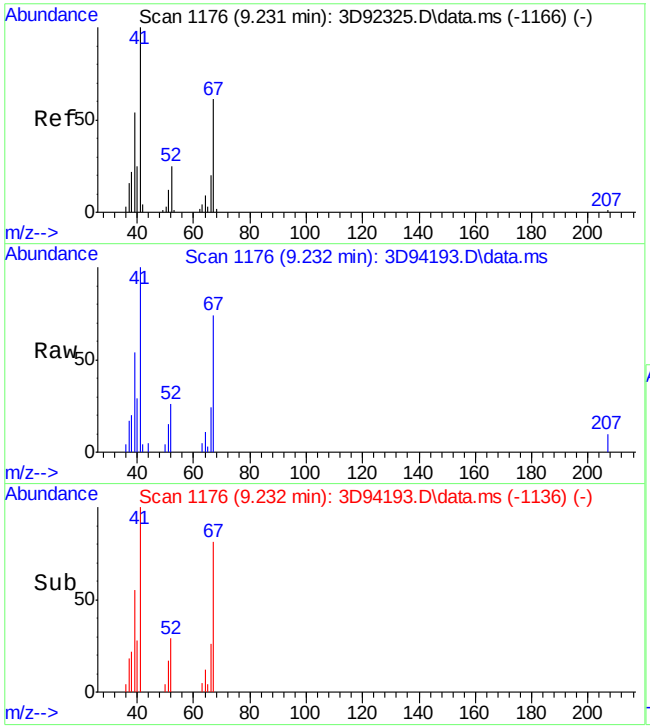
Tgt Ion:151 Resp: 9602

Ion	Ratio	Lower	Upper
151	100		
101	112.5	82.2	142.2
116	9.9	0.0	39.5



7.7.5

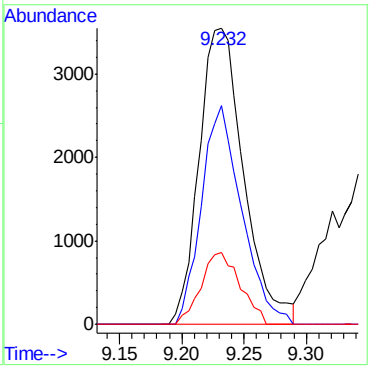
7

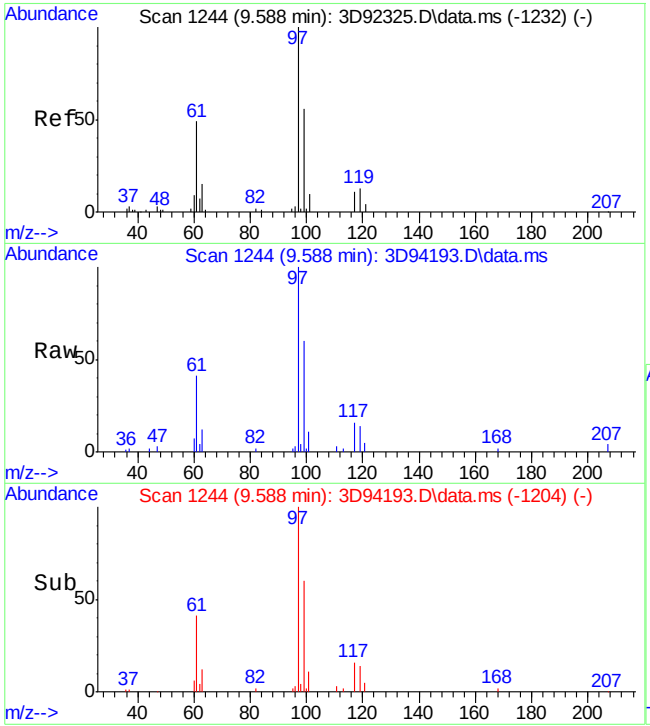


#53
methacrylonitrile
Concen: 10.60 ug/L
RT: 9.232 min Scan# 1176
Delta R.T. 0.012 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 41 Resp: 8856

Ion	Ratio	Lower	Upper
41	100		
67	73.8	38.3	98.3
66	24.1	0.0	52.9

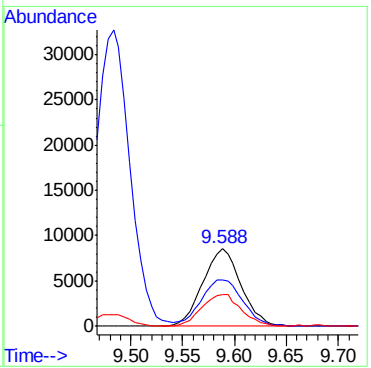


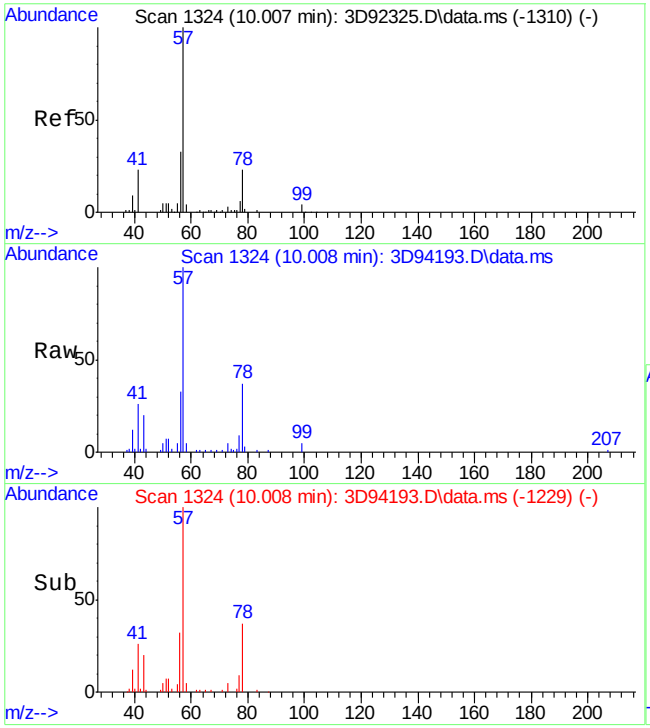


#54
1,1,1-trichloroethane
Concen: 10.04 ug/L
RT: 9.588 min Scan# 1244
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 97 Resp: 21743

Ion	Ratio	Lower	Upper
97	100		
99	60.1	36.0	96.0
61	41.2	11.8	71.8

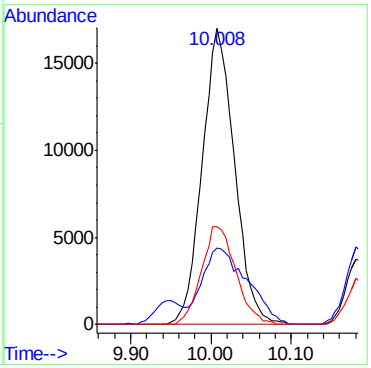


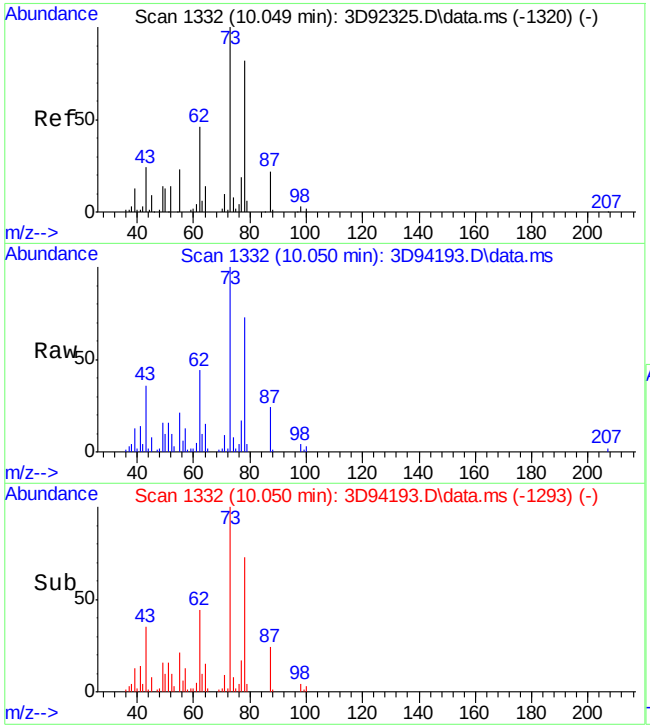


#56
2,2,4-Trimethylpentane
Concen: 10.05 ug/L
RT: 10.008 min Scan# 1324
Delta R.T. 0.001 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 57 Resp: 47594

Ion	Ratio	Lower	Upper
57	100		
41	36.3	4.5	64.5
56	35.0	4.3	64.3

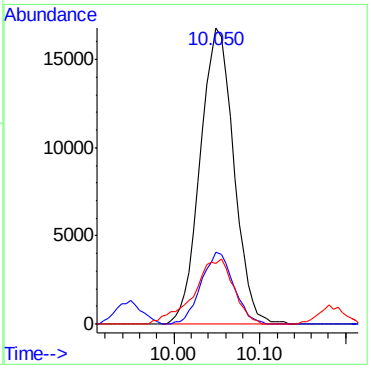


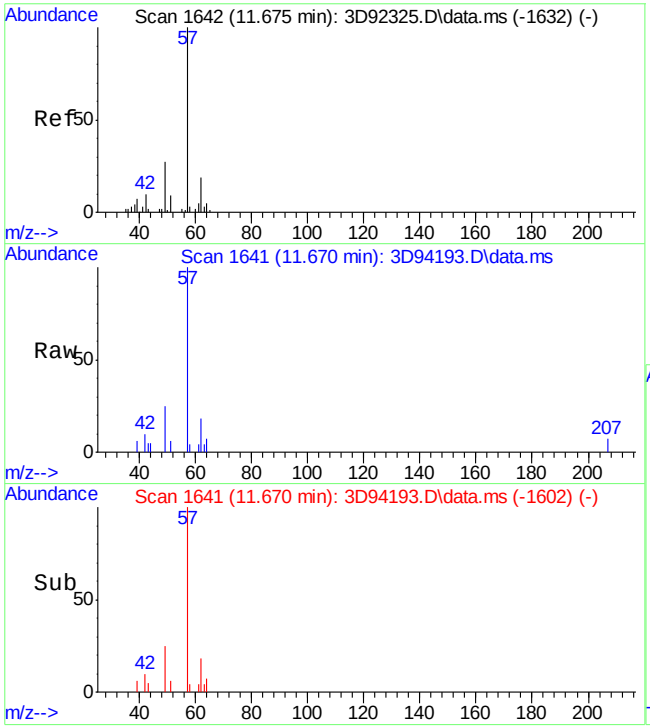


#57
tert-amyl methyl ether
Concen: 10.18 ug/L
RT: 10.050 min Scan# 1332
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 73 Resp: 44510

Ion	Ratio	Lower	Upper
73	100		
87	24.3	0.0	53.3
55	20.6	0.0	52.5

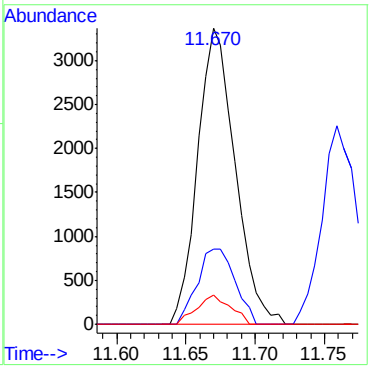


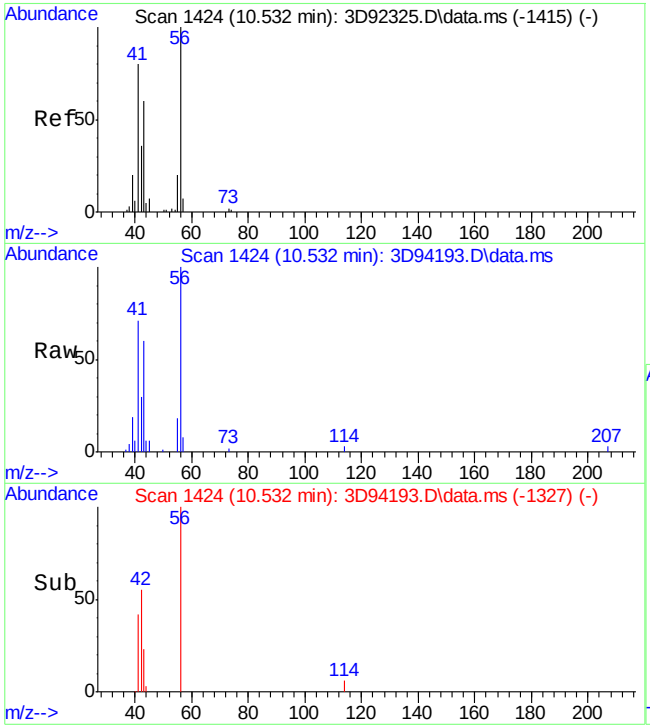


#59
epichlorohydrin
Concen: 53.40 ug/L
RT: 11.670 min Scan# 1641
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 57 Resp: 6368

Ion	Ratio	Lower	Upper
57	100		
49	25.4	0.0	55.9
42	10.0	0.0	37.7

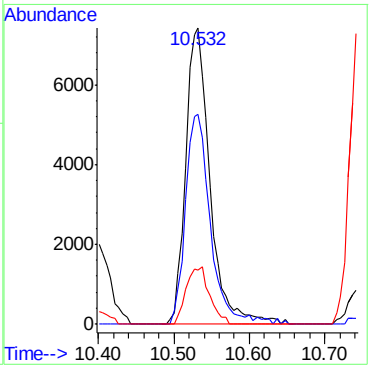




#60
n-butyl alcohol
Concen: 478.71 ug/L
RT: 10.532 min Scan# 1424
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 56 Resp: 16449

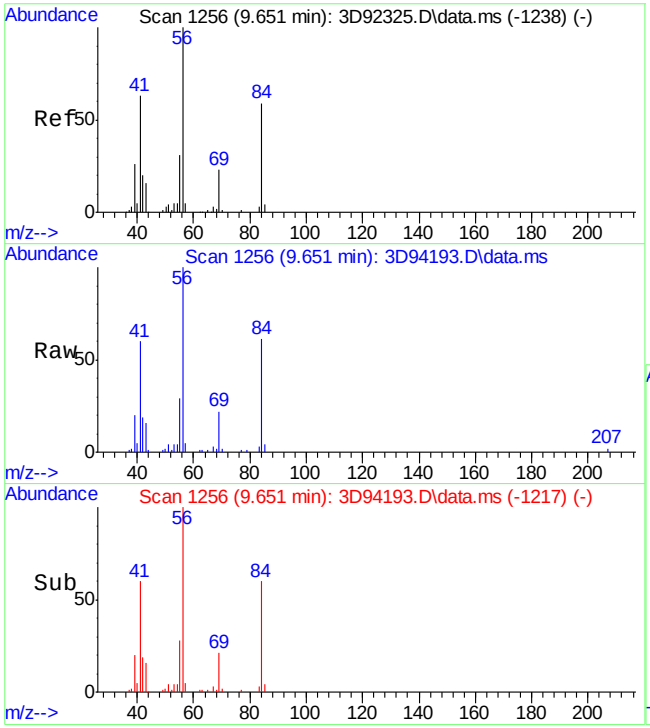
Ion	Ratio	Lower	Upper
56	100		
41	70.7	42.4	102.4
55	18.1	0.0	48.3



7.7.5

7

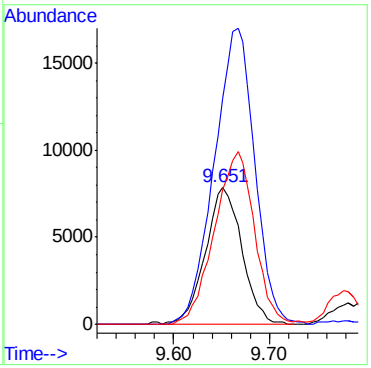
3D94193.D M3D4058.M Thu Dec 19 12:36:58 2013 3D Page 28

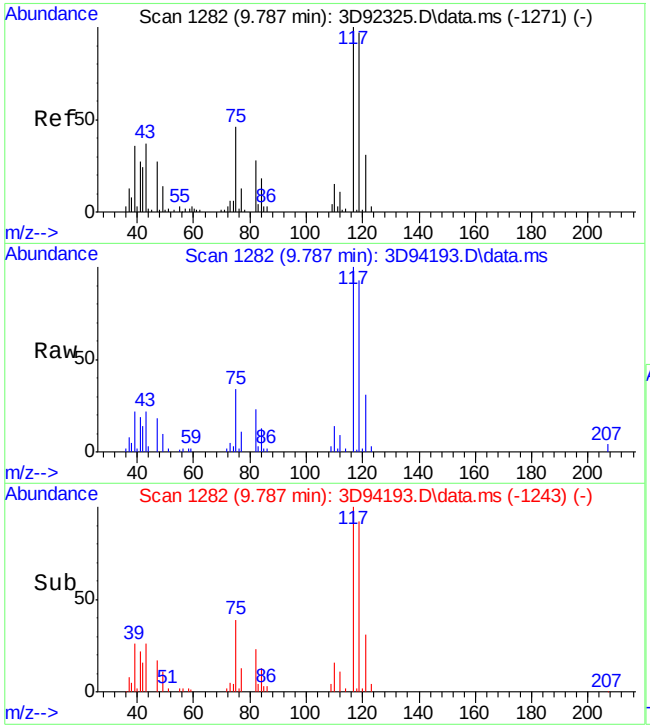


#61
cyclohexane
Concen: 9.89 ug/L
RT: 9.651 min Scan# 1256
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 84 Resp: 20871

Ion	Ratio	Lower	Upper
84	100		
56	240.4	210.2	270.2
41	138.5	108.6	168.6

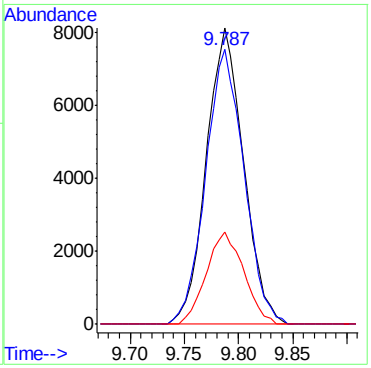


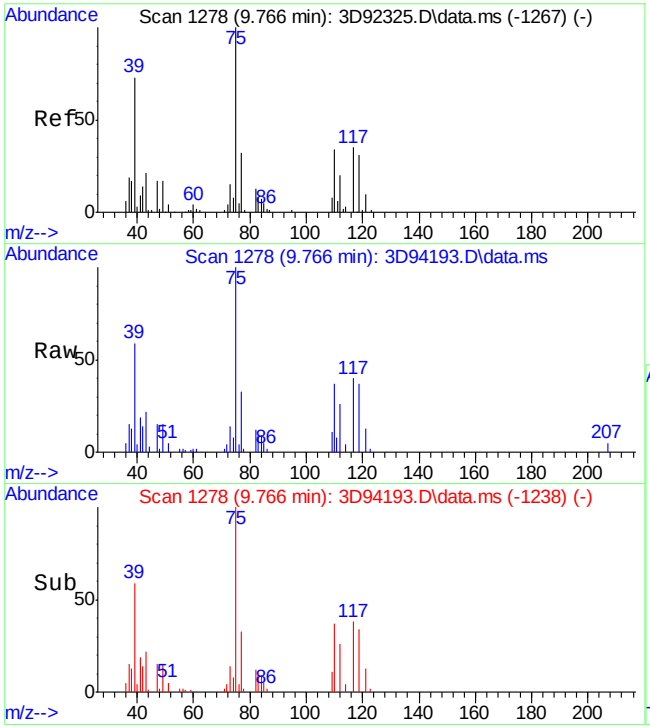


#62
carbon tetrachloride
Concen: 10.33 ug/L
RT: 9.787 min Scan# 1282
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:117 Resp: 19586

Ion	Ratio	Lower	Upper
117	100		
119	92.8	65.7	125.7
121	31.3	0.9	60.9

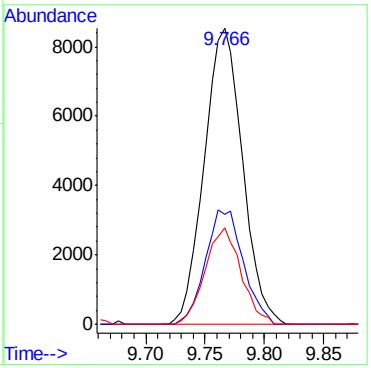


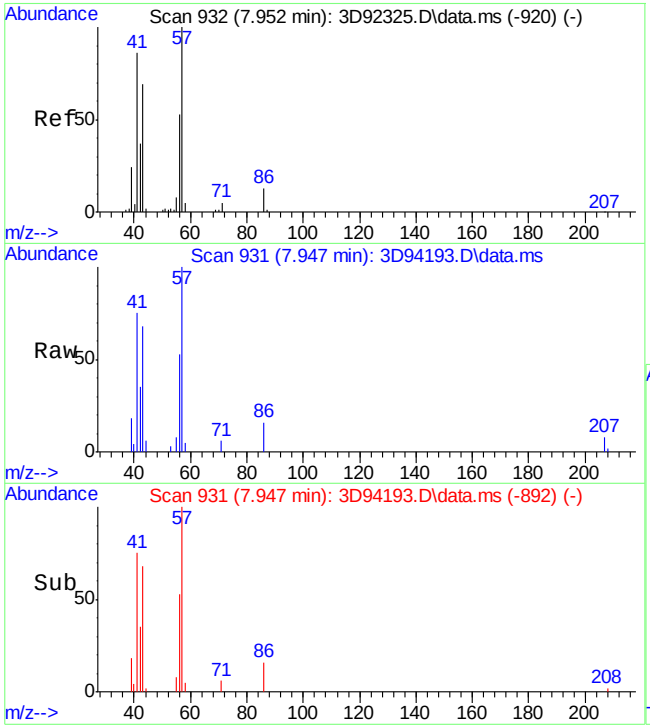


#63
1,1-dichloropropene
Concen: 10.18 ug/L
RT: 9.766 min Scan# 1278
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 75 Resp: 19176

Ion	Ratio	Lower	Upper
75	100		
110	37.2	7.6	67.6
77	32.7	1.7	61.7

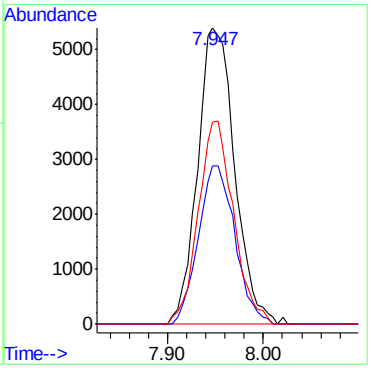


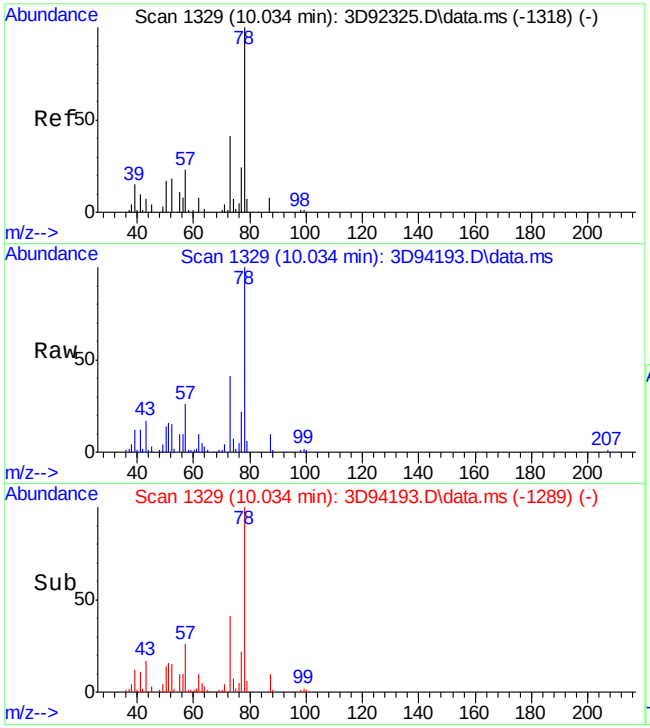


#64
hexane
Concen: 10.55 ug/L
RT: 7.947 min Scan# 931
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 57 Resp: 14565

Ion	Ratio	Lower	Upper
57	100		
56	53.4	22.9	82.9
43	68.2	35.4	95.4

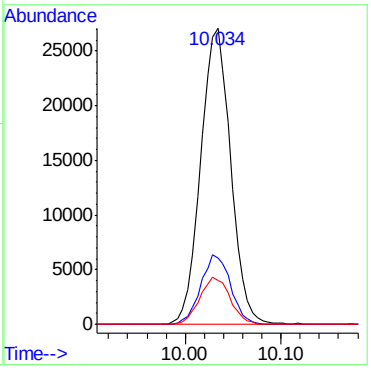


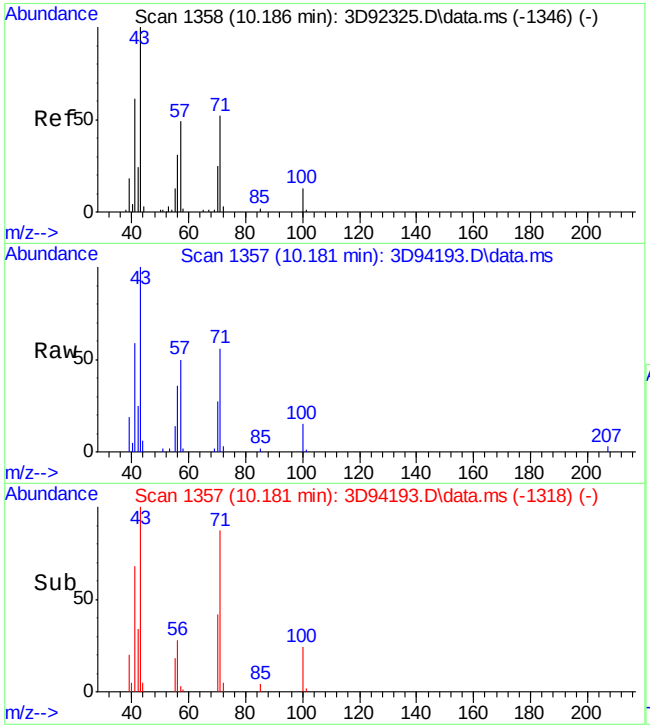


#65
benzene
Concen: 9.90 ug/L
RT: 10.034 min Scan# 1329
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 78 Resp: 58727

Ion	Ratio	Lower	Upper
78	100		
77	22.3	0.0	53.5
52	15.0	0.0	45.7

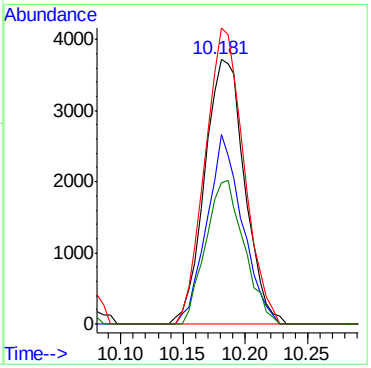


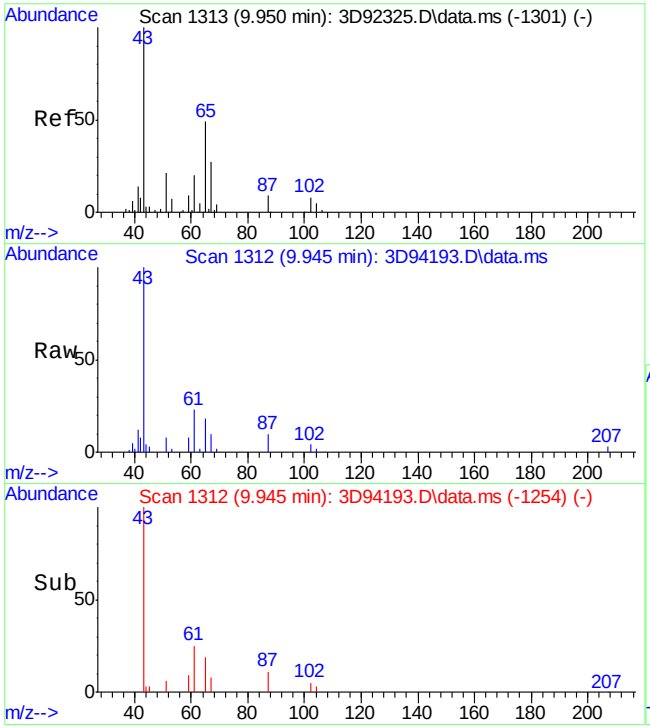


#66
heptane
Concen: 9.97 ug/L
RT: 10.181 min Scan# 1357
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 57 Resp: 8281

Ion	Ratio	Lower	Upper
57	100		
56	71.4	31.5	91.5
71	111.7	75.2	135.2
70	53.3	21.4	81.4

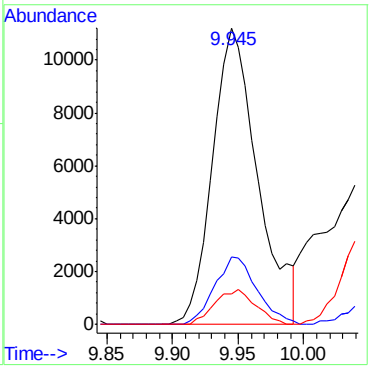


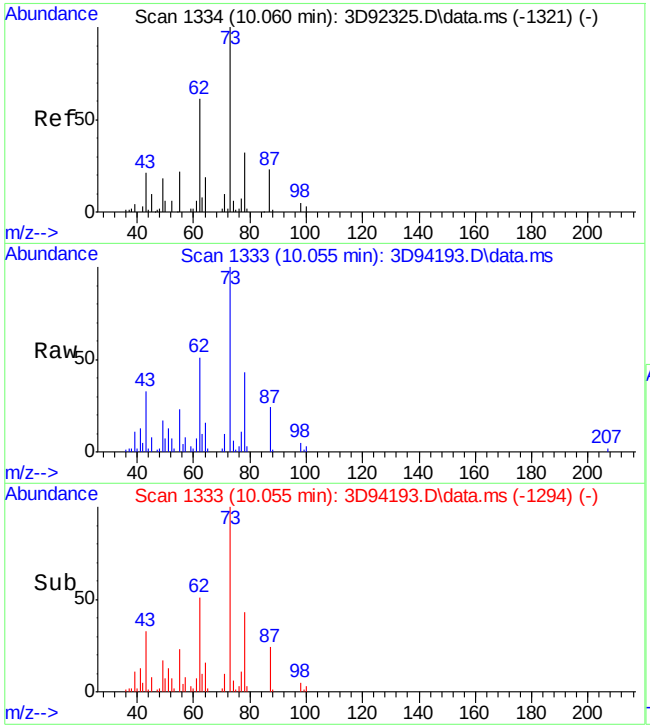


#67
isopropyl acetate
Concen: 10.75 ug/L
RT: 9.945 min Scan# 1312
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 43 Resp: 26807

Ion	Ratio	Lower	Upper
43	100		
61	21.2	0.0	52.4
87	10.6	0.0	40.7

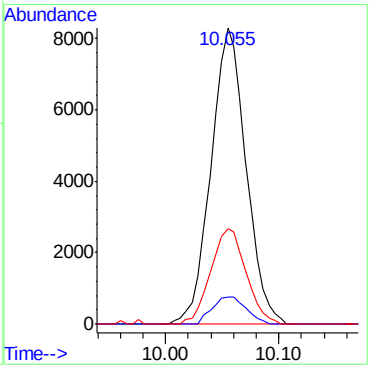


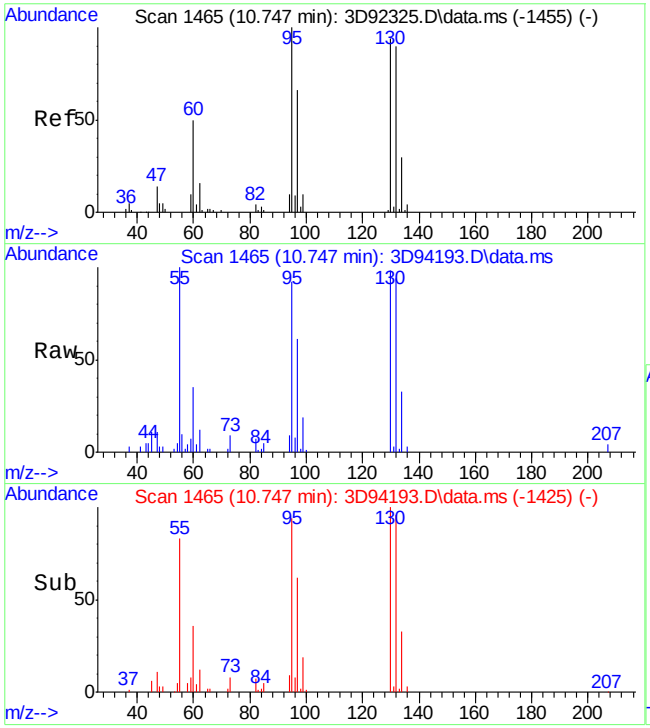


#68
1,2-dichloroethane
Concen: 10.18 ug/L
RT: 10.055 min Scan# 1333
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 62 Resp: 17820

Ion	Ratio	Lower	Upper
62	100		
98	9.1	0.0	40.3
64	32.1	2.1	62.1

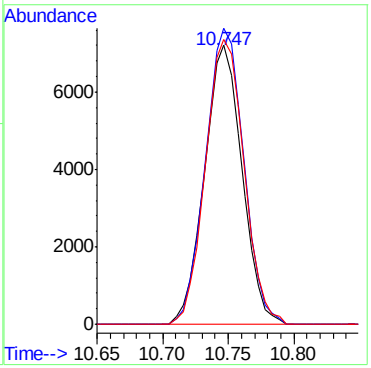


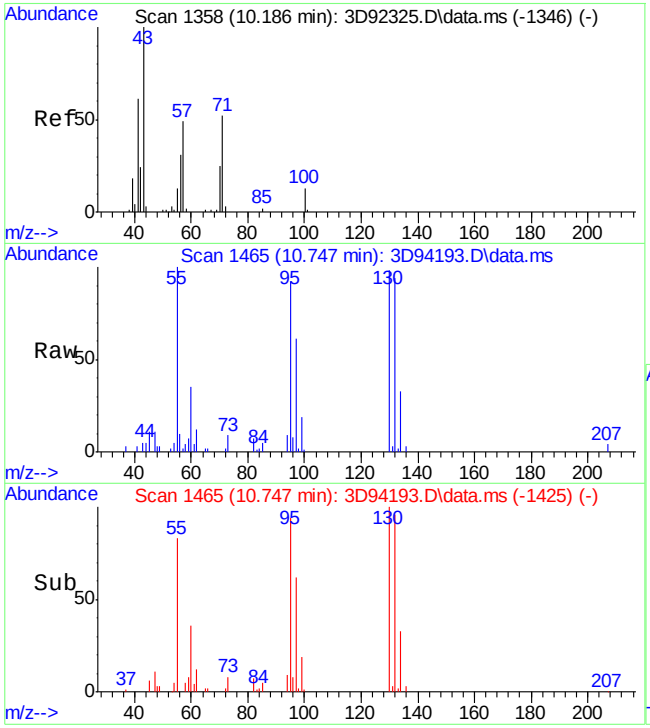


#69
trichloroethene
Concen: 9.75 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 95 Resp: 14262

Ion	Ratio	Lower	Upper
95	100		
130	106.1	78.2	138.2
132	102.0	75.0	135.0

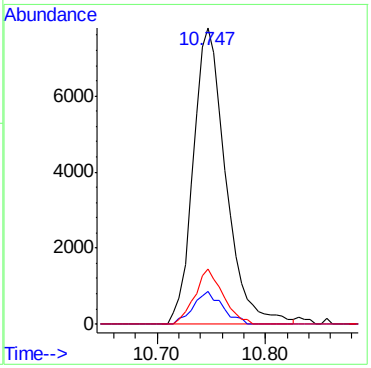


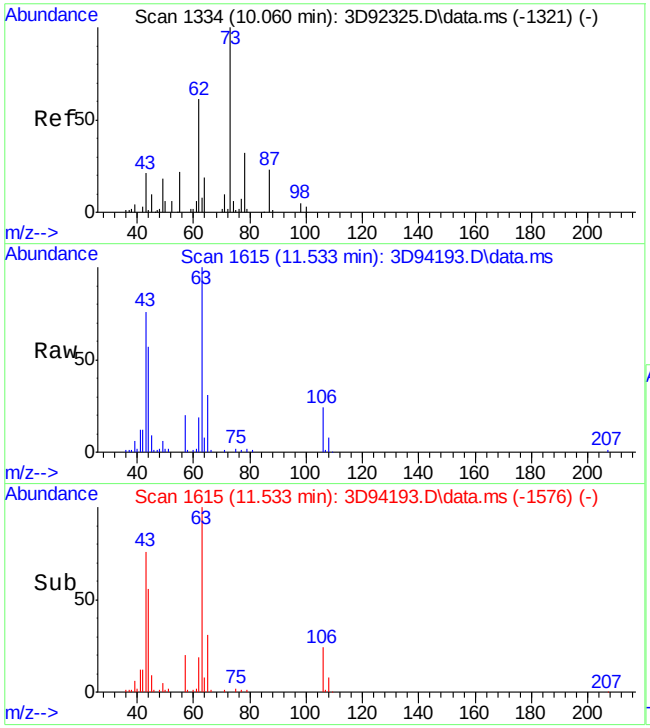


#70
ethyl acrylate
Concen: 10.97 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 55 Resp: 16377

Ion	Ratio	Lower	Upper
55	100		
45	9.8	7.6	11.4
99	16.1	13.3	19.9

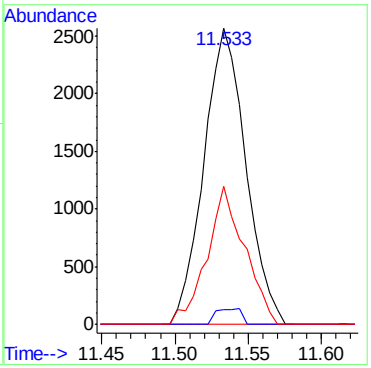


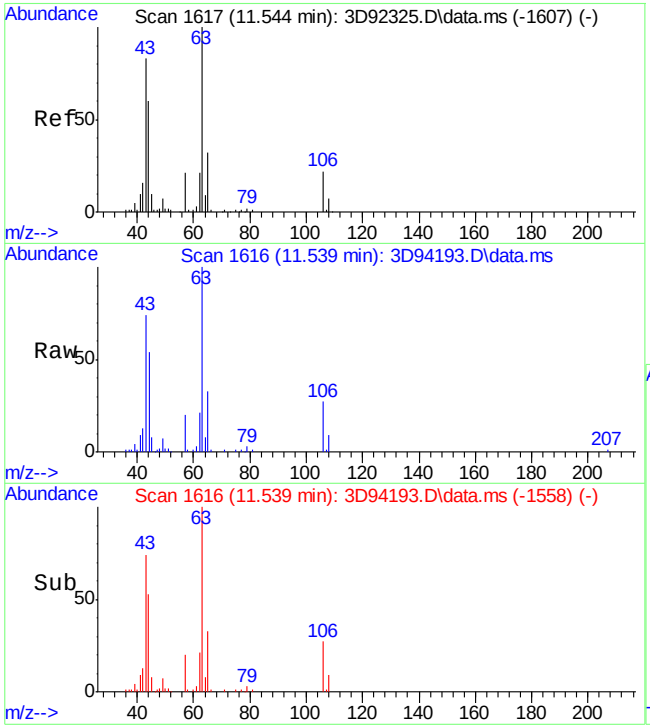


#72
2-nitropropane
Concen: 9.79 ug/L
RT: 11.533 min Scan# 1615
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 41 Resp: 5098

Ion	Ratio	Lower	Upper
41	100		
46	5.1	0.0	35.0
39	46.5	8.6	68.6

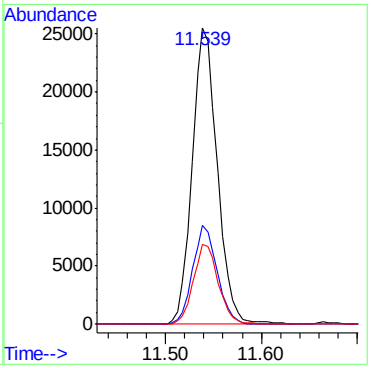


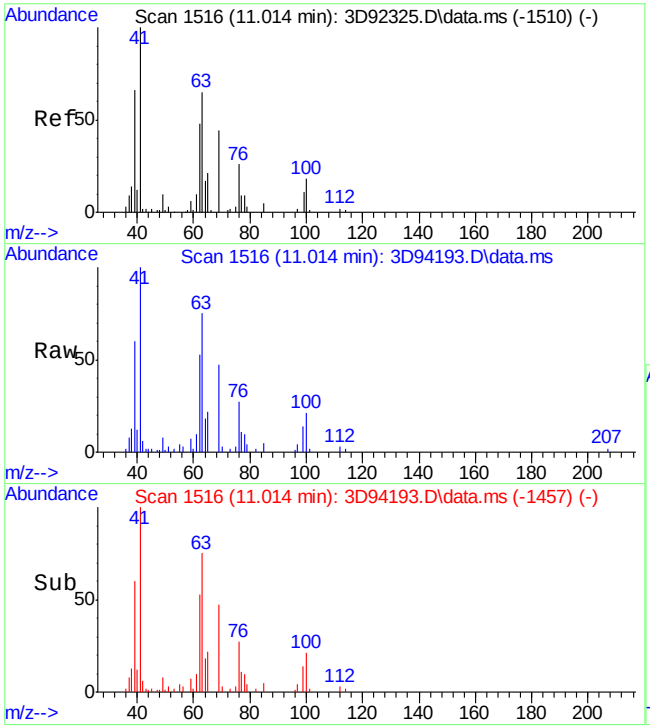


#73
2-chloroethyl vinyl ether
Concen: 52.38 ug/L
RT: 11.539 min Scan# 1616
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 63 Resp: 46044

Ion	Ratio	Lower	Upper
63	100		
65	33.3	2.2	62.2
106	27.0	0.0	56.3

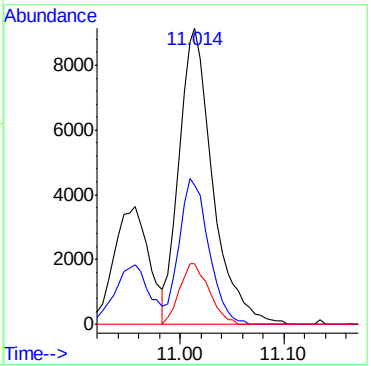


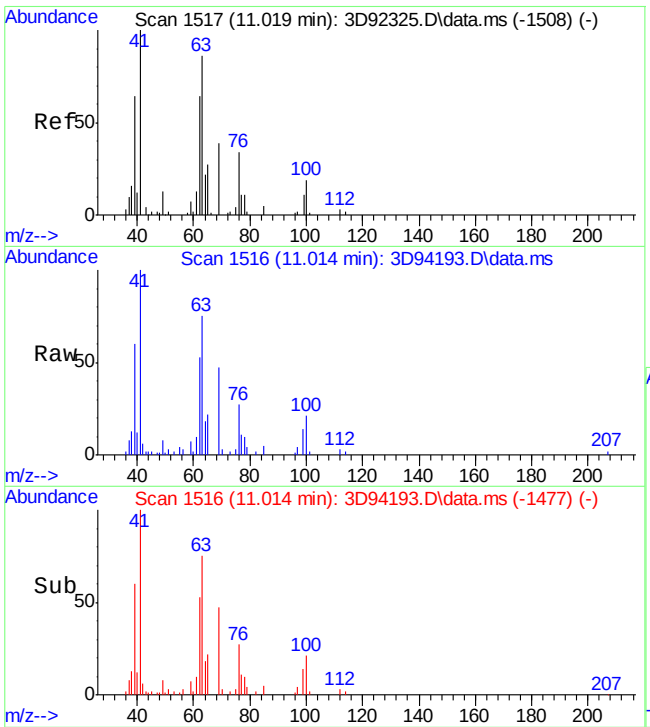


#74
methyl methacrylate
Concen: 9.88 ug/L
RT: 11.014 min Scan# 1516
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 41 Resp: 20665

Ion	Ratio	Lower	Upper
41	100		
69	46.9	19.9	79.9
100	20.6	0.0	51.2

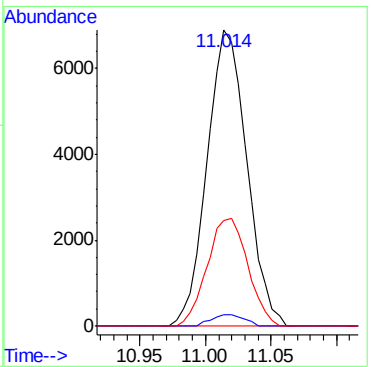


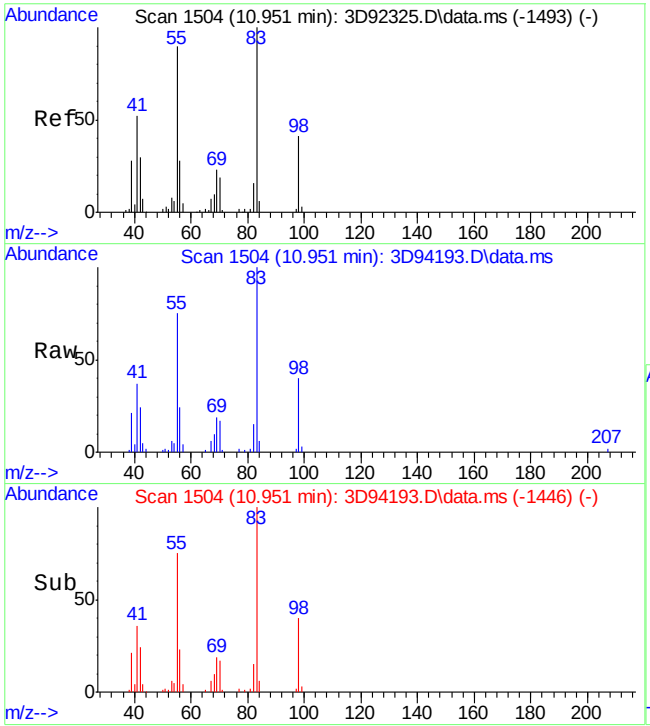


#75
1,2-dichloropropane
Concen: 10.16 ug/L
RT: 11.014 min Scan# 1516
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 63 Resp: 14467

Ion	Ratio	Lower	Upper
63	100		
112	3.9	0.0	33.7
76	35.7	6.0	66.0

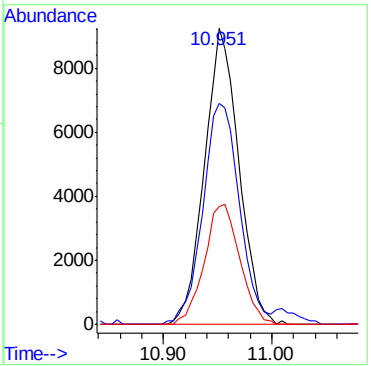


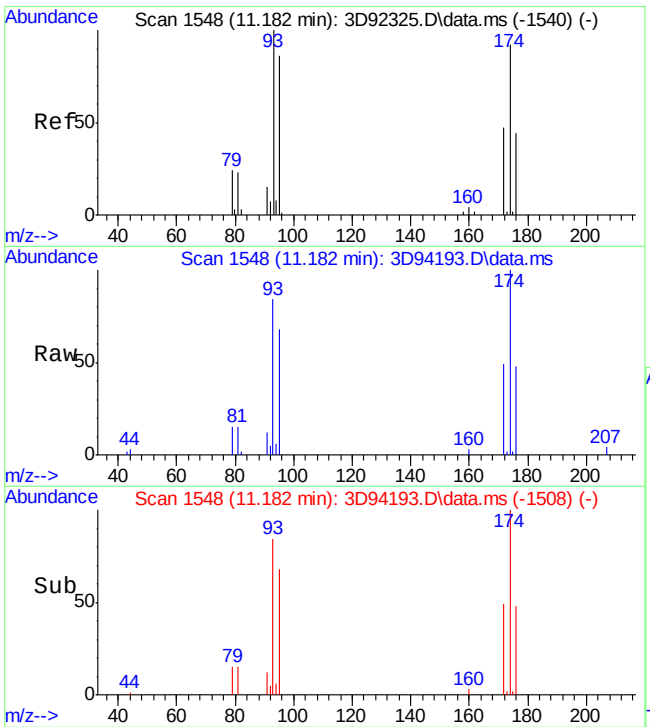


#76
methylcyclohexane
Concen: 10.14 ug/L
RT: 10.951 min Scan# 1504
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 83 Resp: 20547

Ion	Ratio	Lower	Upper
83	100		
55	74.5	49.4	109.4
98	39.8	10.6	70.6

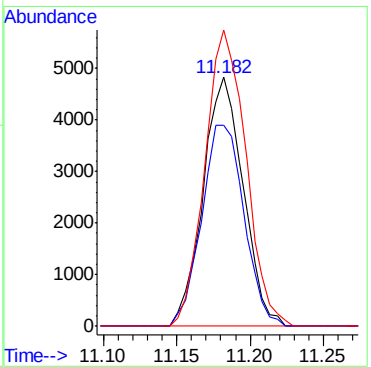


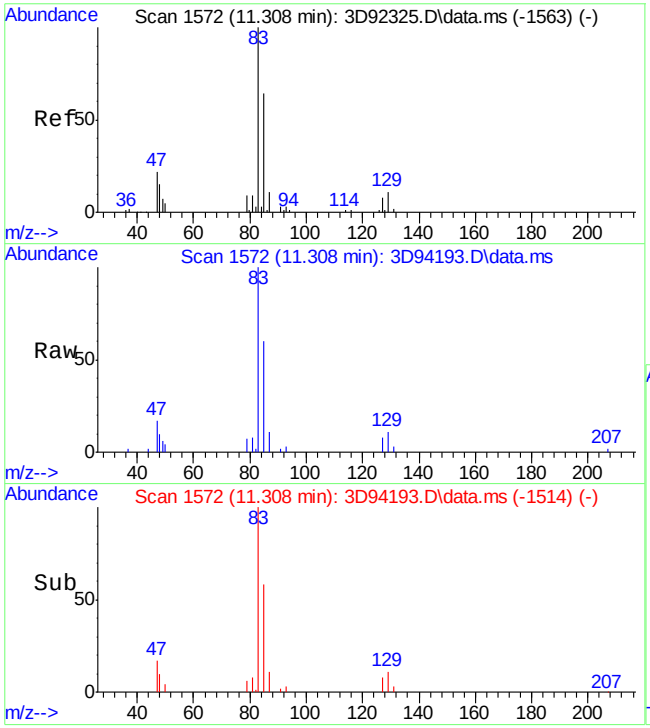


#77
dibromomethane
Concen: 10.24 ug/L
RT: 11.182 min Scan# 1548
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 93 Resp: 9140

Ion	Ratio	Lower	Upper
93	100		
95	80.8	53.0	113.0
174	118.9	88.8	148.8

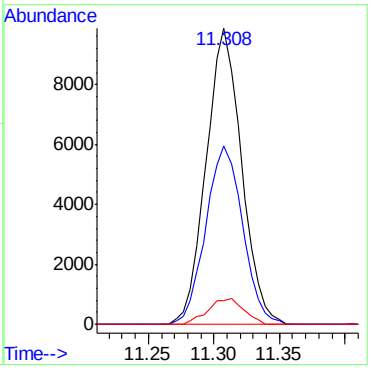


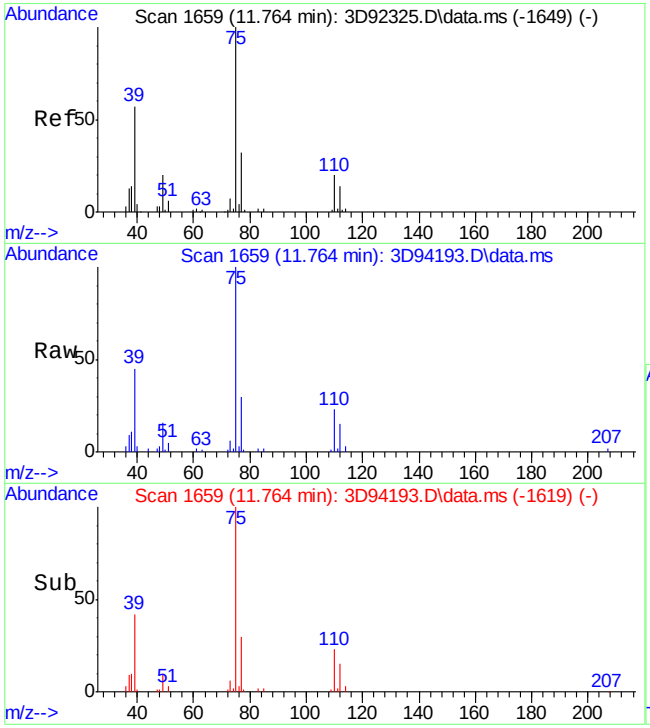


#78
bromodichloromethane
Concen: 10.19 ug/L
RT: 11.308 min Scan# 1572
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 83 Resp: 18420

Ion	Ratio	Lower	Upper
83	100		
85	60.1	34.7	94.7
127	8.0	0.0	39.6

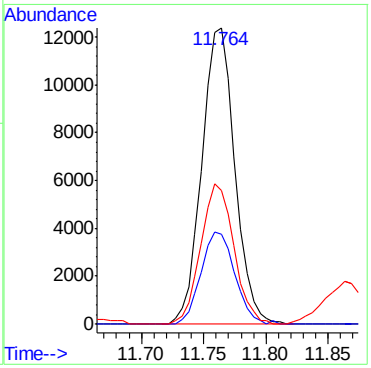


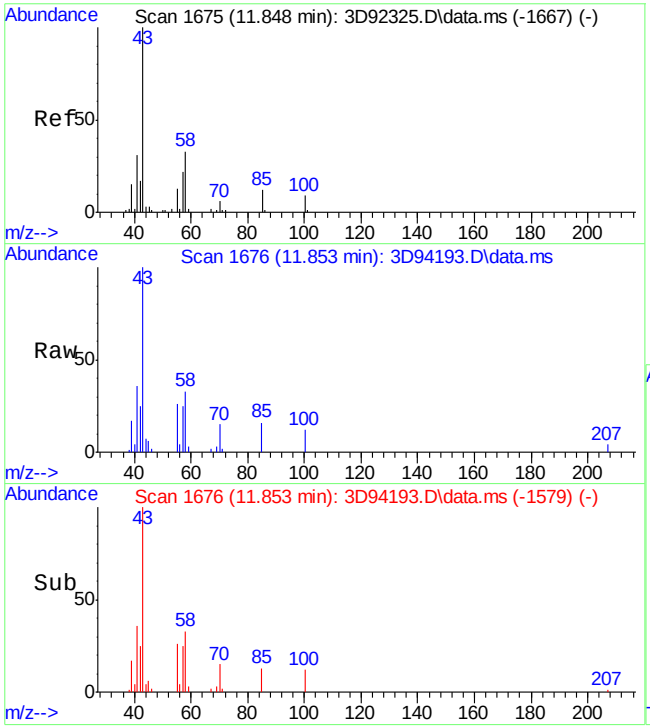


#79
cis-1,3-dichloropropene
Concen: 9.94 ug/L
RT: 11.764 min Scan# 1659
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 75 Resp: 22779

Ion	Ratio	Lower	Upper
75	100		
77	30.3	1.8	61.8
39	45.2	15.6	75.6

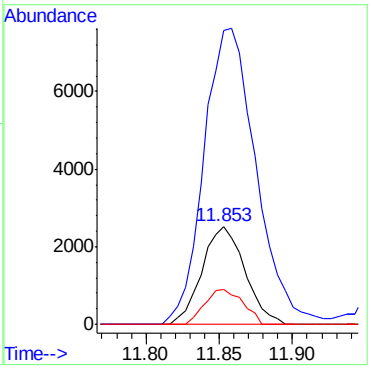


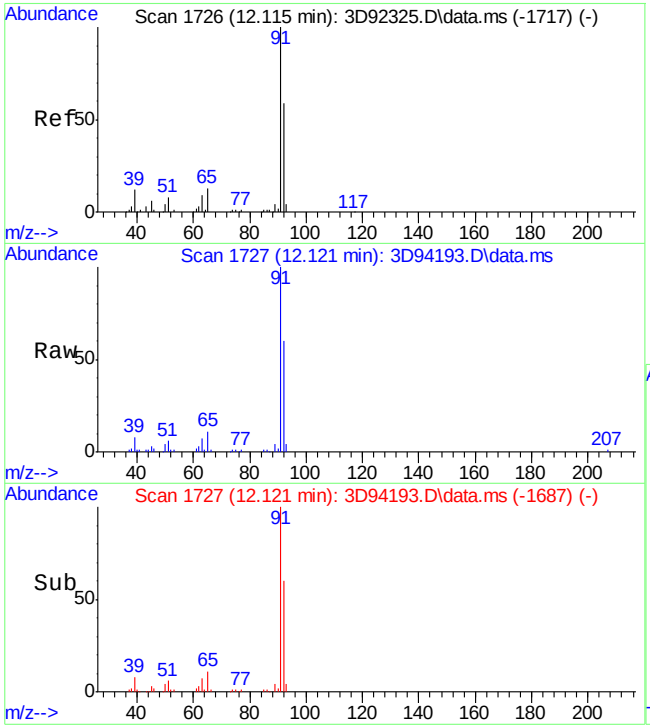


#81
4-methyl-2-pentanone
Concen: 11.44 ug/L
RT: 11.853 min Scan# 1676
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 58 Resp: 5103

Ion	Ratio	Lower	Upper
58	100		
43	370.7	333.6	393.6
100	31.8	1.6	61.6

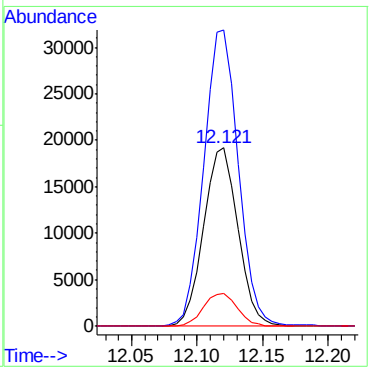


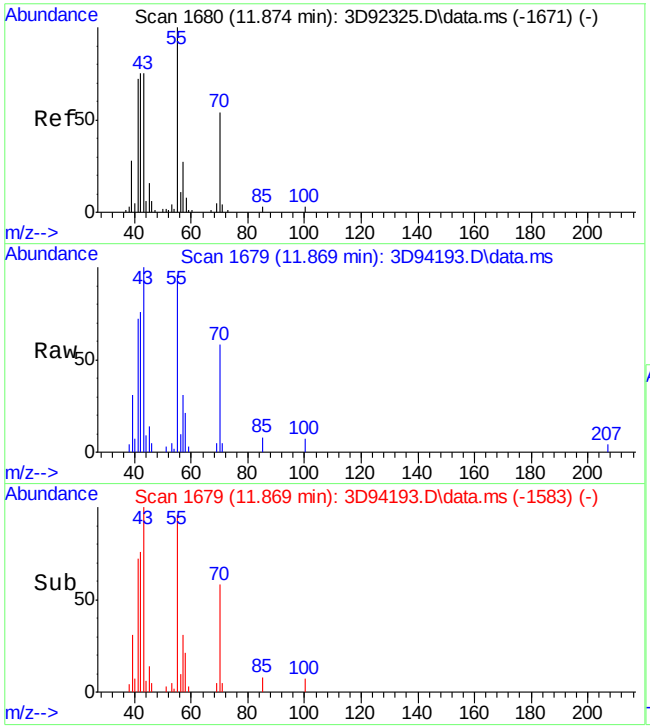


#82
toluene
Concen: 10.30 ug/L
RT: 12.121 min Scan# 1727
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 92 Resp: 34572

Ion	Ratio	Lower	Upper
92	100		
91	166.2	137.9	197.9
65	18.0	0.0	48.1

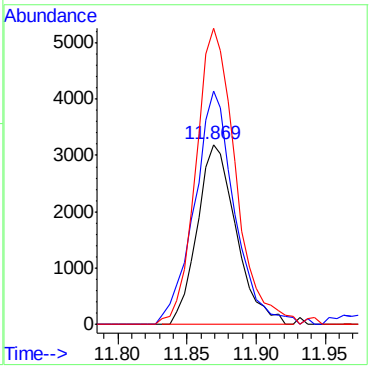


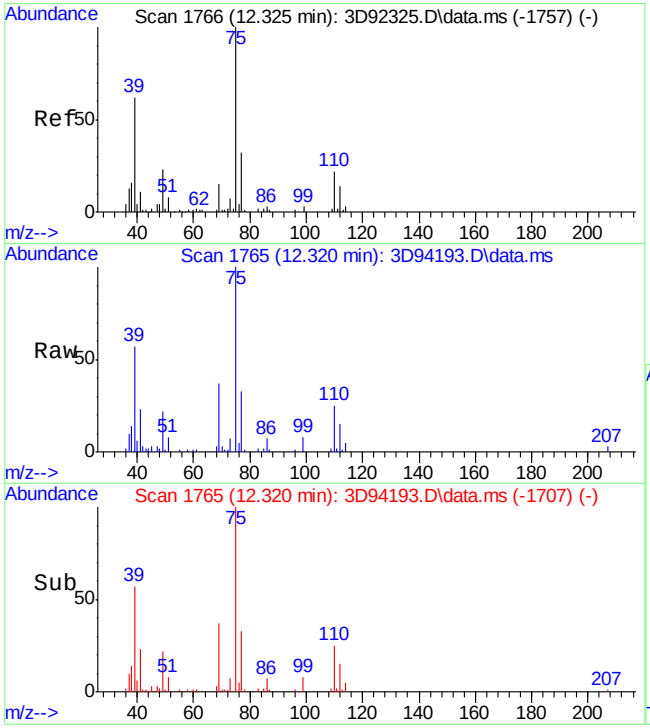


#83
3-methyl-1-butanol
Concen: 188.26 ug/L
RT: 11.869 min Scan# 1679
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 70 Resp: 6237

Ion	Ratio	Lower	Upper
70	100		
42	134.6	102.8	162.8
55	168.4	141.0	201.0

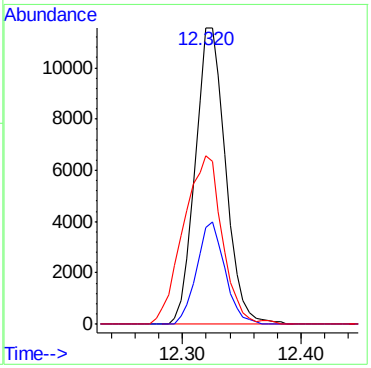




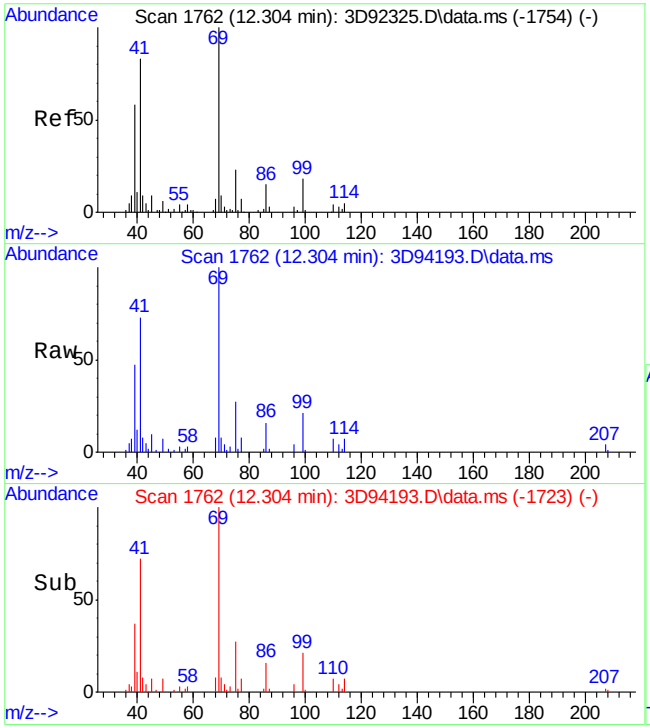
#84
trans-1,3-dichloropropene
Concen: 10.15 ug/L
RT: 12.320 min Scan# 1765
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 75 Resp: 20484

Ion	Ratio	Lower	Upper
75	100		
77	32.7	1.6	61.6
39	56.8	22.9	82.9



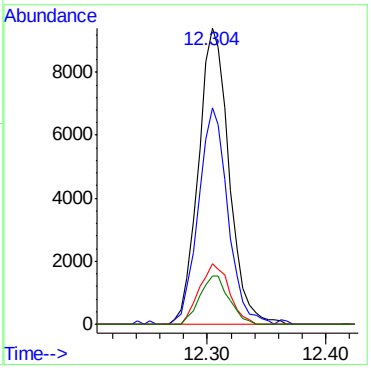
3D94193.D M3D4058.M Thu Dec 19 12:36:59 2013 3D Page 39

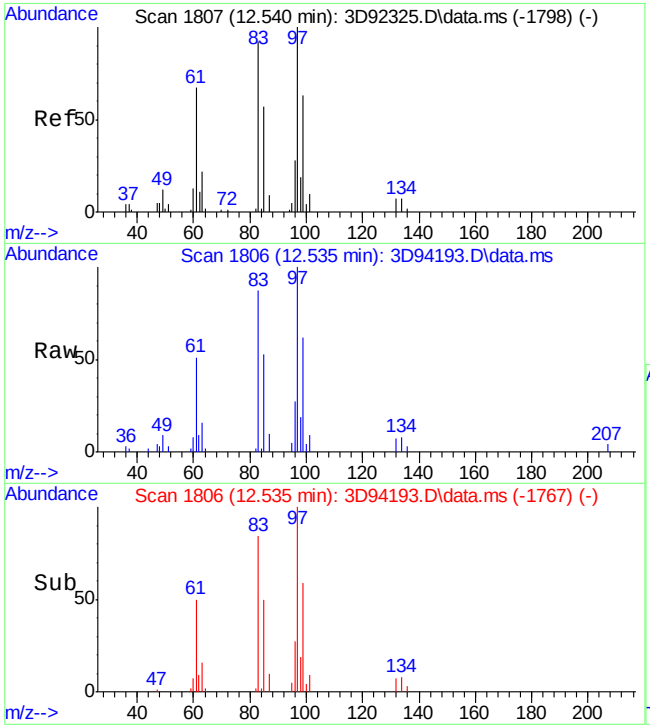


#85
ethyl methacrylate
Concen: 11.15 ug/L
RT: 12.304 min Scan# 1762
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 69 Resp: 16911

Ion	Ratio	Lower	Upper
69	100		
41	73.0	41.9	101.9
99	20.5	0.0	49.8
86	16.4	0.0	47.1

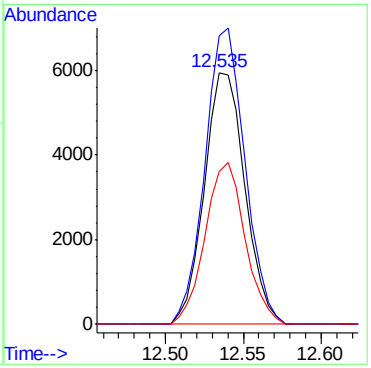


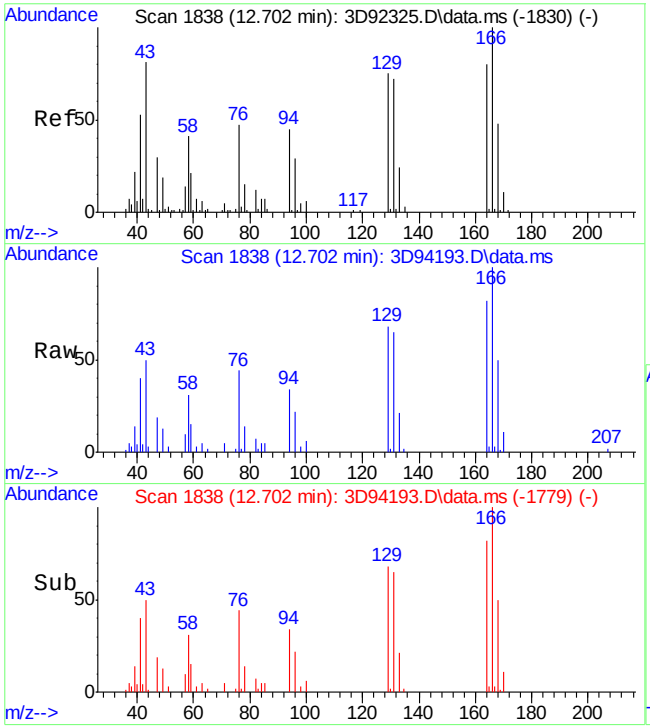


#86
1,1,2-trichloroethane
Concen: 10.58 ug/L
RT: 12.535 min Scan# 1806
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 83 Resp: 10776

Ion	Ratio	Lower	Upper
83	100		
97	114.5	87.9	147.9
85	60.8	33.9	93.9

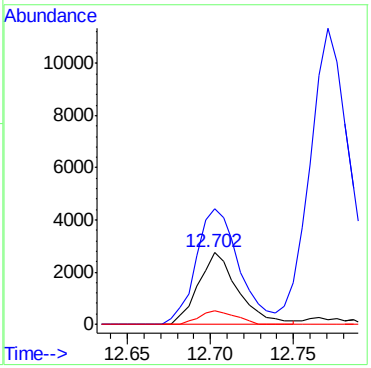


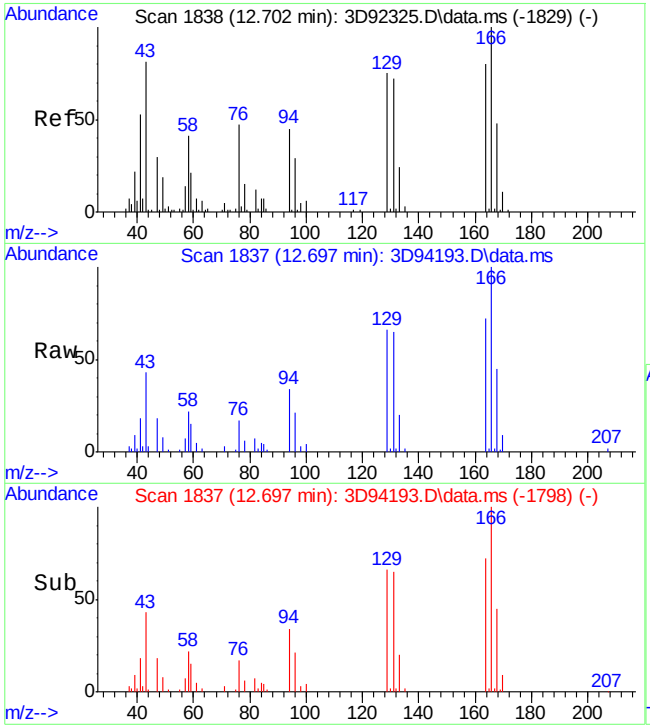


#87
2-hexanone
Concen: 11.90 ug/L
RT: 12.702 min Scan# 1838
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 58 Resp: 4568

Ion	Ratio	Lower	Upper
58	100		
43	160.3	149.9	209.9
100	18.3	0.0	49.9

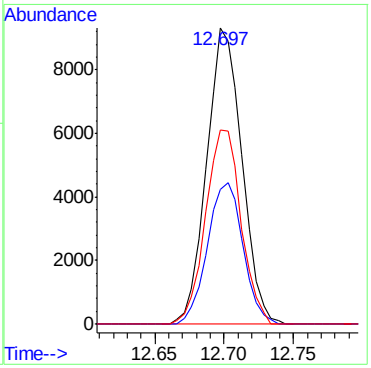


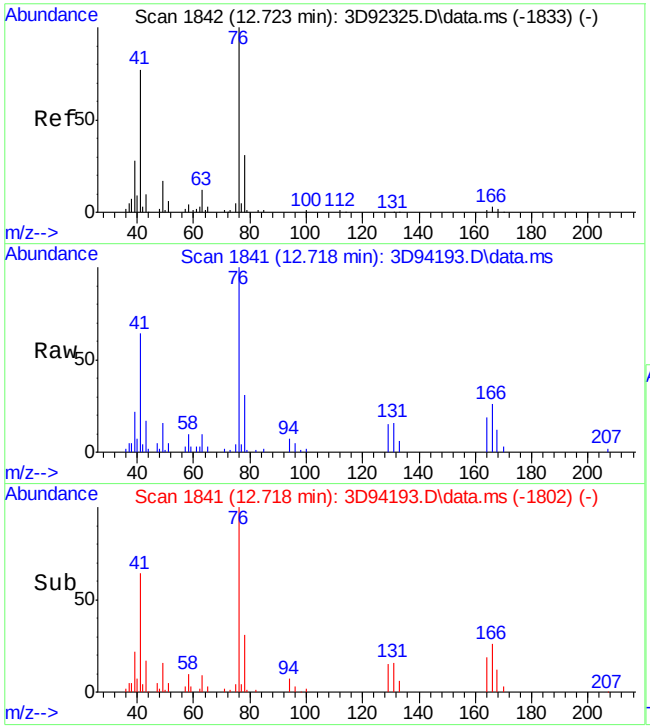


#89
tetrachloroethene
Concen: 10.24 ug/L
RT: 12.697 min Scan# 1837
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:166 Resp: 16558

Ion	Ratio	Lower	Upper
166	100		
168	45.4	18.1	78.1
129	65.6	38.2	98.2

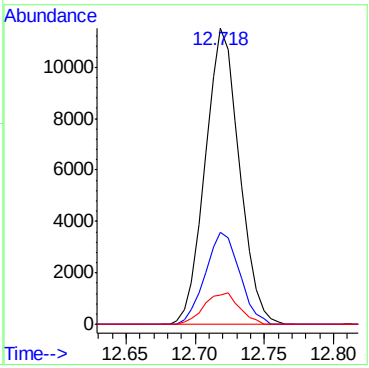


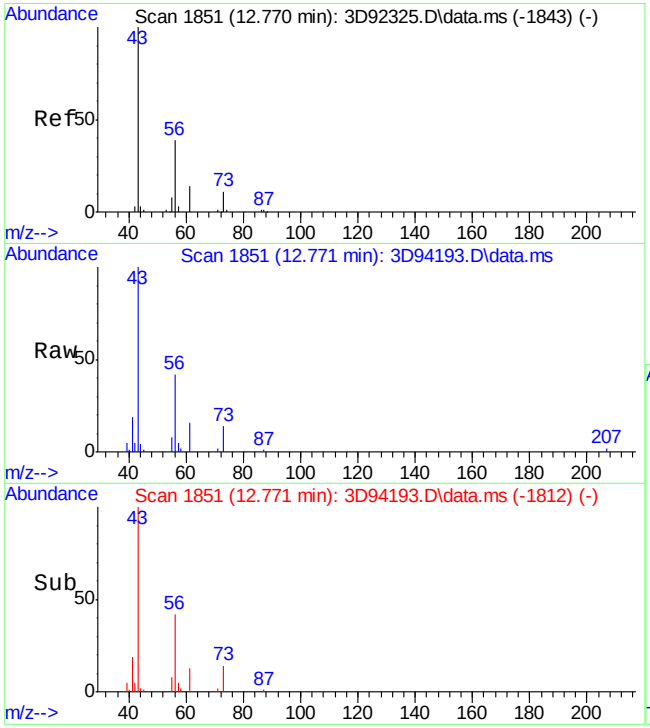


#90
1,3-dichloropropane
Concen: 10.26 ug/L
RT: 12.718 min Scan# 1841
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 76 Resp: 19851

Ion	Ratio	Lower	Upper
76	100		
78	30.9	4.3	64.3
63	9.7	0.0	41.6

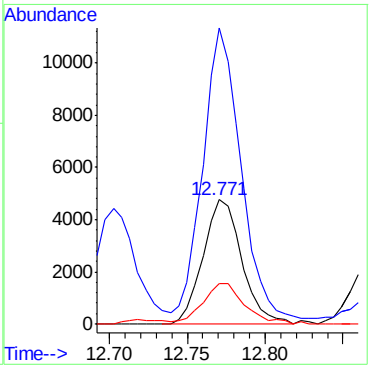




#91
butyl acetate
Concen: 10.98 ug/L
RT: 12.771 min Scan# 1851
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

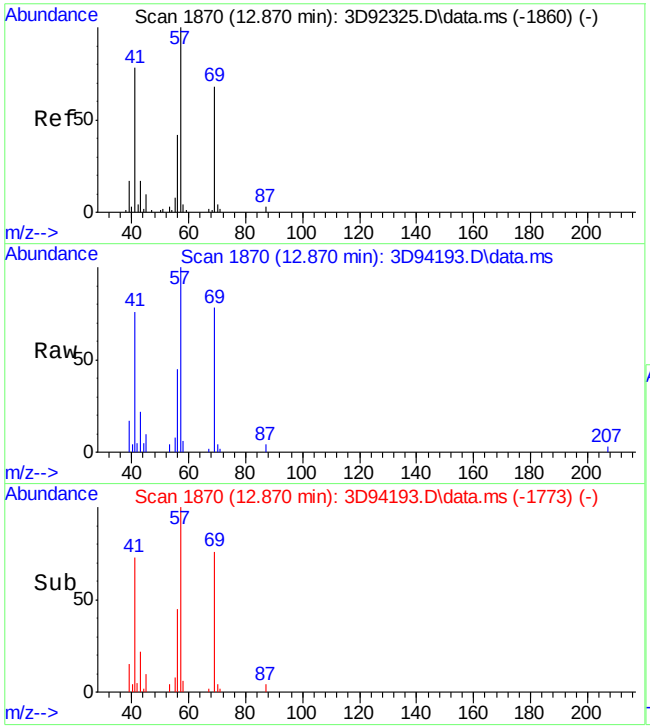
Tgt Ion: 56 Resp: 8259

Ion	Ratio	Lower	Upper
56	100		
43	231.9	209.3	269.3
73	32.7	2.1	62.1



7.7.5

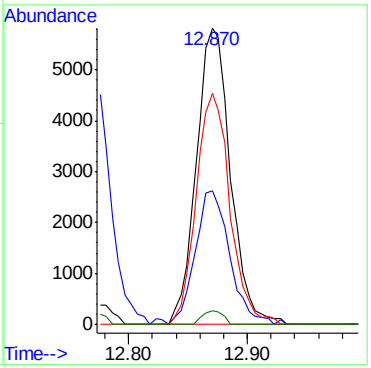
7

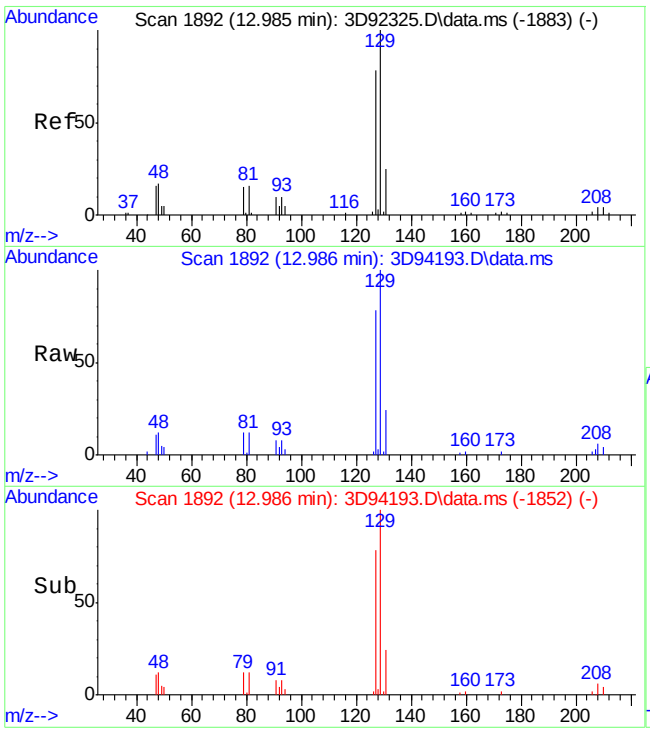


#92
3,3-Dimethyl-1-Butanol
Concen: 84.63 ug/L
RT: 12.870 min Scan# 1870
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 57 Resp: 11641

Ion	Ratio	Lower	Upper
57	100		
56	46.2	36.2	54.2
69	77.1	58.1	87.1
87	2.7	2.5	3.7

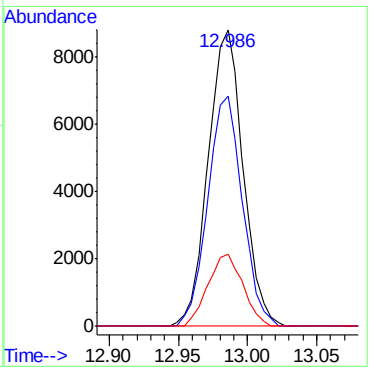


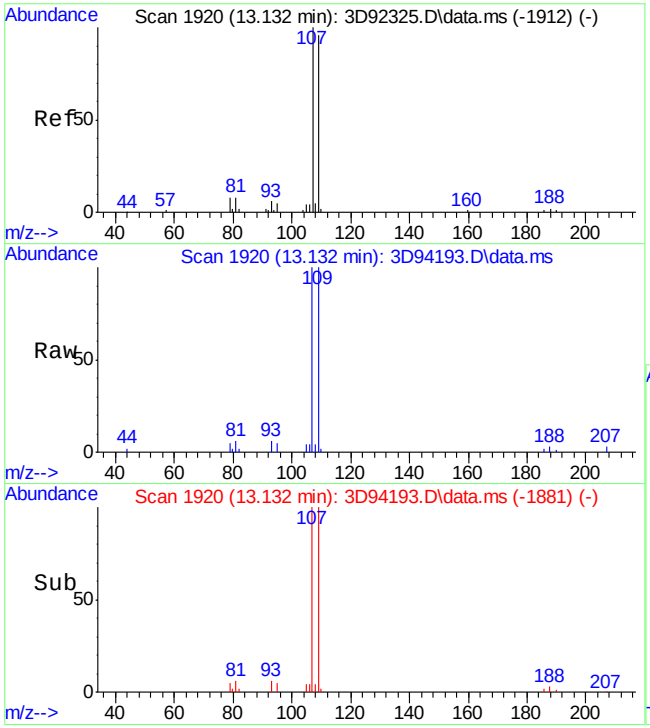


#93
dibromochloromethane
Concen: 10.12 ug/L
RT: 12.986 min Scan# 1892
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:129 Resp: 15531

Ion	Ratio	Lower	Upper
129	100		
127	77.5	44.5	104.5
131	24.2	0.0	53.5

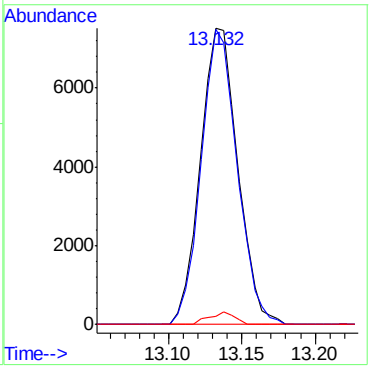


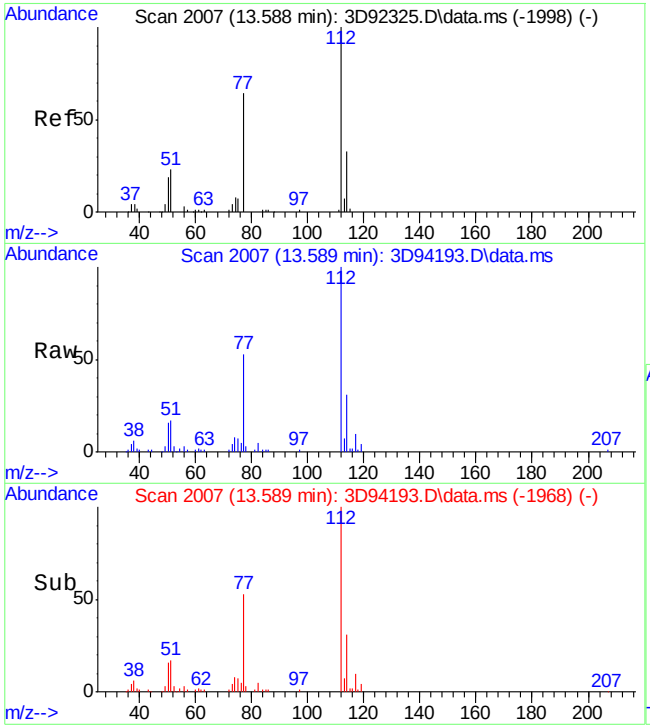


#94
1,2-dibromoethane
Concen: 10.21 ug/L
RT: 13.132 min Scan# 1920
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:107 Resp: 13297

Ion	Ratio	Lower	Upper
107	100		
109	99.6	62.5	122.5
188	2.7	0.0	33.2

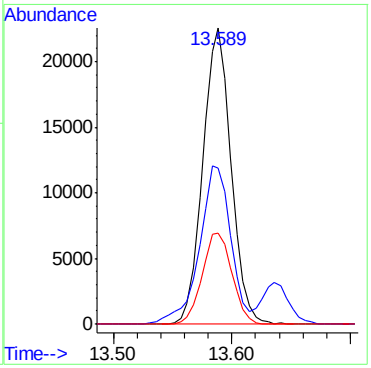


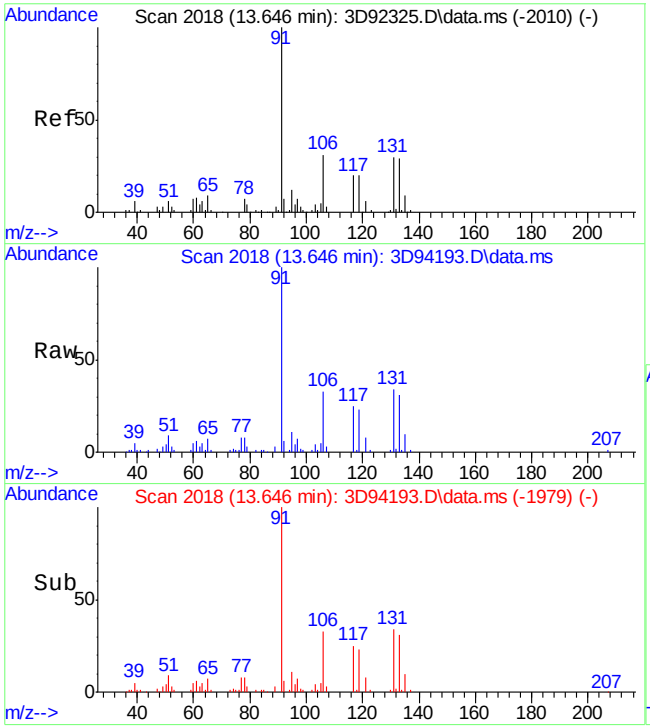


#96
chlorobenzene
Concen: 9.88 ug/L
RT: 13.589 min Scan# 2007
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:112 Resp: 37340

Ion	Ratio	Lower	Upper
112	100		
77	50.9	22.2	82.2
114	30.8	2.5	62.5

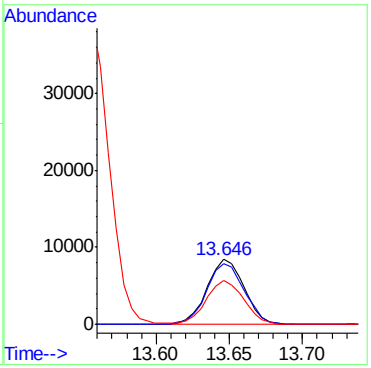


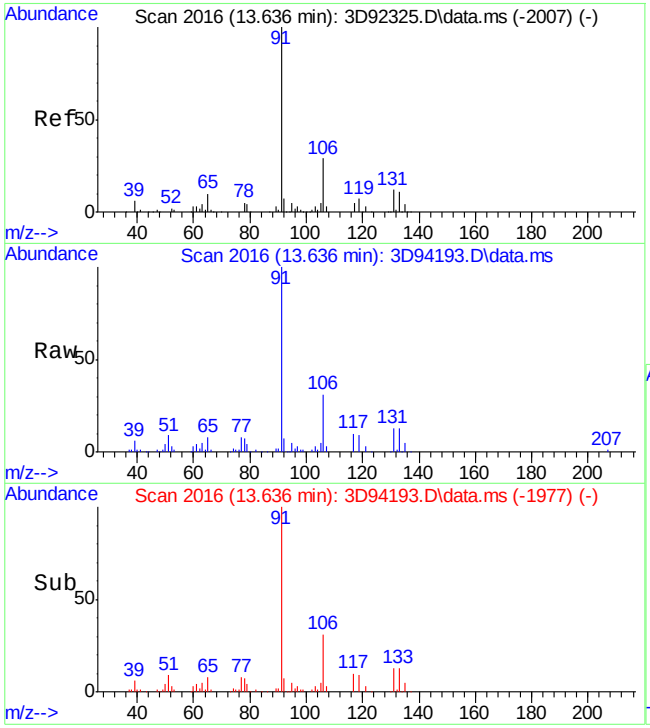


#97
1,1,1,2-tetrachloroethane
Concen: 9.91 ug/L
RT: 13.646 min Scan# 2018
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:131 Resp: 14746

Ion	Ratio	Lower	Upper
131	100		
133	92.9	66.0	126.0
119	67.7	38.3	98.3

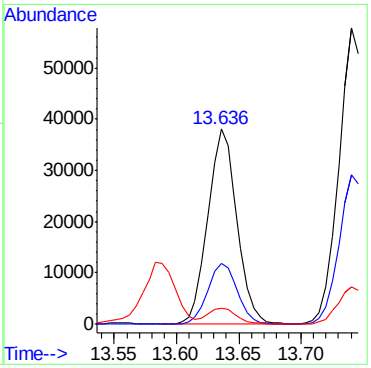


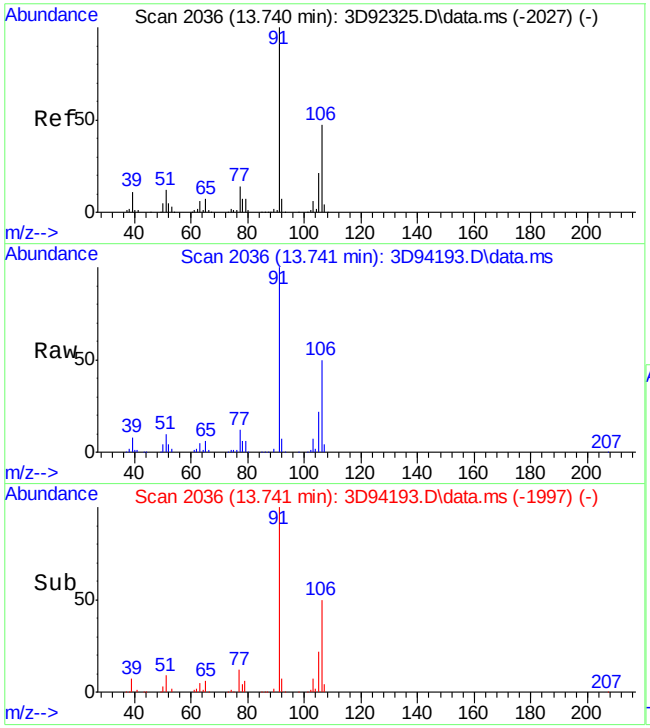


#98
ethylbenzene
Concen: 9.84 ug/L
RT: 13.636 min Scan# 2016
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 91 Resp: 61608

Ion	Ratio	Lower	Upper
91	100		
106	31.4	1.1	61.1
77	8.4	0.0	38.1

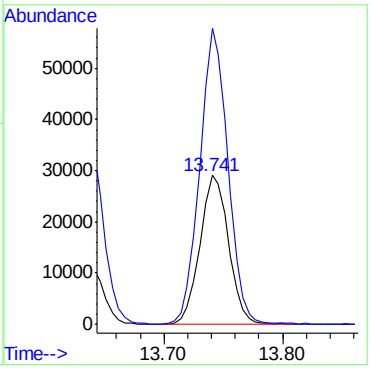


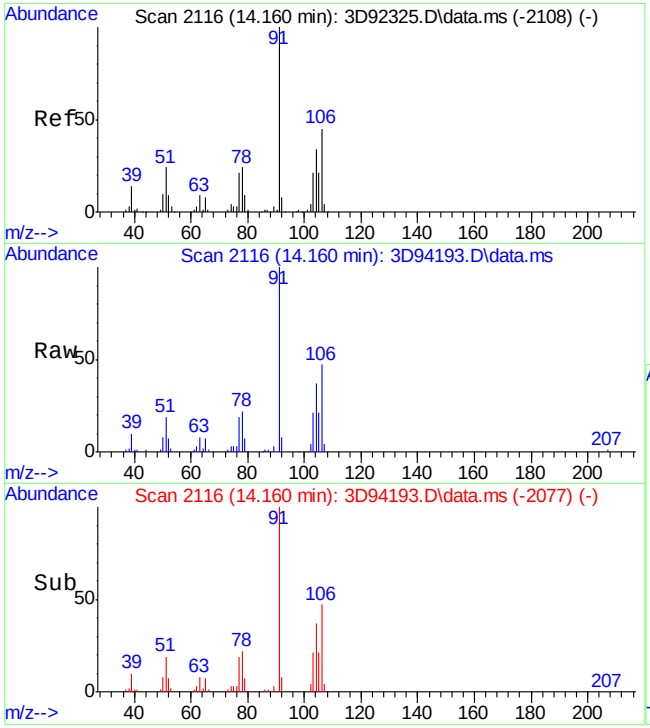


#99
m,p-xylene
Concen: 20.46 ug/L
RT: 13.741 min Scan# 2036
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:106 Resp: 48882

Ion	Ratio	Lower	Upper
106	100		
91	198.5	138.8	257.8

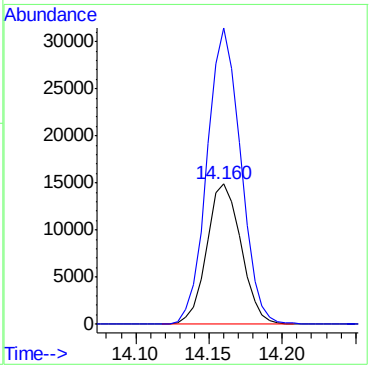


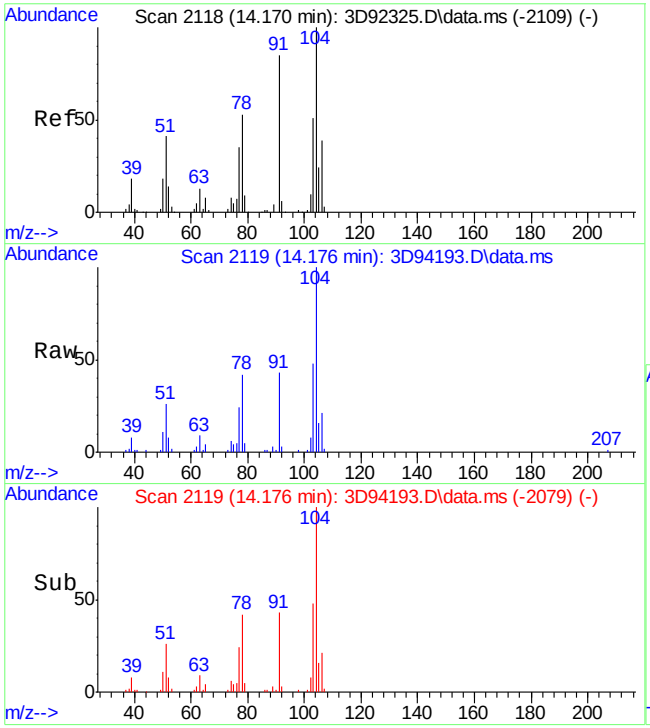


#100
o-xylene
Concen: 9.91 ug/L
RT: 14.160 min Scan# 2116
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:106 Resp: 24047

Ion	Ratio	Lower	Upper
106	100		
91	211.8	144.1	267.7

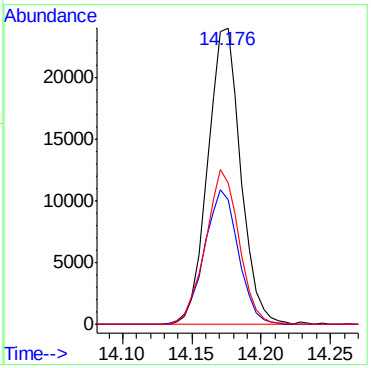


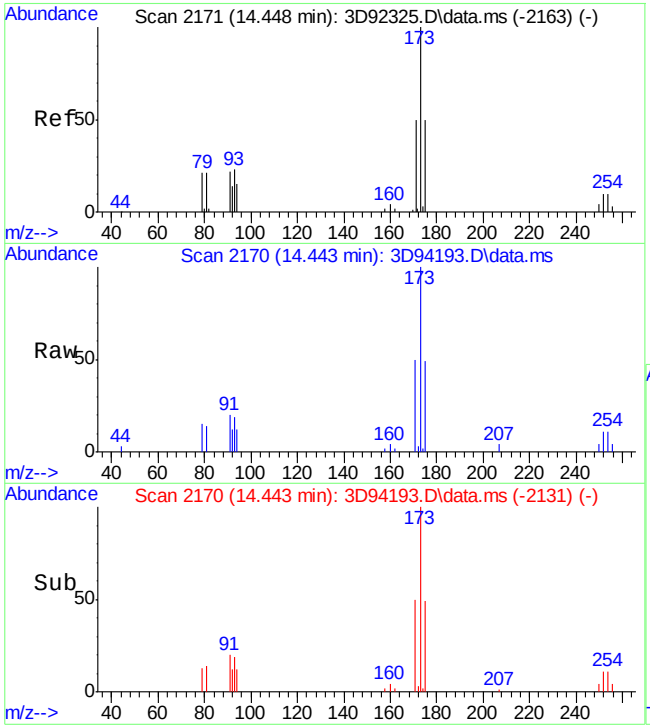


#101
styrene
Concen: 10.34 ug/L
RT: 14.176 min Scan# 2119
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:104 Resp: 40040

Ion	Ratio	Lower	Upper
104	100		
78	41.9	14.3	74.3
103	47.7	20.0	80.0

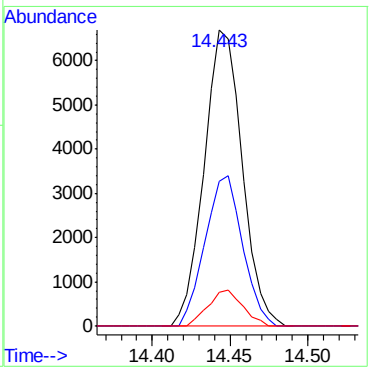


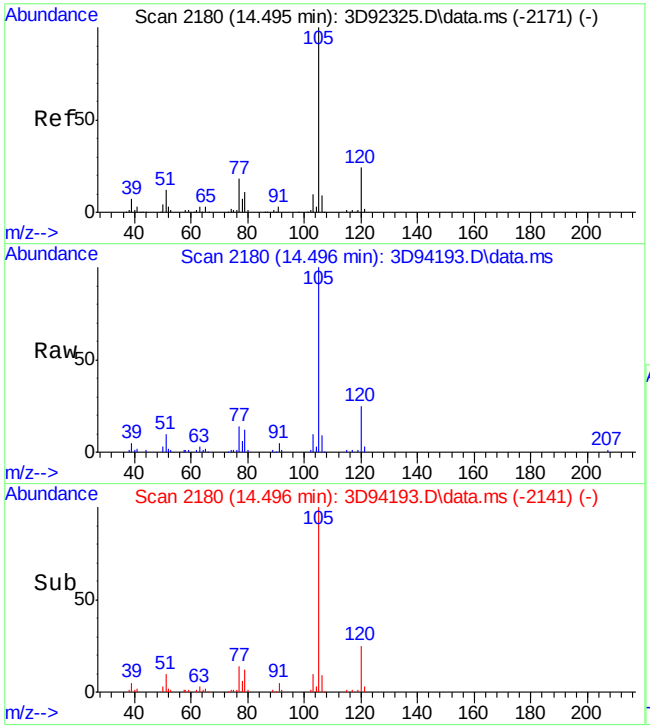


#103
bromoform
Concen: 9.81 ug/L
RT: 14.443 min Scan# 2170
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:173 Resp: 11369

Ion	Ratio	Lower	Upper
173	100		
175	48.7	19.4	79.4
254	11.3	0.0	40.9

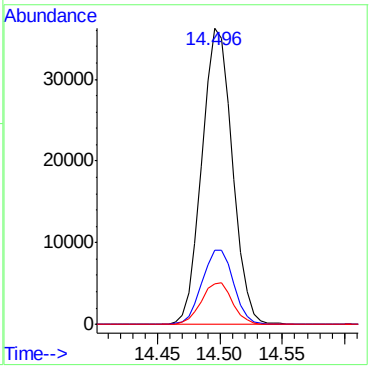


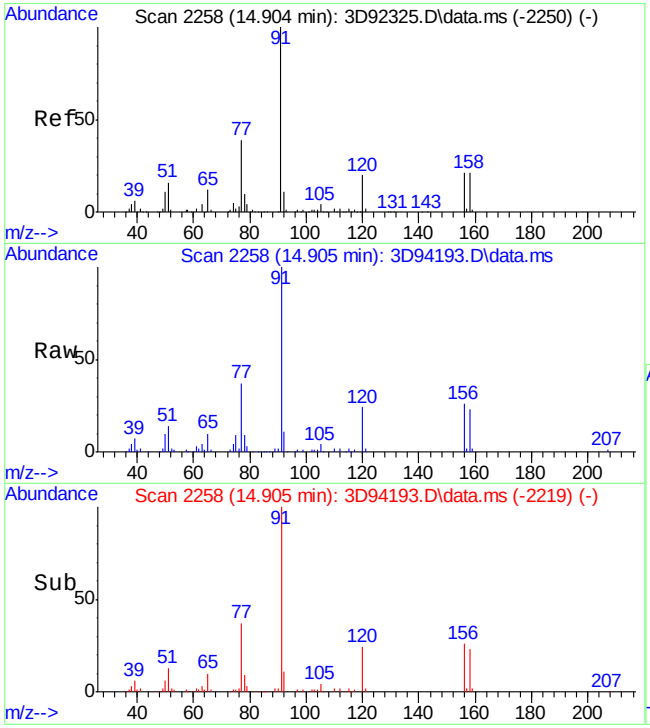


#105
isopropylbenzene
Concen: 10.04 ug/L
RT: 14.496 min Scan# 2180
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:105 Resp: 61370

Ion	Ratio	Lower	Upper
105	100		
120	24.9	0.0	55.5
77	13.6	0.0	44.1

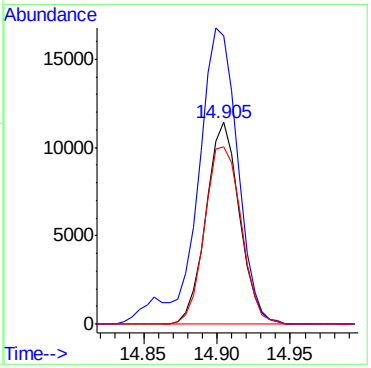


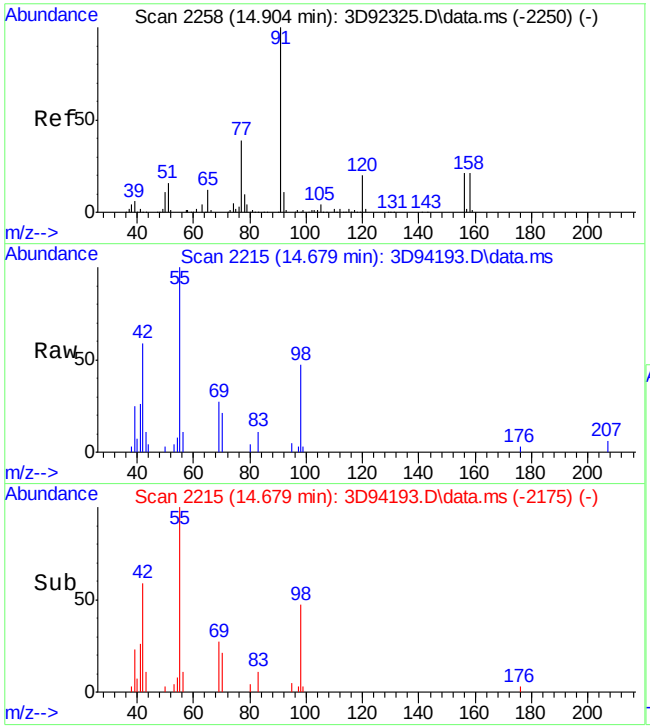


#107
bromobenzene
Concen: 10.07 ug/L
RT: 14.905 min Scan# 2258
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:156 Resp: 18099

Ion	Ratio	Lower	Upper
156	100		
77	143.3	117.2	177.2
158	88.3	67.0	127.0

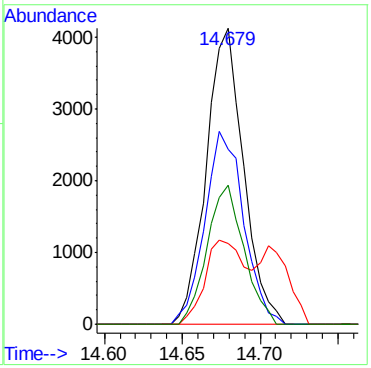


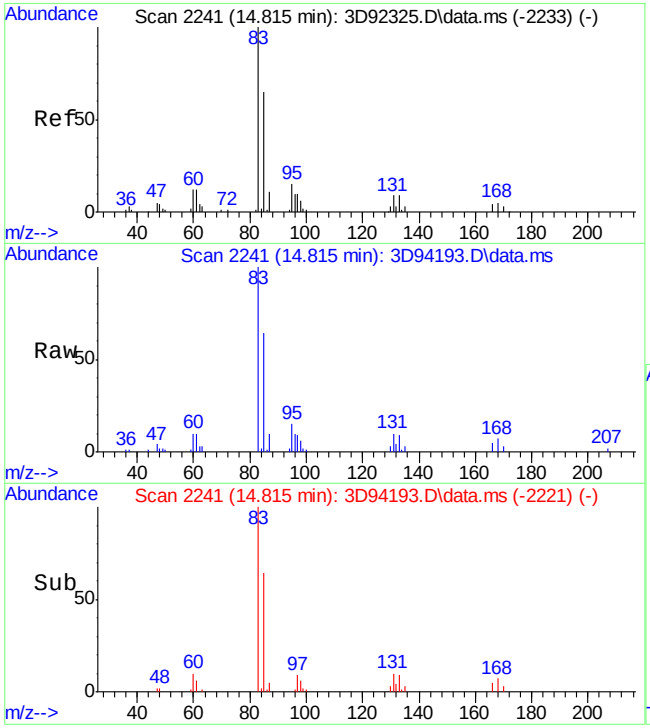


#108
cyclohexanone
Concen: 97.75 ug/L
RT: 14.679 min Scan# 2215
Delta R.T. 0.011 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 55 Resp: 6859

Ion	Ratio	Lower	Upper
55	100		
42	59.1	37.1	97.1
69	27.3	0.7	60.7
98	46.9	15.4	75.4

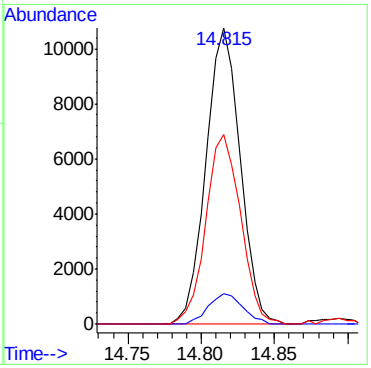


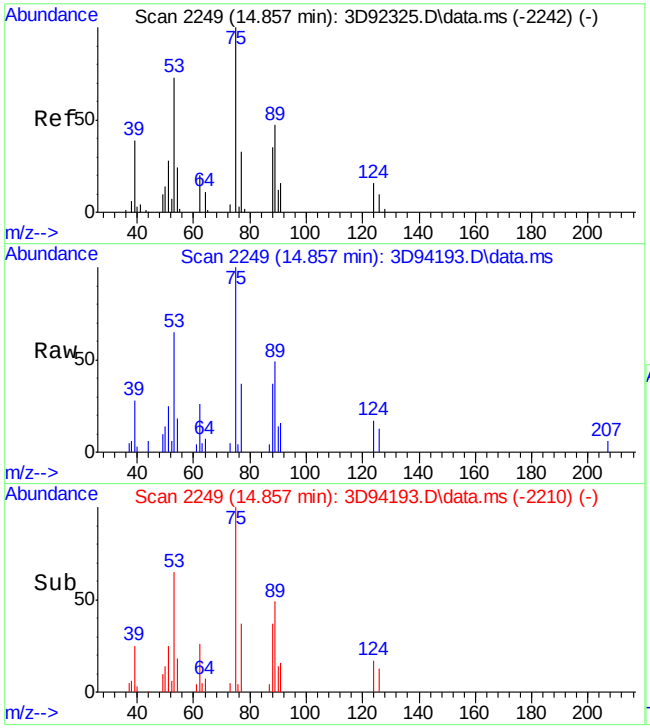


#109
1,1,2,2-tetrachloroethane
Concen: 9.09 ug/L
RT: 14.815 min Scan# 2241
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 83 Resp: 17416

Ion	Ratio	Lower	Upper
83	100		
131	10.4	0.0	39.8
85	64.1	35.0	95.0

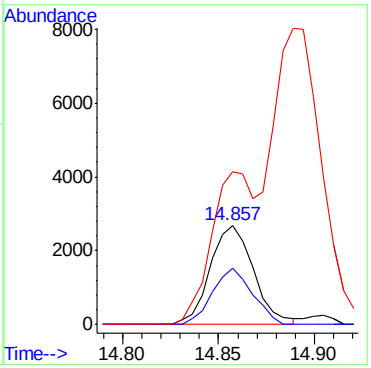


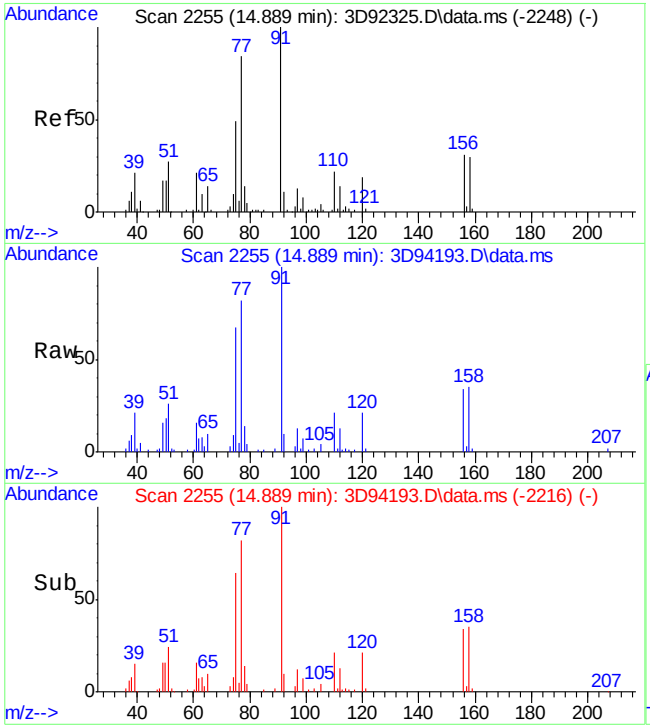


#110
trans-1,4-dichloro-2-butene
Concen: 10.72 ug/L
RT: 14.857 min Scan# 2249
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 53 Resp: 4171

Ion	Ratio	Lower	Upper
53	100		
88	57.1	25.8	85.8
75	153.9	136.3	196.3

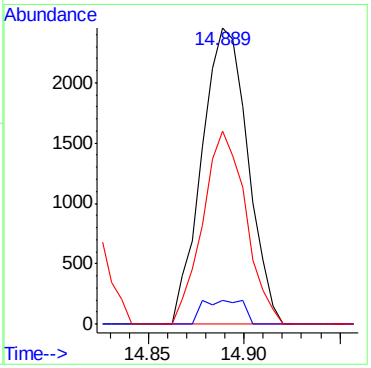


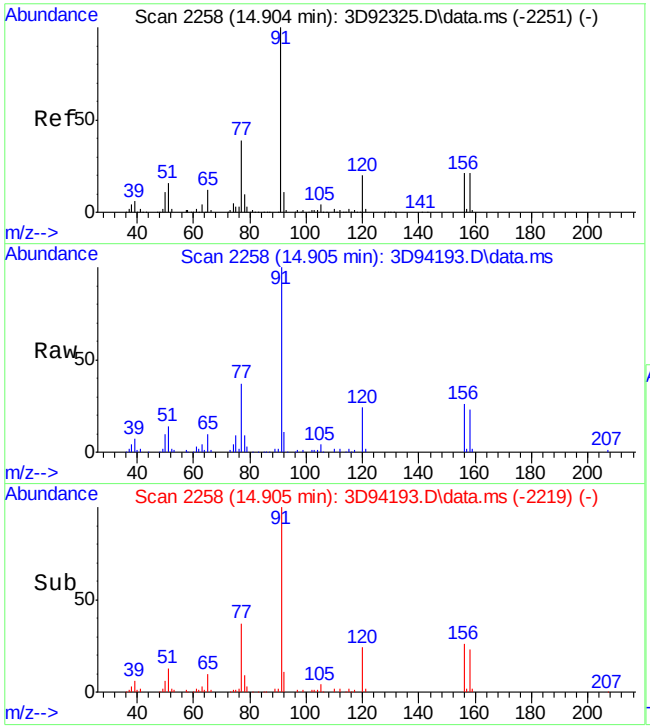


#111
1,2,3-trichloropropane
Concen: 10.38 ug/L
RT: 14.889 min Scan# 2255
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:110 Resp: 4086

Ion	Ratio	Lower	Upper
110	100		
111	8.1	0.0	39.8
97	65.3	25.9	85.9

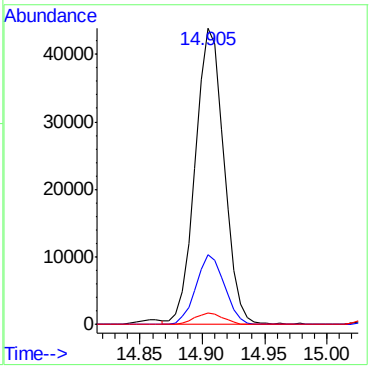


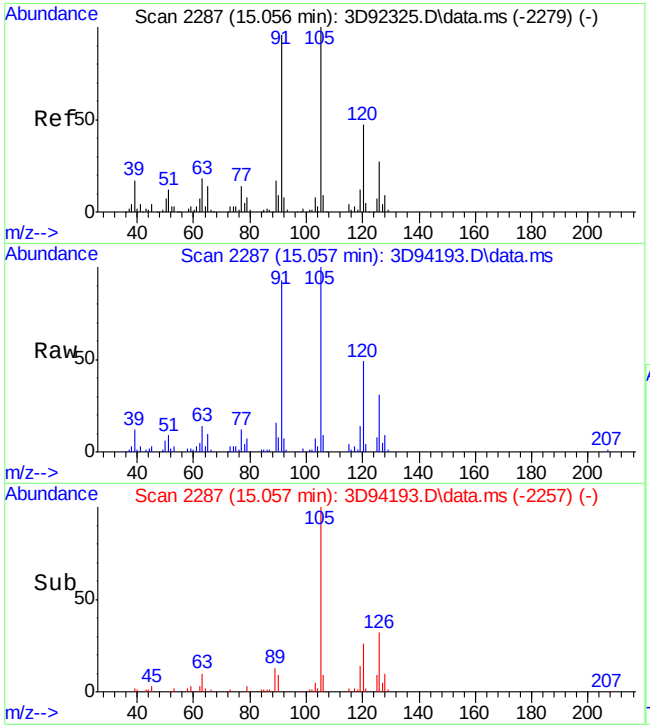


#112
n-propylbenzene
Concen: 10.00 ug/L
RT: 14.905 min Scan# 2258
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 91 Resp: 69982

Ion	Ratio	Lower	Upper
91	100		
120	23.5	0.0	52.3
105	3.7	0.0	33.7

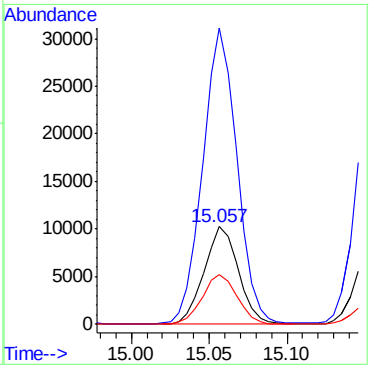


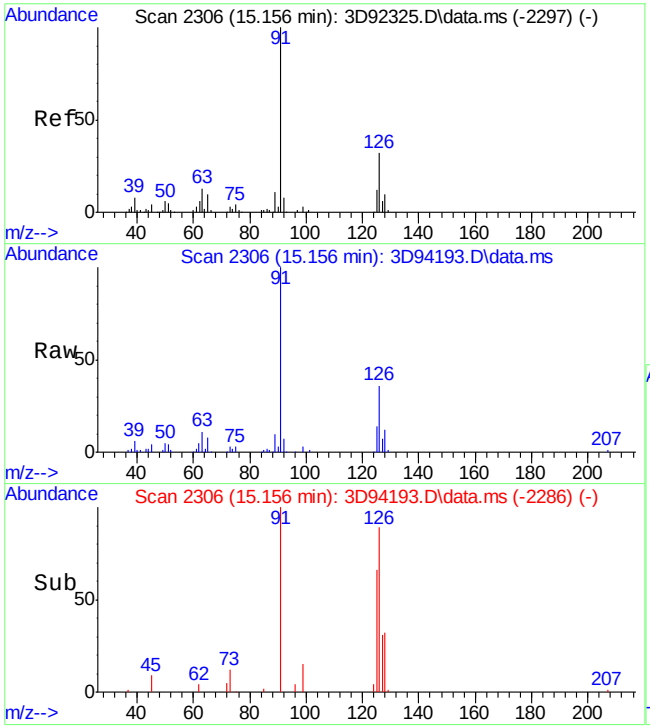


#114
2-chlorotoluene
Concen: 10.17 ug/L
RT: 15.057 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:126 Resp: 15612

Ion	Ratio	Lower	Upper
126	100		
91	302.2	271.2	331.2
89	50.6	19.8	79.8

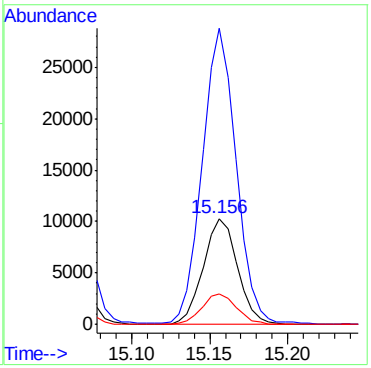


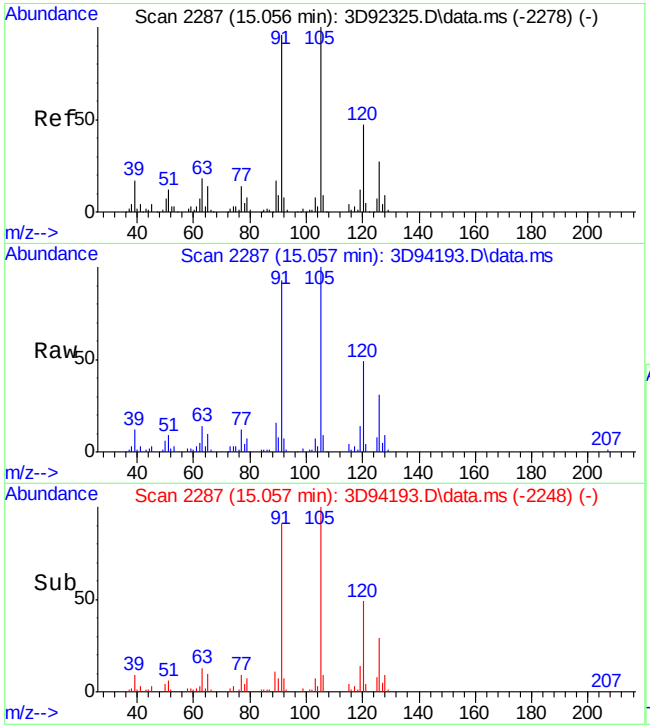


#115
4-chlorotoluene
Concen: 10.14 ug/L
RT: 15.156 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:126 Resp: 15662

Ion	Ratio	Lower	Upper
126	100		
91	278.2	249.9	309.9
89	28.8	0.0	58.8

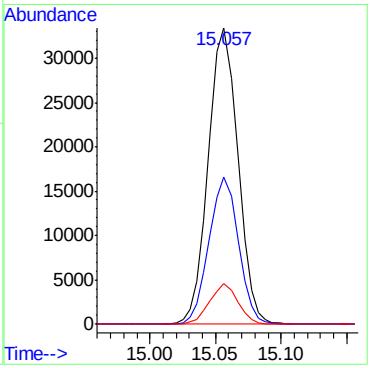




#116
1,3,5-trimethylbenzene
Concen: 10.12 ug/L
RT: 15.057 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:105 Resp: 52393

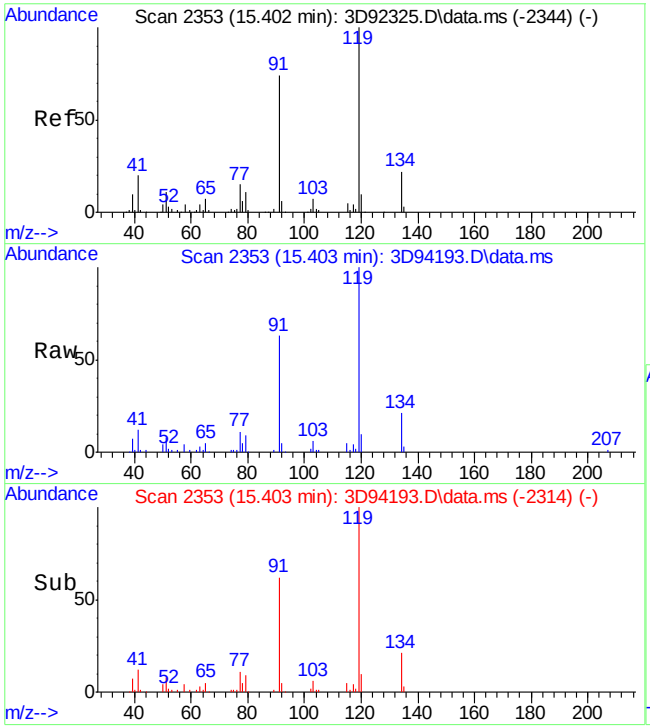
Ion	Ratio	Lower	Upper
105	100		
120	49.5	21.1	81.1
119	13.5	0.0	43.2



7.7.5

7

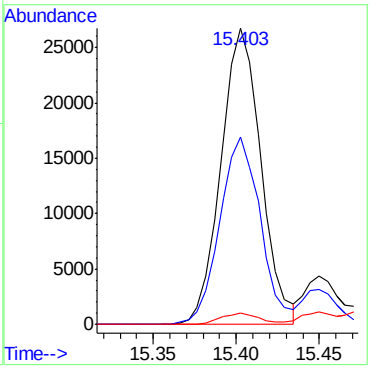
3D94193.D M3D4058.M Thu Dec 19 12:37:00 2013 3D Page 52

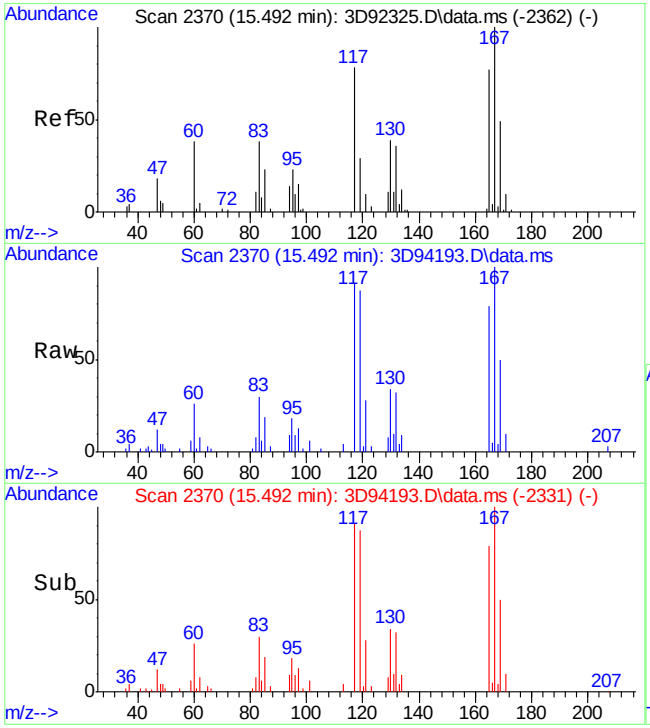


#117
tert-butylbenzene
Concen: 9.99 ug/L
RT: 15.403 min Scan# 2353
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:119 Resp: 44970

Ion	Ratio	Lower	Upper
119	100		
91	63.3	33.7	93.7
117	3.8	0.0	33.3

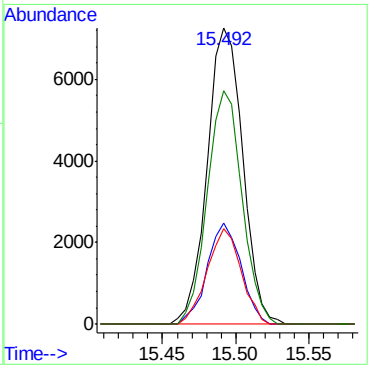




#118
pentachloroethane
Concen: 10.26 ug/L
RT: 15.492 min Scan# 2370
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:167 Resp: 12170

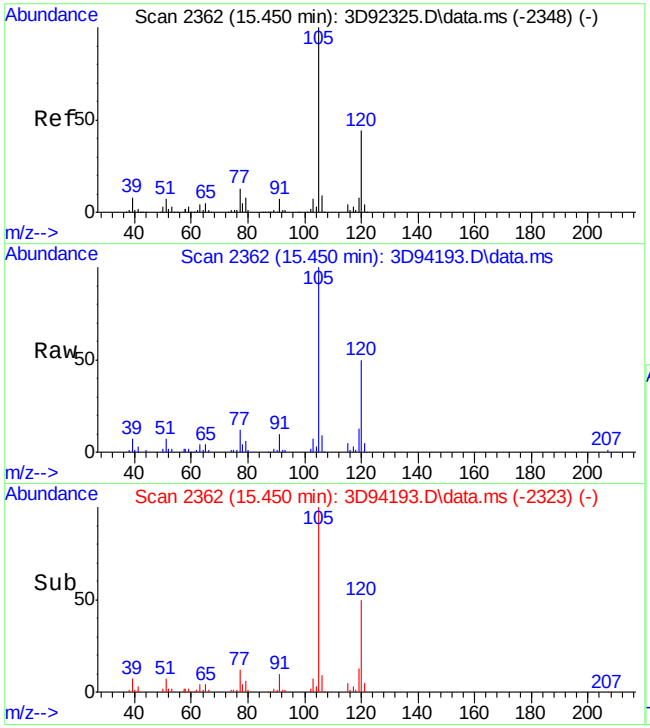
Ion	Ratio	Lower	Upper
167	100		
130	34.3	0.1	60.1
132	32.3	0.5	60.5
165	78.7	46.5	106.5



7.7.5

7

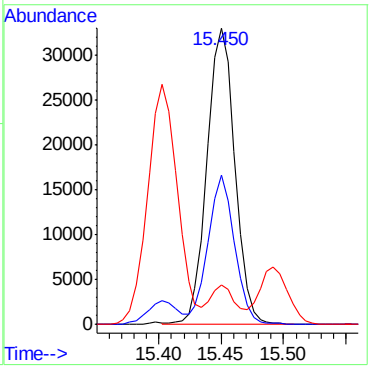
3D94193.D M3D4058.M Thu Dec 19 12:37:00 2013 3D Page 53

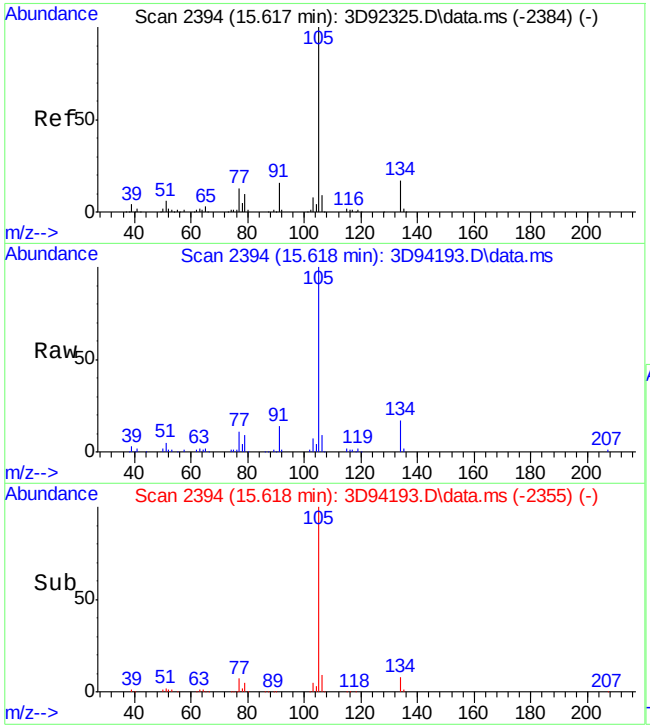


#119
1,2,4-trimethylbenzene
Concen: 10.06 ug/L
RT: 15.450 min Scan# 2362
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:105 Resp: 51355

Ion	Ratio	Lower	Upper
105	100		
120	50.3	16.8	76.8
119	6.4	0.0	42.6

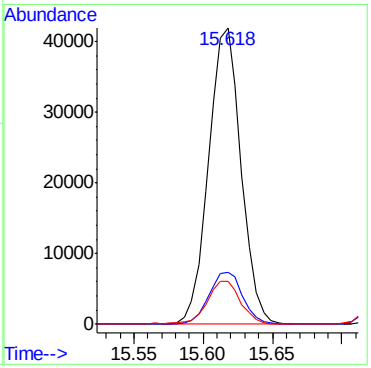


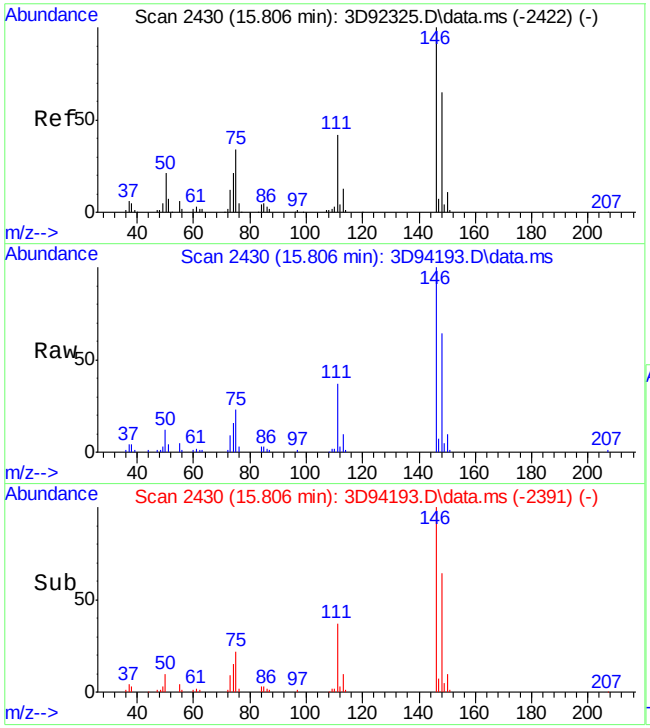


#120
sec-butylbenzene
Concen: 10.07 ug/L
RT: 15.618 min Scan# 2394
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:105 Resp: 68610

Ion	Ratio	Lower	Upper
105	100		
134	17.5	0.0	48.5
91	14.5	0.0	44.8

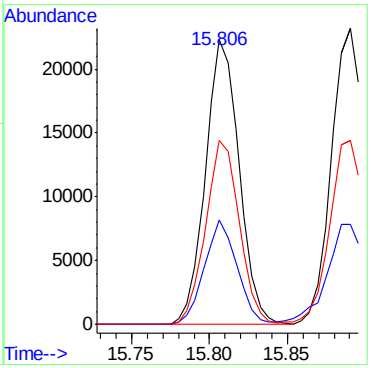


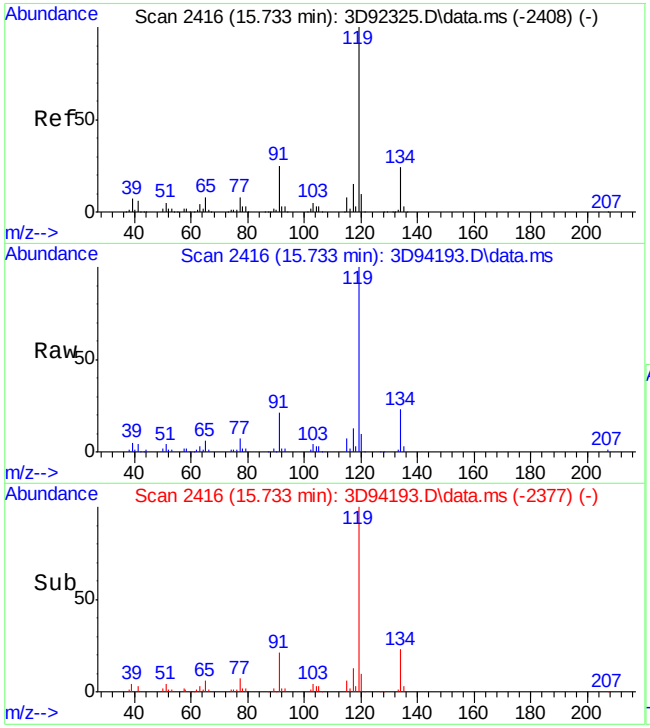


#121
1,3-dichlorobenzene
Concen: 9.79 ug/L
RT: 15.806 min Scan# 2430
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:146 Resp: 33562

Ion	Ratio	Lower	Upper
146	100		
111	36.5	6.0	66.0
148	64.3	34.2	94.2

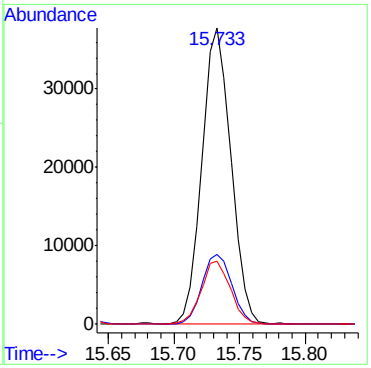




#122
p-isopropyltoluene
Concen: 10.25 ug/L
RT: 15.733 min Scan# 2416
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:119 Resp: 57997

Ion	Ratio	Lower	Upper
119	100		
134	23.5	0.0	55.3
91	21.1	0.0	51.2



7.7.5

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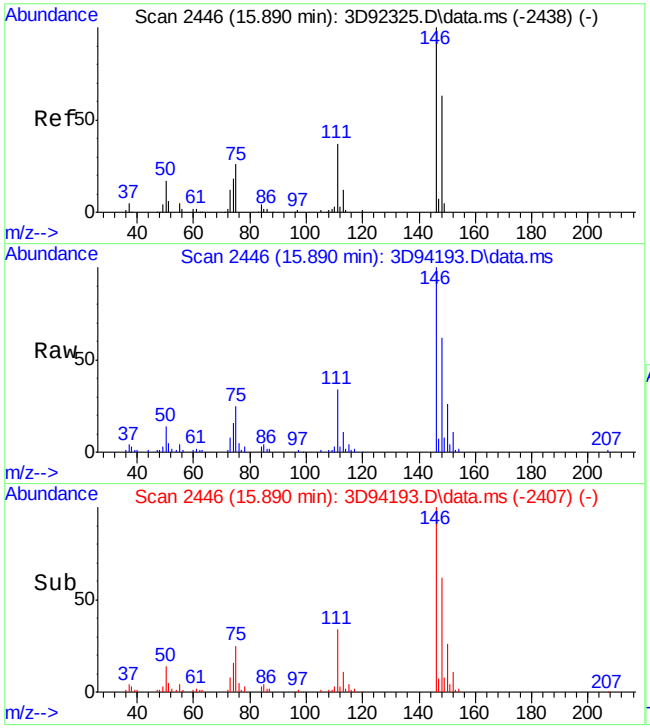
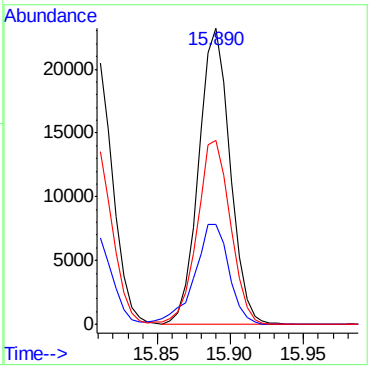
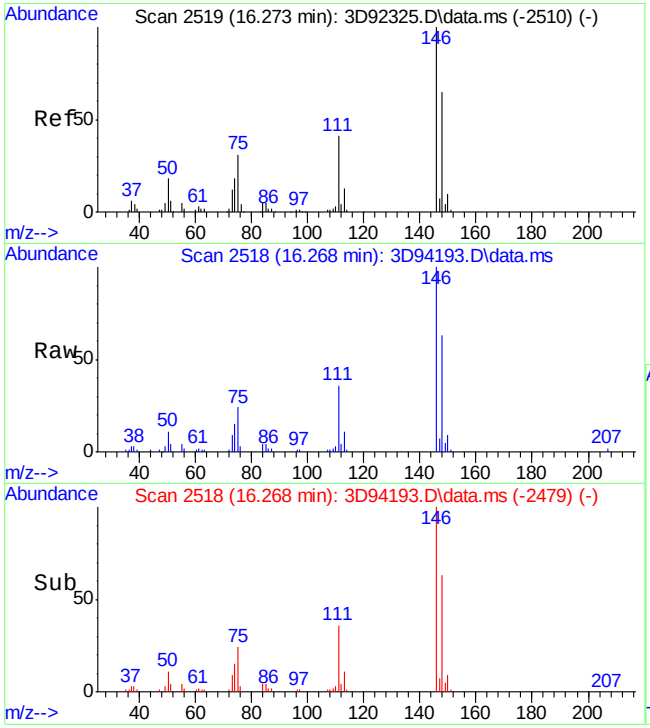


#123
1,4-dichlorobenzene
Concen: 9.59 ug/L
RT: 15.890 min Scan# 2446
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:146 Resp: 34707

Ion	Ratio	Lower	Upper
146	100		
111	33.6	4.9	64.9
148	62.1	34.4	94.4

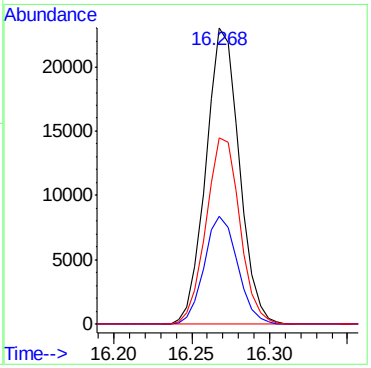


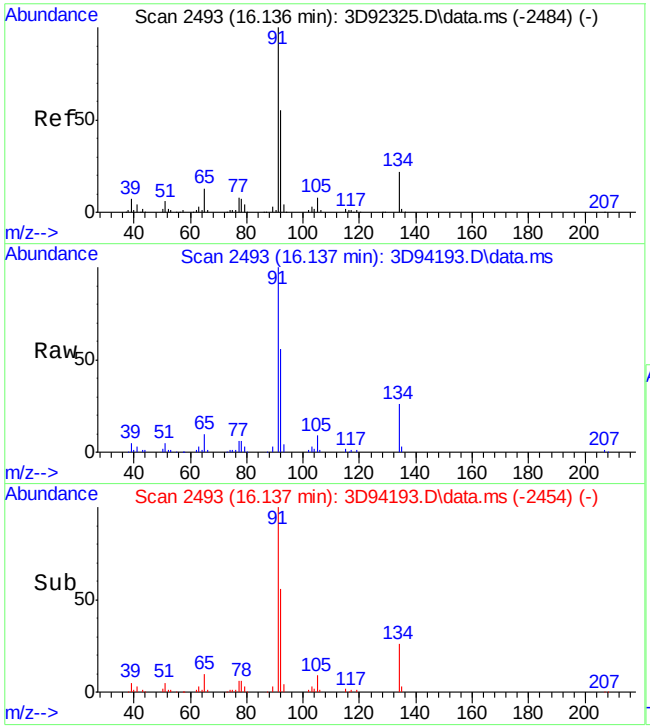


#124
1,2-dichlorobenzene
Concen: 9.68 ug/L
RT: 16.268 min Scan# 2518
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:146 Resp: 34214

Ion	Ratio	Lower	Upper
146	100		
111	36.4	8.3	68.3
148	62.8	34.4	94.4

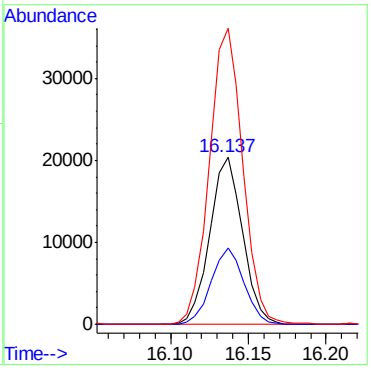


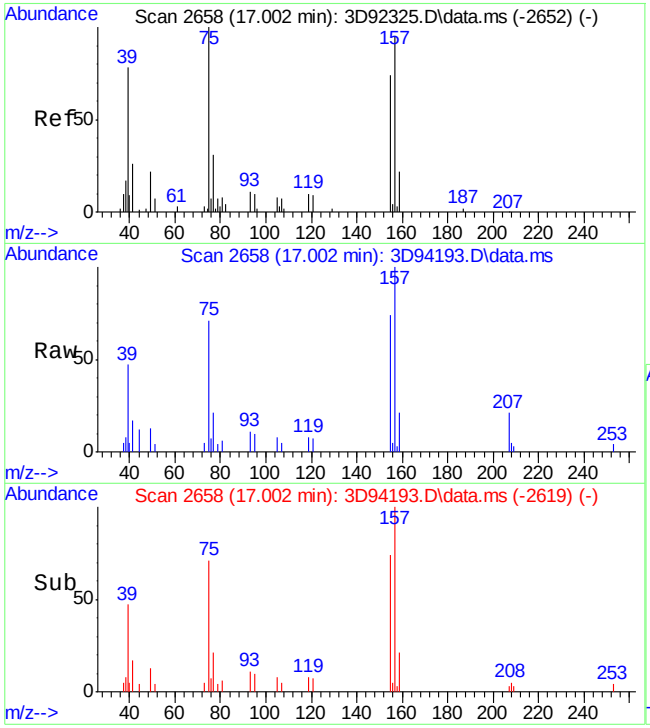


#126
n-butylbenzene
Concen: 10.50 ug/L
RT: 16.137 min Scan# 2493
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 92 Resp: 29818

Ion	Ratio	Lower	Upper
92	100		
134	45.4	15.0	75.0
91	177.1	148.5	208.5

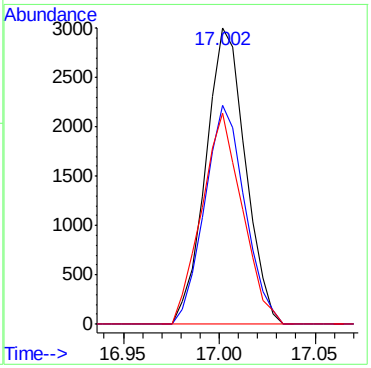


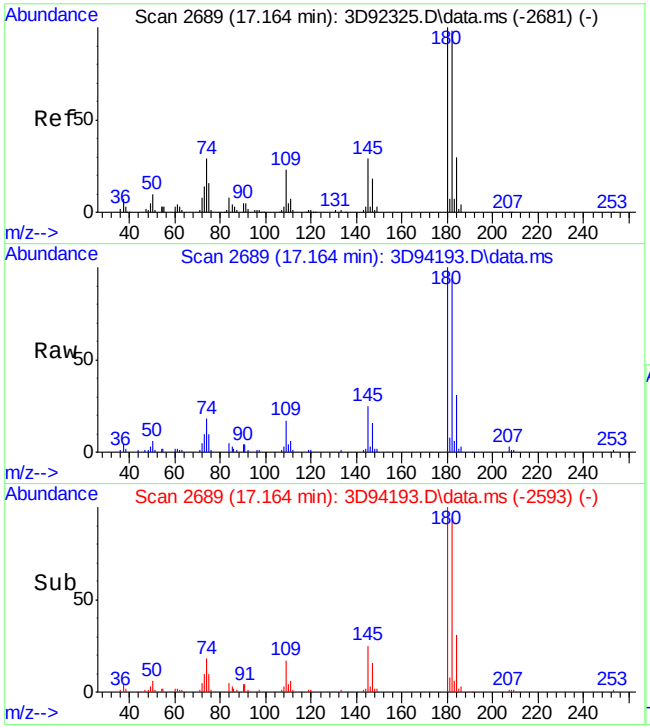


#128
1,2-dibromo-3-chloropropane
Concen: 10.42 ug/L
RT: 17.002 min Scan# 2658
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:157 Resp: 4307

Ion	Ratio	Lower	Upper
157	100		
155	74.1	47.2	107.2
75	71.1	45.0	105.0

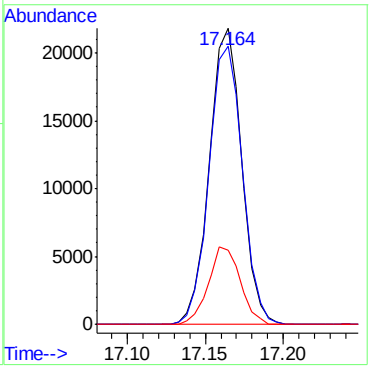


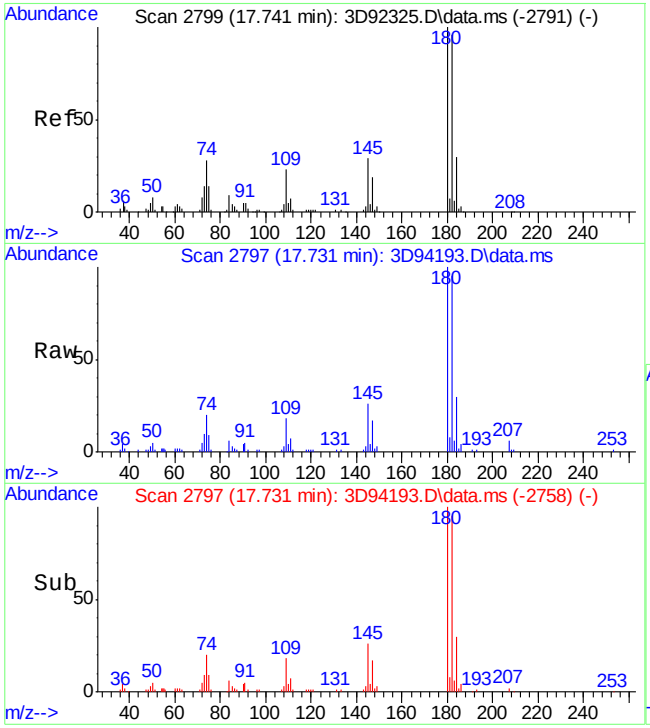


#129
1,3,5-trichlorobenzene
Concen: 9.62 ug/L
RT: 17.164 min Scan# 2689
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:180 Resp: 31420

Ion	Ratio	Lower	Upper
180	100		
182	97.0	66.4	126.4
145	25.7	0.0	55.5

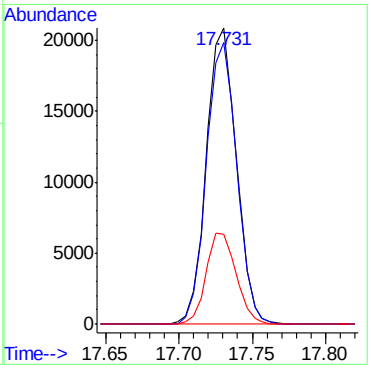


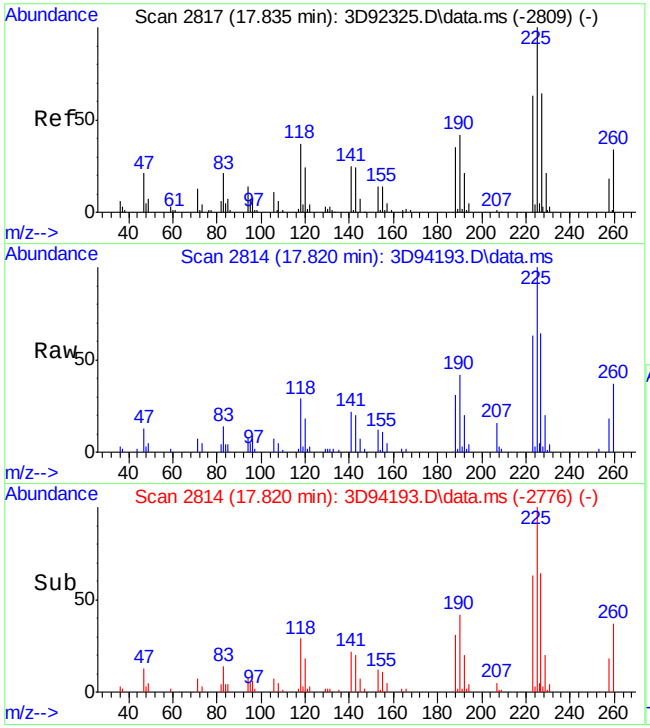


#130
1,2,4-trichlorobenzene
Concen: 10.20 ug/L
RT: 17.731 min Scan# 2797
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:180 Resp: 29617

Ion	Ratio	Lower	Upper
180	100		
182	94.9	67.0	127.0
184	30.3	1.3	61.3

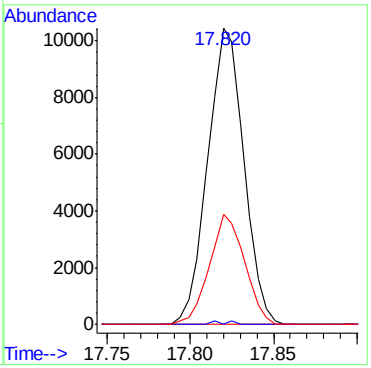


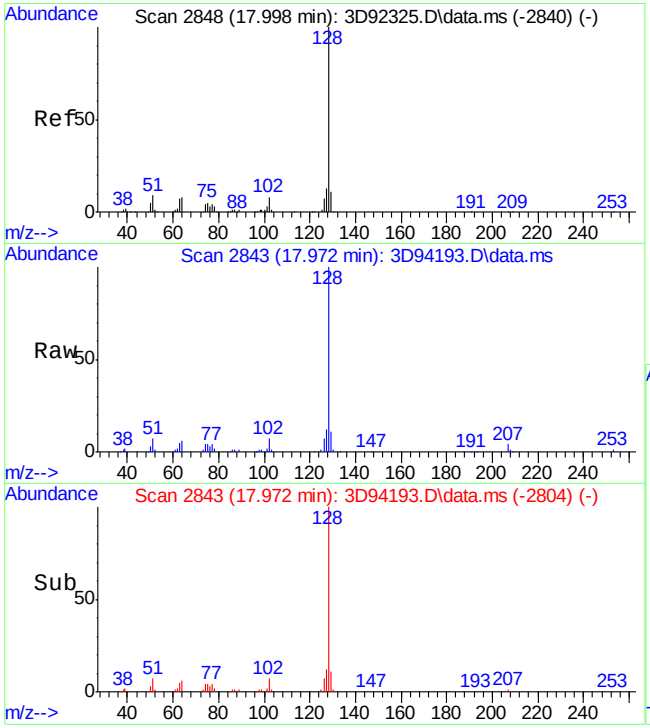


#131
hexachlorobutadiene
Concen: 10.24 ug/L
RT: 17.820 min Scan# 2814
Delta R.T. 0.000 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:225 Resp: 15812

Ion	Ratio	Lower	Upper
225	100		
259	0.0	0.0	31.3
260	37.0	6.4	66.4

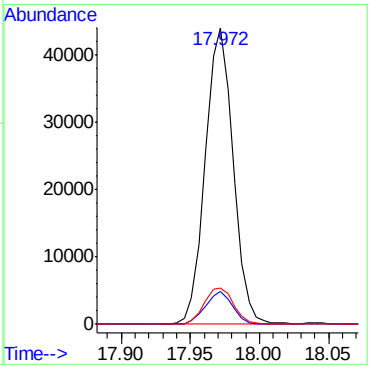




#132
naphthalene
Concen: 9.95 ug/L
RT: 17.972 min Scan# 2843
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

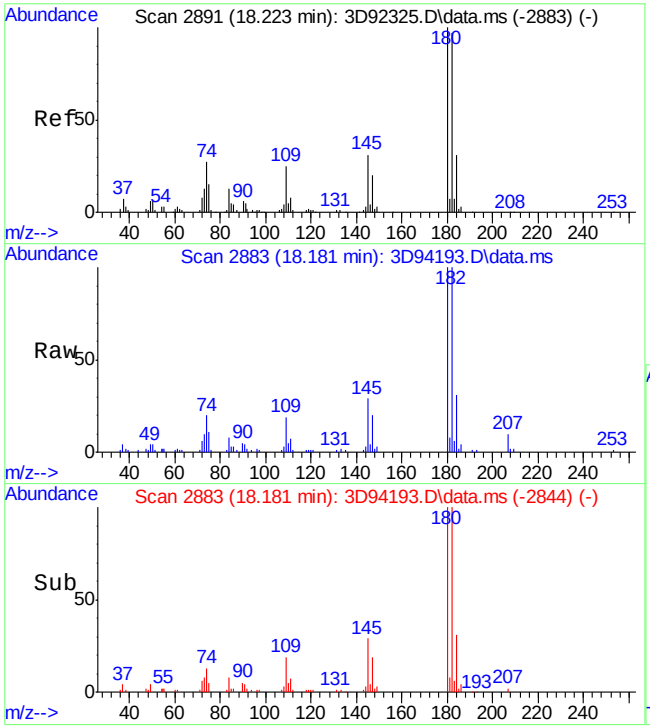
Tgt Ion:128 Resp: 61705

Ion	Ratio	Lower	Upper
128	100		
129	10.9	0.0	41.0
127	12.3	0.0	42.6



7.7.5

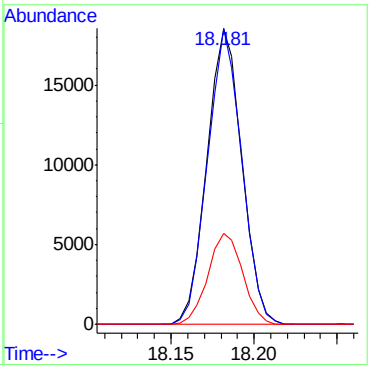
7

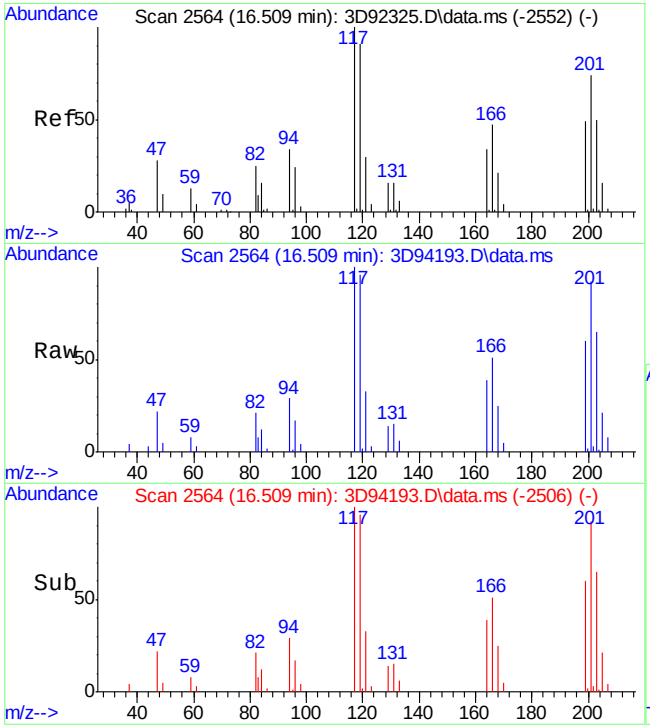


#133
1,2,3-trichlorobenzene
Concen: 9.62 ug/L
RT: 18.181 min Scan# 2883
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:180 Resp: 27150

Ion	Ratio	Lower	Upper
180	100		
182	100.2	64.7	124.7
184	30.9	0.4	60.4

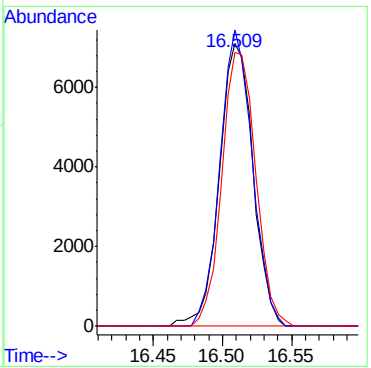


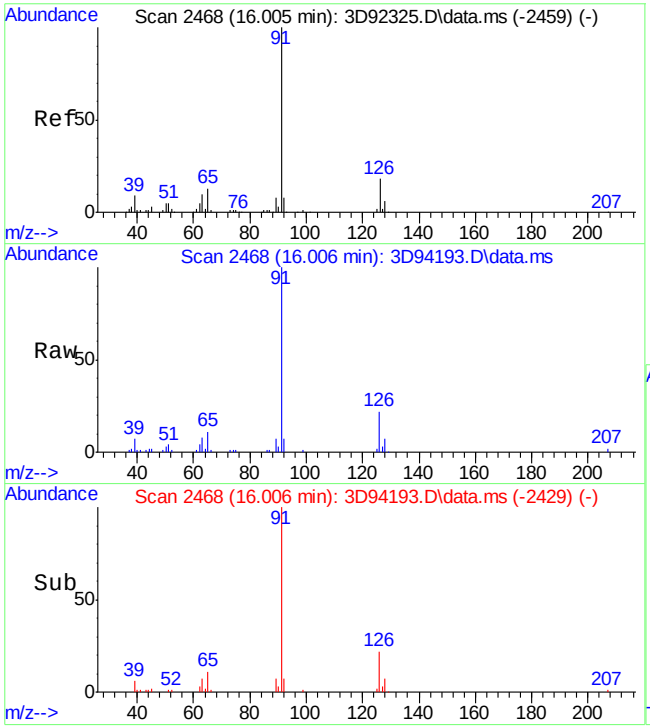


#134
hexachloroethane
Concen: 10.23 ug/L
RT: 16.509 min Scan# 2564
Delta R.T. 0.005 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion:119 Resp: 12113

Ion	Ratio	Lower	Upper
119	100		
117	100.5	71.1	131.1
201	97.3	69.2	129.2

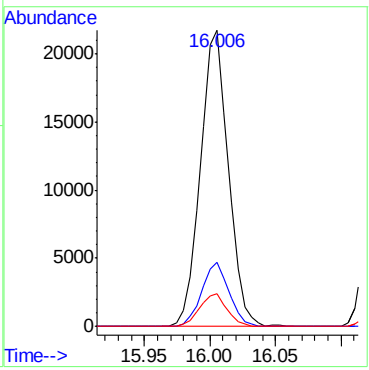




#135
Benzyl chloride
Concen: 9.97 ug/L
RT: 16.006 min Scan# 2468
Delta R.T. 0.006 min
Lab File: 3D94193.D
Acq: 18 Dec 2013 3:12 pm

Tgt Ion: 91 Resp: 32189

Ion	Ratio	Lower	Upper
91	100		
126	20.9	0.0	50.9
65	10.7	0.0	41.0



7.7.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94194.D
Acq On : 18 Dec 2013 3:39 pm
Operator : katteric
Sample : ic4058-20
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 19 12:31:17 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.250	65	72971	500.00	ug/L		0.01
4) pentafluorobenzene	9.488	168	177838	50.00	ug/L		0.01
58) 1,4-difluorobenzene	10.406	114	242128	50.00	ug/L		0.01
88) chlorobenzene-d5	13.557	117	201143	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.864	152	117661	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.546	113	68948	47.70	ug/L		0.01
Spiked Amount 50.000	Range 80 - 119		Recovery = 95.40%				
51) 1,2-dichloroethane-d4 (s)	9.966	65	69738	46.22	ug/L		0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 92.44%				
80) toluene-d8 (s)	12.047	98	239663	50.44	ug/L		0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.88%				
106) 4-bromofluorobenzene (s)	14.711	95	85257	46.05	ug/L		0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 92.10%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.130	88	7172	594.09	ug/L		97
3) tertiary butyl alcohol	7.365	59	16625	97.70	ug/L		90
8) chlorodifluoromethane	3.884	51	28524	23.52	ug/L		99
9) dichlorodifluoromethane	3.868	85	35930	23.00	ug/L		100
10) chloromethane	4.203	50	40164	18.95	ug/L		95
11) vinyl chloride	4.450	62	39602	20.70	ug/L		99
12) bromomethane	5.111	94	27217	19.97	ug/L		96
13) chloroethane	5.289	64	19200	21.32	ug/L		95
14) 1,3-butadiene	4.508	54	22370	22.60	ug/L		99
15) vinyl bromide	5.635	106	23805	21.98	ug/L		99
16) trichlorofluoromethane	5.734	101	43254	20.53	ug/L		99
17) pentane	5.818	43	38382	20.07	ug/L	#	100
18) ethyl ether	6.143	74	15312	21.70	ug/L		95
21) acrolein	6.416	56	61579	204.70	ug/L		98
22) 1,1-dichloroethene	6.573	61	41290	20.15	ug/L		98
23) acetone	6.636	58	2327	26.83	ug/L		87
24) allyl chloride	7.108	76	15834	19.40	ug/L		93
25) acetonitrile	7.087	40	26171	190.24	ug/L		95
27) iodomethane	6.856	142	54990	19.18	ug/L		99
28) iso-butyl alcohol	9.777	41	10379	223.70	ug/L		97
29) carbon disulfide	6.977	76	98880	18.79	ug/L		100
30) methylene chloride	7.302	84	30699	19.27	ug/L		97
31) methyl acetate	7.082	74	4658	21.70	ug/L		90
32) methyl tert butyl ether	7.611	73	85761	18.99	ug/L		98
33) trans-1,2-dichloroethene	7.664	61	41259	19.77	ug/L		95
34) di-isopropyl ether	8.199	45	95991	19.70	ug/L		96
35) ethyl tert-butyl ether	8.665	59	91538	21.44	ug/L		100
36) 2-butanone	8.943	72	3250	25.40	ug/L		90
37) 1,1-dichloroethane	8.241	63	50571	19.24	ug/L		100
38) chloroprene	8.340	53	39248	21.90	ug/L		99
39) acrylonitrile	7.638	53	55867	109.99	ug/L		99
40) vinyl acetate	8.225	86	4810	25.69	ug/L		69
41) ethyl acetate	8.948	45	4036	23.03	ug/L	#	48

M3D4058.M Thu Dec 19 12:37:01 2013 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94194.D
Acq On : 18 Dec 2013 3:39 pm
Operator : katteric
Sample : ic4058-20
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 19 12:31:17 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 2,2-dichloropropane	8.969	77	40175	18.10	ug/L	97
43) cis-1,2-dichloroethene	8.975	61	50244	19.77	ug/L	99
44) propionitrile	9.053	54	42057	218.67	ug/L	98
45) methyl acrylate	9.038	55	31448	23.42	ug/L	98
46) bromochloromethane	9.289	128	16586	21.24	ug/L	98
47) tetrahydrofuran	9.315	42	10043	21.73	ug/L	98
48) chloroform	9.347	83	48998	19.33	ug/L	98
49) Tert-Butyl Formate	9.368	59	27800	22.16	ug/L	98
52) freon 113	6.531	151	21089	23.79	ug/L	99
53) methacrylonitrile	9.232	41	17603	21.02	ug/L	99
54) 1,1,1-trichloroethane	9.588	97	43050	19.84	ug/L	99
56) 2,2,4-Trimethylpentane	10.013	57	108347	22.82	ug/L	100
57) tert-amyl methyl ether	10.049	73	92101	21.03	ug/L	98
59) epichlorohydrin	11.675	57	14393	121.15	ug/L	99
60) n-butyl alcohol	10.527	56	40583	1185.48	ug/L	97
61) cyclohexane	9.651	84	40848	19.42	ug/L	99
62) carbon tetrachloride	9.787	117	37751	19.98	ug/L	100
63) 1,1-dichloropropene	9.766	75	37541	19.99	ug/L	98
64) hexane	7.952	57	33061	24.05	ug/L	97
65) benzene	10.034	78	114700	19.41	ug/L	99
66) heptane	10.186	57	19661	23.75	ug/L	98
67) isopropyl acetate	9.950	43	55260	22.24	ug/L	98
68) 1,2-dichloroethane	10.060	62	34644	19.86	ug/L	98
69) trichloroethene	10.747	95	28222	19.37	ug/L	95
70) ethyl acrylate	10.747	55	34154	22.97	ug/L	99
72) 2-nitropropane	11.533	41	10436	20.13	ug/L	95
73) 2-chloroethyl vinyl ether	11.544	63	98665	112.67	ug/L	99
74) methyl methacrylate	11.014	41	42883	20.58	ug/L	99
75) 1,2-dichloropropane	11.019	63	28733	20.25	ug/L	98
76) methylcyclohexane	10.957	83	45550	22.57	ug/L	98
77) dibromomethane	11.182	93	18135	20.39	ug/L	99
78) bromodichloromethane	11.313	83	36946	20.52	ug/L	97
79) cis-1,3-dichloropropene	11.764	75	45599	19.98	ug/L	99
81) 4-methyl-2-pentanone	11.853	58	10899	24.53	ug/L	95
82) toluene	12.120	92	68497	20.48	ug/L	98
83) 3-methyl-1-butanol	11.869	70	15147	458.90	ug/L	99
84) trans-1,3-dichloropropene	12.325	75	41116	20.45	ug/L	98
85) ethyl methacrylate	12.304	69	33916	22.45	ug/L	98
86) 1,1,2-trichloroethane	12.540	83	21226	20.92	ug/L	92
87) 2-hexanone	12.702	58	9356	24.46	ug/L	95
89) tetrachloroethene	12.702	166	32556	20.05	ug/L	99
90) 1,3-dichloropropane	12.718	76	39355	20.26	ug/L	97
91) butyl acetate	12.776	56	18111	23.99	ug/L	98
92) 3,3-Dimethyl-1-Butanol	12.875	57	28409	205.75	ug/L	99
93) dibromochloromethane	12.986	129	31625	20.52	ug/L	100
94) 1,2-dibromoethane	13.138	107	26609	20.35	ug/L	100
96) chlorobenzene	13.589	112	74644	19.67	ug/L	99
97) 1,1,1,2-tetrachloroethane	13.651	131	29662	19.86	ug/L	99
98) ethylbenzene	13.636	91	122749	19.53	ug/L	99
99) m,p-xylene	13.741	106	96518	40.25	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94194.D
Acq On : 18 Dec 2013 3:39 pm
Operator : katteric
Sample : ic4058-20
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 19 12:31:17 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

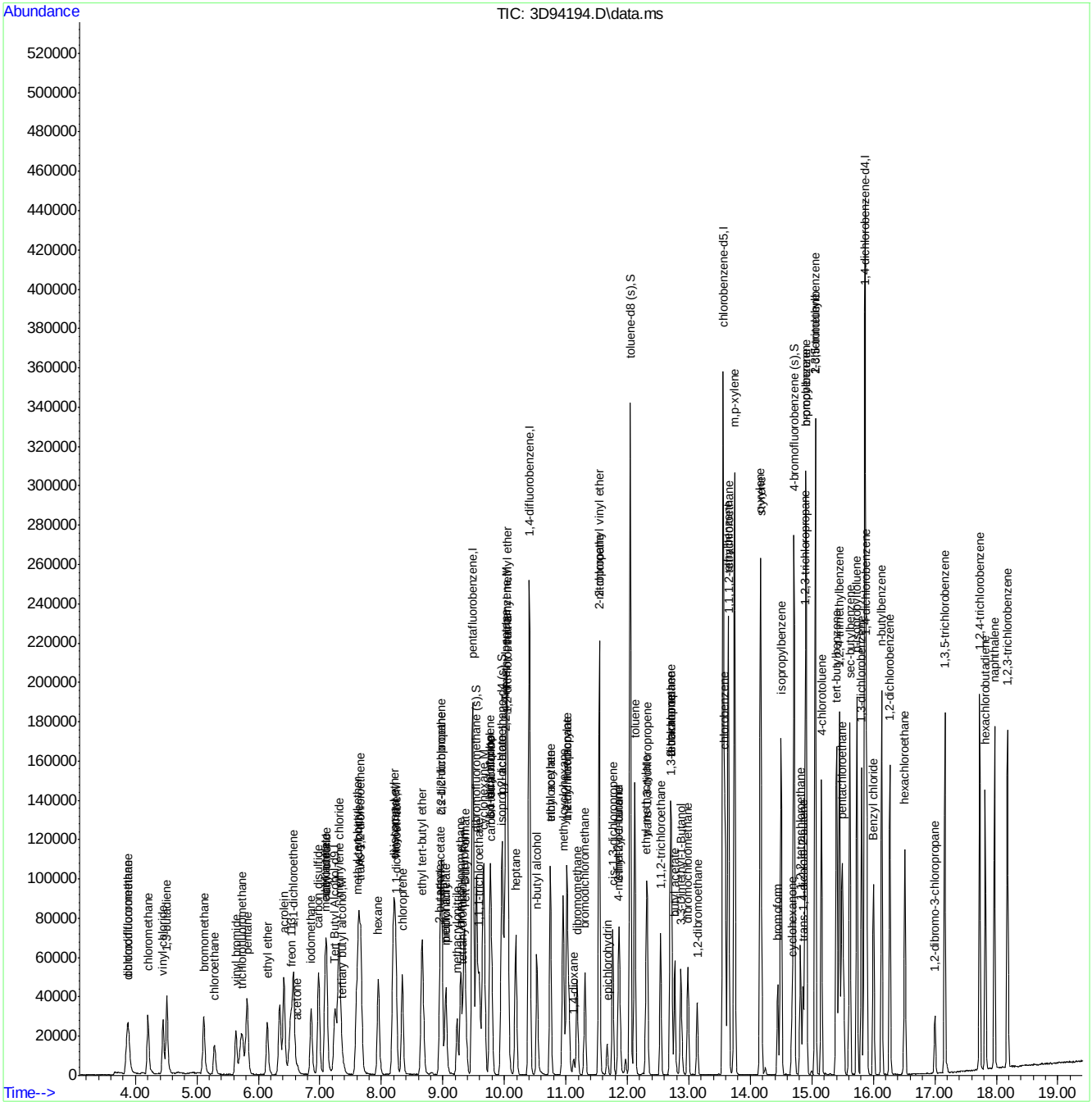
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) o-xylene	14.160	106	48246	19.80	ug/L	98
101) styrene	14.176	104	80044	20.59	ug/L	97
103) bromoform	14.448	173	23699	20.37	ug/L	99
105) isopropylbenzene	14.501	105	124274	20.17	ug/L	99
107) bromobenzene	14.905	156	35945	19.84	ug/L	95
108) cyclohexanone	14.679	55	13387	189.30	ug/L	96
109) 1,1,2,2-tetrachloroethane	14.815	83	35684	18.48	ug/L	99
110) trans-1,4-dichloro-2-b...	14.857	53	8239	21.02	ug/L	99
111) 1,2,3-trichloropropane	14.889	110	8447	21.29	ug/L	98
112) n-propylbenzene	14.905	91	140149	19.87	ug/L	99
114) 2-chlorotoluene	15.057	126	30709	19.85	ug/L	94
115) 4-chlorotoluene	15.156	126	31218	20.06	ug/L	99
116) 1,3,5-trimethylbenzene	15.057	105	103365	19.81	ug/L	99
117) tert-butylbenzene	15.403	119	89526	19.74	ug/L	100
118) pentachloroethane	15.492	167	24007	20.09	ug/L	98
119) 1,2,4-trimethylbenzene	15.450	105	103626	20.14	ug/L	99
120) sec-butylbenzene	15.618	105	137895	20.08	ug/L	99
121) 1,3-dichlorobenzene	15.806	146	66956	19.39	ug/L	100
122) p-isopropyltoluene	15.733	119	116502	20.44	ug/L	99
123) 1,4-dichlorobenzene	15.890	146	68905	18.88	ug/L	98
124) 1,2-dichlorobenzene	16.268	146	68232	19.16	ug/L	98
126) n-butylbenzene	16.137	92	59963	20.95	ug/L	96
128) 1,2-dibromo-3-chloropr...	17.002	157	8944	21.46	ug/L	98
129) 1,3,5-trichlorobenzene	17.164	180	62825	19.09	ug/L	100
130) 1,2,4-trichlorobenzene	17.731	180	60373	20.63	ug/L	99
131) hexachlorobutadiene	17.825	225	32097	20.63	ug/L	98
132) naphthalene	17.972	128	126593	20.25	ug/L	100
133) 1,2,3-trichlorobenzene	18.181	180	55494	19.52	ug/L	98
134) hexachloroethane	16.509	119	24511	20.55	ug/L	100
135) Benzyl chloride	16.000	91	70358	21.63	ug/L	100

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

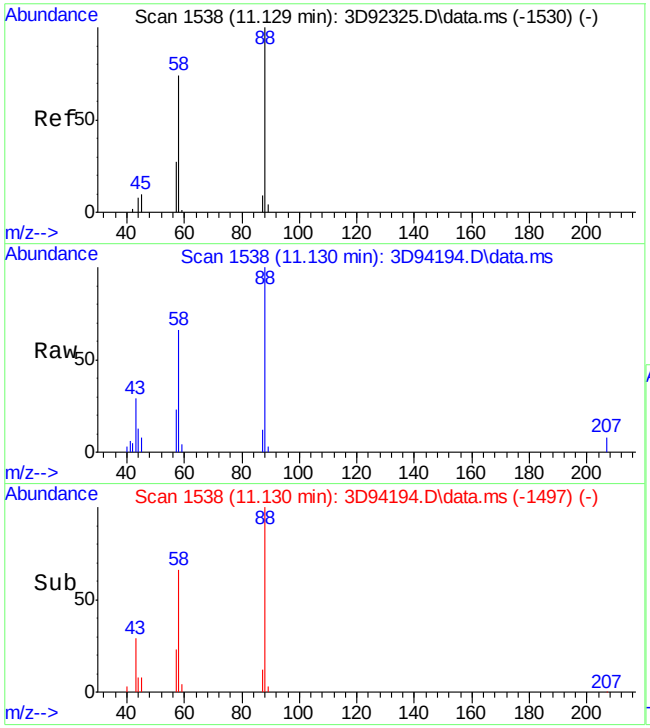
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94194.D
Acq On : 18 Dec 2013 3:39 pm
Operator : katteric
Sample : ic4058-20
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 19 12:31:17 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration



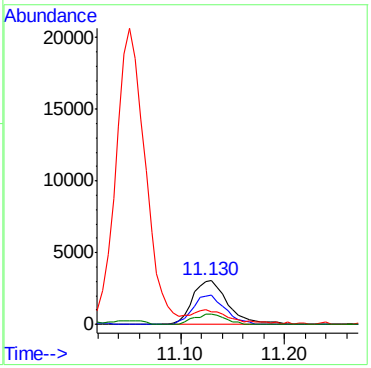
M3D4058.M Thu Dec 19 12:37:02 2013 3D Page: 4

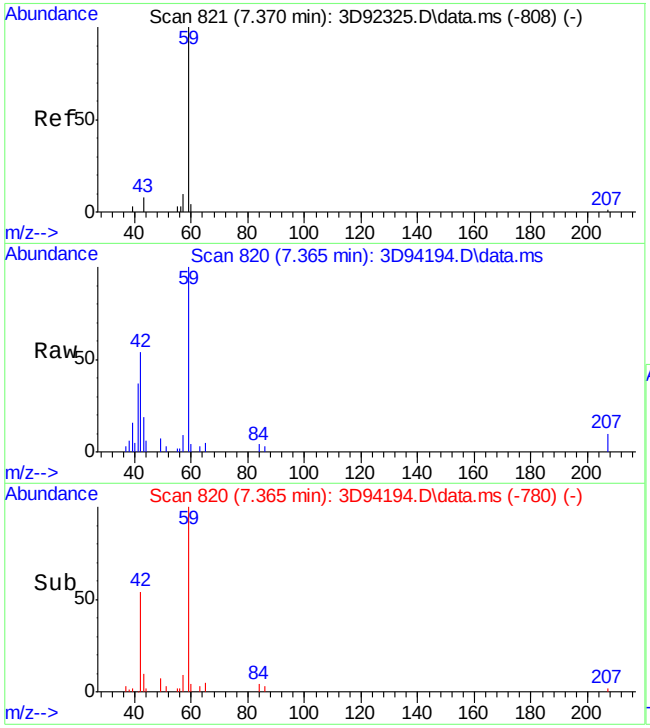


#2
1,4-dioxane
Concen: 594.09 ug/L
RT: 11.130 min Scan# 1538
Delta R.T. 0.017 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 88 Resp: 7172

Ion	Ratio	Lower	Upper
88	100		
58	60.0	33.2	93.2
43	33.0	1.5	61.5
57	20.3	0.0	50.6

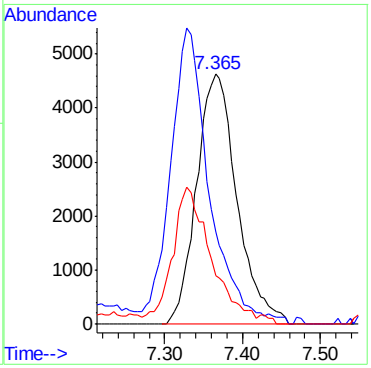


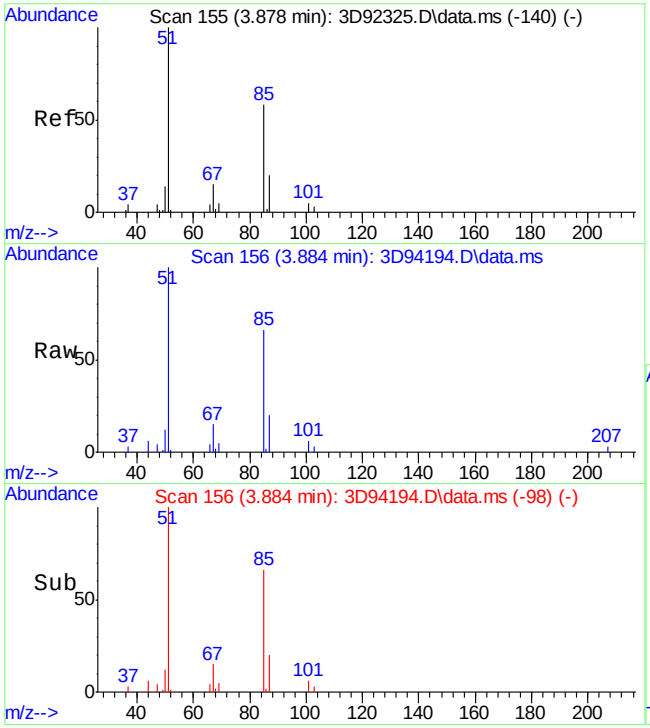


#3
tertiary butyl alcohol
Concen: 97.70 ug/L
RT: 7.365 min Scan# 820
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 59 Resp: 16625

Ion	Ratio	Lower	Upper
59	100		
41	36.9	13.6	73.6
43	19.3	0.0	53.7

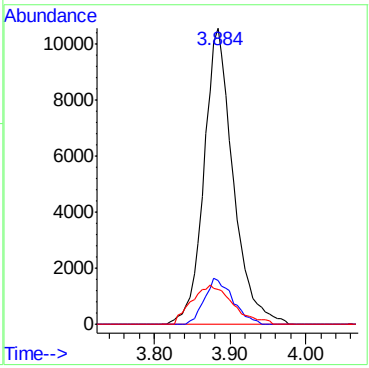


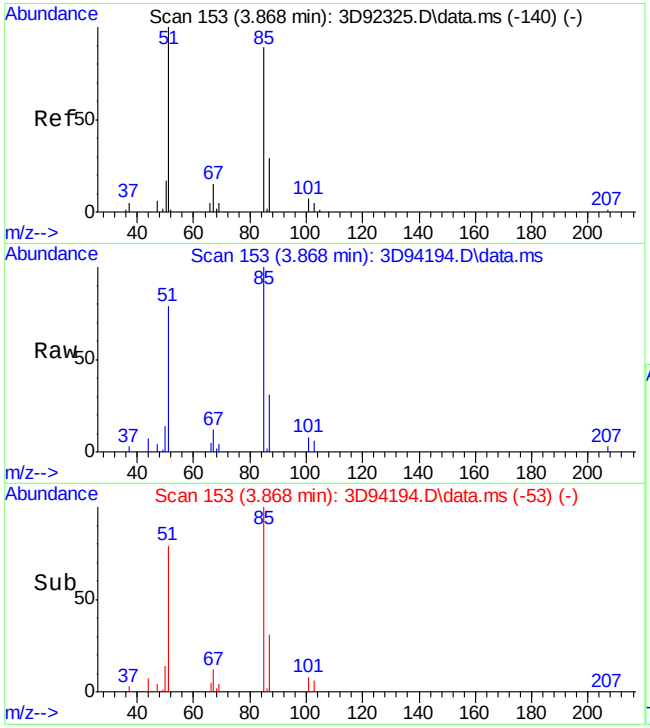


#8
chlorodifluoromethane
Concen: 23.52 ug/L
RT: 3.884 min Scan# 156
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 51 Resp: 28524

Ion	Ratio	Lower	Upper
51	100		
67	14.7	0.0	44.7
50	11.6	0.0	42.3

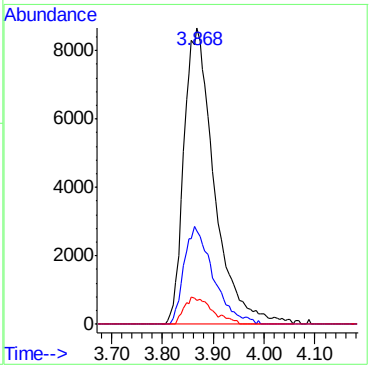


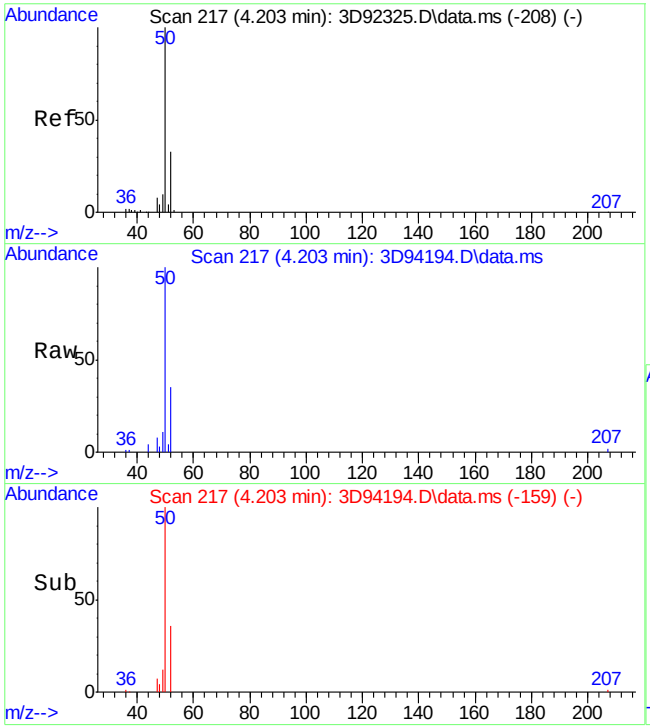


#9
dichlorodifluoromethane
Concen: 23.00 ug/L
RT: 3.868 min Scan# 153
Delta R.T. 0.016 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 85 Resp: 35930

Ion	Ratio	Lower	Upper
85	100		
87	31.4	1.6	61.6
101	7.9	0.0	38.1

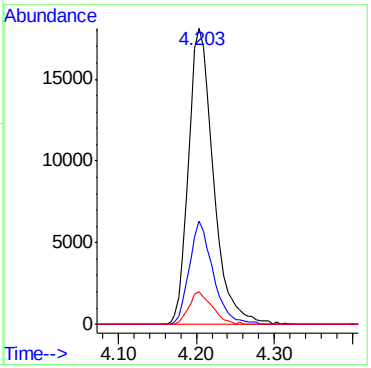


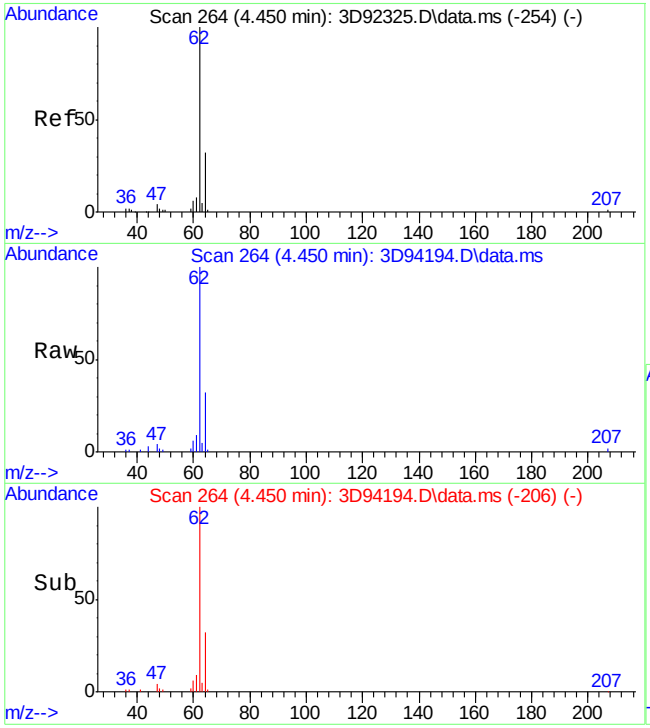


#10
chloromethane
Concen: 18.95 ug/L
RT: 4.203 min Scan# 217
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 50 Resp: 40164

Ion	Ratio	Lower	Upper
50	100		
52	34.7	1.8	61.8
49	11.0	0.0	39.9

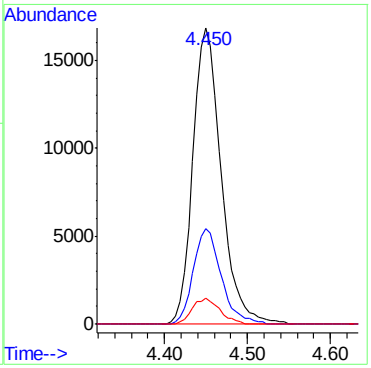


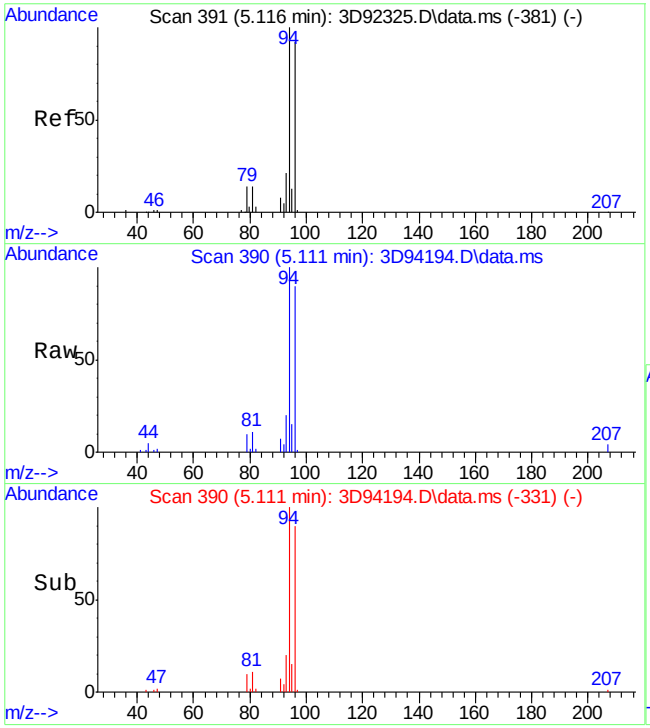


#11
vinyl chloride
Concen: 20.70 ug/L
RT: 4.450 min Scan# 264
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 62 Resp: 39602

Ion	Ratio	Lower	Upper
62	100		
64	32.4	2.0	62.0
61	8.6	0.0	39.1

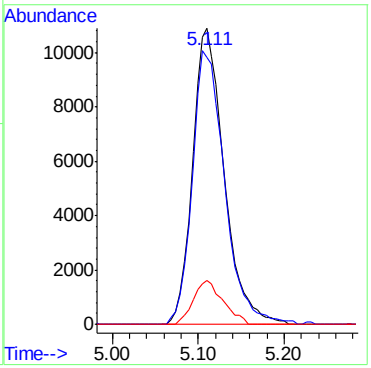


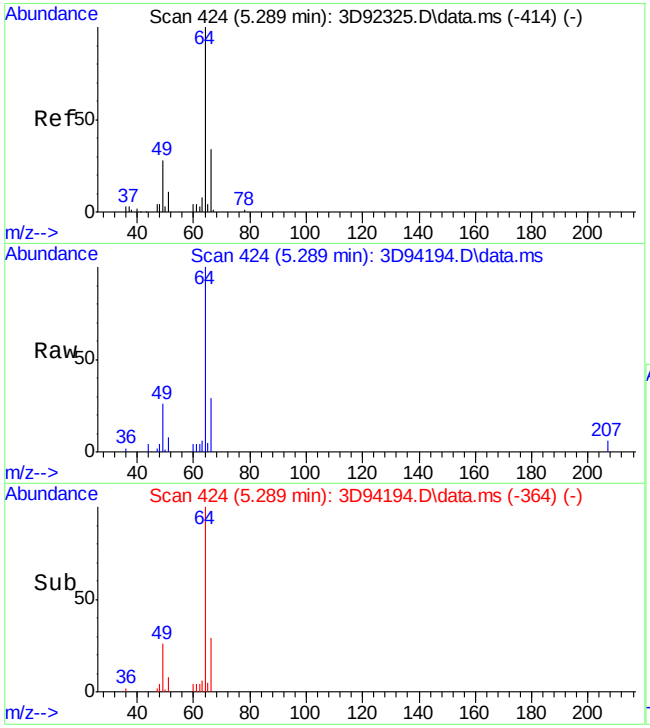


#12
bromomethane
Concen: 19.97 ug/L
RT: 5.111 min Scan# 390
Delta R.T. 0.012 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 94 Resp: 27217

Ion	Ratio	Lower	Upper
94	100		
96	90.1	63.8	123.8
95	14.6	0.0	43.9

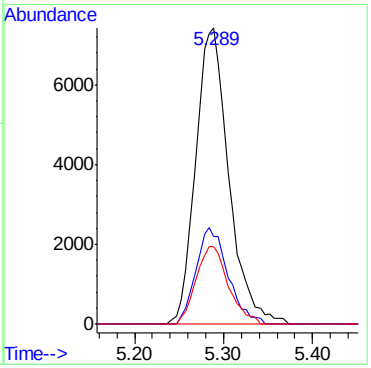


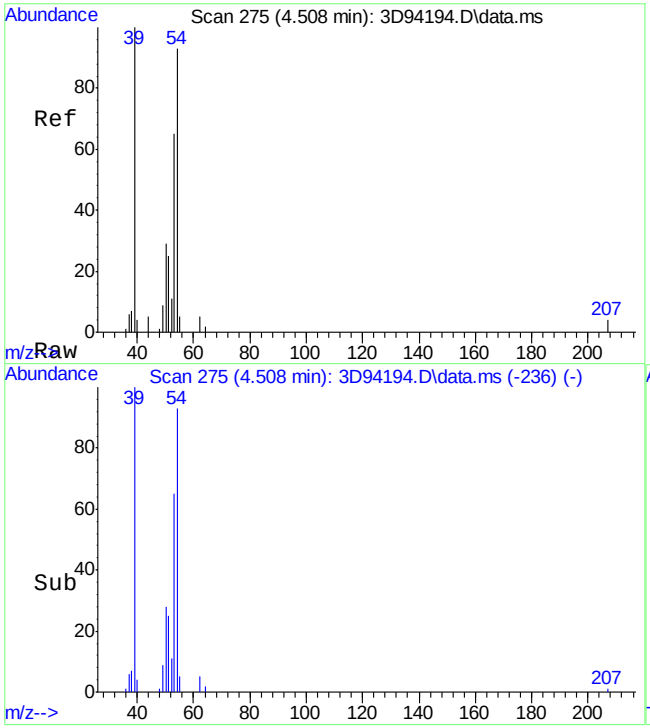


#13
chloroethane
Concen: 21.32 ug/L
RT: 5.289 min Scan# 424
Delta R.T. 0.017 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 64 Resp: 19200

Ion	Ratio	Lower	Upper
64	100		
66	29.5	4.0	64.0
49	26.1	0.0	57.1

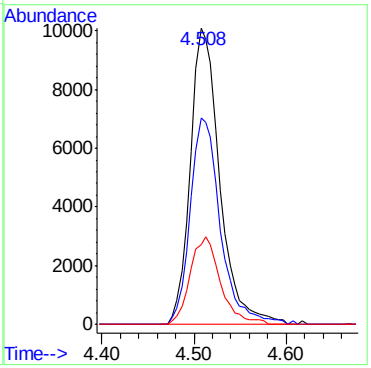


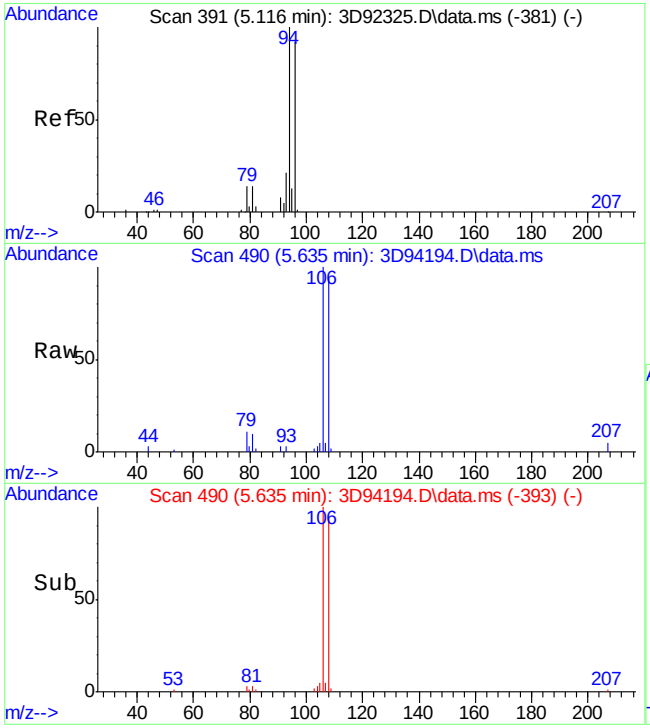


#14
1,3-butadiene
Concen: 22.60 ug/L
RT: 4.508 min Scan# 275
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 54 Resp: 22370

Ion	Ratio	Lower	Upper
54	100		
53	71.5	56.6	85.0
51	30.5	23.8	35.8

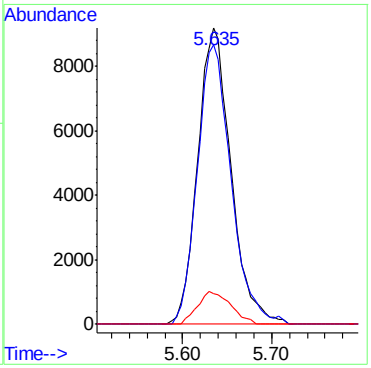


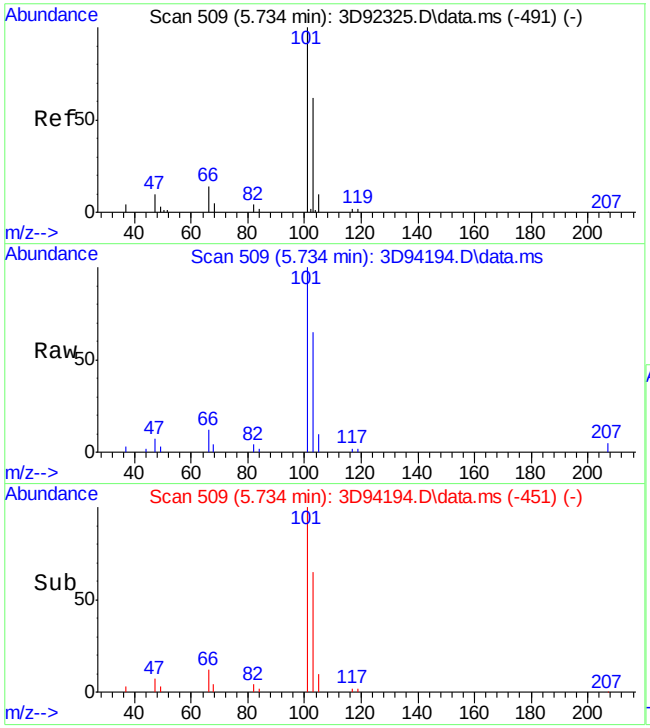


#15
vinyl bromide
Concen: 21.98 ug/L
RT: 5.635 min Scan# 490
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:106 Resp: 23805

Ion	Ratio	Lower	Upper
106	100		
108	95.7	64.3	124.3
81	10.9	0.0	40.6

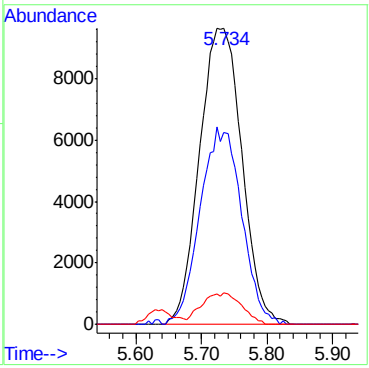


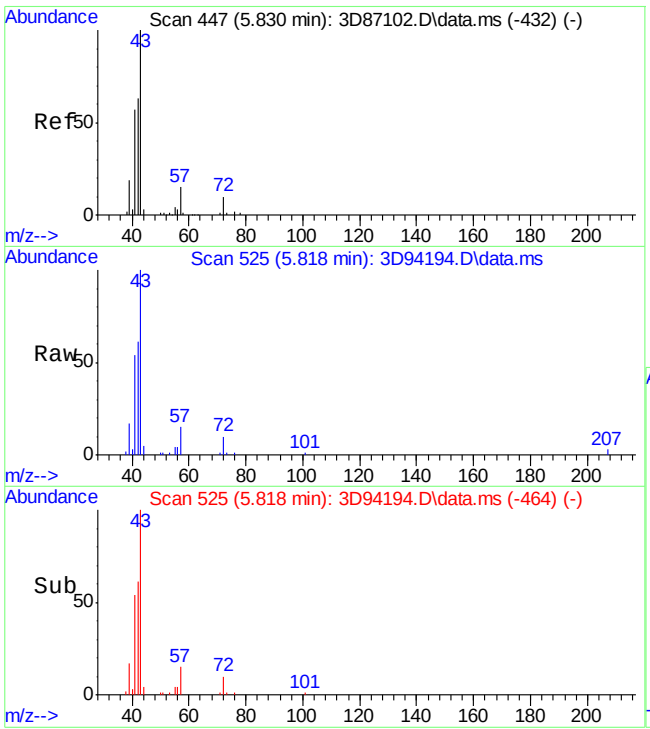


#16
trichlorofluoromethane
Concen: 20.53 ug/L
RT: 5.734 min Scan# 509
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:101 Resp: 43254

Ion	Ratio	Lower	Upper
101	100		
103	64.7	33.7	93.7
105	10.5	0.0	40.4

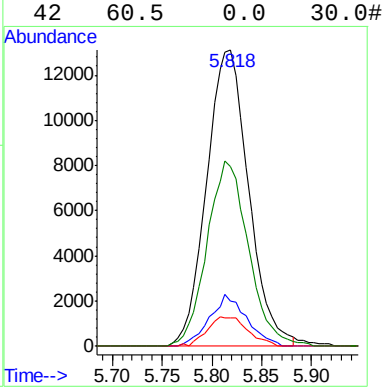


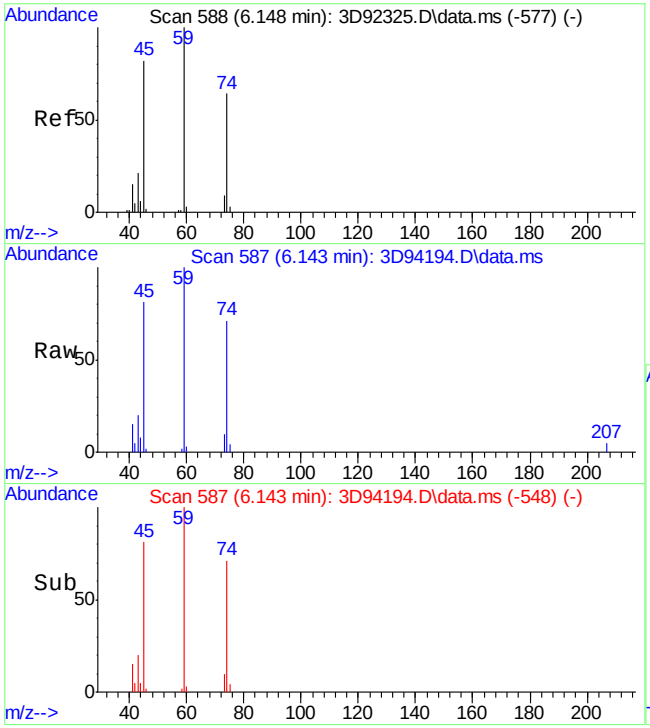


#17
pentane
Concen: 20.07 ug/L
RT: 5.818 min Scan# 525
Delta R.T. 0.121 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 43 Resp: 38382

Ion	Ratio	Lower	Upper
43	100		
57	15.2	0.0	30.0
72	9.5	0.0	30.0
42	60.5	0.0	30.0#

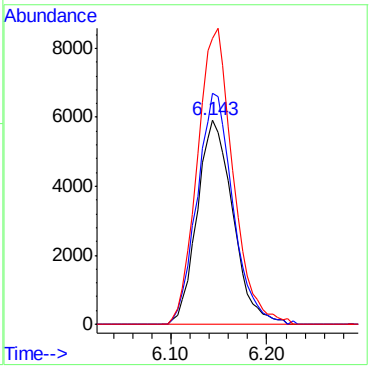


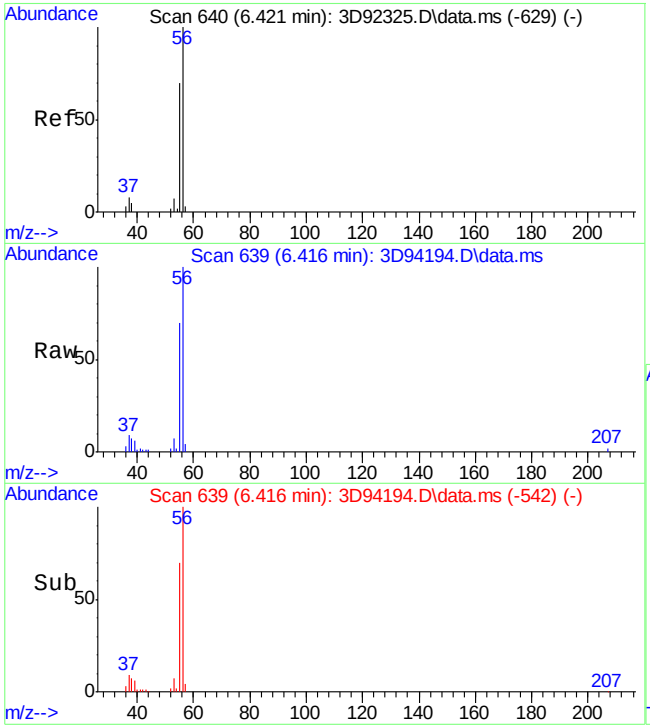


#18
ethyl ether
Concen: 21.70 ug/L
RT: 6.143 min Scan# 587
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 74 Resp: 15312

Ion	Ratio	Lower	Upper
74	100		
45	113.3	84.3	144.3
59	140.3	120.2	180.2

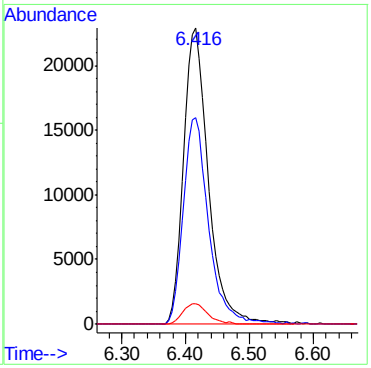


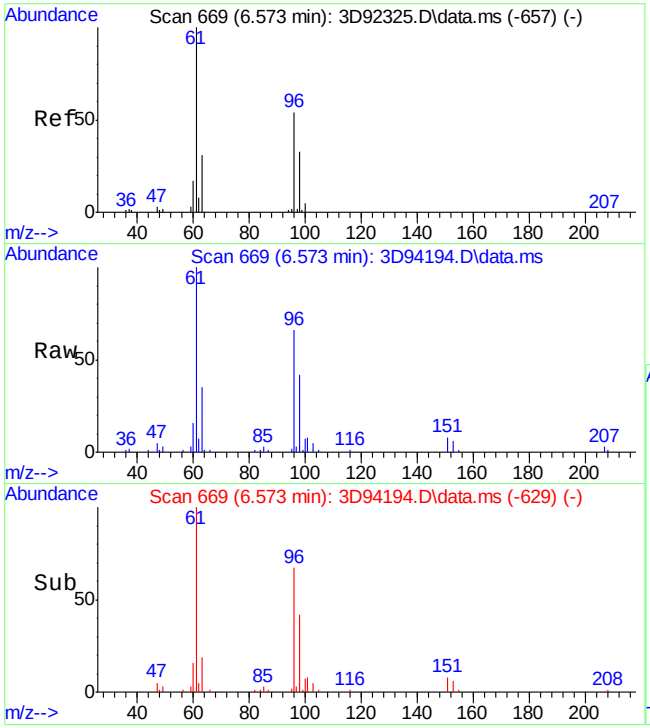


#21
acrolein
Concen: 204.70 ug/L
RT: 6.416 min Scan# 639
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 56 Resp: 61579

Ion	Ratio	Lower	Upper
56	100		
55	69.6	41.4	101.4
53	6.9	0.0	37.0

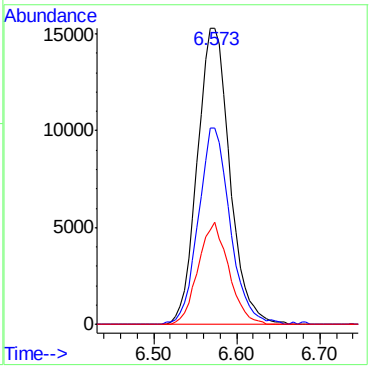


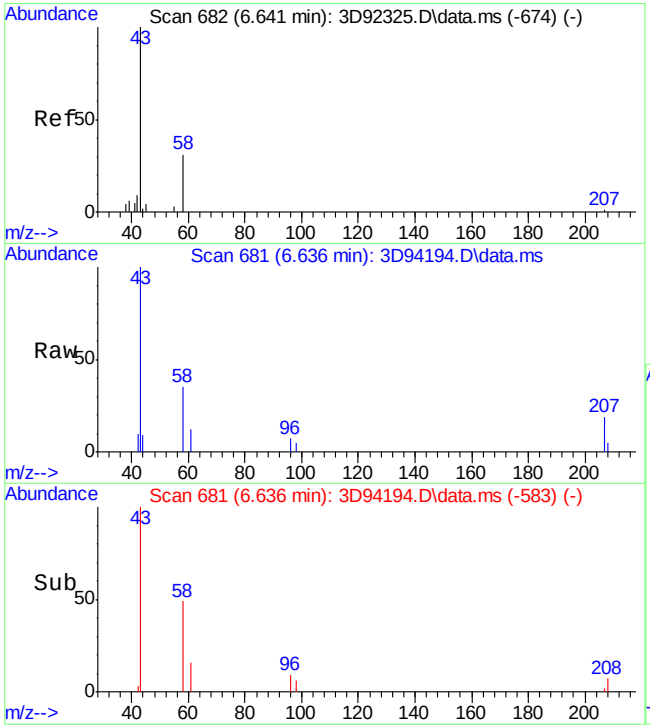


#22
1,1-dichloroethene
Concen: 20.15 ug/L
RT: 6.573 min Scan# 669
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 61 Resp: 41290

Ion	Ratio	Lower	Upper
61	100		
96	66.3	35.0	95.0
63	34.5	2.3	62.3

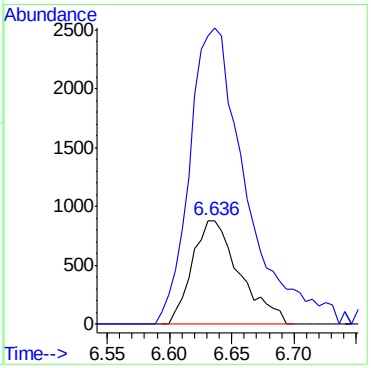




#23
acetone
Concen: 26.83 ug/L
RT: 6.636 min Scan# 681
Delta R.T. 0.016 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

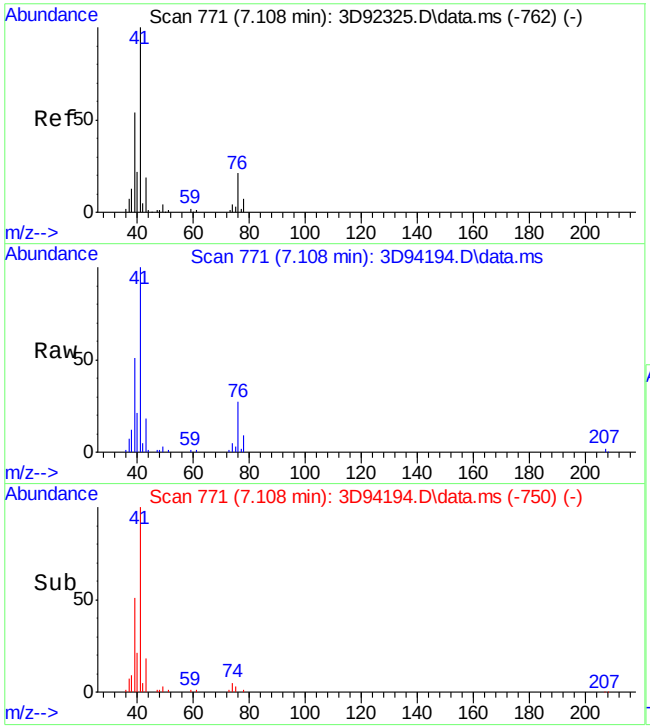
Tgt Ion: 58 Resp: 2327

Ion	Ratio	Lower	Upper
58	100		
43	286.0	281.3	341.3



7.7.6

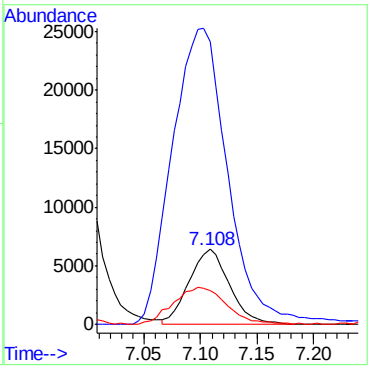
7

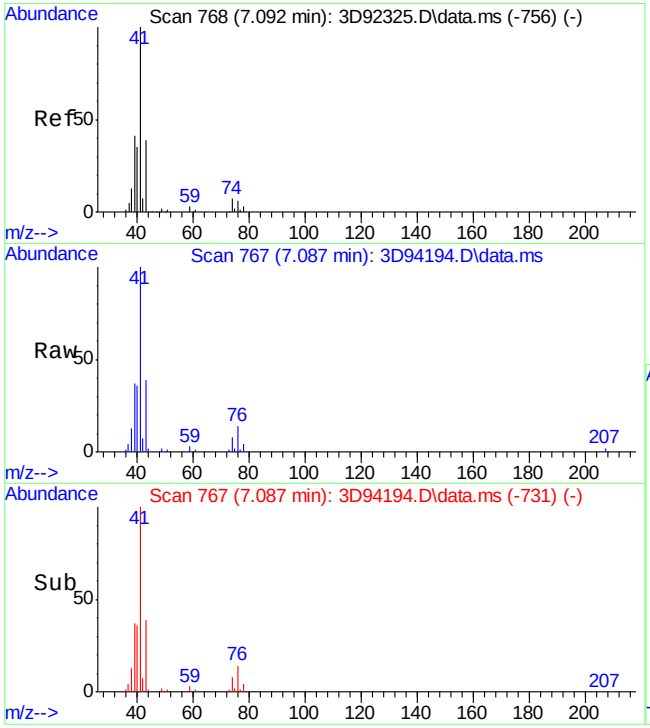


#24
allyl chloride
Concen: 19.40 ug/L
RT: 7.108 min Scan# 771
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 76 Resp: 15834

Ion	Ratio	Lower	Upper
76	100		
41	364.6	352.2	412.2
38	44.8	13.8	73.8

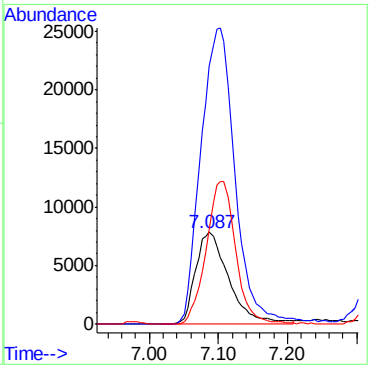


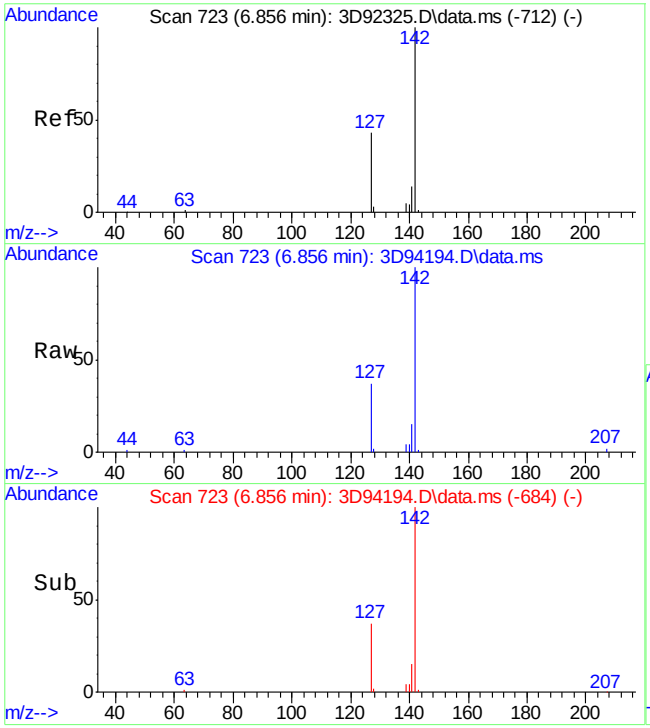


#25
acetonitrile
Concen: 190.24 ug/L
RT: 7.087 min Scan# 767
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 40 Resp: 26171

Ion	Ratio	Lower	Upper
40	100		
41	280.9	246.1	306.1
39	103.1	62.7	122.7

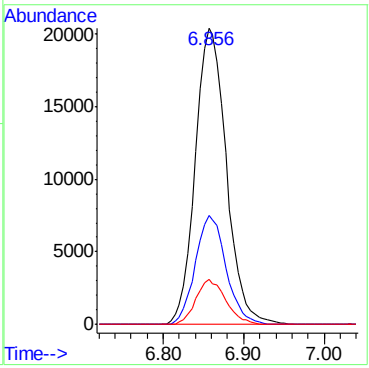


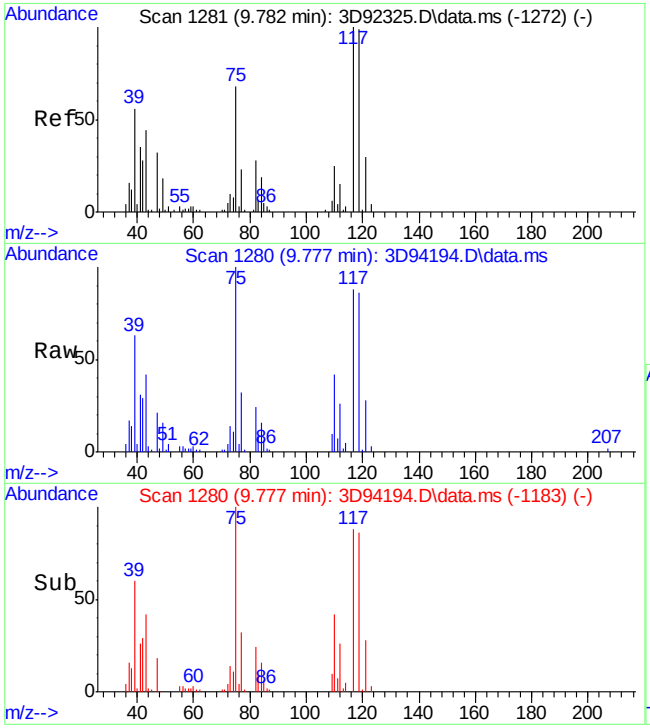


#27
iodomethane
Concen: 19.18 ug/L
RT: 6.856 min Scan# 723
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:142 Resp: 54990

Ion	Ratio	Lower	Upper
142	100		
127	36.7	6.0	66.0
141	15.0	0.0	44.5

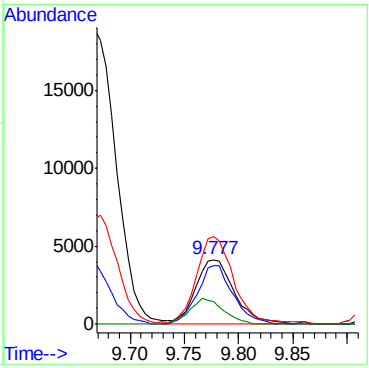


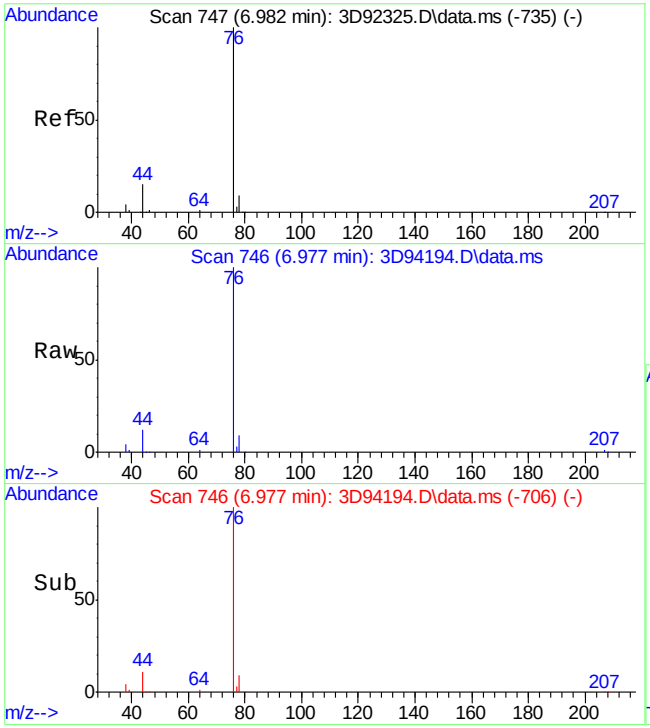


#28
iso-butyl alcohol
Concen: 223.70 ug/L
RT: 9.777 min Scan# 1280
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 41 Resp: 10379

Ion	Ratio	Lower	Upper
41	100		
42	91.0	56.4	116.4
43	132.0	104.5	164.5
74	34.9	4.6	64.6

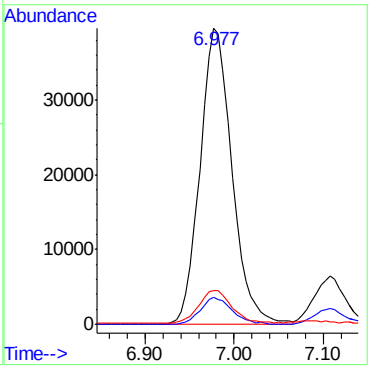


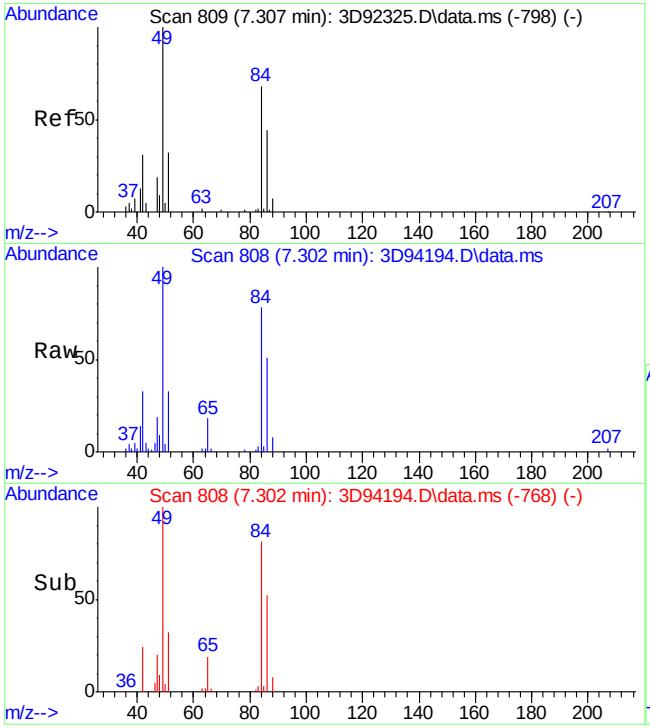


#29
carbon disulfide
Concen: 18.79 ug/L
RT: 6.977 min Scan# 746
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 76 Resp: 98880

Ion	Ratio	Lower	Upper
76	100		
78	9.2	0.0	39.2
44	11.0	0.0	41.2

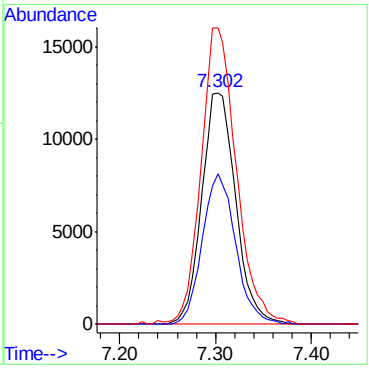


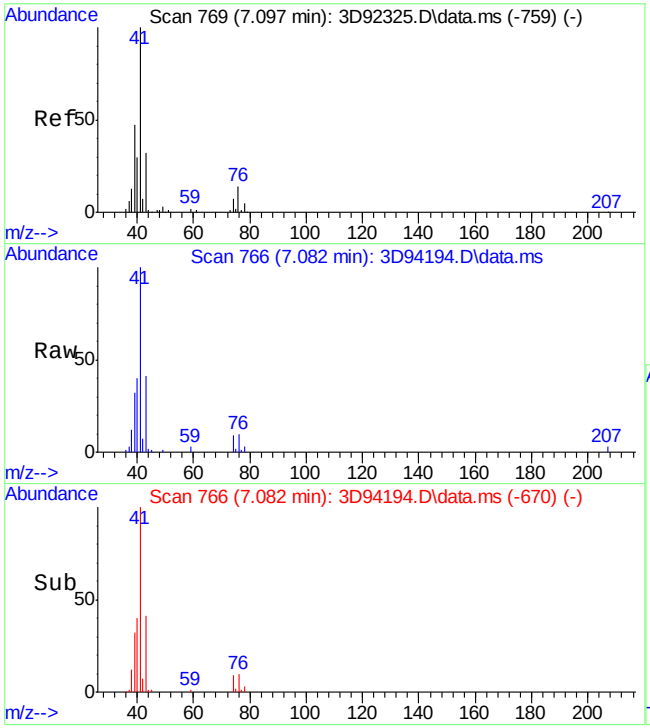


#30
methylene chloride
Concen: 19.27 ug/L
RT: 7.302 min Scan# 808
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 84 Resp: 30699

Ion	Ratio	Lower	Upper
84	100		
86	64.9	46.3	86.1
49	127.0	91.4	169.8

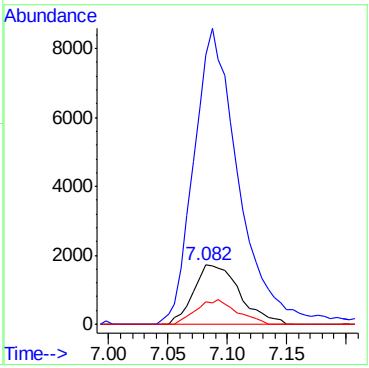


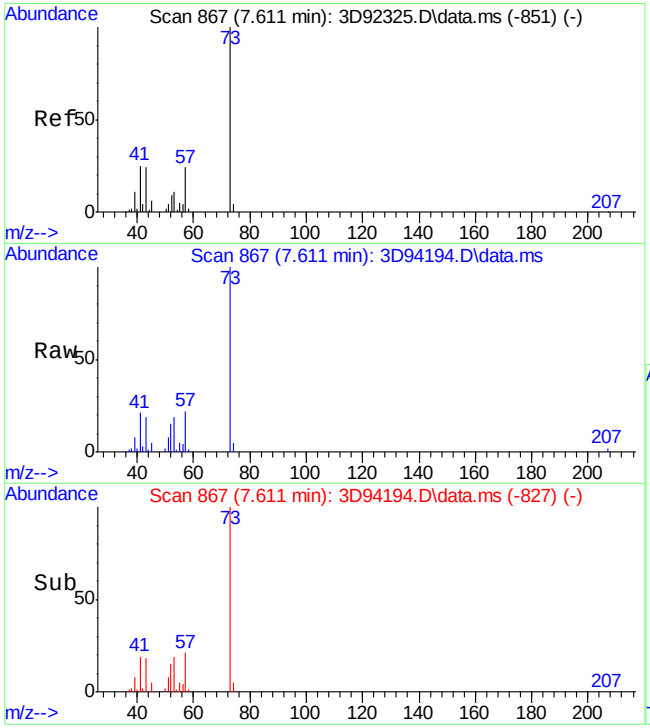


#31
methyl acetate
Concen: 21.70 ug/L
RT: 7.082 min Scan# 766
Delta R.T. 0.001 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 74 Resp: 4658

Ion	Ratio	Lower	Upper
74	100		
43	500.4	443.2	503.2
59	36.3	3.6	63.6

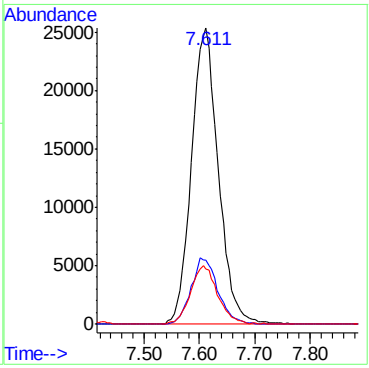


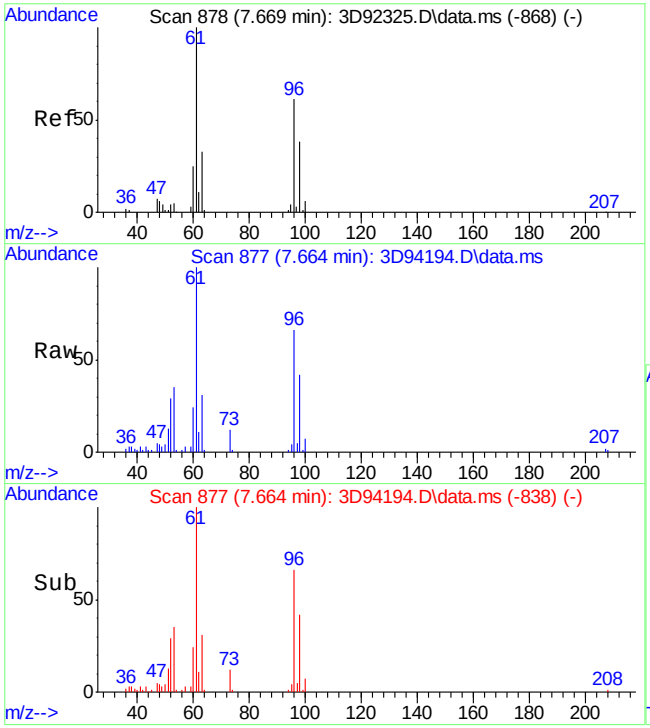


#32
methyl tert butyl ether
Concen: 18.99 ug/L
RT: 7.611 min Scan# 867
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 73 Resp: 85761

Ion	Ratio	Lower	Upper
73	100		
57	21.5	0.0	52.5
43	18.8	0.0	49.9

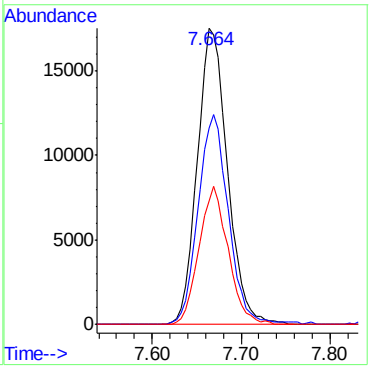


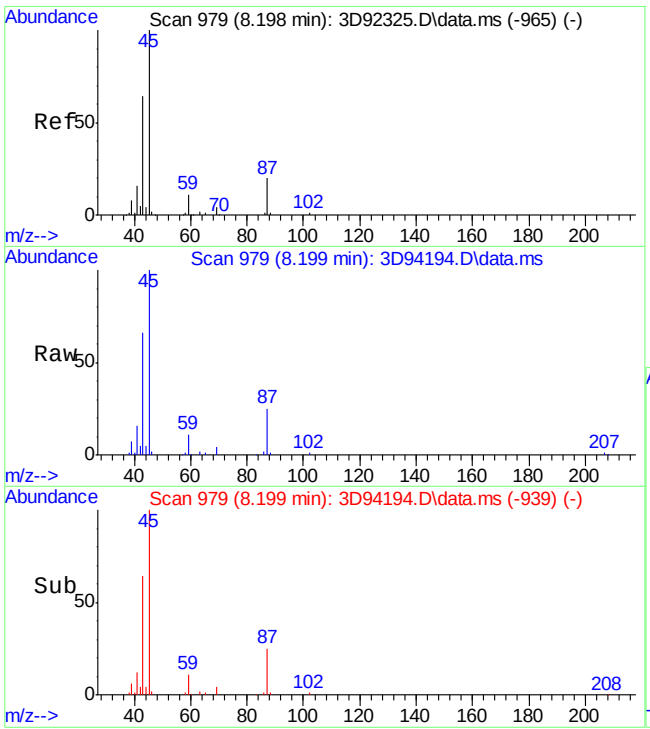


#33
trans-1,2-dichloroethene
Concen: 19.77 ug/L
RT: 7.664 min Scan# 877
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 61 Resp: 41259

Ion	Ratio	Lower	Upper
61	100		
96	66.2	49.6	92.0
98	41.8	31.6	58.8

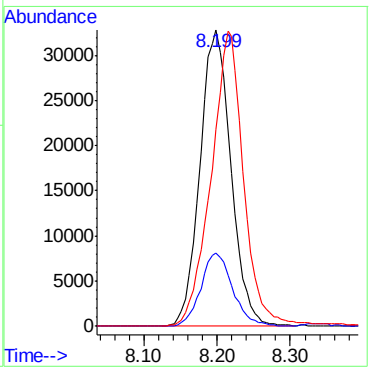


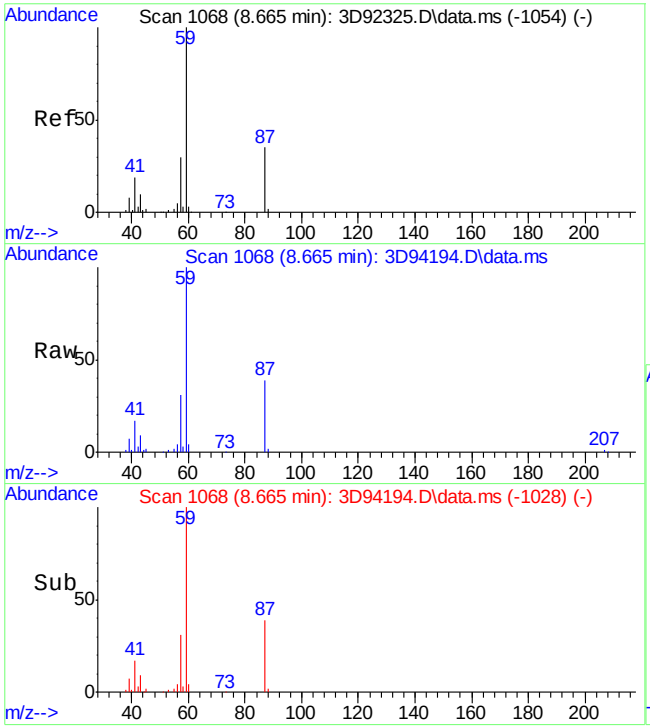


#34
di-isopropyl ether
Concen: 19.70 ug/L
RT: 8.199 min Scan# 979
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 45 Resp: 95991

Ion	Ratio	Lower	Upper
45	100		
87	24.8	0.0	53.7
43	66.3	33.1	93.1

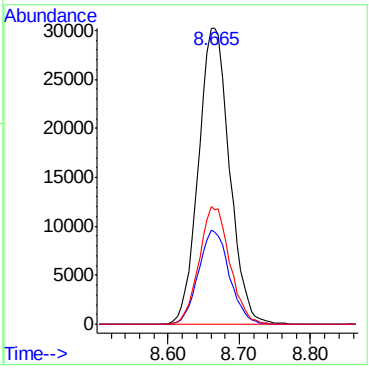


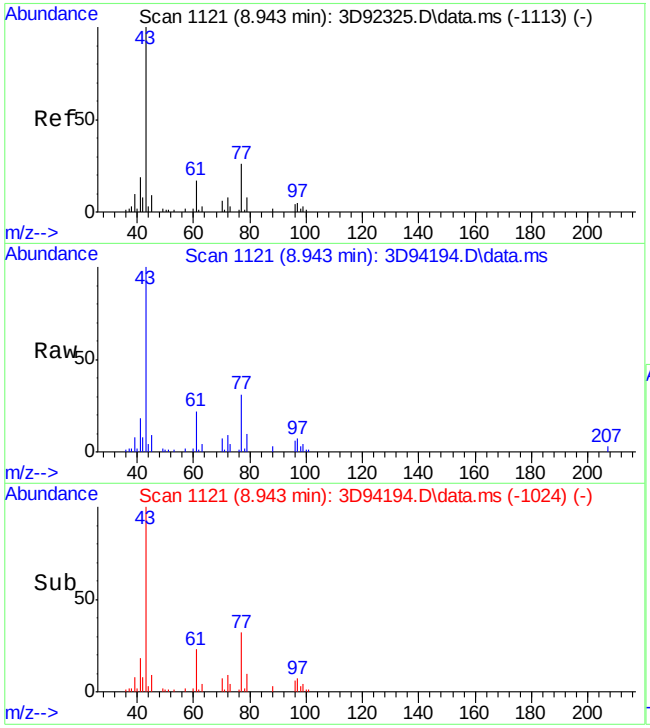


#35
ethyl tert-butyl ether
Concen: 21.44 ug/L
RT: 8.665 min Scan# 1068
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 59 Resp: 91538

Ion	Ratio	Lower	Upper
59	100		
57	30.9	1.0	61.0
87	38.5	8.7	68.7

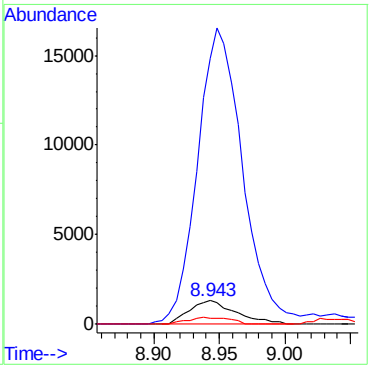


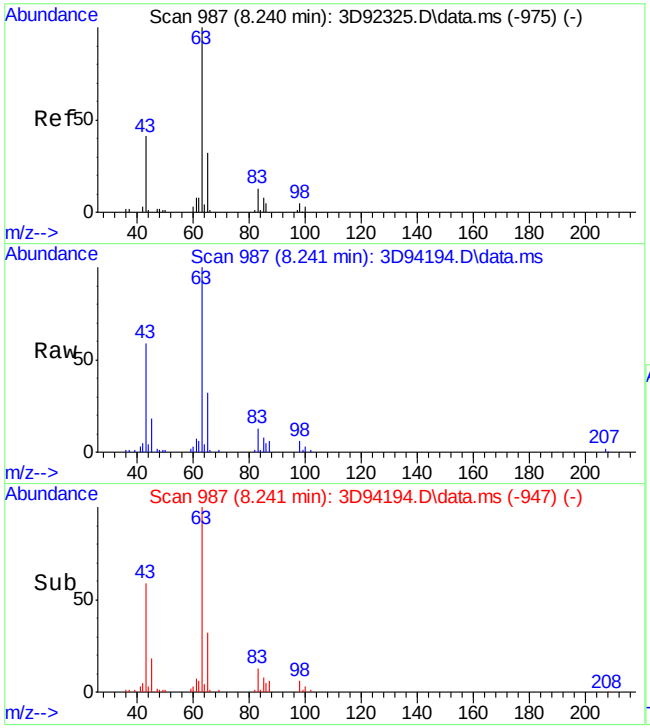


#36
2-butanone
Concen: 25.40 ug/L
RT: 8.943 min Scan# 1121
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 72 Resp: 3250

Ion	Ratio	Lower	Upper
72	100		
43	1263.9	849.2	1577.2
57	25.1	20.6	38.2

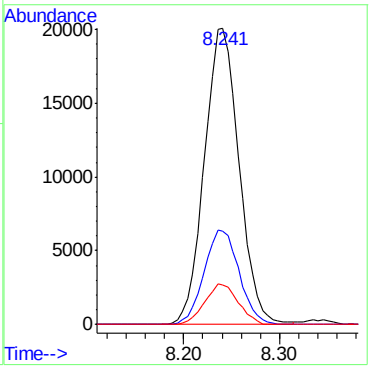


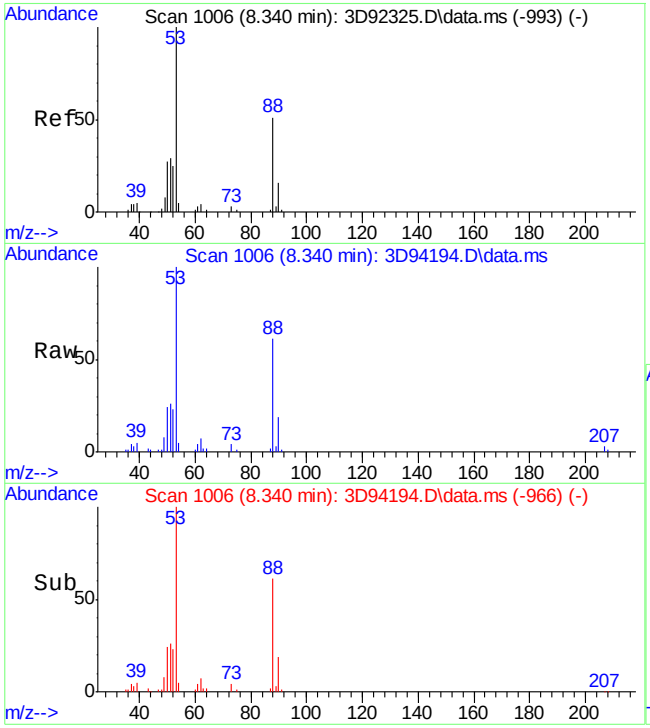


#37
1,1-dichloroethane
Concen: 19.24 ug/L
RT: 8.241 min Scan# 987
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 63 Resp: 50571

Ion	Ratio	Lower	Upper
63	100		
65	31.7	1.9	61.9
83	13.3	0.0	43.2

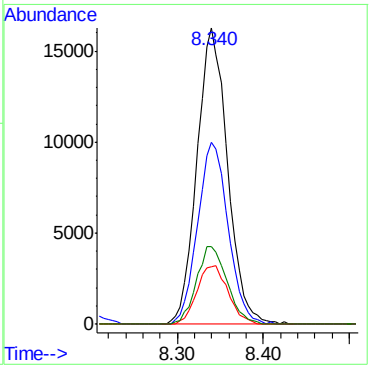


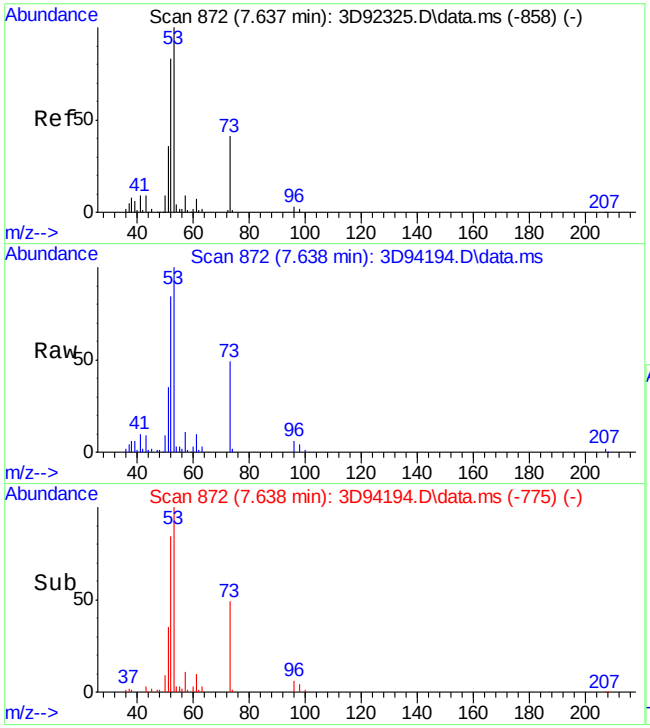


#38
chloroprene
Concen: 21.90 ug/L
RT: 8.340 min Scan# 1006
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 53 Resp: 39248

Ion	Ratio	Lower	Upper
53	100		
88	61.4	31.0	91.0
90	19.2	0.0	49.8
51	26.0	0.0	56.5

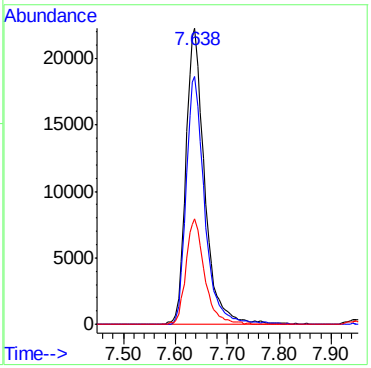


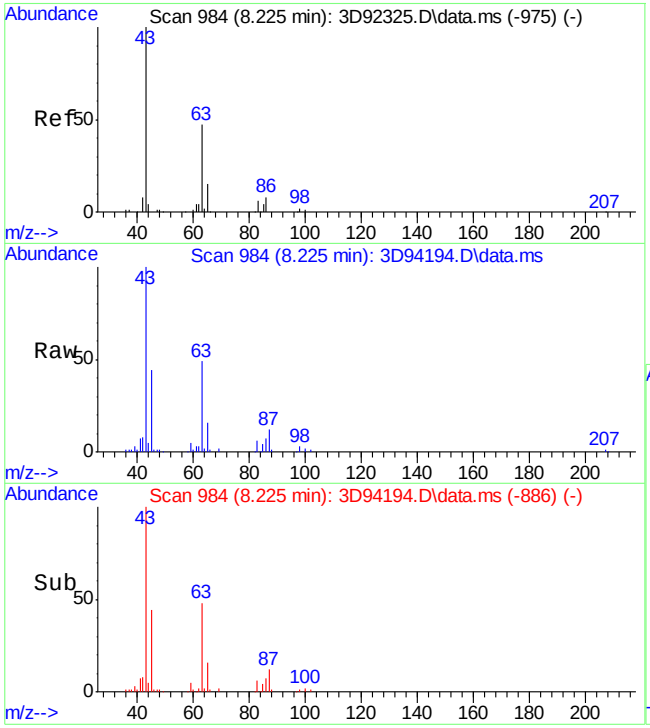


#39
acrylonitrile
Concen: 109.99 ug/L
RT: 7.638 min Scan# 872
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 53 Resp: 55867

Ion	Ratio	Lower	Upper
53	100		
52	83.6	52.8	112.8
51	35.5	3.9	63.9

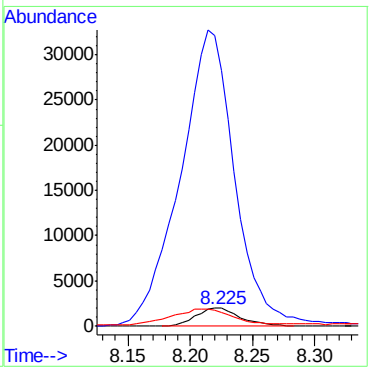


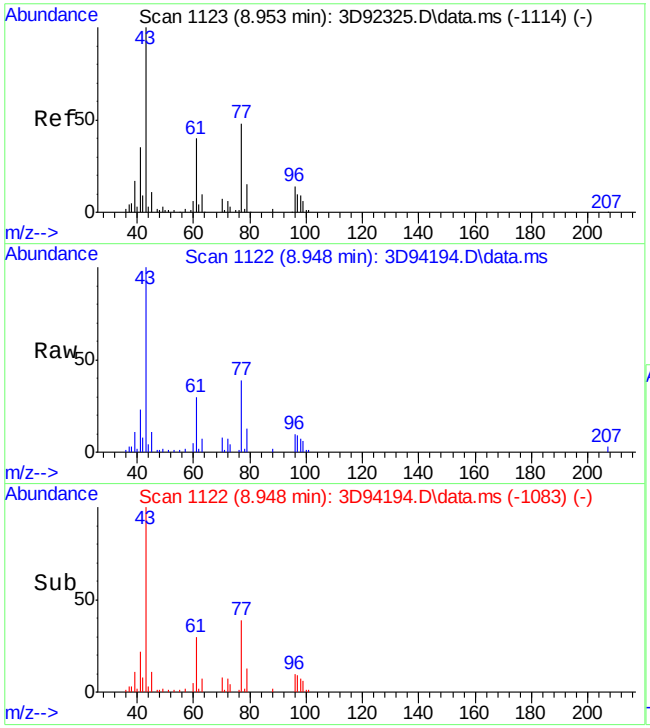


#40
vinyl acetate
Concen: 25.69 ug/L
RT: 8.225 min Scan# 984
Delta R.T. 0.016 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 86 Resp: 4810

Ion	Ratio	Lower	Upper
86	100		
43	1372.8	1099.0	2041.0
44	65.1	58.9	109.5

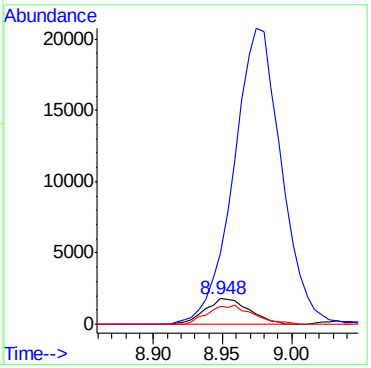


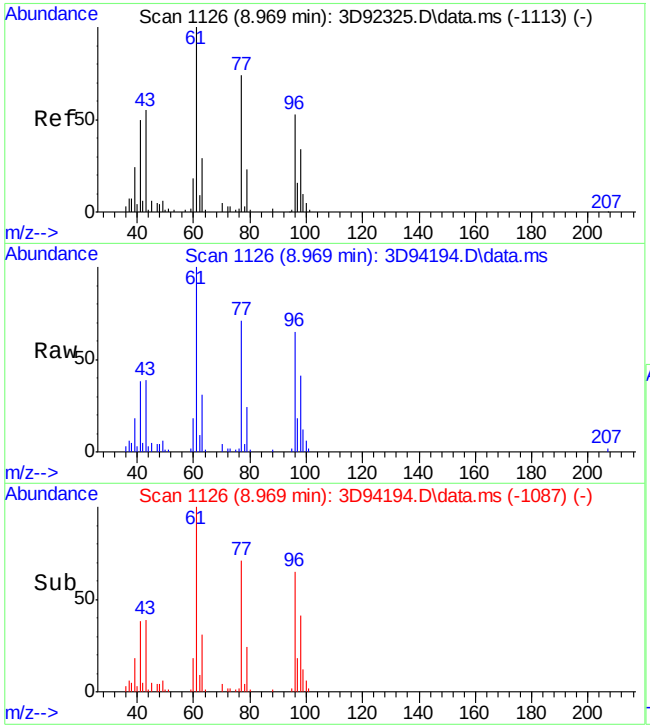


#41
ethyl acetate
Concen: 23.03 ug/L
RT: 8.948 min Scan# 1122
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 45 Resp: 4036

Ion	Ratio	Lower	Upper
45	100		
61	278.1	298.5	554.5#
70	72.1	58.8	109.2

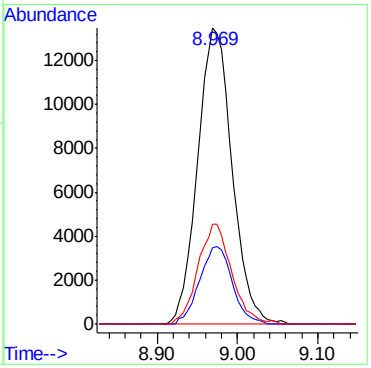


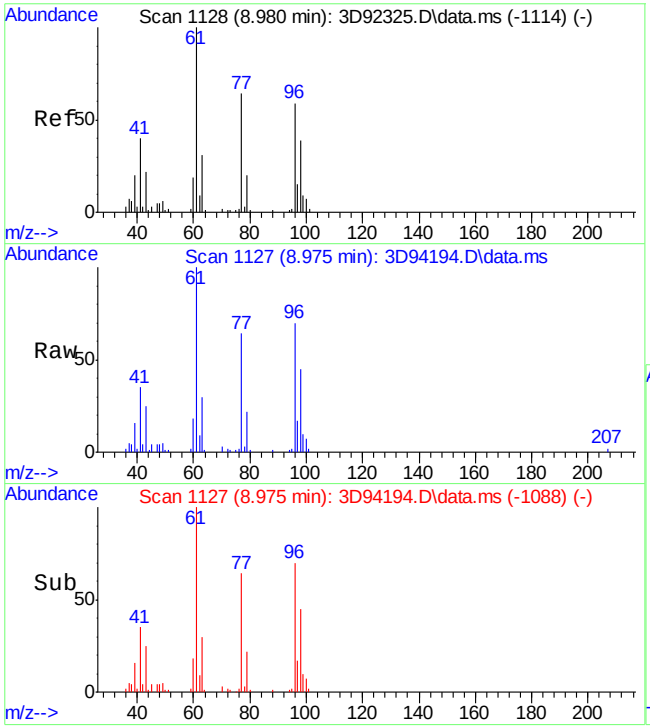


#42
2,2-dichloropropane
Concen: 18.10 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 77 Resp: 40175

Ion	Ratio	Lower	Upper
77	100		
97	25.7	0.0	56.8
79	33.8	2.1	62.1

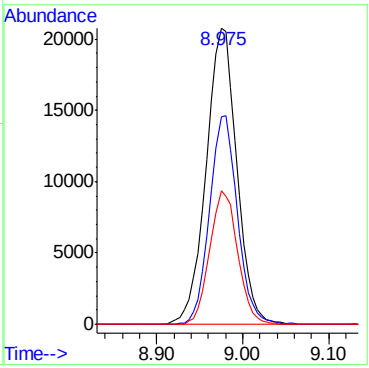


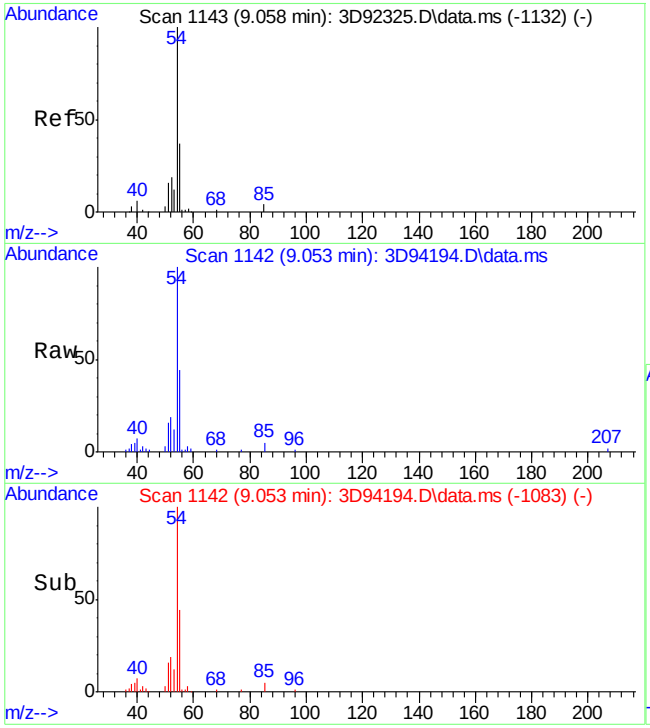


#43
cis-1,2-dichloroethene
Concen: 19.77 ug/L
RT: 8.975 min Scan# 1127
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 61 Resp: 50244

Ion	Ratio	Lower	Upper
61	100		
96	70.2	40.7	100.7
98	45.0	16.0	76.0

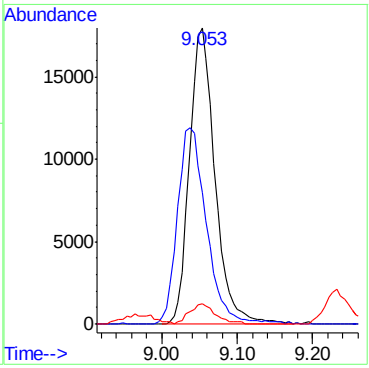


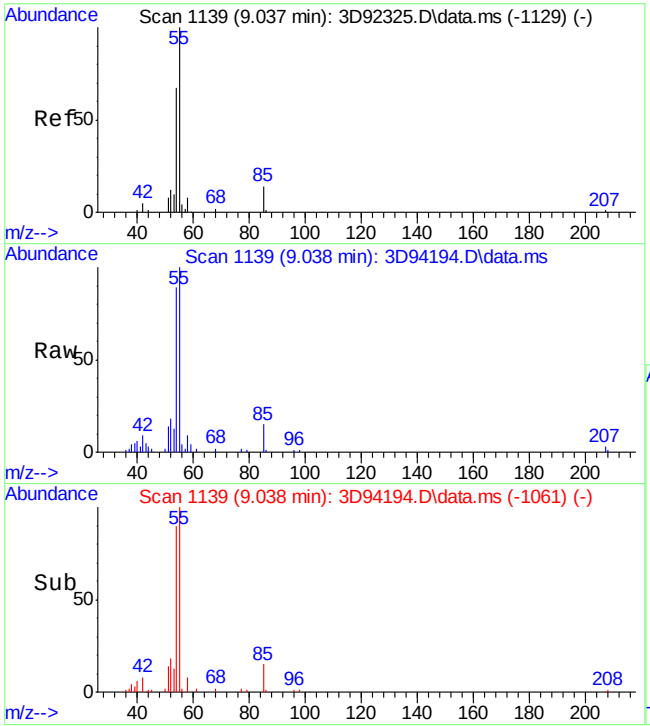


#44
propionitrile
Concen: 218.67 ug/L
RT: 9.053 min Scan# 1142
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 54 Resp: 42057

Ion	Ratio	Lower	Upper
54	100		
55	44.2	13.0	73.0
40	6.7	0.0	35.2

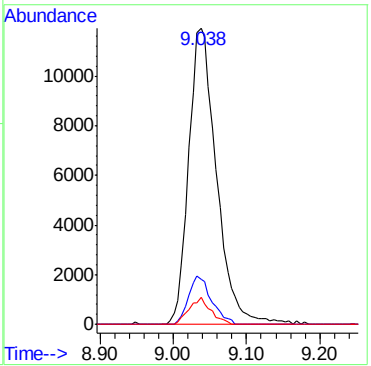


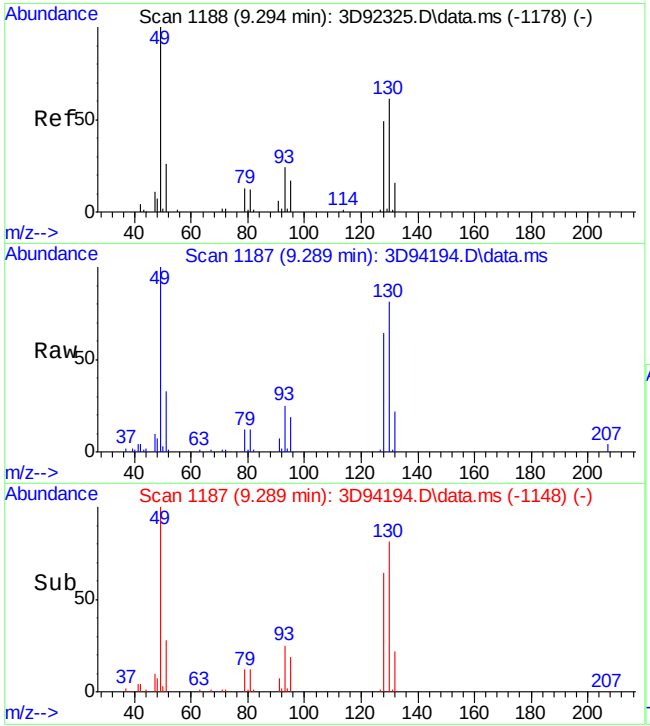


#45
methyl acrylate
Concen: 23.42 ug/L
RT: 9.038 min Scan# 1139
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 55 Resp: 31448

Ion	Ratio	Lower	Upper
55	100		
85	15.2	0.0	46.2
58	9.1	0.0	38.5

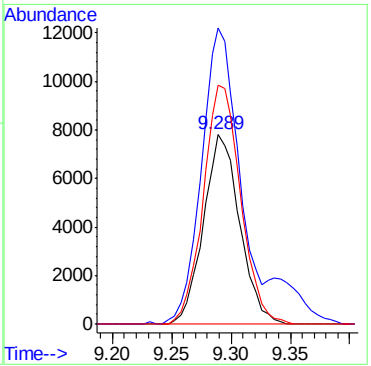


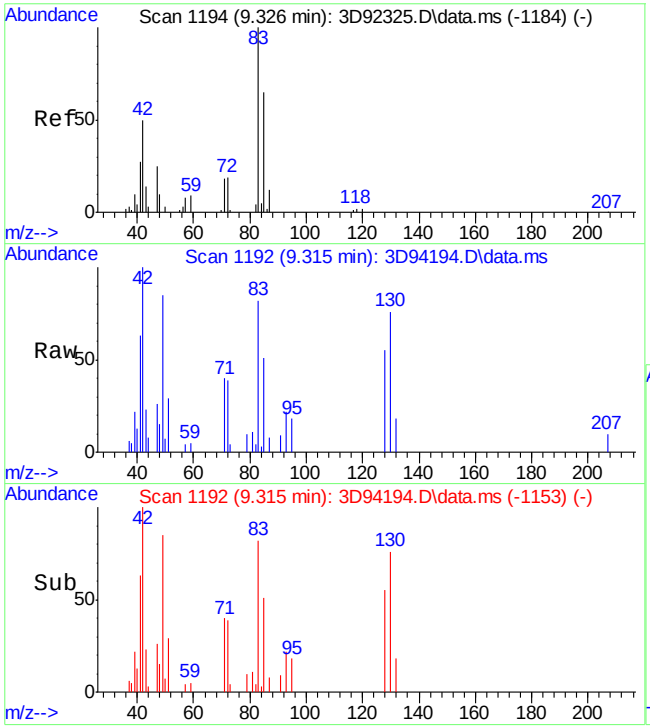


#46
bromochloromethane
Concen: 21.24 ug/L
RT: 9.289 min Scan# 1187
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:128 Resp: 16586

Ion	Ratio	Lower	Upper
128	100		
49	155.9	124.8	184.8
130	125.8	100.2	160.2

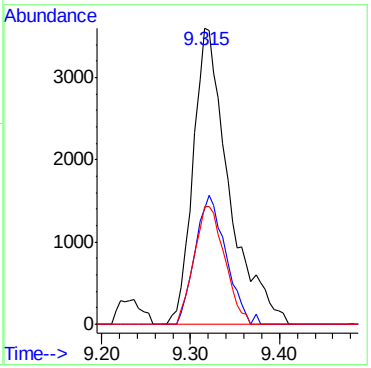


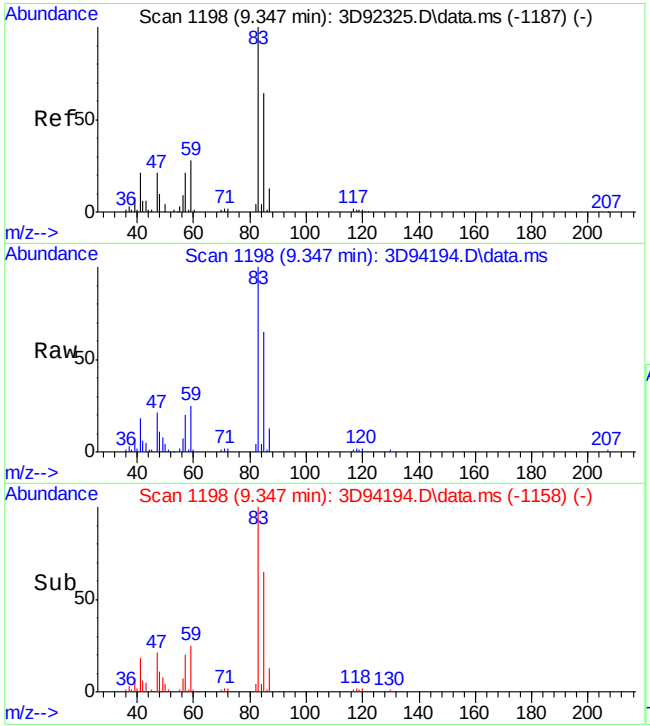


#47
tetrahydrofuran
Concen: 21.73 ug/L
RT: 9.315 min Scan# 1192
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 42 Resp: 10043

Ion	Ratio	Lower	Upper
42	100		
72	37.5	8.2	68.2
71	34.1	5.6	65.6

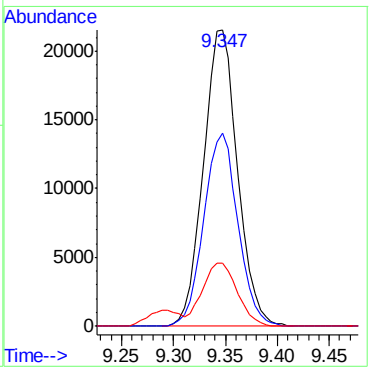


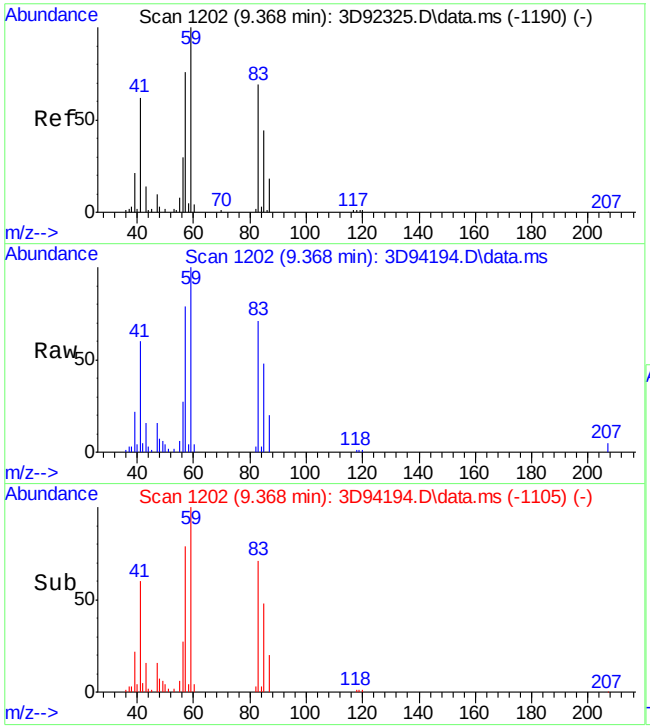


#48
chloroform
Concen: 19.33 ug/L
RT: 9.347 min Scan# 1198
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 83 Resp: 48998

Ion	Ratio	Lower	Upper
83	100		
85	65.0	33.8	93.8
47	21.1	0.0	52.3

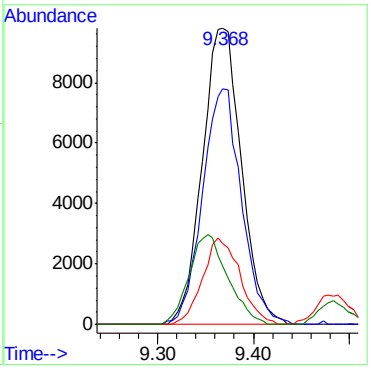


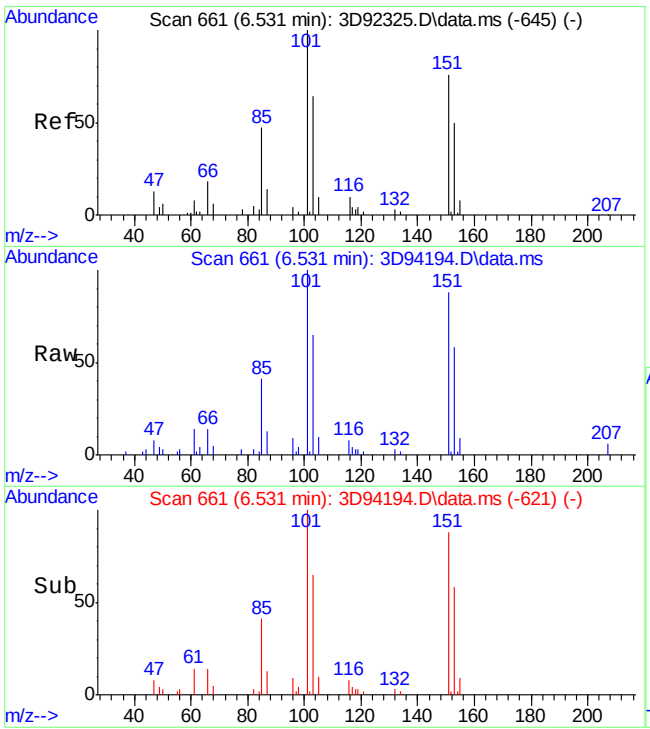


#49
Tert-Butyl Formate
Concen: 22.16 ug/L
RT: 9.368 min Scan# 1202
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 59 Resp: 27800

Ion	Ratio	Lower	Upper
59	100		
57	79.2	64.6	97.0
56	27.9	22.2	33.2
87	29.8	25.0	37.4

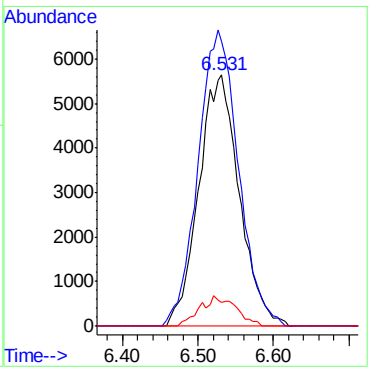


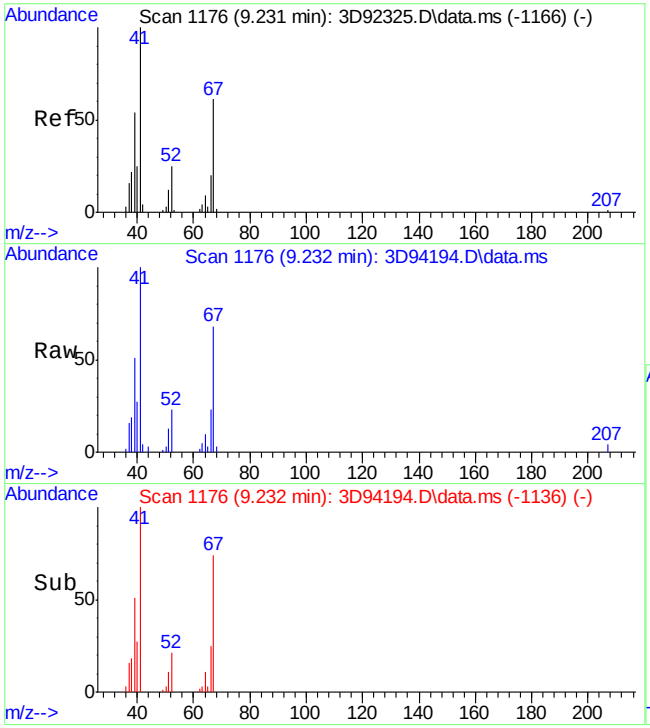


#52
freon 113
Concen: 23.79 ug/L
RT: 6.531 min Scan# 661
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:151 Resp: 21089

Ion	Ratio	Lower	Upper
151	100		
101	113.7	82.2	142.2
116	9.2	0.0	39.5

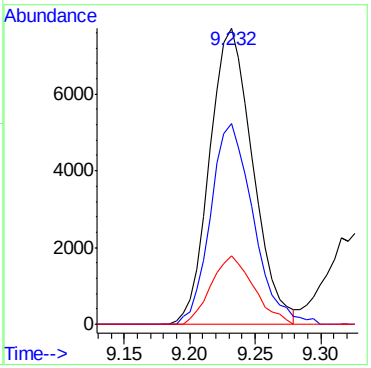


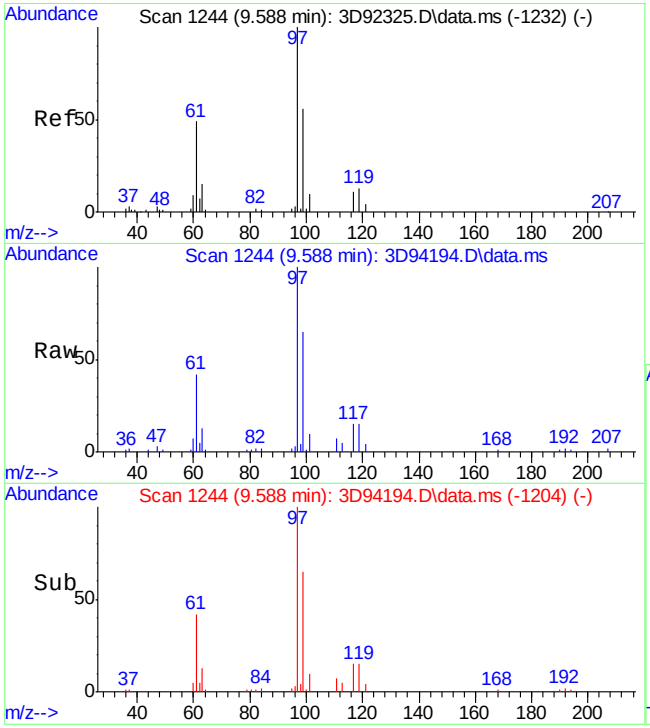


#53
methacrylonitrile
Concen: 21.02 ug/L
RT: 9.232 min Scan# 1176
Delta R.T. 0.012 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 41 Resp: 17603

Ion	Ratio	Lower	Upper
41	100		
67	67.9	38.3	98.3
66	23.2	0.0	52.9

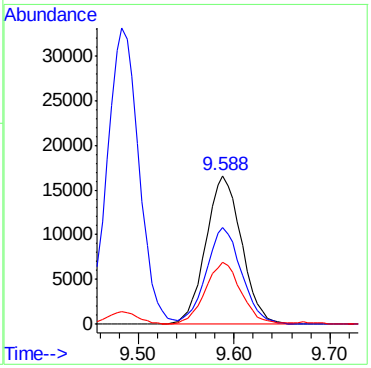


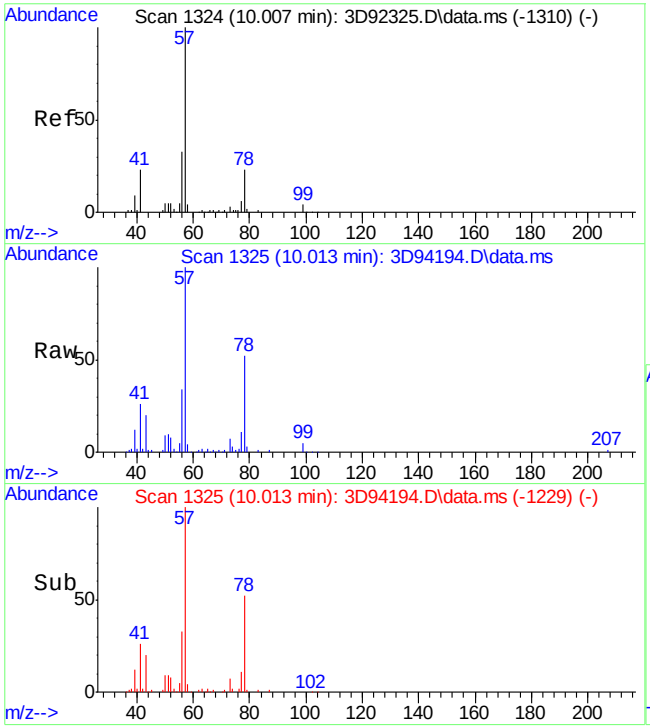


#54
1,1,1-trichloroethane
Concen: 19.84 ug/L
RT: 9.588 min Scan# 1244
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 97 Resp: 43050

Ion	Ratio	Lower	Upper
97	100		
99	65.0	36.0	96.0
61	41.8	11.8	71.8

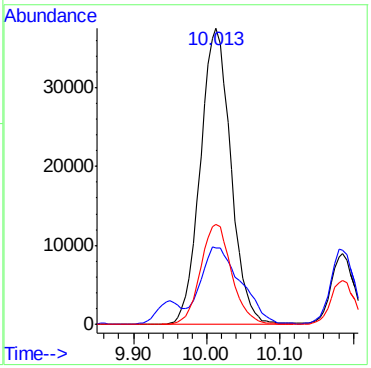


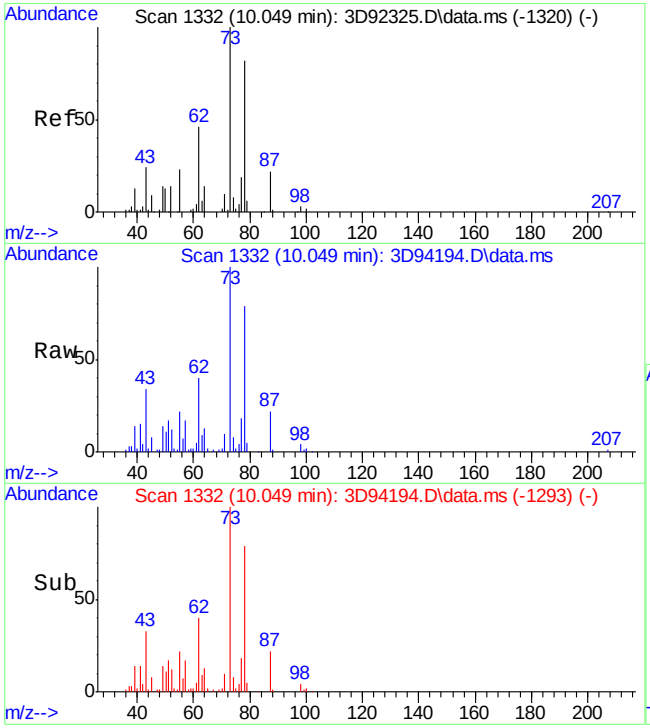


#56
2,2,4-Trimethylpentane
Concen: 22.82 ug/L
RT: 10.013 min Scan# 1325
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 57 Resp: 108347

Ion	Ratio	Lower	Upper
57	100		
41	34.4	4.5	64.5
56	34.4	4.3	64.3

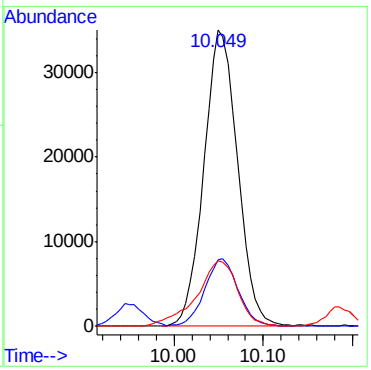


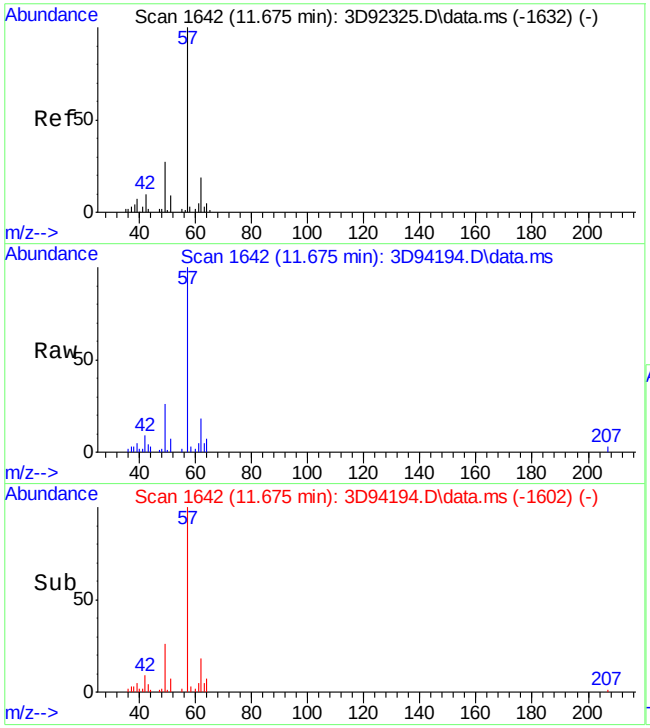


#57
tert-amyl methyl ether
Concen: 21.03 ug/L
RT: 10.049 min Scan# 1332
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 73 Resp: 92101

Ion	Ratio	Lower	Upper
73	100		
87	22.3	0.0	53.3
55	22.0	0.0	52.5

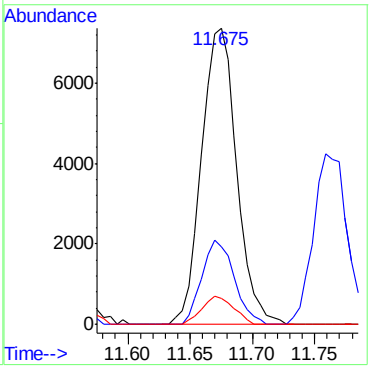


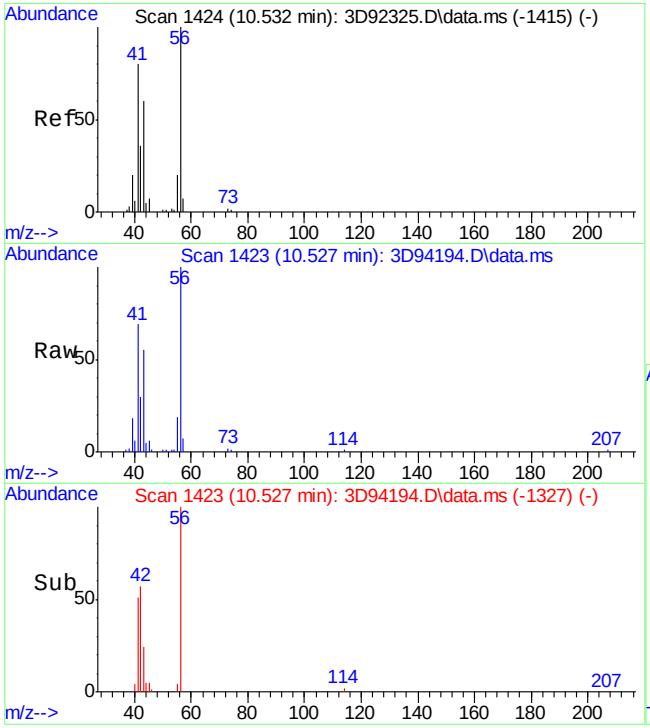


#59
epichlorohydrin
Concen: 121.15 ug/L
RT: 11.675 min Scan# 1642
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 57 Resp: 14393

Ion	Ratio	Lower	Upper
57	100		
49	26.3	0.0	55.9
42	8.9	0.0	37.7

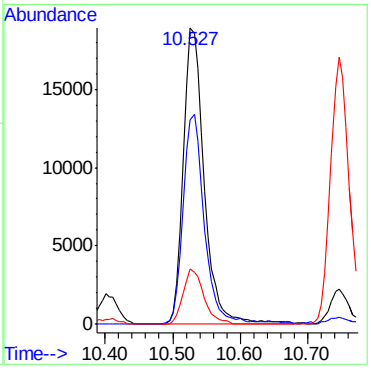


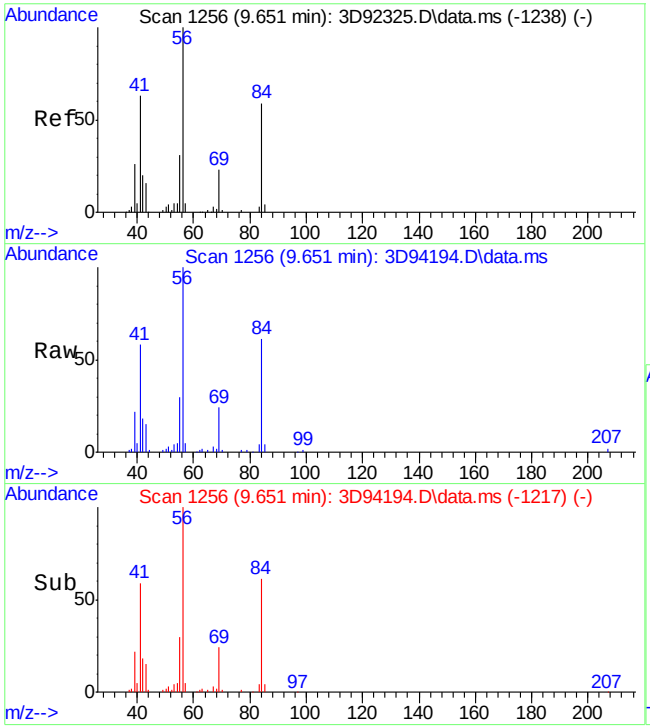


#60
n-butyl alcohol
Concen: 1185.48 ug/L
RT: 10.527 min Scan# 1423
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 56 Resp: 40583

Ion	Ratio	Lower	Upper
56	100		
41	69.0	42.4	102.4
55	18.7	0.0	48.3

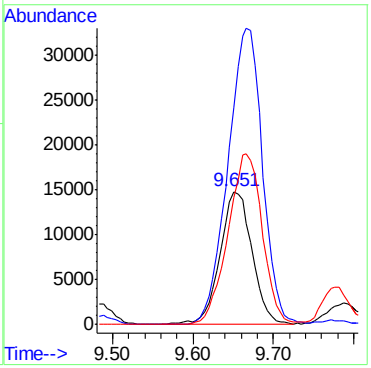


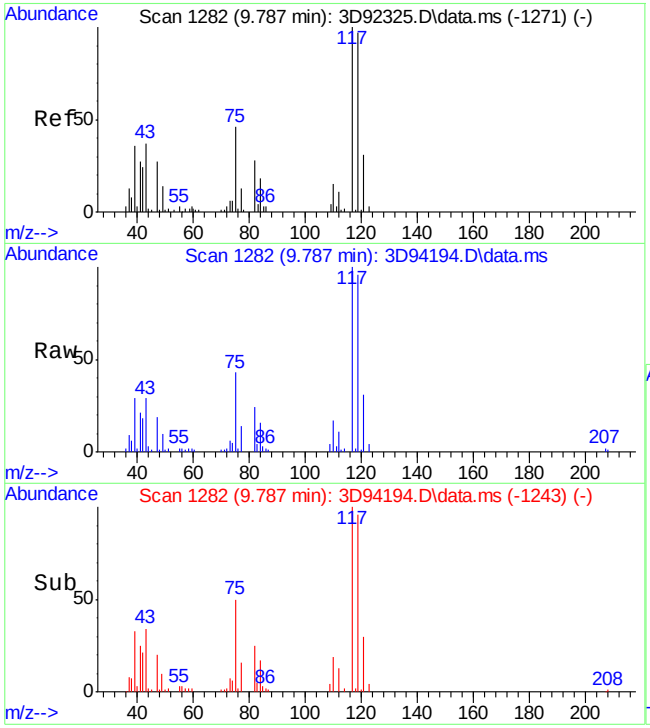


#61
cyclohexane
Concen: 19.42 ug/L
RT: 9.651 min Scan# 1256
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 84 Resp: 40848

Ion	Ratio	Lower	Upper
84	100		
56	240.8	210.2	270.2
41	137.6	108.6	168.6

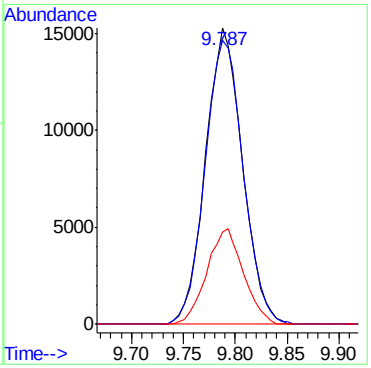


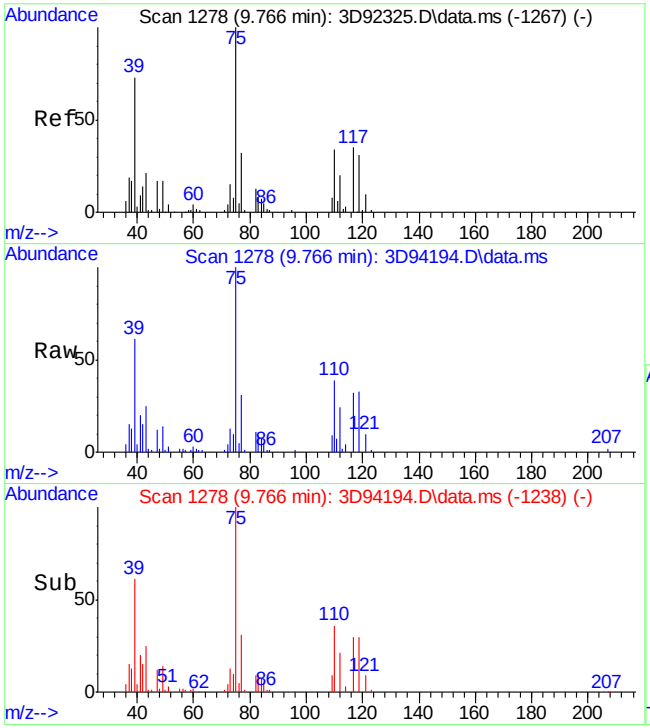


#62
carbon tetrachloride
Concen: 19.98 ug/L
RT: 9.787 min Scan# 1282
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:117 Resp: 37751

Ion	Ratio	Lower	Upper
117	100		
119	95.7	65.7	125.7
121	31.0	0.9	60.9

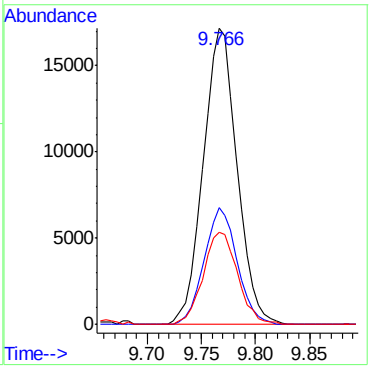


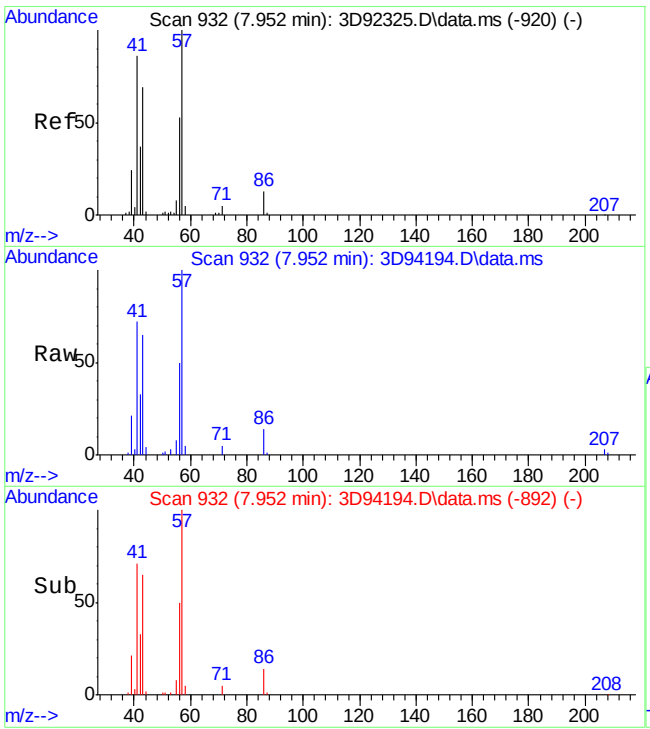


#63
1,1-dichloropropene
Concen: 19.99 ug/L
RT: 9.766 min Scan# 1278
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 75 Resp: 37541

Ion	Ratio	Lower	Upper
75	100		
110	39.3	7.6	67.6
77	31.2	1.7	61.7

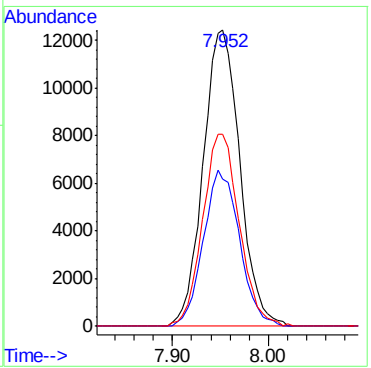


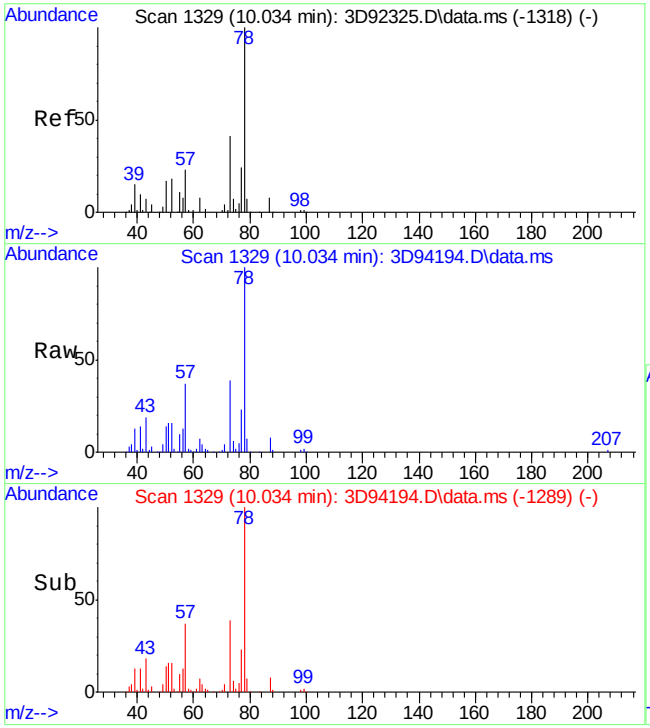


#64
hexane
Concen: 24.05 ug/L
RT: 7.952 min Scan# 932
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 57 Resp: 33061

Ion	Ratio	Lower	Upper
57	100		
56	49.6	22.9	82.9
43	64.8	35.4	95.4

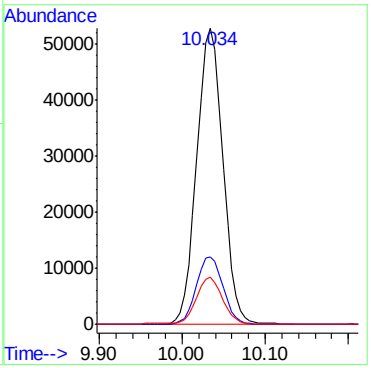


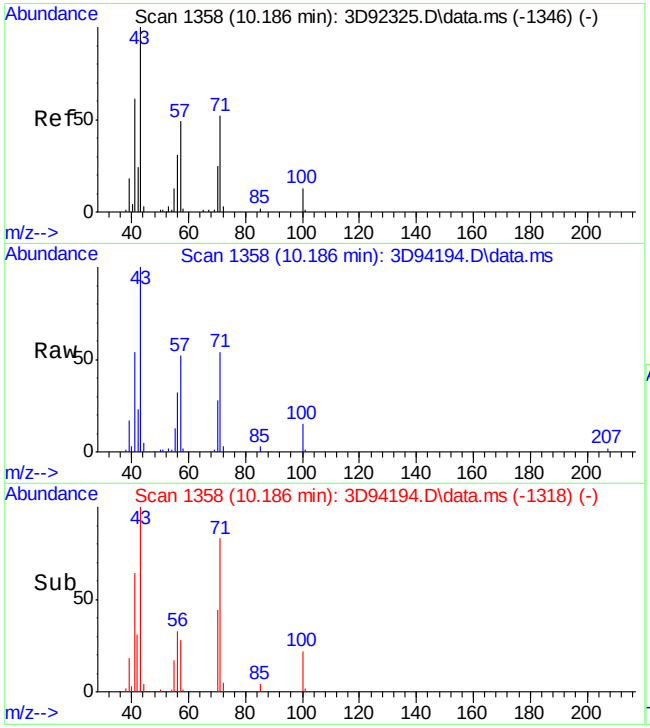


#65
benzene
Concen: 19.41 ug/L
RT: 10.034 min Scan# 1329
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 78 Resp: 114700

Ion	Ratio	Lower	Upper
78	100		
77	22.7	0.0	53.5
52	15.9	0.0	45.7

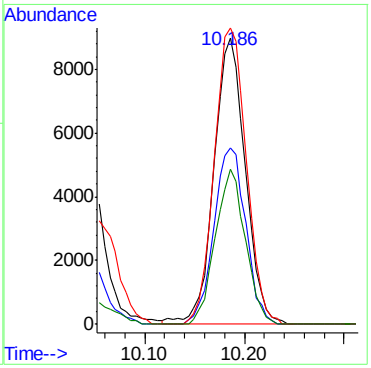




#66
heptane
Concen: 23.75 ug/L
RT: 10.186 min Scan# 1358
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 57 Resp: 19661

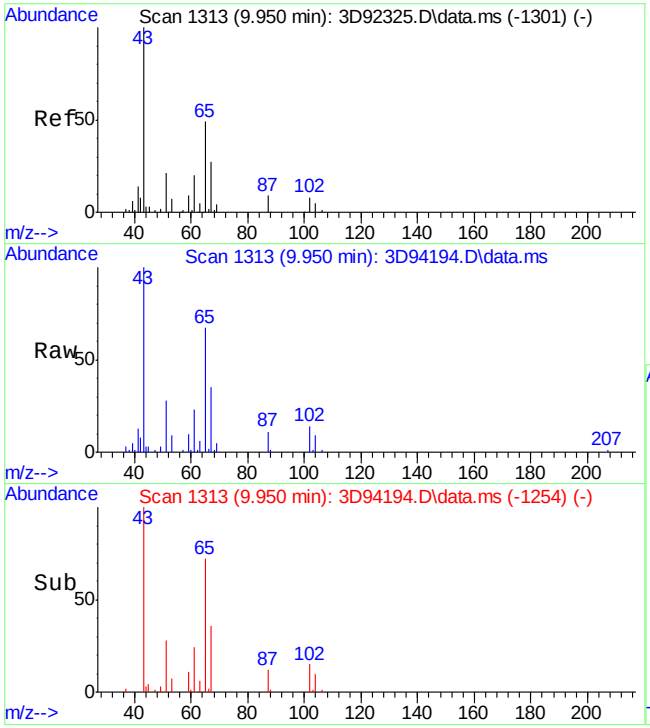
Ion	Ratio	Lower	Upper
57	100		
56	61.8	31.5	91.5
71	103.7	75.2	135.2
70	54.1	21.4	81.4



7.7.6

7

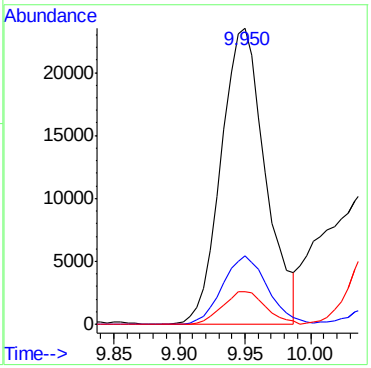
3D94194.D M3D4058.M Thu Dec 19 12:37:04 2013 3D Page 31

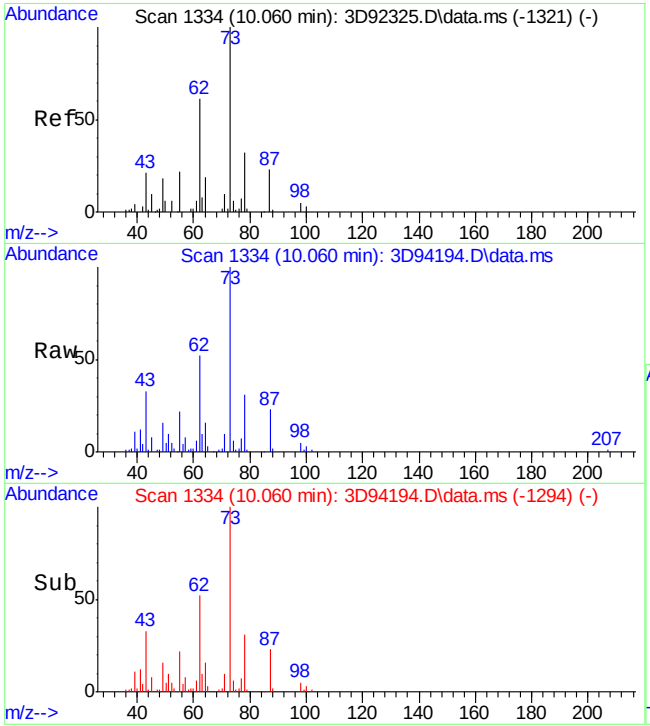


#67
isopropyl acetate
Concen: 22.24 ug/L
RT: 9.950 min Scan# 1313
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 43 Resp: 55260

Ion	Ratio	Lower	Upper
43	100		
61	23.5	0.0	52.4
87	10.7	0.0	40.7

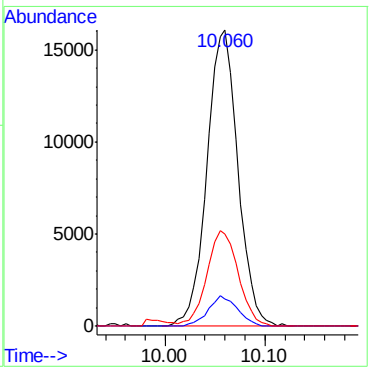


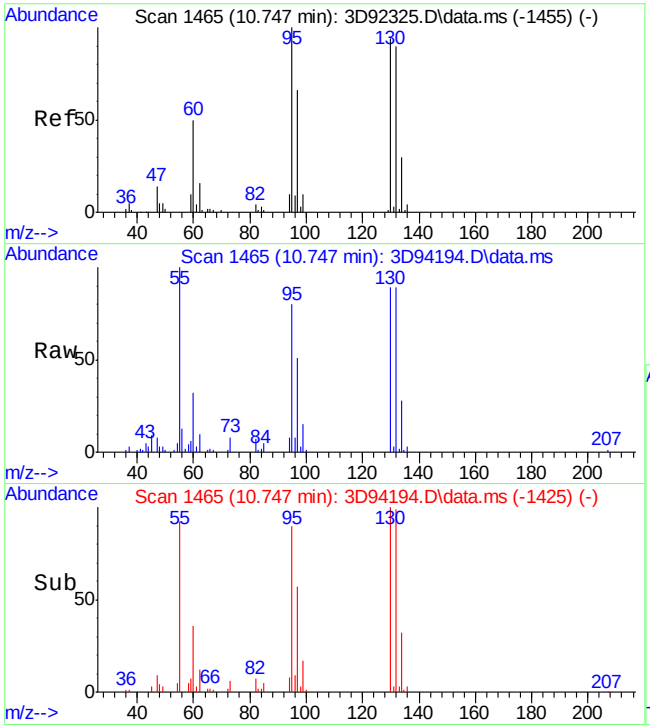


#68
1,2-dichloroethane
Concen: 19.86 ug/L
RT: 10.060 min Scan# 1334
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 62 Resp: 34644

Ion	Ratio	Lower	Upper
62	100		
98	9.2	0.0	40.3
64	31.2	2.1	62.1

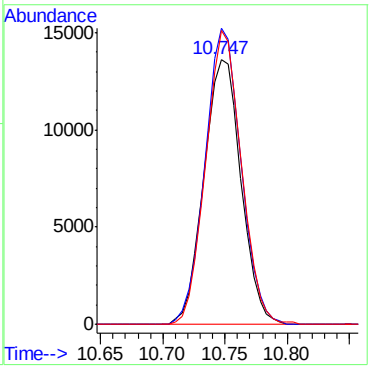


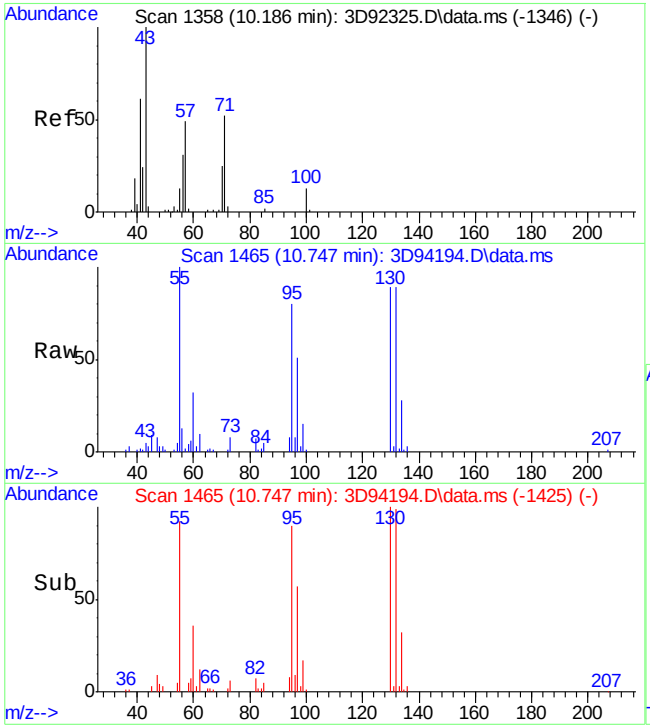


#69
trichloroethene
Concen: 19.37 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 95 Resp: 28222

Ion	Ratio	Lower	Upper
95	100		
130	111.7	78.2	138.2
132	111.0	75.0	135.0

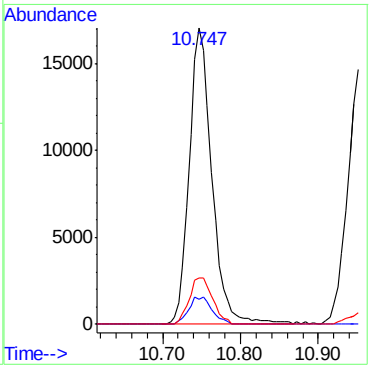


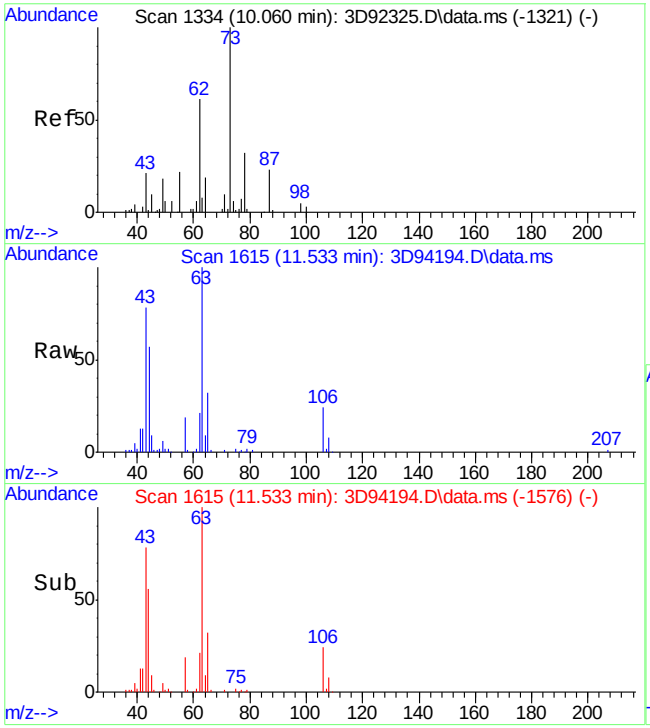


#70
ethyl acrylate
Concen: 22.97 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 55 Resp: 34154

Ion	Ratio	Lower	Upper
55	100		
45	9.2	7.6	11.4
99	16.0	13.3	19.9

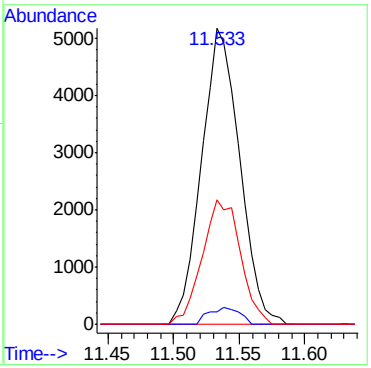


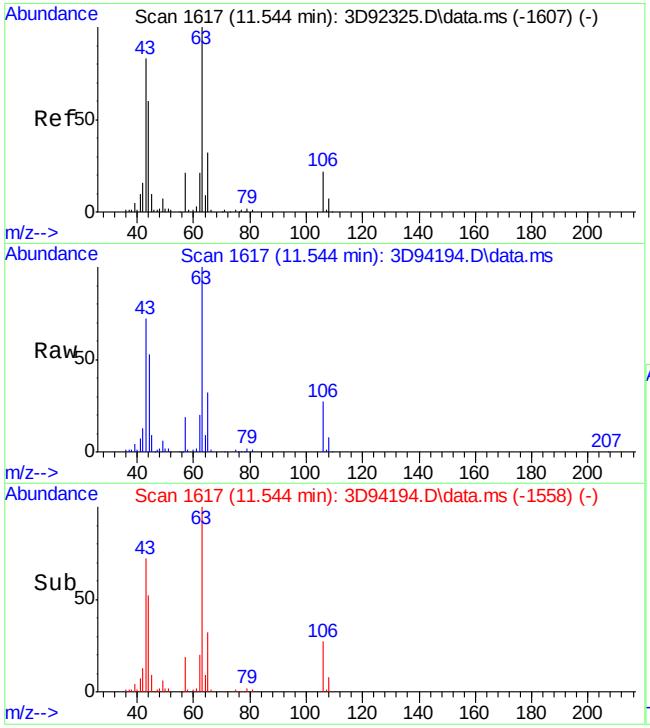


#72
2-nitropropane
Concen: 20.13 ug/L
RT: 11.533 min Scan# 1615
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 41 Resp: 10436

Ion	Ratio	Lower	Upper
41	100		
46	4.2	0.0	35.0
39	41.9	8.6	68.6

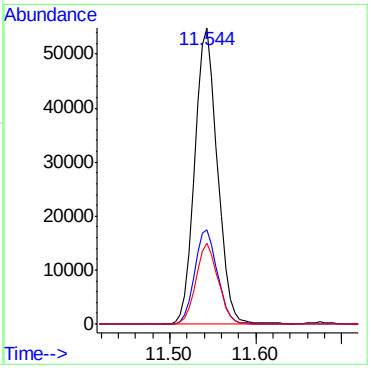


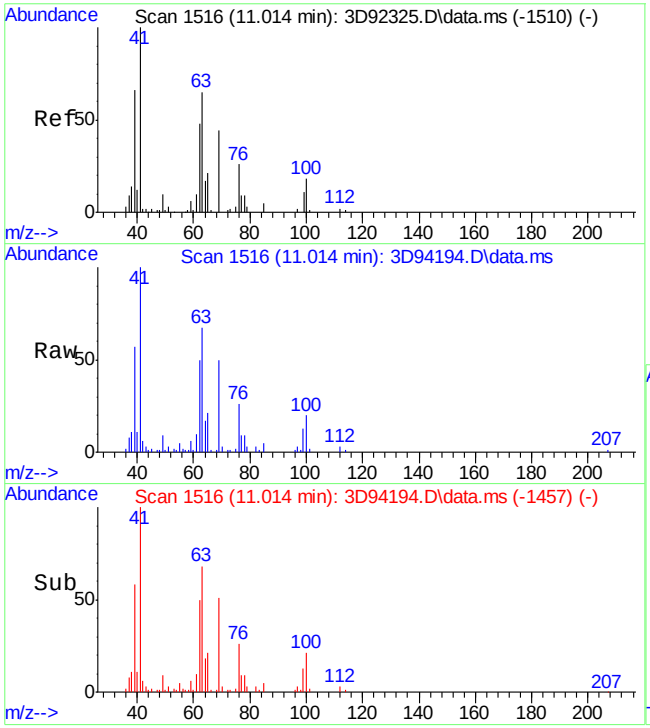


#73
2-chloroethyl vinyl ether
Concen: 112.67 ug/L
RT: 11.544 min Scan# 1617
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 63 Resp: 98665

Ion	Ratio	Lower	Upper
63	100		
65	32.0	2.2	62.2
106	27.3	0.0	56.3

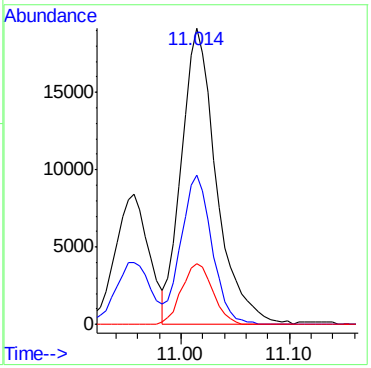


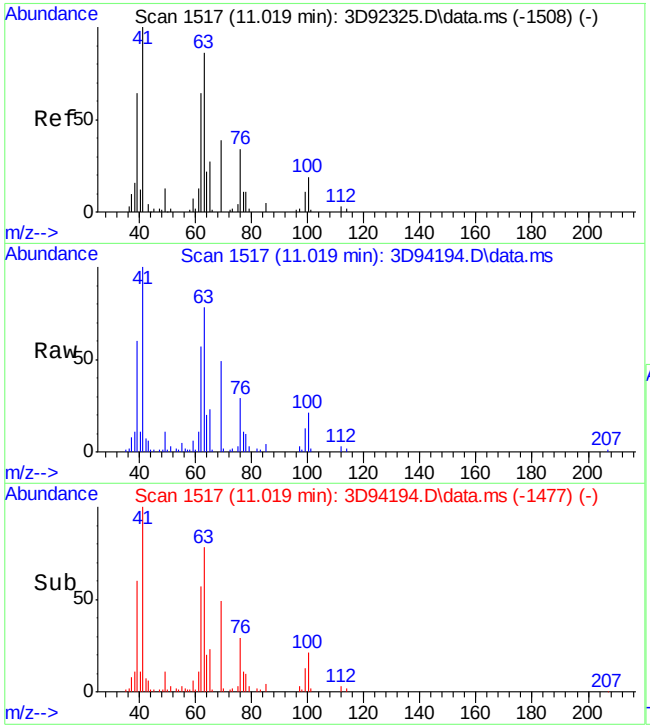


#74
methyl methacrylate
Concen: 20.58 ug/L
RT: 11.014 min Scan# 1516
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 41 Resp: 42883

Ion	Ratio	Lower	Upper
41	100		
69	50.3	19.9	79.9
100	20.5	0.0	51.2

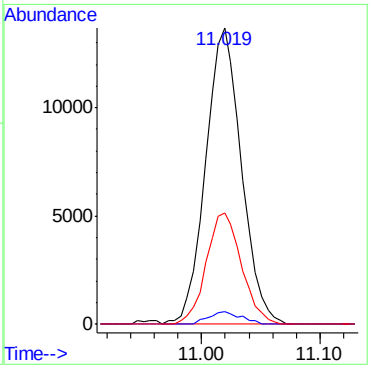


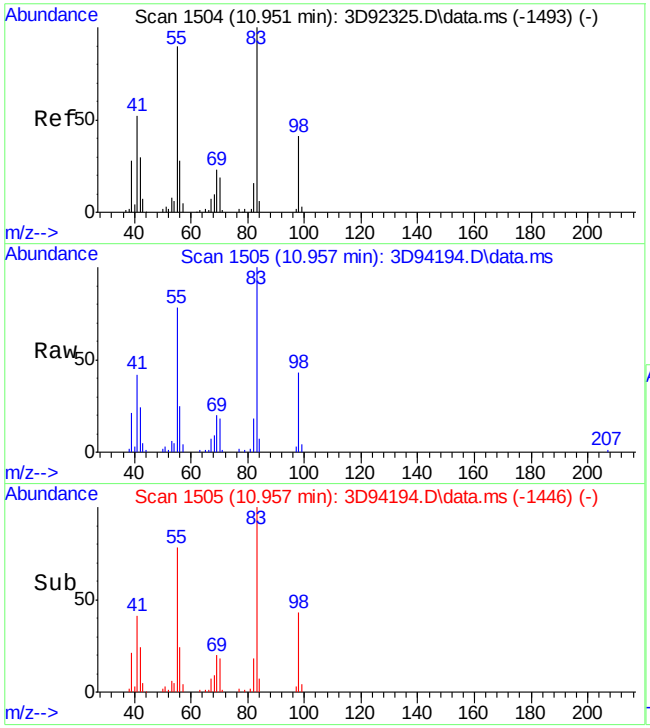


#75
1,2-dichloropropane
Concen: 20.25 ug/L
RT: 11.019 min Scan# 1517
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 63 Resp: 28733

Ion	Ratio	Lower	Upper
63	100		
112	4.1	0.0	33.7
76	37.5	6.0	66.0

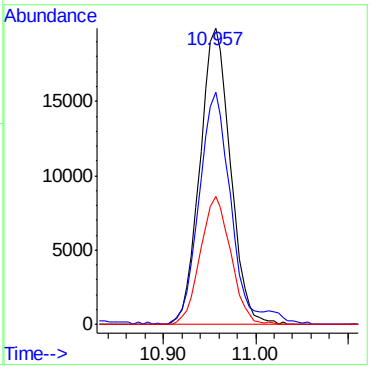


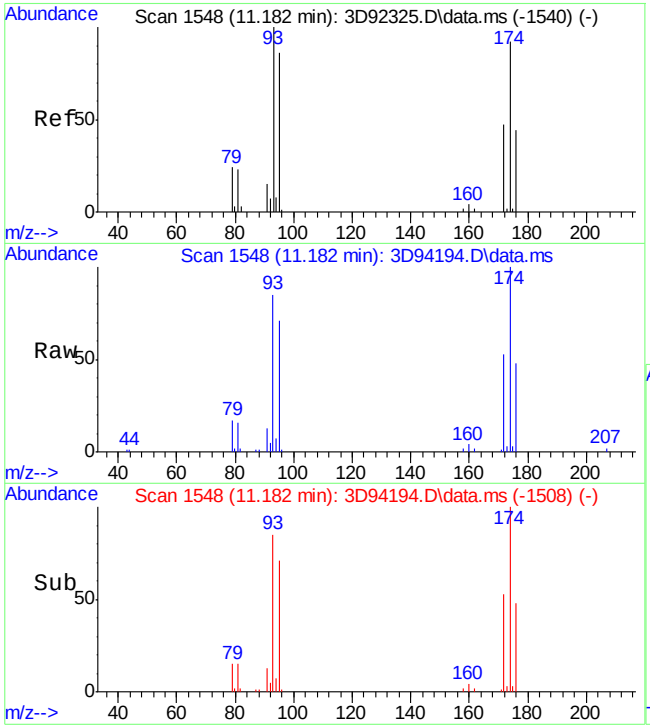


#76
methylcyclohexane
Concen: 22.57 ug/L
RT: 10.957 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 83 Resp: 45550

Ion	Ratio	Lower	Upper
83	100		
55	78.4	49.4	109.4
98	43.2	10.6	70.6

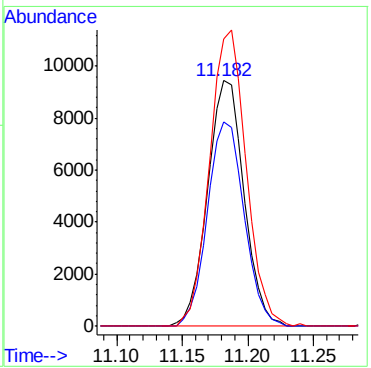


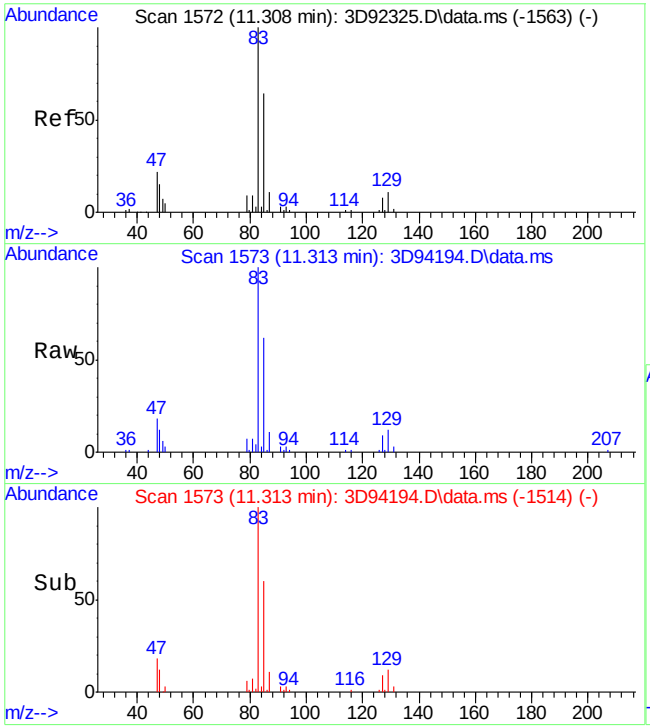


#77
dibromomethane
Concen: 20.39 ug/L
RT: 11.182 min Scan# 1548
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 93 Resp: 18135

Ion	Ratio	Lower	Upper
93	100		
95	83.2	53.0	113.0
174	117.2	88.8	148.8

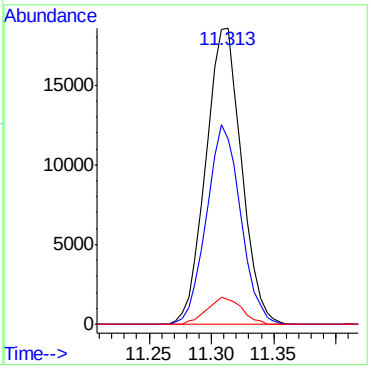


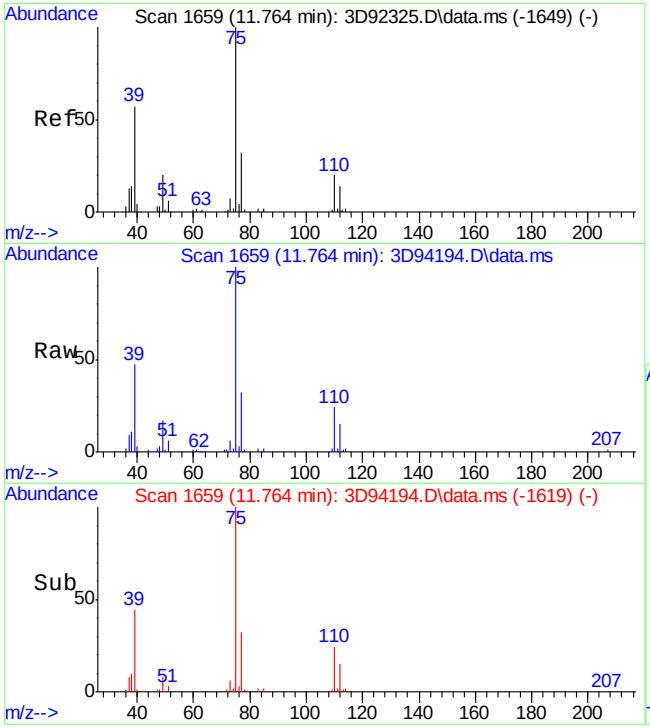


#78
bromodichloromethane
Concen: 20.52 ug/L
RT: 11.313 min Scan# 1573
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 83 Resp: 36946

Ion	Ratio	Lower	Upper
83	100		
85	62.4	34.7	94.7
127	8.5	0.0	39.6

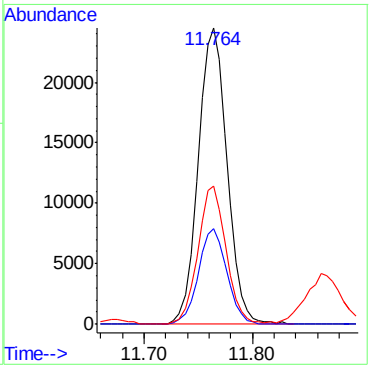




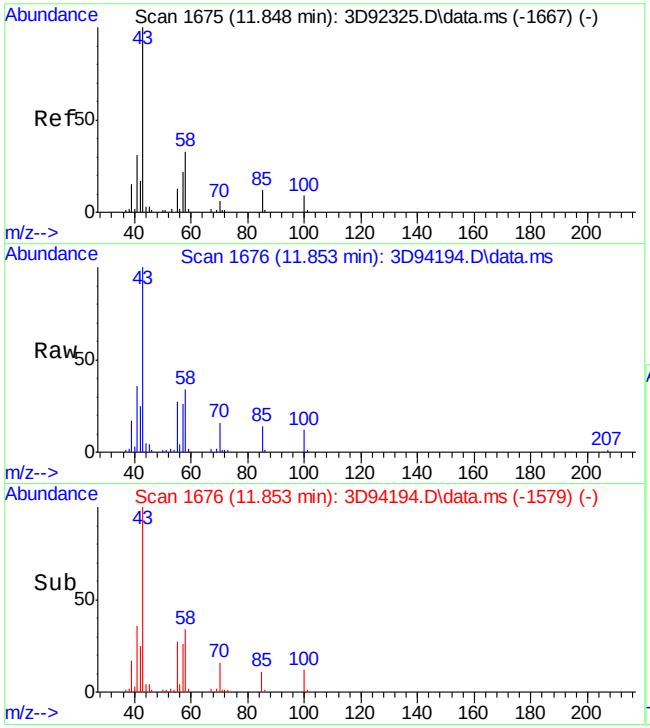
#79
cis-1,3-dichloropropene
Concen: 19.98 ug/L
RT: 11.764 min Scan# 1659
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 75 Resp: 45599

Ion	Ratio	Lower	Upper
75	100		
77	32.3	1.8	61.8
39	46.8	15.6	75.6



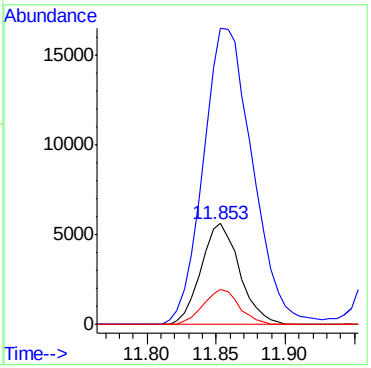
3D94194.D M3D4058.M Thu Dec 19 12:37:04 2013 3D Page 37

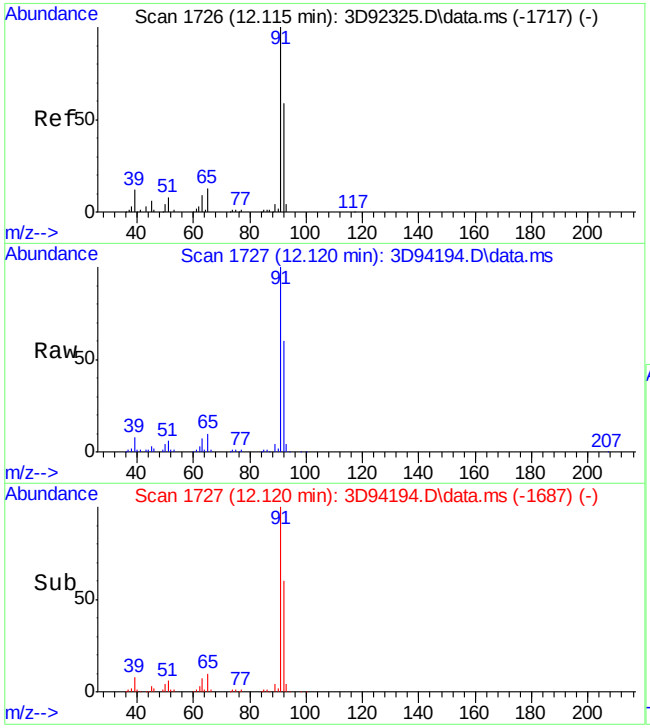


#81
4-methyl-2-pentanone
Concen: 24.53 ug/L
RT: 11.853 min Scan# 1676
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 58 Resp: 10899

Ion	Ratio	Lower	Upper
58	100		
43	376.6	333.6	393.6
100	32.1	1.6	61.6

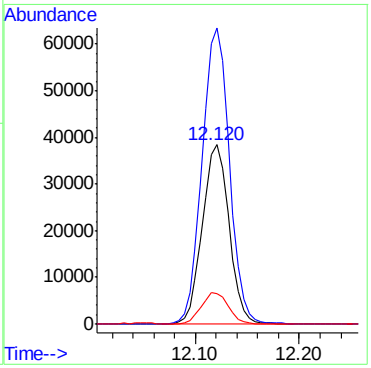


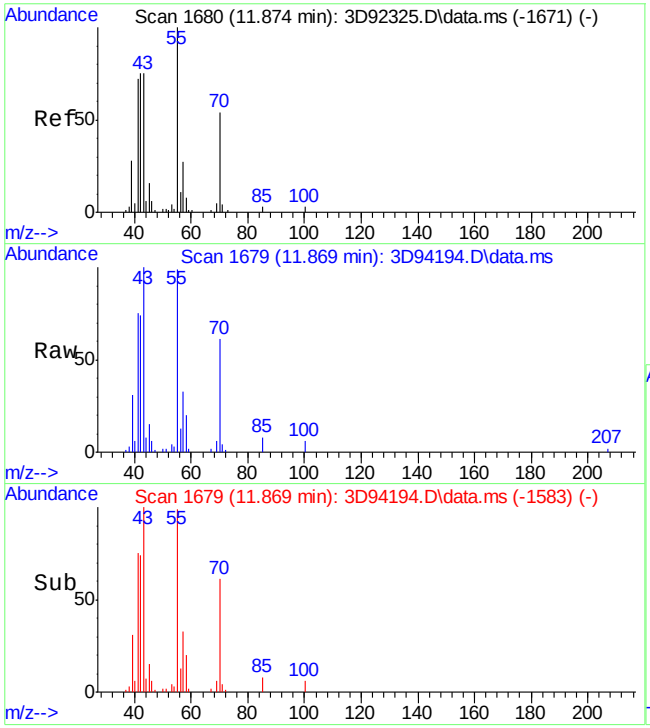


#82
toluene
Concen: 20.48 ug/L
RT: 12.120 min Scan# 1727
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 92 Resp: 68497

Ion	Ratio	Lower	Upper
92	100		
91	165.4	137.9	197.9
65	17.0	0.0	48.1

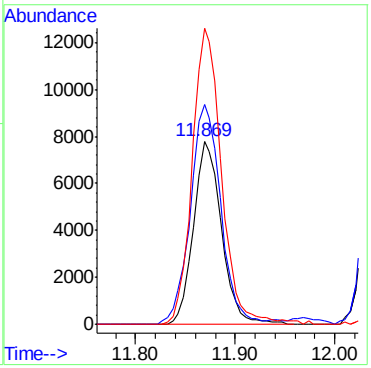


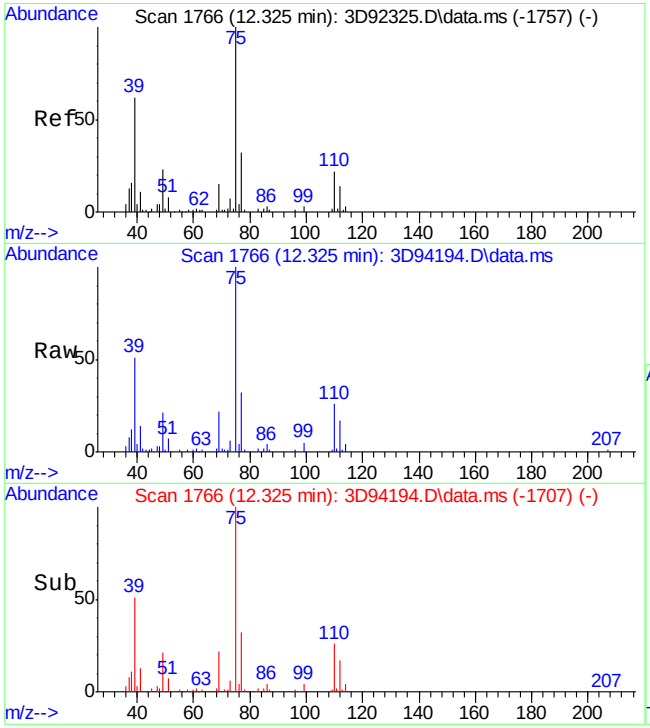


#83
3-methyl-1-butanol
Concen: 458.90 ug/L
RT: 11.869 min Scan# 1679
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 70 Resp: 15147

Ion	Ratio	Lower	Upper
70	100		
42	131.1	102.8	162.8
55	169.7	141.0	201.0

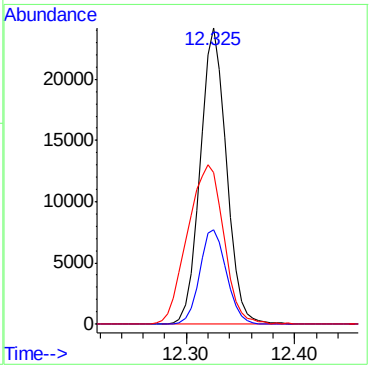


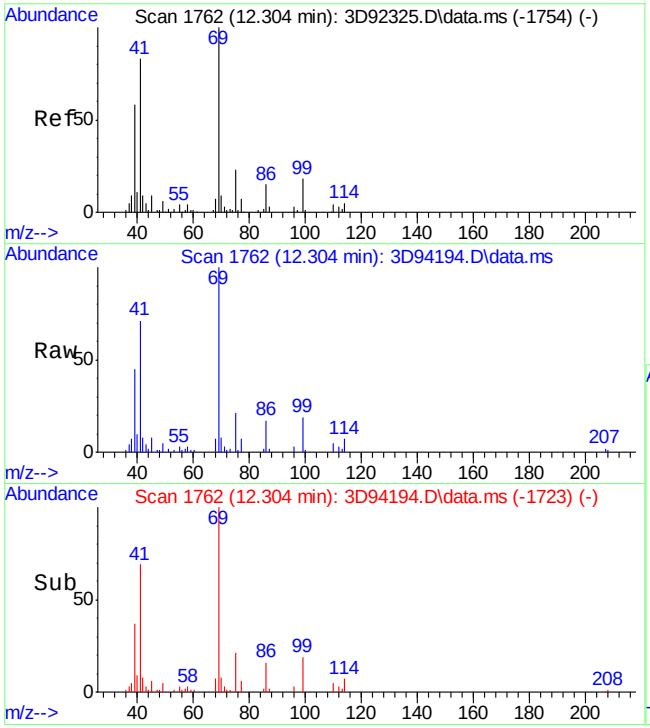


#84
trans-1,3-dichloropropene
Concen: 20.45 ug/L
RT: 12.325 min Scan# 1766
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 75 Resp: 41116

Ion	Ratio	Lower	Upper
75	100		
77	32.0	1.6	61.6
39	51.2	22.9	82.9

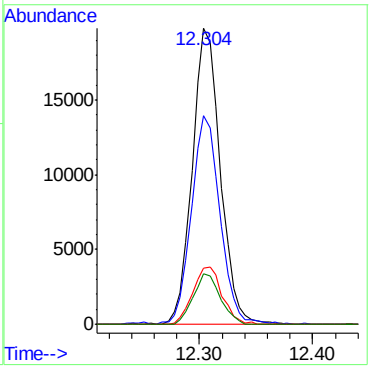


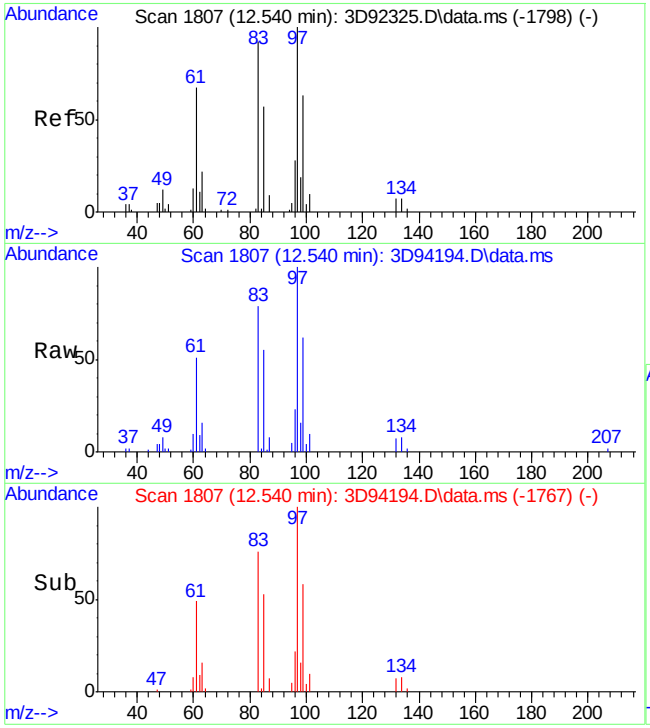


#85
ethyl methacrylate
Concen: 22.45 ug/L
RT: 12.304 min Scan# 1762
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 69 Resp: 33916

Ion	Ratio	Lower	Upper
69	100		
41	70.5	41.9	101.9
99	18.8	0.0	49.8
86	17.0	0.0	47.1

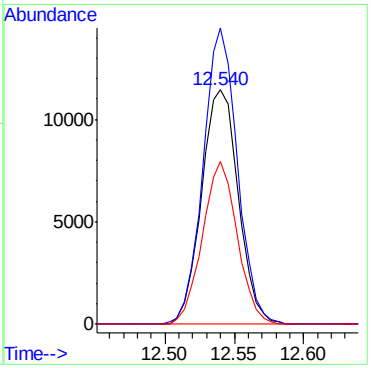


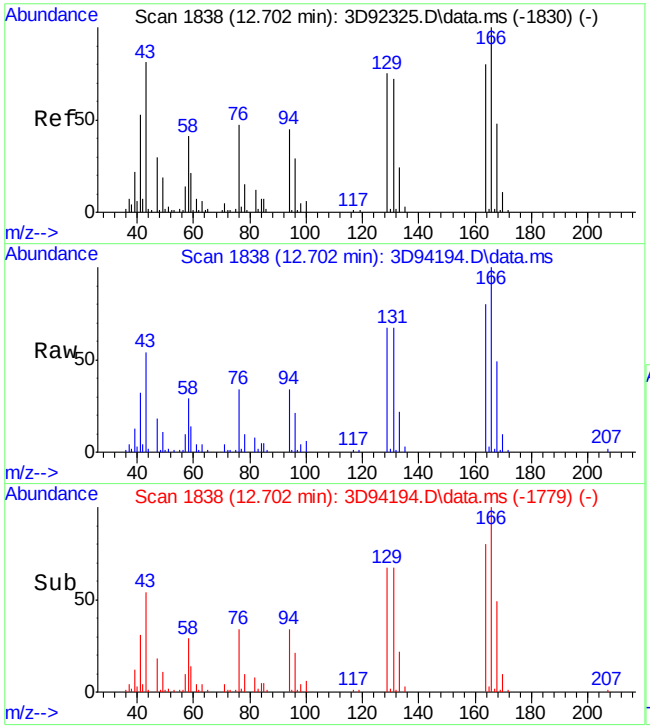


#86
1,1,2-trichloroethane
Concen: 20.92 ug/L
RT: 12.540 min Scan# 1807
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 83 Resp: 21226

Ion	Ratio	Lower	Upper
83	100		
97	126.5	87.9	147.9
85	69.7	33.9	93.9

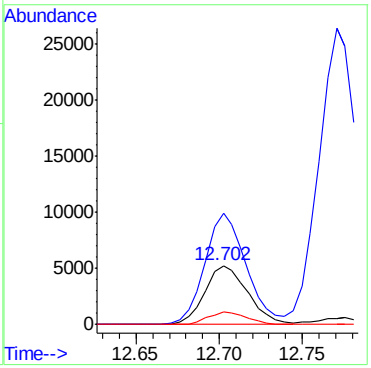


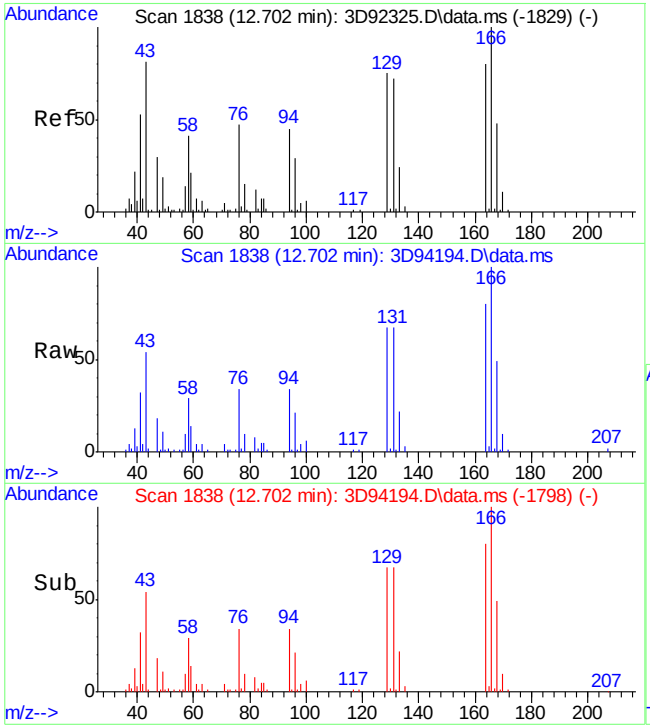


#87
2-hexanone
Concen: 24.46 ug/L
RT: 12.702 min Scan# 1838
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 58 Resp: 9356

Ion	Ratio	Lower	Upper
58	100		
43	187.8	149.9	209.9
100	22.0	0.0	49.9

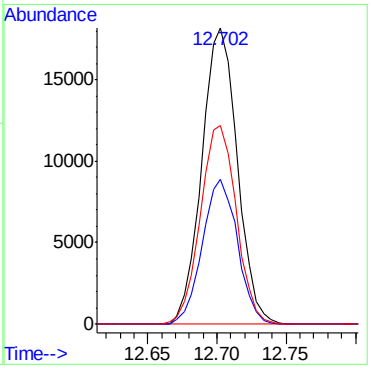


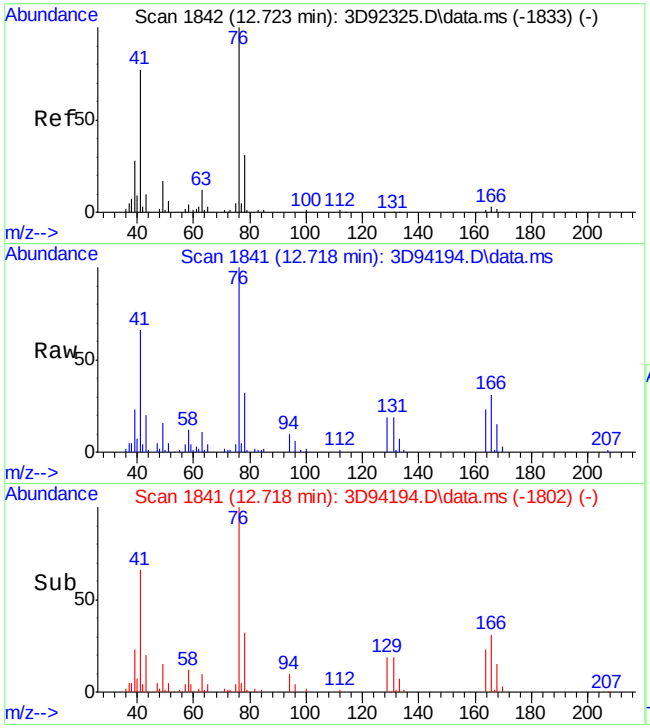


#89
tetrachloroethene
Concen: 20.05 ug/L
RT: 12.702 min Scan# 1838
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:166 Resp: 32556

Ion	Ratio	Lower	Upper
166	100		
168	48.9	18.1	78.1
129	67.2	38.2	98.2

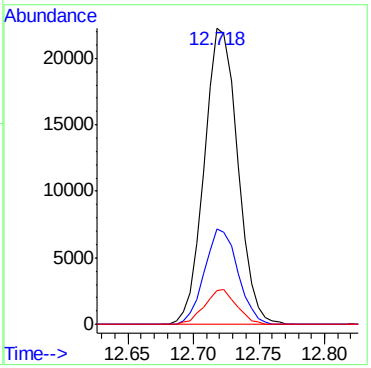


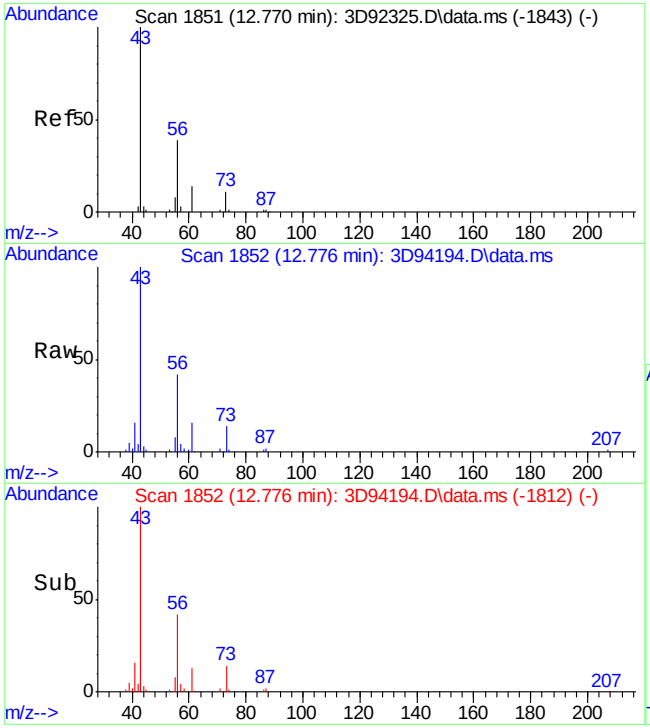


#90
1,3-dichloropropane
Concen: 20.26 ug/L
RT: 12.718 min Scan# 1841
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 76 Resp: 39355

Ion	Ratio	Lower	Upper
76	100		
78	32.1	4.3	64.3
63	11.3	0.0	41.6

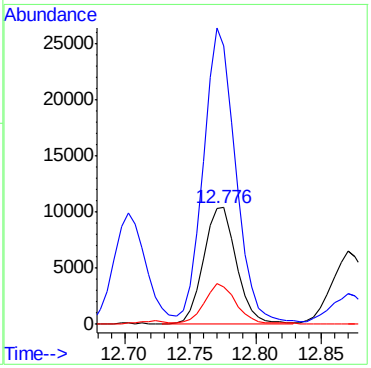


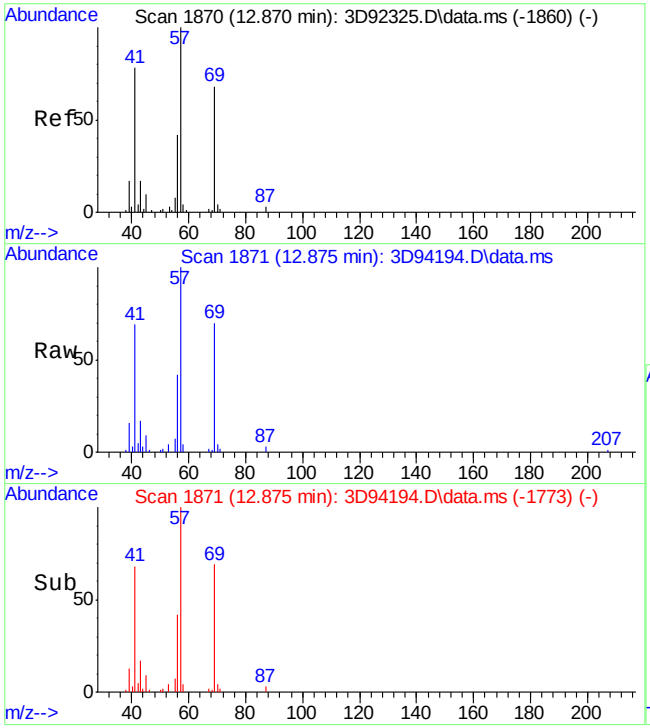


#91
butyl acetate
Concen: 23.99 ug/L
RT: 12.776 min Scan# 1852
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 56 Resp: 18111

Ion	Ratio	Lower	Upper
56	100		
43	236.3	209.3	269.3
73	31.1	2.1	62.1

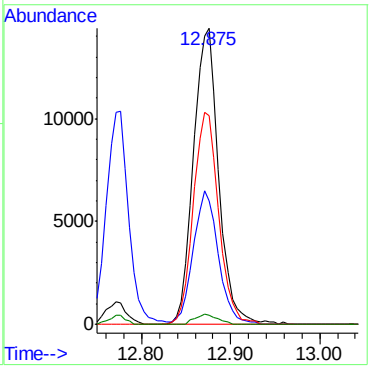


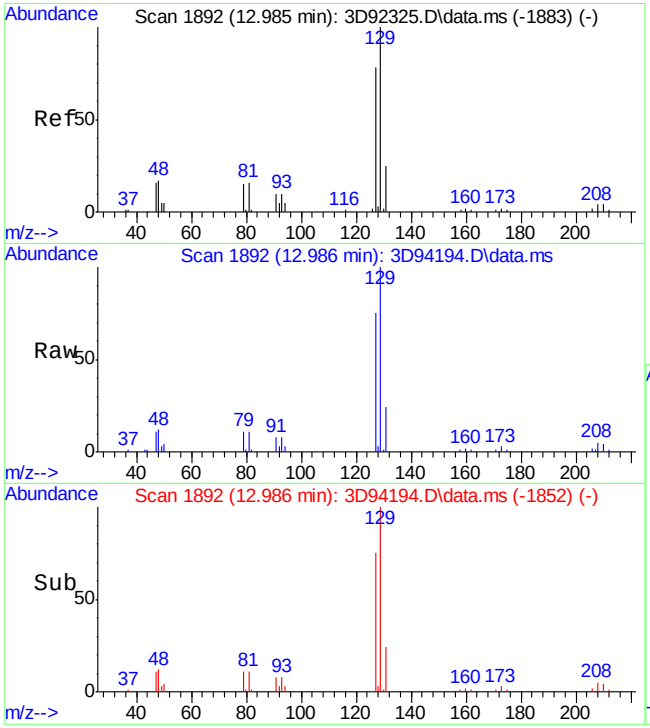


#92
3,3-Dimethyl-1-Butanol
Concen: 205.75 ug/L
RT: 12.875 min Scan# 1871
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 57 Resp: 28409

Ion	Ratio	Lower	Upper
57	100		
56	44.7	36.2	54.2
69	71.9	58.1	87.1
87	3.1	2.5	3.7

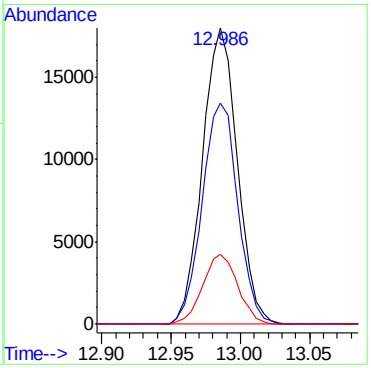


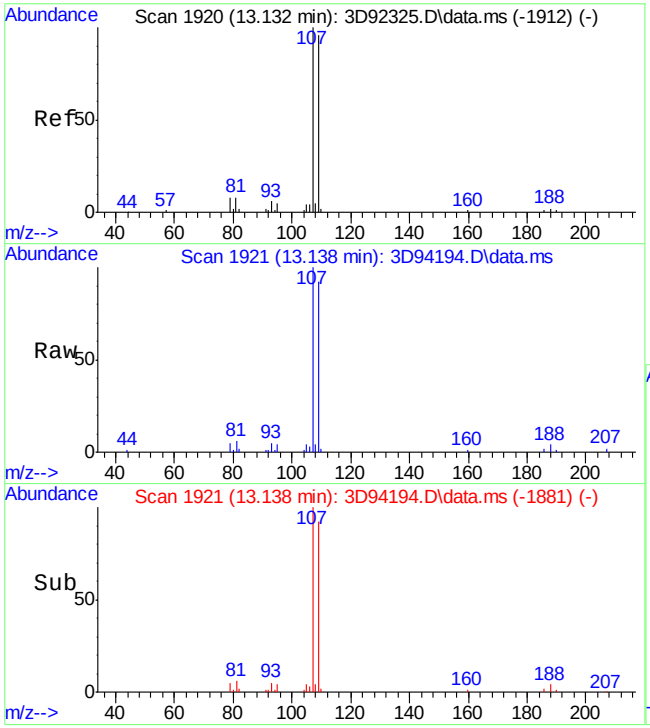


#93
dibromochloromethane
Concen: 20.52 ug/L
RT: 12.986 min Scan# 1892
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:129 Resp: 31625

Ion	Ratio	Lower	Upper
129	100		
127	74.7	44.5	104.5
131	23.7	0.0	53.5

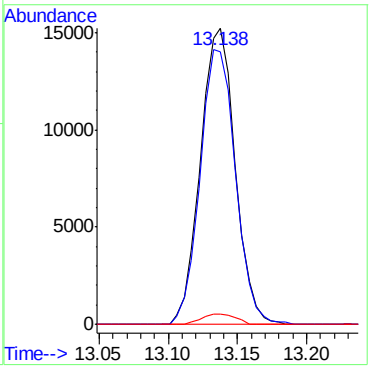


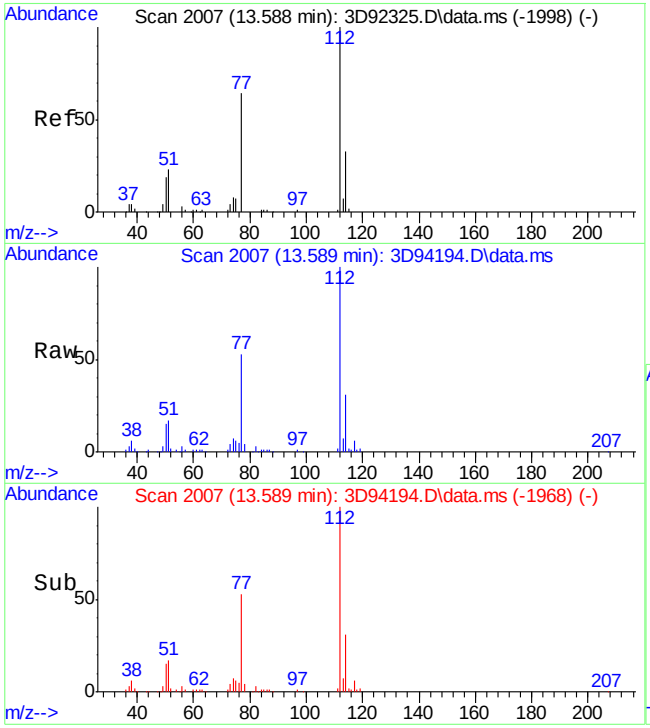


#94
1,2-dibromoethane
Concen: 20.35 ug/L
RT: 13.138 min Scan# 1921
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:107 Resp: 26609

Ion	Ratio	Lower	Upper
107	100		
109	92.2	62.5	122.5
188	3.6	0.0	33.2

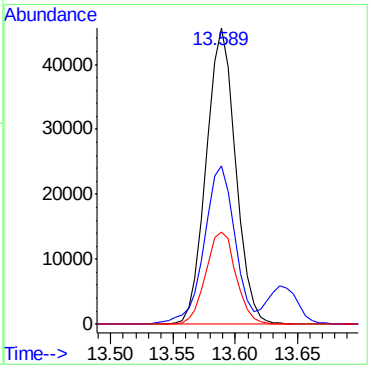


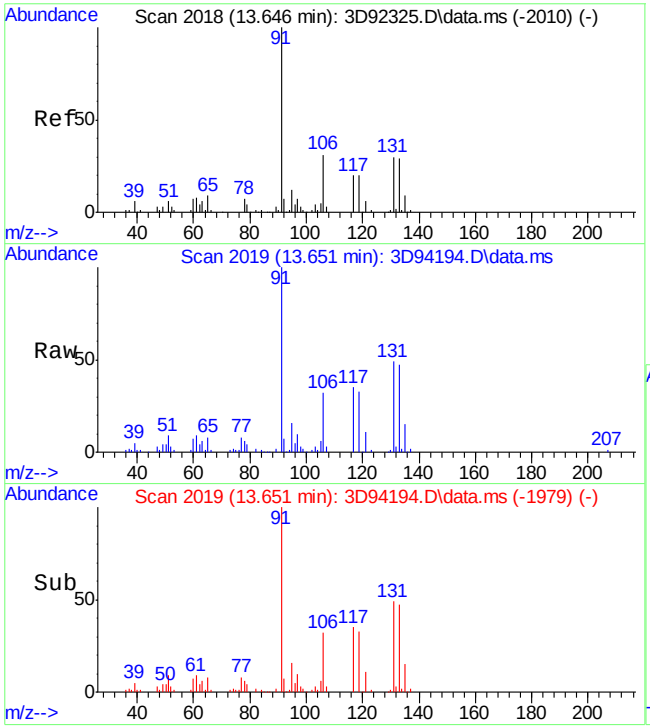


#96
chlorobenzene
Concen: 19.67 ug/L
RT: 13.589 min Scan# 2007
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:112 Resp: 74644

Ion	Ratio	Lower	Upper
112	100		
77	52.4	22.2	82.2
114	31.2	2.5	62.5

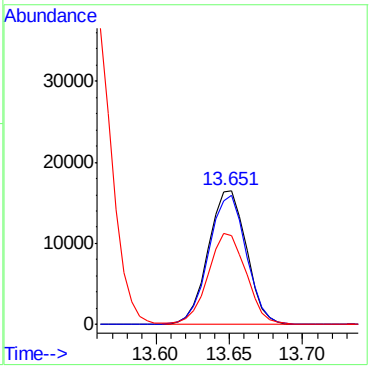


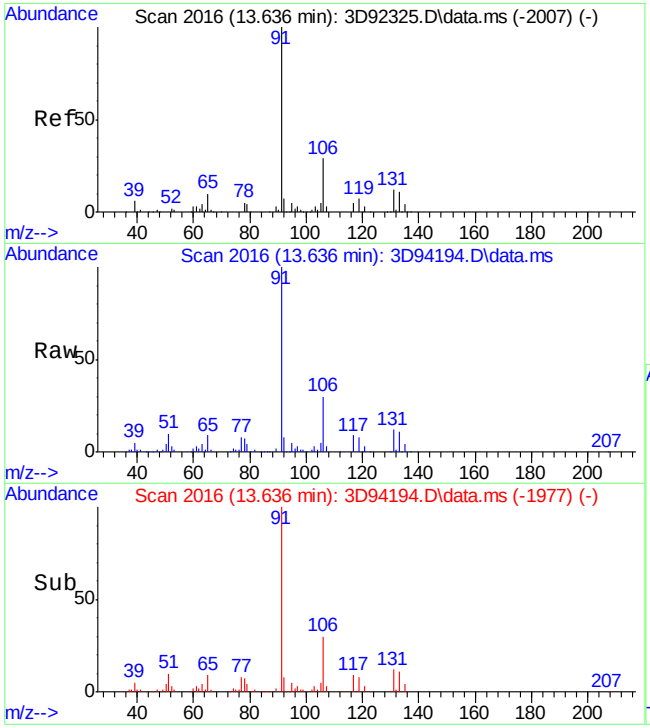


#97
1,1,1,2-tetrachloroethane
Concen: 19.86 ug/L
RT: 13.651 min Scan# 2019
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:131 Resp: 29662

Ion	Ratio	Lower	Upper
131	100		
133	96.2	66.0	126.0
119	66.6	38.3	98.3

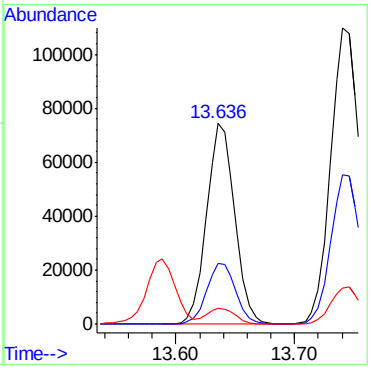


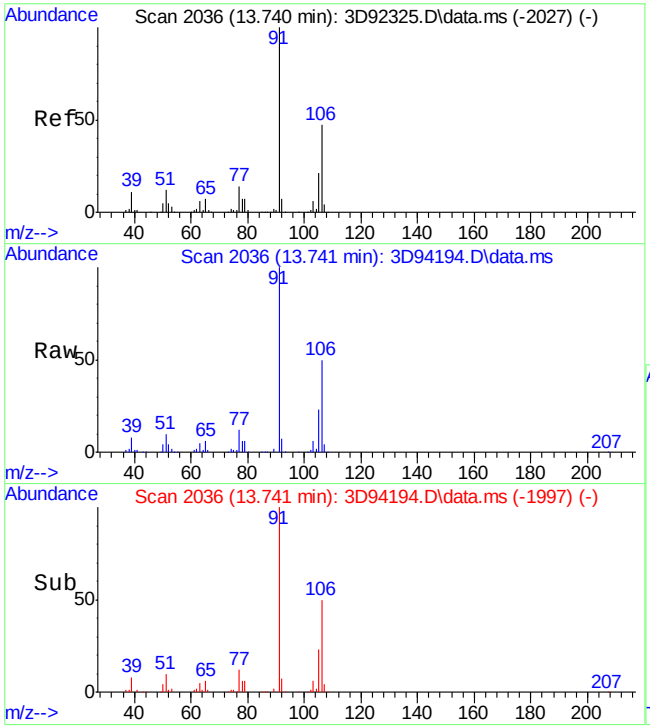


#98
ethylbenzene
Concen: 19.53 ug/L
RT: 13.636 min Scan# 2016
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 91 Resp: 122749

Ion	Ratio	Lower	Upper
91	100		
106	30.4	1.1	61.1
77	8.0	0.0	38.1

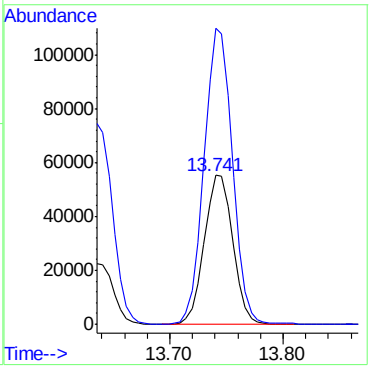


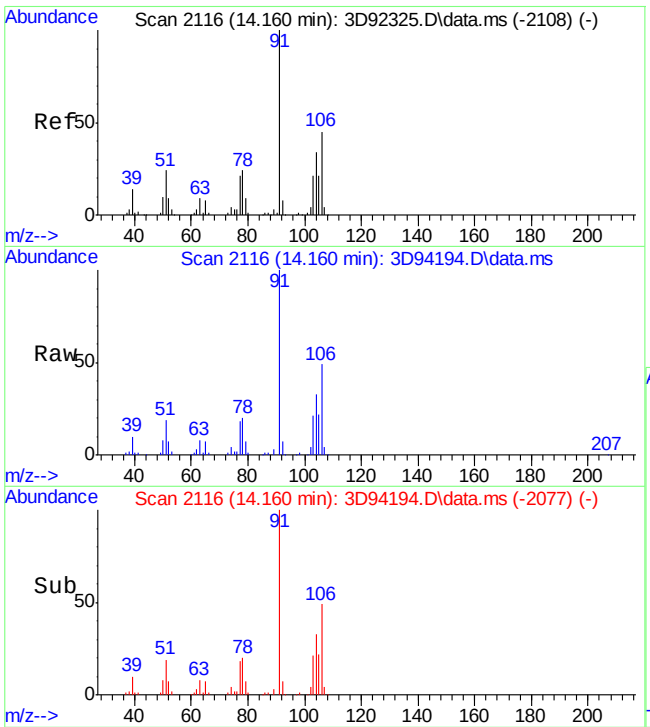


#99
m,p-xylene
Concen: 40.25 ug/L
RT: 13.741 min Scan# 2036
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:106 Resp: 96518

Ion	Ratio	Lower	Upper
106	100		
91	198.6	138.8	257.8

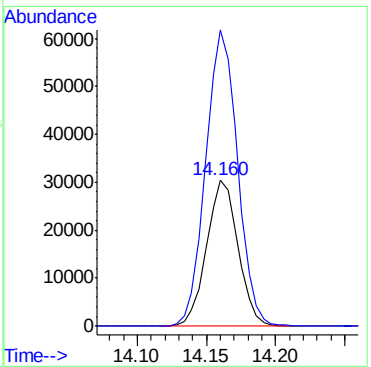




#100
o-xylene
Concen: 19.80 ug/L
RT: 14.160 min Scan# 2116
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:106 Resp: 48246

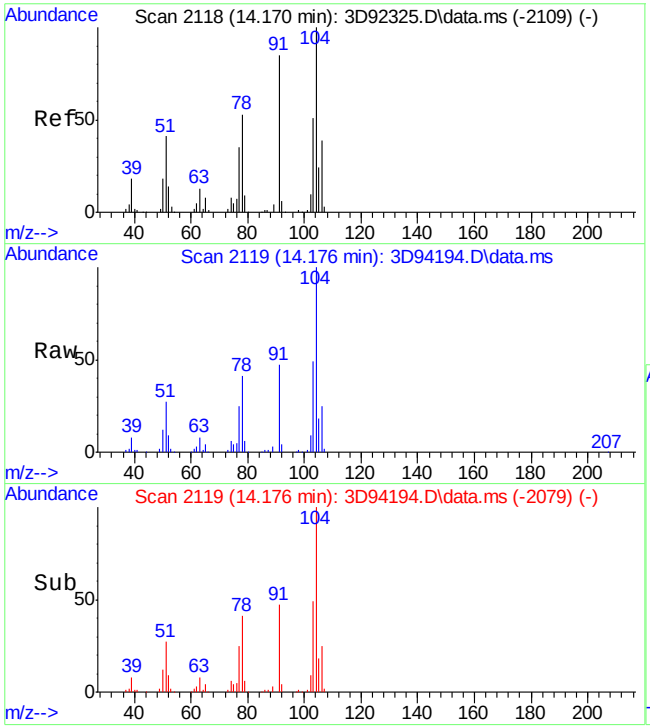
Ion	Ratio	Lower	Upper
106	100		
91	202.8	144.1	267.7



7.7.6

7

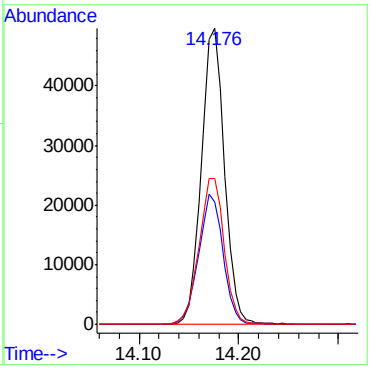
3D94194.D M3D4058.M Thu Dec 19 12:37:05 2013 3D Page 46

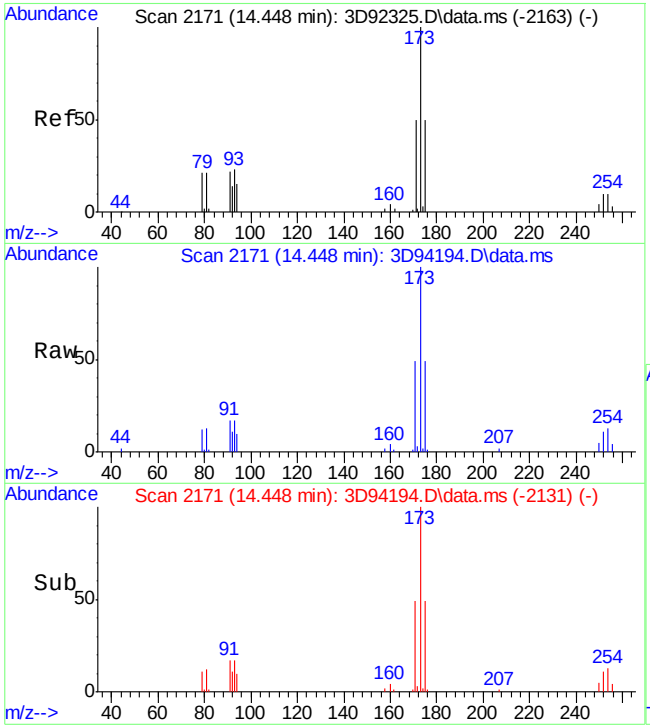


#101
styrene
Concen: 20.59 ug/L
RT: 14.176 min Scan# 2119
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:104 Resp: 80044

Ion	Ratio	Lower	Upper
104	100		
78	41.2	14.3	74.3
103	49.2	20.0	80.0

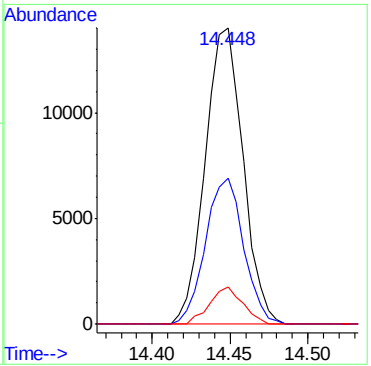


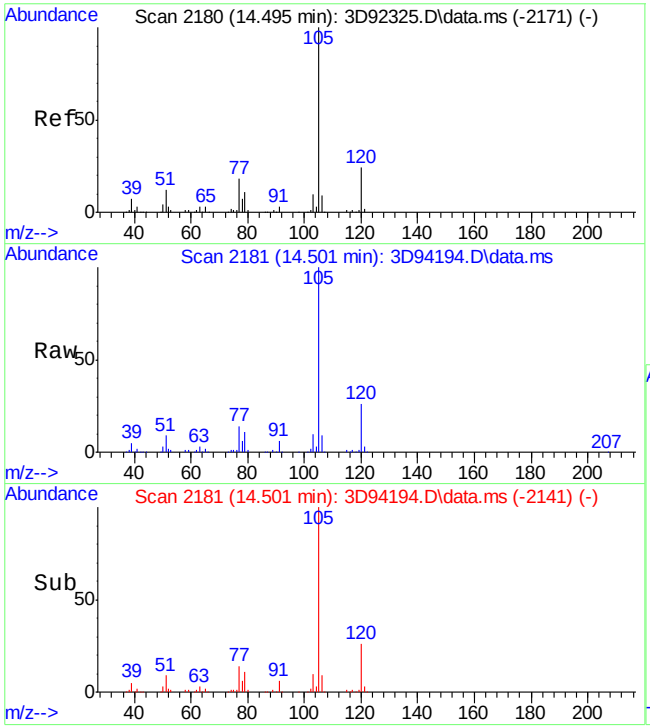


#103
bromoform
Concen: 20.37 ug/L
RT: 14.448 min Scan# 2171
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:173 Resp: 23699

Ion	Ratio	Lower	Upper
173	100		
175	49.4	19.4	79.4
254	12.6	0.0	40.9

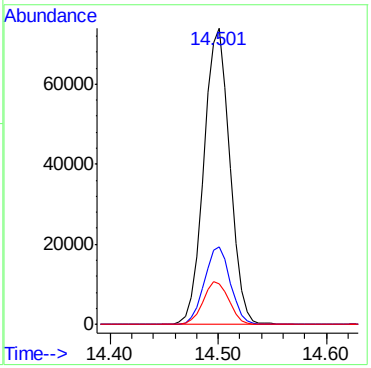


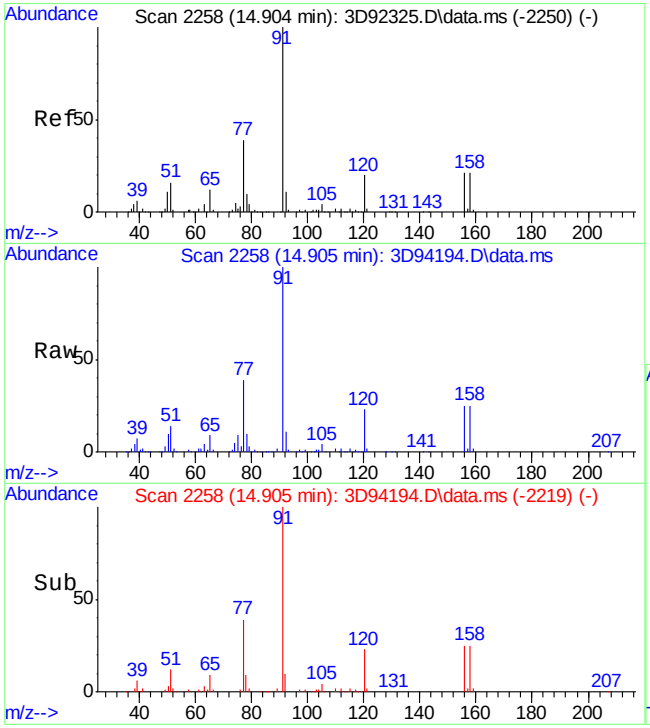


#105
isopropylbenzene
Concen: 20.17 ug/L
RT: 14.501 min Scan# 2181
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:105 Resp: 124274

Ion	Ratio	Lower	Upper
105	100		
120	26.2	0.0	55.5
77	13.8	0.0	44.1

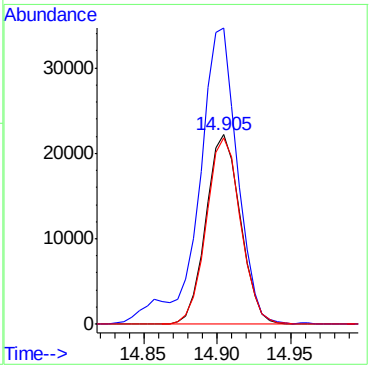


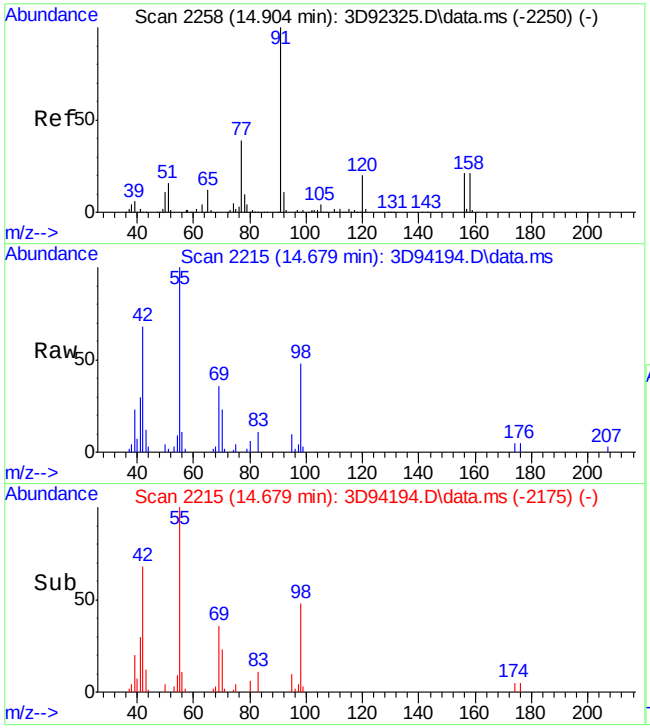


#107
bromobenzene
Concen: 19.84 ug/L
RT: 14.905 min Scan# 2258
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:156 Resp: 35945

Ion	Ratio	Lower	Upper
156	100		
77	156.3	117.2	177.2
158	98.6	67.0	127.0

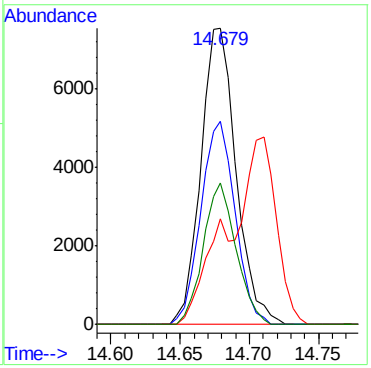


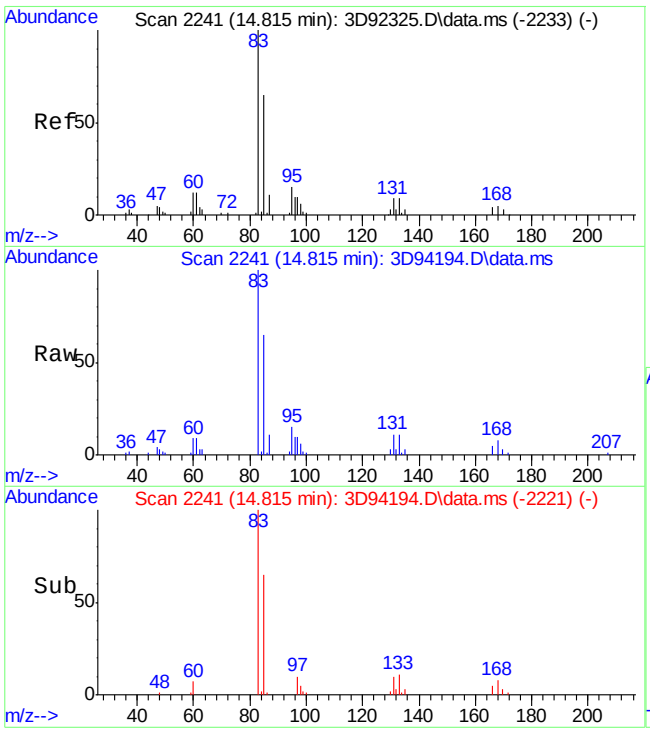


#108
cyclohexanone
Concen: 189.30 ug/L
RT: 14.679 min Scan# 2215
Delta R.T. 0.011 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 55 Resp: 13387

Ion	Ratio	Lower	Upper
55	100		
42	68.5	37.1	97.1
69	35.5	0.7	60.7
98	47.7	15.4	75.4

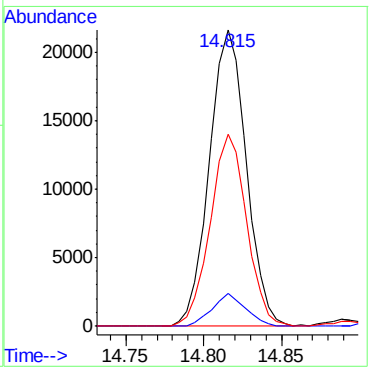


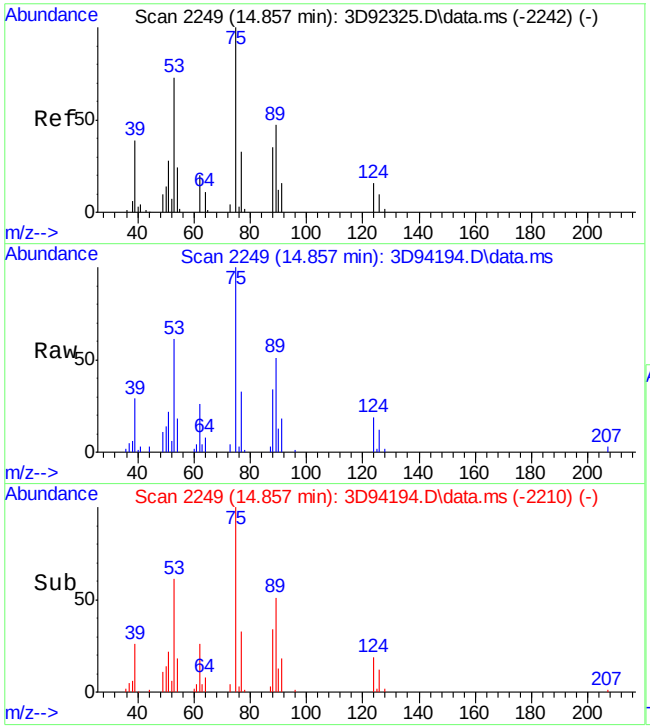


#109
1,1,2,2-tetrachloroethane
Concen: 18.48 ug/L
RT: 14.815 min Scan# 2241
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 83 Resp: 35684

Ion	Ratio	Lower	Upper
83	100		
131	11.0	0.0	39.8
85	64.7	35.0	95.0

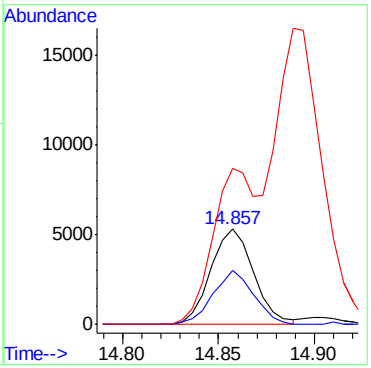


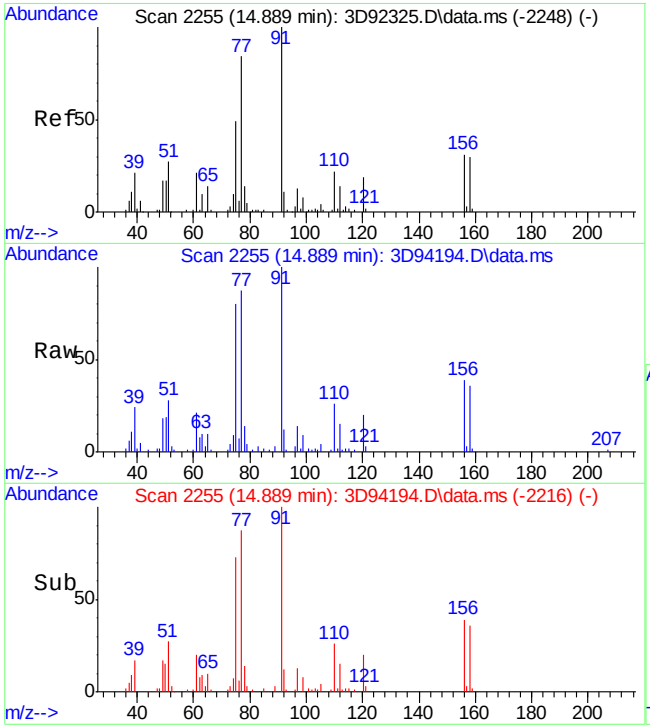


#110
trans-1,4-dichloro-2-butene
Concen: 21.02 ug/L
RT: 14.857 min Scan# 2249
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 53 Resp: 8239

Ion	Ratio	Lower	Upper
53	100		
88	56.2	25.8	85.8
75	164.0	136.3	196.3

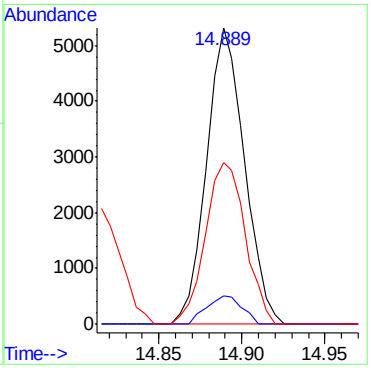


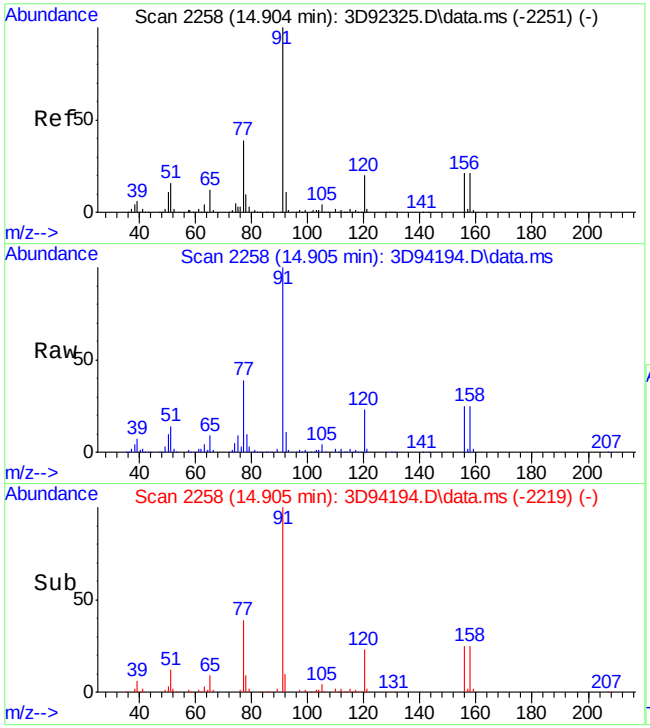


#111
1,2,3-trichloropropane
Concen: 21.29 ug/L
RT: 14.889 min Scan# 2255
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:110 Resp: 8447

Ion	Ratio	Lower	Upper
110	100		
111	9.6	0.0	39.8
97	54.5	25.9	85.9

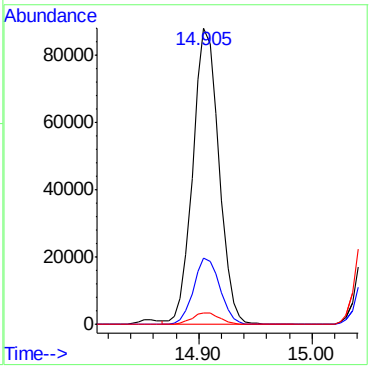


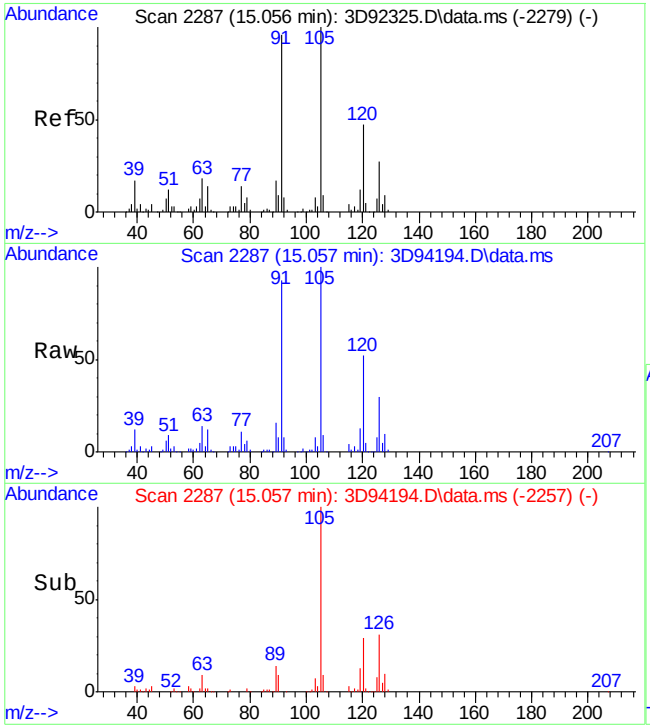


#112
n-propylbenzene
Concen: 19.87 ug/L
RT: 14.905 min Scan# 2258
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 91 Resp: 140149

Ion	Ratio	Lower	Upper
91	100		
120	22.6	0.0	52.3
105	4.0	0.0	33.7

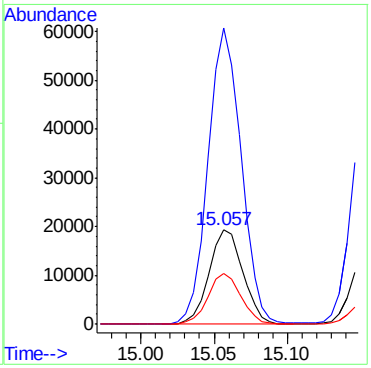


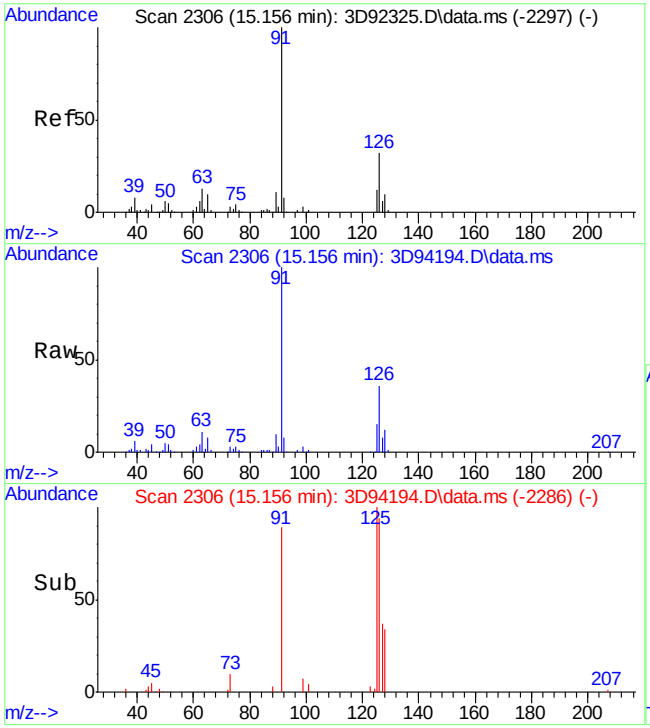


#114
2-chlorotoluene
Concen: 19.85 ug/L
RT: 15.057 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:126 Resp: 30709

Ion	Ratio	Lower	Upper
126	100		
91	314.2	271.2	331.2
89	53.6	19.8	79.8

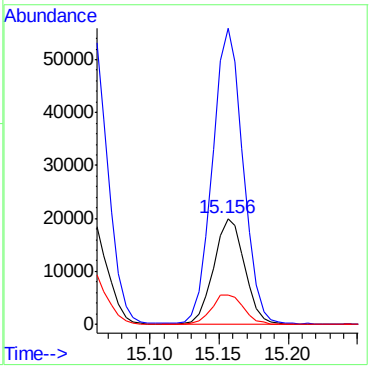


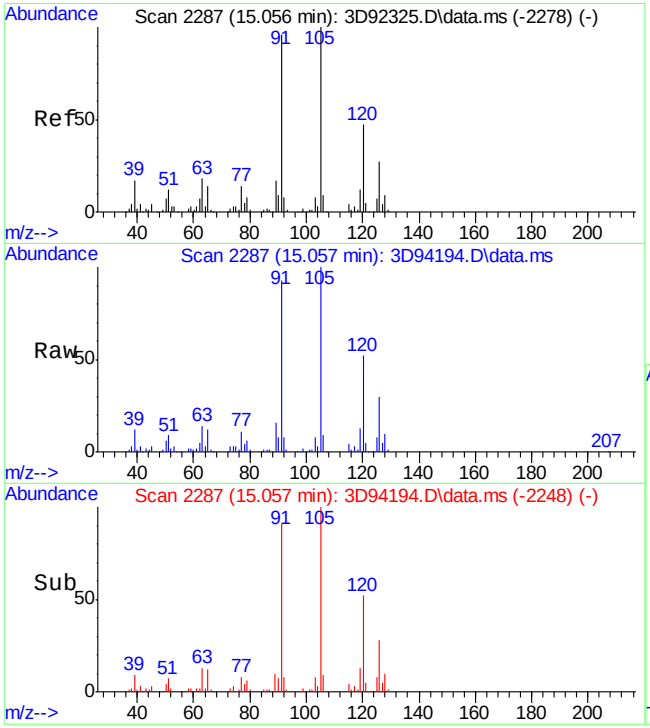


#115
4-chlorotoluene
Concen: 20.06 ug/L
RT: 15.156 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:126 Resp: 31218

Ion	Ratio	Lower	Upper
126	100		
91	278.6	249.9	309.9
89	28.1	0.0	58.8

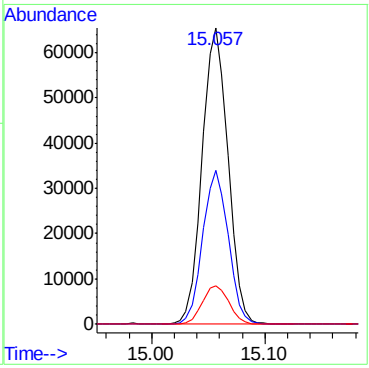


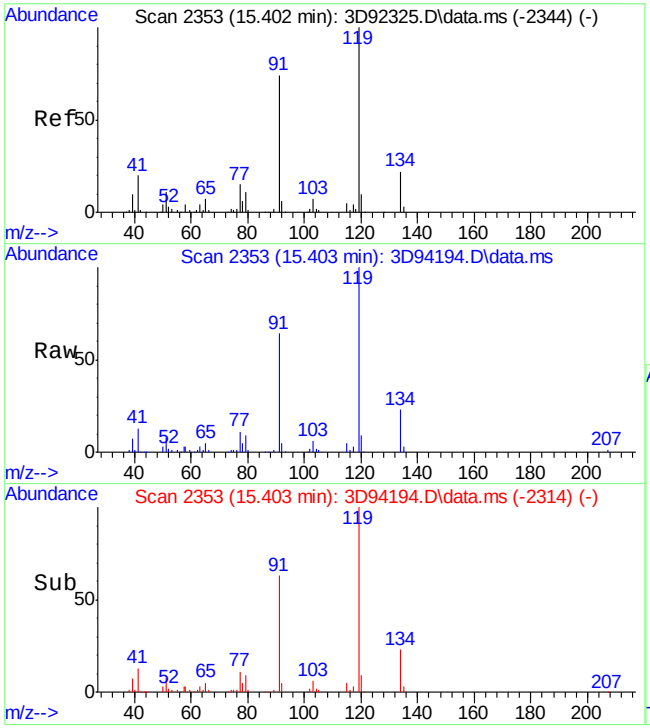


#116
1,3,5-trimethylbenzene
Concen: 19.81 ug/L
RT: 15.057 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:105 Resp: 103365

Ion	Ratio	Lower	Upper
105	100		
120	52.0	21.1	81.1
119	12.8	0.0	43.2

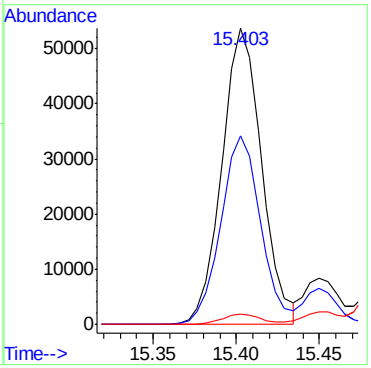


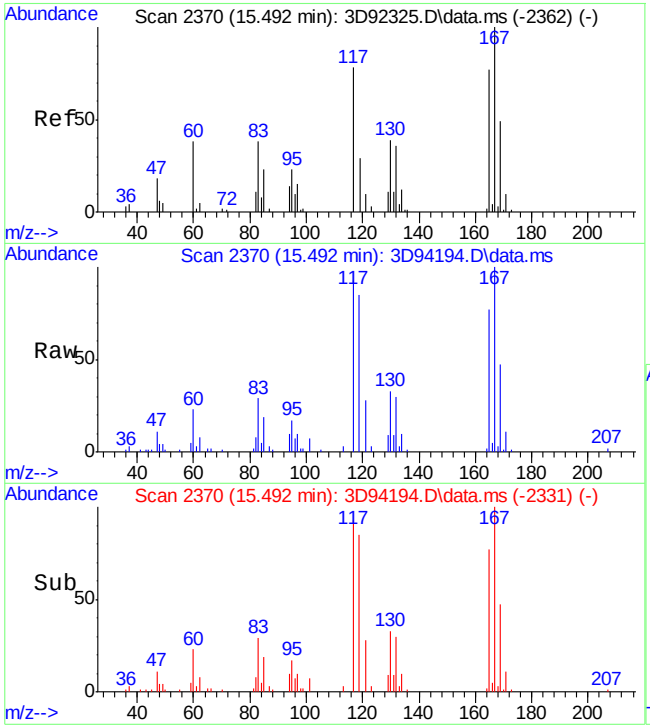


#117
tert-butylbenzene
Concen: 19.74 ug/L
RT: 15.403 min Scan# 2353
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:119 Resp: 89526

Ion	Ratio	Lower	Upper
119	100		
91	63.5	33.7	93.7
117	3.3	0.0	33.3

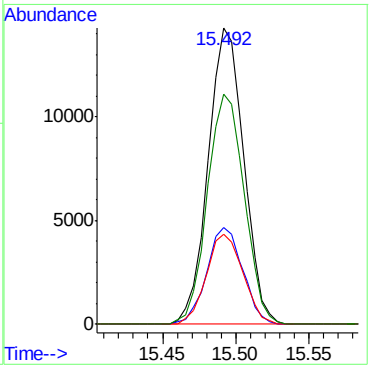




#118
pentachloroethane
Concen: 20.09 ug/L
RT: 15.492 min Scan# 2370
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:167 Resp: 24007

Ion	Ratio	Lower	Upper
167	100		
130	32.7	0.1	60.1
132	30.2	0.5	60.5
165	77.5	46.5	106.5



7.7.6

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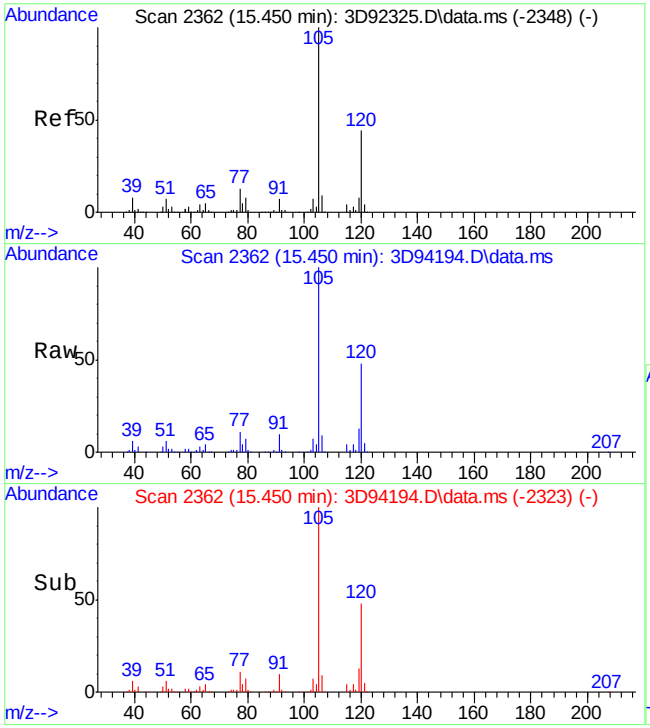
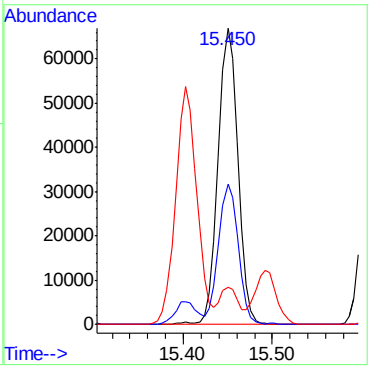
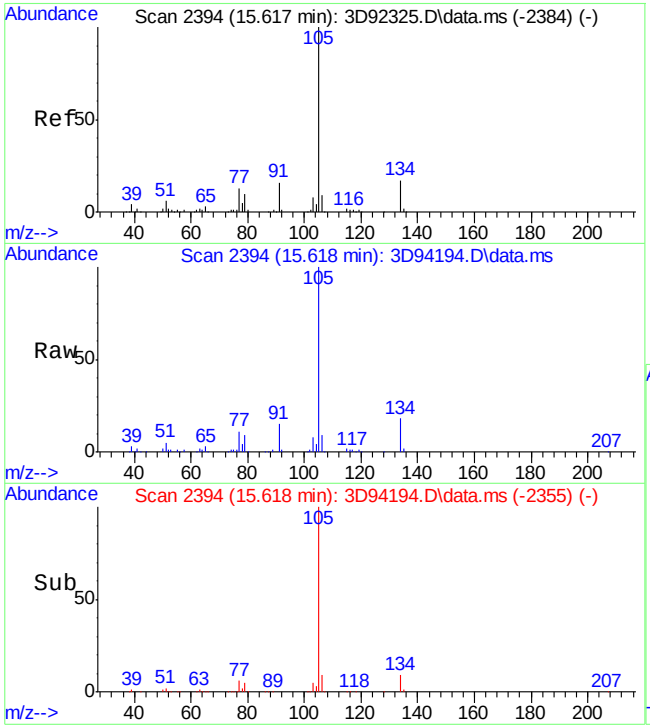


#119
1,2,4-trimethylbenzene
Concen: 20.14 ug/L
RT: 15.450 min Scan# 2362
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:105 Resp: 103626

Ion	Ratio	Lower	Upper
105	100		
120	47.6	16.8	76.8
119	12.1	0.0	42.6

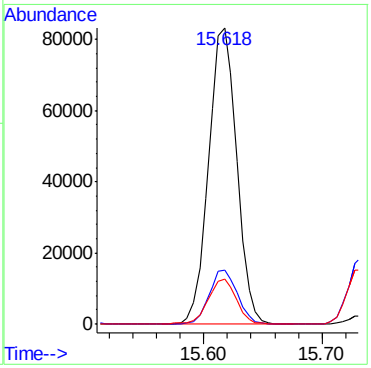


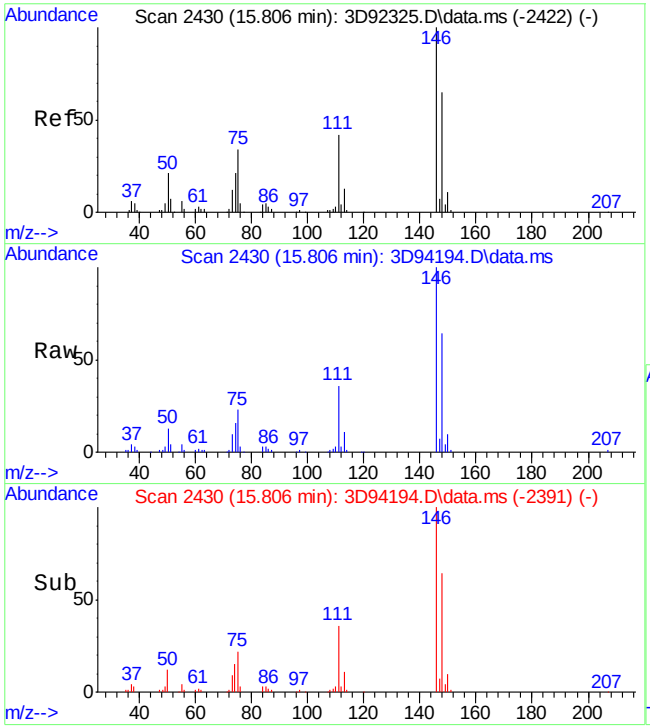


#120
sec-butylbenzene
Concen: 20.08 ug/L
RT: 15.618 min Scan# 2394
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:105 Resp: 137895

Ion	Ratio	Lower	Upper
105	100		
134	18.2	0.0	48.5
91	15.1	0.0	44.8

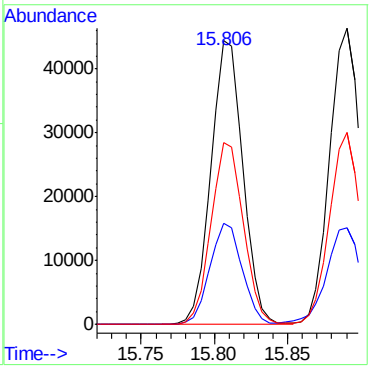


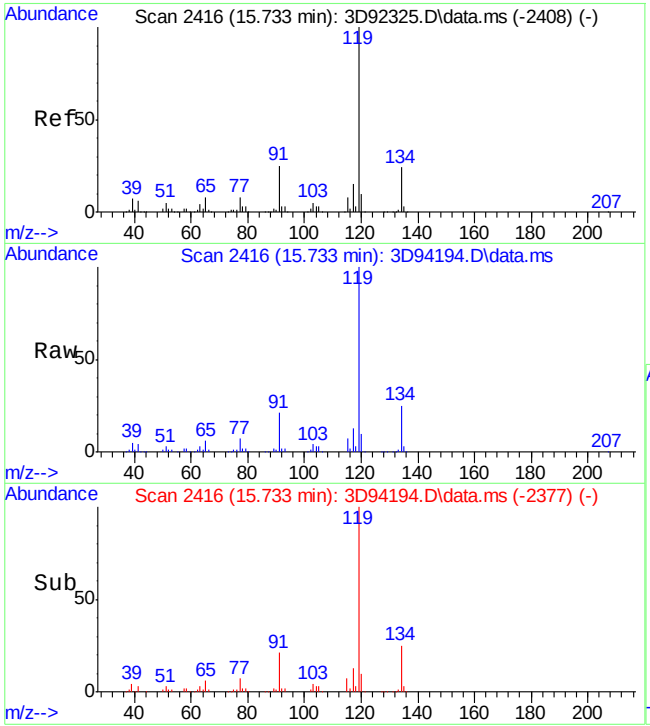


#121
1,3-dichlorobenzene
Concen: 19.39 ug/L
RT: 15.806 min Scan# 2430
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:146 Resp: 66956

Ion	Ratio	Lower	Upper
146	100		
111	35.8	6.0	66.0
148	64.2	34.2	94.2

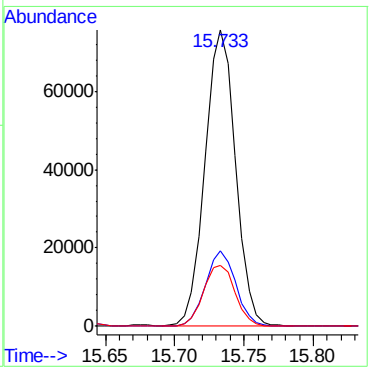


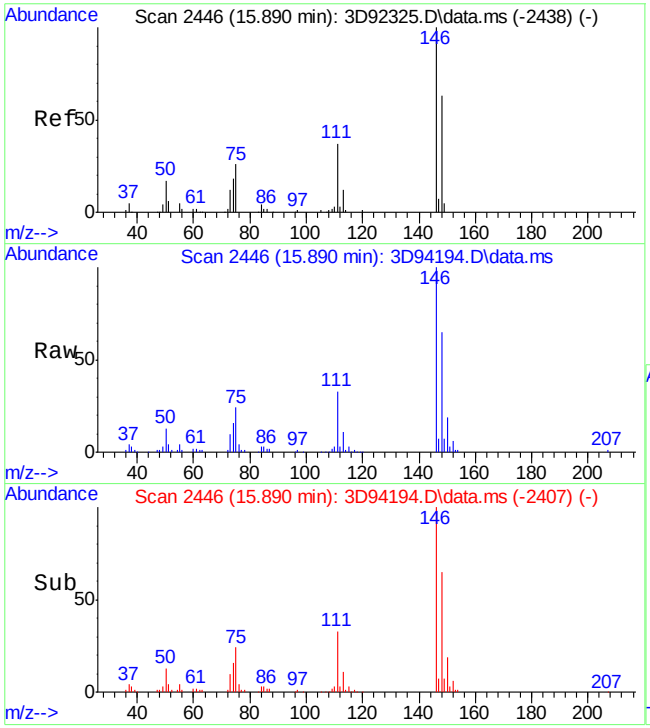


#122
p-isopropyltoluene
Concen: 20.44 ug/L
RT: 15.733 min Scan# 2416
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:119 Resp: 116502

Ion	Ratio	Lower	Upper
119	100		
134	25.5	0.0	55.3
91	20.5	0.0	51.2

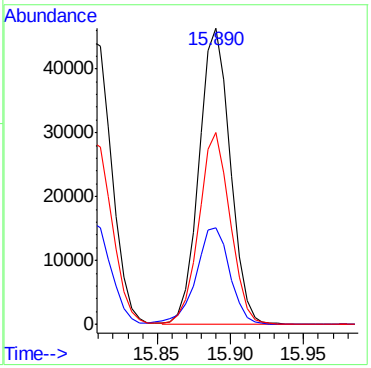


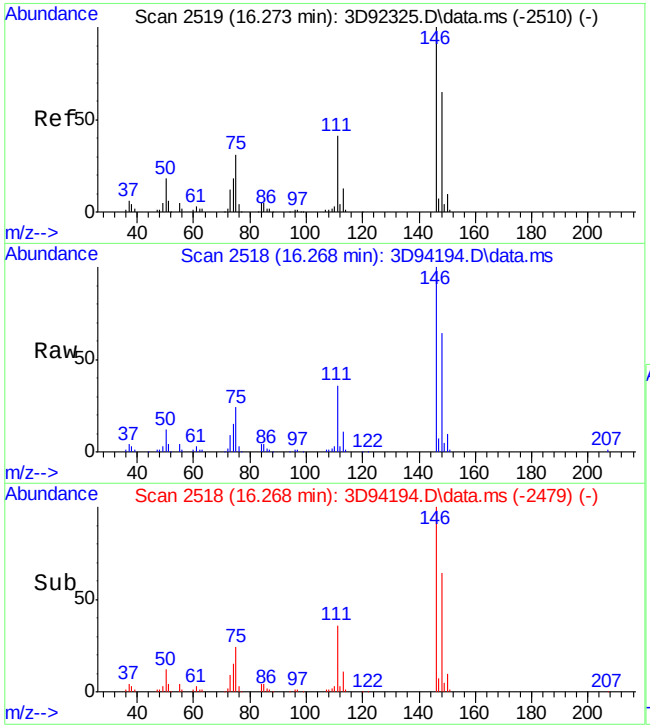


#123
1,4-dichlorobenzene
Concen: 18.88 ug/L
RT: 15.890 min Scan# 2446
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:146 Resp: 68905

Ion	Ratio	Lower	Upper
146	100		
111	32.6	4.9	64.9
148	64.8	34.4	94.4

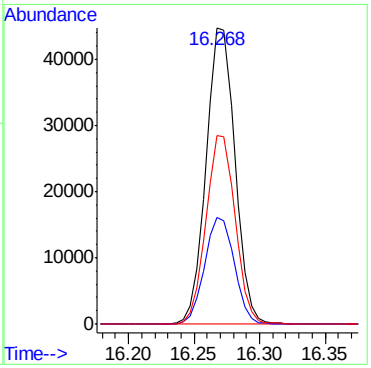


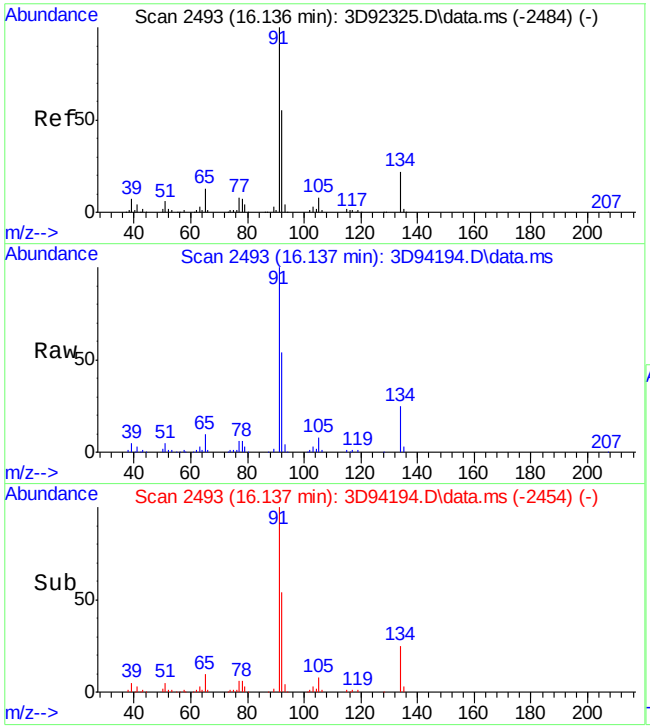


#124
1,2-dichlorobenzene
Concen: 19.16 ug/L
RT: 16.268 min Scan# 2518
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:146 Resp: 68232

Ion	Ratio	Lower	Upper
146	100		
111	36.2	8.3	68.3
148	63.8	34.4	94.4

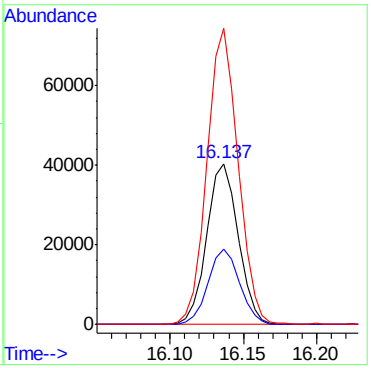


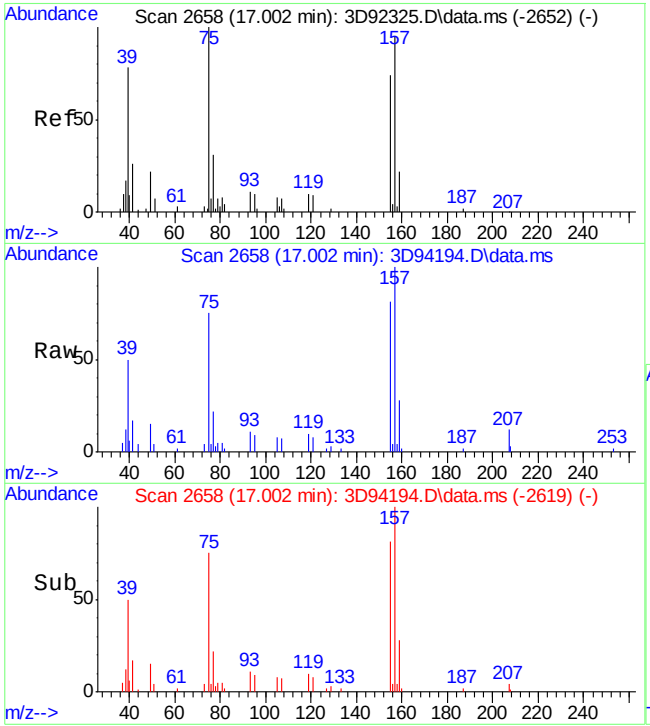


#126
n-butylbenzene
Concen: 20.95 ug/L
RT: 16.137 min Scan# 2493
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 92 Resp: 59963

Ion	Ratio	Lower	Upper
92	100		
134	46.6	15.0	75.0
91	184.5	148.5	208.5

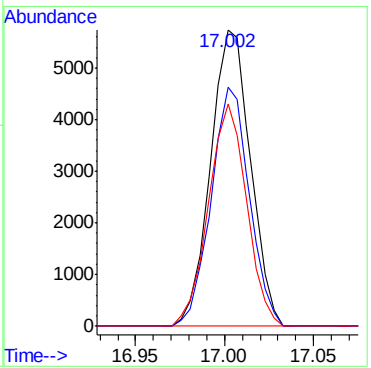


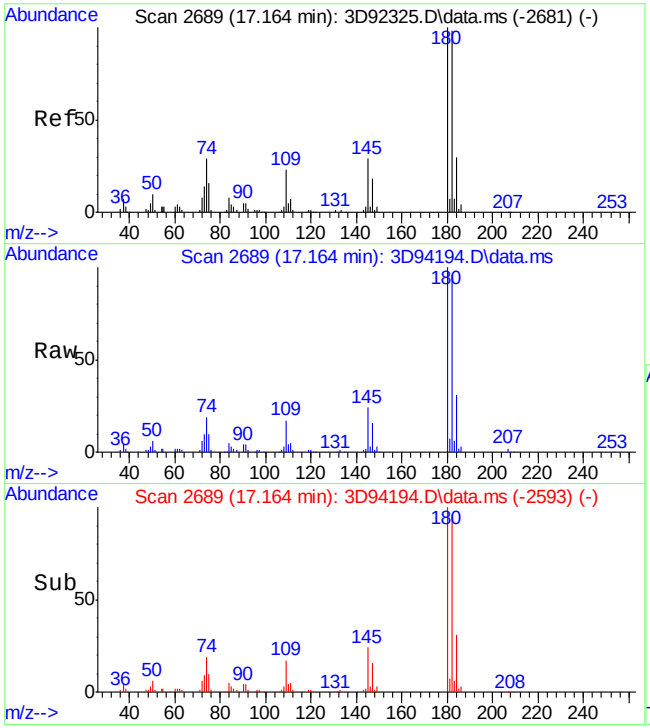


#128
1,2-dibromo-3-chloropropane
Concen: 21.46 ug/L
RT: 17.002 min Scan# 2658
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:157 Resp: 8944

Ion	Ratio	Lower	Upper
157	100		
155	80.8	47.2	107.2
75	75.2	45.0	105.0

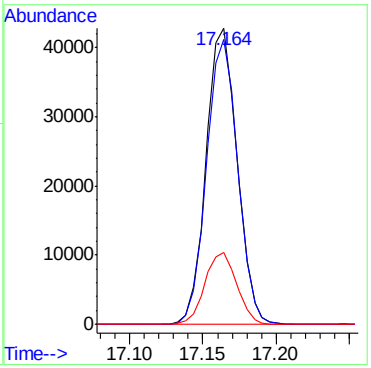


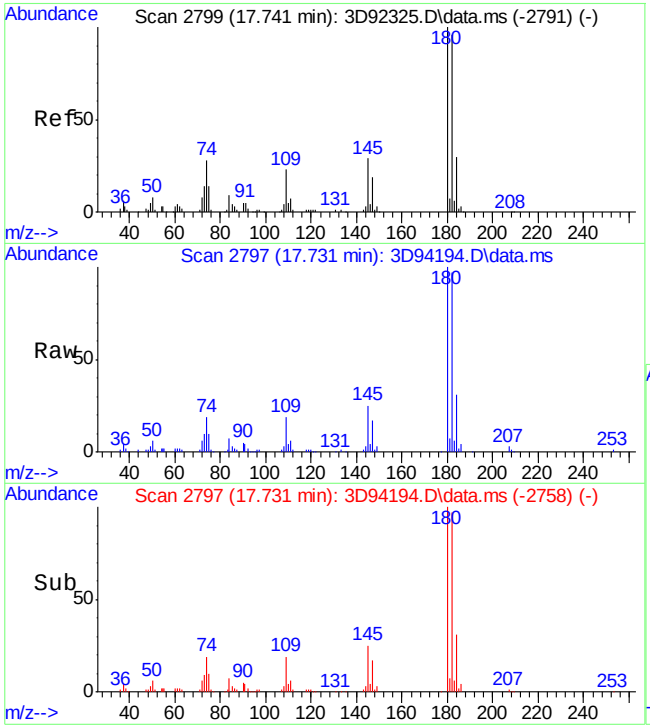


#129
1,3,5-trichlorobenzene
Concen: 19.09 ug/L
RT: 17.164 min Scan# 2689
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:180 Resp: 62825

Ion	Ratio	Lower	Upper
180	100		
182	96.2	66.4	126.4
145	24.8	0.0	55.5

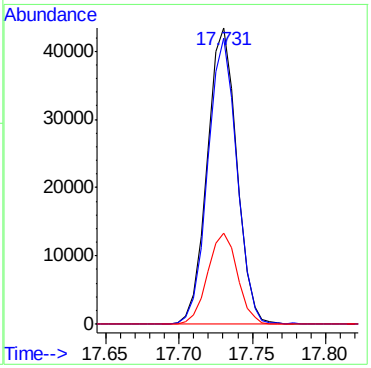


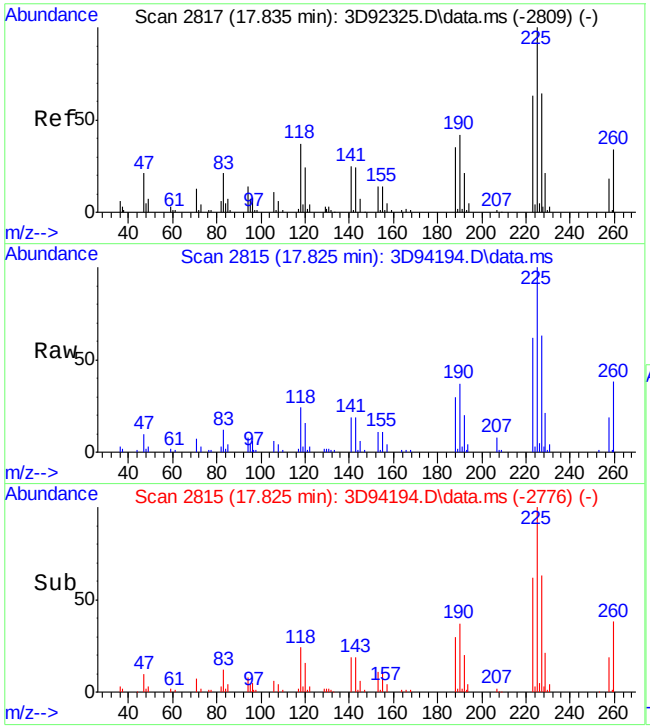


#130
1,2,4-trichlorobenzene
Concen: 20.63 ug/L
RT: 17.731 min Scan# 2797
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:180 Resp: 60373

Ion	Ratio	Lower	Upper
180	100		
182	96.5	67.0	127.0
184	30.7	1.3	61.3

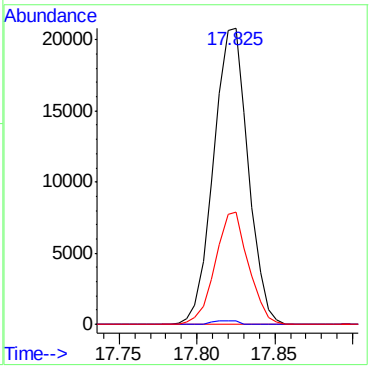


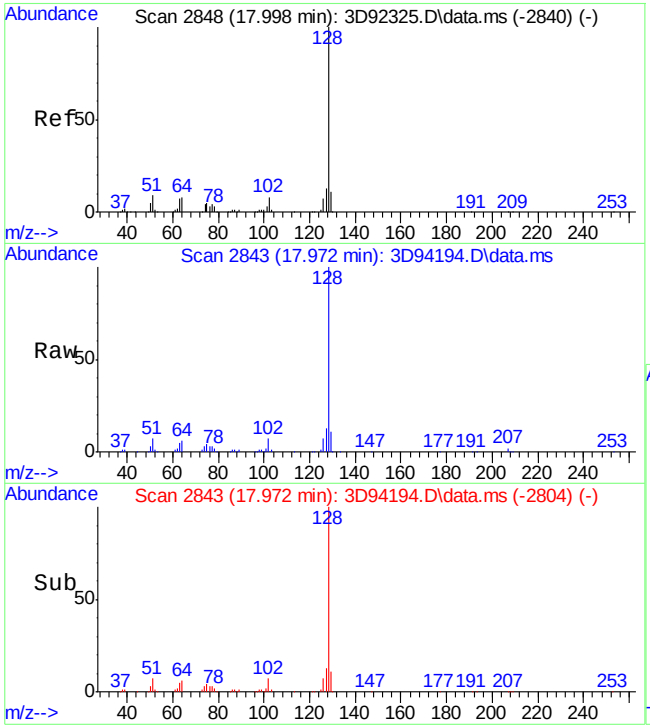


#131
hexachlorobutadiene
Concen: 20.63 ug/L
RT: 17.825 min Scan# 2815
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:225 Resp: 32097

Ion	Ratio	Lower	Upper
225	100		
259	1.1	0.0	31.3
260	37.7	6.4	66.4

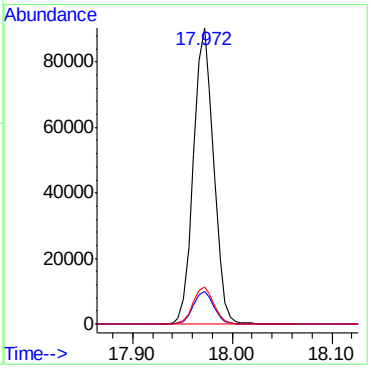


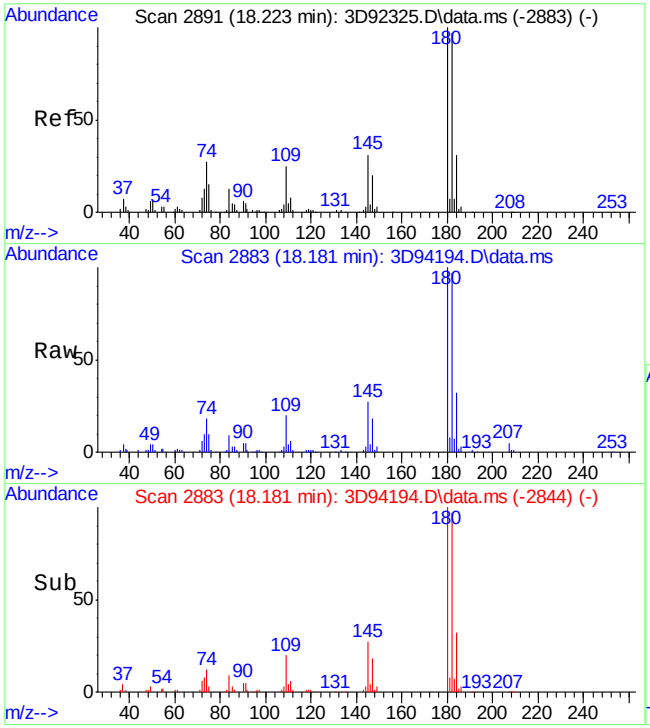


#132
naphthalene
Concen: 20.25 ug/L
RT: 17.972 min Scan# 2843
Delta R.T. 0.006 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:128 Resp: 126593

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	41.0
127	12.6	0.0	42.6

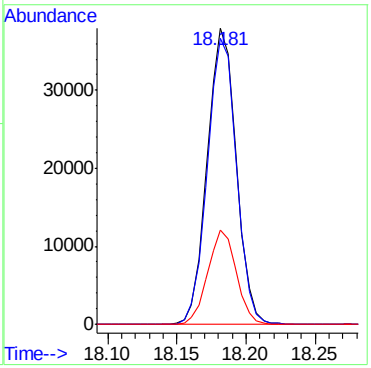


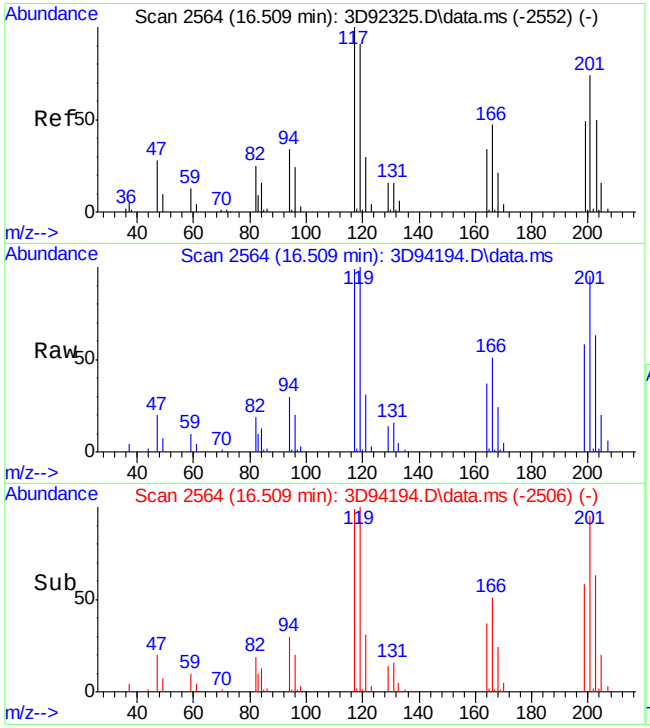


#133
1,2,3-trichlorobenzene
Concen: 19.52 ug/L
RT: 18.181 min Scan# 2883
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:180 Resp: 55494

Ion	Ratio	Lower	Upper
180	100		
182	96.6	64.7	124.7
184	32.0	0.4	60.4

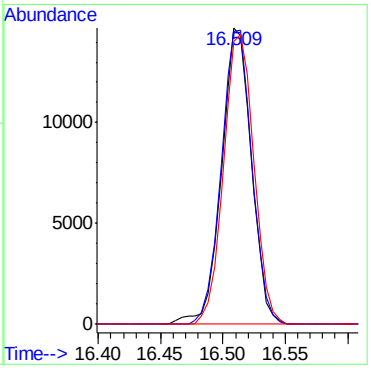


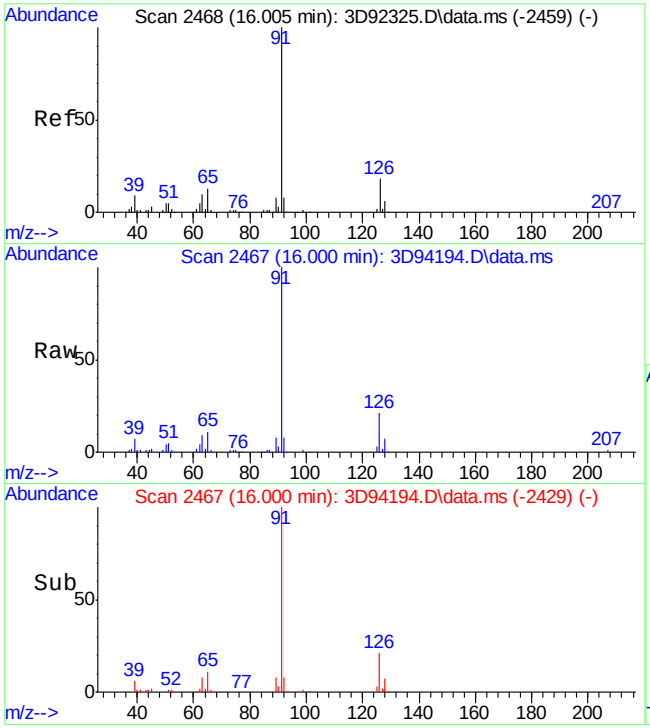


#134
hexachloroethane
Concen: 20.55 ug/L
RT: 16.509 min Scan# 2564
Delta R.T. 0.005 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion:119 Resp: 24511

Ion	Ratio	Lower	Upper
119	100		
117	101.4	71.1	131.1
201	99.1	69.2	129.2

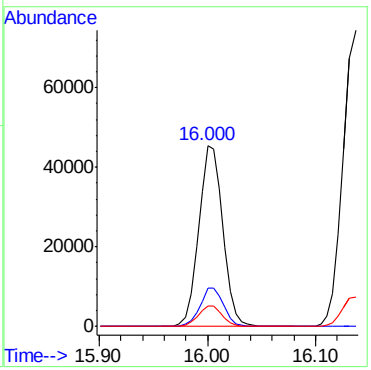




#135
Benzyl chloride
Concen: 21.63 ug/L
RT: 16.000 min Scan# 2467
Delta R.T. 0.000 min
Lab File: 3D94194.D
Acq: 18 Dec 2013 3:39 pm

Tgt Ion: 91 Resp: 70358

Ion	Ratio	Lower	Upper
91	100		
126	20.8	0.0	50.9
65	11.1	0.0	41.0



7.7.6

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3D94194.D M3D4058.M Thu Dec 19 12:37:06 2013 3D Page 61

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94195.D
Acq On : 18 Dec 2013 4:06 pm
Operator : katteric
Sample : icc4058-50
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 19 12:31:42 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.244	65	68659	500.00	ug/L	0.00
4) pentafluorobenzene	9.478	168	178659	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.395	114	245122	50.00	ug/L	0.00
88) chlorobenzene-d5	13.552	117	203020	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.859	152	117796	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.541	113	69500	47.86	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 95.72%			
51) 1,2-dichloroethane-d4 (s)	9.960	65	70447	46.47	ug/L	0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 92.94%			
80) toluene-d8 (s)	12.036	98	239475	49.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.58%			
106) 4-bromofluorobenzene (s)	14.705	95	84417	45.54	ug/L	0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 91.08%			
Target Compounds						Qvalue
2) 1,4-dioxane	11.119	88	15826	1393.27	ug/L	97
3) tertiary butyl alcohol	7.360	59	36704	229.23	ug/L	91
8) chlorodifluoromethane	3.883	51	70834	58.13	ug/L	100
9) dichlorodifluoromethane	3.862	85	90401	57.61	ug/L	99
10) chloromethane	4.203	50	102829	48.28	ug/L	98
11) vinyl chloride	4.450	62	101382	52.76	ug/L	99
12) bromomethane	5.105	94	68930	50.35	ug/L	99
13) chloroethane	5.283	64	48006	53.05	ug/L	97
14) 1,3-butadiene	4.507	54	58657	58.98	ug/L	99
15) vinyl bromide	5.629	106	62166	57.15	ug/L	99
16) trichlorofluoromethane	5.734	101	109233	51.61	ug/L	100
18) ethyl ether	6.143	74	38134	53.81	ug/L	95
21) acrolein	6.411	56	148986	492.99	ug/L	99
22) 1,1-dichloroethene	6.568	61	105028	51.02	ug/L	98
23) acetone	6.631	58	5703	65.46	ug/L	98
24) allyl chloride	7.103	76	40669	49.60	ug/L	94
25) acetonitrile	7.082	40	61764	446.89	ug/L	90
27) iodomethane	6.856	142	140822	48.90	ug/L	99
28) iso-butyl alcohol	9.766	41	22649	485.92	ug/L	99
29) carbon disulfide	6.972	76	251321	47.54	ug/L	99
30) methylene chloride	7.297	84	76677	47.91	ug/L	98
31) methyl acetate	7.082	74	11629	53.92	ug/L	96
32) methyl tert butyl ether	7.601	73	213309	47.01	ug/L	100
33) trans-1,2-dichloroethene	7.658	61	102544	48.91	ug/L	99
34) di-isopropyl ether	8.188	45	238674	48.75	ug/L	96
35) ethyl tert-butyl ether	8.660	59	226530	52.82	ug/L	99
36) 2-butanone	8.932	72	7643	59.45	ug/L	98
37) 1,1-dichloroethane	8.230	63	126355	47.86	ug/L	100
38) chloroprene	8.335	53	98165	54.54	ug/L	98
39) acrylonitrile	7.627	53	135745	266.02	ug/L	98
40) vinyl acetate	8.214	86	11976	63.66	ug/L	100
41) ethyl acetate	8.943	45	9508	54.01	ug/L	75
42) 2,2-dichloropropane	8.964	77	101122	45.34	ug/L	100

M3D4058.M Thu Dec 19 12:41:26 2013 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94195.D
Acq On : 18 Dec 2013 4:06 pm
Operator : katteric
Sample : icc4058-50
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 19 12:31:42 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) cis-1,2-dichloroethene	8.969	61	125481	49.16	ug/L	98
44) propionitrile	9.043	54	101397	524.78	ug/L	91
45) methyl acrylate	9.027	55	76402	56.63	ug/L	99
46) bromochloromethane	9.284	128	42098	53.65	ug/L	98
47) tetrahydrofuran	9.310	42	23879	51.42	ug/L	100
48) chloroform	9.336	83	123189	48.39	ug/L	99
49) Tert-Butyl Formate	9.357	59	68085	54.02	ug/L	100
52) freon 113	6.526	151	54227	60.89	ug/L	95
53) methacrylonitrile	9.221	41	43271	51.43	ug/L	99
54) 1,1,1-trichloroethane	9.583	97	107948	49.52	ug/L	98
56) 2,2,4-Trimethylpentane	10.007	57	278370	58.36	ug/L	100
57) tert-amyl methyl ether	10.044	73	225047	51.14	ug/L	98
59) epichlorohydrin	11.664	57	33039	274.70	ug/L	99
60) n-butyl alcohol	10.521	56	88700	2559.40	ug/L	100
61) cyclohexane	9.646	84	106757	50.14	ug/L	99
62) carbon tetrachloride	9.782	117	98439	51.46	ug/L	99
63) 1,1-dichloropropene	9.761	75	94083	49.50	ug/L	98
64) hexane	7.942	57	83291	59.84	ug/L	97
65) benzene	10.023	78	287923	48.12	ug/L	99
66) heptane	10.175	57	50147	59.83	ug/L	99
67) isopropyl acetate	9.939	43	129547	51.51	ug/L	99
68) 1,2-dichloroethane	10.049	62	86212	48.82	ug/L	99
69) trichloroethene	10.741	95	71944	48.78	ug/L	100
70) ethyl acrylate	10.736	55	87402	58.06	ug/L	99
72) 2-nitropropane	11.528	41	25277	48.15	ug/L	98
73) 2-chloroethyl vinyl ether	11.533	63	232664	262.45	ug/L	99
74) methyl methacrylate	11.003	41	103218	48.92	ug/L	98
75) 1,2-dichloropropane	11.009	63	72364	50.37	ug/L	98
76) methylcyclohexane	10.946	83	115355	56.45	ug/L	98
77) dibromomethane	11.171	93	45840	50.90	ug/L	97
78) bromodichloromethane	11.302	83	94215	51.68	ug/L	98
79) cis-1,3-dichloropropene	11.753	75	115784	50.10	ug/L	99
81) 4-methyl-2-pentanone	11.842	58	26667	59.27	ug/L	99
82) toluene	12.110	92	172379	50.90	ug/L	99
83) 3-methyl-1-butanol	11.863	70	33318	997.09	ug/L	100
84) trans-1,3-dichloropropene	12.314	75	102926	50.58	ug/L	98
85) ethyl methacrylate	12.299	69	85317	55.77	ug/L	98
86) 1,1,2-trichloroethane	12.529	83	53084	51.67	ug/L	97
87) 2-hexanone	12.697	58	23088	59.62	ug/L	95
89) tetrachloroethene	12.692	166	83828	51.15	ug/L	99
90) 1,3-dichloropropane	12.713	76	96558	49.24	ug/L	98
91) butyl acetate	12.765	56	41454	54.41	ug/L	98
92) 3,3-Dimethyl-1-Butanol	12.865	57	62733	450.13	ug/L	99
93) dibromochloromethane	12.980	129	79920	51.39	ug/L	96
94) 1,2-dibromoethane	13.127	107	66634	50.49	ug/L	97
96) chlorobenzene	13.583	112	188601	49.23	ug/L	100
97) 1,1,1,2-tetrachloroethane	13.641	131	75580	50.14	ug/L	98
98) ethylbenzene	13.630	91	310933	49.02	ug/L	100
99) m,p-xylene	13.735	106	242476	100.18	ug/L	100
100) o-xylene	14.155	106	121842	49.54	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94195.D
Acq On : 18 Dec 2013 4:06 pm
Operator : katteric
Sample : icc4058-50
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 19 12:31:42 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration

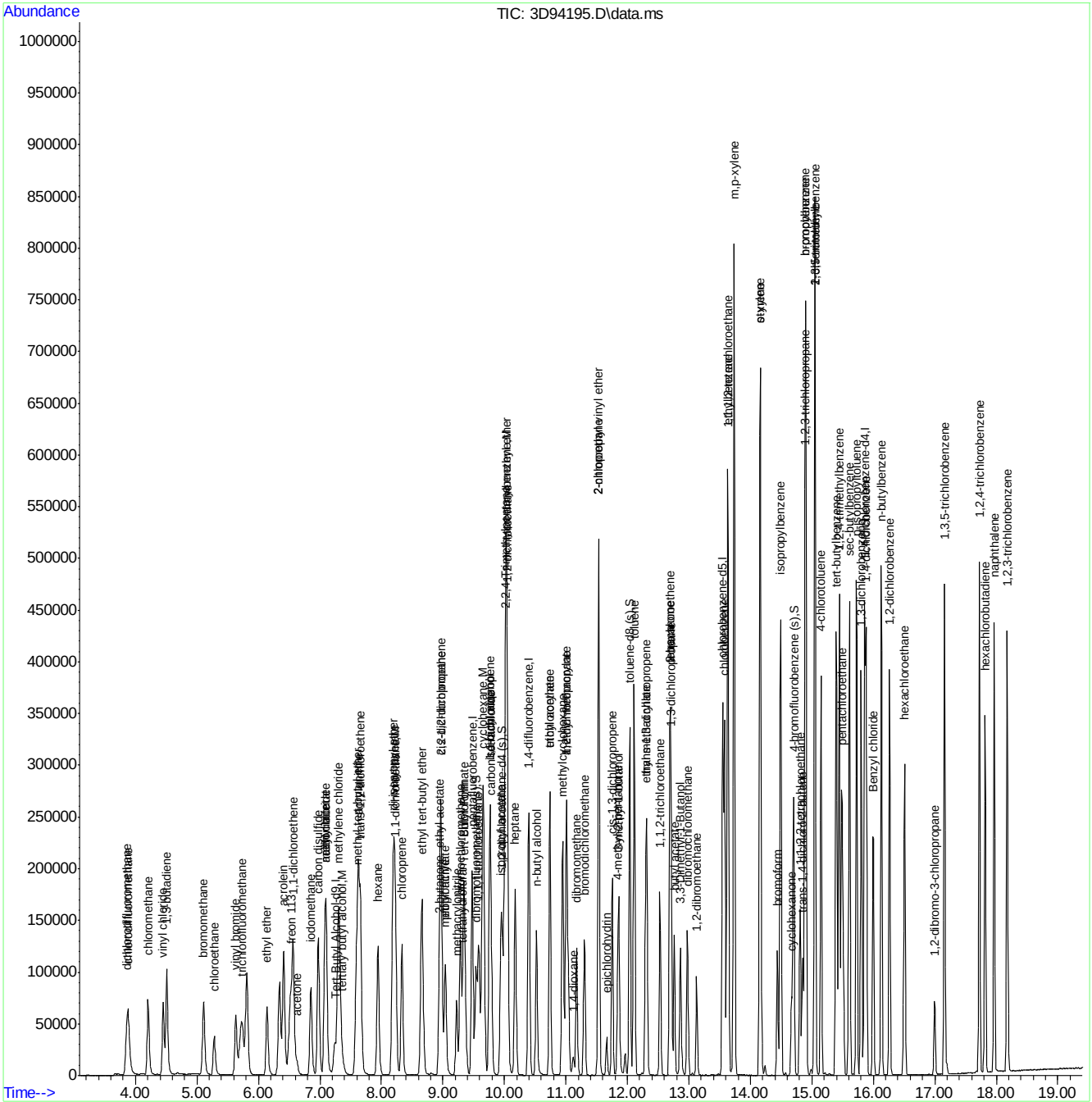
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
101) styrene	14.165	104	206569	52.64 ug/L	99
103) bromoform	14.438	173	60340	51.38 ug/L	99
105) isopropylbenzene	14.490	105	317308	51.44 ug/L	99
107) bromobenzene	14.899	156	89762	49.48 ug/L	99
108) cyclohexanone	14.668	55	32514	459.23 ug/L	99
109) 1,1,2,2-tetrachloroethane	14.810	83	87674	45.35 ug/L	98
110) trans-1,4-dichloro-2-b...	14.852	53	20558	52.38 ug/L	98
111) 1,2,3-trichloropropane	14.883	110	20424	51.42 ug/L	100
112) n-propylbenzene	14.899	91	351871	49.82 ug/L	100
114) 2-chlorotoluene	15.051	126	78470	50.66 ug/L	99
115) 4-chlorotoluene	15.151	126	79352	50.92 ug/L	95
116) 1,3,5-trimethylbenzene	15.051	105	265087	50.75 ug/L	100
117) tert-butylbenzene	15.397	119	230650	50.79 ug/L	100
118) pentachloroethane	15.486	167	62970	52.63 ug/L	96
119) 1,2,4-trimethylbenzene	15.444	105	263854	51.22 ug/L	99
120) sec-butylbenzene	15.612	105	352321	51.25 ug/L	99
121) 1,3-dichlorobenzene	15.801	146	169953	49.16 ug/L	100
122) p-isopropyltoluene	15.727	119	293001	51.34 ug/L	100
123) 1,4-dichlorobenzene	15.885	146	172609	47.25 ug/L	100
124) 1,2-dichlorobenzene	16.267	146	171174	48.00 ug/L	99
126) n-butylbenzene	16.131	92	150874	52.65 ug/L	99
128) 1,2-dibromo-3-chloropr...	16.996	157	21663	51.92 ug/L	96
129) 1,3,5-trichlorobenzene	17.159	180	158459	48.09 ug/L	99
130) 1,2,4-trichlorobenzene	17.725	180	151817	51.81 ug/L	100
131) hexachlorobutadiene	17.819	225	81257	52.17 ug/L	99
132) naphthalene	17.966	128	309551	49.46 ug/L	99
133) 1,2,3-trichlorobenzene	18.176	180	138399	48.62 ug/L	98
134) hexachloroethane	16.509	119	63228	52.95 ug/L	99
135) Benzyl chloride	16.000	91	164686	50.56 ug/L	99

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

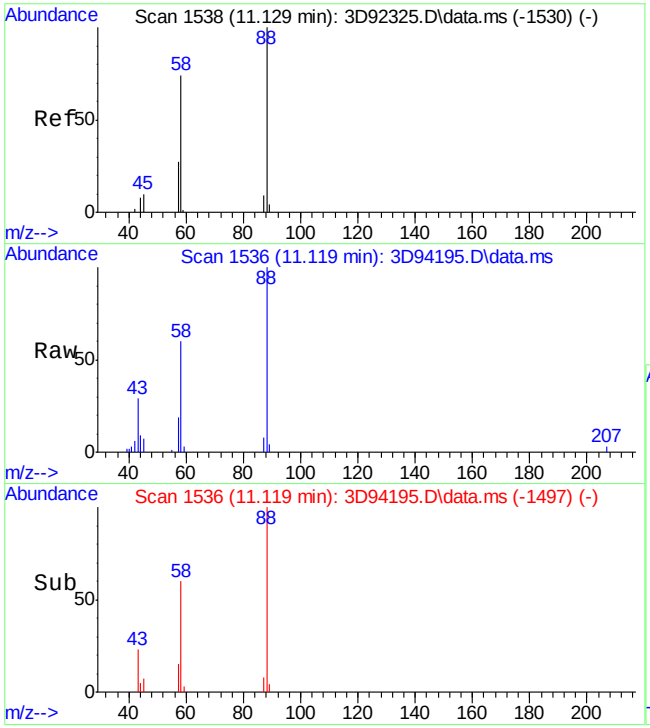
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94195.D
Acq On : 18 Dec 2013 4:06 pm
Operator : katteric
Sample : icc4058-50
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 19 12:31:42 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 15:25:52 2013
Response via : Initial Calibration



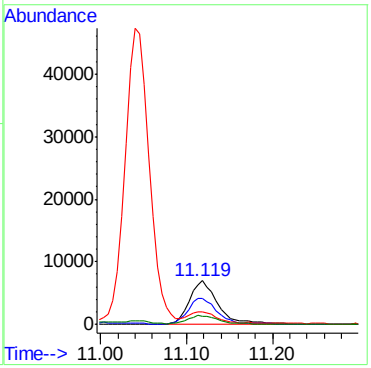
M3D4058.M Thu Dec 19 12:41:26 2013 3D Page: 4

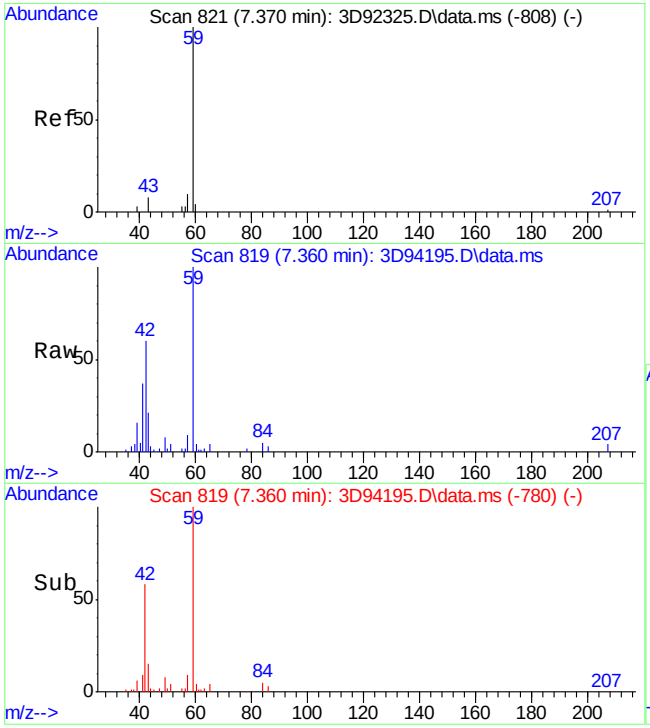


#2
1,4-dioxane
Concen: 1393.27 ug/L
RT: 11.119 min Scan# 1536
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 88 Resp: 15826

Ion	Ratio	Lower	Upper
88	100		
58	62.0	33.2	93.2
43	35.6	1.5	61.5
57	21.8	0.0	50.6

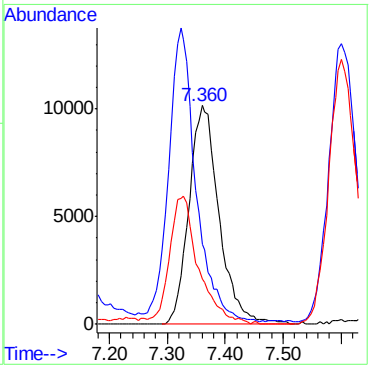


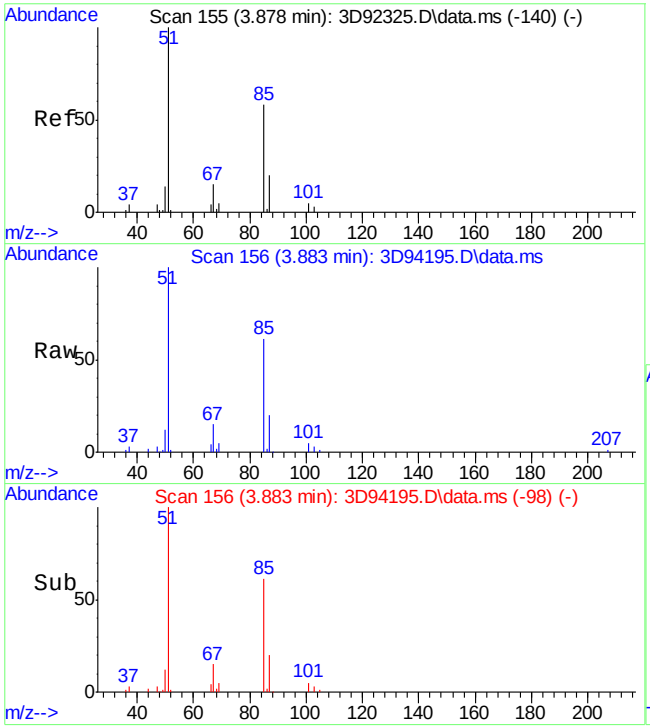


#3
tertiary butyl alcohol
Concen: 229.23 ug/L
RT: 7.360 min Scan# 819
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 59 Resp: 36704

Ion	Ratio	Lower	Upper
59	100		
41	36.5	13.6	73.6
43	20.7	0.0	53.7

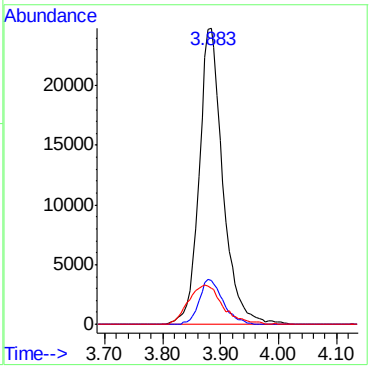


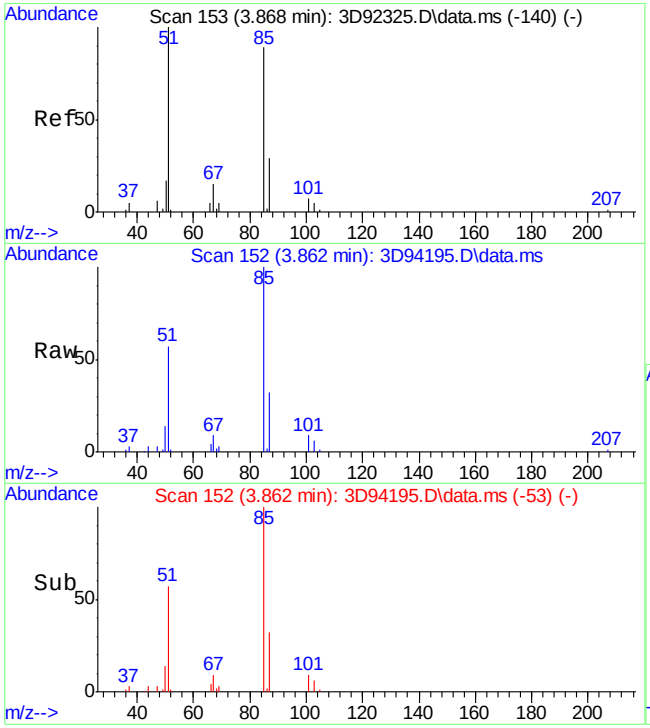


#8
chlorodifluoromethane
Concen: 58.13 ug/L
RT: 3.883 min Scan# 156
Delta R.T. 0.010 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 51 Resp: 70834

Ion	Ratio	Lower	Upper
51	100		
67	14.9	0.0	44.7
50	12.2	0.0	42.3

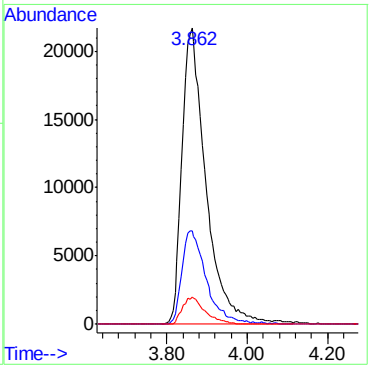


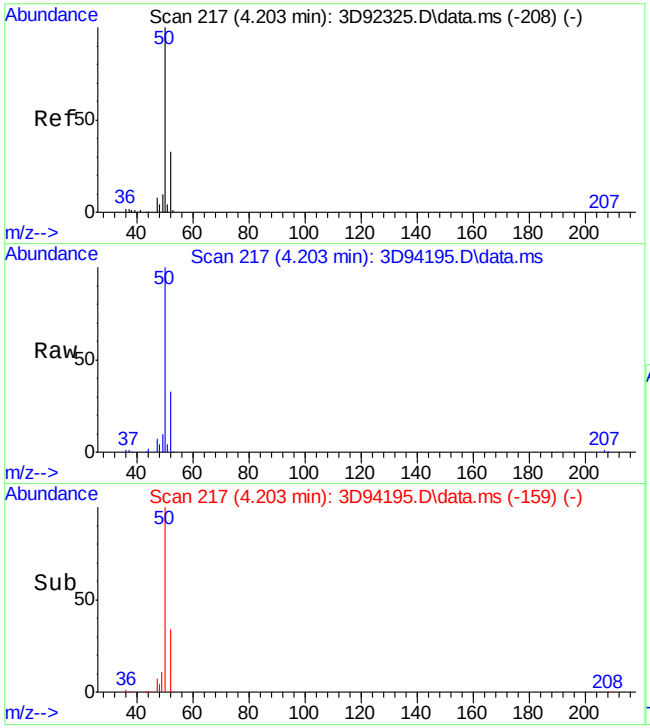


#9
dichlorodifluoromethane
Concen: 57.61 ug/L
RT: 3.862 min Scan# 152
Delta R.T. 0.010 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 85 Resp: 90401

Ion	Ratio	Lower	Upper
85	100		
87	31.5	1.6	61.6
101	9.0	0.0	38.1

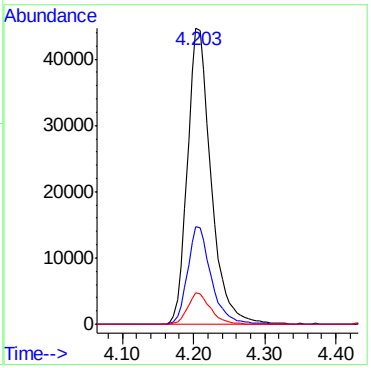


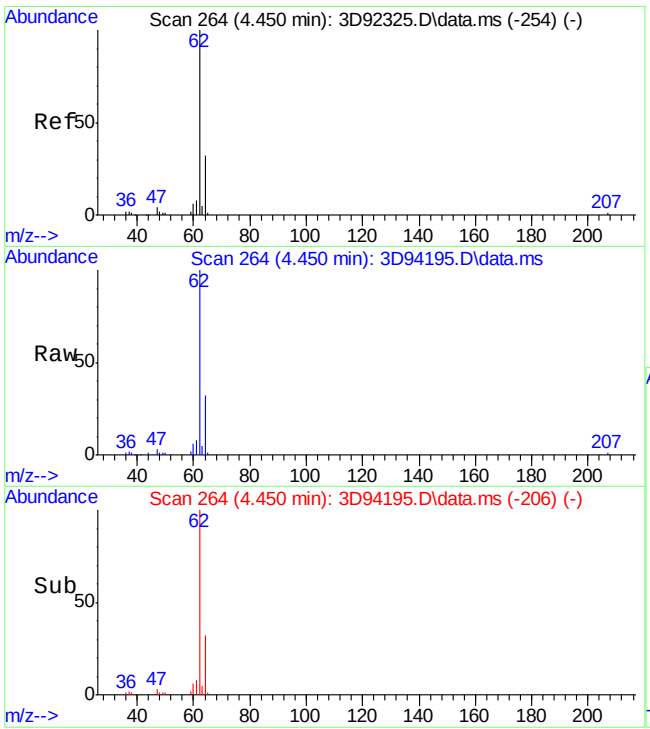


#10
chloromethane
Concen: 48.28 ug/L
RT: 4.203 min Scan# 217
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 50 Resp: 102829

Ion	Ratio	Lower	Upper
50	100		
52	32.9	1.8	61.8
49	10.5	0.0	39.9

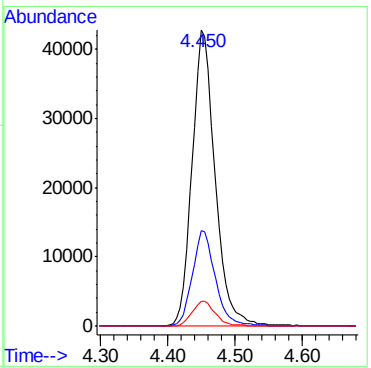


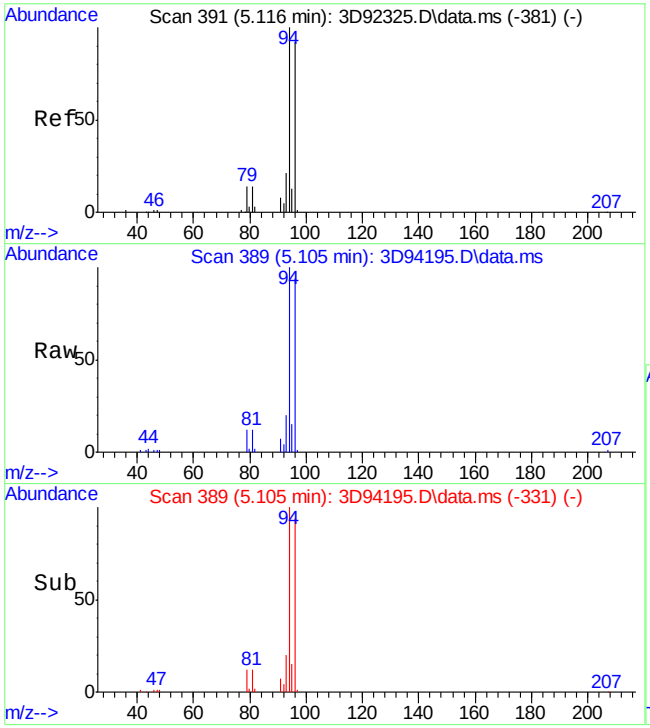


#11
vinyl chloride
Concen: 52.76 ug/L
RT: 4.450 min Scan# 264
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 62 Resp: 101382

Ion	Ratio	Lower	Upper
62	100		
64	32.3	2.0	62.0
61	8.3	0.0	39.1

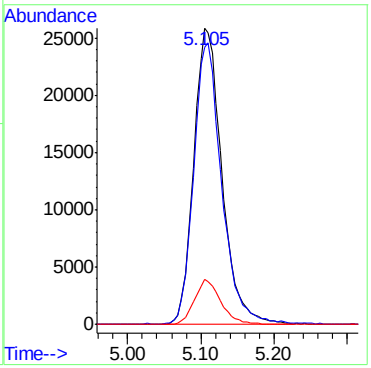


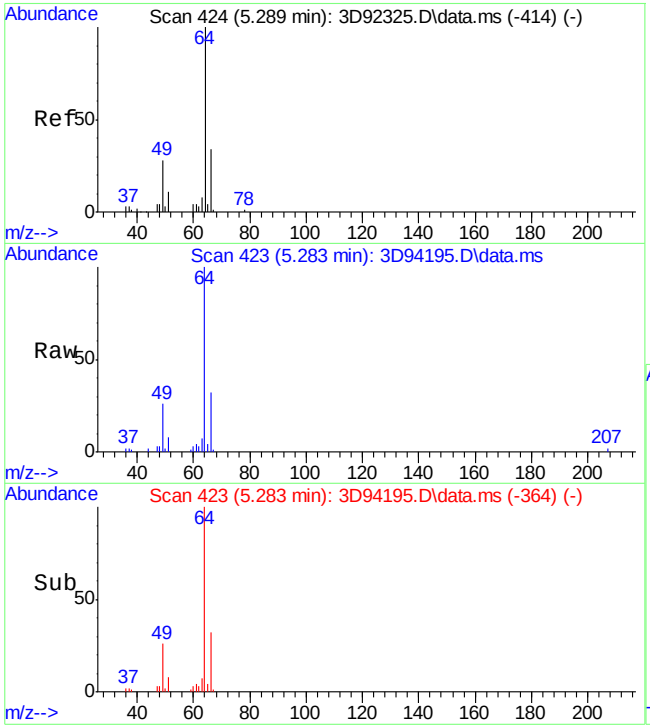


#12
bromomethane
Concen: 50.35 ug/L
RT: 5.105 min Scan# 389
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 94 Resp: 68930

Ion	Ratio	Lower	Upper
94	100		
96	93.5	63.8	123.8
95	15.2	0.0	43.9

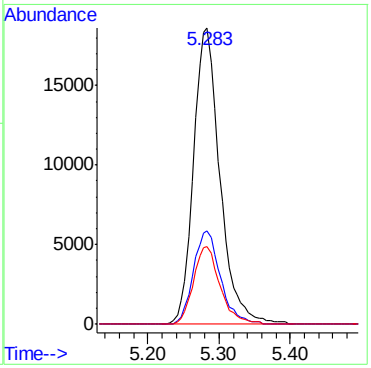




#13
chloroethane
Concen: 53.05 ug/L
RT: 5.283 min Scan# 423
Delta R.T. 0.011 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 64 Resp: 48006

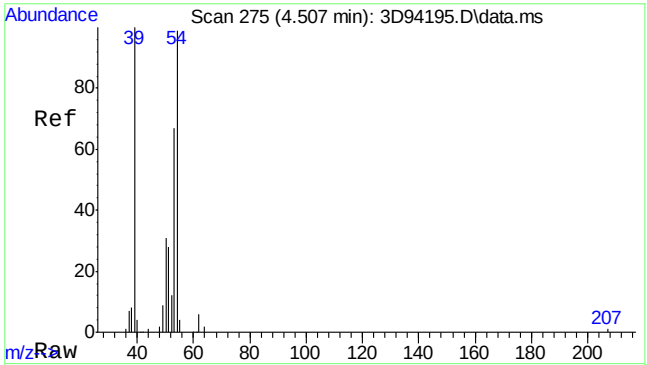
Ion	Ratio	Lower	Upper
64	100		
66	31.6	4.0	64.0
49	26.3	0.0	57.1



7.2.7

7

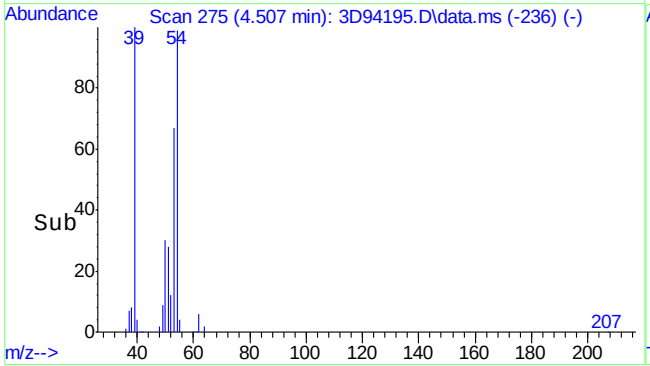
3D94195.D M3D4058.M Thu Dec 19 12:41:27 2013 3D Page 8

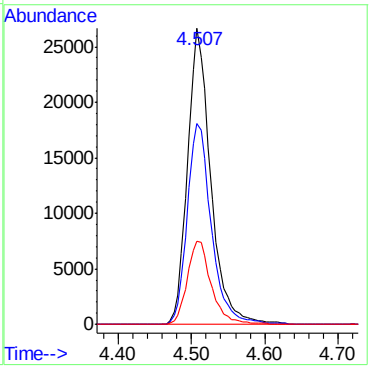


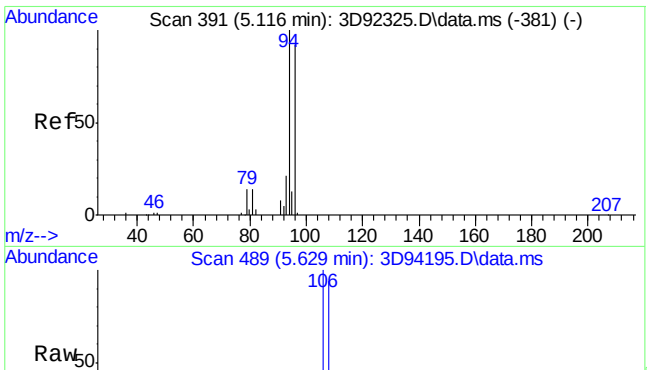
#14
1,3-butadiene
Concen: 58.98 ug/L
RT: 4.507 min Scan# 275
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 54 Resp: 58657

Ion	Ratio	Lower	Upper
54	100		
53	70.6	56.6	85.0
51	29.0	23.8	35.8



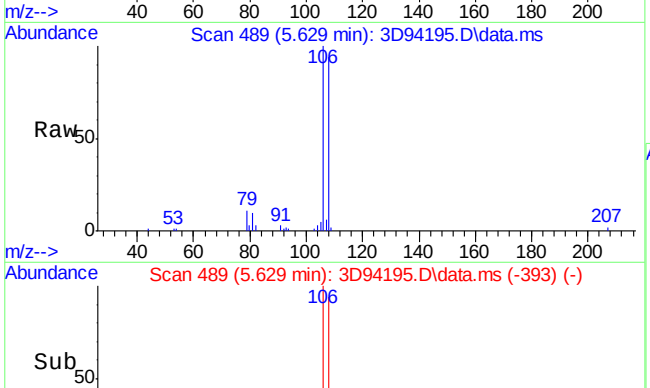


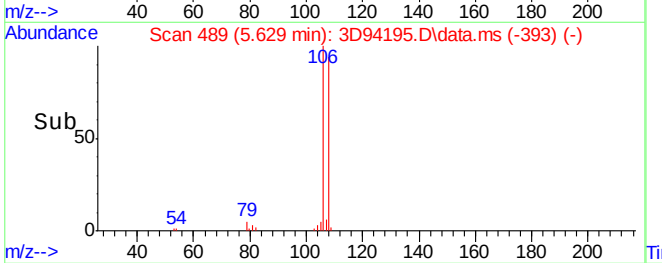


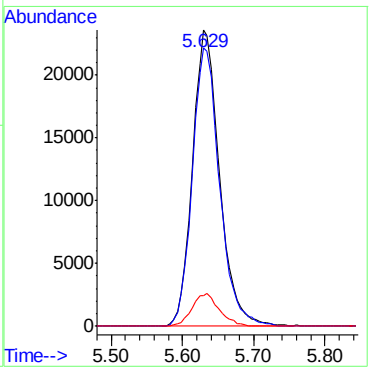
#15
vinyl bromide
Concen: 57.15 ug/L
RT: 5.629 min Scan# 489
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

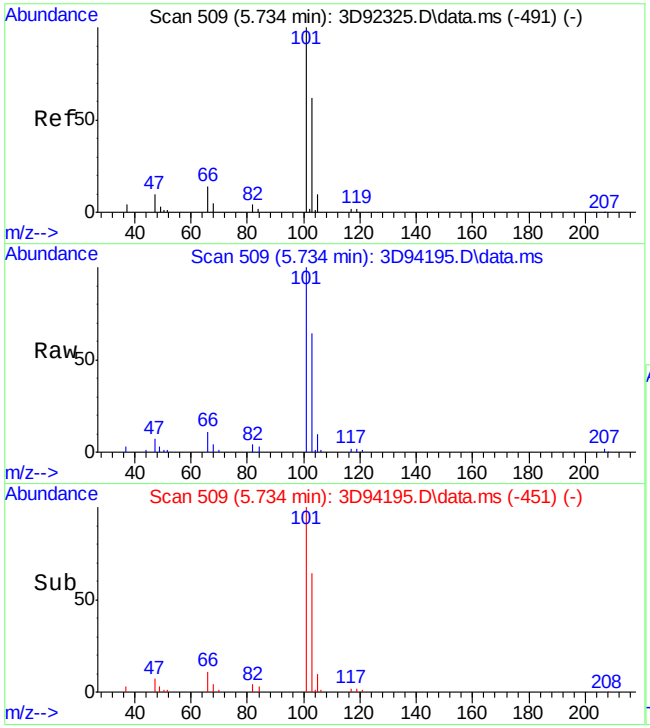
Tgt Ion:106 Resp: 62166

Ion	Ratio	Lower	Upper
106	100		
108	94.9	64.3	124.3
81	11.0	0.0	40.6





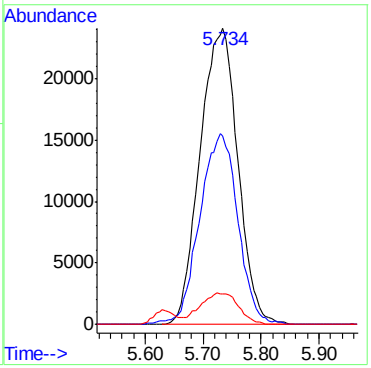


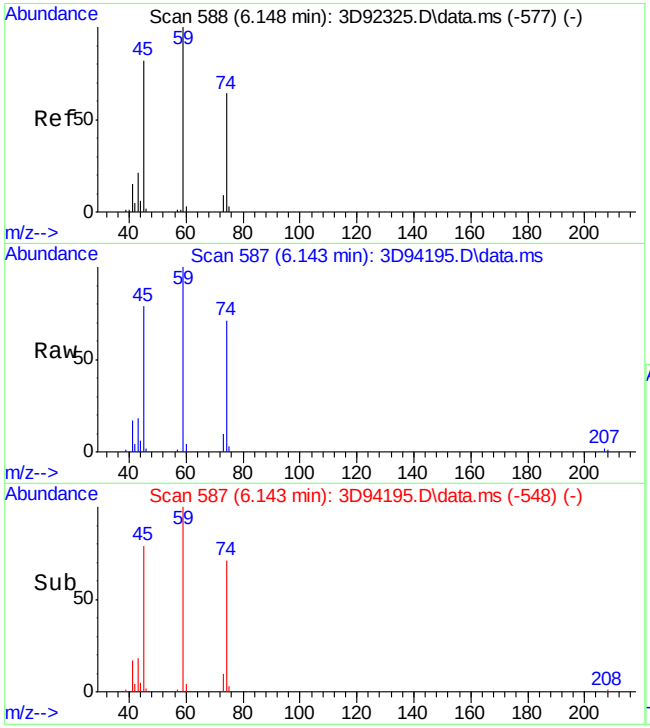


#16
trichlorofluoromethane
Concen: 51.61 ug/L
RT: 5.734 min Scan# 509
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:101 Resp: 109233

Ion	Ratio	Lower	Upper
101	100		
103	63.8	33.7	93.7
105	10.4	0.0	40.4

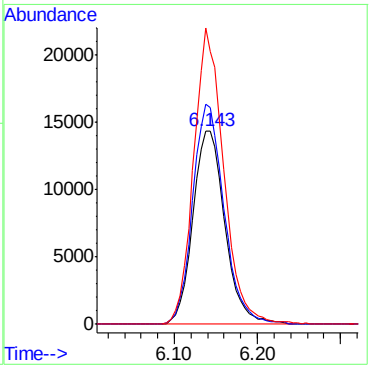


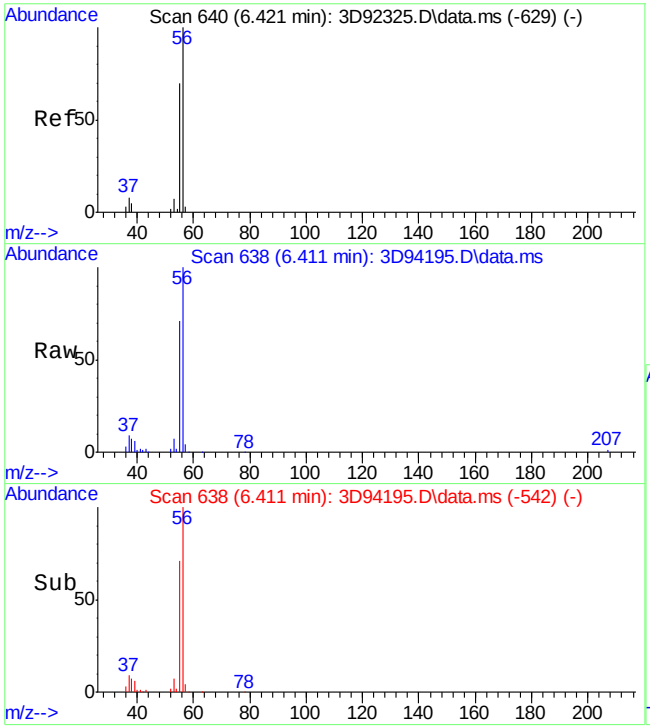


#18
ethyl ether
Concen: 53.81 ug/L
RT: 6.143 min Scan# 587
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 74 Resp: 38134

Ion	Ratio	Lower	Upper
74	100		
45	111.7	84.3	144.3
59	140.6	120.2	180.2

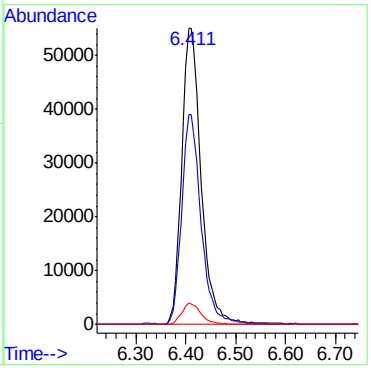


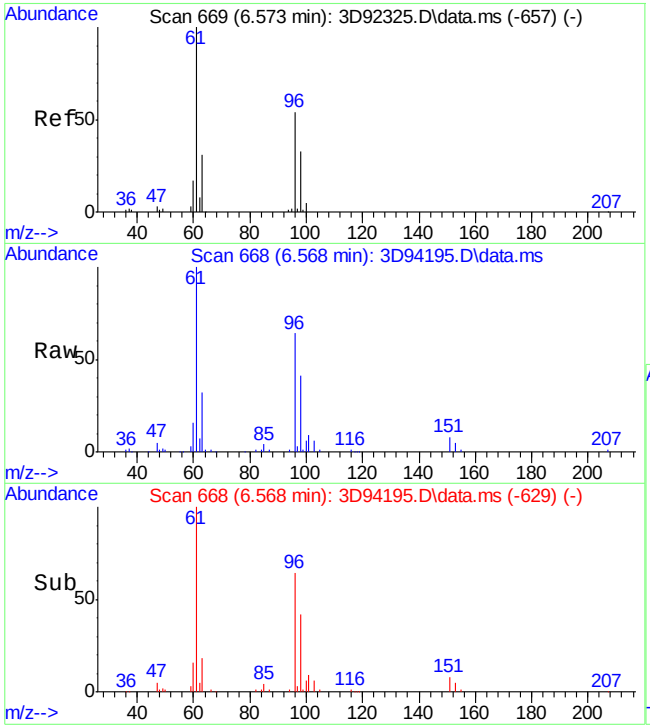


#21
acrolein
Concen: 492.99 ug/L
RT: 6.411 min Scan# 638
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 56 Resp: 148986

Ion	Ratio	Lower	Upper
56	100		
55	70.8	41.4	101.4
53	7.0	0.0	37.0

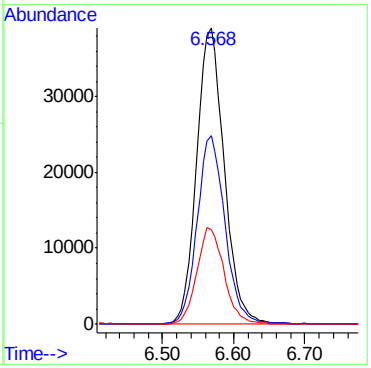


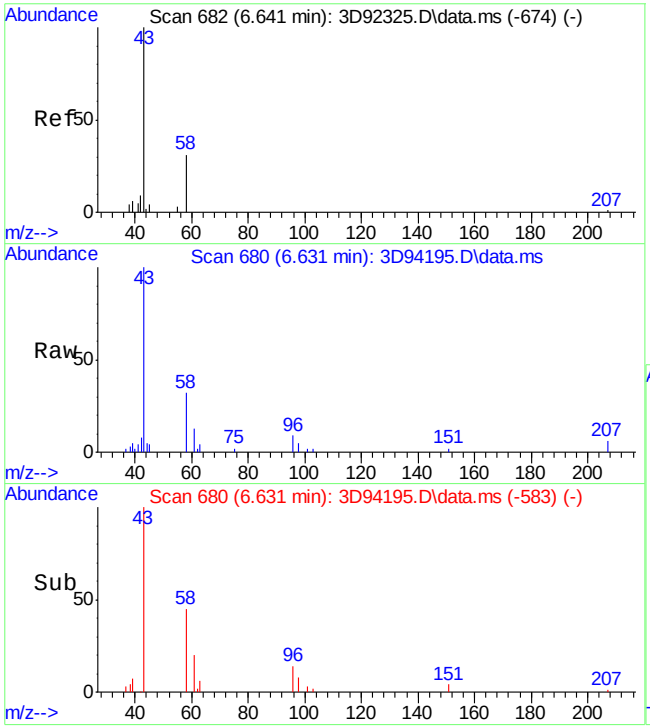


#22
1,1-dichloroethene
Concen: 51.02 ug/L
RT: 6.568 min Scan# 668
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 61 Resp: 105028

Ion	Ratio	Lower	Upper
61	100		
96	63.6	35.0	95.0
63	31.8	2.3	62.3

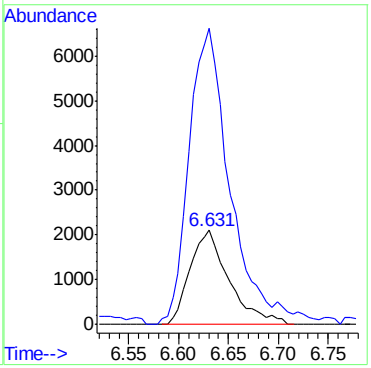


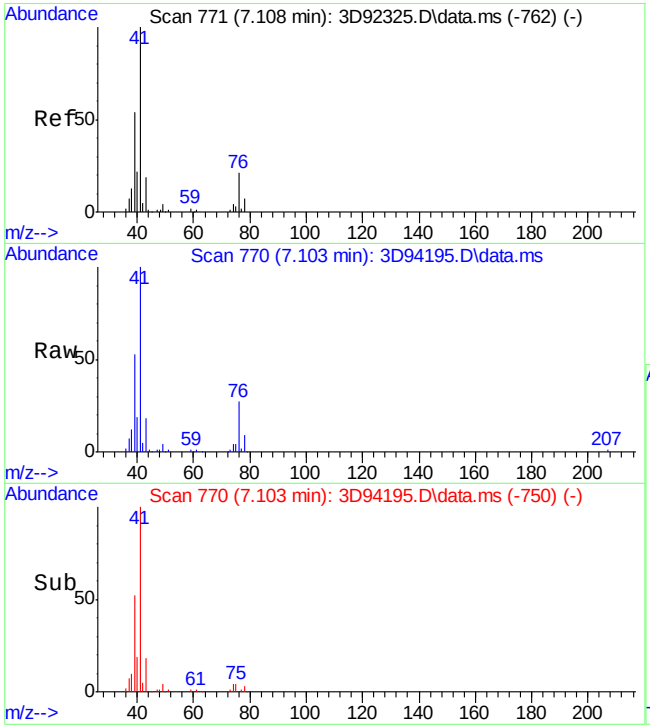


#23
acetone
Concen: 65.46 ug/L
RT: 6.631 min Scan# 680
Delta R.T. 0.011 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 58 Resp: 5703

Ion	Ratio	Lower	Upper
58	100		
43	315.6	281.3	341.3

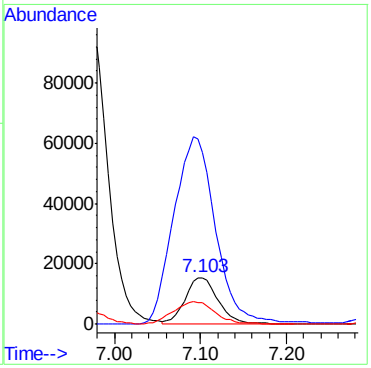


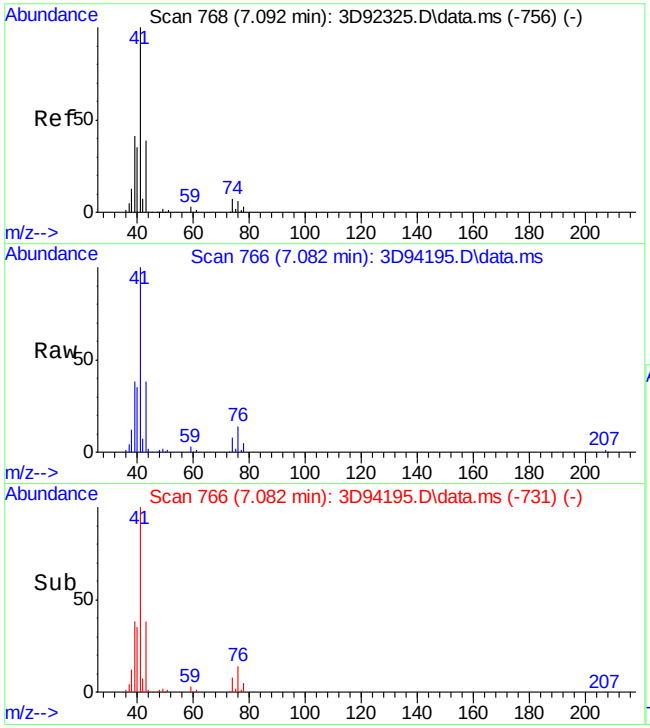


#24
allyl chloride
Concen: 49.60 ug/L
RT: 7.103 min Scan# 770
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 76 Resp: 40669

Ion	Ratio	Lower	Upper
76	100		
41	366.7	352.2	412.2
38	44.5	13.8	73.8

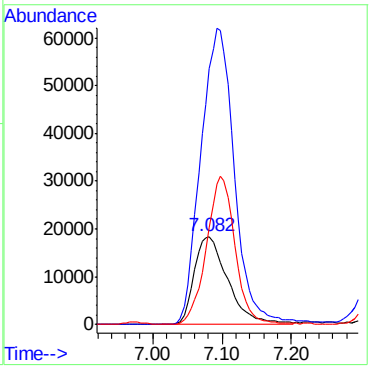


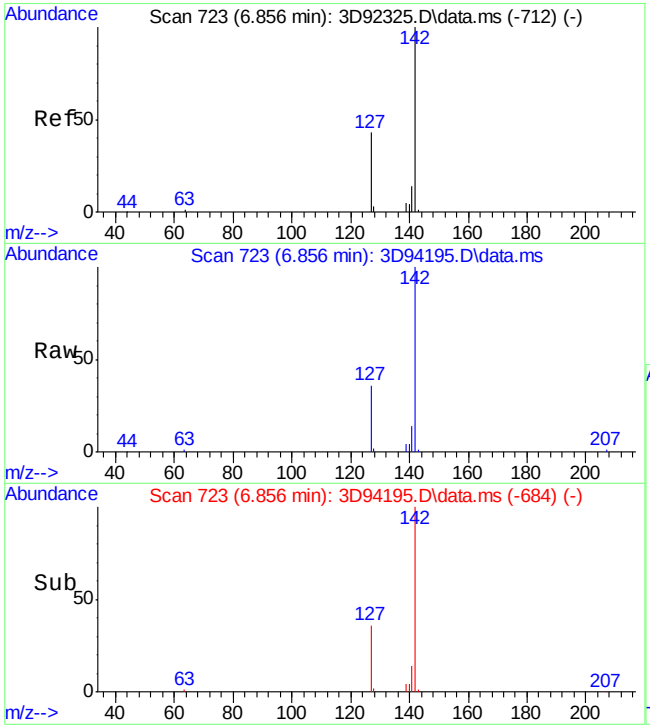


#25
acetonitrile
Concen: 446.89 ug/L
RT: 7.082 min Scan# 766
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 40 Resp: 61764

Ion	Ratio	Lower	Upper
40	100		
41	289.7	246.1	306.1
39	109.2	62.7	122.7

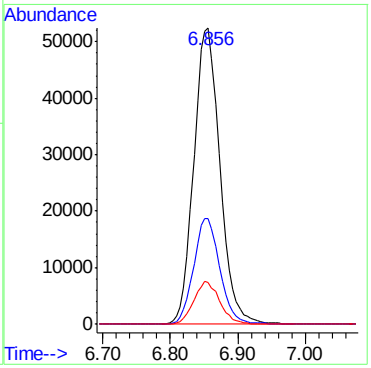


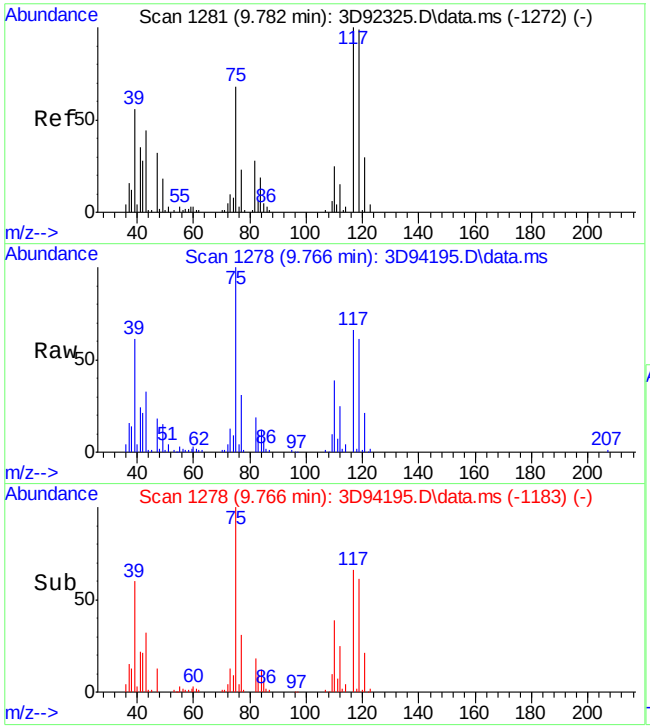


#27
iodomethane
Concen: 48.90 ug/L
RT: 6.856 min Scan# 723
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:142 Resp: 140822

Ion	Ratio	Lower	Upper
142	100		
127	35.6	6.0	66.0
141	14.2	0.0	44.5

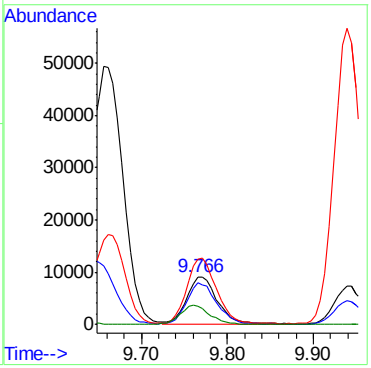


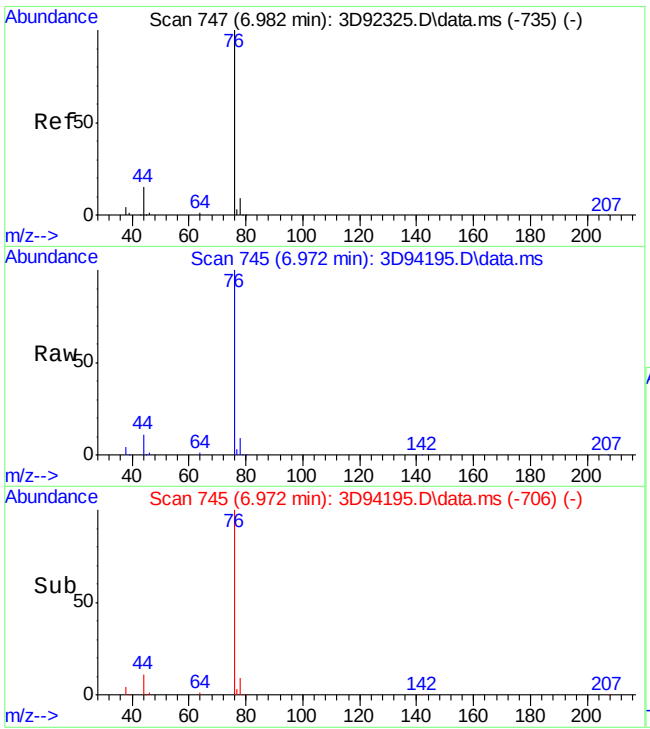


#28
iso-butyl alcohol
Concen: 485.92 ug/L
RT: 9.766 min Scan# 1278
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 41 Resp: 22649

Ion	Ratio	Lower	Upper
41	100		
42	87.2	56.4	116.4
43	135.0	104.5	164.5
74	38.4	4.6	64.6

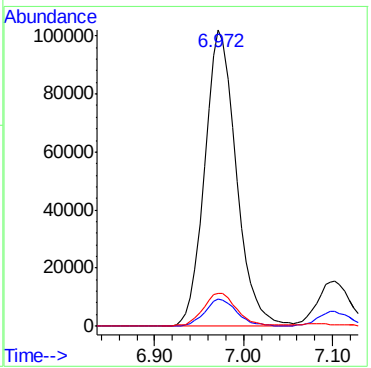


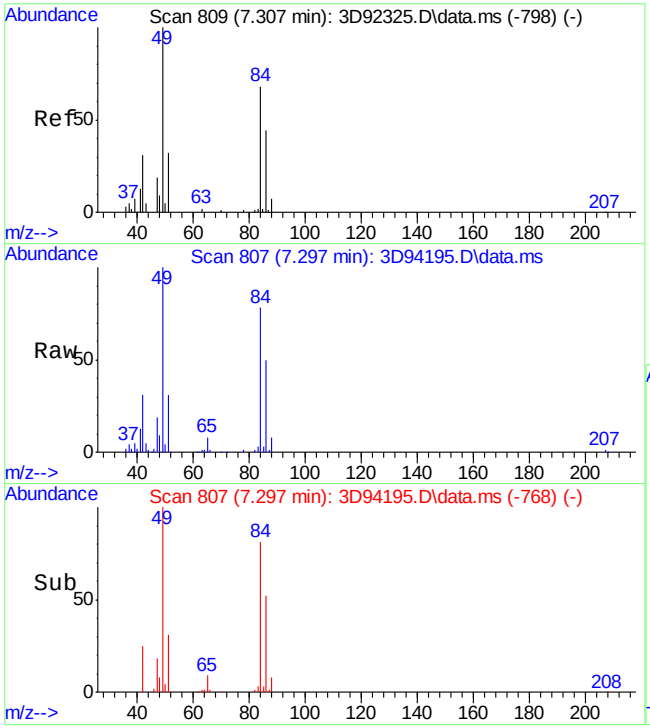


#29
carbon disulfide
Concen: 47.54 ug/L
RT: 6.972 min Scan# 745
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 76 Resp: 251321

Ion	Ratio	Lower	Upper
76	100		
78	9.1	0.0	39.2
44	10.9	0.0	41.2

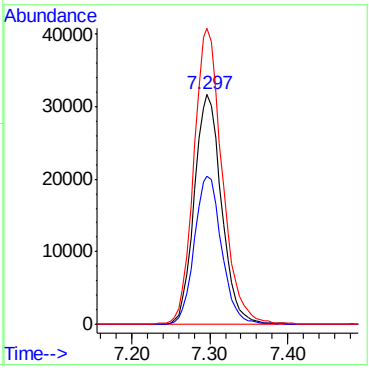


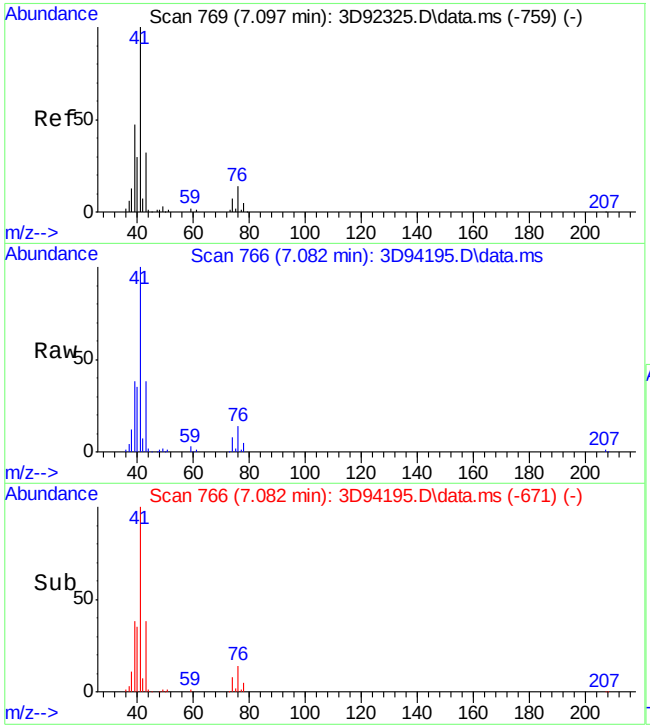


#30
methylene chloride
Concen: 47.91 ug/L
RT: 7.297 min Scan# 807
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 84 Resp: 76677

Ion	Ratio	Lower	Upper
84	100		
86	64.4	46.3	86.1
49	128.2	91.4	169.8

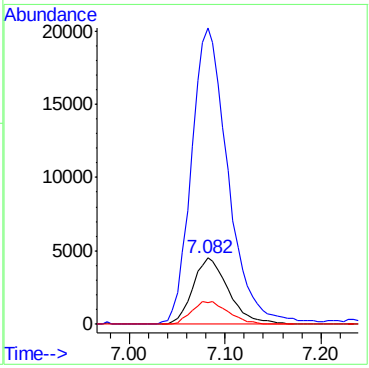


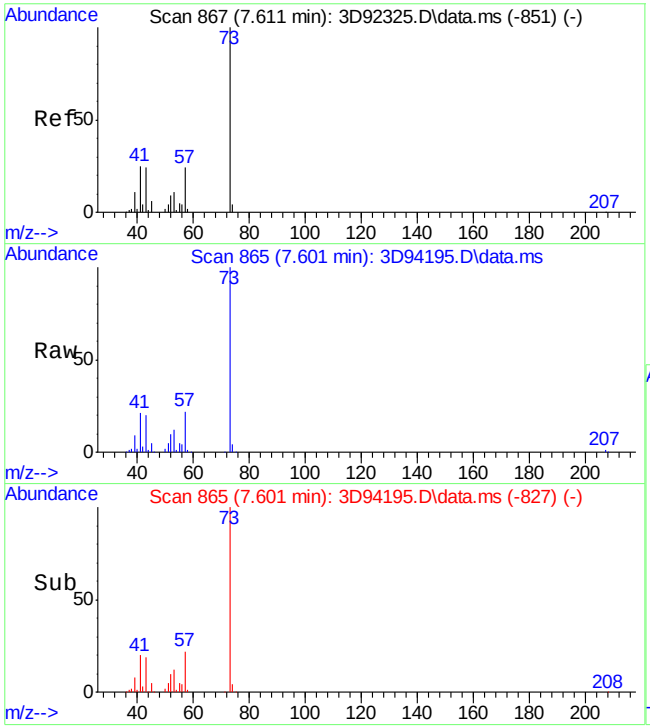


#31
methyl acetate
Concen: 53.92 ug/L
RT: 7.082 min Scan# 766
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 74 Resp: 11629

Ion	Ratio	Lower	Upper
74	100		
43	461.4	443.2	503.2
59	34.4	3.6	63.6

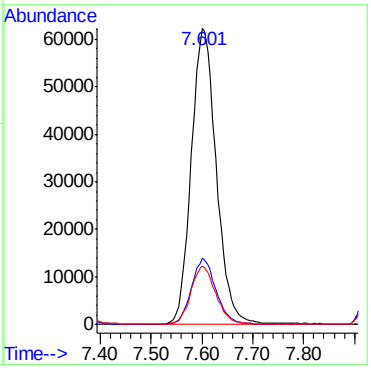


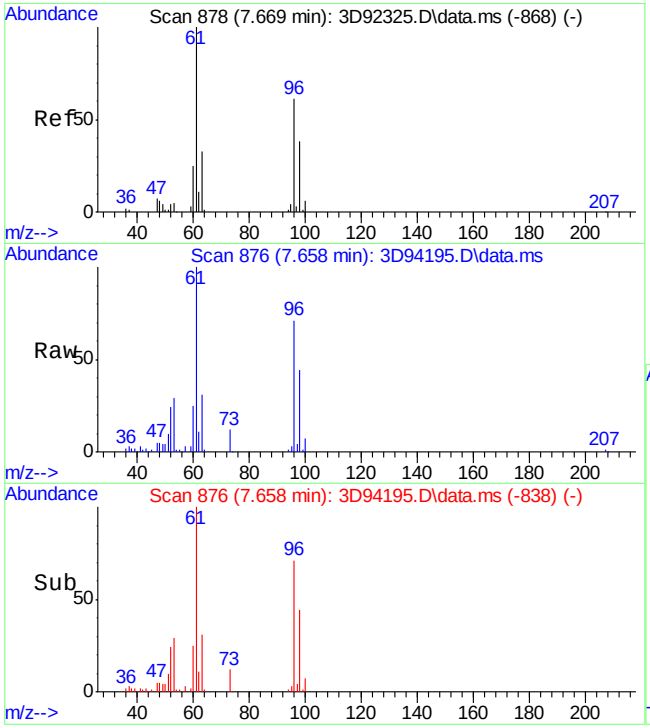


#32
methyl tert butyl ether
Concen: 47.01 ug/L
RT: 7.601 min Scan# 865
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 73 Resp: 213309

Ion	Ratio	Lower	Upper
73	100		
57	22.4	0.0	52.5
43	19.7	0.0	49.9

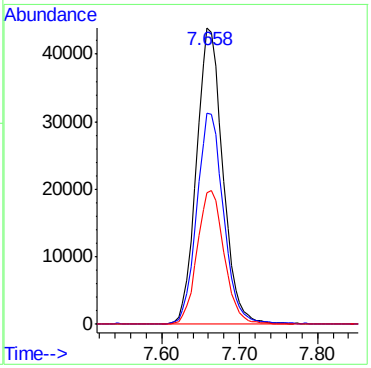


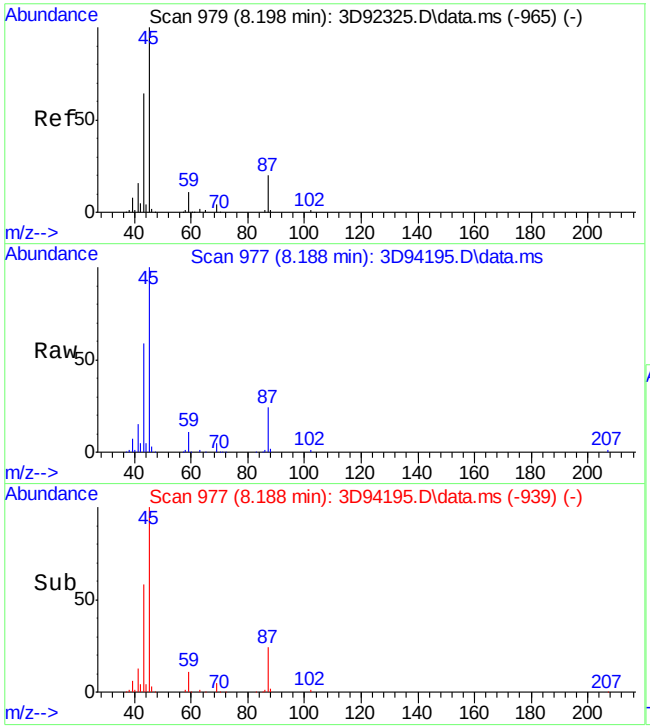


#33
trans-1,2-dichloroethene
Concen: 48.91 ug/L
RT: 7.658 min Scan# 876
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 61 Resp: 102544

Ion	Ratio	Lower	Upper
61	100		
96	71.4	49.6	92.0
98	44.3	31.6	58.8

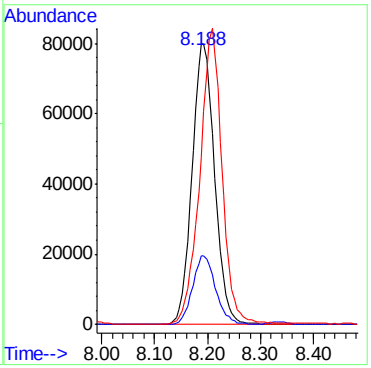


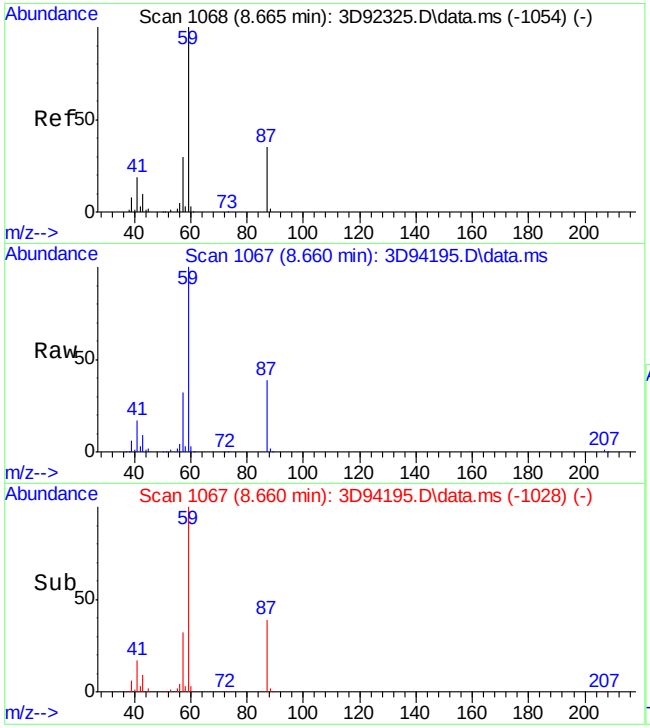


#34
di-isopropyl ether
Concen: 48.75 ug/L
RT: 8.188 min Scan# 977
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 45 Resp: 238674

Ion	Ratio	Lower	Upper
45	100		
87	24.3	0.0	53.7
43	59.5	33.1	93.1

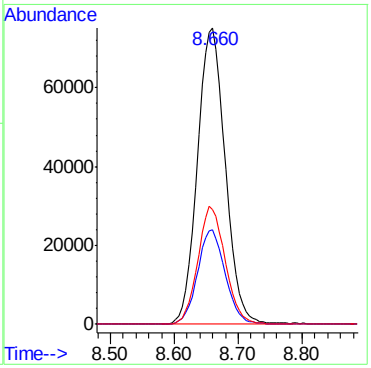


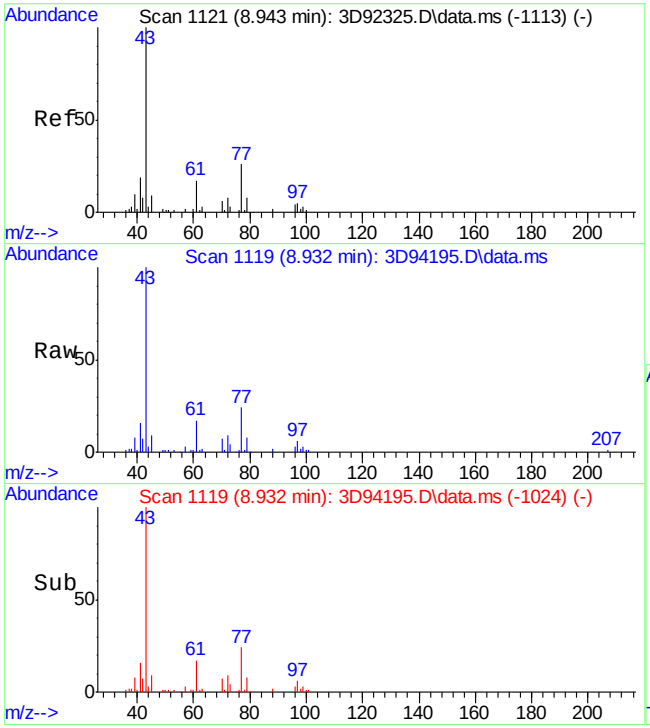


#35
ethyl tert-butyl ether
Concen: 52.82 ug/L
RT: 8.660 min Scan# 1067
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 59 Resp: 226530

Ion	Ratio	Lower	Upper
59	100		
57	31.9	1.0	61.0
87	38.8	8.7	68.7

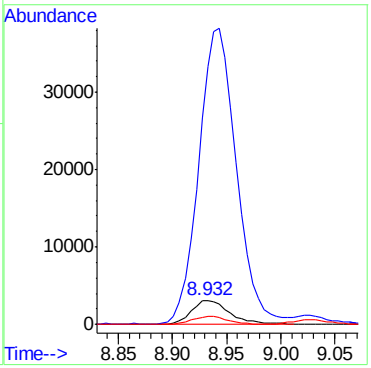


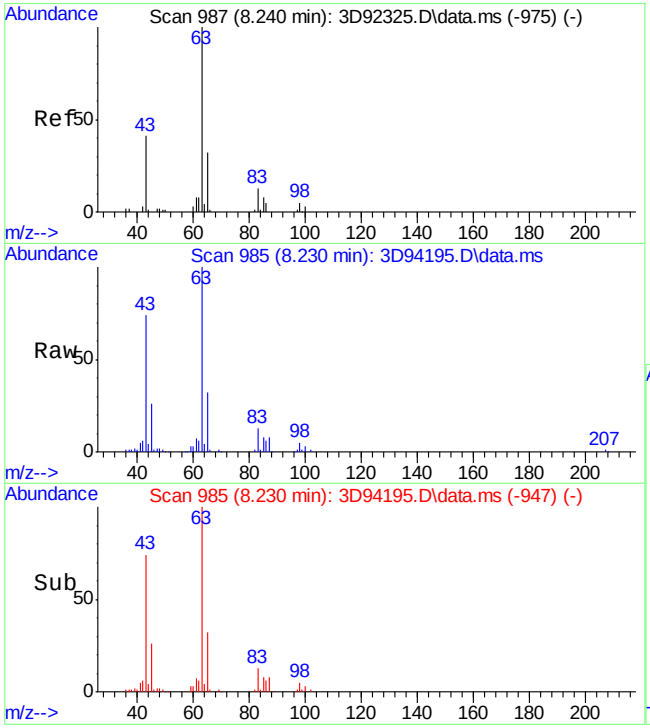


#36
2-butanone
Concen: 59.45 ug/L
RT: 8.932 min Scan# 1119
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 72 Resp: 7643

Ion	Ratio	Lower	Upper
72	100		
43	1223.0	849.2	1577.2
57	29.8	20.6	38.2

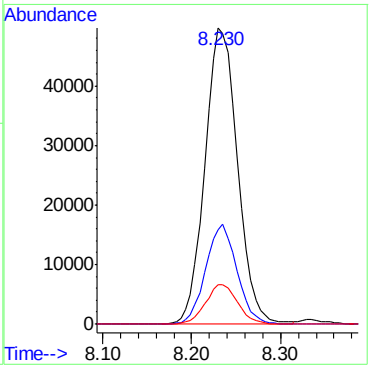


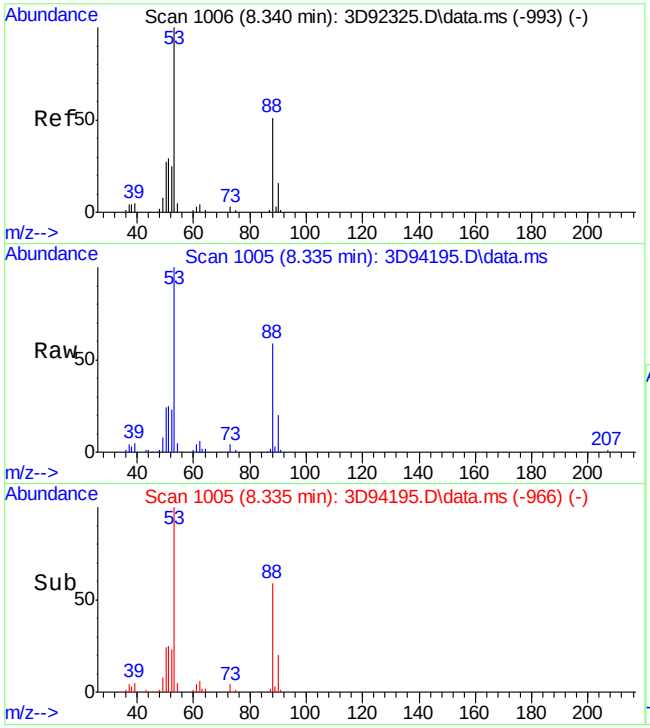


#37
1,1-dichloroethane
Concen: 47.86 ug/L
RT: 8.230 min Scan# 985
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 63 Resp: 126355

Ion	Ratio	Lower	Upper
63	100		
65	32.0	1.9	61.9
83	13.2	0.0	43.2

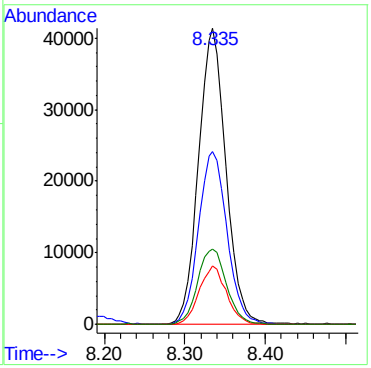


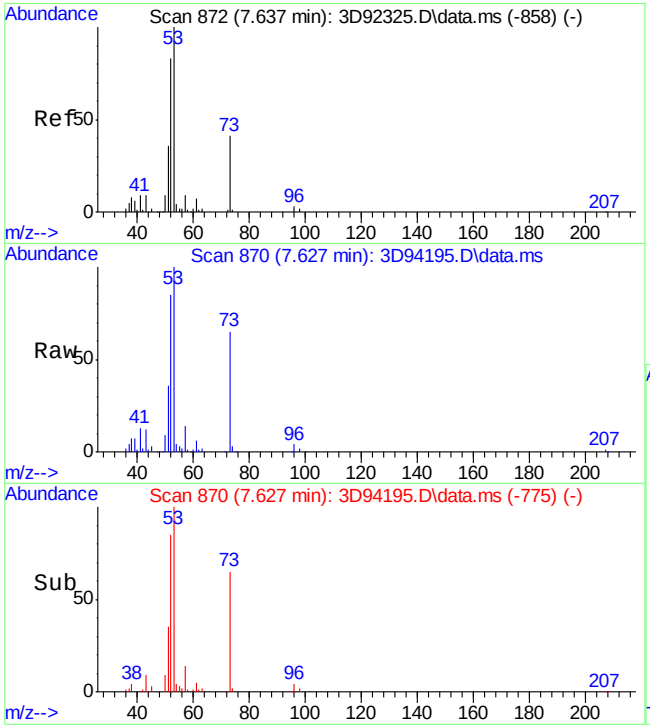


#38
chloroprene
Concen: 54.54 ug/L
RT: 8.335 min Scan# 1005
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 53 Resp: 98165

Ion	Ratio	Lower	Upper
53	100		
88	58.5	31.0	91.0
90	19.6	0.0	49.8
51	25.5	0.0	56.5

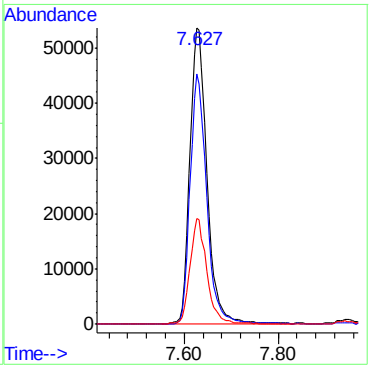


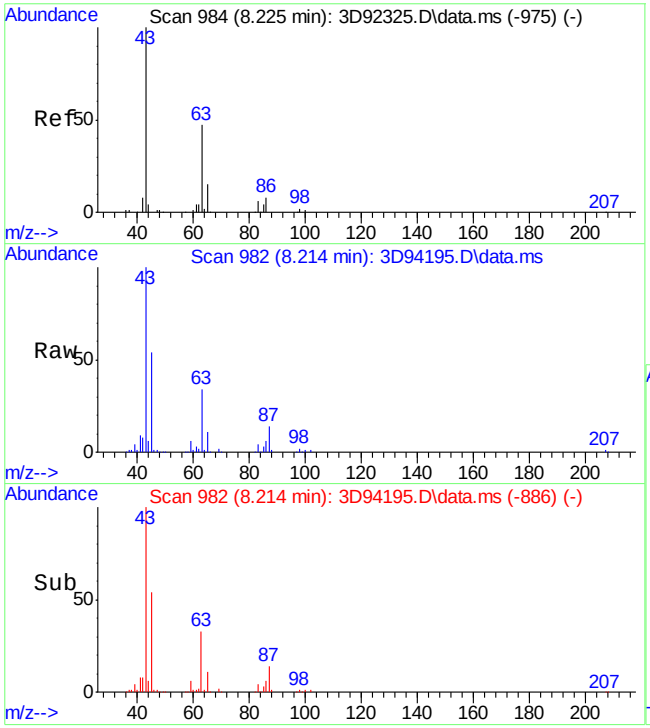


#39
acrylonitrile
Concen: 266.02 ug/L
RT: 7.627 min Scan# 870
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 53 Resp: 135745

Ion	Ratio	Lower	Upper
53	100		
52	84.6	52.8	112.8
51	35.6	3.9	63.9

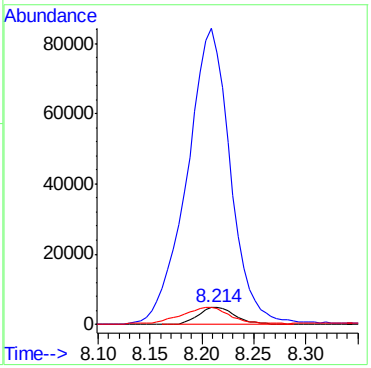


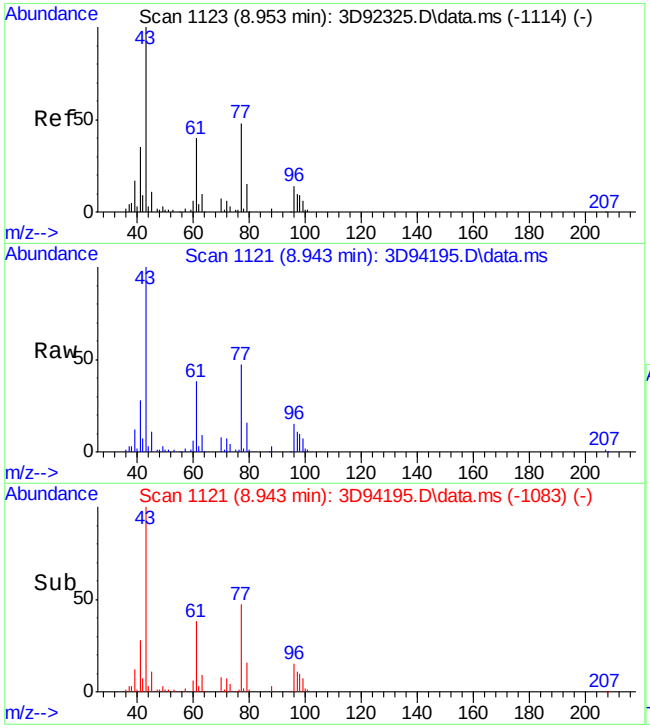


#40
vinyl acetate
Concen: 63.66 ug/L
RT: 8.214 min Scan# 982
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 86 Resp: 11976

Ion	Ratio	Lower	Upper
86	100		
43	1571.4	1099.0	2041.0
44	86.8	58.9	109.5

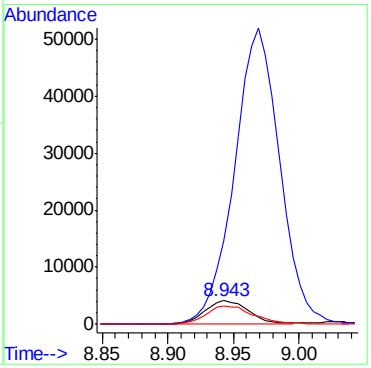


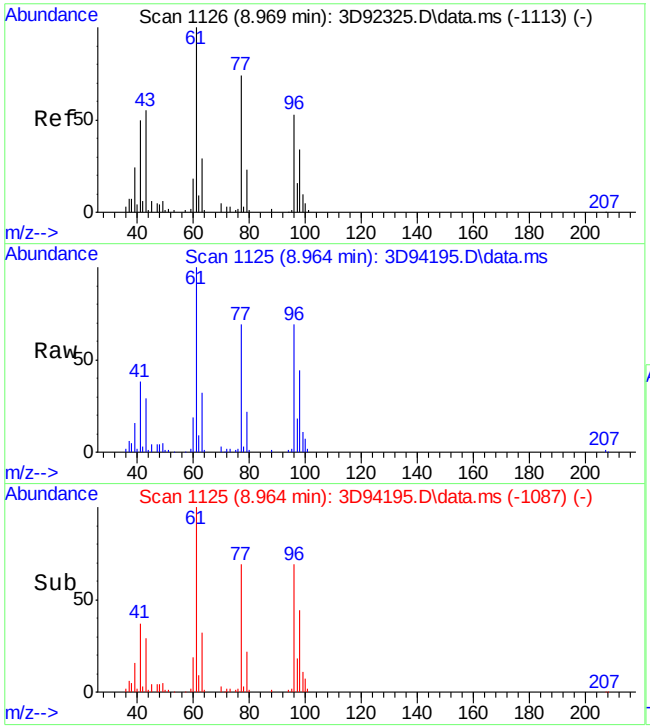


#41
ethyl acetate
Concen: 54.01 ug/L
RT: 8.943 min Scan# 1121
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 45 Resp: 9508

Ion	Ratio	Lower	Upper
45	100		
61	356.0	298.5	554.5
70	78.0	58.8	109.2

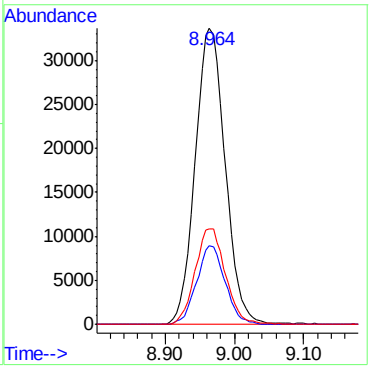


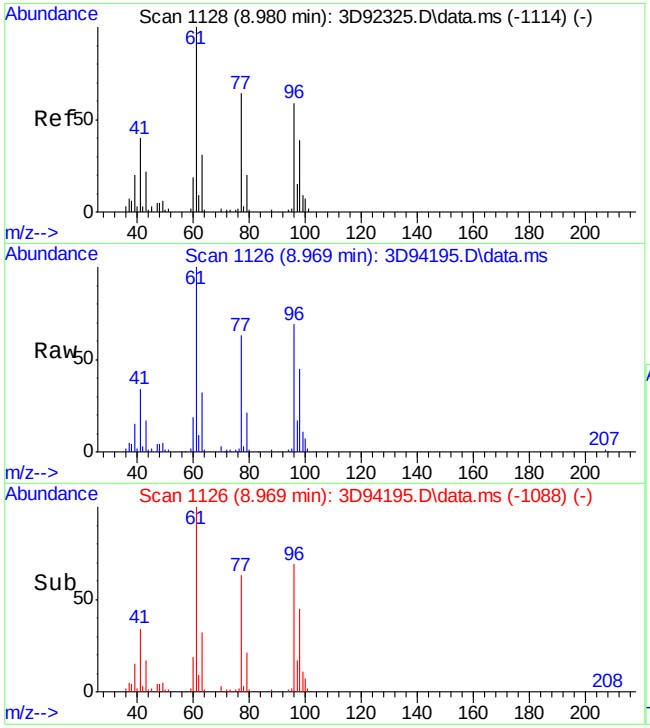


#42
2,2-dichloropropane
Concen: 45.34 ug/L
RT: 8.964 min Scan# 1125
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 77 Resp: 101122

Ion	Ratio	Lower	Upper
77	100		
97	26.7	0.0	56.8
79	32.2	2.1	62.1

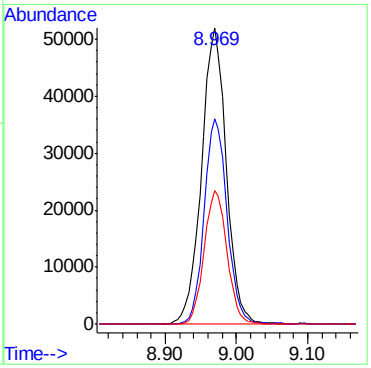


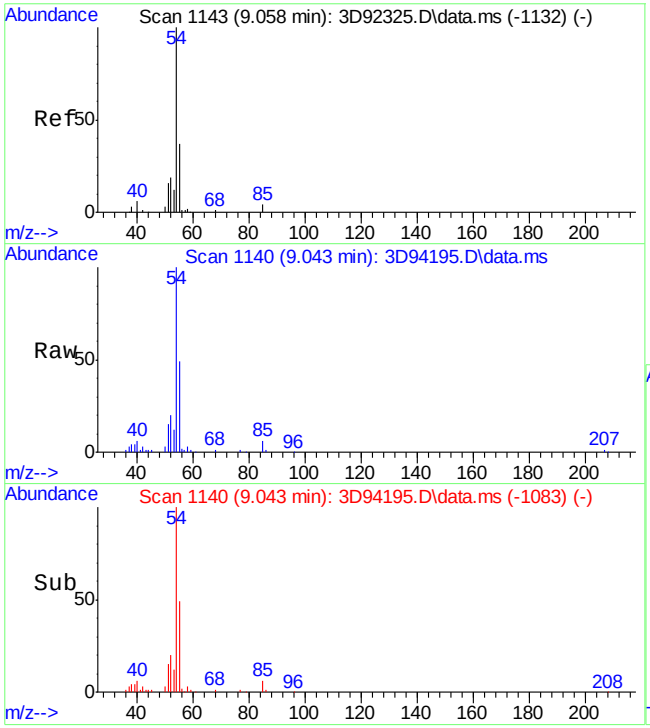


#43
cis-1,2-dichloroethene
Concen: 49.16 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 61 Resp: 125481

Ion	Ratio	Lower	Upper
61	100		
96	69.3	40.7	100.7
98	44.9	16.0	76.0

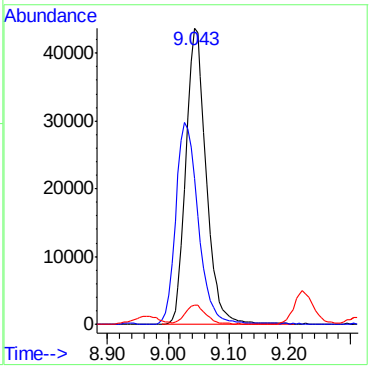


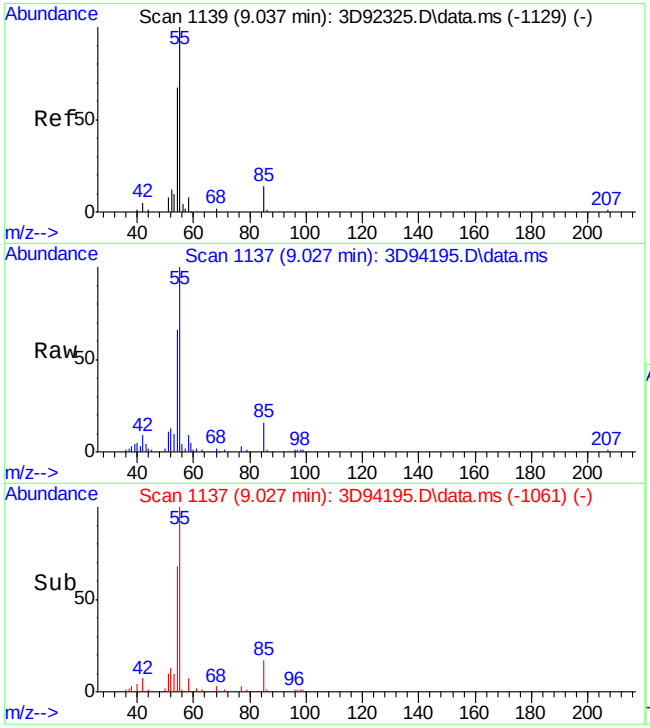


#44
propionitrile
Concen: 524.78 ug/L
RT: 9.043 min Scan# 1140
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 54 Resp: 101397

Ion	Ratio	Lower	Upper
54	100		
55	49.2	13.0	73.0
40	5.1	0.0	35.2

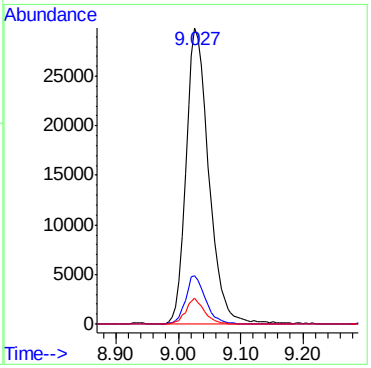


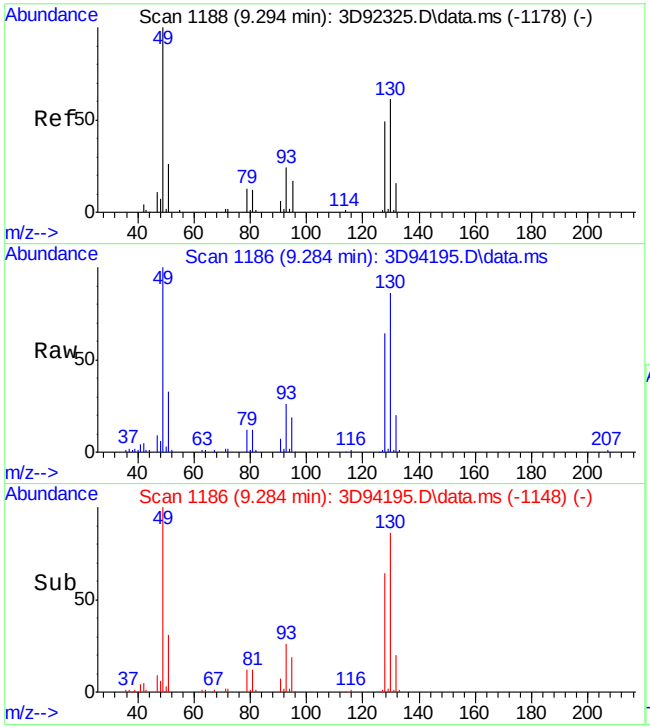


#45
methyl acrylate
Concen: 56.63 ug/L
RT: 9.027 min Scan# 1137
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 55 Resp: 76402

Ion	Ratio	Lower	Upper
55	100		
85	16.5	0.0	46.2
58	8.9	0.0	38.5

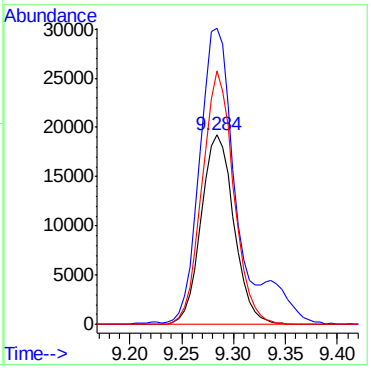


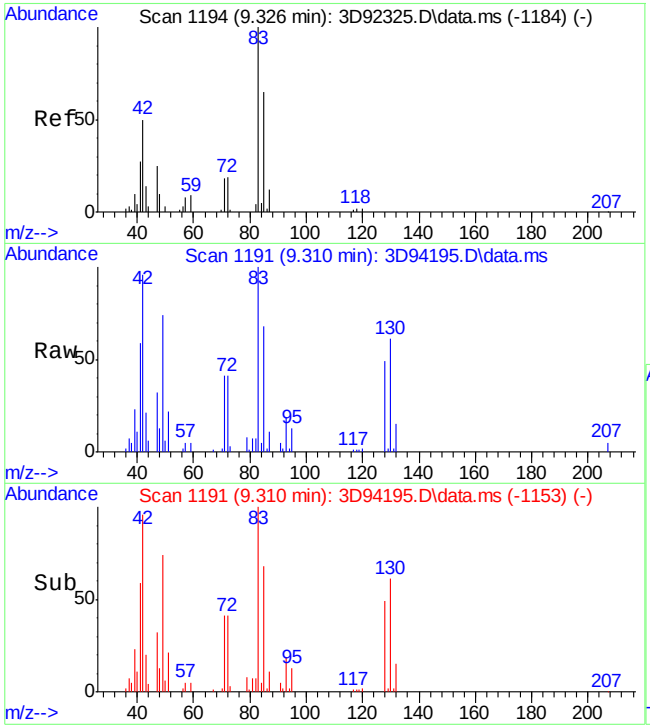


#46
bromochloromethane
Concen: 53.65 ug/L
RT: 9.284 min Scan# 1186
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:128 Resp: 42098

Ion	Ratio	Lower	Upper
128	100		
49	155.6	124.8	184.8
130	133.9	100.2	160.2

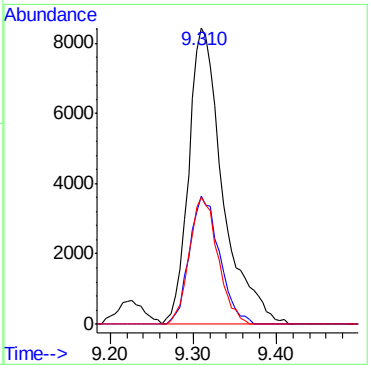




#47
tetrahydrofuran
Concen: 51.42 ug/L
RT: 9.310 min Scan# 1191
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 42 Resp: 23879

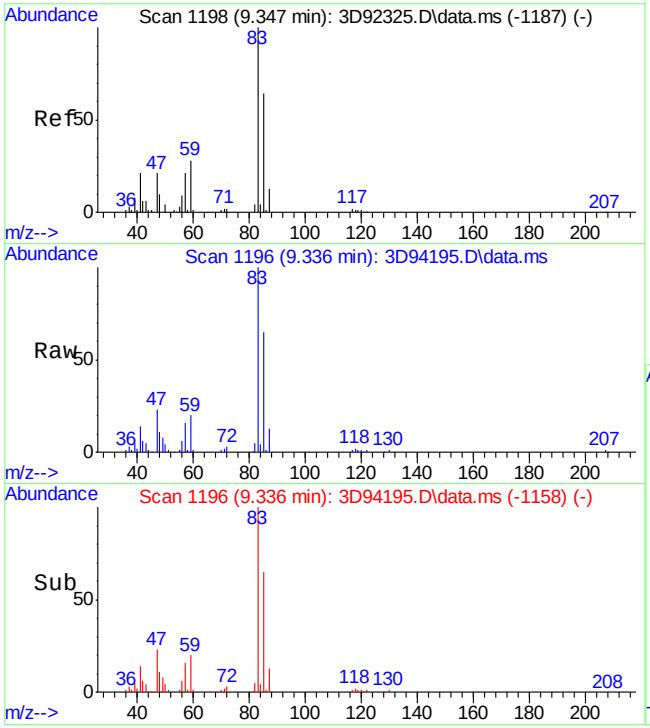
Ion	Ratio	Lower	Upper
42	100		
72	38.3	8.2	68.2
71	36.0	5.6	65.6



7.2.7

7

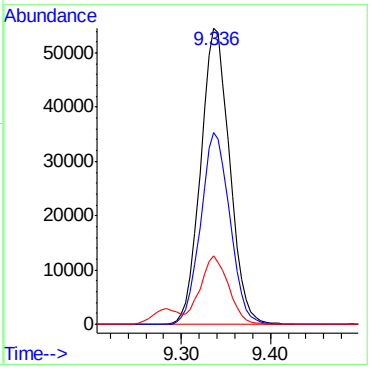
3D94195.D M3D4058.M Thu Dec 19 12:41:28 2013 3D Page 23

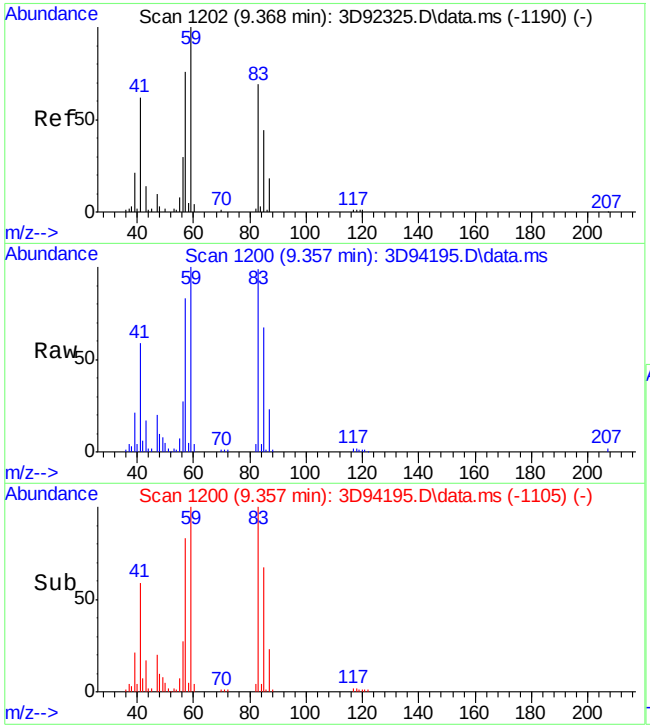


#48
chloroform
Concen: 48.39 ug/L
RT: 9.336 min Scan# 1196
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 83 Resp: 123189

Ion	Ratio	Lower	Upper
83	100		
85	64.8	33.8	93.8
47	23.3	0.0	52.3

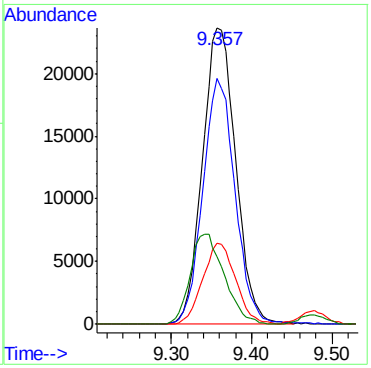


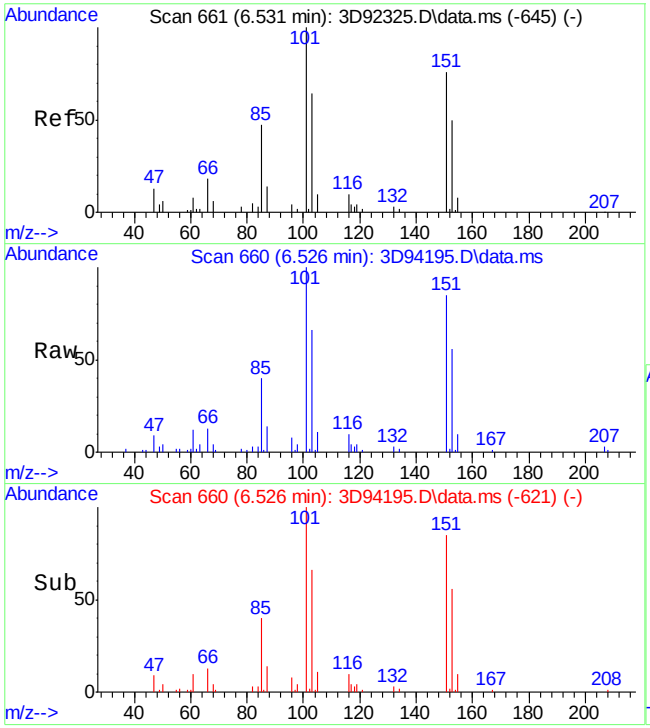


#49
Tert-Butyl Formate
Concen: 54.02 ug/L
RT: 9.357 min Scan# 1200
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 59 Resp: 68085

Ion	Ratio	Lower	Upper
59	100		
57	80.6	64.6	97.0
56	27.0	22.2	33.2
87	31.1	25.0	37.4

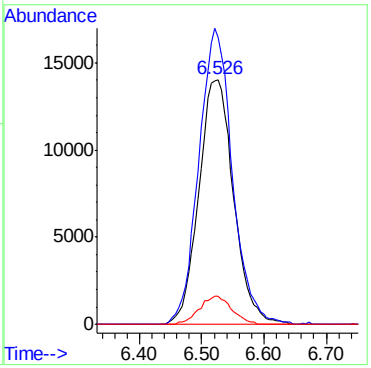


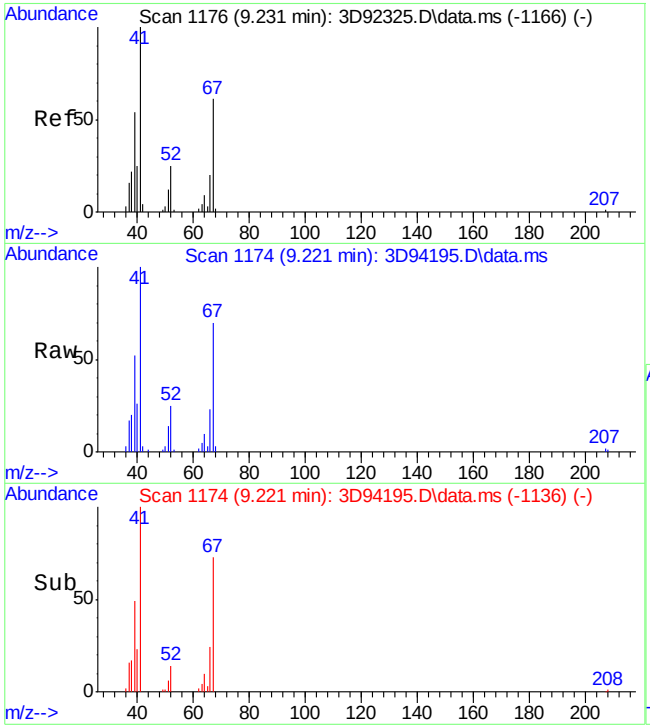


#52
freon 113
Concen: 60.89 ug/L
RT: 6.526 min Scan# 660
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:151 Resp: 54227

Ion	Ratio	Lower	Upper
151	100		
101	117.2	82.2	142.2
116	11.5	0.0	39.5

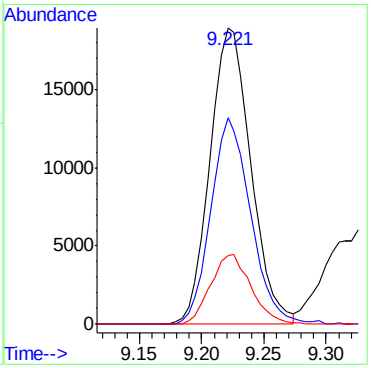


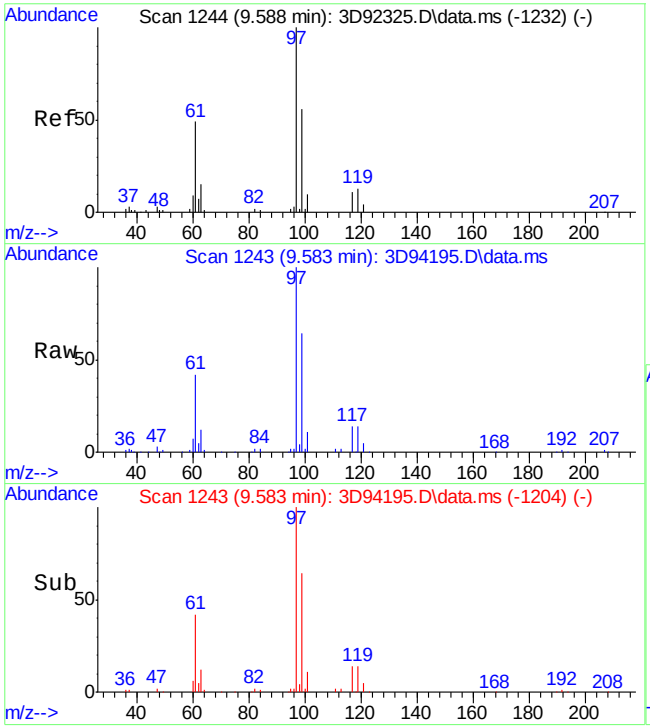


#53
methacrylonitrile
Concen: 51.43 ug/L
RT: 9.221 min Scan# 1174
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 41 Resp: 43271

Ion	Ratio	Lower	Upper
41	100		
67	69.6	38.3	98.3
66	23.3	0.0	52.9

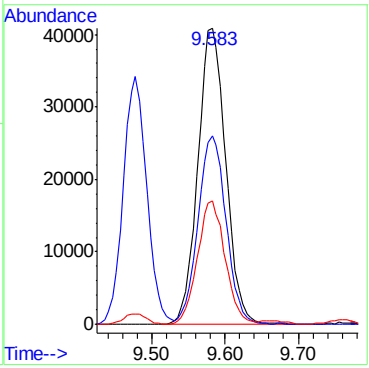


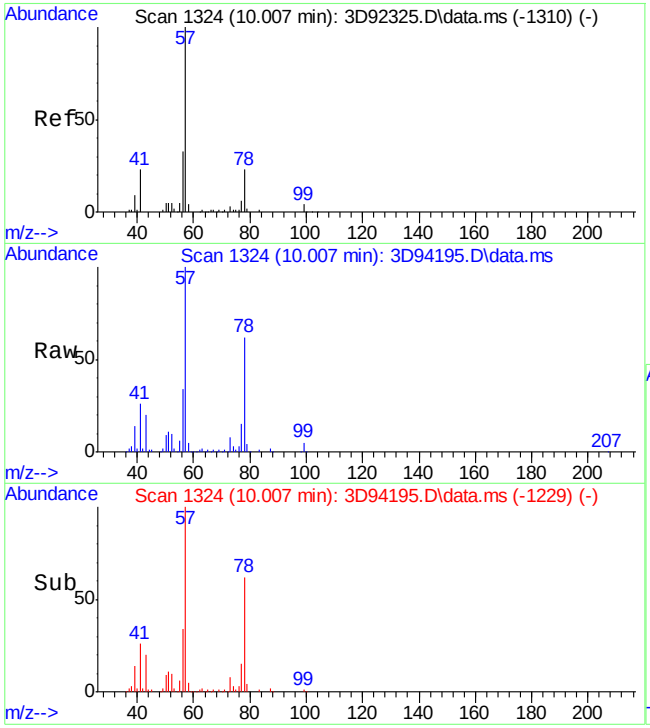


#54
1,1,1-trichloroethane
Concen: 49.52 ug/L
RT: 9.583 min Scan# 1243
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 97 Resp: 107948

Ion	Ratio	Lower	Upper
97	100		
99	63.6	36.0	96.0
61	41.5	11.8	71.8

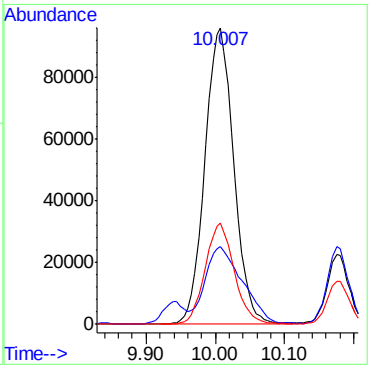


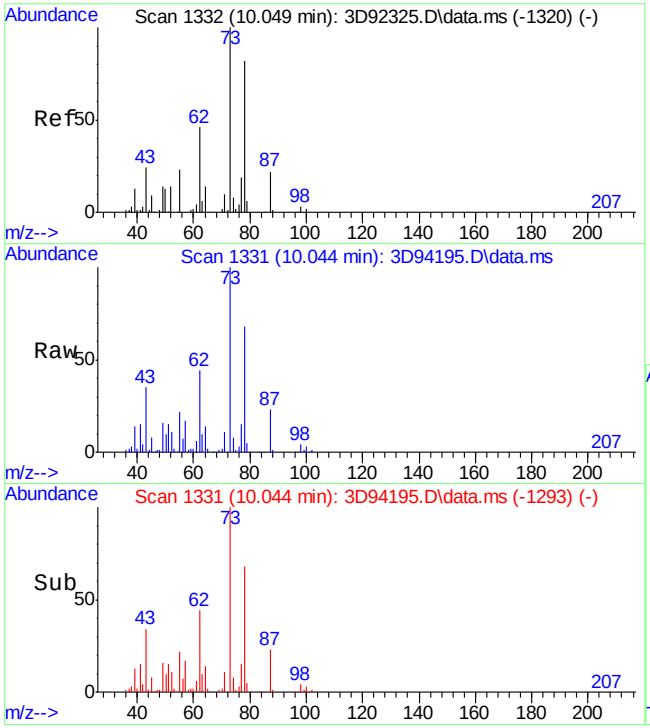


#56
2,2,4-Trimethylpentane
Concen: 58.36 ug/L
RT: 10.007 min Scan# 1324
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 57 Resp: 278370

Ion	Ratio	Lower	Upper
57	100		
41	34.1	4.5	64.5
56	34.4	4.3	64.3

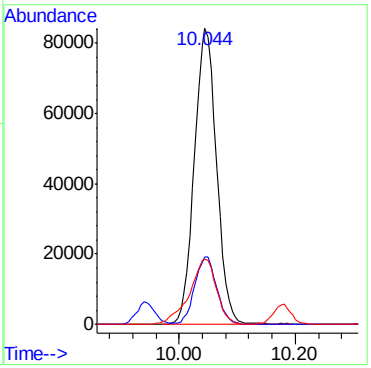


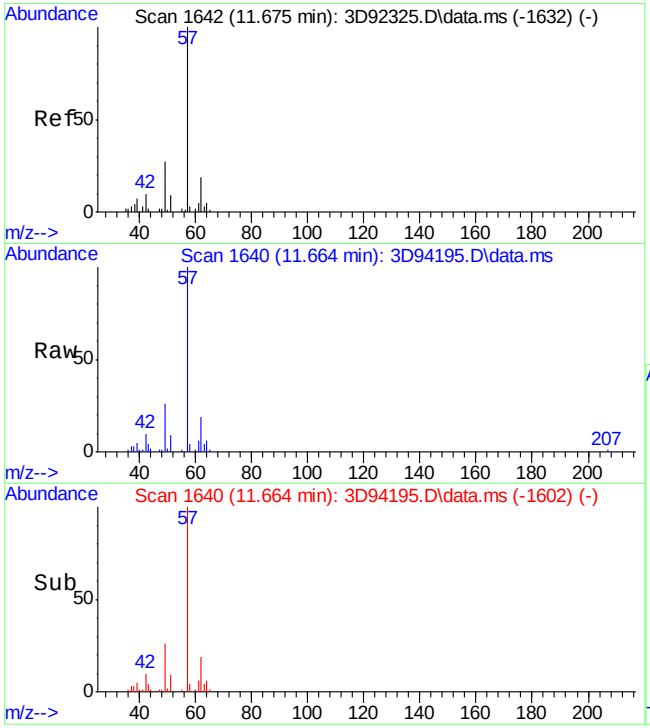


#57
tert-amyl methyl ether
Concen: 51.14 ug/L
RT: 10.044 min Scan# 1331
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 73 Resp: 225047

Ion	Ratio	Lower	Upper
73	100		
87	22.9	0.0	53.3
55	21.2	0.0	52.5

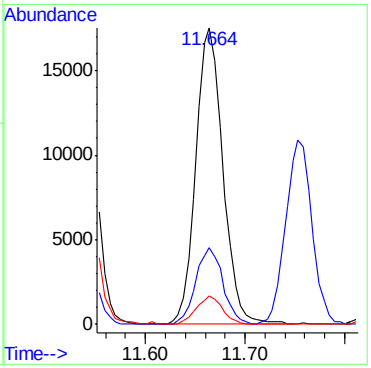


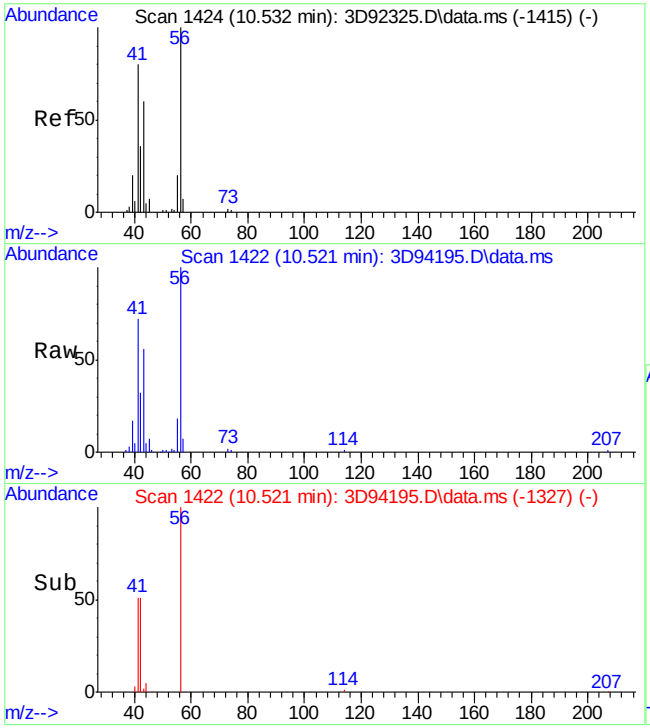


#59
epichlorohydrin
Concen: 274.70 ug/L
RT: 11.664 min Scan# 1640
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 57 Resp: 33039

Ion	Ratio	Lower	Upper
57	100		
49	25.7	0.0	55.9
42	9.6	0.0	37.7

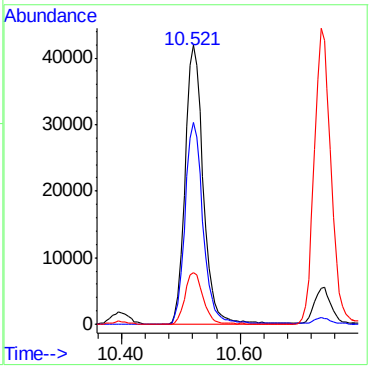


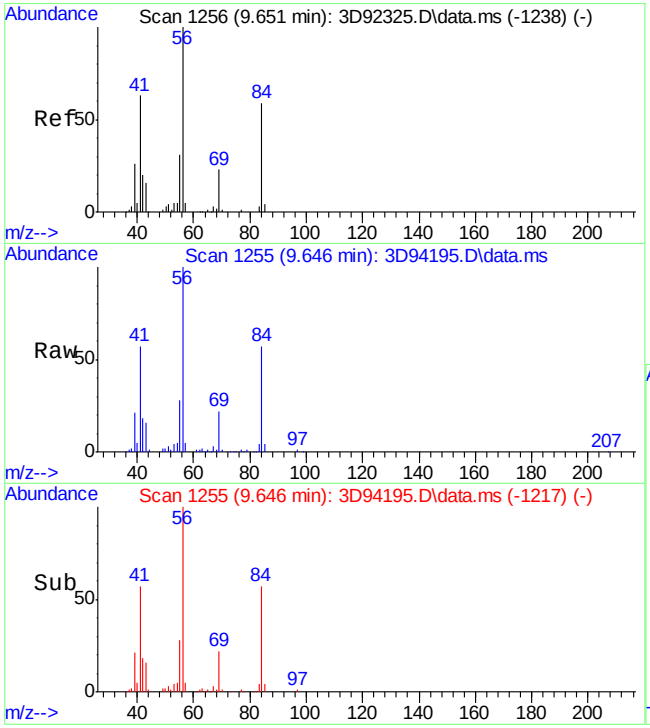


#60
n-butyl alcohol
Concen: 2559.40 ug/L
RT: 10.521 min Scan# 1422
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 56 Resp: 88700

Ion	Ratio	Lower	Upper
56	100		
41	72.2	42.4	102.4
55	18.4	0.0	48.3

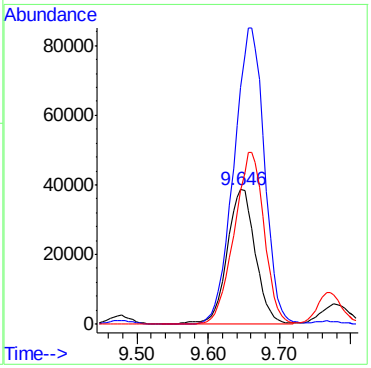


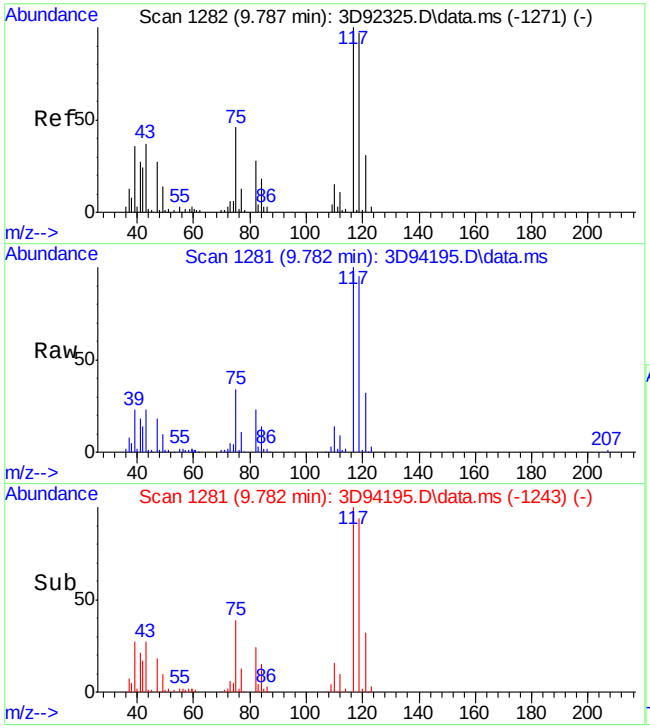


#61
cyclohexane
Concen: 50.14 ug/L
RT: 9.646 min Scan# 1255
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 84 Resp: 106757

Ion	Ratio	Lower	Upper
84	100		
56	238.4	210.2	270.2
41	135.8	108.6	168.6

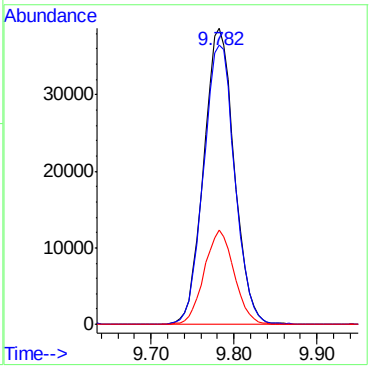


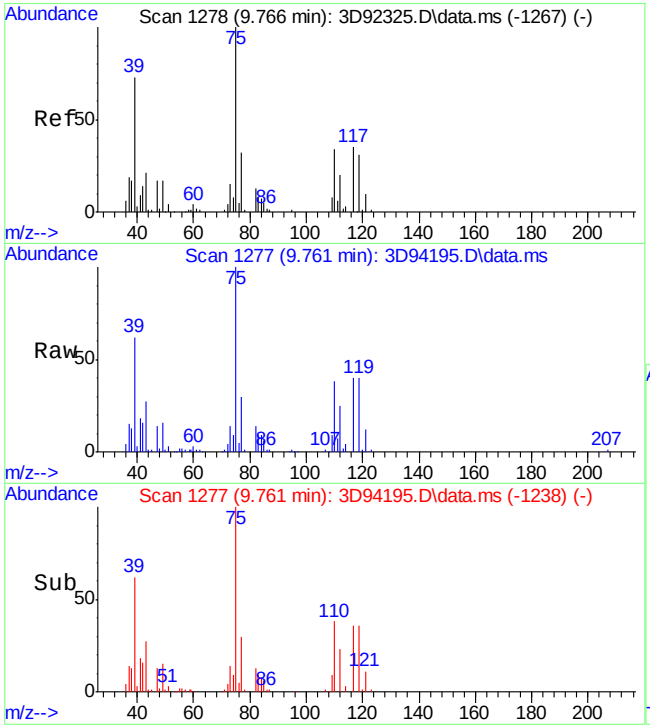


#62
carbon tetrachloride
Concen: 51.46 ug/L
RT: 9.782 min Scan# 1281
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:117 Resp: 98439

Ion	Ratio	Lower	Upper
117	100		
119	94.5	65.7	125.7
121	31.7	0.9	60.9

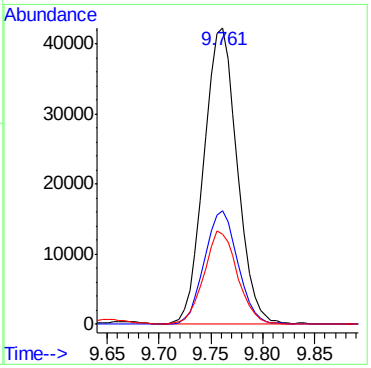




#63
1,1-dichloropropene
Concen: 49.50 ug/L
RT: 9.761 min Scan# 1277
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 75 Resp: 94083

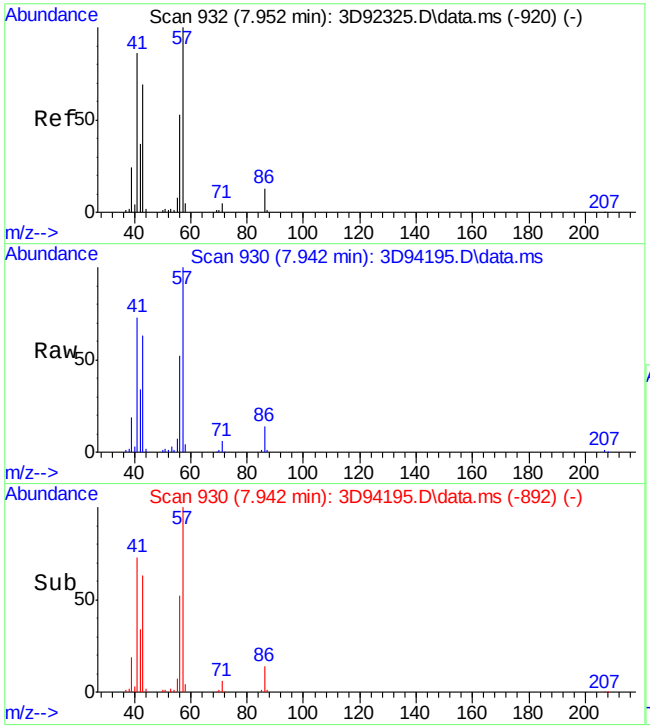
Ion	Ratio	Lower	Upper
75	100		
110	38.3	7.6	67.6
77	30.4	1.7	61.7



7.2.7

7

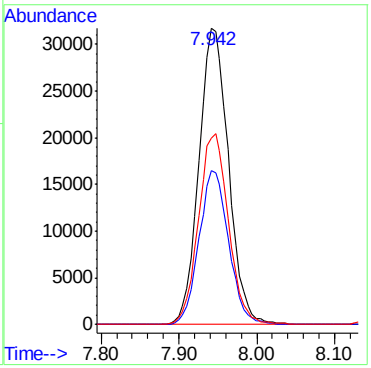
3D94195.D M3D4058.M Thu Dec 19 12:41:28 2013 3D Page 29

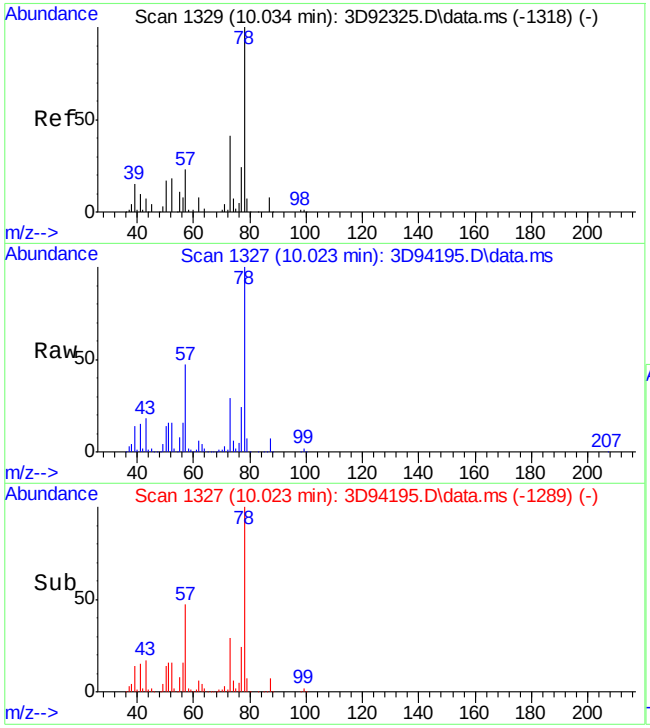


#64
hexane
Concen: 59.84 ug/L
RT: 7.942 min Scan# 930
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 57 Resp: 83291

Ion	Ratio	Lower	Upper
57	100		
56	51.9	22.9	82.9
43	62.7	35.4	95.4

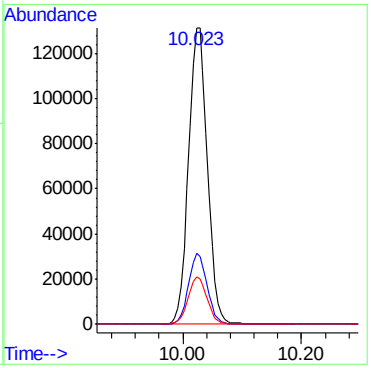




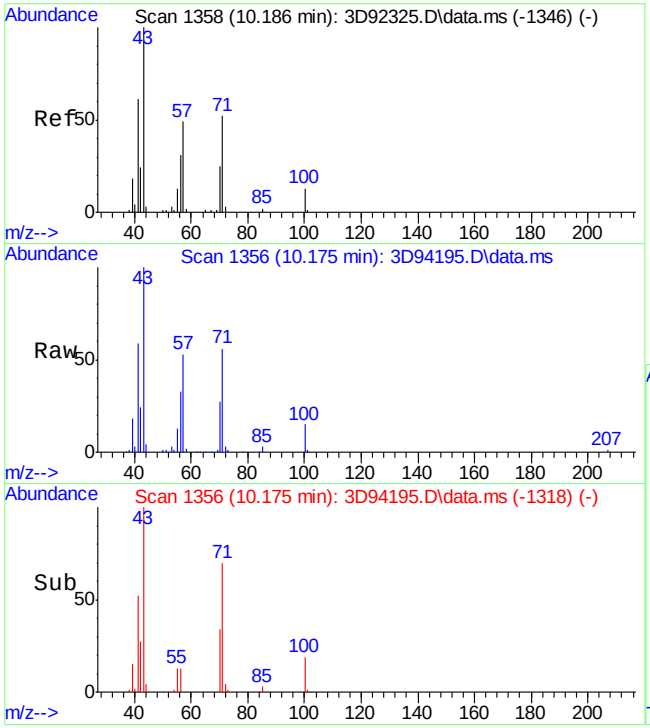
#65
benzene
Concen: 48.12 ug/L
RT: 10.023 min Scan# 1327
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 78 Resp: 287923

Ion	Ratio	Lower	Upper
78	100		
77	23.8	0.0	53.5
52	15.9	0.0	45.7



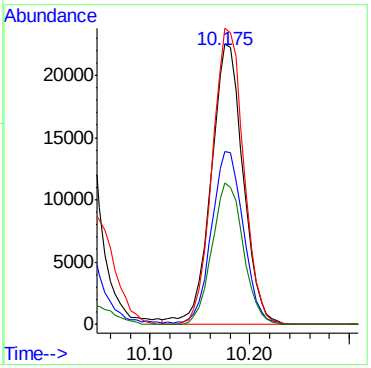
3D94195.D M3D4058.M Thu Dec 19 12:41:28 2013 3D Page 30

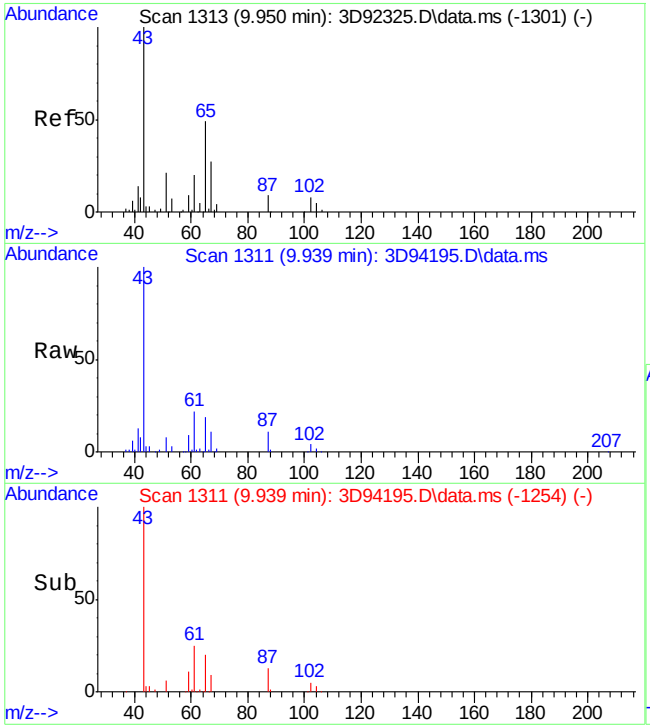


#66
heptane
Concen: 59.83 ug/L
RT: 10.175 min Scan# 1356
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 57 Resp: 50147

Ion	Ratio	Lower	Upper
57	100		
56	61.4	31.5	91.5
71	105.5	75.2	135.2
70	50.3	21.4	81.4

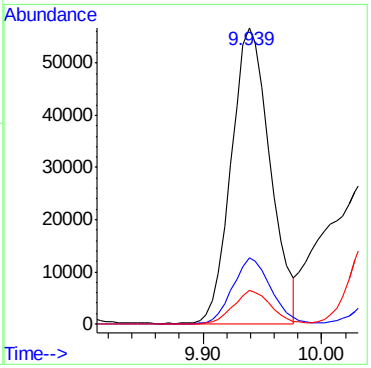


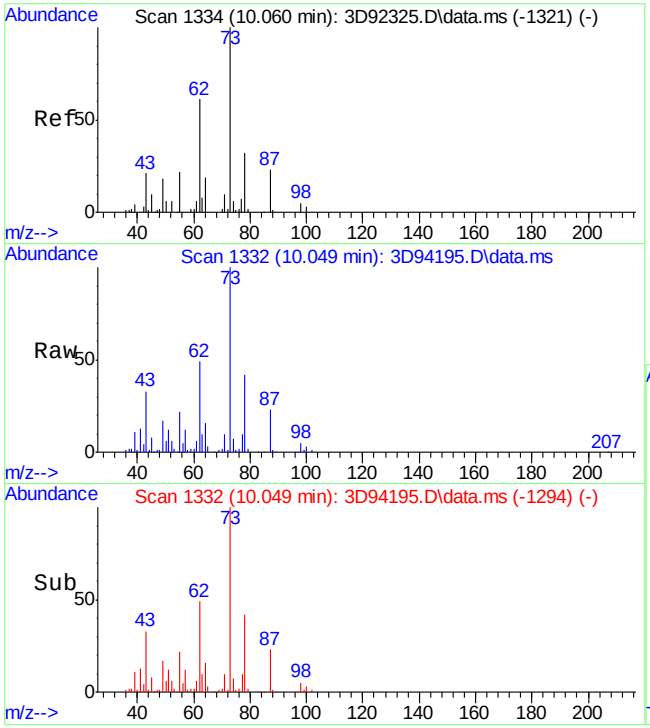


#67
isopropyl acetate
Concen: 51.51 ug/L
RT: 9.939 min Scan# 1311
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 43 Resp: 129547

Ion	Ratio	Lower	Upper
43	100		
61	22.1	0.0	52.4
87	10.9	0.0	40.7

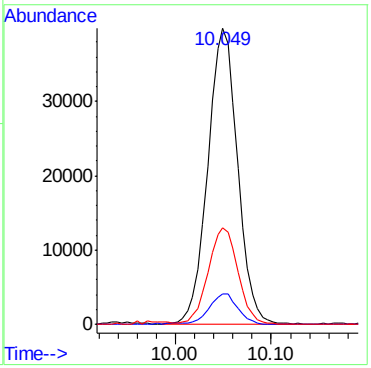


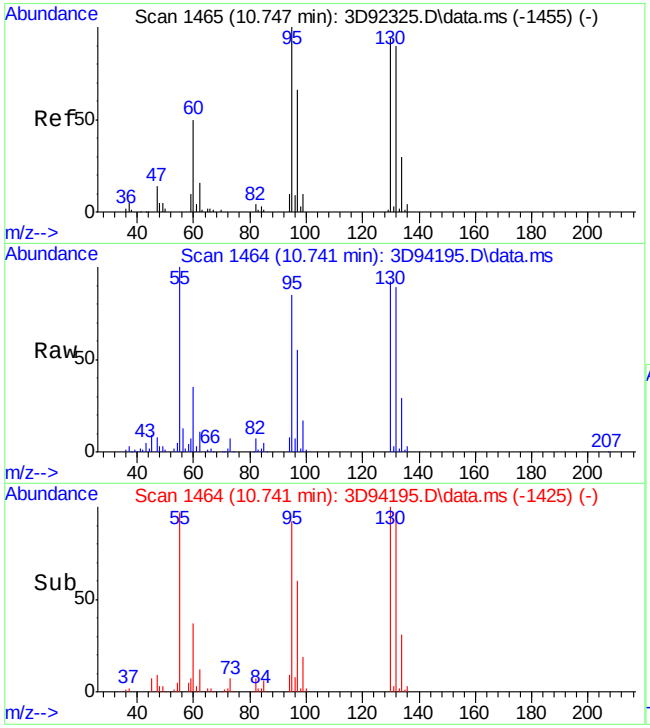


#68
1,2-dichloroethane
Concen: 48.82 ug/L
RT: 10.049 min Scan# 1332
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 62 Resp: 86212

Ion	Ratio	Lower	Upper
62	100		
98	10.2	0.0	40.3
64	32.5	2.1	62.1

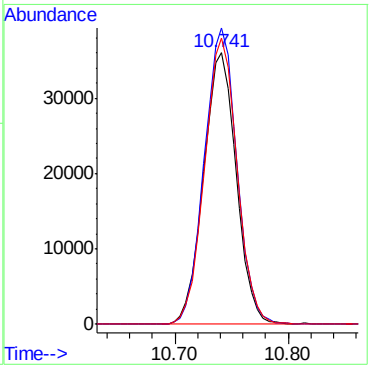


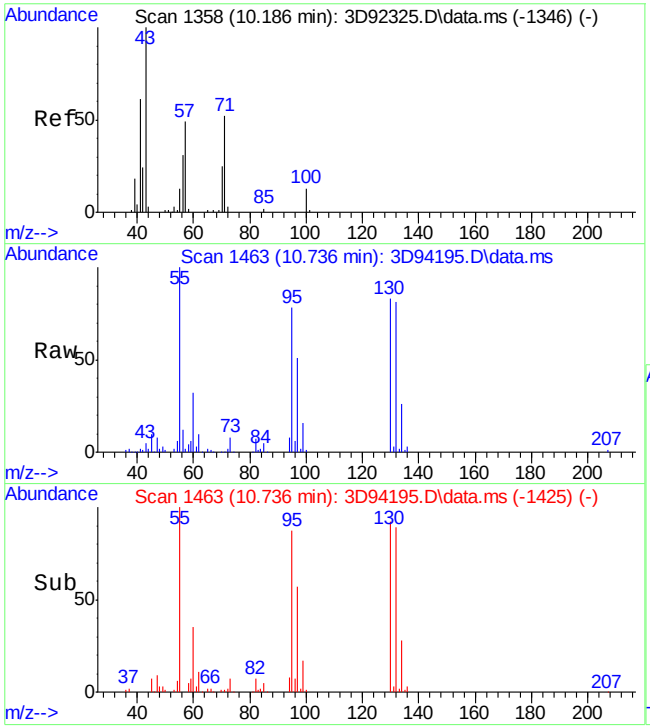


#69
trichloroethene
Concen: 48.78 ug/L
RT: 10.741 min Scan# 1464
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 95 Resp: 71944

Ion	Ratio	Lower	Upper
95	100		
130	108.9	78.2	138.2
132	105.1	75.0	135.0

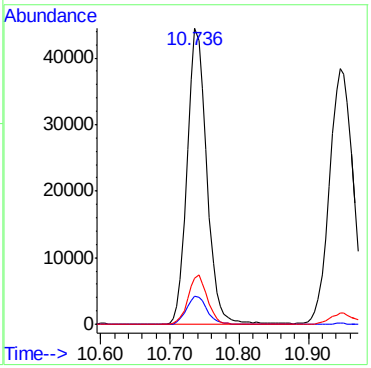


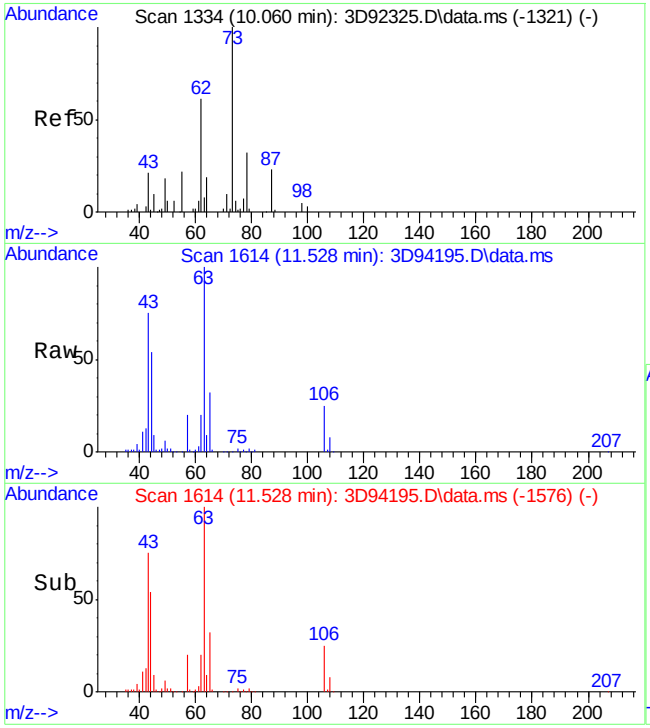


#70
ethyl acrylate
Concen: 58.06 ug/L
RT: 10.736 min Scan# 1463
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 55 Resp: 87402

Ion	Ratio	Lower	Upper
55	100		
45	9.7	7.6	11.4
99	16.1	13.3	19.9

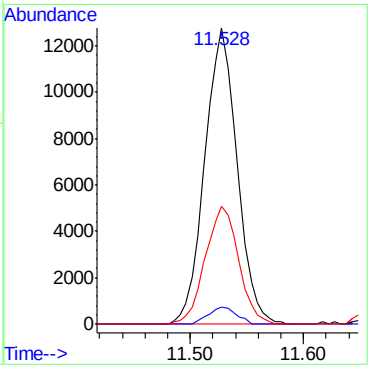


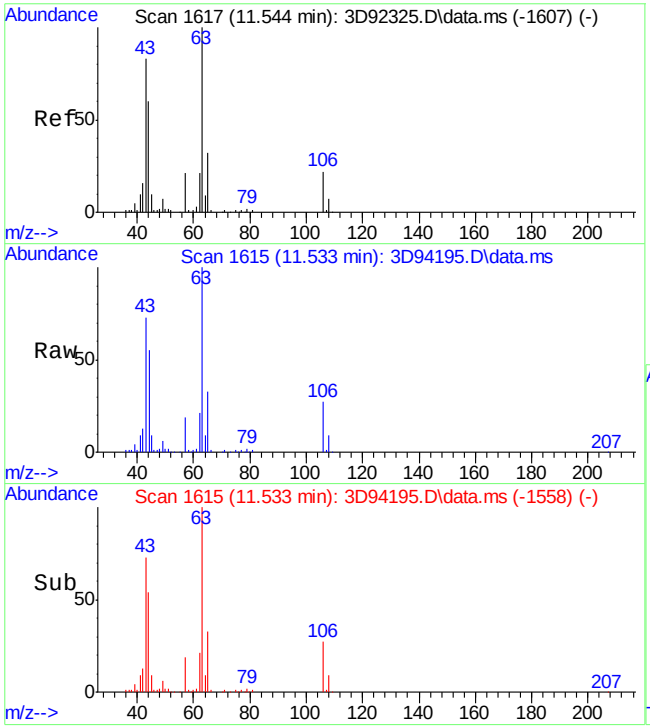


#72
2-nitropropane
Concen: 48.15 ug/L
RT: 11.528 min Scan# 1614
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 41 Resp: 25277

Ion	Ratio	Lower	Upper
41	100		
46	5.6	0.0	35.0
39	39.8	8.6	68.6

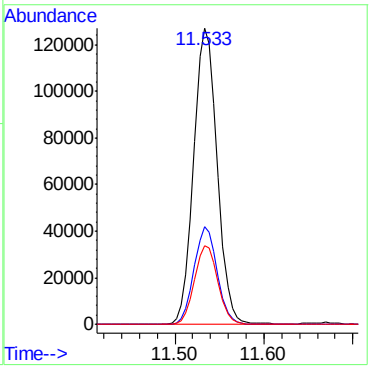


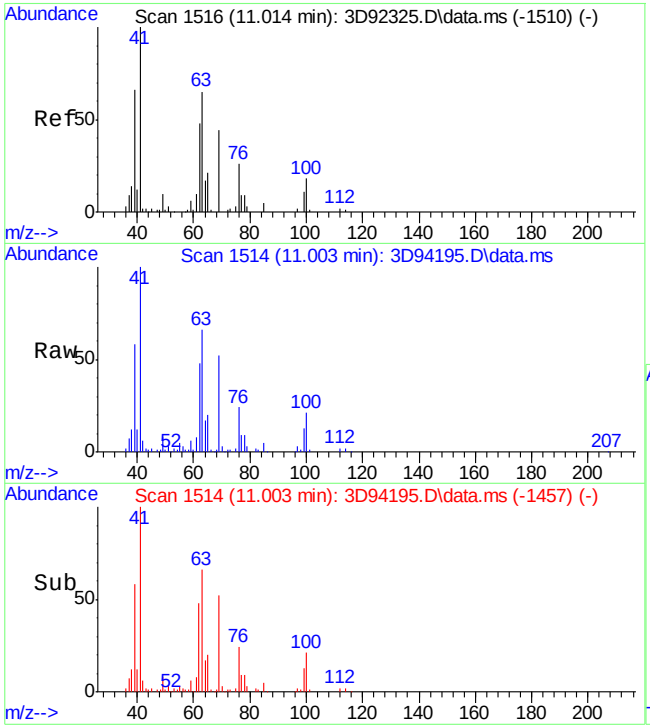


#73
2-chloroethyl vinyl ether
Concen: 262.45 ug/L
RT: 11.533 min Scan# 1615
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 63 Resp: 232664

Ion	Ratio	Lower	Upper
63	100		
65	33.0	2.2	62.2
106	26.6	0.0	56.3

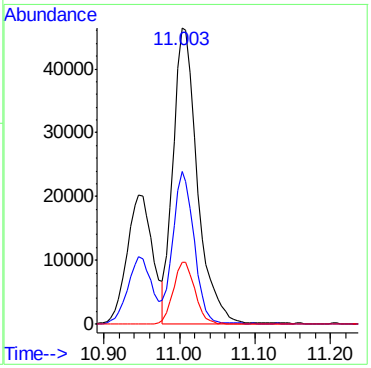


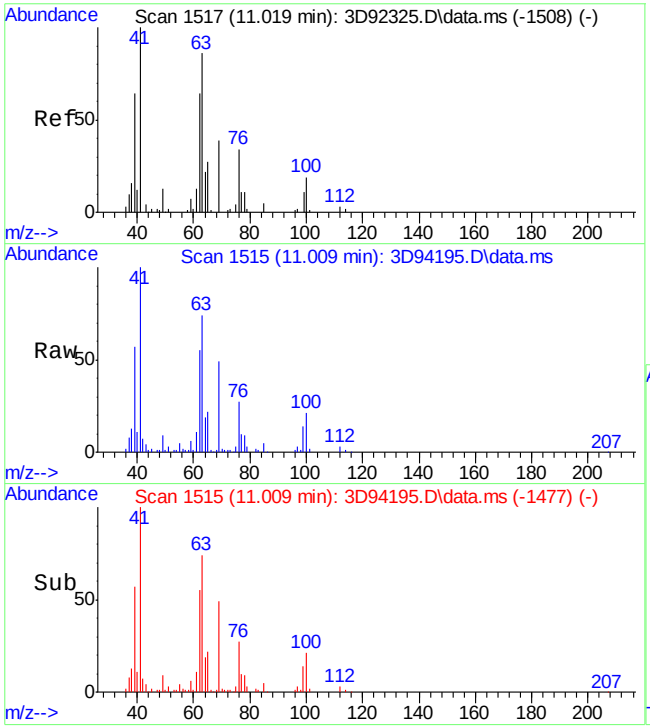


#74
methyl methacrylate
Concen: 48.92 ug/L
RT: 11.003 min Scan# 1514
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 41 Resp: 103218

Ion	Ratio	Lower	Upper
41	100		
69	51.5	19.9	79.9
100	20.7	0.0	51.2

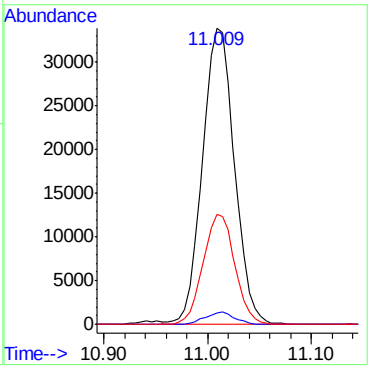


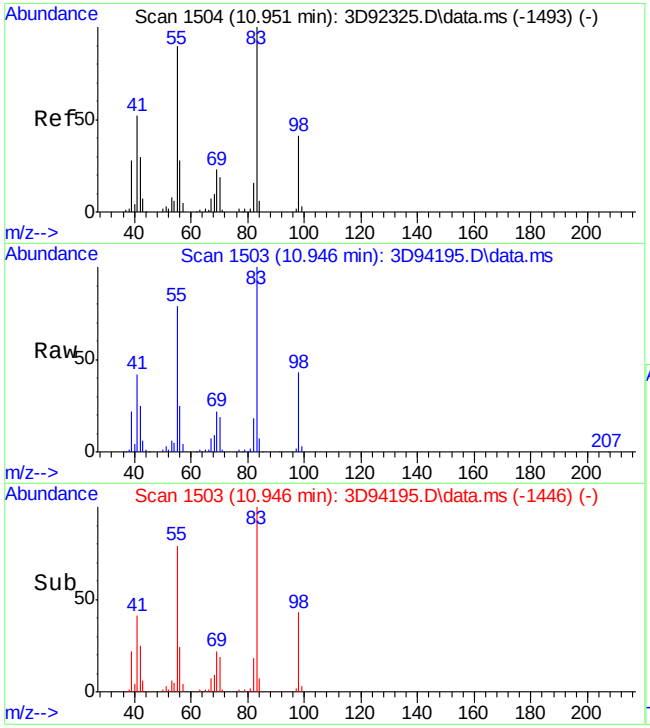


#75
1,2-dichloropropane
Concen: 50.37 ug/L
RT: 11.009 min Scan# 1515
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 63 Resp: 72364

Ion	Ratio	Lower	Upper
63	100		
112	3.7	0.0	33.7
76	37.1	6.0	66.0

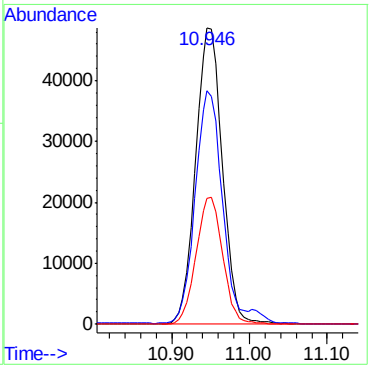


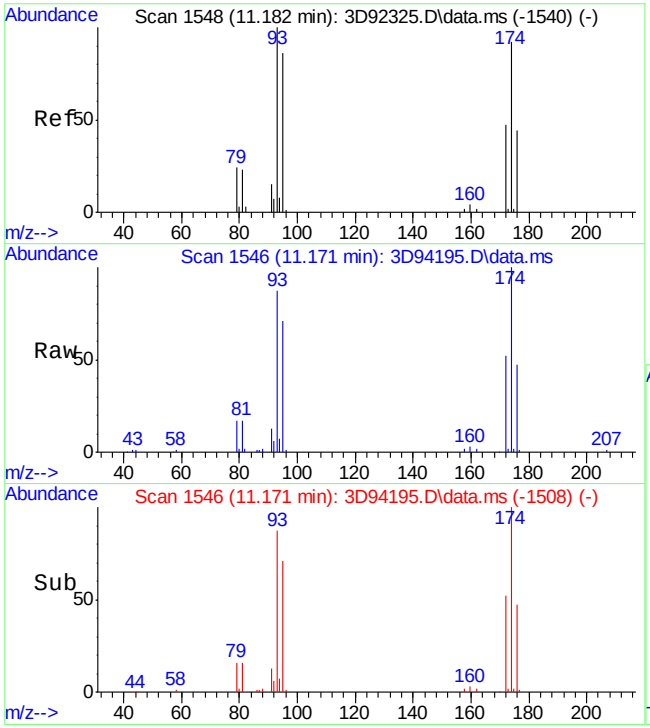


#76
methylcyclohexane
Concen: 56.45 ug/L
RT: 10.946 min Scan# 1503
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 83 Resp: 115355

Ion	Ratio	Lower	Upper
83	100		
55	78.6	49.4	109.4
98	42.6	10.6	70.6

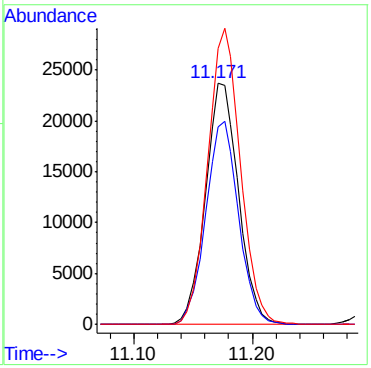


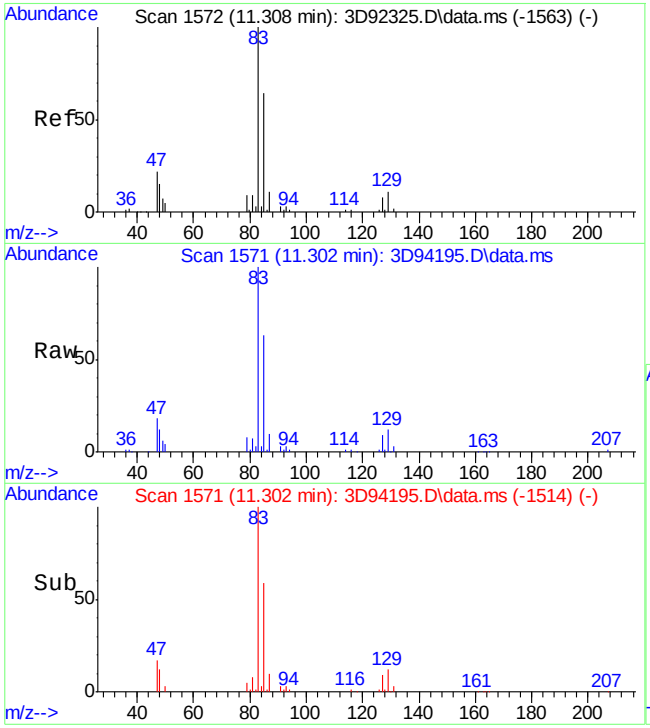


#77
dibromomethane
Concen: 50.90 ug/L
RT: 11.171 min Scan# 1546
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 93 Resp: 45840

Ion	Ratio	Lower	Upper
93	100		
95	81.7	53.0	113.0
174	114.5	88.8	148.8

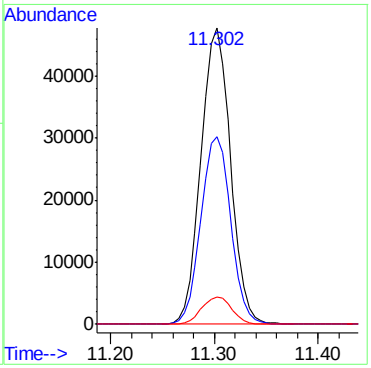


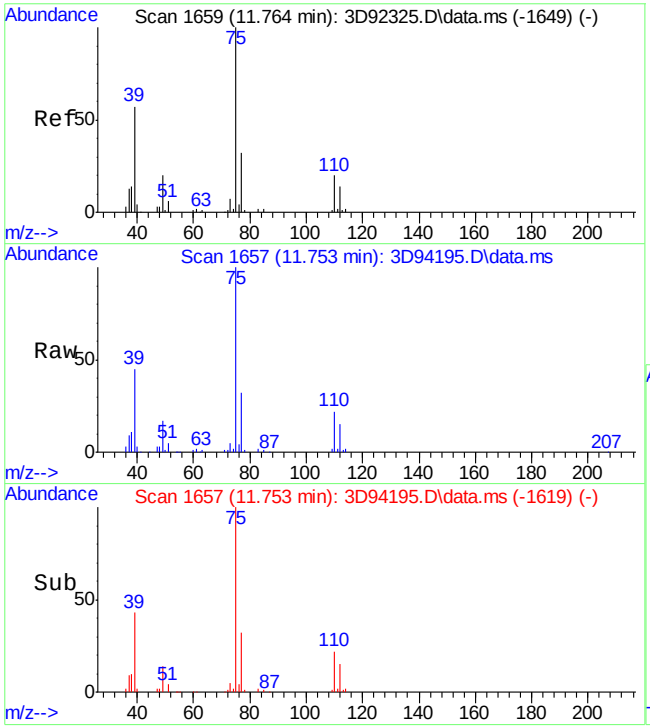


#78
bromodichloromethane
Concen: 51.68 ug/L
RT: 11.302 min Scan# 1571
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 83 Resp: 94215

Ion	Ratio	Lower	Upper
83	100		
85	63.4	34.7	94.7
127	9.1	0.0	39.6

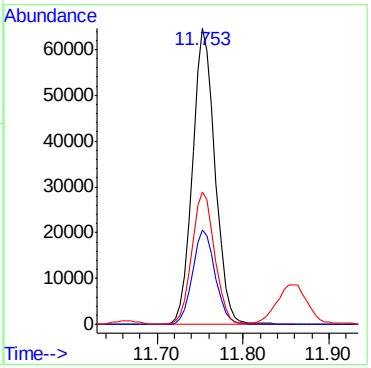


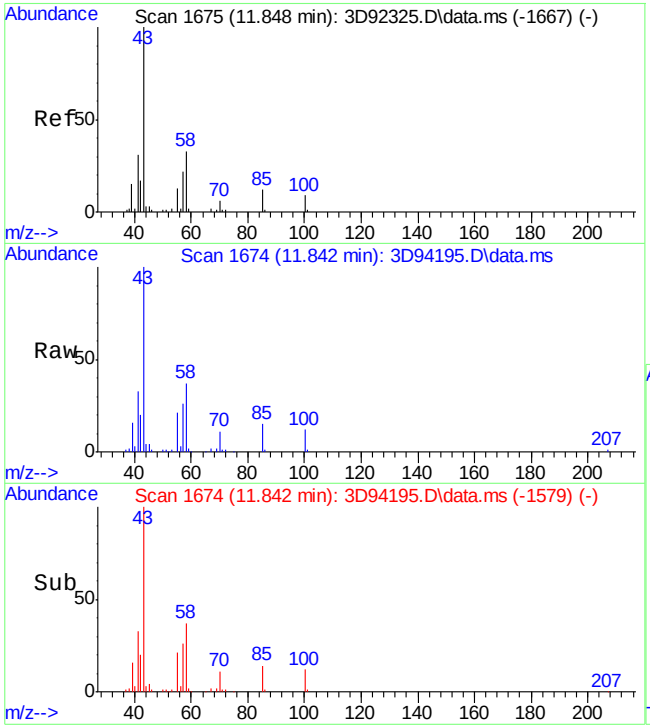


#79
cis-1,3-dichloropropene
Concen: 50.10 ug/L
RT: 11.753 min Scan# 1657
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 75 Resp: 115784

Ion	Ratio	Lower	Upper
75	100		
77	31.7	1.8	61.8
39	44.6	15.6	75.6

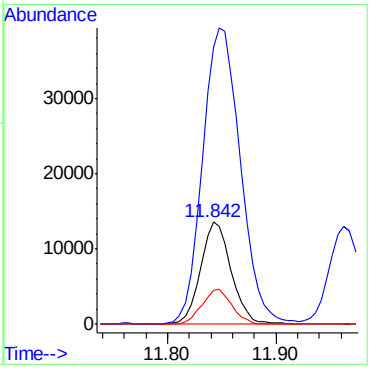


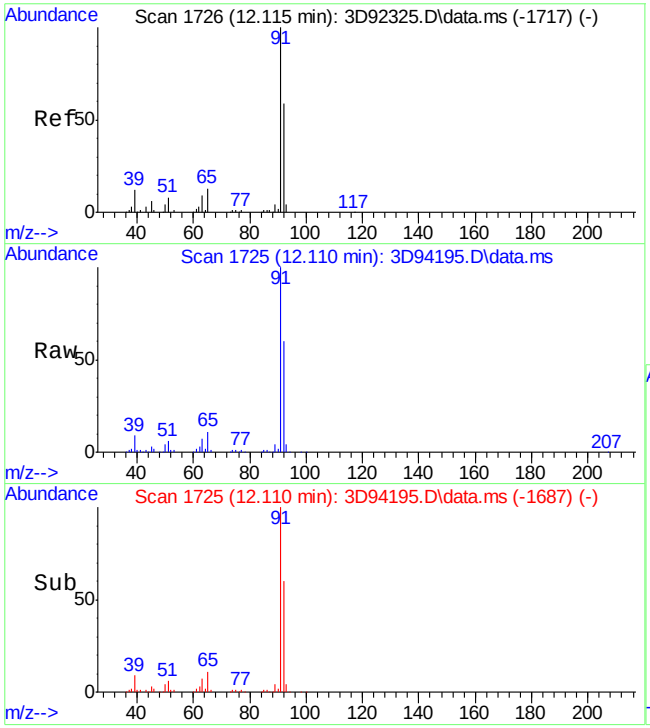


#81
4-methyl-2-pentanone
Concen: 59.27 ug/L
RT: 11.842 min Scan# 1674
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 58 Resp: 26667

Ion	Ratio	Lower	Upper
58	100		
43	361.5	333.6	393.6
100	33.0	1.6	61.6

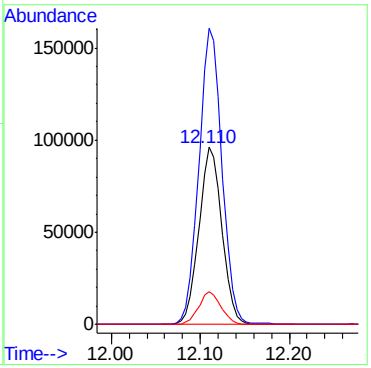


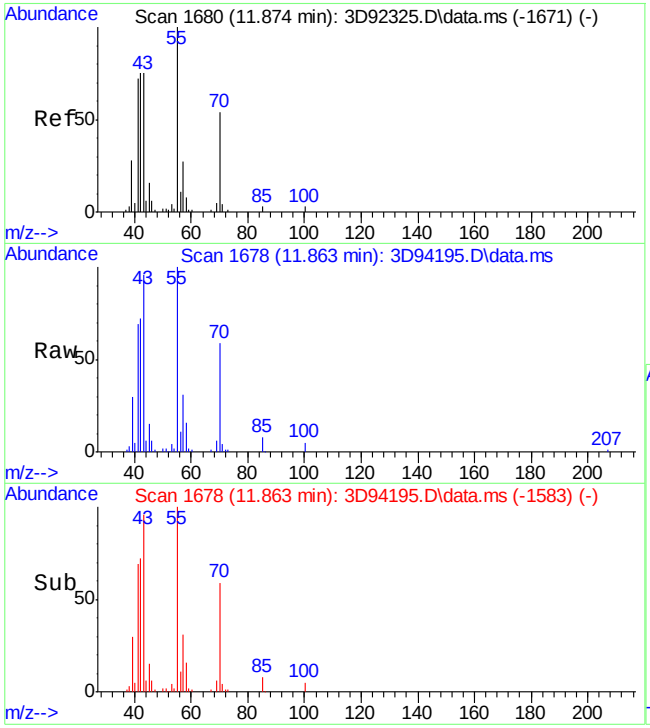


#82
toluene
Concen: 50.90 ug/L
RT: 12.110 min Scan# 1725
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 92 Resp: 172379

Ion	Ratio	Lower	Upper
92	100		
91	167.1	137.9	197.9
65	18.7	0.0	48.1

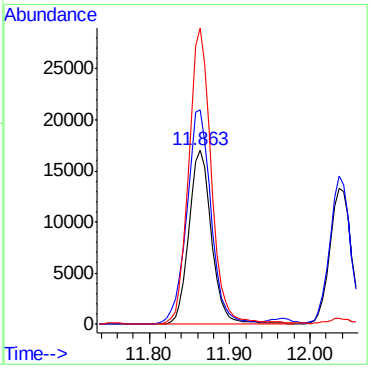


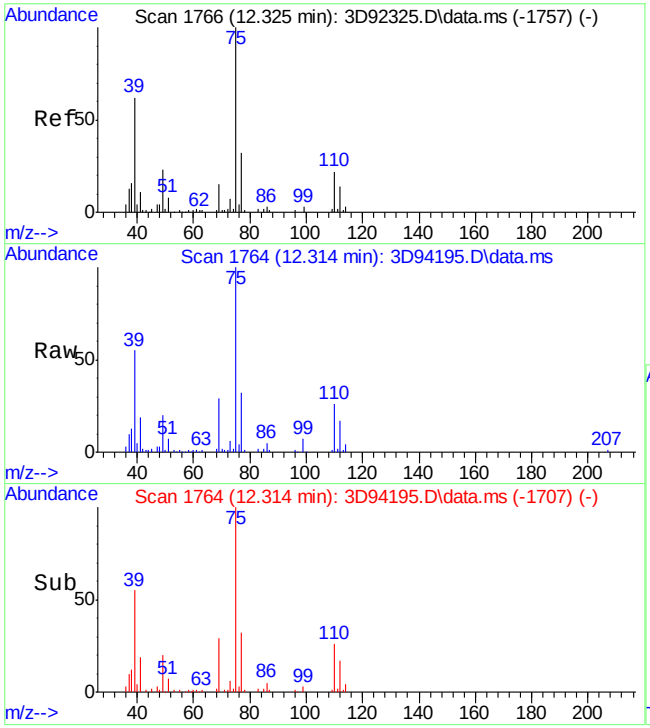


#83
3-methyl-1-butanol
Concen: 997.09 ug/L
RT: 11.863 min Scan# 1678
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 70 Resp: 33318

Ion	Ratio	Lower	Upper
70	100		
42	132.8	102.8	162.8
55	170.8	141.0	201.0

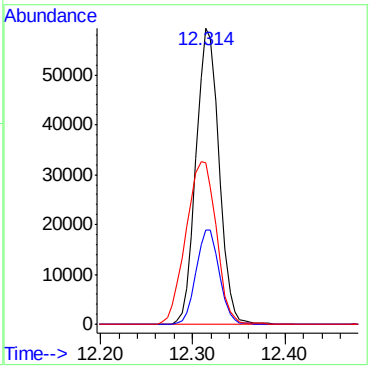


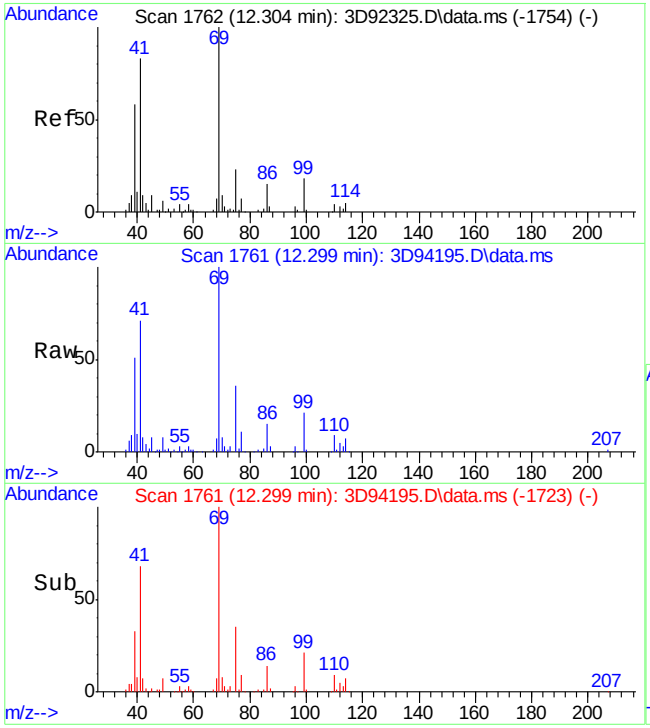


#84
trans-1,3-dichloropropene
Concen: 50.58 ug/L
RT: 12.314 min Scan# 1764
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 75 Resp: 102926

Ion	Ratio	Lower	Upper
75	100		
77	32.0	1.6	61.6
39	54.5	22.9	82.9

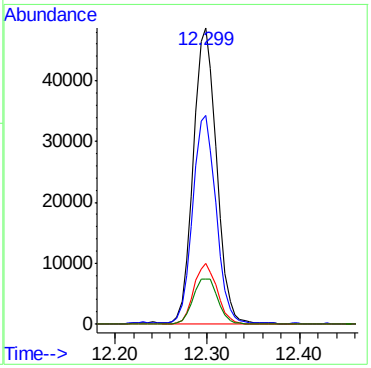


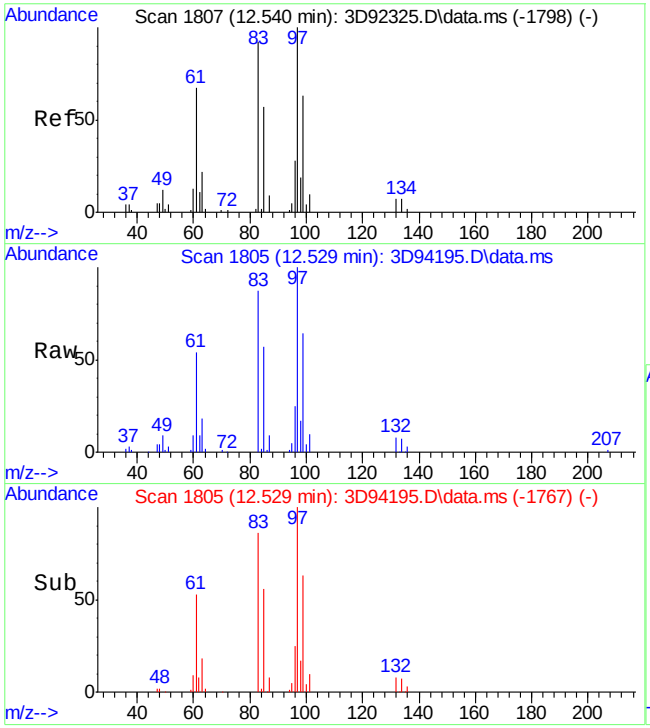


#85
ethyl methacrylate
Concen: 55.77 ug/L
RT: 12.299 min Scan# 1761
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 69 Resp: 85317

Ion	Ratio	Lower	Upper
69	100		
41	70.4	41.9	101.9
99	20.5	0.0	49.8
86	15.2	0.0	47.1

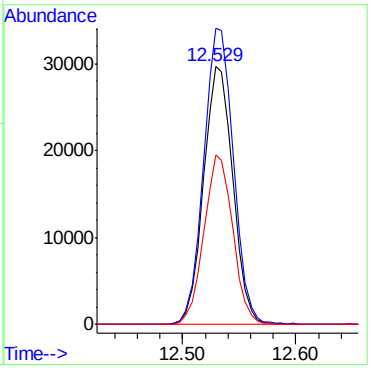


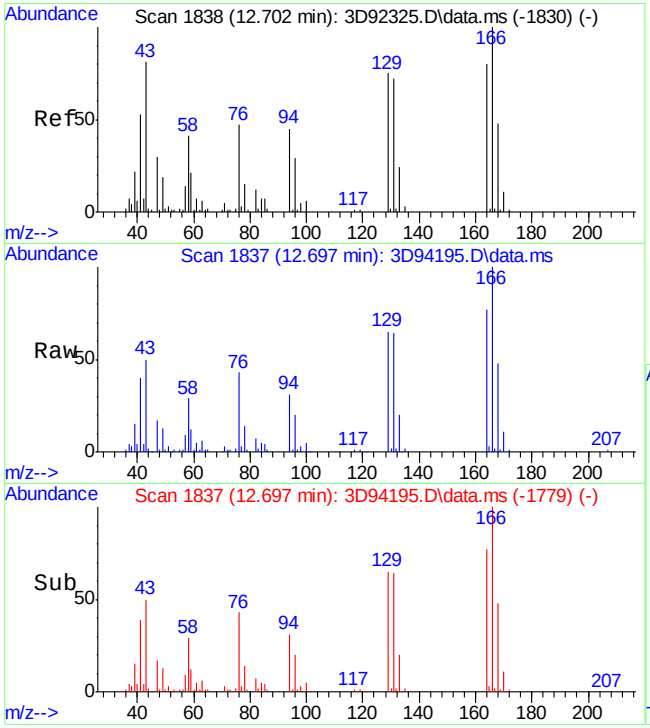


#86
1,1,2-trichloroethane
Concen: 51.67 ug/L
RT: 12.529 min Scan# 1805
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 83 Resp: 53084

Ion	Ratio	Lower	Upper
83	100		
97	114.6	87.9	147.9
85	65.4	33.9	93.9

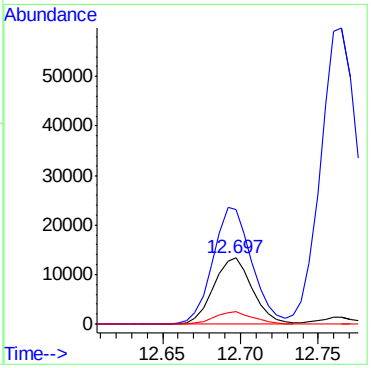


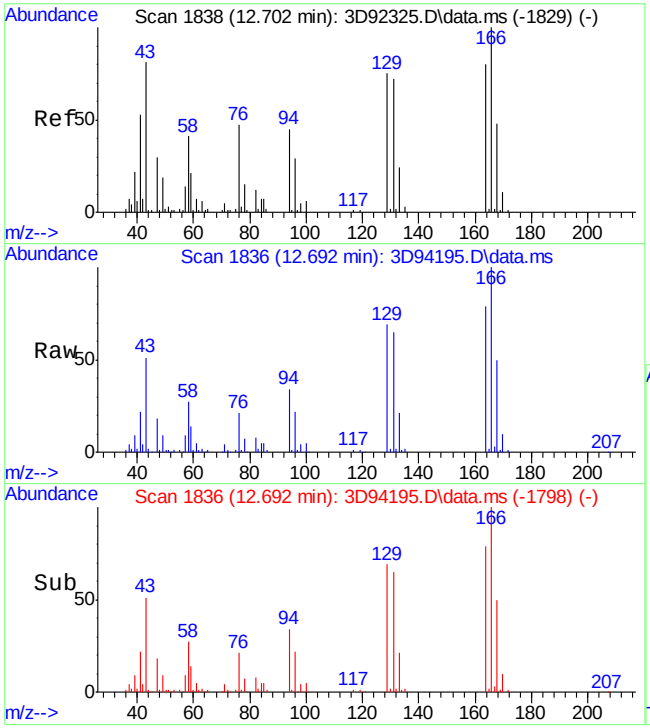


#87
2-hexanone
Concen: 59.62 ug/L
RT: 12.697 min Scan# 1837
Delta R.T. 0.006 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 58 Resp: 23088

Ion	Ratio	Lower	Upper
58	100		
43	173.4	149.9	209.9
100	18.0	0.0	49.9

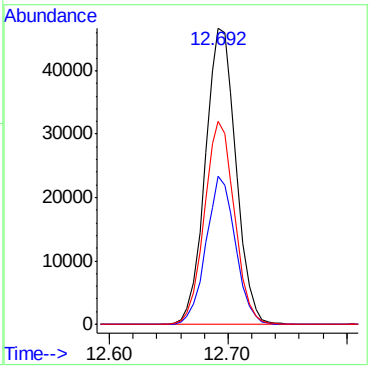


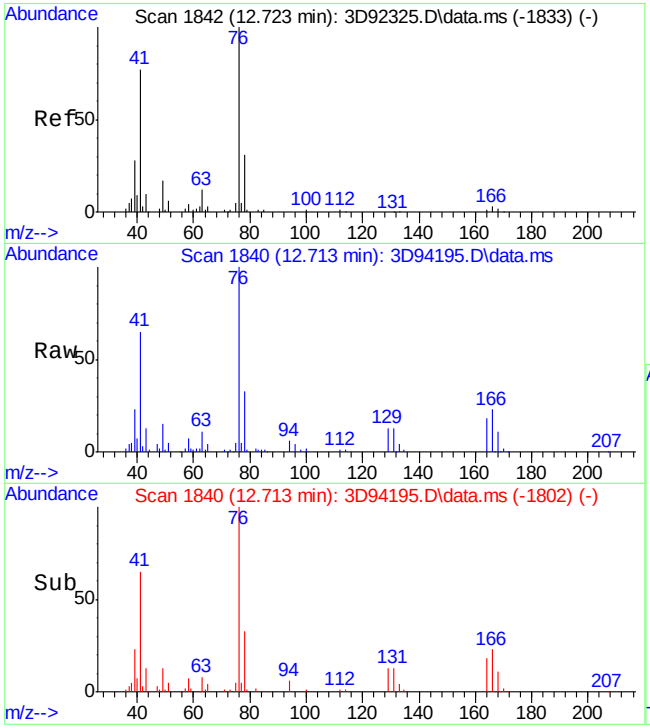


#89
tetrachloroethene
Concen: 51.15 ug/L
RT: 12.692 min Scan# 1836
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:166 Resp: 83828

Ion	Ratio	Lower	Upper
166	100		
168	49.9	18.1	78.1
129	68.6	38.2	98.2

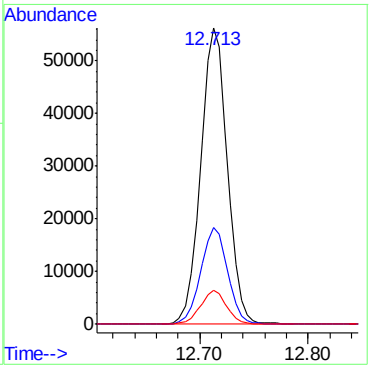


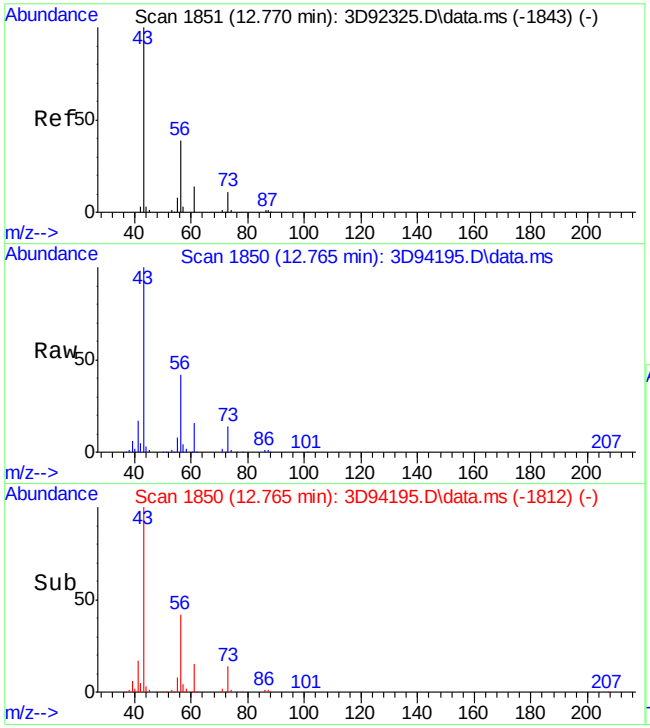


#90
1,3-dichloropropane
Concen: 49.24 ug/L
RT: 12.713 min Scan# 1840
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 76 Resp: 96558

Ion	Ratio	Lower	Upper
76	100		
78	32.6	4.3	64.3
63	11.3	0.0	41.6

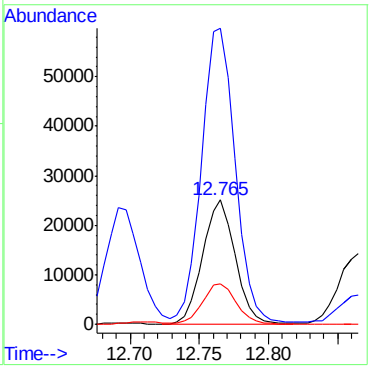


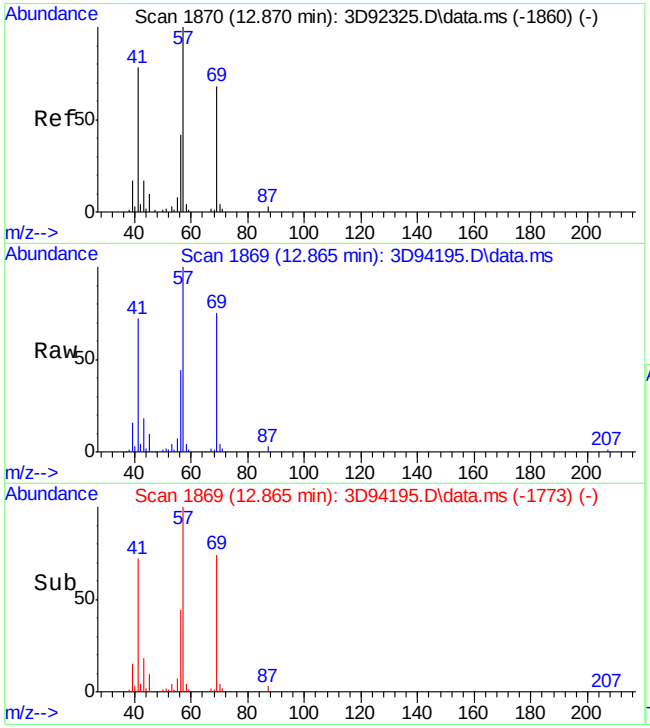


#91
butyl acetate
Concen: 54.41 ug/L
RT: 12.765 min Scan# 1850
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 56 Resp: 41454

Ion	Ratio	Lower	Upper
56	100		
43	236.2	209.3	269.3
73	32.1	2.1	62.1

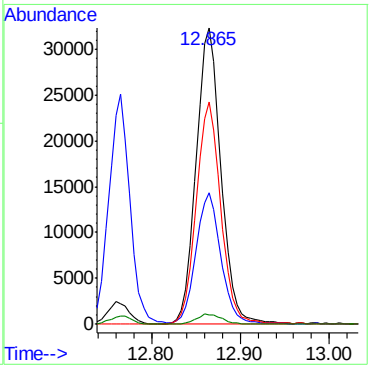


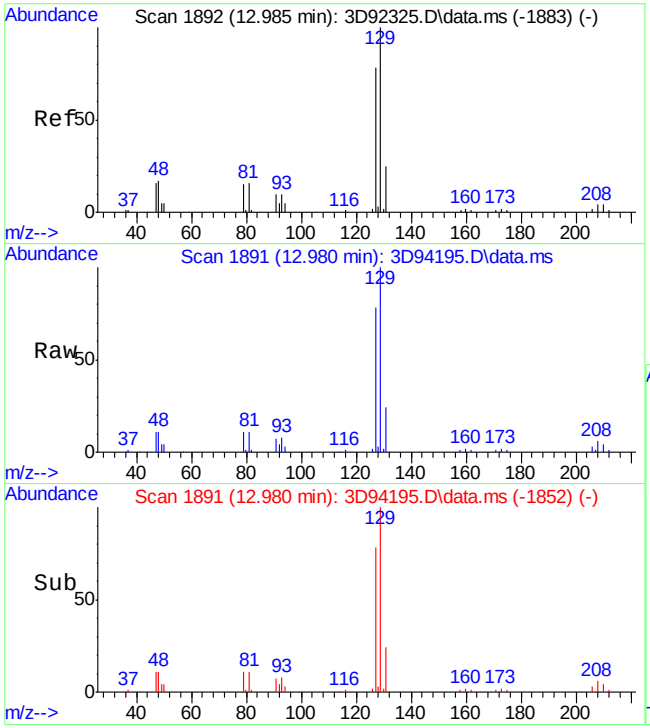


#92
3,3-Dimethyl-1-Butanol
Concen: 450.13 ug/L
RT: 12.865 min Scan# 1869
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 57 Resp: 62733

Ion	Ratio	Lower	Upper
57	100		
56	44.7	36.2	54.2
69	74.1	58.1	87.1
87	3.4	2.5	3.7

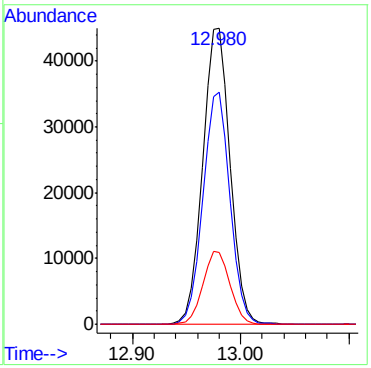


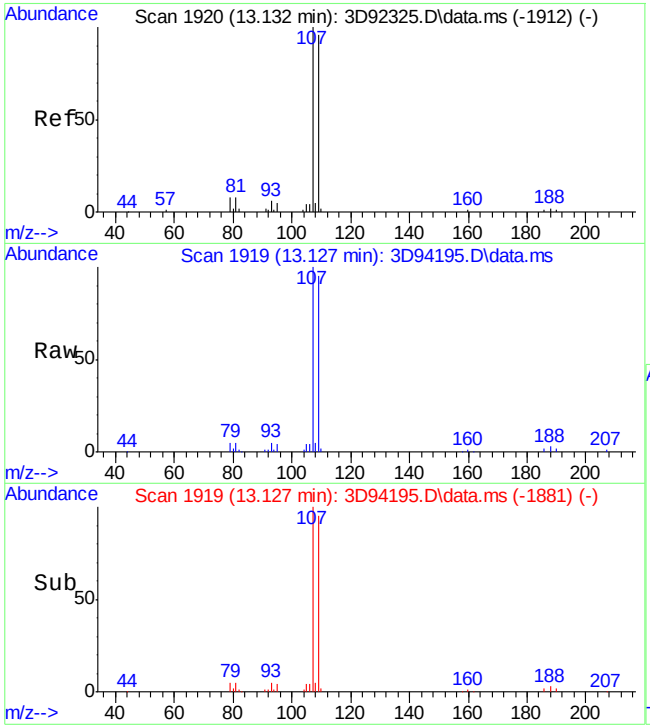


#93
dibromochloromethane
Concen: 51.39 ug/L
RT: 12.980 min Scan# 1891
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:129 Resp: 79920

Ion	Ratio	Lower	Upper
129	100		
127	78.3	44.5	104.5
131	24.2	0.0	53.5

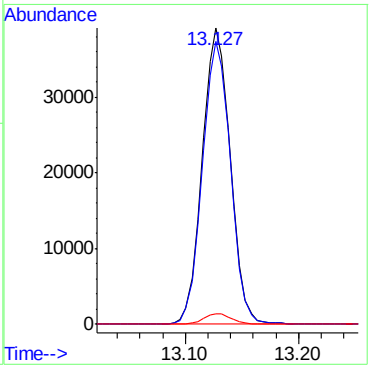


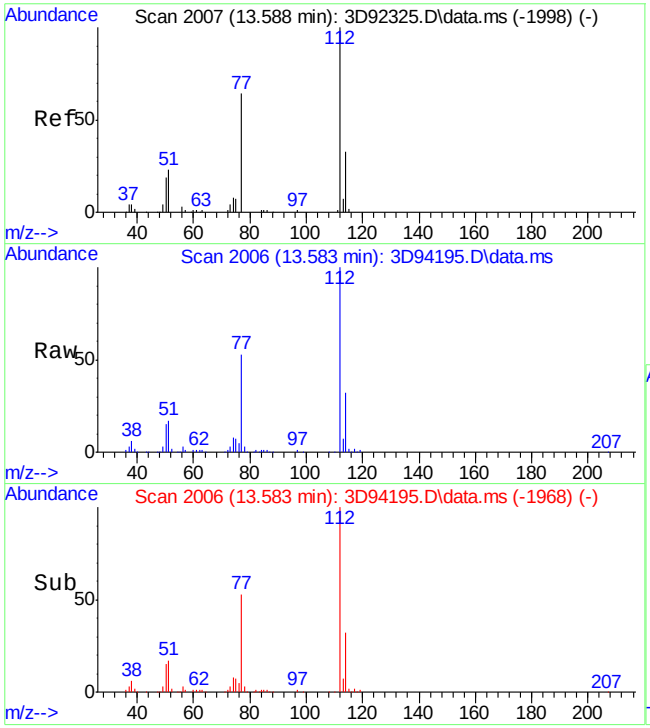


#94
1,2-dibromoethane
Concen: 50.49 ug/L
RT: 13.127 min Scan# 1919
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:107 Resp: 66634

Ion	Ratio	Lower	Upper
107	100		
109	95.3	62.5	122.5
188	3.4	0.0	33.2

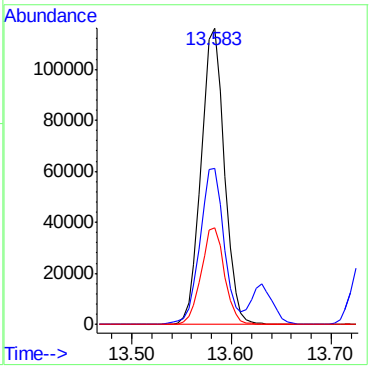


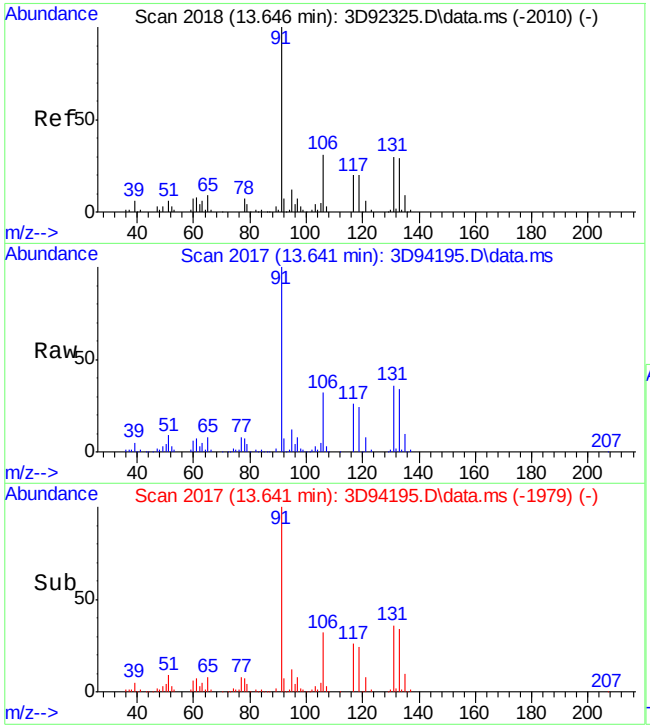


#96
chlorobenzene
Concen: 49.23 ug/L
RT: 13.583 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:112 Resp: 188601

Ion	Ratio	Lower	Upper
112	100		
77	52.5	22.2	82.2
114	32.5	2.5	62.5

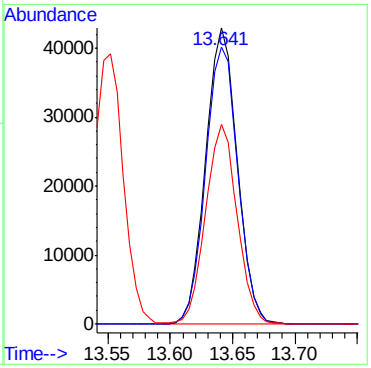


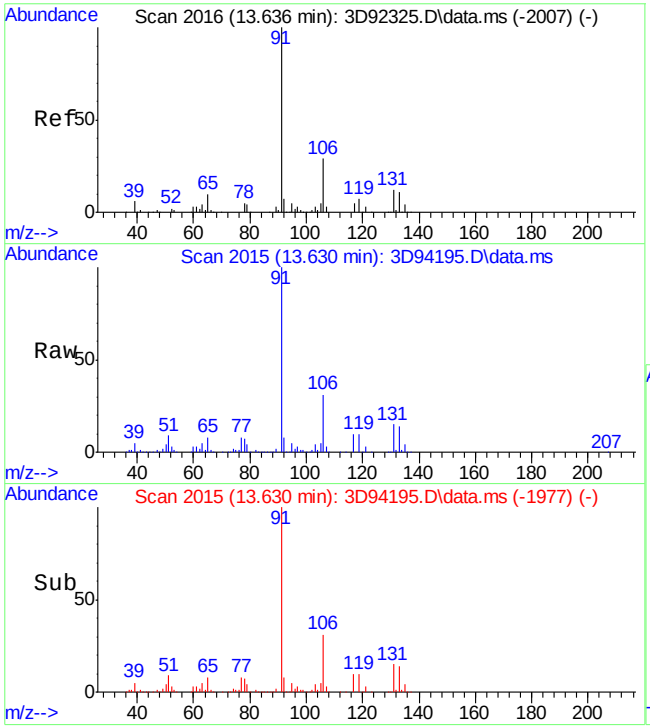


#97
1,1,1,2-tetrachloroethane
Concen: 50.14 ug/L
RT: 13.641 min Scan# 2017
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:131 Resp: 75580

Ion	Ratio	Lower	Upper
131	100		
133	93.6	66.0	126.0
119	67.5	38.3	98.3

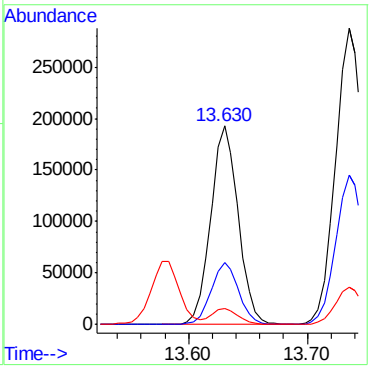


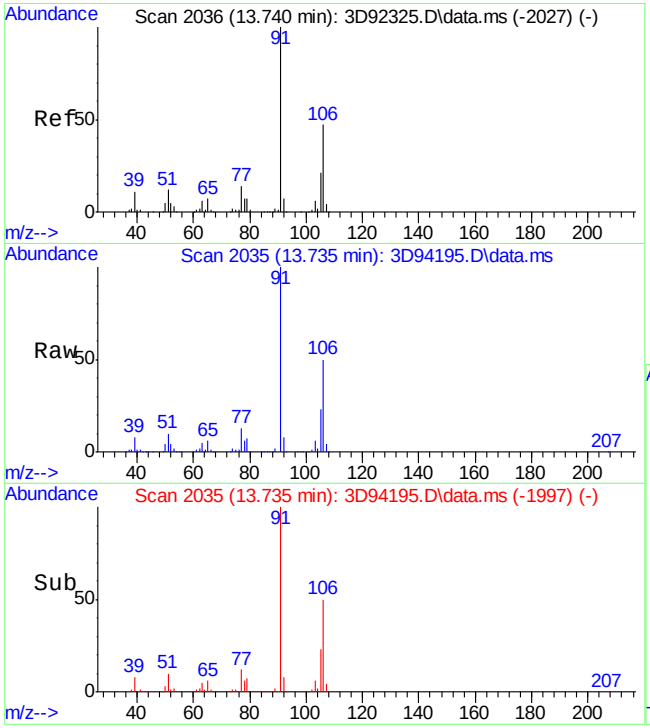


#98
ethylbenzene
Concen: 49.02 ug/L
RT: 13.630 min Scan# 2015
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 91 Resp: 310933

Ion	Ratio	Lower	Upper
91	100		
106	31.2	1.1	61.1
77	8.2	0.0	38.1

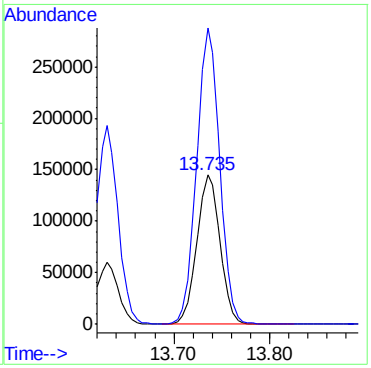


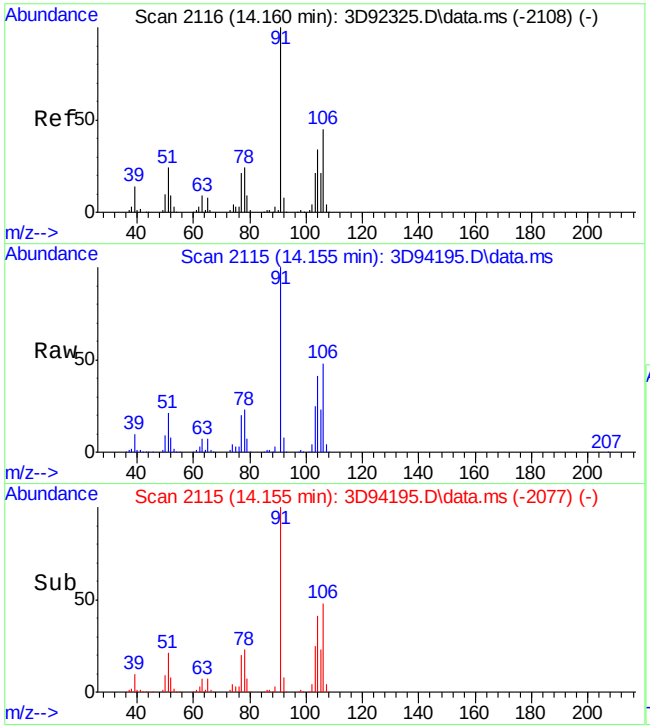


#99
m,p-xylene
Concen: 100.18 ug/L
RT: 13.735 min Scan# 2035
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:106 Resp: 242476

Ion	Ratio	Lower	Upper
106	100		
91	198.6	138.8	257.8

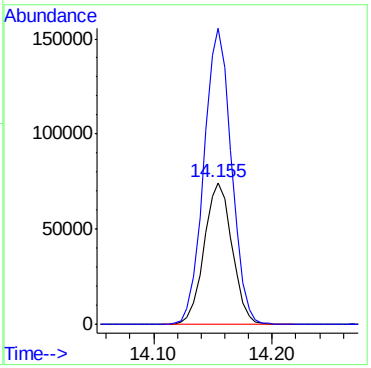


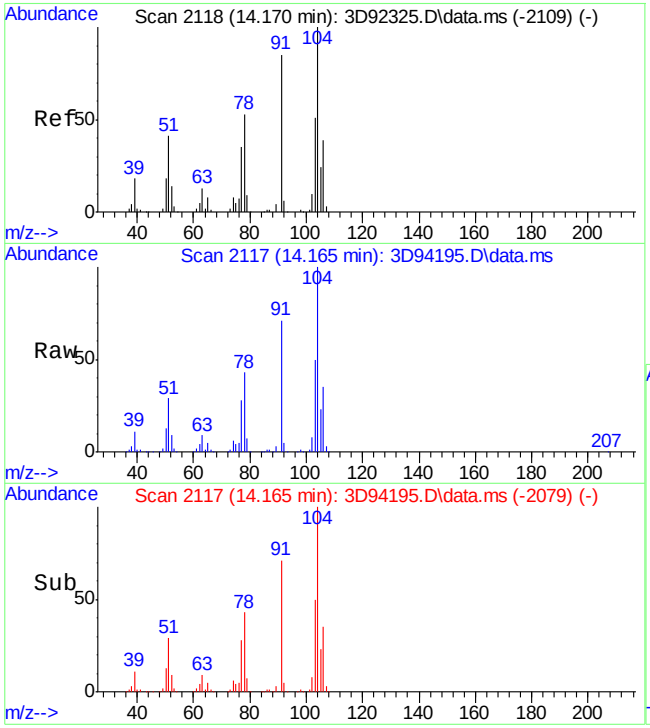


#100
o-xylene
Concen: 49.54 ug/L
RT: 14.155 min Scan# 2115
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:106 Resp: 121842

Ion	Ratio	Lower	Upper
106	100		
91	209.3	144.1	267.7

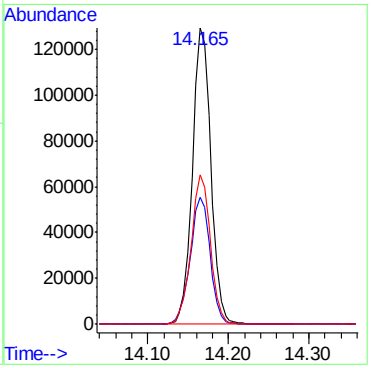


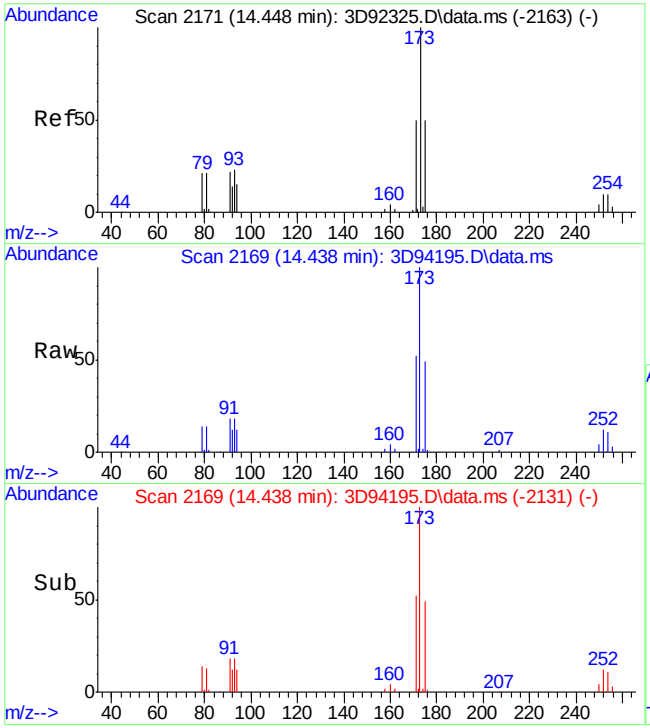


#101
styrene
Concen: 52.64 ug/L
RT: 14.165 min Scan# 2117
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:104 Resp: 206569

Ion	Ratio	Lower	Upper
104	100		
78	42.8	14.3	74.3
103	50.3	20.0	80.0

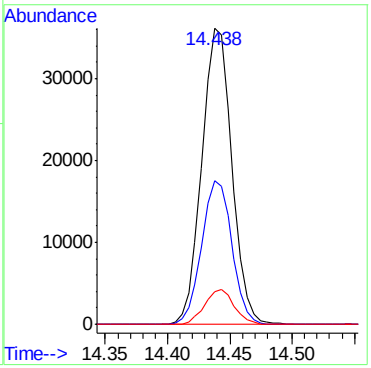


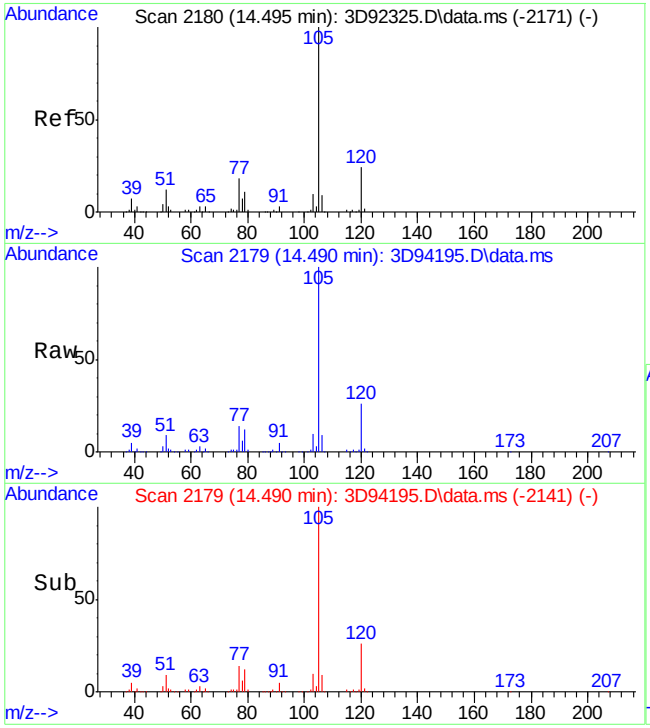


#103
bromoform
Concen: 51.38 ug/L
RT: 14.438 min Scan# 2169
Delta R.T. 0.001 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:173 Resp: 60340

Ion	Ratio	Lower	Upper
173	100		
175	48.6	19.4	79.4
254	11.1	0.0	40.9

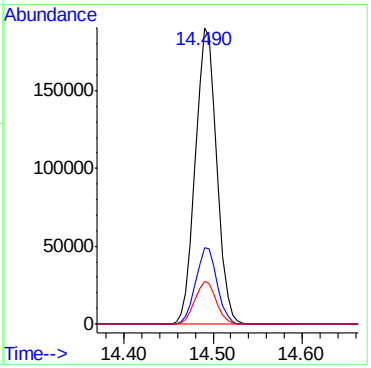


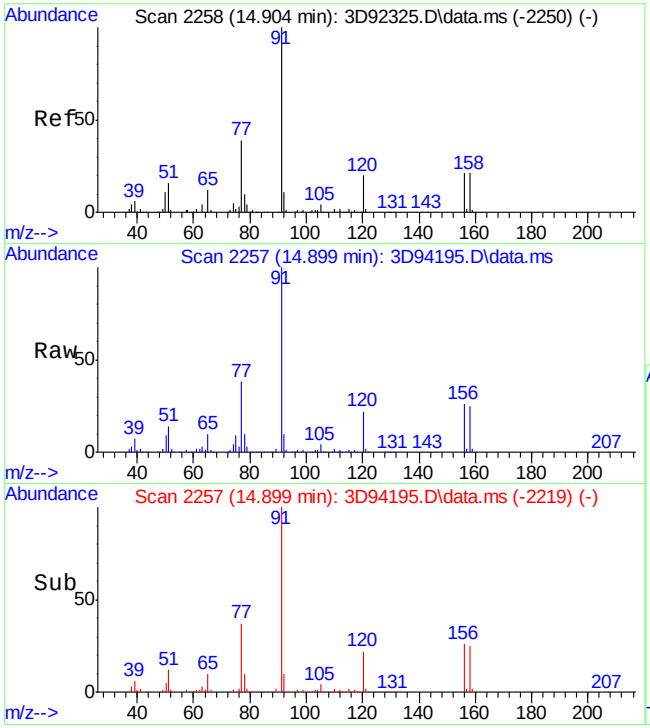


#105
isopropylbenzene
Concen: 51.44 ug/L
RT: 14.490 min Scan# 2179
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:105 Resp: 317308

Ion	Ratio	Lower	Upper
105	100		
120	25.8	0.0	55.5
77	14.4	0.0	44.1

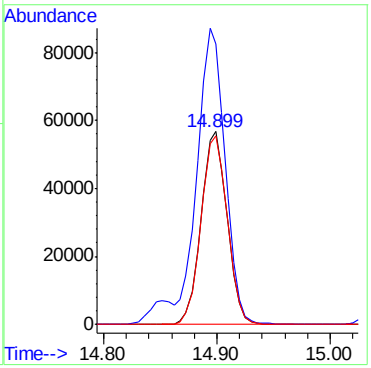


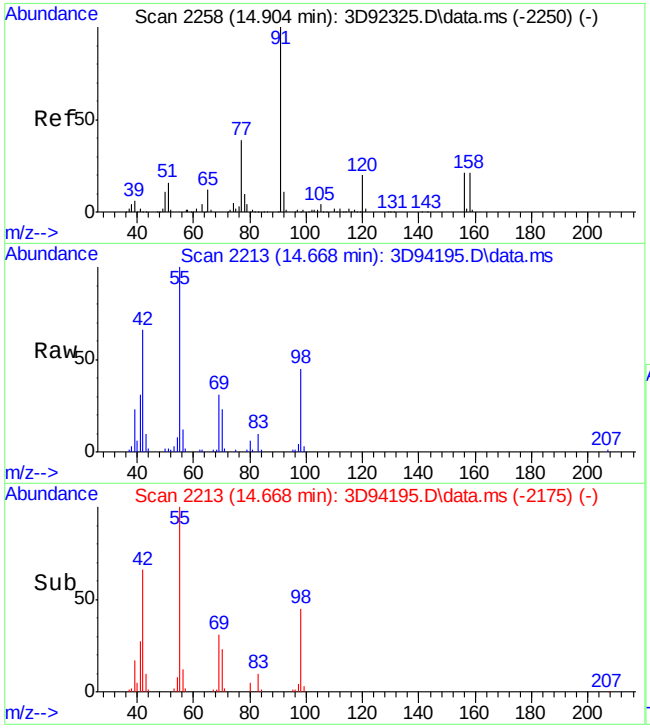


#107
bromobenzene
Concen: 49.48 ug/L
RT: 14.899 min Scan# 2257
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:156 Resp: 89762

Ion	Ratio	Lower	Upper
156	100		
77	145.4	117.2	177.2
158	97.8	67.0	127.0

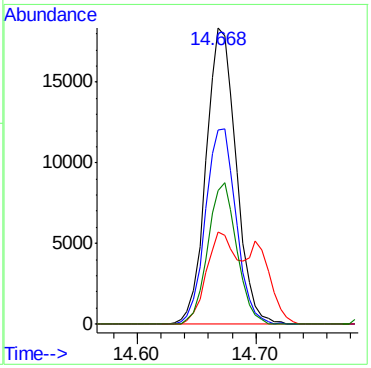


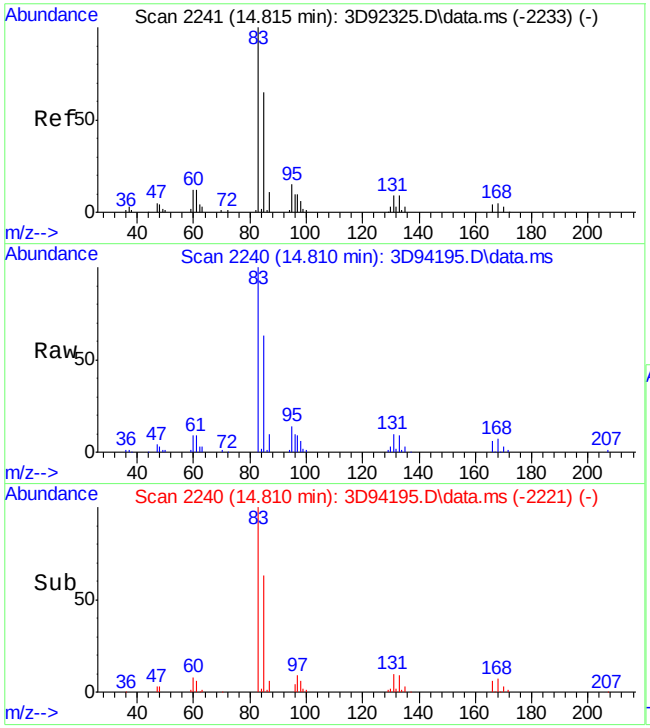


#108
cyclohexanone
Concen: 459.23 ug/L
RT: 14.668 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 55 Resp: 32514

Ion	Ratio	Lower	Upper
55	100		
42	65.5	37.1	97.1
69	31.0	0.7	60.7
98	45.1	15.4	75.4

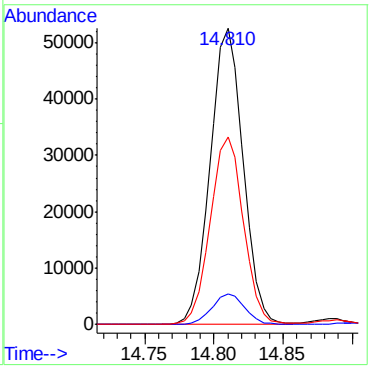


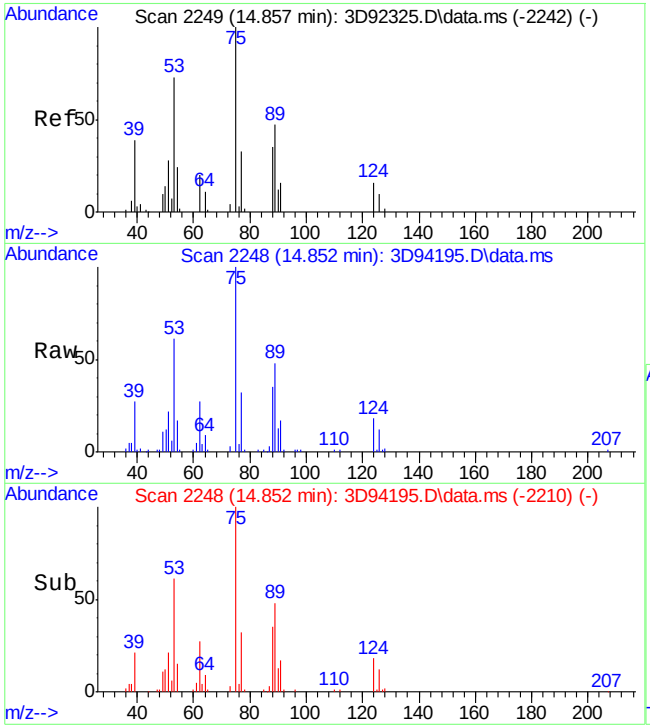


#109
1,1,2,2-tetrachloroethane
Concen: 45.35 ug/L
RT: 14.810 min Scan# 2240
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 83 Resp: 87674

Ion	Ratio	Lower	Upper
83	100		
131	10.2	0.0	39.8
85	63.4	35.0	95.0

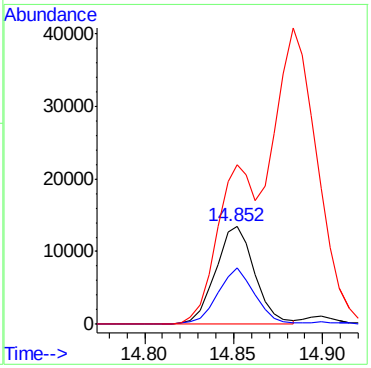


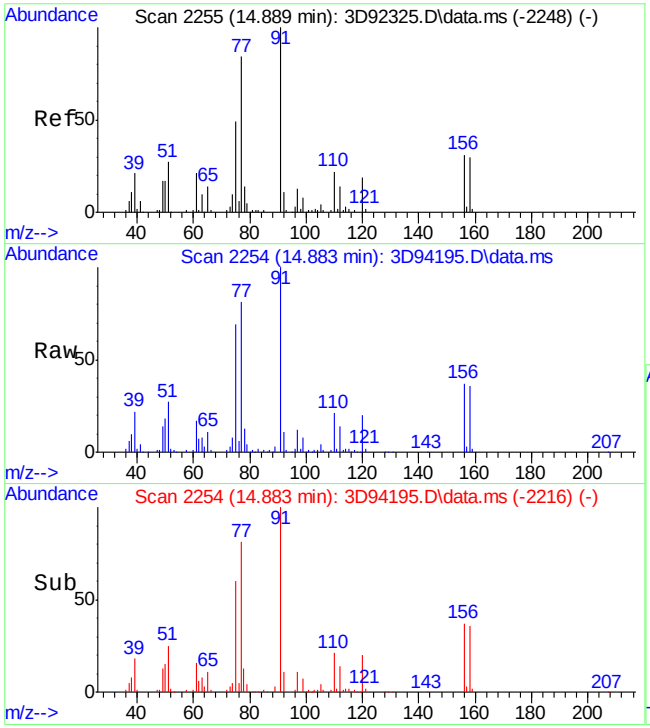


#110
trans-1,4-dichloro-2-butene
Concen: 52.38 ug/L
RT: 14.852 min Scan# 2248
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 53 Resp: 20558

Ion	Ratio	Lower	Upper
53	100		
88	57.1	25.8	85.8
75	162.8	136.3	196.3

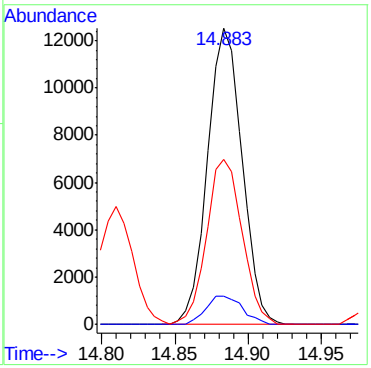


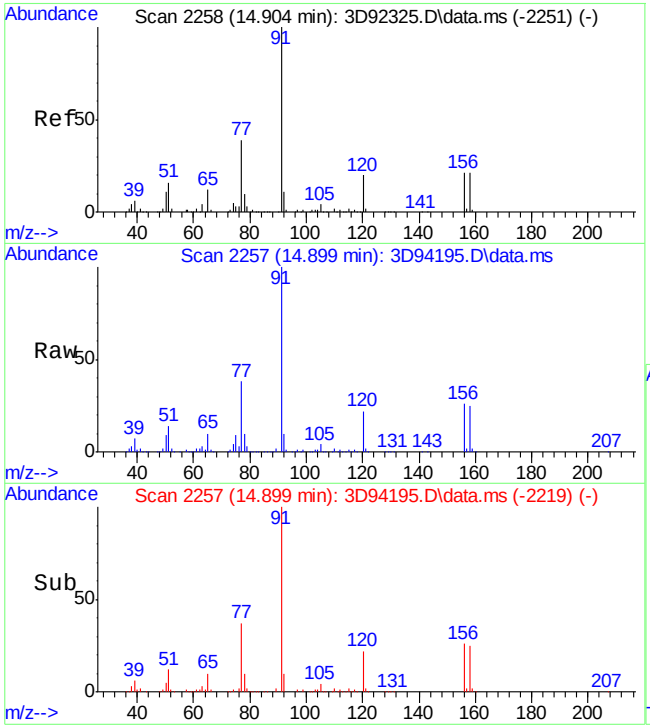


#111
1,2,3-trichloropropane
Concen: 51.42 ug/L
RT: 14.883 min Scan# 2254
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:110 Resp: 20424

Ion	Ratio	Lower	Upper
110	100		
111	9.5	0.0	39.8
97	55.8	25.9	85.9

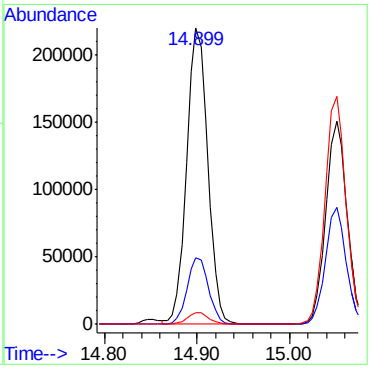




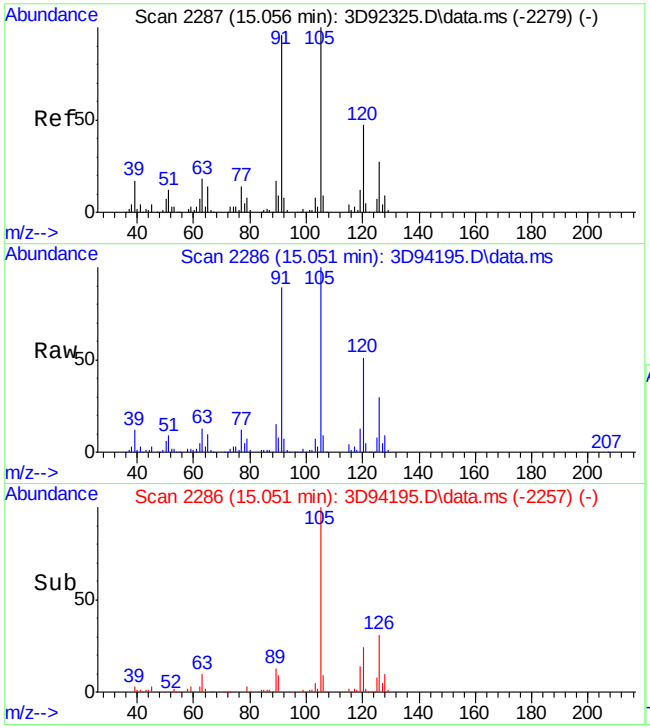
#112
n-propylbenzene
Concen: 49.82 ug/L
RT: 14.899 min Scan# 2257
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 91 Resp: 351871

Ion	Ratio	Lower	Upper
91	100		
120	22.2	0.0	52.3
105	3.7	0.0	33.7



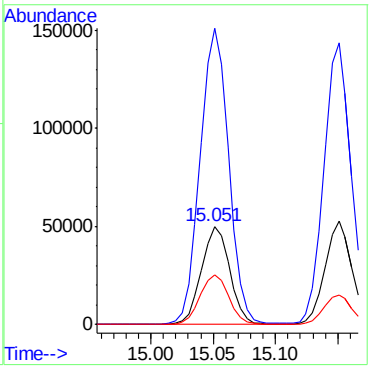
3D94195.D M3D4058.M Thu Dec 19 12:41:30 2013 3D Page 50

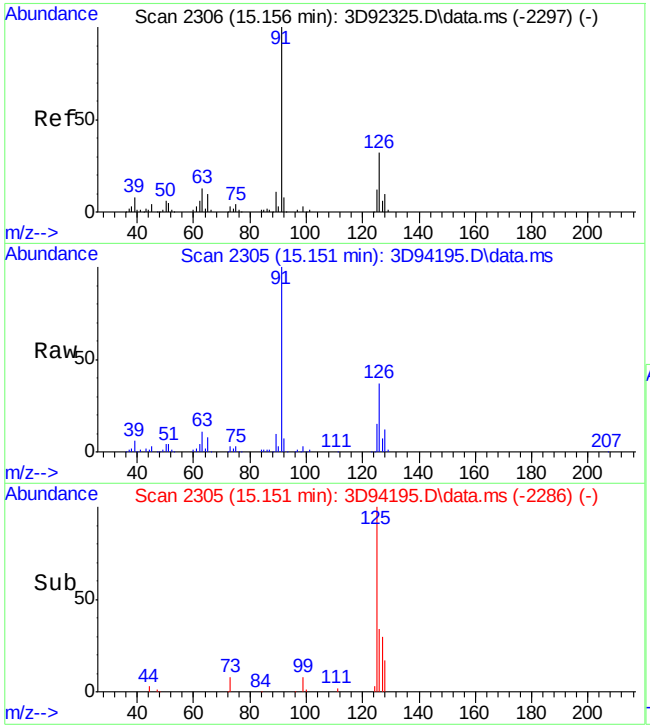


#114
2-chlorotoluene
Concen: 50.66 ug/L
RT: 15.051 min Scan# 2286
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:126 Resp: 78470

Ion	Ratio	Lower	Upper
126	100		
91	302.2	271.2	331.2
89	51.0	19.8	79.8

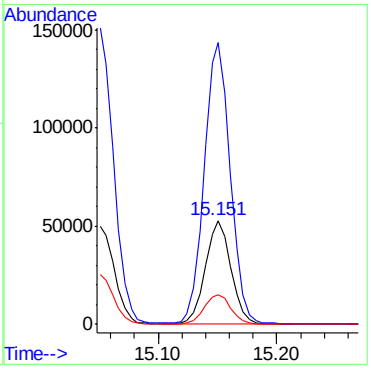


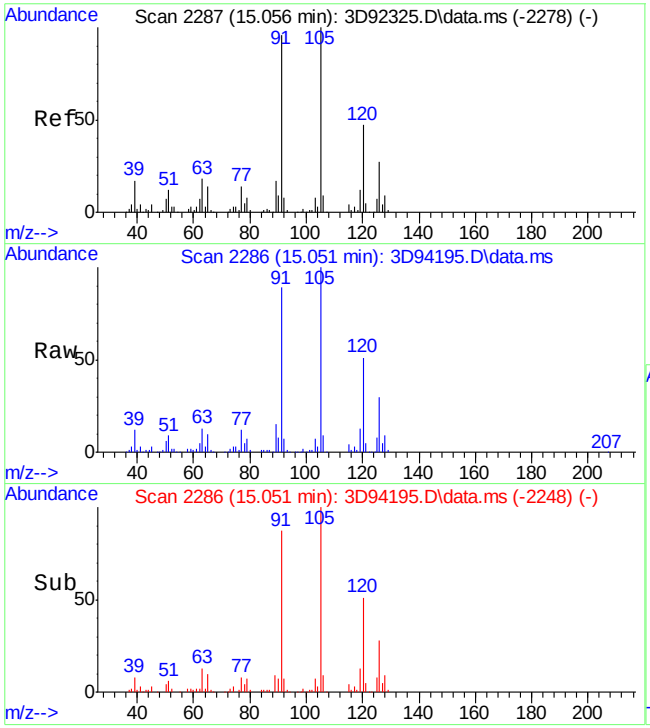


#115
4-chlorotoluene
Concen: 50.92 ug/L
RT: 15.151 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:126 Resp: 79352

Ion	Ratio	Lower	Upper
126	100		
91	270.5	249.9	309.9
89	28.4	0.0	58.8

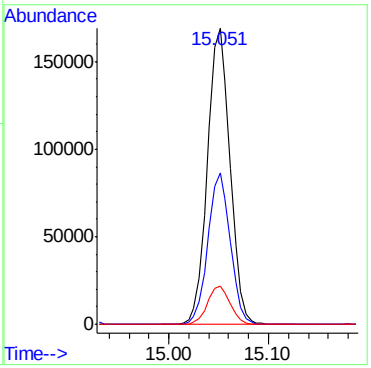


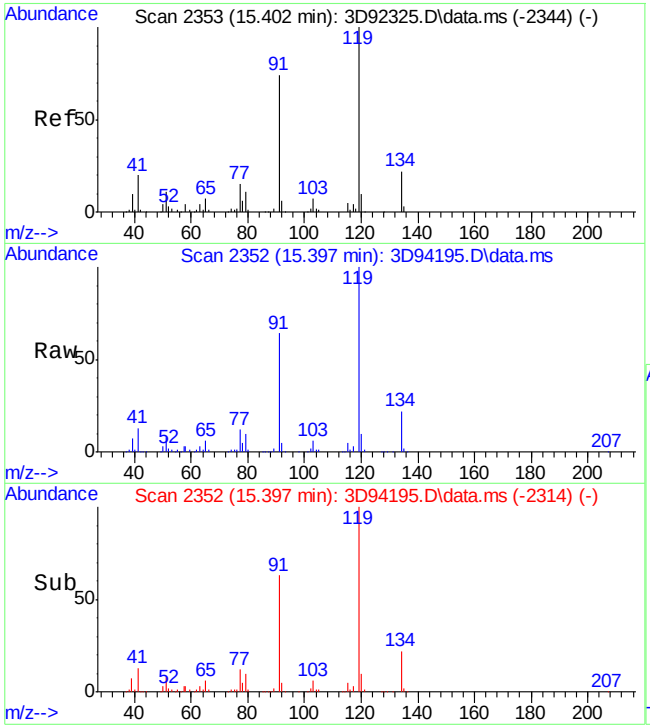


#116
1,3,5-trimethylbenzene
Concen: 50.75 ug/L
RT: 15.051 min Scan# 2286
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:105 Resp: 265087

Ion	Ratio	Lower	Upper
105	100		
120	51.2	21.1	81.1
119	13.0	0.0	43.2

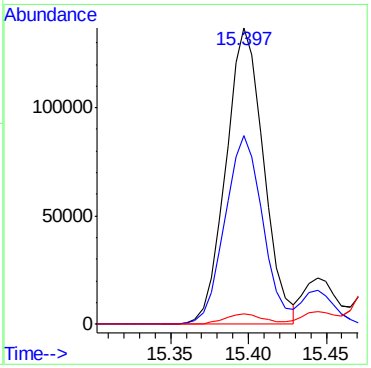


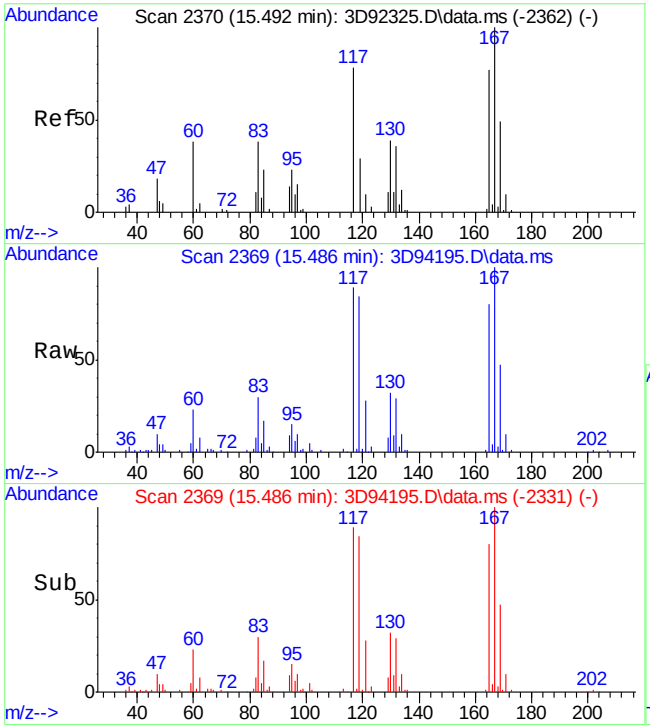


#117
tert-butylbenzene
Concen: 50.79 ug/L
RT: 15.397 min Scan# 2352
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:119 Resp: 230650

Ion	Ratio	Lower	Upper
119	100		
91	63.7	33.7	93.7
117	3.4	0.0	33.3

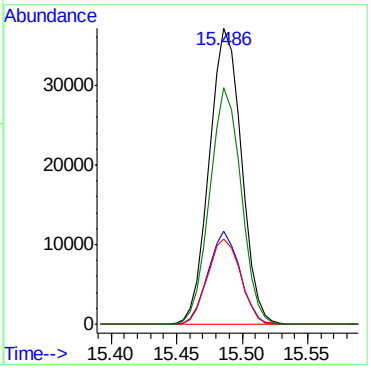


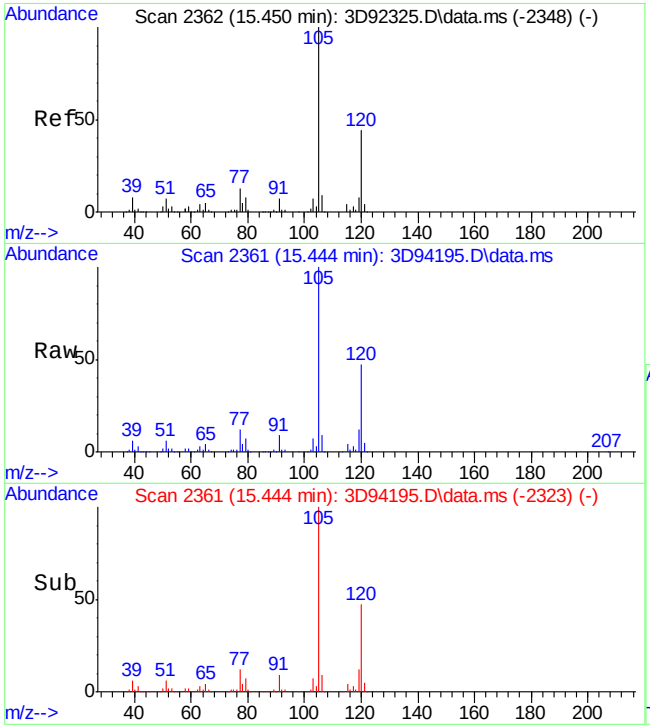


#118
pentachloroethane
Concen: 52.63 ug/L
RT: 15.486 min Scan# 2369
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:167 Resp: 62970

Ion	Ratio	Lower	Upper
167	100		
130	31.5	0.1	60.1
132	28.9	0.5	60.5
165	80.0	46.5	106.5

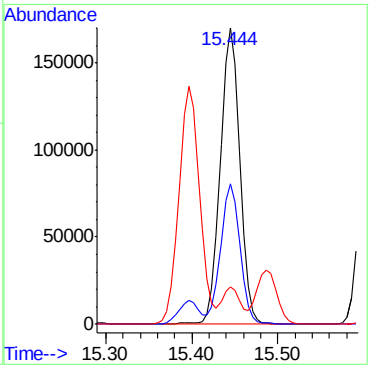


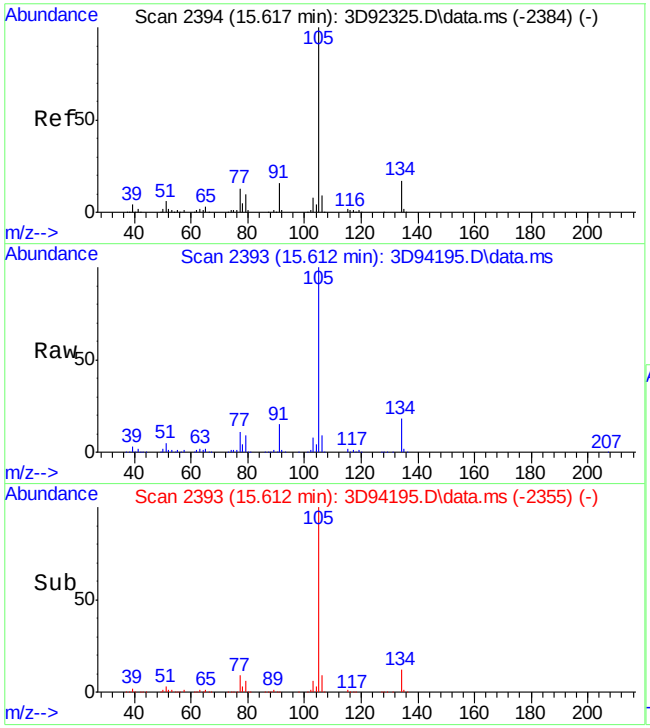


#119
1,2,4-trimethylbenzene
Concen: 51.22 ug/L
RT: 15.444 min Scan# 2361
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:105 Resp: 263854

Ion	Ratio	Lower	Upper
105	100		
120	47.4	16.8	76.8
119	12.0	0.0	42.6

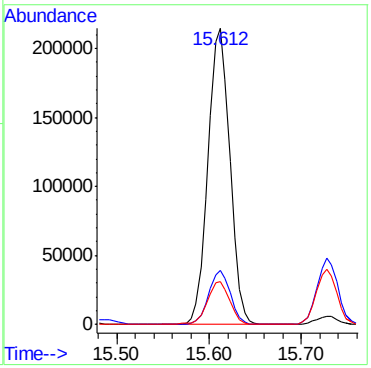


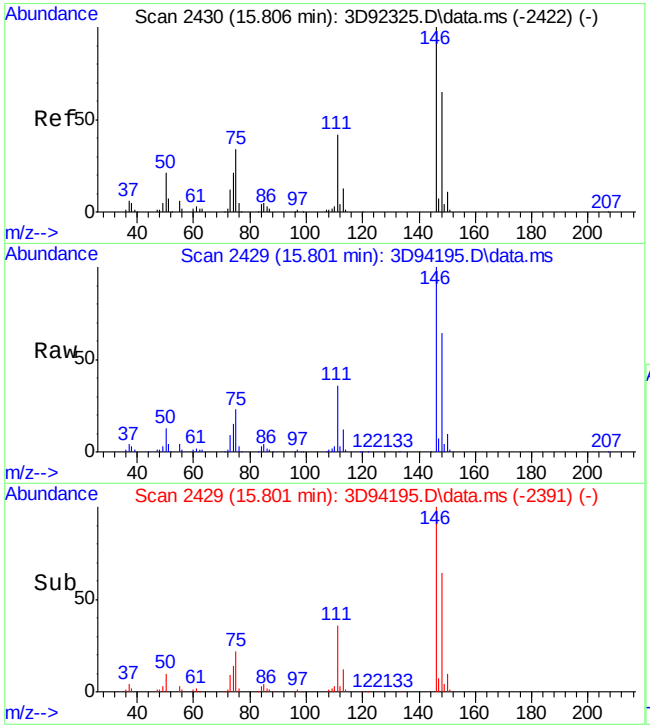


#120
sec-butylbenzene
Concen: 51.25 ug/L
RT: 15.612 min Scan# 2393
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:105 Resp: 352321

Ion	Ratio	Lower	Upper
105	100		
134	18.2	0.0	48.5
91	14.6	0.0	44.8

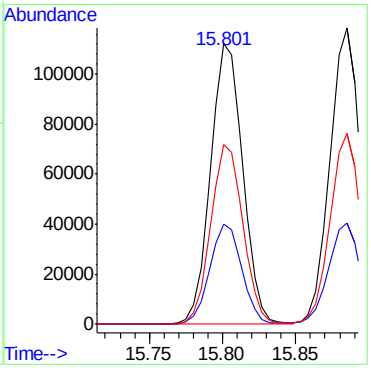


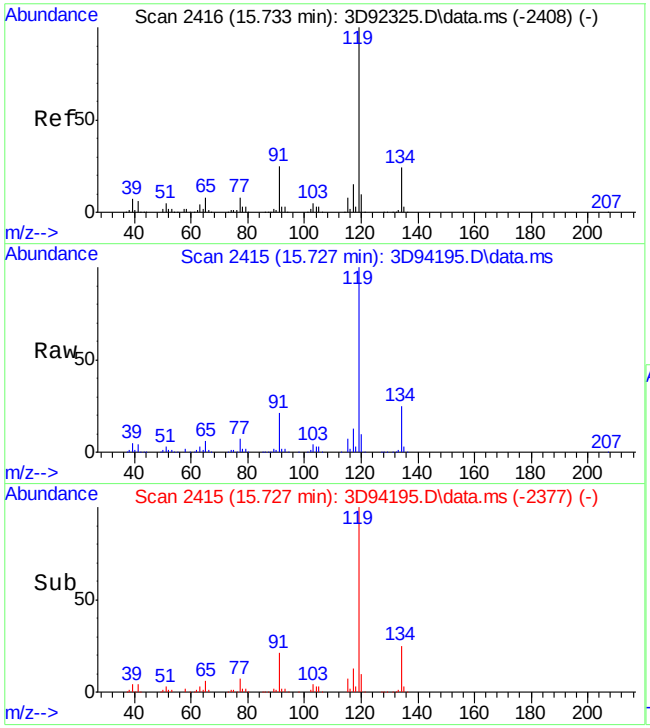


#121
1,3-dichlorobenzene
Concen: 49.16 ug/L
RT: 15.801 min Scan# 2429
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:146 Resp: 169953

Ion	Ratio	Lower	Upper
146	100		
111	35.6	6.0	66.0
148	64.0	34.2	94.2

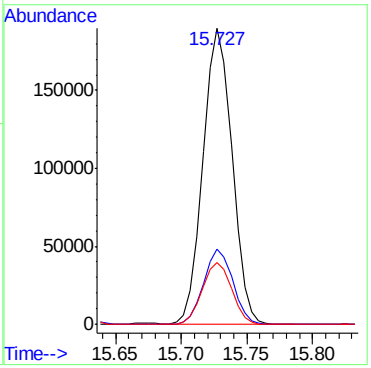


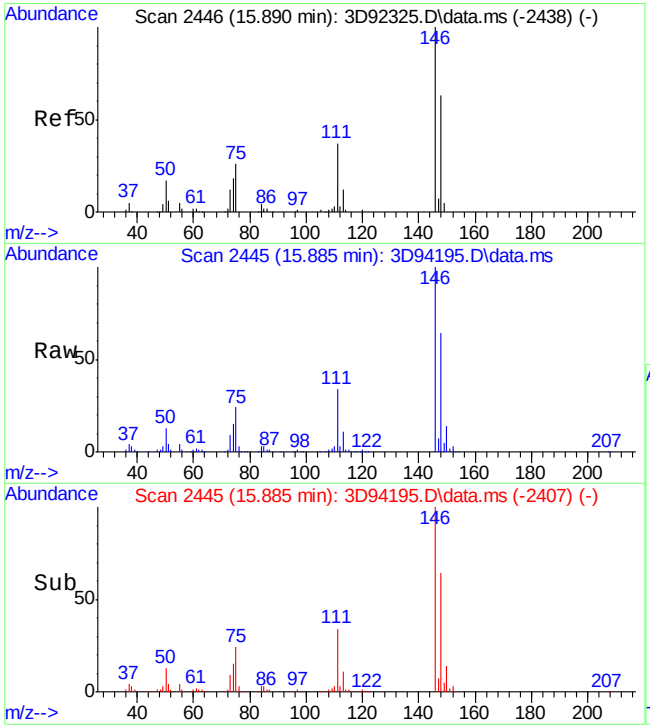


#122
p-isopropyltoluene
Concen: 51.34 ug/L
RT: 15.727 min Scan# 2415
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:119 Resp: 293001

Ion	Ratio	Lower	Upper
119	100		
134	25.4	0.0	55.3
91	21.1	0.0	51.2

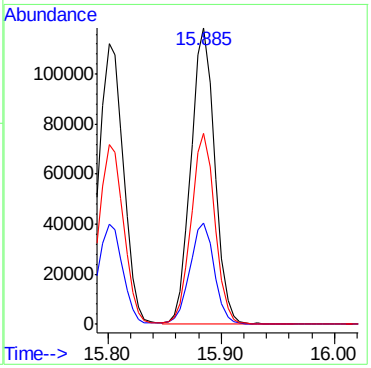


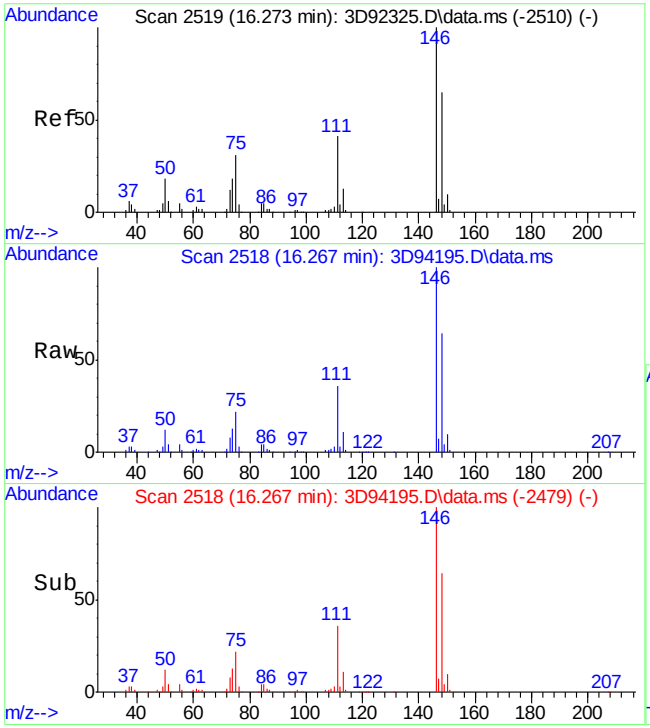


#123
1,4-dichlorobenzene
Concen: 47.25 ug/L
RT: 15.885 min Scan# 2445
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:146 Resp: 172609

Ion	Ratio	Lower	Upper
146	100		
111	34.2	4.9	64.9
148	64.3	34.4	94.4

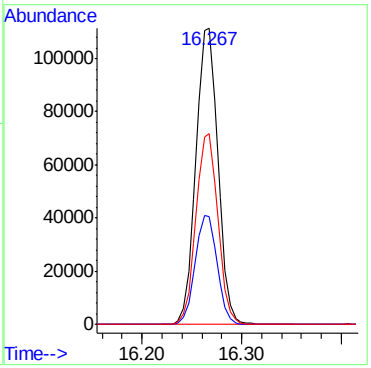


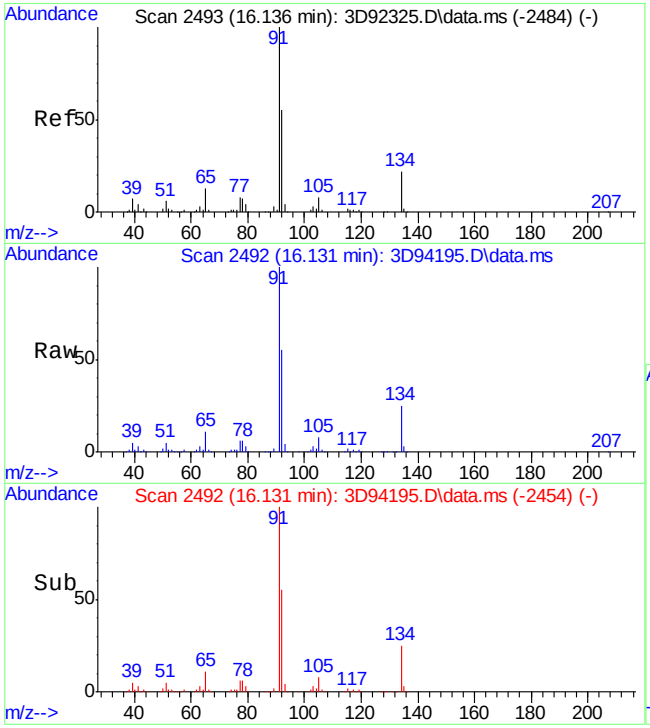


#124
1,2-dichlorobenzene
Concen: 48.00 ug/L
RT: 16.267 min Scan# 2518
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:146 Resp: 171174

Ion	Ratio	Lower	Upper
146	100		
111	36.4	8.3	68.3
148	64.3	34.4	94.4

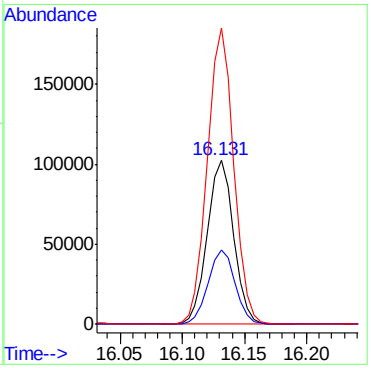




#126
n-butylbenzene
Concen: 52.65 ug/L
RT: 16.131 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 92 Resp: 150874

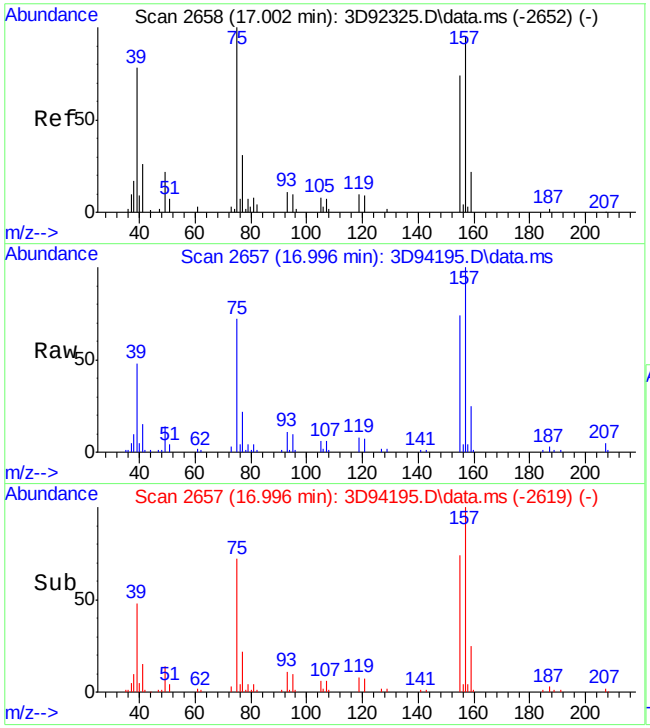
Ion	Ratio	Lower	Upper
92	100		
134	45.5	15.0	75.0
91	180.4	148.5	208.5



7.2.7

7

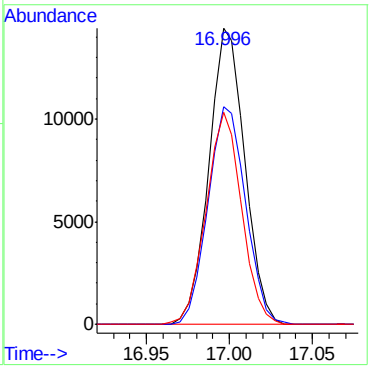
3D94195.D M3D4058.M Thu Dec 19 12:41:31 2013 3D Page 56

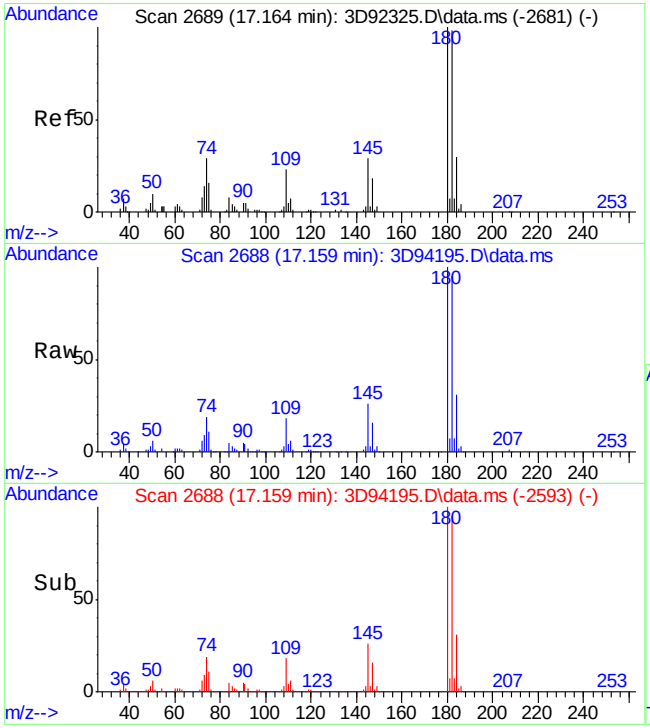


#128
1,2-dibromo-3-chloropropane
Concen: 51.92 ug/L
RT: 16.996 min Scan# 2657
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:157 Resp: 21663

Ion	Ratio	Lower	Upper
157	100		
155	73.7	47.2	107.2
75	71.6	45.0	105.0

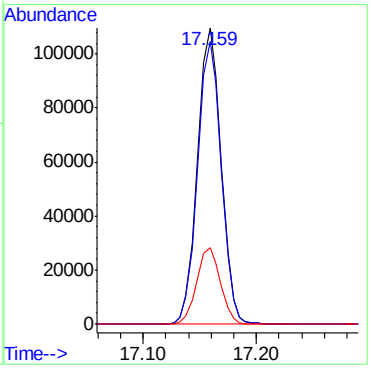


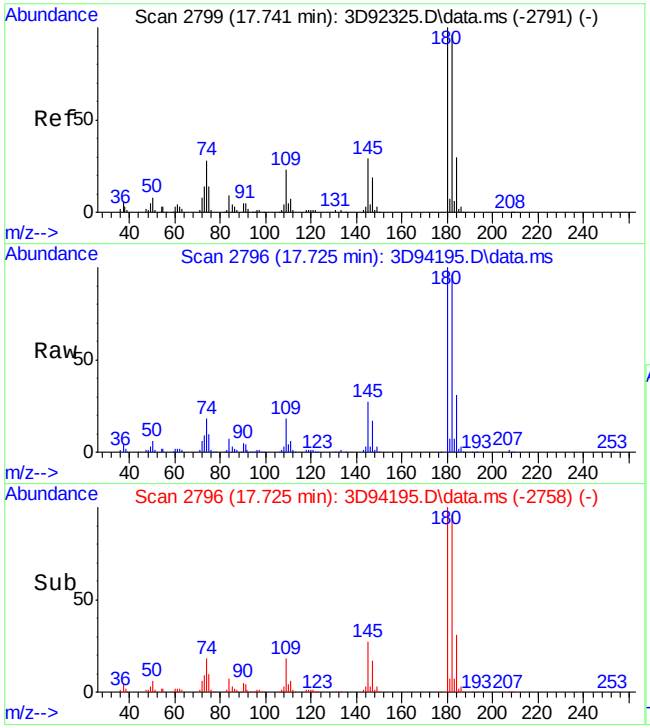


#129
1,3,5-trichlorobenzene
Concen: 48.09 ug/L
RT: 17.159 min Scan# 2688
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:180 Resp: 158459

Ion	Ratio	Lower	Upper
180	100		
182	95.4	66.4	126.4
145	25.6	0.0	55.5

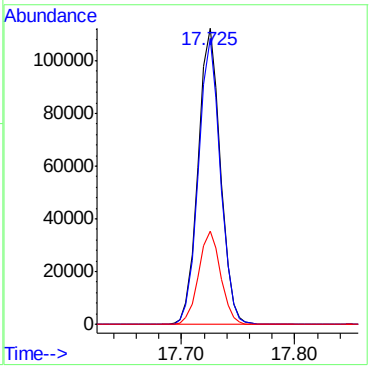


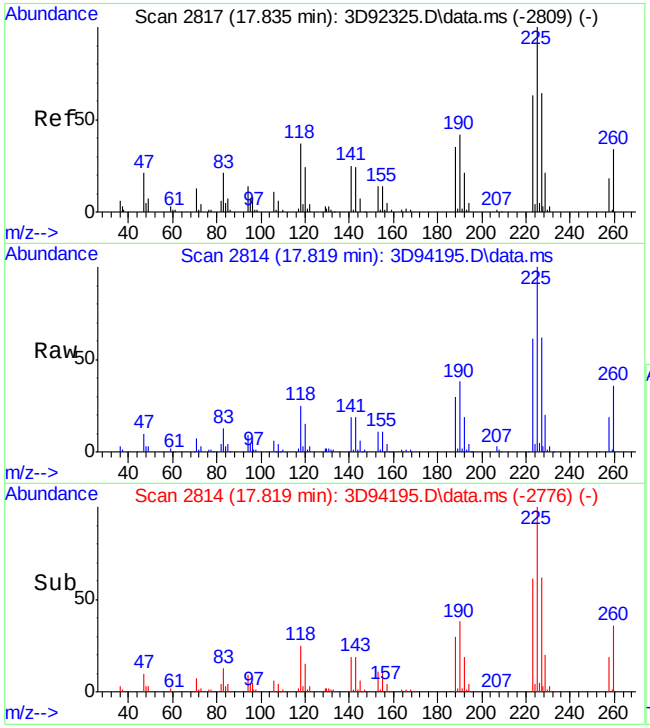


#130
1,2,4-trichlorobenzene
Concen: 51.81 ug/L
RT: 17.725 min Scan# 2796
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:180 Resp: 151817

Ion	Ratio	Lower	Upper
180	100		
182	96.4	67.0	127.0
184	31.3	1.3	61.3

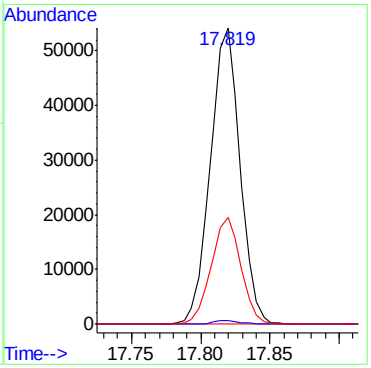




#131
hexachlorobutadiene
Concen: 52.17 ug/L
RT: 17.819 min Scan# 2814
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:225 Resp: 81257

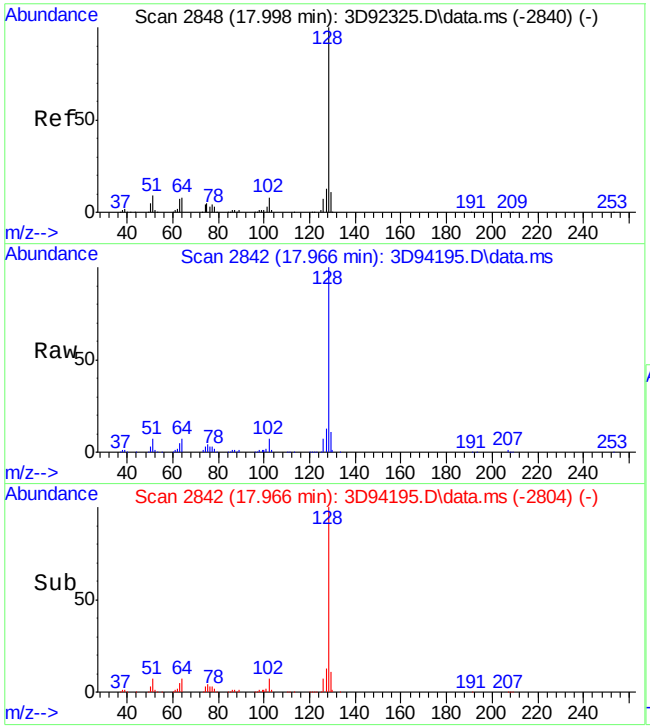
Ion	Ratio	Lower	Upper
225	100		
259	1.1	0.0	31.3
260	35.9	6.4	66.4



7.2.7

7

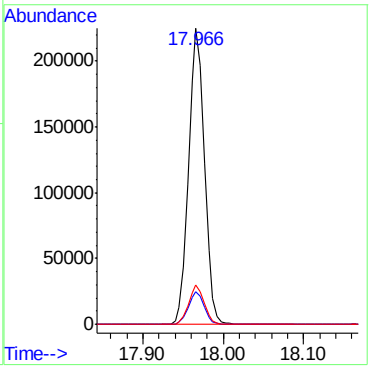
3D94195.D M3D4058.M Thu Dec 19 12:41:31 2013 3D Page 58

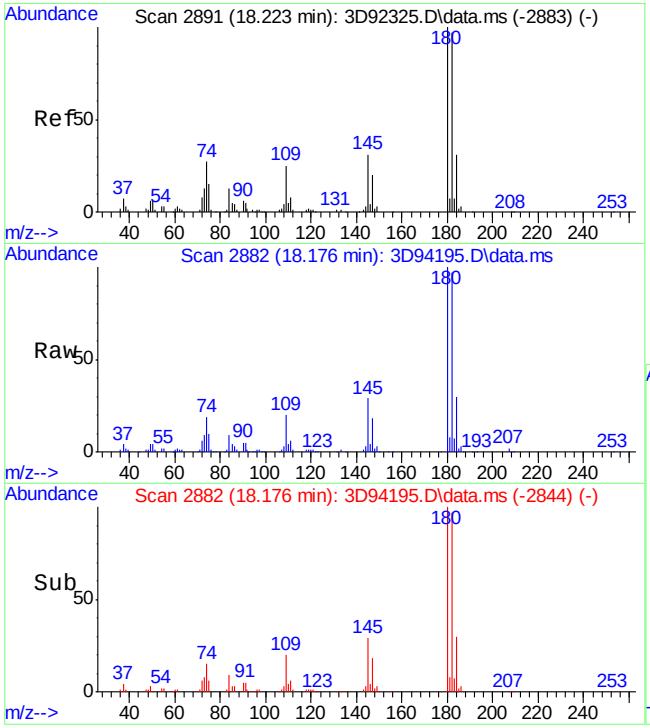


#132
naphthalene
Concen: 49.46 ug/L
RT: 17.966 min Scan# 2842
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:128 Resp: 309551

Ion	Ratio	Lower	Upper
128	100		
129	10.9	0.0	41.0
127	13.2	0.0	42.6

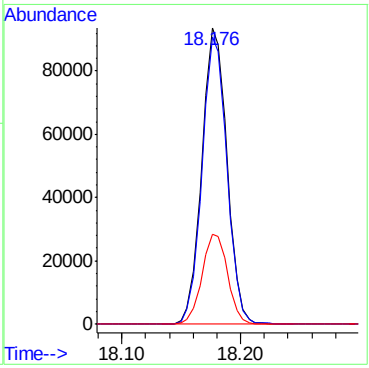


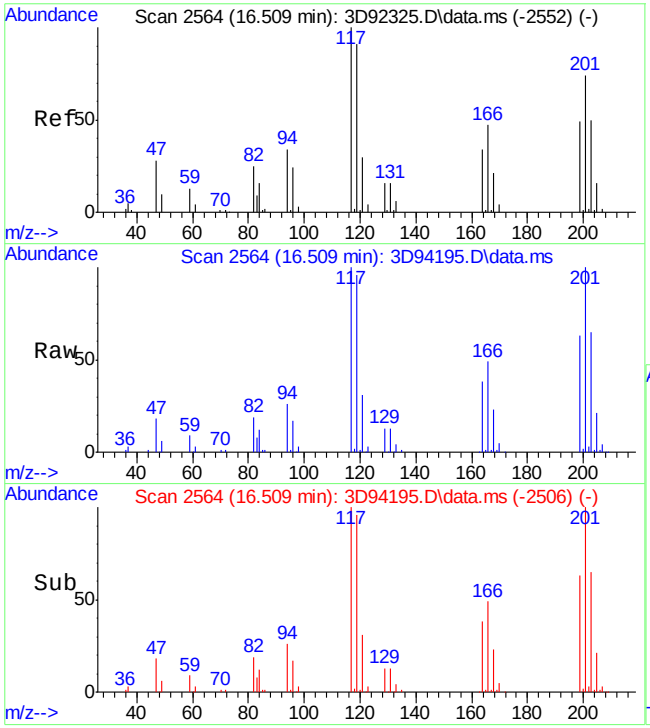


#133
1,2,3-trichlorobenzene
Concen: 48.62 ug/L
RT: 18.176 min Scan# 2882
Delta R.T. -0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:180 Resp: 138399

Ion	Ratio	Lower	Upper
180	100		
182	97.0	64.7	124.7
184	30.3	0.4	60.4

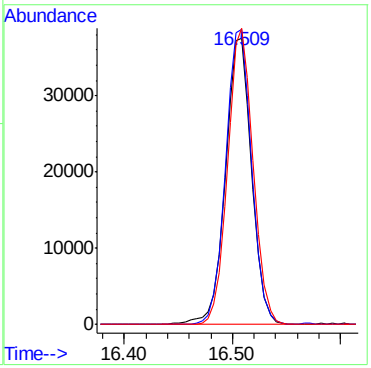


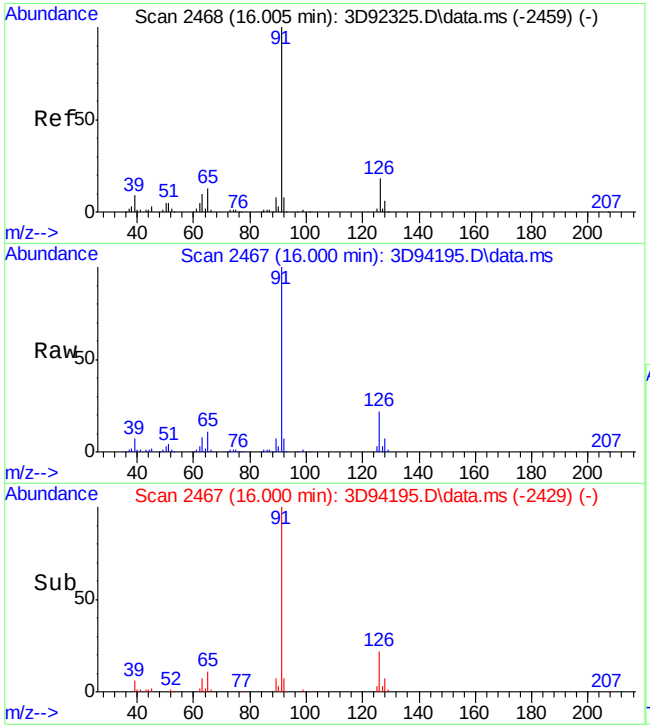


#134
hexachloroethane
Concen: 52.95 ug/L
RT: 16.509 min Scan# 2564
Delta R.T. 0.005 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion:119 Resp: 63228

Ion	Ratio	Lower	Upper
119	100		
117	102.2	71.1	131.1
201	100.2	69.2	129.2

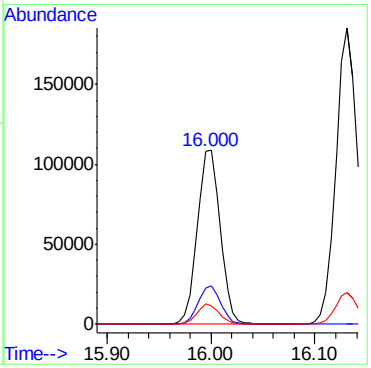




#135
Benzyl chloride
Concen: 50.56 ug/L
RT: 16.000 min Scan# 2467
Delta R.T. 0.000 min
Lab File: 3D94195.D
Acq: 18 Dec 2013 4:06 pm

Tgt Ion: 91 Resp: 164686

Ion	Ratio	Lower	Upper
91	100		
126	21.4	0.0	50.9
65	11.1	0.0	41.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94196.D
Acq On : 18 Dec 2013 4:33 pm
Operator : katteric
Sample : ic4058-100
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 19 12:32:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 16:33:17 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.239	65	72240	500.00	ug/L		0.00
4) pentafluorobenzene	9.478	168	181625	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.395	114	248713	50.00	ug/L		0.00
88) chlorobenzene-d5	13.552	117	205467	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.859	152	120572	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.536	113	142738	98.69	ug/L		0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 197.38%#				
51) 1,2-dichloroethane-d4 (s)	9.960	65	142900	95.60	ug/L		0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 191.20%#				
80) toluene-d8 (s)	12.037	98	493142	101.08	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 202.16%#				
106) 4-bromofluorobenzene (s)	14.700	95	174901	95.74	ug/L		0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 191.48%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.119	88	33921	2682.98	ug/L		96
3) tertiary butyl alcohol	7.360	59	75685	467.29	ug/L		89
8) chlorodifluoromethane	3.873	51	143785	105.85	ug/L		99
9) dichlorodifluoromethane	3.852	85	177919	106.27	ug/L		99
10) chloromethane	4.203	50	211504	100.26	ug/L		99
11) vinyl chloride	4.450	62	209789	106.34	ug/L		100
12) bromomethane	5.100	94	138371	99.80	ug/L		99
13) chloroethane	5.273	64	95571	101.39	ug/L		99
14) 1,3-butadiene	4.502	54	113756	106.93	ug/L		100
15) vinyl bromide	5.624	106	122751	105.28	ug/L		100
16) trichlorofluoromethane	5.724	101	217300	100.79	ug/L		99
18) ethyl ether	6.133	74	78421	104.74	ug/L		97
21) acrolein	6.411	56	2908	9.51	ug/L		96
22) 1,1-dichloroethene	6.563	61	209325	99.31	ug/L		99
23) acetone	6.626	58	11713	107.83	ug/L		95
24) allyl chloride	7.098	76	83316	100.68	ug/L		99
25) acetonitrile	7.071	40	128471	946.05	ug/L	#	73
27) iodomethane	6.851	142	282537	97.52	ug/L		99
28) iso-butyl alcohol	9.766	41	45585	945.54	ug/L		98
29) carbon disulfide	6.967	76	506466	96.42	ug/L		100
30) methylene chloride	7.292	84	156465	97.48	ug/L		99
31) methyl acetate	7.077	74	24620	108.20	ug/L		98
32) methyl tert butyl ether	7.596	73	430747	95.21	ug/L		100
33) trans-1,2-dichloroethene	7.659	61	208553	98.43	ug/L		98
34) di-isopropyl ether	8.188	45	487266	98.98	ug/L		90
35) ethyl tert-butyl ether	8.655	59	465886	103.75	ug/L		98
36) 2-butanone	8.933	72	16666	111.50	ug/L		92
37) 1,1-dichloroethane	8.230	63	257814	97.51	ug/L		100
38) chloroprene	8.330	53	199975	105.83	ug/L		96
39) acrylonitrile	7.627	53	279497	520.89	ug/L		98
40) vinyl acetate	8.209	86	25516	113.72	ug/L		99
41) ethyl acetate	8.943	45	19992	105.99	ug/L		79
42) 2,2-dichloropropane	8.964	77	200048	91.46	ug/L		99

M3D4058.M Thu Dec 19 12:37:12 2013 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94196.D
Acq On : 18 Dec 2013 4:33 pm
Operator : katteric
Sample : ic4058-100
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 19 12:32:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 16:33:17 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) cis-1,2-dichloroethene	8.964	61	254026	98.14	ug/L	100
44) propionitrile	9.043	54	214206	1060.72	ug/L	90
45) methyl acrylate	9.027	55	159803	108.36	ug/L	99
46) bromochloromethane	9.284	128	86169	104.74	ug/L	99
47) tetrahydrofuran	9.310	42	49736	102.37	ug/L	100
48) chloroform	9.336	83	250449	97.96	ug/L	99
49) Tert-Butyl Formate	9.357	59	140775	105.06	ug/L	99
52) freon 113	6.521	151	106926	109.14	ug/L	96
53) methacrylonitrile	9.221	41	90476	103.71	ug/L	98
54) 1,1,1-trichloroethane	9.578	97	216506	97.89	ug/L	99
56) 2,2,4-Trimethylpentane	10.007	57	550450	108.66	ug/L	100
57) tert-amyl methyl ether	10.044	73	459122	101.08	ug/L	98
59) epichlorohydrin	11.664	57	68722	529.74	ug/L	99
60) n-butyl alcohol	10.521	56	189387	5240.22	ug/L	100
61) cyclohexane	9.646	84	209940	97.70	ug/L	98
62) carbon tetrachloride	9.777	117	195212	99.71	ug/L	98
63) 1,1-dichloropropene	9.756	75	193083	100.01	ug/L	100
64) hexane	7.942	57	162874	107.21	ug/L	100
65) benzene	10.023	78	587624	97.88	ug/L	99
66) heptane	10.175	57	98928	110.33	ug/L	98
67) isopropyl acetate	9.939	43	268222	101.43	ug/L	99
68) 1,2-dichloroethane	10.049	62	174707	97.69	ug/L	100
69) trichloroethene	10.742	95	147068	99.41	ug/L	99
70) ethyl acrylate	10.736	55	178207	109.26	ug/L	100
72) 2-nitropropane	11.528	41	51488	97.67	ug/L	100
73) 2-chloroethyl vinyl ether	11.533	63	481326	515.83	ug/L	99
74) methyl methacrylate	11.004	41	217584	101.71	ug/L	98
75) 1,2-dichloropropane	11.009	63	148005	101.03	ug/L	100
76) methylcyclohexane	10.946	83	226992	105.39	ug/L	99
77) dibromomethane	11.171	93	94181	102.18	ug/L	99
78) bromodichloromethane	11.303	83	194547	104.01	ug/L	99
79) cis-1,3-dichloropropene	11.753	75	238362	101.73	ug/L	99
81) 4-methyl-2-pentanone	11.843	58	55699	108.10	ug/L	100
82) toluene	12.110	92	352774	101.62	ug/L	98
83) 3-methyl-1-butanol	11.864	70	70439	2052.45	ug/L	98
84) trans-1,3-dichloropropene	12.314	75	213073	102.47	ug/L	97
85) ethyl methacrylate	12.299	69	179080	109.84	ug/L	99
86) 1,1,2-trichloroethane	12.529	83	109995	103.50	ug/L	98
87) 2-hexanone	12.692	58	49055	109.10	ug/L	100
89) tetrachloroethene	12.692	166	171007	102.38	ug/L	98
90) 1,3-dichloropropane	12.713	76	200375	100.63	ug/L	100
91) butyl acetate	12.765	56	86427	101.40	ug/L	96
92) 3,3-Dimethyl-1-Butanol	12.865	57	132200	973.75	ug/L	99
93) dibromochloromethane	12.975	129	167643	105.52	ug/L	97
94) 1,2-dibromoethane	13.127	107	138297	102.83	ug/L	99
96) chlorobenzene	13.578	112	388556	100.86	ug/L	97
97) 1,1,1,2-tetrachloroethane	13.641	131	153431	100.77	ug/L	99
98) ethylbenzene	13.630	91	638147	100.25	ug/L	99
99) m,p-xylene	13.735	106	496248	201.68	ug/L	99
100) o-xylene	14.155	106	250989	101.25	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94196.D
Acq On : 18 Dec 2013 4:33 pm
Operator : katteric
Sample : ic4058-100
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 19 12:32:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 16:33:17 2013
Response via : Initial Calibration

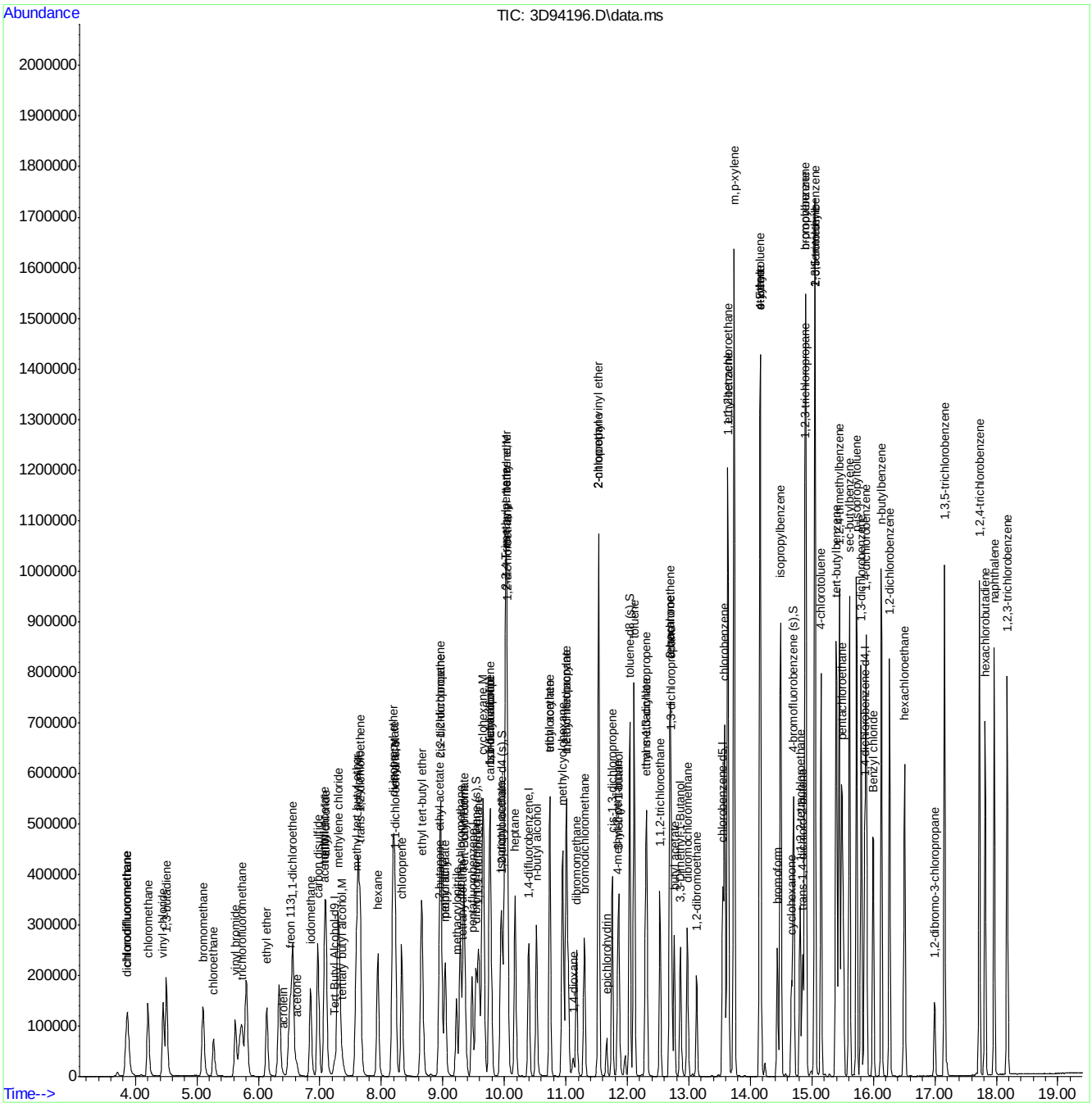
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) styrene	14.165	104	427875	105.98	ug/L		99
103) bromoform	14.438	173	127518	106.88	ug/L		100
105) isopropylbenzene	14.490	105	645712	101.67	ug/L		99
107) bromobenzene	14.899	156	186938	100.85	ug/L		99
108) cyclohexanone	14.669	55	80286	1137.75	ug/L		98
109) 1,1,2,2-tetrachloroethane	14.810	83	182510	95.80	ug/L		97
110) trans-1,4-dichloro-2-b...	14.852	53	43294	104.79	ug/L		96
111) 1,2,3-trichloropropane	14.884	110	42590	102.83	ug/L		97
112) n-propylbenzene	14.899	91	721015	99.88	ug/L		99
113) 4-Ethyltoluene	14.155	105	137354	105.05	ug/L	#	98
114) 2-chlorotoluene	15.051	126	160407	100.85	ug/L		99
115) 4-chlorotoluene	15.151	126	163014	101.69	ug/L		95
116) 1,3,5-trimethylbenzene	15.051	105	546380	101.94	ug/L		99
117) tert-butylbenzene	15.397	119	474297	102.01	ug/L		100
118) pentachloroethane	15.486	167	129723	104.68	ug/L		99
119) 1,2,4-trimethylbenzene	15.445	105	542446	102.33	ug/L		99
120) sec-butylbenzene	15.612	105	720176	101.82	ug/L		100
121) 1,3-dichlorobenzene	15.801	146	353079	100.75	ug/L		99
122) p-isopropyltoluene	15.728	119	607661	102.94	ug/L		99
123) 1,4-dichlorobenzene	15.885	146	361319	98.78	ug/L		100
124) 1,2-dichlorobenzene	16.268	146	356944	99.41	ug/L		99
126) n-butylbenzene	16.131	92	315419	105.27	ug/L		100
128) 1,2-dibromo-3-chloropr...	16.996	157	45140	103.07	ug/L		98
129) 1,3,5-trichlorobenzene	17.159	180	328888	99.24	ug/L		99
130) 1,2,4-trichlorobenzene	17.725	180	303986	99.90	ug/L		100
131) hexachlorobutadiene	17.820	225	162690	100.62	ug/L		100
132) naphthalene	17.966	128	600251	93.75	ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	258237	89.78	ug/L		98
134) hexachloroethane	16.509	119	131918	106.26	ug/L		100
135) Benzyl chloride	15.995	91	338508	100.04	ug/L		100

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

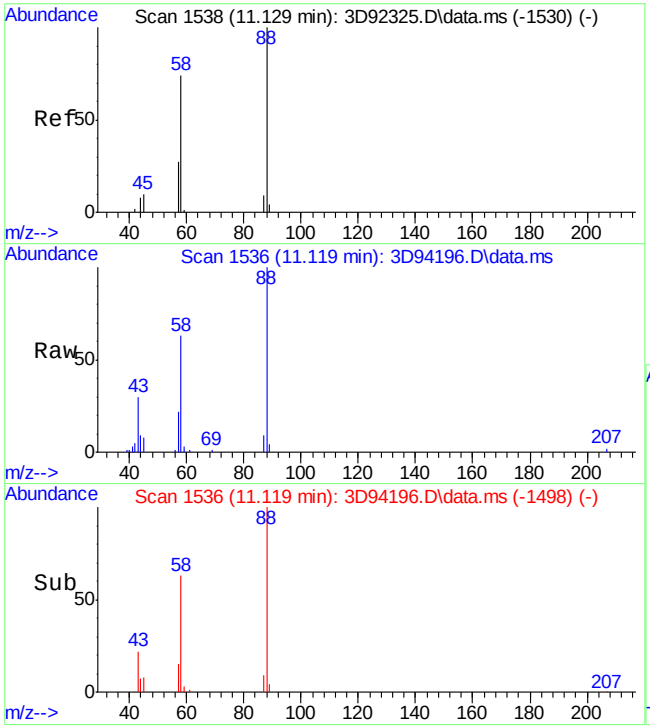
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94196.D
Acq On : 18 Dec 2013 4:33 pm
Operator : katteric
Sample : ic4058-100
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 19 12:32:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 16:33:17 2013
Response via : Initial Calibration



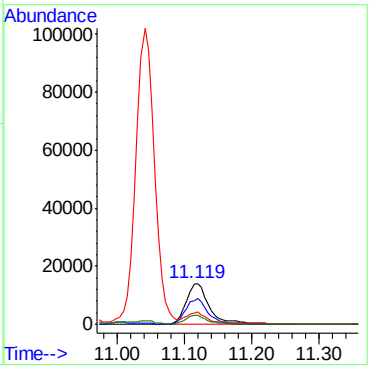
M3D4058.M Thu Dec 19 12:37:12 2013 3D Page: 4

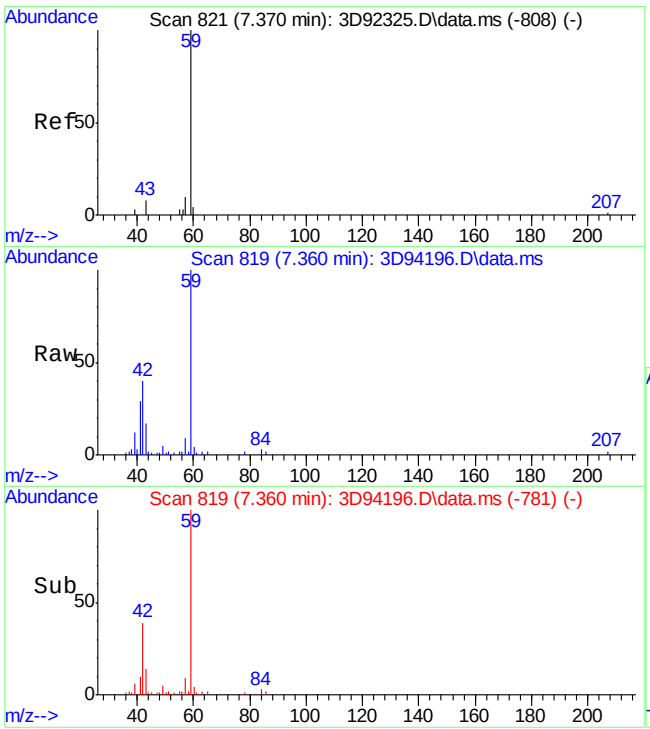


#2
1,4-dioxane
Concen: 2682.98 ug/L
RT: 11.119 min Scan# 1536
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 88 Resp: 33921

Ion	Ratio	Lower	Upper
88	100		
58	61.3	32.0	92.0
43	28.2	5.6	65.6
57	21.9	0.0	51.8

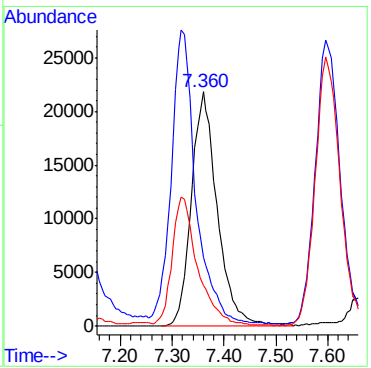


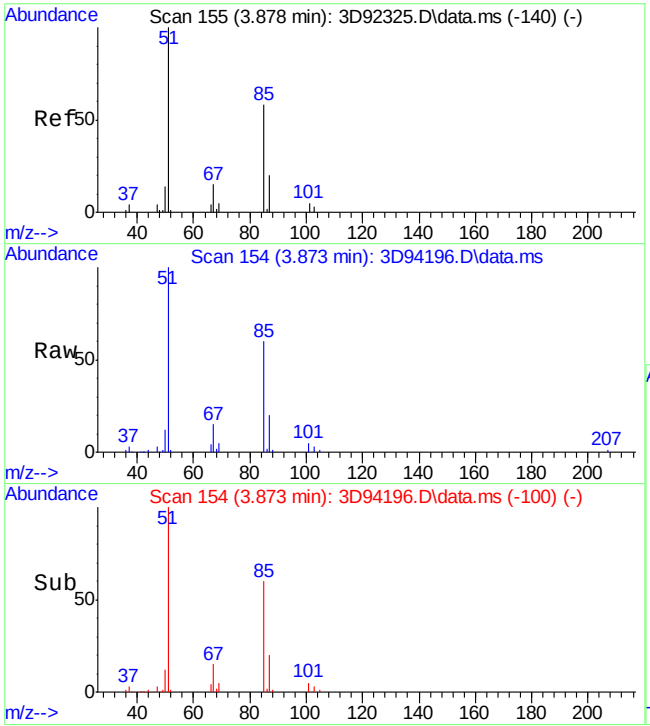


#3
tertiary butyl alcohol
Concen: 467.29 ug/L
RT: 7.360 min Scan# 819
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 59 Resp: 75685

Ion	Ratio	Lower	Upper
59	100		
41	29.2	6.5	66.5
43	17.1	0.0	50.7

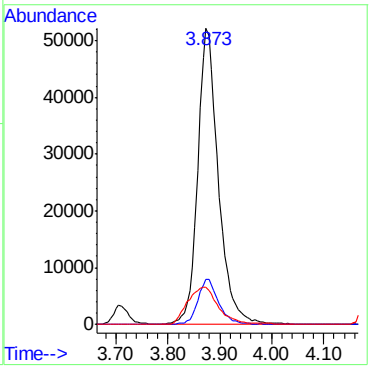


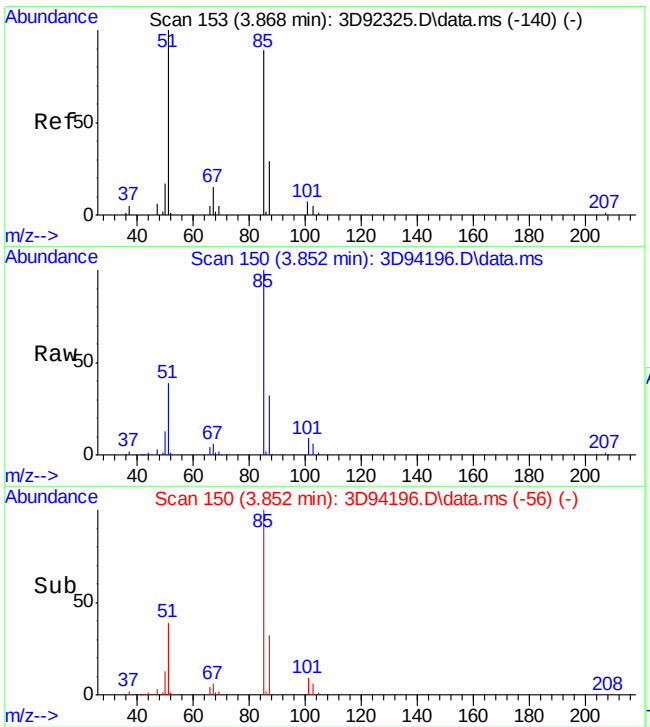


#8
chlorodifluoromethane
Concen: 105.85 ug/L
RT: 3.873 min Scan# 154
Delta R.T. -0.010 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 51 Resp: 143785

Ion	Ratio	Lower	Upper
51	100		
67	15.3	0.0	44.9
50	12.4	0.0	42.2

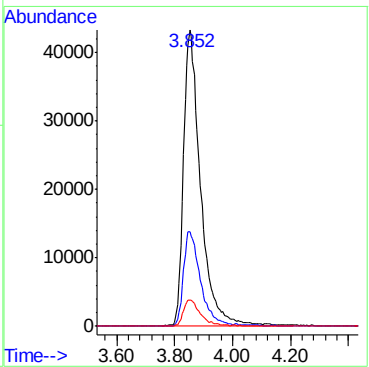




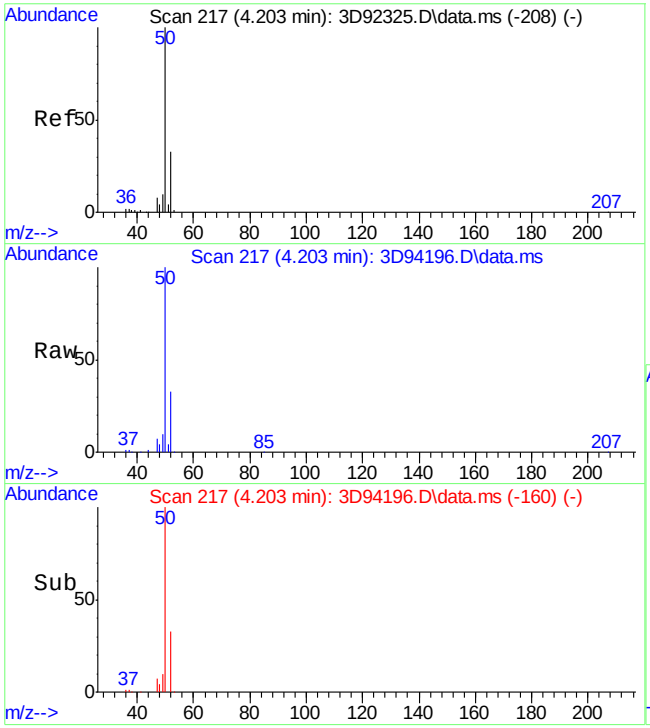
#9
dichlorodifluoromethane
Concen: 106.27 ug/L
RT: 3.852 min Scan# 150
Delta R.T. -0.010 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 85 Resp: 177919

Ion	Ratio	Lower	Upper
85	100		
87	31.9	1.5	61.5
101	8.6	0.0	39.0



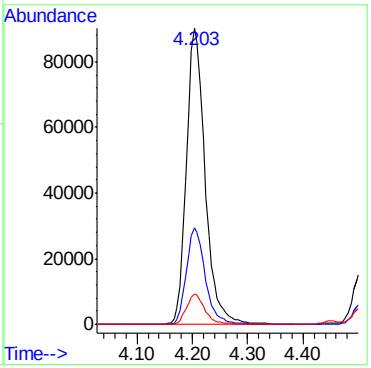
3D94196.D M3D4058.M Thu Dec 19 12:37:12 2013 3D Page 6

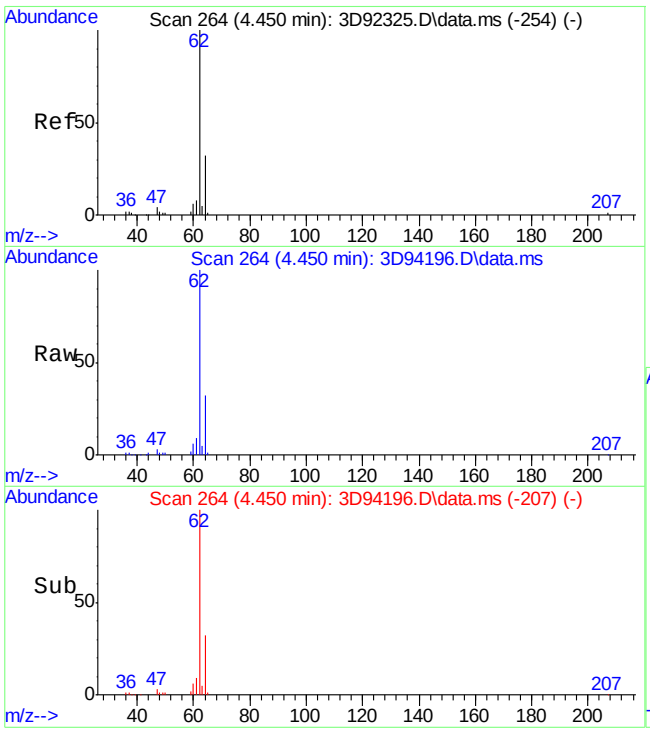


#10
chloromethane
Concen: 100.26 ug/L
RT: 4.203 min Scan# 217
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 50 Resp: 211504

Ion	Ratio	Lower	Upper
50	100		
52	32.6	2.9	62.9
49	10.3	0.0	40.5

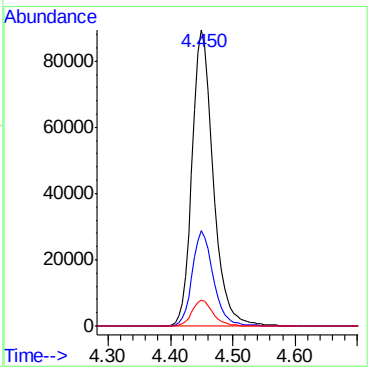


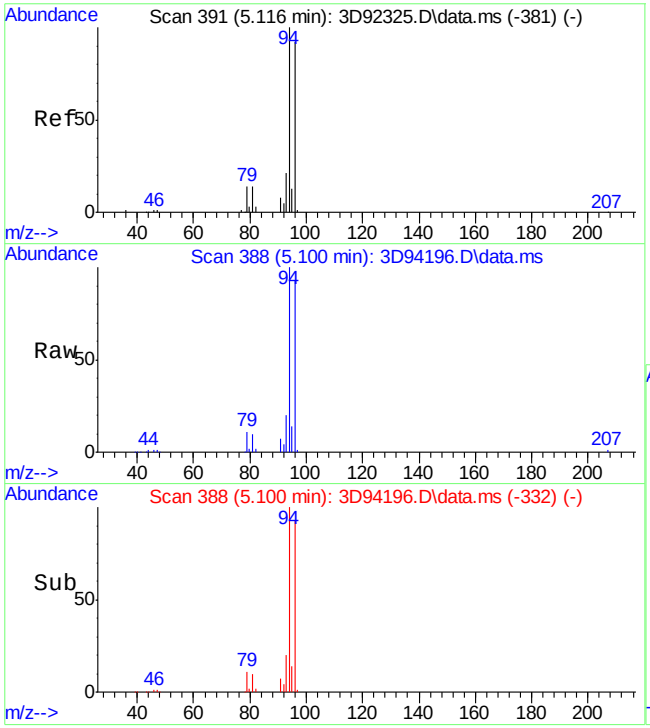


#11
vinyl chloride
Concen: 106.34 ug/L
RT: 4.450 min Scan# 264
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 62 Resp: 209789

Ion	Ratio	Lower	Upper
62	100		
64	32.3	2.3	62.3
61	8.6	0.0	38.3

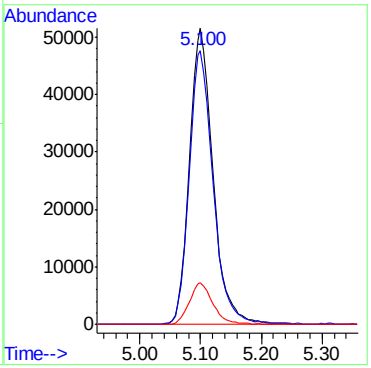


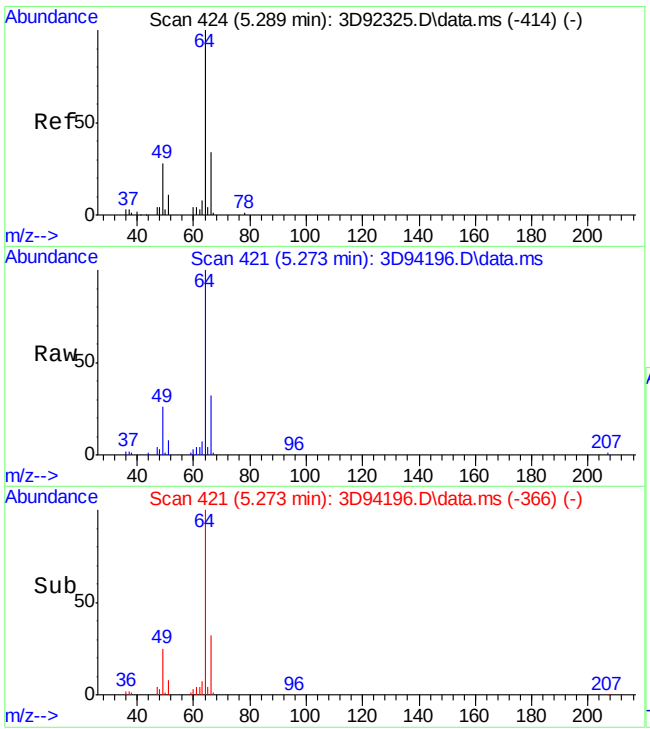


#12
bromomethane
Concen: 99.80 ug/L
RT: 5.100 min Scan# 388
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 94 Resp: 138371

Ion	Ratio	Lower	Upper
94	100		
96	92.6	63.5	123.5
95	14.2	0.0	45.2

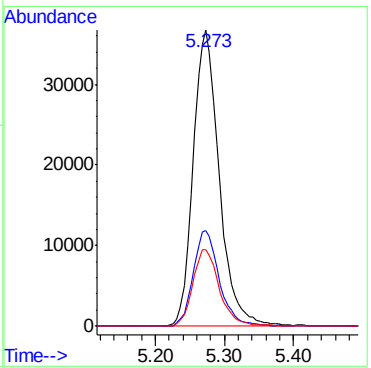


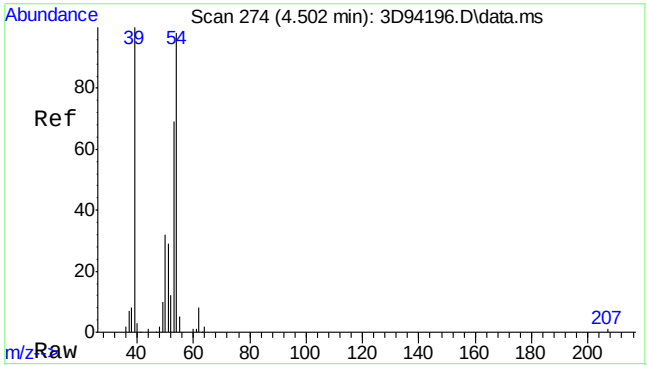


#13
chloroethane
Concen: 101.39 ug/L
RT: 5.273 min Scan# 421
Delta R.T. -0.010 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 64 Resp: 95571

Ion	Ratio	Lower	Upper
64	100		
66	32.1	1.6	61.6
49	25.7	0.0	56.3

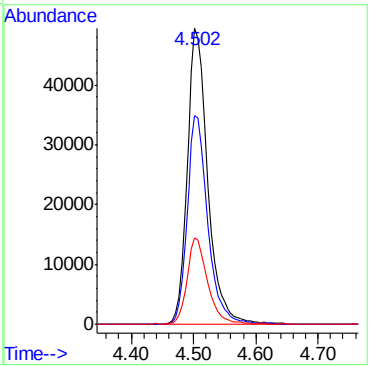


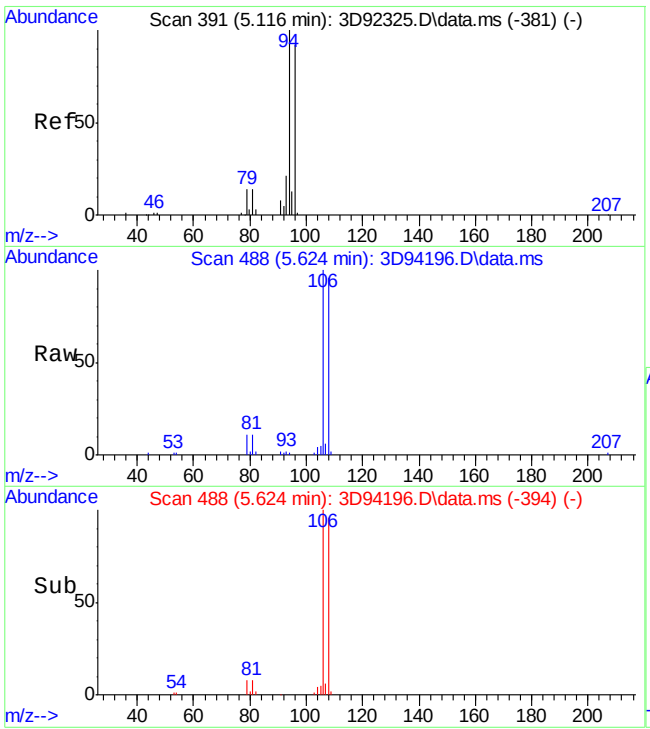


#14
1,3-butadiene
Concen: 106.93 ug/L
RT: 4.502 min Scan# 274
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 54 Resp: 113756

Ion	Ratio	Lower	Upper
54	100		
53	70.9	56.5	84.7
51	29.4	23.2	34.8

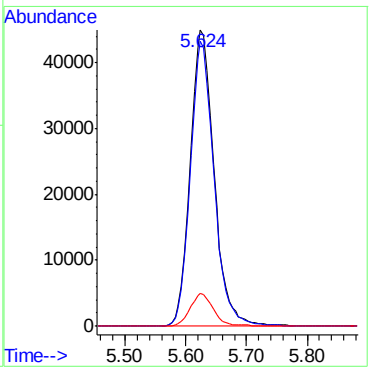




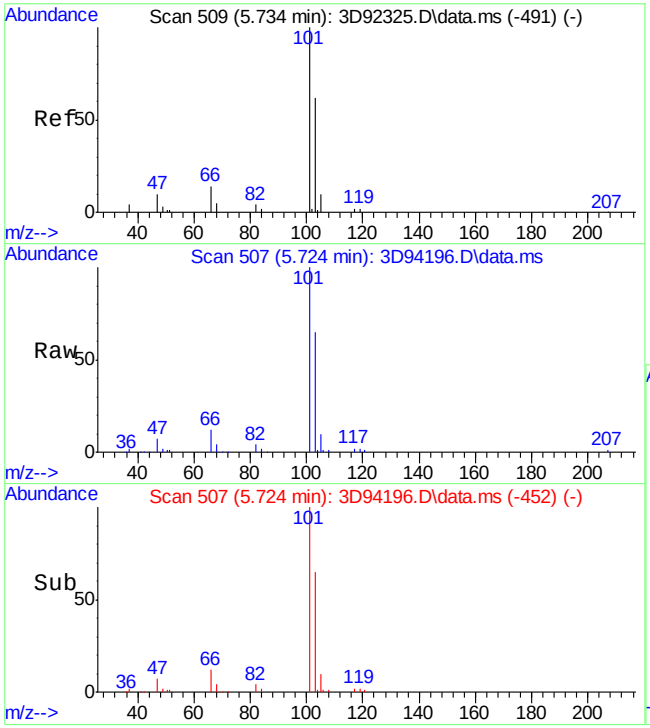
#15
vinyl bromide
Concen: 105.28 ug/L
RT: 5.624 min Scan# 488
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:106 Resp: 122751

Ion	Ratio	Lower	Upper
106	100		
108	95.2	64.9	124.9
81	10.7	0.0	41.0



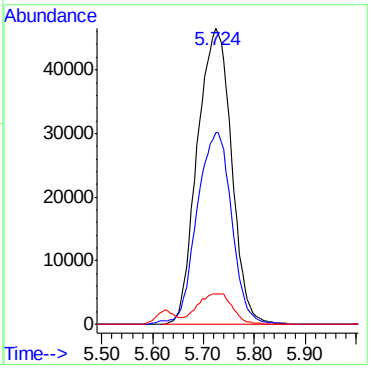
3D94196.D M3D4058.M Thu Dec 19 12:37:13 2013 3D Page 9

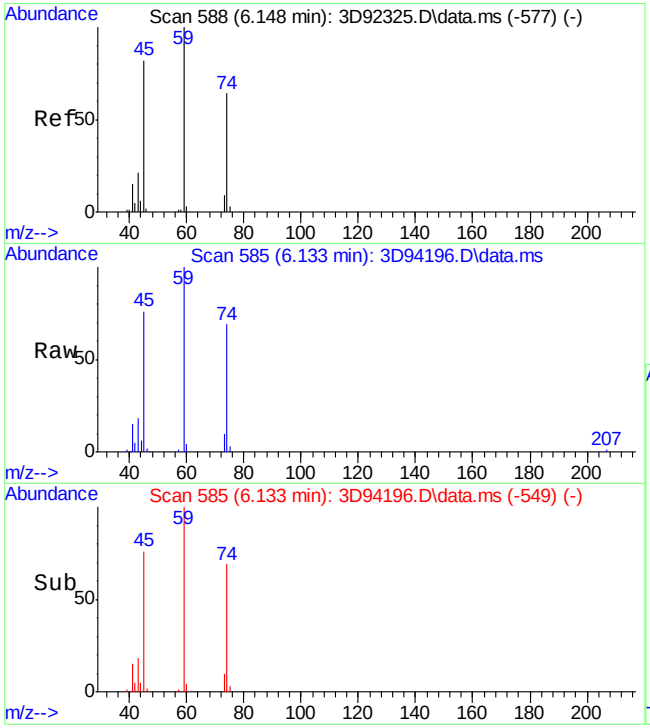


#16
trichlorofluoromethane
Concen: 100.79 ug/L
RT: 5.724 min Scan# 507
Delta R.T. -0.010 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:101 Resp: 217300

Ion	Ratio	Lower	Upper
101	100		
103	64.7	33.8	93.8
105	10.4	0.0	40.4

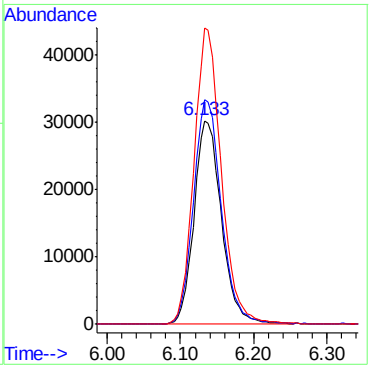


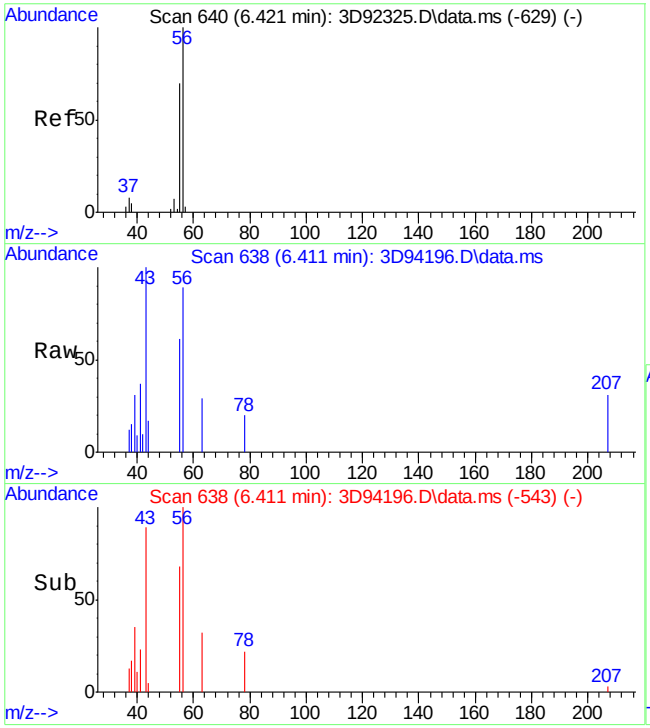


#18
ethyl ether
Concen: 104.74 ug/L
RT: 6.133 min Scan# 585
Delta R.T. -0.010 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 74 Resp: 78421

Ion	Ratio	Lower	Upper
74	100		
45	110.2	81.7	141.7
59	145.5	110.6	170.6

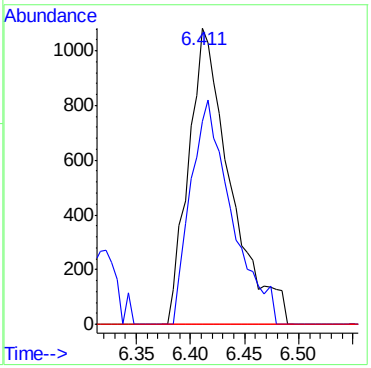


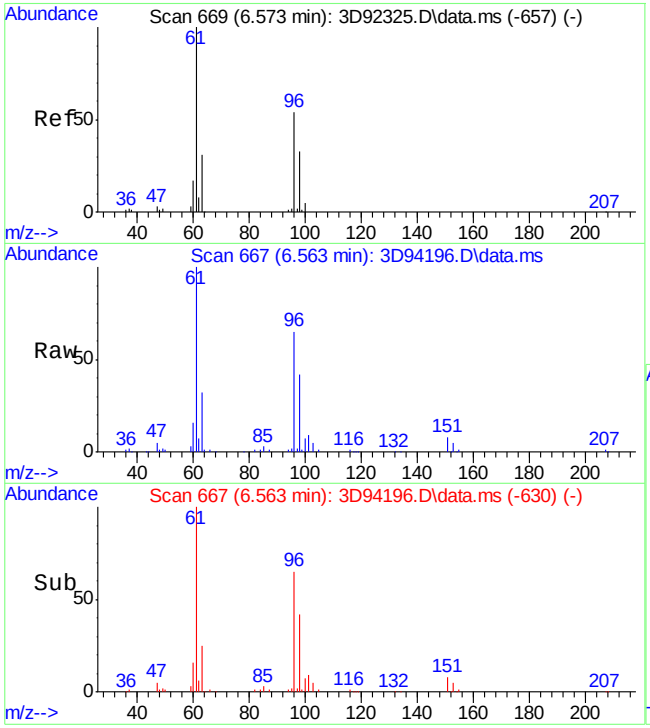


#21
acrolein
Concen: 9.51 ug/L
RT: 6.411 min Scan# 638
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 56 Resp: 2908

Ion	Ratio	Lower	Upper
56	100		
55	68.5	40.8	100.8
53	0.0	0.0	37.0

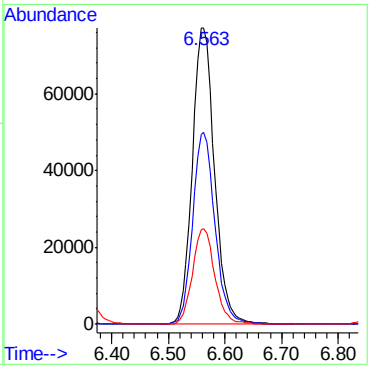


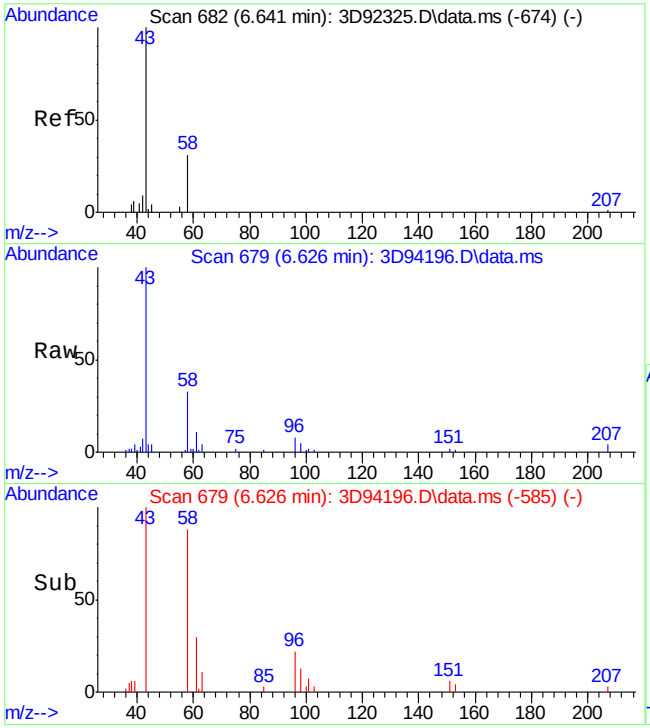


#22
1,1-dichloroethene
Concen: 99.31 ug/L
RT: 6.563 min Scan# 667
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 61 Resp: 209325

Ion	Ratio	Lower	Upper
61	100		
96	64.9	33.6	93.6
63	32.1	1.8	61.8

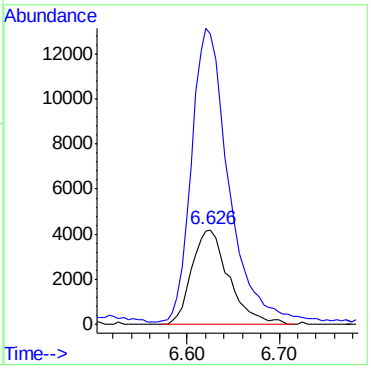


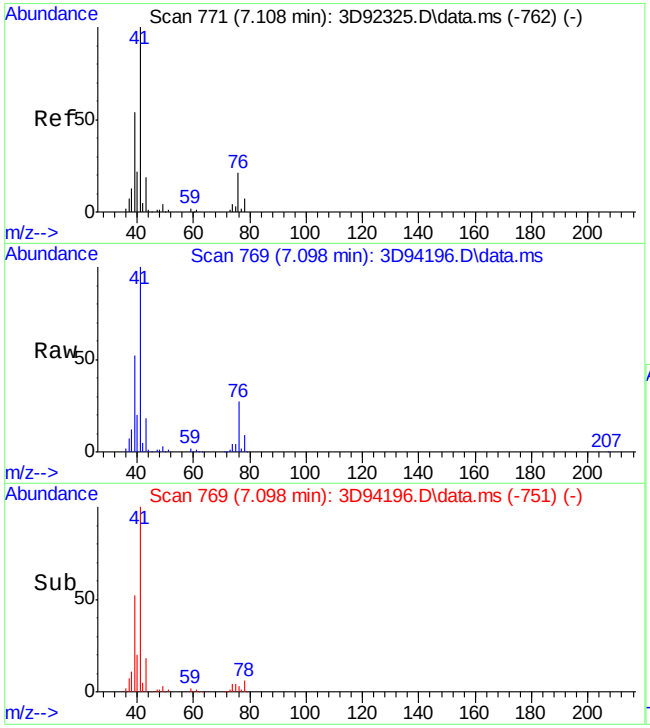


#23
acetone
Concen: 107.83 ug/L
RT: 6.626 min Scan# 679
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 58 Resp: 11713

Ion	Ratio	Lower	Upper
58	100		
43	305.9	285.6	345.6

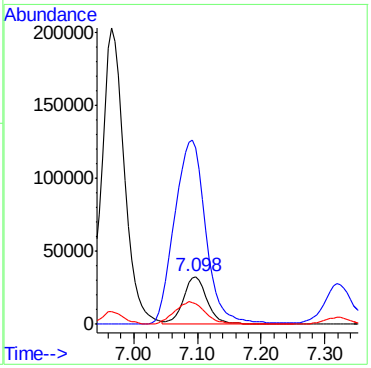


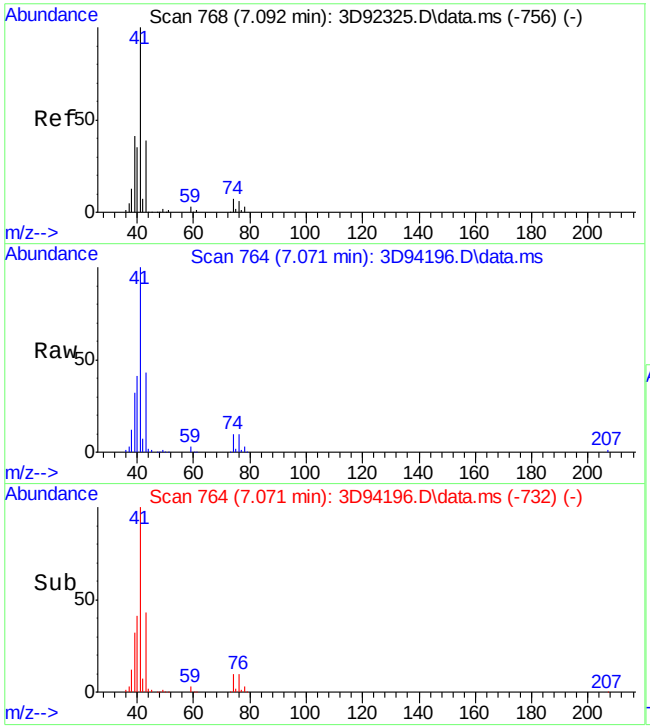


#24
allyl chloride
Concen: 100.68 ug/L
RT: 7.098 min Scan# 769
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 76 Resp: 83316

Ion	Ratio	Lower	Upper
76	100		
41	368.6	336.7	396.7
38	42.7	14.5	74.5

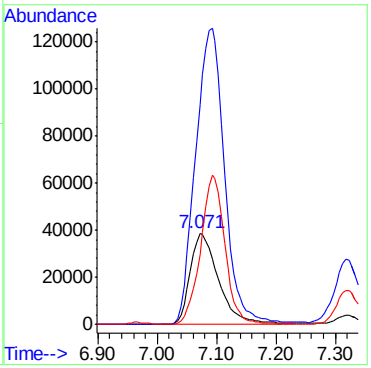


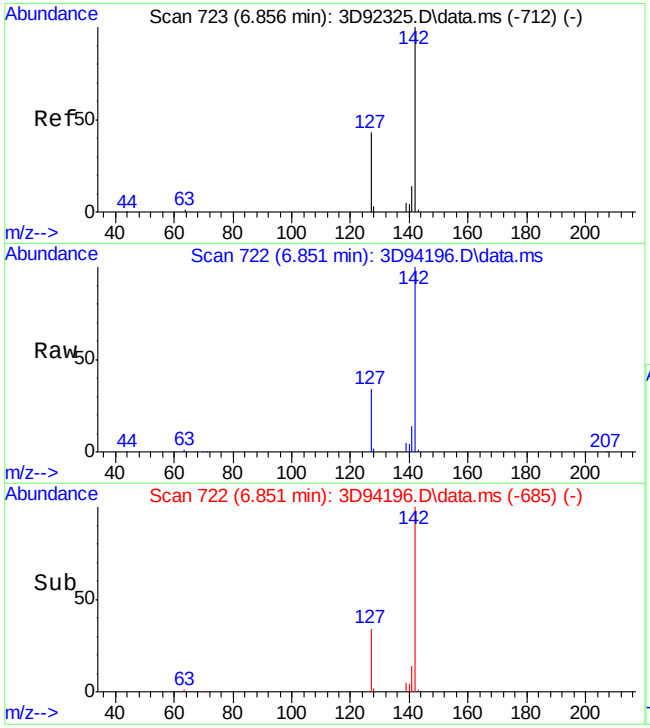


#25
acetonitrile
Concen: 946.05 ug/L
RT: 7.071 min Scan# 764
Delta R.T. -0.010 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 40 Resp: 128471

Ion	Ratio	Lower	Upper
40	100		
41	241.8	259.7	319.7#
39	77.0	79.2	139.2#

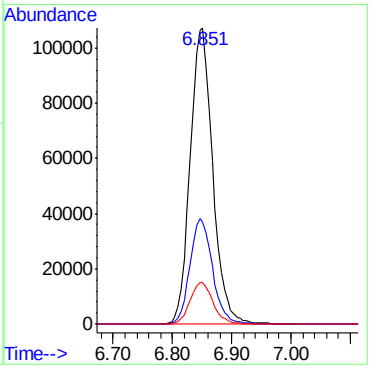


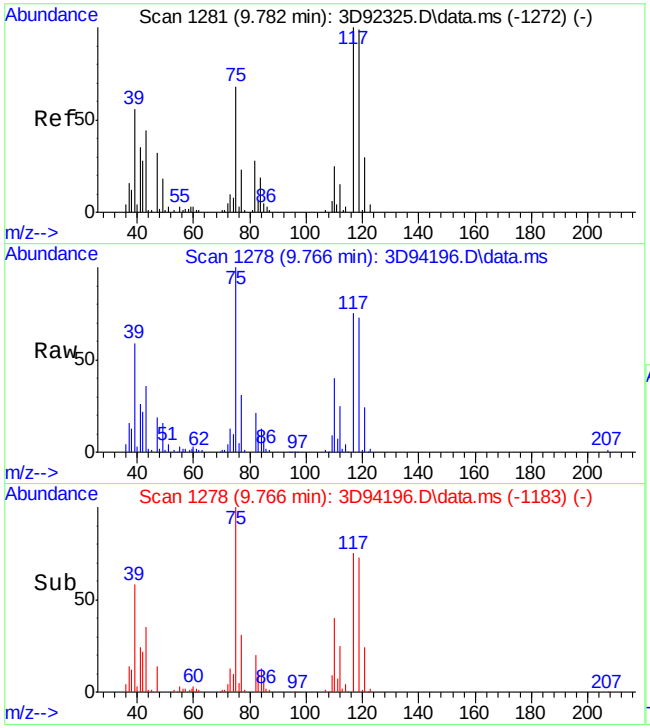


#27
iodomethane
Concen: 97.52 ug/L
RT: 6.851 min Scan# 722
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:142 Resp: 282537

Ion	Ratio	Lower	Upper
142	100		
127	34.5	5.6	65.6
141	14.2	0.0	44.2

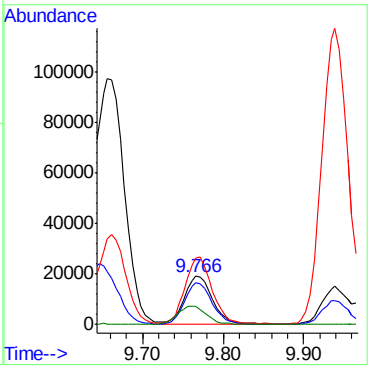


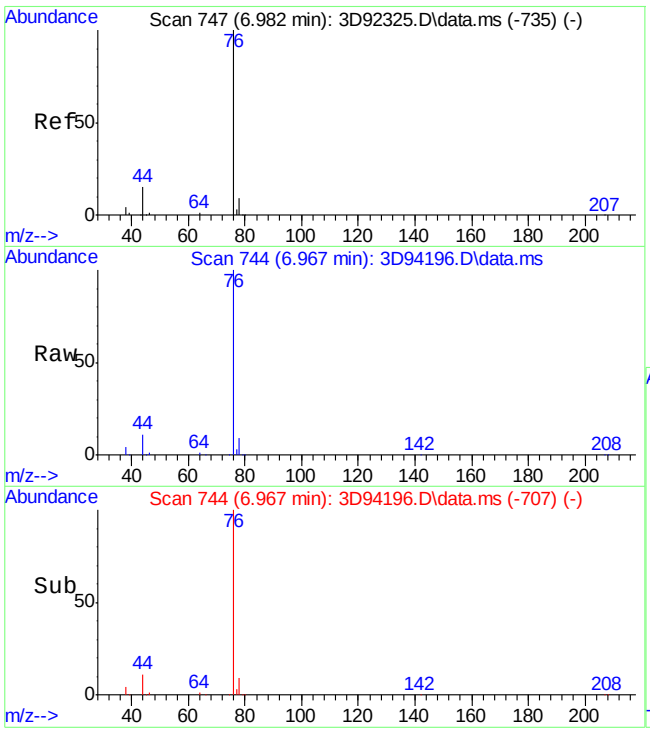


#28
iso-butyl alcohol
Concen: 945.54 ug/L
RT: 9.766 min Scan# 1278
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 41 Resp: 45585

Ion	Ratio	Lower	Upper
41	100		
42	85.9	57.2	117.2
43	137.3	105.0	165.0
74	37.5	8.4	68.4

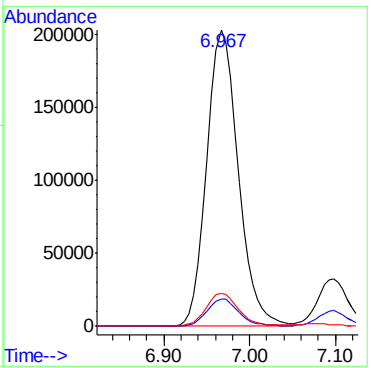




#29
carbon disulfide
Concen: 96.42 ug/L
RT: 6.967 min Scan# 744
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

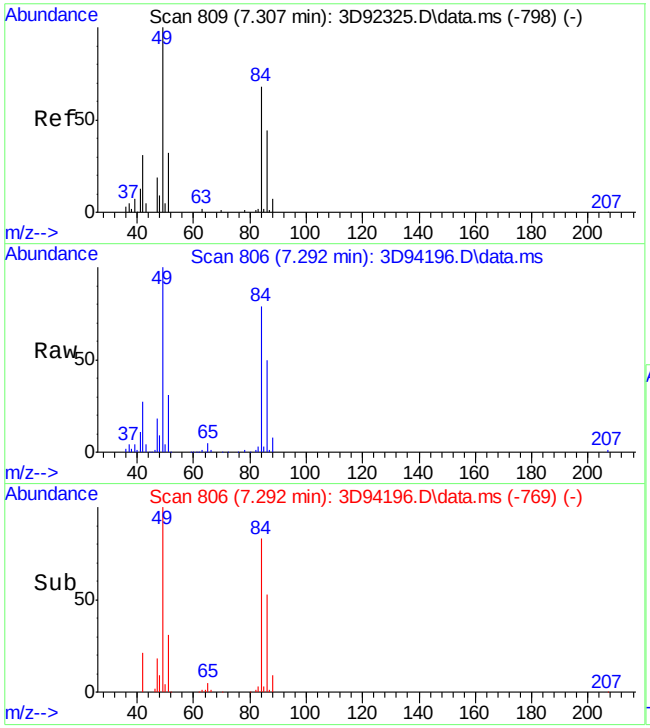
Tgt Ion: 76 Resp: 506466

Ion	Ratio	Lower	Upper
76	100		
78	9.0	0.0	39.1
44	10.9	0.0	40.9



7.7.8

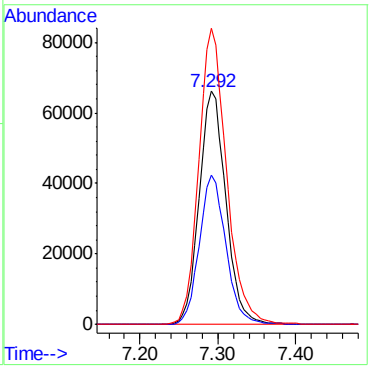
7

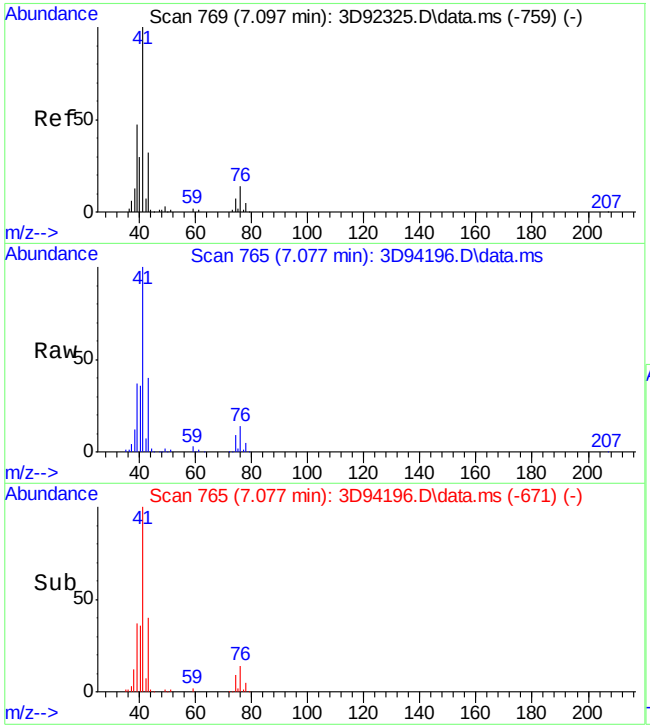


#30
methylene chloride
Concen: 97.48 ug/L
RT: 7.292 min Scan# 806
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 84 Resp: 156465

Ion	Ratio	Lower	Upper
84	100		
86	64.0	45.1	83.7
49	127.0	89.7	166.7

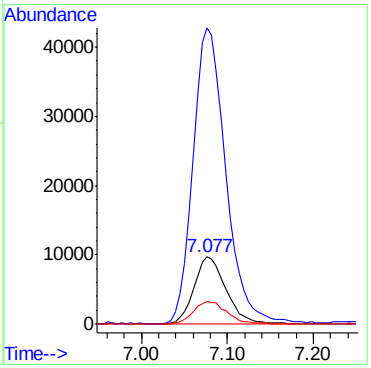


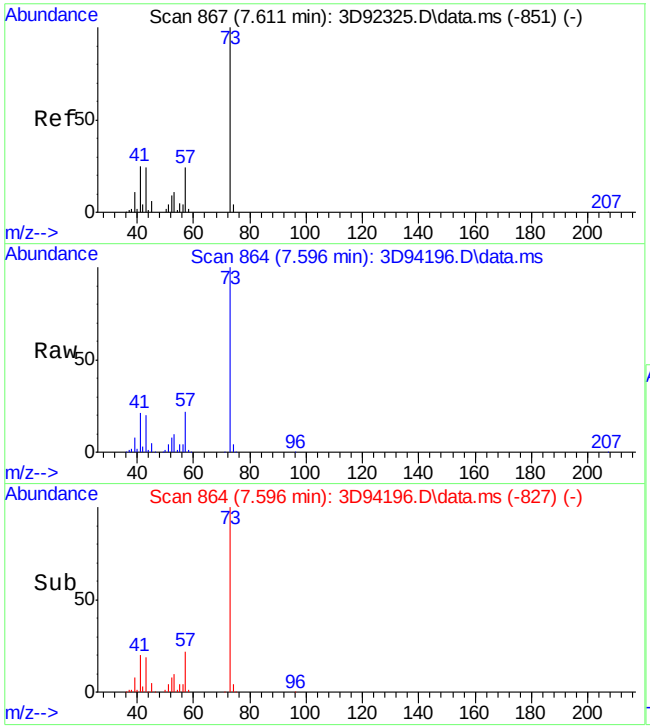


#31
methyl acetate
Concen: 108.20 ug/L
RT: 7.077 min Scan# 765
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 74 Resp: 24620

Ion	Ratio	Lower	Upper
74	100		
43	454.9	431.4	491.4
59	34.6	4.4	64.4

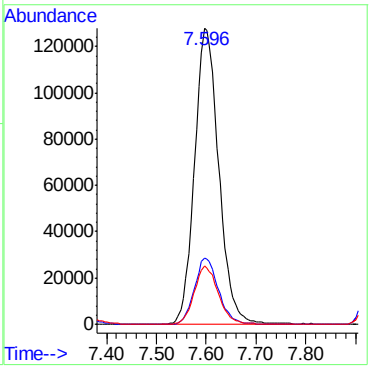


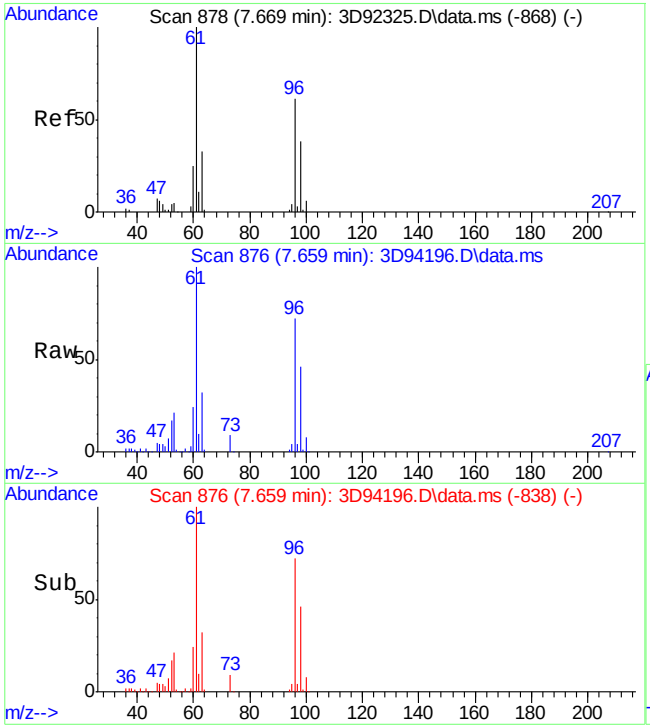


#32
methyl tert butyl ether
Concen: 95.21 ug/L
RT: 7.596 min Scan# 864
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 73 Resp: 430747

Ion	Ratio	Lower	Upper
73	100		
57	22.3	0.0	52.4
43	19.6	0.0	49.7

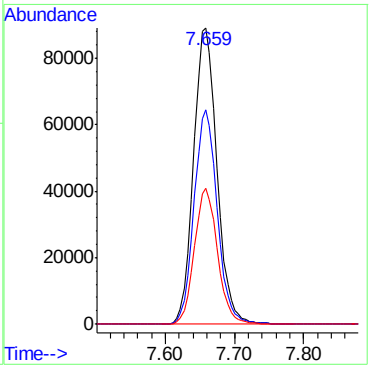


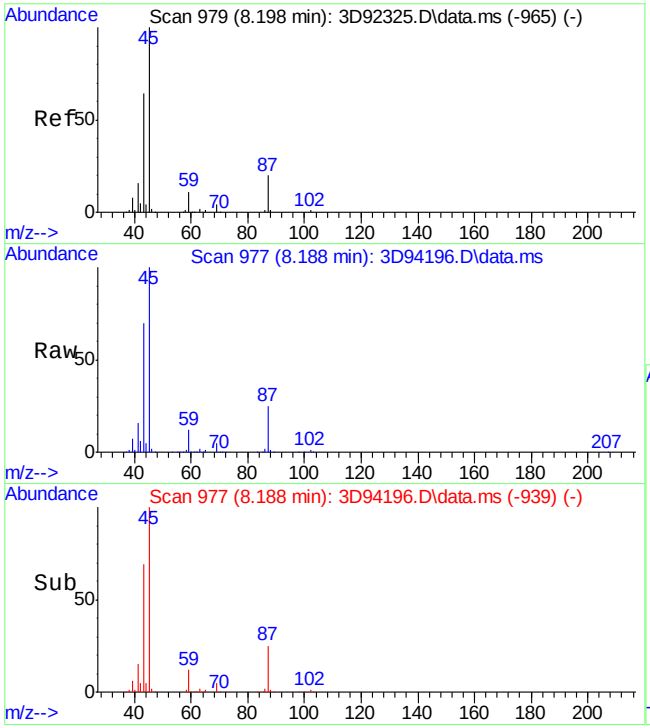


#33
trans-1,2-dichloroethene
Concen: 98.43 ug/L
RT: 7.659 min Scan# 876
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 61 Resp: 208553

Ion	Ratio	Lower	Upper
61	100		
96	72.3	50.0	92.8
98	45.8	31.0	57.6

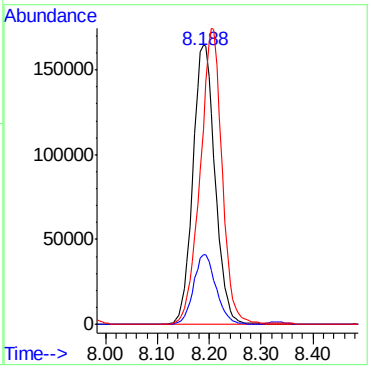


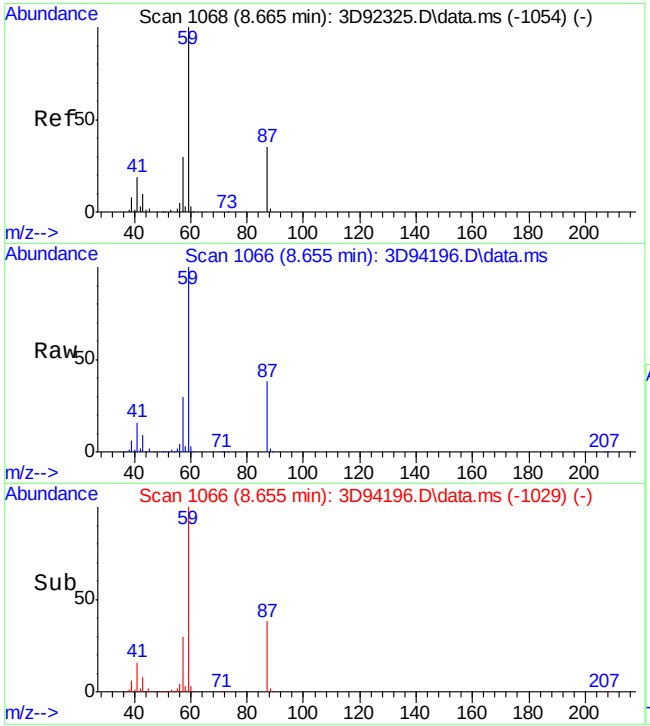


#34
di-isopropyl ether
Concen: 98.98 ug/L
RT: 8.188 min Scan# 977
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 45 Resp: 487266

Ion	Ratio	Lower	Upper
45	100		
87	24.8	0.0	54.3
43	70.0	29.5	89.5

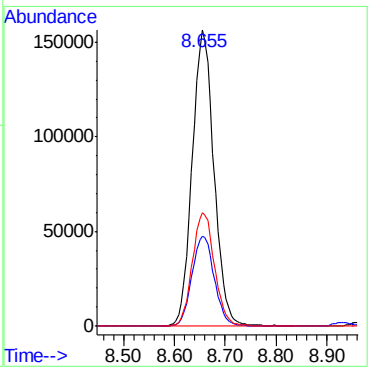


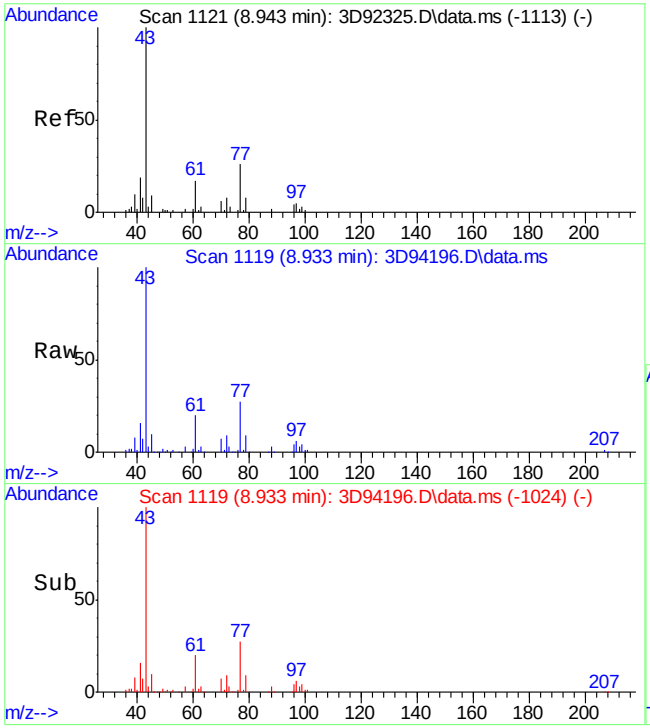


#35
ethyl tert-butyl ether
Concen: 103.75 ug/L
RT: 8.655 min Scan# 1066
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 59 Resp: 465886

Ion	Ratio	Lower	Upper
59	100		
57	30.4	1.9	61.9
87	38.3	8.8	68.8

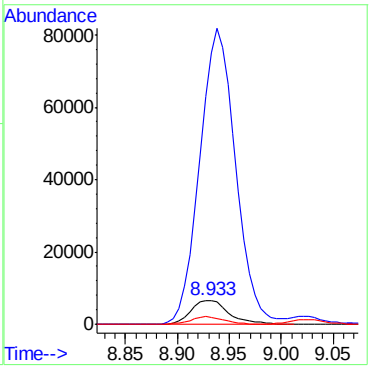


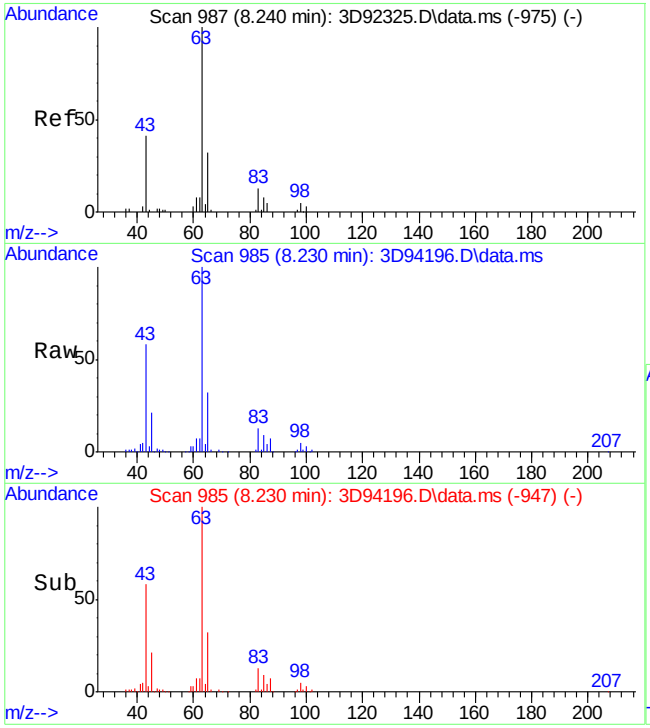


#36
2-butanone
Concen: 111.50 ug/L
RT: 8.933 min Scan# 1119
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 72 Resp: 16666

Ion	Ratio	Lower	Upper
72	100		
43	1182.1	856.1	1589.9
57	28.4	20.9	38.7

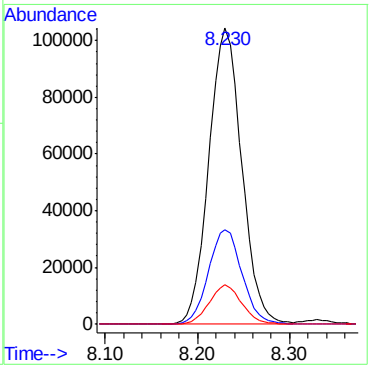


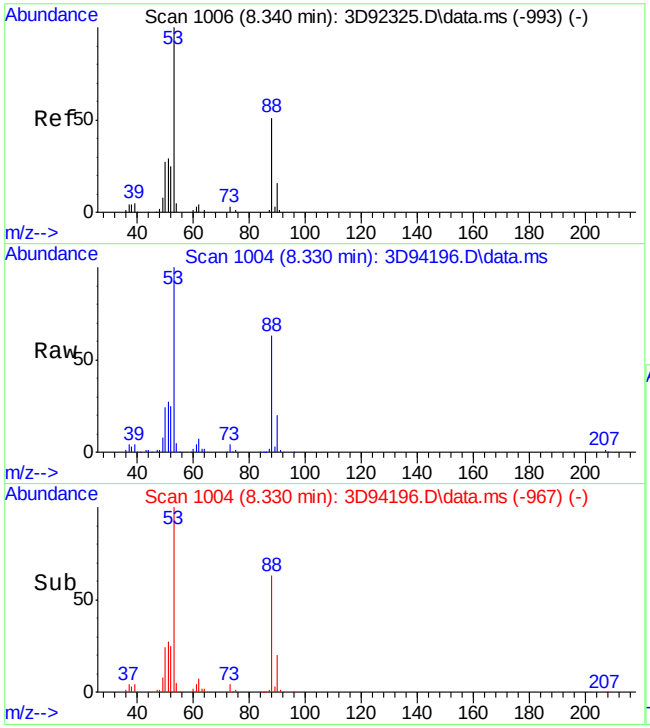


#37
1,1-dichloroethane
Concen: 97.51 ug/L
RT: 8.230 min Scan# 985
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 63 Resp: 257814

Ion	Ratio	Lower	Upper
63	100		
65	31.9	2.0	62.0
83	13.2	0.0	43.2

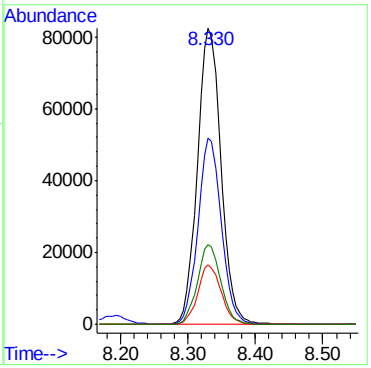


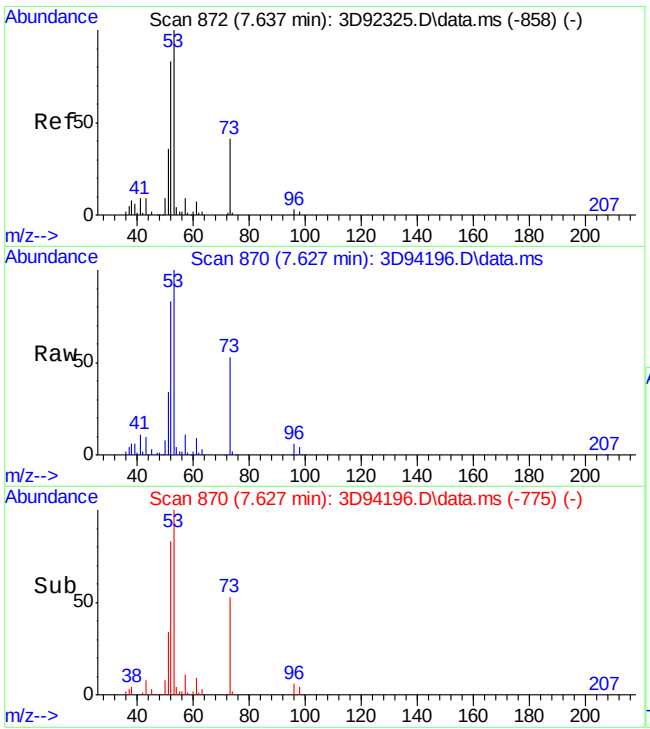


#38
chloroprene
Concen: 105.83 ug/L
RT: 8.330 min Scan# 1004
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 53 Resp: 199975

Ion	Ratio	Lower	Upper
53	100		
88	62.8	28.5	88.5
90	20.2	0.0	49.6
51	27.0	0.0	55.5

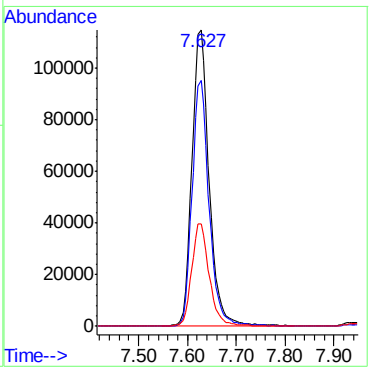




#39
acrylonitrile
Concen: 520.89 ug/L
RT: 7.627 min Scan# 870
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 53 Resp: 279497

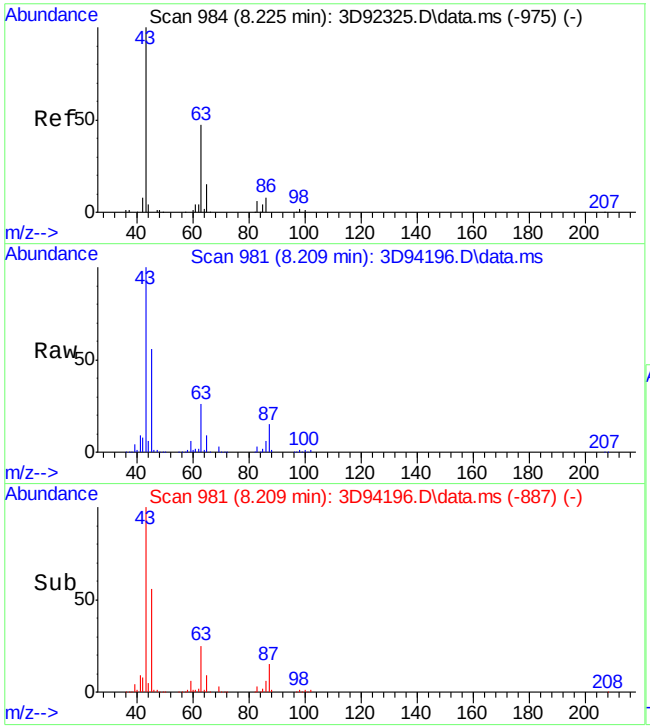
Ion	Ratio	Lower	Upper
53	100		
52	82.9	54.6	114.6
51	34.3	5.6	65.6



7.7.8

7

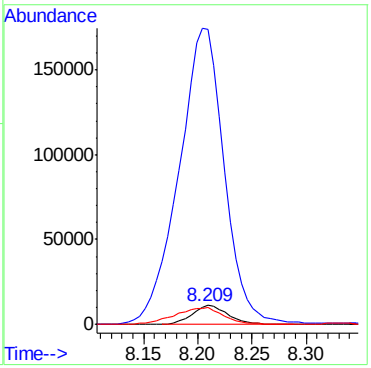
3D94196.D M3D4058.M Thu Dec 19 12:37:13 2013 3D Page 19

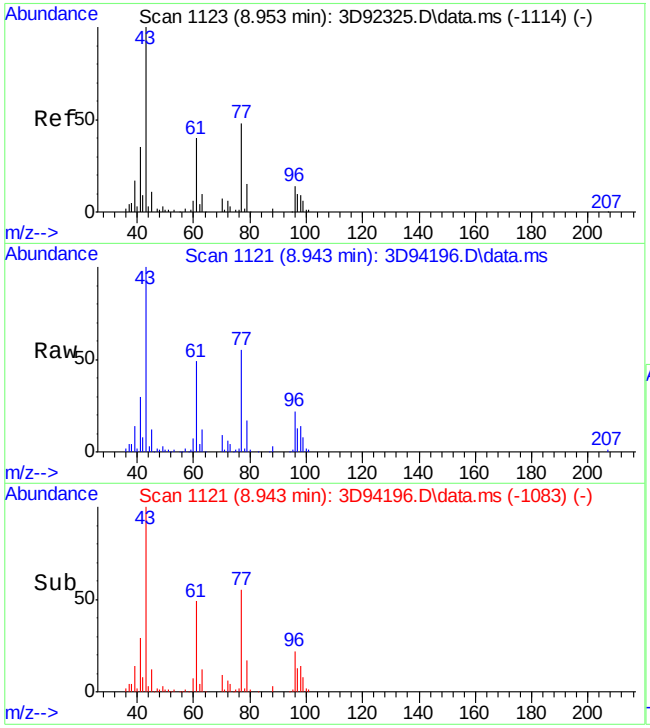


#40
vinyl acetate
Concen: 113.72 ug/L
RT: 8.209 min Scan# 981
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 86 Resp: 25516

Ion	Ratio	Lower	Upper
86	100		
43	1567.9	1100.0	2042.8
44	85.8	60.8	112.8

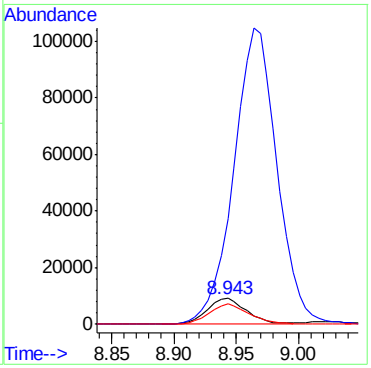




#41
ethyl acetate
Concen: 105.99 ug/L
RT: 8.943 min Scan# 1121
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 45 Resp: 19992

Ion	Ratio	Lower	Upper
45	100		
61	411.6	249.2	462.8
70	79.8	54.6	101.4



7.7.8

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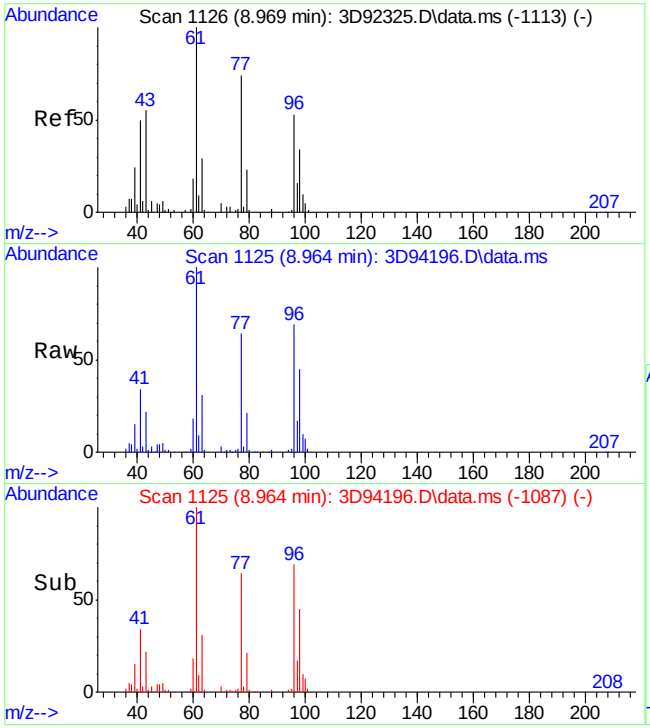
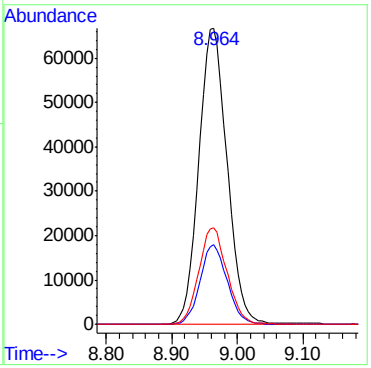
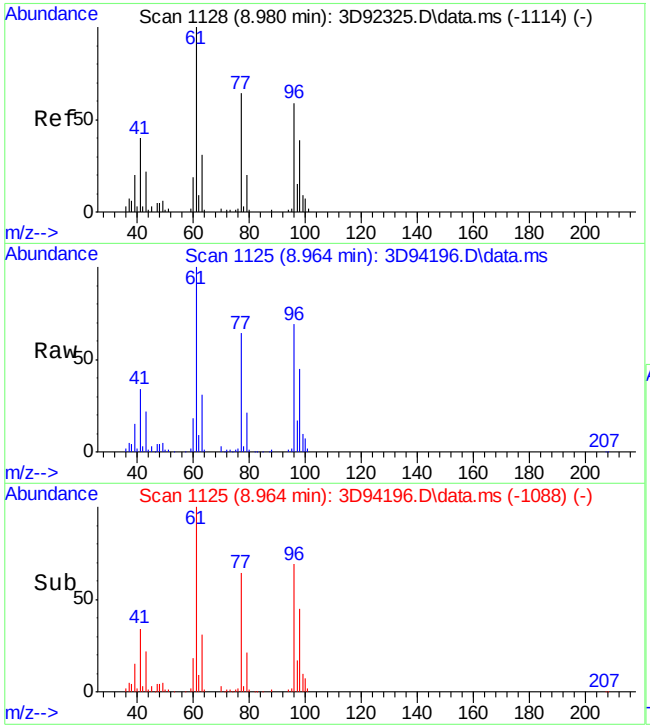


#42
2,2-dichloropropane
Concen: 91.46 ug/L
RT: 8.964 min Scan# 1125
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 77 Resp: 200048

Ion	Ratio	Lower	Upper
77	100		
97	27.0	0.0	56.7
79	32.7	2.2	62.2

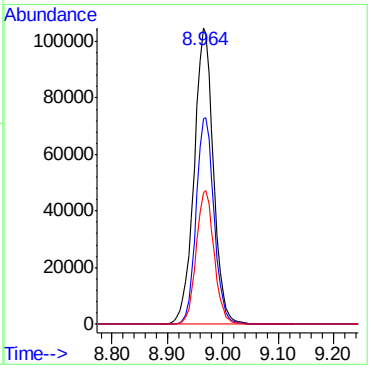


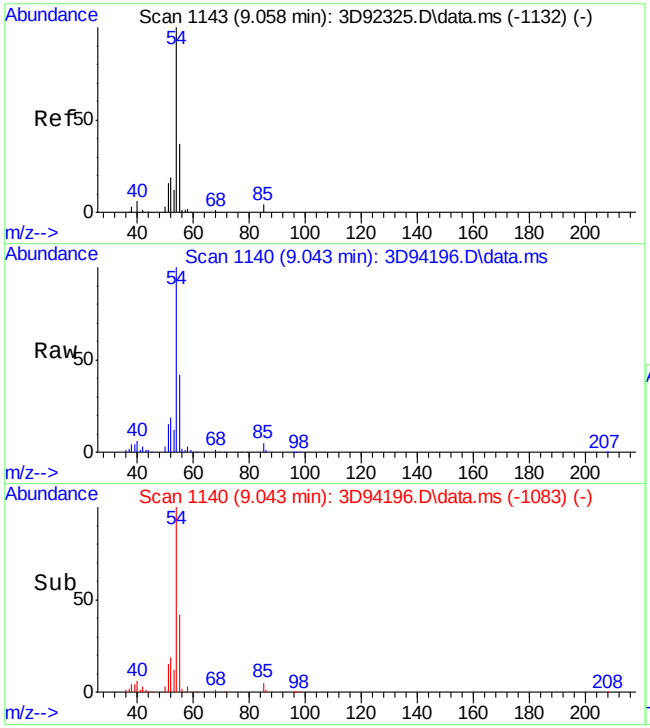


#43
cis-1,2-dichloroethene
Concen: 98.14 ug/L
RT: 8.964 min Scan# 1125
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 61 Resp: 254026

Ion	Ratio	Lower	Upper
61	100		
96	69.3	39.3	99.3
98	44.5	14.9	74.9

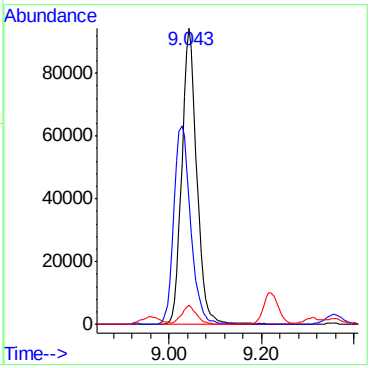


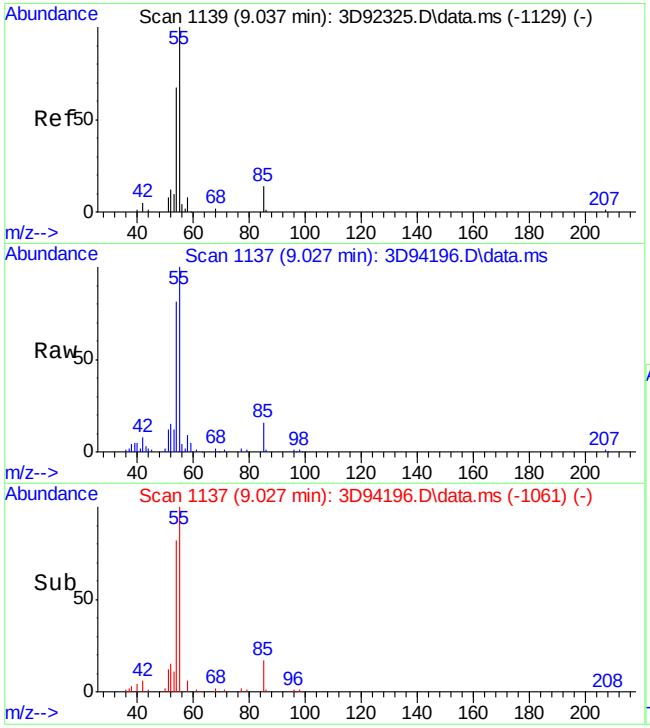


#44
propionitrile
Concen: 1060.72 ug/L
RT: 9.043 min Scan# 1140
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 54 Resp: 214206

Ion	Ratio	Lower	Upper
54	100		
55	42.2	19.2	79.2
40	6.0	0.0	35.1

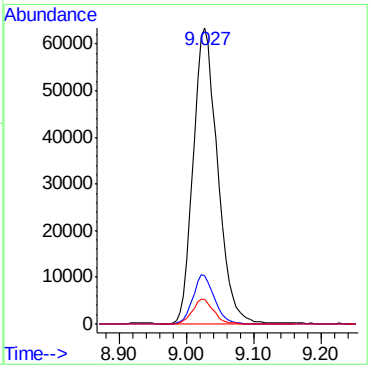


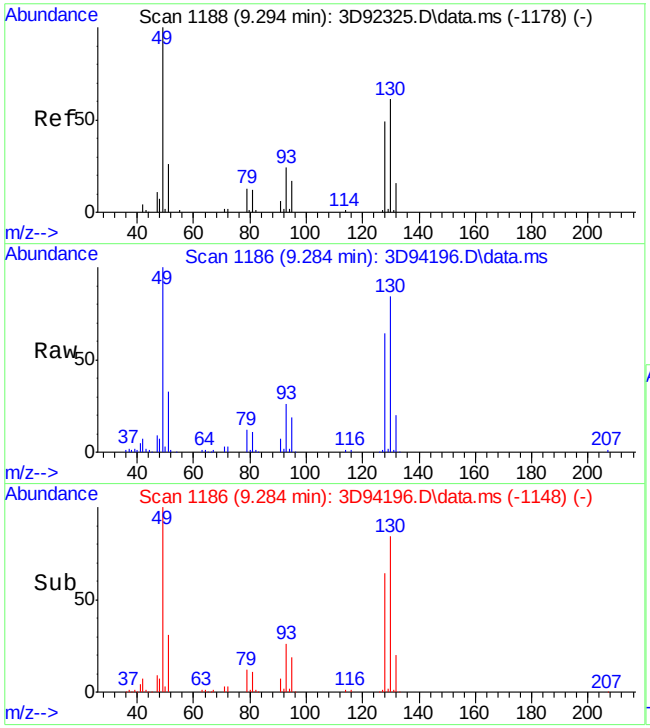


#45
methyl acrylate
Concen: 108.36 ug/L
RT: 9.027 min Scan# 1137
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 55 Resp: 159803

Ion	Ratio	Lower	Upper
55	100		
85	16.3	0.0	46.5
58	8.5	0.0	38.9

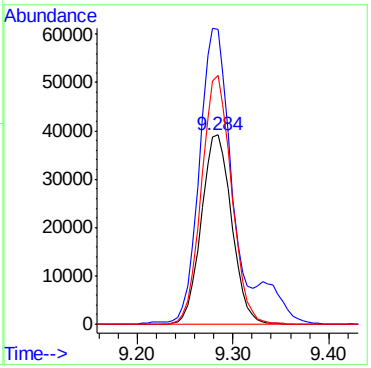


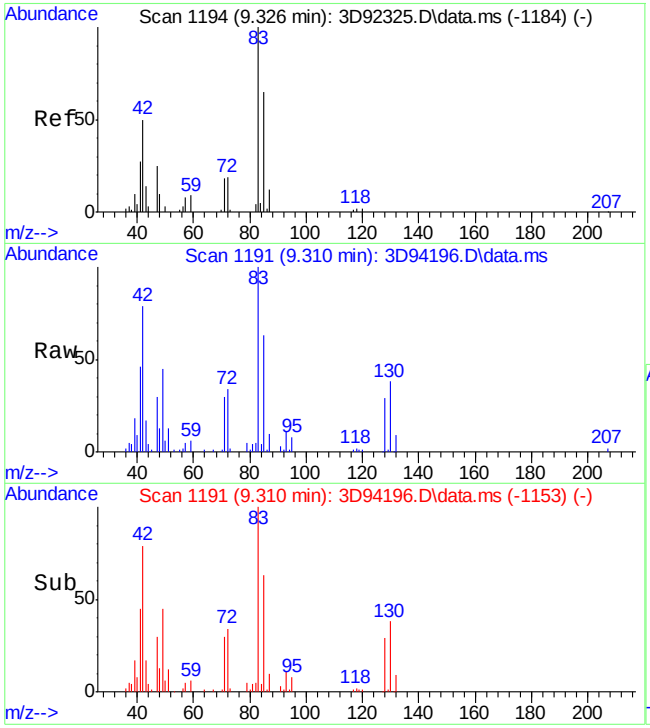


#46
bromochloromethane
Concen: 104.74 ug/L
RT: 9.284 min Scan# 1186
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:128 Resp: 86169

Ion	Ratio	Lower	Upper
128	100		
49	154.9	125.6	185.6
130	131.5	103.9	163.9

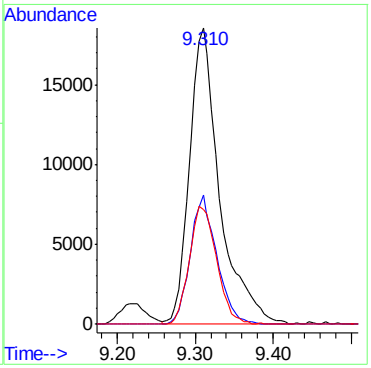


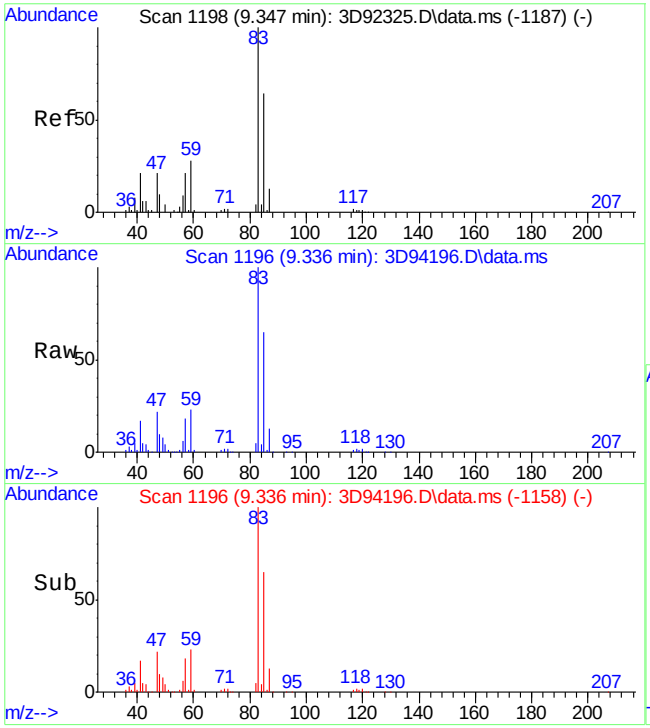


#47
tetrahydrofuran
Concen: 102.37 ug/L
RT: 9.310 min Scan# 1191
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 42 Resp: 49736

Ion	Ratio	Lower	Upper
42	100		
72	38.1	8.3	68.3
71	35.8	6.0	66.0

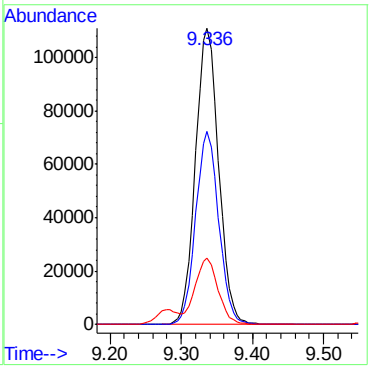


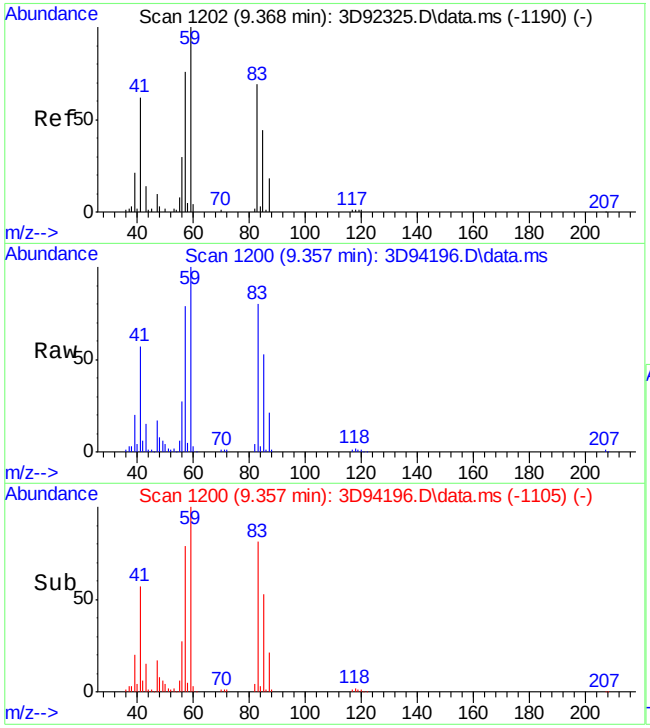


#48
chloroform
Concen: 97.96 ug/L
RT: 9.336 min Scan# 1196
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 83 Resp: 250449

Ion	Ratio	Lower	Upper
83	100		
85	65.0	34.8	94.8
47	22.2	0.0	53.3

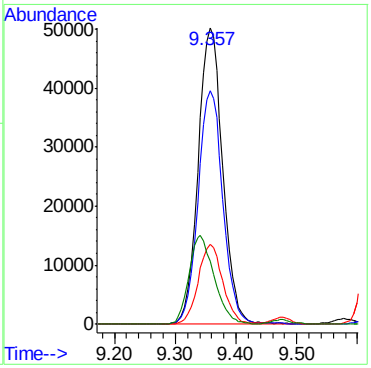


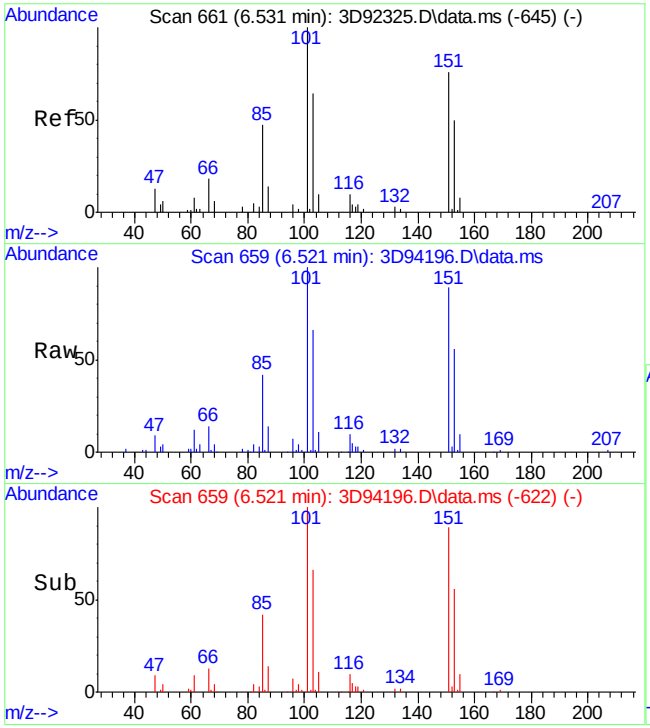


#49
Tert-Butyl Formate
Concen: 105.06 ug/L
RT: 9.357 min Scan# 1200
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 59 Resp: 140775

Ion	Ratio	Lower	Upper
59	100		
57	79.5	64.5	96.7
56	26.9	21.6	32.4
87	30.6	24.9	37.3

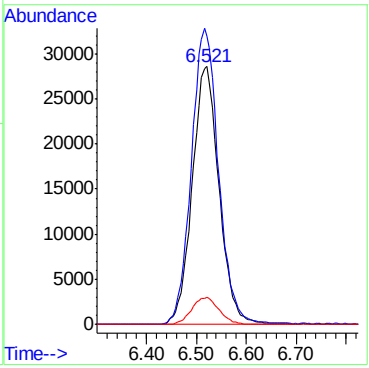


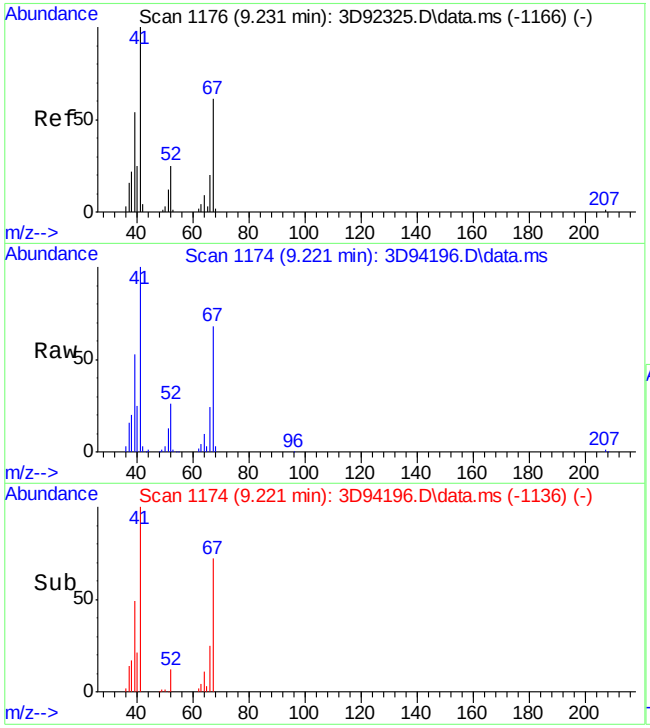


#52
freon 113
Concen: 109.14 ug/L
RT: 6.521 min Scan# 659
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:151 Resp: 106926

Ion	Ratio	Lower	Upper
151	100		
101	112.2	87.2	147.2
116	10.7	0.0	41.5

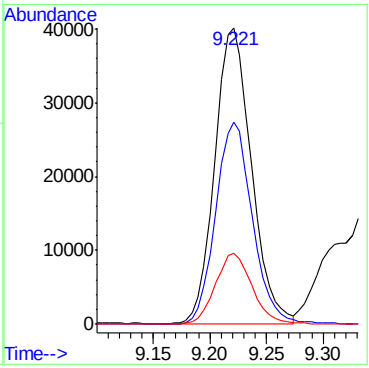




#53
methacrylonitrile
Concen: 103.71 ug/L
RT: 9.221 min Scan# 1174
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 41 Resp: 90476

Ion	Ratio	Lower	Upper
41	100		
67	68.3	39.6	99.6
66	24.0	0.0	53.3



7.7.8

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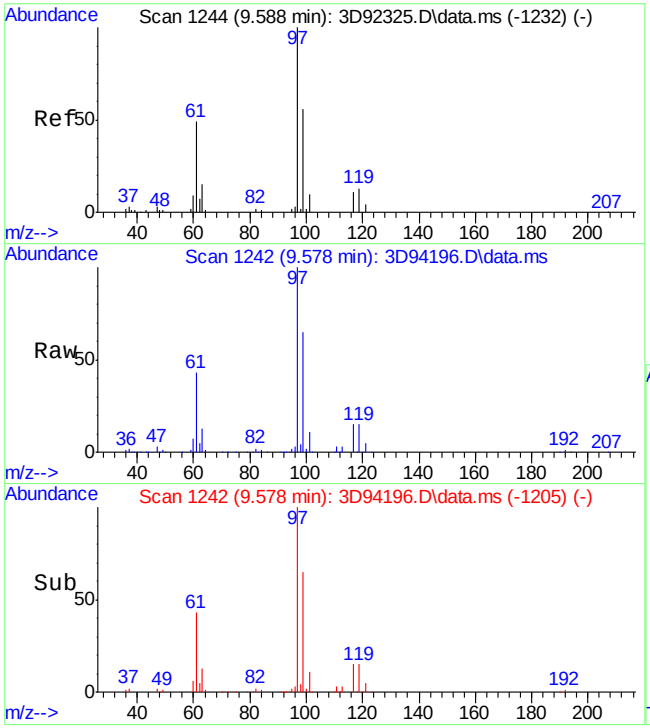
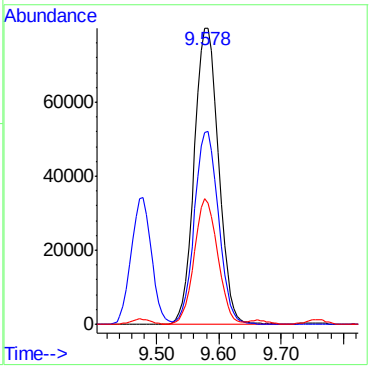
3D94196.D M3D4058.M Thu Dec 19 12:37:14 2013 3D Page 25

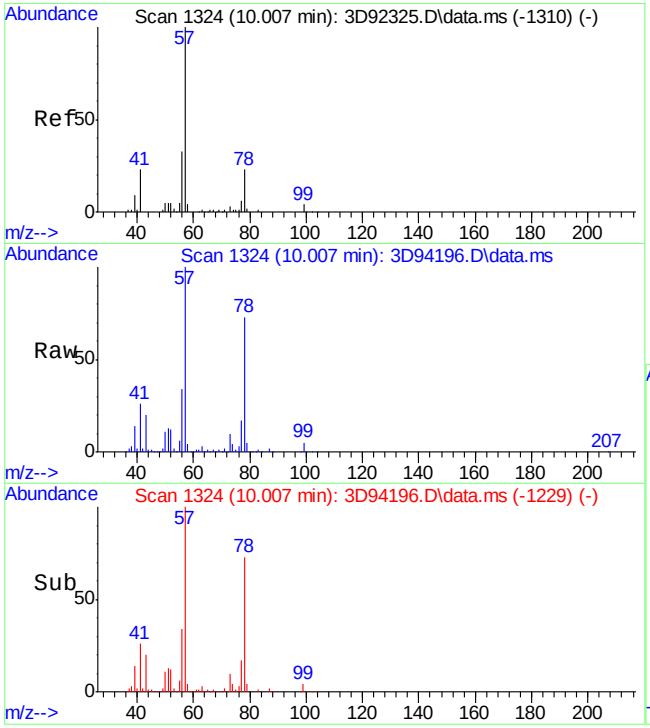


#54
1,1,1-trichloroethane
Concen: 97.89 ug/L
RT: 9.578 min Scan# 1242
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 97 Resp: 216506

Ion	Ratio	Lower	Upper
97	100		
99	64.7	33.6	93.6
61	42.4	11.5	71.5

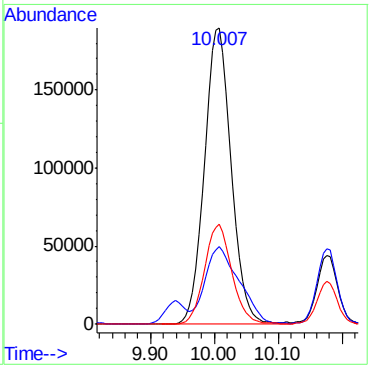


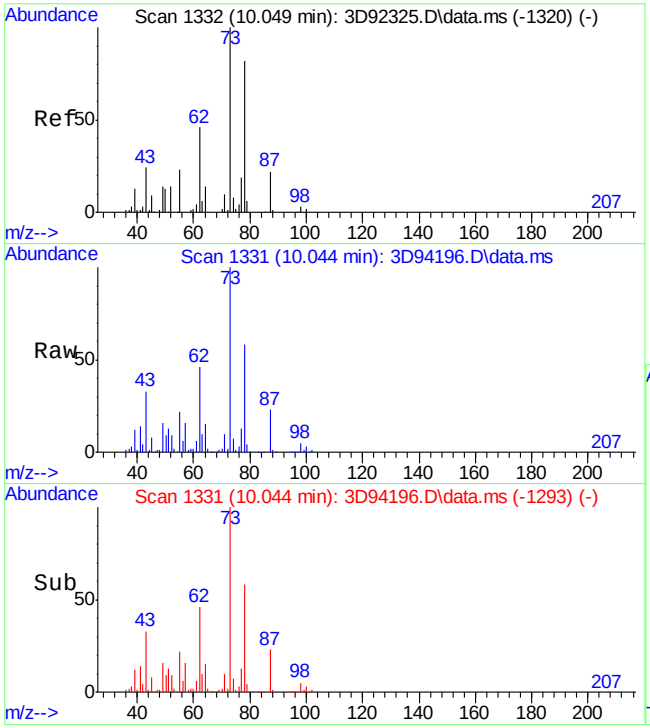


#56
2,2,4-Trimethylpentane
Concen: 108.66 ug/L
RT: 10.007 min Scan# 1324
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 57 Resp: 550450

Ion	Ratio	Lower	Upper
57	100		
41	33.6	4.1	64.1
56	34.3	4.4	64.4

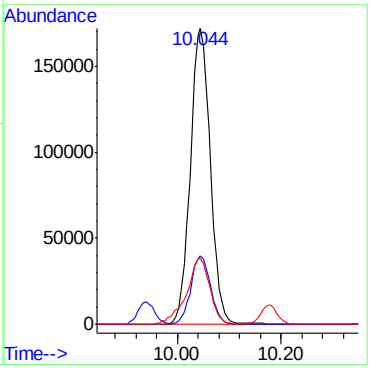


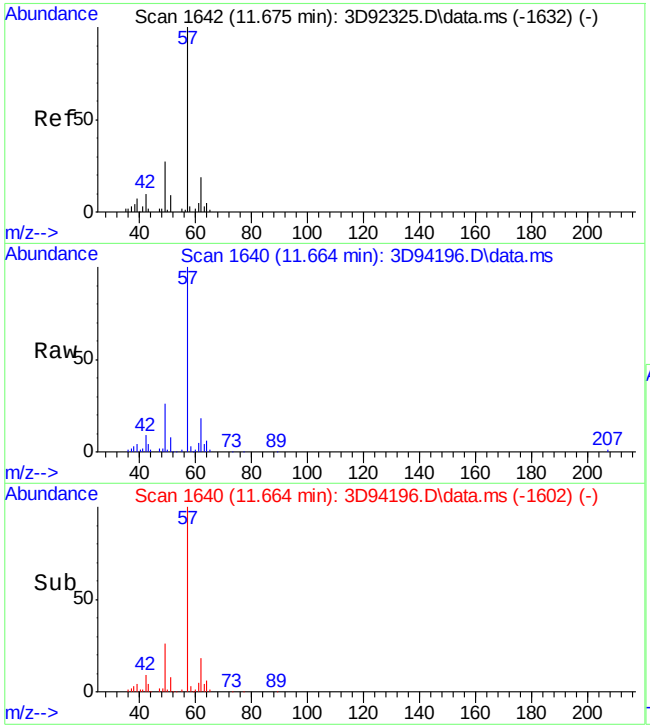


#57
tert-amyl methyl ether
Concen: 101.08 ug/L
RT: 10.044 min Scan# 1331
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 73 Resp: 459122

Ion	Ratio	Lower	Upper
73	100		
87	23.3	0.0	52.9
55	22.3	0.0	51.2

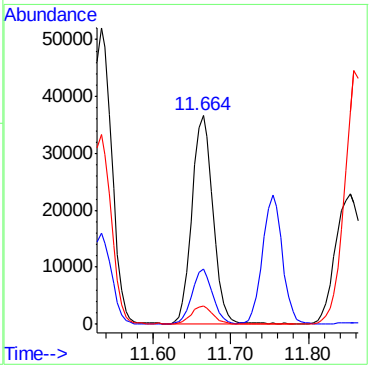


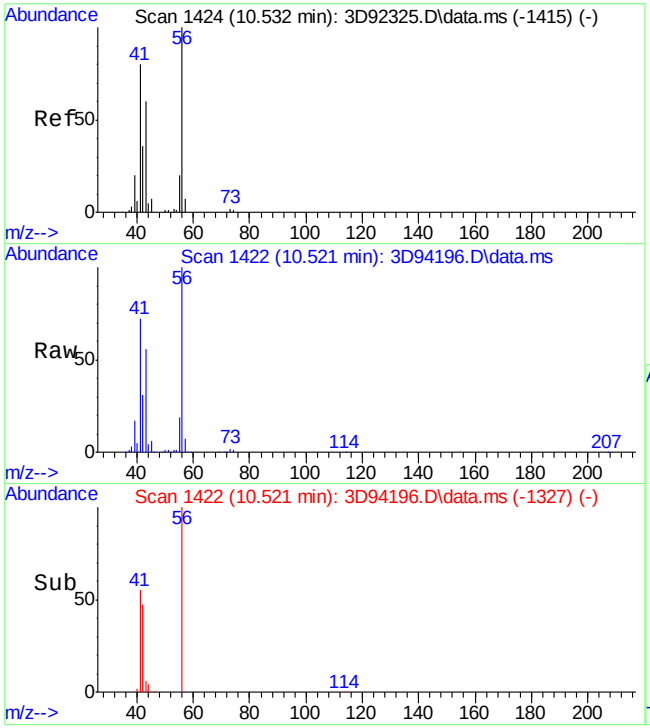


#59
epichlorohydrin
Concen: 529.74 ug/L
RT: 11.664 min Scan# 1640
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 57 Resp: 68722

Ion	Ratio	Lower	Upper
57	100		
49	26.1	0.0	55.7
42	8.5	0.0	39.6

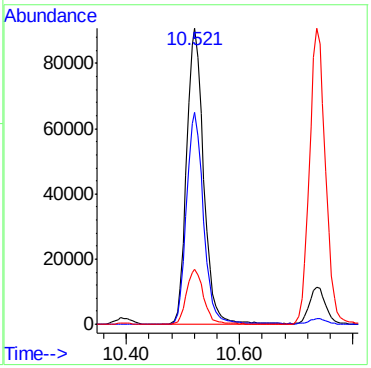


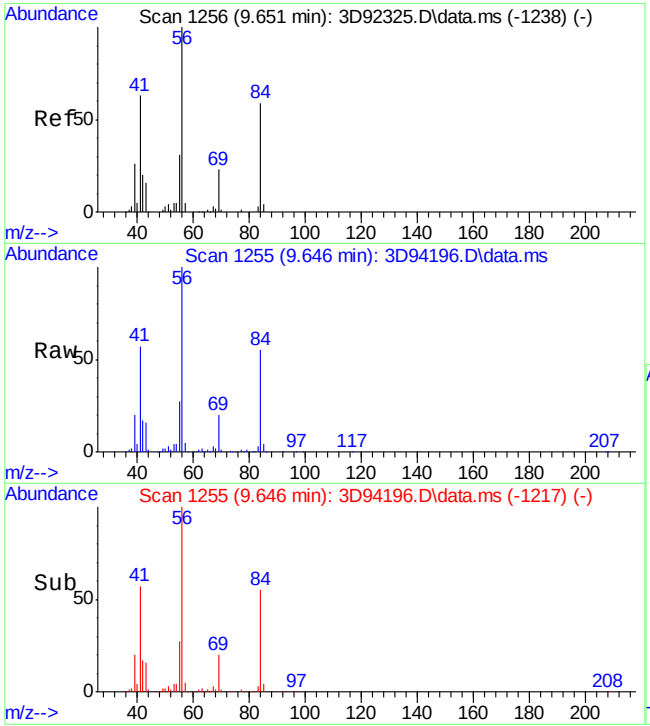


#60
n-butyl alcohol
Concen: 5240.22 ug/L
RT: 10.521 min Scan# 1422
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 56 Resp: 189387

Ion	Ratio	Lower	Upper
56	100		
41	71.9	42.2	102.2
55	18.7	0.0	48.4

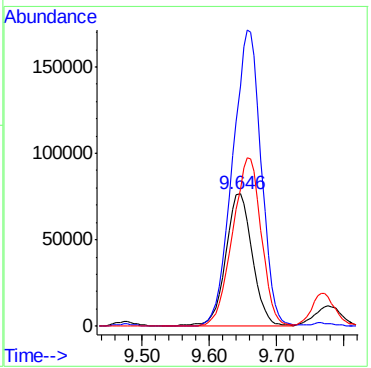


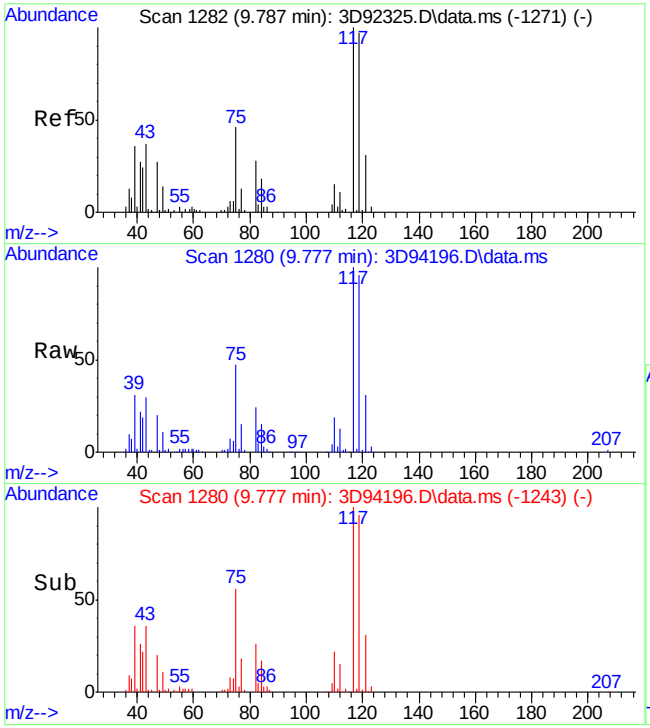


#61
cyclohexane
Concen: 97.70 ug/L
RT: 9.646 min Scan# 1255
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 84 Resp: 209940

Ion	Ratio	Lower	Upper
84	100		
56	241.6	208.4	268.4
41	137.4	105.8	165.8

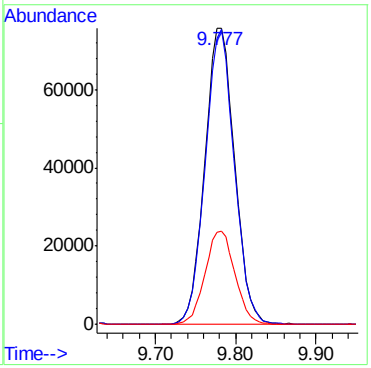


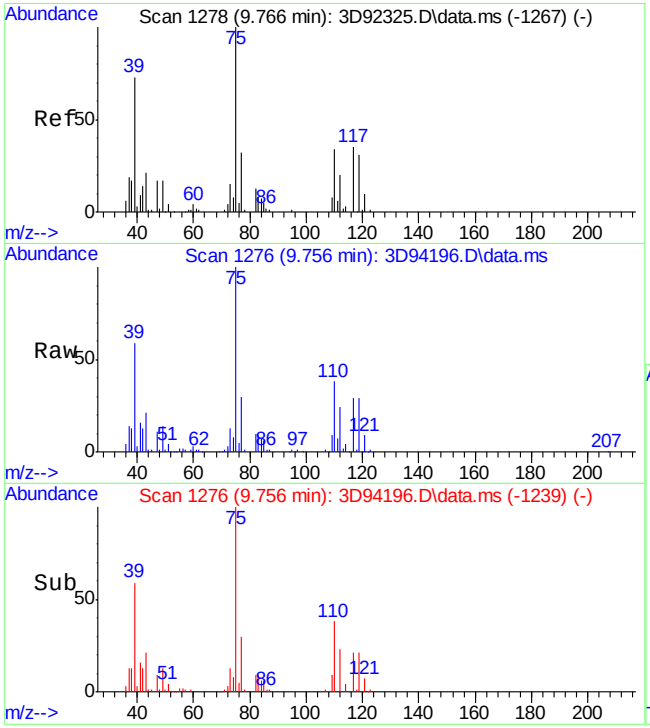


#62
carbon tetrachloride
Concen: 99.71 ug/L
RT: 9.777 min Scan# 1280
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:117 Resp: 195212

Ion	Ratio	Lower	Upper
117	100		
119	96.5	64.5	124.5
121	31.0	1.7	61.7

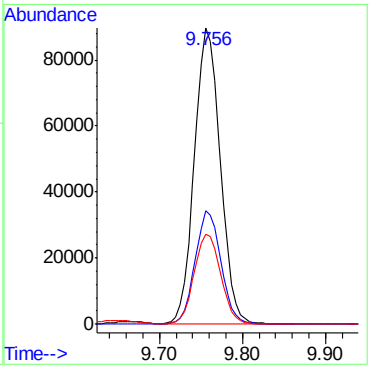


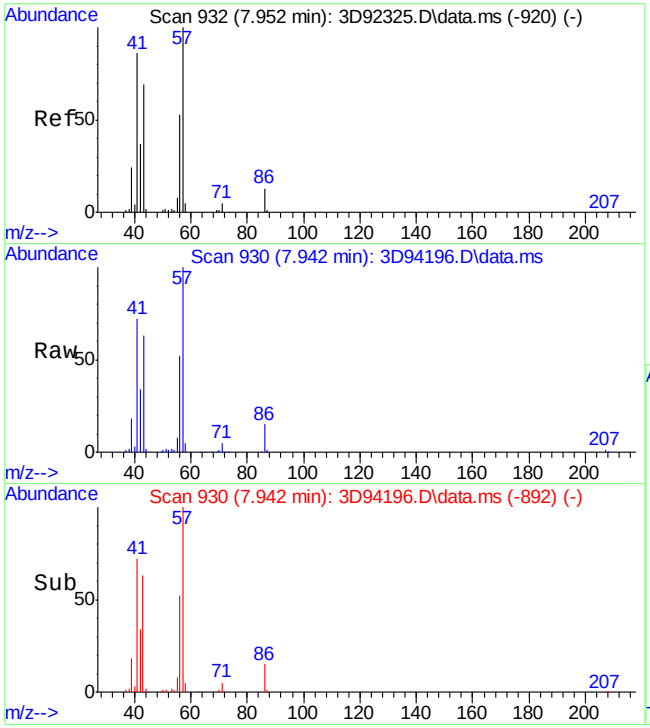


#63
1,1-dichloropropene
Concen: 100.01 ug/L
RT: 9.756 min Scan# 1276
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 75 Resp: 193083

Ion	Ratio	Lower	Upper
75	100		
110	38.1	8.3	68.3
77	30.4	0.4	60.4

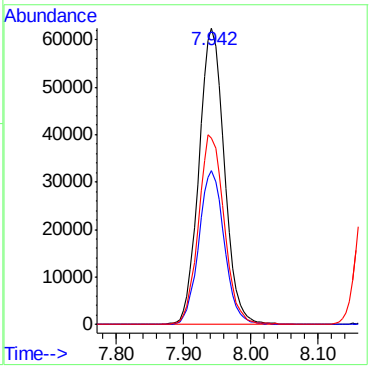


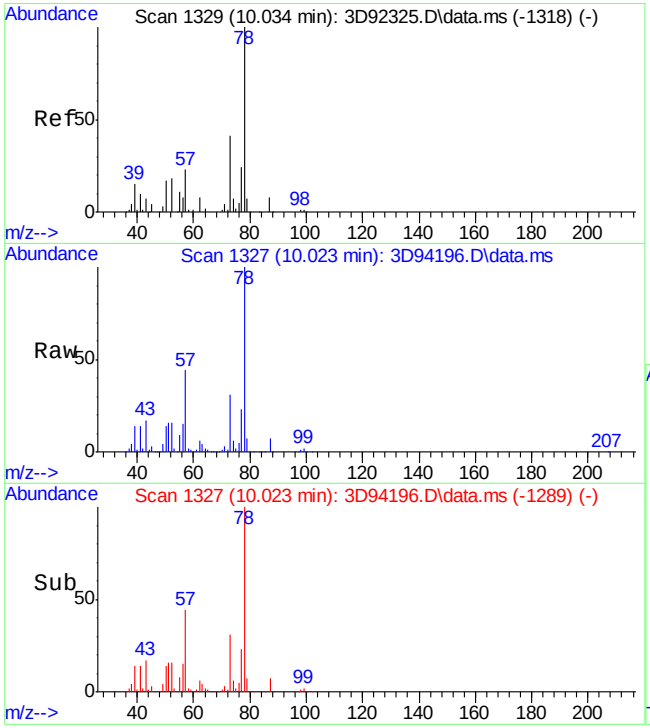


#64
hexane
Concen: 107.21 ug/L
RT: 7.942 min Scan# 930
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 57 Resp: 162874

Ion	Ratio	Lower	Upper
57	100		
56	52.0	21.9	81.9
43	62.8	32.7	92.7

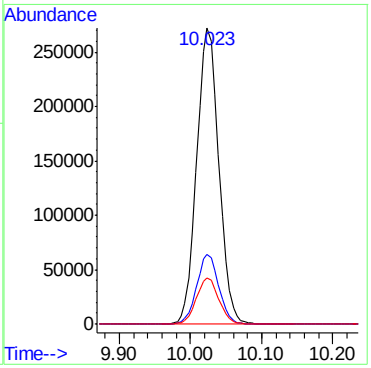


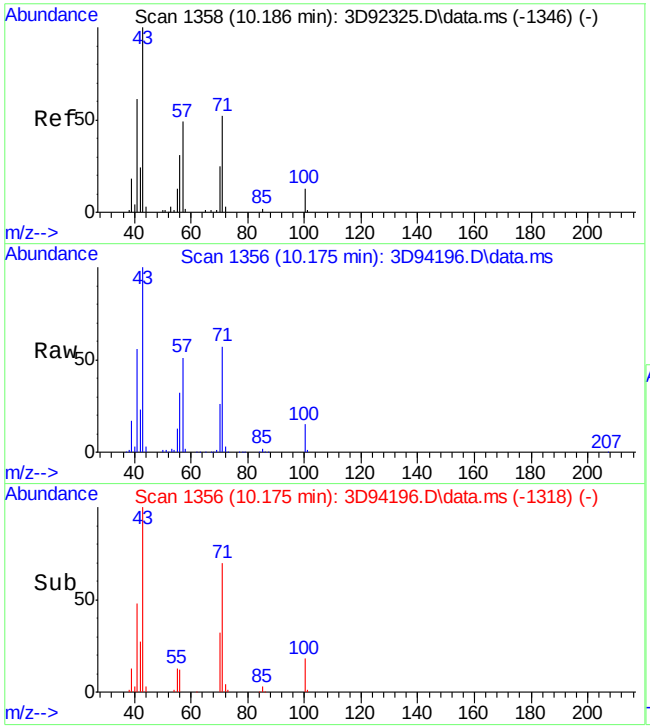


#65
benzene
Concen: 97.88 ug/L
RT: 10.023 min Scan# 1327
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 78 Resp: 587624

Ion	Ratio	Lower	Upper
78	100		
77	23.5	0.0	53.8
52	15.6	0.0	45.9

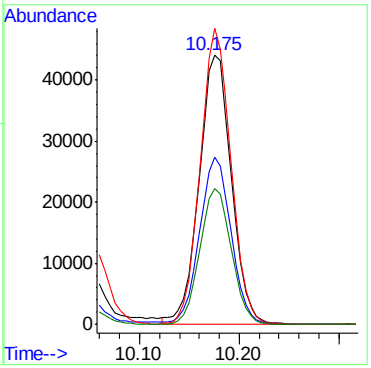


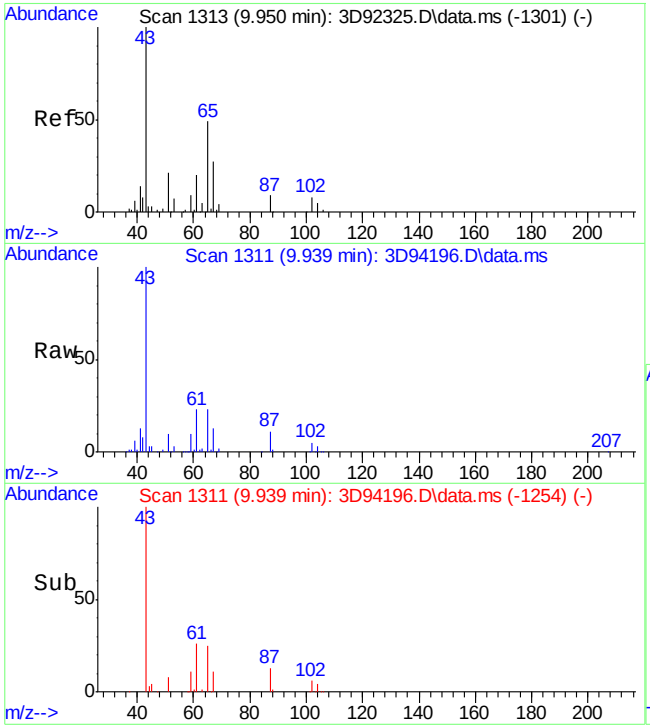


#66
heptane
Concen: 110.33 ug/L
RT: 10.175 min Scan# 1356
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 57 Resp: 98928

Ion	Ratio	Lower	Upper
57	100		
56	62.1	31.4	91.4
71	110.0	75.5	135.5
70	50.5	20.3	80.3

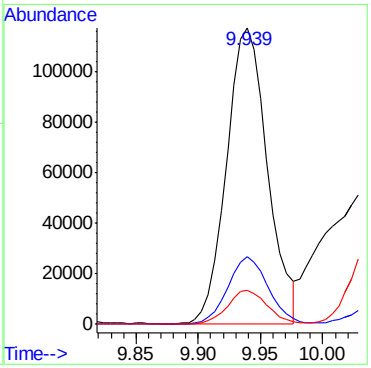


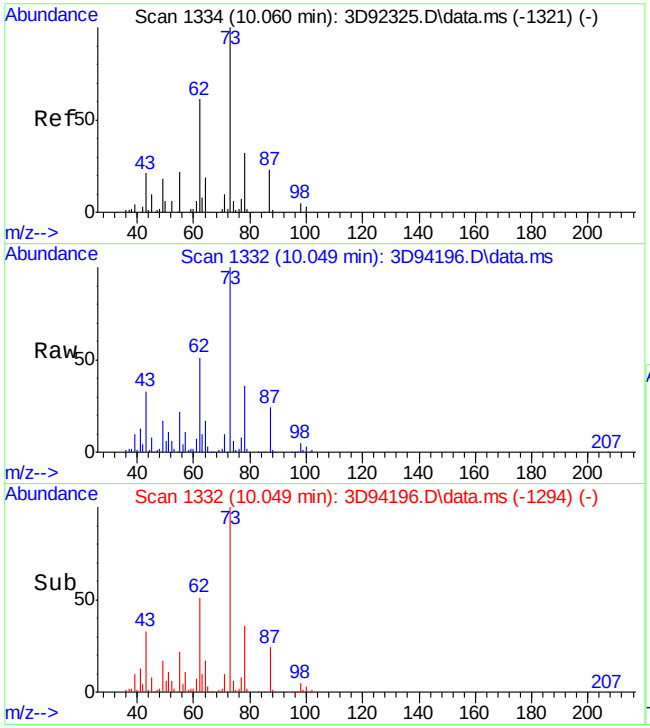


#67
isopropyl acetate
Concen: 101.43 ug/L
RT: 9.939 min Scan# 1311
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 43 Resp: 268222

Ion	Ratio	Lower	Upper
43	100		
61	22.5	0.0	52.1
87	10.9	0.0	40.9

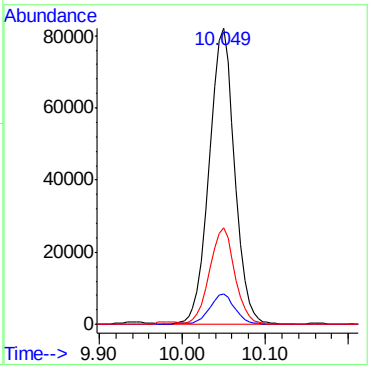


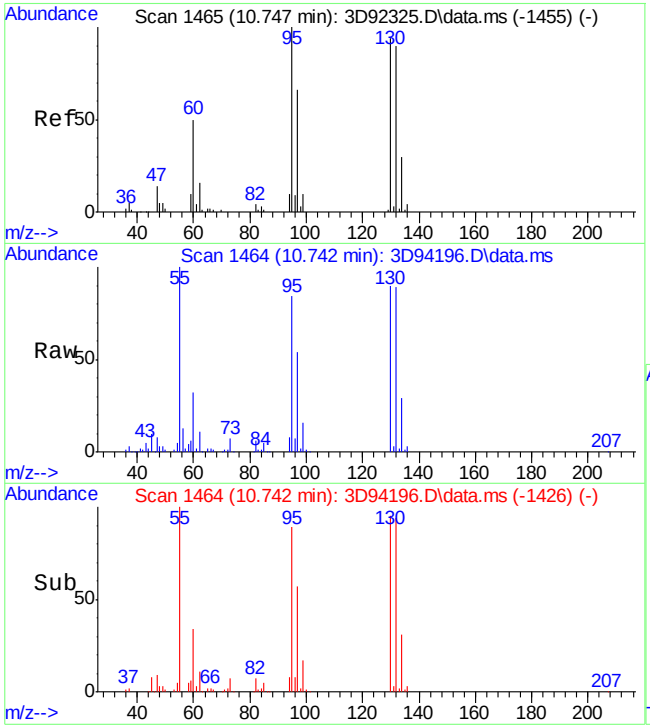


#68
1,2-dichloroethane
Concen: 97.69 ug/L
RT: 10.049 min Scan# 1332
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 62 Resp: 174707

Ion	Ratio	Lower	Upper
62	100		
98	10.1	0.0	40.2
64	32.7	2.5	62.5

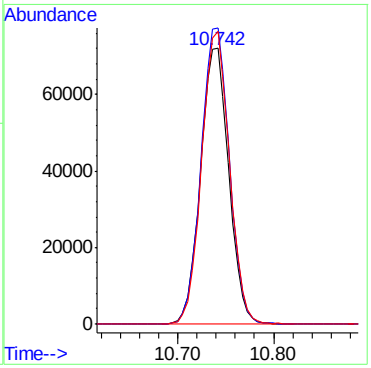


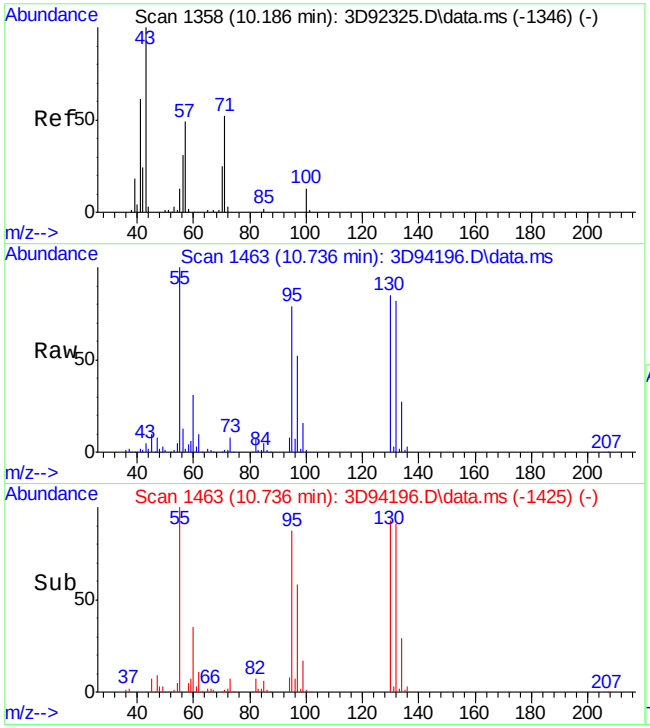


#69
trichloroethene
Concen: 99.41 ug/L
RT: 10.742 min Scan# 1464
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 95 Resp: 147068

Ion	Ratio	Lower	Upper
95	100		
130	107.4	78.9	138.9
132	106.1	75.1	135.1

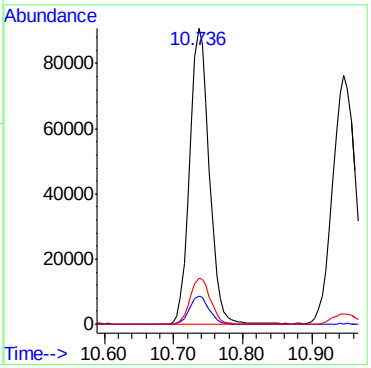


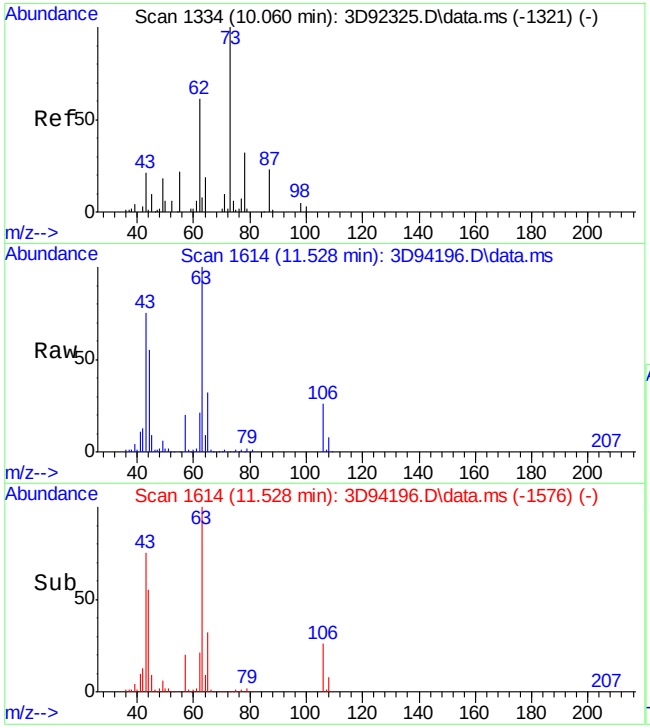


#70
ethyl acrylate
Concen: 109.26 ug/L
RT: 10.736 min Scan# 1463
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 55 Resp: 178207

Ion	Ratio	Lower	Upper
55	100		
45	9.6	7.8	11.6
99	16.2	12.9	19.3

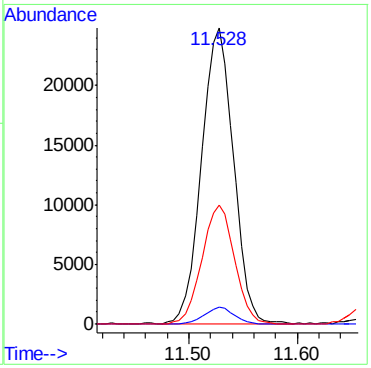


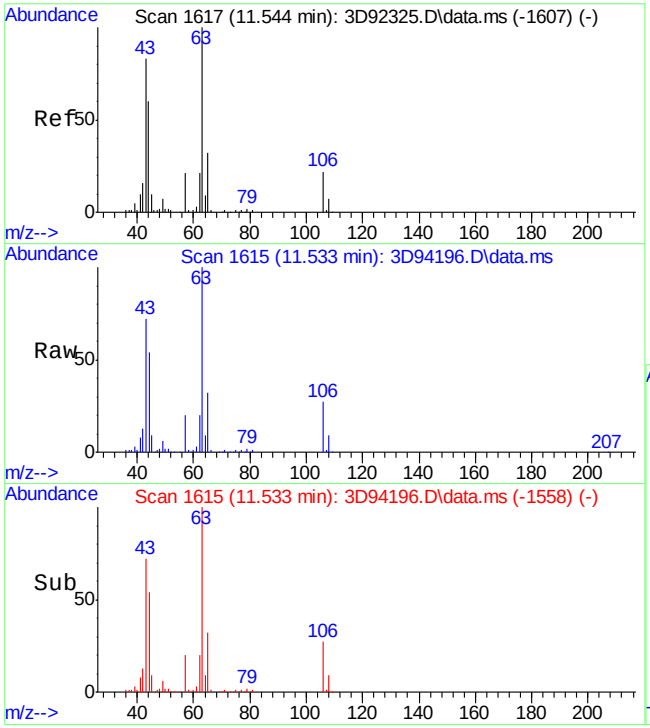


#72
2-nitropropane
Concen: 97.67 ug/L
RT: 11.528 min Scan# 1614
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 41 Resp: 51488

Ion	Ratio	Lower	Upper
41	100		
46	5.8	0.0	35.6
39	40.0	9.8	69.8

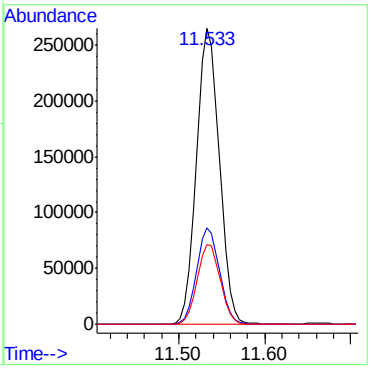


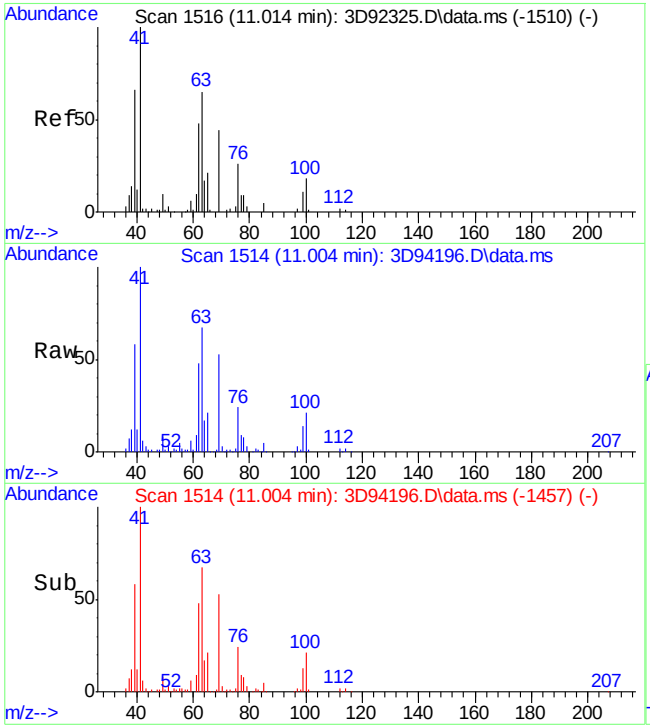


#73
2-chloroethyl vinyl ether
Concen: 515.83 ug/L
RT: 11.533 min Scan# 1615
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 63 Resp: 481326

Ion	Ratio	Lower	Upper
63	100		
65	32.5	3.0	63.0
106	26.8	0.0	56.6

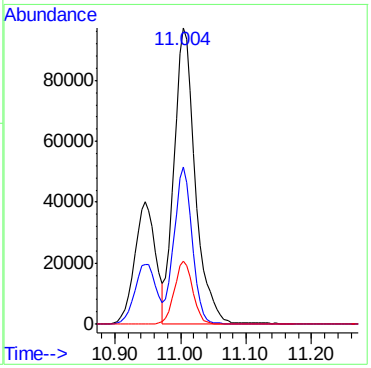


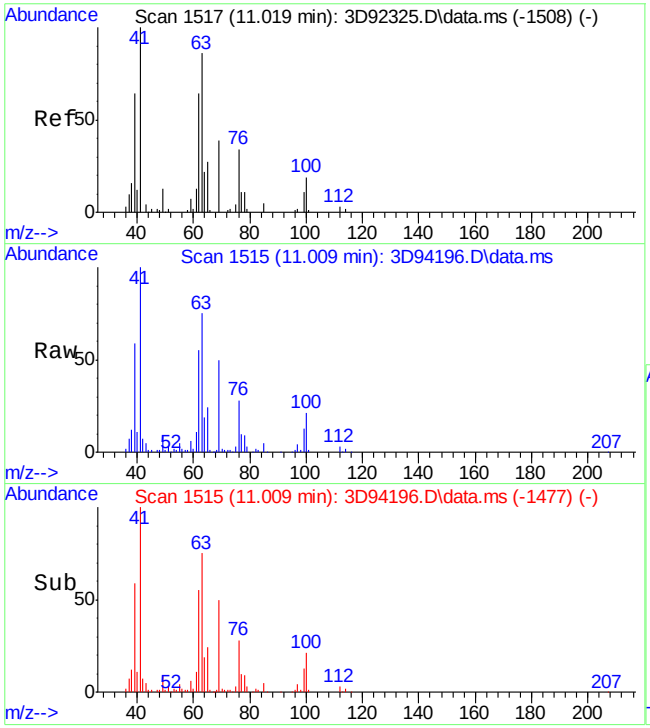


#74
methyl methacrylate
Concen: 101.71 ug/L
RT: 11.004 min Scan# 1514
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 41 Resp: 217584

Ion	Ratio	Lower	Upper
41	100		
69	53.0	21.5	81.5
100	21.3	0.0	50.7

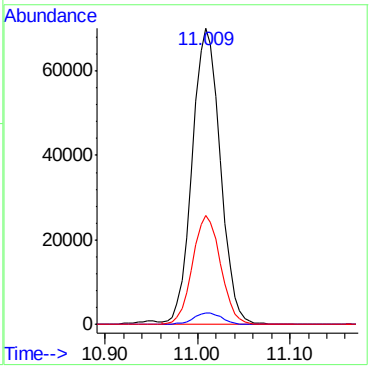


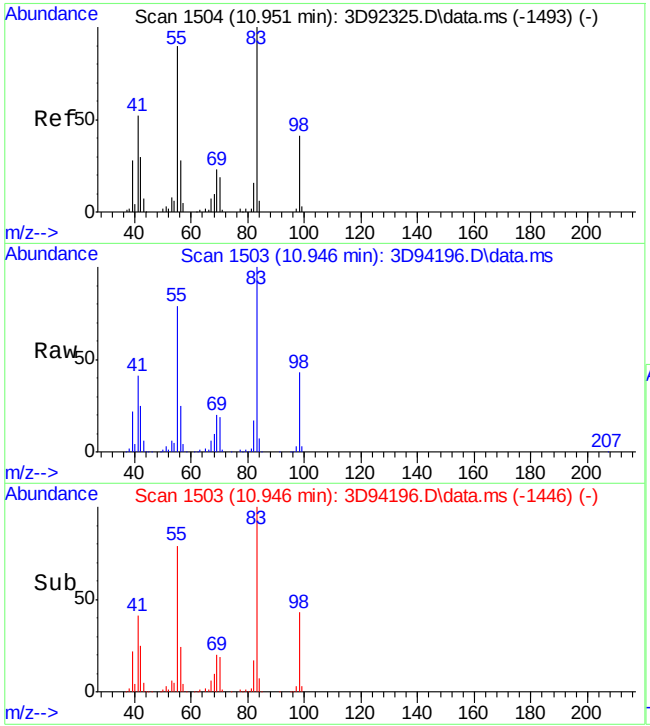


#75
1,2-dichloropropane
Concen: 101.03 ug/L
RT: 11.009 min Scan# 1515
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 63 Resp: 148005

Ion	Ratio	Lower	Upper
63	100		
112	3.9	0.0	33.7
76	36.8	7.1	67.1

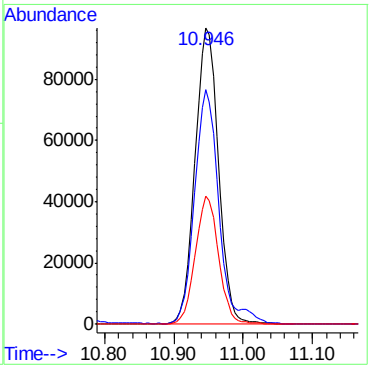




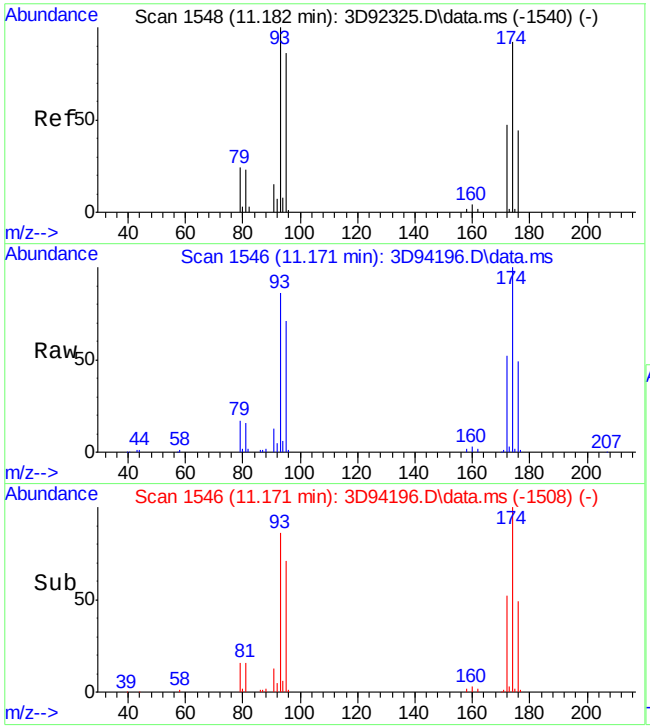
#76
methylcyclohexane
Concen: 105.39 ug/L
RT: 10.946 min Scan# 1503
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 83 Resp: 226992

Ion	Ratio	Lower	Upper
83	100		
55	78.9	48.6	108.6
98	43.2	12.6	72.6



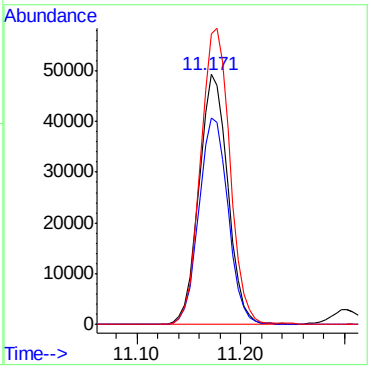
3D94196.D M3D4058.M Thu Dec 19 12:37:14 2013 3D Page 35

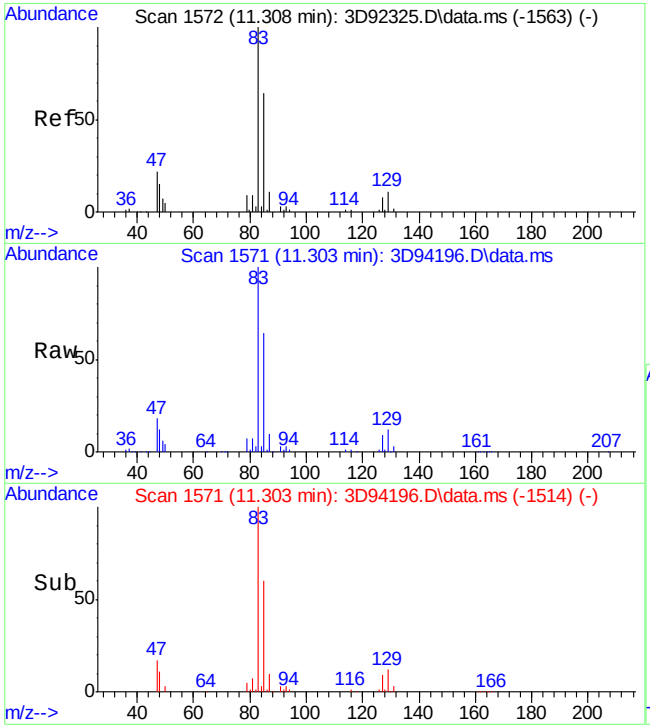


#77
dibromomethane
Concen: 102.18 ug/L
RT: 11.171 min Scan# 1546
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 93 Resp: 94181

Ion	Ratio	Lower	Upper
93	100		
95	82.4	51.7	111.7
174	116.3	84.5	144.5

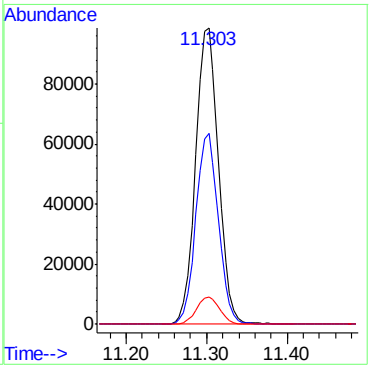




#78
bromodichloromethane
Concen: 104.01 ug/L
RT: 11.303 min Scan# 1571
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

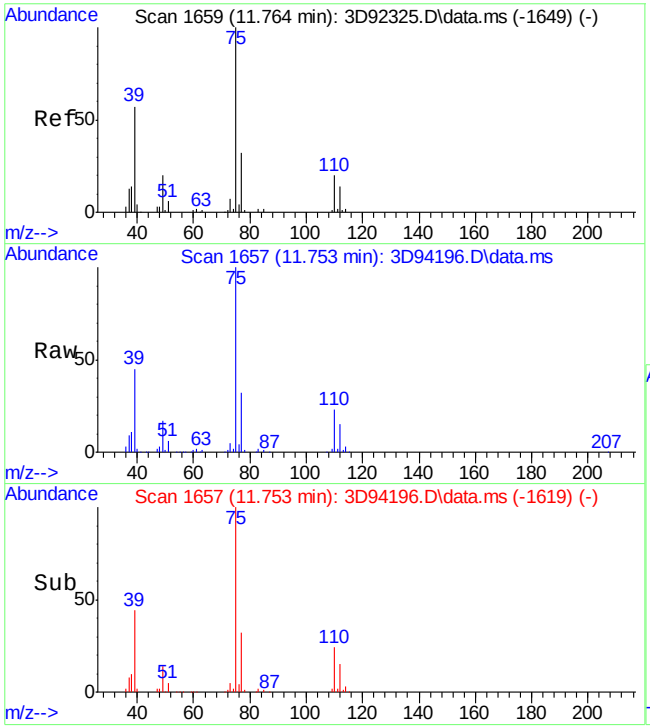
Tgt Ion: 83 Resp: 194547

Ion	Ratio	Lower	Upper
83	100		
85	64.3	33.4	93.4
127	9.3	0.0	39.1



7.7.8

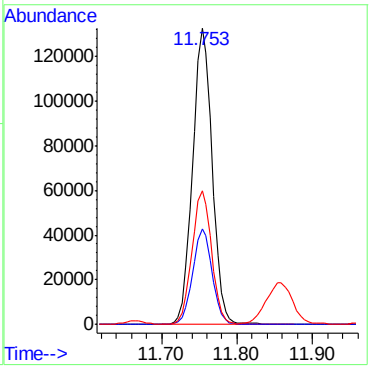
7

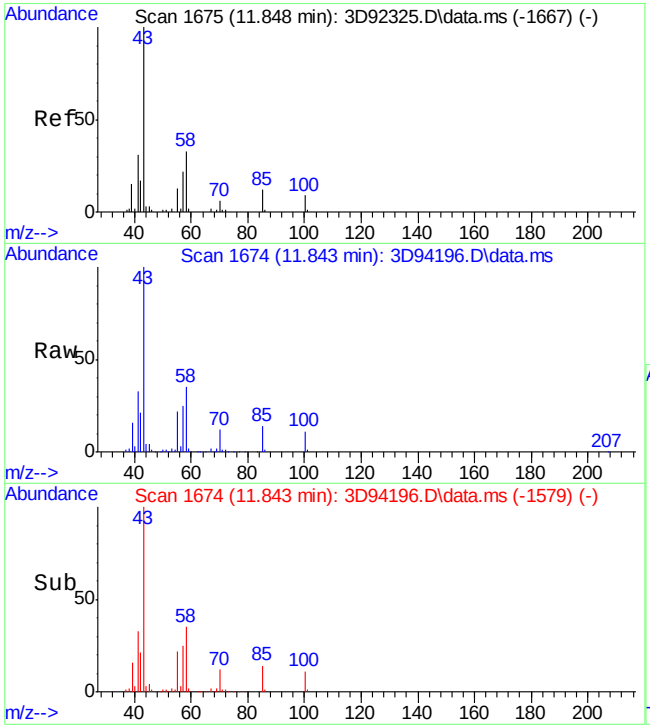


#79
cis-1,3-dichloropropene
Concen: 101.73 ug/L
RT: 11.753 min Scan# 1657
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 75 Resp: 238362

Ion	Ratio	Lower	Upper
75	100		
77	32.1	1.7	61.7
39	45.2	14.6	74.6

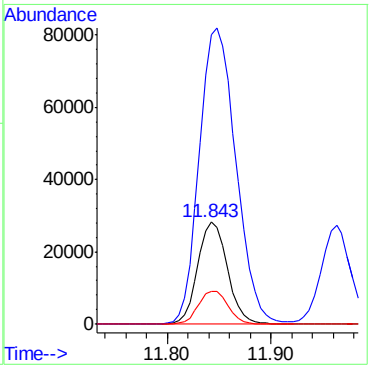




#81
4-methyl-2-pentanone
Concen: 108.10 ug/L
RT: 11.843 min Scan# 1674
Delta R.T. 0.001 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 58 Resp: 55699

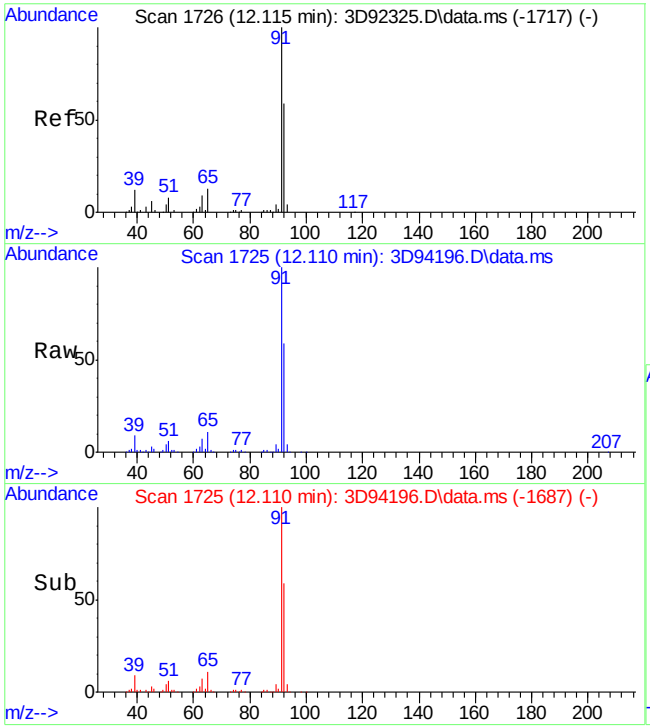
Ion	Ratio	Lower	Upper
58	100		
43	361.1	331.5	391.5
100	32.4	3.0	63.0



7.7.8

7

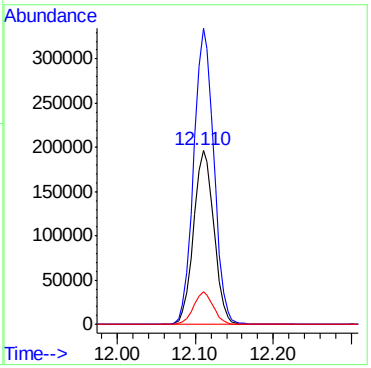
3D94196.D M3D4058.M Thu Dec 19 12:37:15 2013 3D Page 37

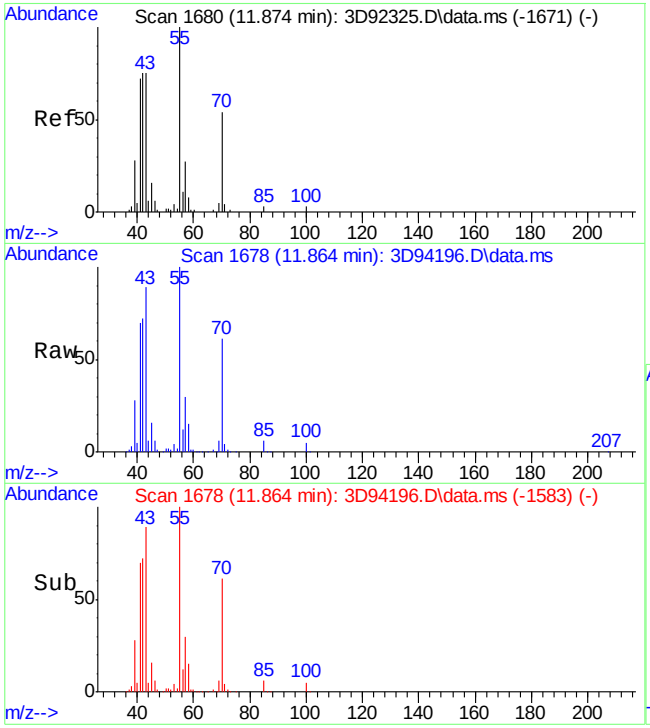


#82
toluene
Concen: 101.62 ug/L
RT: 12.110 min Scan# 1725
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 92 Resp: 352774

Ion	Ratio	Lower	Upper
92	100		
91	169.8	137.1	197.1
65	18.7	0.0	48.7

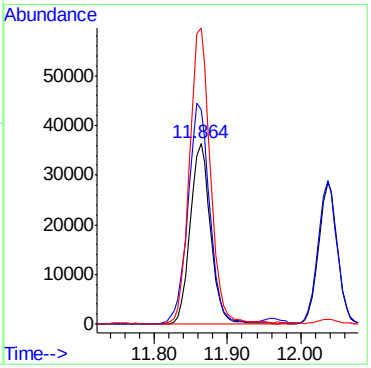


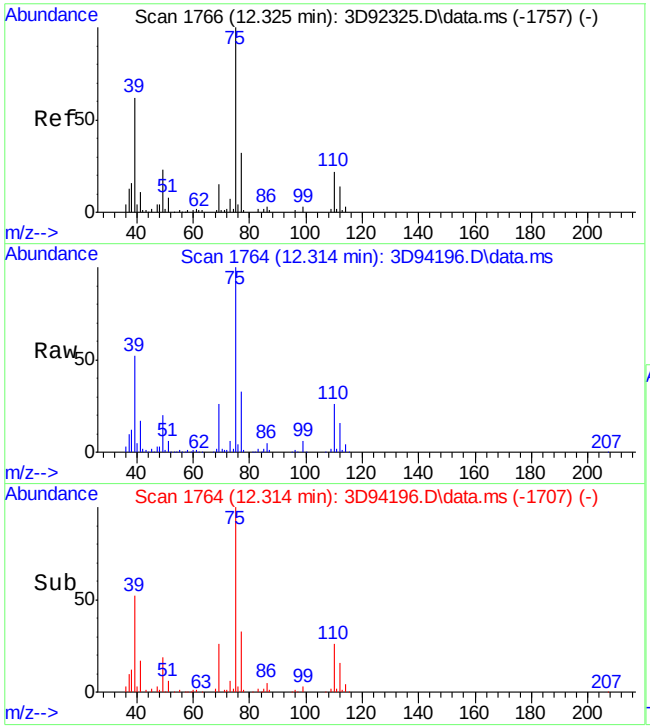


#83
3-methyl-1-butanol
Concen: 2052.45 ug/L
RT: 11.864 min Scan# 1678
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 70 Resp: 70439

Ion	Ratio	Lower	Upper
70	100		
42	130.4	102.8	162.8
55	168.8	140.8	200.8

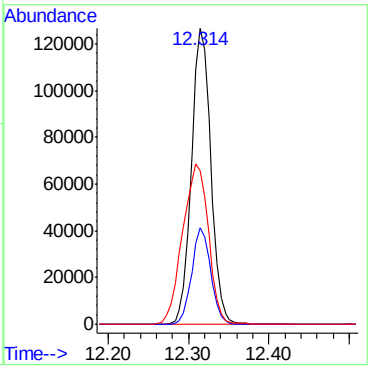


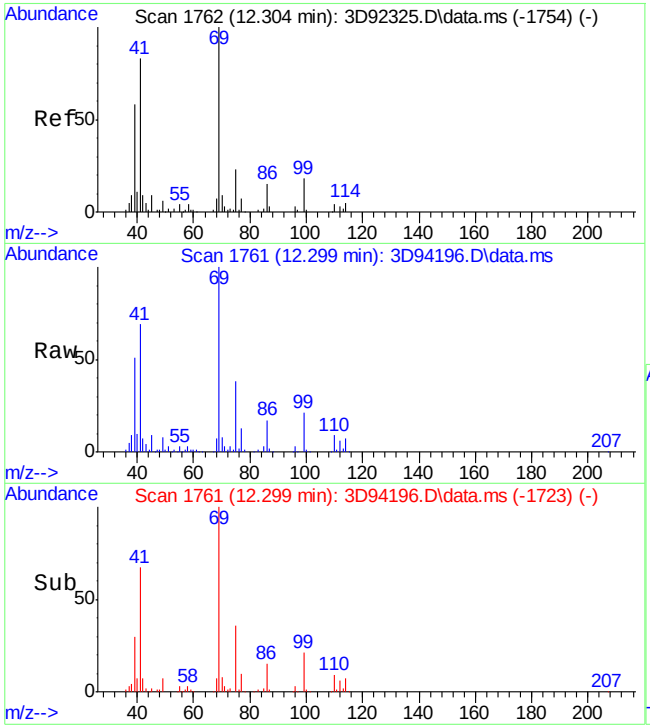


#84
trans-1,3-dichloropropene
Concen: 102.47 ug/L
RT: 12.314 min Scan# 1764
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 75 Resp: 213073

Ion	Ratio	Lower	Upper
75	100		
77	32.5	2.0	62.0
39	51.8	24.5	84.5

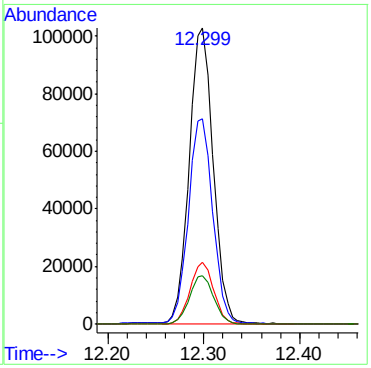




#85
ethyl methacrylate
Concen: 109.84 ug/L
RT: 12.299 min Scan# 1761
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 69 Resp: 179080

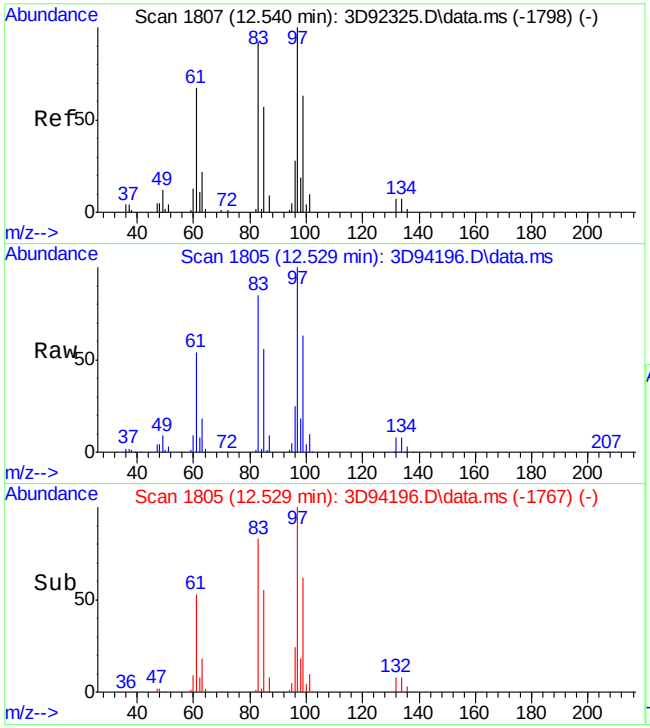
Ion	Ratio	Lower	Upper
69	100		
41	69.3	40.4	100.4
99	20.8	0.0	50.5
86	16.5	0.0	45.2



7.7.8

7

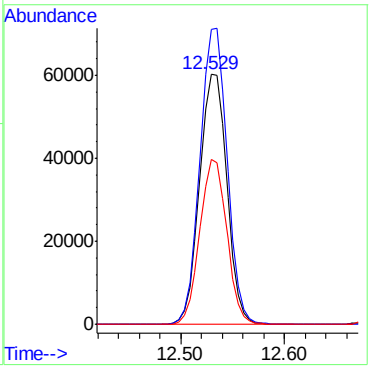
3D94196.D M3D4058.M Thu Dec 19 12:37:15 2013 3D Page 39

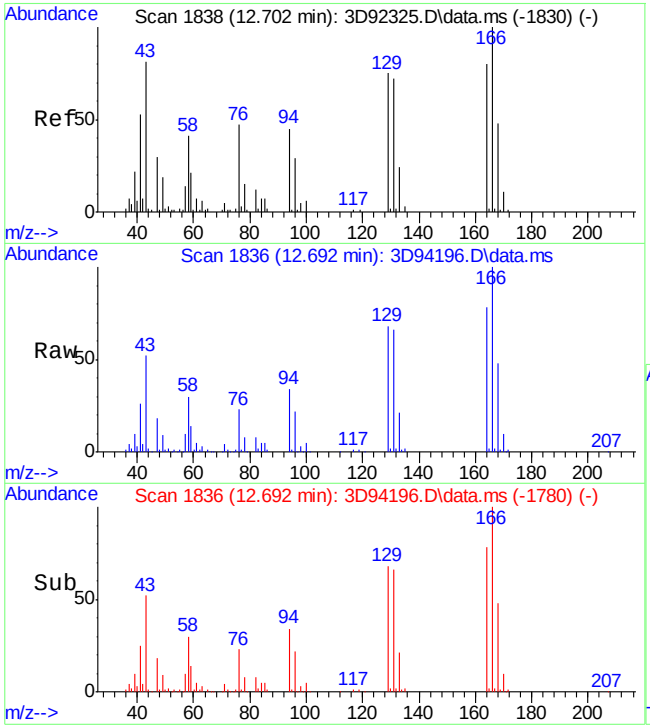


#86
1,1,2-trichloroethane
Concen: 103.50 ug/L
RT: 12.529 min Scan# 1805
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 83 Resp: 109995

Ion	Ratio	Lower	Upper
83	100		
97	117.6	84.6	144.6
85	66.0	35.4	95.4

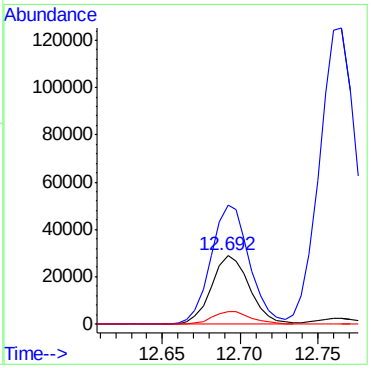


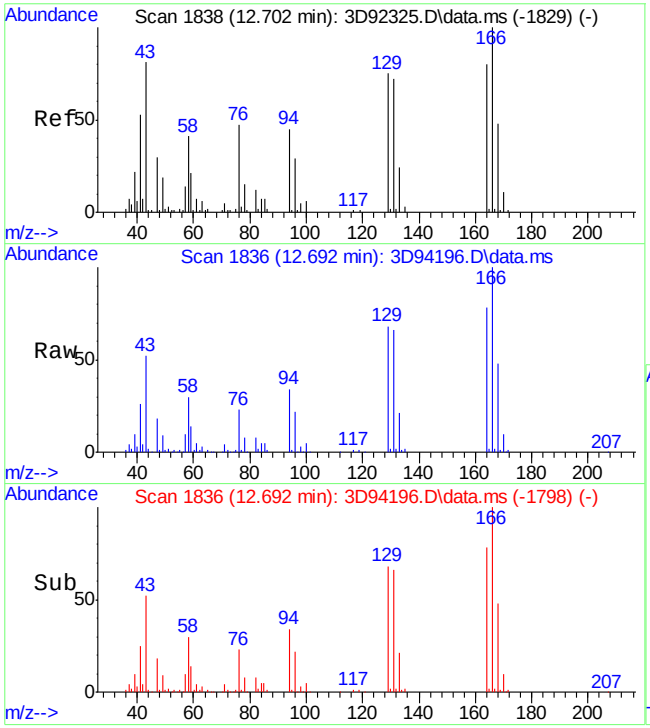


#87
2-hexanone
Concen: 109.10 ug/L
RT: 12.692 min Scan# 1836
Delta R.T. -0.004 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 58 Resp: 49055

Ion	Ratio	Lower	Upper
58	100		
43	173.1	143.4	203.4
100	17.7	0.0	48.0

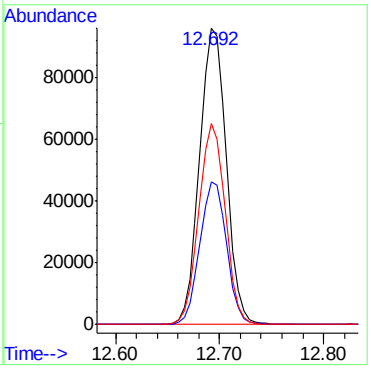


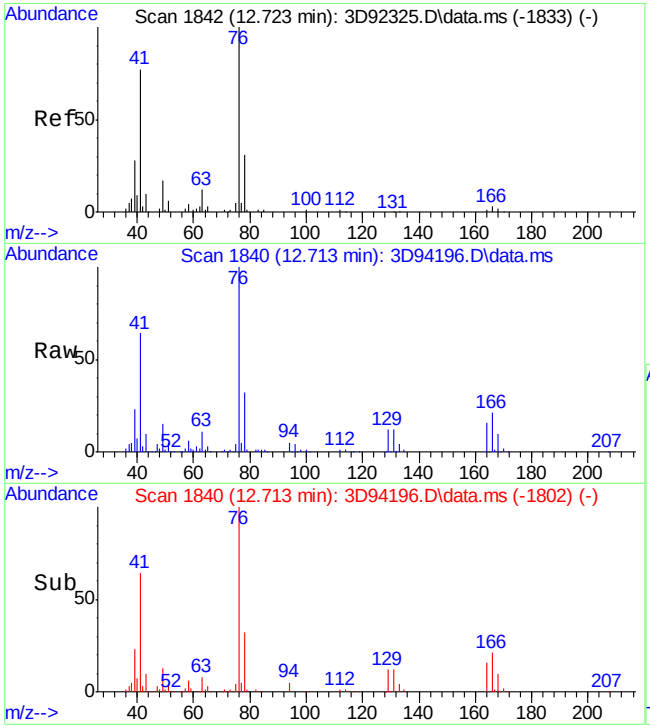


#89
tetrachloroethene
Concen: 102.38 ug/L
RT: 12.692 min Scan# 1836
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:166 Resp: 171007

Ion	Ratio	Lower	Upper
166	100		
168	48.1	19.9	79.9
129	67.7	38.6	98.6

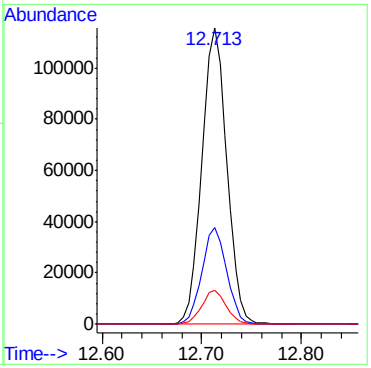


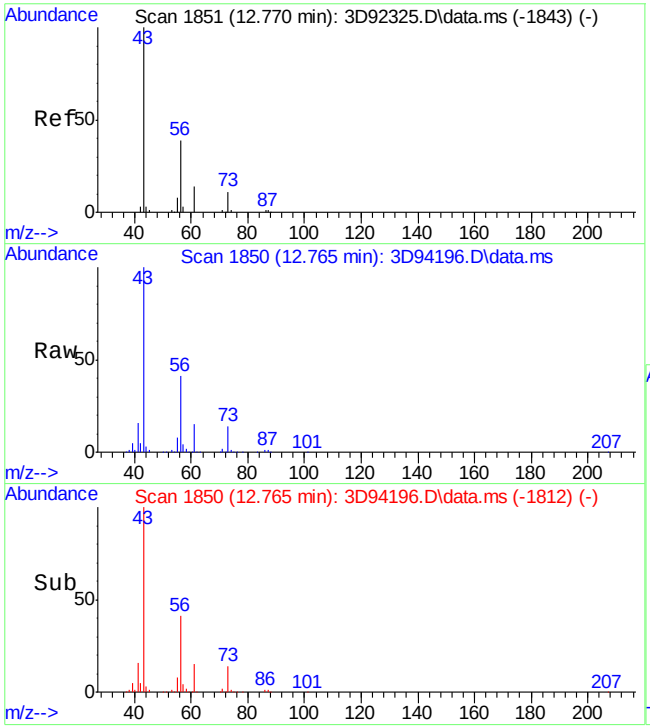


#90
1,3-dichloropropane
Concen: 100.63 ug/L
RT: 12.713 min Scan# 1840
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 76 Resp: 200375

Ion	Ratio	Lower	Upper
76	100		
78	32.5	2.6	62.6
63	11.3	0.0	41.3

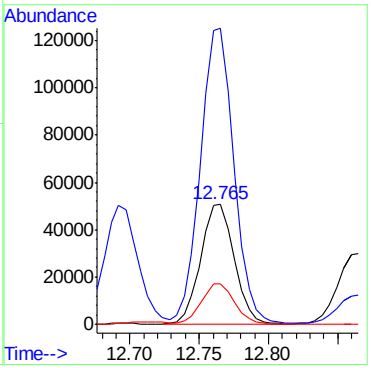


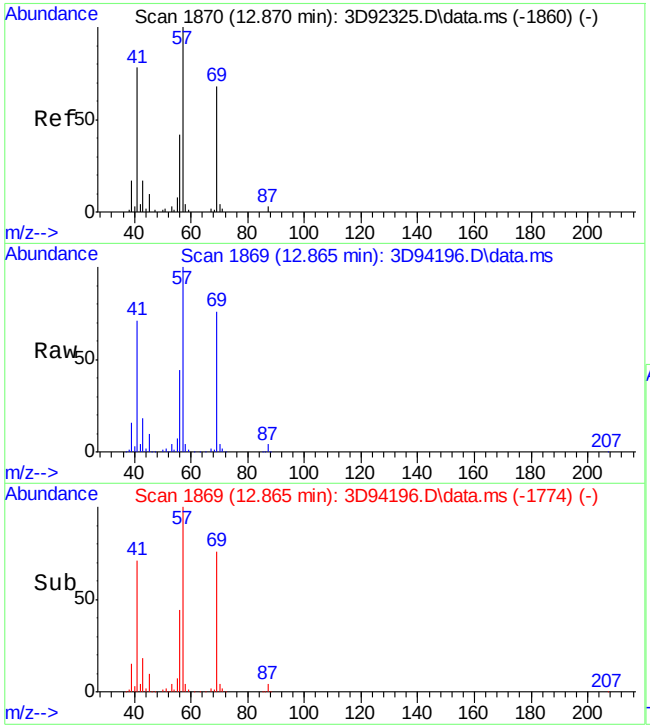


#91
butyl acetate
Concen: 101.40 ug/L
RT: 12.765 min Scan# 1850
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 56 Resp: 86427

Ion	Ratio	Lower	Upper
56	100		
43	244.3	206.2	266.2
73	33.2	2.1	62.1

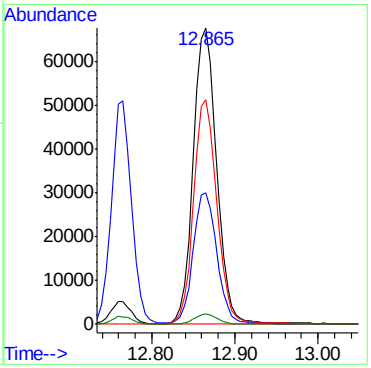


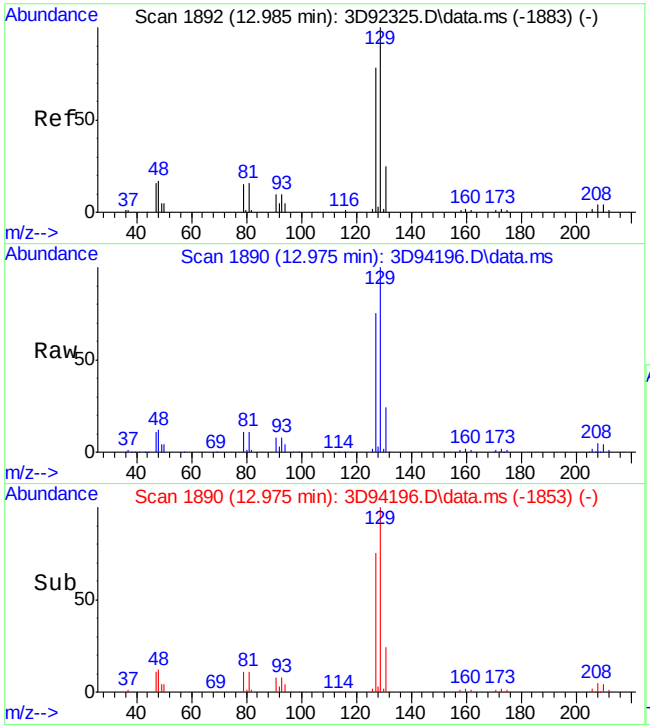


#92
3,3-Dimethyl-1-Butanol
Concen: 973.75 ug/L
RT: 12.865 min Scan# 1869
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 57 Resp: 132200

Ion	Ratio	Lower	Upper
57	100		
56	45.0	35.8	53.6
69	75.1	59.3	88.9
87	3.3	2.7	4.1

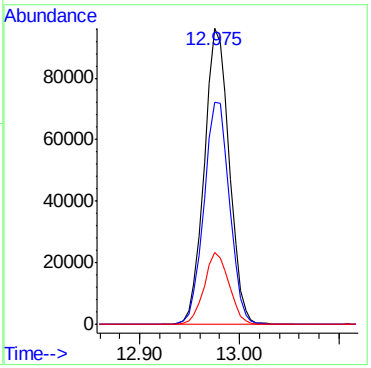


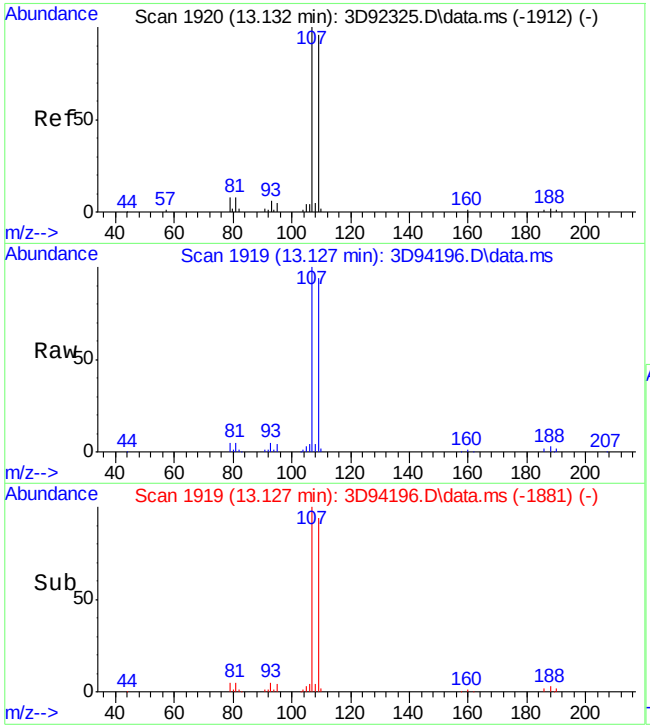


#93
dibromochloromethane
Concen: 105.52 ug/L
RT: 12.975 min Scan# 1890
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:129 Resp: 167643

Ion	Ratio	Lower	Upper
129	100		
127	75.0	48.3	108.3
131	24.3	0.0	54.2

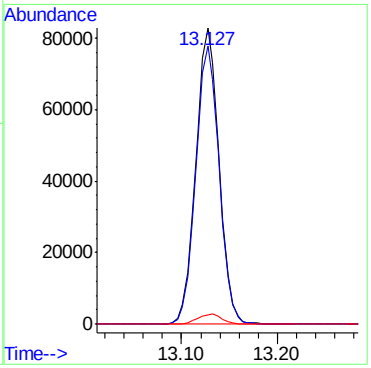


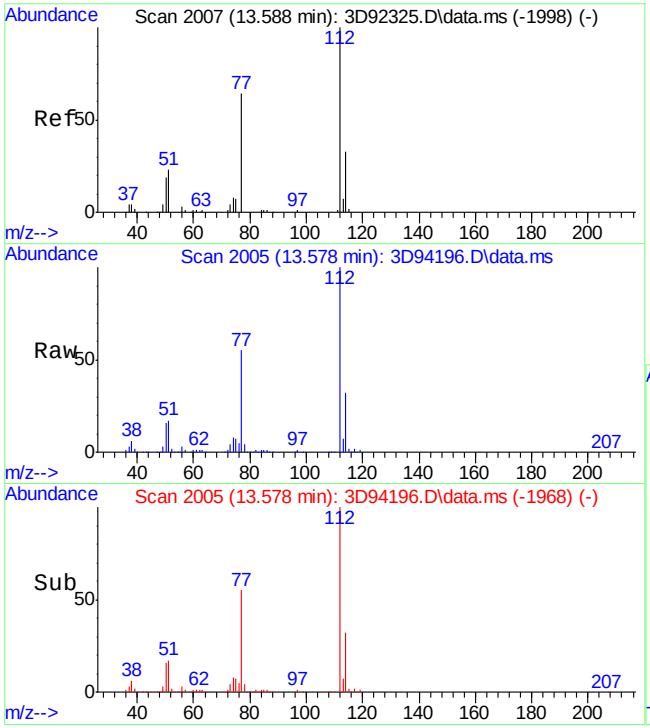


#94
1,2-dibromoethane
Concen: 102.83 ug/L
RT: 13.127 min Scan# 1919
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:107 Resp: 138297

Ion	Ratio	Lower	Upper
107	100		
109	93.9	65.3	125.3
188	3.2	0.0	33.4

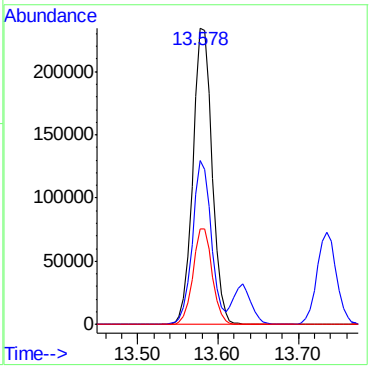


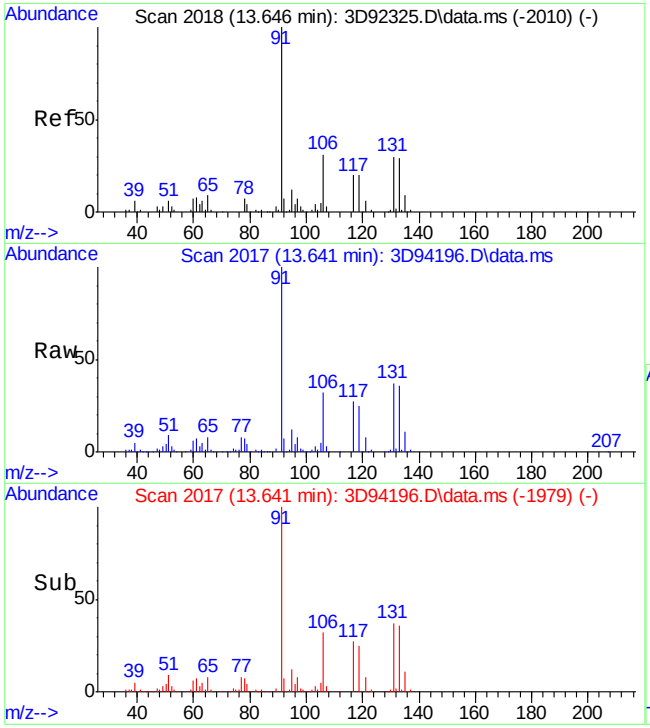


#96
chlorobenzene
Concen: 100.86 ug/L
RT: 13.578 min Scan# 2005
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:112 Resp: 388556

Ion	Ratio	Lower	Upper
112	100		
77	55.4	22.5	82.5
114	32.3	2.5	62.5

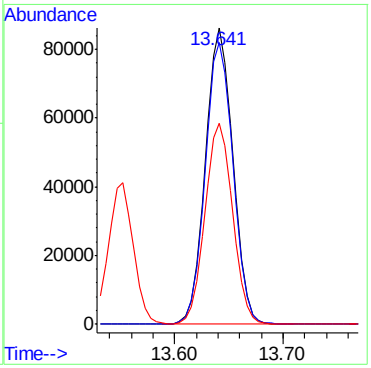


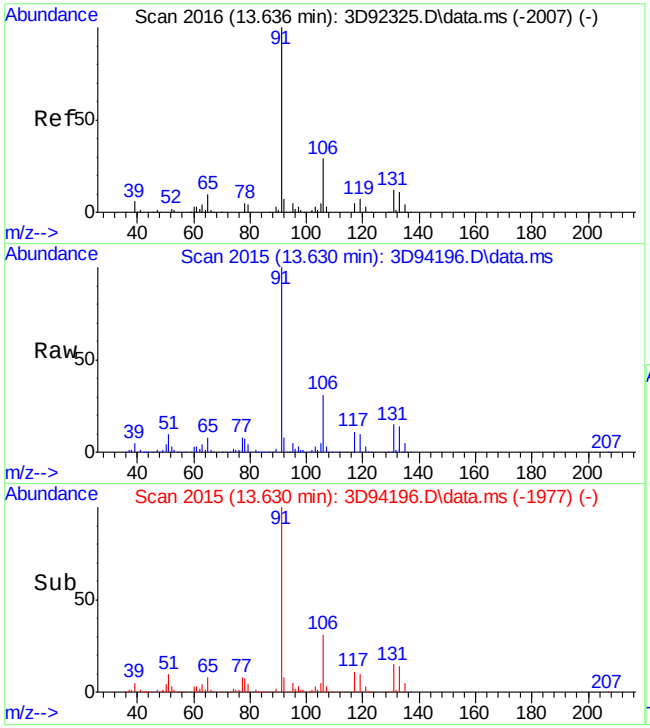


#97
1,1,1,2-tetrachloroethane
Concen: 100.77 ug/L
RT: 13.641 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:131 Resp: 153431

Ion	Ratio	Lower	Upper
131	100		
133	95.3	63.6	123.6
119	67.8	37.5	97.5

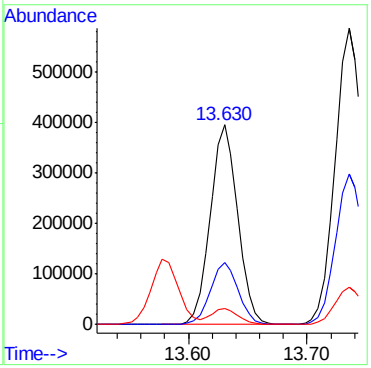


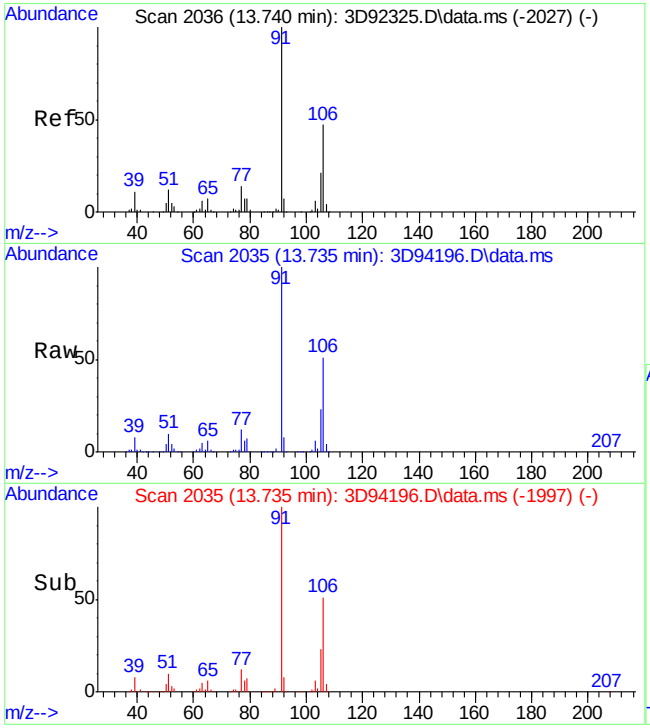


#98
ethylbenzene
Concen: 100.25 ug/L
RT: 13.630 min Scan# 2015
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 91 Resp: 638147

Ion	Ratio	Lower	Upper
91	100		
106	30.8	1.2	61.2
77	8.0	0.0	38.2

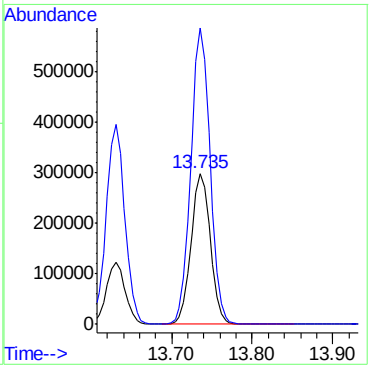


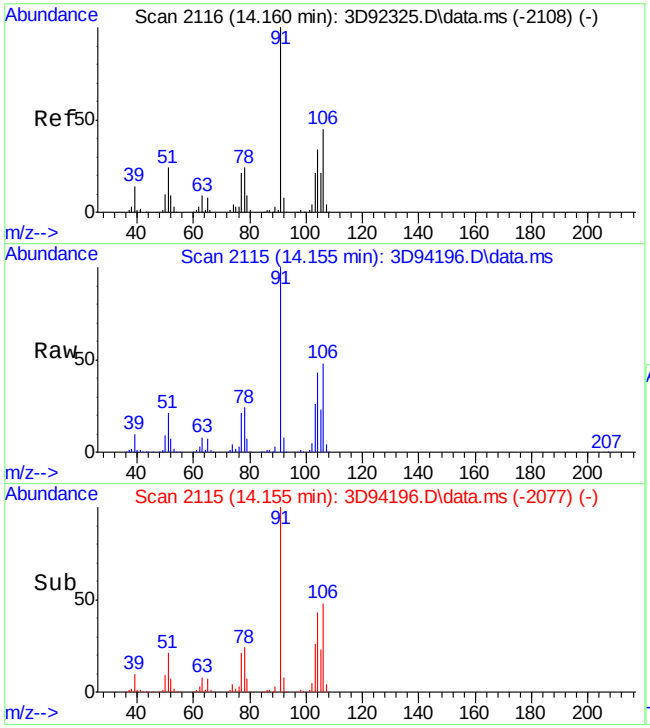


#99
m,p-xylene
Concen: 201.68 ug/L
RT: 13.735 min Scan# 2035
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:106 Resp: 496248

Ion	Ratio	Lower	Upper
106	100		
91	196.9	139.0	258.2

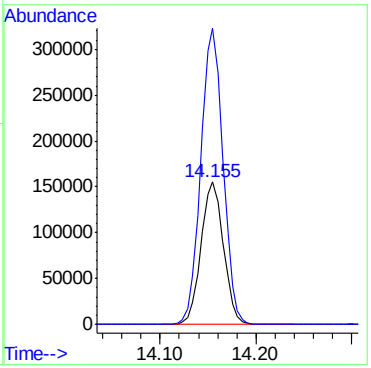


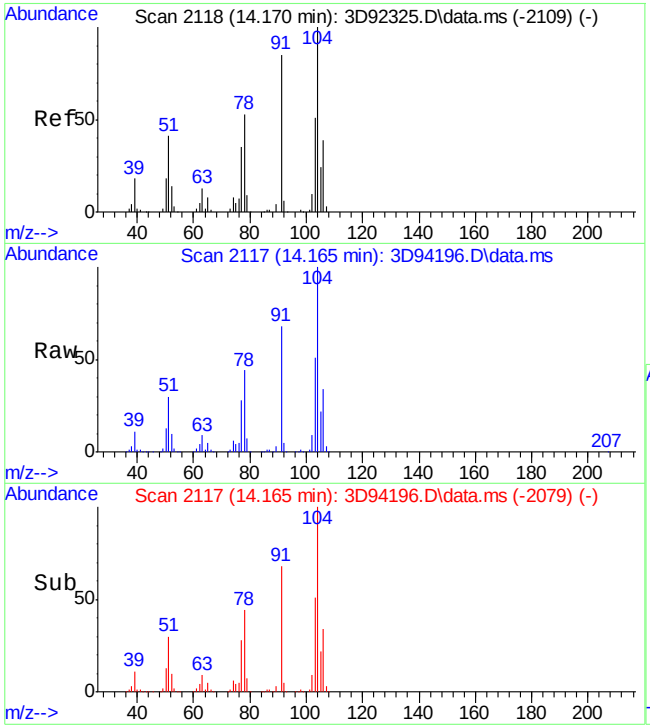


#100
o-xylene
Concen: 101.25 ug/L
RT: 14.155 min Scan# 2115
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:106 Resp: 250989

Ion	Ratio	Lower	Upper
106	100		
91	208.2	146.5	272.1

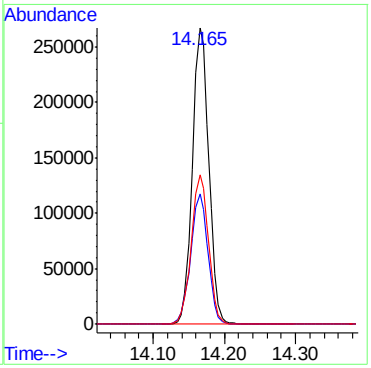


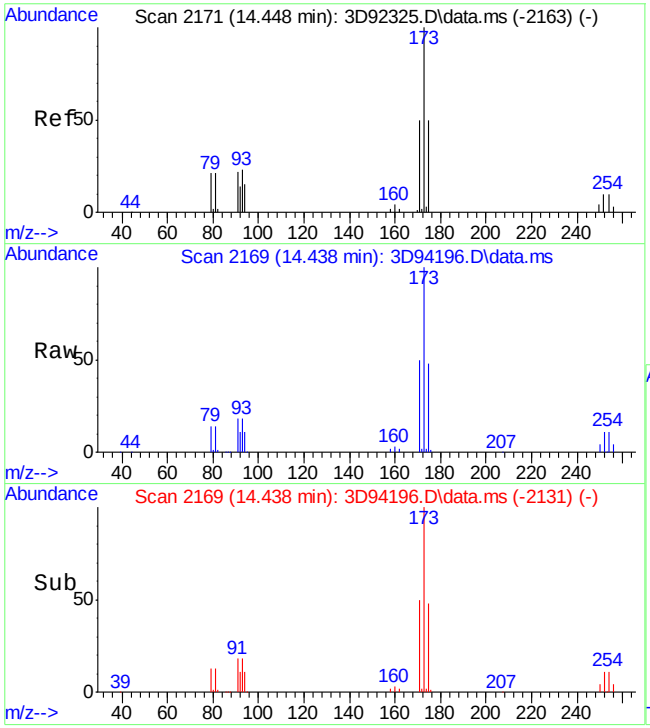


#101
styrene
Concen: 105.98 ug/L
RT: 14.165 min Scan# 2117
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:104 Resp: 427875

Ion	Ratio	Lower	Upper
104	100		
78	44.1	12.8	72.8
103	50.5	20.3	80.3

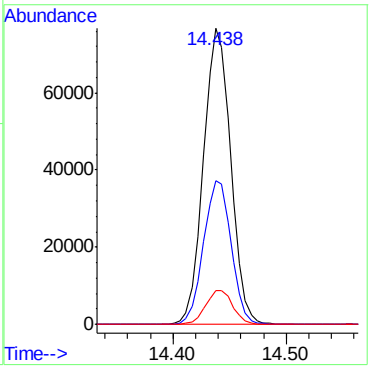


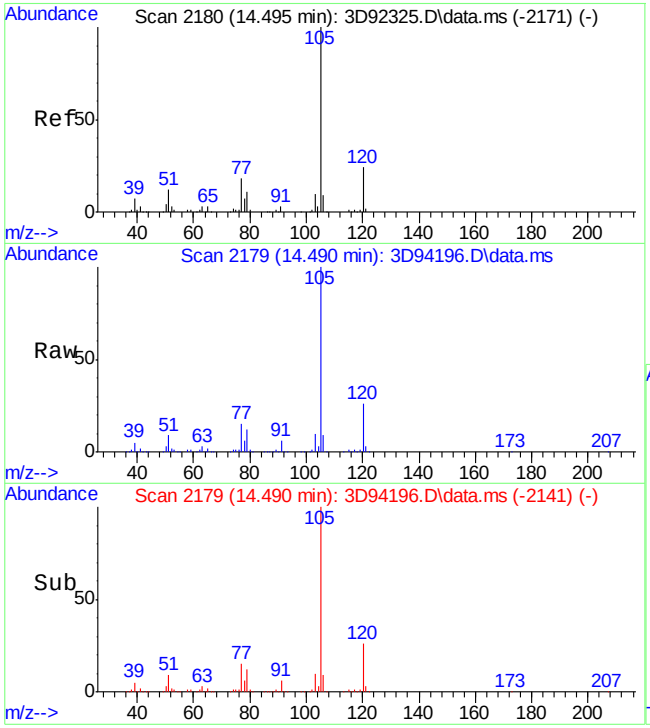


#103
bromoform
Concen: 106.88 ug/L
RT: 14.438 min Scan# 2169
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:173 Resp: 127518

Ion	Ratio	Lower	Upper
173	100		
175	48.5	18.6	78.6
254	11.5	0.0	41.1

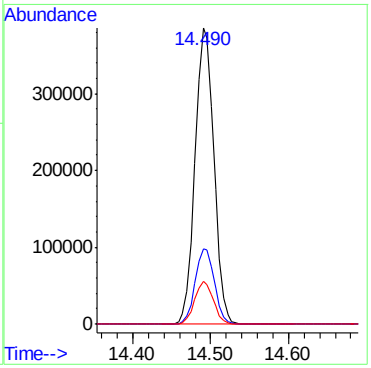


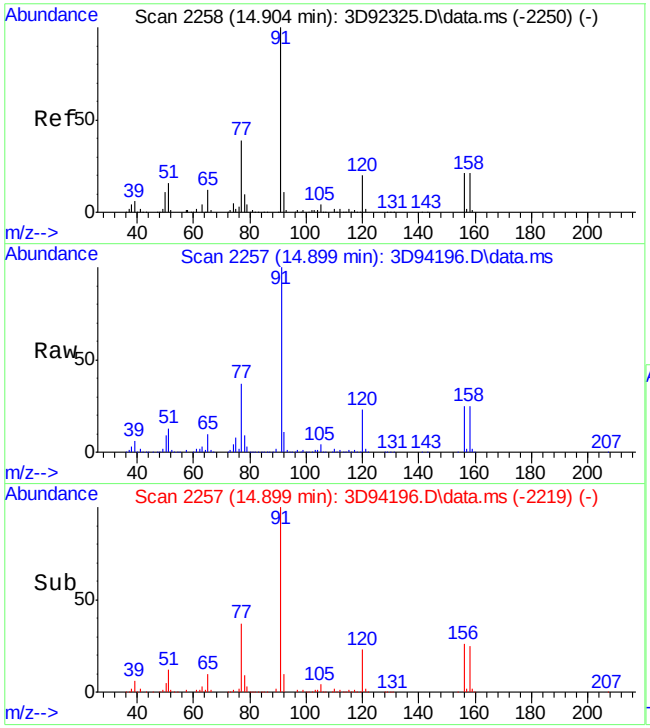


#105
isopropylbenzene
Concen: 101.67 ug/L
RT: 14.490 min Scan# 2179
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:105 Resp: 645712

Ion	Ratio	Lower	Upper
105	100		
120	25.5	0.0	55.8
77	14.6	0.0	44.4

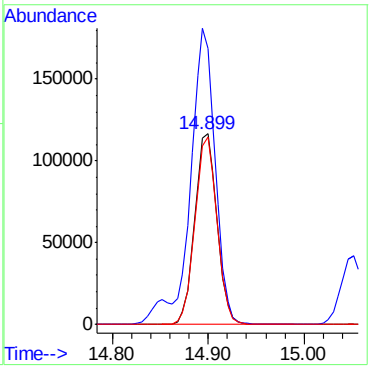


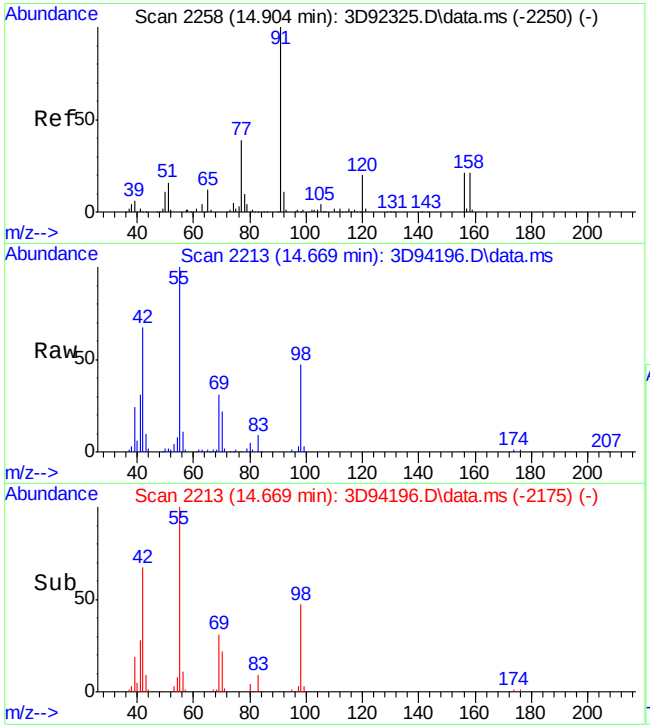


#107
bromobenzene
Concen: 100.85 ug/L
RT: 14.899 min Scan# 2257
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:156 Resp: 186938

Ion	Ratio	Lower	Upper
156	100		
77	144.8	115.4	175.4
158	98.4	67.8	127.8

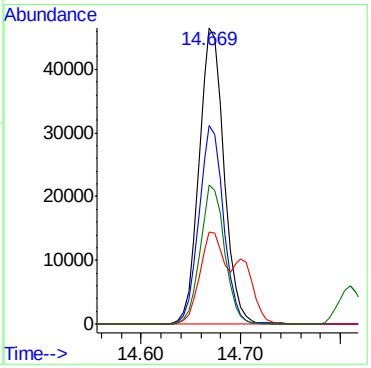




#108
cyclohexanone
Concen: 1137.75 ug/L
RT: 14.669 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 55 Resp: 80286

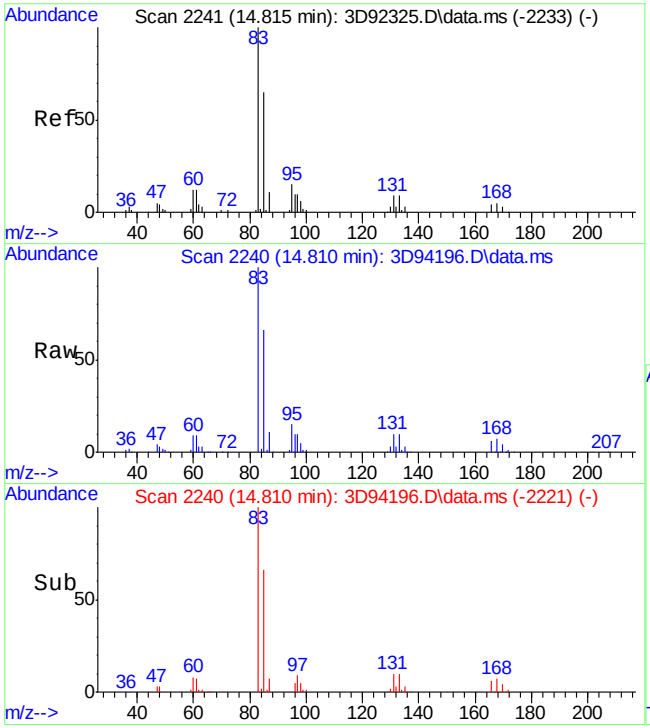
Ion	Ratio	Lower	Upper
55	100		
42	67.2	35.5	95.5
69	31.0	1.0	61.0
98	47.0	15.1	75.1



7.7.8

7

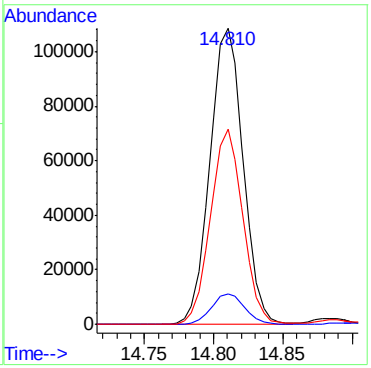
3D94196.D M3D4058.M Thu Dec 19 12:37:15 2013 3D Page 48

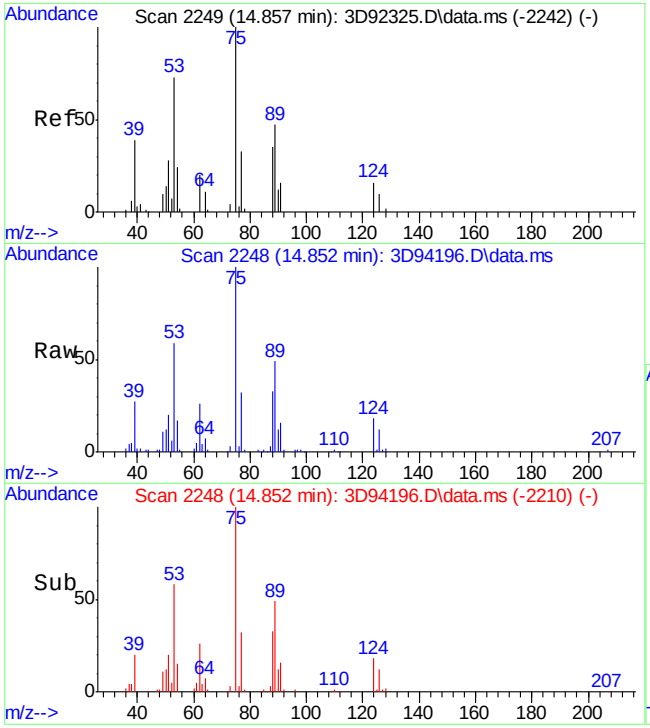


#109
1,1,2,2-tetrachloroethane
Concen: 95.80 ug/L
RT: 14.810 min Scan# 2240
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 83 Resp: 182510

Ion	Ratio	Lower	Upper
83	100		
131	10.4	0.0	40.2
85	65.8	33.4	93.4

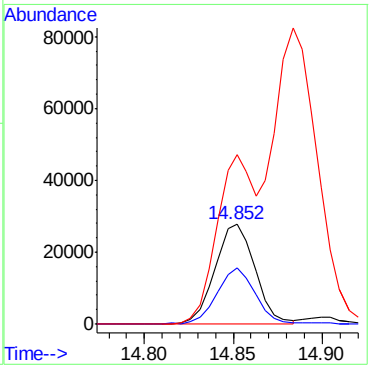


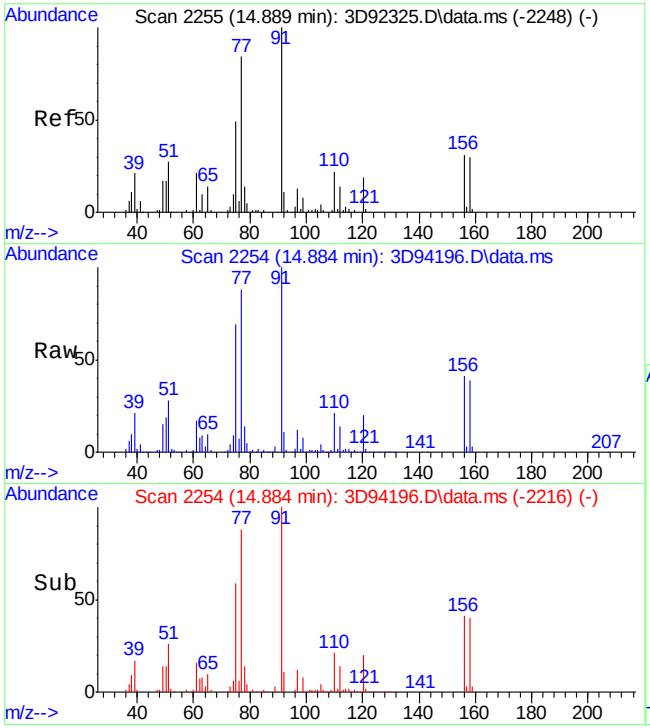


#110
trans-1,4-dichloro-2-butene
Concen: 104.79 ug/L
RT: 14.852 min Scan# 2248
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 53 Resp: 43294

Ion	Ratio	Lower	Upper
53	100		
88	55.9	27.1	87.1
75	169.6	132.8	192.8

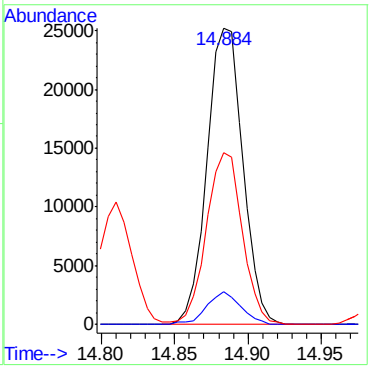


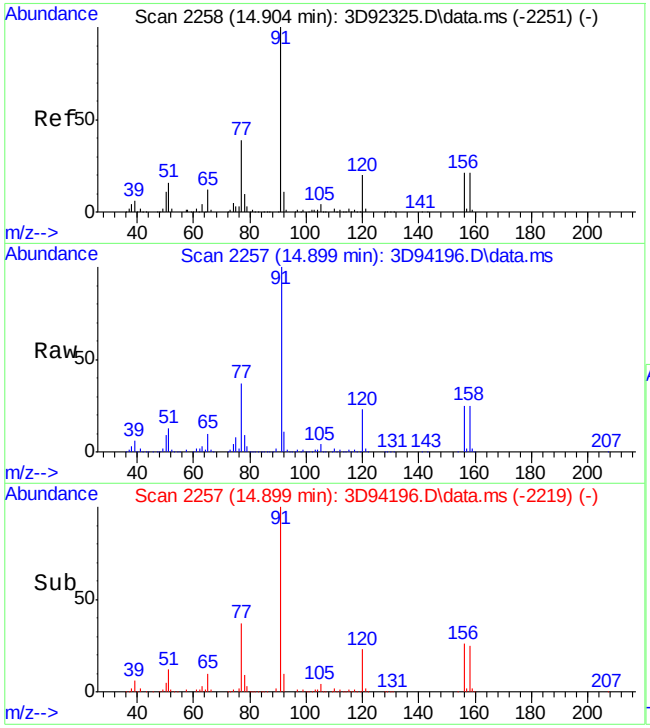


#111
1,2,3-trichloropropane
Concen: 102.83 ug/L
RT: 14.884 min Scan# 2254
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:110 Resp: 42590

Ion	Ratio	Lower	Upper
110	100		
111	11.0	0.0	39.5
97	58.2	25.8	85.8

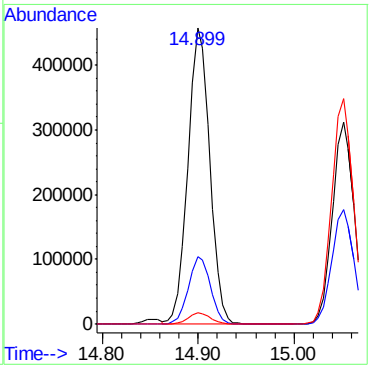


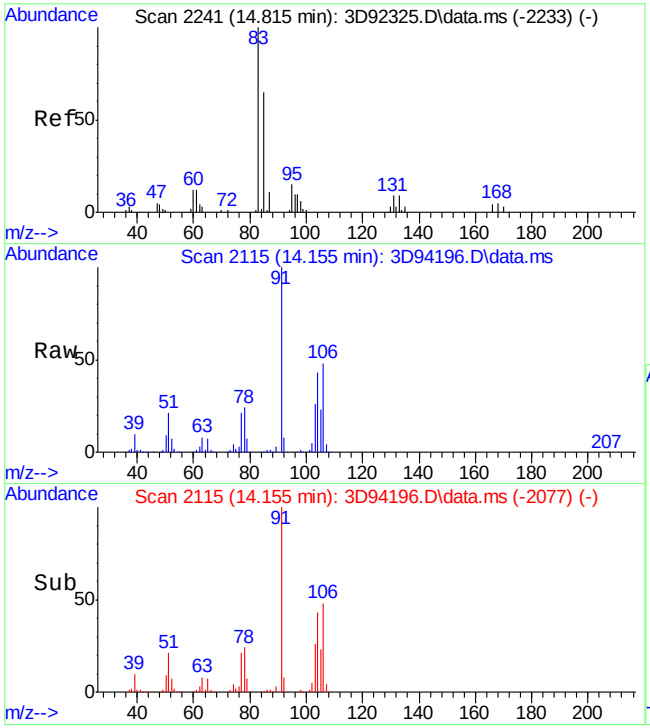


#112
n-propylbenzene
Concen: 99.88 ug/L
RT: 14.899 min Scan# 2257
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 91 Resp: 721015

Ion	Ratio	Lower	Upper
91	100		
120	22.9	0.0	52.2
105	3.9	0.0	33.7

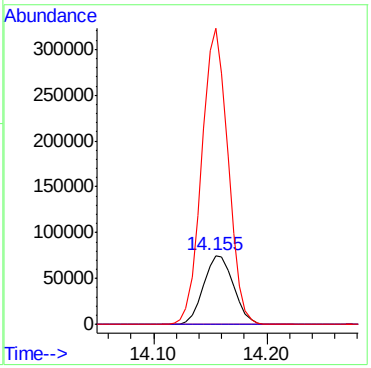


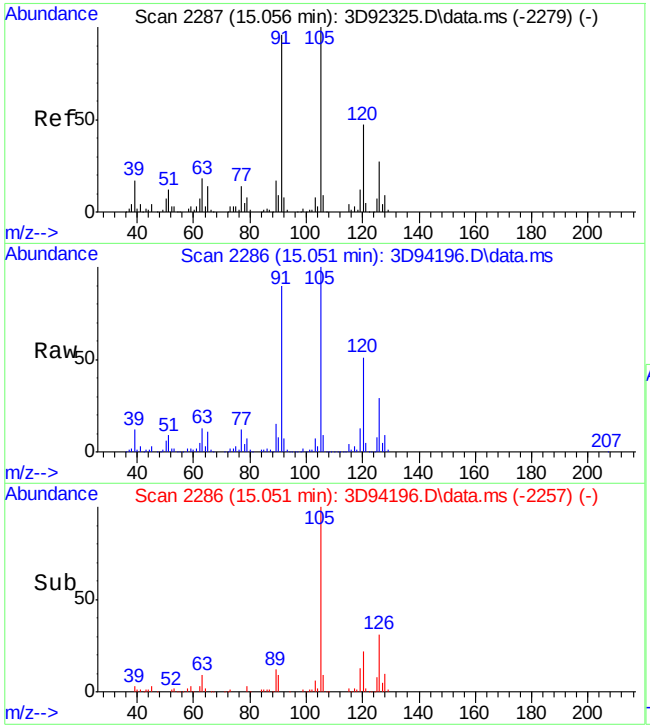


#113
4-Ethyltoluene
Concen: 105.05 ug/L
RT: 14.155 min Scan# 2115
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:105 Resp: 137354

Ion	Ratio	Lower	Upper
105	100		
120	0.0	0.0	0.0
91	378.5	262.0	486.6

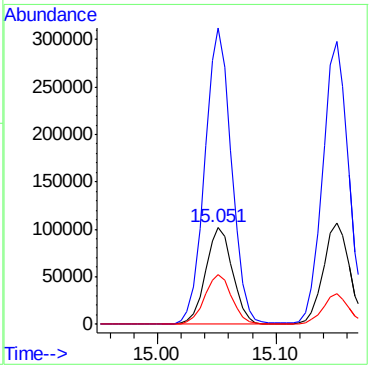


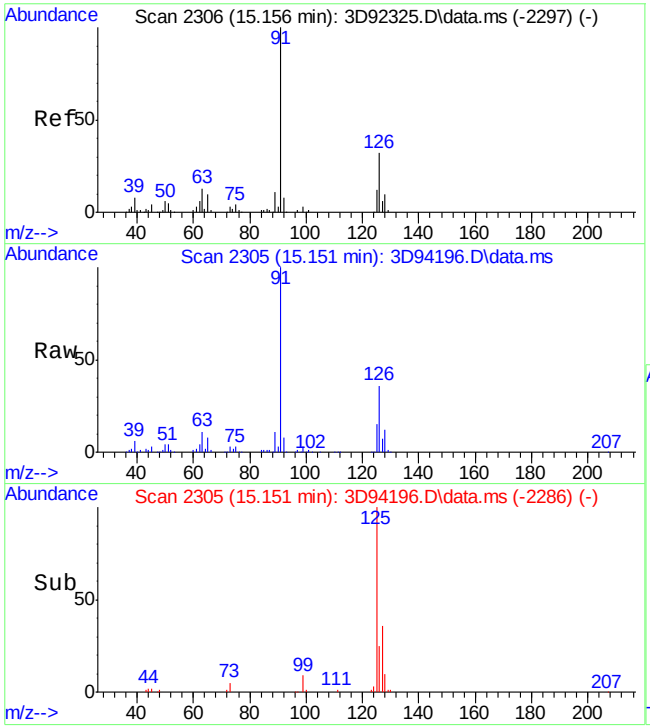


#114
2-chlorotoluene
Concen: 100.85 ug/L
RT: 15.051 min Scan# 2286
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:126 Resp: 160407

Ion	Ratio	Lower	Upper
126	100		
91	305.4	272.2	332.2
89	50.9	21.0	81.0

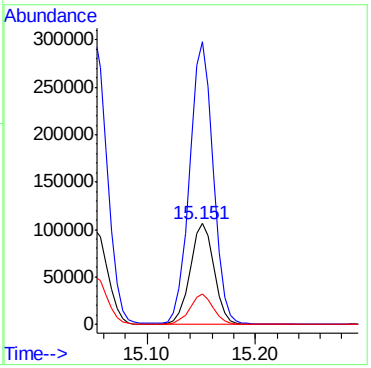


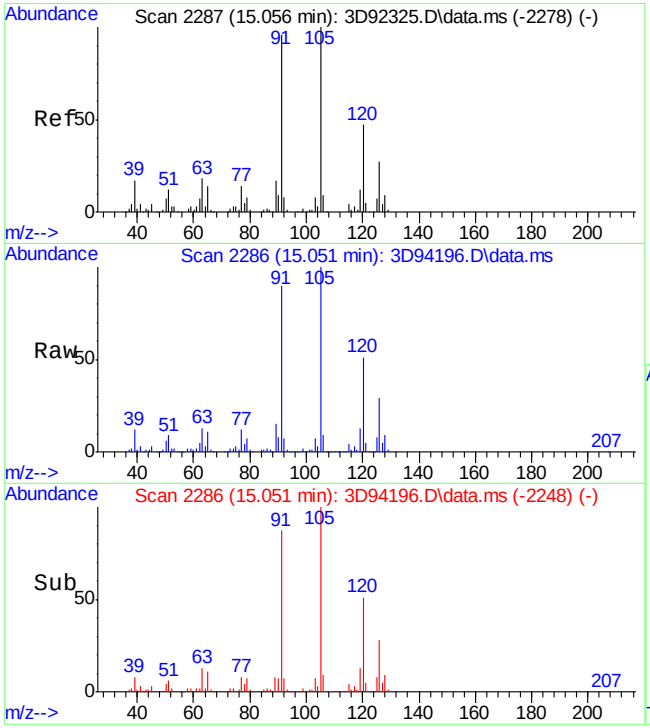


#115
4-chlorotoluene
Concen: 101.69 ug/L
RT: 15.151 min Scan# 2305
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:126 Resp: 163014

Ion	Ratio	Lower	Upper
126	100		
91	280.6	240.5	300.5
89	29.7	0.0	58.4

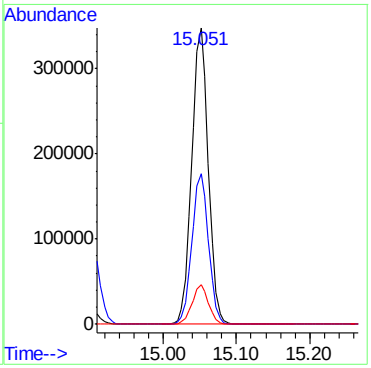


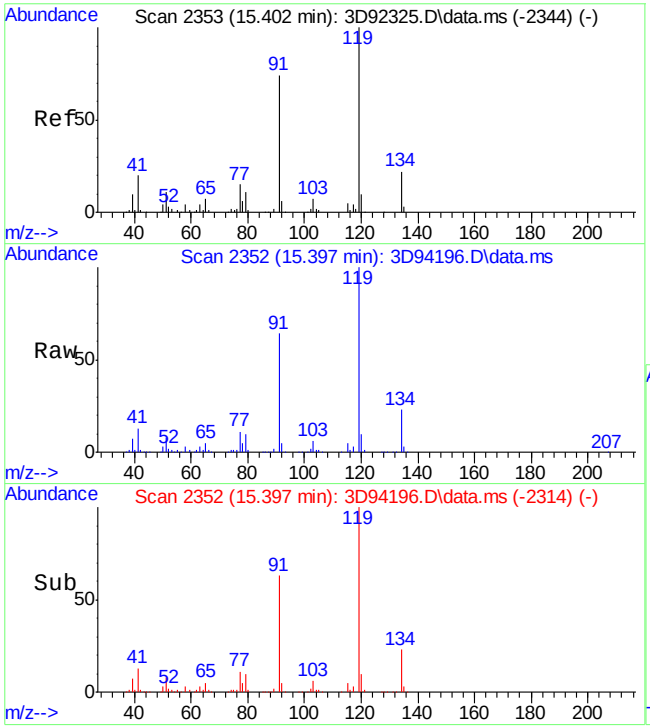


#116
1,3,5-trimethylbenzene
Concen: 101.94 ug/L
RT: 15.051 min Scan# 2286
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:105 Resp: 546380

Ion	Ratio	Lower	Upper
105	100		
120	50.7	21.2	81.2
119	13.1	0.0	43.0

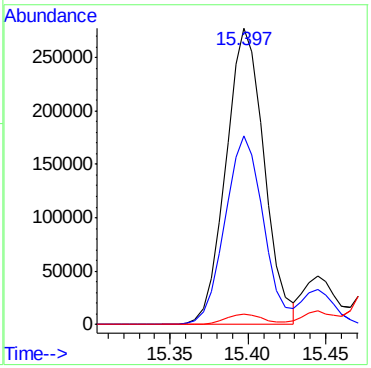


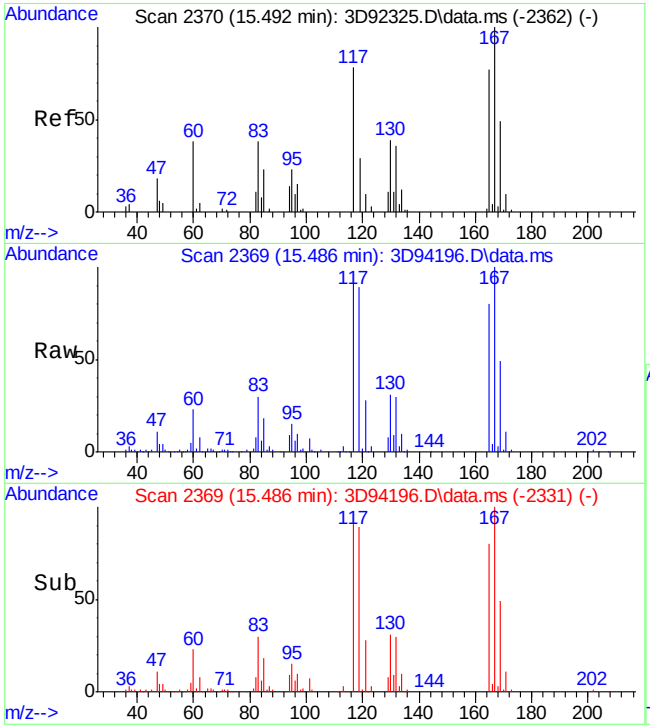


#117
tert-butylbenzene
Concen: 102.01 ug/L
RT: 15.397 min Scan# 2352
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:119 Resp: 474297

Ion	Ratio	Lower	Upper
119	100		
91	63.5	33.7	93.7
117	3.4	0.0	33.4

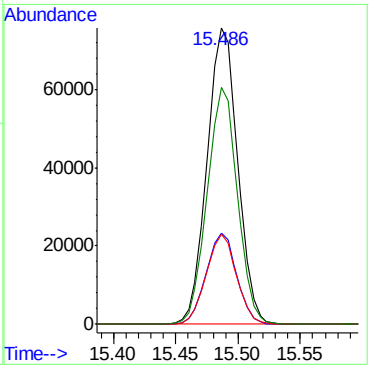


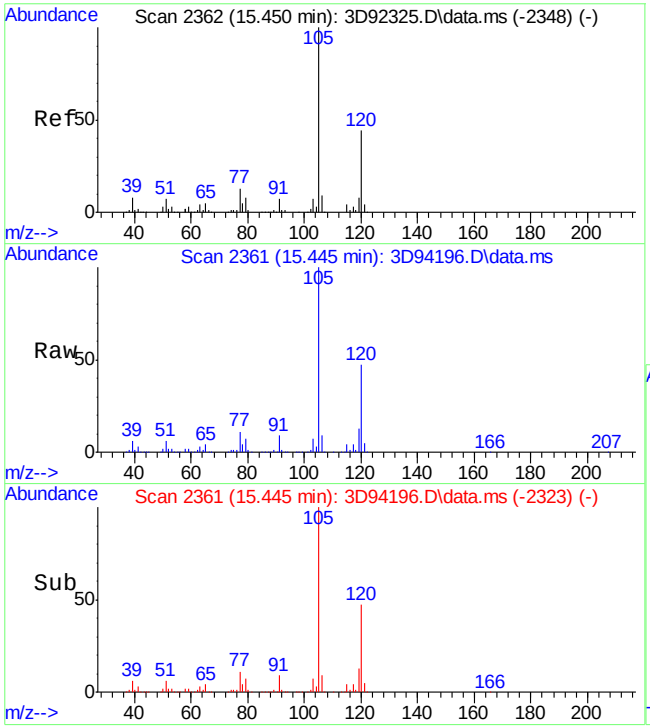


#118
pentachloroethane
Concen: 104.68 ug/L
RT: 15.486 min Scan# 2369
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:167 Resp: 129723

Ion	Ratio	Lower	Upper
167	100		
130	30.7	1.5	61.5
132	30.4	0.0	58.9
165	79.9	50.0	110.0

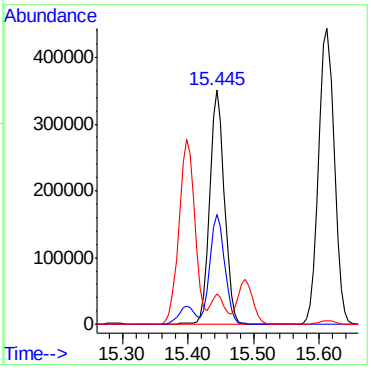


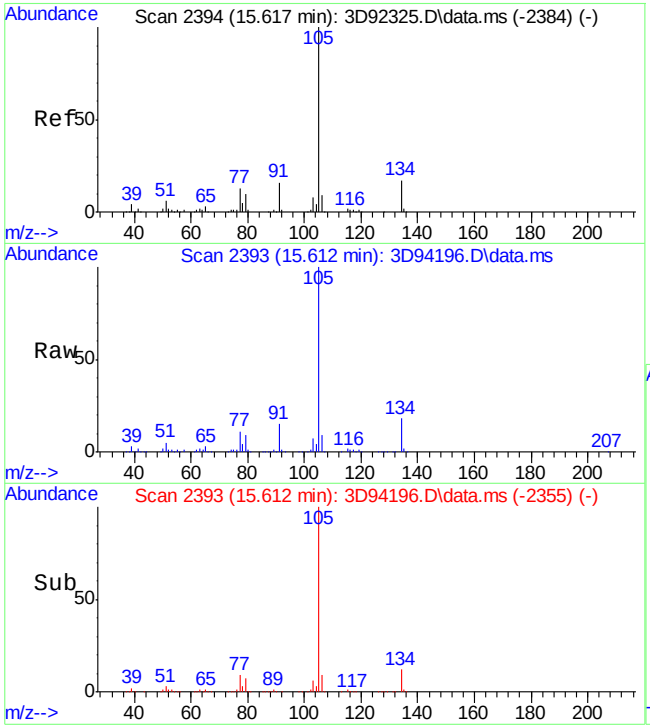


#119
1,2,4-trimethylbenzene
Concen: 102.33 ug/L
RT: 15.445 min Scan# 2361
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:105 Resp: 542446

Ion	Ratio	Lower	Upper
105	100		
120	47.1	17.4	77.4
119	13.0	0.0	42.0

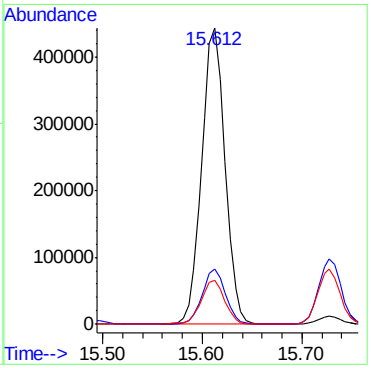


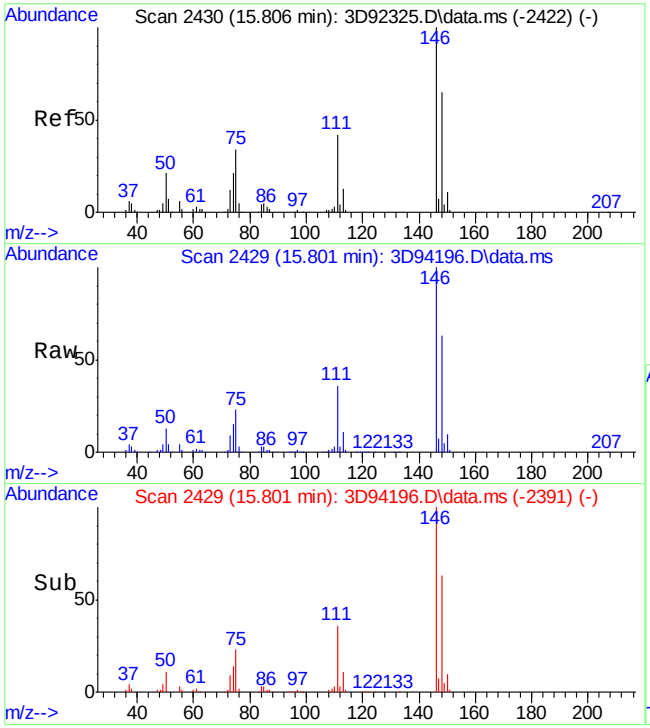


#120
sec-butylbenzene
Concen: 101.82 ug/L
RT: 15.612 min Scan# 2393
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:105 Resp: 720176

Ion	Ratio	Lower	Upper
105	100		
134	18.4	0.0	48.2
91	14.6	0.0	44.6

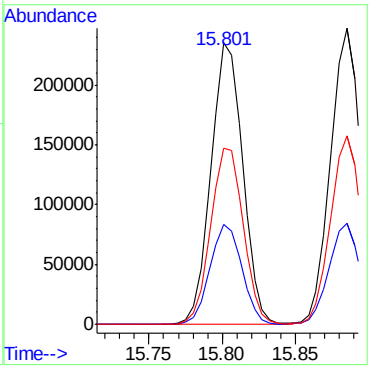


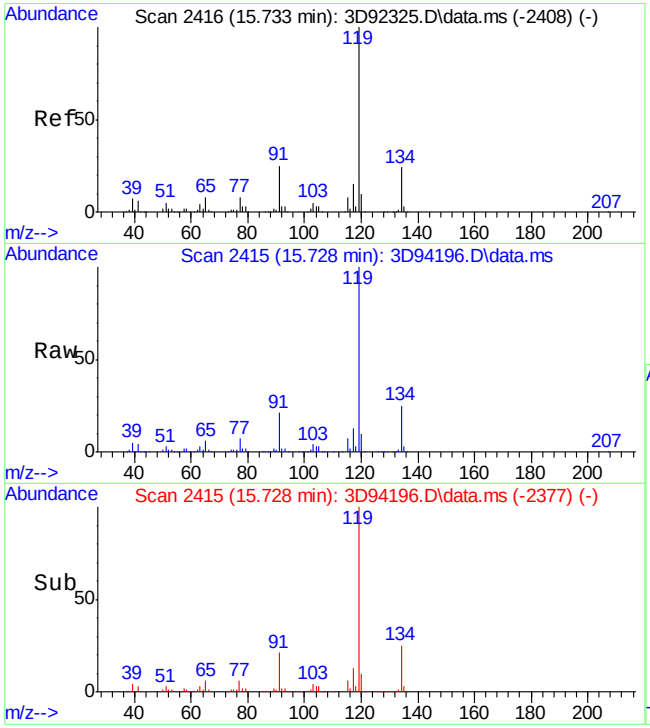


#121
1,3-dichlorobenzene
Concen: 100.75 ug/L
RT: 15.801 min Scan# 2429
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:146 Resp: 353079

Ion	Ratio	Lower	Upper
146	100		
111	35.7	5.6	65.6
148	62.6	34.0	94.0

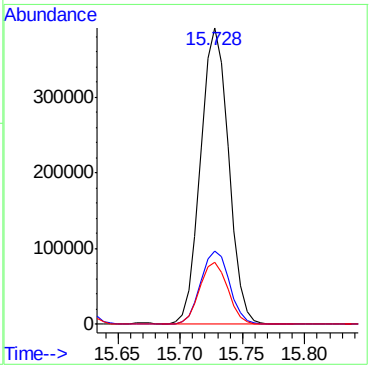


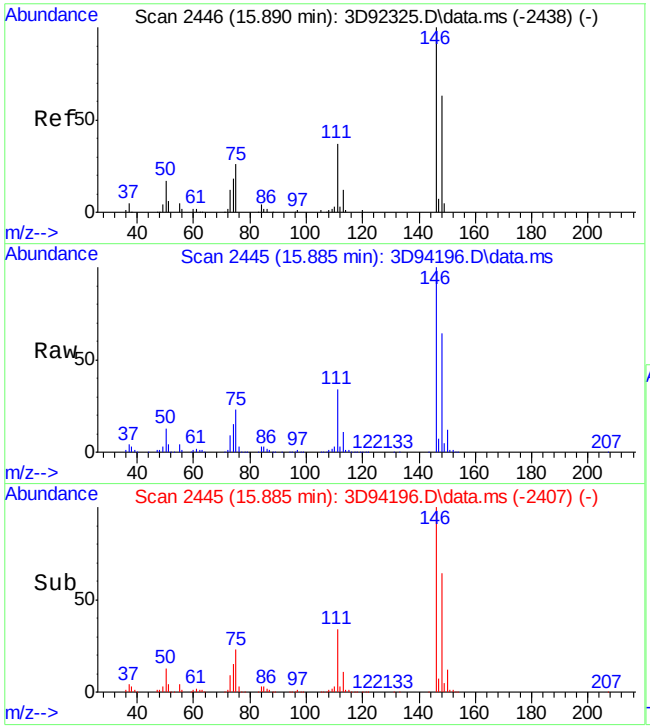


#122
p-isopropyltoluene
Concen: 102.94 ug/L
RT: 15.728 min Scan# 2415
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:119 Resp: 607661

Ion	Ratio	Lower	Upper
119	100		
134	24.8	0.0	55.4
91	21.0	0.0	51.1

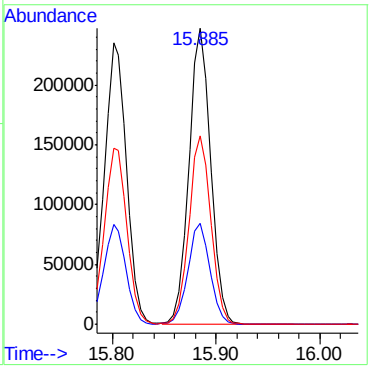


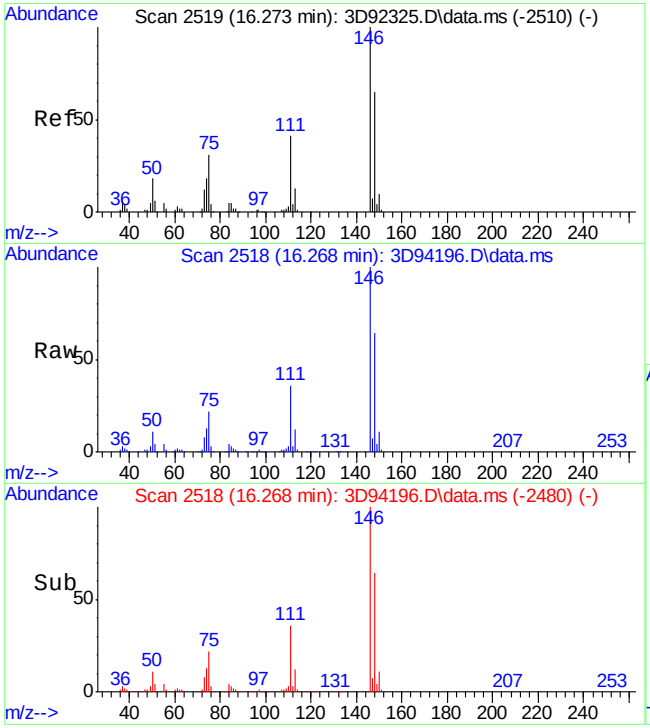


#123
1,4-dichlorobenzene
Concen: 98.78 ug/L
RT: 15.885 min Scan# 2445
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:146 Resp: 361319

Ion	Ratio	Lower	Upper
146	100		
111	34.1	4.2	64.2
148	63.9	34.3	94.3

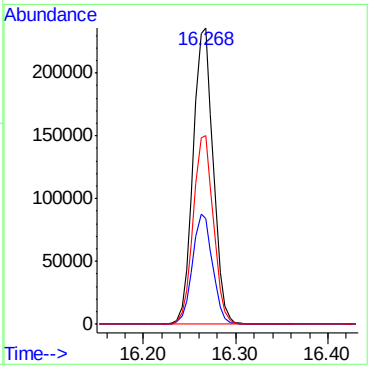


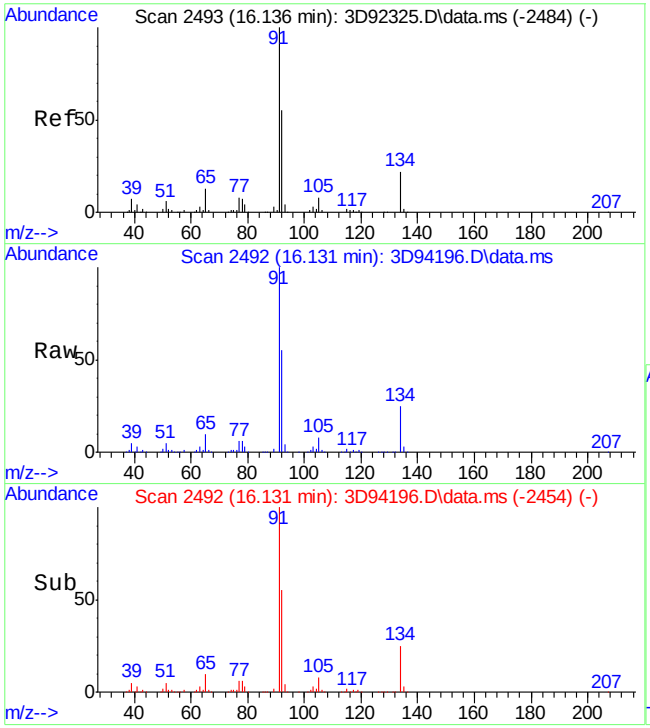


#124
1,2-dichlorobenzene
Concen: 99.41 ug/L
RT: 16.268 min Scan# 2518
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:146 Resp: 356944

Ion	Ratio	Lower	Upper
146	100		
111	35.7	6.4	66.4
148	63.8	34.3	94.3

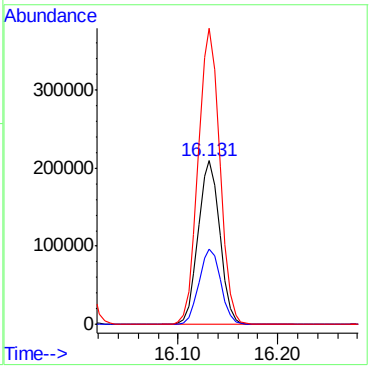


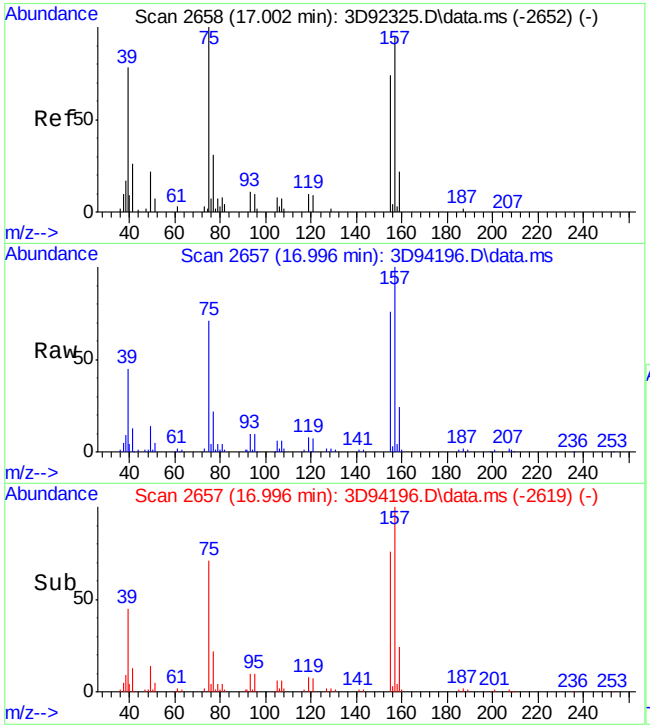


#126
n-butylbenzene
Concen: 105.27 ug/L
RT: 16.131 min Scan# 2492
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 92 Resp: 315419

Ion	Ratio	Lower	Upper
92	100		
134	45.8	15.5	75.5
91	180.9	150.4	210.4

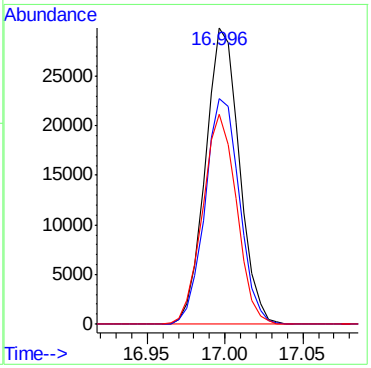


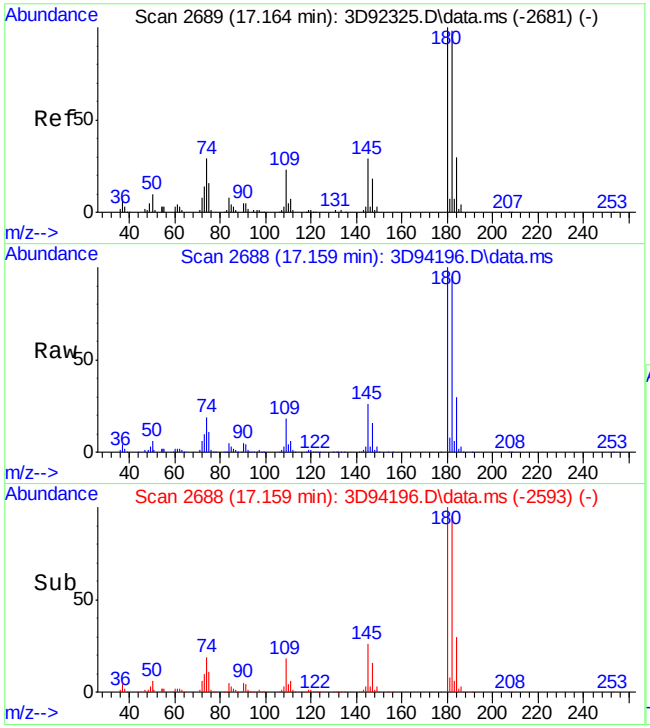


#128
1,2-dibromo-3-chloropropane
Concen: 103.07 ug/L
RT: 16.996 min Scan# 2657
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:157 Resp: 45140

Ion	Ratio	Lower	Upper
157	100		
155	76.3	43.7	103.7
75	70.7	41.6	101.6

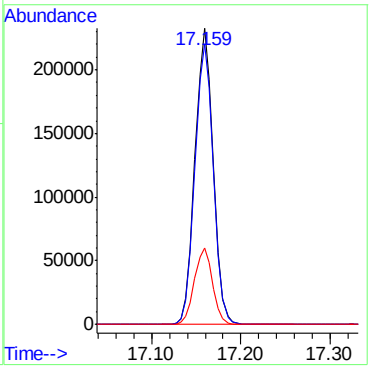


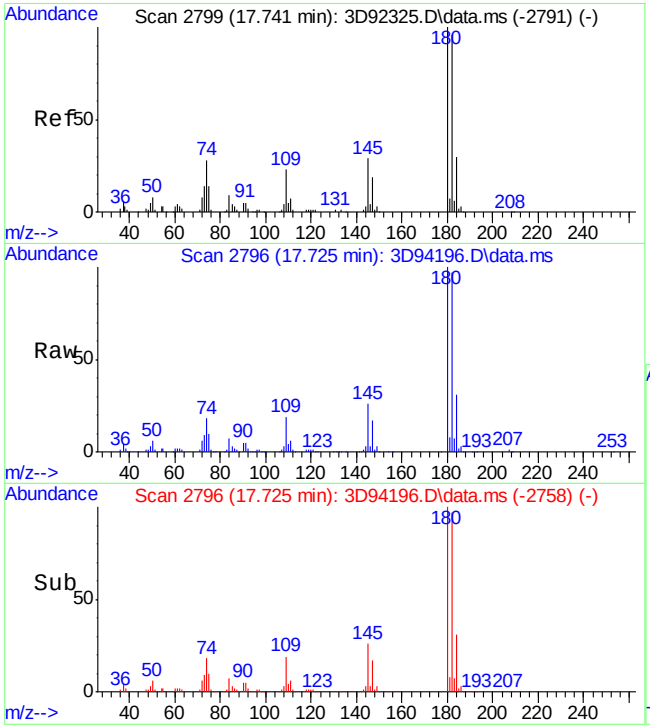


#129
1,3,5-trichlorobenzene
Concen: 99.24 ug/L
RT: 17.159 min Scan# 2688
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:180 Resp: 328888

Ion	Ratio	Lower	Upper
180	100		
182	96.0	65.4	125.4
145	25.7	0.0	55.6

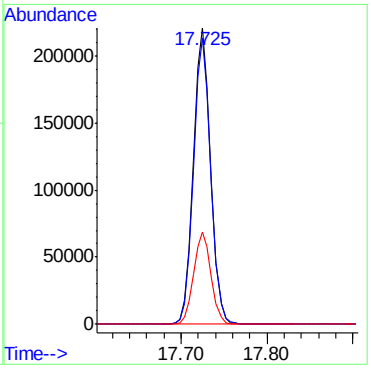


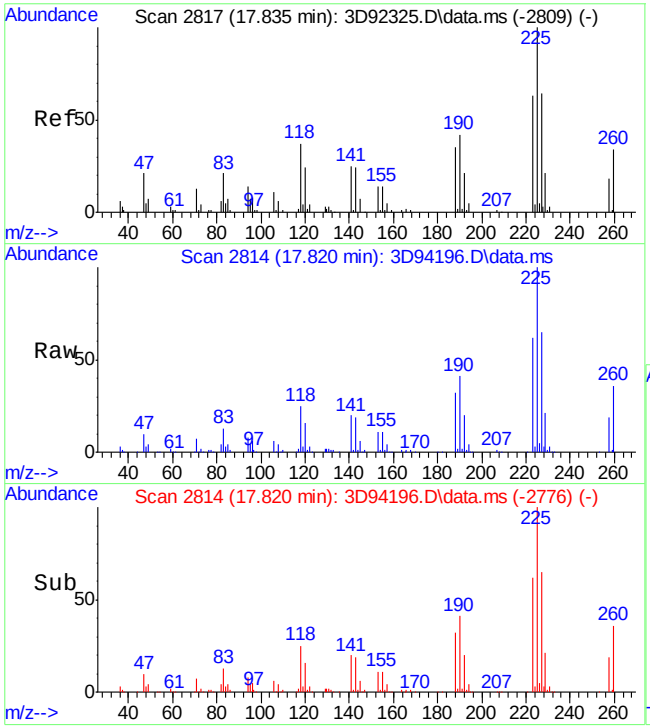


#130
1,2,4-trichlorobenzene
Concen: 99.90 ug/L
RT: 17.725 min Scan# 2796
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:180 Resp: 303986

Ion	Ratio	Lower	Upper
180	100		
182	96.6	66.4	126.4
184	31.2	1.3	61.3

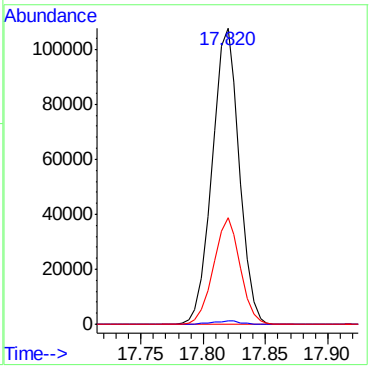


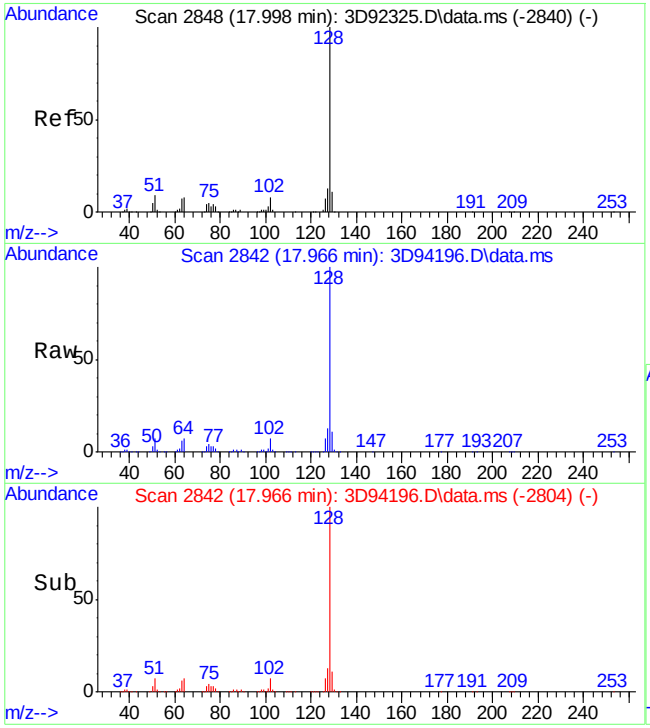


#131
hexachlorobutadiene
Concen: 100.62 ug/L
RT: 17.820 min Scan# 2814
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:225 Resp: 162690

Ion	Ratio	Lower	Upper
225	100		
259	1.1	0.0	31.1
260	36.1	5.9	65.9

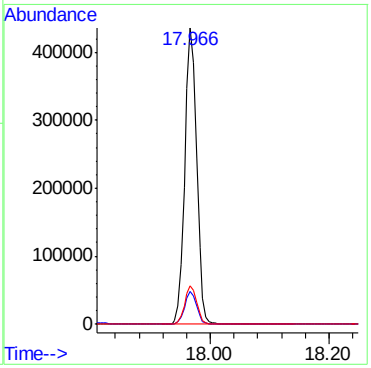


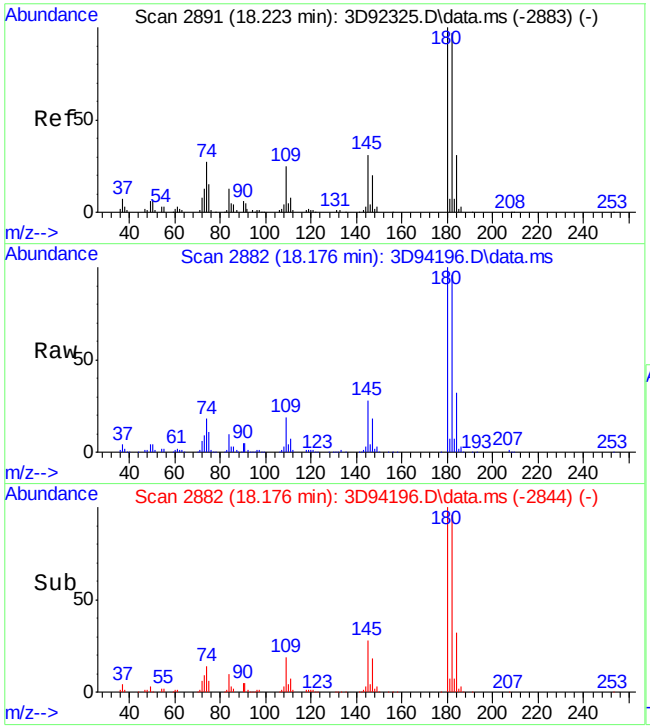


#132
naphthalene
Concen: 93.75 ug/L
RT: 17.966 min Scan# 2842
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:128 Resp: 600251

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	40.9
127	12.9	0.0	43.2

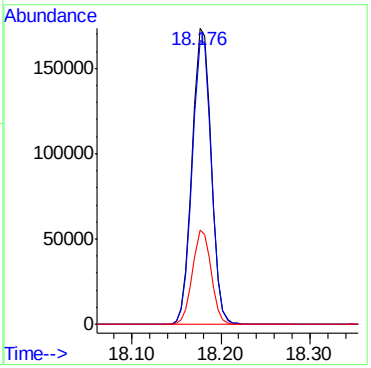


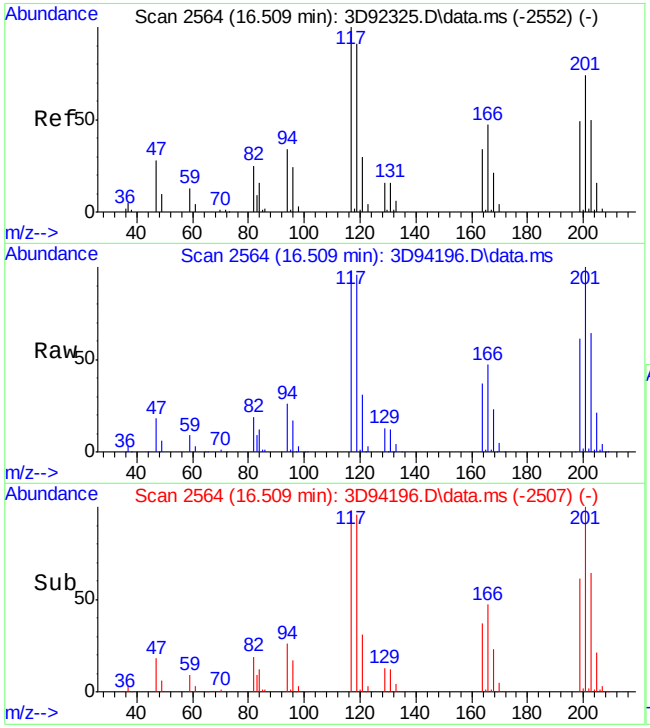


#133
1,2,3-trichlorobenzene
Concen: 89.78 ug/L
RT: 18.176 min Scan# 2882
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:180 Resp: 258237

Ion	Ratio	Lower	Upper
180	100		
182	95.8	67.0	127.0
184	31.8	0.3	60.3

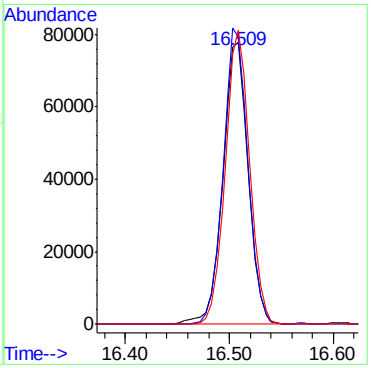




#134
hexachloroethane
Concen: 106.26 ug/L
RT: 16.509 min Scan# 2564
Delta R.T. 0.000 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion:119 Resp: 131918

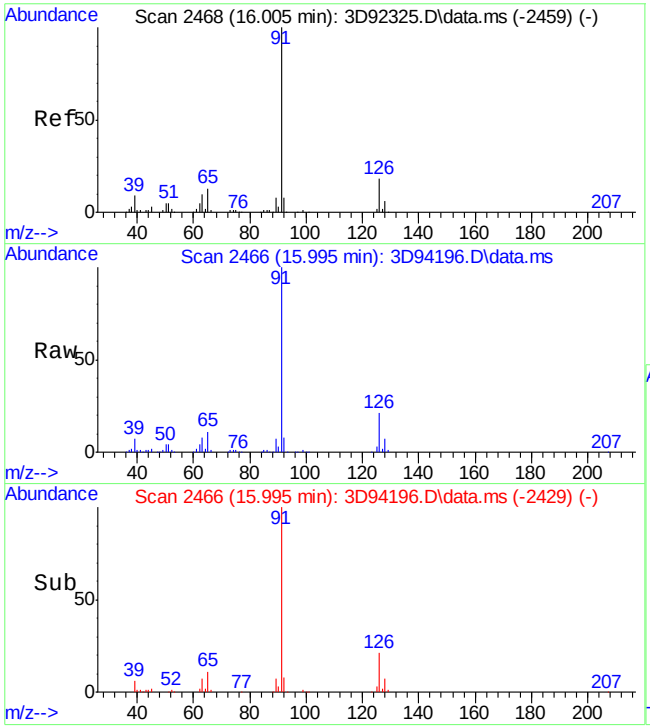
Ion	Ratio	Lower	Upper
119	100		
117	102.4	72.2	132.2
201	100.1	70.2	130.2



7.7.8

7

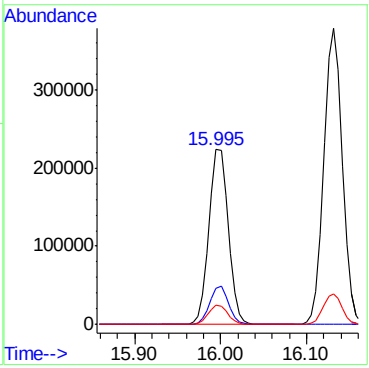
3D94196.D M3D4058.M Thu Dec 19 12:37:17 2013 3D Page 60



#135
Benzyl chloride
Concen: 100.04 ug/L
RT: 15.995 min Scan# 2466
Delta R.T. -0.005 min
Lab File: 3D94196.D
Acq: 18 Dec 2013 4:33 pm

Tgt Ion: 91 Resp: 338508

Ion	Ratio	Lower	Upper
91	100		
126	21.1	0.0	51.4
65	11.0	0.0	41.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94197.D
Acq On : 18 Dec 2013 5:00 pm
Operator : katteric
Sample : ic4058-200
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 19 12:33:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 17:12:23 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.260	65	77545	500.00	ug/L		0.02
4) pentafluorobenzene	9.478	168	186000	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.401	114	255405	50.00	ug/L		0.00
88) chlorobenzene-d5	13.552	117	218419	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.859	152	128249	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.541	113	294143	198.95	ug/L		0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 397.90%#				
51) 1,2-dichloroethane-d4 (s)	9.960	65	290421	190.92	ug/L		0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 381.84%#				
80) toluene-d8 (s)	12.036	98	1039502	207.11	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 414.22%#				
106) 4-bromofluorobenzene (s)	14.705	95	375687	194.72	ug/L		0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 389.44%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.119	88	72202	5256.02	ug/L		95
3) tertiary butyl alcohol	7.370	59	158945	924.30	ug/L		89
8) chlorodifluoromethane	3.889	51	298230	212.61	ug/L		99
9) dichlorodifluoromethane	3.862	85	374536	216.75	ug/L		99
10) chloromethane	4.224	50	447286	206.97	ug/L		99
11) vinyl chloride	4.471	62	454351	223.12	ug/L		99
12) bromomethane	5.105	94	271717	191.41	ug/L		98
13) chloroethane	5.278	64	193490	200.10	ug/L		99
14) 1,3-butadiene	4.523	54	247875	225.56	ug/L		100
15) vinyl bromide	5.635	106	262817	218.45	ug/L		99
16) trichlorofluoromethane	5.734	101	461950	209.02	ug/L		100
18) ethyl ether	6.148	74	160394	207.95	ug/L		98
21) acrolein	6.421	56	6072	19.51	ug/L		90
22) 1,1-dichloroethene	6.568	61	436688	202.48	ug/L		99
23) acetone	6.631	58	24437	216.29	ug/L		100
24) allyl chloride	7.103	76	167764	197.77	ug/L	#	87
25) acetonitrile	7.087	40	264950	1919.97	ug/L		89
27) iodomethane	6.856	142	588704	199.04	ug/L		100
28) iso-butyl alcohol	9.777	41	95919	1958.01	ug/L		95
29) carbon disulfide	6.977	76	1070213	199.85	ug/L		99
30) methylene chloride	7.297	84	321597	196.27	ug/L		99
31) methyl acetate	7.087	74	50380	212.72	ug/L		98
32) methyl tert butyl ether	7.606	73	886288	192.44	ug/L		99
33) trans-1,2-dichloroethene	7.664	61	430015	198.57	ug/L		99
34) di-isopropyl ether	8.198	45	1008518	200.30	ug/L		74
35) ethyl tert-butyl ether	8.665	59	962114	208.10	ug/L		99
36) 2-butanone	8.932	72	33841	216.10	ug/L		93
37) 1,1-dichloroethane	8.235	63	530218	196.42	ug/L		100
38) chloroprene	8.335	53	420155	215.55	ug/L		97
39) acrylonitrile	7.632	53	566941	1026.38	ug/L		99
40) vinyl acetate	8.214	86	52796	223.62	ug/L		99
41) ethyl acetate	8.943	45	40995	209.71	ug/L		78
42) 2,2-dichloropropane	8.969	77	410945	185.44	ug/L		100

M3D4058.M Thu Dec 19 12:37:17 2013 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94197.D
Acq On : 18 Dec 2013 5:00 pm
Operator : katteric
Sample : ic4058-200
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 19 12:33:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 17:12:23 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) cis-1,2-dichloroethene	8.969	61	524920	198.48	ug/L	99
44) propionitrile	9.048	54	436709	2095.76	ug/L	89
45) methyl acrylate	9.032	55	326798	213.82	ug/L	99
46) bromochloromethane	9.284	128	177102	208.97	ug/L	96
47) tetrahydrofuran	9.315	42	99161	198.62	ug/L	99
48) chloroform	9.341	83	518046	198.36	ug/L	99
49) Tert-Butyl Formate	9.362	59	289946	209.78	ug/L	100
52) freon 113	6.526	151	231025	227.29	ug/L	99
53) methacrylonitrile	9.226	41	184323	205.37	ug/L	99
54) 1,1,1-trichloroethane	9.583	97	452700	200.40	ug/L	100
56) 2,2,4-Trimethylpentane	10.007	57	1207466	230.26	ug/L	99
57) tert-amyl methyl ether	10.049	73	948244	203.53	ug/L	98
59) epichlorohydrin	11.664	57	144371	1074.58	ug/L	99
60) n-butyl alcohol	10.526	56	404557	10826.24	ug/L	99
61) cyclohexane	9.651	84	452301	205.56	ug/L	99
62) carbon tetrachloride	9.782	117	408198	203.12	ug/L	98
63) 1,1-dichloropropene	9.761	75	400975	202.25	ug/L	99
64) hexane	7.947	57	356789	226.37	ug/L	99
65) benzene	10.028	78	1224830	199.19	ug/L	100
66) heptane	10.180	57	217524	233.23	ug/L	99
67) isopropyl acetate	9.944	43	560341	205.93	ug/L	99
68) 1,2-dichloroethane	10.049	62	358373	195.70	ug/L	99
69) trichloroethene	10.741	95	309317	203.76	ug/L	99
70) ethyl acrylate	10.741	55	371841	219.11	ug/L	99
72) 2-nitropropane	11.528	41	105357	195.37	ug/L	98
73) 2-chloroethyl vinyl ether	11.538	63	986697	1025.08	ug/L	98
74) methyl methacrylate	11.009	41	436504	198.27	ug/L	99
75) 1,2-dichloropropane	11.014	63	308160	204.57	ug/L	100
76) methylcyclohexane	10.951	83	498840	224.03	ug/L	99
77) dibromomethane	11.177	93	192215	202.53	ug/L	94
78) bromodichloromethane	11.302	83	401934	208.20	ug/L	98
79) cis-1,3-dichloropropene	11.753	75	495840	205.62	ug/L	99
81) 4-methyl-2-pentanone	11.842	58	116601	217.44	ug/L	100
82) toluene	12.110	92	742637	207.91	ug/L	99
83) 3-methyl-1-butanol	11.863	70	153117	4330.43	ug/L	97
84) trans-1,3-dichloropropene	12.314	75	439236	205.06	ug/L	99
85) ethyl methacrylate	12.299	69	373131	220.16	ug/L	98
86) 1,1,2-trichloroethane	12.534	83	227561	207.60	ug/L	97
87) 2-hexanone	12.697	58	102805	219.32	ug/L	98
89) tetrachloroethene	12.697	166	360272	202.31	ug/L	96
90) 1,3-dichloropropane	12.713	76	413078	195.00	ug/L	100
91) butyl acetate	12.765	56	183846	202.43	ug/L	97
92) 3,3-Dimethyl-1-Butanol	12.865	57	296292	2060.72	ug/L	100
93) dibromochloromethane	12.980	129	347812	204.53	ug/L	99
94) 1,2-dibromoethane	13.127	107	286351	199.59	ug/L	99
96) chlorobenzene	13.583	112	821854	200.46	ug/L	99
97) 1,1,1,2-tetrachloroethane	13.641	131	322408	199.00	ug/L	97
98) ethylbenzene	13.630	91	1354826	200.15	ug/L	100
99) m,p-xylene	13.735	106	1056159	403.36	ug/L	99
100) o-xylene	14.155	106	534606	202.55	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94197.D
Acq On : 18 Dec 2013 5:00 pm
Operator : katteric
Sample : ic4058-200
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 19 12:33:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 17:12:23 2013
Response via : Initial Calibration

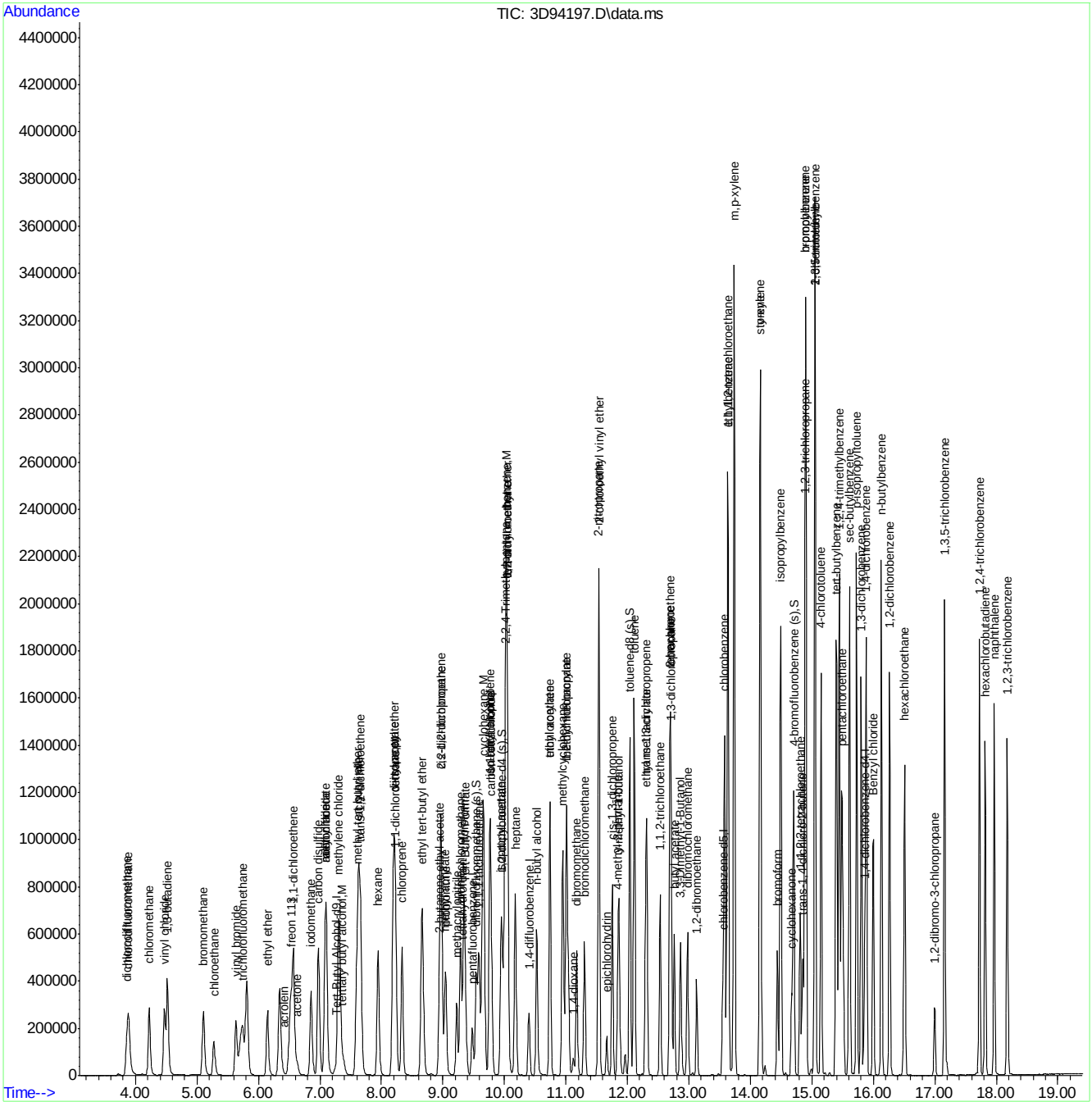
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
101) styrene	14.170	104	912531	211.05 ug/L	99
103) bromoform	14.438	173	268341	209.77 ug/L	99
105) isopropylbenzene	14.495	105	1389594	205.28 ug/L	99
107) bromobenzene	14.899	156	398349	201.82 ug/L	99
108) cyclohexanone	14.674	55	145994	1907.52 ug/L	98
109) 1,1,2,2-tetrachloroethane	14.810	83	380841	188.92 ug/L	98
110) trans-1,4-dichloro-2-b...	14.852	53	88248	199.44 ug/L	95
111) 1,2,3-trichloropropane	14.883	110	87476	197.86 ug/L	96
112) n-propylbenzene	14.904	91	1550990	202.03 ug/L	98
114) 2-chlorotoluene	15.051	126	341545	201.66 ug/L	93
115) 4-chlorotoluene	15.151	126	351587	205.76 ug/L	96
116) 1,3,5-trimethylbenzene	15.051	105	1188738	208.01 ug/L	100
117) tert-butylbenzene	15.397	119	1021057	205.95 ug/L	99
118) pentachloroethane	15.486	167	278589	210.12 ug/L	98
119) 1,2,4-trimethylbenzene	15.444	105	1185766	209.68 ug/L	100
120) sec-butylbenzene	15.612	105	1567534	207.88 ug/L	100
121) 1,3-dichlorobenzene	15.806	146	758643	203.33 ug/L	99
122) p-isopropyltoluene	15.727	119	1323749	210.05 ug/L	99
123) 1,4-dichlorobenzene	15.885	146	774941	199.48 ug/L	99
124) 1,2-dichlorobenzene	16.268	146	755863	198.06 ug/L	100
126) n-butylbenzene	16.131	92	686012	213.85 ug/L	100
128) 1,2-dibromo-3-chloropr...	17.002	157	89782	191.89 ug/L	94
129) 1,3,5-trichlorobenzene	17.159	180	659330	187.22 ug/L	100
130) 1,2,4-trichlorobenzene	17.725	180	582464	179.99 ug/L	99
131) hexachlorobutadiene	17.819	225	325892	189.34 ug/L	99
132) naphthalene	17.966	128	1119654	165.89 ug/L	99
133) 1,2,3-trichlorobenzene	18.181	180	471516	156.11 ug/L	99
134) hexachloroethane	16.509	119	283360	212.91 ug/L	100
135) Benzyl chloride	16.000	91	718507	199.62 ug/L	100

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

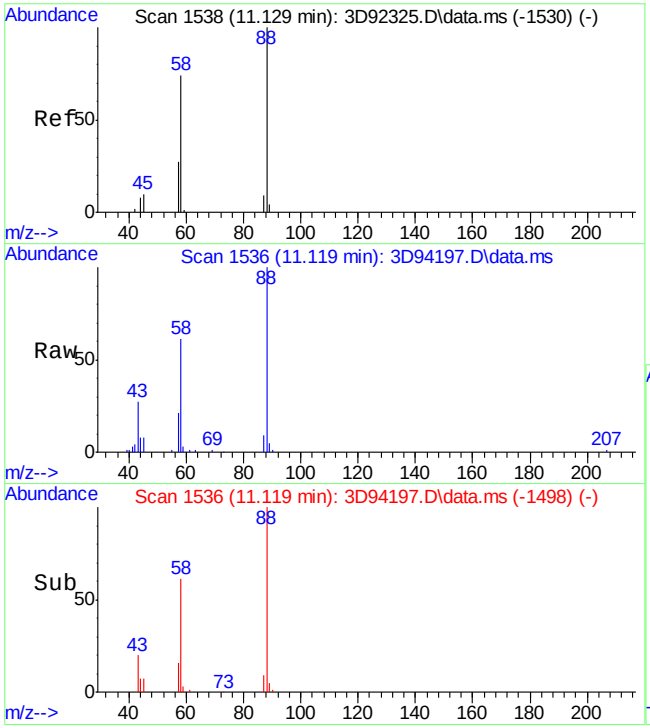
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94197.D
Acq On : 18 Dec 2013 5:00 pm
Operator : katteric
Sample : ic4058-200
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 19 12:33:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Dec 18 17:12:23 2013
Response via : Initial Calibration



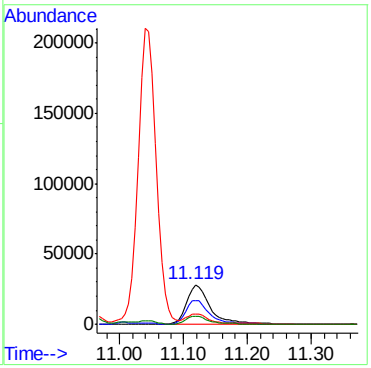
M3D4058.M Thu Dec 19 12:37:18 2013 3D Page: 4

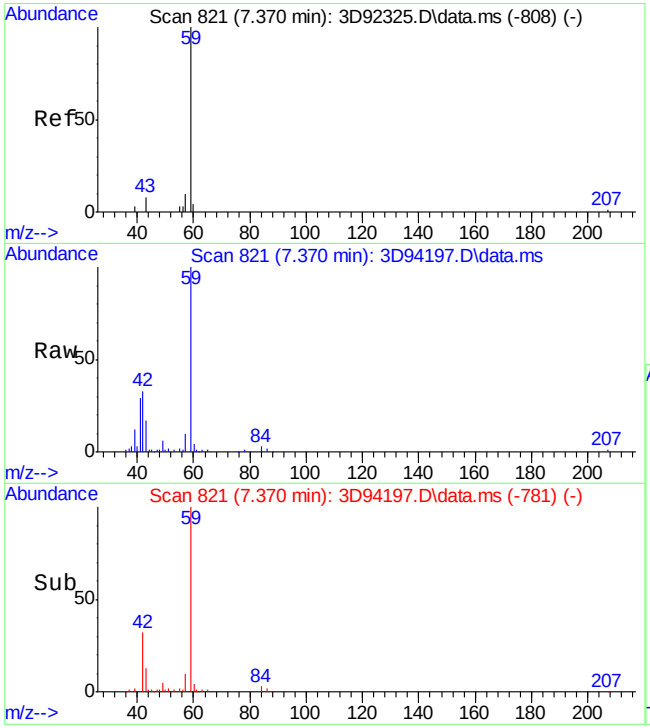


#2
1,4-dioxane
Concen: 5256.02 ug/L
RT: 11.119 min Scan# 1536
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 88 Resp: 72202

Ion	Ratio	Lower	Upper
88	100		
58	61.7	32.0	92.0
43	27.2	5.6	65.6
57	19.9	0.0	51.8

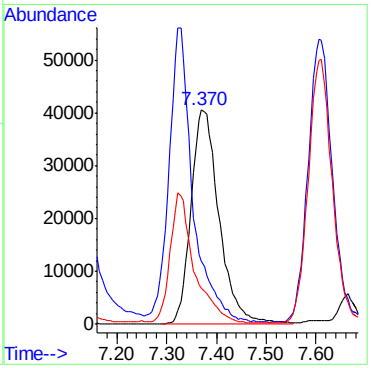


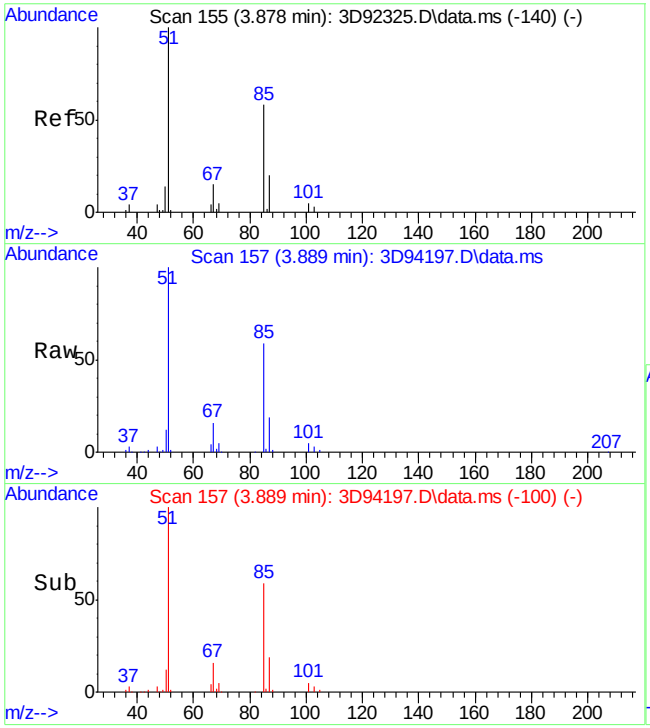


#3
tertiary butyl alcohol
Concen: 924.30 ug/L
RT: 7.370 min Scan# 821
Delta R.T. 0.011 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 59 Resp: 158945

Ion	Ratio	Lower	Upper
59	100		
41	29.1	6.5	66.5
43	16.8	0.0	50.7

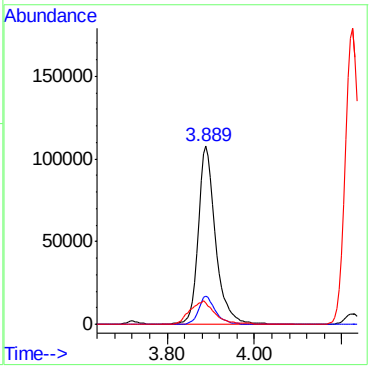


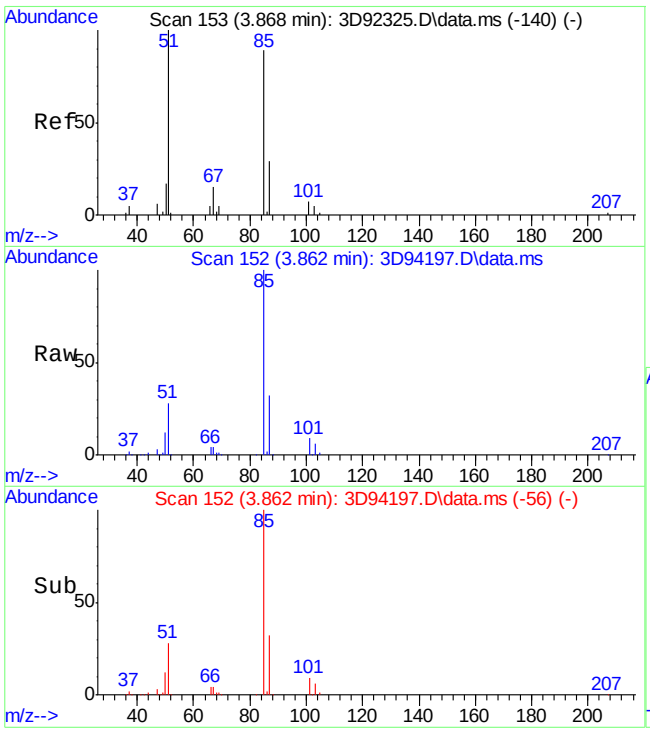


#8
chlorodifluoromethane
Concen: 212.61 ug/L
RT: 3.889 min Scan# 157
Delta R.T. 0.006 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 51 Resp: 298230

Ion	Ratio	Lower	Upper
51	100		
67	15.7	0.0	44.9
50	12.0	0.0	42.2

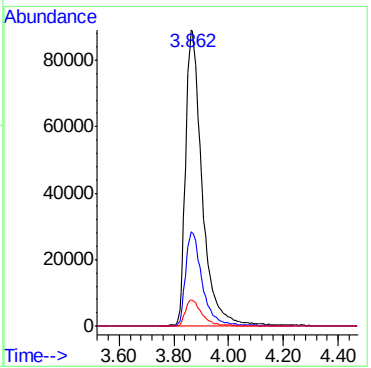


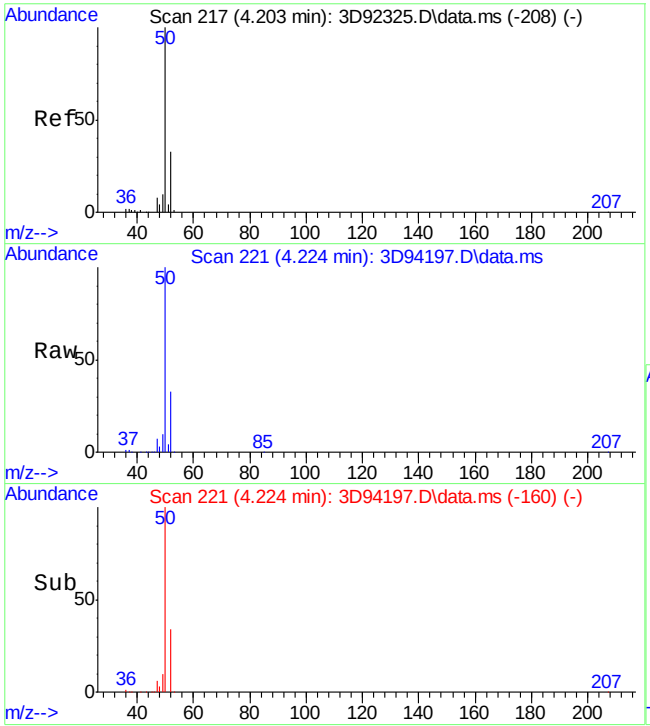


#9
dichlorodifluoromethane
Concen: 216.75 ug/L
RT: 3.862 min Scan# 152
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 85 Resp: 374536

Ion	Ratio	Lower	Upper
85	100		
87	31.9	1.5	61.5
101	8.9	0.0	39.0

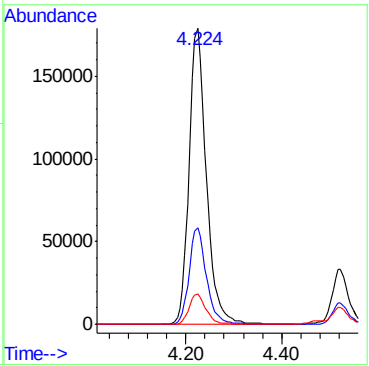


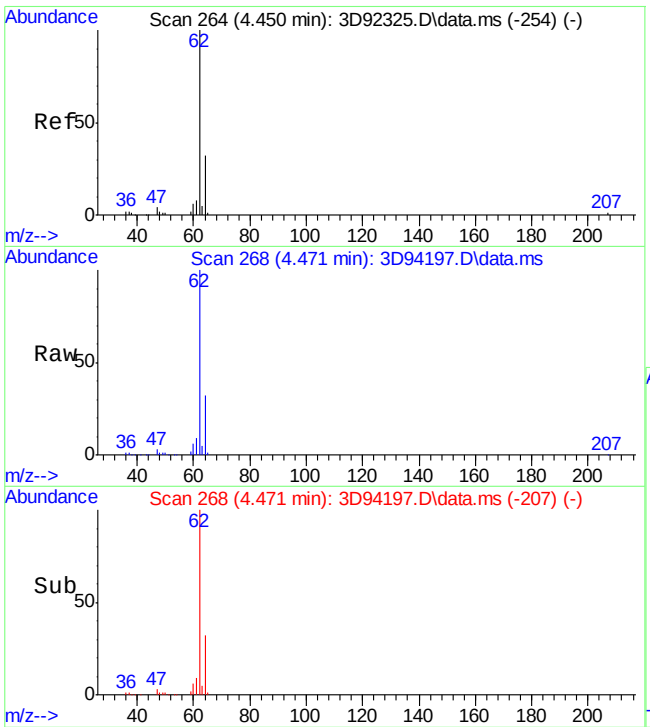


#10
chloromethane
Concen: 206.97 ug/L
RT: 4.224 min Scan# 221
Delta R.T. 0.021 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 50 Resp: 447286

Ion	Ratio	Lower	Upper
50	100		
52	32.7	2.9	62.9
49	10.1	0.0	40.5

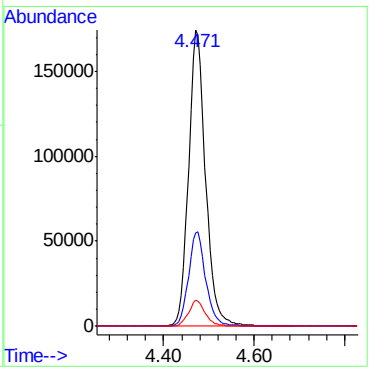


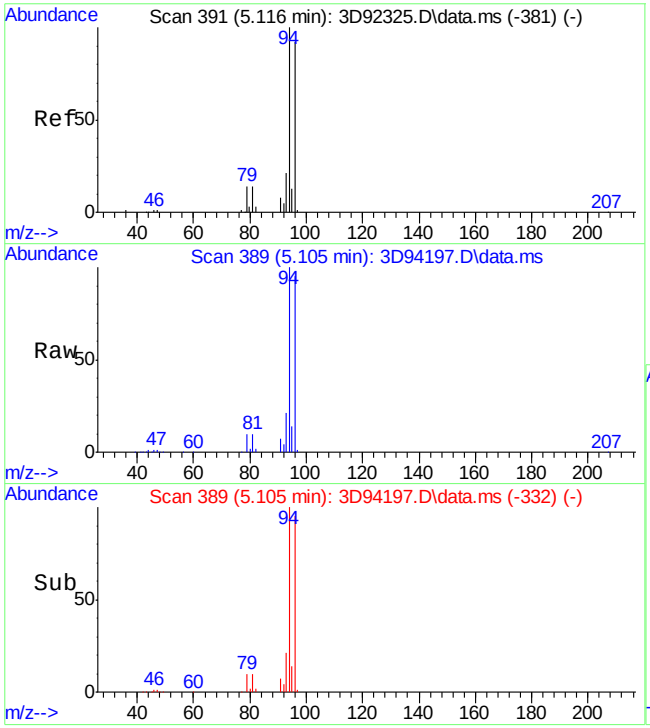


#11
vinyl chloride
Concen: 223.12 ug/L
RT: 4.471 min Scan# 268
Delta R.T. 0.021 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 62 Resp: 454351

Ion	Ratio	Lower	Upper
62	100		
64	31.6	2.3	62.3
61	8.6	0.0	38.3

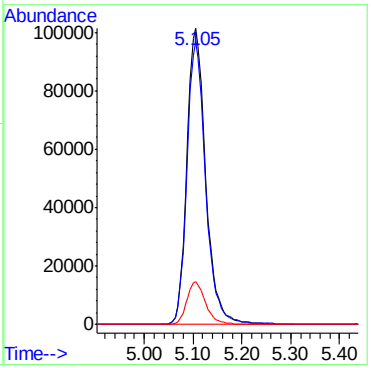


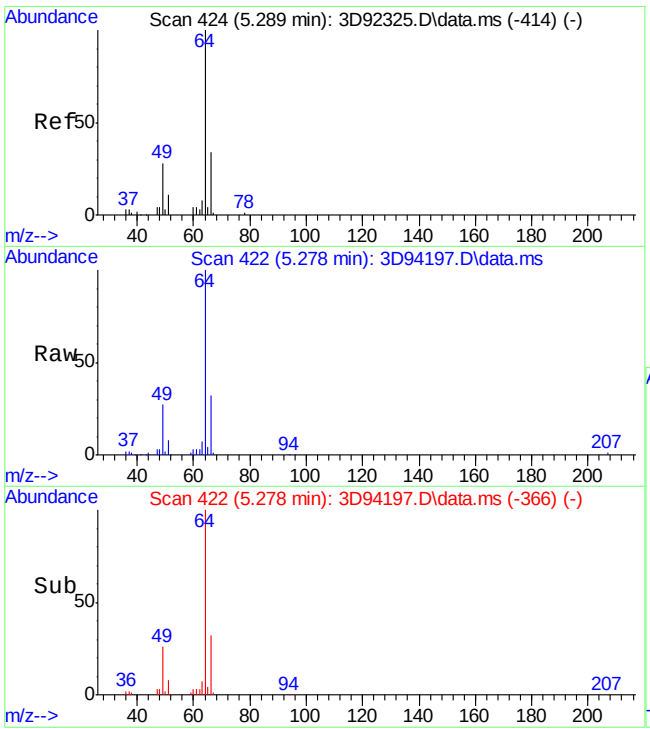


#12
bromomethane
Concen: 191.41 ug/L
RT: 5.105 min Scan# 389
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 94 Resp: 271717

Ion	Ratio	Lower	Upper
94	100		
96	95.3	63.5	123.5
95	14.3	0.0	45.2

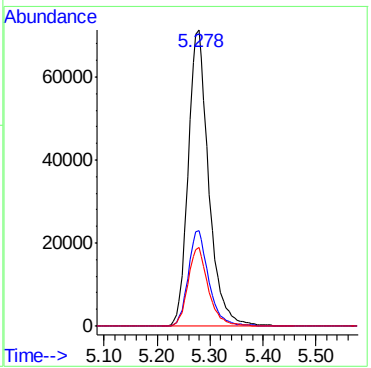


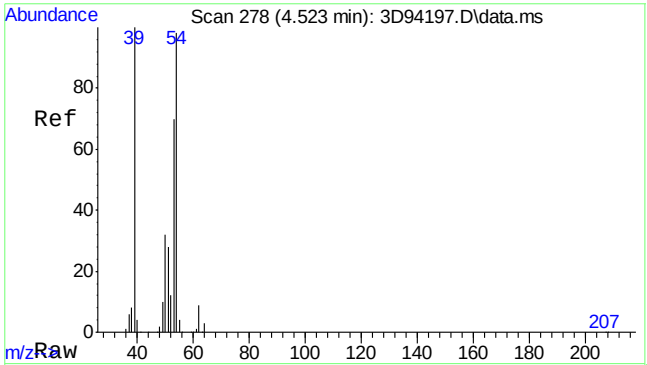


#13
chloroethane
Concen: 200.10 ug/L
RT: 5.278 min Scan# 422
Delta R.T. -0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 64 Resp: 193490

Ion	Ratio	Lower	Upper
64	100		
66	32.4	1.6	61.6
49	26.5	0.0	56.3

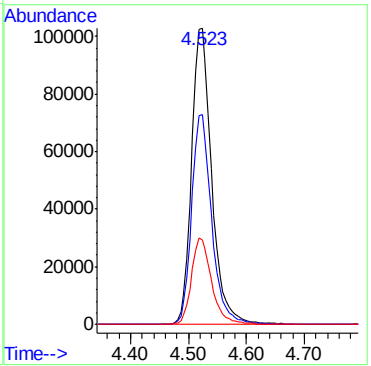


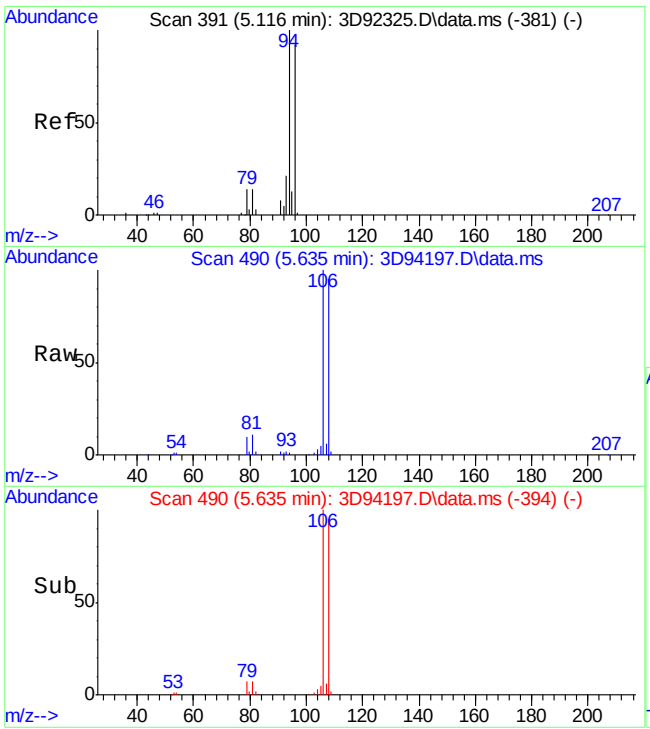


#14
1,3-butadiene
Concen: 225.56 ug/L
RT: 4.523 min Scan# 278
Delta R.T. 0.016 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 54 Resp: 247875

Ion	Ratio	Lower	Upper
54	100		
53	70.7	56.5	84.7
51	29.2	23.2	34.8

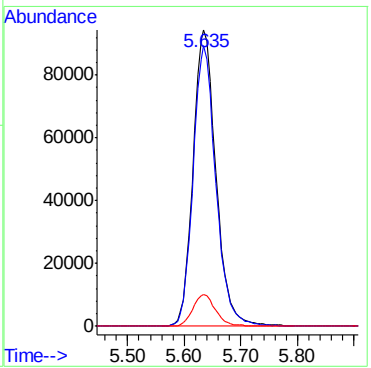


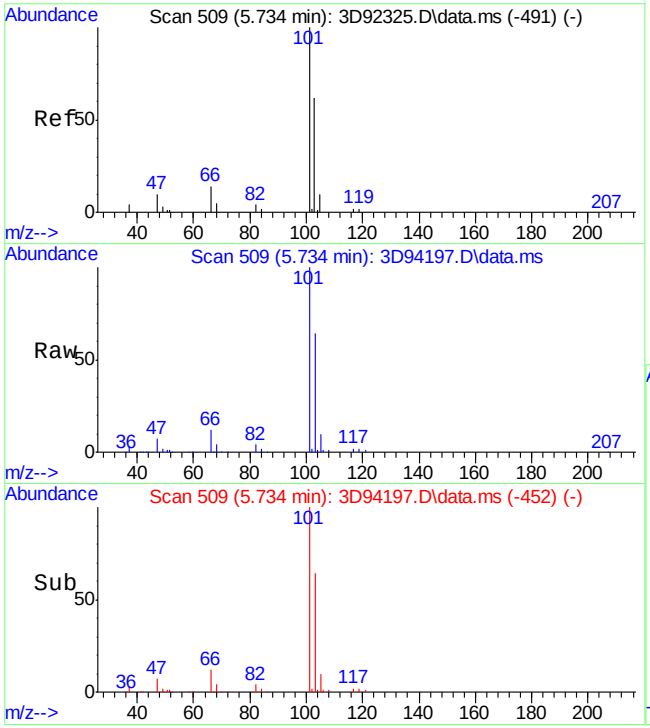


#15
vinyl bromide
Concen: 218.45 ug/L
RT: 5.635 min Scan# 490
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:106 Resp: 262817

Ion	Ratio	Lower	Upper
106	100		
108	94.2	64.9	124.9
81	10.6	0.0	41.0

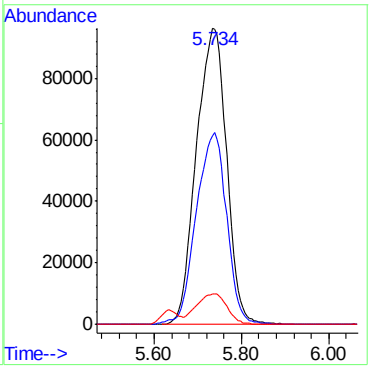


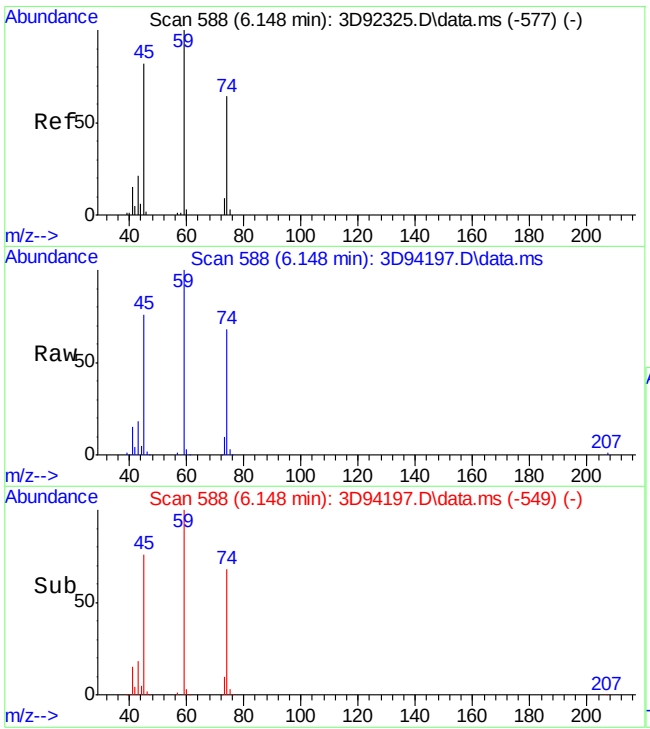


#16
trichlorofluoromethane
Concen: 209.02 ug/L
RT: 5.734 min Scan# 509
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:101 Resp: 461950

Ion	Ratio	Lower	Upper
101	100		
103	63.5	33.8	93.8
105	10.3	0.0	40.4

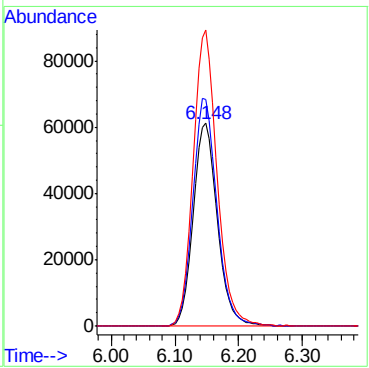


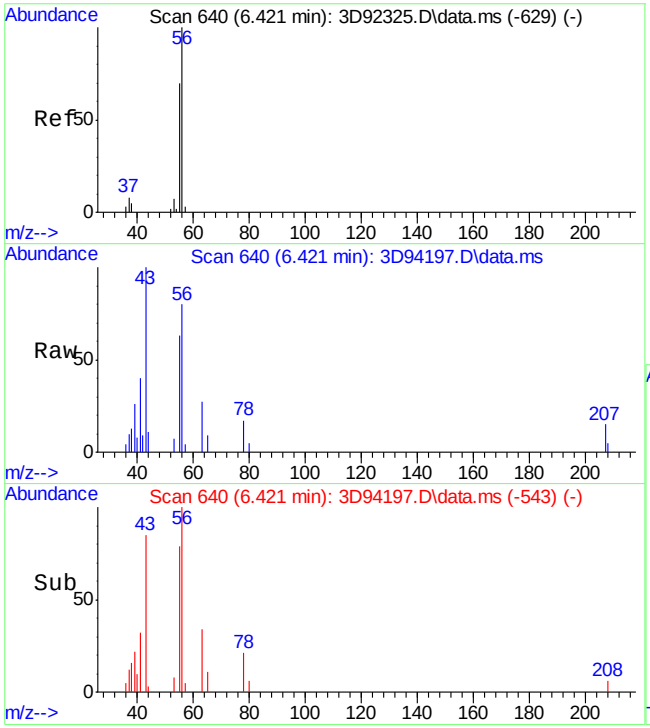


#18
ethyl ether
Concen: 207.95 ug/L
RT: 6.148 min Scan# 588
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 74 Resp: 160394

Ion	Ratio	Lower	Upper
74	100		
45	111.7	81.7	141.7
59	146.0	110.6	170.6

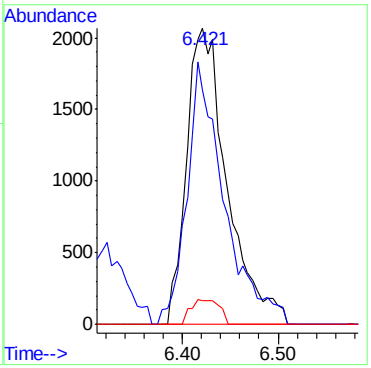


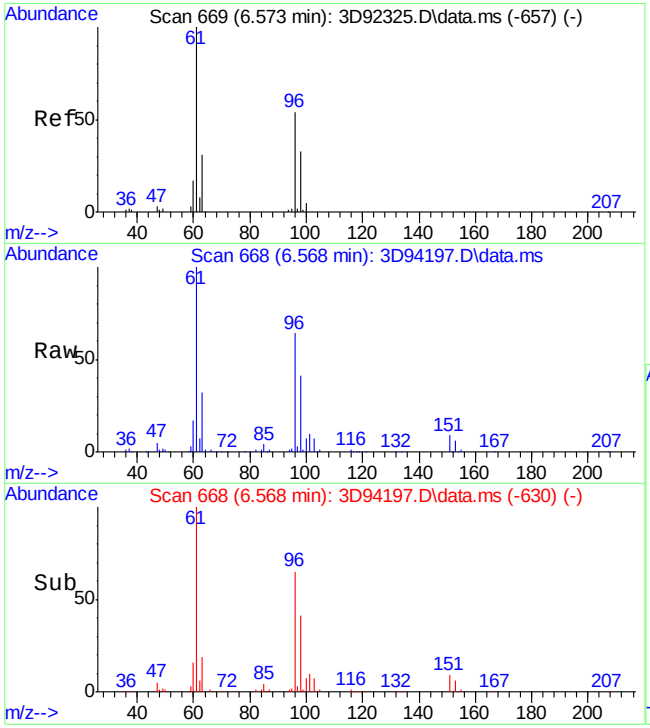


#21
acrolein
Concen: 19.51 ug/L
RT: 6.421 min Scan# 640
Delta R.T. 0.011 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 56 Resp: 6072

Ion	Ratio	Lower	Upper
56	100		
55	79.1	40.8	100.8
53	8.2	0.0	37.0

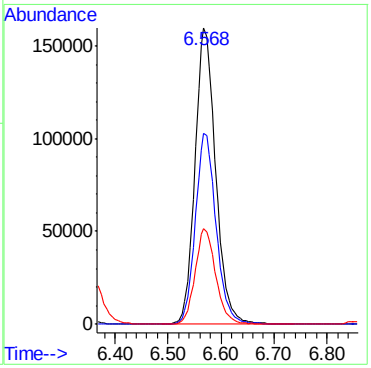


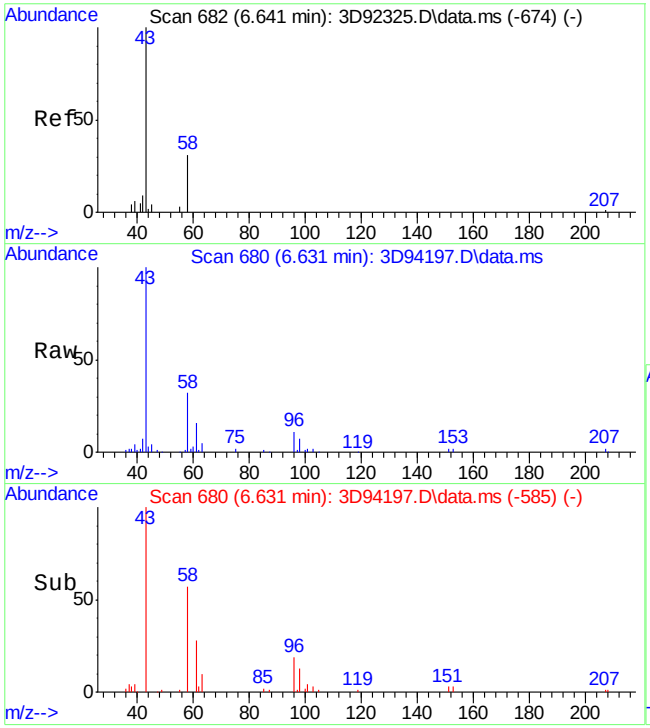


#22
1,1-dichloroethene
Concen: 202.48 ug/L
RT: 6.568 min Scan# 668
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 61 Resp: 436688

Ion	Ratio	Lower	Upper
61	100		
96	64.4	33.6	93.6
63	32.3	1.8	61.8

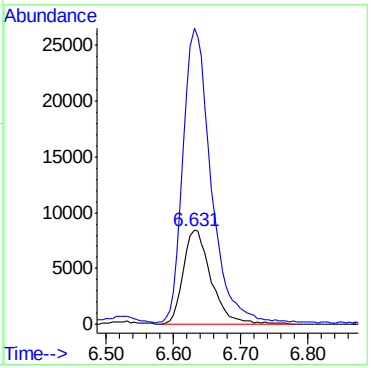


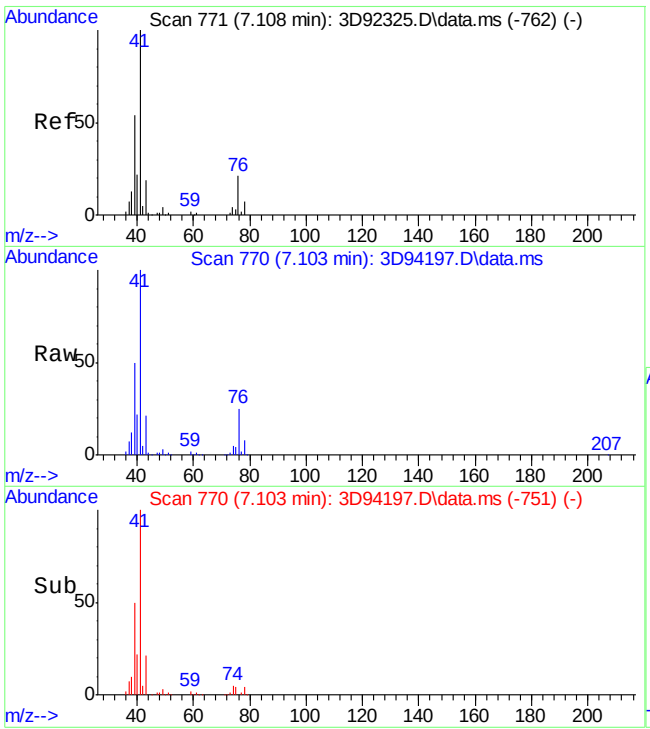


#23
acetone
Concen: 216.29 ug/L
RT: 6.631 min Scan# 680
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 58 Resp: 24437

Ion	Ratio	Lower	Upper
58	100		
43	315.8	285.6	345.6

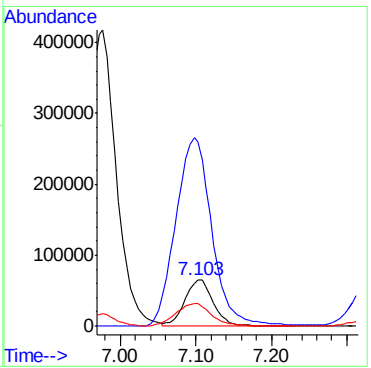


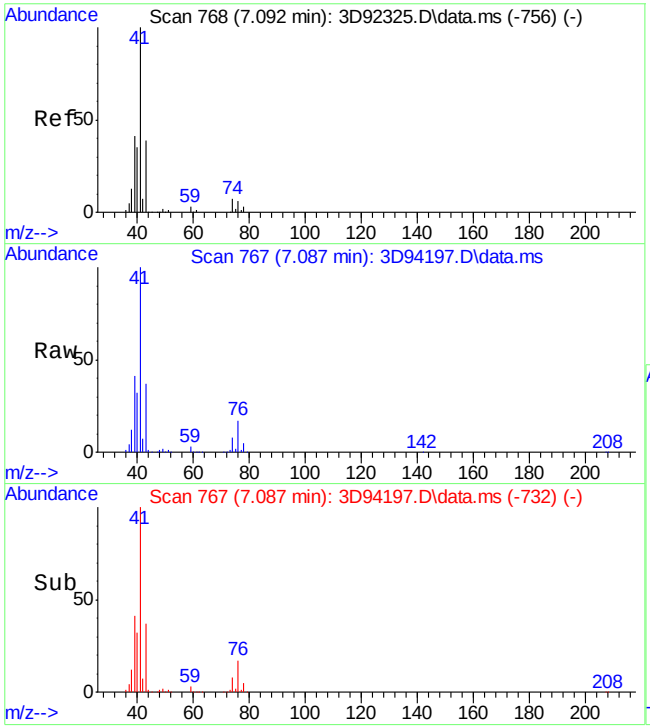


#24
allyl chloride
Concen: 197.77 ug/L
RT: 7.103 min Scan# 770
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 76 Resp: 167764

Ion	Ratio	Lower	Upper
76	100		
41	397.8	336.7	396.7#
38	47.5	14.5	74.5

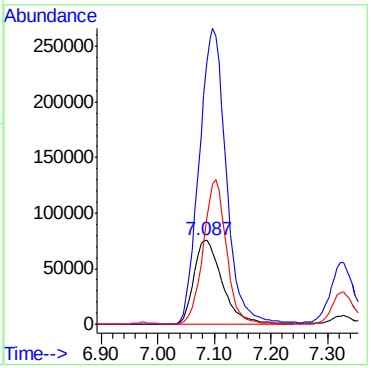


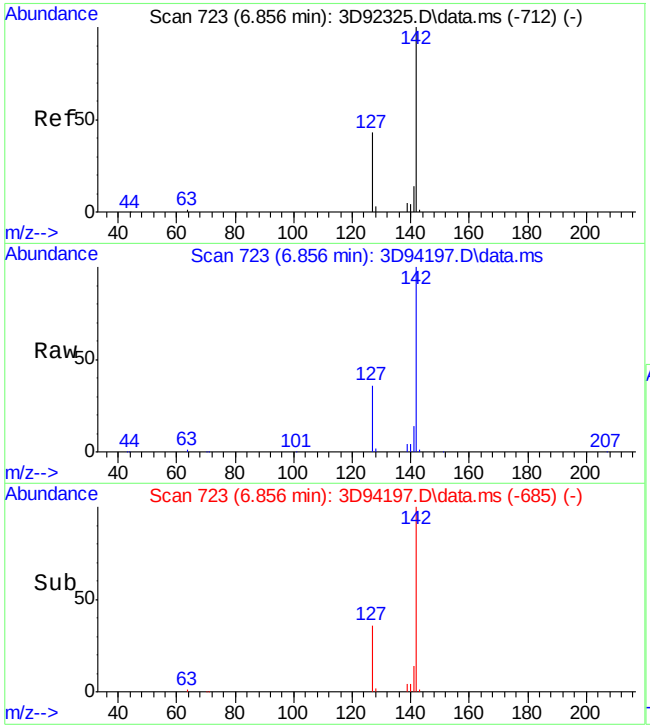


#25
acetonitrile
Concen: 1919.97 ug/L
RT: 7.087 min Scan# 767
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 40 Resp: 264950

Ion	Ratio	Lower	Upper
40	100		
41	309.3	259.7	319.7
39	124.8	79.2	139.2

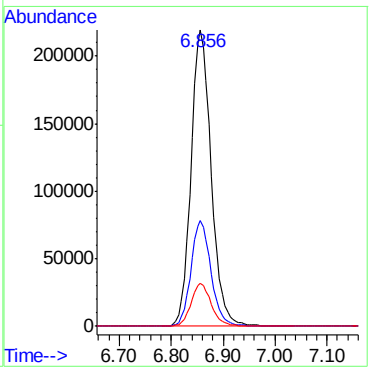


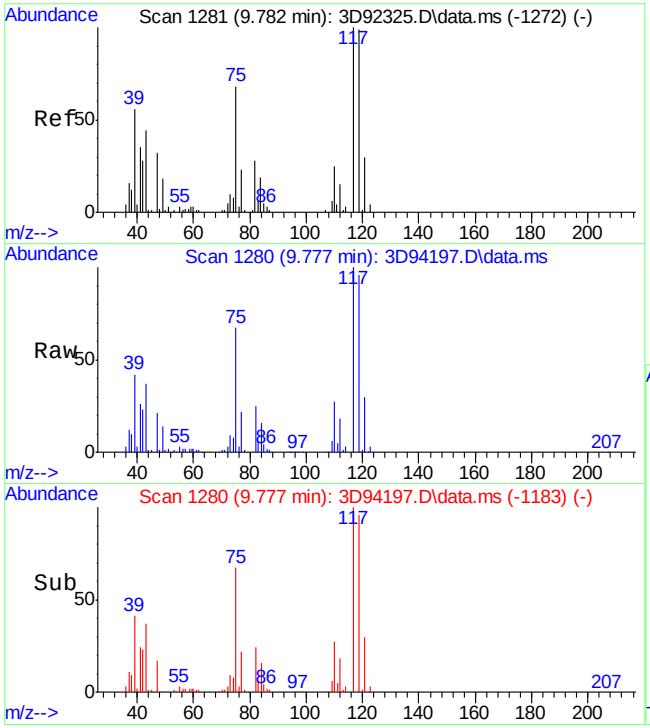


#27
iodomethane
Concen: 199.04 ug/L
RT: 6.856 min Scan# 723
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:142 Resp: 588704

Ion	Ratio	Lower	Upper
142	100		
127	35.7	5.6	65.6
141	14.5	0.0	44.2

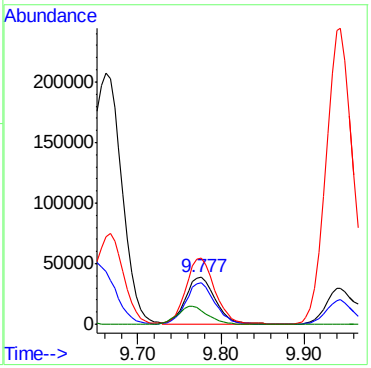


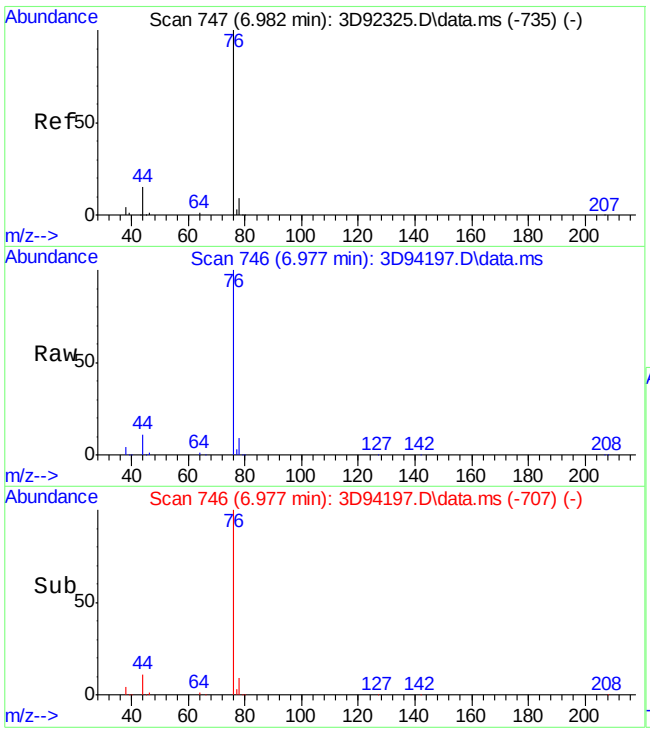


#28
iso-butyl alcohol
Concen: 1958.01 ug/L
RT: 9.777 min Scan# 1280
Delta R.T. 0.011 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 41 Resp: 95919

Ion	Ratio	Lower	Upper
41	100		
42	87.2	57.2	117.2
43	141.3	105.0	165.0
74	29.1	8.4	68.4

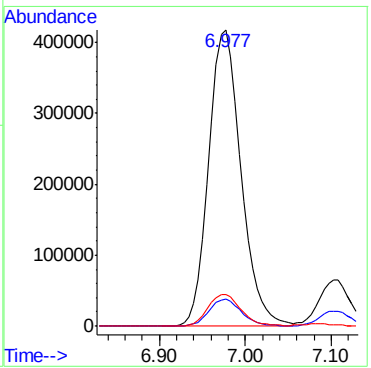


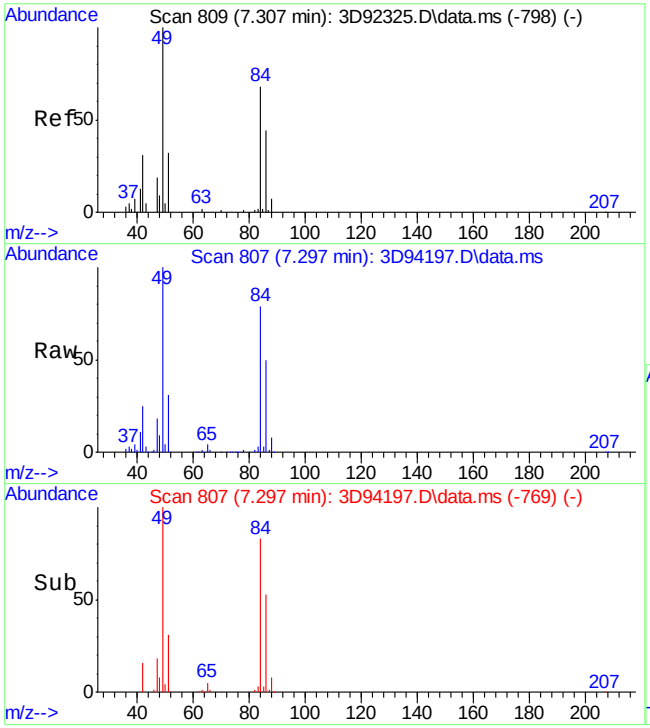


#29
carbon disulfide
Concen: 199.85 ug/L
RT: 6.977 min Scan# 746
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 76 Resp: 1070213

Ion	Ratio	Lower	Upper
76	100		
78	8.9	0.0	39.1
44	10.7	0.0	40.9

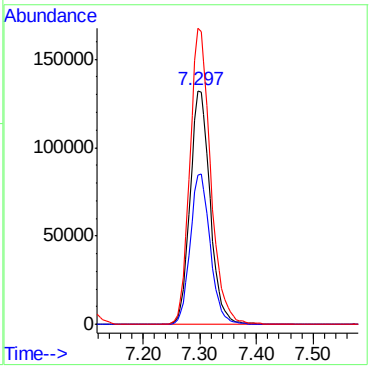


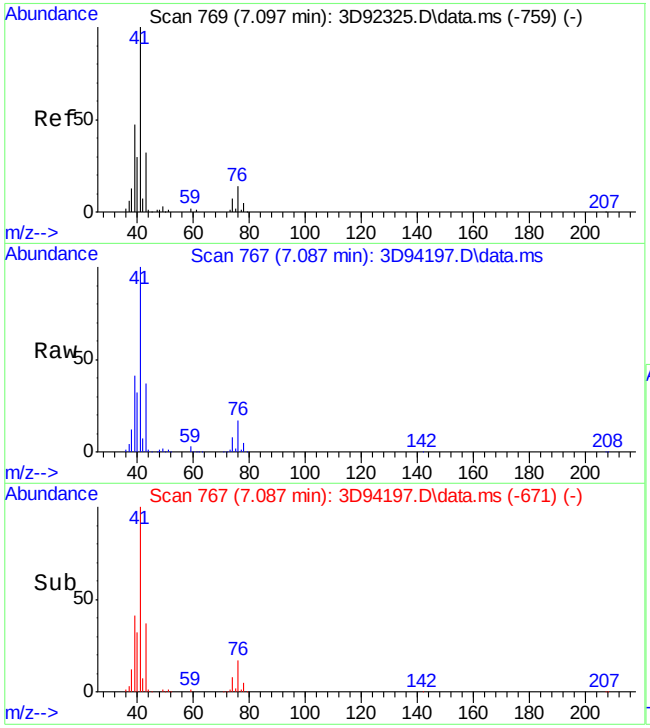


#30
methylene chloride
Concen: 196.27 ug/L
RT: 7.297 min Scan# 807
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 84 Resp: 321597

Ion	Ratio	Lower	Upper
84	100		
86	63.7	45.1	83.7
49	126.6	89.7	166.7

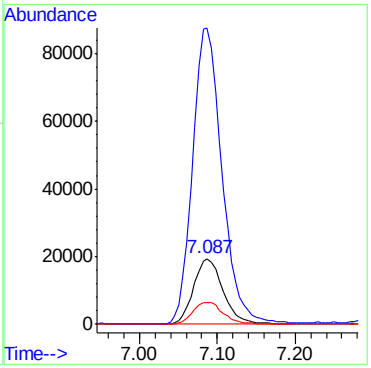


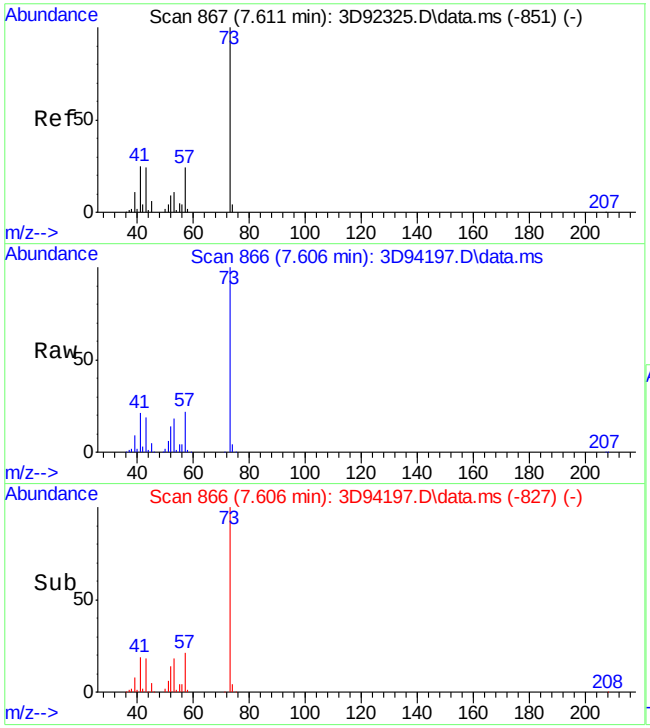


#31
methyl acetate
Concen: 212.72 ug/L
RT: 7.087 min Scan# 767
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 74 Resp: 50380

Ion	Ratio	Lower	Upper
74	100		
43	456.4	431.4	491.4
59	34.3	4.4	64.4

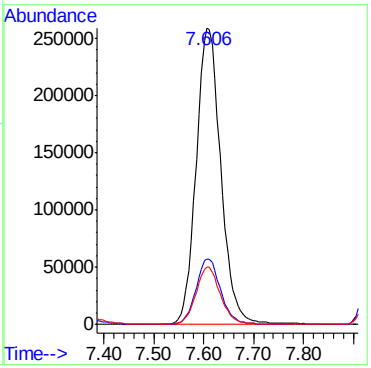


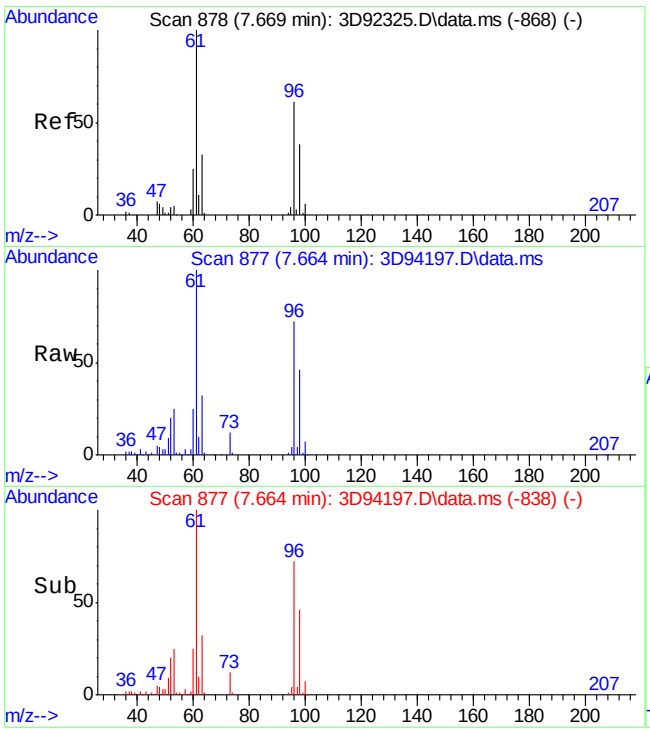


#32
methyl tert butyl ether
Concen: 192.44 ug/L
RT: 7.606 min Scan# 866
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 73 Resp: 886288

Ion	Ratio	Lower	Upper
73	100		
57	21.9	0.0	52.4
43	19.3	0.0	49.7

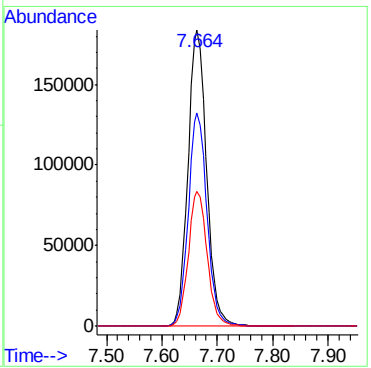


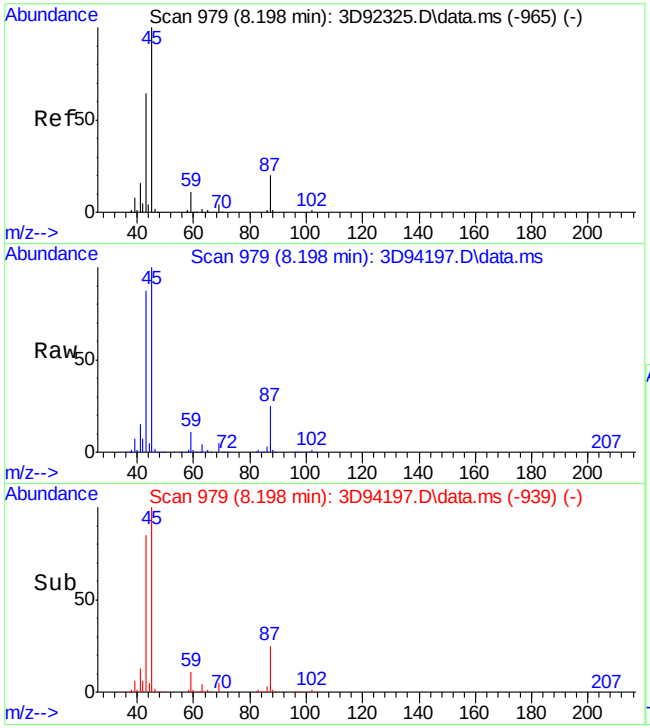


#33
trans-1,2-dichloroethene
Concen: 198.57 ug/L
RT: 7.664 min Scan# 877
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 61 Resp: 430015

Ion	Ratio	Lower	Upper
61	100		
96	72.0	50.0	92.8
98	45.6	31.0	57.6

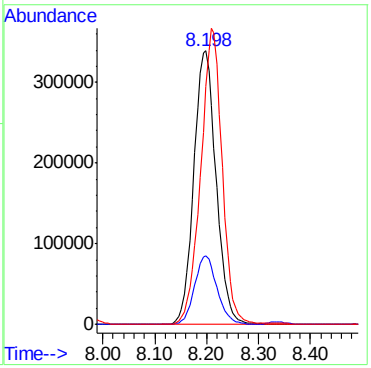


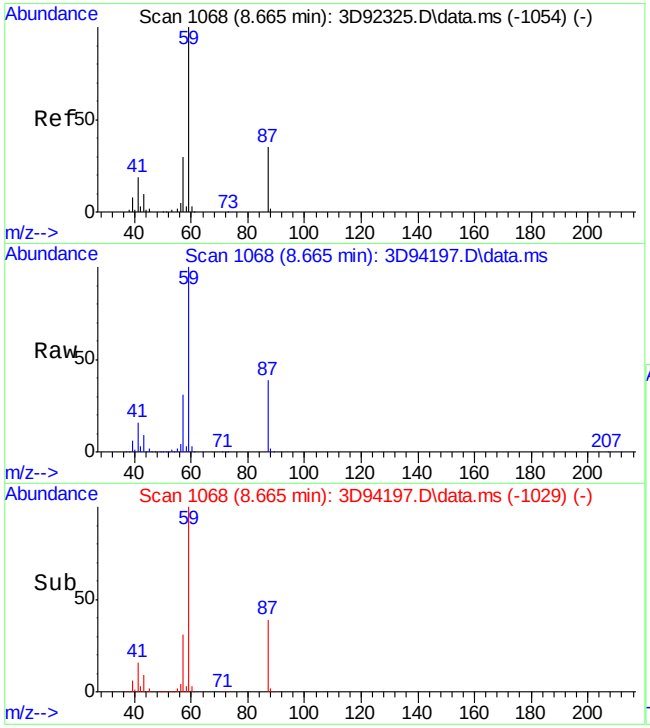


#34
di-isopropyl ether
Concen: 200.30 ug/L
RT: 8.198 min Scan# 979
Delta R.T. 0.011 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 45 Resp: 1008518

Ion	Ratio	Lower	Upper
45	100		
87	25.1	0.0	54.3
43	86.8	29.5	89.5

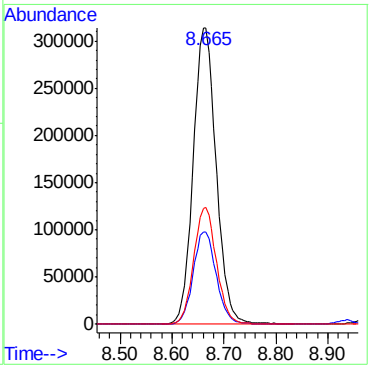


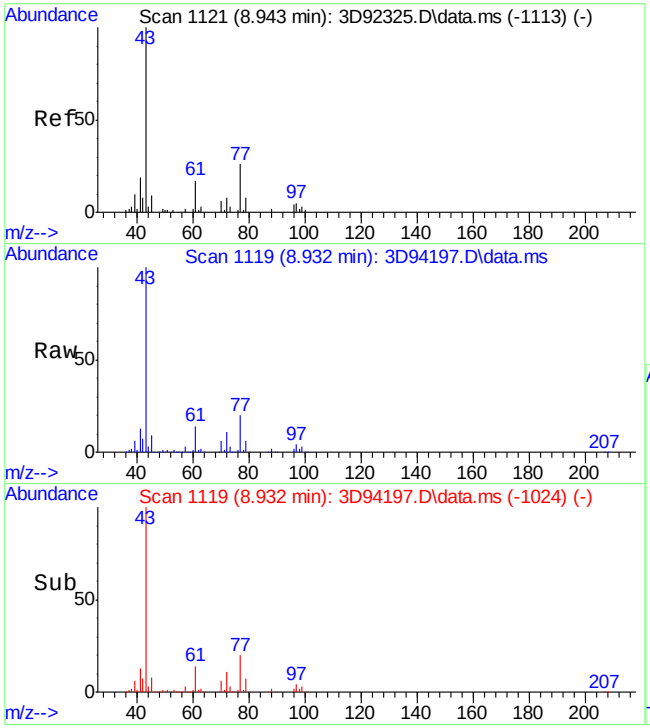


#35
ethyl tert-butyl ether
Concen: 208.10 ug/L
RT: 8.665 min Scan# 1068
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 59 Resp: 962114

Ion	Ratio	Lower	Upper
59	100		
57	31.1	1.9	61.9
87	39.5	8.8	68.8

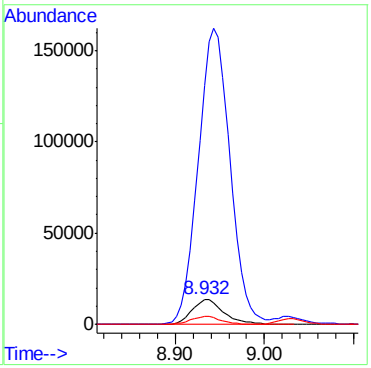


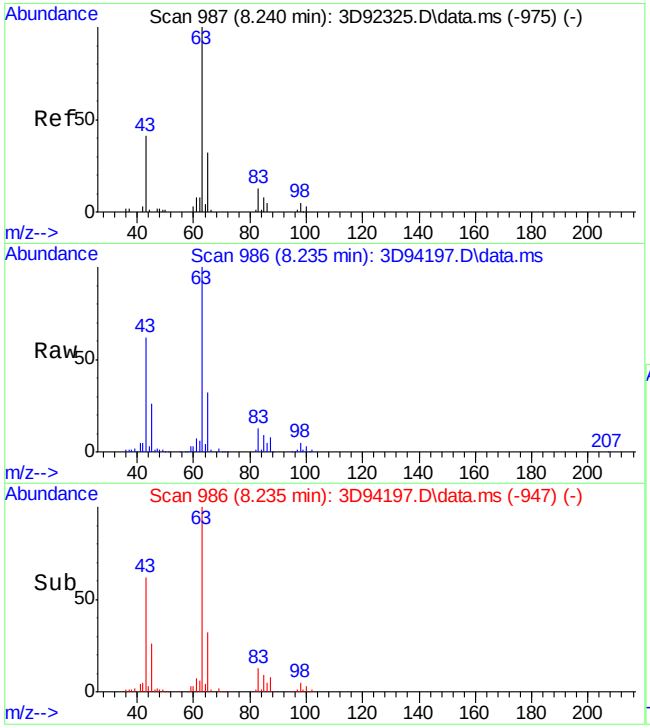


#36
2-butanone
Concen: 216.10 ug/L
RT: 8.932 min Scan# 1119
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 72 Resp: 33841

Ion	Ratio	Lower	Upper
72	100		
43	1186.3	856.1	1589.9
57	30.2	20.9	38.7

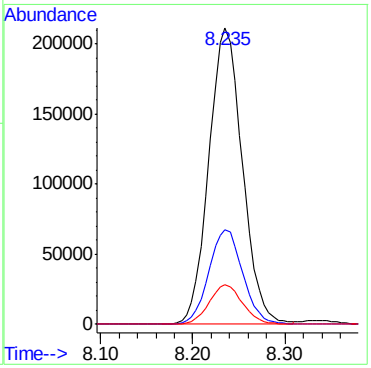


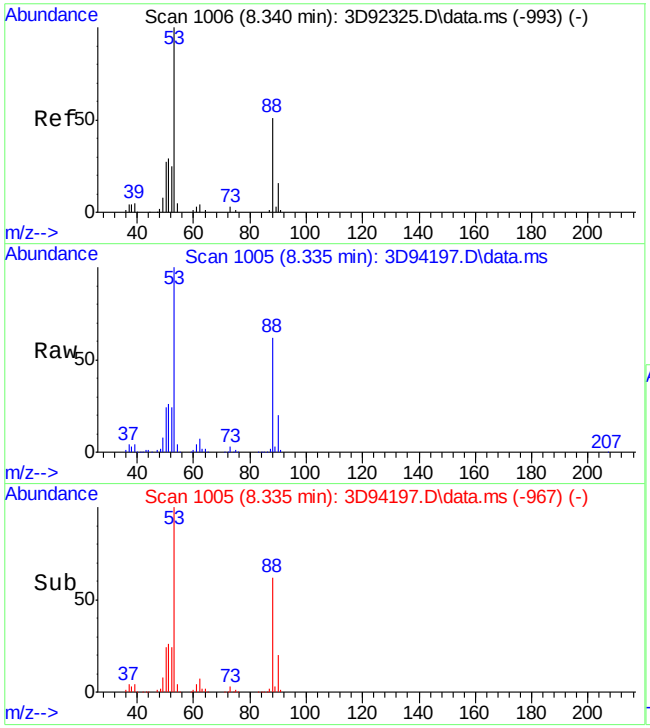


#37
1,1-dichloroethane
Concen: 196.42 ug/L
RT: 8.235 min Scan# 986
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 63 Resp: 530218

Ion	Ratio	Lower	Upper
63	100		
65	31.9	2.0	62.0
83	13.5	0.0	43.2

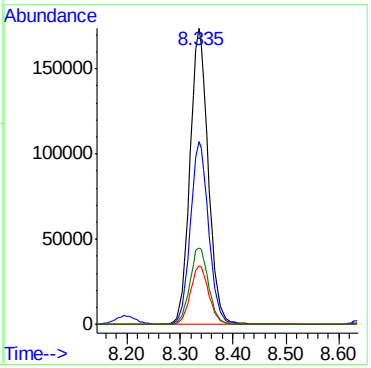


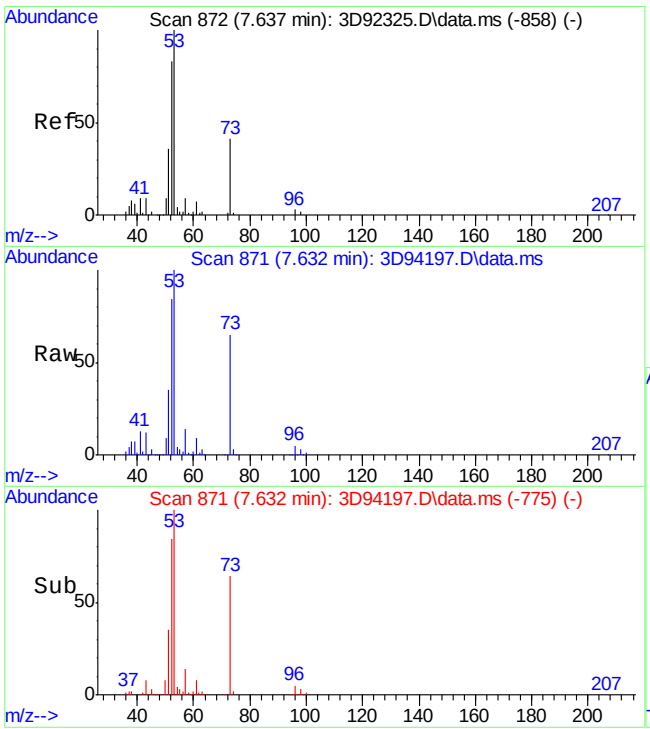


#38
chloroprene
Concen: 215.55 ug/L
RT: 8.335 min Scan# 1005
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 53 Resp: 420155

Ion	Ratio	Lower	Upper
53	100		
88	61.7	28.5	88.5
90	19.8	0.0	49.6
51	25.9	0.0	55.5

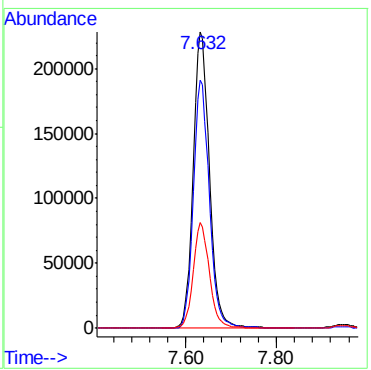


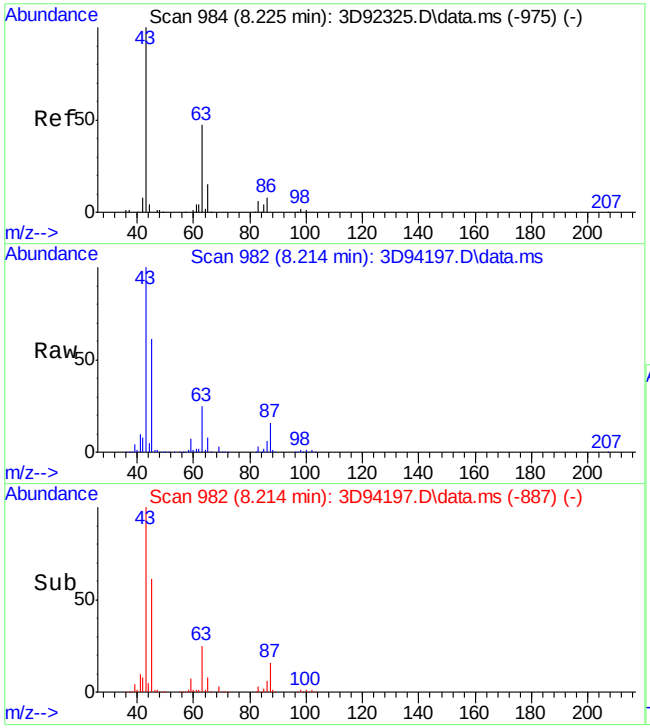


#39
acrylonitrile
Concen: 1026.38 ug/L
RT: 7.632 min Scan# 871
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 53 Resp: 566941

Ion	Ratio	Lower	Upper
53	100		
52	83.5	54.6	114.6
51	35.5	5.6	65.6

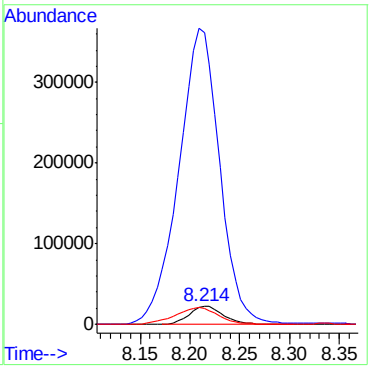


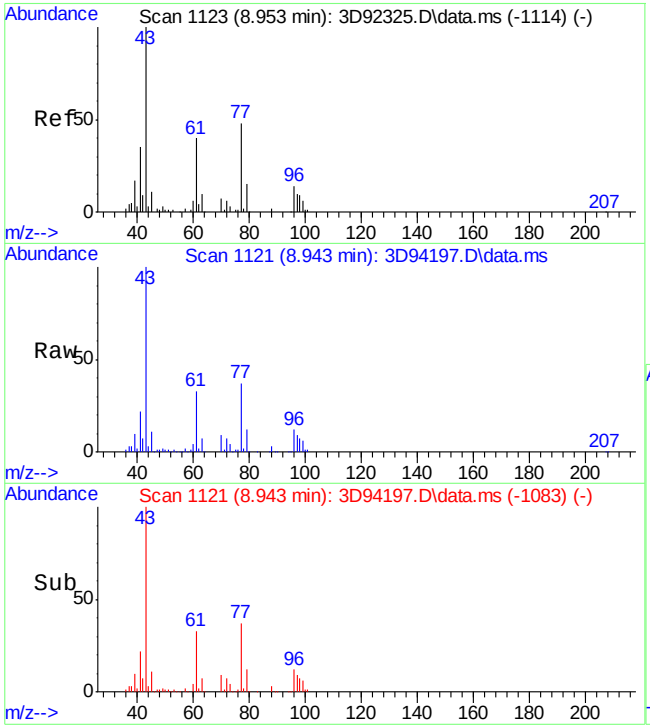


#40
vinyl acetate
Concen: 223.62 ug/L
RT: 8.214 min Scan# 982
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 86 Resp: 52796

Ion	Ratio	Lower	Upper
86	100		
43	1575.3	1100.0	2042.8
44	84.1	60.8	112.8

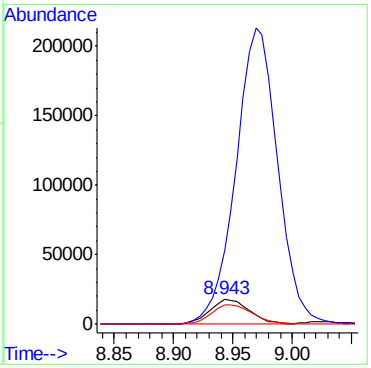




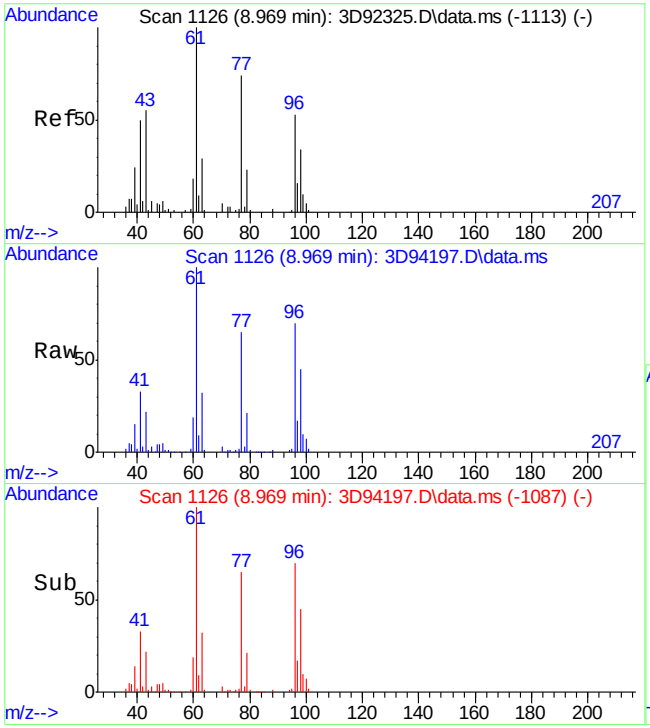
#41
ethyl acetate
Concen: 209.71 ug/L
RT: 8.943 min Scan# 1121
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 45 Resp: 40995

Ion	Ratio	Lower	Upper
45	100		
61	297.7	249.2	462.8
70	77.8	54.6	101.4



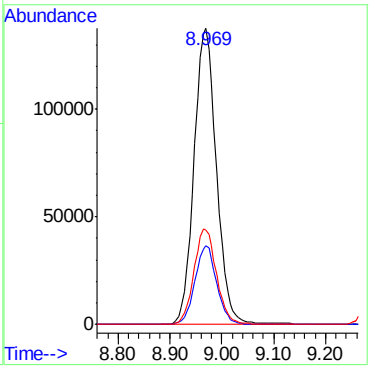
3D94197.D M3D4058.M Thu Dec 19 12:37:19 2013 3D Page 20

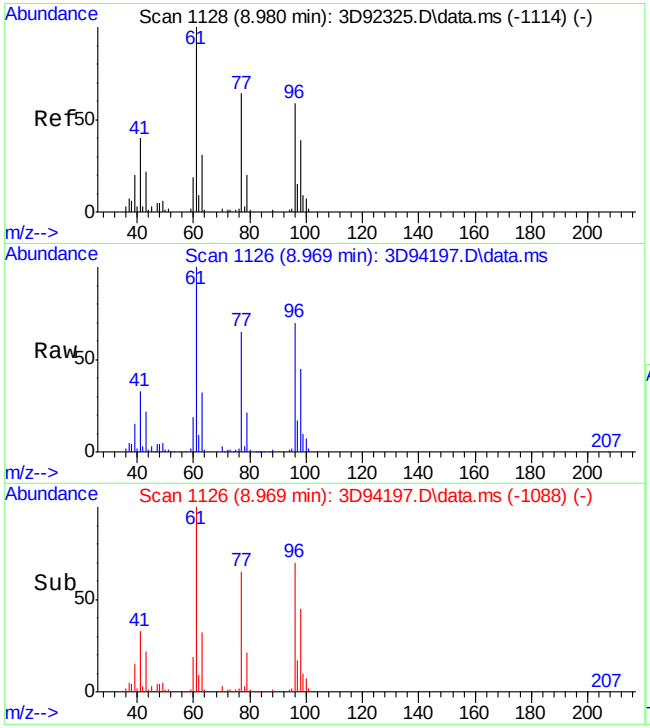


#42
2,2-dichloropropane
Concen: 185.44 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 77 Resp: 410945

Ion	Ratio	Lower	Upper
77	100		
97	26.5	0.0	56.7
79	31.9	2.2	62.2

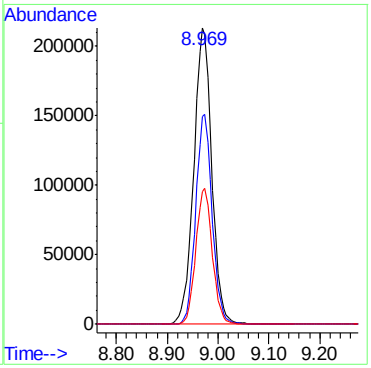


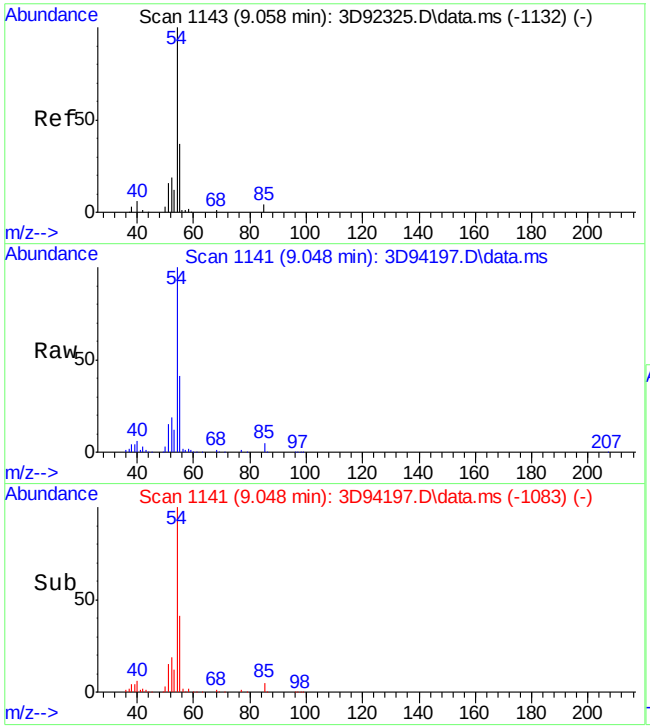


#43
cis-1,2-dichloroethene
Concen: 198.48 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 61 Resp: 524920

Ion	Ratio	Lower	Upper
61	100		
96	70.1	39.3	99.3
98	44.8	14.9	74.9

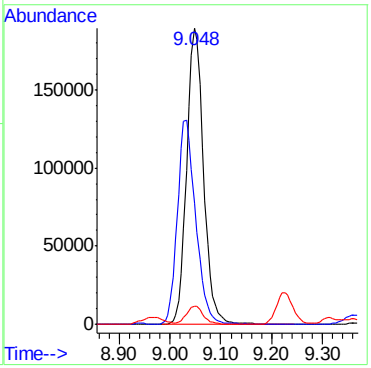


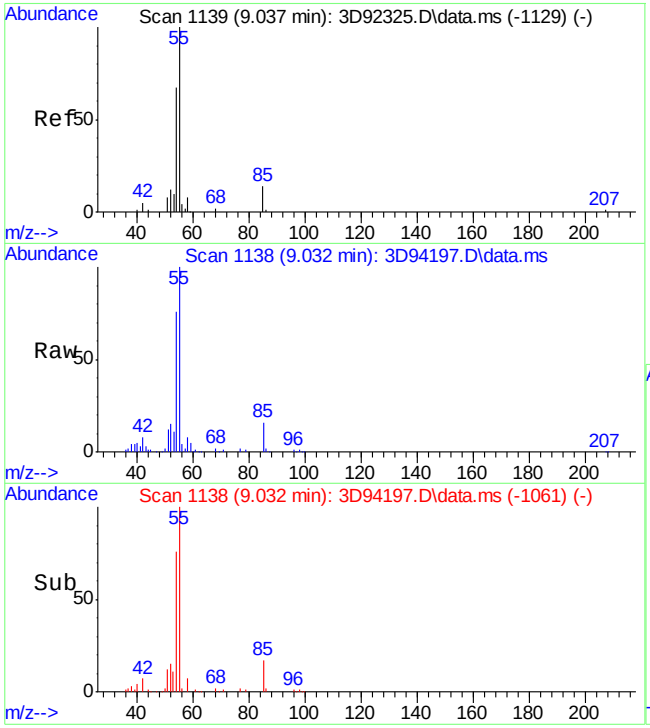


#44
propionitrile
Concen: 2095.76 ug/L
RT: 9.048 min Scan# 1141
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 54 Resp: 436709

Ion	Ratio	Lower	Upper
54	100		
55	41.0	19.2	79.2
40	4.5	0.0	35.1

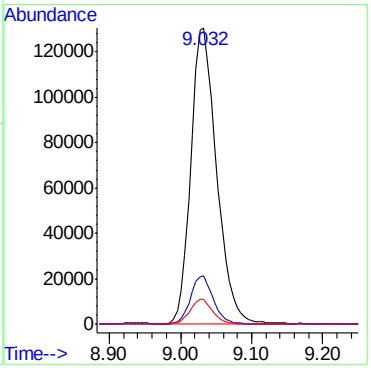




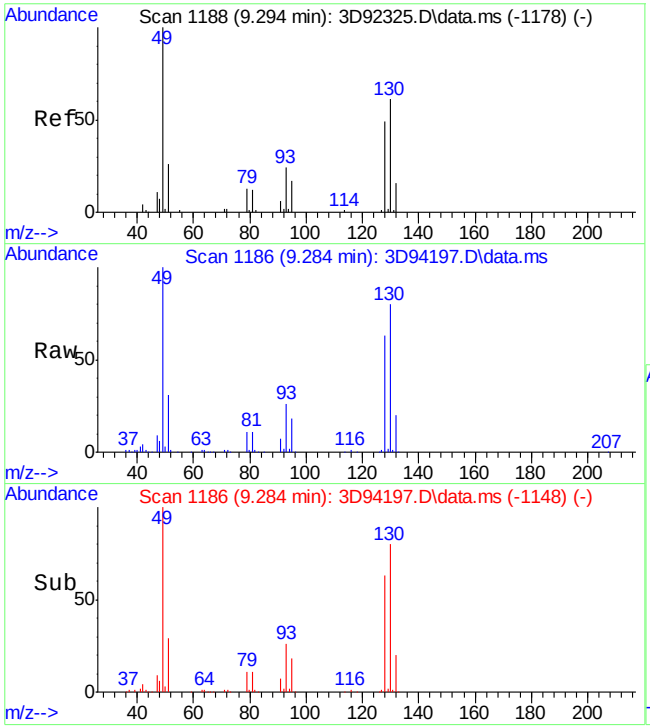
#45
methyl acrylate
Concen: 213.82 ug/L
RT: 9.032 min Scan# 1138
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 55 Resp: 326798

Ion	Ratio	Lower	Upper
55	100		
85	16.4	0.0	46.5
58	8.4	0.0	38.9



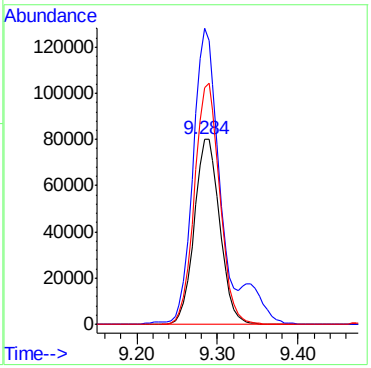
3D94197.D M3D4058.M Thu Dec 19 12:37:19 2013 3D Page 22

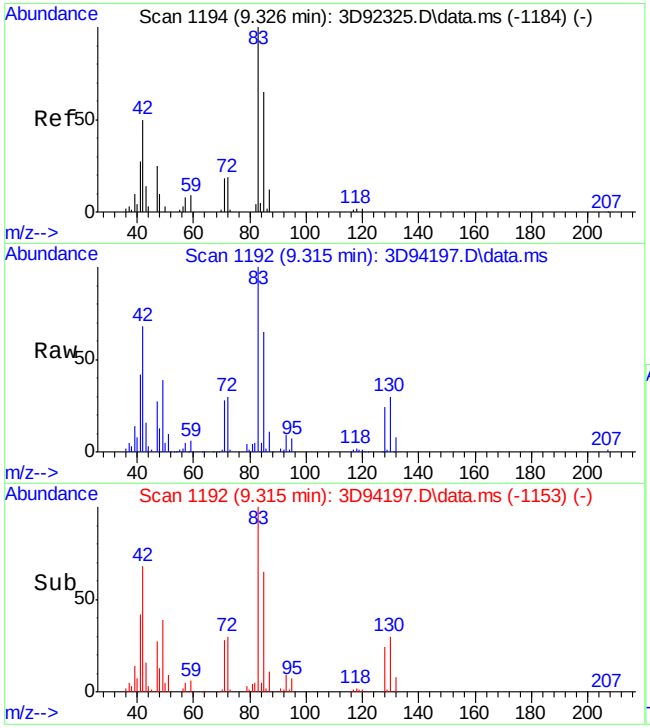


#46
bromochloromethane
Concen: 208.97 ug/L
RT: 9.284 min Scan# 1186
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:128 Resp: 177102

Ion	Ratio	Lower	Upper
128	100		
49	159.4	125.6	185.6
130	127.9	103.9	163.9

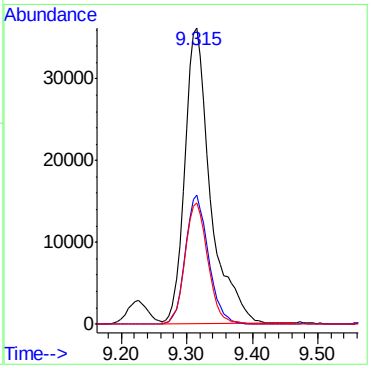




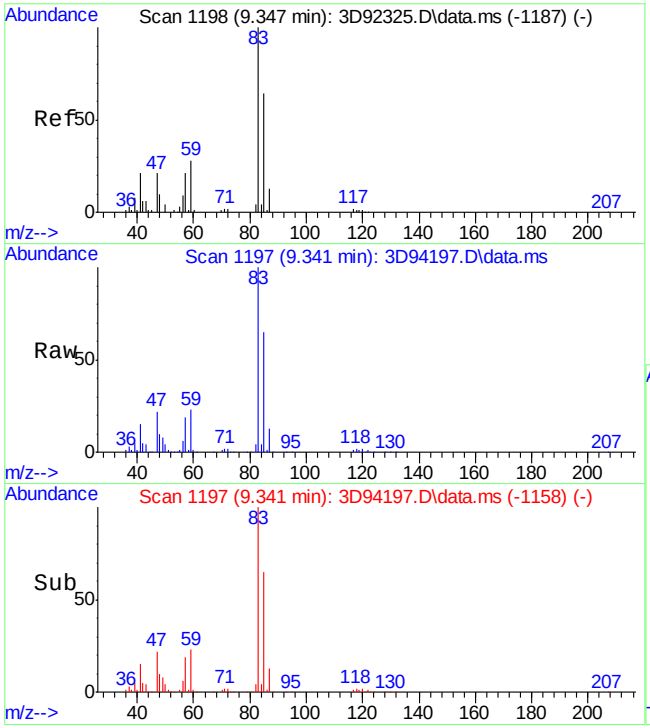
#47
tetrahydrofuran
Concen: 198.62 ug/L
RT: 9.315 min Scan# 1192
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 42 Resp: 99161

Ion	Ratio	Lower	Upper
42	100		
72	39.4	8.3	68.3
71	36.6	6.0	66.0



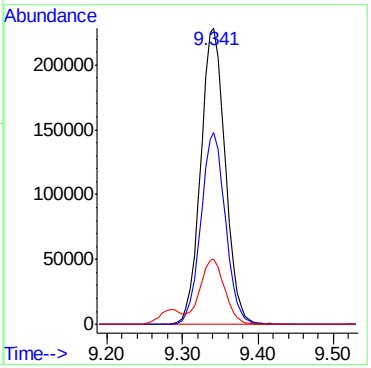
3D94197.D M3D4058.M Thu Dec 19 12:37:19 2013 3D Page 23

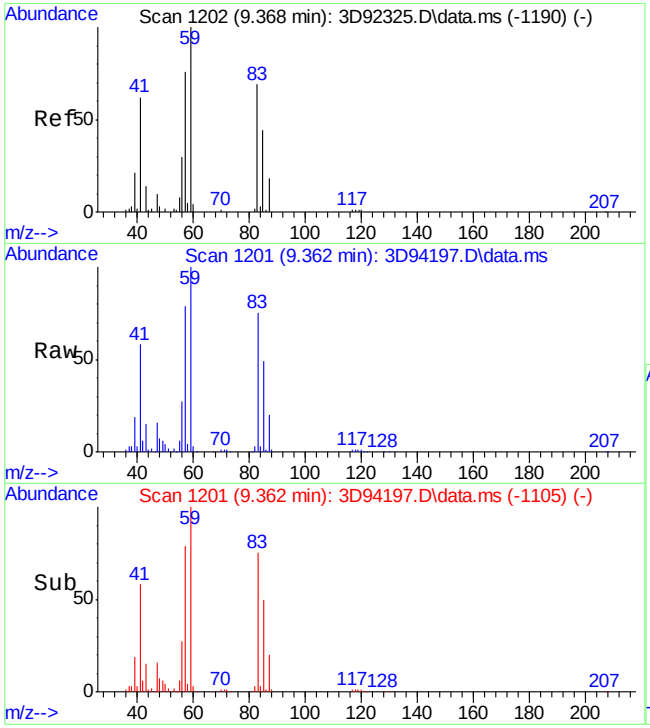


#48
chloroform
Concen: 198.36 ug/L
RT: 9.341 min Scan# 1197
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 83 Resp: 518046

Ion	Ratio	Lower	Upper
83	100		
85	64.8	34.8	94.8
47	21.9	0.0	53.3

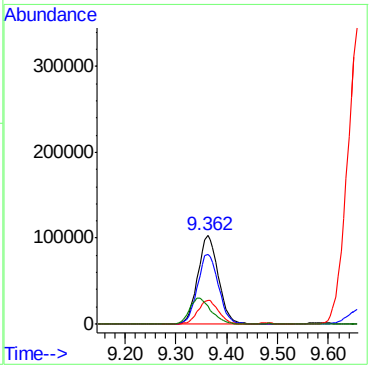


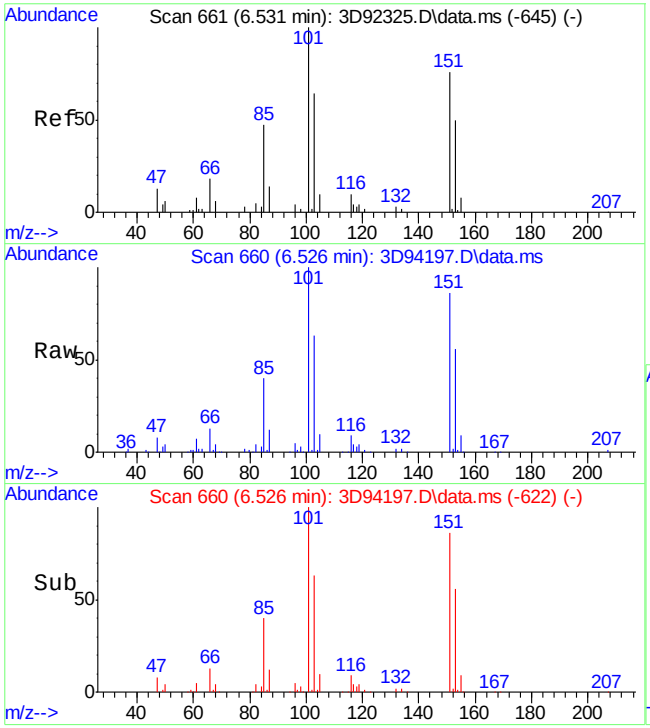


#49
Tert-Butyl Formate
Concen: 209.78 ug/L
RT: 9.362 min Scan# 1201
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 59 Resp: 289946

Ion	Ratio	Lower	Upper
59	100		
57	80.4	64.5	96.7
56	27.1	21.6	32.4
87	30.5	24.9	37.3

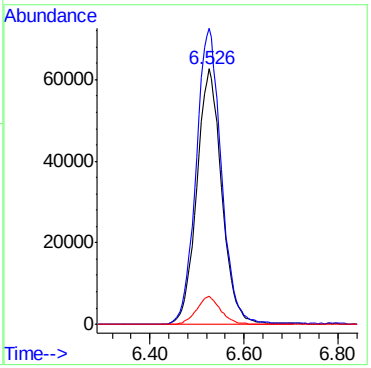


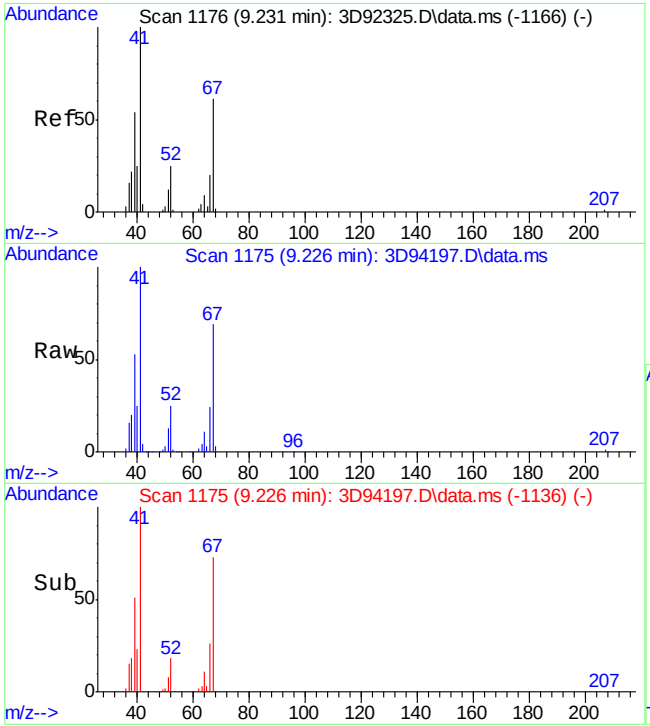


#52
freon 113
Concen: 227.29 ug/L
RT: 6.526 min Scan# 660
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:151 Resp: 231025

Ion	Ratio	Lower	Upper
151	100		
101	115.9	87.2	147.2
116	10.8	0.0	41.5

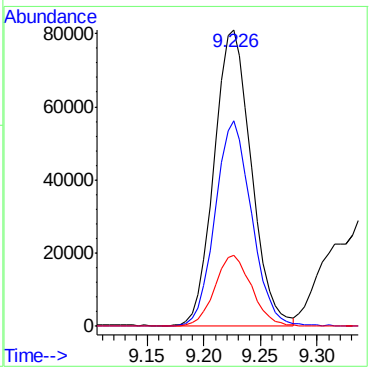




#53
methacrylonitrile
Concen: 205.37 ug/L
RT: 9.226 min Scan# 1175
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 41 Resp: 184323

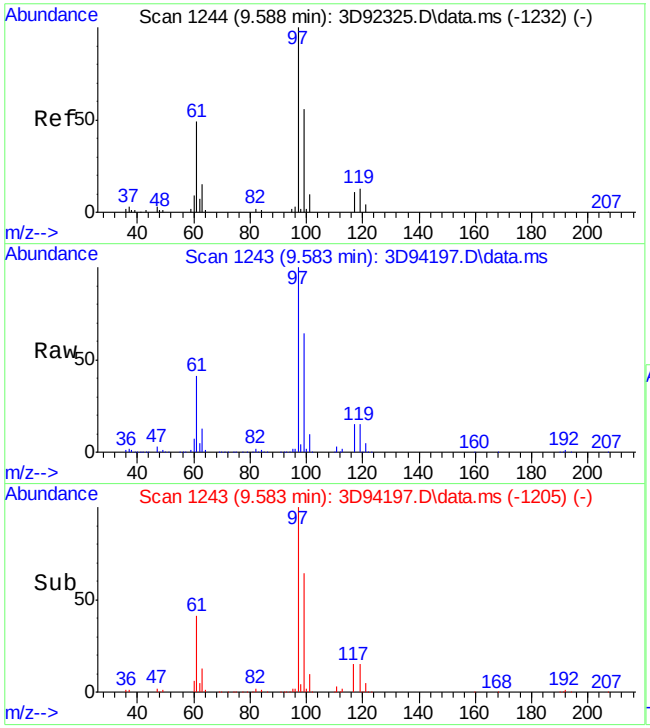
Ion	Ratio	Lower	Upper
41	100		
67	69.3	39.6	99.6
66	24.1	0.0	53.3



7.7.9

7

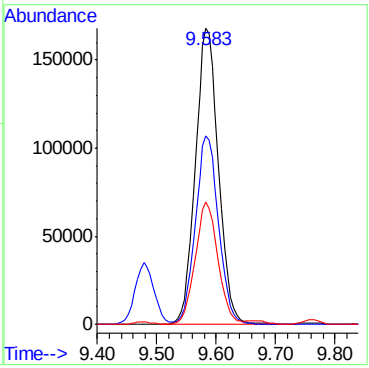
3D94197.D M3D4058.M Thu Dec 19 12:37:19 2013 3D Page 25

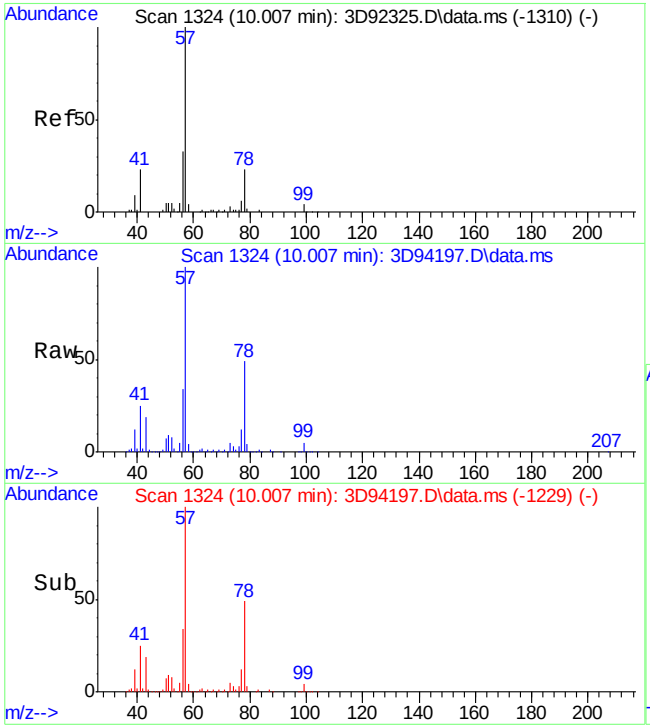


#54
1,1,1-trichloroethane
Concen: 200.40 ug/L
RT: 9.583 min Scan# 1243
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 97 Resp: 452700

Ion	Ratio	Lower	Upper
97	100		
99	63.5	33.6	93.6
61	41.2	11.5	71.5

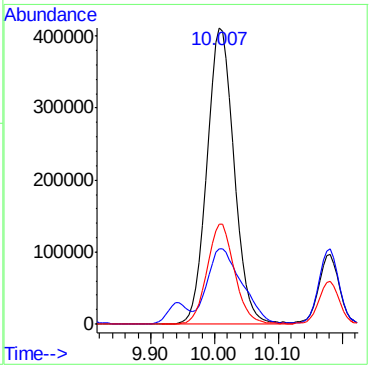


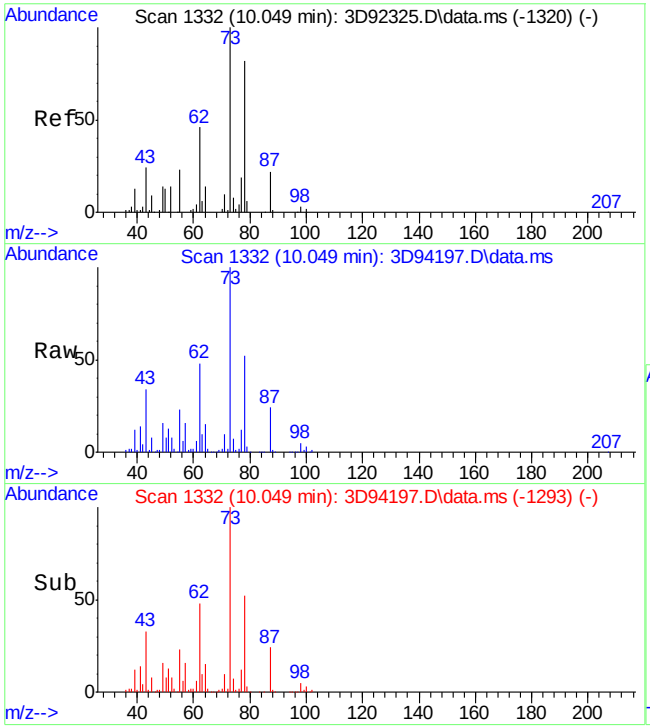


#56
2,2,4-Trimethylpentane
Concen: 230.26 ug/L
RT: 10.007 min Scan# 1324
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 57 Resp: 1207466

Ion	Ratio	Lower	Upper
57	100		
41	32.7	4.1	64.1
56	34.2	4.4	64.4

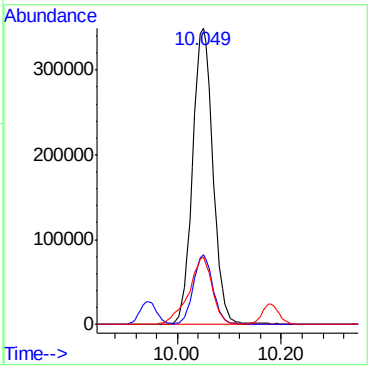


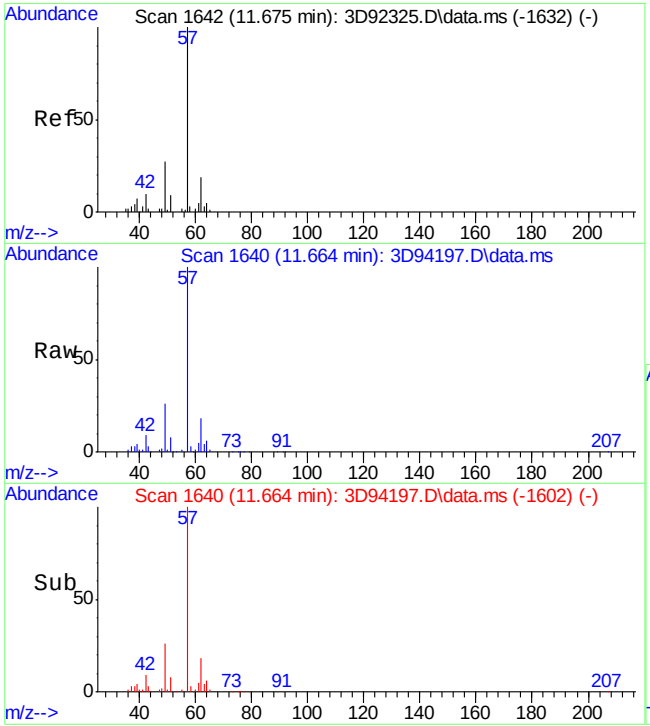


#57
tert-amyl methyl ether
Concen: 203.53 ug/L
RT: 10.049 min Scan# 1332
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 73 Resp: 948244

Ion	Ratio	Lower	Upper
73	100		
87	23.6	0.0	52.9
55	22.5	0.0	51.2

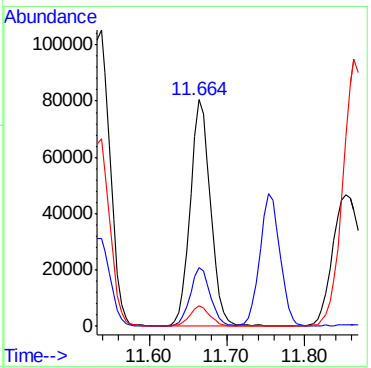


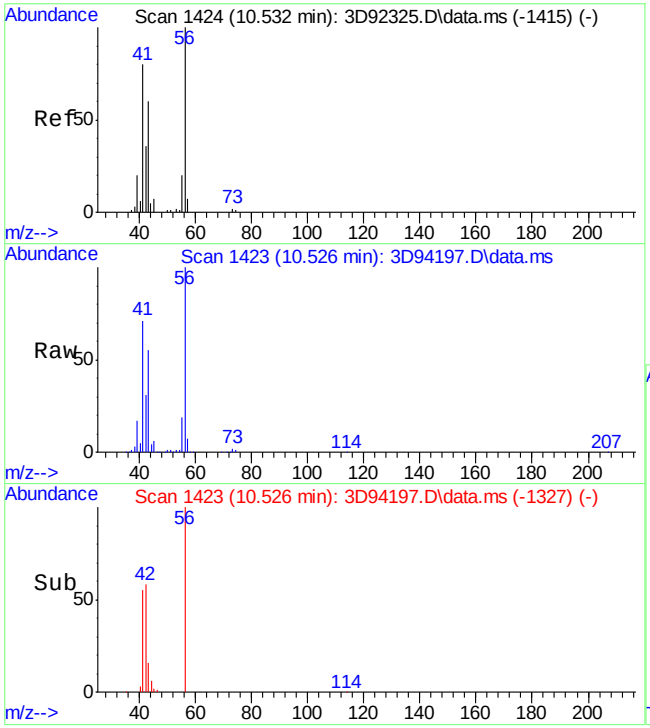


#59
epichlorohydrin
Concen: 1074.58 ug/L
RT: 11.664 min Scan# 1640
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 57 Resp: 144371

Ion	Ratio	Lower	Upper
57	100		
49	25.8	0.0	55.7
42	8.8	0.0	39.6

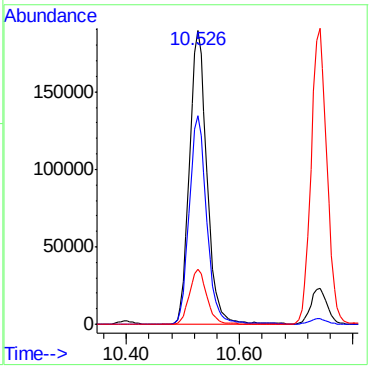


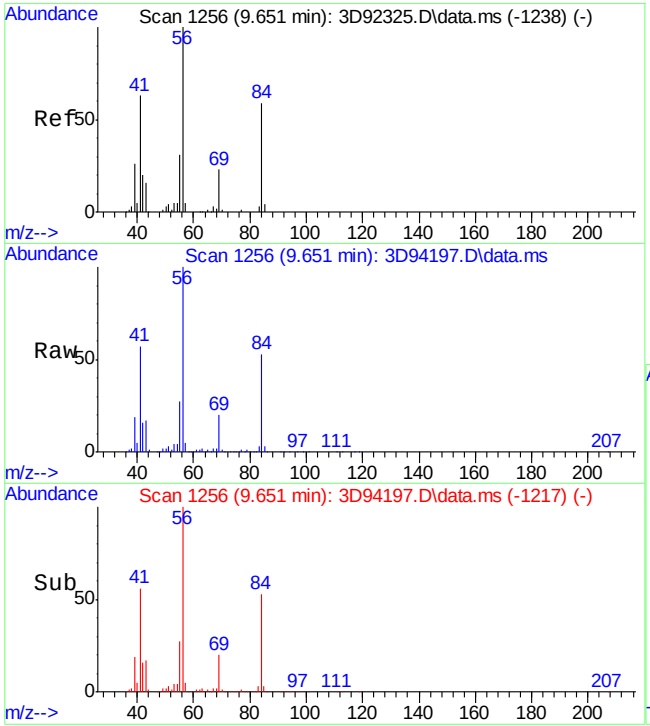


#60
n-butyl alcohol
Concen: 10826.24 ug/L
RT: 10.526 min Scan# 1423
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 56 Resp: 404557

Ion	Ratio	Lower	Upper
56	100		
41	71.1	42.2	102.2
55	18.6	0.0	48.4

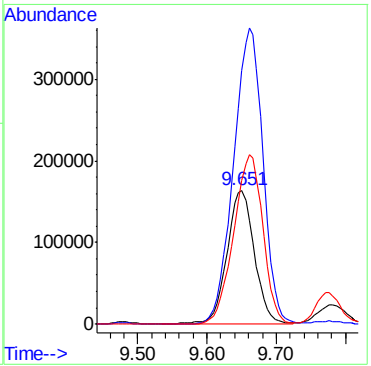


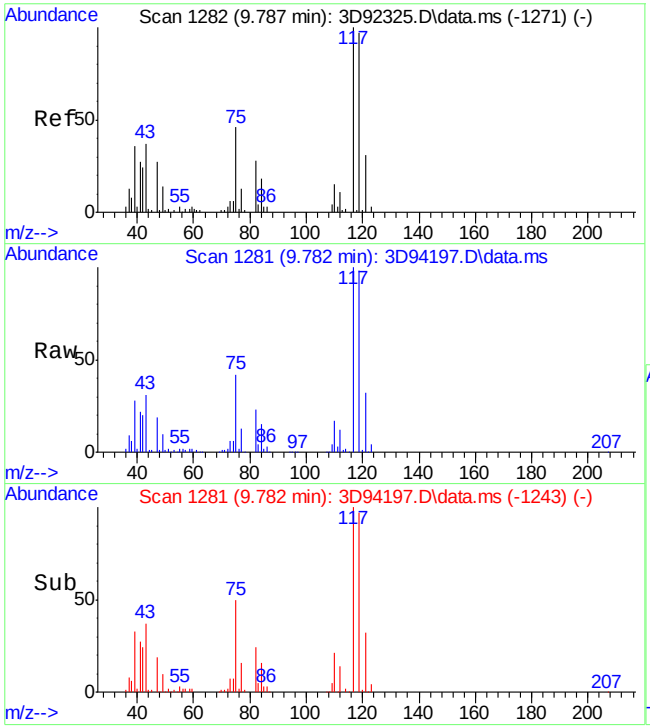


#61
cyclohexane
Concen: 205.56 ug/L
RT: 9.651 min Scan# 1256
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 84 Resp: 452301

Ion	Ratio	Lower	Upper
84	100		
56	236.6	208.4	268.4
41	134.2	105.8	165.8

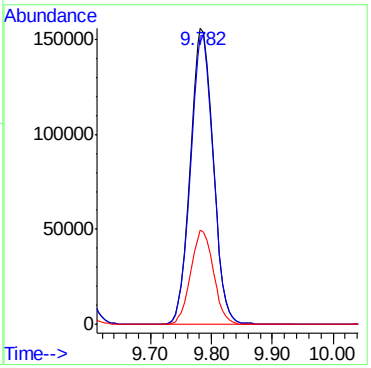


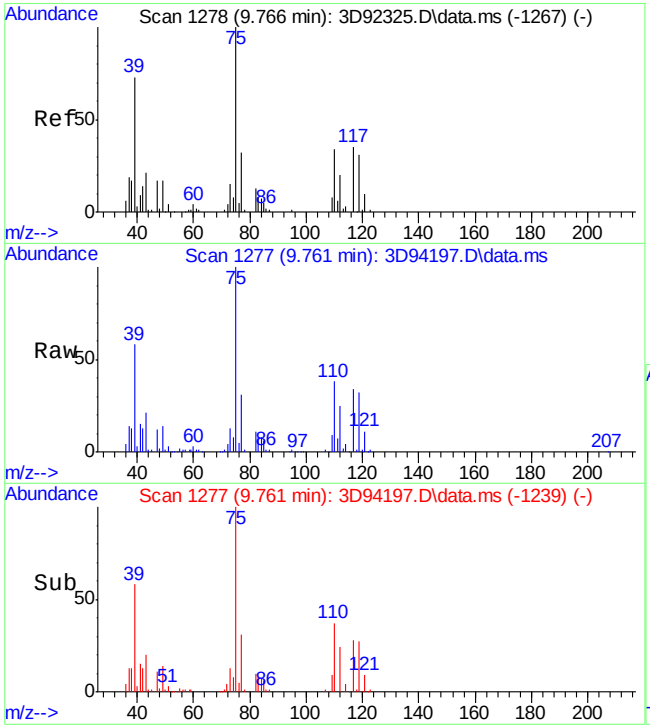


#62
carbon tetrachloride
Concen: 203.12 ug/L
RT: 9.782 min Scan# 1281
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:117 Resp: 408198

Ion	Ratio	Lower	Upper
117	100		
119	97.5	64.5	124.5
121	31.8	1.7	61.7

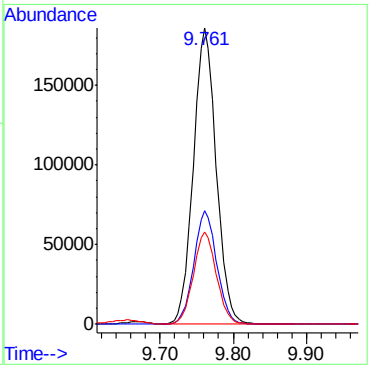


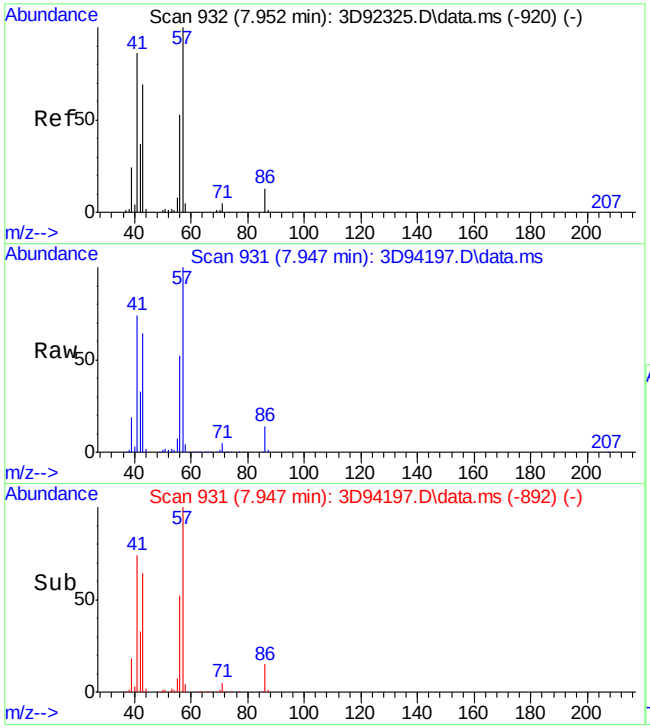


#63
1,1-dichloropropene
Concen: 202.25 ug/L
RT: 9.761 min Scan# 1277
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 75 Resp: 400975

Ion	Ratio	Lower	Upper
75	100		
110	38.2	8.3	68.3
77	31.3	0.4	60.4

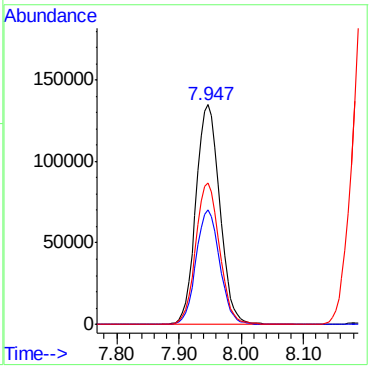


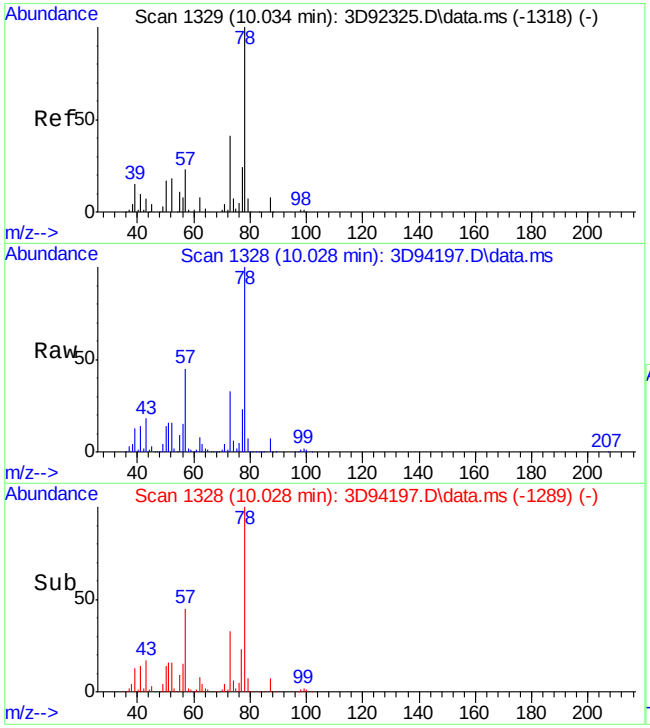


#64
hexane
Concen: 226.37 ug/L
RT: 7.947 min Scan# 931
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 57 Resp: 356789

Ion	Ratio	Lower	Upper
57	100		
56	52.0	21.9	81.9
43	64.2	32.7	92.7

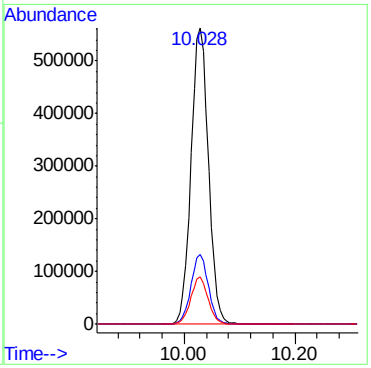




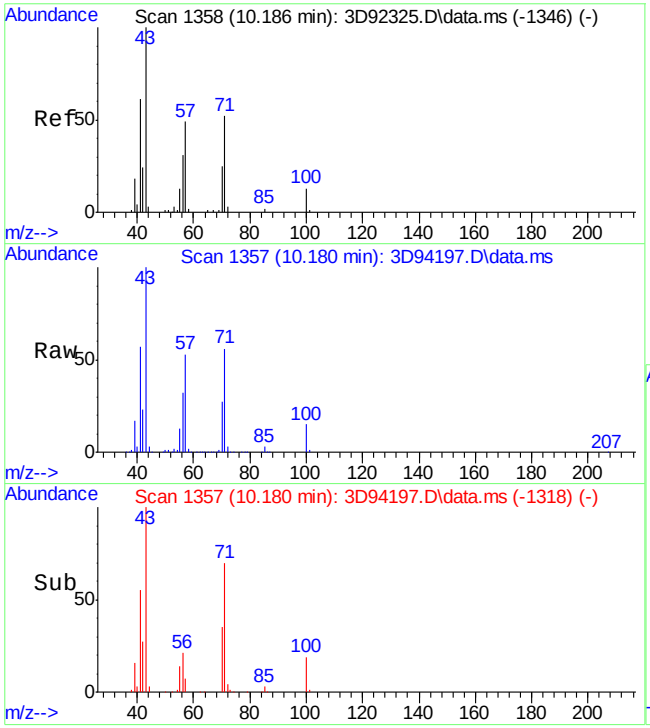
#65
benzene
Concen: 199.19 ug/L
RT: 10.028 min Scan# 1328
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 78 Resp: 1224830

Ion	Ratio	Lower	Upper
78	100		
77	23.5	0.0	53.8
52	15.8	0.0	45.9



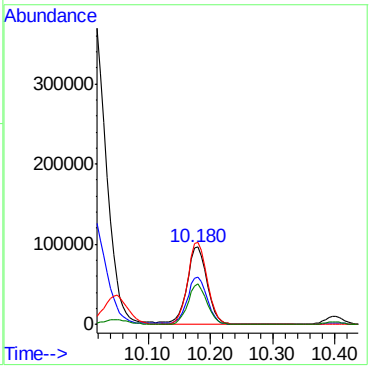
3D94197.D M3D4058.M Thu Dec 19 12:37:20 2013 3D Page 30

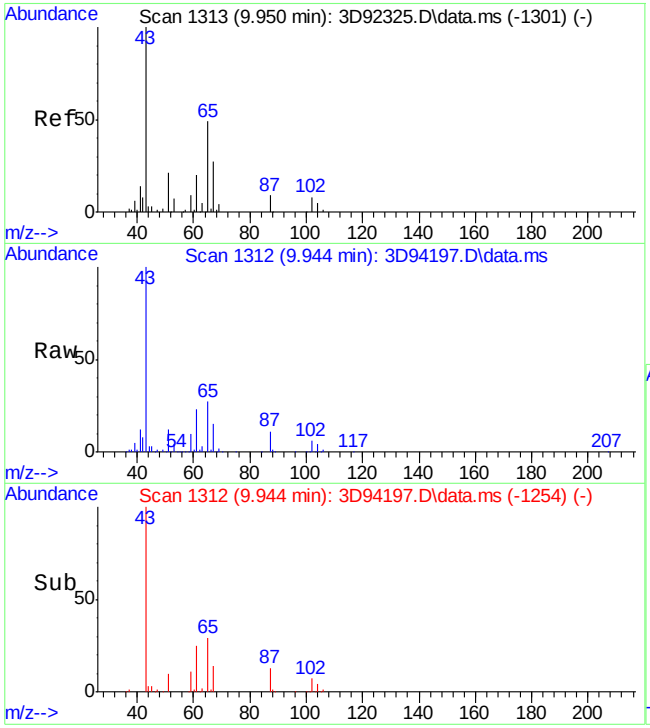


#66
heptane
Concen: 233.23 ug/L
RT: 10.180 min Scan# 1357
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 57 Resp: 217524

Ion	Ratio	Lower	Upper
57	100		
56	61.3	31.4	91.4
71	106.1	75.5	135.5
70	52.0	20.3	80.3

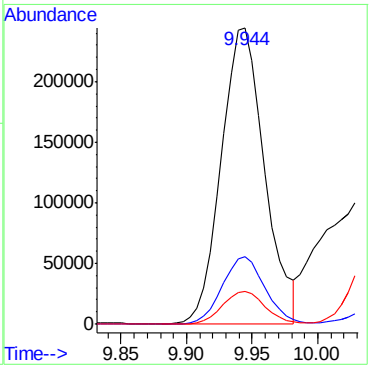


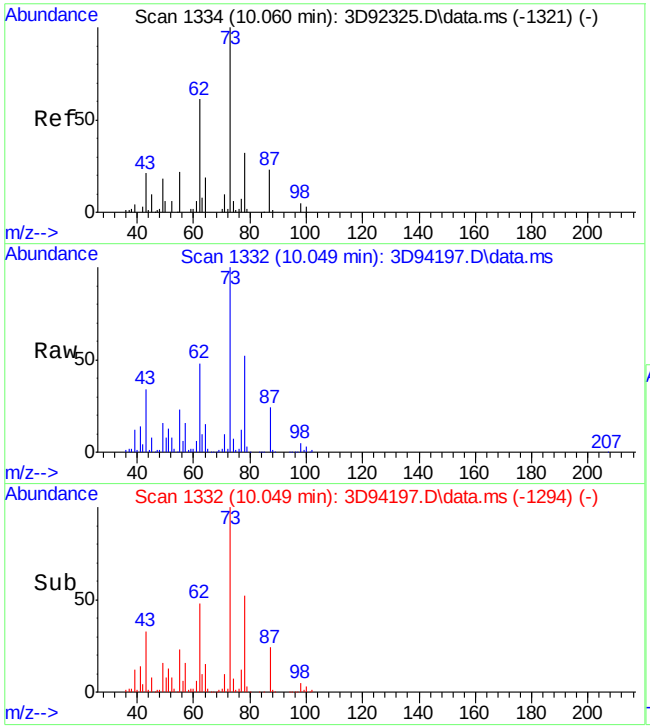


#67
isopropyl acetate
Concen: 205.93 ug/L
RT: 9.944 min Scan# 1312
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 43 Resp: 560341

Ion	Ratio	Lower	Upper
43	100		
61	22.5	0.0	52.1
87	10.9	0.0	40.9

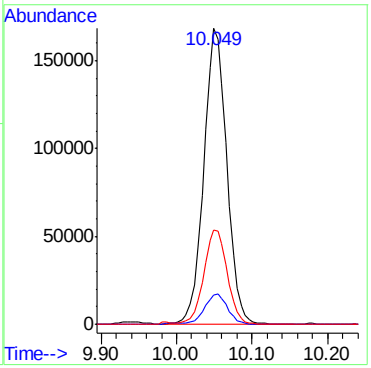


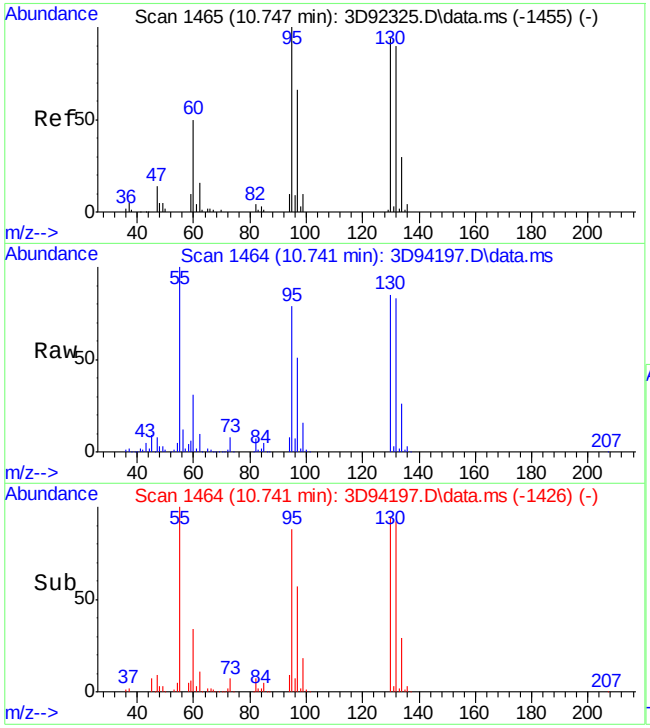


#68
1,2-dichloroethane
Concen: 195.70 ug/L
RT: 10.049 min Scan# 1332
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 62 Resp: 358373

Ion	Ratio	Lower	Upper
62	100		
98	10.0	0.0	40.2
64	31.9	2.5	62.5

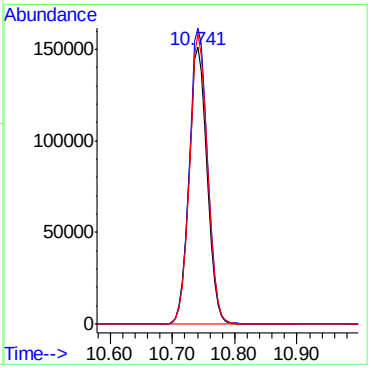


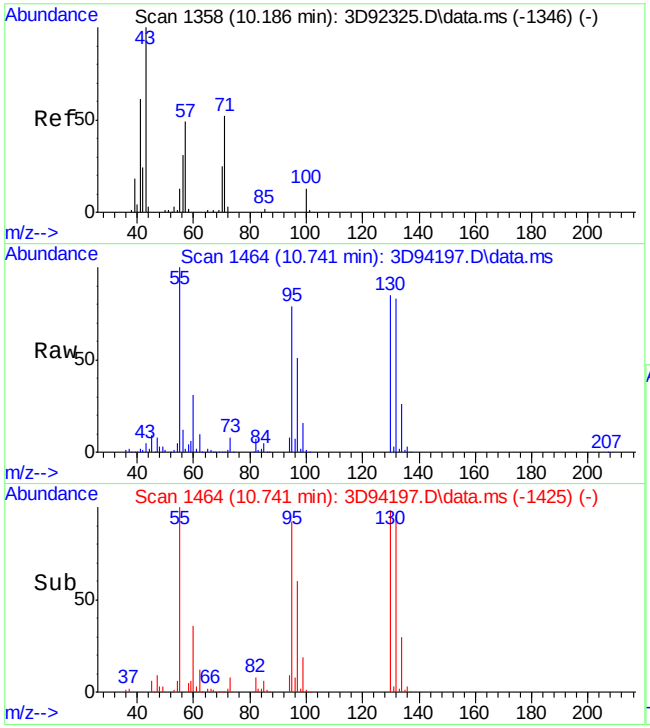


#69
trichloroethene
Concen: 203.76 ug/L
RT: 10.741 min Scan# 1464
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 95 Resp: 309317

Ion	Ratio	Lower	Upper
95	100		
130	106.7	78.9	138.9
132	104.5	75.1	135.1

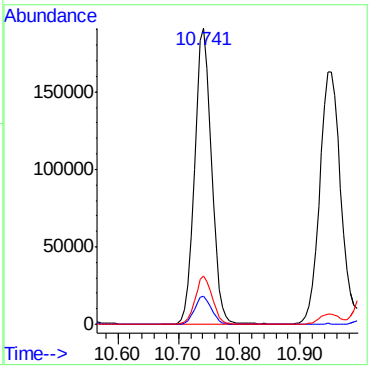


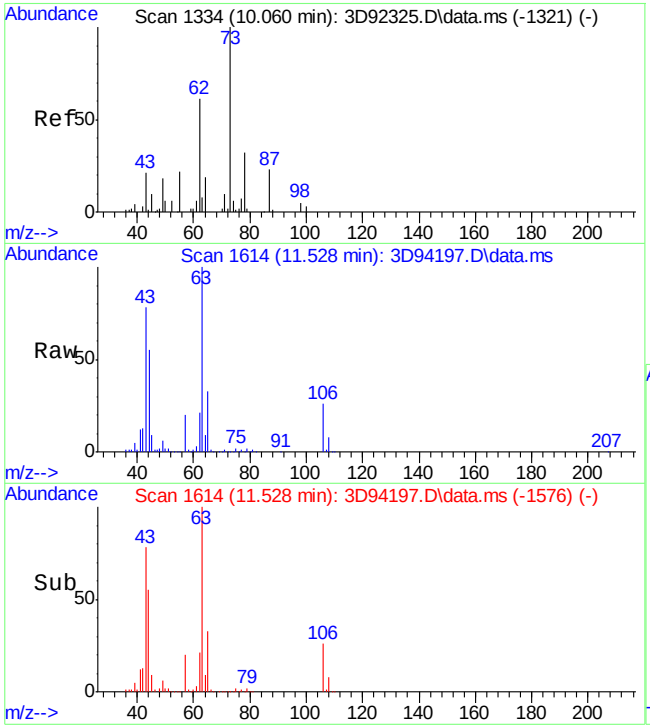


#70
ethyl acrylate
Concen: 219.11 ug/L
RT: 10.741 min Scan# 1464
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 55 Resp: 371841

Ion	Ratio	Lower	Upper
55	100		
45	9.5	7.8	11.6
99	16.4	12.9	19.3

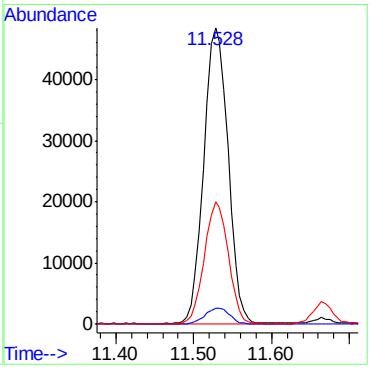


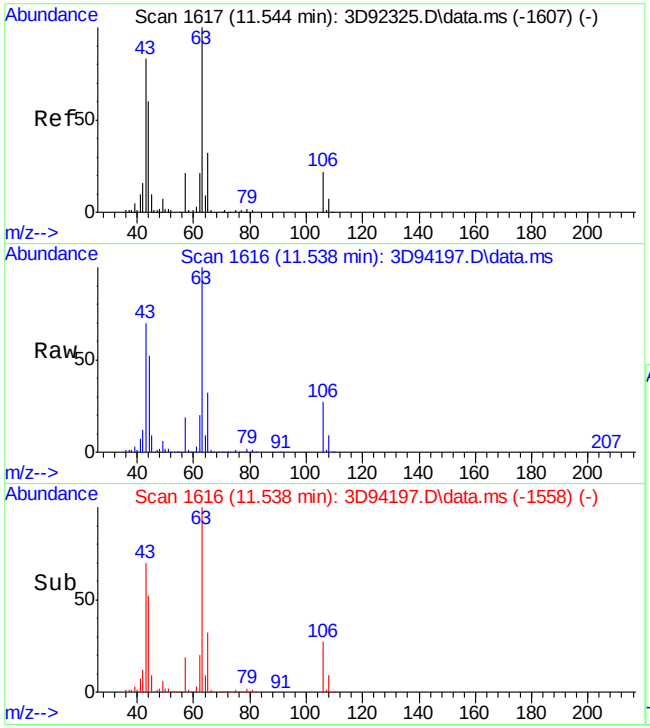


#72
2-nitropropane
Concen: 195.37 ug/L
RT: 11.528 min Scan# 1614
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 41 Resp: 105357

Ion	Ratio	Lower	Upper
41	100		
46	5.4	0.0	35.6
39	41.4	9.8	69.8

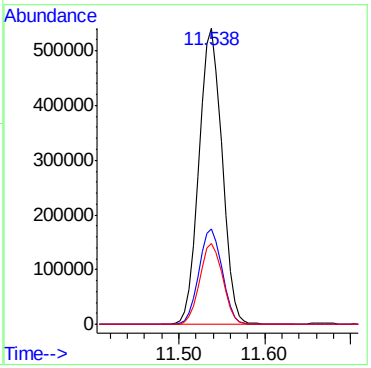


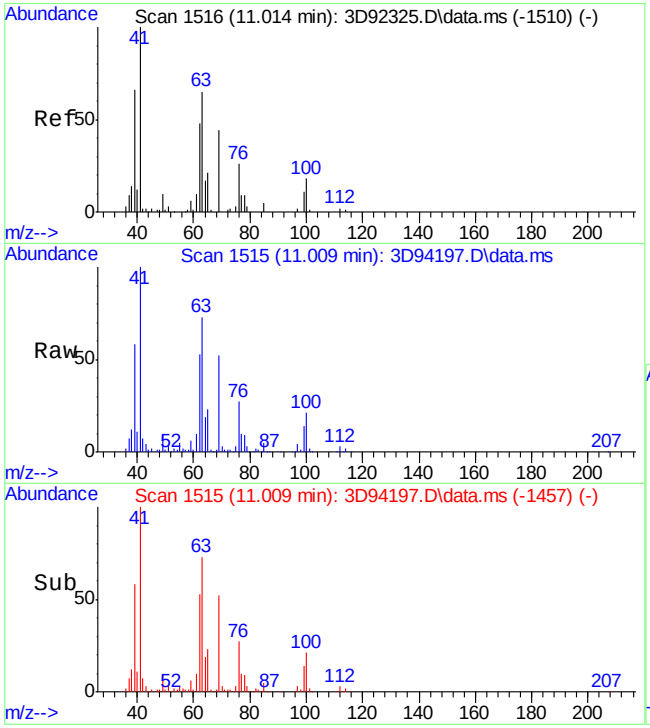


#73
2-chloroethyl vinyl ether
Concen: 1025.08 ug/L
RT: 11.538 min Scan# 1616
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 63 Resp: 986697

Ion	Ratio	Lower	Upper
63	100		
65	32.2	3.0	63.0
106	27.4	0.0	56.6

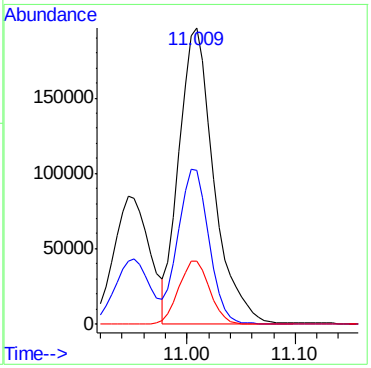


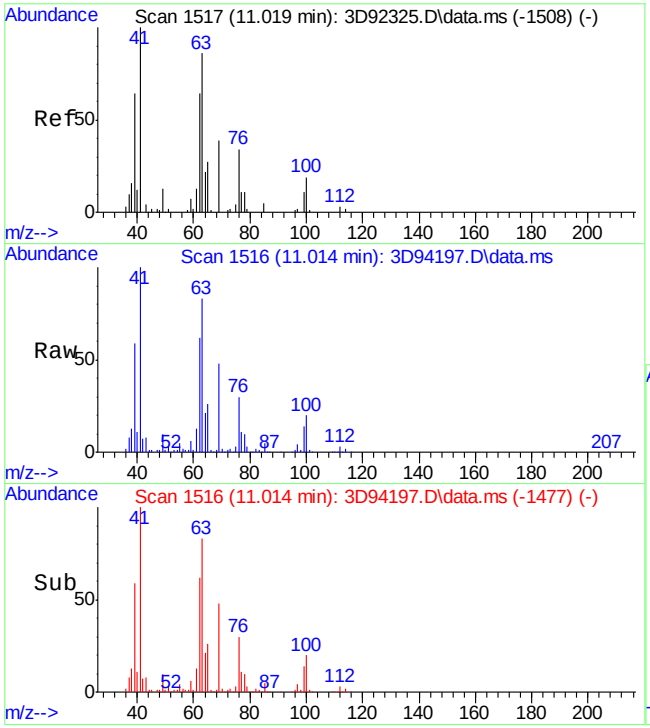


#74
methyl methacrylate
Concen: 198.27 ug/L
RT: 11.009 min Scan# 1515
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 41 Resp: 436504

Ion	Ratio	Lower	Upper
41	100		
69	52.0	21.5	81.5
100	21.3	0.0	50.7

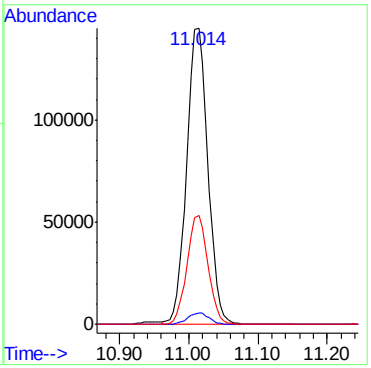


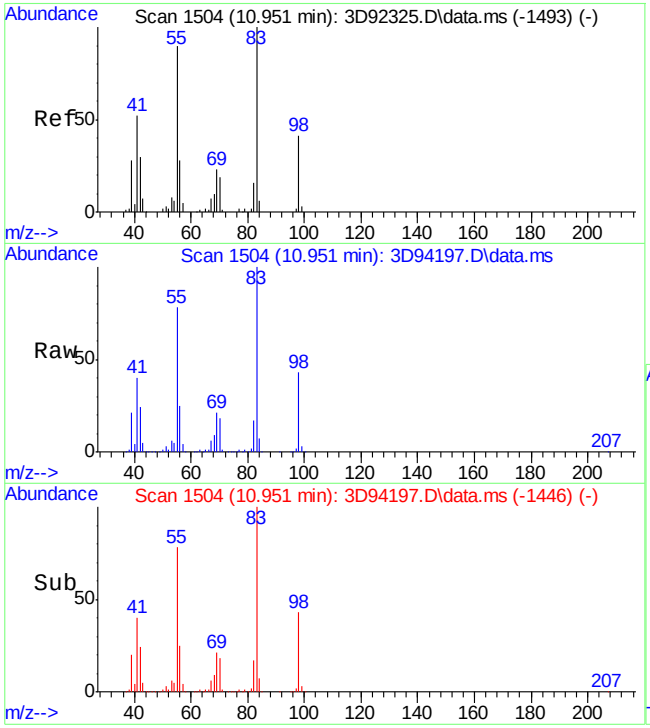


#75
1,2-dichloropropane
Concen: 204.57 ug/L
RT: 11.014 min Scan# 1516
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 63 Resp: 308160

Ion	Ratio	Lower	Upper
63	100		
112	3.9	0.0	33.7
76	36.8	7.1	67.1

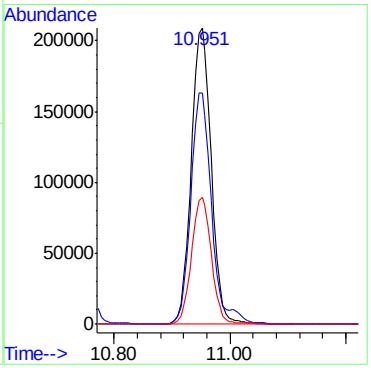


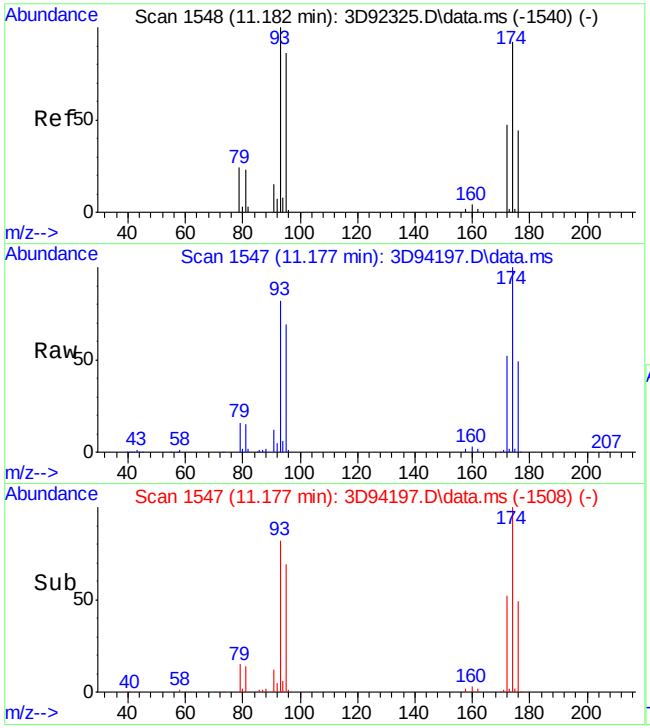


#76
methylcyclohexane
Concen: 224.03 ug/L
RT: 10.951 min Scan# 1504
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 83 Resp: 498840

Ion	Ratio	Lower	Upper
83	100		
55	78.0	48.6	108.6
98	43.0	12.6	72.6

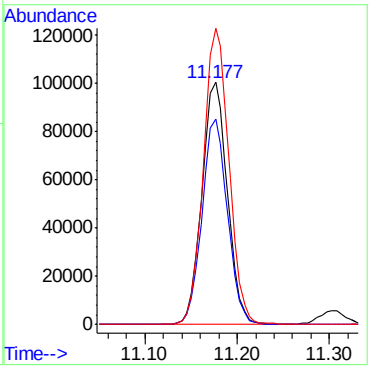


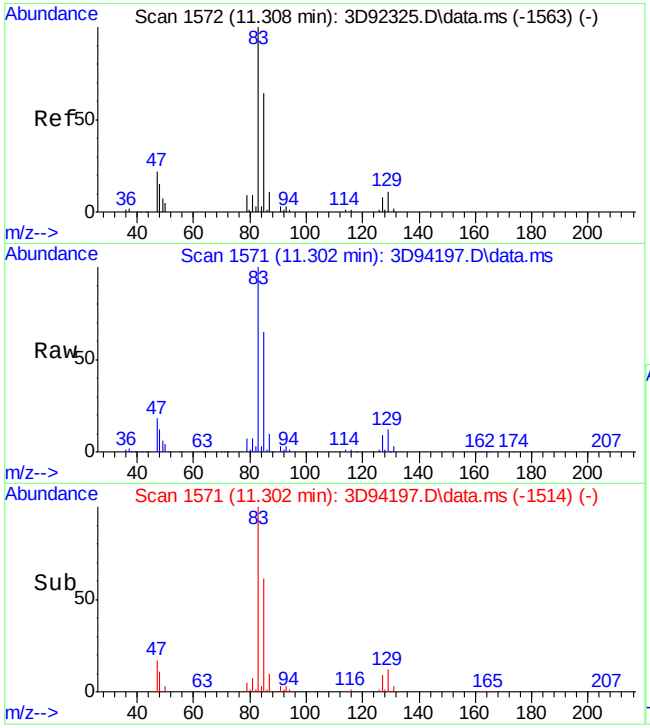


#77
dibromomethane
Concen: 202.53 ug/L
RT: 11.177 min Scan# 1547
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 93 Resp: 192215

Ion	Ratio	Lower	Upper
93	100		
95	84.6	51.7	111.7
174	122.3	84.5	144.5

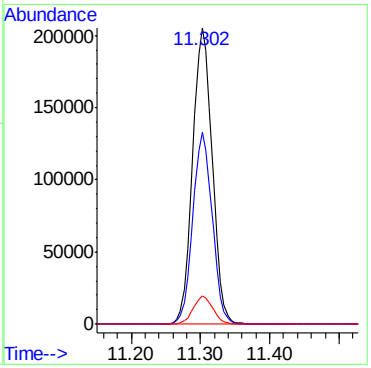


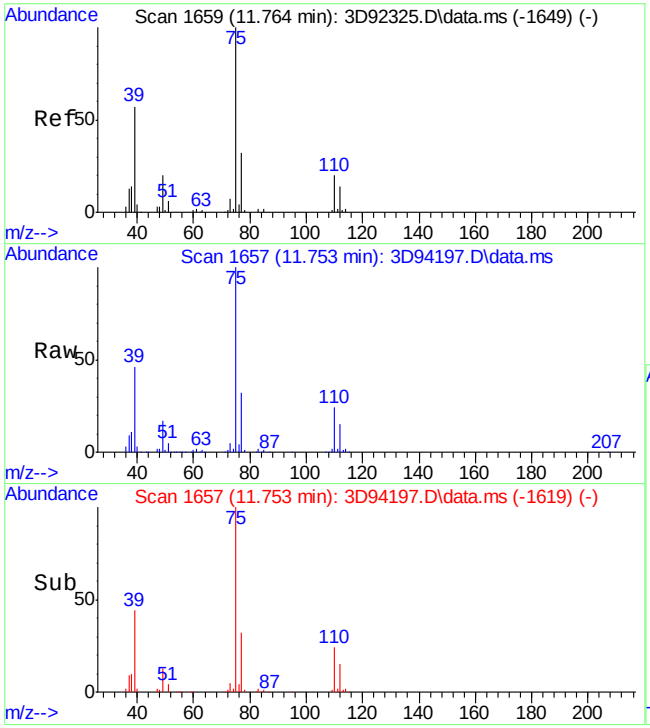


#78
bromodichloromethane
Concen: 208.20 ug/L
RT: 11.302 min Scan# 1571
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 83 Resp: 401934

Ion	Ratio	Lower	Upper
83	100		
85	64.8	33.4	93.4
127	9.3	0.0	39.1

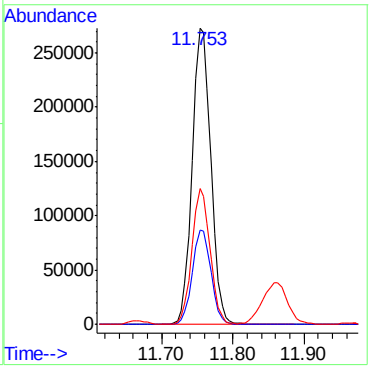


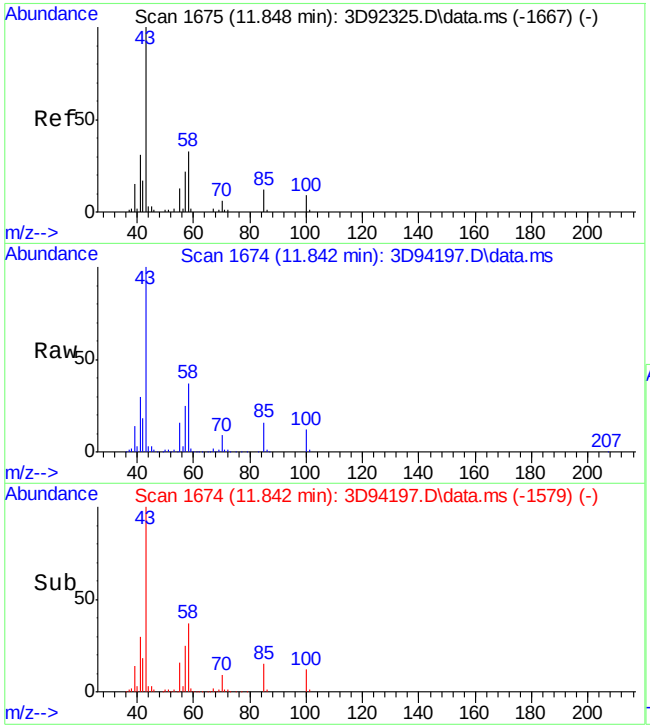


#79
cis-1,3-dichloropropene
Concen: 205.62 ug/L
RT: 11.753 min Scan# 1657
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 75 Resp: 495840

Ion	Ratio	Lower	Upper
75	100		
77	32.0	1.7	61.7
39	45.9	14.6	74.6

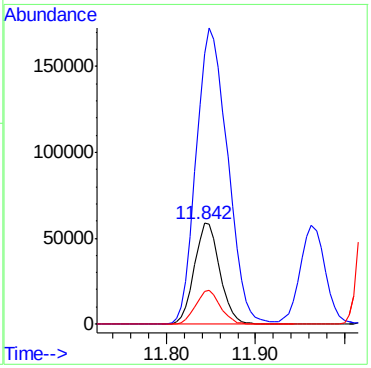


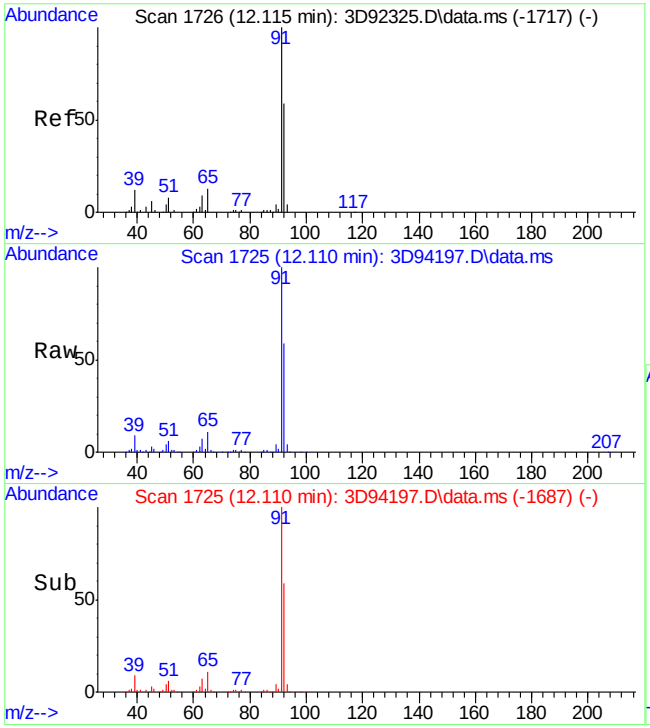


#81
4-methyl-2-pentanone
Concen: 217.44 ug/L
RT: 11.842 min Scan# 1674
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 58 Resp: 116601

Ion	Ratio	Lower	Upper
58	100		
43	362.0	331.5	391.5
100	32.4	3.0	63.0

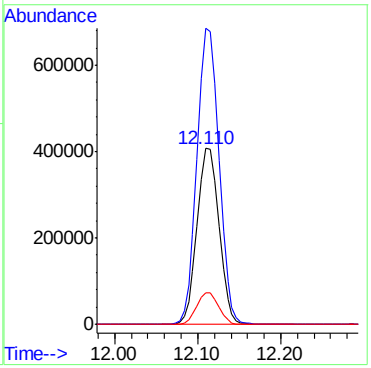


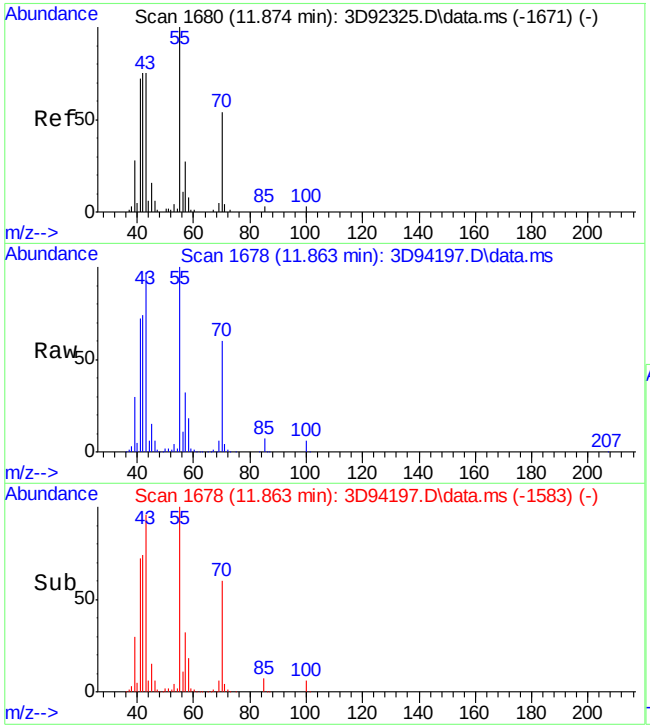


#82
toluene
Concen: 207.91 ug/L
RT: 12.110 min Scan# 1725
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 92 Resp: 742637

Ion	Ratio	Lower	Upper
92	100		
91	168.3	137.1	197.1
65	18.0	0.0	48.7

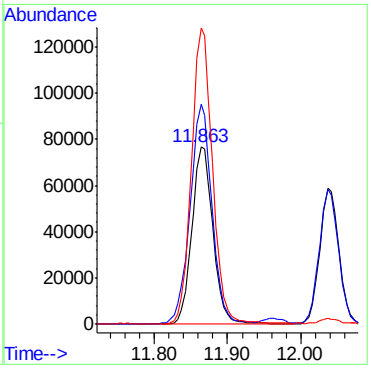


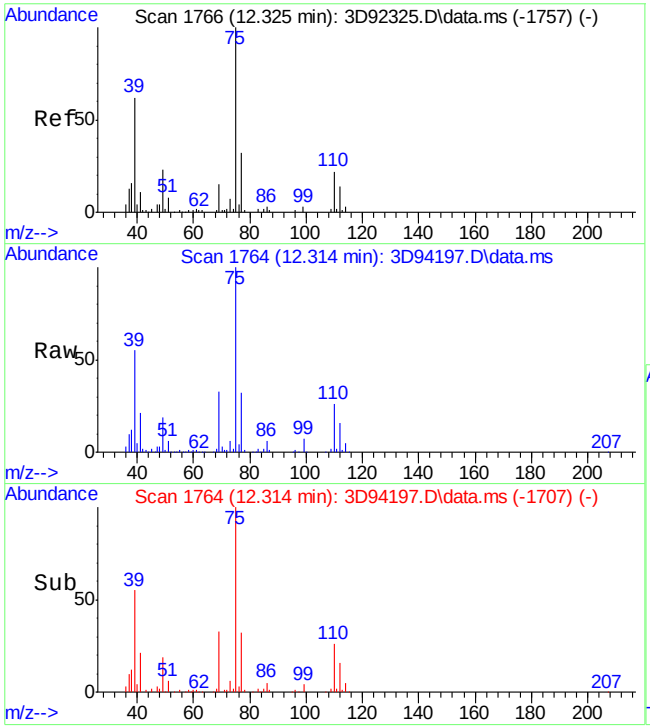


#83
3-methyl-1-butanol
Concen: 4330.43 ug/L
RT: 11.863 min Scan# 1678
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 70 Resp: 153117

Ion	Ratio	Lower	Upper
70	100		
42	129.5	102.8	162.8
55	167.6	140.8	200.8

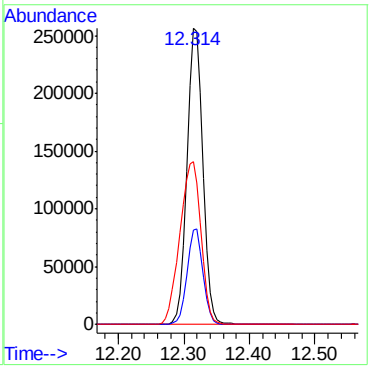


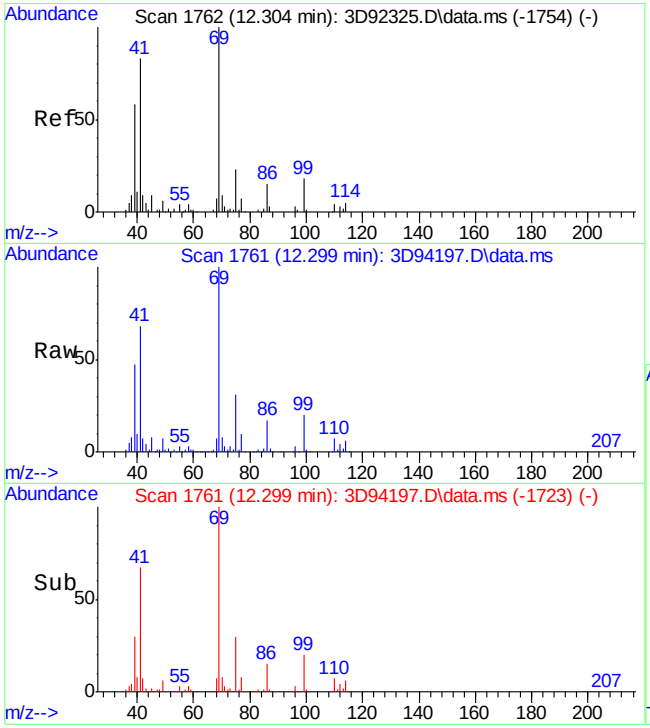


#84
trans-1,3-dichloropropene
Concen: 205.06 ug/L
RT: 12.314 min Scan# 1764
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 75 Resp: 439236

Ion	Ratio	Lower	Upper
75	100		
77	31.7	2.0	62.0
39	54.9	24.5	84.5

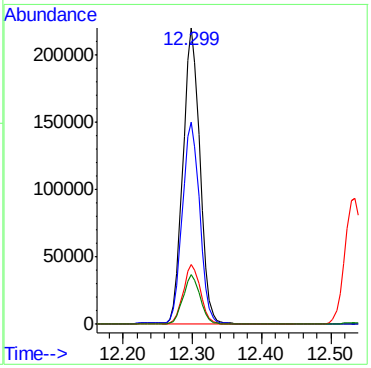


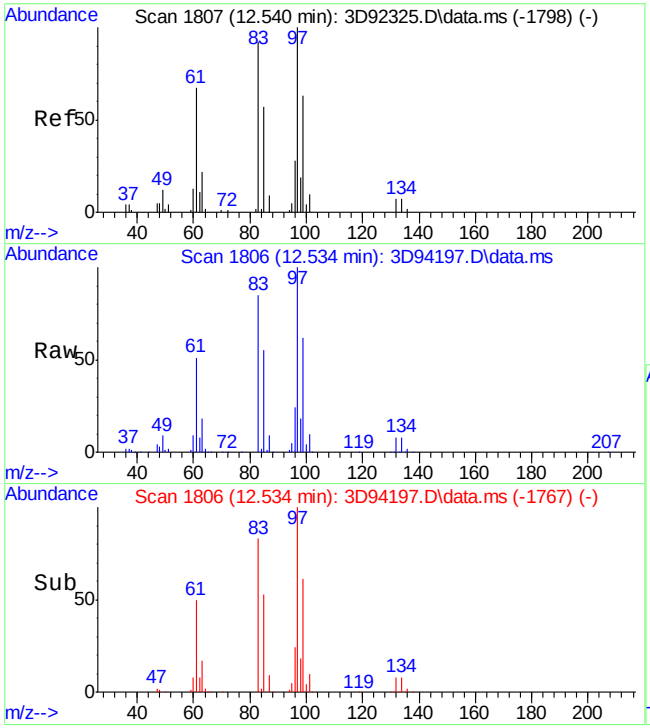


#85
ethyl methacrylate
Concen: 220.16 ug/L
RT: 12.299 min Scan# 1761
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 69 Resp: 373131

Ion	Ratio	Lower	Upper
69	100		
41	68.2	40.4	100.4
99	20.1	0.0	50.5
86	16.5	0.0	45.2

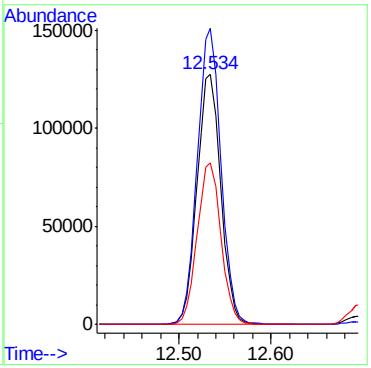


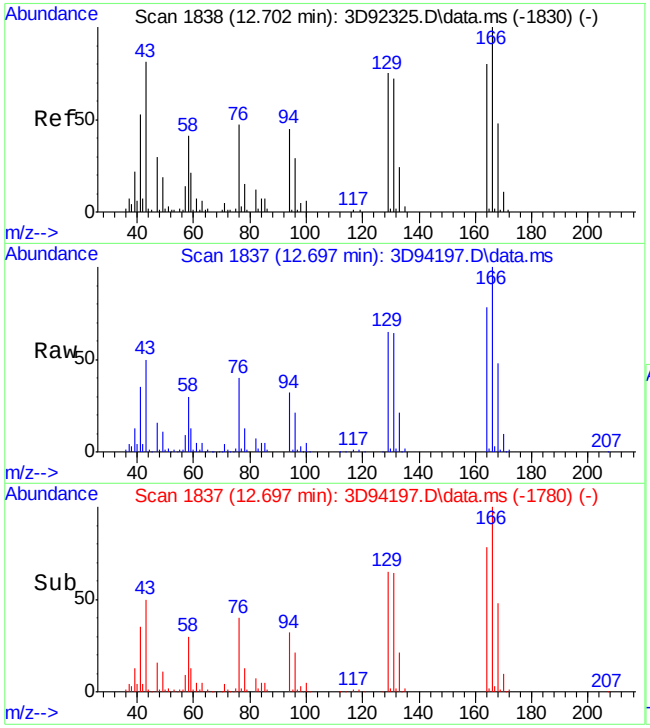


#86
1,1,2-trichloroethane
Concen: 207.60 ug/L
RT: 12.534 min Scan# 1806
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 83 Resp: 227561

Ion	Ratio	Lower	Upper
83	100		
97	118.3	84.6	144.6
85	64.5	35.4	95.4

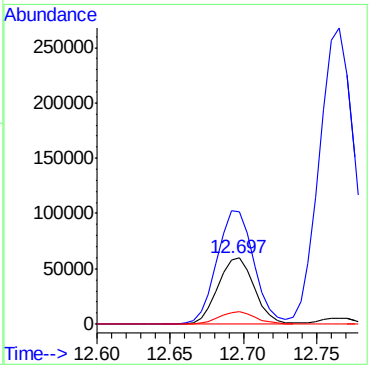


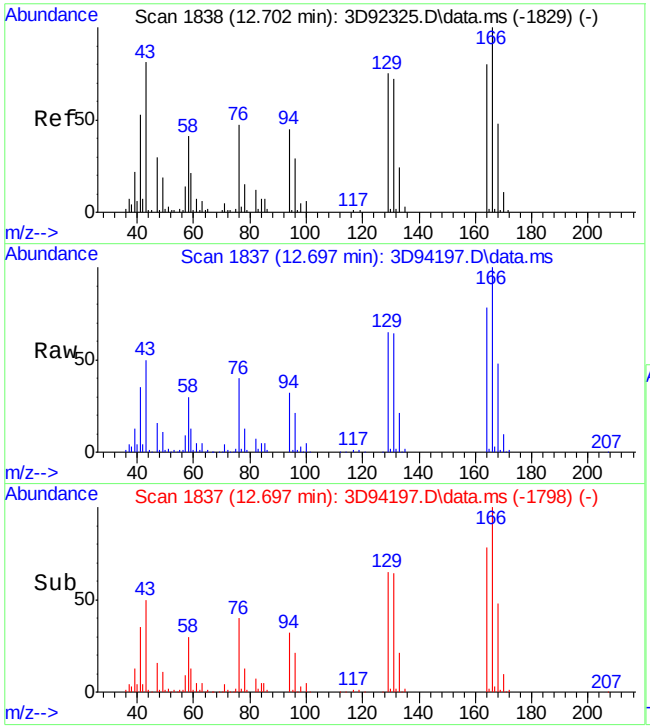


#87
2-hexanone
Concen: 219.32 ug/L
RT: 12.697 min Scan# 1837
Delta R.T. 0.001 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 58 Resp: 102805

Ion	Ratio	Lower	Upper
58	100		
43	169.8	143.4	203.4
100	18.1	0.0	48.0

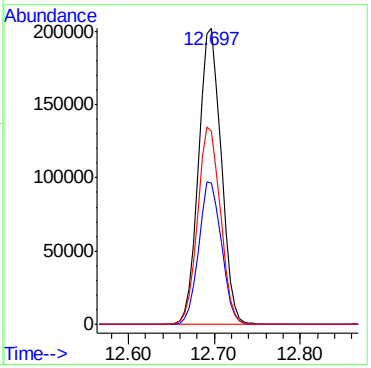


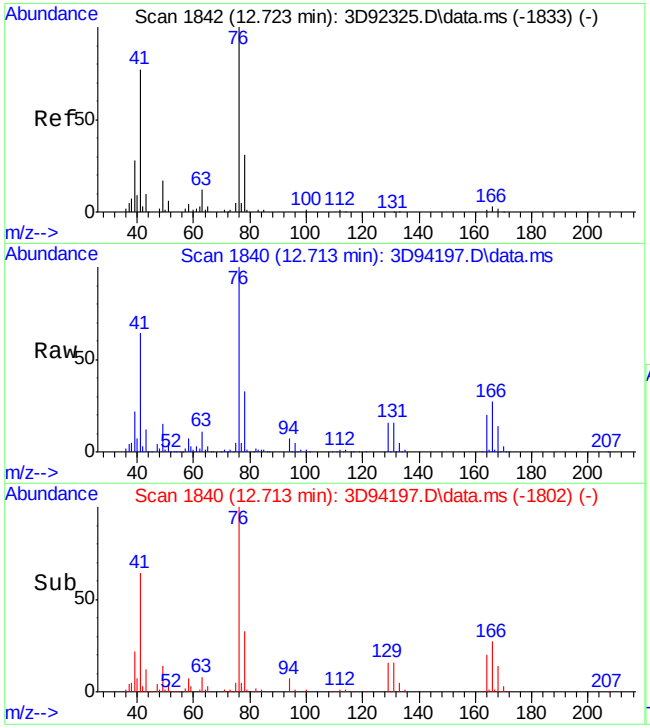


#89
tetrachloroethene
Concen: 202.31 ug/L
RT: 12.697 min Scan# 1837
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:166 Resp: 360272

Ion	Ratio	Lower	Upper
166	100		
168	47.9	19.9	79.9
129	65.3	38.6	98.6

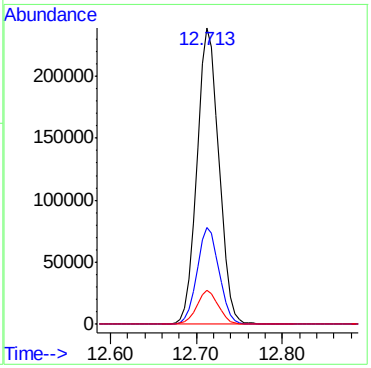


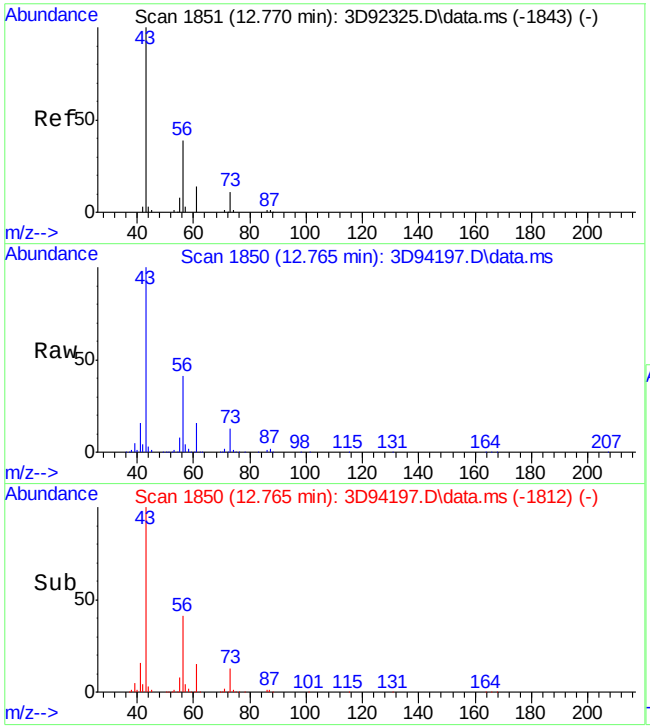


#90
1,3-dichloropropane
Concen: 195.00 ug/L
RT: 12.713 min Scan# 1840
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 76 Resp: 413078

Ion	Ratio	Lower	Upper
76	100		
78	32.7	2.6	62.6
63	11.2	0.0	41.3

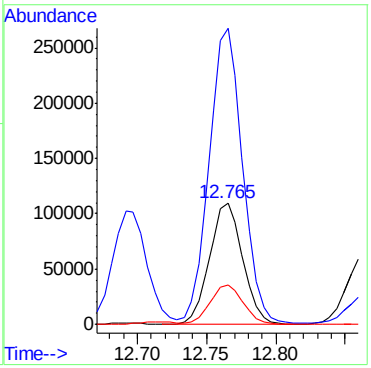


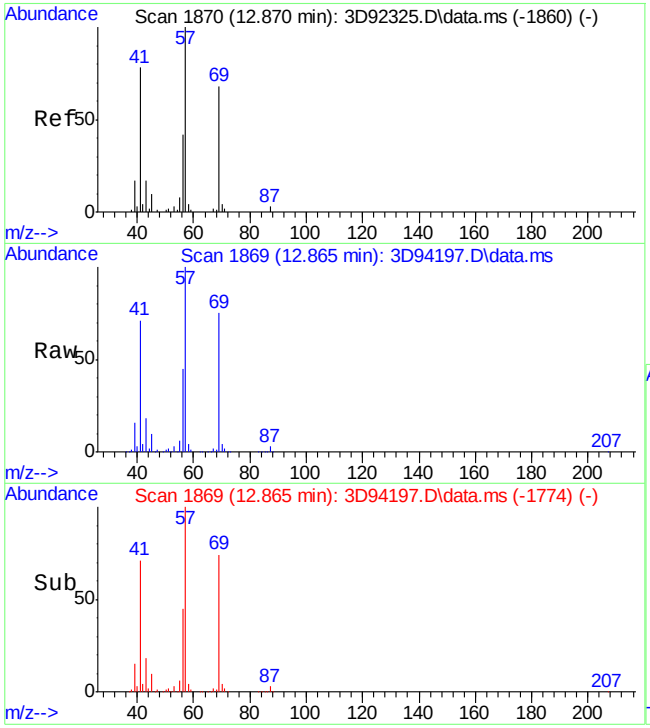


#91
butyl acetate
Concen: 202.43 ug/L
RT: 12.765 min Scan# 1850
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 56 Resp: 183846

Ion	Ratio	Lower	Upper
56	100		
43	242.7	206.2	266.2
73	32.3	2.1	62.1

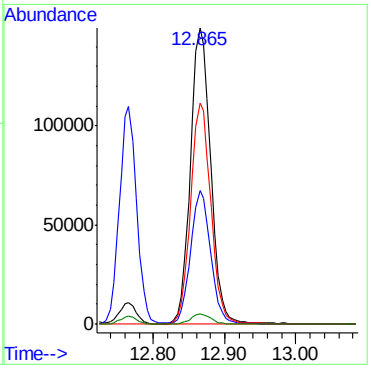


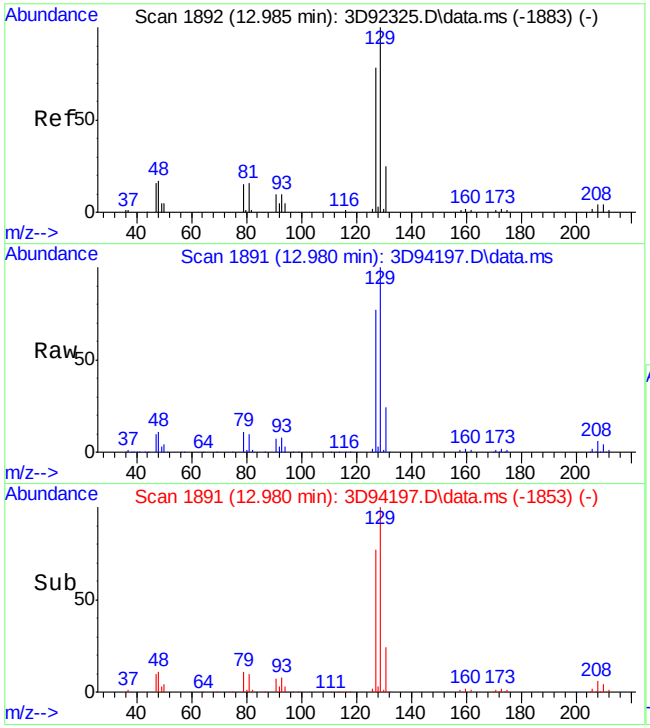


#92
3,3-Dimethyl-1-Butanol
Concen: 2060.72 ug/L
RT: 12.865 min Scan# 1869
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 57 Resp: 296292

Ion	Ratio	Lower	Upper
57	100		
56	44.5	35.8	53.6
69	74.6	59.3	88.9
87	3.3	2.7	4.1

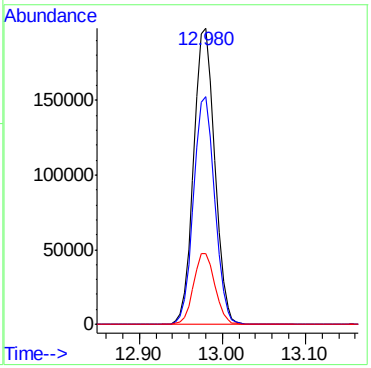


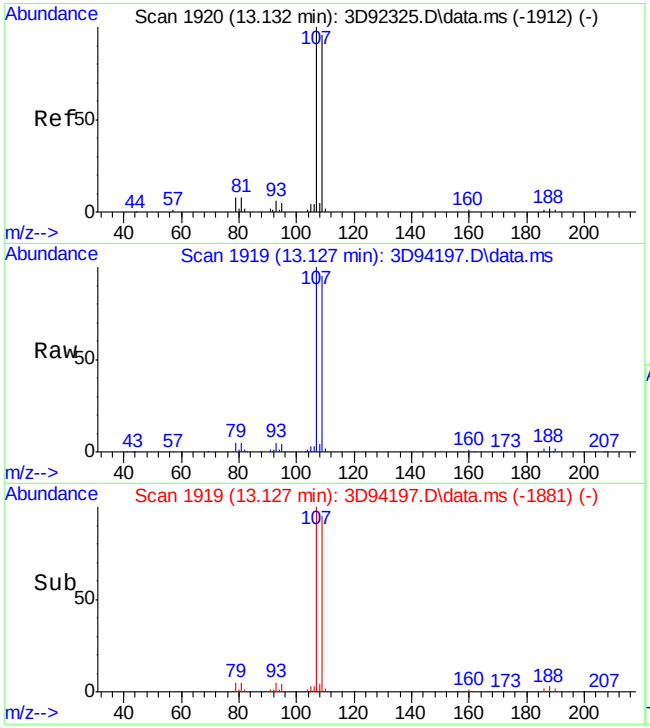


#93
dibromochloromethane
Concen: 204.53 ug/L
RT: 12.980 min Scan# 1891
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:129 Resp: 347812

Ion	Ratio	Lower	Upper
129	100		
127	76.8	48.3	108.3
131	24.0	0.0	54.2

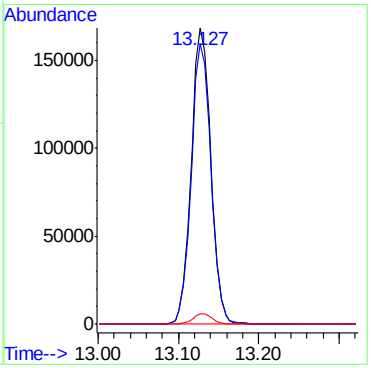


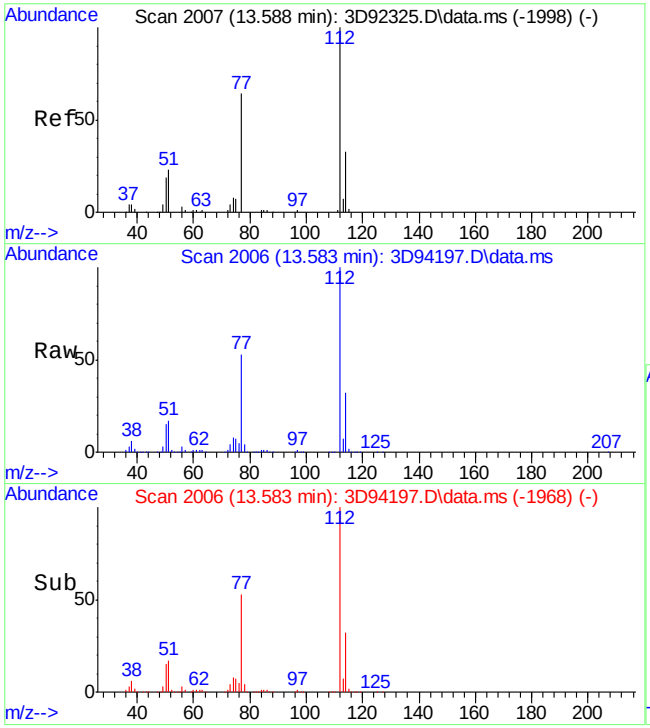


#94
1,2-dibromoethane
Concen: 199.59 ug/L
RT: 13.127 min Scan# 1919
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:107 Resp: 286351

Ion	Ratio	Lower	Upper
107	100		
109	94.7	65.3	125.3
188	3.3	0.0	33.4

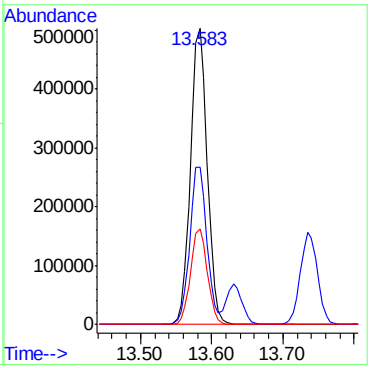


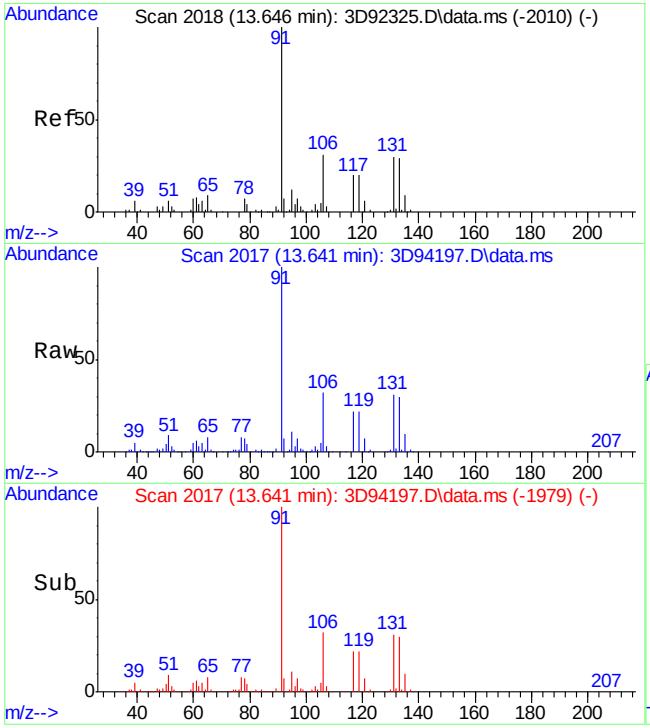


#96
chlorobenzene
Concen: 200.46 ug/L
RT: 13.583 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:112 Resp: 821854

Ion	Ratio	Lower	Upper
112	100		
77	53.1	22.5	82.5
114	32.2	2.5	62.5

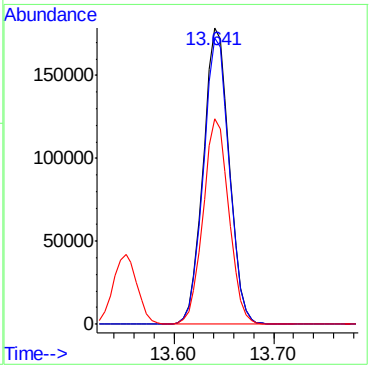


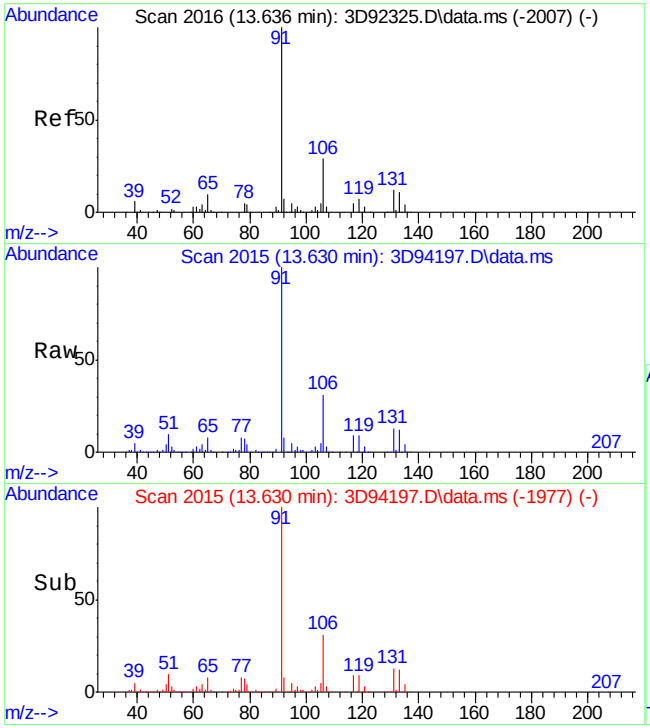


#97
1,1,1,2-tetrachloroethane
Concen: 199.00 ug/L
RT: 13.641 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:131 Resp: 322408

Ion	Ratio	Lower	Upper
131	100		
133	96.4	63.6	123.6
119	69.4	37.5	97.5

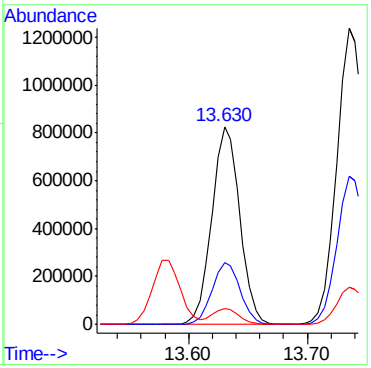


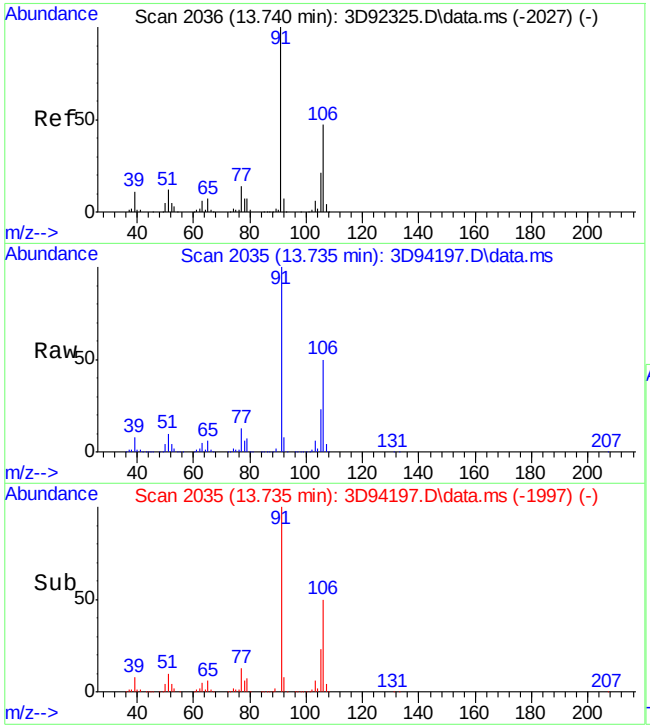


#98
ethylbenzene
Concen: 200.15 ug/L
RT: 13.630 min Scan# 2015
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 91 Resp: 1354826

Ion	Ratio	Lower	Upper
91	100		
106	31.3	1.2	61.2
77	8.2	0.0	38.2

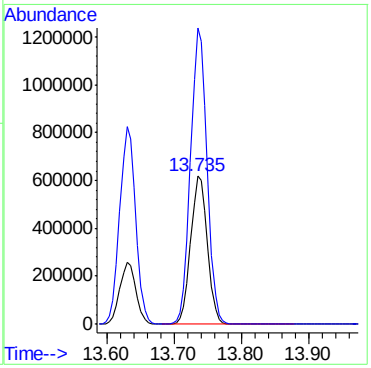


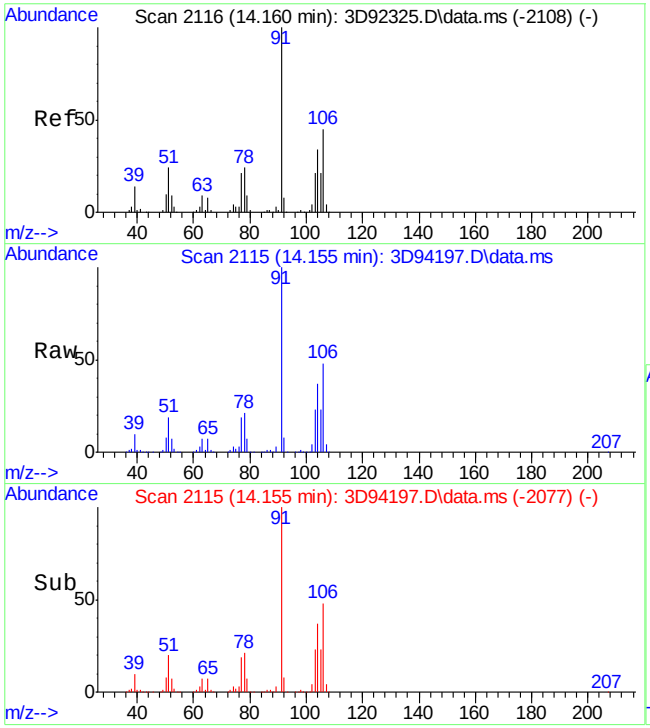


#99
m,p-xylene
Concen: 403.36 ug/L
RT: 13.735 min Scan# 2035
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:106 Resp: 1056159

Ion	Ratio	Lower	Upper
106	100		
91	200.2	139.0	258.2

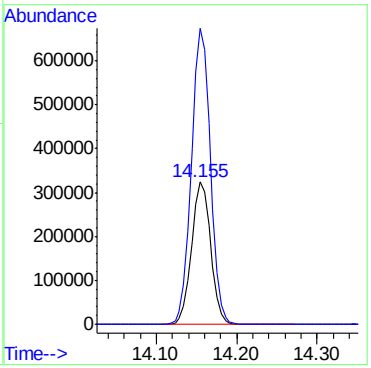


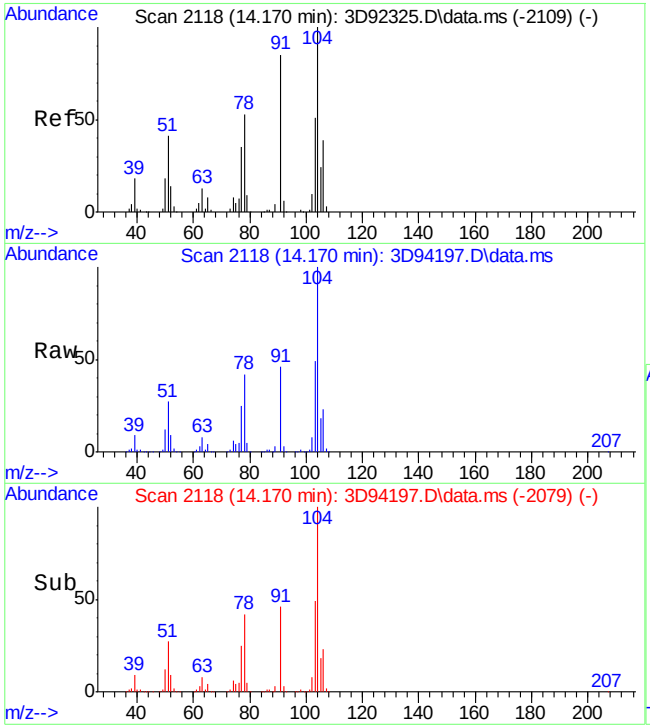


#100
o-xylene
Concen: 202.55 ug/L
RT: 14.155 min Scan# 2115
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:106 Resp: 534606

Ion	Ratio	Lower	Upper
106	100		
91	208.2	146.5	272.1

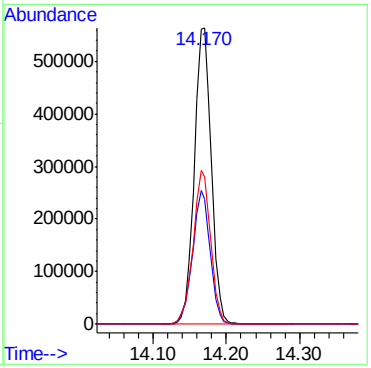




#101
styrene
Concen: 211.05 ug/L
RT: 14.170 min Scan# 2118
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:104 Resp: 912531

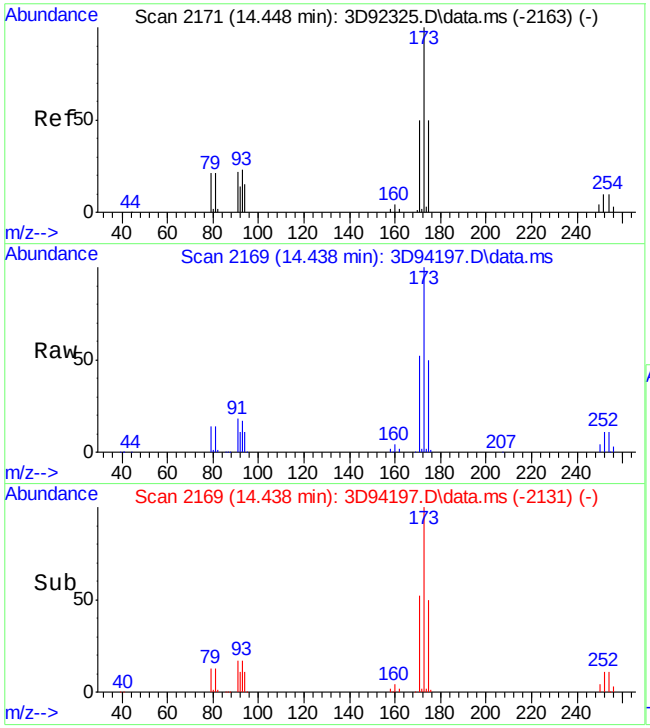
Ion	Ratio	Lower	Upper
104	100		
78	41.9	12.8	72.8
103	49.5	20.3	80.3



7.7.9

7

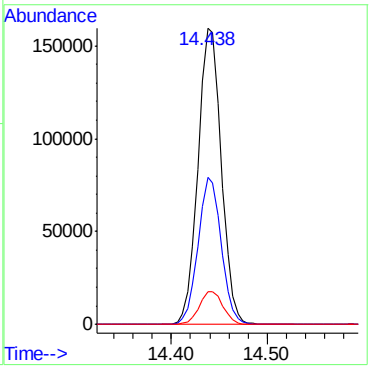
3D94197.D M3D4058.M Thu Dec 19 12:37:21 2013 3D Page 46

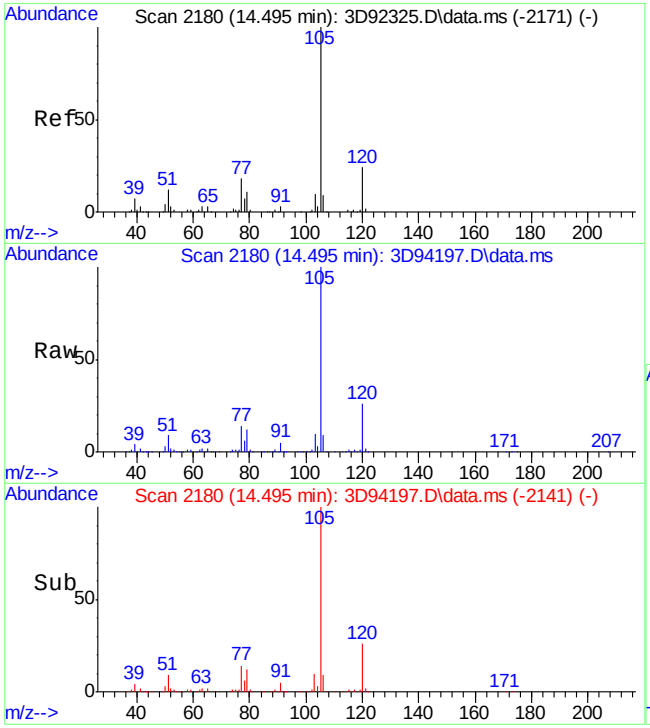


#103
bromoform
Concen: 209.77 ug/L
RT: 14.438 min Scan# 2169
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:173 Resp: 268341

Ion	Ratio	Lower	Upper
173	100		
175	49.6	18.6	78.6
254	11.4	0.0	41.1

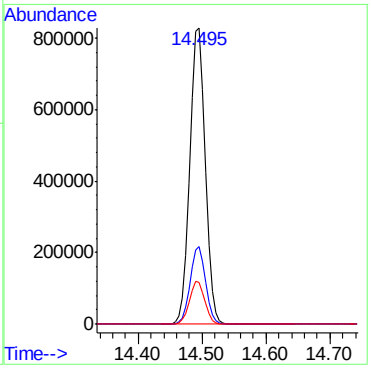


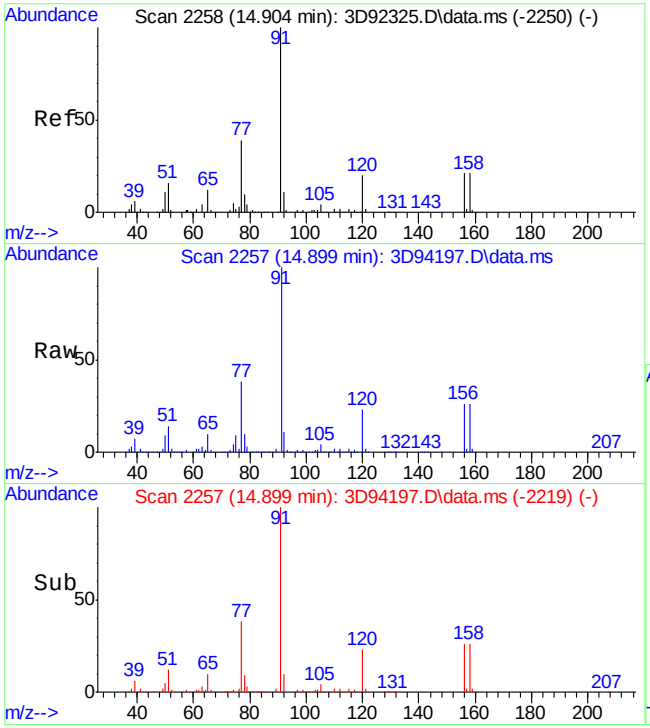


#105
isopropylbenzene
Concen: 205.28 ug/L
RT: 14.495 min Scan# 2180
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:105 Resp: 1389594

Ion	Ratio	Lower	Upper
105	100		
120	26.2	0.0	55.8
77	13.9	0.0	44.4

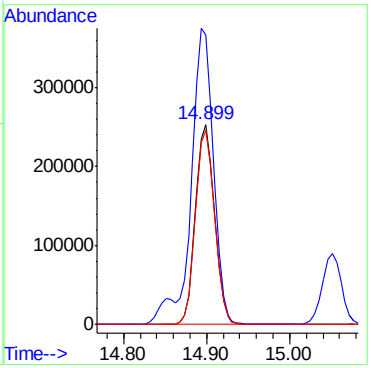


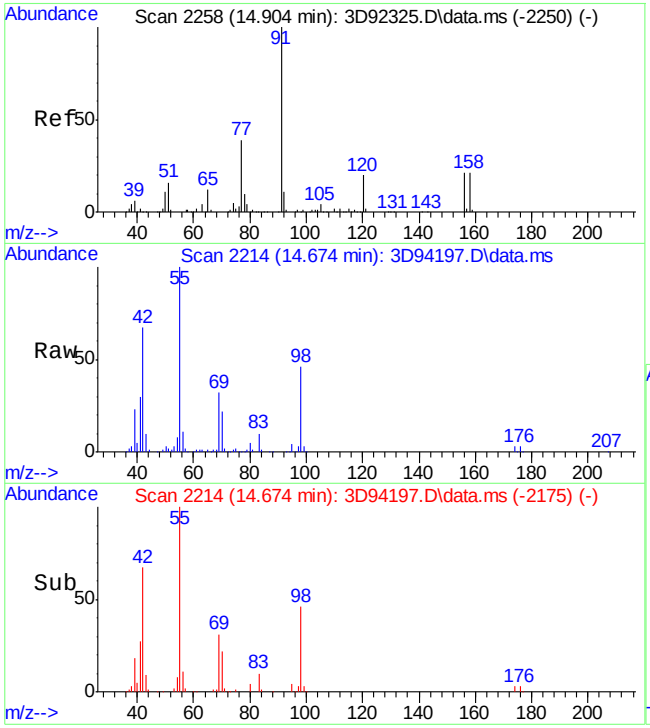


#107
bromobenzene
Concen: 201.82 ug/L
RT: 14.899 min Scan# 2257
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:156 Resp: 398349

Ion	Ratio	Lower	Upper
156	100		
77	144.6	115.4	175.4
158	97.2	67.8	127.8

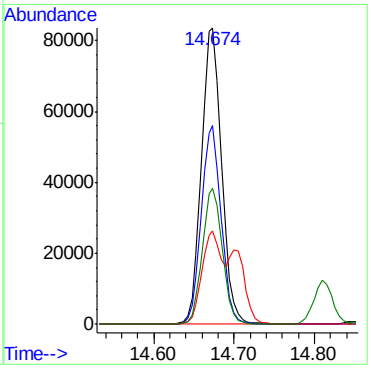


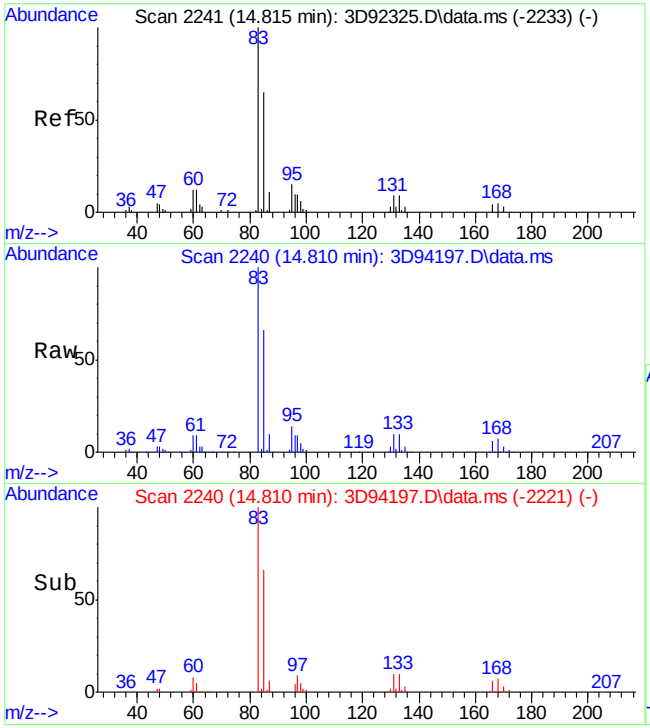


#108
cyclohexanone
Concen: 1907.52 ug/L
RT: 14.674 min Scan# 2214
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 55 Resp: 145994

Ion	Ratio	Lower	Upper
55	100		
42	67.2	35.5	95.5
69	31.6	1.0	61.0
98	46.0	15.1	75.1

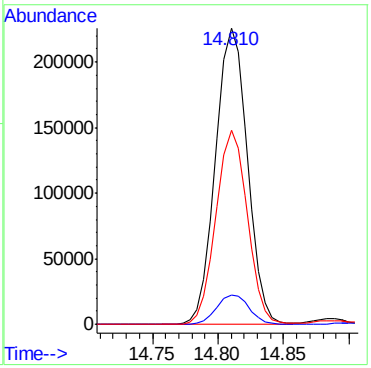


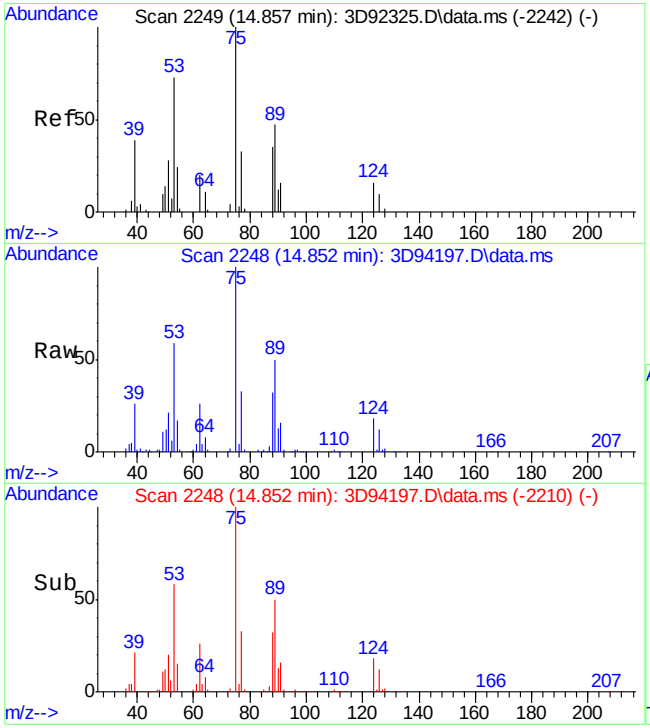


#109
1,1,2,2-tetrachloroethane
Concen: 188.92 ug/L
RT: 14.810 min Scan# 2240
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 83 Resp: 380841

Ion	Ratio	Lower	Upper
83	100		
131	9.9	0.0	40.2
85	65.6	33.4	93.4

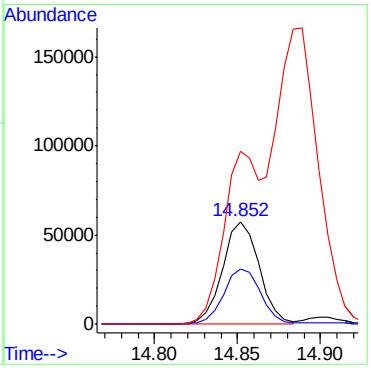


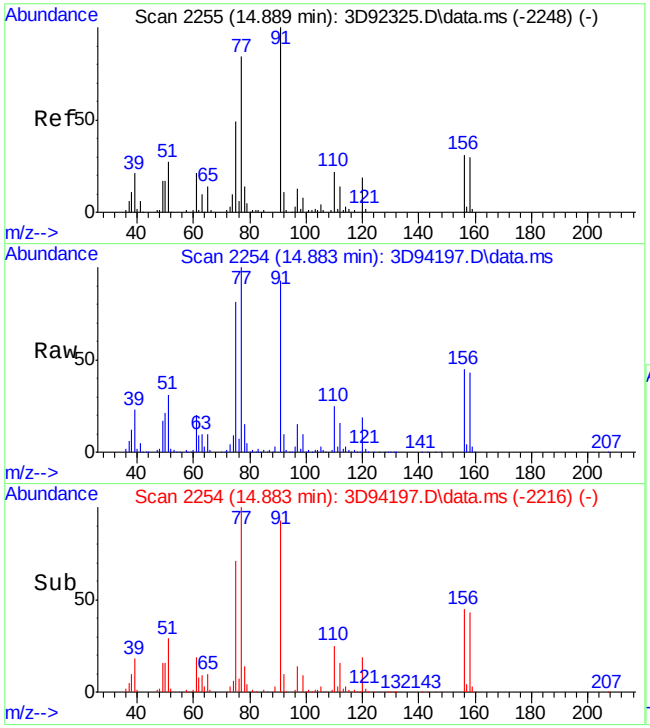


#110
trans-1,4-dichloro-2-butene
Concen: 199.44 ug/L
RT: 14.852 min Scan# 2248
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 53 Resp: 88248

Ion	Ratio	Lower	Upper
53	100		
88	53.4	27.1	87.1
75	169.0	132.8	192.8

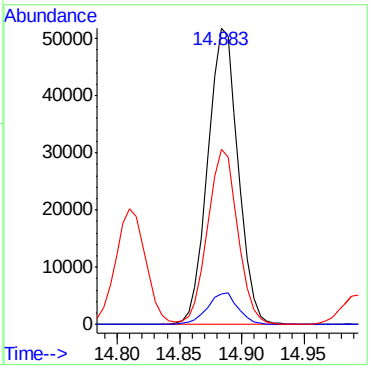


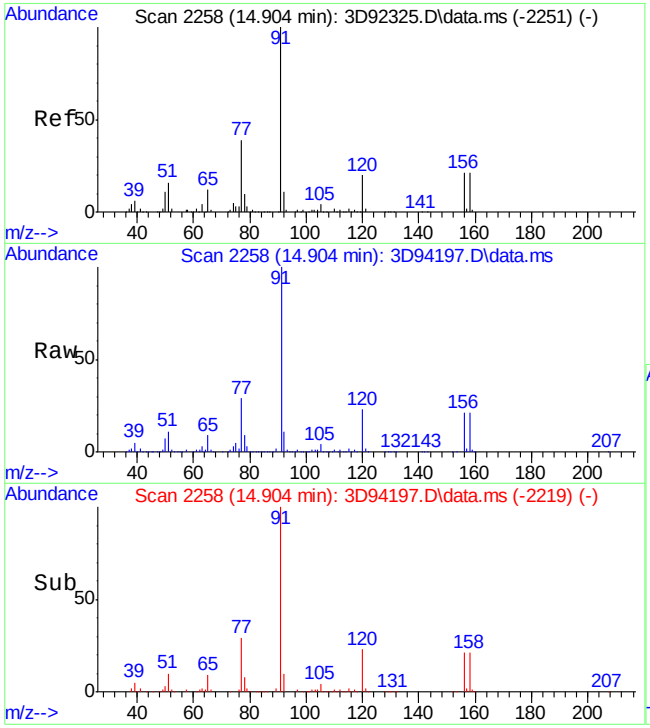


#111
1,2,3-trichloropropane
Concen: 197.86 ug/L
RT: 14.883 min Scan# 2254
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:110 Resp: 87476

Ion	Ratio	Lower	Upper
110	100		
111	10.1	0.0	39.5
97	59.3	25.8	85.8

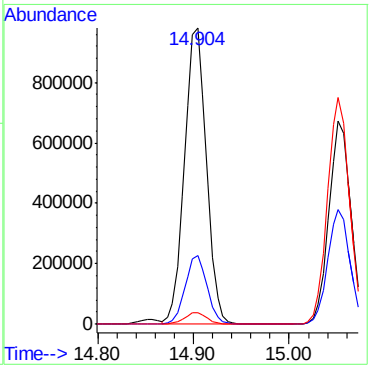


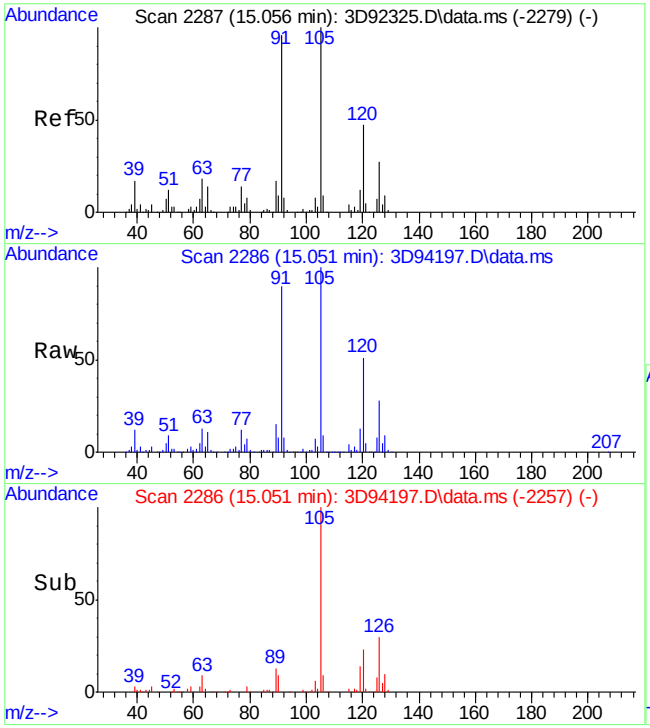


#112
n-propylbenzene
Concen: 202.03 ug/L
RT: 14.904 min Scan# 2258
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 91 Resp: 1550990

Ion	Ratio	Lower	Upper
91	100		
120	23.2	0.0	52.2
105	3.8	0.0	33.7

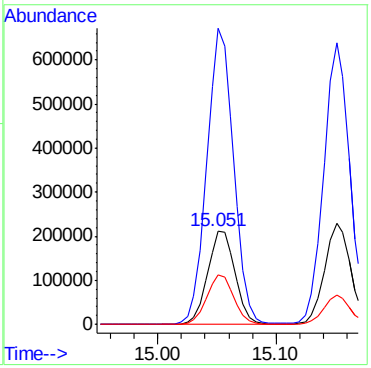


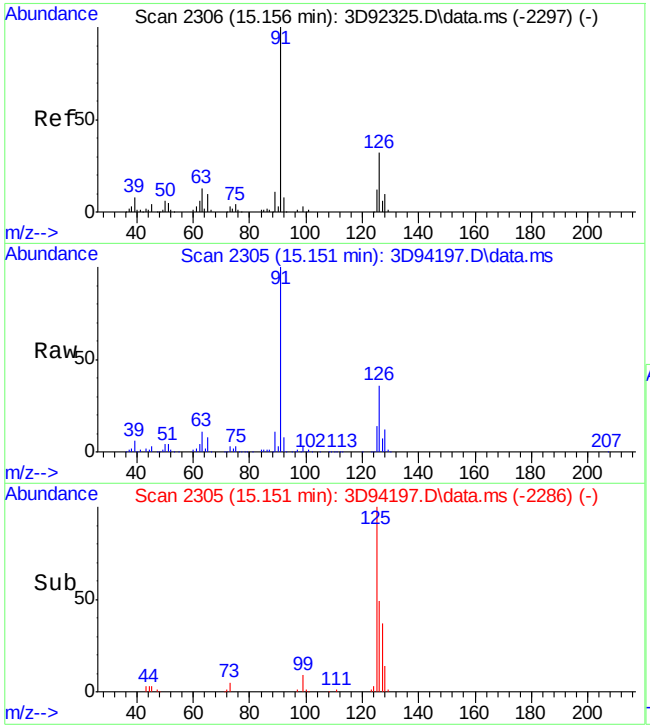


#114
2-chlorotoluene
Concen: 201.66 ug/L
RT: 15.051 min Scan# 2286
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:126 Resp: 341545

Ion	Ratio	Lower	Upper
126	100		
91	316.7	272.2	332.2
89	53.5	21.0	81.0

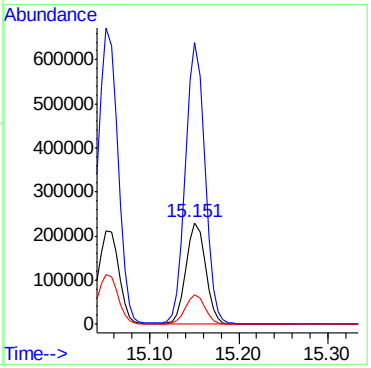


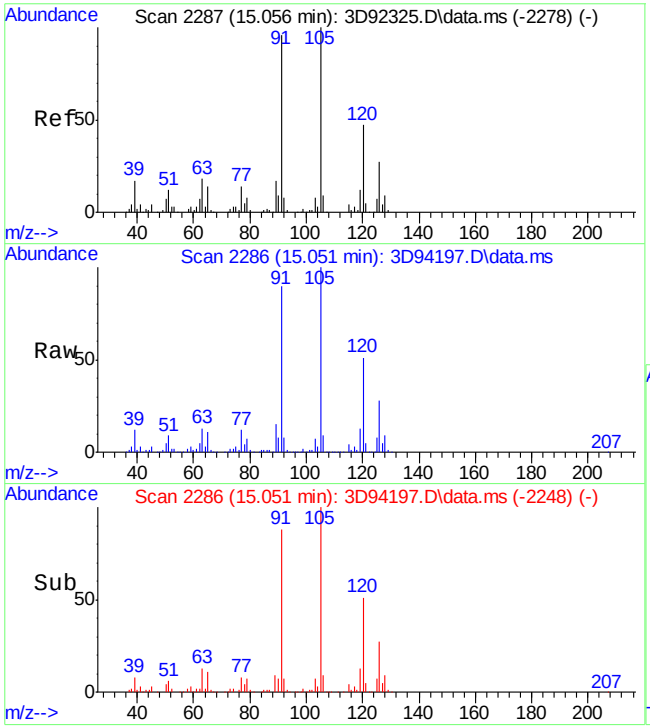


#115
4-chlorotoluene
Concen: 205.76 ug/L
RT: 15.151 min Scan# 2305
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:126 Resp: 351587

Ion	Ratio	Lower	Upper
126	100		
91	278.5	240.5	300.5
89	29.3	0.0	58.4

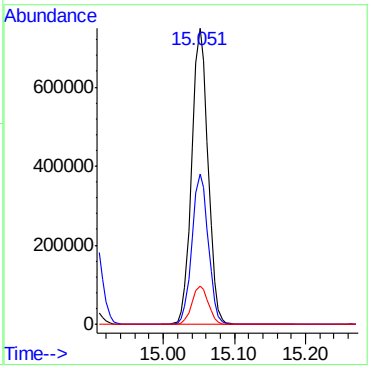


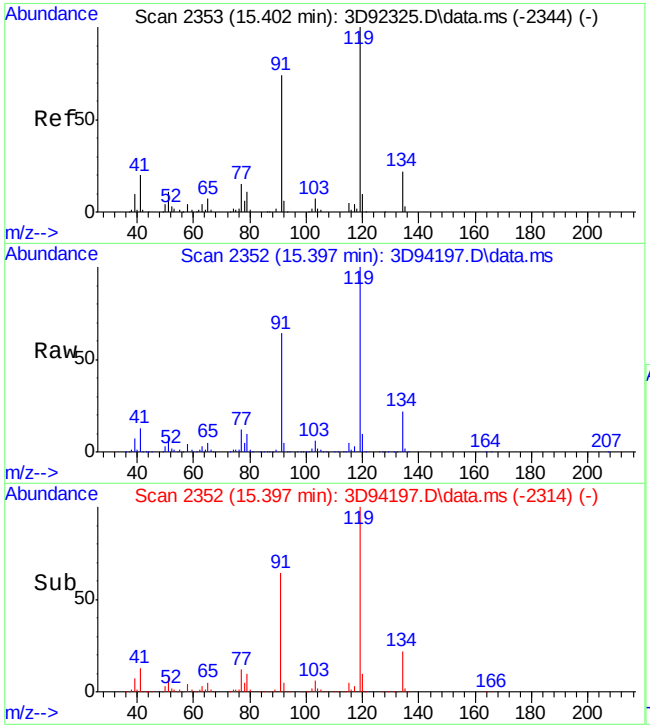


#116
1,3,5-trimethylbenzene
Concen: 208.01 ug/L
RT: 15.051 min Scan# 2286
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:105 Resp: 1188738

Ion	Ratio	Lower	Upper
105	100		
120	50.9	21.2	81.2
119	13.1	0.0	43.0

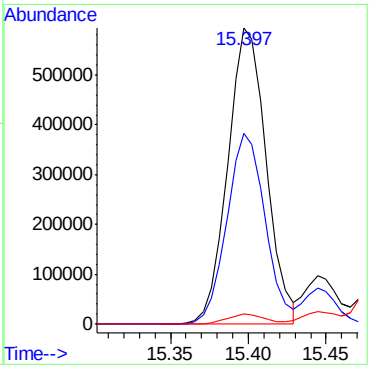


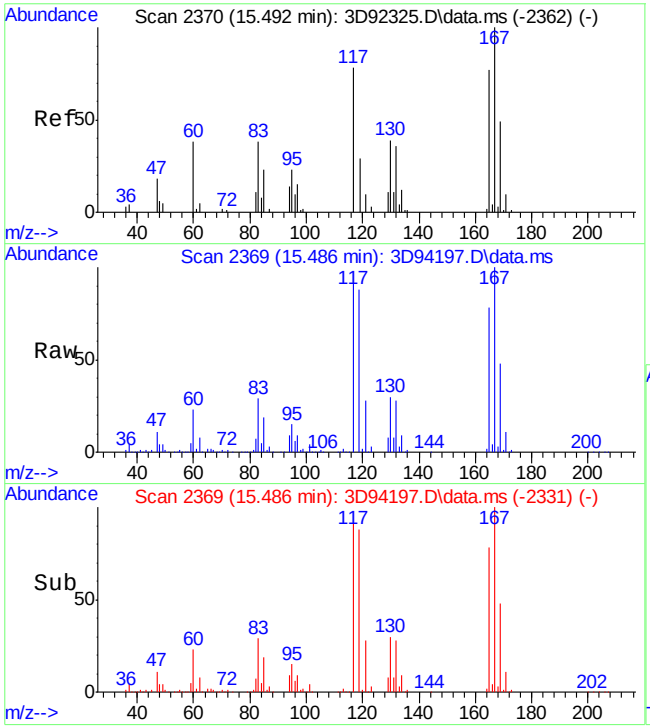


#117
tert-butylbenzene
Concen: 205.95 ug/L
RT: 15.397 min Scan# 2352
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:119 Resp: 1021057

Ion	Ratio	Lower	Upper
119	100		
91	64.4	33.7	93.7
117	3.4	0.0	33.4

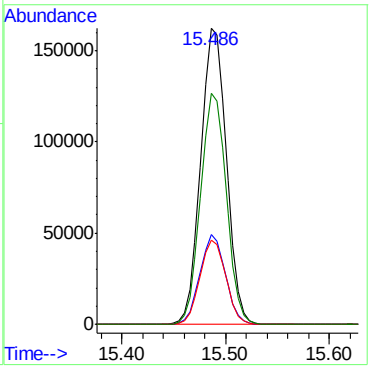


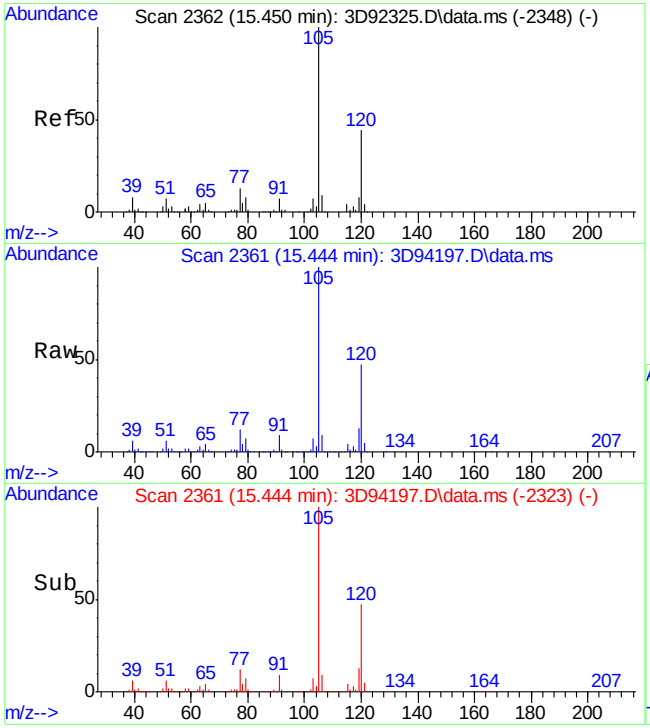


#118
pentachloroethane
Concen: 210.12 ug/L
RT: 15.486 min Scan# 2369
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:167 Resp: 278589

Ion	Ratio	Lower	Upper
167	100		
130	30.2	1.5	61.5
132	28.3	0.0	58.9
165	78.0	50.0	110.0

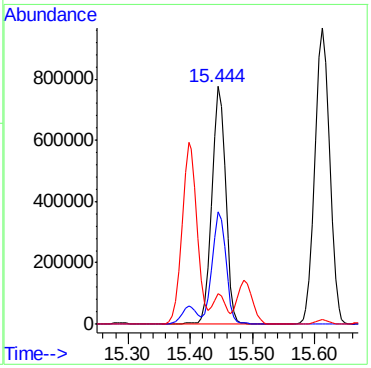


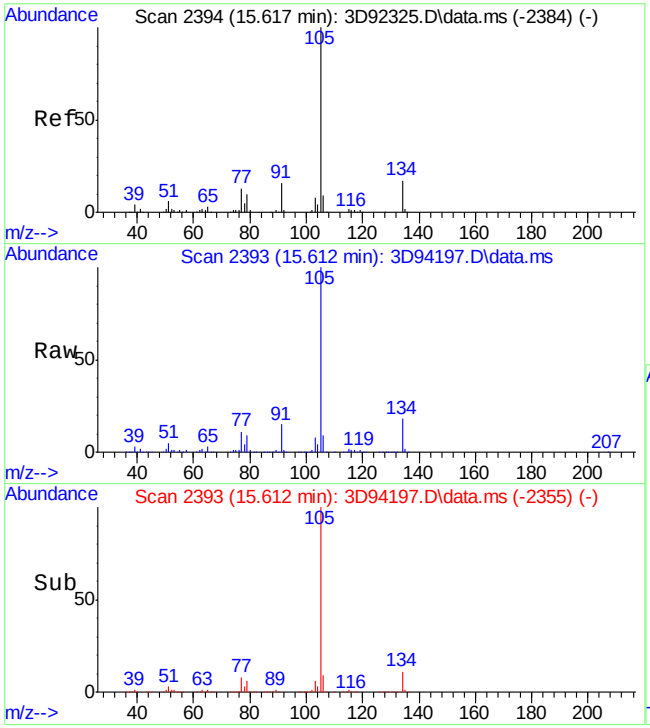


#119
1,2,4-trimethylbenzene
Concen: 209.68 ug/L
RT: 15.444 min Scan# 2361
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:105 Resp: 1185766

Ion	Ratio	Lower	Upper
105	100		
120	47.3	17.4	77.4
119	12.6	0.0	42.0

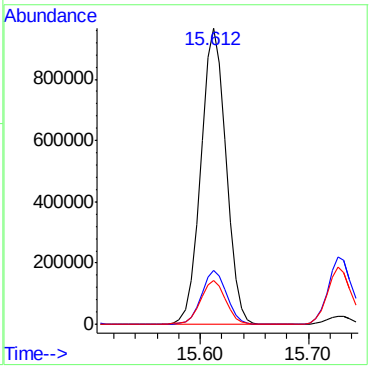


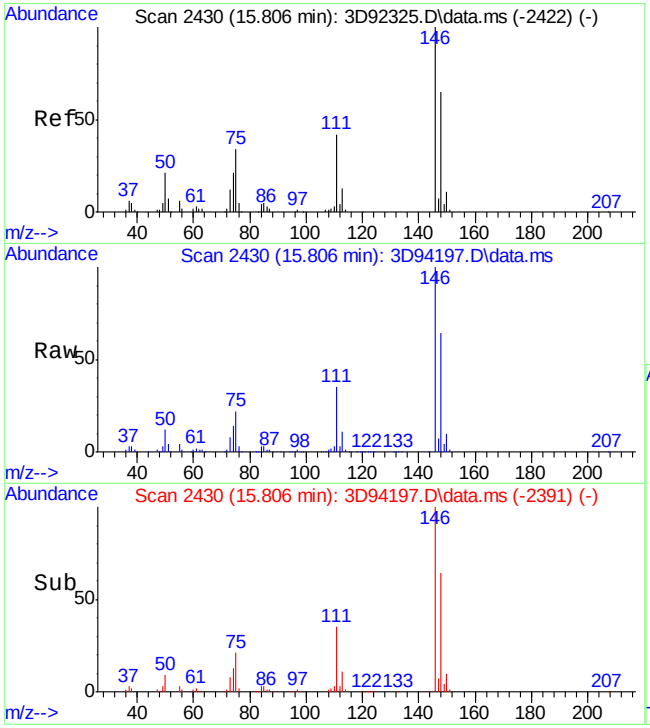


#120
sec-butylbenzene
Concen: 207.88 ug/L
RT: 15.612 min Scan# 2393
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:105 Resp: 1567534

Ion	Ratio	Lower	Upper
105	100		
134	18.1	0.0	48.2
91	14.7	0.0	44.6

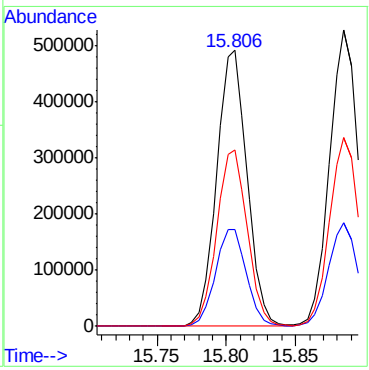


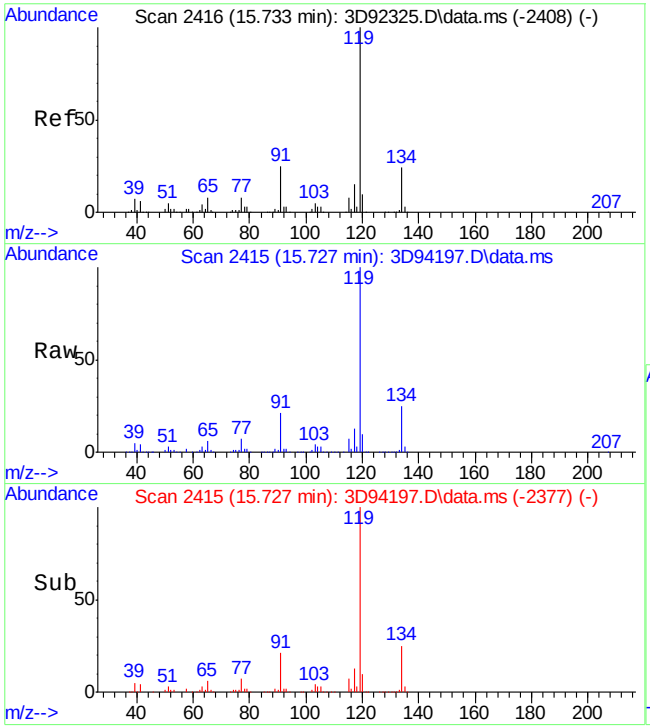


#121
1,3-dichlorobenzene
Concen: 203.33 ug/L
RT: 15.806 min Scan# 2430
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:146 Resp: 758643

Ion	Ratio	Lower	Upper
146	100		
111	35.0	5.6	65.6
148	63.7	34.0	94.0

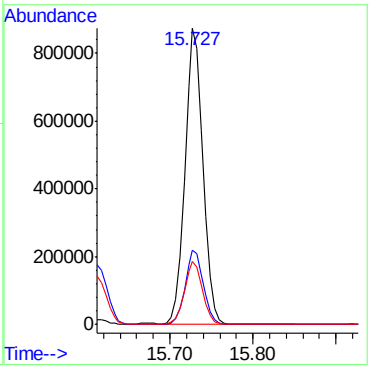


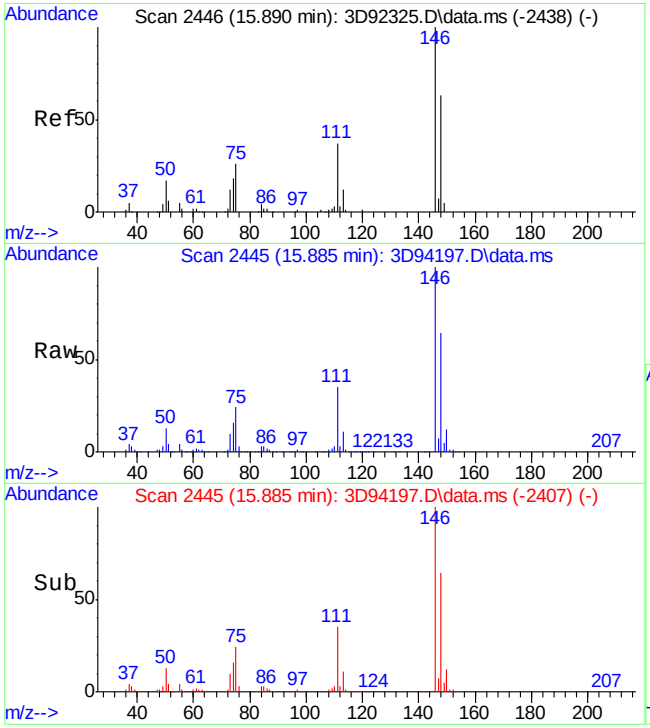


#122
p-isopropyltoluene
Concen: 210.05 ug/L
RT: 15.727 min Scan# 2415
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:119 Resp: 1323749

Ion	Ratio	Lower	Upper
119	100		
134	25.0	0.0	55.4
91	21.4	0.0	51.1

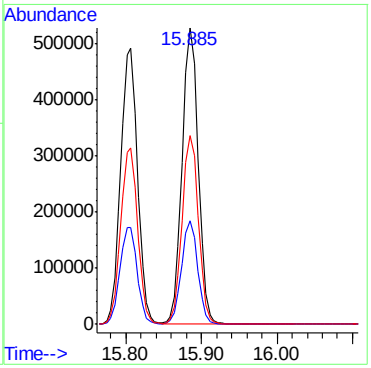


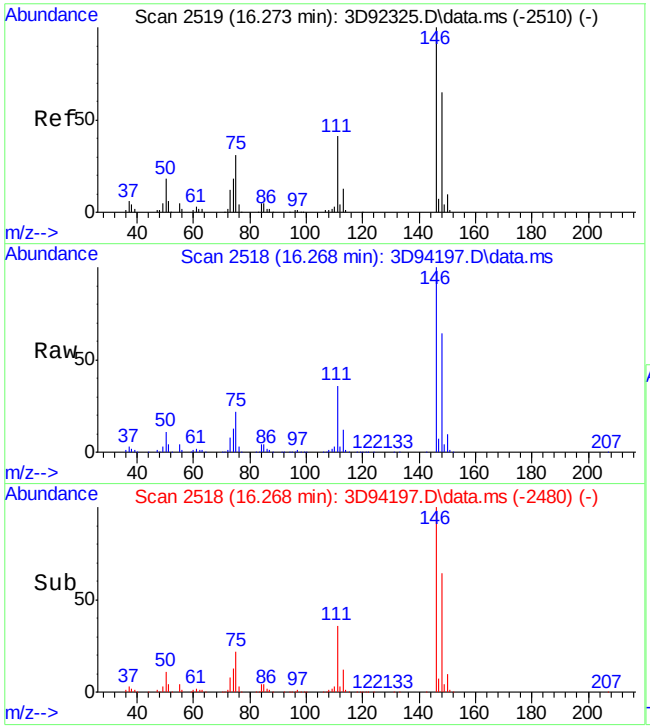


#123
1,4-dichlorobenzene
Concen: 199.48 ug/L
RT: 15.885 min Scan# 2445
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:146 Resp: 774941

Ion	Ratio	Lower	Upper
146	100		
111	34.8	4.2	64.2
148	63.7	34.3	94.3

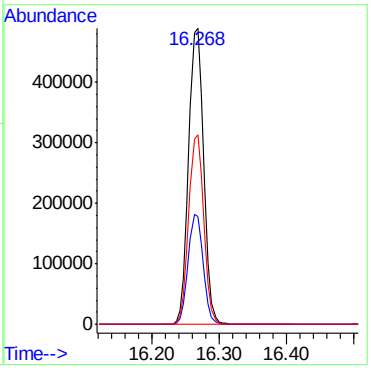


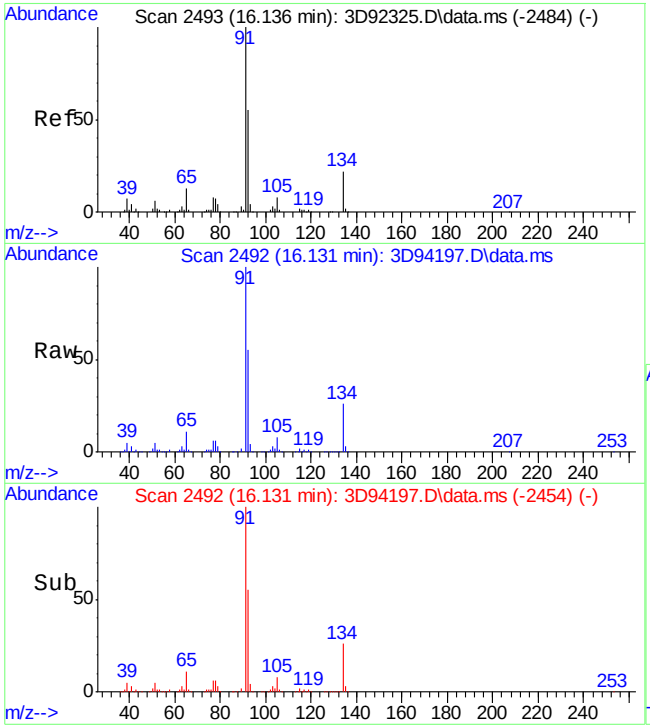


#124
1,2-dichlorobenzene
Concen: 198.06 ug/L
RT: 16.268 min Scan# 2518
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:146 Resp: 755863

Ion	Ratio	Lower	Upper
146	100		
111	36.4	6.4	66.4
148	63.9	34.3	94.3

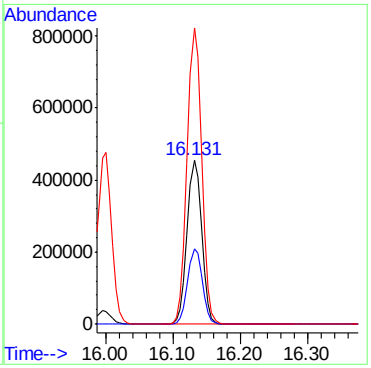


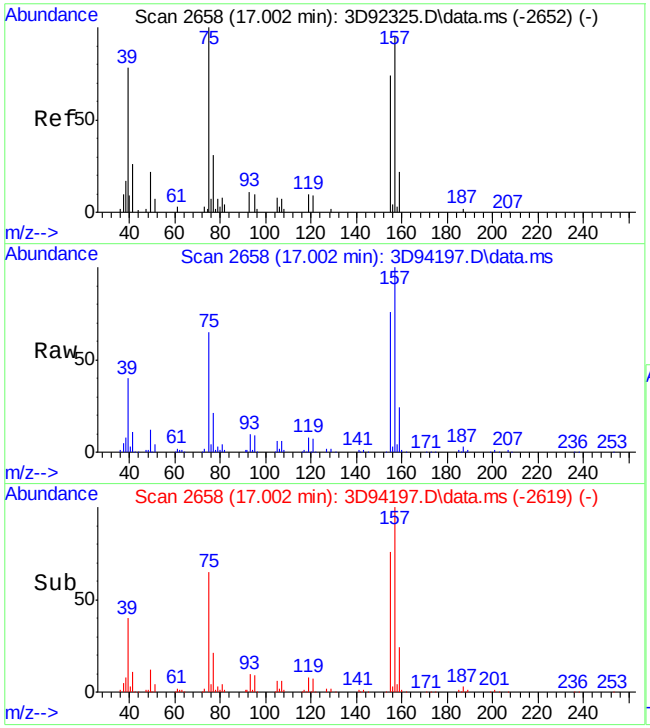


#126
n-butylbenzene
Concen: 213.85 ug/L
RT: 16.131 min Scan# 2492
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 92 Resp: 686012

Ion	Ratio	Lower	Upper
92	100		
134	46.1	15.5	75.5
91	180.3	150.4	210.4

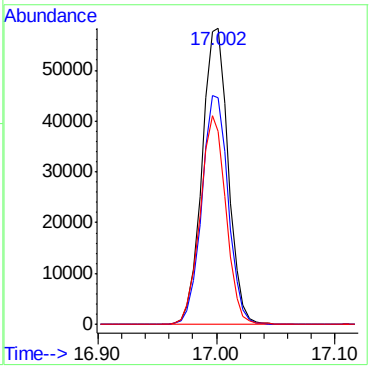


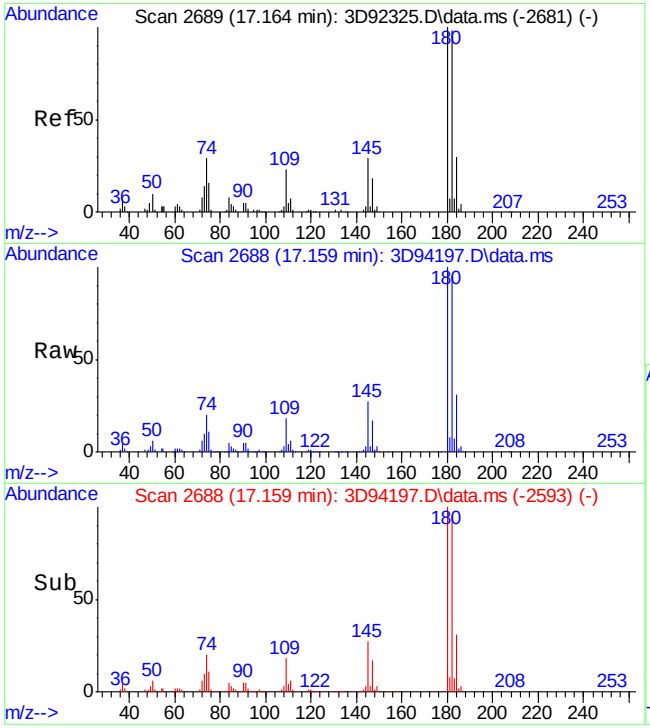


#128
1,2-dibromo-3-chloropropane
Concen: 191.89 ug/L
RT: 17.002 min Scan# 2658
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:157 Resp: 89782

Ion	Ratio	Lower	Upper
157	100		
155	76.4	43.7	103.7
75	65.1	41.6	101.6

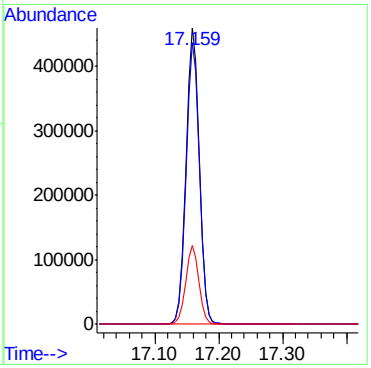




#129
1,3,5-trichlorobenzene
Concen: 187.22 ug/L
RT: 17.159 min Scan# 2688
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:180 Resp: 659330

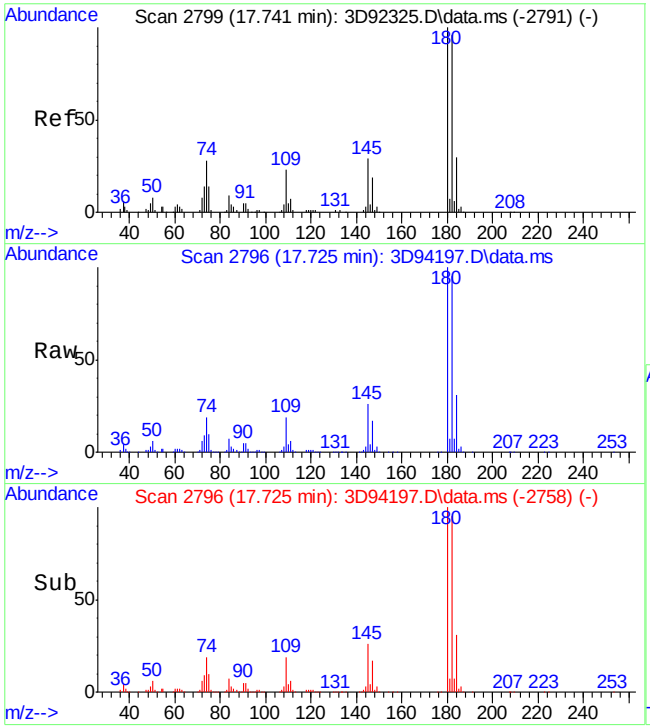
Ion	Ratio	Lower	Upper
180	100		
182	95.4	65.4	125.4
145	26.1	0.0	55.6



7.7.9

7

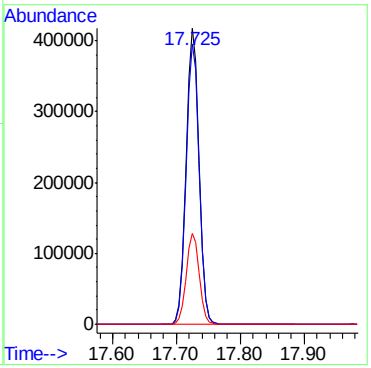
3D94197.D M3D4058.M Thu Dec 19 12:37:22 2013 3D Page 57

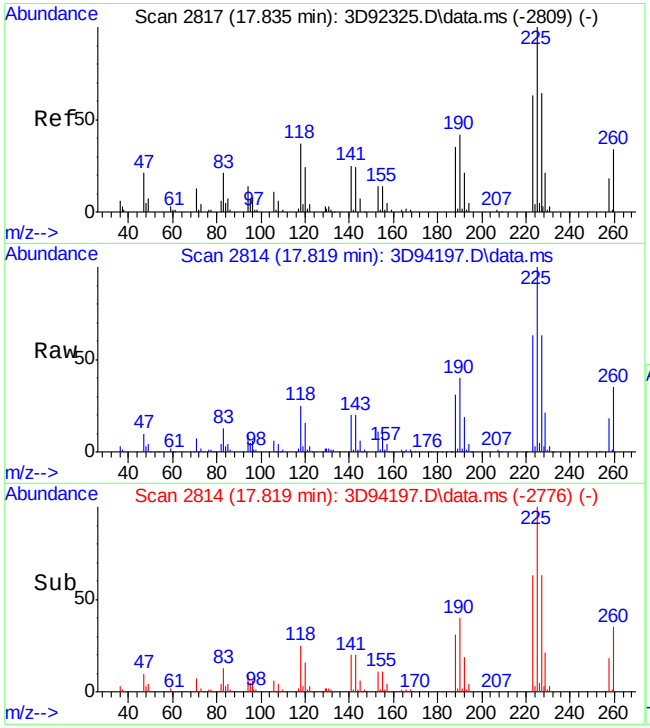


#130
1,2,4-trichlorobenzene
Concen: 179.99 ug/L
RT: 17.725 min Scan# 2796
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:180 Resp: 582464

Ion	Ratio	Lower	Upper
180	100		
182	94.8	66.4	126.4
184	30.9	1.3	61.3

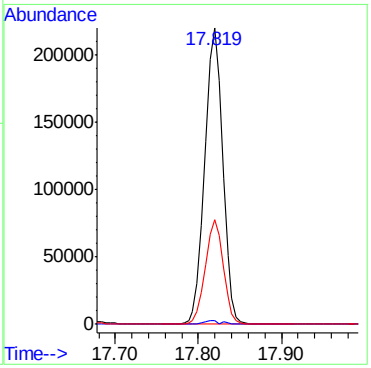


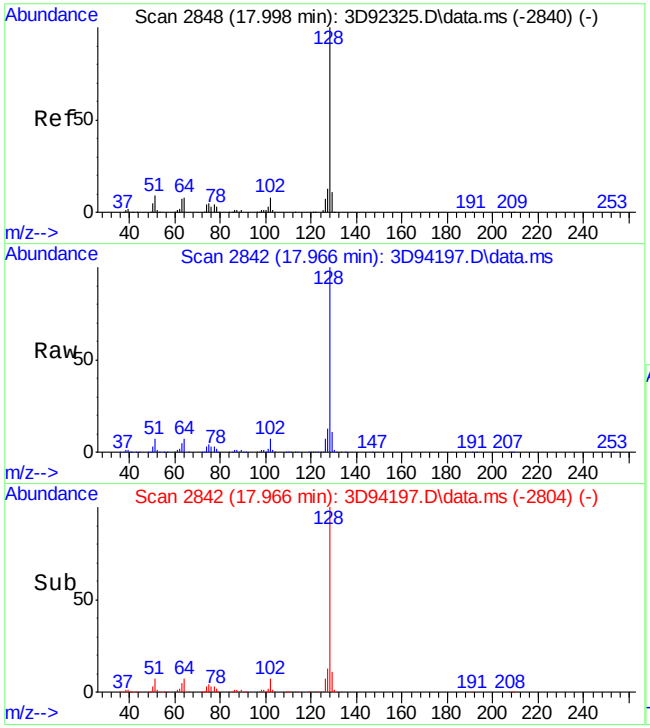


#131
hexachlorobutadiene
Concen: 189.34 ug/L
RT: 17.819 min Scan# 2814
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:225 Resp: 325892

Ion	Ratio	Lower	Upper
225	100		
259	1.2	0.0	31.1
260	35.2	5.9	65.9

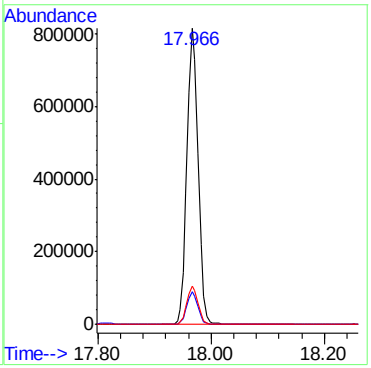


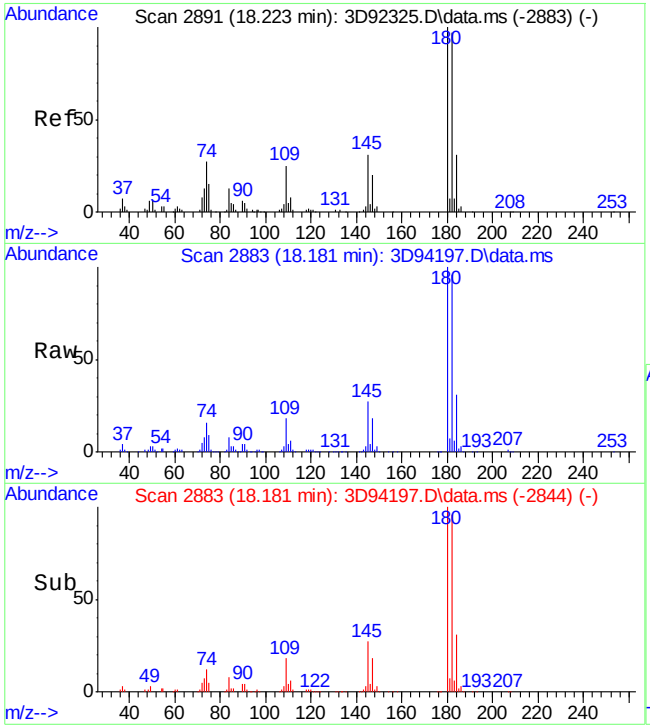


#132
naphthalene
Concen: 165.89 ug/L
RT: 17.966 min Scan# 2842
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:128 Resp: 1119654

Ion	Ratio	Lower	Upper
128	100		
129	10.9	0.0	40.9
127	12.7	0.0	43.2

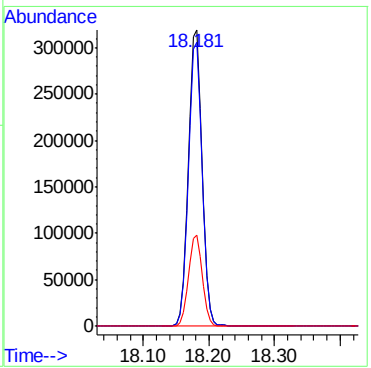




#133
1,2,3-trichlorobenzene
Concen: 156.11 ug/L
RT: 18.181 min Scan# 2883
Delta R.T. 0.005 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

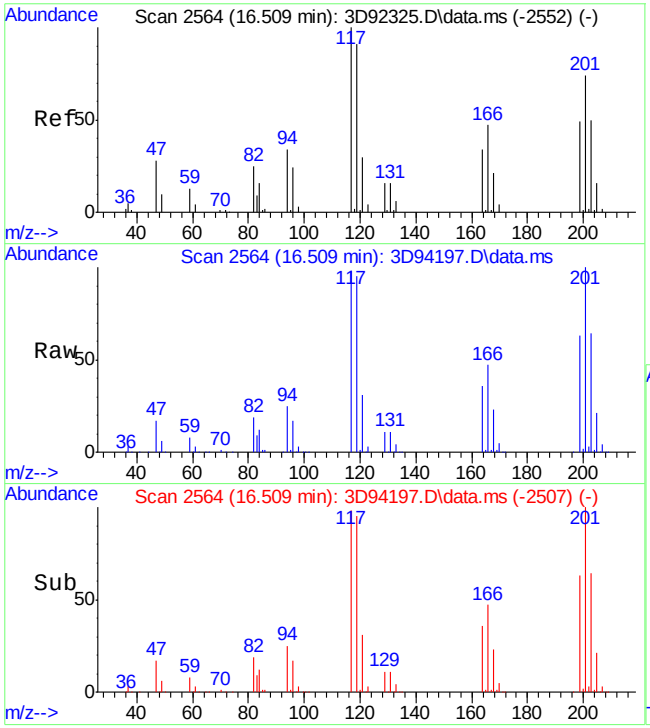
Tgt Ion:180 Resp: 471516

Ion	Ratio	Lower	Upper
180	100		
182	95.9	67.0	127.0
184	30.8	0.3	60.3



7.7.9

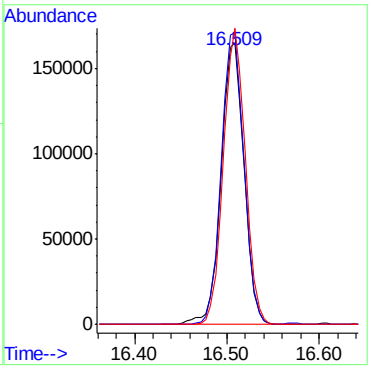
7

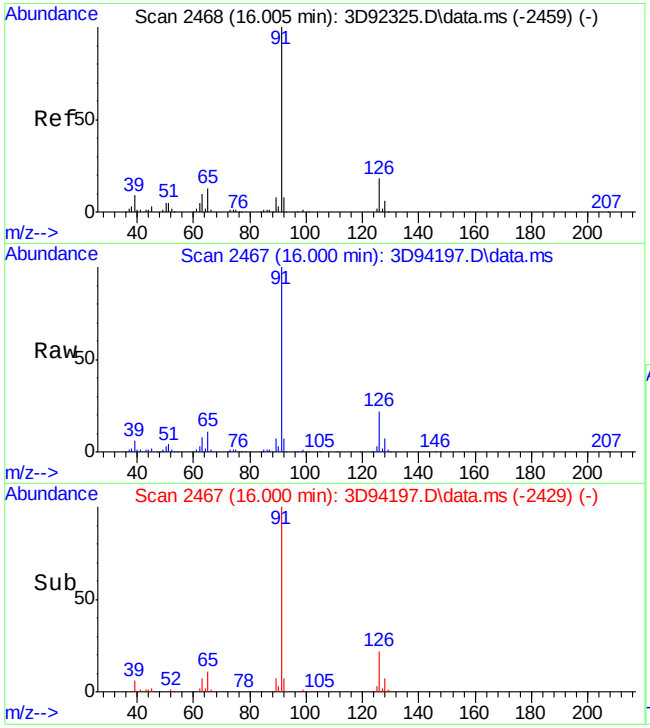


#134
hexachloroethane
Concen: 212.91 ug/L
RT: 16.509 min Scan# 2564
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion:119 Resp: 283360

Ion	Ratio	Lower	Upper
119	100		
117	102.2	72.2	132.2
201	100.3	70.2	130.2

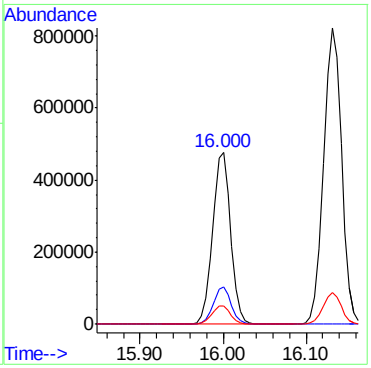




#135
Benzyl chloride
Concen: 199.62 ug/L
RT: 16.000 min Scan# 2467
Delta R.T. 0.000 min
Lab File: 3D94197.D
Acq: 18 Dec 2013 5:00 pm

Tgt Ion: 91 Resp: 718507

Ion	Ratio	Lower	Upper
91	100		
126	21.3	0.0	51.4
65	11.0	0.0	41.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94199.D
Acq On : 18 Dec 2013 5:54 pm
Operator : katteric
Sample : icv4058-50
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 19 12:34:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.244	65	74265	500.00	ug/L		0.00
4) pentafluorobenzene	9.483	168	188337	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.406	114	257421	50.00	ug/L		0.01
88) chlorobenzene-d5	13.557	117	211360	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.864	152	122450	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.541	113	72569	48.51	ug/L		0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 97.02%				
51) 1,2-dichloroethane-d4 (s)	9.965	65	72965	47.64	ug/L		0.00
Spiked Amount 50.000	Range 74 - 122		Recovery = 95.28%				
80) toluene-d8 (s)	12.047	98	251628	49.49	ug/L		0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.98%				
106) 4-bromofluorobenzene (s)	14.710	95	89253	48.63	ug/L		0.00
Spiked Amount 50.000	Range 76 - 116		Recovery = 97.26%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.124	88	17112	1291.26	ug/L		99
3) tertiary butyl alcohol	7.360	59	39748	243.99	ug/L		98
8) chlorodifluoromethane	3.873	51	64436	45.01	ug/L		98
9) dichlorodifluoromethane	3.852	85	92372	52.31	ug/L		98
10) chloromethane	4.198	50	106997	48.71	ug/L		99
11) vinyl chloride	4.444	62	106963	51.22	ug/L		99
12) bromomethane	5.105	94	71873	50.24	ug/L		98
13) chloroethane	5.278	64	49967	51.03	ug/L		99
14) 1,3-butadiene	4.502	54	60516	53.62	ug/L		99
15) vinyl bromide	5.629	106	63596	51.61	ug/L		99
16) trichlorofluoromethane	5.718	101	113397	50.42	ug/L		97
18) ethyl ether	6.138	74	44322	56.50	ug/L		97
21) acrolein	6.411	56	161396	513.55	ug/L		100
22) 1,1-dichloroethene	6.563	61	108380	49.56	ug/L		100
23) acetone	6.620	58	6606	56.97	ug/L		89
24) allyl chloride	7.103	76	44315	51.67	ug/L		98
27) iodomethane	6.851	142	146922	49.08	ug/L		100
28) iso-butyl alcohol	9.771	41	24987	505.06	ug/L		97
29) carbon disulfide	6.972	76	264957	48.87	ug/L		99
30) methylene chloride	7.297	84	81441	49.19	ug/L		97
31) methyl acetate	7.082	74	12232	50.47	ug/L		98
32) methyl tert butyl ether	7.601	73	448151	96.51	ug/L		98
33) trans-1,2-dichloroethene	7.664	61	105612	48.20	ug/L		97
34) di-isopropyl ether	8.193	45	246030	48.25	ug/L		93
35) ethyl tert-butyl ether	8.660	59	238906	50.77	ug/L		99
36) 2-butanone	8.932	72	8953	55.72	ug/L		92
37) 1,1-dichloroethane	8.235	63	133874	49.08	ug/L		99
38) chloroprene	8.335	53	100240	50.35	ug/L		97
39) acrylonitrile	7.632	53	148146	264.10	ug/L		98
40) vinyl acetate	8.214	86	13648	55.99	ug/L		98
41) ethyl acetate	8.943	45	10736	53.80	ug/L	#	57
42) 2,2-dichloropropane	8.964	77	98819	44.40	ug/L		99
43) cis-1,2-dichloroethene	8.969	61	129623	48.45	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94199.D
Acq On : 18 Dec 2013 5:54 pm
Operator : katteric
Sample : icv4058-50
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 19 12:34:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) propionitrile	9.048	54	117147	552.27	ug/L	94
45) methyl acrylate	9.032	55	85413	54.72	ug/L	100
46) bromochloromethane	9.289	128	44557	51.67	ug/L	97
47) tetrahydrofuran	9.315	42	26818	53.10	ug/L	98
48) chloroform	9.341	83	128301	48.56	ug/L	98
49) Tert-Butyl Formate	9.362	59	76824	54.56	ug/L	99
52) freon 113	6.521	151	61716	58.96	ug/L	99
53) methacrylonitrile	9.226	41	47718	52.35	ug/L	98
54) 1,1,1-trichloroethane	9.588	97	109284	47.77	ug/L	98
56) 2,2,4-Trimethylpentane	10.013	57	272568	50.48	ug/L	100
57) tert-amyl methyl ether	10.049	73	239488	50.65	ug/L	99
59) epichlorohydrin	11.669	57	35498	259.73	ug/L	99
60) n-butyl alcohol	10.526	56	100471	2640.35	ug/L	99
61) cyclohexane	9.651	84	111727	50.23	ug/L	99
62) carbon tetrachloride	9.787	117	98893	48.74	ug/L	98
63) 1,1-dichloropropene	9.761	75	93986	46.98	ug/L	100
64) hexane	7.947	57	86923	52.52	ug/L	100
65) benzene	10.028	78	305050	49.24	ug/L	99
66) heptane	10.186	57	50208	51.10	ug/L	98
67) isopropyl acetate	9.944	43	153975	55.94	ug/L	98
68) 1,2-dichloroethane	10.054	62	90389	49.09	ug/L	99
69) trichloroethene	10.747	95	75999	49.57	ug/L	99
70) ethyl acrylate	10.747	55	94622	54.67	ug/L	100
72) 2-nitropropane	11.533	41	26897	49.65	ug/L	99
73) 2-chloroethyl vinyl ether	11.538	63	242920	249.61	ug/L	100
74) methyl methacrylate	11.014	41	113676	51.28	ug/L	99
75) 1,2-dichloropropane	11.014	63	77418	50.86	ug/L	98
76) methylcyclohexane	10.951	83	124446	54.72	ug/L	100
77) dibromomethane	11.182	93	49715	51.90	ug/L	96
78) bromodichloromethane	11.308	83	98722	50.51	ug/L	100
79) cis-1,3-dichloropropene	11.764	75	113069	46.38	ug/L	100
81) 4-methyl-2-pentanone	11.848	58	30085	54.98	ug/L	99
82) toluene	12.120	92	179044	49.51	ug/L	99
83) 3-methyl-1-butanol	11.869	70	36649	1019.03	ug/L	100
84) trans-1,3-dichloropropene	12.325	75	107319	49.57	ug/L	94
85) ethyl methacrylate	12.304	69	91696	53.09	ug/L	99
86) 1,1,2-trichloroethane	12.540	83	58213	52.47	ug/L	99
87) 2-hexanone	12.702	58	26210	54.72	ug/L	97
89) tetrachloroethene	12.702	166	86417	50.08	ug/L	99
90) 1,3-dichloropropane	12.718	76	103721	50.74	ug/L	99
91) butyl acetate	12.770	56	45873	52.11	ug/L	95
92) 3,3-Dimethyl-1-Butanol	12.870	57	71350	510.88	ug/L	100
93) dibromochloromethane	12.985	129	84829	51.42	ug/L	98
94) 1,2-dibromoethane	13.132	107	71333	51.39	ug/L	100
96) chlorobenzene	13.588	112	197517	49.77	ug/L	100
97) 1,1,1,2-tetrachloroethane	13.646	131	76159	48.60	ug/L	97
98) ethylbenzene	13.635	91	320482	48.92	ug/L	100
99) m,p-xylene	13.740	106	252158	99.43	ug/L	99
100) o-xylene	14.160	106	126075	49.29	ug/L	100
101) styrene	14.170	104	215569	51.21	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94199.D
Acq On : 18 Dec 2013 5:54 pm
Operator : katteric
Sample : icv4058-50
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 19 12:34:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration

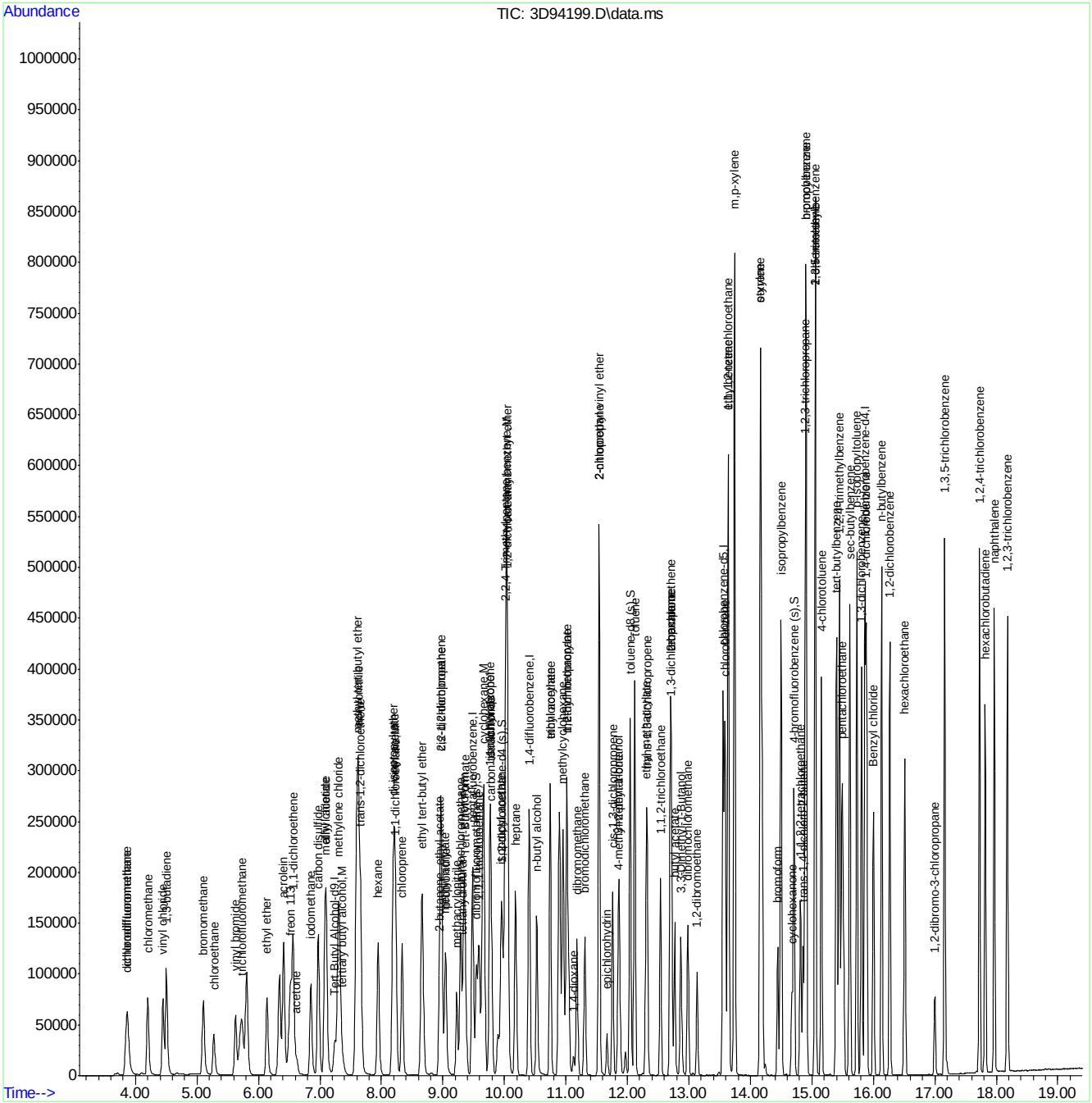
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
103) bromoform	14.443	173	64958	52.19	ug/L	100
105) isopropylbenzene	14.501	105	325323	50.19	ug/L	99
107) bromobenzene	14.904	156	93797	49.72	ug/L	98
108) cyclohexanone	14.679	55	36517	502.62	ug/L	97
109) 1,1,2,2-tetrachloroethane	14.815	83	93227	48.74	ug/L	100
110) trans-1,4-dichloro-2-b...	14.857	53	22257	52.70	ug/L	95
111) 1,2,3-trichloropropane	14.889	110	21839	51.80	ug/L	97
112) n-propylbenzene	14.904	91	374195	50.99	ug/L	99
114) 2-chlorotoluene	15.056	126	80387	49.66	ug/L	99
115) 4-chlorotoluene	15.156	126	80625	49.26	ug/L	98
116) 1,3,5-trimethylbenzene	15.056	105	270816	49.41	ug/L	100
117) tert-butylbenzene	15.402	119	236231	49.74	ug/L	99
118) pentachloroethane	15.492	167	64763	50.87	ug/L	96
119) 1,2,4-trimethylbenzene	15.450	105	275829	50.81	ug/L	99
120) sec-butylbenzene	15.617	105	356163	49.25	ug/L	99
121) 1,3-dichlorobenzene	15.806	146	175630	49.21	ug/L	98
122) p-isopropyltoluene	15.733	119	307766	50.86	ug/L	100
123) 1,4-dichlorobenzene	15.890	146	180429	48.66	ug/L	99
124) 1,2-dichlorobenzene	16.267	146	179467	49.31	ug/L	100
126) n-butylbenzene	16.136	92	157518	51.04	ug/L	99
128) 1,2-dibromo-3-chloropr...	17.002	157	23894	53.76	ug/L	96
129) 1,3,5-trichlorobenzene	17.159	180	171022	51.23	ug/L	99
130) 1,2,4-trichlorobenzene	17.725	180	159968	52.43	ug/L	100
131) hexachlorobutadiene	17.819	225	83755	51.27	ug/L	99
132) naphthalene	17.966	128	335159	53.14	ug/L	99
133) 1,2,3-trichlorobenzene	18.181	180	147454	52.41	ug/L	99
134) hexachloroethane	16.509	119	64834	50.66	ug/L	99
135) Benzyl chloride	16.000	91	185444	53.97	ug/L	100

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

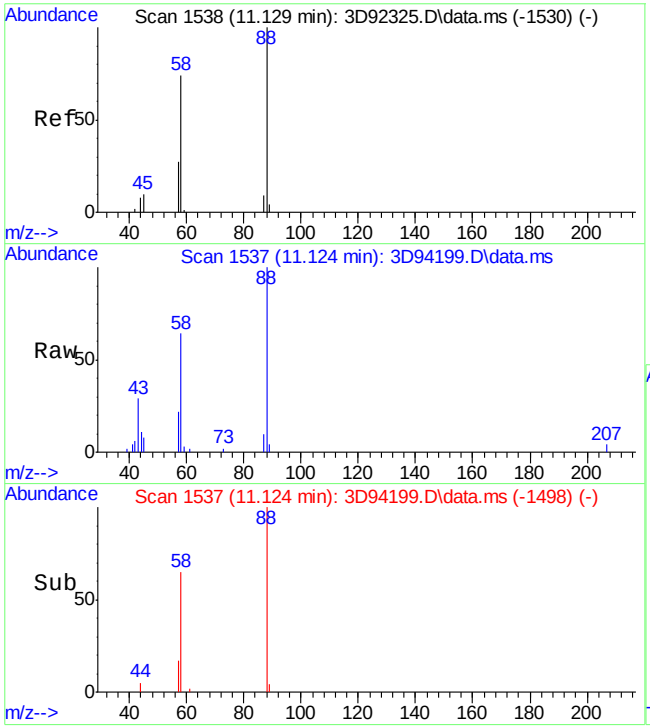
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D94199.D
Acq On : 18 Dec 2013 5:54 pm
Operator : katteric
Sample : icv4058-50
Misc : MS59846,V3D4058,w,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 19 12:34:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Thu Dec 19 12:22:47 2013
Response via : Initial Calibration



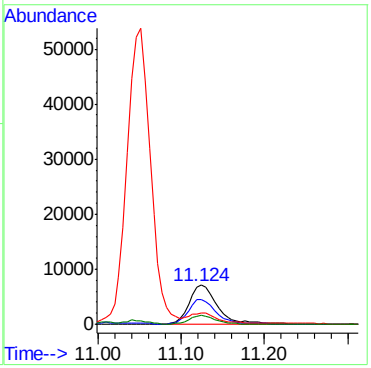
M3D4058.M Thu Dec 19 12:37:23 2013 3D Page: 4

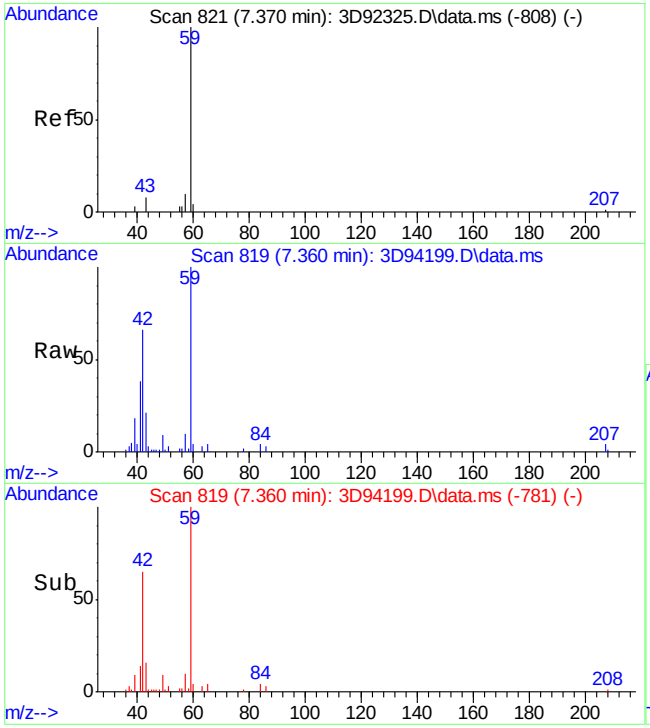


#2
1,4-dioxane
Concen: 1291.26 ug/L
RT: 11.124 min Scan# 1537
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 88 Resp: 17112

Ion	Ratio	Lower	Upper
88	100		
58	61.9	32.0	92.0
43	34.4	5.6	65.6
57	20.1	0.0	51.8

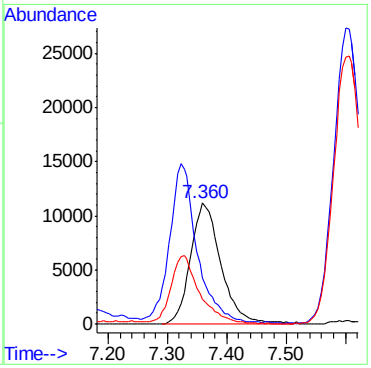




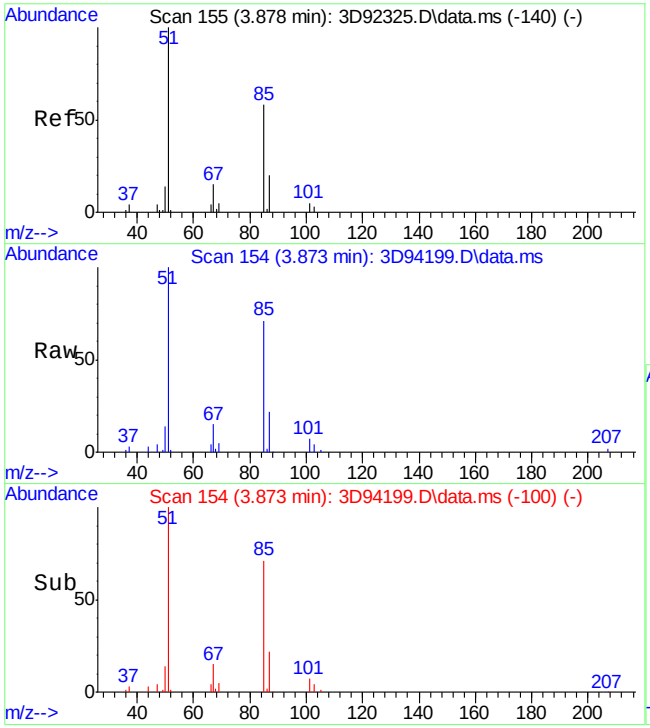
#3
tertiary butyl alcohol
Concen: 243.99 ug/L
RT: 7.360 min Scan# 819
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 59 Resp: 39748

Ion	Ratio	Lower	Upper
59	100		
41	38.1	6.5	66.5
43	20.8	0.0	50.7



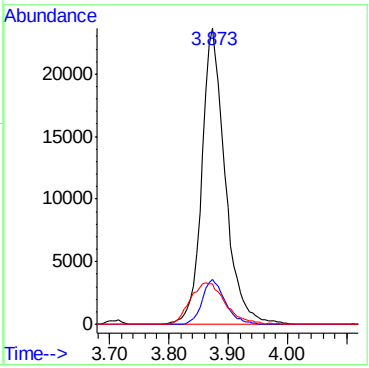
3D94199.D M3D4058.M Thu Dec 19 12:37:23 2013 3D Page 5

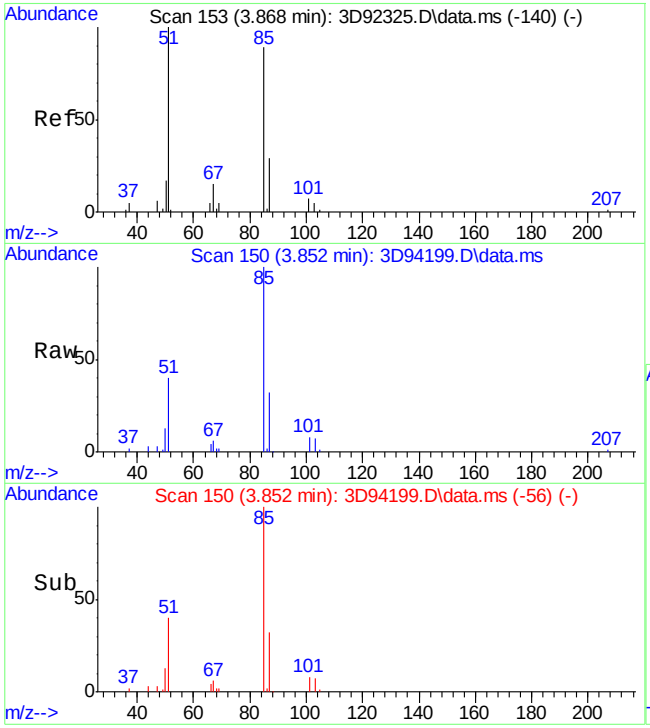


#8
chlorodifluoromethane
Concen: 45.01 ug/L
RT: 3.873 min Scan# 154
Delta R.T. -0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 51 Resp: 64436

Ion	Ratio	Lower	Upper
51	100		
67	15.3	0.0	44.9
50	13.7	0.0	42.2

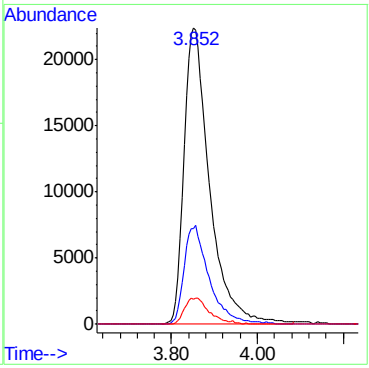




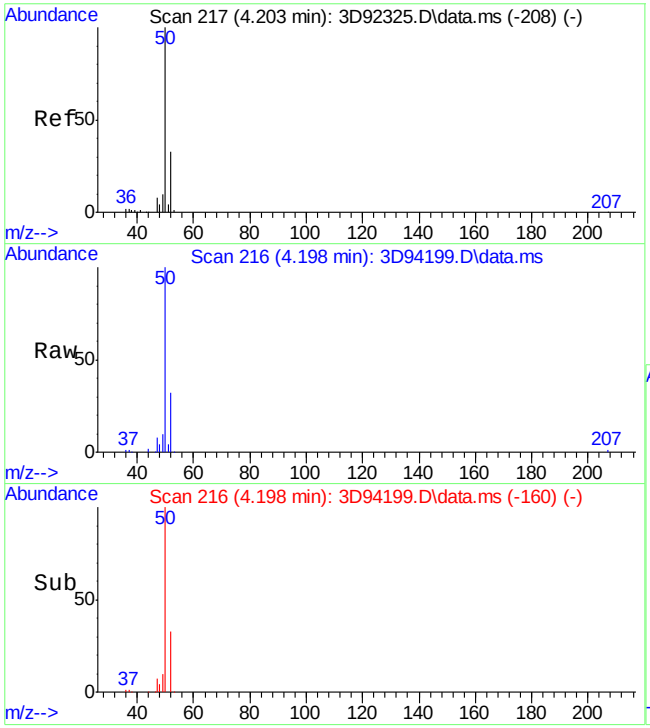
#9
dichlorodifluoromethane
Concen: 52.31 ug/L
RT: 3.852 min Scan# 150
Delta R.T. -0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 85 Resp: 92372

Ion	Ratio	Lower	Upper
85	100		
87	32.3	1.5	61.5
101	8.4	0.0	39.0



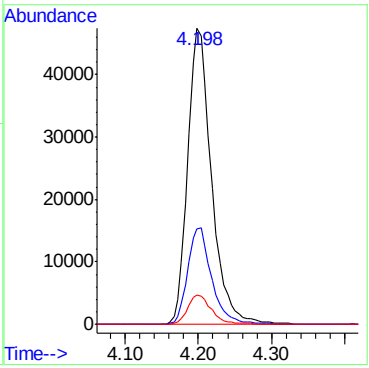
3D94199.D M3D4058.M Thu Dec 19 12:37:23 2013 3D Page 6

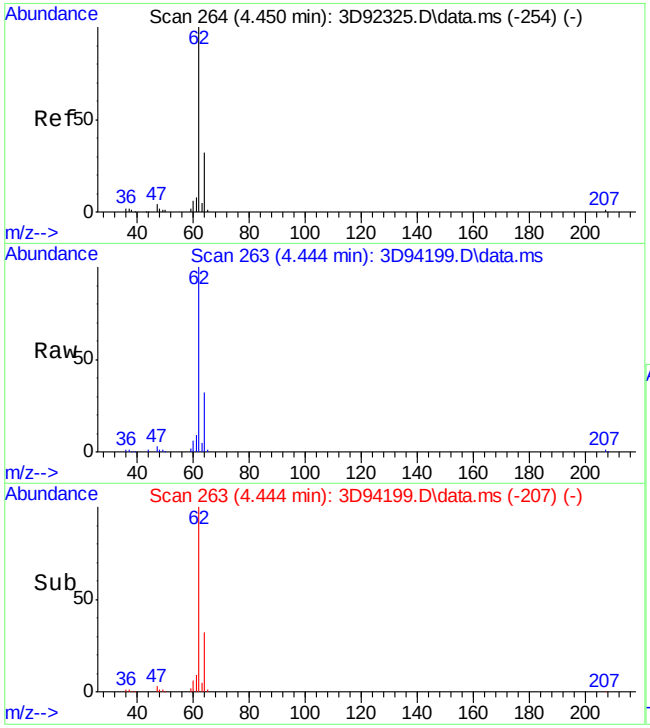


#10
chloromethane
Concen: 48.71 ug/L
RT: 4.198 min Scan# 216
Delta R.T. -0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 50 Resp: 106997

Ion	Ratio	Lower	Upper
50	100		
52	32.2	2.9	62.9
49	9.7	0.0	40.5

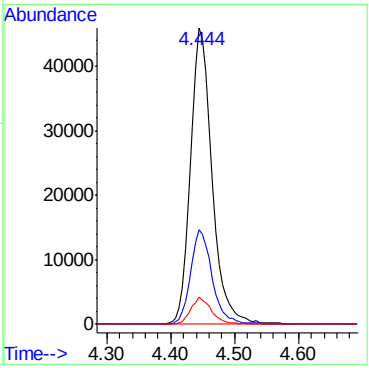




#11
vinyl chloride
Concen: 51.22 ug/L
RT: 4.444 min Scan# 263
Delta R.T. -0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

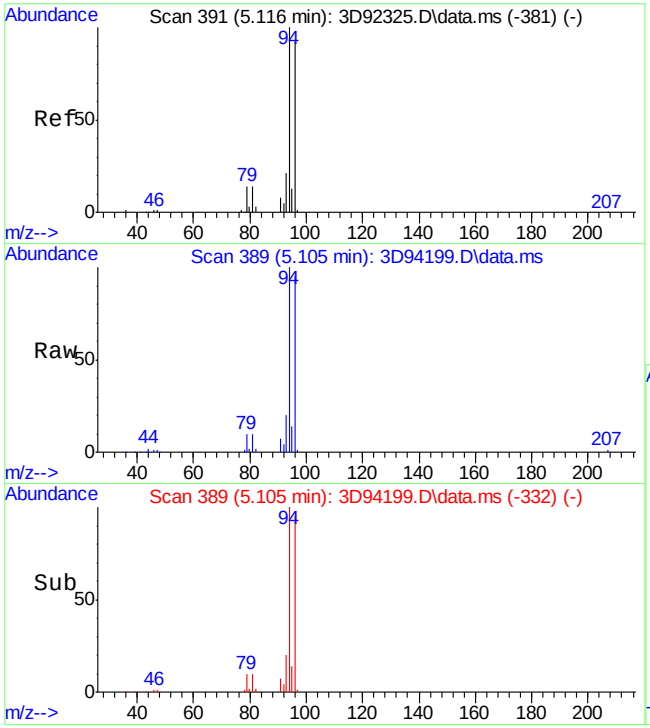
Tgt Ion: 62 Resp: 106963

Ion	Ratio	Lower	Upper
62	100		
64	31.9	2.3	62.3
61	9.1	0.0	38.3



7.7.10

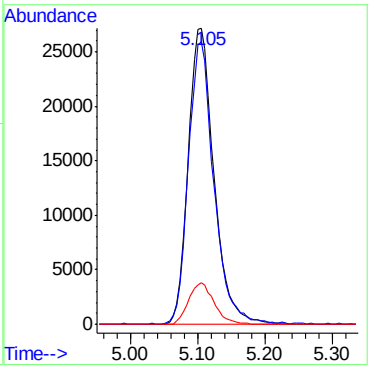
7

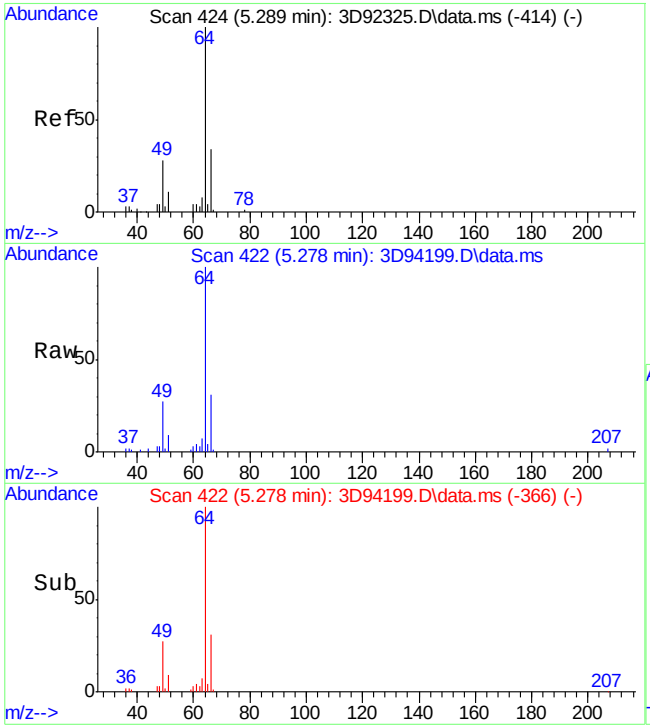


#12
bromomethane
Concen: 50.24 ug/L
RT: 5.105 min Scan# 389
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 94 Resp: 71873

Ion	Ratio	Lower	Upper
94	100		
96	95.3	63.5	123.5
95	14.2	0.0	45.2

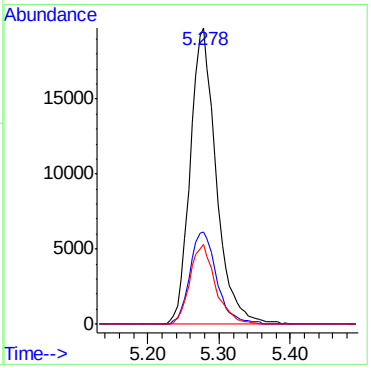


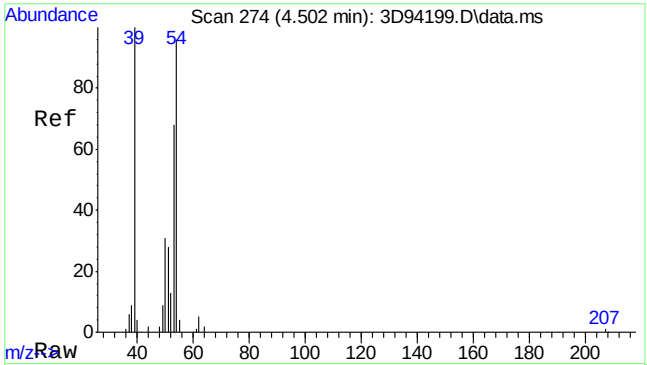


#13
chloroethane
Concen: 51.03 ug/L
RT: 5.278 min Scan# 422
Delta R.T. -0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 64 Resp: 49967

Ion	Ratio	Lower	Upper
64	100		
66	30.9	1.6	61.6
49	26.8	0.0	56.3

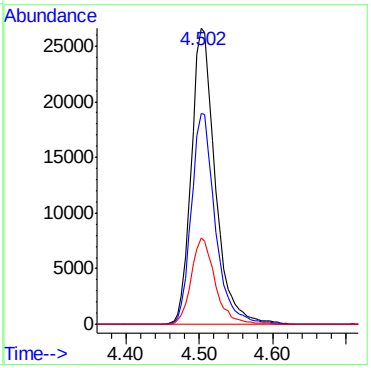


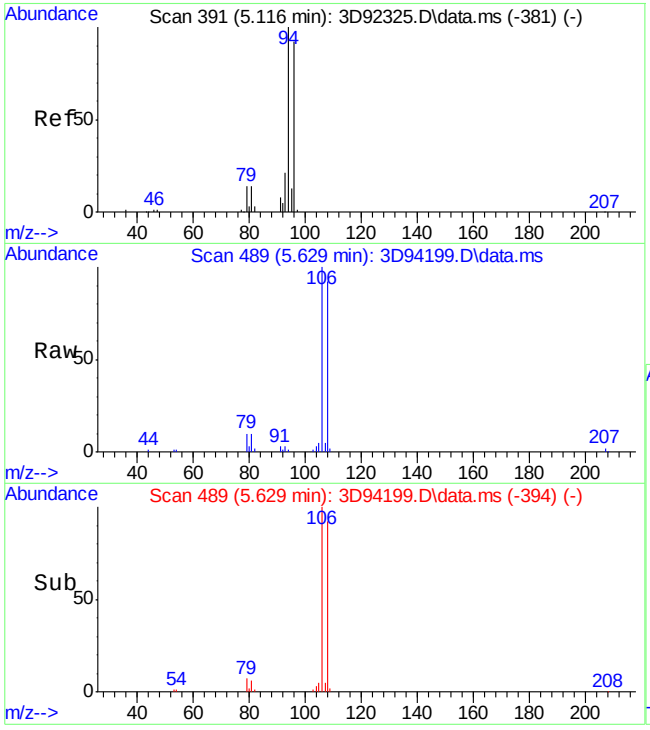


#14
1,3-butadiene
Concen: 53.62 ug/L
RT: 4.502 min Scan# 274
Delta R.T. -0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 54 Resp: 60516

Ion	Ratio	Lower	Upper
54	100		
53	71.1	56.5	84.7
51	29.3	23.2	34.8

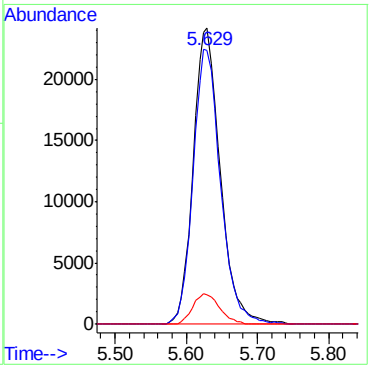




#15
vinyl bromide
Concen: 51.61 ug/L
RT: 5.629 min Scan# 489
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

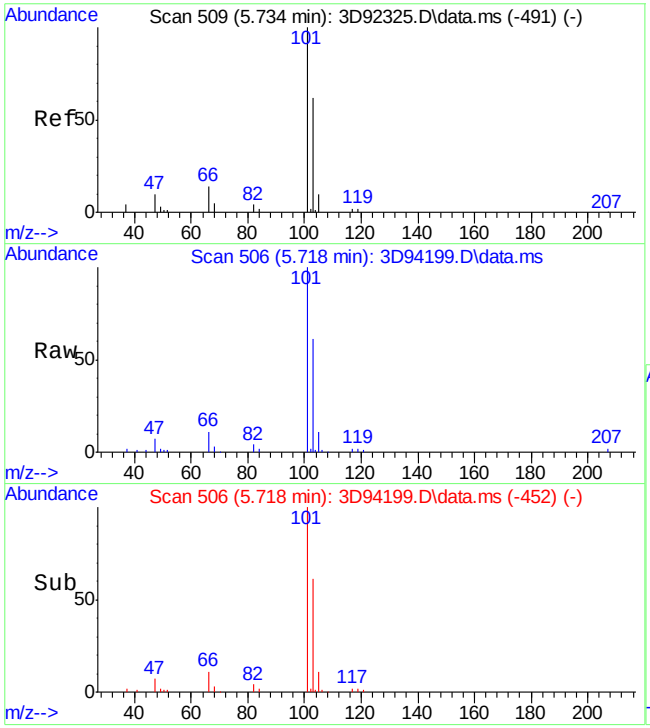
Tgt Ion:106 Resp: 63596

Ion	Ratio	Lower	Upper
106	100		
108	94.2	64.9	124.9
81	10.1	0.0	41.0



7.7.10

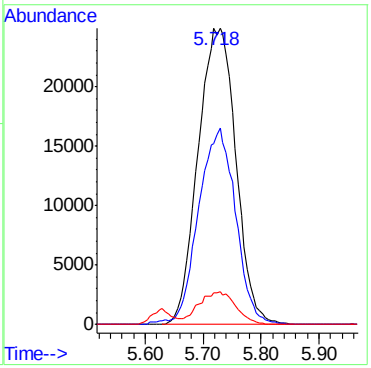
7

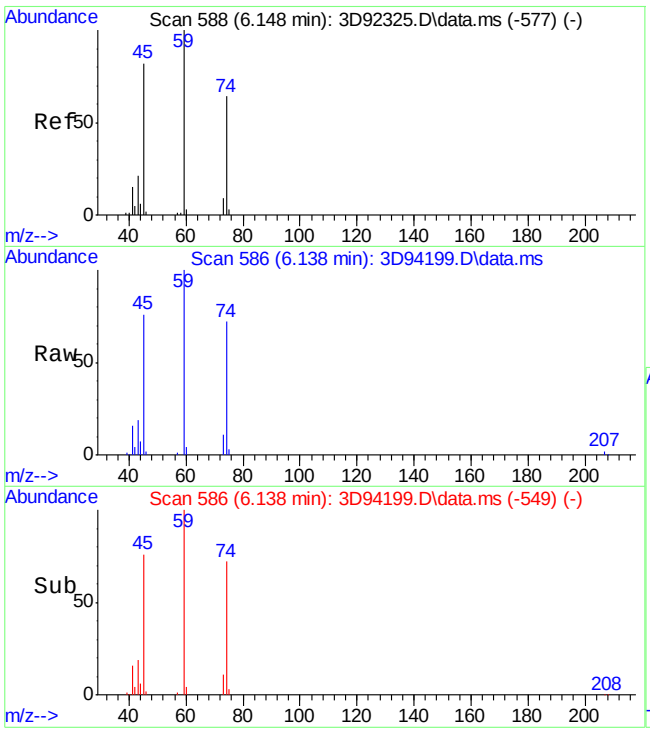


#16
trichlorofluoromethane
Concen: 50.42 ug/L
RT: 5.718 min Scan# 506
Delta R.T. -0.016 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:101 Resp: 113397

Ion	Ratio	Lower	Upper
101	100		
103	60.9	33.8	93.8
105	10.6	0.0	40.4

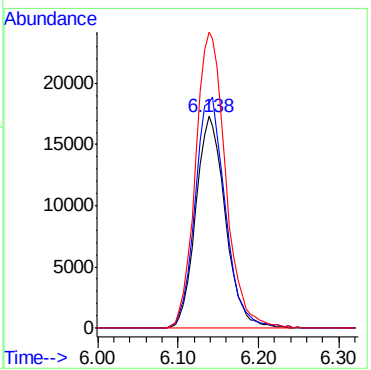


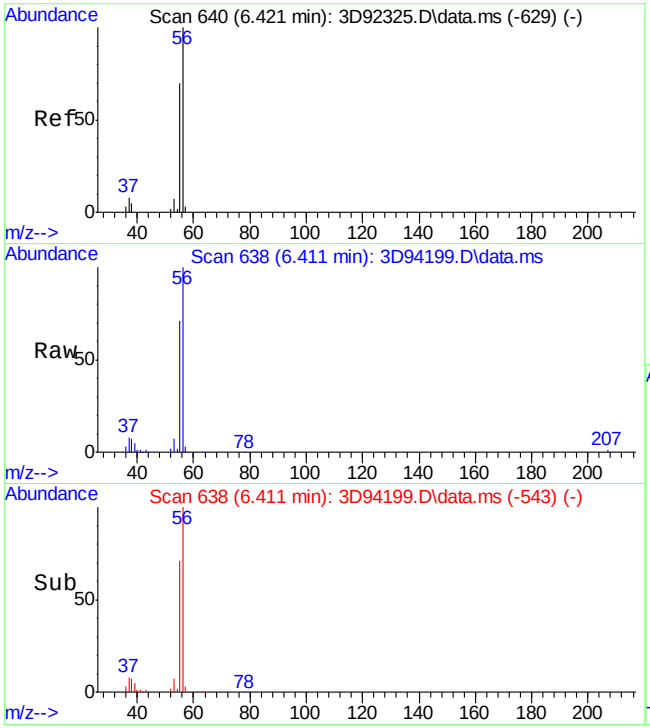


#18
ethyl ether
Concen: 56.50 ug/L
RT: 6.138 min Scan# 586
Delta R.T. -0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 74 Resp: 44322

Ion	Ratio	Lower	Upper
74	100		
45	106.5	81.7	141.7
59	139.7	110.6	170.6

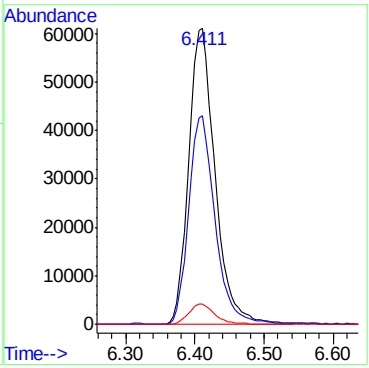


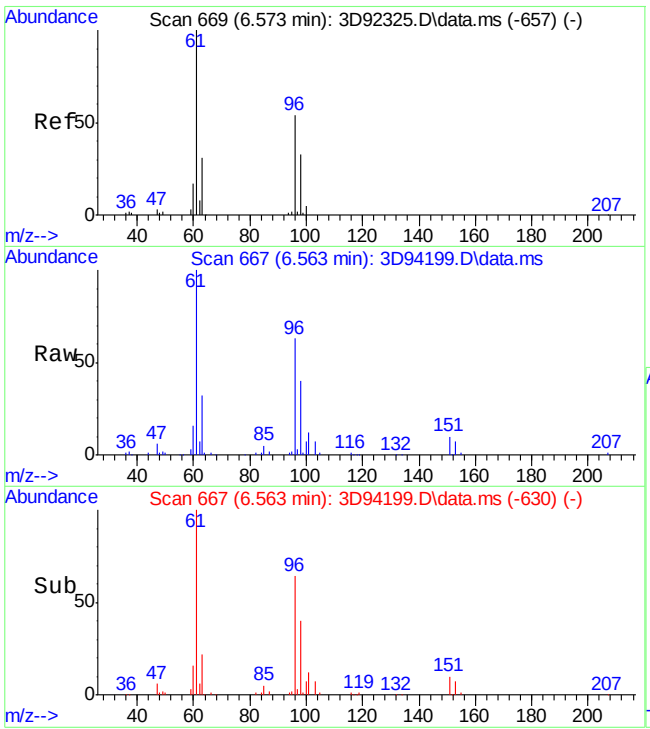


#21
acrolein
Concen: 513.55 ug/L
RT: 6.411 min Scan# 638
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 56 Resp: 161396

Ion	Ratio	Lower	Upper
56	100		
55	70.5	40.8	100.8
53	6.7	0.0	37.0

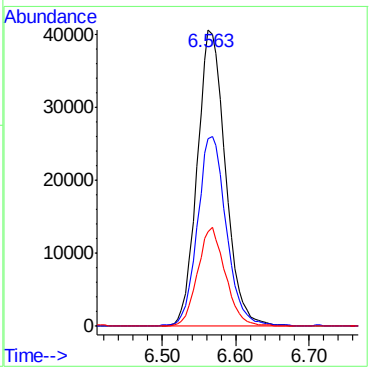


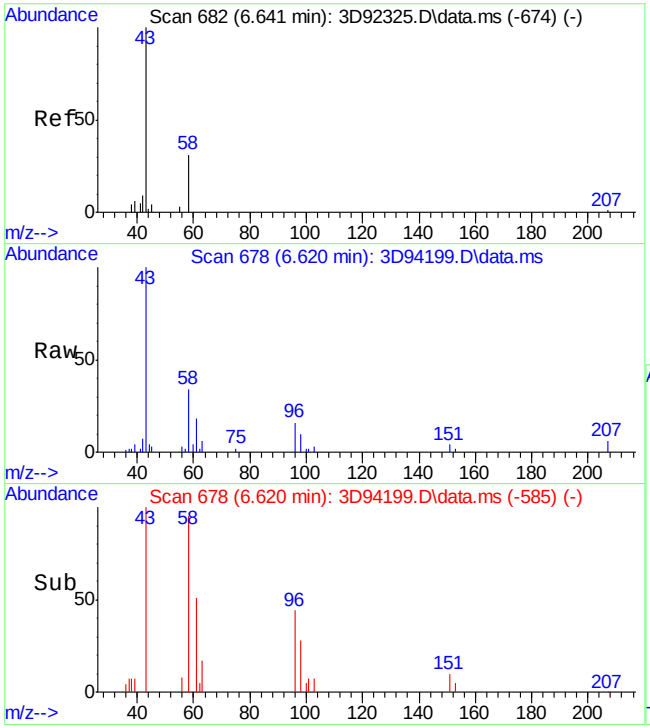


#22
1,1-dichloroethene
Concen: 49.56 ug/L
RT: 6.563 min Scan# 667
Delta R.T. -0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 61 Resp: 108380

Ion	Ratio	Lower	Upper
61	100		
96	63.3	33.6	93.6
63	31.8	1.8	61.8

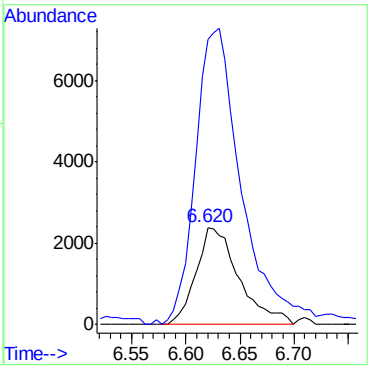


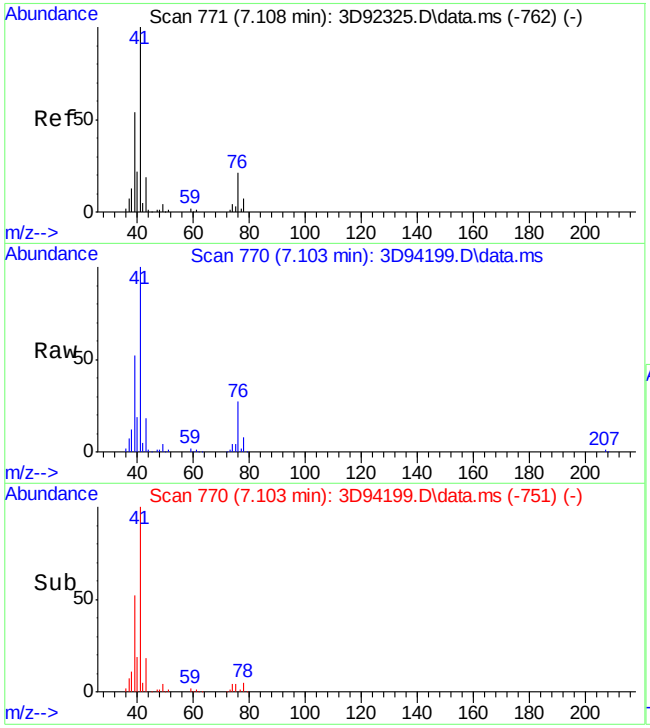


#23
acetone
Concen: 56.97 ug/L
RT: 6.620 min Scan# 678
Delta R.T. -0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 58 Resp: 6606

Ion	Ratio	Lower	Upper
58	100		
43	294.1	285.6	345.6

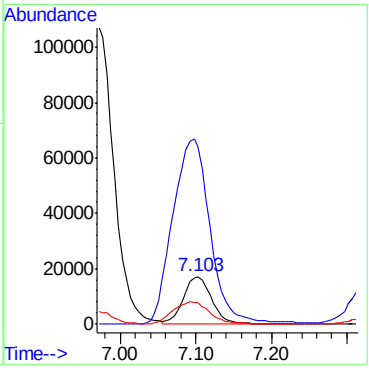


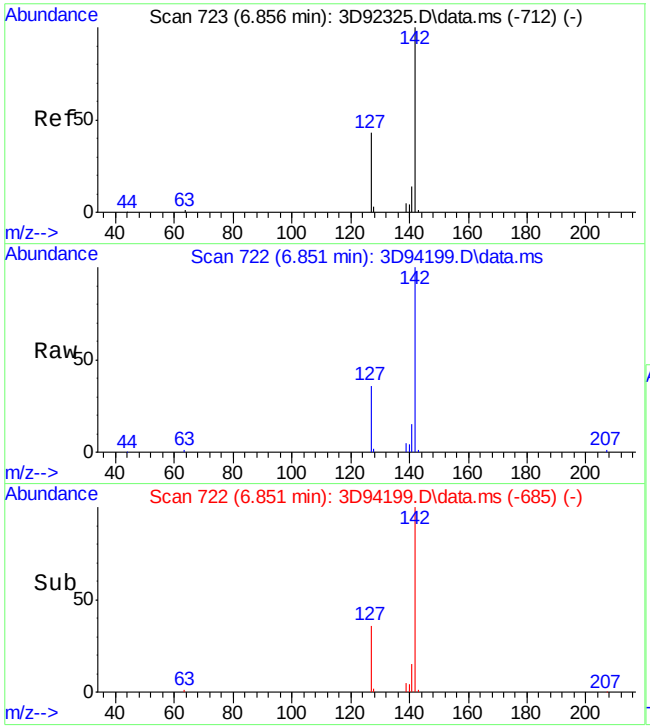


#24
allyl chloride
Concen: 51.67 ug/L
RT: 7.103 min Scan# 770
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 76 Resp: 44315

Ion	Ratio	Lower	Upper
76	100		
41	371.7	336.7	396.7
38	45.6	14.5	74.5

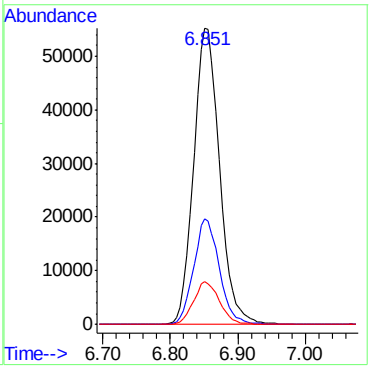


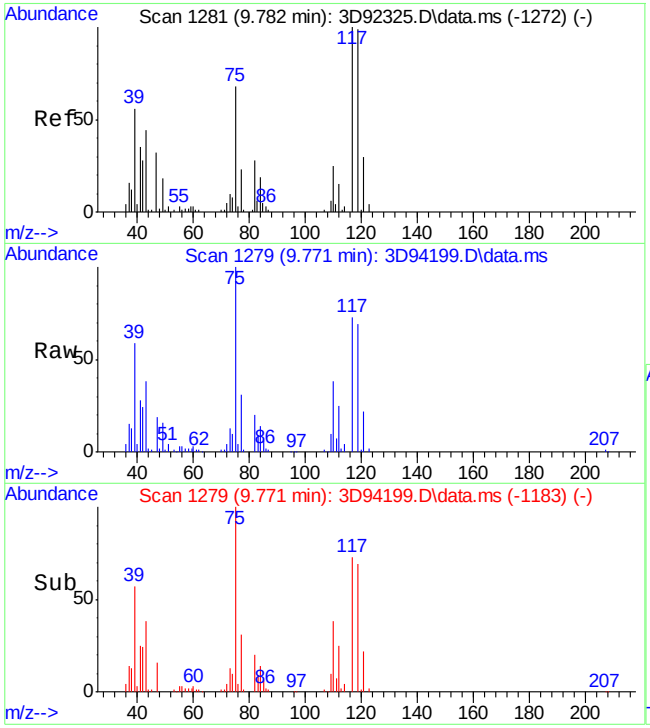


#27
iodomethane
Concen: 49.08 ug/L
RT: 6.851 min Scan# 722
Delta R.T. -0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:142 Resp: 146922

Ion	Ratio	Lower	Upper
142	100		
127	35.7	5.6	65.6
141	14.5	0.0	44.2

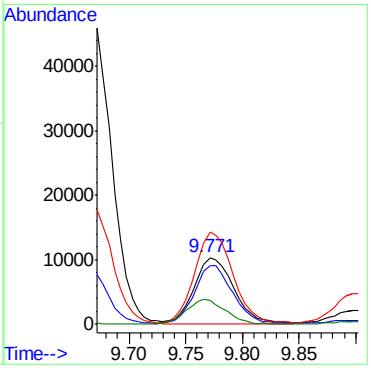




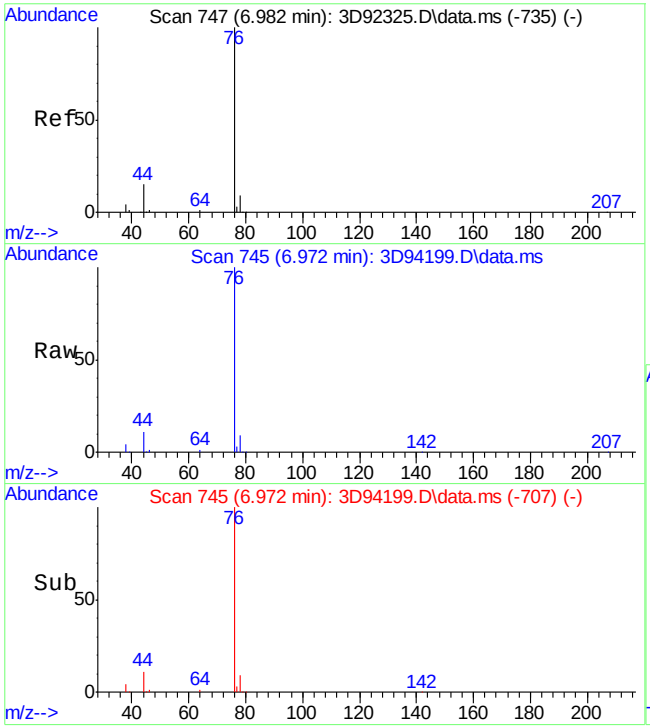
#28
iso-butyl alcohol
Concen: 505.06 ug/L
RT: 9.771 min Scan# 1279
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 41 Resp: 24987

Ion	Ratio	Lower	Upper
41	100		
42	88.2	57.2	117.2
43	139.0	105.0	165.0
74	35.9	8.4	68.4



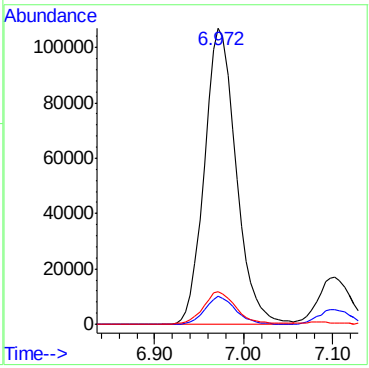
3D94199.D M3D4058.M Thu Dec 19 12:37:24 2013 3D Page 13

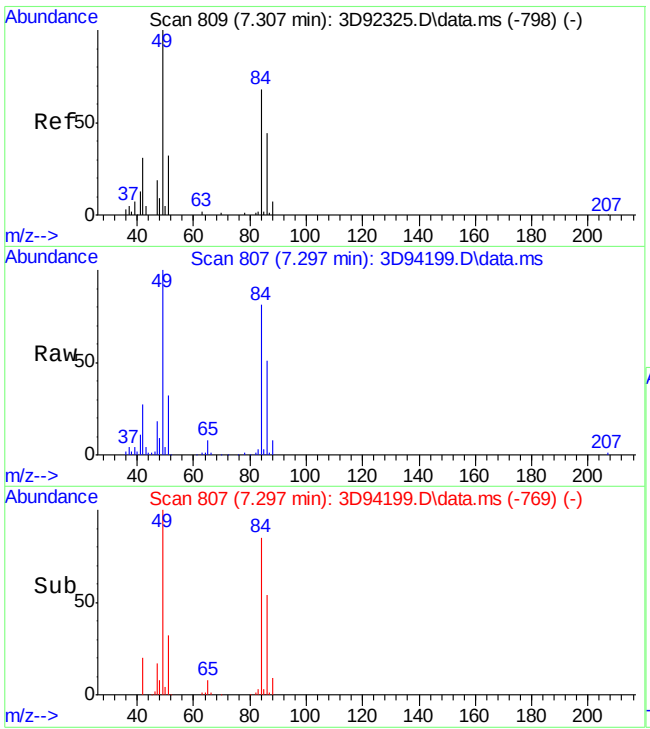


#29
carbon disulfide
Concen: 48.87 ug/L
RT: 6.972 min Scan# 745
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 76 Resp: 264957

Ion	Ratio	Lower	Upper
76	100		
78	9.4	0.0	39.1
44	10.7	0.0	40.9

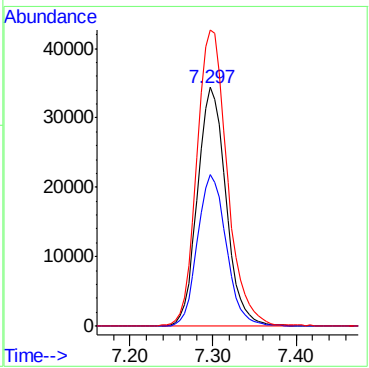


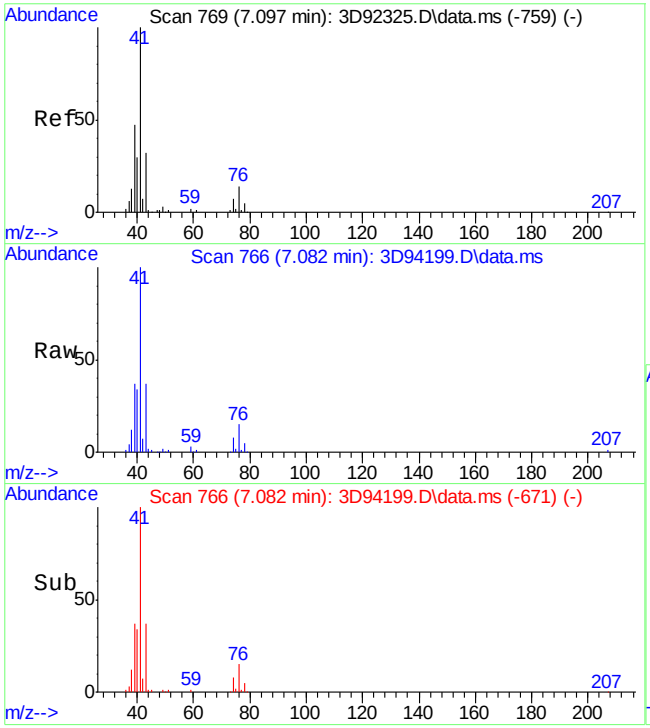


#30
methylene chloride
Concen: 49.19 ug/L
RT: 7.297 min Scan# 807
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 84 Resp: 81441

Ion	Ratio	Lower	Upper
84	100		
86	63.4	45.1	83.7
49	123.7	89.7	166.7

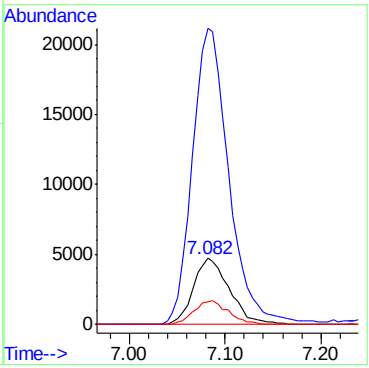


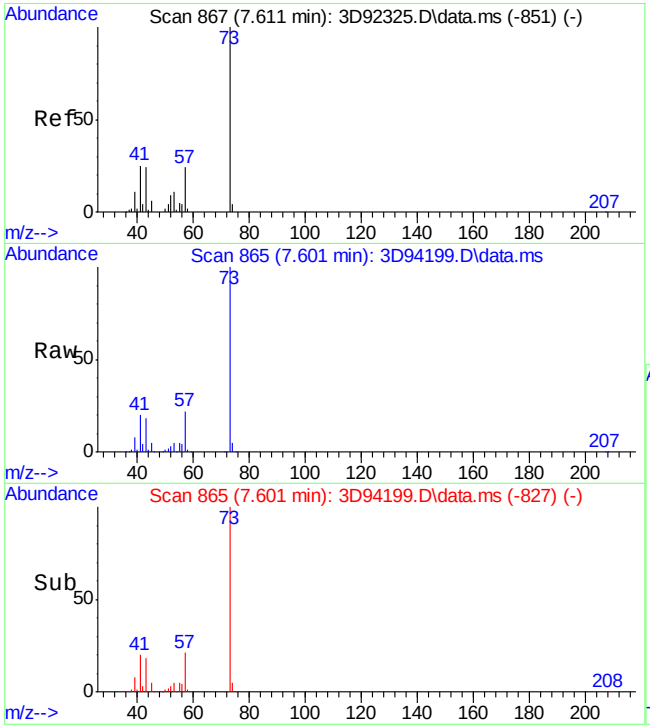


#31
methyl acetate
Concen: 50.47 ug/L
RT: 7.082 min Scan# 766
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 74 Resp: 12232

Ion	Ratio	Lower	Upper
74	100		
43	456.9	431.4	491.4
59	34.0	4.4	64.4

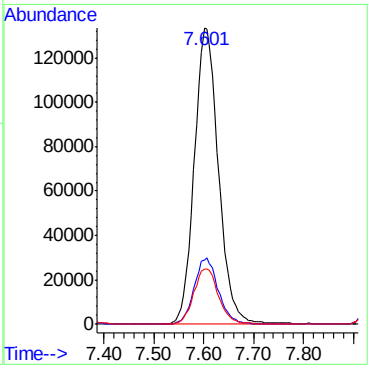


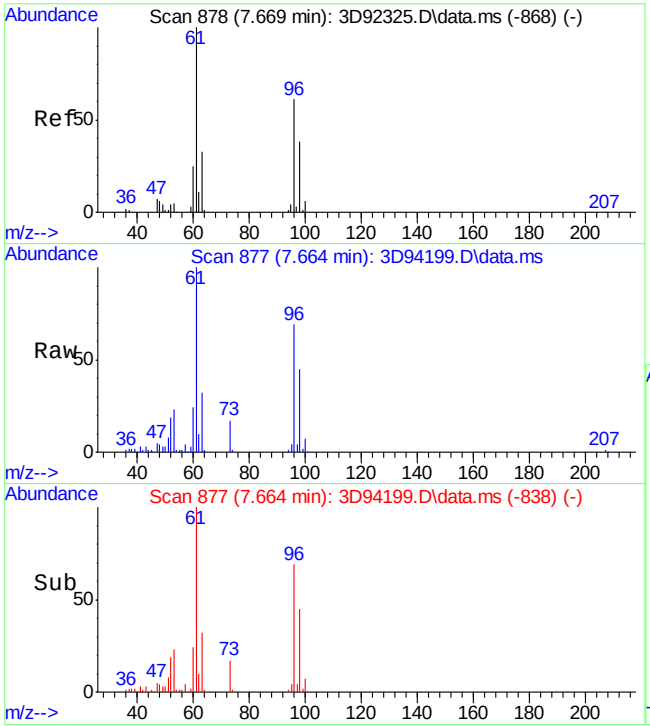


#32
methyl tert butyl ether
Concen: 96.51 ug/L
RT: 7.601 min Scan# 865
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 73 Resp: 448151

Ion	Ratio	Lower	Upper
73	100		
57	21.5	0.0	52.4
43	18.5	0.0	49.7

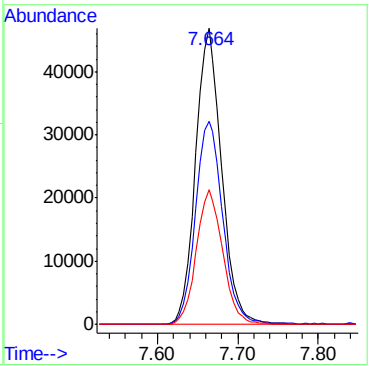


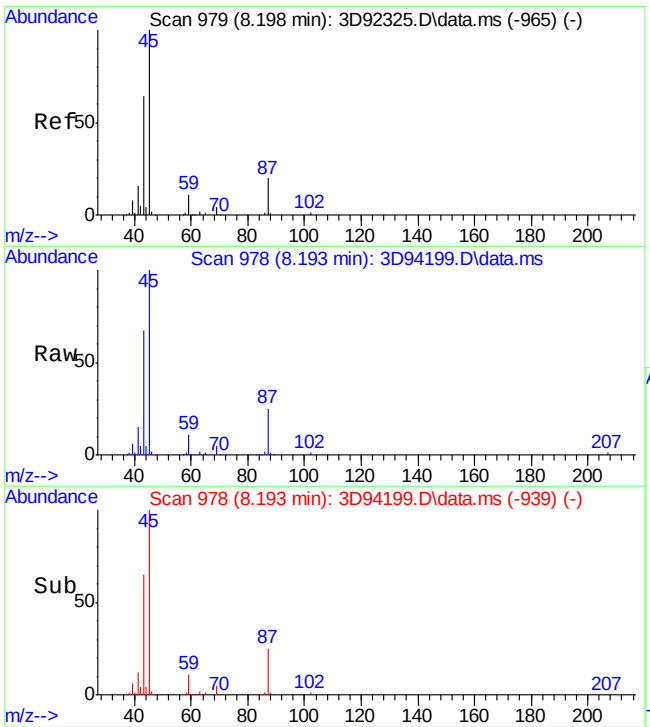


#33
trans-1,2-dichloroethene
Concen: 48.20 ug/L
RT: 7.664 min Scan# 877
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 61 Resp: 105612

Ion	Ratio	Lower	Upper
61	100		
96	68.7	50.0	92.8
98	45.4	31.0	57.6

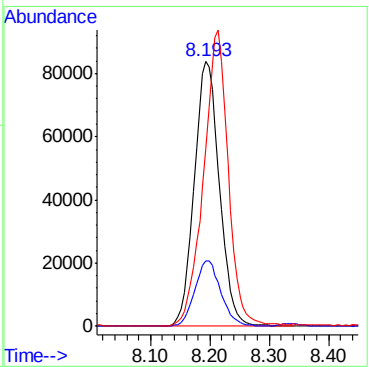


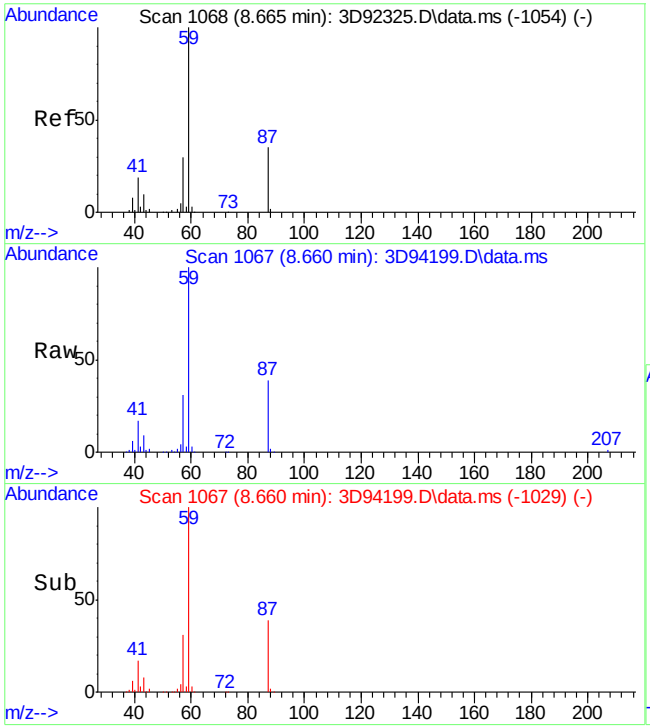


#34
di-isopropyl ether
Concen: 48.25 ug/L
RT: 8.193 min Scan# 978
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 45 Resp: 246030

Ion	Ratio	Lower	Upper
45	100		
87	24.8	0.0	54.3
43	67.0	29.5	89.5

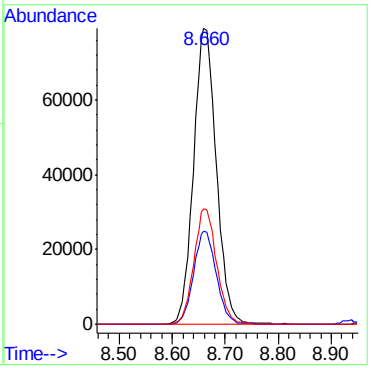


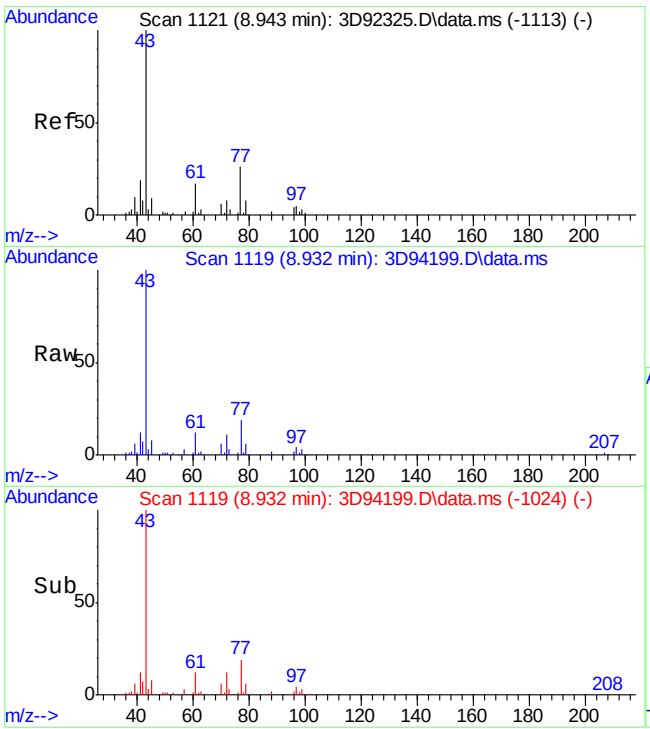


#35
ethyl tert-butyl ether
Concen: 50.77 ug/L
RT: 8.660 min Scan# 1067
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 59 Resp: 238906

Ion	Ratio	Lower	Upper
59	100		
57	31.3	1.9	61.9
87	38.9	8.8	68.8

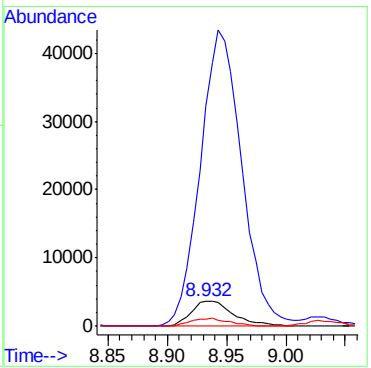


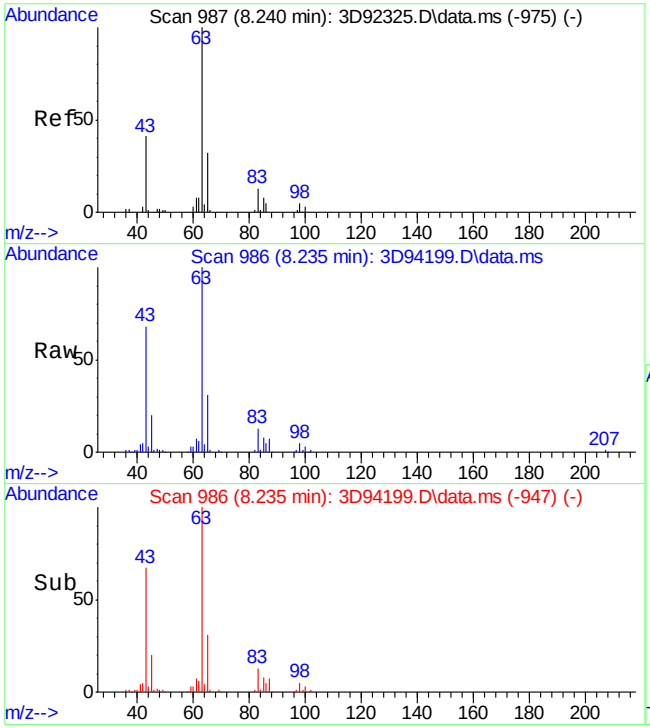


#36
2-butanone
Concen: 55.72 ug/L
RT: 8.932 min Scan# 1119
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 72 Resp: 8953

Ion	Ratio	Lower	Upper
72	100		
43	1180.2	856.1	1589.9
57	27.0	20.9	38.7

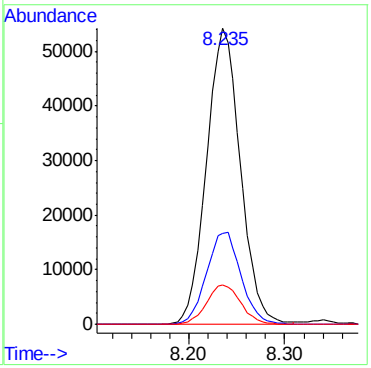


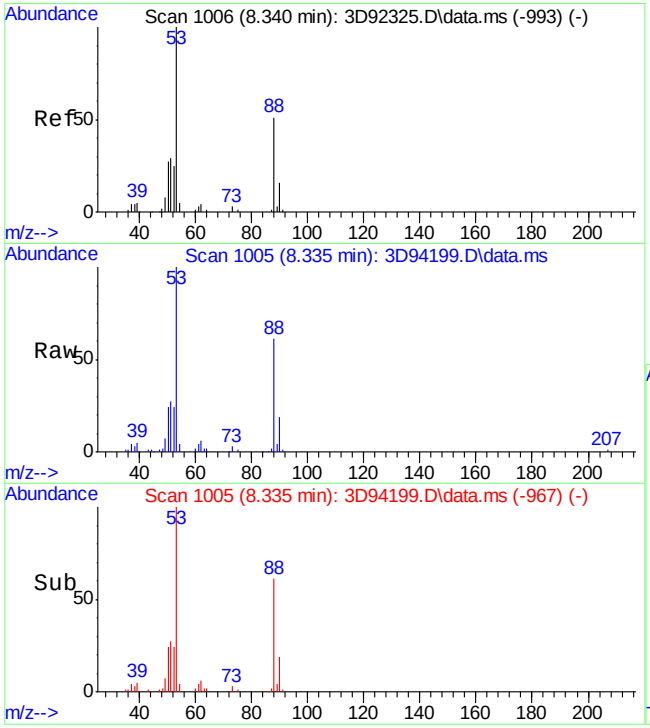


#37
1,1-dichloroethane
Concen: 49.08 ug/L
RT: 8.235 min Scan# 986
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 63 Resp: 133874

Ion	Ratio	Lower	Upper
63	100		
65	30.9	2.0	62.0
83	13.1	0.0	43.2

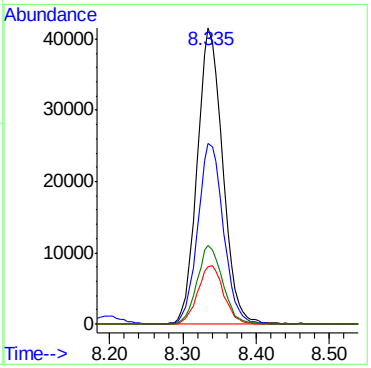




#38
chloroprene
Concen: 50.35 ug/L
RT: 8.335 min Scan# 1005
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

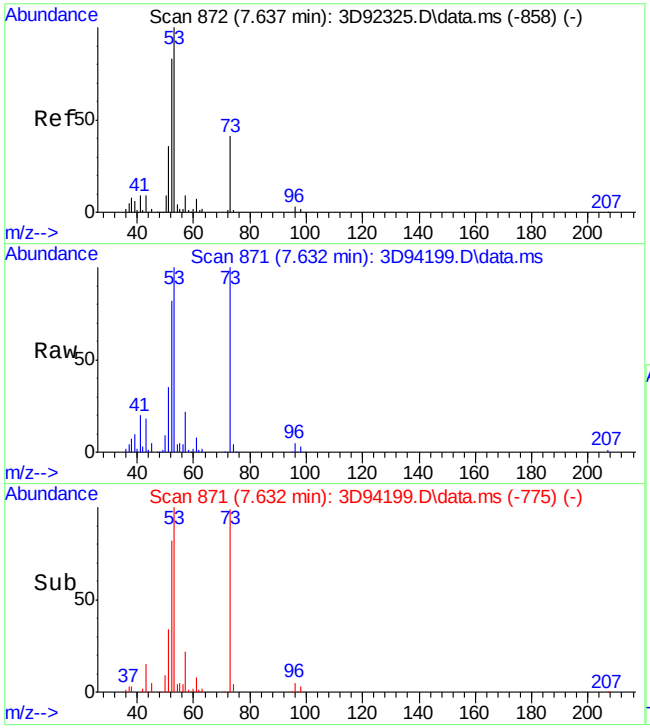
Tgt Ion: 53 Resp: 100240

Ion	Ratio	Lower	Upper
53	100		
88	61.2	28.5	88.5
90	19.2	0.0	49.6
51	26.7	0.0	55.5



7.7.10

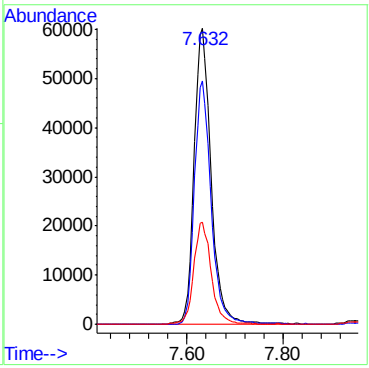
7

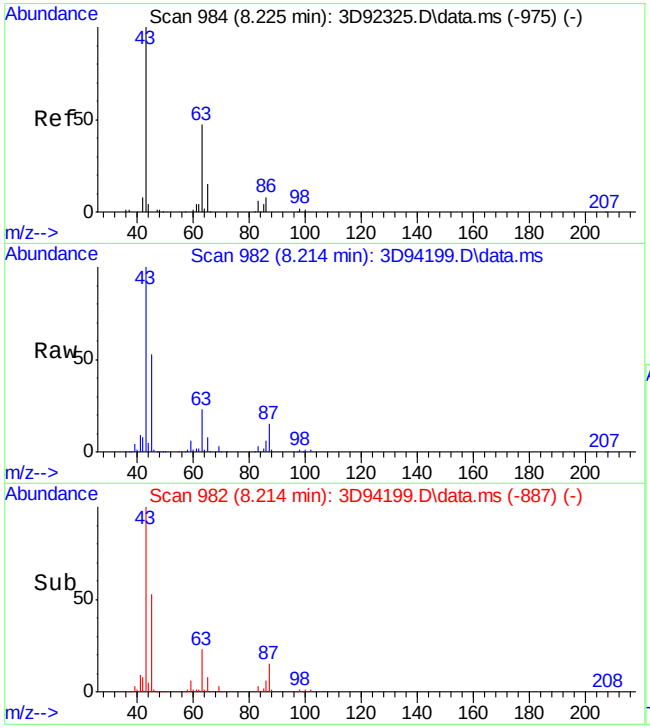


#39
acrylonitrile
Concen: 264.10 ug/L
RT: 7.632 min Scan# 871
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 53 Resp: 148146

Ion	Ratio	Lower	Upper
53	100		
52	82.1	54.6	114.6
51	34.5	5.6	65.6

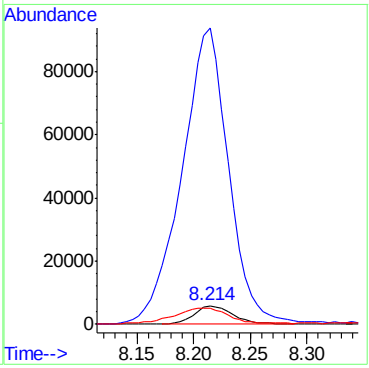


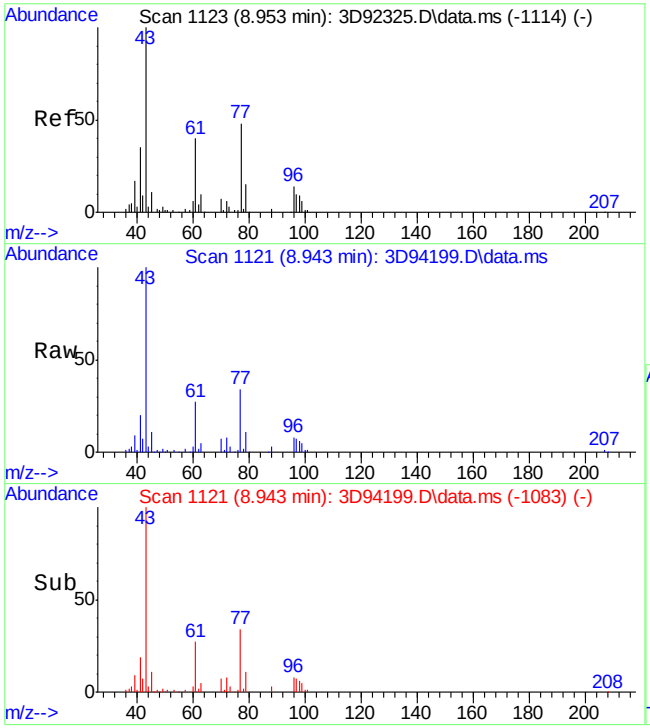


#40
vinyl acetate
Concen: 55.99 ug/L
RT: 8.214 min Scan# 982
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 86 Resp: 13648

Ion	Ratio	Lower	Upper
86	100		
43	1581.3	1100.0	2042.8
44	80.1	60.8	112.8

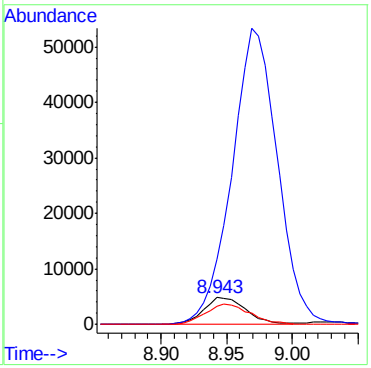


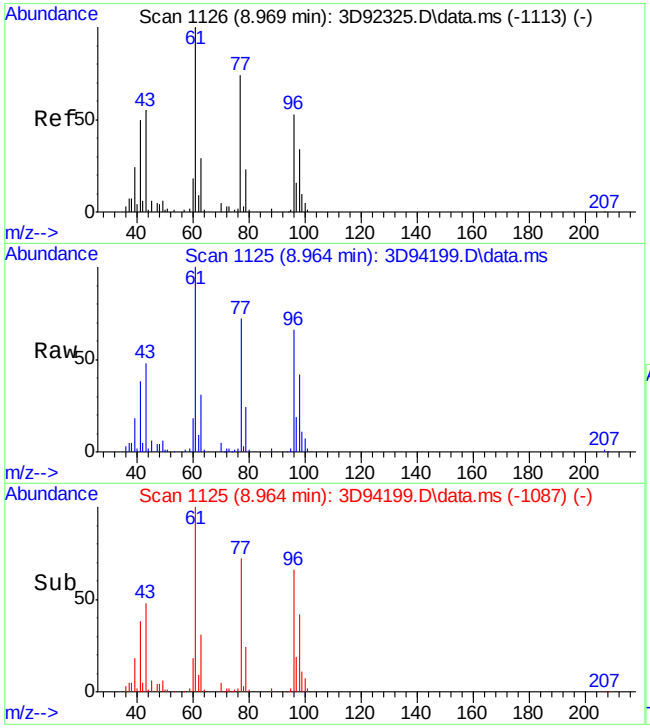


#41
ethyl acetate
Concen: 53.80 ug/L
RT: 8.943 min Scan# 1121
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 45 Resp: 10736

Ion	Ratio	Lower	Upper
45	100		
61	247.0	249.2	462.8#
70	66.8	54.6	101.4

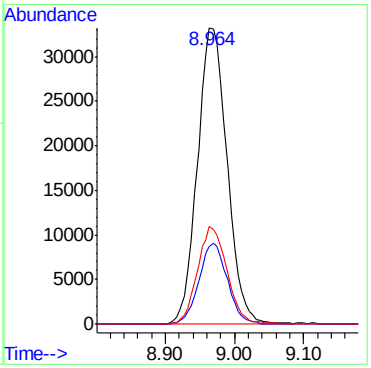




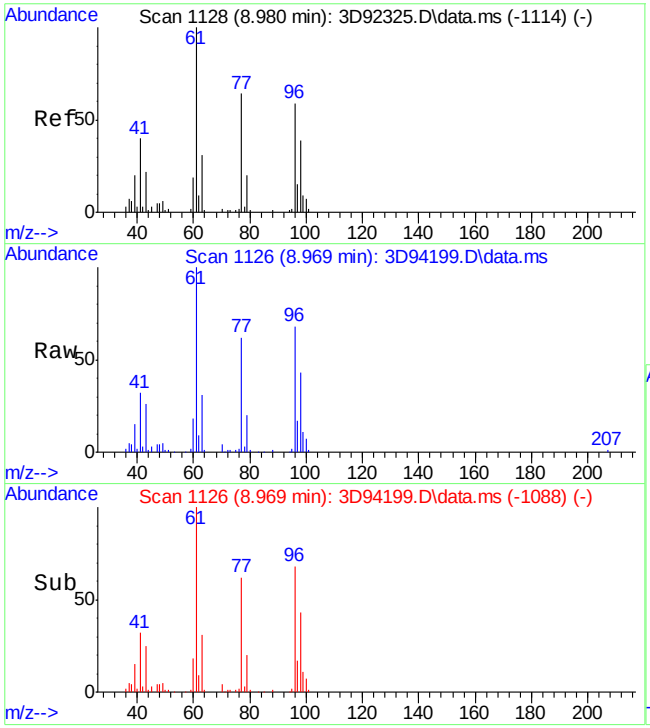
#42
2,2-dichloropropane
Concen: 44.40 ug/L
RT: 8.964 min Scan# 1125
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 77 Resp: 98819

Ion	Ratio	Lower	Upper
77	100		
97	26.0	0.0	56.7
79	33.1	2.2	62.2



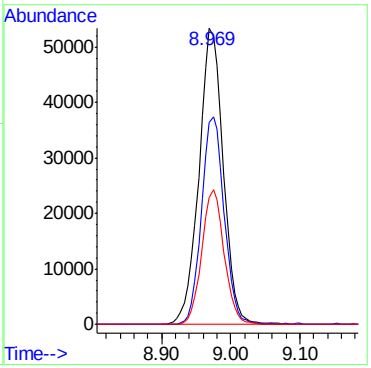
3D94199.D M3D4058.M Thu Dec 19 12:37:24 2013 3D Page 20

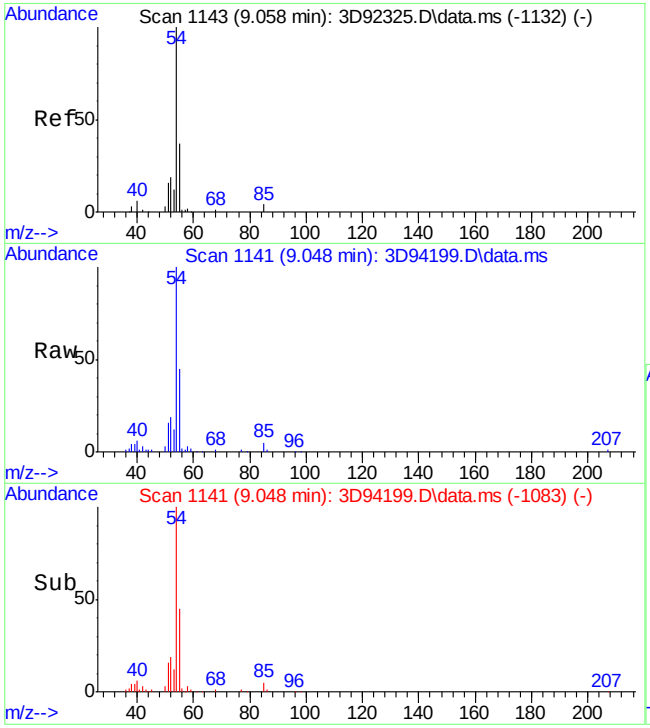


#43
cis-1,2-dichloroethene
Concen: 48.45 ug/L
RT: 8.969 min Scan# 1126
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 61 Resp: 129623

Ion	Ratio	Lower	Upper
61	100		
96	68.3	39.3	99.3
98	43.0	14.9	74.9

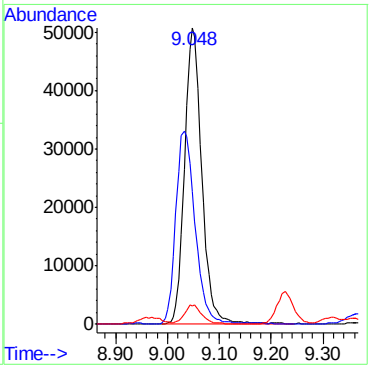




#44
propionitrile
Concen: 552.27 ug/L
RT: 9.048 min Scan# 1141
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

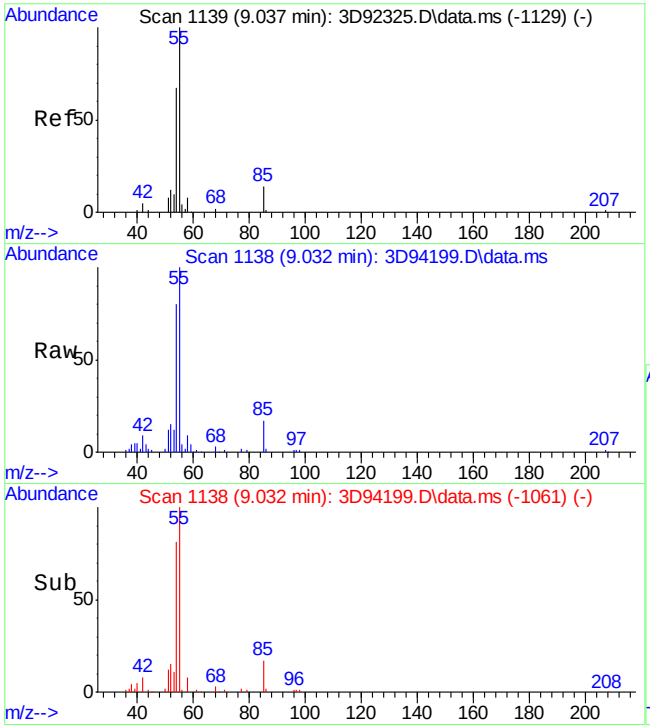
Tgt Ion: 54 Resp: 117147

Ion	Ratio	Lower	Upper
54	100		
55	44.6	19.2	79.2
40	5.1	0.0	35.1



7.7.10

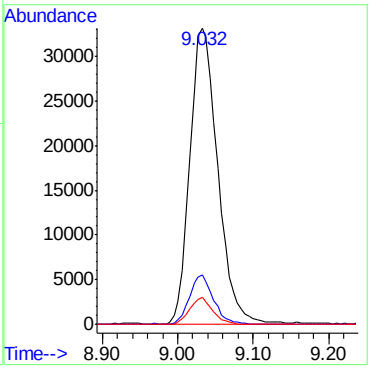
7

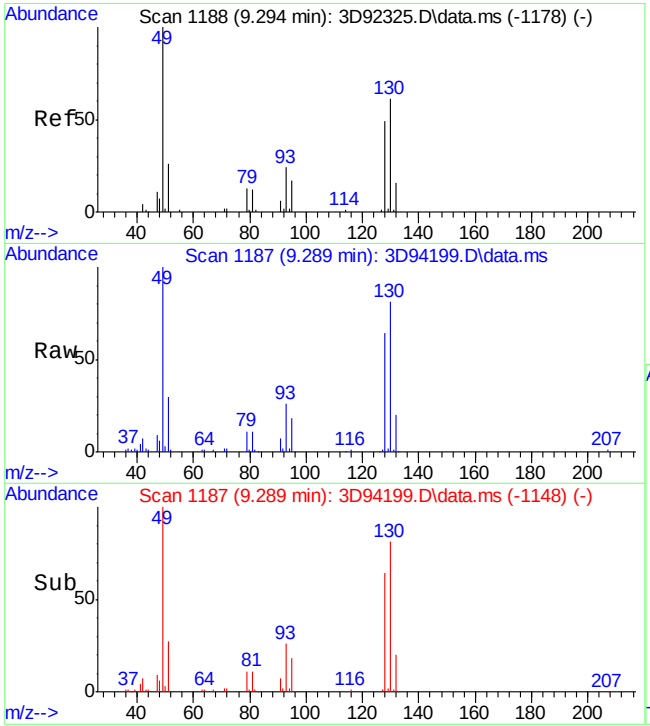


#45
methyl acrylate
Concen: 54.72 ug/L
RT: 9.032 min Scan# 1138
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 55 Resp: 85413

Ion	Ratio	Lower	Upper
55	100		
85	16.7	0.0	46.5
58	9.1	0.0	38.9

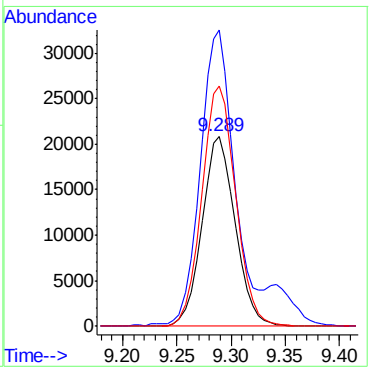


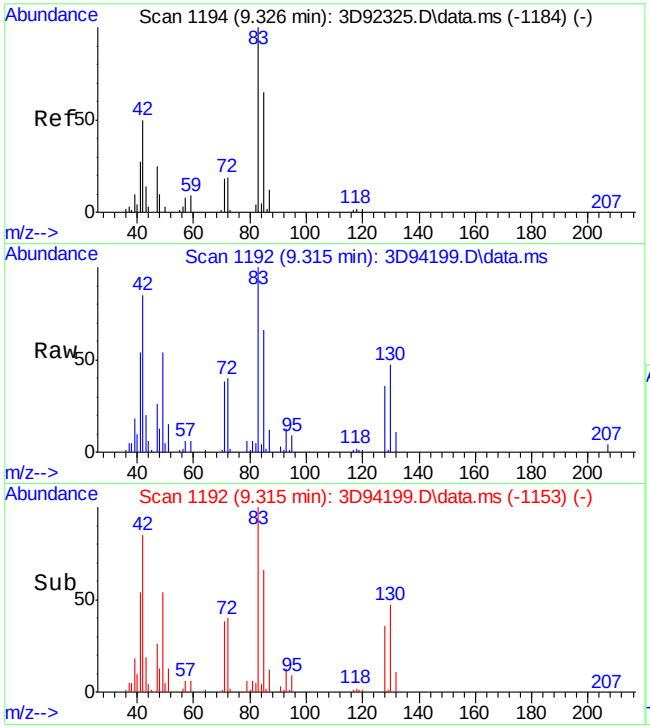


#46
bromochloromethane
Concen: 51.67 ug/L
RT: 9.289 min Scan# 1187
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:128 Resp: 44557

Ion	Ratio	Lower	Upper
128	100		
49	154.8	125.6	185.6
130	126.7	103.9	163.9

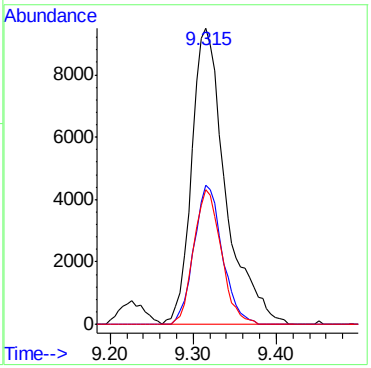


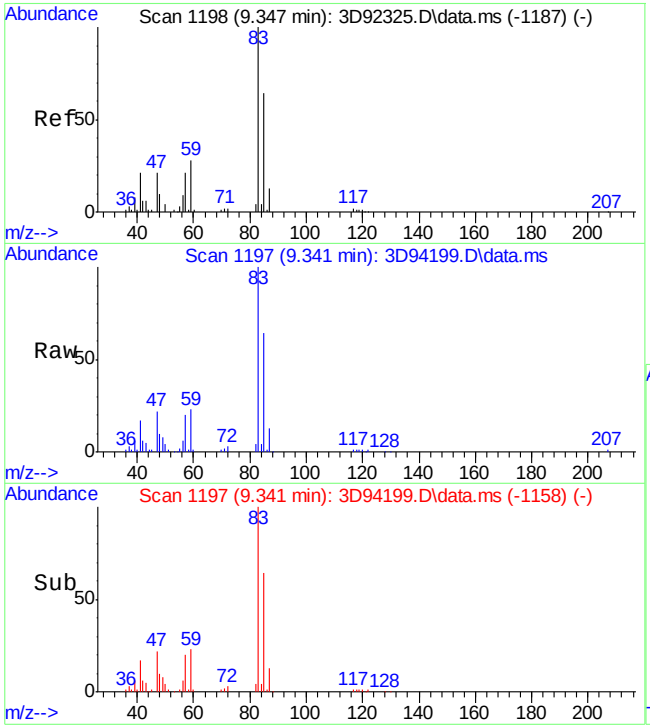


#47
tetrahydrofuran
Concen: 53.10 ug/L
RT: 9.315 min Scan# 1192
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 42 Resp: 26818

Ion	Ratio	Lower	Upper
42	100		
72	39.2	8.3	68.3
71	36.9	6.0	66.0

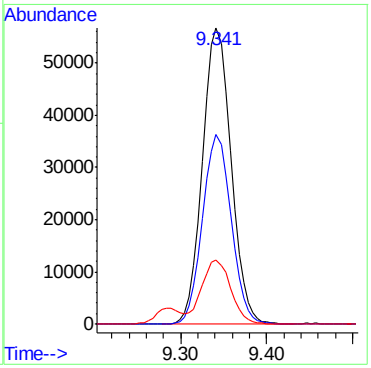


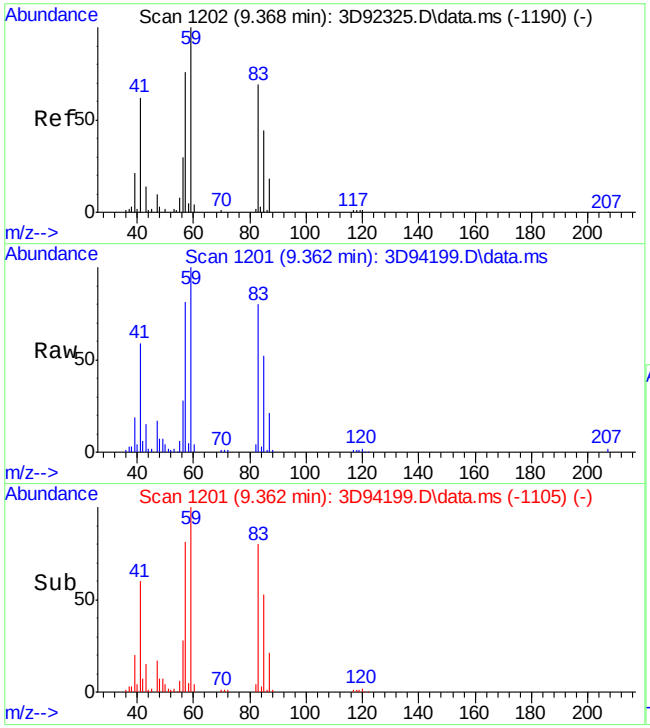


#48
chloroform
Concen: 48.56 ug/L
RT: 9.341 min Scan# 1197
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 83 Resp: 128301

Ion	Ratio	Lower	Upper
83	100		
85	64.0	34.8	94.8
47	21.6	0.0	53.3

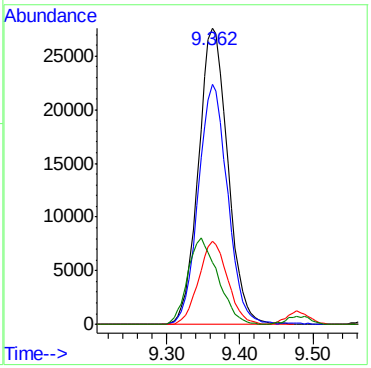


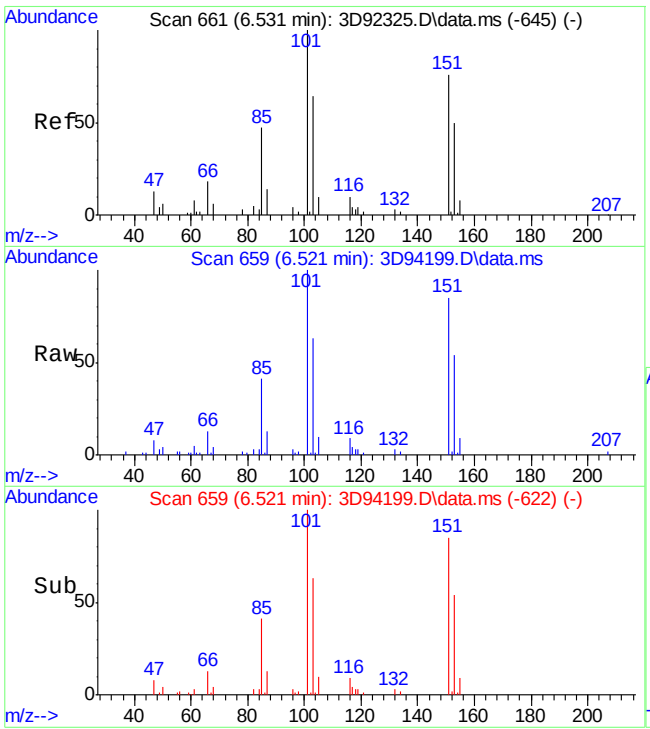


#49
Tert-Butyl Formate
Concen: 54.56 ug/L
RT: 9.362 min Scan# 1201
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 59 Resp: 76824

Ion	Ratio	Lower	Upper
59	100		
57	80.5	64.5	96.7
56	27.6	21.6	32.4
87	30.0	24.9	37.3

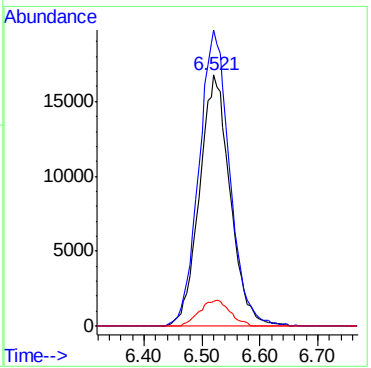


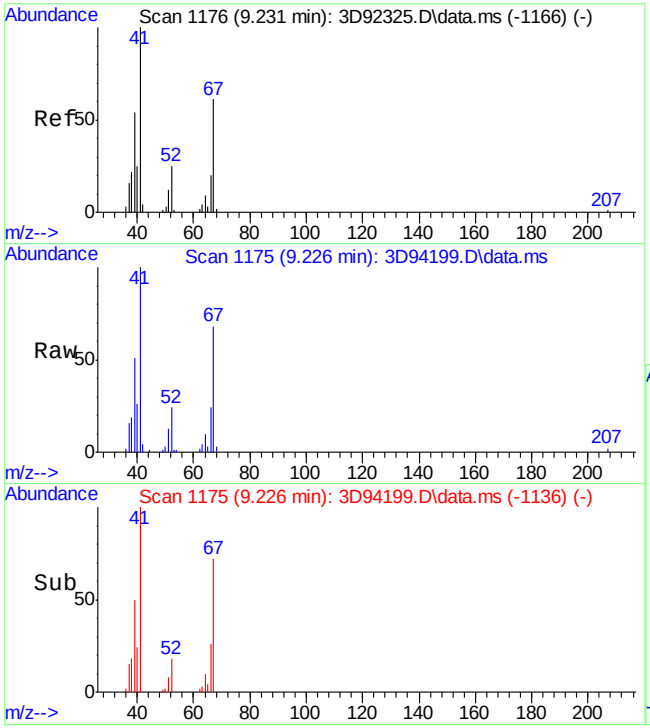


#52
freon 113
Concen: 58.96 ug/L
RT: 6.521 min Scan# 659
Delta R.T. -0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:151 Resp: 61716

Ion	Ratio	Lower	Upper
151	100		
101	118.0	87.2	147.2
116	10.0	0.0	41.5

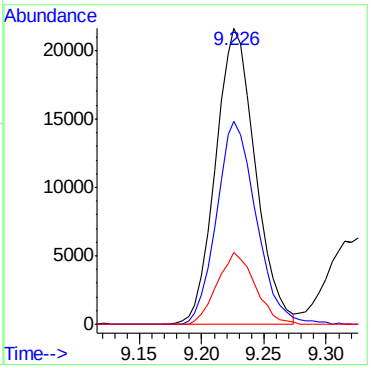


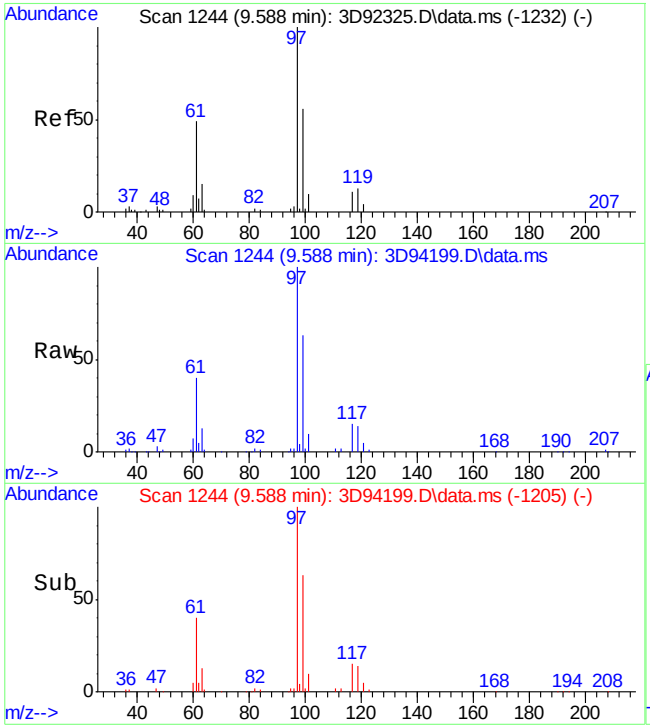


#53
methacrylonitrile
Concen: 52.35 ug/L
RT: 9.226 min Scan# 1175
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 41 Resp: 47718

Ion	Ratio	Lower	Upper
41	100		
67	68.5	39.6	99.6
66	24.3	0.0	53.3

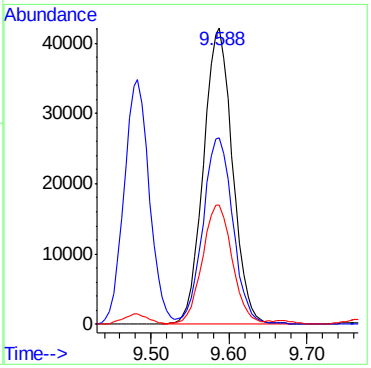


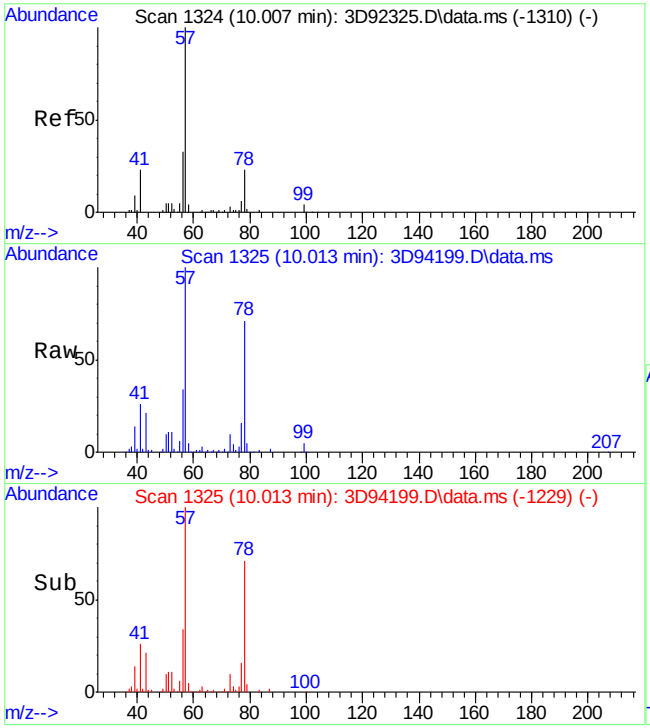


#54
1,1,1-trichloroethane
Concen: 47.77 ug/L
RT: 9.588 min Scan# 1244
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 97 Resp: 109284

Ion	Ratio	Lower	Upper
97	100		
99	63.0	33.6	93.6
61	39.6	11.5	71.5

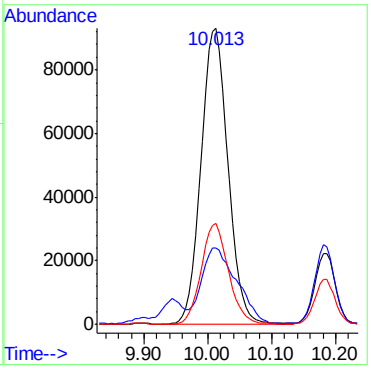


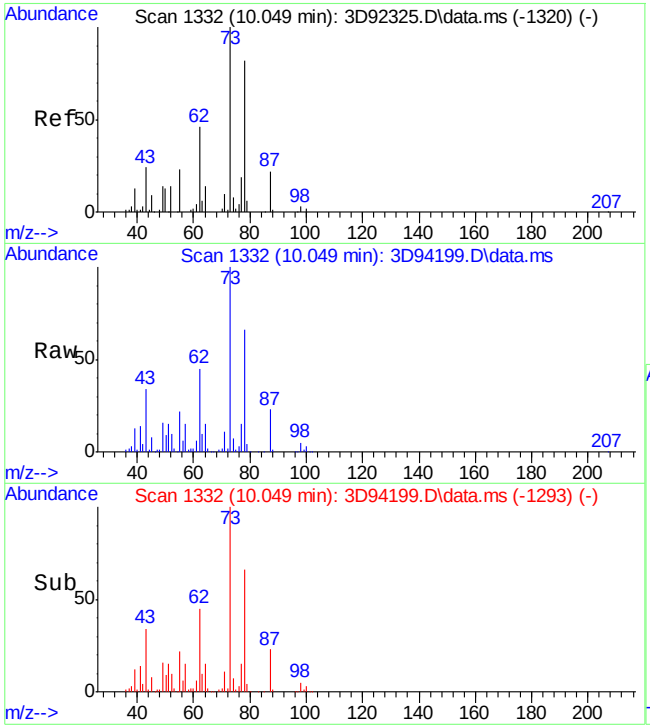


#56
2,2,4-Trimethylpentane
Concen: 50.48 ug/L
RT: 10.013 min Scan# 1325
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 57 Resp: 272568

Ion	Ratio	Lower	Upper
57	100		
41	34.2	4.1	64.1
56	34.5	4.4	64.4

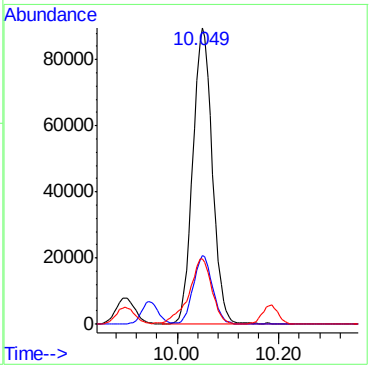


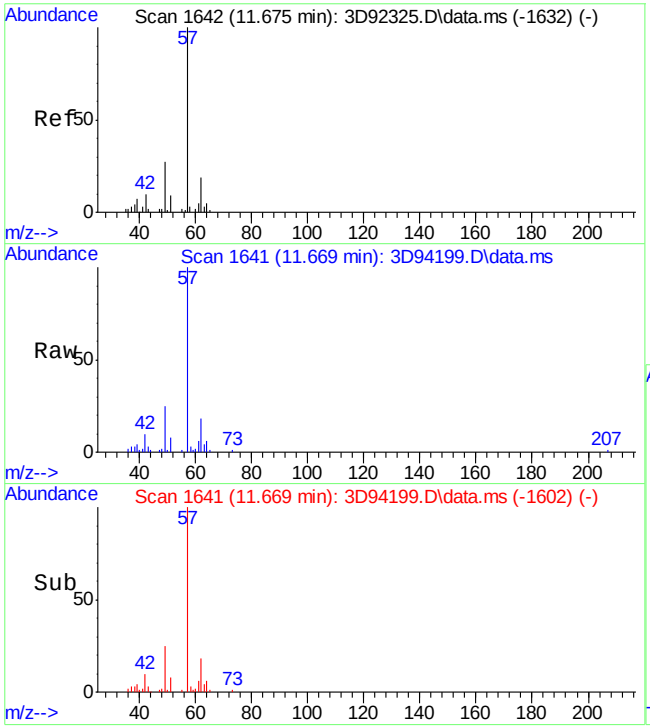


#57
tert-amyl methyl ether
Concen: 50.65 ug/L
RT: 10.049 min Scan# 1332
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 73 Resp: 239488

Ion	Ratio	Lower	Upper
73	100		
87	23.0	0.0	52.9
55	22.0	0.0	51.2

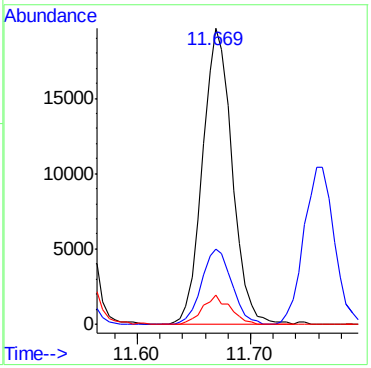


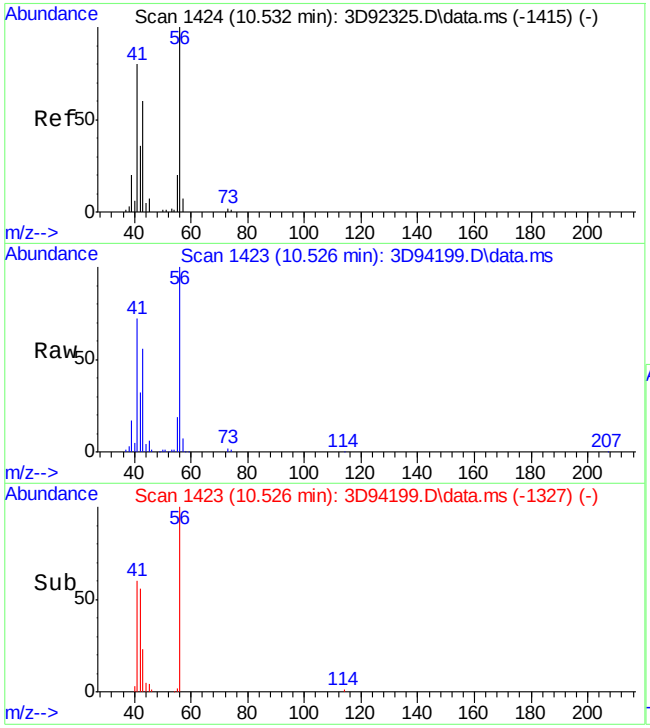


#59
epichlorohydrin
Concen: 259.73 ug/L
RT: 11.669 min Scan# 1641
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 57 Resp: 35498

Ion	Ratio	Lower	Upper
57	100		
49	25.4	0.0	55.7
42	9.7	0.0	39.6

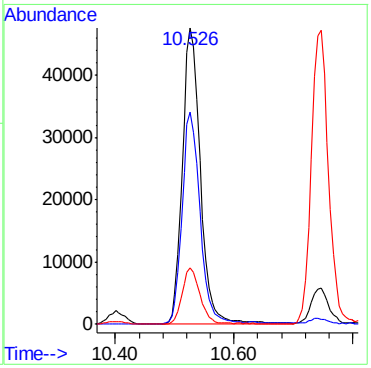


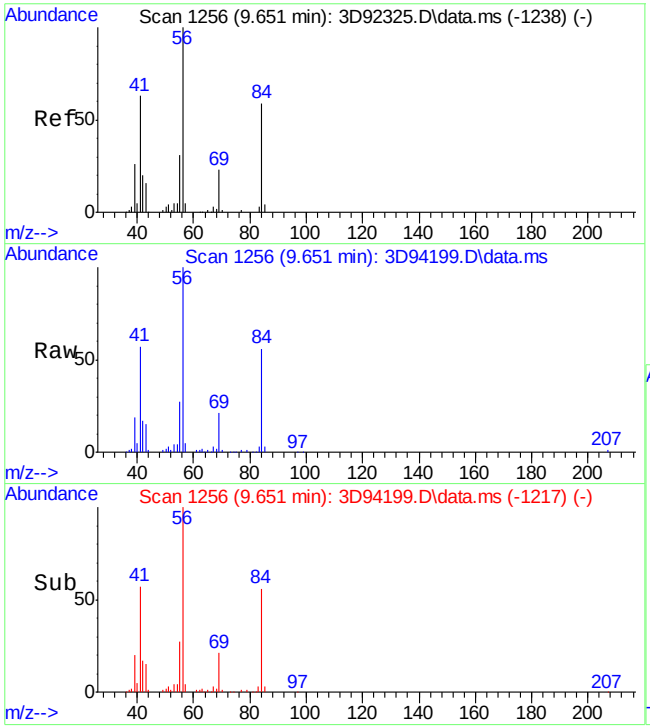


#60
n-butyl alcohol
Concen: 2640.35 ug/L
RT: 10.526 min Scan# 1423
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 56 Resp: 100471

Ion	Ratio	Lower	Upper
56	100		
41	71.7	42.2	102.2
55	19.1	0.0	48.4

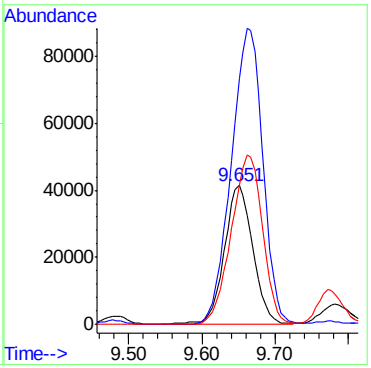


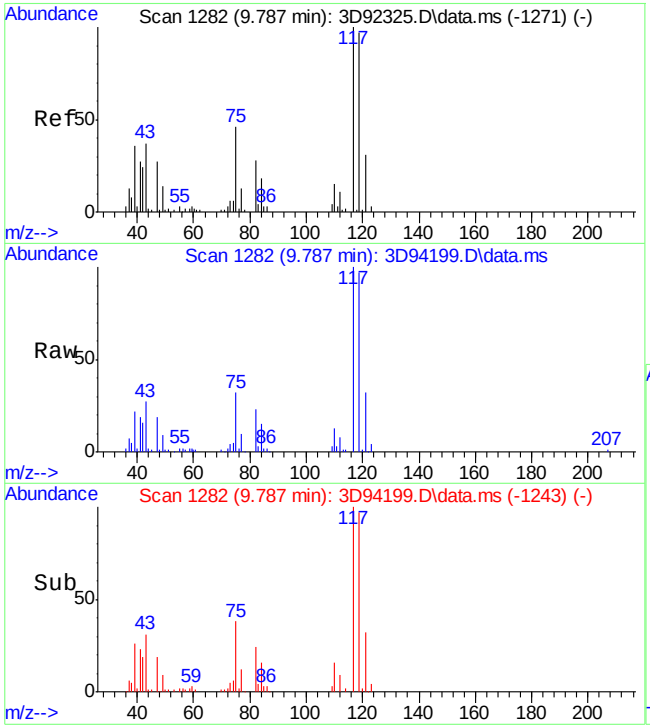


#61
cyclohexane
Concen: 50.23 ug/L
RT: 9.651 min Scan# 1256
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 84 Resp: 111727

Ion	Ratio	Lower	Upper
84	100		
56	236.6	208.4	268.4
41	134.3	105.8	165.8

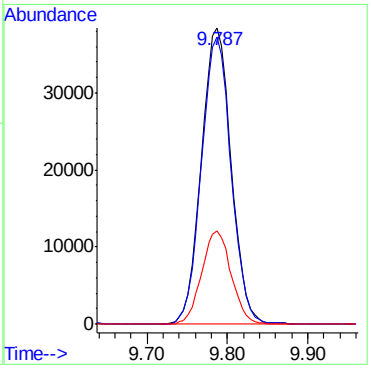


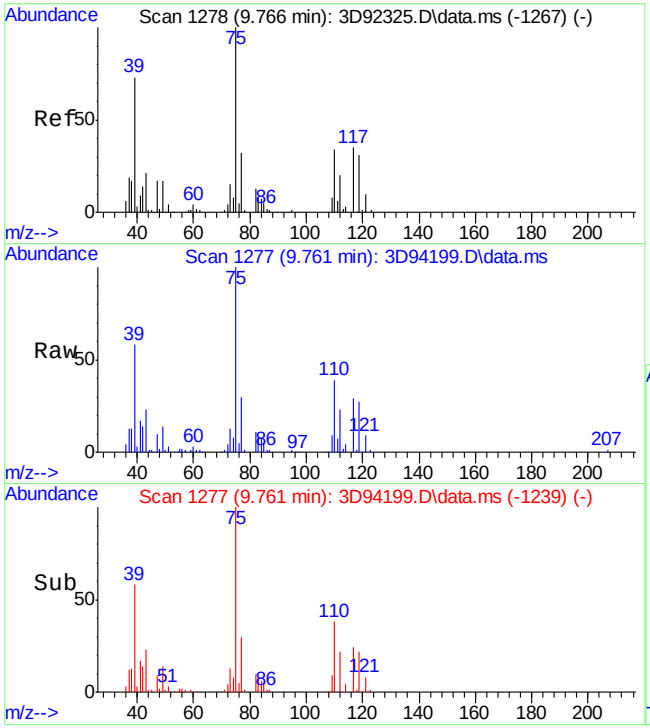


#62
carbon tetrachloride
Concen: 48.74 ug/L
RT: 9.787 min Scan# 1282
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:117 Resp: 98893

Ion	Ratio	Lower	Upper
117	100		
119	97.0	64.5	124.5
121	31.6	1.7	61.7

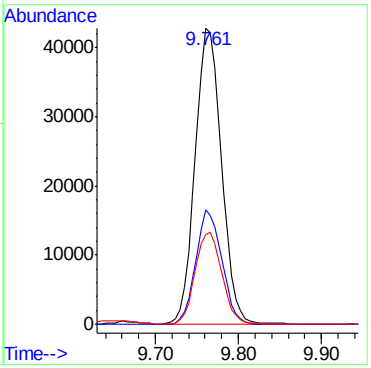


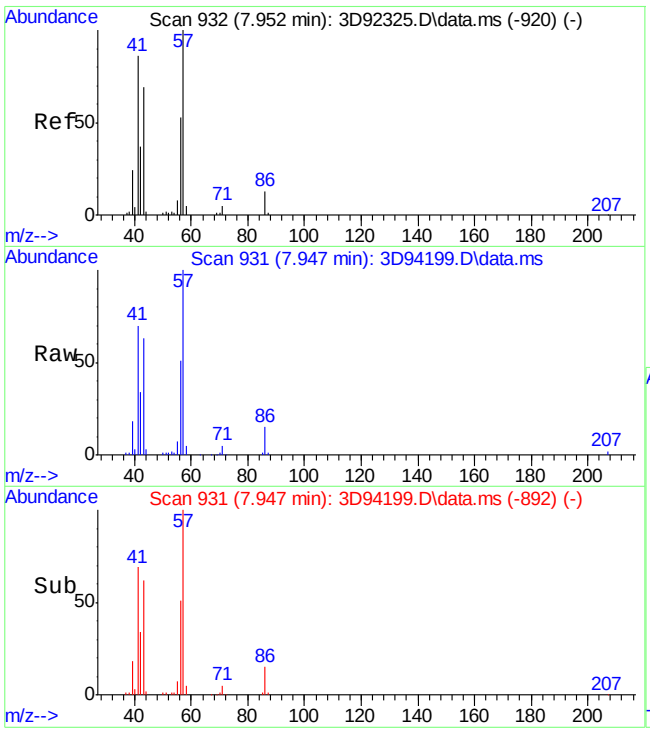


#63
1,1-dichloropropene
Concen: 46.98 ug/L
RT: 9.761 min Scan# 1277
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 75 Resp: 93986

Ion	Ratio	Lower	Upper
75	100		
110	38.6	8.3	68.3
77	30.3	0.4	60.4

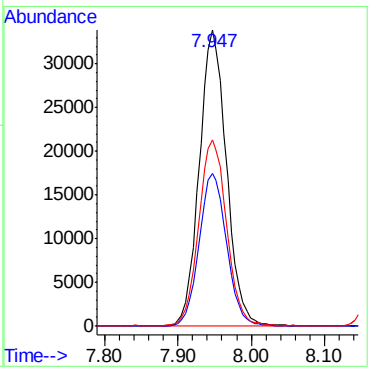


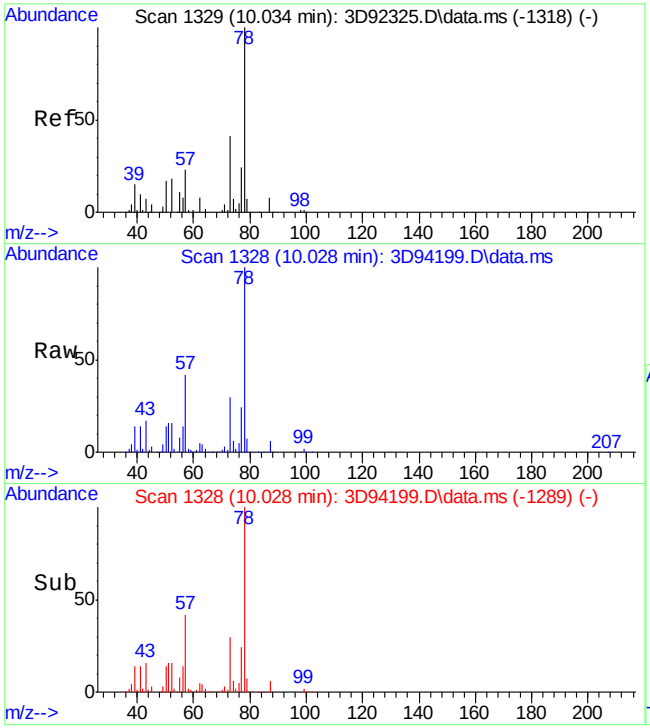


#64
hexane
Concen: 52.52 ug/L
RT: 7.947 min Scan# 931
Delta R.T. 0.006 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 57 Resp: 86923

Ion	Ratio	Lower	Upper
57	100		
56	51.4	21.9	81.9
43	62.8	32.7	92.7

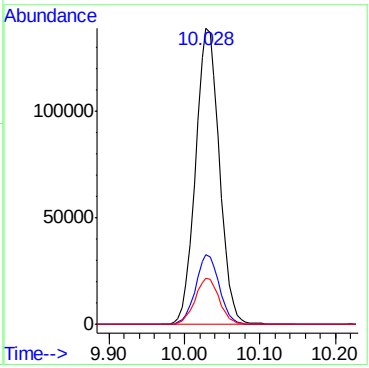


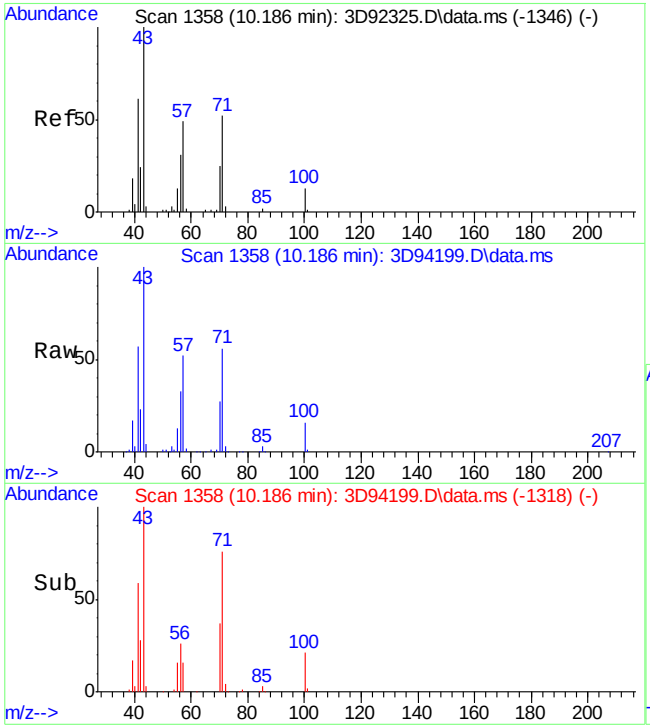


#65
benzene
Concen: 49.24 ug/L
RT: 10.028 min Scan# 1328
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 78 Resp: 305050

Ion	Ratio	Lower	Upper
78	100		
77	23.6	0.0	53.8
52	15.5	0.0	45.9

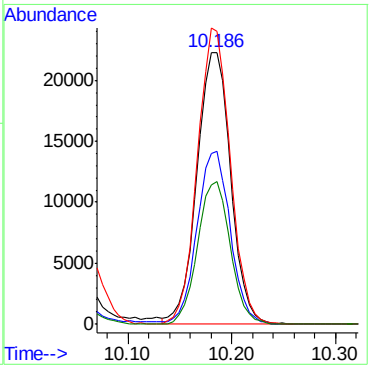


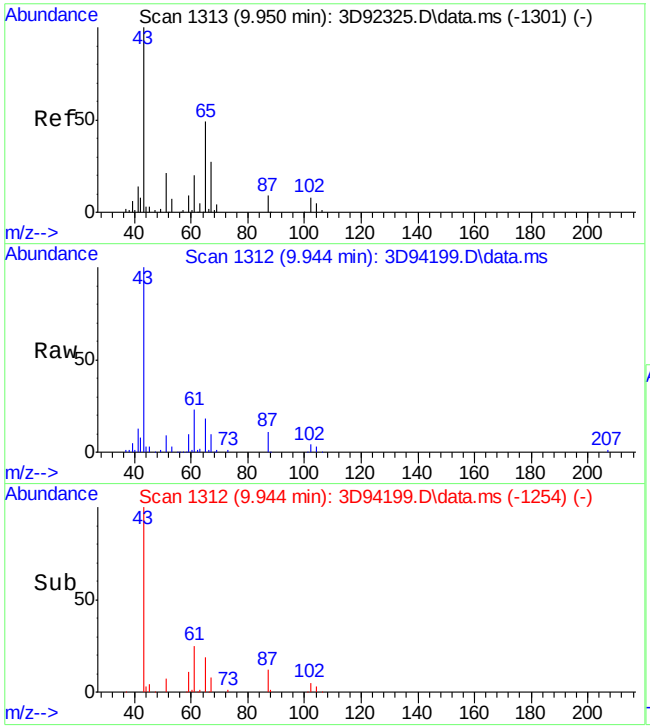


#66
heptane
Concen: 51.10 ug/L
RT: 10.186 min Scan# 1358
Delta R.T. 0.011 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 57 Resp: 50208

Ion	Ratio	Lower	Upper
57	100		
56	63.5	31.4	91.4
71	107.8	75.5	135.5
70	52.3	20.3	80.3

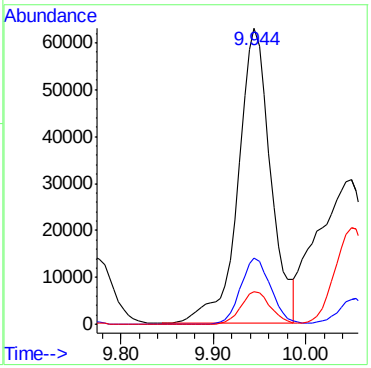


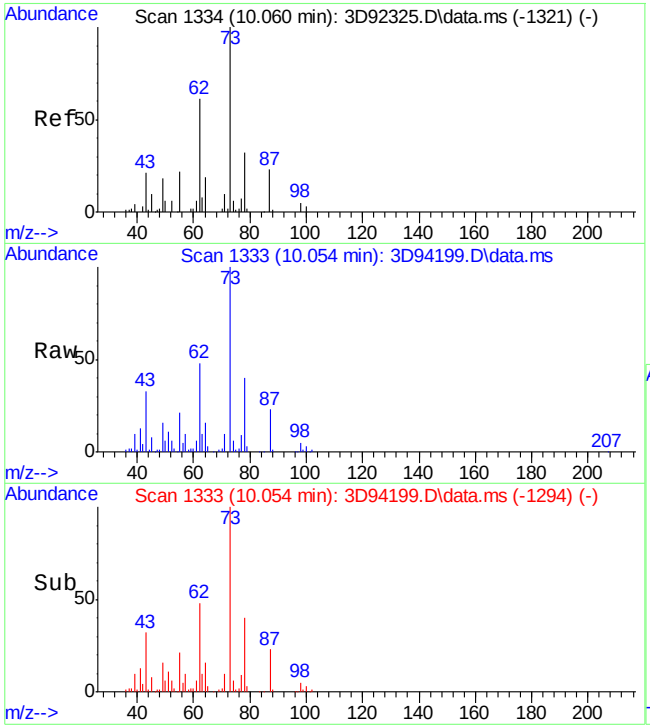


#67
isopropyl acetate
Concen: 55.94 ug/L
RT: 9.944 min Scan# 1312
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 43 Resp: 153975

Ion	Ratio	Lower	Upper
43	100		
61	21.0	0.0	52.1
87	10.1	0.0	40.9

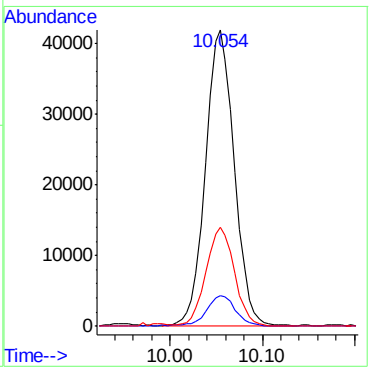


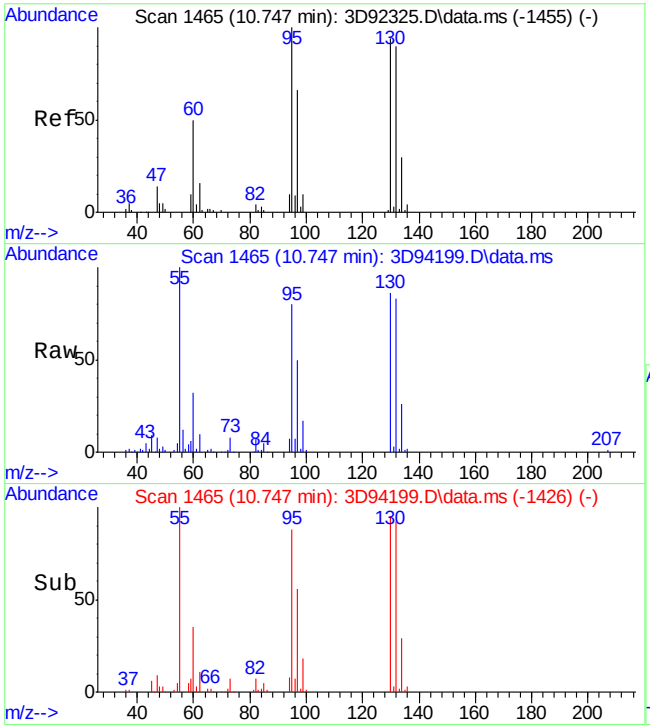


#68
1,2-dichloroethane
Concen: 49.09 ug/L
RT: 10.054 min Scan# 1333
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 62 Resp: 90389

Ion	Ratio	Lower	Upper
62	100		
98	10.4	0.0	40.2
64	33.2	2.5	62.5

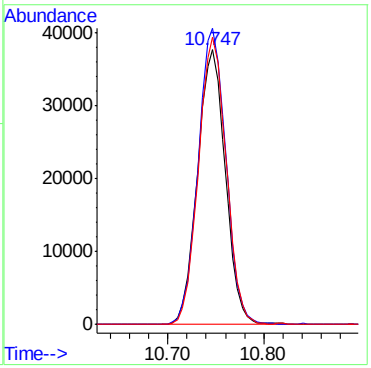


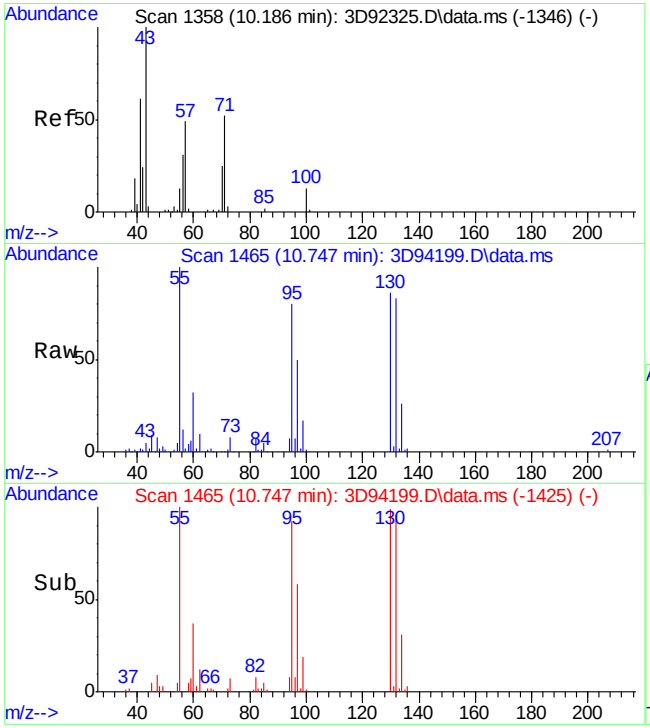


#69
trichloroethene
Concen: 49.57 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 95 Resp: 75999

Ion	Ratio	Lower	Upper
95	100		
130	107.5	78.9	138.9
132	104.3	75.1	135.1

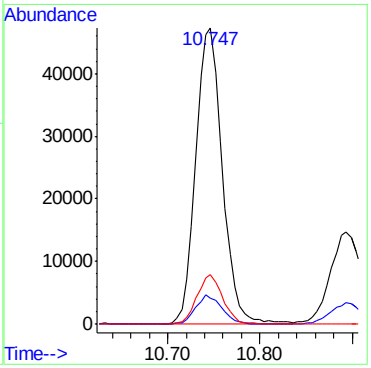


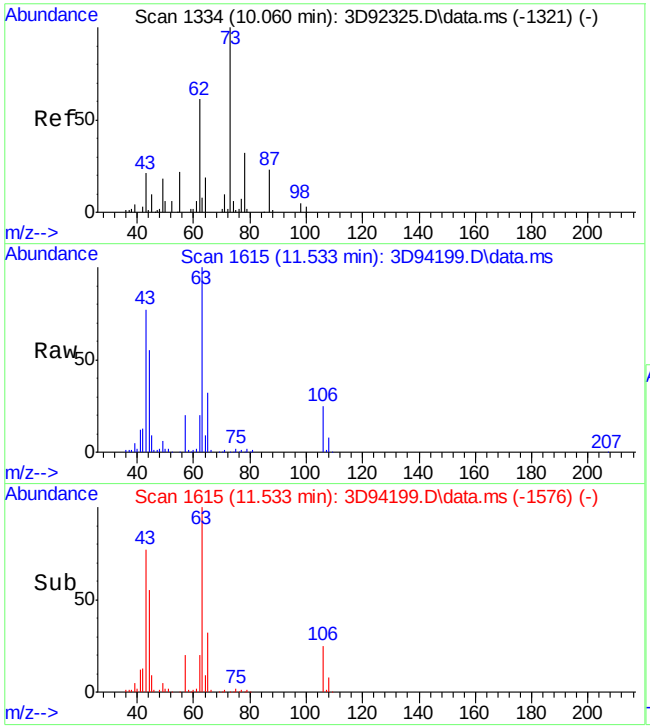


#70
ethyl acrylate
Concen: 54.67 ug/L
RT: 10.747 min Scan# 1465
Delta R.T. 0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 55 Resp: 94622

Ion	Ratio	Lower	Upper
55	100		
45	9.6	7.8	11.6
99	15.9	12.9	19.3

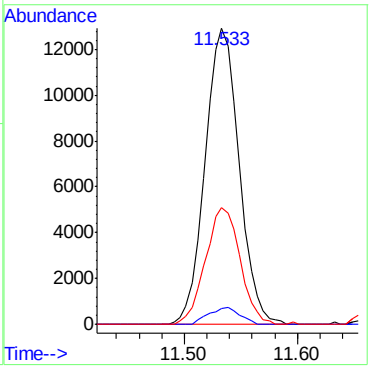


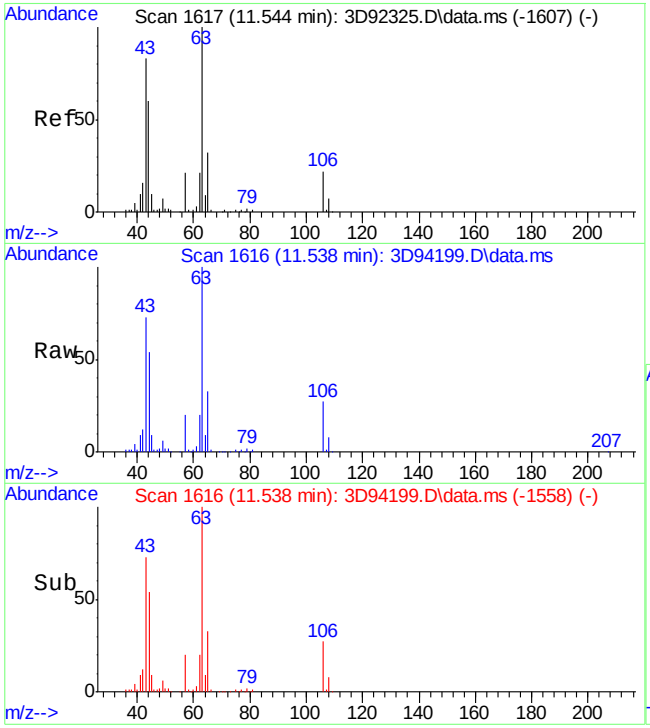


#72
2-nitropropane
Concen: 49.65 ug/L
RT: 11.533 min Scan# 1615
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 41 Resp: 26897

Ion	Ratio	Lower	Upper
41	100		
46	5.5	0.0	35.6
39	39.3	9.8	69.8

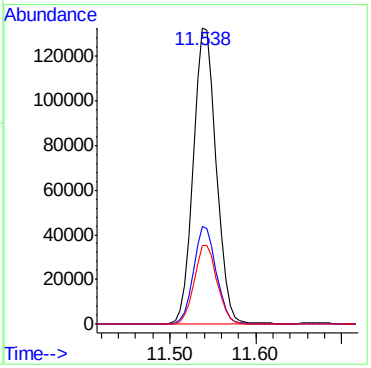


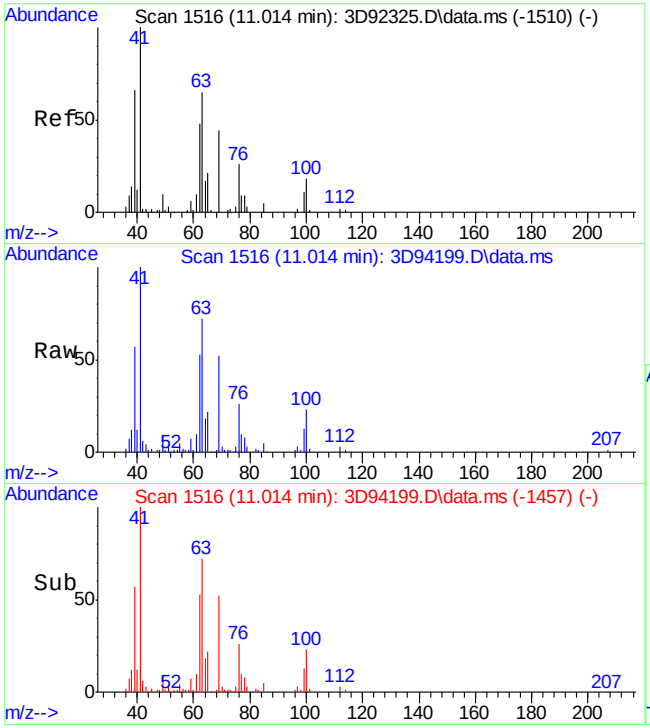


#73
2-chloroethyl vinyl ether
Concen: 249.61 ug/L
RT: 11.538 min Scan# 1616
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 63 Resp: 242920

Ion	Ratio	Lower	Upper
63	100		
65	32.8	3.0	63.0
106	26.6	0.0	56.6

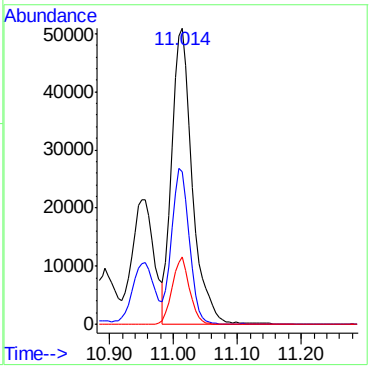


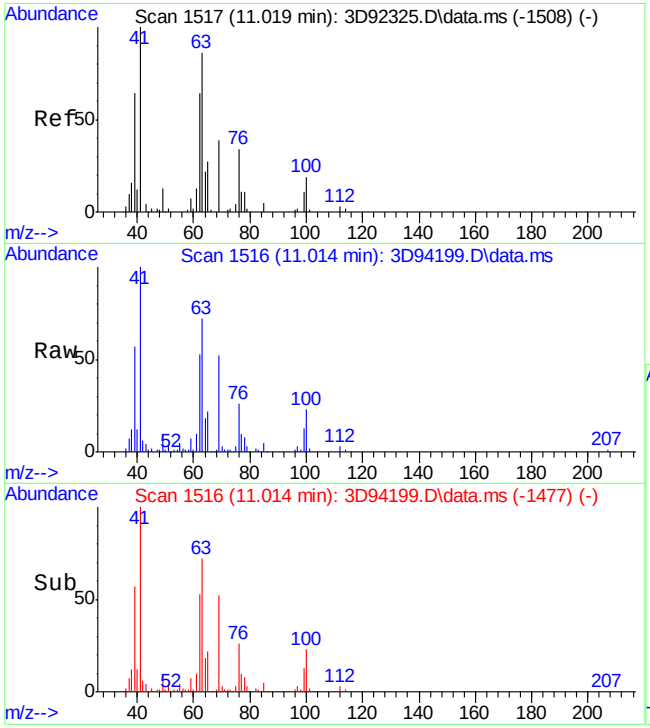


#74
methyl methacrylate
Concen: 51.28 ug/L
RT: 11.014 min Scan# 1516
Delta R.T. 0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 41 Resp: 113676

Ion	Ratio	Lower	Upper
41	100		
69	51.7	21.5	81.5
100	22.6	0.0	50.7

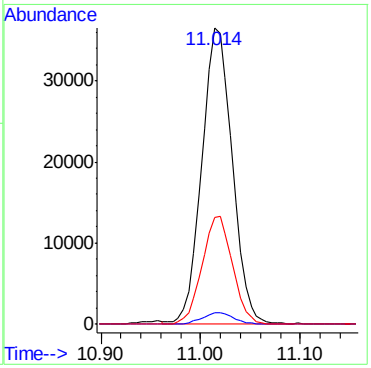


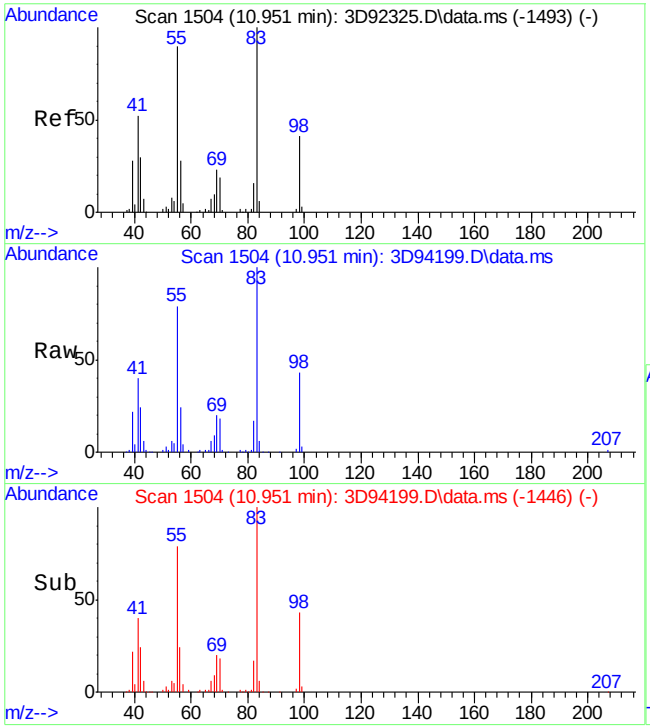


#75
1,2-dichloropropane
Concen: 50.86 ug/L
RT: 11.014 min Scan# 1516
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 63 Resp: 77418

Ion	Ratio	Lower	Upper
63	100		
112	3.8	0.0	33.7
76	36.0	7.1	67.1

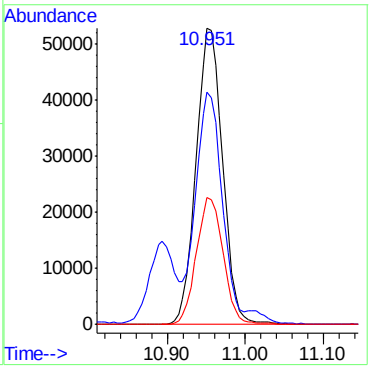


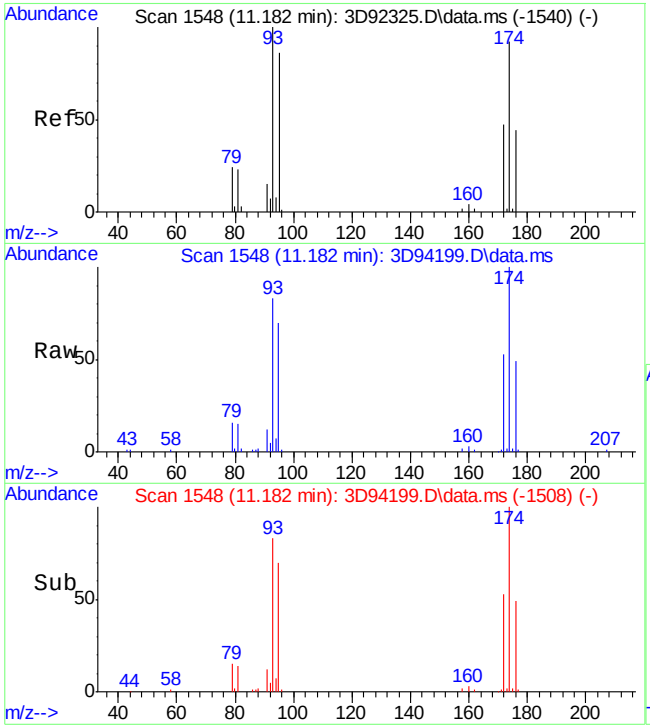


#76
methylcyclohexane
Concen: 54.72 ug/L
RT: 10.951 min Scan# 1504
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 83 Resp: 124446

Ion	Ratio	Lower	Upper
83	100		
55	78.3	48.6	108.6
98	42.9	12.6	72.6

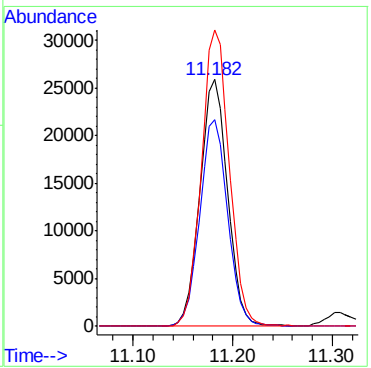


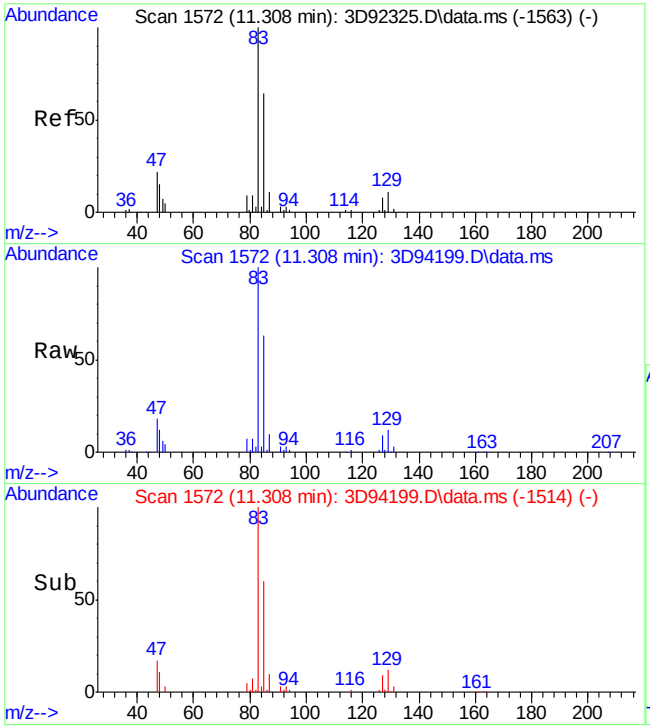


#77
dibromomethane
Concen: 51.90 ug/L
RT: 11.182 min Scan# 1548
Delta R.T. 0.011 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 93 Resp: 49715

Ion	Ratio	Lower	Upper
93	100		
95	83.6	51.7	111.7
174	120.1	84.5	144.5

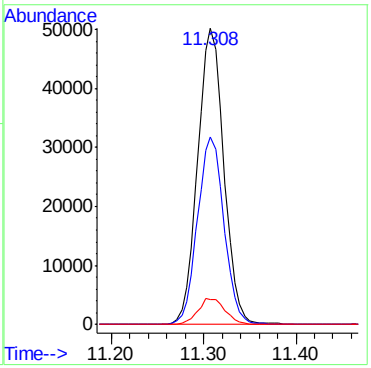


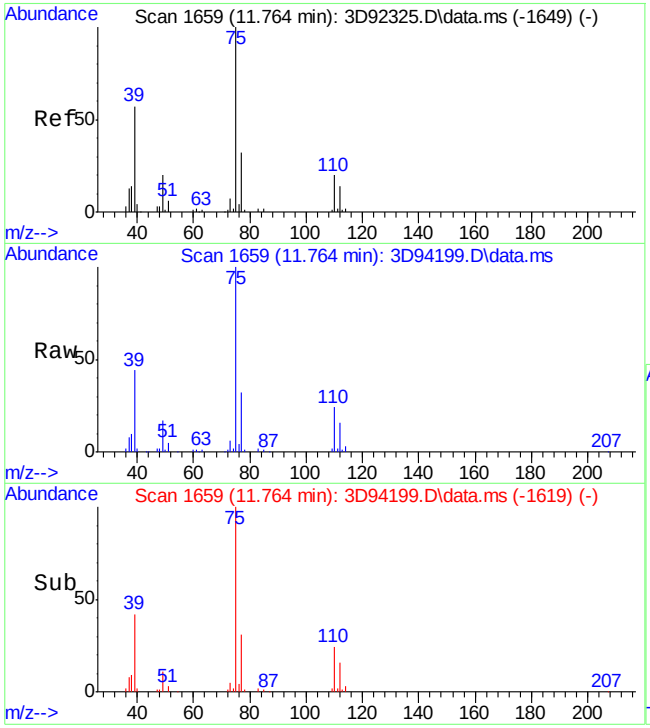


#78
bromodichloromethane
Concen: 50.51 ug/L
RT: 11.308 min Scan# 1572
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 83 Resp: 98722

Ion	Ratio	Lower	Upper
83	100		
85	63.3	33.4	93.4
127	8.6	0.0	39.1

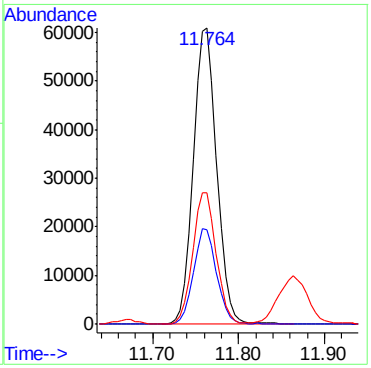


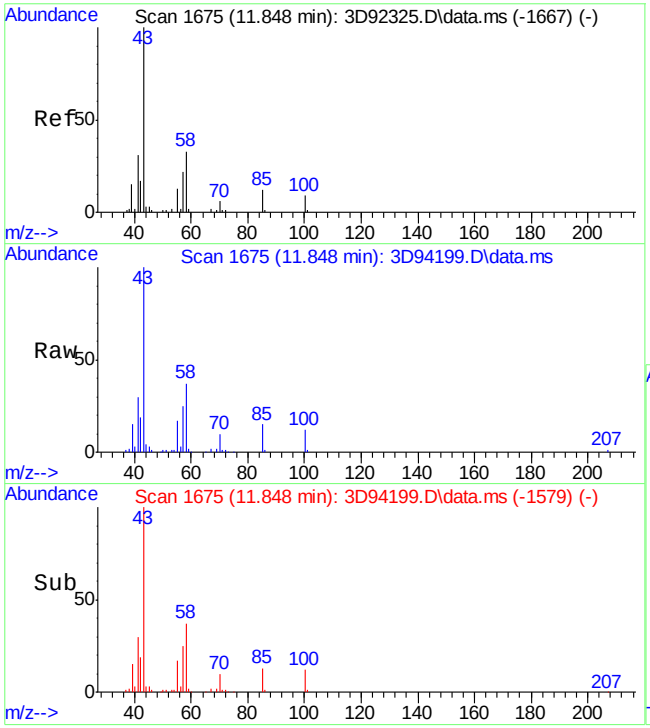


#79
cis-1,3-dichloropropene
Concen: 46.38 ug/L
RT: 11.764 min Scan# 1659
Delta R.T. 0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 75 Resp: 113069

Ion	Ratio	Lower	Upper
75	100		
77	31.8	1.7	61.7
39	44.3	14.6	74.6

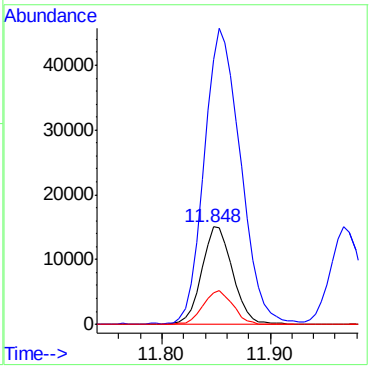


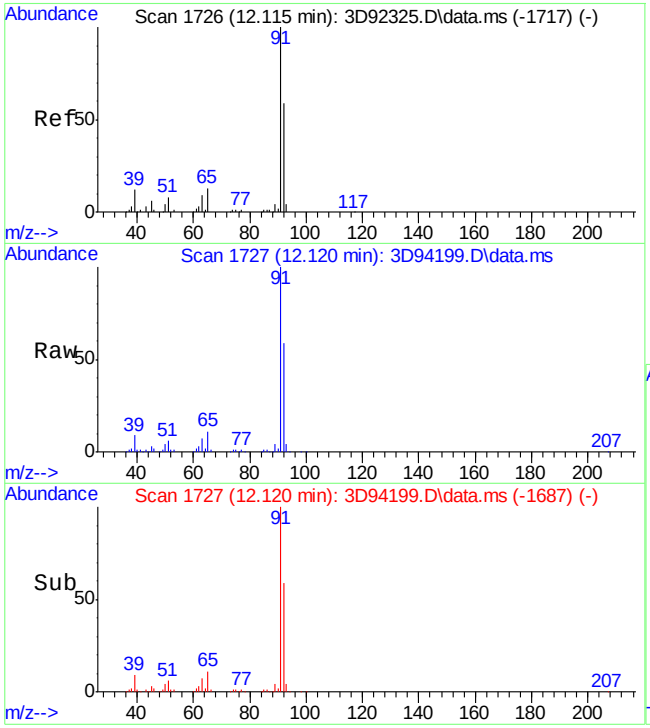


#81
4-methyl-2-pentanone
Concen: 54.98 ug/L
RT: 11.848 min Scan# 1675
Delta R.T. 0.006 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 58 Resp: 30085

Ion	Ratio	Lower	Upper
58	100		
43	358.0	331.5	391.5
100	33.1	3.0	63.0

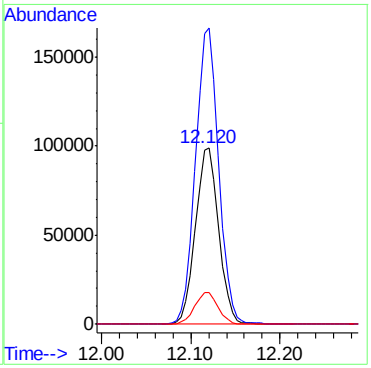


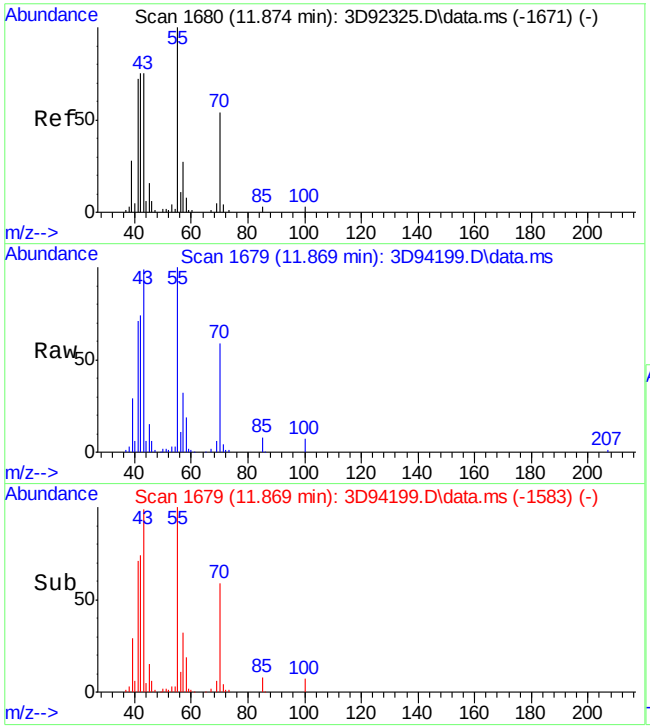


#82
toluene
Concen: 49.51 ug/L
RT: 12.120 min Scan# 1727
Delta R.T. 0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 92 Resp: 179044

Ion	Ratio	Lower	Upper
92	100		
91	168.6	137.1	197.1
65	18.0	0.0	48.7

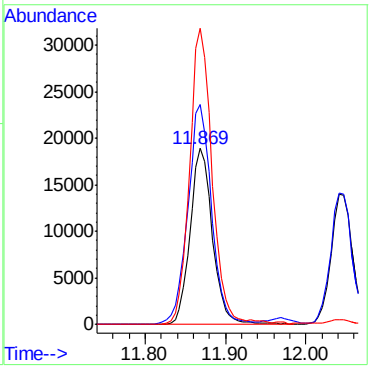


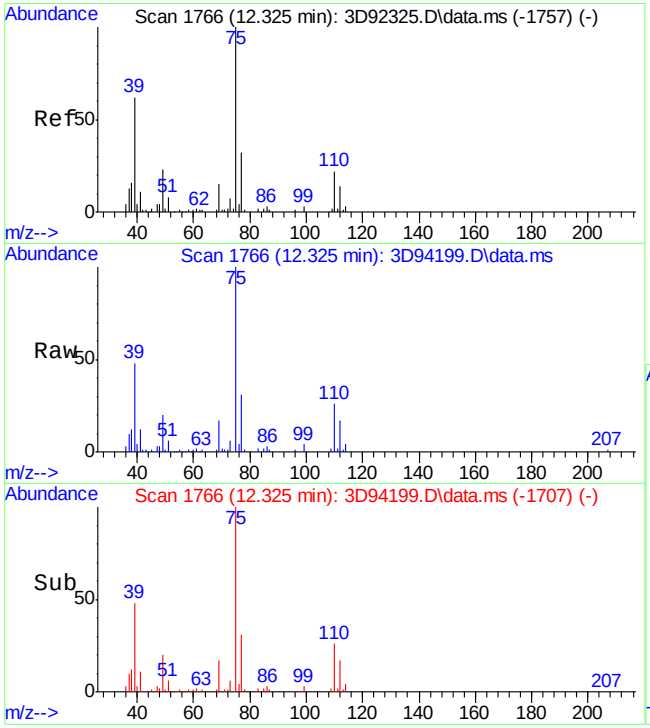


#83
3-methyl-1-butanol
Concen: 1019.03 ug/L
RT: 11.869 min Scan# 1679
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 70 Resp: 36649

Ion	Ratio	Lower	Upper
70	100		
42	132.8	102.8	162.8
55	170.3	140.8	200.8

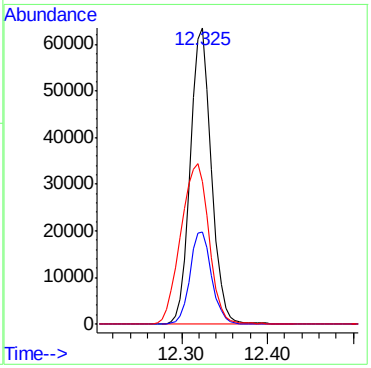




#84
trans-1,3-dichloropropene
Concen: 49.57 ug/L
RT: 12.325 min Scan# 1766
Delta R.T. 0.011 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 75 Resp: 107319

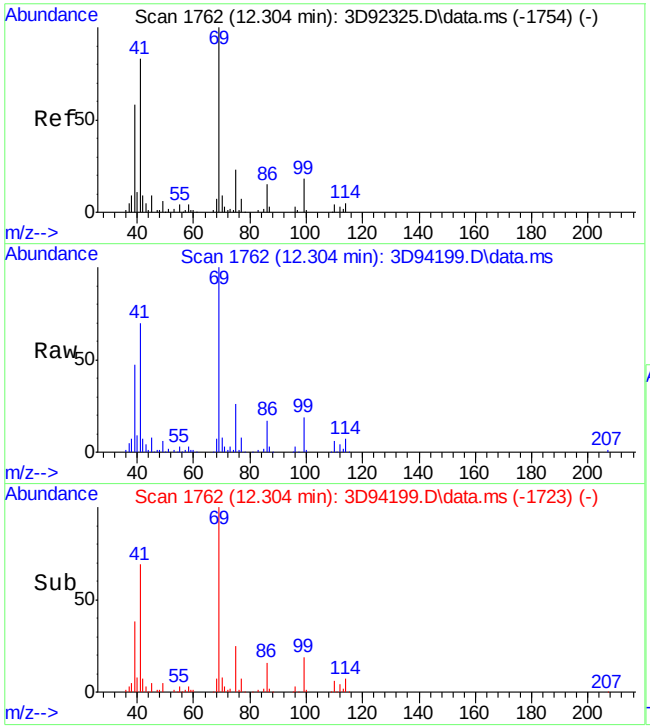
Ion	Ratio	Lower	Upper
75	100		
77	31.0	2.0	62.0
39	48.0	24.5	84.5



7.7.10

7

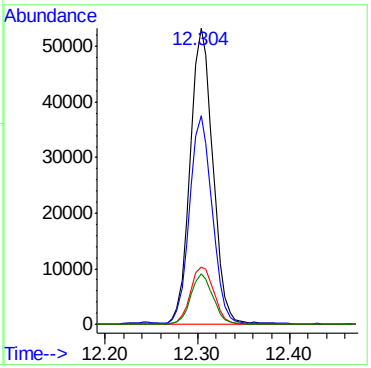
3D94199.D M3D4058.M Thu Dec 19 12:37:25 2013 3D Page 38

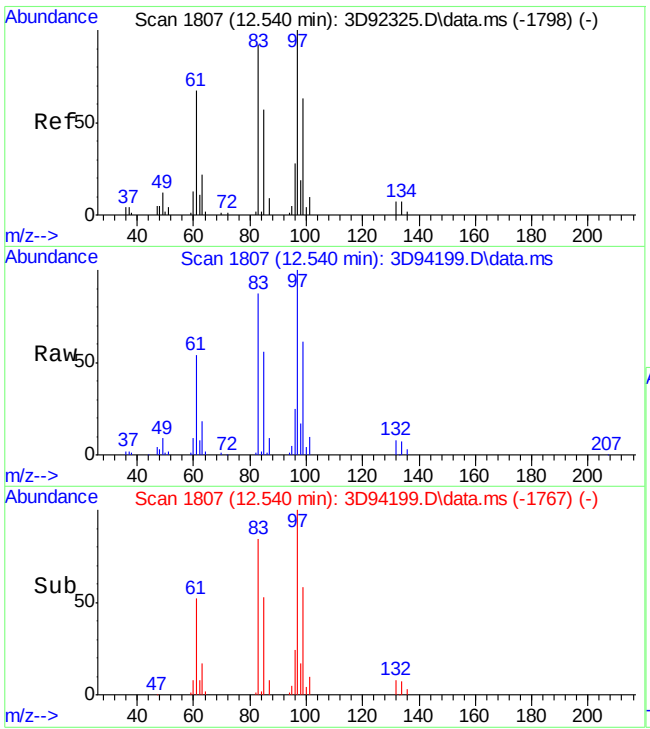


#85
ethyl methacrylate
Concen: 53.09 ug/L
RT: 12.304 min Scan# 1762
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 69 Resp: 91696

Ion	Ratio	Lower	Upper
69	100		
41	70.5	40.4	100.4
99	19.2	0.0	50.5
86	17.0	0.0	45.2

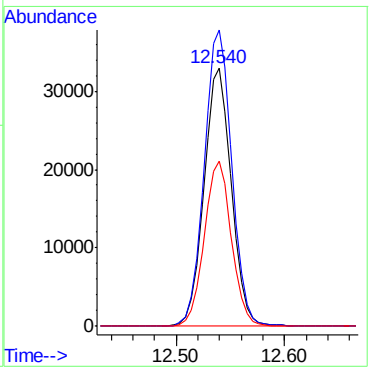


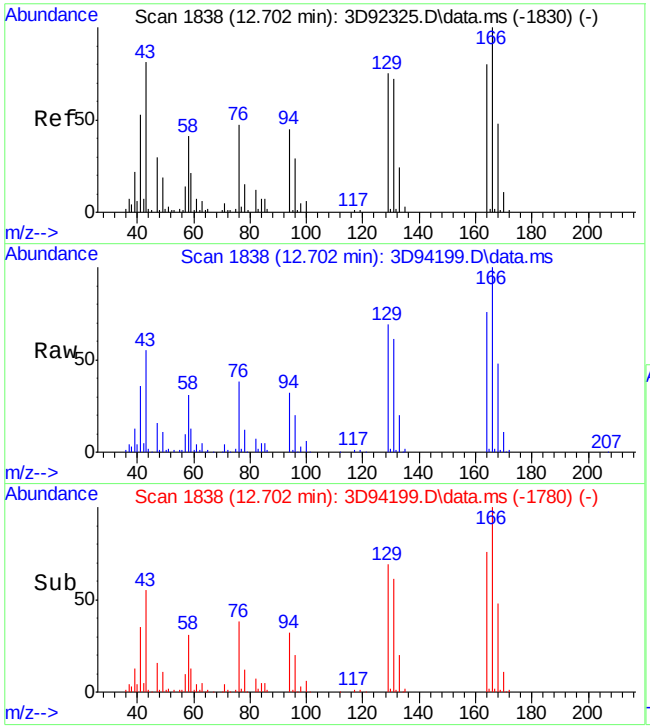


#86
1,1,2-trichloroethane
Concen: 52.47 ug/L
RT: 12.540 min Scan# 1807
Delta R.T. 0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 83 Resp: 58213

Ion	Ratio	Lower	Upper
83	100		
97	114.8	84.6	144.6
85	63.8	35.4	95.4

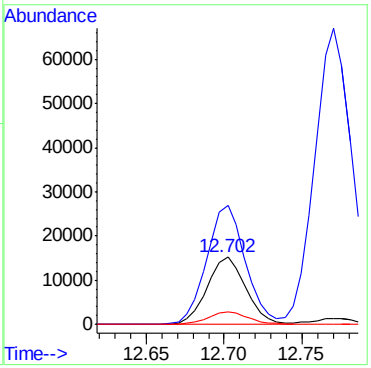


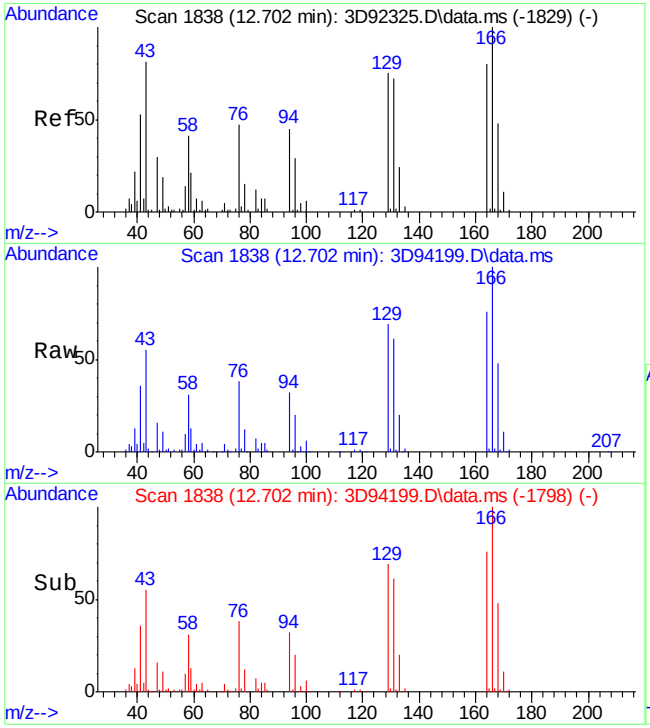


#87
2-hexanone
Concen: 54.72 ug/L
RT: 12.702 min Scan# 1838
Delta R.T. 0.006 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 58 Resp: 26210

Ion	Ratio	Lower	Upper
58	100		
43	177.6	143.4	203.4
100	19.3	0.0	48.0

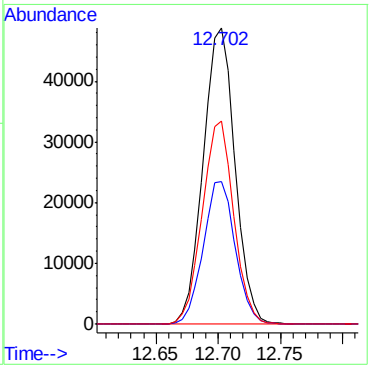


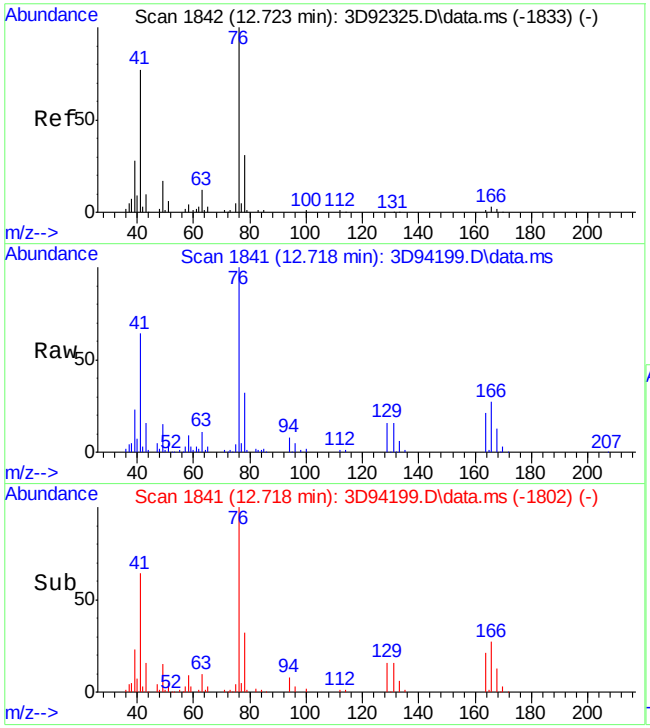


#89
tetrachloroethene
Concen: 50.08 ug/L
RT: 12.702 min Scan# 1838
Delta R.T. 0.011 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:166 Resp: 86417

Ion	Ratio	Lower	Upper
166	100		
168	48.3	19.9	79.9
129	68.5	38.6	98.6

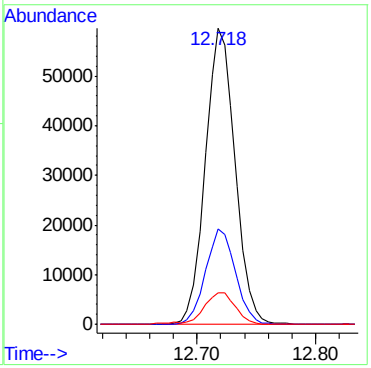


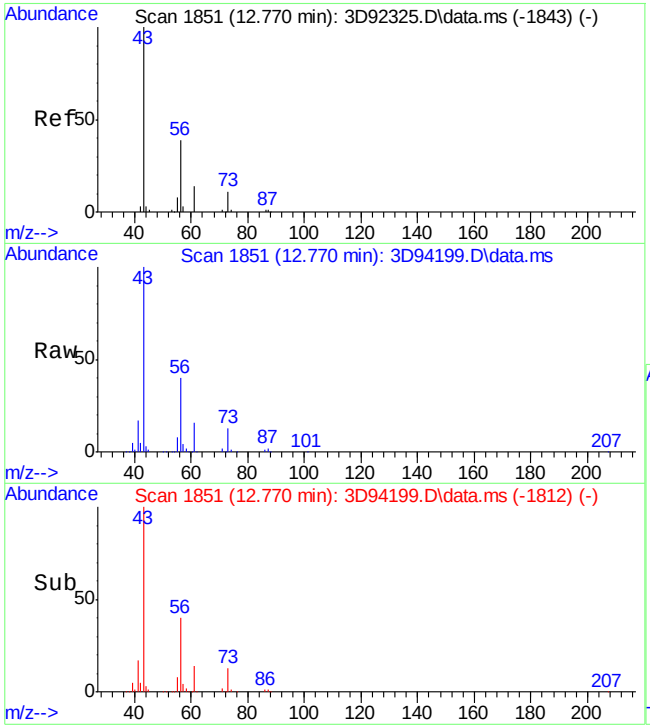


#90
1,3-dichloropropane
Concen: 50.74 ug/L
RT: 12.718 min Scan# 1841
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 76 Resp: 103721

Ion	Ratio	Lower	Upper
76	100		
78	32.1	2.6	62.6
63	10.7	0.0	41.3

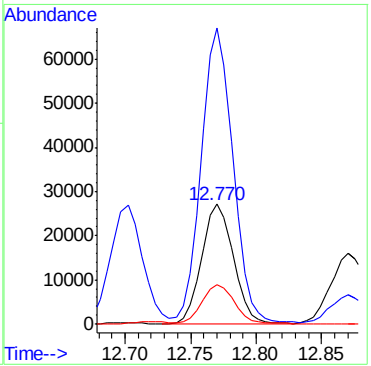


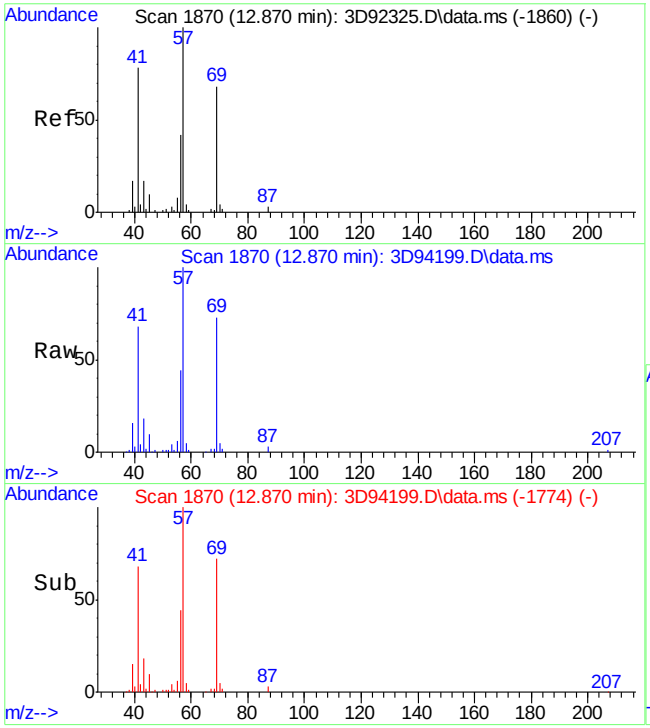


#91
butyl acetate
Concen: 52.11 ug/L
RT: 12.770 min Scan# 1851
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 56 Resp: 45873

Ion	Ratio	Lower	Upper
56	100		
43	245.2	206.2	266.2
73	32.2	2.1	62.1

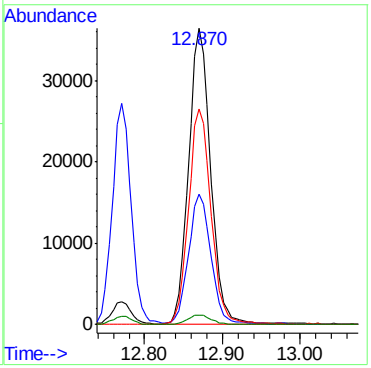


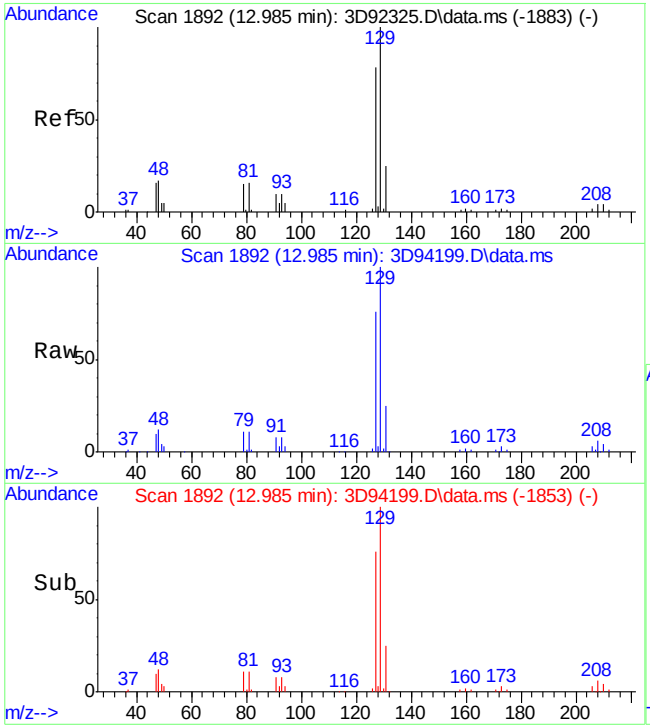


#92
3,3-Dimethyl-1-Butanol
Concen: 510.88 ug/L
RT: 12.870 min Scan# 1870
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 57 Resp: 71350

Ion	Ratio	Lower	Upper
57	100		
56	44.6	35.8	53.6
69	73.9	59.3	88.9
87	3.2	2.7	4.1

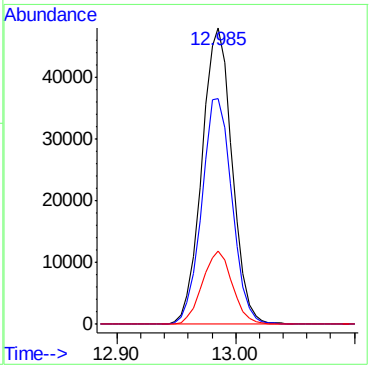


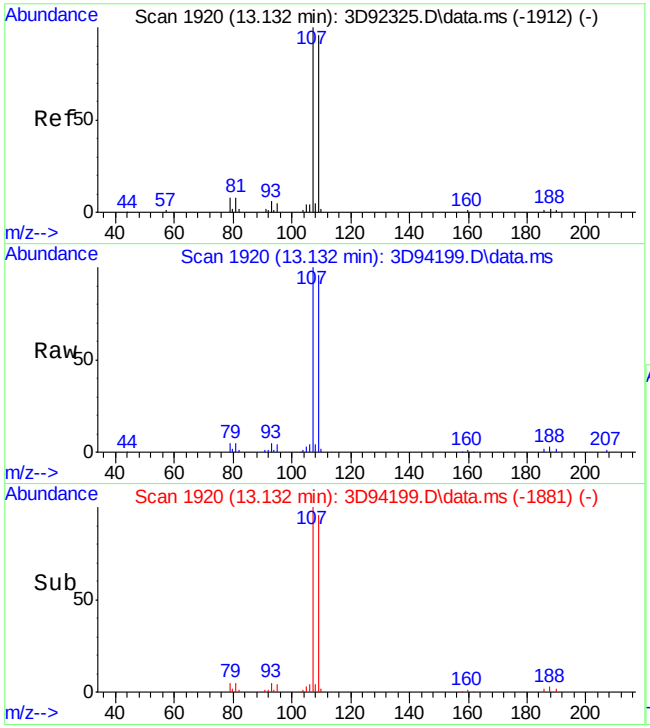


#93
dibromochloromethane
Concen: 51.42 ug/L
RT: 12.985 min Scan# 1892
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:129 Resp: 84829

Ion	Ratio	Lower	Upper
129	100		
127	76.2	48.3	108.3
131	24.7	0.0	54.2

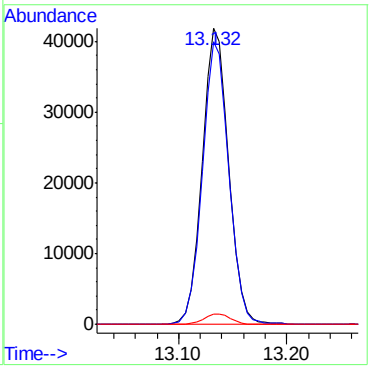


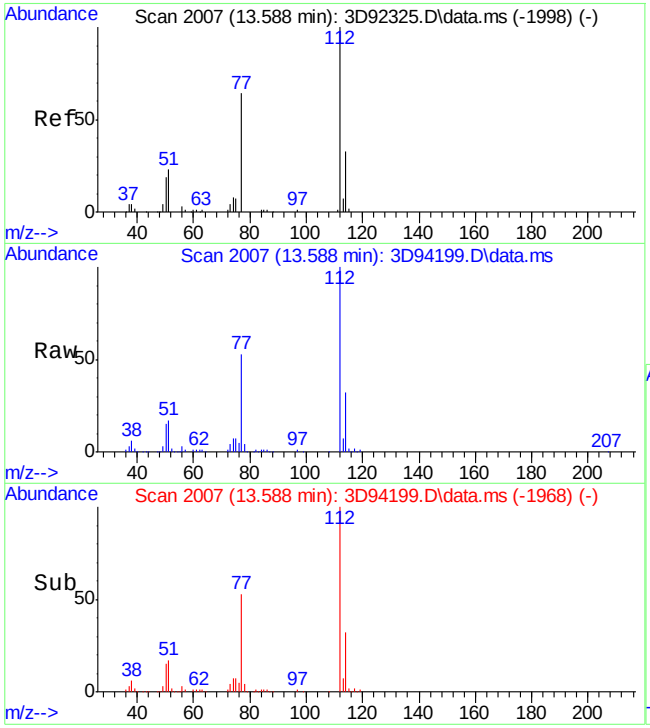


#94
1,2-dibromoethane
Concen: 51.39 ug/L
RT: 13.132 min Scan# 1920
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:107 Resp: 71333

Ion	Ratio	Lower	Upper
107	100		
109	95.6	65.3	125.3
188	3.4	0.0	33.4

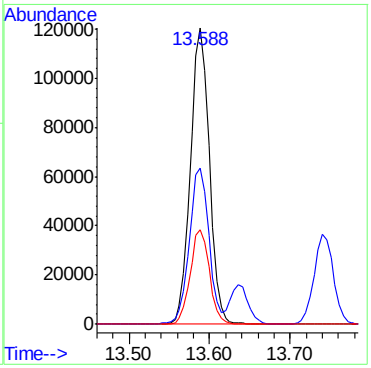


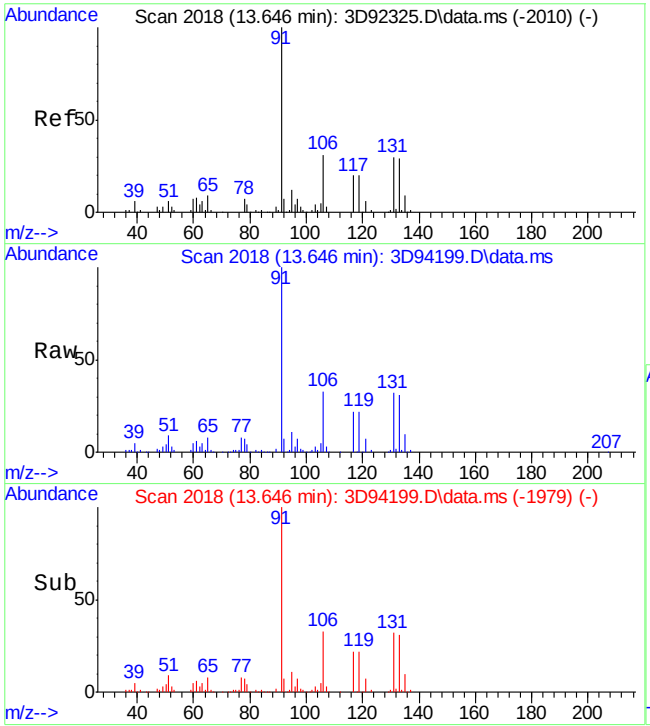


#96
chlorobenzene
Concen: 49.77 ug/L
RT: 13.588 min Scan# 2007
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:112 Resp: 197517

Ion	Ratio	Lower	Upper
112	100		
77	52.6	22.5	82.5
114	32.0	2.5	62.5

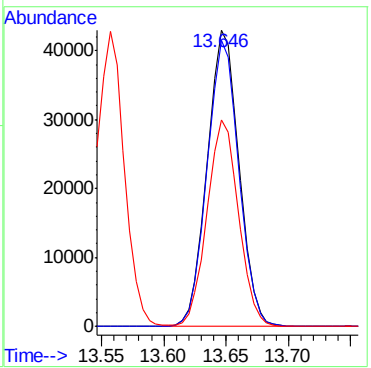


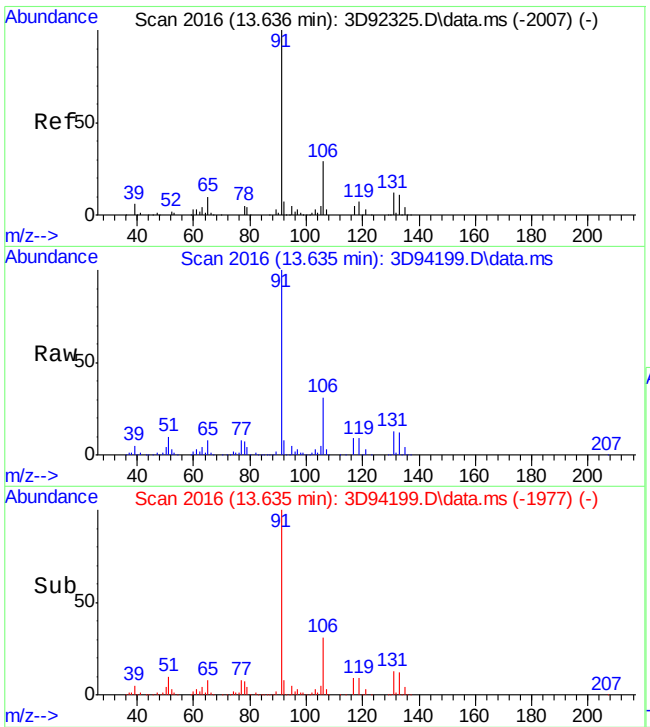


#97
1,1,1,2-tetrachloroethane
Concen: 48.60 ug/L
RT: 13.646 min Scan# 2018
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:131 Resp: 76159

Ion	Ratio	Lower	Upper
131	100		
133	96.6	63.6	123.6
119	69.7	37.5	97.5

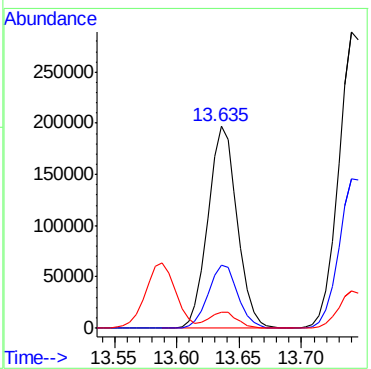


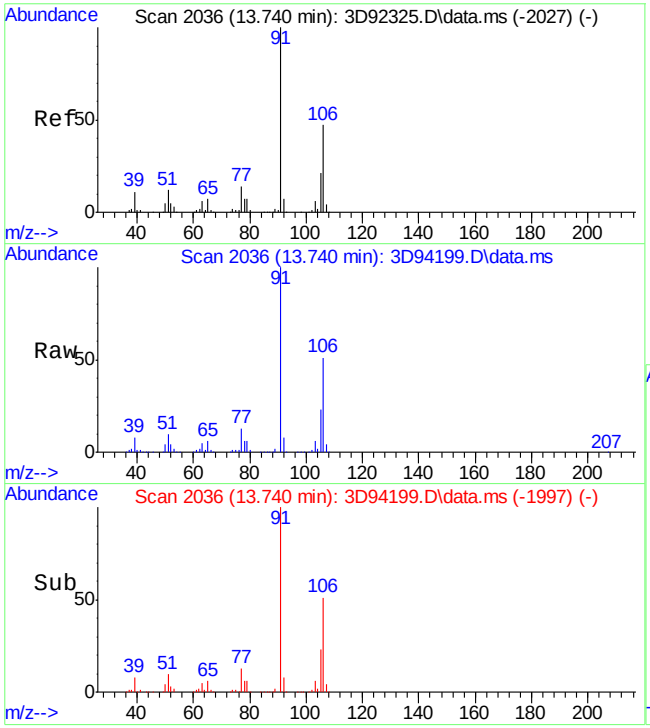


#98
ethylbenzene
Concen: 48.92 ug/L
RT: 13.635 min Scan# 2016
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 91 Resp: 320482

Ion	Ratio	Lower	Upper
91	100		
106	31.2	1.2	61.2
77	8.0	0.0	38.2

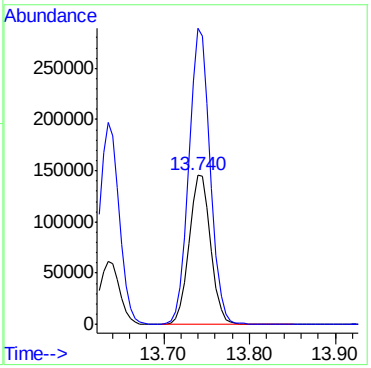


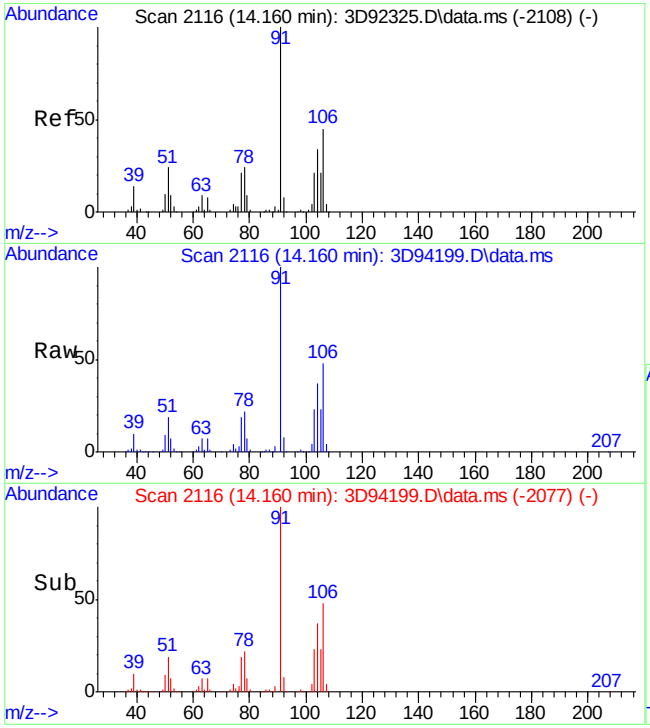


#99
m,p-xylene
Concen: 99.43 ug/L
RT: 13.740 min Scan# 2036
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:106 Resp: 252158

Ion	Ratio	Lower	Upper
106	100		
91	197.7	139.0	258.2

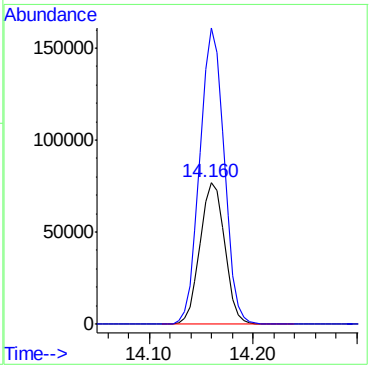




#100
o-xylene
Concen: 49.29 ug/L
RT: 14.160 min Scan# 2116
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

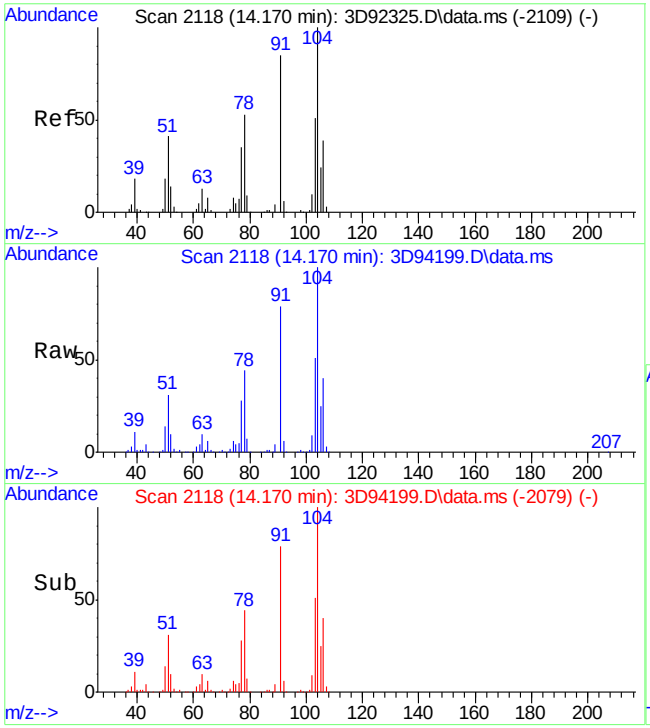
Tgt Ion:106 Resp: 126075

Ion	Ratio	Lower	Upper
106	100		
91	208.6	146.5	272.1



7.7.10

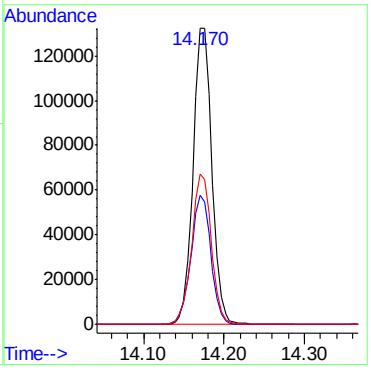
7

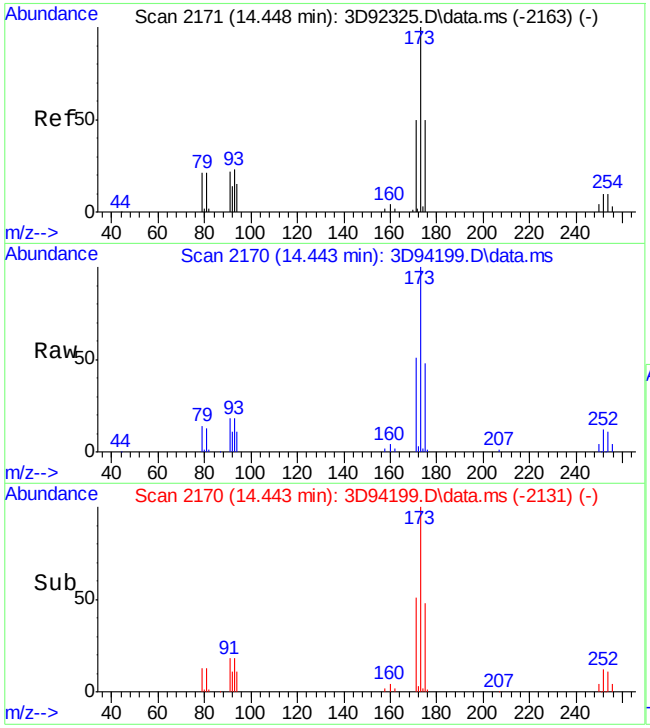


#101
styrene
Concen: 51.21 ug/L
RT: 14.170 min Scan# 2118
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:104 Resp: 215569

Ion	Ratio	Lower	Upper
104	100		
78	43.5	12.8	72.8
103	50.8	20.3	80.3

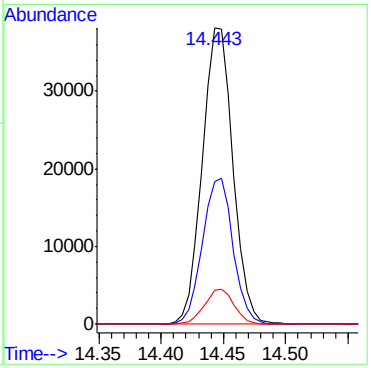


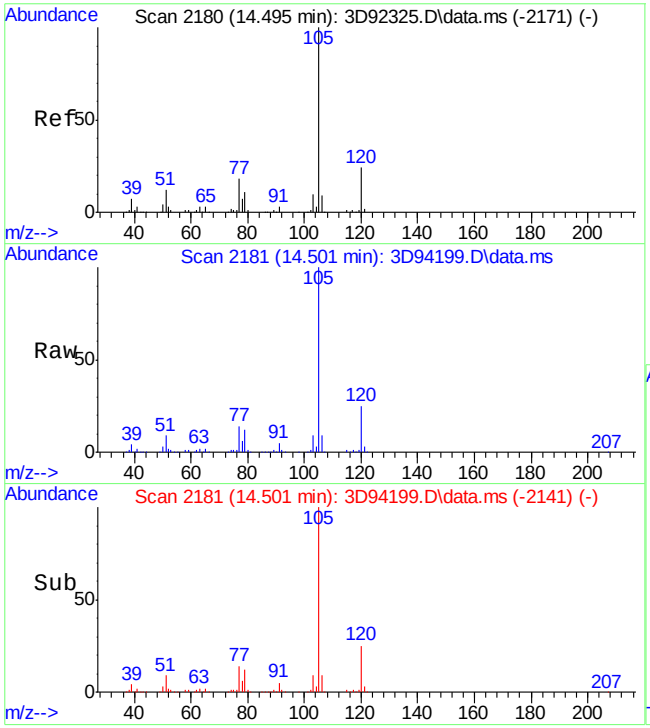


#103
bromoform
Concen: 52.19 ug/L
RT: 14.443 min Scan# 2170
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:173 Resp: 64958

Ion	Ratio	Lower	Upper
173	100		
175	48.3	18.6	78.6
254	11.3	0.0	41.1

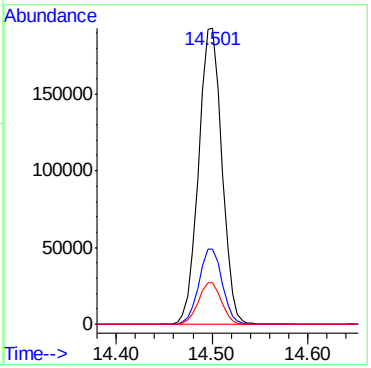


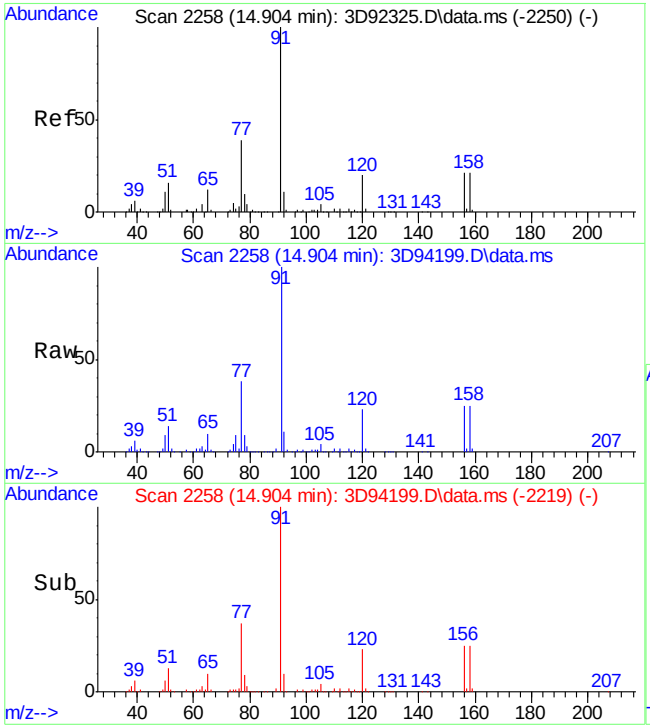


#105
isopropylbenzene
Concen: 50.19 ug/L
RT: 14.501 min Scan# 2181
Delta R.T. 0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:105 Resp: 325323

Ion	Ratio	Lower	Upper
105	100		
120	25.4	0.0	55.8
77	14.1	0.0	44.4

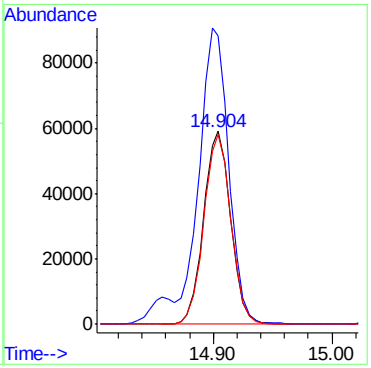




#107
bromobenzene
Concen: 49.72 ug/L
RT: 14.904 min Scan# 2258
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:156 Resp: 93797

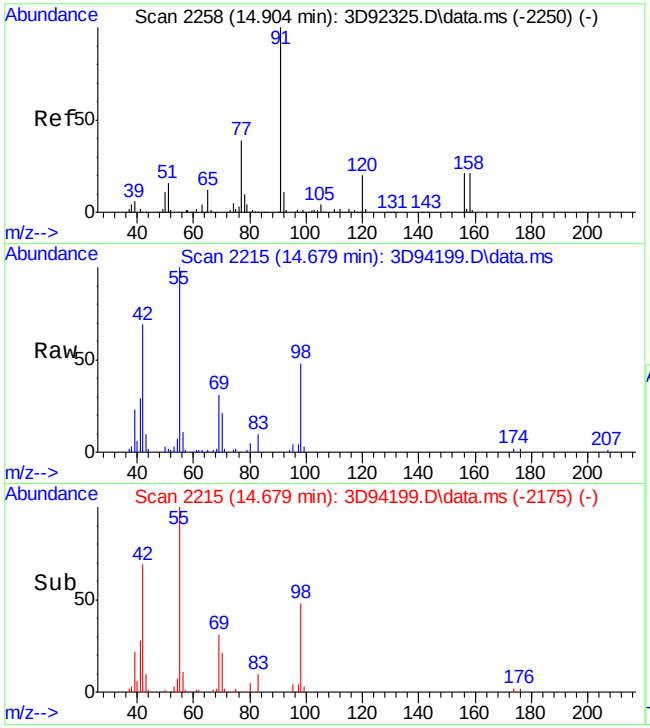
Ion	Ratio	Lower	Upper
156	100		
77	149.3	115.4	175.4
158	98.6	67.8	127.8



7.7.10

7

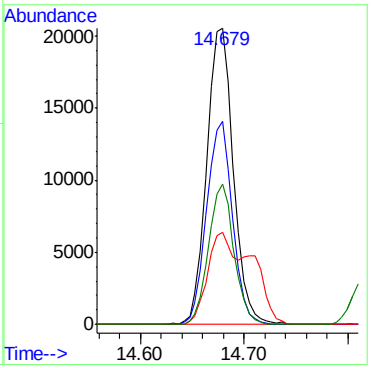
3D94199.D M3D4058.M Thu Dec 19 12:37:26 2013 3D Page 47

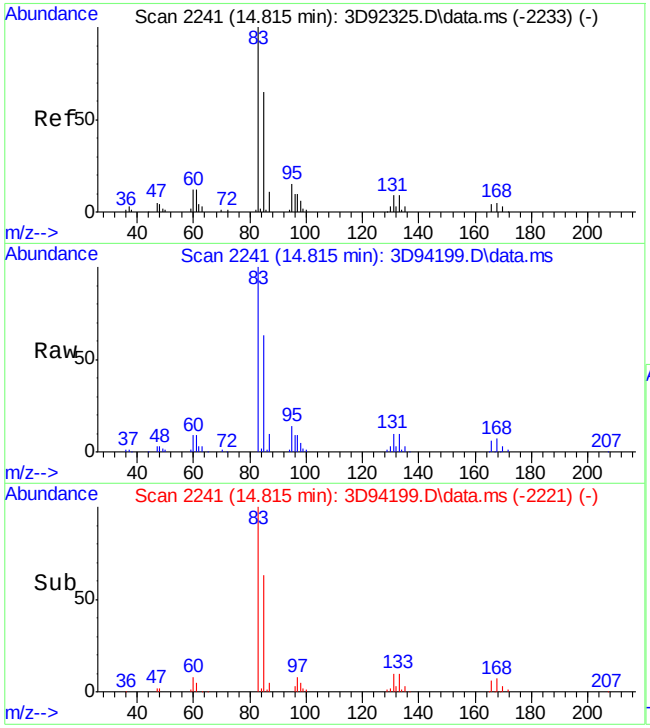


#108
cyclohexanone
Concen: 502.62 ug/L
RT: 14.679 min Scan# 2215
Delta R.T. 0.010 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 55 Resp: 36517

Ion	Ratio	Lower	Upper
55	100		
42	68.5	35.5	95.5
69	30.9	1.0	61.0
98	47.5	15.1	75.1

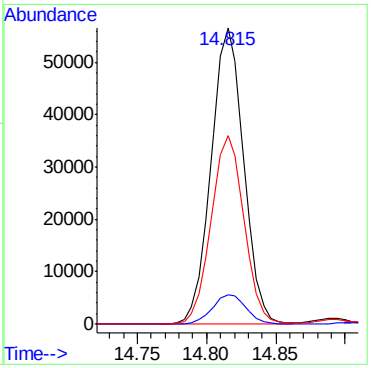


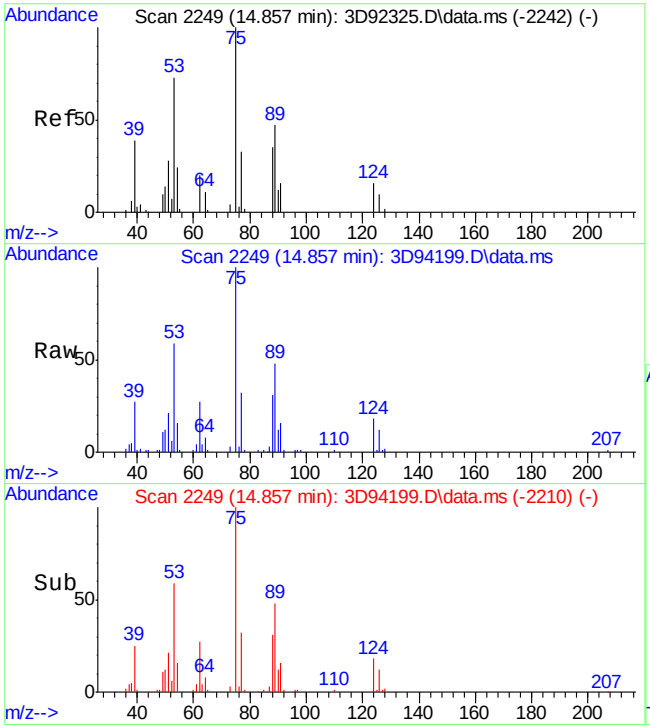


#109
1,1,2,2-tetrachloroethane
Concen: 48.74 ug/L
RT: 14.815 min Scan# 2241
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 83 Resp: 93227

Ion	Ratio	Lower	Upper
83	100		
131	9.8	0.0	40.2
85	63.5	33.4	93.4

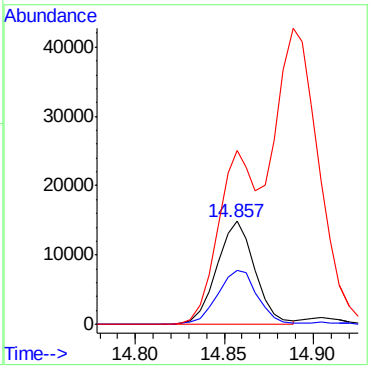


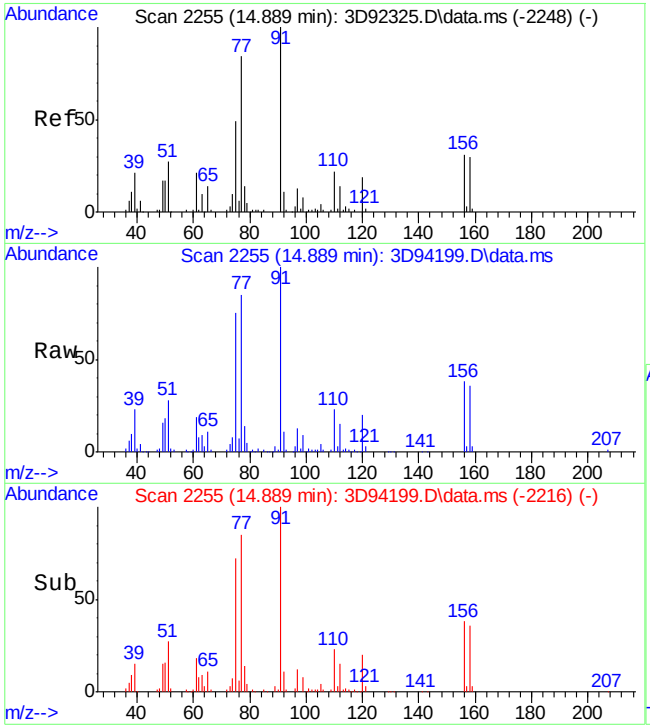


#110
trans-1,4-dichloro-2-butene
Concen: 52.70 ug/L
RT: 14.857 min Scan# 2249
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 53 Resp: 22257

Ion	Ratio	Lower	Upper
53	100		
88	52.7	27.1	87.1
75	168.9	132.8	192.8

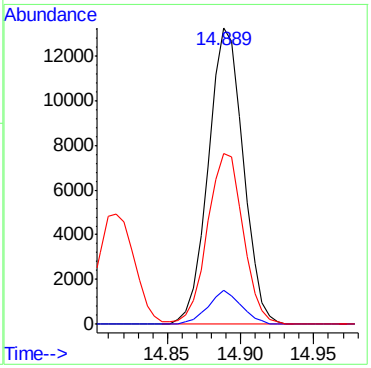


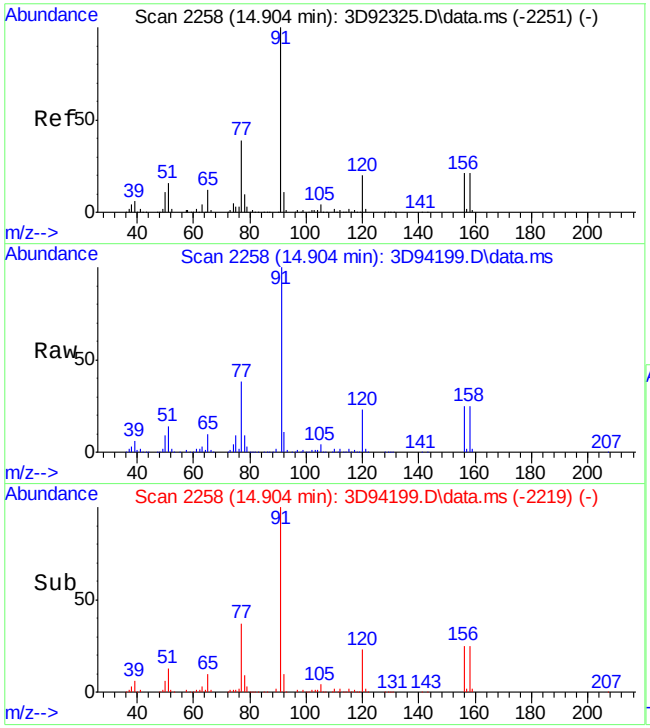


#111
1,2,3-trichloropropane
Concen: 51.80 ug/L
RT: 14.889 min Scan# 2255
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:110 Resp: 21839

Ion	Ratio	Lower	Upper
110	100		
111	11.4	0.0	39.5
97	57.5	25.8	85.8

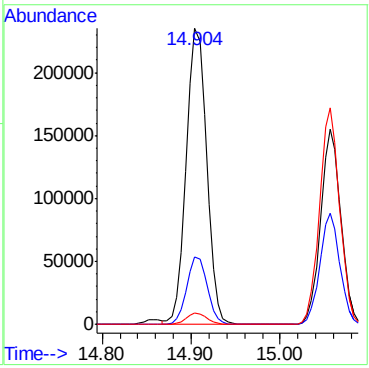


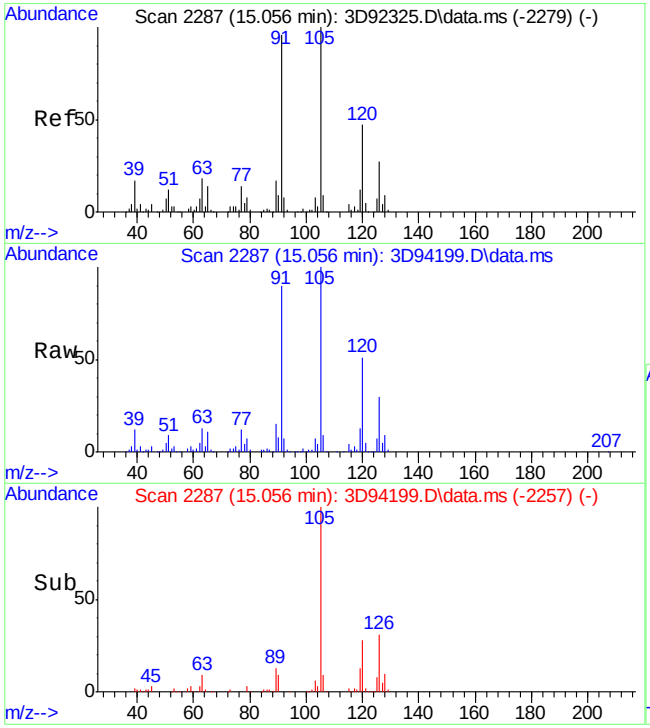


#112
n-propylbenzene
Concen: 50.99 ug/L
RT: 14.904 min Scan# 2258
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 91 Resp: 374195

Ion	Ratio	Lower	Upper
91	100		
120	22.7	0.0	52.2
105	3.8	0.0	33.7

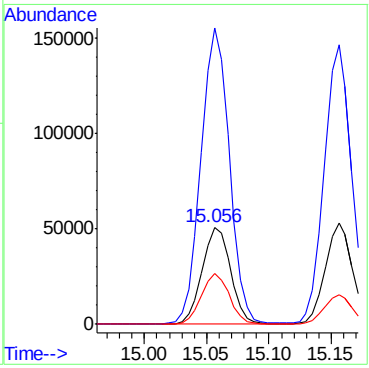


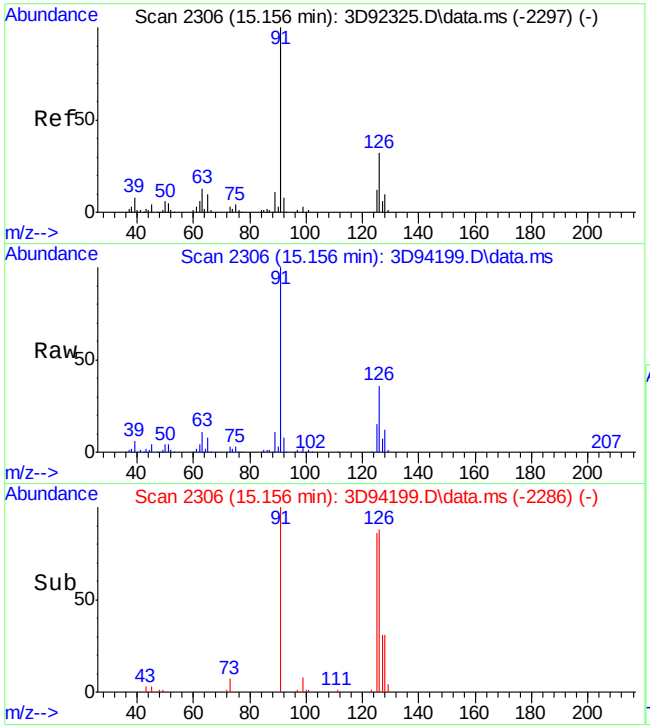


#114
2-chlorotoluene
Concen: 49.66 ug/L
RT: 15.056 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:126 Resp: 80387

Ion	Ratio	Lower	Upper
126	100		
91	304.7	272.2	332.2
89	52.2	21.0	81.0

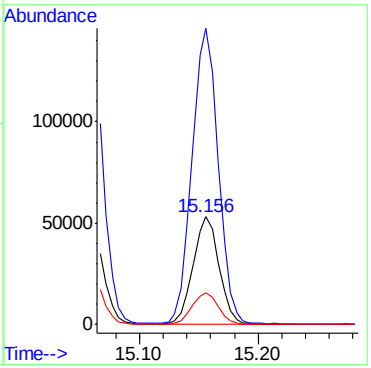


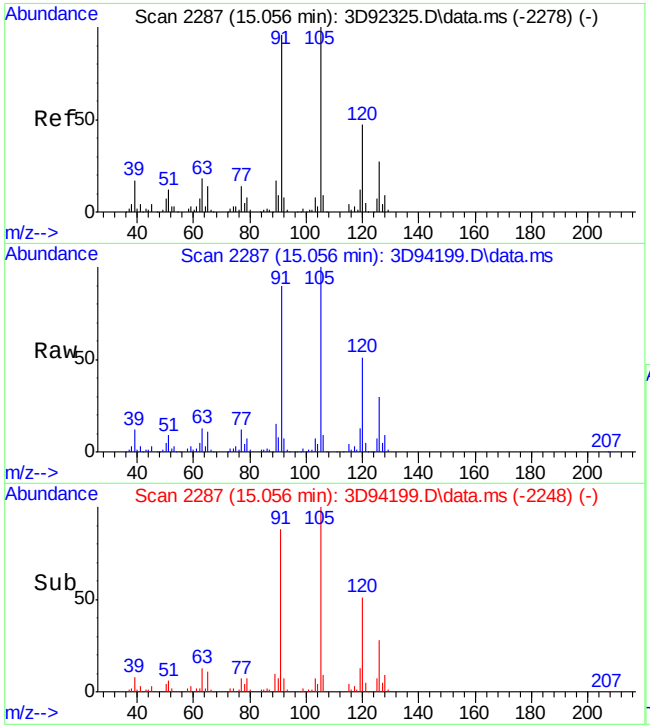


#115
4-chlorotoluene
Concen: 49.26 ug/L
RT: 15.156 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:126 Resp: 80625

Ion	Ratio	Lower	Upper
126	100		
91	275.2	240.5	300.5
89	29.1	0.0	58.4

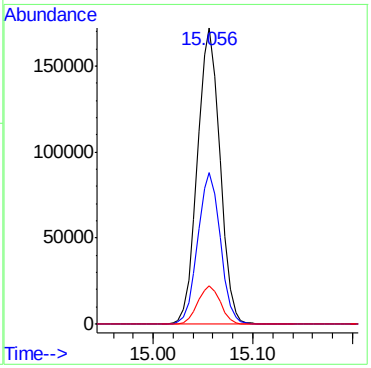


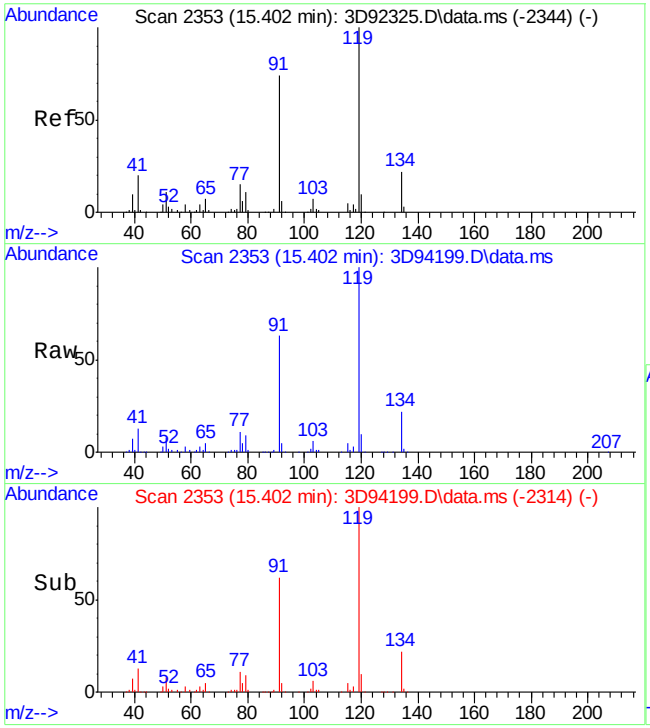


#116
1,3,5-trimethylbenzene
Concen: 49.41 ug/L
RT: 15.056 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:105 Resp: 270816

Ion	Ratio	Lower	Upper
105	100		
120	51.1	21.2	81.2
119	12.7	0.0	43.0

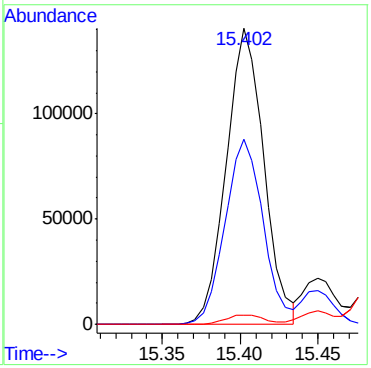


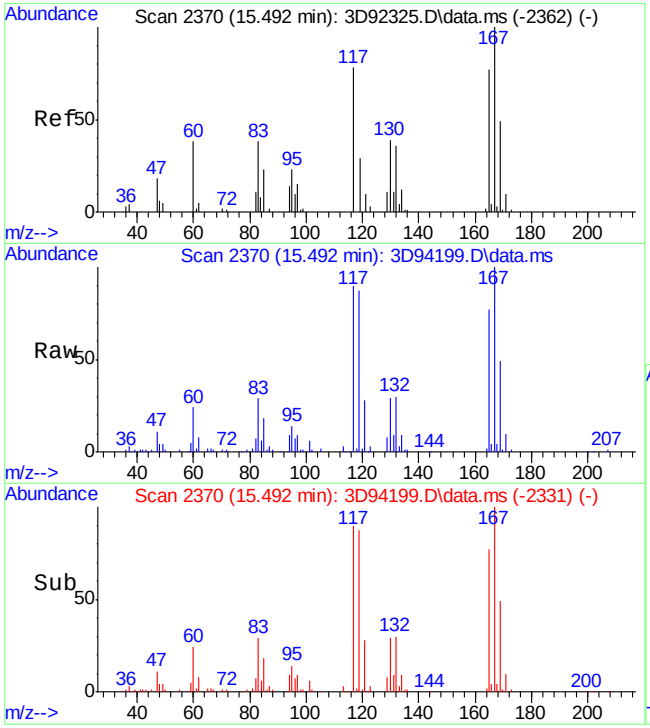


#117
tert-butylbenzene
Concen: 49.74 ug/L
RT: 15.402 min Scan# 2353
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:119 Resp: 236231

Ion	Ratio	Lower	Upper
119	100		
91	62.5	33.7	93.7
117	3.2	0.0	33.4

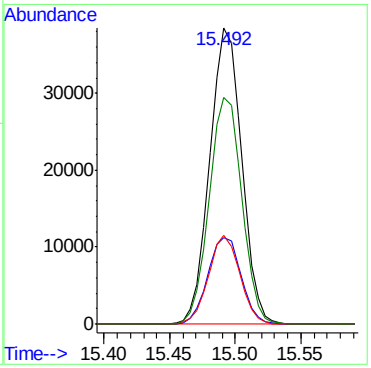


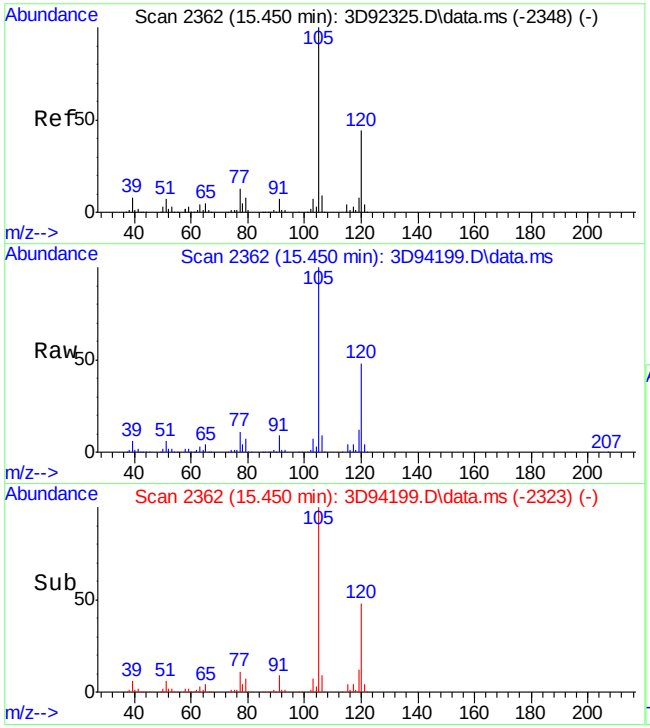


#118
pentachloroethane
Concen: 50.87 ug/L
RT: 15.492 min Scan# 2370
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:167 Resp: 64763

Ion	Ratio	Lower	Upper
167	100		
130	29.1	1.5	61.5
132	30.0	0.0	58.9
165	76.6	50.0	110.0

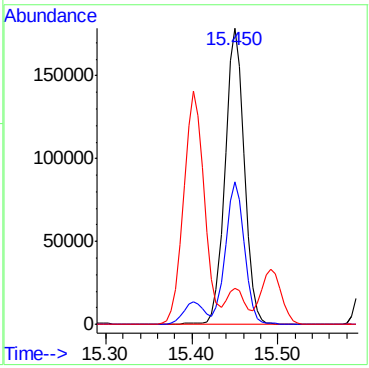


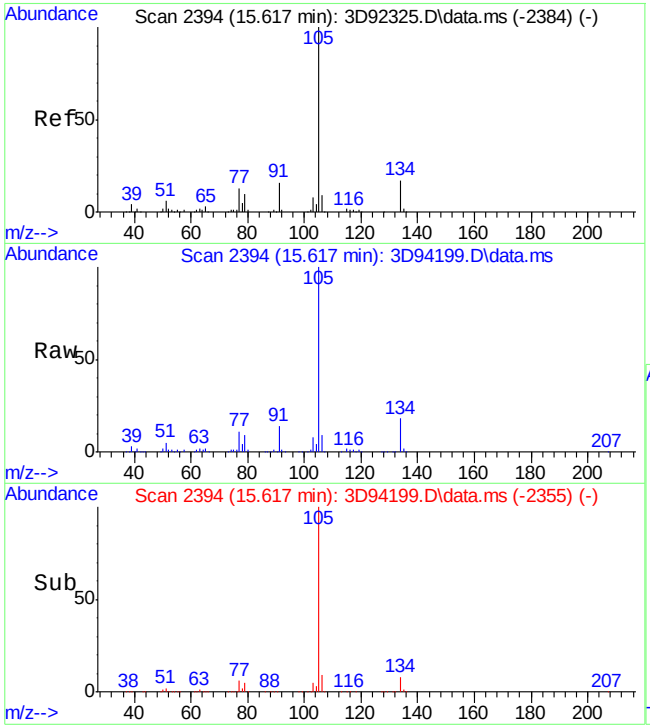


#119
1,2,4-trimethylbenzene
Concen: 50.81 ug/L
RT: 15.450 min Scan# 2362
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:105 Resp: 275829

Ion	Ratio	Lower	Upper
105	100		
120	47.9	17.4	77.4
119	12.1	0.0	42.0

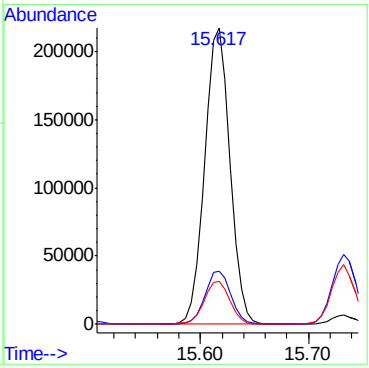


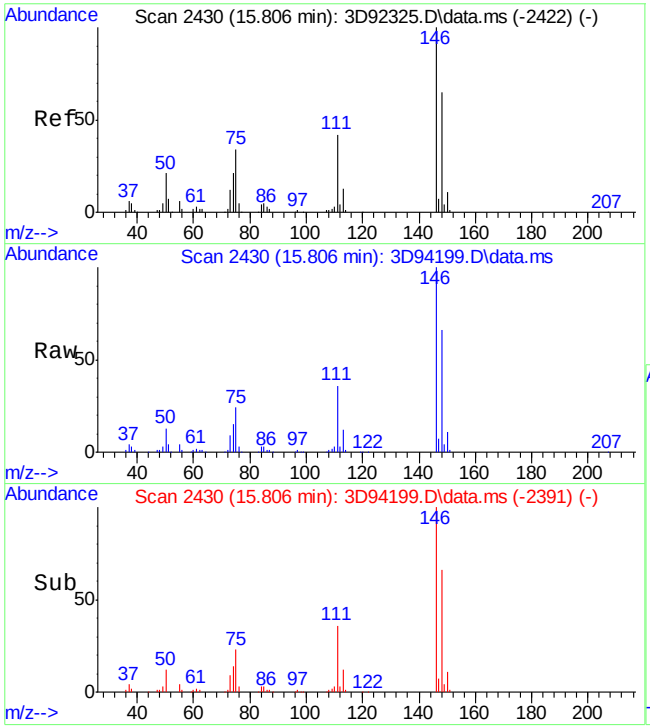


#120
sec-butylbenzene
Concen: 49.25 ug/L
RT: 15.617 min Scan# 2394
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:105 Resp: 356163

Ion	Ratio	Lower	Upper
105	100		
134	17.9	0.0	48.2
91	14.4	0.0	44.6

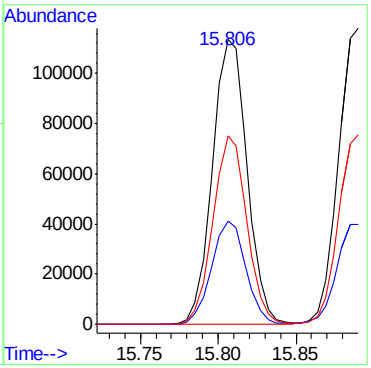


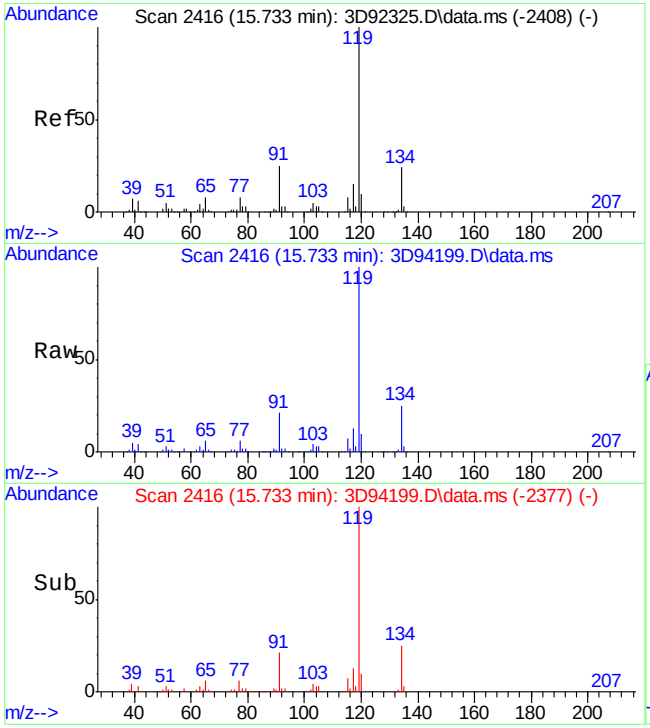


#121
1,3-dichlorobenzene
Concen: 49.21 ug/L
RT: 15.806 min Scan# 2430
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:146 Resp: 175630

Ion	Ratio	Lower	Upper
146	100		
111	36.4	5.6	65.6
148	66.2	34.0	94.0

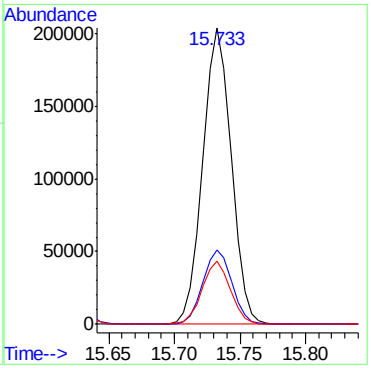


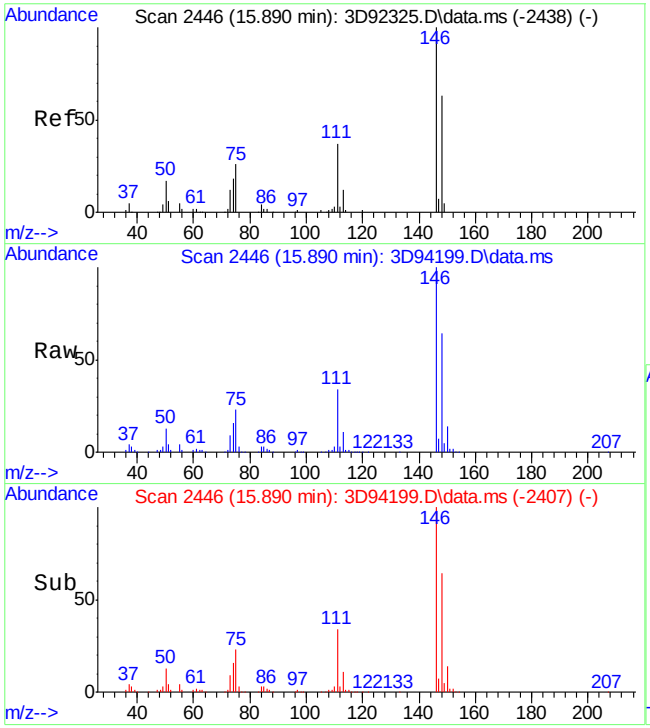


#122
p-isopropyltoluene
Concen: 50.86 ug/L
RT: 15.733 min Scan# 2416
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:119 Resp: 307766

Ion	Ratio	Lower	Upper
119	100		
134	25.2	0.0	55.4
91	21.3	0.0	51.1

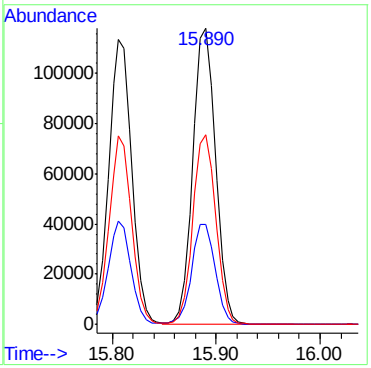


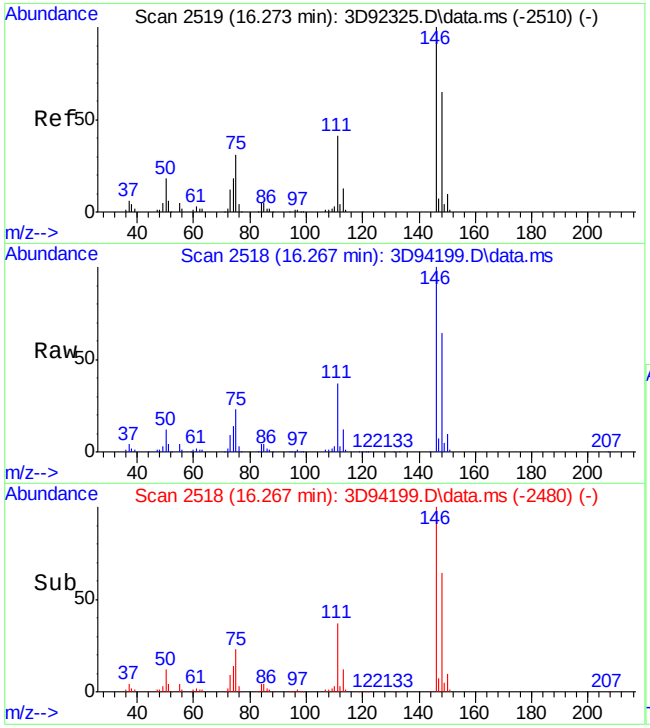


#123
1,4-dichlorobenzene
Concen: 48.66 ug/L
RT: 15.890 min Scan# 2446
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:146 Resp: 180429

Ion	Ratio	Lower	Upper
146	100		
111	33.6	4.2	64.2
148	63.9	34.3	94.3

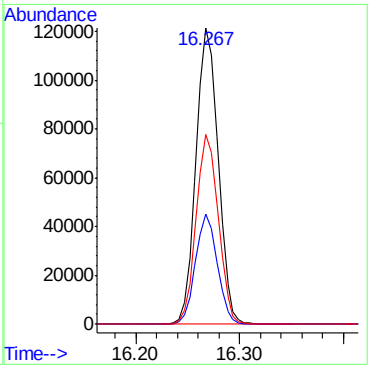


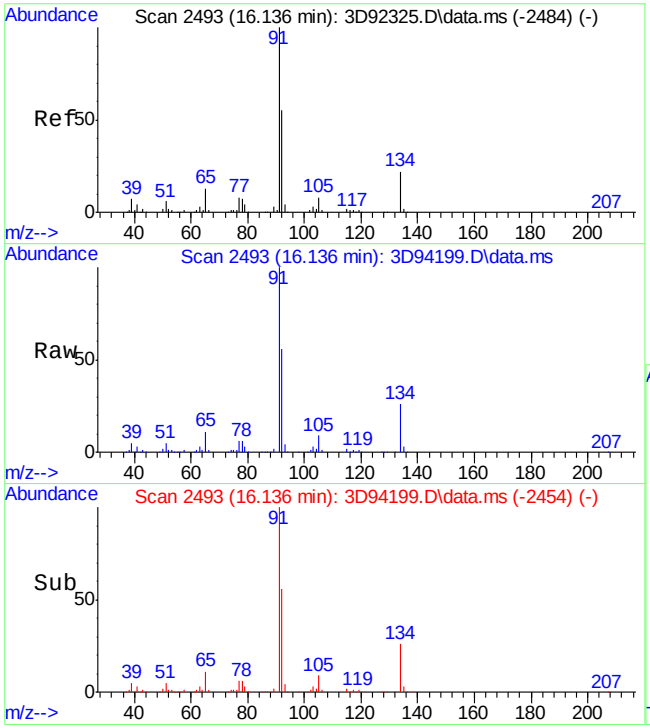


#124
1,2-dichlorobenzene
Concen: 49.31 ug/L
RT: 16.267 min Scan# 2518
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:146 Resp: 179467

Ion	Ratio	Lower	Upper
146	100		
111	37.0	6.4	66.4
148	64.2	34.3	94.3

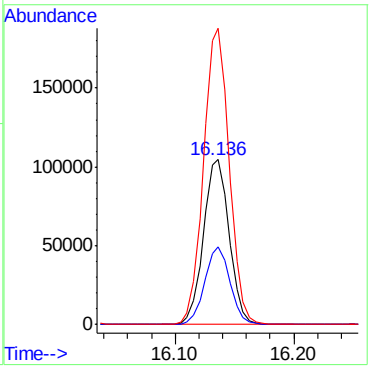


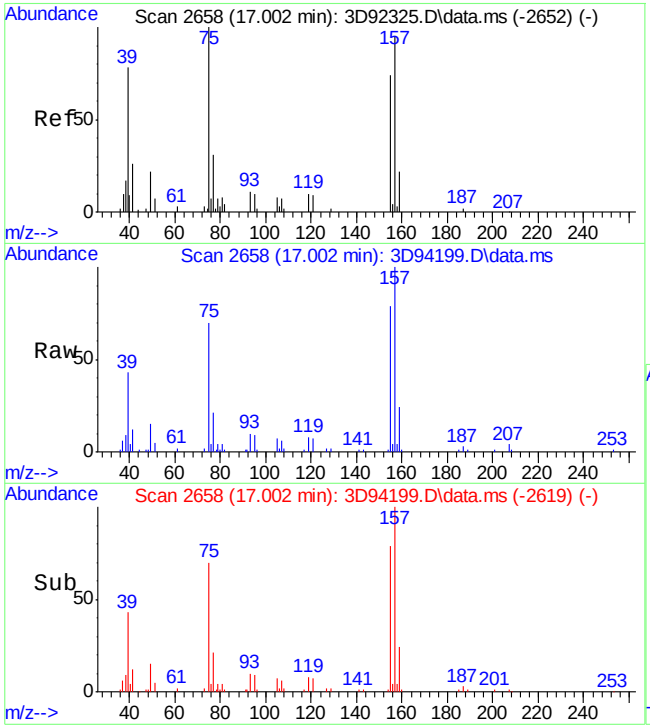


#126
n-butylbenzene
Concen: 51.04 ug/L
RT: 16.136 min Scan# 2493
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 92 Resp: 157518

Ion	Ratio	Lower	Upper
92	100		
134	47.0	15.5	75.5
91	179.9	150.4	210.4

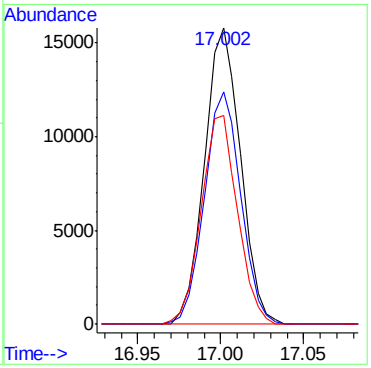


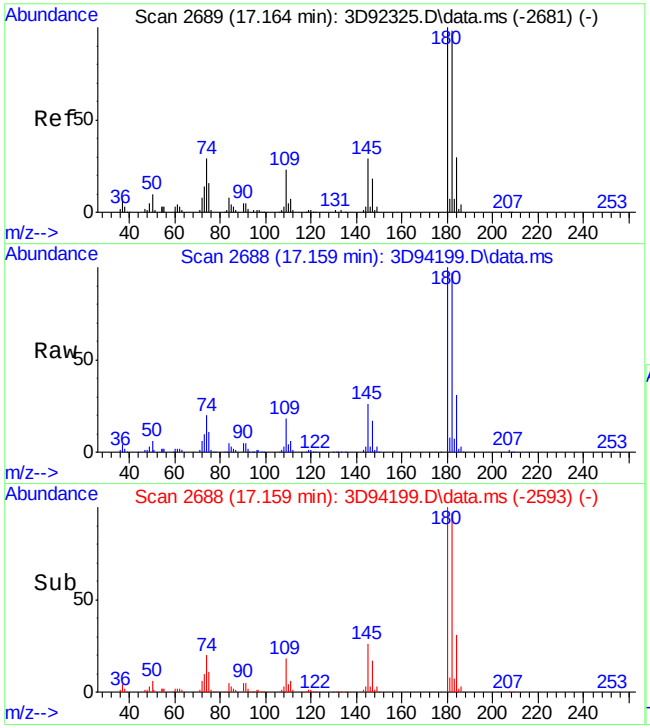


#128
1,2-dibromo-3-chloropropane
Concen: 53.76 ug/L
RT: 17.002 min Scan# 2658
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:157 Resp: 23894

Ion	Ratio	Lower	Upper
157	100		
155	78.6	43.7	103.7
75	70.3	41.6	101.6

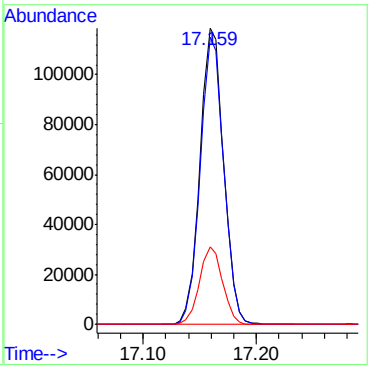


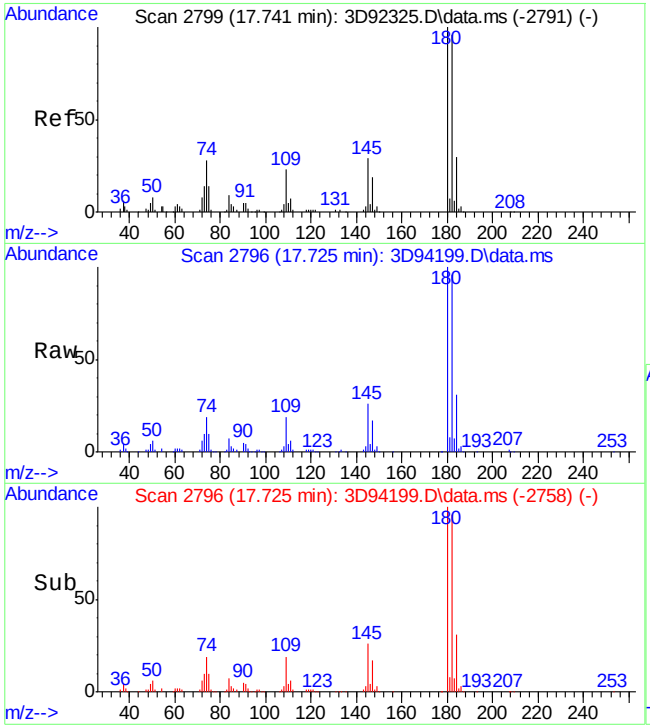


#129
1,3,5-trichlorobenzene
Concen: 51.23 ug/L
RT: 17.159 min Scan# 2688
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:180 Resp: 171022

Ion	Ratio	Lower	Upper
180	100		
182	96.3	65.4	125.4
145	25.7	0.0	55.6

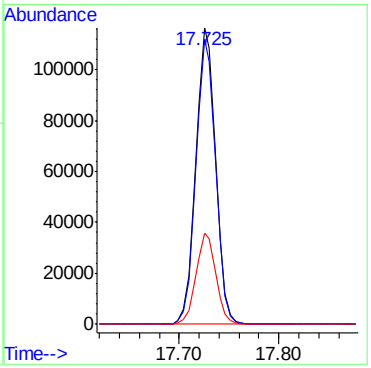


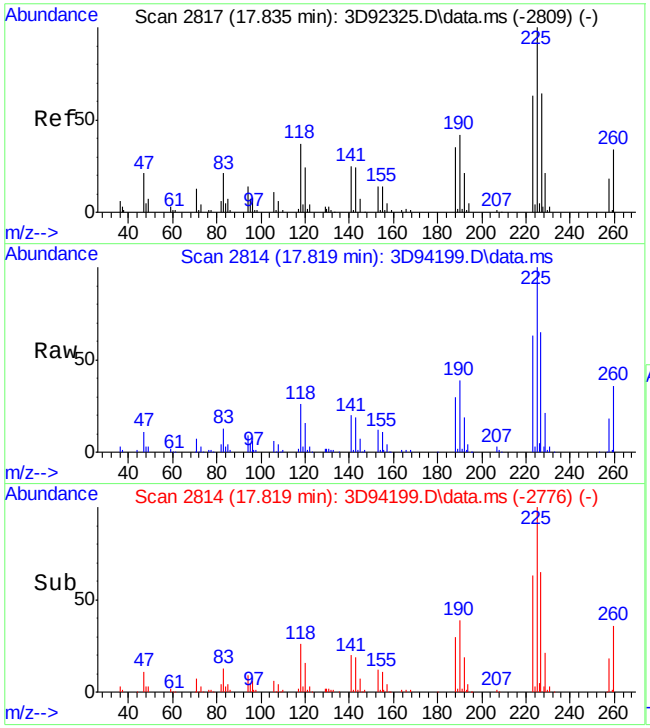


#130
1,2,4-trichlorobenzene
Concen: 52.43 ug/L
RT: 17.725 min Scan# 2796
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:180 Resp: 159968

Ion	Ratio	Lower	Upper
180	100		
182	96.3	66.4	126.4
184	30.6	1.3	61.3

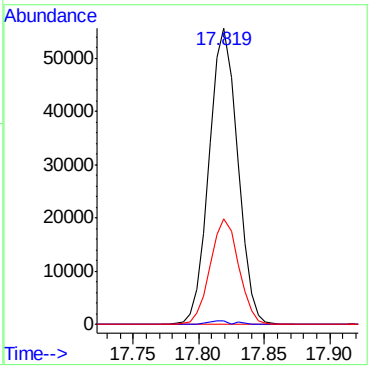


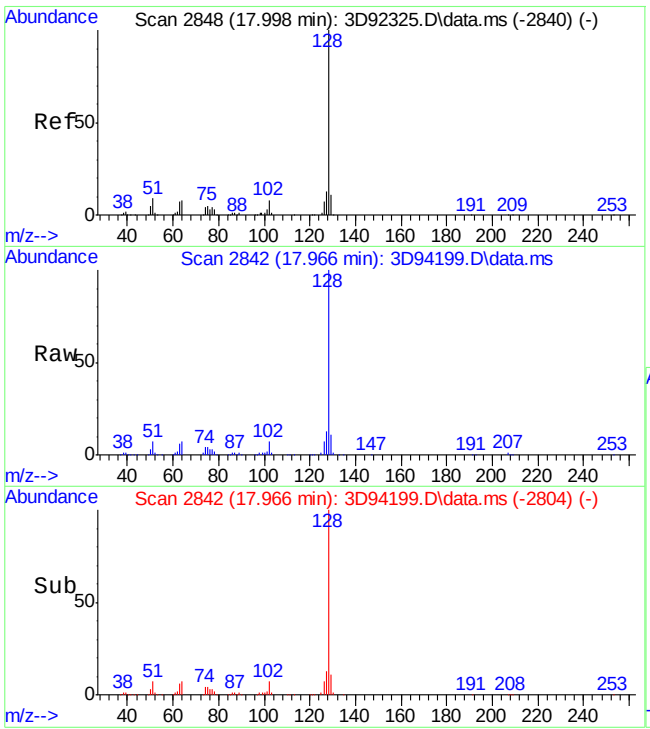


#131
hexachlorobutadiene
Concen: 51.27 ug/L
RT: 17.819 min Scan# 2814
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:225 Resp: 83755

Ion	Ratio	Lower	Upper
225	100		
259	1.3	0.0	31.1
260	35.6	5.9	65.9

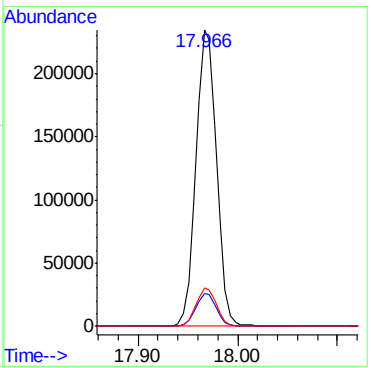


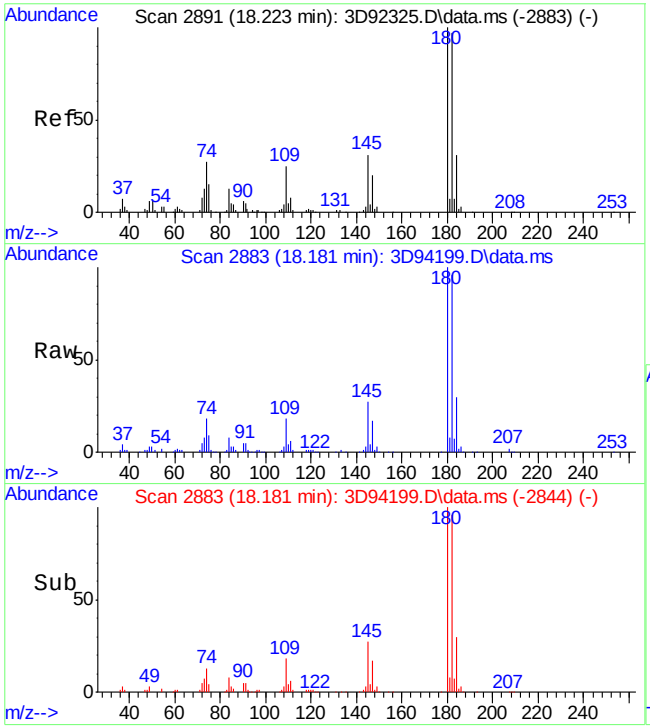


#132
naphthalene
Concen: 53.14 ug/L
RT: 17.966 min Scan# 2842
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:128 Resp: 335159

Ion	Ratio	Lower	Upper
128	100		
129	11.2	0.0	40.9
127	12.8	0.0	43.2

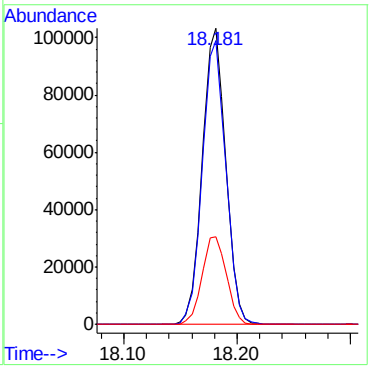


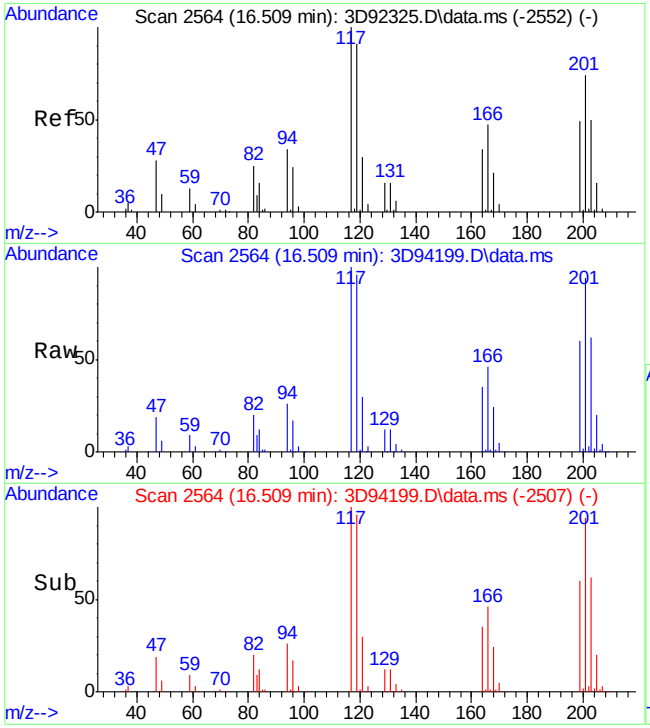


#133
1,2,3-trichlorobenzene
Concen: 52.41 ug/L
RT: 18.181 min Scan# 2883
Delta R.T. 0.005 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:180 Resp: 147454

Ion	Ratio	Lower	Upper
180	100		
182	95.7	67.0	127.0
184	29.7	0.3	60.3

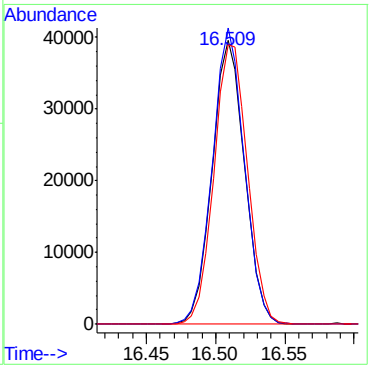




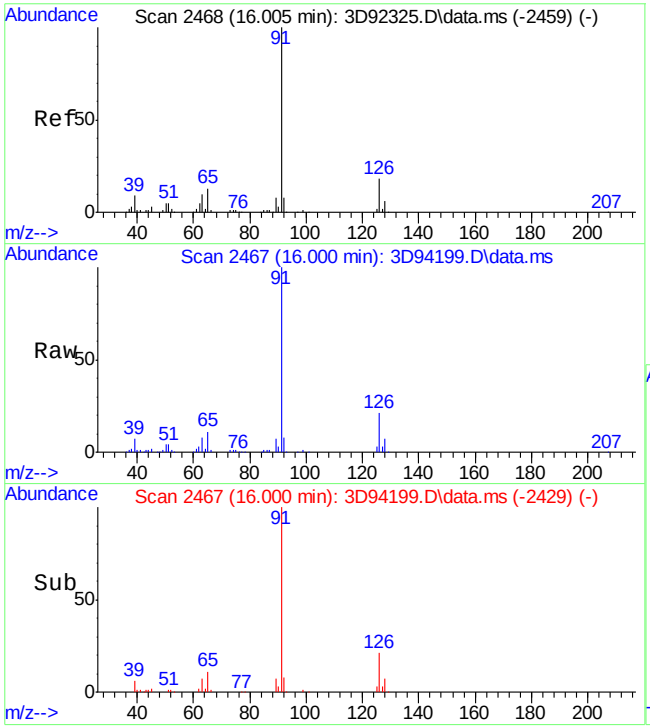
#134
hexachloroethane
Concen: 50.66 ug/L
RT: 16.509 min Scan# 2564
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion:119 Resp: 64834

Ion	Ratio	Lower	Upper
119	100		
117	103.1	72.2	132.2
201	102.0	70.2	130.2



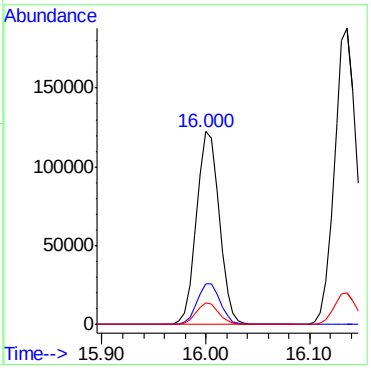
3D94199.D M3D4058.M Thu Dec 19 12:37:27 2013 3D Page 59



#135
Benzyl chloride
Concen: 53.97 ug/L
RT: 16.000 min Scan# 2467
Delta R.T. 0.000 min
Lab File: 3D94199.D
Acq: 18 Dec 2013 5:54 pm

Tgt Ion: 91 Resp: 185444

Ion	Ratio	Lower	Upper
91	100		
126	21.3	0.0	51.4
65	10.9	0.0	41.1



7.7.10

7

3D94199.D M3D4058.M Thu Dec 19 12:37:27 2013 3D Page 60

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95400.D
Acq On : 28 Jan 2014 2:50 pm
Operator : nickm1
Sample : cc4058-20
Misc : MS62219,V3D4109,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 29 11:56:15 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.244	65	78306	500.00	ug/L		0.00
4) pentafluorobenzene	9.483	168	190518	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.401	114	255333	50.00	ug/L		0.00
88) chlorobenzene-d5	13.552	117	207461	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.864	152	123104	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.541	113	75409	49.83	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 99.66%				
51) 1,2-dichloroethane-d4 (s)	9.960	65	77699	50.15	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 100.30%				
80) toluene-d8 (s)	12.042	98	246019	48.78	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 97.56%				
106) 4-bromofluorobenzene (s)	14.705	95	85093	46.12	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 92.24%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.119	88	8149	583.18	ug/L		95
3) tertiary butyl alcohol	7.365	59	17044	99.22	ug/L		90
8) chlorodifluoromethane	3.894	51	29951	20.68	ug/L		99
9) dichlorodifluoromethane	3.873	85	43442	24.32	ug/L		98
10) chloromethane	4.214	50	46213	20.80	ug/L		99
11) vinyl chloride	4.460	62	48126	22.78	ug/L		98
12) bromomethane	5.121	94	32957	22.77	ug/L		97
13) chloroethane	5.289	64	20429	20.63	ug/L		98
16) trichlorofluoromethane	5.740	101	53031	23.31	ug/L		97
18) ethyl ether	6.154	74	16240	20.47	ug/L		89
21) acrolein	6.421	56	55600	174.89	ug/L		99
22) 1,1-dichloroethene	6.573	61	45102	20.39	ug/L		98
23) acetone	6.631	58	2367	20.18	ug/L	#	75
24) allyl chloride	7.103	76	17346	19.99	ug/L		93
25) acetonitrile	7.092	40	25981	184.73	ug/L	#	80
27) iodomethane	6.862	142	64875	21.43	ug/L		96
28) iso-butyl alcohol	9.772	41	9667	193.16	ug/L		98
29) carbon disulfide	6.977	76	106762	19.47	ug/L		98
30) methylene chloride	7.302	84	33302	19.88	ug/L		92
31) methyl acetate	7.087	74	4986	20.34	ug/L		95
32) methyl tert butyl ether	7.606	73	94437	20.10	ug/L		98
33) trans-1,2-dichloroethene	7.669	61	44824	20.22	ug/L		96
34) di-isopropyl ether	8.193	45	89447	17.34	ug/L		97
35) ethyl tert-butyl ether	8.660	59	92086	19.35	ug/L		100
36) 2-butanone	8.938	72	3478	21.40	ug/L		73
37) 1,1-dichloroethane	8.241	63	54193	19.64	ug/L		97
38) chloroprene	8.335	53	42309	21.01	ug/L		96
39) acrylonitrile	7.632	53	57210	100.82	ug/L		98
40) vinyl acetate	8.214	86	4748	19.25	ug/L		64
41) ethyl acetate	8.948	45	3653	18.10	ug/L		82
42) 2,2-dichloropropane	8.969	77	46457	20.63	ug/L		95
43) cis-1,2-dichloroethene	8.975	61	54115	19.99	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95400.D
Acq On : 28 Jan 2014 2:50 pm
Operator : nickm1
Sample : cc4058-20
Misc : MS62219,V3D4109,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 29 11:56:15 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) propionitrile	9.048	54	45392	211.54	ug/L	92
45) methyl acrylate	9.032	55	31925	20.22	ug/L	97
46) bromochloromethane	9.289	128	19632	22.50	ug/L	89
47) tetrahydrofuran	9.321	42	10092	19.75	ug/L	96
48) chloroform	9.342	83	56355	21.09	ug/L	98
49) Tert-Butyl Formate	9.368	59	26473	18.59	ug/L	96
52) freon 113	6.531	151	25850	24.41	ug/L	96
53) methacrylonitrile	9.226	41	17477	18.95	ug/L	97
54) 1,1,1-trichloroethane	9.588	97	50411	21.78	ug/L	99
56) 2,2,4-Trimethylpentane	10.013	57	106335	19.47	ug/L	97
57) tert-amyl methyl ether	10.049	73	91917	19.22	ug/L	97
59) epichlorohydrin	11.664	57	13944	102.86	ug/L	99
60) n-butyl alcohol	10.521	56	39279	1040.68	ug/L	97
61) cyclohexane	9.651	84	47197	21.39	ug/L	92
62) carbon tetrachloride	9.787	117	48007	23.85	ug/L	100
63) 1,1-dichloropropene	9.766	75	41867	21.10	ug/L	99
64) hexane	7.947	57	31027	18.90	ug/L	96
65) benzene	10.029	78	121352	19.75	ug/L	98
66) heptane	10.186	57	18725	19.21	ug/L	95
67) isopropyl acetate	9.945	43	51678	18.93	ug/L	96
68) 1,2-dichloroethane	10.049	62	40988	22.44	ug/L	99
69) trichloroethene	10.742	95	31788	20.90	ug/L	100
72) 2-nitropropane	11.533	41	11293	21.02	ug/L	95
73) 2-chloroethyl vinyl ether	11.539	63	95593	99.03	ug/L	98
74) methyl methacrylate	11.009	41	42914	19.52	ug/L	97
75) 1,2-dichloropropane	11.014	63	28579	18.93	ug/L	92
76) methylcyclohexane	10.951	83	48513	21.51	ug/L	96
77) dibromomethane	11.177	93	20916	22.01	ug/L	95
78) bromodichloromethane	11.308	83	41567	21.44	ug/L	98
79) cis-1,3-dichloropropene	11.759	75	47020	19.44	ug/L	98
81) 4-methyl-2-pentanone	11.848	58	10985	20.24	ug/L	96
82) toluene	12.115	92	71380	19.90	ug/L	96
83) 3-methyl-1-butanol	11.864	70	14855	416.42	ug/L	95
84) trans-1,3-dichloropropene	12.320	75	43945	20.46	ug/L	99
85) ethyl methacrylate	12.299	69	34683	20.24	ug/L	97
86) 1,1,2-trichloroethane	12.535	83	21879	19.88	ug/L	94
87) 2-hexanone	12.702	58	9521	20.04	ug/L	96
89) tetrachloroethene	12.697	166	37415	22.09	ug/L	98
90) 1,3-dichloropropane	12.713	76	41125	20.50	ug/L	99
91) butyl acetate	12.771	56	16902	19.56	ug/L	96
92) 3,3-Dimethyl-1-Butanol	12.870	57	26668	194.54	ug/L	98
93) dibromochloromethane	12.980	129	35205	21.74	ug/L	95
94) 1,2-dibromoethane	13.132	107	28970	21.26	ug/L	98
96) chlorobenzene	13.583	112	80903	20.77	ug/L	99
97) 1,1,1,2-tetrachloroethane	13.646	131	33599	21.85	ug/L	99
98) ethylbenzene	13.636	91	131278	20.42	ug/L	98
99) m,p-xylene	13.741	106	103019	41.38	ug/L	97
100) o-xylene	14.160	106	51651	20.57	ug/L	99
101) styrene	14.171	104	83569	20.22	ug/L	98
103) bromoform	14.443	173	26981	22.09	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95400.D
Acq On : 28 Jan 2014 2:50 pm
Operator : nickm1
Sample : cc4058-20
Misc : MS62219,V3D4109,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 29 11:56:15 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration

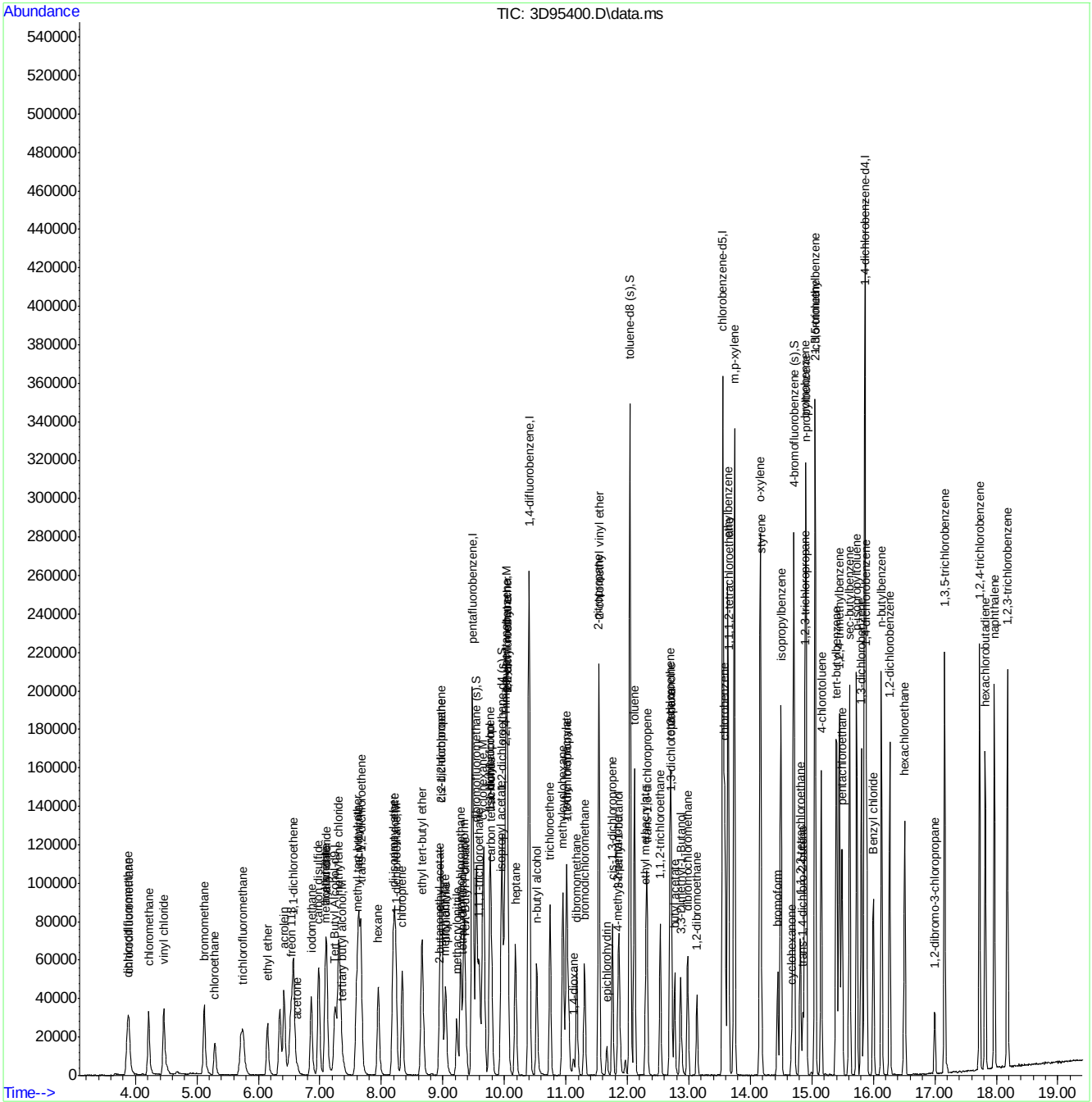
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) isopropylbenzene	14.496	105	135247	20.75	ug/L	100
107) bromobenzene	14.899	156	39481	20.82	ug/L	98
108) cyclohexanone	14.674	55	9973	136.54	ug/L	88
109) 1,1,2,2-tetrachloroethane	14.810	83	36802	19.14	ug/L	97
110) trans-1,4-dichloro-2-b...	14.852	53	6275	14.78	ug/L	95
111) 1,2,3-trichloropropane	14.889	110	9426	22.24	ug/L	99
112) n-propylbenzene	14.905	91	145851	19.77	ug/L	99
114) 2-chlorotoluene	15.057	126	34291	21.07	ug/L	94
115) 4-chlorotoluene	15.156	126	34089	20.72	ug/L	95
116) 1,3,5-trimethylbenzene	15.051	105	114445	20.77	ug/L	97
117) tert-butylbenzene	15.403	119	99045	20.74	ug/L	100
118) pentachloroethane	15.492	167	27173	21.23	ug/L	95
119) 1,2,4-trimethylbenzene	15.450	105	111360	20.41	ug/L	98
120) sec-butylbenzene	15.612	105	148802	20.47	ug/L	99
121) 1,3-dichlorobenzene	15.806	146	73585	20.51	ug/L	97
122) p-isopropyltoluene	15.733	119	127945	21.03	ug/L	99
123) 1,4-dichlorobenzene	15.885	146	74478	19.98	ug/L	98
124) 1,2-dichlorobenzene	16.268	146	74354	20.32	ug/L	99
126) n-butylbenzene	16.131	92	62785	20.23	ug/L	99
128) 1,2-dibromo-3-chloropr...	16.997	157	9970	22.31	ug/L	98
129) 1,3,5-trichlorobenzene	17.159	180	72451	21.59	ug/L	99
130) 1,2,4-trichlorobenzene	17.725	180	69475	22.65	ug/L	99
131) hexachlorobutadiene	17.820	225	36837	22.43	ug/L	95
132) naphthalene	17.966	128	147449	23.26	ug/L	99
133) 1,2,3-trichlorobenzene	18.181	180	65748	23.24	ug/L	98
134) hexachloroethane	16.509	119	26981	20.97	ug/L	99
135) Benzyl chloride	16.000	91	63549	18.40	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D\v3d4110\
Data File : 3D95400.D
Acq On : 28 Jan 2014 2:50 pm
Operator : nickm1
Sample : cc4058-20
Misc : MS62219,V3D4109,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 29 11:56:15 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4058.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Jan 24 10:17:26 2014
Response via : Initial Calibration



M3D4058.M Wed Jan 29 13:01:13 2014 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142284.D
Acq On : 7 Jan 2014 12:08 pm
Operator : prashans
Sample : IC6161-20
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 08 15:46:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:30:27 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	54858	500.00	ug/L		0.00
5) pentafluorobenzene	9.81	168	156519	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.72	114	213272	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	174082	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.09	152	86000	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.90	113	68517	44.86	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 89.72%				
50) 1,2-dichloroethane-d4 (s)	10.31	65	73394	41.25	ug/L		0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 82.50%				
79) toluene-d8 (s)	12.32	98	243145	48.91	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 97.82%				
103) 4-bromofluorobenzene (s)	14.94	95	84770	48.89	ug/L		0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 97.78%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.45	88	6230	521.91	ug/L		95
3) tertiary butyl alcohol	7.76	59	14322	101.17	ug/L		88
4) isobutyl alcohol	10.13	41	8074	215.18	ug/L	#	88
11) chlorodifluoromethane	4.23	51	20707	17.91	ug/L		93
12) dichlorodifluoromethane	4.22	85	25197	16.20	ug/L		98
13) chloromethane	4.55	50	35602	19.69	ug/L		99
14) vinyl chloride	4.82	62	30305	19.44	ug/L		99
15) 1,3-butadiene	4.86	54	54698	21.50	ug/L		99
16) bromomethane	5.49	94	22513	16.35	ug/L		95
17) chloroethane	5.66	64	15290	19.01	ug/L		93
18) Vinyl Bromide	6.01	106	18764	16.56	ug/L		96
19) trichlorofluoromethane	6.11	101	33526	15.78	ug/L		95
20) ethyl ether	6.50	74	14769	20.40	ug/L		98
21) 2-chloropropane	6.72	63	9094	20.20	ug/L		97
22) acrolein	6.82	56	45768	209.09	ug/L		95
23) 1,1-dichloroethene	6.94	61	33463	19.06	ug/L		96
24) acetone	7.05	43	7548	18.57	ug/L		96
25) allyl chloride	7.48	76	13627	19.35	ug/L		85
26) acetonitrile	7.53	40	19541	230.88	ug/L	#	75
27) iodomethane	7.25	142	43523	18.06	ug/L		98
28) carbon disulfide	7.35	76	75074	19.70	ug/L		94
29) 1-chloropropane	7.69	42	44867	18.82	ug/L		98
30) methylene chloride	7.69	49	37476	19.29	ug/L		99
31) methyl acetate	7.48	74	3677	20.19	ug/L	#	76
32) methyl tert butyl ether	7.97	73	71172	16.97	ug/L		96
33) trans-1,2-dichloroethene	8.03	61	35228	19.32	ug/L		99
34) di-isopropyl ether	8.52	45	91620	20.40	ug/L		98
35) ethyl tert-butyl ether	8.99	59	81319	18.44	ug/L		95
36) 2-butanone	9.32	72	2757	19.53	ug/L		70
37) 1,1-dichloroethane	8.60	63	46282	19.36	ug/L		98
38) chloroprene	8.69	53	33949	18.38	ug/L		96
39) acrylonitrile	8.05	53	40731	111.34	ug/L		98
40) vinyl acetate	8.59	86	3723	17.43	ug/L	#	65

MY6161.M Wed Jan 08 16:00:14 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142284.D
Acq On : 7 Jan 2014 12:08 pm
Operator : prashans
Sample : IC6161-20
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 08 15:46:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:30:27 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) ethyl acetate	9.30	45	3549	20.22	ug/L		90
42) 2,2-dichloropropane	9.31	77	33149	15.71	ug/L		98
43) cis-1,2-dichloroethene	9.33	96	29340	17.83	ug/L		97
44) propionitrile	9.45	54	33281	229.81	ug/L		97
45) bromochloromethane	9.64	130	18966	17.96	ug/L		92
46) tetrahydrofuran	9.67	72	3324	20.63	ug/L		92
47) chloroform	9.69	83	45498	17.06	ug/L		98
48) tert-Butyl Formate	9.71	59	15232	15.45	ug/L		89
51) freon 113	6.89	151	16127	18.70	ug/L		99
52) methacrylonitrile	9.61	67	9281	19.91	ug/L		89
53) 1,1,1-trichloroethane	9.92	97	35498	16.37	ug/L		97
54) Cyclohexane	9.96	84	33582	18.93	ug/L	#	97
55) 2,2,4-trimethylpentane	10.30	57	90924	18.74	ug/L		96
56) tert-amyl methyl ether	10.36	73	78004	17.11	ug/L		98
58) epichlorohydrin	11.99	57	10795	98.70	ug/L		98
59) n-butyl alcohol	10.87	56	35900	1065.46	ug/L		100
60) carbon tetrachloride	10.10	117	31751	16.80	ug/L		99
61) 1,1-dichloropropene	10.09	75	33040	19.33	ug/L		97
62) hexane	8.27	57	29800	19.25	ug/L		97
63) Tert Amyl Alcohol	10.25	73	7070	90.98	ug/L	#	95
64) benzene	10.36	78	104393	19.69	ug/L		99
65) heptane	10.47	57	18438	19.49	ug/L		96
66) isopropyl acetate	10.27	61	10486	22.27	ug/L		91
67) 1,2-dichloroethane	10.40	62	32436	16.80	ug/L		98
68) trichloroethene	11.05	95	25827	18.74	ug/L		95
69) ethyl acrylate	11.06	55	29529	21.28	ug/L		97
70) 2-nitropropane	11.85	41	7221	13.73	ug/L	#	87
71) 2-chloroethyl vinyl ether	11.84	63	35398	72.63	ug/L		96
72) methyl methacrylate	11.32	69	16586	20.03	ug/L		91
73) 1,2-dichloropropane	11.33	63	27286	20.24	ug/L		90
74) methylcyclohexane	11.23	83	36787	18.81	ug/L		97
75) Tert-amyl ethyl ether	11.17	59	65751	19.12	ug/L		97
76) dibromomethane	11.50	93	15606	17.65	ug/L		98
77) bromodichloromethane	11.62	83	35742	17.61	ug/L		93
78) cis-1,3-dichloropropene	12.06	75	43388	18.49	ug/L		93
80) 4-methyl-2-pentanone	12.14	58	9478	21.16	ug/L		98
81) toluene	12.39	91	107176	18.26	ug/L		98
82) 3-methyl-1-butanol	12.17	70	12767	388.01	ug/L		95
83) trans-1,3-dichloropropene	12.61	75	36839	17.55	ug/L		93
84) ethyl methacrylate	12.57	69	29257	18.08	ug/L		97
85) 1,1,2-trichloroethane	12.82	83	19512	18.89	ug/L		92
86) 2-hexanone	12.98	58	8993	20.91	ug/L		89
88) tetrachloroethene	12.95	166	28752	18.76	ug/L		96
89) 1,3-dichloropropane	13.00	76	36008	19.72	ug/L		98
90) butyl acetate	13.02	56	15327	21.60	ug/L		99
91) dibromochloromethane	13.26	129	28020	18.52	ug/L		97
92) 1,2-dibromoethane	13.41	107	22578	19.19	ug/L		99
93) 3,3-Dimethyl-1-Butanol	13.14	57	22047	194.74	ug/L		96
94) chlorobenzene	13.84	112	69616	18.45	ug/L		98
95) 1,1,1,2-tetrachloroethane	13.90	131	25845	17.92	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142284.D
Acq On : 7 Jan 2014 12:08 pm
Operator : prashans
Sample : IC6161-20
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 08 15:46:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:30:27 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) ethylbenzene	13.88	91	111739	18.48	ug/L	99
97) m,p-xylene	13.97	106	87057	36.34	ug/L	98
98) o-xylene	14.39	91	90646	18.09	ug/L	100
99) styrene	14.41	104	71010	17.97	ug/L	97
100) bromoform	14.70	173	18518	18.41	ug/L	100
102) isopropylbenzene	14.72	105	105657	18.84	ug/L	98
105) bromobenzene	15.14	156	31500	18.89	ug/L	91
106) cyclohexanone	14.93	55	30992	161.03	ug/L	90
107) 1,1,2,2-tetrachloroethane	15.06	83	28968	20.36	ug/L	97
108) trans-1,4-dichloro-2-buten	15.10	53	6373	17.62	ug/L	94
109) 1,2,3-trichloropropane	15.14	110	6945	19.72	ug/L	91
110) n-propylbenzene	15.12	91	119290	18.36	ug/L	99
111) 4-Ethyltoluene	15.22	105	104084	19.18	ug/L	99
112) 2-chlorotoluene	15.28	126	26819	18.78	ug/L	96
113) 4-chlorotoluene	15.38	91	76854	17.89	ug/L	100
114) 1,3,5-trimethylbenzene	15.27	105	89856	18.93	ug/L	99
115) tert-butylbenzene	15.61	119	73744	18.38	ug/L	99
116) pentachloroethane	15.71	167	19571	18.76	ug/L	99
117) 1,2,4-trimethylbenzene	15.66	105	86397	18.04	ug/L	99
118) sec-butylbenzene	15.82	105	111658	18.49	ug/L	99
119) 1,3-dichlorobenzene	16.03	146	55448	18.34	ug/L	98
120) p-isopropyltoluene	15.94	119	91906	18.33	ug/L	97
121) 1,4-dichlorobenzene	16.11	146	55023	17.66	ug/L	98
122) 1,2-dichlorobenzene	16.51	146	52509	18.24	ug/L	97
123) n-butylbenzene	16.34	91	82222m	75.89	ug/L	
124) p-Diethylbenzene	16.31	119	56486	17.91	ug/L	98
125) 1,2-dibromo-3-chloropropan	17.29	157	5180	19.62	ug/L	96
126) 1,3,5-Trichlorobenzene	17.44	180	42526	18.37	ug/L	100
127) 1,2,4-trichlorobenzene	18.09	180	35080	17.80	ug/L	97
128) 1,2,4,5-tetramethylbenzene	17.10	119	87050	21.46	ug/L	99
129) hexachlorobutadiene	18.17	225	23229	18.43	ug/L	98
130) naphthalene	18.38	128	67038	17.55	ug/L	99
131) 1,2,3-trichlorobenzene	18.63	180	32481	18.00	ug/L	95
132) hexachloroethane	16.74	119	17938	17.26	ug/L	97
133) Benzyl chloride	16.23	91	43655	17.59	ug/L	99

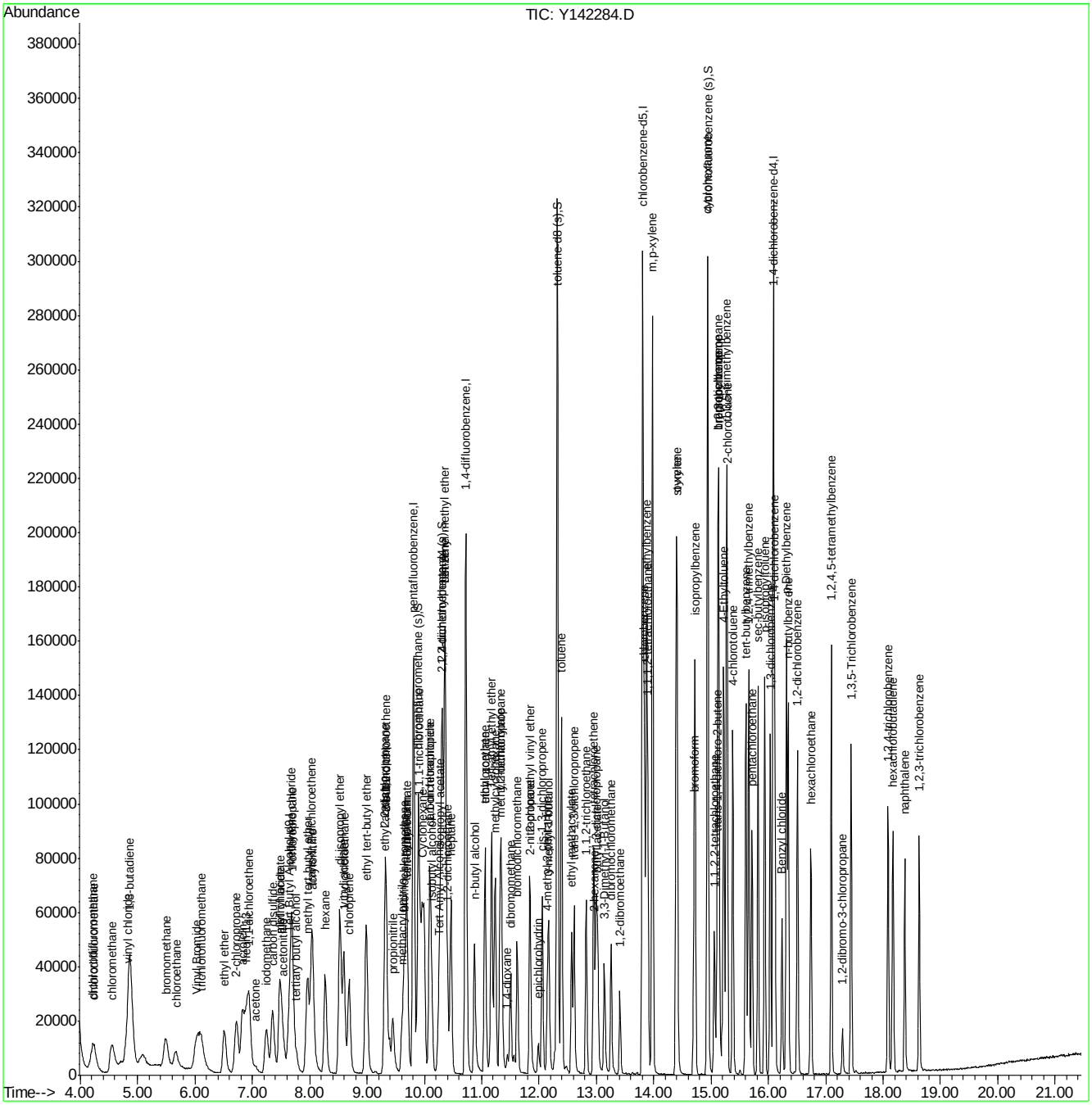
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MY6161.M Wed Jan 08 16:00:14 2014 RPT1 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142284.D
Acq On : 7 Jan 2014 12:08 pm
Operator : prashans
Sample : IC6161-20
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 08 15:46:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:30:27 2014
Response via : Initial Calibration



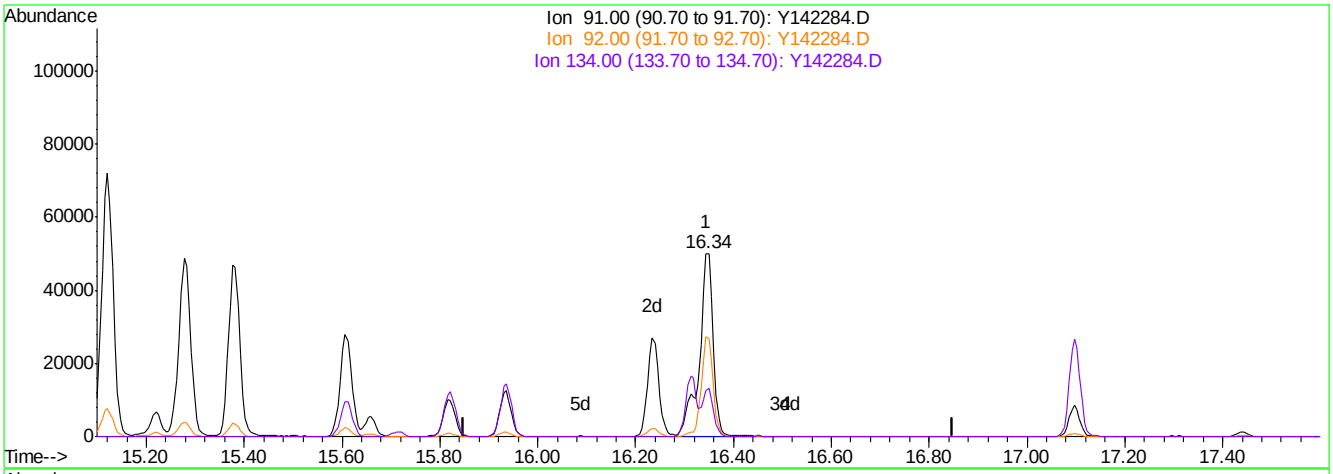
MY6161.M Wed Jan 08 16:00:14 2014 RPT1 Page: 4

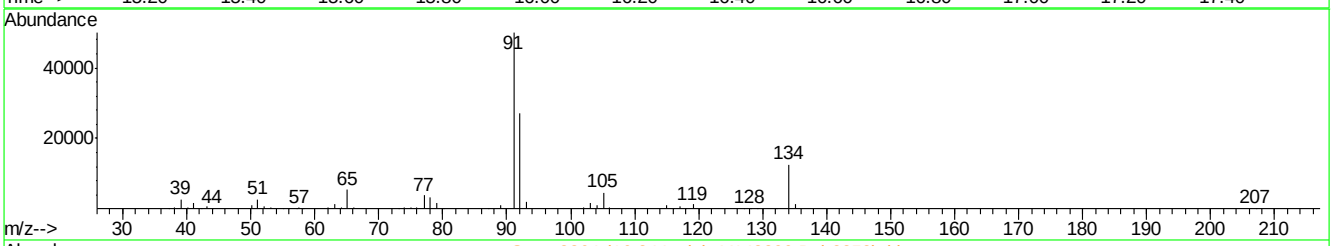
Quantitation Report (Qedit)

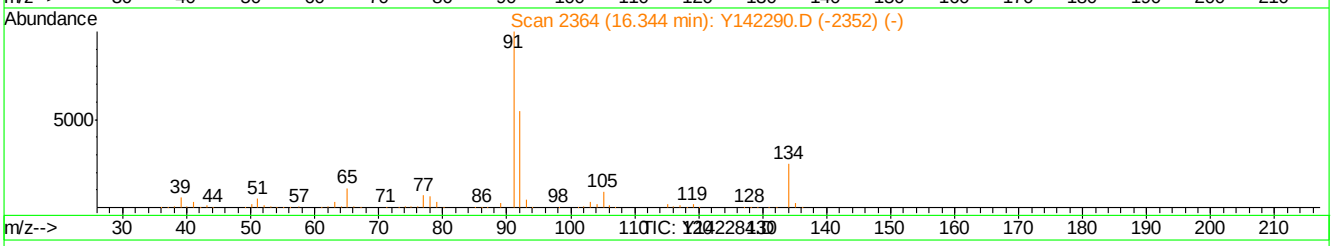
Data File : C:\MSDCHEM\1\DATA\Y142284.D Vial: 2
Acq On : 7 Jan 2014 12:08 pm Operator: prashans
Sample : IC6161-20 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:37:56 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.34min 92.16ug/L

response 99847

Ion	Exp%	Act%
91.00	100	100
92.00	30.00	54.44
134.00	30.00	25.11
0.00	0.00	0.00

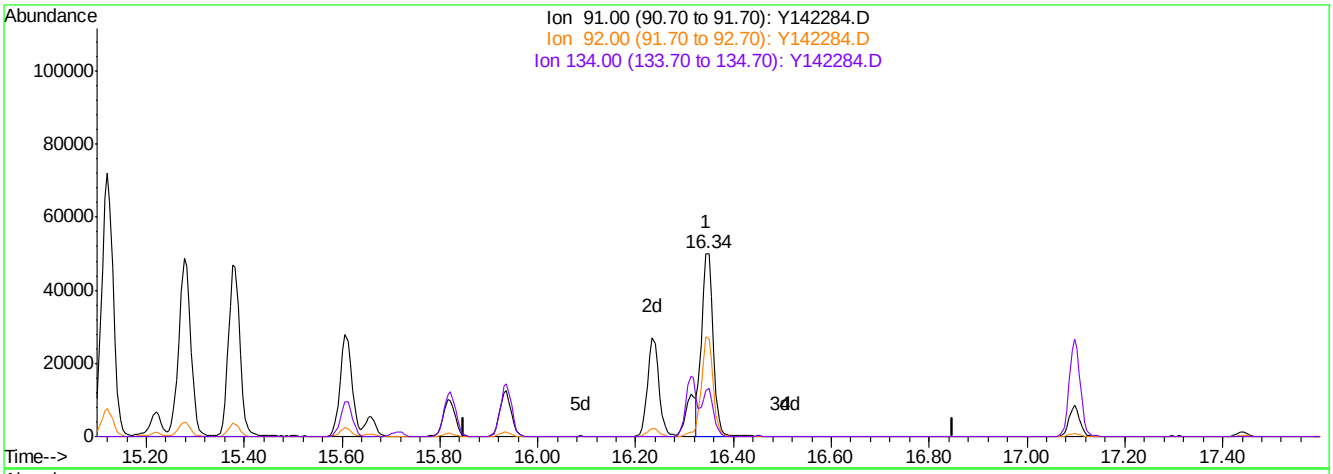
Y142284.D MY6161.M Wed Jan 08 15:46:45 2014 RPT1

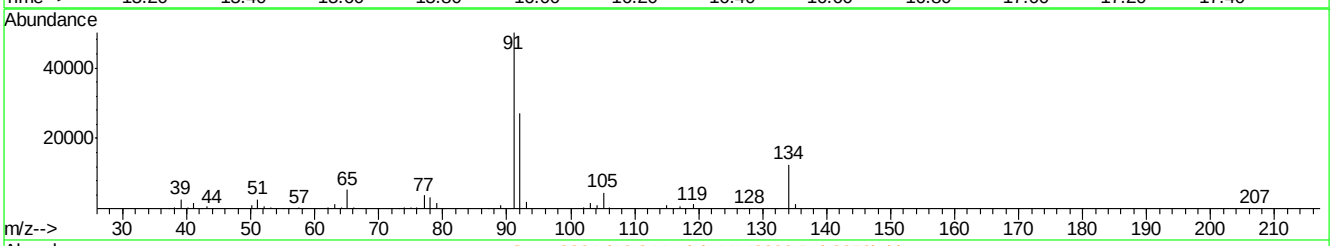
Quantitation Report (Qedit)

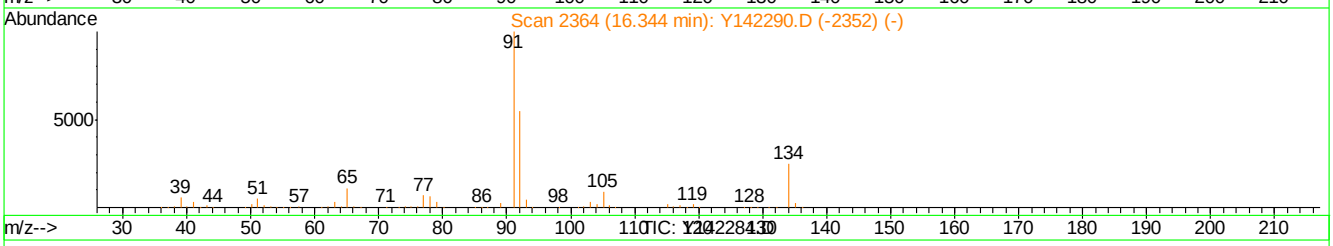
Data File : C:\MSDCHEM\1\DATA\Y142284.D Vial: 2
Acq On : 7 Jan 2014 12:08 pm Operator: prashans
Sample : IC6161-20 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:37:56 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.34min 75.89ug/L m

response 82222

Ion	Exp%	Act%
91.00	100	100
92.00	30.00	54.44
134.00	30.00	25.11
0.00	0.00	0.00

Y142284.D MY6161.M Wed Jan 08 15:47:33 2014 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142285.D
Acq On : 7 Jan 2014 12:37 pm
Operator : prashans
Sample : IC6161-10
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 08 15:48:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:39:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	50902	500.00	ug/L	0.00
5) pentafluorobenzene	9.81	168	158873	50.00	ug/L	0.00
57) 1,4-difluorobenzene	10.73	114	217902	50.00	ug/L	0.00
87) chlorobenzene-d5	13.81	117	176976	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.09	152	85561	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	9.90	113	13639	9.81	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 19.62%#			
50) 1,2-dichloroethane-d4 (s)	10.32	65	14547	9.76	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 19.52%#			
79) toluene-d8 (s)	12.32	98	51372	10.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 20.68%#			
103) 4-bromofluorobenzene (s)	14.94	95	17516	10.38	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 20.76%#			
Target Compounds						Qvalue
2) 1,4-dioxane	11.45	88	2771	239.68	ug/L #	82
3) tertiary butyl alcohol	7.77	59	6499	48.90	ug/L	95
4) isobutyl alcohol	10.14	41	3499	93.41	ug/L #	90
11) chlorodifluoromethane	4.24	51	9623	9.16	ug/L	97
12) dichlorodifluoromethane	4.21	85	12150	9.50	ug/L	93
13) chloromethane	4.54	50	17962	9.94	ug/L	99
14) vinyl chloride	4.81	62	15168	9.86	ug/L	98
15) 1,3-butadiene	4.86	54	26513	9.55	ug/L	98
16) bromomethane	5.51	94	11914	10.43	ug/L	91
17) chloroethane	5.67	64	7782	10.03	ug/L	91
18) Vinyl Bromide	6.02	106	9291	9.76	ug/L	97
19) trichlorofluoromethane	6.11	101	16019	9.41	ug/L	97
20) ethyl ether	6.51	74	7903	10.54	ug/L	92
21) 2-chloropropane	6.72	63	4756	10.30	ug/L	92
22) acrolein	6.84	56	21877	94.18	ug/L	93
23) 1,1-dichloroethene	6.95	61	16983	10.00	ug/L	98
24) acetone	7.06	43	4206	10.98	ug/L	89
25) allyl chloride	7.48	76	7195	10.40	ug/L	87
26) acetonitrile	7.53	40	9306	93.83	ug/L	91
27) iodomethane	7.25	142	23421	10.60	ug/L	95
28) carbon disulfide	7.37	76	39778	10.44	ug/L	99
29) 1-chloropropane	7.69	42	26412	11.60	ug/L	96
30) methylene chloride	7.69	49	20914	11.00	ug/L	98
31) methyl acetate	7.48	74	1784	9.56	ug/L	94
32) methyl tert butyl ether	7.97	73	38383	10.63	ug/L	98
33) trans-1,2-dichloroethene	8.03	61	18637	10.42	ug/L	98
34) di-isopropyl ether	8.53	45	45073	9.69	ug/L	97
35) ethyl tert-butyl ether	8.99	59	39443	9.56	ug/L	97
36) 2-butanone	9.33	72	1323	9.46	ug/L	97
37) 1,1-dichloroethane	8.60	63	24780	10.55	ug/L	97
38) chloroprene	8.69	53	16225	9.42	ug/L	99
39) acrylonitrile	8.06	53	21527	52.07	ug/L	98
40) vinyl acetate	8.59	86	1470	7.78	ug/L	67

MY6161.M Wed Jan 08 16:00:15 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142285.D
Acq On : 7 Jan 2014 12:37 pm
Operator : prashans
Sample : IC6161-10
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 08 15:48:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:39:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) ethyl acetate	9.31	45	1585	8.80	ug/L		66
42) 2,2-dichloropropane	9.32	77	17311	10.29	ug/L		99
43) cis-1,2-dichloroethene	9.34	96	15457	10.38	ug/L		95
44) propionitrile	9.46	54	16222	96.04	ug/L		96
45) bromochloromethane	9.65	130	10150	10.54	ug/L		92
46) tetrahydrofuran	9.69	72	1638	9.71	ug/L		92
47) chloroform	9.70	83	24167	10.47	ug/L		98
48) tert-Butyl Formate	9.71	59	6546	8.47	ug/L		95
51) freon 113	6.90	151	7556	9.23	ug/L		100
52) methacrylonitrile	9.61	67	4699	9.98	ug/L		81
53) 1,1,1-trichloroethane	9.92	97	18339	10.18	ug/L		99
54) Cyclohexane	9.96	84	17338	10.17	ug/L	#	99
55) 2,2,4-trimethylpentane	10.30	57	42764	9.27	ug/L		100
56) tert-amyl methyl ether	10.36	73	38015	9.60	ug/L		97
58) epichlorohydrin	11.99	57	5179	46.96	ug/L		94
59) n-butyl alcohol	10.88	56	15528	423.34	ug/L		99
60) carbon tetrachloride	10.11	117	16332	10.07	ug/L		99
61) 1,1-dichloropropene	10.09	75	17162	10.17	ug/L		99
62) hexane	8.27	57	14403	9.46	ug/L		97
63) Tert Amyl Alcohol	10.25	73	3391	46.94	ug/L	#	96
64) benzene	10.36	78	56614	10.62	ug/L		97
65) heptane	10.47	57	8572	9.10	ug/L		98
66) isopropyl acetate	10.27	61	4440	8.29	ug/L		92
67) 1,2-dichloroethane	10.41	62	17226	10.40	ug/L		98
68) trichloroethene	11.06	95	13699	10.38	ug/L		98
69) ethyl acrylate	11.07	55	12812	8.49	ug/L		96
70) 2-nitropropane	11.86	41	3566	9.67	ug/L	#	65
71) 2-chloroethyl vinyl ether	11.85	63	15645	43.26	ug/L		97
72) methyl methacrylate	11.32	69	8289	9.78	ug/L		88
73) 1,2-dichloropropane	11.34	63	14634	10.50	ug/L		99
74) methylcyclohexane	11.24	83	17211	9.16	ug/L		99
75) Tert-amyl ethyl ether	11.18	59	32564	9.69	ug/L		99
76) dibromomethane	11.51	93	8166	10.24	ug/L		98
77) bromodichloromethane	11.62	83	18880	10.34	ug/L		95
78) cis-1,3-dichloropropene	12.06	75	22766	10.27	ug/L		99
80) 4-methyl-2-pentanone	12.15	58	4695	9.70	ug/L		96
81) toluene	12.40	91	57007	10.41	ug/L		96
82) 3-methyl-1-butanol	12.18	70	5595	171.57	ug/L		97
83) trans-1,3-dichloropropene	12.61	75	19032	10.11	ug/L		93
84) ethyl methacrylate	12.57	69	14723	9.85	ug/L		93
85) 1,1,2-trichloroethane	12.82	83	10081	10.11	ug/L		95
86) 2-hexanone	12.99	58	4078	8.88	ug/L		91
88) tetrachloroethene	12.95	166	14973	10.24	ug/L		97
89) 1,3-dichloropropane	13.00	76	18878	10.31	ug/L		99
90) butyl acetate	13.03	56	6824	8.76	ug/L		97
91) dibromochloromethane	13.26	129	14613	10.26	ug/L		98
92) 1,2-dibromoethane	13.42	107	11250	9.80	ug/L		92
93) 3,3-Dimethyl-1-Butanol	13.14	57	9778	87.25	ug/L		99
94) chlorobenzene	13.84	112	37065	10.47	ug/L		97
95) 1,1,1,2-tetrachloroethane	13.90	131	13749	10.47	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142285.D
Acq On : 7 Jan 2014 12:37 pm
Operator : prashans
Sample : IC6161-10
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 08 15:48:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:39:56 2014
Response via : Initial Calibration

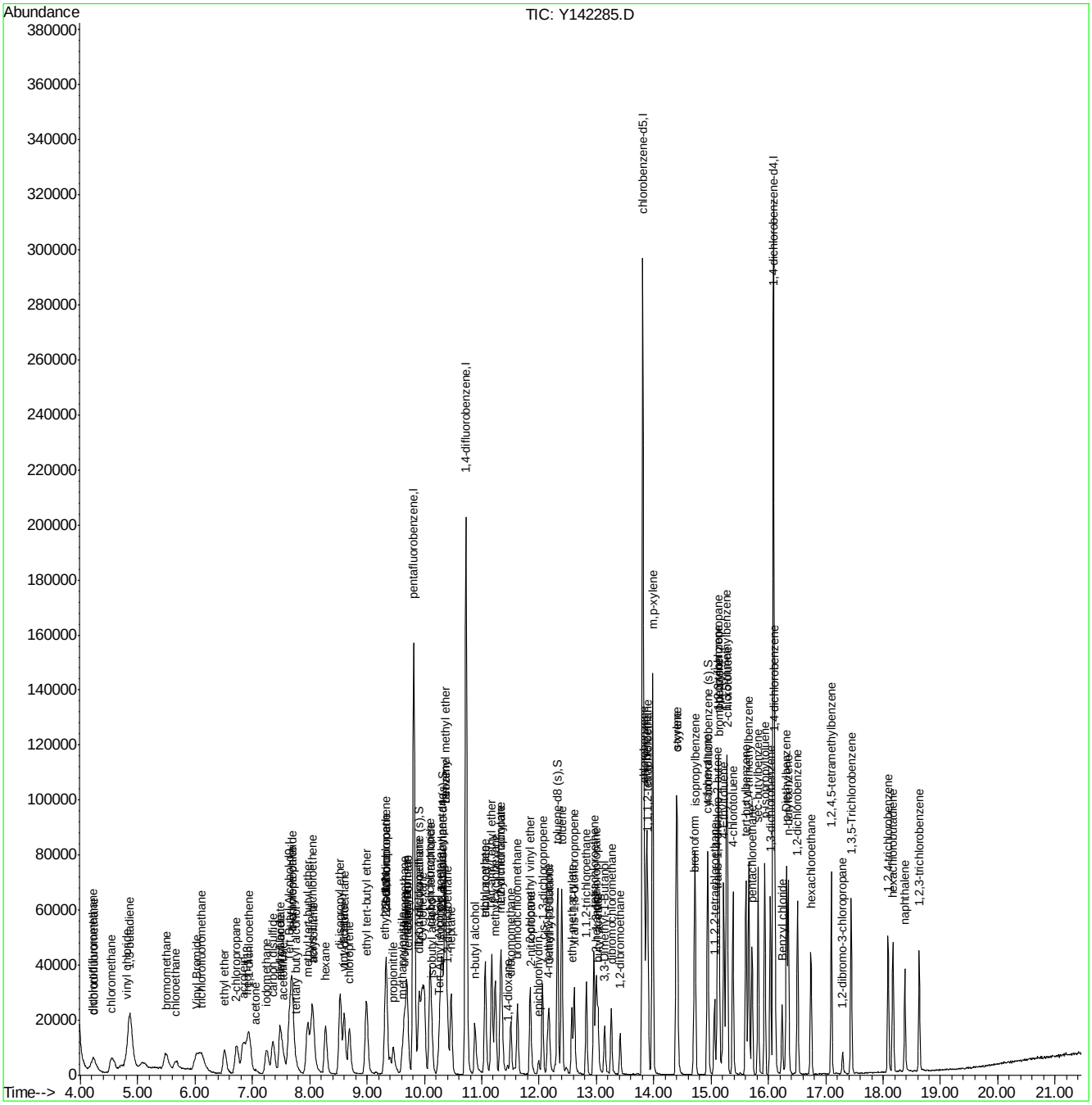
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) ethylbenzene	13.88	91	60103	10.58	ug/L	98
97) m,p-xylene	13.98	106	46319	20.93	ug/L	99
98) o-xylene	14.39	91	48120	10.44	ug/L	97
99) styrene	14.41	104	37102	10.28	ug/L	98
100) bromoform	14.70	173	9464	10.05	ug/L	99
102) isopropylbenzene	14.72	105	55098	10.48	ug/L	100
105) bromobenzene	15.14	156	16460	10.50	ug/L	99
106) cyclohexanone	14.93	55	16687	108.24	ug/L	93
107) 1,1,2,2-tetrachloroethane	15.06	83	15183	10.54	ug/L	99
108) trans-1,4-dichloro-2-buten	15.10	53	3027	9.55	ug/L	96
109) 1,2,3-trichloropropane	15.14	110	3518	10.18	ug/L	90
110) n-propylbenzene	15.12	91	62327	10.50	ug/L	98
111) 4-Ethyltoluene	15.22	105	51945	10.03	ug/L	99
112) 2-chlorotoluene	15.28	126	14277	10.70	ug/L	96
113) 4-chlorotoluene	15.38	91	41190	10.77	ug/L	99
114) 1,3,5-trimethylbenzene	15.27	105	46591	10.42	ug/L	100
115) tert-butylbenzene	15.61	119	38668	10.54	ug/L	98
116) pentachloroethane	15.72	167	10379	10.66	ug/L	92
117) 1,2,4-trimethylbenzene	15.66	105	44814	10.43	ug/L	96
118) sec-butylbenzene	15.82	105	58172	10.47	ug/L	98
119) 1,3-dichlorobenzene	16.03	146	29105	10.55	ug/L	100
120) p-isopropyltoluene	15.94	119	48165	10.54	ug/L	99
121) 1,4-dichlorobenzene	16.11	146	29370	10.73	ug/L	98
122) 1,2-dichlorobenzene	16.51	146	28215	10.80	ug/L	98
123) n-butylbenzene	16.35	91	42817m	8.62	ug/L	
124) p-Diethylbenzene	16.31	119	27017	9.61	ug/L	98
125) 1,2-dibromo-3-chloropropan	17.29	157	2592	10.06	ug/L	94
126) 1,3,5-Trichlorobenzene	17.44	180	22320	10.55	ug/L	99
127) 1,2,4-trichlorobenzene	18.09	180	17521	10.04	ug/L	100
128) 1,2,4,5-tetramethylbenzene	17.10	119	41943	9.69	ug/L	99
129) hexachlorobutadiene	18.17	225	12017	10.40	ug/L	97
130) naphthalene	18.38	128	33211	9.96	ug/L	99
131) 1,2,3-trichlorobenzene	18.63	180	16482	10.20	ug/L	95
132) hexachloroethane	16.74	119	9265	10.38	ug/L	99
133) Benzyl chloride	16.24	91	19579	9.02	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142285.D
Acq On : 7 Jan 2014 12:37 pm
Operator : prashans
Sample : IC6161-10
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 08 15:48:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:39:56 2014
Response via : Initial Calibration



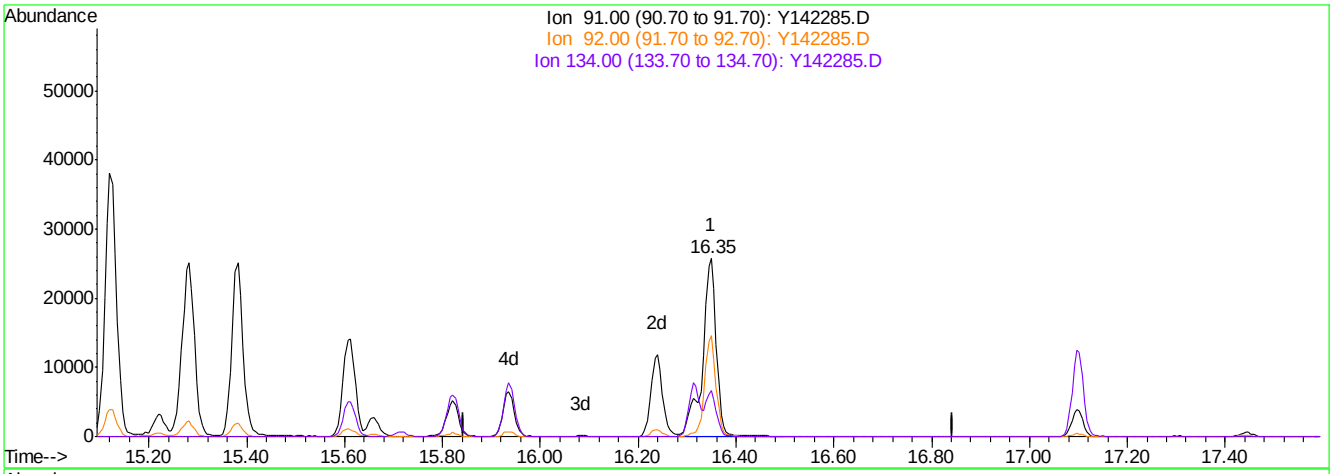
MY6161.M Wed Jan 08 16:00:15 2014 RPT1 Page: 4

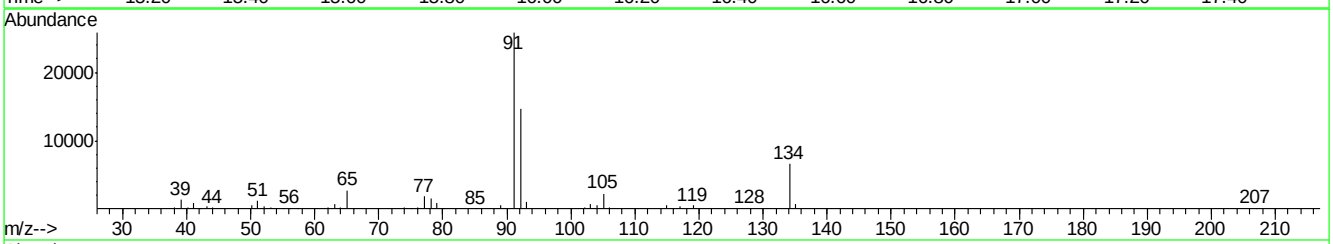
Quantitation Report (Qedit)

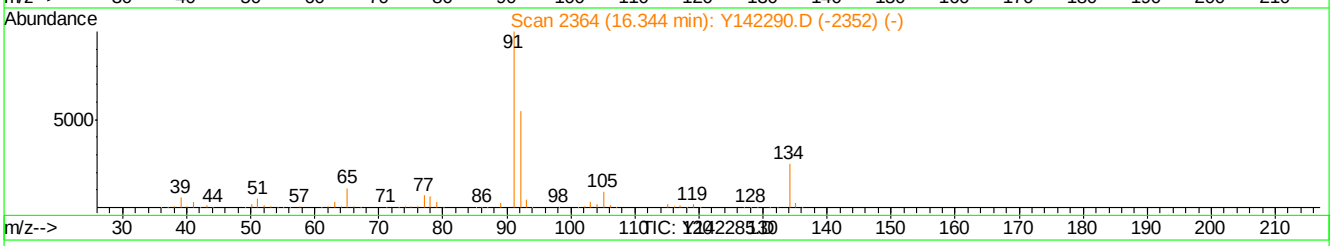
Data File : C:\MSDCHEM\1\DATA\Y142285.D Vial: 3
Acq On : 7 Jan 2014 12:37 pm Operator: prashans
Sample : IC6161-10 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:42:52 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 10.35ug/L

response 51397

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	56.60
134.00	25.10	25.56
0.00	0.00	0.00

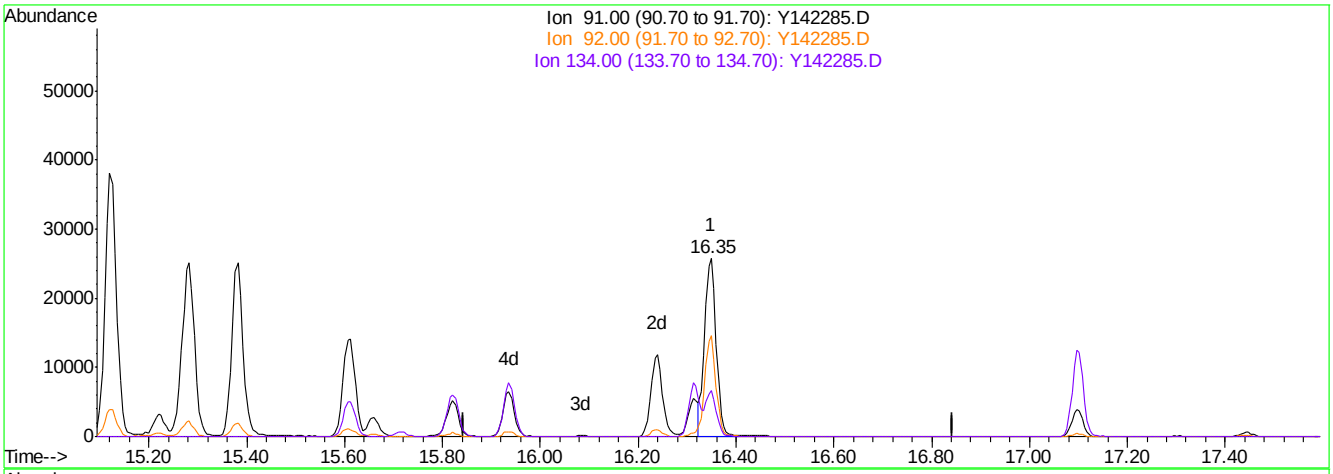
Y142285.D MY6161.M Wed Jan 08 15:47:53 2014 RPT1

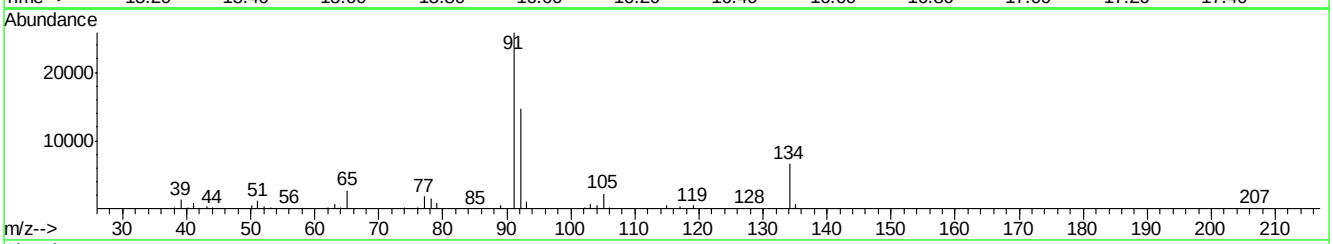
Quantitation Report (Qedit)

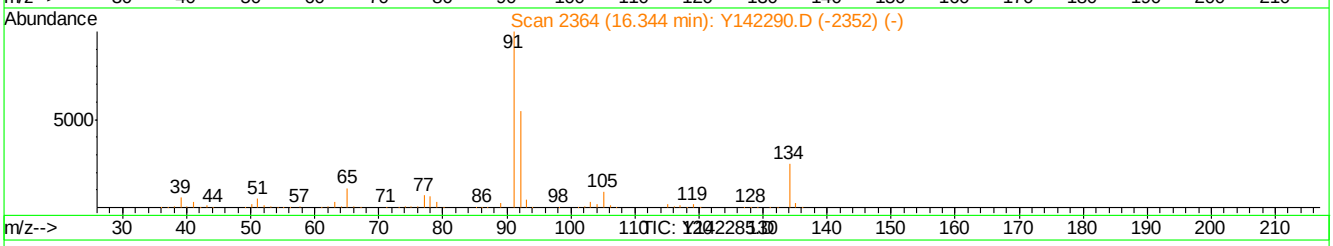
Data File : C:\MSDCHEM\1\DATA\Y142285.D Vial: 3
Acq On : 7 Jan 2014 12:37 pm Operator: prashans
Sample : IC6161-10 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:42:52 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 8.62ug/L m

response 42817

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	56.60
134.00	25.10	25.56
0.00	0.00	0.00

Y142285.D MY6161.M Wed Jan 08 15:48:23 2014 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142286.D
Acq On : 7 Jan 2014 1:06 pm
Operator : prashans
Sample : IC6161-5
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 08 15:48:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:43:08 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	55266	500.00	ug/L		0.00
5) pentafluorobenzene	9.81	168	155013	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.73	114	213361	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	172627	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.09	152	82836	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.90	113	7789	5.80	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 11.60%#				
50) 1,2-dichloroethane-d4 (s)	10.31	65	8266	5.75	ug/L		0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 11.50%#				
79) toluene-d8 (s)	12.32	98	29279	5.92	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 11.84%#				
103) 4-bromofluorobenzene (s)	14.94	95	10069	6.05	ug/L		0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 12.10%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.45	88	1648	134.05	ug/L	#	81
3) tertiary butyl alcohol	7.76	59	3776	26.46	ug/L		89
4) isobutyl alcohol	10.14	41	2531	64.35	ug/L	#	85
11) chlorodifluoromethane	4.26	51	5668	5.77	ug/L		94
12) dichlorodifluoromethane	4.22	85	6755	5.55	ug/L		92
13) chloromethane	4.54	50	9858	5.61	ug/L		90
14) vinyl chloride	4.80	62	8395	5.63	ug/L		96
15) 1,3-butadiene	4.87	54	16595	6.27	ug/L		95
16) bromomethane	5.49	94	6525	5.73	ug/L		94
17) chloroethane	5.67	64	4251	5.61	ug/L		92
18) Vinyl Bromide	6.00	106	5547	6.04	ug/L		93
19) trichlorofluoromethane	6.11	101	9014	5.59	ug/L		97
20) ethyl ether	6.52	74	3640	4.85	ug/L		88
21) 2-chloropropane	6.73	63	2592	5.67	ug/L		97
22) acrolein	6.84	56	13876	63.06	ug/L		98
23) 1,1-dichloroethene	6.95	61	9109	5.50	ug/L		91
24) acetone	7.07	43	2170	5.53	ug/L		97
25) allyl chloride	7.48	76	3457	5.02	ug/L		75
26) acetonitrile	7.54	40	7169	76.44	ug/L		86
27) iodomethane	7.25	142	11608	5.23	ug/L		98
28) carbon disulfide	7.36	76	20503	5.40	ug/L		96
29) 1-chloropropane	7.69	42	16510	6.88	ug/L	#	88
30) methylene chloride	7.68	49	10633	5.46	ug/L		94
31) methyl acetate	7.48	74	858	4.82	ug/L	#	65
32) methyl tert butyl ether	7.97	73	18624	5.12	ug/L		95
33) trans-1,2-dichloroethene	8.04	61	9362	5.26	ug/L		97
34) di-isopropyl ether	8.54	45	24456	5.47	ug/L		97
35) ethyl tert-butyl ether	8.99	59	21538	5.47	ug/L		99
37) 1,1-dichloroethane	8.60	63	12176	5.17	ug/L		97
38) chloroprene	8.70	53	9302	5.70	ug/L		96
39) acrylonitrile	8.07	53	10442	25.36	ug/L		94
40) vinyl acetate	8.60	86	795	4.85	ug/L		43
41) ethyl acetate	9.33	45	867	5.25	ug/L	#	1

MY6161.M Wed Jan 08 16:00:15 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142286.D
Acq On : 7 Jan 2014 1:06 pm
Operator : prashans
Sample : IC6161-5
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 08 15:48:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:43:08 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) 2,2-dichloropropane	9.32	77	9014	5.41	ug/L		92
43) cis-1,2-dichloroethene	9.34	96	7589	5.13	ug/L		94
44) propionitrile	9.46	54	7690	47.60	ug/L		83
45) bromochloromethane	9.65	130	4857	5.03	ug/L		100
46) tetrahydrofuran	9.69	72	767	4.73	ug/L	#	80
47) chloroform	9.69	83	12137	5.26	ug/L		97
48) tert-Butyl Formate	9.71	59	3452	4.96	ug/L		98
51) freon 113	6.90	151	5574	7.26	ug/L		96
52) methacrylonitrile	9.61	67	2198	4.79	ug/L		90
53) 1,1,1-trichloroethane	9.92	97	9631	5.43	ug/L		99
54) Cyclohexane	9.97	84	9062	5.40	ug/L	#	97
55) 2,2,4-trimethylpentane	10.30	57	25857	5.96	ug/L		98
56) tert-amyl methyl ether	10.36	73	21255	5.61	ug/L		95
58) epichlorohydrin	12.00	57	2712	25.90	ug/L		91
59) n-butyl alcohol	10.89	56	8704	262.47	ug/L		95
60) carbon tetrachloride	10.11	117	8523	5.35	ug/L		97
61) 1,1-dichloropropene	10.09	75	8595	5.16	ug/L		96
62) hexane	8.27	57	8801	6.07	ug/L		95
63) Tert Amyl Alcohol	10.26	73	1839	26.82	ug/L	#	78
64) benzene	10.37	78	28054	5.21	ug/L		99
65) heptane	10.47	57	5121	5.81	ug/L		92
66) isopropyl acetate	10.28	61	2476	5.16	ug/L		98
67) 1,2-dichloroethane	10.41	62	8293	5.01	ug/L		99
68) trichloroethene	11.06	95	6949	5.28	ug/L		96
69) ethyl acrylate	11.07	55	6544	4.79	ug/L		97
70) 2-nitropropane	11.86	41	1834	5.16	ug/L		87
71) 2-chloroethyl vinyl ether	11.85	63	8468	25.64	ug/L		97
72) methyl methacrylate	11.33	69	3839	4.68	ug/L	#	71
73) 1,2-dichloropropane	11.33	63	7055	5.04	ug/L		97
74) methylcyclohexane	11.24	83	10546	5.98	ug/L		98
75) Tert-amyl ethyl ether	11.17	59	16245	5.02	ug/L		98
76) dibromomethane	11.51	93	3986	5.04	ug/L		93
77) bromodichloromethane	11.62	83	9028	4.97	ug/L		98
78) cis-1,3-dichloropropene	12.06	75	10736	4.88	ug/L		96
80) 4-methyl-2-pentanone	12.15	58	2318	4.96	ug/L		92
81) toluene	12.40	91	28720	5.25	ug/L		98
82) 3-methyl-1-butanol	12.18	70	3159	106.50	ug/L		99
83) trans-1,3-dichloropropene	12.61	75	8977	4.84	ug/L		92
84) ethyl methacrylate	12.58	69	6857	4.72	ug/L		98
85) 1,1,2-trichloroethane	12.82	83	4820	4.91	ug/L		88
86) 2-hexanone	12.99	58	1912	4.50	ug/L		91
88) tetrachloroethene	12.95	166	7788	5.40	ug/L		98
89) 1,3-dichloropropane	13.00	76	9013	4.97	ug/L		99
90) butyl acetate	13.03	56	3708	5.20	ug/L		95
91) dibromochloromethane	13.26	129	6817	4.84	ug/L		95
92) 1,2-dibromoethane	13.42	107	5358	4.83	ug/L		90
93) 3,3-Dimethyl-1-Butanol	13.15	57	5388	52.65	ug/L		99
94) chlorobenzene	13.84	112	17994	5.09	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.90	131	6629	5.06	ug/L		99
96) ethylbenzene	13.88	91	29858	5.24	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142286.D
Acq On : 7 Jan 2014 1:06 pm
Operator : prashans
Sample : IC6161-5
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 08 15:48:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:43:08 2014
Response via : Initial Calibration

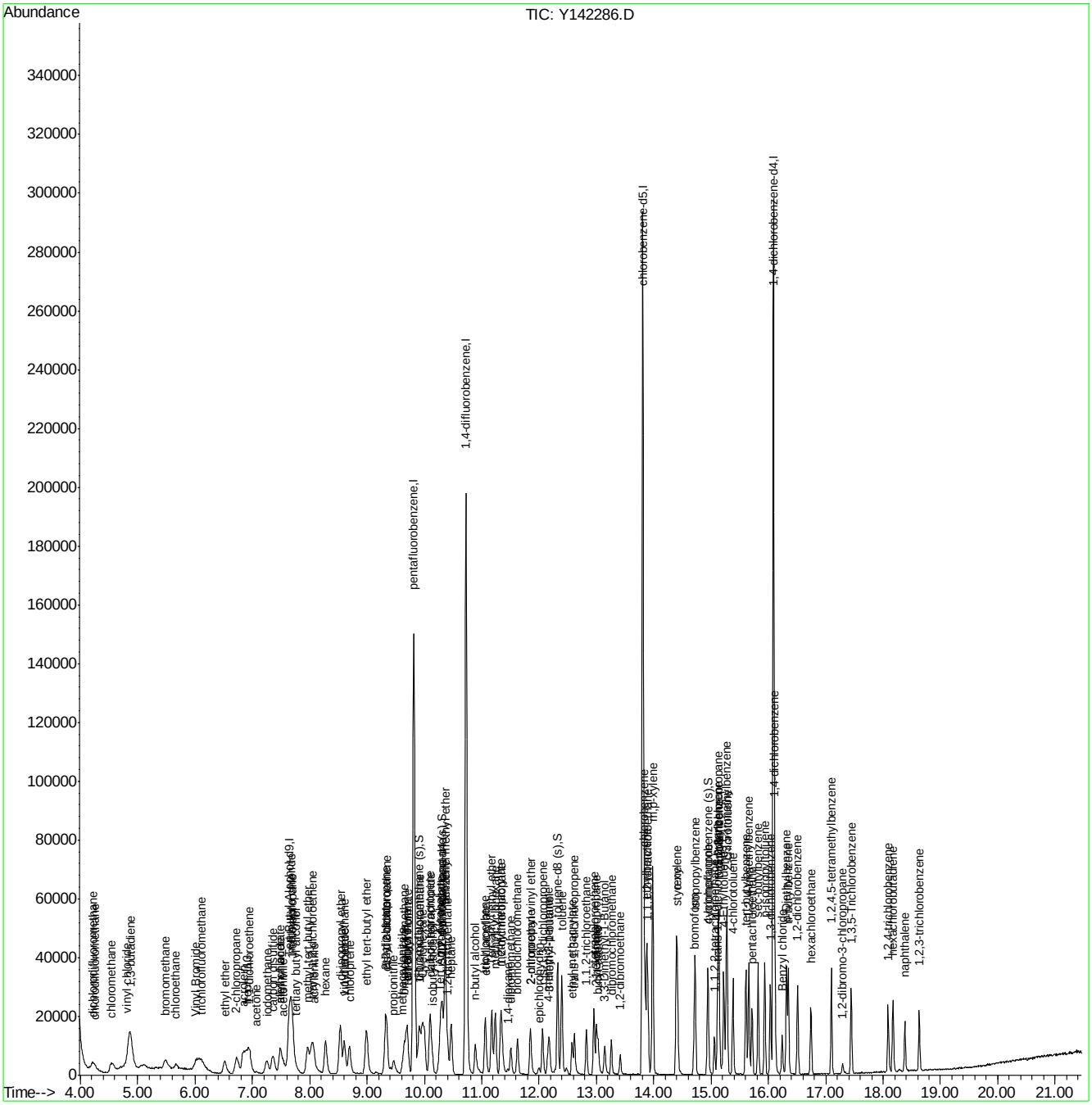
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
97) m,p-xylene	13.98	106	23000	10.41 ug/L	96
98) o-xylene	14.39	91	23218	5.05 ug/L	98
99) styrene	14.41	104	17196	4.82 ug/L	97
100) bromoform	14.70	173	4610	5.01 ug/L	99
102) isopropylbenzene	14.72	105	27628	5.30 ug/L	97
105) bromobenzene	15.14	156	7990	5.14 ug/L	97
106) cyclohexanone	14.94	55	4780	30.76 ug/L	98
107) 1,1,2,2-tetrachloroethane	15.06	83	7199	5.03 ug/L	97
108) trans-1,4-dichloro-2-buten	15.10	53	1259	4.20 ug/L	99
109) 1,2,3-trichloropropane	15.14	110	1667	4.94 ug/L	94
110) n-propylbenzene	15.12	91	31592	5.36 ug/L	99
111) 4-Ethyltoluene	15.22	105	26120	5.20 ug/L	98
112) 2-chlorotoluene	15.28	126	6998	5.23 ug/L	97
113) 4-chlorotoluene	15.38	91	20296	5.28 ug/L	96
114) 1,3,5-trimethylbenzene	15.27	105	22894	5.18 ug/L	95
115) tert-butylbenzene	15.61	119	19746	5.41 ug/L	97
116) pentachloroethane	15.72	167	4808	4.94 ug/L	95
117) 1,2,4-trimethylbenzene	15.66	105	21894	5.15 ug/L	95
118) sec-butylbenzene	15.82	105	29520	5.36 ug/L	99
119) 1,3-dichlorobenzene	16.03	146	13914	5.07 ug/L	97
120) p-isopropyltoluene	15.94	119	23790	5.23 ug/L	99
121) 1,4-dichlorobenzene	16.11	146	14040	5.11 ug/L	98
122) 1,2-dichlorobenzene	16.51	146	13266	5.04 ug/L	95
123) n-butylbenzene	16.35	91	21879m	4.47 ug/L	
124) p-Diethylbenzene	16.31	119	13592	5.09 ug/L	98
125) 1,2-dibromo-3-chloropropan	17.30	157	1181	4.72 ug/L	83
126) 1,3,5-Trichlorobenzene	17.44	180	10694	5.08 ug/L	98
127) 1,2,4-trichlorobenzene	18.09	180	8578	5.07 ug/L	98
128) 1,2,4,5-tetramethylbenzene	17.10	119	20814	5.04 ug/L	100
129) hexachlorobutadiene	18.17	225	6152	5.39 ug/L	98
130) naphthalene	18.38	128	15434	4.79 ug/L	96
131) 1,2,3-trichlorobenzene	18.63	180	7709	4.88 ug/L	99
132) hexachloroethane	16.74	119	4652	5.28 ug/L	98
133) Benzyl chloride	16.24	91	10270	5.14 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142286.D
Acq On : 7 Jan 2014 1:06 pm
Operator : prashans
Sample : IC6161-5
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 08 15:48:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:43:08 2014
Response via : Initial Calibration



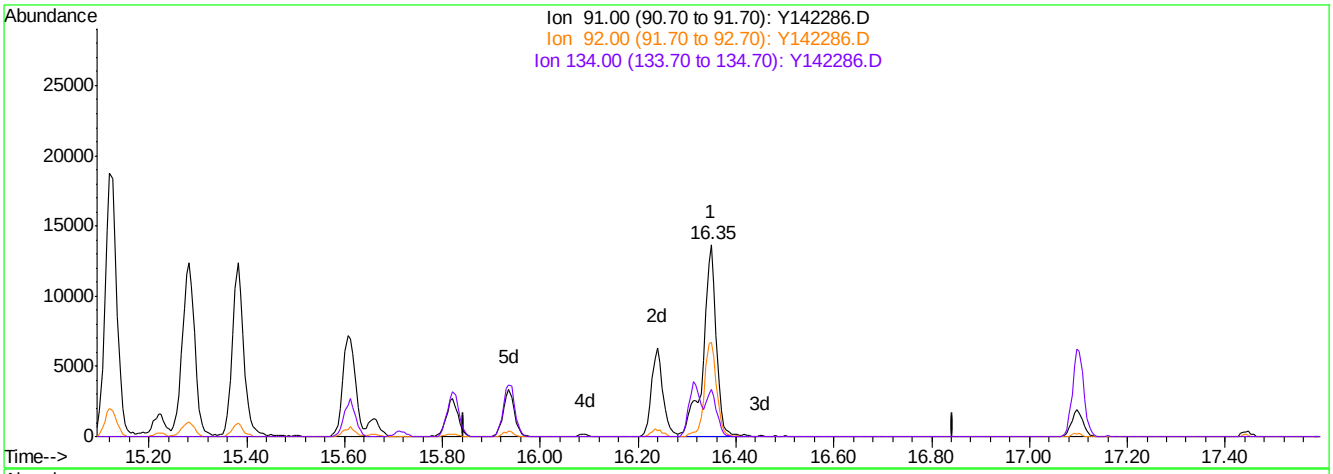
MY6161.M Wed Jan 08 16:00:16 2014 RPT1 Page: 4

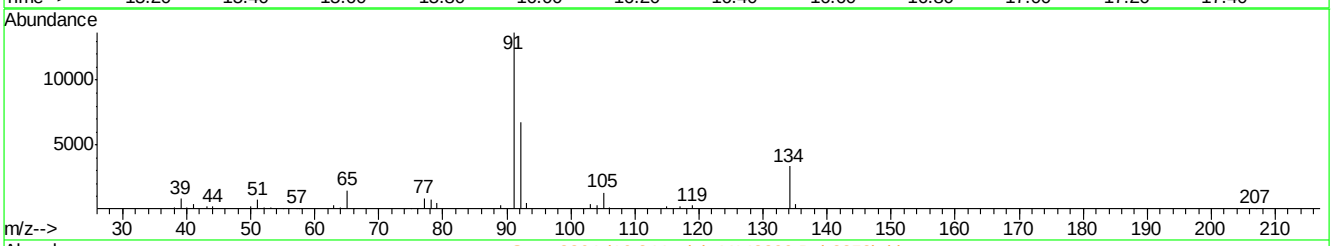
Quantitation Report (Qedit)

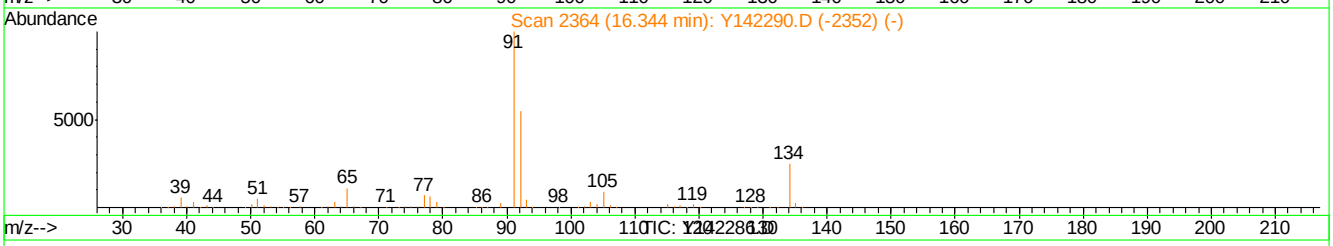
Data File : C:\MSDCHEM\1\DATA\Y142286.D Vial: 4
Acq On : 7 Jan 2014 1:06 pm Operator: prashans
Sample : IC6161-5 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:45:06 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 5.28ug/L

response 25846

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	49.07
134.00	25.10	24.46
0.00	0.00	0.00

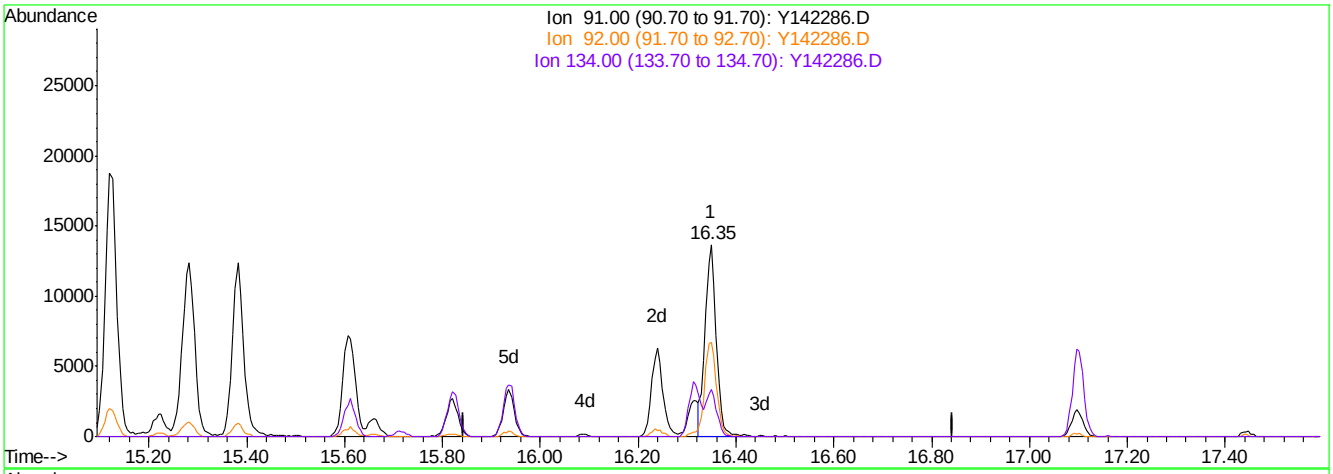
Y142286.D MY6161.M Wed Jan 08 15:48:39 2014 RPT1

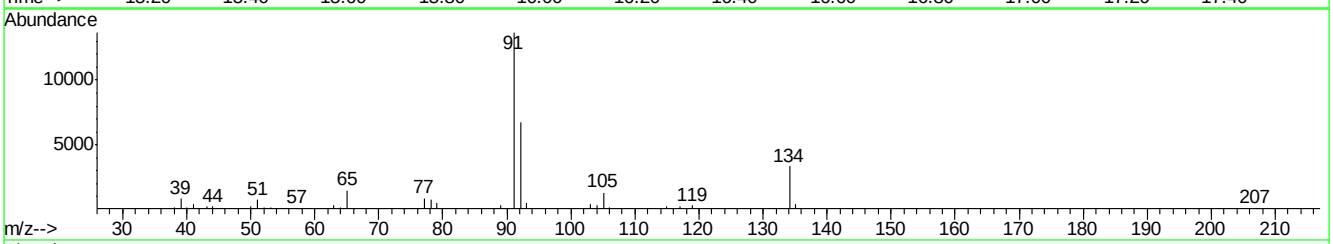
Quantitation Report (Qedit)

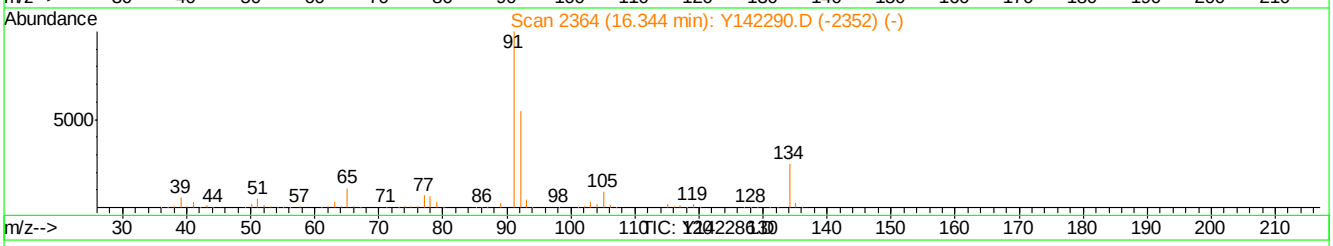
Data File : C:\MSDCHEM\1\DATA\Y142286.D Vial: 4
Acq On : 7 Jan 2014 1:06 pm Operator: prashans
Sample : IC6161-5 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:45:06 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 4.47ug/L m

response 21879

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	49.07
134.00	25.10	24.46
0.00	0.00	0.00

Y142286.D MY6161.M Wed Jan 08 15:49:48 2014 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142287.D
Acq On : 7 Jan 2014 1:35 pm
Operator : prashans
Sample : IC6161-2
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 08 15:50:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:48:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	49304	500.00	ug/L	0.00
5) pentafluorobenzene	9.82	168	158484	50.00	ug/L	0.00
57) 1,4-difluorobenzene	10.73	114	217631	50.00	ug/L	0.00
87) chlorobenzene-d5	13.81	117	174153	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.09	152	81968	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	9.90	113	3538	2.45	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery =	4.90%#		
50) 1,2-dichloroethane-d4 (s)	10.31	65	3644	2.36	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery =	4.72%#		
79) toluene-d8 (s)	12.33	98	13910	2.60	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery =	5.20%#		
103) 4-bromofluorobenzene (s)	14.95	95	4797	2.72	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery =	5.44%#		
Target Compounds						Qvalue
2) 1,4-dioxane	11.46	88	543	48.34	ug/L #	72
3) tertiary butyl alcohol	7.78	59	1285	9.90	ug/L	85
4) isobutyl alcohol	10.15	41	817	21.25	ug/L #	88
11) chlorodifluoromethane	4.23	51	2195	2.08	ug/L #	78
12) dichlorodifluoromethane	4.21	85	2693	2.09	ug/L	83
13) chloromethane	4.55	50	4366	2.33	ug/L	85
14) vinyl chloride	4.82	62	3595	2.26	ug/L	90
15) 1,3-butadiene	4.88	54	305947	104.21	ug/L	99
16) bromomethane	5.49	94	3093	2.53	ug/L	95
17) chloroethane	5.65	64	1768	2.19	ug/L	90
18) Vinyl Bromide	6.02	106	102463	102.09	ug/L	97
19) trichlorofluoromethane	6.09	101	3716	2.17	ug/L	75
20) ethyl ether	6.51	74	1504	1.98	ug/L	84
21) 2-chloropropane	6.72	63	1097	2.25	ug/L	98
22) acrolein	6.82	56	233168	953.42	ug/L	96
23) 1,1-dichloroethene	6.95	61	3730	2.13	ug/L	85
25) allyl chloride	7.48	76	1490	2.11	ug/L	71
27) iodomethane	7.25	142	4938	2.14	ug/L	93
28) carbon disulfide	7.35	76	8945	2.24	ug/L	87
30) methylene chloride	7.69	49	5023	2.45	ug/L	89
32) methyl tert butyl ether	7.98	73	7574	2.02	ug/L	94
33) trans-1,2-dichloroethene	8.03	61	3919	2.12	ug/L	88
34) di-isopropyl ether	8.53	45	9441	2.00	ug/L	93
35) ethyl tert-butyl ether	8.99	59	7930	1.91	ug/L	96
37) 1,1-dichloroethane	8.60	63	4942	2.03	ug/L	97
38) chloroprene	8.69	53	3658	2.09	ug/L	91
39) acrylonitrile	8.07	53	3737	8.83	ug/L	91
42) 2,2-dichloropropane	9.31	77	3745	2.14	ug/L	94
43) cis-1,2-dichloroethene	9.34	96	3174	2.08	ug/L	96
44) propionitrile	9.49	54	2771	17.05	ug/L	81
45) bromochloromethane	9.65	130	2080	2.10	ug/L	83
47) chloroform	9.69	83	5006	2.09	ug/L	97
48) tert-Butyl Formate	9.72	59	1275	1.80	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142287.D
Acq On : 7 Jan 2014 1:35 pm
Operator : prashans
Sample : IC6161-2
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 08 15:50:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:48:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) freon 113	6.90	151	2801	3.10	ug/L		88
52) methacrylonitrile	9.62	67	796	1.72	ug/L		87
53) 1,1,1-trichloroethane	9.92	97	3980	2.13	ug/L		94
54) Cyclohexane	9.97	84	3717	2.11	ug/L	#	97
55) 2,2,4-trimethylpentane	10.30	57	9508	2.01	ug/L		97
56) tert-amyl methyl ether	10.37	73	7480	1.86	ug/L		91
58) epichlorohydrin	12.00	57	887	8.21	ug/L		89
59) n-butyl alcohol	10.90	56	2860	83.17	ug/L		93
60) carbon tetrachloride	10.10	117	3487	2.10	ug/L		98
61) 1,1-dichloropropene	10.10	75	3555	2.07	ug/L		93
62) hexane	8.27	57	3659	2.31	ug/L		97
63) Tert Amyl Alcohol	10.26	73	789	11.01	ug/L	#	83
64) benzene	10.36	78	11638	2.09	ug/L		97
65) heptane	10.47	57	2035	2.15	ug/L		91
66) isopropyl acetate	10.29	61	853	1.72	ug/L	#	7
67) 1,2-dichloroethane	10.41	62	3257	1.93	ug/L		93
68) trichloroethene	11.06	95	2858	2.09	ug/L		96
69) ethyl acrylate	11.08	55	2301	1.67	ug/L		93
70) 2-nitropropane	11.86	41	785	2.14	ug/L	#	67
71) 2-chloroethyl vinyl ether	11.86	63	2782	8.19	ug/L		96
72) methyl methacrylate	11.33	69	1423	1.74	ug/L	#	64
73) 1,2-dichloropropane	11.34	63	2915	2.04	ug/L		94
74) methylcyclohexane	11.23	83	3891	2.03	ug/L		91
75) Tert-amyl ethyl ether	11.18	59	6668	2.02	ug/L		96
76) dibromomethane	11.52	93	1667	2.06	ug/L		84
77) bromodichloromethane	11.62	83	3684	1.99	ug/L		95
78) cis-1,3-dichloropropene	12.07	75	4378	1.97	ug/L		97
80) 4-methyl-2-pentanone	12.16	58	832	1.75	ug/L		89
81) toluene	12.40	91	11752	2.07	ug/L		97
82) 3-methyl-1-butanol	12.19	70	987	31.93	ug/L		95
83) trans-1,3-dichloropropene	12.61	75	3511	1.88	ug/L		97
84) ethyl methacrylate	12.58	69	2562	1.76	ug/L		93
85) 1,1,2-trichloroethane	12.82	83	1961	1.97	ug/L		97
86) 2-hexanone	13.00	58	638	1.52	ug/L	#	56
88) tetrachloroethene	12.95	166	3114	2.08	ug/L		91
89) 1,3-dichloropropane	13.01	76	3743	2.05	ug/L		99
90) butyl acetate	13.03	56	1181	1.62	ug/L	#	77
91) dibromochloromethane	13.26	129	2630	1.87	ug/L		94
92) 1,2-dibromoethane	13.42	107	2082	1.88	ug/L		87
93) 3,3-Dimethyl-1-Butanol	13.14	57	1739	16.55	ug/L	#	93
94) chlorobenzene	13.84	112	7643	2.13	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.90	131	2690	2.03	ug/L		92
96) ethylbenzene	13.88	91	12433	2.13	ug/L		98
97) m,p-xylene	13.98	106	9200	4.07	ug/L		99
98) o-xylene	14.39	91	9606	2.07	ug/L		99
99) styrene	14.41	104	6908	1.94	ug/L		97
100) bromoform	14.70	173	1620	1.74	ug/L		92
102) isopropylbenzene	14.72	105	11346	2.16	ug/L		96
105) bromobenzene	15.14	156	3054	1.97	ug/L		93
106) cyclohexanone	14.93	55	1876	13.99	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142287.D
Acq On : 7 Jan 2014 1:35 pm
Operator : prashans
Sample : IC6161-2
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 08 15:50:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:48:53 2014
Response via : Initial Calibration

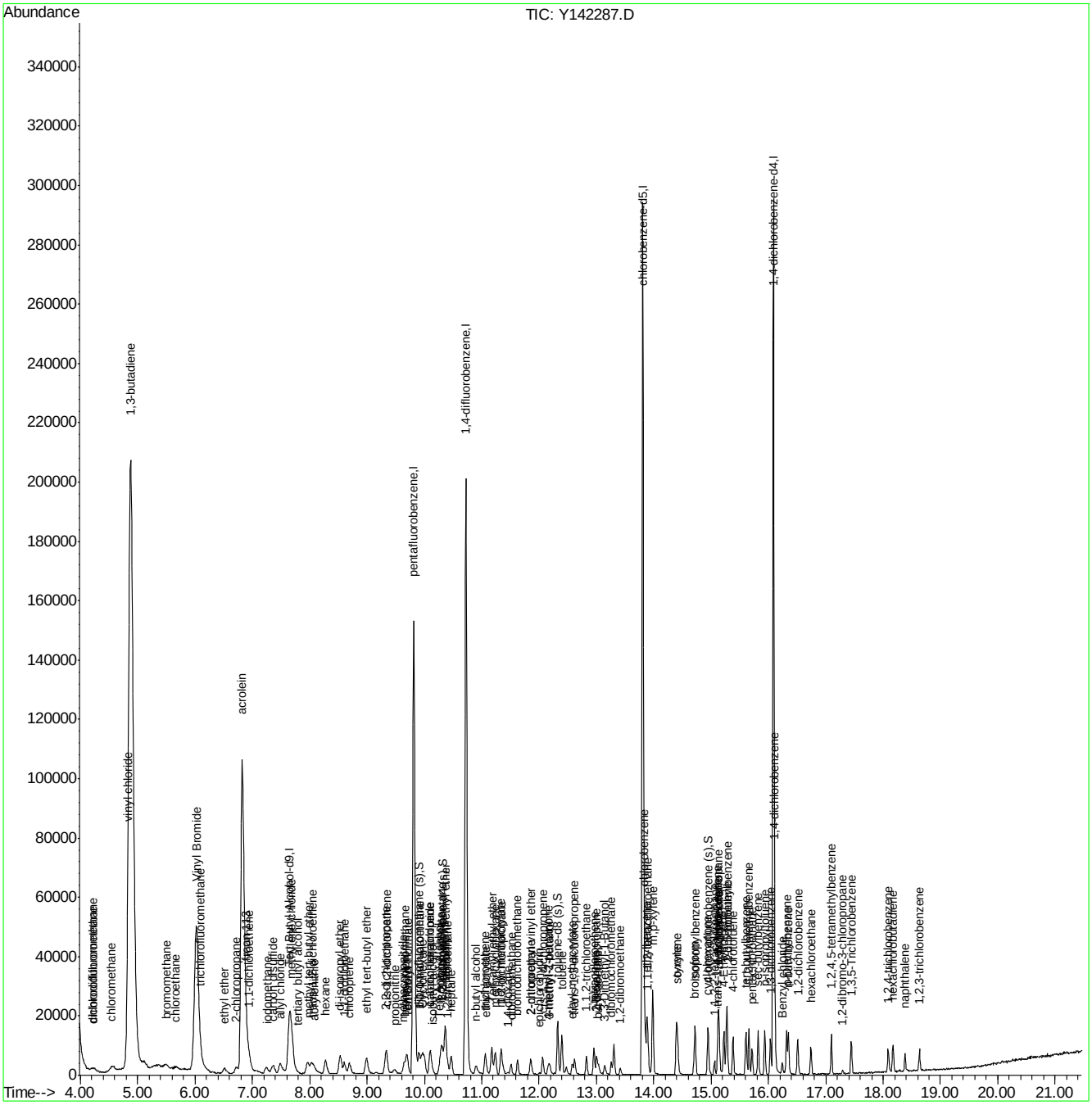
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
107) 1,1,2,2-tetrachloroethane	15.06	83	2793	1.97 ug/L	98
108) trans-1,4-dichloro-2-buten	15.10	53	517	1.84 ug/L #	69
109) 1,2,3-trichloropropane	15.14	110	644	1.94 ug/L	79
110) n-propylbenzene	15.13	91	12748	2.14 ug/L	99
111) 4-Ethyltoluene	15.22	105	11000	2.18 ug/L	98
112) 2-chlorotoluene	15.28	126	2904	2.16 ug/L	94
113) 4-chlorotoluene	15.38	91	8379	2.16 ug/L	97
114) 1,3,5-trimethylbenzene	15.27	105	9550	2.16 ug/L	99
115) tert-butylbenzene	15.61	119	8021	2.16 ug/L	96
116) pentachloroethane	15.72	167	1960	2.04 ug/L	91
117) 1,2,4-trimethylbenzene	15.66	105	9019	2.12 ug/L	95
118) sec-butylbenzene	15.82	105	12008	2.15 ug/L	96
119) 1,3-dichlorobenzene	16.03	146	5767	2.11 ug/L	96
120) p-isopropyltoluene	15.94	119	9518	2.08 ug/L	96
121) 1,4-dichlorobenzene	16.11	146	5947	2.17 ug/L	93
122) 1,2-dichlorobenzene	16.51	146	5653	2.17 ug/L	92
123) n-butylbenzene	16.35	91	8769m	1.78 ug/L	
124) p-Diethylbenzene	16.32	119	5540	2.09 ug/L	97
125) 1,2-dibromo-3-chloropropan	17.30	157	441	1.82 ug/L	89
126) 1,3,5-Trichlorobenzene	17.44	180	4307	2.06 ug/L	97
127) 1,2,4-trichlorobenzene	18.09	180	3267	1.94 ug/L	95
128) 1,2,4,5-tetramethylbenzene	17.10	119	8356	2.04 ug/L	98
129) hexachlorobutadiene	18.17	225	2509	2.17 ug/L	88
130) naphthalene	18.38	128	6064	1.93 ug/L	99
131) 1,2,3-trichlorobenzene	18.63	180	3009	1.94 ug/L	93
132) hexachloroethane	16.74	119	1791	2.02 ug/L	97
133) Benzyl chloride	16.24	91	3531	1.77 ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142287.D
Acq On : 7 Jan 2014 1:35 pm
Operator : prashans
Sample : IC6161-2
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 08 15:50:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:48:53 2014
Response via : Initial Calibration

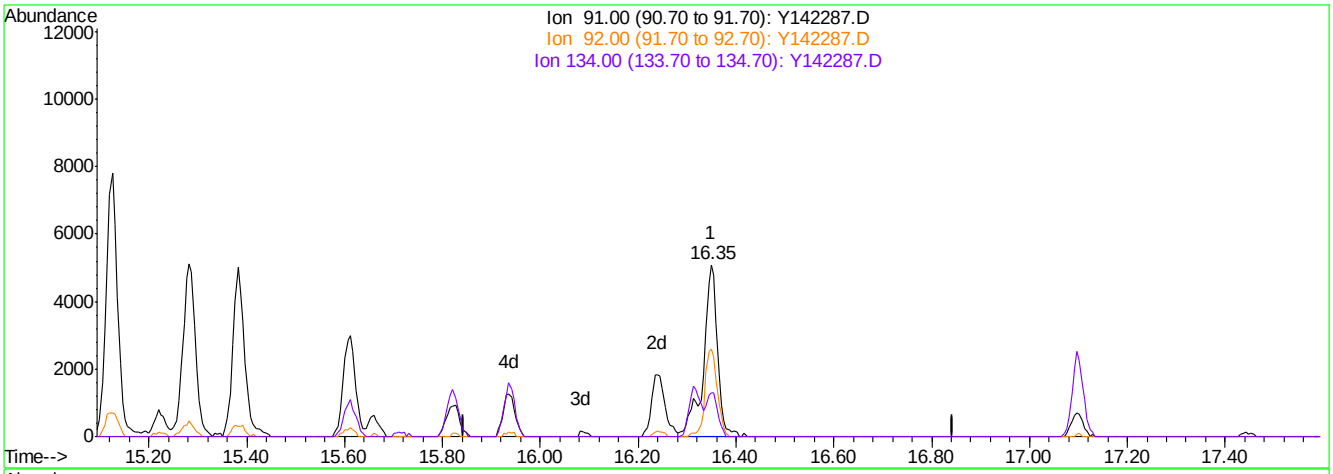


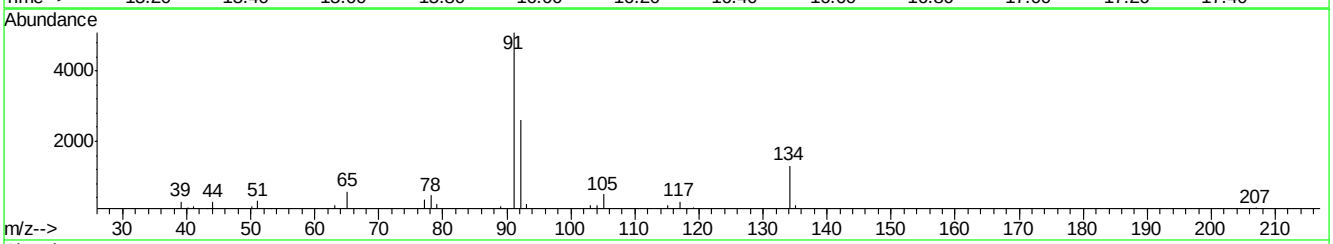
Quantitation Report (Qedit)

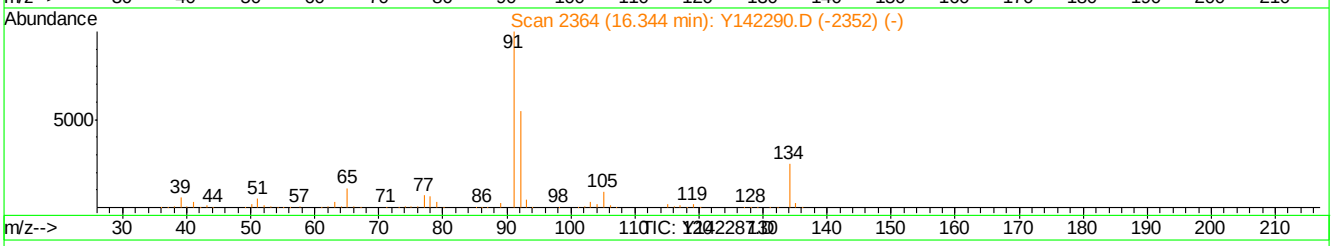
Data File : C:\MSDCHEM\1\DATA\Y142287.D Vial: 5
Acq On : 7 Jan 2014 1:35 pm Operator: prashans
Sample : IC6161-2 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:50:21 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 2.10ug/L

response 10361

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	51.26
134.00	25.10	25.62
0.00	0.00	0.00

Y142287.D MY6161.M Wed Jan 08 15:50:01 2014 RPT1

Y142287.D edits: n-butylbenzene

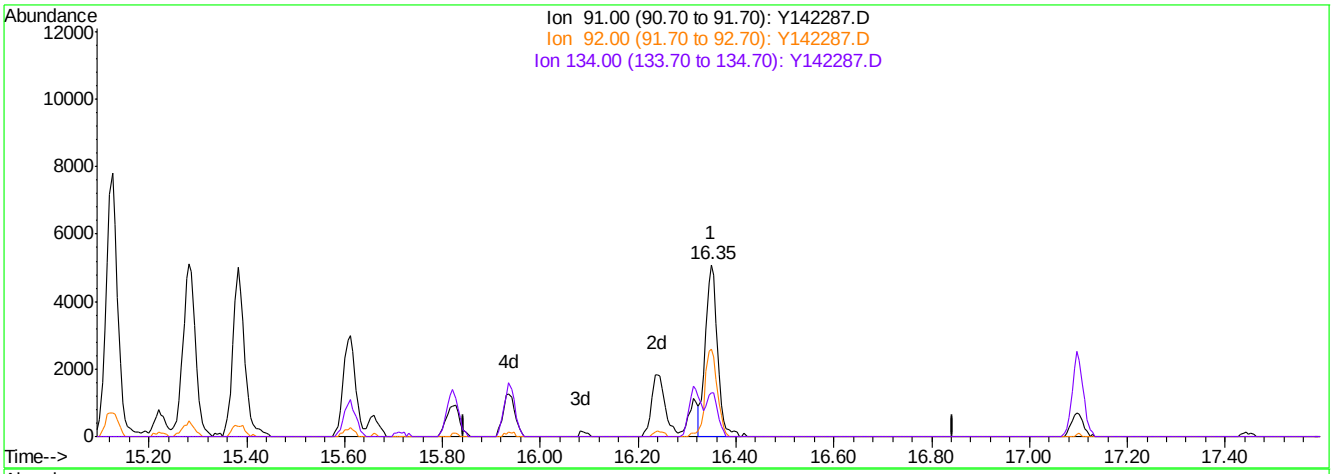
7.7.5.1
7

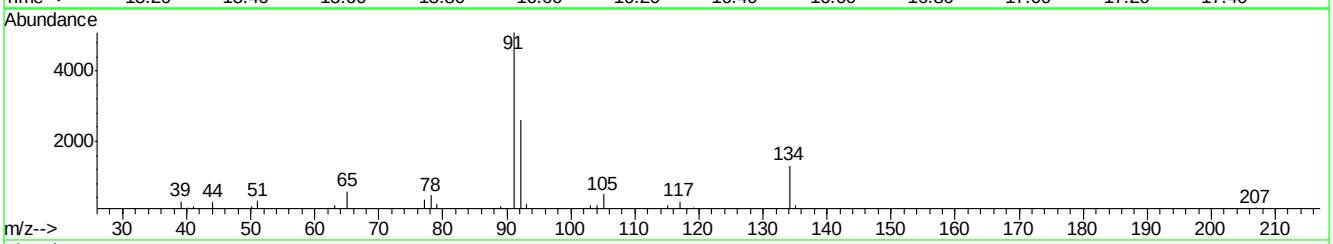
Quantitation Report (Qedit)

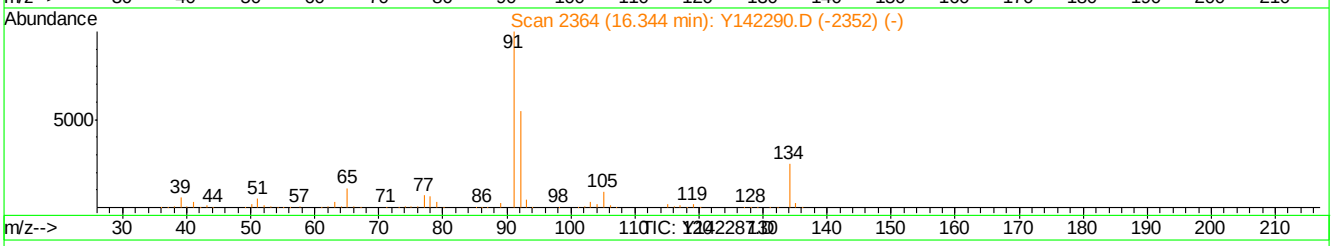
Data File : C:\MSDCHEM\1\DATA\Y142287.D Vial: 5
Acq On : 7 Jan 2014 1:35 pm Operator: prashans
Sample : IC6161-2 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:50:21 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 1.78ug/L m

response 8769

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	51.26
134.00	25.10	25.62
0.00	0.00	0.00

Y142287.D MY6161.M Wed Jan 08 15:50:16 2014 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142288.D
Acq On : 7 Jan 2014 2:04 pm
Operator : prashans
Sample : IC6161-1
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 08 15:50:52 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:53:03 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	51212	500.00	ug/L		0.00
5) pentafluorobenzene	9.82	168	165285	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.73	114	223611	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	183835	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.09	152	83659	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.89	113	2165	1.36	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery =	2.72%#			
50) 1,2-dichloroethane-d4 (s)	10.32	65	2309	1.37	ug/L		0.01
Spiked Amount 50.000	Range 65 - 123		Recovery =	2.74%#			
79) toluene-d8 (s)	12.33	98	8799	1.49	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery =	2.98%#			
103) 4-bromofluorobenzene (s)	14.95	95	2977	1.52	ug/L		0.01
Spiked Amount 50.000	Range 71 - 132		Recovery =	3.04%#			
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.76	59	787	5.85	ug/L		80
4) isobutyl alcohol	10.14	41	503	12.60	ug/L	#	72
12) dichlorodifluoromethane	4.22	85	1327	0.98	ug/L	#	48
13) chloromethane	4.54	50	2542	1.25	ug/L		92
14) vinyl chloride	4.81	62	1785	1.04	ug/L		82
15) 1,3-butadiene	4.88	54	581650	187.99	ug/L		99
16) bromomethane	5.48	94	1799	1.32	ug/L		85
17) chloroethane	5.66	64	818	0.95	ug/L	#	44
18) Vinyl Bromide	6.02	106	197764	187.95	ug/L		97
19) trichlorofluoromethane	6.11	101	1957	1.07	ug/L	#	65
20) ethyl ether	6.51	74	637	0.81	ug/L	#	64
22) acrolein	6.82	56	465591	1846.96	ug/L		99
23) 1,1-dichloroethene	6.95	61	1665	0.90	ug/L		88
27) iodomethane	7.25	142	2140	0.87	ug/L		87
28) carbon disulfide	7.35	76	4061	0.95	ug/L		97
30) methylene chloride	7.68	49	2816	1.25	ug/L		82
32) methyl tert butyl ether	7.95	73	3721	0.95	ug/L		96
33) trans-1,2-dichloroethene	8.03	61	1880	0.96	ug/L		99
34) di-isopropyl ether	8.54	45	4996	1.02	ug/L		95
35) ethyl tert-butyl ether	8.98	59	4346	1.02	ug/L		97
37) 1,1-dichloroethane	8.61	63	2436	0.96	ug/L		94
38) chloroprene	8.69	53	1713	0.93	ug/L		97
39) acrylonitrile	8.09	53	1859	4.34	ug/L		70
42) 2,2-dichloropropane	9.31	77	1878	1.01	ug/L		95
43) cis-1,2-dichloroethene	9.35	96	1551	0.96	ug/L		84
44) propionitrile	9.49	54	1209	7.41	ug/L		73
45) bromochloromethane	9.65	130	838	0.80	ug/L		89
47) chloroform	9.69	83	2480	0.98	ug/L		95
48) tert-Butyl Formate	9.72	59	646	0.90	ug/L	#	29
51) freon 113	6.89	151	1555	1.45	ug/L		81
53) 1,1,1-trichloroethane	9.93	97	1815	0.92	ug/L		90
54) Cyclohexane	9.95	84	1763	0.95	ug/L	#	96
55) 2,2,4-trimethylpentane	10.29	57	5017	1.02	ug/L		97

MY6161.M Wed Jan 08 16:00:17 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142288.D
Acq On : 7 Jan 2014 2:04 pm
Operator : prashans
Sample : IC6161-1
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 08 15:50:52 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:53:03 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
56) tert-amyl methyl ether	10.37	73	4349	1.05 ug/L		100
59) n-butyl alcohol	10.90	56	1399	41.33 ug/L		91
60) carbon tetrachloride	10.11	117	1594	0.92 ug/L		78
61) 1,1-dichloropropene	10.09	75	1762	0.99 ug/L		92
62) hexane	8.27	57	2033	1.20 ug/L		95
63) Tert Amyl Alcohol	10.26	73	455	6.03 ug/L	#	47
64) benzene	10.37	78	5590	0.97 ug/L		98
65) heptane	10.47	57	1009	1.02 ug/L		94
66) isopropyl acetate	10.28	61	464	0.95 ug/L	#	1
67) 1,2-dichloroethane	10.40	62	1667	0.97 ug/L		86
68) trichloroethene	11.06	95	1291	0.91 ug/L		83
69) ethyl acrylate	11.10	55	1095	0.81 ug/L	#	65
70) 2-nitropropane	11.86	41	448	1.17 ug/L	#	39
71) 2-chloroethyl vinyl ether	11.86	63	1450	4.35 ug/L		93
72) methyl methacrylate	11.33	69	566	0.70 ug/L	#	65
73) 1,2-dichloropropane	11.34	63	1432	0.97 ug/L		88
74) methylcyclohexane	11.23	83	1954	0.99 ug/L		85
75) Tert-amyl ethyl ether	11.18	59	3618	1.06 ug/L		97
76) dibromomethane	11.51	93	734	0.88 ug/L		96
77) bromodichloromethane	11.63	83	1731	0.91 ug/L		97
78) cis-1,3-dichloropropene	12.07	75	2055	0.90 ug/L		89
81) toluene	12.40	91	5624	0.96 ug/L		90
82) 3-methyl-1-butanol	12.18	70	474	15.72 ug/L	#	76
83) trans-1,3-dichloropropene	12.63	75	1662	0.88 ug/L		87
84) ethyl methacrylate	12.59	69	1194	0.82 ug/L		84
85) 1,1,2-trichloroethane	12.83	83	940	0.92 ug/L		88
88) tetrachloroethene	12.96	166	1447	0.91 ug/L		91
89) 1,3-dichloropropane	13.01	76	1781	0.92 ug/L		96
91) dibromochloromethane	13.26	129	1251	0.86 ug/L		89
92) 1,2-dibromoethane	13.42	107	958	0.83 ug/L		77
93) 3,3-Dimethyl-1-Butanol	13.15	57	963	9.07 ug/L	#	91
94) chlorobenzene	13.84	112	3813	0.99 ug/L		85
95) 1,1,1,2-tetrachloroethane	13.90	131	1215	0.86 ug/L		83
96) ethylbenzene	13.88	91	5909	0.94 ug/L		91
97) m,p-xylene	13.98	106	4605	1.92 ug/L		91
98) o-xylene	14.39	91	4698	0.95 ug/L		95
99) styrene	14.42	104	3240	0.87 ug/L		94
100) bromoform	14.71	173	795	0.84 ug/L		89
102) isopropylbenzene	14.72	105	5277	0.96 ug/L		97
105) bromobenzene	15.14	156	1516	0.96 ug/L		90
106) cyclohexanone	14.93	55	990	7.82 ug/L		88
107) 1,1,2,2-tetrachloroethane	15.06	83	1342	0.93 ug/L		86
109) 1,2,3-trichloropropane	15.13	110	297	0.88 ug/L		83
110) n-propylbenzene	15.13	91	6064	0.98 ug/L		95
111) 4-Ethyltoluene	15.22	105	5493	1.04 ug/L	#	97
112) 2-chlorotoluene	15.29	126	1316	0.94 ug/L	#	79
113) 4-chlorotoluene	15.38	91	4003	0.99 ug/L		97
114) 1,3,5-trimethylbenzene	15.27	105	4551	0.99 ug/L		94
115) tert-butylbenzene	15.61	119	3767	0.98 ug/L		98
116) pentachloroethane	15.71	167	885	0.90 ug/L		86

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142288.D
Acq On : 7 Jan 2014 2:04 pm
Operator : prashans
Sample : IC6161-1
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 08 15:50:52 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:53:03 2014
Response via : Initial Calibration

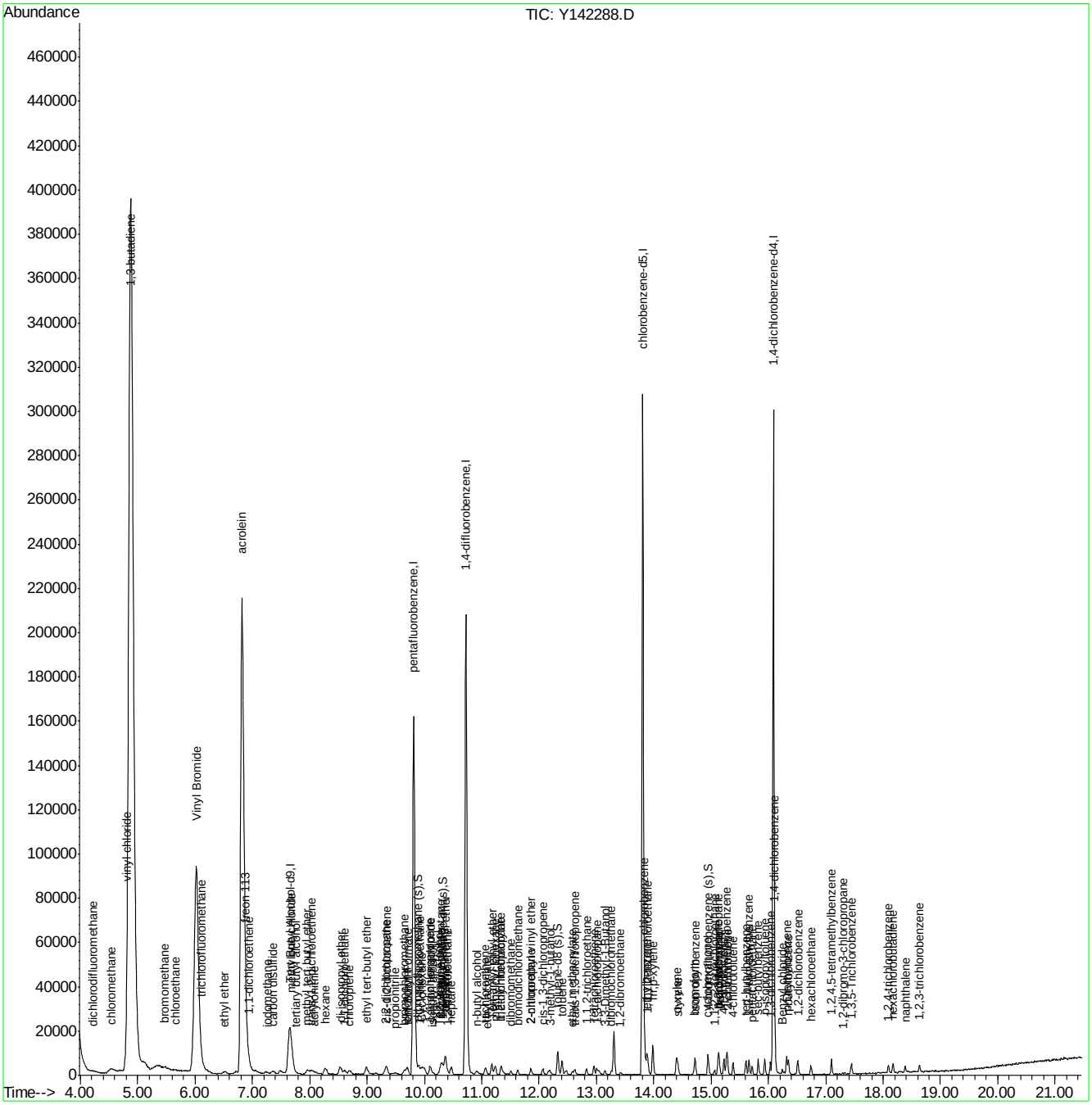
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
117) 1,2,4-trimethylbenzene	15.66	105	4162	0.95	ug/L		91
118) sec-butylbenzene	15.82	105	5423	0.93	ug/L		97
119) 1,3-dichlorobenzene	16.04	146	2906	1.03	ug/L		98
120) p-isopropyltoluene	15.94	119	4614	0.98	ug/L		95
121) 1,4-dichlorobenzene	16.11	146	3008	1.05	ug/L		91
122) 1,2-dichlorobenzene	16.51	146	2587	0.95	ug/L		94
123) n-butylbenzene	16.35	91	4161m	0.82	ug/L		
124) p-Diethylbenzene	16.32	119	2826	1.03	ug/L		94
125) 1,2-dibromo-3-chloropropan	17.29	157	173	0.71	ug/L	#	52
126) 1,3,5-Trichlorobenzene	17.45	180	2163	1.01	ug/L		98
127) 1,2,4-trichlorobenzene	18.09	180	1569	0.92	ug/L		91
128) 1,2,4,5-tetramethylbenzene	17.10	119	4511	1.07	ug/L		98
129) hexachlorobutadiene	18.17	225	1228	1.02	ug/L		97
130) naphthalene	18.38	128	2833	0.89	ug/L		93
131) 1,2,3-trichlorobenzene	18.63	180	1514	0.96	ug/L		86
132) hexachloroethane	16.74	119	829	0.91	ug/L		96
133) Benzyl chloride	16.24	91	1940	0.98	ug/L		93

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142288.D
Acq On : 7 Jan 2014 2:04 pm
Operator : prashans
Sample : IC6161-1
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 08 15:50:52 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:53:03 2014
Response via : Initial Calibration



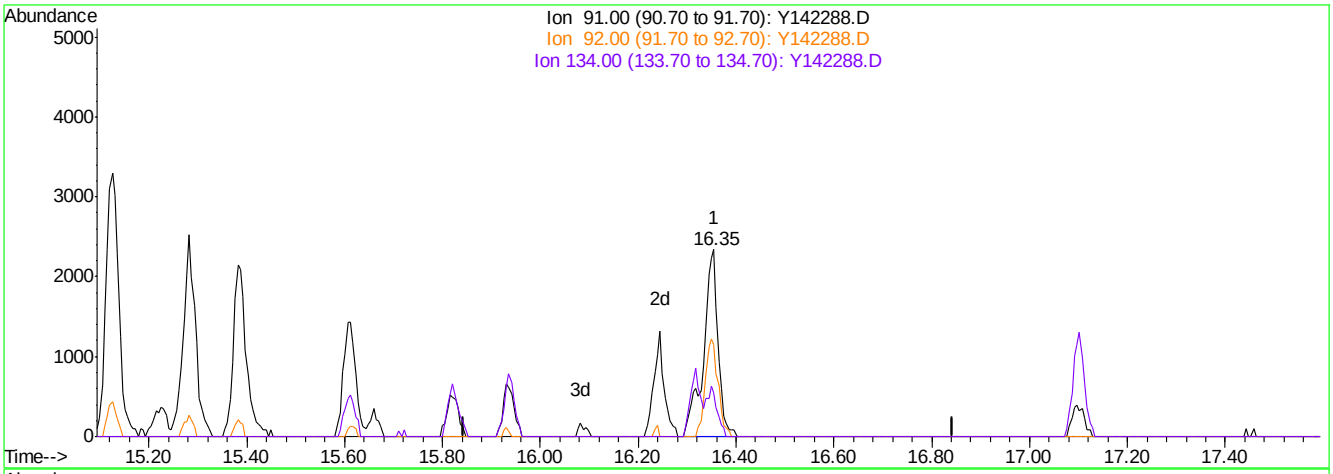
MY6161.M Wed Jan 08 16:00:17 2014 RPT1 Page: 4

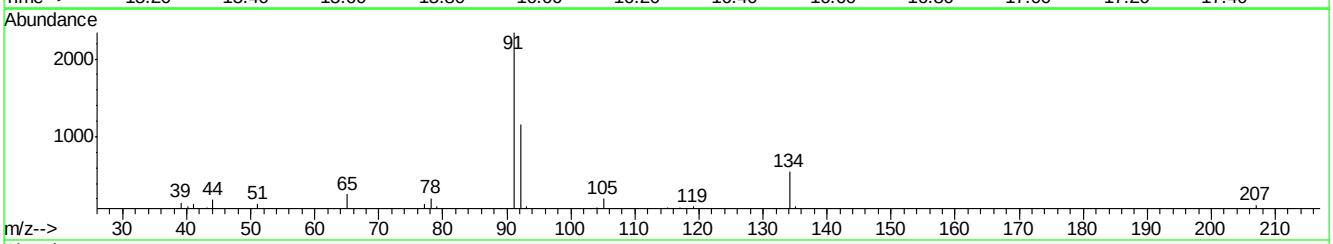
Quantitation Report (Qedit)

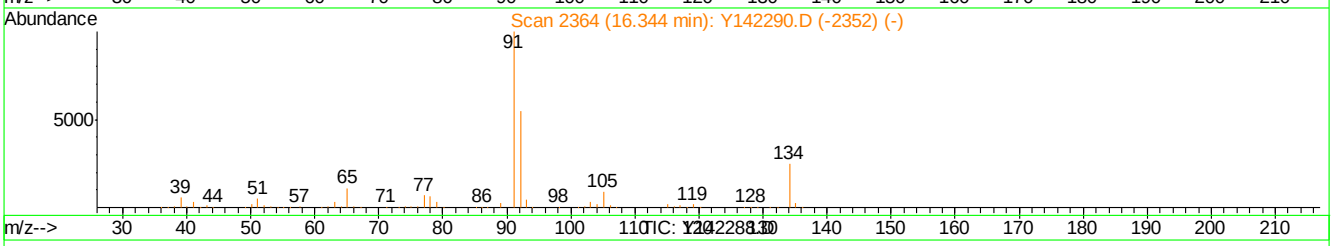
Data File : C:\MSDCHEM\1\DATA\Y142288.D Vial: 6
Acq On : 7 Jan 2014 2:04 pm Operator: prashans
Sample : IC6161-1 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:56:49 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 0.96ug/L

response 4918

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	49.19
134.00	25.10	23.38
0.00	0.00	0.00

Y142288.D MY6161.M Wed Jan 08 15:50:42 2014 RPT1

Y142288.D edits: n-butylbenzene

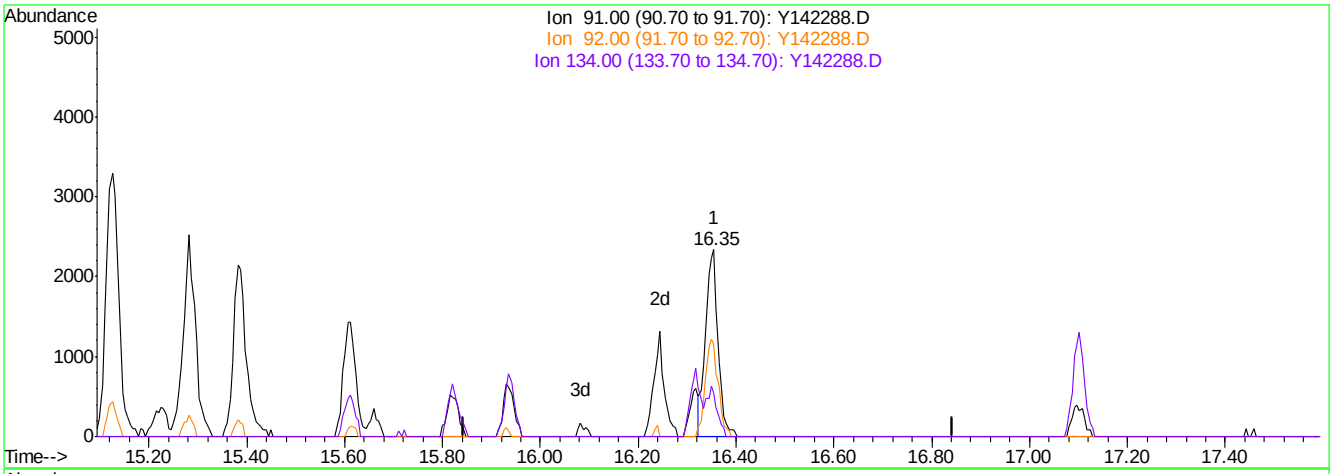
7.7.16.1
7

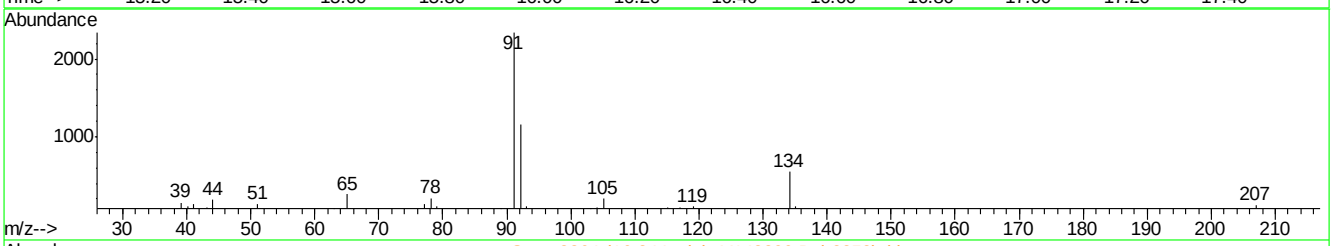
Quantitation Report (Qedit)

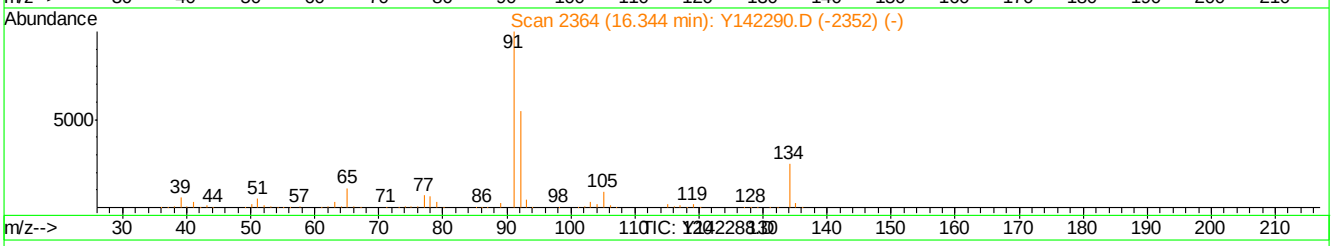
Data File : C:\MSDCHEM\1\DATA\Y142288.D Vial: 6
Acq On : 7 Jan 2014 2:04 pm Operator: prashans
Sample : IC6161-1 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 14:56:49 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 0.82ug/L m

response 4161

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	49.19
134.00	25.10	23.38
0.00	0.00	0.00

Y142288.D MY6161.M Wed Jan 08 15:50:56 2014 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142289.D
Acq On : 7 Jan 2014 2:33 pm
Operator : prashans
Sample : IC6161-0.5
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 08 16:09:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:57:22 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	48526	500.00	ug/L		0.00
5) pentafluorobenzene	9.82	168	154121	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.73	114	213924	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	175576	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.09	152	79577	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.90	113	1534	0.96	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 1.92%#				
50) 1,2-dichloroethane-d4 (s)	10.32	65	1483	0.88	ug/L		0.01
Spiked Amount 50.000	Range 65 - 123		Recovery = 1.76%#				
79) toluene-d8 (s)	12.33	98	6899	1.22	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 2.44%#				
103) 4-bromofluorobenzene (s)	14.95	95	2274	1.10	ug/L		0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 2.20%#				
Target Compounds							Qvalue
13) chloromethane	4.53	50	1449	0.73	ug/L		61
14) vinyl chloride	4.80	62	725	0.45	ug/L		64
15) 1,3-butadiene	4.85	54	1490	0.52	ug/L	#	85
16) bromomethane	5.48	94	1110	0.82	ug/L		90
17) chloroethane	5.68	64	397	0.50	ug/L	#	44
22) acrolein	6.84	56	1706	7.37	ug/L		92
23) 1,1-dichloroethene	6.95	61	836	0.49	ug/L		98
27) iodomethane	7.24	142	1153	0.52	ug/L		78
28) carbon disulfide	7.35	76	2193	0.55	ug/L		91
30) methylene chloride	7.68	49	2057	0.93	ug/L	#	77
32) methyl tert butyl ether	7.97	73	1947	0.54	ug/L		88
33) trans-1,2-dichloroethene	8.03	61	886	0.49	ug/L		85
34) di-isopropyl ether	8.53	45	2485	0.54	ug/L		89
35) ethyl tert-butyl ether	8.98	59	2092	0.52	ug/L		95
37) 1,1-dichloroethane	8.61	63	1286	0.55	ug/L		87
38) chloroprene	8.70	53	843	0.50	ug/L		77
39) acrylonitrile	8.12	53	619	1.59	ug/L	#	60
42) 2,2-dichloropropane	9.31	77	914	0.53	ug/L		75
43) cis-1,2-dichloroethene	9.33	96	845	0.57	ug/L		90
45) bromochloromethane	9.66	130	486	0.52	ug/L		92
47) chloroform	9.69	83	1310	0.56	ug/L		92
51) freon 113	6.90	151	1590	1.46	ug/L		84
53) 1,1,1-trichloroethane	9.93	97	982	0.54	ug/L		96
54) Cyclohexane	9.97	84	970	0.56	ug/L	#	93
55) 2,2,4-trimethylpentane	10.30	57	2467	0.53	ug/L		94
56) tert-amyl methyl ether	10.37	73	2367	0.61	ug/L		92
59) n-butyl alcohol	10.91	56	385	12.32	ug/L		66
60) carbon tetrachloride	10.11	117	869	0.53	ug/L		84
61) 1,1-dichloropropene	10.09	75	843	0.50	ug/L		83
62) hexane	8.28	57	1302	0.77	ug/L		98
64) benzene	10.36	78	3068	0.56	ug/L		96
65) heptane	10.47	57	456	0.48	ug/L	#	83
67) 1,2-dichloroethane	10.42	62	774	0.47	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142289.D
Acq On : 7 Jan 2014 2:33 pm
Operator : prashans
Sample : IC6161-0.5
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 08 16:09:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:57:22 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
68) trichloroethene	11.07	95	687	0.51 ug/L		83
71) 2-chloroethyl vinyl ether	11.86	63	613	1.97 ug/L		76
73) 1,2-dichloropropane	11.33	63	801	0.57 ug/L		92
74) methylcyclohexane	11.24	83	973	0.52 ug/L		93
75) Tert-amyl ethyl ether	11.18	59	1590	0.48 ug/L	#	86
76) dibromomethane	11.51	93	322	0.41 ug/L		86
77) bromodichloromethane	11.62	83	856	0.48 ug/L		85
78) cis-1,3-dichloropropene	12.07	75	959	0.45 ug/L		87
81) toluene	12.39	91	2973	0.53 ug/L		97
83) trans-1,3-dichloropropene	12.63	75	816	0.46 ug/L		91
84) ethyl methacrylate	12.58	69	560	0.42 ug/L		81
85) 1,1,2-trichloroethane	12.83	83	472	0.49 ug/L		83
88) tetrachloroethene	12.95	166	746	0.50 ug/L		94
89) 1,3-dichloropropane	13.01	76	896	0.49 ug/L		81
91) dibromochloromethane	13.26	129	610	0.45 ug/L		96
92) 1,2-dibromoethane	13.42	107	490	0.46 ug/L		94
93) 3,3-Dimethyl-1-Butanol	13.14	57	462	4.64 ug/L	#	87
94) chlorobenzene	13.84	112	2011	0.55 ug/L		96
95) 1,1,1,2-tetrachloroethane	13.90	131	647	0.50 ug/L	#	73
96) ethylbenzene	13.88	91	3144	0.53 ug/L		93
97) m,p-xylene	13.97	106	2272	1.00 ug/L		77
98) o-xylene	14.39	91	2356	0.50 ug/L		98
99) styrene	14.42	104	1685	0.49 ug/L		95
100) bromoform	14.70	173	429	0.49 ug/L		91
102) isopropylbenzene	14.72	105	2798	0.54 ug/L		99
105) bromobenzene	15.15	156	780	0.52 ug/L		93
107) 1,1,2,2-tetrachloroethane	15.06	83	720	0.53 ug/L		89
110) n-propylbenzene	15.13	91	2981	0.51 ug/L		98
111) 4-Ethyltoluene	15.23	105	2650	0.53 ug/L		95
112) 2-chlorotoluene	15.29	126	675	0.51 ug/L		89
113) 4-chlorotoluene	15.39	91	2136	0.56 ug/L		95
114) 1,3,5-trimethylbenzene	15.27	105	2163	0.49 ug/L		93
115) tert-butylbenzene	15.61	119	1915	0.52 ug/L		96
116) pentachloroethane	15.72	167	477	0.52 ug/L		88
117) 1,2,4-trimethylbenzene	15.66	105	2134	0.52 ug/L		91
118) sec-butylbenzene	15.82	105	2858	0.52 ug/L		98
119) 1,3-dichlorobenzene	16.04	146	1501	0.56 ug/L		81
120) p-isopropyltoluene	15.94	119	2261	0.51 ug/L		88
121) 1,4-dichlorobenzene	16.11	146	1586	0.58 ug/L		72
122) 1,2-dichlorobenzene	16.51	146	1351	0.53 ug/L		92
124) p-Diethylbenzene	16.32	119	1288	0.49 ug/L		99
126) 1,3,5-Trichlorobenzene	17.45	180	960	0.47 ug/L		91
127) 1,2,4-trichlorobenzene	18.10	180	723	0.45 ug/L		95
128) 1,2,4,5-tetramethylbenzene	17.10	119	1965	0.48 ug/L		97
129) hexachlorobutadiene	18.17	225	525	0.46 ug/L		97
130) naphthalene	18.38	128	1405	0.47 ug/L		98
131) 1,2,3-trichlorobenzene	18.64	180	714	0.48 ug/L		97
132) hexachloroethane	16.74	119	414	0.49 ug/L		95
133) Benzyl chloride	16.24	91	926	0.49 ug/L	#	75

MY6161.M Wed Jan 08 16:09:22 2014 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142289.D
Acq On : 7 Jan 2014 2:33 pm
Operator : prashans
Sample : IC6161-0.5
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 08 16:09:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:57:22 2014
Response via : Initial Calibration

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

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

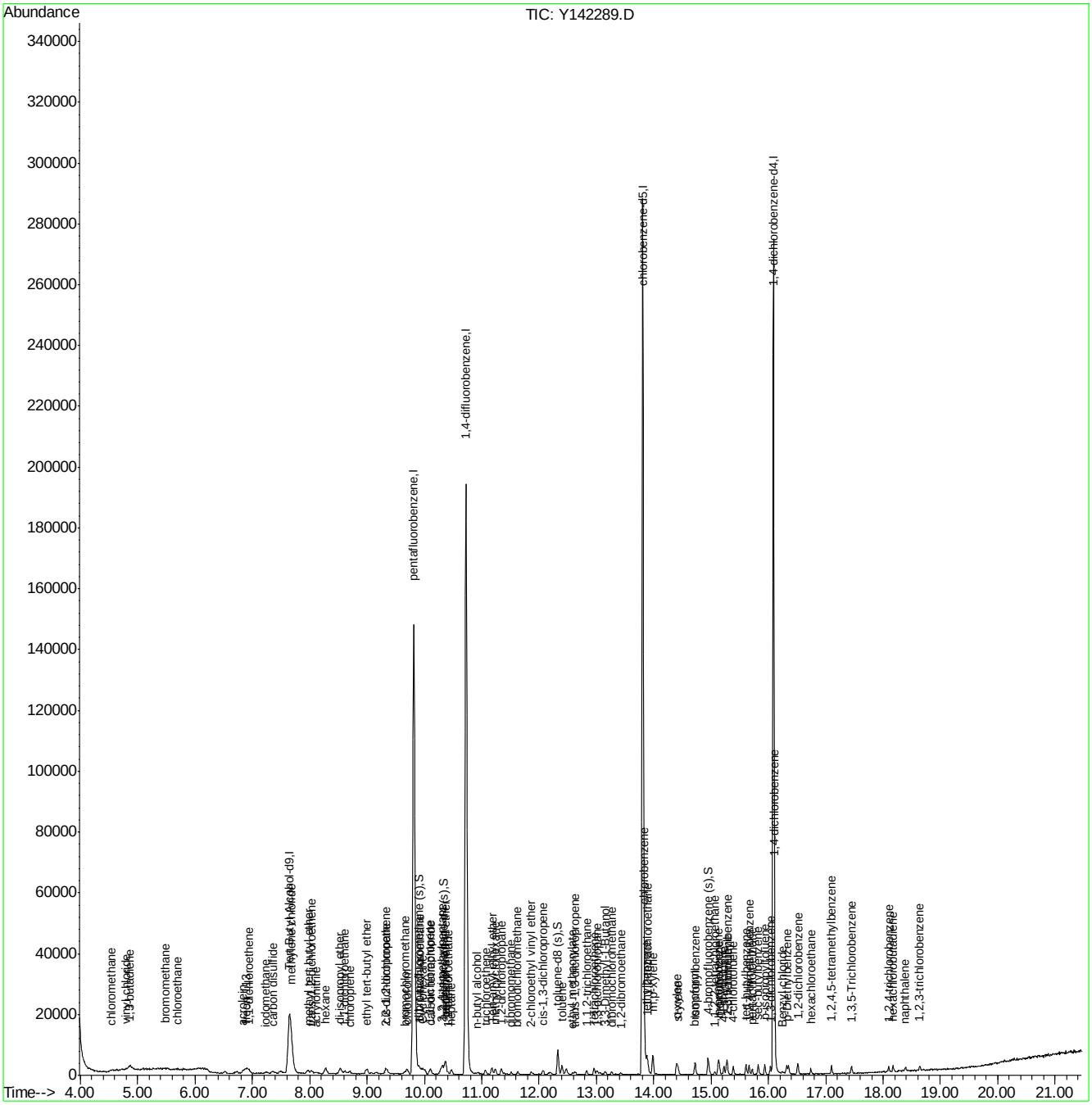
7.7.17

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142289.D
Acq On : 7 Jan 2014 2:33 pm
Operator : prashans
Sample : IC6161-0.5
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 08 16:09:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 14:57:22 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142290.D
Acq On : 7 Jan 2014 3:02 pm
Operator : prashans
Sample : ICC6161-50
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 08 15:53:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 15:05:28 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	54046	500.00	ug/L		0.00
5) pentafluorobenzene	9.81	168	161397	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.73	114	223036	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	185268	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.09	152	92512	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.89	113	68642	41.17	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 82.34%				
50) 1,2-dichloroethane-d4 (s)	10.31	65	72415	41.04	ug/L		0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 82.08%				
79) toluene-d8 (s)	12.32	98	243786	41.33	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 82.66%				
103) 4-bromofluorobenzene (s)	14.94	95	85678	35.80	ug/L		0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 71.60%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.45	88	17473	1430.99	ug/L		97
3) tertiary butyl alcohol	7.77	59	36851	251.10	ug/L		91
4) isobutyl alcohol	10.13	41	22198	526.74	ug/L	#	97
6) propene	4.04	42	454	51.34	ug/L	#	62
11) chlorodifluoromethane	4.23	51	51258	47.21	ug/L		94
12) dichlorodifluoromethane	4.21	85	63965	48.41	ug/L		93
13) chloromethane	4.56	50	89923	43.16	ug/L		99
14) vinyl chloride	4.82	62	77828	46.96	ug/L		99
15) 1,3-butadiene	4.87	54	135969	45.55	ug/L		99
16) bromomethane	5.48	94	57266	40.55	ug/L		96
17) chloroethane	5.66	64	40130	48.21	ug/L		99
18) Vinyl Bromide	6.01	106	47936	47.22	ug/L		98
19) trichlorofluoromethane	6.10	101	85577	47.35	ug/L		97
20) ethyl ether	6.51	74	39851	53.71	ug/L		93
21) 2-chloropropane	6.73	63	25123	49.01	ug/L		96
22) acrolein	6.82	56	120756	498.19	ug/L		96
23) 1,1-dichloroethene	6.95	61	86709	48.97	ug/L		99
24) acetone	7.05	43	18334	43.37	ug/L		96
25) allyl chloride	7.48	76	35927	50.05	ug/L		74
26) acetonitrile	7.52	40	51954	452.33	ug/L	#	65
27) iodomethane	7.25	142	118869	50.73	ug/L		98
28) carbon disulfide	7.36	76	201054	47.69	ug/L		98
29) 1-chloropropane	7.69	42	113788	40.47	ug/L		100
30) methylene chloride	7.68	49	101329	38.27	ug/L		98
31) methyl acetate	7.47	74	9990	54.54	ug/L		91
32) methyl tert butyl ether	7.96	73	197883	51.59	ug/L		99
33) trans-1,2-dichloroethene	8.03	61	94458	49.95	ug/L		99
34) di-isopropyl ether	8.53	45	247900	50.79	ug/L		96
35) ethyl tert-butyl ether	8.99	59	219377	51.93	ug/L		98
36) 2-butanone	9.31	72	7405	53.55	ug/L		97
37) 1,1-dichloroethane	8.60	63	124828	49.84	ug/L		97
38) chloroprene	8.69	53	89678	50.59	ug/L		99
39) acrylonitrile	8.05	53	110901	272.37	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142290.D
Acq On : 7 Jan 2014 3:02 pm
Operator : prashans
Sample : ICC6161-50
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 08 15:53:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 15:05:28 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) vinyl acetate	8.59	86	10411	61.62	ug/L		99
41) ethyl acetate	9.30	45	9037	51.69	ug/L		60
42) 2,2-dichloropropane	9.32	77	88037	48.02	ug/L		96
43) cis-1,2-dichloroethene	9.33	96	79495	49.87	ug/L		99
44) propionitrile	9.45	54	90285	597.38	ug/L		94
45) bromochloromethane	9.65	130	52048	52.79	ug/L		97
46) tetrahydrofuran	9.68	72	8653	52.18	ug/L		96
47) chloroform	9.69	83	124582	49.69	ug/L		99
48) tert-Butyl Formate	9.71	59	42844	62.11	ug/L		98
51) freon 113	6.90	151	41144	36.06	ug/L		97
52) methacrylonitrile	9.61	67	25690	56.50	ug/L		96
53) 1,1,1-trichloroethane	9.92	97	94256	48.95	ug/L		98
54) Cyclohexane	9.96	84	87623	47.68	ug/L	#	99
55) 2,2,4-trimethylpentane	10.30	57	225637	46.17	ug/L		100
56) tert-amyl methyl ether	10.36	73	210304	49.83	ug/L		97
58) epichlorohydrin	11.99	57	29273	276.67	ug/L		96
59) n-butyl alcohol	10.87	56	99376	3049.38	ug/L		98
60) carbon tetrachloride	10.11	117	84564	49.25	ug/L		97
61) 1,1-dichloropropene	10.09	75	86510	48.88	ug/L		95
62) hexane	8.27	57	73578	41.92	ug/L		97
63) Tert Amyl Alcohol	10.24	73	17796	236.41	ug/L	#	91
64) benzene	10.36	78	284897	48.76	ug/L		99
65) heptane	10.47	57	45667	46.35	ug/L		98
66) isopropyl acetate	10.27	61	26597	54.35	ug/L		96
67) 1,2-dichloroethane	10.40	62	88613	52.44	ug/L		98
68) trichloroethene	11.06	95	69137	49.44	ug/L		95
69) ethyl acrylate	11.06	55	79015	60.83	ug/L		99
70) 2-nitropropane	11.85	41	19132	50.08	ug/L		90
71) 2-chloroethyl vinyl ether	11.84	63	99013	316.92	ug/L		98
72) methyl methacrylate	11.31	69	45271	59.38	ug/L		89
73) 1,2-dichloropropane	11.33	63	75783	50.57	ug/L		99
74) methylcyclohexane	11.24	83	92059	46.57	ug/L		98
75) Tert-amyl ethyl ether	11.17	59	175373	51.31	ug/L		99
76) dibromomethane	11.51	93	42999	54.40	ug/L		95
77) bromodichloromethane	11.62	83	99089	53.62	ug/L		96
78) cis-1,3-dichloropropene	12.06	75	120071	54.84	ug/L		98
80) 4-methyl-2-pentanone	12.14	58	26013	55.14	ug/L		99
81) toluene	12.39	91	289983	49.32	ug/L		99
82) 3-methyl-1-butanol	12.16	70	34595	1201.53	ug/L		99
83) trans-1,3-dichloropropene	12.61	75	103323	56.83	ug/L		99
84) ethyl methacrylate	12.57	69	83412	61.47	ug/L		98
85) 1,1,2-trichloroethane	12.82	83	52807	52.93	ug/L		95
86) 2-hexanone	12.98	58	24916	61.74	ug/L		100
88) tetrachloroethene	12.95	166	75946	48.18	ug/L		99
89) 1,3-dichloropropane	13.00	76	99316	51.80	ug/L		99
90) butyl acetate	13.02	56	41091	55.64	ug/L		96
91) dibromochloromethane	13.26	129	78063	55.55	ug/L		97
92) 1,2-dibromoethane	13.41	107	62251	56.28	ug/L		98
93) 3,3-Dimethyl-1-Butanol	13.14	57	60809	579.26	ug/L		98
94) chlorobenzene	13.84	112	190434	48.42	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142290.D
Acq On : 7 Jan 2014 3:02 pm
Operator : prashans
Sample : ICC6161-50
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 08 15:53:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 15:05:28 2014
Response via : Initial Calibration

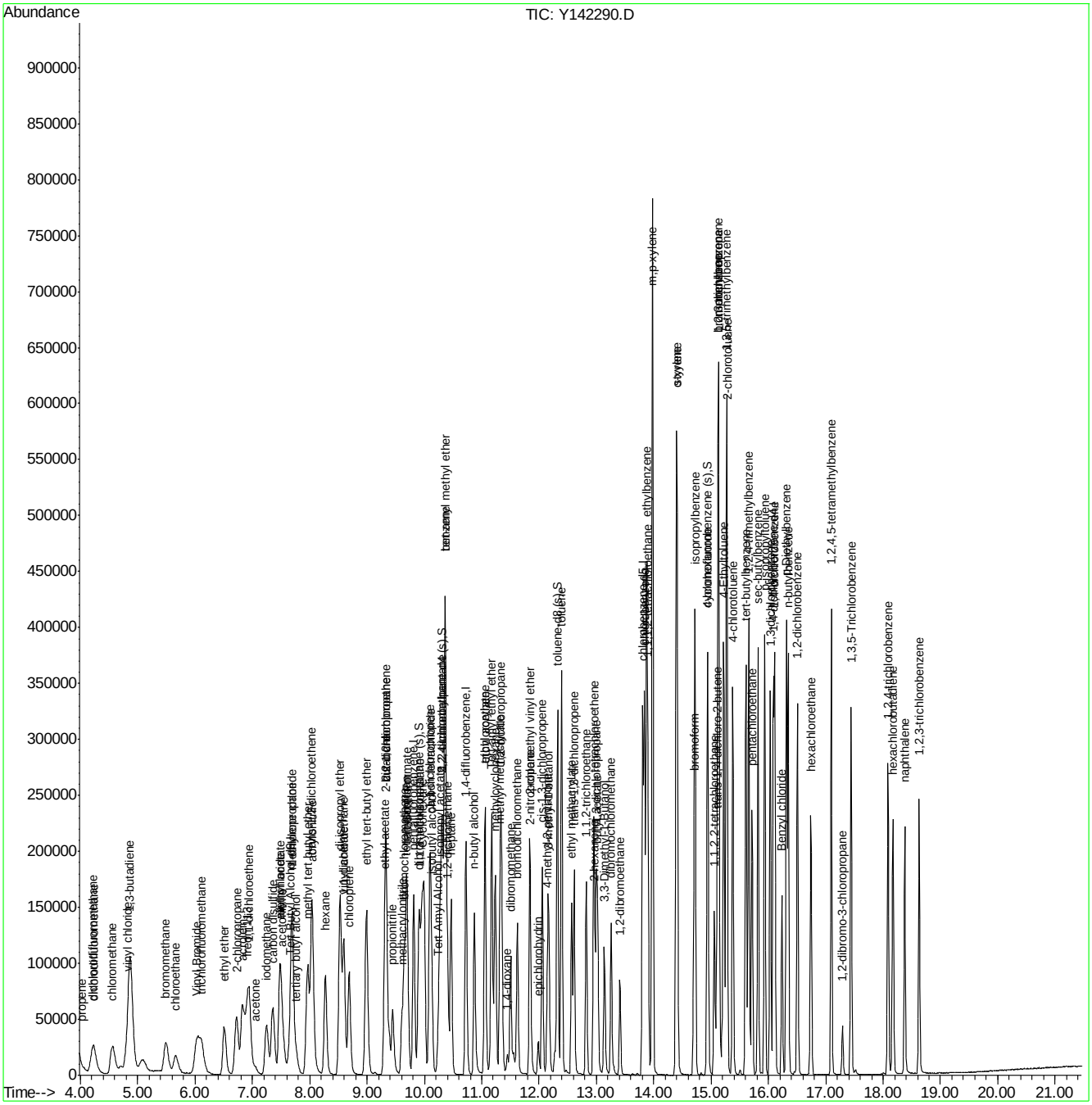
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 1,1,1,2-tetrachloroethane	13.90	131	71324	51.82	ug/L	96
96) ethylbenzene	13.88	91	307818	48.80	ug/L	99
97) m,p-xylene	13.97	106	237647	99.20	ug/L	100
98) o-xylene	14.39	91	248902	50.35	ug/L	100
99) styrene	14.41	104	203323	55.83	ug/L	99
100) bromoform	14.70	173	51716	56.07	ug/L	100
102) isopropylbenzene	14.72	105	285980	46.94	ug/L	98
105) bromobenzene	15.14	156	87006	49.85	ug/L	95
106) cyclohexanone	14.93	55	71267	532.46	ug/L	94
107) 1,1,2,2-tetrachloroethane	15.06	83	78264	49.21	ug/L	100
108) trans-1,4-dichloro-2-buten	15.10	53	18082	58.19	ug/L	94
109) 1,2,3-trichloropropane	15.14	110	18547	51.01	ug/L	95
110) n-propylbenzene	15.12	91	327656	47.90	ug/L	100
111) 4-Ethyltoluene	15.22	105	270780	45.78	ug/L	99
112) 2-chlorotoluene	15.28	126	72400	47.15	ug/L	96
113) 4-chlorotoluene	15.38	91	212027	46.70	ug/L	99
114) 1,3,5-trimethylbenzene	15.27	105	244782	48.26	ug/L	99
115) tert-butylbenzene	15.61	119	197921	46.20	ug/L	99
116) pentachloroethane	15.72	167	53398	49.73	ug/L	96
117) 1,2,4-trimethylbenzene	15.66	105	237780	49.13	ug/L	97
118) sec-butylbenzene	15.82	105	298125	46.69	ug/L	99
119) 1,3-dichlorobenzene	16.03	146	152261	47.59	ug/L	99
120) p-isopropyltoluene	15.94	119	250003	48.08	ug/L	99
121) 1,4-dichlorobenzene	16.11	146	152944	46.72	ug/L	100
122) 1,2-dichlorobenzene	16.51	146	144249	48.00	ug/L	98
123) n-butylbenzene	16.34	91	222625m	39.77	ug/L	
124) p-Diethylbenzene	16.31	119	146341	48.13	ug/L	99
125) 1,2-dibromo-3-chloropropan	17.29	157	13689	54.20	ug/L	96
126) 1,3,5-Trichlorobenzene	17.44	180	114921	48.75	ug/L	100
127) 1,2,4-trichlorobenzene	18.09	180	97751	53.53	ug/L	99
128) 1,2,4,5-tetramethylbenzene	17.10	119	232249	49.52	ug/L	99
129) hexachlorobutadiene	18.17	225	60063	45.52	ug/L	98
130) naphthalene	18.38	128	190663	55.90	ug/L	100
131) 1,2,3-trichlorobenzene	18.63	180	89786	52.39	ug/L	96
132) hexachloroethane	16.74	119	49283	50.16	ug/L	99
133) Benzyl chloride	16.23	91	119246	54.83	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142290.D
Acq On : 7 Jan 2014 3:02 pm
Operator : prashans
Sample : ICC6161-50
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 08 15:53:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 15:05:28 2014
Response via : Initial Calibration



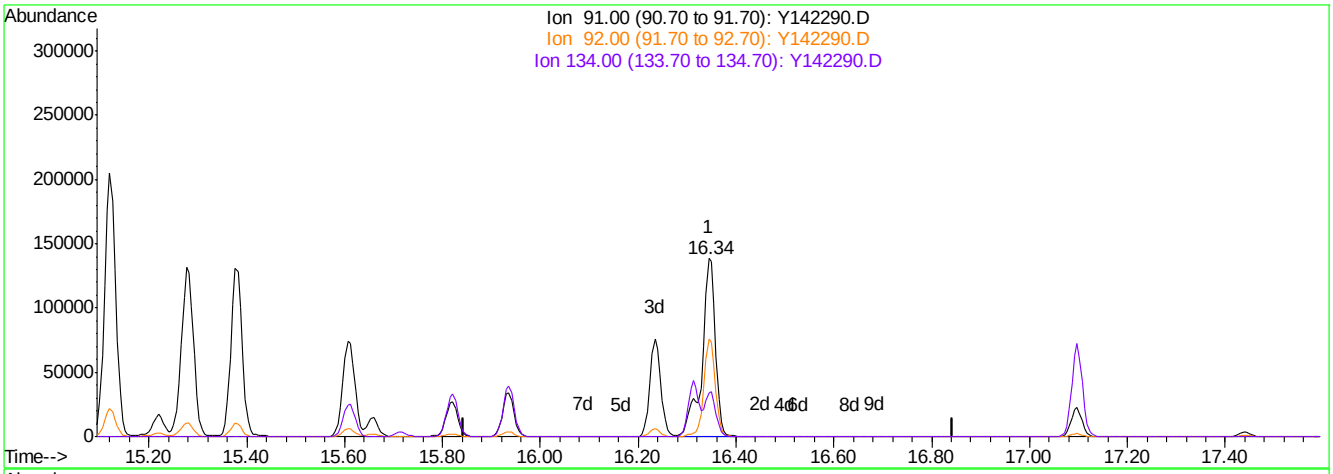
ACCUTEST LABORATORIES JB58468

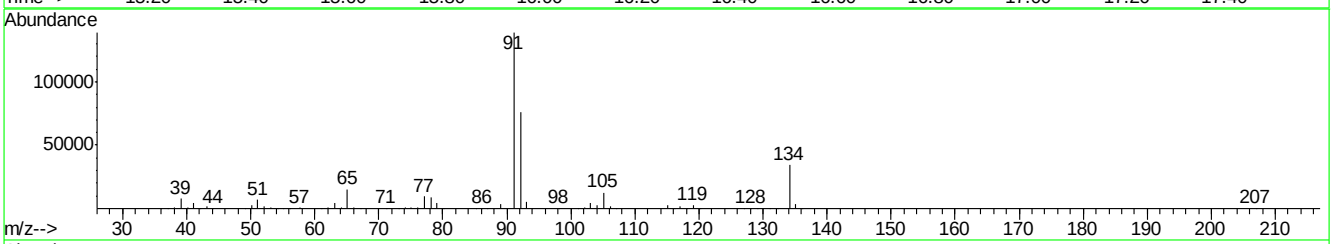
Quantitation Report (Qedit)

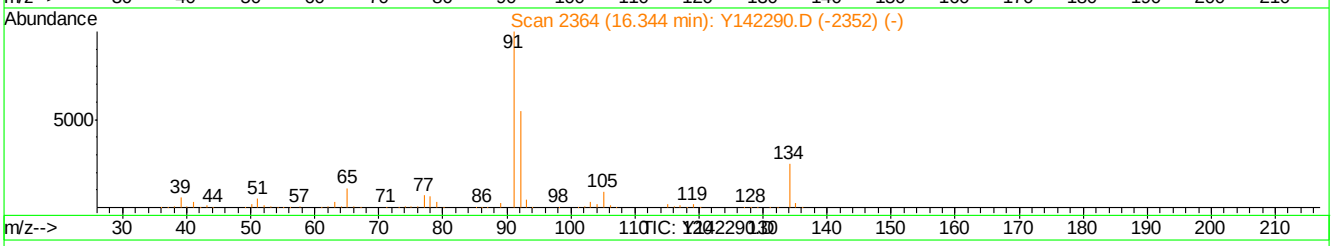
Data File : C:\MSDCHEM\1\DATA\Y142290.D Vial: 8
Acq On : 7 Jan 2014 3:02 pm Operator: prashans
Sample : ICC6161-50 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 15:33:07 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.34min 47.61ug/L

response 266483

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	54.87
134.00	25.10	24.76
0.00	0.00	0.00

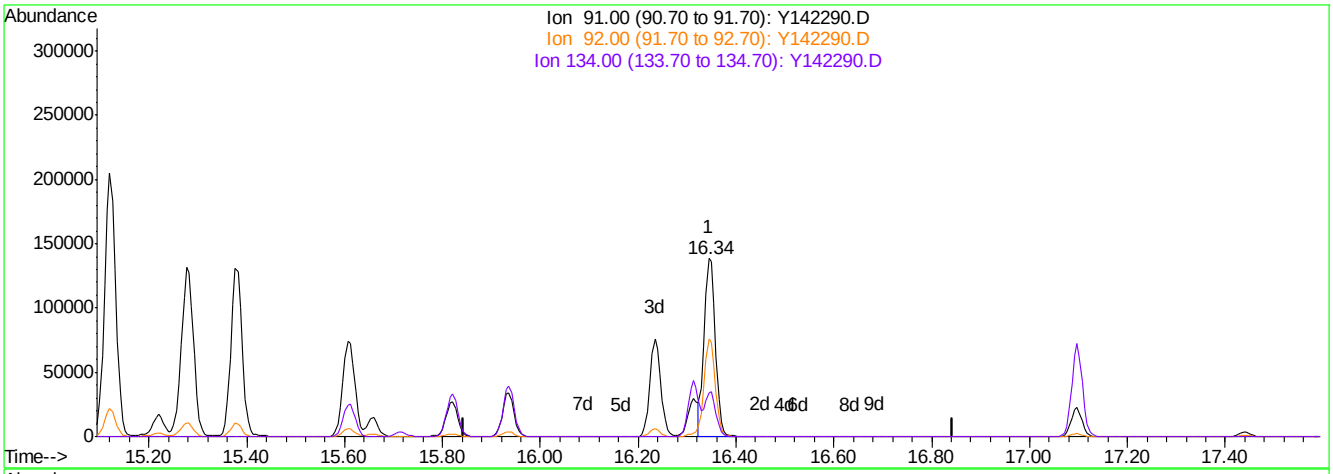
Y142290.D MY6161.M Wed Jan 08 15:52:53 2014 RPT1

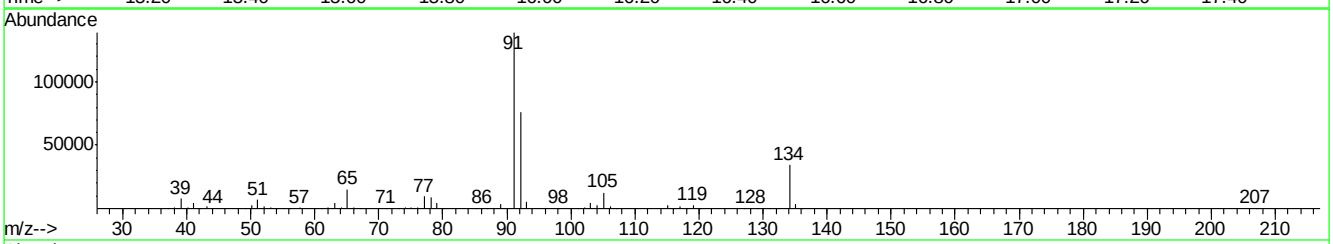
Quantitation Report (Qedit)

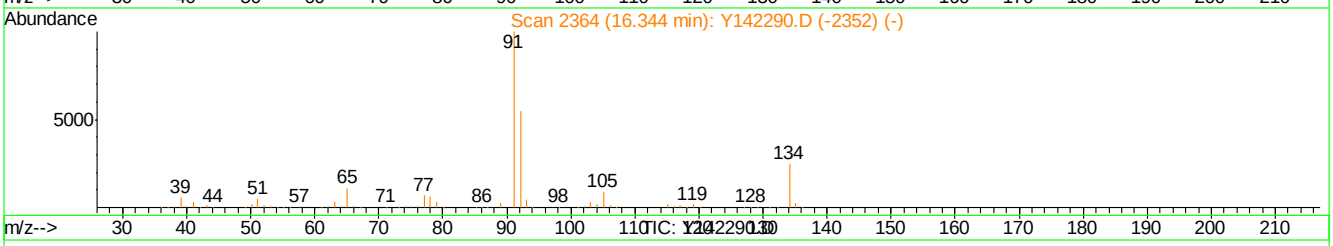
Data File : C:\MSDCHEM\1\DATA\Y142290.D Vial: 8
Acq On : 7 Jan 2014 3:02 pm Operator: prashans
Sample : ICC6161-50 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 15:33:07 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.34min 39.77ug/L m

response 222625

Ion	Exp%	Act%
91.00	100	100
92.00	54.40	54.83
134.00	25.10	24.84
0.00	0.00	0.00

Y142290.D MY6161.M Wed Jan 08 15:53:32 2014 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142291.D
Acq On : 7 Jan 2014 3:31 pm
Operator : prashans
Sample : IC6161-100
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 08 15:53:56 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 15:55:25 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	56764	500.00	ug/L		0.00
5) pentafluorobenzene	9.81	168	165230	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.73	114	228272	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	189556	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.09	152	94835	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.89	113	141721	91.14	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 182.28%#				
50) 1,2-dichloroethane-d4 (s)	10.31	65	148076	90.21	ug/L		0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 180.42%#				
79) toluene-d8 (s)	12.32	98	496127	90.86	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 181.72%#				
103) 4-bromofluorobenzene (s)	14.94	95	178818	90.85	ug/L		0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 181.70%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.44	88	35947	2724.11	ug/L		97
3) tertiary butyl alcohol	7.77	59	73211	474.62	ug/L		99
4) isobutyl alcohol	10.13	41	44907	1001.20	ug/L	#	99
11) chlorodifluoromethane	4.23	51	100685	91.60	ug/L		98
12) dichlorodifluoromethane	4.21	85	124959	92.86	ug/L		93
13) chloromethane	4.56	50	183729	88.14	ug/L		99
14) vinyl chloride	4.82	62	154369	91.78	ug/L		99
15) 1,3-butadiene	4.86	54	3186	1.06	ug/L		93
16) bromomethane	5.49	94	114103	86.40	ug/L		97
17) chloroethane	5.66	64	80506	94.95	ug/L		97
18) Vinyl Bromide	6.04	106	1434	1.39	ug/L	#	18
19) trichlorofluoromethane	6.10	101	167179	91.17	ug/L		97
20) ethyl ether	6.51	74	81208	105.60	ug/L		99
21) 2-chloropropane	6.73	63	49151	94.03	ug/L		100
22) acrolein	6.82	56	3082	12.43	ug/L		89
23) 1,1-dichloroethene	6.95	61	173359	95.92	ug/L		99
24) acetone	7.05	43	33457	79.95	ug/L		96
25) allyl chloride	7.47	76	73012	99.33	ug/L		93
26) acetonitrile	7.52	40	103197	1010.74	ug/L		99
27) iodomethane	7.24	142	240959	100.24	ug/L		100
28) carbon disulfide	7.36	76	399769	93.24	ug/L		100
29) 1-chloropropane	7.70	42	219530	80.09	ug/L		99
30) methylene chloride	7.68	49	203704	87.75	ug/L		100
31) methyl acetate	7.47	74	20903	109.00	ug/L		94
32) methyl tert butyl ether	7.97	73	400847	101.62	ug/L		99
33) trans-1,2-dichloroethene	8.03	61	188593	97.43	ug/L		99
34) di-isopropyl ether	8.52	45	505909	101.02	ug/L		99
35) ethyl tert-butyl ether	8.99	59	447045	102.80	ug/L		100
36) 2-butanone	9.31	72	15130	104.41	ug/L		93
37) 1,1-dichloroethane	8.60	63	251089	97.97	ug/L		98
38) chloroprene	8.69	53	178676	98.29	ug/L		99
39) acrylonitrile	8.04	53	224202	529.95	ug/L		99
40) vinyl acetate	8.58	86	22105	120.79	ug/L		94

MY6161.M Wed Jan 08 16:00:19 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142291.D
Acq On : 7 Jan 2014 3:31 pm
Operator : prashans
Sample : IC6161-100
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 08 15:53:56 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 15:55:25 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) ethyl acetate	9.30	45	18238	101.04	ug/L		98
42) 2,2-dichloropropane	9.32	77	174633	93.58	ug/L		98
43) cis-1,2-dichloroethene	9.33	96	160566	98.43	ug/L		97
44) propionitrile	9.45	54	179128	1121.33	ug/L		96
45) bromochloromethane	9.65	130	106567	104.74	ug/L		98
46) tetrahydrofuran	9.68	72	17253	100.53	ug/L		98
47) chloroform	9.69	83	251161	97.94	ug/L		99
48) tert-Butyl Formate	9.71	59	91812	124.96	ug/L		98
51) freon 113	6.90	151	80604	72.37	ug/L		98
52) methacrylonitrile	9.60	67	52742	110.43	ug/L		96
53) 1,1,1-trichloroethane	9.92	97	187332	95.31	ug/L		100
54) Cyclohexane	9.96	84	172089	92.09	ug/L	#	27
55) 2,2,4-trimethylpentane	10.30	57	450079	90.95	ug/L		100
56) tert-amyl methyl ether	10.36	73	434118	100.52	ug/L		100
58) epichlorohydrin	11.99	57	58461	528.59	ug/L		98
59) n-butyl alcohol	10.87	56	202603	5859.72	ug/L		98
60) carbon tetrachloride	10.11	117	167858	95.72	ug/L		96
61) 1,1-dichloropropene	10.09	75	172219	95.39	ug/L		99
62) hexane	8.27	57	143792	82.27	ug/L		95
63) Tert Amyl Alcohol	10.25	73	36097	473.67	ug/L	#	97
64) benzene	10.36	78	578583	97.10	ug/L		100
65) heptane	10.47	57	90357	90.54	ug/L		98
66) isopropyl acetate	10.27	61	54447	106.85	ug/L		98
67) 1,2-dichloroethane	10.40	62	180496	103.64	ug/L		99
68) trichloroethene	11.06	95	138904	97.21	ug/L		98
69) ethyl acrylate	11.06	55	166007	120.52	ug/L		99
70) 2-nitropropane	11.85	41	37668	96.30	ug/L		92
71) 2-chloroethyl vinyl ether	11.84	63	210442	633.89	ug/L		99
72) methyl methacrylate	11.31	69	92152	105.19	ug/L		99
73) 1,2-dichloropropane	11.33	63	152699	99.39	ug/L		99
74) methylcyclohexane	11.23	83	182974	91.33	ug/L		97
75) Tert-amyl ethyl ether	11.17	59	355253	101.17	ug/L		99
76) dibromomethane	11.50	93	87951	107.36	ug/L		95
77) bromodichloromethane	11.62	83	202413	105.92	ug/L		97
78) cis-1,3-dichloropropene	12.06	75	246820	108.65	ug/L		99
80) 4-methyl-2-pentanone	12.14	58	52579	106.70	ug/L		99
81) toluene	12.39	91	586799	97.71	ug/L		100
82) 3-methyl-1-butanol	12.16	70	71098	2242.06	ug/L		98
83) trans-1,3-dichloropropene	12.61	75	213111	112.33	ug/L		98
84) ethyl methacrylate	12.57	69	174190	121.44	ug/L		99
85) 1,1,2-trichloroethane	12.82	83	108136	105.02	ug/L		98
86) 2-hexanone	12.97	58	50622	110.79	ug/L		93
88) tetrachloroethene	12.95	166	152568	95.09	ug/L		99
89) 1,3-dichloropropane	13.00	76	200358	101.61	ug/L		99
90) butyl acetate	13.02	56	85418	110.55	ug/L		98
91) dibromochloromethane	13.26	129	161056	110.27	ug/L		99
92) 1,2-dibromoethane	13.41	107	127060	110.30	ug/L		96
93) 3,3-Dimethyl-1-Butanol	13.14	57	124616	1130.37	ug/L		100
94) chlorobenzene	13.84	112	386220	96.41	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.90	131	146664	103.61	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142291.D
Acq On : 7 Jan 2014 3:31 pm
Operator : prashans
Sample : IC6161-100
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 08 15:53:56 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 15:55:25 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
96) ethylbenzene	13.88	91	621096	96.56 ug/L	98
97) m,p-xylene	13.97	106	483881	197.64 ug/L	98
98) o-xylene	14.39	91	507686	100.27 ug/L	99
99) styrene	14.41	104	421682	111.32 ug/L	100
100) bromoform	14.70	173	107238	111.70 ug/L	98
102) isopropylbenzene	14.72	105	579015	93.53 ug/L	99
105) bromobenzene	15.14	156	177404	99.20 ug/L	99
106) cyclohexanone	14.93	55	135228	884.71 ug/L	99
107) 1,1,2,2-tetrachloroethane	15.06	83	159186	97.87 ug/L	97
108) trans-1,4-dichloro-2-buten	15.10	53	38249	116.26 ug/L	96
109) 1,2,3-trichloropropane	15.14	110	37284	99.69 ug/L	98
110) n-propylbenzene	15.12	91	666268	95.59 ug/L	99
111) 4-Ethyltoluene	15.22	105	548550	91.57 ug/L	100
112) 2-chlorotoluene	15.28	126	148302	94.99 ug/L	100
113) 4-chlorotoluene	15.38	91	435412	94.44 ug/L	99
114) 1,3,5-trimethylbenzene	15.27	105	498079	96.27 ug/L	99
115) tert-butylbenzene	15.61	119	404369	93.09 ug/L	100
116) pentachloroethane	15.72	167	110892	100.82 ug/L	98
117) 1,2,4-trimethylbenzene	15.66	105	482400	97.48 ug/L	99
118) sec-butylbenzene	15.82	105	604881	93.30 ug/L	99
119) 1,3-dichlorobenzene	16.03	146	313614	96.29 ug/L	99
120) p-isopropyltoluene	15.94	119	512080	96.61 ug/L	100
121) 1,4-dichlorobenzene	16.11	146	315562	94.93 ug/L	99
122) 1,2-dichlorobenzene	16.51	146	298338	97.40 ug/L	100
123) n-butylbenzene	16.34	91	459224m	80.68 ug/L	
124) p-Diethylbenzene	16.31	119	302420	97.56 ug/L	99
125) 1,2-dibromo-3-chloropropan	17.29	157	28914	110.13 ug/L	99
126) 1,3,5-Trichlorobenzene	17.44	180	240667	99.95 ug/L	99
127) 1,2,4-trichlorobenzene	18.09	180	208366	110.19 ug/L	98
128) 1,2,4,5-tetramethylbenzene	17.10	119	486452	101.32 ug/L	100
129) hexachlorobutadiene	18.17	225	124254	93.05 ug/L	100
130) naphthalene	18.38	128	407462	114.60 ug/L	99
131) 1,2,3-trichlorobenzene	18.63	180	187731	106.13 ug/L	99
132) hexachloroethane	16.74	119	102729	101.94 ug/L	99
133) Benzyl chloride	16.23	91	251935	111.46 ug/L	100

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

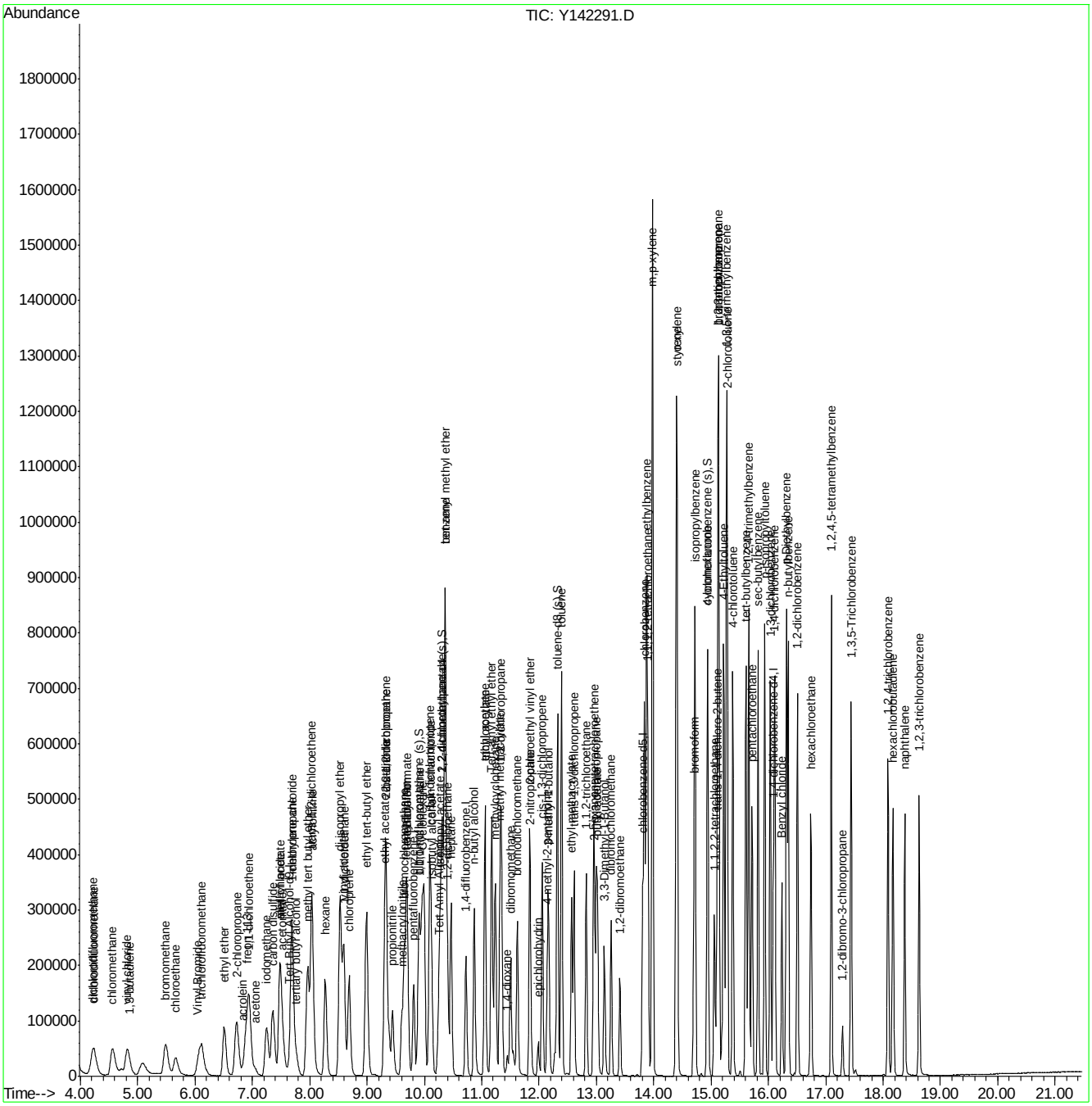
7.7.19

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142291.D
Acq On : 7 Jan 2014 3:31 pm
Operator : prashans
Sample : IC6161-100
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 08 15:53:56 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 15:55:25 2014
Response via : Initial Calibration



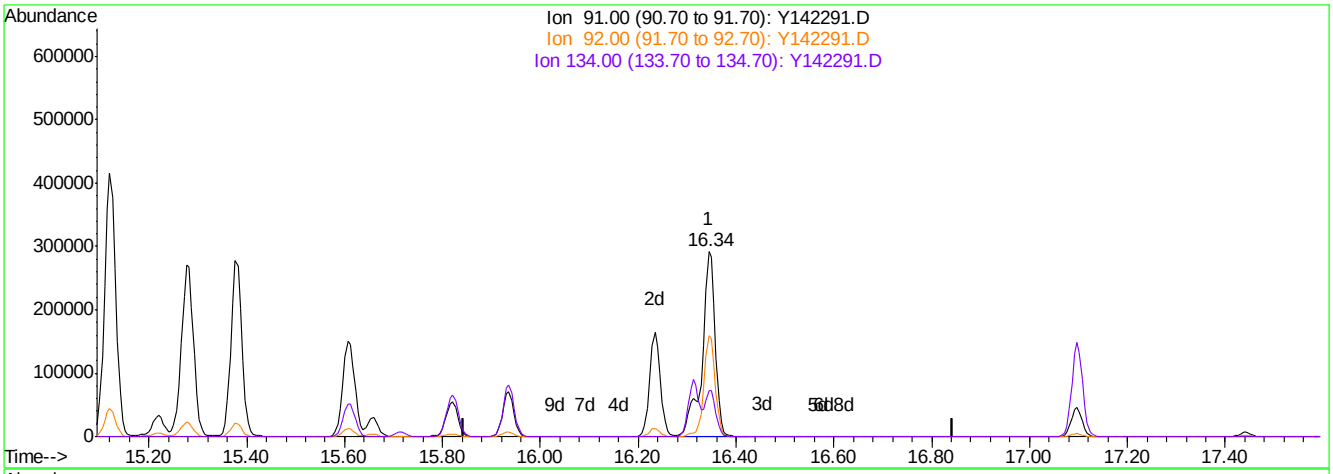
MY6161.M Wed Jan 08 16:00:19 2014 RPT1 Page: 4

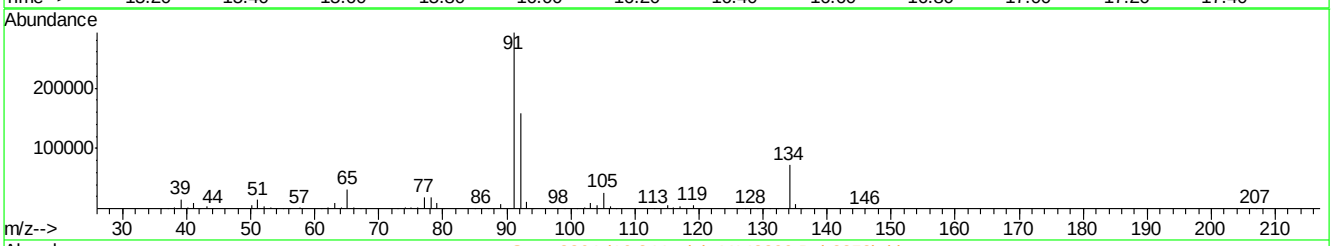
Quantitation Report (Qedit)

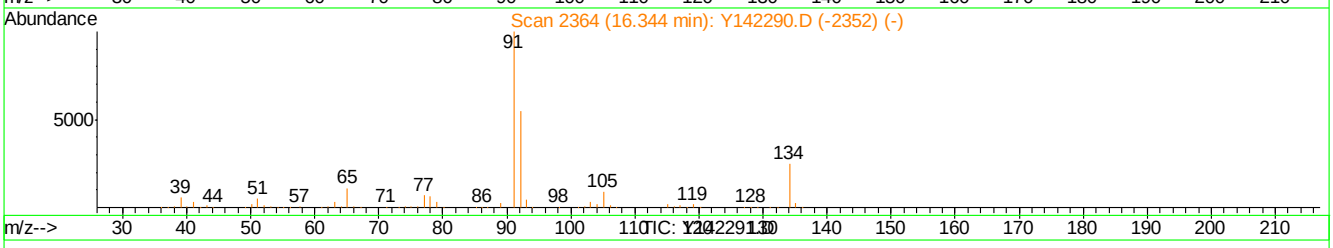
Data File : C:\MSDCHEM\1\DATA\Y142291.D Vial: 9
Acq On : 7 Jan 2014 3:31 pm Operator: prashans
Sample : IC6161-100 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 15:55:53 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.34min 96.51ug/L

response 549323

Ion	Exp%	Act%
91.00	100	100
92.00	54.90	54.37
134.00	24.80	24.67
0.00	0.00	0.00

Y142291.D MY6161.M Wed Jan 08 15:53:47 2014 RPT1

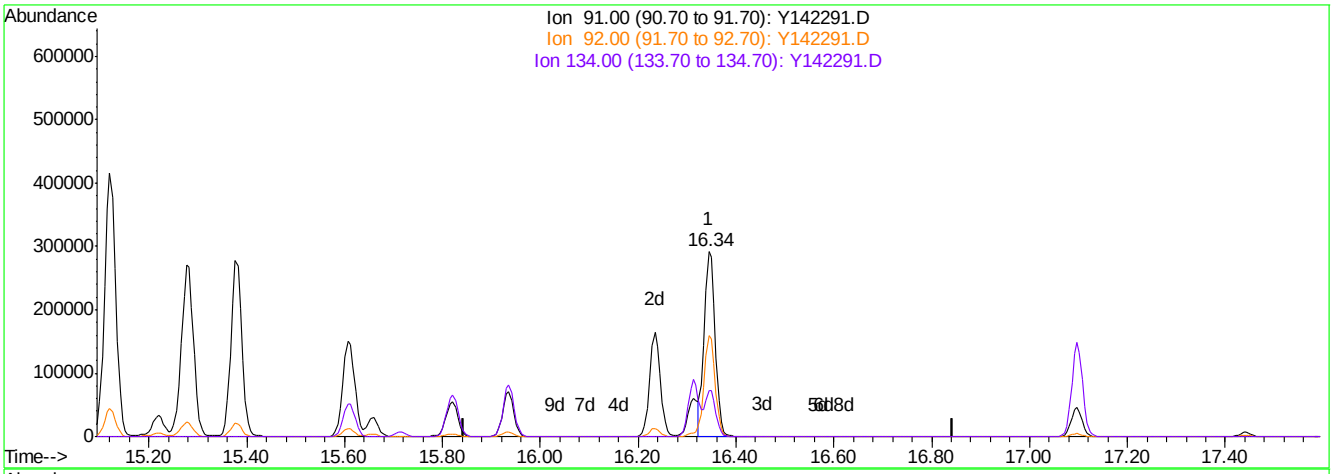
Y142291.D edits: n-butylbenzene

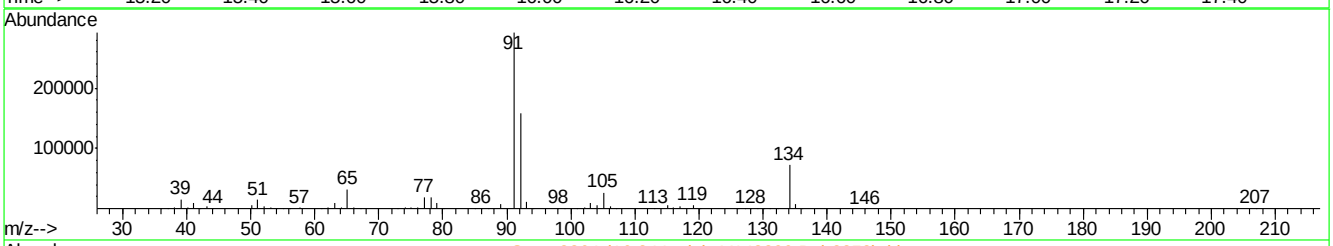
Quantitation Report (Qedit)

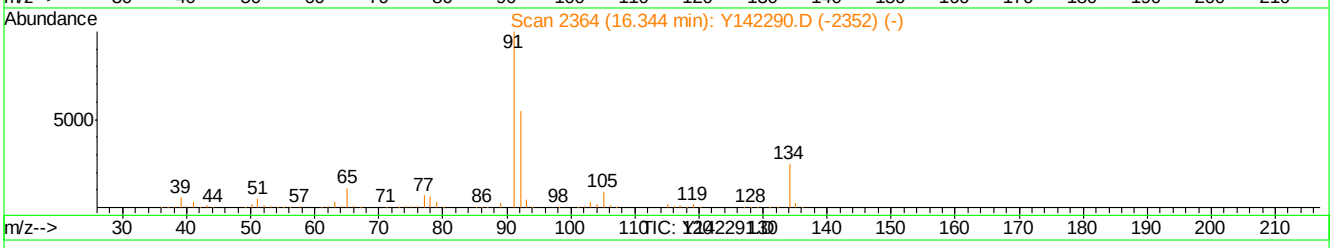
Data File : C:\MSDCHEM\1\DATA\Y142291.D Vial: 9
Acq On : 7 Jan 2014 3:31 pm Operator: prashans
Sample : IC6161-100 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 15:55:53 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.34min 80.68ug/L m

response 459224

Ion	Exp%	Act%
91.00	100	100
92.00	54.90	54.35
134.00	24.80	24.67
0.00	0.00	0.00

Y142291.D MY6161.M Wed Jan 08 15:54:01 2014 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142292.D
Acq On : 7 Jan 2014 4:00 pm
Operator : prashans
Sample : IC6161-200
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 08 15:54:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 16:10:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.66	65	59512	500.00	ug/L		0.01
5) pentafluorobenzene	9.81	168	179700	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.72	114	246349	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	204667	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.09	152	101065	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.89	113	289636	173.82	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 347.64%#				
50) 1,2-dichloroethane-d4 (s)	10.31	65	300951	171.38	ug/L		0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 342.76%#				
79) toluene-d8 (s)	12.32	98	1009850	174.56	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 349.12%#				
103) 4-bromofluorobenzene (s)	14.94	95	358458	174.08	ug/L		0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 348.16%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.44	88	70947	5052.71	ug/L		96
3) tertiary butyl alcohol	7.77	59	145873	908.61	ug/L		96
4) isobutyl alcohol	10.13	41	91108	1936.99	ug/L	#	99
11) chlorodifluoromethane	4.24	51	205444	174.30	ug/L		98
12) dichlorodifluoromethane	4.21	85	254298	175.56	ug/L		95
13) chloromethane	4.57	50	368723	165.45	ug/L		97
14) vinyl chloride	4.83	62	315768	174.42	ug/L		99
15) 1,3-butadiene	4.86	54	5832	1.77	ug/L		91
16) bromomethane	5.48	94	210208	149.75	ug/L		98
17) chloroethane	5.65	64	164535	179.57	ug/L		97
18) Vinyl Bromide	6.02	106	2466	2.20	ug/L	#	81
19) trichlorofluoromethane	6.10	101	344339	174.86	ug/L		99
20) ethyl ether	6.51	74	166926	198.00	ug/L		98
21) 2-chloropropane	6.72	63	100014	177.70	ug/L		99
22) acrolein	6.83	56	5544	20.56	ug/L		90
23) 1,1-dichloroethene	6.95	61	352605	180.31	ug/L		98
24) acetone	7.04	43	69750	159.66	ug/L		94
25) allyl chloride	7.48	76	153406	192.16	ug/L		93
26) acetonitrile	7.51	40	209396	1880.69	ug/L		88
27) iodomethane	7.24	142	491035	187.76	ug/L		98
28) carbon disulfide	7.35	76	817598	176.84	ug/L		99
29) 1-chloropropane	7.69	42	441326	154.18	ug/L		99
30) methylene chloride	7.68	49	409378	165.04	ug/L		98
31) methyl acetate	7.47	74	42586	200.58	ug/L		94
32) methyl tert butyl ether	7.96	73	813379	189.21	ug/L		100
33) trans-1,2-dichloroethene	8.02	61	384349	183.16	ug/L		99
34) di-isopropyl ether	8.53	45	1037922	190.32	ug/L		99
35) ethyl tert-butyl ether	8.99	59	920745	194.00	ug/L		99
36) 2-butanone	9.31	72	31060	194.93	ug/L		91
37) 1,1-dichloroethane	8.60	63	508923	183.05	ug/L		98
38) chloroprene	8.69	53	369205	187.14	ug/L		98
39) acrylonitrile	8.04	53	452268	974.61	ug/L		98
40) vinyl acetate	8.57	86	46417	217.86	ug/L		72

MY6161.M Wed Jan 08 16:00:20 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142292.D
Acq On : 7 Jan 2014 4:00 pm
Operator : prashans
Sample : IC6161-200
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 08 15:54:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 16:10:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
41) ethyl acetate	9.29	45	41315	210.02 ug/L	64
42) 2,2-dichloropropane	9.32	77	358303	177.96 ug/L	99
43) cis-1,2-dichloroethene	9.33	96	330621	186.73 ug/L	99
44) propionitrile	9.45	54	359313	2032.92 ug/L	96
45) bromochloromethane	9.64	130	218107	195.95 ug/L	99
46) tetrahydrofuran	9.67	72	35377	189.34 ug/L	97
47) chloroform	9.69	83	515602	185.35 ug/L	99
48) tert-Butyl Formate	9.71	59	198010	239.27 ug/L	97
51) freon 113	6.89	151	163322	167.83 ug/L	96
52) methacrylonitrile	9.60	67	107438	203.30 ug/L	98
53) 1,1,1-trichloroethane	9.92	97	384729	181.04 ug/L	99
54) Cyclohexane	9.96	84	351707	174.78 ug/L #	27
55) 2,2,4-trimethylpentane	10.30	57	916848	172.30 ug/L	98
56) tert-amyl methyl ether	10.36	73	892422	189.88 ug/L	99
58) epichlorohydrin	11.98	57	119723	993.60 ug/L	97
59) n-butyl alcohol	10.87	56	410669	10406.08 ug/L	98
60) carbon tetrachloride	10.11	117	344642	183.09 ug/L	97
61) 1,1-dichloropropene	10.09	75	354149	182.81 ug/L	99
62) hexane	8.27	57	297253	167.78 ug/L	97
63) Tert Amyl Alcohol	10.25	73	74283	911.23 ug/L #	93
64) benzene	10.36	78	1185609	185.05 ug/L	100
65) heptane	10.46	57	184679	173.53 ug/L	98
66) isopropyl acetate	10.27	61	113206	203.53 ug/L	95
67) 1,2-dichloroethane	10.40	62	364926	193.29 ug/L	99
68) trichloroethene	11.06	95	285572	185.84 ug/L	97
69) ethyl acrylate	11.06	55	350392	221.20 ug/L	99
70) 2-nitropropane	11.85	41	76218	181.68 ug/L	94
71) 2-chloroethyl vinyl ether	11.84	63	454070	1226.33 ug/L	99
72) methyl methacrylate	11.31	69	188930	197.79 ug/L	98
73) 1,2-dichloropropane	11.33	63	313719	189.36 ug/L	99
74) methylcyclohexane	11.24	83	379373	177.38 ug/L	98
75) Tert-amyl ethyl ether	11.18	59	737781	194.41 ug/L	99
76) dibromomethane	11.50	93	179501	201.19 ug/L	95
77) bromodichloromethane	11.62	83	418154	201.27 ug/L	99
78) cis-1,3-dichloropropene	12.05	75	508413	205.16 ug/L	98
80) 4-methyl-2-pentanone	12.14	58	105049	195.35 ug/L	98
81) toluene	12.39	91	1211311	187.44 ug/L	99
82) 3-methyl-1-butanol	12.16	70	144195	3971.35 ug/L	98
83) trans-1,3-dichloropropene	12.60	75	441476	212.35 ug/L	98
84) ethyl methacrylate	12.57	69	357884	225.17 ug/L	99
85) 1,1,2-trichloroethane	12.82	83	219609	196.39 ug/L	100
86) 2-hexanone	12.97	58	105123	208.69 ug/L	93
88) tetrachloroethene	12.95	166	313014	181.80 ug/L	98
89) 1,3-dichloropropane	13.00	76	408182	191.34 ug/L	99
90) butyl acetate	13.02	56	174388	205.42 ug/L	96
91) dibromochloromethane	13.26	129	332181	207.98 ug/L	99
92) 1,2-dibromoethane	13.41	107	258658	205.32 ug/L	96
93) 3,3-Dimethyl-1-Butanol	13.14	57	253420	2050.52 ug/L	99
94) chlorobenzene	13.84	112	791727	183.87 ug/L	100
95) 1,1,1,2-tetrachloroethane	13.90	131	300668	195.84 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142292.D
Acq On : 7 Jan 2014 4:00 pm
Operator : prashans
Sample : IC6161-200
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 08 15:54:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 16:10:45 2014
Response via : Initial Calibration

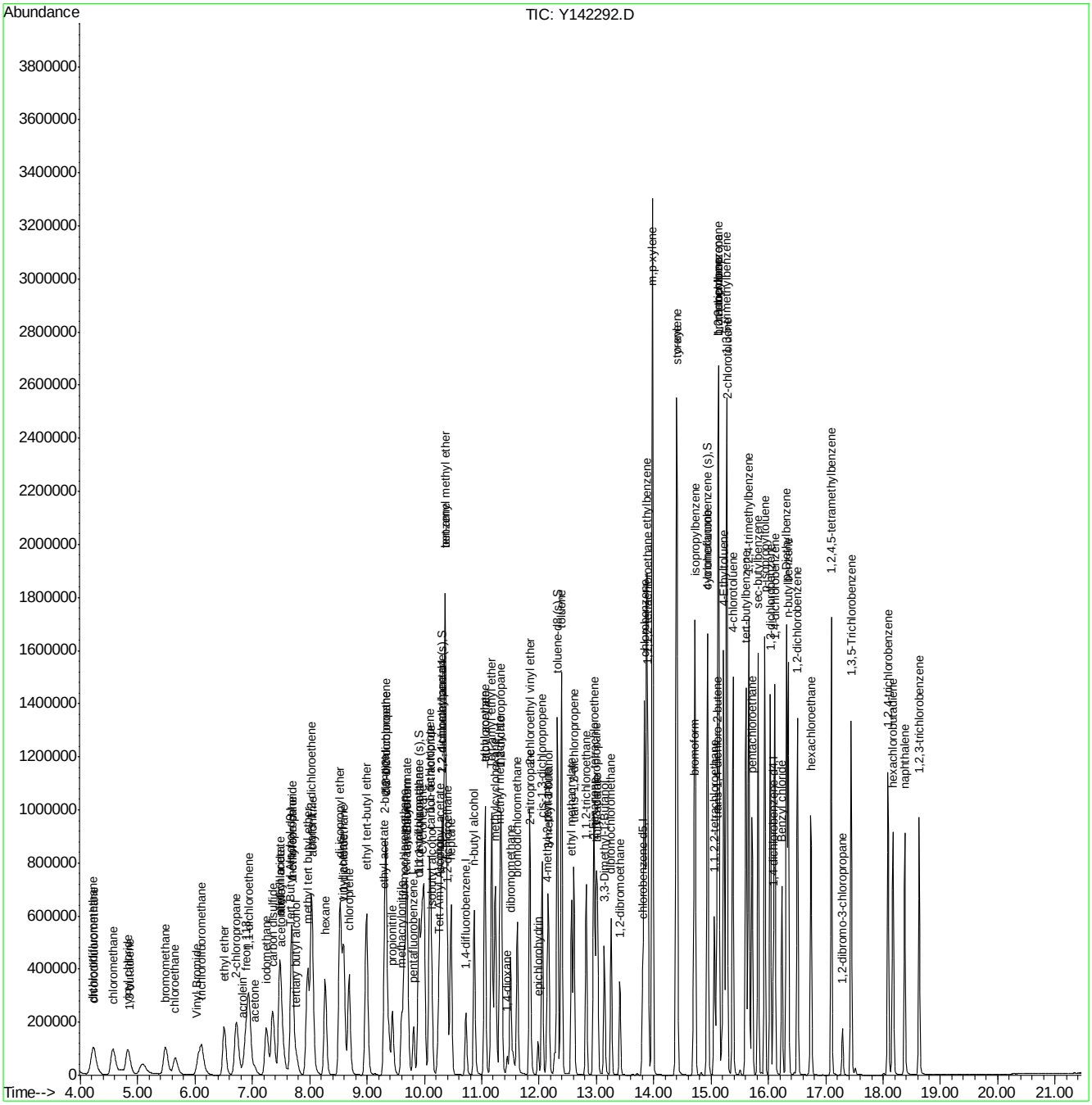
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
96) ethylbenzene	13.88	91	1283576	185.62 ug/L	99
97) m,p-xylene	13.97	106	992363	375.96 ug/L	97
98) o-xylene	14.39	91	1037156	189.66 ug/L	100
99) styrene	14.41	104	864623	208.45 ug/L	99
100) bromoform	14.70	173	220871	210.01 ug/L	98
102) isopropylbenzene	14.72	105	1185893	181.21 ug/L	99
105) bromobenzene	15.14	156	359285	188.70 ug/L	98
106) cyclohexanone	14.93	55	331770	2311.46 ug/L	97
107) 1,1,2,2-tetrachloroethane	15.06	83	318742	184.37 ug/L	96
108) trans-1,4-dichloro-2-buten	15.10	53	78358	217.60 ug/L	95
109) 1,2,3-trichloropropane	15.14	110	74639	187.35 ug/L	96
110) n-propylbenzene	15.12	91	1359962	184.10 ug/L	100
111) 4-Ethyltoluene	15.22	105	1167058	184.75 ug/L	98
112) 2-chlorotoluene	15.28	126	298465	180.52 ug/L	98
113) 4-chlorotoluene	15.38	91	877920	179.93 ug/L	99
114) 1,3,5-trimethylbenzene	15.27	105	966159	176.04 ug/L	99
115) tert-butylbenzene	15.61	119	817035	178.04 ug/L	98
116) pentachloroethane	15.72	167	223814	190.75 ug/L	98
117) 1,2,4-trimethylbenzene	15.66	105	983417	187.06 ug/L	99
118) sec-butylbenzene	15.82	105	1222754	178.48 ug/L	99
119) 1,3-dichlorobenzene	16.03	146	628919	182.04 ug/L	99
120) p-isopropyltoluene	15.94	119	1027644	182.70 ug/L	100
121) 1,4-dichlorobenzene	16.11	146	627508	178.26 ug/L	99
122) 1,2-dichlorobenzene	16.51	146	591887	181.92 ug/L	99
123) n-butylbenzene	16.35	91	922310m	152.81 ug/L	
124) p-Diethylbenzene	16.31	119	610914	185.49 ug/L	99
125) 1,2-dibromo-3-chloropropan	17.29	157	57389	202.20 ug/L	97
126) 1,3,5-Trichlorobenzene	17.44	180	467152	182.06 ug/L	99
127) 1,2,4-trichlorobenzene	18.09	180	403111	197.53 ug/L	99
128) 1,2,4,5-tetramethylbenzene	17.10	119	971278	189.52 ug/L	99
129) hexachlorobutadiene	18.17	225	240029	170.15 ug/L	100
130) naphthalene	18.38	128	803911	208.36 ug/L	99
131) 1,2,3-trichlorobenzene	18.63	180	355173	186.98 ug/L	99
132) hexachloroethane	16.74	119	210189	195.25 ug/L	100
133) Benzyl chloride	16.23	91	517990	212.00 ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142292.D
Acq On : 7 Jan 2014 4:00 pm
Operator : prashans
Sample : IC6161-200
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 08 15:54:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Jan 07 16:10:45 2014
Response via : Initial Calibration



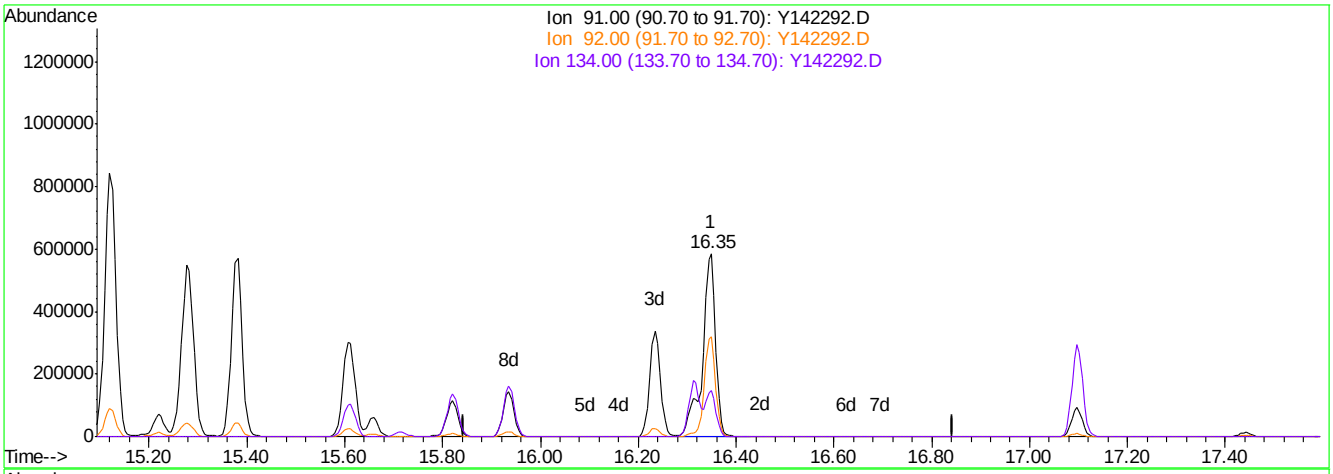
MY6161.M Wed Jan 08 16:00:20 2014 RPT1 Page: 4

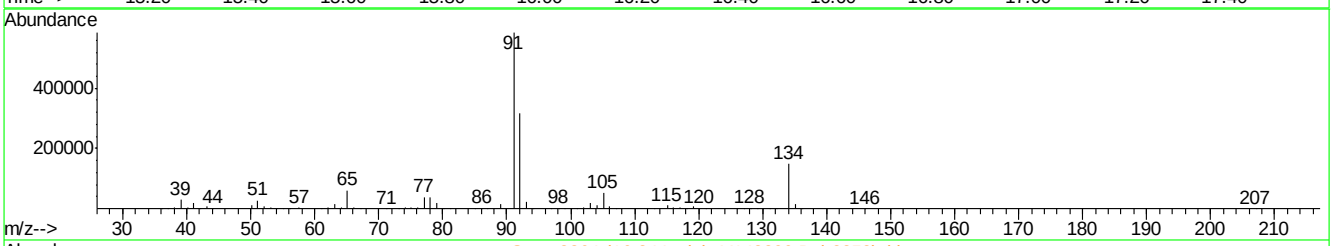
Quantitation Report (Qedit)

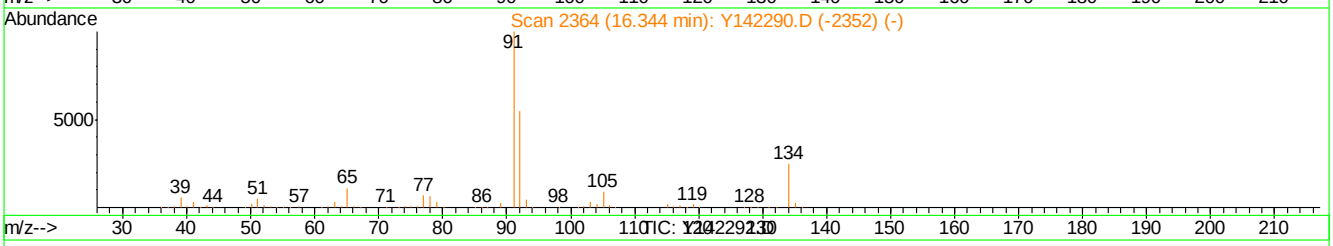
Data File : C:\MSDCHEM\1\DATA\Y142292.D Vial: 10
Acq On : 7 Jan 2014 4:00 pm Operator: prashans
Sample : IC6161-200 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 16:23:20 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 181.80ug/L

response 1097260

Ion	Exp%	Act%
91.00	100	100
92.00	54.90	54.41
134.00	24.80	25.42
0.00	0.00	0.00

Y142292.D MY6161.M Wed Jan 08 15:54:18 2014 RPT1

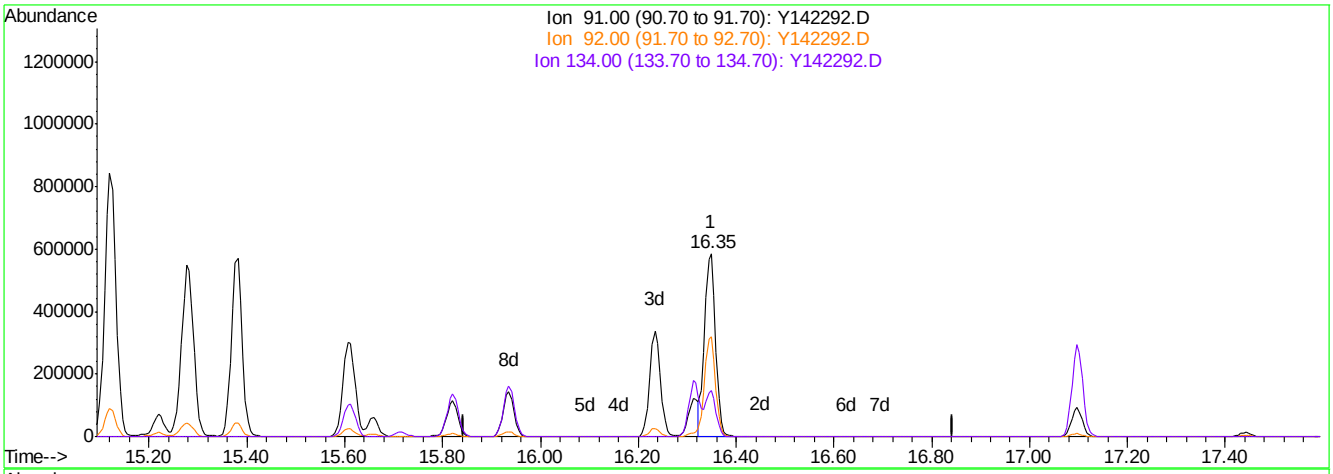
Y142292.D edits: n-butylbenzene

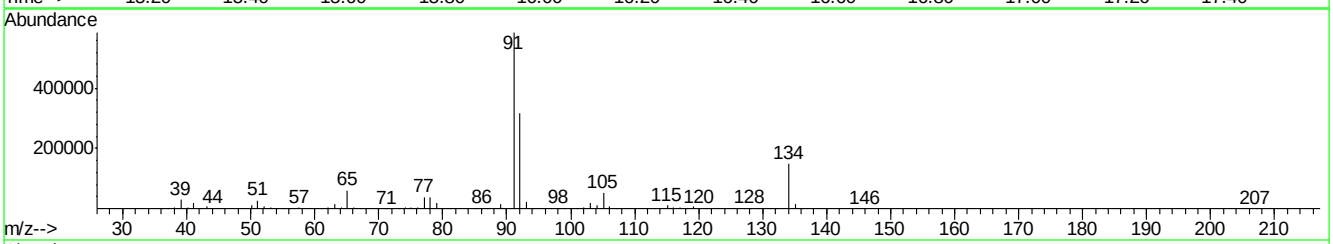
Quantitation Report (Qedit)

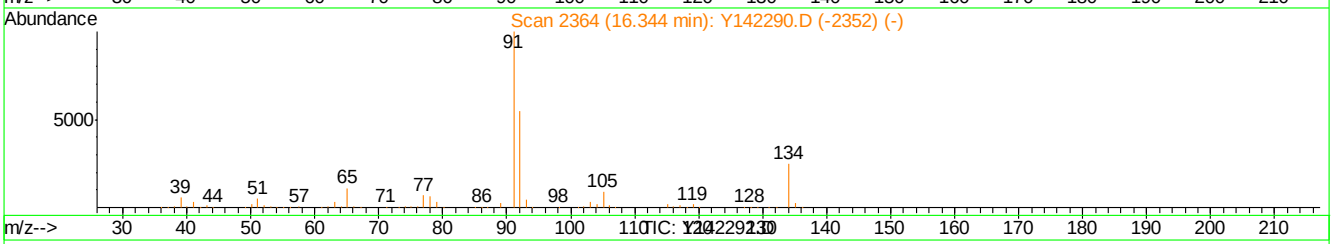
Data File : C:\MSDCHEM\1\DATA\Y142292.D Vial: 10
Acq On : 7 Jan 2014 4:00 pm Operator: prashans
Sample : IC6161-200 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 07 16:23:20 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 13:38:23 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.35min 152.81ug/L m

response 922310

Ion	Exp%	Act%
91.00	100	100
92.00	54.90	54.40
134.00	24.80	25.44
0.00	0.00	0.00

Y142292.D MY6161.M Wed Jan 08 15:54:29 2014 RPT1

Y142292.D edits: n-butylbenzene

Manual Integrations APPROVED (compounds with "m" flag)
Jessica Reitan-Chu 01/08/14 17:28

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142295.D
Acq On : 7 Jan 2014 5:27 pm
Operator : prashans
Sample : ICV6161-50
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 08 15:58:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	52427	500.00	ug/L	0.00
5) pentafluorobenzene	9.81	168	175985	50.00	ug/L	0.00
57) 1,4-difluorobenzene	10.73	114	240993	50.00	ug/L	0.00
87) chlorobenzene-d5	13.81	117	197879	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.09	152	96562	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	9.89	113	74816	46.72	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 93.44%			
50) 1,2-dichloroethane-d4 (s)	10.31	65	76092	45.17	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 90.34%			
79) toluene-d8 (s)	12.32	98	265581	47.94	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 95.88%			
103) 4-bromofluorobenzene (s)	14.94	95	93693	48.67	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 97.34%			
Target Compounds						Qvalue
2) 1,4-dioxane	11.45	88	17607	1421.25	ug/L	96
3) tertiary butyl alcohol	7.77	59	35158	251.46	ug/L	98
4) isobutyl alcohol	10.13	41	21271	516.05	ug/L #	99
11) chlorodifluoromethane	4.23	51	48245	42.58	ug/L	97
12) dichlorodifluoromethane	4.20	85	62755	44.92	ug/L	99
13) chloromethane	4.57	50	95306	46.40	ug/L	96
14) vinyl chloride	4.81	62	79884	45.71	ug/L	99
15) 1,3-butadiene	4.87	54	131245	41.19	ug/L	99
16) bromomethane	5.50	94	62258	49.41	ug/L	97
17) chloroethane	5.66	64	42376	47.77	ug/L	97
18) Vinyl Bromide	6.02	106	49225	44.25	ug/L	100
19) trichlorofluoromethane	6.11	101	85052	44.81	ug/L	99
20) ethyl ether	6.52	74	42434	51.46	ug/L	92
21) 2-chloropropane	6.73	63	25380	46.79	ug/L	100
22) acrolein	6.83	56	119282	449.81	ug/L	99
23) 1,1-dichloroethene	6.95	61	89943	47.48	ug/L	97
24) acetone	7.04	43	17247	41.72	ug/L	95
25) allyl chloride	7.48	76	39283	50.58	ug/L	92
26) acetonitrile	7.52	40	51451	477.56	ug/L	96
27) iodomethane	7.24	142	129988	51.10	ug/L	98
28) carbon disulfide	7.36	76	209608	46.90	ug/L	99
29) 1-chloropropane	7.69	42	116353	49.29	ug/L	100
30) methylene chloride	7.69	49	107161	46.85	ug/L	96
31) methyl acetate	7.48	74	9520	45.76	ug/L	95
32) methyl tert butyl ether	7.97	73	400372	95.67	ug/L	100
33) trans-1,2-dichloroethene	8.03	61	100402	49.32	ug/L	100
34) di-isopropyl ether	8.53	45	257880	48.55	ug/L	99
35) ethyl tert-butyl ether	8.98	59	228971	49.43	ug/L	100
36) 2-butanone	9.32	72	7296	46.99	ug/L	95
37) 1,1-dichloroethane	8.60	63	134078	49.71	ug/L	97
38) chloroprene	8.69	53	86174	44.92	ug/L	99
39) acrylonitrile	8.05	53	110150	243.15	ug/L	99
40) vinyl acetate	8.58	86	11715	55.16	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142295.D
Acq On : 7 Jan 2014 5:27 pm
Operator : prashans
Sample : ICV6161-50
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 08 15:58:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) ethyl acetate	9.30	45	9977	51.36	ug/L	#	39
42) 2,2-dichloropropane	9.32	77	90238	46.33	ug/L		100
43) cis-1,2-dichloroethene	9.33	96	86524	50.27	ug/L		99
44) propionitrile	9.45	54	88748	511.66	ug/L		96
45) bromochloromethane	9.65	130	55842	51.34	ug/L		98
46) tetrahydrofuran	9.67	72	8751	48.25	ug/L		95
47) chloroform	9.69	83	133919	49.56	ug/L		99
48) tert-Butyl Formate	9.71	59	44614	52.44	ug/L		98
51) freon 113	6.90	151	43336	50.87	ug/L		99
52) methacrylonitrile	9.60	67	26377	50.85	ug/L		98
53) 1,1,1-trichloroethane	9.92	97	97356	47.28	ug/L		99
54) Cyclohexane	9.96	84	87770	45.17	ug/L	#	27
55) 2,2,4-trimethylpentane	10.30	57	216542	42.20	ug/L		98
56) tert-amyl methyl ether	10.36	73	221414	48.38	ug/L		99
58) epichlorohydrin	11.99	57	26899	228.41	ug/L		99
59) n-butyl alcohol	10.87	56	94840	2442.42	ug/L		98
60) carbon tetrachloride	10.11	117	86383	47.36	ug/L		98
61) 1,1-dichloropropene	10.09	75	90146	48.03	ug/L		97
62) hexane	8.27	57	67769	40.02	ug/L		97
63) Tert Amyl Alcohol	10.24	73	34489	438.03	ug/L	#	78
64) benzene	10.36	78	308362	49.61	ug/L		99
65) heptane	10.47	57	42450	41.38	ug/L		97
66) isopropyl acetate	10.27	61	27152	49.78	ug/L	#	42
67) 1,2-dichloroethane	10.40	62	92874	50.47	ug/L		98
68) trichloroethene	11.06	95	74028	49.64	ug/L		95
69) ethyl acrylate	11.06	55	80108	50.92	ug/L		98
70) 2-nitropropane	11.86	41	18549	45.80	ug/L	#	64
71) 2-chloroethyl vinyl ether	11.84	63	94665	240.69	ug/L		100
72) methyl methacrylate	11.31	69	46296	49.64	ug/L		98
73) 1,2-dichloropropane	11.33	63	80587	50.02	ug/L		99
74) methylcyclohexane	11.24	83	92769	44.90	ug/L		98
75) Tert-amyl ethyl ether	11.17	59	376168	101.64	ug/L		99
76) dibromomethane	11.50	93	45311	51.88	ug/L		96
77) bromodichloromethane	11.62	83	106162	52.20	ug/L		100
78) cis-1,3-dichloropropene	12.06	75	128240	52.75	ug/L		99
80) 4-methyl-2-pentanone	12.14	58	26362	50.28	ug/L		96
81) toluene	12.39	91	314769	50.14	ug/L		100
82) 3-methyl-1-butanol	12.16	70	33645	948.36	ug/L		99
83) trans-1,3-dichloropropene	12.61	75	109416	53.43	ug/L		100
84) ethyl methacrylate	12.57	69	86165	54.65	ug/L		98
85) 1,1,2-trichloroethane	12.82	83	56102	51.39	ug/L		98
86) 2-hexanone	12.98	58	24812	49.99	ug/L		93
88) tetrachloroethene	12.95	166	79702	48.37	ug/L		98
89) 1,3-dichloropropane	13.00	76	103931	50.63	ug/L		98
90) butyl acetate	13.02	56	41858	50.80	ug/L		98
91) dibromochloromethane	13.26	129	83150	53.61	ug/L		99
92) 1,2-dibromoethane	13.41	107	65620	53.72	ug/L		98
93) 3,3-Dimethyl-1-Butanol	13.14	57	59204	493.69	ug/L		99
94) chlorobenzene	13.84	112	206914	50.15	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.90	131	77967	52.65	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142295.D
Acq On : 7 Jan 2014 5:27 pm
Operator : prashans
Sample : ICV6161-50
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 08 15:58:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

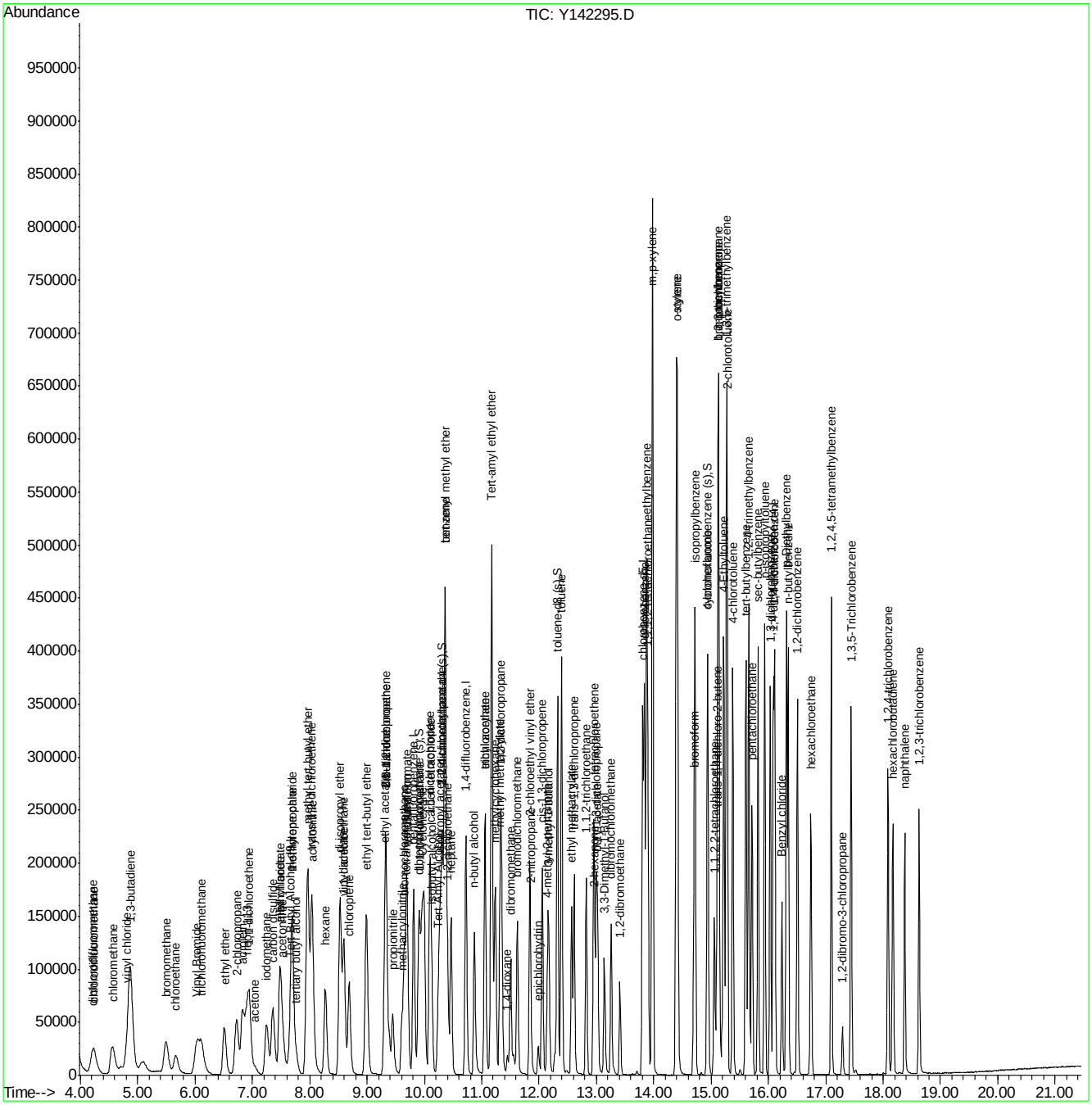
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
96) ethylbenzene	13.88	91	331179	49.93 ug/L	100
97) m,p-xylene	13.97	106	257573	101.61 ug/L	98
98) o-xylene	14.39	91	269311	51.23 ug/L	100
99) styrene	14.41	104	222266	55.17 ug/L	99
100) bromoform	14.70	173	54320	53.12 ug/L	98
102) isopropylbenzene	14.72	105	306934	49.61 ug/L	98
105) bromobenzene	15.14	156	93278	51.60 ug/L	99
106) cyclohexanone	14.93	55	69913	460.80 ug/L	97
107) 1,1,2,2-tetrachloroethane	15.06	83	81486	49.76 ug/L	98
108) trans-1,4-dichloro-2-buten	15.10	53	18143	52.08 ug/L	98
109) 1,2,3-trichloropropane	15.14	110	18694	49.50 ug/L	92
110) n-propylbenzene	15.12	91	347899	49.73 ug/L	99
111) 4-Ethyltoluene	15.22	105	291512	48.71 ug/L	100
112) 2-chlorotoluene	15.28	126	79372	50.80 ug/L	99
113) 4-chlorotoluene	15.38	91	228014	49.46 ug/L	100
114) 1,3,5-trimethylbenzene	15.27	105	261910	50.62 ug/L	100
115) tert-butylbenzene	15.61	119	210757	48.66 ug/L	98
116) pentachloroethane	15.72	167	58298	52.27 ug/L	99
117) 1,2,4-trimethylbenzene	15.66	105	257469	51.63 ug/L	99
118) sec-butylbenzene	15.82	105	315204	48.74 ug/L	99
119) 1,3-dichlorobenzene	16.03	146	163803	50.12 ug/L	99
120) p-isopropyltoluene	15.94	119	267517	50.26 ug/L	99
121) 1,4-dichlorobenzene	16.11	146	163422	49.18 ug/L	98
122) 1,2-dichlorobenzene	16.51	146	154995	50.37 ug/L	99
123) n-butylbenzene	16.34	91	236206m	49.41 ug/L	
124) p-Diethylbenzene	16.31	119	155957	49.96 ug/L	100
125) 1,2-dibromo-3-chloropropan	17.29	157	13601	50.09 ug/L	98
126) 1,3,5-Trichlorobenzene	17.44	180	122571	50.50 ug/L	100
127) 1,2,4-trichlorobenzene	18.09	180	103274	53.04 ug/L	99
128) 1,2,4,5-tetramethylbenzene	17.10	119	251800	51.73 ug/L	100
129) hexachlorobutadiene	18.17	225	63217	47.69 ug/L	100
130) naphthalene	18.38	128	197914	53.44 ug/L	98
131) 1,2,3-trichlorobenzene	18.63	180	93839	52.08 ug/L	98
132) hexachloroethane	16.74	119	53159	51.82 ug/L	99
133) Benzyl chloride	16.23	91	120115	51.11 ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y142295.D
Acq On : 7 Jan 2014 5:27 pm
Operator : prashans
Sample : ICV6161-50
Misc : MS61184,VY6161,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 08 15:58:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration



MY6161.M Wed Jan 08 17:17:46 2014 RPT1 Page: 4

Manual Integration Approval Summary

Sample Number: VY6161-ICV6161 **Method:** SW846 8260B
Lab FileID: Y142295.D **Analyst approved:** 01/08/14 17:17 Dipa Patel
Injection Time: 01/07/14 17:27 **Supervisor approved:** 01/08/14 17:28 Jessica Reitan-Chu

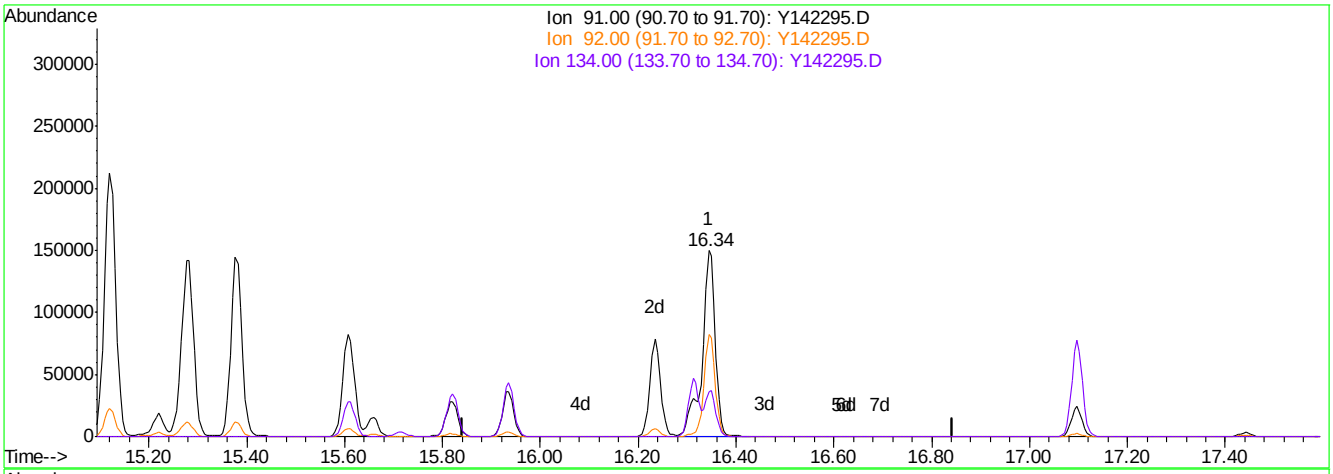
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Butylbenzene	104-51-8		16.34	Poor instrument integration

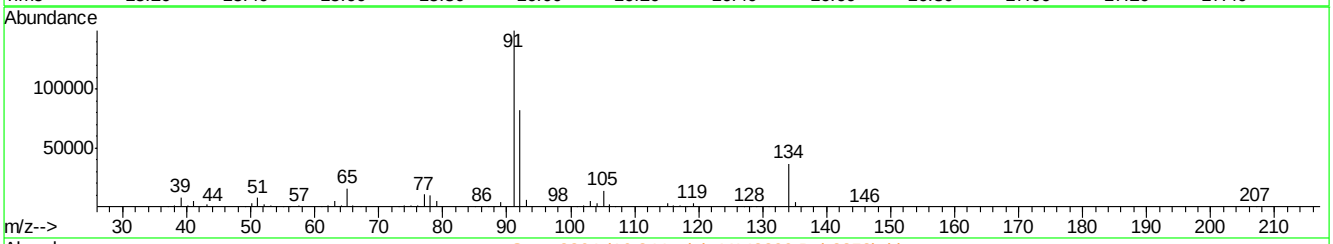
Quantitation Report (Qedit)

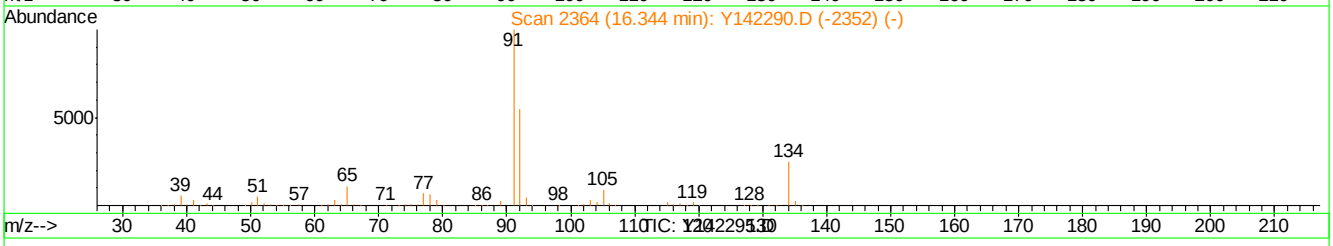
Data File : C:\MSDCHEM\1\DATA\Y142295.D Vial: 13
Acq On : 7 Jan 2014 5:27 pm Operator: prashans
Sample : ICV6161-50 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 08 15:57:49 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 15:57:45 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.34min 59.12ug/L

response 282637

Ion	Exp%	Act%
91.00	100	100
92.00	54.90	54.70
134.00	24.80	24.34
0.00	0.00	0.00

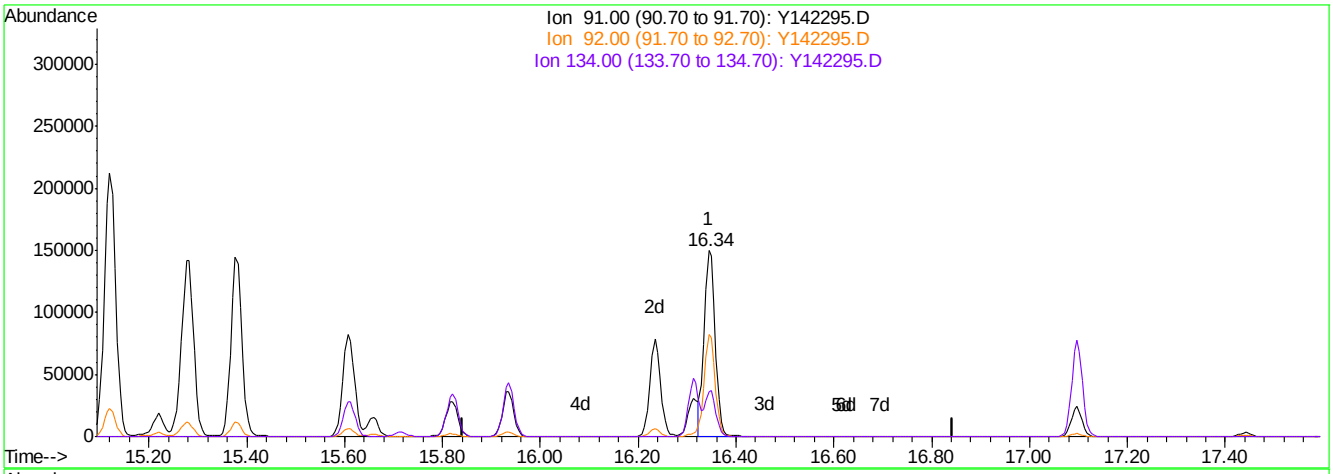
Y142295.D MY6161.M Wed Jan 08 15:58:27 2014 RPT1

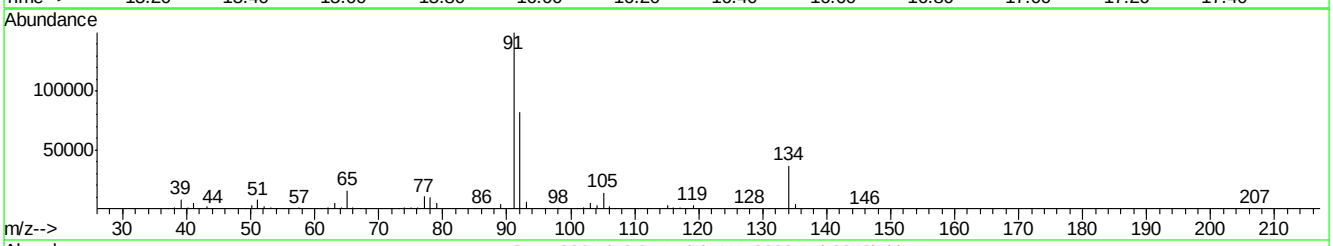
Quantitation Report (Qedit)

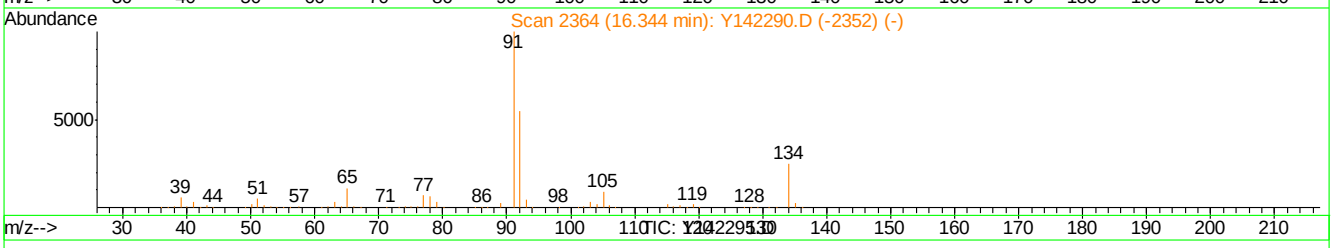
Data File : C:\MSDCHEM\1\DATA\Y142295.D Vial: 13
Acq On : 7 Jan 2014 5:27 pm Operator: prashans
Sample : ICV6161-50 Inst : MSY
Misc : MS61184,VY6161,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Jan 08 15:57:49 2014 Results File: MY6161.RES

Method : C:\MSDCHEM\1\METHODS\MY6161.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Jan 08 15:57:45 2014
Response via : Multiple Level Calibration







(123) n-butylbenzene

16.34min 49.41ug/L m

response 236206

Ion	Exp%	Act%
91.00	100	100
92.00	54.90	54.68
134.00	24.80	24.36
0.00	0.00	0.00

Y142295.D MY6161.M Wed Jan 08 15:58:38 2014 RPT1

Y142295.D edits: n-butylbenzene

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143017.D
Acq On : 31 Jan 2014 9:23 am
Operator : prashans
Sample : CC6161-20
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 03 17:27:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.65	65	52486	500.00	ug/L		0.00
5) pentafluorobenzene	9.81	168	145819	50.00	ug/L		0.00
57) 1,4-difluorobenzene	10.72	114	217485	50.00	ug/L		0.00
87) chlorobenzene-d5	13.81	117	196970	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.09	152	100561	50.00	ug/L		0.00
System Monitoring Compounds							
49) dibromofluoromethane (s)	9.89	113	67955	51.22	ug/L		0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 102.44%				
50) 1,2-dichloroethane-d4 (s)	10.31	65	69672	49.92	ug/L		0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 99.84%				
79) toluene-d8 (s)	12.32	98	262945	52.60	ug/L		0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 105.20%				
103) 4-bromofluorobenzene (s)	14.94	95	93810	46.80	ug/L		0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 93.60%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.45	88	6190	499.10	ug/L		95
3) tertiary butyl alcohol	7.76	59	13537	96.71	ug/L		85
4) isobutyl alcohol	10.13	41	7420	179.81	ug/L	#	95
11) chlorodifluoromethane	4.24	51	22738	24.22	ug/L		96
12) dichlorodifluoromethane	4.22	85	26332	22.75	ug/L		94
13) chloromethane	4.57	50	32259	18.96	ug/L		99
14) vinyl chloride	4.81	62	29992	20.71	ug/L		97
16) bromomethane	5.49	94	21364	20.46	ug/L		96
17) chloroethane	5.66	64	16831	22.90	ug/L		98
19) trichlorofluoromethane	6.11	101	35332	22.46	ug/L		97
20) ethyl ether	6.52	74	13506	19.77	ug/L		95
21) 2-chloropropane	6.73	63	8663	19.28	ug/L		97
22) acrolein	6.84	56	28927	131.65	ug/L		98
23) 1,1-dichloroethene	6.95	61	35857	22.85	ug/L		95
24) acetone	7.05	43	7880	23.00	ug/L		100
25) allyl chloride	7.48	76	13426	20.86	ug/L		72
26) acetonitrile	7.52	40	18340	205.44	ug/L	#	78
27) iodomethane	7.25	142	45229	21.46	ug/L		98
28) carbon disulfide	7.36	76	79466	21.46	ug/L		98
29) 1-chloropropane	7.70	42	47959	21.87	ug/L		98
30) methylene chloride	7.69	49	37200	19.63	ug/L		96
31) methyl acetate	7.48	74	3495	20.28	ug/L		96
32) methyl tert butyl ether	7.96	73	71252	20.55	ug/L		97
33) trans-1,2-dichloroethene	8.03	61	37200	22.05	ug/L		97
34) di-isopropyl ether	8.53	45	83379	18.94	ug/L		96
35) ethyl tert-butyl ether	8.99	59	79560	20.73	ug/L		98
36) 2-butanone	9.32	72	2773	21.56	ug/L		84
37) 1,1-dichloroethane	8.60	63	47996	21.48	ug/L		97
38) chloroprene	8.69	53	35608	22.40	ug/L		98
39) acrylonitrile	8.06	53	35949	95.77	ug/L		98
40) vinyl acetate	8.58	86	3548	20.16	ug/L		97
41) ethyl acetate	9.30	45	3075	19.10	ug/L	#	1
42) 2,2-dichloropropane	9.31	77	37361	23.15	ug/L		96

MY6161.M Mon Feb 03 17:50:16 2014 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143017.D
Acq On : 31 Jan 2014 9:23 am
Operator : prashans
Sample : CC6161-20
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 03 17:27:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) cis-1,2-dichloroethene	9.33	96	30120	21.12	ug/L		97
44) propionitrile	9.45	54	29190	203.11	ug/L		86
45) bromochloromethane	9.64	130	19953	22.14	ug/L		97
46) tetrahydrofuran	9.68	72	3165	21.06	ug/L		91
47) chloroform	9.69	83	49550	22.13	ug/L		98
48) tert-Butyl Formate	9.71	59	14492	20.56	ug/L		97
51) freon 113	6.90	151	16869	22.00	ug/L		94
52) methacrylonitrile	9.61	67	8714	20.27	ug/L		98
53) 1,1,1-trichloroethane	9.92	97	39343	23.06	ug/L		97
54) Cyclohexane	9.97	84	34937	21.70	ug/L		99
55) 2,2,4-trimethylpentane	10.30	57	91900	21.62	ug/L		98
56) tert-amyl methyl ether	10.36	73	77230	20.36	ug/L		99
58) epichlorohydrin	11.99	57	10474	98.55	ug/L		94
59) n-butyl alcohol	10.87	56	31976	912.49	ug/L		97
60) carbon tetrachloride	10.10	117	35744	21.71	ug/L		96
61) 1,1-dichloropropene	10.09	75	35262	20.82	ug/L		97
62) hexane	8.27	57	28555	18.69	ug/L		98
64) benzene	10.36	78	109580	19.54	ug/L		99
65) heptane	10.47	57	18028	19.47	ug/L		93
66) isopropyl acetate	10.27	61	9673	19.65	ug/L	#	30
67) 1,2-dichloroethane	10.40	62	35813	21.57	ug/L		95
68) trichloroethene	11.05	95	27951	20.77	ug/L		94
70) 2-nitropropane	11.85	41	7781	21.29	ug/L		89
71) 2-chloroethyl vinyl ether	11.84	63	43313	122.03	ug/L		99
72) methyl methacrylate	11.32	69	15346	18.23	ug/L	#	77
73) 1,2-dichloropropane	11.33	63	27851	19.16	ug/L		99
74) methylcyclohexane	11.23	83	38415	20.60	ug/L		96
76) dibromomethane	11.50	93	16888	21.43	ug/L		92
77) bromodichloromethane	11.62	83	38897	21.19	ug/L		99
78) cis-1,3-dichloropropene	12.06	75	45157	20.58	ug/L		100
80) 4-methyl-2-pentanone	12.14	58	9235	19.52	ug/L		97
81) toluene	12.39	91	116700	20.60	ug/L		99
82) 3-methyl-1-butanol	12.16	70	11982	374.25	ug/L		97
83) trans-1,3-dichloropropene	12.61	75	40315	21.82	ug/L		99
84) ethyl methacrylate	12.56	69	29379	20.65	ug/L		97
85) 1,1,2-trichloroethane	12.82	83	20986	21.30	ug/L		98
86) 2-hexanone	12.98	58	8555	19.10	ug/L		97
88) tetrachloroethene	12.95	166	31574	19.25	ug/L		94
89) 1,3-dichloropropane	13.00	76	39371	19.27	ug/L		99
90) butyl acetate	13.02	56	14625	17.83	ug/L		92
91) dibromochloromethane	13.25	129	30058	19.47	ug/L		99
92) 1,2-dibromoethane	13.41	107	24065	19.79	ug/L		94
93) 3,3-Dimethyl-1-Butanol	13.14	57	20870	174.84	ug/L		97
94) chlorobenzene	13.84	112	77254	18.81	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.89	131	28563	19.38	ug/L		98
96) ethylbenzene	13.87	91	128328	19.44	ug/L		98
97) m,p-xylene	13.97	106	98162	38.90	ug/L		98
98) o-xylene	14.39	91	102352	19.56	ug/L		99
99) styrene	14.41	104	77696	19.37	ug/L		100
100) bromoform	14.70	173	19542	19.20	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143017.D
Acq On : 31 Jan 2014 9:23 am
Operator : prashans
Sample : CC6161-20
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 03 17:27:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration

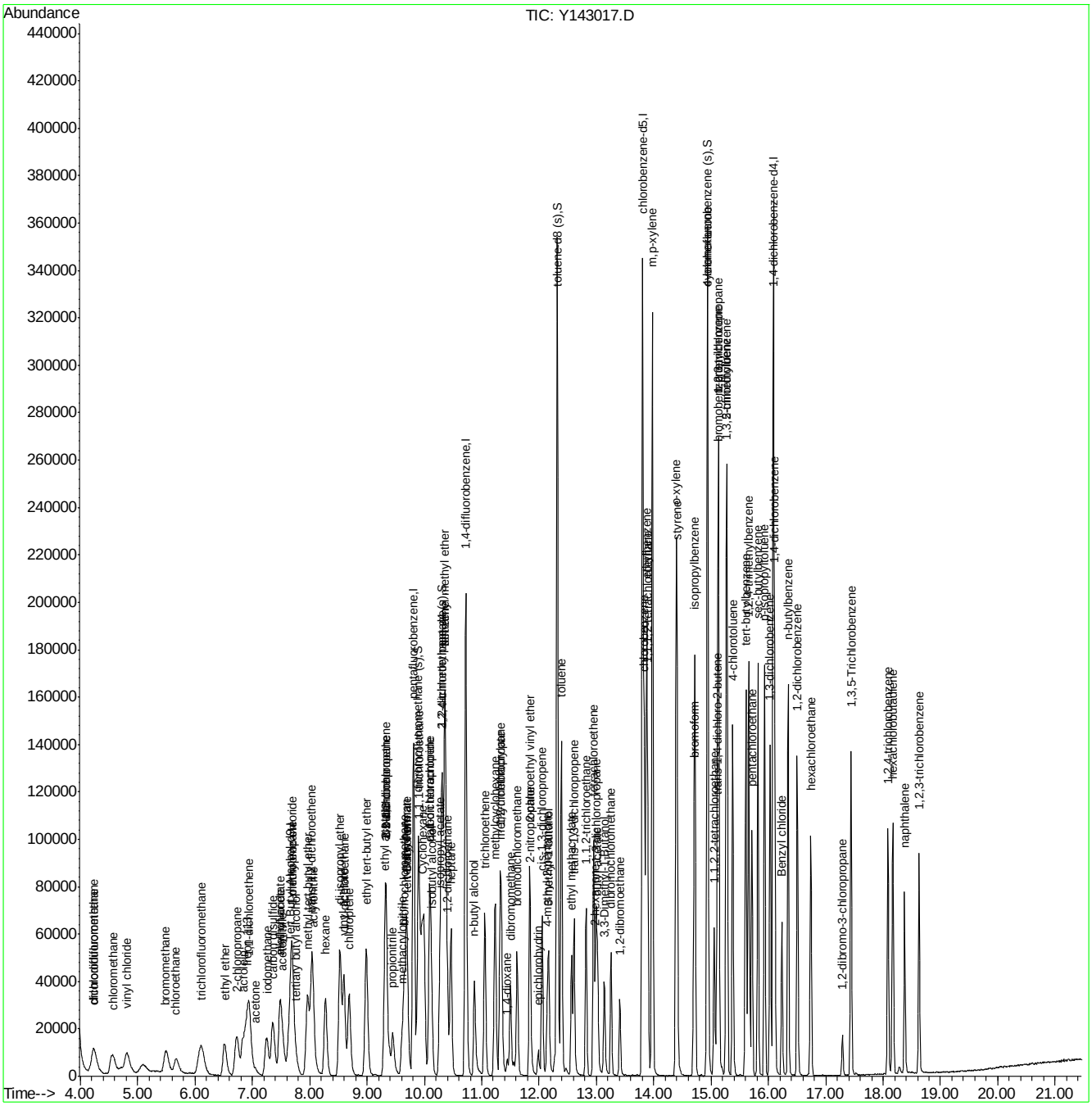
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) isopropylbenzene	14.72	105	120746	18.74	ug/L	99
105) bromobenzene	15.14	156	34626	18.39	ug/L	95
106) cyclohexanone	14.93	55	42366	272.87	ug/L	93
107) 1,1,2,2-tetrachloroethane	15.05	83	33477	19.63	ug/L	100
108) trans-1,4-dichloro-2-buten	15.10	53	6909	19.04	ug/L	94
109) 1,2,3-trichloropropane	15.13	110	7592	19.30	ug/L	92
110) n-propylbenzene	15.12	91	143048	19.64	ug/L	99
112) 2-chlorotoluene	15.28	126	31033	19.07	ug/L	92
113) 4-chlorotoluene	15.38	91	89185	18.58	ug/L	98
114) 1,3,5-trimethylbenzene	15.26	105	101713	18.88	ug/L	98
115) tert-butylbenzene	15.61	119	84355	18.70	ug/L	98
116) pentachloroethane	15.71	167	21415	18.44	ug/L	97
117) 1,2,4-trimethylbenzene	15.65	105	99275	19.12	ug/L	97
118) sec-butylbenzene	15.82	105	131068	19.46	ug/L	98
119) 1,3-dichlorobenzene	16.03	146	61507	18.07	ug/L	99
120) p-isopropyltoluene	15.93	119	105691	19.07	ug/L	99
121) 1,4-dichlorobenzene	16.11	146	62508	18.06	ug/L	99
122) 1,2-dichlorobenzene	16.51	146	58675	18.31	ug/L	98
123) n-butylbenzene	16.34	91	99354	19.96	ug/L	98
125) 1,2-dibromo-3-chloropropan	17.29	157	5252	18.57	ug/L	96
126) 1,3,5-Trichlorobenzene	17.44	180	47797	18.91	ug/L	99
127) 1,2,4-trichlorobenzene	18.09	180	37355	18.42	ug/L	95
129) hexachlorobutadiene	18.17	225	25948	18.80	ug/L	99
130) naphthalene	18.37	128	67523	17.51	ug/L	100
131) 1,2,3-trichlorobenzene	18.63	180	34066	18.15	ug/L	99
132) hexachloroethane	16.74	119	22053	20.64	ug/L	96
133) Benzyl chloride	16.23	91	48514	19.82	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y143017.D
Acq On : 31 Jan 2014 9:23 am
Operator : prashans
Sample : CC6161-20
Misc : MS62262,VY6198,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 03 17:27:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\MY6161.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Jan 08 15:57:45 2014
Response via : Initial Calibration



MY6161.M Mon Feb 03 17:50:16 2014 RPT1 Page: 4

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V3D4058

Print Analyst Name: Robert Szot

Analyst Signature:

Date: 12/18/13

Columns: 28-624/60mx0.25mmx1.4um

Method 8260B/8260C

Initial Cal. Method M3D4058

Standard Data

Lot #	Description	Conc.
V03-1727-58	8260A	100 ppm
-96	Dbz8	100ppm
-104	8260C	100ppm
-115	8260 Int std	250/25 ppm
-97	Acrolein	1000ppm

Standard Data

Lot #	Description	Conc.
V03-1727-58	Ext A	100ppm
-96	Ext B	100ppm
-104	Ext C	100ppm
-101	Ext Acrolein	1000ppm
-109	4-CP Surrogate	100ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 12/19/2013

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	3D94188	BFB	8260			1	5								
	3D94189	IC4058-0.5				2	5						ok		
	3D94190	IC4058-1				3	5						ok		
	3D94191	IC4058-2				4	5						ok		
	3D94192	IC4058-5				5	5						ok		
	3D94193	IC4058-10				6	5						ok		
	3D94194	IC4058-20				7	5						ok		
	3D94195	ICC4058-50				8	5						ok		
	3D94196	IC4058-100				9	5						ok		
	3D94197	IC4058-200				10	5						ok		
	3D94198	IB				11	5						c/o		
	3D94199	ICV4058-50				12	5						ok		

12/18/2013

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

283

Instrument Run Log V3D4058 page 1 of 1

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V3D4110 ~~V3D10~~ JM 11/28/14

Date: 11/28/2014

Print Analyst Name: Nicholas Medeiros

Analyst Signature:

Columns: ZB624

Method V8260B

Initial Cal. Method M3D4058

Standard Data

Lot #	Description	Conc.
014-TM1-417	STD A	100 ppm
-48	B	↓
-55	C	↓
-146	acrolein	1000 ppm

Standard Data

Lot #	Description	Conc.
014-1771-44	Ext A	100 ppm
- 66	B	↓
- 54	C	↓
- 42	acrolein	1000 ppm
- 35	int/surr	200/5000

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: **Date:** 1/7/2014

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
	3D95349	BFB				1							ok	2:11pm	
	Q5400 ~~Q5400~~ JM 11/28/14	CC 4058-20				2							ok		
	~~Q5401~~ ~~Q5401~~ Q5401	TB				3							c/o	Purge run ↓	
	Q5402	MB				4							NG		
	~~Q5403~~ Q5403A ~~Q5403~~ Q5404	MB BS				5							ok ok		
	~~Q5404~~ Q5405	JB 58428-6 MS	62148 TCLP2r VMSTBA	W	3	6	10/50		5X				ok		✓
	~~Q5405~~ Q5406	JB58428-6 MSD	↓	↓	3	7	10/50		5X				ok		✓
	~~Q5406~~ Q5407	TB				8							c/o		
	Q5408	JB58445-2	~~62148 TCLP2~~ ~~VMSTBA~~	W	2	9	5/50		10X				ok	62170 SL Dil due to Foaming	
	Q5409	JB58483-1	62172 TCLP2	W	2	10	5		1X				ok		✓
	Q5410	JB58483-2	↓	↓	2	11	5		1X				ok		✓
	Q5411	JB58483-3	↓	↓	2	12	5		1X				ok		✓
	Q5412	JB58468-2	62192 SL	W	1	13	5		1X				ok		✓
	Q5413	JB58468-3	↓	↓	1	14	5		1X				ok		✓
	Q5414	JB58428-1	62148 TCLP2r VMSTBA	W	2	15	5/50		10X				ok		✓
	Q5415	JB58428-2	↓	↓	1	16	5		1X				ok		✓
	Q5416	JB58429-3	↓	↓	1	17	5		1X				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

183

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: 3D4110

D Date: 1/28/2014

Print Analyst Name: Nicholas Mirdellos

Analyst Signature:

Columns: ZB 624

Method V8260B

Initial Cal. Method M3D4058

Standard Data

Lot #	Description	Conc.
	refer to	

Standard Data

Lot #	Description	Conc.
Page	183	

[1] Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply [2] with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 1/29/2014

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
	3D95417	JB58428-4	624MS TCLLIQT VMS+TBA	W	1	18	5		1X		✓	✓	OK		
	95418	JB58428-4			1	19	5/50		10X		✓		NOT NEED		✓
	95419	JB58428-5			1	20	5		1X		✓	✓	OK		✓
	95420	JB58428-6			3	21	10/50		5X		✓	✓	OK		✓
	95421	JB58428-6			3	22	1/50		50X		✓	✓	NOT NEED		✓
	95422	JB58428-7			1	23	10/50		5X		✓	✓	OK RR	RR 1X combine	✓
	95423	JB58428-7			1	24	1/50		50X		✓	✓	NOT NEED		✓
	95424	JB58428-8			1	25	5		1X		✓	✓	OK	2nd Am	✓
	95425	JB58428-4				26	5		1X				NOT LOAD		
	95426	JB58428-9				27	5/50		10X				↓		
	95427	JB58428-10				28	5		1X				NOT LOAD		
	95428	JB58428-10				29	5/50		10X						
	95429	JB58428-11				30	5/50		10X						
	95430	JB58519-2	TCLLIQ VMS+TBA 624.2			31	2.5/50		2X						

NM 1/28/2014

TX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
mple Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
computer miscalculation; 4 = analyst's correction error
rm: OR001-9
v. Date: 2/14/2007

185

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VY6161

Print Analyst Name: Prashant B Shukla

Analyst Signature:

Date: 01/07/2014

Columns: 2B 624

Method V8260

Initial Cal. Method MY6161

Standard Data

Lot #	Description	Conc.
VY-1727-97	Acrolein	1000 PPM
101	Ext Acrolein	↓
107	Int	250/250 PPM
137	Surr	↓
VY-1771-01	Std + Eth Ac	100 PPM

Standard Data

Lot #	Description	Conc.
VY-1727-134	Std A	100 PPM
136	B	
VY-1771-01	C	
VY-1727-138	Ext A	
143	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:** 1/9/14

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
Y															
	142283	BFB	TUNE V8260			1	5						ok	11:34 AM	
	142284	IC 6161-20	IC V8260			2	5						ok	10µl Std A+B+C+AC+S,EtOH,Ac +VB 130µl +Surr	50 ml DI H2O
	142285	IC 6161-10	IC V8260			3	5						ok	5µl Std A+B+C+AC+S,EtOH,Ac +VB 130µl +Surr	50 ml DI H2O
	142286	IC 6161-5	IC V8260			4	5						ok	5µl Std A+B+C+AC+S,EtOH,Ac +VB, 13 Bmix +Surr	100 ml DI H2O
	142287	IC 6161-2	IC V8260			5	5						ok	2µl Std A+B+C+S,EtOH,AC+Surr +100µl AC +100µl VB Bmix	100 ml DI H2O
	142288	IC 6161-1	IC V8260			6	5						ok	1µl Std A+B+C+S,EtOH,AC+Surr +200µl AC +100µl VB, 13 Bmix	100 ml DI H2O
	142289	IC 6161-0.5	IC V8260			7	5						ok	1µl Std A+B+C+S,EtOH,AC+VB +AC+Surr	200 ml DI H2O
	142290	IC 6161-50	IC V8260			8	5						ok	250µl Std A+B+C+AC+S,EtOH,AC +VB,13 Bmix +Surr	50 ml DI H2O
	142291	IC 6161-100	IC V8260			9	5						ok	100µl Std A+B+C+S,EtOH,AC+VB Surr +0.5µl AC +0.5µl VB13 Bmix	50 ml DI H2O
	142292	IC 6161-200	IC V8260			10	5						ok	400µl Std A+B+C+S,EtOH,AC+Surr +1µl AC +1.1 VB, 13 Bmix	50 ml DI H2O
	142293	IB				11	5						-		
	142294	IB				12	5						-		
	142295	ICV6161-50	ICV V8260			13	5						ok	250µl Ext A+B+C+AC 250µl Std S,EtOH,AC +VB 130µl Surr	50 ml DI H2O
	142296	IB				14	5						-		

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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

151

Instrument Run Log VY6161 page 1 of 1
ACCUTEST LABORATORIES JB58468

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VY6198

Print Analyst Name: Prashant B Sakal

Analyst Signature:

Date: 1/31/14

Columns: 28 62

Method VSPCC

Initial Cal. Method MY6161

Standard Data

Lot #	Description	Conc.
1771-88	Arclen	100 PPM
11	Ext Arclen	1
35	Int Surr	200 PPM
61	Ext Hexane	

Standard Data

Lot #	Description	Conc.
1771-67	STD A	100 PPM
63	B	
68	C	
69	Ext A	
70	B	
	C	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 2/5/14

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
	1H3016	BFB				1							CW	8:03 AM	
	1H3017	CC 6161-20				2							CW	1ml STD A+B+C+IAC / 5ml DI H2O	
	1H3018	MB				3							CW		
	1H3019	BS				4							CW	5ml Ext A+B+C+IAC+Hexane / 5ml DI H2O	
R	1H3020	JB58620-5	MS 62262 BTX VLS	SL	4	5	5.3						CW		
	1H3021	JB58585-1	MS 62162 TCL 2nd TBA	SL	5	6	5.6						CW		
	1H3022	JB58585-2			4	7	4.7						CW		
R	1H3023	JB58429-4	MS 62169 TCL 2nd +		5	8	5.2						CW	12:33	
R	1H3024	JB58431-1	MS 62150 TCL 2nd +		5	9	5.1						CW		
R	1H3025	JB58431-2			5	10	5.2						CW		
R	1H3026	JB58431-2x	+ TBA		5	11	6.1						CW		
	1H3027	JB58585-2D	62162 TCL 2nd + TBA		5	12	5.1						NC		
R	1H3028	JB58633-21	MS 62213 TCL 2nd		4	13	5.8						CW	to the folder Need SMED	
	1H3029	JB58585-1MS	MS 62162 TCL 2nd + TBA		6	14	5.5						CW		
	1H3030	IB				15									
	1H3031	JB58468-1 / JB58585-5		STD	4	X	7.7 / 5.0						CW	MS 62151 SL, VLS DOD	
A	1H3032	JB58620-4	MS 62262 TCL 2nd + TBA	SL	5	17	6.2						CW		

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

281

Form: OR001-9
Rev. Date: 2/14/2007

Instrument Run Log VY6198 page 1 of 2

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VY6198

Date: 1/31/14

Print Analyst Name: Prashant B Shukla

Analyst Signature:

Columns: 23 624

Method VY 8260

Initial Cal. Method MVY6161

Standard Data

Lot #	Description	Conc.
	Refer to	

Standard Data

Lot #	Description	Conc.
	Page # 281	

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: Jr cell Date: 2/5/14

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
R	1h3033	JB58468-1 JB58620-6	MS 12181 BTEX+MTBE	S/L	3	13	5.43	1131					Not used	MS 12181	
R	1h3034	JB58620-7	TCL 8260 + TBA	S/L	5	19	4.9						pm		
R	1h3035	JB58447-9 JB58620-8		S/L	5	20	5.8						pm	MS 12182	
R	1h3036	JB58447-9 Dup JB58620-9		S/L	5	21	5.1						pm		
R	1h3037	JB58633-11	MS 12183 TCL 8260	S/L	4	22	4.7						pm		
R	1h3038	JB58633-15		S/L	4	23	5.6						pm	8:01 PM	
	1h3039	BFB2				24							Not used	8:34 PM	
	1h3040	CC 6161-50				25							NG	20 mL Std + IS + TBA + Surr + Allico Some Tentative	
	1h3041	IB				26									
	1h3042	MB 2				27							Not used	Not used	
	1h3043	JB58515-6A	MS 12184 TCL+TBA	S/L	10	28	5.8						RR		
	1h3044	JB58515-12A			10	29	4.9								
	1h3045	JB58515-15A			10	30	6.6								
	1h3046	558447-10	MS 12185	S/L	5	31	4.6								

2/12/14

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

283

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: JB58468
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample: JB58468-1 **Analyzed:** 28-JAN-14 by GL **Method:** SM2540 G-97
ClientID: FTMM-22-SS-SB3-6.5-7-QA

Wet Weight (Total)	31.28	g
Tare Weight	25.33	g
Dry Weight (Total)	30.4	g
Solids, Percent	85.2	%

New Jersey ACCUTEST LABORATORIES

Misc. Raw Data

Raw Data

ACCUTEST LABORATORIES

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
1/2/2014-35	JB58468-1.2	36.4100	43.5600	7.1500	1/24/2014 5:27:47 PM	dj239	na	10ml MeOH	
1/6/2014-660	JB58468-1.3	34.1700	39.4300	5.2600	1/25/2014 10:00:46 AM	di	jp	DI water	
1/11/2014-1625	JB58468-1.4	30.4800	38.2000	7.7200	1/24/2014 5:28:52 PM	di	ht	DI water	

New Jersey ACCUTEST LABORATORIES

03/25/14

Technical Report for

Parsons Engineering Science

Fort Monmouth, Oceanport, Monmouth County, NJ

W912DY-09-D-0062 TSK 0012 PROJ NO. 36985 Project#748810-03000

Accutest Job Number: JB61656

Sampling Date: 03/12/14

Report to:

Parsons Engineering Science
200 Cottontail Lane, South
Somerset, NJ 08861
Sandra.delasFuentes@parsons.com

ATTN: Sandra de las Fuentes

Total number of pages in report: **134**

NELAP ACCREDITED TNI LABORATORY

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: Matt Cordova 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

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: JB61656-1: FTMM-53-GW-699MW01-10.55 QA 7
4.2: JB61656-2: FTMM-TB031214 10
Section 5: Misc. Forms 13
5.1: Chain of Custody 14
5.2: Sample Tracking Chronicle 16
5.3: Internal Chain of Custody 17
Section 6: GC/MS Volatiles - QC Data Summaries 18
6.1: Method Blank Summary 19
6.2: Blank Spike Summary 22
6.3: Matrix Spike/Matrix Spike Duplicate Summary 24
6.4: Instrument Performance Checks (BFB) 26
6.5: Internal Standard Area Summaries 28
6.6: Surrogate Recovery Summaries 29
6.7: Initial and Continuing Calibration Summaries 30
Section 7: GC/MS Volatiles - Raw Data 44
7.1: Samples 45
7.2: Method Blanks 62
7.3: Blank Spikes 70
7.4: Matrix Spike/Matrix Spike Duplicates 74
7.5: Instrument Performance Checks (BFB) 82
7.6: Initial and Continuing Calibarations 86
7.7: Instrument Run Logs 132

Accutest Laboratories

Sample Summary

Parsons Engineering Science

Job No: JB61656

Fort Monmouth, Oceanport, Monmouth County, NJ
Project No: W912DY-09-D-0062 TSK 0012 PROJ NO. 36985 Project#748810-03000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB61656-1	03/12/14	12:30	ZL	03/12/14	AQ	Ground Water	FTMM-53-GW-699MW01-10.55 QA
JB61656-2	03/12/14	12:30	ZL	03/12/14	AQ	Trip Blank Water	FTMM-TB031214

2

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Parsons Engineering Science	**Job No**	JB61656
Site:	Fort Monmouth, Oceanport,Monmouth County,NJ	**Report Date**	3/24/2014 4:41:25 PM

On 03/12/2014, 1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB61656 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: AQ **Batch ID:** V2D5481

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB61656-1MS, JB61656-1MSD were used as the QC samples indicated.

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: JB61656
Account: Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Collected: 03/12/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JB61656-1	**FTMM-53-GW-699MW01-10.55 QA**					
Ethylbenzene		0.72	0.50	0.25	ug/l	SW846 8260B
JB61656-2	**FTMM-TB031214**					

No hits reported in this sample.

New Jersey ACCUTEST LABORATORIES

4

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-53-GW-699MW01-10.55 QA
Lab Sample ID: JB61656-1
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 03/12/14
Date Received: 03/12/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D130998.D	1	03/21/14	BM	n/a	n/a	V2D5481
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.35 U	0.50	0.35	ug/l	
108-86-1	Bromobenzene	0.50 U	5.0	0.50	ug/l	
74-97-5	Bromochloromethane	1.0 U	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	2.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	2.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	1.0 U	1.0	1.0	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	1.0 U	1.0	1.0	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	1.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-53-GW-699MW01-10.55 QA
Lab Sample ID: JB61656-1
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 03/12/14
Date Received: 03/12/14
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.72	0.50	0.25	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
591-78-6	2-Hexanone	2.0 U	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	5.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U	5.0	5.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	2.0	0.50	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	5.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	5.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	2.0 U	5.0	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.19 U	1.0	0.19 [a]	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		79-117%
17060-07-0	1,2-Dichloroethane-D4	103%		72-123%
2037-26-5	Toluene-D8	101%		82-118%
460-00-4	4-Bromofluorobenzene	98%		75-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-53-GW-699MW01-10.55 QA		
Lab Sample ID:	JB61656-1	**Date Sampled:**	03/12/14
Matrix:	AQ - Ground Water	**Date Received:**	03/12/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	3.51	260	ug/l	JNB
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

(a) Value reported is laboratory DL (MDL).

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-TB031214
Lab Sample ID: JB61656-2
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 03/12/14
Date Received: 03/12/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D130999.D	1	03/21/14	BM	n/a	n/a	V2D5481
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.35 U	0.50	0.35	ug/l	
108-86-1	Bromobenzene	0.50 U	5.0	0.50	ug/l	
74-97-5	Bromochloromethane	1.0 U	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	2.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	2.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	1.0 U	1.0	1.0	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	1.0 U	1.0	1.0	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	1.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-TB031214
Lab Sample ID: JB61656-2
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 03/12/14
Date Received: 03/12/14
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.25 U	0.50	0.25	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
591-78-6	2-Hexanone	2.0 U	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	5.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U	5.0	5.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	2.0	0.50	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	5.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	5.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	2.0 U	5.0	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.19 U	1.0	0.19 [a]	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		79-117%
17060-07-0	1,2-Dichloroethane-D4	104%		72-123%
2037-26-5	Toluene-D8	101%		82-118%
460-00-4	4-Bromofluorobenzene	98%		75-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-TB031214		
Lab Sample ID:	JB61656-2	**Date Sampled:**	03/12/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/12/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	3.52	26	ug/l	JNB
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

(a) Value reported is laboratory DL (MDL).

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

New Jersey ACCUTEST LABORATORIES

5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

PAGE 1 OF 1

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

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # JB61656

Client / Reporting Information

Company Name: Parsons
Street Address: 100 High St.
City State Zip: Boston, MA 02210
Project Contact: chris.greene@parsons.com
E-mail
Phone #: 617 449 1573 Fax #
Sampler(s) Name(s): Z. Lavy Phone #

Project Information

Project Name: FTMM - 1Q 2014
Street
City State: Oceanport, NJ
Project #
Client Purchase Order #: 748810-03000
Project Manager: Chris Greene

Billing Information (if different from Report to)

Company Name
Street Address
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet)

VOCs + TICs 8260C

Matrix Codes

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	FTMM-53-GW-699MW01-10.55QA		3/12/14	1230	ZL	GW	3	3								V6317
2	FTMM-TB031214		3/12/14	1230	ZL	TB	2	2								

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] 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

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 ERPTAS.Txt

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

Comments / Special Instructions

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		3/12/14	1	2 3-12-14 1410	1640	2
3	Relinquished by Sampler:	Date Time:	3	4	Date Time:	4
5	Relinquished by:	Date Time:	5	Custody Seal # 394 [X] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [X] Cooler Temp. 4.4

ZA 1

IRP JK

JB61656: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB61656 **Client:** **Project:**

Date / Time Received: 3/12/2014 **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (4.4/4.4); 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:	IR Gun		
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

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB61656: Chain of Custody
Page 2 of 2

Accutest Laboratories

Internal Sample Tracking Chronicle

Parsons Engineering Science

Job No: JB61656

Fort Monmouth, Oceanport, Monmouth County, NJ
Project No: W912DY-09-D-0062 TSK 0012 PROJ NO. 36985 Project#748810-03000

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB61656-1	Collected: 12-MAR-14 12:30 By: ZL			Received: 12-MAR-14	By: OS	
FTMM-53-GW-699MW01-10.55 QA						
JB61656-1	SW846 8260B	21-MAR-14 12:42	BM			V8260SL
JB61656-2	Collected: 12-MAR-14 12:30 By: ZL			Received: 12-MAR-14	By: OS	
FTMM-TB031214						
JB61656-2	SW846 8260B	21-MAR-14 13:12	BM			V8260SL

Accutest Internal Chain of Custody

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Received: 03/12/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB61656-1.1	Secured Storage	Benjamin Mendez	03/21/14 11:51	Retrieve from Storage
JB61656-1.1	Benjamin Mendez	GCMS2D	03/21/14 11:51	Load on Instrument
JB61656-1.1	GCMS2D	Benjamin Mendez	03/24/14 09:25	Unload from Instrument
JB61656-1.1	Benjamin Mendez	Secured Storage	03/24/14 09:25	Return to Storage
JB61656-1.2	Secured Storage	Benjamin Mendez	03/21/14 14:31	Retrieve from Storage
JB61656-1.2	Benjamin Mendez	GCMS2D	03/21/14 14:31	Load on Instrument
JB61656-1.2	GCMS2D	Benjamin Mendez	03/24/14 09:25	Unload from Instrument
JB61656-1.2	Benjamin Mendez	Secured Storage	03/24/14 09:25	Return to Storage
JB61656-2.2	Secured Storage	Benjamin Mendez	03/21/14 11:51	Retrieve from Storage
JB61656-2.2	Benjamin Mendez	GCMS2D	03/21/14 11:51	Load on Instrument
JB61656-2.2	GCMS2D	Benjamin Mendez	03/24/14 09:25	Unload from Instrument
JB61656-2.2	Benjamin Mendez	Secured Storage	03/24/14 09:25	Return to Storage

New Jersey ACCUTEST LABORATORIES

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: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D5481-MB	2D130995.D	1	03/21/14	BM	n/a	n/a	V2D5481

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

JB61656-1, JB61656-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	2.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.23	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D5481-MB	2D130995.D	1	03/21/14	BM	n/a	n/a	V2D5481

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

JB61656-1, JB61656-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	0.50	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.32	ug/l	
100-42-5	Styrene	ND	2.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	79-117%
17060-07-0	1,2-Dichloroethane-D4	104%	72-123%
2037-26-5	Toluene-D8	100%	82-118%
460-00-4	4-Bromofluorobenzene	96%	75-118%

Method Blank Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D5481-MB	2D130995.D	1	03/21/14	BM	n/a	n/a	V2D5481

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

JB61656-1, JB61656-2

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	3.51	67	ug/l	JN
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D5481-BS	2D130996.D	1	03/21/14	BM	n/a	n/a	V2D5481

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

JB61656-1, JB61656-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	47.2	94	49-153
71-43-2	Benzene	50	52.9	106	80-119
108-86-1	Bromobenzene	50	48.7	97	80-122
74-97-5	Bromochloromethane	50	47.4	95	84-123
75-27-4	Bromodichloromethane	50	52.3	105	83-127
75-25-2	Bromoform	50	46.3	93	71-133
74-83-9	Bromomethane	50	51.9	104	62-143
78-93-3	2-Butanone (MEK)	50	45.8	92	64-136
104-51-8	n-Butylbenzene	50	56.3	113	79-128
135-98-8	sec-Butylbenzene	50	53.2	106	79-125
98-06-6	tert-Butylbenzene	50	52.2	104	78-128
56-23-5	Carbon tetrachloride	50	57.1	114	78-138
108-90-7	Chlorobenzene	50	51.3	103	83-118
75-00-3	Chloroethane	50	53.7	107	67-143
67-66-3	Chloroform	50	54.8	110	81-124
74-87-3	Chloromethane	50	54.8	110	56-146
95-49-8	o-Chlorotoluene	50	50.3	101	80-124
106-43-4	p-Chlorotoluene	50	51.3	103	79-121
96-12-8	1,2-Dibromo-3-chloropropane	50	41.2	82	63-137
124-48-1	Dibromochloromethane	50	49.7	99	79-125
106-93-4	1,2-Dibromoethane	50	46.6	93	79-122
95-50-1	1,2-Dichlorobenzene	50	50.0	100	81-120
541-73-1	1,3-Dichlorobenzene	50	50.5	101	81-120
106-46-7	1,4-Dichlorobenzene	50	49.9	100	81-117
75-71-8	Dichlorodifluoromethane	50	55.3	111	43-143
75-34-3	1,1-Dichloroethane	50	55.9	112	80-129
107-06-2	1,2-Dichloroethane	50	55.2	110	75-133
75-35-4	1,1-Dichloroethene	50	49.9	100	74-127
156-59-2	cis-1,2-Dichloroethene	50	49.0	98	79-123
156-60-5	trans-1,2-Dichloroethene	50	49.5	99	75-123
78-87-5	1,2-Dichloropropane	50	53.5	107	80-125
142-28-9	1,3-Dichloropropane	50	49.9	100	80-119
594-20-7	2,2-Dichloropropane	50	56.9	114	53-140
563-58-6	1,1-Dichloropropene	50	51.8	104	79-125
10061-01-5	cis-1,3-Dichloropropene	50	46.6	93	76-118
10061-02-6	trans-1,3-Dichloropropene	50	49.1	98	79-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D5481-BS	2D130996.D	1	03/21/14	BM	n/a	n/a	V2D5481

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

JB61656-1, JB61656-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	53.7	107	82-119
87-68-3	Hexachlorobutadiene	50	50.4	101	66-137
591-78-6	2-Hexanone	50	44.6	89	60-136
98-82-8	Isopropylbenzene	50	52.8	106	77-127
99-87-6	p-Isopropyltoluene	50	52.8	106	82-128
1634-04-4	Methyl Tert Butyl Ether	100	100	100	75-122
108-10-1	4-Methyl-2-pentanone(MIBK)	50	46.3	93	67-133
75-09-2	Methylene chloride	50	50.1	100	74-123
91-20-3	Naphthalene	50	44.4	89	62-133
103-65-1	n-Propylbenzene	50	56.2	112	80-128
100-42-5	Styrene	50	52.5	105	80-120
630-20-6	1,1,1,2-Tetrachloroethane	50	51.1	102	81-123
79-34-5	1,1,2,2-Tetrachloroethane	50	44.3	89	69-125
127-18-4	Tetrachloroethene	50	49.6	99	73-134
108-88-3	Toluene	50	51.6	103	82-120
87-61-6	1,2,3-Trichlorobenzene	50	47.5	95	63-138
120-82-1	1,2,4-Trichlorobenzene	50	49.7	99	74-136
71-55-6	1,1,1-Trichloroethane	50	57.5	115	80-131
79-00-5	1,1,2-Trichloroethane	50	47.7	95	79-124
79-01-6	Trichloroethene	50	49.6	99	84-126
75-69-4	Trichlorofluoromethane	50	56.4	113	67-145
96-18-4	1,2,3-Trichloropropane	50	44.4	89	70-130
95-63-6	1,2,4-Trimethylbenzene	50	53.0	106	81-123
108-67-8	1,3,5-Trimethylbenzene	50	51.9	104	79-124
75-01-4	Vinyl chloride	50	53.9	108	57-132
	m,p-Xylene	100	106	106	81-119
95-47-6	o-Xylene	50	53.0	106	82-120
1330-20-7	Xylene (total)	150	159	106	82-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	79-117%
17060-07-0	1,2-Dichloroethane-D4	102%	72-123%
2037-26-5	Toluene-D8	101%	82-118%
460-00-4	4-Bromofluorobenzene	96%	75-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB61656-1MS	2D131004.D	1	03/21/14	BM	n/a	n/a	V2D5481
JB61656-1MSD	2D131005.D	1	03/21/14	BM	n/a	n/a	V2D5481
JB61656-1	2D130998.D	1	03/21/14	BM	n/a	n/a	V2D5481

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

JB61656-1, JB61656-2

CAS No.	Compound	JB61656-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	U	50	44.4	89	43.7	87	2	45-157/19
71-43-2	Benzene	0.50	U	50	49.0	98	46.5	93	5	49-138/12
108-86-1	Bromobenzene	5.0	U	50	48.0	96	46.9	94	2	71-130/13
74-97-5	Bromochloromethane	5.0	U	50	47.0	94	45.2	90	4	75-130/12
75-27-4	Bromodichloromethane	1.0	U	50	51.3	103	49.6	99	3	73-132/13
75-25-2	Bromoform	2.0	U	50	45.1	90	44.2	88	2	61-138/13
74-83-9	Bromomethane	2.0	U	50	44.1	88	41.6	83	6	49-146/18
78-93-3	2-Butanone (MEK)	10	U	50	45.6	91	43.1	86	6	58-144/14
104-51-8	n-Butylbenzene	2.0	U	50	50.8	102	47.4	95	7	61-140/14
135-98-8	sec-Butylbenzene	2.0	U	50	48.0	96	45.0	90	6	61-137/14
98-06-6	tert-Butylbenzene	2.0	U	50	46.8	94	44.3	89	5	63-137/14
56-23-5	Carbon tetrachloride	1.0	U	50	49.6	99	45.1	90	10	57-147/16
108-90-7	Chlorobenzene	1.0	U	50	48.7	97	47.2	94	3	69-129/12
75-00-3	Chloroethane	1.0	U	50	47.1	94	42.6	85	10	52-145/17
67-66-3	Chloroform	1.0	U	50	51.0	102	48.8	98	4	68-131/13
74-87-3	Chloromethane	1.0	U	50	48.6	97	45.1	90	7	43-145/17
95-49-8	o-Chlorotoluene	5.0	U	50	47.8	96	46.2	92	3	67-132/13
106-43-4	p-Chlorotoluene	5.0	U	50	49.9	100	47.9	96	4	67-130/13
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	50	41.7	83	40.3	81	3	58-143/14
124-48-1	Dibromochloromethane	1.0	U	50	48.7	97	47.8	96	2	71-131/12
106-93-4	1,2-Dibromoethane	1.0	U	50	46.2	92	45.1	90	2	72-130/12
95-50-1	1,2-Dichlorobenzene	1.0	U	50	49.8	100	48.0	96	4	71-128/12
541-73-1	1,3-Dichlorobenzene	1.0	U	50	49.5	99	47.8	96	3	70-128/13
106-46-7	1,4-Dichlorobenzene	1.0	U	50	48.9	98	47.5	95	3	70-126/12
75-71-8	Dichlorodifluoromethane	5.0	U	50	46.5	93	41.9	84	10	35-161/21
75-34-3	1,1-Dichloroethane	1.0	U	50	50.8	102	48.1	96	5	64-136/14
107-06-2	1,2-Dichloroethane	1.0	U	50	54.0	108	52.1	104	4	69-138/12
75-35-4	1,1-Dichloroethene	1.0	U	50	44.8	90	40.1	80	11	50-141/17
156-59-2	cis-1,2-Dichloroethene	1.0	U	50	46.8	94	44.9	90	4	60-135/13
156-60-5	trans-1,2-Dichloroethene	1.0	U	50	46.2	92	42.8	86	8	58-134/15
78-87-5	1,2-Dichloropropane	1.0	U	50	50.5	101	48.9	98	3	69-132/12
142-28-9	1,3-Dichloropropane	2.0	U	50	49.3	99	48.4	97	2	72-126/12
594-20-7	2,2-Dichloropropane	2.0	U	50	55.8	112	51.1	102	9	48-143/16
563-58-6	1,1-Dichloropropene	2.0	U	50	47.6	95	44.1	88	8	59-139/15
10061-01-5	cis-1,3-Dichloropropene	1.0	U	50	50.2	100	48.5	97	3	73-129/13
10061-02-6	trans-1,3-Dichloropropene	1.0	U	50	50.0	100	48.0	96	4	72-129/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB61656-1MS	2D131004.D	1	03/21/14	BM	n/a	n/a	V2D5481
JB61656-1MSD	2D131005.D	1	03/21/14	BM	n/a	n/a	V2D5481
JB61656-1	2D130998.D	1	03/21/14	BM	n/a	n/a	V2D5481

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

JB61656-1, JB61656-2

CAS No.	Compound	JB61656-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	0.72		50	50.0	99	48.0	95	4	48-139/13
87-68-3	Hexachlorobutadiene	2.0 U		50	45.4	91	43.2	86	5	50-144/16
591-78-6	2-Hexanone	5.0 U		50	44.6	89	43.6	87	2	55-146/15
98-82-8	Isopropylbenzene	0.25		50	48.3	96	45.5	91	6	61-138/14
99-87-6	p-Isopropyltoluene	5.0 U		50	48.0	96	44.9	90	7	63-135/14
1634-04-4	Methyl Tert Butyl Ether	1.0 U		50	51.4	103	48.6	97	6	63-134/12
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U		50	46.1	92	43.8	88	5	62-144/13
75-09-2	Methylene chloride	2.0 U		50	49.3	99	46.7	93	5	64-131/13
91-20-3	Naphthalene	5.0 U		50	44.8	90	44.0	88	2	50-149/15
103-65-1	n-Propylbenzene	0.49		50	49.3	98	46.4	92	6	57-140/14
100-42-5	Styrene	2.0 U		50	49.6	99	48.7	97	2	62-133/13
630-20-6	1,1,1,2-Tetrachloroethane	5.0 U		50	49.2	98	48.3	97	2	71-130/13
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		50	46.2	92	44.6	89	4	65-134/12
127-18-4	Tetrachloroethene	1.0 U		50	43.8	88	41.5	83	5	53-144/15
108-88-3	Toluene	1.0 U		50	48.0	96	45.9	92	4	54-138/13
87-61-6	1,2,3-Trichlorobenzene	5.0 U		50	46.0	92	45.3	91	2	55-142/15
120-82-1	1,2,4-Trichlorobenzene	5.0 U		50	48.3	97	47.6	95	1	64-138/14
71-55-6	1,1,1-Trichloroethane	1.0 U		50	51.1	102	47.1	94	8	60-143/15
79-00-5	1,1,2-Trichloroethane	1.0 U		50	47.0	94	46.0	92	2	71-130/12
79-01-6	Trichloroethene	1.0 U		50	45.1	90	42.5	85	6	59-140/14
75-69-4	Trichlorofluoromethane	5.0 U		50	49.2	98	43.7	87	12	50-158/20
96-18-4	1,2,3-Trichloropropane	5.0 U		50	45.1	90	44.4	89	2	64-138/12
95-63-6	1,2,4-Trimethylbenzene	0.63		50	50.0	99	48.3	95	3	51-140/13
108-67-8	1,3,5-Trimethylbenzene	2.0 U		50	48.8	98	46.7	93	4	58-138/14
75-01-4	Vinyl chloride	1.0 U		50	46.4	93	42.1	84	10	41-151/18
	m,p-Xylene	1.0 U		100	97.2	97	93.5	94	4	49-138/13
95-47-6	o-Xylene	1.0 U		50	49.6	99	47.8	96	4	59-134/12
1330-20-7	Xylene (total)	1.0 U		150	147	98	141	94	4	53-136/12

CAS No.	Surrogate Recoveries	MS	MSD	JB61656-1	Limits
1868-53-7	Dibromofluoromethane	98%	96%	98%	79-117%
17060-07-0	1,2-Dichloroethane-D4	100%	98%	103%	72-123%
2037-26-5	Toluene-D8	102%	101%	101%	82-118%
460-00-4	4-Bromofluorobenzene	98%	99%	98%	75-118%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V2D5448-BFB
Lab File ID: 2D130200.D
Instrument ID: GCMS2D
Injection Date: 02/26/14
Injection Time: 10:37

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20053	18.3		Pass
75	30.0 - 60.0% of mass 95	49965	45.6		Pass
95	Base peak, 100% relative abundance	109685	100.0		Pass
96	5.0 - 9.0% of mass 95	7131	6.50		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	100520	91.6		Pass
175	5.0 - 9.0% of mass 174	8041	7.33	(8.00) [a]	Pass
176	95.0 - 101.0% of mass 174	98669	90.0	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	6456	5.89	(6.54) [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
V2D5448-IC5448	2D130201.D	02/26/14	11:22	00:45	Initial cal 0.5
V2D5448-IC5448	2D130202.D	02/26/14	11:52	01:15	Initial cal 1
V2D5448-IC5448	2D130203.D	02/26/14	12:22	01:45	Initial cal 2
V2D5448-IC5448	2D130204.D	02/26/14	12:52	02:15	Initial cal 5
V2D5448-IC5448	2D130206.D	02/26/14	14:48	04:11	Initial cal 20
V2D5448-ICC5448	2D130207.D	02/26/14	15:18	04:41	Initial cal 50
V2D5448-IC5448	2D130208.D	02/26/14	15:48	05:11	Initial cal 100
V2D5448-IC5448	2D130209.D	02/26/14	16:19	05:42	Initial cal 200
V2D5448-IC5448	2D130212.D	02/26/14	17:50	07:13	Initial cal 10
V2D5448-ICV5448	2D130213.D	02/26/14	18:20	07:43	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample:	V2D5481-BFB	**Injection Date:**	03/21/14
Lab File ID:	2D130992.D	**Injection Time:**	09:04
Instrument ID:	GCMS2D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15558	20.8		Pass
75	30.0 - 60.0% of mass 95	36504	48.7		Pass
95	Base peak, 100% relative abundance	74978	100.0		Pass
96	5.0 - 9.0% of mass 95	4879	6.51		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	66384	88.5		Pass
175	5.0 - 9.0% of mass 174	5307	7.08	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	65373	87.2	(98.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4336	5.78	(6.63) [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
V2D5481-CC5448	2D130993.D	03/21/14	09:36	00:32	Continuing cal 20
V2D5481-MB	2D130995.D	03/21/14	11:03	01:59	Method Blank
V2D5481-BS	2D130996.D	03/21/14	11:42	02:38	Blank Spike
ZZZZZZ	2D130997.D	03/21/14	12:12	03:08	(unrelated sample)
JB61656-1	2D130998.D	03/21/14	12:42	03:38	FTMM-53-GW-699MW01-10.55 QA
JB61656-2	2D130999.D	03/21/14	13:12	04:08	FTMM-TB031214
ZZZZZZ	2D131000.D	03/21/14	13:41	04:37	(unrelated sample)
ZZZZZZ	2D131001.D	03/21/14	14:12	05:08	(unrelated sample)
ZZZZZZ	2D131002.D	03/21/14	14:41	05:37	(unrelated sample)
ZZZZZZ	2D131003.D	03/21/14	15:11	06:07	(unrelated sample)
JB61656-1MS	2D131004.D	03/21/14	15:41	06:37	Matrix Spike
JB61656-1MSD	2D131005.D	03/21/14	16:11	07:07	Matrix Spike Duplicate
ZZZZZZ	2D131007.D	03/21/14	17:12	08:08	(unrelated sample)
ZZZZZZ	2D131008.D	03/21/14	17:41	08:37	(unrelated sample)
ZZZZZZ	2D131009.D	03/21/14	18:11	09:07	(unrelated sample)
ZZZZZZ	2D131010.D	03/21/14	18:41	09:37	(unrelated sample)
ZZZZZZ	2D131011.D	03/21/14	19:12	10:08	(unrelated sample)
ZZZZZZ	2D131012.D	03/21/14	19:42	10:38	(unrelated sample)
ZZZZZZ	2D131013.D	03/21/14	20:12	11:08	(unrelated sample)
ZZZZZZ	2D131014.D	03/21/14	20:43	11:39	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Check Std:	V2D5481-CC5448	**Injection Date:**	03/21/14
Lab File ID:	2D130993.D	**Injection Time:**	09:36
Instrument ID:	GCMS2D	**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	81951	7.61	211758	10.35	314136	11.51	290929	15.72	172647	18.46
Upper Limit [a]	163902	8.11	423516	10.85	628272	12.01	581858	16.22	345294	18.96
Lower Limit [b]	40976	7.11	105879	9.85	157068	11.01	145465	15.22	86324	17.96

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2D5481-MB	82265	7.61	213660	10.35	316020	11.51	293723	15.71	178441	18.46
V2D5481-BS	86303	7.61	218959	10.35	321754	11.51	299632	15.71	182051	18.46
ZZZZZZ	86730	7.61	221479	10.35	325169	11.51	304469	15.72	184802	18.46
JB61656-1	85536	7.61	221102	10.35	326555	11.52	311416	15.72	185922	18.46
JB61656-2	82848	7.61	217225	10.35	321571	11.51	302750	15.72	179894	18.46
ZZZZZZ	93626	7.61	213742	10.35	317298	11.51	300519	15.72	181228	18.46
ZZZZZZ	85017	7.61	219743	10.35	320375	11.51	302322	15.72	183923	18.46
ZZZZZZ	91796	7.61	224753	10.35	330350	11.52	311707	15.72	188470	18.46
ZZZZZZ	92528	7.61	229708	10.35	339682	11.51	313597	15.72	188011	18.46
JB61656-1MS	91859	7.61	227732	10.35	335282	11.51	316910	15.72	188889	18.46
JB61656-1MSD	89368	7.61	232689	10.35	341586	11.51	319209	15.72	191023	18.46
ZZZZZZ	88548	7.61	226588	10.35	334211	11.51	311747	15.72	187498	18.46
ZZZZZZ	87186	7.60	224776	10.35	331540	11.51	313584	15.72	190256	18.46
ZZZZZZ	82013	7.61	216966	10.36	321947	11.52	299808	15.72	179512	18.46
ZZZZZZ	80566	7.61	216130	10.35	317954	11.51	297842	15.72	179829	18.46
ZZZZZZ	82389	7.61	221898	10.35	326226	11.51	308070	15.71	183932	18.46
ZZZZZZ	83186	7.61	220508	10.35	327795	11.51	308375	15.72	183244	18.46
ZZZZZZ	81928	7.61	218662	10.35	323144	11.51	299635	15.71	180392	18.46
ZZZZZZ	82394	7.60	216729	10.35	319577	11.51	302318	15.71	182992	18.46

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: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JB61656-1	2D130998.D	98.0	103.0	101.0	98.0
JB61656-2	2D130999.D	98.0	104.0	101.0	98.0
JB61656-1MS	2D131004.D	98.0	100.0	102.0	98.0
JB61656-1MSD	2D131005.D	96.0	98.0	101.0	99.0
V2D5481-BS	2D130996.D	99.0	102.0	101.0	96.0
V2D5481-MB	2D130995.D	98.0	104.0	100.0	96.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-117%
S2 = 1,2-Dichloroethane-D4	72-123%
S3 = Toluene-D8	82-118%
S4 = 4-Bromofluorobenzene	75-118%

Initial Calibration Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V2D5448-ICC5448
Lab FileID: 2D130207.D

Response Factor Report MS2D

Method : C:\MSDCHEM\1\METHODS\M2D5448.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Calibration Files
1 =2D130202.D 2 =2D130203.D 100 =2D130208.D 50 =2D130207.D
20 =2D130206.D 200 =2D130209.D 5 =2D130204.D 0.5 =2D130201.D
10 =2D130212.D =

Compound	1	2	100	50	20	200	5	0.5	10	Avg	%RSD
1) I tert butyl alcohol-d9	ISTD										
2) tertiary butyl alcohol	1.107	0.943	1.029	1.061	1.023	0.950	0.979		1.025	1.015	5.49
3) ethyl alcohol	0.118	0.105	0.110	0.113	0.113	0.097	0.108	0.106	0.120	0.110	6.38
4) 1,4-dioxane		0.083	0.101	0.102	0.099	0.094	0.092		0.092	0.095	6.84
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		0.338	0.424	0.399	0.375	0.424	0.352		0.201	0.359	21.55
----- Linear regression ----- Coefficient = 0.9994											
Response Ratio = -0.02032 + 0.42973 *A											
12) dichlorodifluoromethane	0.435	0.374	0.465	0.470	0.452	0.455	0.463		0.390	0.438	8.26
13) freon 114										0.000	-1.00
14) freon 142b										0.000	-1.00
15) chloromethane	0.667	0.615	0.680	0.695	0.687	0.650	0.659		0.615	0.659	4.61
16) vinyl chloride	0.592	0.537	0.637	0.634	0.614	0.610	0.613	0.554	0.560	0.594	6.09
17) acetaldehyde										0.000	-1.00
18) bromomethane		0.354	0.358	0.377	0.380		0.371		0.380	0.370	3.11
19) chloroethane	0.328	0.300	0.332	0.340	0.338	0.317	0.343	0.295	0.316	0.323	5.41
20) trichlorofluoromethane	0.536	0.491	0.616	0.617	0.591	0.606	0.595		0.526	0.572	8.39
21) pentane										0.000	-1.00

Initial Calibration Summary

Job Number: JB61656 **Sample:** V2D5448-ICC5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130207.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

22)	ethyl ether										
	0.249	0.249	0.241	0.239	0.227	0.228	0.221	0.192	0.219	0.229	7.87
23)	acrolein										
	0.092	0.088		0.093	0.090		0.093		0.085	0.090	3.73
24)	freon 141b										
										0.000	-1.00
25)	freon 123a										
										0.000	-1.00
26)	freon 123										
										0.000	-1.00
27)	1,1-dichloroethene										
	0.484	0.446	0.431	0.427	0.388	0.432	0.398		0.280	0.411	14.69
28)	2-chloropropane										
	0.741	0.737	0.685	0.692	0.629	0.688	0.629		0.452	0.657	14.09
29)	acetone										
			0.038	0.039	0.035	0.036	0.032		0.033	0.036	7.84
30)	allyl chloride										
	0.235	0.250	0.256	0.259	0.238	0.255	0.227		0.193	0.239	9.12
31)	acetonitrile										
	0.047	0.043	0.045	0.045	0.043	0.042	0.041		0.040	0.043	5.29
32)	iodomethane										
	0.816	0.813	0.851	0.851	0.774	0.837	0.738		0.658	0.792	8.43
33)	carbon disulfide										
	1.656	1.571	1.596	1.593	1.465	1.591	1.392	1.437	1.095	1.488	11.53
34)	methylene chloride										
	0.522	0.499	0.497	0.496	0.464	0.482	0.451	0.472	0.432	0.479	5.77
35)	methyl acetate										
			0.066	0.075	0.074	0.069	0.069	0.068		0.064	0.069	5.87
36)	1-chloropropane										
			0.038	0.039	0.038	0.036	0.038	0.041		0.027	0.036	12.30
37)	methyl tert butyl ether										
	1.303	1.283	1.363	1.375	1.281	1.289	1.237	1.101	1.248	1.276	6.26
38)	trans-1,2-dichloroethene										
	0.498	0.480	0.461	0.457	0.424	0.452	0.430		0.343	0.443	10.63
39)	di-isopropyl ether										
	1.592	1.476	1.649	1.645	1.563	1.553	1.533	1.484	1.398	1.544	5.29
40)	2-butanone										
			0.049	0.048	0.043	0.045	0.040		0.042	0.045	8.14
41)	1,1-dichloroethane										
	0.828	0.820	0.827	0.822	0.765	0.799	0.736		0.636	0.779	8.57
42)	chloroprene										
	0.615	0.601	0.687	0.663	0.599	0.662	0.616	0.583	0.429	0.606	12.36
43)	acrylonitrile										
	0.174	0.169	0.179	0.178	0.168	0.164	0.160		0.167	0.170	3.86
44)	vinyl acetate										
			0.063	0.074	0.072	0.067	0.068	0.063		0.062	0.067	6.83
45)	ethyl tert-butyl ether										
	1.520	1.385	1.580	1.588	1.497	1.517	1.447	1.395	1.370	1.478	5.57
46)	ethyl acetate										
			0.050	0.063	0.062	0.059	0.058	0.055		0.055	0.057	7.52
47)	2,2-dichloropropane										
	0.654	0.641	0.613	0.617	0.595	0.588	0.576	0.522	0.453	0.584	10.72
48)	cis-1,2-dichloroethene										
	0.568	0.522	0.503	0.502	0.456	0.489	0.460		0.413	0.489	9.57
49)	propionitrile										
	0.067	0.066	0.068	0.067	0.063	0.063	0.062		0.063	0.065	3.61
50)	tert-Butyl Formate										
	0.419	0.398	0.469	0.460	0.434	0.447	0.411	0.374	0.398	0.423	7.51
51)	bromochloromethane										
	0.231	0.248	0.247	0.245	0.230	0.236	0.220		0.220	0.235	4.84

Initial Calibration Summary

Job Number: JB61656 **Sample:** V2D5448-ICC5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130207.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

52) tetrahydrofuran
0.160 0.153 0.139 0.137 0.131 0.127 0.136 0.138 0.140 7.74
53) chloroform
0.765 0.755 0.783 0.774 0.711 0.754 0.678 0.623 0.730 7.63
54) dibromofluoromethane (s)
0.442 0.392 0.416 0.403 0.395 0.403 0.398 0.370 0.402 5.11
55) 1,2-dichloroethane-d4 (s)
0.505 0.421 0.460 0.450 0.444 0.433 0.442 0.426 0.448 5.90
56) freon 113
0.301 0.347 0.334 0.309 0.339 0.326 0.204 0.308 15.87
----- Linear regression ----- Coefficient = 0.9994
Response Ratio = -0.00883 + 0.34287 *A

57) methacrylonitrile
0.168 0.176 0.185 0.181 0.168 0.173 0.154 0.173 0.172 5.33
58) 1,1,1-trichloroethane
0.619 0.618 0.643 0.644 0.583 0.638 0.564 0.432 0.593 11.95
59) cyclohexane
0.622 0.646 0.672 0.669 0.610 0.672 0.580 0.405 0.609 14.59
60) isobutyl alcohol
0.005 0.006 0.006 0.005 0.006 0.004 0.004 0.005 16.85
----- Linear regression ----- Coefficient = 0.9992
Response Ratio = -0.00106 + 0.00562 *A

61) tert amyl alcohol
0.000 -1.00
62) iso-octane
1.588 1.613 1.854 1.832 1.605 1.779 1.747 1.502 1.262 1.642 11.40

63) I 1,4-difluorobenzene ----------ISTD----------
64) di-isobutylene
0.000 -1.00
65) epichlorohydrin
0.031 0.028 0.031 0.030 0.030 0.029 0.027 0.028 0.029 4.85
66) n-butyl alcohol
0.008 0.007 0.009 0.009 0.008 0.008 0.008 0.008 0.008 7.59
67) carbon tetrachloride
0.368 0.372 0.392 0.390 0.363 0.389 0.345 0.254 0.359 12.69
68) 1,1-dichloropropene
0.397 0.396 0.404 0.395 0.359 0.396 0.349 0.264 0.370 12.78
69) hexane
0.043 0.050 0.052 0.051 0.047 0.051 0.047 0.031 0.047 15.07
----- Linear regression ----- Coefficient = 0.9994
Response Ratio = -0.00102 + 0.05158 *A

70) benzene
1.258 1.249 1.252 1.251 1.171 1.201 1.101 0.975 0.958 1.157 10.35
71) tert-amyl methyl ether
0.296 0.295 0.282 0.285 0.274 0.267 0.278 0.280 0.247 0.278 5.37
72) heptane
0.200 0.200 0.218 0.208 0.192 0.208 0.212 0.175 0.155 0.196 10.20
73) isopropyl acetate
0.582 0.530 0.600 0.600 0.569 0.562 0.547 0.527 0.537 0.561 5.00
74) 1,2-dichloroethane
0.368 0.373 0.386 0.389 0.365 0.360 0.348 0.305 0.345 0.360 7.04
75) trichloroethene
0.308 0.317 0.318 0.312 0.288 0.310 0.276 0.228 0.295 10.39
76) ethyl acrylate
0.000 -1.00
77) tert amyl ethyl ether

Initial Calibration Summary

Job Number: JB61656 **Sample:** V2D5448-ICC5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130207.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

										0.000	-1.00
78)	2-nitropropane											
										0.000	-1.00
79)	2-chloroethyl vinyl ether											
	0.183	0.177	0.201	0.197	0.190	0.183	0.174		0.174	0.185	5.50
80)	methyl methacrylate											
	0.184	0.190	0.204	0.198	0.184	0.192	0.168		0.183	0.188	5.79
81)	1,2-dichloropropane											
	0.305	0.313	0.320	0.318	0.295	0.309	0.287		0.263	0.301	6.30
82)	dibromomethane											
	0.184	0.185	0.192	0.192	0.182	0.183	0.173	0.160	0.177	0.181	5.56
83)	methylcyclohexane											
	0.462	0.480	0.535	0.527	0.478	0.524	0.508	0.419	0.347	0.476	12.81
84)	bromodichloromethane											
	0.378	0.392	0.418	0.412	0.378	0.404	0.356		0.342	0.385	6.95
85)	cis-1,3-dichloropropene											
	0.504	0.497	0.521	0.512	0.480	0.499	0.448		0.437	0.487	6.18
86)	toluene-d8 (s)											
	1.037	0.961	1.057	1.034	1.008	1.020	0.990		0.895	1.000	5.18
87)	4-methyl-2-pentanone											
	0.105	0.115	0.123	0.122	0.114	0.117	0.109		0.113	0.115	5.19
88)	toluene											
	0.754	0.750	0.763	0.756	0.706	0.740	0.670	0.572	0.569	0.698	11.20
89)	3-methyl-1-butanol											
	0.012	0.012	0.014	0.014	0.013	0.013	0.012		0.013	0.013	7.04
90)	trans-1,3-dichloropropene											
	0.465	0.454	0.471	0.463	0.438	0.447	0.406		0.417	0.445	5.28
91)	ethyl methacrylate											
	0.334	0.354	0.399	0.391	0.357	0.380	0.328		0.348	0.361	7.20
92)	1,1,2-trichloroethane											
	0.229	0.231	0.239	0.237	0.221	0.225	0.212		0.216	0.226	4.25
93)	2-hexanone											
	0.102	0.101	0.112	0.108	0.104	0.105	0.099		0.105	0.104	3.89
94)	I chlorobenzene-d5	----------	ISTD	----------								
95)	3,3-Dimethyl-1-butanol											
	0.027	0.026	0.034	0.032	0.031	0.033	0.027		0.029	0.030	10.22
96)	tetrachloroethene											
	0.301	0.302	0.294	0.288	0.270	0.285	0.258		0.201	0.275	12.15
97)	1,3-dichloropropane											
	0.482	0.468	0.483	0.483	0.461	0.447	0.436	0.394	0.445	0.455	6.40
98)	butyl acetate											
	0.213	0.202	0.216	0.214	0.211	0.201	0.200	0.198	0.200	0.206	3.46
99)	dibromochloromethane											
	0.306	0.314	0.355	0.352	0.329	0.336	0.301		0.309	0.325	6.49
100)	1,2-dibromoethane											
	0.293	0.300	0.307	0.306	0.292	0.286	0.273		0.282	0.292	4.13
101)	n-butyl ether											
										0.000	-1.00
102)	chlorobenzene											
	0.884	0.912	0.907	0.901	0.855	0.875	0.793	0.709	0.734	0.841	9.15
103)	1,1,1,2-tetrachloroethane											
	0.334	0.314	0.357	0.356	0.334	0.348	0.311		0.303	0.332	6.37
104)	ethylbenzene											
	1.516	1.540	1.561	1.544	1.470	1.506	1.361	1.101	1.168	1.418	12.16
105)	m,p-xylene											
	0.577	0.587	0.595	0.592	0.562	0.574	0.519	0.435	0.452	0.544	11.30
106)	o-xylene											
	0.559	0.597	0.611	0.616	0.578	0.594	0.537	0.394	0.483	0.552	13.09
107)	styrene											

Initial Calibration Summary

Job Number: JB61656 **Sample:** V2D5448-ICC5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130207.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
            0.878 0.923 1.041 1.029 0.957 1.003 0.858       0.822   0.939    8.74
108)  bromoform
            0.231 0.237 0.277 0.271 0.252 0.264 0.230       0.240   0.250    7.44

109) I   1,4-dichlorobenzene-d ----------------ISTD--------------------
110)  isopropylbenzene
            2.451 2.559 2.685 2.666 2.507 2.582 2.280       1.943   2.459    9.96
111)  4-bromofluorobenzene (s)
            0.895 0.717 0.753 0.723 0.735 0.730 0.730       0.679   0.745    8.59
112)  cyclohexanone
            0.040 0.025 0.021 0.020 0.025 0.020 0.020       0.031   0.025   28.23
             ----- Linear regression -----  Coefficient =  0.9985
               Response Ratio = 0.01074 + 0.01951 *A

113)  bromobenzene
            0.725 0.733 0.754 0.741 0.711 0.723 0.647       0.638   0.709    6.05
114)  1,1,2,2-tetrachloroethane
            0.688 0.706 0.728 0.722 0.713 0.675 0.668       0.684   0.698    3.21
115)  trans-1,4-dichloro-2-butene
            0.167 0.169 0.188 0.182 0.185 0.173 0.160       0.177   0.175    5.52
116)  1,2,3-trichloropropane
            0.165 0.172 0.176 0.173 0.173 0.162 0.168       0.172   0.170    2.78
117)  n-propylbenzene
            2.875 2.949 3.018 2.983 2.856 2.897 2.605       2.249   2.804    9.17
118)  4-ethyltoluene
                                                            0.000   -1.00
119)  2-chlorotoluene
            0.627 0.638 0.671 0.650 0.623 0.651 0.596       0.522   0.622    7.40
120)  4-chlorotoluene
            1.907 1.975 1.957 1.919 1.850 1.883 1.727       1.604   1.853    6.82
121)  1,3,5-trimethylbenzene
            2.169 2.233 2.350 2.321 2.192 2.259 1.980       1.806   2.164    8.48
122)  tert-butylbenzene
            1.840 1.945 2.046 2.016 1.861 1.974 1.682       1.497   1.858   10.03
123)  pentachloroethane
            0.427 0.453 0.511 0.501 0.469 0.493 0.412       0.423   0.461    8.29
124)  1,2,4-trimethylbenzene
            2.105 2.264 2.353 2.320 2.209 2.260 2.009       1.863   2.173    7.75
125)  1,2,3-trimethylbenzene
                                                            0.000   -1.00
126)  sec-butylbenzene
            2.809 2.905 3.144 3.090 2.873 2.998 2.611       2.299   2.841    9.70
127)  1,3-dichlorobenzene
            1.444 1.457 1.482 1.463 1.403 1.409 1.297 1.132 1.262   1.372    8.56
128)  p-isopropyltoluene
            2.451 2.569 2.672 2.630 2.447 2.534 2.254       2.025   2.448    8.76
129)  1,4-dichlorobenzene
            1.493 1.497 1.497 1.481 1.424 1.428 1.320 1.283 1.300   1.414    6.31
130)  1,2-dichlorobenzene
            1.429 1.454 1.488 1.467 1.428 1.389 1.324 1.151 1.315   1.383    7.63
131)  benzyl chloride
            1.654 1.411 1.489 1.448 1.541 1.353 1.405 1.576 1.446   1.480    6.41
132)  1,4-diethylbenzene
                                                            0.000   -1.00
133)  n-butylbenzene
            1.272 1.323 1.390 1.340 1.253 1.302 1.144 0.945 1.033   1.222   12.30
134)  1,2,4,5-tetramethylbenzene
                                                            0.000   -1.00
135)  1,2-dibromo-3-chloropropane
            0.167 0.169 0.177 0.175 0.169 0.160 0.152 0.146 0.168   0.165    6.26
```

Initial Calibration Summary

Job Number: JB61656 **Sample:** V2D5448-ICC5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130207.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
136)  1,3,5-trichlorobenzene
            1.262 1.307 1.386 1.356 1.265 1.224 1.170 1.055 1.169   1.244    8.27
137)  hexachlorobutadiene
            0.608 0.641 0.695 0.681 0.584 0.607 0.564 0.539 0.534   0.606    9.55
138)  naphthalene
            2.131 2.172 2.545 2.500 2.392 2.192 2.032 2.009 2.295   2.252    8.61
139)  1,2,4-trichlorobenzene
            1.088 1.130 1.260 1.236 1.157 1.103 1.009 0.974 1.106   1.118    8.35
140)  1,2,3-trichlorobenzene
            0.951 1.009 1.121 1.094 1.024 0.977 0.882 0.898 0.982   0.993    8.04
141)  hexachloroethane
            0.431 0.461 0.553 0.528 0.470 0.531 0.422       0.394   0.474   12.25
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2D5448.M         Thu Feb 27 09:58:24 2014   MS2D
```

Initial Calibration Verification

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V2D5448-ICV5448
Lab FileID: 2D130213.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2D130213.D Vial: 14
Acq On : 26 Feb 2014 6:20 pm Operator: thomass1
Sample : ICV5448-50 Inst : MS2D
Misc : ms63168,v2d5448,w,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M2D5448.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 27 09:46:43 2014
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	102	0.00	7.63
2		tertiary butyl alcohol	1.015	1.146	-12.9	110	0.00	7.76
3		ethyl alcohol	0.110	0.111	-0.9	99	0.00	6.23
4		1,4-dioxane	0.095	0.110	-15.8	110	0.00	12.48
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	10.37
6	m	freon 23		----------NA----------				
7	m	freon 115		----------NA----------				
8	m	freon 143a		----------NA----------				
9	m	freon 152a		----------NA----------				
10	m	chlorotrifluoroethene		----------NA----------				
		----------	True	Calc.	% Drift	----------		
11		chlorodifluoromethane	50.000	46.576	6.8	100	0.01	3.99
		----------	AvgRF	CCRF	% Dev	----------		
12		dichlorodifluoromethane	0.438	0.423	3.4	94	0.00	3.96
13	m	freon 114		----------NA----------				
14	m	freon 142b		----------NA----------				
15		chloromethane	0.659	0.635	3.6	96	0.01	4.32
16		vinyl chloride	0.594	0.579	2.5	96	0.01	4.59
17	m	acetaldehyde		----------NA----------				
18		bromomethane	0.370	0.351	5.1	98	0.00	5.26
19		chloroethane	0.323	0.312	3.4	96	0.00	5.45
20		trichlorofluoromethane	0.572	0.565	1.2	96	0.01	5.97
21	m	pentane		----------NA----------				
22		ethyl ether	0.229	0.244	-6.6	107	0.00	6.40
23		acrolein	0.090	0.088	2.2	99	0.01	6.68
24	m	freon 141b		----------NA----------				
25	m	freon 123a		----------NA----------				
26	m	freon 123		----------NA----------				
27		1,1-dichloroethene	0.411	0.403	1.9	99	0.00	6.85
28	m	2-chloropropane	0.657	0.833	-26.8#	126	0.00	6.61
29		acetone	0.036	0.040	-11.1	108	0.00	6.92
30		allyl chloride	0.239	0.261	-9.2	106	0.00	7.45
31		acetonitrile	0.043	0.045	-4.7	106	0.01	7.44
32		iodomethane	0.792	0.813	-2.7	100	0.01	7.16
33		carbon disulfide	1.488	1.485	0.2	98	0.01	7.28
34		methylene chloride	0.479	0.485	-1.3	103	0.01	7.66
35		methyl acetate	0.069	0.065	5.8	92	0.00	7.44
36	m	1-chloropropane	0.036	0.038	-5.6	105	0.00	7.71
37		methyl tert butyl ether	1.276	1.325	-3.8	101	0.00	8.06

Initial Calibration Verification

Job Number: JB61656 **Sample:** V2D5448-ICV5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130213.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

38		trans-1,2-dichloroethene	0.443	0.440	0.7	101	0.00	8.09
39		di-isopropyl ether	1.544	1.630	-5.6	104	0.00	8.78
40		2-butanone	0.045	0.049	-8.9	107	0.00	9.66
41		1,1-dichloroethane	0.779	0.816	-4.7	104	0.00	8.78
42		chloroprene	0.606	0.533	12.0	84	0.00	8.90
43		acrylonitrile	0.170	0.181	-6.5	106	0.00	8.06
44		vinyl acetate	0.067	0.080	-19.4	117	0.01	8.79
45		ethyl tert-butyl ether	1.478	1.512	-2.3	100	0.00	9.35
46		ethyl acetate	0.057	0.064	-12.3	107	0.00	9.70
47		2,2-dichloropropane	0.584	0.598	-2.4	102	0.00	9.69
48		cis-1,2-dichloroethene	0.489	0.493	-0.8	103	0.00	9.68
49		propionitrile	0.065	0.069	-6.2	108	0.00	9.80
50		tert-Butyl Formate	0.423	0.472	-11.6	108	0.01	10.22
51		bromochloromethane	0.235	0.241	-2.6	103	0.00	10.06
52		tetrahydrofuran	0.140	0.136	2.9	104	0.00	10.11
53		chloroform	0.730	0.777	-6.4	105	0.00	10.14
54	S	dibromofluoromethane (s)	0.402	0.403	-0.2	105	0.00	10.40
55	S	1,2-dichloroethane-d4 (s)	0.448	0.441	1.6	103	0.00	10.94
		----------	True	Calc.	% Drift	----------		
56		freon 113	50.000	44.924	10.2	94	0.01	6.84
		----------	AvgRF	CCRF	% Dev	----------		
57		methacrylonitrile	0.172	0.181	-5.2	105	0.00	10.02
58		1,1,1-trichloroethane	0.593	0.628	-5.9	102	0.01	10.46
59		cyclohexane	0.609	0.639	-4.9	100	0.00	10.55
		----------	True	Calc.	% Drift	----------		
60		isobutyl alcohol	500.000	499.067	0.2	105	0.00	10.69
		----------	AvgRF	CCRF	% Dev	----------		
61	m	tert amyl alcohol		----------NA----------				
62	m	iso-octane	1.642	1.373	16.4	79	0.00	11.06
63	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	11.53
64		di-isobutylene		----------NA----------				
65		epichlorohydrin	0.029	0.033	-13.8	114	0.00	13.21
66		n-butyl alcohol	0.008	0.009	-12.5	111	0.00	11.71
67		carbon tetrachloride	0.359	0.384	-7.0	103	0.00	10.71
68		1,1-dichloropropene	0.370	0.371	-0.3	98	0.00	10.69
		----------	True	Calc.	% Drift	----------		
69		hexane	50.000	53.341	-6.7	111	0.01	8.47
		----------	AvgRF	CCRF	% Dev	----------		
70		benzene	1.157	1.242	-7.3	104	0.00	11.02
71		tert-amyl methyl ether	0.278	0.270	2.9	99	0.00	11.10
72		heptane	0.196	0.154	21.4#	77	0.00	11.28
73		isopropyl acetate	0.561	0.620	-10.5	108	0.00	10.98
74		1,2-dichloroethane	0.360	0.393	-9.2	105	0.00	11.05
75		trichloroethene	0.295	0.312	-5.8	105	0.00	11.95
76	m	ethyl acrylate		----------NA----------				
77	m	tert amyl ethyl ether		----------NA----------				
78		2-nitropropane		----------NA----------				
79		2-chloroethyl vinyl ether	0.185	0.216	-16.8	115	0.00	13.06
80		methyl methacrylate	0.188	0.205	-9.0	108	0.00	12.37
81		1,2-dichloropropane	0.301	0.324	-7.6	107	0.00	12.32
82		dibromomethane	0.181	0.198	-9.4	107	0.00	12.51
83		methylcyclohexane	0.476	0.433	9.0	86	0.00	12.25
84		bromodichloromethane	0.385	0.416	-8.1	105	0.00	12.70

Initial Calibration Verification

Job Number: JB61656 **Sample:** V2D5448-ICV5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130213.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

85		cis-1,3-dichloropropene	0.487	0.483	0.8	99	0.00	13.33
86	S	toluene-d8 (s)	1.000	1.033	-3.3	104	0.00	13.71
87		4-methyl-2-pentanone	0.115	0.128	-11.3	109	0.00	13.50
88		toluene	0.698	0.758	-8.6	105	0.00	13.81
89		3-methyl-1-butanol	0.013	0.015	-15.4	114	0.00	13.52
90		trans-1,3-dichloropropene	0.445	0.467	-4.9	105	0.00	14.09
91		ethyl methacrylate	0.361	0.392	-8.6	105	0.00	14.13
92		1,1,2-trichloroethane	0.226	0.242	-7.1	107	0.00	14.37
93		2-hexanone	0.104	0.113	-8.7	110	0.00	14.65
94	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	15.73
95		3,3-Dimethyl-1-butanol	0.030	0.036	-20.0	115	0.00	14.88
96		tetrachloroethene	0.275	0.293	-6.5	105	0.00	14.58
97		1,3-dichloropropane	0.455	0.495	-8.8	106	0.00	14.62
98		butyl acetate	0.206	0.230	-11.7	111	0.00	14.77
99		dibromochloromethane	0.325	0.362	-11.4	106	0.00	14.95
100		1,2-dibromoethane	0.292	0.314	-7.5	106	0.00	15.14
101	m	n-butyl ether		----------NA----------				
102		chlorobenzene	0.841	0.925	-10.0	106	0.00	15.77
103		1,1,1,2-tetrachloroethane	0.332	0.357	-7.5	104	0.00	15.86
104		ethylbenzene	1.418	1.559	-9.9	105	0.00	15.87
105		m,p-xylene	0.544	0.598	-9.9	105	0.00	16.01
106		o-xylene	0.552	0.615	-11.4	103	0.00	16.55
107		styrene	0.939	1.046	-11.4	105	0.00	16.56
108		bromoform	0.250	0.279	-11.6	106	0.00	16.86
109	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	18.47
110		isopropylbenzene	2.459	2.653	-7.9	102	0.00	16.98
111	S	4-bromofluorobenzene (s)	0.745	0.728	2.3	104	0.00	17.20
		----------	True	Calc.	% Drift	----------		
112	m	cyclohexanone	500.000	491.125	1.8	104	0.00	17.17
		----------	AvgRF	CCRF	% Dev	----------		
113		bromobenzene	0.709	0.757	-6.8	105	0.00	17.42
114		1,1,2,2-tetrachloroethane	0.698	0.721	-3.3	103	0.00	17.34
115		trans-1,4-dichloro-2-bute	0.175	0.195	-11.4	110	0.00	17.40
116		1,2,3-trichloropropane	0.170	0.177	-4.1	105	0.00	17.42
117		n-propylbenzene	2.804	3.142	-12.1	108	0.00	17.46
118	m	4-ethyltoluene		----------NA----------				
119		2-chlorotoluene	0.622	0.662	-6.4	105	0.00	17.60
120		4-chlorotoluene	1.853	1.942	-4.8	104	0.00	17.72
121		1,3,5-trimethylbenzene	2.164	2.296	-6.1	102	0.00	17.64
122		tert-butylbenzene	1.858	1.981	-6.6	101	0.00	18.01
123		pentachloroethane	0.461	0.506	-9.8	104	0.00	18.08
124		1,2,4-trimethylbenzene	2.173	2.404	-10.6	107	0.00	18.06
125	m	1,2,3-trimethylbenzene		----------NA----------				
126		sec-butylbenzene	2.841	3.005	-5.8	100	0.00	18.24
127		1,3-dichlorobenzene	1.372	1.476	-7.6	104	0.00	18.41
128		p-isopropyltoluene	2.448	2.615	-6.8	102	0.00	18.37
129		1,4-dichlorobenzene	1.414	1.496	-5.8	104	0.00	18.50
130		1,2-dichlorobenzene	1.383	1.487	-7.5	104	0.00	18.88
131		benzyl chloride	1.480	1.650	-11.5	117	0.00	18.62
132	m	1,4-diethylbenzene		----------NA----------				
133		n-butylbenzene	1.222	1.350	-10.5	104	0.00	18.78
134	m	1,2,4,5-tetramethylbenzen		----------NA----------				
135		1,2-dibromo-3-chloropropa	0.165	0.178	-7.9	105	0.00	19.66
136		1,3,5-trichlorobenzene	1.244	1.388	-11.6	105	0.00	19.84
137		hexachlorobutadiene	0.606	0.639	-5.4	97	0.00	20.59
138		naphthalene	2.252	2.554	-13.4	105	0.00	20.76

Initial Calibration Verification

Job Number: JB61656 **Sample:** V2D5448-ICV5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130213.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

139		1,2,4-trichlorobenzene	1.118	1.243	-11.2	104	0.00	20.47
140	m	1,2,3-trichlorobenzene	0.993	1.115	-12.3	105	0.00	21.00
141		hexachloroethane	0.474	0.529	-11.6	103	0.00	19.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D130207.D M2D5448.M Thu Feb 27 09:59:03 2014 MS2D

Continuing Calibration Summary

Job Number: JB61656
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V2D5481-CC5448
Lab FileID: 2D130993.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\DATA\2D130993.D Vial: 2
Acq On : 21 Mar 2014 9:36 am Operator: BenM
Sample : cc5448-20 Inst : MS2D
Misc : ms64447,v2d5481,w,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M2D5448.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 27 09:46:43 2014
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	63	-0.01	7.61
2		tertiary butyl alcohol	1.015	1.022	-0.7	63	-0.02	7.74
3		ethyl alcohol	0.110	0.115	-4.5	64	-0.01	6.21
4		1,4-dioxane	0.095	0.091	4.2	58	-0.02	12.46
5	I	pentafluorobenzene	1.000	1.000	0.0	75	-0.01	10.35
6	m	freon 23		----------NA----------				
7	m	freon 115		----------NA----------				
8	m	freon 143a		----------NA----------				
9	m	freon 152a		----------NA----------				
10	m	chlorotrifluoroethene		----------NA----------				
		----------	True	Calc.	% Drift	----------		
11		chlorodifluoromethane	20.000	27.404	-37.0#	108	0.00	3.97
		----------	AvgRF	CCRF	% Dev	----------		
12		dichlorodifluoromethane	0.438	0.523	-19.4	87	0.00	3.96
13	m	freon 114		----------NA----------				
14	m	freon 142b		----------NA----------				
15		chloromethane	0.659	0.747	-13.4	82	0.00	4.31
16		vinyl chloride	0.594	0.669	-12.6	82	-0.01	4.57
17	m	acetaldehyde		----------NA----------				
18		bromomethane	0.370	0.373	-0.8	74	0.00	5.25
19		chloroethane	0.323	0.347	-7.4	77	0.00	5.45
20		trichlorofluoromethane	0.572	0.666	-16.4	85	-0.01	5.94
21	m	pentane		----------NA----------				
22		ethyl ether	0.229	0.218	4.8	72	0.00	6.39
23		acrolein	0.090	0.075	16.7	62	0.00	6.66
24	m	freon 141b		----------NA----------				
25	m	freon 123a		----------NA----------				
26	m	freon 123		----------NA----------				
27		1,1-dichloroethene	0.411	0.429	-4.4	83	-0.01	6.84
28	m	2-chloropropane	0.657	0.938	-42.8#	112	-0.01	6.59
29		acetone	0.036	0.029	19.4	62	0.00	6.91
30		allyl chloride	0.239	0.261	-9.2	82	0.00	7.44
31		acetonitrile	0.043	0.041	4.7	71	0.00	7.43
32		iodomethane	0.792	0.797	-0.6	77	-0.01	7.13
33		carbon disulfide	1.488	1.636	-9.9	84	0.00	7.26
34		methylene chloride	0.479	0.493	-2.9	80	-0.01	7.64
35		methyl acetate	0.069	0.061	11.6	66	0.00	7.43
36	m	1-chloropropane	0.036	0.041	-13.9	86	0.00	7.70
37		methyl tert butyl ether	1.276	1.284	-0.6	75	-0.01	8.04

Continuing Calibration Summary

Job Number: JB61656 **Sample:** V2D5481-CC5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130993.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

38		trans-1,2-dichloroethene	0.443	0.460	-3.8	82	0.00	8.08
39		di-isopropyl ether	1.544	1.768	-14.5	85	-0.01	8.76
40		2-butanone	0.045	0.040	11.1	69	-0.01	9.65
41		1,1-dichloroethane	0.779	0.872	-11.9	86	-0.01	8.76
42		chloroprene	0.606	0.701	-15.7	88	-0.01	8.89
43		acrylonitrile	0.170	0.151	11.2	67	-0.01	8.05
44		vinyl acetate	0.067	0.061	9.0	68	0.00	8.77
45		ethyl tert-butyl ether	1.478	1.570	-6.2	79	-0.01	9.34
46		ethyl acetate	0.057	0.054	5.3	69	0.00	9.69
47		2,2-dichloropropane	0.584	0.732	-25.3#	92	-0.01	9.68
48		cis-1,2-dichloroethene	0.489	0.492	-0.6	81	-0.01	9.66
49		propionitrile	0.065	0.055	15.4	66	-0.01	9.78
50		tert-Butyl Formate	0.423	0.411	2.8	71	0.00	10.20
51		bromochloromethane	0.235	0.232	1.3	76	-0.01	10.04
52		tetrahydrofuran	0.140	0.121	13.6	70	-0.01	10.10
53		chloroform	0.730	0.799	-9.5	84	-0.01	10.13
54	S	dibromofluoromethane (s)	0.402	0.397	1.2	76	-0.01	10.38
55	S	1,2-dichloroethane-d4 (s)	0.448	0.462	-3.1	78	-0.01	10.92
		----------	True	Calc.	% Drift	----------		
56		freon 113	20.000	21.362	-6.8	84	0.00	6.83
		----------	AvgRF	CCRF	% Dev	----------		
57		methacrylonitrile	0.172	0.147	14.5	66	-0.01	10.01
58		1,1,1-trichloroethane	0.593	0.687	-15.9	89	0.00	10.45
59		cyclohexane	0.609	0.685	-12.5	84	-0.01	10.53
		----------	True	Calc.	% Drift	----------		
60		isobutyl alcohol	200.000	200.872	-0.4	77	-0.01	10.67
		----------	AvgRF	CCRF	% Dev	----------		
61	m	tert amyl alcohol		----------NA----------				
62	m	iso-octane	1.642	1.797	-9.4	84	-0.02	11.05
63	I	1,4-difluorobenzene	1.000	1.000	0.0	77	-0.02	11.51
64		di-isobutylene		----------NA----------				
65		epichlorohydrin	0.029	0.024	17.2	63	-0.02	13.19
66		n-butyl alcohol	0.008	0.007	12.5	60	-0.01	11.70
67		carbon tetrachloride	0.359	0.410	-14.2	88	-0.01	10.69
68		1,1-dichloropropene	0.370	0.407	-10.0	88	-0.01	10.67
		----------	True	Calc.	% Drift	----------		
69		hexane	20.000	20.007	-0.0	81	-0.01	8.45
		----------	AvgRF	CCRF	% Dev	----------		
70		benzene	1.157	1.239	-7.1	82	-0.01	11.01
71		tert-amyl methyl ether	0.278	0.289	-4.0	82	-0.01	11.08
72		heptane	0.196	0.206	-5.1	83	-0.01	11.27
73		isopropyl acetate	0.561	0.523	6.8	71	-0.01	10.97
74		1,2-dichloroethane	0.360	0.391	-8.6	83	-0.01	11.04
75		trichloroethene	0.295	0.297	-0.7	80	-0.01	11.94
76	m	ethyl acrylate		----------NA----------				
77	m	tert amyl ethyl ether		----------NA----------				
78		2-nitropropane		----------NA----------				
79		2-chloroethyl vinyl ether	0.185	0.170	8.1	69	-0.01	13.05
80		methyl methacrylate	0.188	0.161	14.4	68	-0.01	12.36
81		1,2-dichloropropane	0.301	0.318	-5.6	84	-0.01	12.31
82		dibromomethane	0.181	0.179	1.1	76	-0.01	12.49
83		methylcyclohexane	0.476	0.511	-7.4	83	-0.01	12.24
84		bromodichloromethane	0.385	0.403	-4.7	83	-0.01	12.68

Continuing Calibration Summary

Job Number: JB61656 **Sample:** V2D5481-CC5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130993.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

85		cis-1,3-dichloropropene	0.487	0.491	-0.8	79	-0.01	13.31
86	S	toluene-d8 (s)	1.000	1.008	-0.8	78	-0.01	13.70
87		4-methyl-2-pentanone	0.115	0.099	13.9	67	-0.01	13.49
88		toluene	0.698	0.724	-3.7	79	-0.01	13.80
89		3-methyl-1-butanol	0.013	0.011	15.4	62	-0.01	13.50
90		trans-1,3-dichloropropene	0.445	0.436	2.0	77	-0.01	14.08
91		ethyl methacrylate	0.361	0.328	9.1	71	-0.01	14.11
92		1,1,2-trichloroethane	0.226	0.212	6.2	74	-0.01	14.36
93		2-hexanone	0.104	0.089	14.4	66	-0.01	14.64
94	I	chlorobenzene-d5	1.000	1.000	0.0	77	-0.01	15.72
95		3,3-Dimethyl-1-butanol	0.030	0.025	16.7	61	-0.01	14.87
96		tetrachloroethene	0.275	0.277	-0.7	79	-0.01	14.57
97		1,3-dichloropropane	0.455	0.458	-0.7	77	-0.02	14.60
98		butyl acetate	0.206	0.190	7.8	70	-0.01	14.75
99		dibromochloromethane	0.325	0.315	3.1	74	-0.02	14.93
100		1,2-dibromoethane	0.292	0.268	8.2	71	-0.01	15.13
101	m	n-butyl ether		----------NA----------				
102		chlorobenzene	0.841	0.859	-2.1	78	-0.02	15.75
103		1,1,1,2-tetrachloroethane	0.332	0.336	-1.2	78	-0.02	15.84
104		ethylbenzene	1.418	1.537	-8.4	81	-0.01	15.85
105		m,p-xylene	0.544	0.575	-5.7	79	-0.01	16.00
106		o-xylene	0.552	0.576	-4.3	77	-0.01	16.54
107		styrene	0.939	0.946	-0.7	76	-0.01	16.55
108		bromoform	0.250	0.220	12.0	67	0.00	16.85
109	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	77	-0.01	18.46
110		isopropylbenzene	2.459	2.665	-8.4	81	-0.01	16.97
111	S	4-bromofluorobenzene (s)	0.745	0.722	3.1	75	-0.01	17.19
		----------	True	Calc.	% Drift	----------		
112	m	cyclohexanone	200.000	165.493	17.3	58	0.00	17.16
		----------	AvgRF	CCRF	% Dev	----------		
113		bromobenzene	0.709	0.694	2.1	75	-0.01	17.41
114		1,1,2,2-tetrachloroethane	0.698	0.636	8.9	68	-0.01	17.33
115		trans-1,4-dichloro-2-bute	0.175	0.140	20.0	58	-0.01	17.38
116		1,2,3-trichloropropane	0.170	0.156	8.2	69	-0.01	17.41
117		n-propylbenzene	2.804	3.062	-9.2	82	-0.01	17.45
118	m	4-ethyltoluene		----------NA----------				
119		2-chlorotoluene	0.622	0.632	-1.6	78	-0.01	17.59
120		4-chlorotoluene	1.853	1.951	-5.3	81	-0.01	17.71
121		1,3,5-trimethylbenzene	2.164	2.289	-5.8	80	-0.01	17.63
122		tert-butylbenzene	1.858	1.939	-4.4	80	-0.01	18.00
123		pentachloroethane	0.461	0.463	-0.4	76	-0.01	18.07
124		1,2,4-trimethylbenzene	2.173	2.292	-5.5	79	-0.01	18.05
125	m	1,2,3-trimethylbenzene		----------NA----------				
126		sec-butylbenzene	2.841	3.054	-7.5	81	-0.01	18.23
127		1,3-dichlorobenzene	1.372	1.402	-2.2	77	-0.01	18.40
128		p-isopropyltoluene	2.448	2.565	-4.8	80	-0.01	18.36
129		1,4-dichlorobenzene	1.414	1.416	-0.1	76	-0.01	18.49
130		1,2-dichlorobenzene	1.383	1.392	-0.7	75	-0.01	18.87
131		benzyl chloride	1.480	1.338	9.6	67	-0.01	18.61
132	m	1,4-diethylbenzene		----------NA----------				
133		n-butylbenzene	1.222	1.343	-9.9	82	-0.01	18.77
134	m	1,2,4,5-tetramethylbenzen		----------NA----------				
135		1,2-dibromo-3-chloropropa	0.165	0.134	18.8	61	0.00	19.65
136		1,3,5-trichlorobenzene	1.244	1.254	-0.8	76	-0.01	19.83
137		hexachlorobutadiene	0.606	0.598	1.3	78	-0.01	20.58
138		naphthalene	2.252	1.993	11.5	64	-0.02	20.74

Continuing Calibration Summary

Job Number: JB61656 **Sample:** V2D5481-CC5448
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2D130993.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

139	1,2,4-trichlorobenzene	1.118	1.099	1.7	73	-0.01	20.46
140 m	1,2,3-trichlorobenzene	0.993	0.919	7.5	69	-0.02	20.98
141	hexachloroethane	0.474	0.473	0.2	77	-0.01	19.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D130206.D M2D5448.M Fri Mar 21 14:22:32 2014 MS2D

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130998.D
Acq On : 21 Mar 2014 12:42 pm
Operator : BenM
Sample : jb61656-1
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 21 14:25:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

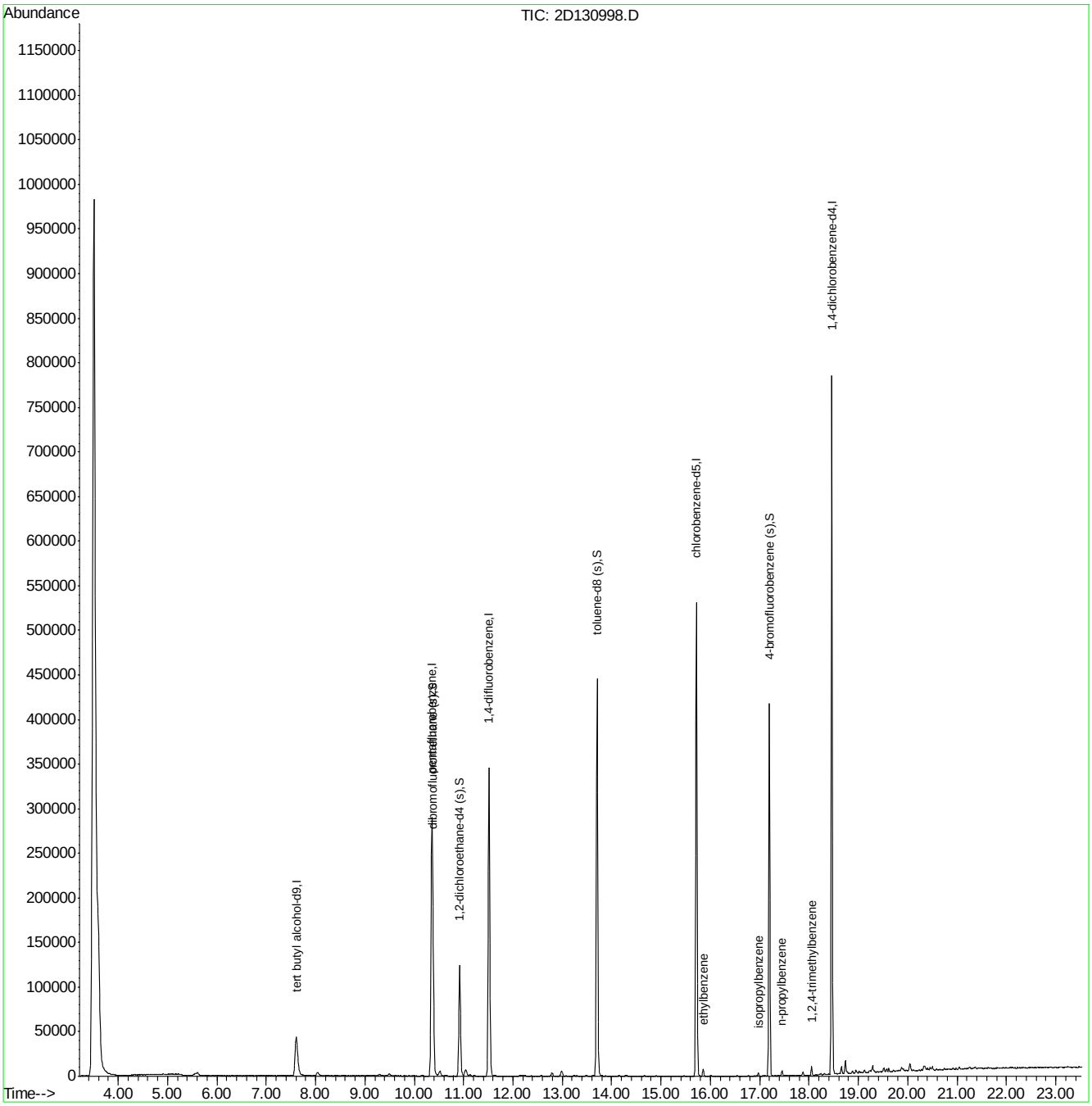
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.61	65	85536	500.00	ug/L	-0.01
5) pentafluorobenzene	10.35	168	221102	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	11.52	114	326555	50.00	ug/L	-0.01
94) chlorobenzene-d5	15.72	117	311416	50.00	ug/L	-0.01
109) 1,4-dichlorobenzene-d4	18.46	152	185922	50.00	ug/L	-0.01
System Monitoring Compounds						
54) dibromofluoromethane (s)	10.38	113	86751	48.76	ug/L	-0.01
Spiked Amount 50.000	Range 79 - 117		Recovery = 97.52%			
55) 1,2-dichloroethane-d4 (s)	10.92	65	102340	51.71	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 103.42%			
86) toluene-d8 (s)	13.70	98	329708	50.47	ug/L	0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 100.94%			
111) 4-bromofluorobenzene (s)	17.20	95	135502	48.90	ug/L	0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 97.80%			
Target Compounds						Qvalue
104) ethylbenzene	15.86	91	6347	0.72	ug/L	94
110) isopropylbenzene	16.97	105	2325	0.25	ug/L	93
117) n-propylbenzene	17.45	91	5137	0.49	ug/L	97
124) 1,2,4-trimethylbenzene	18.05	105	5123	0.63	ug/L	94

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

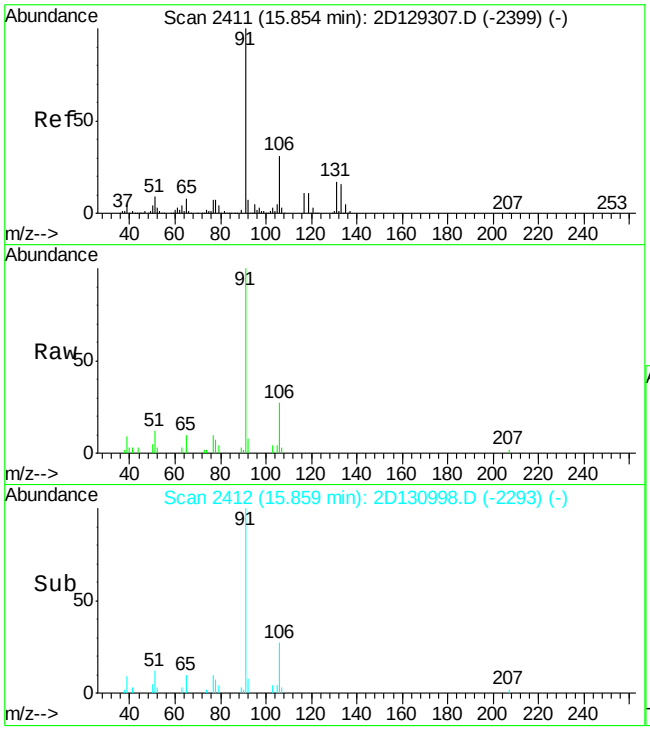
Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130998.D
Acq On : 21 Mar 2014 12:42 pm
Operator : BenM
Sample : jb61656-1
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 21 14:25:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration



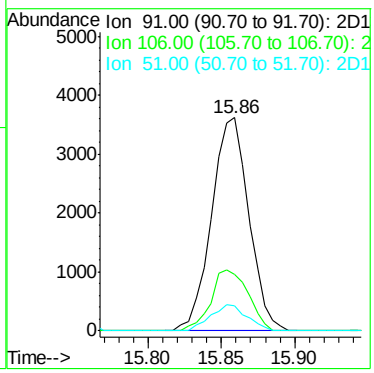
M2D5448.M Fri Mar 21 14:27:34 2014 MS2D Page: 2

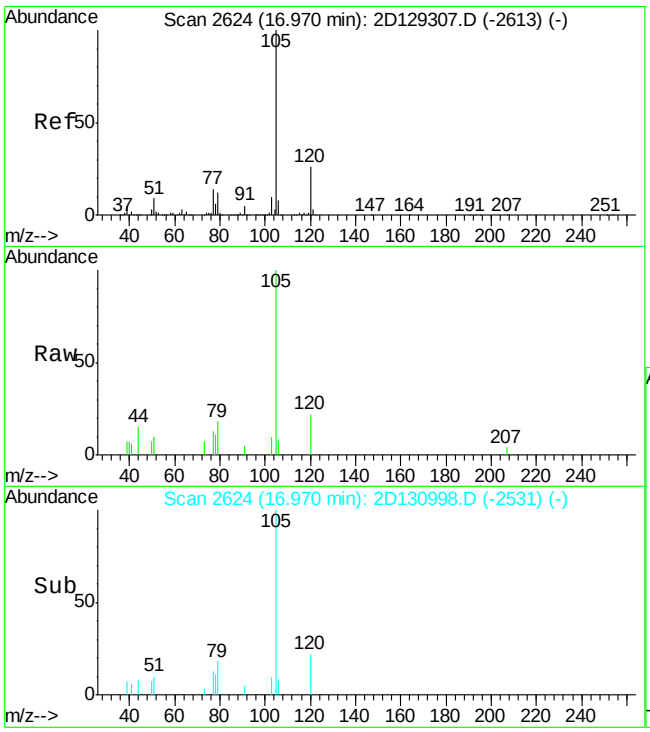


#104
ethylbenzene
Concen: 0.72 ug/L
RT: 15.86 min Scan# 2412
Delta R.T. -0.01 min
Lab File: 2D130998.D
Acq: 21 Mar 2014 12:42 pm

Tgt Ion: 91 Resp: 6347

Ion	Ratio	Lower	Upper
91	100		
106	26.6	0.7	60.7
51	11.5	0.0	40.5

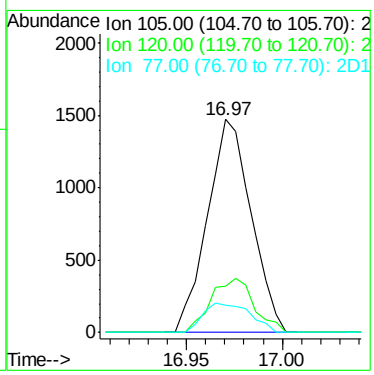


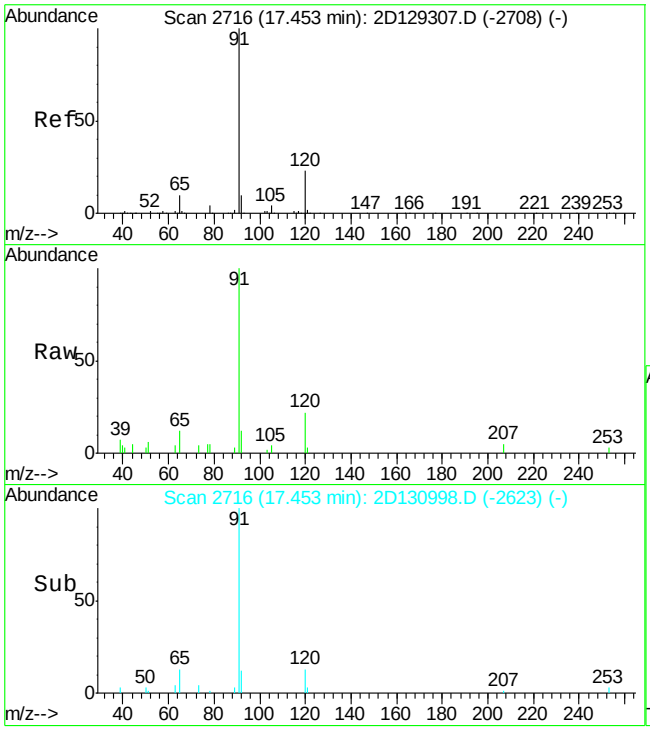


#110
isopropylbenzene
Concen: 0.25 ug/L
RT: 16.97 min Scan# 2624
Delta R.T. -0.01 min
Lab File: 2D130998.D
Acq: 21 Mar 2014 12:42 pm

Tgt Ion:105 Resp: 2325

Ion	Ratio	Lower	Upper
105	100		
120	21.7	0.0	55.6
77	12.8	0.0	45.2

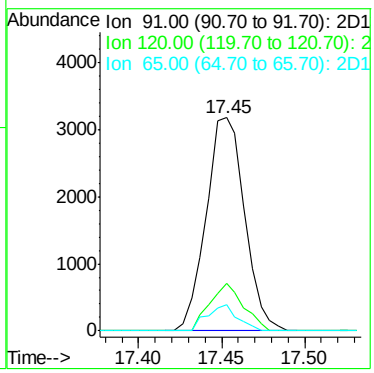


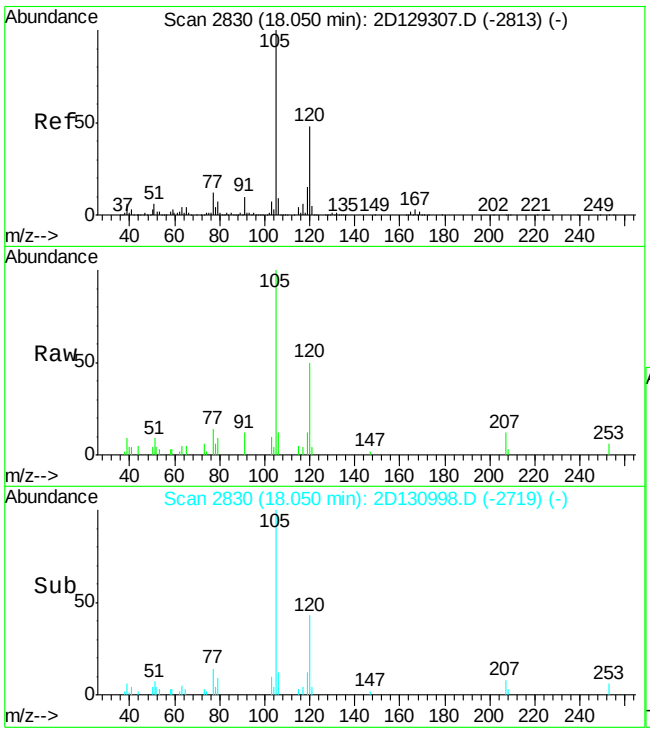


#117
n-propylbenzene
Concen: 0.49 ug/L
RT: 17.45 min Scan# 2716
Delta R.T. -0.01 min
Lab File: 2D130998.D
Acq: 21 Mar 2014 12:42 pm

Tgt Ion: 91 Resp: 5137

Ion	Ratio	Lower	Upper
91	100		
120	22.2	0.0	52.6
65	12.3	0.0	39.9

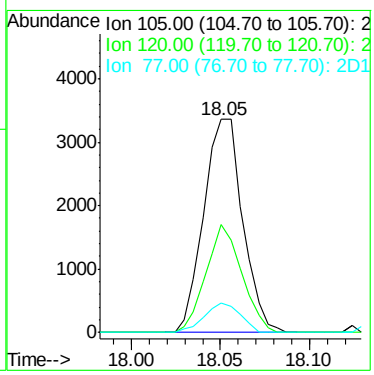




#124
1,2,4-trimethylbenzene
Concen: 0.63 ug/L
RT: 18.05 min Scan# 2830
Delta R.T. -0.01 min
Lab File: 2D130998.D
Acq: 21 Mar 2014 12:42 pm

Tgt Ion:105 Resp: 5123

Ion	Ratio	Lower	Upper
105	100		
120	50.4	16.3	76.3
77	13.7	0.0	41.6



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130998.D
Acq On : 21 Mar 2014 12:42 pm
Operator : BenM
Sample : jb61656-1
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.01 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.512	33	57	139	rBV	982828	4579633	100.00%	42.829%
2	4.277	192	203	206	rBV3	833	2268	0.05%	0.021%
3	4.434	228	233	235	rBV3	593	940	0.02%	0.009%
4	4.571	257	259	263	rBV4	520	529	0.01%	0.005%
5	5.399	416	417	423	rVB3	327	341	0.01%	0.003%
6	5.436	423	424	432	rVB3	251	437	0.01%	0.004%
7	5.598	435	455	469	rVB5	3631	19031	0.42%	0.178%
8	5.693	470	473	476	rVB3	312	347	0.01%	0.003%
9	5.792	490	492	496	rBV	298	313	0.01%	0.003%
10	6.033	532	538	548	rVB3	413	1024	0.02%	0.010%
11	6.154	556	561	566	rVB3	199	339	0.01%	0.003%
12	6.427	610	613	616	rVB3	259	280	0.01%	0.003%
13	6.631	646	652	657	rBV4	240	422	0.01%	0.004%
14	6.705	661	666	667	rBV3	292	372	0.01%	0.003%
15	6.857	688	695	696	rBV3	718	959	0.02%	0.009%
16	7.260	762	772	783	rBV4	477	1694	0.04%	0.016%
17	7.381	792	795	799	rBV3	262	299	0.01%	0.003%
18	7.612	824	839	863	rBV	44071	169085	3.69%	1.581%
19	7.958	900	905	909	rBV3	308	509	0.01%	0.005%
20	8.042	909	921	936	rVB4	3775	12574	0.27%	0.118%
21	8.372	983	984	990	rBV3	278	401	0.01%	0.004%
22	8.482	1004	1005	1011	rBV3	245	382	0.01%	0.004%
23	8.912	1083	1087	1090	rBV2	319	307	0.01%	0.003%
24	9.169	1133	1136	1146	rVB2	436	499	0.01%	0.005%
25	9.300	1149	1161	1177	rVB6	1976	6102	0.13%	0.057%
26	9.494	1186	1198	1210	rBV8	2199	7765	0.17%	0.073%
27	10.149	1319	1323	1326	rBV3	213	321	0.01%	0.003%
28	10.359	1351	1363	1385	rBV2	289785	867083	18.93%	8.109%
29	10.521	1385	1394	1405	rVV4	5359	15358	0.34%	0.144%
30	10.632	1409	1415	1426	rVB6	1041	2309	0.05%	0.022%
31	10.799	1441	1447	1453	rVB3	294	473	0.01%	0.004%
32	10.920	1459	1470	1484	rBV	124287	283411	6.19%	2.650%
33	11.041	1484	1493	1503	rVV4	7426	22904	0.50%	0.214%
34	11.124	1503	1509	1516	rVV5	1946	4163	0.09%	0.039%

M2D5448.M Fri Mar 21 14:25:04 2014 MS2D Page: 1

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130998.D
Acq On : 21 Mar 2014 12:42 pm
Operator : BenM
Sample : jb61656-1
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.01 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

35	11.208	1516	1525	1537	rVB6	992	2742	0.06%	0.026%
36	11.512	1567	1583	1611	rBV	345645	758255	16.56%	7.091%
37	12.184	1693	1711	1715	rBV6	1190	4423	0.10%	0.041%
38	12.236	1716	1721	1731	rVB4	1292	2773	0.06%	0.026%
39	12.367	1741	1746	1754	rBV3	615	1045	0.02%	0.010%
40	12.577	1777	1786	1795	rBV4	499	986	0.02%	0.009%
41	12.786	1817	1826	1835	rVV3	3678	8374	0.18%	0.078%
42	12.986	1854	1864	1875	rBV3	5558	14927	0.33%	0.140%
43	13.075	1878	1881	1888	rVB3	353	598	0.01%	0.006%
44	13.243	1906	1913	1918	rBV4	1023	1924	0.04%	0.018%
45	13.290	1919	1922	1928	rVB2	457	623	0.01%	0.006%
46	13.473	1949	1957	1959	rBV4	602	953	0.02%	0.009%
47	13.625	1978	1986	1991	rBV4	1263	2411	0.05%	0.023%
48	13.704	1991	2001	2017	rBV	445727	888154	19.39%	8.306%
49	13.872	2026	2033	2047	rBV3	451	1287	0.03%	0.012%
50	14.144	2074	2085	2091	rBV5	575	1388	0.03%	0.013%
51	14.291	2105	2113	2124	rBV5	1262	2636	0.06%	0.025%
52	14.658	2180	2183	2186	rVB2	447	425	0.01%	0.004%
53	14.899	2227	2229	2235	rVB3	358	358	0.01%	0.003%
54	15.224	2290	2291	2297	rVB	236	297	0.01%	0.003%
55	15.466	2331	2337	2344	rBV4	357	747	0.02%	0.007%
56	15.633	2365	2369	2375	rBV3	258	509	0.01%	0.005%
57	15.717	2375	2385	2402	rVB	530960	968923	21.16%	9.061%
58	15.854	2402	2411	2422	rBV2	8234	14750	0.32%	0.138%
59	16.006	2433	2440	2441	rBV3	515	627	0.01%	0.006%
60	16.168	2465	2471	2475	rVB3	225	487	0.01%	0.005%
61	16.467	2526	2528	2534	rVB3	236	300	0.01%	0.003%
62	16.535	2537	2541	2542	rBV2	393	279	0.01%	0.003%
63	16.761	2580	2584	2586	rVV2	416	357	0.01%	0.003%
64	16.813	2592	2594	2599	rBV4	177	297	0.01%	0.003%
65	16.928	2614	2616	2619	rBV4	298	345	0.01%	0.003%
66	16.970	2619	2624	2631	rVV3	3247	5120	0.11%	0.048%
67	17.196	2655	2667	2679	rVV	417407	681246	14.88%	6.371%
68	17.264	2679	2680	2686	rBV4	323	387	0.01%	0.004%
69	17.374	2696	2701	2704	rBV3	349	541	0.01%	0.005%
70	17.453	2709	2716	2726	rVB	6113	9516	0.21%	0.089%
71	17.542	2726	2733	2735	rBV3	361	532	0.01%	0.005%

M2D5448.M Fri Mar 21 14:25:04 2014 MS2D Page: 2

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130998.D
Acq On : 21 Mar 2014 12:42 pm
Operator : BenM
Sample : jb61656-1
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.01 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

72	17.631	2744	2750	2754	rBV3	797	1237	0.03%	0.012%
73	17.794	2776	2781	2784	rBV5	435	555	0.01%	0.005%
74	17.830	2786	2788	2791	rBV3	405	352	0.01%	0.003%
75	17.877	2791	2797	2804	rVB2	4200	6050	0.13%	0.057%
76	17.919	2804	2805	2809	rBV	400	364	0.01%	0.003%
77	18.050	2825	2830	2838	rVB	10024	14260	0.31%	0.133%
78	18.197	2855	2858	2861	rBV4	940	1337	0.03%	0.013%
79	18.229	2861	2864	2871	rVB4	1523	2115	0.05%	0.020%
80	18.302	2873	2878	2883	rBV2	1639	2355	0.05%	0.022%
81	18.360	2886	2889	2893	rBV6	782	1057	0.02%	0.010%
82	18.402	2893	2897	2900	rBV5	872	1050	0.02%	0.010%
83	18.459	2900	2908	2920	rBV	784155	1143496	24.97%	10.694%
84	18.653	2940	2945	2952	rVB	8438	11413	0.25%	0.107%
85	18.737	2954	2961	2967	rBV2	14459	22779	0.50%	0.213%
86	18.879	2983	2988	2993	rBV8	2411	3710	0.08%	0.035%
87	18.947	2997	3001	3009	rBV2	3617	5403	0.12%	0.051%
88	19.015	3011	3014	3018	rBV3	2088	2345	0.05%	0.022%
89	19.120	3029	3034	3040	rVB3	2967	5304	0.12%	0.050%
90	19.230	3048	3055	3059	rBV7	2293	5964	0.13%	0.056%
91	19.288	3061	3066	3077	rVB2	8186	14959	0.33%	0.140%
92	19.513	3104	3109	3116	rVB2	4558	7546	0.16%	0.071%
93	19.576	3116	3121	3125	rBV4	3255	4604	0.10%	0.043%
94	19.613	3125	3128	3134	rVB4	3757	5422	0.12%	0.051%
95	19.875	3173	3178	3181	rBV	3439	5104	0.11%	0.048%
96	20.043	3203	3210	3219	rBV2	8129	14903	0.33%	0.139%
97	20.326	3259	3264	3274	rBV8	4500	12161	0.27%	0.114%
98	20.394	3275	3277	3284	rVV6	2421	3384	0.07%	0.032%
99	20.452	3284	3288	3292	rVV6	2987	4629	0.10%	0.043%
100	20.499	3293	3297	3303	rVB4	4121	6669	0.15%	0.062%

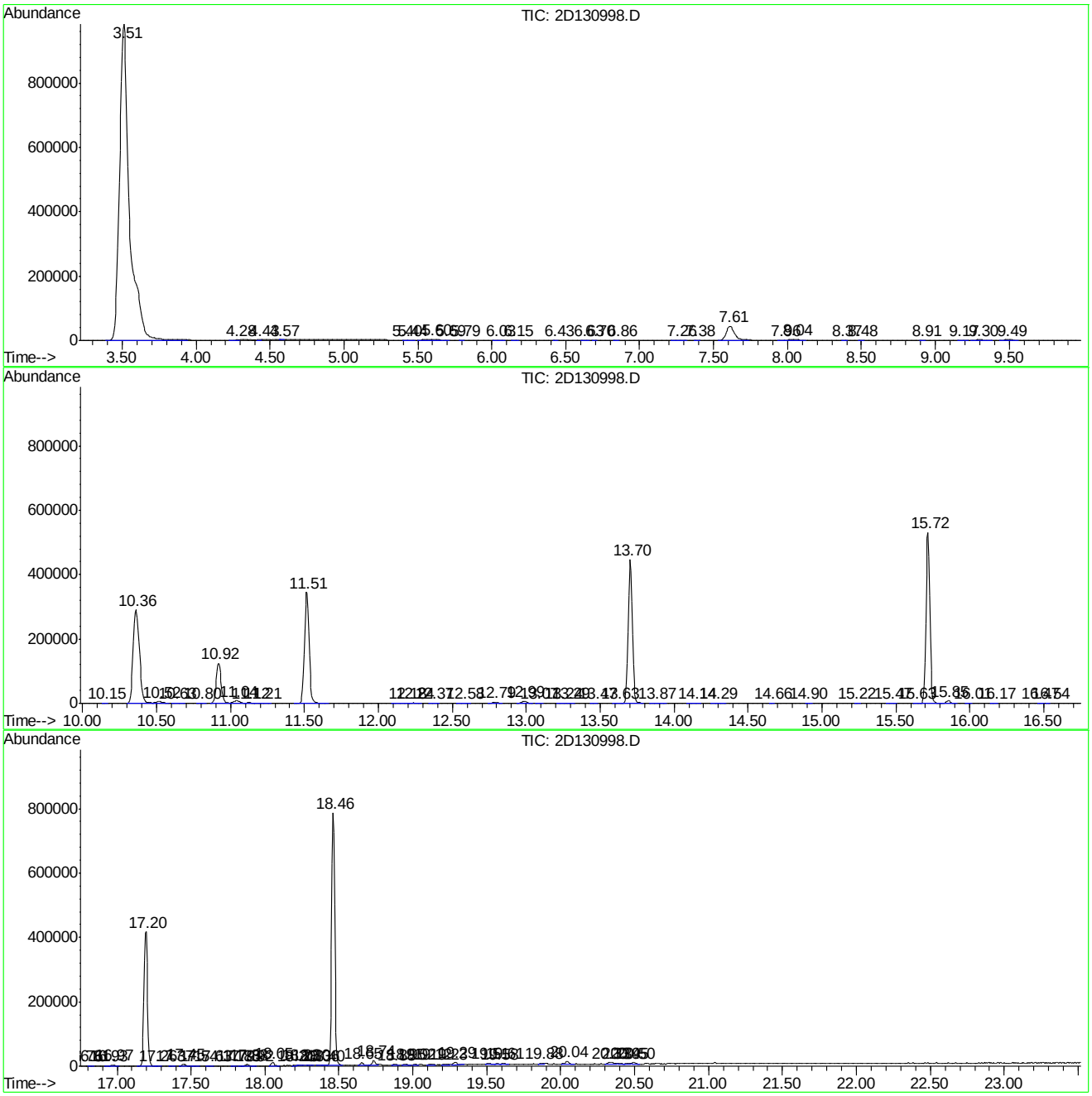
Sum of corrected areas: 10692943

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130998.D
Acq On : 21 Mar 2014 12:42 pm
Operator : BenM
Sample : jb61656-1
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130998.D
Acq On : 21 Mar 2014 12:42 pm
Operator : BenM
Sample : jb61656-1
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

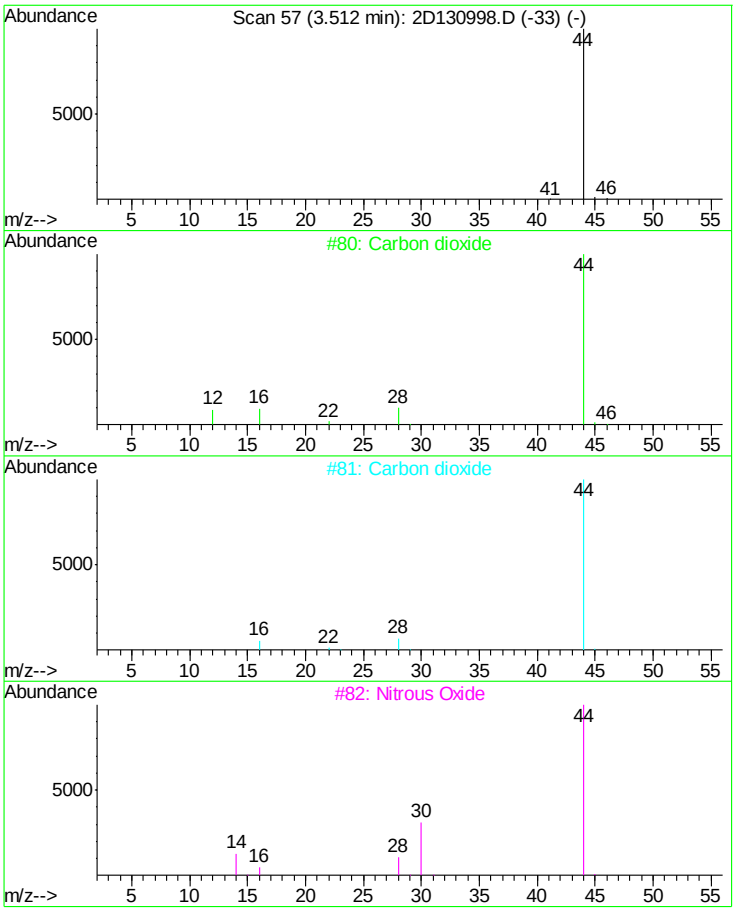
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p

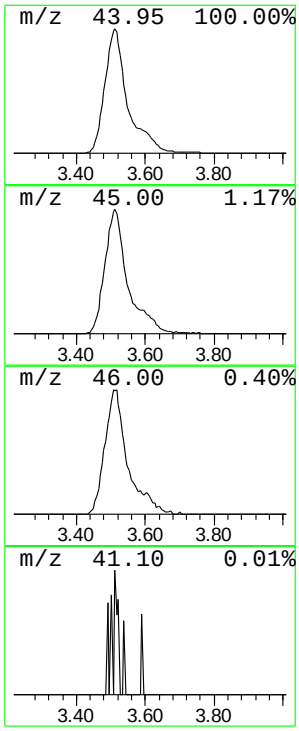
****

Peak Number 1 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.51	264.08 ug/L	4579630	pentafluorobenzene	10.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Carbon dioxide	44	CO2	000124-38-9	3
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Nitrous Oxide	44	N2O	010024-97-2	3
5	Ethylene oxide	44	C2H4O	000075-21-8	2





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130998.D
Acq On : 21 Mar 2014 12:42 pm
Operator : BenM
Sample : jb61656-1
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Carbon dioxide	3.51	264.1	ug/L	4579630	2	10.35	867083	50.0

7.1.2
7

M2D5448.M Fri Mar 21 14:25:05 2014 MS2D Page: 6

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130999.D
Acq On : 21 Mar 2014 1:12 pm
Operator : BenM
Sample : jb61656-2
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 14:25:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.61	65	82848	500.00	ug/L	-0.01
5) pentafluorobenzene	10.35	168	217225	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	11.51	114	321571	50.00	ug/L	-0.02
94) chlorobenzene-d5	15.72	117	302750	50.00	ug/L	-0.01
109) 1,4-dichlorobenzene-d4	18.46	152	179894	50.00	ug/L	-0.01
System Monitoring Compounds						
54) dibromofluoromethane (s)	10.38	113	86036	49.22	ug/L	-0.01
Spiked Amount 50.000	Range 79 - 117		Recovery = 98.44%			
55) 1,2-dichloroethane-d4 (s)	10.92	65	100862	51.87	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 103.74%			
86) toluene-d8 (s)	13.70	98	323803	50.33	ug/L	-0.01
Spiked Amount 50.000	Range 82 - 118		Recovery = 100.66%			
111) 4-bromofluorobenzene (s)	17.19	95	131741	49.13	ug/L	-0.01
Spiked Amount 50.000	Range 75 - 118		Recovery = 98.26%			

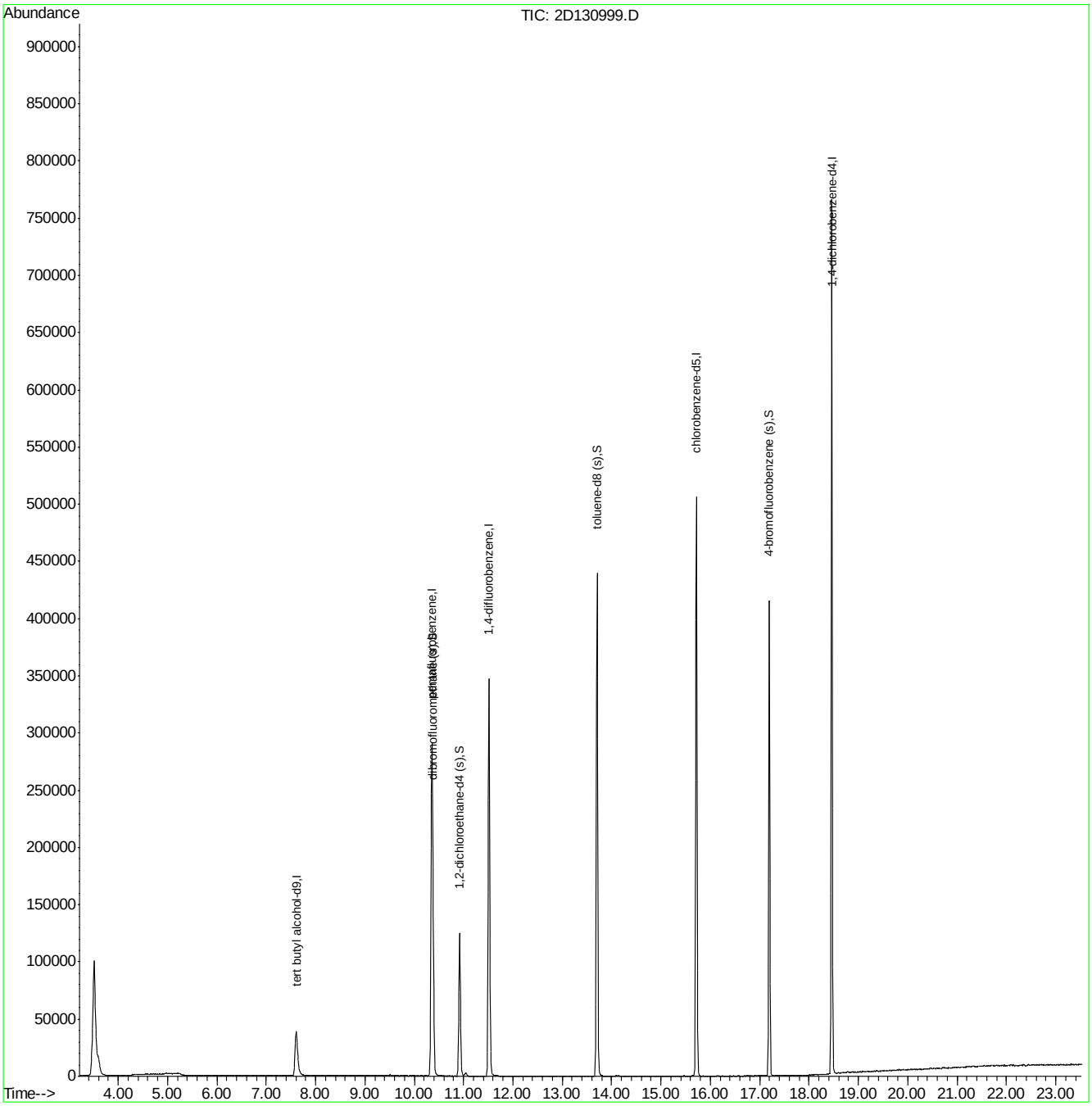
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130999.D
Acq On : 21 Mar 2014 1:12 pm
Operator : BenM
Sample : jb61656-2
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 14:25:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration



M2D5448.M Fri Mar 21 14:27:35 2014 MS2D Page: 2

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130999.D
Acq On : 21 Mar 2014 1:12 pm
Operator : BenM
Sample : jb61656-2
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.01 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.517	35	58	107	rBV	100360	447817	40.49%	7.354%
2	4.293	192	206	207	rBV4	1065	2234	0.20%	0.037%
3	4.550	250	255	256	rBV4	584	644	0.06%	0.011%
4	5.745	482	483	487	rVB2	346	219	0.02%	0.004%
5	6.075	545	546	549	rVB2	260	196	0.02%	0.003%
6	6.332	593	595	598	rBV2	240	256	0.02%	0.004%
7	6.547	633	636	641	rVB3	186	257	0.02%	0.004%
8	7.030	723	728	732	rBV3	242	413	0.04%	0.007%
9	7.266	765	773	778	rBV4	343	735	0.07%	0.012%
10	7.507	814	819	820	rVB2	329	425	0.04%	0.007%
11	7.612	825	839	869	rVV2	38997	149692	13.53%	2.458%
12	8.236	956	958	961	rVV3	232	214	0.02%	0.004%
13	8.267	961	964	968	rVB3	221	350	0.03%	0.006%
14	8.561	1016	1020	1023	rBV3	299	359	0.03%	0.006%
15	9.017	1103	1107	1110	rVB3	237	293	0.03%	0.005%
16	9.169	1133	1136	1139	rBV3	228	218	0.02%	0.004%
17	9.468	1191	1193	1196	rBV2	193	226	0.02%	0.004%
18	9.510	1196	1201	1215	rVB3	955	2395	0.22%	0.039%
19	9.599	1217	1218	1222	rVB2	254	236	0.02%	0.004%
20	9.625	1222	1223	1226	rBV2	270	203	0.02%	0.003%
21	10.359	1349	1363	1394	rBV2	290659	855789	77.37%	14.053%
22	10.920	1458	1470	1486	rBV	125076	278623	25.19%	4.575%
23	11.051	1486	1495	1506	rVB4	2582	7725	0.70%	0.127%
24	11.208	1519	1525	1528	rBV2	155	205	0.02%	0.003%
25	11.512	1572	1583	1610	rBV	347298	746928	67.53%	12.266%
26	12.378	1744	1748	1753	rBV2	227	366	0.03%	0.006%
27	13.400	1940	1943	1949	rBV	143	201	0.02%	0.003%
28	13.704	1989	2001	2024	rBV	439294	869900	78.64%	14.285%
29	14.134	2077	2083	2090	rVB2	382	946	0.09%	0.016%
30	14.197	2090	2095	2098	rBV2	158	194	0.02%	0.003%
31	14.391	2130	2132	2136	rBV2	232	211	0.02%	0.003%
32	14.941	2233	2237	2241	rVB2	160	211	0.02%	0.003%
33	15.277	2299	2301	2308	rVB2	170	288	0.03%	0.005%
34	15.460	2333	2336	2346	rVB2	303	550	0.05%	0.009%

M2D5448.M Fri Mar 21 14:25:44 2014 MS2D Page: 1

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130999.D
Acq On : 21 Mar 2014 1:12 pm
Operator : BenM
Sample : jb61656-2
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.01 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

35	15.639	2361	2370	2375	rBV4	370	809	0.07%	0.013%
36	15.717	2375	2385	2401	rVB	506160	939757	84.96%	15.432%
37	16.021	2439	2443	2447	rVB2	191	282	0.03%	0.005%
38	16.289	2487	2494	2497	rBV2	214	367	0.03%	0.006%
39	16.467	2523	2528	2533	rVB3	222	361	0.03%	0.006%
40	16.682	2564	2569	2571	rBV3	262	407	0.04%	0.007%
41	16.787	2586	2589	2591	rVB	240	220	0.02%	0.004%
42	16.824	2591	2596	2601	rBV4	285	486	0.04%	0.008%
43	16.892	2606	2609	2613	rBV3	205	256	0.02%	0.004%
44	16.960	2619	2622	2626	rVB3	229	296	0.03%	0.005%
45	16.986	2626	2627	2630	rBV2	206	202	0.02%	0.003%
46	17.054	2637	2640	2645	rVB3	178	215	0.02%	0.004%
47	17.191	2652	2666	2681	rBV	415168	663227	59.96%	10.891%
48	17.306	2686	2688	2690	rBV2	230	210	0.02%	0.003%
49	17.379	2697	2702	2705	rBV3	258	486	0.04%	0.008%
50	17.448	2712	2715	2725	rBV4	368	523	0.05%	0.009%
51	17.568	2736	2738	2741	rBV3	221	236	0.02%	0.004%
52	17.668	2751	2757	2761	rBV4	332	433	0.04%	0.007%
53	17.715	2763	2766	2770	rVB3	297	277	0.03%	0.005%
54	17.767	2774	2776	2778	rBV2	249	199	0.02%	0.003%
55	17.788	2778	2780	2786	rBV4	303	298	0.03%	0.005%
56	18.061	2828	2832	2834	rVB3	444	402	0.04%	0.007%
57	18.113	2840	2842	2845	rBV4	381	429	0.04%	0.007%
58	18.402	2894	2897	2900	rBV3	756	772	0.07%	0.013%
59	18.459	2901	2908	2929	rVV	764650	1106122	100.00%	18.164%
60	18.769	2965	2967	2975	rBV9	861	2074	0.19%	0.034%
61	19.073	3023	3025	3027	rBV3	909	784	0.07%	0.013%

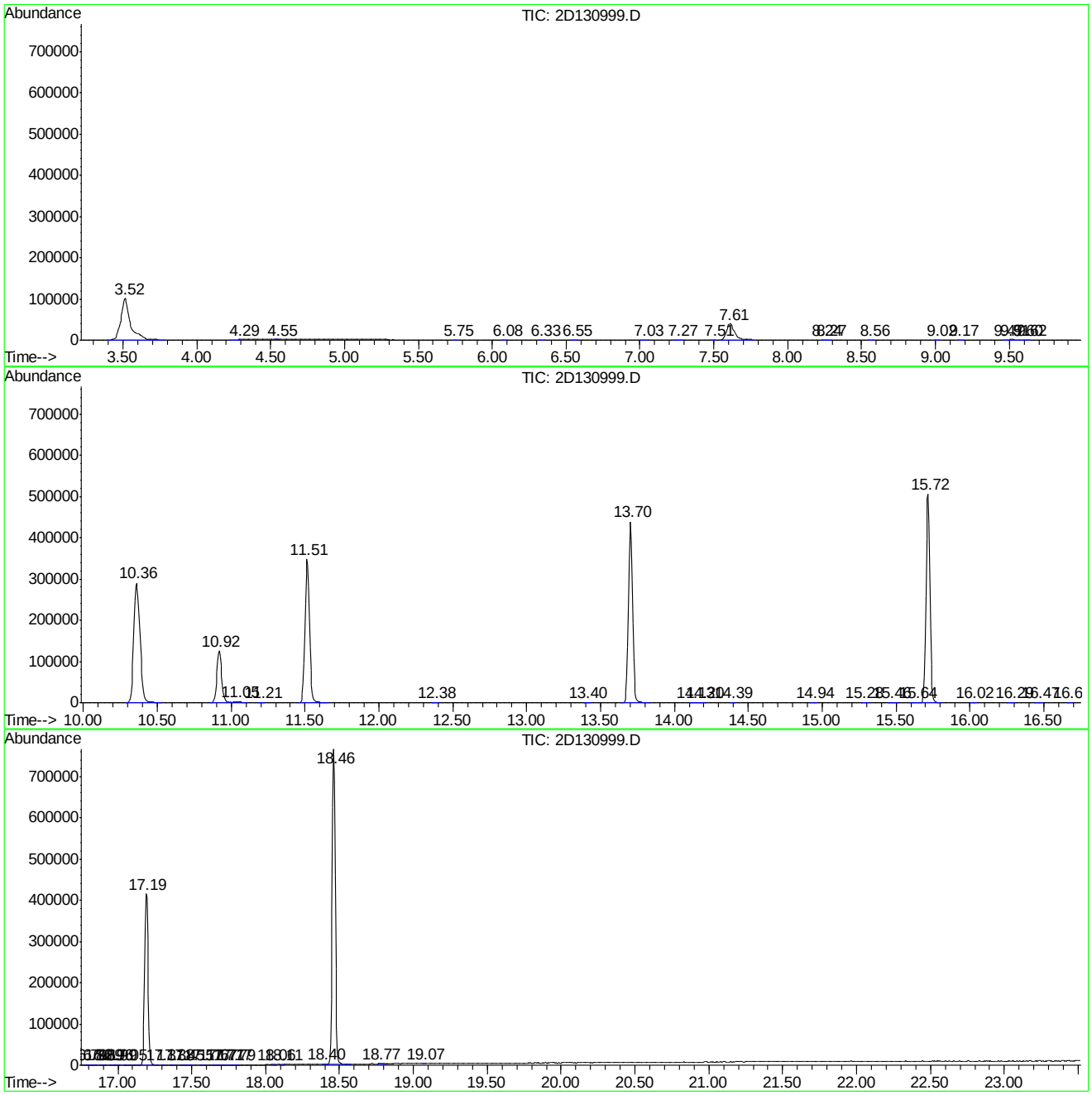
Sum of corrected areas: 6089649

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130999.D
Acq On : 21 Mar 2014 1:12 pm
Operator : BenM
Sample : jb61656-2
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130999.D
Acq On : 21 Mar 2014 1:12 pm
Operator : BenM
Sample : jb61656-2
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

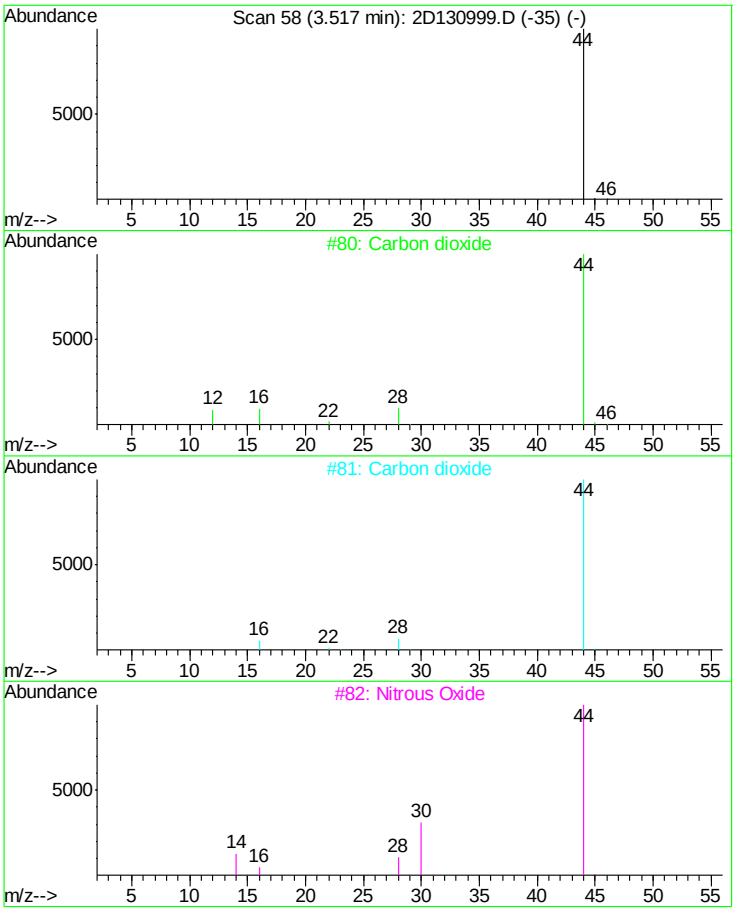
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p

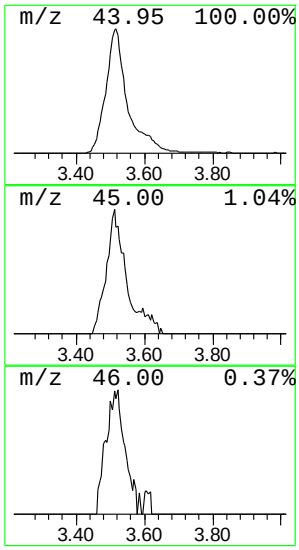
****

Peak Number 1 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.52	26.16 ug/L	447817	pentafluorobenzene	10.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Carbon dioxide	44	CO2	000124-38-9	3
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Nitrous Oxide	44	N2O	010024-97-2	3
5	Acetaldehyde	44	C2H4O	000075-07-0	2





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130999.D
Acq On : 21 Mar 2014 1:12 pm
Operator : BenM
Sample : jb61656-2
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Carbon dioxide	3.52	26.2	ug/L	447817	2	10.35	855789	50.0

7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130995.D
Acq On : 21 Mar 2014 11:03 am
Operator : BenM
Sample : mb
Misc : ms64587,v2d5481,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 21 14:22:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.61	65	82265	500.00	ug/L	-0.02
5) pentafluorobenzene	10.35	168	213660	50.00	ug/L	-0.02
63) 1,4-difluorobenzene	11.51	114	316020	50.00	ug/L	-0.02
94) chlorobenzene-d5	15.71	117	293723	50.00	ug/L	-0.02
109) 1,4-dichlorobenzene-d4	18.46	152	178441	50.00	ug/L	-0.01
System Monitoring Compounds						
54) dibromofluoromethane (s)	10.37	113	84414	49.10	ug/L	-0.02
Spiked Amount 50.000	Range 79 - 117		Recovery = 98.20%			
55) 1,2-dichloroethane-d4 (s)	10.91	65	99400	51.97	ug/L	-0.02
Spiked Amount 50.000	Range 72 - 123		Recovery = 103.94%			
86) toluene-d8 (s)	13.70	98	316982	50.14	ug/L	-0.02
Spiked Amount 50.000	Range 82 - 118		Recovery = 100.28%			
111) 4-bromofluorobenzene (s)	17.19	95	127457	47.92	ug/L	-0.01
Spiked Amount 50.000	Range 75 - 118		Recovery = 95.84%			

Target Compounds	Qvalue

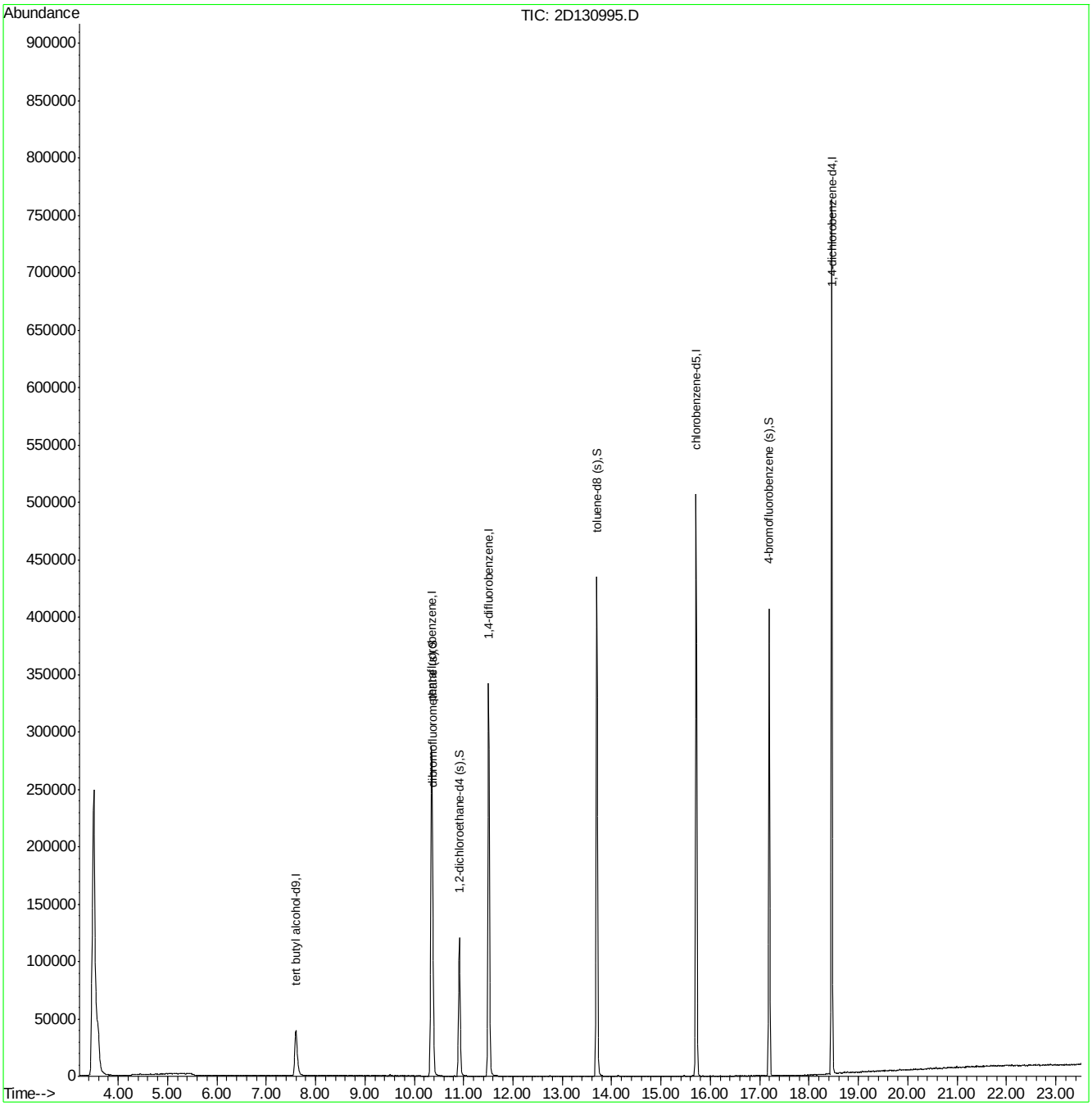
(#) = qualifier out of range (m) = manual integration (+) = signals summed

M2D5448.M Fri Mar 21 14:27:32 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130995.D
Acq On : 21 Mar 2014 11:03 am
Operator : BenM
Sample : mb
Misc : ms64587,v2d5481,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 21 14:22:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration



M2D5448.M Fri Mar 21 14:27:33 2014 MS2D Page: 2

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130995.D
Acq On : 21 Mar 2014 11:03 am
Operator : BenM
Sample : mb
Misc : ms64587,v2d5481,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.01 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.286	5	14	17	rBV3	202	451	0.04%	0.007%
2	3.375	24	31	32	rBV2	192	283	0.03%	0.004%
3	3.506	36	56	102	rBV	249301	1123320	100.00%	16.806%
4	3.978	145	146	152	rVB3	224	252	0.02%	0.004%
5	4.282	189	204	207	rBV6	1068	3013	0.27%	0.045%
6	4.330	210	213	216	rVV5	348	358	0.03%	0.005%
7	4.387	221	224	226	rVB3	209	266	0.02%	0.004%
8	4.440	233	234	239	rVB2	623	540	0.05%	0.008%
9	4.544	251	254	257	rVB4	470	444	0.04%	0.007%
10	4.565	257	258	264	rBV4	318	370	0.03%	0.006%
11	4.618	264	268	271	rBV5	345	579	0.05%	0.009%
12	4.660	273	276	279	rVB3	417	396	0.04%	0.006%
13	4.702	280	284	286	rBV3	293	321	0.03%	0.005%
14	4.796	301	302	307	rVB3	285	254	0.02%	0.004%
15	4.854	310	313	314	rBV3	371	343	0.03%	0.005%
16	4.896	319	321	327	rBV4	388	476	0.04%	0.007%
17	4.969	331	335	339	rBV5	521	900	0.08%	0.013%
18	5.016	341	344	346	rBV3	494	566	0.05%	0.008%
19	5.331	400	404	406	rBV4	310	396	0.04%	0.006%
20	5.389	411	415	417	rBV3	596	680	0.06%	0.010%
21	5.630	459	461	464	rVB2	378	244	0.02%	0.004%
22	5.860	501	505	508	rVB3	193	276	0.02%	0.004%
23	5.929	514	518	523	rBV2	235	391	0.03%	0.006%
24	5.965	523	525	529	rVV2	196	258	0.02%	0.004%
25	6.002	531	532	537	rVV3	181	265	0.02%	0.004%
26	6.060	541	543	549	rVV3	205	245	0.02%	0.004%
27	6.380	599	604	608	rBV4	169	315	0.03%	0.005%
28	6.479	617	623	626	rVB2	238	413	0.04%	0.006%
29	6.909	703	705	709	rBV3	223	267	0.02%	0.004%
30	7.072	732	736	739	rVB2	271	289	0.03%	0.004%
31	7.260	761	772	775	rBV4	383	800	0.07%	0.012%
32	7.512	814	820	822	rBV2	308	369	0.03%	0.006%
33	7.601	822	837	866	rBV	39752	149473	13.31%	2.236%
34	7.800	873	875	879	rVB2	338	362	0.03%	0.005%

M2D5448.M Fri Mar 21 14:22:54 2014 MS2D Page: 1

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130995.D
Acq On : 21 Mar 2014 11:03 am
Operator : BenM
Sample : mb
Misc : ms64587,v2d5481,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.01 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

35	7.884	887	891	895	rVV3	188	263	0.02%	0.004%
36	7.942	898	902	905	rBV2	285	270	0.02%	0.004%
37	8.901	1080	1085	1089	rBV2	180	272	0.02%	0.004%
38	9.347	1167	1170	1176	rBV3	184	343	0.03%	0.005%
39	9.504	1194	1200	1211	rVB3	1004	2261	0.20%	0.034%
40	10.354	1350	1362	1397	rBV2	287647	840502	74.82%	12.575%
41	10.915	1454	1469	1493	rBV	120805	276393	24.61%	4.135%
42	11.056	1493	1496	1500	rVB2	256	330	0.03%	0.005%
43	11.507	1569	1582	1607	rBV	342276	733977	65.34%	10.981%
44	11.685	1615	1616	1622	rVB2	254	303	0.03%	0.005%
45	12.750	1815	1819	1826	rBV2	260	323	0.03%	0.005%
46	13.699	1988	2000	2027	rVV	435080	853741	76.00%	12.773%
47	14.595	2166	2171	2174	rVB2	201	262	0.02%	0.004%
48	15.093	2264	2266	2268	rBV2	288	259	0.02%	0.004%
49	15.172	2276	2281	2287	rBV2	154	314	0.03%	0.005%
50	15.466	2329	2337	2341	rBV3	367	694	0.06%	0.010%
51	15.644	2364	2371	2375	rVV2	376	749	0.07%	0.011%
52	15.712	2375	2384	2400	rVB	507125	916636	81.60%	13.714%
53	15.995	2433	2438	2444	rBV3	294	518	0.05%	0.008%
54	16.158	2465	2469	2474	rVB2	202	403	0.04%	0.006%
55	16.200	2474	2477	2480	rBV	350	335	0.03%	0.005%
56	16.520	2530	2538	2540	rVB2	331	615	0.05%	0.009%
57	16.541	2540	2542	2545	rBV2	338	387	0.03%	0.006%
58	16.567	2545	2547	2550	rVV2	207	258	0.02%	0.004%
59	16.593	2550	2552	2558	rVB3	258	357	0.03%	0.005%
60	16.729	2575	2578	2584	rVB4	159	292	0.03%	0.004%
61	16.824	2592	2596	2600	rVB3	230	420	0.04%	0.006%
62	16.929	2609	2616	2618	rBV3	166	258	0.02%	0.004%
63	17.191	2653	2666	2682	rVV	407072	644632	57.39%	9.644%
64	17.400	2701	2706	2709	rBV4	236	290	0.03%	0.004%
65	17.589	2741	2742	2747	rVB2	232	259	0.02%	0.004%
66	17.647	2747	2753	2754	rBV3	278	399	0.04%	0.006%
67	17.704	2761	2764	2769	rBV4	297	521	0.05%	0.008%
68	17.914	2801	2804	2806	rBV2	469	267	0.02%	0.004%
69	17.935	2806	2808	2810	rVB2	312	279	0.02%	0.004%
70	17.982	2812	2817	2822	rBV4	531	830	0.07%	0.012%
71	18.014	2822	2823	2827	rBV4	443	575	0.05%	0.009%

M2D5448.M Fri Mar 21 14:22:54 2014 MS2D Page: 2

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130995.D
Acq On : 21 Mar 2014 11:03 am
Operator : BenM
Sample : mb
Misc : ms64587,v2d5481,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.01 Peak Location: TOP

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

Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

72	18.045	2827	2829	2833	rVB3	237	251	0.02%	0.004%
73	18.077	2833	2835	2837	rVB3	460	311	0.03%	0.005%
74	18.103	2837	2840	2841	rBV2	618	434	0.04%	0.006%
75	18.119	2841	2843	2848	rVB4	605	759	0.07%	0.011%
76	18.176	2851	2854	2857	rBV4	526	629	0.06%	0.009%
77	18.229	2862	2864	2867	rBV3	363	364	0.03%	0.005%
78	18.412	2892	2899	2901	rBV6	706	1237	0.11%	0.019%
79	18.459	2901	2908	2921	rBV	762187	1089471	96.99%	16.300%
80	18.564	2927	2928	2931	rBV3	302	286	0.03%	0.004%
81	18.601	2932	2935	2939	rBV3	578	853	0.08%	0.013%
82	18.680	2948	2950	2954	rBV5	735	676	0.06%	0.010%
83	18.716	2954	2957	2963	rVB5	991	1271	0.11%	0.019%
84	18.779	2965	2969	2974	rBV6	1325	2114	0.19%	0.032%
85	18.842	2978	2981	2983	rBV4	542	402	0.04%	0.006%
86	18.868	2983	2986	2989	rBV5	819	809	0.07%	0.012%
87	19.005	3010	3012	3015	rVB3	601	543	0.05%	0.008%
88	19.073	3022	3025	3028	rBV4	1037	1063	0.09%	0.016%
89	19.204	3048	3050	3052	rVB3	792	492	0.04%	0.007%
90	19.361	3078	3080	3082	rBV2	645	417	0.04%	0.006%
91	19.456	3095	3098	3101	rBV5	833	1170	0.10%	0.018%
92	19.545	3114	3115	3117	rBV	904	537	0.05%	0.008%
93	19.623	3129	3130	3131	rBV	756	312	0.03%	0.005%
94	19.791	3160	3162	3164	rBV3	1032	863	0.08%	0.013%
95	19.838	3164	3171	3175	rVV8	1317	2699	0.24%	0.040%
96	20.122	3220	3225	3227	rBV5	887	1305	0.12%	0.020%
97	20.153	3227	3231	3234	rBV6	1129	1609	0.14%	0.024%
98	20.992	3387	3391	3393	rBV5	1320	1657	0.15%	0.025%
99	22.255	3629	3632	3638	rBV8	936	1401	0.12%	0.021%
100	23.204	3810	3813	3817	rBV6	1283	2042	0.18%	0.031%

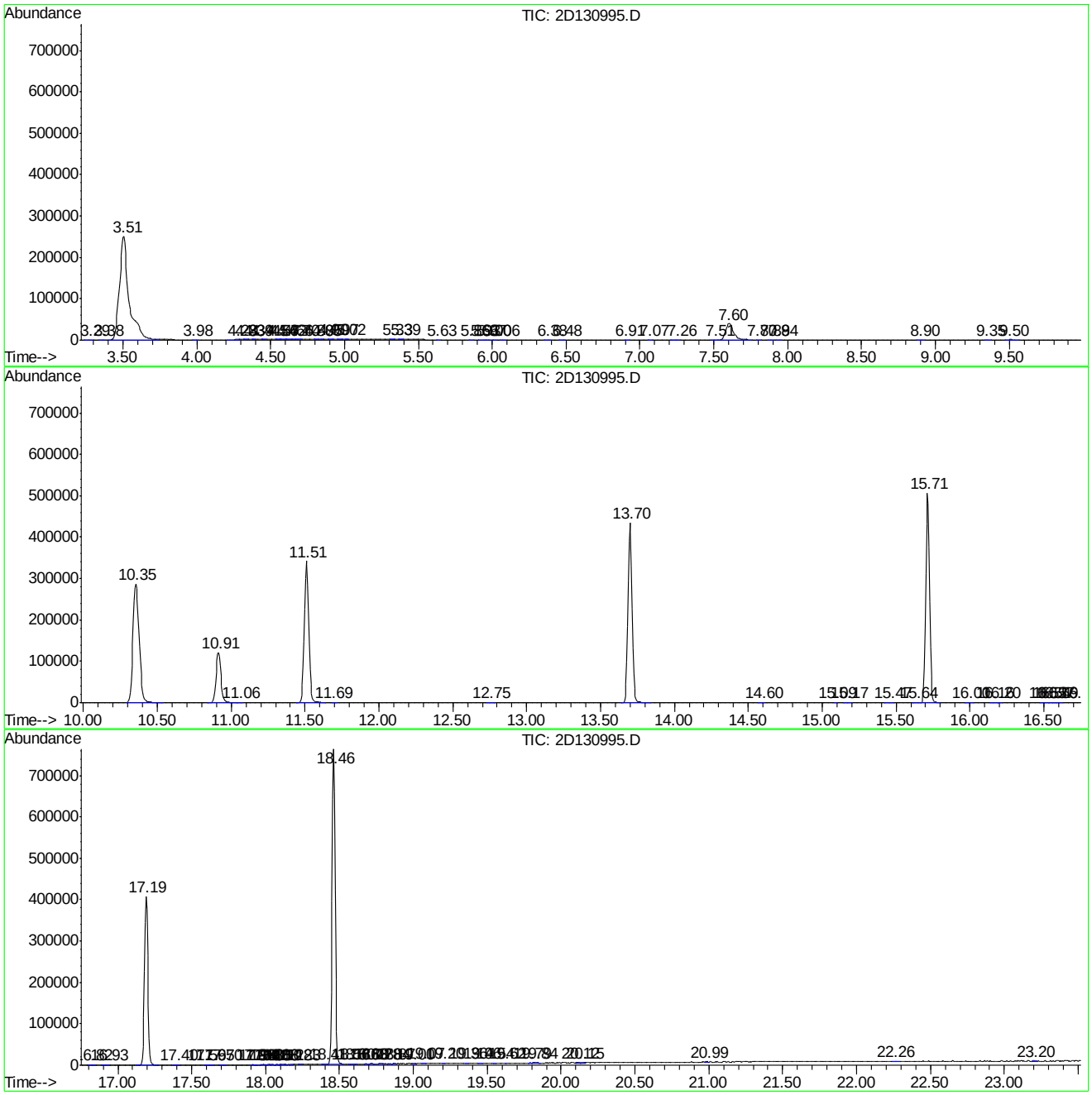
Sum of corrected areas: 6683939

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130995.D
Acq On : 21 Mar 2014 11:03 am
Operator : BenM
Sample : mb
Misc : ms64587,v2d5481,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130995.D
Acq On : 21 Mar 2014 11:03 am
Operator : BenM
Sample : mb
Misc : ms64587,v2d5481,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

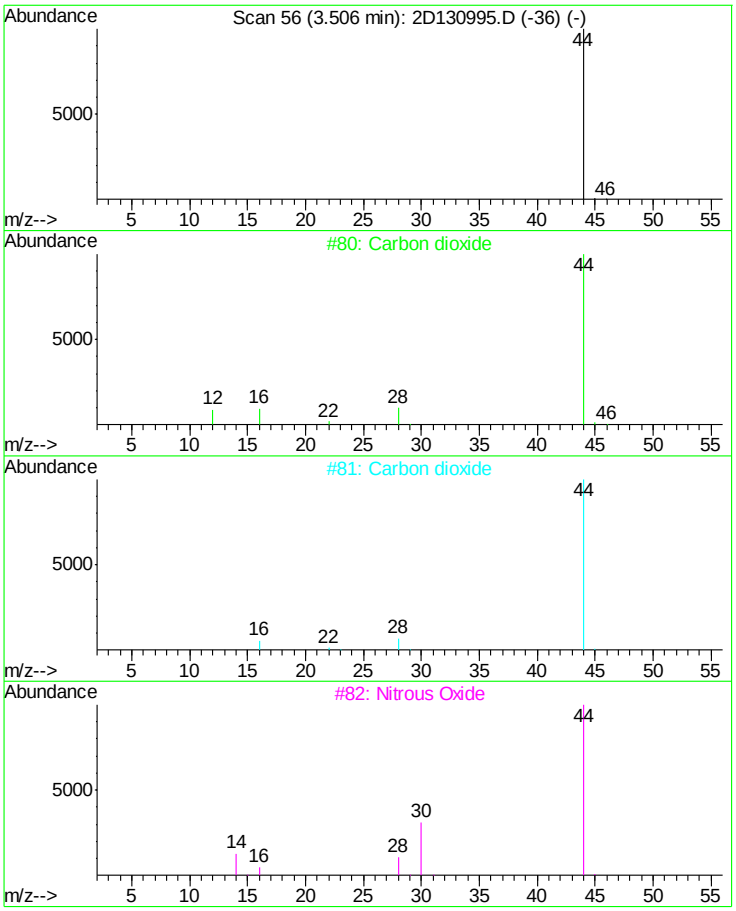
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p

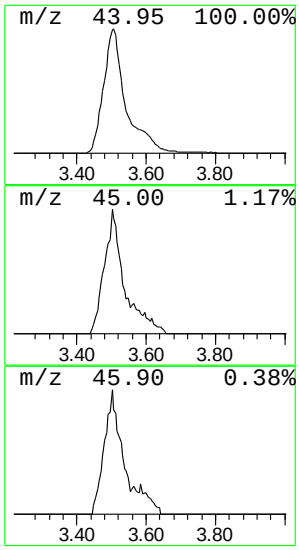
****

Peak Number 1 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.51	66.82 ug/L	1123320	pentafluorobenzene	10.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Carbon dioxide	44	CO2	000124-38-9	3
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Nitrous Oxide	44	N2O	010024-97-2	3
5	Acetaldehyde	44	C2H4O	000075-07-0	2





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\
Data File : 2D130995.D
Acq On : 21 Mar 2014 11:03 am
Operator : BenM
Sample : mb
Misc : ms64587,v2d5481,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: Lscint.p

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Carbon dioxide	3.51	66.8	ug/L	1123320	2	10.35	840502	50.0

7.2.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130996.D
Acq On : 21 Mar 2014 11:42 am
Operator : BenM
Sample : bs
Misc : ms64447,v2d5481,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 21 14:23:09 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.61	65	86303	500.00	ug/L	-0.02
5) pentafluorobenzene	10.35	168	218959	50.00	ug/L	-0.02
63) 1,4-difluorobenzene	11.51	114	321754	50.00	ug/L	-0.02
94) chlorobenzene-d5	15.71	117	299632	50.00	ug/L	-0.02
109) 1,4-dichlorobenzene-d4	18.46	152	182051	50.00	ug/L	-0.01
System Monitoring Compounds						
54) dibromofluoromethane (s)	10.37	113	87101	49.44	ug/L	-0.02
Spiked Amount 50.000	Range 79 - 117		Recovery = 98.88%			
55) 1,2-dichloroethane-d4 (s)	10.91	65	99749	50.89	ug/L	-0.02
Spiked Amount 50.000	Range 72 - 123		Recovery = 101.78%			
86) toluene-d8 (s)	13.70	98	324065	50.34	ug/L	-0.02
Spiked Amount 50.000	Range 82 - 118		Recovery = 100.68%			
111) 4-bromofluorobenzene (s)	17.19	95	129758	47.82	ug/L	-0.01
Spiked Amount 50.000	Range 75 - 118		Recovery = 95.64%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.74	59	44279	252.80	ug/L	95
3) ethyl alcohol	6.21	45	102879	5418.55	ug/L	100
4) 1,4-dioxane	12.46	88	20049	1224.22	ug/L #	94
11) chlorodifluoromethane	3.97	51	102487	56.82	ug/L	99
12) dichlorodifluoromethane	3.95	85	106125	55.33	ug/L	98
15) chloromethane	4.31	50	157929	54.76	ug/L	100
16) vinyl chloride	4.57	62	140261	53.88	ug/L	100
18) bromomethane	5.25	94	84129	51.91	ug/L	98
19) chloroethane	5.44	64	75936	53.67	ug/L	96
20) trichlorofluoromethane	5.94	101	141345	56.40	ug/L	99
22) ethyl ether	6.38	74	51145	50.93	ug/L	91
23) acrolein	6.66	56	168027	425.22	ug/L	99
27) 1,1-dichloroethene	6.83	96	89660	49.86	ug/L	89
28) 2-chloropropane	6.59	43	202191	70.29	ug/L	98
29) acetone	6.91	58	7374	47.19	ug/L	94
30) allyl chloride	7.43	76	57900	55.27	ug/L	94
31) acetonitrile	7.41	40	89404	474.41	ug/L	89
32) iodomethane	7.13	142	172308	49.66	ug/L	96
33) carbon disulfide	7.26	76	341375	52.38	ug/L	98
34) methylene chloride	7.64	84	105085	50.06	ug/L	93
35) methyl acetate	7.42	74	12099	39.83	ug/L #	89
36) 1-chloropropane	7.69	63	8686	54.41	ug/L	99
37) methyl tert butyl ether	8.04	73	558348	99.96	ug/L	99
38) trans-1,2-dichloroethene	8.07	96	96107	49.52	ug/L	94
39) di-isopropyl ether	8.76	45	378627	56.01	ug/L	98
40) 2-butanone	9.65	72	8940	45.78	ug/L	98
41) 1,1-dichloroethane	8.75	63	190749	55.91	ug/L	99
42) chloroprene	8.89	53	136289	51.35	ug/L	95
43) acrylonitrile	8.04	53	175919	236.45	ug/L	96
44) vinyl acetate	8.76	86	14927	50.93	ug/L	65
45) ethyl tert-butyl ether	9.33	59	333849	51.59	ug/L	98
46) ethyl acetate	9.68	45	12072	47.99	ug/L	64
47) 2,2-dichloropropane	9.67	77	145529	56.87	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130996.D
Acq On : 21 Mar 2014 11:42 am
Operator : BenM
Sample : bs
Misc : ms64447,v2d5481,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 21 14:23:09 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.66	96	104883	48.97	ug/L		94
49) propionitrile	9.78	54	126211	443.22	ug/L		97
50) tert-Butyl Formate	10.20	59	96271	51.92	ug/L		98
51) bromochloromethane	10.04	128	48722	47.41	ug/L		92
52) tetrahydrofuran	10.09	42	27037	44.11	ug/L		95
53) chloroform	10.12	83	175294	54.80	ug/L		98
56) freon 113	6.83	151	68621	46.99	ug/L		95
57) methacrylonitrile	10.00	67	33291	44.10	ug/L		94
58) 1,1,1-trichloroethane	10.44	97	149250	57.50	ug/L		98
59) cyclohexane	10.53	84	146789	55.00	ug/L		94
60) isobutyl alcohol	10.66	74	11378	471.67	ug/L	#	100
62) iso-octane	11.05	57	374048	52.01	ug/L		98
65) epichlorohydrin	13.19	57	39695	212.27	ug/L		98
66) n-butyl alcohol	11.69	56	112697	2157.91	ug/L		98
67) carbon tetrachloride	10.69	117	131917	57.10	ug/L		98
68) 1,1-dichloropropene	10.67	75	123328	51.84	ug/L		97
69) hexane	8.45	86	14851	45.72	ug/L	#	85
70) benzene	11.01	78	393808	52.88	ug/L		100
71) tert-amyl methyl ether	11.08	55	89011	49.73	ug/L		90
72) heptane	11.27	57	58218	46.11	ug/L		96
73) isopropyl acetate	10.97	43	174711	48.35	ug/L		98
74) 1,2-dichloroethane	11.03	62	127921	55.22	ug/L		98
75) trichloroethene	11.94	130	94022	49.60	ug/L		98
79) 2-chloroethyl vinyl ether	13.04	63	287082	241.34	ug/L		97
80) methyl methacrylate	12.35	69	55125	45.61	ug/L		91
81) 1,2-dichloropropane	12.30	63	103696	53.53	ug/L		99
82) dibromomethane	12.49	93	57710	49.59	ug/L		97
83) methylcyclohexane	12.24	83	161184	52.66	ug/L		90
84) bromodichloromethane	12.68	83	129602	52.29	ug/L		99
85) cis-1,3-dichloropropene	13.31	75	146216	46.63	ug/L		97
87) 4-methyl-2-pentanone	13.48	58	34173	46.26	ug/L		96
88) toluene	13.80	92	231789	51.62	ug/L		100
89) 3-methyl-1-butanol	13.50	55	74358	908.73	ug/L		97
90) trans-1,3-dichloropropene	14.08	75	140504	49.07	ug/L		98
91) ethyl methacrylate	14.11	69	108952	46.85	ug/L		96
92) 1,1,2-trichloroethane	14.35	83	69450	47.70	ug/L		97
93) 2-hexanone	14.64	58	29996	44.61	ug/L		93
95) 3,3-Dimethyl-1-butanol	14.86	57	83437	466.24	ug/L		99
96) tetrachloroethene	14.56	164	81705	49.61	ug/L		98
97) 1,3-dichloropropane	14.60	76	136250	49.93	ug/L		96
98) butyl acetate	14.75	56	57930	46.95	ug/L		91
99) dibromochloromethane	14.93	129	96990	49.73	ug/L		98
100) 1,2-dibromoethane	15.12	107	81518	46.55	ug/L		99
102) chlorobenzene	15.75	112	258464	51.27	ug/L		96
103) 1,1,1,2-tetrachloroethane	15.84	131	101640	51.07	ug/L		99
104) ethylbenzene	15.85	91	456515	53.70	ug/L		98
105) m,p-xylene	16.00	106	344630	105.80	ug/L		97
106) o-xylene	16.54	106	175485	53.03	ug/L		95
107) styrene	16.55	104	295154	52.46	ug/L		98
108) bromoform	16.84	173	69346	46.26	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130996.D
Acq On : 21 Mar 2014 11:42 am
Operator : BenM
Sample : bs
Misc : ms64447,v2d5481,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 21 14:23:09 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

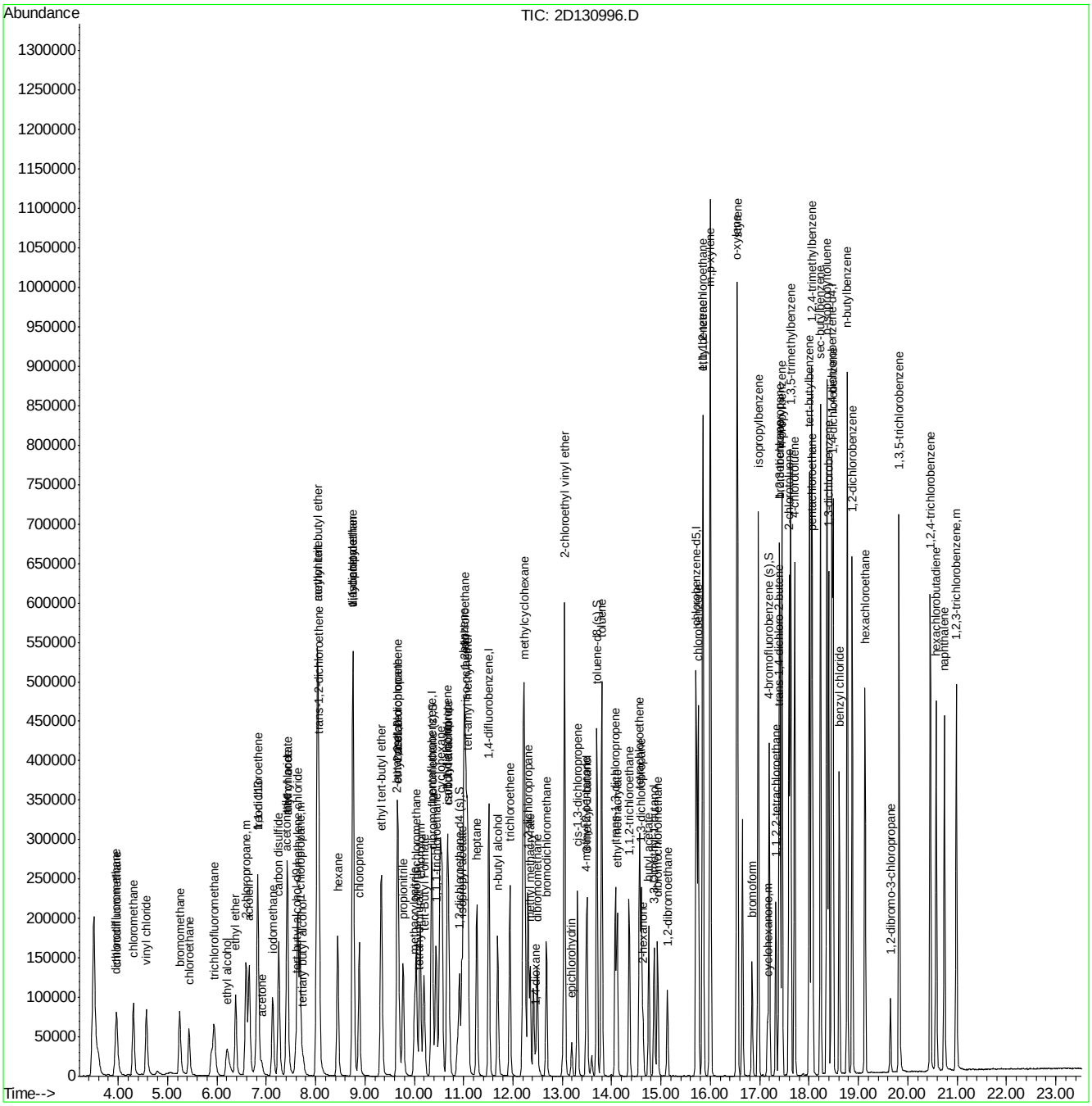
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) isopropylbenzene	16.97	105	472633	52.78	ug/L		99
112) cyclohexanone	17.16	55	29711	390.67	ug/L		95
113) bromobenzene	17.41	156	125729	48.71	ug/L		97
114) 1,1,2,2-tetrachloroethane	17.33	83	112638	44.32	ug/L		100
115) trans-1,4-dichloro-2-buten	17.38	53	29139	45.73	ug/L		98
116) 1,2,3-trichloropropane	17.41	110	27489	44.37	ug/L	#	37
117) n-propylbenzene	17.45	91	573281	56.16	ug/L		98
119) 2-chlorotoluene	17.59	126	114013	50.32	ug/L		98
120) 4-chlorotoluene	17.71	91	345987	51.28	ug/L		97
121) 1,3,5-trimethylbenzene	17.63	105	408717	51.88	ug/L		99
122) tert-butylbenzene	18.00	119	353222	52.22	ug/L		96
123) pentachloroethane	18.07	167	85527	50.96	ug/L		98
124) 1,2,4-trimethylbenzene	18.05	105	419181	52.98	ug/L		99
126) sec-butylbenzene	18.23	105	549972	53.17	ug/L		98
127) 1,3-dichlorobenzene	18.40	146	252051	50.45	ug/L		99
128) p-isopropyltoluene	18.36	119	470272	52.77	ug/L		98
129) 1,4-dichlorobenzene	18.49	146	256625	49.86	ug/L		98
130) 1,2-dichlorobenzene	18.87	146	251734	50.00	ug/L		99
131) benzyl chloride	18.61	91	241901	44.88	ug/L		98
133) n-butylbenzene	18.77	92	250727	56.34	ug/L		98
135) 1,2-dibromo-3-chloropropan	19.65	157	24702	41.19	ug/L		92
136) 1,3,5-trichlorobenzene	19.83	180	232094	51.25	ug/L		99
137) hexachlorobutadiene	20.58	225	111216	50.40	ug/L		99
138) naphthalene	20.75	128	364395	44.44	ug/L		98
139) 1,2,4-trichlorobenzene	20.46	180	202235	49.68	ug/L		99
140) 1,2,3-trichlorobenzene	20.99	180	171705	47.48	ug/L		99
141) hexachloroethane	19.13	201	90490	52.45	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130996.D
Acq On : 21 Mar 2014 11:42 am
Operator : BenM
Sample : bs
Misc : ms64447,v2d5481,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 21 14:23:09 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration



M2D5448.M Fri Mar 21 14:27:33 2014 MS2D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D131004.D
Acq On : 21 Mar 2014 3:41 pm
Operator : BenM
Sample : jb61656-1ms
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 24 08:34:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.61	65	91859	500.00	ug/L		-0.02
5) pentafluorobenzene	10.35	168	227732	50.00	ug/L		-0.01
63) 1,4-difluorobenzene	11.51	114	335282	50.00	ug/L		-0.02
94) chlorobenzene-d5	15.72	117	316910	50.00	ug/L		-0.01
109) 1,4-dichlorobenzene-d4	18.46	152	188889	50.00	ug/L		-0.01
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.37	113	89610	48.90	ug/L		-0.02
Spiked Amount 50.000	Range 79 - 117		Recovery = 97.80%				
55) 1,2-dichloroethane-d4 (s)	10.92	65	102300	50.18	ug/L		-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 100.36%				
86) toluene-d8 (s)	13.70	98	340503	50.76	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 101.52%				
111) 4-bromofluorobenzene (s)	17.19	95	137538	48.85	ug/L		-0.01
Spiked Amount 50.000	Range 75 - 118		Recovery = 97.70%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.74	59	49495	265.49	ug/L		96
3) ethyl alcohol	6.21	45	98507	4874.47	ug/L		91
4) 1,4-dioxane	12.46	88	20305	1164.86	ug/L	#	93
11) chlorodifluoromethane	3.97	51	95518	51.17	ug/L		99
12) dichlorodifluoromethane	3.95	85	92768	46.50	ug/L		99
15) chloromethane	4.31	50	145824	48.62	ug/L		100
16) vinyl chloride	4.57	62	125671	46.41	ug/L		98
18) bromomethane	5.25	94	74293	44.08	ug/L		100
19) chloroethane	5.44	64	69342	47.12	ug/L		96
20) trichlorofluoromethane	5.94	101	128141	49.16	ug/L		98
22) ethyl ether	6.38	74	50384	48.24	ug/L		95
23) acrolein	6.66	56	176061	428.39	ug/L		99
27) 1,1-dichloroethene	6.83	96	83723	44.76	ug/L		91
28) 2-chloropropane	6.59	43	182170	60.89	ug/L		99
29) acetone	6.91	58	7219	44.42	ug/L		86
30) allyl chloride	7.43	76	52719	48.38	ug/L		94
31) acetonitrile	7.41	40	89308	455.65	ug/L	#	74
32) iodomethane	7.13	142	171315	47.47	ug/L		97
33) carbon disulfide	7.26	76	326529	48.17	ug/L		98
34) methylene chloride	7.64	84	107731	49.34	ug/L		96
35) methyl acetate	7.43	74	13770	43.59	ug/L		90
36) 1-chloropropane	7.69	63	8176	49.24	ug/L		95
37) methyl tert butyl ether	8.04	73	298631	51.40	ug/L		98
38) trans-1,2-dichloroethene	8.07	96	93292	46.22	ug/L		94
39) di-isopropyl ether	8.77	45	379756	54.01	ug/L		95
40) 2-butanone	9.65	72	9270	45.64	ug/L		90
41) 1,1-dichloroethane	8.76	63	180141	50.77	ug/L		99
42) chloroprene	8.89	53	135195	48.97	ug/L		96
43) acrylonitrile	8.04	53	174079	224.96	ug/L		97
44) vinyl acetate	8.77	86	13807	45.29	ug/L		71
45) ethyl tert-butyl ether	9.33	59	353883	52.58	ug/L		98
46) ethyl acetate	9.68	45	12437	47.53	ug/L	#	46
47) 2,2-dichloropropane	9.67	77	148541	55.82	ug/L		97

M2D5448.M Mon Mar 24 09:05:34 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D131004.D
Acq On : 21 Mar 2014 3:41 pm
Operator : BenM
Sample : jb61656-1ms
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 24 08:34:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.66	96	104364	46.85	ug/L		93
49) propionitrile	9.78	54	126580	427.39	ug/L		90
50) tert-Butyl Formate	10.20	59	36109	18.72	ug/L		98
51) bromochloromethane	10.04	128	50262	47.02	ug/L		95
52) tetrahydrofuran	10.10	42	27197	42.66	ug/L		98
53) chloroform	10.12	83	169505	50.95	ug/L		97
56) freon 113	6.82	151	67140	44.28	ug/L		93
57) methacrylonitrile	10.01	67	34927	44.48	ug/L		94
58) 1,1,1-trichloroethane	10.45	97	137944	51.09	ug/L		99
59) cyclohexane	10.53	84	135012	48.64	ug/L		92
60) isobutyl alcohol	10.67	74	11181	446.17	ug/L	#	100
62) iso-octane	11.05	57	384879	51.45	ug/L		97
65) epichlorohydrin	13.19	57	35805	183.74	ug/L		100
66) n-butyl alcohol	11.69	56	114798	2109.45	ug/L		99
67) carbon tetrachloride	10.69	117	119329	49.56	ug/L		98
68) 1,1-dichloropropene	10.67	75	118074	47.63	ug/L		96
69) hexane	8.45	86	15582	46.03	ug/L	#	94
70) benzene	11.01	78	380012	48.97	ug/L		99
71) tert-amyl methyl ether	11.08	55	92239	49.45	ug/L		93
72) heptane	11.27	57	64437	48.97	ug/L		98
73) isopropyl acetate	10.97	43	174626	46.38	ug/L		99
74) 1,2-dichloroethane	11.03	62	130248	53.95	ug/L		99
75) trichloroethene	11.94	130	89142	45.13	ug/L		99
80) methyl methacrylate	12.35	69	57452	45.61	ug/L		93
81) 1,2-dichloropropane	12.31	63	101897	50.48	ug/L		99
82) dibromomethane	12.49	93	58904	48.57	ug/L		96
83) methylcyclohexane	12.24	83	152896	47.94	ug/L		97
84) bromodichloromethane	12.68	83	132577	51.33	ug/L		99
85) cis-1,3-dichloropropene	13.31	75	163924	50.17	ug/L		98
87) 4-methyl-2-pentanone	13.49	58	35454	46.06	ug/L		97
88) toluene	13.80	92	224514	47.99	ug/L		99
89) 3-methyl-1-butanol	13.50	55	76098	892.47	ug/L		98
90) trans-1,3-dichloropropene	14.08	75	149216	50.01	ug/L		98
91) ethyl methacrylate	14.11	69	117540	48.51	ug/L		95
92) 1,1,2-trichloroethane	14.36	83	71264	46.97	ug/L		99
93) 2-hexanone	14.64	58	31269	44.63	ug/L		94
95) 3,3-Dimethyl-1-butanol	14.86	57	89038	470.41	ug/L		99
96) tetrachloroethene	14.57	164	76364	43.84	ug/L		96
97) 1,3-dichloropropane	14.61	76	142401	49.34	ug/L		97
98) butyl acetate	14.75	56	58966	45.18	ug/L		92
99) dibromochloromethane	14.94	129	100440	48.69	ug/L		99
100) 1,2-dibromoethane	15.13	107	85653	46.25	ug/L		98
102) chlorobenzene	15.75	112	259777	48.72	ug/L		96
103) 1,1,1,2-tetrachloroethane	15.84	131	103544	49.19	ug/L		100
104) ethylbenzene	15.85	91	449425	49.99	ug/L		98
105) m,p-xylene	16.00	106	335035	97.24	ug/L		97
106) o-xylene	16.54	106	173415	49.55	ug/L		93
107) styrene	16.55	104	295455	49.65	ug/L		95
108) bromoform	16.84	173	71538	45.12	ug/L		98
110) isopropylbenzene	16.97	105	448337	48.26	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D131004.D
Acq On : 21 Mar 2014 3:41 pm
Operator : BenM
Sample : jb61656-1ms
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 24 08:34:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

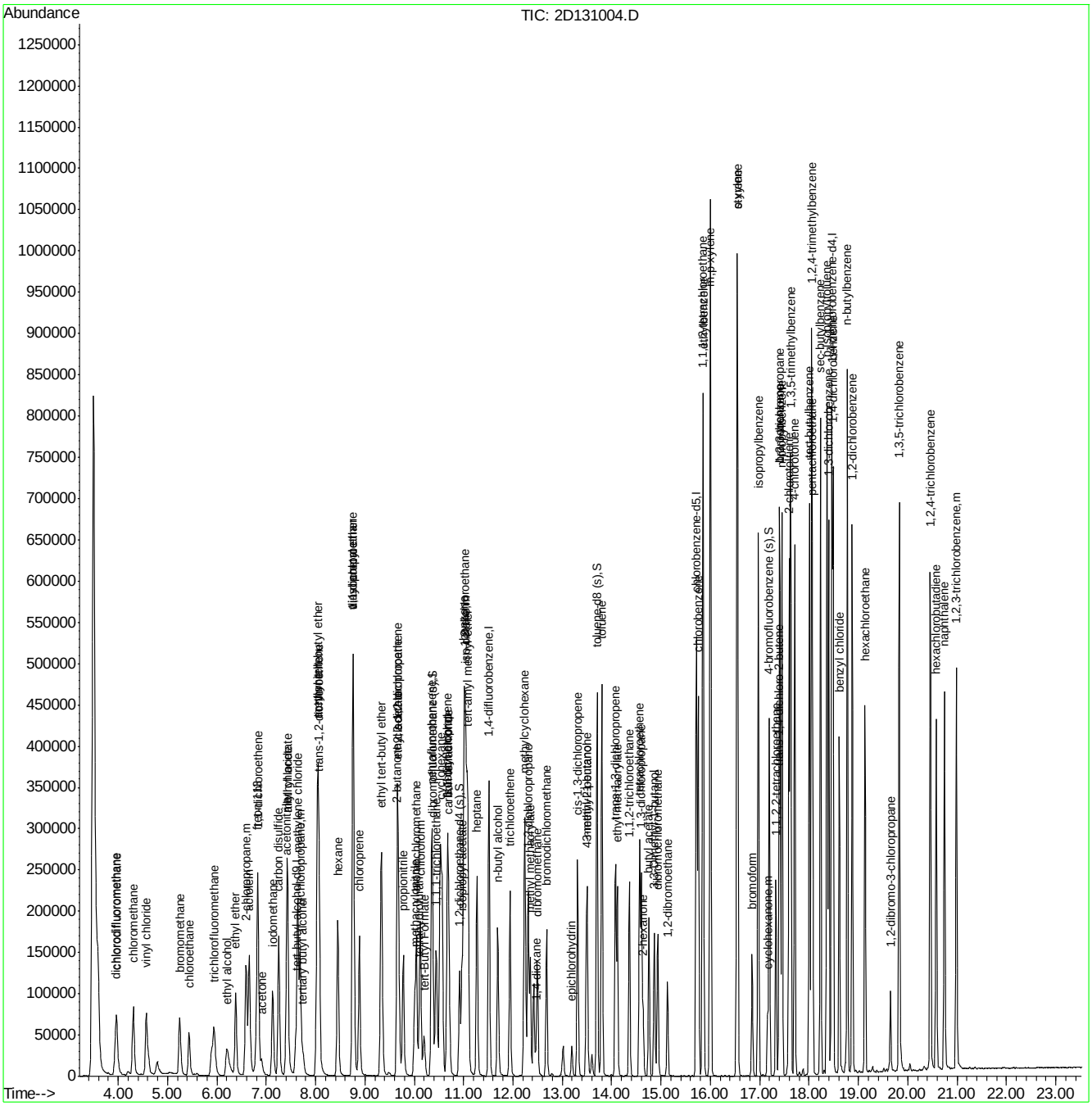
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) cyclohexanone	17.16	55	31494	399.72	ug/L		98
113) bromobenzene	17.41	156	128532	47.99	ug/L		96
114) 1,1,2,2-tetrachloroethane	17.33	83	121788	46.18	ug/L		100
115) trans-1,4-dichloro-2-buten	17.38	53	18228	27.57	ug/L		94
116) 1,2,3-trichloropropane	17.41	110	28998	45.11	ug/L	#	80
117) n-propylbenzene	17.45	91	522430	49.32	ug/L		98
119) 2-chlorotoluene	17.59	126	112384	47.81	ug/L		91
120) 4-chlorotoluene	17.71	91	349103	49.87	ug/L		98
121) 1,3,5-trimethylbenzene	17.63	105	398971	48.81	ug/L		99
122) tert-butylbenzene	18.01	119	328239	46.77	ug/L		99
123) pentachloroethane	18.07	167	86502	49.67	ug/L		98
124) 1,2,4-trimethylbenzene	18.05	105	410467	50.00	ug/L		99
126) sec-butylbenzene	18.23	105	514888	47.97	ug/L		98
127) 1,3-dichlorobenzene	18.40	146	256696	49.52	ug/L		98
128) p-isopropyltoluene	18.37	119	443714	47.99	ug/L		99
129) 1,4-dichlorobenzene	18.49	146	261009	48.87	ug/L		98
130) 1,2-dichlorobenzene	18.87	146	260040	49.78	ug/L		99
131) benzyl chloride	18.61	91	266321	47.62	ug/L		98
133) n-butylbenzene	18.77	92	234518	50.79	ug/L		98
135) 1,2-dibromo-3-chloropropan	19.65	157	25925	41.66	ug/L		91
136) 1,3,5-trichlorobenzene	19.83	180	228665	48.67	ug/L		99
137) hexachlorobutadiene	20.58	225	103905	45.38	ug/L		99
138) naphthalene	20.75	128	380756	44.75	ug/L		99
139) 1,2,4-trichlorobenzene	20.46	180	203993	48.30	ug/L		98
140) 1,2,3-trichlorobenzene	20.99	180	172764	46.05	ug/L		99
141) hexachloroethane	19.14	201	82494	46.09	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D131004.D
Acq On : 21 Mar 2014 3:41 pm
Operator : BenM
Sample : jb61656-1ms
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 24 08:34:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration



M2D5448.M Mon Mar 24 09:05:34 2014 MS2D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D131005.D
Acq On : 21 Mar 2014 4:11 pm
Operator : BenM
Sample : jb61656-1msd
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 24 08:34:36 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.61	65	89368	500.00	ug/L	-0.02
5) pentafluorobenzene	10.35	168	232689	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	11.51	114	341586	50.00	ug/L	-0.02
94) chlorobenzene-d5	15.72	117	319209	50.00	ug/L	-0.01
109) 1,4-dichlorobenzene-d4	18.46	152	191023	50.00	ug/L	-0.01
System Monitoring Compounds						
54) dibromofluoromethane (s)	10.37	113	89945	48.04	ug/L	-0.02
Spiked Amount 50.000	Range 79 - 117		Recovery = 96.08%			
55) 1,2-dichloroethane-d4 (s)	10.92	65	102549	49.23	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 98.46%			
86) toluene-d8 (s)	13.70	98	345858	50.61	ug/L	0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 101.22%			
111) 4-bromofluorobenzene (s)	17.20	95	140231	49.25	ug/L	0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 98.50%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.74	59	48352	266.58	ug/L	95
3) ethyl alcohol	6.20	45	95108	4837.45	ug/L	92
4) 1,4-dioxane	12.46	88	20348	1199.86	ug/L #	94
11) chlorodifluoromethane	3.97	51	90524	47.63	ug/L	99
12) dichlorodifluoromethane	3.95	85	85401	41.89	ug/L	99
15) chloromethane	4.30	50	138069	45.05	ug/L	98
16) vinyl chloride	4.57	62	116363	42.06	ug/L	99
18) bromomethane	5.25	94	71619	41.59	ug/L	99
19) chloroethane	5.44	64	64107	42.63	ug/L	93
20) trichlorofluoromethane	5.94	101	116501	43.74	ug/L	99
22) ethyl ether	6.38	74	50033	46.88	ug/L	96
23) acrolein	6.66	56	171945	409.46	ug/L	100
27) 1,1-dichloroethene	6.83	96	76656	40.11	ug/L	91
28) 2-chloropropane	6.59	43	169352	55.40	ug/L	98
29) acetone	6.91	58	7251	43.67	ug/L	94
30) allyl chloride	7.43	76	51295	46.07	ug/L	95
31) acetonitrile	7.41	40	86528	432.06	ug/L #	76
32) iodomethane	7.13	142	164515	44.62	ug/L	97
33) carbon disulfide	7.26	76	298281	43.06	ug/L	98
34) methylene chloride	7.64	84	104209	46.71	ug/L	96
35) methyl acetate	7.43	74	13572	42.04	ug/L	93
36) 1-chloropropane	7.69	63	7585	44.71	ug/L	96
37) methyl tert butyl ether	8.04	73	288748	48.64	ug/L	98
38) trans-1,2-dichloroethene	8.07	96	88325	42.82	ug/L	93
39) di-isopropyl ether	8.77	45	372142	51.80	ug/L	96
40) 2-butanone	9.65	72	8941	43.09	ug/L	88
41) 1,1-dichloroethane	8.76	63	174308	48.08	ug/L	100
42) chloroprene	8.89	53	126293	44.77	ug/L	94
43) acrylonitrile	8.04	53	167989	212.46	ug/L	100
44) vinyl acetate	8.77	86	13658	43.85	ug/L	58
45) ethyl tert-butyl ether	9.33	59	344886	50.15	ug/L	98
46) ethyl acetate	9.68	45	11550	43.20	ug/L	92
47) 2,2-dichloropropane	9.68	77	138905	51.08	ug/L	98

M2D5448.M Mon Mar 24 09:05:35 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D131005.D
Acq On : 21 Mar 2014 4:11 pm
Operator : BenM
Sample : jb61656-1msd
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 24 08:34:36 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.66	96	102134	44.87	ug/L		92
49) propionitrile	9.78	54	124458	411.27	ug/L		99
50) tert-Butyl Formate	10.20	59	23585	11.97	ug/L		98
51) bromochloromethane	10.04	128	49404	45.23	ug/L		94
52) tetrahydrofuran	10.10	42	26529	40.72	ug/L		98
53) chloroform	10.12	83	165762	48.76	ug/L		98
56) freon 113	6.82	151	61608	39.90	ug/L		92
57) methacrylonitrile	10.01	67	34369	42.84	ug/L		95
58) 1,1,1-trichloroethane	10.45	97	129956	47.11	ug/L		99
59) cyclohexane	10.53	84	122835	43.31	ug/L		94
60) isobutyl alcohol	10.67	74	10367	405.75	ug/L	#	100
62) iso-octane	11.05	57	346974	45.39	ug/L		97
65) epichlorohydrin	13.20	57	33115	166.80	ug/L		100
66) n-butyl alcohol	11.70	56	110511	1993.20	ug/L		98
67) carbon tetrachloride	10.69	117	110512	45.06	ug/L		99
68) 1,1-dichloropropene	10.67	75	111257	44.05	ug/L		98
69) hexane	8.45	86	13998	40.71	ug/L	#	88
70) benzene	11.01	78	367896	46.53	ug/L		100
71) tert-amyl methyl ether	11.08	55	88617	46.63	ug/L		95
72) heptane	11.27	57	59504	44.39	ug/L		100
73) isopropyl acetate	10.97	43	170781	44.52	ug/L		99
74) 1,2-dichloroethane	11.04	62	128103	52.09	ug/L		98
75) trichloroethene	11.94	130	85628	42.55	ug/L		100
80) methyl methacrylate	12.35	69	55790	43.48	ug/L		90
81) 1,2-dichloropropane	12.31	63	100583	48.90	ug/L		98
82) dibromomethane	12.49	93	58167	47.08	ug/L		94
83) methylcyclohexane	12.24	83	137329	42.26	ug/L		97
84) bromodichloromethane	12.68	83	130591	49.63	ug/L		97
85) cis-1,3-dichloropropene	13.31	75	161329	48.46	ug/L		97
87) 4-methyl-2-pentanone	13.49	58	34365	43.82	ug/L		98
88) toluene	13.80	92	218949	45.93	ug/L		100
89) 3-methyl-1-butanol	13.50	55	72838	838.47	ug/L		98
90) trans-1,3-dichloropropene	14.08	75	145925	48.00	ug/L		98
91) ethyl methacrylate	14.11	69	115571	46.81	ug/L		97
92) 1,1,2-trichloroethane	14.36	83	71163	46.04	ug/L		97
93) 2-hexanone	14.64	58	31133	43.61	ug/L		97
95) 3,3-Dimethyl-1-butanol	14.87	57	85293	447.38	ug/L		99
96) tetrachloroethene	14.57	164	72764	41.47	ug/L		97
97) 1,3-dichloropropane	14.61	76	140730	48.41	ug/L		97
98) butyl acetate	14.75	56	58098	44.19	ug/L		90
99) dibromochloromethane	14.94	129	99245	47.77	ug/L		99
100) 1,2-dibromoethane	15.13	107	84107	45.09	ug/L		99
102) chlorobenzene	15.76	112	253719	47.25	ug/L		98
103) 1,1,1,2-tetrachloroethane	15.85	131	102384	48.28	ug/L		98
104) ethylbenzene	15.85	91	434969	48.03	ug/L		98
105) m,p-xylene	16.00	106	324467	93.50	ug/L		95
106) o-xylene	16.54	106	168637	47.84	ug/L		95
107) styrene	16.55	104	291980	48.71	ug/L		96
108) bromoform	16.85	173	70652	44.24	ug/L		100
110) isopropylbenzene	16.98	105	427827	45.54	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D131005.D
Acq On : 21 Mar 2014 4:11 pm
Operator : BenM
Sample : jb61656-1msd
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 24 08:34:36 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

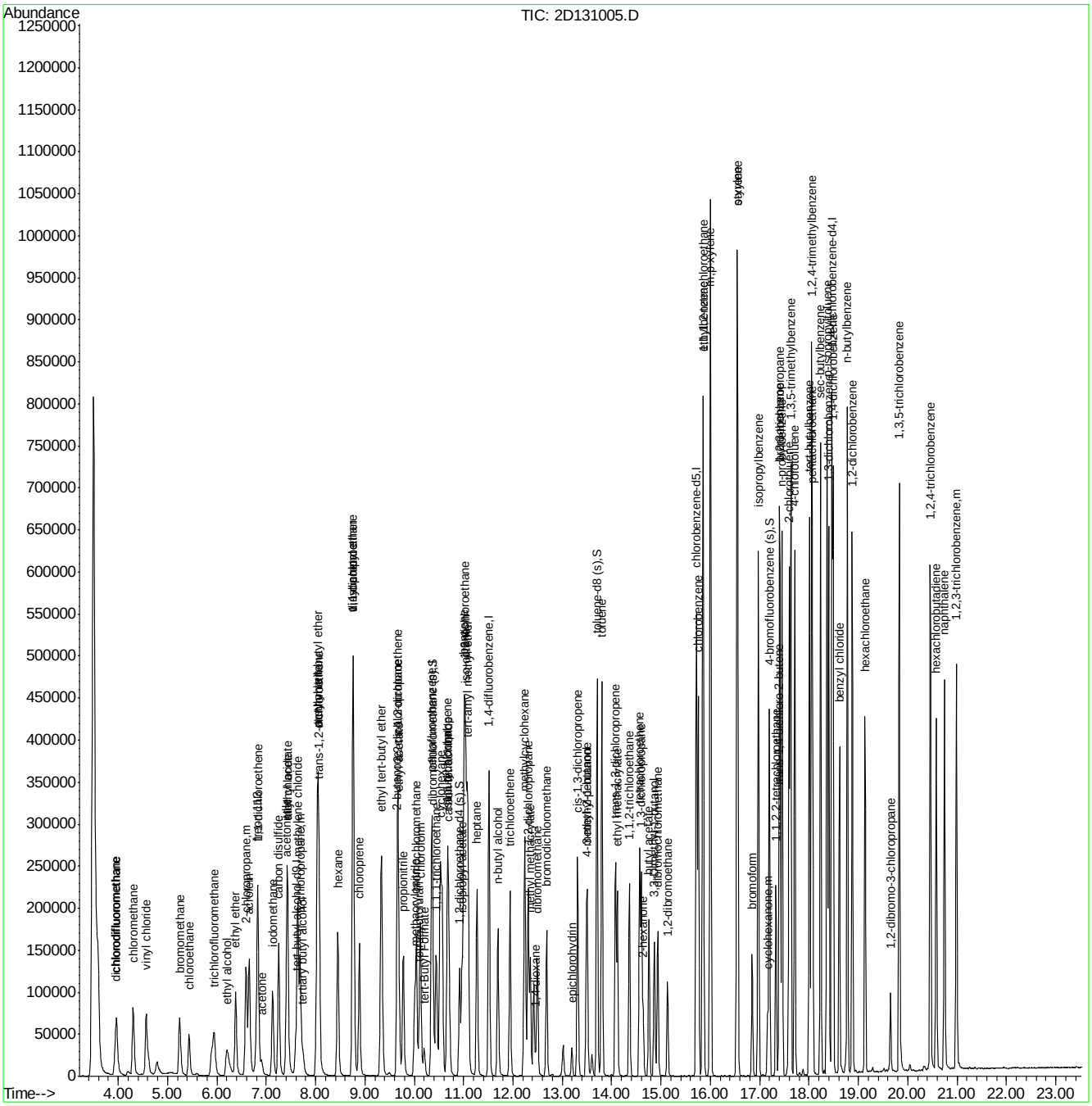
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
112) cyclohexanone	17.16	55	30270	378.53 ug/L		97
113) bromobenzene	17.41	156	127155	46.95 ug/L		95
114) 1,1,2,2-tetrachloroethane	17.33	83	119072	44.65 ug/L		98
115) trans-1,4-dichloro-2-buten	17.38	53	17407	26.04 ug/L		95
116) 1,2,3-trichloropropane	17.41	110	28878	44.43 ug/L	#	77
117) n-propylbenzene	17.45	91	496792	46.38 ug/L		98
119) 2-chlorotoluene	17.60	126	109873	46.22 ug/L		98
120) 4-chlorotoluene	17.71	91	338973	47.89 ug/L		99
121) 1,3,5-trimethylbenzene	17.63	105	385879	46.68 ug/L		98
122) tert-butylbenzene	18.01	119	314591	44.33 ug/L		100
123) pentachloroethane	18.07	167	84848	48.18 ug/L		97
124) 1,2,4-trimethylbenzene	18.05	105	401001	48.30 ug/L		99
126) sec-butylbenzene	18.23	105	488661	45.02 ug/L		99
127) 1,3-dichlorobenzene	18.40	146	250370	47.76 ug/L		99
128) p-isopropyltoluene	18.37	119	419871	44.90 ug/L		100
129) 1,4-dichlorobenzene	18.49	146	256774	47.54 ug/L		99
130) 1,2-dichlorobenzene	18.88	146	253858	48.05 ug/L		99
131) benzyl chloride	18.62	91	256148	45.29 ug/L		98
133) n-butylbenzene	18.77	92	221247	47.38 ug/L		98
135) 1,2-dibromo-3-chloropropan	19.65	157	25359	40.30 ug/L		92
136) 1,3,5-trichlorobenzene	19.83	180	225511	47.46 ug/L		98
137) hexachlorobutadiene	20.58	225	99965	43.17 ug/L		98
138) naphthalene	20.75	128	378923	44.04 ug/L		99
139) 1,2,4-trichlorobenzene	20.46	180	203490	47.64 ug/L		99
140) 1,2,3-trichlorobenzene	20.99	180	171865	45.30 ug/L		100
141) hexachloroethane	19.14	201	80004	44.20 ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D131005.D
Acq On : 21 Mar 2014 4:11 pm
Operator : BenM
Sample : jb61656-1msd
Misc : ms64210,v2d5481,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 24 08:34:36 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

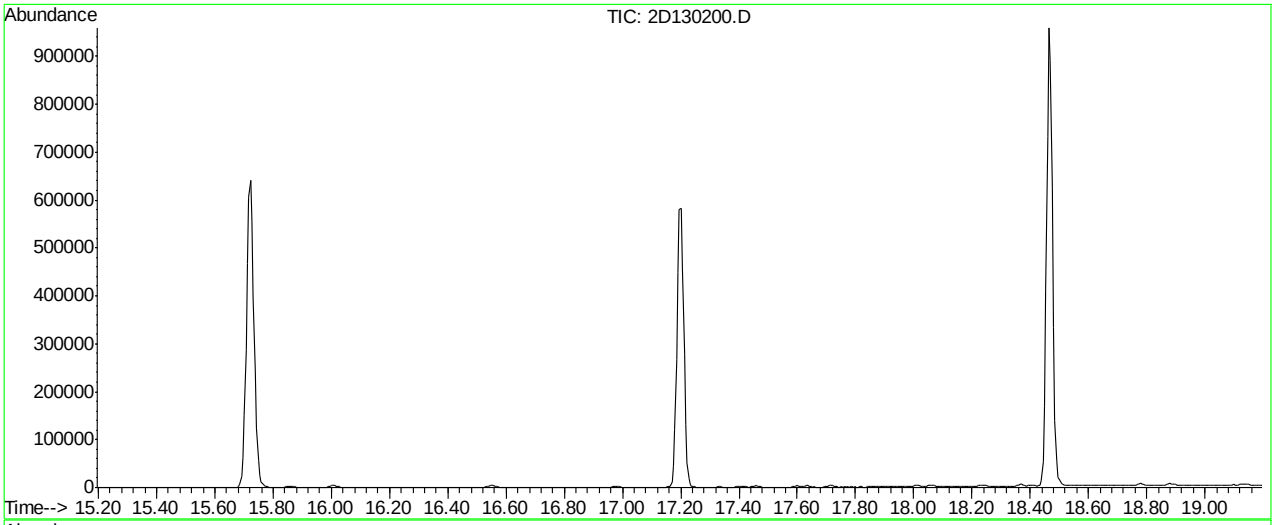


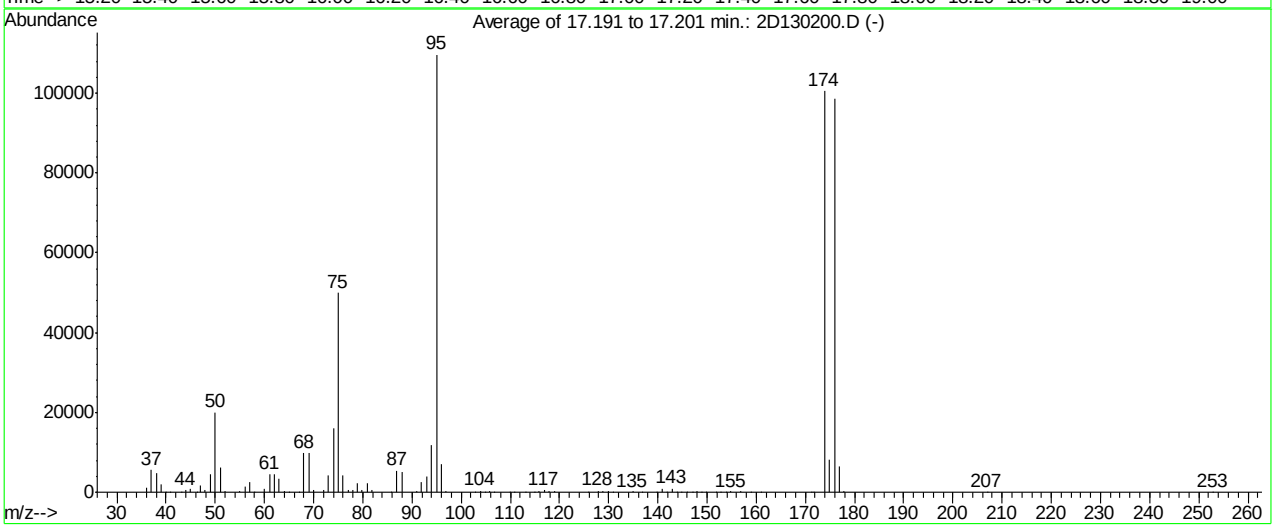
M2D5448.M Mon Mar 24 09:05:35 2014 MS2D Page: 4

BFB

Data File : C:\MSDChem\1\DATA\2D130200.D Vial: 1
Acq On : 26 Feb 2014 10:37 am Operator: thomass1
Sample : bfb Inst : MS2D
Misc : ms63168,v2d5448,w,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M2D5448.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2666, 2667, 2668; Background Corrected with Scan 2658

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	20053	PASS
75	95	30	60	45.6	49965	PASS
95	95	100	100	100.0	109685	PASS
96	95	5	9	6.5	7131	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.6	100520	PASS
175	174	5	9	8.0	8041	PASS
176	174	95	101	98.2	98669	PASS
177	176	5	9	6.5	6456	PASS

2D130200.D M2D5448.M Thu Feb 27 09:56:34 2014 MS2D

Average of 17.191 to 17.201 min.: 2D130200.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1180	47.95	670	62.00	4421	75.00	49965
37.00	5558	49.00	4434	63.00	3335	76.00	4229
38.00	4655	50.00	20053	64.00	300	76.95	650
39.00	1837	51.00	6162	65.05	45	77.95	499
39.90	85	52.00	245	67.00	98	78.90	2177
40.90	25	54.95	293	68.00	9760	79.90	686
43.05	57	56.00	1372	69.00	9773	80.90	2257
44.00	522	57.00	2499	70.00	710	81.85	484
45.00	980	57.95	119	71.95	558	85.80	45
46.20	28	60.00	950	73.00	4273	86.90	5474
47.00	1793	61.00	4500	74.00	15969	87.90	5207

Average of 17.191 to 17.201 min.: 2D130200.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
90.95	310	106.80	70	128.85	166	145.85	149
91.95	2531	109.80	26	129.85	309	146.95	83
93.00	4048	110.90	24	130.85	129	147.90	247
94.00	11783	113.00	20	134.90	154	148.80	55
95.00	109685	114.80	92	136.85	125	149.85	84
96.00	7131	115.90	300	139.85	68	151.90	27
96.95	225	116.90	487	140.85	770	152.80	54
102.80	27	117.85	322	141.85	118	153.85	83
103.90	378	118.90	399	142.85	853	154.80	257
104.90	113	125.90	37	143.90	25	156.90	179
105.85	360	127.85	331	144.85	50	158.90	105

Average of 17.191 to 17.201 min.: 2D130200.D
bfb
Modified:subtracted

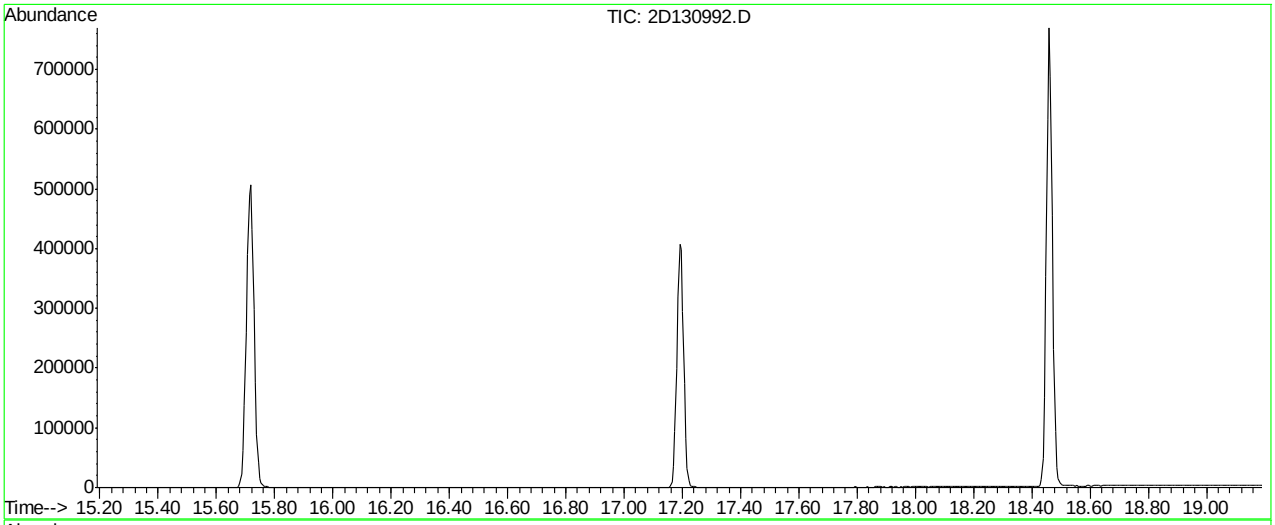
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
160.85	127						
171.30	22						
171.70	31						
173.90	100520						
174.90	8041						
175.90	98669						
176.90	6456						
177.85	191						
206.95	28						
252.90	26						

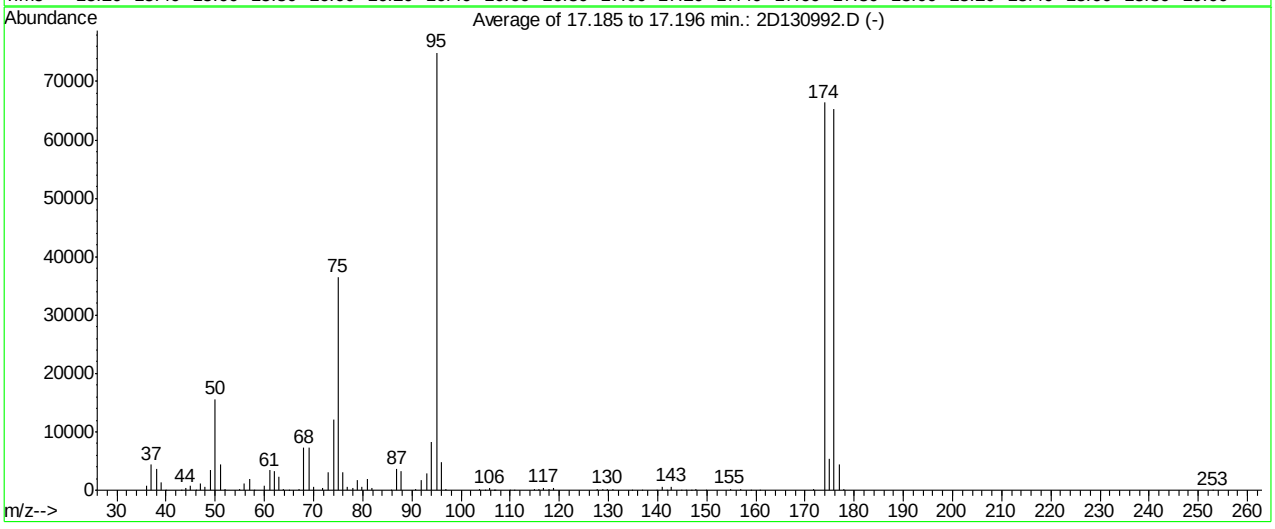
7.5.1
7

BFB

Data File : C:\MSDCHEM\1\DATA\2D130992.D Vial: 1
Acq On : 21 Mar 2014 9:04 am Operator: BenM
Sample : bfb Inst : MS2D
Misc : ms64447,v2d5481,w,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M2D5448.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2665, 2666, 2667; Background Corrected with Scan 2656

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	15558	PASS
75	95	30	60	48.7	36504	PASS
95	95	100	100	100.0	74978	PASS
96	95	5	9	6.5	4879	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	88.5	66384	PASS
175	174	5	9	8.0	5307	PASS
176	174	95	101	98.5	65373	PASS
177	176	5	9	6.6	4336	PASS

2D130992.D M2D5448.M Fri Mar 21 14:22:06 2014 MS2D

Average of 17.185 to 17.196 min.: 2D130992.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	855	49.00	3447	63.00	2393	76.00	3133
37.00	4356	50.00	15558	63.95	215	76.90	501
38.00	3726	51.00	4482	64.90	25	77.90	392
39.00	1402	52.00	182	66.95	229	78.90	1827
39.90	45	54.95	198	68.00	7228	79.90	561
43.00	23	55.95	1087	69.00	7396	80.90	1835
44.00	426	57.00	1858	69.95	562	81.90	428
45.00	722	58.00	83	71.90	451	85.85	63
46.10	44	59.95	734	73.00	3164	86.90	3615
47.00	1173	61.00	3444	74.00	12167	87.90	3352
47.95	533	62.00	3363	75.00	36504	90.85	268

Average of 17.185 to 17.196 min.: 2D130992.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.95	1815	109.90	20	134.85	101	154.85	198
92.95	2849	110.85	48	136.85	92	156.85	116
94.00	8308	114.90	107	139.85	75	158.85	83
95.00	74978	115.85	235	140.85	605	160.75	90
96.00	4879	116.85	432	141.95	84	171.75	114
96.95	139	117.85	237	142.85	645	173.90	66384
103.85	287	118.85	345	144.80	21	174.90	5307
104.90	87	127.80	200	145.80	63	175.90	65373
105.85	319	128.80	121	146.85	80	176.90	4336
106.80	25	129.80	229	147.85	155	177.85	111
107.00	22	130.85	106	149.90	75	252.95	6

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130201.D
Acq On : 26 Feb 2014 11:22 am
Operator : thomass1
Sample : IC5448-0.5
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 27 09:51:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:09:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.62	65	131063	500.00	ug/L		0.00
5) pentafluorobenzene	10.36	168	286293	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.52	114	414927	50.00	ug/L		0.00
94) chlorobenzene-d5	15.72	117	385313	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.46	152	238175	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 79 - 117		Recovery =	0.00%#			
55) 1,2-dichloroethane-d4 (s)	0.00	65	0d	0.00	ug/L		
Spiked Amount 50.000	Range 72 - 123		Recovery =	0.00%#			
86) toluene-d8 (s)	0.00	98	0d	0.00	ug/L		
Spiked Amount 50.000	Range 82 - 118		Recovery =	0.00%#			
111) 4-bromofluorobenzene (s)	0.00	95	0d	0.00	ug/L		
Spiked Amount 50.000	Range 75 - 118		Recovery =	0.00%#			
Target Compounds							Qvalue
3) ethyl alcohol	6.23	45	1388	49.59	ug/L	#	59
16) vinyl chloride	4.56	62	1585	0.44	ug/L		97
19) chloroethane	5.45	64	844	0.45	ug/L		85
22) ethyl ether	6.39	74	549	0.41	ug/L		81
33) carbon disulfide	7.27	76	4113	0.45	ug/L		87
34) methylene chloride	7.65	84	1351	0.48	ug/L		99
37) methyl tert butyl ether	8.05	73	3153	0.41	ug/L		99
39) di-isopropyl ether	8.78	45	4249	0.46	ug/L		99
42) chloroprene	8.90	53	1670	0.43	ug/L		91
45) ethyl tert-butyl ether	9.34	59	3993	0.45	ug/L		96
47) 2,2-dichloropropane	9.68	77	1495	0.43	ug/L		82
50) tert-Butyl Formate	10.20	59	1070	0.41	ug/L	#	92
62) iso-octane	11.05	57	4299	0.41	ug/L		95
70) benzene	11.01	78	4045	0.39	ug/L		99
71) tert-amyl methyl ether	11.09	55	1161	0.50	ug/L	#	86
72) heptane	11.27	57	726	0.41	ug/L		80
73) isopropyl acetate	10.97	43	2187	0.45	ug/L		98
74) 1,2-dichloroethane	11.04	62	1266	0.40	ug/L		92
82) dibromomethane	12.50	93	663	0.42	ug/L		86
83) methylcyclohexane	12.25	83	1738	0.40	ug/L		92
88) toluene	13.81	92	2372	0.38	ug/L		96
97) 1,3-dichloropropane	14.61	76	1517	0.42	ug/L		84
98) butyl acetate	14.76	56	763	0.47	ug/L		96
102) chlorobenzene	15.76	112	2732	0.40	ug/L		96
104) ethylbenzene	15.86	91	4241	0.36	ug/L		95
105) m,p-xylene	16.01	106	3349	0.74	ug/L		98
106) o-xylene	16.54	106	1520	0.33	ug/L		82
127) 1,3-dichlorobenzene	18.41	146	2696	0.39	ug/L		94
129) 1,4-dichlorobenzene	18.50	146	3056	0.44	ug/L		97
130) 1,2-dichlorobenzene	18.88	146	2742	0.40	ug/L		95
131) benzyl chloride	18.62	91	3753	0.55	ug/L		98
133) n-butylbenzene	18.78	92	2250	0.35	ug/L		97
135) 1,2-dibromo-3-chloropropan	19.66	157	347	0.43	ug/L		94

M2D5448.M Tue Mar 04 14:20:01 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130201.D
Acq On : 26 Feb 2014 11:22 am
Operator : thomass1
Sample : IC5448-0.5
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 27 09:51:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:09:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
136) 1,3,5-trichlorobenzene	19.83	180	2513	0.40	ug/L	97
137) hexachlorobutadiene	20.58	225	1284	0.41	ug/L	94
138) naphthalene	20.75	128	4785	0.42	ug/L	96
139) 1,2,4-trichlorobenzene	20.46	180	2319	0.41	ug/L	91
140) 1,2,3-trichlorobenzene	20.99	180	2140	0.42	ug/L	98

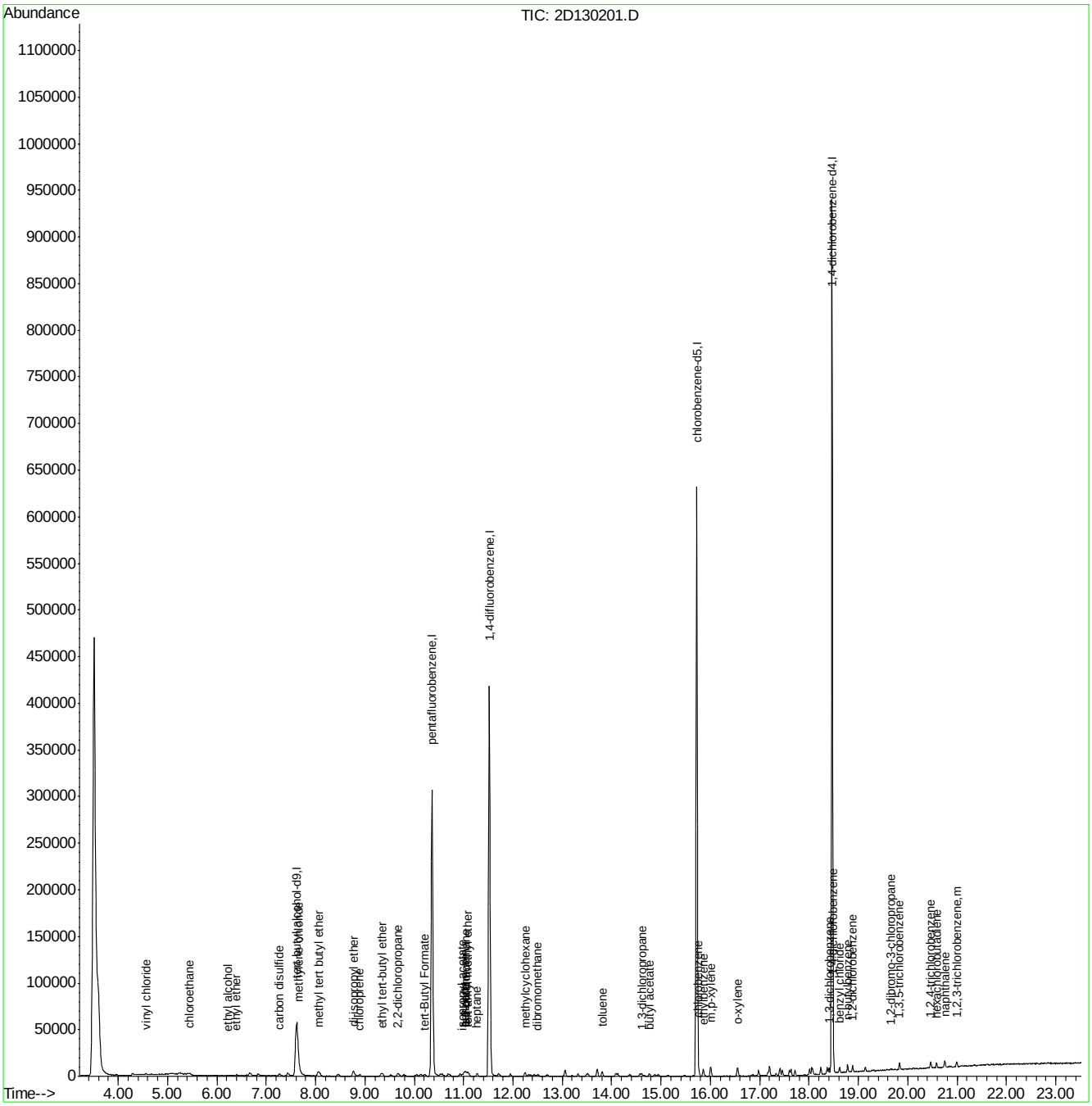
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130201.D
Acq On : 26 Feb 2014 11:22 am
Operator : thomass1
Sample : IC5448-0.5
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 27 09:51:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:09:57 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:01 2014 MS2D Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130202.D
Acq On : 26 Feb 2014 11:52 am
Operator : thomass1
Sample : IC5448-1
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 27 09:20:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:15:58 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.62	65	118109	500.00	ug/L		0.00
5) pentafluorobenzene	10.36	168	268611	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.52	114	386509	50.00	ug/L		0.00
94) chlorobenzene-d5	15.72	117	364881	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.47	152	224103	50.00	ug/L		0.00
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.39	113	2374	1.09	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery =	2.18%#			
55) 1,2-dichloroethane-d4 (s)	10.92	65	2712	1.13	ug/L		-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery =	2.26%#			
86) toluene-d8 (s)	13.71	98	8015	1.00	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery =	2.00%#			
111) 4-bromofluorobenzene (s)	17.20	95	4012	1.22	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery =	2.44%#			
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.76	59	1308	5.46	ug/L		89
3) ethyl alcohol	6.22	45	2784	110.60	ug/L	#	71
12) dichlorodifluoromethane	3.96	85	2338	0.94	ug/L		90
15) chloromethane	4.29	50	3582	0.99	ug/L		97
16) vinyl chloride	4.56	62	3182	0.97	ug/L		97
19) chloroethane	5.45	64	1761	1.02	ug/L		90
20) trichlorofluoromethane	5.95	101	2877	0.87	ug/L		88
22) ethyl ether	6.39	74	1336	1.11	ug/L	#	68
23) acrolein	6.67	56	493411	1220.74	ug/L		99
27) 1,1-dichloroethene	6.84	96	2598	1.13	ug/L		91
28) 2-chloropropane	6.59	43	3979	1.08	ug/L	#	81
30) allyl chloride	7.45	76	1264	0.92	ug/L	#	66
31) acetonitrile	7.44	40	2507	10.65	ug/L	#	81
32) iodomethane	7.14	142	4384	0.96	ug/L		95
33) carbon disulfide	7.27	76	8897	1.07	ug/L		96
34) methylene chloride	7.66	84	2803	1.07	ug/L		95
37) methyl tert butyl ether	8.05	73	7001	1.02	ug/L		99
38) trans-1,2-dichloroethene	8.08	96	2674	1.09	ug/L		94
39) di-isopropyl ether	8.78	45	8550	1.01	ug/L		98
41) 1,1-dichloroethane	8.76	63	4450	1.02	ug/L		98
42) chloroprene	8.90	53	3304	0.95	ug/L		95
43) acrylonitrile	8.06	53	4674	5.01	ug/L		91
45) ethyl tert-butyl ether	9.34	59	8165	1.00	ug/L		99
47) 2,2-dichloropropane	9.68	77	3512	1.12	ug/L		92
48) cis-1,2-dichloroethene	9.67	96	3050	1.14	ug/L		94
49) propionitrile	9.80	54	3593	10.10	ug/L		74
50) tert-Butyl Formate	10.21	59	2251	0.96	ug/L	#	97
51) bromochloromethane	10.05	128	1243	0.95	ug/L		93
52) tetrahydrofuran	10.11	42	858	1.19	ug/L		87
53) chloroform	10.14	83	4108	0.99	ug/L		97
57) methacrylonitrile	10.02	67	904	0.94	ug/L		96
58) 1,1,1-trichloroethane	10.45	97	3323	0.96	ug/L		96
59) cyclohexane	10.54	84	3341	0.93	ug/L		98

M2D5448.M Tue Mar 04 14:20:02 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130202.D
Acq On : 26 Feb 2014 11:52 am
Operator : thomass1
Sample : IC5448-1
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 27 09:20:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:15:58 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
62) iso-octane	11.06	57	8531	0.91 ug/L		82
65) epichlorohydrin	13.20	57	1182	5.11 ug/L		92
66) n-butyl alcohol	11.70	56	3121	46.48 ug/L		97
67) carbon tetrachloride	10.70	117	2847	0.94 ug/L		98
68) 1,1-dichloropropene	10.68	75	3066	1.00 ug/L		97
69) hexane	8.47	86	336	0.85 ug/L	#	41
70) benzene	11.02	78	9726	1.08 ug/L		99
71) tert-amyl methyl ether	11.09	55	2287	1.06 ug/L		94
72) heptane	11.28	57	1543	0.99 ug/L		92
73) isopropyl acetate	10.98	43	4496	1.02 ug/L		98
74) 1,2-dichloroethane	11.05	62	2841	1.02 ug/L		94
75) trichloroethene	11.95	130	2384	0.98 ug/L		92
79) 2-chloroethyl vinyl ether	13.06	63	7066	4.72 ug/L		98
80) methyl methacrylate	12.36	69	1425	0.93 ug/L		89
81) 1,2-dichloropropane	12.32	63	2355	0.97 ug/L		94
82) dibromomethane	12.50	93	1422	1.01 ug/L		87
83) methylcyclohexane	12.25	83	3571	0.92 ug/L		97
84) bromodichloromethane	12.69	83	2923	0.92 ug/L		97
85) cis-1,3-dichloropropene	13.32	75	3899	0.99 ug/L		97
87) 4-methyl-2-pentanone	13.50	58	815	0.87 ug/L	#	84
88) toluene	13.81	92	5831	1.07 ug/L		96
89) 3-methyl-1-butanol	13.52	55	1834	17.44 ug/L		94
90) trans-1,3-dichloropropene	14.08	75	3594	1.01 ug/L		96
91) ethyl methacrylate	14.12	69	2582	0.86 ug/L		91
92) 1,1,2-trichloroethane	14.36	83	1770	0.98 ug/L		90
93) 2-hexanone	14.65	58	792	0.95 ug/L		98
95) 3,3-Dimethyl-1-butanol	14.88	57	1950	8.11 ug/L	#	96
96) tetrachloroethene	14.58	164	2193	1.04 ug/L		93
97) 1,3-dichloropropane	14.61	76	3520	1.07 ug/L		95
98) butyl acetate	14.76	56	1551	1.03 ug/L		93
99) dibromochloromethane	14.94	129	2232	0.88 ug/L		98
100) 1,2-dibromoethane	15.14	107	2136	0.98 ug/L		98
102) chlorobenzene	15.76	112	6454	1.04 ug/L		96
103) 1,1,1,2-tetrachloroethane	15.85	131	2437	0.94 ug/L		92
104) ethylbenzene	15.86	91	11063	1.06 ug/L		96
105) m,p-xylene	16.01	106	8416	2.10 ug/L		96
106) o-xylene	16.55	106	4080	1.01 ug/L		98
107) styrene	16.56	104	6410	0.86 ug/L		98
108) bromoform	16.85	173	1685	0.85 ug/L		91
110) isopropylbenzene	16.98	105	10987	0.93 ug/L		98
112) cyclohexanone	17.17	55	1783	19.76 ug/L		94
113) bromobenzene	17.42	156	3251	0.98 ug/L		87
114) 1,1,2,2-tetrachloroethane	17.34	83	3082	0.97 ug/L		100
115) trans-1,4-dichloro-2-buten	17.40	53	748	0.92 ug/L		91
116) 1,2,3-trichloropropane	17.42	110	739	0.97 ug/L	#	76
117) n-propylbenzene	17.46	91	12884	0.97 ug/L		99
119) 2-chlorotoluene	17.60	126	2809	0.95 ug/L		94
120) 4-chlorotoluene	17.71	91	8546	0.99 ug/L		98
121) 1,3,5-trimethylbenzene	17.64	105	9721	0.94 ug/L		96
122) tert-butylbenzene	18.01	119	8246	0.91 ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130202.D
Acq On : 26 Feb 2014 11:52 am
Operator : thomass1
Sample : IC5448-1
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 27 09:20:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:15:58 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
123) pentachloroethane	18.08	167	1914	0.85 ug/L	91
124) 1,2,4-trimethylbenzene	18.06	105	9436	0.91 ug/L	98
126) sec-butylbenzene	18.24	105	12590	0.91 ug/L	97
127) 1,3-dichlorobenzene	18.41	146	6473	1.05 ug/L	99
128) p-isopropyltoluene	18.36	119	10984	0.94 ug/L	99
129) 1,4-dichlorobenzene	18.49	146	6691	1.05 ug/L	96
130) 1,2-dichlorobenzene	18.88	146	6407	1.04 ug/L	99
131) benzyl chloride	18.62	91	7415	1.13 ug/L	98
133) n-butylbenzene	18.78	92	5702	1.02 ug/L	92
135) 1,2-dibromo-3-chloropropan	19.66	157	748	1.01 ug/L	96
136) 1,3,5-trichlorobenzene	19.83	180	5657	1.01 ug/L	92
137) hexachlorobutadiene	20.58	225	2727	0.96 ug/L	96
138) naphthalene	20.75	128	9550	0.92 ug/L	98
139) 1,2,4-trichlorobenzene	20.47	180	4877	0.95 ug/L	99
140) 1,2,3-trichlorobenzene	20.99	180	4263	0.93 ug/L	96
141) hexachloroethane	19.14	201	1931	0.80 ug/L	93

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

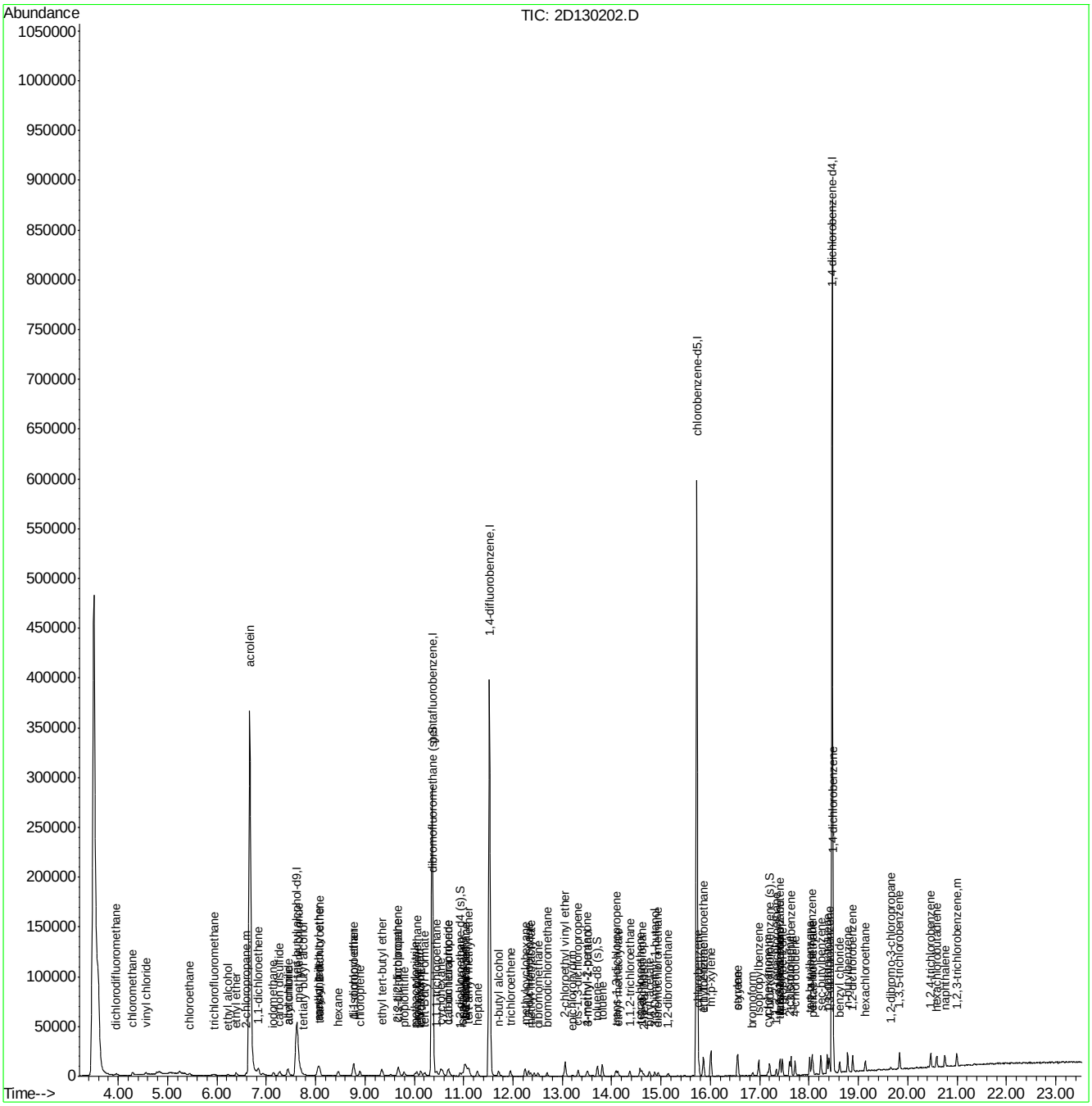
7.6.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130202.D
Acq On : 26 Feb 2014 11:52 am
Operator : thomass1
Sample : IC5448-1
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 27 09:20:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:15:58 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130203.D
Acq On : 26 Feb 2014 12:22 pm
Operator : thomass1
Sample : IC5448-2
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 27 09:22:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:20:39 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.63	65	120124	500.00	ug/L		0.00
5) pentafluorobenzene	10.37	168	276984	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.53	114	398886	50.00	ug/L		0.00
94) chlorobenzene-d5	15.73	117	376363	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.47	152	226952	50.00	ug/L		0.00
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.39	113	4343	1.89	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 3.78%#				
55) 1,2-dichloroethane-d4 (s)	10.93	65	4664	1.82	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 3.64%#				
86) toluene-d8 (s)	13.71	98	15340	1.85	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 3.70%#				
111) 4-bromofluorobenzene (s)	17.20	95	6508	1.85	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 3.70%#				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.76	59	2266	9.09	ug/L		89
3) ethyl alcohol	6.22	45	5045	192.97	ug/L		93
4) 1,4-dioxane	12.47	88	1003	42.16	ug/L	#	86
11) chlorodifluoromethane	3.98	51	3744	1.63	ug/L		91
12) dichlorodifluoromethane	3.97	85	4147	1.64	ug/L		98
15) chloromethane	4.30	50	6818	1.83	ug/L		96
16) vinyl chloride	4.57	62	5945	1.77	ug/L		98
18) bromomethane	5.25	94	3921	2.28	ug/L		93
19) chloroethane	5.46	64	3322	1.86	ug/L		90
20) trichlorofluoromethane	5.97	101	5440	1.65	ug/L		91
22) ethyl ether	6.40	74	2762	2.17	ug/L		98
23) acrolein	6.67	56	972123	2233.80	ug/L		100
27) 1,1-dichloroethene	6.85	96	4940	2.01	ug/L		92
28) 2-chloropropane	6.60	43	8171	2.10	ug/L	#	82
30) allyl chloride	7.45	76	2766	1.99	ug/L		94
31) acetonitrile	7.43	40	4728	19.16	ug/L	#	86
32) iodomethane	7.15	142	9003	1.94	ug/L		98
33) carbon disulfide	7.27	76	17408	2.00	ug/L		97
34) methylene chloride	7.66	84	5534	2.02	ug/L		99
35) methyl acetate	7.45	74	735	1.82	ug/L	#	95
36) 1-chloropropane	7.70	63	416	1.98	ug/L	#	89
37) methyl tert butyl ether	8.06	73	14212	1.99	ug/L		99
38) trans-1,2-dichloroethene	8.09	96	5315	2.05	ug/L		91
39) di-isopropyl ether	8.78	45	16355	1.86	ug/L		90
41) 1,1-dichloroethane	8.78	63	9088	2.00	ug/L		98
42) chloroprene	8.90	53	6655	1.87	ug/L		88
43) acrylonitrile	8.06	53	9354	9.72	ug/L		93
44) vinyl acetate	8.78	86	694	1.76	ug/L		51
45) ethyl tert-butyl ether	9.35	59	15347	1.82	ug/L		100
46) ethyl acetate	9.70	45	558	1.66	ug/L		61
47) 2,2-dichloropropane	9.68	77	7107	2.14	ug/L		97
48) cis-1,2-dichloroethene	9.68	96	5782	2.02	ug/L		92
49) propionitrile	9.80	54	7312	19.88	ug/L		79

M2D5448.M Tue Mar 04 14:20:03 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130203.D
Acq On : 26 Feb 2014 12:22 pm
Operator : thomass1
Sample : IC5448-2
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 27 09:22:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:20:39 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
50) tert-Butyl Formate	10.21	59	4414	1.84 ug/L		98
51) bromochloromethane	10.07	128	2753	2.07 ug/L	#	78
52) tetrahydrofuran	10.12	42	1690	2.17 ug/L		77
53) chloroform	10.14	83	8365	1.96 ug/L		94
56) freon 113	6.83	151	3335	1.77 ug/L		97
57) methacrylonitrile	10.02	67	1952	1.99 ug/L		81
58) 1,1,1-trichloroethane	10.46	97	6850	1.94 ug/L		97
59) cyclohexane	10.54	84	7153	1.96 ug/L		97
60) isobutyl alcohol	10.69	74	549	17.63 ug/L	#	100
62) iso-octane	11.06	57	17874	1.89 ug/L		85
65) epichlorohydrin	13.21	57	2199	9.17 ug/L		98
66) n-butyl alcohol	11.71	56	5677	83.38 ug/L		92
67) carbon tetrachloride	10.70	117	5931	1.93 ug/L		91
68) 1,1-dichloropropene	10.68	75	6312	1.99 ug/L		97
69) hexane	8.47	86	792	2.01 ug/L	#	67
70) benzene	11.02	78	19924	2.10 ug/L		97
71) tert-amyl methyl ether	11.10	55	4703	2.09 ug/L	#	78
72) heptane	11.28	57	3186	1.98 ug/L		92
73) isopropyl acetate	10.98	43	8462	1.85 ug/L		98
74) 1,2-dichloroethane	11.05	62	5948	2.06 ug/L		99
75) trichloroethene	11.95	130	5058	2.03 ug/L		90
79) 2-chloroethyl vinyl ether	13.06	63	14111	9.26 ug/L		97
80) methyl methacrylate	12.37	69	3036	1.96 ug/L		89
81) 1,2-dichloropropane	12.32	63	4994	2.00 ug/L		98
82) dibromomethane	12.50	93	2950	2.03 ug/L		98
83) methylcyclohexane	12.25	83	7664	1.95 ug/L		91
84) bromodichloromethane	12.70	83	6259	1.95 ug/L		94
85) cis-1,3-dichloropropene	13.32	75	7924	1.95 ug/L		97
87) 4-methyl-2-pentanone	13.50	58	1837	1.97 ug/L		94
88) toluene	13.81	92	11965	2.09 ug/L		98
89) 3-methyl-1-butanol	13.52	55	3716	35.37 ug/L		96
90) trans-1,3-dichloropropene	14.09	75	7243	1.97 ug/L		95
91) ethyl methacrylate	14.12	69	5642	1.88 ug/L		96
92) 1,1,2-trichloroethane	14.37	83	3682	1.98 ug/L		96
93) 2-hexanone	14.65	58	1609	1.89 ug/L		82
95) 3,3-Dimethyl-1-butanol	14.88	57	3981	16.84 ug/L	#	96
96) tetrachloroethene	14.57	164	4544	2.07 ug/L		96
97) 1,3-dichloropropane	14.62	76	7047	2.05 ug/L		93
98) butyl acetate	14.76	56	3035	1.94 ug/L		92
99) dibromochloromethane	14.95	129	4725	1.86 ug/L		91
100) 1,2-dibromoethane	15.14	107	4519	2.02 ug/L		96
102) chlorobenzene	15.76	112	13735	2.13 ug/L		96
103) 1,1,1,2-tetrachloroethane	15.85	131	4720	1.80 ug/L		91
104) ethylbenzene	15.86	91	23188	2.13 ug/L		99
105) m,p-xylene	16.01	106	17677	4.24 ug/L		100
106) o-xylene	16.55	106	8987	2.15 ug/L		98
107) styrene	16.56	104	13890	1.87 ug/L		97
108) bromoform	16.86	173	3564	1.82 ug/L		93
110) isopropylbenzene	16.98	105	23228	1.97 ug/L		99
112) cyclohexanone	17.17	55	2227	19.59 ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130203.D
Acq On : 26 Feb 2014 12:22 pm
Operator : thomass1
Sample : IC5448-2
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 27 09:22:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:20:39 2014
Response via : Initial Calibration

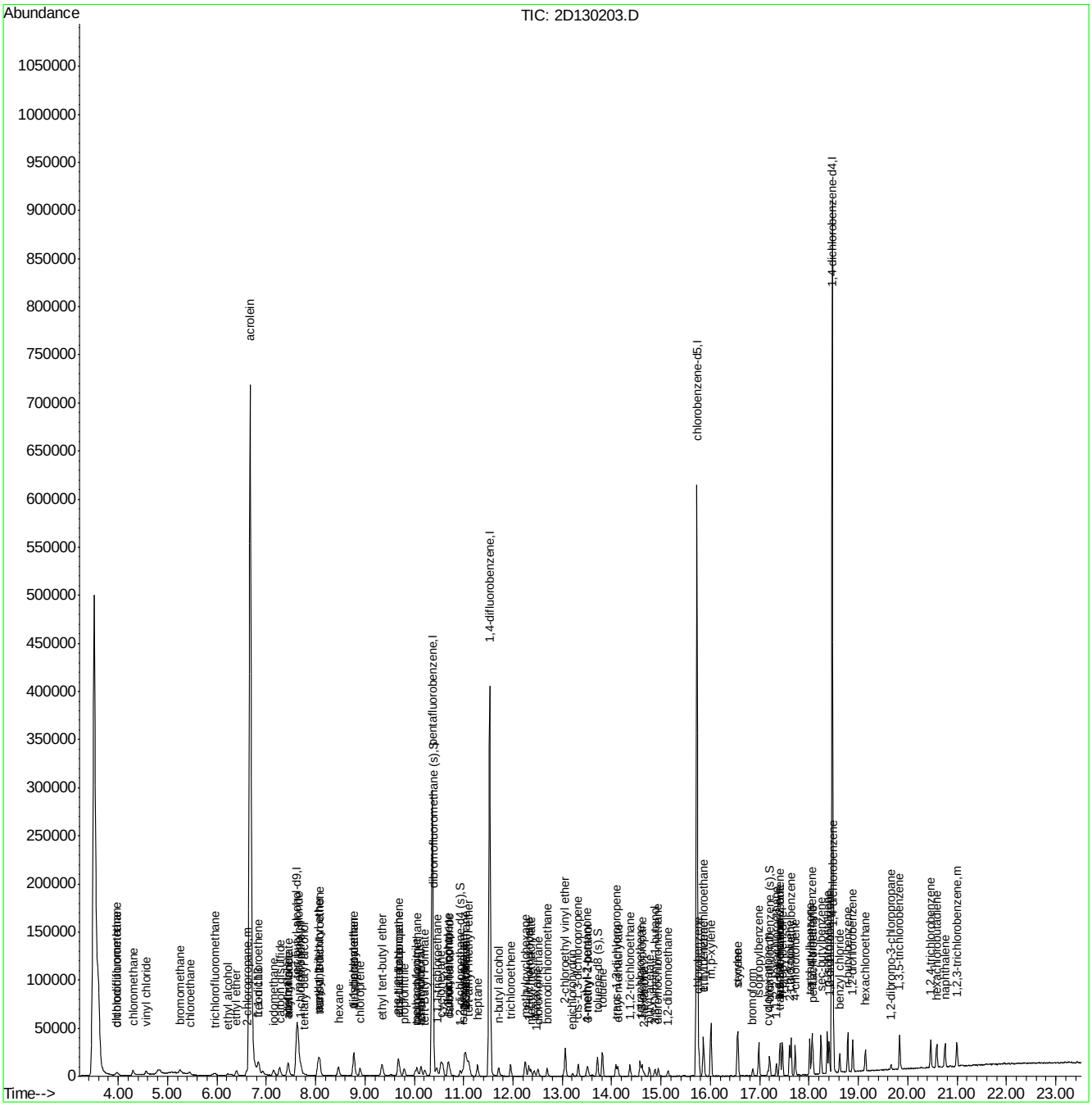
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
113) bromobenzene	17.41	156	6654	1.99 ug/L	96
114) 1,1,2,2-tetrachloroethane	17.34	83	6411	2.01 ug/L	97
115) trans-1,4-dichloro-2-buten	17.40	53	1530	1.90 ug/L	87
116) 1,2,3-trichloropropane	17.42	110	1557	2.03 ug/L	91
117) n-propylbenzene	17.46	91	26775	2.00 ug/L	98
119) 2-chlorotoluene	17.60	126	5789	1.96 ug/L	97
120) 4-chlorotoluene	17.72	91	17925	2.06 ug/L	98
121) 1,3,5-trimethylbenzene	17.64	105	20271	1.96 ug/L	98
122) tert-butylbenzene	18.01	119	17656	1.98 ug/L	96
123) pentachloroethane	18.08	167	4114	1.88 ug/L	95
124) 1,2,4-trimethylbenzene	18.06	105	20556	2.00 ug/L	99
126) sec-butylbenzene	18.24	105	26370	1.93 ug/L	97
127) 1,3-dichlorobenzene	18.41	146	13226	2.10 ug/L	96
128) p-isopropyltoluene	18.37	119	23319	2.00 ug/L	97
129) 1,4-dichlorobenzene	18.50	146	13586	2.08 ug/L	97
130) 1,2-dichlorobenzene	18.88	146	13203	2.10 ug/L	99
131) benzyl chloride	18.62	91	12809	1.88 ug/L	100
133) n-butylbenzene	18.78	92	12008	2.12 ug/L	97
135) 1,2-dibromo-3-chloropropan	19.66	157	1532	2.05 ug/L	93
136) 1,3,5-trichlorobenzene	19.83	180	11862	2.08 ug/L	97
137) hexachlorobutadiene	20.58	225	5817	2.05 ug/L	92
138) naphthalene	20.76	128	19721	1.91 ug/L	99
139) 1,2,4-trichlorobenzene	20.46	180	10255	2.00 ug/L	99
140) 1,2,3-trichlorobenzene	20.99	180	9157	2.00 ug/L	98
141) hexachloroethane	19.14	201	4189	1.81 ug/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130203.D
Acq On : 26 Feb 2014 12:22 pm
Operator : thomass1
Sample : IC5448-2
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 27 09:22:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:20:39 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:03 2014 MS2D Page: 4

Manual Integrations APPROVED (compounds with "m" flag)
Jessica Reitan-Chu
03/04/14 14:16

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130204.D
Acq On : 26 Feb 2014 12:52 pm
Operator : thomass1
Sample : IC5448-5
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 27 09:26:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:22:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.62	65	119889	500.00	ug/L		0.00
5) pentafluorobenzene	10.37	168	271695	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.53	114	392081	50.00	ug/L		0.00
94) chlorobenzene-d5	15.73	117	368781	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.47	152	227084	50.00	ug/L		0.00
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.39	113	10827	4.85	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 9.70%#				
55) 1,2-dichloroethane-d4 (s)	10.93	65	11997	4.86	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 9.72%#				
86) toluene-d8 (s)	13.71	98	38825	4.84	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 9.68%#				
111) 4-bromofluorobenzene (s)	17.20	95	16581	4.78	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 9.56%#				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.76	59	5868	24.03	ug/L		89
3) ethyl alcohol	6.22	45	12976	500.23	ug/L		91
4) 1,4-dioxane	12.48	88	2756	120.81	ug/L	#	96
11) chlorodifluoromethane	3.98	51	9558	4.44	ug/L		91
12) dichlorodifluoromethane	3.97	85	12572	5.26	ug/L		95
15) chloromethane	4.30	50	17901	4.98	ug/L		98
16) vinyl chloride	4.57	62	16658	5.16	ug/L		100
18) bromomethane	5.25	94	10093	5.77	ug/L		98
19) chloroethane	5.45	64	9320	5.38	ug/L		97
20) trichlorofluoromethane	5.97	101	16153	5.18	ug/L		93
22) ethyl ether	6.40	74	6001	4.74	ug/L		93
23) acrolein	6.68	56	25350	58.25	ug/L		99
27) 1,1-dichloroethene	6.85	96	10827	4.49	ug/L		91
28) 2-chloropropane	6.60	43	17095	4.44	ug/L	#	91
29) acetone	6.94	58	869m	4.23	ug/L		
30) allyl chloride	7.45	76	6167	4.52	ug/L		99
31) acetonitrile	7.44	40	11094	46.23	ug/L		97
32) iodomethane	7.14	142	20047	4.43	ug/L		99
33) carbon disulfide	7.27	76	37831	4.42	ug/L		99
34) methylene chloride	7.66	84	12264	4.56	ug/L		98
35) methyl acetate	7.45	74	1846	4.77	ug/L		93
36) 1-chloropropane	7.70	63	1114	5.41	ug/L		80
37) methyl tert butyl ether	8.06	73	33607	4.81	ug/L		99
38) trans-1,2-dichloroethene	8.09	96	11690	4.58	ug/L		99
39) di-isopropyl ether	8.78	45	41654	4.89	ug/L		96
40) 2-butanone	9.67	72	1087	4.21	ug/L		98
41) 1,1-dichloroethane	8.78	63	19989	4.49	ug/L		99
42) chloroprene	8.90	53	16723	4.85	ug/L		96
43) acrylonitrile	8.06	53	21784	23.20	ug/L		99
44) vinyl acetate	8.78	86	1712	4.57	ug/L		48
45) ethyl tert-butyl ether	9.34	59	39323	4.83	ug/L		99
46) ethyl acetate	9.70	45	1502	4.75	ug/L		71
47) 2,2-dichloropropane	9.69	77	15637	4.75	ug/L		95

M2D5448.M Tue Mar 04 14:20:04 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130204.D
Acq On : 26 Feb 2014 12:52 pm
Operator : thomass1
Sample : IC5448-5
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 27 09:26:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:22:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.68	96	12489	4.45	ug/L		97
49) propionitrile	9.80	54	16862	46.80	ug/L		96
50) tert-Butyl Formate	10.21	59	11170	4.80	ug/L		99
51) bromochloromethane	10.06	128	5987	4.56	ug/L		96
52) tetrahydrofuran	10.12	42	3687	4.74	ug/L		97
53) chloroform	10.14	83	18410	4.42	ug/L		99
56) freon 113	6.83	151	8849	4.93	ug/L		96
57) methacrylonitrile	10.03	67	4196	4.37	ug/L		93
58) 1,1,1-trichloroethane	10.46	97	15337	4.46	ug/L		92
59) cyclohexane	10.55	84	15764	4.42	ug/L		94
60) isobutyl alcohol	10.69	74	968	32.66	ug/L	#	100
62) iso-octane	11.06	57	47453	5.15	ug/L		99
65) epichlorohydrin	13.21	57	5354	23.09	ug/L		98
66) n-butyl alcohol	11.71	56	14773	228.34	ug/L		95
67) carbon tetrachloride	10.71	117	13524	4.51	ug/L		97
68) 1,1-dichloropropene	10.69	75	13685	4.39	ug/L		97
69) hexane	8.47	86	1860	4.80	ug/L	#	93
70) benzene	11.02	78	43149	4.59	ug/L		100
71) tert-amyl methyl ether	11.10	55	10905	4.90	ug/L		91
72) heptane	11.28	57	8296	5.25	ug/L		98
73) isopropyl acetate	10.98	43	21441	4.83	ug/L		99
74) 1,2-dichloroethane	11.05	62	13657	4.79	ug/L		98
75) trichloroethene	11.95	130	10815	4.41	ug/L		92
79) 2-chloroethyl vinyl ether	13.06	63	34085	23.10	ug/L		99
80) methyl methacrylate	12.37	69	6591	4.34	ug/L		93
81) 1,2-dichloropropane	12.32	63	11237	4.58	ug/L		98
82) dibromomethane	12.51	93	6783	4.74	ug/L		95
83) methylcyclohexane	12.25	83	19914	5.17	ug/L		98
84) bromodichloromethane	12.69	83	13956	4.44	ug/L		98
85) cis-1,3-dichloropropene	13.33	75	17571	4.42	ug/L		95
87) 4-methyl-2-pentanone	13.50	58	4276	4.68	ug/L		98
88) toluene	13.81	92	26255	4.63	ug/L		99
89) 3-methyl-1-butanol	13.52	55	9210	91.30	ug/L		97
90) trans-1,3-dichloropropene	14.09	75	15920	4.41	ug/L		99
91) ethyl methacrylate	14.13	69	12869	4.42	ug/L		97
92) 1,1,2-trichloroethane	14.38	83	8314	4.57	ug/L		99
93) 2-hexanone	14.65	58	3867	4.67	ug/L		94
95) 3,3-Dimethyl-1-butanol	14.88	57	9773	43.58	ug/L	#	98
96) tetrachloroethene	14.58	164	9517	4.39	ug/L		98
97) 1,3-dichloropropane	14.62	76	16082	4.75	ug/L		95
98) butyl acetate	14.77	56	7368	4.82	ug/L		89
99) dibromochloromethane	14.95	129	11113	4.53	ug/L		97
100) 1,2-dibromoethane	15.14	107	10053	4.57	ug/L		98
102) chlorobenzene	15.77	112	29238	4.58	ug/L		98
103) 1,1,1,2-tetrachloroethane	15.86	131	11458	4.54	ug/L		96
104) ethylbenzene	15.86	91	50176	4.66	ug/L		99
105) m,p-xylene	16.01	106	38296	9.27	ug/L		99
106) o-xylene	16.55	106	19804	4.78	ug/L		95
107) styrene	16.56	104	31649	4.40	ug/L		98
108) bromoform	16.86	173	8465	4.49	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130204.D
Acq On : 26 Feb 2014 12:52 pm
Operator : thomass1
Sample : IC5448-5
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 27 09:26:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:22:56 2014
Response via : Initial Calibration

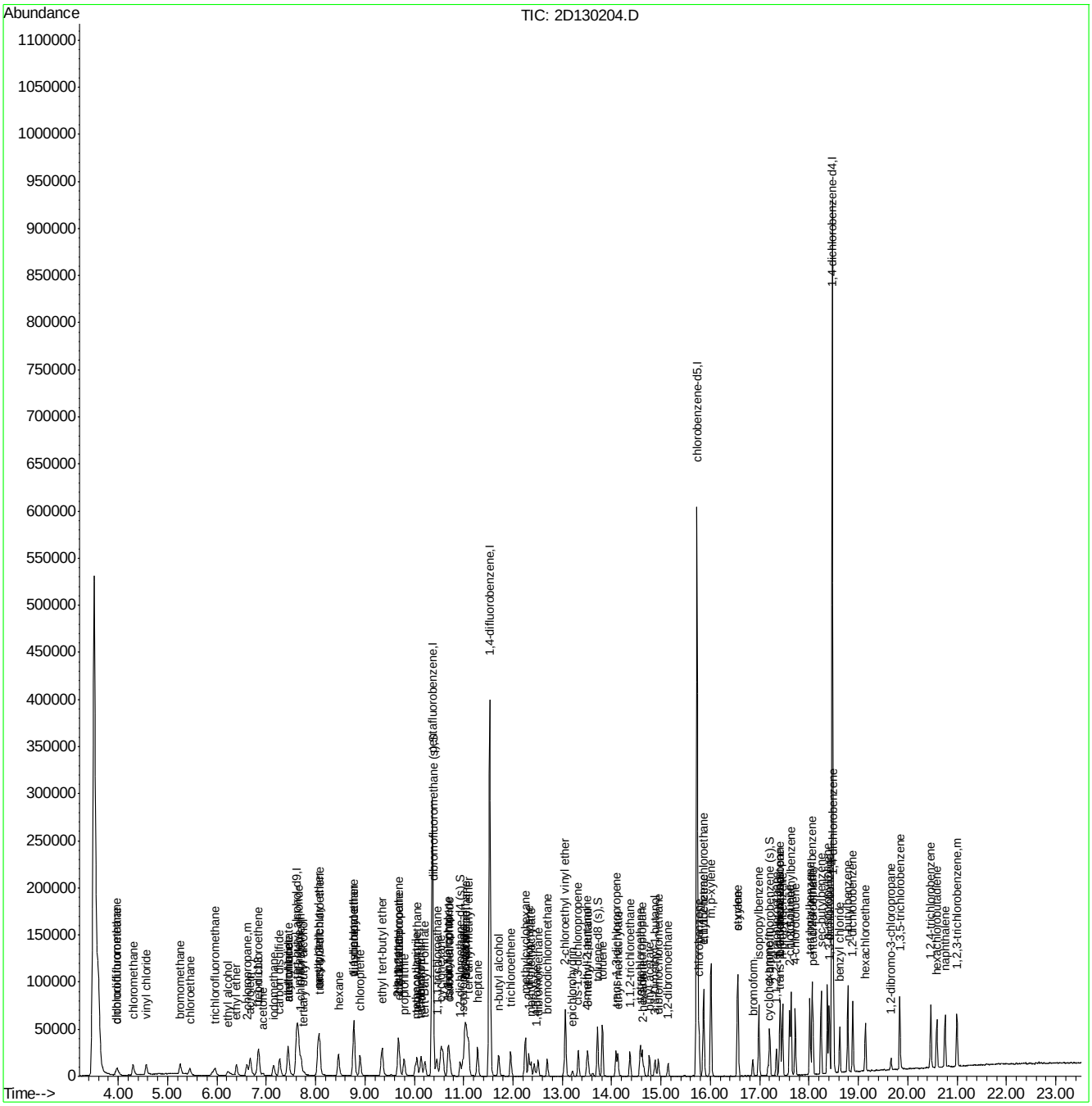
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) isopropylbenzene	16.98	105	51780	4.40	ug/L		100
112) cyclohexanone	17.17	55	4634	40.91	ug/L		97
113) bromobenzene	17.42	156	14699	4.40	ug/L		96
114) 1,1,2,2-tetrachloroethane	17.34	83	15173	4.75	ug/L		96
115) trans-1,4-dichloro-2-buten	17.40	53	3630	4.55	ug/L		97
116) 1,2,3-trichloropropane	17.42	110	3805	4.94	ug/L	#	84
117) n-propylbenzene	17.46	91	59152	4.42	ug/L		99
119) 2-chlorotoluene	17.60	126	13539	4.61	ug/L		98
120) 4-chlorotoluene	17.72	91	39215	4.48	ug/L		99
121) 1,3,5-trimethylbenzene	17.64	105	44969	4.37	ug/L		100
122) tert-butylbenzene	18.01	119	38196	4.28	ug/L		99
123) pentachloroethane	18.08	167	9349	4.32	ug/L		98
124) 1,2,4-trimethylbenzene	18.06	105	45629	4.44	ug/L		97
126) sec-butylbenzene	18.24	105	59283	4.37	ug/L		99
127) 1,3-dichlorobenzene	18.41	146	29462	4.64	ug/L		98
128) p-isopropyltoluene	18.37	119	51193	4.38	ug/L		100
129) 1,4-dichlorobenzene	18.50	146	29968	4.56	ug/L		98
130) 1,2-dichlorobenzene	18.88	146	30076	4.74	ug/L		99
131) benzyl chloride	18.62	91	31906	4.72	ug/L		99
133) n-butylbenzene	18.78	92	25971	4.53	ug/L		100
135) 1,2-dibromo-3-chloropropan	19.67	157	3461	4.60	ug/L		91
136) 1,3,5-trichlorobenzene	19.84	180	26561	4.62	ug/L		98
137) hexachlorobutadiene	20.58	225	12800	4.48	ug/L		98
138) naphthalene	20.76	128	46148	4.50	ug/L		98
139) 1,2,4-trichlorobenzene	20.47	180	22903	4.46	ug/L		98
140) 1,2,3-trichlorobenzene	21.00	180	20034	4.37	ug/L		100
141) hexachloroethane	19.14	201	9584	4.21	ug/L		96

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130204.D
Acq On : 26 Feb 2014 12:52 pm
Operator : thomass1
Sample : IC5448-5
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 27 09:26:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:22:56 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:04 2014 MS2D Page: 4

Manual Integration Approval Summary

Sample Number: V2D5448-IC5448 **Method:** SW846 8260B
Lab FileID: 2D130204.D **Analyst approved:** 02/27/14 10:00 Mei Chen
Injection Time: 02/26/14 12:52 **Supervisor approved:** 03/04/14 14:16 Jessica Reitan-Chu

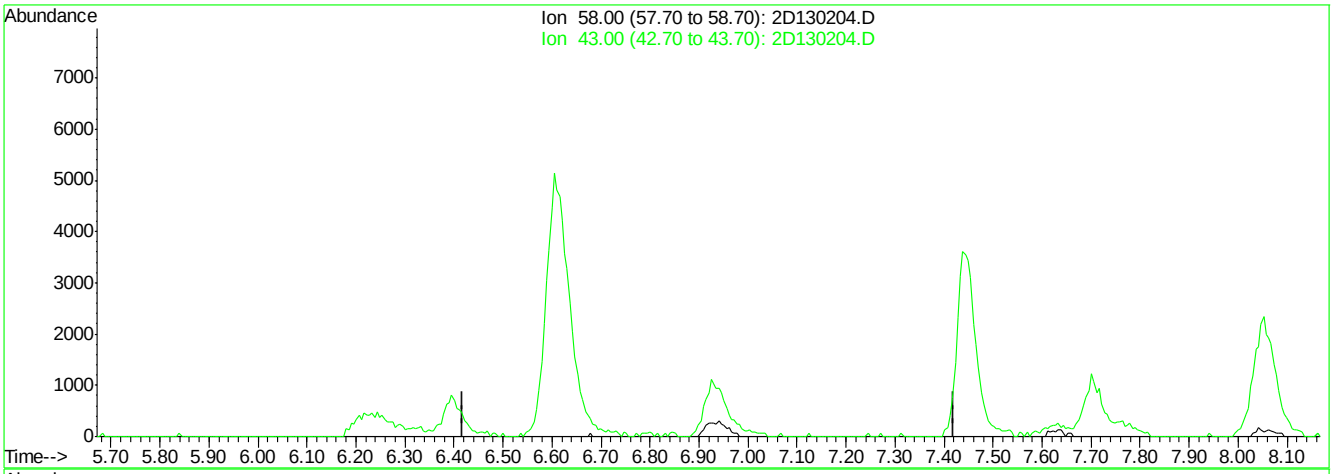
Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetone	67-64-1		6.94	Poor instrument integration

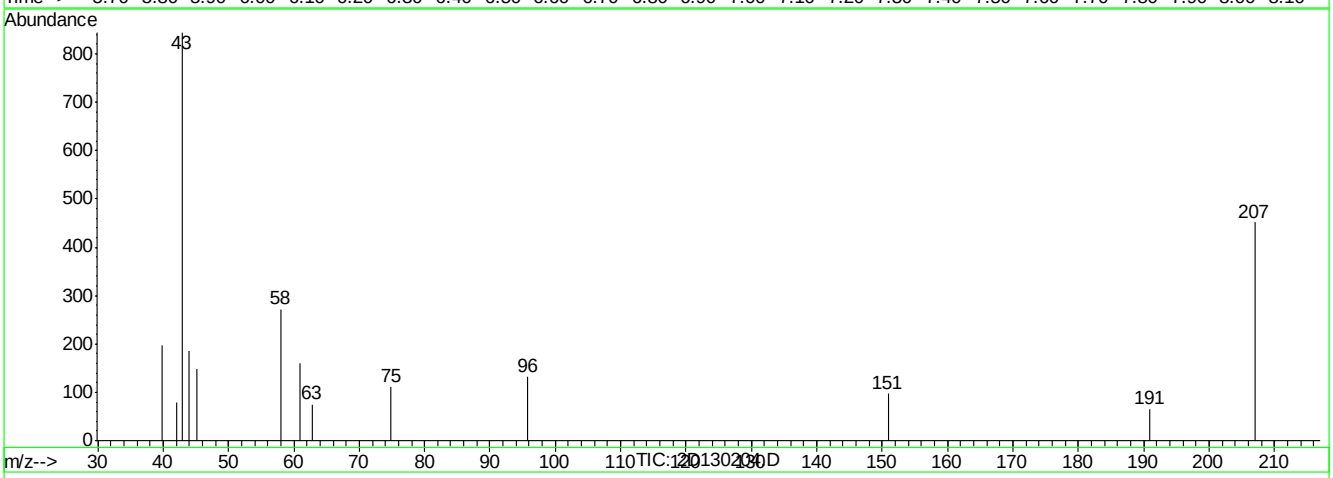
Quantitation Report (Qedit)

Data File : C:\MSDChem\1\DATA\2D130204.D Vial: 5
Acq On : 26 Feb 2014 12:52 pm Operator: thomass1
Sample : IC5448-5 Inst : MS2D
Misc : ms63168,v2d5448,w,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Feb 27 09:24:50 2014 Results File: M2D5448.RES

Method : C:\MSDCHEM\1\METHODS\M2D5448.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 27 09:22:56 2014
Response via : Multiple Level Calibration





(29) acetone

6.92min 0.00ug/L

response 0

Ion	Exp%	Act%
58.00	100	0.00
43.00	328.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

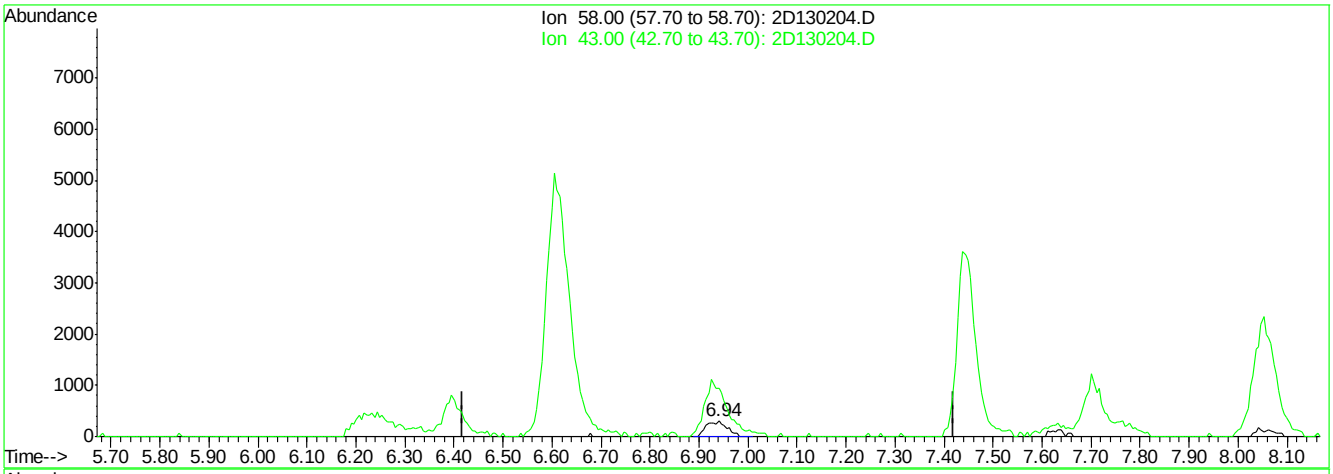
2D130204.D M2D5448.M Thu Feb 27 09:25:14 2014 MS2D

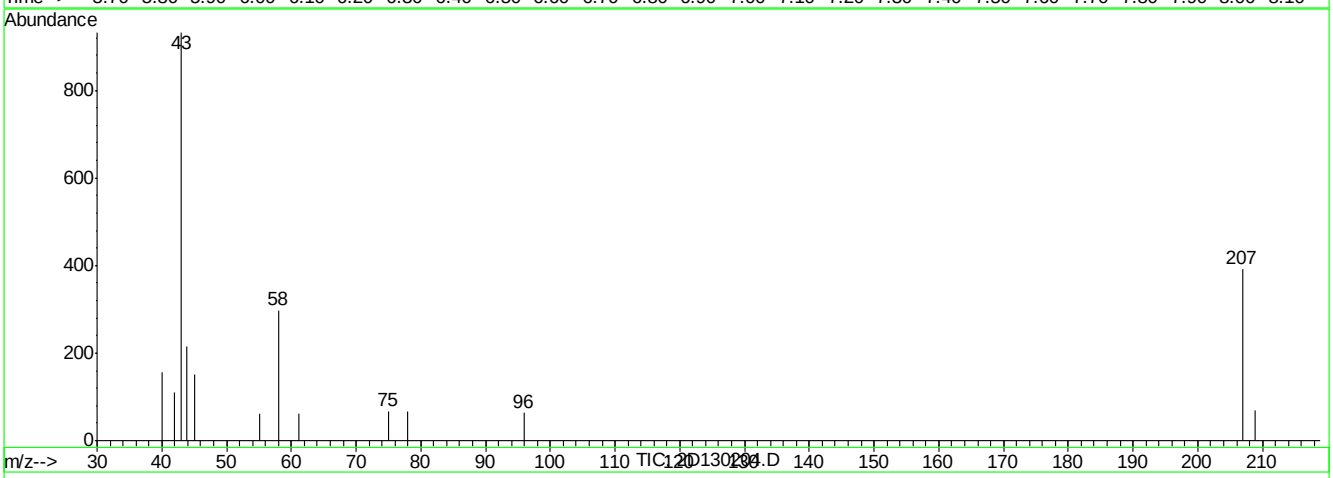
Quantitation Report (Qedit)

Data File : C:\MSDChem\1\DATA\2D130204.D Vial: 5
Acq On : 26 Feb 2014 12:52 pm Operator: thomass1
Sample : IC5448-5 Inst : MS2D
Misc : ms63168,v2d5448,w,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Feb 27 09:26:16 2014 Results File: M2D5448.RES

Method : C:\MSDCHEM\1\METHODS\M2D5448.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 27 09:46:43 2014
Response via : Multiple Level Calibration





(29) acetone

6.94min 4.23ug/L m

response 869

Ion	Exp%	Act%
58.00	100	100
43.00	328.70	312.75
0.00	0.00	0.00
0.00	0.00	0.00

2D130204.D M2D5448.M Thu Feb 27 09:55:53 2014 MS2D

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130206.D
Acq On : 26 Feb 2014 2:48 pm
Operator : thomass1
Sample : IC5448-20
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 27 09:53:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:26:39 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.62	65	130088	500.00	ug/L		0.00
5) pentafluorobenzene	10.36	168	281764	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.52	114	405353	50.00	ug/L		0.00
94) chlorobenzene-d5	15.72	117	376207	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.47	152	225371	50.00	ug/L		0.00
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.39	113	44485	19.30	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 38.60%#				
55) 1,2-dichloroethane-d4 (s)	10.93	65	50062	19.66	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 39.32%#				
86) toluene-d8 (s)	13.71	98	163365	19.82	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 39.64%#				
111) 4-bromofluorobenzene (s)	17.20	95	66222	19.38	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 38.76%#				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.75	59	26605	101.07	ug/L		89
3) ethyl alcohol	6.22	45	58669	2084.26	ug/L		98
4) 1,4-dioxane	12.47	88	12917	525.34	ug/L	#	98
11) chlorodifluoromethane	3.98	51	42273	19.36	ug/L		98
12) dichlorodifluoromethane	3.96	85	50923	20.37	ug/L		96
15) chloromethane	4.31	50	77424	20.79	ug/L		98
16) vinyl chloride	4.58	62	69169	20.57	ug/L		99
18) bromomethane	5.25	94	42821	22.91	ug/L		96
19) chloroethane	5.45	64	38089	20.99	ug/L		99
20) trichlorofluoromethane	5.95	101	66614	20.49	ug/L		98
22) ethyl ether	6.39	74	25556	19.61	ug/L		100
23) acrolein	6.67	56	101704	220.16	ug/L		100
27) 1,1-dichloroethene	6.84	96	43709	17.78	ug/L		97
28) 2-chloropropane	6.60	43	70904	18.09	ug/L	#	92
29) acetone	6.91	58	4000	19.52	ug/L		87
30) allyl chloride	7.44	76	26839	19.28	ug/L		95
31) acetonitrile	7.43	40	48287	196.48	ug/L		97
32) iodomethane	7.14	142	87284	18.94	ug/L		98
33) carbon disulfide	7.27	76	165082	18.92	ug/L		99
34) methylene chloride	7.65	84	52298	19.00	ug/L		99
35) methyl acetate	7.44	74	7828	19.70	ug/L		98
36) 1-chloropropane	7.70	63	4038	18.62	ug/L		89
37) methyl tert butyl ether	8.05	73	144370	20.04	ug/L		99
38) trans-1,2-dichloroethene	8.08	96	47777	18.31	ug/L		97
39) di-isopropyl ether	8.77	45	176175	20.02	ug/L		100
40) 2-butanone	9.66	72	4871	18.93	ug/L		95
41) 1,1-dichloroethane	8.77	63	86174	18.99	ug/L		98
42) chloroprene	8.90	53	67524	18.95	ug/L		99
43) acrylonitrile	8.05	53	94685	98.42	ug/L		96
44) vinyl acetate	8.77	86	7606	19.91	ug/L		85
45) ethyl tert-butyl ether	9.34	59	168754	20.09	ug/L		99
46) ethyl acetate	9.69	45	6644	20.46	ug/L		84
47) 2,2-dichloropropane	9.68	77	67097	19.79	ug/L		96

M2D5448.M Tue Mar 04 14:20:06 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130206.D
Acq On : 26 Feb 2014 2:48 pm
Operator : thomass1
Sample : IC5448-20
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 27 09:53:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:26:39 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.67	96	51368	17.97	ug/L		96
49) propionitrile	9.79	54	71342	192.98	ug/L		96
50) tert-Butyl Formate	10.21	59	48910	20.39	ug/L		99
51) bromochloromethane	10.05	128	25936	19.34	ug/L		93
52) tetrahydrofuran	10.10	42	14767	18.47	ug/L		99
53) chloroform	10.13	83	80158	18.93	ug/L		100
56) freon 113	6.83	151	34813	18.76	ug/L		97
57) methacrylonitrile	10.01	67	18971	19.47	ug/L		97
58) 1,1,1-trichloroethane	10.45	97	65724	18.78	ug/L		99
59) cyclohexane	10.53	84	68780	18.97	ug/L		94
60) isobutyl alcohol	10.68	74	5948	207.94	ug/L	#	100
62) iso-octane	11.05	57	180876	18.86	ug/L		99
65) epichlorohydrin	13.20	57	23960	101.24	ug/L		99
66) n-butyl alcohol	11.70	56	67778	1028.16	ug/L		99
67) carbon tetrachloride	10.70	117	58782	19.28	ug/L		100
68) 1,1-dichloropropene	10.68	75	58172	18.44	ug/L		97
69) hexane	8.46	86	7618	19.13	ug/L		98
70) benzene	11.02	78	189820	19.78	ug/L		100
71) tert-amyl methyl ether	11.09	55	44464	19.36	ug/L		100
72) heptane	11.28	57	31083	18.90	ug/L		98
73) isopropyl acetate	10.98	43	92283	20.19	ug/L		100
74) 1,2-dichloroethane	11.05	62	59243	20.23	ug/L		100
75) trichloroethene	11.95	130	46635	18.75	ug/L		94
79) 2-chloroethyl vinyl ether	13.05	63	153972	102.24	ug/L		97
80) methyl methacrylate	12.36	69	29785	19.40	ug/L		95
81) 1,2-dichloropropane	12.31	63	47757	19.10	ug/L		97
82) dibromomethane	12.50	93	29492	20.07	ug/L		99
83) methylcyclohexane	12.25	83	77575	19.38	ug/L		98
84) bromodichloromethane	12.69	83	61326	19.23	ug/L		99
85) cis-1,3-dichloropropene	13.32	75	77904	19.34	ug/L		98
87) 4-methyl-2-pentanone	13.49	58	18443	19.74	ug/L		97
88) toluene	13.81	92	114552	19.76	ug/L		99
89) 3-methyl-1-butanol	13.52	55	42650	414.98	ug/L		99
90) trans-1,3-dichloropropene	14.09	75	70941	19.41	ug/L		98
91) ethyl methacrylate	14.12	69	57943	19.62	ug/L		98
92) 1,1,2-trichloroethane	14.36	83	35833	19.31	ug/L		99
93) 2-hexanone	14.65	58	16885	19.94	ug/L		97
95) 3,3-Dimethyl-1-butanol	14.87	57	47228	210.95	ug/L		99
96) tetrachloroethene	14.57	164	40698	18.79	ug/L		99
97) 1,3-dichloropropane	14.61	76	69315	20.20	ug/L		99
98) butyl acetate	14.76	56	31691	20.44	ug/L		99
99) dibromochloromethane	14.94	129	49575	20.12	ug/L		96
100) 1,2-dibromoethane	15.14	107	43874	19.83	ug/L		97
102) chlorobenzene	15.76	112	128713	20.02	ug/L		99
103) 1,1,1,2-tetrachloroethane	15.85	131	50323	19.87	ug/L		99
104) ethylbenzene	15.86	91	221202	20.32	ug/L		99
105) m,p-xylene	16.01	106	169078	40.55	ug/L		98
106) o-xylene	16.55	106	86956	20.70	ug/L		96
107) styrene	16.56	104	144077	20.04	ug/L		97
108) bromoform	16.86	173	37908	20.03	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130206.D
Acq On : 26 Feb 2014 2:48 pm
Operator : thomass1
Sample : IC5448-20
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 27 09:53:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:26:39 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
110) isopropylbenzene	16.98	105	226045	19.77 ug/L		99
112) cyclohexanone	17.17	55	22368	205.18 ug/L		99
113) bromobenzene	17.42	156	64106	19.74 ug/L		98
114) 1,1,2,2-tetrachloroethane	17.34	83	64261	20.43 ug/L		98
115) trans-1,4-dichloro-2-buten	17.40	53	16658	21.35 ug/L		95
116) 1,2,3-trichloropropane	17.42	110	15632	20.49 ug/L	#	74
117) n-propylbenzene	17.46	91	257485	19.78 ug/L		99
119) 2-chlorotoluene	17.60	126	56188	19.52 ug/L		98
120) 4-chlorotoluene	17.72	91	166818	19.53 ug/L		99
121) 1,3,5-trimethylbenzene	17.64	105	197592	19.76 ug/L		99
122) tert-butylbenzene	18.01	119	167796	19.42 ug/L		99
123) pentachloroethane	18.08	167	42250	20.11 ug/L		99
124) 1,2,4-trimethylbenzene	18.06	105	199139	19.91 ug/L		100
126) sec-butylbenzene	18.24	105	259016	19.64 ug/L		98
127) 1,3-dichlorobenzene	18.41	146	126479	20.28 ug/L		98
128) p-isopropyltoluene	18.37	119	220559	19.43 ug/L		99
129) 1,4-dichlorobenzene	18.50	146	128405	19.95 ug/L		100
130) 1,2-dichlorobenzene	18.88	146	128754	20.61 ug/L		99
131) benzyl chloride	18.62	91	138927	20.87 ug/L		100
133) n-butylbenzene	18.78	92	112937	20.13 ug/L		98
135) 1,2-dibromo-3-chloropropan	19.66	157	15239	20.66 ug/L		98
136) 1,3,5-trichlorobenzene	19.83	180	114036	20.22 ug/L		98
137) hexachlorobutadiene	20.59	225	52680	18.87 ug/L		97
138) naphthalene	20.76	128	215643	21.49 ug/L		100
139) 1,2,4-trichlorobenzene	20.47	180	104260	20.76 ug/L		98
140) 1,2,3-trichlorobenzene	21.00	180	92331	20.68 ug/L		99
141) hexachloroethane	19.14	201	42393	19.28 ug/L		98

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

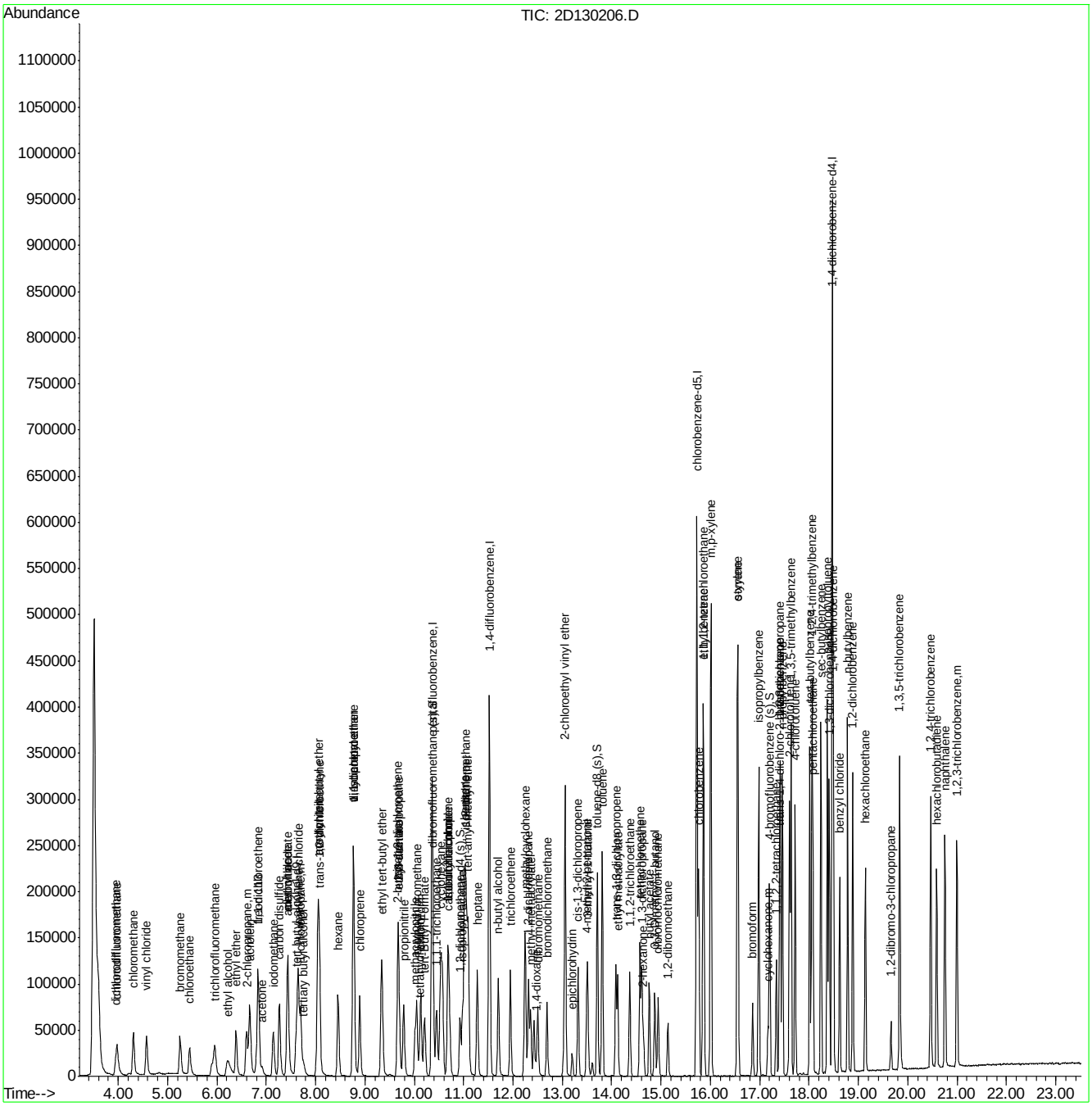
7.6.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130206.D
Acq On : 26 Feb 2014 2:48 pm
Operator : thomass1
Sample : IC5448-20
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 27 09:53:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:26:39 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:06 2014 MS2D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130207.D
Acq On : 26 Feb 2014 3:18 pm
Operator : thomass1
Sample : ICC5448-50
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 27 09:54:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:01:29 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.62	65	118418	500.00	ug/L		0.00
5) pentafluorobenzene	10.36	168	264290	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.53	114	382737	50.00	ug/L		0.00
94) chlorobenzene-d5	15.73	117	362020	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.47	152	220106	50.00	ug/L		0.00
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.39	113	106515	50.00	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 100.00%				
55) 1,2-dichloroethane-d4 (s)	10.93	65	119041	50.00	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 100.00%				
86) toluene-d8 (s)	13.71	98	395902	50.00	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 100.00%				
111) 4-bromofluorobenzene (s)	17.20	95	159135	50.00	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 100.00%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.76	59	62833	250.00	ug/L		100
3) ethyl alcohol	6.22	45	134391	4943.28	ug/L	#	100
4) 1,4-dioxane	12.47	88	30143	1250.00	ug/L	#	100
11) chlorodifluoromethane	3.98	51	105392	50.00	ug/L		100
12) dichlorodifluoromethane	3.96	85	124211	50.00	ug/L		100
15) chloromethane	4.31	50	183644	50.00	ug/L		100
16) vinyl chloride	4.58	62	167445	50.00	ug/L		100
18) bromomethane	5.25	94	99640	50.00	ug/L		100
19) chloroethane	5.45	64	89792	50.00	ug/L		100
20) trichlorofluoromethane	5.95	101	163195	50.00	ug/L		100
22) ethyl ether	6.40	74	63245	50.00	ug/L		100
23) acrolein	6.67	56	246797	500.00	ug/L		100
27) 1,1-dichloroethene	6.85	96	112823	50.00	ug/L		100
28) 2-chloropropane	6.61	43	182962	50.00	ug/L		100
29) acetone	6.92	58	10379	50.00	ug/L		100
30) allyl chloride	7.44	76	68447	50.00	ug/L		100
31) acetonitrile	7.43	40	118032	500.00	ug/L		100
32) iodomethane	7.15	142	224907	50.00	ug/L		100
33) carbon disulfide	7.27	76	421094	50.00	ug/L		100
34) methylene chloride	7.65	84	131035	50.00	ug/L		100
35) methyl acetate	7.44	74	19502	50.00	ug/L		100
36) 1-chloropropane	7.70	63	9964	50.00	ug/L		100
37) methyl tert butyl ether	8.05	73	363380	50.00	ug/L		100
38) trans-1,2-dichloroethene	8.08	96	120873	50.00	ug/L		100
39) di-isopropyl ether	8.78	45	434657	50.00	ug/L		100
40) 2-butanone	9.66	72	12627	50.00	ug/L		100
41) 1,1-dichloroethane	8.77	63	217341	50.00	ug/L		100
42) chloroprene	8.90	53	175209	50.00	ug/L		100
43) acrylonitrile	8.06	53	235317	250.00	ug/L		100
44) vinyl acetate	8.78	86	18912	50.00	ug/L		100
45) ethyl tert-butyl ether	9.35	59	419639	50.00	ug/L		100
46) ethyl acetate	9.69	45	16418	50.00	ug/L		100
47) 2,2-dichloropropane	9.69	77	163169	50.00	ug/L		100

M2D5448.M Tue Mar 04 14:20:07 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130207.D
Acq On : 26 Feb 2014 3:18 pm
Operator : thomass1
Sample : ICC5448-50
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 27 09:54:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:01:29 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.67	96	132740	50.00	ug/L		100
49) propionitrile	9.79	54	178073	500.00	ug/L		100
50) tert-Butyl Formate	10.21	59	121673	50.00	ug/L		100
51) bromochloromethane	10.05	128	64745	50.00	ug/L		100
52) tetrahydrofuran	10.11	42	36261	50.00	ug/L		100
53) chloroform	10.14	83	204618	50.00	ug/L		100
56) freon 113	6.83	151	88236	50.00	ug/L		100
57) methacrylonitrile	10.02	67	47722	50.00	ug/L		100
58) 1,1,1-trichloroethane	10.45	97	170162	50.00	ug/L		100
59) cyclohexane	10.54	84	176726	50.00	ug/L		100
60) isobutyl alcohol	10.68	74	14581	500.00	ug/L	#	100
62) iso-octane	11.06	57	484220	50.00	ug/L		100
65) epichlorohydrin	13.21	57	57636	250.00	ug/L		100
66) n-butyl alcohol	11.71	56	164889	2500.00	ug/L		100
67) carbon tetrachloride	10.71	117	149424	50.00	ug/L		100
68) 1,1-dichloropropene	10.68	75	151011	50.00	ug/L		100
69) hexane	8.46	86	19420	50.00	ug/L		100
70) benzene	11.02	78	478841	50.00	ug/L		100
71) tert-amyl methyl ether	11.09	55	109077	50.00	ug/L		100
72) heptane	11.28	57	79642	50.00	ug/L		100
73) isopropyl acetate	10.98	43	229453	50.00	ug/L		100
74) 1,2-dichloroethane	11.05	62	148923	50.00	ug/L		100
75) trichloroethene	11.95	130	119329	50.00	ug/L		100
79) 2-chloroethyl vinyl ether	13.06	63	376582	250.00	ug/L		100
80) methyl methacrylate	12.37	69	75891	50.00	ug/L		100
81) 1,2-dichloropropane	12.32	63	121530	50.00	ug/L		100
82) dibromomethane	12.50	93	73502	50.00	ug/L		100
83) methylcyclohexane	12.25	83	201830	50.00	ug/L		100
84) bromodichloromethane	12.69	83	157813	50.00	ug/L		100
85) cis-1,3-dichloropropene	13.32	75	196049	50.00	ug/L		100
87) 4-methyl-2-pentanone	13.50	58	46679	50.00	ug/L		100
88) toluene	13.81	92	289422	50.00	ug/L		100
89) 3-methyl-1-butanol	13.52	55	104542	1000.00	ug/L		100
90) trans-1,3-dichloropropene	14.09	75	177293	50.00	ug/L		100
91) ethyl methacrylate	14.12	69	149538	50.00	ug/L		100
92) 1,1,2-trichloroethane	14.37	83	90772	50.00	ug/L		100
93) 2-hexanone	14.65	58	41242	50.00	ug/L		100
95) 3,3-Dimethyl-1-butanol	14.88	57	117309	500.00	ug/L		100
96) tetrachloroethene	14.58	164	104431	50.00	ug/L		100
97) 1,3-dichloropropane	14.62	76	174877	50.00	ug/L		100
98) butyl acetate	14.76	56	77299	50.00	ug/L		100
99) dibromochloromethane	14.95	129	127509	50.00	ug/L		100
100) 1,2-dibromoethane	15.14	107	110825	50.00	ug/L		100
102) chlorobenzene	15.77	112	326065	50.00	ug/L		100
103) 1,1,1,2-tetrachloroethane	15.86	131	129017	50.00	ug/L		100
104) ethylbenzene	15.86	91	558856	50.00	ug/L		100
105) m,p-xylene	16.01	106	428505	100.00	ug/L		100
106) o-xylene	16.55	106	222909	50.00	ug/L		100
107) styrene	16.56	104	372675	50.00	ug/L		100
108) bromoform	16.86	173	98234	50.00	ug/L		100

M2D5448.M Tue Mar 04 14:20:07 2014 MS2D Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130207.D
Acq On : 26 Feb 2014 3:18 pm
Operator : thomass1
Sample : ICC5448-50
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 27 09:54:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:01:29 2014
Response via : Initial Calibration

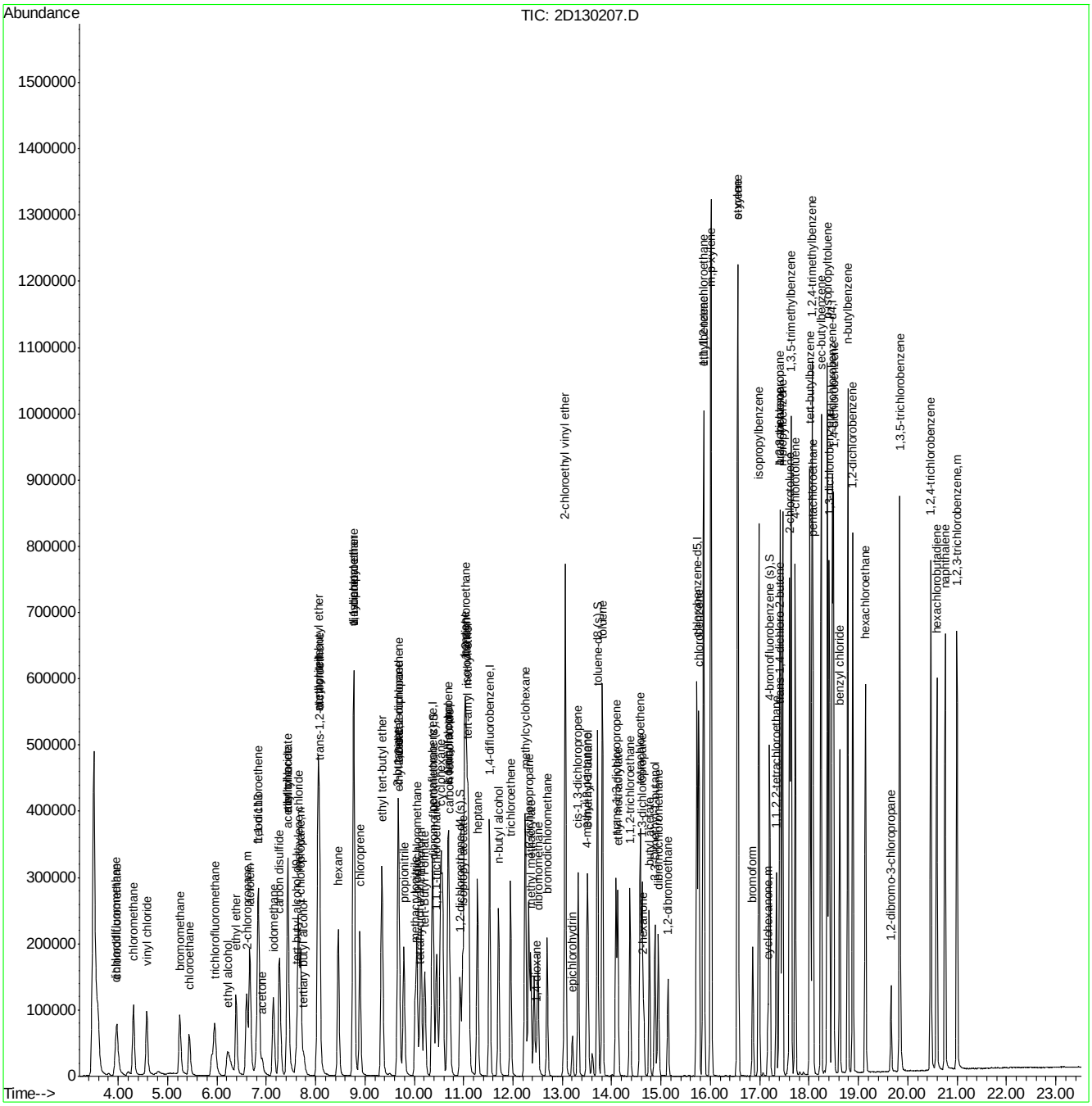
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) isopropylbenzene	16.98	105	586807	50.00	ug/L	100
112) cyclohexanone	17.17	55	44103	500.00	ug/L	100
113) bromobenzene	17.42	156	162996	50.00	ug/L	100
114) 1,1,2,2-tetrachloroethane	17.34	83	159007	50.00	ug/L	100
115) trans-1,4-dichloro-2-buten	17.40	53	40154	50.00	ug/L	100
116) 1,2,3-trichloropropane	17.42	110	38079	50.00	ug/L	100
117) n-propylbenzene	17.46	91	656476	50.00	ug/L	100
119) 2-chlorotoluene	17.60	126	143013	50.00	ug/L	100
120) 4-chlorotoluene	17.72	91	422487	50.00	ug/L	100
121) 1,3,5-trimethylbenzene	17.64	105	510764	50.00	ug/L	100
122) tert-butylbenzene	18.01	119	443736	50.00	ug/L	100
123) pentachloroethane	18.08	167	110235	50.00	ug/L	100
124) 1,2,4-trimethylbenzene	18.06	105	510542	50.00	ug/L	100
126) sec-butylbenzene	18.24	105	680148	50.00	ug/L	100
127) 1,3-dichlorobenzene	18.41	146	321917	50.00	ug/L	100
128) p-isopropyltoluene	18.37	119	578804	50.00	ug/L	100
129) 1,4-dichlorobenzene	18.50	146	325895	50.00	ug/L	100
130) 1,2-dichlorobenzene	18.88	146	322845	50.00	ug/L	100
131) benzyl chloride	18.62	91	318754	50.00	ug/L	100
133) n-butylbenzene	18.78	92	294962	50.00	ug/L	100
135) 1,2-dibromo-3-chloropropan	19.66	157	38529	50.00	ug/L	100
136) 1,3,5-trichlorobenzene	19.84	180	298480	50.00	ug/L	100
137) hexachlorobutadiene	20.59	225	149978	50.00	ug/L	100
138) naphthalene	20.76	128	550290	50.00	ug/L	100
139) 1,2,4-trichlorobenzene	20.47	180	271948	50.00	ug/L	100
140) 1,2,3-trichlorobenzene	21.00	180	240709	50.00	ug/L	100
141) hexachloroethane	19.14	201	116243	50.00	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130207.D
Acq On : 26 Feb 2014 3:18 pm
Operator : thomass1
Sample : ICC5448-50
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 27 09:54:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:01:29 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:07 2014 MS2D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130208.D
Acq On : 26 Feb 2014 3:48 pm
Operator : thomass1
Sample : IC5448-100
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 27 09:54:47 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:05:55 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.63	65	124797	500.00	ug/L		0.01
5) pentafluorobenzene	10.37	168	265152	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.53	114	387161	50.00	ug/L		0.00
94) chlorobenzene-d5	15.73	117	367868	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.47	152	220501	50.00	ug/L		0.00
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.39	113	220389	103.12	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 206.24%#				
55) 1,2-dichloroethane-d4 (s)	10.93	65	243965	102.14	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 204.28%#				
86) toluene-d8 (s)	13.71	98	818161	102.15	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 204.30%#				
111) 4-bromofluorobenzene (s)	17.20	95	331967	104.12	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 208.24%#				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.76	59	128472	485.04	ug/L		94
3) ethyl alcohol	6.23	45	274208	9680.40	ug/L		97
4) 1,4-dioxane	12.47	88	63139	2484.48	ug/L	#	97
11) chlorodifluoromethane	3.98	51	225082	106.44	ug/L		98
12) dichlorodifluoromethane	3.96	85	246364	98.85	ug/L		98
15) chloromethane	4.32	50	360561	97.85	ug/L		99
16) vinyl chloride	4.59	62	337954	100.59	ug/L		99
18) bromomethane	5.25	94	189726	94.90	ug/L		96
19) chloroethane	5.44	64	176262	97.83	ug/L		99
20) trichlorofluoromethane	5.96	101	326898	99.83	ug/L		99
22) ethyl ether	6.40	74	127656	100.59	ug/L		97
27) 1,1-dichloroethene	6.85	96	228382	100.88	ug/L		99
28) 2-chloropropane	6.61	43	363506	99.02	ug/L	#	91
29) acetone	6.92	58	20193	96.96	ug/L		100
30) allyl chloride	7.45	76	135901	98.95	ug/L		96
31) acetonitrile	7.43	40	238125	1005.45	ug/L	#	83
32) iodomethane	7.15	142	451465	100.04	ug/L		99
33) carbon disulfide	7.28	76	846143	100.14	ug/L		99
34) methylene chloride	7.66	84	263359	100.17	ug/L		99
35) methyl acetate	7.44	74	39896	101.95	ug/L		100
36) 1-chloropropane	7.71	63	20425	102.16	ug/L		94
37) methyl tert butyl ether	8.05	73	722545	99.10	ug/L		100
38) trans-1,2-dichloroethene	8.09	96	244636	100.87	ug/L		100
39) di-isopropyl ether	8.78	45	874443	100.26	ug/L		99
40) 2-butanone	9.66	72	26235	103.55	ug/L		89
41) 1,1-dichloroethane	8.77	63	438315	100.51	ug/L		99
42) chloroprene	8.90	53	364196	103.59	ug/L		99
43) acrylonitrile	8.06	53	474124	502.07	ug/L		98
44) vinyl acetate	8.78	86	39047	102.90	ug/L		94
45) ethyl tert-butyl ether	9.35	59	837861	99.51	ug/L		100
46) ethyl acetate	9.70	45	33232	100.88	ug/L		82
47) 2,2-dichloropropane	9.69	77	324943	99.25	ug/L		99
48) cis-1,2-dichloroethene	9.67	96	266901	100.21	ug/L		98

M2D5448.M Tue Mar 04 14:20:08 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130208.D
Acq On : 26 Feb 2014 3:48 pm
Operator : thomass1
Sample : IC5448-100
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 27 09:54:47 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:05:55 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
49) propionitrile	9.80	54	361690	1012.27 ug/L		97
50) tert-Butyl Formate	10.21	59	248965	101.98 ug/L		99
51) bromochloromethane	10.06	128	130944	100.79 ug/L		97
52) tetrahydrofuran	10.11	42	73519	101.05 ug/L		99
53) chloroform	10.14	83	415278	101.15 ug/L		99
56) freon 113	6.84	151	183961	103.90 ug/L		96
57) methacrylonitrile	10.02	67	97968	102.31 ug/L		99
58) 1,1,1-trichloroethane	10.46	97	341238	99.94 ug/L		99
59) cyclohexane	10.54	84	356271	100.47 ug/L		99
60) isobutyl alcohol	10.68	74	30785	1052.22 ug/L	#	100
62) iso-octane	11.06	57	983289	101.20 ug/L		99
65) epichlorohydrin	13.21	57	119400	511.99 ug/L		99
66) n-butyl alcohol	11.71	56	348596	5224.92 ug/L		97
67) carbon tetrachloride	10.70	117	303530	100.41 ug/L		99
68) 1,1-dichloropropene	10.68	75	312475	102.28 ug/L		100
69) hexane	8.47	86	40529	103.16 ug/L	#	91
70) benzene	11.02	78	969784	100.11 ug/L		99
71) tert-amyl methyl ether	11.10	55	218306	98.93 ug/L		100
72) heptane	11.29	57	168416	104.52 ug/L		97
73) isopropyl acetate	10.98	43	464286	100.02 ug/L		99
74) 1,2-dichloroethane	11.05	62	298964	99.23 ug/L		97
75) trichloroethene	11.95	130	245967	101.88 ug/L		97
79) 2-chloroethyl vinyl ether	13.06	63	777602	510.32 ug/L		99
80) methyl methacrylate	12.37	69	157727	102.73 ug/L		96
81) 1,2-dichloropropane	12.32	63	247835	100.80 ug/L		100
82) dibromomethane	12.51	93	148987	100.19 ug/L		99
83) methylcyclohexane	12.25	83	414399	101.49 ug/L		98
84) bromodichloromethane	12.70	83	323412	101.30 ug/L		100
85) cis-1,3-dichloropropene	13.33	75	403059	101.62 ug/L		99
87) 4-methyl-2-pentanone	13.50	58	95321	100.94 ug/L		99
88) toluene	13.81	92	590776	100.90 ug/L		99
89) 3-methyl-1-butanol	13.52	55	214975	2032.85 ug/L		99
90) trans-1,3-dichloropropene	14.09	75	364610	101.65 ug/L		99
91) ethyl methacrylate	14.13	69	309234	102.21 ug/L		99
92) 1,1,2-trichloroethane	14.37	83	184988	100.73 ug/L		99
93) 2-hexanone	14.65	58	86485	103.65 ug/L		98
95) 3,3-Dimethyl-1-butanol	14.88	57	246555	1034.17 ug/L		100
96) tetrachloroethene	14.58	164	215996	101.77 ug/L		99
97) 1,3-dichloropropane	14.62	76	355282	99.97 ug/L		100
98) butyl acetate	14.77	56	159038	101.24 ug/L		100
99) dibromochloromethane	14.95	129	261548	100.93 ug/L		98
100) 1,2-dibromoethane	15.14	107	225969	100.33 ug/L		99
102) chlorobenzene	15.77	112	667260	100.69 ug/L		98
103) 1,1,1,2-tetrachloroethane	15.86	131	262695	100.19 ug/L		98
104) ethylbenzene	15.87	91	1148706	101.14 ug/L		99
105) m,p-xylene	16.01	106	876127	201.21 ug/L		100
106) o-xylene	16.55	106	449747	99.28 ug/L		99
107) styrene	16.56	104	765599	101.08 ug/L		98
108) bromoform	16.86	173	203785	102.08 ug/L		99
110) isopropylbenzene	16.99	105	1184085	100.71 ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130208.D
Acq On : 26 Feb 2014 3:48 pm
Operator : thomass1
Sample : IC5448-100
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 27 09:54:47 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:05:55 2014
Response via : Initial Calibration

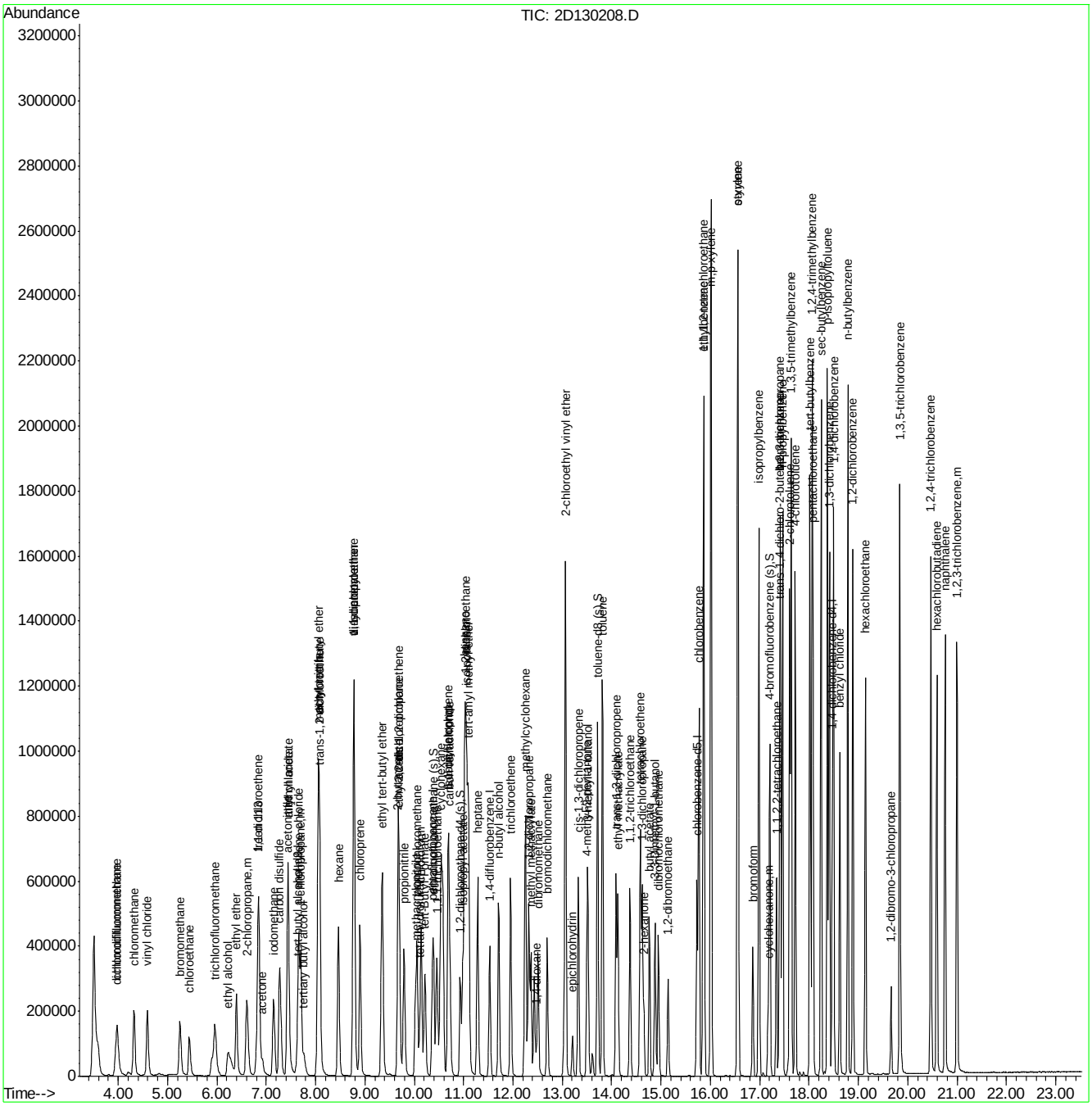
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) cyclohexanone	17.17	55	91519	1035.70	ug/L		99
113) bromobenzene	17.42	156	332316	101.76	ug/L		98
114) 1,1,2,2-tetrachloroethane	17.34	83	321048	100.77	ug/L		99
115) trans-1,4-dichloro-2-buten	17.40	53	82755	102.86	ug/L	#	77
116) 1,2,3-trichloropropane	17.42	110	77705	101.85	ug/L	#	89
117) n-propylbenzene	17.46	91	1330735	101.17	ug/L		100
119) 2-chlorotoluene	17.61	126	295784	103.23	ug/L		97
120) 4-chlorotoluene	17.72	91	863137	101.97	ug/L		100
121) 1,3,5-trimethylbenzene	17.64	105	1036552	101.29	ug/L		100
122) tert-butylbenzene	18.02	119	902297	101.49	ug/L		98
123) pentachloroethane	18.08	167	225230	101.98	ug/L		99
124) 1,2,4-trimethylbenzene	18.06	105	1037790	101.45	ug/L		99
126) sec-butylbenzene	18.24	105	1386508	101.74	ug/L		99
127) 1,3-dichlorobenzene	18.41	146	653489	101.32	ug/L		100
128) p-isopropyltoluene	18.37	119	1178523	101.62	ug/L		99
129) 1,4-dichlorobenzene	18.50	146	660139	101.10	ug/L		99
130) 1,2-dichlorobenzene	18.88	146	655991	101.41	ug/L		100
131) benzyl chloride	18.62	91	656473	102.79	ug/L		100
133) n-butylbenzene	18.78	92	612821	103.70	ug/L		98
135) 1,2-dibromo-3-chloropropan	19.66	157	78177	101.27	ug/L		99
136) 1,3,5-trichlorobenzene	19.84	180	611124	102.19	ug/L		99
137) hexachlorobutadiene	20.59	225	306697	102.06	ug/L		98
138) naphthalene	20.76	128	1122310	101.79	ug/L		99
139) 1,2,4-trichlorobenzene	20.47	180	555860	102.02	ug/L		100
140) 1,2,3-trichlorobenzene	21.00	180	494236	102.48	ug/L		99
141) hexachloroethane	19.14	201	243948	104.74	ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130208.D
Acq On : 26 Feb 2014 3:48 pm
Operator : thomass1
Sample : IC5448-100
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 27 09:54:47 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:05:55 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:08 2014 MS2D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130209.D
Acq On : 26 Feb 2014 4:19 pm
Operator : thomass1
Sample : IC5448-200
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 27 09:55:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:08:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.64	65	131469	500.00	ug/L	0.02
5) pentafluorobenzene	10.37	168	271660	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.53	114	398092	50.00	ug/L	0.00
94) chlorobenzene-d5	15.73	117	384477	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	18.47	152	234216	50.00	ug/L	0.00
System Monitoring Compounds						
54) dibromofluoromethane (s)	10.40	113	437704	196.82	ug/L	0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 393.64%#			
55) 1,2-dichloroethane-d4 (s)	10.94	65	470502	190.23	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 380.46%#			
86) toluene-d8 (s)	13.72	98	1624726	195.18	ug/L	0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 390.36%#			
111) 4-bromofluorobenzene (s)	17.21	95	683946	197.88	ug/L	0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 395.76%#			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.77	59	249831	908.95	ug/L	90
3) ethyl alcohol	6.24	45	510079	17371.11	ug/L	94
4) 1,4-dioxane	12.48	88	123671	4633.79	ug/L #	96
11) chlorodifluoromethane	3.98	51	461096	206.18	ug/L	99
12) dichlorodifluoromethane	3.97	85	494780	194.89	ug/L	97
15) chloromethane	4.33	50	706478	189.17	ug/L	99
16) vinyl chloride	4.60	62	662534	191.91	ug/L	100
19) chloroethane	5.44	64	344315	188.57	ug/L	98
20) trichlorofluoromethane	5.96	101	658890	196.56	ug/L	98
22) ethyl ether	6.40	74	247524	189.81	ug/L	92
27) 1,1-dichloroethene	6.86	96	469397	201.49	ug/L	99
28) 2-chloropropane	6.61	43	747770	199.79	ug/L #	90
29) acetone	6.93	58	39281	186.94	ug/L	96
30) allyl chloride	7.45	76	277443	198.21	ug/L	91
31) acetonitrile	7.43	40	455590	1872.48	ug/L	93
32) iodomethane	7.16	142	909543	196.68	ug/L	98
33) carbon disulfide	7.28	76	1728415	199.52	ug/L	100
34) methylene chloride	7.66	84	523396	194.14	ug/L	98
35) methyl acetate	7.45	74	75280	185.95	ug/L	98
36) 1-chloropropane	7.71	63	40949	197.77	ug/L	89
37) methyl tert butyl ether	8.06	73	1400361	188.31	ug/L	100
38) trans-1,2-dichloroethene	8.09	96	491607	196.99	ug/L	99
39) di-isopropyl ether	8.78	45	1688015	188.66	ug/L	98
40) 2-butanone	9.67	72	49293	186.58	ug/L	94
41) 1,1-dichloroethane	8.78	63	868090	193.80	ug/L	100
42) chloroprene	8.91	53	719705	196.29	ug/L	98
43) acrylonitrile	8.06	53	892356	920.41	ug/L	99
44) vinyl acetate	8.79	86	73992	187.60	ug/L	92
45) ethyl tert-butyl ether	9.35	59	1648965	191.62	ug/L	99
46) ethyl acetate	9.70	45	62718	185.01	ug/L	88
47) 2,2-dichloropropane	9.69	77	638664	191.11	ug/L	99
48) cis-1,2-dichloroethene	9.68	96	531053	194.41	ug/L	99
49) propionitrile	9.80	54	685586	1861.37	ug/L	93

M2D5448.M Tue Mar 04 14:20:09 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130209.D
Acq On : 26 Feb 2014 4:19 pm
Operator : thomass1
Sample : IC5448-200
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 27 09:55:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:08:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) tert-Butyl Formate	10.22	59	485719	192.28	ug/L		99
51) bromochloromethane	10.06	128	255907	191.50	ug/L		98
52) tetrahydrofuran	10.11	42	138297	184.56	ug/L		99
53) chloroform	10.14	83	819845	193.79	ug/L		99
56) freon 113	6.84	151	368211	199.10	ug/L		99
57) methacrylonitrile	10.03	67	188513	189.96	ug/L		97
58) 1,1,1-trichloroethane	10.46	97	693074	198.18	ug/L		99
59) cyclohexane	10.55	84	729766	200.40	ug/L		99
60) isobutyl alcohol	10.69	74	60189	1956.86	ug/L	#	100
62) iso-octane	11.07	57	1933656	193.09	ug/L		99
65) epichlorohydrin	13.21	57	228817	942.92	ug/L		99
66) n-butyl alcohol	11.72	56	672084	9581.40	ug/L		97
67) carbon tetrachloride	10.71	117	619096	198.77	ug/L		100
68) 1,1-dichloropropene	10.69	75	630086	198.32	ug/L		100
69) hexane	8.47	86	81300	198.12	ug/L		97
70) benzene	11.02	78	1912689	191.91	ug/L		100
71) tert-amyl methyl ether	11.10	55	425344	188.47	ug/L		100
72) heptane	11.29	57	331570	195.71	ug/L		97
73) isopropyl acetate	10.99	43	894572	187.40	ug/L		100
74) 1,2-dichloroethane	11.05	62	573577	185.86	ug/L		98
75) trichloroethene	11.96	130	493691	197.03	ug/L		97
79) 2-chloroethyl vinyl ether	13.06	63	1459716	922.16	ug/L		99
80) methyl methacrylate	12.37	69	305292	190.78	ug/L		97
81) 1,2-dichloropropane	12.33	63	491494	193.64	ug/L		99
82) dibromomethane	12.51	93	290872	190.05	ug/L		99
83) methylcyclohexane	12.25	83	834232	197.23	ug/L		99
84) bromodichloromethane	12.70	83	644056	194.92	ug/L		100
85) cis-1,3-dichloropropene	13.33	75	794632	193.28	ug/L		99
87) 4-methyl-2-pentanone	13.50	58	185991	190.65	ug/L		99
88) toluene	13.81	92	1178356	194.85	ug/L		99
89) 3-methyl-1-butanol	13.53	55	422725	3855.95	ug/L		99
90) trans-1,3-dichloropropene	14.09	75	711042	191.21	ug/L		99
91) ethyl methacrylate	14.13	69	604519	192.20	ug/L		99
92) 1,1,2-trichloroethane	14.38	83	358787	189.31	ug/L		100
93) 2-hexanone	14.65	58	167947	192.25	ug/L		100
95) 3,3-Dimethyl-1-butanol	14.88	57	506760	1999.61	ug/L		100
96) tetrachloroethene	14.58	164	438172	195.80	ug/L		99
97) 1,3-dichloropropane	14.62	76	687275	185.06	ug/L		99
98) butyl acetate	14.77	56	309163	187.14	ug/L		99
99) dibromochloromethane	14.95	129	517331	190.13	ug/L		99
100) 1,2-dibromoethane	15.15	107	439469	186.39	ug/L		100
102) chlorobenzene	15.77	112	1345327	193.58	ug/L		98
103) 1,1,1,2-tetrachloroethane	15.86	131	535413	195.19	ug/L		99
104) ethylbenzene	15.87	91	2316192	194.02	ug/L		99
105) m,p-xylene	16.02	106	1765356	386.75	ug/L		99
106) o-xylene	16.55	106	912888	193.51	ug/L		96
107) styrene	16.57	104	1542234	193.78	ug/L		98
108) bromoform	16.86	173	405257	192.23	ug/L		98
110) isopropylbenzene	16.99	105	2419189	193.03	ug/L		99
112) cyclohexanone	17.17	55	183689	1922.72	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130209.D
Acq On : 26 Feb 2014 4:19 pm
Operator : thomass1
Sample : IC5448-200
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 27 09:55:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:08:43 2014
Response via : Initial Calibration

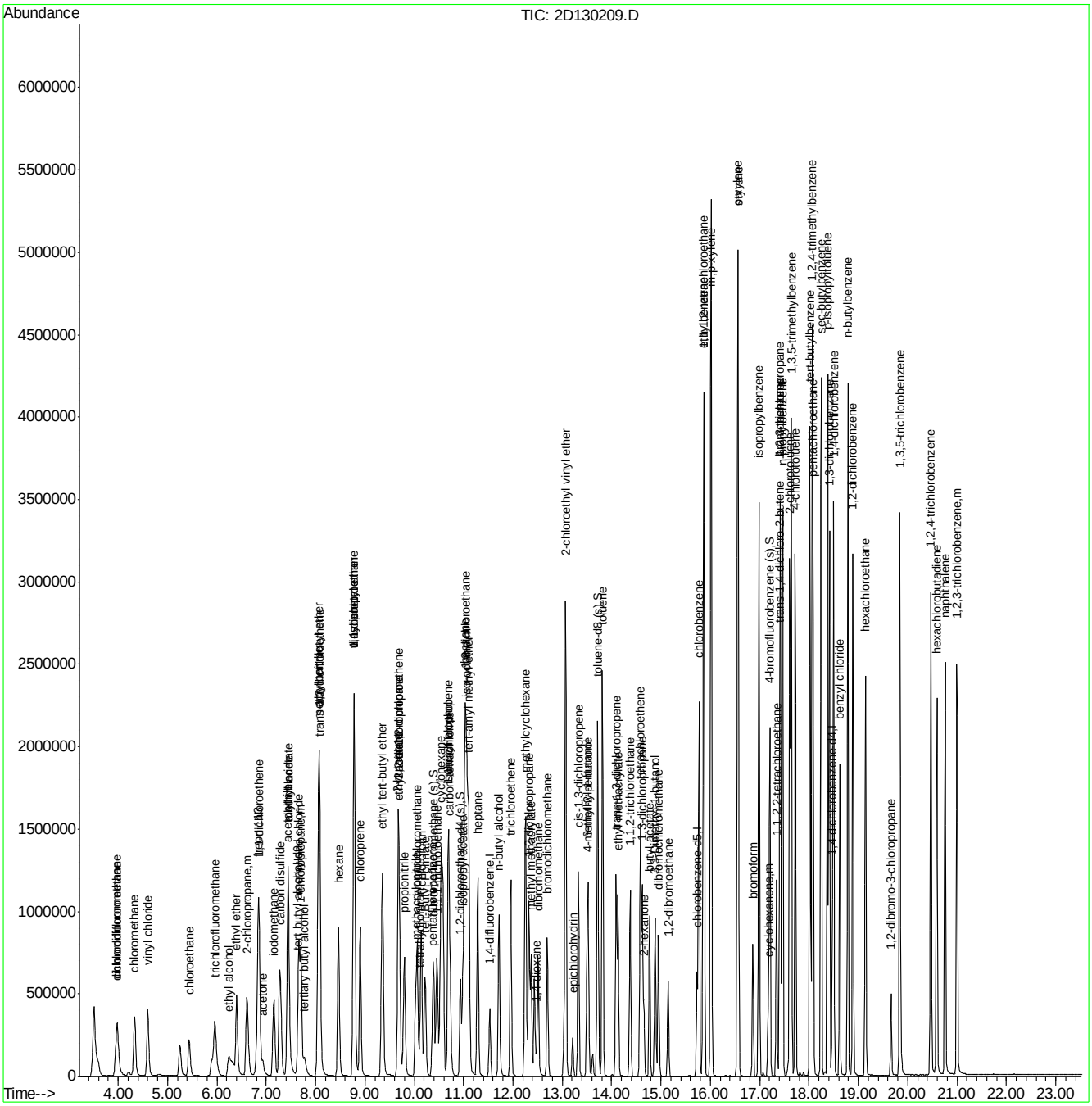
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
113) bromobenzene	17.42	156	677217	193.52 ug/L	99
114) 1,1,2,2-tetrachloroethane	17.34	83	632086	186.07 ug/L	99
115) trans-1,4-dichloro-2-buten	17.40	53	162329	187.28 ug/L	82
116) 1,2,3-trichloropropane	17.42	110	152118	185.99 ug/L #	76
117) n-propylbenzene	17.46	91	2713800	193.11 ug/L	99
119) 2-chlorotoluene	17.61	126	610097	197.27 ug/L	95
120) 4-chlorotoluene	17.72	91	1764552	194.34 ug/L	100
121) 1,3,5-trimethylbenzene	17.64	105	2116698	193.48 ug/L	98
122) tert-butylbenzene	18.02	119	1849274	194.38 ug/L	99
123) pentachloroethane	18.08	167	461785	194.91 ug/L	99
124) 1,2,4-trimethylbenzene	18.07	105	2117233	193.45 ug/L	98
126) sec-butylbenzene	18.24	105	2808931	192.38 ug/L	99
127) 1,3-dichlorobenzene	18.41	146	1320050	191.42 ug/L	99
128) p-isopropyltoluene	18.38	119	2373989	191.17 ug/L	98
129) 1,4-dichlorobenzene	18.50	146	1338185	191.89 ug/L	98
130) 1,2-dichlorobenzene	18.89	146	1301521	188.10 ug/L	99
131) benzyl chloride	18.62	91	1268032	184.35 ug/L	99
133) n-butylbenzene	18.78	92	1219440	190.73 ug/L	98
135) 1,2-dibromo-3-chloropropan	19.67	157	149621	181.32 ug/L	97
136) 1,3,5-trichlorobenzene	19.84	180	1146437	178.52 ug/L	99
137) hexachlorobutadiene	20.59	225	568629	176.33 ug/L	97
138) naphthalene	20.76	128	2054028	173.83 ug/L	99
139) 1,2,4-trichlorobenzene	20.47	180	1033798	176.84 ug/L	99
140) 1,2,3-trichlorobenzene	21.00	180	915549	176.53 ug/L	99
141) hexachloroethane	19.15	201	497409	196.41 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130209.D
Acq On : 26 Feb 2014 4:19 pm
Operator : thomass1
Sample : IC5448-200
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 27 09:55:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:08:43 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:09 2014 MS2D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130212.D
Acq On : 26 Feb 2014 5:50 pm
Operator : thomass1
Sample : IC5448-10
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 27 09:29:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:28:12 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.63	65	113419	500.00	ug/L		0.00
5) pentafluorobenzene	10.37	168	263675	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.53	114	381826	50.00	ug/L		0.00
94) chlorobenzene-d5	15.73	117	356886	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.47	152	219003	50.00	ug/L		0.00
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.39	113	19516	9.92	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 19.84%#				
55) 1,2-dichloroethane-d4 (s)	10.94	65	22450	10.32	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 20.64%#				
86) toluene-d8 (s)	13.71	98	68367	9.64	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 19.28%#				
111) 4-bromofluorobenzene (s)	17.20	95	29761	9.82	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 19.64%#				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.76	59	11628	50.59	ug/L		89
3) ethyl alcohol	6.22	45	27199	1102.47	ug/L		99
4) 1,4-dioxane	12.48	88	5237	242.25	ug/L	#	94
11) chlorodifluoromethane	3.98	51	10587	5.21	ug/L		96
12) dichlorodifluoromethane	3.97	85	20582	8.77	ug/L		95
15) chloromethane	4.31	50	32452	9.26	ug/L		98
16) vinyl chloride	4.58	62	29552	9.36	ug/L		97
18) bromomethane	5.26	94	20050	11.19	ug/L		96
19) chloroethane	5.46	64	16643	9.74	ug/L		96
20) trichlorofluoromethane	5.97	101	27727	9.08	ug/L		98
22) ethyl ether	6.40	74	11530	9.48	ug/L		94
23) acrolein	6.68	56	44772	102.28	ug/L		100
27) 1,1-dichloroethene	6.85	96	14755	6.52	ug/L		97
28) 2-chloropropane	6.62	43	23856	6.59	ug/L		94
29) acetone	6.93	58	1746	9.15	ug/L		92
30) allyl chloride	7.45	76	10190	7.86	ug/L		98
31) acetonitrile	7.43	40	20969	91.41	ug/L	#	70
32) iodomethane	7.15	142	34700	8.11	ug/L		98
33) carbon disulfide	7.28	76	57724	7.12	ug/L		99
34) methylene chloride	7.66	84	22763	8.89	ug/L		94
35) methyl acetate	7.44	74	3349	9.03	ug/L		89
36) 1-chloropropane	7.71	63	1419	7.07	ug/L		94
37) methyl tert butyl ether	8.06	73	65835	9.76	ug/L		99
38) trans-1,2-dichloroethene	8.09	96	18077	7.49	ug/L		99
39) di-isopropyl ether	8.78	45	73731	8.95	ug/L		99
40) 2-butanone	9.67	72	2199	9.23	ug/L		87
41) 1,1-dichloroethane	8.78	63	33535	7.95	ug/L		98
42) chloroprene	8.91	53	22641	6.83	ug/L		98
43) acrylonitrile	8.06	53	43986	48.97	ug/L		96
44) vinyl acetate	8.78	86	3273	9.16	ug/L		62
45) ethyl tert-butyl ether	9.35	59	72270	9.19	ug/L		99
46) ethyl acetate	9.70	45	2902	9.51	ug/L		70
47) 2,2-dichloropropane	9.69	77	23869	7.53	ug/L		99

M2D5448.M Tue Mar 04 14:20:10 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130212.D
Acq On : 26 Feb 2014 5:50 pm
Operator : thomass1
Sample : IC5448-10
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 27 09:29:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:28:12 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.68	96	21805	8.27	ug/L		96
49) propionitrile	9.80	54	33377	96.96	ug/L		99
50) tert-Butyl Formate	10.22	59	20968	9.32	ug/L		99
51) bromochloromethane	10.06	128	11592	9.28	ug/L		97
52) tetrahydrofuran	10.12	42	7265	9.82	ug/L		95
53) chloroform	10.14	83	32858	8.35	ug/L		97
56) freon 113	6.84	151	10742	6.25	ug/L		95
57) methacrylonitrile	10.02	67	9131	10.05	ug/L		94
58) 1,1,1-trichloroethane	10.46	97	22804	7.02	ug/L		98
59) cyclohexane	10.54	84	21366	6.34	ug/L		97
60) isobutyl alcohol	10.69	74	2150	79.79	ug/L	#	100
62) iso-octane	11.06	57	66534	7.47	ug/L		96
65) epichlorohydrin	13.21	57	10603	47.48	ug/L		99
66) n-butyl alcohol	11.71	56	29694	476.28	ug/L		96
67) carbon tetrachloride	10.71	117	19364	6.78	ug/L		99
68) 1,1-dichloropropene	10.69	75	20134	6.85	ug/L		96
69) hexane	8.46	86	2340	6.28	ug/L		97
70) benzene	11.02	78	73131	8.10	ug/L		100
71) tert-amyl methyl ether	11.10	55	18833	8.74	ug/L		99
72) heptane	11.29	57	11805	7.67	ug/L		97
73) isopropyl acetate	10.98	43	41041	9.52	ug/L		99
74) 1,2-dichloroethane	11.05	62	26381	9.55	ug/L		100
75) trichloroethene	11.95	130	17429	7.51	ug/L		99
79) 2-chloroethyl vinyl ether	13.06	63	66580	46.79	ug/L		99
80) methyl methacrylate	12.37	69	13940	9.68	ug/L		92
81) 1,2-dichloropropane	12.32	63	20113	8.59	ug/L		99
82) dibromomethane	12.51	93	13513	9.76	ug/L		97
83) methylcyclohexane	12.26	83	26468	7.05	ug/L		96
84) bromodichloromethane	12.70	83	26130	8.74	ug/L		94
85) cis-1,3-dichloropropene	13.33	75	33367	8.84	ug/L		99
87) 4-methyl-2-pentanone	13.50	58	8642	9.84	ug/L		100
88) toluene	13.81	92	43417	7.96	ug/L		99
89) 3-methyl-1-butanol	13.52	55	19105	196.29	ug/L		100
90) trans-1,3-dichloropropene	14.09	75	31816	9.28	ug/L		99
91) ethyl methacrylate	14.12	69	26577	9.58	ug/L		99
92) 1,1,2-trichloroethane	14.37	83	16482	9.48	ug/L		98
93) 2-hexanone	14.65	58	8015	10.05	ug/L		96
95) 3,3-Dimethyl-1-butanol	14.88	57	20690	96.66	ug/L		99
96) tetrachloroethene	14.58	164	14333	7.04	ug/L		94
97) 1,3-dichloropropane	14.62	76	31737	9.74	ug/L		97
98) butyl acetate	14.77	56	14275	9.68	ug/L		99
99) dibromochloromethane	14.95	129	22053	9.43	ug/L		98
100) 1,2-dibromoethane	15.14	107	20101	9.59	ug/L		99
102) chlorobenzene	15.77	112	52411	8.59	ug/L		99
103) 1,1,1,2-tetrachloroethane	15.86	131	21622	9.01	ug/L		97
104) ethylbenzene	15.87	91	83360	8.06	ug/L		98
105) m,p-xylene	16.01	106	64484	16.28	ug/L		97
106) o-xylene	16.55	106	34506	8.62	ug/L		96
107) styrene	16.56	104	58642	8.60	ug/L		98
108) bromoform	16.86	173	17138	9.54	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130212.D
Acq On : 26 Feb 2014 5:50 pm
Operator : thomass1
Sample : IC5448-10
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 27 09:29:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:28:12 2014
Response via : Initial Calibration

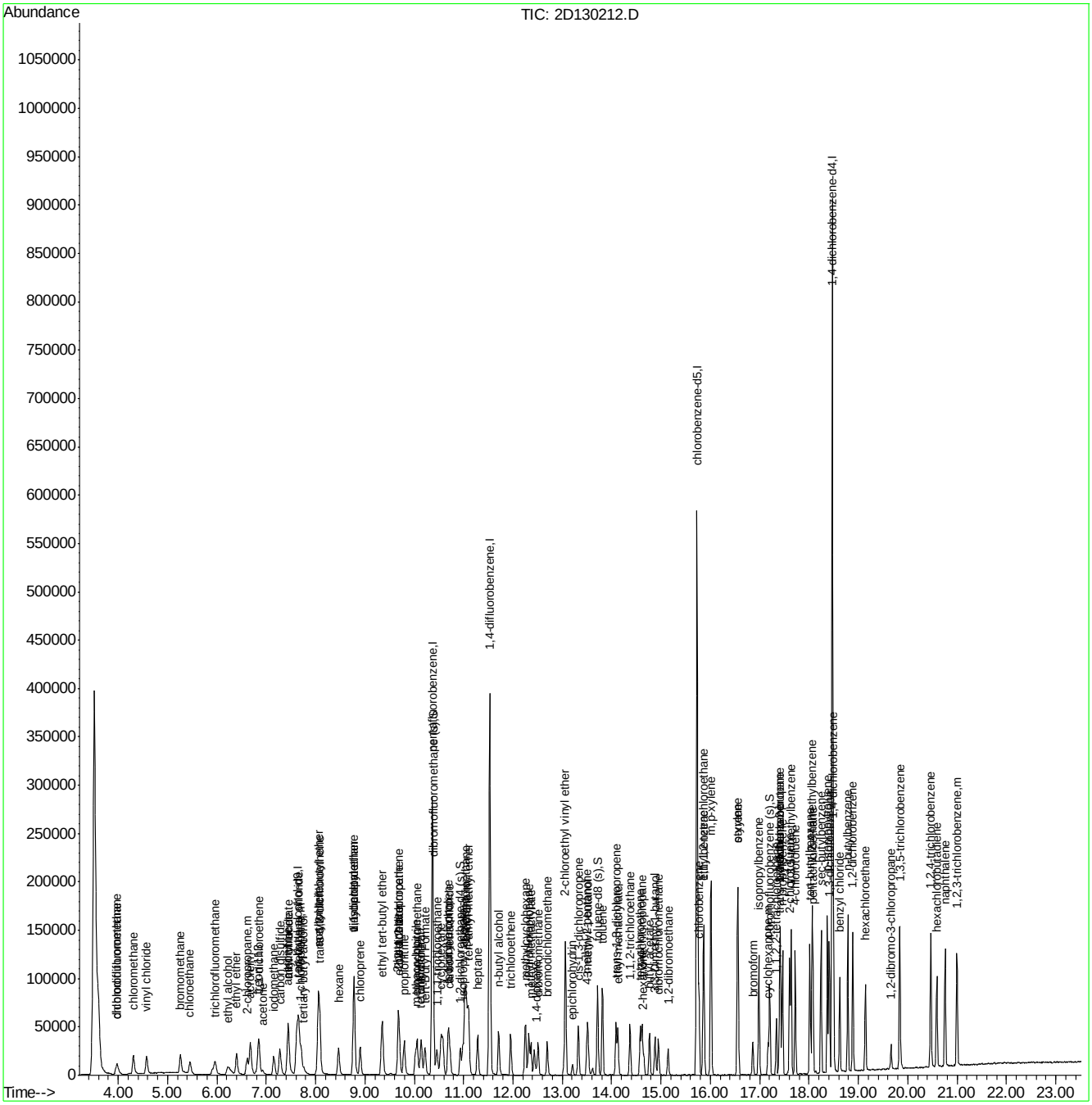
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) isopropylbenzene	16.98	105	85088	7.67	ug/L		99
112) cyclohexanone	17.17	55	13795	129.74	ug/L	#	92
113) bromobenzene	17.42	156	27944	8.87	ug/L		98
114) 1,1,2,2-tetrachloroethane	17.34	83	29979	9.78	ug/L		98
115) trans-1,4-dichloro-2-buten	17.40	53	7734	10.10	ug/L	#	73
116) 1,2,3-trichloropropane	17.42	110	7543	10.14	ug/L	#	75
117) n-propylbenzene	17.46	91	98486	7.80	ug/L		100
119) 2-chlorotoluene	17.60	126	22880	8.21	ug/L		97
120) 4-chlorotoluene	17.72	91	70268	8.50	ug/L		99
121) 1,3,5-trimethylbenzene	17.64	105	79101	8.15	ug/L		99
122) tert-butylbenzene	18.01	119	65554	7.84	ug/L		98
123) pentachloroethane	18.08	167	18522	9.07	ug/L		98
124) 1,2,4-trimethylbenzene	18.06	105	81595	8.40	ug/L		100
126) sec-butylbenzene	18.24	105	100678	7.88	ug/L		98
127) 1,3-dichlorobenzene	18.41	146	55260	9.10	ug/L		97
128) p-isopropyltoluene	18.37	119	88707	8.07	ug/L		99
129) 1,4-dichlorobenzene	18.50	146	56952	9.11	ug/L		99
130) 1,2-dichlorobenzene	18.88	146	57578	9.45	ug/L		99
131) benzyl chloride	18.62	91	63320	9.74	ug/L		100
133) n-butylbenzene	18.78	92	45232	8.29	ug/L		99
135) 1,2-dibromo-3-chloropropan	19.66	157	7340	10.20	ug/L		97
136) 1,3,5-trichlorobenzene	19.84	180	51221	9.33	ug/L		95
137) hexachlorobutadiene	20.59	225	23403	8.69	ug/L		100
138) naphthalene	20.76	128	100539	10.22	ug/L		99
139) 1,2,4-trichlorobenzene	20.47	180	48453	9.88	ug/L		98
140) 1,2,3-trichlorobenzene	21.00	180	43005	9.87	ug/L		99
141) hexachloroethane	19.14	201	17250	8.12	ug/L		97

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130212.D
Acq On : 26 Feb 2014 5:50 pm
Operator : thomass1
Sample : IC5448-10
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 27 09:29:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:28:12 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:10 2014 MS2D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130213.D
Acq On : 26 Feb 2014 6:20 pm
Operator : thomass1
Sample : ICV5448-50
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 27 09:49:46 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	7.63	65	120471	500.00	ug/L		0.00
5) pentafluorobenzene	10.37	168	277285	50.00	ug/L		0.00
63) 1,4-difluorobenzene	11.53	114	399760	50.00	ug/L		0.00
94) chlorobenzene-d5	15.73	117	374634	50.00	ug/L		0.00
109) 1,4-dichlorobenzene-d4	18.47	152	226616	50.00	ug/L		0.00
System Monitoring Compounds							
54) dibromofluoromethane (s)	10.40	113	111876	50.14	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 100.28%				
55) 1,2-dichloroethane-d4 (s)	10.94	65	122182	49.22	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 98.44%				
86) toluene-d8 (s)	13.71	98	413114	51.65	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 103.30%				
111) 4-bromofluorobenzene (s)	17.20	95	165011	48.85	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 97.70%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.76	59	69025	282.31	ug/L		90
3) ethyl alcohol	6.23	45	133631	5042.04	ug/L		97
4) 1,4-dioxane	12.48	88	33175	1451.18	ug/L	#	99
11) chlorodifluoromethane	3.99	51	105364	46.58	ug/L		100
12) dichlorodifluoromethane	3.96	85	117243	48.26	ug/L		96
15) chloromethane	4.32	50	176062	48.21	ug/L		98
16) vinyl chloride	4.59	62	160575	48.71	ug/L		100
18) bromomethane	5.26	94	97447	47.48	ug/L		98
19) chloroethane	5.45	64	86648	48.36	ug/L		99
20) trichlorofluoromethane	5.97	101	156672	49.37	ug/L		99
22) ethyl ether	6.40	74	67534	53.11	ug/L		95
23) acrolein	6.68	56	244106	487.81	ug/L		99
27) 1,1-dichloroethene	6.85	96	111822	49.10	ug/L		98
28) 2-chloropropane	6.61	43	230940	63.40	ug/L		97
29) acetone	6.92	58	11221	56.71	ug/L		95
30) allyl chloride	7.45	76	72346	54.53	ug/L		98
31) acetonitrile	7.44	40	125325	525.14	ug/L	#	84
32) iodomethane	7.16	142	225393	51.30	ug/L		100
33) carbon disulfide	7.28	76	411719	49.88	ug/L		99
34) methylene chloride	7.66	84	134594	50.63	ug/L		95
35) methyl acetate	7.44	74	17927	46.60	ug/L		99
36) 1-chloropropane	7.71	63	10489	51.88	ug/L		95
37) methyl tert butyl ether	8.06	73	734807	103.88	ug/L		99
38) trans-1,2-dichloroethene	8.09	96	121918	49.60	ug/L		98
39) di-isopropyl ether	8.78	45	452034	52.80	ug/L		92
40) 2-butanone	9.66	72	13527	54.70	ug/L		88
41) 1,1-dichloroethane	8.78	63	226283	52.37	ug/L		99
42) chloroprene	8.90	53	147749	43.96	ug/L		99
43) acrylonitrile	8.06	53	250333	265.69	ug/L		98
44) vinyl acetate	8.79	86	22123	59.61	ug/L		75
45) ethyl tert-butyl ether	9.35	59	419378	51.17	ug/L		100
46) ethyl acetate	9.70	45	17636	55.36	ug/L		90
47) 2,2-dichloropropane	9.69	77	165925	51.21	ug/L		99

M2D5448.M Tue Mar 04 14:20:11 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130213.D
Acq On : 26 Feb 2014 6:20 pm
Operator : thomass1
Sample : ICV5448-50
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 27 09:49:46 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.68	96	136656	50.38	ug/L		99
49) propionitrile	9.80	54	192358	533.42	ug/L		95
50) tert-Butyl Formate	10.22	59	130835	55.72	ug/L		99
51) bromochloromethane	10.06	128	66833	51.35	ug/L		96
52) tetrahydrofuran	10.11	42	37668	48.52	ug/L		99
53) chloroform	10.14	83	215495	53.20	ug/L		99
56) freon 113	6.84	151	82971	44.92	ug/L		100
57) methacrylonitrile	10.02	67	50117	52.42	ug/L		98
58) 1,1,1-trichloroethane	10.46	97	174156	52.98	ug/L		99
59) cyclohexane	10.55	84	177208	52.44	ug/L		98
60) isobutyl alcohol	10.69	74	15263	499.07	ug/L	#	100
62) iso-octane	11.06	57	380646	41.79	ug/L		97
65) epichlorohydrin	13.21	57	65743	282.96	ug/L		99
66) n-butyl alcohol	11.71	56	182544	2813.29	ug/L		99
67) carbon tetrachloride	10.71	117	153359	53.43	ug/L		99
68) 1,1-dichloropropene	10.69	75	148353	50.19	ug/L		100
69) hexane	8.47	86	21593	53.34	ug/L		97
70) benzene	11.02	78	496312	53.64	ug/L		99
71) tert-amyl methyl ether	11.10	55	107740	48.45	ug/L		94
72) heptane	11.28	57	61680	39.32	ug/L		99
73) isopropyl acetate	10.98	43	247843	55.21	ug/L		100
74) 1,2-dichloroethane	11.05	62	156918	54.52	ug/L		99
75) trichloroethene	11.95	130	124908	53.04	ug/L		99
79) 2-chloroethyl vinyl ether	13.06	63	431496	291.96	ug/L		100
80) methyl methacrylate	12.37	69	82042	54.63	ug/L		94
81) 1,2-dichloropropane	12.32	63	129566	53.83	ug/L		98
82) dibromomethane	12.51	93	78992	54.63	ug/L		96
83) methylcyclohexane	12.25	83	172955	45.48	ug/L		94
84) bromodichloromethane	12.70	83	166150	53.96	ug/L		99
85) cis-1,3-dichloropropene	13.33	75	193110	49.57	ug/L		99
87) 4-methyl-2-pentanone	13.50	58	50986	55.55	ug/L		96
88) toluene	13.81	92	302882	54.29	ug/L		99
89) 3-methyl-1-butanol	13.52	55	119343	1173.89	ug/L		99
90) trans-1,3-dichloropropene	14.09	75	186881	52.53	ug/L		97
91) ethyl methacrylate	14.13	69	156737	54.25	ug/L		99
92) 1,1,2-trichloroethane	14.37	83	96717	53.47	ug/L		99
93) 2-hexanone	14.65	58	45328	54.26	ug/L		99
95) 3,3-Dimethyl-1-butanol	14.88	57	134689	601.95	ug/L		100
96) tetrachloroethene	14.58	164	109591	53.22	ug/L		99
97) 1,3-dichloropropane	14.62	76	185422	54.34	ug/L		98
98) butyl acetate	14.77	56	85989	55.73	ug/L		100
99) dibromochloromethane	14.95	129	135653	55.63	ug/L		98
100) 1,2-dibromoethane	15.14	107	117453	53.65	ug/L		100
102) chlorobenzene	15.77	112	346560	54.99	ug/L		98
103) 1,1,1,2-tetrachloroethane	15.86	131	133560	53.67	ug/L		98
104) ethylbenzene	15.87	91	584090	54.96	ug/L		100
105) m,p-xylene	16.01	106	448391	110.09	ug/L		99
106) o-xylene	16.55	106	230425	55.70	ug/L		99
107) styrene	16.56	104	391978	55.72	ug/L		99
108) bromoform	16.86	173	104511	55.76	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130213.D
Acq On : 26 Feb 2014 6:20 pm
Operator : thomass1
Sample : ICV5448-50
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 27 09:49:46 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
110) isopropylbenzene	16.98	105	601206	53.94 ug/L		99
112) cyclohexanone	17.17	55	45868	491.13 ug/L		99
113) bromobenzene	17.42	156	171448	53.36 ug/L		99
114) 1,1,2,2-tetrachloroethane	17.34	83	163289	51.61 ug/L		99
115) trans-1,4-dichloro-2-buten	17.40	53	44159	55.68 ug/L		99
116) 1,2,3-trichloropropane	17.42	110	40008	51.88 ug/L	#	87
117) n-propylbenzene	17.46	91	712069	56.03 ug/L		100
119) 2-chlorotoluene	17.60	126	149981	53.18 ug/L		97
120) 4-chlorotoluene	17.72	91	440102	52.41 ug/L		99
121) 1,3,5-trimethylbenzene	17.64	105	520222	53.05 ug/L		99
122) tert-butylbenzene	18.01	119	449006	53.33 ug/L		100
123) pentachloroethane	18.08	167	114729	54.91 ug/L		100
124) 1,2,4-trimethylbenzene	18.06	105	544758	55.31 ug/L		100
126) sec-butylbenzene	18.24	105	680878	52.88 ug/L		99
127) 1,3-dichlorobenzene	18.41	146	334564	53.80 ug/L		99
128) p-isopropyltoluene	18.37	119	592550	53.41 ug/L		100
129) 1,4-dichlorobenzene	18.50	146	339047	52.92 ug/L		99
130) 1,2-dichlorobenzene	18.88	146	337011	53.77 ug/L		99
131) benzyl chloride	18.62	91	374020	55.75 ug/L		100
133) n-butylbenzene	18.78	92	305954	55.23 ug/L		98
135) 1,2-dibromo-3-chloropropan	19.66	157	40362	54.07 ug/L		100
136) 1,3,5-trichlorobenzene	19.84	180	314579	55.81 ug/L		99
137) hexachlorobutadiene	20.59	225	144858	52.74 ug/L		99
138) naphthalene	20.76	128	578790	56.70 ug/L		100
139) 1,2,4-trichlorobenzene	20.47	180	281753	55.60 ug/L		99
140) 1,2,3-trichlorobenzene	21.00	180	252618	56.12 ug/L		99
141) hexachloroethane	19.14	201	119931	55.85 ug/L		100

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

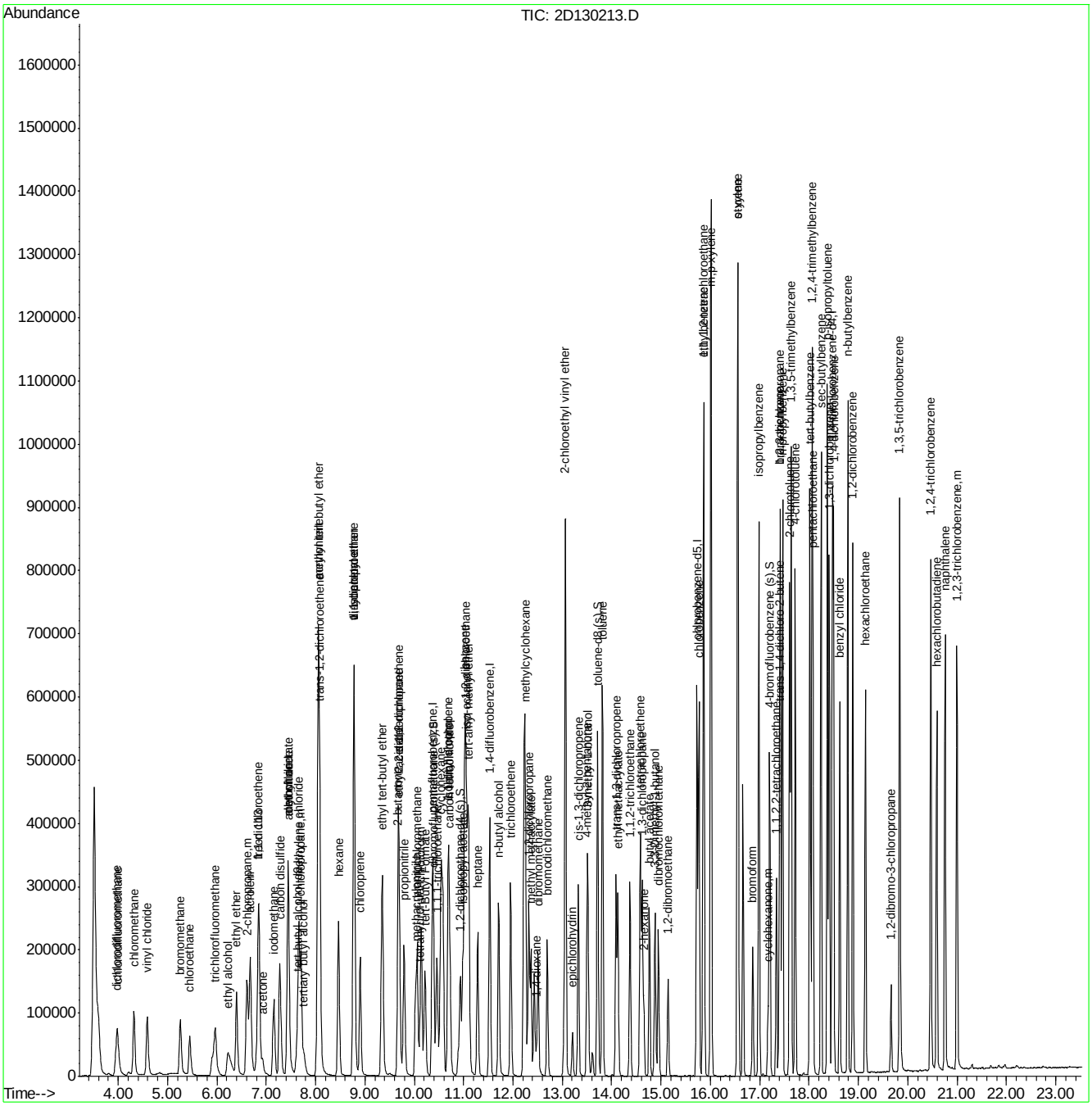
7.6.10

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130213.D
Acq On : 26 Feb 2014 6:20 pm
Operator : thomass1
Sample : ICV5448-50
Misc : ms63168,v2d5448,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 27 09:49:46 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration



M2D5448.M Tue Mar 04 14:20:11 2014 MS2D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130993.D
Acq On : 21 Mar 2014 9:36 am
Operator : BenM
Sample : cc5448-20
Misc : ms64447,v2d5481,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 21 14:22:21 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.61	65	81951	500.00	ug/L	-0.01
5) pentafluorobenzene	10.35	168	211758	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	11.51	114	314136	50.00	ug/L	-0.02
94) chlorobenzene-d5	15.72	117	290929	50.00	ug/L	-0.01
109) 1,4-dichlorobenzene-d4	18.46	152	172647	50.00	ug/L	-0.01
System Monitoring Compounds						
54) dibromofluoromethane (s)	10.38	113	84092	49.35	ug/L	-0.01
Spiked Amount 50.000	Range 79 - 117		Recovery = 98.70%			
55) 1,2-dichloroethane-d4 (s)	10.92	65	97847	51.62	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 103.24%			
86) toluene-d8 (s)	13.70	98	316802	50.41	ug/L	-0.01
Spiked Amount 50.000	Range 82 - 118		Recovery = 100.82%			
111) 4-bromofluorobenzene (s)	17.19	95	124622	48.43	ug/L	-0.01
Spiked Amount 50.000	Range 75 - 118		Recovery = 96.86%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.74	59	16753	100.73	ug/L	89
3) ethyl alcohol	6.21	45	37582	2084.53	ug/L	99
4) 1,4-dioxane	12.46	88	7492	481.77	ug/L #	93
11) chlorodifluoromethane	3.97	51	45572	27.40	ug/L	99
12) dichlorodifluoromethane	3.96	85	44264	23.86	ug/L	99
15) chloromethane	4.31	50	63243	22.68	ug/L	97
16) vinyl chloride	4.57	62	56637	22.50	ug/L	98
18) bromomethane	5.25	94	31552	20.13	ug/L	95
19) chloroethane	5.45	64	29367	21.46	ug/L	93
20) trichlorofluoromethane	5.94	101	56410	23.27	ug/L	98
22) ethyl ether	6.39	74	18484	19.03	ug/L	93
23) acrolein	6.66	56	63435	165.99	ug/L	100
27) 1,1-dichloroethene	6.84	96	36354	20.90	ug/L	90
28) 2-chloropropane	6.59	43	79468	28.57	ug/L	98
29) acetone	6.91	58	2489	16.47	ug/L	96
30) allyl chloride	7.44	76	22126	21.84	ug/L	92
31) acetonitrile	7.43	40	34504	189.32	ug/L #	68
32) iodomethane	7.13	142	67478	20.11	ug/L	94
33) carbon disulfide	7.26	76	138541	21.98	ug/L	96
34) methylene chloride	7.64	84	41720	20.55	ug/L	94
35) methyl acetate	7.43	74	5198	17.69	ug/L #	84
36) 1-chloropropane	7.70	63	3454	22.37	ug/L	96
37) methyl tert butyl ether	8.04	73	108748	20.13	ug/L	99
38) trans-1,2-dichloroethene	8.08	96	38953	20.75	ug/L	92
39) di-isopropyl ether	8.76	45	149748	22.91	ug/L	95
40) 2-butanone	9.65	72	3378	17.89	ug/L	92
41) 1,1-dichloroethane	8.76	63	73831	22.38	ug/L	99
42) chloroprene	8.89	53	59357	23.12	ug/L	97
43) acrylonitrile	8.05	53	63746	88.59	ug/L	98
44) vinyl acetate	8.77	86	5139	18.13	ug/L	76
45) ethyl tert-butyl ether	9.34	59	132985	21.25	ug/L	98
46) ethyl acetate	9.69	45	4586	18.85	ug/L	62
47) 2,2-dichloropropane	9.68	77	62011	25.06	ug/L	94

M2D5448.M Fri Mar 21 14:27:32 2014 MS2D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130993.D
Acq On : 21 Mar 2014 9:36 am
Operator : BenM
Sample : cc5448-20
Misc : ms64447,v2d5481,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 21 14:22:21 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cis-1,2-dichloroethene	9.66	96	41649	20.11	ug/L		96
49) propionitrile	9.78	54	46984	170.61	ug/L		98
50) tert-Butyl Formate	10.20	59	34772	19.39	ug/L		98
51) bromochloromethane	10.04	128	19690	19.81	ug/L		92
52) tetrahydrofuran	10.10	42	10288	17.35	ug/L		95
53) chloroform	10.13	83	67663	21.87	ug/L		98
56) freon 113	6.83	151	29150	21.36	ug/L		97
57) methacrylonitrile	10.01	67	12488	17.10	ug/L		89
58) 1,1,1-trichloroethane	10.45	97	58203	23.18	ug/L		99
59) cyclohexane	10.53	84	57991	22.47	ug/L		94
60) isobutyl alcohol	10.67	74	4557	200.87	ug/L	#	100
62) iso-octane	11.05	57	152250	21.89	ug/L		97
65) epichlorohydrin	13.19	57	15040	82.38	ug/L		98
66) n-butyl alcohol	11.70	56	40965	803.42	ug/L		96
67) carbon tetrachloride	10.69	117	51475	22.82	ug/L		98
68) 1,1-dichloropropene	10.67	75	51131	22.01	ug/L		98
69) hexane	8.45	86	6165	20.01	ug/L	#	82
70) benzene	11.01	78	155649	21.41	ug/L		99
71) tert-amyl methyl ether	11.08	55	36320	20.78	ug/L	#	86
72) heptane	11.27	57	25908	21.02	ug/L		99
73) isopropyl acetate	10.97	43	65723	18.63	ug/L		96
74) 1,2-dichloroethane	11.04	62	49145	21.73	ug/L		96
75) trichloroethene	11.94	130	37297	20.15	ug/L		98
79) 2-chloroethyl vinyl ether	13.05	63	106571	91.76	ug/L		99
80) methyl methacrylate	12.36	69	20260	17.17	ug/L		93
81) 1,2-dichloropropane	12.31	63	39942	21.12	ug/L		98
82) dibromomethane	12.49	93	22476	19.78	ug/L		93
83) methylcyclohexane	12.24	83	64188	21.48	ug/L		96
84) bromodichloromethane	12.68	83	50653	20.93	ug/L		99
85) cis-1,3-dichloropropene	13.31	75	61728	20.16	ug/L		99
87) 4-methyl-2-pentanone	13.49	58	12409	17.20	ug/L		94
88) toluene	13.80	92	91028	20.76	ug/L		99
89) 3-methyl-1-butanol	13.50	55	26452	331.11	ug/L		98
90) trans-1,3-dichloropropene	14.08	75	54747	19.58	ug/L		98
91) ethyl methacrylate	14.11	69	41187	18.14	ug/L		94
92) 1,1,2-trichloroethane	14.36	83	26690	18.78	ug/L		98
93) 2-hexanone	14.64	58	11127	16.95	ug/L		90
95) 3,3-Dimethyl-1-butanol	14.87	57	29022	167.02	ug/L		98
96) tetrachloroethene	14.57	164	32222	20.15	ug/L		97
97) 1,3-dichloropropane	14.60	76	53265	20.10	ug/L		95
98) butyl acetate	14.75	56	22138	18.48	ug/L		96
99) dibromochloromethane	14.93	129	36616	19.34	ug/L		99
100) 1,2-dibromoethane	15.13	107	31209	18.36	ug/L		96
102) chlorobenzene	15.75	112	99936	20.42	ug/L		95
103) 1,1,1,2-tetrachloroethane	15.84	131	39129	20.25	ug/L		99
104) ethylbenzene	15.85	91	178844	21.67	ug/L		98
105) m,p-xylene	16.00	106	133817	42.31	ug/L		97
106) o-xylene	16.54	106	67067	20.88	ug/L		94
107) styrene	16.55	104	110137	20.16	ug/L		97
108) bromoform	16.85	173	25587	17.58	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130993.D
Acq On : 21 Mar 2014 9:36 am
Operator : BenM
Sample : cc5448-20
Misc : ms64447,v2d5481,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 21 14:22:21 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration

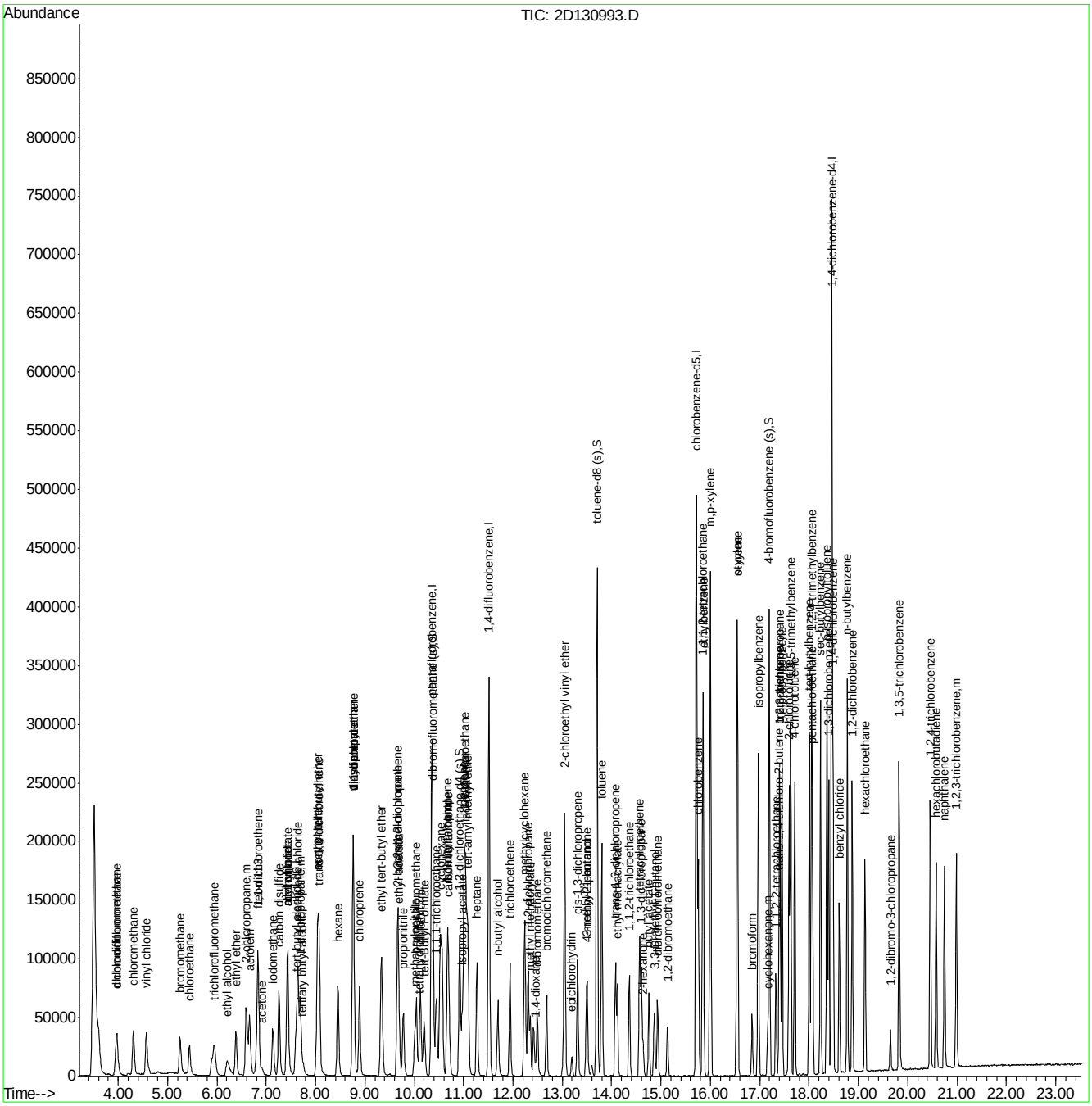
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) isopropylbenzene	16.97	105	184069	21.68 ug/L	99
112) cyclohexanone	17.16	55	13004	165.49 ug/L #	85
113) bromobenzene	17.41	156	47911	19.57 ug/L	93
114) 1,1,2,2-tetrachloroethane	17.33	83	43932	18.23 ug/L	98
115) trans-1,4-dichloro-2-buten	17.38	53	9671	16.00 ug/L	93
116) 1,2,3-trichloropropane	17.41	110	10749	18.30 ug/L #	83
117) n-propylbenzene	17.45	91	211473	21.84 ug/L	98
119) 2-chlorotoluene	17.59	126	43627	20.31 ug/L	92
120) 4-chlorotoluene	17.71	91	134747	21.06 ug/L	98
121) 1,3,5-trimethylbenzene	17.63	105	158100	21.16 ug/L	98
122) tert-butylbenzene	18.00	119	133876	20.87 ug/L	97
123) pentachloroethane	18.07	167	31970	20.08 ug/L	96
124) 1,2,4-trimethylbenzene	18.05	105	158278	21.10 ug/L	99
126) sec-butylbenzene	18.23	105	210933	21.50 ug/L	98
127) 1,3-dichlorobenzene	18.40	146	96812	20.43 ug/L	98
128) p-isopropyltoluene	18.36	119	177126	20.96 ug/L	98
129) 1,4-dichlorobenzene	18.49	146	97793	20.03 ug/L	99
130) 1,2-dichlorobenzene	18.87	146	96121	20.13 ug/L	100
131) benzyl chloride	18.61	91	92399	18.08 ug/L	98
133) n-butylbenzene	18.77	92	92727	21.97 ug/L	98
135) 1,2-dibromo-3-chloropropan	19.65	157	9266	16.29 ug/L	96
136) 1,3,5-trichlorobenzene	19.83	180	86634	20.17 ug/L	97
137) hexachlorobutadiene	20.58	225	41270	19.72 ug/L	95
138) naphthalene	20.74	128	137649	17.70 ug/L	98
139) 1,2,4-trichlorobenzene	20.46	180	75915	19.66 ug/L	98
140) 1,2,3-trichlorobenzene	20.98	180	63484	18.51 ug/L	99
141) hexachloroethane	19.13	201	32633	19.95 ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 2D130993.D
Acq On : 21 Mar 2014 9:36 am
Operator : BenM
Sample : cc5448-20
Misc : ms64447,v2d5481,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 21 14:22:21 2014
Quant Method : C:\MSDCHEM\1\METHODS\M2D5448.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Thu Feb 27 09:46:43 2014
Response via : Initial Calibration



M2D5448.M Fri Mar 21 14:27:32 2014 MS2D Page: 4

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V2D5448

Date: 2/26/14

Print Analyst Name: Thomas Seedah

Analyst Signature:

Standard Data

Lot #	Description	Conc.
0414771-114	Ext 1	100ppb
-97	Ext B	
-126	Ext C	
-98	Ext Under	1000ppb
-119	Ext Ether	1000ppb

Standard Data

Lot #	Description	Conc.
0414771-100	STD A	100ppb
-102	STD B	
-116	STD C	
-111	Acetone	1000ppb
-109	Ether	1000ppb

Columns: DB624

Method V8260B

Initial Cal. Method MV05448

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 2/27/14

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
	130200	BFB				1							OK	25ul surrogate in 50ml DI 10.37am	
	130201	ICV5448-0.5				2							OK	1ul A,B,C,Acetone,Ether in 20ml DI 1ul surrogate	
	130202	ICV5448-1				3							OK	1ul A,B,C,Acetone,Ether 1ul surrogate in 20ml DI	
	130203	ICV5448-2				4							OK	2ul A,B,C,Ether 2ul surrogate 20ml DI in 100 mlDI	
	130204	ICV5448-5				5							OK	5ul A,B,C,Ether 5ul surrogate in 100ml DI	
	130205	ICV5448-10 ~~ICV5448-10~~				6							NOT OK	10ul A,B,C,Acetone,Ether,Surrogate in 50ml DI 2/27/14	
	130206	ICV5448-20				7							OK	10ul A,B,C,Acetone,Ether 10ul surrogate in ~~Water~~ 50ml DI	
	130207	ICV5448-50				8							OK	25ul A,B,C,Acetone,Ether 25ul surrogate in 50ml DI	
	130208	ICV5448-100				9							OK	50ul A,B,C,Ether 50ul surrogate in ~~50ml~~ 50ml DI	
	130209	ICV5448-200				10							OK	100ul A,B,C,Ether 100ul surrogate in 50ml DI	
	130210	IB				11									
	130211	IB				12							OK		
	130212	ICV5448-10 ~~ICV5448-50~~ 2/27/2014				13							OK	5ul A,B,C,Acetone,Ether surrogate in 100ml DI	
	130213	ICV544-50				14								25ul Lot # 0414771-114 Ext A, Ext B, Ext C, Ext Under, Ether 75ul surrogate in 50ml DI	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

101

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V2D5481

Date: 3/21/14 (Fri)

Print Analyst Name: Ben Meinken

Analyst Signature:

Columns: ZB624 (60m x 0.25 x 1.4um)

Method V8260MS

Initial Cal. Method MV05448

Standard Data

Lot #	Description	Conc.
VM4853-15	8260 A	100 ppm
-10	B	100
-28	C	100
VM4771-14	Acros	100
-13	ISTD	2500/2500

Standard Data

Lot #	Description	Conc.
VM4-1511-06	524 BFB A	100 ppm
-02	B	100
-07	C	100
-16	Ext Acro	1000
VM4771-14	Ext HC	1000

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 3/24/14

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
	20130992	BFB				1	5		1x				ok	9:04 am	
	130993	CC5448-20				2	5		1x				ok	10ul ABC Acro/50 mL DI	
	130994	IB				3	5		1x				ok		
	130995	MB				4	5		1x				ok		
	130996	BS				5	5		1x				ok	25ul ABC Acro/	
FD	130997	JB62257-1	64587 TCLM,T	G W	15	6	10/50		5x				ok	~~ACQUISITION~~	✓ HL 3/24
	130998	JB61656-1	64210 8260	L	1	7	5		1x				ok	ACQUISITION	✓
	130999	JB61656-2	↓	L B	2	8	5		1x				ok	↓	✓
R	131000	JB62257-2	64587 TCLM,T	G W	1	9	5		1x				ok		✓
	131001	JB62162-9	64522 TVOC+		2	10	5		1x				ok		✓
	131002	JB62162-12	↓		2	11	5		1x				ok		✓
	131003	JB62162-14	↓		3	12	5		1x				ok		✓
	131004	JB61656-1MS	64210 8260		1,2	13	5		1x				ok	25ul ABC Acro 50 mL	✓
	131005	JB61656-1MSD	↓		1,2	14	5		1x				ok		✓
	131006	IB				15							ok		
	131007	JB62257-1	64587 TCL	G W	2	16	5		1x				ok		✓
	131008	JB62257-2	↓		2	17	5		1x				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

231

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V2D5481

Date: 3/21/14 (Fri)

Print Analyst Name: Ben Mendez

Analyst Signature: BM

Columns: ZB624 (60m x 0.25mm x 1.4μm)

Method V8260B

Initial Cal. Method M2D5448

Standard Data

Lot #	Description	Conc.
	See Page 231	

Standard Data

Lot #	Description	Conc.
	See Page 231	

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: BM Date: 3/24/14

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
	20131009	JB60237-3	8260T TCL	W	8	18	5		1x		W	W	QC		✓
	131010	JB60237-4			1	19	5		1x		W	W	QC		✓
	131011	JB60237-5			2	20	5		1x		W	W	QC		✓
	131012	JB60237-6			2	21	5		1x		W	W	QC		✓
	131013	JB60237-7			2	22	5		1x		W	W	QC		✓
	131014	JB60237-8			1	23	5		1x		W	W	QC	8:43 pm	✓
	~~1340[illegible]~~ BM 3/28					~~24~~									

BM 3/21

BM 3/21

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

233

New Jersey ACCUTEST LABORATORIES

04/14/14

Technical Report for

Parsons Engineering Science

Fort Monmouth, Oceanport, Monmouth County, NJ

748810-03000

Accutest Job Number: JB63450

Sampling Date: 03/31/14

Report to:

Parsons Engineering Science
200 Cottontail Lane, South
Somerset, NJ 08861
Sandra.delasFuentes@parsons.com

ATTN: Sandra de las Fuentes

Total number of pages in report: **163**

NELAP ACCREDITED TNI LABORATORY

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: Matt Cordova 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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Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3 4 5 6 7

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: JB63450-1: FTMM-68-GW-565MW01-11-99-QA 7
4.2: JB63450-2: FTMM-TB-03312014 10
Section 5: Misc. Forms 13
5.1: Chain of Custody 14
5.2: Sample Tracking Chronicle 16
5.3: Internal Chain of Custody 17
Section 6: GC/MS Volatiles - QC Data Summaries 18
6.1: Method Blank Summary 19
6.2: Blank Spike Summary 23
6.3: Matrix Spike/Matrix Spike Duplicate Summary 26
6.4: Instrument Performance Checks (BFB) 30
6.5: Internal Standard Area Summaries 34
6.6: Surrogate Recovery Summaries 36
6.7: Initial and Continuing Calibration Summaries 37
Section 7: GC/MS Volatiles - Raw Data 51
7.1: Samples 52
7.2: Method Blanks 71
7.3: Blank Spikes 78
7.4: Matrix Spike/Matrix Spike Duplicates 86
7.5: Instrument Performance Checks (BFB) 102
7.6: Initial and Continuing Calibarations 110
7.7: Instrument Run Logs 158

Accutest Laboratories

Sample Summary

Parsons Engineering Science

Job No: JB63450

Fort Monmouth, Oceanport, Monmouth County, NJ
Project No: 748810-03000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB63450-1	03/31/14	12:30	MB	04/01/14	AQ	Ground Water	FTMM-68-GW-565MW01-11-99-QA
JB63450-2	03/31/14	12:30	MB	04/01/14	AQ	Trip Blank Water	FTMM-TB-03312014

2

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Parsons Engineering Science **Job No** JB63450

Site: Fort Monmouth, Oceanport,Monmouth County,NJ **Report Date** 4/14/2014 10:14:45 A

On 04/01/2014, 1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 2 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB63450 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: AQ **Batch ID:** V3D4217

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB63746-23MS, JB63746-23MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for 1,2,4-Trimethylbenzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: AQ **Batch ID:** V3D4218

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB63730-2MS, JB63730-2MSD were used as the QC samples indicated.

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: JB63450
Account: Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Collected: 03/31/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JB63450-1	**FTMM-68-GW-565MW01-11-99-QA**					
1,1-Dichloroethene		2.3	1.0	0.50	ug/l	SW846 8260B
cis-1,2-Dichloroethene		272	10	5.0	ug/l	SW846 8260B
trans-1,2-Dichloroethene		1.6	1.0	0.50	ug/l	SW846 8260B
Tetrachloroethene		452	10	5.0	ug/l	SW846 8260B
Trichloroethene		238	10	5.0	ug/l	SW846 8260B
Vinyl chloride		20.1	1.0	0.50	ug/l	SW846 8260B
JB63450-2	**FTMM-TB-03312014**					
No hits reported in this sample.						

New Jersey ACCUTEST LABORATORIES

4

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-68-GW-565MW01-11-99-QA
Lab Sample ID: JB63450-1
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 03/31/14
Date Received: 04/01/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D97800.D	1	04/08/14	CM	n/a	n/a	V3D4217
Run #2	3D97808.D	10	04/08/14	CM	n/a	n/a	V3D4218

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.35 U	0.50	0.35	ug/l	
108-86-1	Bromobenzene	0.50 U	5.0	0.50	ug/l	
74-97-5	Bromochloromethane	1.0 U	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	2.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	2.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	1.0 U	1.0	1.0	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	1.0 U	1.0	1.0	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	1.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	2.3	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	272 [a]	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.6	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-68-GW-565MW01-11-99-QA
Lab Sample ID: JB63450-1
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 03/31/14
Date Received: 04/01/14
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.25 U	0.50	0.25	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
591-78-6	2-Hexanone	2.0 U	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	5.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U	5.0	5.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	2.0	0.50	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	5.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
127-18-4	Tetrachloroethene	452 [a]	10	5.0	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	238 [a]	10	5.0	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	5.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	2.0 U	5.0	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	20.1	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.19 U	1.0	0.19 [b]	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%	110%	79-120%
17060-07-0	1,2-Dichloroethane-D4	112%	115%	72-123%
2037-26-5	Toluene-D8	106%	106%	78-119%
460-00-4	4-Bromofluorobenzene	107%	105%	74-119%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-68-GW-565MW01-11-99-QA		
Lab Sample ID:	JB63450-1	**Date Sampled:**	03/31/14
Matrix:	AQ - Ground Water	**Date Received:**	04/01/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

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

(a) Result is from Run# 2
(b) Value reported is laboratory DL (MDL).

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-TB-03312014
Lab Sample ID: JB63450-2
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 03/31/14
Date Received: 04/01/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D97801.D	1	04/08/14	CM	n/a	n/a	V3D4217
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.35 U	0.50	0.35	ug/l	
108-86-1	Bromobenzene	0.50 U	5.0	0.50	ug/l	
74-97-5	Bromochloromethane	1.0 U	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	2.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	2.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	1.0 U	1.0	1.0	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	1.0 U	1.0	1.0	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	1.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-TB-03312014		
Lab Sample ID:	JB63450-2	**Date Sampled:**	03/31/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/01/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.25 U	0.50	0.25	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
591-78-6	2-Hexanone	2.0 U	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	5.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U	5.0	5.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	2.0	0.50	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	5.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	5.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	2.0 U	5.0	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.19 U	1.0	0.19 [a]	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		79-120%
17060-07-0	1,2-Dichloroethane-D4	112%		72-123%
2037-26-5	Toluene-D8	107%		78-119%
460-00-4	4-Bromofluorobenzene	105%		74-119%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-TB-03312014		
Lab Sample ID:	JB63450-2	**Date Sampled:**	03/31/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/01/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

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

(a) Value reported is laboratory DL (MDL).

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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

New Jersey ACCUTEST LABORATORIES

5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW
TB

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

PAGE ___ OF ___

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

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # JB63450

Client / Reporting Information

Company Name: PARSONS
Street Address: 100 HIGH ST.
City: BOSTON State: MA Zip: 02210
Project Contact: CHRIS.GREENE@PARSONS.COM E-mail
Phone #: 617-449-1573 Fax #
Sampler(s) Name(s): M.BRUNO / C. WATSON (732.757.5483) Phone #

Project Information

Project Name: FTMM - 1Q2014
Street
City: OCEANPORT State: NJ
Project #: 748810 - 03002
Client Purchase Order #: CHRIS GREENE
Project Manager: CHRIS GREENE

Billing Information (if different from Report to)

Company Name
Street Address
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet)

52606
52066
VOAs + TICs

Matrix Codes

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	FTMM-68-GW-565MW01-11.99-QA		3/31/14	1230	MB	GW	3	X								V986
2	FTMM-TB-03312014		"	1201	MB	GW	2	X								

3/31/14

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other

AS PER SOW

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 ERPIS TAT
Commercial "B" = Results + QC Summary NJDEP HAZSITE EDD
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

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

	Date Time:			Date Time:	
Relinquished by Sampler: 1	3/31/14: 1430	Received By: 1	Relinquished By: 4-1-14 0920	1445	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # None	Intact / Not intact	Preserved where applicable: ☐ On Ice: ☑ Cooler Temp: 2.0 C-B

2A TB

JK

JB63450: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB63450 **Client:** **Project:**

Date / Time Received: 4/1/2014 **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (2/2); 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:	Bar Therm		
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

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

JB63450: Chain of Custody
Page 2 of 2

Accutest Laboratories

Internal Sample Tracking Chronicle

Parsons Engineering Science

Job No: JB63450

Fort Monmouth, Oceanport, Monmouth County, NJ
Project No: 748810-03000

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB63450-1	Collected: 31-MAR-14 12:30 By: MB		Received: 01-APR-14 By: OS			
FTMM-68-GW-565MW01-11-99-QA						
JB63450-1	SW846 8260B	08-APR-14 06:07	CM			V8260SL
JB63450-1	SW846 8260B	08-APR-14 10:34	CM			V8260SL
JB63450-2	Collected: 31-MAR-14 12:30 By: MB		Received: 01-APR-14 By: OS			
FTMM-TB-03312014						
JB63450-2	SW846 8260B	08-APR-14 06:34	CM			V8260SL

Accutest Internal Chain of Custody

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Received: 04/01/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB63450-1.1	Secured Storage	Courtney McKenna	04/07/14 14:43	Retrieve from Storage
JB63450-1.1	Courtney McKenna	GCMS3D	04/07/14 14:43	Load on Instrument
JB63450-1.1	GCMS3D	Courtney McKenna	04/08/14 09:46	Unload from Instrument
JB63450-1.1	Courtney McKenna	Secured Storage	04/08/14 09:46	Return to Storage
JB63450-1.2	Secured Storage	Courtney McKenna	04/08/14 10:13	Retrieve from Storage
JB63450-1.2	Courtney McKenna	Secured Storage	04/08/14 16:06	Return to Storage
JB63450-2.1	Secured Storage	Courtney McKenna	04/07/14 14:43	Retrieve from Storage
JB63450-2.1	Courtney McKenna	GCMS3D	04/07/14 14:43	Load on Instrument
JB63450-2.1	GCMS3D	Courtney McKenna	04/08/14 09:46	Unload from Instrument
JB63450-2.1	Courtney McKenna	Secured Storage	04/08/14 09:46	Return to Storage

New Jersey ACCUTEST LABORATORIES

6

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: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4217-MB	3D97782.D	1	04/07/14	CM	n/a	n/a	V3D4217

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

JB63450-1, JB63450-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	2.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.23	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4217-MB	3D97782.D	1	04/07/14	CM	n/a	n/a	V3D4217

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

JB63450-1, JB63450-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	0.50	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.32	ug/l	
100-42-5	Styrene	ND	2.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	108%	79-120%
17060-07-0	1,2-Dichloroethane-D4	109%	72-123%
2037-26-5	Toluene-D8	107%	78-119%
460-00-4	4-Bromofluorobenzene	104%	74-119%

Method Blank Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4217-MB	3D97782.D	1	04/07/14	CM	n/a	n/a	V3D4217

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

JB63450-1, JB63450-2

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

Method Blank Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4218-MB	3D97806.D	1	04/08/14	CM	n/a	n/a	V3D4218

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

JB63450-1

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	110%	79-120%
17060-07-0	1,2-Dichloroethane-D4	118%	72-123%
2037-26-5	Toluene-D8	107%	78-119%
460-00-4	4-Bromofluorobenzene	105%	74-119%

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

Blank Spike Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4217-BS	3D97783.D	1	04/07/14	CM	n/a	n/a	V3D4217

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

JB63450-1, JB63450-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	49.3	99	52-152
71-43-2	Benzene	50	46.5	93	80-121
108-86-1	Bromobenzene	50	48.7	97	81-121
74-97-5	Bromochloromethane	50	50.7	101	82-125
75-27-4	Bromodichloromethane	50	48.7	97	83-127
75-25-2	Bromoform	50	48.6	97	74-131
74-83-9	Bromomethane	50	56.2	112	45-155
78-93-3	2-Butanone (MEK)	50	50.1	100	67-136
104-51-8	n-Butylbenzene	50	47.2	94	79-126
135-98-8	sec-Butylbenzene	50	46.4	93	80-123
98-06-6	tert-Butylbenzene	50	47.7	95	81-126
56-23-5	Carbon tetrachloride	50	49.6	99	77-138
108-90-7	Chlorobenzene	50	47.7	95	82-119
75-00-3	Chloroethane	50	54.3	109	61-151
67-66-3	Chloroform	50	48.9	98	79-124
74-87-3	Chloromethane	50	50.7	101	48-148
95-49-8	o-Chlorotoluene	50	48.7	97	81-121
106-43-4	p-Chlorotoluene	50	48.0	96	79-118
96-12-8	1,2-Dibromo-3-chloropropane	50	49.1	98	66-137
124-48-1	Dibromochloromethane	50	48.2	96	81-127
106-93-4	1,2-Dibromoethane	50	48.6	97	79-122
95-50-1	1,2-Dichlorobenzene	50	47.4	95	81-121
541-73-1	1,3-Dichlorobenzene	50	46.3	93	81-119
106-46-7	1,4-Dichlorobenzene	50	46.6	93	80-116
75-71-8	Dichlorodifluoromethane	50	58.8	118	33-161
75-34-3	1,1-Dichloroethane	50	49.1	98	78-129
107-06-2	1,2-Dichloroethane	50	51.9	104	75-133
75-35-4	1,1-Dichloroethene	50	48.0	96	74-128
156-59-2	cis-1,2-Dichloroethene	50	48.1	96	78-123
156-60-5	trans-1,2-Dichloroethene	50	47.5	95	75-122
78-87-5	1,2-Dichloropropane	50	49.1	98	80-124
142-28-9	1,3-Dichloropropane	50	48.3	97	79-120
594-20-7	2,2-Dichloropropane	50	46.8	94	50-145
563-58-6	1,1-Dichloropropene	50	45.1	90	77-121
10061-01-5	cis-1,3-Dichloropropene	50	45.6	91	75-114
10061-02-6	trans-1,3-Dichloropropene	50	46.1	92	78-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4217-BS	3D97783.D	1	04/07/14	CM	n/a	n/a	V3D4217

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

JB63450-1, JB63450-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	46.6	93	82-120
87-68-3	Hexachlorobutadiene	50	47.6	95	69-134
591-78-6	2-Hexanone	50	48.0	96	65-135
98-82-8	Isopropylbenzene	50	47.6	95	80-124
99-87-6	p-Isopropyltoluene	50	46.7	93	83-127
1634-04-4	Methyl Tert Butyl Ether	100	94.1	94	74-123
108-10-1	4-Methyl-2-pentanone(MIBK)	50	48.3	97	68-135
75-09-2	Methylene chloride	50	43.8	88	75-121
91-20-3	Naphthalene	50	55.4	111	65-138
103-65-1	n-Propylbenzene	50	48.9	98	81-125
100-42-5	Styrene	50	46.8	94	81-123
630-20-6	1,1,1,2-Tetrachloroethane	50	49.7	99	82-123
79-34-5	1,1,2,2-Tetrachloroethane	50	44.1	88	71-123
127-18-4	Tetrachloroethene	50	48.8	98	69-141
108-88-3	Toluene	50	46.3	93	80-122
87-61-6	1,2,3-Trichlorobenzene	50	55.6	111	71-138
120-82-1	1,2,4-Trichlorobenzene	50	51.9	104	77-132
71-55-6	1,1,1-Trichloroethane	50	50.0	100	80-132
79-00-5	1,1,2-Trichloroethane	50	46.8	94	80-127
79-01-6	Trichloroethene	50	47.2	94	82-126
75-69-4	Trichlorofluoromethane	50	56.5	113	63-141
96-18-4	1,2,3-Trichloropropane	50	50.1	100	74-125
95-63-6	1,2,4-Trimethylbenzene	50	49.0	98	81-122
108-67-8	1,3,5-Trimethylbenzene	50	47.1	94	80-122
75-01-4	Vinyl chloride	50	50.2	100	53-135
	m,p-Xylene	100	92.3	92	81-121
95-47-6	o-Xylene	50	46.4	93	82-121
1330-20-7	Xylene (total)	150	139	93	82-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	110%	79-120%
17060-07-0	1,2-Dichloroethane-D4	111%	72-123%
2037-26-5	Toluene-D8	107%	78-119%
460-00-4	4-Bromofluorobenzene	104%	74-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D4218-BS	3D97807.D	1	04/08/14	CM	n/a	n/a	V3D4218

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

JB63450-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
156-59-2	cis-1,2-Dichloroethene	50	49.3	99	78-123
127-18-4	Tetrachloroethene	50	47.2	94	69-141
79-01-6	Trichloroethene	50	46.5	93	82-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	112%	79-120%
17060-07-0	1,2-Dichloroethane-D4	117%	72-123%
2037-26-5	Toluene-D8	108%	78-119%
460-00-4	4-Bromofluorobenzene	105%	74-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB63746-23MS	3D97784.D	5	04/07/14	CM	n/a	n/a	V3D4217
JB63746-23MSD	3D97785.D	5	04/07/14	CM	n/a	n/a	V3D4217
JB63746-23	3D97787.D	5	04/08/14	CM	n/a	n/a	V3D4217

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

JB63450-1, JB63450-2

CAS No.	Compound	JB63746-23 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	250	100	233	93	7	44-160/20
71-43-2	Benzene	50.0		250	285	94	284	94	0	50-136/12
108-86-1	Bromobenzene	ND		250	257	103	257	103	0	73-127/11
74-97-5	Bromochloromethane	ND		250	268	107	267	107	0	74-131/11
75-27-4	Bromodichloromethane	ND		250	257	103	255	102	1	74-132/11
75-25-2	Bromoform	ND		250	257	103	256	102	0	68-136/12
74-83-9	Bromomethane	ND		250	311	124	303	121	3	37-157/21
78-93-3	2-Butanone (MEK)	ND		250	259	104	256	102	1	60-145/15
104-51-8	n-Butylbenzene	21.8		250	276	102	272	100	1	53-141/15
135-98-8	sec-Butylbenzene	12.6		250	265	101	262	100	1	54-137/15
98-06-6	tert-Butylbenzene	ND		250	264	106	260	104	2	58-137/14
56-23-5	Carbon tetrachloride	ND		250	267	107	265	106	1	46-152/17
108-90-7	Chlorobenzene	ND		250	254	102	252	101	1	70-127/12
75-00-3	Chloroethane	ND		250	245	98	242	97	1	44-147/16
67-66-3	Chloroform	ND		250	258	103	250	100	3	67-129/12
74-87-3	Chloromethane	ND		250	279	112	274	110	2	40-149/19
95-49-8	o-Chlorotoluene	ND		250	259	104	258	103	0	67-129/12
106-43-4	p-Chlorotoluene	ND		250	258	103	259	104	0	68-125/12
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	265	106	267	107	1	61-144/14
124-48-1	Dibromochloromethane	ND		250	258	103	255	102	1	74-131/10
106-93-4	1,2-Dibromoethane	ND		250	253	101	254	102	0	74-129/10
95-50-1	1,2-Dichlorobenzene	ND		250	251	100	253	101	1	73-126/11
541-73-1	1,3-Dichlorobenzene	ND		250	252	101	249	100	1	71-124/12
106-46-7	1,4-Dichlorobenzene	ND		250	248	99	247	99	0	71-123/12
75-71-8	Dichlorodifluoromethane	ND		250	343	137	334	134	3	20-161/25
75-34-3	1,1-Dichloroethane	ND		250	257	103	252	101	2	61-134/12
107-06-2	1,2-Dichloroethane	ND		250	272	109	271	108	0	68-137/11
75-35-4	1,1-Dichloroethene	ND		250	252	101	245	98	3	40-143/17
156-59-2	cis-1,2-Dichloroethene	ND		250	257	103	253	101	2	59-133/12
156-60-5	trans-1,2-Dichloroethene	ND		250	258	103	253	101	2	55-132/14
78-87-5	1,2-Dichloropropane	ND		250	255	102	254	102	0	70-128/11
142-28-9	1,3-Dichloropropane	ND		250	249	100	250	100	0	73-125/10
594-20-7	2,2-Dichloropropane	ND		250	265	106	255	102	4	39-149/16
563-58-6	1,1-Dichloropropene	ND		250	253	101	250	100	1	50-141/16
10061-01-5	cis-1,3-Dichloropropene	ND		250	248	99	246	98	1	73-127/11
10061-02-6	trans-1,3-Dichloropropene	ND		250	254	102	254	102	0	72-128/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB63746-23MS	3D97784.D	5	04/07/14	CM	n/a	n/a	V3D4217
JB63746-23MSD	3D97785.D	5	04/07/14	CM	n/a	n/a	V3D4217
JB63746-23	3D97787.D	5	04/08/14	CM	n/a	n/a	V3D4217

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

JB63450-1, JB63450-2

CAS No.	Compound	JB63746-23 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	282		250	470	75	466	74	1	49-137/13
87-68-3	Hexachlorobutadiene	ND		250	274	110	268	107	2	44-145/17
591-78-6	2-Hexanone	ND		250	256	102	261	104	2	59-145/14
98-82-8	Isopropylbenzene	37.8		250	286	99	285	99	0	57-136/14
99-87-6	p-Isopropyltoluene	6.7		250	260	101	258	101	1	58-135/14
1634-04-4	Methyl Tert Butyl Ether	55.0		250	297	97	288	93	3	64-134/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		250	250	100	247	99	1	63-144/13
75-09-2	Methylene chloride	ND		250	239	96	229	92	4	64-128/11
91-20-3	Naphthalene	147		250	440	117	438	116	0	53-153/14
103-65-1	n-Propylbenzene	127		250	342	86	341	86	0	53-138/14
100-42-5	Styrene	ND		250	252	101	248	99	2	67-130/12
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	269	108	261	104	3	73-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	242	97	239	96	1	68-131/11
127-18-4	Tetrachloroethene	ND		250	261	104	258	103	1	48-143/15
108-88-3	Toluene	55.1		250	290	94	291	94	0	54-137/13
87-61-6	1,2,3-Trichlorobenzene	ND		250	304	121	297	118	2	62-143/13
120-82-1	1,2,4-Trichlorobenzene	ND		250	286	114	285	114	0	66-138/12
71-55-6	1,1,1-Trichloroethane	ND		250	265	106	258	103	3	52-145/16
79-00-5	1,1,2-Trichloroethane	ND		250	246	98	246	98	0	73-130/10
79-01-6	Trichloroethene	ND		250	252	101	254	102	1	54-141/13
75-69-4	Trichlorofluoromethane	ND		250	316	126	307	123	3	33-159/25
96-18-4	1,2,3-Trichloropropane	ND		250	260	104	260	104	0	70-133/11
95-63-6	1,2,4-Trimethylbenzene	630		250	754	50	750	48* [a]	1	50-139/13
108-67-8	1,3,5-Trimethylbenzene	190		250	408	87	404	86	1	56-136/14
75-01-4	Vinyl chloride	ND		250	286	114	277	111	3	36-149/19
	m,p-Xylene	489		500	882	79	875	77	1	50-137/12
95-47-6	o-Xylene	139		250	365	90	359	88	2	60-134/12
1330-20-7	Xylene (total)	628		750	1250	83	1230	80	2	53-136/12

CAS No.	Surrogate Recoveries	MS	MSD	JB63746-23	Limits
1868-53-7	Dibromofluoromethane	110%	108%	108%	79-120%
17060-07-0	1,2-Dichloroethane-D4	110%	109%	109%	72-123%
2037-26-5	Toluene-D8	107%	107%	107%	78-119%
460-00-4	4-Bromofluorobenzene	104%	105%	104%	74-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB63746-23MS	3D97784.D	5	04/07/14	CM	n/a	n/a	V3D4217
JB63746-23MSD	3D97785.D	5	04/07/14	CM	n/a	n/a	V3D4217
JB63746-23	3D97787.D	5	04/08/14	CM	n/a	n/a	V3D4217

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

JB63450-1, JB63450-2

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB63730-2MS	3D97817.D	1	04/08/14	CM	n/a	n/a	V3D4218
JB63730-2MSD	3D97818.D	1	04/08/14	CM	n/a	n/a	V3D4218
JB63730-2	3D97810.D	1	04/08/14	CM	n/a	n/a	V3D4218

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

JB63450-1

CAS No.	Compound	JB63730-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
156-59-2	cis-1,2-Dichloroethene	ND		50	42.2	84	41.2	82	2	59-133/12
127-18-4	Tetrachloroethene	ND		50	36.5	73	35.3	71	3	48-143/15
79-01-6	Trichloroethene	ND		50	36.6	73	35.8	72	2	54-141/13

CAS No.	Surrogate Recoveries	MS	MSD	JB63730-2	Limits
1868-53-7	Dibromofluoromethane	113%	111%	109%	79-120%
17060-07-0	1,2-Dichloroethane-D4	119%	118%	116%	72-123%
2037-26-5	Toluene-D8	108%	108%	107%	78-119%
460-00-4	4-Bromofluorobenzene	105%	106%	104%	74-119%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample: V3D4135-BFB
Lab File ID: 3D95821.D
Instrument ID: GCMS3D
Injection Date: 02/12/14
Injection Time: 19:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9206	16.7		Pass
75	30.0 - 60.0% of mass 95	23626	43.0		Pass
95	Base peak, 100% relative abundance	54978	100.0		Pass
96	5.0 - 9.0% of mass 95	3650	6.64		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	52920	96.3		Pass
175	5.0 - 9.0% of mass 174	4055	7.38	(7.66) [a]	Pass
176	95.0 - 101.0% of mass 174	52320	95.2	(98.9) [a]	Pass
177	5.0 - 9.0% of mass 176	3359	6.11	(6.42) [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
V3D4135-IC4135	3D95822.D	02/12/14	20:16	00:28	Initial cal 0.5
V3D4135-IC4135	3D95823.D	02/12/14	20:43	00:55	Initial cal 1.0
V3D4135-IC4135	3D95824.D	02/12/14	21:10	01:22	Initial cal 2.0
V3D4135-IC4135	3D95825.D	02/12/14	21:37	01:49	Initial cal 5.0
V3D4135-IC4135	3D95826.D	02/12/14	22:04	02:16	Initial cal 10
V3D4135-IC4135	3D95827.D	02/12/14	22:31	02:43	Initial cal 20
V3D4135-ICC4135	3D95828.D	02/12/14	22:58	03:10	Initial cal 50
V3D4135-IC4135	3D95829.D	02/12/14	23:25	03:37	Initial cal 100
V3D4135-IC4135	3D95830.D	02/12/14	23:52	04:04	Initial cal 200

Instrument Performance Check (BFB)

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample:	V3D4135-BFB	**Injection Date:**	02/15/14
Lab File ID:	3D95841.D	**Injection Time:**	10:59
Instrument ID:	GCMS3D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10214	16.0		Pass
75	30.0 - 60.0% of mass 95	27277	42.7		Pass
95	Base peak, 100% relative abundance	63869	100.0		Pass
96	5.0 - 9.0% of mass 95	4236	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	61813	96.8		Pass
175	5.0 - 9.0% of mass 174	4912	7.69	(7.95) [a]	Pass
176	95.0 - 101.0% of mass 174	60504	94.7	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4097	6.41	(6.77) [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
V3D4135-ICV4135	3D95841A.D	02/15/14	12:04	01:05	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V3D4217-BFB
Lab File ID: 3D97779.D
Instrument ID: GCMS3D
Injection Date: 04/07/14
Injection Time: 20:35

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10666	17.4		Pass
75	30.0 - 60.0% of mass 95	26701	43.5		Pass
95	Base peak, 100% relative abundance	61315	100.0		Pass
96	5.0 - 9.0% of mass 95	4111	6.70		Pass
173	Less than 2.0% of mass 174	349	0.57	(0.58) [a]	Pass
174	50.0 - 120.0% of mass 95	60312	98.4		Pass
175	5.0 - 9.0% of mass 174	4894	7.98	(8.11) [a]	Pass
176	95.0 - 101.0% of mass 174	60117	98.0	(99.7) [a]	Pass
177	5.0 - 9.0% of mass 176	3959	6.46	(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
V3D4217-CC4135	3D97780.D	04/07/14	21:02	00:27	Continuing cal 50
V3D4217-MB	3D97782.D	04/07/14	21:57	01:22	Method Blank
V3D4217-BS	3D97783.D	04/07/14	22:24	01:49	Blank Spike
JB63746-23MS	3D97784.D	04/07/14	22:51	02:16	Matrix Spike
JB63746-23MSD	3D97785.D	04/07/14	23:18	02:43	Matrix Spike Duplicate
JB63746-23	3D97787.D	04/08/14	00:13	03:38	(used for QC only; not part of job JB63450)
ZZZZZZ	3D97788.D	04/08/14	00:40	04:05	(unrelated sample)
ZZZZZZ	3D97789.D	04/08/14	01:07	04:32	(unrelated sample)
ZZZZZZ	3D97790.D	04/08/14	01:35	05:00	(unrelated sample)
ZZZZZZ	3D97791.D	04/08/14	02:02	05:27	(unrelated sample)
ZZZZZZ	3D97792.D	04/08/14	02:29	05:54	(unrelated sample)
ZZZZZZ	3D97793.D	04/08/14	02:56	06:21	(unrelated sample)
ZZZZZZ	3D97794.D	04/08/14	03:24	06:49	(unrelated sample)
ZZZZZZ	3D97795.D	04/08/14	03:51	07:16	(unrelated sample)
ZZZZZZ	3D97796.D	04/08/14	04:18	07:43	(unrelated sample)
ZZZZZZ	3D97797.D	04/08/14	04:45	08:10	(unrelated sample)
ZZZZZZ	3D97798.D	04/08/14	05:12	08:37	(unrelated sample)
ZZZZZZ	3D97799.D	04/08/14	05:40	09:05	(unrelated sample)
JB63450-1	3D97800.D	04/08/14	06:07	09:32	FTMM-68-GW-565MW01-11-99-QA
JB63450-2	3D97801.D	04/08/14	06:34	09:59	FTMM-TB-03312014

Instrument Performance Check (BFB)

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V3D4218-BFB
Lab File ID: 3D97803.D
Instrument ID: GCMS3D
Injection Date: 04/08/14
Injection Time: 07:56

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9949	18.8		Pass
75	30.0 - 60.0% of mass 95	24402	46.0		Pass
95	Base peak, 100% relative abundance	53034	100.0		Pass
96	5.0 - 9.0% of mass 95	3703	6.98		Pass
173	Less than 2.0% of mass 174	284	0.54	(0.53) [a]	Pass
174	50.0 - 120.0% of mass 95	53186	100.3		Pass
175	5.0 - 9.0% of mass 174	4173	7.87	(7.85) [a]	Pass
176	95.0 - 101.0% of mass 174	52216	98.5	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	3490	6.58	(6.68) [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
V3D4218-CC4135	3D97804.D	04/08/14	08:30	00:34	Continuing cal 20
V3D4218-MB	3D97806.D	04/08/14	09:28	01:32	Method Blank
V3D4218-BS	3D97807.D	04/08/14	10:00	02:04	Blank Spike
JB63450-1	3D97808.D	04/08/14	10:34	02:38	FTMM-68-GW-565MW01-11-99-QA
ZZZZZZ	3D97809.D	04/08/14	11:01	03:05	(unrelated sample)
JB63730-2	3D97810.D	04/08/14	11:29	03:33	(used for QC only; not part of job JB63450)
ZZZZZZ	3D97811.D	04/08/14	11:56	04:00	(unrelated sample)
ZZZZZZ	3D97812.D	04/08/14	12:23	04:27	(unrelated sample)
ZZZZZZ	3D97813.D	04/08/14	12:50	04:54	(unrelated sample)
ZZZZZZ	3D97814.D	04/08/14	13:17	05:21	(unrelated sample)
ZZZZZZ	3D97815.D	04/08/14	13:44	05:48	(unrelated sample)
ZZZZZZ	3D97816.D	04/08/14	14:11	06:15	(unrelated sample)
JB63730-2MS	3D97817.D	04/08/14	14:38	06:42	Matrix Spike
JB63730-2MSD	3D97818.D	04/08/14	15:05	07:09	Matrix Spike Duplicate
ZZZZZZ	3D97819.D	04/08/14	15:32	07:36	(unrelated sample)
ZZZZZZ	3D97820.D	04/08/14	15:59	08:03	(unrelated sample)
ZZZZZZ	3D97821.D	04/08/14	16:26	08:30	(unrelated sample)
ZZZZZZ	3D97822.D	04/08/14	16:53	08:57	(unrelated sample)
ZZZZZZ	3D97823.D	04/08/14	17:20	09:24	(unrelated sample)
ZZZZZZ	3D97824.D	04/08/14	17:48	09:52	(unrelated sample)
ZZZZZZ	3D97825.D	04/08/14	18:15	10:19	(unrelated sample)
ZZZZZZ	3D97826.D	04/08/14	18:42	10:46	(unrelated sample)
ZZZZZZ	3D97827.D	04/08/14	19:09	11:13	(unrelated sample)
ZZZZZZ	3D97828.D	04/08/14	19:36	11:40	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Check Std:	V3D4217-CC4135	**Injection Date:**	04/07/14
Lab File ID:	3D97780.D	**Injection Time:**	21:02
Instrument ID:	GCMS3D	**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	79731	7.23	192001	9.47	274793	10.38	220683	13.54	117400	15.85
Upper Limit [a]	159462	7.73	384002	9.97	549586	10.88	441366	14.04	234800	16.35
Lower Limit [b]	39866	6.73	96001	8.97	137397	9.88	110342	13.04	58700	15.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3D4217-MB	80842	7.23	189468	9.47	270627	10.39	218572	13.54	116967	15.85
V3D4217-BS	82318	7.23	186806	9.47	272690	10.39	217451	13.55	117533	15.85
JB63746-23MS	84347	7.23	187026	9.47	272705	10.39	218060	13.55	118773	15.85
JB63746-23MSD	84539	7.23	190898	9.47	275335	10.39	221789	13.55	119601	15.85
JB63746-23	83578	7.23	194718	9.47	277995	10.39	226236	13.54	120798	15.85
ZZZZZZ	98999	7.23	197595	9.47	286162	10.38	234110	13.54	131302	15.85
ZZZZZZ	85147	7.23	198496	9.47	283001	10.39	228582	13.55	121437	15.85
ZZZZZZ	83144	7.23	199022	9.47	286480	10.38	228762	13.55	123659	15.85
ZZZZZZ	84401	7.23	199211	9.47	283104	10.38	228468	13.54	122479	15.85
ZZZZZZ	85898	7.23	194664	9.47	279990	10.39	221541	13.54	120258	15.85
ZZZZZZ	83274	7.22	194379	9.47	278385	10.39	223285	13.54	121374	15.85
ZZZZZZ	81824	7.23	192177	9.47	274254	10.38	220718	13.54	119440	15.85
ZZZZZZ	79755	7.22	187962	9.47	269580	10.39	217038	13.54	117748	15.85
ZZZZZZ	80562	7.22	185415	9.47	266848	10.38	213067	13.54	115528	15.85
ZZZZZZ	81721	7.23	185192	9.47	265603	10.38	214180	13.54	113843	15.85
ZZZZZZ	78733	7.23	181765	9.47	260986	10.38	208122	13.54	112419	15.85
ZZZZZZ	79076	7.23	184195	9.47	262699	10.38	210213	13.54	113263	15.85
JB63450-1	75038	7.23	177697	9.46	258301	10.39	205991	13.54	108741	15.85
JB63450-2	76872	7.23	176981	9.47	251761	10.38	202316	13.54	108913	15.85

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: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Check Std: V3D4218-CC4135 **Injection Date:** 04/08/14
Lab File ID: 3D97804.D **Injection Time:** 08:30
Instrument ID: GCMS3D **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	80836	7.23	172370	9.47	248387	10.39	197965	13.55	107119	15.85
Upper Limit [a]	161672	7.73	344740	9.97	496774	10.89	395930	14.05	214238	16.35
Lower Limit [b]	40418	6.73	86185	8.97	124194	9.89	98983	13.05	53560	15.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3D4218-MB	87506	7.23	171028	9.47	245731	10.39	196384	13.55	106707	15.85
V3D4218-BS	81614	7.23	171579	9.47	247272	10.39	201351	13.55	108796	15.85
JB63450-1	80785	7.23	175613	9.47	252564	10.39	201446	13.55	107955	15.86
ZZZZZZ	79370	7.24	168622	9.47	240934	10.40	192310	13.55	106170	15.85
JB63730-2	74961	7.23	168752	9.47	242605	10.39	195630	13.55	106436	15.85
ZZZZZZ	72773	7.23	167953	9.47	241494	10.39	192969	13.55	103983	15.85
ZZZZZZ	70189	7.23	167311	9.47	239615	10.39	191984	13.55	103882	15.85
ZZZZZZ	67715	7.23	161014	9.47	229980	10.38	182359	13.55	100880	15.85
ZZZZZZ	73729	7.23	163297	9.47	234151	10.39	187165	13.55	102433	15.85
ZZZZZZ	72283	7.22	164328	9.47	234114	10.39	189315	13.54	101816	15.85
ZZZZZZ	71066	7.23	160561	9.47	230866	10.38	183571	13.54	99657	15.85
JB63730-2MS	81176	7.23	160513	9.47	231474	10.40	188750	13.55	102861	15.85
JB63730-2MSD	85586	7.23	166405	9.47	238252	10.40	193486	13.55	104963	15.85
ZZZZZZ	72574	7.23	168277	9.47	241584	10.39	194790	13.54	105025	15.85
ZZZZZZ	70901	7.23	167835	9.47	239445	10.38	194452	13.54	105746	15.85
ZZZZZZ	70772	7.23	164863	9.47	235792	10.39	190030	13.54	102505	15.85
ZZZZZZ	72382	7.23	160328	9.47	230339	10.39	184175	13.54	100614	15.85
ZZZZZZ	70969	7.22	164991	9.47	236923	10.39	190871	13.54	102618	15.85
ZZZZZZ	70585	7.22	159889	9.47	231847	10.39	185505	13.55	100945	15.85
ZZZZZZ	68841	7.23	159649	9.47	229492	10.39	186107	13.55	100677	15.85
ZZZZZZ	65691	7.23	160528	9.47	225894	10.39	181169	13.54	98486	15.85
ZZZZZZ	70325	7.22	160595	9.47	227912	10.39	184971	13.54	100559	15.85
ZZZZZZ	68392	7.23	157559	9.47	226590	10.39	182182	13.55	98549	15.85

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: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JB63450-1	3D97800.D	109	112	106	107
JB63450-1	3D97808.D	110	115	106	105
JB63450-2	3D97801.D	108	112	107	105
JB63730-2MS	3D97817.D	113	119	108	105
JB63730-2MSD	3D97818.D	111	118	108	106
JB63746-23MS	3D97784.D	110	110	107	104
JB63746-23MSD	3D97785.D	108	109	107	105
V3D4217-BS	3D97783.D	110	111	107	104
V3D4217-MB	3D97782.D	108	109	107	104
V3D4218-BS	3D97807.D	112	117	108	105
V3D4218-MB	3D97806.D	110	118	107	105

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-120%
S2 = 1,2-Dichloroethane-D4	72-123%
S3 = Toluene-D8	78-119%
S4 = 4-Bromofluorobenzene	74-119%

Initial Calibration Summary

Job Number: JB63450 **Sample:** V3D4135-ICC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95828.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Response Factor Report MS3D

Method : C:\MSDCHEM\1\METHODS\M3D4135.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Wed Feb 19 12:40:56 2014
Response via : Initial Calibration

Calibration Files
5 =3D95825.D 0.5 =3D95822.D 2 =3D95824.D 50 =3D95828.D
100 =3D95829.D 1 =3D95823.D 200 =3D95830.D 20 =3D95827.D
10 =3D95826.D =

Compound	5	0.5	2	50	100	1	200	20	10	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------										
2) 1,4-dioxane	0.083		0.068	0.089	0.088		0.083	0.091	0.081	0.083	9.25
3) tertiary butyl alcohol	1.062		1.165	1.060	1.075	1.183	1.011	1.141	1.119	1.102	5.40
4) I pentafluorobenzene	----------ISTD----------										
5) FREON 115										0.000#	-1.00
6) FREON 152A										0.000#	-1.00
7) chlorotrifluoroethene										0.000#	-1.00
8) chlorodifluoromethane	0.326		0.300	0.351	0.367		0.382	0.351	0.336	0.345	7.85
9) dichlorodifluoromethane	0.427		0.384	0.437	0.448	0.393	0.457	0.456	0.443	0.431	6.52
10) chloromethane	0.602	0.613	0.554	0.595	0.626	0.557	0.625	0.605	0.615	0.599	4.48
11) vinyl chloride	0.562	0.479	0.514	0.585	0.614	0.503	0.626	0.597	0.606	0.565	9.50
12) bromomethane	0.333	0.342	0.305	0.327	0.329	0.327	0.267	0.340	0.348	0.324	7.64
13) chloroethane	0.312	0.252	0.295	0.303	0.313	0.278	0.309	0.314	0.325	0.300	7.41
14) 1,3-butadiene										0.000#	-1.00
15) vinyl bromide										0.000#	-1.00
16) trichlorofluoromethane	0.570		0.517	0.593	0.614	0.517	0.628	0.615	0.625	0.585	7.86
17) pentane										0.000#	-1.00
18) ethyl ether	0.241	0.192	0.218	0.236	0.251	0.194	0.247	0.259	0.253	0.232	10.75
19) freon 123a										0.000#	-1.00
20) FREON 123										0.000#	-1.00
21) acrolein	0.098		0.094	0.085		0.085		0.097	0.101	0.093	7.37
22) 1,1-dichloroethene	0.666	0.600	0.627	0.645	0.674	0.574	0.684	0.676	0.647	0.644	5.79
23) acetone											

Initial Calibration Summary

Job Number: JB63450 **Sample:** V3D4135-ICC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95828.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

	0.033		0.038	0.042		0.041	0.042	0.042	0.040	9.57
24)	allyl chloride										
	0.252	0.232	0.245	0.247	0.190	0.253	0.254	0.247	0.240	8.99
25)	acetonitrile										
	0.042	0.046	0.037	0.042	0.047	0.041	0.042	0.043	0.043	6.87
26)	acetaldehyde										
									0.000#	-1.00
27)	iodomethane										
	0.837	0.739	0.800	0.802	0.844	0.740	0.847	0.853	0.829	0.810	5.45
28)	iso-butyl alcohol										
	0.018		0.014	0.015		0.015	0.015	0.018	0.016	11.12
29)	carbon disulfide										
	1.577	1.542	1.541	1.521	1.591	1.404	1.617	1.581	1.524	1.544	4.00
30)	methylene chloride										
	0.501	0.539	0.465	0.479	0.558	0.477	0.493	0.487	0.500	6.49
31)	methyl acetate										
	0.065		0.068	0.077		0.075	0.077	0.078	0.073	7.52
32)	methyl tert butyl ether										
	1.311	1.325	1.315	1.269	1.331	1.179	1.302	1.362	1.374	1.308	4.40
33)	trans-1,2-dichloroethene										
	0.663	0.558	0.625	0.639	0.655	0.572	0.664	0.668	0.646	0.632	6.41
34)	di-isopropyl ether										
	1.510	1.525	1.512	1.468	1.510	1.421	1.478	1.552	1.556	1.503	2.83
35)	ethyl tert-butyl ether										
	1.399	1.256	1.344	1.362	1.412	1.218	1.380	1.441	1.448	1.362	5.82
36)	2-butanone										
	0.040		0.045	0.052		0.051	0.052	0.048	0.048	9.89
37)	1,1-dichloroethane										
	0.830	0.735	0.784	0.786	0.813	0.709	0.814	0.831	0.812	0.791	5.38
38)	chloroprene										
	0.608	0.483	0.585	0.595	0.613	0.515	0.619	0.619	0.619	0.584	8.59
39)	acrylonitrile										
	0.178	0.134	0.169	0.162	0.180	0.137	0.176	0.185	0.191	0.168	12.08
40)	vinyl acetate										
	0.062		0.067	0.073		0.073	0.074	0.068	0.070	6.93
41)	ethyl acetate										
	0.075	0.069	0.057	0.064	0.070	0.063	0.068	0.072	0.067	8.18
42)	2,2-dichloropropane										
	0.538	0.548	0.571	0.524	0.534	0.534	0.524	0.547	0.536	0.540	2.67
43)	cis-1,2-dichloroethene										
	0.788	0.680	0.767	0.759	0.792	0.715	0.785	0.808	0.786	0.764	5.41
44)	propionitrile										
	0.065	0.055	0.063	0.061	0.068	0.049	0.067	0.071	0.073	0.063	11.68
45)	methyl acrylate										
	0.529	0.524	0.469	0.515		0.502	0.524	0.556	0.517	5.19	
46)	bromochloromethane										
	0.241	0.172	0.223	0.244	0.254	0.202	0.254	0.257	0.253	0.233	12.55
47)	tetrahydrofuran										
	0.194		0.147	0.160		0.156	0.175	0.187	0.170	10.88	
48)	chloroform										
	0.753	0.789	0.744	0.733	0.758	0.699	0.759	0.774	0.747	0.751	3.40
49)	Tert-Butyl Formate										
	0.398	0.313	0.382	0.385	0.407	0.318	0.396	0.417	0.421	0.382	10.44
50)	dibromofluoromethane (s)										
	0.432	0.468	0.418	0.417	0.426	0.421	0.425	0.432	0.427	0.429	3.60
51)	1,2-dichloroethane-d4 (s)										
	0.449	0.497	0.452	0.427	0.438	0.470	0.428	0.448	0.450	0.451	4.80
52)	freon 113										
	0.283	0.264	0.301	0.303		0.313	0.306	0.294	0.295	5.64	
53)	methacrylonitrile										

Initial Calibration Summary

Job Number: JB63450 **Sample:** V3D4135-ICC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95828.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

	0.305	0.370	0.263	0.290	0.366	0.284	0.299	0.309	0.311	12.33
54)	1,1,1-trichloroethane										
	0.633	0.601	0.618	0.628	0.654	0.562	0.661	0.648	0.631	0.626	4.84
55)	tert amyl alcohol										
										0.000#	-1.00
56)	2,2,4-Trimethylpentane										
	1.458	1.407	1.439	1.592	1.654	1.232	1.668	1.583	1.488	1.502	9.21
57)	tert-amyl methyl ether										
	1.351	1.295	1.326	1.307	1.358	1.246	1.345	1.393	1.415	1.337	3.85
58)	I 1,4-difluorobenzene	----------ISTD----------									
59)	epichlorohydrin										
	0.030	0.032	0.027	0.030	0.032	0.029	0.031	0.032	0.030	6.40	
60)	n-butyl alcohol										
	0.008	0.007	0.009	0.008	0.008	0.009	0.008	0.009	0.009	0.008#	8.51
61)	cyclohexane										
	0.439	0.426	0.439	0.443	0.462	0.387	0.468	0.465	0.431	0.440	5.64
62)	carbon tetrachloride										
	0.400	0.358	0.390	0.395	0.412	0.347	0.419	0.413	0.397	0.392	6.27
63)	1,1-dichloropropene										
	0.403	0.402	0.393	0.397	0.414	0.375	0.422	0.415	0.400	0.402	3.49
64)	hexane										
	0.287	0.279	0.293	0.295	0.301	0.259	0.304	0.304	0.296	0.291	5.02
65)	benzene										
	1.214	1.184	1.218	1.182	1.236	1.119	1.243	1.257	1.210	1.207	3.43
66)	heptane										
	0.179	0.166	0.180	0.184	0.191	0.164	0.191	0.190	0.185	0.181	5.68
67)	isopropyl acetate										
	0.590	0.578	0.542	0.588	0.524	0.579	0.613	0.627	0.580	5.83	
68)	1,2-dichloroethane										
	0.374	0.308	0.367	0.360	0.375	0.324	0.369	0.389	0.382	0.361	7.52
69)	trichloroethene										
	0.304	0.292	0.303	0.293	0.309	0.272	0.310	0.306	0.300	0.299	3.98
70)	ethyl acrylate										
										0.000#	-1.00
71)	tert amyl ethyl ether										
										0.000#	-1.00
72)	2-nitropropane										
	0.123			0.104	0.113		0.106	0.119	0.126	0.115	7.95
73)	2-chloroethyl vinyl ether										
	0.207	0.172	0.204	0.201	0.216	0.193	0.209	0.221	0.225	0.205	7.83
74)	methyl methacrylate										
	0.491	0.585	0.512	0.431	0.476	0.468	0.449	0.469	0.499	0.487	9.09
75)	1,2-dichloropropane										
	0.323	0.287	0.313	0.309	0.322	0.272	0.319	0.326	0.324	0.311	6.01
76)	methylcyclohexane										
	0.440	0.351	0.448	0.462	0.475	0.377	0.481	0.470	0.458	0.440	10.31
77)	dibromomethane										
	0.199	0.148	0.188	0.188	0.200	0.168	0.196	0.205	0.202	0.188	9.97
78)	bromodichloromethane										
	0.400	0.399	0.409	0.392	0.412	0.368	0.407	0.412	0.400	0.400	3.44
79)	cis-1,3-dichloropropene										
	0.486	0.482	0.479	0.476	0.500	0.468	0.493	0.500	0.489	0.486	2.20
80)	toluene-d8 (s)										
	1.010	1.161	1.017	0.984	1.012	1.052	1.007	1.010	1.031	1.032	5.04
81)	4-methyl-2-pentanone										
	0.121	0.116	0.112	0.124	0.106	0.123	0.126	0.131	0.120	6.79	
82)	toluene										
	0.701	0.624	0.697	0.693	0.724	0.620	0.728	0.724	0.700	0.690	5.89
83)	3-methyl-1-butanol										

Initial Calibration Summary

Job Number: JB63450 **Sample:** V3D4135-ICC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95828.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

		0.008	0.008	0.007	0.008	0.009	0.008	0.008	0.009	0.008#	6.91
84)	trans-1,3-dichloropropene										
		0.421	0.371	0.418	0.418	0.442	0.388	0.435	0.445	0.443	0.420	6.10
85)	ethyl methacrylate										
		0.346	0.312	0.358	0.349	0.382	0.309	0.378	0.370	0.372	0.353	7.63
86)	1,1,2-trichloroethane										
		0.225	0.209	0.230	0.220	0.233	0.205	0.229	0.235	0.236	0.225	5.02
87)	2-hexanone										
		0.103		0.103	0.099	0.111	0.073	0.111	0.112	0.117	0.104	13.32
88)	I chlorobenzene-d5	----------ISTD----------										
89)	tetrachloroethene										
		0.390	0.340	0.379	0.384	0.404	0.324	0.409	0.403	0.382	0.379	7.69
90)	1,3-dichloropropane										
		0.524	0.475	0.529	0.497	0.530	0.477	0.519	0.546	0.543	0.515	5.16
91)	butyl acetate										
		0.244	0.207	0.240	0.218	0.232	0.252	0.234	0.252	0.266	0.238	7.62
92)	3,3-Dimethyl-1-Butanol										
		0.039	0.042	0.040	0.032	0.037	0.046	0.039	0.038	0.042	0.039	9.50
93)	dibromochloromethane										
		0.394	0.368	0.407	0.389	0.415	0.358	0.412	0.415	0.402	0.396	5.21
94)	1,2-dibromoethane										
		0.334	0.287	0.346	0.320	0.347	0.297	0.340	0.355	0.356	0.331	7.51
95)	n-Butyl Ether										
											0.000#	-1.00
96)	chlorobenzene										
		0.935	0.860	0.955	0.911	0.954	0.825	0.962	0.966	0.936	0.923	5.33
97)	1,1,1,2-tetrachloroethane										
		0.356	0.314	0.368	0.359	0.376	0.315	0.378	0.382	0.361	0.356	7.13
98)	ethylbenzene										
		1.551	1.500	1.542	1.520	1.589	1.378	1.620	1.606	1.550	1.539	4.69
99)	m,p-xylene										
		0.595	0.572	0.598	0.581	0.607	0.525	0.618	0.618	0.595	0.590	4.87
100)	o-xylene										
		0.592	0.548	0.596	0.584	0.609	0.541	0.619	0.618	0.599	0.590	4.79
101)	styrene										
		0.964	0.877	0.983	0.984	1.033	0.863	1.054	1.038	1.001	0.977	6.90
102)	Butyl Acrylate										
											0.000#	-1.00
103)	bromoform										
		0.280	0.261	0.305	0.278	0.305	0.253	0.307	0.306	0.311	0.290	7.54
104)	I 1,4-dichlorobenzene-d	----------ISTD----------										
105)	isopropylbenzene										
		2.792	2.551	2.714	2.757	2.857	2.417	2.813	2.884	2.749	2.726	5.54
106)	4-bromofluorobenzene (s)										
		0.824		0.874	0.773	0.788	0.998	0.765	0.812	0.809	0.830	9.09
107)	bromobenzene										
		0.773	0.738	0.775	0.759	0.794	0.732	0.779	0.800	0.786	0.771	3.07
108)	cyclohexanone										
		0.021		0.028	0.019	0.021		0.020	0.022	0.023	0.022	13.57
109)	1,1,2,2-tetrachloroethane										
		0.840	0.830	0.943	0.773	0.846	0.825	0.814	0.876	0.902	0.850	5.92
110)	trans-1,4-dichloro-2-butene										
		0.180		0.175	0.171	0.186	0.172	0.177	0.192	0.191	0.180	4.50
111)	1,2,3-trichloropropane										
		0.190		0.199	0.172	0.189	0.138	0.183	0.203	0.204	0.185	11.70
112)	n-propylbenzene										
		3.133	3.080	3.140	3.061	3.167	2.845	3.147	3.264	3.088	3.103	3.66
113)	4-Ethyltoluene										

Initial Calibration Summary

Job Number: JB63450 **Sample:** V3D4135-ICC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95828.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
                                                                    0.000#  -1.00
114)  2-chlorotoluene
           0.682 0.574 0.708 0.673 0.706 0.616 0.690 0.720 0.686   0.673    7.06
115)  4-chlorotoluene
           0.699 0.580 0.678 0.684 0.705 0.620 0.702 0.724 0.701   0.677    6.86
116)  1,3,5-trimethylbenzene
           2.302 2.163 2.271 2.297 2.400 2.074 2.411 2.412 2.301   2.292    5.00
117)  tert-butylbenzene
           1.921 1.885 1.930 1.955 2.054 1.716 2.053 2.035 1.932   1.942    5.41
118)  pentachloroethane
           0.499 0.436 0.504 0.518 0.547 0.472 0.544 0.550 0.526   0.511    7.46
119)  1,2,4-trimethylbenzene
           2.269 2.158 2.281 2.227 2.327 2.015 2.346 2.368 2.270   2.251    4.84
120)  sec-butylbenzene
           3.014 2.800 2.942 3.038 3.158 2.832 3.192 3.158 2.994   3.014    4.67
121)  1,3-dichlorobenzene
           1.438 1.443 1.462 1.418 1.487 1.322 1.486 1.510 1.473   1.449    3.83
122)  p-isopropyltoluene
           2.525 2.368 2.560 2.522 2.633 2.302 2.662 2.647 2.498   2.524    4.89
123)  1,4-dichlorobenzene
           1.481 1.442 1.489 1.436 1.506 1.408 1.514 1.520 1.471   1.474    2.62
124)  1,2-dichlorobenzene
           1.422 1.310 1.497 1.411 1.503 1.353 1.482 1.517 1.472   1.441    5.00
125)  1,4-Diethylbenzene
                                                                    0.000#  -1.00
126)  n-butylbenzene
           1.306 1.208 1.275 1.307 1.357 1.125 1.382 1.366 1.292   1.291    6.33
127)  1,2,4,5-Tetramethylbenzene
                                                                    0.000#  -1.00
128)  1,2-dibromo-3-chloropropane
           0.185       0.182 0.173 0.189 0.146 0.179 0.198 0.204   0.182    9.68
129)  1,3,5-trichlorobenzene
           1.268 1.102 1.271 1.321 1.356 1.159 1.279 1.358 1.300   1.268    6.79
130)  1,2,4-trichlorobenzene
           1.173 0.996 1.167 1.248 1.257 1.041 1.123 1.292 1.220   1.168    8.58
131)  hexachlorobutadiene
           0.615 0.593 0.638 0.648 0.661 0.580 0.607 0.654 0.615   0.623    4.53
132)  naphthalene
           2.365 2.041 2.494 2.409 2.445 2.182 2.143 2.657 2.612   2.372    8.92
133)  1,2,3-trichlorobenzene
           1.086 0.925 1.092 1.118 1.065 1.004 0.911 1.183 1.144   1.059    8.89
134)  hexachloroethane
           0.516 0.467 0.519 0.556 0.588 0.420 0.596 0.563 0.532   0.528   10.77
135)  Benzyl chloride
           1.158 1.083 1.249 1.042 1.117 1.319 1.087 1.146 1.175   1.153    7.53
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M3D4135.M         Wed Feb 19 12:46:30 2014   3D
```

Initial Calibration Verification

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V3D4135-ICV4135
Lab FileID: 3D95841A.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D95841A.D Vial: 3
Acq On : 15 Feb 2014 12:04 pm Operator: courtnem
Sample : icv4135-50 Inst : MS3D
Misc : MS62765,V3D4135,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D4135.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Wed Feb 19 12:40:56 2014
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
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	127	0.00	7.24
2		1,4-dioxane	0.083	0.109	-31.3#	155	0.00	11.12
3	M	tertiary butyl alcohol	1.102	1.096	0.5	131	0.00	7.35
4	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	9.48
5		FREON 115		----------NA----------				
6		FREON 152A		----------NA----------				
7		chlorotrifluoroethene		----------NA----------				
8		chlorodifluoromethane	0.345	0.483	-40.0#	150	0.00	3.87
9		dichlorodifluoromethane	0.431	0.414	3.9	103	0.00	3.85
10		chloromethane	0.599	0.571	4.7	105	0.00	4.20
11		vinyl chloride	0.565	0.555	1.8	103	0.00	4.46
12		bromomethane	0.324	0.306	5.6	102	-0.02	5.09
13		chloroethane	0.300	0.285	5.0	103	-0.01	5.27
14		1,3-butadiene		----------NA----------				
15		vinyl bromide		----------NA----------				
16		trichlorofluoromethane	0.585	0.578	1.2	106	0.00	5.73
17		pentane		----------NA----------				
18		ethyl ether	0.232	0.230	0.9	106	0.00	6.13
19		freon 123a		----------NA----------				
20		FREON 123		----------NA----------				
21		acrolein	0.093	0.092	1.1	118	0.00	6.40
22		1,1-dichloroethene	0.644	0.578	10.2	98	0.00	6.56
23		acetone	0.040	0.040	0.0	116	0.00	6.62
24		allyl chloride	0.240	0.224	6.7	100	0.00	7.09
25		acetonitrile		----------NA----------				
26	m	acetaldehyde		----------NA----------				
27		iodomethane	0.810	0.747	7.8	101	0.00	6.85
28		iso-butyl alcohol	0.016	0.017	-6.3	131	0.00	9.77
29		carbon disulfide	1.544	1.348	12.7	97	0.00	6.97
30		methylene chloride	0.500	0.431	13.8	101	0.00	7.29
31		methyl acetate	0.073	0.069	5.5	111	0.00	7.08
32		methyl tert butyl ether	1.308	1.202	8.1	103	0.00	7.60
33		trans-1,2-dichloroethene	0.632	0.570	9.8	97	0.00	7.65
34		di-isopropyl ether	1.503	1.362	9.4	101	0.00	8.19
35		ethyl tert-butyl ether	1.362	1.289	5.4	103	0.00	8.65
36		2-butanone	0.048	0.049	-2.1	118	0.00	8.93
37	M	1,1-dichloroethane	0.791	0.718	9.2	100	0.00	8.23
38		chloroprene	0.584	0.503	13.9	92	0.00	8.33
39		acrylonitrile	0.168	0.177	-5.4	119	0.00	7.62
40		vinyl acetate	0.070	0.077	-10.0	126	0.00	8.21
41		ethyl acetate	0.067	0.061	9.0	116	0.00	8.94

Initial Calibration Verification

Job Number: JB63450 **Sample:** V3D4135-ICV4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95841A.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

42		2,2-dichloropropane	0.540	0.568	-5.2	118	0.00	8.96
43		cis-1,2-dichloroethene	0.764	0.718	6.0	103	0.00	8.96
44		propionitrile	0.063	0.068	-7.9	122	0.00	9.04
45		methyl acrylate	0.517	0.494	4.4	115	0.00	9.03
46		bromochloromethane	0.233	0.232	0.4	104	0.00	9.28
47		tetrahydrofuran	0.170	0.158	7.1	117	0.00	9.30
48		chloroform	0.751	0.679	9.6	101	0.00	9.34
49		Tert-Butyl Formate	0.382	0.403	-5.5	114	0.00	9.36
50	S	dibromofluoromethane (s)	0.429	0.395	7.9	103	0.00	9.54
51	S	1,2-dichloroethane-d4 (s)	0.451	0.412	8.6	105	0.00	9.95
52		freon 113	0.295	0.322	-9.2	117	0.00	6.52
53		methacrylonitrile	0.311	0.275	11.6	114	0.00	9.22
54		1,1,1-trichloroethane	0.626	0.580	7.3	101	0.00	9.58
55		tert amyl alcohol		----------NA----------				
56		2,2,4-Trimethylpentane	1.502	1.410	6.1	97	0.00	10.01
57		tert-amyl methyl ether	1.337	1.275	4.6	106	0.00	10.04
58	I	1,4-difluorobenzene	1.000	1.000	0.0	107	0.00	10.40
59		epichlorohydrin	0.030	0.032	-6.7	129	0.00	11.66
60		n-butyl alcohol	0.008	0.010#	-25.0#	137	0.00	10.52
61	M	cyclohexane	0.440	0.416	5.5	100	0.00	9.65
62		carbon tetrachloride	0.392	0.371	5.4	100	0.00	9.78
63		1,1-dichloropropene	0.402	0.371	7.7	100	0.00	9.76
64		hexane	0.291	0.337	-15.8	122	0.00	7.94
65	M	benzene	1.207	1.120	7.2	101	0.00	10.02
66		heptane	0.181	0.187	-3.3	109	0.00	10.18
67		isopropyl acetate	0.580	0.589	-1.6	116	0.00	9.94
68		1,2-dichloroethane	0.361	0.355	1.7	105	0.00	10.05
69		trichloroethene	0.299	0.278	7.0	101	0.00	10.74
70		ethyl acrylate		----------NA----------				
71		tert amyl ethyl ether		----------NA----------				
72		2-nitropropane	0.115	0.109	5.2	112	0.00	11.53
73		2-chloroethyl vinyl ether	0.205	0.210	-2.4	111	0.00	11.53
74		methyl methacrylate	0.487	0.445	8.6	110	0.00	11.00
75		1,2-dichloropropane	0.311	0.295	5.1	102	0.00	11.01
76		methylcyclohexane	0.440	0.461	-4.8	107	0.00	10.95
77		dibromomethane	0.188	0.191	-1.6	108	0.00	11.17
78		bromodichloromethane	0.400	0.378	5.5	103	0.00	11.30
79		cis-1,3-dichloropropene	0.486	0.478	1.6	107	0.00	11.75
80	S	toluene-d8 (s)	1.032	0.952	7.8	103	0.00	12.04
81		4-methyl-2-pentanone	0.120	0.123	-2.5	117	0.00	11.85
82		toluene	0.690	0.660	4.3	102	0.00	12.11
83		3-methyl-1-butanol	0.008	0.009#	-12.5	133	0.00	11.86
84		trans-1,3-dichloropropene	0.420	0.426	-1.4	109	0.00	12.31
85		ethyl methacrylate	0.353	0.363	-2.8	111	0.00	12.30
86		1,1,2-trichloroethane	0.225	0.220	2.2	107	0.00	12.53
87		2-hexanone	0.104	0.108	-3.8	117	0.00	12.70
88	I	chlorobenzene-d5	1.000	1.000	0.0	106	0.00	13.55
89		tetrachloroethene	0.379	0.367	3.2	102	0.00	12.70
90		1,3-dichloropropane	0.515	0.503	2.3	108	0.00	12.71
91		butyl acetate	0.238	0.235	1.3	115	0.00	12.77
92		3,3-Dimethyl-1-Butanol	0.039	0.039	0.0	127	0.00	12.86
93		dibromochloromethane	0.396	0.390	1.5	107	0.00	12.98
94		1,2-dibromoethane	0.331	0.334	-0.9	111	0.00	13.13
95		n-Butyl Ether		----------NA----------				
96		chlorobenzene	0.923	0.881	4.6	103	0.00	13.58
97		1,1,1,2-tetrachloroethane	0.356	0.354	0.6	105	0.00	13.64
98		ethylbenzene	1.539	1.459	5.2	102	0.00	13.63
99		m,p-xylene	0.590	0.559	5.3	102	0.00	13.74

Initial Calibration Verification

Job Number: JB63450 **Sample:** V3D4135-ICV4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D95841A.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

100		o-xylene	0.590	0.563	4.6	103	0.00	14.15
101		styrene	0.977	0.953	2.5	103	0.00	14.17
102		Butyl Acrylate		----------NA----------				
103		bromoform	0.290	0.290	0.0	111	0.01	14.44
104	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	15.86
105		isopropylbenzene	2.726	2.634	3.4	101	0.00	14.50
106	S	4-bromofluorobenzene (s)	0.830	0.767	7.6	105	0.00	14.71
107		bromobenzene	0.771	0.742	3.8	104	0.00	14.90
108		cyclohexanone	0.022	0.031	-40.9#	168	0.00	14.67
109		1,1,2,2-tetrachloroethane	0.850	0.831	2.2	114	0.00	14.81
110		trans-1,4-dichloro-2-bute	0.180	0.197	-9.4	122	0.00	14.85
111		1,2,3-trichloropropane	0.185	0.189	-2.2	116	0.00	14.88
112		n-propylbenzene	3.103	2.949	5.0	102	0.01	14.90
113		4-Ethyltoluene		----------NA----------				
114		2-chlorotoluene	0.673	0.655	2.7	103	0.00	15.05
115		4-chlorotoluene	0.677	0.665	1.8	103	0.00	15.15
116		1,3,5-trimethylbenzene	2.292	2.211	3.5	102	0.00	15.05
117		tert-butylbenzene	1.942	1.882	3.1	102	0.00	15.40
118		pentachloroethane	0.511	0.521	-2.0	107	0.00	15.49
119		1,2,4-trimethylbenzene	2.251	2.152	4.4	102	0.00	15.44
120		sec-butylbenzene	3.014	2.910	3.5	102	0.00	15.61
121		1,3-dichlorobenzene	1.449	1.389	4.1	104	0.00	15.81
122		p-isopropyltoluene	2.524	2.412	4.4	101	0.00	15.73
123		1,4-dichlorobenzene	1.474	1.410	4.3	104	0.00	15.88
124		1,2-dichlorobenzene	1.441	1.397	3.1	105	0.00	16.27
125		1,4-Diethylbenzene		----------NA----------				
126		n-butylbenzene	1.291	1.240	4.0	101	0.00	16.13
127		1,2,4,5-Tetramethylbenzen		----------NA----------				
128		1,2-dibromo-3-chloropropa	0.182	0.191	-4.9	117	0.00	17.00
129		1,3,5-trichlorobenzene	1.268	1.287	-1.5	103	0.00	17.16
130		1,2,4-trichlorobenzene	1.168	1.232	-5.5	105	0.00	17.73
131		hexachlorobutadiene	0.623	0.603	3.2	99	0.00	17.82
132		naphthalene	2.372	2.626	-10.7	116	0.00	17.97
133		1,2,3-trichlorobenzene	1.059	1.137	-7.4	108	0.00	18.18
134		hexachloroethane	0.528	0.527	0.2	100	0.00	16.51
135		Benzyl chloride	1.153	1.626	-41.0#	165	0.00	16.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D95828.D M3D4135.M Wed Feb 19 12:45:30 2014 3D

Continuing Calibration Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V3D4217-CC4135
Lab FileID: 3D97780.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3d\v3d4217\3D97780.D Vial: 25
Acq On : 7 Apr 2014 9:02 pm Operator: courtnem
Sample : cc4135-50 Inst : MS3D
Misc : MS65550,V3D4217,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D4135.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Mon Feb 17 16:21:19 2014
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
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	108	0.00	7.23
2		1,4-dioxane	0.083	0.090	-8.4	110	-0.01	11.10
3	M	tertiary butyl alcohol	1.102	1.100	0.2	112	-0.02	7.34
4	I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	9.47
5		FREON 115		----------NA----------				
6		FREON 152A		----------NA----------				
7		chlorotrifluoroethene		----------NA----------				
8		chlorodifluoromethane	0.345	0.485	-40.6#	148	0.00	3.88
9		dichlorodifluoromethane	0.431	0.644	-49.4#	158	0.00	3.85
10		chloromethane	0.599	0.663	-10.7	119	0.00	4.21
11		vinyl chloride	0.565	0.648	-14.7	118	0.00	4.46
12		bromomethane	0.324	0.397	-22.5#	130	0.00	5.11
13		chloroethane	0.300	0.286	4.7	101	0.00	5.27
14		1,3-butadiene		----------NA----------				
15		vinyl bromide		----------NA----------				
16		trichlorofluoromethane	0.585	0.724	-23.8#	130	0.00	5.73
17		pentane		----------NA----------				
18		ethyl ether	0.232	0.223	3.9	101	0.00	6.13
19		freon 123a		----------NA----------				
20		FREON 123		----------NA----------				
21		acrolein	0.093	0.084	9.7	107	-0.01	6.40
22		1,1-dichloroethene	0.644	0.599	7.0	99	0.00	6.56
23		acetone	0.040	0.036	10.0	102	0.00	6.62
24		allyl chloride	0.240	0.225	6.2	98	0.00	7.09
25		acetonitrile	0.043	0.040	7.0	114	-0.02	7.06
26	m	acetaldehyde		----------NA----------				
27		iodomethane	0.810	0.748	7.7	100	-0.01	6.84
28		iso-butyl alcohol	0.016	0.014	12.5	111	-0.01	9.76
29		carbon disulfide	1.544	1.329	13.9	93	0.00	6.96
30		methylene chloride	0.500	0.431	13.8	99	0.00	7.28
31		methyl acetate	0.073	0.072	1.4	114	0.00	7.07
32		methyl tert butyl ether	1.308	1.218	6.9	103	0.00	7.59
33		trans-1,2-dichloroethene	0.632	0.605	4.3	101	-0.01	7.65
34		di-isopropyl ether	1.503	1.510	-0.5	110	0.00	8.18
35		ethyl tert-butyl ether	1.362	1.403	-3.0	110	-0.01	8.64
36		2-butanone	0.048	0.047	2.1	110	-0.01	8.92
37	M	1,1-dichloroethane	0.791	0.763	3.5	104	0.00	8.22
38		chloroprene	0.584	0.610	-4.5	110	0.00	8.32
39		acrylonitrile	0.168	0.165	1.8	109	0.00	7.62
40		vinyl acetate	0.070	0.067	4.3	108	-0.01	8.20
41		ethyl acetate	0.067	0.062	7.5	115	0.00	8.93

Continuing Calibration Summary

Job Number: JB63450 **Sample:** V3D4217-CC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D97780.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

42		2,2-dichloropropane	0.540	0.519	3.9	106	0.00	8.95
43		cis-1,2-dichloroethene	0.764	0.743	2.7	105	0.00	8.96
44		propionitrile	0.063	0.062	1.6	110	0.00	9.03
45		methyl acrylate	0.532	0.480	9.8	109	0.00	9.02
46		bromochloromethane	0.233	0.236	-1.3	104	0.00	9.27
47		tetrahydrofuran	0.170	0.152	10.6	111	0.00	9.30
48		chloroform	0.751	0.729	2.9	106	0.00	9.33
49		Tert-Butyl Formate	0.382	0.389	-1.8	108	0.00	9.35
50	S	dibromofluoromethane (s)	0.429	0.460	-7.2	118	0.00	9.53
51	S	1,2-dichloroethane-d4 (s)	0.451	0.484	-7.3	121	0.00	9.95
52		freon 113	0.295	0.334	-13.2	119	0.00	6.52
53		methacrylonitrile	0.311	0.277	10.9	113	0.00	9.21
54		1,1,1-trichloroethane	0.626	0.619	1.1	105	0.00	9.57
55		tert amyl alcohol		----------NA----------				
56		2,2,4-Trimethylpentane	1.502	1.495	0.5	100	0.00	10.00
57		tert-amyl methyl ether	1.337	1.324	1.0	108	0.00	10.03
58	I	1,4-difluorobenzene	1.000	1.000	0.0	106	-0.01	10.38
59		epichlorohydrin	0.030	0.027	10.0	106	0.00	11.65
60		n-butyl alcohol	0.008	0.008#	0.0	111	0.00	10.51
61	M	cyclohexane	0.440	0.428	2.7	103	-0.01	9.64
62		carbon tetrachloride	0.392	0.400	-2.0	107	0.00	9.77
63		1,1-dichloropropene	0.402	0.391	2.7	104	-0.01	9.75
64		hexane	0.291	0.345	-18.6	124	0.00	7.94
65	M	benzene	1.207	1.146	5.1	103	0.00	10.01
66		heptane	0.181	0.189	-4.4	109	-0.01	10.16
67		isopropyl acetate	0.580	0.570	1.7	111	0.00	9.93
68		1,2-dichloroethane	0.361	0.379	-5.0	112	-0.01	10.03
69		trichloroethene	0.299	0.290	3.0	105	-0.01	10.73
70		ethyl acrylate		----------NA----------				
71		tert amyl ethyl ether		----------NA----------				
72		2-nitropropane	0.115	0.106	7.8	108	0.00	11.52
73		2-chloroethyl vinyl ether	0.205	0.194	5.4	102	-0.01	11.52
74		methyl methacrylate	0.487	0.455	6.6	112	-0.01	10.99
75		1,2-dichloropropane	0.311	0.310	0.3	106	0.00	11.00
76		methylcyclohexane	0.440	0.473	-7.5	108	-0.01	10.94
77		dibromomethane	0.188	0.189	-0.5	107	-0.01	11.16
78		bromodichloromethane	0.400	0.390	2.5	105	-0.01	11.29
79		cis-1,3-dichloropropene	0.486	0.466	4.1	104	-0.01	11.74
80	S	toluene-d8 (s)	1.032	1.099	-6.5	118	0.00	12.03
81		4-methyl-2-pentanone	0.120	0.115	4.2	109	-0.01	11.83
82		toluene	0.690	0.662	4.1	101	-0.01	12.10
83		3-methyl-1-butanol	0.008	0.007#	12.5	107	0.00	11.85
84		trans-1,3-dichloropropene	0.420	0.418	0.5	106	-0.01	12.30
85		ethyl methacrylate	0.353	0.347	1.7	105	0.00	12.29
86		1,1,2-trichloroethane	0.225	0.218	3.1	105	-0.01	12.52
87		2-hexanone	0.104	0.100	3.8	107	0.00	12.69
88	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	13.54
89		tetrachloroethene	0.379	0.384	-1.3	104	0.00	12.69
90		1,3-dichloropropane	0.515	0.514	0.2	107	0.00	12.70
91		butyl acetate	0.238	0.226	5.0	107	0.00	12.75
92		3,3-Dimethyl-1-Butanol	0.039	0.033	15.4	107	0.00	12.85
93		dibromochloromethane	0.396	0.396	0.0	106	-0.01	12.96
94		1,2-dibromoethane	0.331	0.332	-0.3	107	0.00	13.12
95		n-Butyl Ether		----------NA----------				
96		chlorobenzene	0.923	0.909	1.5	103	0.00	13.57
97		1,1,1,2-tetrachloroethane	0.356	0.366	-2.8	106	0.00	13.63
98		ethylbenzene	1.539	1.492	3.1	102	0.00	13.62
99		m,p-xylene	0.590	0.566	4.1	101	0.00	13.73

Continuing Calibration Summary

Job Number: JB63450 **Sample:** V3D4217-CC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D97780.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

100		o-xylene	0.590	0.568	3.7	101	0.00	14.14
101		styrene	0.977	0.941	3.7	99	-0.01	14.15
102		Butyl Acrylate		----------NA----------				
103		bromoform	0.290	0.290	0.0	108	0.00	14.43
104	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	15.85
105		isopropylbenzene	2.726	2.756	-1.1	102	0.00	14.49
106	S	4-bromofluorobenzene (s)	0.830	0.868	-4.6	114	0.00	14.69
107		bromobenzene	0.771	0.786	-1.9	105	0.00	14.89
108		cyclohexanone	0.022	0.020	9.1	104	0.00	14.66
109		1,1,2,2-tetrachloroethane	0.850	0.808	4.9	106	0.00	14.80
110		trans-1,4-dichloro-2-bute	0.180	0.130	27.8#	77	0.00	14.84
111		1,2,3-trichloropropane	0.185	0.190	-2.7	112	0.00	14.87
112		n-propylbenzene	3.103	3.019	2.7	100	0.00	14.89
113		4-Ethyltoluene		----------NA----------				
114		2-chlorotoluene	0.673	0.678	-0.7	102	-0.01	15.04
115		4-chlorotoluene	0.677	0.678	-0.1	101	0.00	15.14
116		1,3,5-trimethylbenzene	2.292	2.272	0.9	101	0.00	15.04
117		tert-butylbenzene	1.942	1.951	-0.5	101	-0.01	15.39
118		pentachloroethane	0.511	0.538	-5.3	105	-0.01	15.48
119		1,2,4-trimethylbenzene	2.251	2.197	2.4	100	0.00	15.43
120		sec-butylbenzene	3.014	2.946	2.3	99	0.00	15.60
121		1,3-dichlorobenzene	1.449	1.421	1.9	102	0.00	15.80
122		p-isopropyltoluene	2.524	2.451	2.9	99	0.00	15.72
123		1,4-dichlorobenzene	1.474	1.432	2.8	101	0.00	15.87
124		1,2-dichlorobenzene	1.441	1.425	1.1	103	0.00	16.26
125		1,4-Diethylbenzene		----------NA----------				
126		n-butylbenzene	1.291	1.241	3.9	97	0.00	16.12
127		1,2,4,5-Tetramethylbenzen		----------NA----------				
128		1,2-dibromo-3-chloropropa	0.182	0.184	-1.1	108	0.00	16.99
129		1,3,5-trichlorobenzene	1.268	1.308	-3.2	101	0.00	17.15
130		1,2,4-trichlorobenzene	1.168	1.280	-9.6	104	0.00	17.71
131		hexachlorobutadiene	0.623	0.644	-3.4	101	0.00	17.81
132		naphthalene	2.372	2.778	-17.1	117	0.00	17.96
133		1,2,3-trichlorobenzene	1.059	1.242	-17.3	113	0.00	18.17
134		hexachloroethane	0.528	0.540	-2.3	99	0.00	16.50
135		Benzyl chloride	1.153	1.102	4.4	108	0.00	15.99

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D95828.D M3D4135.M Wed Apr 09 15:25:59 2014 DATAREVIW

6.7.3

6

Continuing Calibration Summary

Job Number: JB63450
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V3D4218-CC4135
Lab FileID: 3D97804.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D97804.D Vial: 1
Acq On : 8 Apr 2014 8:30 am Operator: courtnem
Sample : cc4135-20 Inst : MS3D
Misc : MS65386,V3D4218,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D4135.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Fri Mar 28 13:07:34 2014
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
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	108	0.00	7.23
2		1,4-dioxane	0.083	0.095	-14.5	112	0.00	11.11
3	M	tertiary butyl alcohol	1.102	1.101	0.1	104	-0.01	7.35
4	I	pentafluorobenzene	1.000	1.000	0.0	100	0.00	9.47
5		FREON 115		----------NA----------				
6		FREON 152A		----------NA----------				
7		chlorotrifluoroethene		----------NA----------				
8		chlorodifluoromethane	0.345	0.475	-37.7#	135	0.00	3.87
9		dichlorodifluoromethane	0.431	0.604	-40.1#	132	0.00	3.85
10		chloromethane	0.599	0.657	-9.7	108	0.00	4.20
11		vinyl chloride	0.565	0.637	-12.7	107	-0.02	4.44
12		bromomethane	0.324	0.407	-25.6#	119	0.00	5.11
13		chloroethane	0.300	0.304	-1.3	97	0.00	5.27
14		1,3-butadiene		----------NA----------				
15		vinyl bromide		----------NA----------				
16		trichlorofluoromethane	0.585	0.768	-31.3#	125	-0.01	5.72
17		pentane		----------NA----------				
18		ethyl ether	0.232	0.238	-2.6	92	0.00	6.13
19		freon 123a		----------NA----------				
20		FREON 123		----------NA----------				
21		acrolein	0.093	0.081	12.9	84	0.00	6.40
22		1,1-dichloroethene	0.644	0.661	-2.6	98	-0.01	6.55
23		acetone	0.040	0.042	-5.0	98	0.00	6.62
24		allyl chloride	0.240	0.237	1.3	93	0.00	7.09
25		acetonitrile	0.043	0.046	-7.0	109	0.00	7.08
26	m	acetaldehyde		----------NA----------				
27		iodomethane	0.810	0.817	-0.9	96	-0.01	6.84
28		iso-butyl alcohol	0.016	0.016	0.0	106	0.00	9.76
29		carbon disulfide	1.544	1.446	6.3	91	0.00	6.96
30		methylene chloride	0.500	0.472	5.6	95	0.00	7.29
31		methyl acetate	0.073	0.075	-2.7	97	0.00	7.07
32		methyl tert butyl ether	1.308	1.334	-2.0	98	-0.01	7.59
33		trans-1,2-dichloroethene	0.632	0.666	-5.4	99	0.00	7.65
34		di-isopropyl ether	1.503	1.610	-7.1	104	0.00	8.18
35		ethyl tert-butyl ether	1.362	1.488	-9.3	103	-0.01	8.64
36		2-butanone	0.048	0.049	-2.1	93	0.00	8.93
37	M	1,1-dichloroethane	0.791	0.845	-6.8	101	0.00	8.22
38		chloroprene	0.584	0.641	-9.8	104	0.00	8.32
39		acrylonitrile	0.168	0.181	-7.7	98	0.00	7.62
40		vinyl acetate	0.070	0.066	5.7	89	0.00	8.20
41		ethyl acetate	0.067	0.064	4.5	94	0.00	8.93

Continuing Calibration Summary

Job Number: JB63450 **Sample:** V3D4218-CC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D97804.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

42		2,2-dichloropropane	0.540	0.514	4.8	94	0.00	8.95
43		cis-1,2-dichloroethene	0.764	0.805	-5.4	99	0.00	8.96
44		propionitrile	0.063	0.069	-9.5	98	0.00	9.03
45		methyl acrylate	0.532	0.503	5.5	96	0.00	9.02
46		bromochloromethane	0.233	0.261	-12.0	101	0.00	9.27
47		tetrahydrofuran	0.170	0.171	-0.6	97	0.00	9.30
48		chloroform	0.751	0.796	-6.0	103	0.00	9.33
49		Tert-Butyl Formate	0.382	0.427	-11.8	102	0.00	9.35
50	S	dibromofluoromethane (s)	0.429	0.481	-12.1	111	0.00	9.53
51	S	1,2-dichloroethane-d4 (s)	0.451	0.529	-17.3	118	0.00	9.95
52		freon 113	0.295	0.325	-10.2	106	0.00	6.52
53		methacrylonitrile	0.311	0.299	3.9	100	0.00	9.21
54		1,1,1-trichloroethane	0.626	0.696	-11.2	107	0.00	9.57
55		tert amyl alcohol		----------NA----------				
56		2,2,4-Trimethylpentane	1.502	1.395	7.1	88	0.00	10.00
57		tert-amyl methyl ether	1.337	1.405	-5.1	101	0.00	10.03
58	I	1,4-difluorobenzene	1.000	1.000	0.0	100	0.00	10.39
59		epichlorohydrin	0.030	0.028	6.7	92	0.00	11.66
60		n-butyl alcohol	0.008	0.008#	0.0	97	0.00	10.52
61	M	cyclohexane	0.440	0.451	-2.5	97	0.00	9.64
62		carbon tetrachloride	0.392	0.443	-13.0	107	0.00	9.77
63		1,1-dichloropropene	0.402	0.414	-3.0	100	0.00	9.75
64		hexane	0.291	0.309	-6.2	102	0.00	7.94
65	M	benzene	1.207	1.221	-1.2	97	0.00	10.02
66		heptane	0.181	0.164	9.4	86	0.00	10.17
67		isopropyl acetate	0.580	0.615	-6.0	100	0.00	9.93
68		1,2-dichloroethane	0.361	0.424	-17.5	109	0.00	10.04
69		trichloroethene	0.299	0.307	-2.7	100	0.00	10.73
70		ethyl acrylate		----------NA----------				
71		tert amyl ethyl ether		----------NA----------				
72		2-nitropropane	0.115	0.119	-3.5	100	0.00	11.52
73		2-chloroethyl vinyl ether	0.205	0.199	2.9	90	0.00	11.53
74		methyl methacrylate	0.487	0.485	0.4	103	0.00	11.00
75		1,2-dichloropropane	0.311	0.323	-3.9	99	0.00	11.00
76		methylcyclohexane	0.440	0.459	-4.3	97	0.00	10.94
77		dibromomethane	0.188	0.205	-9.0	100	0.00	11.17
78		bromodichloromethane	0.400	0.419	-4.7	102	0.00	11.29
79		cis-1,3-dichloropropene	0.486	0.463	4.7	93	0.00	11.75
80	S	toluene-d8 (s)	1.032	1.094	-6.0	108	0.00	12.03
81		4-methyl-2-pentanone	0.120	0.123	-2.5	98	0.00	11.84
82		toluene	0.690	0.680	1.4	94	0.00	12.10
83		3-methyl-1-butanol	0.008	0.008#	0.0	95	0.00	11.86
84		trans-1,3-dichloropropene	0.420	0.421	-0.2	95	0.00	12.31
85		ethyl methacrylate	0.353	0.347	1.7	94	0.00	12.29
86		1,1,2-trichloroethane	0.225	0.227	-0.9	96	0.00	12.52
87		2-hexanone	0.104	0.099	4.8	88	0.00	12.69
88	I	chlorobenzene-d5	1.000	1.000	0.0	99	0.00	13.55
89		tetrachloroethene	0.379	0.399	-5.3	98	0.00	12.69
90		1,3-dichloropropane	0.515	0.535	-3.9	97	0.00	12.71
91		butyl acetate	0.238	0.228	4.2	90	0.00	12.76
92		3,3-Dimethyl-1-Butanol	0.039	0.036	7.7	92	0.00	12.86
93		dibromochloromethane	0.396	0.408	-3.0	97	0.00	12.97
94		1,2-dibromoethane	0.331	0.344	-3.9	96	0.00	13.12
95		n-Butyl Ether		----------NA----------				
96		chlorobenzene	0.923	0.933	-1.1	96	0.00	13.58
97		1,1,1,2-tetrachloroethane	0.356	0.395	-11.0	102	0.00	13.64
98		ethylbenzene	1.539	1.548	-0.6	95	0.00	13.63
99		m,p-xylene	0.590	0.585	0.8	94	0.00	13.74

Continuing Calibration Summary

Job Number: JB63450 **Sample:** V3D4218-CC4135
Account: PESNJP Parsons Engineering Science **Lab FileID:** 3D97804.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

100		o-xylene	0.590	0.597	-1.2	96	0.00	14.15
101		styrene	0.977	0.968	0.9	92	0.00	14.17
102		Butyl Acrylate		----------NA----------				
103		bromoform	0.290	0.304	-4.8	99	0.00	14.43
104	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	15.85
105		isopropylbenzene	2.726	2.827	-3.7	96	0.00	14.49
106	S	4-bromofluorobenzene (s)	0.830	0.868	-4.6	104	0.00	14.70
107		bromobenzene	0.771	0.806	-4.5	98	0.00	14.89
108		cyclohexanone	0.022	0.023	-4.5	102	0.00	14.67
109		1,1,2,2-tetrachloroethane	0.850	0.863	-1.5	96	0.00	14.80
110		trans-1,4-dichloro-2-bute	0.180	0.139	22.8#	71	0.00	14.85
111		1,2,3-trichloropropane	0.185	0.203	-9.7	98	0.00	14.88
112		n-propylbenzene	3.103	3.110	-0.2	93	0.00	14.90
113		4-Ethyltoluene		----------NA----------				
114		2-chlorotoluene	0.673	0.689	-2.4	94	0.00	15.05
115		4-chlorotoluene	0.677	0.698	-3.1	94	0.00	15.15
116		1,3,5-trimethylbenzene	2.292	2.311	-0.8	94	0.00	15.05
117		tert-butylbenzene	1.942	1.973	-1.6	95	0.00	15.39
118		pentachloroethane	0.511	0.538	-5.3	95	0.00	15.48
119		1,2,4-trimethylbenzene	2.251	2.264	-0.6	93	0.00	15.44
120		sec-butylbenzene	3.014	3.011	0.1	93	0.00	15.61
121		1,3-dichlorobenzene	1.449	1.447	0.1	94	0.00	15.80
122		p-isopropyltoluene	2.524	2.504	0.8	92	0.00	15.73
123		1,4-dichlorobenzene	1.474	1.464	0.7	94	0.00	15.88
124		1,2-dichlorobenzene	1.441	1.468	-1.9	95	0.00	16.26
125		1,4-Diethylbenzene		----------NA----------				
126		n-butylbenzene	1.291	1.246	3.5	89	0.00	16.13
127		1,2,4,5-Tetramethylbenzen		----------NA----------				
128		1,2-dibromo-3-chloropropa	0.182	0.193	-6.0	95	0.00	17.00
129		1,3,5-trichlorobenzene	1.268	1.315	-3.7	95	0.00	17.15
130		1,2,4-trichlorobenzene	1.168	1.269	-8.6	96	0.00	17.72
131		hexachlorobutadiene	0.623	0.629	-1.0	94	0.00	17.81
132		naphthalene	2.372	2.777	-17.1	102	0.00	17.96
133		1,2,3-trichlorobenzene	1.059	1.244	-17.5	103	0.00	18.17
134		hexachloroethane	0.528	0.542	-2.7	94	0.00	16.50
135		Benzyl chloride	1.153	0.949	17.7	81	0.00	15.99

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D95827.D M3D4135.M Tue Apr 08 15:40:43 2014 3D

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97800.D
Acq On : 8 Apr 2014 6:07 am
Operator : courtnem
Sample : jb63450-1
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Apr 09 16:03:52 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

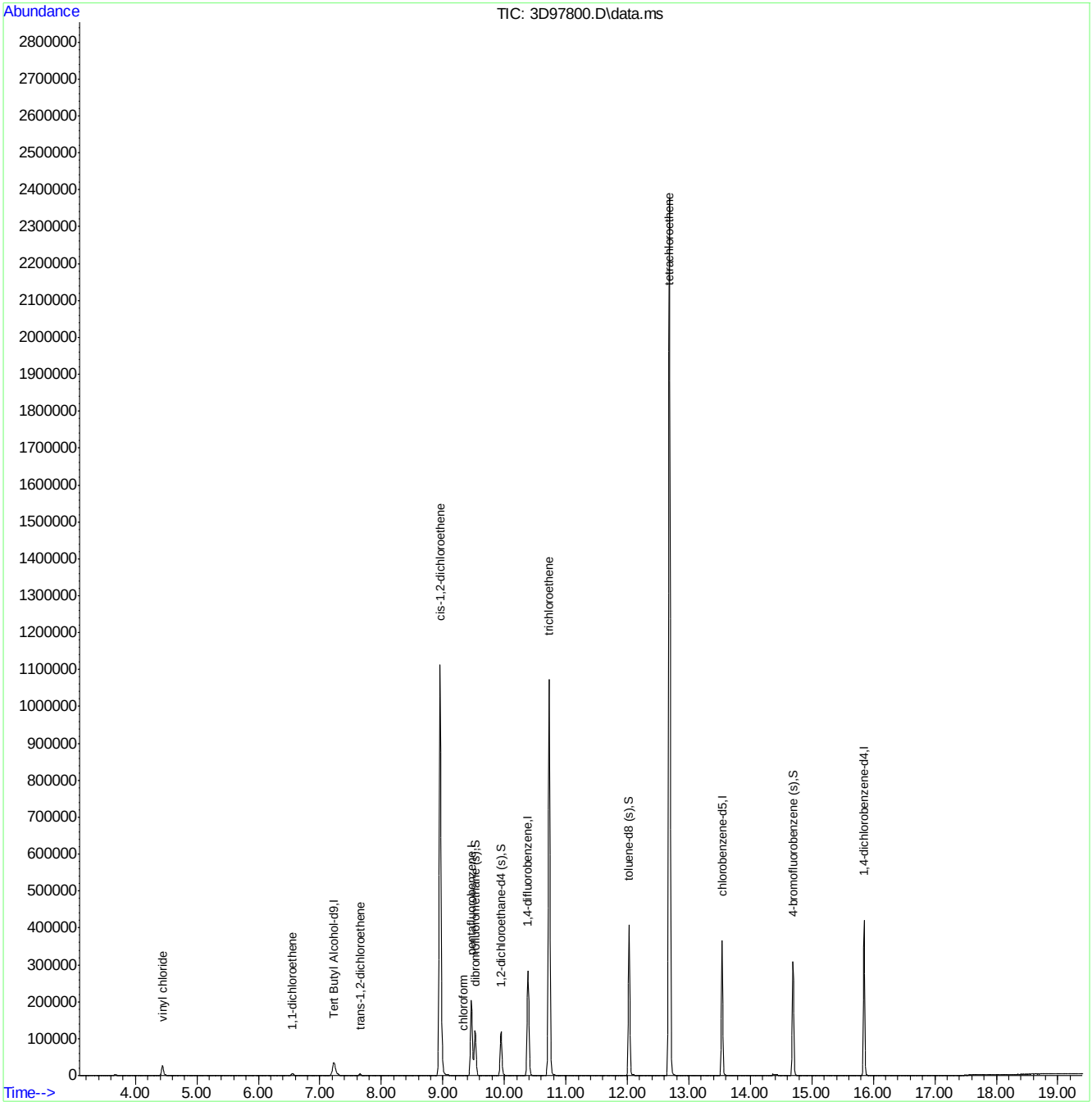
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.229	65	75038	500.00	ug/L	0.00
4) pentafluorobenzene	9.462	168	177697	50.00	ug/L	-0.01
58) 1,4-difluorobenzene	10.385	114	258301	50.00	ug/L	-0.01
88) chlorobenzene-d5	13.541	117	205991	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.848	152	108741	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.525	113	83396	54.65	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 109.30%			
51) 1,2-dichloroethane-d4 (s)	9.945	65	89926	56.11	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 112.22%			
80) toluene-d8 (s)	12.026	98	282206	52.95	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 105.90%			
106) 4-bromofluorobenzene (s)	14.695	95	96729	53.56	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 107.12%			
Target Compounds						Qvalue
11) vinyl chloride	4.439	62	40444	20.13	ug/L	99
22) 1,1-dichloroethene	6.552	61	5209	2.28	ug/L	92
33) trans-1,2-dichloroethene	7.653	61	3612	1.61	ug/L	99
43) cis-1,2-dichloroethene	8.954	61	763193	280.90	ug/L	93
48) chloroform	9.331	83	638	0.24	ug/L	83
69) trichloroethene	10.726	95	386653	250.44	ug/L	98
89) tetrachloroethene	12.687	166	779082	498.33	ug/L	98

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

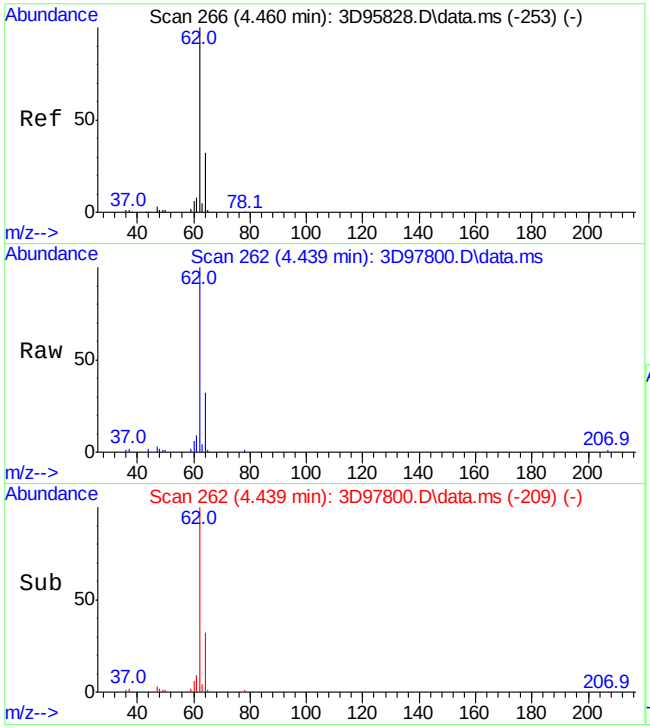
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97800.D
Acq On : 8 Apr 2014 6:07 am
Operator : courtnem
Sample : jb63450-1
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Apr 09 16:03:52 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



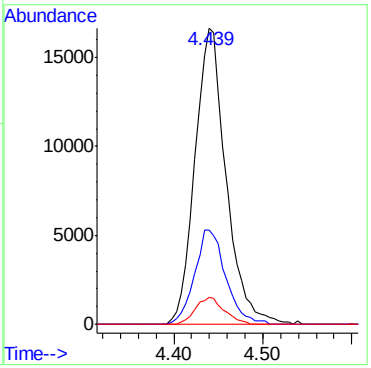
M3D4135.M Wed Apr 09 16:07:43 2014 DATAREVIW Page: 2

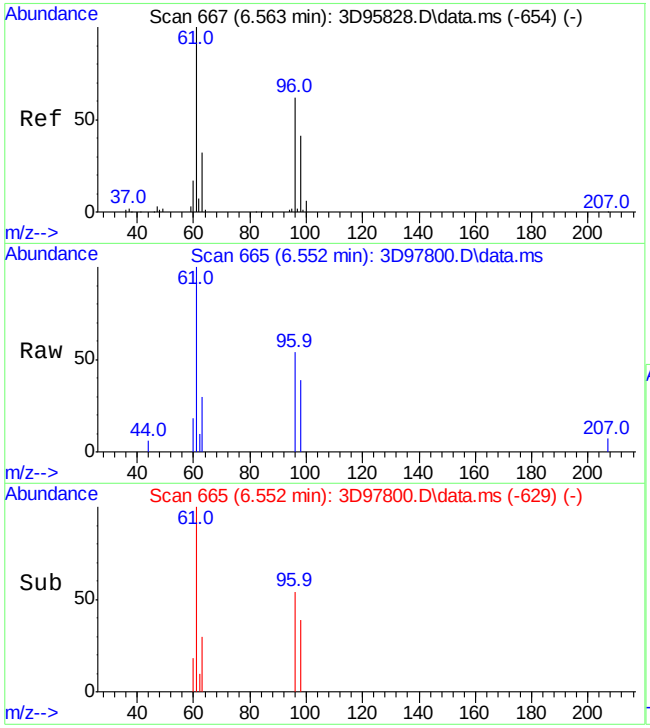


#11
vinyl chloride
Concen: 20.13 ug/L
RT: 4.439 min Scan# 262
Delta R.T. -0.021 min
Lab File: 3D97800.D
Acq: 8 Apr 2014 6:07 am

Tgt Ion: 62 Resp: 40444

Ion	Ratio	Lower	Upper
62	100		
64	32.0	2.2	62.2
61	9.1	0.0	38.4

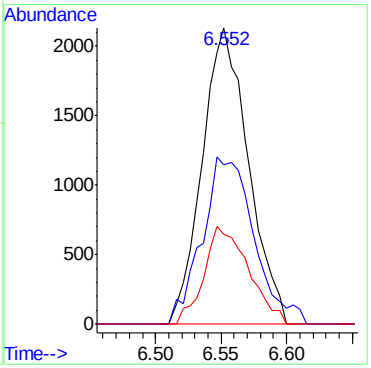


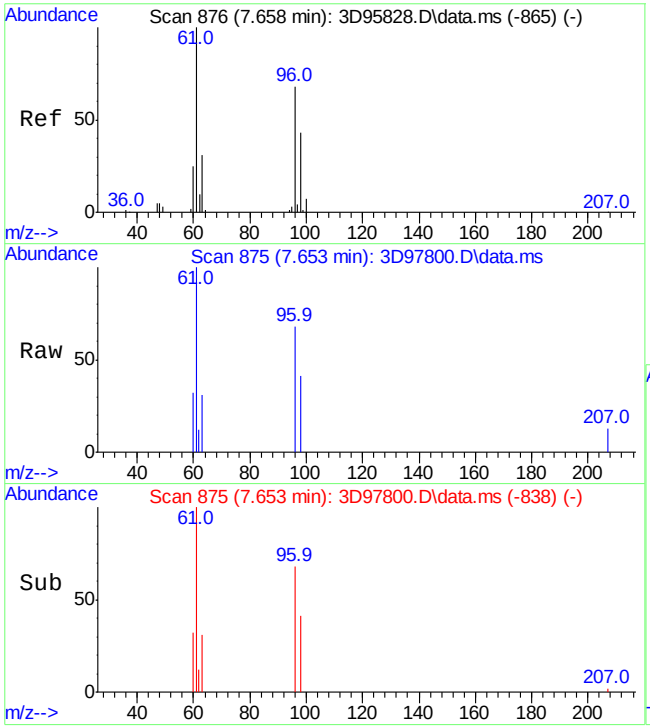


#22
1,1-dichloroethene
Concen: 2.28 ug/L
RT: 6.552 min Scan# 665
Delta R.T. -0.010 min
Lab File: 3D97800.D
Acq: 8 Apr 2014 6:07 am

Tgt Ion: 61 Resp: 5209

Ion	Ratio	Lower	Upper
61	100		
96	53.7	32.1	92.1
63	30.4	2.1	62.1

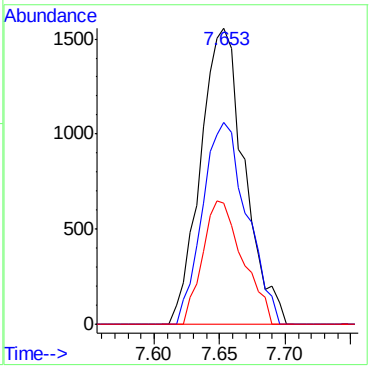


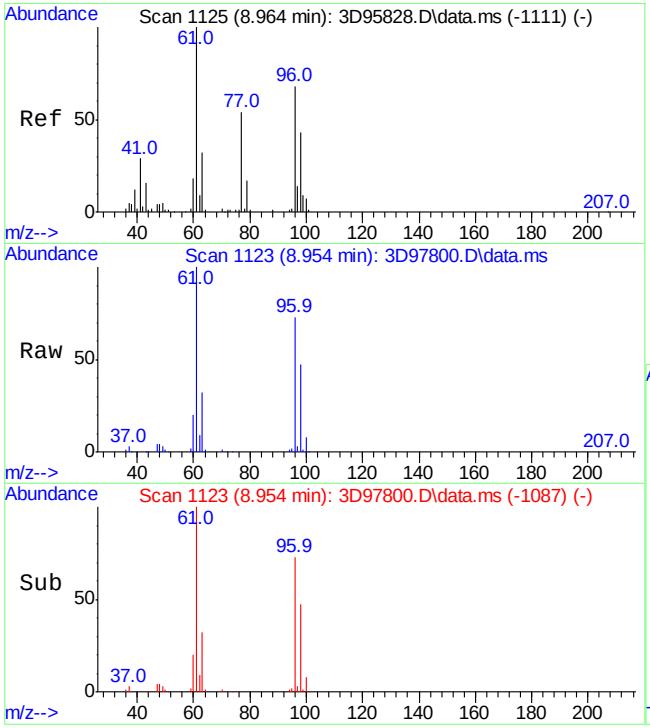


#33
trans-1,2-dichloroethene
Concen: 1.61 ug/L
RT: 7.653 min Scan# 875
Delta R.T. -0.005 min
Lab File: 3D97800.D
Acq: 8 Apr 2014 6:07 am

Tgt Ion: 61 Resp: 3612

Ion	Ratio	Lower	Upper
61	100		
96	68.2	47.6	88.4
98	40.9	30.2	56.0

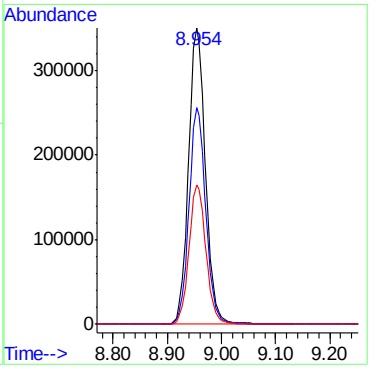


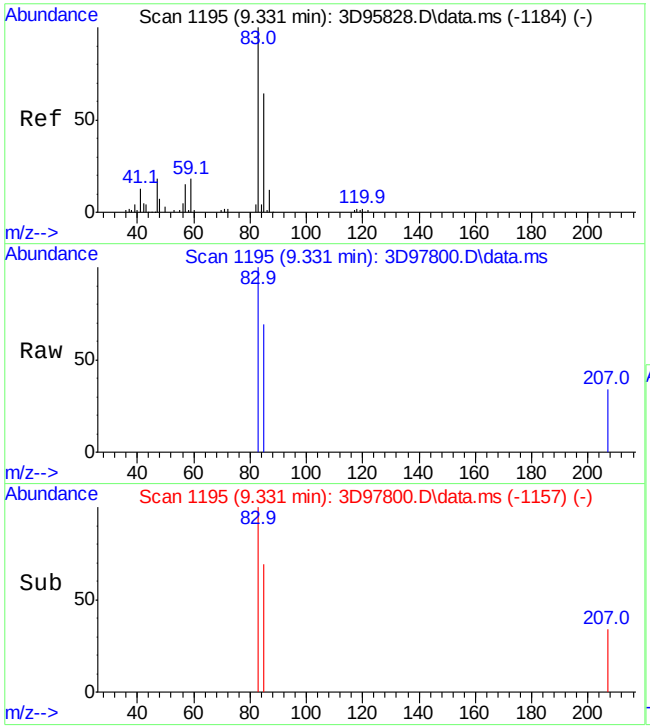


#43
cis-1,2-dichloroethene
Concen: 280.90 ug/L
RT: 8.954 min Scan# 1123
Delta R.T. -0.010 min
Lab File: 3D97800.D
Acq: 8 Apr 2014 6:07 am

Tgt Ion: 61 Resp: 763193

Ion	Ratio	Lower	Upper
61	100		
96	73.3	37.6	97.6
98	46.9	13.1	73.1

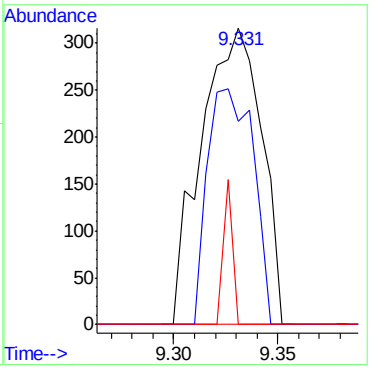


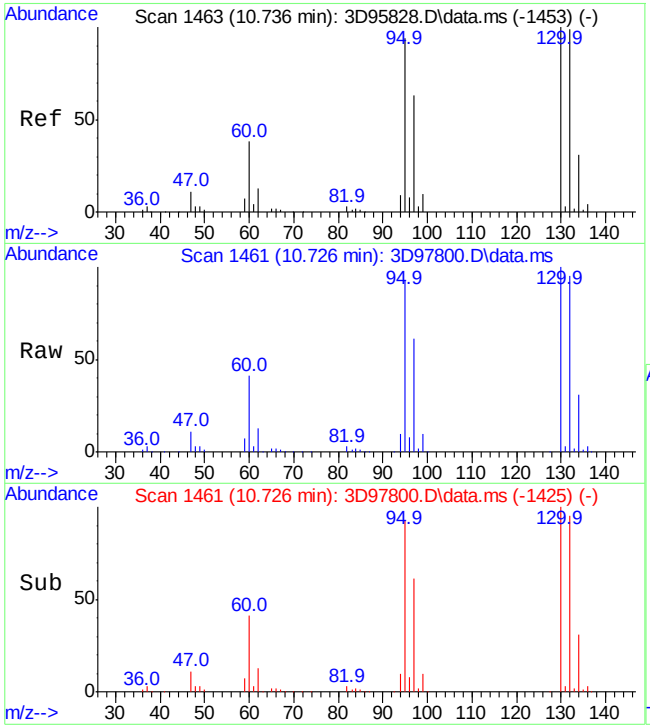


#48
chloroform
Concen: 0.24 ug/L
RT: 9.331 min Scan# 1195
Delta R.T. 0.000 min
Lab File: 3D97800.D
Acq: 8 Apr 2014 6:07 am

Tgt Ion: 83 Resp: 638

Ion	Ratio	Lower	Upper
83	100		
85	68.7	34.3	94.3
47	0.0	0.0	53.3

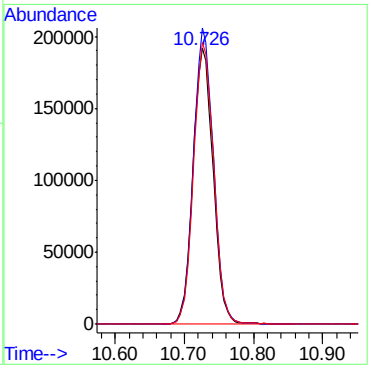


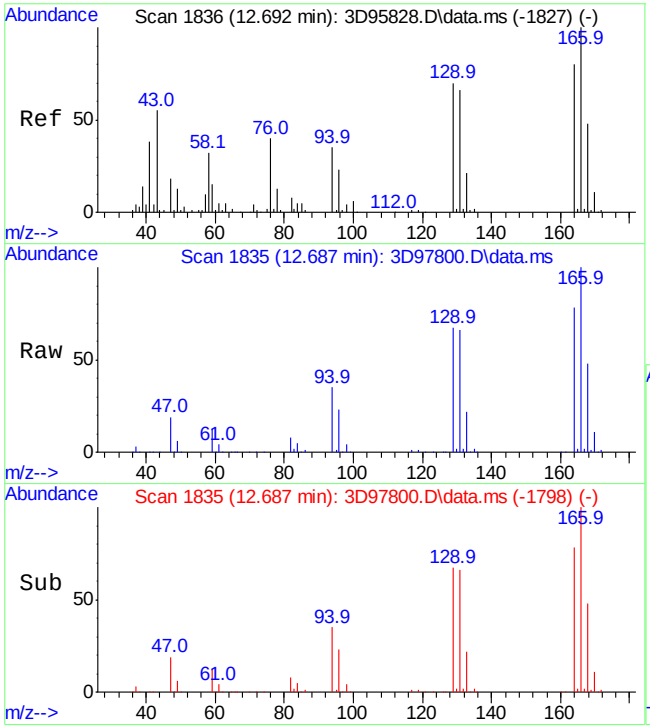


#69
trichloroethene
Concen: 250.44 ug/L
RT: 10.726 min Scan# 1461
Delta R.T. -0.010 min
Lab File: 3D97800.D
Acq: 8 Apr 2014 6:07 am

Tgt Ion: 95 Resp: 386653

Ion	Ratio	Lower	Upper
95	100		
130	107.4	76.2	136.2
132	102.1	74.7	134.7

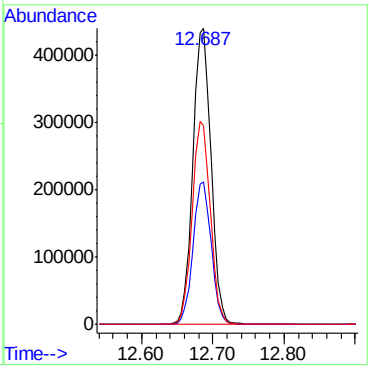




#89
tetrachloroethene
Concen: 498.33 ug/L
RT: 12.687 min Scan# 1835
Delta R.T. -0.005 min
Lab File: 3D97800.D
Acq: 8 Apr 2014 6:07 am

Tgt Ion:166 Resp: 779082

Ion	Ratio	Lower	Upper
166	100		
168	48.2	18.4	78.4
129	67.1	40.1	100.1



7.1.1

7

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97800.D
Acq On : 8 Apr 2014 6:07 am
Operator : courtnem
Sample : jb63450-1
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 45 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

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

Method : C:\msdchem\1\METHODS\M3D4135.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D97800.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.663	112	114	118	rBV	1675	3565	0.08%	0.027%
2	3.695	118	120	129	rVB2	918	2126	0.05%	0.016%
3	4.439	252	262	280	rBV2	27647	67297	1.59%	0.514%
4	6.552	657	665	678	rBV	5380	13881	0.33%	0.106%
5	7.223	781	793	823	rBV2	35349	128367	3.03%	0.981%
6	7.653	866	875	884	rBV2	4377	9853	0.23%	0.075%
7	8.796	1088	1093	1098	rVB3	665	1409	0.03%	0.011%
8	8.954	1112	1123	1154	rBV	1113703	2418730	57.03%	18.487%
9	9.326	1188	1194	1200	rVB4	837	1366	0.03%	0.010%
10	9.462	1209	1220	1227	rBV	204690	464121	10.94%	3.547%
11	9.525	1227	1232	1246	rVB	121458	258688	6.10%	1.977%
12	9.945	1303	1312	1327	rBV	119208	249991	5.89%	1.911%
13	10.385	1384	1396	1412	rBV	283504	569812	13.44%	4.355%
14	10.726	1451	1461	1496	rVB	1073668	2154824	50.81%	16.470%
15	12.026	1700	1709	1720	rBV	407379	733097	17.29%	5.603%
16	12.089	1720	1721	1730	rVB2	1610	2903	0.07%	0.022%
17	12.681	1825	1834	1858	rBV	2378022	4241055	100.00%	32.415%
18	13.541	1989	1998	2013	rBV	366396	608674	14.35%	4.652%
19	14.365	2154	2155	2160	rBV2	4093	5803	0.14%	0.044%
20	14.427	2164	2167	2172	rVB2	2919	4962	0.12%	0.038%
21	14.695	2210	2218	2232	rBV	309694	484769	11.43%	3.705%
22	15.848	2431	2438	2451	rBV	419747	636774	15.01%	4.867%
23	17.605	2769	2773	2776	rBV2	897	1268	0.03%	0.010%
24	18.003	2846	2849	2858	rBV4	513	1158	0.03%	0.009%
25	18.444	2931	2933	2943	rVB5	606	1109	0.03%	0.008%
26	18.533	2943	2950	2952	rBV4	610	1092	0.03%	0.008%
27	18.627	2965	2968	2976	rVB6	730	1708	0.04%	0.013%
28	18.753	2984	2992	2993	rBV6	619	1032	0.02%	0.008%
29	18.915	3008	3023	3026	rVB9	858	2400	0.06%	0.018%
30	19.036	3044	3046	3050	rVB3	972	1156	0.03%	0.009%
31	19.083	3053	3055	3062	rVV6	792	1432	0.03%	0.011%
32	19.214	3062	3080	3094	rVV8	1095	7651	0.18%	0.058%
33	19.340	3094	3104	3110	rVV7	604	1579	0.04%	0.012%

M3D4135.M Wed Apr 09 16:04:43 2014 DATAREVIW Page: 1

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97800.D
Acq On : 8 Apr 2014 6:07 am
Operator : courtnem
Sample : jb63450-1
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 45 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

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

Method : C:\msdchem\1\METHODS\M3D4135.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

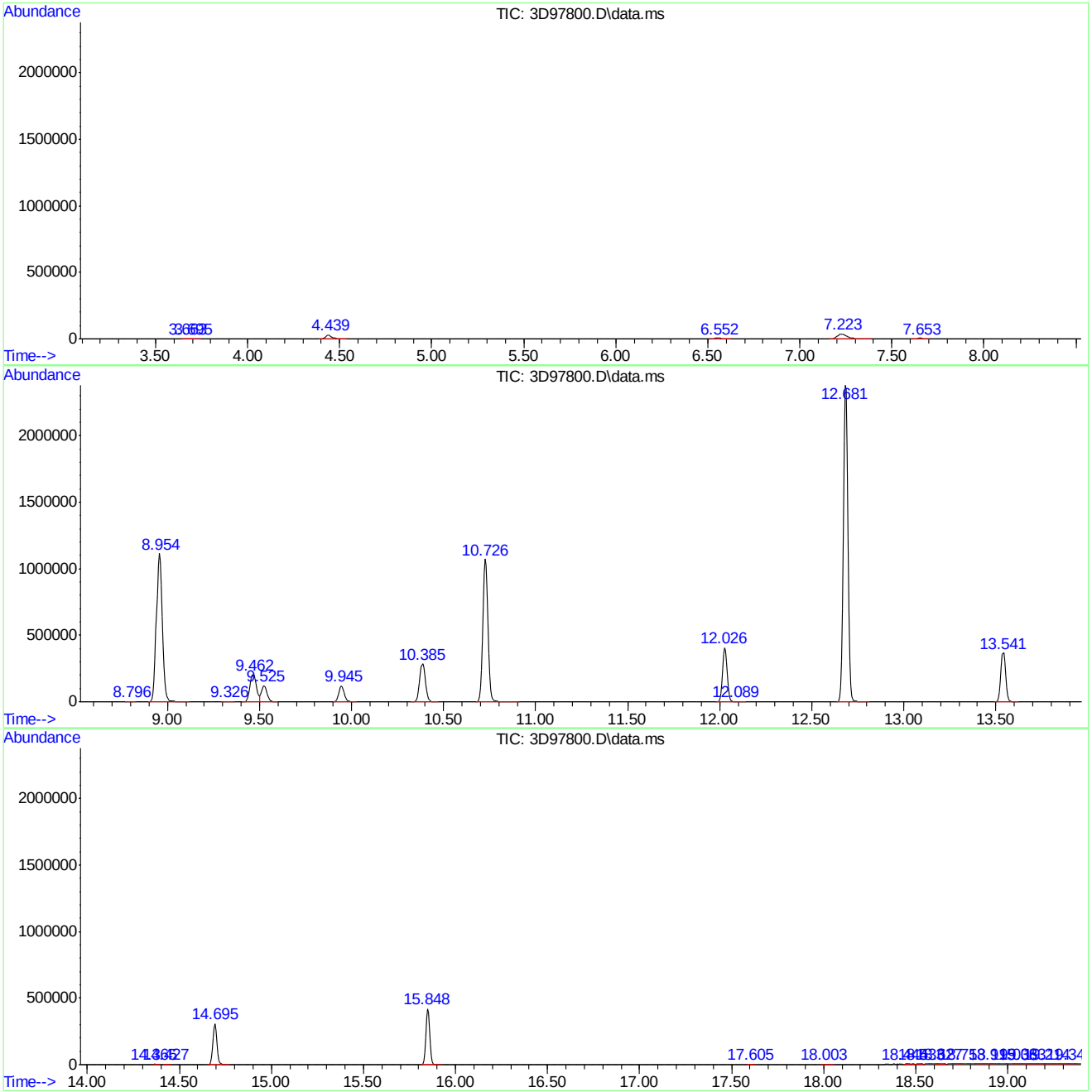
Sum of corrected areas: 13083652

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97800.D
Acq On : 8 Apr 2014 6:07 am
Operator : courtnem
Sample : jb63450-1
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97800.D
Acq On : 8 Apr 2014 6:07 am
Operator : courtnem
Sample : jb63450-1
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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

No Library Search Compounds Detected

M3D4135.M Wed Apr 09 16:04:44 2014 DATAREVIW Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97808.D
Acq On : 8 Apr 2014 10:34 am
Operator : courtnem
Sample : jb63450-1
Misc : MS65386,V3D4218,w,,,,10
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:44:20 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.229	65	80785	500.00	ug/L	0.00
4) pentafluorobenzene	9.473	168	175613	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.390	114	252564	50.00	ug/L	0.00
88) chlorobenzene-d5	13.546	117	201446	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.859	152	107955	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.530	113	83015	55.05	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 110.10%			
51) 1,2-dichloroethane-d4 (s)	9.950	65	91361	57.68	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 115.36%			
80) toluene-d8 (s)	12.036	98	277218	53.20	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.40%			
106) 4-bromofluorobenzene (s)	14.700	95	94142	52.50	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 105.00%			
Target Compounds						Qvalue
11) vinyl chloride	4.434	62	3661	1.84	ug/L	94
43) cis-1,2-dichloroethene	8.964	61	73149	27.24	ug/L	95
69) trichloroethene	10.736	95	35950	23.81	ug/L	96
89) tetrachloroethene	12.692	166	69132	45.22	ug/L	98

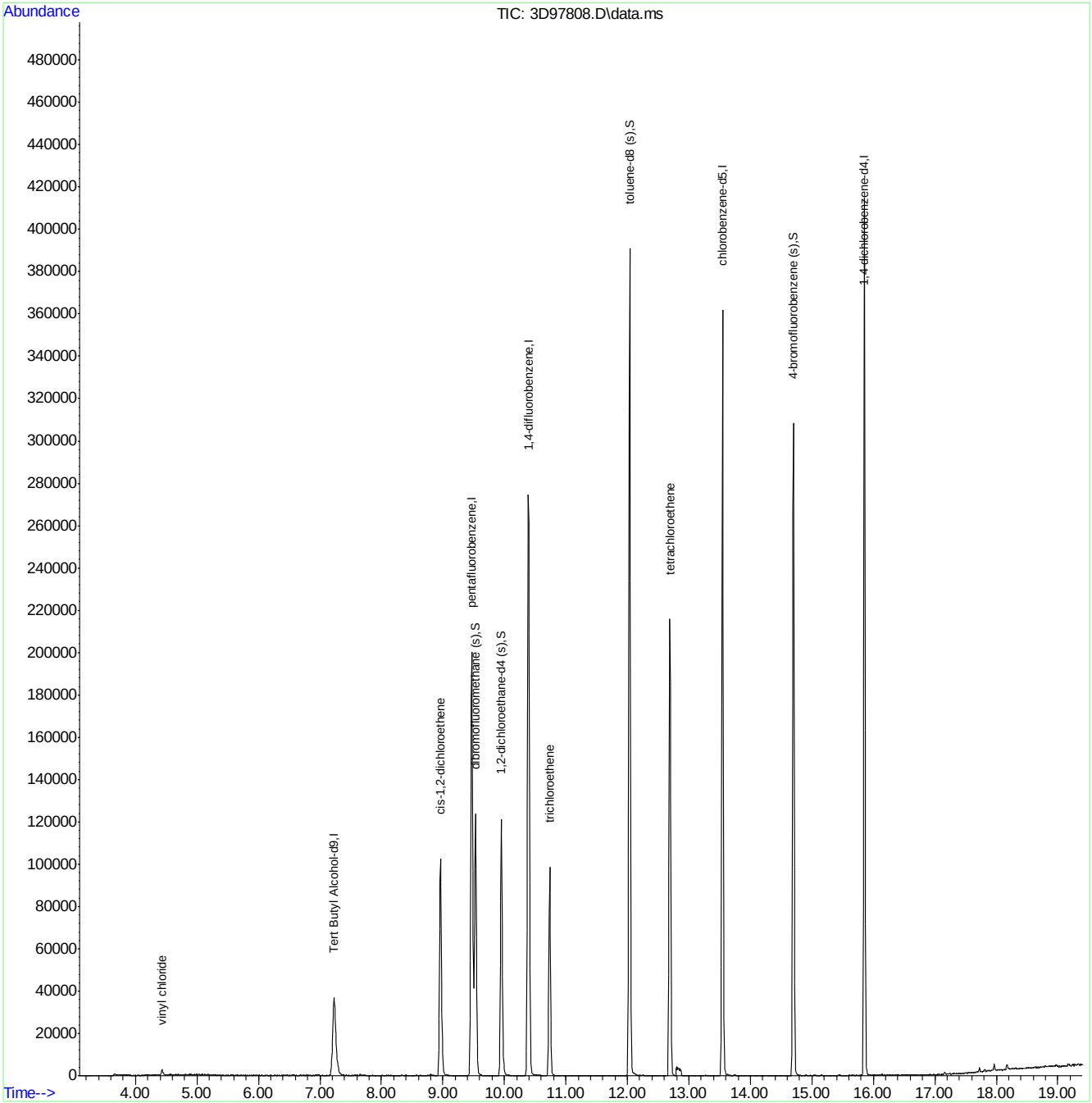
(#) = qualifier out of range (m) = manual integration (+) = signals summed

M3D4135.M Tue Apr 08 15:44:27 2014 3D Page: 1

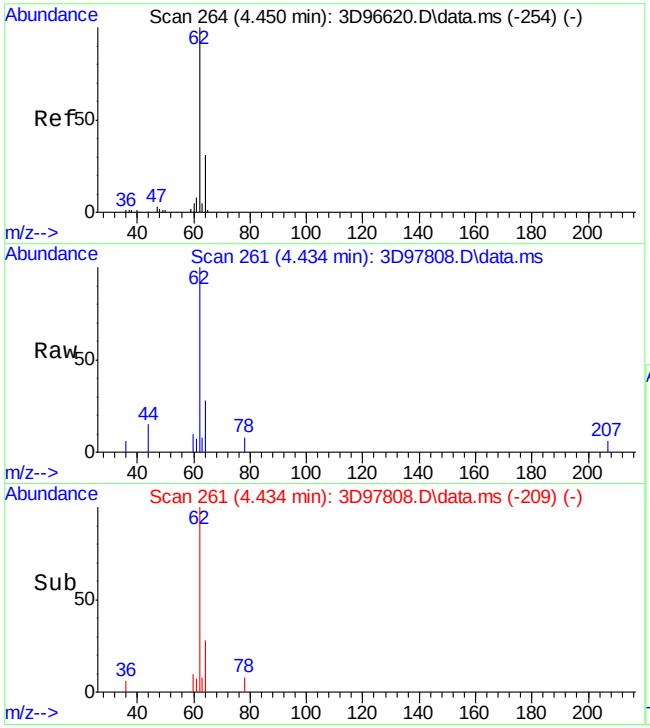
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97808.D
Acq On : 8 Apr 2014 10:34 am
Operator : courtnem
Sample : jb63450-1
Misc : MS65386,V3D4218,w,,,,10
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:44:20 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



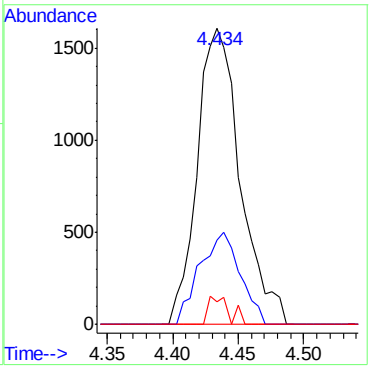
M3D4135.M Tue Apr 08 15:44:27 2014 3D Page: 2

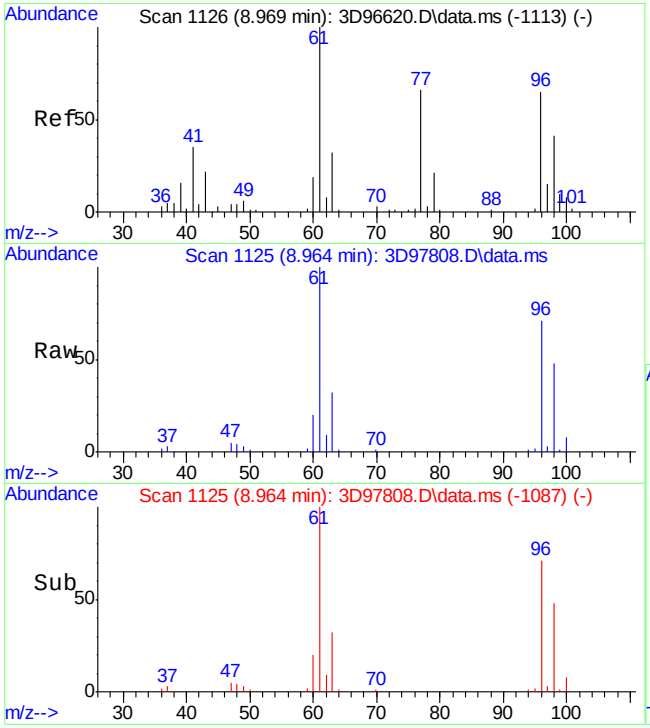


#11
vinyl chloride
Concen: 1.84 ug/L
RT: 4.434 min Scan# 261
Delta R.T. -0.026 min
Lab File: 3D97808.D
Acq: 8 Apr 2014 10:34 am

Tgt Ion: 62 Resp: 3661

Ion	Ratio	Lower	Upper
62	100		
64	28.4	2.2	62.2
61	7.5	0.0	38.4

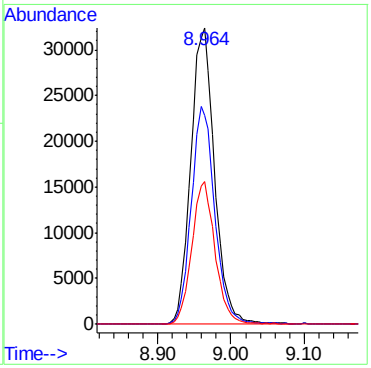


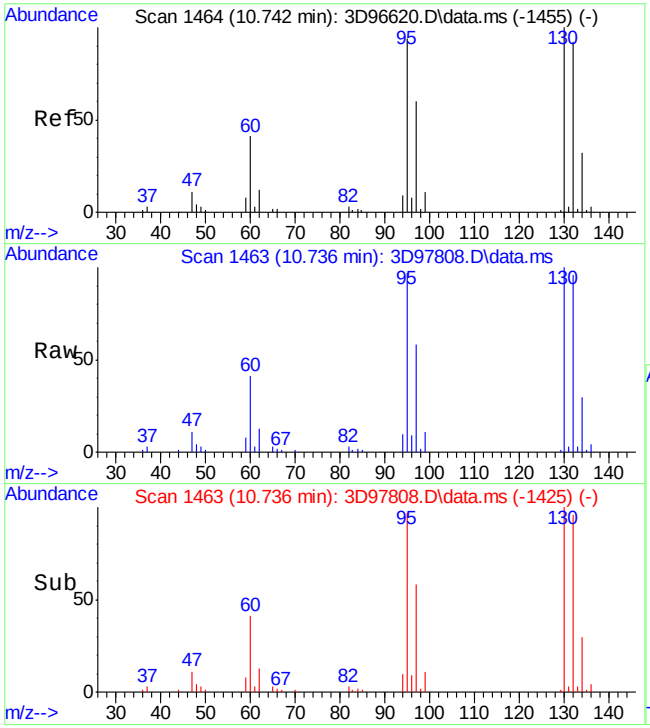


#43
cis-1,2-dichloroethene
Concen: 27.24 ug/L
RT: 8.964 min Scan# 1125
Delta R.T. 0.000 min
Lab File: 3D97808.D
Acq: 8 Apr 2014 10:34 am

Tgt Ion: 61 Resp: 73149

Ion	Ratio	Lower	Upper
61	100		
96	70.6	37.6	97.6
98	48.0	13.1	73.1

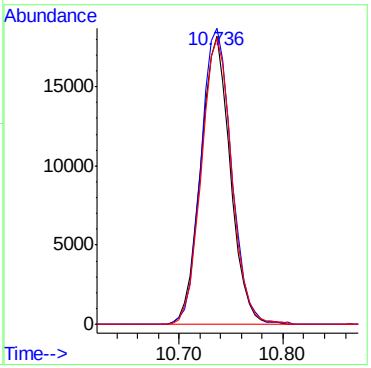


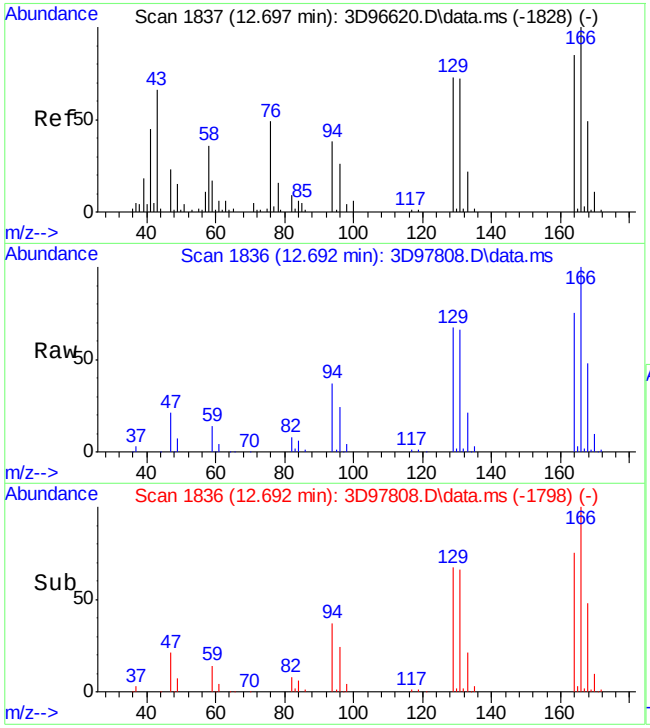


#69
trichloroethene
Concen: 23.81 ug/L
RT: 10.736 min Scan# 1463
Delta R.T. 0.000 min
Lab File: 3D97808.D
Acq: 8 Apr 2014 10:34 am

Tgt Ion: 95 Resp: 35950

Ion	Ratio	Lower	Upper
95	100		
130	102.7	76.2	136.2
132	99.1	74.7	134.7

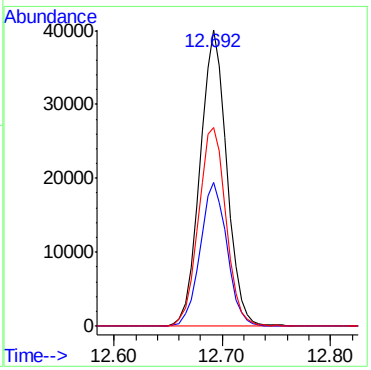




#89
tetrachloroethene
Concen: 45.22 ug/L
RT: 12.692 min Scan# 1836
Delta R.T. 0.000 min
Lab File: 3D97808.D
Acq: 8 Apr 2014 10:34 am

Tgt Ion:166 Resp: 69132

Ion	Ratio	Lower	Upper
166	100		
168	48.5	18.4	78.4
129	66.9	40.1	100.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97801.D
Acq On : 8 Apr 2014 6:34 am
Operator : courtnem
Sample : jb63450-2
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Apr 09 16:04:59 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.229	65	76872	500.00	ug/L	0.00
4) pentafluorobenzene	9.467	168	176981	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.385	114	251761	50.00	ug/L	-0.01
88) chlorobenzene-d5	13.541	117	202316	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.848	152	108913	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.525	113	81840	53.85	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 107.70%			
51) 1,2-dichloroethane-d4 (s)	9.945	65	89451	56.04	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 112.08%			
80) toluene-d8 (s)	12.026	98	277618	53.45	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.90%			
106) 4-bromofluorobenzene (s)	14.695	95	94550	52.27	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 104.54%			

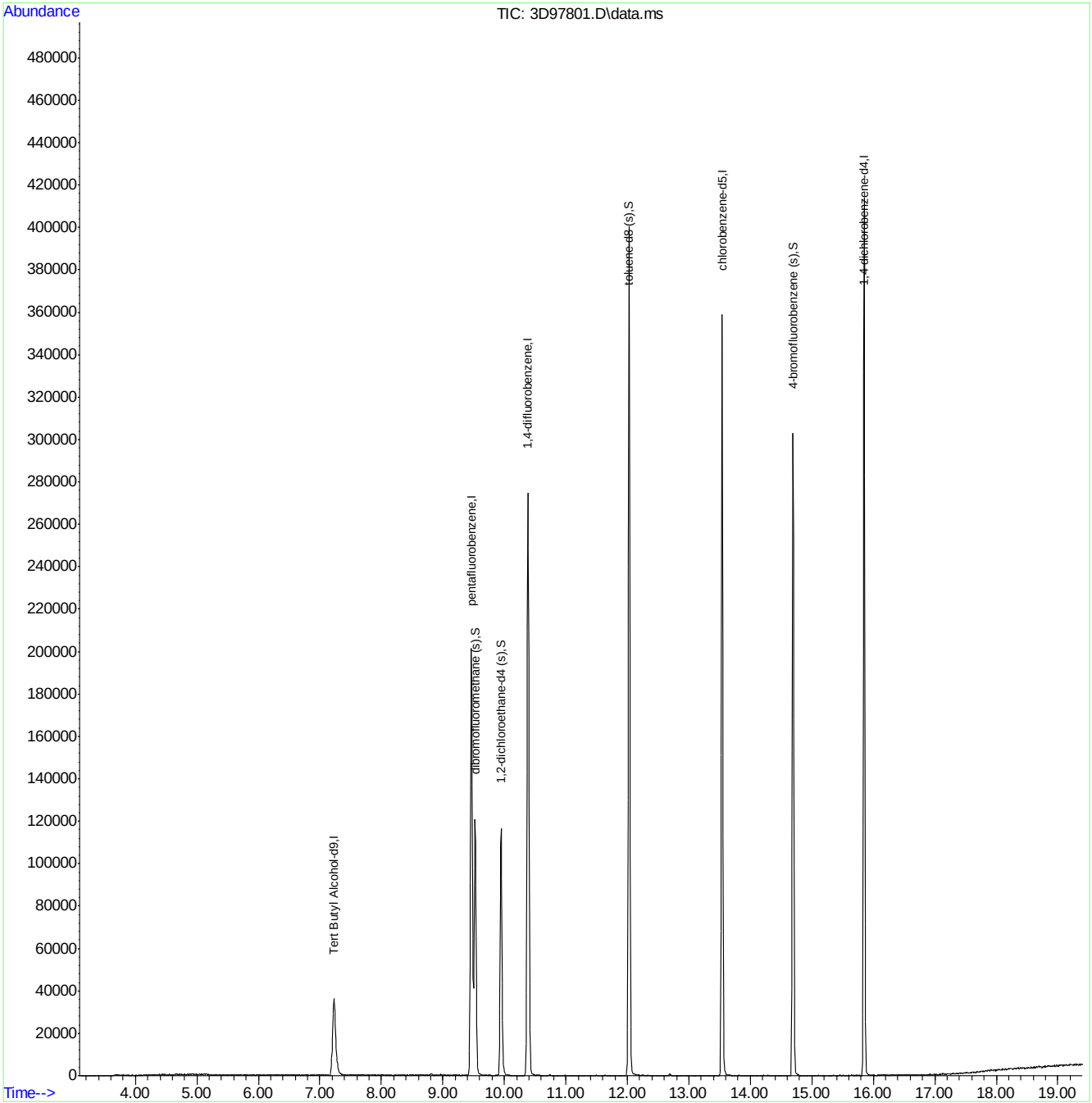
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97801.D
Acq On : 8 Apr 2014 6:34 am
Operator : courtnem
Sample : jb63450-2
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Apr 09 16:04:59 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Wed Apr 09 16:07:46 2014 DATAREVIW Page: 2

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97801.D
Acq On : 8 Apr 2014 6:34 am
Operator : courtnem
Sample : jb63450-2
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 46 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

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

Method : C:\msdchem\1\METHODS\M3D4135.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D97801.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.229	782	794	818	rBV	36241	132943	18.42%	3.237%
2	8.807	1088	1095	1102	rVB3	794	2000	0.28%	0.049%
3	8.964	1119	1125	1132	rBV3	524	1047	0.15%	0.025%
4	9.462	1208	1220	1227	rBV	201561	458803	63.57%	11.173%
5	9.525	1227	1232	1246	rVB	120563	255786	35.44%	6.229%
6	9.945	1299	1312	1333	rBV	116650	250143	34.66%	6.091%
7	10.385	1387	1396	1415	rBV	274671	557683	77.27%	13.581%
8	12.026	1700	1709	1732	rBV	400588	721718	100.00%	17.575%
9	12.687	1831	1835	1840	rBV2	962	1159	0.16%	0.028%
10	13.541	1990	1998	2013	rBV	358862	601587	83.35%	14.650%
11	14.695	2210	2218	2241	rVB	302924	474921	65.80%	11.565%
12	15.848	2431	2438	2452	rBV	413836	633581	87.79%	15.429%
13	17.442	2738	2742	2746	rBV4	526	1025	0.14%	0.025%
14	17.688	2786	2789	2796	rBV3	755	1178	0.16%	0.029%
15	17.767	2799	2804	2808	rBV4	709	1358	0.19%	0.033%
16	18.197	2885	2886	2897	rVB7	571	1240	0.17%	0.030%
17	18.653	2970	2973	2976	rBV5	894	1129	0.16%	0.027%
18	18.695	2976	2981	2983	rVV5	1065	1553	0.22%	0.038%
19	18.716	2983	2985	2990	rVB4	743	1090	0.15%	0.027%
20	18.852	3001	3011	3021	rBV8	591	2248	0.31%	0.055%
21	19.125	3061	3063	3075	rBV6	622	1945	0.27%	0.047%
22	19.198	3075	3077	3085	rVB5	1025	1269	0.18%	0.031%
23	19.309	3096	3098	3103	rBV3	934	1038	0.14%	0.025%

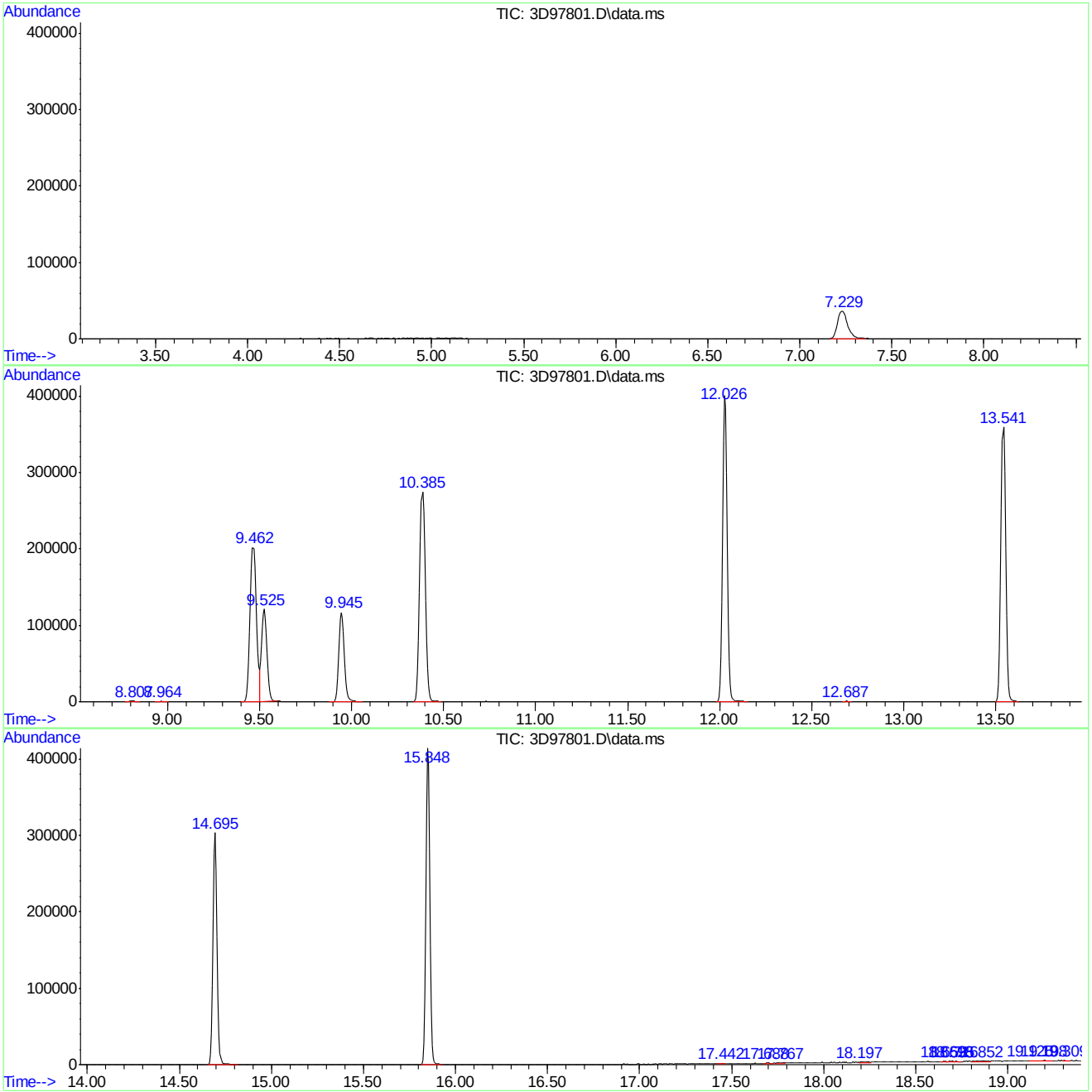
Sum of corrected areas: 4106444

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97801.D
Acq On : 8 Apr 2014 6:34 am
Operator : courtnem
Sample : jb63450-2
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 46 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p



M3D4135.M Wed Apr 09 16:05:11 2014 DATAREVIW Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97801.D
Acq On : 8 Apr 2014 6:34 am
Operator : courtnem
Sample : jb63450-2
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 46 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97782.D
Acq On : 7 Apr 2014 9:57 pm
Operator : courtnem
Sample : mb
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 09 15:27:09 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

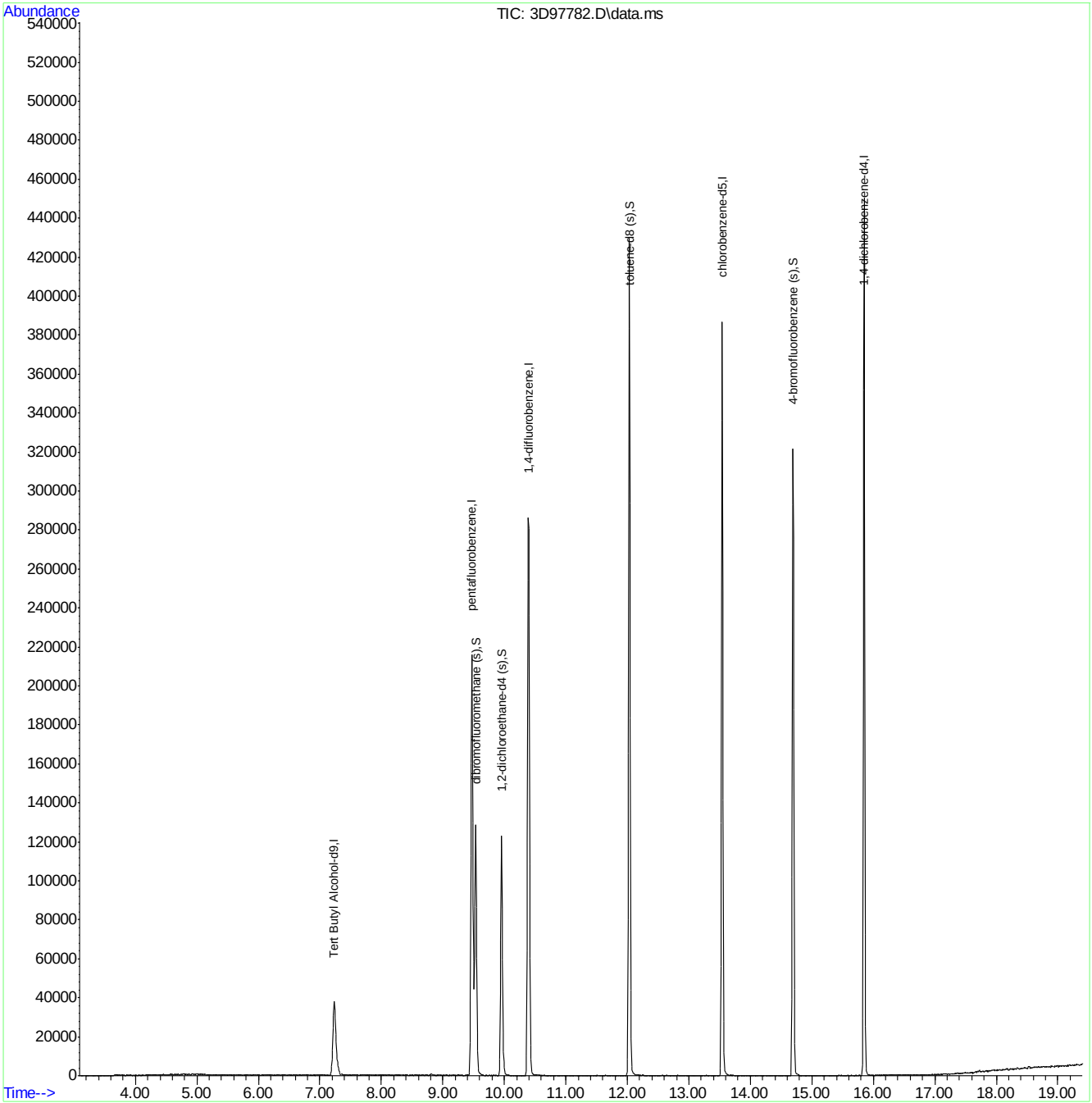
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.229	65	80842	500.00	ug/L	0.00
4) pentafluorobenzene	9.473	168	189468	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.390	114	270627	50.00	ug/L	0.00
88) chlorobenzene-d5	13.541	117	218572	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.848	152	116967	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.536	113	87871	54.01	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 108.02%			
51) 1,2-dichloroethane-d4 (s)	9.955	65	93309	54.60	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 109.20%			
80) toluene-d8 (s)	12.031	98	297332	53.25	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.50%			
106) 4-bromofluorobenzene (s)	14.695	95	100754	51.86	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 103.72%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97782.D
Acq On : 7 Apr 2014 9:57 pm
Operator : courtnem
Sample : mb
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 09 15:27:09 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Wed Apr 09 16:11:37 2014 DATAREVIW Page: 2

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97782.D
Acq On : 7 Apr 2014 9:57 pm
Operator : courtnem
Sample : mb
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

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

Method : C:\msdchem\1\METHODS\M3D4135.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D97782.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.234	780	795	815	rBV	38151	137708	17.95%	3.158%
2	8.802	1089	1094	1100	rBV3	624	1391	0.18%	0.032%
3	9.473	1210	1222	1228	rBV	215732	477899	62.30%	10.959%
4	9.530	1228	1233	1248	rVB	127926	282474	36.82%	6.477%
5	9.955	1304	1314	1328	rBV	122896	259743	33.86%	5.956%
6	10.390	1385	1397	1417	rBV	286312	593475	77.36%	13.609%
7	12.031	1701	1710	1730	rBV	429372	767112	100.00%	17.590%
8	13.541	1990	1998	2016	rBV	386999	638675	83.26%	14.645%
9	14.695	2211	2218	2233	rBV	321504	506200	65.99%	11.607%
10	15.848	2430	2438	2457	rBV	450502	675854	88.10%	15.498%
11	17.951	2832	2839	2840	rBV4	755	1486	0.19%	0.034%
12	18.234	2887	2893	2894	rBV4	812	1023	0.13%	0.023%
13	18.339	2911	2913	2923	rVB8	816	1329	0.17%	0.030%
14	18.617	2956	2966	2969	rBV7	731	1992	0.26%	0.046%
15	18.763	2990	2994	2999	rBV4	845	1594	0.21%	0.037%
16	18.889	3017	3018	3028	rBV7	641	1165	0.15%	0.027%
17	18.973	3032	3034	3042	rVB7	765	1503	0.20%	0.034%
18	19.125	3042	3063	3065	rBV8	913	4498	0.59%	0.103%
19	19.162	3068	3070	3088	rVV8	865	2533	0.33%	0.058%
20	19.309	3094	3098	3105	rVB7	1071	2297	0.30%	0.053%
21	19.361	3105	3108	3110	rBV4	760	1033	0.13%	0.024%

Sum of corrected areas: 4360984

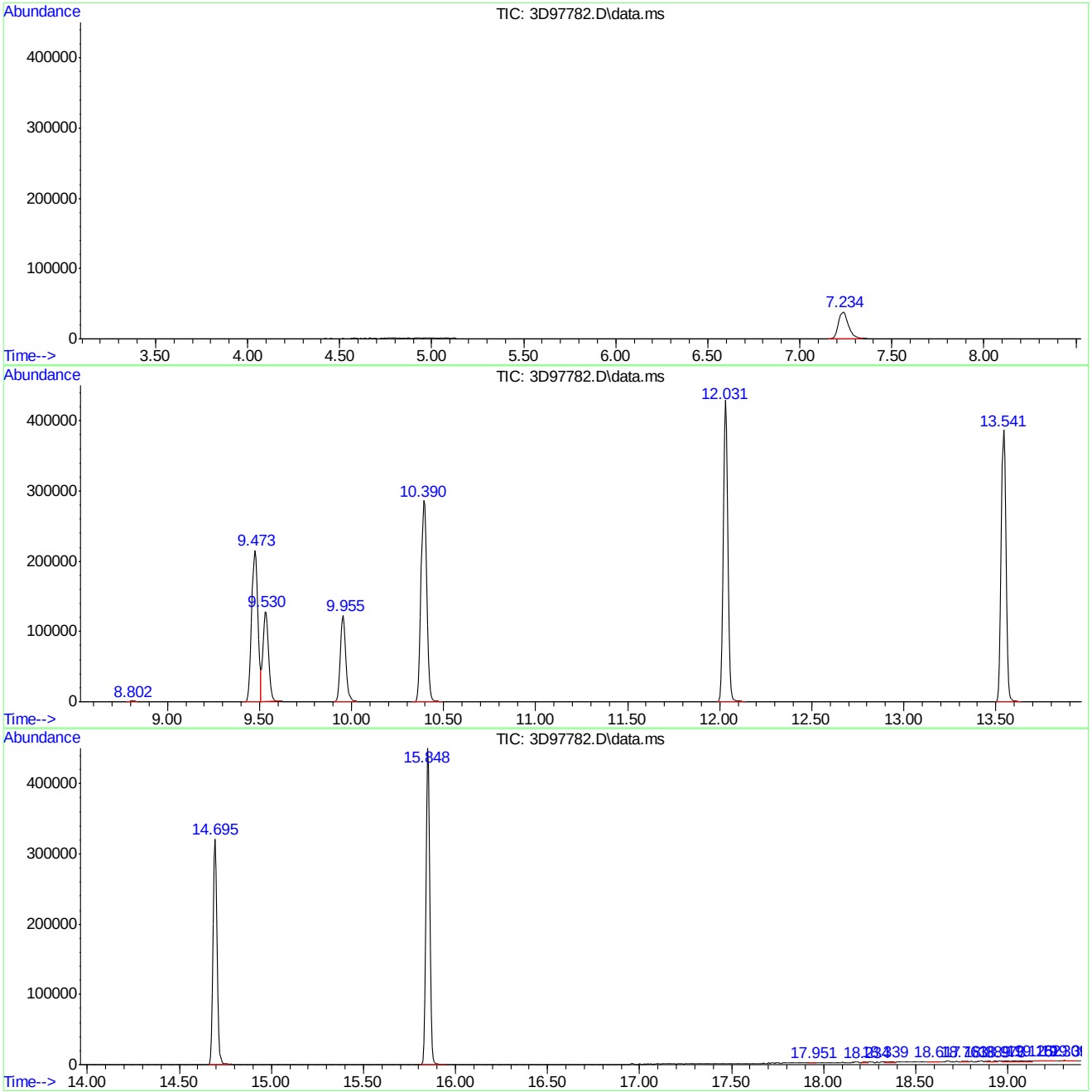
M3D4135.M Wed Apr 09 15:27:16 2014 DATAREVIW Page: 1

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97782.D
Acq On : 7 Apr 2014 9:57 pm
Operator : courtnem
Sample : mb
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97782.D
Acq On : 7 Apr 2014 9:57 pm
Operator : courtnem
Sample : mb
Misc : MS65386,V3D4217,w,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97806.D
Acq On : 8 Apr 2014 9:28 am
Operator : courtnem
Sample : mb
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 15:42:26 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.229	65	87506	500.00	ug/L	0.00
4) pentafluorobenzene	9.473	168	171028	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.390	114	245731	50.00	ug/L	0.00
88) chlorobenzene-d5	13.547	117	196384	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.853	152	106707	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.530	113	80797	55.01	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 110.02%			
51) 1,2-dichloroethane-d4 (s)	9.950	65	91066	59.03	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 118.06%			
80) toluene-d8 (s)	12.037	98	270399	53.33	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.66%			
106) 4-bromofluorobenzene (s)	14.700	95	93245	52.61	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 105.22%			

Target Compounds	Qvalue

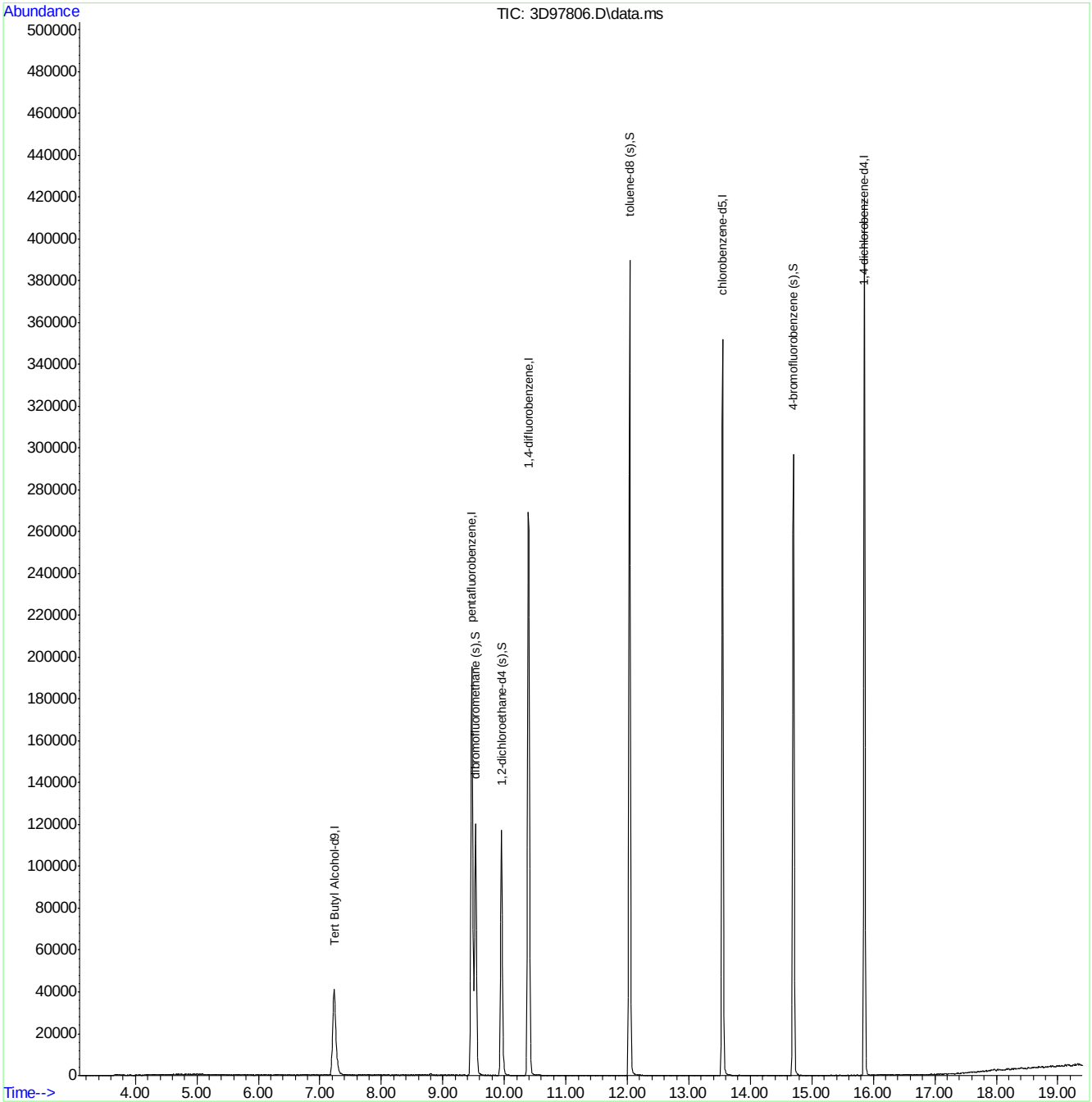
(#) = qualifier out of range (m) = manual integration (+) = signals summed

M3D4135.M Tue Apr 08 15:42:32 2014 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97806.D
Acq On : 8 Apr 2014 9:28 am
Operator : courtnem
Sample : mb
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 15:42:26 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Tue Apr 08 15:42:32 2014 3D Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97783.D
Acq On : 7 Apr 2014 10:24 pm
Operator : courtnem
Sample : bs
Misc : MS65550,V3D4217,w,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 09 15:27:40 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.234	65	82318	500.00	ug/L		0.00
4) pentafluorobenzene	9.468	168	186806	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	272690	50.00	ug/L		0.00
88) chlorobenzene-d5	13.547	117	217451	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.854	152	117533	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	88205	54.98	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 109.96%				
51) 1,2-dichloroethane-d4 (s)	9.950	65	93877	55.72	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 111.44%				
80) toluene-d8 (s)	12.031	98	300735	53.45	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.90%				
106) 4-bromofluorobenzene (s)	14.700	95	101114	51.80	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 103.60%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	18589	1357.10	ug/L		99
3) tertiary butyl alcohol	7.349	59	44012	242.60	ug/L		97
8) chlorodifluoromethane	3.873	51	89783	69.69	ug/L		97
9) dichlorodifluoromethane	3.847	85	94563	58.77	ug/L		95
10) chloromethane	4.204	50	113564	50.74	ug/L		100
11) vinyl chloride	4.455	62	105905	50.15	ug/L		99
12) bromomethane	5.095	94	68073	56.21	ug/L		98
13) chloroethane	5.273	64	60904	54.32	ug/L		97
16) trichlorofluoromethane	5.729	101	123551	56.54	ug/L		98
18) ethyl ether	6.128	74	43748	50.41	ug/L		95
21) acrolein	6.395	56	135828	389.63	ug/L		100
22) 1,1-dichloroethene	6.558	61	115428	48.00	ug/L		98
23) acetone	6.615	58	7294	49.27	ug/L		89
24) allyl chloride	7.087	76	44073	49.14	ug/L	#	82
25) acetonitrile	7.066	40	78115	491.87	ug/L	#	75
27) iodomethane	6.841	142	143246	47.33	ug/L		98
28) iso-butyl alcohol	9.761	41	28356	481.18	ug/L		98
29) carbon disulfide	6.961	76	261158	45.26	ug/L		98
30) methylene chloride	7.281	84	81742	43.77	ug/L		97
31) methyl acetate	7.071	74	12470	45.61	ug/L		93
32) methyl tert butyl ether	7.591	73	459721	94.10	ug/L		98
33) trans-1,2-dichloroethene	7.648	61	112142	47.47	ug/L		99
34) di-isopropyl ether	8.178	45	283764	50.52	ug/L		88
35) ethyl tert-butyl ether	8.650	59	257964	50.69	ug/L		99
36) 2-butanone	8.922	72	8990	50.09	ug/L		85
37) 1,1-dichloroethane	8.220	63	144898	49.06	ug/L		99
38) chloroprene	8.319	53	104257	47.79	ug/L		97
39) acrylonitrile	7.617	53	158588	252.49	ug/L		98
40) vinyl acetate	8.204	86	14456	55.59	ug/L		96
41) ethyl acetate	8.933	45	11629	46.34	ug/L		82
42) 2,2-dichloropropane	8.954	77	94467	46.85	ug/L		97
43) cis-1,2-dichloroethene	8.959	61	137390	48.10	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97783.D
Acq On : 7 Apr 2014 10:24 pm
Operator : courtnem
Sample : bs
Misc : MS65550,V3D4217,w,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 09 15:27:40 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) propionitrile	9.032	54	120950	509.94	ug/L	99
45) methyl acrylate	9.017	55	89921	45.21	ug/L	100
46) bromochloromethane	9.274	128	44211	50.72	ug/L	95
47) tetrahydrofuran	9.305	42	29399	46.39	ug/L	98
48) chloroform	9.326	83	137193	48.92	ug/L	99
49) Tert-Butyl Formate	9.352	59	76392	53.55	ug/L	98
52) freon 113	6.516	151	60479	54.90	ug/L	98
53) methacrylonitrile	9.211	41	52367	45.11	ug/L	95
54) 1,1,1-trichloroethane	9.572	97	117021	50.03	ug/L	99
56) 2,2,4-Trimethylpentane	9.997	57	259801	46.29	ug/L	97
57) tert-amyl methyl ether	10.034	73	247454	49.53	ug/L	98
59) epichlorohydrin	11.659	57	31274	189.57	ug/L	97
60) n-butyl alcohol	10.516	56	112673	2433.32	ug/L	99
61) cyclohexane	9.641	84	112722	46.98	ug/L	96
62) carbon tetrachloride	9.772	117	106079	49.57	ug/L	99
63) 1,1-dichloropropene	9.751	75	98861	45.05	ug/L	98
64) hexane	7.931	57	83191	52.44	ug/L	98
65) benzene	10.018	78	305805	46.46	ug/L	99
66) heptane	10.170	57	47314	47.88	ug/L	98
67) isopropyl acetate	9.934	43	169944	53.73	ug/L	97
68) 1,2-dichloroethane	10.039	62	102158	51.90	ug/L	98
69) trichloroethene	10.731	95	76849	47.15	ug/L	95
72) 2-nitropropane	11.518	41	29105	46.31	ug/L	100
73) 2-chloroethyl vinyl ether	11.528	63	265101	236.84	ug/L	98
74) methyl methacrylate	10.999	41	124817	47.04	ug/L	96
75) 1,2-dichloropropane	11.004	63	83261	49.13	ug/L	97
76) methylcyclohexane	10.941	83	122487	51.01	ug/L	98
77) dibromomethane	11.166	93	50459	49.16	ug/L	99
78) bromodichloromethane	11.297	83	106162	48.66	ug/L	98
79) cis-1,3-dichloropropene	11.748	75	120721	45.56	ug/L	97
81) 4-methyl-2-pentanone	11.837	58	31631	48.34	ug/L	93
82) toluene	12.105	92	174306	46.32	ug/L	98
83) 3-methyl-1-butanol	11.858	70	40845	944.60	ug/L	98
84) trans-1,3-dichloropropene	12.309	75	105717	46.14	ug/L	91
85) ethyl methacrylate	12.294	69	90192	46.84	ug/L	96
86) 1,1,2-trichloroethane	12.524	83	57381	46.84	ug/L	97
87) 2-hexanone	12.692	58	27096	47.99	ug/L	90
89) tetrachloroethene	12.692	166	80511	48.78	ug/L	98
90) 1,3-dichloropropane	12.708	76	108212	48.27	ug/L	99
91) butyl acetate	12.760	56	49788	48.07	ug/L	91
92) 3,3-Dimethyl-1-Butanol	12.860	57	77818	453.84	ug/L	97
93) dibromochloromethane	12.975	129	82940	48.22	ug/L	99
94) 1,2-dibromoethane	13.122	107	70100	48.64	ug/L	100
96) chlorobenzene	13.578	112	191337	47.67	ug/L	99
97) 1,1,1,2-tetrachloroethane	13.636	131	77026	49.69	ug/L	98
98) ethylbenzene	13.625	91	312197	46.63	ug/L	100
99) m,p-xylene	13.735	106	236848	92.34	ug/L	94
100) o-xylene	14.150	106	118929	46.39	ug/L	98
101) styrene	14.165	104	199108	46.84	ug/L	99
103) bromoform	14.433	173	61148	48.56	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97783.D
Acq On : 7 Apr 2014 10:24 pm
Operator : courtnem
Sample : bs
Misc : MS65550,V3D4217,w,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 09 15:27:40 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

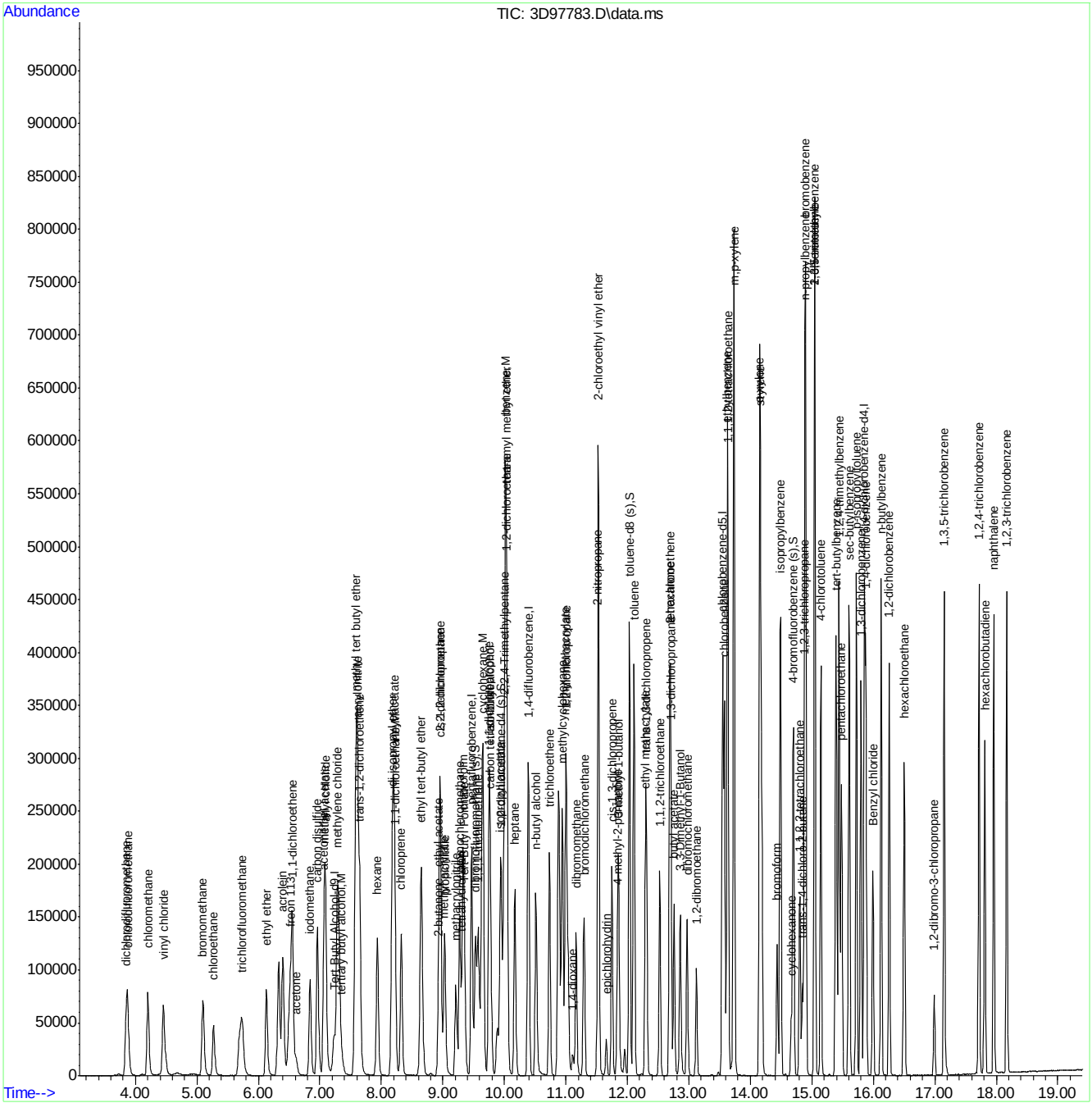
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) isopropylbenzene	14.490	105	305099	47.61	ug/L	99
107) bromobenzene	14.894	156	88189	48.68	ug/L	97
108) cyclohexanone	14.663	55	23088	445.88	ug/L	97
109) 1,1,2,2-tetrachloroethane	14.805	83	88077	44.09	ug/L	100
110) trans-1,4-dichloro-2-b...	14.847	53	16080	37.94	ug/L	89
111) 1,2,3-trichloropropane	14.878	110	21801	50.13	ug/L	94
112) n-propylbenzene	14.899	91	356897	48.93	ug/L	98
114) 2-chlorotoluene	15.046	126	76963	48.66	ug/L	99
115) 4-chlorotoluene	15.146	126	76336	47.96	ug/L	99
116) 1,3,5-trimethylbenzene	15.046	105	253523	47.05	ug/L	100
117) tert-butylbenzene	15.392	119	217577	47.65	ug/L	94
118) pentachloroethane	15.481	167	61181	50.96	ug/L	98
119) 1,2,4-trimethylbenzene	15.439	105	259100	48.96	ug/L	100
120) sec-butylbenzene	15.607	105	328556	46.37	ug/L	99
121) 1,3-dichlorobenzene	15.796	146	157676	46.30	ug/L	99
122) p-isopropyltoluene	15.722	119	276781	46.65	ug/L	99
123) 1,4-dichlorobenzene	15.880	146	161342	46.57	ug/L	99
124) 1,2-dichlorobenzene	16.257	146	160611	47.43	ug/L	97
126) n-butylbenzene	16.126	92	143183	47.19	ug/L	97
128) 1,2-dibromo-3-chloropr...	16.991	157	21003	49.11	ug/L	89
129) 1,3,5-trichlorobenzene	17.154	180	148957	49.96	ug/L	100
130) 1,2,4-trichlorobenzene	17.720	180	142469	51.87	ug/L	99
131) hexachlorobutadiene	17.814	225	69786	47.62	ug/L	99
132) naphthalene	17.961	128	309047	55.43	ug/L	99
133) 1,2,3-trichlorobenzene	18.171	180	138451	55.63	ug/L	98
134) hexachloroethane	16.504	119	61095	49.18	ug/L	98
135) Benzyl chloride	15.995	91	135328	49.93	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97783.D
Acq On : 7 Apr 2014 10:24 pm
Operator : courtnem
Sample : bs
Misc : MS65550,V3D4217,w,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 09 15:27:40 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Wed Apr 09 16:11:40 2014 DATAREVIW Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97807.D
Acq On : 8 Apr 2014 10:00 am
Operator : courtnem
Sample : bs
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:43:23 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.234	65	81614	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	171579	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	247272	50.00	ug/L		0.00
88) chlorobenzene-d5	13.547	117	201351	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.854	152	108796	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	82512	56.00	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 112.00%				
51) 1,2-dichloroethane-d4 (s)	9.950	65	90185	58.28	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 116.56%				
80) toluene-d8 (s)	12.037	98	274739	53.85	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 107.70%				
106) 4-bromofluorobenzene (s)	14.700	95	94685	52.40	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 104.80%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.119	88	18191	1339.50	ug/L		97
3) tertiary butyl alcohol	7.349	59	43143	239.86	ug/L		97
8) chlorodifluoromethane	3.868	51	77834	65.78	ug/L		97
9) dichlorodifluoromethane	3.847	85	73309	49.61	ug/L		98
10) chloromethane	4.198	50	83370	40.56	ug/L		97
11) vinyl chloride	4.450	62	81319	41.93	ug/L		99
12) bromomethane	5.095	94	52923	47.58	ug/L		98
13) chloroethane	5.268	64	47402	46.03	ug/L		94
16) trichlorofluoromethane	5.729	101	104580	52.11	ug/L		98
18) ethyl ether	6.122	74	39200	49.18	ug/L		94
21) acrolein	6.395	56	154605	482.86	ug/L		99
22) 1,1-dichloroethene	6.552	61	102710	46.50	ug/L		97
23) acetone	6.615	58	6370	46.85	ug/L		91
24) allyl chloride	7.087	76	40155	48.75	ug/L	#	74
25) acetonitrile	7.071	40	76084	521.60	ug/L		90
27) iodomethane	6.841	142	125500	45.14	ug/L		97
28) iso-butyl alcohol	9.766	41	27310	504.55	ug/L		98
29) carbon disulfide	6.961	76	225373	42.53	ug/L		98
30) methylene chloride	7.286	84	72427	42.23	ug/L		96
31) methyl acetate	7.071	74	11443	45.57	ug/L	#	89
32) methyl tert butyl ether	7.591	73	424629	94.63	ug/L		97
33) trans-1,2-dichloroethene	7.653	61	100206	46.18	ug/L		97
34) di-isopropyl ether	8.183	45	254578	49.34	ug/L		97
35) ethyl tert-butyl ether	8.650	59	232441	49.73	ug/L		99
36) 2-butanone	8.928	72	8406	50.99	ug/L		81
37) 1,1-dichloroethane	8.225	63	130202	48.00	ug/L		99
38) chloroprene	8.325	53	93026	46.43	ug/L		96
39) acrylonitrile	7.617	53	152091	263.64	ug/L		97
40) vinyl acetate	8.204	86	13281	55.60	ug/L		90
41) ethyl acetate	8.938	45	11345	49.22	ug/L		95
42) 2,2-dichloropropane	8.959	77	107224	57.90	ug/L		97
43) cis-1,2-dichloroethene	8.959	61	129212	49.25	ug/L		95
44) propionitrile	9.038	54	114358	524.94	ug/L		91

M3D4135.M Tue Apr 08 15:43:30 2014 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97807.D
Acq On : 8 Apr 2014 10:00 am
Operator : courtnem
Sample : bs
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:43:23 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) methyl acrylate	9.022	55	83819	45.88	ug/L	97
46) bromochloromethane	9.274	128	40570	50.67	ug/L	95
47) tetrahydrofuran	9.305	42	28111	48.29	ug/L	97
48) chloroform	9.331	83	125315	48.65	ug/L	98
49) Tert-Butyl Formate	9.352	59	72405	55.26	ug/L	97
52) freon 113	6.516	151	51520	50.92	ug/L	98
53) methacrylonitrile	9.211	41	49686	46.60	ug/L	95
54) 1,1,1-trichloroethane	9.578	97	106130	49.40	ug/L	99
56) 2,2,4-Trimethylpentane	10.002	57	228537	44.33	ug/L	96
57) tert-amyl methyl ether	10.039	73	225158	49.06	ug/L	99
59) epichlorohydrin	11.659	57	31654	211.59	ug/L	94
60) n-butyl alcohol	10.516	56	105693	2517.21	ug/L	97
61) cyclohexane	9.641	84	98416	45.23	ug/L	93
62) carbon tetrachloride	9.777	117	96655	49.81	ug/L	98
63) 1,1-dichloropropene	9.751	75	88725	44.59	ug/L	95
64) hexane	7.937	57	71286	49.55	ug/L	99
65) benzene	10.018	78	273377	45.80	ug/L	99
66) heptane	10.175	57	43873	48.96	ug/L	98
67) isopropyl acetate	9.934	43	162115	56.53	ug/L	95
68) 1,2-dichloroethane	10.044	62	97463	54.61	ug/L	98
69) trichloroethene	10.736	95	68716	46.49	ug/L	97
72) 2-nitropropane	11.523	41	29032	50.94	ug/L	98
73) 2-chloroethyl vinyl ether	11.528	63	247433	243.77	ug/L	99
74) methyl methacrylate	11.004	41	115869	48.15	ug/L	93
75) 1,2-dichloropropane	11.004	63	73835	48.05	ug/L	97
76) methylcyclohexane	10.946	83	105330	48.37	ug/L	99
77) dibromomethane	11.166	93	46462	49.92	ug/L	97
78) bromodichloromethane	11.297	83	96545	48.80	ug/L	98
79) cis-1,3-dichloropropene	11.748	75	113401	47.19	ug/L	94
81) 4-methyl-2-pentanone	11.837	58	29786	50.20	ug/L	92
82) toluene	12.110	92	154558	45.29	ug/L	100
83) 3-methyl-1-butanol	11.858	70	38186	973.88	ug/L	98
84) trans-1,3-dichloropropene	12.315	75	100961	48.59	ug/L	97
85) ethyl methacrylate	12.294	69	83092	47.59	ug/L	97
86) 1,1,2-trichloroethane	12.529	83	52371	47.15	ug/L	99
87) 2-hexanone	12.692	58	24939	48.71	ug/L	86
89) tetrachloroethene	12.692	166	72193	47.24	ug/L	98
90) 1,3-dichloropropane	12.708	76	98785	47.59	ug/L	99
91) butyl acetate	12.760	56	44831	46.74	ug/L	94
92) 3,3-Dimethyl-1-Butanol	12.860	57	73854	465.16	ug/L	98
93) dibromochloromethane	12.975	129	77200	48.47	ug/L	99
94) 1,2-dibromoethane	13.122	107	65040	48.73	ug/L	95
96) chlorobenzene	13.578	112	171120	46.05	ug/L	99
97) 1,1,1,2-tetrachloroethane	13.636	131	69291	48.28	ug/L	100
98) ethylbenzene	13.625	91	279451	45.08	ug/L	99
99) m,p-xylene	13.735	106	214132	90.15	ug/L	93
100) o-xylene	14.150	106	106683	44.94	ug/L	97
101) styrene	14.165	104	178716	45.40	ug/L	98
103) bromoform	14.438	173	56887	48.79	ug/L	99
105) isopropylbenzene	14.490	105	272356	45.92	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97807.D
Acq On : 8 Apr 2014 10:00 am
Operator : courtnem
Sample : bs
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:43:23 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

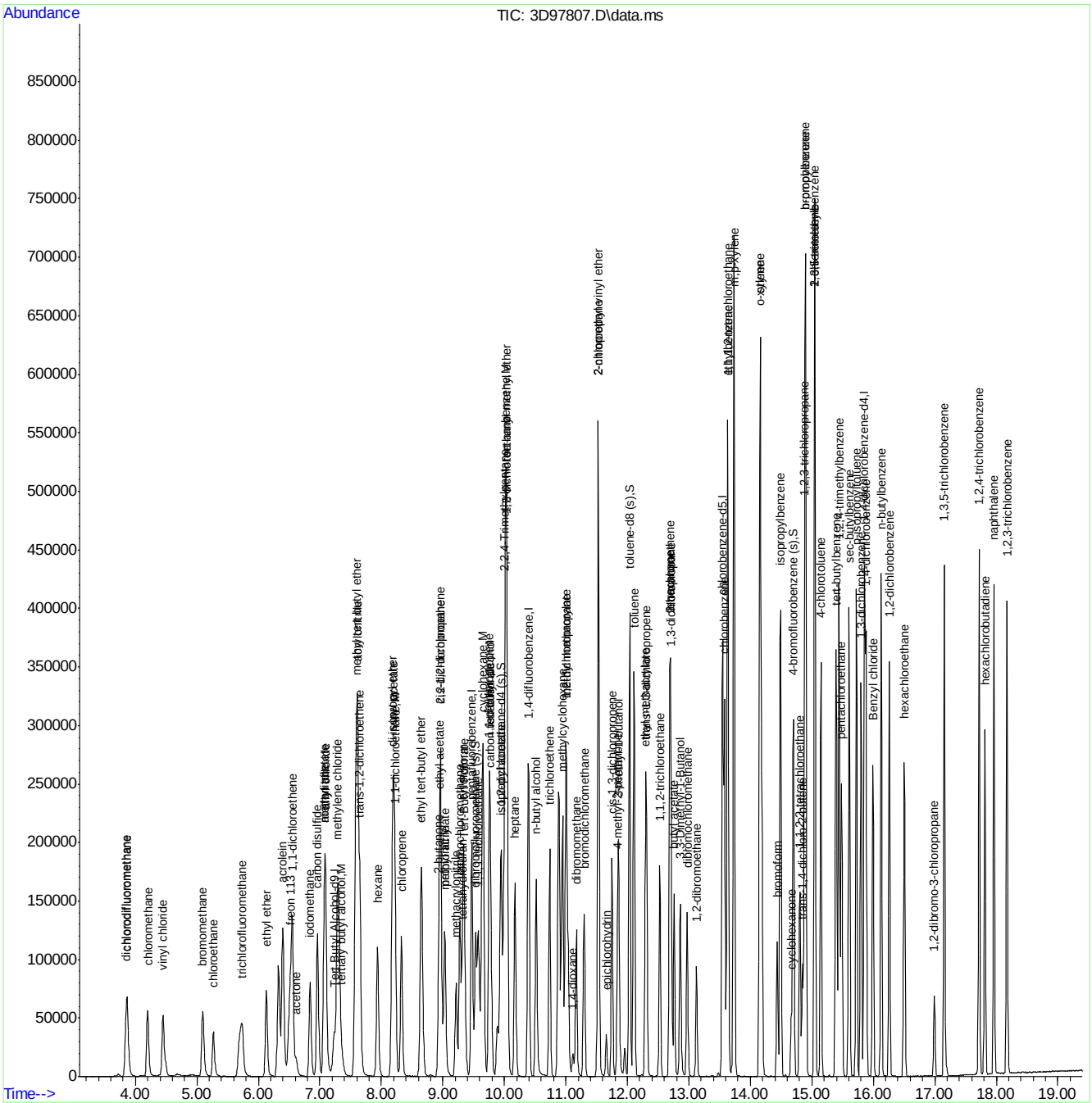
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) bromobenzene	14.894	156	79920	47.66	ug/L	97
108) cyclohexanone	14.663	55	22522	469.88	ug/L	93
109) 1,1,2,2-tetrachloroethane	14.805	83	82253	44.48	ug/L	98
110) trans-1,4-dichloro-2-b...	14.847	53	17708	45.14	ug/L	87
111) 1,2,3-trichloropropane	14.878	110	20114	49.96	ug/L	93
112) n-propylbenzene	14.899	91	322381	47.75	ug/L	99
114) 2-chlorotoluene	15.051	126	68171	46.56	ug/L	99
115) 4-chlorotoluene	15.146	126	68877	46.75	ug/L	99
116) 1,3,5-trimethylbenzene	15.046	105	228966	45.91	ug/L	99
117) tert-butylbenzene	15.397	119	193245	45.72	ug/L	96
118) pentachloroethane	15.481	167	54439	48.99	ug/L	96
119) 1,2,4-trimethylbenzene	15.439	105	235934	48.16	ug/L	98
120) sec-butylbenzene	15.607	105	293134	44.70	ug/L	99
121) 1,3-dichlorobenzene	15.801	146	142238	45.12	ug/L	99
122) p-isopropyltoluene	15.728	119	250878	45.68	ug/L	100
123) 1,4-dichlorobenzene	15.880	146	145927	45.50	ug/L	99
124) 1,2-dichlorobenzene	16.262	146	144572	46.12	ug/L	97
126) n-butylbenzene	16.126	92	129357	46.05	ug/L	98
128) 1,2-dibromo-3-chloropr...	16.997	157	20086	50.74	ug/L	97
129) 1,3,5-trichlorobenzene	17.154	180	135618	49.14	ug/L	100
130) 1,2,4-trichlorobenzene	17.720	180	131055	51.55	ug/L	98
131) hexachlorobutadiene	17.814	225	62862	46.34	ug/L	99
132) naphthalene	17.961	128	288559	55.91	ug/L	99
133) 1,2,3-trichlorobenzene	18.176	180	126945	55.11	ug/L	99
134) hexachloroethane	16.504	119	53825	46.81	ug/L	97
135) Benzyl chloride	15.995	91	184315	73.47	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97807.D
Acq On : 8 Apr 2014 10:00 am
Operator : courtnem
Sample : bs
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:43:23 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Tue Apr 08 15:43:30 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97784.D
Acq On : 7 Apr 2014 10:51 pm
Operator : courtnem
Sample : jb63746-23ms
Misc : MS65550,V3D4217,w,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 09 15:28:07 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.234	65	84347	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	187026	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	272705	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	218060	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	118773	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	88466	55.08	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 110.16%				
51) 1,2-dichloroethane-d4 (s)	9.950	65	92962	55.11	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 110.22%				
80) toluene-d8 (s)	12.036	98	300312	53.38	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.76%				
106) 4-bromofluorobenzene (s)	14.700	95	102135	51.77	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 103.54%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	18415	1312.06	ug/L		94
3) tertiary butyl alcohol	7.349	59	47691	256.56	ug/L		75
8) chlorodifluoromethane	3.878	51	92712	71.88	ug/L		98
9) dichlorodifluoromethane	3.852	85	110444	68.56	ug/L		97
10) chloromethane	4.209	50	124941	55.76	ug/L		100
11) vinyl chloride	4.465	62	120929	57.20	ug/L		100
12) bromomethane	5.105	94	75398	62.19	ug/L		96
13) chloroethane	5.273	64	55026	49.02	ug/L		97
16) trichlorofluoromethane	5.740	101	138169	63.16	ug/L		97
18) ethyl ether	6.133	74	43788	50.39	ug/L		97
21) acrolein	6.400	56	153998	441.24	ug/L		98
22) 1,1-dichloroethene	6.557	61	121434	50.44	ug/L		97
23) acetone	6.615	58	7412	50.01	ug/L		96
24) allyl chloride	7.087	76	45103	50.23	ug/L		89
25) acetonitrile	7.066	40	77768	489.11	ug/L	#	71
27) iodomethane	6.841	142	150851	49.78	ug/L		97
28) iso-butyl alcohol	9.766	41	26450	448.30	ug/L		99
29) carbon disulfide	6.961	76	273036	47.27	ug/L		99
30) methylene chloride	7.286	84	89206	47.72	ug/L		97
31) methyl acetate	7.071	74	13465	49.19	ug/L	#	89
32) methyl tert butyl ether	7.590	73	290052	59.30	ug/L		79
33) trans-1,2-dichloroethene	7.653	61	122088	51.62	ug/L		99
34) di-isopropyl ether	8.183	45	292214	51.96	ug/L		92
35) ethyl tert-butyl ether	8.649	59	272784	53.54	ug/L		99
36) 2-butanone	8.927	72	9309	51.81	ug/L		98
37) 1,1-dichloroethane	8.225	63	151927	51.38	ug/L		98
38) chloroprene	8.324	53	119686	54.80	ug/L		97
39) acrylonitrile	7.617	53	161449	256.74	ug/L		98
40) vinyl acetate	8.204	86	12549	48.20	ug/L		68
41) ethyl acetate	8.938	45	11799	46.96	ug/L		66
42) 2,2-dichloropropane	8.959	77	107101	53.05	ug/L		100
43) cis-1,2-dichloroethene	8.959	61	147003	51.41	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97784.D
Acq On : 7 Apr 2014 10:51 pm
Operator : courtnem
Sample : jb63746-23ms
Misc : MS65550,V3D4217,w,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 09 15:28:07 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	propionitrile	9.032	54	121872	513.23	ug/L		96
45)	methyl acrylate	9.022	55	91420	45.91	ug/L		98
46)	bromochloromethane	9.273	128	46748	53.56	ug/L		97
47)	tetrahydrofuran	9.300	42	27133	42.76	ug/L		89
48)	chloroform	9.331	83	144669	51.52	ug/L		99
49)	Tert-Butyl Formate	9.352	59	14124	9.89	ug/L	#	63
52)	freon 113	6.521	151	64966	58.91	ug/L		96
53)	methacrylonitrile	9.210	41	54202	46.64	ug/L		97
54)	1,1,1-trichloroethane	9.577	97	124009	52.95	ug/L		98
56)	2,2,4-Trimethylpentane	10.002	57	363347	64.66	ug/L		97
57)	tert-amyl methyl ether	10.039	73	259858	51.95	ug/L		98
59)	epichlorohydrin	11.659	57	32927	199.57	ug/L		96
60)	n-butyl alcohol	10.516	56	109101	2356.04	ug/L		97
61)	cyclohexane	9.640	84	138675	57.79	ug/L		97
62)	carbon tetrachloride	9.777	117	114362	53.44	ug/L		100
63)	1,1-dichloropropene	9.750	75	111136	50.64	ug/L		96
64)	hexane	7.936	57	115965	73.09	ug/L		98
65)	benzene	10.018	78	375149	56.99	ug/L		99
66)	heptane	10.175	57	56917	57.59	ug/L		99
67)	isopropyl acetate	9.934	43	160011	50.59	ug/L		98
68)	1,2-dichloroethane	10.044	62	107064	54.39	ug/L		100
69)	trichloroethene	10.736	95	82140	50.39	ug/L		99
72)	2-nitropropane	11.517	41	28403	45.19	ug/L		94
74)	methyl methacrylate	11.004	41	126476	47.66	ug/L		96
75)	1,2-dichloropropane	11.004	63	86287	50.92	ug/L		97
76)	methylcyclohexane	10.946	83	147393	61.37	ug/L		99
77)	dibromomethane	11.171	93	53765	52.38	ug/L		98
78)	bromodichloromethane	11.297	83	111948	51.31	ug/L		99
79)	cis-1,3-dichloropropene	11.748	75	131179	49.50	ug/L		97
81)	4-methyl-2-pentanone	11.842	58	32686	49.95	ug/L		95
82)	toluene	12.110	92	218207	57.98	ug/L		98
83)	3-methyl-1-butanol	11.858	70	40517	936.96	ug/L		99
84)	trans-1,3-dichloropropene	12.314	75	116330	50.77	ug/L		99
85)	ethyl methacrylate	12.293	69	95226	49.45	ug/L		96
86)	1,1,2-trichloroethane	12.529	83	60277	49.20	ug/L		97
87)	2-hexanone	12.692	58	28931	51.24	ug/L		89
89)	tetrachloroethene	12.692	166	86538	52.29	ug/L		98
90)	1,3-dichloropropane	12.708	76	112100	49.86	ug/L		99
91)	butyl acetate	12.760	56	48940	47.12	ug/L		92
92)	3,3-Dimethyl-1-Butanol	12.860	57	75279	437.80	ug/L		99
93)	dibromochloromethane	12.975	129	89006	51.60	ug/L		99
94)	1,2-dibromoethane	13.122	107	73217	50.66	ug/L		97
96)	chlorobenzene	13.578	112	204290	50.76	ug/L		99
97)	1,1,1,2-tetrachloroethane	13.641	131	83536	53.74	ug/L		99
98)	ethylbenzene	13.630	91	630457	93.90	ug/L		99
99)	m,p-xylene	13.735	106	453823	176.43	ug/L		96
100)	o-xylene	14.149	106	187761	73.03	ug/L		98
101)	styrene	14.165	104	214454	50.31	ug/L		94
103)	bromoform	14.432	173	65006	51.48	ug/L		98
105)	isopropylbenzene	14.490	105	370920	57.28	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97784.D
Acq On : 7 Apr 2014 10:51 pm
Operator : courtnem
Sample : jb63746-23ms
Misc : MS65550,V3D4217,w,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 09 15:28:07 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

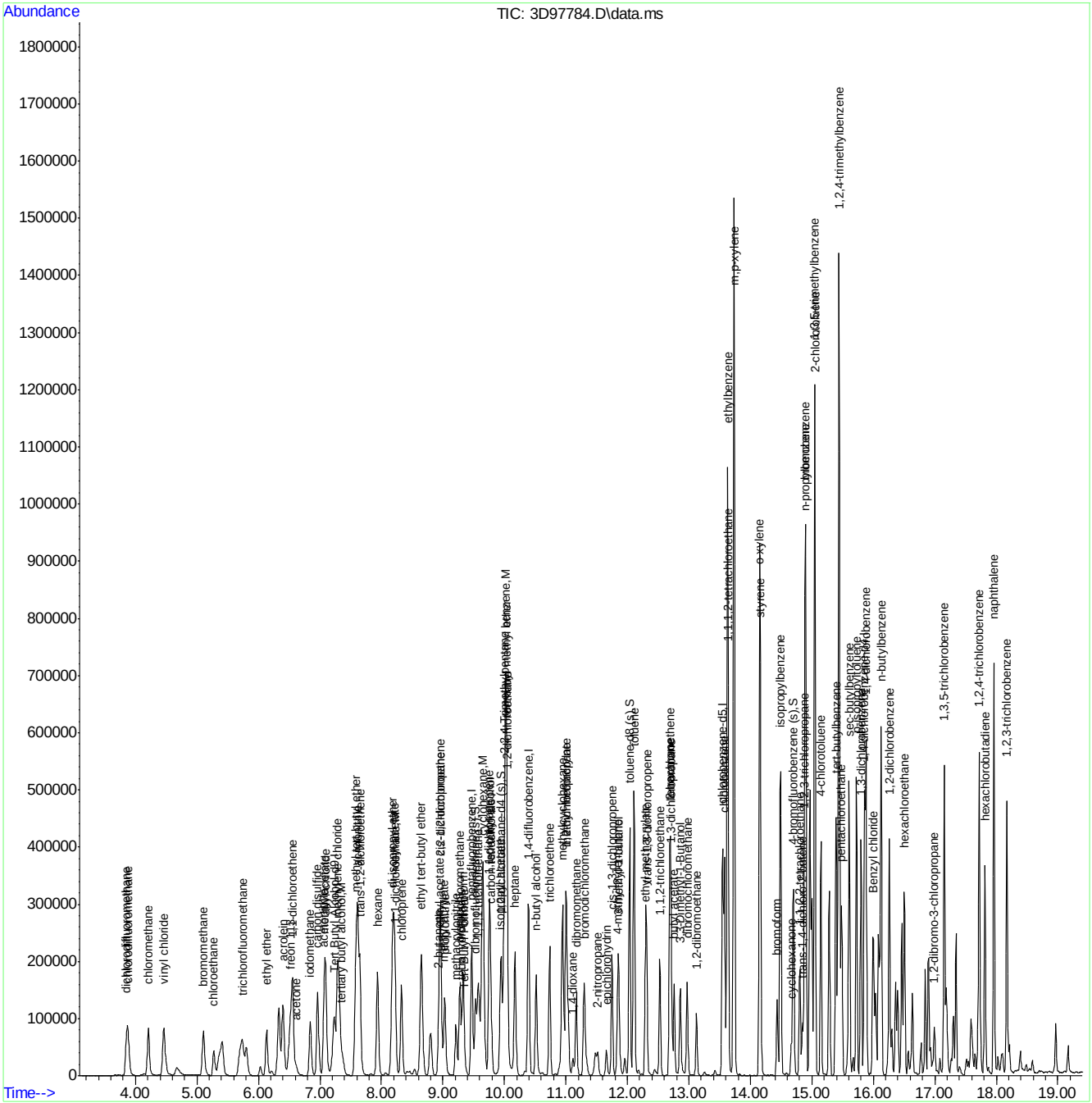
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) bromobenzene	14.894	156	94081	51.39	ug/L	98
108) cyclohexanone	14.668	55	24870	475.28	ug/L	94
109) 1,1,2,2-tetrachloroethane	14.805	83	97740	48.41	ug/L	99
110) trans-1,4-dichloro-2-b...	14.847	53	17105	39.94	ug/L	91
111) 1,2,3-trichloropropane	14.878	110	22877	52.05	ug/L	94
112) n-propylbenzene	14.899	91	504598	68.46	ug/L	99
114) 2-chlorotoluene	15.051	126	82942	51.89	ug/L	93
115) 4-chlorotoluene	15.146	126	82995	51.60	ug/L	98
116) 1,3,5-trimethylbenzene	15.046	105	444275	81.59	ug/L	100
117) tert-butylbenzene	15.397	119	243557	52.79	ug/L	98
118) pentachloroethane	15.481	167	65118	53.68	ug/L	97
119) 1,2,4-trimethylbenzene	15.439	105	806656	150.84	ug/L	99
120) sec-butylbenzene	15.607	105	379100	52.95	ug/L	99
121) 1,3-dichlorobenzene	15.801	146	173222	50.33	ug/L	100
122) p-isopropyltoluene	15.727	119	312118	52.06	ug/L	99
123) 1,4-dichlorobenzene	15.880	146	174011	49.70	ug/L	99
124) 1,2-dichlorobenzene	16.262	146	171549	50.13	ug/L	97
126) n-butylbenzene	16.126	92	169144	55.16	ug/L	97
128) 1,2-dibromo-3-chloropr...	16.991	157	22905	53.00	ug/L	92
129) 1,3,5-trichlorobenzene	17.154	180	164570	54.63	ug/L	100
130) 1,2,4-trichlorobenzene	17.720	180	159003	57.29	ug/L	99
131) hexachlorobutadiene	17.814	225	81279	54.88	ug/L	98
132) naphthalene	17.961	128	496237	88.07	ug/L	100
133) 1,2,3-trichlorobenzene	18.171	180	152750	60.74	ug/L	99
134) hexachloroethane	16.503	119	57719	45.98	ug/L	83
135) Benzyl chloride	15.995	91	159202	58.13	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97784.D
Acq On : 7 Apr 2014 10:51 pm
Operator : courtnem
Sample : jb63746-23ms
Misc : MS65550,V3D4217,w,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 09 15:28:07 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Wed Apr 09 16:05:27 2014 DATAREVIW Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97785.D
Acq On : 7 Apr 2014 11:18 pm
Operator : courtnem
Sample : jb63746-23msd
Misc : MS65550,V3D4217,w,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 09 15:28:38 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.229	65	84539	500.00	ug/L		0.00
4) pentafluorobenzene	9.468	168	190898	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	275335	50.00	ug/L		0.00
88) chlorobenzene-d5	13.547	117	221789	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.854	152	119601	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	88610	54.05	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 108.10%				
51) 1,2-dichloroethane-d4 (s)	9.950	65	93953	54.57	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 109.14%				
80) toluene-d8 (s)	12.031	98	304233	53.56	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 107.12%				
106) 4-bromofluorobenzene (s)	14.700	95	104351	52.53	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 105.06%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.109	88	17790	1264.65	ug/L		93
3) tertiary butyl alcohol	7.344	59	47462	254.75	ug/L		79
8) chlorodifluoromethane	3.873	51	91408	69.43	ug/L		97
9) dichlorodifluoromethane	3.847	85	109744	66.75	ug/L		96
10) chloromethane	4.204	50	125454	54.85	ug/L		99
11) vinyl chloride	4.455	62	119339	55.30	ug/L		98
12) bromomethane	5.095	94	74980	60.59	ug/L		98
13) chloroethane	5.268	64	55559	48.49	ug/L		98
16) trichlorofluoromethane	5.729	101	137303	61.49	ug/L		99
18) ethyl ether	6.128	74	43506	49.05	ug/L		98
21) acrolein	6.395	56	151416	425.04	ug/L		98
22) 1,1-dichloroethene	6.552	61	120580	49.07	ug/L		97
23) acetone	6.615	58	7052	46.62	ug/L		93
24) allyl chloride	7.087	76	44405	48.45	ug/L		95
25) acetonitrile	7.061	40	78158	481.60	ug/L	#	67
27) iodomethane	6.841	142	153221	49.54	ug/L		99
28) iso-butyl alcohol	9.761	41	26272	436.26	ug/L		97
29) carbon disulfide	6.956	76	271391	46.03	ug/L		98
30) methylene chloride	7.281	84	87478	45.84	ug/L		97
31) methyl acetate	7.066	74	13848	49.56	ug/L		95
32) methyl tert butyl ether	7.591	73	287579	57.60	ug/L		80
33) trans-1,2-dichloroethene	7.648	61	122253	50.64	ug/L		100
34) di-isopropyl ether	8.178	45	292754	51.00	ug/L		87
35) ethyl tert-butyl ether	8.644	59	273190	52.53	ug/L		98
36) 2-butanone	8.917	72	9401	51.26	ug/L		99
37) 1,1-dichloroethane	8.220	63	151837	50.31	ug/L		99
38) chloroprene	8.319	53	118169	53.01	ug/L		97
39) acrylonitrile	7.611	53	161925	252.28	ug/L		96
40) vinyl acetate	8.199	86	12636	47.55	ug/L		62
41) ethyl acetate	8.933	45	11620	45.31	ug/L		93
42) 2,2-dichloropropane	8.954	77	105160	51.03	ug/L		99
43) cis-1,2-dichloroethene	8.954	61	147833	50.65	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97785.D
Acq On : 7 Apr 2014 11:18 pm
Operator : courtnem
Sample : jb63746-23msd
Misc : MS65550,V3D4217,w,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 09 15:28:38 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) propionitrile	9.032	54	122121	503.84	ug/L		97
45) methyl acrylate	9.017	55	93194	45.85	ug/L		99
46) bromochloromethane	9.274	128	47511	53.33	ug/L		97
47) tetrahydrofuran	9.300	42	26446	40.84	ug/L		88
48) chloroform	9.326	83	143545	50.08	ug/L		100
49) Tert-Butyl Formate	9.342	59	13337	9.15	ug/L	#	60
52) freon 113	6.516	151	64427	57.23	ug/L		97
53) methacrylonitrile	9.211	41	53806	45.36	ug/L		95
54) 1,1,1-trichloroethane	9.572	97	123192	51.54	ug/L		96
56) 2,2,4-Trimethylpentane	10.002	57	355491	61.98	ug/L		96
57) tert-amyl methyl ether	10.039	73	260197	50.96	ug/L		99
59) epichlorohydrin	11.659	57	32795	196.88	ug/L		98
60) n-butyl alcohol	10.516	56	112095	2397.58	ug/L		97
61) cyclohexane	9.641	84	138108	57.00	ug/L		96
62) carbon tetrachloride	9.777	117	114475	52.98	ug/L		98
63) 1,1-dichloropropene	9.751	75	110846	50.03	ug/L		98
64) hexane	7.931	57	116001	72.42	ug/L		97
65) benzene	10.018	78	377384	56.78	ug/L		99
66) heptane	10.170	57	55754	55.87	ug/L		98
67) isopropyl acetate	9.929	43	162637	50.93	ug/L		98
68) 1,2-dichloroethane	10.039	62	107616	54.15	ug/L		99
69) trichloroethene	10.731	95	83570	50.78	ug/L		95
72) 2-nitropropane	11.512	41	26222	41.32	ug/L		93
74) methyl methacrylate	10.998	41	126020	47.03	ug/L		96
75) 1,2-dichloropropane	11.004	63	86936	50.81	ug/L		96
76) methylcyclohexane	10.941	83	146310	60.34	ug/L		99
77) dibromomethane	11.166	93	53490	51.61	ug/L		99
78) bromodichloromethane	11.292	83	112439	51.05	ug/L		99
79) cis-1,3-dichloropropene	11.748	75	131680	49.22	ug/L		97
81) 4-methyl-2-pentanone	11.837	58	32588	49.33	ug/L		95
82) toluene	12.105	92	221020	58.17	ug/L		100
83) 3-methyl-1-butanol	11.858	70	40853	935.71	ug/L		97
84) trans-1,3-dichloropropene	12.309	75	117307	50.70	ug/L		94
85) ethyl methacrylate	12.294	69	95815	49.28	ug/L		99
86) 1,1,2-trichloroethane	12.524	83	60757	49.12	ug/L		97
87) 2-hexanone	12.692	58	29765	52.21	ug/L		96
89) tetrachloroethene	12.692	166	86993	51.68	ug/L		99
90) 1,3-dichloropropane	12.708	76	114145	49.92	ug/L		99
91) butyl acetate	12.760	56	49632	46.98	ug/L		92
92) 3,3-Dimethyl-1-Butanol	12.860	57	75855	433.74	ug/L		99
93) dibromochloromethane	12.975	129	89491	51.01	ug/L		99
94) 1,2-dibromoethane	13.122	107	74600	50.75	ug/L		99
96) chlorobenzene	13.578	112	206262	50.39	ug/L		98
97) 1,1,1,2-tetrachloroethane	13.636	131	82479	52.17	ug/L		98
98) ethylbenzene	13.625	91	636125	93.15	ug/L		99
99) m,p-xylene	13.735	106	457696	174.94	ug/L		95
100) o-xylene	14.150	106	187910	71.86	ug/L		100
101) styrene	14.165	104	215336	49.66	ug/L		97
103) bromoform	14.438	173	65634	51.10	ug/L		100
105) isopropylbenzene	14.490	105	371769	57.01	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97785.D
Acq On : 7 Apr 2014 11:18 pm
Operator : courtnem
Sample : jb63746-23msd
Misc : MS65550,V3D4217,w,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 09 15:28:38 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

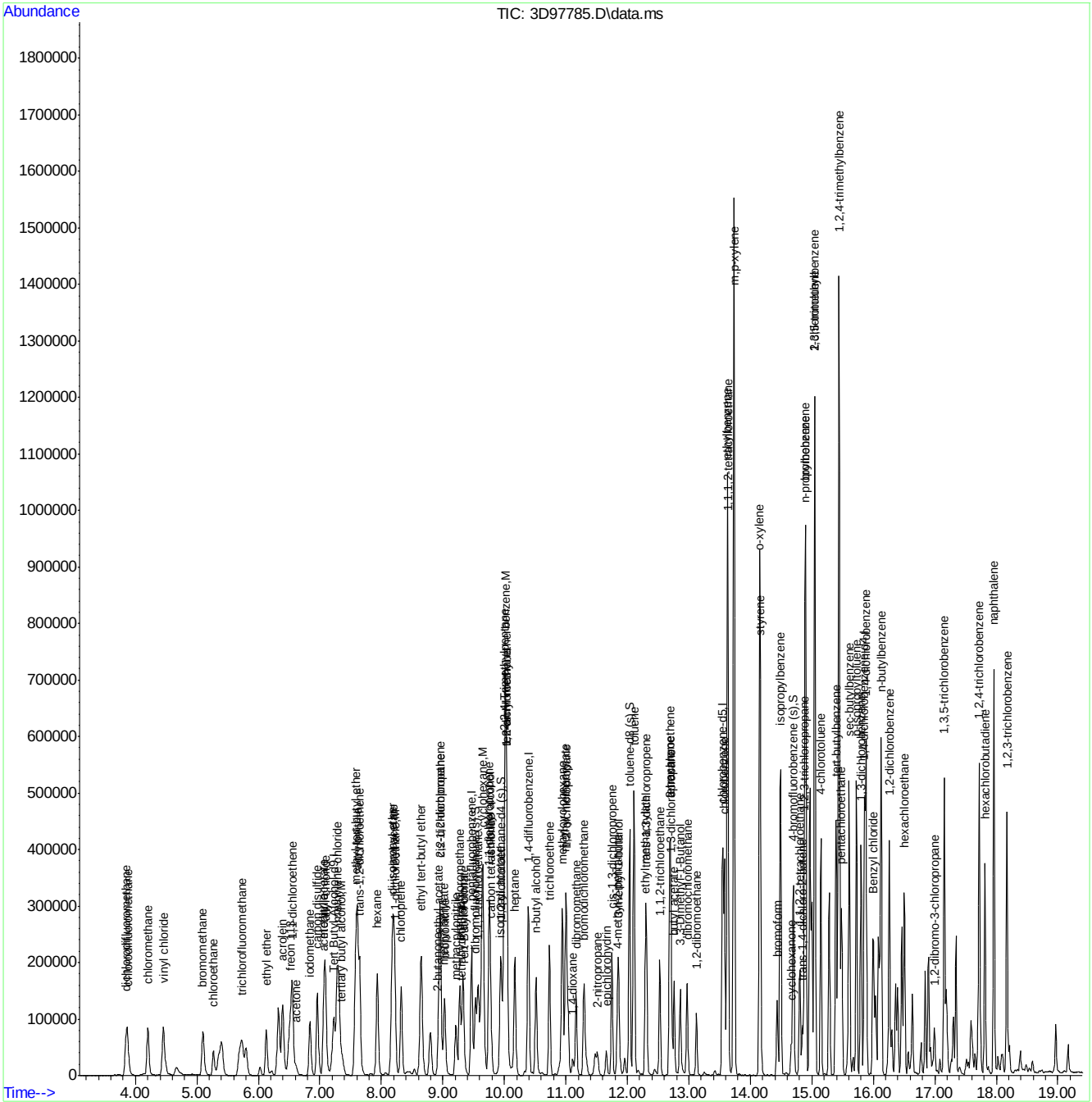
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) bromobenzene	14.894	156	94796	51.42	ug/L	95
108) cyclohexanone	14.663	55	23720	450.17	ug/L	94
109) 1,1,2,2-tetrachloroethane	14.805	83	96995	47.71	ug/L	98
110) trans-1,4-dichloro-2-b...	14.847	53	16341	37.89	ug/L	90
111) 1,2,3-trichloropropane	14.878	110	22984	51.94	ug/L	95
112) n-propylbenzene	14.899	91	506254	68.21	ug/L	99
114) 2-chlorotoluene	15.046	126	83114	51.64	ug/L	90
115) 4-chlorotoluene	15.146	126	83877	51.79	ug/L	100
116) 1,3,5-trimethylbenzene	15.046	105	443163	80.82	ug/L	99
117) tert-butylbenzene	15.397	119	241774	52.04	ug/L	98
118) pentachloroethane	15.481	167	64835	53.07	ug/L	98
119) 1,2,4-trimethylbenzene	15.439	105	808198	150.08	ug/L	99
120) sec-butylbenzene	15.607	105	377677	52.39	ug/L	99
121) 1,3-dichlorobenzene	15.801	146	172264	49.70	ug/L	99
122) p-isopropyltoluene	15.722	119	311104	51.53	ug/L	99
123) 1,4-dichlorobenzene	15.880	146	174235	49.42	ug/L	97
124) 1,2-dichlorobenzene	16.262	146	174710	50.70	ug/L	97
126) n-butylbenzene	16.126	92	168252	54.49	ug/L	97
128) 1,2-dibromo-3-chloropr...	16.997	157	23270	53.47	ug/L	98
129) 1,3,5-trichlorobenzene	17.154	180	162067	53.42	ug/L	99
130) 1,2,4-trichlorobenzene	17.720	180	159143	56.94	ug/L	99
131) hexachlorobutadiene	17.814	225	80009	53.65	ug/L	99
132) naphthalene	17.961	128	496505	87.51	ug/L	99
133) 1,2,3-trichlorobenzene	18.176	180	150669	59.50	ug/L	98
134) hexachloroethane	16.504	119	57137	45.20	ug/L	82
135) Benzyl chloride	15.995	91	157720	57.19	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97785.D
Acq On : 7 Apr 2014 11:18 pm
Operator : courtnem
Sample : jb63746-23msd
Misc : MS65550,V3D4217,w,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 09 15:28:38 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Wed Apr 09 16:05:30 2014 DATAREVIW Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97817.D
Acq On : 8 Apr 2014 2:38 pm
Operator : courtnem
Sample : jb63730-2ms
Misc : MS65547,V3D4218,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 08 15:49:35 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.234	65	81176	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	160513	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.395	114	231474	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	188750	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	102861	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.536	113	77598	56.30	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 112.60%				
51) 1,2-dichloroethane-d4 (s)	9.955	65	86470	59.73	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 119.46%				
80) toluene-d8 (s)	12.036	98	258352	54.10	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 108.20%				
106) 4-bromofluorobenzene (s)	14.695	95	89397	52.33	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 104.66%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	15407	1140.62	ug/L		95
3) tertiary butyl alcohol	7.349	59	42187	235.81	ug/L		90
8) chlorodifluoromethane	3.878	51	52601	47.52	ug/L		98
9) dichlorodifluoromethane	3.852	85	72951	52.77	ug/L		96
10) chloromethane	4.209	50	77217	40.15	ug/L		100
11) vinyl chloride	4.455	62	66911	36.88	ug/L		100
12) bromomethane	5.105	94	48307	46.43	ug/L		97
13) chloroethane	5.278	64	33216	34.48	ug/L		98
16) trichlorofluoromethane	5.719	101	82209	43.79	ug/L		94
18) ethyl ether	6.138	74	32888	44.10	ug/L		97
21) acrolein	6.400	56	134334	448.47	ug/L		97
22) 1,1-dichloroethene	6.563	61	68880	33.34	ug/L		93
23) acetone	6.615	58	5932	46.64	ug/L		97
24) allyl chloride	7.092	76	25635	33.27	ug/L	#	52
25) acetonitrile	7.071	40	65783	482.07	ug/L	#	59
27) iodomethane	6.851	142	94817	36.46	ug/L		97
28) iso-butyl alcohol	9.766	41	25430	502.21	ug/L		93
29) carbon disulfide	6.966	76	150198	30.30	ug/L		98
30) methylene chloride	7.291	84	59582	37.13	ug/L		97
31) methyl acetate	7.077	74	11843	50.41	ug/L	#	88
32) methyl tert butyl ether	7.596	73	189610	45.17	ug/L		98
33) trans-1,2-dichloroethene	7.658	61	74239	36.57	ug/L		97
34) di-isopropyl ether	8.188	45	216707	44.90	ug/L		94
35) ethyl tert-butyl ether	8.655	59	209972	48.02	ug/L		98
36) 2-butanone	8.927	72	7758	50.31	ug/L		74
37) 1,1-dichloroethane	8.225	63	98577	38.84	ug/L		99
38) chloroprene	8.330	53	71448	38.12	ug/L		96
39) acrylonitrile	7.622	53	135842	251.71	ug/L		97
40) vinyl acetate	8.209	86	10269	45.95	ug/L		84
41) ethyl acetate	8.938	45	10285	47.70	ug/L	#	54
42) 2,2-dichloropropane	8.964	77	79898	46.12	ug/L		98
43) cis-1,2-dichloroethene	8.964	61	103525	42.18	ug/L		96
44) propionitrile	9.037	54	105588	518.10	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97817.D
Acq On : 8 Apr 2014 2:38 pm
Operator : courtnem
Sample : jb63730-2ms
Misc : MS65547,V3D4218,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 08 15:49:35 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methyl acrylate	9.027	55	77809	45.53	ug/L		98
46) bromochloromethane	9.279	128	33743	45.05	ug/L		98
47) tetrahydrofuran	9.305	42	24068	44.20	ug/L		99
48) chloroform	9.336	83	98511	40.88	ug/L		100
49) Tert-Butyl Formate	9.357	59	27473	22.41	ug/L	#	91
52) freon 113	6.526	151	36900	38.98	ug/L		100
53) methacrylonitrile	9.216	41	46582	46.70	ug/L		94
54) 1,1,1-trichloroethane	9.577	97	75694	37.66	ug/L		98
56) 2,2,4-Trimethylpentane	10.007	57	171330	35.53	ug/L		93
57) tert-amyl methyl ether	10.044	73	201643	46.97	ug/L		97
59) epichlorohydrin	11.659	57	29955	213.90	ug/L		93
60) n-butyl alcohol	10.516	56	96801	2462.78	ug/L		96
61) cyclohexane	9.640	84	67029	32.91	ug/L		91
62) carbon tetrachloride	9.777	117	68355	37.63	ug/L		97
63) 1,1-dichloropropene	9.756	75	64569	34.66	ug/L		98
64) hexane	7.942	57	56777	42.16	ug/L		96
65) benzene	10.023	78	207180	37.08	ug/L		99
66) heptane	10.175	57	31993	38.14	ug/L		99
67) isopropyl acetate	9.939	43	139410	51.93	ug/L		97
68) 1,2-dichloroethane	10.044	62	84913	50.82	ug/L		97
69) trichloroethene	10.736	95	50648	36.61	ug/L		98
72) 2-nitropropane	11.517	41	17839	33.44	ug/L		93
73) 2-chloroethyl vinyl ether	11.659	63	1025	1.08	ug/L		74
74) methyl methacrylate	11.004	41	103545	45.97	ug/L		97
75) 1,2-dichloropropane	11.009	63	59305	41.23	ug/L		94
76) methylcyclohexane	10.946	83	74862	36.72	ug/L		100
77) dibromomethane	11.171	93	41047	47.11	ug/L		99
78) bromodichloromethane	11.297	83	80911	43.69	ug/L		94
79) cis-1,3-dichloropropene	11.748	75	97273	43.25	ug/L		94
81) 4-methyl-2-pentanone	11.842	58	27188	48.95	ug/L		88
82) toluene	12.110	92	119302	37.35	ug/L		98
83) 3-methyl-1-butanol	11.858	70	35252	960.41	ug/L		97
84) trans-1,3-dichloropropene	12.309	75	91678	47.13	ug/L		91
85) ethyl methacrylate	12.293	69	76504	46.81	ug/L		97
86) 1,1,2-trichloroethane	12.524	83	45393	43.65	ug/L		98
87) 2-hexanone	12.687	58	24214	50.52	ug/L		90
89) tetrachloroethene	12.692	166	52349	36.54	ug/L		98
90) 1,3-dichloropropane	12.708	76	87480	44.96	ug/L		99
91) butyl acetate	12.760	56	41561	46.23	ug/L		90
92) 3,3-Dimethyl-1-Butanol	12.860	57	69731	468.51	ug/L		100
93) dibromochloromethane	12.970	129	68289	45.74	ug/L		99
94) 1,2-dibromoethane	13.122	107	56815	45.41	ug/L		100
96) chlorobenzene	13.573	112	139394	40.01	ug/L		98
97) 1,1,1,2-tetrachloroethane	13.636	131	58950	43.81	ug/L		98
98) ethylbenzene	13.625	91	216487	37.25	ug/L		99
99) m,p-xylene	13.730	106	165680	74.41	ug/L		94
100) o-xylene	14.149	106	86748	38.98	ug/L		96
101) styrene	14.160	104	147431	39.95	ug/L		97
103) bromoform	14.432	173	52190	47.75	ug/L		99
105) isopropylbenzene	14.485	105	209690	37.39	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97817.D
Acq On : 8 Apr 2014 2:38 pm
Operator : courtnem
Sample : jb63730-2ms
Misc : MS65547,V3D4218,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 08 15:49:35 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

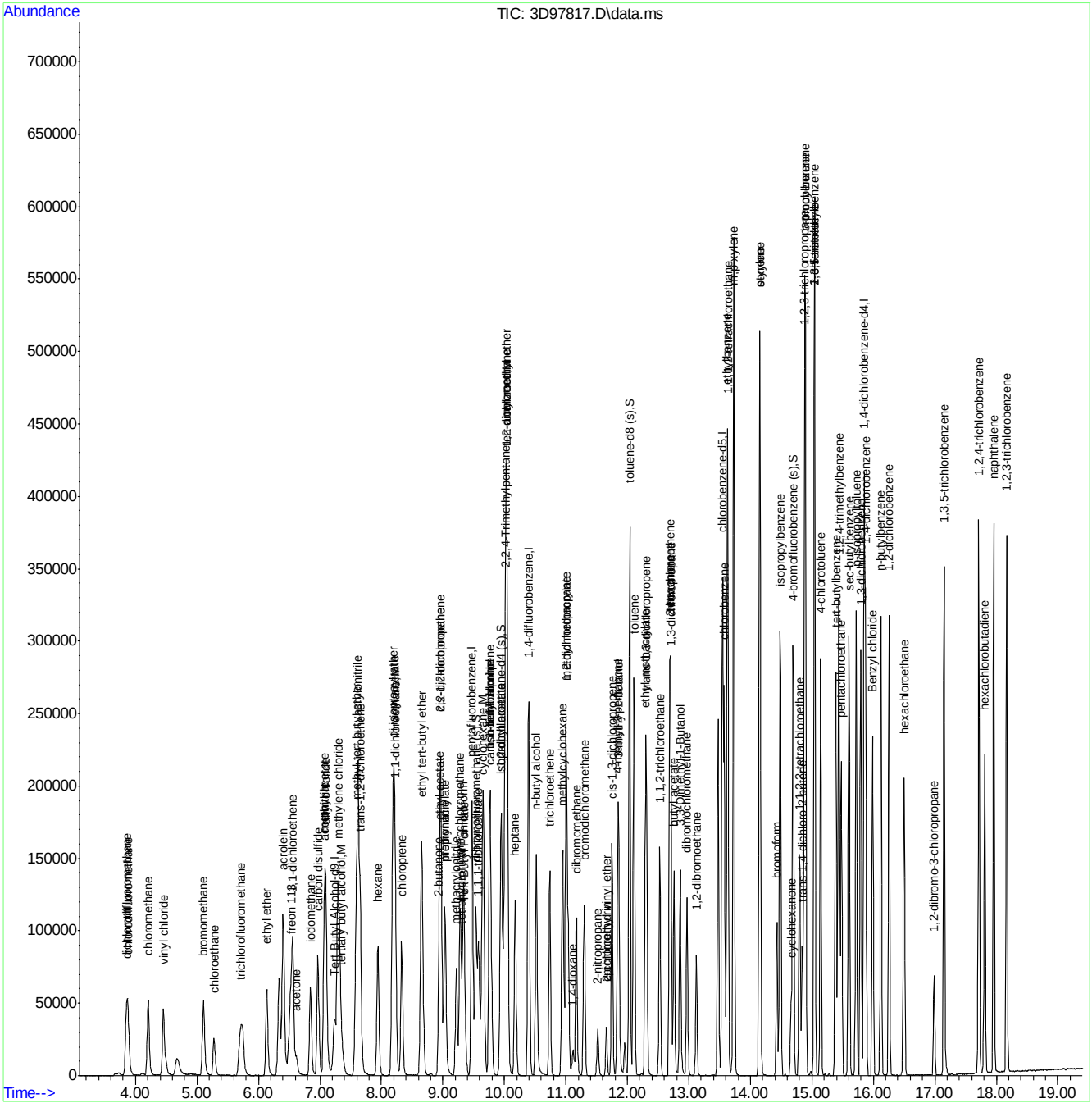
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) bromobenzene	14.889	156	68307	43.08	ug/L	98
108) cyclohexanone	14.663	55	21037	464.22	ug/L	92
109) 1,1,2,2-tetrachloroethane	14.800	83	79179	45.29	ug/L	100
110) trans-1,4-dichloro-2-b...	14.841	53	17234	46.47	ug/L	84
111) 1,2,3-trichloropropane	14.878	110	19630	51.58	ug/L	92
112) n-propylbenzene	14.894	91	233179	36.53	ug/L	99
114) 2-chlorotoluene	15.046	126	56194	40.60	ug/L	98
115) 4-chlorotoluene	15.146	126	56799	40.77	ug/L	96
116) 1,3,5-trimethylbenzene	15.041	105	182249	38.65	ug/L	99
117) tert-butylbenzene	15.392	119	146669	36.71	ug/L	97
118) pentachloroethane	15.476	167	47680	45.38	ug/L	97
119) 1,2,4-trimethylbenzene	15.439	105	182944	39.50	ug/L	99
120) sec-butylbenzene	15.602	105	221153	35.67	ug/L	99
121) 1,3-dichlorobenzene	15.796	146	121872	40.89	ug/L	99
122) p-isopropyltoluene	15.722	119	191531	36.89	ug/L	99
123) 1,4-dichlorobenzene	15.874	146	125487	41.38	ug/L	100
124) 1,2-dichlorobenzene	16.257	146	126234	42.59	ug/L	98
126) n-butylbenzene	16.121	92	96817	36.46	ug/L	100
128) 1,2-dibromo-3-chloropr...	16.991	157	19509	52.12	ug/L	94
129) 1,3,5-trichlorobenzene	17.154	180	113268	43.41	ug/L	99
130) 1,2,4-trichlorobenzene	17.715	180	114347	47.57	ug/L	99
131) hexachlorobutadiene	17.809	225	47209	36.81	ug/L	97
132) naphthalene	17.961	128	273543	56.06	ug/L	98
133) 1,2,3-trichlorobenzene	18.171	180	111814	51.34	ug/L	99
134) hexachloroethane	16.498	119	42757	39.33	ug/L	99
135) Benzyl chloride	15.990	91	159196	67.12	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97817.D
Acq On : 8 Apr 2014 2:38 pm
Operator : courtnem
Sample : jb63730-2ms
Misc : MS65547,V3D4218,w,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 08 15:49:35 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Tue Apr 08 15:49:42 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97818.D
Acq On : 8 Apr 2014 3:05 pm
Operator : courtnem
Sample : jb63730-2msd
Misc : MS65547,V3D4218,w,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 15:50:12 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.229	65	85586	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	166405	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.395	114	238252	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	193486	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	104963	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	79274	55.47	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 110.94%				
51) 1,2-dichloroethane-d4 (s)	9.955	65	88663	59.07	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 118.14%				
80) toluene-d8 (s)	12.036	98	264828	53.88	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 107.76%				
106) 4-bromofluorobenzene (s)	14.700	95	92135	52.85	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 105.70%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	16211	1138.30	ug/L		93
3) tertiary butyl alcohol	7.349	59	44569	236.29	ug/L		99
8) chlorodifluoromethane	3.873	51	52525	45.77	ug/L		98
9) dichlorodifluoromethane	3.847	85	70004	48.84	ug/L		97
10) chloromethane	4.203	50	78099	39.17	ug/L		99
11) vinyl chloride	4.450	62	66844	35.53	ug/L		100
12) bromomethane	5.100	94	48699	45.14	ug/L		99
13) chloroethane	5.273	64	33667	33.71	ug/L		97
16) trichlorofluoromethane	5.729	101	80533	41.37	ug/L		97
18) ethyl ether	6.133	74	33353	43.14	ug/L		98
21) acrolein	6.395	56	138344	445.50	ug/L		100
22) 1,1-dichloroethene	6.552	61	67318	31.43	ug/L		96
23) acetone	6.615	58	6362	48.25	ug/L	#	81
24) allyl chloride	7.087	76	25998	32.54	ug/L	#	60
25) acetonitrile	7.066	40	68251	482.45	ug/L	#	54
27) iodomethane	6.841	142	95971	35.59	ug/L		97
28) iso-butyl alcohol	9.761	41	26548	505.73	ug/L		98
29) carbon disulfide	6.961	76	148015	28.80	ug/L		97
30) methylene chloride	7.286	84	59960	36.05	ug/L		96
31) methyl acetate	7.071	74	12106	49.71	ug/L	#	87
32) methyl tert butyl ether	7.596	73	194334	44.66	ug/L		98
33) trans-1,2-dichloroethene	7.653	61	74598	35.45	ug/L		98
34) di-isopropyl ether	8.188	45	222407	44.45	ug/L		94
35) ethyl tert-butyl ether	8.655	59	216178	47.69	ug/L		98
36) 2-butanone	8.927	72	8044	50.31	ug/L		80
37) 1,1-dichloroethane	8.225	63	98118	37.29	ug/L		98
38) chloroprene	8.324	53	70588	36.32	ug/L		96
39) acrylonitrile	7.617	53	141167	252.31	ug/L		98
40) vinyl acetate	8.204	86	10700	46.19	ug/L		69
41) ethyl acetate	8.938	45	10738	48.03	ug/L		79
42) 2,2-dichloropropane	8.959	77	78038	43.45	ug/L		97
43) cis-1,2-dichloroethene	8.959	61	104716	41.16	ug/L		94
44) propionitrile	9.037	54	110543	523.20	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97818.D
Acq On : 8 Apr 2014 3:05 pm
Operator : courtnem
Sample : jb63730-2msd
Misc : MS65547,V3D4218,w,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 15:50:12 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methyl acrylate	9.022	55	81956	46.25	ug/L		99
46) bromochloromethane	9.279	128	34954	45.01	ug/L		98
47) tetrahydrofuran	9.305	42	24833	43.99	ug/L		98
48) chloroform	9.331	83	100786	40.34	ug/L		97
49) Tert-Butyl Formate	9.357	59	21151	16.64	ug/L	#	87
52) freon 113	6.521	151	37213	37.92	ug/L		99
53) methacrylonitrile	9.216	41	47241	45.69	ug/L		95
54) 1,1,1-trichloroethane	9.577	97	75987	36.47	ug/L		99
56) 2,2,4-Trimethylpentane	10.002	57	170038	34.01	ug/L		93
57) tert-amyl methyl ether	10.039	73	206443	46.38	ug/L		98
59) epichlorohydrin	11.664	57	29354	203.65	ug/L		97
60) n-butyl alcohol	10.516	56	103262	2552.42	ug/L		96
61) cyclohexane	9.640	84	64026	30.54	ug/L		87
62) carbon tetrachloride	9.777	117	67556	36.14	ug/L		98
63) 1,1-dichloropropene	9.756	75	64198	33.48	ug/L		98
64) hexane	7.936	57	55845	40.29	ug/L		98
65) benzene	10.023	78	210177	36.55	ug/L		98
66) heptane	10.175	57	31333	36.29	ug/L		97
67) isopropyl acetate	9.934	43	142145	51.44	ug/L		98
68) 1,2-dichloroethane	10.044	62	85491	49.71	ug/L		99
69) trichloroethene	10.736	95	51046	35.85	ug/L		96
72) 2-nitropropane	11.517	41	18396	33.50	ug/L		90
73) 2-chloroethyl vinyl ether	11.659	63	1128	1.15	ug/L		67
74) methyl methacrylate	11.004	41	105537	45.52	ug/L		97
75) 1,2-dichloropropane	11.009	63	61456	41.51	ug/L		93
76) methylcyclohexane	10.946	83	74570	35.54	ug/L		100
77) dibromomethane	11.171	93	41577	46.36	ug/L		99
78) bromodichloromethane	11.297	83	82778	43.43	ug/L		97
79) cis-1,3-dichloropropene	11.753	75	100201	43.28	ug/L		94
81) 4-methyl-2-pentanone	11.842	58	28957	50.65	ug/L		90
82) toluene	12.110	92	122191	37.16	ug/L		98
83) 3-methyl-1-butanol	11.858	70	37820	1001.06	ug/L		98
84) trans-1,3-dichloropropene	12.314	75	94110	47.01	ug/L		94
85) ethyl methacrylate	12.293	69	79510	47.26	ug/L		96
86) 1,1,2-trichloroethane	12.529	83	47426	44.31	ug/L		99
87) 2-hexanone	12.692	58	25733	52.16	ug/L		90
89) tetrachloroethene	12.692	166	51867	35.32	ug/L		97
90) 1,3-dichloropropane	12.713	76	89757	45.00	ug/L		99
91) butyl acetate	12.760	56	43705	47.42	ug/L		89
92) 3,3-Dimethyl-1-Butanol	12.860	57	74892	490.87	ug/L		99
93) dibromochloromethane	12.975	129	69792	45.60	ug/L		99
94) 1,2-dibromoethane	13.127	107	58916	45.94	ug/L		100
96) chlorobenzene	13.578	112	141462	39.61	ug/L		99
97) 1,1,1,2-tetrachloroethane	13.641	131	60521	43.88	ug/L		99
98) ethylbenzene	13.630	91	218823	36.73	ug/L		99
99) m,p-xylene	13.735	106	167662	73.46	ug/L		92
100) o-xylene	14.155	106	87629	38.41	ug/L		97
101) styrene	14.165	104	150726	39.85	ug/L		97
103) bromoform	14.438	173	54232	48.40	ug/L		98
105) isopropylbenzene	14.490	105	211029	36.88	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97818.D
Acq On : 8 Apr 2014 3:05 pm
Operator : courtnem
Sample : jb63730-2msd
Misc : MS65547,V3D4218,w,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 15:50:12 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

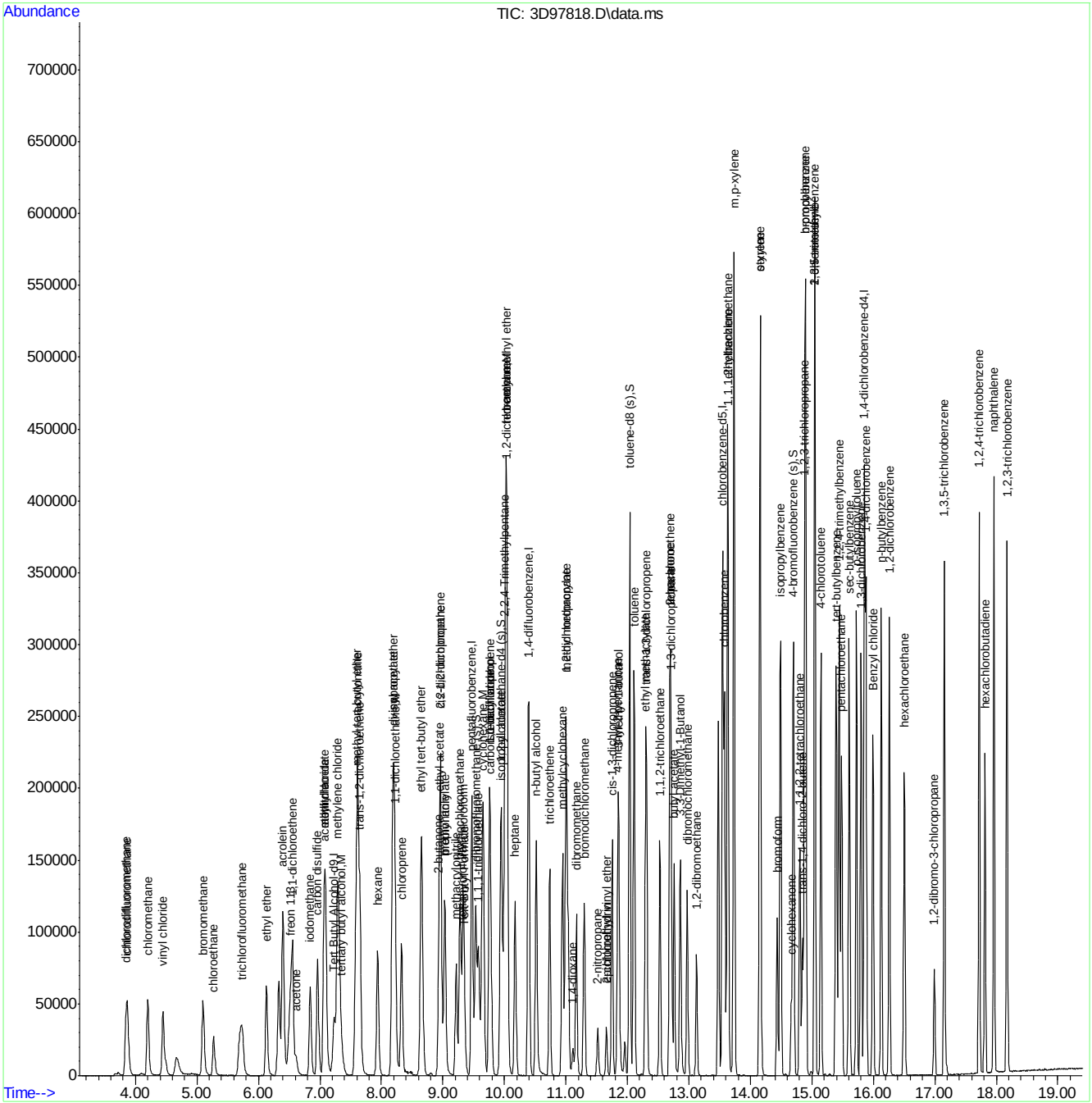
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) bromobenzene	14.894	156	70274	43.44	ug/L	99
108) cyclohexanone	14.668	55	21970	475.10	ug/L	93
109) 1,1,2,2-tetrachloroethane	14.805	83	82066	46.00	ug/L	98
110) trans-1,4-dichloro-2-b...	14.847	53	17908	47.32	ug/L	85
111) 1,2,3-trichloropropane	14.878	110	19962	51.40	ug/L	97
112) n-propylbenzene	14.899	91	236323	36.28	ug/L	100
114) 2-chlorotoluene	15.051	126	56964	40.33	ug/L	95
115) 4-chlorotoluene	15.146	126	57704	40.59	ug/L	99
116) 1,3,5-trimethylbenzene	15.046	105	185262	38.50	ug/L	100
117) tert-butylbenzene	15.397	119	148148	36.33	ug/L	97
118) pentachloroethane	15.481	167	48746	45.47	ug/L	96
119) 1,2,4-trimethylbenzene	15.444	105	186529	39.47	ug/L	99
120) sec-butylbenzene	15.607	105	221297	34.98	ug/L	99
121) 1,3-dichlorobenzene	15.801	146	124933	41.08	ug/L	99
122) p-isopropyltoluene	15.722	119	191120	36.07	ug/L	99
123) 1,4-dichlorobenzene	15.880	146	128824	41.63	ug/L	100
124) 1,2-dichlorobenzene	16.262	146	130105	43.02	ug/L	99
126) n-butylbenzene	16.126	92	97838	36.10	ug/L	99
128) 1,2-dibromo-3-chloropr...	16.991	157	20784	54.42	ug/L	93
129) 1,3,5-trichlorobenzene	17.154	180	116218	43.65	ug/L	100
130) 1,2,4-trichlorobenzene	17.720	180	117944	48.09	ug/L	100
131) hexachlorobutadiene	17.814	225	47710	36.45	ug/L	98
132) naphthalene	17.961	128	287936	57.82	ug/L	99
133) 1,2,3-trichlorobenzene	18.176	180	117027	52.66	ug/L	98
134) hexachloroethane	16.503	119	43216	38.95	ug/L	99
135) Benzyl chloride	15.995	91	163906	67.72	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97818.D
Acq On : 8 Apr 2014 3:05 pm
Operator : courtnem
Sample : jb63730-2msd
Misc : MS65547,V3D4218,w,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 15:50:12 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

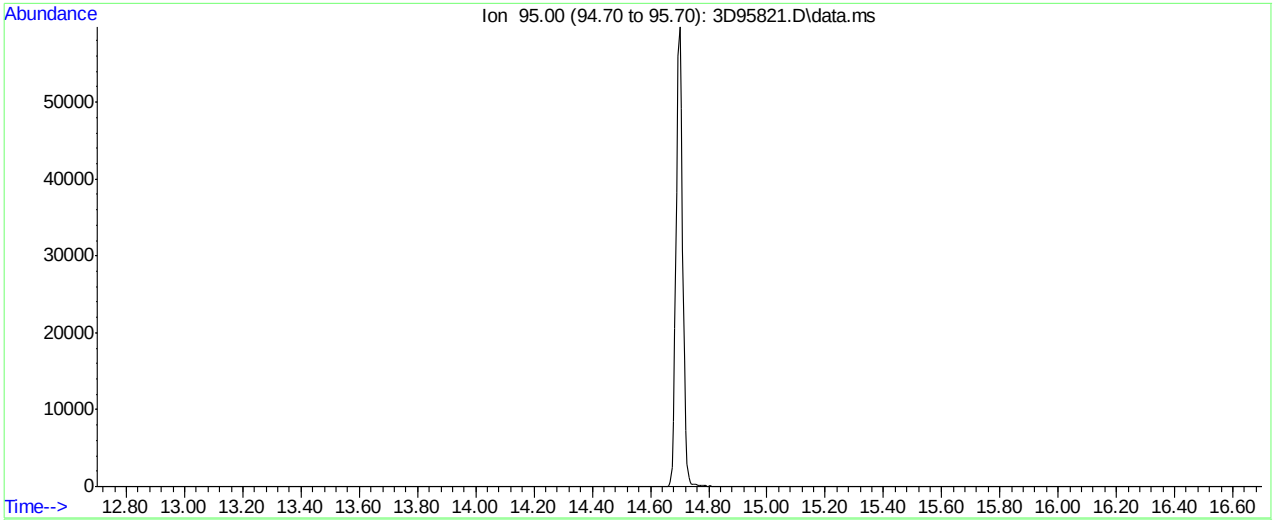


M3D4135.M Tue Apr 08 15:50:18 2014 3D Page: 4

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\3D95821.D Vial: 11
Acq On : 12 Feb 2014 7:48 pm Operator: courtnem
Sample : bfb Inst : MS3D
Misc : MS62765,V3D4135,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D4135.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um



AutoFind: Scans 2218, 2219, 2220; Background Corrected with Scan 2209

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	9206	PASS
75	95	30	60	43.0	23626	PASS
95	95	100	100	100.0	54978	PASS
96	95	5	9	6.6	3650	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	96.3	52920	PASS
175	174	5	9	7.7	4055	PASS
176	174	95	101	98.9	52320	PASS
177	176	5	9	6.4	3359	PASS

3D95821.D M3D4135.M Fri Feb 14 09:42:43 2014 3D

Average of 14.695 to 14.705 min.: 3D95821.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	479	49.00	1867	64.00	135	77.95	254
37.05	2240	50.05	9206	67.05	186	78.90	1037
38.05	1985	51.00	2770	68.00	4611	79.95	314
39.05	893	52.05	151	69.00	4798	80.90	1023
40.00	89	54.95	192	70.00	367	81.95	221
41.05	8	56.00	678	72.00	262	87.00	2926
43.00	24	57.00	1263	73.00	2015	88.00	2923
44.00	246	60.05	425	74.00	7589	90.90	215
45.00	489	61.00	2018	75.00	23626	92.00	1276
47.00	798	62.00	2008	76.00	2137	93.00	1999
48.00	276	63.00	1453	76.95	350	94.00	5631

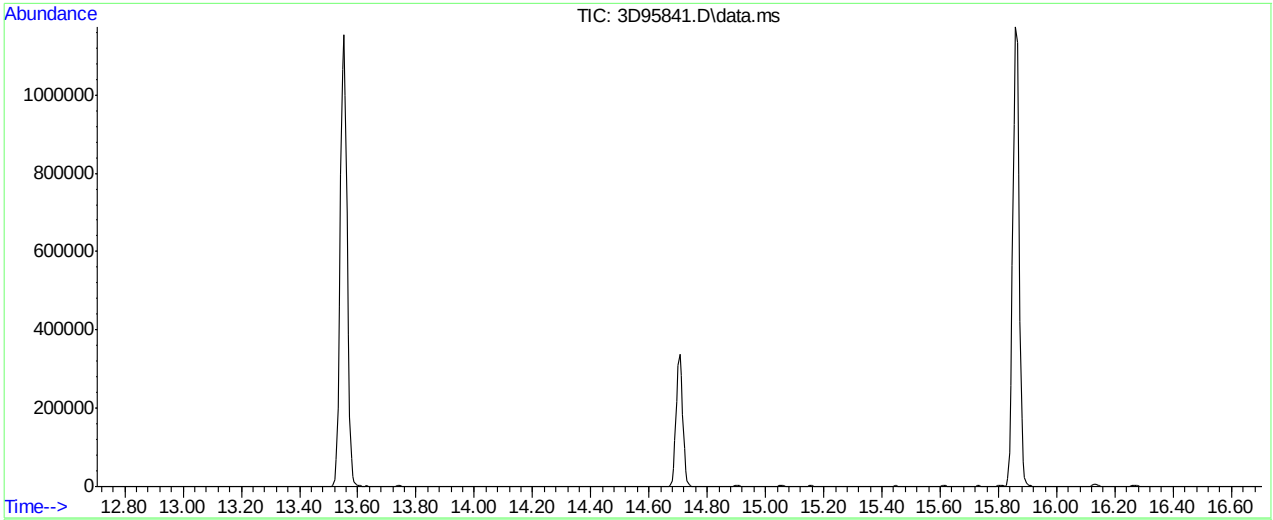
Average of 14.695 to 14.705 min.: 3D95821.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	54978	128.90	77	176.90	3359		
96.00	3650	129.90	179	177.90	45		
97.00	151	134.95	75	206.90	40		
103.90	167	140.90	437				
105.00	39	142.90	421				
105.85	180	147.90	118				
115.95	157	154.90	138				
116.85	274	156.90	113				
117.90	159	173.95	52920				
118.90	248	175.00	4055				
127.90	164	175.90	52320				

SW-846 Method 8260

```
Data File : C:\msdchem\1\DATA\3D95841.D                Vial: 1
Acq On    : 15 Feb 2014  10:59 am                  Operator: courtnem
Sample    : bfb                                    Inst    : MS3D
Misc      : MS62765,V3D4136,w,,,,1                 Multiplr: 1.00
MS Integration Params: rteint.p

Method   : C:\msdchem\1\METHODS\M3D4135.M (RTE Integrator)
Title    : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
```



AutoFind: Scans 2219, 2220, 2221; Background Corrected with Scan 2210

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.0	10214	PASS
75	95	30	60	42.7	27277	PASS
95	95	100	100	100.0	63869	PASS
96	95	5	9	6.6	4236	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	96.8	61813	PASS
175	174	5	9	7.9	4912	PASS
176	174	95	101	97.9	60504	PASS
177	176	5	9	6.8	4097	PASS

3D95841.D M3D4135.M Tue Feb 18 12:44:36 2014 3D

Average of 14.700 to 14.710 min.: 3D95841.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	489	51.95	133	69.00	5498	80.90	1227
37.05	2633	55.00	185	70.00	471	81.95	235
38.05	2286	56.00	771	72.00	289	86.00	69
39.10	895	57.05	1364	73.00	2390	87.00	3433
44.00	283	60.00	500	74.00	8594	88.00	3458
45.00	462	61.00	2322	75.00	27277	90.95	169
47.00	986	62.00	2396	76.05	2344	92.00	1482
48.00	320	63.00	1716	76.95	331	93.00	2277
49.00	2271	64.00	139	77.95	327	94.00	6482
50.05	10214	67.10	164	78.90	1229	95.00	63869
51.05	3056	68.00	5568	79.95	352	96.00	4236

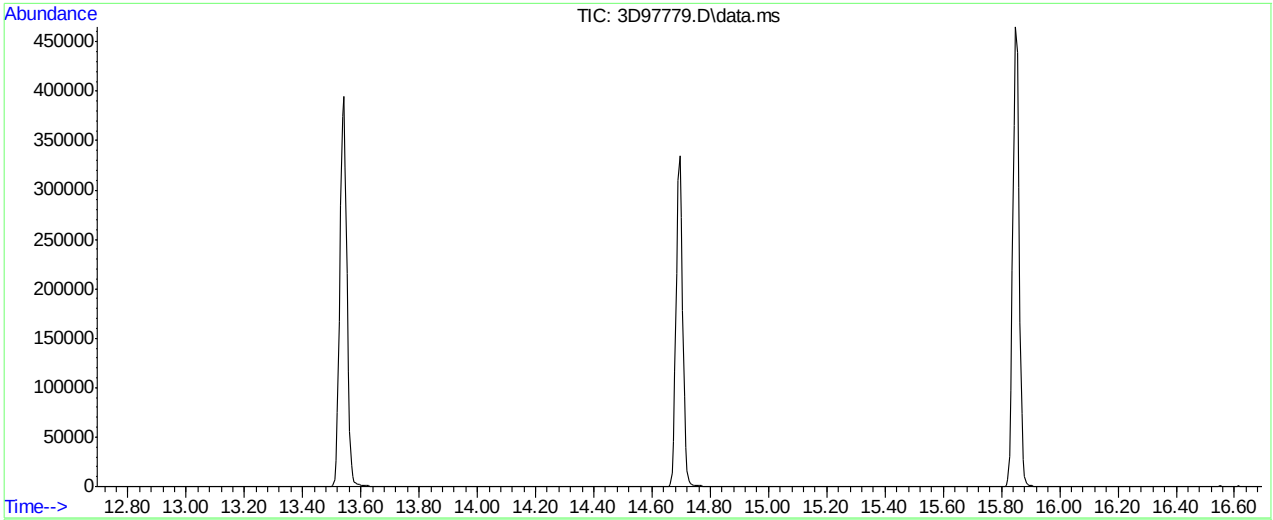
Average of 14.700 to 14.710 min.: 3D95841.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.00	120	134.90	34	175.90	60504		
103.90	222	136.85	71	176.95	4097		
105.90	199	140.90	451	177.85	81		
115.90	203	142.90	489				
116.90	298	145.90	82				
117.85	188	147.95	158				
118.90	261	154.90	140				
127.85	188	156.90	88				
128.90	34	160.90	38				
129.95	222	173.90	61813				
130.80	33	174.95	4912				

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\3d\v3d4217\3D97779.D Vial: 24
Acq On : 7 Apr 2014 8:35 pm Operator: courtnem
Sample : bfb Inst : MS3D
Misc : MS65550,V3D4217,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D4135.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um



AutoFind: Scans 2217, 2218, 2219; Background Corrected with Scan 2209

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	10666	PASS
75	95	30	60	43.5	26701	PASS
95	95	100	100	100.0	61315	PASS
96	95	5	9	6.7	4111	PASS
173	174	0.00	2	0.6	349	PASS
174	95	50	120	98.4	60312	PASS
175	174	5	9	8.1	4894	PASS
176	174	95	101	99.7	60117	PASS
177	176	5	9	6.6	3959	PASS

3D97779.D M3D4135.M Wed Apr 09 15:25:14 2014 DATAREVIW

Average of 14.689 to 14.700 min.: 3D97779.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	519	51.00	3403	68.00	5640	79.95	355
37.00	2760	52.10	153	69.00	5394	80.90	1297
38.00	2384	54.95	149	70.05	402	81.95	287
39.10	900	56.00	703	71.95	296	86.10	43
39.95	78	57.00	1426	73.00	2263	86.95	3103
44.00	265	60.00	501	74.00	8900	87.90	3069
45.00	475	61.00	2461	75.00	26701	90.90	184
47.05	958	62.00	2237	76.05	2261	92.00	1437
48.05	290	63.00	1628	76.95	363	93.00	2223
49.05	2269	64.05	162	77.90	292	94.00	6436
50.05	10666	67.10	175	78.95	1308	95.00	61315

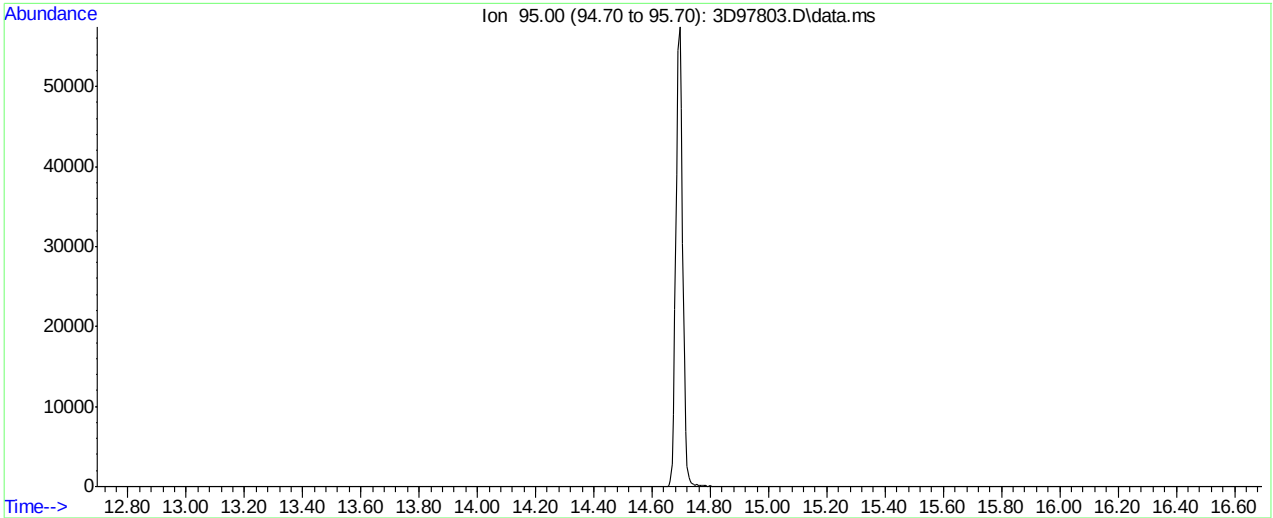
Average of 14.689 to 14.700 min.: 3D97779.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	4111	131.00	74	173.10	349		
96.95	78	134.90	73	173.90	60312		
103.90	227	140.90	531	174.95	4894		
105.95	220	142.00	35	175.90	60117		
115.85	215	142.90	536	176.90	3959		
116.90	290	145.90	39	177.90	114		
117.85	123	147.80	147				
118.90	335	154.90	135				
127.85	227	156.90	81				
128.90	37	171.90	44				
129.95	183	172.20	73				

SW-846 Method 8260

```
Data File : C:\msdchem\1\DATA\3D97803.D              Vial: 1
Acq On    :  8 Apr 2014   7:56 am                  Operator: courtnem
Sample    : bfb                                    Inst    : MS3D
Misc      : MS65386,V3D4218,w,,,,1                 Multiplr: 1.00
MS Integration Params: rteint.p

Method   : C:\msdchem\1\METHODS\M3D4135.M (RTE Integrator)
Title    : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
```



AutoFind: Scans 2217, 2218, 2219; Background Corrected with Scan 2208

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	9949	PASS
75	95	30	60	46.0	24402	PASS
95	95	100	100	100.0	53034	PASS
96	95	5	9	7.0	3703	PASS
173	174	0.00	2	0.5	284	PASS
174	95	50	120	100.3	53186	PASS
175	174	5	9	7.8	4173	PASS
176	174	95	101	98.2	52216	PASS
177	176	5	9	6.7	3490	PASS

3D97803.D M3D4135.M Tue Apr 08 15:39:49 2014 3D

Average of 14.689 to 14.700 min.: 3D97803.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	443	51.05	2804	67.00	167	78.00	170
37.05	2614	51.95	102	68.00	5267	78.95	1186
38.05	2217	55.05	91	69.00	5279	79.90	343
39.05	833	56.00	688	70.00	359	80.90	1170
39.90	38	57.00	1289	72.00	264	81.95	227
44.00	404	60.00	482	73.00	2150	85.90	39
45.00	467	61.05	2235	74.00	8136	86.95	2617
47.00	849	62.00	2104	75.00	24402	87.90	2454
48.00	306	63.00	1568	76.05	2193	90.95	157
49.05	1998	63.90	66	76.95	330	92.00	1338
50.00	9949	64.10	41	77.80	93	93.00	2144

Average of 14.689 to 14.700 min.: 3D97803.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	5796	127.85	184	173.90	53186		
95.00	53034	128.80	33	174.95	4173		
96.00	3703	129.85	177	175.90	52216		
97.00	84	136.90	39	176.90	3490		
103.80	142	140.90	493	177.90	34		
104.00	54	142.90	490				
105.90	198	147.85	135				
115.85	157	154.90	112				
116.90	270	156.90	33				
117.85	182	171.70	42				
118.85	249	173.10	284				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95822.D
Acq On : 12 Feb 2014 8:16 pm
Operator : courtnem
Sample : ic4135-0.5
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 19 12:40:38 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.234	65	73731	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	172686	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	247816	50.00	ug/L		0.00
88) chlorobenzene-d5	13.547	117	201406	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	111801	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	808	0.57	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 1.14%#				
51) 1,2-dichloroethane-d4 (s)	9.950	65	858	0.47	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 0.94%#				
80) toluene-d8 (s)	12.031	98	2878	0.58	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 1.16%#				
106) 4-bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L		
Spiked Amount 50.000	Range 75 - 118		Recovery = 0.00%#				
Target Compounds							Qvalue
10) chloromethane	4.182	50	1058	0.82	ug/L		89
11) vinyl chloride	4.434	62	827	0.64	ug/L		85
12) bromomethane	5.095	94	591	0.65	ug/L		87
13) chloroethane	5.273	64	436	0.78	ug/L	#	42
18) ethyl ether	6.138	74	332	0.64	ug/L		83
22) 1,1-dichloroethene	6.552	61	1036	0.66	ug/L		93
27) iodomethane	6.846	142	1276	0.56	ug/L		89
29) carbon disulfide	6.961	76	2662	0.80	ug/L		92
32) methyl tert butyl ether	7.596	73	2288	0.61	ug/L		85
33) trans-1,2-dichloroethene	7.653	61	964	0.65	ug/L		93
34) di-isopropyl ether	8.188	45	2633	0.85	ug/L	#	57
35) ethyl tert-butyl ether	8.660	59	2169	0.60	ug/L		87
37) 1,1-dichloroethane	8.220	63	1270	0.68	ug/L		88
38) chloroprene	8.330	53	834	0.48	ug/L		89
39) acrylonitrile	7.638	53	1157	3.07	ug/L		83
42) 2,2-dichloropropane	8.964	77	947	0.50	ug/L		91
43) cis-1,2-dichloroethene	8.964	61	1174	0.59	ug/L		90
44) propionitrile	9.064	54	953	6.47	ug/L		64
46) bromochloromethane	9.273	128	297	0.42	ug/L		78
48) chloroform	9.336	83	1362	0.63	ug/L		88
49) Tert-Butyl Formate	9.352	59	540	0.47	ug/L	#	58
54) 1,1,1-trichloroethane	9.567	97	1037	0.50	ug/L		78
56) 2,2,4-Trimethylpentane	9.992	57	2430	0.72	ug/L		73
57) tert-amyl methyl ether	10.044	73	2236	0.60	ug/L		87
60) n-butyl alcohol	10.542	56	901	30.24	ug/L	#	57
61) cyclohexane	9.640	84	1055	0.70	ug/L	#	72
62) carbon tetrachloride	9.766	117	886	0.41	ug/L	#	80
63) 1,1-dichloropropene	9.751	75	996	0.62	ug/L		76
64) hexane	7.936	57	691	0.66	ug/L		76
65) benzene	10.018	78	2933	0.66	ug/L		95
66) heptane	10.180	57	411	0.63	ug/L	#	79
68) 1,2-dichloroethane	10.044	62	763	0.36	ug/L		91
69) trichloroethene	10.731	95	724	0.56	ug/L		75

M3D4135.M Wed Feb 19 12:47:13 2014 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95822.D
Acq On : 12 Feb 2014 8:16 pm
Operator : courtnem
Sample : ic4135-0.5
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 19 12:40:38 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
73) 2-chloroethyl vinyl ether	11.538	63	2129	2.64	ug/L		93
74) methyl methacrylate	11.004	41	1449	0.75	ug/L		82
75) 1,2-dichloropropane	11.009	63	712	0.65	ug/L	#	57
76) methylcyclohexane	10.941	83	871	0.47	ug/L		90
77) dibromomethane	11.171	93	367	0.40	ug/L		94
78) bromodichloromethane	11.297	83	989	0.51	ug/L		89
79) cis-1,3-dichloropropene	11.753	75	1194	0.57	ug/L		88
82) toluene	12.105	92	1546	0.54	ug/L		96
83) 3-methyl-1-butanol	11.879	70	240	7.91	ug/L	#	1
84) trans-1,3-dichloropropene	12.314	75	920	0.44	ug/L		75
85) ethyl methacrylate	12.309	69	773	0.56	ug/L		71
86) 1,1,2-trichloroethane	12.524	83	518	0.55	ug/L		84
89) tetrachloroethene	12.687	166	685	0.47	ug/L		86
90) 1,3-dichloropropane	12.713	76	956	0.57	ug/L		91
91) butyl acetate	12.776	56	416	0.65	ug/L	#	37
92) 3,3-Dimethyl-1-Butanol	12.870	57	848	8.69	ug/L	#	80
93) dibromochloromethane	12.975	129	741	0.46	ug/L		78
94) 1,2-dibromoethane	13.127	107	579	0.48	ug/L		86
96) chlorobenzene	13.573	112	1733	0.53	ug/L		93
97) 1,1,1,2-tetrachloroethane	13.641	131	633	0.44	ug/L		85
98) ethylbenzene	13.630	91	3021	0.58	ug/L		98
99) m,p-xylene	13.735	106	2306	1.17	ug/L		96
100) o-xylene	14.155	106	1103	0.53	ug/L		69
101) styrene	14.170	104	1767	0.52	ug/L		88
103) bromoform	14.443	173	526	0.41	ug/L		95
105) isopropylbenzene	14.490	105	2852	0.58	ug/L		97
107) bromobenzene	14.894	156	825	0.54	ug/L		89
108) cyclohexanone	14.674	55	509	12.67	ug/L	#	53
109) 1,1,2,2-tetrachloroethane	14.805	83	928	0.68	ug/L		90
112) n-propylbenzene	14.899	91	3444	0.66	ug/L		91
114) 2-chlorotoluene	15.051	126	642	0.51	ug/L	#	82
115) 4-chlorotoluene	15.151	126	649	0.50	ug/L	#	72
116) 1,3,5-trimethylbenzene	15.046	105	2418	0.57	ug/L		94
117) tert-butylbenzene	15.392	119	2107	0.58	ug/L		91
118) pentachloroethane	15.486	167	487	0.44	ug/L		98
119) 1,2,4-trimethylbenzene	15.444	105	2413	0.56	ug/L		91
120) sec-butylbenzene	15.607	105	3130	0.59	ug/L		96
121) 1,3-dichlorobenzene	15.801	146	1613	0.57	ug/L		85
122) p-isopropyltoluene	15.722	119	2647	0.56	ug/L		93
123) 1,4-dichlorobenzene	15.880	146	1612	0.54	ug/L		88
124) 1,2-dichlorobenzene	16.262	146	1465	0.50	ug/L		85
126) n-butylbenzene	16.131	92	1351	0.55	ug/L		82
129) 1,3,5-trichlorobenzene	17.154	180	1232	0.45	ug/L		95
130) 1,2,4-trichlorobenzene	17.725	180	1113	0.42	ug/L		91
131) hexachlorobutadiene	17.814	225	663	0.49	ug/L		88
132) naphthalene	17.966	128	2282	0.46	ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	1034	0.44	ug/L		90
134) hexachloroethane	16.504	119	522	0.48	ug/L		79
135) Benzyl chloride	16.000	91	1211	0.43	ug/L	#	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95822.D
Acq On : 12 Feb 2014 8:16 pm
Operator : courtnem
Sample : ic4135-0.5
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 19 12:40:38 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

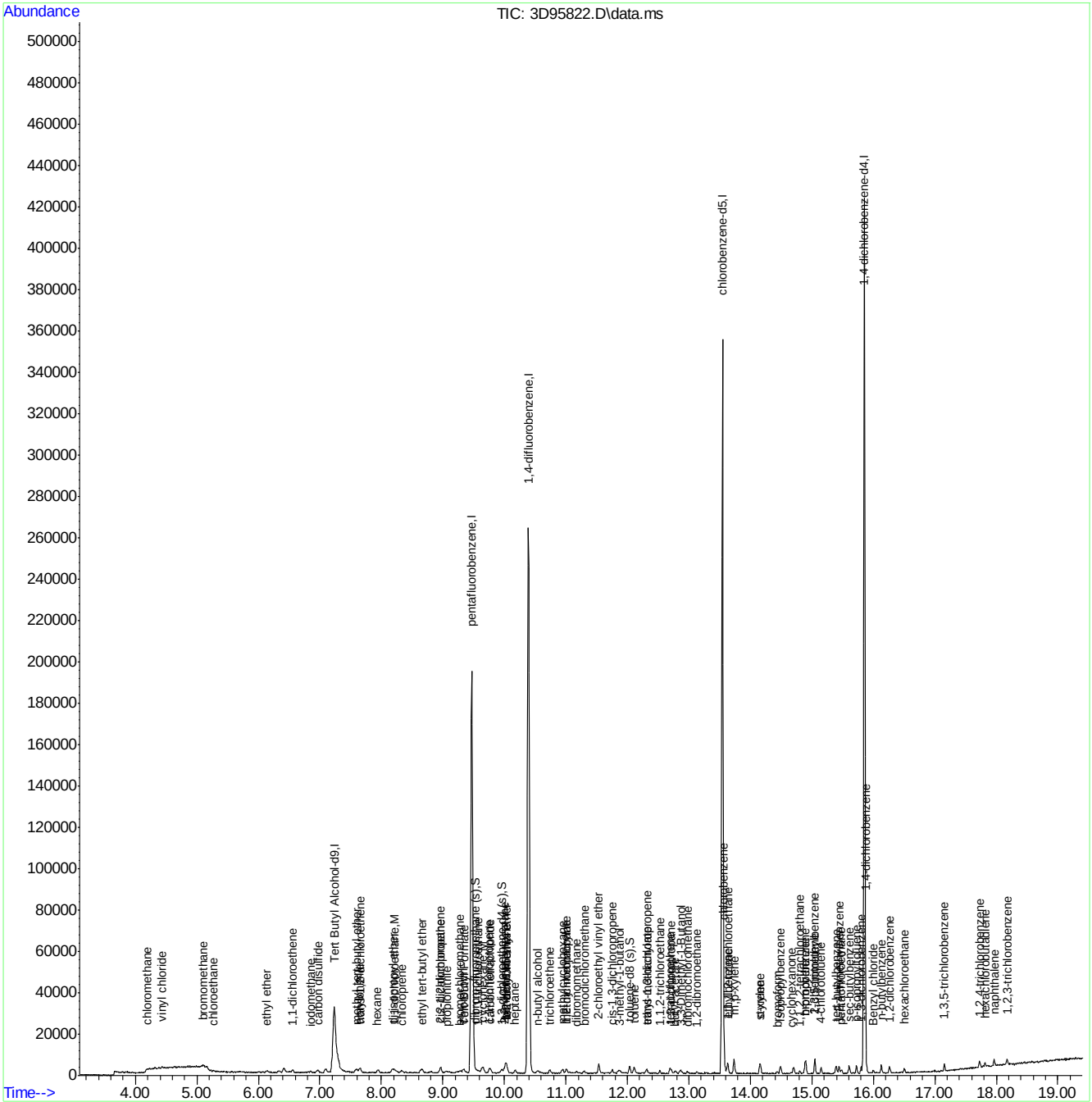
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95822.D
Acq On : 12 Feb 2014 8:16 pm
Operator : courtnem
Sample : ic4135-0.5
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 19 12:40:38 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:13 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95823.D
Acq On : 12 Feb 2014 8:43 pm
Operator : courtnem
Sample : ic4135-1.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 14 10:42:57 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.234	65	72450	500.00	ug/L		0.00
4) pentafluorobenzene	9.472	168	178792	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	255856	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	208695	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	114832	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	1505	1.02	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 2.04%#				
51) 1,2-dichloroethane-d4 (s)	9.950	65	1682	0.89	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 1.78%#				
80) toluene-d8 (s)	12.042	98	5382	1.06	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 2.12%#				
106) 4-bromofluorobenzene (s)	14.700	95	2291	1.26	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 2.52%#				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.359	59	857	5.71	ug/L	#	8
9) dichlorodifluoromethane	3.857	85	1404	0.93	ug/L		91
10) chloromethane	4.187	50	1991	1.48	ug/L		93
11) vinyl chloride	4.439	62	1800	1.35	ug/L		89
12) bromomethane	5.100	94	1168	1.24	ug/L		77
13) chloroethane	5.278	64	995	1.72	ug/L		94
16) trichlorofluoromethane	5.729	101	1847	0.89	ug/L		92
18) ethyl ether	6.133	74	695	1.29	ug/L		90
21) acrolein	6.405	56	304666	1489.69	ug/L		97
22) 1,1-dichloroethene	6.557	61	2054	1.26	ug/L		91
24) allyl chloride	7.097	76	678	1.16	ug/L	#	85
25) acetonitrile	7.092	40	1673	17.81	ug/L		93
27) iodomethane	6.851	142	2647	1.11	ug/L		86
29) carbon disulfide	6.972	76	5022	1.45	ug/L		88
30) methylene chloride	7.297	84	1997	1.73	ug/L		91
32) methyl tert butyl ether	7.601	73	4216	1.09	ug/L		90
33) trans-1,2-dichloroethene	7.653	61	2046	1.33	ug/L		89
34) di-isopropyl ether	8.188	45	5081	1.58	ug/L	#	59
35) ethyl tert-butyl ether	8.649	59	4354	1.16	ug/L		90
37) 1,1-dichloroethane	8.225	63	2535	1.31	ug/L		93
38) chloroprene	8.324	53	1842	1.03	ug/L		92
39) acrylonitrile	7.643	53	2453	6.29	ug/L		98
41) ethyl acetate	8.948	45	251	1.87	ug/L	#	52
42) 2,2-dichloropropane	8.959	77	1911	0.98	ug/L		91
43) cis-1,2-dichloroethene	8.964	61	2558	1.25	ug/L		99
44) propionitrile	9.053	54	1770	11.61	ug/L		89
46) bromochloromethane	9.278	128	721	0.98	ug/L		90
48) chloroform	9.331	83	2498	1.11	ug/L		98
49) Tert-Butyl Formate	9.357	59	1138	0.97	ug/L	#	64
53) methacrylonitrile	9.231	41	1310	1.96	ug/L		67
54) 1,1,1-trichloroethane	9.572	97	2010	0.93	ug/L		94
56) 2,2,4-Trimethylpentane	9.997	57	4405	1.27	ug/L		89
57) tert-amyl methyl ether	10.039	73	4454	1.15	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95823.D
Acq On : 12 Feb 2014 8:43 pm
Operator : courtnem
Sample : ic4135-1.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 14 10:42:57 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
59) epichlorohydrin	11.659	57	819	6.52	ug/L		48
60) n-butyl alcohol	10.526	56	2424	78.79	ug/L		87
61) cyclohexane	9.645	84	1982	1.27	ug/L	#	73
62) carbon tetrachloride	9.771	117	1777	0.79	ug/L		98
63) 1,1-dichloropropene	9.750	75	1917	1.16	ug/L		87
64) hexane	7.941	57	1323	1.23	ug/L		88
65) benzene	10.023	78	5726	1.24	ug/L		98
66) heptane	10.175	57	839	1.26	ug/L		83
67) isopropyl acetate	9.939	43	2682	1.05	ug/L	#	89
68) 1,2-dichloroethane	10.044	62	1659	0.76	ug/L		91
69) trichloroethene	10.736	95	1392	1.05	ug/L		95
73) 2-chloroethyl vinyl ether	11.533	63	4929	5.92	ug/L		93
74) methyl methacrylate	11.003	41	2394	1.20	ug/L		93
75) 1,2-dichloropropane	11.009	63	1394	1.24	ug/L		78
76) methylcyclohexane	10.951	83	1931	1.01	ug/L		88
77) dibromomethane	11.171	93	858	0.90	ug/L		92
78) bromodichloromethane	11.297	83	1882	0.94	ug/L		89
79) cis-1,3-dichloropropene	11.753	75	2397	1.11	ug/L		89
81) 4-methyl-2-pentanone	11.853	58	544	1.23	ug/L	#	53
82) toluene	12.110	92	3175	1.08	ug/L		93
83) 3-methyl-1-butanol	11.863	70	884	28.23	ug/L	#	67
84) trans-1,3-dichloropropene	12.319	75	1986	0.92	ug/L		86
85) ethyl methacrylate	12.298	69	1583	1.10	ug/L		82
86) 1,1,2-trichloroethane	12.529	83	1048	1.08	ug/L		94
87) 2-hexanone	12.707	58	372	0.97	ug/L	#	54
89) tetrachloroethene	12.692	166	1352	0.89	ug/L		94
90) 1,3-dichloropropane	12.707	76	1991	1.14	ug/L		98
91) butyl acetate	12.770	56	1050	1.59	ug/L		87
92) 3,3-Dimethyl-1-Butanol	12.865	57	1904	18.82	ug/L	#	89
93) dibromochloromethane	12.975	129	1494	0.89	ug/L		96
94) 1,2-dibromoethane	13.127	107	1238	0.99	ug/L		92
96) chlorobenzene	13.578	112	3443	1.01	ug/L		94
97) 1,1,1,2-tetrachloroethane	13.641	131	1313	0.89	ug/L		90
98) ethylbenzene	13.630	91	5751	1.07	ug/L		98
99) m,p-xylene	13.735	106	4379	2.14	ug/L		96
100) o-xylene	14.154	106	2257	1.04	ug/L		76
101) styrene	14.165	104	3604	1.03	ug/L		97
103) bromoform	14.432	173	1057	0.79	ug/L		85
105) isopropylbenzene	14.490	105	5550	1.11	ug/L		93
107) bromobenzene	14.899	156	1680	1.07	ug/L		95
108) cyclohexanone	14.668	55	700	16.97	ug/L	#	81
109) 1,1,2,2-tetrachloroethane	14.805	83	1895	1.36	ug/L		90
110) trans-1,4-dichloro-2-b...	14.857	53	394	0.99	ug/L	#	36
111) 1,2,3-trichloropropane	14.883	110	318	0.80	ug/L		80
112) n-propylbenzene	14.899	91	6534	1.21	ug/L		98
114) 2-chlorotoluene	15.051	126	1415	1.08	ug/L		95
115) 4-chlorotoluene	15.145	126	1425	1.07	ug/L	#	73
116) 1,3,5-trimethylbenzene	15.046	105	4764	1.09	ug/L		97
117) tert-butylbenzene	15.392	119	3942	1.05	ug/L		91
118) pentachloroethane	15.491	167	1084	0.95	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95823.D
Acq On : 12 Feb 2014 8:43 pm
Operator : courtnem
Sample : ic4135-1.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 14 10:42:57 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) 1,2,4-trimethylbenzene	15.444	105	4627	1.05	ug/L	91
120) sec-butylbenzene	15.607	105	6503	1.20	ug/L	96
121) 1,3-dichlorobenzene	15.801	146	3036	1.04	ug/L	95
122) p-isopropyltoluene	15.722	119	5286	1.08	ug/L	98
123) 1,4-dichlorobenzene	15.879	146	3233	1.06	ug/L	97
124) 1,2-dichlorobenzene	16.262	146	3107	1.03	ug/L	93
126) n-butylbenzene	16.126	92	2584	1.03	ug/L	87
128) 1,2-dibromo-3-chloropr...	16.991	157	335	0.86	ug/L	89
129) 1,3,5-trichlorobenzene	17.159	180	2662	0.94	ug/L	99
130) 1,2,4-trichlorobenzene	17.720	180	2390	0.88	ug/L	99
131) hexachlorobutadiene	17.814	225	1331	0.95	ug/L	96
132) naphthalene	17.966	128	5011	0.99	ug/L	99
133) 1,2,3-trichlorobenzene	18.176	180	2305	0.95	ug/L	99
134) hexachloroethane	16.503	119	964	0.86	ug/L	91
135) Benzyl chloride	15.995	91	3030	1.05	ug/L	96

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

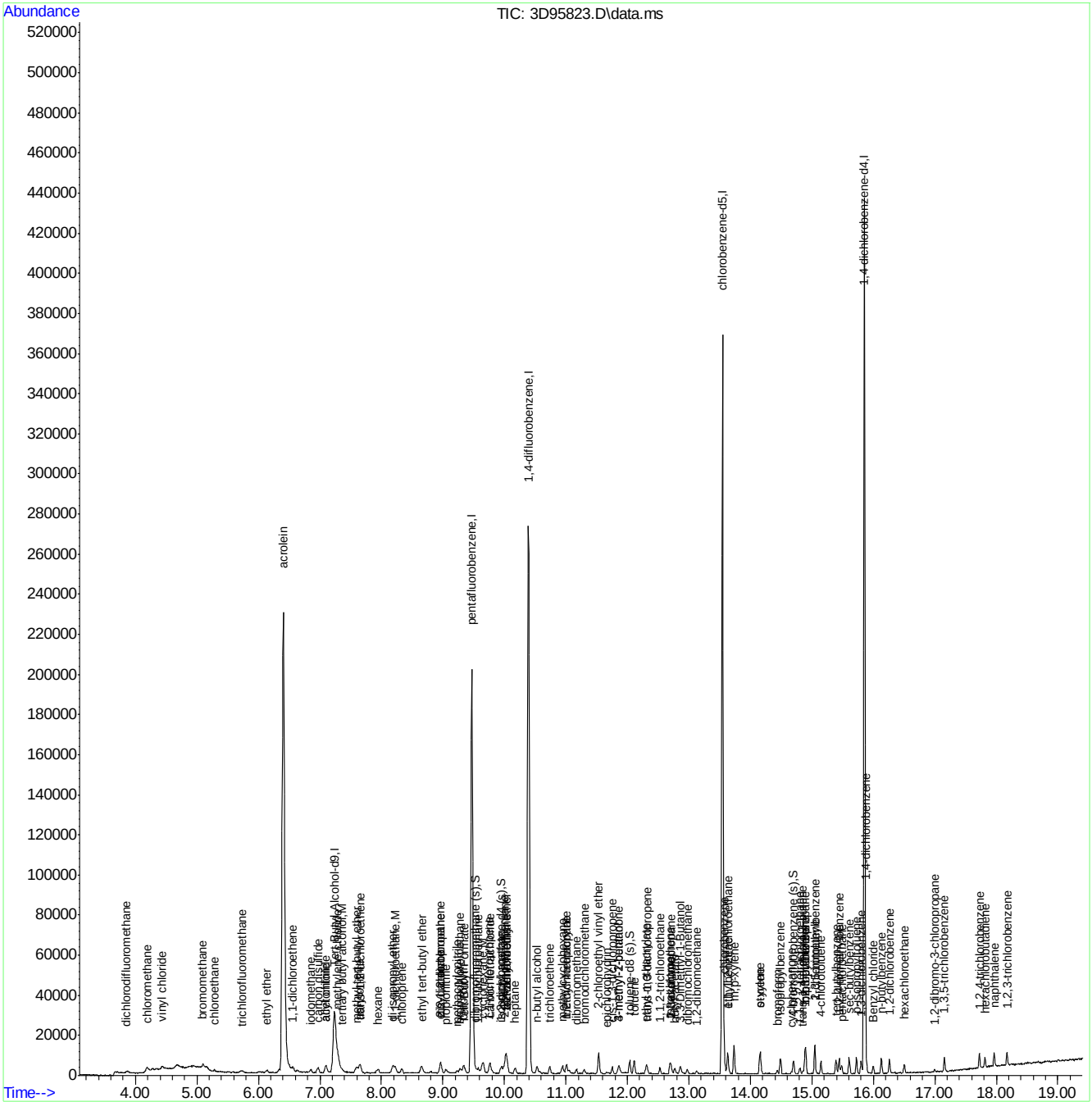
7.6.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95823.D
Acq On : 12 Feb 2014 8:43 pm
Operator : courtnem
Sample : ic4135-1.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 14 10:42:57 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:14 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95824.D
Acq On : 12 Feb 2014 9:10 pm
Operator : courtnem
Sample : ic4135-2.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 14 10:43:50 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.239	65	72592	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	171776	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	244146	50.00	ug/L		0.00
88) chlorobenzene-d5	13.547	117	198603	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	110167	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.536	113	2869	2.02	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 4.04%#				
51) 1,2-dichloroethane-d4 (s)	9.950	65	3107	1.71	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 3.42%#				
80) toluene-d8 (s)	12.037	98	9933	2.04	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 4.08%#				
106) 4-bromofluorobenzene (s)	14.700	95	3850	2.20	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 4.40%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	494	39.71	ug/L	#	69
3) tertiary butyl alcohol	7.355	59	1691	11.25	ug/L		54
8) chlorodifluoromethane	3.873	51	2060	1.91	ug/L		89
9) dichlorodifluoromethane	3.852	85	2636	1.81	ug/L		94
10) chloromethane	4.188	50	3804	2.95	ug/L		97
11) vinyl chloride	4.434	62	3535	2.76	ug/L		98
12) bromomethane	5.095	94	2094	2.30	ug/L		96
13) chloroethane	5.273	64	2027	3.64	ug/L		93
16) trichlorofluoromethane	5.734	101	3554	1.79	ug/L		92
18) ethyl ether	6.138	74	1500	2.90	ug/L		97
21) acrolein	6.400	56	646192	3288.67	ug/L		95
22) 1,1-dichloroethene	6.558	61	4306	2.74	ug/L		91
23) acetone	6.626	58	982	12.20	ug/L	#	70
24) allyl chloride	7.092	76	1594	2.85	ug/L	#	68
25) acetonitrile	7.082	40	3166	35.08	ug/L		91
27) iodomethane	6.846	142	5494	2.41	ug/L		88
28) iso-butyl alcohol	9.772	41	1673	45.96	ug/L		89
29) carbon disulfide	6.972	76	10588	3.19	ug/L		90
30) methylene chloride	7.292	84	3701	3.34	ug/L		96
32) methyl tert butyl ether	7.601	73	9033	2.43	ug/L		92
33) trans-1,2-dichloroethene	7.653	61	4297	2.91	ug/L		99
34) di-isopropyl ether	8.188	45	10389	3.35	ug/L	#	70
35) ethyl tert-butyl ether	8.650	59	9236	2.56	ug/L		93
37) 1,1-dichloroethane	8.225	63	5389	2.89	ug/L		94
38) chloroprene	8.330	53	4017	2.33	ug/L		98
39) acrylonitrile	7.632	53	5808	15.49	ug/L		90
41) ethyl acetate	8.954	45	472	3.66	ug/L	#	1
42) 2,2-dichloropropane	8.959	77	3923	2.10	ug/L		92
43) cis-1,2-dichloroethene	8.964	61	5271	2.67	ug/L		98
44) propionitrile	9.043	54	4352	29.70	ug/L		90
45) methyl acrylate	9.038	55	3601	3.27	ug/L		83
46) bromochloromethane	9.284	128	1532	2.17	ug/L	#	81
48) chloroform	9.331	83	5113	2.37	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95824.D
Acq On : 12 Feb 2014 9:10 pm
Operator : courtnem
Sample : ic4135-2.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 14 10:43:50 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Tert-Butyl Formate	9.352	59	2623	2.32	ug/L	#	80
52) freon 113	6.526	151	1814	1.96	ug/L		84
53) methacrylonitrile	9.226	41	2545	3.96	ug/L		88
54) 1,1,1-trichloroethane	9.578	97	4243	2.04	ug/L		98
56) 2,2,4-Trimethylpentane	9.997	57	9889	2.96	ug/L		98
57) tert-amyl methyl ether	10.044	73	9111	2.44	ug/L		91
59) epichlorohydrin	11.670	57	1542	12.87	ug/L		88
60) n-butyl alcohol	10.527	56	4339	147.80	ug/L		91
61) cyclohexane	9.640	84	4288	2.89	ug/L		88
62) carbon tetrachloride	9.772	117	3813	1.78	ug/L		98
63) 1,1-dichloropropene	9.756	75	3842	2.43	ug/L		94
64) hexane	7.936	57	2860	2.78	ug/L		93
65) benzene	10.018	78	11893	2.71	ug/L		97
66) heptane	10.175	57	1762	2.76	ug/L		93
67) isopropyl acetate	9.939	43	5641	2.31	ug/L		95
68) 1,2-dichloroethane	10.049	62	3582	1.73	ug/L		95
69) trichloroethene	10.731	95	2958	2.33	ug/L		90
73) 2-chloroethyl vinyl ether	11.533	63	9951	12.52	ug/L		95
74) methyl methacrylate	11.004	41	4996	2.62	ug/L		85
75) 1,2-dichloropropane	11.009	63	3061	2.85	ug/L		64
76) methylcyclohexane	10.941	83	4371	2.40	ug/L		98
77) dibromomethane	11.171	93	1838	2.03	ug/L		93
78) bromodichloromethane	11.292	83	3992	2.08	ug/L		97
79) cis-1,3-dichloropropene	11.753	75	4681	2.27	ug/L		89
81) 4-methyl-2-pentanone	11.843	58	1132	2.69	ug/L	#	80
82) toluene	12.110	92	6807	2.43	ug/L		96
83) 3-methyl-1-butanol	11.864	70	1497	50.10	ug/L	#	77
84) trans-1,3-dichloropropene	12.314	75	4082	1.99	ug/L		86
85) ethyl methacrylate	12.299	69	3501	2.56	ug/L		97
86) 1,1,2-trichloroethane	12.524	83	2243	2.42	ug/L		97
87) 2-hexanone	12.702	58	1004	2.76	ug/L	#	70
89) tetrachloroethene	12.692	166	3010	2.07	ug/L		93
90) 1,3-dichloropropane	12.708	76	4205	2.53	ug/L		97
91) butyl acetate	12.765	56	1906	3.04	ug/L	#	81
92) 3,3-Dimethyl-1-Butanol	12.865	57	3210	33.34	ug/L	#	87
93) dibromochloromethane	12.975	129	3233	2.03	ug/L		95
94) 1,2-dibromoethane	13.127	107	2749	2.30	ug/L		99
96) chlorobenzene	13.578	112	7588	2.33	ug/L		95
97) 1,1,1,2-tetrachloroethane	13.636	131	2920	2.08	ug/L		99
98) ethylbenzene	13.625	91	12247	2.40	ug/L		98
99) m,p-xylene	13.735	106	9507	4.87	ug/L		92
100) o-xylene	14.150	106	4733	2.29	ug/L		89
101) styrene	14.165	104	7813	2.35	ug/L		97
103) bromoform	14.438	173	2425	1.92	ug/L		96
105) isopropylbenzene	14.490	105	11961	2.49	ug/L		99
107) bromobenzene	14.894	156	3414	2.26	ug/L	#	84
108) cyclohexanone	14.669	55	1244	31.43	ug/L		87
109) 1,1,2,2-tetrachloroethane	14.805	83	4154	3.11	ug/L		96
110) trans-1,4-dichloro-2-b...	14.852	53	772	2.03	ug/L		78
111) 1,2,3-trichloropropane	14.884	110	879	2.31	ug/L		83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95824.D
Acq On : 12 Feb 2014 9:10 pm
Operator : courtnem
Sample : ic4135-2.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 14 10:43:50 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

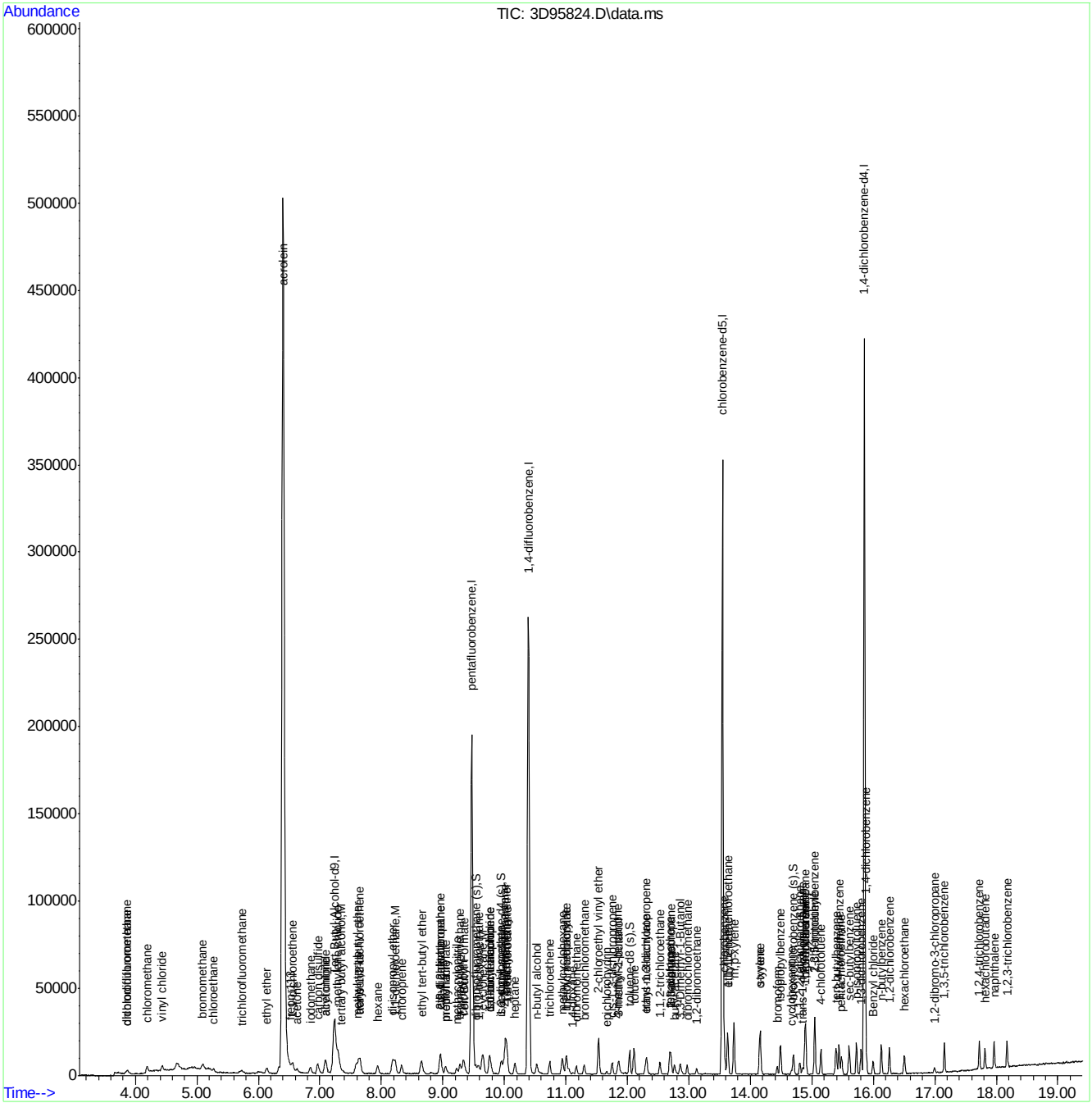
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) n-propylbenzene	14.899	91	13839	2.68	ug/L	98
114) 2-chlorotoluene	15.051	126	3122	2.49	ug/L	88
115) 4-chlorotoluene	15.151	126	2987	2.35	ug/L	89
116) 1,3,5-trimethylbenzene	15.046	105	10006	2.38	ug/L	99
117) tert-butylbenzene	15.397	119	8507	2.36	ug/L	97
118) pentachloroethane	15.481	167	2222	2.02	ug/L	96
119) 1,2,4-trimethylbenzene	15.445	105	10053	2.38	ug/L	93
120) sec-butylbenzene	15.607	105	12965	2.49	ug/L	96
121) 1,3-dichlorobenzene	15.801	146	6443	2.29	ug/L	98
122) p-isopropyltoluene	15.728	119	11283	2.41	ug/L	97
123) 1,4-dichlorobenzene	15.880	146	6561	2.24	ug/L	97
124) 1,2-dichlorobenzene	16.262	146	6599	2.29	ug/L	99
126) n-butylbenzene	16.126	92	5620	2.33	ug/L	92
128) 1,2-dibromo-3-chloropr...	17.002	157	803	2.14	ug/L	87
129) 1,3,5-trichlorobenzene	17.154	180	5601	2.06	ug/L	97
130) 1,2,4-trichlorobenzene	17.725	180	5141	1.98	ug/L	97
131) hexachlorobutadiene	17.814	225	2813	2.10	ug/L	100
132) naphthalene	17.966	128	10991	2.26	ug/L	99
133) 1,2,3-trichlorobenzene	18.176	180	4812	2.07	ug/L	97
134) hexachloroethane	16.504	119	2286	2.14	ug/L	92
135) Benzyl chloride	15.995	91	5503	1.99	ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95824.D
Acq On : 12 Feb 2014 9:10 pm
Operator : courtnem
Sample : ic4135-2.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 14 10:43:50 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:15 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95825.D
Acq On : 12 Feb 2014 9:37 pm
Operator : courtnem
Sample : ic4135-5.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 14 10:10:04 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.234	65	73379	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	172134	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.395	114	248001	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	201084	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	110244	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	7435	5.23	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 10.46%#				
51) 1,2-dichloroethane-d4 (s)	9.955	65	7724	4.23	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 8.46%#				
80) toluene-d8 (s)	12.036	98	25050	5.07	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 10.14%#				
106) 4-bromofluorobenzene (s)	14.700	95	9088	5.19	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 10.38%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	1525	121.26	ug/L	#	74
3) tertiary butyl alcohol	7.360	59	3895	25.64	ug/L		69
8) chlorodifluoromethane	3.878	51	5619	5.20	ug/L		91
9) dichlorodifluoromethane	3.857	85	7355	5.05	ug/L		91
10) chloromethane	4.198	50	10370	8.02	ug/L		98
11) vinyl chloride	4.445	62	9669	7.54	ug/L		98
12) bromomethane	5.105	94	5732	6.30	ug/L		99
13) chloroethane	5.278	64	5377	9.64	ug/L		91
16) trichlorofluoromethane	5.729	101	9808	4.92	ug/L		99
18) ethyl ether	6.138	74	4151	8.01	ug/L		88
21) acrolein	6.411	56	16870	85.68	ug/L		97
22) 1,1-dichloroethene	6.563	61	11459	7.29	ug/L		97
23) acetone	6.631	58	562	6.97	ug/L	#	73
24) allyl chloride	7.092	76	4340	7.74	ug/L		85
25) acetonitrile	7.082	40	7202	79.64	ug/L	#	88
27) iodomethane	6.846	142	14405	6.30	ug/L		85
28) iso-butyl alcohol	9.766	41	3100	84.98	ug/L		87
29) carbon disulfide	6.972	76	27151	8.17	ug/L		95
30) methylene chloride	7.291	84	8618	7.76	ug/L		94
31) methyl acetate	7.082	74	1112	6.22	ug/L	#	55
32) methyl tert butyl ether	7.596	73	22569	6.05	ug/L		91
33) trans-1,2-dichloroethene	7.659	61	11409	7.71	ug/L		97
34) di-isopropyl ether	8.183	45	25993	8.37	ug/L	#	66
35) ethyl tert-butyl ether	8.655	59	24079	6.66	ug/L		94
36) 2-butanone	8.938	72	686	5.38	ug/L	#	1
37) 1,1-dichloroethane	8.230	63	14281	7.64	ug/L		98
38) chloroprene	8.330	53	10466	6.07	ug/L		91
39) acrylonitrile	7.632	53	15356	40.88	ug/L		92
40) vinyl acetate	8.209	86	1067	6.20	ug/L		70
41) ethyl acetate	8.948	45	1283	9.94	ug/L	#	17
42) 2,2-dichloropropane	8.959	77	9253	4.94	ug/L		90
43) cis-1,2-dichloroethene	8.964	61	13561	6.86	ug/L		98
44) propionitrile	9.037	54	11148	75.93	ug/L		79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95825.D
Acq On : 12 Feb 2014 9:37 pm
Operator : courtnem
Sample : ic4135-5.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 14 10:10:04 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methyl acrylate	9.027	55	9110	8.25	ug/L		94
46) bromochloromethane	9.279	128	4155	5.86	ug/L	#	63
47) tetrahydrofuran	9.305	42	3331	9.33	ug/L		78
48) chloroform	9.336	83	12967	5.99	ug/L		98
49) Tert-Butyl Formate	9.352	59	6848	6.04	ug/L	#	85
52) freon 113	6.526	151	4871	5.26	ug/L		93
53) methacrylonitrile	9.216	41	5242	8.13	ug/L		91
54) 1,1,1-trichloroethane	9.577	97	10892	5.23	ug/L		96
56) 2,2,4-Trimethylpentane	10.002	57	25097	7.51	ug/L		92
57) tert-amyl methyl ether	10.044	73	23251	6.21	ug/L		93
59) epichlorohydrin	11.659	57	3741	30.73	ug/L		94
60) n-butyl alcohol	10.521	56	10505	352.26	ug/L		94
61) cyclohexane	9.640	84	10892	7.23	ug/L		93
62) carbon tetrachloride	9.777	117	9925	4.55	ug/L		99
63) 1,1-dichloropropene	9.756	75	9987	6.22	ug/L		94
64) hexane	7.942	57	7128	6.83	ug/L		96
65) benzene	10.023	78	30109	6.74	ug/L		97
66) heptane	10.175	57	4432	6.84	ug/L		94
67) isopropyl acetate	9.939	43	14637	5.91	ug/L		96
68) 1,2-dichloroethane	10.044	62	9276	4.41	ug/L		93
69) trichloroethene	10.736	95	7538	5.85	ug/L		94
72) 2-nitropropane	11.523	41	3045	4.76	ug/L		97
73) 2-chloroethyl vinyl ether	11.528	63	25695	31.82	ug/L		95
74) methyl methacrylate	11.004	41	12168	6.29	ug/L		93
75) 1,2-dichloropropane	11.004	63	8017	7.34	ug/L		76
76) methylcyclohexane	10.941	83	10903	5.90	ug/L		95
77) dibromomethane	11.171	93	4930	5.36	ug/L		89
78) bromodichloromethane	11.297	83	9922	5.10	ug/L		95
79) cis-1,3-dichloropropene	11.748	75	12048	5.75	ug/L		89
81) 4-methyl-2-pentanone	11.842	58	3005	7.02	ug/L		90
82) toluene	12.110	92	17376	6.11	ug/L		96
83) 3-methyl-1-butanol	11.863	70	3872	127.56	ug/L		87
84) trans-1,3-dichloropropene	12.314	75	10442	5.00	ug/L		86
85) ethyl methacrylate	12.299	69	8593	6.18	ug/L		87
86) 1,1,2-trichloroethane	12.529	83	5570	5.92	ug/L		93
87) 2-hexanone	12.697	58	2548	6.89	ug/L		92
89) tetrachloroethene	12.692	166	7851	5.34	ug/L		96
90) 1,3-dichloropropane	12.708	76	10529	6.26	ug/L		97
91) butyl acetate	12.765	56	4897	7.71	ug/L		89
92) 3,3-Dimethyl-1-Butanol	12.865	57	7809	80.11	ug/L	#	90
93) dibromochloromethane	12.970	129	7932	4.93	ug/L		93
94) 1,2-dibromoethane	13.122	107	6712	5.55	ug/L		90
96) chlorobenzene	13.578	112	18811	5.71	ug/L		95
97) 1,1,1,2-tetrachloroethane	13.636	131	7151	5.03	ug/L		91
98) ethylbenzene	13.625	91	31180	6.02	ug/L		99
99) m,p-xylene	13.735	106	23933	12.12	ug/L		92
100) o-xylene	14.149	106	11898	5.69	ug/L		90
101) styrene	14.165	104	19382	5.76	ug/L		95
103) bromoform	14.438	173	5636	4.40	ug/L		95
105) isopropylbenzene	14.490	105	30778	6.40	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95825.D
Acq On : 12 Feb 2014 9:37 pm
Operator : courtnem
Sample : ic4135-5.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 14 10:10:04 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

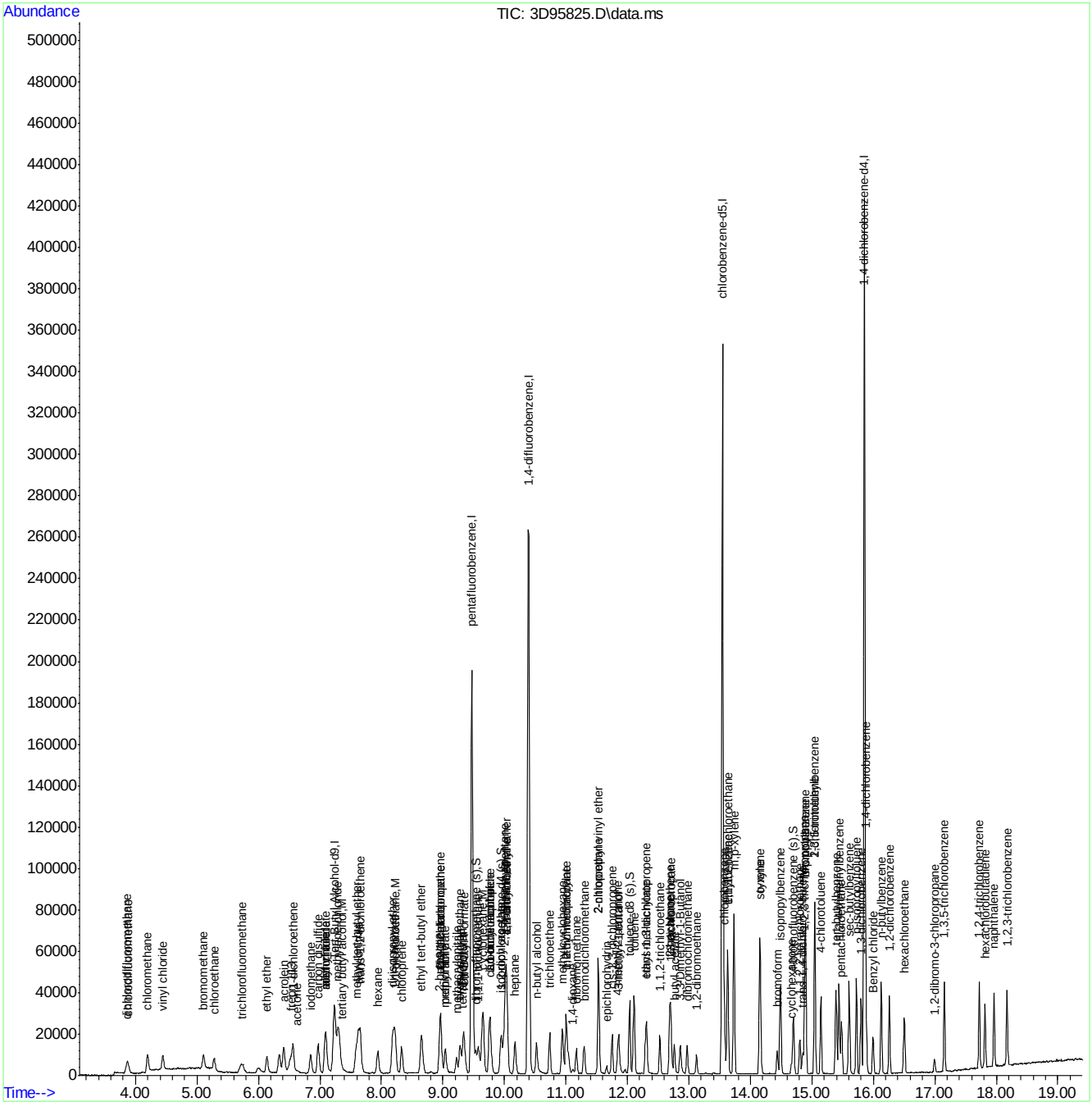
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) bromobenzene	14.894	156	8527	5.64	ug/L	#	81
108) cyclohexanone	14.668	55	2354	59.43	ug/L		95
109) 1,1,2,2-tetrachloroethane	14.805	83	9263	6.92	ug/L		95
110) trans-1,4-dichloro-2-b...	14.852	53	1981	5.19	ug/L	#	71
111) 1,2,3-trichloropropane	14.878	110	2095	5.51	ug/L		80
112) n-propylbenzene	14.899	91	34535	6.67	ug/L		100
114) 2-chlorotoluene	15.051	126	7518	6.00	ug/L		92
115) 4-chlorotoluene	15.146	126	7706	6.05	ug/L		96
116) 1,3,5-trimethylbenzene	15.046	105	25382	6.03	ug/L		100
117) tert-butylbenzene	15.392	119	21178	5.88	ug/L		96
118) pentachloroethane	15.481	167	5502	5.00	ug/L		98
119) 1,2,4-trimethylbenzene	15.439	105	25013	5.91	ug/L		92
120) sec-butylbenzene	15.607	105	33225	6.38	ug/L		97
121) 1,3-dichlorobenzene	15.801	146	15852	5.63	ug/L		93
122) p-isopropyltoluene	15.722	119	27841	5.93	ug/L		96
123) 1,4-dichlorobenzene	15.880	146	16322	5.56	ug/L		95
124) 1,2-dichlorobenzene	16.262	146	15673	5.43	ug/L		93
126) n-butylbenzene	16.131	92	14393	5.97	ug/L		90
128) 1,2-dibromo-3-chloropr...	16.996	157	2039	5.43	ug/L		95
129) 1,3,5-trichlorobenzene	17.154	180	13977	5.14	ug/L		98
130) 1,2,4-trichlorobenzene	17.725	180	12927	4.96	ug/L		98
131) hexachlorobutadiene	17.814	225	6785	5.07	ug/L		96
132) naphthalene	17.966	128	26073	5.37	ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	11970	5.14	ug/L		99
134) hexachloroethane	16.503	119	5691	5.32	ug/L		94
135) Benzyl chloride	15.995	91	12770	4.61	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95825.D
Acq On : 12 Feb 2014 9:37 pm
Operator : courtnem
Sample : ic4135-5.0
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 14 10:10:04 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:16 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95826.D
Acq On : 12 Feb 2014 10:04 pm
Operator : courtnem
Sample : ic4135-10
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 14 10:07:10 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.234	65	79345	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	171412	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	245034	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	198497	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	109632	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.535	113	14648	10.34	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 20.68%#				
51) 1,2-dichloroethane-d4 (s)	9.955	65	15416	8.49	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 16.98%#				
80) toluene-d8 (s)	12.031	98	50528	10.35	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 20.70%#				
106) 4-bromofluorobenzene (s)	14.700	95	17746	10.19	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 20.38%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	3201	235.39	ug/L		88
3) tertiary butyl alcohol	7.354	59	8880	54.07	ug/L		82
8) chlorodifluoromethane	3.883	51	11527	10.71	ug/L		90
9) dichlorodifluoromethane	3.852	85	15182	10.47	ug/L		95
10) chloromethane	4.198	50	21086	16.37	ug/L		100
11) vinyl chloride	4.450	62	20773	16.26	ug/L		98
12) bromomethane	5.105	94	11941	13.17	ug/L		96
13) chloroethane	5.278	64	11129	20.05	ug/L		91
16) trichlorofluoromethane	5.739	101	21422	10.79	ug/L		99
18) ethyl ether	6.133	74	8661	16.77	ug/L		83
21) acrolein	6.405	56	34616	176.55	ug/L		94
22) 1,1-dichloroethene	6.568	61	22164	14.16	ug/L		92
23) acetone	6.620	58	1427	17.77	ug/L	#	54
24) allyl chloride	7.097	76	8472	15.18	ug/L		89
25) acetonitrile	7.082	40	14678	163.00	ug/L	#	85
27) iodomethane	6.851	142	28426	12.49	ug/L		91
28) iso-butyl alcohol	9.766	41	6119	168.45	ug/L		78
29) carbon disulfide	6.972	76	52257	15.79	ug/L		95
30) methylene chloride	7.291	84	16702	15.10	ug/L		95
31) methyl acetate	7.082	74	2671	15.01	ug/L	#	80
32) methyl tert butyl ether	7.596	73	47112	12.68	ug/L		92
33) trans-1,2-dichloroethene	7.658	61	22139	15.03	ug/L		97
34) di-isopropyl ether	8.188	45	53352	17.25	ug/L		80
35) ethyl tert-butyl ether	8.655	59	49657	13.78	ug/L		94
36) 2-butanone	8.938	72	1645	12.96	ug/L	#	19
37) 1,1-dichloroethane	8.230	63	27853	14.97	ug/L		99
38) chloroprene	8.330	53	21222	12.35	ug/L		92
39) acrylonitrile	7.627	53	32810	87.71	ug/L		90
40) vinyl acetate	8.214	86	2345	13.67	ug/L		72
41) ethyl acetate	8.938	45	2459	19.13	ug/L	#	39
42) 2,2-dichloropropane	8.959	77	18375	9.85	ug/L		96
43) cis-1,2-dichloroethene	8.964	61	26940	13.69	ug/L		96
44) propionitrile	9.037	54	24910	170.37	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95826.D
Acq On : 12 Feb 2014 10:04 pm
Operator : courtnem
Sample : ic4135-10
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 14 10:07:10 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methyl acrylate	9.027	55	19057	17.34	ug/L		96
46) bromochloromethane	9.279	128	8682	12.30	ug/L	#	79
47) tetrahydrofuran	9.305	42	6407	18.02	ug/L		89
48) chloroform	9.331	83	25624	11.89	ug/L		98
49) Tert-Butyl Formate	9.352	59	14443	12.79	ug/L	#	86
52) freon 113	6.526	151	10072	10.92	ug/L		95
53) methacrylonitrile	9.216	41	10582	16.48	ug/L		91
54) 1,1,1-trichloroethane	9.583	97	21634	10.43	ug/L		98
56) 2,2,4-Trimethylpentane	9.997	57	51000	15.32	ug/L		90
57) tert-amyl methyl ether	10.039	73	48517	13.02	ug/L		95
59) epichlorohydrin	11.659	57	7959	66.17	ug/L		96
60) n-butyl alcohol	10.516	56	22804	773.95	ug/L		95
61) cyclohexane	9.640	84	21125	14.18	ug/L		92
62) carbon tetrachloride	9.777	117	19447	9.03	ug/L		99
63) 1,1-dichloropropene	9.756	75	19601	12.35	ug/L		96
64) hexane	7.942	57	14522	14.08	ug/L		97
65) benzene	10.018	78	59274	13.44	ug/L		98
66) heptane	10.175	57	9072	14.17	ug/L		93
67) isopropyl acetate	9.939	43	30710	12.54	ug/L		96
68) 1,2-dichloroethane	10.044	62	18736	9.02	ug/L		96
69) trichloroethene	10.736	95	14711	11.56	ug/L		93
72) 2-nitropropane	11.523	41	6198	9.80	ug/L		96
73) 2-chloroethyl vinyl ether	11.528	63	55151	69.13	ug/L		93
74) methyl methacrylate	11.004	41	24449	12.79	ug/L		89
75) 1,2-dichloropropane	11.004	63	15856	14.70	ug/L		74
76) methylcyclohexane	10.941	83	22445	12.29	ug/L		97
77) dibromomethane	11.166	93	9912	10.90	ug/L		93
78) bromodichloromethane	11.297	83	19621	10.21	ug/L		96
79) cis-1,3-dichloropropene	11.748	75	23947	11.56	ug/L		91
81) 4-methyl-2-pentanone	11.842	58	6419	15.18	ug/L		97
82) toluene	12.105	92	34303	12.21	ug/L		94
83) 3-methyl-1-butanol	11.858	70	8475	282.58	ug/L		92
84) trans-1,3-dichloropropene	12.314	75	21687	10.51	ug/L		83
85) ethyl methacrylate	12.293	69	18245	13.29	ug/L		95
86) 1,1,2-trichloroethane	12.529	83	11564	12.43	ug/L		95
87) 2-hexanone	12.692	58	5732	15.68	ug/L		92
89) tetrachloroethene	12.692	166	15153	10.45	ug/L		97
90) 1,3-dichloropropane	12.708	76	21550	12.99	ug/L		98
91) butyl acetate	12.760	56	10549	16.83	ug/L		87
92) 3,3-Dimethyl-1-Butanol	12.860	57	16499	171.47	ug/L	#	91
93) dibromochloromethane	12.970	129	15954	10.04	ug/L		94
94) 1,2-dibromoethane	13.127	107	14139	11.84	ug/L		90
96) chlorobenzene	13.578	112	37157	11.43	ug/L		97
97) 1,1,1,2-tetrachloroethane	13.636	131	14330	10.21	ug/L		91
98) ethylbenzene	13.625	91	61529	12.04	ug/L		99
99) m,p-xylene	13.730	106	47224	24.22	ug/L		97
100) o-xylene	14.149	106	23793	11.52	ug/L		92
101) styrene	14.165	104	39724	11.95	ug/L		95
103) bromoform	14.438	173	12334	9.75	ug/L		97
105) isopropylbenzene	14.490	105	60269	12.59	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95826.D
Acq On : 12 Feb 2014 10:04 pm
Operator : courtnem
Sample : ic4135-10
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 14 10:07:10 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

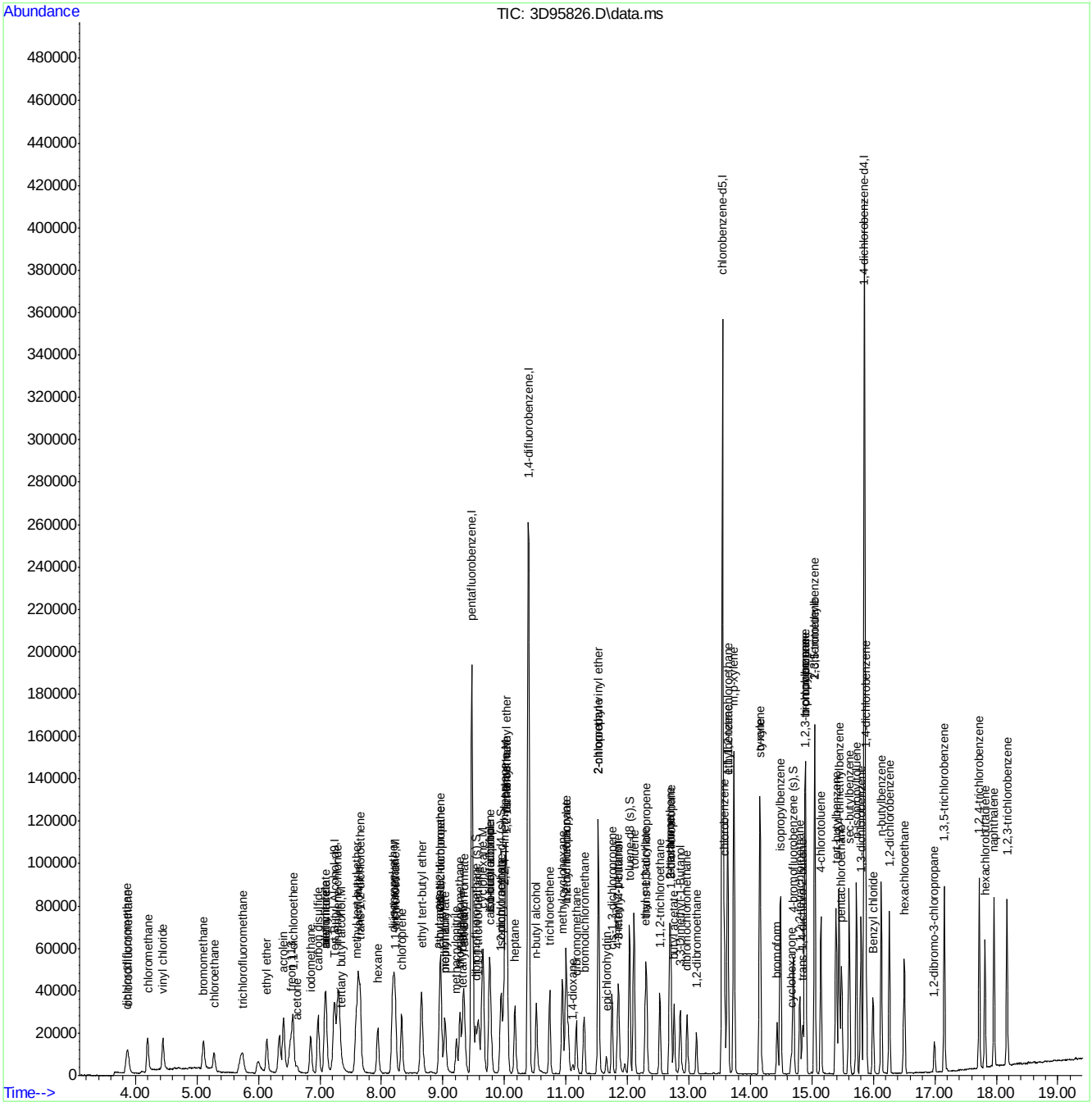
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) bromobenzene	14.894	156	17241	11.47	ug/L		87
108) cyclohexanone	14.663	55	5052	128.26	ug/L		87
109) 1,1,2,2-tetrachloroethane	14.805	83	19768	14.85	ug/L		97
110) trans-1,4-dichloro-2-b...	14.847	53	4180	11.02	ug/L	#	70
111) 1,2,3-trichloropropane	14.883	110	4482	11.85	ug/L		97
112) n-propylbenzene	14.899	91	67717	13.16	ug/L		97
114) 2-chlorotoluene	15.051	126	15049	12.08	ug/L		96
115) 4-chlorotoluene	15.146	126	15367	12.13	ug/L		98
116) 1,3,5-trimethylbenzene	15.046	105	50446	12.04	ug/L		99
117) tert-butylbenzene	15.392	119	42356	11.83	ug/L		97
118) pentachloroethane	15.481	167	11531	10.54	ug/L		98
119) 1,2,4-trimethylbenzene	15.439	105	49770	11.83	ug/L		94
120) sec-butylbenzene	15.607	105	65648	12.69	ug/L		96
121) 1,3-dichlorobenzene	15.801	146	32307	11.54	ug/L		96
122) p-isopropyltoluene	15.722	119	54762	11.74	ug/L		98
123) 1,4-dichlorobenzene	15.880	146	32262	11.05	ug/L		99
124) 1,2-dichlorobenzene	16.262	146	32277	11.24	ug/L		97
126) n-butylbenzene	16.126	92	28325	11.82	ug/L		88
128) 1,2-dibromo-3-chloropr...	16.996	157	4469	11.96	ug/L		92
129) 1,3,5-trichlorobenzene	17.154	180	28503	10.54	ug/L		100
130) 1,2,4-trichlorobenzene	17.720	180	26756	10.33	ug/L		99
131) hexachlorobutadiene	17.814	225	13493	10.13	ug/L		94
132) naphthalene	17.966	128	57269	11.86	ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	25083	10.83	ug/L		98
134) hexachloroethane	16.503	119	11655	10.95	ug/L		93
135) Benzyl chloride	15.995	91	25770	9.35	ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95826.D
Acq On : 12 Feb 2014 10:04 pm
Operator : courtnem
Sample : ic4135-10
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 14 10:07:10 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:17 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95827.D
Acq On : 12 Feb 2014 10:31 pm
Operator : courtnem
Sample : ic4135-20
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 14 10:11:05 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.239	65	74816	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	172675	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	248474	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	200034	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	109688	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	29812	20.89	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 41.78%#				
51) 1,2-dichloroethane-d4 (s)	9.955	65	30916	16.89	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 33.78%#				
80) toluene-d8 (s)	12.036	98	100383	20.27	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 40.54%#				
106) 4-bromofluorobenzene (s)	14.700	95	35620	20.44	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 40.88%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	6838	533.29	ug/L		91
3) tertiary butyl alcohol	7.349	59	17074	110.25	ug/L		69
8) chlorodifluoromethane	3.878	51	24267	22.38	ug/L		92
9) dichlorodifluoromethane	3.857	85	31515	21.58	ug/L		95
10) chloromethane	4.198	50	41795	32.21	ug/L		99
11) vinyl chloride	4.450	62	41204	32.02	ug/L		98
12) bromomethane	5.105	94	23471	25.70	ug/L		99
13) chloroethane	5.278	64	21665	38.74	ug/L		94
16) trichlorofluoromethane	5.734	101	42472	21.23	ug/L		99
18) ethyl ether	6.138	74	17880	34.37	ug/L		92
21) acrolein	6.405	56	66999	339.20	ug/L		99
22) 1,1-dichloroethene	6.563	61	46693	29.61	ug/L		97
23) acetone	6.626	58	2926	36.17	ug/L	#	53
24) allyl chloride	7.097	76	17558	31.23	ug/L	#	82
25) acetonitrile	7.071	40	29101	320.81	ug/L	#	65
27) iodomethane	6.851	142	58920	25.69	ug/L		90
28) iso-butyl alcohol	9.766	41	10690	292.14	ug/L		81
29) carbon disulfide	6.972	76	109223	32.76	ug/L		95
30) methylene chloride	7.291	84	34061	30.57	ug/L		95
31) methyl acetate	7.076	74	5300	29.57	ug/L	#	80
32) methyl tert butyl ether	7.595	73	94094	25.13	ug/L		91
33) trans-1,2-dichloroethene	7.653	61	46172	31.12	ug/L		98
34) di-isopropyl ether	8.188	45	107180	34.41	ug/L		85
35) ethyl tert-butyl ether	8.655	59	99530	27.42	ug/L		94
36) 2-butanone	8.922	72	3591	28.09	ug/L		71
37) 1,1-dichloroethane	8.225	63	57431	30.65	ug/L		98
38) chloroprene	8.330	53	42727	24.69	ug/L		92
39) acrylonitrile	7.622	53	63841	169.42	ug/L		92
40) vinyl acetate	8.204	86	5142	29.76	ug/L		97
41) ethyl acetate	8.943	45	4700	36.30	ug/L		86
42) 2,2-dichloropropane	8.964	77	37798	20.11	ug/L		95
43) cis-1,2-dichloroethene	8.964	61	55821	28.16	ug/L		97
44) propionitrile	9.037	54	48945	332.31	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95827.D
Acq On : 12 Feb 2014 10:31 pm
Operator : courtnem
Sample : ic4135-20
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 14 10:11:05 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methyl acrylate	9.027	55	36184	32.68	ug/L		94
46) bromochloromethane	9.278	128	17754	24.97	ug/L	#	78
47) tetrahydrofuran	9.305	42	12095	33.77	ug/L		88
48) chloroform	9.331	83	53477	24.64	ug/L		97
49) Tert-Butyl Formate	9.357	59	28816	25.34	ug/L	#	87
52) freon 113	6.521	151	21129	22.73	ug/L		86
53) methacrylonitrile	9.216	41	20657	31.94	ug/L		95
54) 1,1,1-trichloroethane	9.577	97	44784	21.42	ug/L		97
56) 2,2,4-Trimethylpentane	9.997	57	109311	32.59	ug/L		89
57) tert-amyl methyl ether	10.039	73	96239	25.63	ug/L		96
59) epichlorohydrin	11.659	57	15378	126.08	ug/L		96
60) n-butyl alcohol	10.516	56	43515	1456.41	ug/L		97
61) cyclohexane	9.640	84	46168	30.57	ug/L		95
62) carbon tetrachloride	9.777	117	41025	18.78	ug/L		97
63) 1,1-dichloropropene	9.750	75	41212	25.60	ug/L		96
64) hexane	7.942	57	30228	28.91	ug/L		95
65) benzene	10.018	78	124941	27.93	ug/L		98
66) heptane	10.170	57	18890	29.10	ug/L		93
67) isopropyl acetate	9.934	43	60890	24.52	ug/L		95
68) 1,2-dichloroethane	10.044	62	38694	18.37	ug/L		96
69) trichloroethene	10.731	95	30451	23.60	ug/L		90
72) 2-nitropropane	11.523	41	11857	18.48	ug/L		94
73) 2-chloroethyl vinyl ether	11.528	63	109650	135.54	ug/L		95
74) methyl methacrylate	10.998	41	46609	24.04	ug/L		88
75) 1,2-dichloropropane	11.003	63	32409	29.62	ug/L		71
76) methylcyclohexane	10.941	83	46750	25.24	ug/L		98
77) dibromomethane	11.166	93	20368	22.10	ug/L		92
78) bromodichloromethane	11.297	83	40993	21.03	ug/L		99
79) cis-1,3-dichloropropene	11.748	75	49682	23.66	ug/L		91
81) 4-methyl-2-pentanone	11.842	58	12545	29.26	ug/L		90
82) toluene	12.110	92	71915	25.24	ug/L		96
83) 3-methyl-1-butanol	11.858	70	15921	523.50	ug/L		93
84) trans-1,3-dichloropropene	12.314	75	44236	21.14	ug/L		85
85) ethyl methacrylate	12.293	69	36773	26.41	ug/L		95
86) 1,1,2-trichloroethane	12.529	83	23399	24.81	ug/L		97
87) 2-hexanone	12.692	58	11103	29.96	ug/L		97
89) tetrachloroethene	12.692	166	32266	22.08	ug/L		99
90) 1,3-dichloropropane	12.707	76	43677	26.12	ug/L		97
91) butyl acetate	12.760	56	20188	31.96	ug/L		94
92) 3,3-Dimethyl-1-Butanol	12.860	57	30684	316.44	ug/L		92
93) dibromochloromethane	12.975	129	33223	20.74	ug/L		98
94) 1,2-dibromoethane	13.122	107	28390	23.59	ug/L		95
96) chlorobenzene	13.578	112	77259	23.57	ug/L		95
97) 1,1,1,2-tetrachloroethane	13.641	131	30544	21.60	ug/L		99
98) ethylbenzene	13.625	91	128519	24.96	ug/L		99
99) m,p-xylene	13.730	106	98869	50.33	ug/L		96
100) o-xylene	14.149	106	49470	23.77	ug/L		91
101) styrene	14.165	104	83016	24.78	ug/L		96
103) bromoform	14.432	173	24466	19.19	ug/L		100
105) isopropylbenzene	14.490	105	126557	26.43	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95827.D
Acq On : 12 Feb 2014 10:31 pm
Operator : courtnem
Sample : ic4135-20
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 14 10:11:05 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration

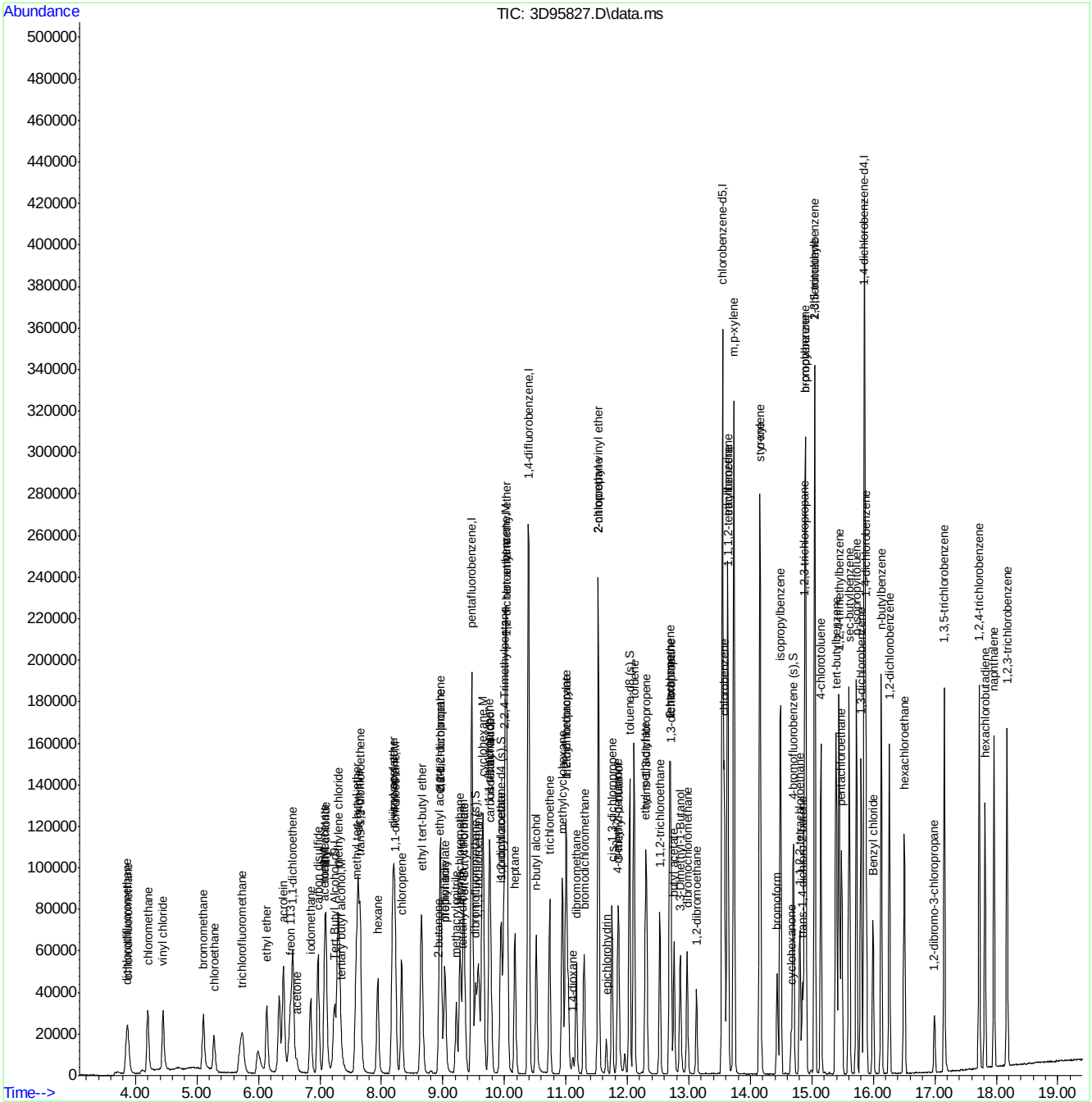
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) bromobenzene	14.894	156	35111	23.34	ug/L		87
108) cyclohexanone	14.668	55	9493	240.89	ug/L		90
109) 1,1,2,2-tetrachloroethane	14.805	83	38443	28.87	ug/L		99
110) trans-1,4-dichloro-2-b...	14.847	53	8410	22.17	ug/L	#	77
111) 1,2,3-trichloropropane	14.878	110	8909	23.54	ug/L		85
112) n-propylbenzene	14.899	91	143190	27.80	ug/L		98
114) 2-chlorotoluene	15.051	126	31582	25.35	ug/L		92
115) 4-chlorotoluene	15.145	126	31765	25.05	ug/L		90
116) 1,3,5-trimethylbenzene	15.046	105	105807	25.25	ug/L		99
117) tert-butylbenzene	15.392	119	89298	24.92	ug/L		95
118) pentachloroethane	15.481	167	24152	22.06	ug/L		97
119) 1,2,4-trimethylbenzene	15.439	105	103882	24.67	ug/L		98
120) sec-butylbenzene	15.607	105	138564	26.76	ug/L		97
121) 1,3-dichlorobenzene	15.801	146	66267	23.66	ug/L		97
122) p-isopropyltoluene	15.722	119	116127	24.87	ug/L		98
123) 1,4-dichlorobenzene	15.879	146	66688	22.83	ug/L		98
124) 1,2-dichlorobenzene	16.262	146	66548	23.17	ug/L		98
126) n-butylbenzene	16.126	92	59942	25.00	ug/L		89
128) 1,2-dibromo-3-chloropr...	16.996	157	8668	23.18	ug/L		93
129) 1,3,5-trichlorobenzene	17.154	180	59602	22.03	ug/L		100
130) 1,2,4-trichlorobenzene	17.720	180	56685	21.88	ug/L		100
131) hexachlorobutadiene	17.814	225	28695	21.54	ug/L		98
132) naphthalene	17.966	128	116566	24.12	ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	51901	22.40	ug/L		100
134) hexachloroethane	16.503	119	24722	23.22	ug/L		94
135) Benzyl chloride	15.995	91	50270	18.22	ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95827.D
Acq On : 12 Feb 2014 10:31 pm
Operator : courtnem
Sample : ic4135-20
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 14 10:11:05 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:47:37 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:18 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95828.D
Acq On : 12 Feb 2014 10:58 pm
Operator : courtnem
Sample : icc4135-50
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 14 10:11:30 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:45:00 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.234	65	73759	500.00	ug/L	0.00
4) pentafluorobenzene	9.473	168	179523	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.395	114	259243	50.00	ug/L	0.00
88) chlorobenzene-d5	13.546	117	212796	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.853	152	115470	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.530	113	74817	50.43	ug/L	0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 100.86%			
51) 1,2-dichloroethane-d4 (s)	9.955	65	76714	40.32	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 80.64%			
80) toluene-d8 (s)	12.036	98	255075	49.37	ug/L	0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 98.74%			
106) 4-bromofluorobenzene (s)	14.700	95	89278	48.66	ug/L	0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 97.32%			
Target Compounds						Qvalue
2) 1,4-dioxane	11.114	88	16384	1296.09	ug/L	89
3) tertiary butyl alcohol	7.360	59	39100	256.10	ug/L	96
8) chlorodifluoromethane	3.878	51	62980	55.88	ug/L	92
9) dichlorodifluoromethane	3.852	85	78478	51.69	ug/L	95
10) chloromethane	4.203	50	106732	79.11	ug/L	98
11) vinyl chloride	4.460	62	105101	78.57	ug/L	99
12) bromomethane	5.105	94	58621	61.74	ug/L	98
13) chloroethane	5.278	64	54363	93.50	ug/L	93
16) trichlorofluoromethane	5.734	101	106534	51.22	ug/L	98
18) ethyl ether	6.138	74	42321	78.26	ug/L	85
21) acrolein	6.405	56	151899	739.70	ug/L	97
22) 1,1-dichloroethene	6.563	61	115825	70.65	ug/L	94
23) acetone	6.620	58	6792	80.77	ug/L #	61
24) allyl chloride	7.097	76	43960	75.21	ug/L	89
25) acetonitrile	7.077	40	67297	713.58	ug/L #	81
27) iodomethane	6.851	142	144014	60.40	ug/L	90
28) iso-butyl alcohol	9.766	41	24767	651.02	ug/L	83
29) carbon disulfide	6.966	76	272993	78.76	ug/L	95
30) methylene chloride	7.291	84	83392	71.98	ug/L	95
31) methyl acetate	7.077	74	12203	65.49	ug/L #	83
32) methyl tert butyl ether	7.596	73	227792	58.52	ug/L	91
33) trans-1,2-dichloroethene	7.658	61	114670	74.34	ug/L	99
34) di-isopropyl ether	8.188	45	263476	81.36	ug/L	90
35) ethyl tert-butyl ether	8.655	59	244422	64.78	ug/L	94
36) 2-butanone	8.933	72	8164	61.43	ug/L	76
37) 1,1-dichloroethane	8.225	63	141150	72.45	ug/L	99
38) chloroprene	8.330	53	106865	59.39	ug/L	92
39) acrylonitrile	7.622	53	145230	370.70	ug/L	91
40) vinyl acetate	8.209	86	11956	66.56	ug/L	96
41) ethyl acetate	8.938	45	10314	76.62	ug/L	63
42) 2,2-dichloropropane	8.959	77	94133	48.18	ug/L	96
43) cis-1,2-dichloroethene	8.964	61	136285	66.13	ug/L	98
44) propionitrile	9.037	54	108991	711.76	ug/L	91

M3D4135.M Wed Feb 19 12:47:19 2014 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95828.D
Acq On : 12 Feb 2014 10:58 pm
Operator : courtnem
Sample : icc4135-50
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 14 10:11:30 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:45:00 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methyl acrylate	9.022	55	84177	73.13	ug/L		94
46) bromochloromethane	9.279	128	43745	59.19	ug/L	#	74
47) tetrahydrofuran	9.305	42	26417	70.94	ug/L		92
48) chloroform	9.331	83	131591	58.32	ug/L		98
49) Tert-Butyl Formate	9.352	59	69047	58.39	ug/L	#	87
52) freon 113	6.521	151	53966	55.84	ug/L		91
53) methacrylonitrile	9.216	41	47208	70.21	ug/L		94
54) 1,1,1-trichloroethane	9.577	97	112684	51.85	ug/L		99
56) 2,2,4-Trimethylpentane	10.002	57	285727	81.93	ug/L		88
57) tert-amyl methyl ether	10.039	73	234579	60.08	ug/L		95
59) epichlorohydrin	11.659	57	34621	272.06	ug/L		93
60) n-butyl alcohol	10.516	56	98687	3165.77	ug/L		94
61) cyclohexane	9.646	84	114844	72.88	ug/L		95
62) carbon tetrachloride	9.777	117	102428	44.94	ug/L		98
63) 1,1-dichloropropene	9.756	75	102972	61.32	ug/L		98
64) hexane	7.936	57	76352	69.99	ug/L		94
65) benzene	10.018	78	306446	65.66	ug/L		98
66) heptane	10.175	57	47736	70.47	ug/L		94
67) isopropyl acetate	9.934	43	140452	54.22	ug/L		96
68) 1,2-dichloroethane	10.044	62	93216	42.41	ug/L		98
69) trichloroethene	10.736	95	75953	56.42	ug/L		95
72) 2-nitropropane	11.523	41	26858	40.13	ug/L		99
73) 2-chloroethyl vinyl ether	11.533	63	260375	308.48	ug/L		96
74) methyl methacrylate	11.004	41	111772	55.27	ug/L		89
75) 1,2-dichloropropane	11.004	63	80083	70.16	ug/L		71
76) methylcyclohexane	10.946	83	119786	61.99	ug/L		96
77) dibromomethane	11.171	93	48809	50.75	ug/L		95
78) bromodichloromethane	11.297	83	101732	50.03	ug/L		98
79) cis-1,3-dichloropropene	11.753	75	123370	56.30	ug/L		90
81) 4-methyl-2-pentanone	11.842	58	28932	64.68	ug/L		88
82) toluene	12.110	92	179581	60.40	ug/L		98
83) 3-methyl-1-butanol	11.858	70	35995	1134.38	ug/L		94
84) trans-1,3-dichloropropene	12.314	75	108450	49.67	ug/L		86
85) ethyl methacrylate	12.293	69	90423	62.25	ug/L		95
86) 1,1,2-trichloroethane	12.529	83	57024	57.95	ug/L		98
87) 2-hexanone	12.692	58	25710	66.49	ug/L		87
89) tetrachloroethene	12.692	166	81735	52.57	ug/L		98
90) 1,3-dichloropropane	12.708	76	105713	59.43	ug/L		97
91) butyl acetate	12.760	56	46386	69.03	ug/L		92
92) 3,3-Dimethyl-1-Butanol	12.860	57	68586	664.89	ug/L		94
93) dibromochloromethane	12.975	129	82851	48.61	ug/L		97
94) 1,2-dibromoethane	13.122	107	68196	53.26	ug/L		96
96) chlorobenzene	13.578	112	193939	55.63	ug/L		96
97) 1,1,1,2-tetrachloroethane	13.636	131	76409	50.79	ug/L		97
98) ethylbenzene	13.625	91	323469	59.04	ug/L		99
99) m,p-xylene	13.735	106	247192	118.28	ug/L		92
100) o-xylene	14.149	106	124276	56.13	ug/L		91
101) styrene	14.165	104	209407	58.77	ug/L		94
103) bromoform	14.432	173	59218	43.67	ug/L		100
105) isopropylbenzene	14.490	105	318393	63.17	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95828.D
Acq On : 12 Feb 2014 10:58 pm
Operator : courtnem
Sample : icc4135-50
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 14 10:11:30 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:45:00 2014
Response via : Initial Calibration

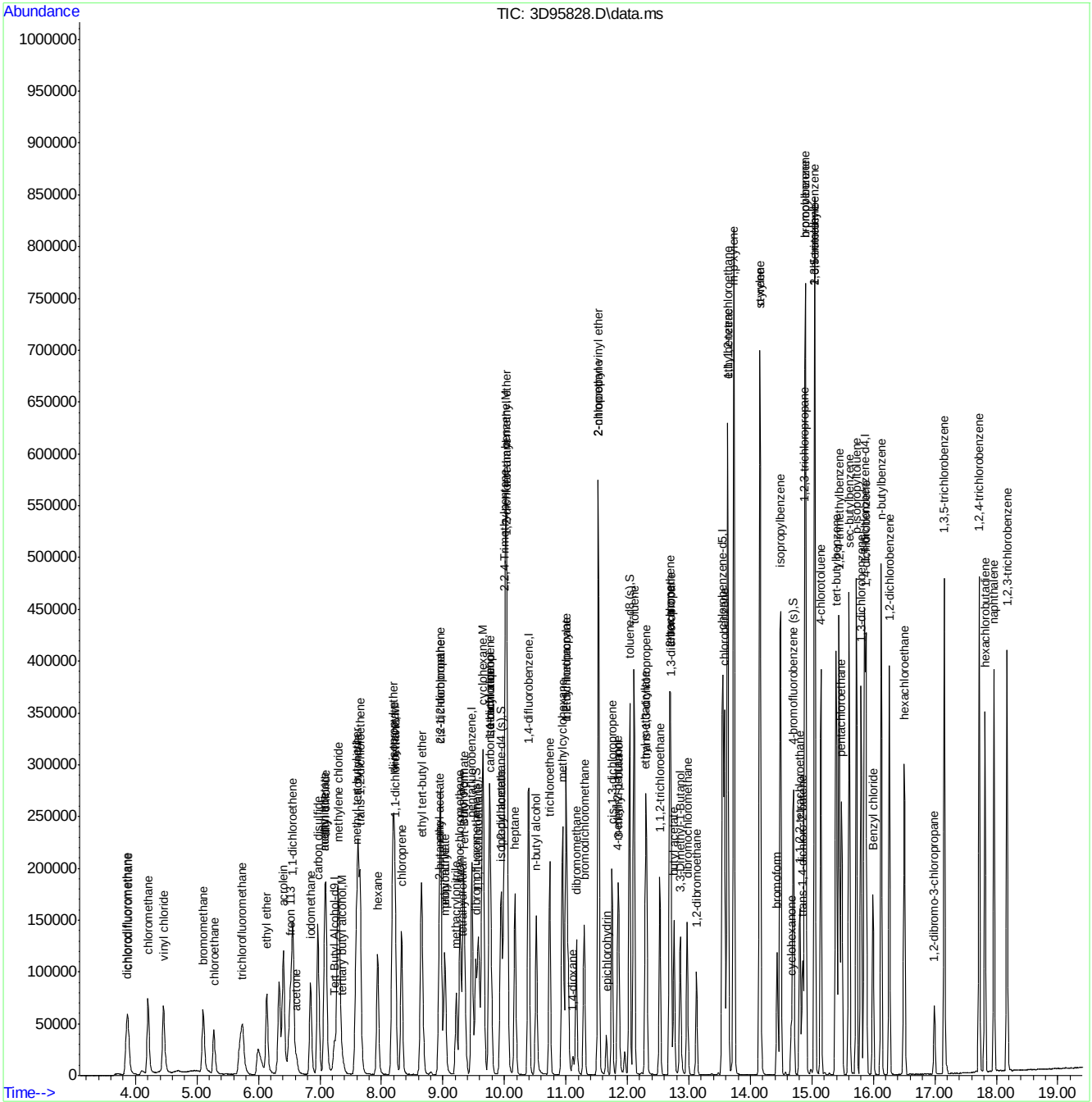
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) bromobenzene	14.894	156	87692	55.38	ug/L		89
108) cyclohexanone	14.668	55	22320	538.01	ug/L		87
109) 1,1,2,2-tetrachloroethane	14.805	83	89308	63.71	ug/L		99
110) trans-1,4-dichloro-2-b...	14.847	53	19786	49.54	ug/L	#	67
111) 1,2,3-trichloropropane	14.878	110	19905	49.96	ug/L		87
112) n-propylbenzene	14.894	91	353434	65.19	ug/L		96
114) 2-chlorotoluene	15.051	126	77751	59.28	ug/L		92
115) 4-chlorotoluene	15.146	126	78939	59.14	ug/L		95
116) 1,3,5-trimethylbenzene	15.046	105	265183	60.12	ug/L		100
117) tert-butylbenzene	15.397	119	225740	59.85	ug/L		93
118) pentachloroethane	15.486	167	59835	51.92	ug/L		96
119) 1,2,4-trimethylbenzene	15.439	105	257201	58.03	ug/L		97
120) sec-butylbenzene	15.607	105	350744	64.35	ug/L		97
121) 1,3-dichlorobenzene	15.801	146	163793	55.56	ug/L		98
122) p-isopropyltoluene	15.722	119	291234	59.26	ug/L		98
123) 1,4-dichlorobenzene	15.880	146	165765	53.90	ug/L		97
124) 1,2-dichlorobenzene	16.262	146	162879	53.87	ug/L		98
126) n-butylbenzene	16.126	92	150865	59.76	ug/L		90
128) 1,2-dibromo-3-chloropr...	16.996	157	20012	50.84	ug/L		90
129) 1,3,5-trichlorobenzene	17.154	180	152578	53.56	ug/L		100
130) 1,2,4-trichlorobenzene	17.720	180	144064	52.82	ug/L		98
131) hexachlorobutadiene	17.814	225	74774	53.31	ug/L		97
132) naphthalene	17.961	128	278132	54.67	ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	129134	52.94	ug/L		99
134) hexachloroethane	16.503	119	64197	57.27	ug/L		94
135) Benzyl chloride	15.995	91	120314	41.43	ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95828.D
Acq On : 12 Feb 2014 10:58 pm
Operator : courtnem
Sample : icc4135-50
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 14 10:11:30 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 09:45:00 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:19 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95829.D
Acq On : 12 Feb 2014 11:25 pm
Operator : courtnem
Sample : ic4135-100
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 14 10:22:56 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 10:13:06 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.239	65	77818	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	172762	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	248650	50.00	ug/L		0.00
88) chlorobenzene-d5	13.547	117	203776	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.854	152	111805	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	147132	103.06	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 206.12%#				
51) 1,2-dichloroethane-d4 (s)	9.950	65	151255	82.60	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 165.20%#				
80) toluene-d8 (s)	12.031	98	503174	101.54	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 203.08%#				
106) 4-bromofluorobenzene (s)	14.700	95	176276	99.22	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 198.44%#				
Target Compounds							Qvalue
2) 1,4-dioxane	11.109	88	34107	2557.37	ug/L		86
3) tertiary butyl alcohol	7.355	59	83661	519.39	ug/L		97
8) chlorodifluoromethane	3.873	51	126879	116.97	ug/L		90
9) dichlorodifluoromethane	3.847	85	154907	106.02	ug/L		97
10) chloromethane	4.204	50	216346	166.63	ug/L		97
11) vinyl chloride	4.460	62	212299	164.92	ug/L		99
12) bromomethane	5.090	94	113609	124.34	ug/L		99
13) chloroethane	5.268	64	108208	193.39	ug/L		94
16) trichlorofluoromethane	5.729	101	212031	105.93	ug/L		97
18) ethyl ether	6.133	74	86574	166.35	ug/L		80
22) 1,1-dichloroethene	6.558	61	232802	147.56	ug/L		95
23) acetone	6.621	58	14556	179.87	ug/L		99
24) allyl chloride	7.092	76	85312	151.68	ug/L		85
25) acetonitrile	7.071	40	144961	1597.23	ug/L	#	83
27) iodomethane	6.841	142	291602	127.08	ug/L		90
28) iso-butyl alcohol	9.761	41	50816	1388.02	ug/L		82
29) carbon disulfide	6.961	76	549624	164.77	ug/L		96
30) methylene chloride	7.286	84	165415	148.37	ug/L		96
31) methyl acetate	7.077	74	26448	147.50	ug/L	#	85
32) methyl tert butyl ether	7.596	73	460030	122.81	ug/L		90
33) trans-1,2-dichloroethene	7.653	61	226449	152.55	ug/L		98
34) di-isopropyl ether	8.183	45	521598	167.37	ug/L		88
35) ethyl tert-butyl ether	8.650	59	487721	134.31	ug/L		95
36) 2-butanone	8.917	72	17850	139.58	ug/L		80
37) 1,1-dichloroethane	8.225	63	280810	149.77	ug/L		99
38) chloroprene	8.325	53	211705	122.26	ug/L		91
39) acrylonitrile	7.617	53	311064	825.07	ug/L		92
40) vinyl acetate	8.204	86	25224	145.92	ug/L		87
41) ethyl acetate	8.933	45	22118	170.73	ug/L	#	37
42) 2,2-dichloropropane	8.959	77	184625	98.20	ug/L		95
43) cis-1,2-dichloroethene	8.959	61	273640	137.97	ug/L		99
44) propionitrile	9.032	54	233704	1585.91	ug/L		88
45) methyl acrylate	9.022	55	177966	160.65	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95829.D
Acq On : 12 Feb 2014 11:25 pm
Operator : courtnem
Sample : ic4135-100
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 14 10:22:56 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 10:13:06 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) bromochloromethane	9.274	128	87895	123.58	ug/L	#	77
47) tetrahydrofuran	9.300	42	55112	153.80	ug/L		93
48) chloroform	9.331	83	261803	120.57	ug/L		97
49) Tert-Butyl Formate	9.352	59	140572	123.53	ug/L	#	88
52) freon 113	6.516	151	104819	112.71	ug/L		90
53) methacrylonitrile	9.211	41	100036	154.61	ug/L		93
54) 1,1,1-trichloroethane	9.572	97	226011	108.07	ug/L		97
56) 2,2,4-Trimethylpentane	10.002	57	571369	170.25	ug/L		87
57) tert-amyl methyl ether	10.039	73	469269	124.90	ug/L		95
59) epichlorohydrin	11.659	57	73495	602.14	ug/L		95
60) n-butyl alcohol	10.516	56	207145	6928.07	ug/L		95
61) cyclohexane	9.641	84	229648	151.94	ug/L		95
62) carbon tetrachloride	9.772	117	205036	93.80	ug/L		98
63) 1,1-dichloropropene	9.751	75	206037	127.92	ug/L		97
64) hexane	7.937	57	149746	143.11	ug/L		97
65) benzene	10.018	78	614668	137.31	ug/L		99
66) heptane	10.170	57	95104	146.38	ug/L		95
67) isopropyl acetate	9.934	43	292216	117.61	ug/L		96
68) 1,2-dichloroethane	10.039	62	186630	88.53	ug/L		98
69) trichloroethene	10.731	95	153494	118.87	ug/L		93
72) 2-nitropropane	11.523	41	56226	87.59	ug/L		99
73) 2-chloroethyl vinyl ether	11.528	63	538005	664.57	ug/L		95
74) methyl methacrylate	10.998	41	236805	122.08	ug/L		89
75) 1,2-dichloropropane	11.004	63	160180	146.31	ug/L		72
76) methylcyclohexane	10.941	83	236190	127.43	ug/L		97
77) dibromomethane	11.166	93	99472	107.84	ug/L		93
78) bromodichloromethane	11.292	83	204708	104.97	ug/L		99
79) cis-1,3-dichloropropene	11.748	75	248535	118.26	ug/L		89
81) 4-methyl-2-pentanone	11.837	58	61790	144.02	ug/L	#	87
82) toluene	12.105	92	359847	126.19	ug/L		98
83) 3-methyl-1-butanol	11.858	70	77573	2548.87	ug/L		97
84) trans-1,3-dichloropropene	12.309	75	219988	105.05	ug/L		88
85) ethyl methacrylate	12.294	69	189828	136.25	ug/L		94
86) 1,1,2-trichloroethane	12.524	83	115711	122.59	ug/L		99
87) 2-hexanone	12.687	58	55311	149.13	ug/L		88
89) tetrachloroethene	12.692	166	164478	110.48	ug/L		97
90) 1,3-dichloropropane	12.708	76	216022	126.81	ug/L		97
91) butyl acetate	12.760	56	94610	147.03	ug/L		95
92) 3,3-Dimethyl-1-Butanol	12.860	57	149334	1511.76	ug/L		94
93) dibromochloromethane	12.970	129	168960	103.52	ug/L		97
94) 1,2-dibromoethane	13.122	107	141368	115.30	ug/L		96
96) chlorobenzene	13.578	112	388918	116.49	ug/L		96
97) 1,1,1,2-tetrachloroethane	13.636	131	153260	106.37	ug/L		93
98) ethylbenzene	13.625	91	647752	123.47	ug/L		100
99) m,p-xylene	13.730	106	494588	247.14	ug/L		96
100) o-xylene	14.150	106	248375	117.14	ug/L		90
101) styrene	14.160	104	420952	123.36	ug/L		97
103) bromoform	14.433	173	124161	95.62	ug/L		99
105) isopropylbenzene	14.490	105	638872	130.92	ug/L		99
107) bromobenzene	14.894	156	177464	115.74	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95829.D
Acq On : 12 Feb 2014 11:25 pm
Operator : courtnem
Sample : ic4135-100
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 14 10:22:56 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 10:13:06 2014
Response via : Initial Calibration

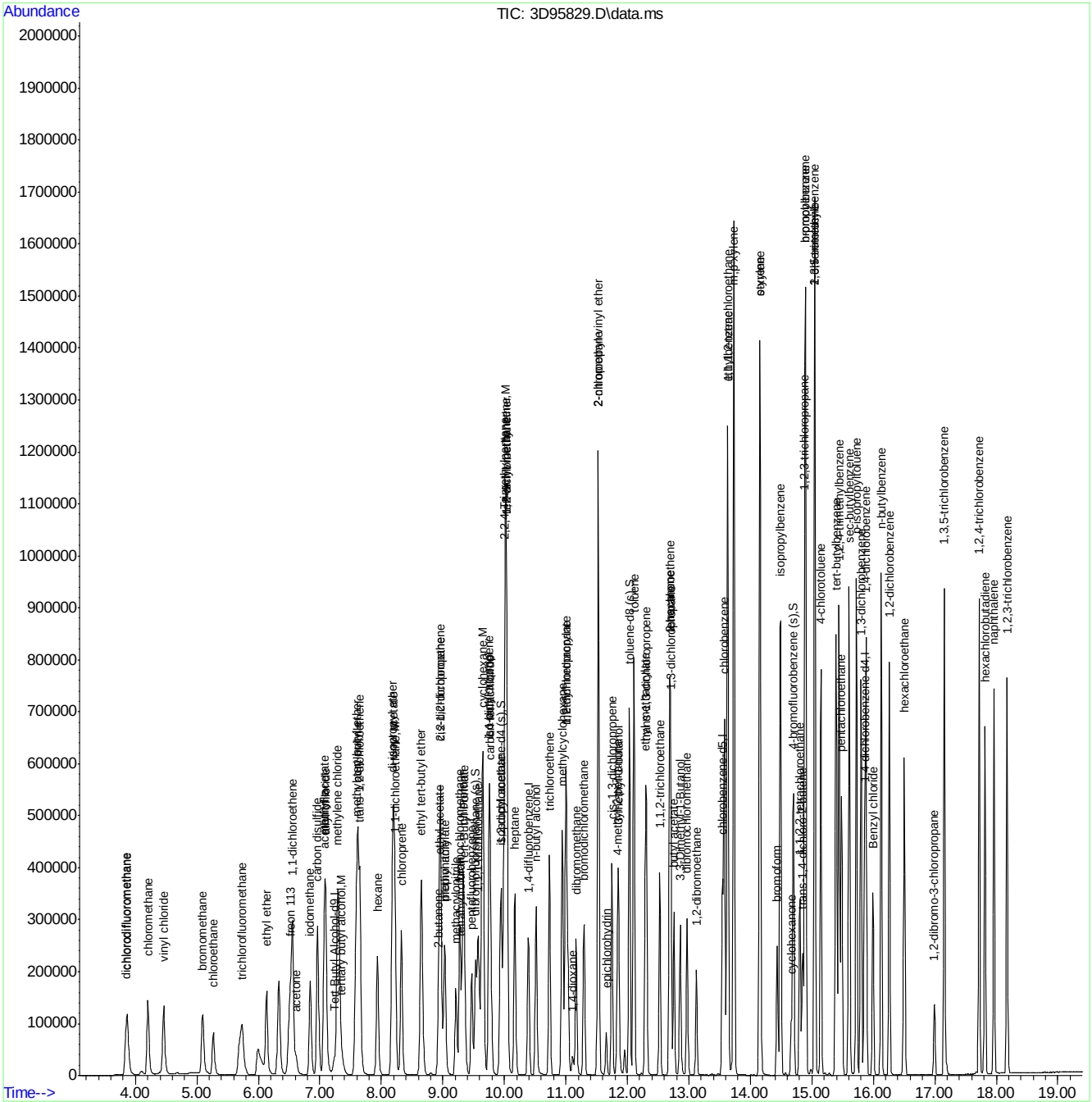
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
108) cyclohexanone	14.669	55	46298	1152.57 ug/L		88
109) 1,1,2,2-tetrachloroethane	14.805	83	189166	139.38 ug/L		99
110) trans-1,4-dichloro-2-b...	14.847	53	41503	107.31 ug/L	#	68
111) 1,2,3-trichloropropane	14.878	110	42261	109.55 ug/L		87
112) n-propylbenzene	14.899	91	708122	134.90 ug/L		98
114) 2-chlorotoluene	15.051	126	157783	124.24 ug/L		94
115) 4-chlorotoluene	15.146	126	157751	122.06 ug/L		95
116) 1,3,5-trimethylbenzene	15.046	105	536600	125.63 ug/L		100
117) tert-butylbenzene	15.392	119	459189	125.73 ug/L		95
118) pentachloroethane	15.481	167	122233	109.55 ug/L		97
119) 1,2,4-trimethylbenzene	15.439	105	520352	121.25 ug/L		97
120) sec-butylbenzene	15.607	105	706131	133.79 ug/L		97
121) 1,3-dichlorobenzene	15.801	146	332510	116.48 ug/L		98
122) p-isopropyltoluene	15.722	119	588667	123.70 ug/L		98
123) 1,4-dichlorobenzene	15.880	146	336740	113.09 ug/L		97
124) 1,2-dichlorobenzene	16.262	146	335980	114.75 ug/L		99
126) n-butylbenzene	16.126	92	303366	124.10 ug/L		90
128) 1,2-dibromo-3-chloropr...	16.997	157	42290	110.97 ug/L		91
129) 1,3,5-trichlorobenzene	17.154	180	303233	109.94 ug/L		100
130) 1,2,4-trichlorobenzene	17.720	180	281028	106.41 ug/L		97
131) hexachlorobutadiene	17.814	225	147780	108.82 ug/L		96
132) naphthalene	17.966	128	546759	111.00 ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	238254	100.87 ug/L		99
134) hexachloroethane	16.504	119	131462	121.13 ug/L		95
135) Benzyl chloride	15.995	91	249749	88.82 ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95829.D
Acq On : 12 Feb 2014 11:25 pm
Operator : courtnem
Sample : ic4135-100
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 14 10:22:56 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 10:13:06 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:20 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95830.D
Acq On : 12 Feb 2014 11:52 pm
Operator : courtnem
Sample : ic4135-200
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 10:21:01 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 10:13:06 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.255	65	83314	500.00	ug/L	0.02
4) pentafluorobenzene	9.473	168	173674	50.00	ug/L	0.00
58) 1,4-difluorobenzene	10.390	114	251753	50.00	ug/L	0.00
88) chlorobenzene-d5	13.546	117	206767	50.00	ug/L	0.00
104) 1,4-dichlorobenzene-d4	15.859	152	118391	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.535	113	295007	205.55	ug/L	0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 411.10%#			
51) 1,2-dichloroethane-d4 (s)	9.955	65	297550	161.64	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 323.28%#			
80) toluene-d8 (s)	12.036	98	1014261	202.15	ug/L	0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 404.30%#			
106) 4-bromofluorobenzene (s)	14.700	95	362480	192.68	ug/L	0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 385.36%#			
Target Compounds						Qvalue
2) 1,4-dioxane	11.114	88	68834	4820.76	ug/L	88
3) tertiary butyl alcohol	7.360	59	168395	976.49	ug/L	96
8) chlorodifluoromethane	3.878	51	265361	243.36	ug/L	90
9) dichlorodifluoromethane	3.852	85	317417	216.11	ug/L	98
10) chloromethane	4.219	50	434103	332.58	ug/L	98
11) vinyl chloride	4.471	62	434995	336.14	ug/L	100
12) bromomethane	5.095	94	185515	201.97	ug/L	99
13) chloroethane	5.262	64	214317	381.01	ug/L	95
16) trichlorofluoromethane	5.734	101	436597	216.99	ug/L	98
18) ethyl ether	6.138	74	171443	327.70	ug/L	78
22) 1,1-dichloroethene	6.557	61	475503	299.81	ug/L	95
23) acetone	6.620	58	28574	351.23	ug/L	88
24) allyl chloride	7.092	76	176102	311.45	ug/L #	78
25) acetonitrile	7.077	40	284576	3119.09	ug/L #	82
27) iodomethane	6.846	142	588644	255.19	ug/L	90
28) iso-butyl alcohol	9.766	41	102824	2793.85	ug/L	79
29) carbon disulfide	6.966	76	1123665	335.09	ug/L	95
30) methylene chloride	7.291	84	331453	295.74	ug/L	96
31) methyl acetate	7.077	74	52314	290.22	ug/L #	85
32) methyl tert butyl ether	7.601	73	904307	240.14	ug/L	91
33) trans-1,2-dichloroethene	7.653	61	461352	309.17	ug/L	98
34) di-isopropyl ether	8.188	45	1026743	327.74	ug/L	94
35) ethyl tert-butyl ether	8.655	59	958728	262.64	ug/L	95
36) 2-butanone	8.927	72	35618	277.05	ug/L	84
37) 1,1-dichloroethane	8.225	63	565138	299.84	ug/L	99
38) chloroprene	8.324	53	429847	246.93	ug/L	91
39) acrylonitrile	7.622	53	612111	1615.05	ug/L	92
40) vinyl acetate	8.204	86	50858	292.67	ug/L	79
41) ethyl acetate	8.938	45	43567	334.54	ug/L	60
42) 2,2-dichloropropane	8.959	77	364074	192.62	ug/L	94
43) cis-1,2-dichloroethene	8.964	61	545404	273.54	ug/L	97
44) propionitrile	9.043	54	463325	3127.61	ug/L	87
45) methyl acrylate	9.022	55	348512	312.96	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95830.D
Acq On : 12 Feb 2014 11:52 pm
Operator : courtnem
Sample : ic4135-200
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 10:21:01 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 10:13:06 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
46) bromochloromethane	9.279	128	176198	246.43 ug/L #	80
47) tetrahydrofuran	9.305	42	108083	300.04 ug/L	94
48) chloroform	9.331	83	527378	241.60 ug/L	98
49) Tert-Butyl Formate	9.352	59	275182	240.55 ug/L #	87
52) freon 113	6.521	151	217605	232.76 ug/L	91
53) methacrylonitrile	9.216	41	197390	303.47 ug/L	96
54) 1,1,1-trichloroethane	9.577	97	458858	218.25 ug/L	97
56) 2,2,4-Trimethylpentane	10.002	57	1158832	343.48 ug/L	87
57) tert-amyl methyl ether	10.039	73	934549	247.44 ug/L	96
59) epichlorohydrin	11.659	57	143741	1163.14 ug/L	94
60) n-butyl alcohol	10.521	56	418009	13808.20 ug/L	93
61) cyclohexane	9.640	84	471287	307.97 ug/L	95
62) carbon tetrachloride	9.777	117	421621	190.50 ug/L	99
63) 1,1-dichloropropene	9.750	75	425359	260.82 ug/L	96
64) hexane	7.936	57	306352	289.16 ug/L	96
65) benzene	10.018	78	1251769	276.18 ug/L	98
66) heptane	10.170	57	192699	292.95 ug/L	95
67) isopropyl acetate	9.934	43	582869	231.69 ug/L	96
68) 1,2-dichloroethane	10.044	62	371180	173.90 ug/L	97
69) trichloroethene	10.731	95	312605	239.11 ug/L	92
72) 2-nitropropane	11.523	41	107019	164.66 ug/L	96
73) 2-chloroethyl vinyl ether	11.533	63	1050944	1282.17 ug/L	96
74) methyl methacrylate	10.998	41	452389	230.34 ug/L	87
75) 1,2-dichloropropane	11.004	63	321628	290.17 ug/L	71
76) methylcyclohexane	10.946	83	484873	258.37 ug/L	98
77) dibromomethane	11.166	93	196974	210.92 ug/L	93
78) bromodichloromethane	11.297	83	410267	207.78 ug/L	98
79) cis-1,3-dichloropropene	11.748	75	496763	233.45 ug/L	90
81) 4-methyl-2-pentanone	11.837	58	124200	285.92 ug/L	88
82) toluene	12.105	92	733506	254.06 ug/L	98
83) 3-methyl-1-butanol	11.858	70	159549	5177.79 ug/L	97
84) trans-1,3-dichloropropene	12.309	75	437654	206.42 ug/L	88
85) ethyl methacrylate	12.293	69	381042	270.13 ug/L	93
86) 1,1,2-trichloroethane	12.529	83	230957	241.68 ug/L	98
87) 2-hexanone	12.692	58	111690	297.42 ug/L	86
89) tetrachloroethene	12.692	166	338515	224.09 ug/L	97
90) 1,3-dichloropropane	12.708	76	429390	248.41 ug/L	97
91) butyl acetate	12.760	56	193280	296.03 ug/L	93
92) 3,3-Dimethyl-1-Butanol	12.860	57	323343	3225.97 ug/L	94
93) dibromochloromethane	12.975	129	340363	205.53 ug/L	97
94) 1,2-dibromoethane	13.122	107	281530	226.30 ug/L	97
96) chlorobenzene	13.578	112	795837	234.92 ug/L	95
97) 1,1,1,2-tetrachloroethane	13.636	131	312592	213.83 ug/L	93
98) ethylbenzene	13.625	91	1339440	251.61 ug/L	99
99) m,p-xylene	13.735	106	1021564	503.08 ug/L	95
100) o-xylene	14.149	106	511712	237.84 ug/L	92
101) styrene	14.165	104	871750	251.78 ug/L	95
103) bromoform	14.432	173	253583	192.46 ug/L	98
105) isopropylbenzene	14.490	105	1332045	257.78 ug/L	99
107) bromobenzene	14.894	156	368941	227.24 ug/L	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95830.D
Acq On : 12 Feb 2014 11:52 pm
Operator : courtnem
Sample : ic4135-200
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 10:21:01 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 10:13:06 2014
Response via : Initial Calibration

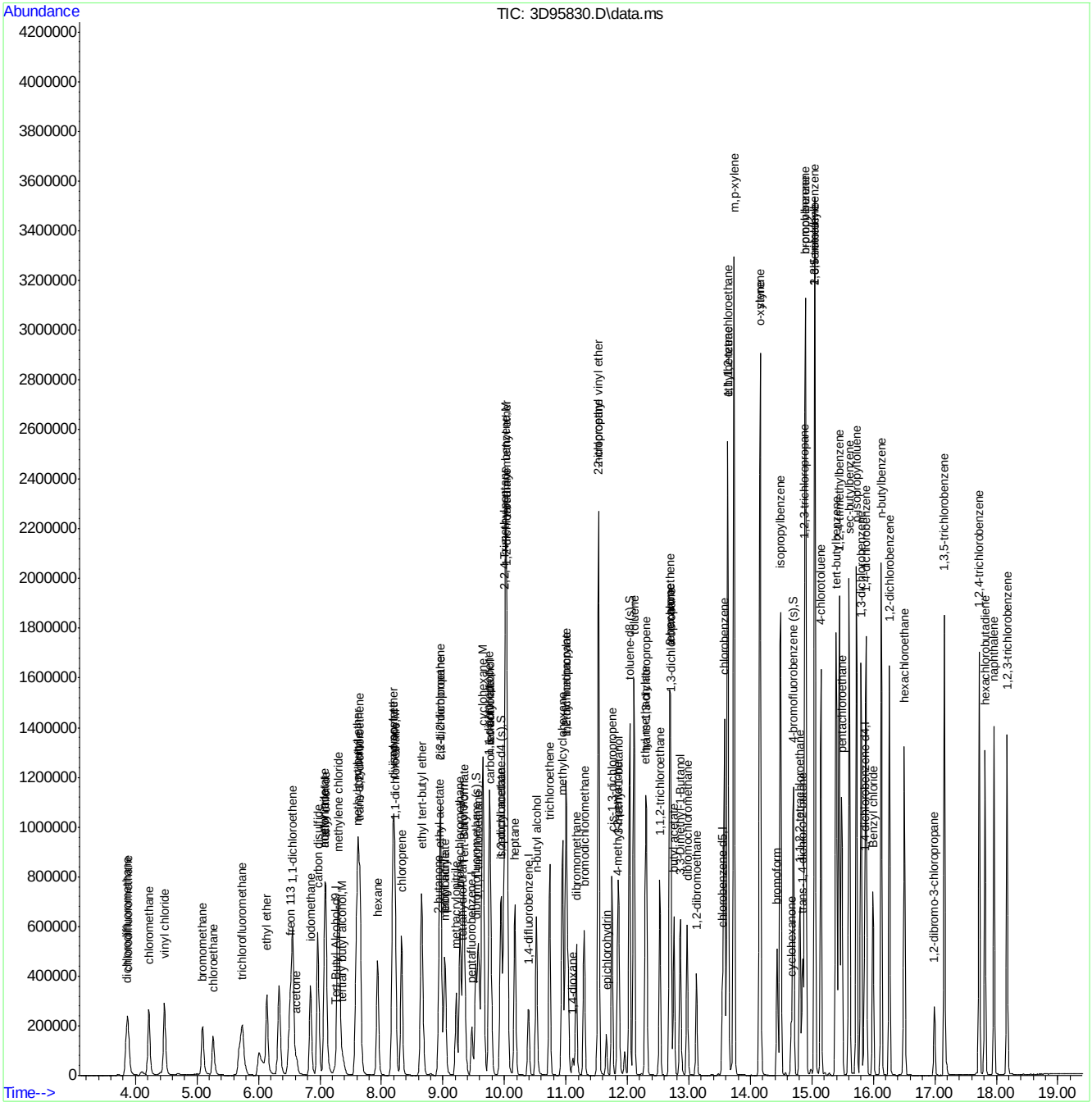
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
108) cyclohexanone	14.668	55	94249	2215.77	ug/L		90
109) 1,1,2,2-tetrachloroethane	14.805	83	385392	268.16	ug/L		99
110) trans-1,4-dichloro-2-b...	14.847	53	83610	204.16	ug/L	#	67
111) 1,2,3-trichloropropane	14.878	110	86798	212.48	ug/L		87
112) n-propylbenzene	14.899	91	1490425	268.13	ug/L		98
114) 2-chlorotoluene	15.051	126	326597	242.86	ug/L		89
115) 4-chlorotoluene	15.146	126	332662	243.08	ug/L		94
116) 1,3,5-trimethylbenzene	15.046	105	1141972	252.49	ug/L		99
117) tert-butylbenzene	15.397	119	972205	251.39	ug/L		94
118) pentachloroethane	15.486	167	257760	218.16	ug/L		96
119) 1,2,4-trimethylbenzene	15.444	105	1110897	244.45	ug/L		96
120) sec-butylbenzene	15.607	105	1511441	270.45	ug/L		97
121) 1,3-dichlorobenzene	15.801	146	703701	232.80	ug/L		99
122) p-isopropyltoluene	15.728	119	1260615	250.17	ug/L		97
123) 1,4-dichlorobenzene	15.880	146	717013	227.40	ug/L		97
124) 1,2-dichlorobenzene	16.262	146	701824	226.37	ug/L		98
126) n-butylbenzene	16.131	92	654657	252.92	ug/L		92
128) 1,2-dibromo-3-chloropr...	16.996	157	84583	209.59	ug/L		92
129) 1,3,5-trichlorobenzene	17.159	180	605531	207.33	ug/L		100
130) 1,2,4-trichlorobenzene	17.720	180	531949	190.21	ug/L		98
131) hexachlorobutadiene	17.814	225	287422	199.88	ug/L		96
132) naphthalene	17.966	128	1015022	194.61	ug/L		99
133) 1,2,3-trichlorobenzene	18.176	180	431460	172.51	ug/L		98
134) hexachloroethane	16.503	119	282145	245.50	ug/L		95
135) Benzyl chloride	15.995	91	514592	172.83	ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95830.D
Acq On : 12 Feb 2014 11:52 pm
Operator : courtnem
Sample : ic4135-200
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 10:21:01 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Feb 14 10:13:06 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:21 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95841A.D
Acq On : 15 Feb 2014 12:04 pm
Operator : courtnem
Sample : icv4135-50
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 19 12:44:45 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Feb 19 12:40:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.239	65	93599	500.00	ug/L		0.00
4) pentafluorobenzene	9.478	168	195600	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.395	114	276793	50.00	ug/L		0.00
88) chlorobenzene-d5	13.552	117	226324	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.859	152	122352	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.536	113	77355	46.05	ug/L		0.00
Spiked Amount 50.000	Range 79 - 117		Recovery = 92.10%				
51) 1,2-dichloroethane-d4 (s)	9.955	65	80547	45.66	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 91.32%				
80) toluene-d8 (s)	12.042	98	263621	46.16	ug/L		0.00
Spiked Amount 50.000	Range 82 - 118		Recovery = 92.32%				
106) 4-bromofluorobenzene (s)	14.705	95	93833	46.17	ug/L		0.00
Spiked Amount 50.000	Range 75 - 118		Recovery = 92.34%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.119	88	25403	1631.04	ug/L		100
3) tertiary butyl alcohol	7.354	59	51282	248.61	ug/L		99
8) chlorodifluoromethane	3.873	51	94384	69.97	ug/L		96
9) dichlorodifluoromethane	3.847	85	81047	48.11	ug/L		98
10) chloromethane	4.203	50	111680	47.66	ug/L		99
11) vinyl chloride	4.460	62	108632	49.13	ug/L		100
12) bromomethane	5.089	94	59949	47.28	ug/L		97
13) chloroethane	5.268	64	55734	47.47	ug/L		99
16) trichlorofluoromethane	5.734	101	113057	49.41	ug/L		99
18) ethyl ether	6.133	74	44919	49.43	ug/L		94
21) acrolein	6.400	56	179507	491.78	ug/L		98
22) 1,1-dichloroethene	6.558	61	112978	44.87	ug/L		100
23) acetone	6.620	58	7865	50.74	ug/L		95
24) allyl chloride	7.092	76	43809	46.65	ug/L	#	84
27) iodomethane	6.846	142	146099	46.10	ug/L		99
28) iso-butyl alcohol	9.766	41	32328	523.91	ug/L		95
29) carbon disulfide	6.966	76	263575	43.63	ug/L		99
30) methylene chloride	7.292	84	84250	43.09	ug/L		99
31) methyl acetate	7.077	74	13557	47.36	ug/L		100
32) methyl tert butyl ether	7.596	73	470244	91.93	ug/L		99
33) trans-1,2-dichloroethene	7.653	61	111532	45.09	ug/L		100
34) di-isopropyl ether	8.188	45	266431	45.30	ug/L		97
35) ethyl tert-butyl ether	8.655	59	252137	47.32	ug/L		99
36) 2-butanone	8.927	72	9633	51.26	ug/L		99
37) 1,1-dichloroethane	8.230	63	140506	45.43	ug/L		98
38) chloroprene	8.330	53	98360	43.06	ug/L		99
39) acrylonitrile	7.622	53	173013	263.07	ug/L		99
40) vinyl acetate	8.209	86	15010	55.12	ug/L		84
41) ethyl acetate	8.938	45	11919	45.36	ug/L		72
42) 2,2-dichloropropane	8.964	77	111047	52.60	ug/L		99
43) cis-1,2-dichloroethene	8.964	61	140356	46.93	ug/L		99
44) propionitrile	9.043	54	132980	535.46	ug/L		86
45) methyl acrylate	9.027	55	96691	47.81	ug/L		98

M3D4135.M Wed Feb 19 12:47:22 2014 3D Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95841A.D
Acq On : 15 Feb 2014 12:04 pm
Operator : courtnem
Sample : icv4135-50
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 19 12:44:45 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Feb 19 12:40:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) bromochloromethane	9.284	128	45418	49.76	ug/L	91
47) tetrahydrofuran	9.305	42	30889	46.55	ug/L	99
48) chloroform	9.336	83	132865	45.24	ug/L	98
49) Tert-Butyl Formate	9.357	59	78779	52.74	ug/L	99
52) freon 113	6.521	151	63040	54.65	ug/L	99
53) methacrylonitrile	9.221	41	53833	44.29	ug/L	98
54) 1,1,1-trichloroethane	9.578	97	113473	46.33	ug/L	98
56) 2,2,4-Trimethylpentane	10.007	57	275768	46.93	ug/L	100
57) tert-amyl methyl ether	10.044	73	249345	47.66	ug/L	99
59) epichlorohydrin	11.664	57	44756	267.26	ug/L	98
60) n-butyl alcohol	10.521	56	135146	2875.38	ug/L	98
61) cyclohexane	9.646	84	115163	47.28	ug/L	97
62) carbon tetrachloride	9.777	117	102774	47.32	ug/L	98
63) 1,1-dichloropropene	9.756	75	102637	46.08	ug/L	99
64) hexane	7.936	57	93361	57.98	ug/L	100
65) benzene	10.023	78	310015	46.40	ug/L	100
66) heptane	10.175	57	51871	51.71	ug/L	97
67) isopropyl acetate	9.939	43	162959	50.76	ug/L	99
68) 1,2-dichloroethane	10.049	62	98273	49.19	ug/L	99
69) trichloroethene	10.736	95	76988	46.54	ug/L	99
72) 2-nitropropane	11.528	41	30146	47.25	ug/L	98
73) 2-chloroethyl vinyl ether	11.533	63	290233	255.45	ug/L	99
74) methyl methacrylate	11.004	41	123308	45.78	ug/L	97
75) 1,2-dichloropropane	11.009	63	81667	47.48	ug/L	99
76) methylcyclohexane	10.946	83	127697	52.39	ug/L	96
77) dibromomethane	11.171	93	52751	50.63	ug/L	97
78) bromodichloromethane	11.302	83	104616	47.24	ug/L	99
79) cis-1,3-dichloropropene	11.753	75	132173	49.14	ug/L	100
81) 4-methyl-2-pentanone	11.848	58	33977	51.16	ug/L	95
82) toluene	12.110	92	182610	47.81	ug/L	100
83) 3-methyl-1-butanol	11.863	70	47838	1089.92	ug/L	97
84) trans-1,3-dichloropropene	12.314	75	117990	50.73	ug/L	96
85) ethyl methacrylate	12.299	69	100425	51.38	ug/L	98
86) 1,1,2-trichloroethane	12.535	83	60914	48.99	ug/L	100
87) 2-hexanone	12.697	58	29959	52.27	ug/L	96
89) tetrachloroethene	12.697	166	83089	48.37	ug/L	98
90) 1,3-dichloropropane	12.713	76	113867	48.80	ug/L	99
91) butyl acetate	12.765	56	53285	49.43	ug/L	96
92) 3,3-Dimethyl-1-Butanol	12.865	57	87365	489.54	ug/L	99
93) dibromochloromethane	12.980	129	88349	49.35	ug/L	99
94) 1,2-dibromoethane	13.127	107	75613	50.41	ug/L	99
96) chlorobenzene	13.583	112	199322	47.72	ug/L	99
97) 1,1,1,2-tetrachloroethane	13.641	131	80009	49.59	ug/L	99
98) ethylbenzene	13.630	91	330240	47.39	ug/L	99
99) m,p-xylene	13.740	106	253090	94.80	ug/L	96
100) o-xylene	14.155	106	127419	47.75	ug/L	99
101) styrene	14.170	104	215659	48.74	ug/L	99
103) bromoform	14.443	173	65624	50.07	ug/L	98
105) isopropylbenzene	14.495	105	322300	48.32	ug/L	100
107) bromobenzene	14.899	156	90820	48.16	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95841A.D
Acq On : 15 Feb 2014 12:04 pm
Operator : courtnem
Sample : icv4135-50
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 19 12:44:45 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Feb 19 12:40:56 2014
Response via : Initial Calibration

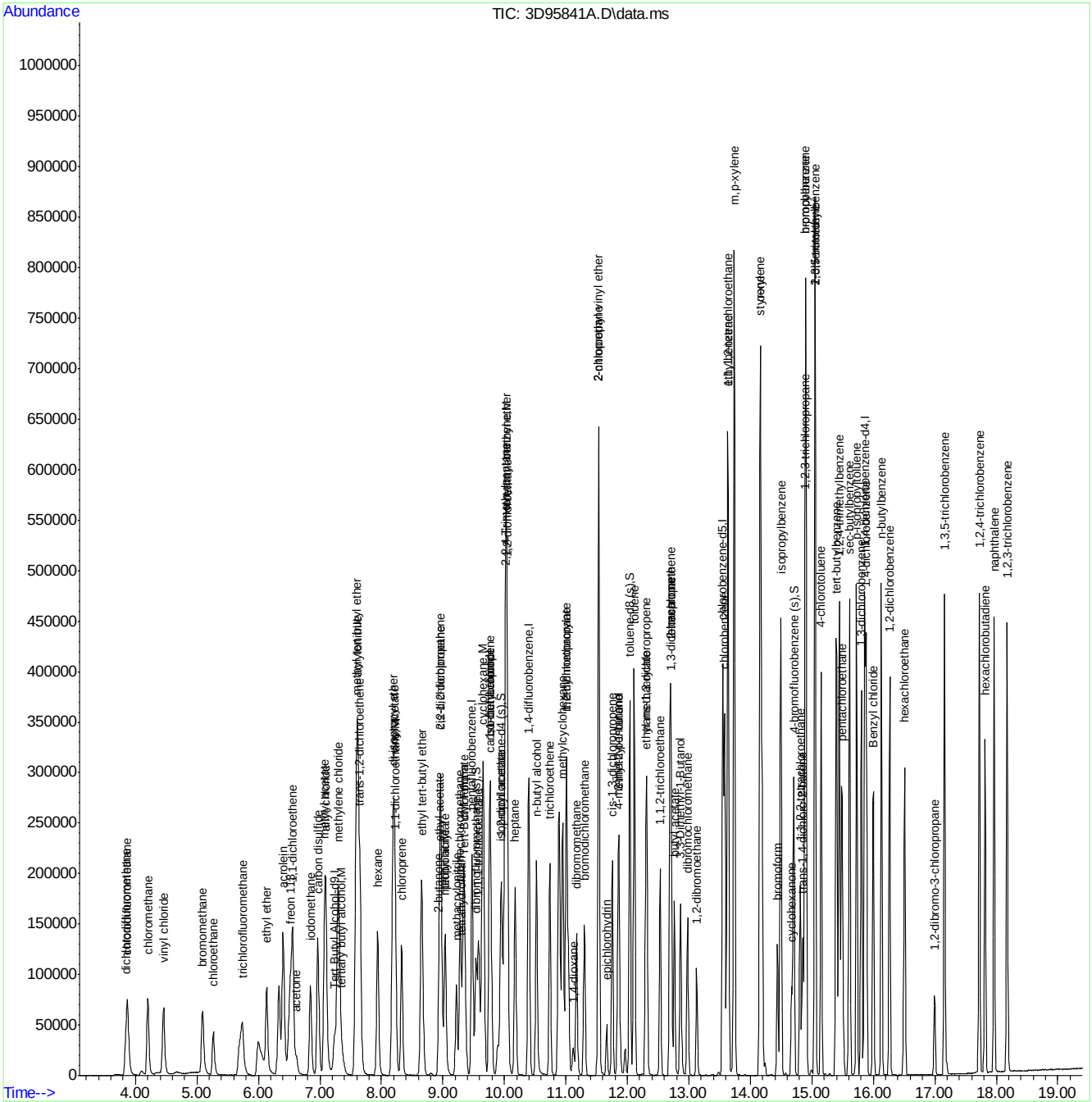
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) cyclohexanone	14.674	55	37564	696.88	ug/L	95
109) 1,1,2,2-tetrachloroethane	14.810	83	101623	48.86	ug/L	100
110) trans-1,4-dichloro-2-b...	14.852	53	24108	54.65	ug/L	97
111) 1,2,3-trichloropropane	14.883	110	23173	51.18	ug/L	97
112) n-propylbenzene	14.904	91	360785	47.52	ug/L	99
114) 2-chlorotoluene	15.051	126	80115	48.66	ug/L	95
115) 4-chlorotoluene	15.151	126	81386	49.12	ug/L	98
116) 1,3,5-trimethylbenzene	15.051	105	270575	48.24	ug/L	99
117) tert-butylbenzene	15.397	119	230210	48.44	ug/L	97
118) pentachloroethane	15.486	167	63737	51.00	ug/L	97
119) 1,2,4-trimethylbenzene	15.444	105	263343	47.80	ug/L	100
120) sec-butylbenzene	15.612	105	356082	48.28	ug/L	100
121) 1,3-dichlorobenzene	15.806	146	170001	47.95	ug/L	100
122) p-isopropyltoluene	15.728	119	295058	47.77	ug/L	99
123) 1,4-dichlorobenzene	15.885	146	172559	47.84	ug/L	99
124) 1,2-dichlorobenzene	16.268	146	170875	48.47	ug/L	98
126) n-butylbenzene	16.131	92	151764	48.04	ug/L	98
128) 1,2-dibromo-3-chloropr...	16.996	157	23411	52.59	ug/L	96
129) 1,3,5-trichlorobenzene	17.159	180	157493	50.75	ug/L	99
130) 1,2,4-trichlorobenzene	17.725	180	150684	52.70	ug/L	99
131) hexachlorobutadiene	17.820	225	73737	48.33	ug/L	99
132) naphthalene	17.966	128	321245	55.35	ug/L	99
133) 1,2,3-trichlorobenzene	18.176	180	139174	53.72	ug/L	99
134) hexachloroethane	16.509	119	64420	49.81	ug/L	98
135) Benzyl chloride	16.000	91	198904	70.50	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D95841A.D
Acq On : 15 Feb 2014 12:04 pm
Operator : courtnem
Sample : icv4135-50
Misc : MS62765,V3D4135,w,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 19 12:44:45 2014
Quant Method : C:\MSDCHEM\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Wed Feb 19 12:40:56 2014
Response via : Initial Calibration



M3D4135.M Wed Feb 19 12:47:22 2014 3D Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97780.D
Acq On : 7 Apr 2014 9:02 pm
Operator : courtnem
Sample : cc4135-50
Misc : MS65550,V3D4217,w,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 09 15:25:38 2014
Quant Title :
QLast Update : Mon Feb 17 16:21:19 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.234	65	79731	500.00	ug/L		0.00
4) pentafluorobenzene	9.467	168	192001	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.385	114	274793	50.00	ug/L		-0.01
88) chlorobenzene-d5	13.541	117	220683	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.848	152	117400	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.525	113	88308	53.56	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 107.12%				
51) 1,2-dichloroethane-d4 (s)	9.950	65	92833	53.61	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 107.22%				
80) toluene-d8 (s)	12.026	98	301934	53.26	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.52%				
106) 4-bromofluorobenzene (s)	14.695	95	101875	52.25	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 104.50%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.103	88	18001	1356.81	ug/L		99
3) tertiary butyl alcohol	7.344	59	43838	249.48	ug/L		84
8) chlorodifluoromethane	3.878	51	93082	70.30	ug/L		97
9) dichlorodifluoromethane	3.852	85	123628	74.76	ug/L		95
10) chloromethane	4.209	50	127204	55.30	ug/L		99
11) vinyl chloride	4.455	62	124397	57.31	ug/L		98
12) bromomethane	5.105	94	76211	61.23	ug/L		97
13) chloroethane	5.273	64	54867	47.61	ug/L		97
16) trichlorofluoromethane	5.734	101	138976	61.88	ug/L		97
18) ethyl ether	6.133	74	42848	48.03	ug/L		96
21) acrolein	6.395	56	162017	452.18	ug/L		100
22) 1,1-dichloroethene	6.558	61	114946	46.51	ug/L		96
23) acetone	6.620	58	6905	45.38	ug/L		99
24) allyl chloride	7.092	76	43160	46.82	ug/L		100
25) acetonitrile	7.061	40	76440	468.30	ug/L	#	56
27) iodomethane	6.841	142	143707	46.19	ug/L		98
28) iso-butyl alcohol	9.756	41	27596	455.61	ug/L		98
29) carbon disulfide	6.961	76	255239	43.04	ug/L		98
30) methylene chloride	7.281	84	82726	43.10	ug/L		97
31) methyl acetate	7.071	74	13911	49.50	ug/L		93
32) methyl tert butyl ether	7.590	73	233813	46.57	ug/L		98
33) trans-1,2-dichloroethene	7.648	61	116235	47.87	ug/L		99
34) di-isopropyl ether	8.183	45	289913	50.22	ug/L		99
35) ethyl tert-butyl ether	8.644	59	269311	51.49	ug/L		98
36) 2-butanone	8.922	72	9016	48.87	ug/L		79
37) 1,1-dichloroethane	8.220	63	146480	48.25	ug/L		98
38) chloroprene	8.324	53	117040	52.20	ug/L		99
39) acrylonitrile	7.617	53	158742	245.90	ug/L		100
40) vinyl acetate	8.199	86	12874	48.16	ug/L		79
41) ethyl acetate	8.933	45	11906	46.16	ug/L		85
42) 2,2-dichloropropane	8.954	77	99697	48.11	ug/L		98
43) cis-1,2-dichloroethene	8.959	61	142732	48.62	ug/L		99
44) propionitrile	9.032	54	119905	491.86	ug/L		95

M3D4135.M Wed Apr 09 16:05:24 2014 DATAREVIW Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97780.D
Acq On : 7 Apr 2014 9:02 pm
Operator : courtnem
Sample : cc4135-50
Misc : MS65550,V3D4217,w,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 09 15:25:38 2014
Quant Title :
QLast Update : Mon Feb 17 16:21:19 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) methyl acrylate	9.017	55	92135	45.07	ug/L	98
46) bromochloromethane	9.273	128	45360	50.63	ug/L	99
47) tetrahydrofuran	9.300	42	29248	44.90	ug/L	98
48) chloroform	9.326	83	139982	48.56	ug/L	99
49) Tert-Butyl Formate	9.347	59	74715	50.96	ug/L	99
52) freon 113	6.521	151	64096	56.61	ug/L	99
53) methacrylonitrile	9.211	41	53251	44.63	ug/L	96
54) 1,1,1-trichloroethane	9.572	97	118782	49.41	ug/L	98
56) 2,2,4-Trimethylpentane	9.997	57	287121	49.77	ug/L	97
57) tert-amyl methyl ether	10.034	73	254173	49.50	ug/L	99
59) epichlorohydrin	11.654	57	36849	221.65	ug/L	97
60) n-butyl alcohol	10.511	56	109974	2356.85	ug/L	98
61) cyclohexane	9.635	84	117720	48.69	ug/L	97
62) carbon tetrachloride	9.772	117	109862	50.95	ug/L	95
63) 1,1-dichloropropene	9.745	75	107316	48.53	ug/L	96
64) hexane	7.936	57	94890	59.36	ug/L	98
65) benzene	10.013	78	314966	47.48	ug/L	99
66) heptane	10.165	57	52031	52.25	ug/L	99
67) isopropyl acetate	9.929	43	156538	49.11	ug/L	99
68) 1,2-dichloroethane	10.034	62	104024	52.45	ug/L	99
69) trichloroethene	10.726	95	79620	48.48	ug/L	97
72) 2-nitropropane	11.517	41	29038	45.85	ug/L	95
73) 2-chloroethyl vinyl ether	11.523	63	266712	236.45	ug/L	99
74) methyl methacrylate	10.993	41	124995	46.74	ug/L	97
75) 1,2-dichloropropane	10.998	63	85251	49.92	ug/L	98
76) methylcyclohexane	10.935	83	129912	53.68	ug/L	98
77) dibromomethane	11.161	93	52020	50.29	ug/L	97
78) bromodichloromethane	11.287	83	107290	48.80	ug/L	97
79) cis-1,3-dichloropropene	11.743	75	128030	47.95	ug/L	97
81) 4-methyl-2-pentanone	11.832	58	31654	48.01	ug/L	94
82) toluene	12.099	92	182038	48.00	ug/L	98
83) 3-methyl-1-butanol	11.853	70	38373	880.64	ug/L	98
84) trans-1,3-dichloropropene	12.304	75	114753	49.70	ug/L	95
85) ethyl methacrylate	12.288	69	95324	49.13	ug/L	99
86) 1,1,2-trichloroethane	12.519	83	60030	48.63	ug/L	97
87) 2-hexanone	12.687	58	27418	48.19	ug/L	92
89) tetrachloroethene	12.687	166	84782	50.62	ug/L	98
90) 1,3-dichloropropane	12.702	76	113409	49.85	ug/L	99
91) butyl acetate	12.755	56	49765	47.34	ug/L	94
92) 3,3-Dimethyl-1-Butanol	12.854	57	73046	419.77	ug/L	99
93) dibromochloromethane	12.965	129	87499	50.12	ug/L	99
94) 1,2-dibromoethane	13.117	107	73168	50.02	ug/L	98
96) chlorobenzene	13.573	112	200530	49.23	ug/L	100
97) 1,1,1,2-tetrachloroethane	13.630	131	80842	51.39	ug/L	99
98) ethylbenzene	13.620	91	329219	48.45	ug/L	99
99) m,p-xylene	13.730	106	249891	95.99	ug/L	97
100) o-xylene	14.144	106	125354	48.18	ug/L	97
101) styrene	14.155	104	207651	48.13	ug/L	96
103) bromoform	14.427	173	64080	50.14	ug/L	100
105) isopropylbenzene	14.485	105	323527	50.55	ug/L	99
107) bromobenzene	14.889	156	92318	51.02	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97780.D
Acq On : 7 Apr 2014 9:02 pm
Operator : courtnem
Sample : cc4135-50
Misc : MS65550,V3D4217,w,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 09 15:25:38 2014
Quant Title :
QLast Update : Mon Feb 17 16:21:19 2014
Response via : Initial Calibration

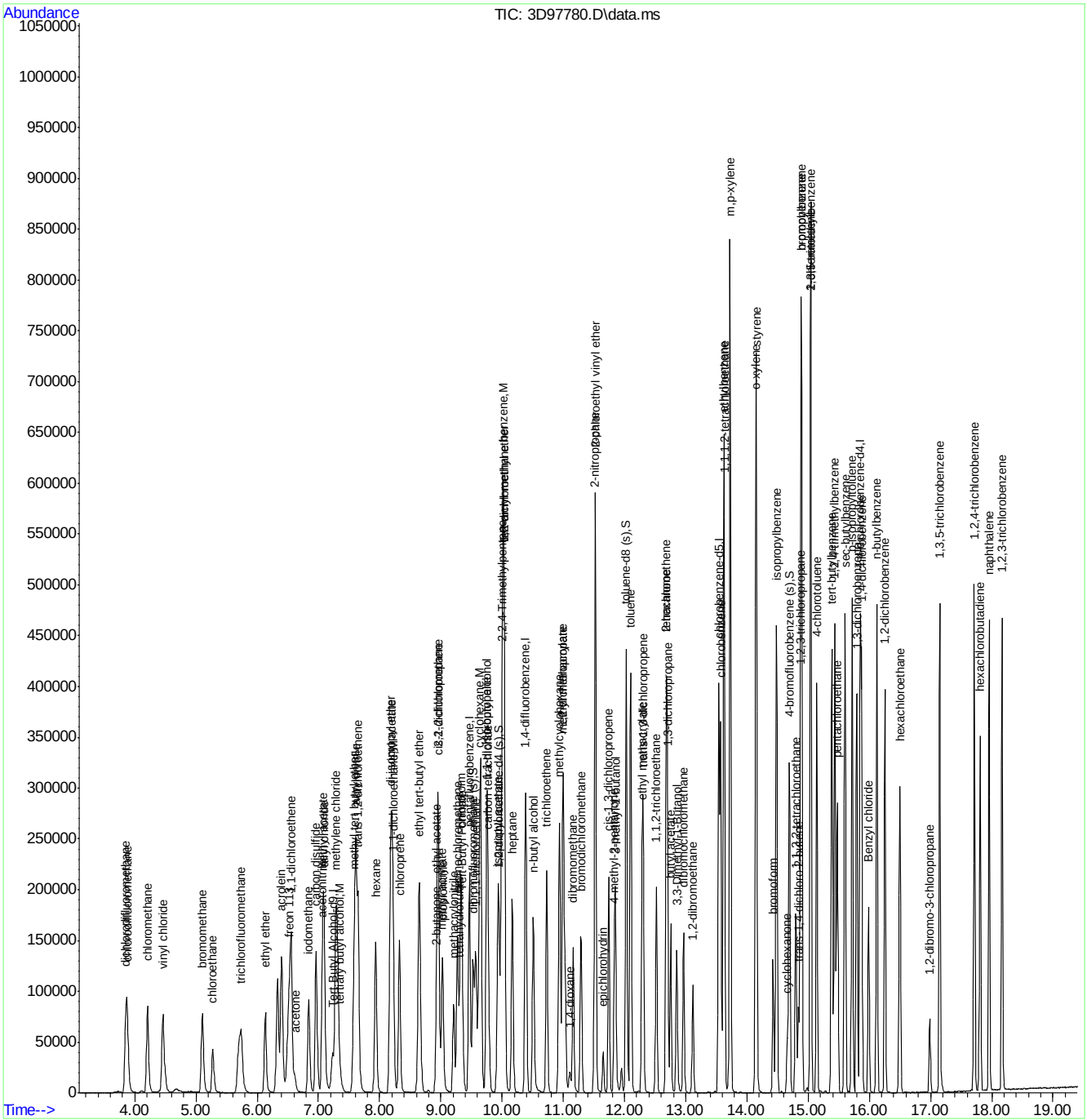
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) cyclohexanone	14.658	55	23118	446.97	ug/L	95
109) 1,1,2,2-tetrachloroethane	14.800	83	94838	47.52	ug/L	100
110) trans-1,4-dichloro-2-b...	14.842	53	15318	36.19	ug/L	96
111) 1,2,3-trichloropropane	14.873	110	22269	51.26	ug/L	99
112) n-propylbenzene	14.889	91	354423	48.65	ug/L	99
114) 2-chlorotoluene	15.041	126	79639	50.41	ug/L	93
115) 4-chlorotoluene	15.140	126	79608	50.07	ug/L	99
116) 1,3,5-trimethylbenzene	15.041	105	266700	49.55	ug/L	100
117) tert-butylbenzene	15.387	119	229042	50.22	ug/L	96
118) pentachloroethane	15.476	167	63110	52.63	ug/L	97
119) 1,2,4-trimethylbenzene	15.434	105	257932	48.80	ug/L	99
120) sec-butylbenzene	15.602	105	345877	48.87	ug/L	99
121) 1,3-dichlorobenzene	15.796	146	166868	49.05	ug/L	99
122) p-isopropyltoluene	15.717	119	287693	48.54	ug/L	100
123) 1,4-dichlorobenzene	15.874	146	168071	48.56	ug/L	98
124) 1,2-dichlorobenzene	16.257	146	167273	49.45	ug/L	98
126) n-butylbenzene	16.121	92	145735	48.08	ug/L	98
128) 1,2-dibromo-3-chloropr...	16.991	157	21645	50.67	ug/L	96
129) 1,3,5-trichlorobenzene	17.148	180	153519	51.55	ug/L	100
130) 1,2,4-trichlorobenzene	17.715	180	150231	54.76	ug/L	99
131) hexachlorobutadiene	17.809	225	75660	51.68	ug/L	97
132) naphthalene	17.956	128	326121	58.56	ug/L	100
133) 1,2,3-trichlorobenzene	18.171	180	145785	58.65	ug/L	97
134) hexachloroethane	16.498	119	63421	51.11	ug/L	99
135) Benzyl chloride	15.990	91	129371	47.79	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3d\v3d4217\
Data File : 3D97780.D
Acq On : 7 Apr 2014 9:02 pm
Operator : courtnem
Sample : cc4135-50
Misc : MS65550,V3D4217,w,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 09 15:25:38 2014
Quant Title :
QLast Update : Mon Feb 17 16:21:19 2014
Response via : Initial Calibration



M3D4135.M Wed Apr 09 16:05:24 2014 DATAREVIW Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97804.D
Acq On : 8 Apr 2014 8:30 am
Operator : courtnem
Sample : cc4135-20
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:40:24 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.229	65	80836	500.00	ug/L		0.00
4) pentafluorobenzene	9.473	168	172370	50.00	ug/L		0.00
58) 1,4-difluorobenzene	10.390	114	248387	50.00	ug/L		0.00
88) chlorobenzene-d5	13.546	117	197965	50.00	ug/L		0.00
104) 1,4-dichlorobenzene-d4	15.853	152	107119	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.530	113	82955	56.04	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 112.08%				
51) 1,2-dichloroethane-d4 (s)	9.950	65	91242	58.69	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 117.38%				
80) toluene-d8 (s)	12.031	98	271726	53.02	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.04%				
106) 4-bromofluorobenzene (s)	14.700	95	93023	52.28	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 104.56%				
Target Compounds							Qvalue
2) 1,4-dioxane	11.114	88	7664	569.77	ug/L		97
3) tertiary butyl alcohol	7.349	59	17795	99.89	ug/L		81
8) chlorodifluoromethane	3.873	51	32718	27.52	ug/L		99
9) dichlorodifluoromethane	3.852	85	41623	28.04	ug/L		96
10) chloromethane	4.198	50	45311	21.94	ug/L		98
11) vinyl chloride	4.445	62	43908	22.53	ug/L		99
12) bromomethane	5.105	94	28029	25.08	ug/L		94
13) chloroethane	5.273	64	20929	20.23	ug/L		98
16) trichlorofluoromethane	5.724	101	52977	26.28	ug/L		97
18) ethyl ether	6.133	74	16396	20.47	ug/L		99
21) acrolein	6.400	56	55957	173.96	ug/L		100
22) 1,1-dichloroethene	6.552	61	45601	20.55	ug/L		96
23) acetone	6.620	58	2867	20.99	ug/L	#	83
24) allyl chloride	7.092	76	16315	19.72	ug/L	#	84
25) acetonitrile	7.077	40	31629	215.84	ug/L		88
27) iodomethane	6.841	142	56299	20.16	ug/L		99
28) iso-butyl alcohol	9.761	41	11303	207.87	ug/L		92
29) carbon disulfide	6.961	76	99731	18.73	ug/L		97
30) methylene chloride	7.286	84	32524	18.88	ug/L		97
31) methyl acetate	7.071	74	5165	20.47	ug/L	#	81
32) methyl tert butyl ether	7.585	73	91974	20.40	ug/L		98
33) trans-1,2-dichloroethene	7.653	61	45940	21.07	ug/L		98
34) di-isopropyl ether	8.183	45	110980	21.41	ug/L		90
35) ethyl tert-butyl ether	8.644	59	102611	21.85	ug/L		98
36) 2-butanone	8.927	72	3353	20.25	ug/L		70
37) 1,1-dichloroethane	8.225	63	58251	21.37	ug/L		97
38) chloroprene	8.324	53	44228	21.97	ug/L		98
39) acrylonitrile	7.617	53	62488	107.82	ug/L		94
40) vinyl acetate	8.204	86	4580	19.09	ug/L		69
41) ethyl acetate	8.933	45	4427	19.12	ug/L		67
42) 2,2-dichloropropane	8.954	77	35440	19.05	ug/L		98
43) cis-1,2-dichloroethene	8.959	61	55496	21.06	ug/L		97
44) propionitrile	9.032	54	47881	218.78	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97804.D
Acq On : 8 Apr 2014 8:30 am
Operator : courtnem
Sample : cc4135-20
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:40:24 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) methyl acrylate	9.022	55	34703	18.91 ug/L	99
46) bromochloromethane	9.273	128	17996	22.37 ug/L	95
47) tetrahydrofuran	9.305	42	11788	20.16 ug/L	94
48) chloroform	9.326	83	54866	21.20 ug/L	97
49) Tert-Butyl Formate	9.347	59	29467	22.39 ug/L	97
52) freon 113	6.521	151	22437	22.07 ug/L	96
53) methacrylonitrile	9.210	41	20626	19.26 ug/L	95
54) 1,1,1-trichloroethane	9.572	97	48006	22.24 ug/L	99
56) 2,2,4-Trimethylpentane	9.997	57	96206	18.58 ug/L	95
57) tert-amyl methyl ether	10.034	73	96897	21.02 ug/L	97
59) epichlorohydrin	11.659	57	14087	93.74 ug/L	97
60) n-butyl alcohol	10.516	56	42032	996.55 ug/L	95
61) cyclohexane	9.640	84	44802	20.50 ug/L	96
62) carbon tetrachloride	9.771	117	43999	22.57 ug/L	98
63) 1,1-dichloropropene	9.751	75	41118	20.57 ug/L	96
64) hexane	7.936	57	30750	21.28 ug/L	99
65) benzene	10.018	78	121308	20.23 ug/L	98
66) heptane	10.170	57	16301	18.11 ug/L	98
67) isopropyl acetate	9.934	43	61134	21.22 ug/L	99
68) 1,2-dichloroethane	10.039	62	42101	23.48 ug/L	96
69) trichloroethene	10.731	95	30489	20.54 ug/L	95
72) 2-nitropropane	11.523	41	11798	20.61 ug/L	99
73) 2-chloroethyl vinyl ether	11.528	63	98906	97.01 ug/L	99
74) methyl methacrylate	10.998	41	48187	19.94 ug/L	99
75) 1,2-dichloropropane	11.004	63	32046	20.76 ug/L	93
76) methylcyclohexane	10.941	83	45576	20.84 ug/L	96
77) dibromomethane	11.166	93	20327	21.74 ug/L	98
78) bromodichloromethane	11.292	83	41638	20.95 ug/L	98
79) cis-1,3-dichloropropene	11.748	75	46026	19.07 ug/L	94
81) 4-methyl-2-pentanone	11.837	58	12266	20.58 ug/L	94
82) toluene	12.105	92	67595	19.72 ug/L	100
83) 3-methyl-1-butanol	11.858	70	15143	384.47 ug/L	98
84) trans-1,3-dichloropropene	12.309	75	41828	20.04 ug/L	92
85) ethyl methacrylate	12.293	69	34480	19.66 ug/L	96
86) 1,1,2-trichloroethane	12.524	83	22550	20.21 ug/L	97
87) 2-hexanone	12.692	58	9805	19.06 ug/L	92
89) tetrachloroethene	12.692	166	31615	21.04 ug/L	98
90) 1,3-dichloropropane	12.708	76	42391	20.77 ug/L	100
91) butyl acetate	12.760	56	18088	19.18 ug/L	95
92) 3,3-Dimethyl-1-Butanol	12.860	57	28215	180.75 ug/L	98
93) dibromochloromethane	12.970	129	32294	20.62 ug/L	96
94) 1,2-dibromoethane	13.122	107	27245	20.76 ug/L	97
96) chlorobenzene	13.578	112	73842	20.21 ug/L	99
97) 1,1,1,2-tetrachloroethane	13.636	131	31266	22.16 ug/L	98
98) ethylbenzene	13.625	91	122607	20.12 ug/L	99
99) m,p-xylene	13.735	106	92574	39.64 ug/L	95
100) o-xylene	14.149	106	47285	20.26 ug/L	99
101) styrene	14.165	104	76613	19.80 ug/L	97
103) bromoform	14.433	173	24104	21.03 ug/L	98
105) isopropylbenzene	14.490	105	121140	20.74 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97804.D
Acq On : 8 Apr 2014 8:30 am
Operator : courtnem
Sample : cc4135-20
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:40:24 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration

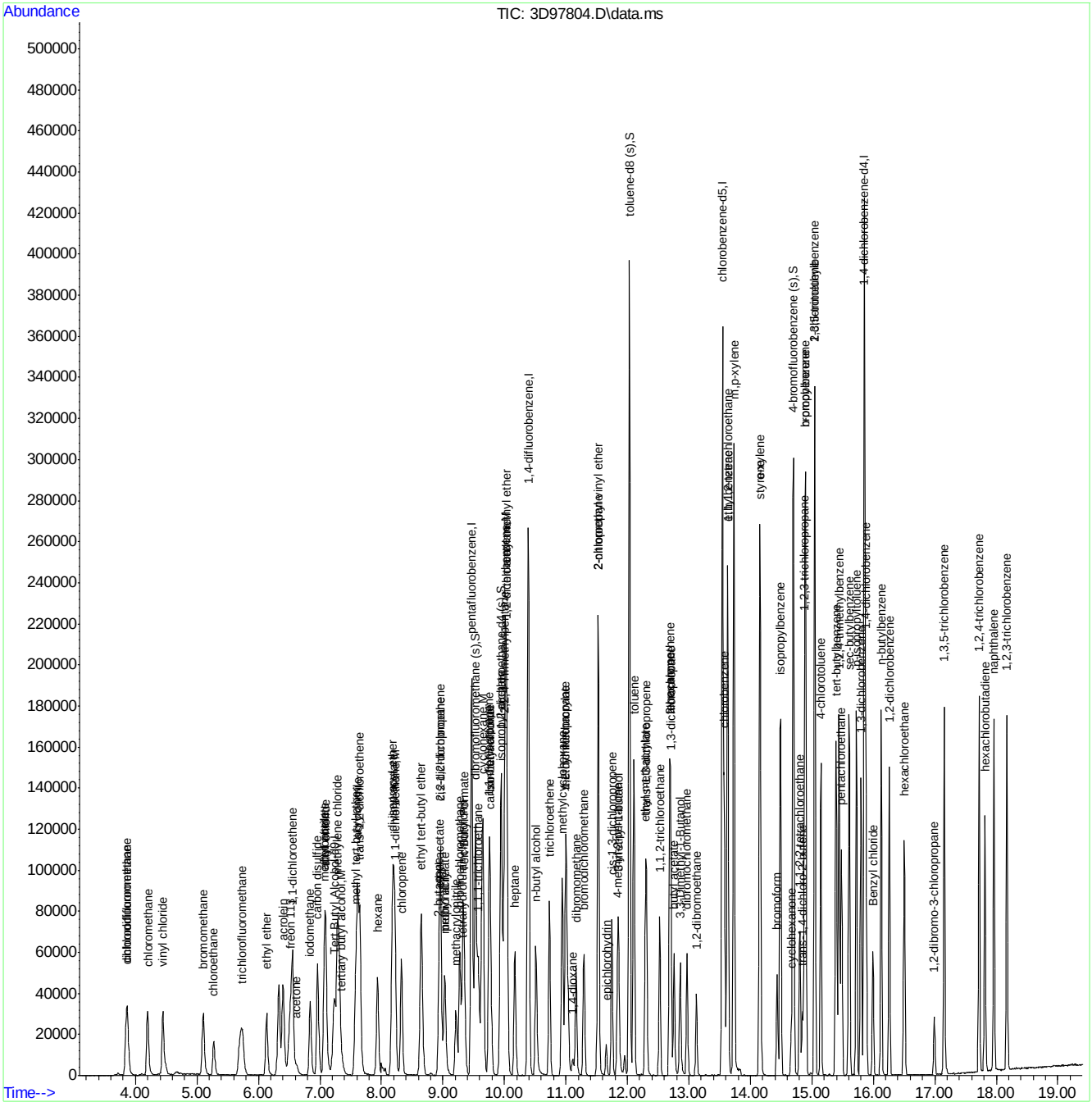
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
107) bromobenzene	14.894	156	34531	20.91 ug/L	97
108) cyclohexanone	14.668	55	9653	204.55 ug/L	95
109) 1,1,2,2-tetrachloroethane	14.805	83	36974	20.31 ug/L	98
110) trans-1,4-dichloro-2-b...	14.847	53	5937	15.37 ug/L	84
111) 1,2,3-trichloropropane	14.878	110	8699	21.95 ug/L	92
112) n-propylbenzene	14.899	91	133237	20.04 ug/L	99
114) 2-chlorotoluene	15.046	126	29536	20.49 ug/L	87
115) 4-chlorotoluene	15.146	126	29894	20.61 ug/L	96
116) 1,3,5-trimethylbenzene	15.046	105	99035	20.17 ug/L	99
117) tert-butylbenzene	15.392	119	84535	20.32 ug/L	95
118) pentachloroethane	15.481	167	23038	21.06 ug/L	96
119) 1,2,4-trimethylbenzene	15.439	105	96988	20.11 ug/L	98
120) sec-butylbenzene	15.607	105	128993	19.98 ug/L	99
121) 1,3-dichlorobenzene	15.796	146	61982	19.97 ug/L	99
122) p-isopropyltoluene	15.728	119	107294	19.84 ug/L	99
123) 1,4-dichlorobenzene	15.880	146	62747	19.87 ug/L	100
124) 1,2-dichlorobenzene	16.262	146	62896	20.38 ug/L	98
126) n-butylbenzene	16.126	92	53377	19.30 ug/L	96
128) 1,2-dibromo-3-chloropr...	16.996	157	8260	21.19 ug/L	93
129) 1,3,5-trichlorobenzene	17.154	180	56342	20.74 ug/L	99
130) 1,2,4-trichlorobenzene	17.720	180	54391	21.73 ug/L	99
131) hexachlorobutadiene	17.814	225	26934	20.16 ug/L	99
132) naphthalene	17.961	128	118978	23.41 ug/L	99
133) 1,2,3-trichlorobenzene	18.171	180	53322	23.51 ug/L	100
134) hexachloroethane	16.504	119	23237	20.52 ug/L	98
135) Benzyl chloride	15.995	91	40641	16.45 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 3D97804.D
Acq On : 8 Apr 2014 8:30 am
Operator : courtnem
Sample : cc4135-20
Misc : MS65386,V3D4218,w,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 08 15:40:24 2014
Quant Method : C:\msdchem\1\METHODS\M3D4135.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Fri Mar 28 13:07:34 2014
Response via : Initial Calibration



M3D4135.M Tue Apr 08 15:41:07 2014 3D Page: 4

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V3D4135

Print Analyst Name: Courtney McKenna
Analyst Signature: Courtney R. McKenna

Date: 2/12/14

Columns: ZB624 (60m x 0.25mm x 1.4µm)

Method V8260B

Initial Cal. Method M3D4135

Standard Data

Lot #	Description	Conc.
VD4-1771-53	Int Only	25/125ppm
	Surr	100ppm
-45	STD A	
-43	B	
-36	C	
-31	Fluorobenzene	1000ppm

Standard Data

Lot #	Description	Conc.
VD4-1771-49	Ext A	100ppm
-52	B	
23	C	
22	Fluorobenzene	1000ppm
-37	EtOH	10,000ppm
-60	EtOH	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ **Date:** 2/18/2014

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
	3D95821	BFB				11							ok		
	95822	IC4135-0.5	Method 8260			12	5		1x				ok	2.5µl STD ABC Acr EtOH Surr to 500 mL DI	
	95823	IC4135-1.0				13	5		1x				ok	1µl STD ABC EtOH Surr 100µl Acr to 100 mL DI	
	95824	IC4135-2.0				14	5		1x				ok	2µl STD ABC EtOH Surr 200µl Acr to 100 mL DI	
	95825	IC4135-5.0				15	5		1x				ok	5µl STD ABC Acr EtOH Surr to 100 mL DI	
	95826	IC4135-10				16	5		1x				ok	10µl	
	95827	IC4135-20				17	5		1x				ok	20µl STD ABC Acr EtOH 5µl Surr to 100 mL DI	
	95828	IC4135-50				18	5		1x				ok	50µl STD ABC Acr EtOH Surr to 100 mL DI	
	95829	IC4135-~~75~~-100				19	5		1x				ok	100µl STD ABC EtOH Surr to 100 mL DI	
	95830	IC4135-200				20	5		1x				ok	200µl	
	95831	IB				21							clip		
	95832	IB				22									
	95833	ICV4135-50				23	5		1x				NG	25µl Ext ABC Acr EtOH to 50 mL DI, needs Acetone	
	95834	IB				24							c/c		
									2/19/14				c/		

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

261

ACCUTEST.

VOLATILE ANALYSIS LOG

4135
~~4136~~
Batch ID: V3D4135 CW 2/17

Print Analyst Name: AUSTIN PARK
Analyst Signature:

Date: 2/15/14

Columns: ZB624/60m x 0.25mm x 1.4µm)

Method V8260B

Initial Cal. Method M3D4135

Standard Data

Lot #	Description	Conc.
V014-1711-53	Int Only	25/2500ppm
-51	Surr	100ppm
-47	STD. A	
-48	B	
-96	C	
	Acrolein	(1000ppm)

Standard Data

Lot #	Description	Conc.
V014-1711-49	Ext A	100ppm
-50	B	
-95	C	
-93	Acrolein	1000ppm
-61	Hexane	100ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 2/18/2014

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
	3D95841	BFB				1							02	10:59AM	
	95841A	ICV4135-50				2					✓		02	25µL EXT A/ACROLEIN TO 50mL DI	
														CW 2/17	

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

265

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V304217

Print Analyst Name: Courtney McKenna
Analyst Signature: Courtney P McKenna

Date: 4/7/14

Columns: ZB624 (60m x 0.25mm x 1.4µm)

Method V8260B

Initial Cal. Method M304135

Standard Data

Lot #	Description	Conc.
V14-1622-93	Int/Surr	25/2500ppm
-15	STD A	100ppm
-10	B	↓
-64	C	↓
-41	Acrolein	1000ppm

Standard Data

Lot #	Description	Conc.
V14-1822-54	Ext A	100ppm
-55	B	↓
-61	C	↓
-16	Acrolein	1000ppm
272511	pH paper	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ Date: 4/9/2014

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
	BD97779	BFB				23 24 4/7							ok	8:55pm	
	97780	CC4135-50 CC4135-20 4/7				24							ok	25µl STD ABCAcn/5mL DI #8,9,12,16↑	
	97781	IB				25							c/o		
	97782	MB				26							ok		
	97783	BS				27							ok	25µl Ext ABCAcn/5mL DI	
	97784	JB63746-23MS	6555D PAUGTMB	GW	1	28	10/50		5X				ok	25µl STD ABCAcn to 10mL Sample → 5mL DI	✓
	97785	JB63746-23MSD	↓	↓	1	29	10/50		5X				ok		
	97786	IB				30							c/o		
	97787	JB63746-23	6555D PAUGTMB	GW	1	31	10/50		5X				ok		✓
	97788	JB63746-16	↓	↓	1	32	5		1X				ok/DL		✓
D	97789	JB63746-16	↓	↓	1	33	5/50		10X				ok		✓
	97790	JB63746-2	PAUG	↓	1	34	5		1X				ok		✓
	97791	JB63746-5	↓	↓	1	35	5		1X				ok		✓
	97792	JB63746-7	↓	↓	1	36	5		1X				ok		✓
	97793	JB63746-18	PAUGTMB	↓	1	37	5		1X				ok		✓
	97794	JB63746-19	↓	↓	1	38	5		1X				ok		✓
	97795	JB63746-20	PAUG	↓	1	39	5		1X				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

281

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V3D4217

Print Analyst Name: Courtney McKenna
Analyst Signature: Courtney R. McKenna

Date: 4/7/14

Columns: ZB624

Method V8260B

Initial Cal. Method M3D4135

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Refer to page 281	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ **Date:** 4/9/2014

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	~~Sccondary~~ dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	3D97796	JB63746-21	6559D PAUG	GW	1	40	5		1x		✓		ok		✓
	97797	JB63746-22	↓	↓	1	41	5		1x		✓		ok		✓
	97798	JB63746-24	PAUGTMB	SW	1	42	5		1x		✓		ok		✓
	97799	JB63746-25	↓	↓	1	43	5		1x		✓		ok		✓
	97800	JB63450-1	6538C SL, VLS	GW	1	44	5		1x		✓		ok/DL	RR10x DOD	✓
	97801	JB63450-2	↓	WB	1	45	5		1x		✓		ok	6134AM	✓
	97802	IB				46							c/c		

@ 4/7/14

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

283

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V3D4218

Print Analyst Name: Courtney McKenna
Analyst Signature: Courtney R. McKenna

Date: 4/8/14

Columns: 7B624 / 60m x 0.25mm x 1.4µ

Method V8260B

Initial Cal. Method M3D4135

Standard Data

Lot #	Description	Conc.
WM4-1822-48	Int/Surr	25/2500 ppm
-15	STD A	100ppm
-16	B	↓
-64	C	↓
-41	Acrolein	1000ppm

Standard Data

Lot #	Description	Conc.
WM4-1822-54	Ext A	100ppm
-55	B	
-61	C	↓
-16	Acrolein	1000ppm
222511	pH paper	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ Date: 4/9/2014

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
	3D97803	BFB				1							qc	7:56AM	
	97804	CC4135-20				1							qc	20µL STD ABC Acro/100mL DI *8,9,12,16↑	
	97805	IB				1							clf		
	97806	MB				2							clf		
	97807	BS				1							qc	25µL Ext ABC Acro/50mL DI	
DL	97808	JB63450-1	65306 SL, VLS	GW	2	1	5/50		10X				qc		✓
R	97809	JB63730-1	65547 PAUG		2	2	5		1X				qc		✓
R	97810	JB63730-2			2	3	5		1X				qc		✓
R	97811	JB63730-3			1	4	5		1X				qc		✓
R	97812	JB63730-4			2	5	5		1X				qc		✓
R	97813	JB63730-5			2	6	5		1X				qc		✓
R	97814	JB63730-7			1	7	5		1X				qc		✓
R	97815	JB63730-8	↓		1	8	5		1X				qc		✓
	97816	JB63841-7	65594 TCL11		2	9	0.5/50		100X				lol	RR 25x 9/0 "2D"	✓
	97817	JB63730-2MS	65547 PAUG		1,2	10	5		1X				qc	20µL STD ABC Acro to 40mL Sample	✓
	97818	JB63730-2MSD	↓		1,2	11	5		1X				qc		✓
DL	97819	JB63841-11	65594 TCL11	↓	2	12	0.1/50		500X				qc		✓

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: V3D4218

Print Analyst Name: Courtney McKenna
Analyst Signature: Courtney K McKenna

Date: 4/8/14

Columns: DB 2B624

Method V8260B

Initial Cal. Method M3D4135

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Refer to page 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: Date: 4/9/2014

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
R	3D97820	JB63841-10	65574 TCL11	GW	1	13	0.025/50		2000X			✓	OK		✓
R	97821	JB63730-9	65547 PAUG		2	14	5		1X			✓	OK		
R	97822	JB63730-10	↓		2	15	5		1X			✓	OK		
	97823	JB64019-4	65699 TCL20+	WTB	4	16	5		1X			✓	OK		
	97824	JB64019-1		GW	4	17	5		1X			✓	OK		
	97825	JB64019-2			4	18	5		1X			✓	OK		
	97826	JB64019-3	↓		4	19	5		1X			✓	OK		
	97827	JB63827-5	65584 TCLM TRA		6	20	5		1X			✓	OK		
	97828	JB63907-1	65660 TCL20		4	21	5		1X			✓	OK		
	97829	JB63979-1	65686 SL	WW	9	22	5		1X			✓	NG	8:03 RR out of BFB	
	97830	IB				23							4/c		

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

February 18, 2014 Service Request No: R1400634

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM Quarterly Groundwater Sampling Event/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on January 25, 2014. For your reference, these analyses have been assigned our service request number **R1400634**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
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Environmental www.alsglobal.com
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00001

Parsons, Inc.
R1400634

TABLE OF CONTENTS

SECTION	***PAGE***
SDG Narrative	00002
Chains of Custody	00006
VOA QC Summary	00013
VOA Sample Data	00033
VOA Standards Data	00075
VOA Raw QC Data	00242

ALS Environmental

SDG NARRATIVE

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00002

CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1400634
Project:	FTMM Quarterly Groundwater	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	1/25/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 1/24/14 and received in good condition at cooler temperatures of 2.6°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Four water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes.

The following CCVs were >20 % and have been flagged with an "*":
- 2/3/14 & 2/6/14: Freon 113 was >20% (<40%)

No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-22-GW-CW1MW31-13 as requested. All MS/MSD recoveries and RPD's were acceptable.

The Method Blanks associated with these samples were free of contamination except the 02/03/14 and 02/04/14 blanks had low level detections for 1,2,4-Trichlorobenzsene, Hexachlorobutadiene and Naphthalene and the 02/04/14 blank also had a low level detection for Bromomethane. No data was affected.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

00003

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #:	748810-03000	Batch Complete: Yes	Date Revised:
Submission:	R1400634	Diskette Requested: No	Date Due: 2/17/14
Client:	Parsons Engineering Science	Date: 1/31/14	Protocol: SW846
Client Rep:	JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project:	FTMM Quarterly Groundwater Sar	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1400634-001QC	FTMM-22-GW-CW1MW31-13	Water	8260C	1/24/14	1/25/14			
R1400634-002	FTMM-22-CW1MW131-13	Water	8260C	1/24/14	1/25/14			
R1400634-003	FTMM-22-GW-CW1MW31-18.7	Water	8260C	1/24/14	1/25/14			
R1400634-004	FTMM-22-GW-CW1MW29-10.9	Water	8260C	1/24/14	1/25/14			Cancelled 2/3/14
R1400634-005	FTMM-22-GW-CW1MW27-11.9	Water	8260C	1/24/14	1/25/14			

Folder Comments:

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Environmental

CHAINS OF CUSTODY

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

13169

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: FTMM-22 QUARTERLY GW SAMPLING EVENT (74856-03000)	Project Number:
Project Manager: CHRIS GREEN	Report CC: SANDRA.DELAFUENTE@CH2M, PARSONS.COM
Company/Address: 200 COTTONTAIL LN. SOMERSET NJ 08873	
Phone #: 617-449-1573	Email:
Sampler's Signature:	Sampler's Printed Name: M BRUNO, A DIENG, C WATSON

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ◦ 8260 ◦ 624 ◦ CLP	GC/MS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-22-GW-CW:MW31-13		1/24/14	1120	GW	3	X							FIELD DUP
FTMM-22-FD			—	GW	3	X							MS
FTMM-22-GW-CW:MW31-13-MS			1120	GW	3	X							MSD.
FTMM-22-GW-CW:MW31-13-MSD			1120	GW	3	X							
FTMM-22-GW-CW:MW31-15.7			1310	GW	3	X							
FTMM-22-GW-CW:MW29-10.9			1320	GW	3	X							
FTMM-22-GW-CW:MW27-11.9			1412	GW	3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
AS PER SOW
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
AS PER SOW
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature: DANIEL WARD	Signature:	Signature:	Signature:	
Printed Name: M. BRUNO	Printed Name: ALS	Printed Name:	Printed Name:	Printed Name:	
Firm: PARSONS	Firm: 1/25/14 / 0928	Firm:	Firm:	Firm:	
Date/Time: 1/24/14 - 1500	Date/Time:	Date/Time:	Date/Time:	Date/Time:	

R1400634 5
Parsons, Inc.
FTMM Quarterly Groundwater Sampling Event

Distribution: White - Lab Copy; Yellow - Return to Originator

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Janice Jaeger

From: de las Fuentes, Sandra [Sandra.delasFuentes@parsons.com]
Sent: Tuesday, January 28, 2014 6:07 PM
To: Janice Jaeger
Cc: Chang, Tammy; Grill, Cris; Kriney, Allyson
Subject: RE: Sample Confirmation from ALS Environmental for FTMM Quarterly Groundwater Sampling Event (R1400634)

I've looked thru the 4 SDGs you've sent and they do include all samples delivered. The email below still holds true, although I've cleared out my questions that were answered after reviewing the latest SDGs.

As indicated below, we only want a total of two SDGs. All sample ID edits and added collection times below are still requested. All 5 day TAT and "Hold" samples are accurate as indicated below. Due date for rushes to be reported is 2/4/14.

Groundwater (GW) SDG:
1) All samples from COC #13169 (received 1/25) included here, except FTMM-22-GW-CW1MW-29-10.9 should be logged in with the RI SDG (below).
Revision: FTMM-22-FD should be FTMM-22-CW1MW131-13 at collection time of 1230.

Remedial Investigation (RI) SDG:
1) COC #13170 (received 1/25); no revisions to sample IDs or times.
2) COC #13458 (received 1/24); with following revisions:
FTMM-22-FD should be: FTMM-22-SS-SB12-10-10.5 at collection time of 1300
FTMM-22-TB collection time of 1000
3) COC #13459 (received 1/25); with following revisions:
FTMM-22-EB1-Soil
FTMM-22-EB2-GW
FTMM-22-TB1 at collection time of 1000
Note: for this RI SDG, three samples are for 5 day TAT (plus MS/MSD); see black text below and four samples are on "hold" pending rush sample results; see red text below.

Soil Boring SB1
SS-SB1-20-20.5 5 day TAT
SS-SB1-28-28.5 Hold pending results from 5 day TAT sample – Parsons will contact lab whether to run analysis
Soil Boring SB2
SS-SB2-17-17.5 5 day TAT
SS-SB2-28-28.5 Hold pending results from 5 day TAT sample – Parsons will contact lab whether to run analysis
Soil Boring SB3
SS-SB3-16.5-17 5 day TAT
SS-SB3-22-22.5 Hold pending results from 5 day TAT sample – Parsons will contact lab whether to run analysis
SS-SB3-29-29.5 Hold pending results from 5 day TAT sample – Parsons will contact lab whether to run analysis

Aside from the 7 samples listed above, all other soils and GW samples are for standard TAT.

The rushes are for 5 working day TAT, due 2/4/14. A reminder that I only need result pages emailed to me by the rush TAT deadline.
Please revise and combine the 4 SDGs into 2 SDGs and return them to me for further review.
Thank you.

Sandra

00008

Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R14-634

Cooler received on 1/25/14 by: DH **COURIER:** ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	NO	
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO	
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO	
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	(NO)	N/A
5.	Were ~~Ice~~ or **Ice packs** present?	(YES)	NO	
6.	Where did the bottles originate?	(ALS/ROC), CLIENT		
7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore Lab5035set (N/A)
8.	Temperature of cooler(s) upon receipt:	2.6°		

Is the temperature within 0° - 6° C?: (Y) N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 1/25/14 / 0944

Thermometer ID: ~~IR GUN~~#3 / IR GUN#4 Reading From: Temp Blank / ~~Sample Bottle~~

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location R-002 by DH on 1/25/14 at 0944
5035 samples placed in storage location R-F05 by ↓ on ↓ at ↓

PC Secondary Review: JMD 1/27/14

Cooler Breakdown: Date: 1/27/14 Time: 1726 by: DH

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)		

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*	411220	12/14				

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 3-294-003

Other Comments:

PC Secondary Review: JMD 1/28/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

G:\SMODOCS\Cooler Receipt 6.doc 11/6/12

00009

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc. **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1400634-001.01					
	8260C				
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
		2/3/14	1231	In Lab / KRUEST	
		2/3/14	1806	R-001-S12 / KRUEST	
R1400634-001.02					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
		2/4/14	1322	In Lab / KRUEST	
		2/4/14	1328	R-001-S12 / KRUEST	
R1400634-001.03					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-001.04					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-001.05					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-001.06					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-001.07					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-001.08					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-001.09					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-002.01					
	8260C				
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
		2/3/14	1230	In Lab / KRUEST	
		2/3/14	1806	R-001-S12 / KRUEST	

00010

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc. **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1400634-002.02					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-002.03					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-003.01					
	8260C				
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
		2/3/14	1230	In Lab / KRUEST	
		2/3/14	1806	R-001-S12 / KRUEST	
R1400634-003.02					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-003.03					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-004.01					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
		2/3/14	1230	In Lab / KRUEST	
R1400634-004.02					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-004.03					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-005.01					
	8260C				
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
		2/3/14	1230	In Lab / KRUEST	
		2/3/14	1806	R-001-S12 / KRUEST	
R1400634-005.02					
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	
R1400634-005.03					

00011

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc. **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		1/27/14	1729	SMO / DWARD	
		1/27/14	1729	R-001 / DWARD	

00012

ALS Environmental

VOLATILE ORGANICS QC SUMMARY

ALS Environmental - Rochester, NY
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Phone (585) 288-5380 Fax (585) 288-8475
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00013

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000
Sample Matrix: Water

Service Request: R1400634
Date Collected: 1/24/14
Date Received: 1/25/14
Date Analyzed: 2/ 4/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW31-13
Lab Code: R1400634-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-22-GW-CW1MW31-13 MS Matrix Spike RQ1401146-05			FTMM-22-GW-CW1MW31-13 DMS Duplicate Matrix Spike RQ1401146-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	48.4	50.0	97	49.7	50.0	99	80 - 130	3	30
1,1,1-Trichloroethane (TCA)	ND	48.3	50.0	96	49.4	50.0	99	65 - 130	2	30
1,1,2,2-Tetrachloroethane	ND	50.2	50.0	100	51.6	50.0	103	65 - 130	3	30
1,1,2-Trichloroethane	ND	49.7	50.0	99	50.9	50.0	102	75 - 125	2	30
1,1-Dichloroethane (1,1-DCA)	ND	47.5	50.0	95	49.4	50.0	99	70 - 135	4	30
1,1-Dichloroethene (1,1-DCE)	ND	55.3	50.0	111	57.3	50.0	114	70 - 130	3	30
1,1-Dichloropropene	ND	54.9	50.0	110	56.3	50.0	113	75 - 130	3	30
1,2,3-Trichlorobenzene	ND	48.0	50.0	96	50.6	50.0	101	75 - 125	5	30
1,2,3-Trichloropropane	ND	48.1	50.0	96	49.8	50.0	100	75 - 125	4	30
1,2,4-Trichlorobenzene	0.30	49.1	50.0	98	50.1	50.0	100	65 - 135	2	30
1,2,4-Trimethylbenzene	ND	45.3	50.0	91	46.7	50.0	93	75 - 130	3	30
1,2-Dibromo-3-chloropropane (DBC	ND	49.5	50.0	99	50.9	50.0	102	50 - 130	3	30
1,2-Dibromoethane	ND	49.1	50.0	98	51.2	50.0	102	80 - 120	4	30
1,2-Dichlorobenzene	ND	48.7	50.0	97	49.2	50.0	98	70 - 120	<1	30
1,2-Dichloroethane	ND	45.8	50.0	92	46.3	50.0	93	70 - 130	1	30
1,2-Dichloropropane	ND	48.3	50.0	97	49.8	50.0	100	75 - 125	3	30
1,3,5-Trimethylbenzene	ND	46.7	50.0	93	47.7	50.0	95	75 - 130	2	30
1,3-Dichlorobenzene	ND	49.9	50.0	100	49.9	50.0	100	75 - 125	<1	30
1,3-Dichloropropane	ND	47.0	50.0	94	48.5	50.0	97	75 - 125	3	30
1,4-Dichlorobenzene	ND	49.5	50.0	99	49.4	50.0	99	75 - 125	<1	30
2,2-Dichloropropane	ND	52.7	50.0	105	53.3	50.0	107	70 - 135	1	30
2-Butanone (MEK)	ND	46.2	50.0	92	47.2	50.0	94	30 - 150	2	30
2-Chlorotoluene	ND	48.9	50.0	98	49.4	50.0	99	75 - 125	<1	30
2-Hexanone	ND	43.5	50.0	87	45.7	50.0	91	55 - 130	5	30
4-Chlorotoluene	ND	49.6	50.0	99	50.1	50.0	100	75 - 130	<1	30
p-Isopropyltoluene	ND	51.5	50.0	103	50.8	50.0	102	75 - 130	1	30
4-Methyl-2-pentanone	ND	47.1	50.0	94	48.3	50.0	97	60 - 135	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000
Sample Matrix: Water

Service Request: R1400634
Date Collected: 1/24/14
Date Received: 1/25/14
Date Analyzed: 2/ 4/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW31-13
Lab Code: R1400634-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-22-GW-CW1MW31-13 MS Matrix Spike RQ1401146-05			FTMM-22-GW-CW1MW31-13 DMS Duplicate Matrix Spike RQ1401146-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acetone	ND	37.3	50.0	75	38.1	50.0	76	40 - 140	2	30
Benzene	ND	48.5	50.0	97	50.2	50.0	100	80 - 120	3	30
Bromobenzene	ND	49.1	50.0	98	49.7	50.0	99	75 - 125	1	30
Bromochloromethane	ND	51.0	50.0	102	52.1	50.0	104	65 - 130	2	30
Bromodichloromethane	ND	49.9	50.0	100	49.3	50.0	99	75 - 120	1	30
Bromoform	ND	49.0	50.0	98	45.5	50.0	91	70 - 130	8	30
Bromomethane	ND	42.9	50.0	86	44.7	50.0	89	30 - 145	4	30
Carbon Tetrachloride	ND	46.7	50.0	93	48.0	50.0	96	65 - 140	3	30
Chlorobenzene	ND	50.2	50.0	100	51.2	50.0	102	80 - 120	2	30
Chloroethane	ND	50.7	50.0	101	51.5	50.0	103	60 - 135	2	30
Chloroform	ND	50.1	50.0	100	52.3	50.0	105	65 - 135	4	30
Chloromethane	ND	51.5	50.0	103	51.1	50.0	102	40 - 125	<1	30
Dibromochloromethane	ND	48.4	50.0	97	49.7	50.0	99	60 - 135	3	30
Dichlorodifluoromethane (CFC 12)	ND	52.7	50.0	105	52.3	50.0	105	30 - 155	<1	30
Methylene Chloride	ND	48.3	50.0	96	50.8	50.0	102	55 - 140	5	30
Ethylbenzene	ND	48.2	50.0	96	49.5	50.0	99	75 - 125	3	30
Hexachlorobutadiene	ND	52.2	50.0	104	50.1	50.0	100	50 - 140	4	30
Isopropylbenzene (Cumene)	ND	50.6	50.0	101	51.1	50.0	102	75 - 125	<1	30
Methyl tert-Butyl Ether	ND	46.4	50.0	93	49.2	50.0	98	65 - 125	6	30
Naphthalene	ND	48.7	50.0	97	53.3	50.0	107	55 - 140	9	30
Styrene	ND	41.2	50.0	82	43.2	50.0	86	65 - 135	5	30
Tetrachloroethene (PCE)	ND	49.4	50.0	99	50.9	50.0	102	45 - 150	3	30
Toluene	ND	51.7	50.0	103	52.7	50.0	105	75 - 120	2	30
Trichloroethene (TCE)	5.1	55.5	50.0	101	56.6	50.0	103	70 - 125	2	30
Trichlorofluoromethane (CFC 11)	ND	47.5	50.0	95	47.8	50.0	96	60 - 145	<1	30
Vinyl Chloride	ND	53.5	50.0	107	53.0	50.0	106	50 - 145	<1	30
cis-1,2-Dichloroethene	2.9	52.1	50.0	98	53.7	50.0	102	70 - 125	3	30

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000
Sample Matrix: Water

Service Request: R1400634
Date Collected: 1/24/14
Date Received: 1/25/14
Date Analyzed: 2/ 4/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW31-13
Lab Code: R1400634-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-22-GW-CW1MW31-13 MS Matrix Spike RQ1401146-05			FTMM-22-GW-CW1MW31-13 DMS Duplicate Matrix Spike RQ1401146-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,3-Dichloropropene	ND	48.6	50.0	97	49.9	50.0	100	70 - 130	3	30
m,p-Xylenes	ND	98.8	100	99	102	100	102	75 - 130	3	30
n-Butylbenzene	ND	52.8	50.0	106	52.5	50.0	105	70 - 135	<1	30
n-Propylbenzene	ND	50.8	50.0	102	51.0	50.0	102	70 - 130	<1	30
o-Xylene	ND	48.5	50.0	97	50.1	50.0	100	80 - 120	3	30
sec-Butylbenzene	ND	51.4	50.0	103	50.8	50.0	102	70 - 125	1	30
tert-Butylbenzene	ND	50.5	50.0	101	49.8	50.0	100	70 - 130	1	30
trans-1,2-Dichloroethene	ND	51.7	50.0	103	53.2	50.0	106	60 - 140	3	30
trans-1,3-Dichloropropene	ND	50.6	50.0	101	50.5	50.0	101	55 - 140	<1	30

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000
Sample Matrix: Water

Service Request: R1400634
Date Analyzed: 2/ 3/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 378753

Analyte Name	Lab Control Sample RQ1401083-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	18.8	20.0	94	80 - 130
1,1,1-Trichloroethane (TCA)	18.8	20.0	94	65 - 130
1,1,2,2-Tetrachloroethane	20.2	20.0	101	65 - 130
1,1,2-Trichloroethane	20.0	20.0	100	75 - 125
1,1-Dichloroethane (1,1-DCA)	19.1	20.0	95	70 - 135
1,1-Dichloroethene (1,1-DCE)	21.1	20.0	106	70 - 130
1,1-Dichloropropene	21.1	20.0	105	75 - 130
1,2,3-Trichlorobenzene	21.5	20.0	107	75 - 125
1,2,3-Trichloropropane	19.8	20.0	99	75 - 125
1,2,4-Trichlorobenzene	20.6	20.0	103	65 - 135
1,2,4-Trimethylbenzene	19.4	20.0	97	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	19.8	20.0	99	50 - 130
1,2-Dibromoethane	19.9	20.0	99	80 - 120
1,2-Dichlorobenzene	19.0	20.0	95	70 - 120
1,2-Dichloroethane	18.1	20.0	91	70 - 130
1,2-Dichloropropane	18.9	20.0	95	75 - 125
1,3,5-Trimethylbenzene	19.4	20.0	97	75 - 130
1,3-Dichlorobenzene	19.1	20.0	96	75 - 125
1,3-Dichloropropane	19.3	20.0	97	75 - 125
1,4-Dichlorobenzene	19.2	20.0	96	75 - 125
2,2-Dichloropropane	21.1	20.0	105	70 - 135
2-Butanone (MEK)	18.0	20.0	90	30 - 150
2-Chlorotoluene	18.9	20.0	95	75 - 125
2-Hexanone	18.6	20.0	93	55 - 130
4-Chlorotoluene	19.1	20.0	96	75 - 130
p-Isopropyltoluene	20.1	20.0	100	75 - 130
4-Methyl-2-pentanone	18.9	20.0	94	60 - 135
Acetone	17.9	20.0	90	40 - 140
Benzene	19.1	20.0	96	80 - 120
Bromobenzene	18.6	20.0	93	75 - 125
Bromochloromethane	21.4	20.0	107	65 - 130
Bromodichloromethane	18.9	20.0	94	75 - 120
Bromoform	17.7	20.0	89	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000
Sample Matrix: Water

Service Request: R1400634
Date Analyzed: 2/ 3/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 378753

Analyte Name	Lab Control Sample RQ1401083-03 Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	18.4	20.0	92	30 - 145
Carbon Tetrachloride	17.5	20.0	88	65 - 140
Chlorobenzene	19.8	20.0	99	80 - 120
Chloroethane	20.1	20.0	101	60 - 135
Chloroform	20.2	20.0	101	65 - 135
Chloromethane	20.1	20.0	100	40 - 125
Dibromochloromethane	19.0	20.0	95	60 - 135
Dichlorodifluoromethane (CFC 12)	20.4	20.0	102	30 - 155
Methylene Chloride	19.7	20.0	99	55 - 140
Ethylbenzene	19.3	20.0	96	75 - 125
Hexachlorobutadiene	22.2	20.0	111	50 - 140
Isopropylbenzene (Cumene)	19.5	20.0	97	75 - 125
Methyl tert-Butyl Ether	19.2	20.0	96	65 - 125
Naphthalene	21.9	20.0	109	55 - 140
Styrene	19.6	20.0	98	65 - 135
Tetrachloroethene (PCE)	19.7	20.0	99	45 - 150
Toluene	19.8	20.0	99	75 - 120
Trichloroethene (TCE)	19.3	20.0	96	70 - 125
Trichlorofluoromethane (CFC 11)	18.4	20.0	92	60 - 145
Vinyl Chloride	20.7	20.0	103	50 - 145
cis-1,2-Dichloroethene	19.9	20.0	99	70 - 125
cis-1,3-Dichloropropene	19.1	20.0	95	70 - 130
m,p-Xylenes	39.6	40.0	99	75 - 130
n-Butylbenzene	20.6	20.0	103	70 - 135
n-Propylbenzene	19.7	20.0	98	70 - 130
o-Xylene	19.4	20.0	97	80 - 120
sec-Butylbenzene	20.1	20.0	100	70 - 125
tert-Butylbenzene	19.5	20.0	97	70 - 130
trans-1,2-Dichloroethene	20.2	20.0	101	60 - 140
trans-1,3-Dichloropropene	19.6	20.0	98	55 - 140

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000
Sample Matrix: Water

Service Request: R1400634
Date Analyzed: 2/ 4/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 378884

Analyte Name	Lab Control Sample RQ1401146-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.7	20.0	99	80 - 130
1,1,1-Trichloroethane (TCA)	20.3	20.0	102	65 - 130
1,1,2,2-Tetrachloroethane	22.0	20.0	110	65 - 130
1,1,2-Trichloroethane	21.2	20.0	106	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.4	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	22.7	20.0	113	70 - 130
1,1-Dichloropropene	23.4	20.0	117	75 - 130
1,2,3-Trichlorobenzene	23.4	20.0	117	75 - 125
1,2,3-Trichloropropane	21.6	20.0	108	75 - 125
1,2,4-Trichlorobenzene	22.7	20.0	113	65 - 135
1,2,4-Trimethylbenzene	20.8	20.0	104	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	20.7	20.0	104	50 - 130
1,2-Dibromoethane	21.9	20.0	109	80 - 120
1,2-Dichlorobenzene	20.7	20.0	104	70 - 120
1,2-Dichloroethane	19.2	20.0	96	70 - 130
1,2-Dichloropropane	20.8	20.0	104	75 - 125
1,3,5-Trimethylbenzene	20.9	20.0	104	75 - 130
1,3-Dichlorobenzene	20.9	20.0	105	75 - 125
1,3-Dichloropropane	20.4	20.0	102	75 - 125
1,4-Dichlorobenzene	20.7	20.0	104	75 - 125
2,2-Dichloropropane	21.7	20.0	109	70 - 135
2-Butanone (MEK)	20.0	20.0	100	30 - 150
2-Chlorotoluene	20.6	20.0	103	75 - 125
2-Hexanone	18.5	20.0	93	55 - 130
4-Chlorotoluene	20.7	20.0	103	75 - 130
p-Isopropyltoluene	21.6	20.0	108	75 - 130
4-Methyl-2-pentanone	19.6	20.0	98	60 - 135
Acetone	16.3	20.0	82	40 - 140
Benzene	20.6	20.0	103	80 - 120
Bromobenzene	20.7	20.0	104	75 - 125
Bromochloromethane	22.0	20.0	110	65 - 130
Bromodichloromethane	20.9	20.0	104	75 - 120
Bromoform	19.8	20.0	99	70 - 130

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000
Sample Matrix: Water

Service Request: R1400634
Date Analyzed: 2/ 4/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 378884

Analyte Name	Lab Control Sample RQ1401146-03 Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	19.0	20.0	95	30 - 145
Carbon Tetrachloride	19.5	20.0	98	65 - 140
Chlorobenzene	21.1	20.0	106	80 - 120
Chloroethane	21.1	20.0	105	60 - 135
Chloroform	21.4	20.0	107	65 - 135
Chloromethane	21.3	20.0	107	40 - 125
Dibromochloromethane	20.7	20.0	104	60 - 135
Dichlorodifluoromethane (CFC 12)	21.6	20.0	108	30 - 155
Methylene Chloride	21.0	20.0	105	55 - 140
Ethylbenzene	20.4	20.0	102	75 - 125
Hexachlorobutadiene	23.0	20.0	115	50 - 140
Isopropylbenzene (Cumene)	21.2	20.0	106	75 - 125
Methyl tert-Butyl Ether	20.5	20.0	102	65 - 125
Naphthalene	24.3	20.0	121	55 - 140
Styrene	21.0	20.0	105	65 - 135
Tetrachloroethene (PCE)	20.8	20.0	104	45 - 150
Toluene	21.6	20.0	108	75 - 120
Trichloroethene (TCE)	21.2	20.0	106	70 - 125
Trichlorofluoromethane (CFC 11)	19.6	20.0	98	60 - 145
Vinyl Chloride	21.7	20.0	109	50 - 145
cis-1,2-Dichloroethene	20.7	20.0	104	70 - 125
cis-1,3-Dichloropropene	20.4	20.0	102	70 - 130
m,p-Xylenes	41.9	40.0	105	75 - 130
n-Butylbenzene	21.9	20.0	110	70 - 135
n-Propylbenzene	21.6	20.0	108	70 - 130
o-Xylene	20.8	20.0	104	80 - 120
sec-Butylbenzene	21.5	20.0	107	70 - 125
tert-Butylbenzene	20.9	20.0	104	70 - 130
trans-1,2-Dichloroethene	21.6	20.0	108	60 - 140
trans-1,3-Dichloropropene	21.0	20.0	105	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 2/3/14 14:16
Sample Matrix: Water

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank **Instrument ID:** R-MS-12
Lab Code: RQ1401083-04 **File ID:** I:\ACQUDATA\msvoa12\Data\020314\J3113.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1401083-03	I:\ACQUDATA\msvoa12\Data\020314\J3111.D\	2/3/14 13:12
FTMM-22-CW1MW131-13	R1400634-002	I:\ACQUDATA\msvoa12\Data\020314\J3124.D\	2/3/14 20:11
FTMM-22-GW-CW1MW31-18.7	R1400634-003	I:\ACQUDATA\msvoa12\Data\020314\J3125.D\	2/3/14 20:43
FTMM-22-GW-CW1MW27-11.9	R1400634-005	I:\ACQUDATA\msvoa12\Data\020314\J3126.D\	2/3/14 21:15
FTMM-22-GW-CW1MW31-13	R1400634-001	I:\ACQUDATA\msvoa12\Data\020314\J3127.D\	2/3/14 21:47

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Analyzed:**	2/4/14 14:01
Sample Matrix:	Water		

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-12
Lab Code:	RQ1401146-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\020414\J3139.D\
Analytical Method:	8260C		

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1401146-03	I:\ACQUDATA\msvoa12\Data\020414\J3137.D\	2/4/14 12:56
FTMM-22-GW-CW1MW31-13MS	RQ1401146-05	I:\ACQUDATA\msvoa12\Data\020414\J3140.D\	2/4/14 14:41
FTMM-22-GW-CW1MW31-13DMS	RQ1401146-06	I:\ACQUDATA\msvoa12\Data\020414\J3141.D\	2/4/14 15:14

Printed 2/7/14 19:24 Form 4A

\\alprews001\starlims$\LIMSReps\MethodBlankSummary.rpt SuperSet Reference: 14-0000278214 rev 00

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 1/15/14 18:54

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\011514\J2736.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 215801

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	22.06	88349	Pass
75	95	30	60	53.13	212821	Pass
95	95	100	100	100.00	400555	Pass
96	95	5	9	6.47	25910	Pass
173	174	0	2	1.03	3532	Pass
174	95	50	120	85.32	341739	Pass
175	174	5	9	7.26	24797	Pass
176	174	95	101	96.82	330880	Pass
177	176	5	9	6.63	21952	Pass

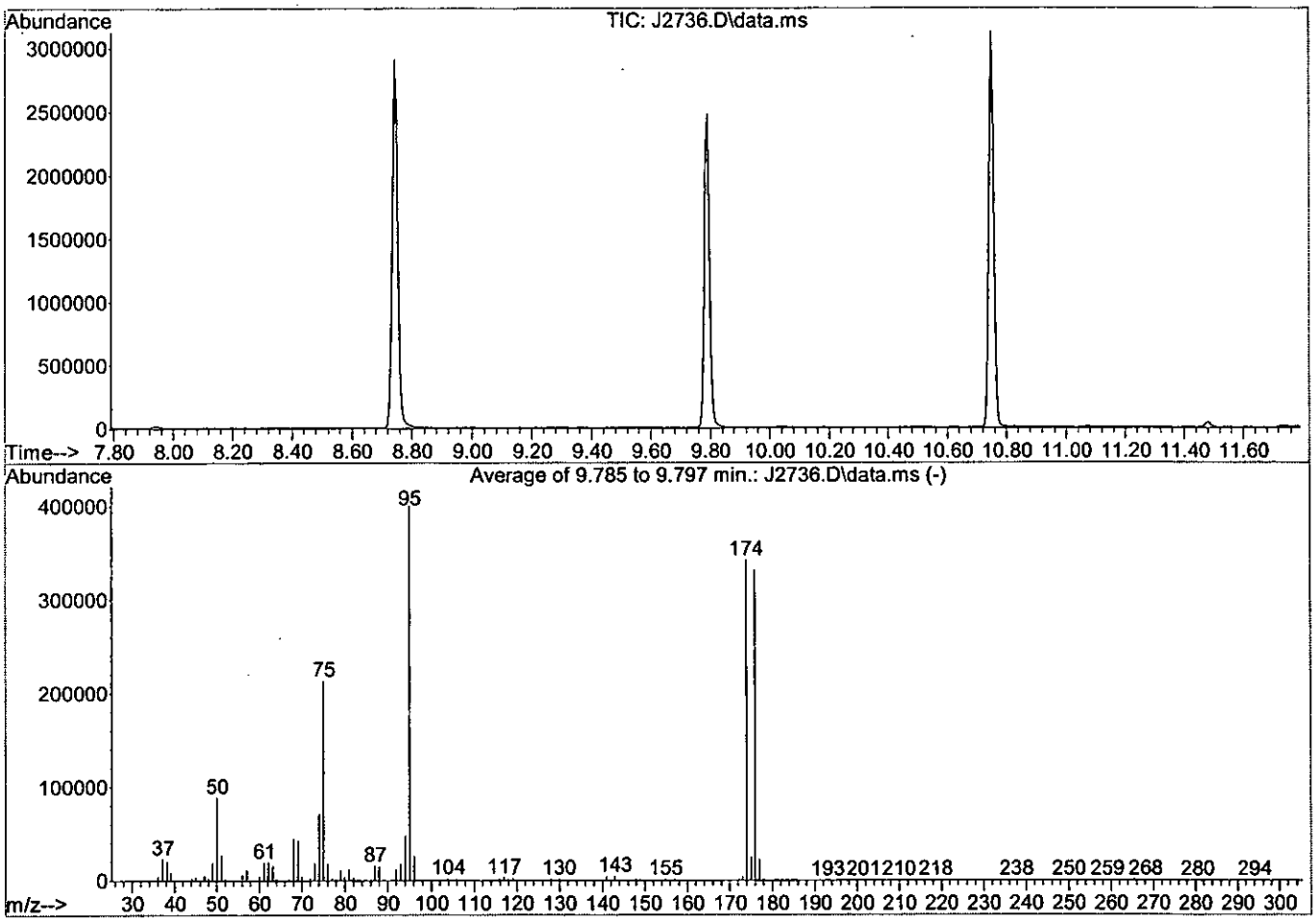
Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa12\Data\011514\J2738.D\	1/15/14 19:59	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa12\Data\011514\J2739.D\	1/15/14 20:32	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa12\Data\011514\J2740.D\	1/15/14 21:04	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa12\Data\011514\J2741.D\	1/15/14 21:37	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\msvoa12\Data\011514\J2742.D\	1/15/14 22:10	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa12\Data\011514\J2743.D\	1/15/14 22:42	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa12\Data\011514\J2744.D\	1/15/14 23:15	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa12\Data\011514\J2745.D\	1/15/14 23:47	

Data Path : I:\ACQUDATA\msvoa12\Data\011514\
Data File : J2736.D
Acq On : 15 Jan 2014 6:54 pm
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Wed Jan 15 16:32:18 2014

KR 1/16/14



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.1	88349	PASS
75	95	30	60	53.1	212821	PASS
95	95	100	100	100.0	400555	PASS
96	95	5	9	6.5	25910	PASS
173	174	0.00	2	1.0	3532	PASS
174	95	50	120	85.3	341739	PASS
175	174	5	9	7.3	24797	PASS
176	174	95	101	96.8	330880	PASS
177	176	5	9	6.6	21952	PASS

W011514.M Thu Jan 16 09:36:05 2014 00534 Page: 1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 2/3/14 11:03

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\020314\J3108.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 378753

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.72	74021	Pass
75	95	30	60	51.68	184612	Pass
95	95	100	100	100.00	357205	Pass
96	95	5	9	6.66	23798	Pass
173	174	0	2	1.02	2918	Pass
174	95	50	120	79.77	284928	Pass
175	174	5	9	8.03	22886	Pass
176	174	95	101	95.72	272725	Pass
177	176	5	9	6.63	18086	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1401083-02	I:\ACQUDATA\msvoa12\Data\020314\J3110.D\	2/3/14 12:24	
Lab Control Sample	RQ1401083-03	I:\ACQUDATA\msvoa12\Data\020314\J3111.D\	2/3/14 13:12	
Method Blank	RQ1401083-04	I:\ACQUDATA\msvoa12\Data\020314\J3113.D\	2/3/14 14:16	
FTMM-22-CW1MW131-13	R1400634-002	I:\ACQUDATA\msvoa12\Data\020314\J3124.D\	2/3/14 20:11	
FTMM-22-GW-CW1MW31-18.7	R1400634-003	I:\ACQUDATA\msvoa12\Data\020314\J3125.D\	2/3/14 20:43	
FTMM-22-GW-CW1MW27-11.9	R1400634-005	I:\ACQUDATA\msvoa12\Data\020314\J3126.D\	2/3/14 21:15	
FTMM-22-GW-CW1MW31-13	R1400634-001	I:\ACQUDATA\msvoa12\Data\020314\J3127.D\	2/3/14 21:47	

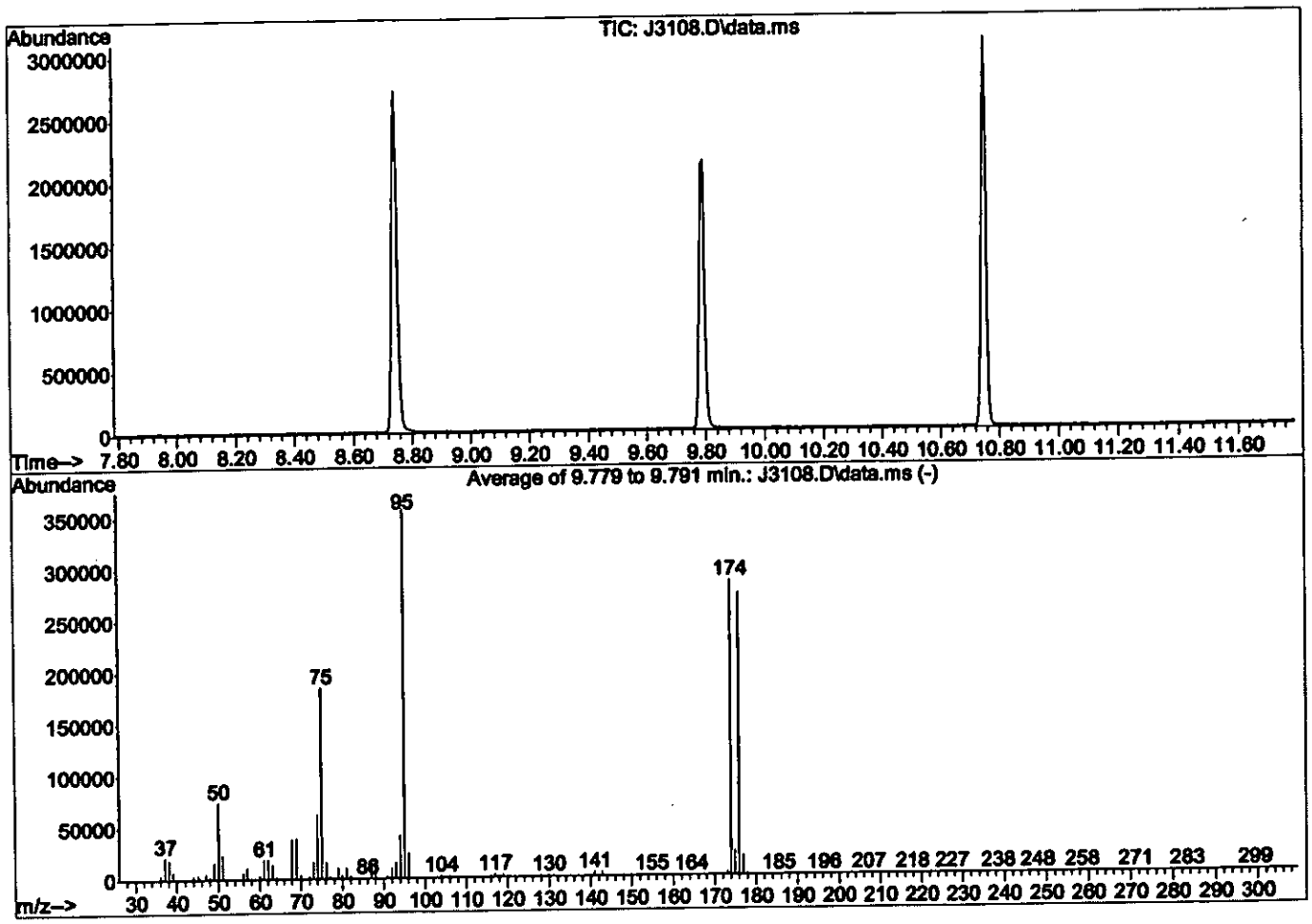
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3108.D
Acq On : 3 Feb 2014 11:03 am
Operator : K.Ruest
Sample : TUNE 140104 93-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Jan 16 12:02:56 2014

KP 2/3/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.7	74021	PASS
75	95	30	60	51.7	184612	PASS
95	95	100	100	100.0	357205	PASS
96	95	5	9	6.7	23798	PASS
173	174	0.00	2	1.0	2918	PASS
174	95	50	120	79.8	284928	PASS
175	174	5	9	8.0	22886	PASS
176	174	95	101	95.7	272725	PASS
177	176	5	9	6.6	18086	PASS

W011514.M Mon Feb 03 12:23:14 2014 Page: 1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 2/4/14 11:06

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\020414\J3134.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 378884

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.12	58266	Pass
75	95	30	60	51.45	141938	Pass
95	95	100	100	100.00	275886	Pass
96	95	5	9	6.63	18288	Pass
173	174	0	2	1.14	2689	Pass
174	95	50	120	85.13	234853	Pass
175	174	5	9	7.90	18548	Pass
176	174	95	101	96.11	225726	Pass
177	176	5	9	6.83	15407	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1401146-02	I:\ACQUDATA\msvoa12\Data\020414\J3136.D\	2/4/14 12:21	
Lab Control Sample	RQ1401146-03	I:\ACQUDATA\msvoa12\Data\020414\J3137.D\	2/4/14 12:56	
Method Blank	RQ1401146-04	I:\ACQUDATA\msvoa12\Data\020414\J3139.D\	2/4/14 14:01	
FTMM-22-GW-CW1MW31-13MS	RQ1401146-05	I:\ACQUDATA\msvoa12\Data\020414\J3140.D\	2/4/14 14:41	
FTMM-22-GW-CW1MW31-13DMS	RQ1401146-06	I:\ACQUDATA\msvoa12\Data\020414\J3141.D\	2/4/14 15:14	

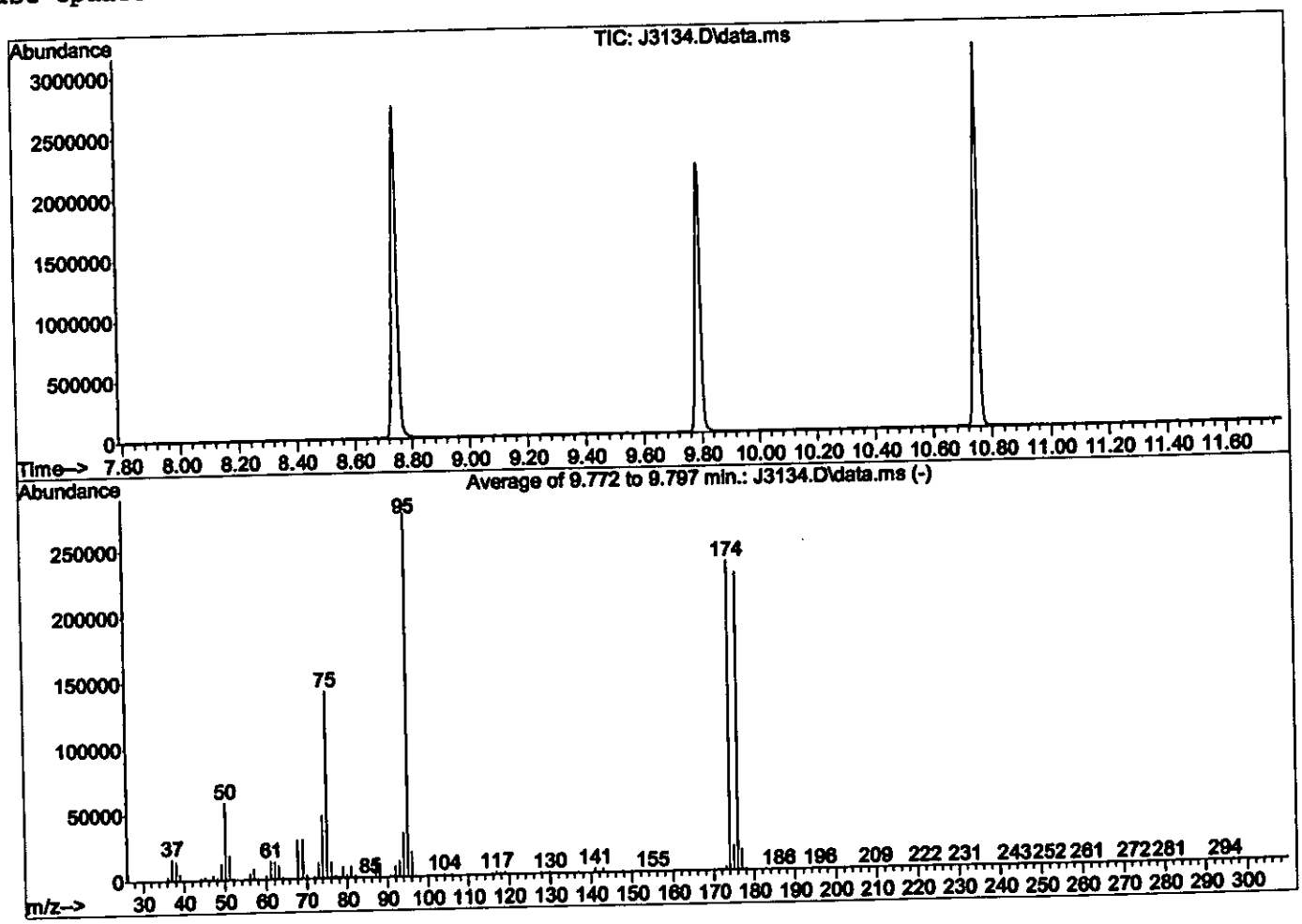
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\020414\
Data File : J3134.D
Acq On : 4 Feb 2014 11:06 am
Operator : K.Ruest
Sample : TUNE RQ 1401146-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: INTP60.P

KR 2/4/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Jan 16 12:02:56 2014



Spectrum Information: Average of 9.772 to 9.797 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.1	58266	PASS
75	95	30	60	51.4	141938	PASS
95	95	100	100	100.0	275886	PASS
96	95	5	9	6.6	18288	PASS
173	174	0.00	2	1.1	2689	PASS
174	95	50	120	85.1	234853	PASS
175	174	5	9	7.9	18548	PASS
176	174	95	101	96.1	225726	PASS
177	176	5	9	6.8	15407	PASS

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W011514.M Tue Feb 04 11:31:07 2014 Page: 1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 2/3/14 12:24

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\020314\J3110.D\ **Lab Code:** RQ1401083-02
Instrument ID: R-MS-12 **Analysis Lot:** 378753
Analytical Method: 8260C **Signal ID:**

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	654,006	10.75	1,280,452	5.44	1,214,609	8.74
	Upper Limit ==>	1,308,012	11.25	2,560,904	5.94	2,429,218	9.24
	Lower Limit ==>	327,003	10.25	640,226	4.94	607,305	8.24
	ICAL Result ==>	602,309	10.75	1,305,540	5.45	1,176,191	8.74
Associated Analyses							
Lab Control Sample	RQ1401083-03	635,295	10.75	1,308,354	5.44	1,214,847	8.74
Method Blank	RQ1401083-04	585,818	10.75	1,239,023	5.45	1,165,240	8.74
FTMM-22-CW1MW131-13	R1400634-002	549,399	10.75	1,172,454	5.45	1,115,040	8.74
FTMM-22-GW-CW1MW31-18.7	R1400634-003	543,355	10.75	1,168,506	5.45	1,098,311	8.74
FTMM-22-GW-CW1MW27-11.9	R1400634-005	539,062	10.75	1,158,851	5.45	1,086,003	8.74
FTMM-22-GW-CW1MW31-13	R1400634-001	539,073	10.75	1,156,726	5.45	1,083,109	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000

Service Request: R1400634
Date Analyzed: 2/3/14 12:24

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\020314\J3110.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1401083-02
Analysis Lot: 378753
Signal ID:

		Pentafluorobenzene	
		Area	RT
	Results ==>	834,620	4.24
	Upper Limit ==>	1,669,240	4.74
	Lower Limit ==>	417,310	3.74
	ICAL Result ==>	868,809	4.25
Associated Analyses			
Lab Control Sample	RQ1401083-03	848,697	4.25
Method Blank	RQ1401083-04	822,235	4.25
FTMM-22-CW1MW131-13	R1400634-002	788,846	4.24
FTMM-22-GW-CW1MW31-18.7	R1400634-003	771,637	4.25
FTMM-22-GW-CW1MW27-11.9	R1400634-005	770,464	4.25
FTMM-22-GW-CW1MW31-13	R1400634-001	764,873	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000

Service Request: R1400634
Date Analyzed: 2/4/14 12:21

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\020414\J3136.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1401146-02
Analysis Lot: 378884
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
Results ==>		644,637	10.75	1,279,534	5.45	1,200,437	8.74
Upper Limit ==>		1,289,274	11.25	2,559,068	5.95	2,400,874	9.24
Lower Limit ==>		322,319	10.25	639,767	4.95	600,219	8.24
ICAL Result ==>		602,309	10.75	1,305,540	5.45	1,176,191	8.74
Associated Analyses							
Lab Control Sample	RQ1401146-03	626,711	10.75	1,282,011	5.45	1,212,647	8.74
Method Blank	RQ1401146-04	586,343	10.75	1,242,211	5.45	1,165,083	8.74
FTMM-22-GW-CW1MW31-13MS	RQ1401146-05	622,264	10.75	1,266,914	5.45	1,215,380	8.74
FTMM-22-GW-CW1MW31-13DMS	RQ1401146-06	645,527	10.75	1,318,414	5.45	1,245,555	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 2/4/14 12:21

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\020414\J3136.D\ **Lab Code:** RQ1401146-02
Instrument ID: R-MS-12 **Analysis Lot:** 378884
Analytical Method: 8260C **Signal ID:**

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	834,331	4.25
	Upper Limit ==>	1,668,662	4.75
	Lower Limit ==>	417,166	3.75
	ICAL Result ==>	868,809	4.25
Associated Analyses			
Lab Control Sample	RQ1401146-03	845,726	4.25
Method Blank	RQ1401146-04	812,912	4.25
FTMM-22-GW-CW1MW31-13MS	RQ1401146-05	831,497	4.25
FTMM-22-GW-CW1MW31-13DMS	RQ1401146-06	860,154	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1120
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 21:47
Sample Name:	FTMM-22-GW-CW1MW31-13	**Units:**	µg/L
Lab Code:	R1400634-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3127.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0		0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0		0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0		0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0		0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0		0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0		0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0		0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0		0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0		0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.30**	**J**	5.0		0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0		0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0		0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0		0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0		0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0		0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0		0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0		0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0		0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0		0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0		0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0		0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0		0.20	
591-78-6	2-Hexanone	ND	U	5.0		1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0		0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0		0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0		0.67	
67-64-1	Acetone	ND	U	5.0		1.3	
71-43-2	Benzene	ND	U	5.0		0.20	
108-86-1	Bromobenzene	ND	U	5.0		0.28	
74-97-5	Bromochloromethane	ND	U	5.0		0.32	
75-27-4	Bromodichloromethane	ND	U	5.0		0.32	
75-25-2	Bromoform	ND	U	5.0		0.42	
74-83-9	Bromomethane	ND	U	5.0		0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0		0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1120
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 21:47
Sample Name:	FTMM-22-GW-CW1MW31-13	**Units:**	µg/L
Lab Code:	R1400634-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3127.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0		0.29	
75-00-3	Chloroethane	ND	U	5.0		0.24	
67-66-3	Chloroform	ND	U	5.0		0.25	
74-87-3	Chloromethane	ND	U	5.0		0.21	
124-48-1	Dibromochloromethane	ND	U	5.0		0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0		0.46	
75-09-2	Methylene Chloride	ND	U	5.0		0.32	
100-41-4	Ethylbenzene	ND	U	5.0		0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0		0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0		0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0		0.29	
91-20-3	Naphthalene	ND	U	5.0		0.20	
100-42-5	Styrene	ND	U	5.0		0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0		0.30	
108-88-3	Toluene	ND	U	5.0		0.20	
79-01-6	Trichloroethene (TCE)	**5.1**		5.0		0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0		0.20	
75-01-4	Vinyl Chloride	ND	U	5.0		0.32	
156-59-2	cis-1,2-Dichloroethene	**2.9**	J	5.0		0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0		0.24	
179601-23-1	m,p-Xylenes	ND	U	10		0.33	
104-51-8	n-Butylbenzene	ND	U	5.0		0.21	
103-65-1	n-Propylbenzene	ND	U	5.0		0.20	
95-47-6	o-Xylene	ND	U	5.0		0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0		0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0		0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0		0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0		0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	2/3/14 21:47	
Dibromofluoromethane	99	85-115	2/3/14 21:47	
Toluene-d8	98	85-120	2/3/14 21:47	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 2147

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW31-13	**Units:**	µg/L
Lab Code:	R1400634-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1400634-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3127.D
Misc : PARSONS 9913 T4
Acq On : 3 Feb 2014 9:47 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 22:03:04 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	764873	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1156726	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1083109	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	539073	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	333659	49.38	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.76%				
48) surr1,1,2-dichloroetha...	4.664	65	382818	47.04	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 94.08%				
65) SURR3,Toluene-d8	7.322	98	1414338	49.23	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.46%				
70) SURR2,BFB	9.791	95	529547	49.58	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.16%				
Target Compounds							Qvalue
15) Acetone	2.048	43	841	0.53	ppb	#	41
26) trans-1,2-Dichloroethene	2.585	96	1867	0.28	ppb	#	83
34) cis-1,2-Dichloroethene	3.554	96	22186	2.85	ppb	#	74
54) Trichloroethene	5.828	130	37642	5.11	ppb		92
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1509~~	~~5.01~~	~~ppb~~	~~#~~	~~9~~
115) 1,2,4-Tcbenzene	12.162	180	2348	0.30	ppb		93

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

KR 2/4/14

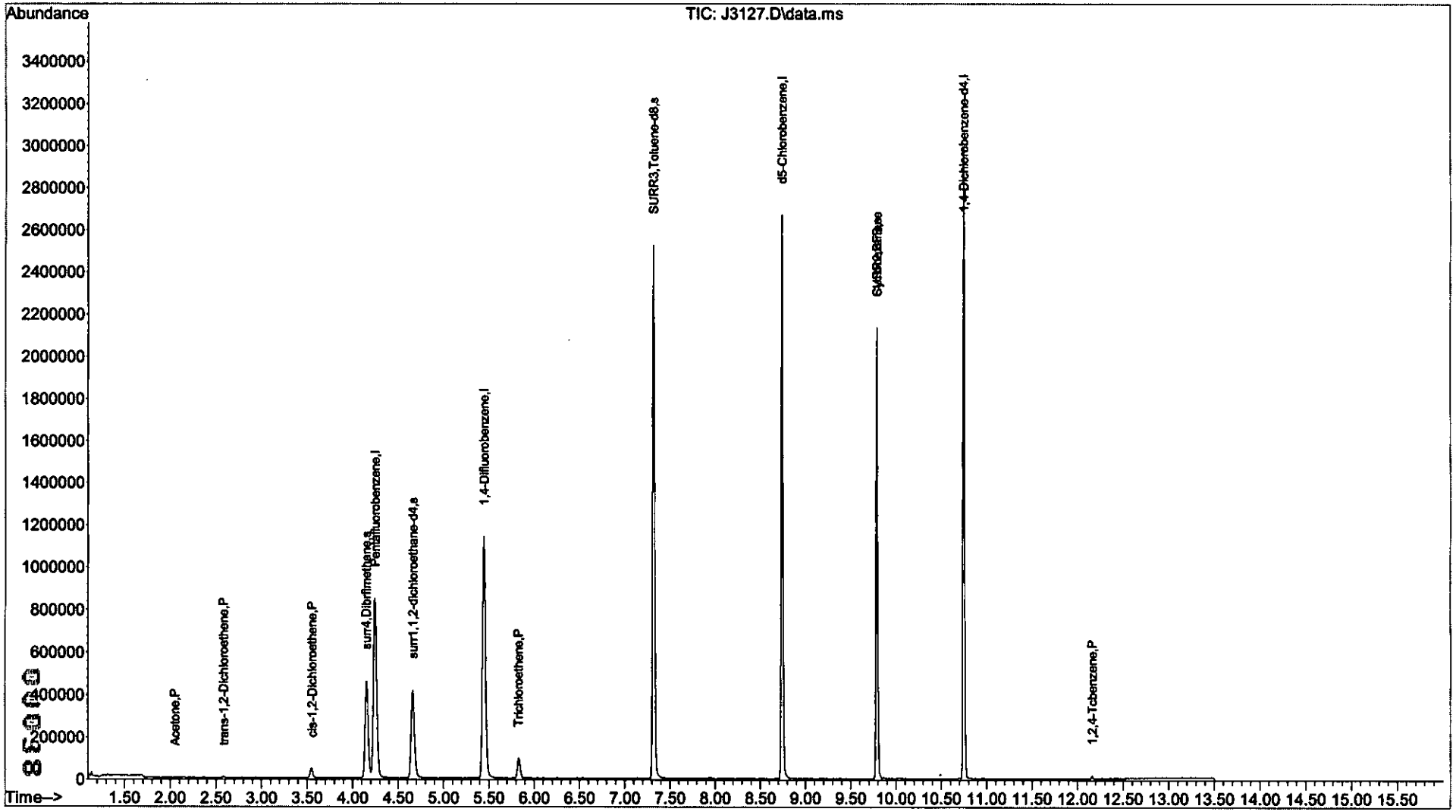
W011514.M Mon Feb 03 22:03:07 2014 Page: 1

00037

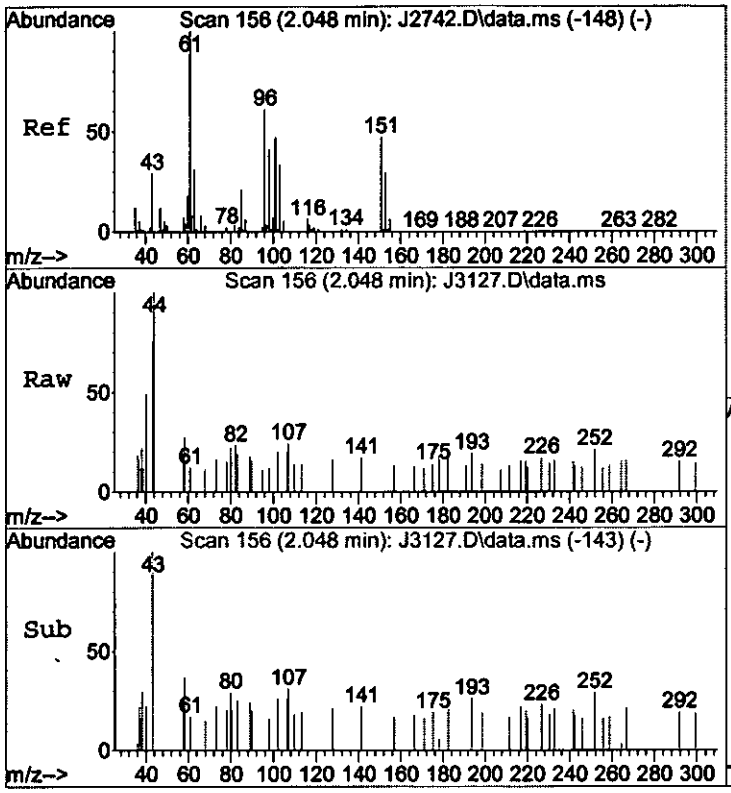
Quantitation Report (Not Reviewed)

Sample : R1400634-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3127.D
Misc : PARSONS 9913 T4
Acq On : 3 Feb 2014 9:47 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 22:03:04 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



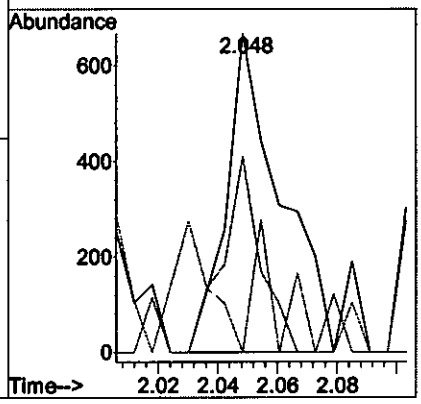
W011514.M Mon Feb 03 22:03:08 2014 Page: 2

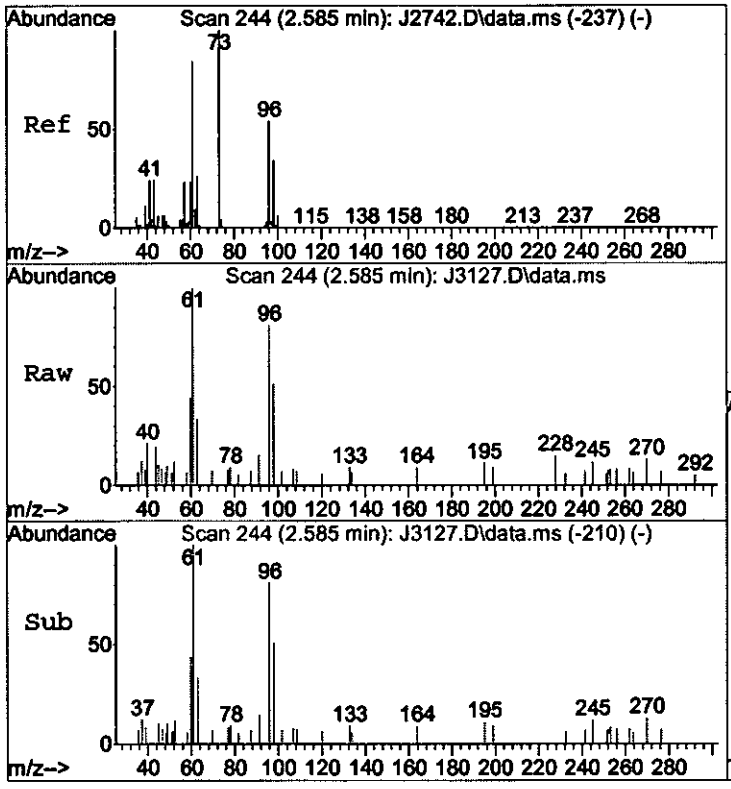


#15
Acetone
Concen: 0.53 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: J3127.D
Acq: 3 Feb 2014 9:47 pm

Tgt Ion: 43 Resp: 841

Ion	Ratio	Lower	Upper
43	100		
58	61.5	5.7	45.7#
42	0.0	0.0	28.0

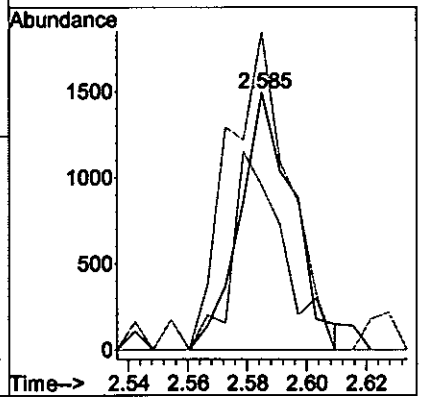




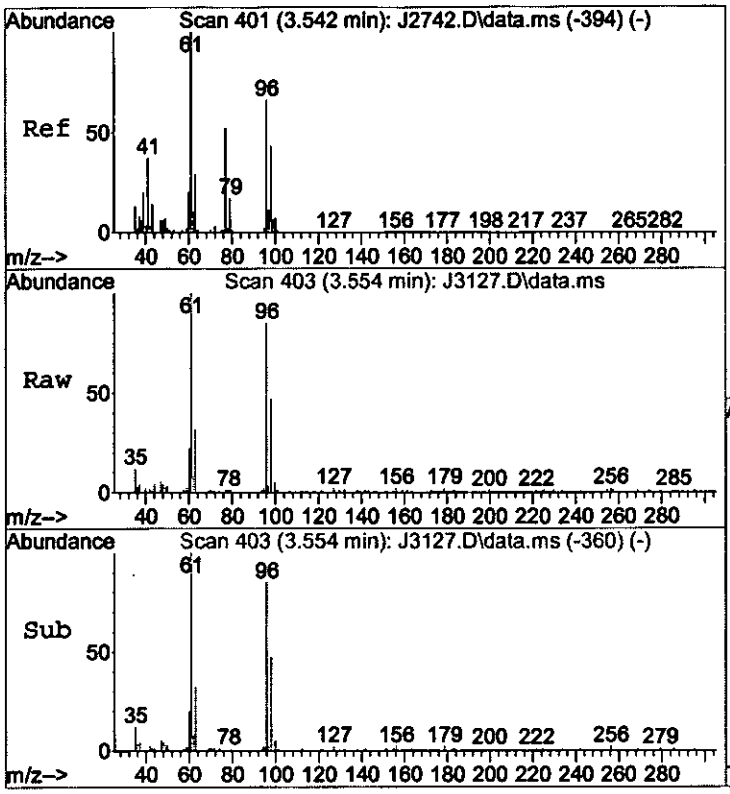
#26
trans-1,2-Dichloroethene
Concen: 0.28 ppb
RT: 2.585 min Scan# 244
Delta R.T. -0.000 min
Lab File: J3127.D
Acq: 3 Feb 2014 9:47 pm

Tgt Ion: 96 Resp: 1867

Ion	Ratio	Lower	Upper
96	100		
98	63.8	42.7	82.7
61	123.9	133.4	173.4#



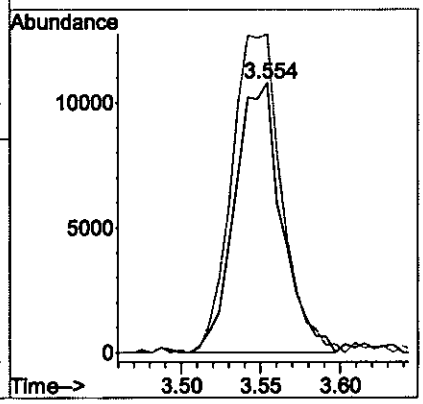
J3127.D W011514.M Tue Feb 04 17:18:14 2014 00038 Page 3

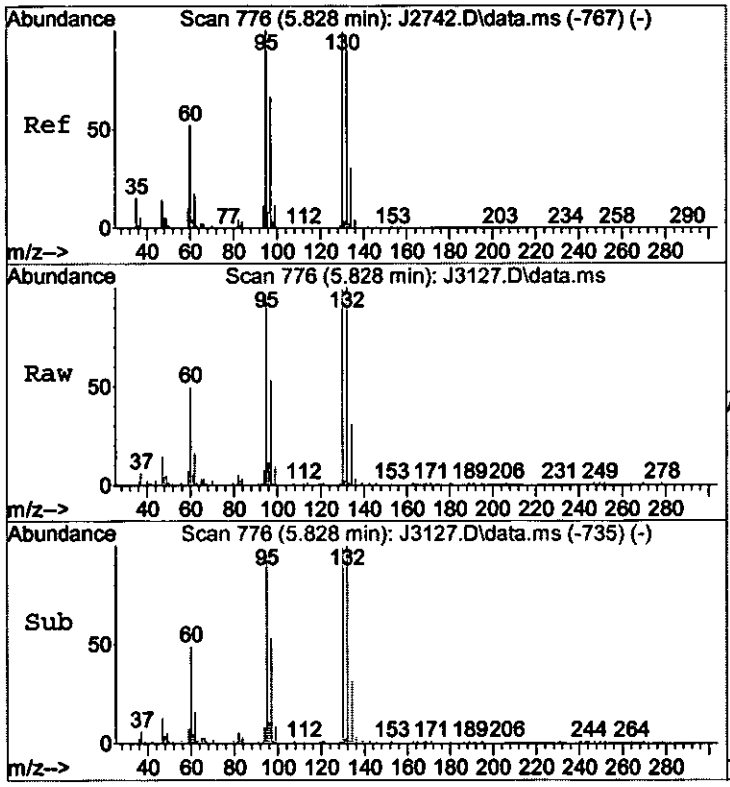


#34
cis-1,2-Dichloroethene
Concen: 2.85 ppb
RT: 3.554 min Scan# 403
Delta R.T. 0.006 min
Lab File: J3127.D
Acq: 3 Feb 2014 9:47 pm

Tgt Ion: 96 Resp: 22186

Ion	Ratio	Lower	Upper
96	100		
61	118.1	131.7	171.7#

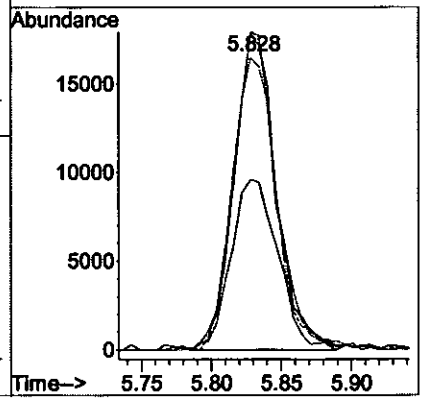


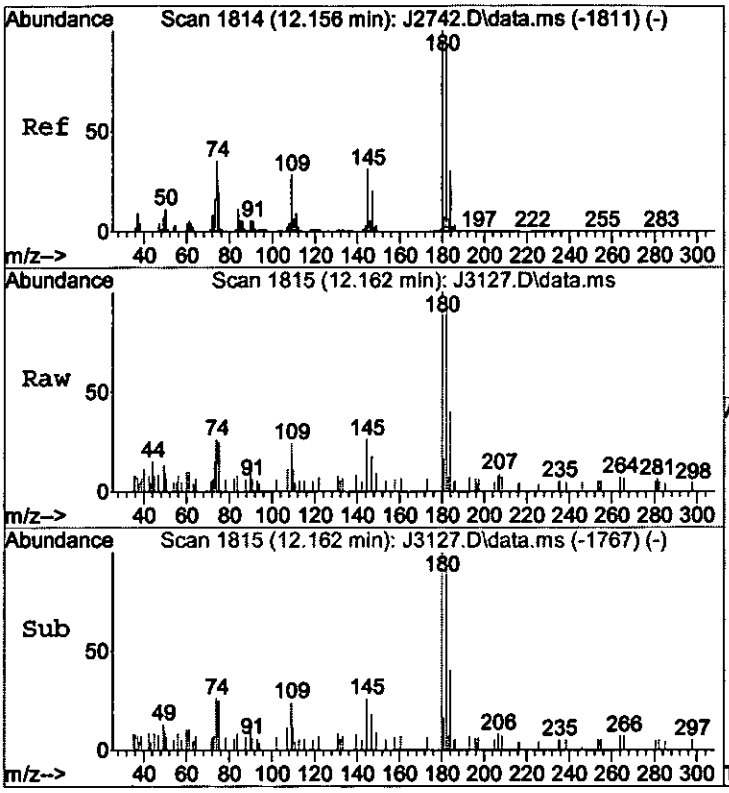


#54
Trichloroethene
Concen: 5.11 ppb
RT: 5.828 min Scan# 776
Delta R.T. -0.000 min
Lab File: J3127.D
Acq: 3 Feb 2014 9:47 pm

Tgt Ion:130 Resp: 37642

Ion	Ratio	Lower	Upper
130	100		
132	100.9	78.2	118.2
95	92.8	81.3	121.3
97	53.8	46.6	86.6

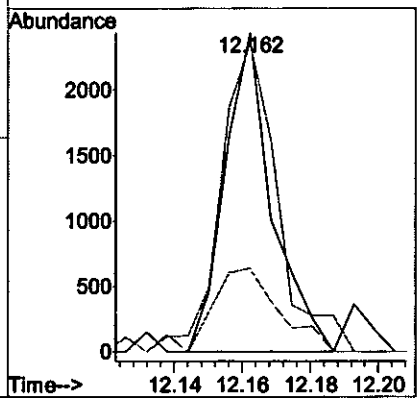




#115
1,2,4-Tcbenzene
Concen: 0.30 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J3127.D
Acq: 3 Feb 2014 9:47 pm

Tgt Ion:180 Resp: 2348

Ion	Ratio	Lower	Upper
180	100		
182	96.7	70.8	110.8
145	26.2	11.4	51.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3127.D
Acq On : 3 Feb 2014 9:47 pm
Operator : K.Ruest
Sample : R1400634-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J3127.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.542	395	401	411	rVB3	47308	102240	2.72%	0.502%
2	4.152	491	501	509	rBV	459654	1106261	29.44%	5.427%
3	4.249	509	517	530	rVB	843154	2109856	56.15%	10.351%
4	4.664	575	585	600	rBV	414515	1067850	28.42%	5.239%
5	5.450	704	714	727	rBV	1139116	2652863	70.60%	13.015%
6	5.828	768	776	787	rBV	97304	211699	5.63%	1.039%
7	7.322	1014	1021	1035	rBV	2522070	3757349	100.00%	18.433%
8	8.742	1249	1254	1269	rVB	2665707	3385516	90.10%	16.609%
9	9.791	1420	1426	1436	rBV	2130804	2639898	70.26%	12.951%
10	10.748	1577	1583	1591	rBV	2982156	3349877	89.16%	16.434%

Sum of corrected areas: 20383409

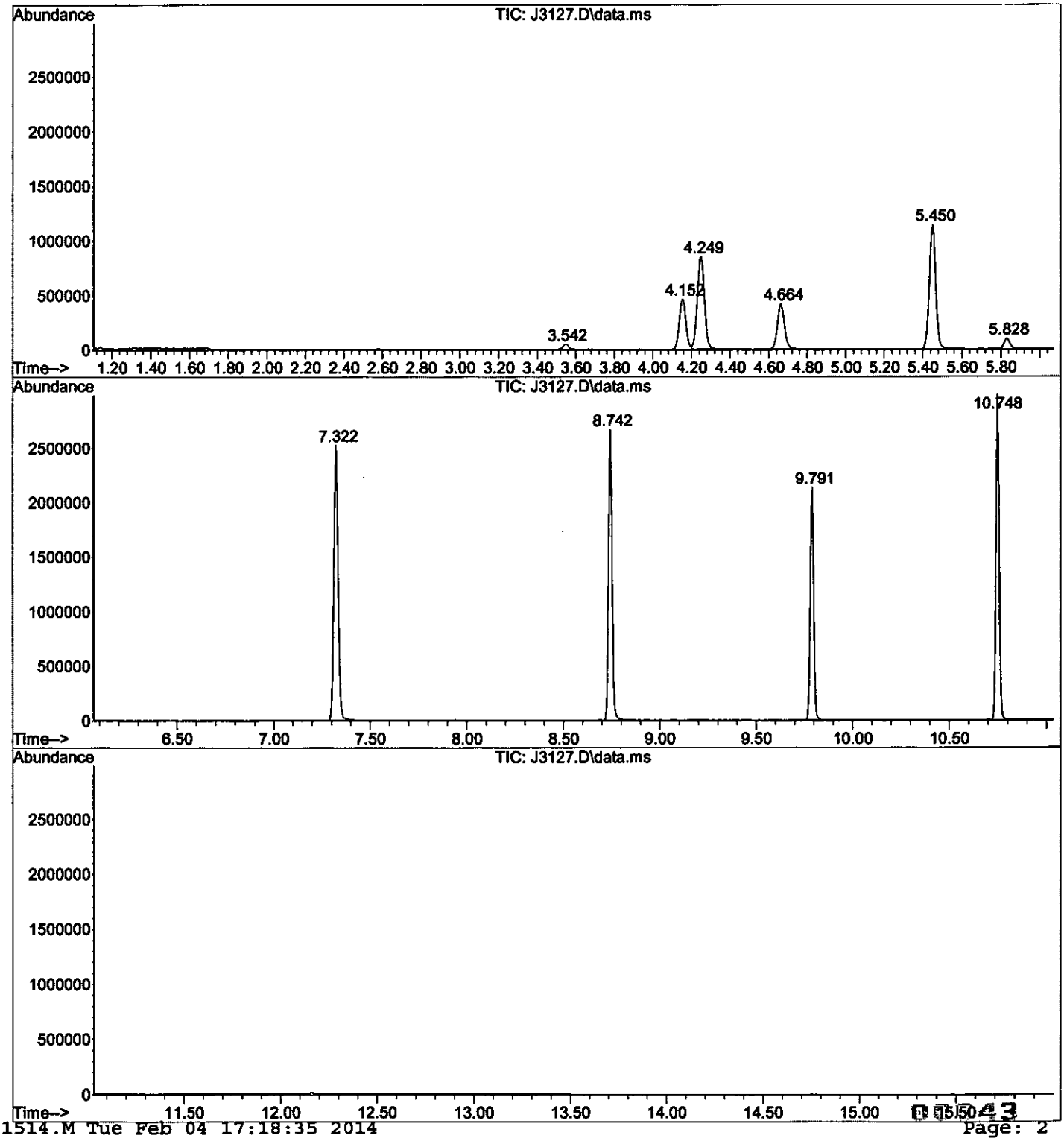
00042

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3127.D
Acq On : 3 Feb 2014 9:47 pm
Operator : K.Ruest
Sample : R1400634-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W011514.M Tue Feb 04 17:18:35 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\020314\\
Data File : J3127.D
Acq On : 3 Feb 2014 9:47 pmm
Operator : K.Ruestt
Sample : R1400634-001|1.00
Misc : PARSONS 9913 T44
ALS Vial : 14 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1230
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 20:11
Sample Name:	FTMM-22-CW1MW131-13	**Units:**	µg/L
Lab Code:	R1400634-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3124.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.32**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1230
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 20:11
Sample Name:	FTMM-22-CW1MW131-13	**Units:**	µg/L
Lab Code:	R1400634-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3124.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**5.2**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**2.7**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	2/3/14 20:11	
Dibromofluoromethane	101	85-115	2/3/14 20:11	
Toluene-d8	100	85-120	2/3/14 20:11	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 2011

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-CW1MW131-13	**Units:**	µg/L
Lab Code:	R1400634-002	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1400634-002|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3124.D
Misc : PARSONS 9913 T4
Acq On : 3 Feb 2014 8:11 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 20:26:25 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	788846	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1172454	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1115040	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	549399	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	344563	50.31	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.62%			
48) surr1,1,2-dichloroetha...	4.658	65	385435	46.72	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 93.44%			
65) SURR3,Toluene-d8	7.322	98	1456279	50.01	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.02%			
70) SURR2,BFB	9.785	95	536332	49.54	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.08%			
Target Compounds						Qvalue
~~19) Acetonitrile~~	~~2.244~~	~~40~~	~~514~~	~~1.98~~	~~ppb~~	~~# 20~~
26) trans-1,2-Dichloroethene	2.585	96	1652	0.24	ppb	# 79
34) cis-1,2-Dichloroethene	3.548	96	21895	2.73	ppb	# 79
54) Trichloroethene	5.828	130	39145	5.24	ppb	93
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1498~~	~~4.88~~	~~ppb~~	~~# 25~~
115) 1,2,4-Tcbenzene	12.162	180	2516	0.32	ppb	87

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

PR 2/4/14

DL 2/7/14

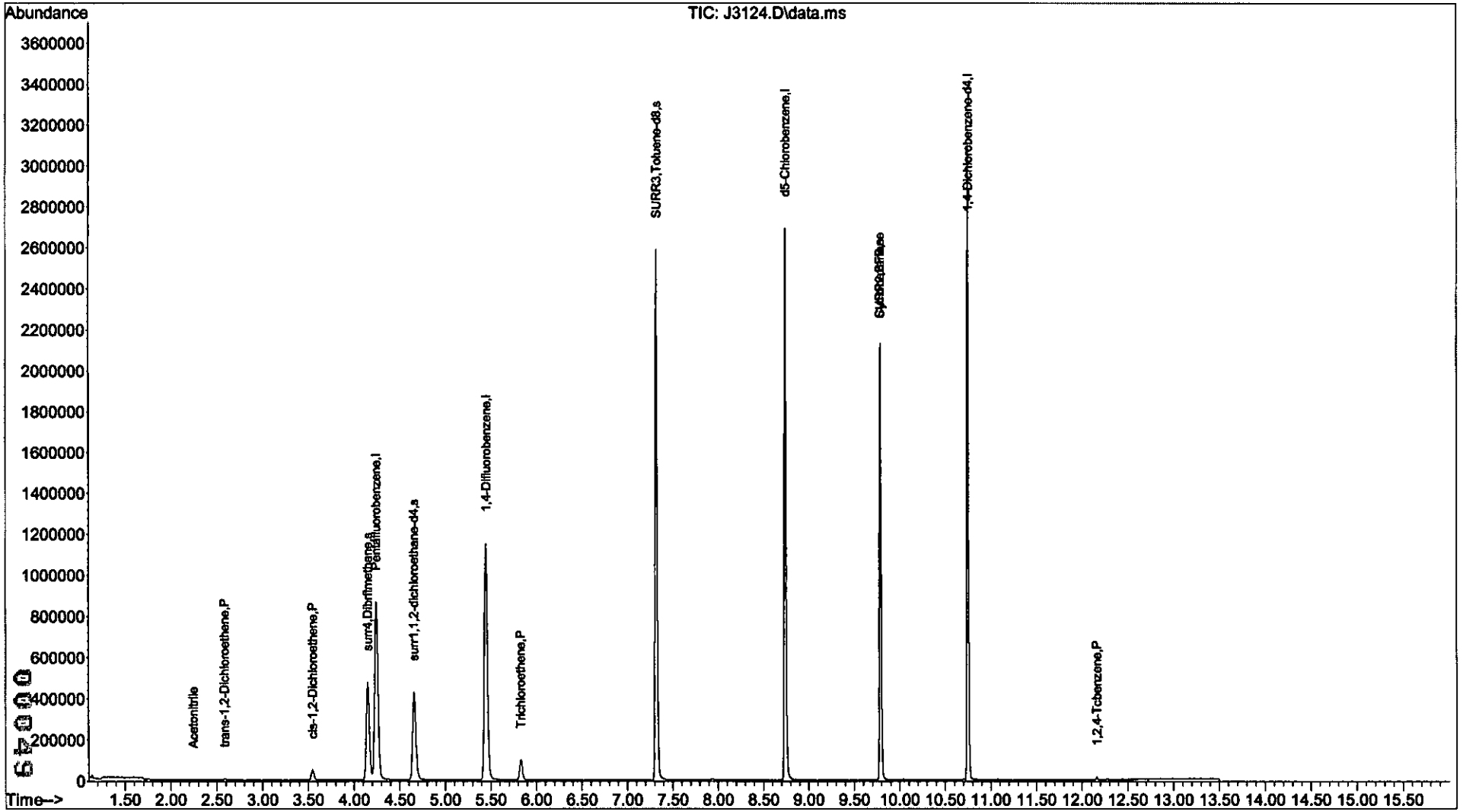
W011514.M Mon Feb 03 20:26:29 2014 Page: 1

Data Path : I:\ACQUDATA\MSVOA12\DATA\020314\

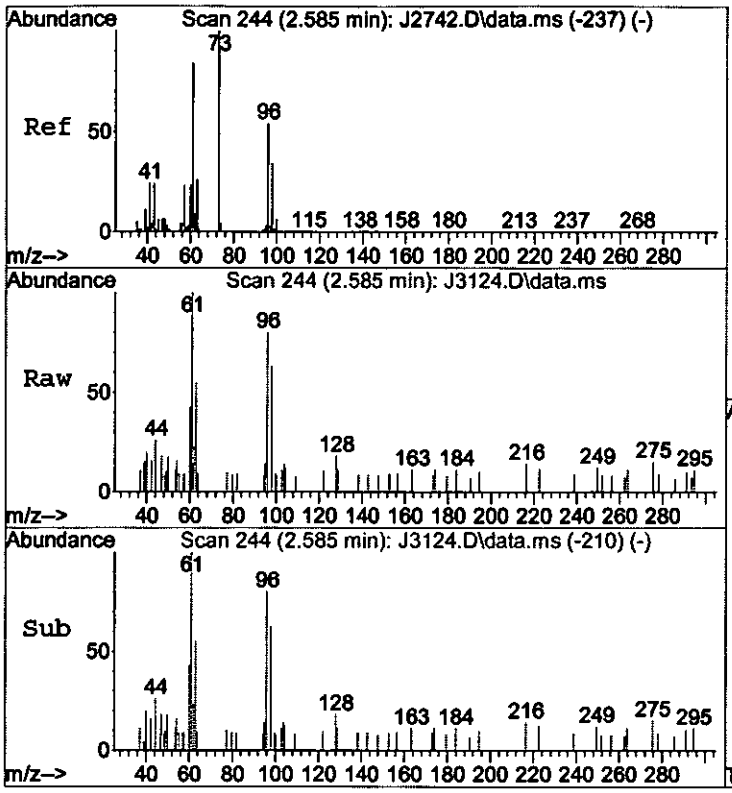
Quantitation Report (Not Reviewed)

Sample : R1400634-002|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3124.D
Misc : PARSONS 9913 T4
Acq On : 3 Feb 2014 8:11 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 20:26:25 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



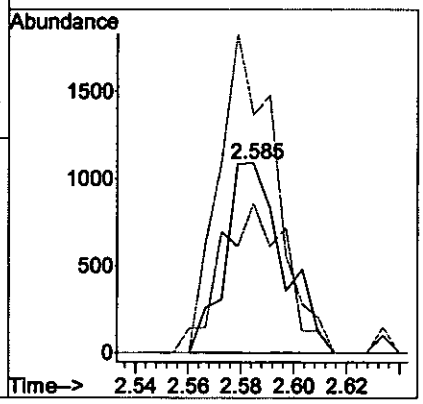
W011514.M Mon Feb 03 20:26:30 2014 Page: 2

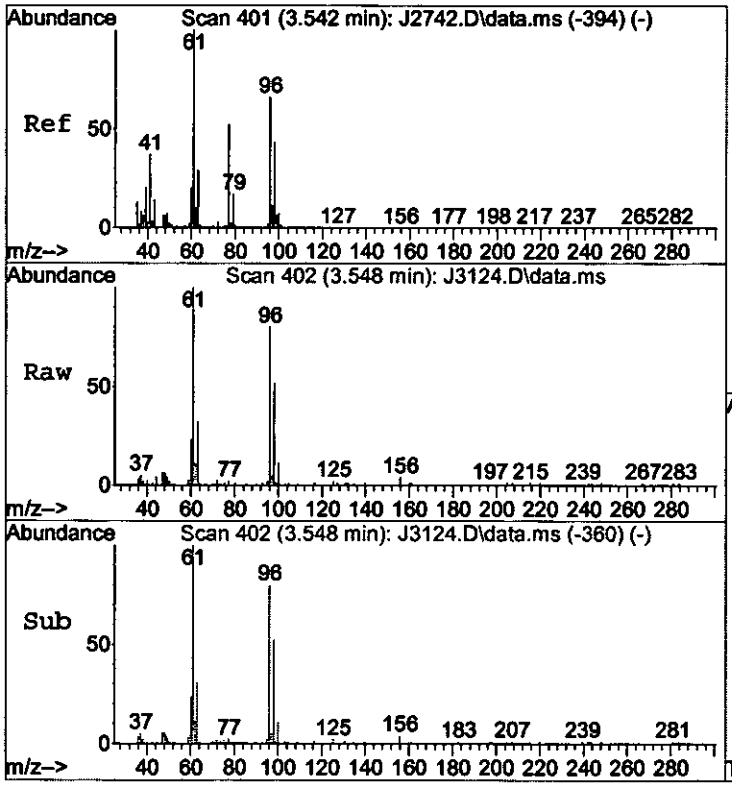


#26
trans-1,2-Dichloroethene
Concen: 0.24 ppb
RT: 2.585 min Scan# 244
Delta R.T. -0.000 min
Lab File: J3124.D
Acq: 3 Feb 2014 8:11 pm

Tgt Ion: 96 Resp: 1652

Ion	Ratio	Lower	Upper
96	100		
98	78.9	42.7	82.7
61	125.5	133.4	173.4#

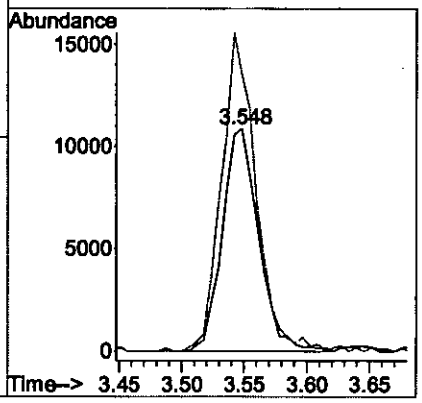




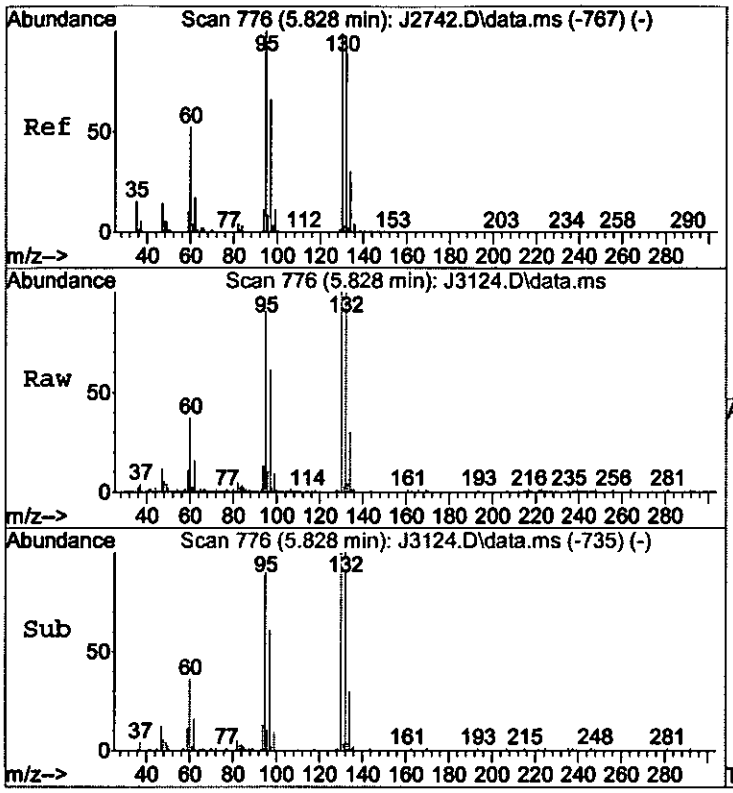
#34
cis-1,2-Dichloroethene
Concen: 2.73 ppb
RT: 3.548 min Scan# 402
Delta R.T. -0.000 min
Lab File: J3124.D
Acq: 3 Feb 2014 8:11 pm

Tgt Ion: 96 Resp: 21895

Ion	Ratio	Lower	Upper
96	100		
61	124.7	131.7	171.7#



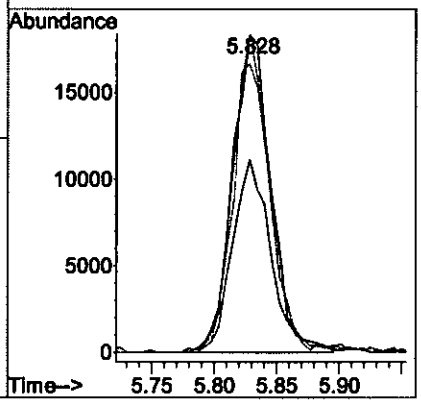
J3124.D W011514.M Tue Feb 04 17:09:35 2014 Page 3

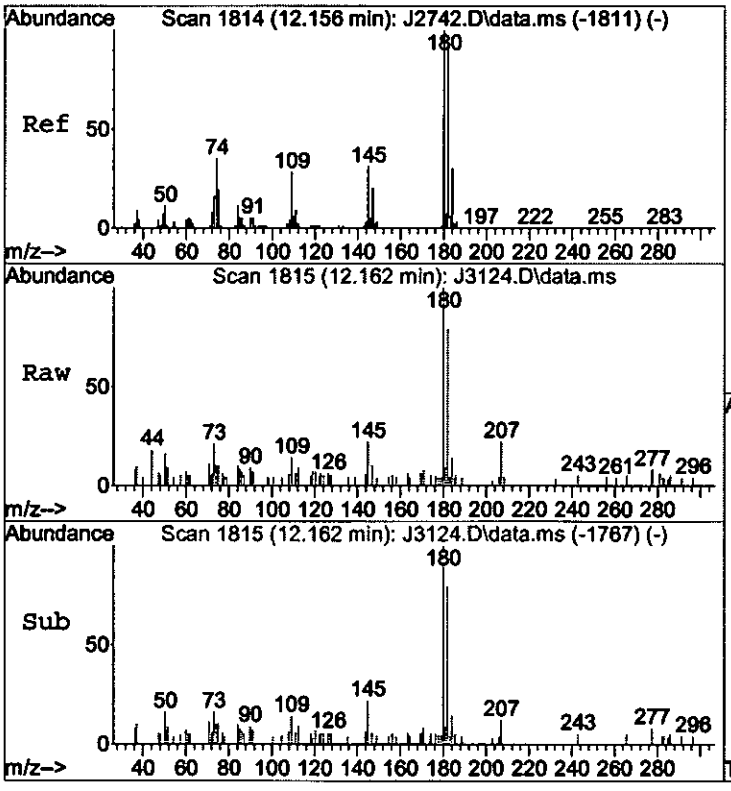


#54
Trichloroethene
Concen: 5.24 ppb
RT: 5.828 min Scan# 776
Delta R.T. -0.000 min
Lab File: J3124.D
Acq: 3 Feb 2014 8:11 pm

Tgt Ion:130 Resp: 39145

Ion	Ratio	Lower	Upper
130	100		
132	100.5	78.2	118.2
95	91.0	81.3	121.3
97	60.8	46.6	86.6

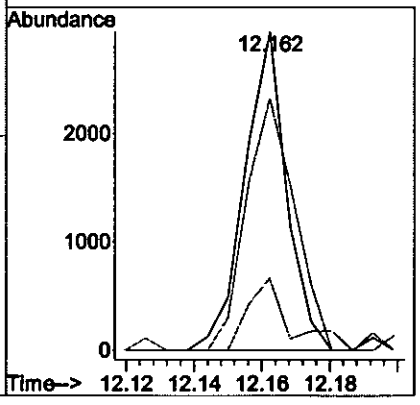




#115
1,2,4-Tcbenzene
Concen: 0.32 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J3124.D
Acq: 3 Feb 2014 8:11 pm

Tgt Ion:180 Resp: 2516

Ion	Ratio	Lower	Upper
180	100		
182	79.2	70.8	110.8
145	22.4	11.4	51.4



J3124.D W011514.M Tue Feb 04 17:09:36 2014 0005 Page 4

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3124.D
Acq On : 3 Feb 2014 8:11 pm
Operator : K.Ruest
Sample : R1400634-002|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J3124.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.542	395	401	410	rVB	50546	105426	2.73%	0.507%
2	4.152	492	501	508	rBV	473706	1112278	28.80%	5.352%
3	4.243	508	516	529	rVB	859808	2171211	56.23%	10.448%
4	4.658	573	584	599	rBV	425769	1066683	27.62%	5.133%
5	5.450	703	714	730	rBV	1151402	2717596	70.38%	13.077%
6	5.828	769	776	786	rBV3	99019	216495	5.61%	1.042%
7	7.322	1014	1021	1032	rBV	2586738	3861413	100.00%	18.581%
8	8.742	1249	1254	1266	rBV	2690354	3456611	89.52%	16.633%
9	9.791	1421	1426	1436	rBV	2130165	2683929	69.51%	12.915%
10	10.748	1578	1583	1592	rBV	3082403	3390093	87.79%	16.313%

Sum of corrected areas: 20781735

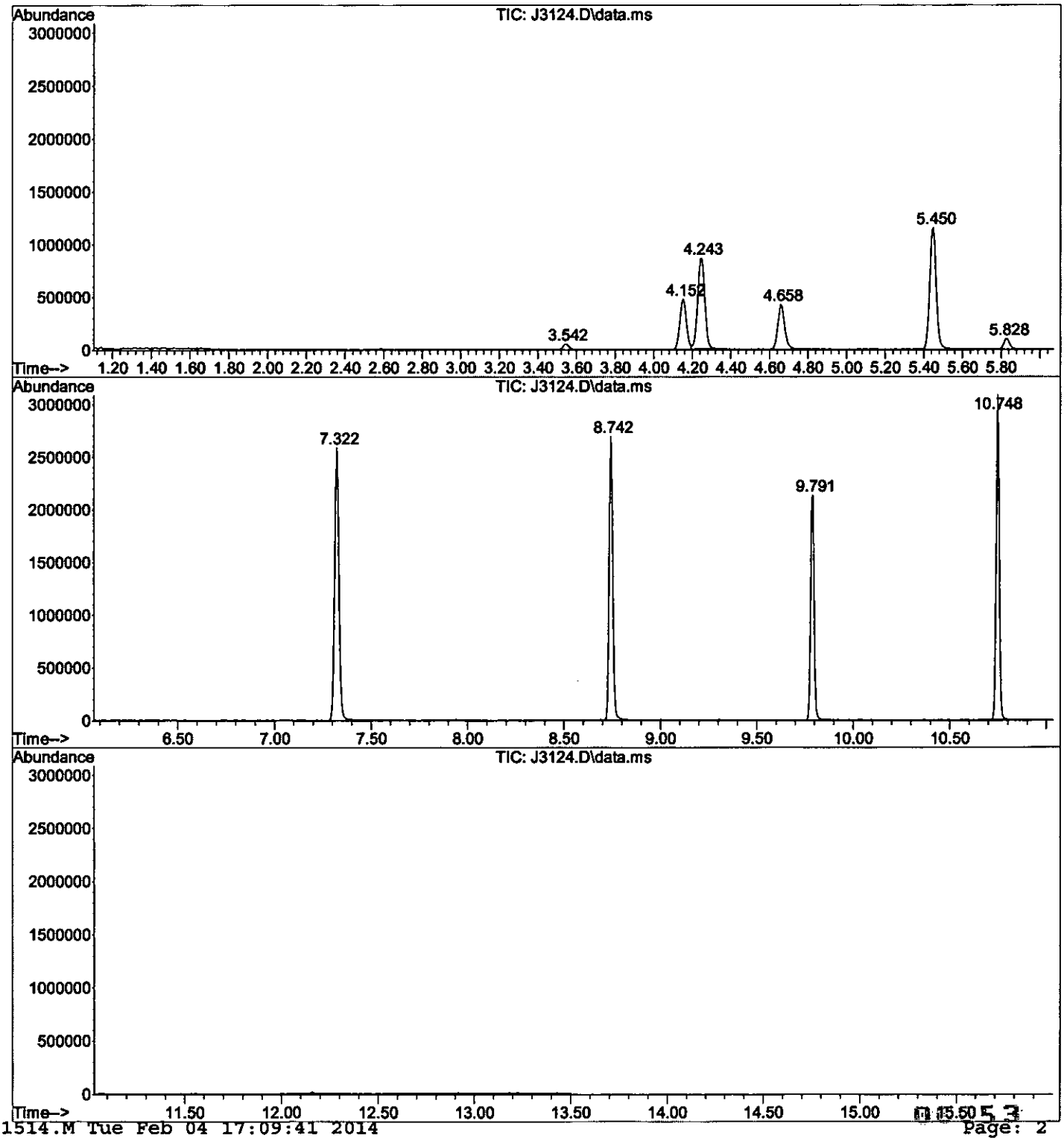
W011514.M Tue Feb 04 17:09:40 2014 00052 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3124.D
Acq On : 3 Feb 2014 8:11 pm
Operator : K.Ruest
Sample : R1400634-002|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W011514.M Tue Feb 04 17:09:41 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\020314\\
Data File : J3124.D
Acq On : 3 Feb 2014 8:11 pmm
Operator : K.Ruestt
Sample : R1400634-002|1.00
Misc : PARSONS 9913 T44
ALS Vial : 11 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1310
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 20:43
Sample Name:	FTMM-22-GW-CW1MW31-18.7	**Units:**	µg/L
Lab Code:	R1400634-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3125.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.37	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1310
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 20:43
Sample Name:	FTMM-22-GW-CW1MW31-18.7	**Units:**	µg/L
Lab Code:	R1400634-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3125.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**5.2**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**2.6**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	2/3/14 20:43	
Dibromofluoromethane	98	85-115	2/3/14 20:43	
Toluene-d8	99	85-120	2/3/14 20:43	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 2043

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW31-18.7	**Units:**	µg/L
Lab Code:	R1400634-003	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1400634-003|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3125.D
Misc : PARSONS 9913 T4
Acq On : 3 Feb 2014 8:43 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 20:58:34 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	771637	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1168506	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1098311	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	543355	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	332994	48.78	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.56%				
48) surr1,1,2-dichloroetha...	4.664	65	376906	45.84	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 91.68%				
65) SURR3,Toluene-d8	7.322	98	1435458	49.46	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.92%				
70) SURR2,BFB	9.791	95	525886	48.74	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.48%				
Target Compounds							Qvalue
15) Acetone	2.055	43	1278	0.80	ppb		82
26) trans-1,2-Dichloroethene	2.591	96	1658	0.25	ppb	#	55
34) cis-1,2-Dichloroethene	3.542	96	20662	2.63	ppb	#	68
54) Trichloroethene	5.828	130	39006	5.24	ppb		89
~~61) 2-Nitropropane~~	~~6.700~~	~~41~~	~~335~~	~~0.28~~	~~ppb~~	~~#~~	~~38~~
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~2124~~	~~7.00~~	~~ppb~~	~~#~~	~~9~~
115) 1,2,4-Tcbenzene	12.162	180	2890	0.37	ppb		90

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

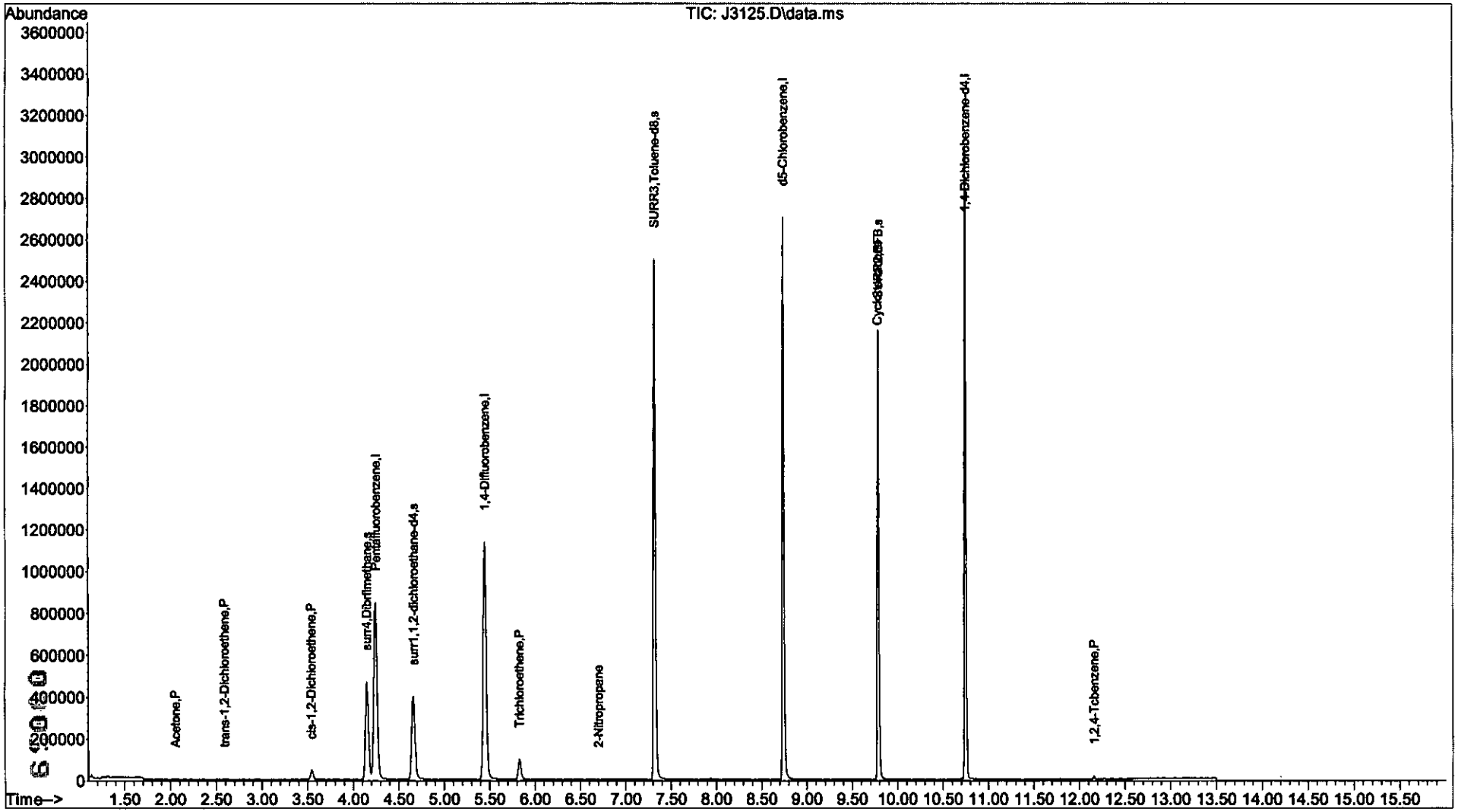
KR 2/4/14

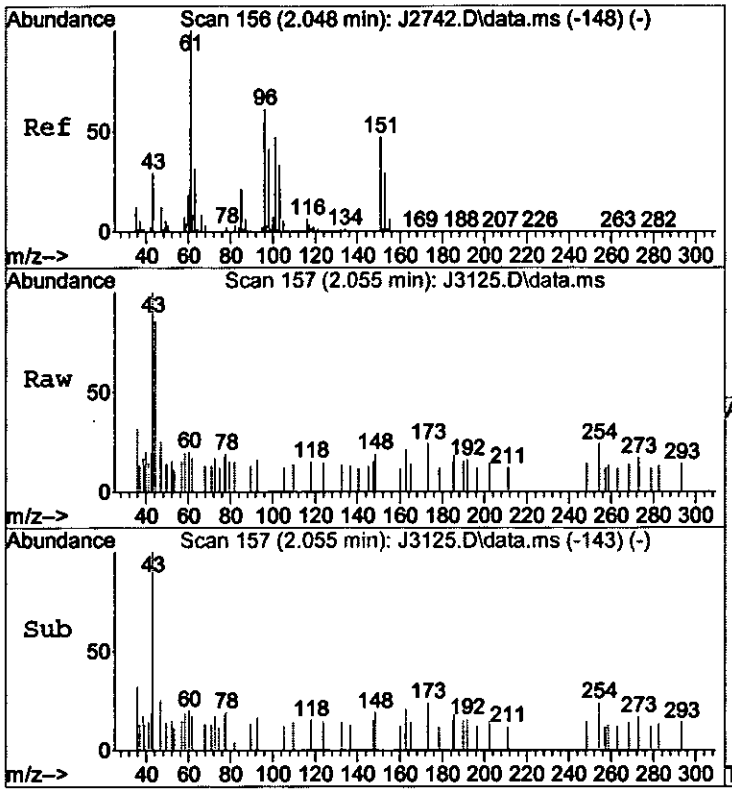
W011514.M Mon Feb 03 20:58:37 2014 00058 Page: 1

Quantitation Report

```
Sample     : R1400634-003|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3125.D
Misc       : PARSONS 9913 T4
Acq On     :  3 Feb 2014    8:43 pm
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 20:58:34 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration
```

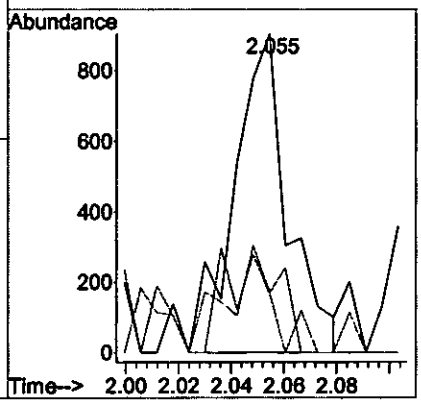


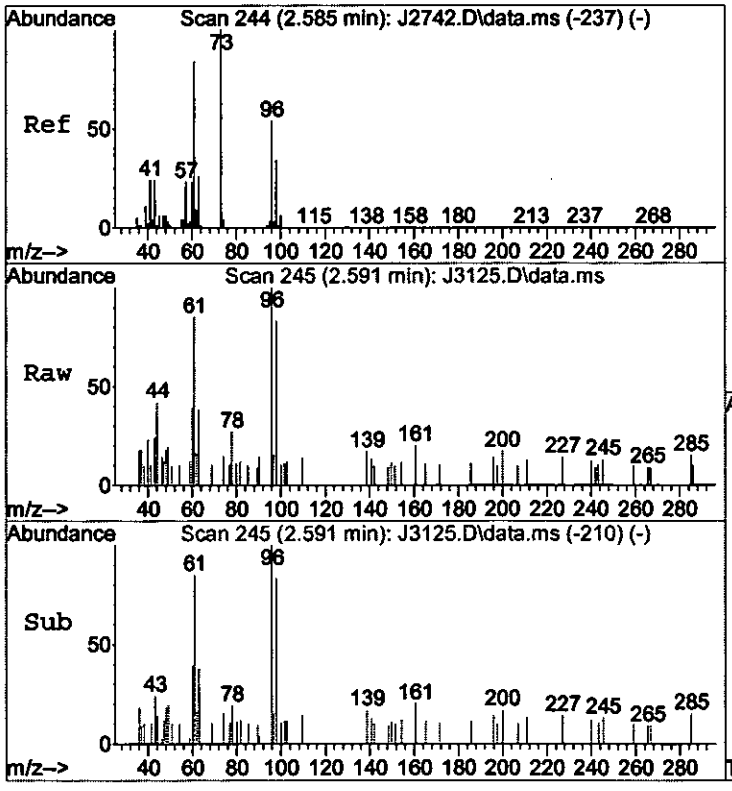


#15
Acetone
Concen: 0.80 ppb
RT: 2.055 min Scan# 157
Delta R.T. 0.012 min
Lab File: J3125.D
Acq: 3 Feb 2014 8:43 pm

Tgt Ion: 43 Resp: 1278

Ion	Ratio	Lower	Upper
43	100		
58	18.7	5.7	45.7
42	19.1	0.0	28.0

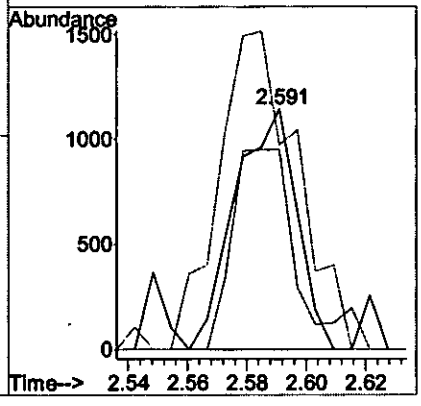




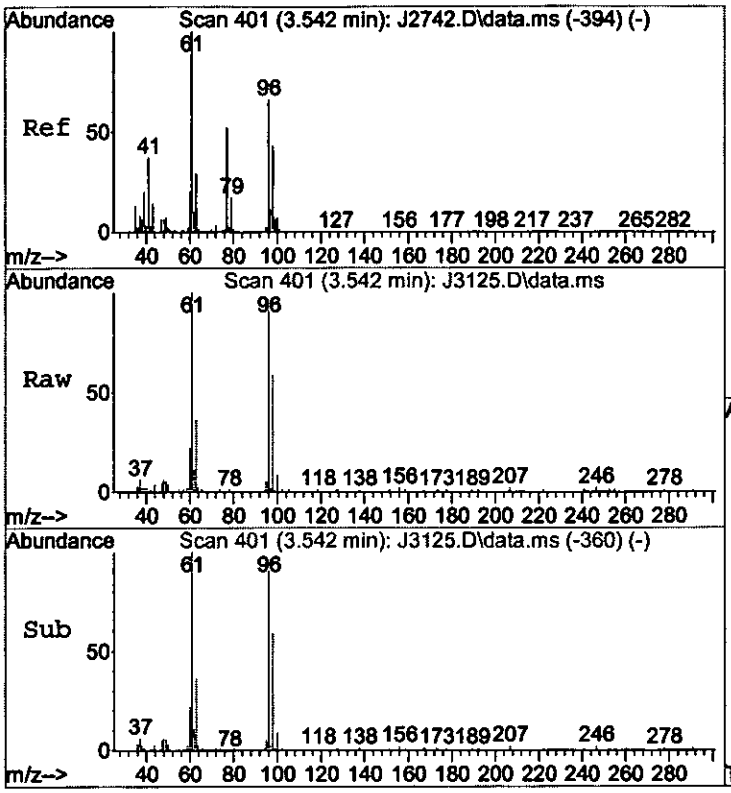
#26
trans-1,2-Dichloroethene
Concen: 0.25 ppb
RT: 2.591 min Scan# 245
Delta R.T. 0.006 min
Lab File: J3125.D
Acq: 3 Feb 2014 8:43 pm

Tgt Ion: 96 Resp: 1658

Ion	Ratio	Lower	Upper
96	100		
98	83.0	42.7	82.7#
61	85.0	133.4	173.4#



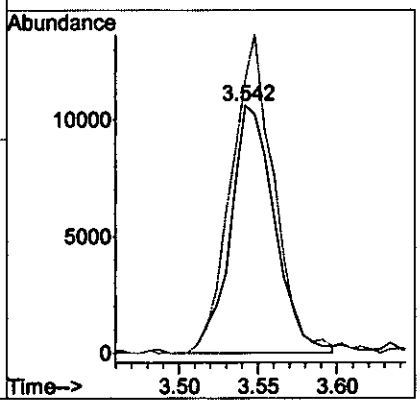
J3125.D W011514.M Tue Feb 04 17:11:56 2014 00060 Page 3

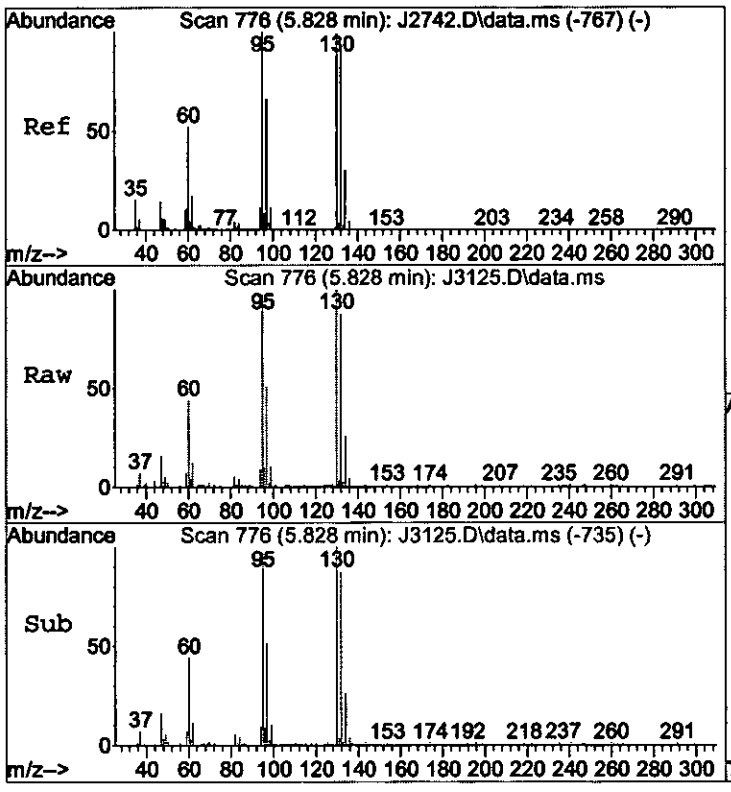


#34
cis-1,2-Dichloroethene
Concen: 2.63 ppb
RT: 3.542 min Scan# 401
Delta R.T. -0.006 min
Lab File: J3125.D
Acq: 3 Feb 2014 8:43 pm

Tgt Ion: 96 Resp: 20662

Ion	Ratio	Lower	Upper
96	100		
61	110.2	131.7	171.7#

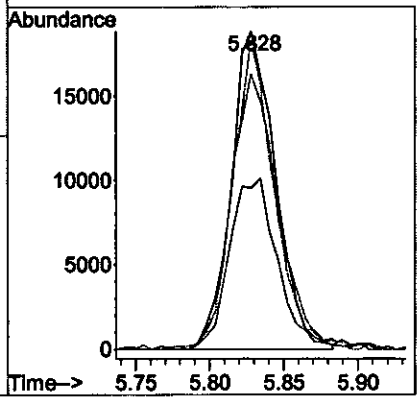


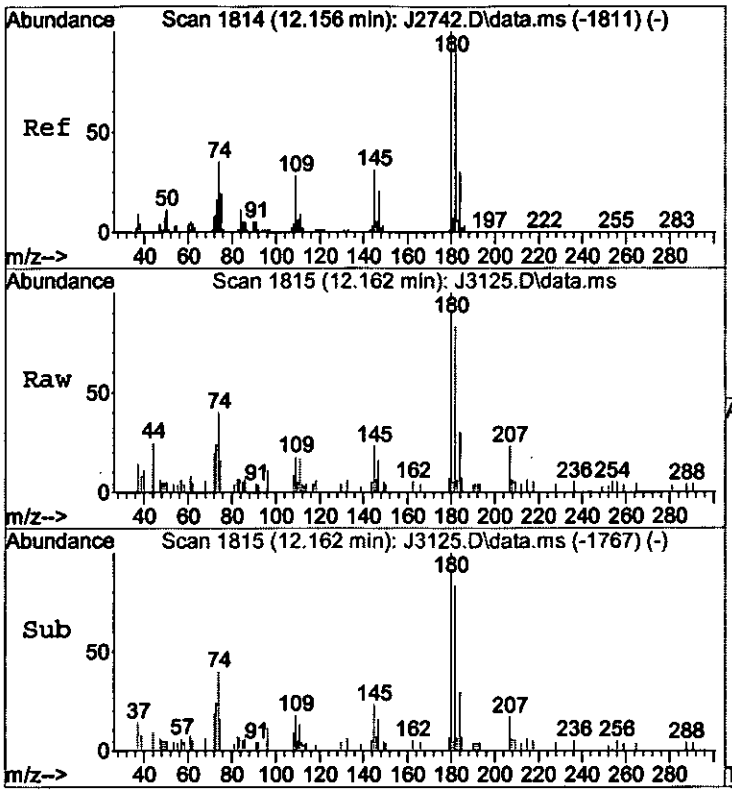


#54
Trichloroethene
Concen: 5.24 ppb
RT: 5.828 min Scan# 776
Delta R.T. -0.000 min
Lab File: J3125.D
Acq: 3 Feb 2014 8:43 pm

Tgt Ion:130 Resp: 39006

Ion	Ratio	Lower	Upper
130	100		
132	86.6	78.2	118.2
95	97.0	81.3	121.3
97	50.6	46.6	86.6

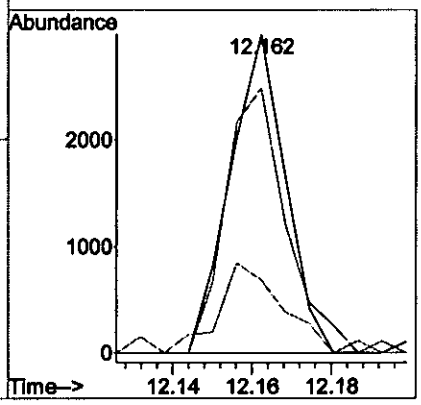




#115
1,2,4-Tcbenzene
Concen: 0.37 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J3125.D
Acq: 3 Feb 2014 8:43 pm

Tgt Ion:180 Resp: 2890

Ion	Ratio	Lower	Upper
180	100		
182	83.1	70.8	110.8
145	23.0	11.4	51.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3125.D
Acq On : 3 Feb 2014 8:43 pm
Operator : K.Ruest
Sample : R1400634-003|1.0
Misc : PARSONS 9913 T4
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J3125.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.548	395	402	409	rVB2	46638	88823	2.34%	0.433%
2	4.152	492	501	508	rBV	467415	1094722	28.83%	5.339%
3	4.249	508	517	533	rVB	844091	2146126	56.52%	10.466%
4	4.664	575	585	599	rBV	398374	1054204	27.76%	5.141%
5	5.450	705	714	729	rBV	1134715	2669186	70.29%	13.017%
6	5.828	770	776	786	rVB2	98088	211470	5.57%	1.031%
7	7.322	1012	1021	1038	rBV	2501773	3797281	100.00%	18.519%
8	8.742	1248	1254	1266	rBV	2706022	3420249	90.07%	16.680%
9	9.791	1420	1426	1435	rBV	2161705	2660300	70.06%	12.974%
10	10.748	1578	1583	1592	rBV	3032672	3362746	88.56%	16.400%

Sum of corrected areas: 20505107

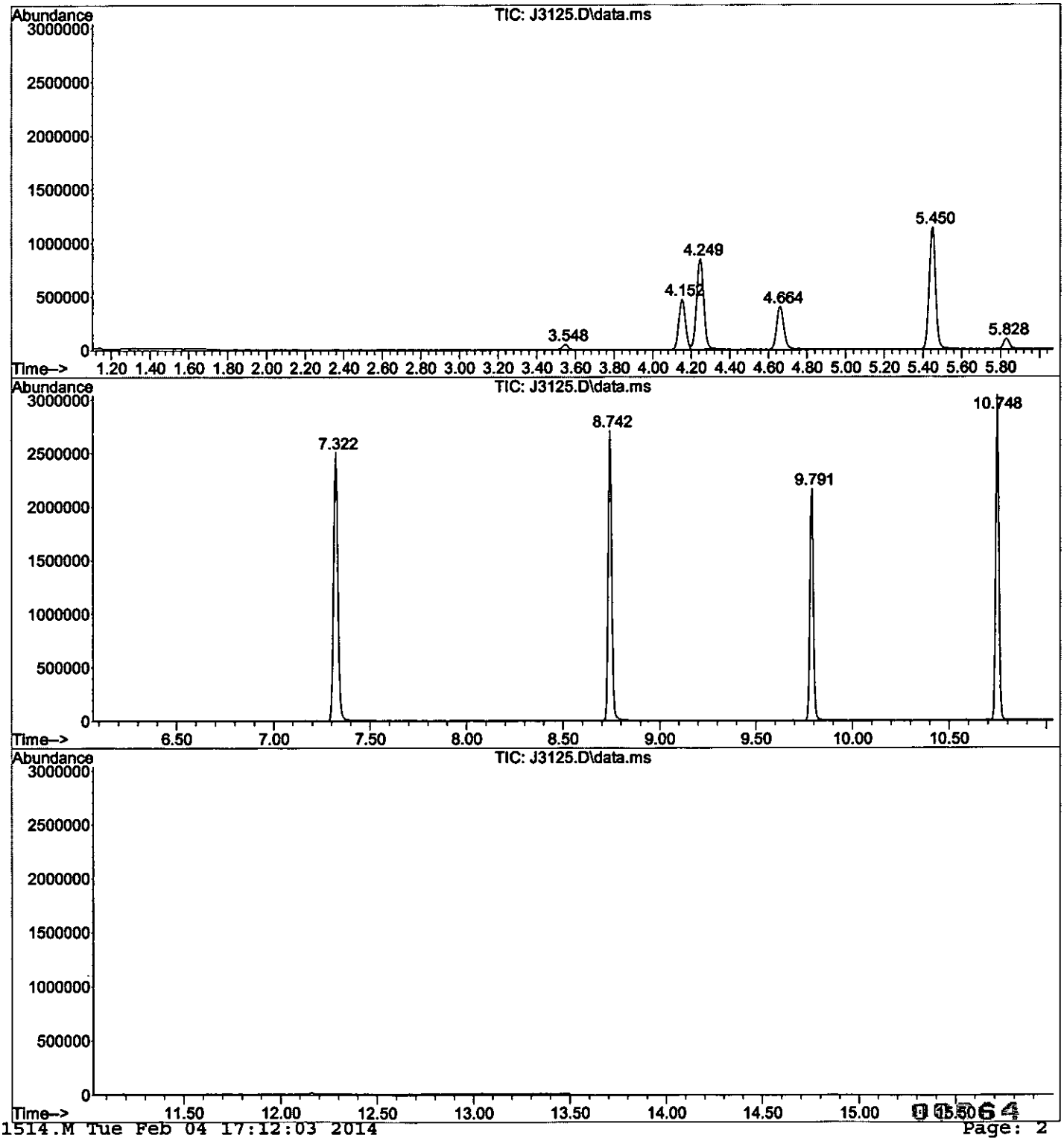
W011514.M Tue Feb 04 17:12:02 2014 00063 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3125.D
Acq On : 3 Feb 2014 8:43 pm
Operator : K.Ruest
Sample : R1400634-003|1.0
Misc : PARSONS 9913 T4
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W011514.M Tue Feb 04 17:12:03 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\020314\\
Data File : J3125.D
Acq On : 3 Feb 2014 8:43 pmm
Operator : K.Ruestt
Sample : R1400634-003|1.00
Misc : PARSONS 9913 T44
ALS Vial : 12 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1412
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 21:15
Sample Name:	FTMM-22-GW-CW1MW27-11.9	**Units:**	µg/L
Lab Code:	R1400634-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3126.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1412
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 21:15
Sample Name:	FTMM-22-GW-CW1MW27-11.9	**Units:**	µg/L
Lab Code:	R1400634-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3126.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**0.45**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	2/3/14 21:15	
Dibromofluoromethane	100	85-115	2/3/14 21:15	
Toluene-d8	100	85-120	2/3/14 21:15	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/3/14 2115

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW27-11.9	**Units:**	µg/L
Lab Code:	R1400634-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1400634-005|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3126.D
Misc : PARSONS 9913 T4
Acq On : 3 Feb 2014 9:15 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 21:30:52 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	770464	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1158851	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1086003	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	539062	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	338659	50.02	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.04%			
48) surr1,1,2-dichloroetha...	4.664	65	375272	46.02	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 92.04%			
65) SURR3,Toluene-d8	7.322	98	1439909	50.03	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.06%			
70) SURR2,BFB	9.785	95	527459	49.29	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.58%			
Target Compounds						Qvalue
~~15) Acetone~~	~~2.055~~	~~43~~	~~635~~	~~0.40~~	~~ppb~~	~~# 67~~
~~16) 2-Propanol~~	~~2.122~~	~~45~~	~~319~~	~~1.33~~	~~ppb~~	~~# 1~~
54) Trichloroethene	5.828	130	3354	0.45	ppb	84
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1234~~	~~4.10~~	~~ppb~~	~~# 9~~

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

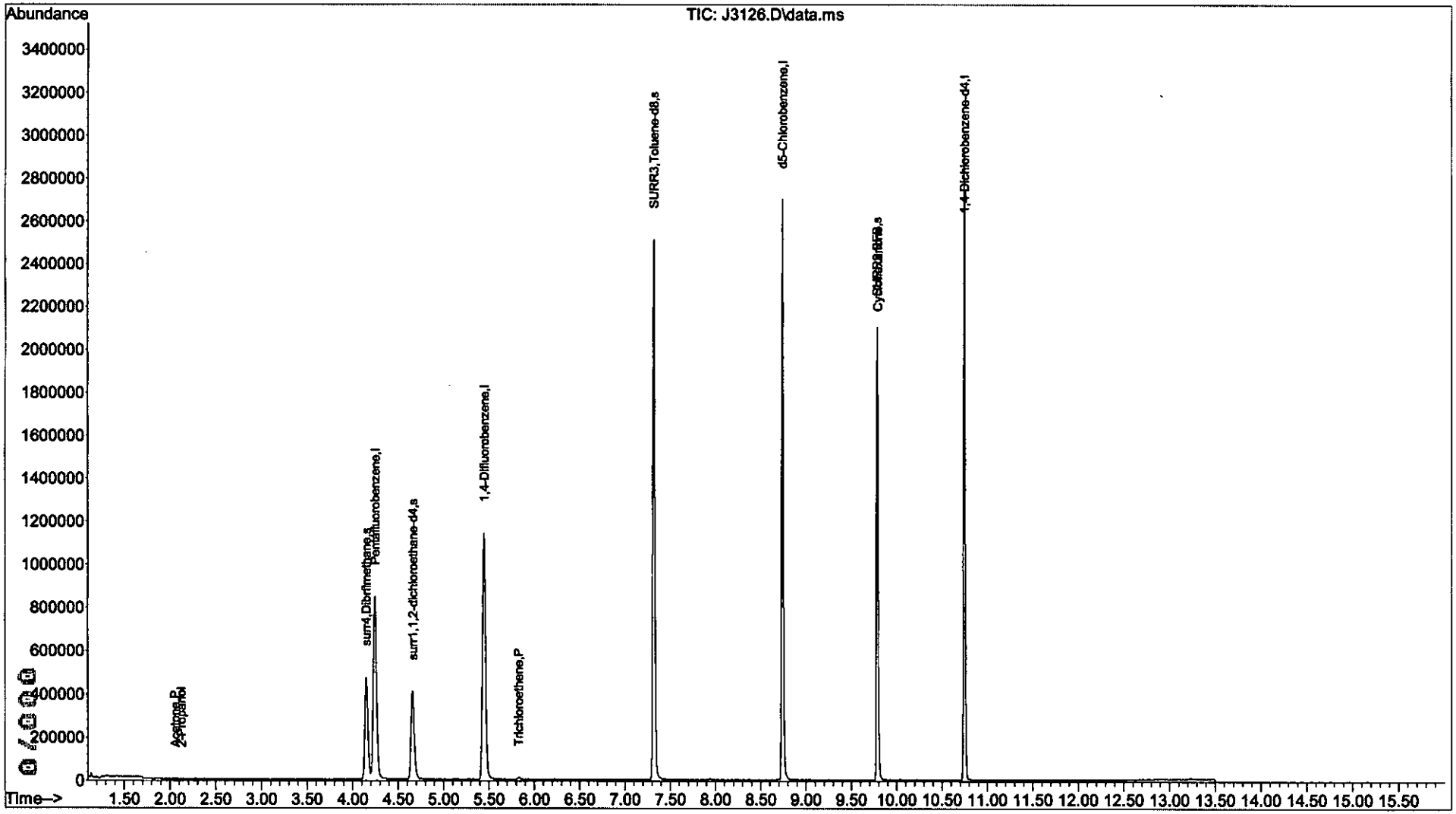
KR 2/14/14

W011514.M Mon Feb 03 21:30:55 2014 00069 Page: 1

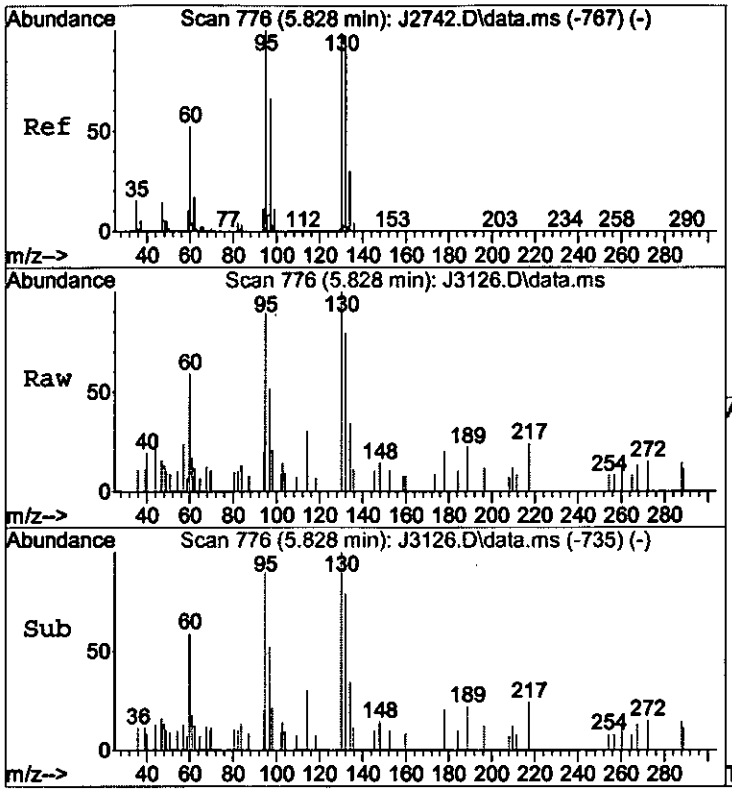
Quantitation Report (Not Reviewed)

Sample : R1400634-005|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3126.D
Misc : PARSONS 9913 T4
Acq On : 3 Feb 2014 9:15 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 21:30:52 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



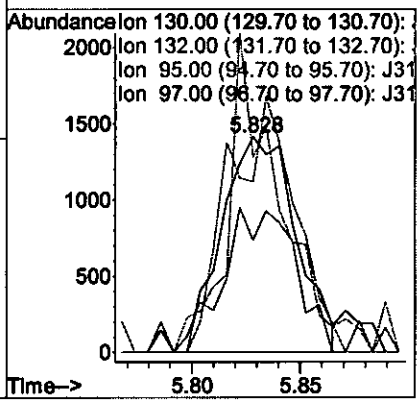
W011514.M Mon Feb 03 21:30:56 2014 Page: 2



#54
Trichloroethene
Concen: 0.45 ppb
RT: 5.828 min Scan# 776
Delta R.T. 0.000 min
Lab File: J3126.D
Acq: 3 Feb 2014 9:15 pm

Tgt Ion:130 Resp: 3354

Ion	Ratio	Lower	Upper
130	100		
132	79.2	78.2	118.2
95	90.4	81.3	121.3
97	52.1	46.6	86.6



J3126.D W011514.M Tue Feb 04 17:14:10 2014 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3126.D
Acq On : 3 Feb 2014 9:15 pm
Operator : K.Ruest
Sample : R1400634-005|1.0
Misc : PARSONS 9913 T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J3126.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	472378	1110604	29.30%	5.517%
2	4.249	509	517	530	rVB	841771	2136265	56.37%	10.612%
3	4.658	574	584	598	rBV	409883	1057509	27.90%	5.253%
4	5.450	705	714	727	rBV	1137244	2630663	69.41%	13.068%
5	7.322	1014	1021	1037	rBV	2510119	3789868	100.00%	18.827%
6	8.742	1249	1254	1267	rVB	2694327	3398949	89.69%	16.885%
7	9.785	1420	1425	1436	rBV	2102351	2657812	70.13%	13.203%
8	10.748	1578	1583	1593	rBV	2929608	3348241	88.35%	16.633%

Sum of corrected areas: 20129911

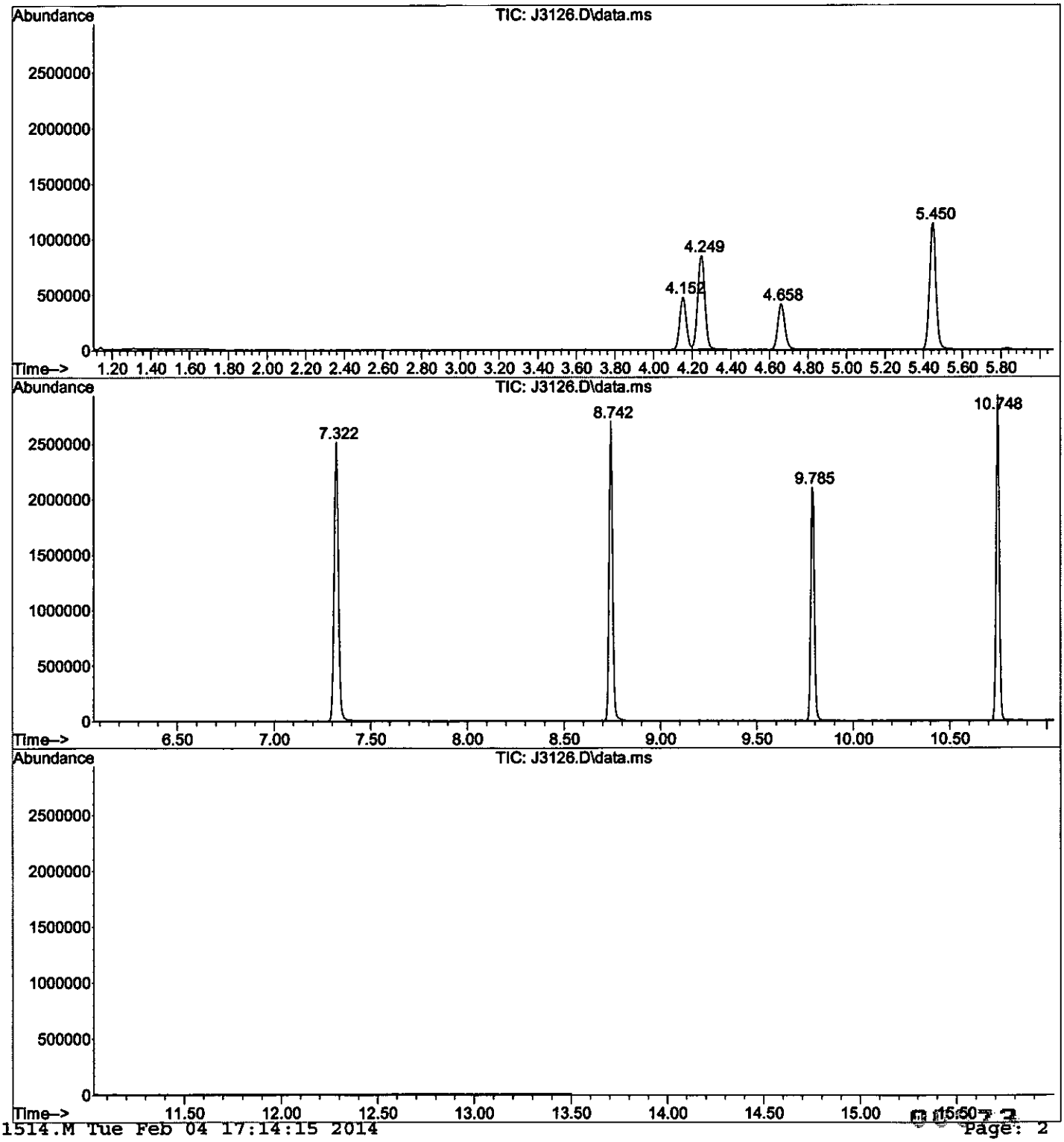
W011514.M Tue Feb 04 17:14:14 2014 00072 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3126.D
Acq On : 3 Feb 2014 9:15 pm
Operator : K.Ruest
Sample : R1400634-005|1.0
Misc : PARSONS 9913 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W011514.M Tue Feb 04 17:14:15 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\020314\\
Data File : J3126.D
Acq On : 3 Feb 2014 9:15 pmm
Operator : K.Ruestt
Sample : R1400634-005|1.00
Misc : PARSONS 9913 T44
ALS Vial : 13 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W011514.M Tue Feb 04 17:14:15 2014 00074 Page: 3

ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00075

Initial Calibration - Summary Report

KPR 1/16/14

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
W011574 8260 waters **Column Name:** 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3121	<=20	10.8
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.7256	<=20	3.4
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5124	<=20	4.7
1,1,2-Trichloroethane	T	Average RF		0.100	0.2166	<=20	7.4
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3784	<=20	2.8
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.8431	<=20	1.7
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3578	<=20	5.7
1,1-Dichloropropene	T	Average RF			0.3846	<=20	2.5
1,2,3-Trichlorobenzene	T	Average RF			0.5920	<=20	13.3
1,2,3-Trichloropropane	T	Average RF			0.1559	<=20	7.6
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.7240	<=20	12.1
1,2,4-Trimethylbenzene	T	Average RF			2.236	<=20	6.2
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08620	<=20	3.5
1,2-Dibromoethane	T	Average RF		0.100	0.2222	<=20	5.3
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5627	<=20	5.5
1,2-Dichlorobenzene	T	Average RF		0.400	1.234	<=20	3.0
1,2-Dichloroethane	T	Average RF		0.100	0.4106	<=20	4.5
1,2-Dichloropropane	T	Average RF		0.100	0.3165	<=20	5.5
1,3,5-Trichlorobenzene	T	Average RF			0.8444	<=20	9.8
1,3,5-Trimethylbenzene	T	Average RF			2.218	<=20	4.2
1,3-Dichlorobenzene	T	Average RF		0.600	1.286	<=20	7.3
1,3-Dichloropropane	T	Average RF			0.4367	<=20	6.4
1,4-Dichlorobenzene	T	Average RF		0.500	1.338	<=20	4.7
1,4-Dioxane	T	Average RF			0.001820	<=20	5.4
1-Butanol	T	Average RF			0.004380	<=20	7.8
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.4020	<=20	6.1
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6005	<=20	3.7
2,2-Dichloropropane	T	Average RF			0.6922	<=20	6.1
2,3,6-Trichlorotoluene	T	Average RF			0.3700	<=20	17.3
2,4,5-Trichlorotoluene	T	Average RF			0.4130	<=20	14.1
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.9857	<=20	5.3
2,4-Dichlorobenzotrifluoride	T	Average RF			0.5170	<=20	9.0
2,5-Dichlorobenzotrifluoride	T	Average RF			0.5968	<=20	7.1
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1339	<=20	5.2
2-Chloro-1,3-butadiene	T	Average RF			0.8763	<=20	3.8
2-Chlorobenzotrifluoride	T	Average RF			0.8437	<=20	9.3
2-Chloroethyl Vinyl Ether	T	Average RF			0.1097	<=20	9.9
2-Chlorotoluene	T	Average RF			1.915	<=20	4.6
2-Hexanone	T	Average RF		0.05	0.1480	<=20	7.5
2-Methyl-1-propanol	T	Average RF			0.008274	<=20	5.6
2-Methyl-2-propanol	T	Average RF			0.02602	<=20	5.5
2-Nitropropane	T	Average RF			0.05106	<=20	14.0
2-Propanol	T	Average RF			0.01555	<=20	9.6
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.044	<=20	6.5
3,4-Dichlorobenzotrifluoride	T	Average RF			0.5786	<=20	3.1
3-Chloro-1-propene	T	Average RF			0.2529	<=20	3.6
3-Chlorobenzotrifluoride	T	Average RF			0.4519	<=20	8.8
3-Chlorotoluene	T	Average RF			1.953	<=20	4.6
4-Chlorotoluene	T	Average RF			2.333	<=20	6.5
4-Isopropyltoluene	T	Average RF			2.206	<=20	4.7
4-Methyl-2-pentanone	T	Average RF		0.05	0.1986	<=20	4.0

Initial Calibration - Summary Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.1032	<=20	5.7
Acetonitrile	T	Average RF			0.01644	<=20	2.4
Acrolein	T	Quadratic	1/X2		0.02666	>=0.99	0.9916
Acrylonitrile	T	Average RF			0.1041	<=20	10.8
Benzene	T	Average RF		0.500	1.244	<=20	5.6
Bromobenzene	T	Average RF			0.7331	<=20	3.1
Bromochloromethane	T	Average RF			0.2685	<=20	7.9
Bromodichloromethane	T	Average RF		0.200	0.3862	<=20	5.1
Bromoform	T	Average RF		0.100	0.2704	<=20	12.5
Bromomethane	T	Average RF		0.100	0.4614	<=20	16.5
Carbon Disulfide	T	Average RF		0.100	1.337	<=20	4.5
Carbon Tetrachloride	T	Average RF		0.05	0.1242	<=20	4.2
Chlorobenzene	T	Average RF		0.500	0.9035	<=20	5.0
Chloroethane	T	Average RF		0.100	0.4128	<=20	4.1
Chloroform	T	Average RF		0.200	0.7920	<=20	4.3
Chloromethane	T	Average RF		0.100	0.7048	<=20	3.1
Cyclohexane	T	Average RF		0.100	0.3235	<=20	7.7
Cyclohexanone	T	Average RF			0.02792	<=20	13.7
Dibromochloromethane	T	Average RF		0.100	0.2603	<=20	10.8
Dibromomethane	T	Average RF			0.1473	<=20	3.5
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5172	<=20	9.1
Dichlorofluoromethane (CFC 21)	T	Average RF			1.006	<=20	3.8
Dichloromethane	T	Average RF		0.100	0.4329	<=20	3.6
Diethyl Ether	T	Average RF			0.3353	<=20	2.5
Diisopropyl Ether	T	Average RF			1.679	<=20	2.3
Ethyl Methacrylate	T	Average RF			0.2959	<=20	7.0
Ethyl tert-Butyl Ether	T	Average RF			1.376	<=20	2.1
Ethylbenzene	T	Average RF		0.100	0.4847	<=20	4.8
Hexachlorobutadiene	T	Average RF			0.3092	<=20	11.5
Iodomethane	T	Average RF			0.5098	<=20	18.3
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.618	<=20	6.0
Methacrylonitrile	T	Average RF			0.1197	<=20	5.2
Methyl Acetate	T	Average RF		0.100	0.2191	<=20	4.5
Methyl Methacrylate	T	Average RF			0.1447	<=20	5.7
Methyl tert-Butyl Ether	T	Average RF		0.100	1.120	<=20	2.5
Methylcyclohexane	T	Average RF		0.100	0.3526	<=20	6.7
Naphthalene	T	Average RF			1.306	<=20	7.1
Propionitrile	T	Average RF			0.03723	<=20	7.1
Styrene	T	Average RF		0.300	0.9611	<=20	13.5
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2622	<=20	8.5
Tetrahydrofuran (THF)	T	Average RF			0.09675	<=20	11.7
Toluene	T	Average RF		0.400	1.303	<=20	3.0
Trichloroethene (TCE)	T	Average RF		0.200	0.3186	<=20	3.5
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.7666	<=20	3.9
Vinyl Acetate	T	Average RF			0.06421	<=20	8.7
Vinyl Chloride	T	Average RF		0.100	0.6849	<=20	3.9
cis-1,2-Dichloroethene	T	Average RF		0.100	0.5091	<=20	5.0
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4600	<=20	6.0
m,p-Xylenes	T	Average RF		0.100	0.5881	<=20	7.3
n-Butyl Acetate	T	Average RF			0.3680	<=20	9.1
n-Butylbenzene	T	Average RF			1.933	<=20	5.9
n-Heptane	T	Average RF			0.3362	<=20	7.9

Initial Calibration - Summary Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.017	<=20	8.2
o-Xylene	T	Average RF		0.300	0.5875	<=20	10.0
sec-Butylbenzene	T	Average RF			2.512	<=20	5.6
tert-Amyl Methyl Ether	T	Average RF			1.133	<=20	4.1
tert-Butylbenzene	T	Average RF			1.795	<=20	5.4
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4373	<=20	3.7
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3738	<=20	8.3
trans-1,4-Dichloro-2-butene	T	Average RF			0.1092	<=20	11.7
1,2-Dichloroethane-d4	S	Average RF			0.3518	<=20	0.9
4-Bromofluorobenzene	S	Average RF			0.4617	<=20	1.8
Dibromofluoromethane	S	Average RF			0.2921	<=20	0.9
Toluene-d8	S	Average RF			1.242	<=20	0.5

Initial Calibration - Detailed Report

KPS 1/16/14

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
	W011514 8260 Waters	**Signal ID:**	1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400002-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\011514\U2738.D	1/15/14 19:59
02	RC1400002-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\011514\U2739.D	1/15/14 20:32
03	RC1400002-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\011514\U2740.D	1/15/14 21:04
04	RC1400002-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\011514\U2741.D	1/15/14 21:37
05	RC1400002-05	20ppb	I:\ACQUDATA\msvoa12\Data\011514\U2742.D	1/15/14 22:10
06	RC1400002-06	50ppb	I:\ACQUDATA\msvoa12\Data\011514\U2743.D	1/15/14 22:42
07	RC1400002-07	100ppb	I:\ACQUDATA\msvoa12\Data\011514\U2744.D	1/15/14 23:15
08	RC1400002-08	200ppb	I:\ACQUDATA\msvoa12\Data\011514\U2745.D	1/15/14 23:47

Analyte — **Curve Fit**: Average RF — **Weighting**

1,1,1,2-Tetrachloroethane — RSD = 10.8 — Average RF = 0.3121

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2976	02	1.000	0.2815	03	2.000	0.2644	04	5.000	0.2897
05	20.000	0.3341	06	50.000	0.3250	07	100.000	0.3453	08	200.000	0.3596

1,1,1-Trichloroethane (TCA) — RSD = 3.4 — Average RF = 0.7256

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7755	02	1.000	0.6973	03	2.000	0.7135	04	5.000	0.7127
05	20.000	0.7450	06	50.000	0.7098	07	100.000	0.7238	08	200.000	0.7274

1,1,2,2-Tetrachloroethane — RSD = 4.7 — Average RF = 0.5124

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4846	02	1.000	0.5332	03	2.000	0.4813	04	5.000	0.5195
05	20.000	0.5511	06	50.000	0.5218	07	100.000	0.5106	08	200.000	0.4968

1,1,2-Trichloroethane — RSD = 7.4 — Average RF = 0.2166

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2492	02	1.000	0.2151	03	2.000	0.1912	04	5.000	0.2092
05	20.000	0.2198	06	50.000	0.2118	07	100.000	0.2185	08	200.000	0.2181

1,1,2-Trichlorotrifluoroethane — RSD = 2.8 — Average RF = 0.3784

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3966	02	1.000	0.3727	03	2.000	0.3715	04	5.000	0.3696
05	20.000	0.3865	06	50.000	0.3667	07	100.000	0.3768	08	200.000	0.3866

1,1-Dichloroethane (1,1-DCA) — RSD = 1.7 — Average RF = 0.8431

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8305	02	1.000	0.8443	03	2.000	0.8317	04	5.000	0.8454
05	20.000	0.8766	06	50.000	0.8353	07	100.000	0.8407	08	200.000	0.8403

1,1-Dichloroethene (1,1-DCE) — RSD = 5.7 — Average RF = 0.3578

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3948	02	1.000	0.3316	03	2.000	0.3508	04	5.000	0.3390
05	20.000	0.3608	06	50.000	0.3479	07	100.000	0.3623	08	200.000	0.3753

1,1-Dichloropropene — RSD = 2.5 — Average RF = 0.3846

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3782	02	1.000	0.3786	03	2.000	0.3739	04	5.000	0.3779
05	20.000	0.3932	06	50.000	0.3803	07	100.000	0.3971	08	200.000	0.3975

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting									
1,2,3-Trichlorobenzene	Average RF			RSD = 13.3		Average RF = 0.5920					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7705	02	1.000	0.5829	03	2.000	0.5965	04	5.000	0.5551
05	20.000	0.5998	06	50.000	0.5787	07	100.000	0.5486	08	200.000	0.5039
1,2,3-Trichloropropane	Average RF			RSD = 7.6		Average RF = 0.1559					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1734	02	1.000	0.1587	03	2.000	0.1653	04	5.000	0.1539
05	20.000	0.1639	06	50.000	0.1511	07	100.000	0.1445	08	200.000	0.1367
1,2,4-Trichlorobenzene	Average RF			RSD = 12.1		Average RF = 0.7240					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9283	02	1.000	0.6721	03	2.000	0.7144	04	5.000	0.6908
05	20.000	0.7416	06	50.000	0.7159	07	100.000	0.6805	08	200.000	0.6486
1,2,4-Trimethylbenzene	Average RF			RSD = 6.2		Average RF = 2.236					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.365	02	1.000	2.046	03	2.000	2.155	04	5.000	2.271
05	20.000	2.399	06	50.000	2.331	07	100.000	2.270	08	200.000	2.047
1,2-Dibromo-3-chloropropane (DBCP)	Average RF			RSD = 3.5		Average RF = 0.08620					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08823	03	2.000	0.08199	04	5.000	0.08663	05	20.000	0.09037
06	50.000	0.08621	07	100.000	0.08730	08	200.000	0.08266			
1,2-Dibromoethane	Average RF			RSD = 5.3		Average RF = 0.2222					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2205	02	1.000	0.2200	03	2.000	0.1998	04	5.000	0.2125
05	20.000	0.2365	06	50.000	0.2280	07	100.000	0.2312	08	200.000	0.2294
1,2-Dichloro-1,1,2-trifluoroethane (CFC	Average RF			RSD = 5.5		Average RF = 0.5627					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6179	02	1.000	0.5638	03	2.000	0.5283	04	5.000	0.5891
05	20.000	0.5295	06	50.000	0.5543	07	100.000	0.5419	08	200.000	0.5770
1,2-Dichlorobenzene	Average RF			RSD = 3.0		Average RF = 1.234					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.268	02	1.000	1.173	03	2.000	1.204	04	5.000	1.219
05	20.000	1.289	06	50.000	1.243	07	100.000	1.250	08	200.000	1.231
1,2-Dichloroethane	Average RF			RSD = 4.5		Average RF = 0.4106					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4442	02	1.000	0.3951	03	2.000	0.3883	04	5.000	0.3956
05	20.000	0.4238	06	50.000	0.4037	07	100.000	0.4166	08	200.000	0.4177
1,2-Dichloroethane-d4	Average RF			RSD = 0.9		Average RF = 0.3518					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	50.000	0.3502	06	50.000	0.3504	04	50.000	0.3482	02	50.000	0.3576
03	50.000	0.3564	05	50.000	0.3509	07	50.000	0.3504	01	50.000	0.3503
1,2-Dichloropropane	Average RF			RSD = 5.5		Average RF = 0.3165					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2858	02	1.000	0.3025	03	2.000	0.3315	04	5.000	0.3032
05	20.000	0.3322	06	50.000	0.3189	07	100.000	0.3283	08	200.000	0.3295

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,3,5-Trichlorobenzene Average RF RSD = 9.8 Average RF = 0.8444

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.000	02	1.000	0.8735	03	2.000	0.9069	04	5.000	0.8488
05	20.000	0.8092	06	50.000	0.8013	07	100.000	0.7688	08	200.000	0.7464

1,3,5-Trimethylbenzene Average RF RSD = 4.2 Average RF = 2.218

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.213	02	1.000	2.105	03	2.000	2.135	04	5.000	2.192
05	20.000	2.327	06	50.000	2.318	07	100.000	2.321	08	200.000	2.135

1,3-Dichlorobenzene Average RF RSD = 7.3 Average RF = 1.286

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.468	02	1.000	1.179	03	2.000	1.188	04	5.000	1.304
05	20.000	1.339	06	50.000	1.300	07	100.000	1.288	08	200.000	1.226

1,3-Dichloropropane Average RF RSD = 6.4 Average RF = 0.4367

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4825	02	1.000	0.3819	03	2.000	0.4298	04	5.000	0.4276
05	20.000	0.4500	06	50.000	0.4365	07	100.000	0.4421	08	200.000	0.4433

1,4-Dichlorobenzene Average RF RSD = 4.7 Average RF = 1.338

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.453	02	1.000	1.267	03	2.000	1.353	04	5.000	1.330
05	20.000	1.390	06	50.000	1.329	07	100.000	1.321	08	200.000	1.264

1,4-Dioxane Average RF RSD = 5.4 Average RF = 0.001820

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.001880	04	100.000	0.001995	05	400.000	0.001786	06	1000.000	0.001738
07	2000.000	0.001754	08	4000.000	0.001770						

1-Butanol Average RF RSD = 7.8 Average RF = 0.004380

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.004545	03	100.000	0.004061	04	250.000	0.003838	05	1000.000	0.004332
06	2500.000	0.004433	07	5000.000	0.004589	08	10000.000	0.004861			

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 6.1 Average RF = 0.4020

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4455	02	1.000	0.3771	03	2.000	0.3891	04	5.000	0.4122
05	20.000	0.3851	06	50.000	0.3830	07	100.000	0.3953	08	200.000	0.4291

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 3.7 Average RF = 0.6005

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6351	02	1.000	0.5898	03	2.000	0.6213	04	5.000	0.6051
05	20.000	0.5689	06	50.000	0.5878	07	100.000	0.5830	08	200.000	0.6126

2,2-Dichloropropane Average RF RSD = 6.1 Average RF = 0.6922

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7799	02	1.000	0.6272	03	2.000	0.6885	04	5.000	0.6746
05	20.000	0.7046	06	50.000	0.6798	07	100.000	0.6871	08	200.000	0.6957

2,3,6-Trichlorotoluene Average RF RSD = 17.3 Average RF = 0.3700

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.5019	03	2.000	0.3958	04	5.000	0.3443	05	20.000	0.3656
06	50.000	0.3436	07	100.000	0.3259	08	200.000	0.3132			

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting									
2,4,5-Trichlorotoluene	Average RF			RSD = 14.1		Average RF = 0.4130					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.5318	03	2.000	0.4283	04	5.000	0.4108	05	20.000	0.4047
06	50.000	0.3943	07	100.000	0.3698	08	200.000	0.3515			
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut	Average RF			RSD = 5.3		Average RF = 0.9857					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	1.075	02	3.000	0.9611	03	6.000	1.005	04	15.000	1.017
05	60.000	1.004	06	150.000	0.9794	07	300.000	0.9452	08	600.000	0.9003
2,4-Dichlorobenzotrifluoride	Average RF			RSD = 9.0		Average RF = 0.5170					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6245	02	1.000	0.4867	03	2.000	0.5237	04	5.000	0.5290
05	20.000	0.4992	06	50.000	0.5032	07	100.000	0.4805	08	200.000	0.4891
2,5-Dichlorobenzotrifluoride	Average RF			RSD = 7.1		Average RF = 0.5968					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6740	02	1.000	0.6268	03	2.000	0.6238	04	5.000	0.5968
05	20.000	0.5783	06	50.000	0.5707	07	100.000	0.5508	08	200.000	0.5528
2-Butanone (MEK)	Average RF			RSD = 5.2		Average RF = 0.1339					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1303	04	5.000	0.1216	05	20.000	0.1367	06	50.000	0.1347
07	100.000	0.1398	08	200.000	0.1399						
2-Chloro-1,3-butadiene	Average RF			RSD = 3.8		Average RF = 0.8763					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8381	02	1.000	0.8375	03	2.000	0.8511	04	5.000	0.8693
05	20.000	0.8928	06	50.000	0.8819	07	100.000	0.9153	08	200.000	0.9247
2-Chlorobenzotrifluoride	Average RF			RSD = 9.3		Average RF = 0.8437					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.027	02	1.000	0.8069	03	2.000	0.8262	04	5.000	0.8474
05	20.000	0.8586	06	50.000	0.8194	07	100.000	0.7808	08	200.000	0.7838
2-Chloroethyl Vinyl Ether	Average RF			RSD = 9.9		Average RF = 0.1097					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.09287	03	2.000	0.09582	04	5.000	0.1117	05	20.000	0.1160
06	50.000	0.1135	07	100.000	0.1206	08	200.000	0.1173			
2-Chlorotoluene	Average RF			RSD = 4.6		Average RF = 1.915					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.982	02	1.000	1.889	03	2.000	1.916	04	5.000	1.943
05	20.000	2.022	06	50.000	1.951	07	100.000	1.884	08	200.000	1.730
2-Hexanone	Average RF			RSD = 7.5		Average RF = 0.1480					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1318	04	5.000	0.1366	05	20.000	0.1538	06	50.000	0.1503
07	100.000	0.1586	08	200.000	0.1567						
2-Methyl-1-propanol	Average RF			RSD = 5.6		Average RF = 0.008274					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.007618	03	40.000	0.007817	04	100.000	0.008016	05	400.000	0.008482
06	1000.000	0.008418	07	2000.000	0.008794	08	4000.000	0.008769			

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2-Methyl-2-propanol Average RF RSD = 5.5 Average RF = 0.02602

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.02863	02	20.000	0.02447	03	40.000	0.02431	04	100.000	0.02499
05	400.000	0.02689	06	1000.000	0.02610	07	2000.000	0.02632	08	4000.000	0.02646

2-Nitropropane Average RF RSD = 14.0 Average RF = 0.05106

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06082	03	4.000	0.04112	04	10.000	0.04359	05	40.000	0.04923
06	100.000	0.05040	07	200.000	0.05501	08	400.000	0.05728			

2-Propanol Average RF RSD = 9.6 Average RF = 0.01555

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01272	03	40.000	0.01577	04	100.000	0.01441	05	400.000	0.01624
06	1000.000	0.01643	07	2000.000	0.01622	08	4000.000	0.01709			

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 6.5 Average RF = 1.044

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.144	02	2.000	1.051	03	4.000	1.029	04	10.000	1.102
05	40.000	1.070	06	100.000	1.038	07	200.000	1.003	08	400.000	0.9183

3,4-Dichlorobenzotrifluoride Average RF RSD = 3.1 Average RF = 0.5786

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5999	02	1.000	0.5577	03	2.000	0.5867	04	5.000	0.5927
05	20.000	0.5737	06	50.000	0.5614	07	100.000	0.5588	08	200.000	0.5982

3-Chloro-1-propene Average RF RSD = 3.6 Average RF = 0.2529

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2442	02	1.000	0.2465	03	2.000	0.2600	04	5.000	0.2578
05	20.000	0.2667	06	50.000	0.2525	07	100.000	0.2559	08	200.000	0.2397

3-Chlorobenzotrifluoride Average RF RSD = 8.8 Average RF = 0.4519

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5403	02	1.000	0.4347	03	2.000	0.4332	04	5.000	0.4288
05	20.000	0.4219	06	50.000	0.4334	07	100.000	0.4448	08	200.000	0.4780

3-Chlorotoluene Average RF RSD = 4.6 Average RF = 1.953

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.995	02	1.000	2.005	03	2.000	1.975	04	5.000	2.059
05	20.000	2.012	06	50.000	1.937	07	100.000	1.845	08	200.000	1.796

4-Bromofluorobenzene Average RF RSD = 1.8 Average RF = 0.4617

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.4595	04	50.000	0.4575	01	50.000	0.4517	06	50.000	0.4589
05	50.000	0.4606	07	50.000	0.4730	08	50.000	0.4758	03	50.000	0.4568

4-Chlorotoluene Average RF RSD = 6.5 Average RF = 2.333

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.496	02	1.000	2.125	03	2.000	2.183	04	5.000	2.416
05	20.000	2.473	06	50.000	2.410	07	100.000	2.408	08	200.000	2.155

4-Isopropyltoluene Average RF RSD = 4.7 Average RF = 2.206

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.188	02	1.000	2.211	03	2.000	2.182	04	5.000	2.235
05	20.000	2.350	06	50.000	2.268	07	100.000	2.226	08	200.000	1.989

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

4-Methyl-2-pentanone Average RF RSD = 4.0 Average RF = 0.1986

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.2002	04	5.000	0.1859	05	20.000	0.1974	06	50.000	0.1954
07	100.000	0.2085	08	200.000	0.2045						

Acetone Average RF RSD = 5.7 Average RF = 0.1032

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1134	05	20.000	0.1025	06	50.000	0.09862	07	100.000	0.1003
08	200.000	0.1012									

Acetonitrile Average RF RSD = 2.4 Average RF = 0.01644

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.01611	04	25.000	0.01598	05	100.000	0.01652	06	250.000	0.01635
07	500.000	0.01656	08	1000.000	0.01709						

Acrolein Quadratic 1/X2 COD = 0.9916 $Y = 0.001205\ X^2 + 0.02050\ X + -1.351E\text{-}4$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.02169	03	10.000	0.01617	04	25.000	0.01796	05	100.000	0.02339
06	250.000	0.02897	07	500.000	0.03634	08	1000.000	0.04211			

Acrylonitrile Average RF RSD = 10.8 Average RF = 0.1041

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1275	02	5.000	0.09400	03	10.000	0.09103	04	25.000	0.09750
05	100.000	0.1089	06	250.000	0.1040	07	500.000	0.1044	08	1000.000	0.1051

Benzene Average RF RSD = 5.6 Average RF = 1.244

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.395	02	1.000	1.173	03	2.000	1.182	04	5.000	1.213
05	20.000	1.272	06	50.000	1.223	07	100.000	1.259	08	200.000	1.236

Bromobenzene Average RF RSD = 3.1 Average RF = 0.7331

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7341	02	1.000	0.7124	03	2.000	0.7134	04	5.000	0.7583
05	20.000	0.7731	06	50.000	0.7389	07	100.000	0.7225	08	200.000	0.7118

Bromochloromethane Average RF RSD = 7.9 Average RF = 0.2685

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3182	02	1.000	0.2713	03	2.000	0.2607	04	5.000	0.2579
05	20.000	0.2701	06	50.000	0.2606	07	100.000	0.2574	08	200.000	0.2515

Bromodichloromethane Average RF RSD = 5.1 Average RF = 0.3862

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3910	02	1.000	0.3579	03	2.000	0.3592	04	5.000	0.3768
05	20.000	0.4012	06	50.000	0.3892	07	100.000	0.4088	08	200.000	0.4055

Bromoform Average RF RSD = 12.5 Average RF = 0.2704

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2564	02	1.000	0.2181	03	2.000	0.2298	04	5.000	0.2625
05	20.000	0.2973	06	50.000	0.3016	07	100.000	0.3011	08	200.000	0.2965

Bromomethane Average RF RSD = 16.5 Average RF = 0.4614

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6158	02	1.000	0.5198	03	2.000	0.4837	04	5.000	0.4491
05	20.000	0.4072	06	50.000	0.3934	07	100.000	0.4037	08	200.000	0.4189

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

Carbon Disulfide Average RF RSD = 4.5 Average RF = 1.337

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.472	02	1.000	1.316	03	2.000	1.300	04	5.000	1.329
05	20.000	1.354	06	50.000	1.321	07	100.000	1.327	08	200.000	1.273

Carbon Tetrachloride Average RF RSD = 4.2 Average RF = 0.1242

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1211	02	1.000	0.1205	03	2.000	0.1235	04	5.000	0.1161
05	20.000	0.1276	06	50.000	0.1232	07	100.000	0.1290	08	200.000	0.1323

Chlorobenzene Average RF RSD = 5.0 Average RF = 0.9035

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8985	02	1.000	0.8210	03	2.000	0.8653	04	5.000	0.8854
05	20.000	0.9514	06	50.000	0.9213	07	100.000	0.9452	08	200.000	0.9404

Chloroethane Average RF RSD = 4.1 Average RF = 0.4128

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4077	02	1.000	0.3901	03	2.000	0.3869	04	5.000	0.4158
05	20.000	0.4360	06	50.000	0.4202	07	100.000	0.4246	08	200.000	0.4209

Chloroform Average RF RSD = 4.3 Average RF = 0.7920

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8016	02	1.000	0.7169	03	2.000	0.7835	04	5.000	0.8333
05	20.000	0.8159	06	50.000	0.7957	07	100.000	0.7930	08	200.000	0.7956

Chloromethane Average RF RSD = 3.1 Average RF = 0.7048

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7255	02	1.000	0.6769	03	2.000	0.7020	04	5.000	0.6885
05	20.000	0.7423	06	50.000	0.7123	07	100.000	0.7079	08	200.000	0.6832

Cyclohexane Average RF RSD = 7.7 Average RF = 0.3235

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3761	02	1.000	0.2915	03	2.000	0.3343	04	5.000	0.3173
05	20.000	0.3088	06	50.000	0.3142	07	100.000	0.3158	08	200.000	0.3303

Cyclohexanone Average RF RSD = 13.7 Average RF = 0.02792

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.03541	02	20.000	0.03098	03	40.000	0.02733	04	100.000	0.02684
05	400.000	0.02851	06	1000.000	0.02633	07	2000.000	0.02489	08	4000.000	0.02306

Dibromochloromethane Average RF RSD = 10.8 Average RF = 0.2603

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2557	02	1.000	0.2218	03	2.000	0.2329	04	5.000	0.2350
05	20.000	0.2735	06	50.000	0.2778	07	100.000	0.2893	08	200.000	0.2964

Dibromofluoromethane Average RF RSD = 0.9 Average RF = 0.2921

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.2926	05	50.000	0.2923	08	50.000	0.2959	04	50.000	0.2924
01	50.000	0.2878	06	50.000	0.2894	07	50.000	0.2946	03	50.000	0.2917

Dibromomethane Average RF RSD = 3.5 Average RF = 0.1473

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1550	02	1.000	0.1409	03	2.000	0.1468	04	5.000	0.1409
05	20.000	0.1524	06	50.000	0.1439	07	100.000	0.1495	08	200.000	0.1486

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

Dichlorodifluoromethane (CFC 12) Average RF RSD = 9.1 Average RF = 0.5172

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4892	02	1.000	0.4800	03	2.000	0.4824	04	5.000	0.4539
05	20.000	0.5890	06	50.000	0.5521	07	100.000	0.5515	08	200.000	0.5393

Dichlorofluoromethane (CFC 21) Average RF RSD = 3.8 Average RF = 1.006

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.075	02	1.000	1.005	03	2.000	1.010	04	5.000	1.046
05	20.000	0.9808	06	50.000	0.9976	07	100.000	0.9720	08	200.000	0.9618

Dichloromethane Average RF RSD = 3.6 Average RF = 0.4329

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4678	02	1.000	0.4253	03	2.000	0.4169	04	5.000	0.4259
05	20.000	0.4410	06	50.000	0.4231	07	100.000	0.4318	08	200.000	0.4317

Diethyl Ether Average RF RSD = 2.5 Average RF = 0.3353

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3408	02	1.000	0.3286	03	2.000	0.3254	04	5.000	0.3259
05	20.000	0.3467	06	50.000	0.3340	07	100.000	0.3362	08	200.000	0.3447

Diisopropyl Ether Average RF RSD = 2.3 Average RF = 1.679

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.715	02	1.000	1.620	03	2.000	1.674	04	5.000	1.721
05	20.000	1.700	06	50.000	1.651	07	100.000	1.639	08	200.000	1.713

Ethyl Methacrylate Average RF RSD = 7.0 Average RF = 0.2959

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2880	02	1.000	0.2786	03	2.000	0.2692	04	5.000	0.2739
05	20.000	0.3115	06	50.000	0.3096	07	100.000	0.3181	08	200.000	0.3181

Ethyl tert-Butyl Ether Average RF RSD = 2.1 Average RF = 1.376

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.419	02	1.000	1.380	03	2.000	1.333	04	5.000	1.377
05	20.000	1.390	06	50.000	1.365	07	100.000	1.340	08	200.000	1.405

Ethylbenzene Average RF RSD = 4.8 Average RF = 0.4847

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4773	02	1.000	0.4459	03	2.000	0.4695	04	5.000	0.4765
05	20.000	0.5065	06	50.000	0.4823	07	100.000	0.5024	08	200.000	0.5173

Hexachlorobutadiene Average RF RSD = 11.5 Average RF = 0.3092

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3744	03	2.000	0.3295	04	5.000	0.2999	05	20.000	0.3147
06	50.000	0.2982	07	100.000	0.2821	08	200.000	0.2656			

Iodomethane Average RF RSD = 18.3 Average RF = 0.5098

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4733	03	2.000	0.3657	04	5.000	0.4133	05	20.000	0.5515
06	50.000	0.5841	07	100.000	0.6027	08	200.000	0.5782			

Isopropylbenzene (Cumene) Average RF RSD = 6.0 Average RF = 2.618

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.647	02	1.000	2.568	03	2.000	2.650	04	5.000	2.719
05	20.000	2.810	06	50.000	2.682	07	100.000	2.585	08	200.000	2.281

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

Methacrylonitrile Average RF RSD = 5.2 Average RF = 0.1197

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1276	03	2.000	0.1180	04	5.000	0.1077	05	20.000	0.1246
06	50.000	0.1195	07	100.000	0.1198	08	200.000	0.1204			

Methyl Acetate Average RF RSD = 4.5 Average RF = 0.2191

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2037	03	2.000	0.2222	04	5.000	0.2093	05	20.000	0.2244
06	50.000	0.2247	07	100.000	0.2172	08	200.000	0.2323			

Methyl Methacrylate Average RF RSD = 5.7 Average RF = 0.1447

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1549	02	1.000	0.1434	03	2.000	0.1373	04	5.000	0.1288
05	20.000	0.1474	06	50.000	0.1460	07	100.000	0.1516	08	200.000	0.1483

Methyl tert-Butyl Ether Average RF RSD = 2.5 Average RF = 1.120

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.144	02	1.000	1.075	03	2.000	1.120	04	5.000	1.084
05	20.000	1.157	06	50.000	1.117	07	100.000	1.127	08	200.000	1.135

Methylcyclohexane Average RF RSD = 6.7 Average RF = 0.3526

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4040	02	1.000	0.3307	03	2.000	0.3535	04	5.000	0.3449
05	20.000	0.3338	06	50.000	0.3403	07	100.000	0.3465	08	200.000	0.3672

Naphthalene Average RF RSD = 7.1 Average RF = 1.306

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.454	02	1.000	1.249	03	2.000	1.287	04	5.000	1.282
05	20.000	1.397	06	50.000	1.338	07	100.000	1.286	08	200.000	1.153

Propionitrile Average RF RSD = 7.1 Average RF = 0.03723

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.03603	02	5.000	0.04252	03	10.000	0.03330	04	25.000	0.03565
05	100.000	0.03834	06	250.000	0.03658	07	500.000	0.03784	08	1000.000	0.03758

Styrene Average RF RSD = 13.5 Average RF = 0.9611

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8538	02	1.000	0.7825	03	2.000	0.8284	04	5.000	0.9317
05	20.000	1.040	06	50.000	1.033	07	100.000	1.099	08	200.000	1.121

Tetrachloroethene (PCE) Average RF RSD = 8.5 Average RF = 0.2622

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2865	02	1.000	0.2175	03	2.000	0.2495	04	5.000	0.2558
05	20.000	0.2716	06	50.000	0.2596	07	100.000	0.2732	08	200.000	0.2836

Tetrahydrofuran (THF) Average RF RSD = 11.7 Average RF = 0.09675

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1179	04	5.000	0.09957	05	20.000	0.09574	06	50.000	0.08833
07	100.000	0.09090	08	200.000	0.08808						

Toluene Average RF RSD = 3.0 Average RF = 1.303

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.335	02	1.000	1.239	03	2.000	1.269	04	5.000	1.323
05	20.000	1.349	06	50.000	1.296	07	100.000	1.334	08	200.000	1.278

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Toluene-d8 Average RF RSD = 0.5 Average RF = 1.242

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.240	04	50.000	1.249	05	50.000	1.241	03	50.000	1.244
08	50.000	1.238	02	50.000	1.247	01	50.000	1.230	07	50.000	1.247

Trichloroethene (TCE) Average RF RSD = 3.5 Average RF = 0.3186

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3397	02	1.000	0.3120	03	2.000	0.3089	04	5.000	0.3079
05	20.000	0.3231	06	50.000	0.3096	07	100.000	0.3230	08	200.000	0.3246

Trichlorofluoromethane (CFC 11) Average RF RSD = 3.9 Average RF = 0.7666

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8324	02	1.000	0.7337	03	2.000	0.7503	04	5.000	0.7689
05	20.000	0.7815	06	50.000	0.7517	07	100.000	0.7594	08	200.000	0.7553

Vinyl Acetate Average RF RSD = 8.7 Average RF = 0.06421

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.06577	03	2.000	0.05928	04	5.000	0.05435	05	20.000	0.06606
06	50.000	0.06910	07	100.000	0.06485	08	200.000	0.07010			

Vinyl Chloride Average RF RSD = 3.9 Average RF = 0.6849

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6829	02	1.000	0.6570	03	2.000	0.6741	04	5.000	0.6603
05	20.000	0.7335	06	50.000	0.7046	07	100.000	0.7025	08	200.000	0.6641

cis-1,2-Dichloroethene Average RF RSD = 5.0 Average RF = 0.5091

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5712	02	1.000	0.5031	03	2.000	0.4931	04	5.000	0.5007
05	20.000	0.5005	06	50.000	0.4979	07	100.000	0.5024	08	200.000	0.5043

cis-1,3-Dichloropropene Average RF RSD = 6.0 Average RF = 0.4600

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4651	02	1.000	0.4184	03	2.000	0.4213	04	5.000	0.4508
05	20.000	0.4866	06	50.000	0.4703	07	100.000	0.4846	08	200.000	0.4827

m,p-Xylenes Average RF RSD = 7.3 Average RF = 0.5881

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5854	02	2.000	0.5131	03	4.000	0.5618	04	10.000	0.5579
05	40.000	0.6102	06	100.000	0.6025	07	200.000	0.6372	08	400.000	0.6369

n-Butyl Acetate Average RF RSD = 9.1 Average RF = 0.3680

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3466	03	2.000	0.3087	04	5.000	0.3519	05	20.000	0.3932
06	50.000	0.3899	07	100.000	0.3867	08	200.000	0.3992			

n-Butylbenzene Average RF RSD = 5.9 Average RF = 1.933

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.992	02	1.000	1.744	03	2.000	1.844	04	5.000	1.922
05	20.000	2.057	06	50.000	2.032	07	100.000	2.030	08	200.000	1.844

n-Heptane Average RF RSD = 7.9 Average RF = 0.3362

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3931	02	1.000	0.3490	03	2.000	0.3457	04	5.000	0.3113
05	20.000	0.3290	06	50.000	0.3160	07	100.000	0.3243	08	200.000	0.3210

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

n-Propylbenzene Average RF RSD = 8.2 Average RF = 3.017

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.331	02	1.000	2.887	03	2.000	3.002	04	5.000	3.091
05	20.000	3.226	06	50.000	3.108	07	100.000	2.979	08	200.000	2.512

o-Xylene Average RF RSD = 10.0 Average RF = 0.5875

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5732	02	1.000	0.4872	03	2.000	0.5455	04	5.000	0.5689
05	20.000	0.6098	06	50.000	0.5967	07	100.000	0.6375	08	200.000	0.6812

sec-Butylbenzene Average RF RSD = 5.6 Average RF = 2.512

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.442	02	1.000	2.590	03	2.000	2.502	04	5.000	2.576
05	20.000	2.695	06	50.000	2.570	07	100.000	2.502	08	200.000	2.215

tert-Amyl Methyl Ether Average RF RSD = 4.1 Average RF = 1.133

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.232	02	1.000	1.149	03	2.000	1.092	04	5.000	1.109
05	20.000	1.145	06	50.000	1.101	07	100.000	1.095	08	200.000	1.144

tert-Butylbenzene Average RF RSD = 5.4 Average RF = 1.795

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.908	02	1.000	1.639	03	2.000	1.827	04	5.000	1.838
05	20.000	1.884	06	50.000	1.822	07	100.000	1.772	08	200.000	1.670

trans-1,2-Dichloroethene Average RF RSD = 3.7 Average RF = 0.4373

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4269	02	1.000	0.4113	03	2.000	0.4259	04	5.000	0.4367
05	20.000	0.4418	06	50.000	0.4403	07	100.000	0.4528	08	200.000	0.4624

trans-1,3-Dichloropropene Average RF RSD = 8.3 Average RF = 0.3738

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3493	02	1.000	0.3534	03	2.000	0.3304	04	5.000	0.3515
05	20.000	0.3949	06	50.000	0.3922	07	100.000	0.4092	08	200.000	0.4091

trans-1,4-Dichloro-2-butene Average RF RSD = 11.7 Average RF = 0.1092

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.08281	02	1.000	0.1193	03	2.000	0.1159	04	5.000	0.09704
05	20.000	0.1145	06	50.000	0.1179	07	100.000	0.1162	08	200.000	0.1099

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	0.90	-9.8	03	2.000	1.69	-15.3
04	5.000	4.64	-7.2	05	20.000	21.41	7.0	06	50.000	52.06	4.1
07	100.000	110.62	10.6	08	200.000	230.42	15.2				

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.9	02	1.000	0.96	-3.9	03	2.000	1.97	-1.7
04	5.000	4.91	-1.8	05	20.000	20.53	2.7	06	50.000	48.91	-2.2
07	100.000	99.75	-0.3	08	200.000	200.48	0.2				

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.4	02	1.000	1.04	4.1	03	2.000	1.88	-6.1
04	5.000	5.07	1.4	05	20.000	21.51	7.6	06	50.000	50.92	1.8
07	100.000	99.66	-0.3	08	200.000	193.91	-3.0				

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	15.0	02	1.000	0.99	-0.7	03	2.000	1.77	-11.7
04	5.000	4.83	-3.4	05	20.000	20.30	1.5	06	50.000	48.89	-2.2
07	100.000	100.85	0.9	08	200.000	201.39	0.7				

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.8	02	1.000	0.99	-1.5	03	2.000	1.96	-1.8
04	5.000	4.88	-2.3	05	20.000	20.43	2.1	06	50.000	48.46	-3.1
07	100.000	99.58	-0.4	08	200.000	204.32	2.2				

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.5	02	1.000	1.00	0.1	03	2.000	1.97	-1.4
04	5.000	5.01	0.3	05	20.000	20.79	4.0	06	50.000	49.54	-0.9
07	100.000	99.72	-0.3	08	200.000	199.34	-0.3				

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.3	02	1.000	0.93	-7.3	03	2.000	1.96	-2.0
04	5.000	4.74	-5.3	05	20.000	20.17	0.8	06	50.000	48.61	-2.8
07	100.000	101.26	1.3	08	200.000	209.78	4.9				

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.7	02	1.000	0.98	-1.6	03	2.000	1.94	-2.8
04	5.000	4.91	-1.7	05	20.000	20.45	2.2	06	50.000	49.44	-1.1
07	100.000	103.25	3.2	08	200.000	206.73	3.4				

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.65	30.2	02	1.000	0.98	-1.5	03	2.000	2.02	0.8
04	5.000	4.69	-6.2	05	20.000	20.26	1.3	06	50.000	48.88	-2.2
07	100.000	92.66	-7.3	08	200.000	170.23	-14.9				

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.2	02	1.000	1.02	1.8	03	2.000	2.12	6.0
04	5.000	4.93	-1.3	05	20.000	21.02	5.1	06	50.000	48.45	-3.1
07	100.000	92.69	-7.3	08	200.000	175.31	-12.3				

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.64	28.2	02	1.000	0.93	-7.2	03	2.000	1.97	-1.3
04	5.000	4.77	-4.6	05	20.000	20.48	2.4	06	50.000	49.44	-1.1
07	100.000	93.98	-6.0	08	200.000	179.16	-10.4				

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.8	02	1.000	0.92	-8.5	03	2.000	1.93	-3.6
04	5.000	5.08	1.6	05	20.000	21.46	7.3	06	50.000	52.13	4.3
07	100.000	101.56	1.6	08	200.000	183.11	-8.4				

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.02	2.4	03	2.000	1.90	-4.9	04	5.000	5.03	0.5
05	20.000	20.97	4.8	06	50.000	50.01	0.0	07	100.000	101.28	1.3
08	200.000	191.78	-4.1								

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	0.99	-1.0	03	2.000	1.80	-10.1
04	5.000	4.78	-4.4	05	20.000	21.28	6.4	06	50.000	51.31	2.6
07	100.000	104.04	4.0	08	200.000	206.43	3.2				

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.8	02	1.000	1.00	0.2	03	2.000	1.88	-6.1
04	5.000	5.23	4.7	05	20.000	18.82	-5.9	06	50.000	49.25	-1.5
07	100.000	96.30	-3.7	08	200.000	205.08	2.5				

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.7	02	1.000	0.95	-5.0	03	2.000	1.95	-2.5
04	5.000	4.94	-1.3	05	20.000	20.88	4.4	06	50.000	50.34	0.7
07	100.000	101.28	1.3	08	200.000	199.47	-0.3				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.2	02	1.000	0.96	-3.8	03	2.000	1.89	-5.4
04	5.000	4.82	-3.7	05	20.000	20.64	3.2	06	50.000	49.16	-1.7
07	100.000	101.45	1.4	08	200.000	203.45	1.7				

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	50.000	49.78	-0.4	06	50.000	49.80	-0.4	04	50.000	49.49	-1.0
02	50.000	50.82	1.6	03	50.000	50.65	1.3	05	50.000	49.88	-0.2
07	50.000	49.81	-0.4	01	50.000	49.78	-0.4				

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.7	02	1.000	0.96	-4.4	03	2.000	2.09	4.7
04	5.000	4.79	-4.2	05	20.000	20.99	5.0	06	50.000	50.38	0.8
07	100.000	103.73	3.7	08	200.000	208.25	4.1				

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.5	02	1.000	1.03	3.4	03	2.000	2.15	7.4
04	5.000	5.03	0.5	05	20.000	19.17	-4.2	06	50.000	47.45	-5.1
07	100.000	91.05	-9.0	08	200.000	176.79	-11.6				

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.2	02	1.000	0.95	-5.1	03	2.000	1.92	-3.8
04	5.000	4.94	-1.2	05	20.000	20.98	4.9	06	50.000	52.26	4.5
07	100.000	104.61	4.6	08	200.000	192.45	-3.8				

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.1	02	1.000	0.92	-8.4	03	2.000	1.85	-7.7
04	5.000	5.07	1.4	05	20.000	20.81	4.1	06	50.000	50.53	1.1
07	100.000	100.08	0.1	08	200.000	190.60	-4.7				

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.5	02	1.000	0.87	-12.5	03	2.000	1.97	-1.6
04	5.000	4.90	-2.1	05	20.000	20.61	3.0	06	50.000	49.98	0.0
07	100.000	101.24	1.2	08	200.000	203.02	1.5				

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.6	02	1.000	0.95	-5.3	03	2.000	2.02	1.1
04	5.000	4.97	-0.6	05	20.000	20.77	3.9	06	50.000	49.64	-0.7
07	100.000	98.72	-1.3	08	200.000	188.87	-5.6				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	41.31	3.3	04	100.000	109.60	9.6	05	400.000	392.34	-1.9
06	1000.000	954.83	-4.5	07	2000.000	1,927.03	-3.6	08	4000.000	3,888.59	-2.8

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	51.88	3.8	03	100.000	92.72	-7.3	04	250.000	219.06	-12.4
05	1000.000	989.13	-1.1	06	2500.000	2,530.39	1.2	07	5000.000	5,239.06	4.8
08	10000.000	11,098.80	11.0								

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.8	02	1.000	0.94	-6.2	03	2.000	1.94	-3.2
04	5.000	5.13	2.5	05	20.000	19.16	-4.2	06	50.000	47.63	-4.7
07	100.000	98.31	-1.7	08	200.000	213.48	6.7				

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.8	02	1.000	0.98	-1.8	03	2.000	2.07	3.5
04	5.000	5.04	0.8	05	20.000	18.95	-5.2	06	50.000	48.95	-2.1
07	100.000	97.10	-2.9	08	200.000	204.04	2.0				

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.7	02	1.000	0.91	-9.4	03	2.000	1.99	-0.5
04	5.000	4.87	-2.5	05	20.000	20.36	1.8	06	50.000	49.11	-1.8
07	100.000	99.26	-0.7	08	200.000	201.01	0.5				

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.36	**35.6**	03	2.000	2.14	6.9	04	5.000	4.65	-7.0
05	20.000	19.76	-1.2	06	50.000	46.43	-7.1	07	100.000	88.08	-11.9
08	200.000	169.29	-15.4								

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.29	28.8	03	2.000	2.07	3.7	04	5.000	4.97	-0.5
05	20.000	19.60	-2.0	06	50.000	47.73	-4.5	07	100.000	89.54	-10.5
08	200.000	170.20	-14.9								

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.64	9.0	02	3.000	2.93	-2.5	03	6.000	6.12	1.9
04	15.000	15.47	3.2	05	60.000	61.09	1.8	06	150.000	149.04	-0.6
07	300.000	287.66	-4.1	08	600.000	547.98	-8.7				

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.8	02	1.000	0.94	-5.9	03	2.000	2.03	1.3
04	5.000	5.12	2.3	05	20.000	19.31	-3.4	06	50.000	48.66	-2.7
07	100.000	92.94	-7.1	08	200.000	189.21	-5.4				

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.9	02	1.000	1.05	5.0	03	2.000	2.09	4.5
04	5.000	5.00	0.0	05	20.000	19.38	-3.1	06	50.000	47.82	-4.4
07	100.000	92.30	-7.7	08	200.000	185.28	-7.4				

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.95	-2.6	04	5.000	4.54	-9.1	05	20.000	20.43	2.1
06	50.000	50.33	0.7	07	100.000	104.45	4.5	08	200.000	209.01	4.5

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.4	02	1.000	0.96	-4.4	03	2.000	1.94	-2.9
04	5.000	4.96	-0.8	05	20.000	20.37	1.9	06	50.000	50.32	0.6
07	100.000	104.44	4.4	08	200.000	211.03	5.5				

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.61	21.7	02	1.000	0.96	-4.4	03	2.000	1.96	-2.1
04	5.000	5.02	0.4	05	20.000	20.35	1.8	06	50.000	48.56	-2.9
07	100.000	92.55	-7.5	08	200.000	185.80	-7.1				

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.85	-15.3	03	2.000	1.75	-12.6	04	5.000	5.09	1.8
05	20.000	21.15	5.7	06	50.000	51.74	3.5	07	100.000	109.97	10.0
08	200.000	213.92	7.0								

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.5	02	1.000	0.99	-1.4	03	2.000	2.00	0.1
04	5.000	5.07	1.5	05	20.000	21.12	5.6	06	50.000	50.96	1.9
07	100.000	98.42	-1.6	08	200.000	180.70	-9.6				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.78	-10.9	04	5.000	4.61	-7.7	05	20.000	20.79	4.0
06	50.000	50.79	1.6	07	100.000	107.20	7.2	08	200.000	211.84	5.9

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	18.42	-7.9	03	40.000	37.79	-5.5	04	100.000	96.89	-3.1
05	400.000	410.06	2.5	06	1000.000	1,017.50	1.7	07	2000.000	2,125.79	6.3
08	4000.000	4,239.75	6.0								

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	11.00	10.0	02	20.000	18.81	-6.0	03	40.000	37.37	-6.6
04	100.000	96.03	-4.0	05	400.000	413.35	3.3	06	1000.000	1,003.06	0.3
07	2000.000	2,023.03	1.2	08	4000.000	4,066.77	1.7				

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	2.38	19.1	03	4.000	3.22	-19.5	04	10.000	8.54	-14.6
05	40.000	38.56	-3.6	06	100.000	98.70	-1.3	07	200.000	215.46	7.7
08	400.000	448.65	12.2								

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	16.36	-18.2	03	40.000	40.55	1.4	04	100.000	92.66	-7.3
05	400.000	417.55	4.4	06	1000.000	1,056.41	5.6	07	2000.000	2,085.50	4.3
08	4000.000	4,394.52	9.9								

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	1.10	9.6	02	2.000	2.01	0.6	03	4.000	3.94	-1.5
04	10.000	10.55	5.5	05	40.000	40.99	2.5	06	100.000	99.38	-0.6
07	200.000	192.00	-4.0	08	400.000	351.72	-12.1				

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	0.96	-3.6	03	2.000	2.03	1.4
04	5.000	5.12	2.4	05	20.000	19.83	-0.9	06	50.000	48.51	-3.0
07	100.000	96.57	-3.4	08	200.000	206.75	3.4				

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.4	02	1.000	0.97	-2.5	03	2.000	2.06	2.8
04	5.000	5.10	2.0	05	20.000	21.09	5.4	06	50.000	49.93	-0.1
07	100.000	101.17	1.2	08	200.000	189.53	-5.2				

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	19.6	02	1.000	0.96	-3.8	03	2.000	1.92	-4.1
04	5.000	4.74	-5.1	05	20.000	18.68	-6.6	06	50.000	47.95	-4.1
07	100.000	98.42	-1.6	08	200.000	211.57	5.8				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	I

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.1	02	1.000	1.03	2.6	03	2.000	2.02	1.1
04	5.000	5.27	5.4	05	20.000	20.60	3.0	06	50.000	49.60	-0.8
07	100.000	94.48	-5.5	08	200.000	183.93	-8.0				

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	49.75	-0.5	04	50.000	49.54	-0.9	01	50.000	48.92	-2.2
06	50.000	49.70	-0.6	05	50.000	49.88	-0.2	07	50.000	51.22	2.4
08	50.000	51.52	3.0	03	50.000	49.47	-1.1				

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	7.0	02	1.000	0.91	-8.9	03	2.000	1.87	-6.5
04	5.000	5.18	3.6	05	20.000	21.20	6.0	06	50.000	51.65	3.3
07	100.000	103.19	3.2	08	200.000	184.74	-7.6				

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	1.00	0.2	03	2.000	1.98	-1.1
04	5.000	5.07	1.3	05	20.000	21.31	6.5	06	50.000	51.40	2.8
07	100.000	100.90	0.9	08	200.000	180.30	-9.8				

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.02	0.8	04	5.000	4.68	-6.4	05	20.000	19.87	-0.6
06	50.000	49.17	-1.7	07	100.000	104.99	5.0	08	200.000	205.88	2.9

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.49	9.9	05	20.000	19.87	-0.6	06	50.000	47.78	-4.4
07	100.000	97.16	-2.8	08	200.000	196.07	-2.0				

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	9.80	-2.0	04	25.000	24.31	-2.7	05	100.000	100.53	0.5
06	250.000	248.73	-0.5	07	500.000	503.70	0.7	08	1000.000	1,039.79	4.0

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	5.58	11.7	03	10.000	8.14	-18.6	04	25.000	21.68	-13.3
05	100.000	102.16	2.2	06	250.000	268.76	7.5	07	500.000	541.71	8.3
08	1000.000	963.47	-3.7								

Initial Calibration - Detailed Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	3.06	22.6	02	5.000	4.52	-9.7	03	10.000	8.75	-12.5
04	25.000	23.43	-6.3	05	100.000	104.67	4.7	06	250.000	249.78	-0.1
07	500.000	501.58	0.3	08	1000.000	1,010.12	1.0				

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.1	02	1.000	0.94	-5.7	03	2.000	1.90	-5.0
04	5.000	4.87	-2.5	05	20.000	20.45	2.3	06	50.000	49.16	-1.7
07	100.000	101.23	1.2	08	200.000	198.70	-0.6				

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.1	02	1.000	0.97	-2.8	03	2.000	1.95	-2.7
04	5.000	5.17	3.4	05	20.000	21.09	5.5	06	50.000	50.40	0.8
07	100.000	98.56	-1.4	08	200.000	194.20	-2.9				

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.5	02	1.000	1.01	1.1	03	2.000	1.94	-2.9
04	5.000	4.80	-3.9	05	20.000	20.12	0.6	06	50.000	48.53	-2.9
07	100.000	95.89	-4.1	08	200.000	187.39	-6.3				

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.2	02	1.000	0.93	-7.3	03	2.000	1.86	-7.0
04	5.000	4.88	-2.4	05	20.000	20.78	3.9	06	50.000	50.39	0.8
07	100.000	105.85	5.9	08	200.000	209.98	5.0				

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.2	02	1.000	0.81	-19.4	03	2.000	1.70	-15.0
04	5.000	4.85	-2.9	05	20.000	21.99	9.9	06	50.000	55.77	11.5
07	100.000	111.33	11.3	08	200.000	219.32	9.7				

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.67	33.5	02	1.000	1.13	12.6	03	2.000	2.10	4.8
04	5.000	4.87	-2.7	05	20.000	17.65	-11.8	06	50.000	42.63	-14.7
07	100.000	87.49	-12.5	08	200.000	181.56	-9.2				

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.1	02	1.000	0.98	-1.5	03	2.000	1.95	-2.7
04	5.000	4.97	-0.6	05	20.000	20.26	1.3	06	50.000	49.41	-1.2
07	100.000	99.29	-0.7	08	200.000	190.53	-4.7				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	0.97	-3.0	03	2.000	1.99	-0.5
04	5.000	4.68	-6.5	05	20.000	20.55	2.7	06	50.000	49.59	-0.8
07	100.000	103.92	3.9	08	200.000	213.17	6.6				

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.91	-9.1	03	2.000	1.92	-4.2
04	5.000	4.90	-2.0	05	20.000	21.06	5.3	06	50.000	50.98	2.0
07	100.000	104.61	4.6	08	200.000	208.16	4.1				

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.2	02	1.000	0.95	-5.5	03	2.000	1.87	-6.3
04	5.000	5.04	0.7	05	20.000	21.13	5.6	06	50.000	50.90	1.8
07	100.000	102.86	2.9	08	200.000	203.94	2.0				

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.2	02	1.000	0.91	-9.5	03	2.000	1.98	-1.1
04	5.000	5.26	5.2	05	20.000	20.61	3.0	06	50.000	50.24	0.5
07	100.000	100.14	0.1	08	200.000	200.93	0.5				

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.9	02	1.000	0.96	-4.0	03	2.000	1.99	-0.4
04	5.000	4.88	-2.3	05	20.000	21.06	5.3	06	50.000	50.53	1.1
07	100.000	100.43	0.4	08	200.000	193.87	-3.1				

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.3	02	1.000	0.90	-9.9	03	2.000	2.07	3.3
04	5.000	4.90	-1.9	05	20.000	19.09	-4.5	06	50.000	48.55	-2.9
07	100.000	97.62	-2.4	08	200.000	204.16	2.1				

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	12.68	26.8	02	20.000	22.20	11.0	03	40.000	39.16	-2.1
04	100.000	96.13	-3.9	05	400.000	408.48	2.1	06	1000.000	942.97	-5.7
07	2000.000	1,783.00	-10.8	08	4000.000	3,304.19	-17.4				

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.8	02	1.000	0.85	-14.8	03	2.000	1.79	-10.5
04	5.000	4.51	-9.7	05	20.000	21.02	5.1	06	50.000	53.36	6.7
07	100.000	111.12	11.1	08	200.000	227.75	13.9				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	50.08	0.2	05	50.000	50.04	0.1	08	50.000	50.66	1.3
04	50.000	50.05	0.1	01	50.000	49.26	-1.5	06	50.000	49.55	-0.9
07	50.000	50.44	0.9	03	50.000	49.93	-0.1				

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.3	02	1.000	0.96	-4.3	03	2.000	1.99	-0.3
04	5.000	4.78	-4.3	05	20.000	20.70	3.5	06	50.000	48.87	-2.3
07	100.000	101.53	1.5	08	200.000	201.77	0.9				

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.4	02	1.000	0.93	-7.2	03	2.000	1.87	-6.7
04	5.000	4.39	-12.2	05	20.000	22.78	13.9	06	50.000	53.38	6.8
07	100.000	106.64	6.6	08	200.000	208.57	4.3				

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.9	02	1.000	1.00	-0.1	03	2.000	2.01	0.4
04	5.000	5.20	4.0	05	20.000	19.50	-2.5	06	50.000	49.58	-0.8
07	100.000	96.62	-3.4	08	200.000	191.21	-4.4				

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	0.98	-1.8	03	2.000	1.93	-3.7
04	5.000	4.92	-1.6	05	20.000	20.37	1.9	06	50.000	48.86	-2.3
07	100.000	99.73	-0.3	08	200.000	199.42	-0.3				

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.7	02	1.000	0.98	-2.0	03	2.000	1.94	-3.0
04	5.000	4.86	-2.8	05	20.000	20.68	3.4	06	50.000	49.81	-0.4
07	100.000	100.27	0.3	08	200.000	205.60	2.8				

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.1	02	1.000	0.96	-3.5	03	2.000	1.99	-0.3
04	5.000	5.13	2.5	05	20.000	20.25	1.3	06	50.000	49.16	-1.7
07	100.000	97.59	-2.4	08	200.000	204.03	2.0				

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.7	02	1.000	0.94	-5.8	03	2.000	1.82	-9.0
04	5.000	4.63	-7.4	05	20.000	21.06	5.3	06	50.000	52.31	4.6
07	100.000	107.52	7.5	08	200.000	215.00	7.5				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	1.00	0.3	03	2.000	1.94	-3.1
04	5.000	5.00	0.1	05	20.000	20.20	1.0	06	50.000	49.60	-0.8
07	100.000	97.37	-2.6	08	200.000	204.26	2.1				

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.5	02	1.000	0.92	-8.0	03	2.000	1.94	-3.1
04	5.000	4.92	-1.7	05	20.000	20.90	4.5	06	50.000	49.75	-0.5
07	100.000	103.64	3.6	08	200.000	213.46	6.7				

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.21	21.1	03	2.000	2.13	6.6	04	5.000	4.85	-3.0
05	20.000	20.36	1.8	06	50.000	48.21	-3.6	07	100.000	91.25	-8.8
08	200.000	171.79	-14.1								

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.93	-7.2	03	2.000	1.43	-28.3	04	5.000	4.05	-18.9
05	20.000	21.63	8.2	06	50.000	57.29	14.6	07	100.000	118.22	18.2
08	200.000	226.83	13.4								

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.1	02	1.000	0.98	-1.9	03	2.000	2.02	1.2
04	5.000	5.19	3.9	05	20.000	21.47	7.4	06	50.000	51.23	2.5
07	100.000	98.76	-1.2	08	200.000	174.25	-12.9				

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.07	6.6	03	2.000	1.97	-1.4	04	5.000	4.50	-10.0
05	20.000	20.83	4.1	06	50.000	49.94	-0.1	07	100.000	100.07	0.1
08	200.000	201.21	0.6								

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.93	-7.0	03	2.000	2.03	1.4	04	5.000	4.78	-4.5
05	20.000	20.48	2.4	06	50.000	51.28	2.6	07	100.000	99.11	-0.9
08	200.000	212.07	6.0								

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.0	02	1.000	0.99	-0.9	03	2.000	1.90	-5.1
04	5.000	4.45	-11.0	05	20.000	20.37	1.9	06	50.000	50.45	0.9
07	100.000	104.75	4.7	08	200.000	204.94	2.5				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.2	02	1.000	0.96	-4.0	03	2.000	2.00	0.0
04	5.000	4.84	-3.2	05	20.000	20.66	3.3	06	50.000	49.87	-0.3
07	100.000	100.66	0.7	08	200.000	202.69	1.3				

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.6	02	1.000	0.94	-6.2	03	2.000	2.01	0.3
04	5.000	4.89	-2.2	05	20.000	18.93	-5.3	06	50.000	48.25	-3.5
07	100.000	98.26	-1.7	08	200.000	208.29	4.1				

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.4	02	1.000	0.96	-4.4	03	2.000	1.97	-1.4
04	5.000	4.91	-1.8	05	20.000	21.40	7.0	06	50.000	51.23	2.5
07	100.000	98.48	-1.5	08	200.000	176.62	-11.7				

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.42	-3.2	02	5.000	5.71	14.2	03	10.000	8.94	-10.6
04	25.000	23.94	-4.3	05	100.000	102.98	3.0	06	250.000	245.61	-1.8
07	500.000	508.23	1.6	08	1000.000	1,009.42	0.9				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.2	02	1.000	0.81	-18.6	03	2.000	1.72	-13.8
04	5.000	4.85	-3.1	05	20.000	21.64	8.2	06	50.000	53.72	7.4
07	100.000	114.35	14.4	08	200.000	233.25	16.6				

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.3	02	1.000	0.83	-17.0	03	2.000	1.90	-4.8
04	5.000	4.88	-2.4	05	20.000	20.72	3.6	06	50.000	49.52	-1.0
07	100.000	104.21	4.2	08	200.000	216.33	8.2				

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.44	21.8	04	5.000	5.15	2.9	05	20.000	19.79	-1.0
06	50.000	45.65	-8.7	07	100.000	93.95	-6.0	08	200.000	182.08	-9.0

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.5	02	1.000	0.95	-4.9	03	2.000	1.95	-2.6
04	5.000	5.08	1.6	05	20.000	20.70	3.5	06	50.000	49.75	-0.5
07	100.000	102.36	2.4	08	200.000	196.13	-1.9				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	49.91	-0.2	04	50.000	50.27	0.5	05	50.000	49.97	-0.1
03	50.000	50.08	0.2	08	50.000	49.83	-0.3	02	50.000	50.19	0.4
01	50.000	49.54	-0.9	07	50.000	50.22	0.4				

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.6	02	1.000	0.98	-2.1	03	2.000	1.94	-3.0
04	5.000	4.83	-3.4	05	20.000	20.28	1.4	06	50.000	48.59	-2.8
07	100.000	101.38	1.4	08	200.000	203.79	1.9				

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.6	02	1.000	0.96	-4.3	03	2.000	1.96	-2.1
04	5.000	5.01	0.3	05	20.000	20.39	1.9	06	50.000	49.03	-1.9
07	100.000	99.06	-0.9	08	200.000	197.04	-1.5				

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.02	2.4	03	2.000	1.85	-7.7	04	5.000	4.23	-15.4
05	20.000	20.57	2.9	06	50.000	53.80	7.6	07	100.000	100.98	1.0
08	200.000	218.35	9.2								

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.3	02	1.000	0.96	-4.1	03	2.000	1.97	-1.6
04	5.000	4.82	-3.6	05	20.000	21.42	7.1	06	50.000	51.44	2.9
07	100.000	102.58	2.6	08	200.000	193.93	-3.0				

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.2	02	1.000	0.99	-1.2	03	2.000	1.94	-3.1
04	5.000	4.92	-1.7	05	20.000	19.66	-1.7	06	50.000	48.89	-2.2
07	100.000	98.68	-1.3	08	200.000	198.08	-1.0				

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.1	02	1.000	0.91	-9.0	03	2.000	1.83	-8.4
04	5.000	4.90	-2.0	05	20.000	21.16	5.8	06	50.000	51.12	2.2
07	100.000	105.36	5.4	08	200.000	209.87	4.9				

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	1.00	-0.5	02	2.000	1.74	-12.8	03	4.000	3.82	-4.5
04	10.000	9.49	-5.1	05	40.000	41.50	3.8	06	100.000	102.45	2.5
07	200.000	216.70	8.3	08	400.000	433.19	8.3				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-5.8	03	2.000	1.68	-16.1	04	5.000	4.78	-4.4
05	20.000	21.37	6.8	06	50.000	52.98	6.0	07	100.000	105.06	5.1
08	200.000	216.93	8.5								

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	0.90	-9.8	03	2.000	1.91	-4.6
04	5.000	4.97	-0.6	05	20.000	21.28	6.4	06	50.000	52.56	5.1
07	100.000	105.01	5.0	08	200.000	190.78	-4.6				

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.9	02	1.000	1.04	3.8	03	2.000	2.06	2.8
04	5.000	4.63	-7.4	05	20.000	19.57	-2.1	06	50.000	47.00	-6.0
07	100.000	96.46	-3.5	08	200.000	190.97	-4.5				

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.4	02	1.000	0.96	-4.3	03	2.000	1.99	-0.5
04	5.000	5.12	2.5	05	20.000	21.38	6.9	06	50.000	51.50	3.0
07	100.000	98.74	-1.3	08	200.000	166.55	-16.7				

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	0.83	-17.1	03	2.000	1.86	-7.1
04	5.000	4.84	-3.2	05	20.000	20.76	3.8	06	50.000	50.78	1.6
07	100.000	108.51	8.5	08	200.000	231.90	15.9				

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.8	02	1.000	1.03	3.1	03	2.000	1.99	-0.4
04	5.000	5.13	2.6	05	20.000	21.46	7.3	06	50.000	51.16	2.3
07	100.000	99.61	-0.4	08	200.000	176.38	-11.8				

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.7	02	1.000	1.01	1.4	03	2.000	1.93	-3.6
04	5.000	4.89	-2.2	05	20.000	20.20	1.0	06	50.000	48.57	-2.9
07	100.000	96.60	-3.4	08	200.000	201.86	0.9				

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.3	02	1.000	0.91	-8.7	03	2.000	2.04	1.8
04	5.000	5.12	2.4	05	20.000	20.99	5.0	06	50.000	50.75	1.5
07	100.000	98.71	-1.3	08	200.000	186.04	-7.0				

Initial Calibration - Detailed Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	0.94	-6.0	03	2.000	1.95	-2.6
04	5.000	4.99	-0.1	05	20.000	20.21	1.0	06	50.000	50.35	0.7
07	100.000	103.56	3.6	08	200.000	211.50	5.8				

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.5	02	1.000	0.95	-5.4	03	2.000	1.77	-11.6
04	5.000	4.70	-6.0	05	20.000	21.13	5.7	06	50.000	52.47	4.9
07	100.000	109.47	9.5	08	200.000	218.92	9.5				

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.38	-24.2	02	1.000	1.09	9.2	03	2.000	2.12	6.2
04	5.000	4.44	-11.1	05	20.000	20.97	4.8	06	50.000	54.00	8.0
07	100.000	106.37	6.4	08	200.000	201.31	0.7				

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:45:10 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	857564	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1283280	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1155742	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	562723	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	369287	49.26	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.52%				
48) surr1,1,2-dichloroetha...	4.664	65	449488	49.78	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.56%				
65) SURR3,Toluene-d8	7.322	98	1578875	49.54	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.08%				
70) SURR2,BFB	9.791	95	579669	48.92	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.84%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.165	85	4195	0.47	ppb		92
3) Chloromethane	1.262	50	6222	0.51	ppb		85
4) Vinyl Chloride	1.323	62	5856	0.50	ppb		91
5) Bromomethane	1.512	94	5281	0.67	ppb		92
6) Chloroethane	1.567	64	3496	0.49	ppb		93
7) Freon 21	1.671	67	9222m	0.54	ppb		
8) Trichlorofluoromethane	1.719	101	7138	0.54	ppb	#	76
9) Diethyl Ether	1.884	59	2923	0.51	ppb		94
10) Freon 123a	1.872	67	5299m	0.55	ppb		
11) Freon 123	1.908	83	5446	0.53	ppb		86
12) Acrolein	1.957	56	1329	2.88	ppb		94
13) 1,1-Diclethene	2.042	96	3386	0.55	ppb		91
14) Freon 113	2.042	101	3401	0.52	ppb		85
16) 2-Propanol	2.122	45	2846	10.66	ppb	#	31
17) Iodomethane	2.152	142	4623	0.53	ppb		93
18) Carbon Disulfide	2.207	76	12627	0.55	ppb		94
20) Allyl Chloride	2.274	76	2094	0.48	ppb	#	88
21) Methyl Acetate	2.280	43	1766	0.46	ppb		77
22) Methylene Chloride	2.359	84	4012	0.54	ppb		96
23) TBA	2.402	59	4911	11.00	ppb		90
24) Acrylonitrile	2.536	53	5468	3.06	ppb	#	81
25) Methyl-t-Butyl Ether	2.579	73	9812	0.51	ppb		92
26) trans-1,2-Dichloroethene	2.591	96	3661	0.49	ppb		90
28) 1,1-Diclethane	2.945	63	7122	0.49	ppb		85
29) Vinyl Acetate	2.993	86	699	0.64	ppb	#	1
30) DIPE	3.018	45	14704	0.51	ppb		96
31) 2-Chloro-1,3-Butadiene	3.036	53	7187	0.48	ppb		93
32) ETBE	3.396	59	12165	0.52	ppb		92
33) 2,2-Dichloropropane	3.566	77	6688	0.56	ppb		95
34) cis-1,2-Dichloroethene	3.542	96	4898	0.56	ppb	#	73
36) Propionitrile	3.621	54	1545m	2.42	ppb		
37) Bromochloromethane	3.841	130	2729	0.59	ppb	#	81
38) Methacrylonitrile	3.810	67	921	0.45	ppb	#	73
40) Chloroform	3.944	83	6874	0.51	ppb	#	81
41) 1,1,1-Trichloroethane	4.207	97	6650	0.53	ppb	#	1

KR 1/16/14

W011514.M Thu Jan 16 10:45:52 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:45:10 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	5.024	73	10565	0.54	ppb		95
44)	Cyclohexane	4.322	41	4827	0.58	ppb		91
46)	Carbontetrachloride	4.463	121	1554m	0.49	ppb		
47)	1,1-Dichloropropene	4.469	75	4854	0.49	ppb		86
49)	Benzene	4.780	78	17897	0.56	ppb		90
50)	1,2-Dichloroethane	4.798	62	5700	0.54	ppb		87
51)	Iso-Butyl Alcohol	4.652	43	3219m	15.16	ppb		
52)	n-Heptane	5.334	43	5045	0.58	ppb		87
53)	1-Butanol	5.792	56	3286m	30.23	ppb		
54)	Trichloroethene	5.828	130	4359m	0.53	ppb		
55)	Methylcyclohexane	6.115	55	5184	0.57	ppb		86
56)	1,2-Diclpropane	6.121	63	3667m	0.45	ppb		
57)	Dibromomethane	6.267	93	1989	0.53	ppb	#	65
59)	Methyl Methacrylate	6.340	69	1988m	0.54	ppb		
60)	Bromodichloromethane	6.487	83	5018	0.51	ppb		80
61)	2-Nitropropane	6.743	41	2076	1.55	ppb	#	65
62)	2-Chloroethylvinyl Ether	6.889	63	1465	0.52	ppb		87
63)	cis-1,3-Dichloropropene	7.029	75	5968	0.51	ppb		91
66)	Toluene	7.395	91	17134	0.51	ppb		83
67)	trans-1,3-Dichloropropene	7.633	75	4483m	0.47	ppb		
68)	Ethyl Methacrylate	7.773	69	3696	0.49	ppb		80
69)	1,1,2-Trichloroethane	7.816	97	3198	0.58	ppb		90
72)	Tetrachloroethene	7.968	164	3311	0.55	ppb	#	85
74)	1,3-Dichloropropane	7.980	76	5576	0.55	ppb		83
75)	Dibromochloromethane	8.194	129	2955	0.49	ppb		84
76)	N-Butyl Acetate	8.248	43	4191	0.49	ppb		88
77)	1,2-Dibromoethane	8.297	107	2548	0.50	ppb	#	79
78)	Chlorobenzene	8.773	112	10384	0.50	ppb		99
79)	3-CBTF	8.785	180	6244	0.60	ppb		88
80)	4-CBTF	8.840	180	5149	0.55	ppb		92
81)	1,1,1,2-Tetrachloroethane	8.852	131	3439	0.48	ppb		92
82)	Ethylbenzene	8.889	106	5516	0.49	ppb	#	82
83)	(m+p)Xylene	8.998	106	13531	1.00	ppb	#	84
84)	o-Xylene	9.346	106	6625	0.49	ppb		90
85)	Styrene	9.358	104	9868	0.44	ppb		97
87)	Bromoform	9.492	173	1443	0.47	ppb		89
88)	2-CBTF	9.584	180	5777	0.61	ppb	#	73
89)	Isopropylbenzene	9.675	105	14893	0.51	ppb		97
90)	Cyclohexanone	9.724	55	3985	12.68	ppb	#	71
91)	trans-1,4-Dichloro-2-B...	9.968	53	466	0.38	ppb	#	77
92)	1,1,2,2-Tetrachloroethane	9.907	83	2727	0.47	ppb		78
93)	Bromobenzene	9.913	156	4131	0.50	ppb		94
94)	1,2,3-Trichloropropane	9.943	110	976	0.56	ppb	#	88
95)	n-Propylbenzene	10.023	91	18743	0.55	ppb		99
96)	2-Chlorotoluene	10.084	91	11155	0.52	ppb		93
97)	3-Chlorotoluene	10.132	91	11225	0.51	ppb		95
98)	4-Chlorotoluene	10.175	91	14048	0.53	ppb		87
99)	1,3,5-Trimethylbenzene	10.175	105	12455	0.50	ppb		88
100)	tert-Butylbenzene	10.437	119	10738	0.53	ppb		94
101)	1,2,4-Trimethylbenzene	10.480	105	13307	0.53	ppb		89
102)	3,4-DCBTF	10.541	214	3376	0.52	ppb		89
103)	sec-Butylbenzene	10.620	105	13741	0.49	ppb		91

W011514.M Thu Jan 16 10:45:52 2014 Page: 2

00106

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:45:10 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

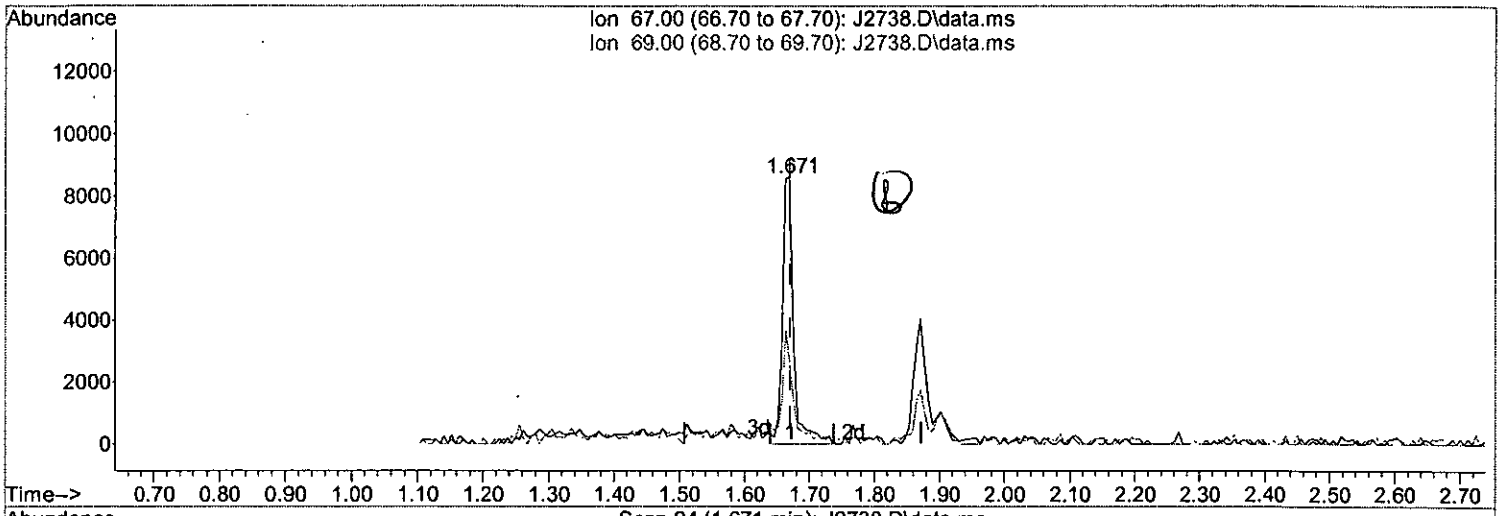
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
104) p-Isopropyltoluene	10.742	119	12313	0.50	ppb		89
105) 1,3-Dclbenz	10.699	146	8262	0.57	ppb		96
106) 1,4-Dclbenz	10.766	146	8176	0.54	ppb		82
107) 2,4-DCBTF	10.821	214	3514	0.60	ppb	#	76
108) 2,5-DCBTF	10.864	214	3793	0.56	ppb	#	72
109) n-Butylbenzene	11.071	91	11209	0.52	ppb		89
110) 1,2-Dclbenz	11.071	146	7134	0.51	ppb		92
111) 1,2-Dibromo-3-chloropr...	11.626	157	431	0.44	ppb	#	78
112) Trielution Dichlorotol...	11.730	125	18141	1.64	ppb	#	92
113) 1,3,5 Trichlorobenzene	11.778	180	5629	0.59	ppb		93
114) Coelution Dichlorotoluene	11.998	125	12876	1.10	ppb		98
115) 1,2,4-Tcbenzene	12.162	180	5224	0.64	ppb		97
116) Hexachlorobt	12.266	225	3128	0.90	ppb		87
117) Naphthalen	12.303	128	8183	0.56	ppb		97
118) 1,2,3-Tclbenzene	12.437	180	4336	0.65	ppb	#	75
119) 2,4,5-Trichlorotolene	12.851	159	5095m	1.10	ppb		
120) 2,3,6-Trichlorotoluene	12.912	159	4709	1.13	ppb		89

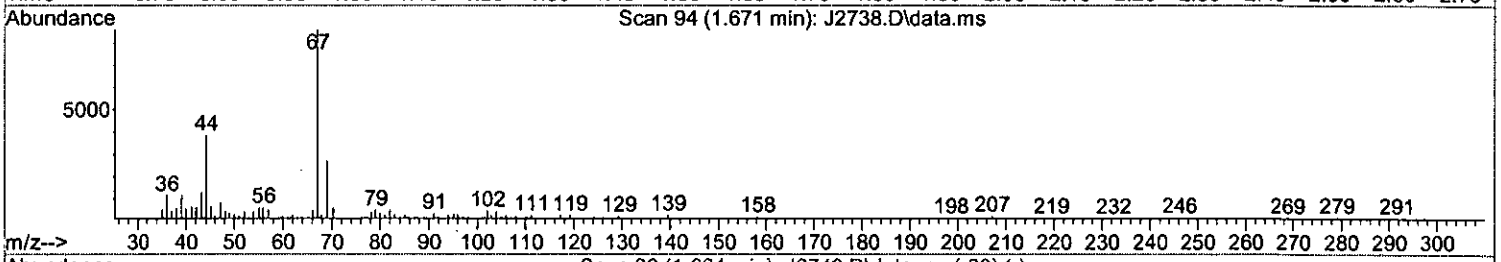
(#) = qualifier out of range (m) = manual integration (+) = signals summed

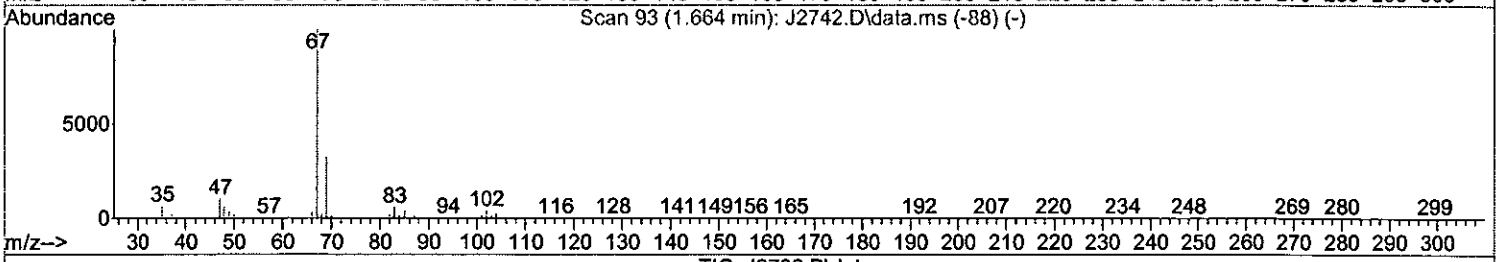
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(7) Freon 21

1.671min (0.000) 0.59 ppb

response 10202

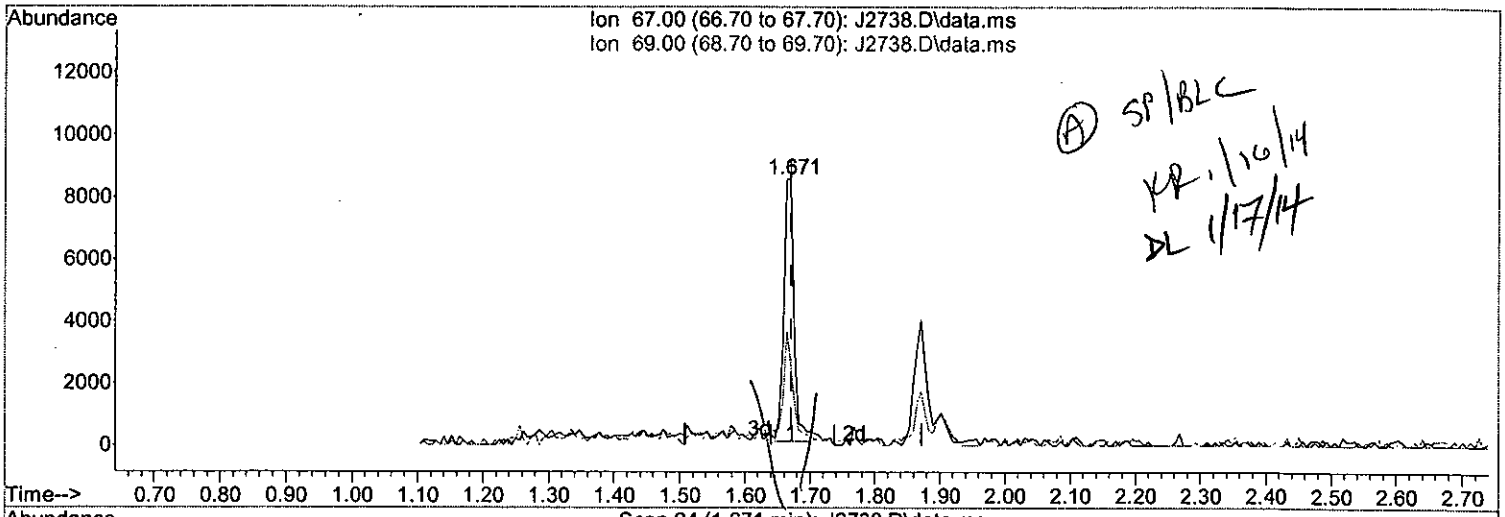
Ion	Exp%	Act%
67.00	100	100
69.00	32.50	31.08
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 10:38:49 2014 Page: 1

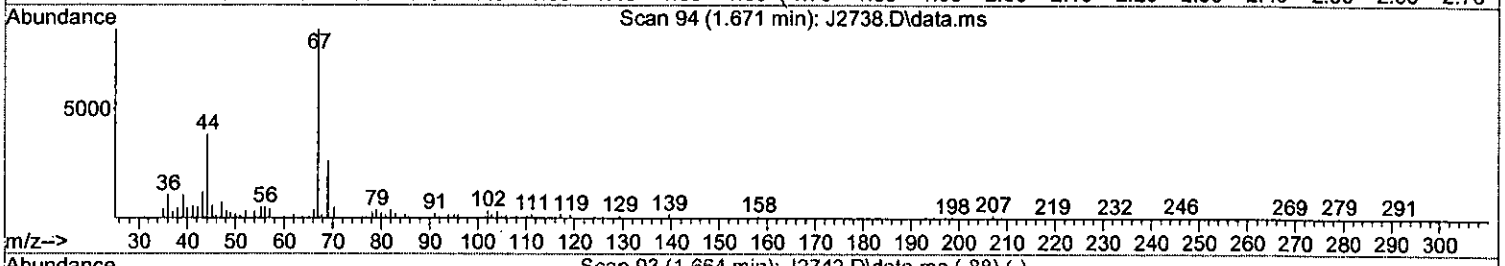
Quantitation Report (Qedit)

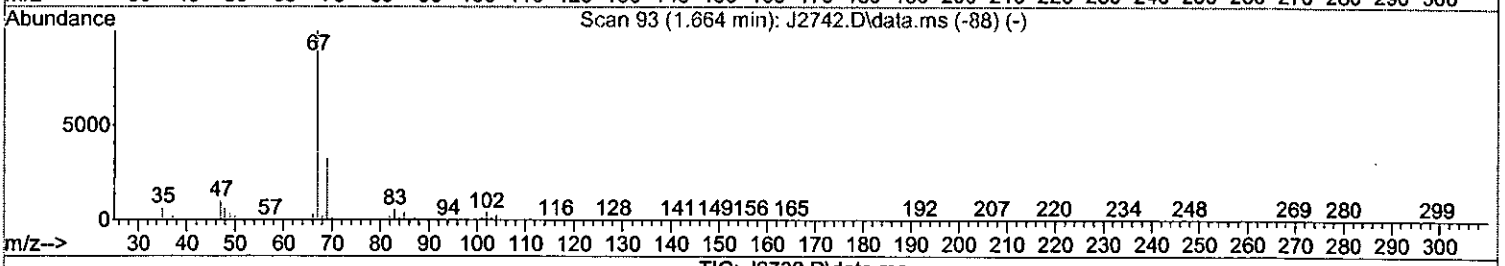
Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



A SP/BLC KP 1/16/14 DL 1/17/14





TIC: J2738.D\data.ms

(7) Freon 21

1.671min (0.000) 0.54 ppb m

response 9222

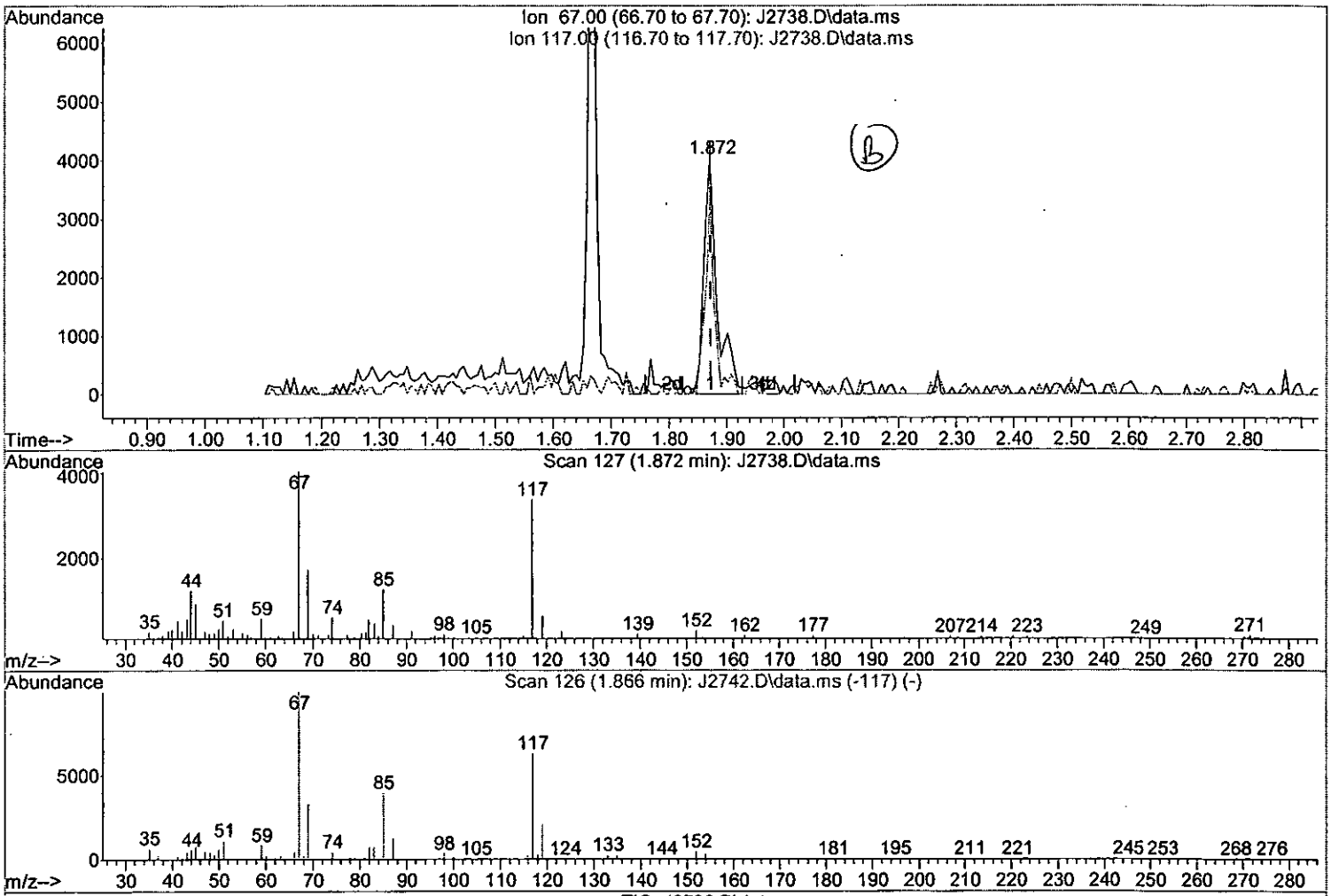
Ion	Exp%	Act%
67.00	100	100
69.00	32.50	31.08
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 10:38:58 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2738.D\data.ms

(10) Freon 123a

1.872min (0.000) 0.68 ppb

response 6589

Ion	Exp%	Act%
67.00	100	100
117.00	63.10	83.49#
0.00	0.00	0.00
0.00	0.00	0.00

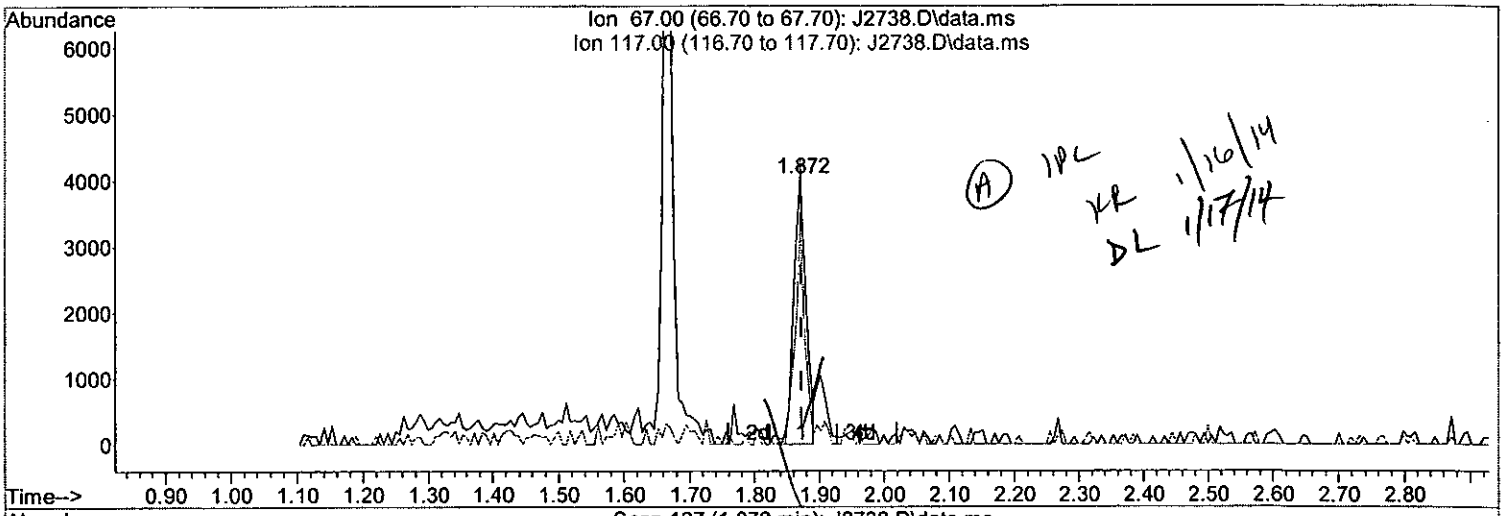
W011514.M Thu Jan 16 10:39:05 2014 Page: 1

00110

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2738.D\data.ms

(A) IPC 1/16/14 KR 1/17/14 DL

(10) Freon 123a

1.872min (0.000) 0.55 ppb m

response 5299

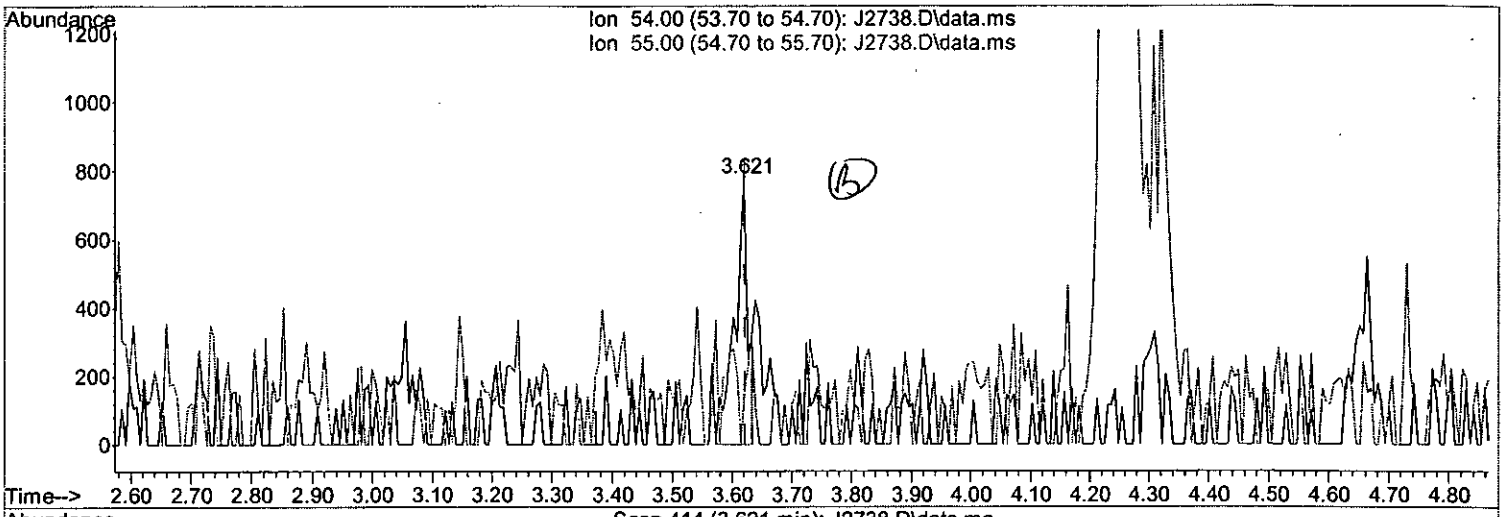
Ion	Exp%	Act%
67.00	100	100
117.00	63.10	83.49#
0.00	0.00	0.00
0.00	0.00	0.00

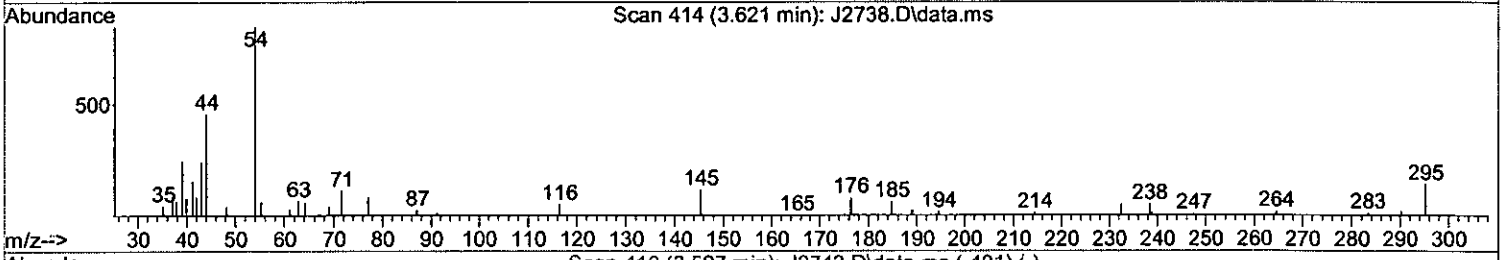
W011514.M Thu Jan 16 10:39:12 2014 Page: 1

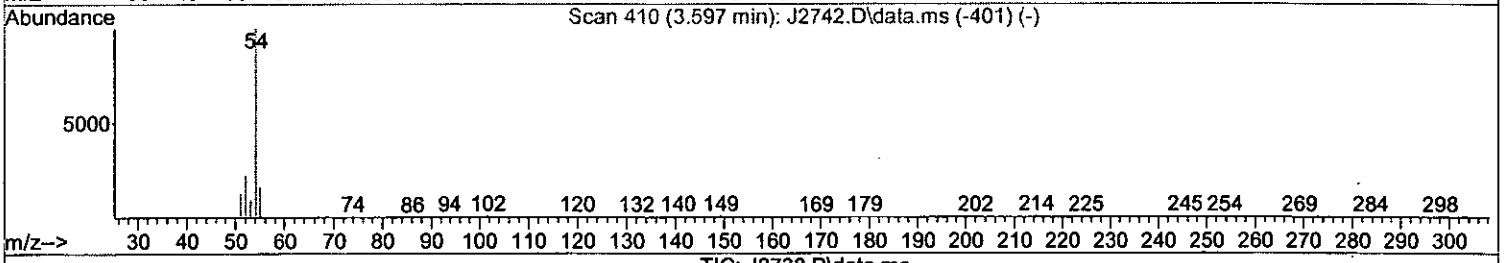
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(36) Propionitrile

3.621min (0.000) 1.89 ppb

response 1204

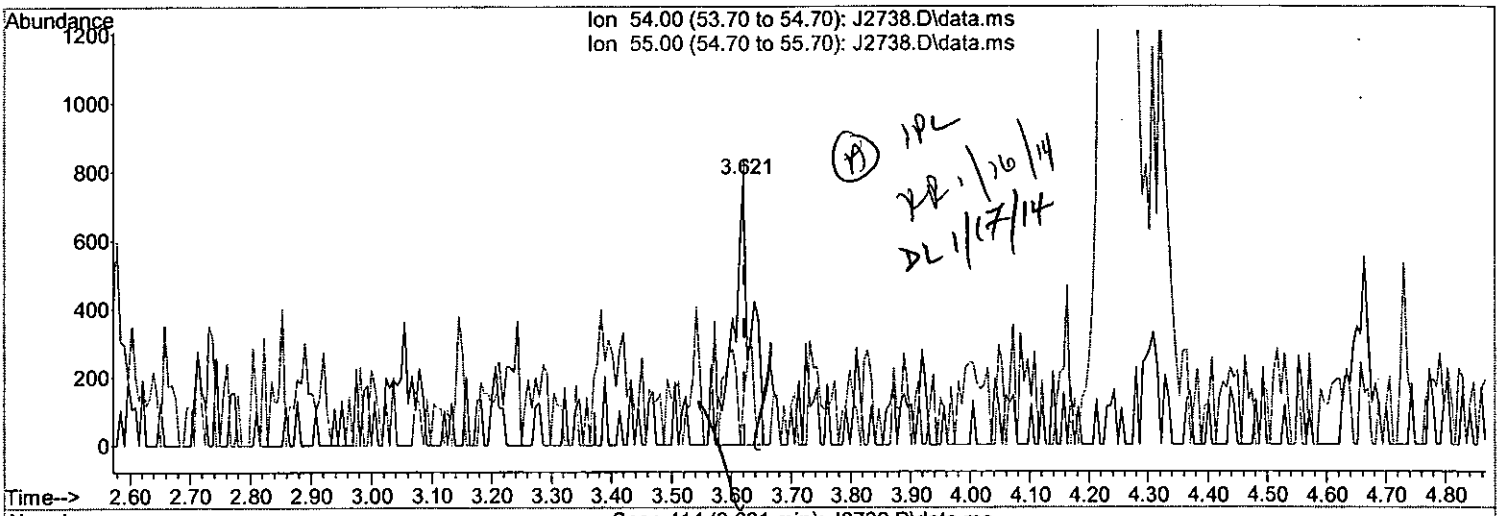
Ion	Exp%	Act%
54.00	100	100
55.00	17.00	19.00
0.00	0.00	0.00
0.00	0.00	0.00

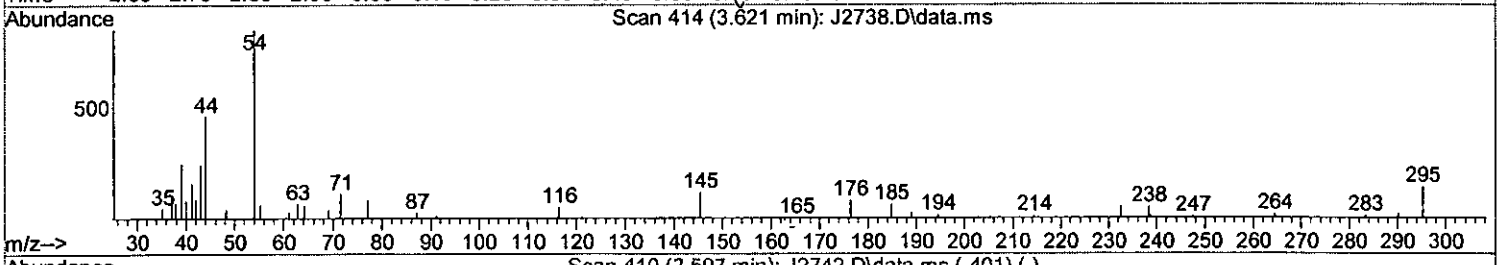
W011514.M Thu Jan 16 10:40:27 2014 Page: 1

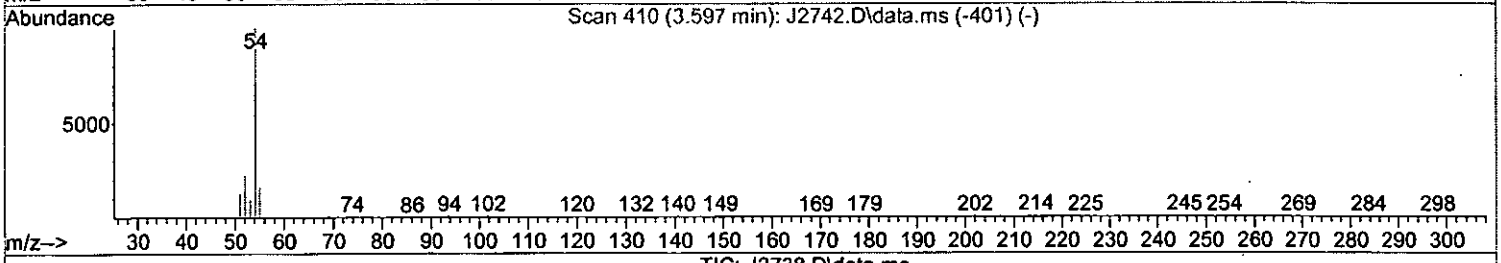
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(36) Propionitrile

3.621min (0.000) 2.42 ppb m

response 1545

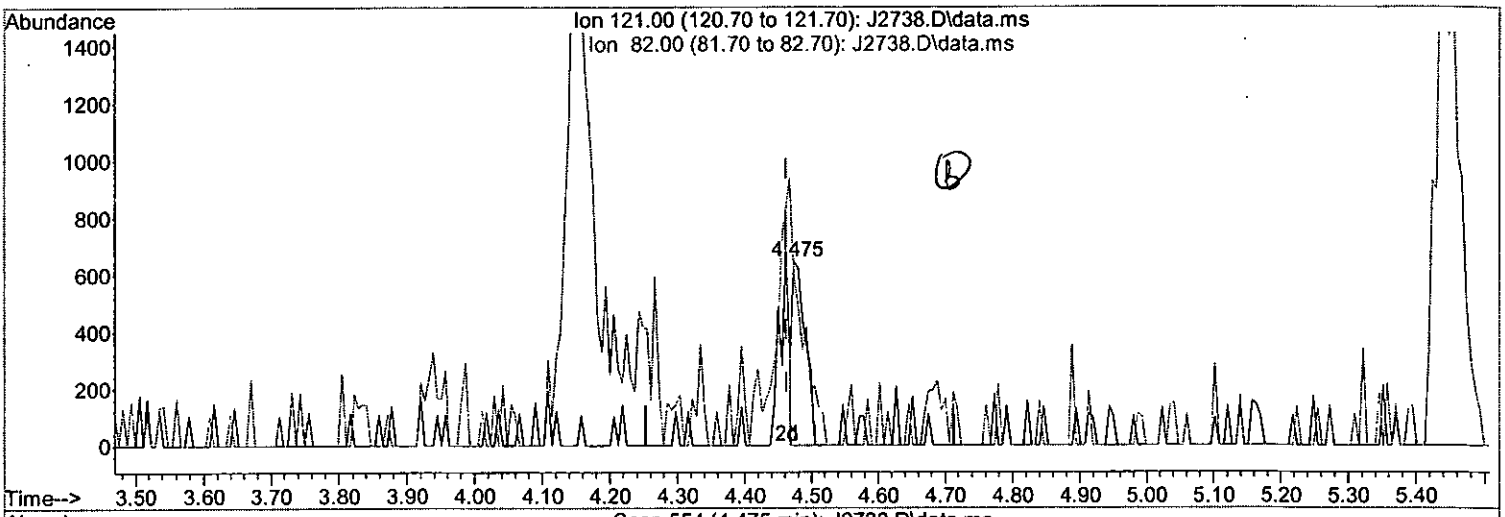
Ion	Exp%	Act%
54.00	100	100
55.00	17.00	19.00
0.00	0.00	0.00
0.00	0.00	0.00

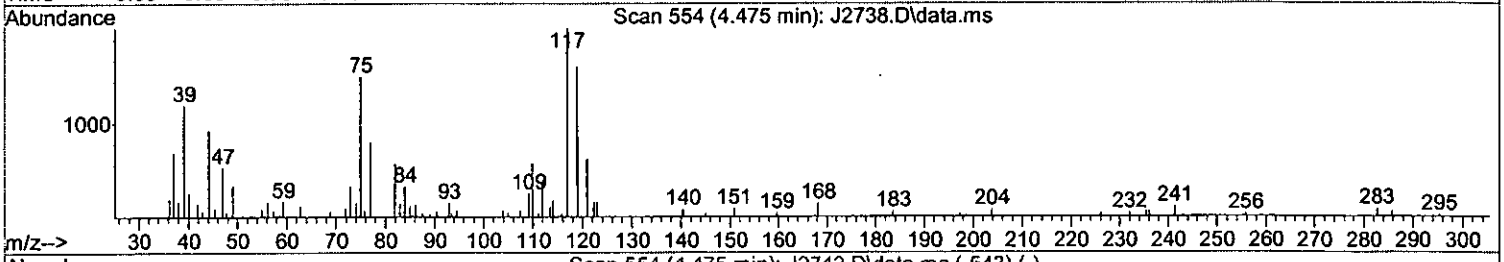
W011514.M Thu Jan 16 10:40:45 2014 Page: 1

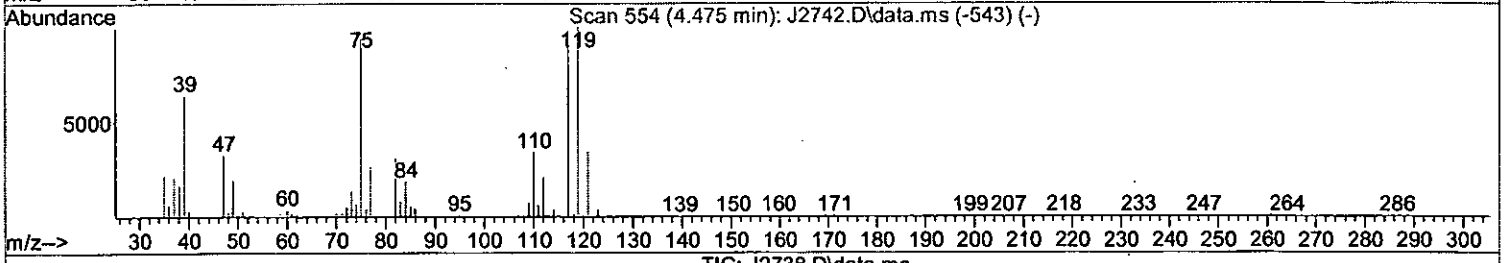
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(46) Carbontetrachloride (P)

4.475min (+0.012) 0.27 ppb

response 851

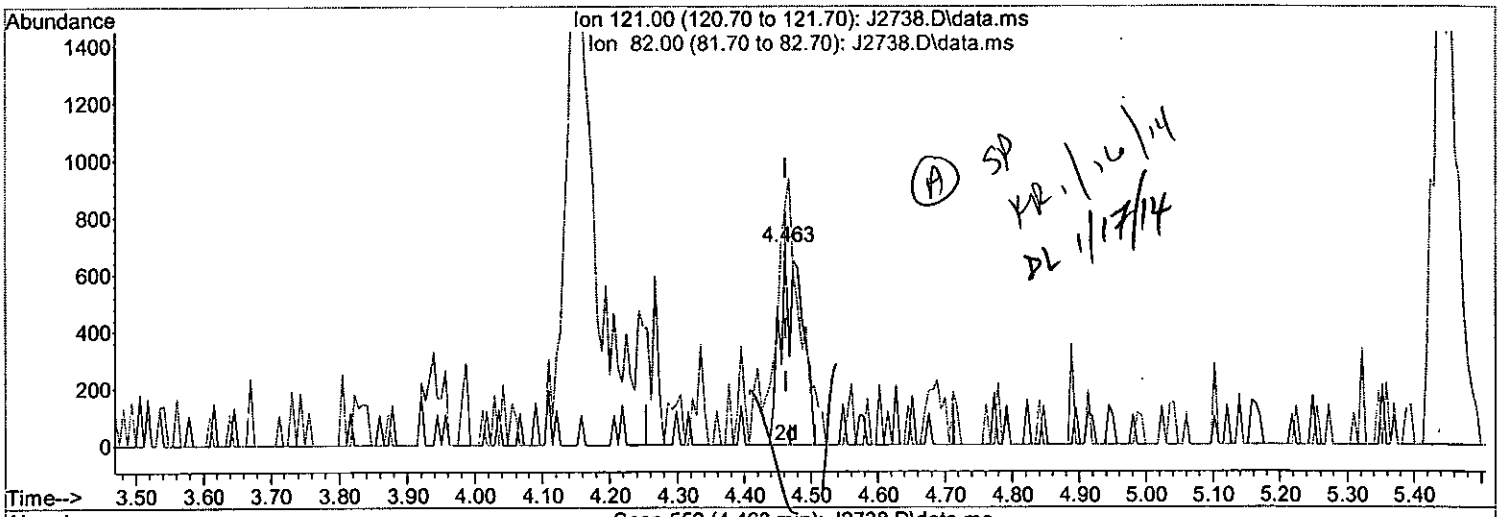
Ion	Exp%	Act%
121.00	100	100
82.00	88.90	93.35
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 10:41:01 2014 Page: 1

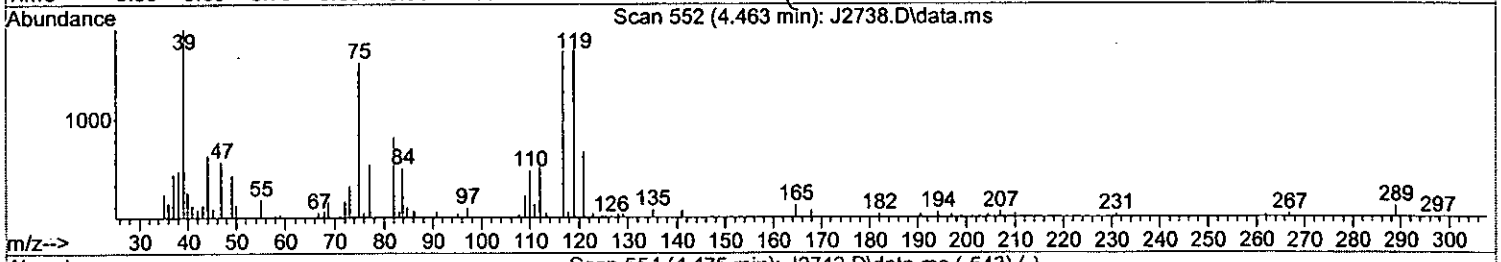
Quantitation Report (Qedit)

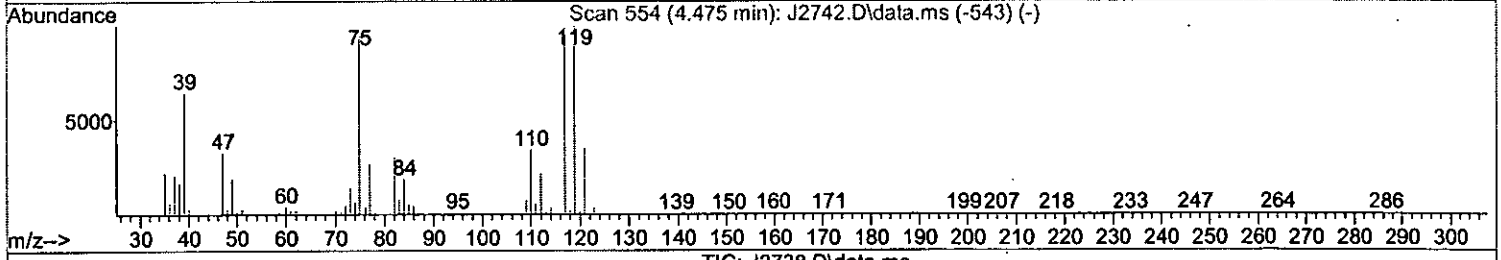
Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



(A) SP 1/16/14 DL 1/17/14





TIC: J2738.D\data.ms

(46) Carbontetrachloride (P)

4.463min (0.000) 0.49 ppb m

response 1554

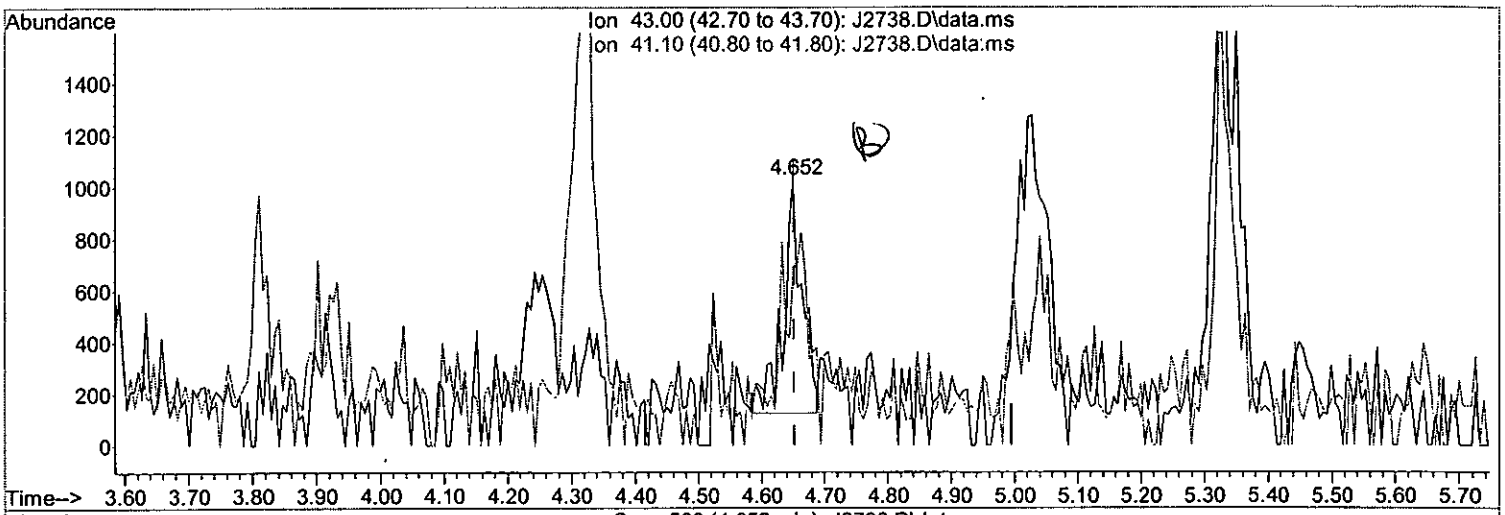
Ion	Exp%	Act%
121.00	100	100
82.00	88.90	119.25#
0.00	0.00	0.00
0.00	0.00	0.00

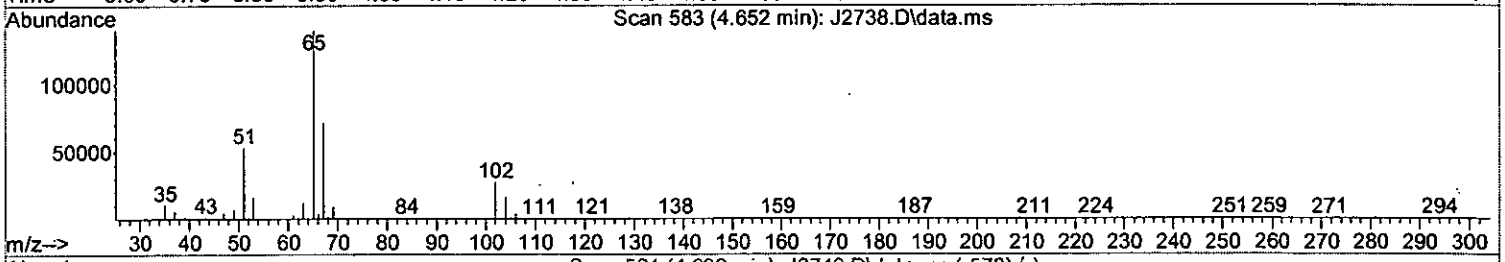
W011514.M Thu Jan 16 10:41:06 2014 Page: 1

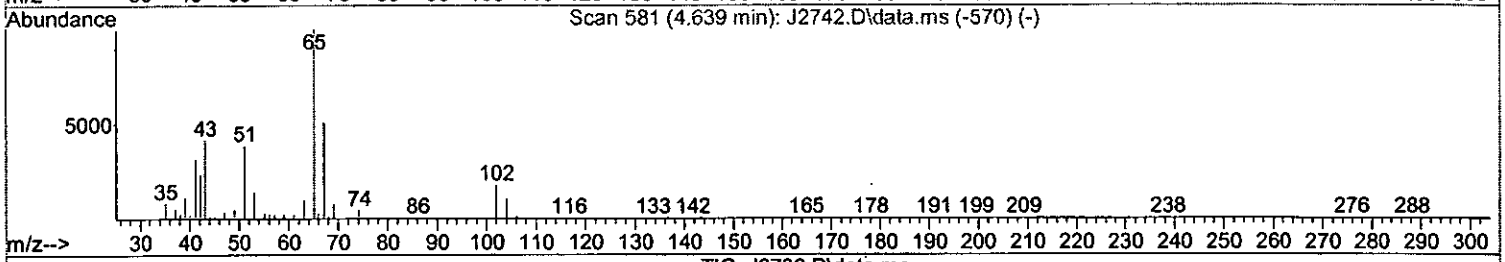
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(51) Iso-Butyl Alcohol

4.652min (0.000) 8.87 ppb

response 1883

Ion	Exp%	Act%
43.00	100	100
41.10	77.50	66.70
0.00	0.00	0.00
0.00	0.00	0.00

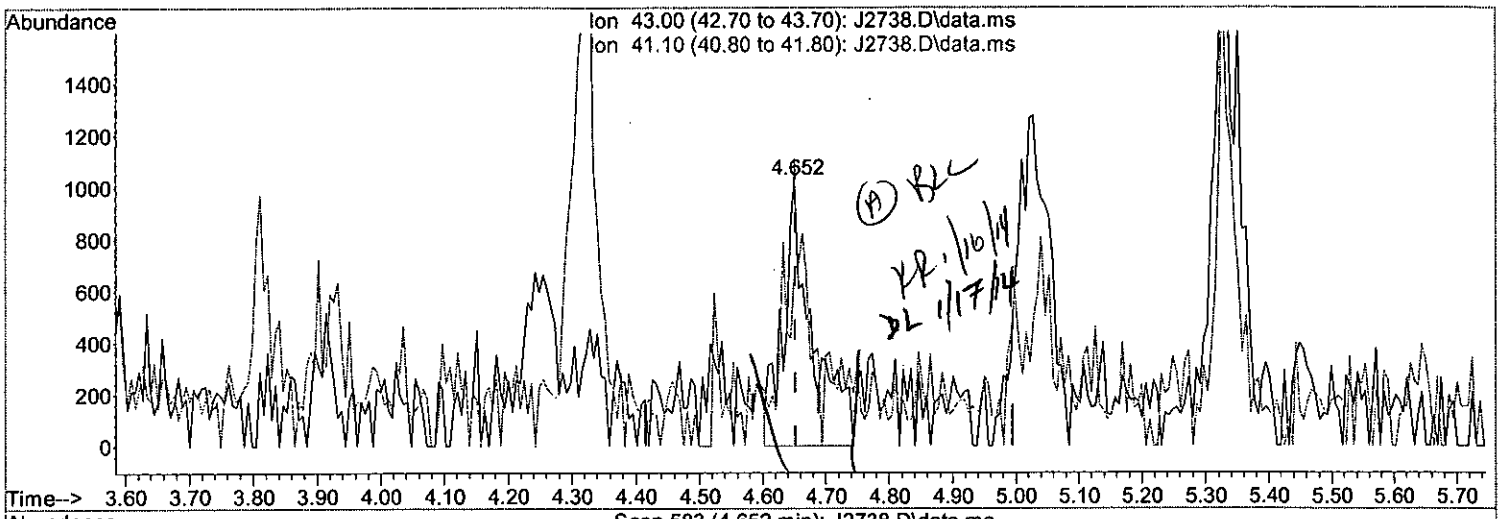
W011514.M Thu Jan 16 10:41:16 2014 Page: 1

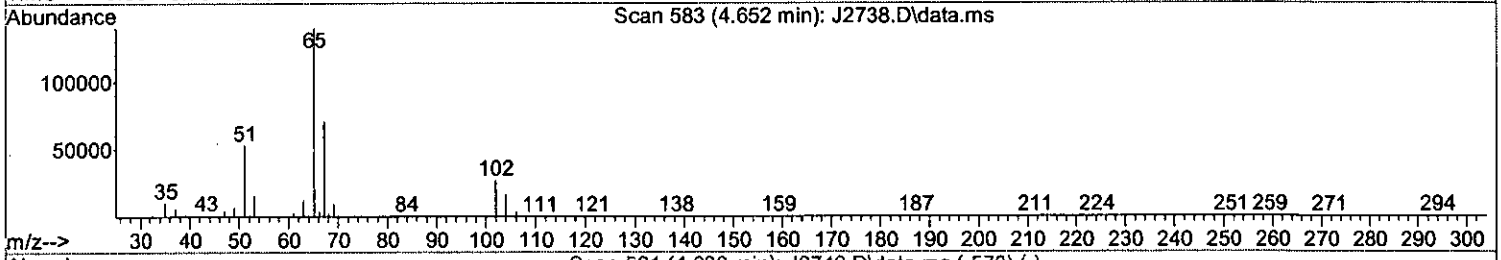
00115

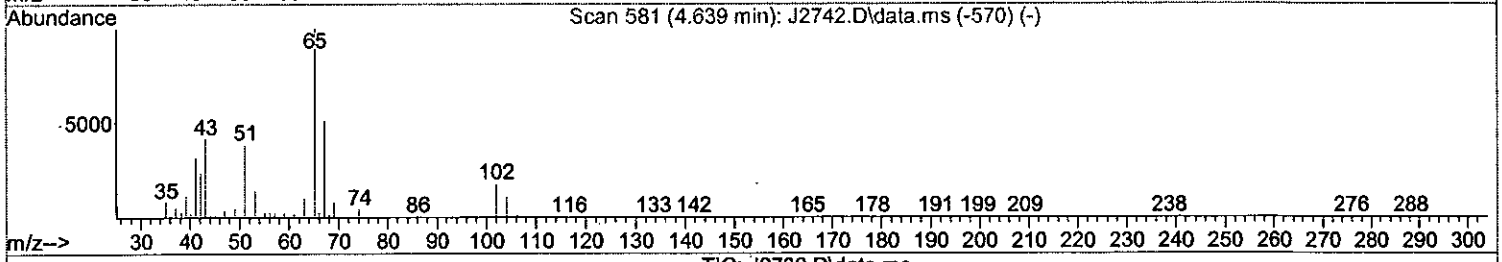
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(51) Iso-Butyl Alcohol

4.652min (0.000) 15.16 ppb m

response 3219

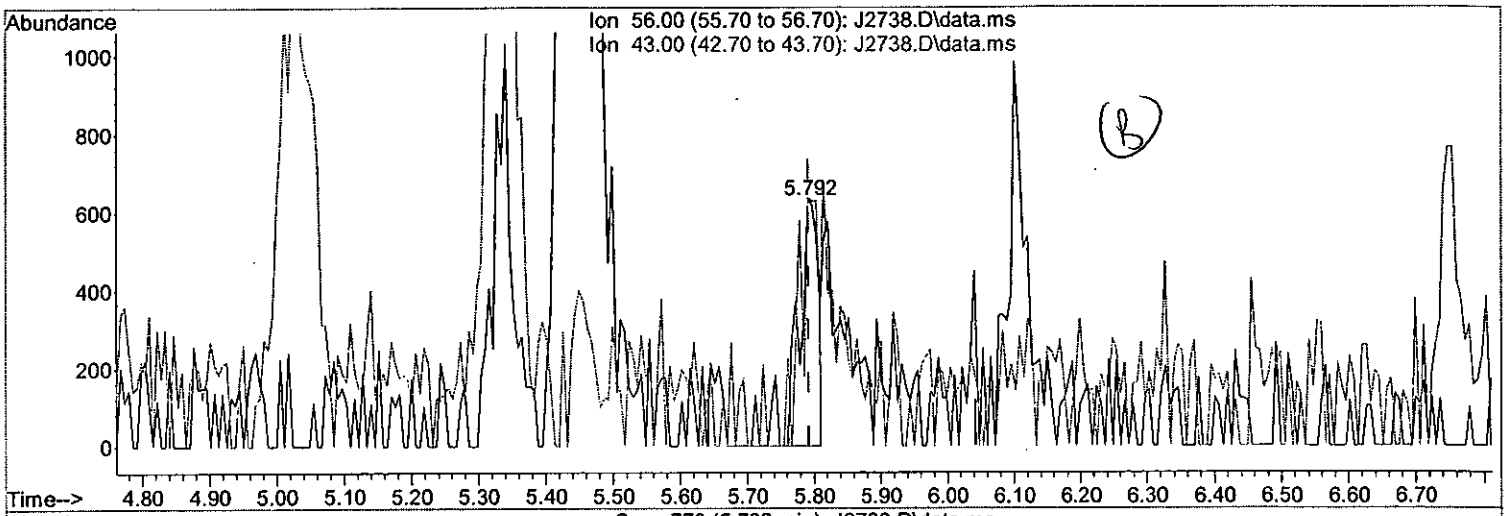
Ion	Exp%	Act%
43.00	100	100
41.10	77.50	66.70
0.00	0.00	0.00
0.00	0.00	0.00

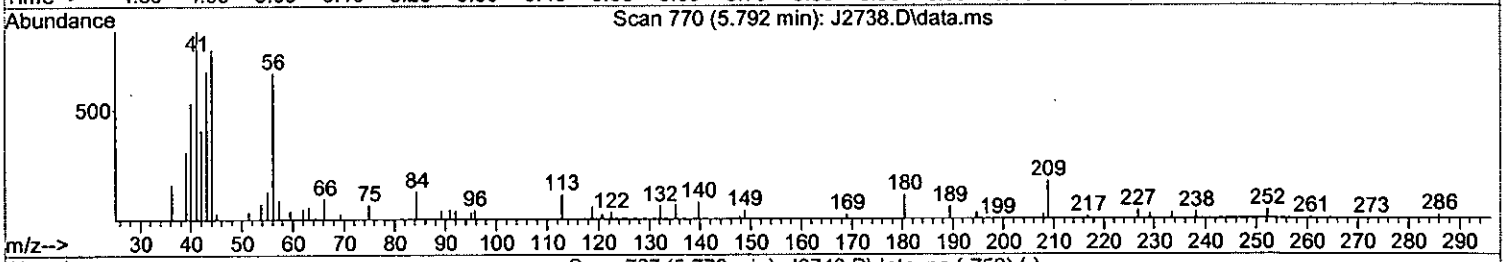
W011514.M Thu Jan 16 10:41:27 2014 Page: 1

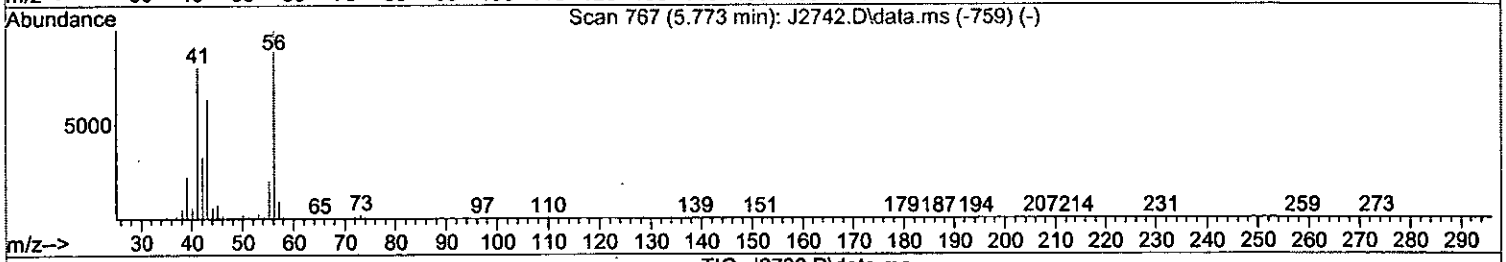
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(53) 1-Butanol

5.792min (0.000) 11.23 ppb

response 1221

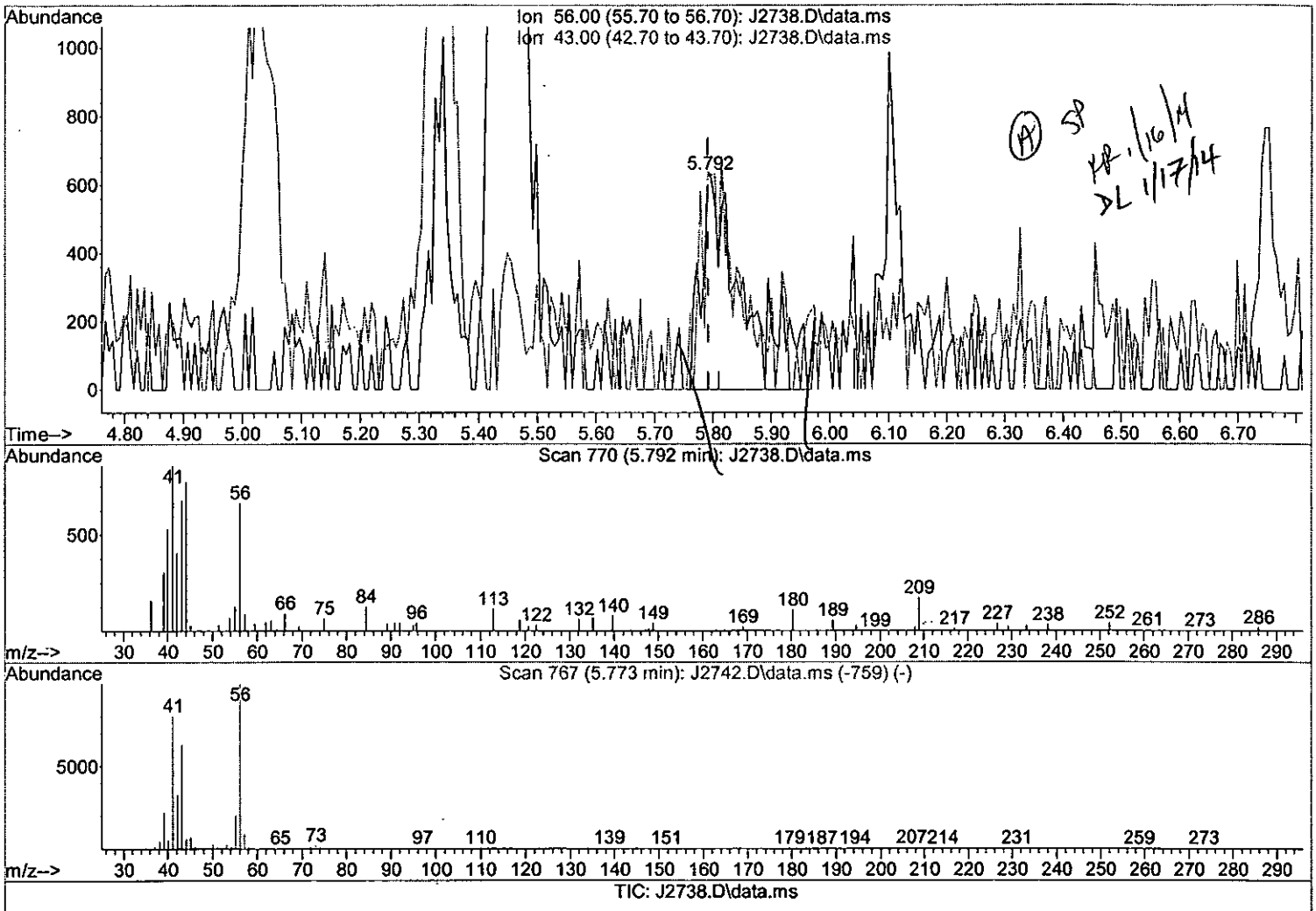
Ion	Exp%	Act%
56.00	100	100
43.00	61.10	156.84#
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 10:41:48 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2738.D\data.ms

(53) 1-Butanol

5.792min (0.000) 30.23 ppb m

response 3286

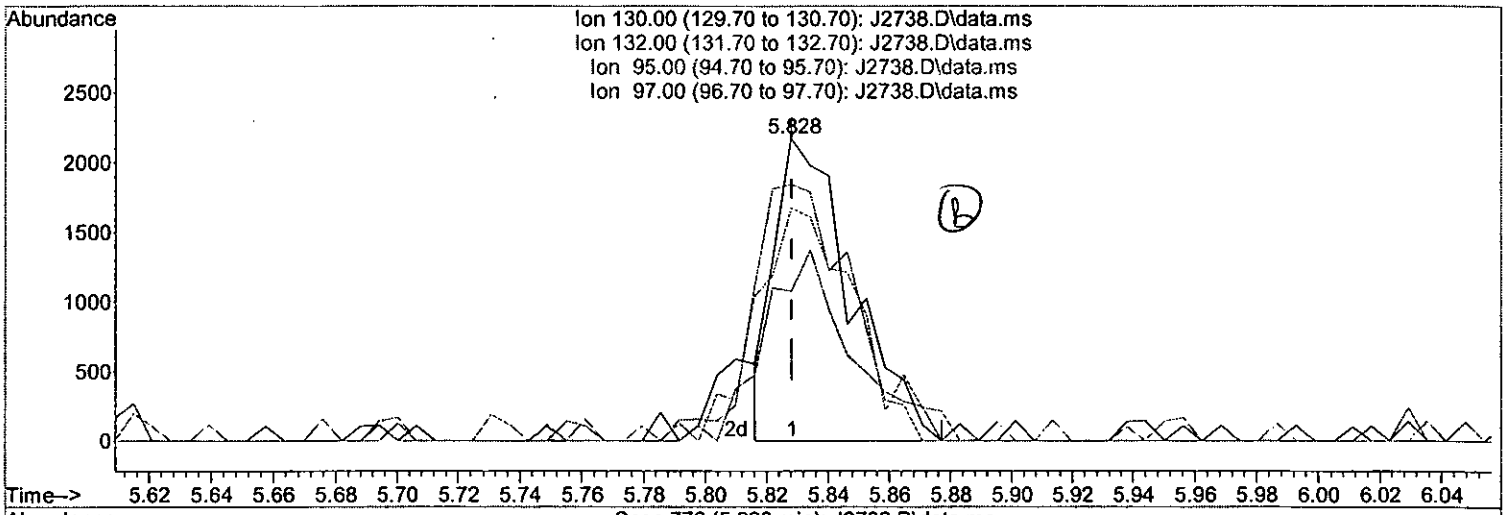
Ion	Exp%	Act%
56.00	100	100
43.00	61.10	58.28
0.00	0.00	0.00
0.00	0.00	0.00

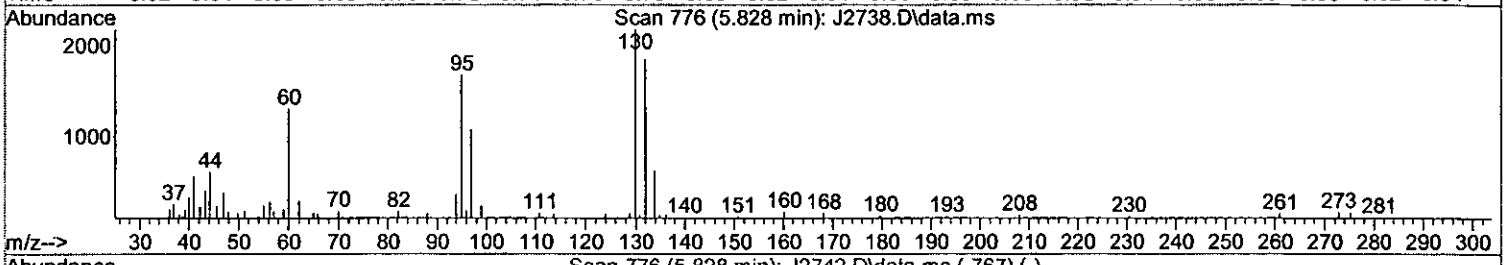
W011514.M Thu Jan 16 10:42:40 2014 Page: 1

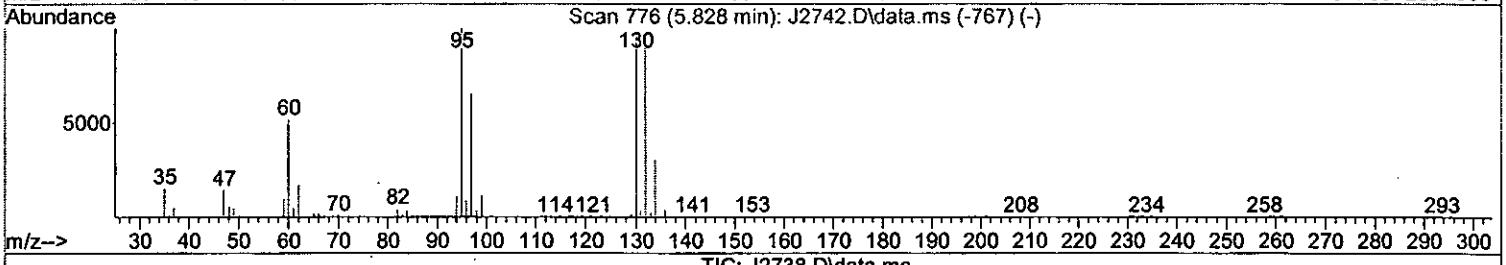
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(54) Trichloroethene (P)

5.828min (0.000) 0.46 ppb

response 3770

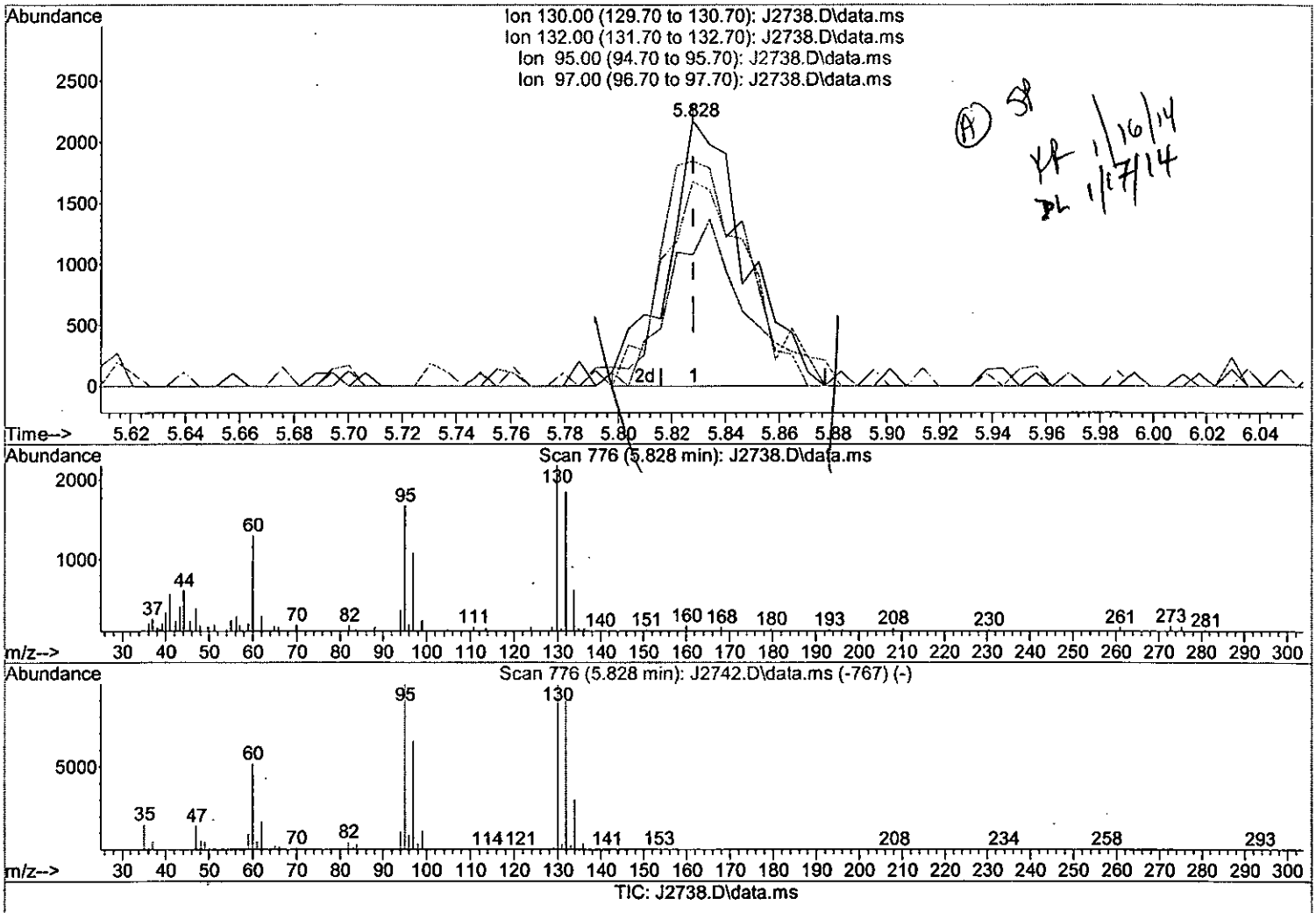
Ion	Exp%	Act%
130.00	100	100
132.00	98.20	84.74
95.00	101.30	76.98#
97.00	66.60	49.45

W011514.M Thu Jan 16 10:42:48 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2738.D\data.ms

(54) Trichloroethene (P)

5.828min (0.000) 0.53 ppb m

response 4359

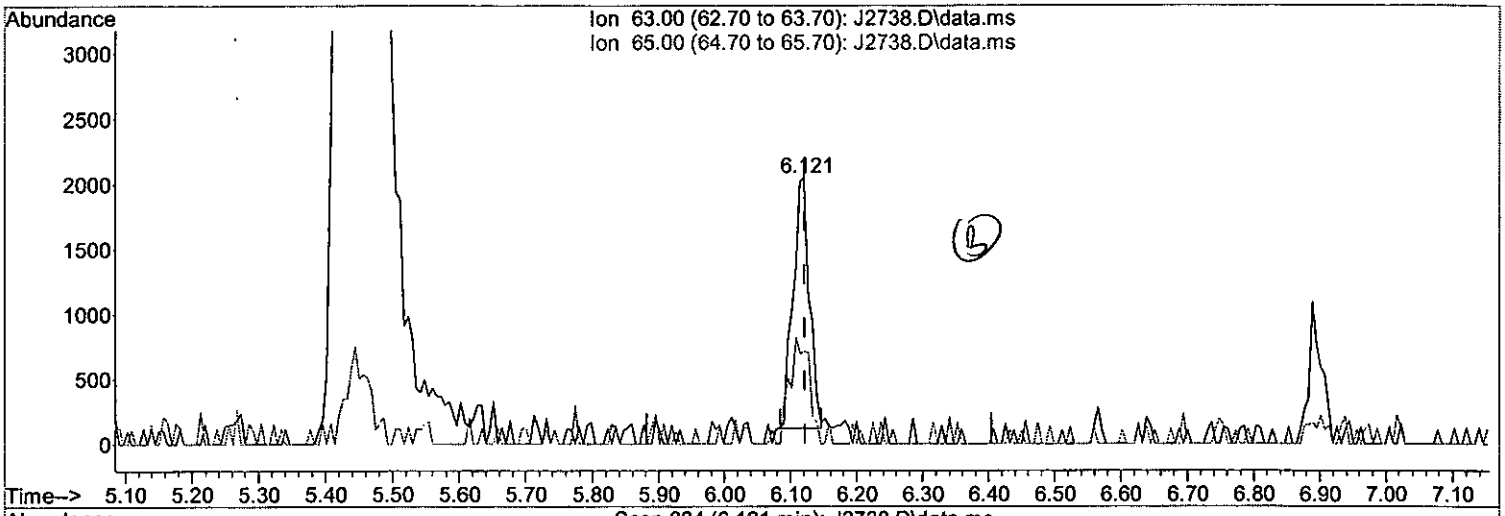
Ion	Exp%	Act%
130.00	100	100
132.00	98.20	84.74
95.00	101.30	76.98#
97.00	66.60	49.45

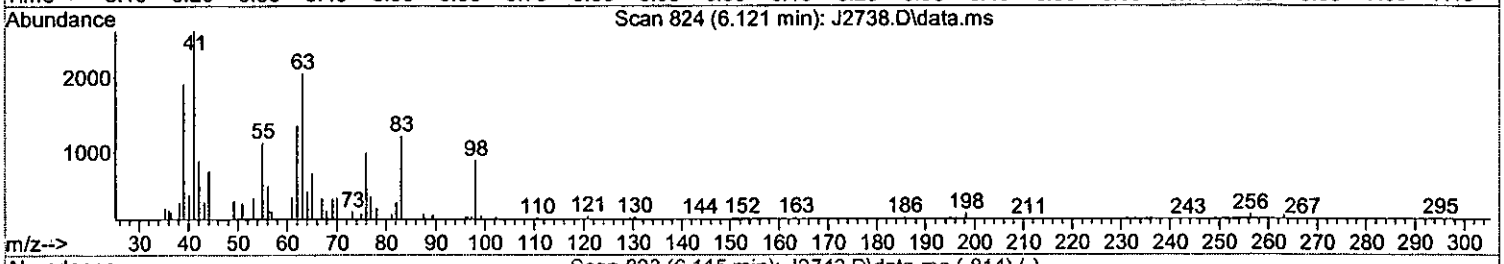
W011514.M Thu Jan 16 10:42:56 2014 Page: 1

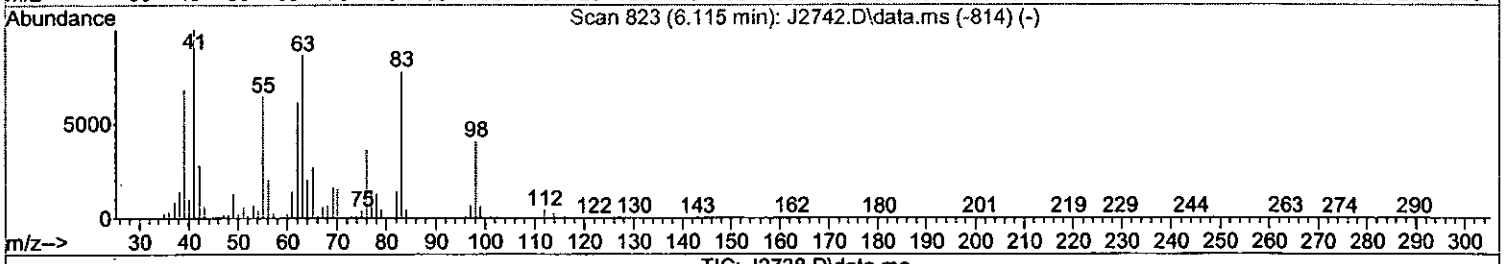
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(56) 1,2-Dichloropropane (P)

6.121min (0.000) 0.40 ppb

response 3228

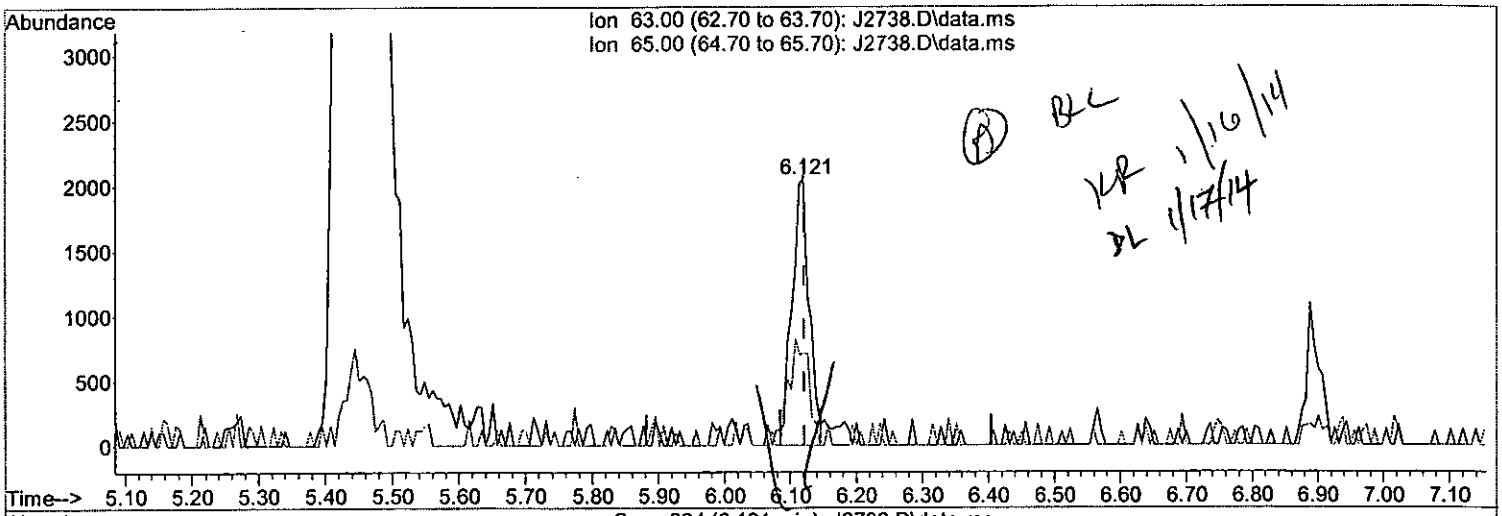
Ion	Exp%	Act%
63.00	100	100
65.00	31.40	34.63
0.00	0.00	0.00
0.00	0.00	0.00

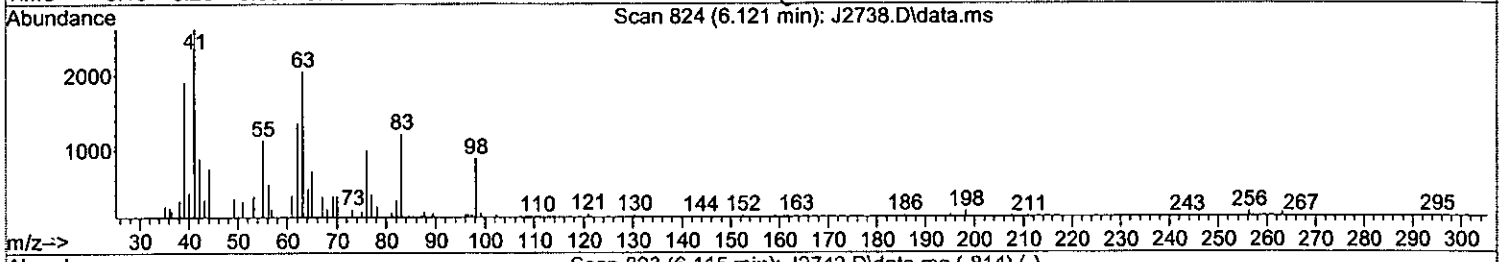
W011514.M Thu Jan 16 10:43:05 2014 Page: 1

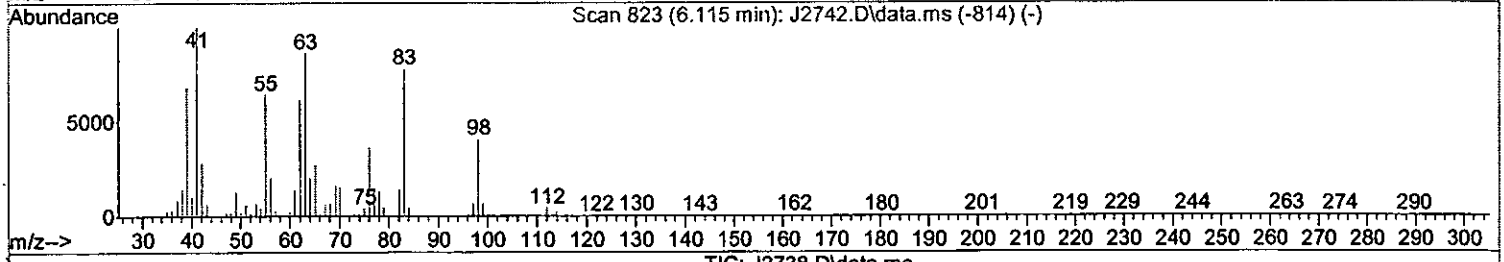
00122

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(56) 1,2-Diclpropane (P)

6.121min (0.000) 0.45 ppb m

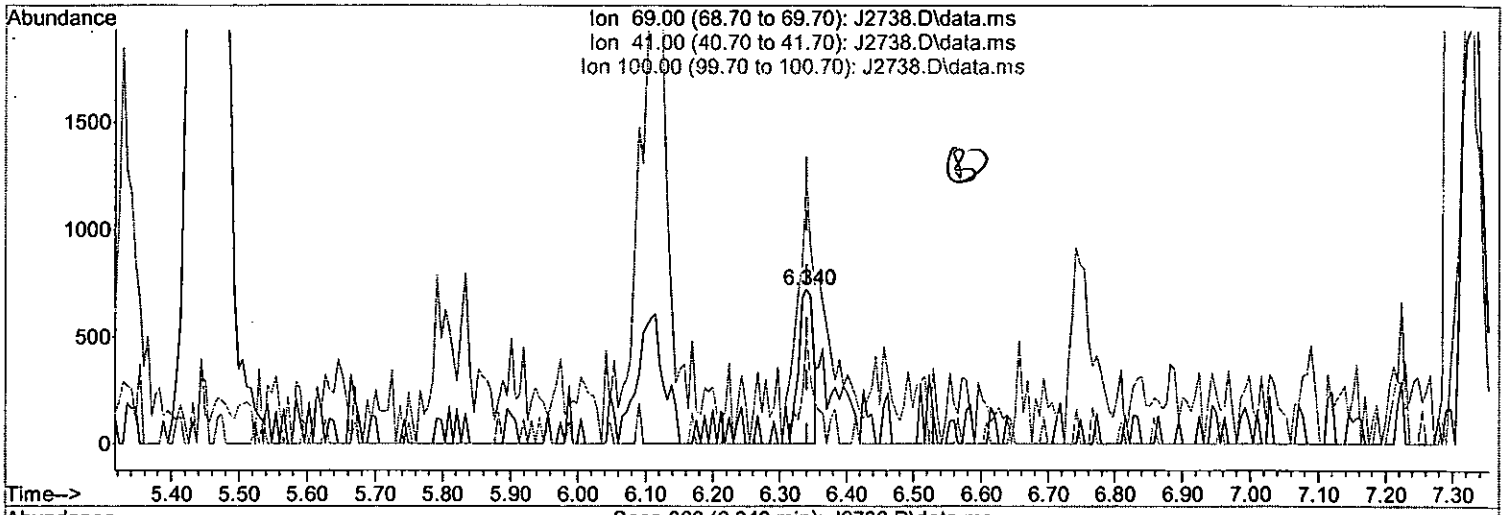
response 3667

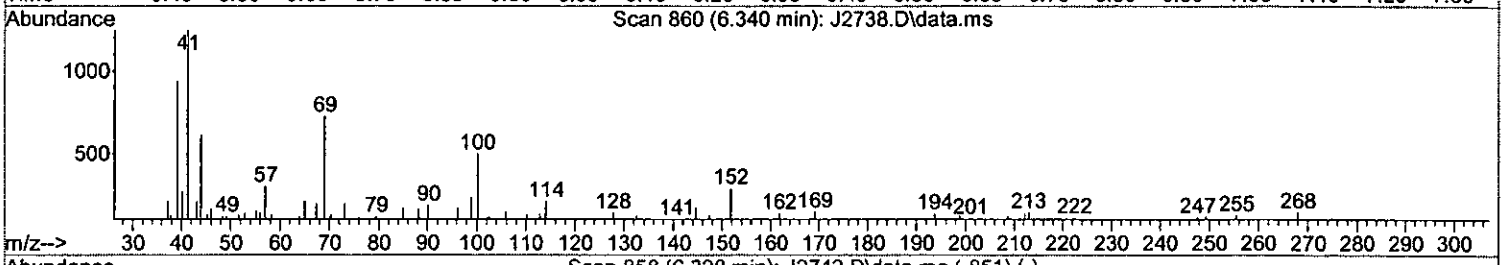
Ion	Exp%	Act%
63.00	100	100
65.00	31.40	34.63
0.00	0.00	0.00
0.00	0.00	0.00

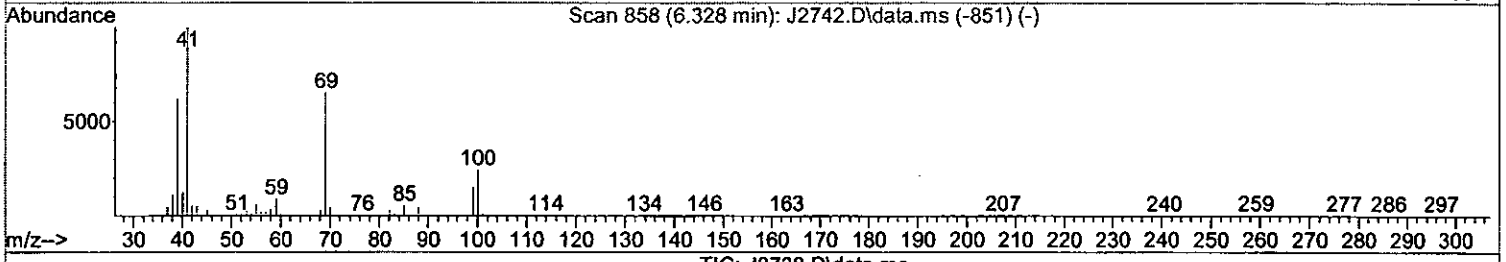
W011514.M Thu Jan 16 10:43:13 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(59) Methyl Methacrylate

6.340min (0.000) 0.29 ppb

response 1080

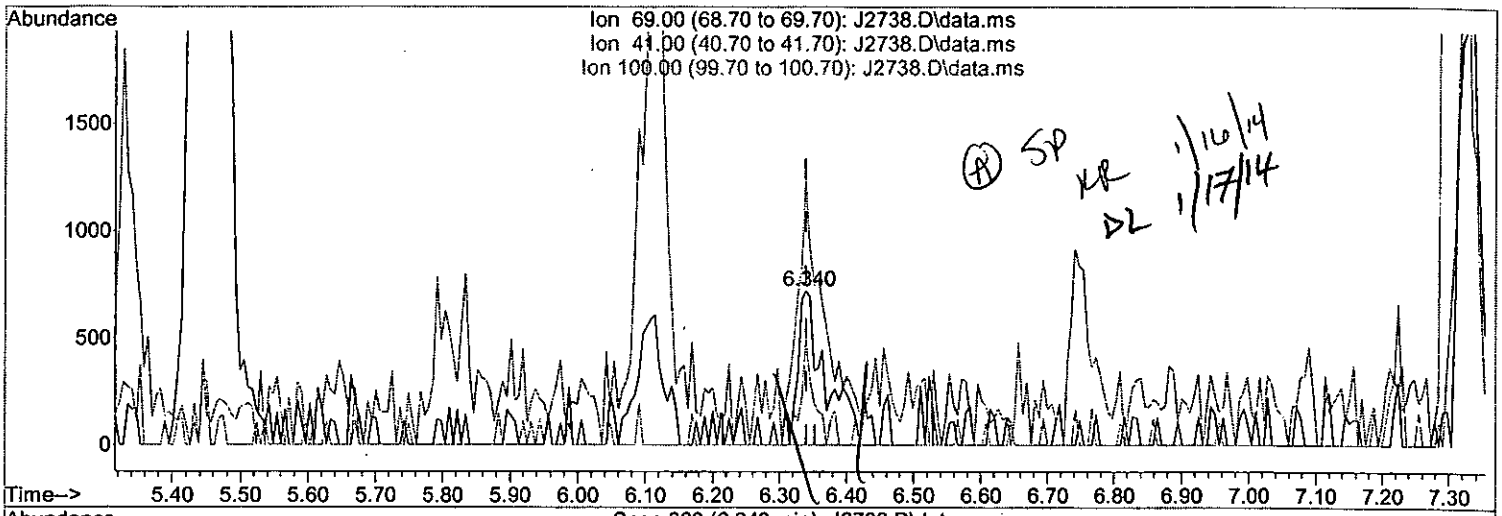
Ion	Exp%	Act%
69.00	100	100
41.00	154.30	172.30
100.00	37.60	68.56#
0.00	0.00	0.00

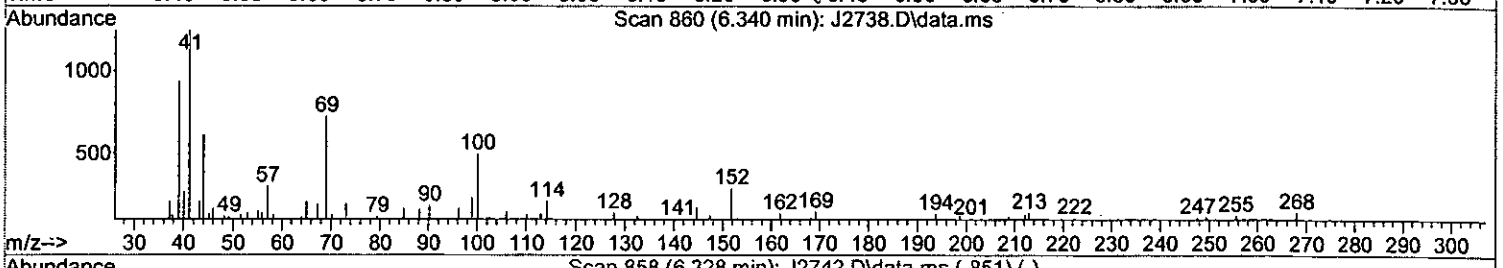
W011514.M Thu Jan 16 10:43:33 2014 Page: 1

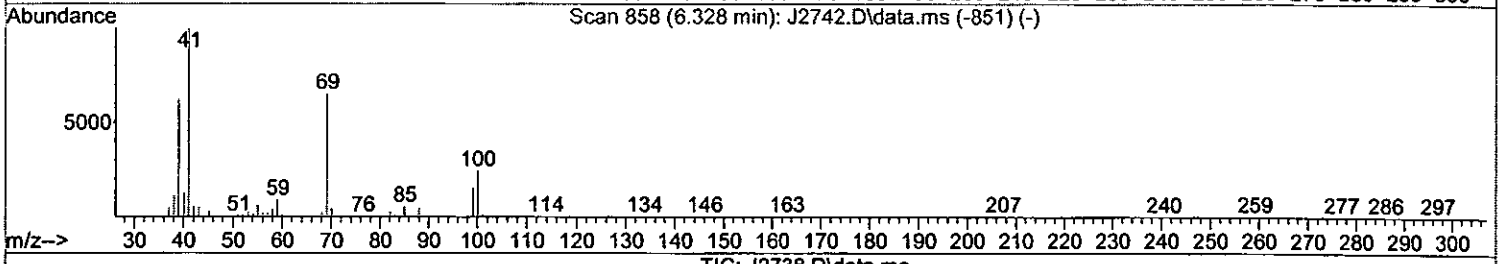
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(59) Methyl Methacrylate

6.340min (0.000) 0.54 ppb m

response 1988

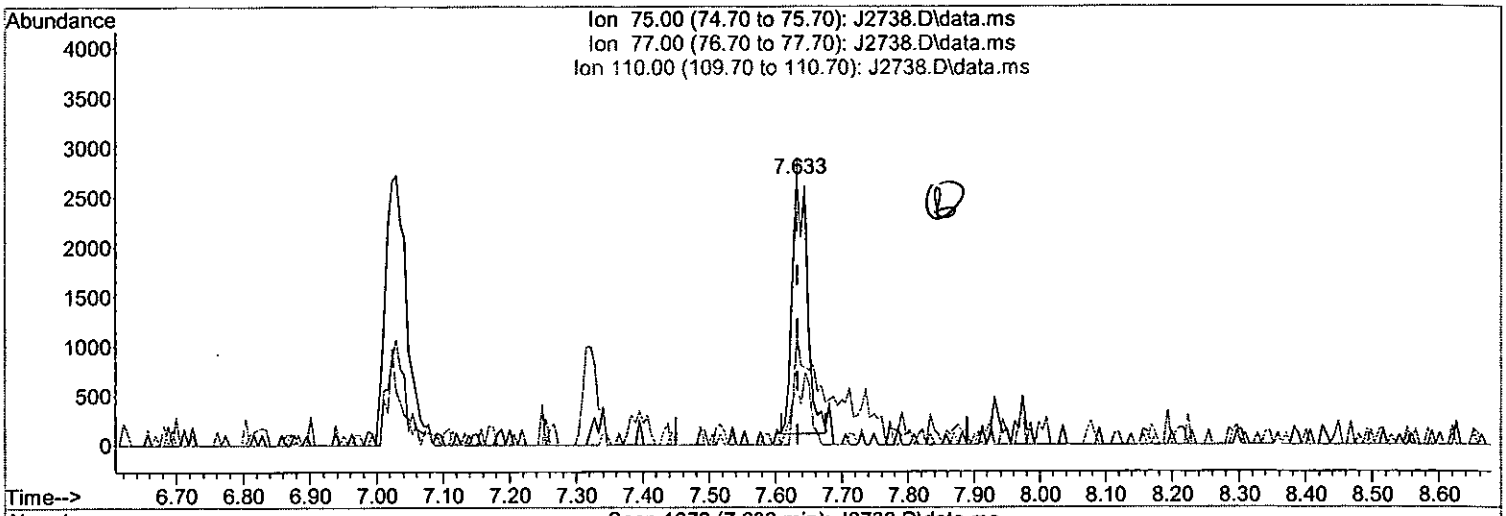
Ion	Exp%	Act%
69.00	100	100
41.00	154.30	172.30
100.00	37.60	68.56#
0.00	0.00	0.00

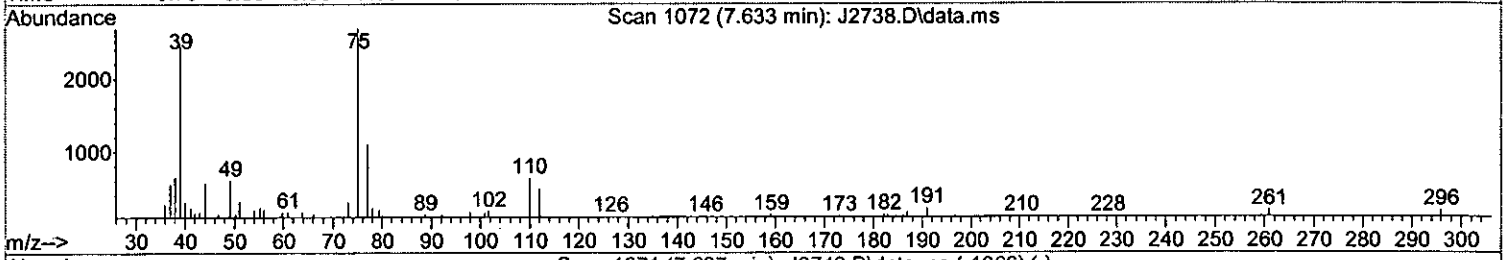
W011514.M Thu Jan 16 10:43:41 2014 Page: 1

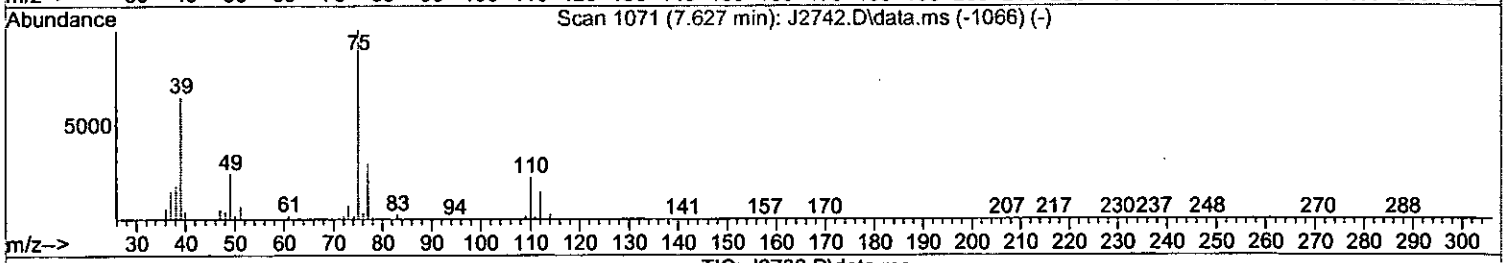
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(67) trans-1,3-Dichloropropene (P)

7.633min (0.000) 0.42 ppb

response 4025

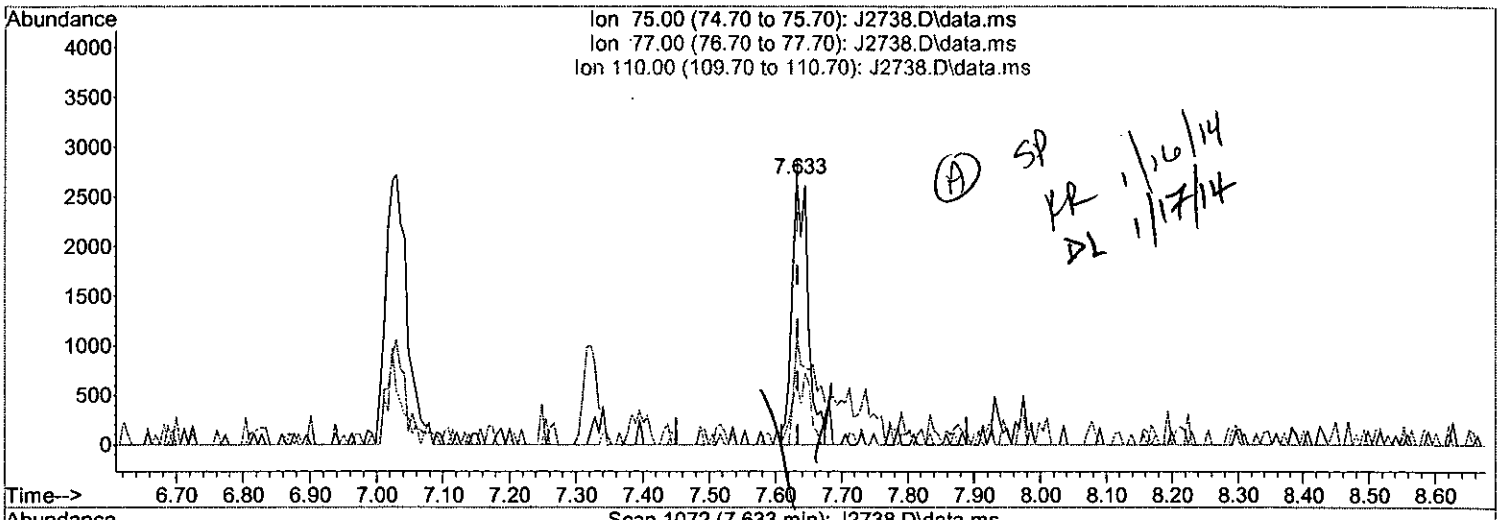
Ion	Exp%	Act%
75.00	100	100
77.00	29.00	40.66
110.00	22.00	23.68
0.00	0.00	0.00

W011514.M Thu Jan 16 10:44:06 2014 Page: 1

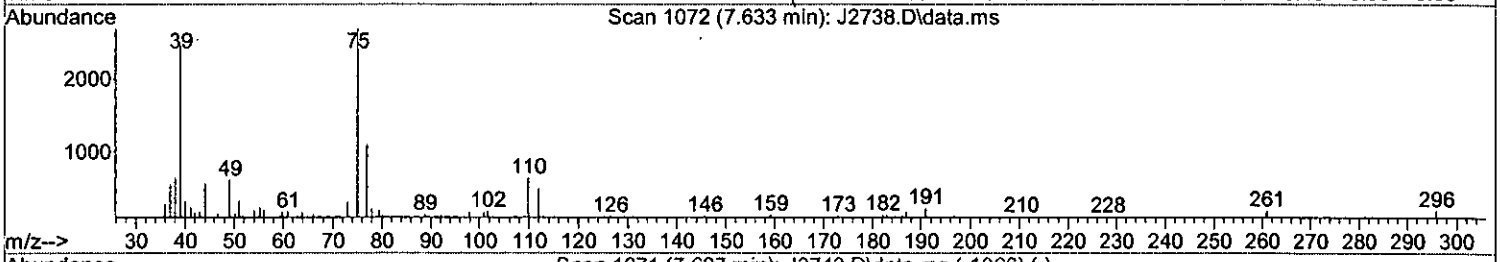
Quantitation Report (Qedit)

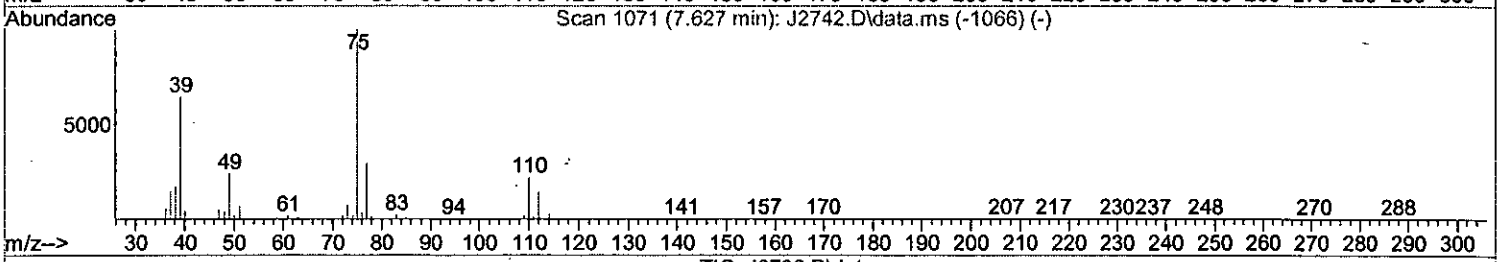
Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:45:10 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



(A) SP 1/16/14
QR 1/17/14
DL





TIC: J2738.D\data.ms

(67) trans-1,3-Dichloropropene (P)

7.633min (0.000) 0.47 ppb m

response 4483

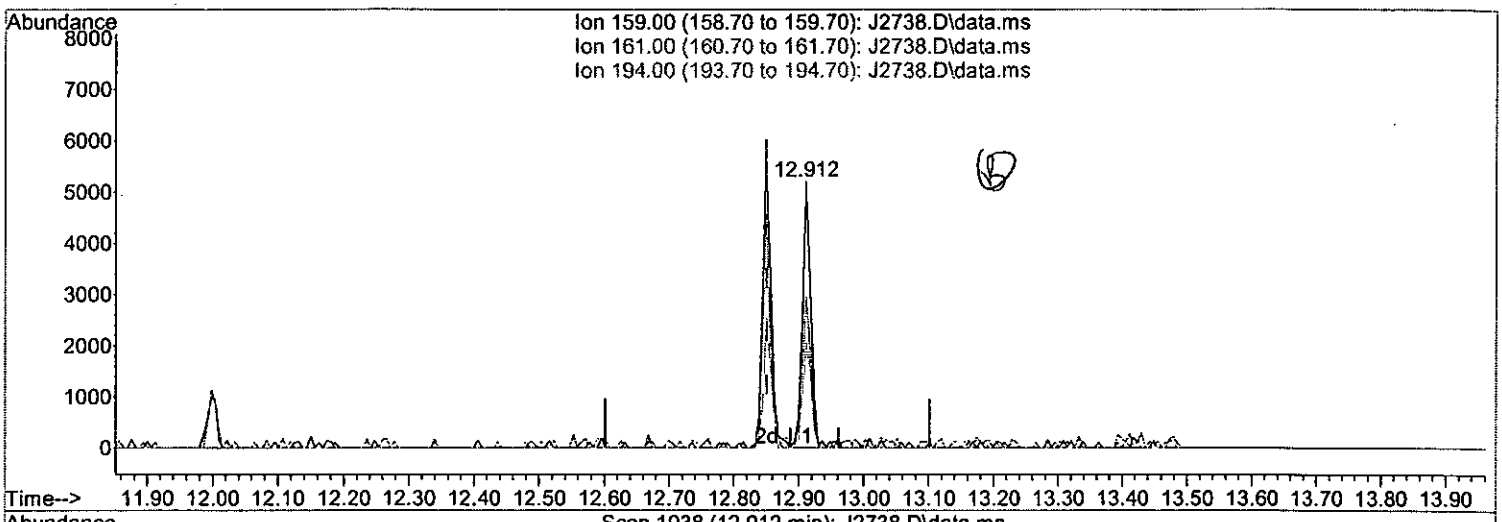
Ion	Exp%	Act%
75.00	100	100
77.00	29.00	40.66
110.00	22.00	23.68
0.00	0.00	0.00

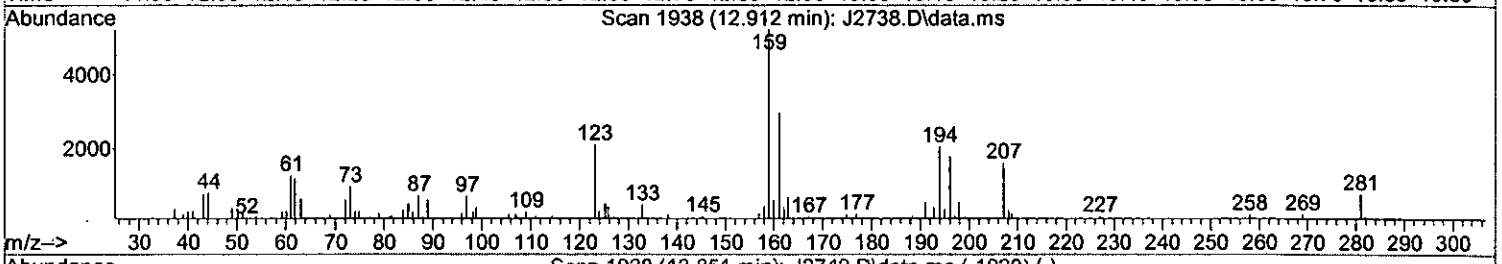
W011514.M Thu Jan 16 12:10:37 2014 00137 Page: 1

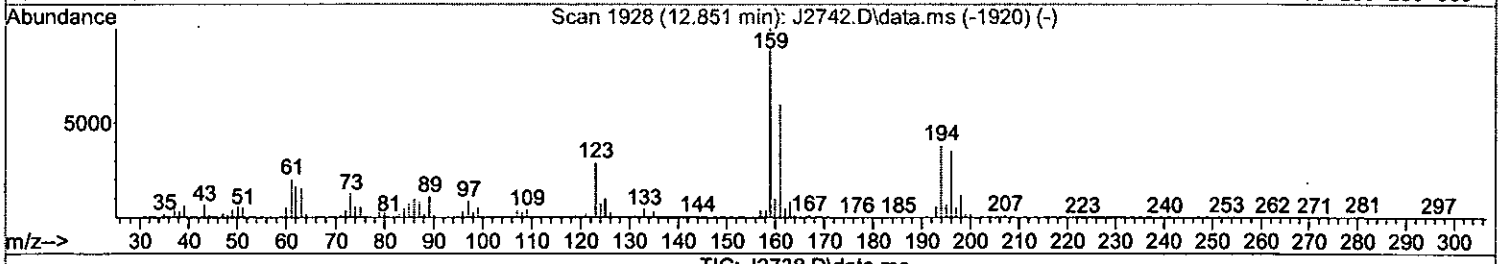
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2738.D\data.ms

(119) 2,4,5-Trichlorotolene

12.912min (+0.061) 1.01 ppb

response 4709

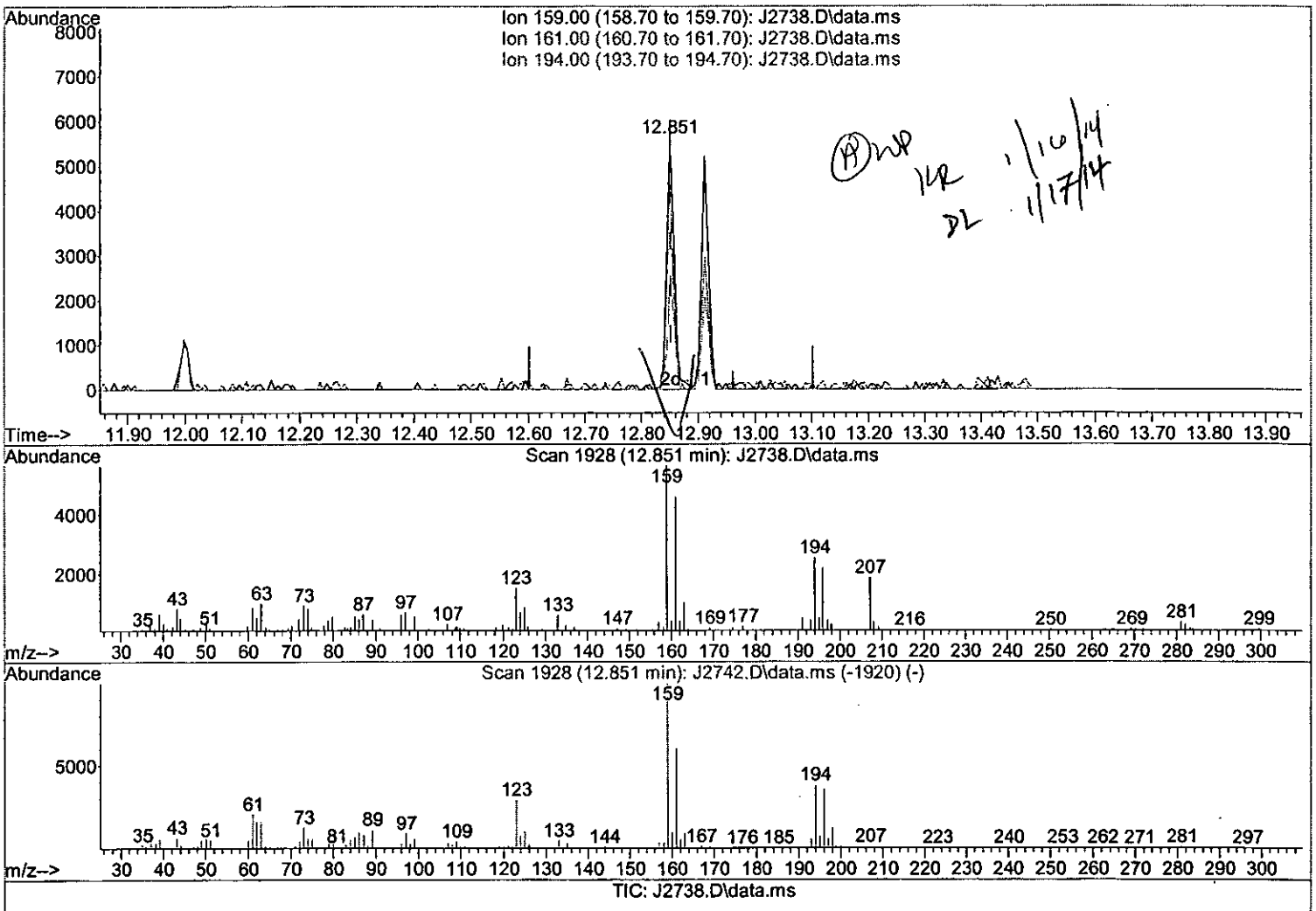
Ion	Exp%	Act%
159.00	100	100
161.00	60.30	56.86
194.00	38.10	39.22
0.00	0.00	0.00

W011514.M Thu Jan 16 10:45:10 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:09 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2738.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (0.000) 1.10 ppb m

response 5095

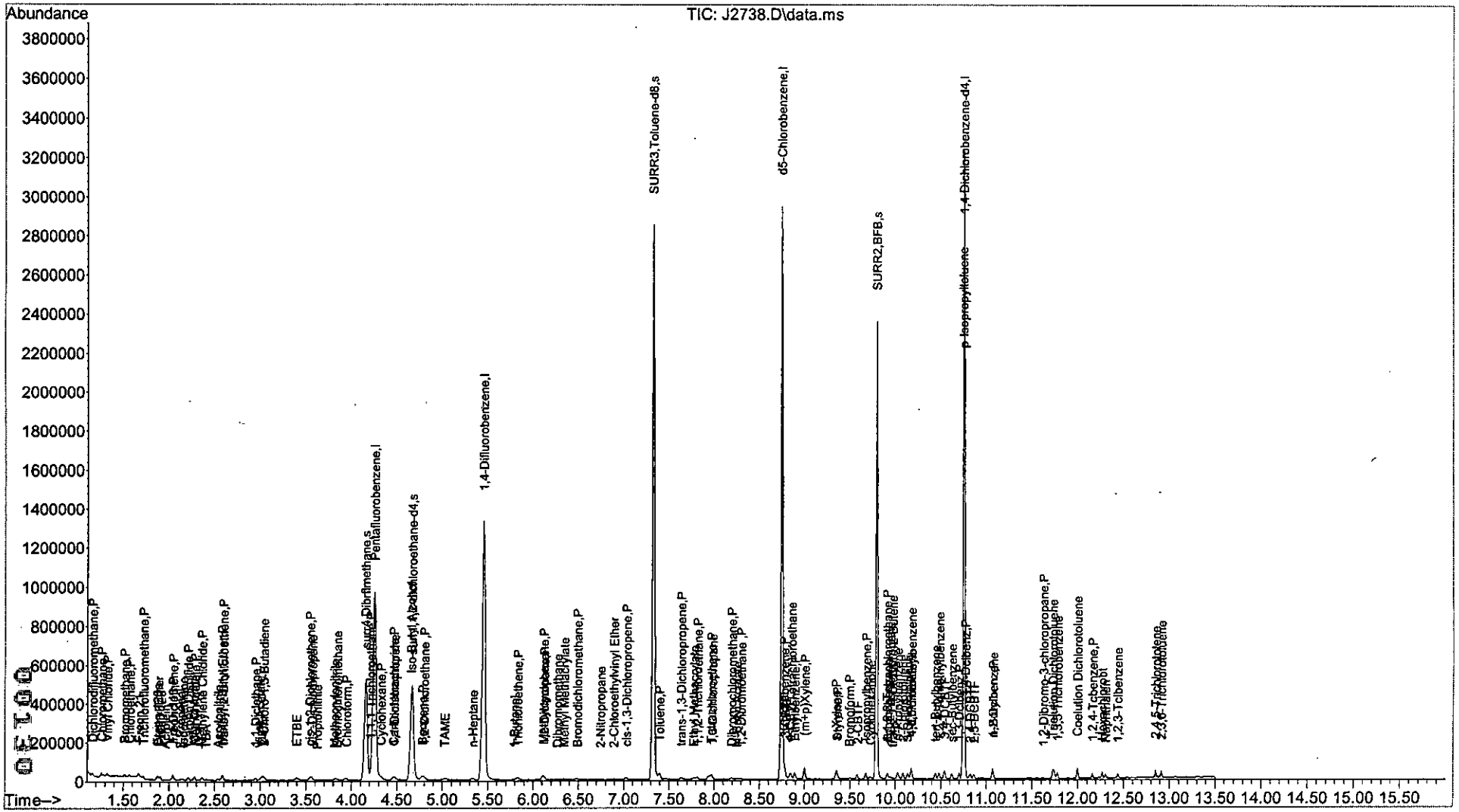
Ion	Exp%	Act%
159.00	100	100
161.00	60.30	81.06#
194.00	38.10	45.09
0.00	0.00	0.00

W011514.M Thu Jan 16 10:45:18 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2738.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 7:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:45:10 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 10:45:54 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:53:53 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	864434	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1272233	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1159905	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	568369	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	372225	50.08	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.16%				
48) surr1,1,2-dichloroetha...	4.664	65	454887	50.82	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 101.64%				
65) SURR3,Toluene-d8	7.322	98	1585847	50.19	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.38%				
70) SURR2,BFB	9.791	95	584537	49.76	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.52%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	8298	0.93	ppb		97
3) Chloromethane	1.262	50	11702	0.96	ppb		91
4) Vinyl Chloride	1.323	62	11358	0.96	ppb		98
5) Bromomethane	1.512	94	8986	1.13	ppb		92
6) Chloroethane	1.567	64	6745	0.95	ppb		96
7) Freon 21	1.664	67	17369	1.00	ppb		94
8) Trichlorofluoromethane	1.719	101	12684	0.96	ppb		96
9) Diethyl Ether	1.884	59	5681	0.98	ppb	#	74
10) Freon 123a	1.872	67	9748	1.00	ppb		96
11) Freon 123	1.908	83	10197	0.98	ppb		88
12) Acrolein	1.963	56	1875	4.03	ppb		81
13) 1,1-Diclethene	2.042	96	5733	0.93	ppb	#	82
14) Freon 113	2.036	101	6444	0.99	ppb		81
15) Acetone	2.049	43	2694	1.51	ppb		83
16) 2-Propanol	2.116	45	4399	16.35	ppb		64
17) Iodomethane	2.146	142	8183	0.93	ppb		74
18) Carbon Disulfide	2.207	76	22757	0.98	ppb		97
19) Acetonitrile	2.225	40	1264	4.45	ppb	#	45
20) Allyl Chloride	2.274	76	4261	0.98	ppb		98
21) Methyl Acetate	2.274	43	3522	0.92	ppb		97
22) Methylene Chloride	2.359	84	7353	0.98	ppb		85
23) TBA	2.408	59	8462	18.81	ppb		85
24) Acrylonitrile	2.530	53	8126	4.52	ppb		100
25) Methyl-t-Butyl Ether	2.585	73	18588	0.96	ppb		85
26) trans-1,2-Dichloroethene	2.585	96	7110	0.94	ppb		88
28) 1,1-Diclethane	2.939	63	14597	1.00	ppb		97
29) Vinyl Acetate	2.981	86	1137m	1.03	ppb		
30) DIPE	3.012	45	28002	0.96	ppb		84
31) 2-Chloro-1,3-Butadiene	3.042	53	14480	0.96	ppb		93
32) ETBE	3.396	59	23852	1.00	ppb		92
33) 2,2-Dichloropropane	3.560	77	10843	0.91	ppb		97
34) cis-1,2-Dichloroethene	3.542	96	8698	0.99	ppb		96
36) Propionitrile	3.609	54	3676m	5.71	ppb		
37) Bromochloromethane	3.829	130	4691	1.01	ppb	#	76
38) Methacrylonitrile	3.804	67	2206	1.07	ppb	#	85

1/16/14

W011514.M Thu Jan 16 10:54:27 2014 Page 1

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:53:53 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) Chloroform	3.932	83	12394	0.91	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	12055	0.96	ppb	#	1
42) TAME	5.024	73	19862	1.01	ppb		82
44) Cyclohexane	4.310	41	7418	0.90	ppb		100
46) Carbontetrachloride	4.475	121	3066m	0.97	ppb		
47) 1,1-Dichloropropene	4.463	75	9634	0.98	ppb		98
49) Benzene	4.786	78	29842	0.94	ppb		96
50) 1,2-Dichloroethane	4.792	62	10054	0.96	ppb		88
51) Iso-Butyl Alcohol	4.652	43	3877	18.42	ppb		87
52) n-Heptane	5.328	43	8881	1.04	ppb		93
53) 1-Butanol	5.792	56	5782m	53.65	ppb		
54) Trichloroethene	5.834	130	7939	0.98	ppb		85
55) Methylcyclohexane	6.109	55	8414	0.93	ppb		95
56) 1,2-Diclpropane	6.109	63	7698	0.95	ppb		94
57) Dibromomethane	6.261	93	3585	0.96	ppb		93
59) Methyl Methacrylate	6.346	69	3650m	0.99	ppb		
60) Bromodichloromethane	6.481	83	9107	0.93	ppb		96
61) 2-Nitropropane	6.749	41	3095m	2.33	ppb		
62) 2-Chloroethylvinyl Ether	6.895	63	2363	0.85	ppb		99
63) cis-1,3-Dichloropropene	7.023	75	10647	0.91	ppb		93
64) 4-Methyl-2-pentanone	7.218	43	5271m	1.03	ppb		
66) Toluene	7.395	91	31516	0.95	ppb		99
67) trans-1,3-Dichloropropene	7.633	75	8992	0.96	ppb		97
68) Ethyl Methacrylate	7.773	69	7089	0.94	ppb		87
69) 1,1,2-Trichloroethane	7.810	97	5472	0.99	ppb		84
72) Tetrachloroethene	7.956	164	5045	0.83	ppb	#	70
73) 2-Hexanone	8.096	43	3630m	1.06	ppb		
74) 1,3-Dichloropropane	7.974	76	8860	0.87	ppb	#	73
75) Dibromochloromethane	8.194	129	5146	0.85	ppb		93
76) N-Butyl Acetate	8.249	43	8040m	0.94	ppb		
77) 1,2-Dibromoethane	8.291	107	5103	0.99	ppb	#	74
78) Chlorobenzene	8.767	112	19045	0.91	ppb		94
79) 3-CBTF	8.791	180	10084	0.96	ppb	#	95
80) 4-CBTF	8.840	180	8747	0.94	ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	6530	0.90	ppb		99
82) Ethylbenzene	8.889	106	10343	0.92	ppb		91
83) (m+p)Xylene	8.998	106	23804	1.74	ppb		96
84) o-Xylene	9.346	106	11301	0.83	ppb	#	87
85) Styrene	9.358	104	18153	0.81	ppb		89
87) Bromoform	9.498	173	2479	0.81	ppb		88
88) 2-CBTF	9.578	180	9172	0.96	ppb	#	84
89) Isopropylbenzene	9.675	105	29193	0.98	ppb		97
90) Cyclohexanone	9.724	55	7044	22.20	ppb		96
91) trans-1,4-Dichloro-2-B...	9.962	53	1356	1.09	ppb		90
92) 1,1,2,2-Tetrachloroethane	9.913	83	6061	1.04	ppb		98
93) Bromobenzene	9.907	156	8098	0.97	ppb		88
94) 1,2,3-Trichloropropane	9.943	110	1804	1.02	ppb	#	80
95) n-Propylbenzene	10.023	91	32821	0.96	ppb		94
96) 2-Chlorotoluene	10.084	91	21471	0.99	ppb		92
97) 3-Chlorotoluene	10.132	91	22786	1.03	ppb		93
98) 4-Chlorotoluene	10.175	91	24159	0.91	ppb		92
99) 1,3,5-Trimethylbenzene	10.175	105	23930	0.95	ppb		95

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:53:53 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

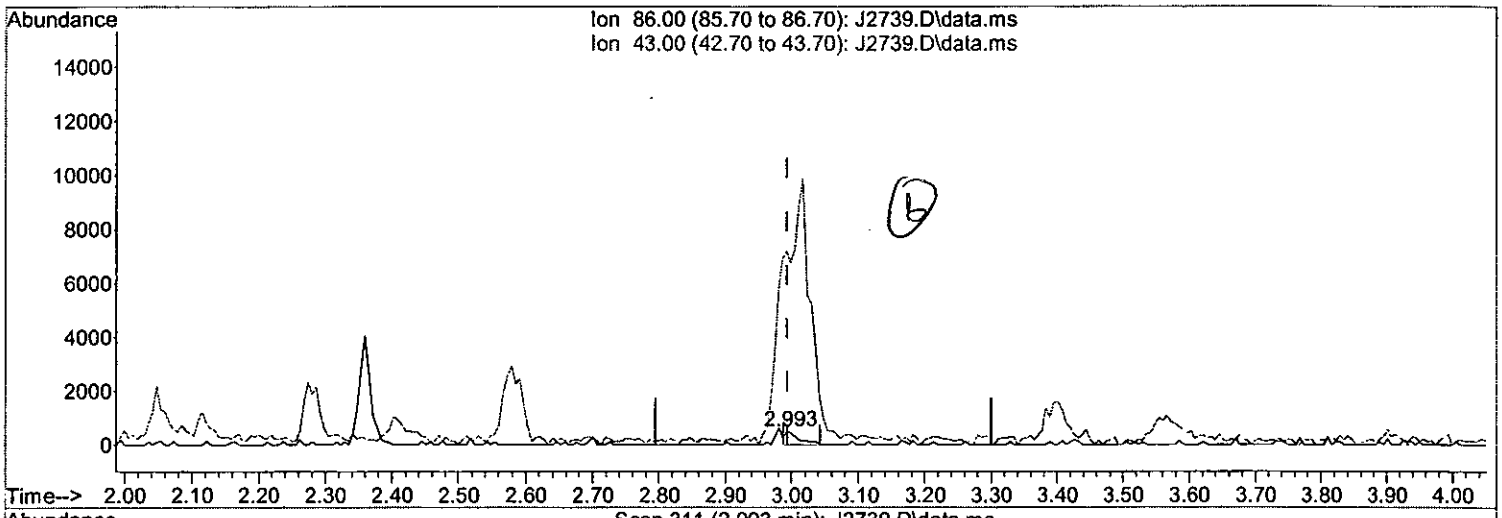
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
100) tert-Butylbenzene	10.437	119	18629	0.91	ppb		94
101) 1,2,4-Trimethylbenzene	10.480	105	23260	0.92	ppb		94
102) 3,4-DCBTF	10.535	214	6340	0.96	ppb	#	85
103) sec-Butylbenzene	10.620	105	29445	1.03	ppb		95
104) p-Isopropyltoluene	10.742	119	25137	1.00	ppb		95
105) 1,3-Dclbenz	10.699	146	13402	0.92	ppb		99
106) 1,4-Dclbenz	10.766	146	14401	0.95	ppb		83
107) 2,4-DCBTF	10.821	214	5533m	0.94	ppb		
108) 2,5-DCBTF	10.864	214	7125	1.05	ppb		90
109) n-Butylbenzene	11.071	91	19820	0.90	ppb		95
110) 1,2-Dclbenz	11.065	146	13333	0.95	ppb		95
111) 1,2-Dibromo-3-chloropr...	11.626	157	1003	1.02	ppb	#	85
112) Trielution Dichlorotol...	11.730	125	32776	2.93	ppb		93
113) 1,3,5 Trichlorobenzene	11.778	180	9929	1.03	ppb		92
114) Coelution Dichlorotoluene	11.998	125	23889	2.01	ppb		98
115) 1,2,4-Tcbenzene	12.162	180	7640	0.93	ppb		85
116) Hexachlorobt	12.266	225	4256	1.21	ppb	#	85
117) Naphthalen	12.303	128	14194	0.96	ppb		94
118) 1,2,3-Tclbenzene	12.443	180	6626	0.98	ppb		95
119) 2,4,5-Trichlorotolene	12.851	159	6045	1.29	ppb	#	89
120) 2,3,6-Trichlorotoluene	12.912	159	5705	1.36	ppb		95

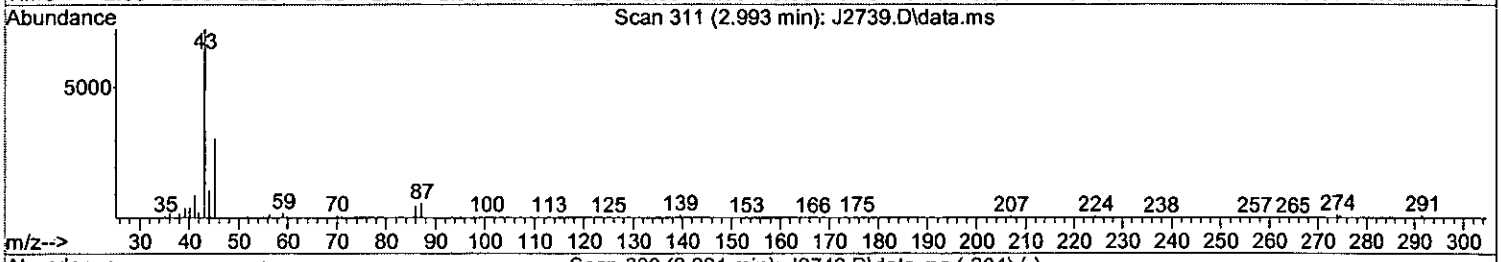
(#) = qualifier out of range (m) = manual integration (+) = signals summed

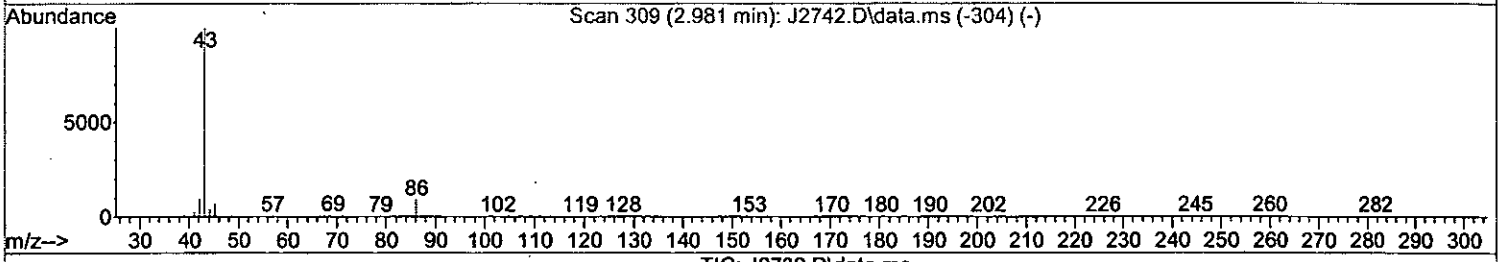
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(29) Vinyl Acetate

2.993min (+0.000) 0.64 ppb

response 707

Ion	Exp%	Act%
86.00	100	100
43.00	1126.30	1374.90#
0.00	0.00	0.00
0.00	0.00	0.00

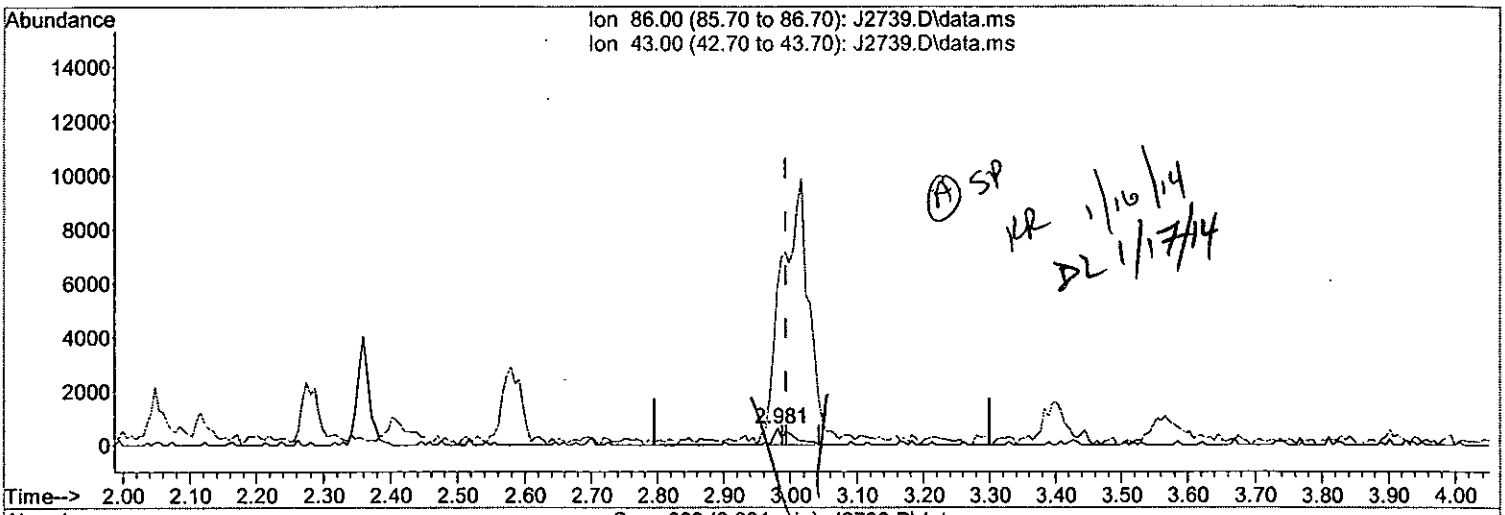
W011514.M Thu Jan 16 10:47:44 2014 Page: 1

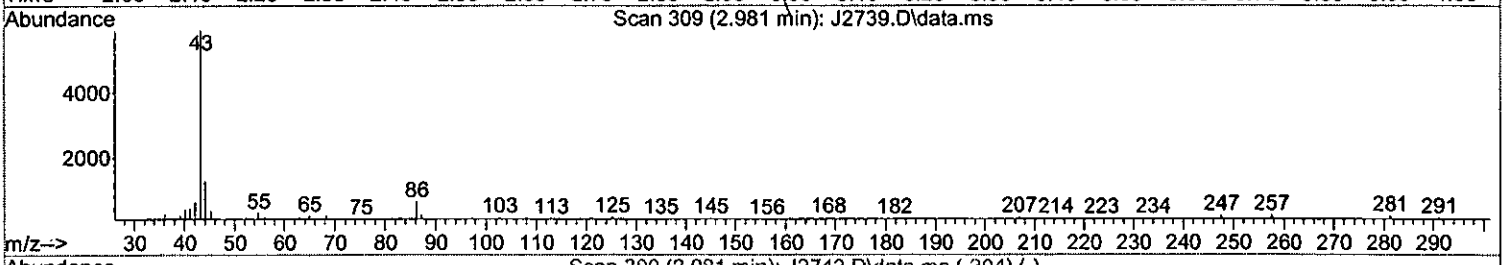
00134

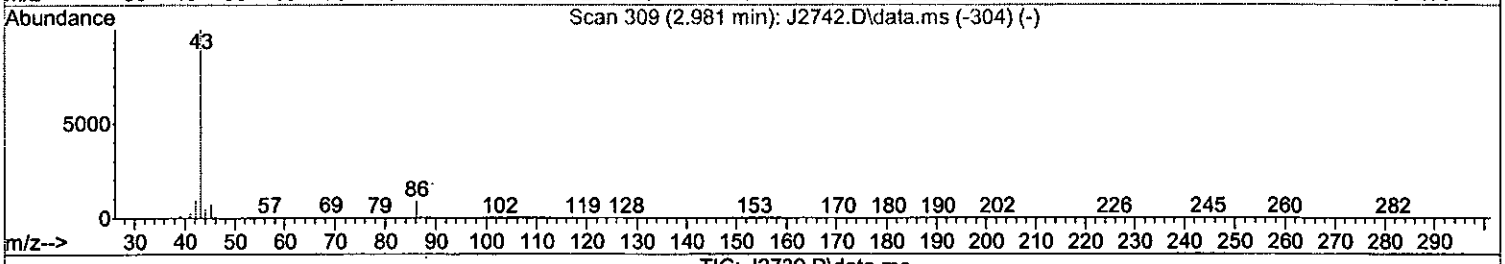
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(29) Vinyl Acetate

2.981min (-0.012) 1.03 ppb m

response 1137

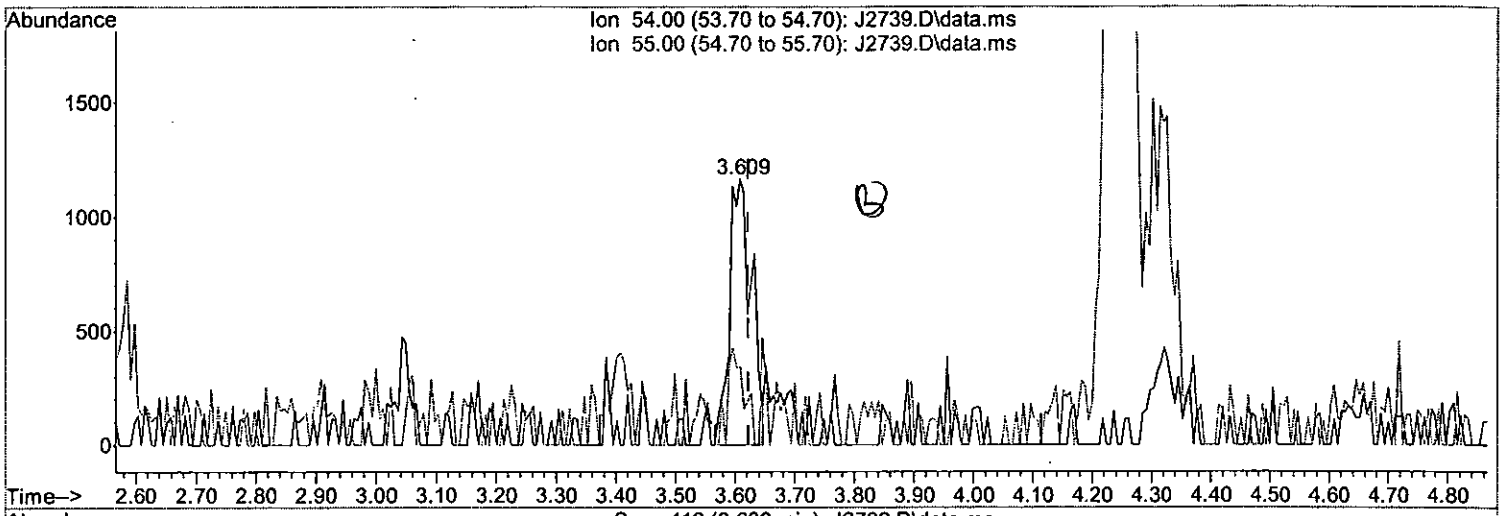
Ion	Exp%	Act%
86.00	100	100
43.00	1126.30	938.19#
0.00	0.00	0.00
0.00	0.00	0.00

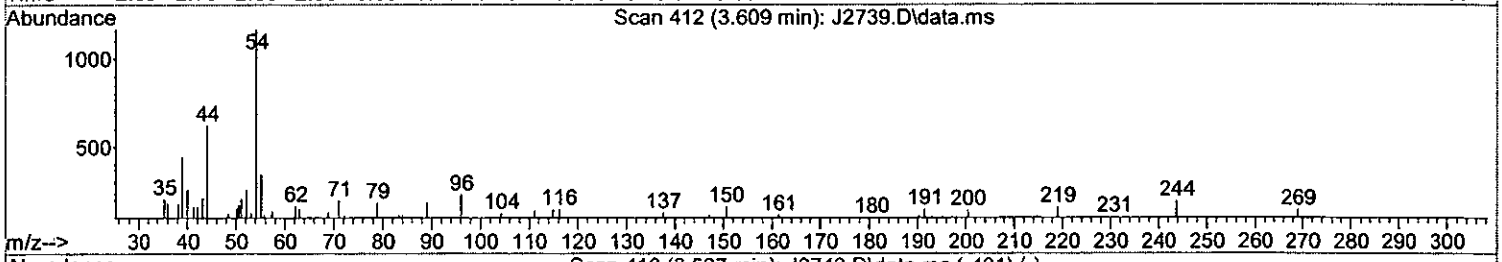
W011514.M Thu Jan 16 10:47:52 2014 Page: 1

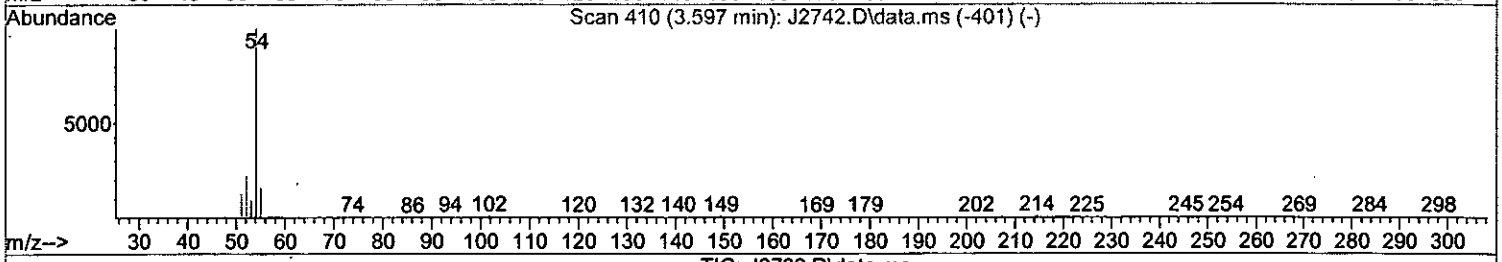
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(36) Propionitrile

3.609min (-0.012) 4.60 ppb

response 2962

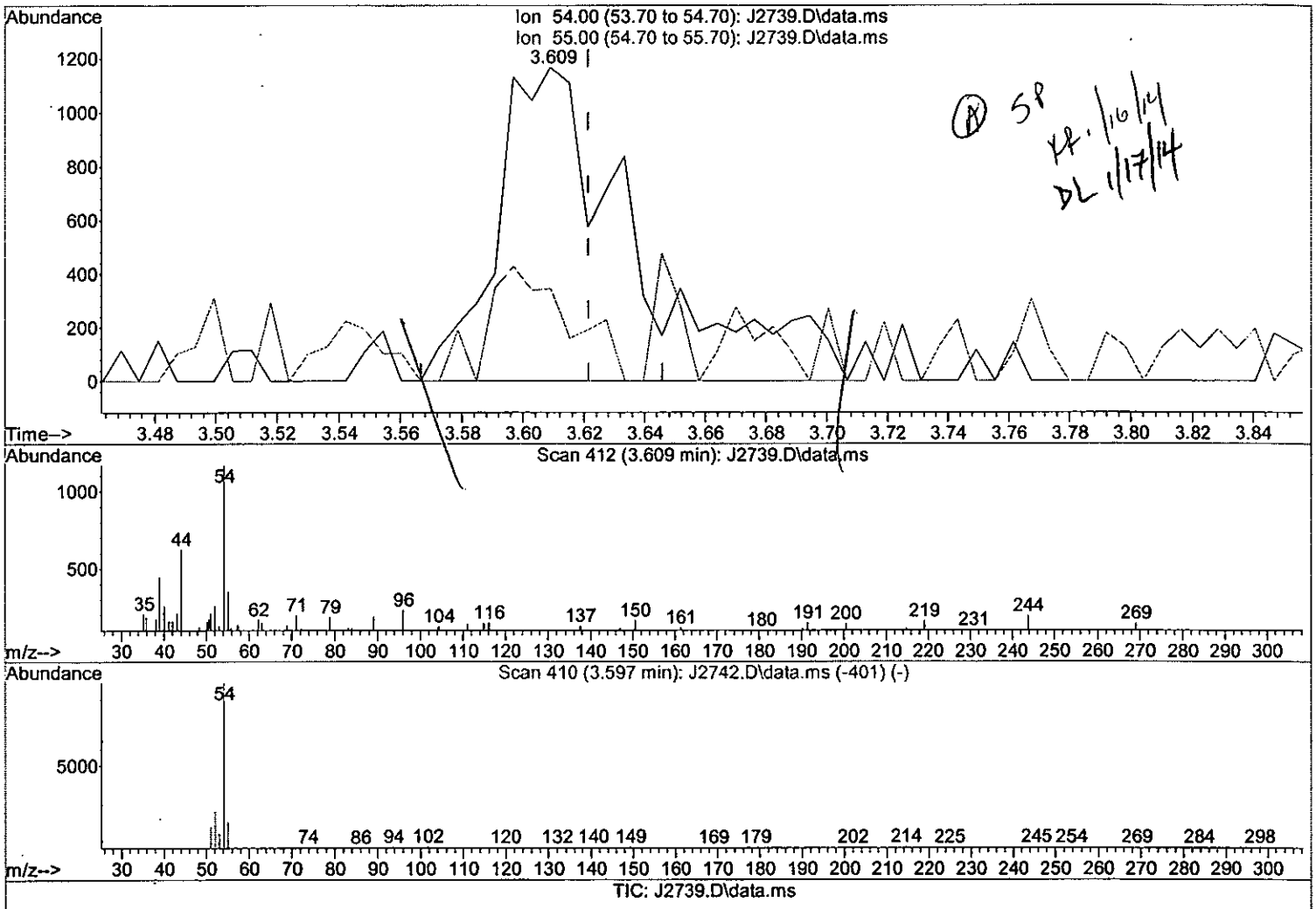
Ion	Exp%	Act%
54.00	100	100
55.00	17.00	29.56
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 10:48:15 2014 00136 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2739.D\data.ms

(36) Propionitrile

3.609min (-0.012) 5.71 ppb m

response 3676

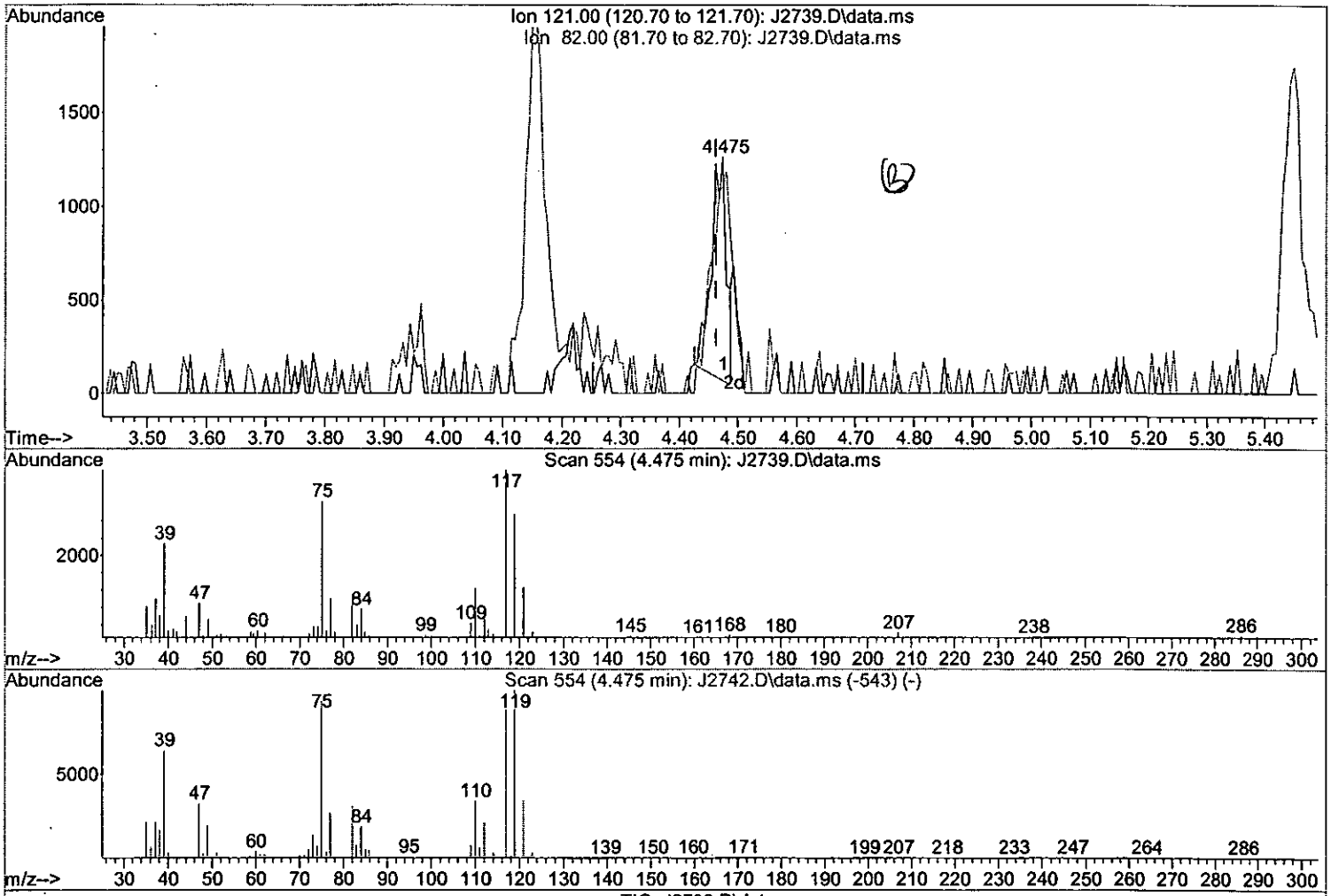
Ion	Exp%	Act%
54.00	100	100
55.00	17.00	29.56
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 10:48:29 2014 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2739.D\data.ms

(46) Carbontetrachloride (P)

4.475min (+0.012) 0.66 ppb

response 2098

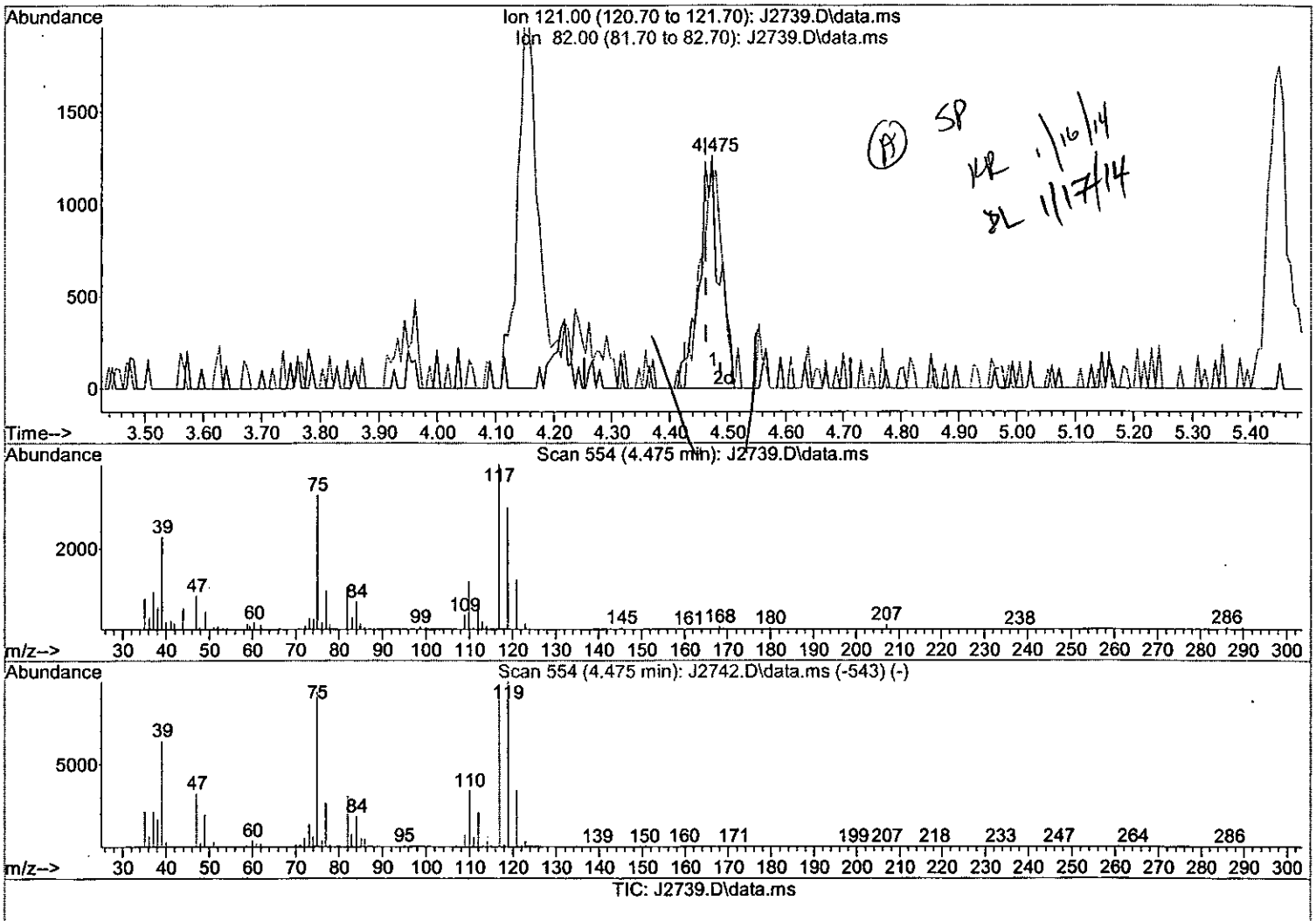
Ion	Exp%	Act%
121.00	100	100
82.00	88.90	86.93
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 10:48:48 2014 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2739.D\data.ms

(46) Carbontetrachloride (P)

4.475min (+0.012) 0.97 ppb m

response 3066

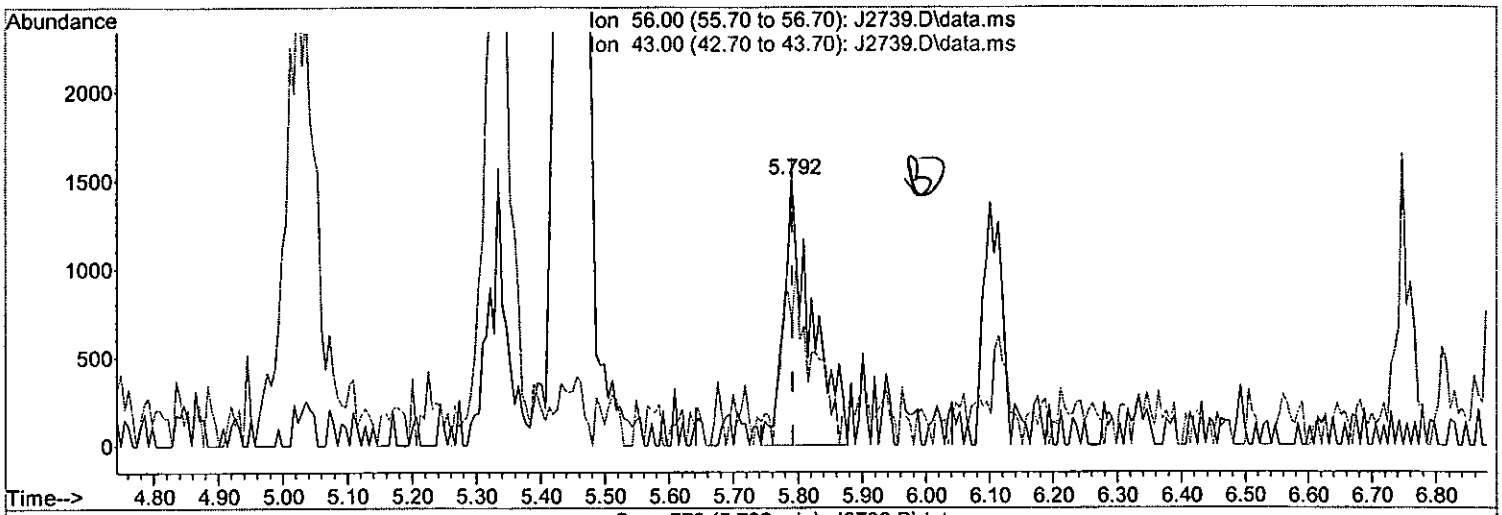
Ion	Exp%	Act%
121.00	100	100
82.00	88.90	86.93
0.00	0.00	0.00
0.00	0.00	0.00

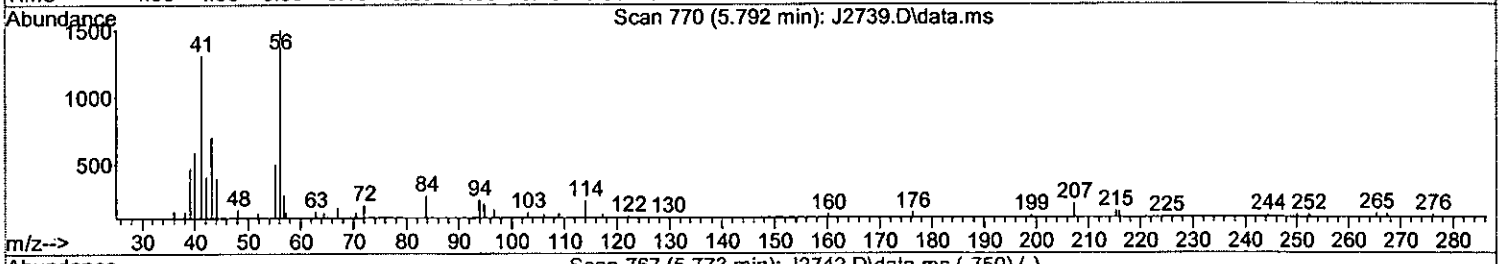
W011514.M Thu Jan 16 10:48:54 2014 Page: 1

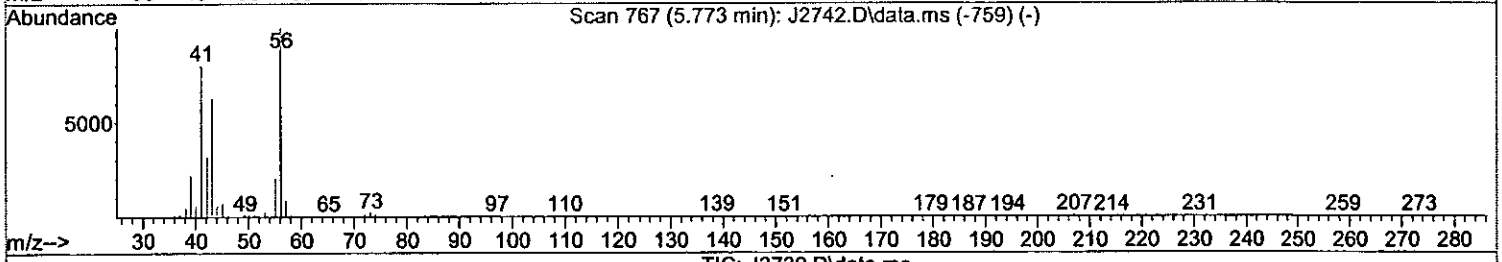
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(53) 1-Butanol

5.792min (+0.000) 41.73 ppb

response 4498

Ion	Exp%	Act%
56.00	100	100
43.00	61.10	70.01
0.00	0.00	0.00
0.00	0.00	0.00

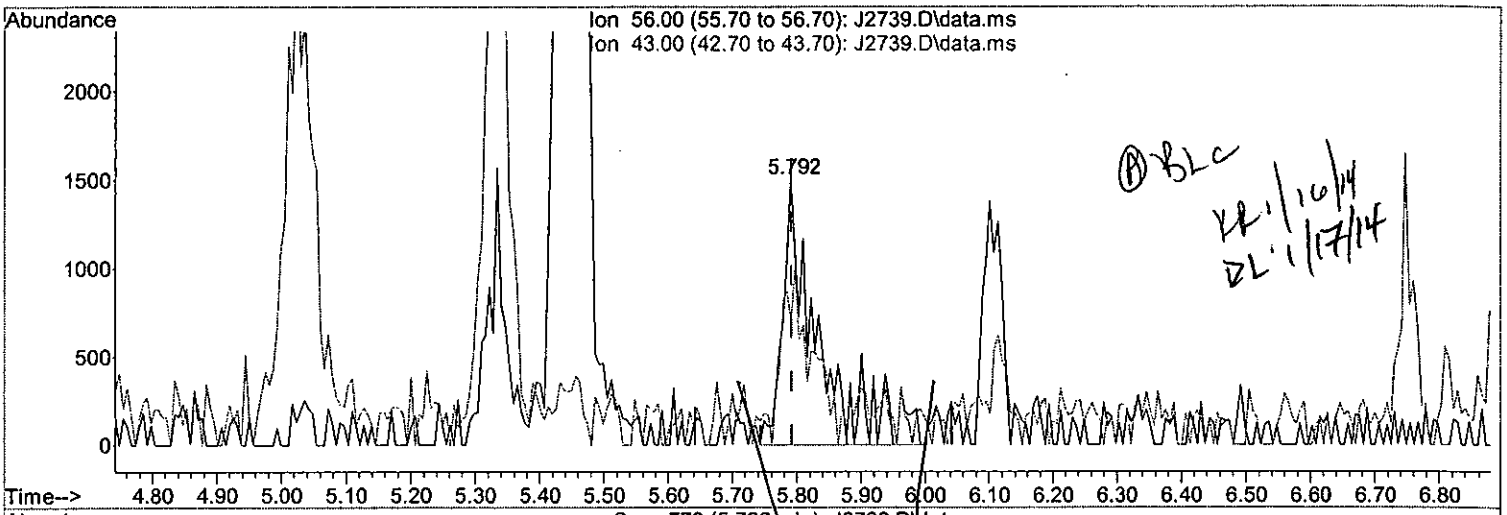
W011514.M Thu Jan 16 10:49:47 2014 Page: 1

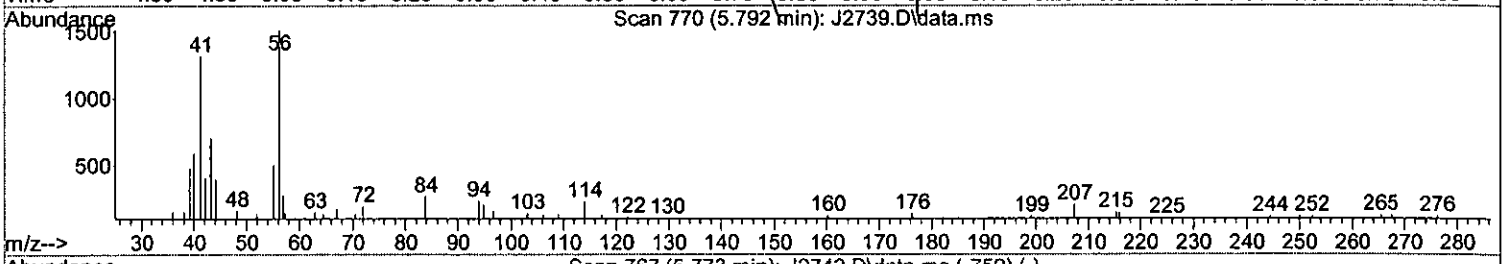
00149

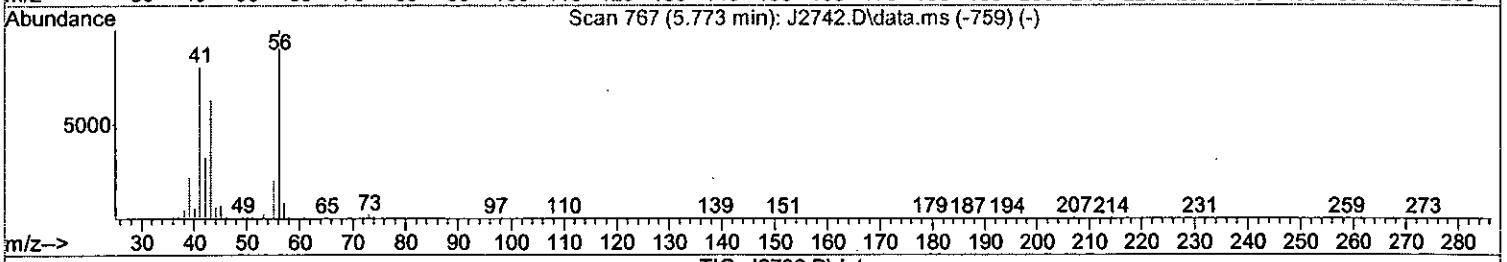
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(53) 1-Butanol

5.792min (+0.000) 53.65 ppb m

response 5782

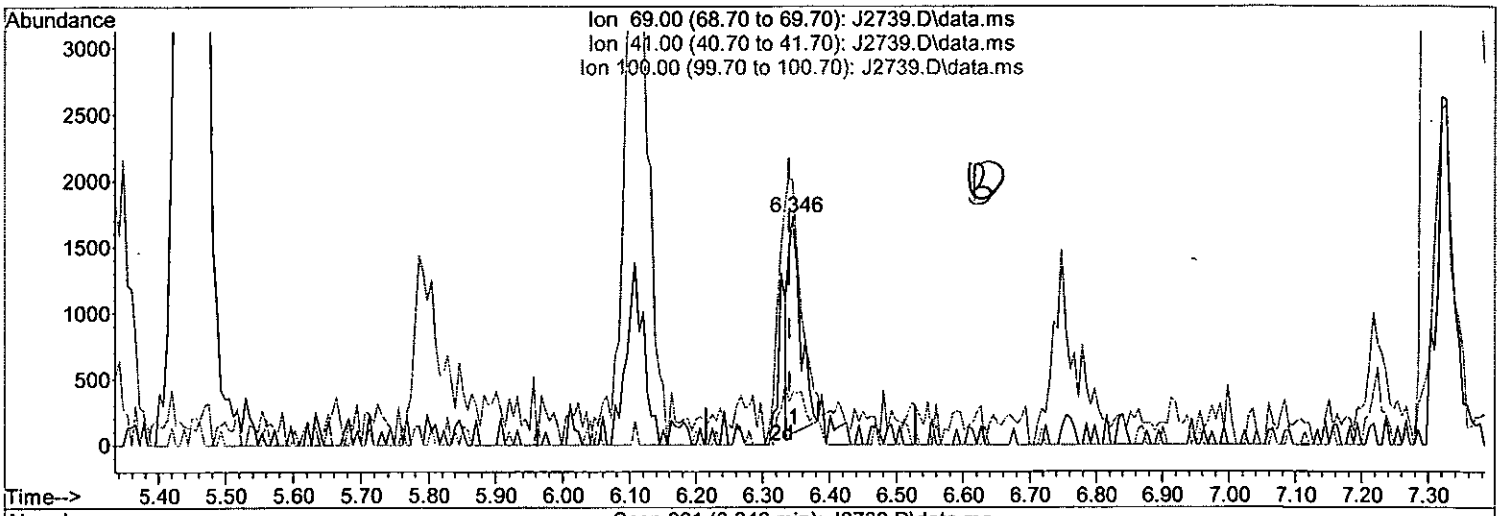
Ion	Exp%	Act%
56.00	100	100
43.00	61.10	54.46
0.00	0.00	0.00
0.00	0.00	0.00

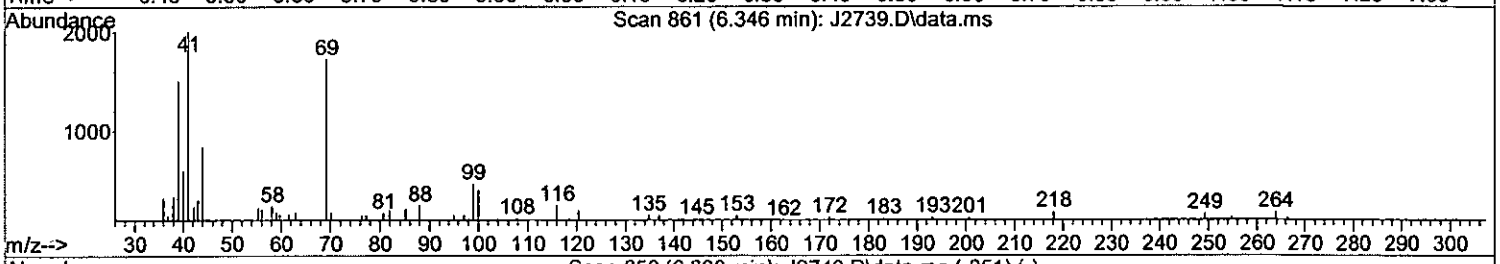
W011514.M Thu Jan 16 10:49:56 2014 Page: 1

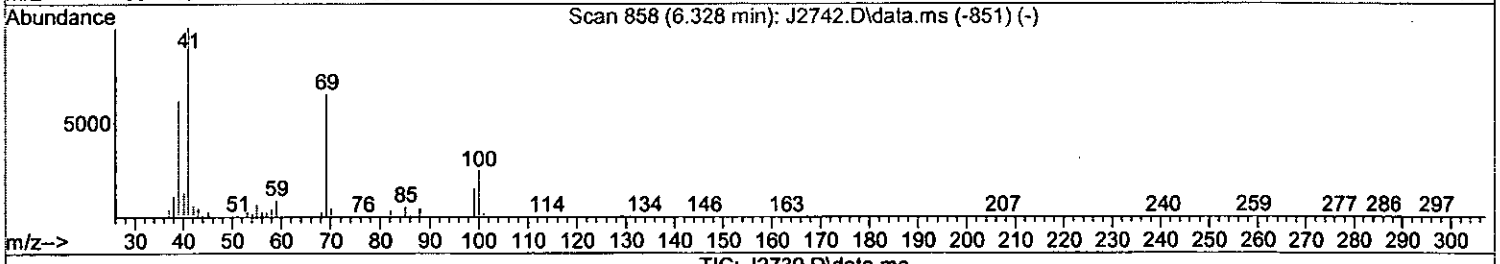
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(59) Methyl Methacrylate

6.346min (+0.006) 0.57 ppb

response 2096

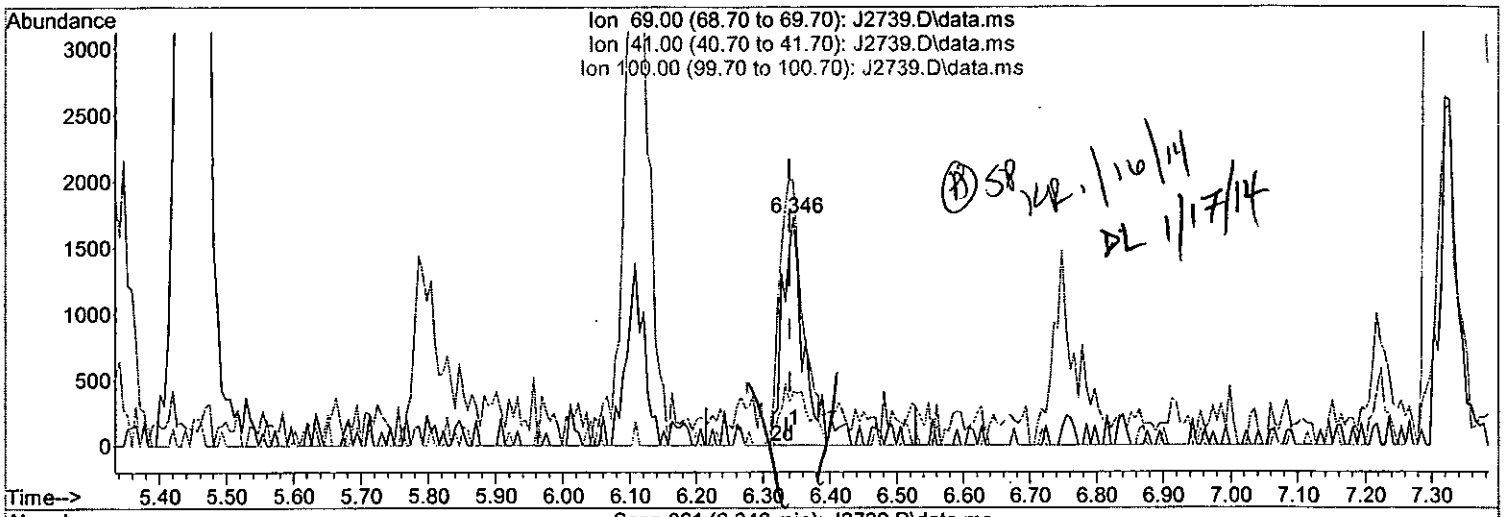
Ion	Exp%	Act%
69.00	100	100
41.00	154.30	116.28#
100.00	37.60	23.41
0.00	0.00	0.00

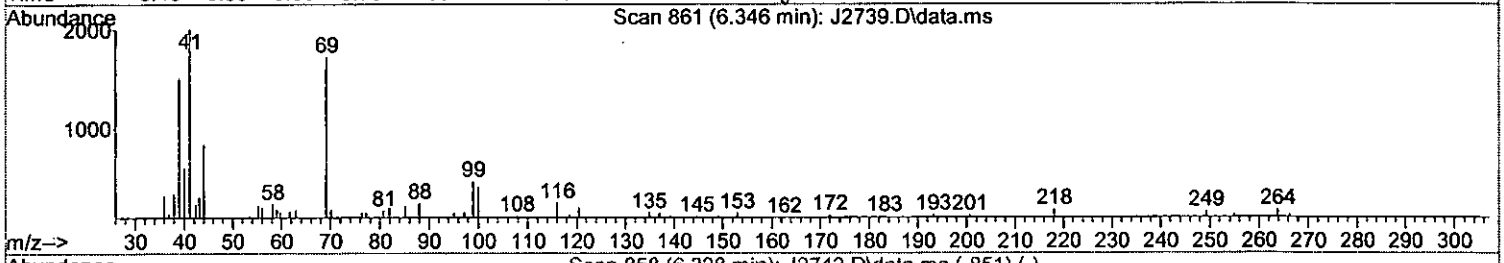
W011514.M Thu Jan 16 10:50:17 2014 Page: 1

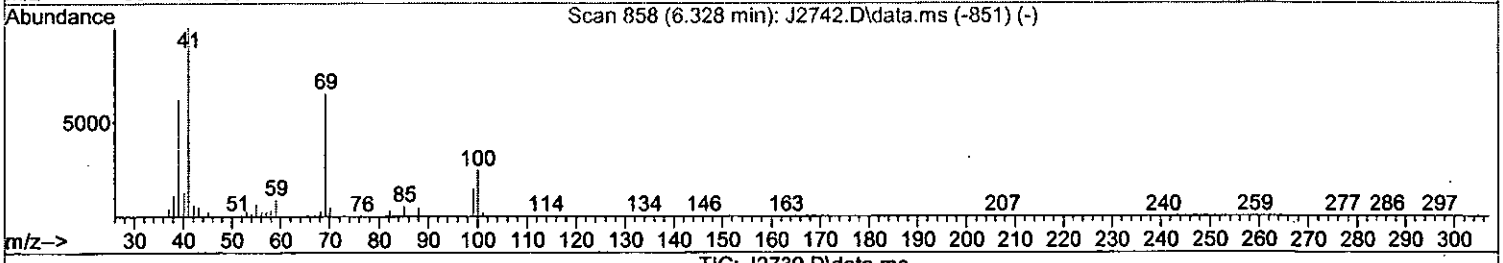
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(59) Methyl Methacrylate

6.346min (+0.006) 0.99 ppb m

response 3650

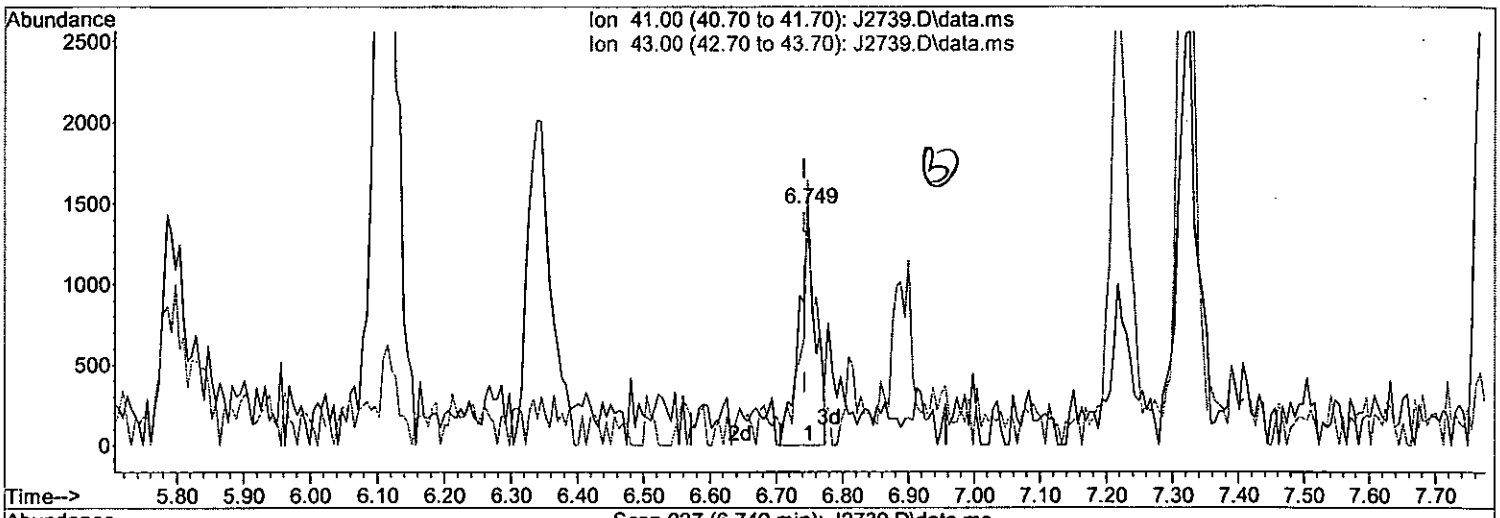
Ion	Exp%	Act%
69.00	100	100
41.00	154.30	116.28#
100.00	37.60	23.41
0.00	0.00	0.00

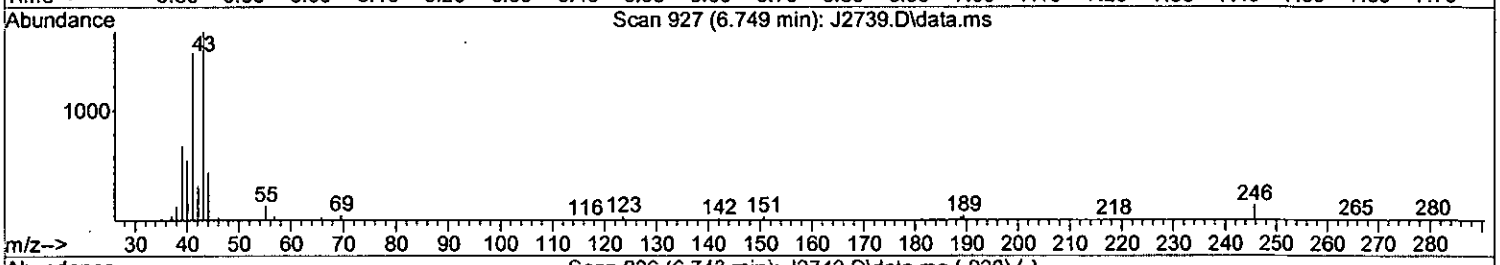
W011514.M Thu Jan 16 10:50:24 2014 Page: 1

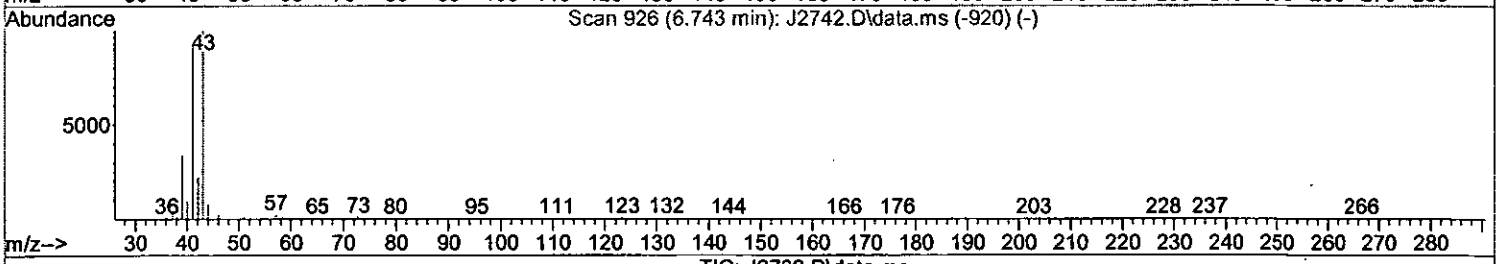
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(61) 2-Nitropropane

6.749min (+0.006) 1.91 ppb

response 2543

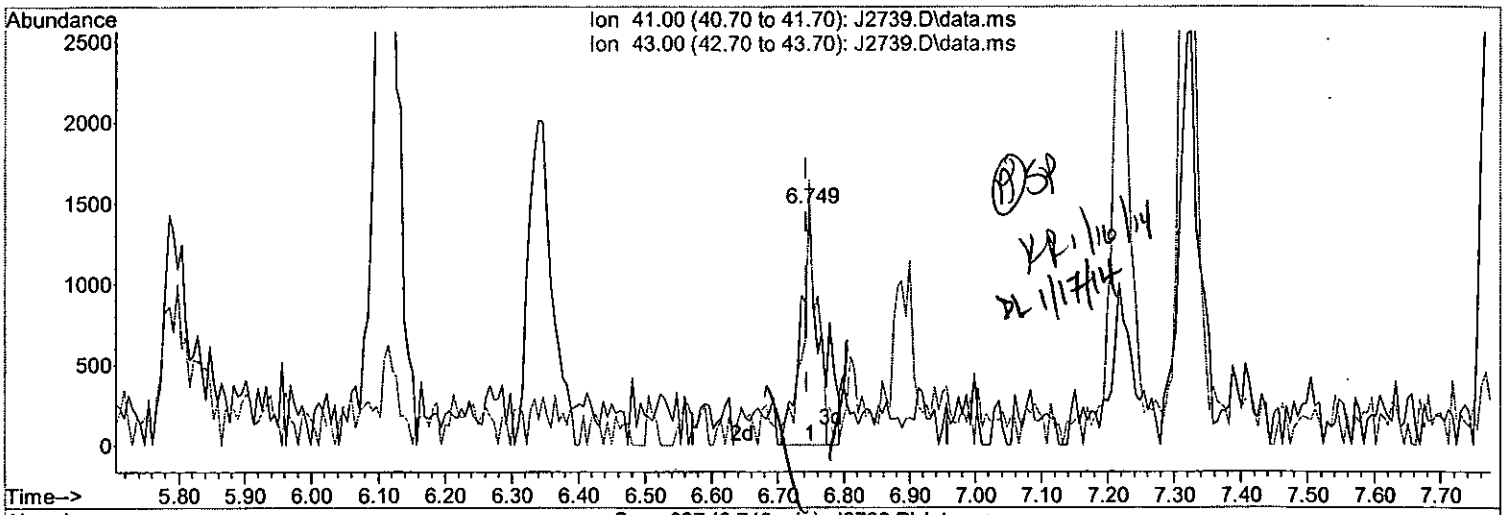
Ion	Exp%	Act%
41.00	100	100
43.00	108.60	112.15
0.00	0.00	0.00
0.00	0.00	0.00

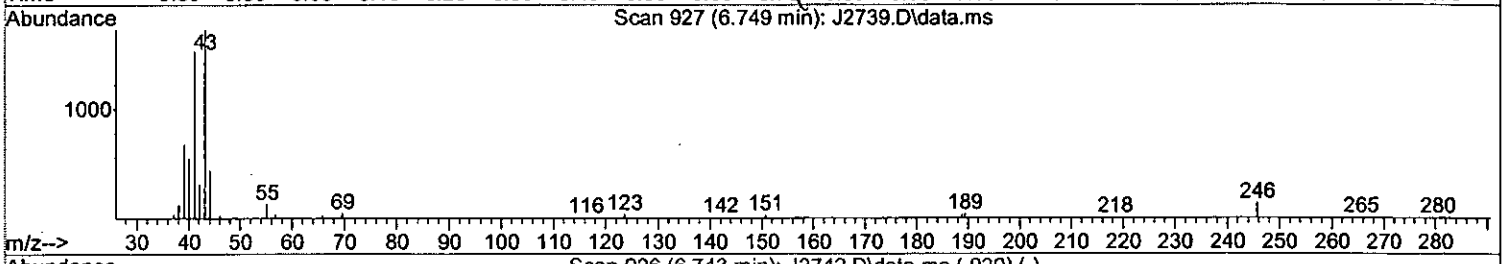
W011514.M Thu Jan 16 10:50:37 2014 Page: 1

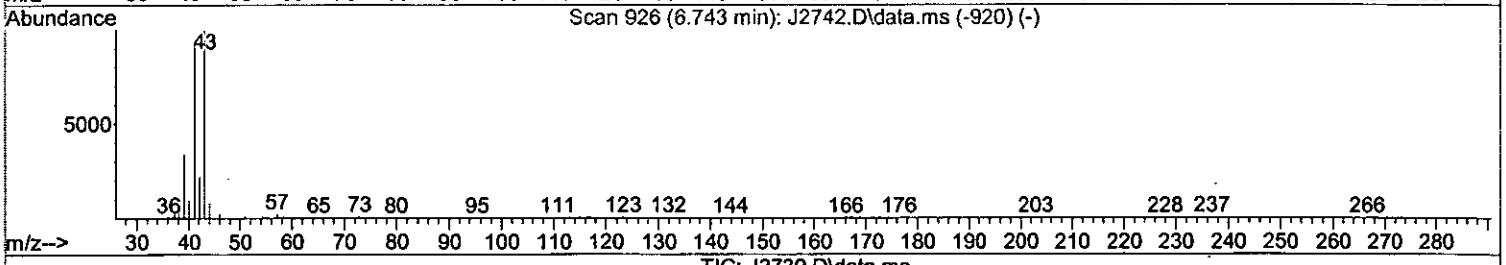
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(61) 2-Nitropropane

6.749min (+0.006) 2.33 ppb m

response 3095

Ion	Exp%	Act%
41.00	100	100
43.00	108.60	112.15
0.00	0.00	0.00
0.00	0.00	0.00

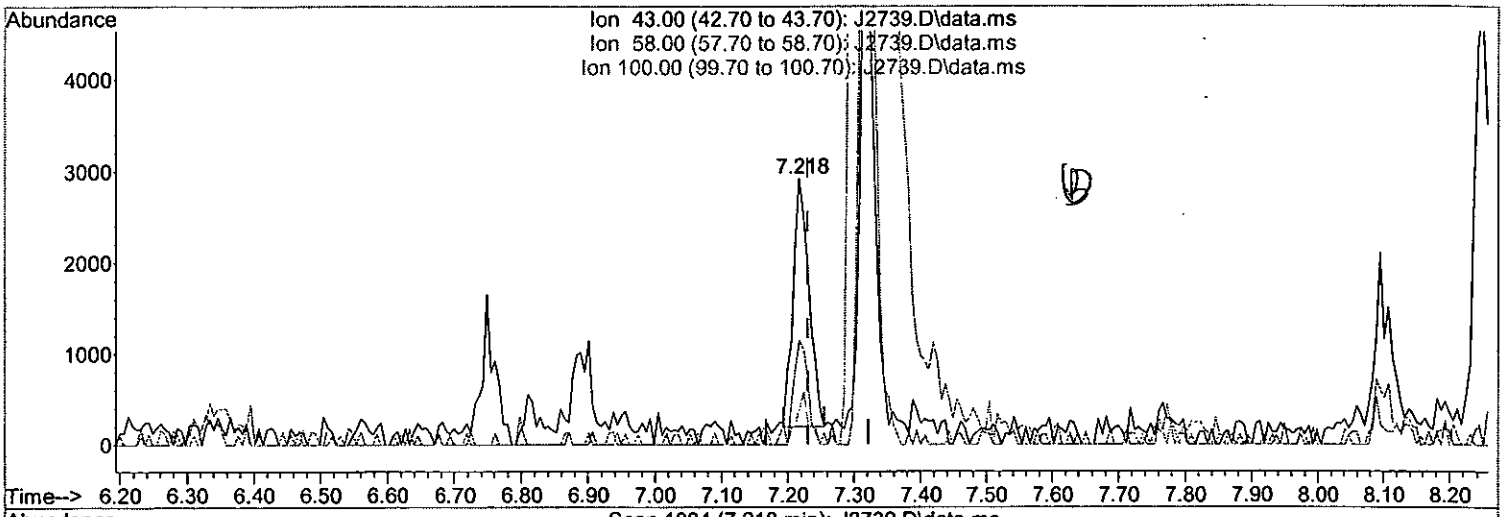
W011514.M Thu Jan 16 10:50:44 2014 Page: 1

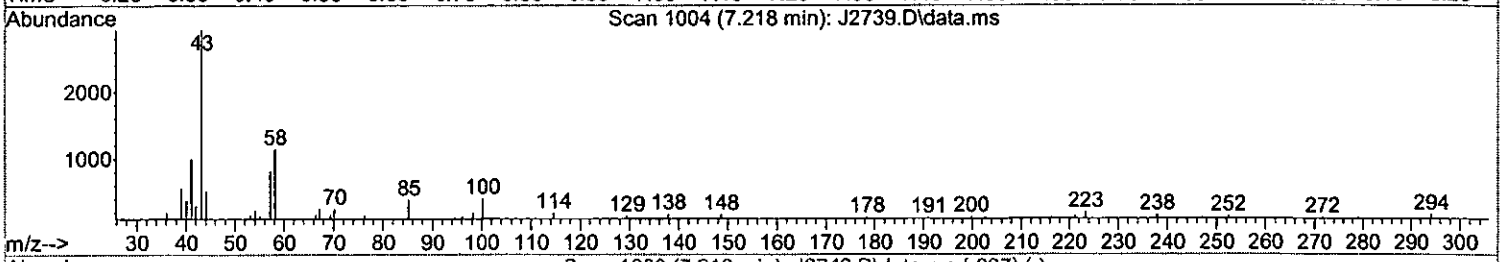
00145

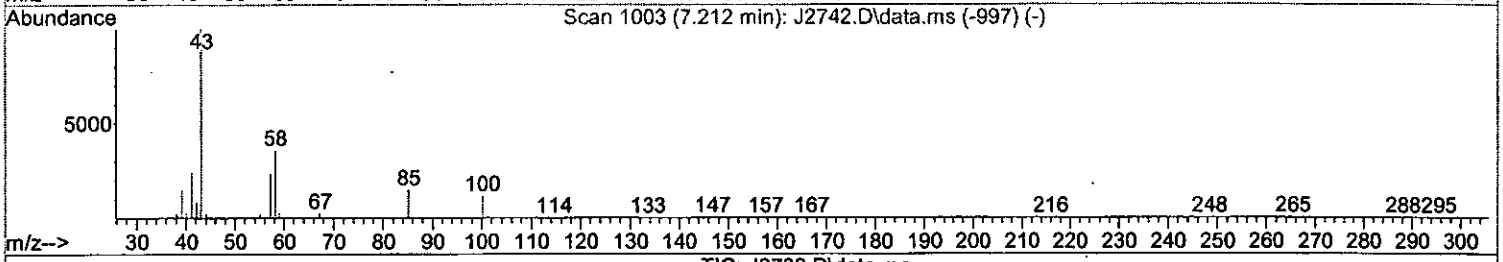
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.218min (-0.012) 0.89 ppb

response 4551

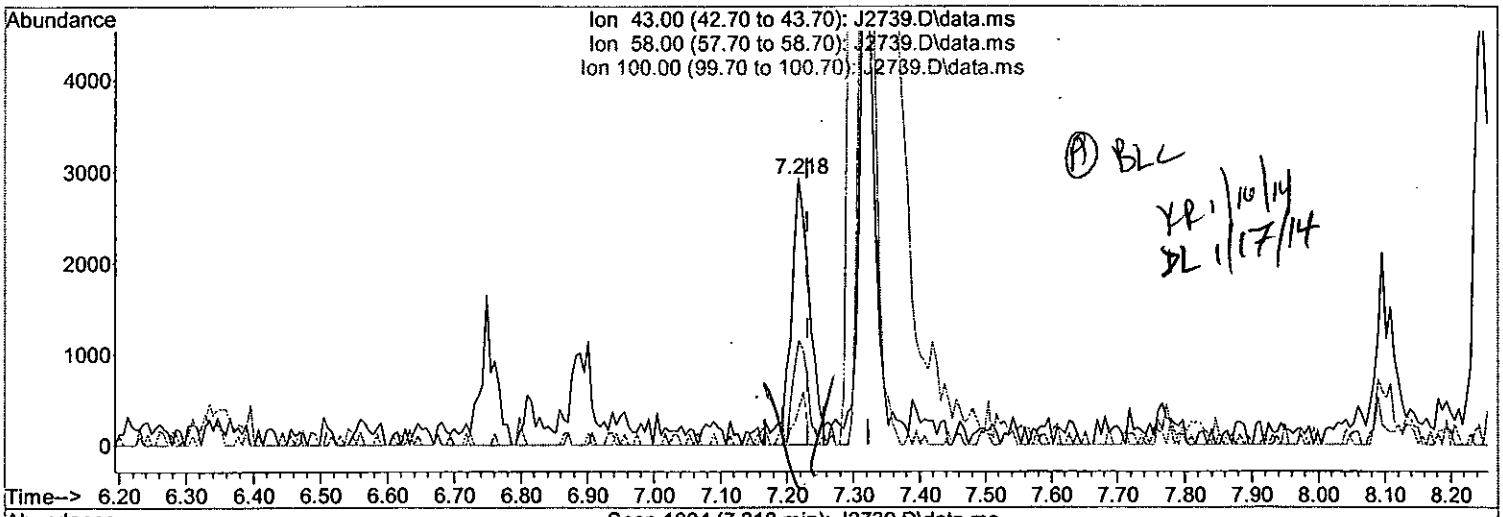
Ion	Exp%	Act%
43.00	100	100
58.00	35.80	39.23
100.00	11.60	13.84
0.00	0.00	0.00

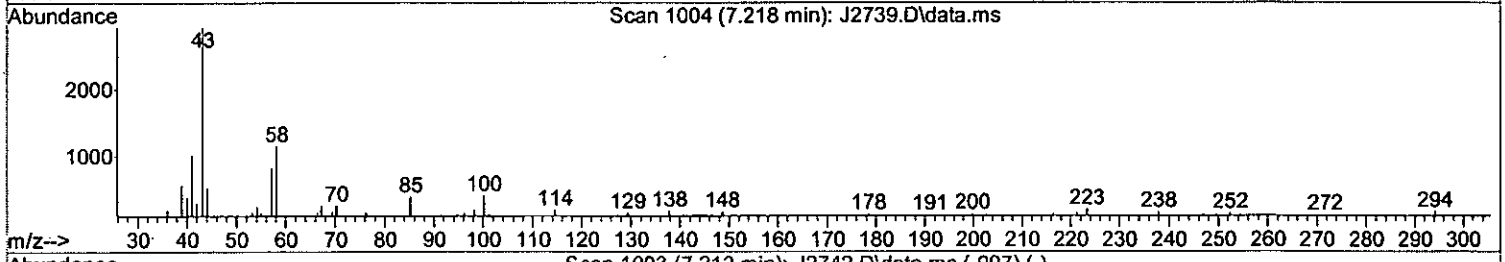
W011514.M Thu Jan 16 10:51:23 2014 Page: 1

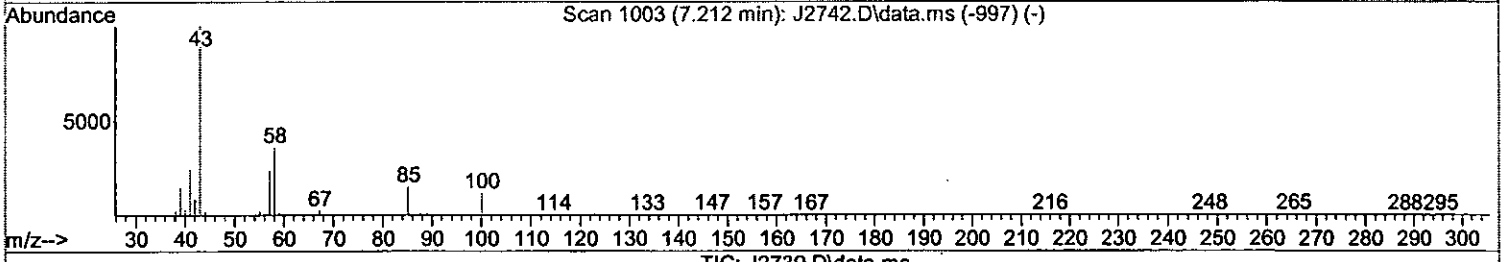
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.218min (-0.012) 1.03 ppb m

response 5271

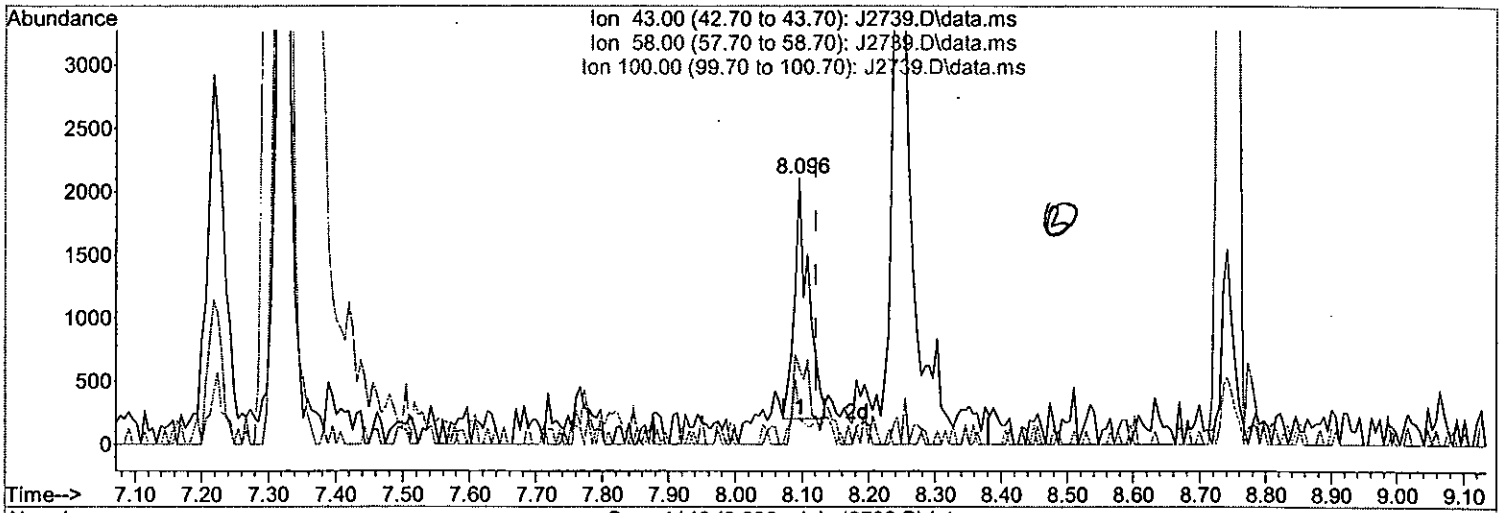
Ion	Exp%	Act%
43.00	100	100
58.00	35.80	39.23
100.00	11.60	13.84
0.00	0.00	0.00

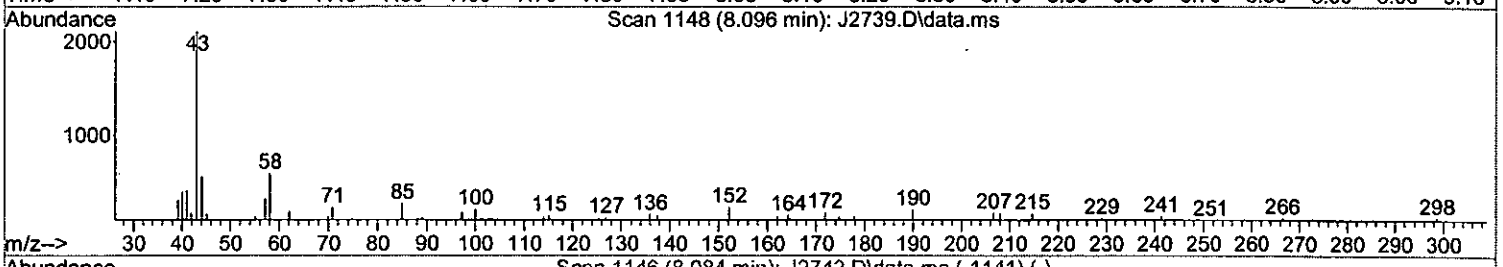
W011514.M Thu Jan 16 10:51:29 2014 Page: 1

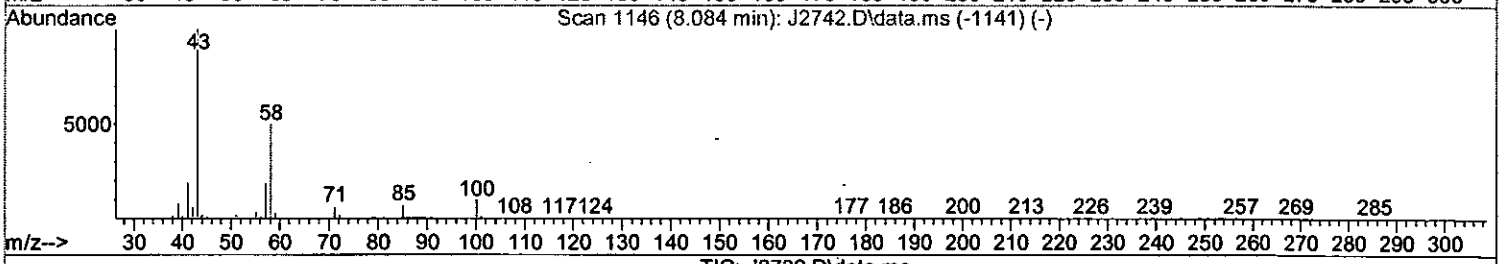
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(73) 2-Hexanone (P)

8.096min (-0.024) 0.80 ppb

response 2749

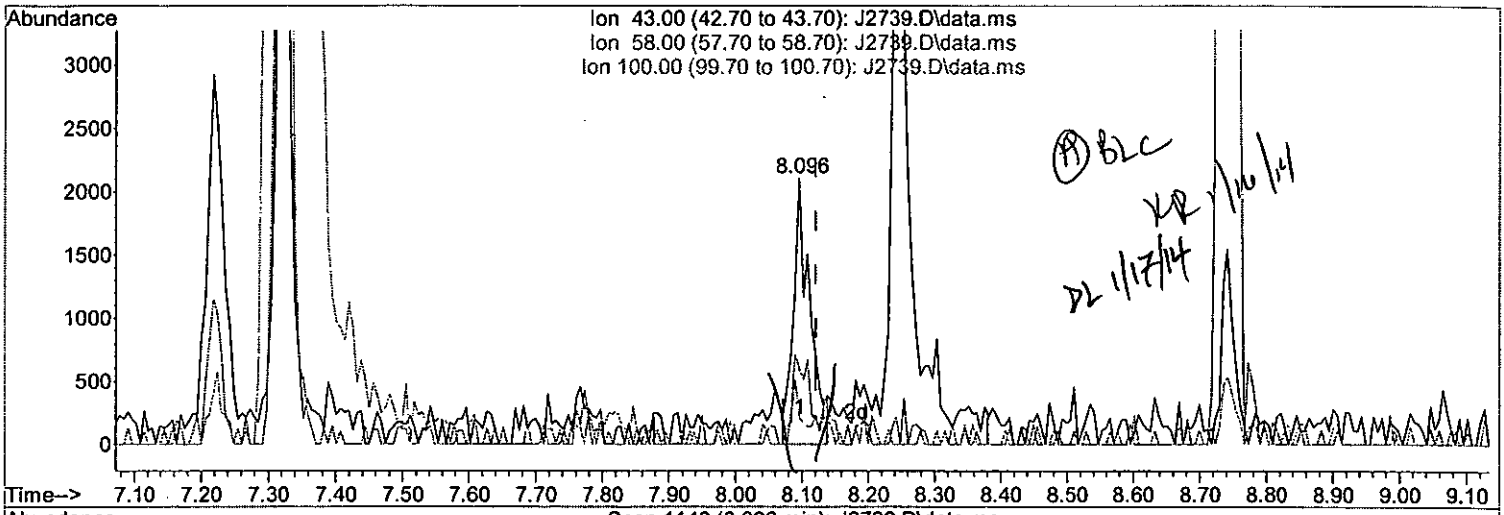
Ion	Exp%	Act%
43.00	100	100
58.00	49.40	28.15#
100.00	9.40	9.95
0.00	0.00	0.00

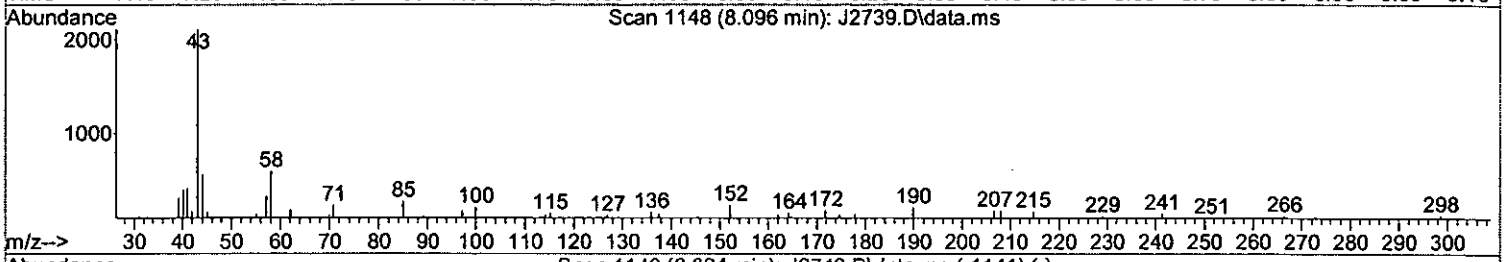
W011514.M Thu Jan 16 10:51:45 2014 Page: 1

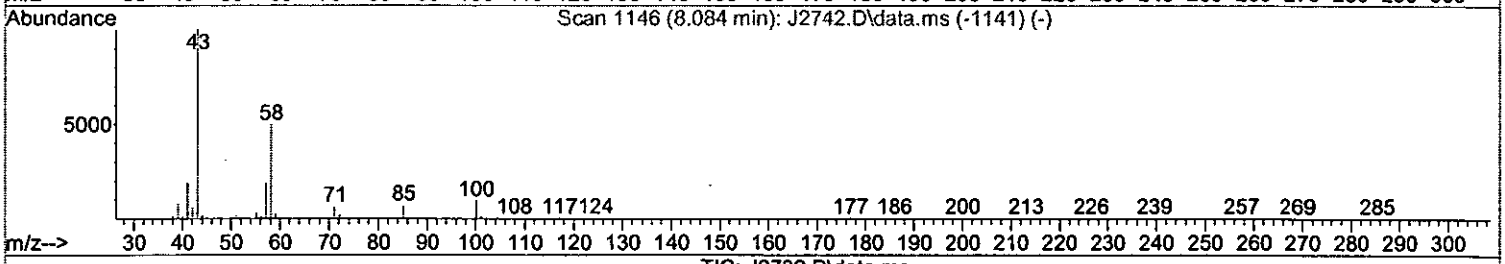
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(73) 2-Hexanone (P)

8.096min (-0.024) 1.06 ppb m

response 3630

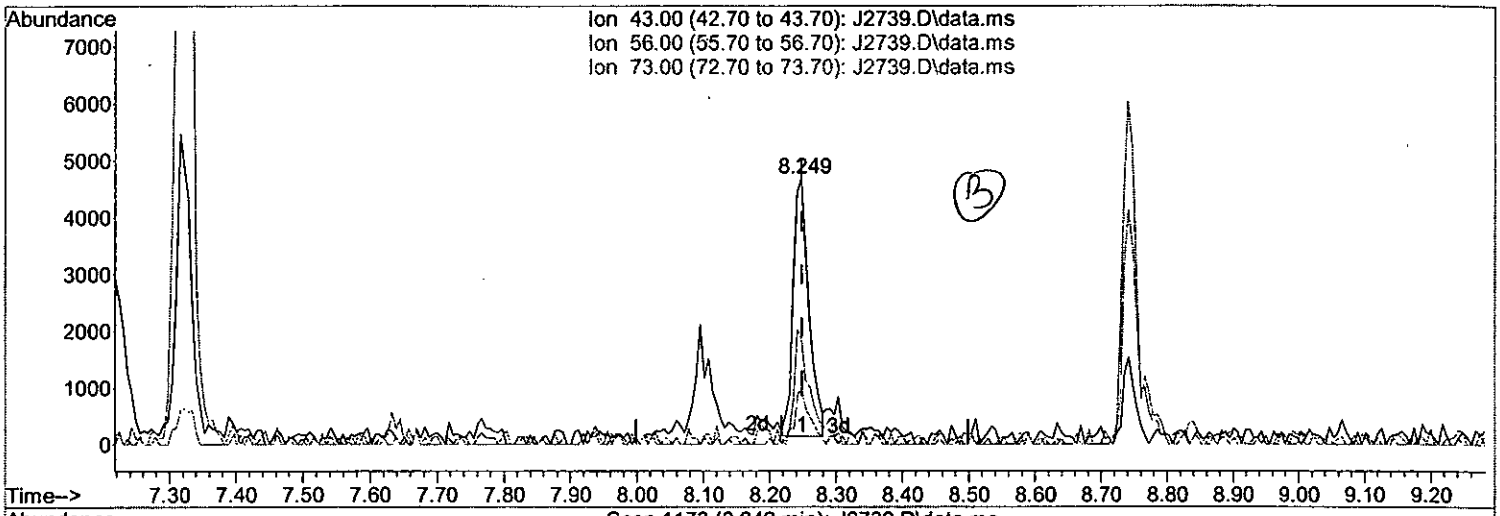
Ion	Exp%	Act%
43.00	100	100
58.00	49.40	28.15#
100.00	9.40	9.95
0.00	0.00	0.00

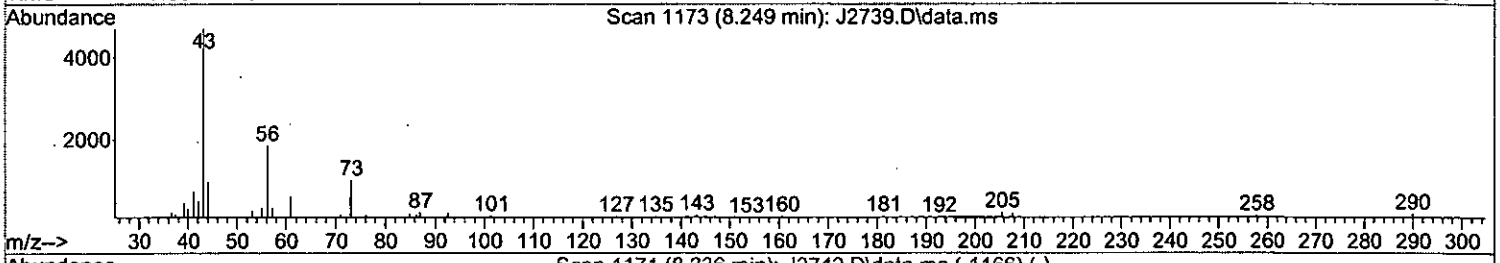
W011514.M Thu Jan 16 10:52:52 2014 Page: 1

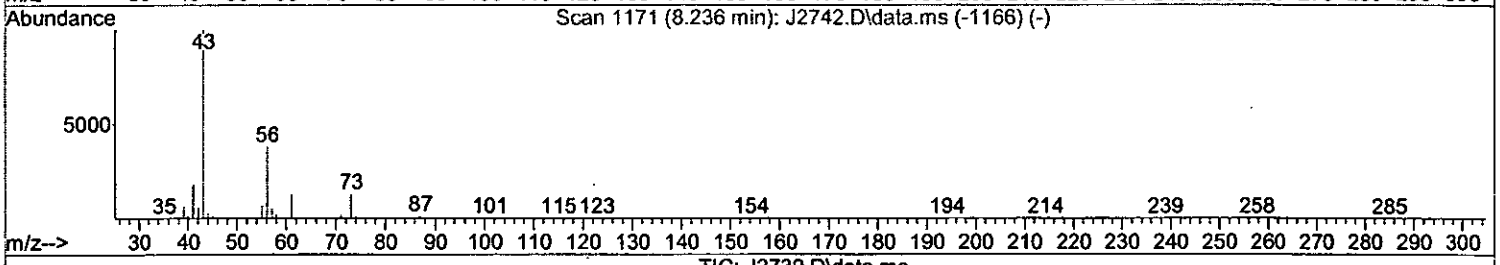
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(76) N-Butyl Acetate

8.249min (+0.000) 0.88 ppb

response 7526

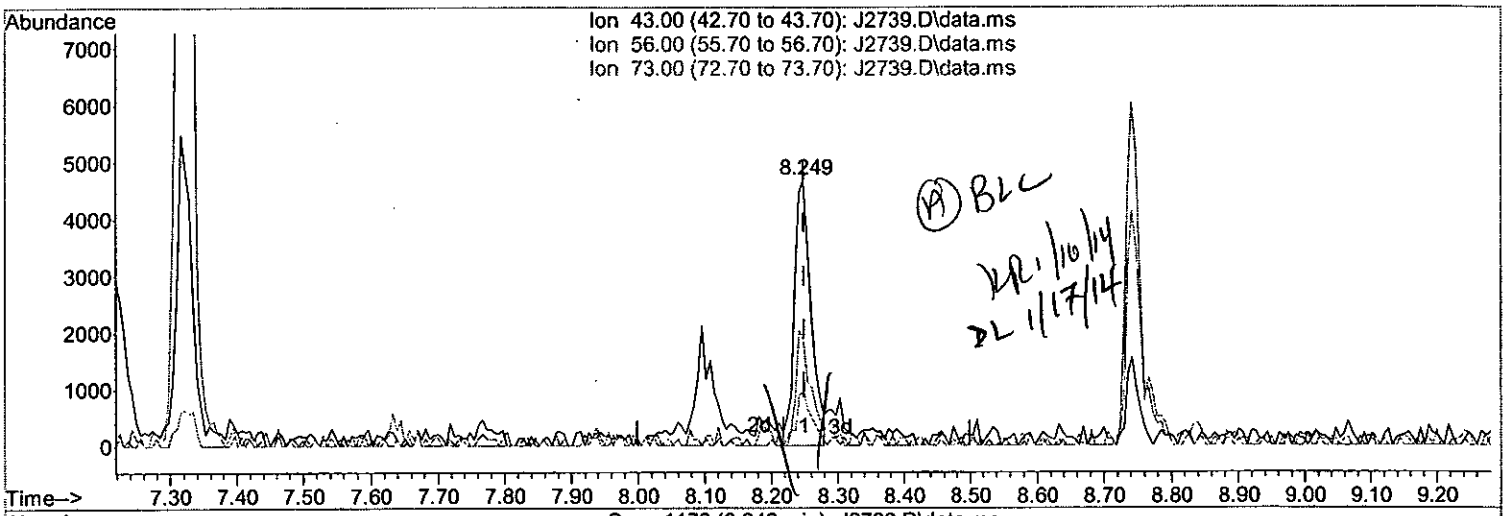
Ion	Exp%	Act%
43.00	100	100
56.00	37.80	39.39
73.00	13.10	21.42
0.00	0.00	0.00

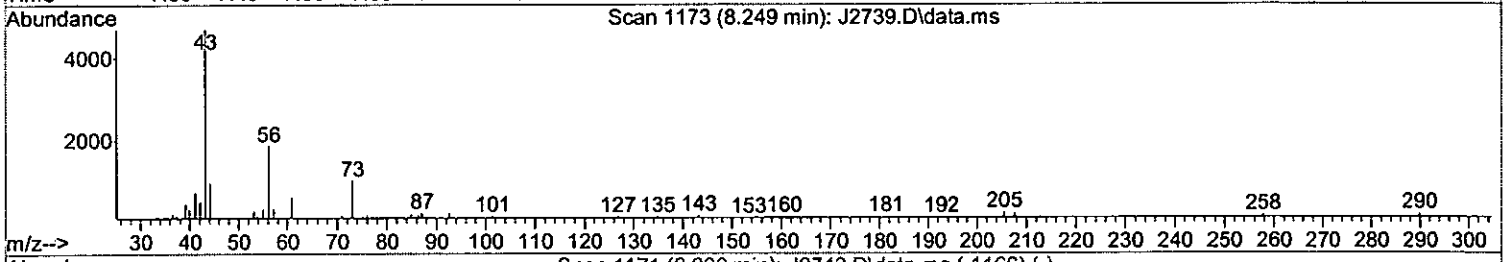
W011514.M Thu Jan 16 10:53:10 2014 Page: 1

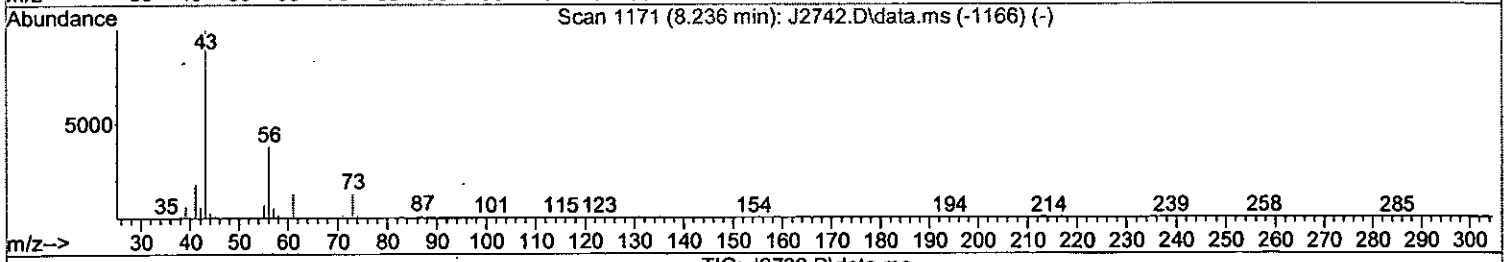
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2739.D\data.ms

(76) N-Butyl Acetate

8.249min (+0.000) 0.94 ppb m

response 8040

Ion	Exp%	Act%
43.00	100	100
56.00	37.80	39.39
73.00	13.10	21.42
0.00	0.00	0.00

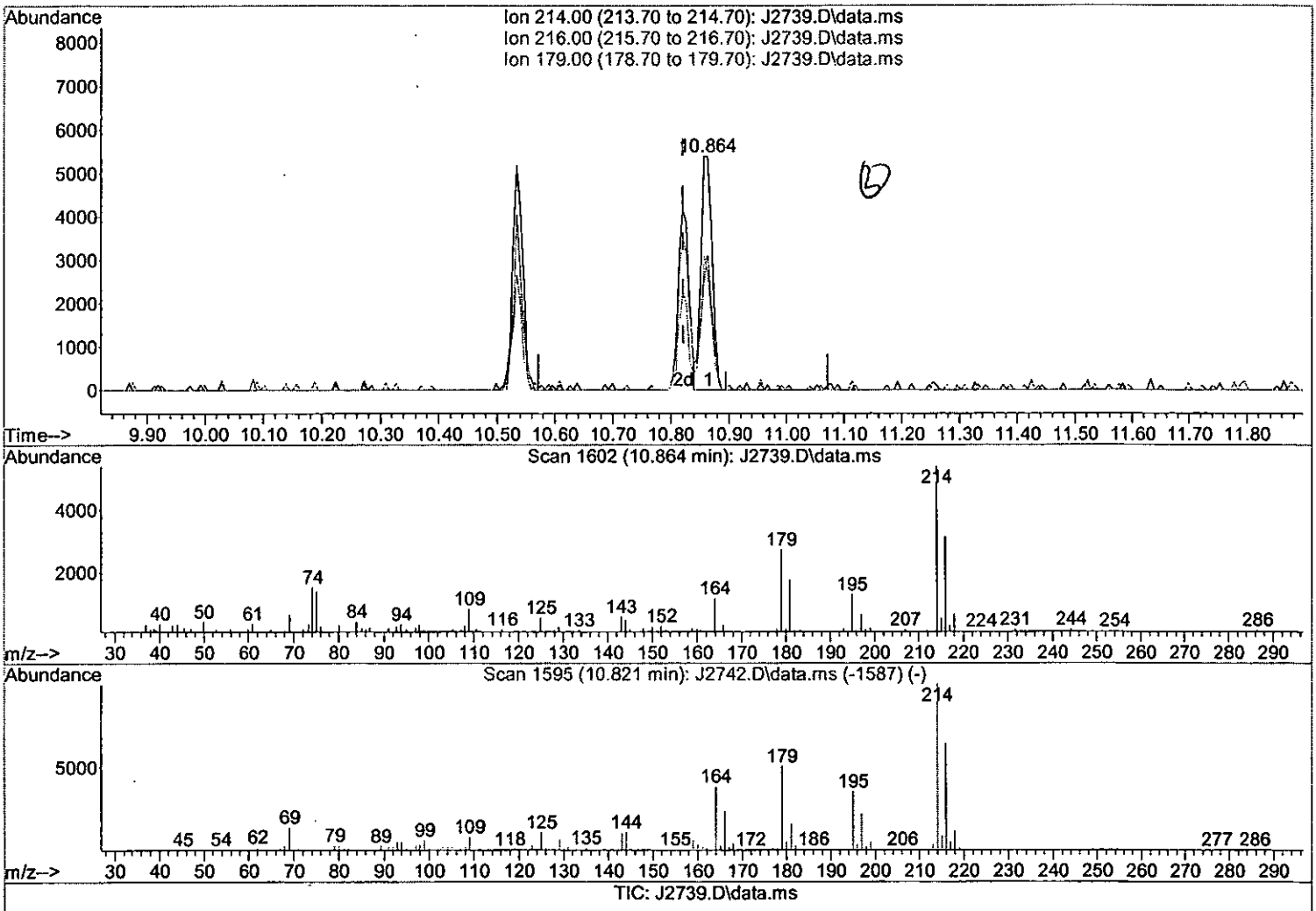
W011514.M Thu Jan 16 10:53:30 2014 Page: 1

00151

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2739.D\data.ms

(107) 2,4-DCBTF

10.864min (+0.043) 1.21 ppb

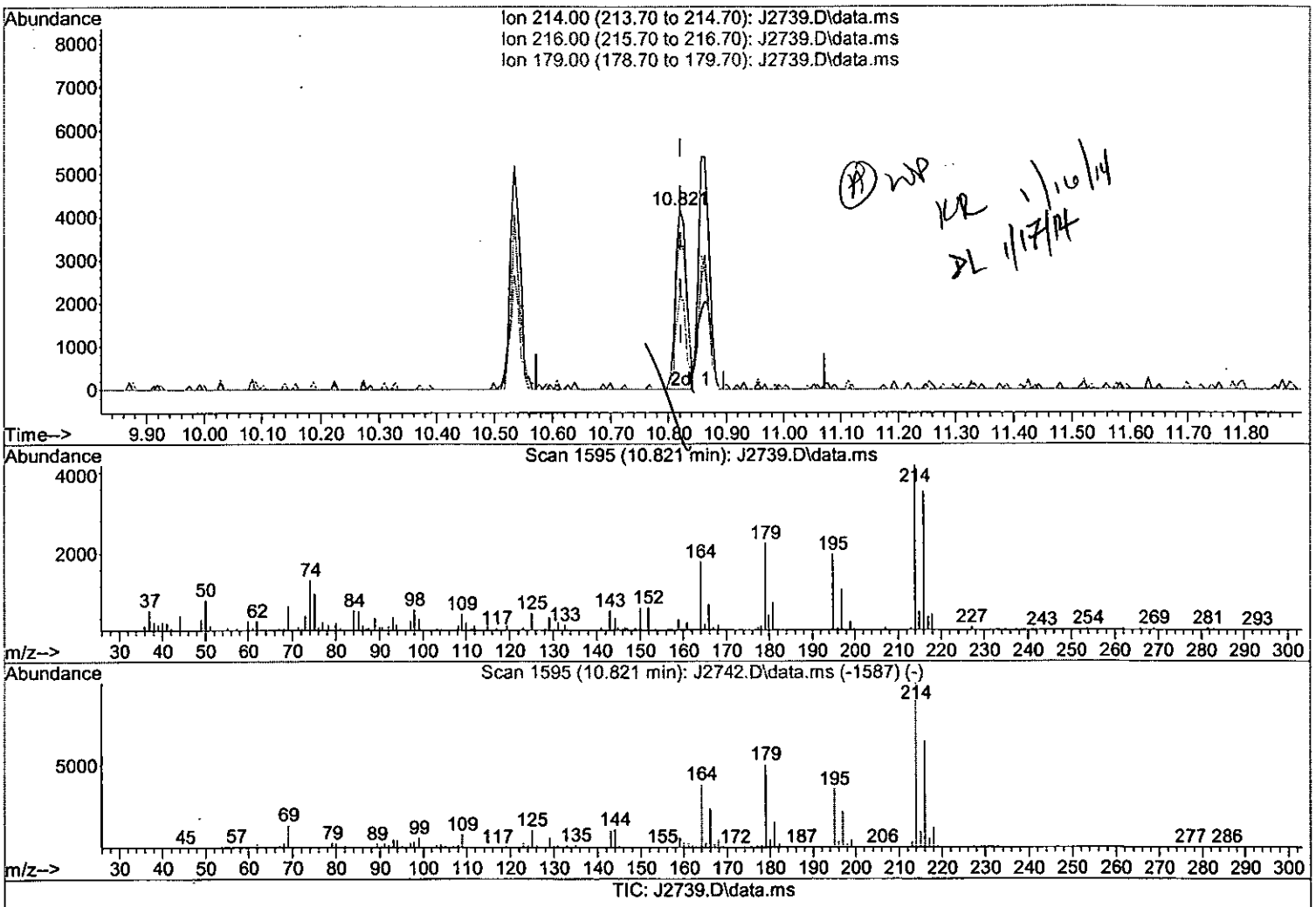
response 7125

Ion	Exp%	Act%
214.00	100	100
216.00	64.10	58.23
179.00	50.40	50.51
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:13 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2739.D\data.ms

(107) 2,4-DCBTF

10.821min (+0.000) 0.94 ppb m

response 5533

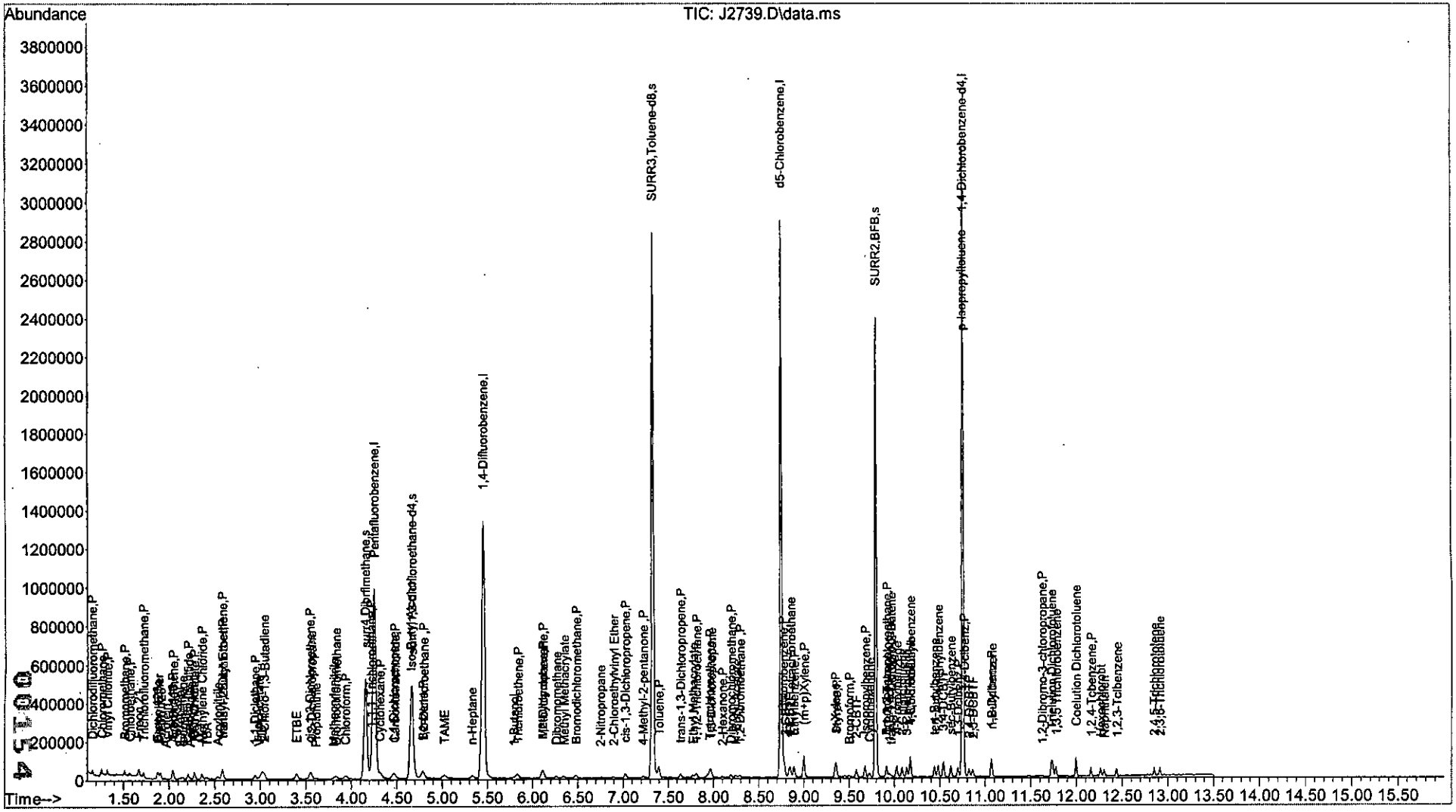
Ion	Exp%	Act%
214.00	100	100
216.00	64.10	84.49#
179.00	50.40	53.80
0.00	0.00	0.00

W011514.M Thu Jan 16 10:53:59 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2739.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 8:32 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:53:53 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 10:54:28 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:09:38 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	854814	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1269333	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1158069	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	561962	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	370220	49.93	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.86%				
48) surr1,1,2-dichloroetha...	4.664	65	452379	50.65	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 101.30%				
65) SURR3,Toluene-d8	7.322	98	1578737	50.08	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.16%				
70) SURR2,BFB	9.791	95	579888	49.47	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.94%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	16494	1.87	ppb		98
3) Chloromethane	1.262	50	24002	1.99	ppb		98
4) Vinyl Chloride	1.323	62	23050	1.97	ppb		96
5) Bromomethane	1.512	94	16538	2.10	ppb		97
6) Chloroethane	1.567	64	13230	1.87	ppb		97
7) Freon 21	1.664	67	34520	2.02	ppb		99
8) Trichlorofluoromethane	1.719	101	25654	1.96	ppb		96
9) Diethyl Ether	1.878	59	11125	1.94	ppb		89
10) Freon 123a	1.872	67	18063	1.88	ppb		97
11) Freon 123	1.902	83	21245	2.07	ppb		94
12) Acrolein	1.957	56	2764	6.01	ppb		94
13) 1,1-Diclethene	2.042	96	11996	1.96	ppb	#	86
14) Freon 113	2.036	101	12704	1.96	ppb		97
15) Acetone	2.048	43	4194m	2.38	ppb		
16) 2-Propanol	2.115	45	10784	40.53	ppb		99
17) Iodomethane	2.146	142	12505	1.43	ppb		97
18) Carbon Disulfide	2.207	76	44460	1.95	ppb		99
19) Acetonitrile	2.231	40	2754	9.80	ppb		86
20) Allyl Chloride	2.280	76	8889	2.06	ppb	#	73
21) Methyl Acetate	2.274	43	7597	2.00	ppb		89
22) Methylene Chloride	2.359	84	14256	1.93	ppb		94
23) TBA	2.408	59	16625	37.37	ppb		90
24) Acrylonitrile	2.524	53	15563	8.75	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	38303	2.00	ppb		94
26) trans-1,2-Dichloroethene	2.585	96	14564	1.95	ppb		91
28) 1,1-Diclethane	2.938	63	28437	1.97	ppb		99
29) Vinyl Acetate	2.987	86	2027	1.86	ppb	#	93
30) DIPE	3.018	45	57240	1.99	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	29102	1.95	ppb		91
32) ETBE	3.396	59	45595	1.94	ppb		96
33) 2,2-Dichloropropane	3.554	77	23542	1.99	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	16861	1.94	ppb		92
35) 2-Butanone	3.560	43	4457m	1.93	ppb		
36) Propionitrile	3.603	54	5693	8.94	ppb		91
37) Bromochloromethane	3.828	130	8913	1.94	ppb		96

KP 1/16/14

W011514.M Thu Jan 16 11:10:09 2014 Page 1

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:09:38 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
38) Methacrylonitrile	3.798	67	4036	1.97 ppb		98
39) Tetrahydrofuran	3.920	42	4031	2.43 ppb		88
40) Chloroform	3.944	83	26791	1.98 ppb		91
41) 1,1,1-Trichloroethane	4.213	97	24398	1.97 ppb	#	1
42) TAME	5.023	73	37346	1.93 ppb		94
44) Cyclohexane	4.316	41	16971	2.07 ppb		89
46) Carbontetrachloride	4.463	121	6272	1.99 ppb		86
47) 1,1-Dichloropropene	4.463	75	18986	1.93 ppb		97
49) Benzene	4.786	78	60011	1.90 ppb		96
50) 1,2-Dichloroethane	4.792	62	19717	1.89 ppb		96
51) Iso-Butyl Alcohol	4.651	43	7938	37.79 ppb		96
52) n-Heptane	5.334	43	17552	2.06 ppb		93
53) 1-Butanol	5.798	56	10310m	95.88 ppb		
54) Trichloroethene	5.828	130	15683	1.94 ppb		91
55) Methylcyclohexane	6.102	55	17949	1.99 ppb		90
56) 1,2-Diclpropane	6.115	63	16829	2.08 ppb		96
57) Dibromomethane	6.261	93	7456	1.99 ppb	#	76
58) 1,4-Dioxane	6.328	88	1909m	41.31 ppb		
59) Methyl Methacrylate	6.334	69	6972m	1.90 ppb		
60) Bromodichloromethane	6.480	83	18240	1.86 ppb		97
61) 2-Nitropropane	6.749	41	4176	3.14 ppb		81
62) 2-Chloroethylvinyl Ether	6.889	63	4865	1.75 ppb		98
63) cis-1,3-Dichloropropene	7.023	75	21390	1.83 ppb		96
64) 4-Methyl-2-pentanone	7.218	43	10167m	1.99 ppb		
66) Toluene	7.395	91	64452	1.95 ppb		99
67) trans-1,3-Dichloropropene	7.633	75	16774	1.79 ppb		97
68) Ethyl Methacrylate	7.767	69	13668	1.82 ppb		91
69) 1,1,2-Trichloroethane	7.809	97	9710	1.77 ppb		97
72) Tetrachloroethene	7.962	164	11559	1.90 ppb		90
73) 2-Hexanone	8.090	43	6106m	1.78 ppb		
74) 1,3-Dichloropropane	7.974	76	19908	1.97 ppb		94
75) Dibromochloromethane	8.187	129	10790	1.79 ppb		97
76) N-Butyl Acetate	8.242	43	14302	1.67 ppb		95
77) 1,2-Dibromoethane	8.291	107	9257	1.80 ppb		95
78) Chlorobenzene	8.767	112	40082	1.92 ppb		100
79) 3-CBTF	8.785	180	20066	1.92 ppb		94
80) 4-CBTF	8.840	180	18023	1.94 ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	12246	1.69 ppb		99
82) Ethylbenzene	8.888	106	21749	1.94 ppb		99
83) (m+p)Xylene	8.998	106	52047	3.82 ppb		99
84) o-Xylene	9.346	106	25270	1.86 ppb		94
85) Styrene	9.358	104	38376	1.72 ppb		92
87) Bromoform	9.498	173	5165	1.70 ppb		85
88) 2-CBTF	9.577	180	18571	1.96 ppb		94
89) Isopropylbenzene	9.675	105	59579	2.02 ppb		98
90) Cyclohexanone	9.718	55	12287	39.16 ppb		92
91) trans-1,4-Dichloro-2-B...	9.968	53	2606	2.12 ppb		90
92) 1,1,2,2-Tetrachloroethane	9.913	83	10820	1.88 ppb		97
93) Bromobenzene	9.907	156	16037	1.95 ppb	#	88
94) 1,2,3-Trichloropropane	9.943	110	3715	2.12 ppb	#	85
95) n-Propylbenzene	10.022	91	67490	1.99 ppb		94
96) 2-Chlorotoluene	10.083	91	43068	2.00 ppb		97

W011514.M Thu Jan 16 11:10:09 2014 Page 2

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:09:38 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	44389	2.02	ppb		97
98)	4-Chlorotoluene	10.175	91	49065	1.87	ppb		94
99)	1,3,5-Trimethylbenzene	10.175	105	47993	1.92	ppb		96
100)	tert-Butylbenzene	10.437	119	41069	2.04	ppb		99
101)	1,2,4-Trimethylbenzene	10.480	105	48445	1.93	ppb		96
102)	3,4-DCBTF	10.534	214	13189	2.03	ppb		95
103)	sec-Butylbenzene	10.620	105	56252	1.99	ppb		98
104)	p-Isopropyltoluene	10.742	119	49037	1.98	ppb		96
105)	1,3-Dclbenz	10.699	146	26701	1.85	ppb		97
106)	1,4-Dclbenz	10.766	146	30410	2.02	ppb		95
107)	2,4-DCBTF	10.821	214	11773	2.03	ppb		93
108)	2,5-DCBTF	10.864	214	14022	2.09	ppb		98
109)	n-Butylbenzene	11.071	91	41440	1.91	ppb		98
110)	1,2-Dclbenz	11.065	146	27054	1.95	ppb		95
111)	1,2-Dibromo-3-chloropr...	11.626	157	1843	1.90	ppb	#	55
112)	Trielution Dichlorotol...	11.735	125	67756	6.12	ppb		92
113)	1,3,5 Trichlorobenzene	11.778	180	20385	2.15	ppb		92
114)	Coelution Dichlorotoluene	11.998	125	46254	3.94	ppb		97
115)	1,2,4-Tcbenzene	12.162	180	16059	1.97	ppb		88
116)	Hexachlorobt	12.266	225	7407	2.13	ppb		86
117)	Naphthalen	12.302	128	28930	1.97	ppb		98
118)	1,2,3-Tclbenzene	12.443	180	13408	2.02	ppb		91
119)	2,4,5-Trichlorotolene	12.851	159	9627	2.07	ppb		99
120)	2,3,6-Trichlorotoluene	12.912	159	8896	2.14	ppb		93

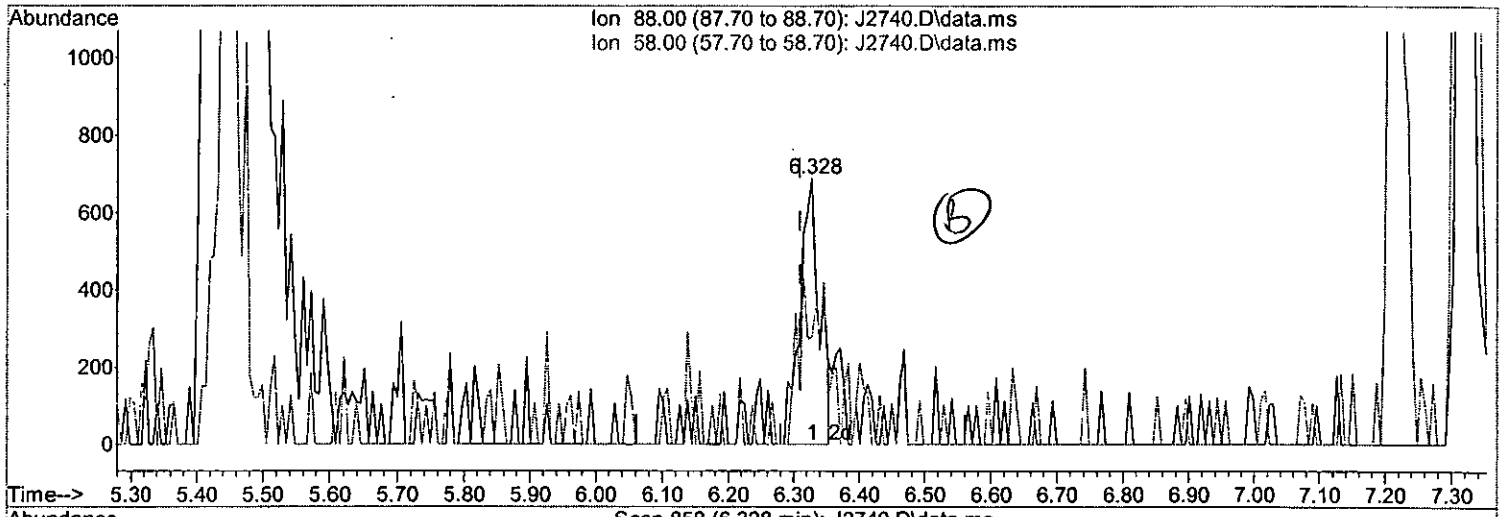
(#) = qualifier out of range (m) = manual integration (+) = signals summed

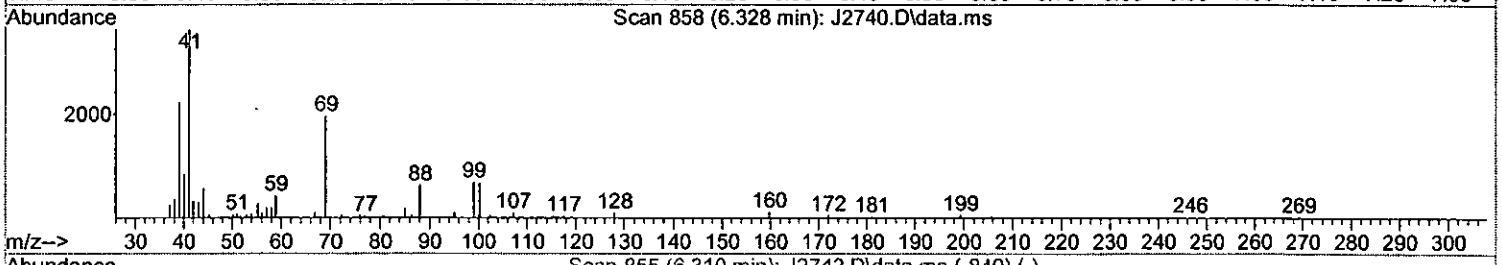
W011514.M Thu Jan 16 11:10:09 2014 Page: 3

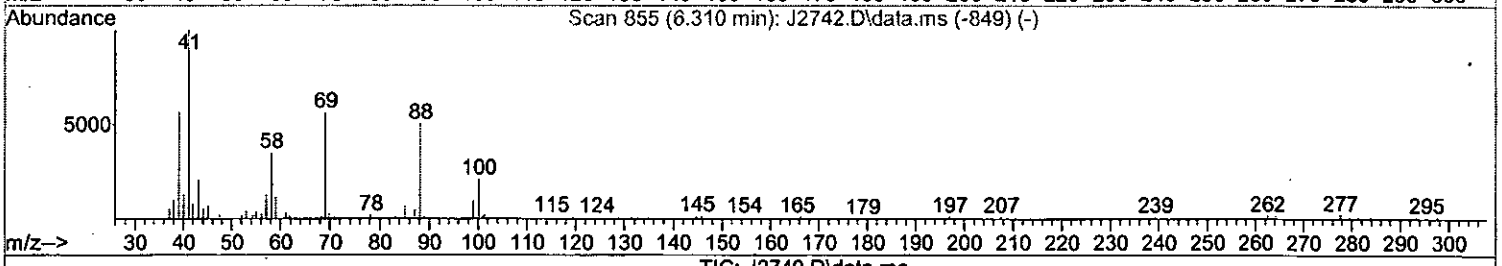
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(58) 1,4-Dioxane

6.328min (+0.018) 30.92 ppb

response 1429

Ion	Exp%	Act%
88.00	100	100
58.00	68.00	40.29#
0.00	0.00	0.00
0.00	0.00	0.00

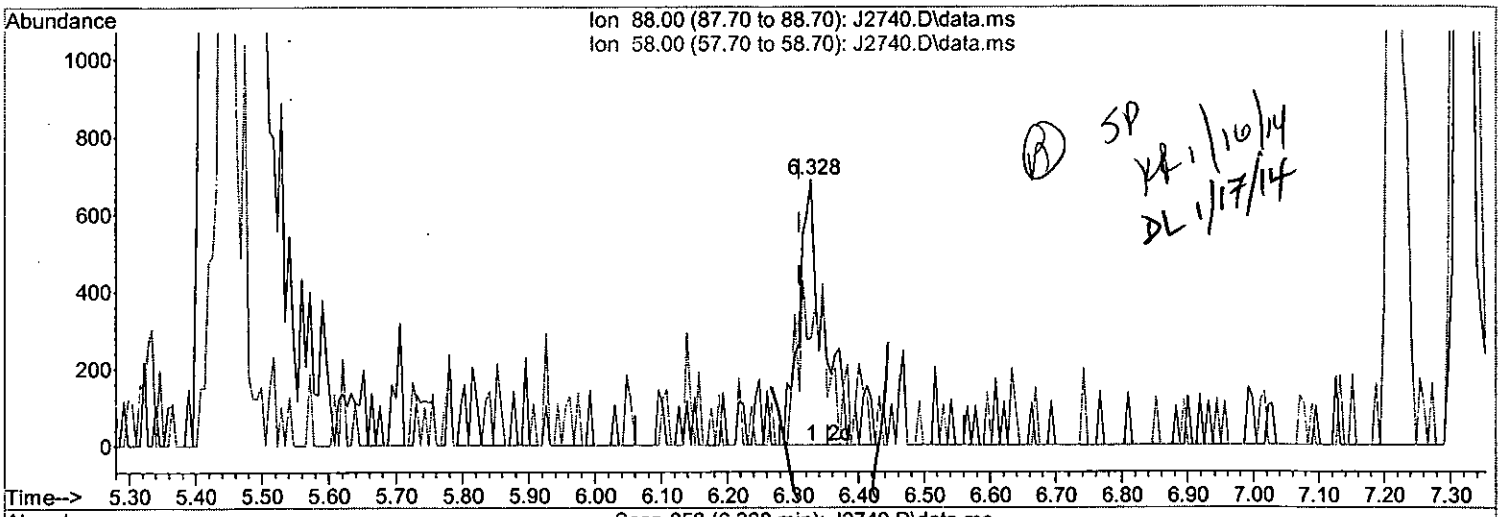
W011514.M Thu Jan 16 11:06:13 2014 Page: 1

00158

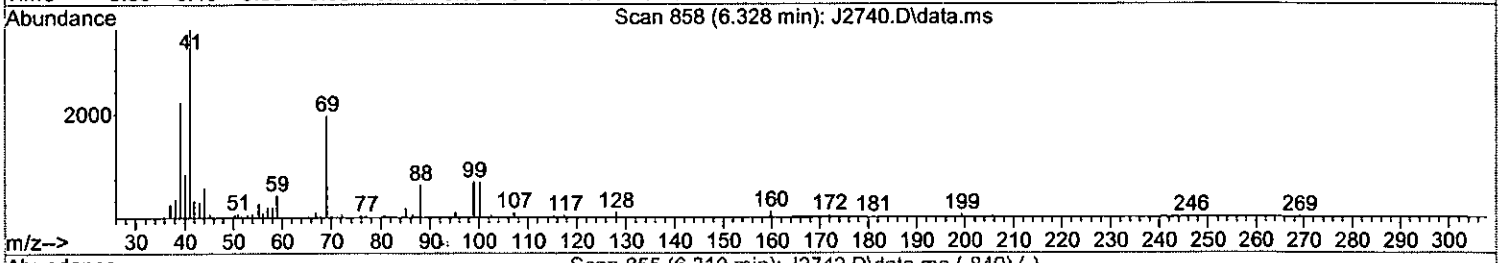
Quantitation Report (Qedit)

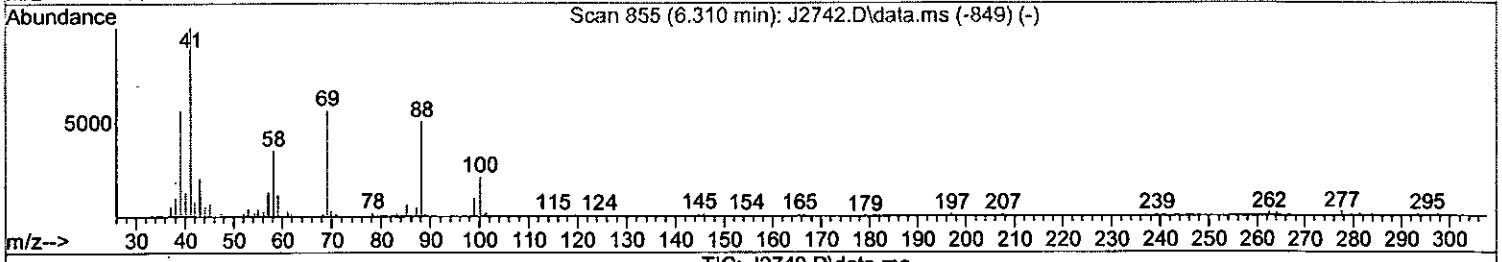
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



B SP 1/16/14 DL 1/17/14





TIC: J2740.D\data.ms

(58) 1,4-Dioxane

6.328min (+0.018) 41.31 ppb m

response 1909

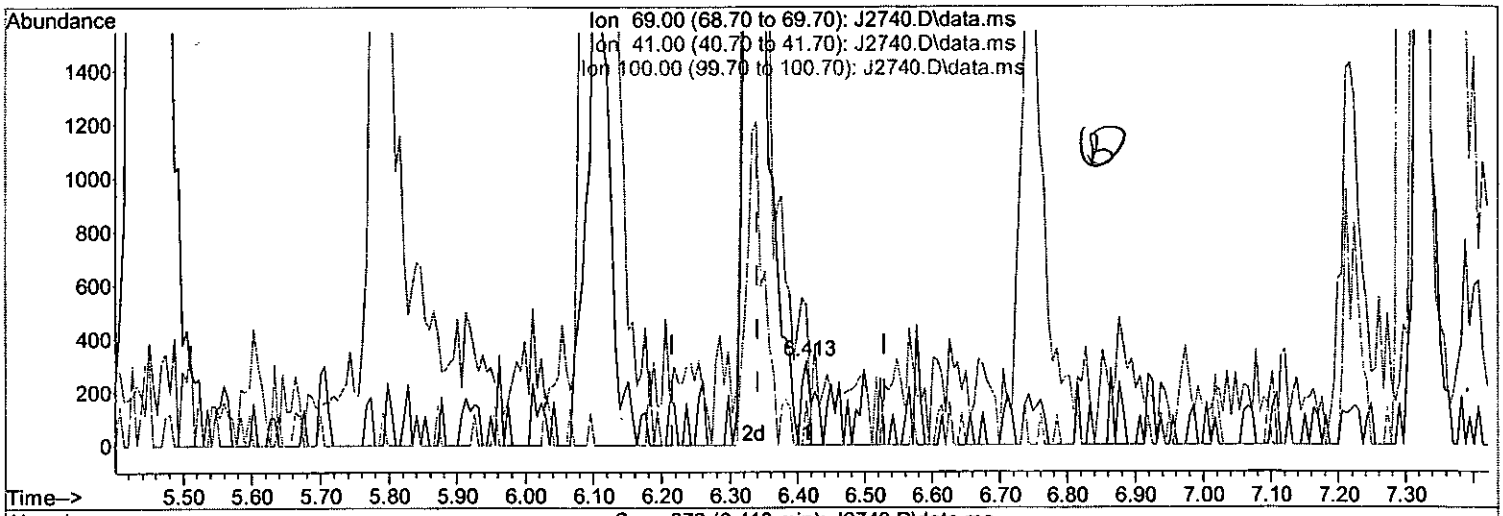
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	40.29#
0.00	0.00	0.00
0.00	0.00	0.00

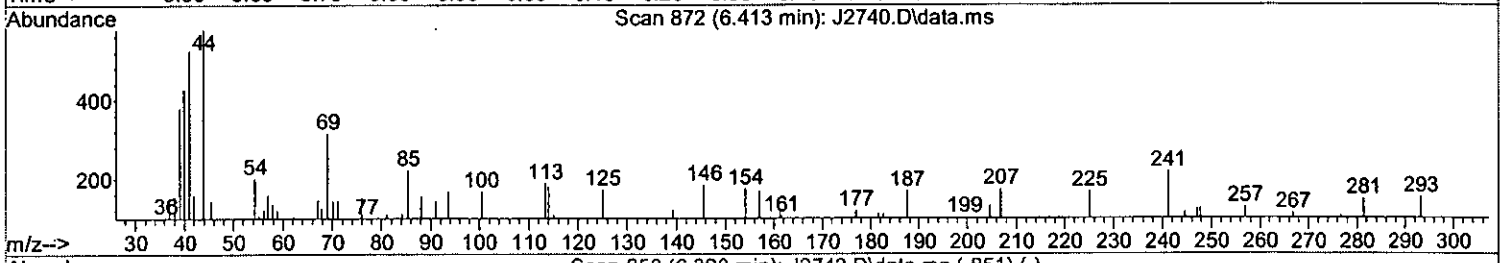
W011514.M Thu Jan 16 11:06:20 2014 Page: 1

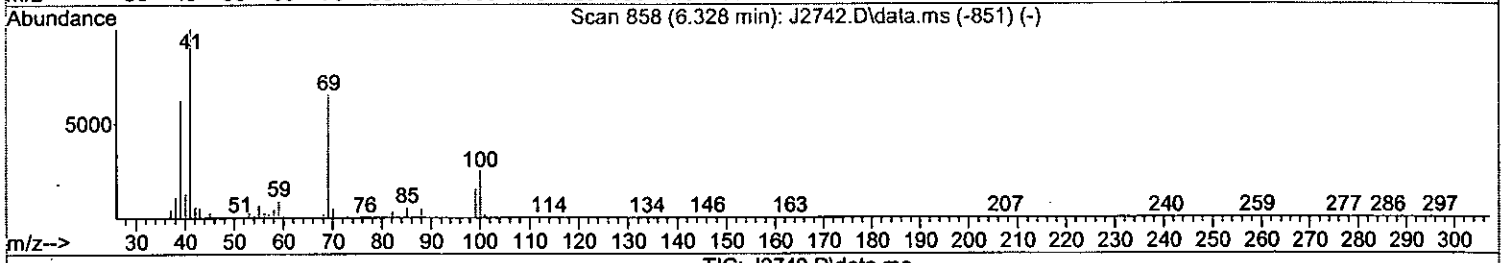
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(59) Methyl Methacrylate

6.413min (+0.073) 0.07 ppb

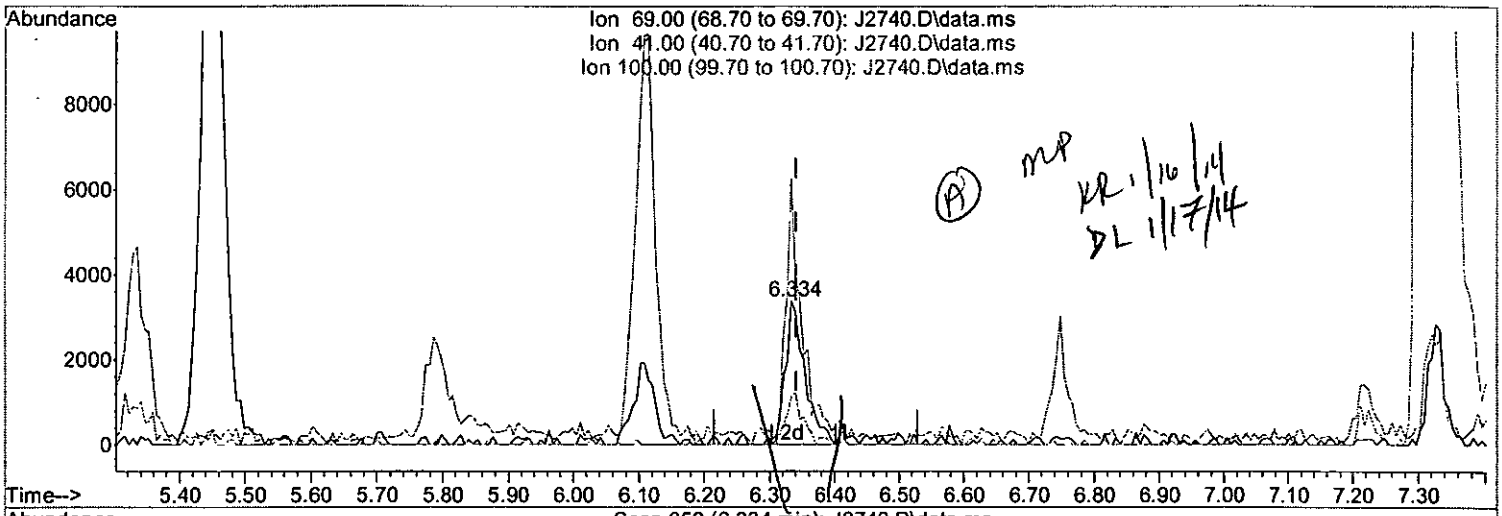
response 254

Ion	Exp%	Act%
69.00	100	100
41.00	154.30	166.14
100.00	37.60	52.85
0.00	0.00	0.00

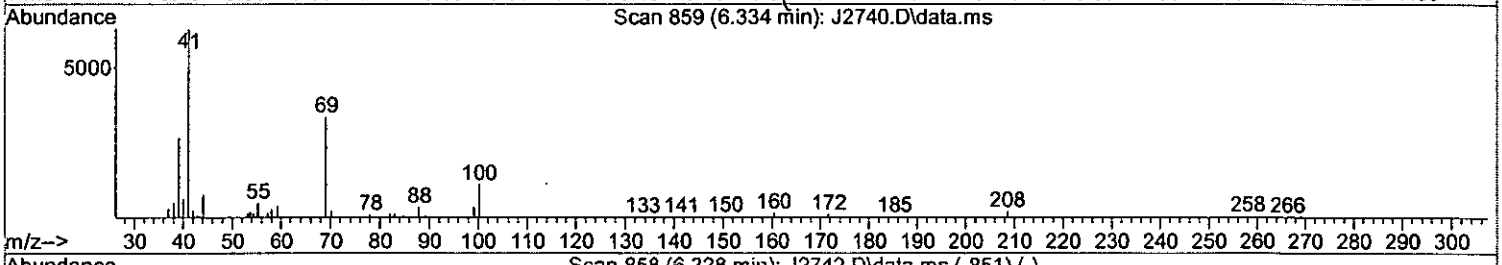
Quantitation Report (Qedit)

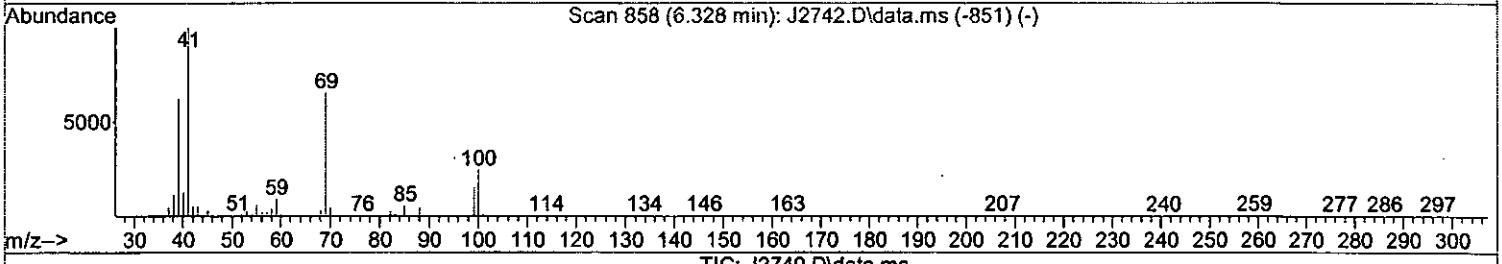
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



MP 1/16/14
KR 1/16/14
DL 1/17/14





TIC: J2740.D\data.ms

(59) Methyl Methacrylate

6.334min (-0.006) 1.90 ppb m

response 6972

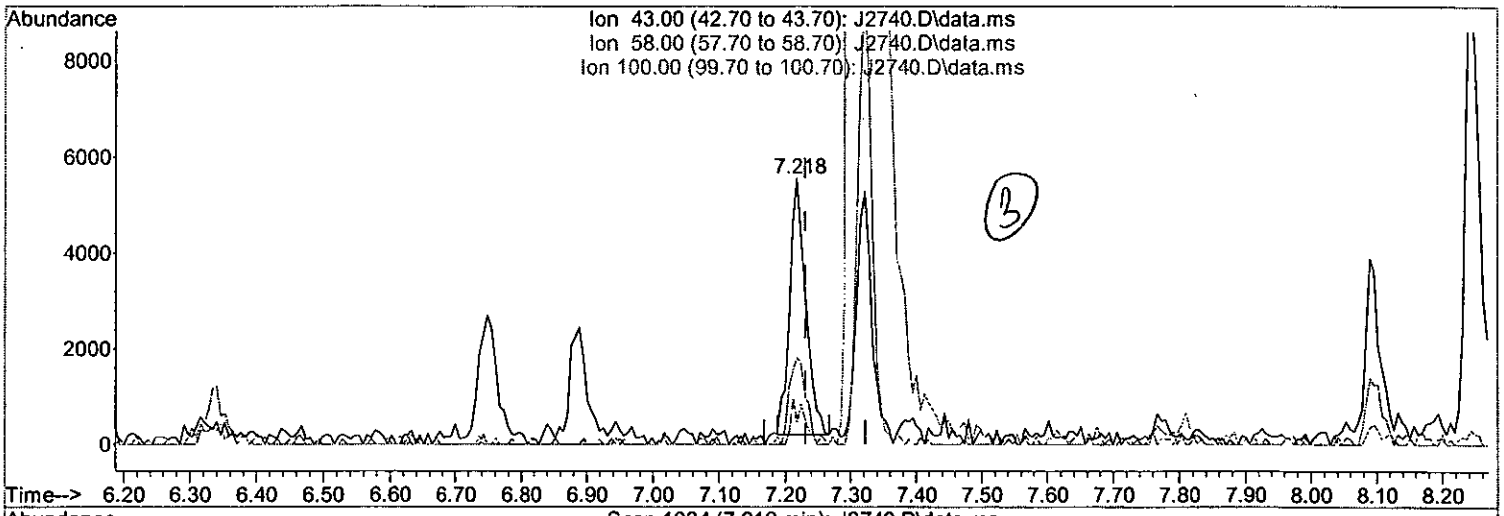
Ion	Exp%	Act%
69.00	100	100
41.00	154.30	185.12#
100.00	37.60	34.52
0.00	0.00	0.00

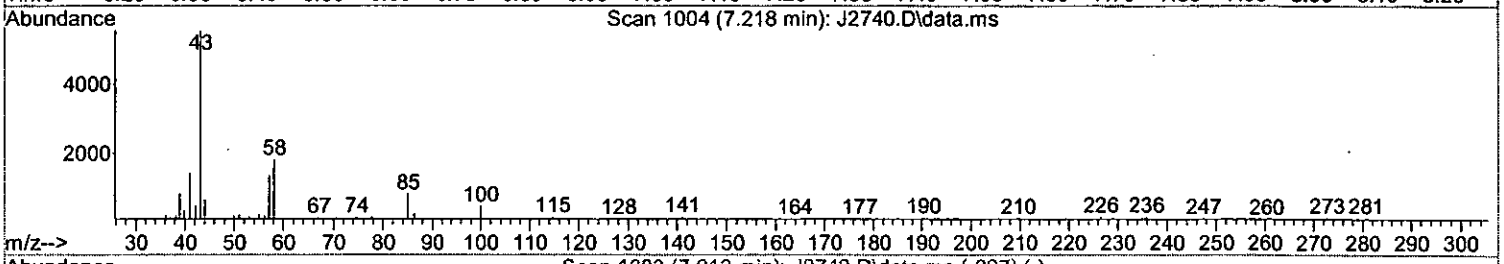
W011514.M Thu Jan 16 11:06:35 2014 Page: 1

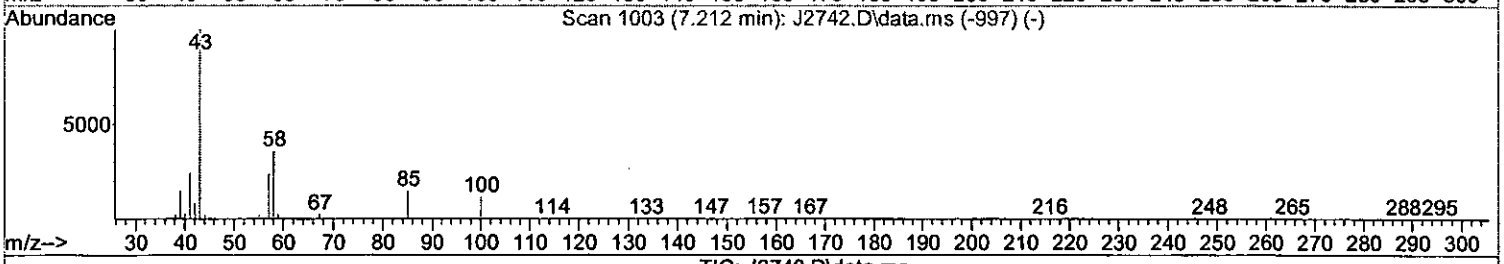
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.218min (-0.012) 1.80 ppb

response 9216

Ion	Exp%	Act%
43.00	100	100
58.00	35.80	32.68
100.00	11.60	8.38
0.00	0.00	0.00

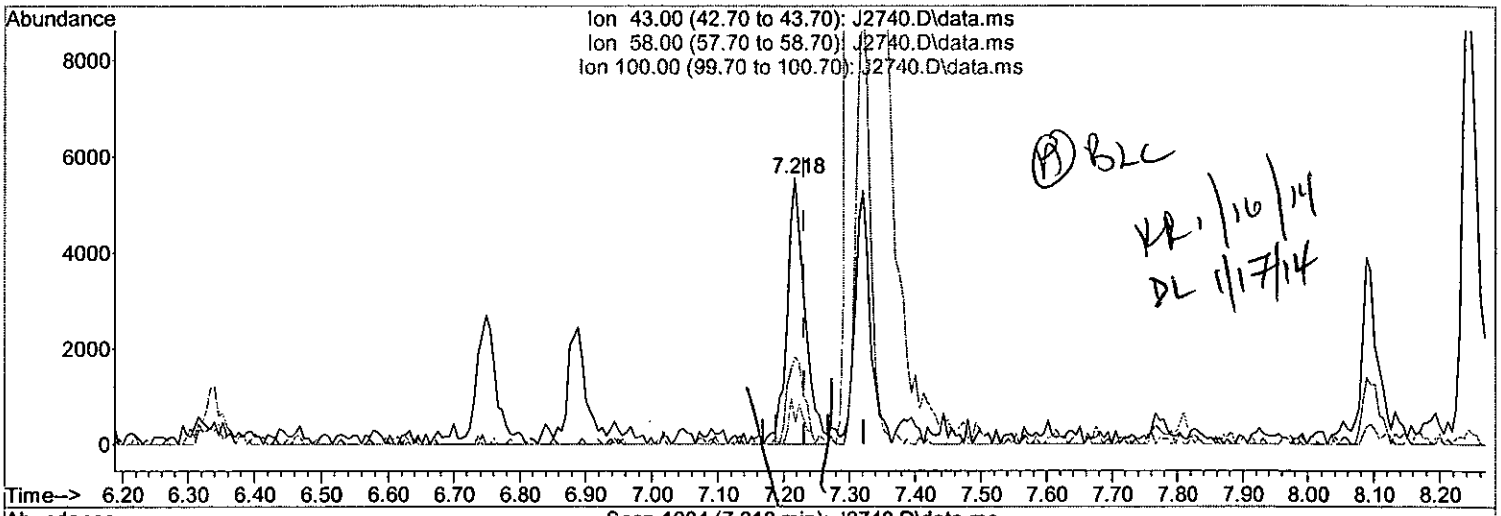
W011514.M Thu Jan 16 11:06:47 2014 Page: 1

00161

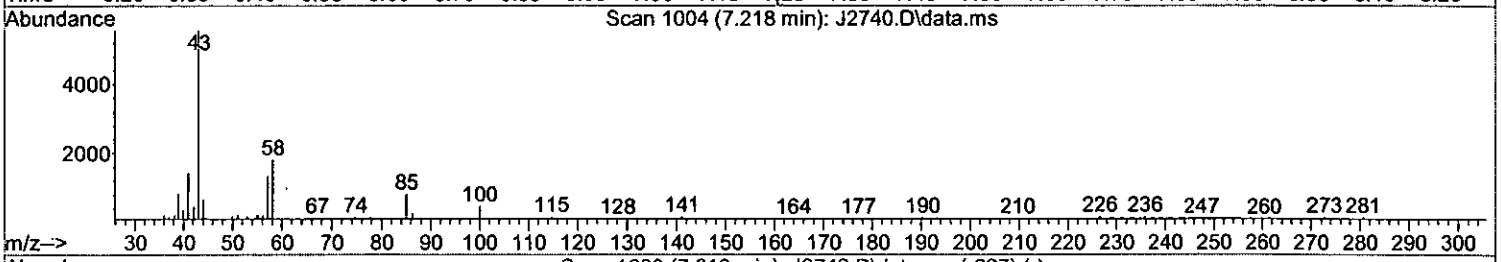
Quantitation Report (Qedit)

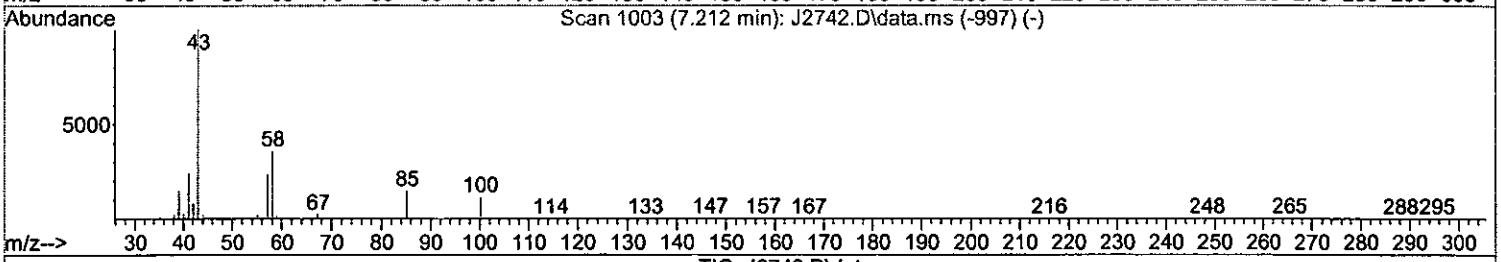
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



(B) BLC KL 1/16/14 DL 1/17/14





TIC: J2740.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.218min (-0.012) 1.99 ppb m

response 10167

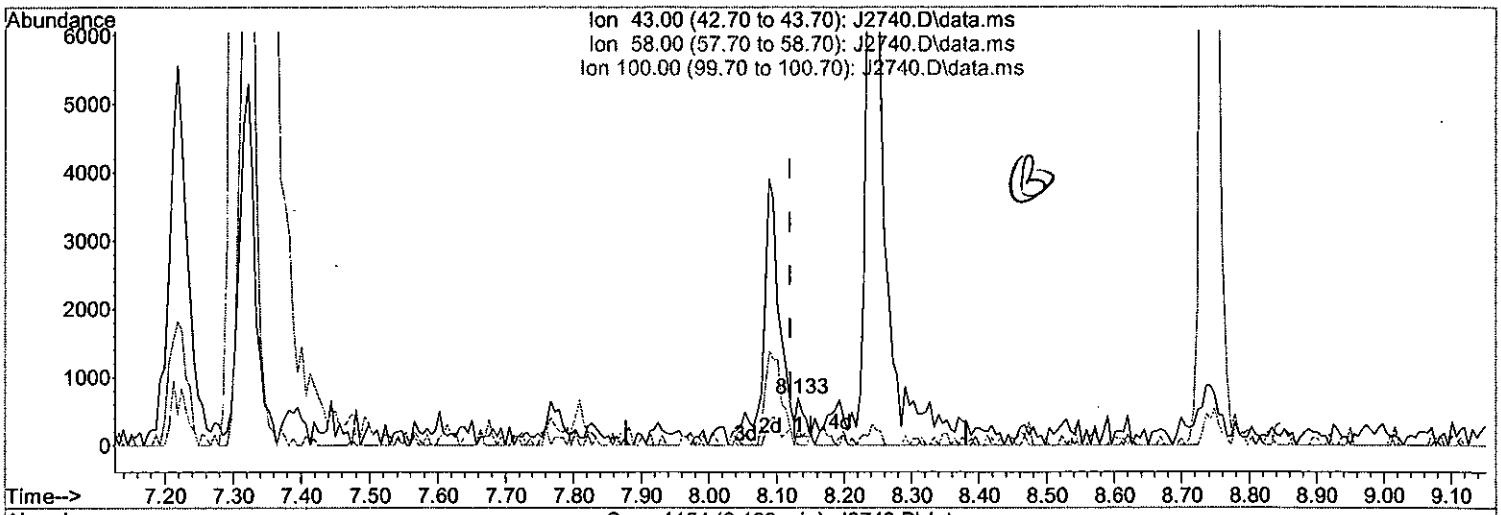
Ion	Exp%	Act%
43.00	100	100
58.00	35.80	32.68
100.00	11.60	8.38
0.00	0.00	0.00

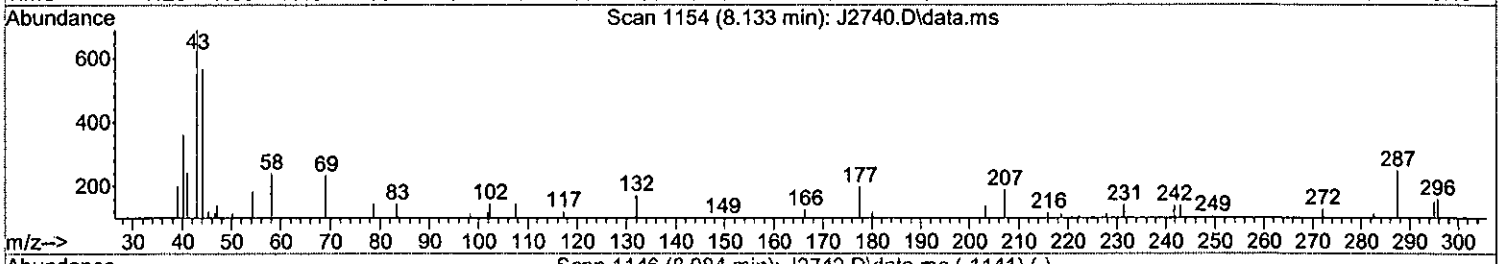
W011514.M Thu Jan 16 11:06:54 2014 Page: 1

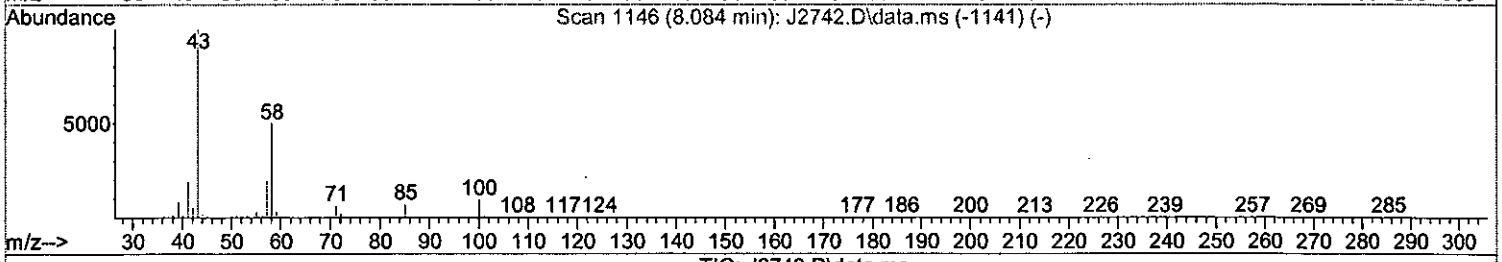
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(73) 2-Hexanone (P)

8.133min (+0.012) 0.12 ppb

response 423

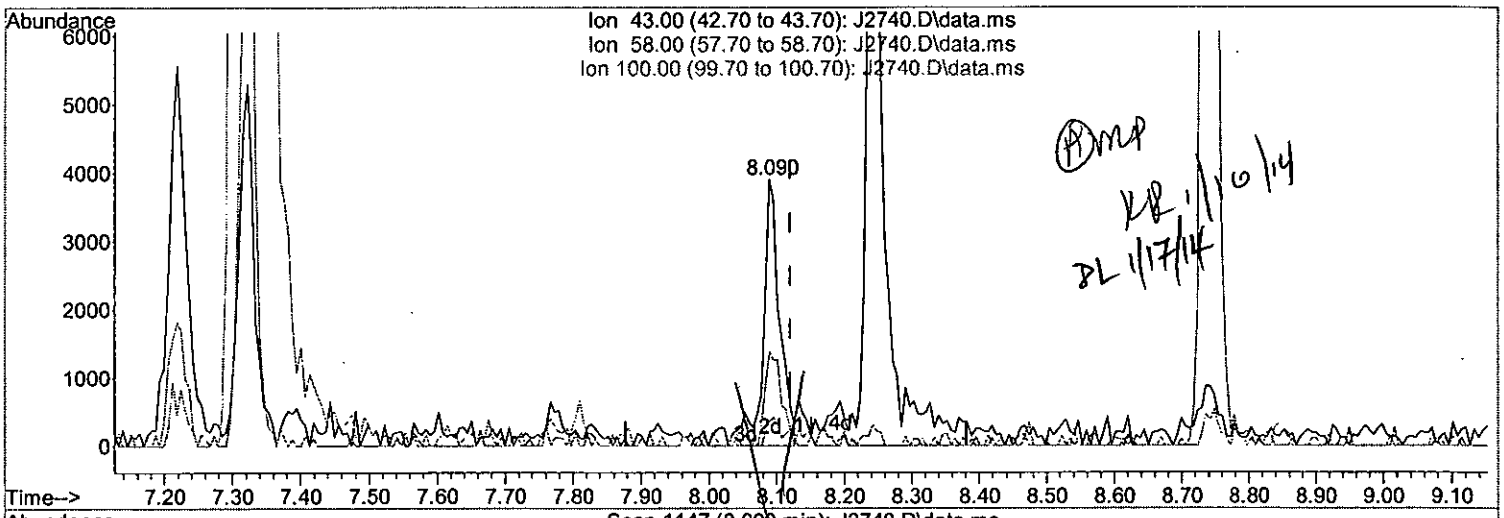
Ion	Exp%	Act%
43.00	100	100
58.00	49.40	34.49
100.00	9.40	0.00
0.00	0.00	0.00

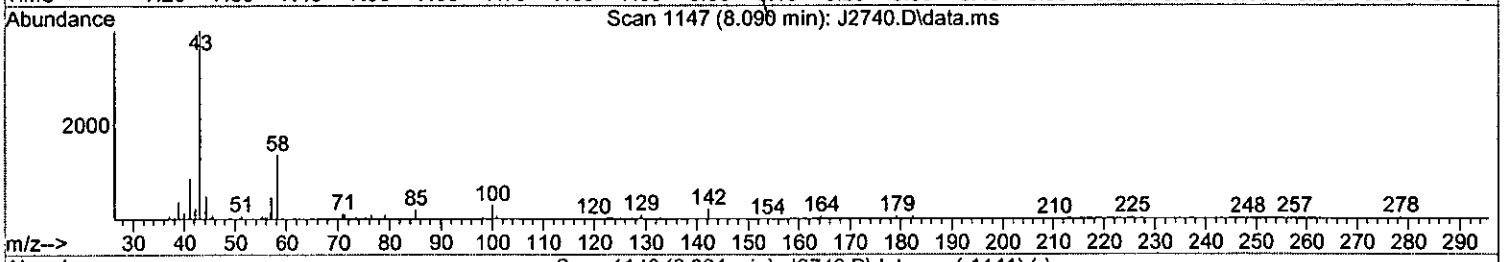
W011514.M Thu Jan 16 11:07:05 2014 Page: 1

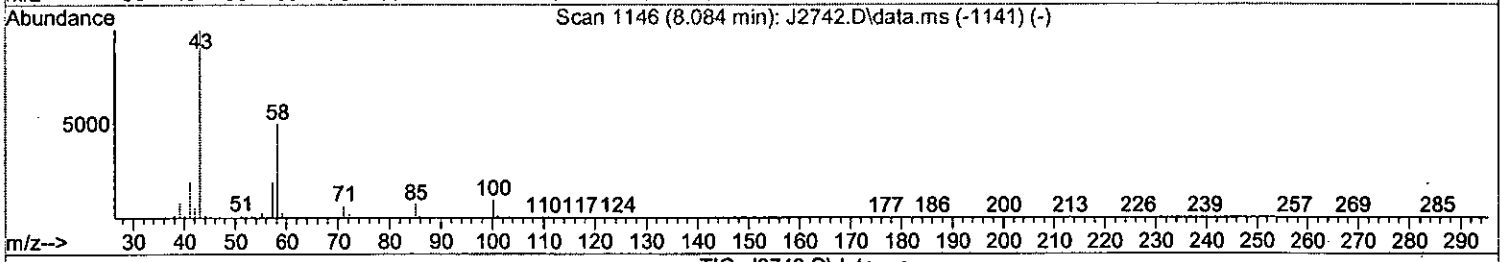
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(73) 2-Hexanone (P)

8.090min (-0.031) 1.78 ppb m

response 6106

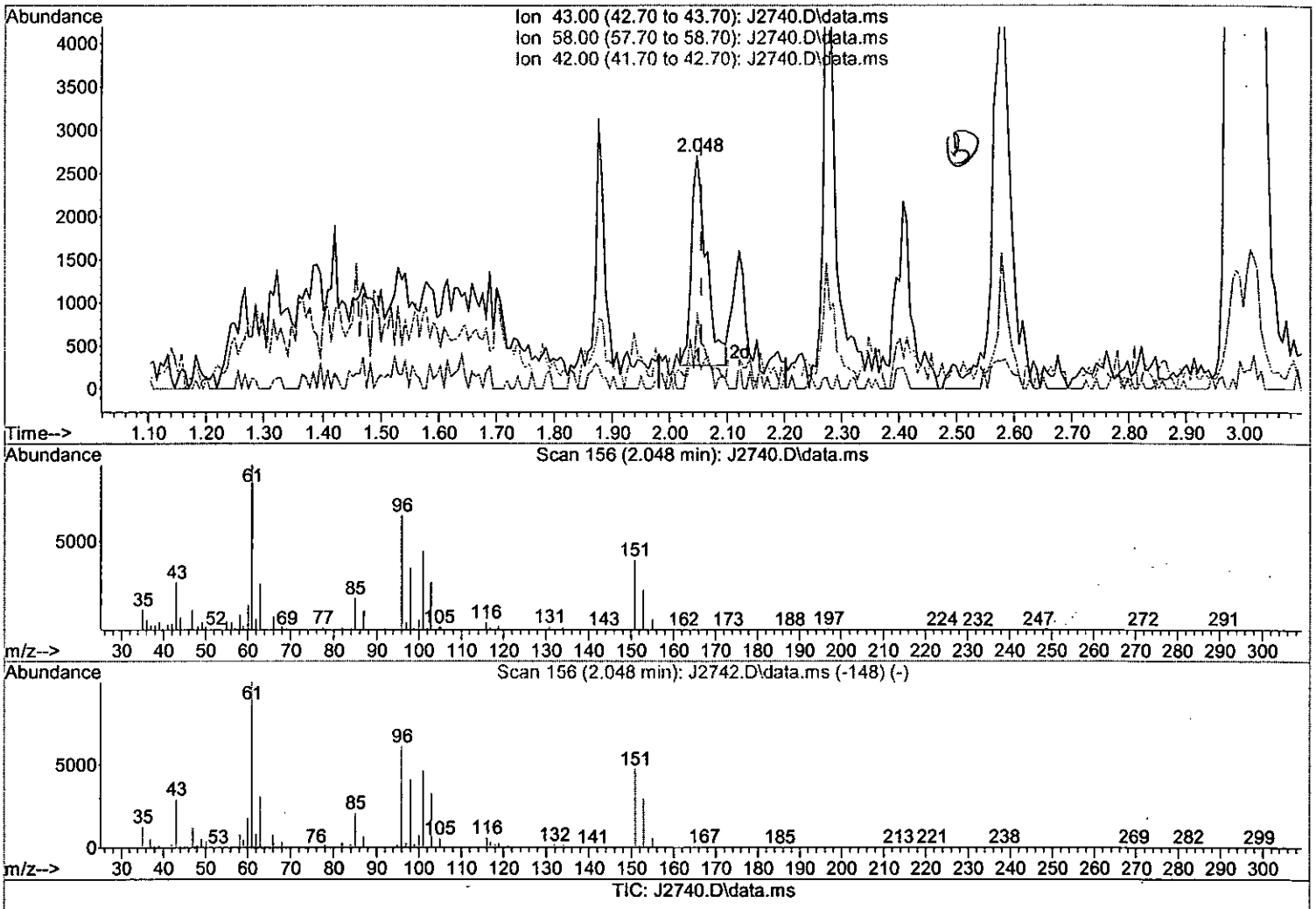
Ion	Exp%	Act%
43.00	100	100
58.00	49.40	35.50
100.00	9.40	9.38
0.00	0.00	0.00

W011514.M Thu Jan 16 11:07:12 2014 Page: 1

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2740.D\data.ms

(15) Acetone (P)

2.048min (-0.006) 2.51 ppb

response 4421

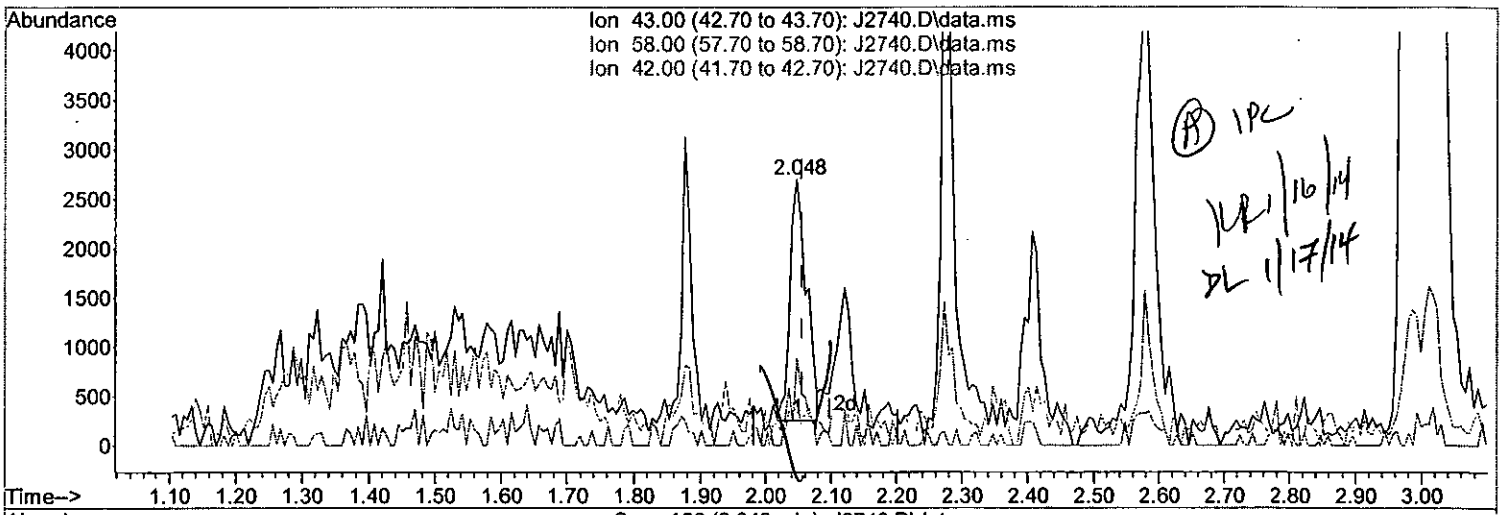
Ion	Exp%	Act%
43.00	100	100
58.00	25.70	32.66
42.00	8.00	15.42
0.00	0.00	0.00

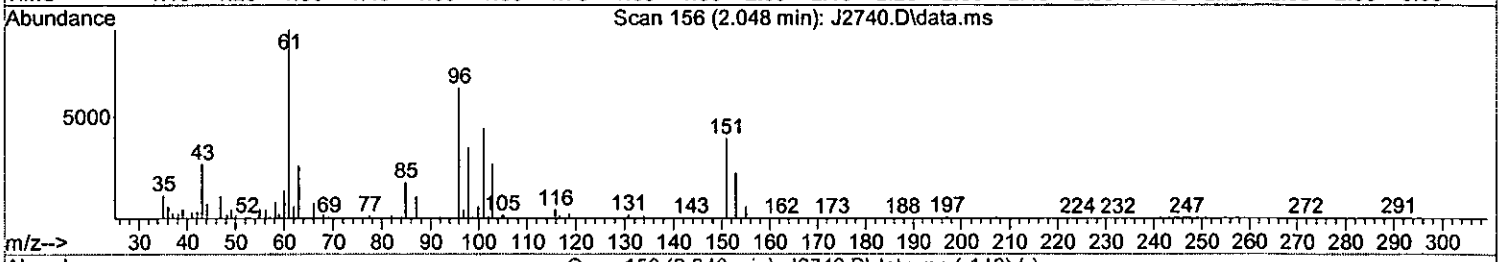
W011514.M Thu Jan 16 11:08:20 2014 00166 Page: 1

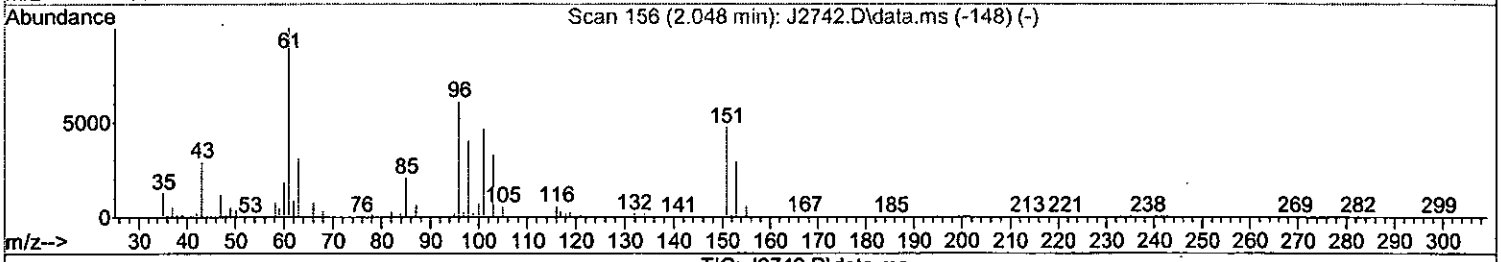
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(15) Acetone (P)

2.048min (-0.006) 2.38 ppb m

response 4194

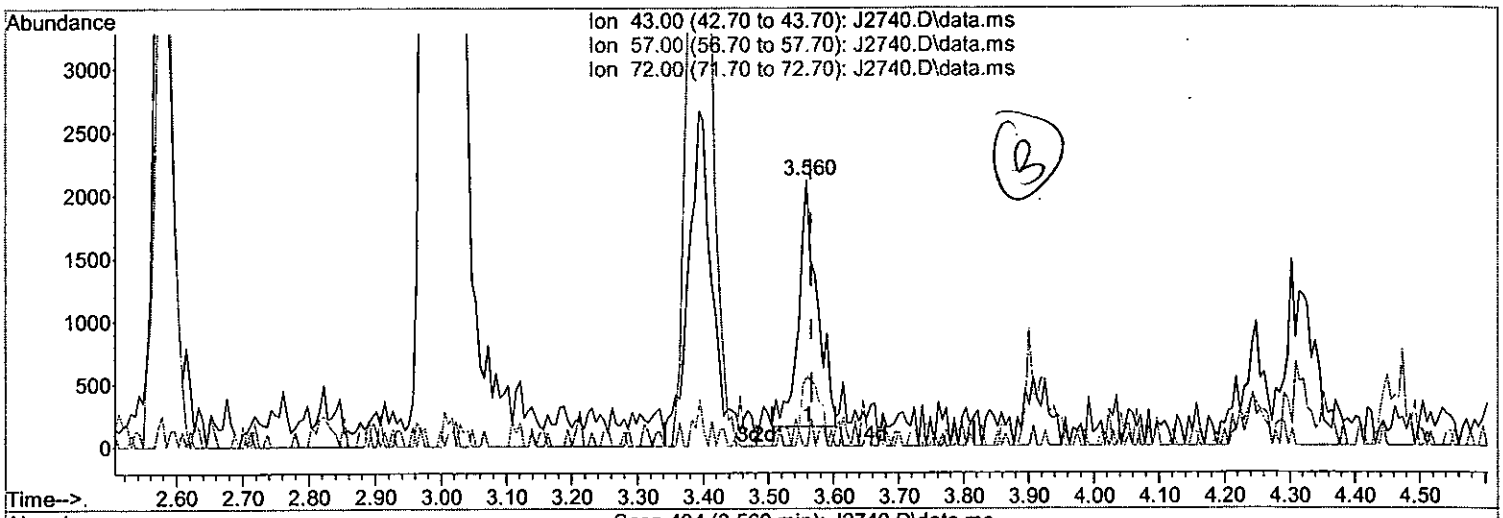
Ion	Exp%	Act%
43.00	100	100
58.00	25.70	32.66
42.00	8.00	15.42
0.00	0.00	0.00

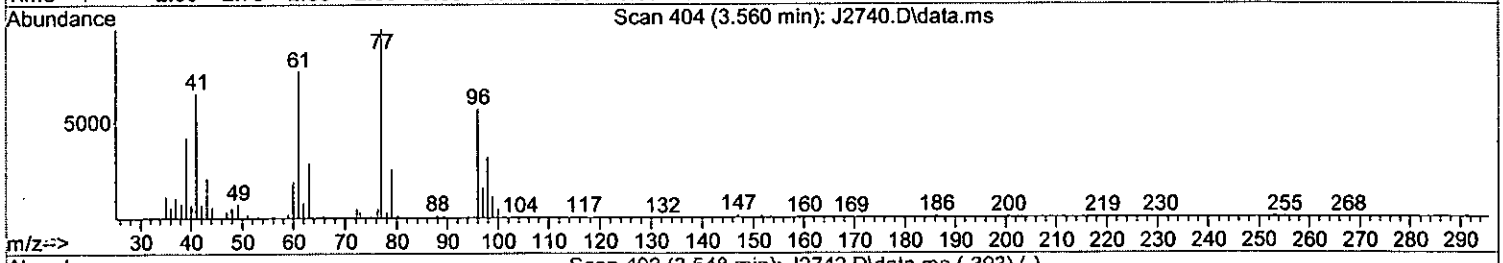
W011514.M Thu Jan 16 11:08:29 2014 Page: 1

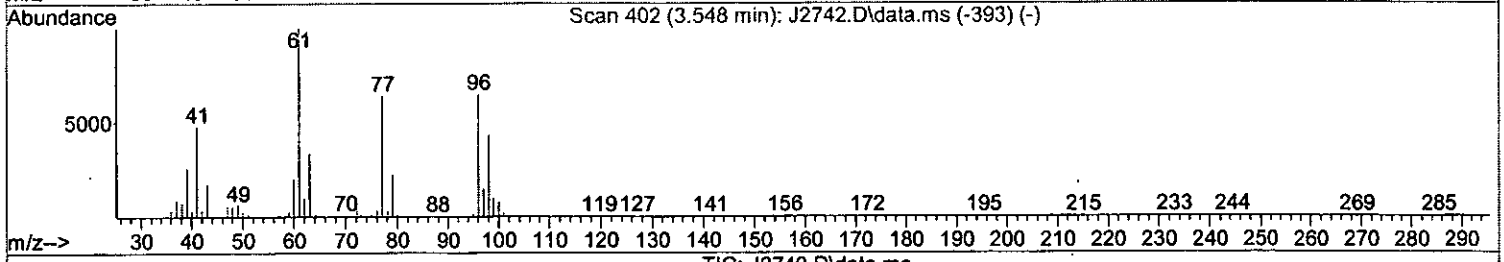
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(35) 2-Butanone (P)

3.560min (-0.006) 1.68 ppb

response 3894

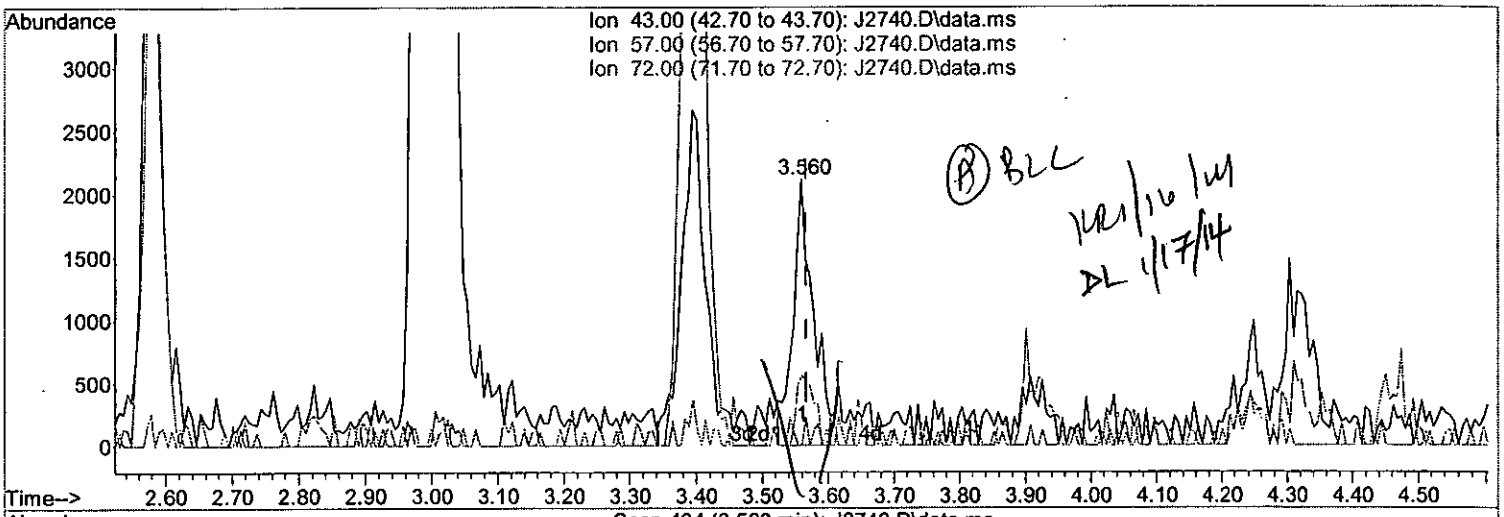
Ion	Exp%	Act%
43.00	100	100
57.00	6.00	0.00
72.00	24.00	26.35
0.00	0.00	0.00

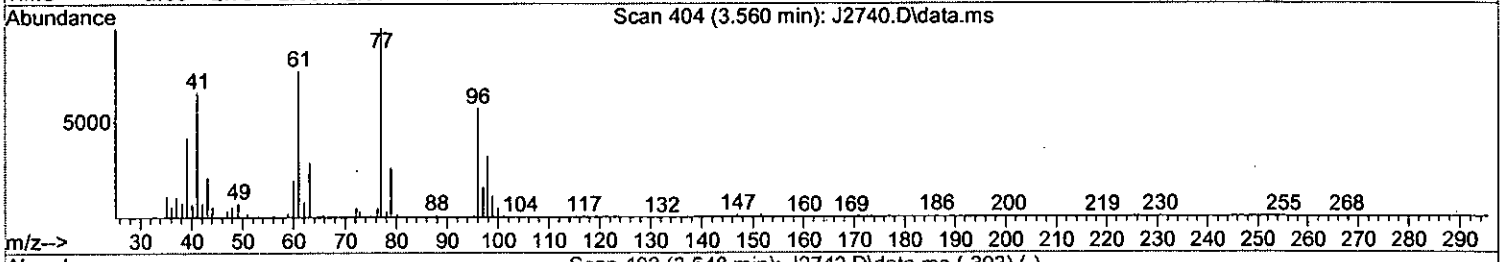
W011514.M Thu Jan 16 11:08:50 2014 Page: 1

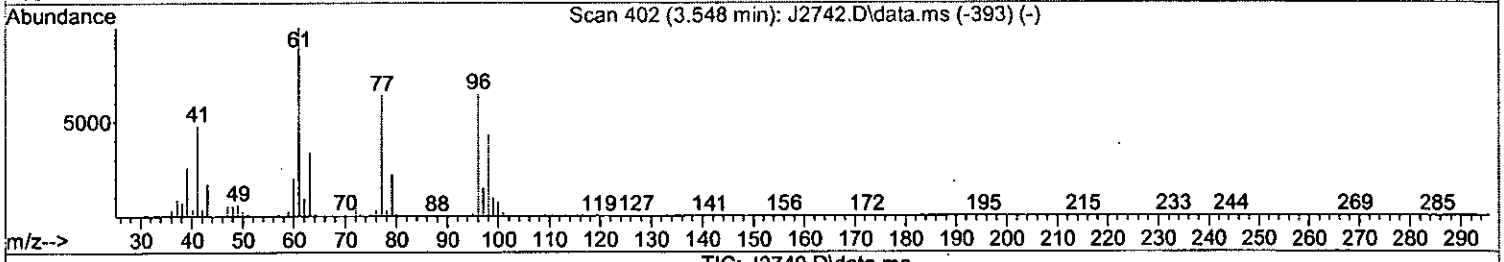
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(35) 2-Butanone (P)

3.560min (-0.006) 1.93 ppb m

response 4457

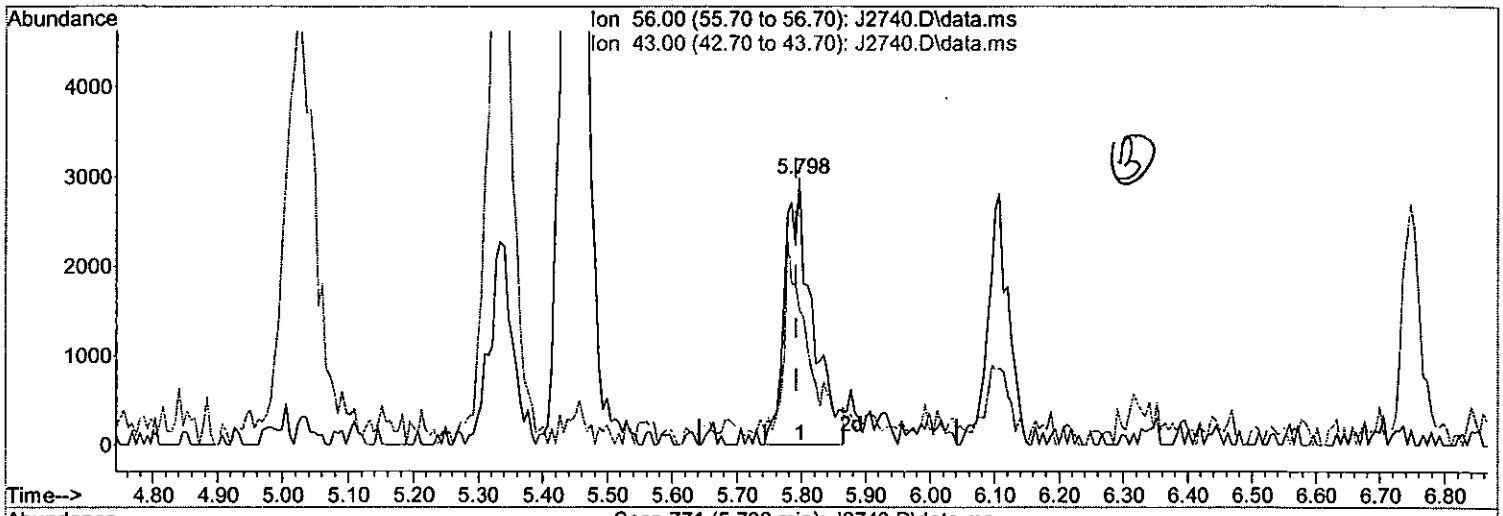
Ion	Exp%	Act%
43.00	100	100
57.00	6.00	0.00
72.00	24.00	26.35
0.00	0.00	0.00

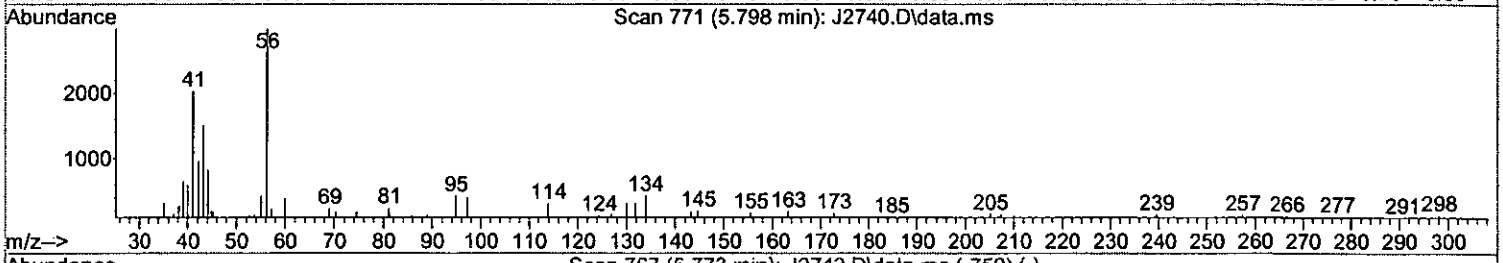
W011514.M Thu Jan 16 11:09:06 2014 Page: 1

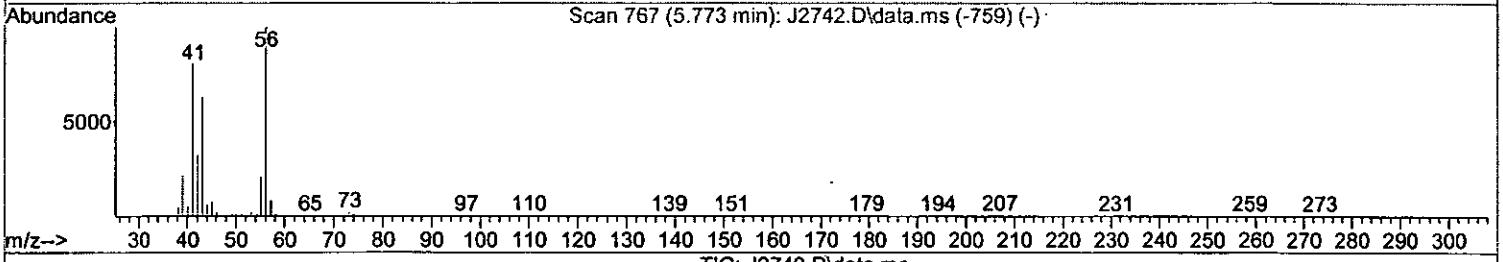
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(53) 1-Butanol

5.798min (+0.006) 82.45 ppb

response 8866

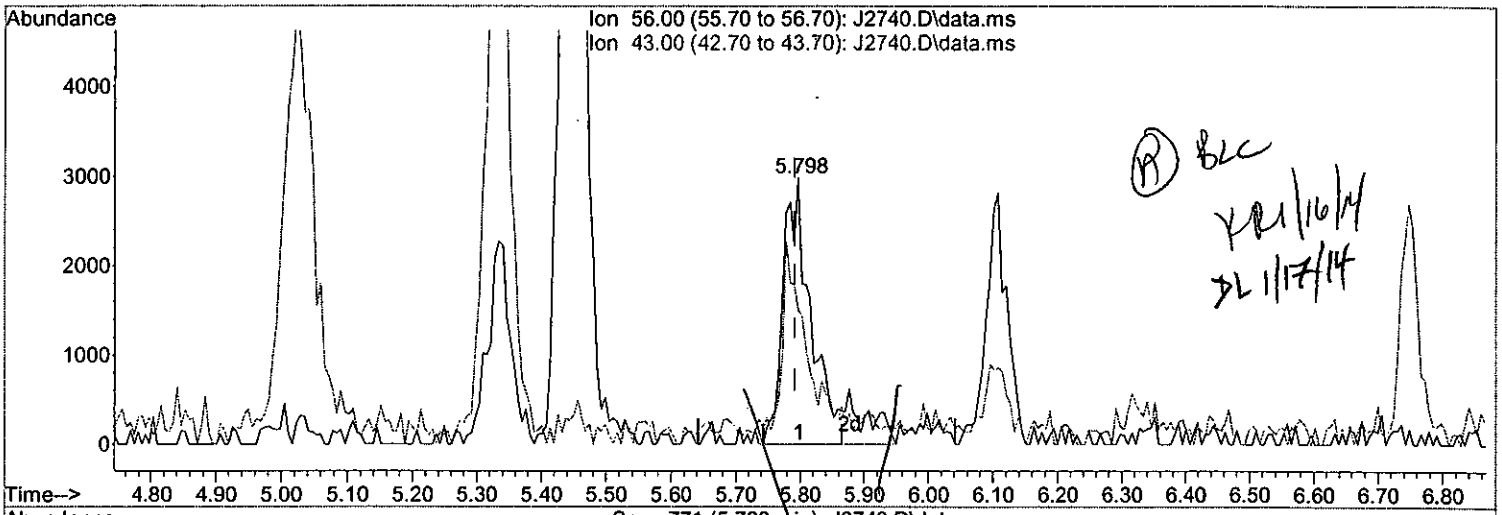
Ion	Exp%	Act%
56.00	100	100
43.00	61.10	48.53
0.00	0.00	0.00
0.00	0.00	0.00

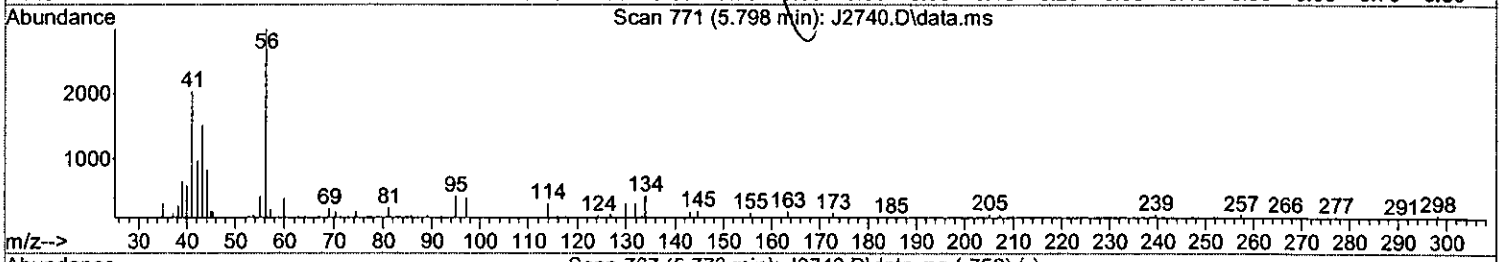
W011514.M Thu Jan 16 11:09:35 2014 001 Page: 1

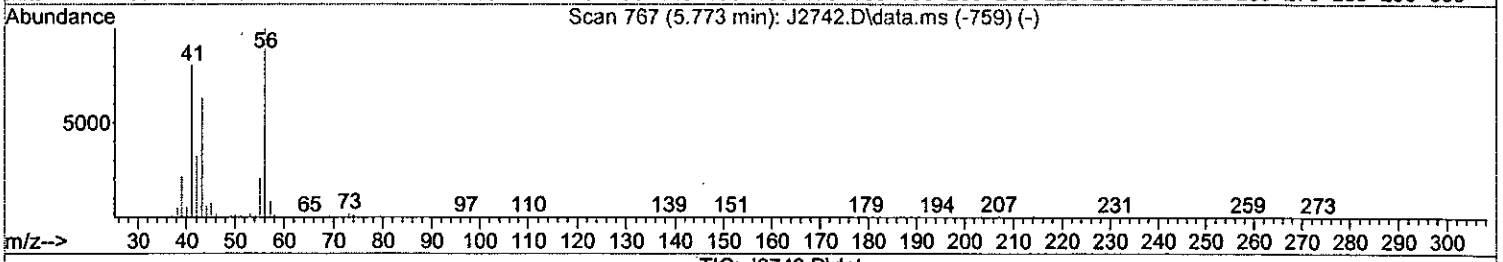
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:20 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2740.D\data.ms

(53) 1-Butanol

5.798min (+0.006) 95.88 ppb m

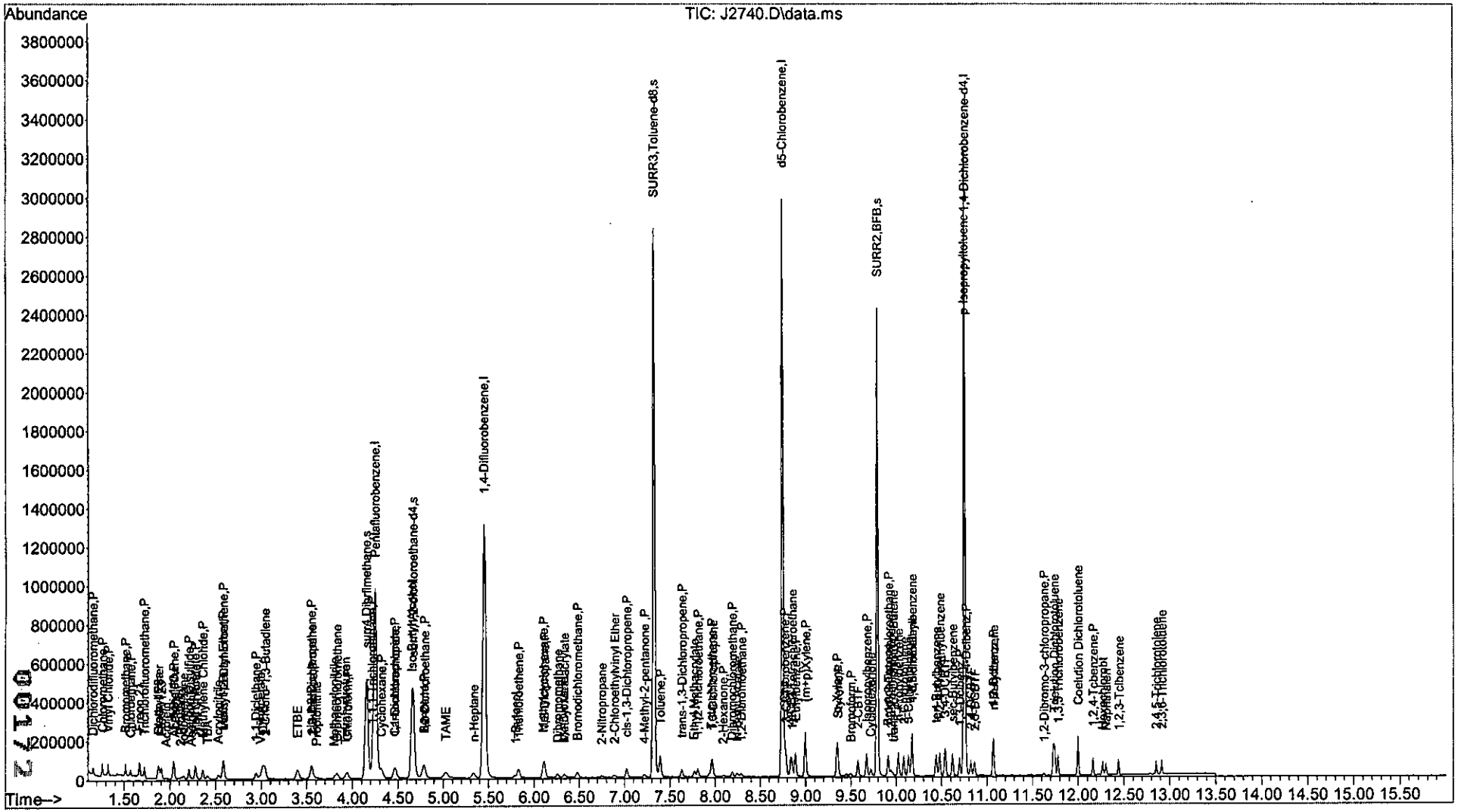
response 10310

Ion	Exp%	Act%
56.00	100	100
43.00	61.10	41.74
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 11:09:47 2014 Page: 1

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2740.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:09:38 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 11:10:10 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:14:14 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	850459	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1282053	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1160089	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	565939	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	374861	50.05	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.10%				
48) surr1,1,2-dichloroetha...	4.664	65	446421	49.49	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 98.98%				
65) SURR3,Toluene-d8	7.322	98	1600710	50.27	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.54%				
70) SURR2,BFB	9.791	95	586495	49.54	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.08%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	38606	4.39	ppb		94
3) Chloromethane	1.262	50	58555	4.88	ppb		98
4) Vinyl Chloride	1.323	62	56159	4.82	ppb		99
5) Bromomethane	1.512	94	38193	4.87	ppb		95
6) Chloroethane	1.567	64	35361	5.04	ppb		99
7) Freon 21	1.664	67	88970	5.23	ppb		97
8) Trichlorofluoromethane	1.719	101	65390	5.01	ppb		98
9) Diethyl Ether	1.878	59	27715	4.86	ppb		94
10) Freon 123a	1.866	67	50100	5.23	ppb		98
11) Freon 123	1.902	83	51459	5.04	ppb		98
12) Acrolein	1.951	56	7636	16.69	ppb		91
13) 1,1-Diclethene	2.036	96	28830	4.74	ppb		95
14) Freon 113	2.036	101	31433	4.88	ppb		95
15) Acetone	2.048	43	9643	5.49	ppb		93
16) 2-Propanol	2.115	45	24516	92.61	ppb		98
17) Iodomethane	2.146	142	35146	4.05	ppb		98
18) Carbon Disulfide	2.207	76	113042	4.97	ppb		97
19) Acetonitrile	2.225	40	6797	24.31	ppb		95
20) Allyl Chloride	2.274	76	21928	5.11	ppb		98
21) Methyl Acetate	2.274	43	17800	4.71	ppb		98
22) Methylene Chloride	2.359	84	36219	4.92	ppb		97
23) TBA	2.408	59	42505	96.03	ppb		91
24) Acrylonitrile	2.524	53	41459	23.43	ppb		95
25) Methyl-t-Butyl Ether	2.579	73	92222	4.84	ppb		95
26) trans-1,2-Dichloroethene	2.585	96	37136	4.99	ppb		97
28) 1,1-Diclethane	2.938	63	71902	5.01	ppb		92
29) Vinyl Acetate	2.981	86	4622	4.25	ppb	#	90
30) DIPE	3.012	45	146399	5.13	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	73927	4.98	ppb		95
32) ETBE	3.402	59	117103	5.00	ppb		98
33) 2,2-Dichloropropane	3.554	77	57370	4.87	ppb		96
34) cis-1,2-Dichloroethene	3.548	96	42582	4.92	ppb		94
35) 2-Butanone	3.560	43	10343m	4.50	ppb		
36) Propionitrile	3.597	54	15158	23.94	ppb		97
37) Bromochloromethane	3.835	130	21936	4.80	ppb		93

KR 1/16/14

W011514.M Thu Jan 16 11:15:04 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:14:14 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	9163	4.50	ppb	#	77
39) Tetrahydrofuran	3.908	42	8468m	5.12	ppb		
40) Chloroform	3.938	83	70870	5.26	ppb		99
41) 1,1,1-Trichloroethane	4.213	97	60615	4.91	ppb	#	57
42) TAME	5.030	73	94305	4.89	ppb		98
44) Cyclohexane	4.316	41	40680	4.90	ppb		98
46) Carbontetrachloride	4.475	121	14888	4.68	ppb		87
47) 1,1-Dichloropropene	4.469	75	48448	4.88	ppb		99
49) Benzene	4.780	78	155483	4.87	ppb		98
50) 1,2-Dichloroethane	4.786	62	50714	4.82	ppb		91
51) Iso-Butyl Alcohol	4.645	43	20554	96.89	ppb		95
52) n-Heptane	5.328	43	39908	4.63	ppb		96
53) 1-Butanol	5.779	56	24602m	226.51	ppb		
54) Trichloroethene	5.828	130	39476	4.83	ppb		93
55) Methylcyclohexane	6.103	55	44222	4.86	ppb		95
56) 1,2-Diclpropane	6.115	63	38871	4.77	ppb		98
57) Dibromomethane	6.255	93	18067	4.78	ppb	#	83
58) 1,4-Dioxane	6.316	88	5116m	109.60	ppb		
59) Methyl Methacrylate	6.334	69	16515	4.45	ppb	#	86
60) Bromodichloromethane	6.481	83	48303	4.88	ppb		99
61) 2-Nitropropane	6.749	41	11178	8.33	ppb		90
62) 2-Chloroethylvinyl Ether	6.883	63	14318	5.09	ppb		86
63) cis-1,3-Dichloropropene	7.023	75	57798	4.90	ppb		93
64) 4-Methyl-2-pentanone	7.218	43	23831m	4.61	ppb		
66) Toluene	7.395	91	169634	5.08	ppb		98
67) trans-1,3-Dichloropropene	7.633	75	45063	4.76	ppb		94
68) Ethyl Methacrylate	7.767	69	35121	4.63	ppb		91
69) 1,1,2-Trichloroethane	7.809	97	26823	4.83	ppb		99
72) Tetrachloroethene	7.962	164	29671	4.88	ppb		92
73) 2-Hexanone	8.090	43	15842	4.62	ppb		85
74) 1,3-Dichloropropane	7.974	76	49602	4.90	ppb		96
75) Dibromochloromethane	8.194	129	27264	4.51	ppb		96
76) N-Butyl Acetate	8.242	43	40821	4.76	ppb		92
77) 1,2-Dibromoethane	8.291	107	24649	4.78	ppb		99
78) Chlorobenzene	8.767	112	102718	4.90	ppb		94
79) 3-CBTF	8.785	180	49741	4.74	ppb		95
80) 4-CBTF	8.834	180	47814	5.13	ppb		95
81) 1,1,1,2-Tetrachloroethane	8.852	131	33610	4.64	ppb		96
82) Ethylbenzene	8.889	106	55283	4.92	ppb		98
83) (m+p)Xylene	8.998	106	129436	9.49	ppb		95
84) o-Xylene	9.346	106	65997	4.84	ppb		97
85) Styrene	9.358	104	108082	4.85	ppb		95
87) Bromoform	9.498	173	14858	4.85	ppb		93
88) 2-CBTF	9.577	180	47955	5.02	ppb		96
89) Isopropylbenzene	9.675	105	153870	5.19	ppb		98
90) Cyclohexanone	9.718	55	30376	96.13	ppb		88
91) trans-1,4-Dichloro-2-B...	9.962	53	5492	4.44	ppb		95
92) 1,1,2,2-Tetrachloroethane	9.913	83	29398	5.07	ppb		94
93) Bromobenzene	9.913	156	42917	5.17	ppb		99
94) 1,2,3-Trichloropropane	9.943	110	8709	4.93	ppb		97
95) n-Propylbenzene	10.022	91	174958	5.12	ppb		97
96) 2-Chlorotoluene	10.083	91	109951	5.07	ppb		98

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:14:14 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	116534	5.27	ppb	98
98)	4-Chlorotoluene	10.175	91	136747	5.18	ppb	100
99)	1,3,5-Trimethylbenzene	10.169	105	124065	4.94	ppb	95
100)	tert-Butylbenzene	10.437	119	103998	5.12	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	128539	5.08	ppb	99
102)	3,4-DCBTF	10.535	214	33541	5.12	ppb	97
103)	sec-Butylbenzene	10.620	105	145799	5.13	ppb	99
104)	p-Isopropyltoluene	10.742	119	126482	5.07	ppb	98
105)	1,3-Dclbenz	10.699	146	73807	5.07	ppb	95
106)	1,4-Dclbenz	10.766	146	75244	4.97	ppb	98
107)	2,4-DCBTF	10.821	214	29941	5.12	ppb	94
108)	2,5-DCBTF	10.858	214	33777	5.00	ppb	98
109)	n-Butylbenzene	11.065	91	108752	4.97	ppb	99
110)	1,2-Dclbenz	11.065	146	68971	4.94	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	4903	5.03	ppb	92
112)	Trielution Dichlorotol...	11.729	125	172638	15.47	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	48037	5.03	ppb	95
114)	Coelution Dichlorotoluene	11.998	125	124733	10.55	ppb	99
115)	1,2,4-Tcbenzene	12.162	180	39097	4.77	ppb	92
116)	Hexachlorobt	12.266	225	16971	4.85	ppb	96
117)	Naphthalen	12.303	128	72541	4.91	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	31416	4.69	ppb	96
119)	2,4,5-Trichlorotolene	12.851	159	23249	4.97	ppb	97
120)	2,3,6-Trichlorotoluene	12.912	159	19484	4.65	ppb	95

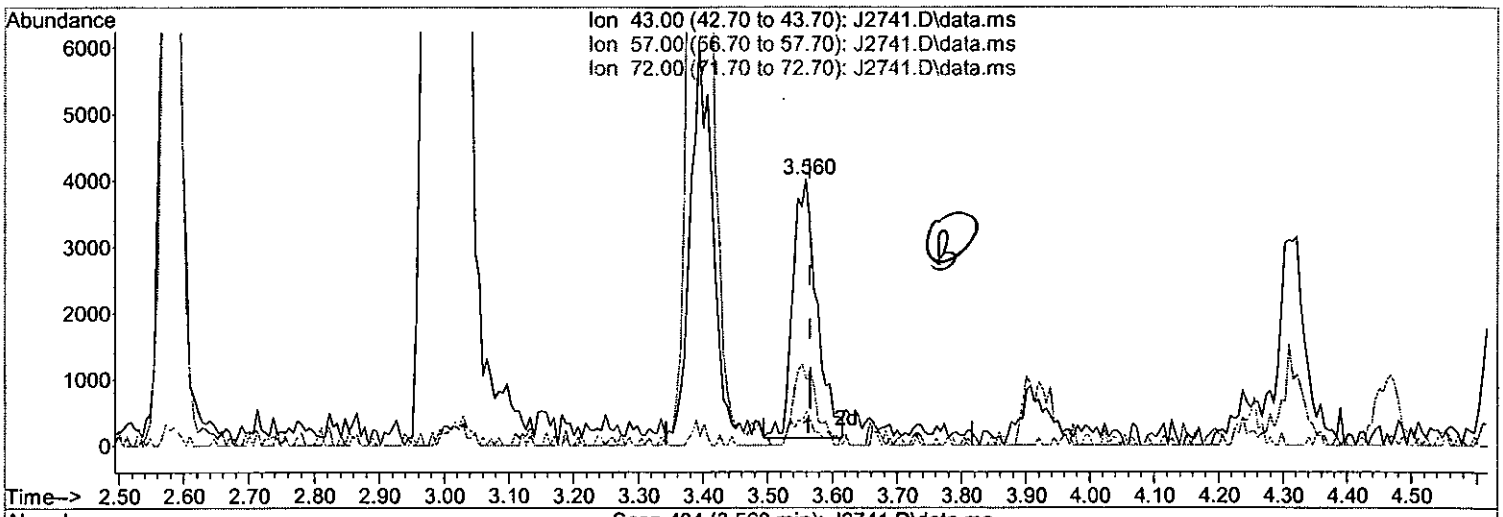
(#) = qualifier out of range (m) = manual integration (+) = signals summed

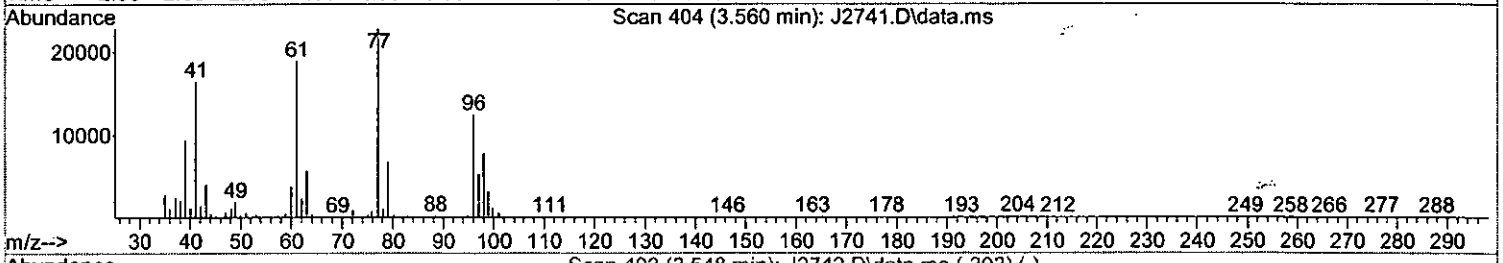
W011514.M Thu Jan 16 11:15:04 2014 00175 Page: 3

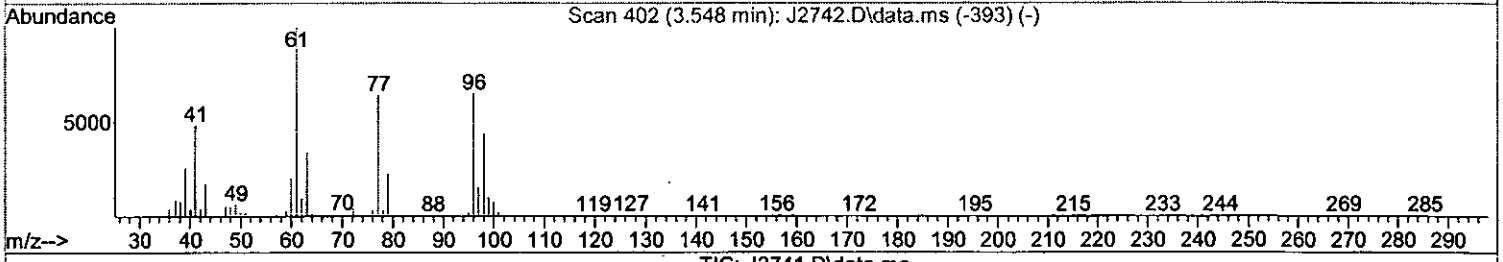
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2741.D\data.ms

(35) 2-Butanone (P)

3.560min (-0.006) 4.39 ppb

response 10107

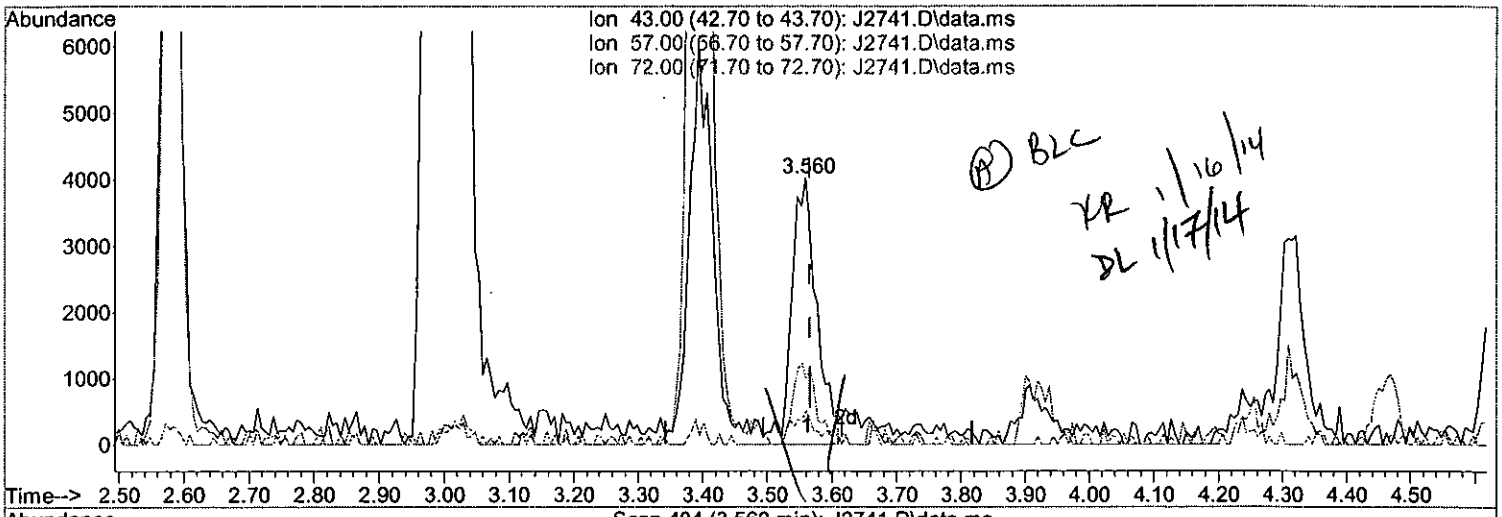
Ion	Exp%	Act%
43.00	100	100
57.00	6.00	12.53
72.00	24.00	24.34
0.00	0.00	0.00

W011514.M Thu Jan 16 11:12:42 2014 Page: 1

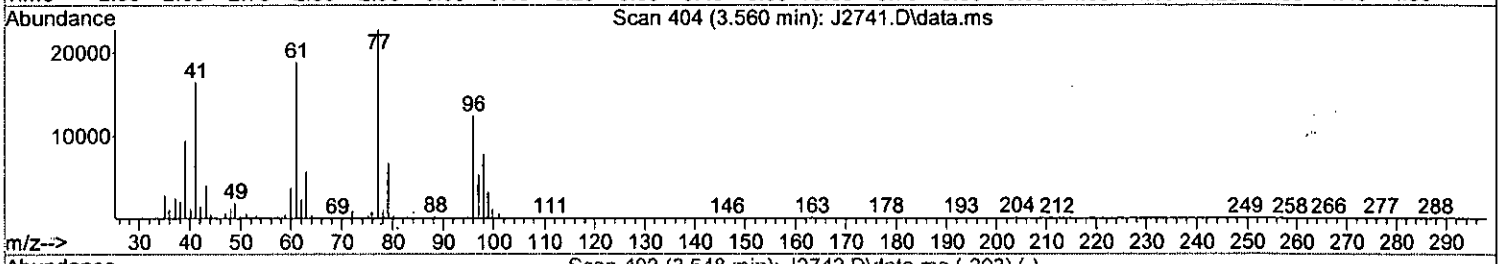
Quantitation Report (Qedit)

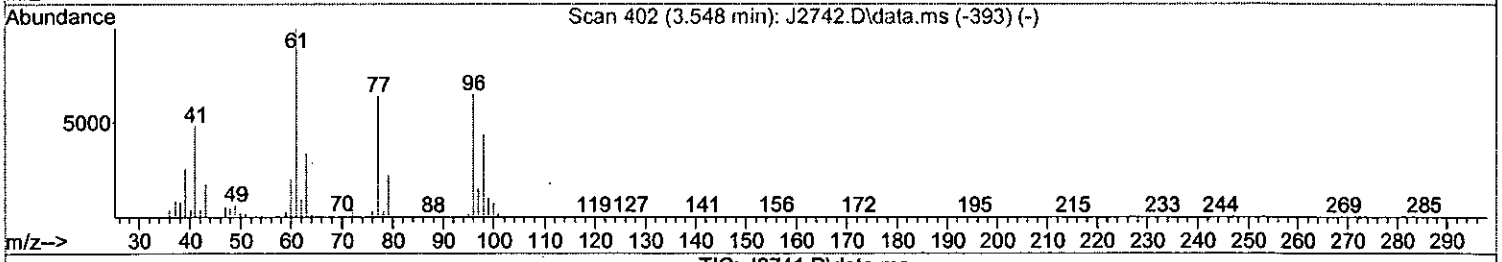
Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



(B) BLC
KR 1/16/14
DL 1/17/14





TIC: J2741.D\data.ms

(35) 2-Butanone (P)

3.560min (-0.006) 4.50 ppb m

response 10343

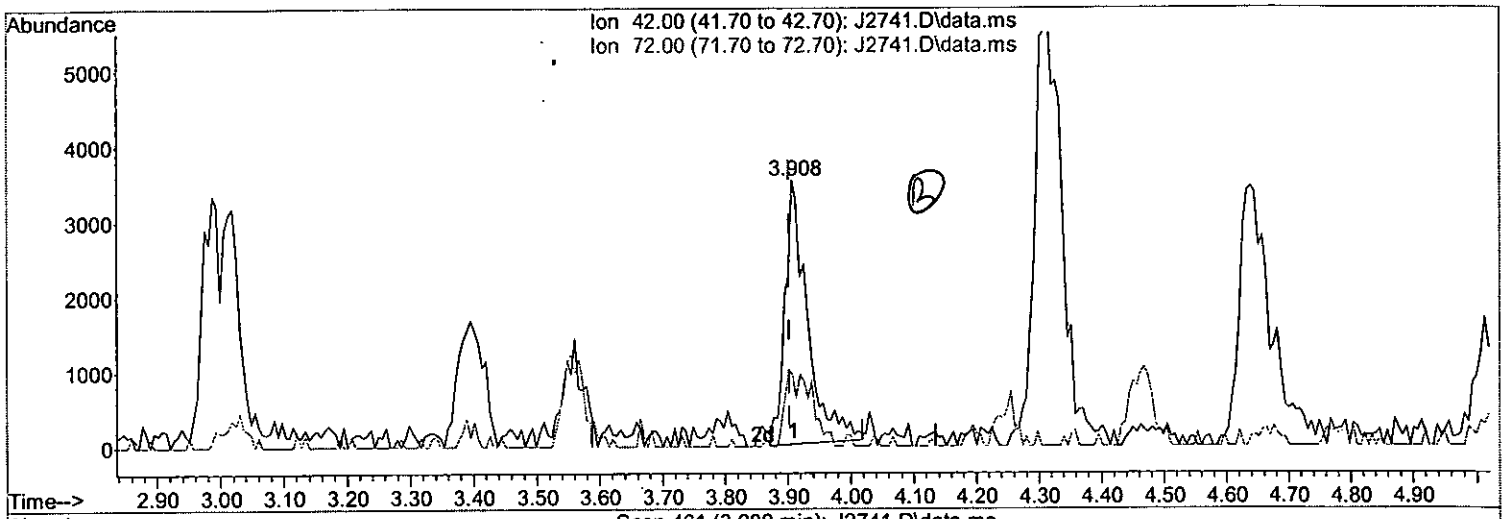
Ion	Exp%	Act%
43.00	100	100
57.00	6.00	6.61
72.00	24.00	24.34
0.00	0.00	0.00

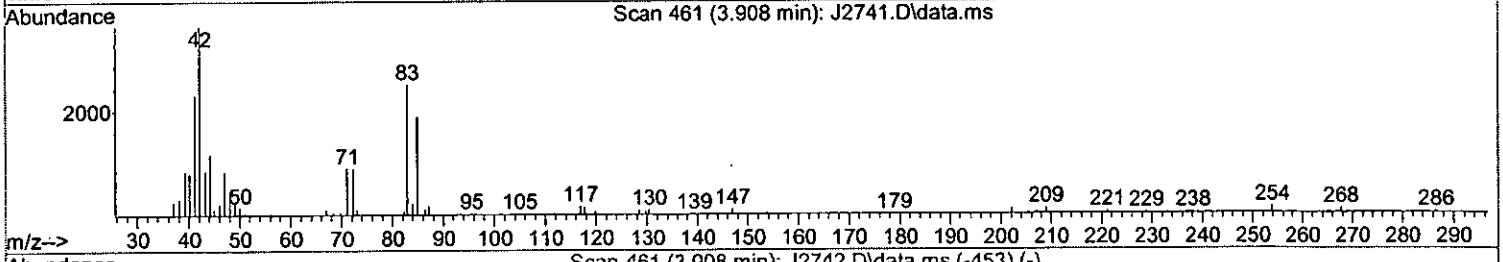
W011514.M Thu Jan 16 11:12:50 2014 Page: 1

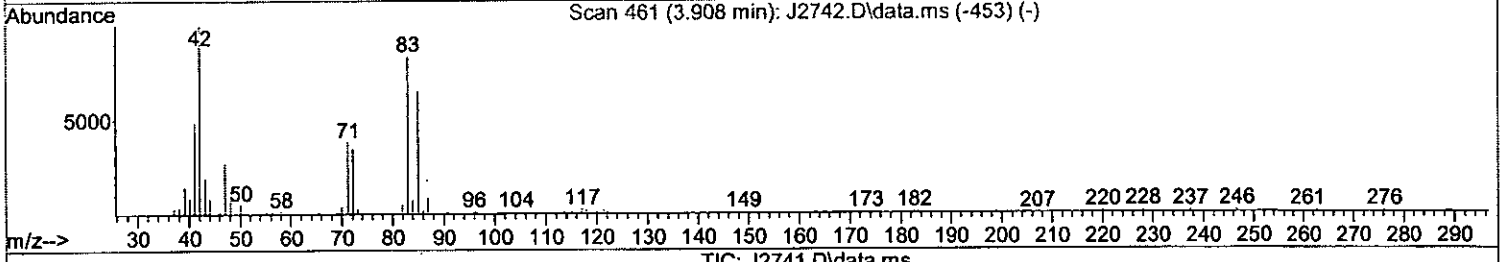
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2741.D\data.ms

(39) Tetrahydrofuran

3.908min (+0.006) 5.33 ppb

response 8814

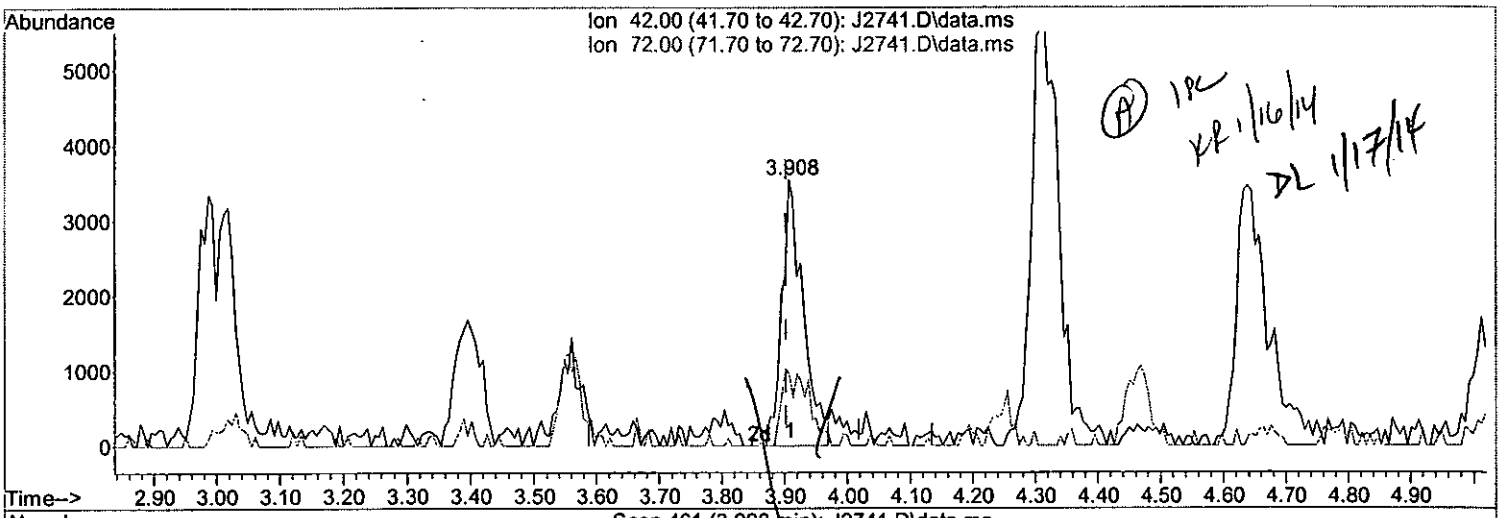
Ion	Exp%	Act%
42.00	100	100
72.00	35.50	26.61
0.00	0.00	0.00
0.00	0.00	0.00

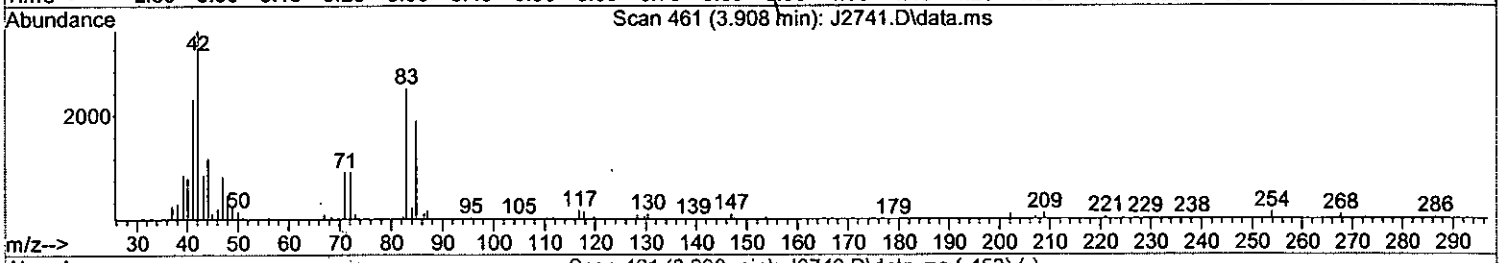
W011514.M Thu Jan 16 11:13:02 2014 Page: 1

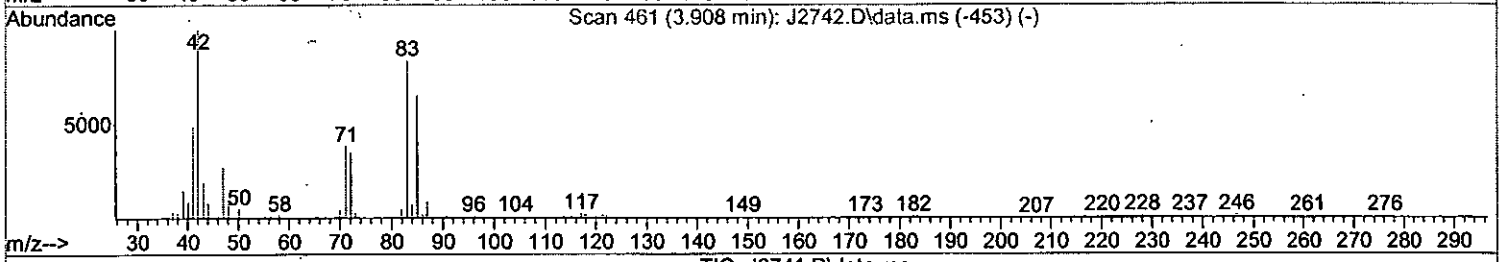
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2741.D\data.ms

(39) Tetrahydrofuran

3.908min (+0.006) 5.12 ppb m

response 8468

Ion	Exp%	Act%
42.00	100	100
72.00	35.50	26.61
0.00	0.00	0.00
0.00	0.00	0.00

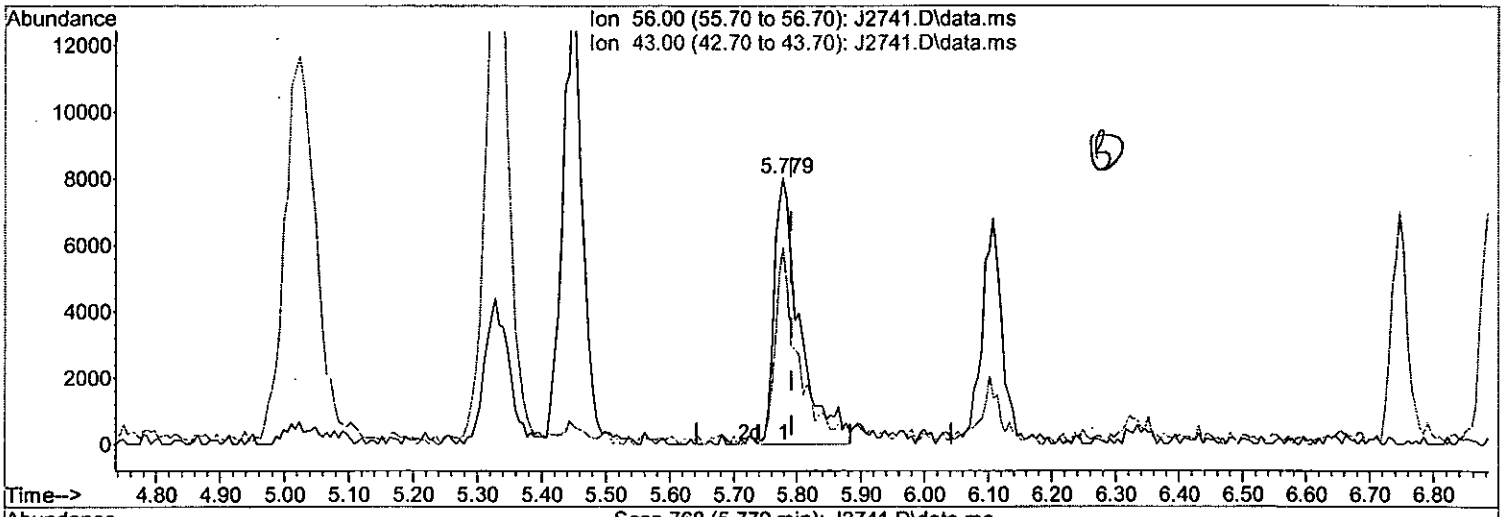
W011514.M Thu Jan 16 11:13:11 2014 Page: 1

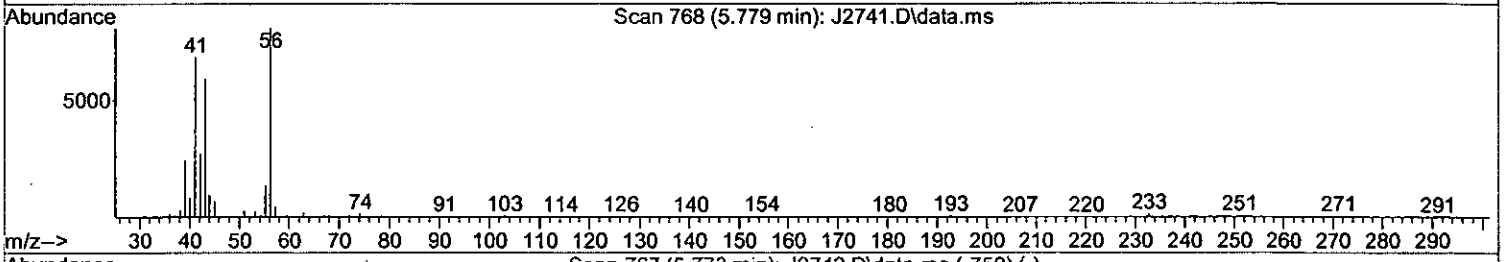
00179

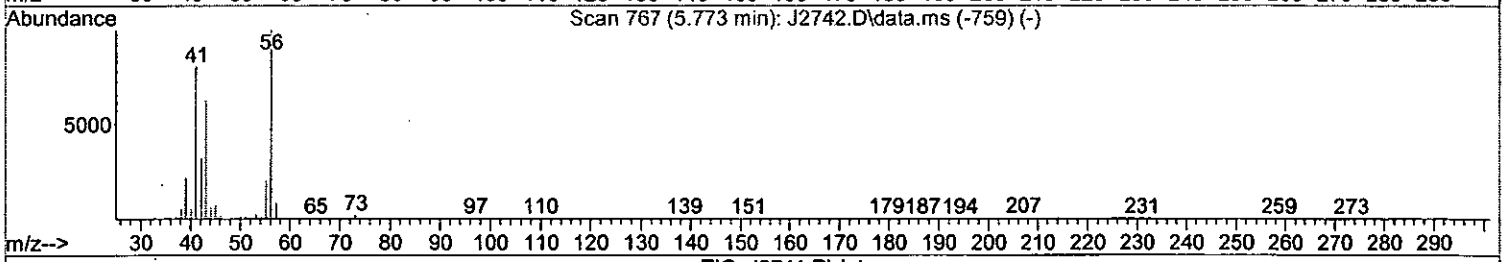
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2741.D\data.ms

(53) 1-Butanol

5.779min (-0.012) 207.79 ppb

response 22569

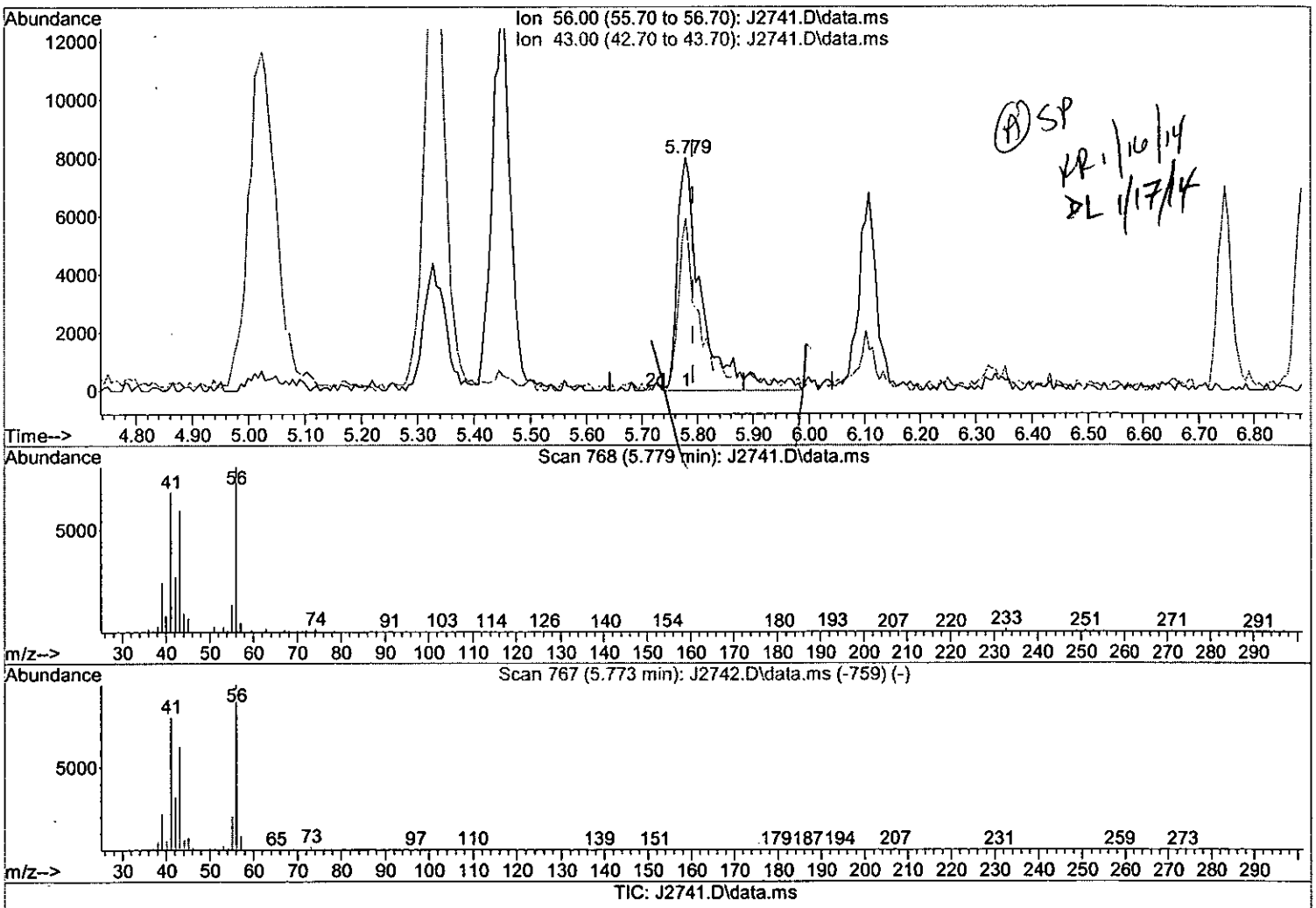
Ion	Exp%	Act%
56.00	100	100
43.00	61.10	63.88
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 11:13:32 2014 00180 Page: 1

Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2741.D\data.ms

(53) 1-Butanol

5.779min (-0.012) 226.51 ppb m

response 24602

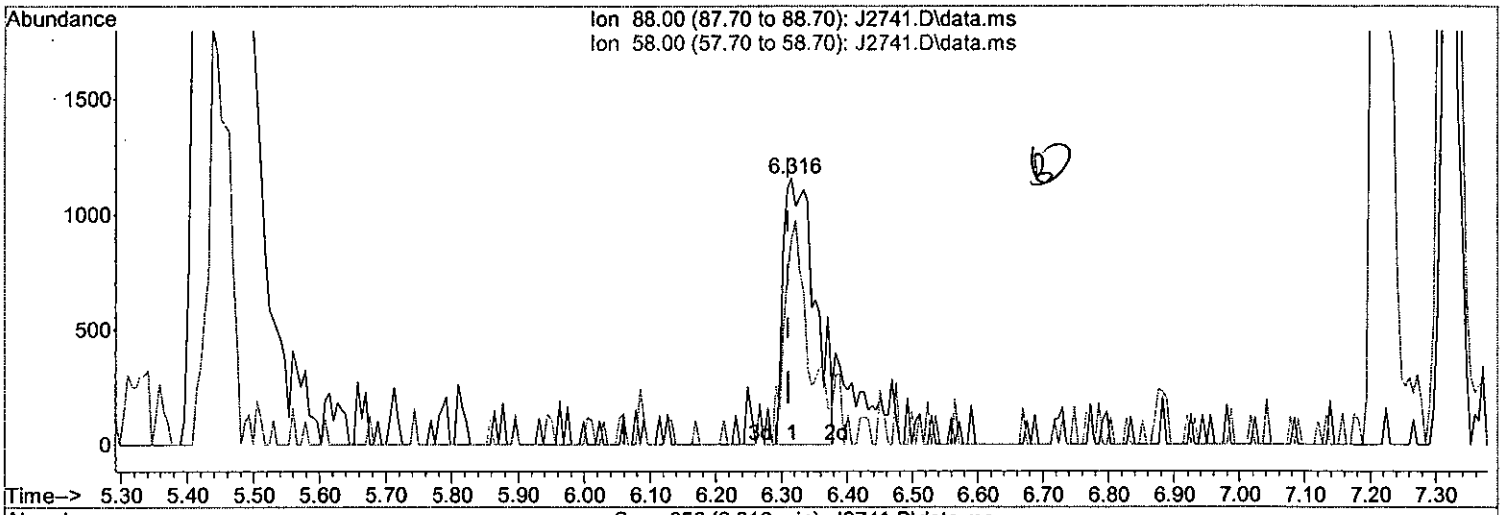
Ion	Exp%	Act%
56.00	100	100
43.00	61.10	58.60
0.00	0.00	0.00
0.00	0.00	0.00

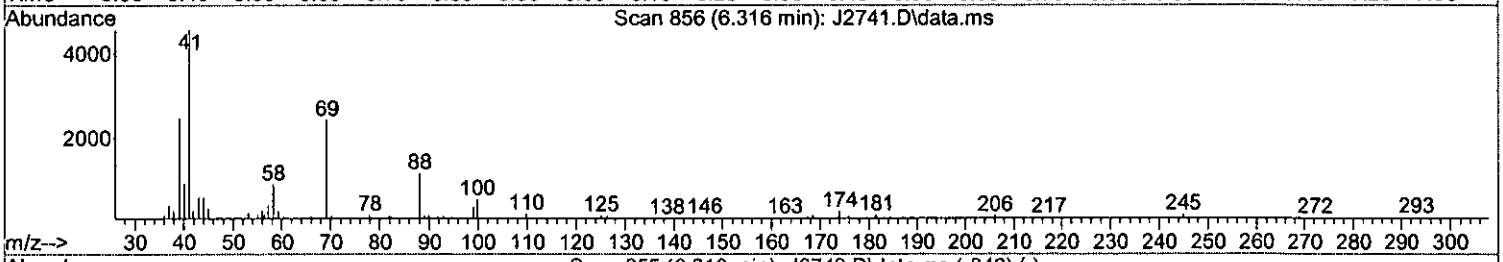
W011514.M Thu Jan 16 11:13:39 2014 Page: 1

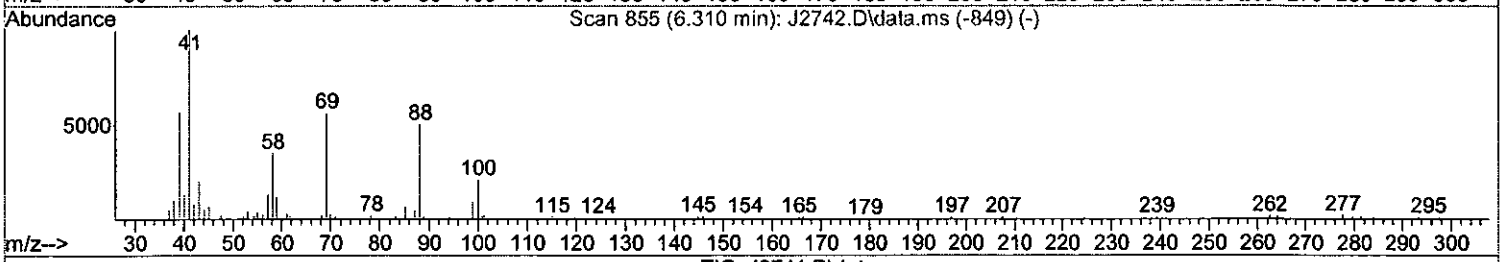
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2741.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 82.58 ppb

response 3855

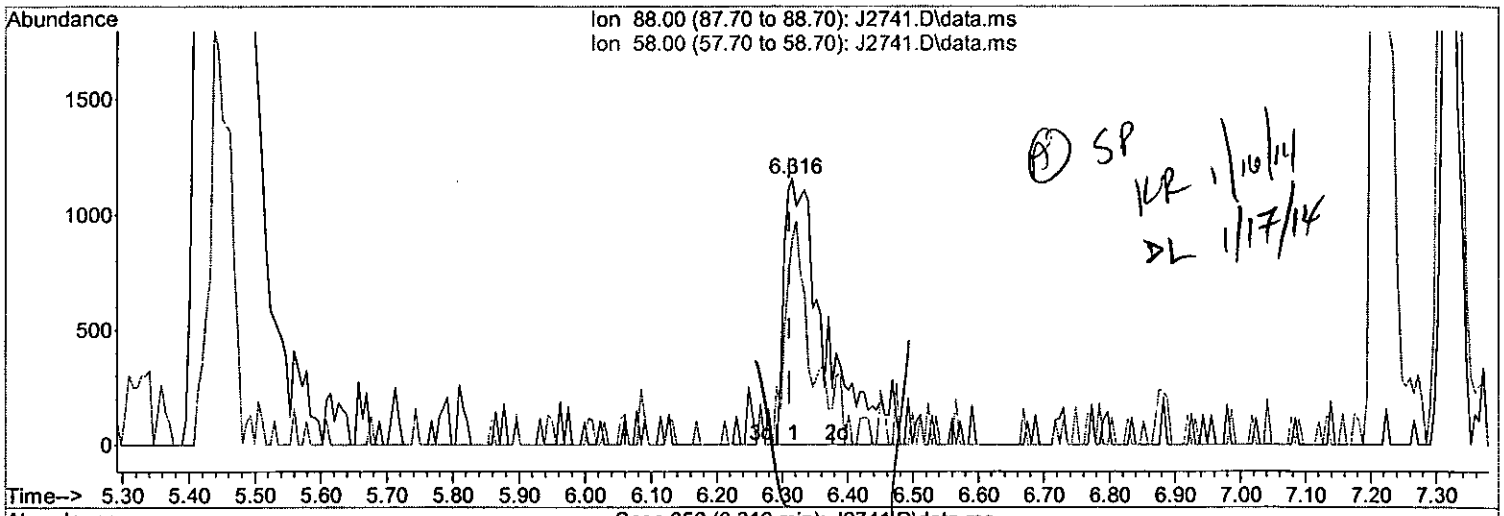
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	76.86
0.00	0.00	0.00
0.00	0.00	0.00

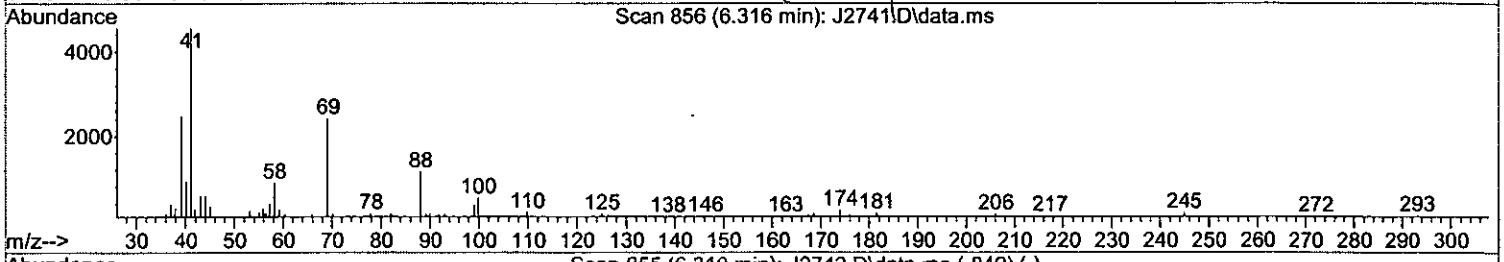
W011514.M Thu Jan 16 11:13:47 2014 Page: 1

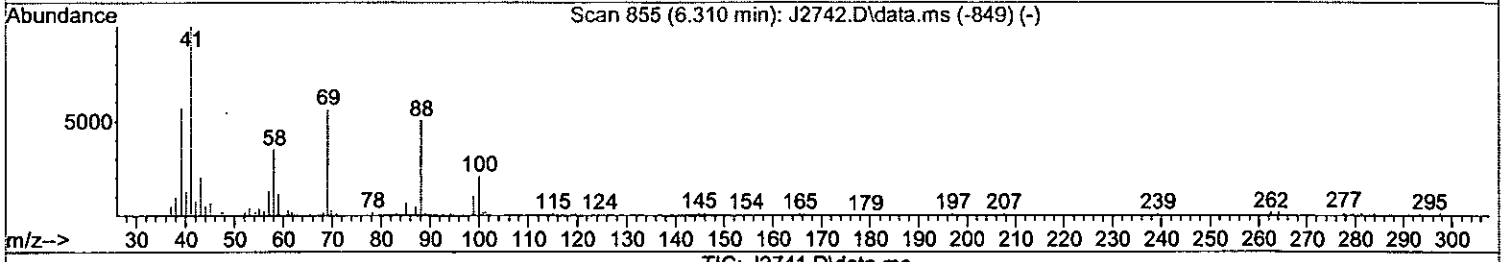
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2741.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 109.60 ppb m

response 5116

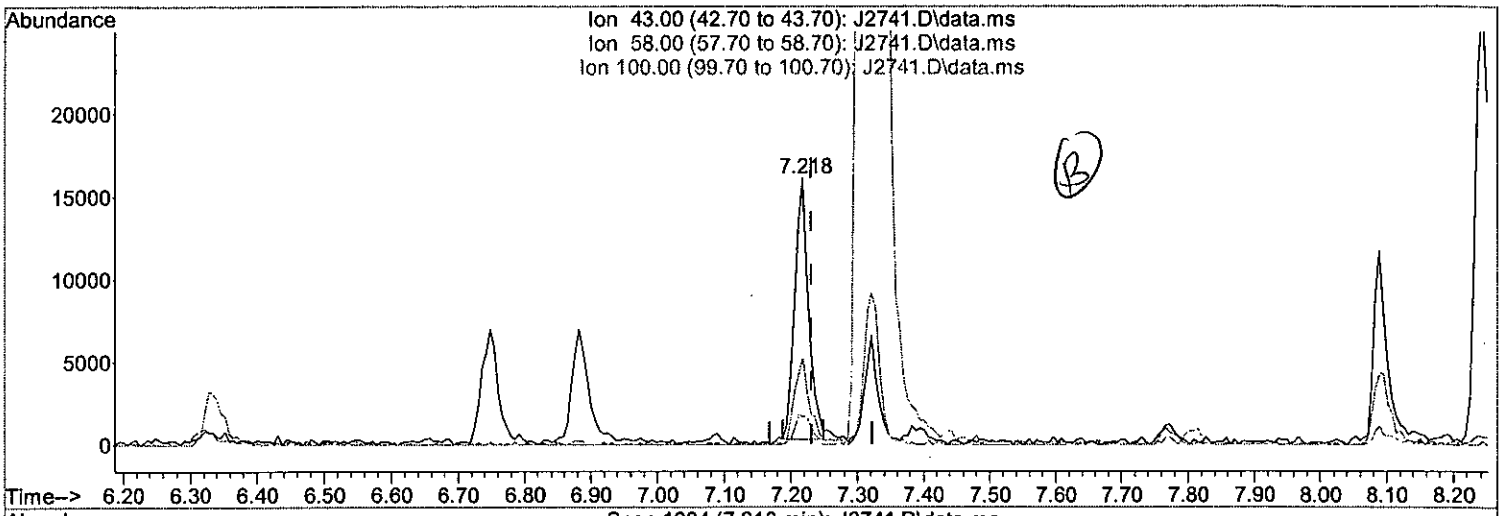
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	76.86
0.00	0.00	0.00
0.00	0.00	0.00

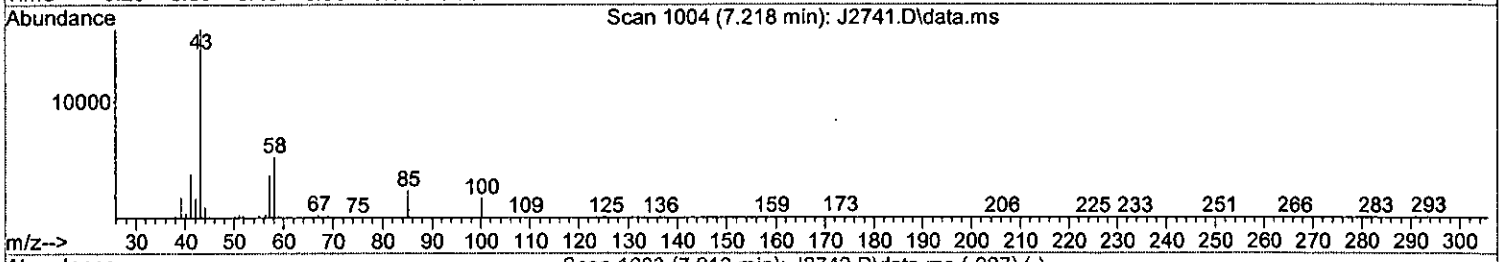
W011514.M Thu Jan 16 11:14:00 2014 Page: 1

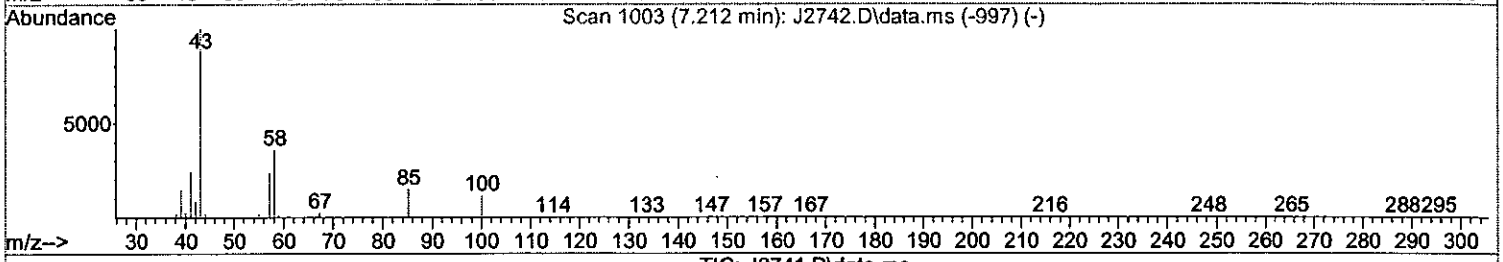
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2741.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.218min (-0.012) 4.39 ppb

response 22689

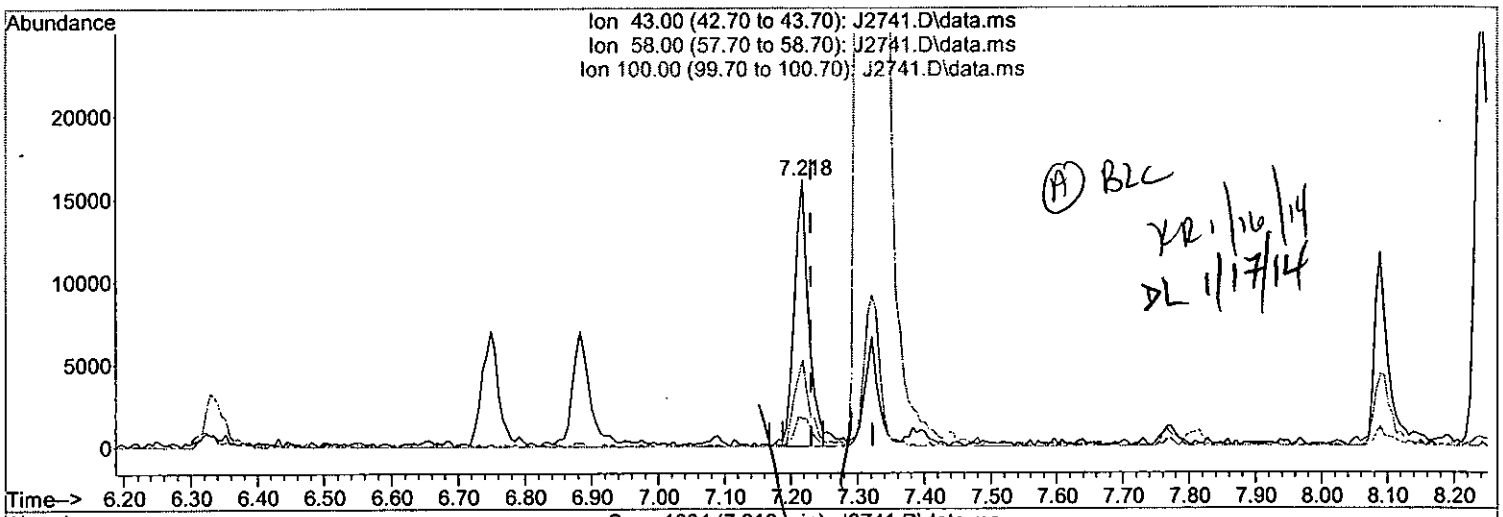
Ion	Exp%	Act%
43.00	100	100
58.00	35.80	32.52
100.00	11.60	10.58
0.00	0.00	0.00

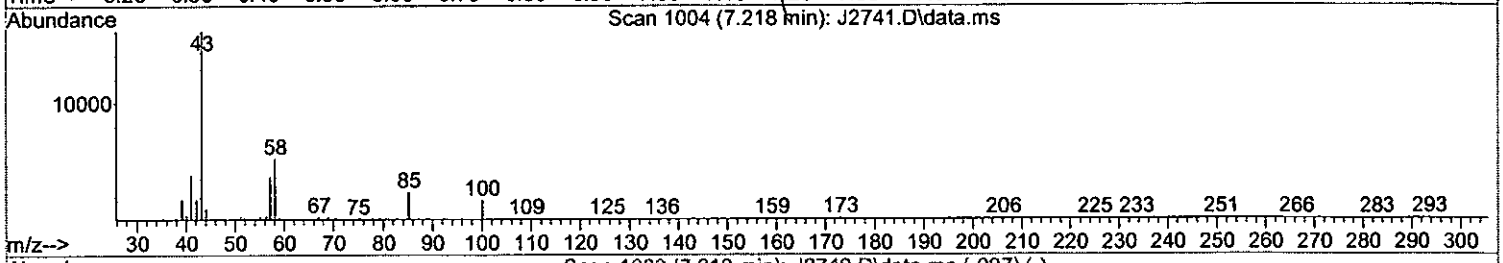
W011514.M Thu Jan 16 11:14:11 2014 Page: 1

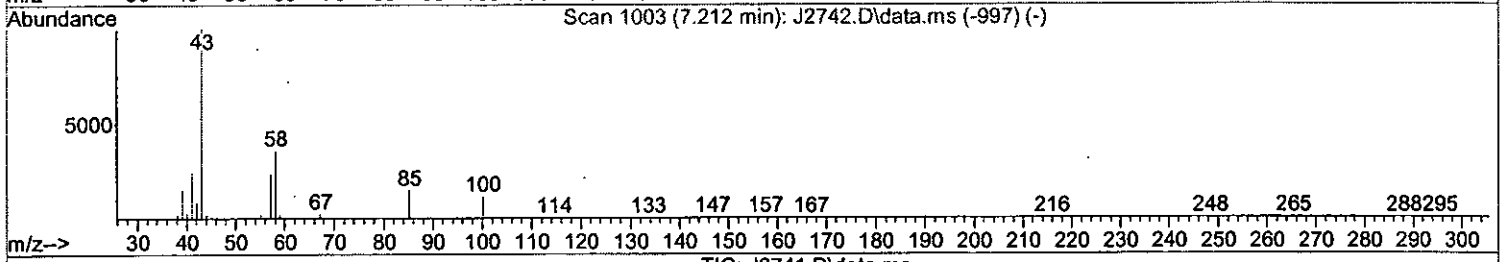
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:25 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2741.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.218min (-0.012) 4.61 ppb m

response 23831

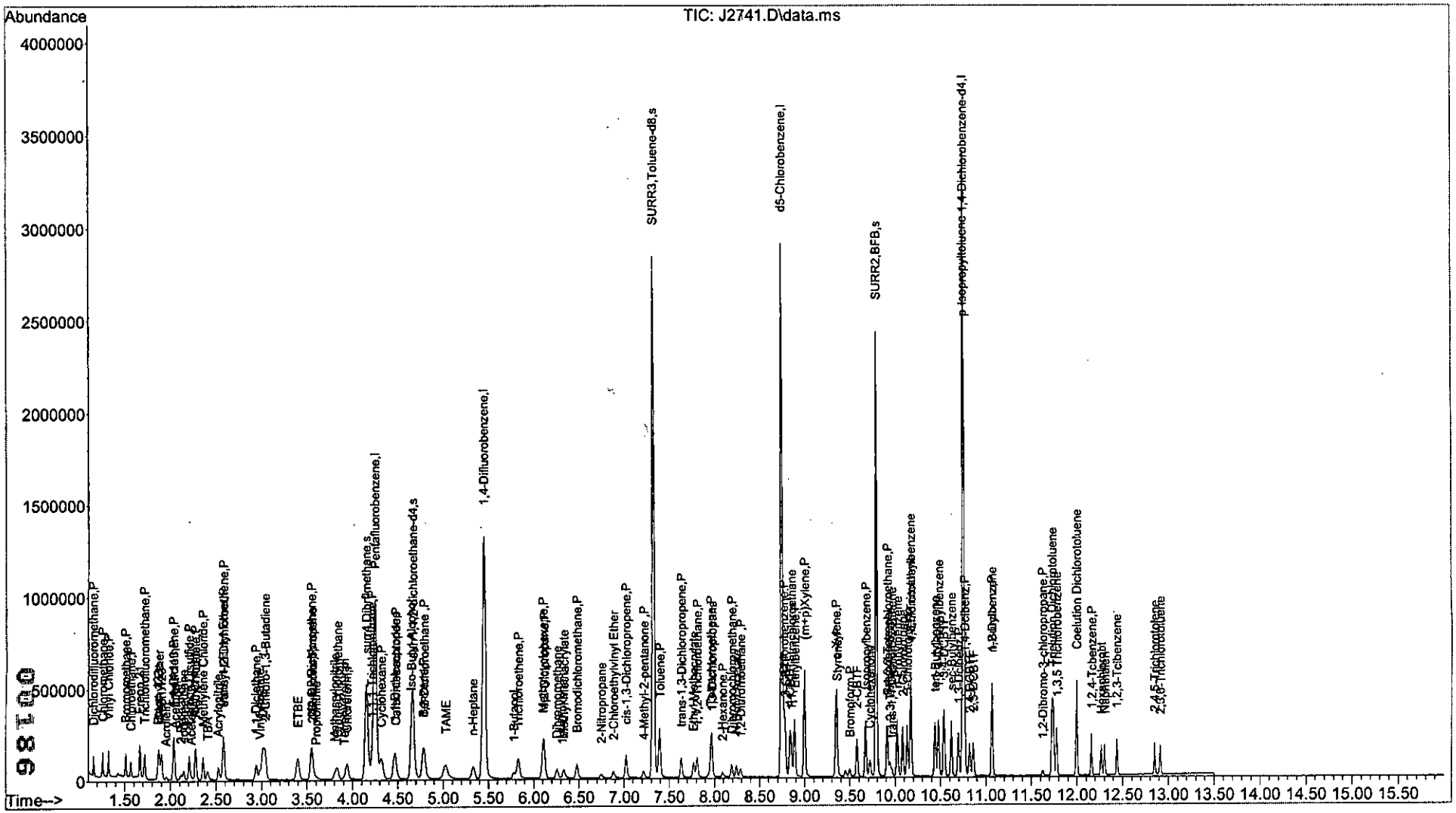
Ion	Exp%	Act%
43.00	100	100
58.00	35.80	32.52
100.00	11.60	10.58
0.00	0.00	0.00

W011514.M Thu Jan 16 11:14:19 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2741.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 9:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:14:14 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 11:15:06 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2742.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:18:14 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	868660	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1292405	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1167010	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	585641	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.158	113	377832	50.04	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.08%			
48) surr1,1,2-dichloroetha...	4.664	65	453549	49.88	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.76%			
65) SURR3,Toluene-d8	7.322	98	1604032	49.97	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.94%			
70) SURR2,BFB	9.785	95	595296	49.88	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.158	85	204652	22.78	ppb	100
3) Chloromethane	1.262	50	257939	21.06	ppb	100
4) Vinyl Chloride	1.323	62	254857	21.42	ppb	100
5) Bromomethane	1.512	94	141496	17.65	ppb	100
6) Chloroethane	1.567	64	151508	21.13	ppb	100
7) Freon 21	1.664	67	340787	19.60	ppb	100
8) Trichlorofluoromethane	1.719	101	271539	20.39	ppb	100
9) Diethyl Ether	1.878	59	120483	20.68	ppb	100
10) Freon 123a	1.866	67	183975	18.82	ppb	100
11) Freon 123	1.902	83	197685	18.95	ppb	100
12) Acrolein	1.951	56	40636	86.97	ppb	100
13) 1,1-Diclethene	2.036	96	125362	20.17	ppb	100
14) Freon 113	2.036	101	134296	20.43	ppb	100
15) Acetone	2.048	43	35630	19.87	ppb	100
16) 2-Propanol	2.116	45	112837	417.33	ppb	100
17) Iodomethane	2.146	142	191625	21.63	ppb	100
18) Carbon Disulfide	2.207	76	470576	20.26	ppb	100
19) Acetonitrile	2.225	40	28706	100.53	ppb	100
20) Allyl Chloride	2.274	76	92655	21.12	ppb	100
21) Methyl Acetate	2.274	43	77980	20.21	ppb	100
22) Methylene Chloride	2.359	84	153216	20.37	ppb	100
23) TBA	2.408	59	186870	413.32	ppb	100
24) Acrylonitrile	2.524	53	189210	104.67	ppb	100
25) Methyl-t-Butyl Ether	2.579	73	401980	20.66	ppb	100
26) trans-1,2-Dichloroethene	2.585	96	153524	20.21	ppb	100
28) 1,1-Diclethane	2.939	63	304572	20.79	ppb	100
29) Vinyl Acetate	2.981	86	22953	20.69	ppb	100
30) DIPE	3.018	45	590806	20.25	ppb	100
31) 2-Chloro-1,3-Butadiene	3.042	53	310199	20.47	ppb	100
32) ETBE	3.396	59	482950	20.20	ppb	100
33) 2,2-Dichloropropane	3.554	77	244822	20.36	ppb	100
34) cis-1,2-Dichloroethene	3.542	96	173920	19.66	ppb	100
35) 2-Butanone	3.548	43	47501	20.22	ppb	100
36) Propionitrile	3.597	54	66613	102.98	ppb	100
37) Bromochloromethane	3.829	130	93839	20.12	ppb	100

KR 1/16/14

W011514.M Thu Jan 16 11:19:36 2014 Page: 1

00187

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2742.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:18:14 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	43307	20.83	ppb	100
39) Tetrahydrofuran	3.908	42	33267	19.70	ppb	100
40) Chloroform	3.938	83	283513	20.61	ppb	100
41) 1,1,1-Trichloroethane	4.213	97	258857	20.53	ppb	100
42) TAME	5.024	73	397770	20.20	ppb	100
44) Cyclohexane	4.316	41	159649	19.09	ppb	100
46) Carbontetrachloride	4.475	121	65949	20.55	ppb	100
47) 1,1-Dichloropropene	4.463	75	203261	20.30	ppb	100
49) Benzene	4.780	78	657743	20.45	ppb	100
50) 1,2-Dichloroethane	4.786	62	219104	20.64	ppb	100
51) Iso-Butyl Alcohol	4.639	43	87693	410.06	ppb	100
52) n-Heptane	5.328	43	170096	19.58	ppb	100
53) 1-Butanol	5.773	56	111986	1022.80	ppb	100
54) Trichloroethene	5.828	130	167021	20.28	ppb	100
55) Methylcyclohexane	6.103	55	172569	18.80	ppb	100
56) 1,2-Diclpropane	6.115	63	171726	20.89	ppb	100
57) Dibromomethane	6.255	93	78786	20.70	ppb	100
58) 1,4-Dioxane	6.310	88	18462m	392.34	ppb	
59) Methyl Methacrylate	6.328	69	76218	20.37	ppb	100
60) Bromodichloromethane	6.481	83	207418	20.78	ppb	100
61) 2-Nitropropane	6.743	41	50898	37.64	ppb	100
62) 2-Chloroethylvinyl Ether	6.877	63	59959	21.15	ppb	100
63) cis-1,3-Dichloropropene	7.023	75	251575	21.16	ppb	100
64) 4-Methyl-2-pentanone	7.212	43	102029	19.58	ppb	100
66) Toluene	7.395	91	697233	20.70	ppb	100
67) trans-1,3-Dichloropropene	7.627	75	204172	21.39	ppb	100
68) Ethyl Methacrylate	7.767	69	161033	21.06	ppb	100
69) 1,1,2-Trichloroethane	7.810	97	113643	20.30	ppb	100
72) Tetrachloroethene	7.962	164	126798	20.72	ppb	100
73) 2-Hexanone	8.084	43	71811	20.80	ppb	100
74) 1,3-Dichloropropane	7.974	76	210047	20.61	ppb	100
75) Dibromochloromethane	8.194	129	127688	21.02	ppb	100
76) N-Butyl Acetate	8.236	43	183528	21.29	ppb	100
77) 1,2-Dibromoethane	8.285	107	110397	21.28	ppb	100
78) Chlorobenzene	8.767	112	444103	21.06	ppb	100
79) 3-CBTF	8.785	180	196966	18.68	ppb	100
80) 4-CBTF	8.840	180	179786	19.16	ppb	100
81) 1,1,1,2-Tetrachloroethane	8.852	131	155970	21.41	ppb	100
82) Ethylbenzene	8.889	106	236433	20.90	ppb	100
83) (m+p)Xylene	8.998	106	569664	41.50	ppb	100
84) o-Xylene	9.346	106	284645	20.76	ppb	100
85) Styrene	9.352	104	485345	21.64	ppb	100
87) Bromoform	9.498	173	69639	21.99	ppb	100
88) 2-CBTF	9.578	180	201140	20.35	ppb	100
89) Isopropylbenzene	9.669	105	658310	21.47	ppb	100
90) Cyclohexanone	9.718	55	133575	408.48	ppb	100
91) trans-1,4-Dichloro-2-B...	9.962	53	26819	20.97	ppb	100
92) 1,1,2,2-Tetrachloroethane	9.913	83	129095	21.51	ppb	100
93) Bromobenzene	9.913	156	181102	21.09	ppb	100
94) 1,2,3-Trichloropropane	9.943	110	38402	21.02	ppb	100
95) n-Propylbenzene	10.023	91	755705	21.38	ppb	100
96) 2-Chlorotoluene	10.077	91	473713	21.12	ppb	100

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2742.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:18:14 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

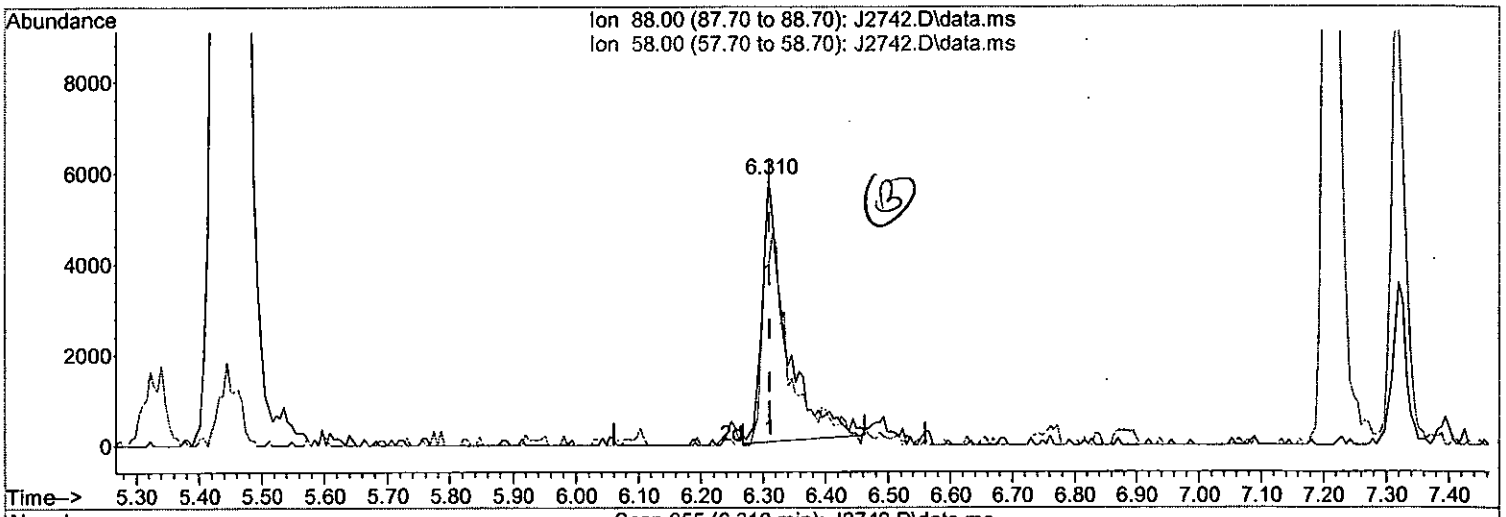
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	471290	20.60	ppb	100
98)	4-Chlorotoluene	10.175	91	579280	21.20	ppb	100
99)	1,3,5-Trimethylbenzene	10.169	105	545228	20.98	ppb	100
100)	tert-Butylbenzene	10.437	119	441334	20.99	ppb	100
101)	1,2,4-Trimethylbenzene	10.480	105	561944	21.46	ppb	100
102)	3,4-DCBTF	10.535	214	134383	19.83	ppb	100
103)	sec-Butylbenzene	10.620	105	631388	21.46	ppb	100
104)	p-Isopropyltoluene	10.742	119	550569	21.31	ppb	100
105)	1,3-Dclbenz	10.699	146	313591	20.81	ppb	100
106)	1,4-Dclbenz	10.766	146	325628	20.77	ppb	100
107)	2,4-DCBTF	10.821	214	116931	19.31	ppb	100
108)	2,5-DCBTF	10.864	214	135472	19.38	ppb	100
109)	n-Butylbenzene	11.065	91	481816	21.28	ppb	100
110)	1,2-Dclbenz	11.065	146	301844	20.88	ppb	100
111)	1,2-Dibromo-3-chloropr...	11.626	157	21169	20.97	ppb	100
112)	Trielution Dichlorotol...	11.730	125	705341	61.09	ppb	100
113)	1,3,5 Trichlorobenzene	11.778	180	189553	19.17	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	501383	40.99	ppb	100
115)	1,2,4-Tcbenzene	12.156	180	173718	20.48	ppb	100
116)	Hexachlorobt	12.266	225	73722	20.36	ppb	100
117)	Naphthalen	12.303	128	327314	21.40	ppb	100
118)	1,2,3-Tclbenzene	12.443	180	140515	20.26	ppb	100
119)	2,4,5-Trichlorotolene	12.851	159	94799	19.60	ppb	100
120)	2,3,6-Trichlorotoluene	12.912	159	85646	19.76	ppb	100

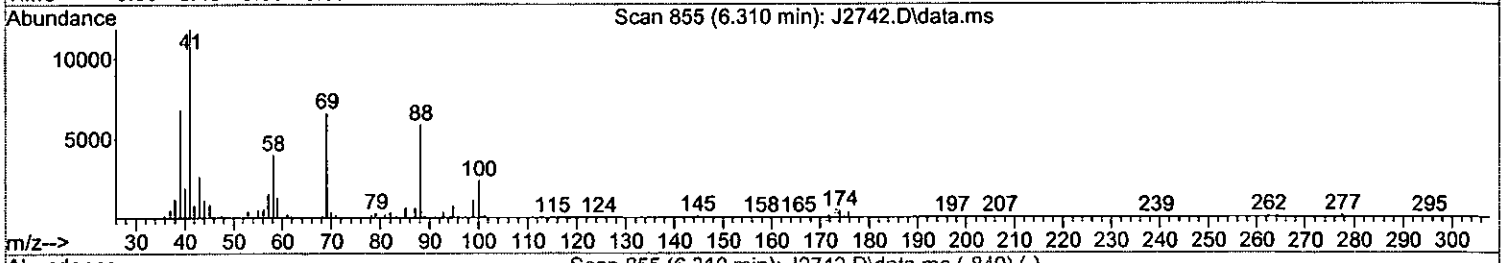
(#) = qualifier out of range (m) = manual integration (+) = signals summed

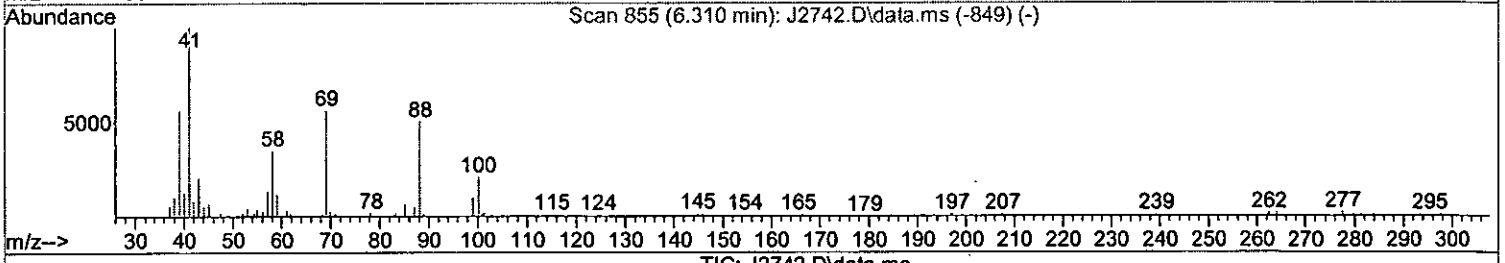
Quantitation Report (Qedit)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2742.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:30 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2742.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 331.49 ppb

response 15599

Ion	Exp%	Act%
88.00	100	100
58.00	68.00	68.05
0.00	0.00	0.00
0.00	0.00	0.00

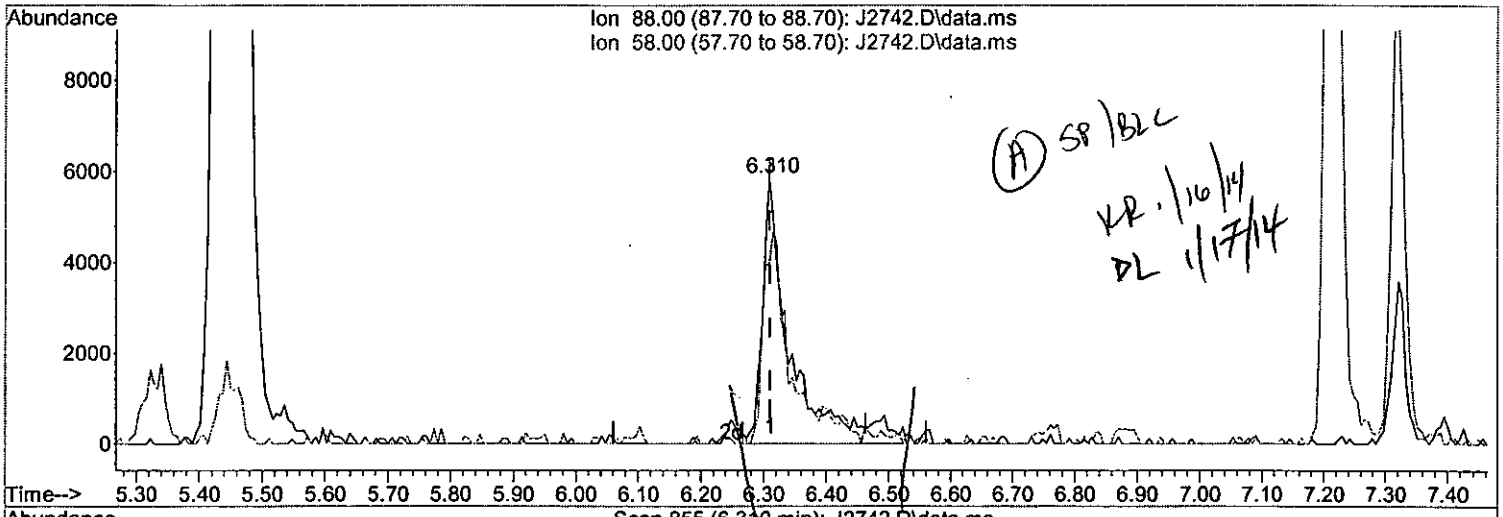
W011514.M Thu Jan 16 11:18:12 2014 Page: 1

00190

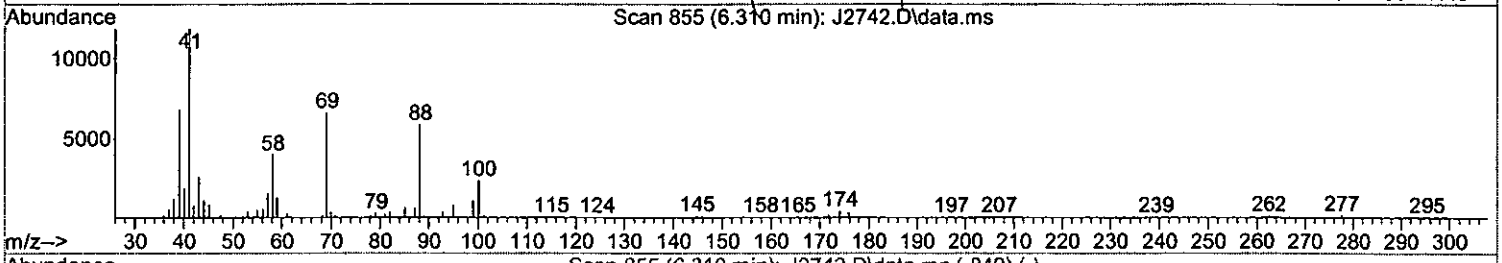
Quantitation Report (Qedit)

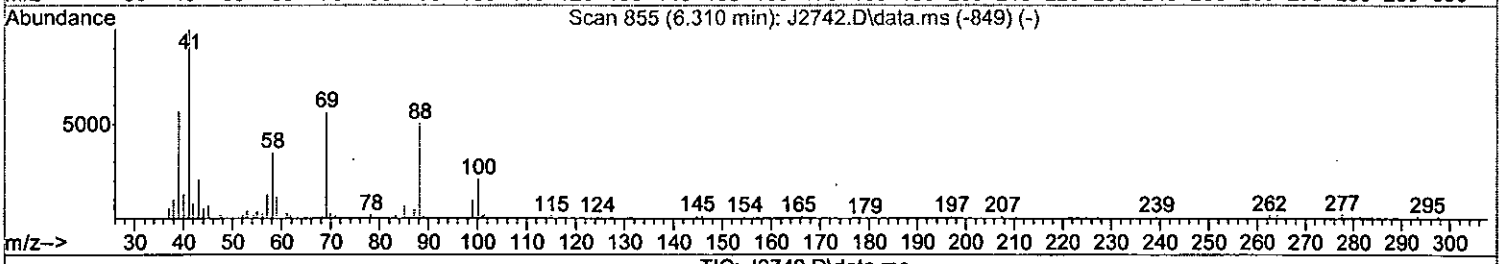
Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2742.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:30 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



(A) 58/B2C
KR. 1/16/14
DL 1/17/14





TIC: J2742.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 392.34 ppb m

response 18462

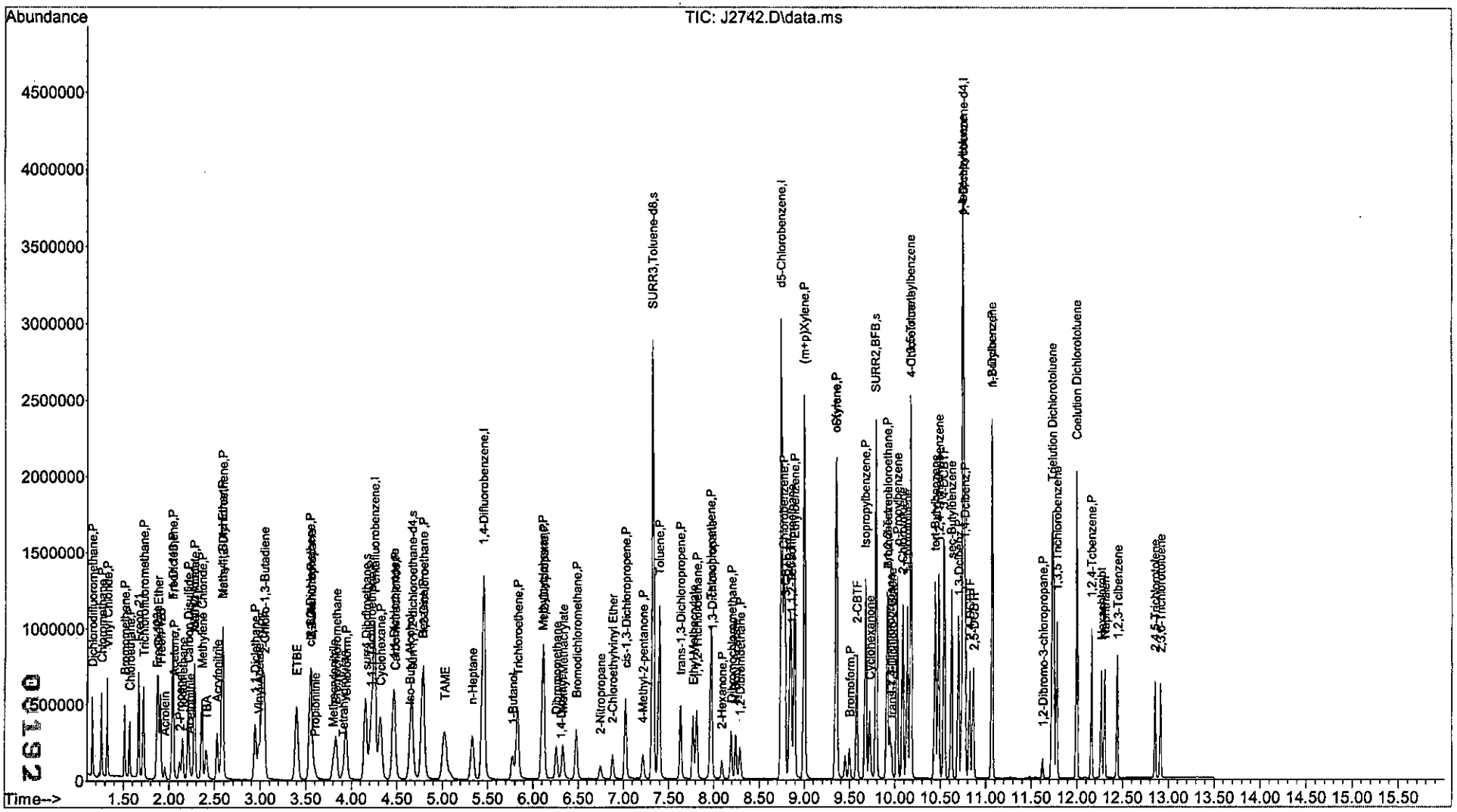
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	68.05
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 11:18:18 2014 Page: 1

00191

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2742.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:18:14 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 11:19:37 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2743.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:21:19 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	868809	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1305540	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1176191	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	602309	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	377884	49.55	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.10%				
48) surr1,1,2-dichloroetha...	4.664	65	457478	49.80	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.60%				
65) SURR3,Toluene-d8	7.322	98	1618497	49.91	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.82%				
70) SURR2,BFB	9.791	95	599147	49.70	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.40%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	479694	53.38	ppb		97
3) Chloromethane	1.262	50	618843	50.53	ppb		100
4) Vinyl Chloride	1.323	62	612182	51.44	ppb		99
5) Bromomethane	1.512	94	341787	42.63	ppb		99
6) Chloroethane	1.567	64	365109	50.90	ppb		97
7) Freon 21	1.664	67	866757	49.84	ppb		99
8) Trichlorofluoromethane	1.719	101	653118	49.03	ppb		98
9) Diethyl Ether	1.878	59	290189	49.81	ppb		99
10) Freon 123a	1.872	67	481567	49.25	ppb		88
11) Freon 123	1.902	83	510704	48.95	ppb		98
12) Acrolein	1.951	56	125863	269.34	ppb		98
13) 1,1-Diclethene	2.042	96	302224	48.61	ppb		92
14) Freon 113	2.036	101	318588	48.46	ppb		97
15) Acetone	2.042	43	85678	47.78	ppb		95
16) 2-Propanol	2.115	45	285528	1055.85	ppb		100
17) Iodomethane	2.146	142	507498	57.29	ppb		97
18) Carbon Disulfide	2.207	76	1147679	49.41	ppb		99
19) Acetonitrile	2.225	40	71037	248.73	ppb		99
20) Allyl Chloride	2.274	76	219417	50.01	ppb		99
21) Methyl Acetate	2.274	43	195256	50.60	ppb		95
22) Methylene Chloride	2.359	84	367554	48.86	ppb		99
23) TBA	2.408	59	453549	1002.99	ppb		100
24) Acrylonitrile	2.524	53	451596	249.78	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	970506	49.87	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	382546	50.35	ppb		99
28) 1,1-Diclethane	2.944	63	725721	49.54	ppb		98
29) Vinyl Acetate	2.981	86	60031	54.09	ppb	#	84
30) DIPE	3.018	45	1434178	49.16	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	766225	50.55	ppb		99
32) ETBE	3.396	59	1186074	49.60	ppb		99
33) 2,2-Dichloropropane	3.560	77	590616	49.11	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	432564	48.89	ppb		99
35) 2-Butanone	3.548	43	117069	49.82	ppb		95
36) Propionitrile	3.591	54	158893	245.61	ppb		98
37) Bromochloromethane	3.828	130	226394	48.53	ppb		98

KR 1/16/14

W011514.M Thu Jan 16 11:22:08 2014 00193 Page: 1

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2743.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:21:19 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	103852	49.94	ppb	93
39) Tetrahydrofuran	3.908	42	76739	45.44	ppb	98
40) Chloroform	3.938	83	691339	50.24	ppb	96
41) 1,1,1-Trichloroethane	4.213	97	616639	48.91	ppb	90
42) TAME	5.023	73	956504	48.57	ppb	98
44) Cyclohexane	4.316	41	410168	48.55	ppb	99
46) Carbontetrachloride	4.469	121	160794	49.59	ppb	95
47) 1,1-Dichloropropene	4.462	75	496496	49.09	ppb	98
49) Benzene	4.779	78	1596977	49.16	ppb	99
50) 1,2-Dichloroethane	4.786	62	527106	49.16	ppb	99
51) Iso-Butyl Alcohol	4.639	43	219809	1017.50	ppb	92
52) n-Heptane	5.328	43	412537	47.00	ppb	99
53) 1-Butanol	5.773	56	289393	2616.52	ppb	98
54) Trichloroethene	5.828	130	404175	48.59	ppb	96
55) Methylcyclohexane	6.102	55	444243	47.92	ppb	99
56) 1,2-Diclpropane	6.115	63	416349	50.14	ppb	99
57) Dibromomethane	6.255	93	187922	48.87	ppb	97
58) 1,4-Dioxane	6.310	88	45387m	954.82	ppb	
59) Methyl Methacrylate	6.328	69	190651	50.45	ppb	96
60) Bromodichloromethane	6.480	83	508121	50.39	ppb	99
61) 2-Nitropropane	6.743	41	131600	96.34	ppb	92
62) 2-Chloroethylvinyl Ether	6.877	63	148168	51.74	ppb	97
63) cis-1,3-Dichloropropene	7.023	75	613994	51.12	ppb	98
64) 4-Methyl-2-pentanone	7.212	43	255039	48.46	ppb	96
66) Toluene	7.395	91	1692484	49.75	ppb	99
67) trans-1,3-Dichloropropene	7.633	75	512091	53.11	ppb	94
68) Ethyl Methacrylate	7.767	69	404151	52.31	ppb	100
69) 1,1,2-Trichloroethane	7.809	97	276542	48.89	ppb	100
72) Tetrachloroethene	7.962	164	305358	49.52	ppb	99
73) 2-Hexanone	8.084	43	176796	50.81	ppb	96
74) 1,3-Dichloropropane	7.974	76	513417	49.98	ppb	99
75) Dibromochloromethane	8.187	129	326780	53.36	ppb	100
76) N-Butyl Acetate	8.236	43	458635	52.78	ppb	97
77) 1,2-Dibromoethane	8.285	107	268222	51.31	ppb	97
78) Chlorobenzene	8.767	112	1083579	50.98	ppb	98
79) 3-CBTF	8.785	180	509715	47.95	ppb	98
80) 4-CBTF	8.840	180	450462	47.63	ppb	99
81) 1,1,1,2-Tetrachloroethane	8.852	131	382277	52.06	ppb	98
82) Ethylbenzene	8.888	106	567264	49.75	ppb	96
83) (m+p)Xylene	8.998	106	1417401	102.45	ppb	100
84) o-Xylene	9.346	106	701822	50.78	ppb	99
85) Styrene	9.352	104	1214591	53.72	ppb	99
87) Bromoform	9.498	173	181670	55.77	ppb	100
88) 2-CBTF	9.577	180	493522	48.56	ppb	98
89) Isopropylbenzene	9.675	105	1615475	51.23	ppb	97
90) Cyclohexanone	9.718	55	317128	942.97	ppb	97
91) trans-1,4-Dichloro-2-B...	9.961	53	71027	54.00	ppb	97
92) 1,1,2,2-Tetrachloroethane	9.913	83	314281	50.92	ppb	95
93) Bromobenzene	9.913	156	445048	50.40	ppb	95
94) 1,2,3-Trichloropropane	9.943	110	91013	48.45	ppb	94
95) n-Propylbenzene	10.022	91	1871853	51.50	ppb	99
96) 2-Chlorotoluene	10.083	91	1175298	50.96	ppb	97

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2743.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:21:19 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

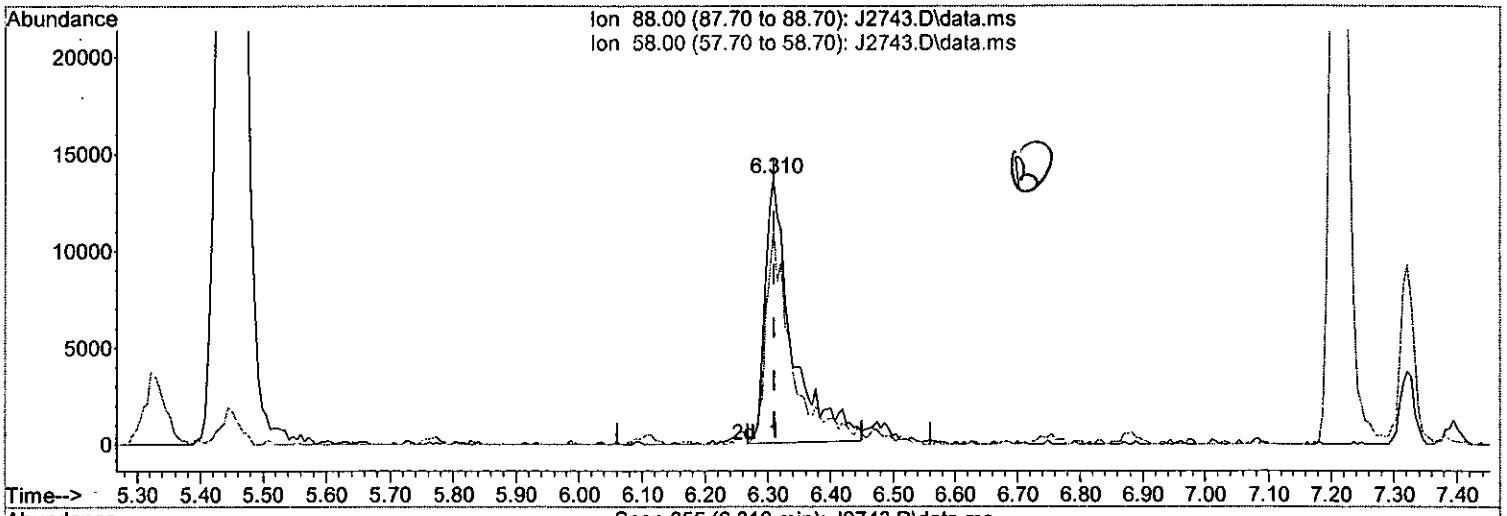
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1166947	49.60	ppb	99
98)	4-Chlorotoluene	10.175	91	1451687	51.65	ppb	99
99)	1,3,5-Trimethylbenzene	10.169	105	1396421	52.26	ppb	100
100)	tert-Butylbenzene	10.437	119	1097159	50.75	ppb	99
101)	1,2,4-Trimethylbenzene	10.480	105	1403966	52.13	ppb	98
102)	3,4-DCBTF	10.534	214	338165	48.51	ppb	99
103)	sec-Butylbenzene	10.620	105	1548028	51.16	ppb	99
104)	p-Isopropyltoluene	10.742	119	1365979	51.40	ppb	99
105)	1,3-Dclbenz	10.693	146	783116	50.53	ppb	97
106)	1,4-Dclbenz	10.766	146	800209	49.64	ppb	99
107)	2,4-DCBTF	10.821	214	303075	48.66	ppb	96
108)	2,5-DCBTF	10.864	214	343761	47.82	ppb	99
109)	n-Butylbenzene	11.065	91	1223696	52.56	ppb	99
110)	1,2-Dclbenz	11.065	146	748517	50.34	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	51927	50.01	ppb	93
112)	Trielution Dichlorotol...	11.729	125	1769751	149.04	ppb	96
113)	1,3,5 Trichlorobenzene	11.778	180	482617	47.45	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1250233	99.38	ppb	99
115)	1,2,4-Tcbenzene	12.156	180	431185	49.44	ppb	97
116)	Hexachlorobt	12.266	225	179582	48.21	ppb	98
117)	Naphthalen	12.302	128	805820	51.23	ppb	97
118)	1,2,3-Tclbenzene	12.437	180	348551	48.88	ppb	91
119)	2,4,5-Trichlorotolene	12.851	159	237462	47.73	ppb	95
120)	2,3,6-Trichlorotoluene	12.912	159	206947	46.43	ppb	99

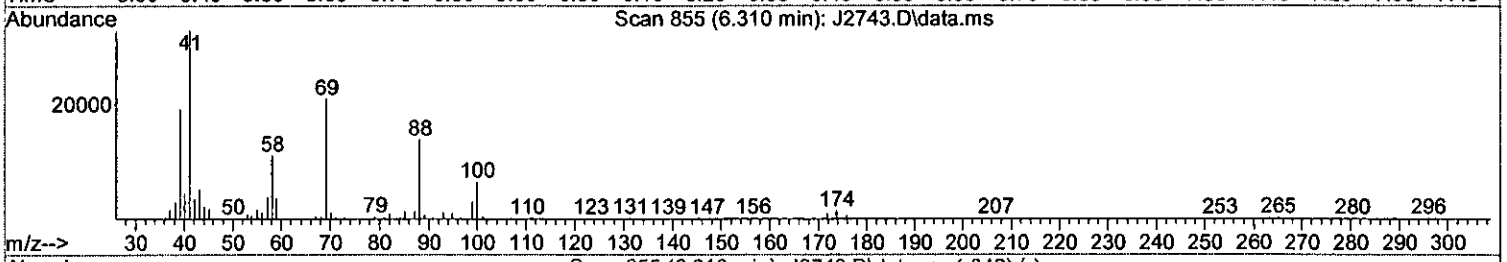
(#) = qualifier out of range (m) = manual integration (+) = signals summed

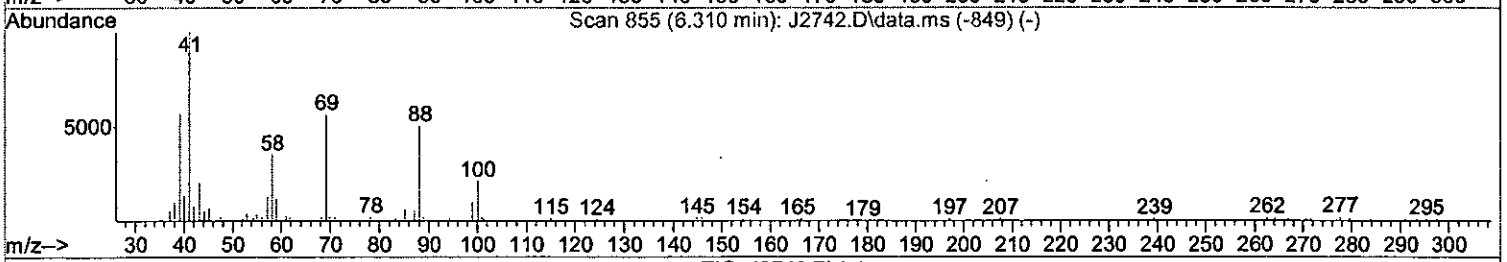
Quantitation Report (Qedit)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2743.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:35 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2743.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 863.94 ppb

response 41067

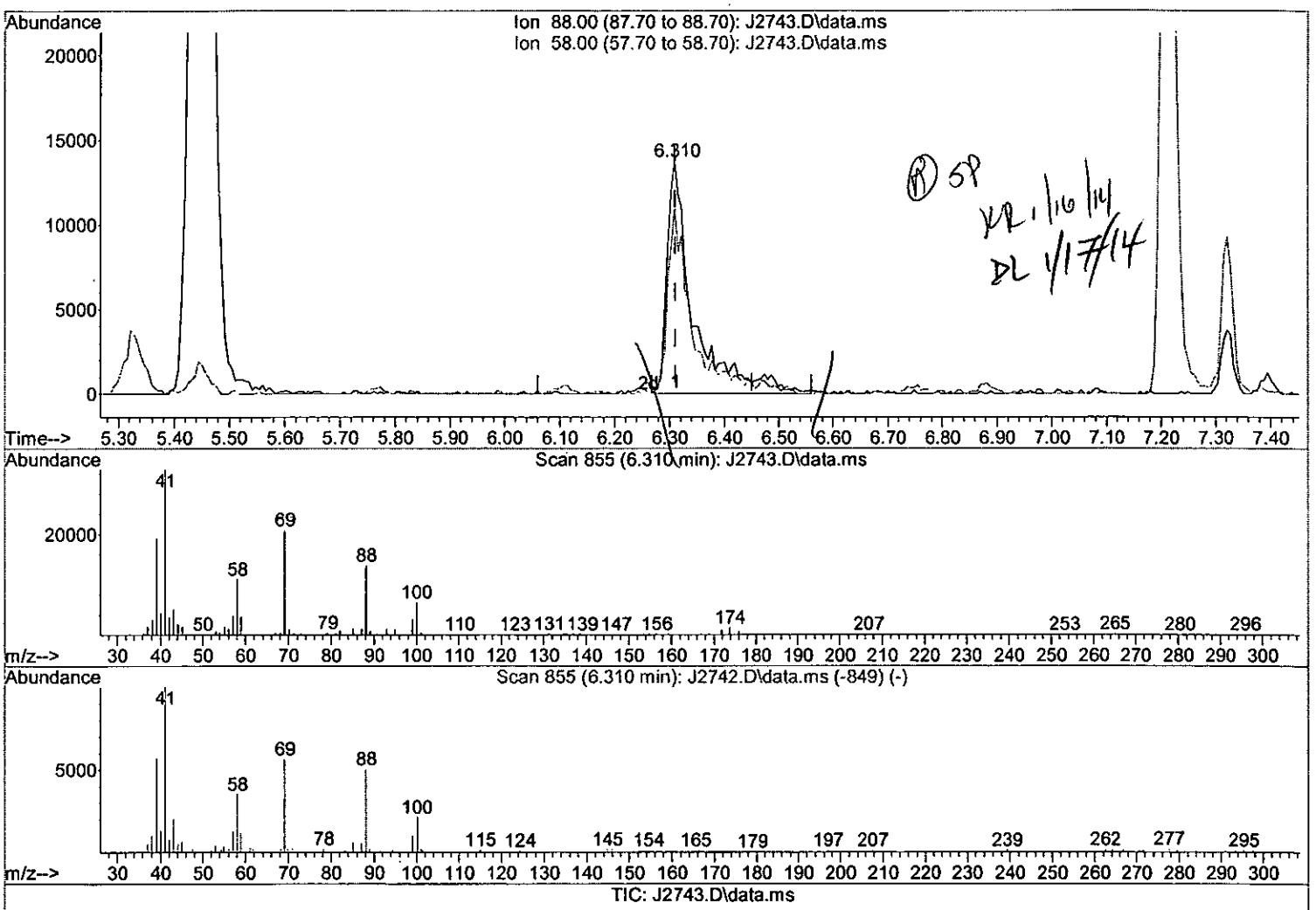
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	80.10
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 11:21:16 2014 Page: 1

Quantitation Report (Qedit)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2743.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:35 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2743.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 954.82 ppb m

response 45387

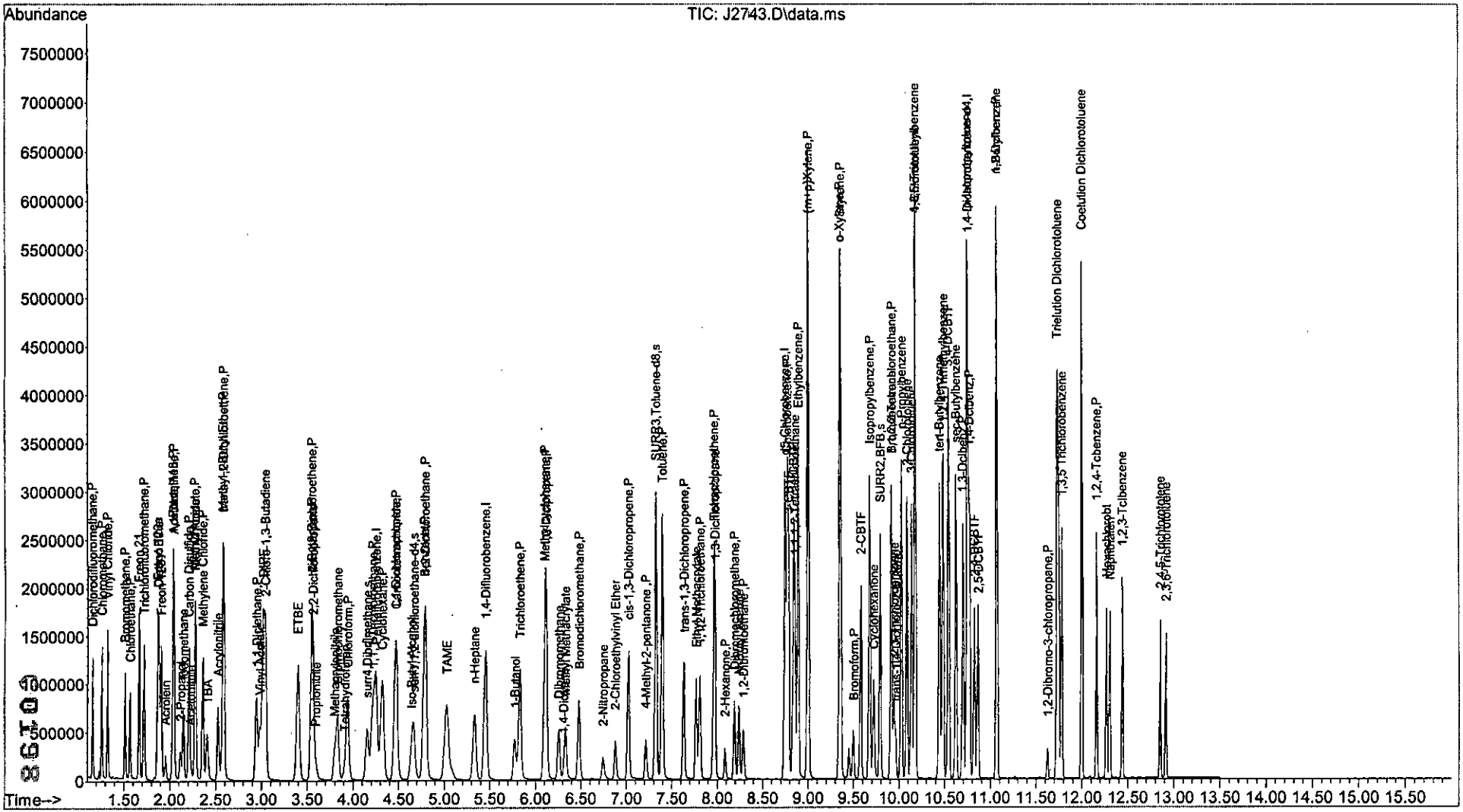
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	80.10
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 11:21:22 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2743.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 10:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:21:19 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 11:22:09 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2744.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:15 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:23:06 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	891961	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1308008	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1202776	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	656684	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	385397	50.44	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.88%				
48) surr1,1,2-dichloroetha...	4.664	65	458385	49.81	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.62%				
65) SURR3,Toluene-d8	7.322	98	1631663	50.22	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.44%				
70) SURR2,BFB	9.791	95	618683	51.22	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.44%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	983858	106.64	ppb		97
3) Chloromethane	1.262	50	1262799	100.43	ppb		99
4) Vinyl Chloride	1.323	62	1253291	102.58	ppb		98
5) Bromomethane	1.512	94	720180	87.49	ppb		97
6) Chloroethane	1.567	64	757427	102.86	ppb		98
7) Freon 21	1.664	67	1734044	97.12	ppb		98
8) Trichlorofluoromethane	1.719	101	1354728	99.06	ppb		98
9) Diethyl Ether	1.878	59	599718	100.27	ppb		97
10) Freon 123a	1.865	67	966729	96.30	ppb		98
11) Freon 123	1.902	83	1040109	97.10	ppb		98
12) Acrolein	1.951	56	324131	675.63	ppb		100
13) 1,1-Diclethene	2.036	96	646396	101.26	ppb		99
14) Freon 113	2.036	101	672165	99.58	ppb		98
15) Acetone	2.042	43	178866	97.16	ppb		98
16) 2-Propanol	2.109	45	578694	2084.40	ppb		99
17) Iodomethane	2.146	142	1075177	118.22	ppb		96
18) Carbon Disulfide	2.207	76	2367863	99.29	ppb		99
19) Acetonitrile	2.219	40	147688	503.70	ppb		91
20) Allyl Chloride	2.274	76	456427	101.33	ppb		99
21) Methyl Acetate	2.274	43	387403	97.79	ppb		97
22) Methylene Chloride	2.359	84	770241	99.73	ppb		96
23) TBA	2.408	59	939121	2022.90	ppb		100
24) Acrylonitrile	2.524	53	931027	501.58	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	2011164	100.66	ppb		100
26) trans-1,2-Dichloroethene	2.585	96	807833	103.56	ppb		98
28) 1,1-Diclethane	2.945	63	1499818	99.72	ppb		99
29) Vinyl Acetate	2.981	86	115681	101.53	ppb	#	91
30) DIPE	3.018	45	2923019	97.59	ppb		99
31) 2-Chloro-1,3-Butadiene	3.042	53	1632767	104.92	ppb		100
32) ETBE	3.396	59	2390219	97.37	ppb		99
33) 2,2-Dichloropropane	3.554	77	1225658	99.26	ppb		100
34) cis-1,2-Dichloroethene	3.548	96	896315	98.68	ppb		100
35) 2-Butanone	3.542	43	249412	103.38	ppb		98
36) Propionitrile	3.591	54	337553	508.23	ppb		96
37) Bromochloromethane	3.828	130	459233	95.89	ppb		98

KL 1/16/14

W011514.M Thu Jan 16 11:23:59 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2744.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:15 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:23:06 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	213640	100.07	ppb		94
39) Tetrahydrofuran	3.902	42	162162	93.53	ppb		97
40) Chloroform	3.938	83	1414719	100.14	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	1291199	99.75	ppb		89
42) TAME	5.023	73	1952922	96.60	ppb		100
44) Cyclohexane	4.316	41	826225	97.62	ppb		99
46) Carbontetrachloride	4.469	121	337581	103.92	ppb		94
47) 1,1-Dichloropropene	4.462	75	1038781	102.52	ppb		97
49) Benzene	4.786	78	3294817	101.23	ppb		100
50) 1,2-Dichloroethane	4.792	62	1089779	101.45	ppb		99
51) Iso-Butyl Alcohol	4.639	43	460100	2125.79	ppb		95
52) n-Heptane	5.328	43	848362	96.48	ppb		100
53) 1-Butanol	5.767	56	600309	5417.39	ppb		99
54) Trichloroethene	5.828	130	844913	101.38	ppb		98
55) Methylcyclohexane	6.109	55	906354	97.58	ppb		97
56) 1,2-Diclpropane	6.115	63	858819	103.23	ppb		98
57) Dibromomethane	6.255	93	391146	101.53	ppb		96
58) 1,4-Dioxane	6.310	88	91773m	1927.01	ppb		
59) Methyl Methacrylate	6.328	69	396601	104.75	ppb		100
60) Bromodichloromethane	6.480	83	1069470	105.85	ppb		99
61) 2-Nitropropane	6.749	41	287830	210.32	ppb		97
62) 2-Chloroethylvinyl Ether	6.877	63	315523	109.97	ppb		95
63) cis-1,3-Dichloropropene	7.023	75	1267827	105.36	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	545567	103.47	ppb		99
66) Toluene	7.395	91	3488657	102.36	ppb		99
67) trans-1,3-Dichloropropene	7.633	75	1070364	110.79	ppb		94
68) Ethyl Methacrylate	7.767	69	832250	107.52	ppb		99
69) 1,1,2-Trichloroethane	7.809	97	571530	100.85	ppb		100
72) Tetrachloroethene	7.962	164	657169	104.21	ppb		97
73) 2-Hexanone	8.084	43	381618	107.26	ppb		98
74) 1,3-Dichloropropane	7.974	76	1063490	101.24	ppb		98
75) Dibromochloromethane	8.187	129	695863	111.12	ppb		98
76) N-Butyl Acetate	8.236	43	930112	104.67	ppb		99
77) 1,2-Dibromoethane	8.285	107	556213	104.04	ppb		97
78) Chlorobenzene	8.773	112	2273642	104.61	ppb		98
79) 3-CBTF	8.785	180	1069870	98.42	ppb		97
80) 4-CBTF	8.840	180	950803	98.31	ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	830598	110.62	ppb		98
82) Ethylbenzene	8.888	106	1208480	103.64	ppb		95
83) (m+p)Xylene	8.998	106	3065743	216.70	ppb	#	88
84) o-Xylene	9.346	106	1533478	108.51	ppb		95
85) Styrene	9.358	104	2643721	114.35	ppb		97
87) Bromoform	9.498	173	395405	111.33	ppb		98
88) 2-CBTF	9.577	180	1025493	92.55	ppb		99
89) Isopropylbenzene	9.675	105	3395375	98.76	ppb		96
90) Cyclohexanone	9.718	55	653774	1783.00	ppb		100
91) trans-1,4-Dichloro-2-B...	9.961	53	152553	106.37	ppb		98
92) 1,1,2,2-Tetrachloroethane	9.913	83	670601	99.66	ppb		95
93) Bromobenzene	9.913	156	948968	98.56	ppb		97
94) 1,2,3-Trichloropropane	9.943	110	189838	92.69	ppb		96
95) n-Propylbenzene	10.022	91	3912524	98.74	ppb		99
96) 2-Chlorotoluene	10.083	91	2474985	98.42	ppb		94

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2744.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:15 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:23:06 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

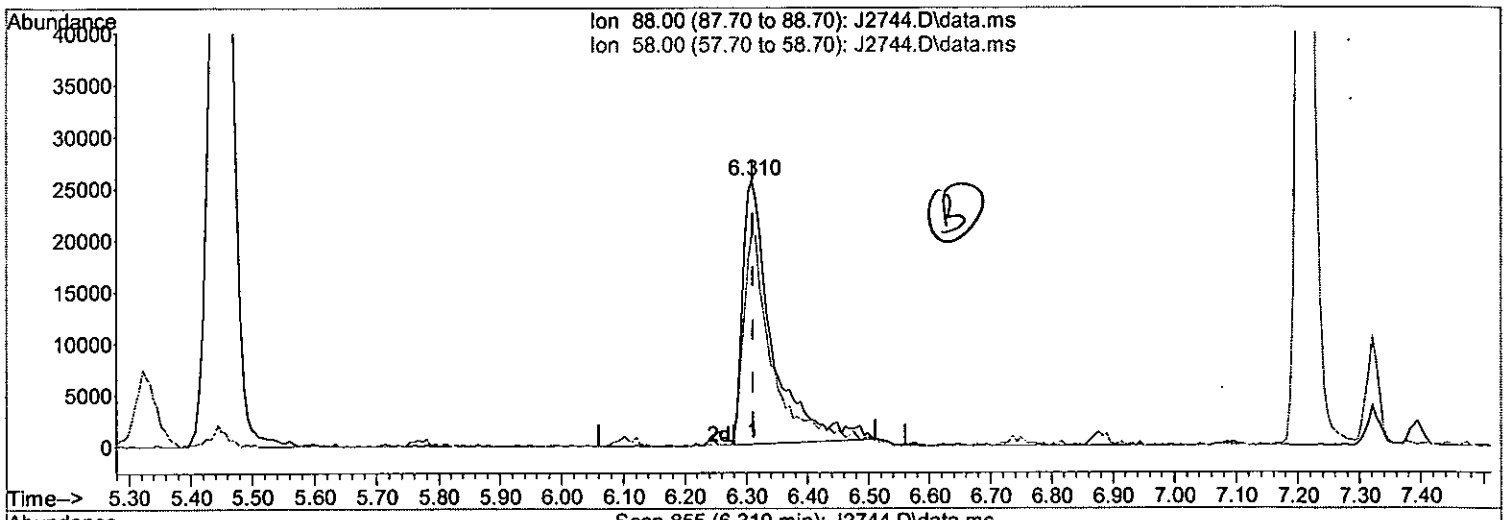
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	2423221	94.48	ppb	99
98)	4-Chlorotoluene	10.175	91	3162508	103.19	ppb	98
99)	1,3,5-Trimethylbenzene	10.175	105	3048026	104.61	ppb	96
100)	tert-Butylbenzene	10.443	119	2326729	98.71	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	2981848	101.56	ppb	99
102)	3,4-DCBTF	10.534	214	733881	96.57	ppb	98
103)	sec-Butylbenzene	10.620	105	3285697	99.61	ppb	99
104)	p-Isopropyltoluene	10.742	119	2923388	100.90	ppb	98
105)	1,3-Dclbenz	10.699	146	1690970	100.08	ppb	100
106)	1,4-Dclbenz	10.766	146	1735005	98.72	ppb	99
107)	2,4-DCBTF	10.821	214	631062	92.94	ppb	96
108)	2,5-DCBTF	10.864	214	723407	92.30	ppb	99
109)	n-Butylbenzene	11.065	91	2665695	105.01	ppb	98
110)	1,2-Dclbenz	11.065	146	1642073	101.28	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	114663	101.28	ppb	93
112)	Trielution Dichlorotol...	11.729	125	3724038	287.66	ppb	95
113)	1,3,5 Trichlorobenzene	11.778	180	1009682	91.05	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	2633346	192.00	ppb	97
115)	1,2,4-Tcbenzene	12.162	180	893706	93.98	ppb	94
116)	Hexachlorobt	12.266	225	370544	91.25	ppb	98
117)	Naphthalen	12.302	128	1688893	98.48	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	720461	92.66	ppb	96
119)	2,4,5-Trichlorotolene	12.851	159	485671	89.54	ppb	97
120)	2,3,6-Trichlorotoluene	12.912	159	428086	88.08	ppb	98

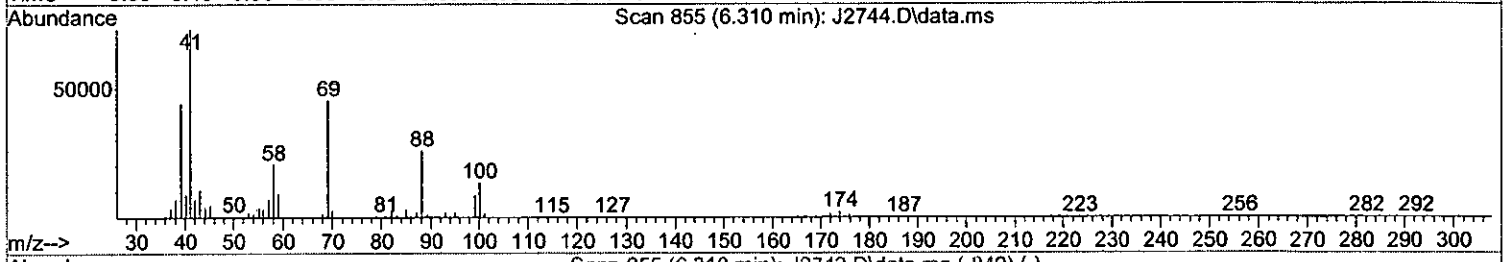
(#) = qualifier out of range (m) = manual integration (+) = signals summed

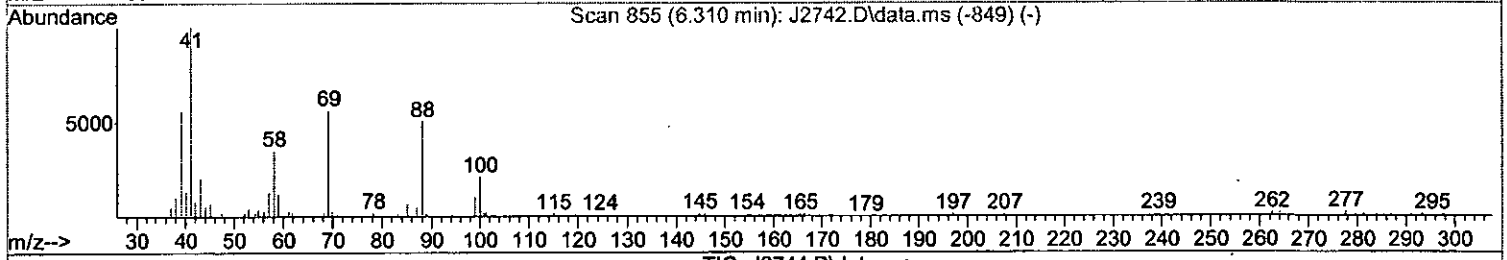
Quantitation Report (Qedit)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2744.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:15 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:40 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2744.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 1794.24 ppb

response 85450

Ion	Exp%	Act%
88.00	100	100
58.00	68.00	79.62
0.00	0.00	0.00
0.00	0.00	0.00

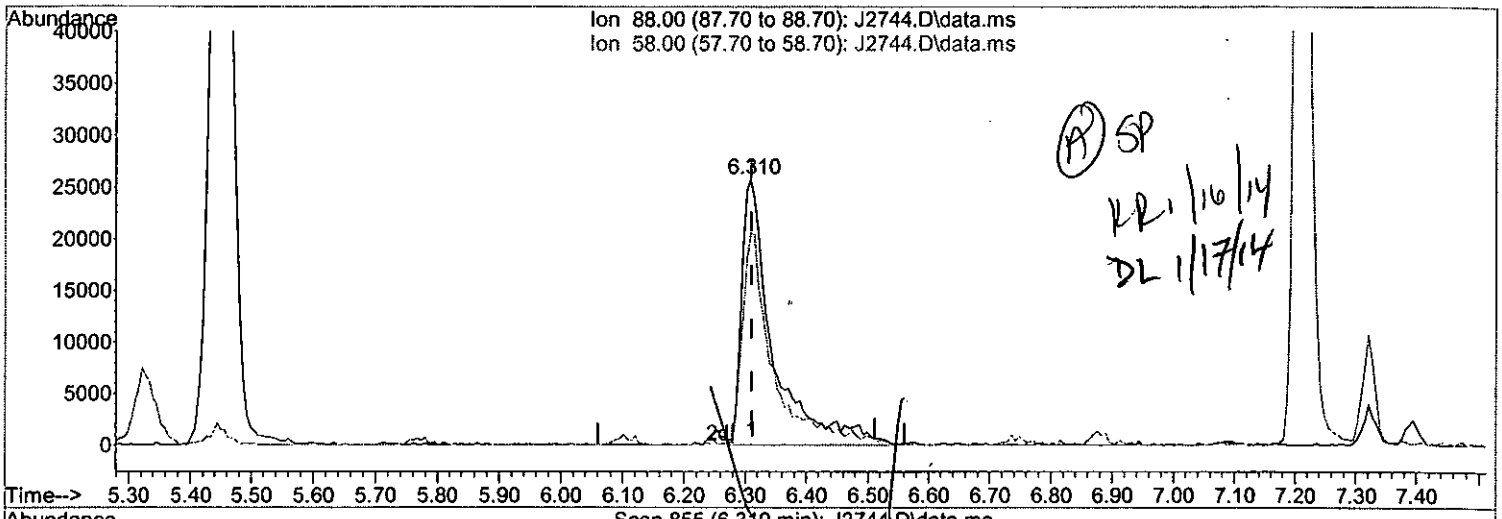
W011514.M Thu Jan 16 11:23:04 2014 Page: 1

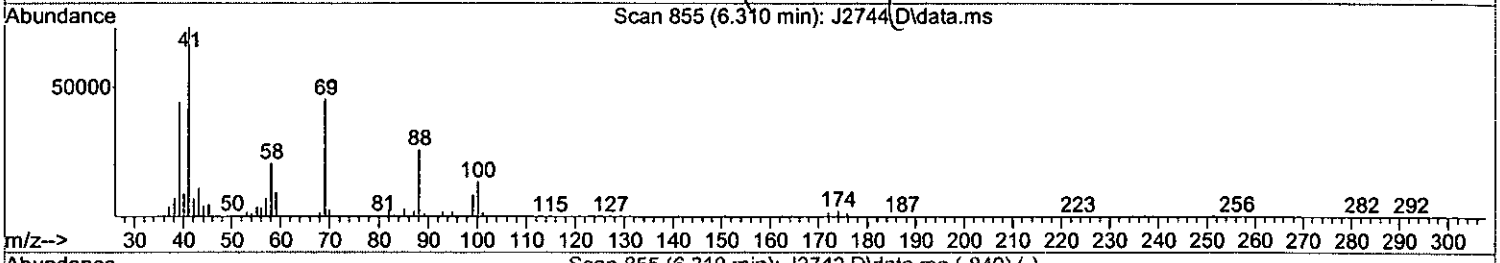
00202

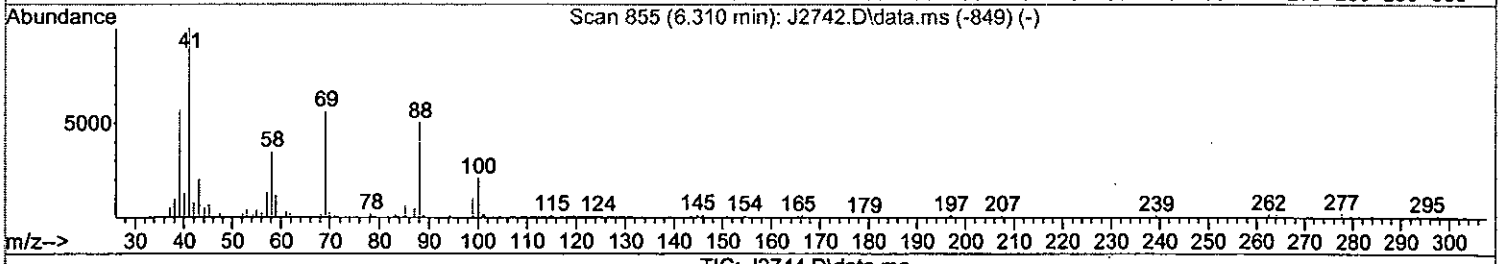
Quantitation Report (Qedit)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2744.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:15 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:40 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2744.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 1927.01 ppb m

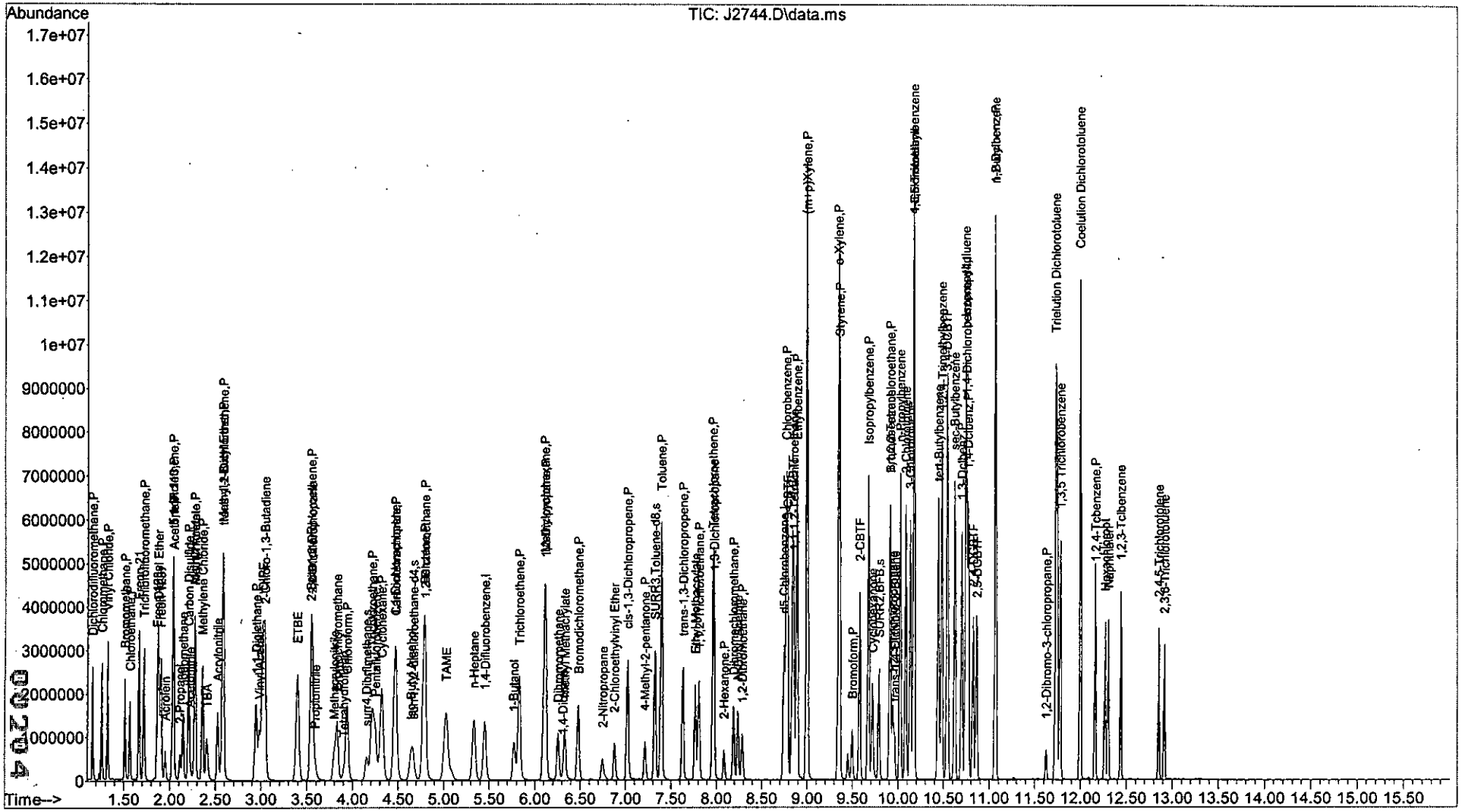
response 91773

Ion	Exp%	Act%
88.00	100	100
58.00	68.00	79.62
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 11:23:11 2014 00223 Page: 1

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2744.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:15 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:23:06 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 11:24:01 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2745.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:47 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:24:49 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	904629	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1342745	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1236936	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	720808	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	397363	50.66	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.32%				
48) surr1,1,2-dichloroetha...	4.658	65	470275	49.78	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.56%				
65) SURR3,Toluene-d8	7.322	98	1661812	49.83	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.66%				
70) SURR2,BFB	9.791	95	638815	51.52	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.04%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	1951597	208.57	ppb		94
3) Chloromethane	1.256	50	2472272	193.87	ppb		97
4) Vinyl Chloride	1.323	62	2403066	193.93	ppb		94
5) Bromomethane	1.512	94	1515816	181.56	ppb		96
6) Chloroethane	1.567	64	1523090	203.94	ppb		99
7) Freon 21	1.664	67	3480148	192.19	ppb		94
8) Trichlorofluoromethane	1.719	101	2733052	197.04	ppb		97
9) Diethyl Ether	1.878	59	1247242	205.60	ppb		97
10) Freon 123a	1.866	67	2087906	205.08	ppb		95
11) Freon 123	1.902	83	2216635	204.05	ppb		99
12) Acrolein	1.951	56	761929	1565.94	ppb		100
13) 1,1-Diclethene	2.036	96	1358139	209.78	ppb		95
14) Freon 113	2.036	101	1398759	204.32	ppb		93
15) Acetone	2.042	43	366082	196.07	ppb		98
16) 2-Propanol	2.116	45	1236728	4392.20	ppb		99
17) Iodomethane	2.146	142	2092300	226.83	ppb		96
18) Carbon Disulfide	2.207	76	4608136	190.53	ppb		97
19) Acetonitrile	2.219	40	309205	1039.79	ppb		92
20) Allyl Chloride	2.274	76	867199	189.83	ppb		93
21) Methyl Acetate	2.274	43	840738	209.25	ppb		98
22) Methylene Chloride	2.353	84	1562025	199.42	ppb		99
23) TBA	2.408	59	1914663	4066.49	ppb		98
24) Acrylonitrile	2.524	53	1901612	1010.12	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	4107311	202.69	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	1673271	211.50	ppb		95
28) 1,1-Diclethane	2.939	63	3040771	199.34	ppb		98
29) Vinyl Acetate	2.975	86	253676	219.53	ppb	#	87
30) DIPE	3.018	45	6198123	204.03	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	3345886	211.99	ppb		98
32) ETBE	3.396	59	5085517	204.26	ppb		98
33) 2,2-Dichloropropane	3.554	77	2517284	201.01	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	1824677	198.08	ppb		98
35) 2-Butanone	3.542	43	506181	206.86	ppb		97
36) Propionitrile	3.591	54	679952	1009.42	ppb		99
37) Bromochloromethane	3.829	130	910235	187.39	ppb		98

1/16/14

W011514.M Thu Jan 16 11:25:44 2014 Page 1

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2745.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:47 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:24:49 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	435662	201.21	ppb		98
39) Tetrahydrofuran	3.902	42	318734	181.26	ppb		99
40) Chloroform	3.938	83	2879063	200.93	ppb		97
41) 1,1,1-Trichloroethane	4.213	97	2632013	200.48	ppb		88
42) TAME	5.024	73	4138888	201.86	ppb		98
44) Cyclohexane	4.316	41	1773911	204.17	ppb		98
46) Carbontetrachloride	4.469	121	710837	213.17	ppb		93
47) 1,1-Dichloropropene	4.463	75	2135194	205.28	ppb		97
49) Benzene	4.786	78	6639098	198.70	ppb		98
50) 1,2-Dichloroethane	4.792	62	2243522	203.44	ppb		99
51) Iso-Butyl Alcohol	4.639	43	942012	4239.75	ppb		98
52) n-Heptane	5.328	43	1724112	191.00	ppb		99
53) 1-Butanol	5.773	56	1305511	11476.58	ppb		100
54) Trichloroethene	5.828	130	1743586	203.79	ppb		98
55) Methylcyclohexane	6.109	55	1972378	206.85	ppb		99
56) 1,2-Diclpropane	6.115	63	1769976	207.24	ppb		98
57) Dibromomethane	6.255	93	797931	201.77	ppb		97
58) 1,4-Dioxane	6.310	88	190108m	3888.53	ppb		
59) Methyl Methacrylate	6.328	69	796576	204.94	ppb		100
60) Bromodichloromethane	6.481	83	2177814	209.98	ppb		99
61) 2-Nitropropane	6.743	41	615248	437.93	ppb		94
62) 2-Chloroethylvinyl Ether	6.877	63	630085	213.92	ppb		97
63) cis-1,3-Dichloropropene	7.023	75	2592521	209.87	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	1098306	202.91	ppb		99
66) Toluene	7.395	91	6862049	196.13	ppb		92
67) trans-1,3-Dichloropropene	7.633	75	2197304	221.56	ppb		94
68) Ethyl Methacrylate	7.767	69	1708314	215.00	ppb		97
69) 1,1,2-Trichloroethane	7.810	97	1171559	201.39	ppb		99
72) Tetrachloroethene	7.962	164	1403016	216.33	ppb		98
73) 2-Hexanone	8.084	43	775533	211.95	ppb		99
74) 1,3-Dichloropropane	7.974	76	2193250	203.02	ppb		97
75) Dibromochloromethane	8.188	129	1466717	227.75	ppb		96
76) N-Butyl Acetate	8.236	43	1974939	216.11	ppb		99
77) 1,2-Dibromoethane	8.285	107	1134889	206.43	ppb		95
78) Chlorobenzene	8.773	112	4652982	208.16	ppb		96
79) 3-CBTF	8.785	180	2365027	211.57	ppb		100
80) 4-CBTF	8.840	180	2123270	213.48	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.852	131	1779299	230.42	ppb		96
82) Ethylbenzene	8.889	106	2559574	213.46	ppb	#	72
83) (m+p)Xylene	8.998	106	6302621	433.19	ppb	#	66
84) o-Xylene	9.346	106	3370321	231.90	ppb	#	81
85) Styrene	9.358	104	5545670	233.25	ppb		96
87) Bromoform	9.498	173	854967	219.32	ppb		99
88) 2-CBTF	9.578	180	2259818	185.80	ppb		96
89) Isopropylbenzene	9.675	105	6575872	174.25	ppb		87
90) Cyclohexanone	9.718	55	1329852	3304.19	ppb		99
91) trans-1,4-Dichloro-2-B...	9.962	53	316896	201.31	ppb		98
92) 1,1,2,2-Tetrachloroethane	9.913	83	1432289	193.91	ppb		95
93) Bromobenzene	9.913	156	2052350	194.20	ppb		99
94) 1,2,3-Trichloropropane	9.943	110	394116	175.31	ppb		98
95) n-Propylbenzene	10.023	91	7244012	166.55	ppb		88
96) 2-Chlorotoluene	10.084	91	4987936	180.70	ppb		90

W011514.M Thu Jan 16 11:25:44 2014 Page: 2

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2745.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:47 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:24:49 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration

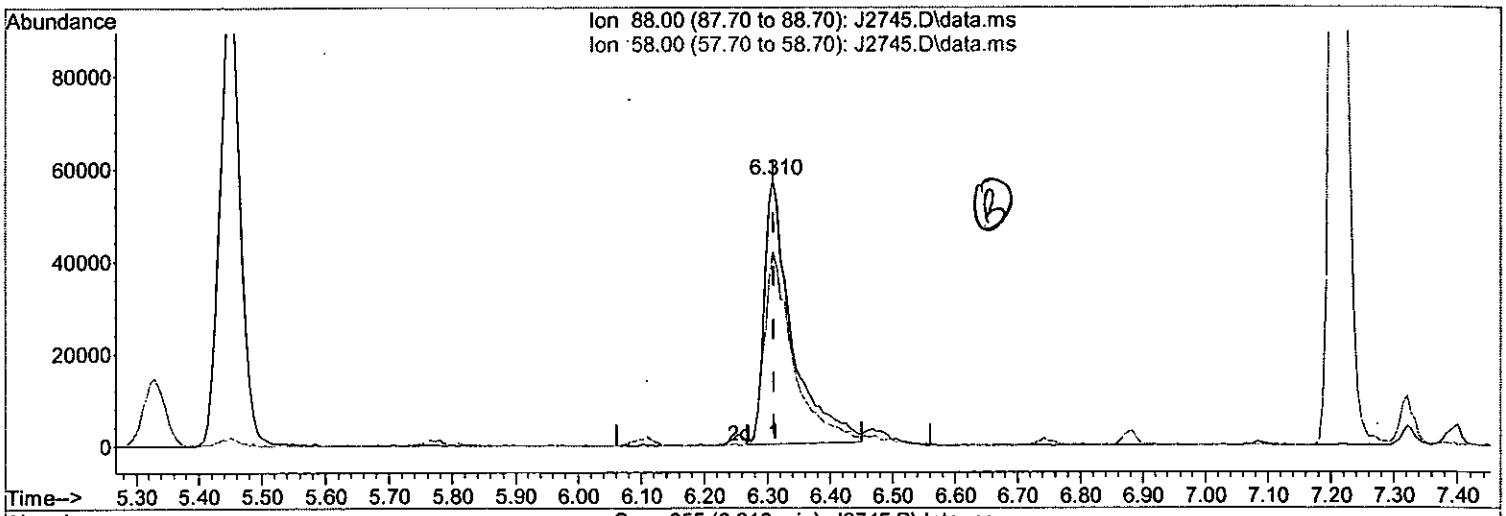
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	5178217	183.93	ppb		95
98)	4-Chlorotoluene	10.175	91	6214513	184.74	ppb		89
99)	1,3,5-Trimethylbenzene	10.175	105	6154851	192.45	ppb		85
100)	tert-Butylbenzene	10.443	119	4813623	186.04	ppb		95
101)	1,2,4-Trimethylbenzene	10.480	105	5901348	183.11	ppb		90
102)	3,4-DCBTF	10.541	214	1724654	206.75	ppb		99
103)	sec-Butylbenzene	10.620	105	6386495	176.38	ppb		93
104)	p-Isopropyltoluene	10.742	119	5734224	180.30	ppb		91
105)	1,3-Dclbenz	10.699	146	3534806	190.60	ppb		97
106)	1,4-Dclbenz	10.772	146	3643703	188.87	ppb		97
107)	2,4-DCBTF	10.821	214	1410228	189.21	ppb		98
108)	2,5-DCBTF	10.864	214	1593991	185.28	ppb		98
109)	n-Butylbenzene	11.071	91	5315859	190.78	ppb		88
110)	1,2-Dclbenz	11.065	146	3549886	199.47	ppb		96
111)	1,2-Dibromo-3-chloropr...	11.626	157	238317	191.78	ppb		92
112)	Trielution Dichlorotol...	11.730	125	7786926	547.98	ppb		92
113)	1,3,5 Trichlorobenzene	11.778	180	2151969	176.79	ppb		99
114)	Coelution Dichlorotoluene	11.998	125	5295148	351.72	ppb	#	85
115)	1,2,4-Tcbenzene	12.162	180	1870017	179.16	ppb		95
116)	Hexachlorobt	12.266	225	765748	171.79	ppb		98
117)	Naphthalen	12.303	128	3324529	176.62	ppb		97
118)	1,2,3-Tclbenzene	12.437	180	1452826	170.23	ppb		94
119)	2,4,5-Trichlorotolene	12.851	159	1013378	170.20	ppb		94
120)	2,3,6-Trichlorotoluene	12.912	159	903109	169.29	ppb		98

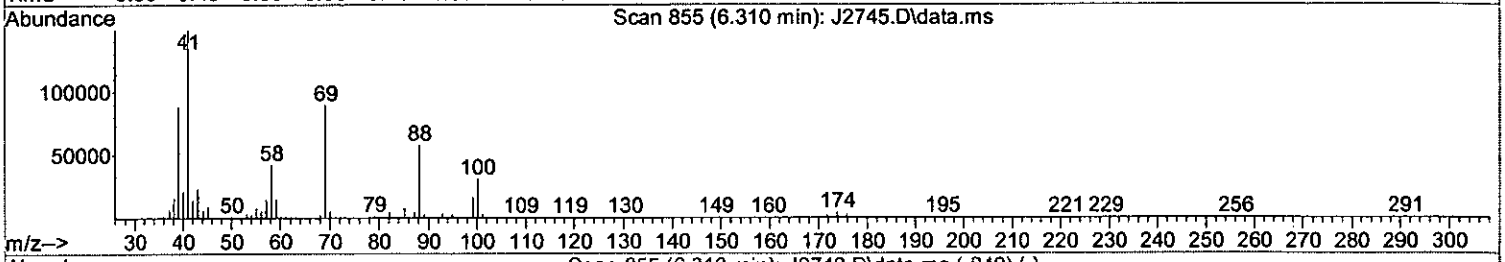
(#) = qualifier out of range (m) = manual integration (+) = signals summed

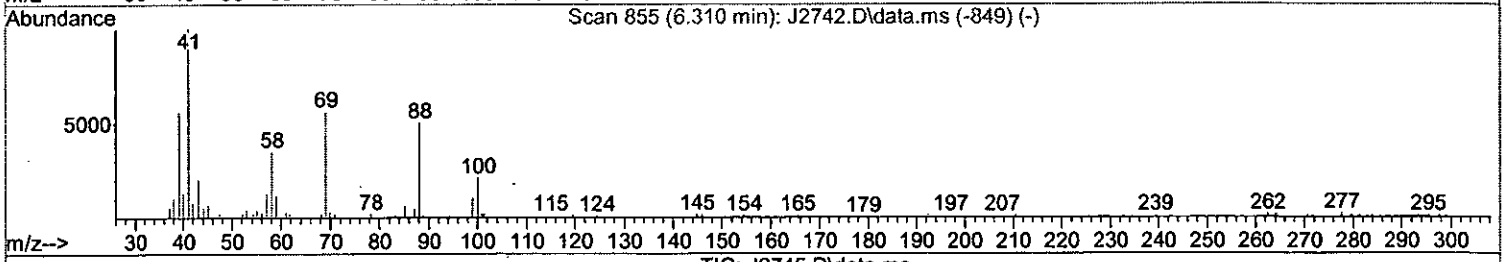
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2745.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:47 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:45 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration







TIC: J2745.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 3570.96 ppb

response 174582

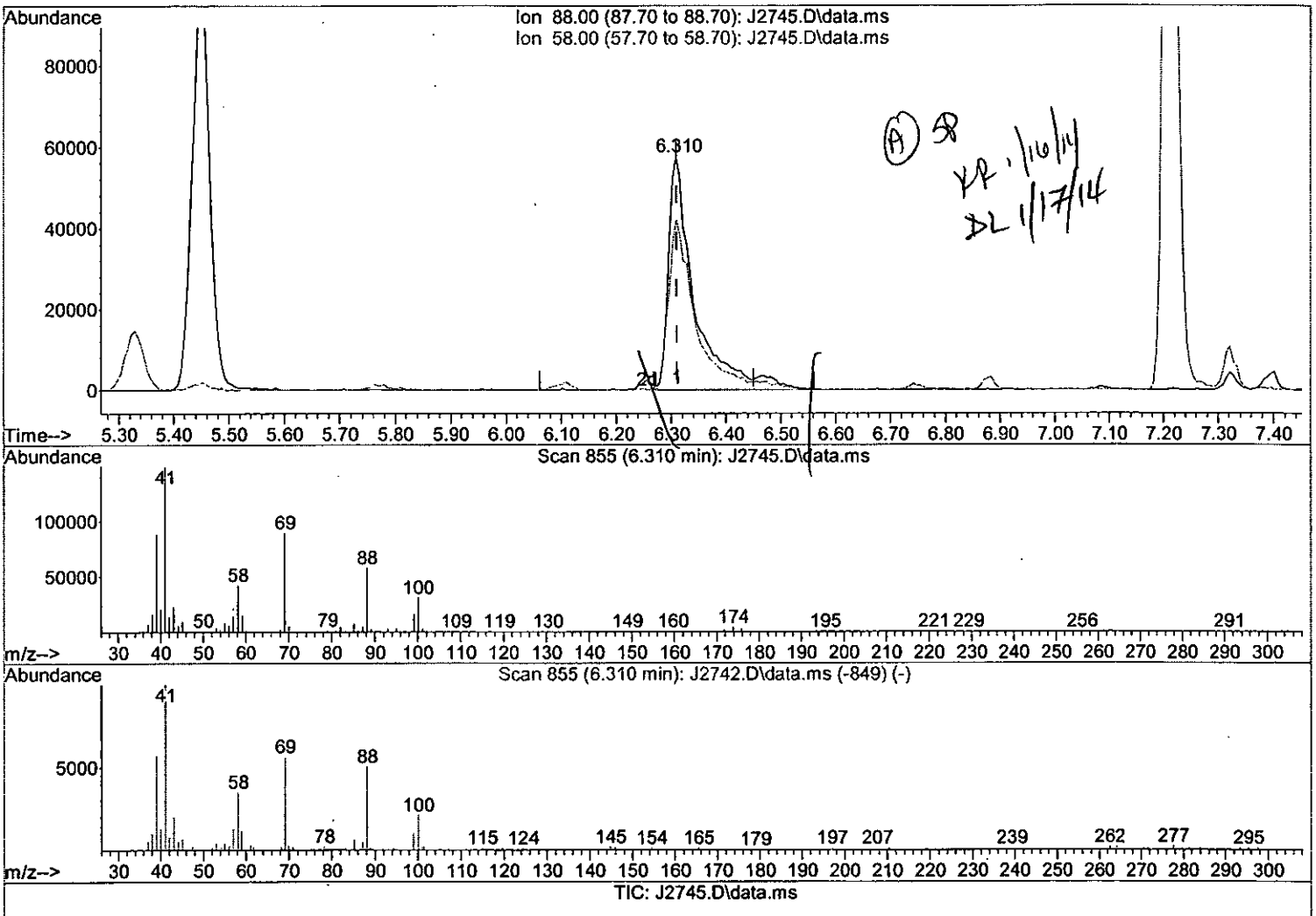
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	72.83
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 11:24:46 2014 Page: 1

Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2745.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:47 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 10:32:45 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



TIC: J2745.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 3888.53 ppb m

response 190108

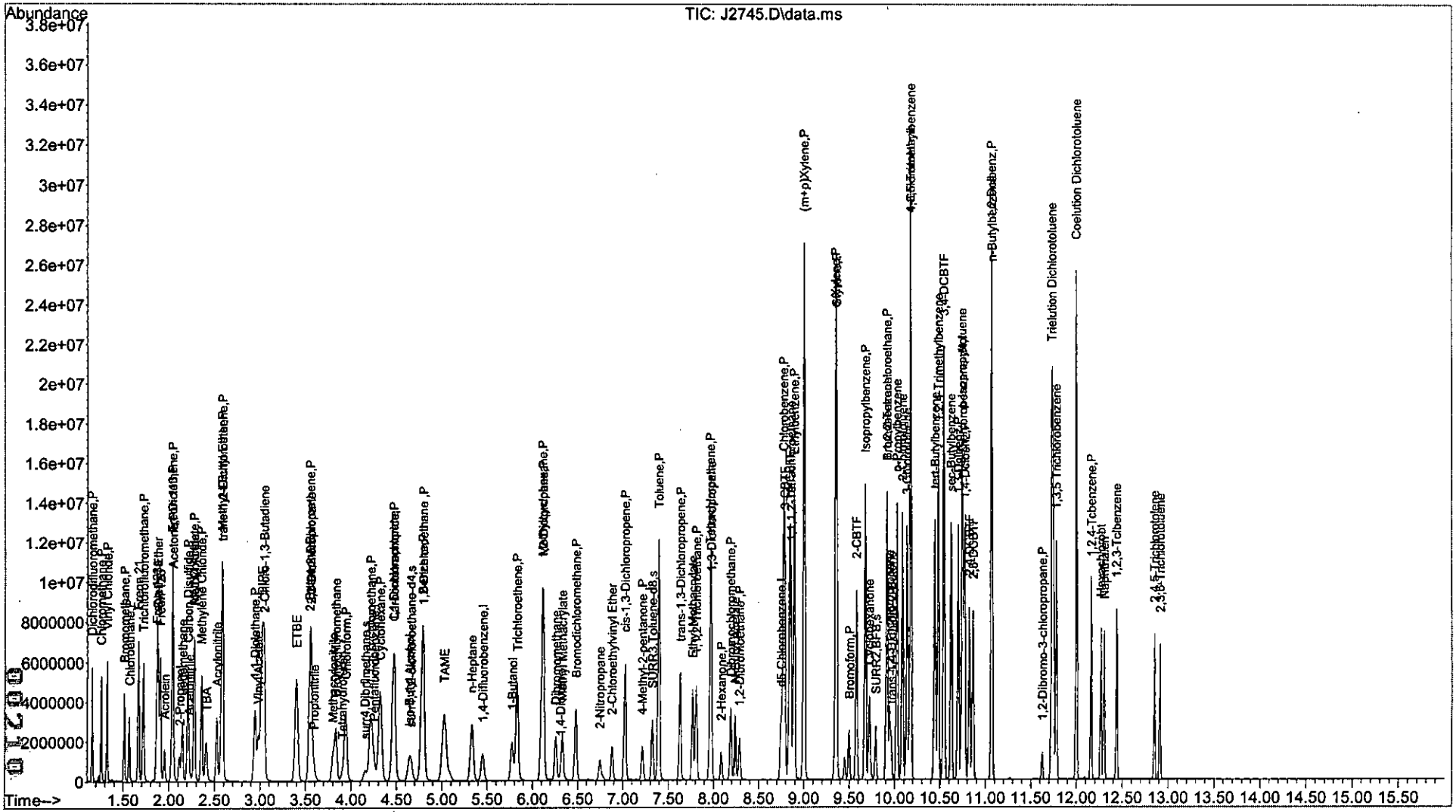
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	72.83
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Jan 16 11:24:53 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\011514\J2745.D
Misc : 8260 WATER ICAL
Acq On : 15 Jan 2014 11:47 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 11:24:49 2014
QLast Update : Thu Jan 16 10:29:54 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 11:25:46 2014 Page: 4

Initial Calibration Verification Summary Report

KLR 1/16/14

Calibration ID: RC1400002
W011514 8260 Waters
Instrument ID: R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400002-09	T	Average RF	50	51.80	ppm	3.6	<=30
1,1,1-Trichloroethane (TCA)	RC1400002-09	T	Average RF	50	49.02	ppm	-2.0	<=30
1,1,2,2-Tetrachloroethane	RC1400002-09	T	Average RF	50	53.00	ppm	6.0	<=30
1,1,2-Trichloroethane	RC1400002-09	T	Average RF	50	49.43	ppm	-1.1	<=30
1,1,2-Trichlorotrifluoroethane	RC1400002-09	T	Average RF	50	49.50	ppm	-1.0	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400002-09	T	Average RF	50	49.93	ppm	-0.1	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400002-09	T	Average RF	50	56.51	ppm	13.0	<=30
1,1-Dichloropropene	RC1400002-09	T	Average RF	50	55.98	ppm	12.0	<=30
1,2,3-Trichlorobenzene	RC1400002-09	T	Average RF	50	51.01	ppm	2.0	<=30
1,2,3-Trichloropropane	RC1400002-09	T	Average RF	50	51.06	ppm	2.1	<=30
1,2,4-Trichlorobenzene	RC1400002-09	T	Average RF	50	50.98	ppm	2.0	<=30
1,2,4-Trimethylbenzene	RC1400002-09	T	Average RF	50	50.97	ppm	1.9	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400002-09	T	Average RF	50	52.49	ppm	5.0	<=30
1,2-Dibromoethane	RC1400002-09	T	Average RF	50	52.07	ppm	4.1	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400002-09	T	Average RF	50	55.28	ppm	10.6	<=30
1,2-Dichlorobenzene	RC1400002-09	T	Average RF	50	50.14	ppm	0.3	<=30
1,2-Dichloroethane	RC1400002-09	T	Average RF	50	50.04	ppm	0.1	<=30
1,2-Dichloropropane	RC1400002-09	T	Average RF	50	50.33	ppm	0.7	<=30
1,3,5-Trichlorobenzene	RC1400002-09	T	Average RF	50	49.80	ppm	-0.4	<=30
1,3,5-Trimethylbenzene	RC1400002-09	T	Average RF	50	51.69	ppm	3.4	<=30
1,3-Dichlorobenzene	RC1400002-09	T	Average RF	50	50.05	ppm	0.1	<=30
1,3-Dichloropropane	RC1400002-09	T	Average RF	50	49.97	ppm	-0.1	<=30
1,4-Dichlorobenzene	RC1400002-09	T	Average RF	50	49.90	ppm	-0.2	<=30
1,4-Dioxane	RC1400002-09	T	Average RF	1000	1018	ppm	1.8	<=30
1-Butanol	RC1400002-09	T	Average RF	2500	2848	ppm	13.9	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400002-09	T	Average RF	50	51.25	ppm	2.5	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400002-09	T	Average RF	50	56.59	ppm	13.2	<=30
2,2-Dichloropropane	RC1400002-09	T	Average RF	50	54.85	ppm	9.7	<=30
2,3,6-Trichlorotoluene	RC1400002-09	T	Average RF	50	52.65	ppm	5.3	<=30
2,4,5-Trichlorotoluene	RC1400002-09	T	Average RF	50	53.61	ppm	7.2	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400002-09	T	Average RF	150	156.8	ppm	4.5	<=30
2,4-Dichlorobenzotrifluoride	RC1400002-09	T	Average RF	50	51.27	ppm	2.5	<=30
2,5-Dichlorobenzotrifluoride	RC1400002-09	T	Average RF	50	50.46	ppm	0.9	<=30
2-Butanone (MEK)	RC1400002-09	T	Average RF	50	51.42	ppm	2.8	<=30
2-Chloro-1,3-butadiene	RC1400002-09	T	Average RF	50	46.21	ppm	-7.6	<=30
2-Chlorobenzotrifluoride	RC1400002-09	T	Average RF	50	49.99	ppm	0.0	<=30
2-Chloroethyl Vinyl Ether	RC1400002-09	T	Average RF	50	65.62	ppm	31.2	<=30
2-Chlorotoluene	RC1400002-09	T	Average RF	50	49.76	ppm	-0.5	<=30
2-Hexanone	RC1400002-09	T	Average RF	50	53.98	ppm	8.0	<=30
2-Methyl-1-propanol	RC1400002-09	T	Average RF	1000	1104	ppm	10.4	<=30
2-Methyl-2-propanol	RC1400002-09	T	Average RF	1000	1085	ppm	8.5	<=30
2-Nitropropane	RC1400002-09	T	Average RF	100	105.6	ppm	5.6	<=30
2-Propanol	RC1400002-09	T	Average RF	1000	1139	ppm	13.9	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400002-09	T	Average RF	100	105.0	ppm	5.0	<=30
3,4-Dichlorobenzotrifluoride	RC1400002-09	T	Average RF	50	51.74	ppm	3.5	<=30
3-Chloro-1-propene	RC1400002-09	T	Average RF	50	51.27	ppm	2.5	<=30
3-Chlorobenzotrifluoride	RC1400002-09	T	Average RF	50	50.21	ppm	0.4	<=30
3-Chlorotoluene	RC1400002-09	T	Average RF	50	51.02	ppm	2.0	<=30
4-Chlorotoluene	RC1400002-09	T	Average RF	50	51.66	ppm	3.3	<=30
4-Isopropyltoluene	RC1400002-09	T	Average RF	50	52.51	ppm	5.0	<=30
4-Methyl-2-pentanone	RC1400002-09	T	Average RF	50	53.46	ppm	6.9	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400002 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400002-09	T	Average RF	50	46.95	ppm	-6.1	<=30
Acetonitrile	RC1400002-09	T	Average RF	250	266.0	ppm	6.4	<=30
Acrolein	RC1400002-09	T	Quadratic	100	87.25	ppm	-12.8	<=30
Acrylonitrile	RC1400002-09	T	Average RF	250	253.4	ppm	1.4	<=30
Benzene	RC1400002-09	T	Average RF	50	49.12	ppm	-1.8	<=30
Bromobenzene	RC1400002-09	T	Average RF	50	50.11	ppm	0.2	<=30
Bromochloromethane	RC1400002-09	T	Average RF	50	49.33	ppm	-1.3	<=30
Bromodichloromethane	RC1400002-09	T	Average RF	50	51.54	ppm	3.1	<=30
Bromoform	RC1400002-09	T	Average RF	50	54.55	ppm	9.1	<=30
Bromomethane	RC1400002-09	T	Average RF	50	46.65	ppm	-6.7	<=30
Carbon Disulfide	RC1400002-09	T	Average RF	50	50.82	ppm	1.6	<=30
Carbon Tetrachloride	RC1400002-09	T	Average RF	50	50.30	ppm	0.6	<=30
Chlorobenzene	RC1400002-09	T	Average RF	50	50.83	ppm	1.7	<=30
Chloroethane	RC1400002-09	T	Average RF	50	50.46	ppm	0.9	<=30
Chloroform	RC1400002-09	T	Average RF	50	50.41	ppm	0.8	<=30
Chloromethane	RC1400002-09	T	Average RF	50	50.63	ppm	1.3	<=30
Cyclohexane	RC1400002-09	T	Average RF	50	48.97	ppm	-2.1	<=30
Cyclohexanone	RC1400002-09	T	Average RF	1000	909.5	ppm	-9.1	<=30
Dibromochloromethane	RC1400002-09	T	Average RF	50	54.05	ppm	8.1	<=30
Dibromomethane	RC1400002-09	T	Average RF	50	50.94	ppm	1.9	<=30
Dichlorodifluoromethane (CFC 12)	RC1400002-09	T	Average RF	50	54.64	ppm	9.3	<=30
Dichlorofluoromethane (CFC 21)	RC1400002-09	T	Average RF	50	55.84	ppm	11.7	<=30
Dichloromethane	RC1400002-09	T	Average RF	50	51.02	ppm	2.0	<=30
Diethyl Ether	RC1400002-09	T	Average RF	50	51.69	ppm	3.4	<=30
Diisopropyl Ether	RC1400002-09	T	Average RF	50	51.30	ppm	2.6	<=30
Ethyl Methacrylate	RC1400002-09	T	Average RF	50	54.14	ppm	8.3	<=30
Ethyl tert-Butyl Ether	RC1400002-09	T	Average RF	50	52.60	ppm	5.2	<=30
Ethylbenzene	RC1400002-09	T	Average RF	50	49.94	ppm	-0.1	<=30
Hexachlorobutadiene	RC1400002-09	T	Average RF	50	52.92	ppm	5.8	<=30
Iodomethane	RC1400002-09	T	Average RF	50	58.20	ppm	16.4	<=30
Isopropylbenzene (Cumene)	RC1400002-09	T	Average RF	50	50.50	ppm	1.0	<=30
Methacrylonitrile	RC1400002-09	T	Average RF	50	52.44	ppm	4.9	<=30
Methyl Acetate	RC1400002-09	T	Average RF	50	50.95	ppm	1.9	<=30
Methyl Methacrylate	RC1400002-09	T	Average RF	50	50.99	ppm	2.0	<=30
Methyl tert-Butyl Ether	RC1400002-09	T	Average RF	50	50.59	ppm	1.2	<=30
Methylcyclohexane	RC1400002-09	T	Average RF	50	48.73	ppm	-2.5	<=30
Naphthalene	RC1400002-09	T	Average RF	50	55.03	ppm	10.1	<=30
Propionitrile	RC1400002-09	T	Average RF	250	253.3	ppm	1.3	<=30
Styrene	RC1400002-09	T	Average RF	50	52.62	ppm	5.2	<=30
Tetrachloroethene (PCE)	RC1400002-09	T	Average RF	50	50.51	ppm	1.0	<=30
Tetrahydrofuran (THF)	RC1400002-09	T	Average RF	50	47.59	ppm	-4.8	<=30
Toluene	RC1400002-09	T	Average RF	50	49.71	ppm	-0.6	<=30
Trichloroethene (TCE)	RC1400002-09	T	Average RF	50	49.96	ppm	-0.1	<=30
Trichlorofluoromethane (CFC 11)	RC1400002-09	T	Average RF	50	48.70	ppm	-2.6	<=30
Vinyl Acetate	RC1400002-09	T	Average RF	50	60.46	ppm	20.9	<=30
Vinyl Chloride	RC1400002-09	T	Average RF	50	52.47	ppm	4.9	<=30
cis-1,2-Dichloroethene	RC1400002-09	T	Average RF	50	48.55	ppm	-2.9	<=30
cis-1,3-Dichloropropene	RC1400002-09	T	Average RF	50	50.46	ppm	0.9	<=30
m,p-Xylenes	RC1400002-09	T	Average RF	100	103.5	ppm	3.5	<=30
n-Butyl Acetate	RC1400002-09	T	Average RF	50	57.02	ppm	14.0	<=30
n-Butylbenzene	RC1400002-09	T	Average RF	50	54.12	ppm	8.2	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1400002	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400002-09	T	Average RF	50	53.33	ppm	6.7	<=30
n-Propylbenzene	RC1400002-09	T	Average RF	50	50.98	ppm	2.0	<=30
o-Xylene	RC1400002-09	T	Average RF	50	50.75	ppm	1.5	<=30
sec-Butylbenzene	RC1400002-09	T	Average RF	50	51.69	ppm	3.4	<=30
tert-Amyl Methyl Ether	RC1400002-09	T	Average RF	50	51.77	ppm	3.5	<=30
tert-Butylbenzene	RC1400002-09	T	Average RF	50	49.60	ppm	-0.8	<=30
trans-1,2-Dichloroethene	RC1400002-09	T	Average RF	50	51.72	ppm	3.4	<=30
trans-1,3-Dichloropropene	RC1400002-09	T	Average RF	50	53.35	ppm	6.7	<=30
trans-1,4-Dichloro-2-butene	RC1400002-09	T	Average RF	50	77.97	ppm	55.9	<=30
1,2-Dichloroethane-d4	RC1400002-09	S	Average RF	50	49.63	ppm	-0.7	<=30
4-Bromofluorobenzene	RC1400002-09	S	Average RF	50	50.44	ppm	0.9	<=30
Dibromofluoromethane	RC1400002-09	S	Average RF	50	50.29	ppm	0.6	<=30
Toluene-d8	RC1400002-09	S	Average RF	50	50.16	ppm	0.3	<=30

Exceptions

QAP	Method
CRA-OXY	8260C

Compound	Type	Criteria	Result
trans-1,4-Dichloro-2-butene	Percent Difference	<= 30	55.94
2-Chloroethyl Vinyl Ether	Percent Difference	<= 30	31.24

Quantitation Report (Not Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\011614\J2757.D
Misc :
Acq On : 16 Jan 2014 12:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 12:57:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	863150	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1295015	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1179682	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	614217	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	380431	50.29	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.58%				
48) surr1,1,2-dichloroetha...	4.664	65	452263	49.63	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.26%				
65) SURR3,Toluene-d8	7.322	98	1613456	50.16	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.32%				
70) SURR2,BFB	9.791	95	603148	50.44	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	487872	54.64	ppb		97
3) Chloromethane	1.262	50	616021	50.63	ppb		98
4) Vinyl Chloride	1.323	62	620337	52.47	ppb		99
5) Bromomethane	1.512	94	371632	46.65	ppb		100
6) Chloroethane	1.567	64	359567	50.46	ppb		99
7) Freon 21	1.664	67	969758	55.84	ppb		100
8) Trichlorofluoromethane	1.719	101	644585	48.70	ppb		99
9) Diethyl Ether	1.878	59	299193	51.69	ppb		98
10) Freon 123a	1.872	67	537026	55.28	ppb		90
11) Freon 123	1.902	83	586574	56.59	ppb		97
12) Acrolein	1.957	56	33926	87.25	ppb		97
13) 1,1-Diclethene	2.042	96	349084	56.51	ppb		94
14) Freon 113	2.036	101	323330	49.50	ppb		100
15) Acetone	2.042	43	83643	46.95	ppb		96
16) 2-Propanol	2.116	45	305798	1138.82	ppb		98
17) Iodomethane	2.146	142	512265	58.20	ppb		96
18) Carbon Disulfide	2.207	76	1172737	50.82	ppb		99
19) Acetonitrile	2.225	40	75467	265.98	ppb		94
20) Allyl Chloride	2.274	76	223852	51.27	ppb		98
21) Methyl Acetate	2.274	43	192715	50.95	ppb		95
22) Methylene Chloride	2.359	84	381267	51.02	ppb		98
23) TBA	2.408	59	487206	1084.56	ppb		99
24) Acrylonitrile	2.524	53	455236	253.44	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	978238	50.59	ppb		100
26) trans-1,2-Dichloroethene	2.585	96	390379	51.72	ppb		100
28) 1,1-Diclethane	2.945	63	726674	49.93	ppb		100
29) Vinyl Acetate	2.981	86	67026	60.46	ppb	#	84
30) DIPE	3.018	45	1487071	51.30	ppb		100
31) 2-Chloro-1,3-Butadiene	3.042	53	699013	46.21	ppb		98
32) ETBE	3.396	59	1249531	52.60	ppb		99
33) 2,2-Dichloropropane	3.560	77	655406	54.85	ppb		97
34) cis-1,2-Dichloroethene	3.548	96	426765	48.55	ppb		97
35) 2-Butanone	3.548	43	118808	51.42	ppb		98
36) Propionitrile	3.591	54	162794	253.29	ppb		98
37) Bromochloromethane	3.835	130	228611	49.33	ppb		93

KF 1/16/14

00214

Quantitation Report (Not Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\011614\J2757.D
Misc :
Acq On : 16 Jan 2014 12:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 12:57:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	108335	52.44	ppb	93
39) Tetrahydrofuran	3.908	42	79484	47.59	ppb	96
40) Chloroform	3.938	83	689139	50.41	ppb	94
41) 1,1,1-Trichloroethane	4.213	97	614082	49.02	ppb	90
42) TAME	5.024	73	1012840	51.77	ppb	99
44) Cyclohexane	4.316	41	410334	48.97	ppb	97
46) Carbontetrachloride	4.469	121	161770	50.30	ppb	87
47) 1,1-Dichloropropene	4.463	75	557668	55.98	ppb	97
49) Benzene	4.786	78	1582975	49.12	ppb	98
50) 1,2-Dichloroethane	4.786	62	532191	50.04	ppb	99
51) Iso-Butyl Alcohol	4.640	43	236480	1103.56	ppb	93
52) n-Heptane	5.334	43	464322	53.33	ppb	98
53) 1-Butanol	5.767	56	323089	2847.98	ppb	97
54) Trichloroethene	5.828	130	412251	49.96	ppb	95
55) Methylcyclohexane	6.109	55	445027	48.73	ppb	99
56) 1,2-Diclpropane	6.115	63	412535	50.33	ppb	97
57) Dibromomethane	6.255	93	194281	50.94	ppb	98
58) 1,4-Dioxane	6.310	88 48000/43116	M YL	~~914.43~~	ppb 1018.09	92
59) Methyl Methacrylate	6.328	69	191145	50.99	ppb	97
60) Bromodichloromethane	6.481	83	515538	51.54	ppb	100
61) 2-Nitropropane	6.743	41	139624	105.57	ppb	96
62) 2-Chloroethylvinyl Ether	6.877	63	186416	65.62	ppb	91
63) cis-1,3-Dichloropropene	7.023	75	601210	50.46	ppb	97
64) 4-Methyl-2-pentanone	7.212	43	275051	53.46	ppb	98
66) Toluene	7.395	91	1677247	49.71	ppb	100
67) trans-1,3-Dichloropropene	7.633	75	516472	53.35	ppb	95
68) Ethyl Methacrylate	7.767	69	414875	54.14	ppb	100
69) 1,1,2-Trichloroethane	7.810	97	277345	49.43	ppb	99
72) Tetrachloroethene	7.962	164	312434	50.51	ppb	98
73) 2-Hexanone	8.084	43	188462	53.98	ppb	97
74) 1,3-Dichloropropane	7.974	76	514843	49.97	ppb	99
75) Dibromochloromethane	8.194	129	331978	54.05	ppb	100
76) N-Butyl Acetate	8.236	43	495096	57.02	ppb	98
77) 1,2-Dibromoethane	8.285	107	273026	52.07	ppb	99
78) Chlorobenzene	8.773	112	1083594	50.83	ppb	97
79) 3-CBTF	8.785	180	535294	50.21	ppb	98
80) 4-CBTF	8.840	180	486091	51.25	ppb	98
81) 1,1,1,2-Tetrachloroethane	8.852	131	381494	51.80	ppb	96
82) Ethylbenzene	8.889	106	571142	49.94	ppb	98
83) (m+p)Xylene	8.998	106	1435716	103.47	ppb	99
84) o-Xylene	9.346	106	703490	50.75	ppb	99
85) Styrene	9.358	104	1193111	52.62	ppb	96
87) Bromoform	9.498	173	181208	54.55	ppb	99
88) 2-CBTF	9.578	180	518086	49.99	ppb	98
89) Isopropylbenzene	9.675	105	1623894	50.50	ppb	98
90) Cyclohexanone	9.718	55	311910	909.47	ppb	97
91) trans-1,4-Dichloro-2-B...	9.962	53	104584	77.97	ppb	98
92) 1,1,2,2-Tetrachloroethane	9.913	83	333563	53.00	ppb	93
93) Bromobenzene	9.913	156	451295	50.11	ppb	96
94) 1,2,3-Trichloropropane	9.943	110	97807	51.06	ppb	100
95) n-Propylbenzene	10.023	91	1889613	50.98	ppb	100
96) 2-Chlorotoluene	10.084	91	1170322	49.76	ppb	96

00215

Quantitation Report (Not Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\011614\J2757.D
Misc :
Acq On : 16 Jan 2014 12:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 12:57:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

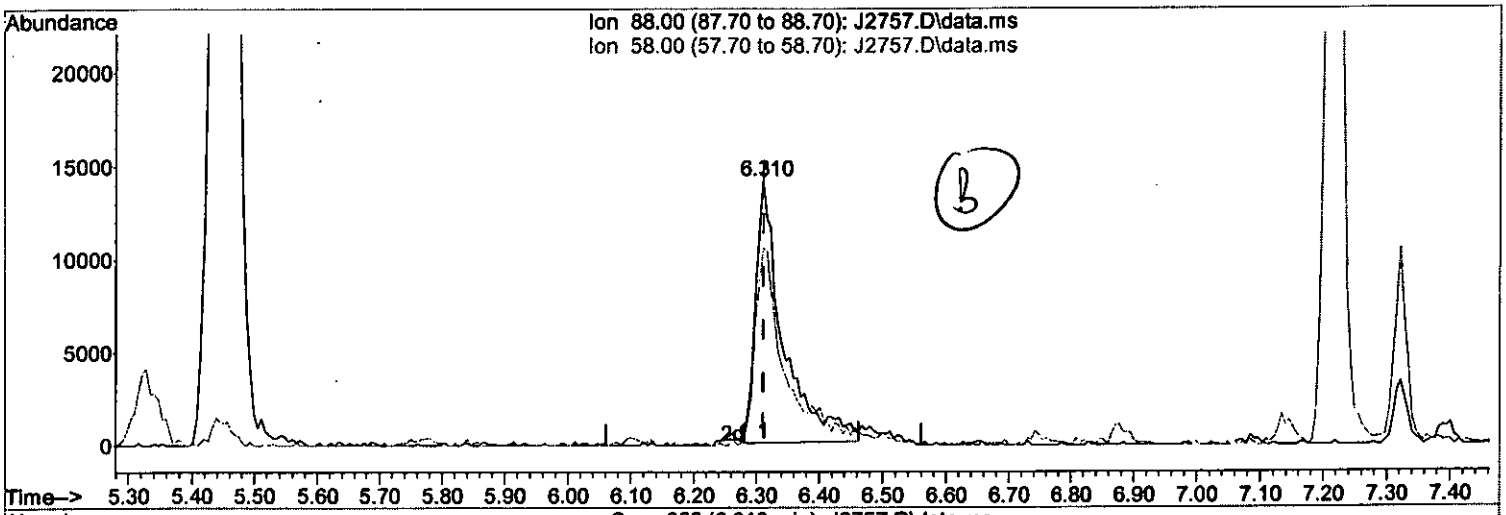
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1223913	51.02	ppb	99
98)	4-Chlorotoluene	10.175	91	1480684	51.66	ppb	99
99)	1,3,5-Trimethylbenzene	10.175	105	1408521	51.69	ppb	97
100)	tert-Butylbenzene	10.437	119	1093659	49.60	ppb	99
101)	1,2,4-Trimethylbenzene	10.480	105	1399623	50.97	ppb	100
102)	3,4-DCBTF	10.535	214	367789	51.74	ppb	99
103)	sec-Butylbenzene	10.620	105	1594762	51.69	ppb	99
104)	p-Isopropyltoluene	10.742	119	1423072	52.51	ppb	100
105)	1,3-Dclbenz	10.699	146	790989	50.05	ppb	99
106)	1,4-Dclbenz	10.766	146	820254	49.90	ppb	99
107)	2,4-DCBTF	10.821	214	325615	51.27	ppb	98
108)	2,5-DCBTF	10.864	214	369882	50.46	ppb	98
109)	n-Butylbenzene	11.065	91	1285016	54.12	ppb	98
110)	1,2-Dclbenz	11.065	146	760419	50.14	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	55581	52.49	ppb	86
112)	Trielution Dichlorotol...	11.730	125	1898691	156.80	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	516557	49.80	ppb	97
114)	Coelution Dichlorotoluene	11.998	125	1347352	105.03	ppb	99
115)	1,2,4-Tcbenzene	12.162	180	453401	50.98	ppb	92
116)	Hexachlorobt	12.266	225	201011	52.92	ppb	99
117)	Naphthalen	12.303	128	882634	55.03	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	370969	51.01	ppb	95
119)	2,4,5-Trichlorotolene	12.851	159	272005	53.61	ppb	92
120)	2,3,6-Trichlorotoluene	12.912	159	239344	52.65	ppb	99

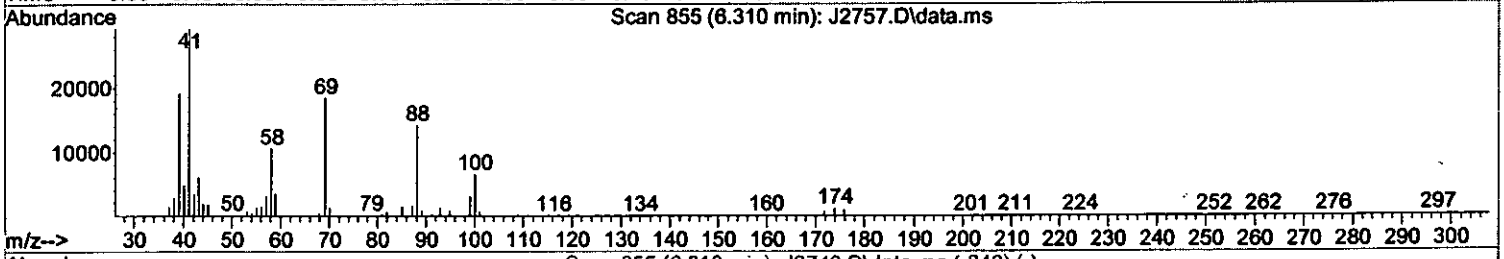
(#) = qualifier out of range (m) = manual integration (+) = signals summed

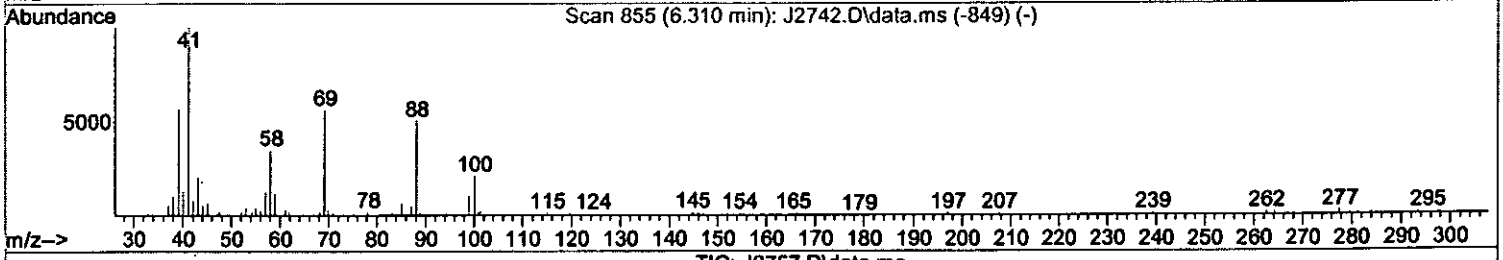
Quantitation Report (Qedit)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\011614\J2757.D
Misc :
Acq On : 16 Jan 2014 12:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 12:57:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J2757.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 914.43 ppb

response 43116

Ion	Exp%	Act%
88.00	100	100
58.00	68.00	74.53
0.00	0.00	0.00
0.00	0.00	0.00

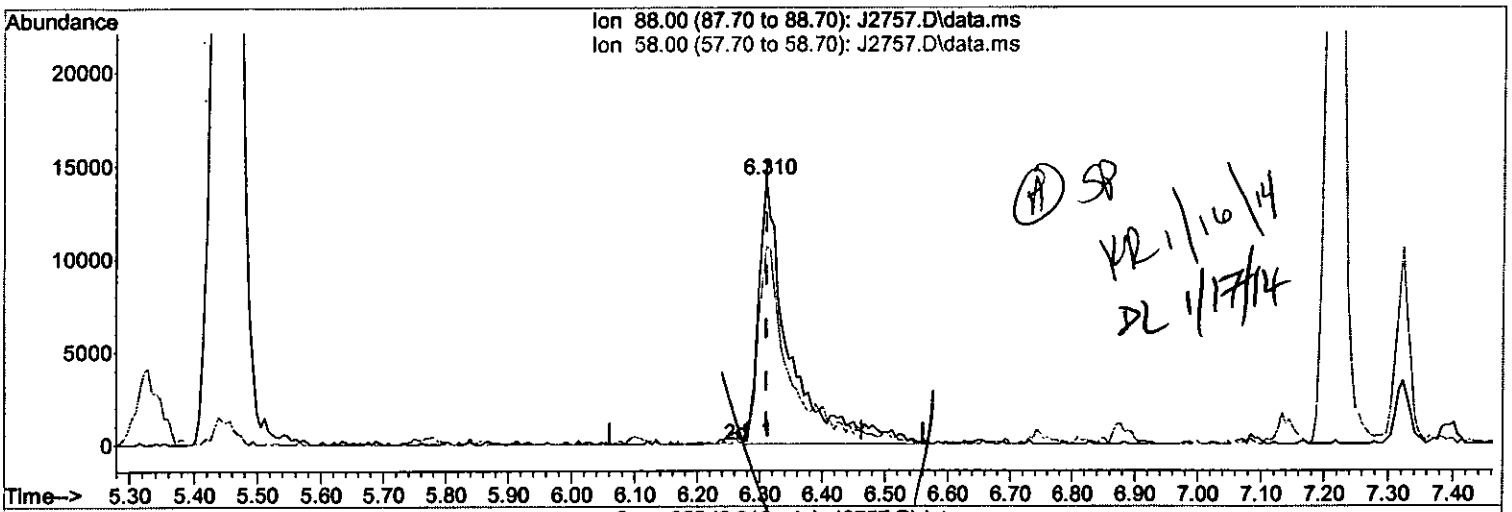
00217

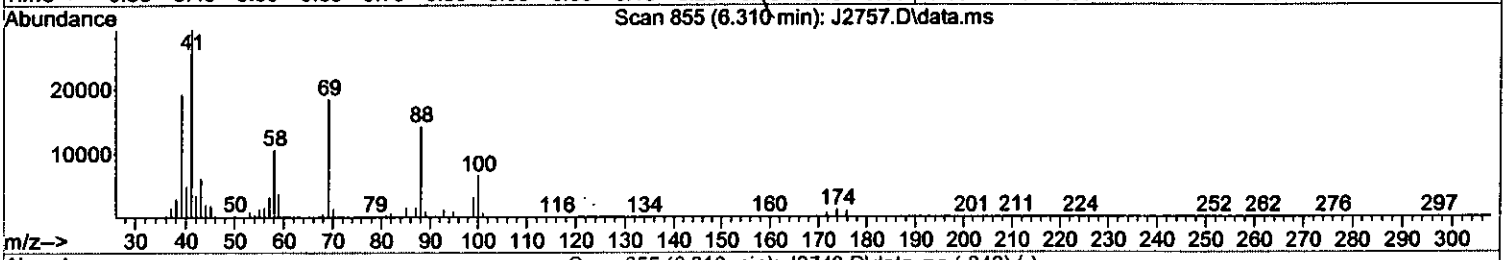
W011514.M Thu Jan 16 14:14:41 2014 Page: 1

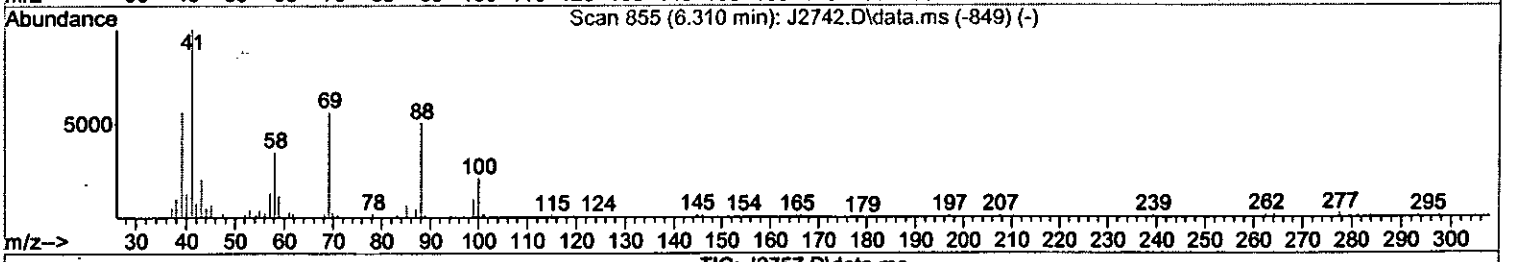
Quantitation Report (Qedit)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\011614\J2757.D
Misc :
Acq On : 16 Jan 2014 12:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 12:57:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J2757.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 1018.09 ppb m

response 48004

Ion	Exp%	Act%
88.00	100	100
58.00	68.00	74.53
0.00	0.00	0.00
0.00	0.00	0.00

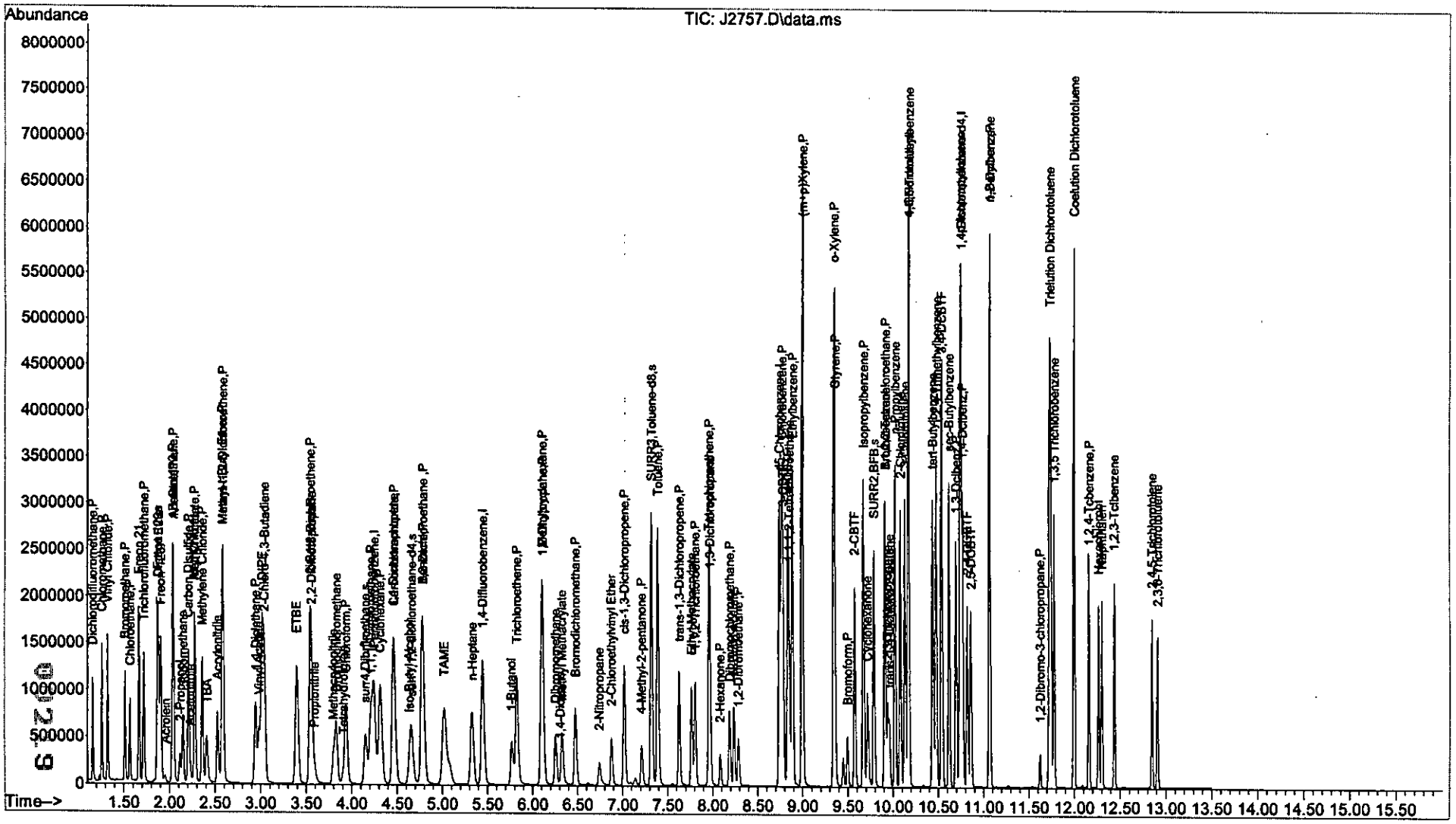
00218

W011514.M Thu Jan 16 14:14:47 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\011614\J2757.D
Misc :
Acq On : 16 Jan 2014 12:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 16 12:57:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



W011514.M Thu Jan 16 12:57:12 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 2/ 3/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C **Calibration Date:** 1/15/14
Calibration ID: RC1400002
File ID: I:\ACQUDATA\msvoa12\Data\020314\J3110.D\ **Analysis Lot:** 378753
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	48.6	0.3121	0.3034	-2.8	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	49.8	0.7256	0.7227	-0.4	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	50.0	0.5124	0.5123	0.0	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	51.7	0.2166	0.2238	3.3	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	49.1	0.8431	0.8282	-1.8	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	51.0	0.3578	0.3649	2.0	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	49.9	0.3846	0.3839	-0.2	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	48.0	0.5920	0.5684	-4.0	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	47.1	0.1559	0.1470	-5.8	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	48.7	0.7240	0.7051	-2.6	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	50.3	2.236	2.249	0.6	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	49.3	0.08620	0.08500	-1.4	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	50.4	0.2222	0.2242	0.9	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	48.8	1.234	1.204	-2.5	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	46.4	0.4106	0.3807	-7.3	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	48.9	0.3165	0.3094	-2.3	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	50.5	2.218	2.239	0.9	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	49.5	1.286	1.274	-1.0	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	48.3	0.4367	0.4221	-3.3	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	48.9	1.338	1.309	-2.2	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	55.1	0.6922	0.7621	10.1	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	51.4	0.1339	0.1375	2.8	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	49.5	1.915	1.894	-1.1	NA	± 20 %	Average RF
2-Hexanone	50.0	47.6	0.1480	0.1409	-4.8	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	49.7	2.333	2.317	-0.7	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	51.3	2.206	2.262	2.6	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	48.9	0.1986	0.1943	-2.2	NA	± 20 %	Average RF
Acetone	50.0	50.7	0.1032	0.1047	1.5	NA	± 20 %	Average RF
Benzene	50.0	50.0	1.244	1.244	0.0	NA	± 20 %	Average RF
Bromobenzene	50.0	48.1	0.7331	0.7057	-3.7	NA	± 20 %	Average RF
Bromochloromethane	50.0	52.7	0.2685	0.2828	5.3	NA	± 20 %	Average RF
Bromodichloromethane	50.0	49.5	0.3862	0.3820	-1.1	NA	± 20 %	Average RF
Bromoform	50.0	46.2	0.2704	0.2500	-7.6	NA	± 20 %	Average RF
Bromomethane	50.0	44.2	0.4614	0.4076	-11.7	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	46.3	0.1242	0.1151	-7.3	NA	± 20 %	Average RF
Chlorobenzene	50.0	51.0	0.9035	0.9209	1.9	NA	± 20 %	Average RF
Chloroethane	50.0	54.7	0.4128	0.4512	9.3	NA	± 20 %	Average RF
Chloroform	50.0	51.4	0.7920	0.8148	2.9	NA	± 20 %	Average RF
Chloromethane	50.0	54.5	0.7048	0.7680	9.0	NA	± 20 %	Average RF
Dibromochloromethane	50.0	49.4	0.2603	0.2569	-1.3	NA	± 20 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 2/ 3/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C **Calibration Date:** 1/15/14
Calibration ID: RC1400002
File ID: I:\ACQUDATA\msvoa12\Data\020314\J3110.D\ **Analysis Lot:** 378753
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	56.5	0.5172	0.5840	12.9	NA	± 20 %	Average RF
Methylene Chloride	50.0	49.2	0.4329	0.4263	-1.5	NA	± 20 %	Average RF
Ethylbenzene	50.0	49.6	0.4847	0.4804	-0.9	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	50.8	0.3092	0.3142	1.6	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	49.6	2.618	2.596	-0.8	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	47.4	1.120	1.061	-5.3	NA	± 20 %	Average RF
Naphthalene	50.0	51.4	1.306	1.341	2.7	NA	± 20 %	Average RF
Styrene	50.0	53.6	0.9611	1.030	7.1	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	50.4	0.2622	0.2641	0.8	NA	± 20 %	Average RF
Toluene	50.0	52.9	1.303	1.378	5.8	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	50.9	0.3186	0.3240	1.7	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	49.3	0.7666	0.7564	-1.3	NA	± 20 %	Average RF
Vinyl Chloride	50.0	56.1	0.6849	0.7680	12.1	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	50.6	0.5091	0.5156	1.3	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	52.1	0.4600	0.4796	4.3	NA	± 20 %	Average RF
m,p-Xylenes	100	104	0.5881	0.6126	4.2	NA	± 20 %	Average RF
n-Butylbenzene	50.0	53.4	1.933	2.064	6.8	NA	± 20 %	Average RF
n-Propylbenzene	50.0	50.5	3.017	3.049	1.1	NA	± 20 %	Average RF
o-Xylene	50.0	51.7	0.5875	0.6078	3.5	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	51.4	2.512	2.584	2.9	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	49.9	1.795	1.790	-0.3	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	52.9	0.4373	0.4625	5.8	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	53.6	0.3738	0.4003	7.1	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	52.2	0.4617	0.4816	4.3	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	49.9	0.2921	0.2914	-0.2	NA	± 20 %	Average RF
Toluene-d8	50.0	50.7	1.242	1.260	1.5	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:59:47 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

KR 2/3/14

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	96	0.00
2	P	Dichlorodifluoromethane	0.5172	0.5840	-12.9	102	0.00
3	P	Chloromethane	0.7048	0.7680	-9.0	104	0.00
4	P	Vinyl Chloride	0.6849	0.7680	-12.1	105	0.00
5	P	Bromomethane	0.4614	0.4076	11.7	100	0.00
6	P	Chloroethane	0.4128	0.4512	-9.3	103	0.00
7		Freon 21	1.0060	1.0292	-2.3	99	0.00
8	P	Trichlorofluoromethane	0.7666	0.7564	1.3	97	0.00
9		Diethyl Ether	0.3353	0.2925	12.8	84	0.00
10		Freon 123a	0.5627	0.5256	6.6	91	0.00
11		Freon 123	0.6005	0.5781	3.7	94	0.00
12		Acrolein	0.0267	0.0363	-36.0#	120	0.00
13	P	1,1-Diclethene	0.3578	0.3649	-2.0	101	0.00
14	P	Freon 113	0.3784	0.2977	21.3#	78	0.00 ⊗ 0000
15	P	Acetone	0.1032	0.1047	-1.5	102	0.00
16		2-Propanol	0.0156	0.0149	4.5	87	0.00
17		Iodomethane	0.5098	0.5907	-15.9	97	0.00
18	P	Carbon Disulfide	1.3368	1.2789	4.3	93	0.00
19		Acetonitrile	0.0164	0.0146	11.0	86	0.00
20		Allyl Chloride	0.2529	0.2359	6.7	90	0.00
21	P	Methyl Acetate	0.2191	0.1984	9.4	85	0.00
22	P	Methylene Chloride	0.4329	0.4263	1.5	97	0.00
23		TBA	0.0260	0.0249	4.2	92	0.00
24		Acrylonitrile	0.1041	0.0983	5.6	91	0.00
25	P	Methyl-t-Butyl Ether	1.1200	1.0608	5.3	91	0.00
26	P	trans-1,2-Dichloroethene	0.4373	0.4625	-5.8	101	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.8431	0.8282	1.8	95	0.00
29		Vinyl Acetate	0.0642	0.0664	-3.4	92	0.00
30		DIPE	1.6790	1.5698	6.5	91	0.00
31		2-Chloro-1,3-Butadiene	0.8763	0.7921	9.6	86	0.00
32		ETBE	1.3761	1.3365	2.9	94	0.00
33		2,2-Dichloropropane	0.6922	0.7621	-10.1	108	0.00
34	P	cis-1,2-Dichloroethene	0.5091	0.5156	-1.3	99	0.00
35	P	2-Butanone	0.1339	0.1375	-2.7	98	0.00
36		Propionitrile	0.0372	0.0358	3.8	94	0.00
37		Bromochloromethane	0.2685	0.2828	-5.3	104	0.00
38		Methacrylonitrile	0.1197	0.1185	1.0	95	0.00
39		Tetrahydrofuran	0.0968	0.0843	12.9	92	0.00
40	P	Chloroform	0.7920	0.8148	-2.9	98	0.00
41	P	1,1,1-Trichloroethane	0.7256	0.7227	0.4	98	0.00
42		TAME	1.1333	1.1354	-0.2	99	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	98	0.00
44	P	Cyclohexane	0.3235	0.2888	10.7	90	0.00
45	S	surr4,Dibrflmethane	0.2921	0.2914	0.2	99	0.00
46	P	Carbontetrachloride	0.1242	0.1151	7.3	92	0.00
47		1,1-Dichloropropene	0.3846	0.3839	0.2	99	0.00

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:59:47 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial 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)
48	s	surr1,1,2-dichloroethane-d4	0.3518	0.3208	8.8	90	0.00
49	P	Benzene	1.2442	1.2437	0.0	100	0.00
50	P	1,2-Dichloroethane	0.4106	0.3807	7.3	92	0.00
51		Iso-Butyl Alcohol	0.0083	0.0076	8.4	89	0.00
52		n-Heptane	0.3362	0.3082	8.3	96	0.00
53		1-Butanol	0.0044	0.0043	2.3	95	0.00
54	P	Trichloroethene	0.3186	0.3240	-1.7	103	0.00
55	P	Methylcyclohexane	0.3526	0.3287	6.8	95	0.00
56	P	1,2-Diclpropane	0.3165	0.3094	2.2	95	0.00
57		Dibromomethane	0.1473	0.1453	1.4	99	0.00
58		1,4-Dioxane	0.0018	0.0018	0.0	103	0.00
59		Methyl Methacrylate	0.1447	0.1397	3.5	94	0.00
60	P	Bromodichloromethane	0.3862	0.3820	1.1	96	0.00
61		2-Nitropropane	0.0511	0.0198	M 61.3#	38#	0.00
62		2-Chloroethylvinyl Ether	0.1097	0.1097	0.0	95	0.00
63	P	cis-1,3-Dichloropropene	0.4600	0.4796	-4.3	100	0.00
64	P	4-Methyl-2-pentanone	0.1986	0.1943	2.2	98	0.00
65	s	SURR3,Toluene-d8	1.2419	1.2603	-1.5	100	0.00
66	P	Toluene	1.3028	1.3782	-5.8	104	0.00
67	P	trans-1,3-Dichloropropene	0.3738	0.4003	-7.1	100	0.00
68		Ethyl Methacrylate	0.2959	0.3059	-3.4	97	0.00
69	P	1,1,2-Trichloroethane	0.2166	0.2238	-3.3	104	0.00
70	s	SURR2,BFB	0.4617	0.4816	-4.3	103	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	103	0.00
72	P	Tetrachloroethene	0.2622	0.2641	-0.7	105	0.00
73	P	2-Hexanone	0.1480	0.1409	4.8	97	0.00
74		1,3-Dichloropropane	0.4367	0.4221	3.3	100	0.00
75	P	Dibromochloromethane	0.2603	0.2569	1.3	95	0.00
76		N-Butyl Acetate	0.3680	0.3482	5.4	92	0.00
77	P	1,2-Dibromoethane	0.2222	0.2242	-0.9	102	0.00
78	P	Chlorobenzene	0.9035	0.9209	-1.9	103	0.00
79		3-CBTF	0.4519	0.4457	1.4	106	0.00
80		4-CBTF	0.4020	0.4015	0.1	108	0.00
81		1,1,1,2-Tetrachloroethane	0.3121	0.3034	2.8	96	0.00
82	P	Ethylbenzene	0.4847	0.4804	0.9	103	0.00
83	P	(m+p)Xylene	0.5881	0.6126	-4.2	105	0.00
84	P	o-Xylene	0.5875	0.6078	-3.5	105	0.00
85	P	Styrene	0.9611	1.0296	-7.1	103	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	109	0.00
87	P	Bromoform	0.2704	0.2500	7.5	90	0.00
88		2-CBTF	0.8437	0.8000	5.2	106	0.00
89	P	Isopropylbenzene	2.6178	2.5960	0.8	105	0.00
90		Cyclohexanone	0.0279	0.0478	M -71.3#	197	0.00
91		trans-1,4-Dichloro-2-Butene	0.1092	0.1056	3.3	97	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5124	0.5123	0.0	107	0.00
93		Bromobenzene	0.7331	0.7057	3.7	104	0.00

W011514.M Mon Feb 03 13:00:54 2014 Page: 2

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:59:47 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial 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)
94		1,2,3-Trichloropropane	0.1559	0.1470	5.7	106	0.00
95		n-Propylbenzene	3.0171	3.0494	-1.1	107	0.00
96		2-Chlorotoluene	1.9147	1.8942	1.1	105	0.00
97		3-Chlorotoluene	1.9529	1.9003	2.7	106	0.00
98		4-Chlorotoluene	2.3334	2.3173	0.7	104	0.00
99		1,3,5-Trimethylbenzene	2.2184	2.2391	-0.9	105	0.00
100		tert-Butylbenzene	1.7948	1.7900	0.3	107	0.00
101		1,2,4-Trimethylbenzene	2.2355	2.2492	-0.6	105	0.00
102		3,4-DCBTF	0.5786	0.5734	0.9	111	0.00
103		sec-Butylbenzene	2.5116	2.5835	-2.9	109	0.00
104		p-Isopropyltoluene	2.2061	2.2625	-2.6	108	0.00
105	P	1,3-Dclbenz	1.2864	1.2737	1.0	106	0.00
106	P	1,4-Dclbenz	1.3382	1.3093	2.2	107	0.00
107		2,4-DCBTF	0.5170	0.5127	0.8	111	0.00
108		2,5-DCBTF	0.5968	0.5615	5.9	107	0.00
109		n-Butylbenzene	1.9328	2.0635	-6.8	110	0.00
110	P	1,2-Dclbenz	1.2345	1.2036	2.5	105	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0862	0.0850	1.4	107	0.00
112		Trielution Dichlorotoluene	0.9857	0.9873	-0.2	109	0.00
113		1,3,5 Trichlorobenzene	0.8444	0.8055	4.6	109	0.00
114		Coelution Dichlorotoluene	1.0443	1.0528	-0.8	110	0.00
115	P	1,2,4-Tcbenzene	0.7240	0.7051	2.6	107	0.00
116		Hexachlorobt	0.3092	0.3142	-1.6	114	0.00
117		Naphthalen	1.3057	1.3409	-2.7	109	0.00
118		1,2,3-Tclbenzene	0.5920	0.5684	4.0	107	0.00
119		2,4,5-Trichlorotolene	0.4130	0.4188	-1.4	115	0.00
120		2,3,6-Trichlorotoluene	0.3700	0.3776	-2.1	119	0.00

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

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1401083-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:40:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	834620	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1280452	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1214609	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	654006	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	373158	49.89	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.78%				
48) surr1,1,2-dichloroetha...	4.658	65	410720	45.59	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 91.18%				
65) SURR3,Toluene-d8	7.322	98	1613707	50.74	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.48%				
70) SURR2,BFB	9.785	95	616683	52.15	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	487418	56.46	ppb		96
3) Chloromethane	1.256	50	640987	54.48	ppb		99
4) Vinyl Chloride	1.323	62	640953	56.07	ppb		99
5) Bromomethane	1.512	94	340183	44.16	ppb		99
6) Chloroethane	1.567	64	376613	54.66	ppb		96
7) Freon 21	1.664	67	858976	51.15	ppb		100
8) Trichlorofluoromethane	1.719	101	631331	49.33	ppb		97
9) Diethyl Ether	1.878	59	244088	43.61	ppb		95
10) Freon 123a	1.866	67	438700	46.70	ppb		91
11) Freon 123	1.902	83	482481	48.14	ppb		97
12) Acrolein	1.951	56	151319	321.23	ppb		98
13) 1,1-Diclethene	2.036	96	304582	50.99	ppb		96
14) Freon 113	2.036	101	248476	39.34	ppb		89
15) Acetone	2.042	43	87403	50.74	ppb		99
16) 2-Propanol	2.109	45	248916	958.68	ppb		99
17) Iodomethane	2.146	142	493012	57.93	ppb		99
18) Carbon Disulfide	2.201	76	1067384	47.83	ppb		100
19) Acetonitrile	2.219	40	60810	221.64	ppb		94
20) Allyl Chloride	2.274	76	196924	46.65	ppb	#	77
21) Methyl Acetate	2.274	43	165614	45.28	ppb		96
22) Methylene Chloride	2.353	84	355780	49.23	ppb		95
23) TBA	2.402	59	415292	956.08	ppb		100
24) Acrylonitrile	2.518	53	410260	236.21	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	885390	47.36	ppb		98
26) trans-1,2-Dichloroethene	2.579	96	385985	52.88	ppb		97
28) 1,1-Diclethane	2.939	63	691191	49.11	ppb		98
29) Vinyl Acetate	2.975	86	55420	51.70	ppb	#	90
30) DIPE	3.012	45	1310218	46.75	ppb		99
31) 2-Chloro-1,3-Butadiene	3.036	53	661134	45.20	ppb		96
32) ETBE	3.396	59	1115494	48.56	ppb		96
33) 2,2-Dichloropropane	3.554	77	636069	55.05	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	430365	50.64	ppb		94
35) 2-Butanone	3.542	43	114791	51.38	ppb		92
36) Propionitrile	3.591	54	149363	240.34	ppb		97
37) Bromochloromethane	3.829	130	235990	52.66	ppb		90

KK 2/3/14

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:40:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	98917	49.52	ppb		89
39) Tetrahydrofuran	3.902	42	70321	43.54	ppb		98
40) Chloroform	3.938	83	680057	51.44	ppb		96
41) 1,1,1-Trichloroethane	4.207	97	603193	49.80	ppb		88
42) TAME	5.024	73	947612	50.09	ppb		94
44) Cyclohexane	4.310	41	369763	44.63	ppb		97
46) Carbontetrachloride	4.469	121	147340	46.33	ppb		96
47) 1,1-Dichloropropene	4.457	75	491568	49.91	ppb		96
49) Benzene	4.780	78	1592446	49.98	ppb		97
50) 1,2-Dichloroethane	4.786	62	487492	46.36	ppb		99
51) Iso-Butyl Alcohol	4.633	43	195144	921.02	ppb		96
52) n-Heptane	5.328	43	394585	45.83	ppb		95
53) 1-Butanol	5.767	56	275818	2458.94	ppb		98
54) Trichloroethene	5.828	130	414913	50.85	ppb		95
55) Methylcyclohexane	6.103	55	420883	46.61	ppb		93
56) 1,2-Diclpropane	6.109	63	396112	48.87	ppb		95
57) Dibromomethane	6.255	93	185991	49.32	ppb		97
58) 1,4-Dioxane	6.310	88	~~468243866~~	~~829.42~~	ppb	1004.36	95
59) Methyl Methacrylate	6.328	69	178931	48.27	ppb		91
60) Bromodichloromethane	6.474	83	489159	49.46	ppb		99
61) 2-Nitropropane	6.743	41	50610	38.70	ppb		89
62) 2-Chloroethylvinyl Ether	6.877	63	140529	50.03	ppb		93
63) cis-1,3-Dichloropropene	7.017	75	614077	52.13	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	248799	48.91	ppb		95
66) Toluene	7.389	91	1764687	52.89	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	512540	53.55	ppb		93
68) Ethyl Methacrylate	7.767	69	391680	51.69	ppb		90
69) 1,1,2-Trichloroethane	7.803	97	286549	51.65	ppb		98
72) Tetrachloroethene	7.962	164	320810	50.38	ppb		95
73) 2-Hexanone	8.084	43	171122	47.60	ppb		99
74) 1,3-Dichloropropane	7.968	76	512673	48.33	ppb		97
75) Dibromochloromethane	8.188	129	312073	49.35	ppb		97
76) N-Butyl Acetate	8.236	43	422978	47.31	ppb		98
77) 1,2-Dibromoethane	8.285	107	272261	50.43	ppb		98
78) Chlorobenzene	8.767	112	1118565	50.96	ppb		100
79) 3-CBTF	8.785	180	541379	49.32	ppb		99
80) 4-CBTF	8.834	180	487718	49.94	ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	368569	48.61	ppb		98
82) Ethylbenzene	8.889	106	583468	49.55	ppb		99
83) (m+p)Xylene	8.998	106	1488073	104.16	ppb		97
84) o-Xylene	9.346	106	738299	51.73	ppb		94
85) Styrene	9.352	104	1250504	53.56	ppb		96
87) Bromoform	9.492	173	163483	46.22	ppb		99
88) 2-CBTF	9.578	180	523227	47.41	ppb		98
89) Isopropylbenzene	9.669	105	1697797	49.58	ppb		99
90) Cyclohexanone	9.718	55	624612	1710.45	ppb		91
91) trans-1,4-Dichloro-2-B...	9.962	53	69080	48.37	ppb		94
92) 1,1,2,2-Tetrachloroethane	9.913	83	335052	50.00	ppb		94
93) Bromobenzene	9.907	156	461525	48.13	ppb	#	89
94) 1,2,3-Trichloropropane	9.943	110	96124	47.12	ppb		92
95) n-Propylbenzene	10.023	91	1994299	50.53	ppb		99
96) 2-Chlorotoluene	10.077	91	1238843	49.46	ppb		99

W011514.M Mon Feb 03 12:40:07 2014 Page: 2

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:40:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.132	91	1242785	48.65	ppb	97
98) 4-Chlorotoluene	10.169	91	1515544	49.66	ppb	96
99) 1,3,5-Trimethylbenzene	10.169	105	1464377	50.47	ppb	99
100) tert-Butylbenzene	10.437	119	1170661	49.87	ppb	99
101) 1,2,4-Trimethylbenzene	10.480	105	1470979	50.31	ppb	99
102) 3,4-DCBTF	10.535	214	375032	49.55	ppb	98
103) sec-Butylbenzene	10.620	105	1689627	51.43	ppb	99
104) p-Isopropyltoluene	10.742	119	1479667	51.28	ppb	98
105) 1,3-Dclbenz	10.693	146	833009	49.50	ppb	97
106) 1,4-Dclbenz	10.766	146	856316	48.92	ppb	99
107) 2,4-DCBTF	10.821	214	335285	49.58	ppb	95
108) 2,5-DCBTF	10.858	214	367238	47.05	ppb	95
109) n-Butylbenzene	11.065	91	1349559	53.38	ppb	99
110) 1,2-Dclbenz	11.065	146	787193	48.75	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	55590	49.30	ppb	91
112) Trielution Dichlorotol...	11.730	125	1937172	150.25	ppb	97
113) 1,3,5 Trichlorobenzene	11.778	180	526786	47.70	ppb	98
114) Coelution Dichlorotoluene	11.998	125	1377018	100.81	ppb	97
115) 1,2,4-Tcbenzene	12.156	180	461143	48.69	ppb	96
116) Hexachlorobt	12.266	225	205516	50.82	ppb	99
117) Naphthalen	12.303	128	876961	51.35	ppb	98
118) 1,2,3-Tclbenzene	12.437	180	371737	48.01	ppb	96
119) 2,4,5-Trichlorotolene	12.851	159	273884	50.70	ppb	97
120) 2,3,6-Trichlorotoluene	12.912	159	246965	51.02	ppb	99

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

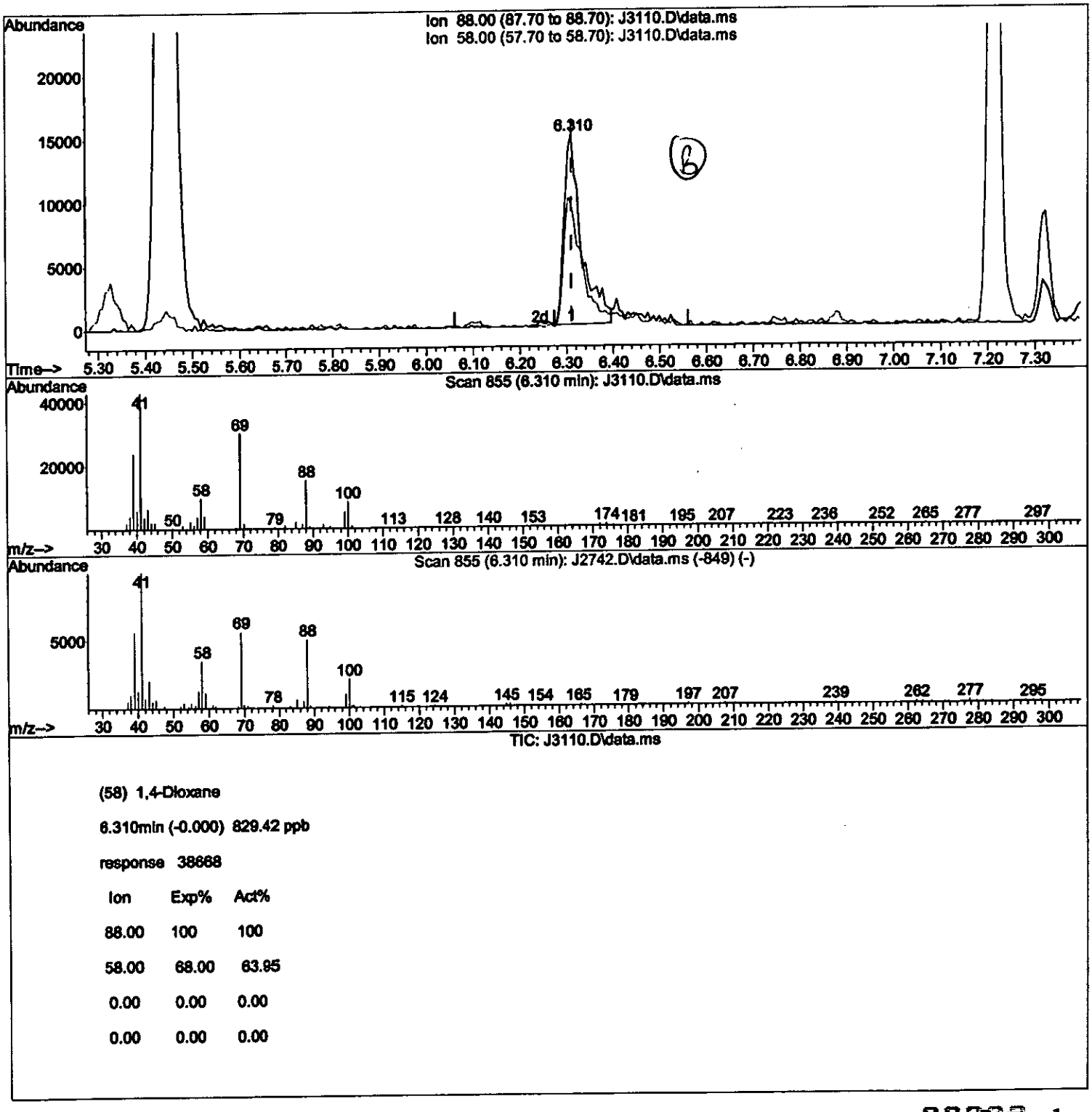
W011514.M Mon Feb 03 12:40:07 2014 Page: 3

00227

Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:40:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



(58) 1,4-Dioxane

6.310min (-0.000) 829.42 ppb

response 38668

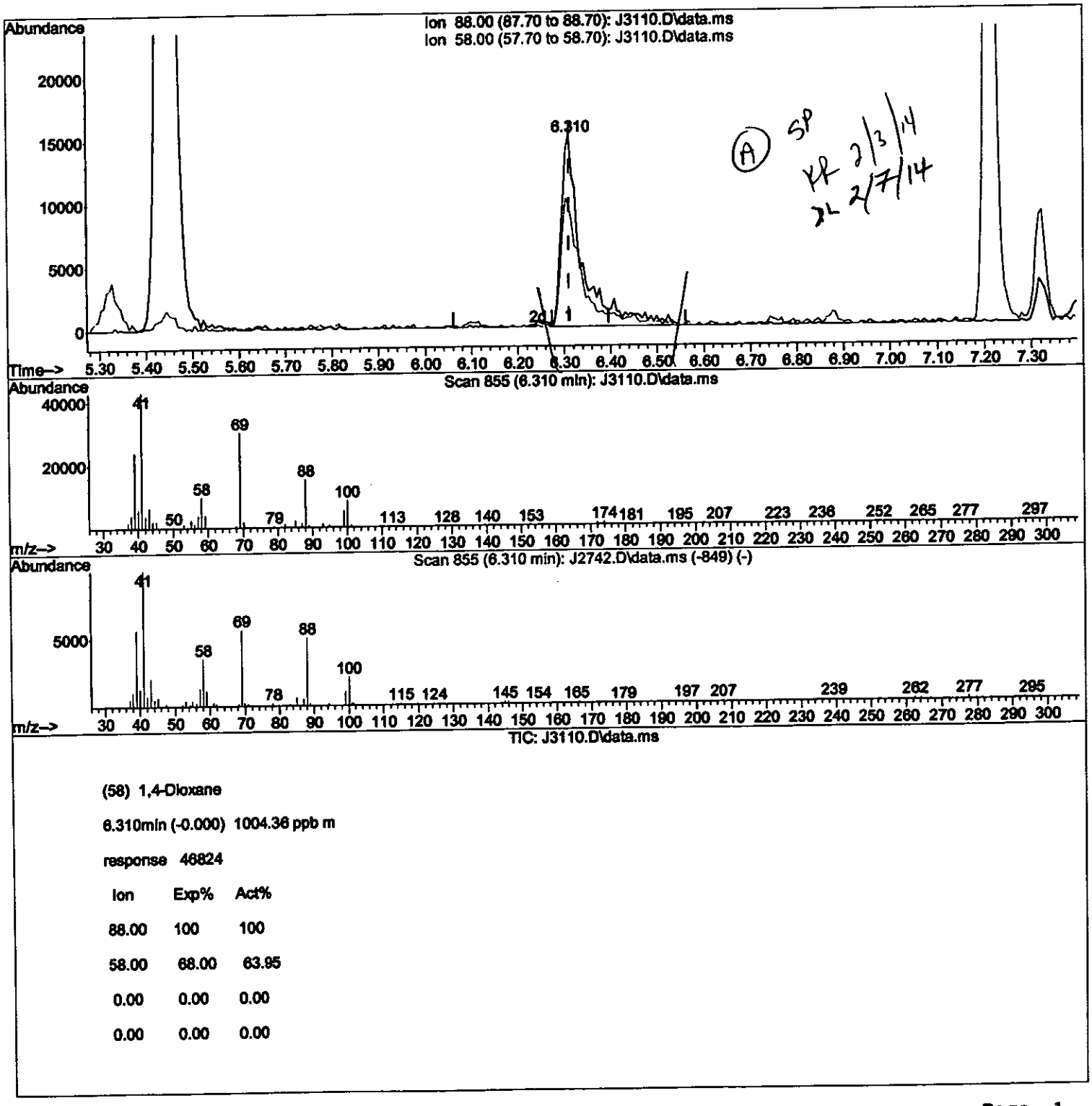
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	63.95
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Mon Feb 03 12:59:42 2014 Page: 1

Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:40:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



(58) 1,4-Dioxane

6.310min (-0.000) 1004.36 ppb m

response 46824

Ion	Exp%	Act%
88.00	100	100
58.00	68.00	63.95
0.00	0.00	0.00
0.00	0.00	0.00

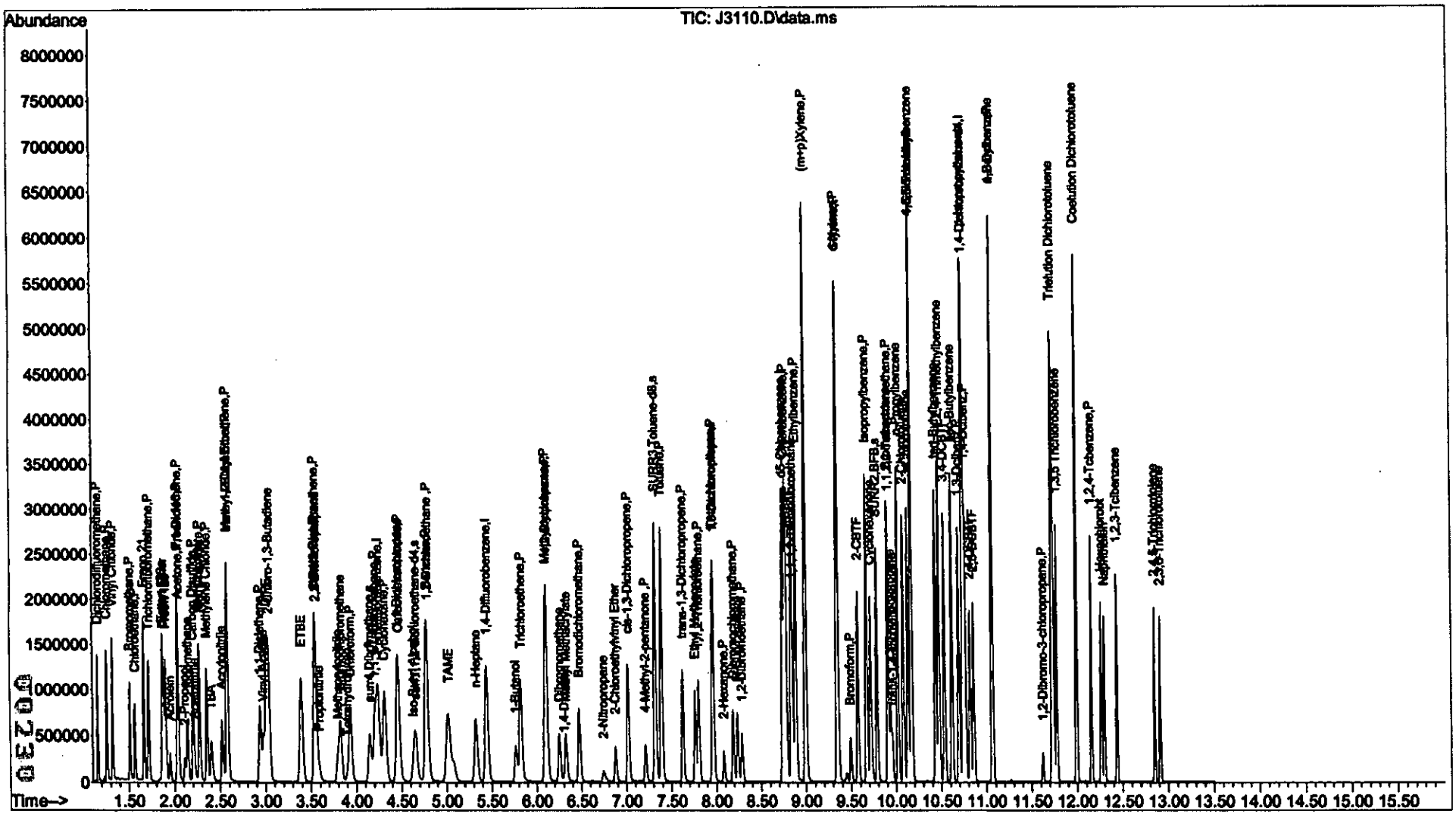
W011514.M Mon Feb 03 12:59:48 2014 Page: 1

00225

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3110.D
Misc :
Acq On : 3 Feb 2014 12:24 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 12:40:06 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



W011514.M Mon Feb 03 12:40:09 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1400634
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000 **Date Analyzed:** 2/ 4/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C **Calibration Date:** 1/15/14
Calibration ID: RC1400002
File ID: I:\ACQUDATA\msvoa12\Data\020414\J3136.D\ **Analysis Lot:** 378884
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	49.8	0.3121	0.3110	-0.4	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	47.4	0.7256	0.6879	-5.2	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	52.4	0.5124	0.5369	4.8	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	51.6	0.2166	0.2235	3.2	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	47.8	0.8431	0.8059	-4.4	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.1	0.3578	0.3516	-1.7	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	48.0	0.3846	0.3690	-4.1	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	50.2	0.5920	0.5940	0.3	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	48.3	0.1559	0.1506	-3.4	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	49.4	0.7240	0.7146	-1.3	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	49.6	2.236	2.220	-0.7	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	50.8	0.08620	0.08758	1.6	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	51.5	0.2222	0.2291	3.1	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	48.8	1.234	1.205	-2.4	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	46.2	0.4106	0.3790	-7.7	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	48.8	0.3165	0.3086	-2.5	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	49.3	2.218	2.187	-1.4	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	49.0	1.286	1.259	-2.1	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	49.0	0.4367	0.4282	-2.0	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	48.2	1.338	1.291	-3.5	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	52.1	0.6922	0.7218	4.3	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	54.2	0.1339	0.1451	8.4	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	47.9	1.915	1.834	-4.2	NA	± 20 %	Average RF
2-Hexanone	50.0	51.7	0.1480	0.1531	3.5	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	48.9	2.333	2.284	-2.1	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	50.1	2.206	2.210	0.2	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	50.1	0.1986	0.1990	0.2	NA	± 20 %	Average RF
Acetone	50.0	47.3	0.1032	0.09756	-5.5	NA	± 20 %	Average RF
Benzene	50.0	48.4	1.244	1.204	-3.3	NA	± 20 %	Average RF
Bromobenzene	50.0	47.9	0.7331	0.7024	-4.2	NA	± 20 %	Average RF
Bromochloromethane	50.0	51.8	0.2685	0.2783	3.6	NA	± 20 %	Average RF
Bromodichloromethane	50.0	48.5	0.3862	0.3745	-3.0	NA	± 20 %	Average RF
Bromoform	50.0	50.3	0.2704	0.2719	0.6	NA	± 20 %	Average RF
Bromomethane	50.0	44.5	0.4614	0.4111	-10.9	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	46.5	0.1242	0.1155	-7.0	NA	± 20 %	Average RF
Chlorobenzene	50.0	50.6	0.9035	0.9152	1.3	NA	± 20 %	Average RF
Chloroethane	50.0	50.5	0.4128	0.4171	1.1	NA	± 20 %	Average RF
Chloroform	50.0	49.5	0.7920	0.7841	-1.0	NA	± 20 %	Average RF
Chloromethane	50.0	52.2	0.7048	0.7363	4.5	NA	± 20 %	Average RF
Dibromochloromethane	50.0	51.9	0.2603	0.2699	3.7	NA	± 20 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000

Service Request: R1400634
Date Analyzed: 2/ 4/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\020414\J3136.D\

Calibration Date: 1/15/14
Calibration ID: RC1400002
Analysis Lot: 378884
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	53.6	0.5172	0.5539	7.1	NA	± 20 %	Average RF
Methylene Chloride	50.0	48.3	0.4329	0.4178	-3.5	NA	± 20 %	Average RF
Ethylbenzene	50.0	48.7	0.4847	0.4724	-2.5	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	50.7	0.3092	0.3135	1.4	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	48.6	2.618	2.543	-2.8	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	47.7	1.120	1.068	-4.6	NA	± 20 %	Average RF
Naphthalene	50.0	53.9	1.306	1.408	7.8	NA	± 20 %	Average RF
Styrene	50.0	53.3	0.9611	1.024	6.5	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	48.7	0.2622	0.2552	-2.7	NA	± 20 %	Average RF
Toluene	50.0	51.4	1.303	1.340	2.9	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	48.8	0.3186	0.3110	-2.4	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	47.2	0.7666	0.7241	-5.5	NA	± 20 %	Average RF
Vinyl Chloride	50.0	52.6	0.6849	0.7208	5.2	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	49.7	0.5091	0.5062	-0.6	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	51.6	0.4600	0.4748	3.2	NA	± 20 %	Average RF
m,p-Xylenes	100	102	0.5881	0.5971	1.5	NA	± 20 %	Average RF
n-Butylbenzene	50.0	52.3	1.933	2.023	4.6	NA	± 20 %	Average RF
n-Propylbenzene	50.0	49.7	3.017	3.001	-0.5	NA	± 20 %	Average RF
o-Xylene	50.0	51.0	0.5875	0.5992	2.0	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	50.0	2.512	2.511	0.0	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	48.7	1.795	1.747	-2.7	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	50.8	0.4373	0.4441	1.6	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	53.1	0.3738	0.3971	6.3	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	52.0	0.4617	0.4805	4.1	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	49.6	0.2921	0.2898	-0.8	NA	± 20 %	Average RF
Toluene-d8	50.0	51.4	1.242	1.276	2.7	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:58:16 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

KF 2/4/14

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	96	0.00
2	P	Dichlorodifluoromethane	0.5172	0.5539	-7.1	96	0.00
3	P	Chloromethane	0.7048	0.7363	-4.5	99	0.00
4	P	Vinyl Chloride	0.6849	0.7208	-5.2	98	0.00
5	P	Bromomethane	0.4614	0.4111	10.9	100	0.00
6	P	Chloroethane	0.4128	0.4171	-1.0	95	0.00
7		Freon 21	1.0060	1.0639	-5.8	102	0.00
8	P	Trichlorofluoromethane	0.7666	0.7241	5.5	93	0.00
9		Diethyl Ether	0.3353	0.2926	12.7	84	0.00
10		Freon 123a	0.5627	0.5170	8.1	90	0.00
11		Freon 123	0.6005	0.5806	3.3	95	0.00
12		Acrolein	0.0267	0.0472	MT -76.8#	156	0.00
13	P	1,1-Diclethene	0.3578	0.3516	1.7	97	0.00
14	P	Freon 113	0.3784	0.2792	26.2#	73	0.00 ⊗
15	P	Acetone	0.1032	0.0976	5.4	95	0.00
16		2-Propanol	0.0156	0.0152	2.6	89	0.00
17		Iodomethane	0.5098	0.5742	-12.6	94	0.00
18	P	Carbon Disulfide	1.3368	1.2623	5.6	92	0.00
19		Acetonitrile	0.0164	0.0147	10.4	86	0.00
20		Allyl Chloride	0.2529	0.2237	11.5	85	0.00
21	P	Methyl Acetate	0.2191	0.2085	4.8	89	0.00
22	P	Methylene Chloride	0.4329	0.4178	3.5	95	0.00
23		TBA	0.0260	0.0259	0.4	95	0.00
24		Acrylonitrile	0.1041	0.1000	3.9	92	0.00
25	P	Methyl-t-Butyl Ether	1.1200	1.0684	4.6	92	0.00
26	P	trans-1,2-Dichloroethene	0.4373	0.4441	-1.6	97	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.8431	0.8059	4.4	93	0.00
29		Vinyl Acetate	0.0642	0.0777	MT -21.0#	108	0.00
30		DIPE	1.6790	1.5679	6.6	91	0.00
31		2-Chloro-1,3-Butadiene	0.8763	0.8655	1.2	94	0.00
32		ETBE	1.3761	1.3562	1.4	95	0.00
33		2,2-Dichloropropane	0.6922	0.7218	-4.3	102	0.00
34	P	cis-1,2-Dichloroethene	0.5091	0.5062	0.6	98	0.00
35	P	2-Butanone	0.1339	0.1451	-8.4	103	0.00
36		Propionitrile	0.0372	0.0376	-1.1	99	0.00
37		Bromochloromethane	0.2685	0.2783	-3.6	103	0.00
38		Methacrylonitrile	0.1197	0.1214	-1.4	98	0.00
39		Tetrahydrofuran	0.0968	0.0865	10.6	94	0.00
40	P	Chloroform	0.7920	0.7841	1.0	95	0.00
41	P	1,1,1-Trichloroethane	0.7256	0.6879	5.2	93	0.00
42		TAME	1.1333	1.1471	-1.2	100	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	98	0.00
44	P	Cyclohexane	0.3235	0.2835	12.4	88	0.00
45	s	surr4,Dibrflmethane	0.2921	0.2898	0.8	98	0.00
46	P	Carbontetrachloride	0.1242	0.1155	7.0	92	0.00
47		1,1-Dichloropropene	0.3846	0.3690	4.1	95	0.00

W011514.M Tue Feb 04 12:59:39 2014 Page: 1

00333

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:58:16 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial 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)
48	s	surr1,1,2-dichloroethane-d4	0.3518	0.3243	7.8	91	0.00
49	P	Benzene	1.2442	1.2036	3.3	96	0.00
50	P	1,2-Dichloroethane	0.4106	0.3790	7.7	92	0.00
51		Iso-Butyl Alcohol	0.0083	0.0081	2.4	95	0.00
52		n-Heptane	0.3362	0.2902	13.7	90	0.00
53		1-Butanol	0.0044	0.0046	-4.5	101	0.00
54	P	Trichloroethene	0.3186	0.3110	2.4	98	0.00
55	P	Methylcyclohexane	0.3526	0.3293	6.6	95	0.00
56	P	1,2-Diclpropane	0.3165	0.3086	2.5	95	0.00
57		Dibromomethane	0.1473	0.1499	-1.8	102	0.00
58		1,4-Dioxane	0.0018	0.0019	-5.6	109	0.00
59		Methyl Methacrylate	0.1447	0.1444	0.2	97	0.00
60	P	Bromodichloromethane	0.3862	0.3745	3.0	94	0.00
61		2-Nitropropane	0.0511	0.0239	M 53.2#	47#	0.00
62		2-Chloroethylvinyl Ether	0.1097	0.1444	M -31.6#	125	0.00
63	P	cis-1,3-Dichloropropene	0.4600	0.4748	-3.2	99	0.00
64	P	4-Methyl-2-pentanone	0.1986	0.1990	-0.2	100	0.00
65	s	SURR3,Toluene-d8	1.2419	1.2757	-2.7	101	0.00
66	P	Toluene	1.3028	1.3401	-2.9	101	0.00
67	P	trans-1,3-Dichloropropene	0.3738	0.3971	-6.2	99	0.00
68		Ethyl Methacrylate	0.2959	0.3177	-7.4	101	0.00
69	P	1,1,2-Trichloroethane	0.2166	0.2235	-3.2	103	0.00
70	s	SURR2,BFB	0.4617	0.4805	-4.1	103	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	102	0.00
72	P	Tetrachloroethene	0.2622	0.2552	2.7	100	0.00
73	P	2-Hexanone	0.1480	0.1531	-3.4	104	0.00
74		1,3-Dichloropropane	0.4367	0.4282	1.9	100	0.00
75	P	Dibromochloromethane	0.2603	0.2699	-3.7	99	0.00
76		N-Butyl Acetate	0.3680	0.3697	-0.5	97	0.00
77	P	1,2-Dibromoethane	0.2222	0.2291	-3.1	103	0.00
78	P	Chlorobenzene	0.9035	0.9152	-1.3	101	0.00
79		3-CBTF	0.4519	0.4457	1.4	105	0.00
80		4-CBTF	0.4020	0.4058	-0.9	108	0.00
81		1,1,1,2-Tetrachloroethane	0.3121	0.3110	0.4	98	0.00
82	P	Ethylbenzene	0.4847	0.4724	2.5	100	0.00
83	P	(m+p)Xylene	0.5881	0.5971	-1.5	101	0.00
84	P	o-Xylene	0.5875	0.5992	-2.0	102	0.00
85	P	Styrene	0.9611	1.0237	-6.5	101	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	107	0.00
87	P	Bromoform	0.2704	0.2719	-0.6	96	0.00
88		2-CBTF	0.8437	0.8029	4.8	105	0.00
89	P	Isopropylbenzene	2.6178	2.5432	2.8	101	0.00
90		Cyclohexanone	0.0279	0.0520	M -86.4#	211#	0.00
91		trans-1,4-Dichloro-2-Butene	0.1092	0.1107	-1.4	100	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5124	0.5369	-4.8	110	0.00
93		Bromobenzene	0.7331	0.7024	4.2	102	0.00

W011514.M Tue Feb 04 12:59:39 2014 00234 Page: 2

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:58:16 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial 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)
94		1,2,3-Trichloropropane	0.1559	0.1506	3.4	107	0.00
95		n-Propylbenzene	3.0171	3.0010	0.5	103	0.00
96		2-Chlorotoluene	1.9147	1.8338	4.2	101	0.00
97		3-Chlorotoluene	1.9529	1.9078	2.3	105	0.00
98		4-Chlorotoluene	2.3334	2.2837	2.1	101	0.00
99		1,3,5-Trimethylbenzene	2.2184	2.1872	1.4	101	0.00
100		tert-Butylbenzene	1.7948	1.7465	2.7	103	0.00
101		1,2,4-Trimethylbenzene	2.2355	2.2196	0.7	102	0.00
102		3,4-DCBTF	0.5786	0.5723	1.1	109	0.00
103		sec-Butylbenzene	2.5116	2.5105	0.0	105	0.00
104		p-Isopropyltoluene	2.2061	2.2100	-0.2	104	0.00
105	P	1,3-Dclbenz	1.2864	1.2594	2.1	104	0.00
106	P	1,4-Dclbenz	1.3382	1.2912	3.5	104	0.00
107		2,4-DCBTF	0.5170	0.5160	0.2	110	0.00
108		2,5-DCBTF	0.5968	0.5785	3.1	108	0.00
109		n-Butylbenzene	1.9328	2.0225	-4.6	107	0.00
110	P	1,2-Dclbenz	1.2345	1.2048	2.4	104	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0862	0.0876	-1.6	109	0.00
112		Trielution Dichlorotoluene	0.9857	0.9784	0.7	107	0.00
113		1,3,5 Trichlorobenzene	0.8444	0.8088	4.2	108	0.00
114		Coelution Dichlorotoluene	1.0443	1.0540	-0.9	109	0.00
115	P	1,2,4-Tcbenzene	0.7240	0.7146	1.3	107	0.00
116		Hexachlorobt	0.3092	0.3135	-1.4	113	0.00
117		Naphthalen	1.3057	1.4080	-7.8	113	0.00
118		1,2,3-Tclbenzene	0.5920	0.5940	-0.3	110	0.00
119		2,4,5-Trichlorotolene	0.4130	0.4203	-1.8	114	0.00
120		2,3,6-Trichlorotoluene	0.3700	0.3840	-3.8	120	0.00

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

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12 PQ 1401146-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:36:48 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	834331	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1279534	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1200437	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	644637	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	370821	49.61	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.22%				
48) surr1,1,2-dichloroetha...	4.658	65	415015	46.10	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 92.20%				
65) SURR3,Toluene-d8	7.322	98	1632309	51.36	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.72%				
70) SURR2,BFB	9.785	95	614876	52.04	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.08%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	462163	53.55	ppb		99
3) Chloromethane	1.262	50	614305	52.23	ppb		99
4) Vinyl Chloride	1.323	62	601375	52.62	ppb		99
5) Bromomethane	1.512	94	342963	44.54	ppb		98
6) Chloroethane	1.567	64	348035	50.53	ppb		99
7) Freon 21	1.664	67	887655	52.88	ppb		98
8) Trichlorofluoromethane	1.719	101	604164	47.23	ppb		99
9) Diethyl Ether	1.878	59	244160	43.64	ppb		94
10) Freon 123a	1.865	67	431330	45.94	ppb		90
11) Freon 123	1.902	83	484446	48.35	ppb		99
12) Acrolein	1.951	56	196885	393.70	ppb		97
13) 1,1-Diclethene	2.036	96	293373	49.13	ppb		93
14) Freon 113	2.036	101	232910	36.89	ppb		89
15) Acetone	2.042	43	81397	47.27	ppb		97
16) 2-Propanol	2.115	45	253321	975.98	ppb		100
17) Iodomethane	2.146	142	479037	56.31	ppb		99
18) Carbon Disulfide	2.207	76	1053198	47.21	ppb		100
19) Acetonitrile	2.219	40	61386	223.82	ppb		97
20) Allyl Chloride	2.274	76	186648	44.23	ppb	#	79
21) Methyl Acetate	2.274	43	173999	47.59	ppb		98
22) Methylene Chloride	2.353	84	348575	48.25	ppb		94
23) TBA	2.408	59	432089	995.09	ppb		99
24) Acrylonitrile	2.524	53	417281	240.33	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	891389	47.69	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	370511	50.78	ppb		93
28) 1,1-Diclethane	2.938	63	672348	47.79	ppb		100
29) Vinyl Acetate	2.981	86	64826	60.50	ppb	#	92
30) DIPE	3.012	45	1308170	46.69	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	722153	49.39	ppb		93
32) ETBE	3.396	59	1131551	49.28	ppb		98
33) 2,2-Dichloropropane	3.554	77	602253	52.14	ppb		97
34) cis-1,2-Dichloroethene	3.542	96	422371	49.71	ppb		89
35) 2-Butanone	3.542	43	121096	54.22	ppb		98
36) Propionitrile	3.591	54	156842	252.46	ppb		94
37) Bromochloromethane	3.829	130	232166	51.82	ppb		90

KR 2/4/14

W011514.M Tue Feb 04 12:36:50 2014 00236 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:36:48 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	101309	50.73	ppb		96
39) Tetrahydrofuran	3.908	42	72204	44.72	ppb		96
40) Chloroform	3.938	83	654167	49.50	ppb		94
41) 1,1,1-Trichloroethane	4.213	97	573975	47.40	ppb		94
42) TAME	5.023	73	957047	50.61	ppb		93
44) Cyclohexane	4.316	41	362783	43.82	ppb		91
46) Carbontetrachloride	4.469	121	147830	46.52	ppb		99
47) 1,1-Dichloropropene	4.463	75	472151	47.97	ppb		96
49) Benzene	4.780	78	1540008	48.37	ppb		96
50) 1,2-Dichloroethane	4.786	62	484961	46.15	ppb		98
51) Iso-Butyl Alcohol	4.639	43	208418	984.38	ppb		89
52) n-Heptane	5.328	43	371317	43.16	ppb		92
53) 1-Butanol	5.767	56	292473	2609.29	ppb		97
54) Trichloroethene	5.828	130	397936	48.81	ppb		95
55) Methylcyclohexane	6.102	55	421325	46.69	ppb		94
56) 1,2-Diclpropane	6.115	63	394841	48.75	ppb		98
57) Dibromomethane	6.255	93	191782	50.89	ppb		94
58) 1,4-Dioxane	6.310	88	41530	891.45	ppb		92
59) Methyl Methacrylate	6.328	69	184762	49.88	ppb		92
60) Bromodichloromethane	6.474	83	479247	48.49	ppb		98
61) 2-Nitropropane	6.749	41	61244	46.87	ppb		95
62) 2-Chloroethylvinyl Ether	6.877	63	184800	65.84	ppb		95
63) cis-1,3-Dichloropropene	7.023	75	607521	51.61	ppb		98
64) 4-Methyl-2-pentanone	7.212	43	254599	50.08	ppb		95
66) Toluene	7.395	91	1714692	51.43	ppb		98
67) trans-1,3-Dichloropropene	7.627	75	508125	53.13	ppb		95
68) Ethyl Methacrylate	7.767	69	406500	53.69	ppb		93
69) 1,1,2-Trichloroethane	7.809	97	285959	51.58	ppb		99
72) Tetrachloroethene	7.962	164	306310	48.67	ppb		99
73) 2-Hexanone	8.084	43	183803	51.73	ppb		97
74) 1,3-Dichloropropane	7.968	76	513998	49.02	ppb		97
75) Dibromochloromethane	8.187	129	324053	51.85	ppb		98
76) N-Butyl Acetate	8.236	43	443849	50.23	ppb		97
77) 1,2-Dibromoethane	8.285	107	274982	51.54	ppb		96
78) Chlorobenzene	8.767	112	1098634	50.64	ppb		99
79) 3-CBTF	8.785	180	535011	49.32	ppb		98
80) 4-CBTF	8.840	180	487118	50.47	ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	373287	49.81	ppb		97
82) Ethylbenzene	8.889	106	567046	48.73	ppb		96
83) (m+p)Xylene	8.998	106	1433503	101.52	ppb		96
84) o-Xylene	9.346	106	719260	50.99	ppb		93
85) Styrene	9.358	104	1228861	53.26	ppb		95
87) Bromoform	9.492	173	175306	50.28	ppb		100
88) 2-CBTF	9.577	180	517562	47.58	ppb		97
89) Isopropylbenzene	9.669	105	1639464	48.58	ppb		98
90) Cyclohexanone	9.718	55	669831	1860.93	ppb		97
91) trans-1,4-Dichloro-2-B...	9.961	53	71353	50.68	ppb		91
92) 1,1,2,2-Tetrachloroethane	9.913	83	346113	52.40	ppb		94
93) Bromobenzene	9.907	156	452810	47.91	ppb	#	87
94) 1,2,3-Trichloropropane	9.943	110	97086	48.29	ppb		98
95) n-Propylbenzene	10.022	91	1934580	49.73	ppb		99
96) 2-Chlorotoluene	10.083	91	1182135	47.89	ppb		95

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:36:48 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

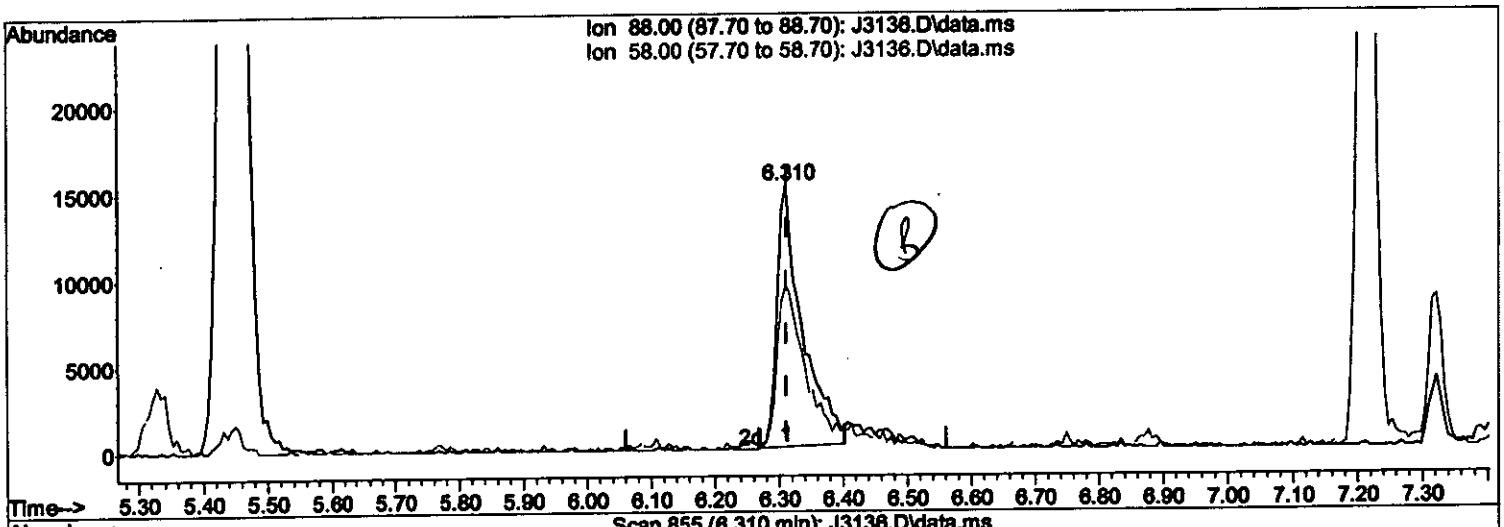
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1229837	48.84	ppb	98
98)	4-Chlorotoluene	10.169	91	1472184	48.94	ppb	97
99)	1,3,5-Trimethylbenzene	10.169	105	1409948	49.30	ppb	99
100)	tert-Butylbenzene	10.437	119	1125875	48.66	ppb	99
101)	1,2,4-Trimethylbenzene	10.474	105	1430850	49.64	ppb	97
102)	3,4-DCBTF	10.535	214	368954	49.46	ppb	98
103)	sec-Butylbenzene	10.620	105	1618388	49.98	ppb	100
104)	p-Isopropyltoluene	10.742	119	1424629	50.09	ppb	98
105)	1,3-Dclbenz	10.699	146	811856	48.95	ppb	100
106)	1,4-Dclbenz	10.766	146	832330	48.24	ppb	99
107)	2,4-DCBTF	10.821	214	332664	49.91	ppb	97
108)	2,5-DCBTF	10.858	214	372940	48.47	ppb	98
109)	n-Butylbenzene	11.065	91	1303804	52.32	ppb	99
110)	1,2-Dclbenz	11.065	146	776678	48.80	ppb	100
111)	1,2-Dibromo-3-chloropr...	11.626	157	56459	50.80	ppb	90
112)	Trielution Dichlorotol...	11.729	125	1892110	148.88	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	521406	47.90	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1358934	100.93	ppb	98
115)	1,2,4-Tcbenzene	12.156	180	460664	49.35	ppb	98
116)	Hexachlorobt	12.266	225	202093	50.70	ppb	97
117)	Naphthalen	12.302	128	907678	53.92	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	382890	50.17	ppb	95
119)	2,4,5-Trichlorotolene	12.851	159	270966	50.89	ppb	95
120)	2,3,6-Trichlorotoluene	12.912	159	247527	51.88	ppb	99

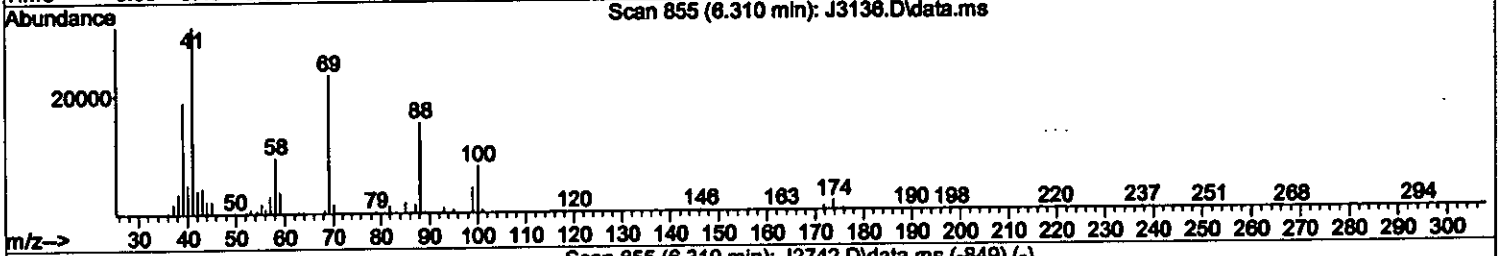
(#) = qualifier out of range (m) = manual integration (+) = signals summed

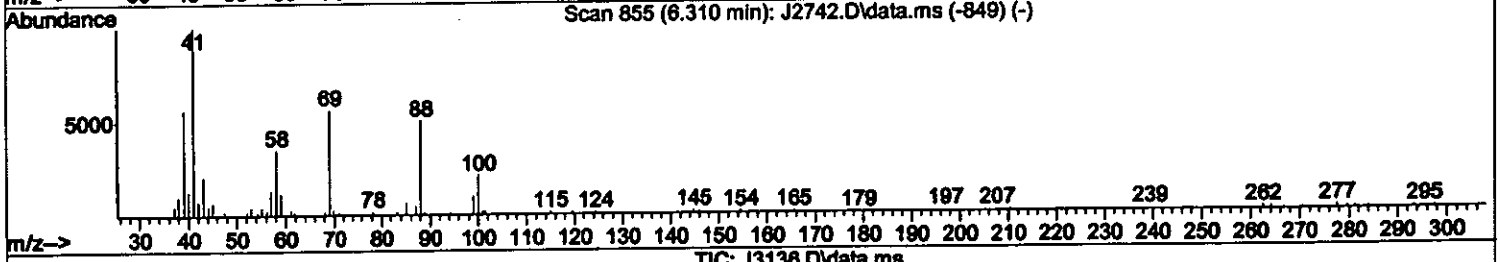
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:36:48 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3136.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 891.45 ppb

response 41530

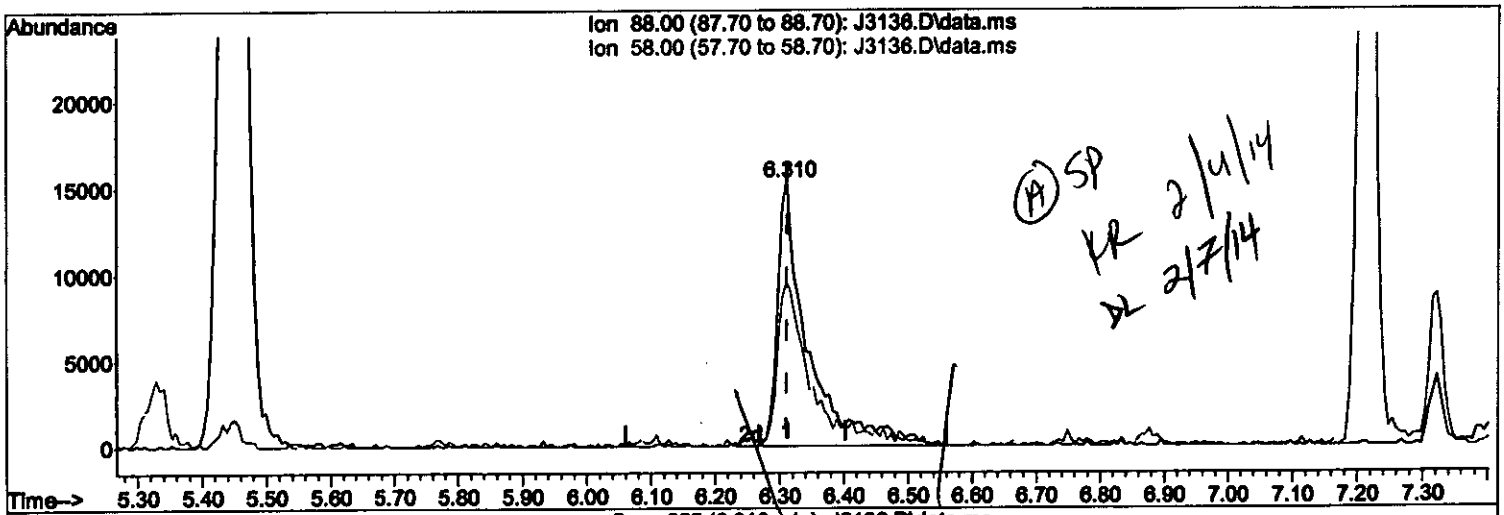
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	61.86
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Tue Feb 04 12:58:12 2014 00239 Page: 1

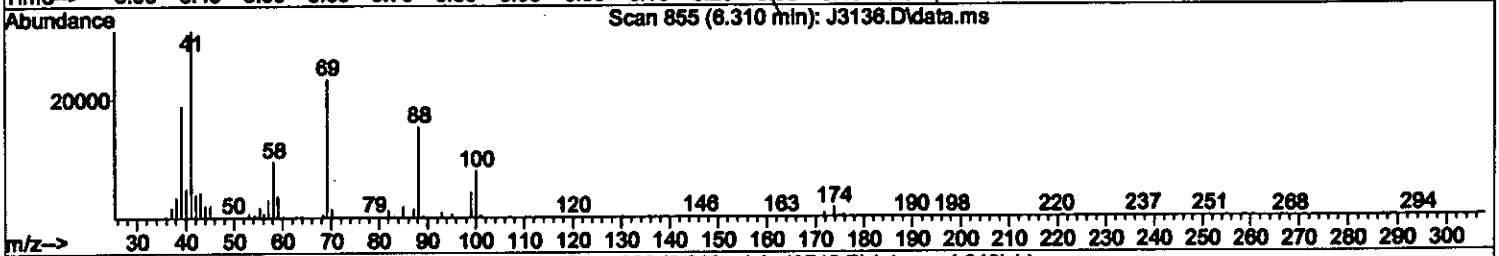
Quantitation Report (Qedit)

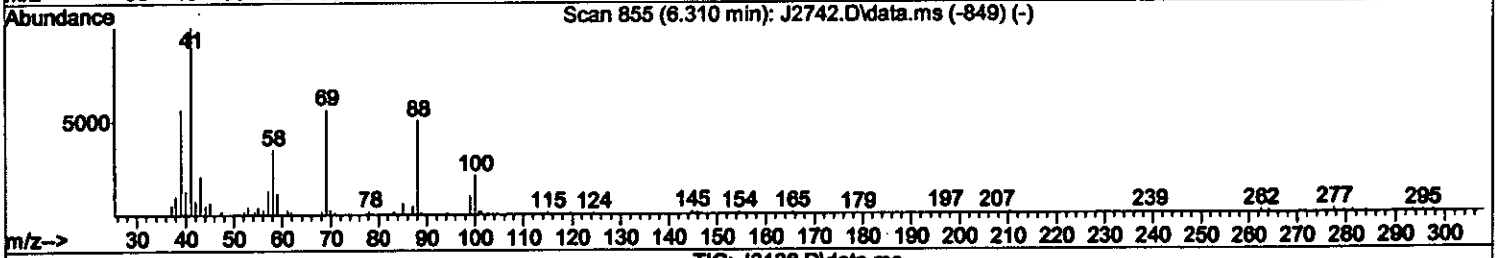
Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:36:48 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



(A) SP 2/4/14
KR 2/7/14
DL 2/7/14





TIC: J3136.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 1061.43 ppb m

response 49449

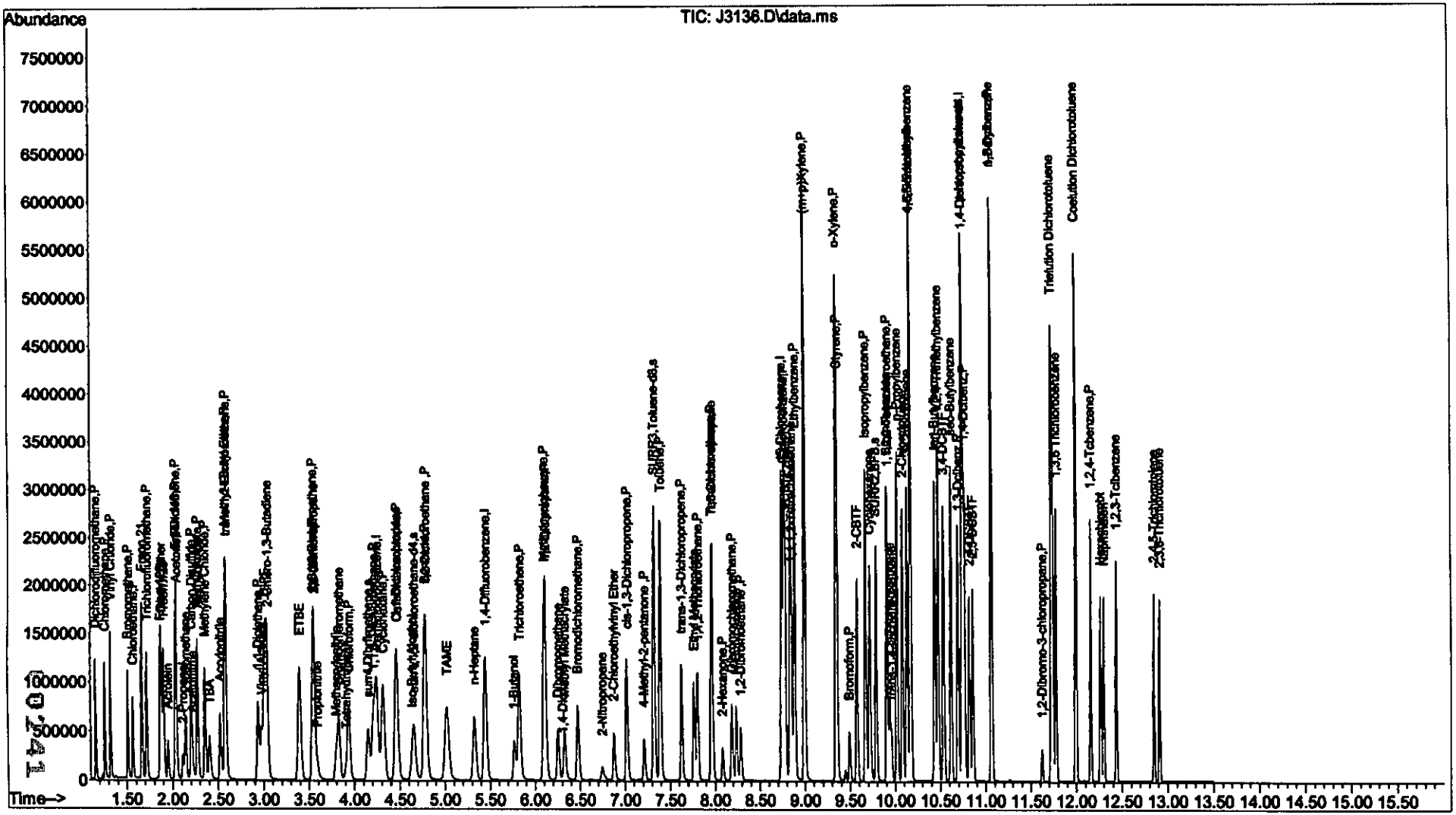
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	61.86
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Tue Feb 04 12:58:19 2014 00240 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3136.D
Misc :
Acq On : 4 Feb 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 12:36:48 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



W011514.M Tue Feb 04 12:36:52 2014 Page: 4

ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00242

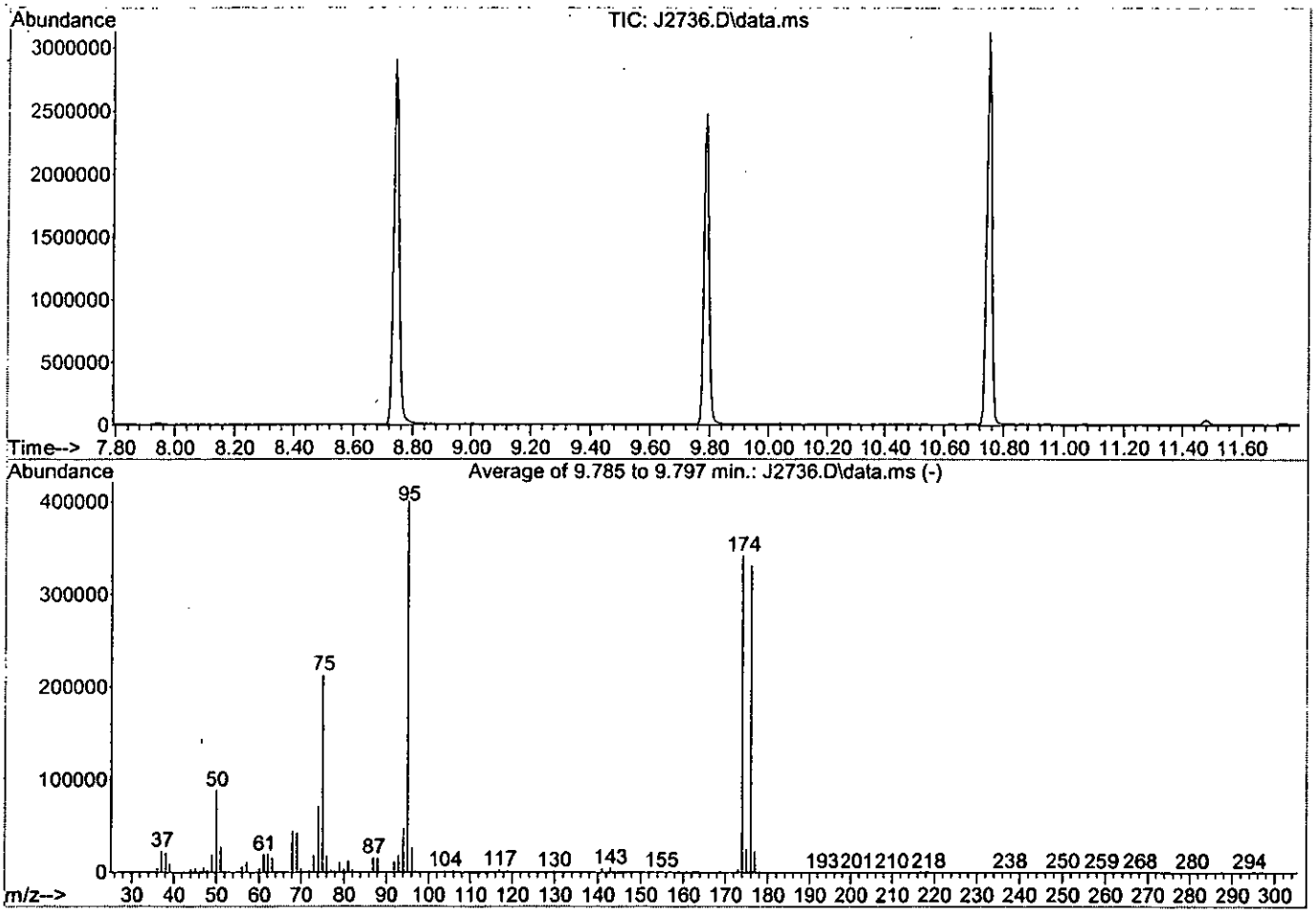
BFB

```
Data Path : I:\ACQUDATA\msvoa12\Data\011514\
Data File : J2736.D
Acq On    : 15 Jan 2014    6:54 pm
Operator  : K.Ruest
Sample    : TUNE
Misc      :
ALS Vial  : 13   Sample Multiplier: 1

Integration File: INTP60.P

Method    : I:\ACQUDATA\msvoa12\Methods\W011514.M
Title     : MS#12 - 8260B WATERS 10mL Purge
Last Update  : Wed Jan 15 16:32:18 2014
```

KR 1/16/14



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.1	88349	PASS
75	95	30	60	53.1	212821	PASS
95	95	100	100	100.0	400555	PASS
96	95	5	9	6.5	25910	PASS
173	174	0.00	2	1.0	3532	PASS
174	95	50	120	85.3	341739	PASS
175	174	5	9	7.3	24797	PASS
176	174	95	101	96.8	330880	PASS
177	176	5	9	6.6	21952	PASS

W011514.M Thu Jan 16 09:36:05 2014 00243 Page: 1

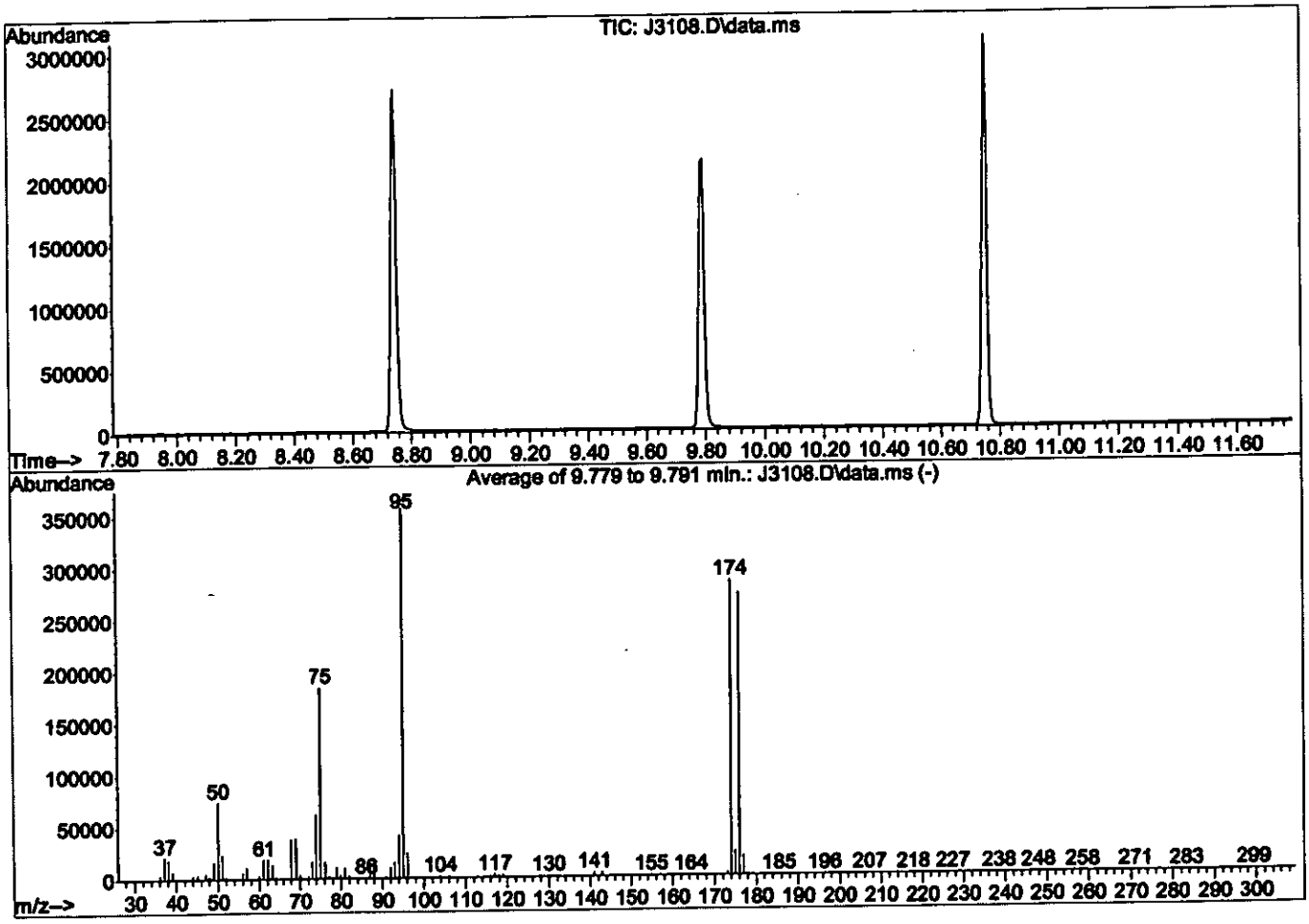
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3108.D
Acq On : 3 Feb 2014 11:03 am
Operator : K.Ruest
Sample : TUNE RQ1401093-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Jan 16 12:02:56 2014

KR 2/3/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.7	74021	PASS
75	95	30	60	51.7	184612	PASS
95	95	100	100	100.0	357205	PASS
96	95	5	9	6.7	23798	PASS
173	174	0.00	2	1.0	2918	PASS
174	95	50	120	79.8	284928	PASS
175	174	5	9	8.0	22886	PASS
176	174	95	101	95.7	272725	PASS
177	176	5	9	6.6	18086	PASS

W011514.M Mon Feb 03 12:23:14 2014 Page: 1

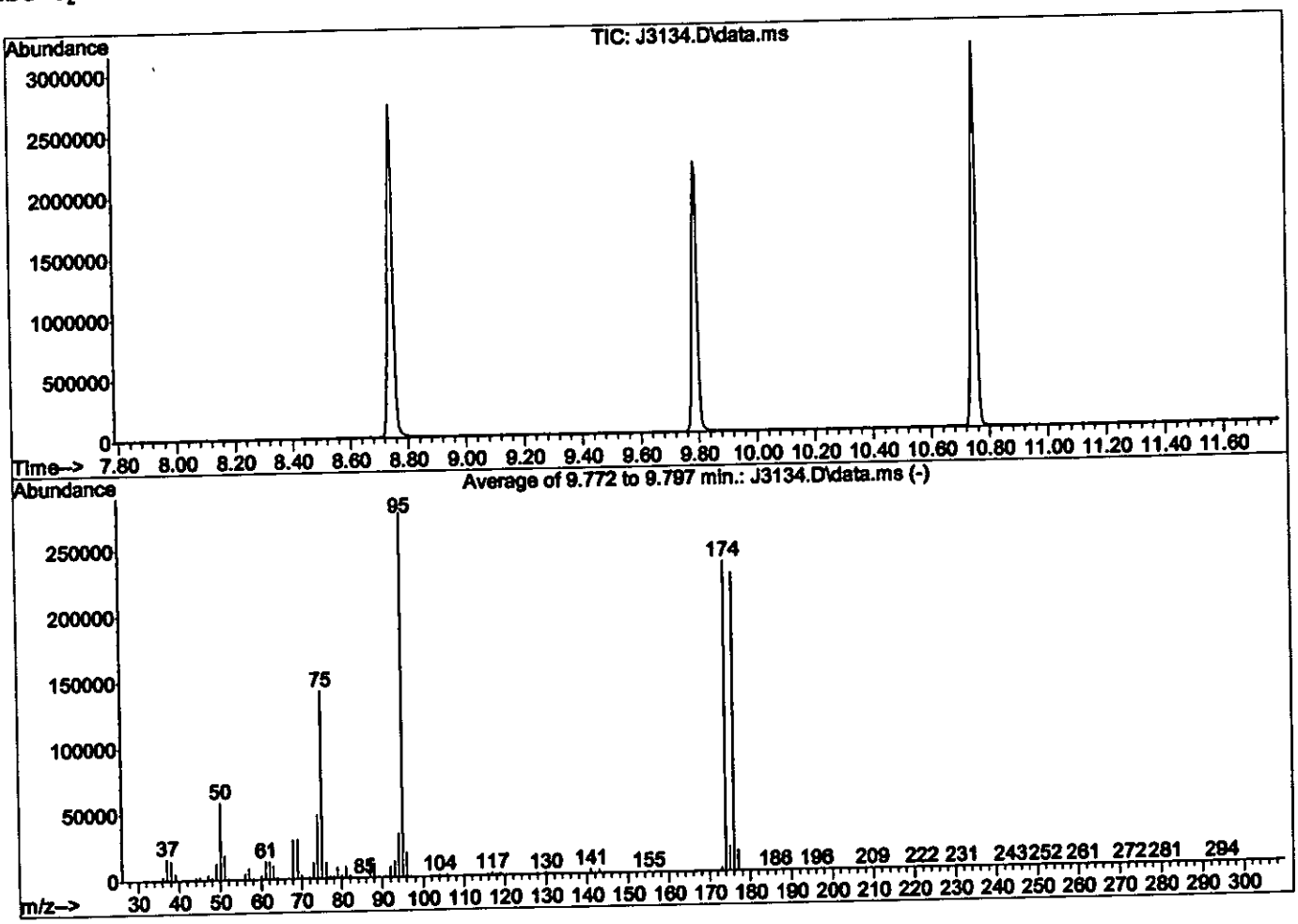
BFB

```
Data Path : I:\ACQUDATA\msvoa12\Data\020414\
Data File : J3134.D
Acq On    :  4 Feb 2014  11:06 am
Operator  : K.Ruest
Sample    : TUNE   RQ M01146-01
Misc      :
ALS Vial  : 3   Sample Multiplier: 1

Integration File: INTP60.P

Method    : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title     : MS#12 - 8260B WATERS 10mL Purge
Last Update  : Thu Jan 16 12:02:56 2014
```

KR 2/4/14



Spectrum Information: Average of 9.772 to 9.797 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.1	58266	PASS
75	95	30	60	51.4	141938	PASS
95	95	100	100	100.0	275886	PASS
96	95	5	9	6.6	18288	PASS
173	174	0.00	2	1.1	2689	PASS
174	95	50	120	85.1	234853	PASS
175	174	5	9	7.9	18548	PASS
176	174	95	101	96.1	225726	PASS
177	176	5	9	6.8	15407	PASS

00245

W011514.M Tue Feb 04 11:31:07 2014 Page: 1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/3/14 14:16
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1401083-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3113.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.24**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/3/14 14:16
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1401083-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3113.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.87**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.23**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	2/3/14 14:16	
Dibromofluoromethane	100	85-115	2/3/14 14:16	
Toluene-d8	102	85-120	2/3/14 14:16	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/3/14 1416

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1401083-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3113.D
Misc :
Acq On : 3 Feb 2014 2:16 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1400283-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 14:31:45 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	822235	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1239023	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1165240	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	585818	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	361085	49.89	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.78%				
48) surr1,1,2-dichloroetha...	4.664	65	401810	46.09	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 92.18%				
65) SURR3,Toluene-d8	7.322	98	1564391	50.83	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.66%				
70) SURR2,BFB	9.785	95	571698	49.97	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.94%				
Target Compounds							Qvalue
5) Bromomethane	1.524	94	KBH ~~1705~~ 0.24	~~0.22~~	ppb	m#(R)	47 <
~~12) Acrolein~~	~~2.012~~	~~56~~	~~200~~	~~0.92~~	~~ppb~~	~~#~~	~~55~~
~~15) Acetone~~	~~2.049~~	~~43~~	~~1153~~	~~0.68~~	~~ppb~~		~~69~~
~~16) 2-Propanol~~	~~2.036~~	~~45~~	~~312~~	~~1.22~~	~~ppb~~		~~79~~
17) Iodomethane	2.152	142	1699	0.20	ppb		95 MD
19) Acetonitrile	2.170	40	821	~~3.04~~	ppb	#	1
20) Allyl Chloride	2.207	76	~~1102~~	0.26	ppb	#	1
35) 2-Butanone	3.554	~~43~~	780	0.35	ppb	#	49
39) Tetrahydrofuran	~~3.853~~	42	373	0.23	ppb	#	39
90) Cyclohexanone	9.718	55	705	2.16	ppb		94 MD
112) Trielution Dichlorotol...	11.730	125	4839	0.42	ppb		98
113) 1,3,5 Trichlorobenzene	11.784	180	2097	0.21	ppb	#	71
~~114) Coelution Dichlorotoluene~~	~~11.998~~	~~125~~	~~4017~~	~~0.33~~	~~ppb~~	~~#~~	~~90~~
115) 1,2,4-Tcbenzene	12.162	180	2036	0.24	ppb	#	74
116) Hexachlorobt	12.266	225	3153	0.87	ppb	#	79
117) Naphthalen	12.303	128	3448	0.23	ppb		89
118) 1,2,3-Tclbenzene	12.437	180	3048	0.44	ppb	#	81 <
119) 2,4,5-Trichlorotolene	12.851	159	7484	1.55	ppb	#	86 MD
120) 2,3,6-Trichlorotoluene NT/kp	12.851	159	7484	1.73	ppb		96

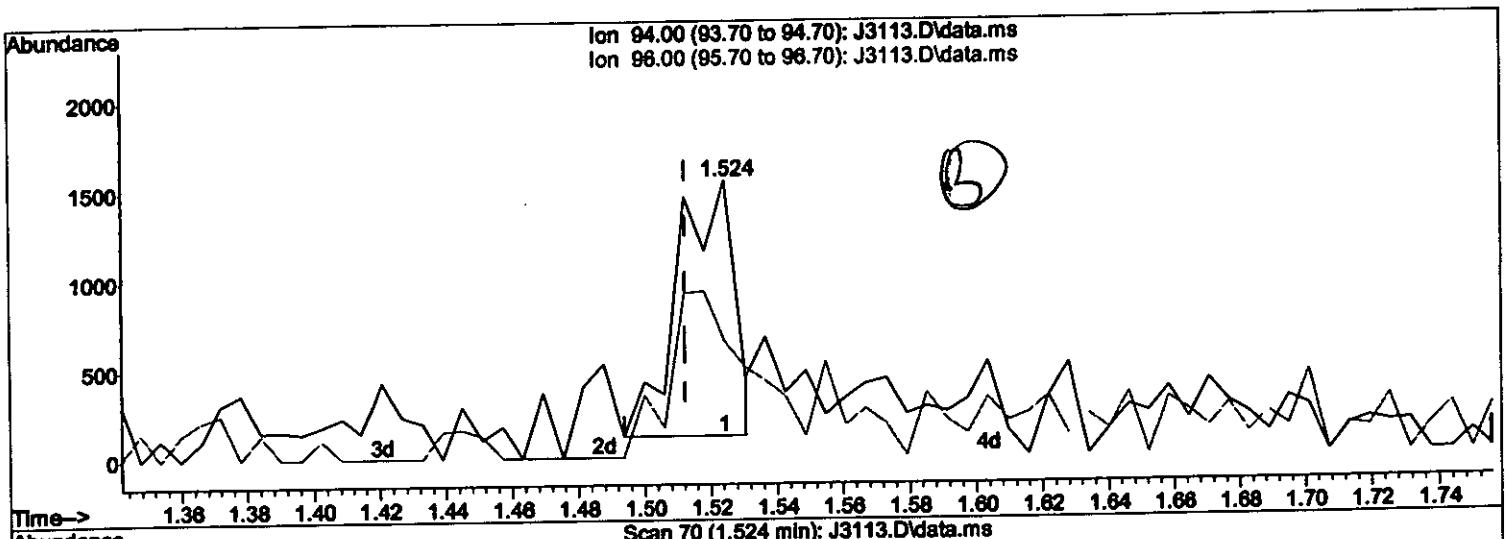
(#) = qualifier out of range (m) = manual integration (+) = signals summed

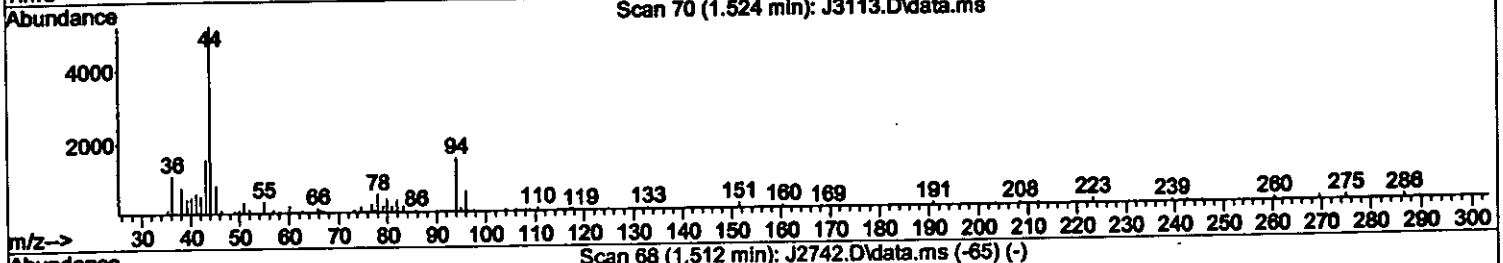
KP 2/4/14

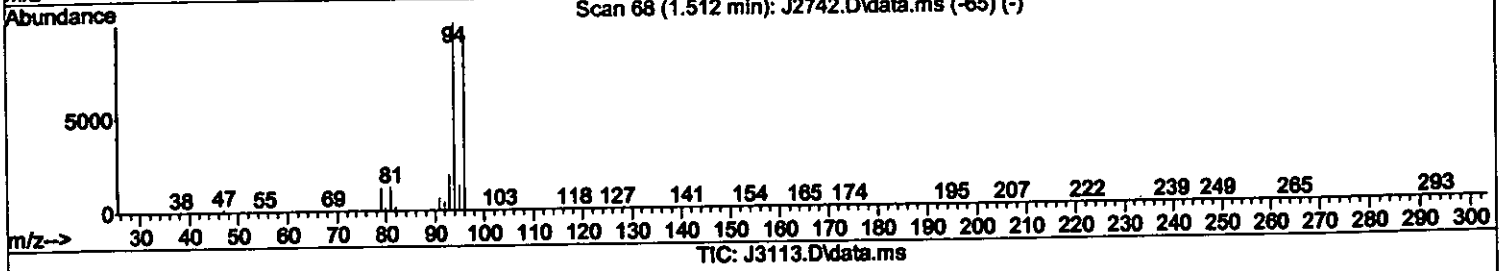
Quantitation Report (Qedit)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3113.D
Misc :
Acq On : 3 Feb 2014 2:16 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 14:31:45 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3113.D\data.ms

(5) Bromomethane (P)

1.524min (+0.012) 0.22 ppb

response 1705

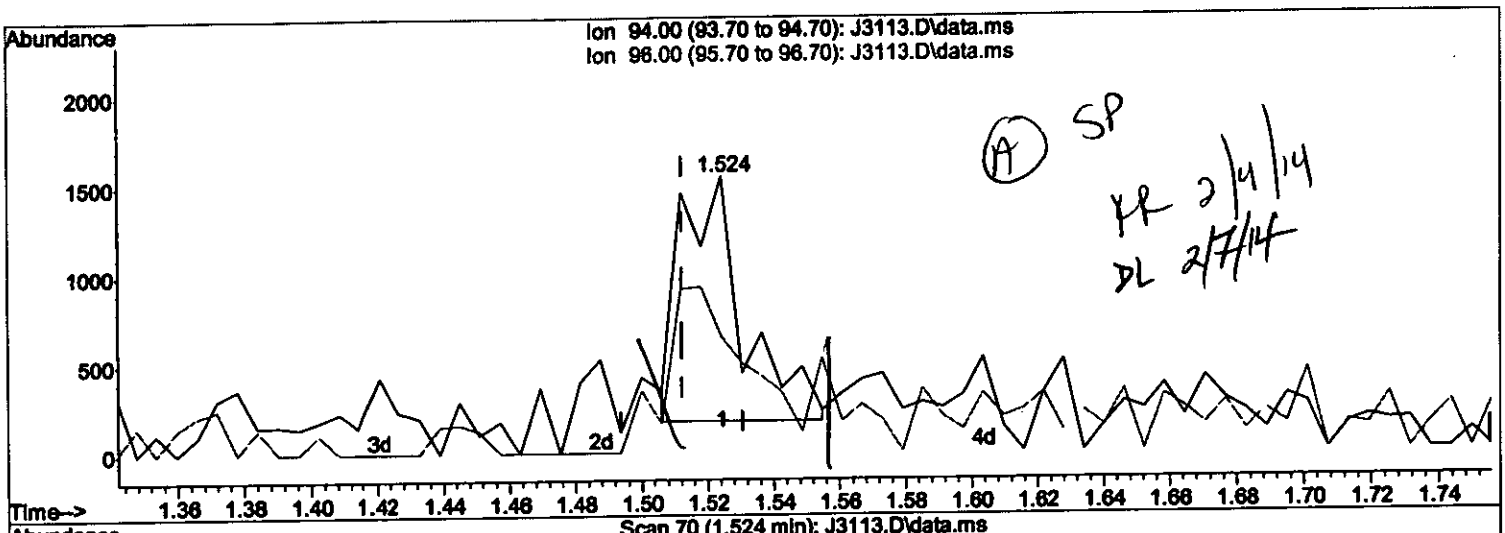
Ion	Exp%	Act%
94.00	100	100
96.00	92.60	42.00#
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Tue Feb 04 16:19:30 2014 Page: 1

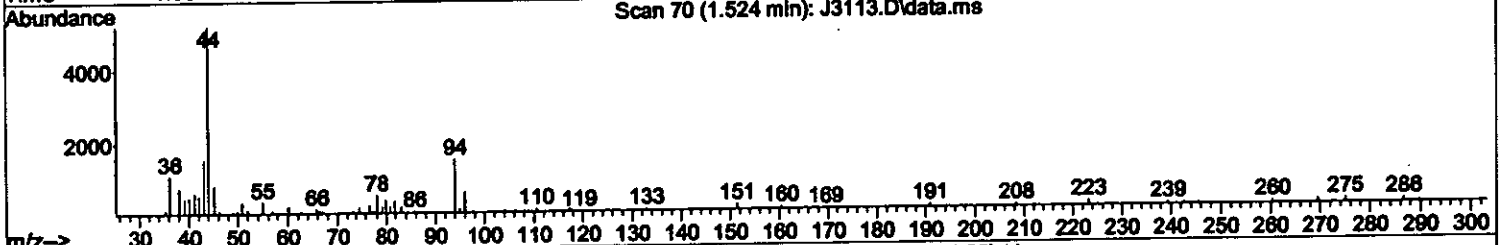
Quantitation Report (Qedit)

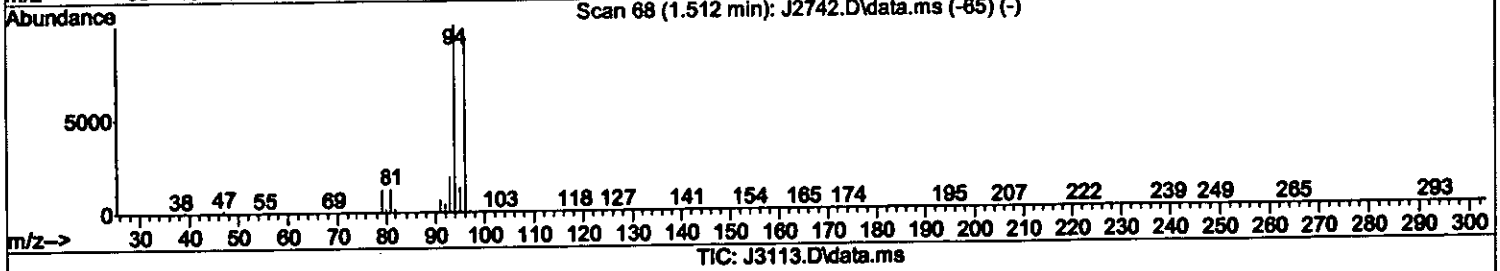
Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3113.D
Misc :
Acq On : 3 Feb 2014 2:16 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 14:31:45 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



SP 2/4/14
DL 2/7/14





TIC: J3113.D\data.ms

(5) Bromomethane (P)

1.524min (+0.012) 0.24 ppb m

response 1804

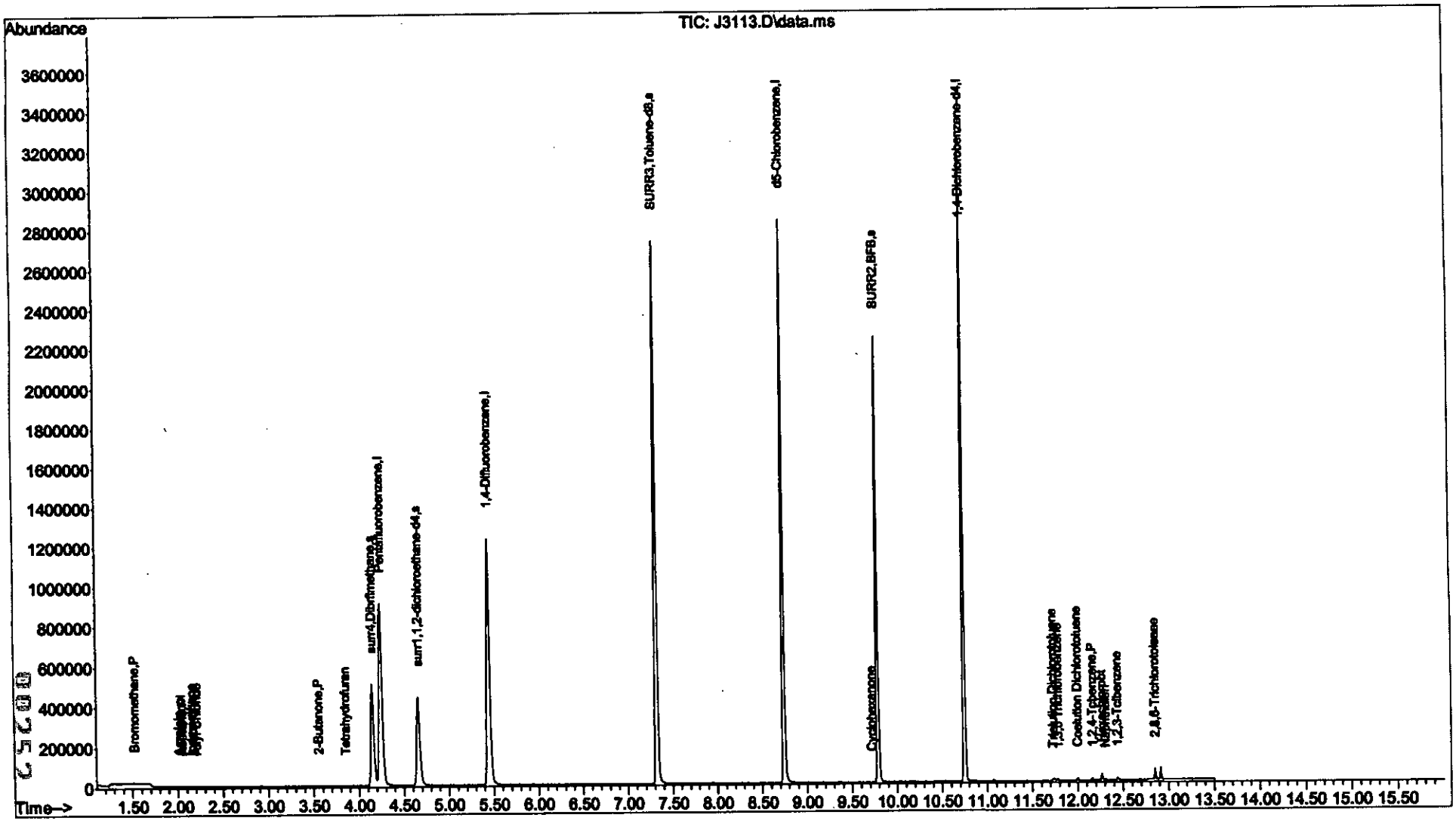
Ion	Exp%	Act%
94.00	100	100
96.00	92.60	42.00#
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Tue Feb 04 16:19:49 2014 Page: 1

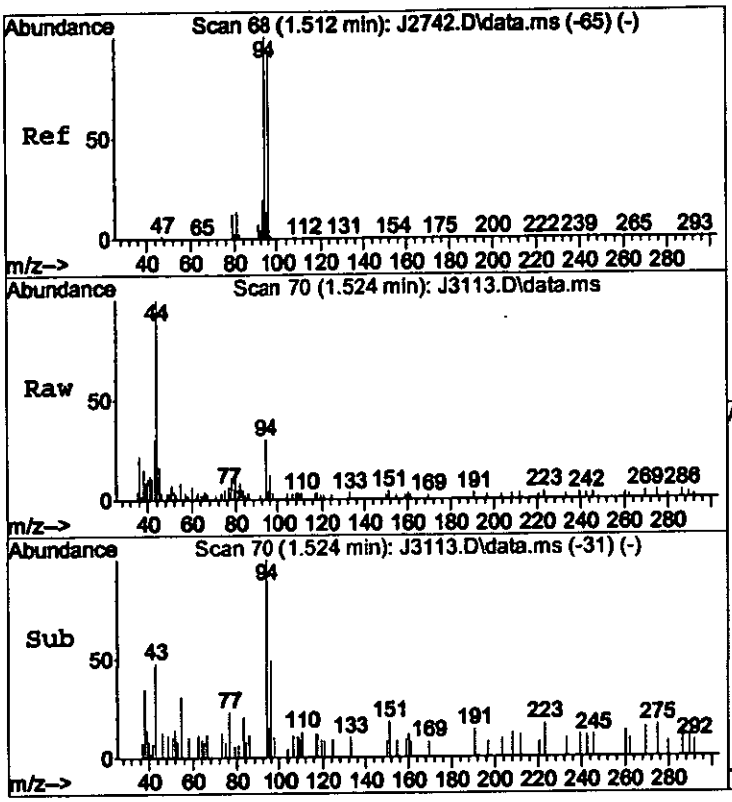
Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3113.D
Misc :
Acq On : 3 Feb 2014 2:16 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 14:31:45 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



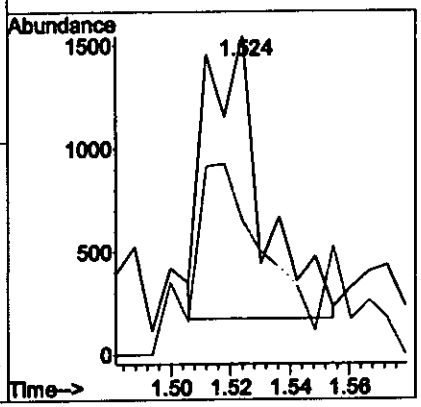
W011514.M Mon Feb 03 14:31:47 2014 Page: 2

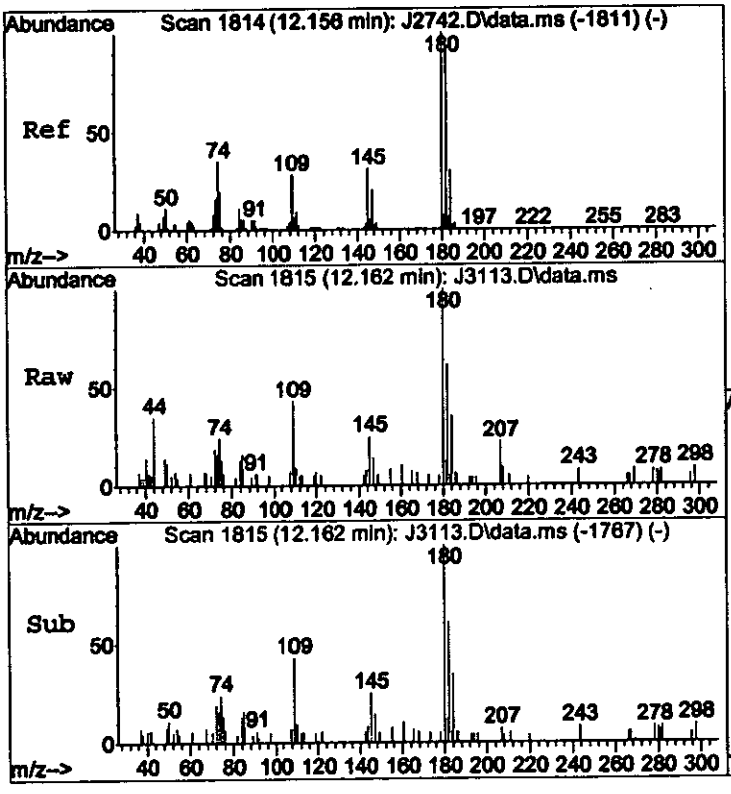


#5
Bromomethane
Concen: 0.24 ppb m
RT: 1.524 min Scan# 70
Delta R.T. 0.012 min
Lab File: J3113.D
Acq: 3 Feb 2014 2:16 pm

Tgt Ion: 94 Resp: 1804

Ion	Ratio	Lower	Upper
94	100		
96	42.0	72.6	112.6#

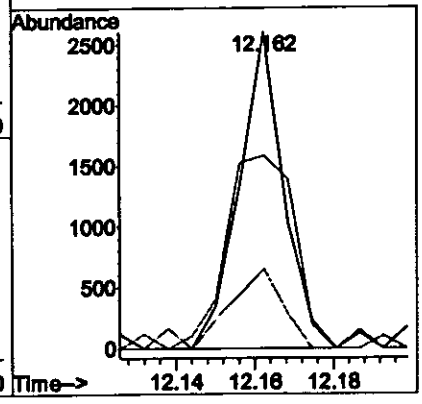




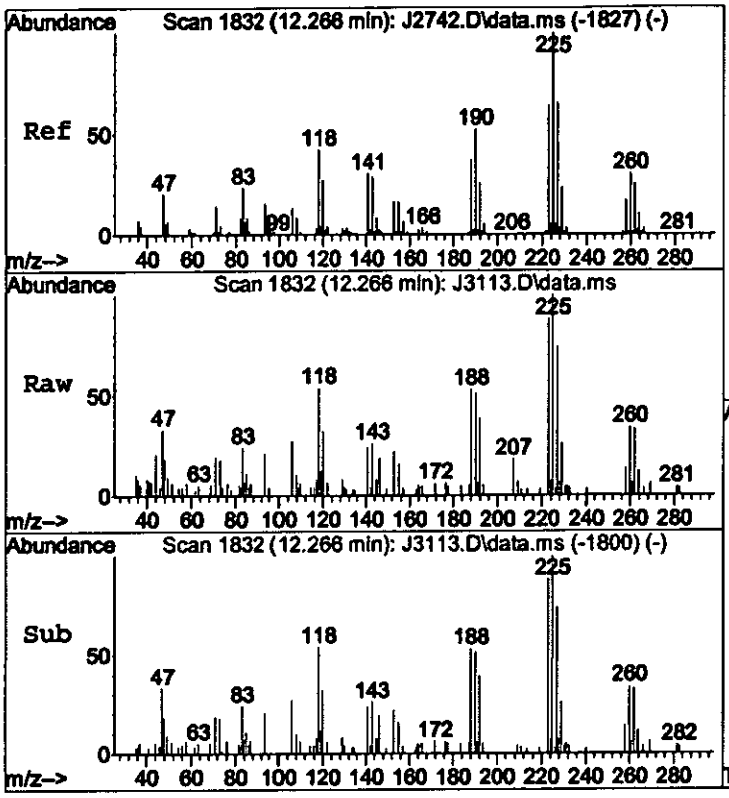
#115
1,2,4-Tcbenzene
Concen: 0.24 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: J3113.D
Acq: 3 Feb 2014 2:16 pm

Tgt Ion:180 Resp: 2036

Ion	Ratio	Lower	Upper
180	100		
182	60.8	70.8	110.8#
145	25.1	11.4	51.4



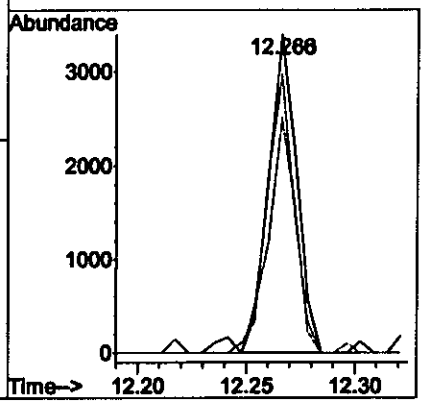
J3113.D W011514.M Tue Feb 04 16:25:49 2014 0025 Page 3

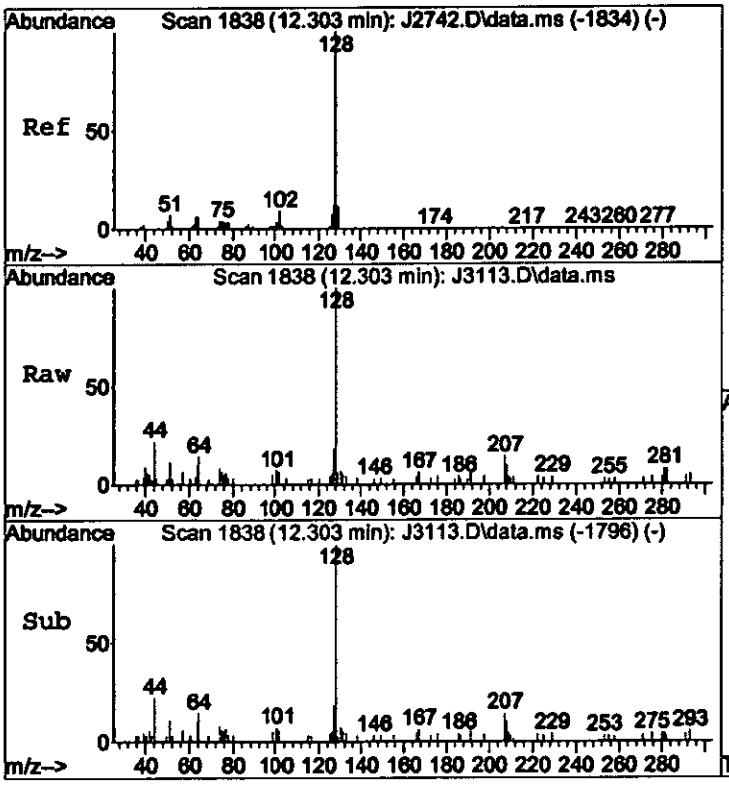


#116
Hexachlorobt
Concen: 0.87 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: J3113.D
Acq: 3 Feb 2014 2:16 pm

Tgt Ion:225 Resp: 3153

Ion	Ratio	Lower	Upper
225	100		
223	87.6	43.6	83.6#
227	73.9	45.0	85.0

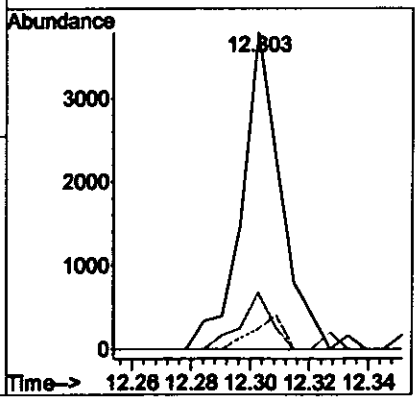




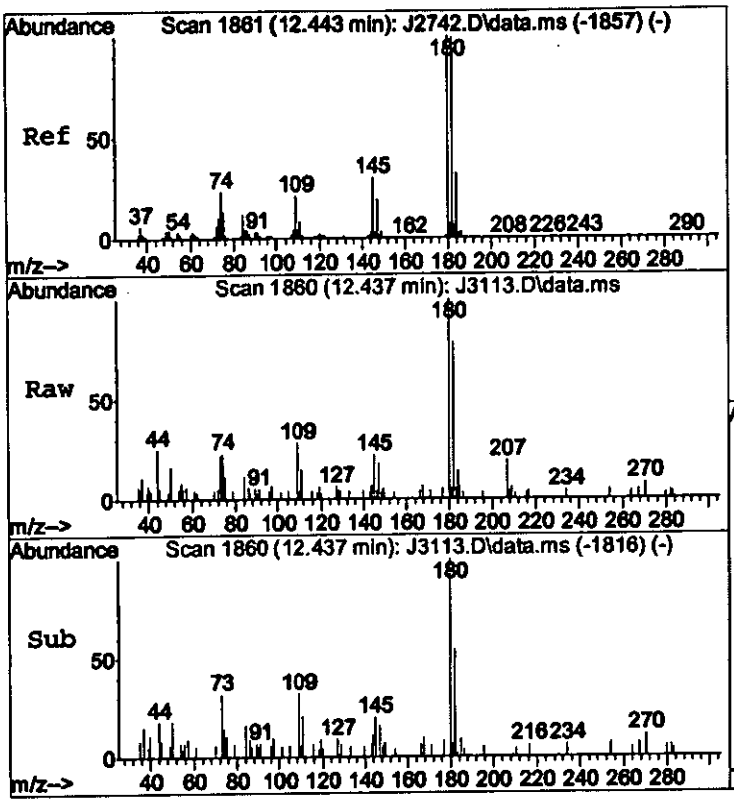
#117
Naphthalen
Concen: 0.23 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J3113.D
Acq: 3 Feb 2014 2:16 pm

Tgt Ion:128 Resp: 3448

Ion	Ratio	Lower	Upper
128	100		
127	17.6	0.0	32.2
102	6.3	0.0	29.1



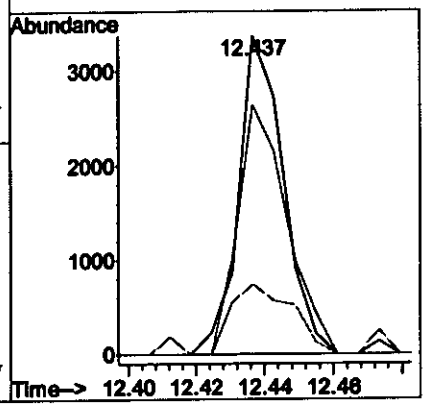
J3113.D W011514.M Tue Feb 04 16:25:50 2014 00254 Page 4



#118
1,2,3-Tclbenzene
Concen: 0.44 ppb
RT: 12.437 min Scan# 1860
Delta R.T. 0.000 min
Lab File: J3113.D
Acq: 3 Feb 2014 2:16 pm

Tgt Ion:180 Resp: 3048

Ion	Ratio	Lower	Upper
180	100		
182	78.4	79.2	119.2#
145	22.0	9.7	49.7



J3113.D W011514.M Tue Feb 04 16:25:51 2014 0025 Page 5

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3113.D
Acq On : 3 Feb 2014 2:16 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J3113.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	506756	1177112	28.38%	5.391%
2	4.249	509	517	532	rVB	909047	2267731	54.68%	10.385%
3	4.664	575	585	599	rBV	440587	1123422	27.09%	5.145%
4	5.450	703	714	731	rBV	1233015	2849195	68.70%	13.048%
5	7.322	1014	1021	1037	rBV	2735347	4147021	100.00%	18.992%
6	8.742	1249	1254	1269	rBV	2838159	3645042	87.90%	16.693%
7	9.791	1420	1426	1434	rBV	2244561	2869678	69.20%	13.142%
8	10.748	1578	1583	1593	rBV	3155920	3601017	86.83%	16.491%
9	12.266	1828	1832	1836	rBV4	37504	45228	1.09%	0.207%
10	12.851	1925	1928	1934	rVB	56335	52074	1.26%	0.238%
11	12.912	1934	1938	1943	rVB	62135	58097	1.40%	0.266%

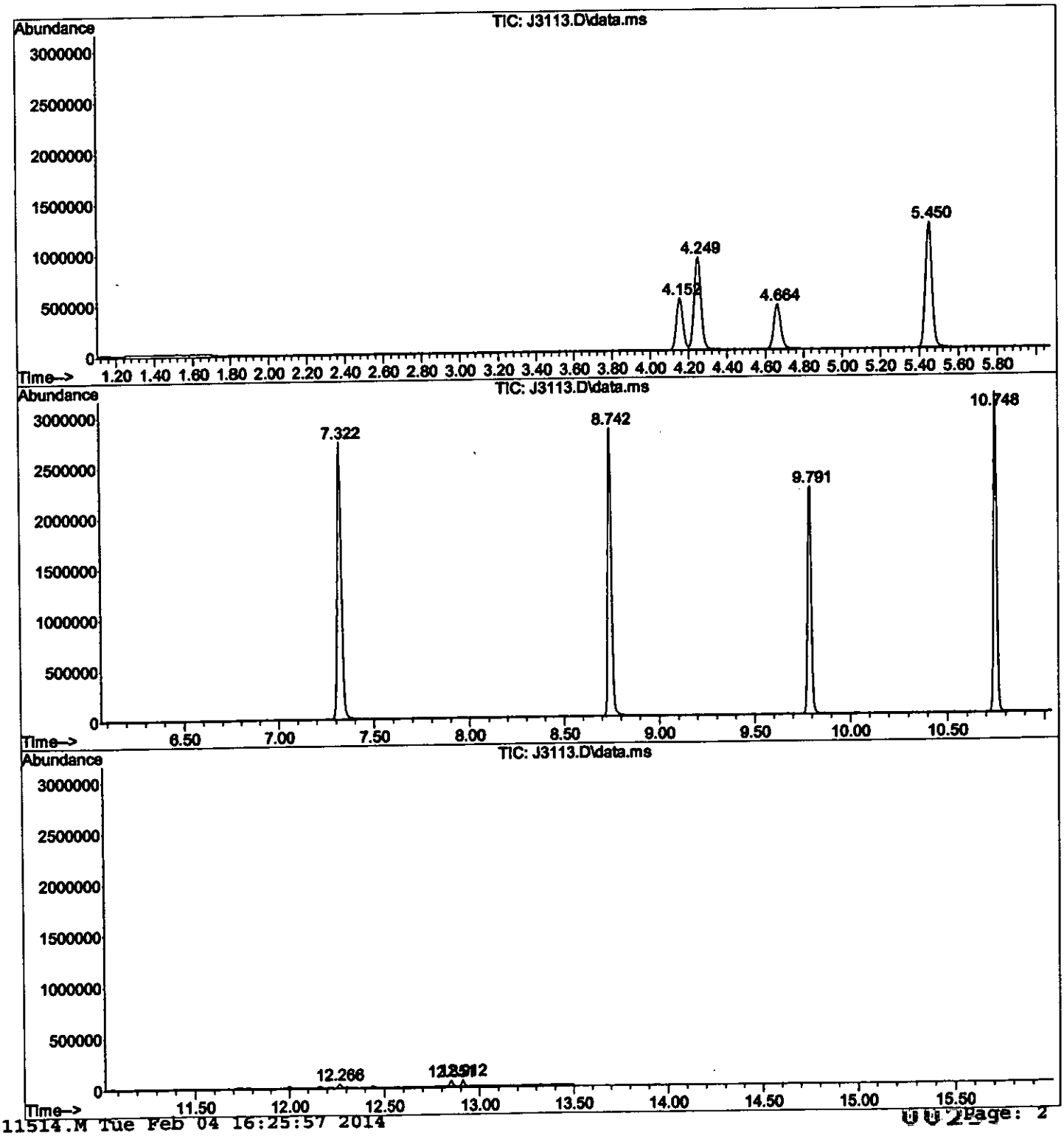
Sum of corrected areas: 21835617

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\020314\
Data File : J3113.D
Acq On : 3 Feb 2014 2:16 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W011514.M Tue Feb 04 16:25:57 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\020314\\
Data File : J3113.D
Acq On : 3 Feb 2014 2:16 pmm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/4/14 14:01
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1401146-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378884
Data File Name:	I:\ACQUDATA\msvoa12\Data\020414\J3139.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.30**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.34**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/4/14 14:01
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1401146-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378884
Data File Name:	I:\ACQUDATA\msvoa12\Data\020414\J3139.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**1.1**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.21**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	2/4/14 14:01	
Dibromofluoromethane	100	85-115	2/4/14 14:01	
Toluene-d8	102	85-120	2/4/14 14:01	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM Quarterly Groundwater Sampling Event/748810-03000
Sample Matrix: Water

Service Request: R1400634
Date Collected: NA
Date Received: NA
Date Analyzed: 2/4/14 1401

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1401146-04

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3139.D
Misc :
Acq On : 4 Feb 2014 2:01 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1401146-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:16:40 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	812912	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1242211	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1165083	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	586343	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	362654	49.97	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.94%				
48) surr1,1,2-dichloroetha...	4.658	65	407685	46.64	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 93.28%				
65) SURR3,Toluene-d8	7.322	98	1578972	51.18	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.36%				
70) SURR2,BFB	9.791	95	577683	50.36	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.72%				
5) Bromomethane	1.518		2591	0.34 m(ee)			J
Target Compounds							Qvalue
12) Acrolein	1.957	56	325	1.30	ppb		82
15) Acetone	2.054	43	673	0.40	ppb	#	56
20) Allyl Chloride	2.207	76	960	0.23	ppb	#	1
61) 2-Nitropropane	6.682	41	324	0.26	ppb	#	1
90) Cyclohexanone	9.724	55	601	1.84	ppb		78
112) Trielution Dichlorotol...	11.742	125	5167	0.45	ppb	#	88 MD
114) Coelution Dichlorotoluene	11.998	125	3682	0.30	ppb	#	93 ↓
115) 1,2,4-Tcbenzene	12.162	180	2512	0.30	ppb		77 J
116) Hexachlorobt	12.266	225	3799	1.05	ppb		83 J
117) Naphthalen	12.302	128	3226	0.21	ppb	#	61 J
118) 1,2,3-Tclbenzene	12.443	180	2734	0.39	ppb		97 <
119) 2,4,5-Trichlorotolene	12.851	159	7756	1.60	ppb		94 MD
120) 2,3,6-Trichlorotoluene	12.912	159	7594	1.75	ppb		88 ↓

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

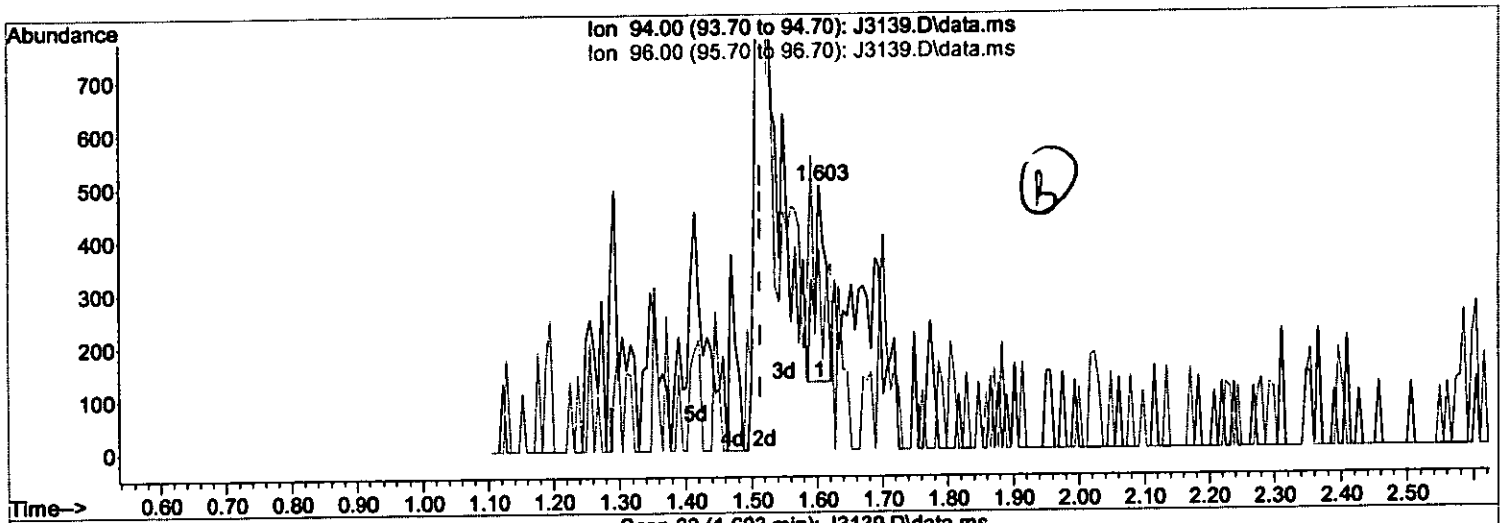
KP 2/6/14

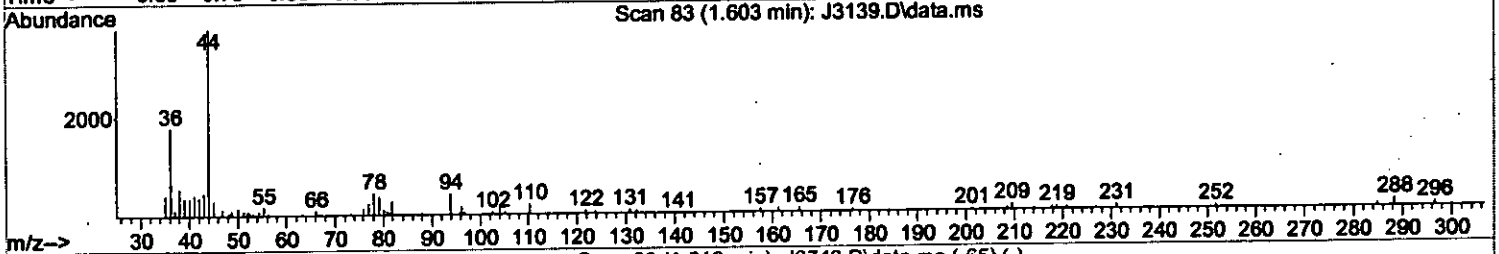
W011514.M Tue Feb 04 14:16:42 2014 Page 1

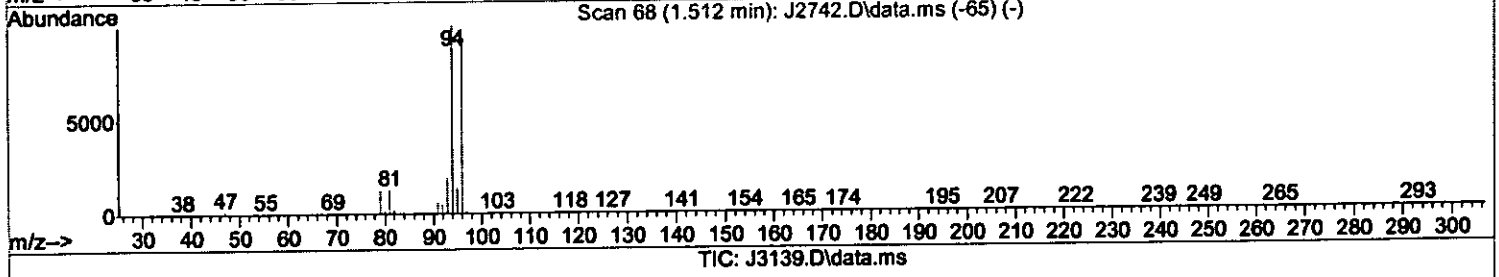
Quantitation Report (Qedit)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3139.D
Misc :
Acq On : 4 Feb 2014 2:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:16:40 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3139.D\data.ms

(5) Bromomethane (P)

1.603min (+0.091) 0.06 ppb

response 438

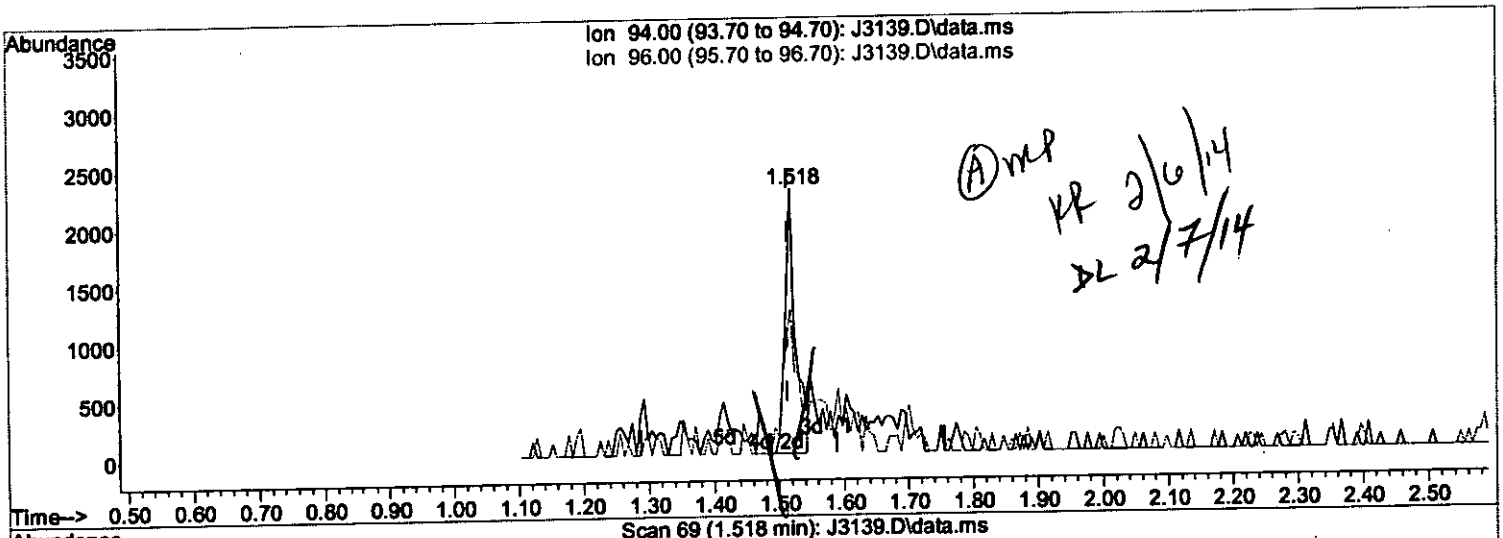
Ion	Exp%	Act%
94.00	100	100
96.00	92.60	75.90
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Feb 06 11:40:45 2014 Page: 1

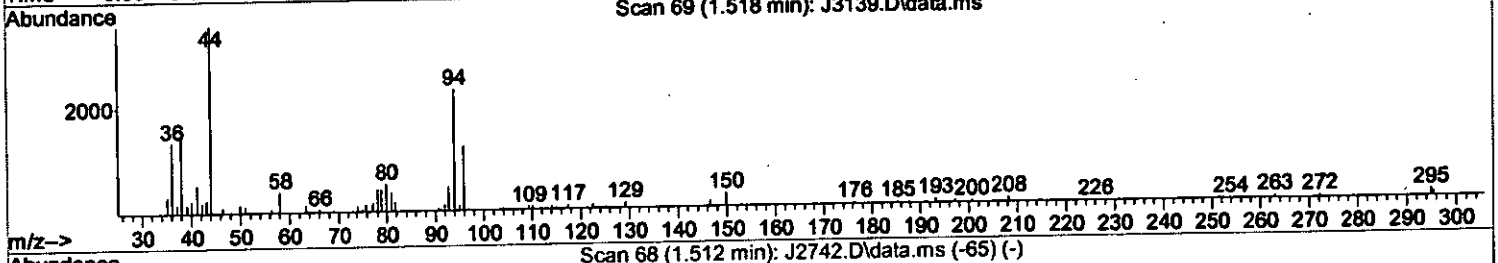
Quantitation Report (Qedit)

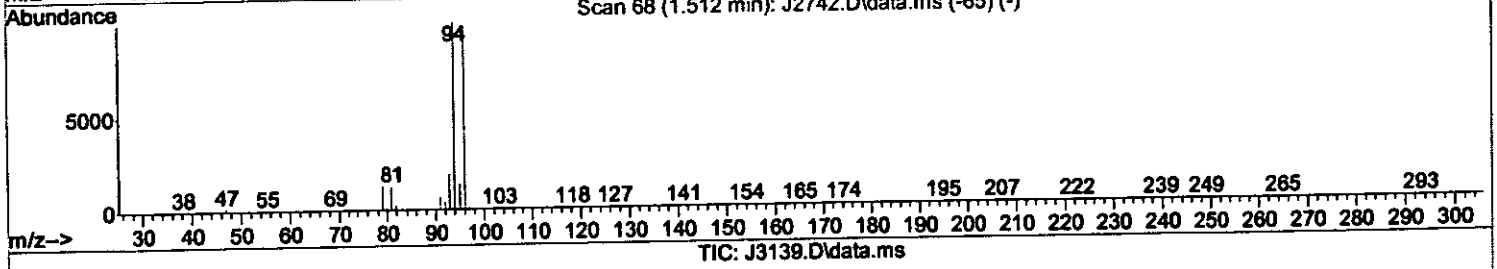
Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3139.D
Misc :
Acq On : 4 Feb 2014 2:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:16:40 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



AMP KR 2/6/14 DL 2/7/14





TIC: J3139.D\data.ms

(5) Bromomethane (P)

1.518min (+0.006) 0.34 ppb m

response 2554

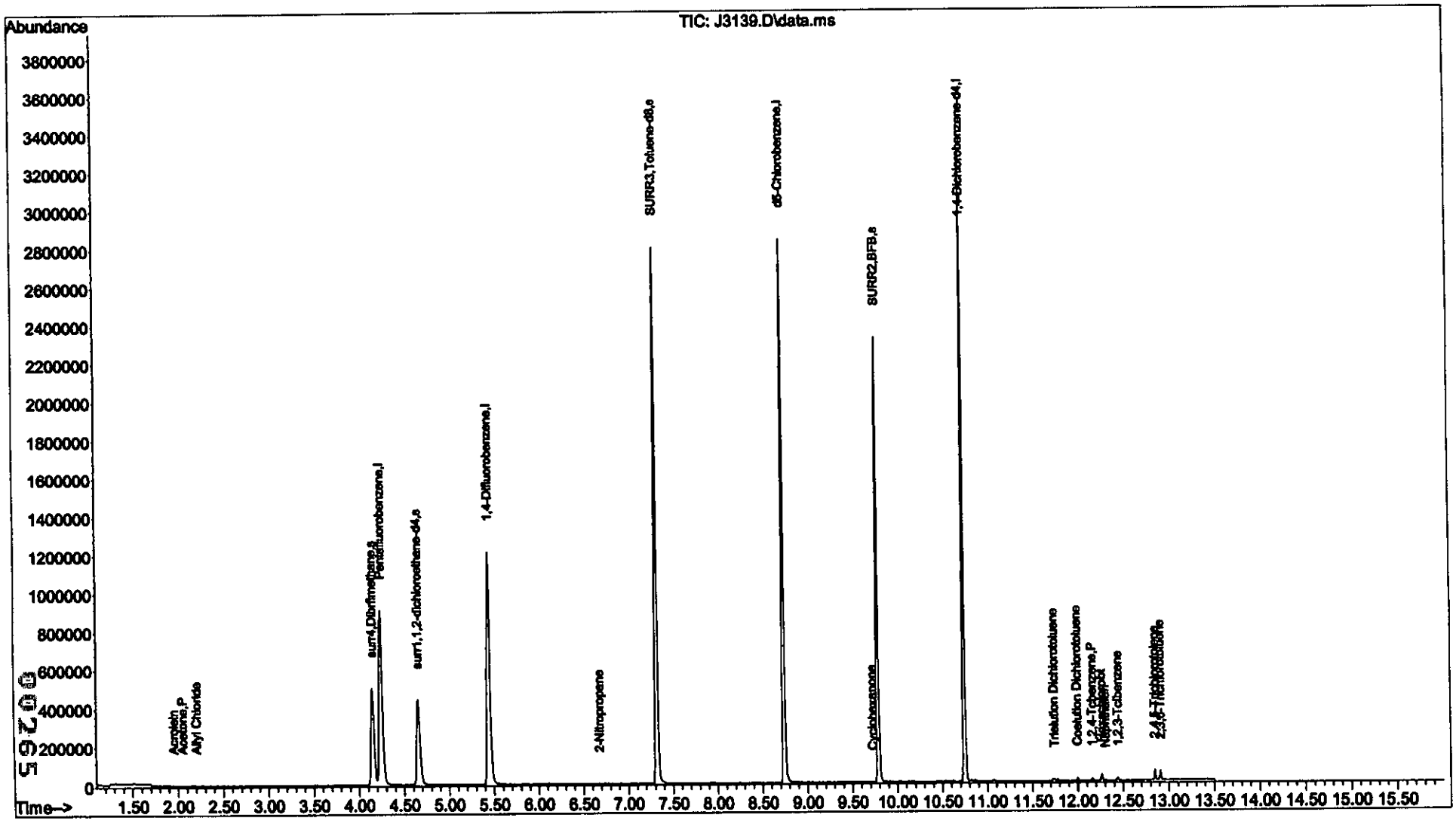
Ion	Exp%	Act%
94.00	100	100
96.00	92.60	55.08#
0.00	0.00	0.00
0.00	0.00	0.00

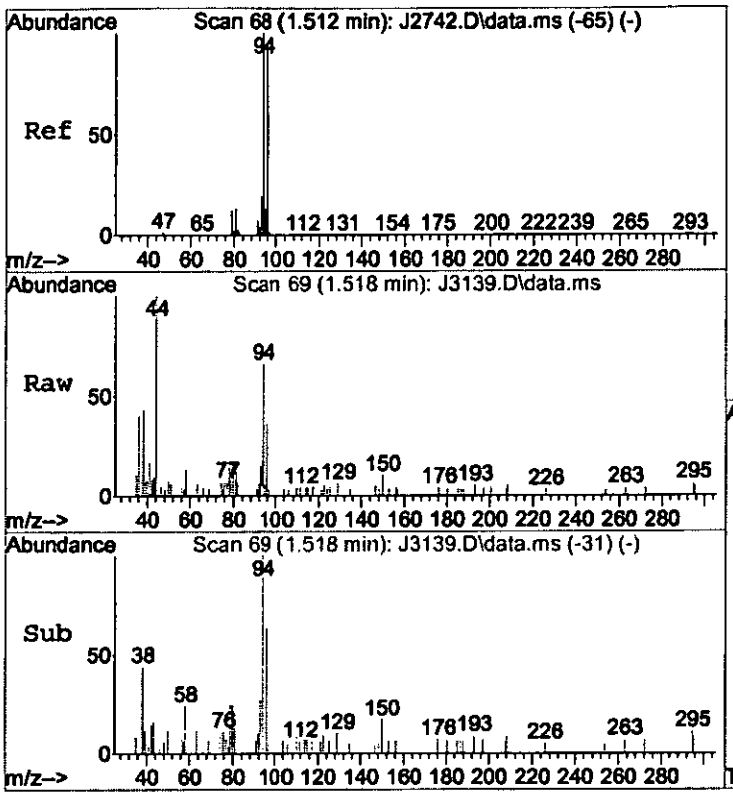
W011514.M Thu Feb 06 11:40:59 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3139.D
Misc :
Acq On : 4 Feb 2014 2:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:16:40 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

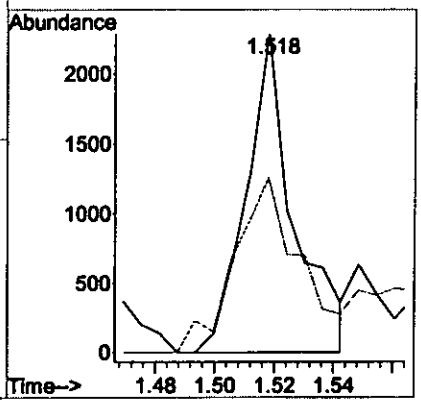

TIC: J3139.D\data.ms
Abundance
Time-->
Acrolein
Acetone,P
Allyl Chloride
sur4,Dibromofluoromethane,s
Pentafluorobenzene,I
sur1,1,2-dichloroethane-d4,s
1,4-Difluorobenzene,I
2-Nitropropene
SURR3,Toluene-d8,s
d5-Chlorobenzene,I
SURR2,BFB,s
Cyclohexanone
1,4-Dichlorobenzene-d4,I
Trichlorotrifluoroethane
Trichlorotrifluoroethane,P
Trichlorotrifluoroethane
Trichlorotrifluoroethane
Trichlorotrifluoroethane

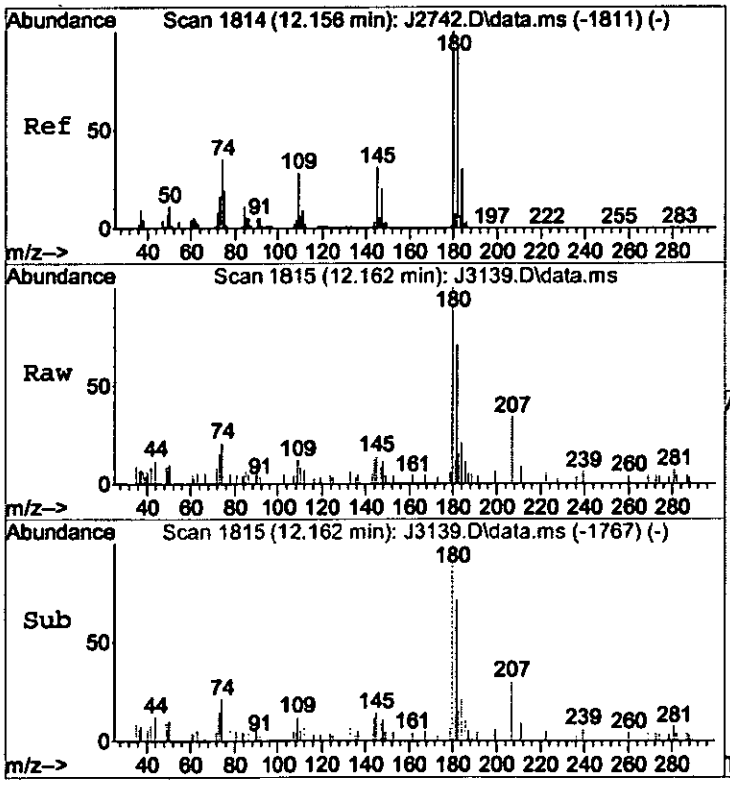


#5
Bromomethane
Concen: 0.34 ppb m
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J3139.D
Acq: 4 Feb 2014 2:01 pm

Tgt Ion: 94 Resp: 2554

Ion	Ratio	Lower	Upper
94	100		
96	55.1	72.6	112.6#

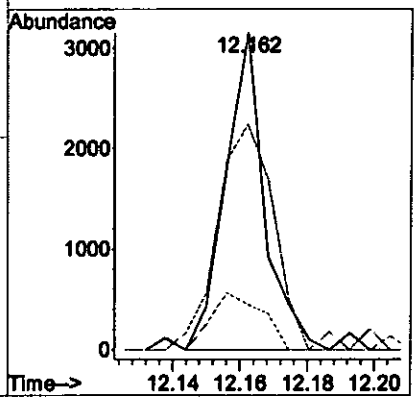




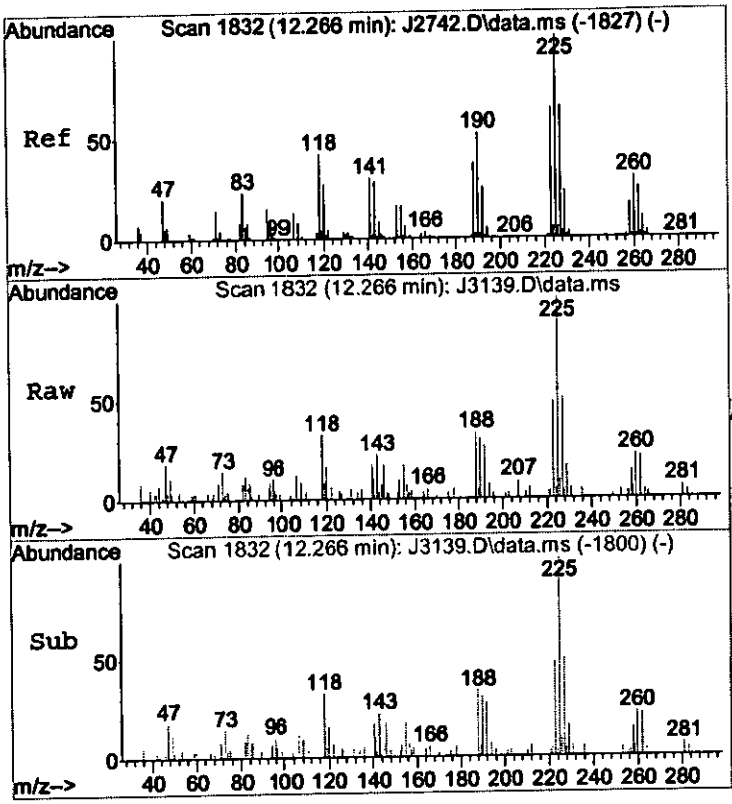
#115
1,2,4-Tcbenzene
Concen: 0.30 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J3139.D
Acq: 4 Feb 2014 2:01 pm

Tgt Ion:180 Resp: 2512

Ion	Ratio	Lower	Upper
180	100		
182	71.1	70.8	110.8
145	14.3	11.4	51.4



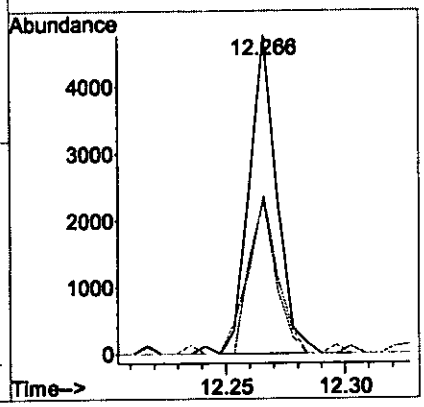
J3139.D W011514.M Thu Feb 06 11:42:54 2014 Page 3

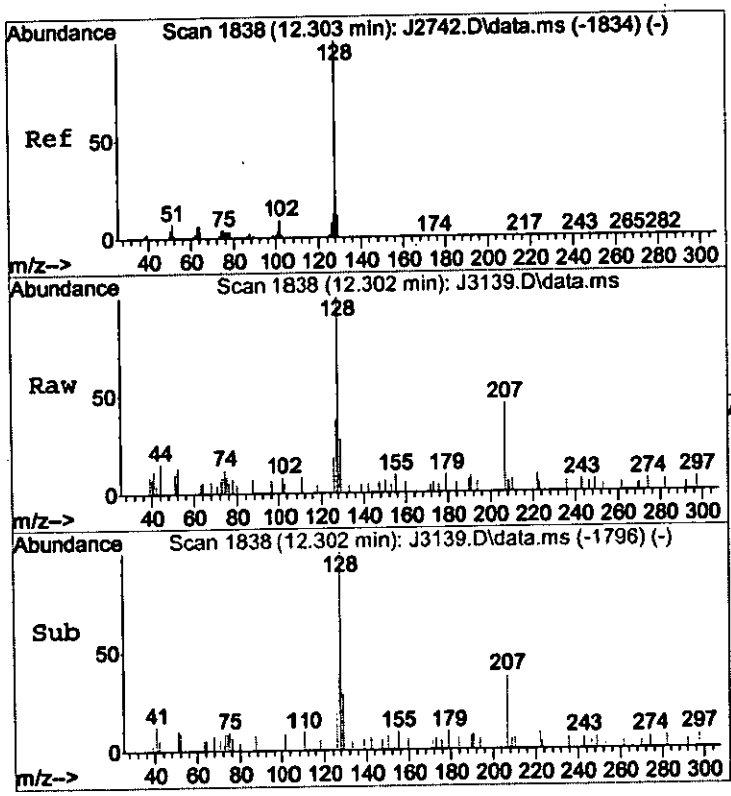


#116
Hexachlorobt
Concen: 1.05 ppb
RT: 12.266 min Scan# 1832
Delta R.T. -0.000 min
Lab File: J3139.D
Acq: 4 Feb 2014 2:01 pm

Tgt Ion:225 Resp: 3799

Ion	Ratio	Lower	Upper
225	100		
223	48.3	43.6	83.6
227	53.9	45.0	85.0

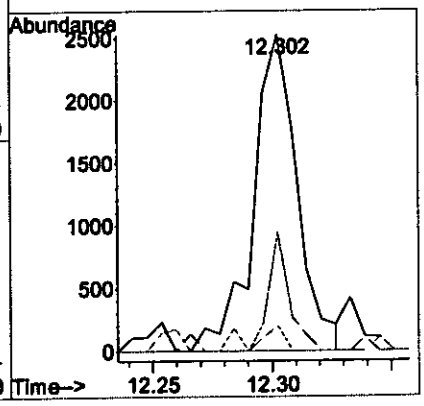




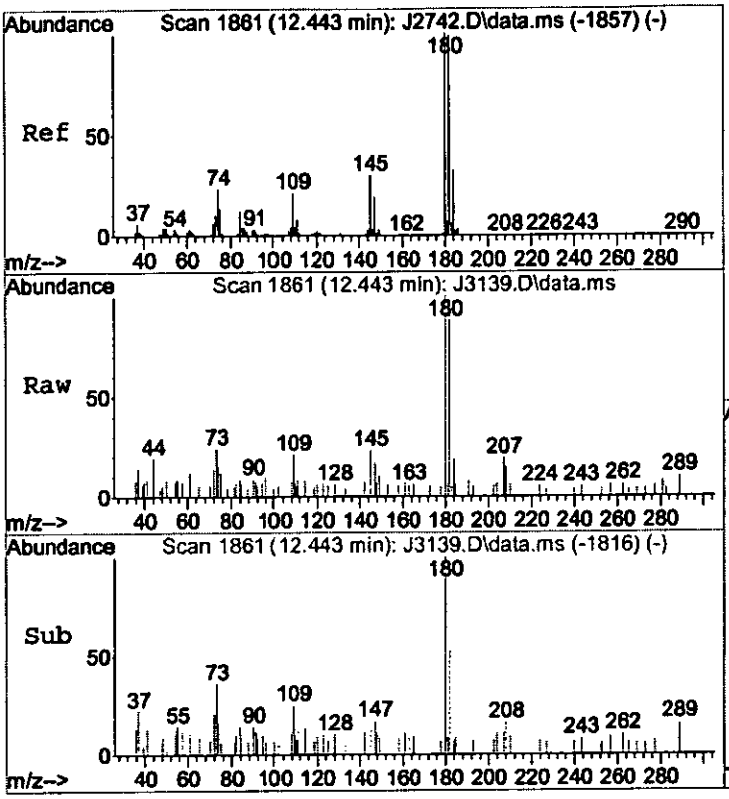
#117
Naphthalen
Concen: 0.21 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J3139.D
Acq: 4 Feb 2014 2:01 pm

Tgt Ion:128 Resp: 3226

Ion	Ratio	Lower	Upper
128	100		
127	37.5	0.0	32.2#
102	7.9	0.0	29.1



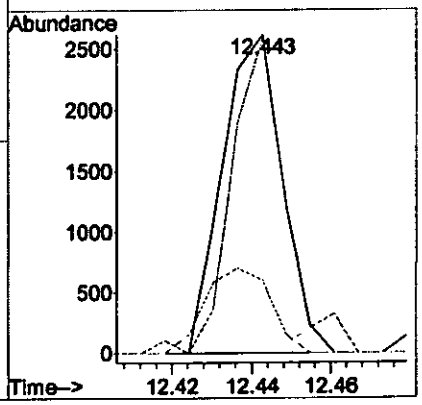
J3139.D W011514.M Thu Feb 06 11:42:55 2014 0026 Page 4



#118
1,2,3-Tclbenzene
Concen: 0.39 ppb
RT: 12.443 min Scan# 1861
Delta R.T. 0.006 min
Lab File: J3139.D
Acq: 4 Feb 2014 2:01 pm

Tgt Ion:180 Resp: 2734

Ion	Ratio	Lower	Upper
180	100		
182	99.0	79.2	119.2
145	22.9	9.7	49.7



J3139.D W011514.M Thu Feb 06 11:42:55 2014 00268 Page 5

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\020414\
Data File : J3139.D
Acq On : 4 Feb 2014 2:01 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J3139.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	493	501	509	rBV	498427	1172511	28.23%	5.361%
2	4.249	509	517	536	rVB	906793	2276056	54.80%	10.406%
3	4.664	574	585	598	rBV	442037	1138971	27.42%	5.207%
4	5.450	702	714	729	rBV	1211123	2861291	68.89%	13.081%
5	7.322	1014	1021	1036	rBV	2799917	4153619	100.00%	18.990%
6	8.742	1249	1254	1270	rBV	2836533	3663703	88.21%	16.750%
7	9.791	1420	1426	1437	rBV	2321530	2876539	69.25%	13.151%
8	10.748	1578	1583	1591	rBV	3277259	3636270	87.54%	16.625%
9	12.851	1925	1928	1931	rVB	51936	47298	1.14%	0.216%
10	12.912	1935	1938	1941	rVB2	46914	46698	1.12%	0.213%

Sum of corrected areas: 21872956

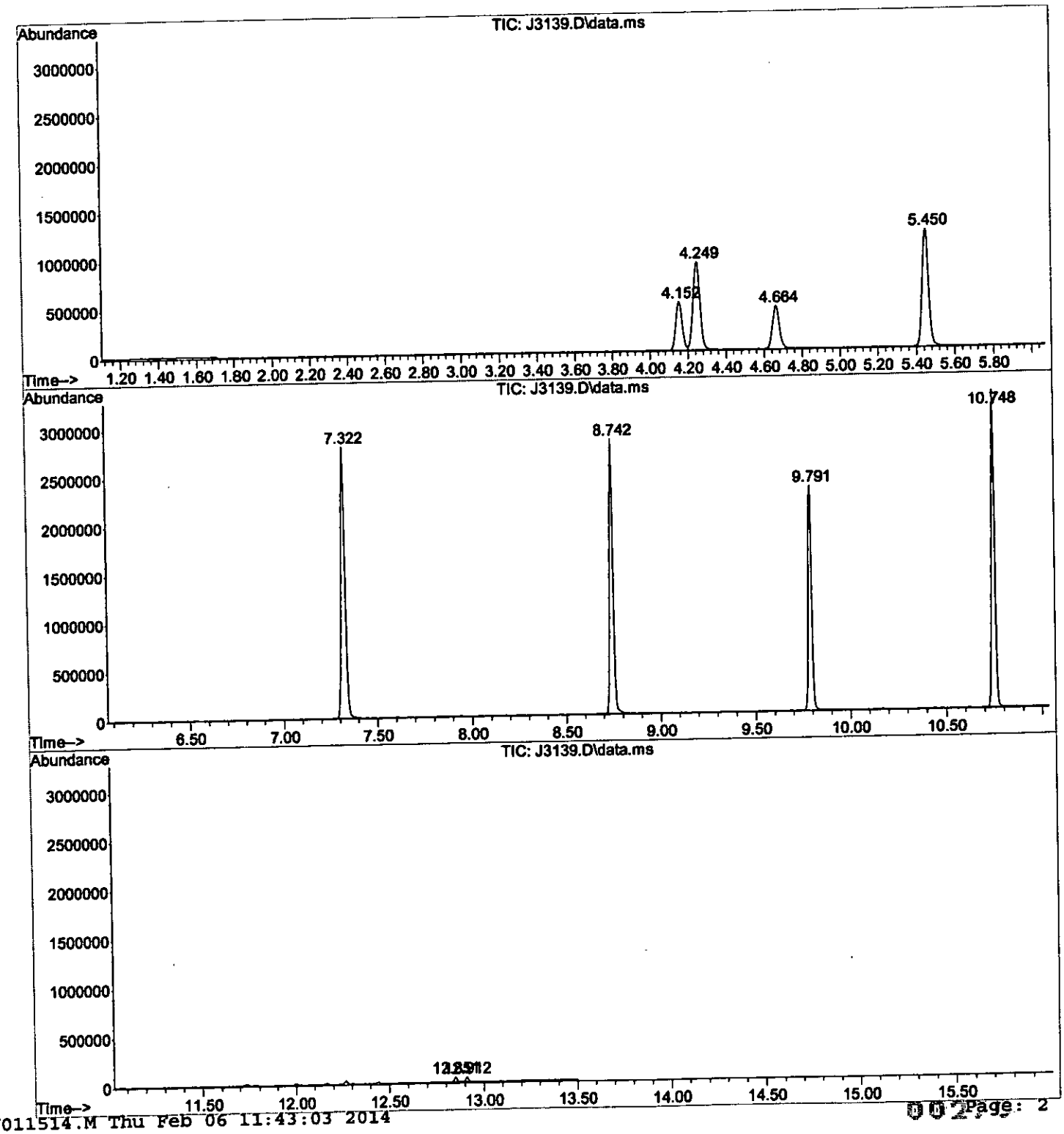
W011514.M Thu Feb 06 11:43:02 2014 00269 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\020414\
Data File : J3139.D
Acq On : 4 Feb 2014 2:01 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W011514.M Thu Feb 06 11:43:03 2014 002 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\020414\\
Data File : J3139.D
Acq On : 4 Feb 2014 2:01 pmm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/3/14 13:12
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1401083-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3111.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**18.8**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**18.8**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**20.2**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**20.0**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**19.1**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**21.1**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**21.1**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**21.5**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**19.8**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**20.6**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**19.4**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**19.8**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**19.9**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**19.0**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**18.1**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**18.9**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**19.4**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**19.1**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**19.3**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**19.2**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**21.1**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**18.0**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**18.9**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**18.6**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**19.1**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**20.1**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**18.9**		5.0	1.0	0.67	
67-64-1	Acetone	**17.9**		5.0	5.0	1.3	
71-43-2	Benzene	**19.1**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**18.6**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**21.4**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**18.9**		5.0	1.0	0.32	
75-25-2	Bromoform	**17.7**		5.0	1.0	0.42	
74-83-9	Bromomethane	**18.4**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**17.5**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/3/14 13:12
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1401083-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378753
Data File Name:	I:\ACQUDATA\msvoa12\Data\020314\J3111.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**19.8**		5.0	1.0	0.29	
75-00-3	Chloroethane	**20.1**		5.0	1.0	0.24	
67-66-3	Chloroform	**20.2**		5.0	1.0	0.25	
74-87-3	Chloromethane	**20.1**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**19.0**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**20.4**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**19.7**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**19.3**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**22.2**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**19.5**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**19.2**		5.0	1.0	0.29	
91-20-3	Naphthalene	**21.9**		5.0	1.0	0.20	
100-42-5	Styrene	**19.6**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**19.7**		5.0	1.0	0.30	
108-88-3	Toluene	**19.8**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**19.3**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**18.4**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**20.7**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**19.9**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**19.1**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**39.6**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**20.6**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**19.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**19.4**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**20.1**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**19.5**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**20.2**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**19.6**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75-120	2/3/14 13:12	
Dibromofluoromethane	100	85-115	2/3/14 13:12	
Toluene-d8	102	85-120	2/3/14 13:12	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3111.D
Misc :
Acq On : 3 Feb 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12 LQ1401083-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 13:27:25 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	848697	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1308354	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1214847	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	635295	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	380418	49.77	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.54%				
48) surr1,1,2-dichloroetha...	4.658	65	418255	45.43	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 90.86%				
65) SURR3,Toluene-d8	7.322	98	1659989	51.08	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.16%				
70) SURR2,BFB	9.785	95	620573	51.36	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.72%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	179319	20.43	ppb		98
3) Chloromethane	1.256	50	240251	20.08	ppb		97
4) Vinyl Chloride	1.323	62	240228	20.66	ppb		98
5) Bromomethane	1.512	94	143798	18.36	ppb		98
6) Chloroethane	1.567	64	140889	20.11	ppb		97
7) Freon 21	1.664	67	380665	22.29	ppb		99
8) Trichlorofluoromethane	1.719	101	238856	18.36	ppb		99
9) Diethyl Ether	1.878	59	103934	18.26	ppb		94
10) Freon 123a	1.865	67	197051	20.63	ppb		91
11) Freon 123	1.902	83	216259	21.22	ppb		99
12) Acrolein	1.951	56	24869	66.59	ppb		100
13) 1,1-Diclethene	2.036	96	128222	21.11	ppb		93
14) Freon 113	2.036	101	122399	19.06	ppb		95
15) Acetone	2.042	43	31374	17.91	ppb		97
16) 2-Propanol	2.109	45	102850	389.55	ppb		97
17) Iodomethane	2.146	142	170078	19.65	ppb		97
18) Carbon Disulfide	2.207	76	408794	18.02	ppb		99
19) Acetonitrile	2.219	40	23318	83.58	ppb		94
20) Allyl Chloride	2.274	76	79873	18.61	ppb	#	76
21) Methyl Acetate	2.274	43	67365	18.11	ppb		97
22) Methylene Chloride	2.353	84	145085	19.74	ppb		94
23) TBA	2.402	59	172143	389.73	ppb		98
24) Acrylonitrile	2.524	53	165534	93.73	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	364154	19.15	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	149803	20.18	ppb		90
28) 1,1-Diclethane	2.938	63	272964	19.07	ppb		99
29) Vinyl Acetate	2.975	86	22796	20.91	ppb	#	80
30) DIPE	3.012	45	520898	18.28	ppb		97
31) 2-Chloro-1,3-Butadiene	3.036	53	252193	16.95	ppb		96
32) ETBE	3.396	59	456505	19.54	ppb		97
33) 2,2-Dichloropropane	3.554	77	247787	21.09	ppb		97
34) cis-1,2-Dichloroethene	3.542	96	171516	19.85	ppb		92
35) 2-Butanone	3.548	43	40785	17.95	ppb		96
36) Propionitrile	3.591	54	61476	97.28	ppb		93
37) Bromochloromethane	3.829	130	97497	21.39	ppb	#	87

KR 2/3/14

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3111.D
Misc :
Acq On : 3 Feb 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 13:27:25 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	40100	19.74	ppb		88
39) Tetrahydrofuran	3.908	42	27548	16.77	ppb		96
40) Chloroform	3.938	83	271140	20.17	ppb		94
41) 1,1,1-Trichloroethane	4.213	97	231742	18.82	ppb		95
42) TAME	5.023	73	373528	19.42	ppb		94
44) Cyclohexane	4.316	41	143536	16.95	ppb		94
46) Carbontetrachloride	4.469	121	56892	17.51	ppb		94
47) 1,1-Dichloropropene	4.456	75	212112	21.08	ppb		98
49) Benzene	4.780	78	622829	19.13	ppb		97
50) 1,2-Dichloroethane	4.786	62	194625	18.11	ppb		95
51) Iso-Butyl Alcohol	4.639	43	77046	355.88	ppb		80
52) n-Heptane	5.322	43	169733	19.29	ppb		90
53) 1-Butanol	5.767	56	110817	966.87	ppb		98
54) Trichloroethene	5.828	130	160551	19.26	ppb		92
55) Methylcyclohexane	6.102	55	167742	18.18	ppb		95
56) 1,2-Diclpropane	6.115	63	156819	18.94	ppb		98
57) Dibromomethane	6.255	93	75387	19.56	ppb		96
58) 1,4-Dioxane	6.310	88	2/10/14 ~~14750~~ (LP)	~~309.64~~	ppb	442.90	96
59) Methyl Methacrylate	6.328	69	71673	18.92	ppb		93
60) Bromodichloromethane	6.474	83	190460	18.85	ppb		99
61) 2-Nitropropane	6.743	41	19119	14.31	ppb		92
62) 2-Chloroethylvinyl Ether	6.877	63	72326	25.20	ppb		92
63) cis-1,3-Dichloropropene	7.023	75	229835	19.09	ppb		100
64) 4-Methyl-2-pentanone	7.212	43	97992	18.85	ppb		97
66) Toluene	7.389	91	674800	19.79	ppb		98
67) trans-1,3-Dichloropropene	7.627	75	191679	19.60	ppb		93
68) Ethyl Methacrylate	7.767	69	151150	19.52	ppb		91
69) 1,1,2-Trichloroethane	7.803	97	113342	20.00	ppb		97
72) Tetrachloroethene	7.962	164	125659	19.73	ppb		95
73) 2-Hexanone	8.084	43	66981	18.63	ppb		95
74) 1,3-Dichloropropane	7.968	76	204893	19.31	ppb		92
75) Dibromochloromethane	8.187	129	120161	19.00	ppb		99
76) N-Butyl Acetate	8.236	43	178396	19.95	ppb		94
77) 1,2-Dibromoethane	8.285	107	107371	19.88	ppb		96
78) Chlorobenzene	8.767	112	434843	19.81	ppb		98
79) 3-CBTF	8.785	180	213699	19.46	ppb		96
80) 4-CBTF	8.834	180	191196	19.57	ppb		98
81) 1,1,1,2-Tetrachloroethane	8.846	131	142334	18.77	ppb		94
82) Ethylbenzene	8.889	106	226813	19.26	ppb		94
83) (m+p)Xylene	8.998	106	565963	39.61	ppb		95
84) o-Xylene	9.346	106	277524	19.44	ppb		97
85) Styrene	9.352	104	457567	19.59	ppb		96
87) Bromoform	9.492	173	60894	17.72	ppb		96
88) 2-CBTF	9.577	180	205232	19.14	ppb		99
89) Isopropylbenzene	9.669	105	647713	19.47	ppb		99
90) Cyclohexanone	9.718	55	228215	643.35	ppb		91
91) trans-1,4-Dichloro-2-B...	9.961	53	35454	25.55	ppb		97
92) 1,1,2,2-Tetrachloroethane	9.913	83	131679	20.23	ppb		96
93) Bromobenzene	9.907	156	173280	18.60	ppb	#	87
94) 1,2,3-Trichloropropane	9.937	110	39299	19.83	ppb		94
95) n-Propylbenzene	10.022	91	754341	19.68	ppb		98
96) 2-Chlorotoluene	10.077	91	460397	18.92	ppb		96

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3111.D
Misc :
Acq On : 3 Feb 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 13:27:25 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

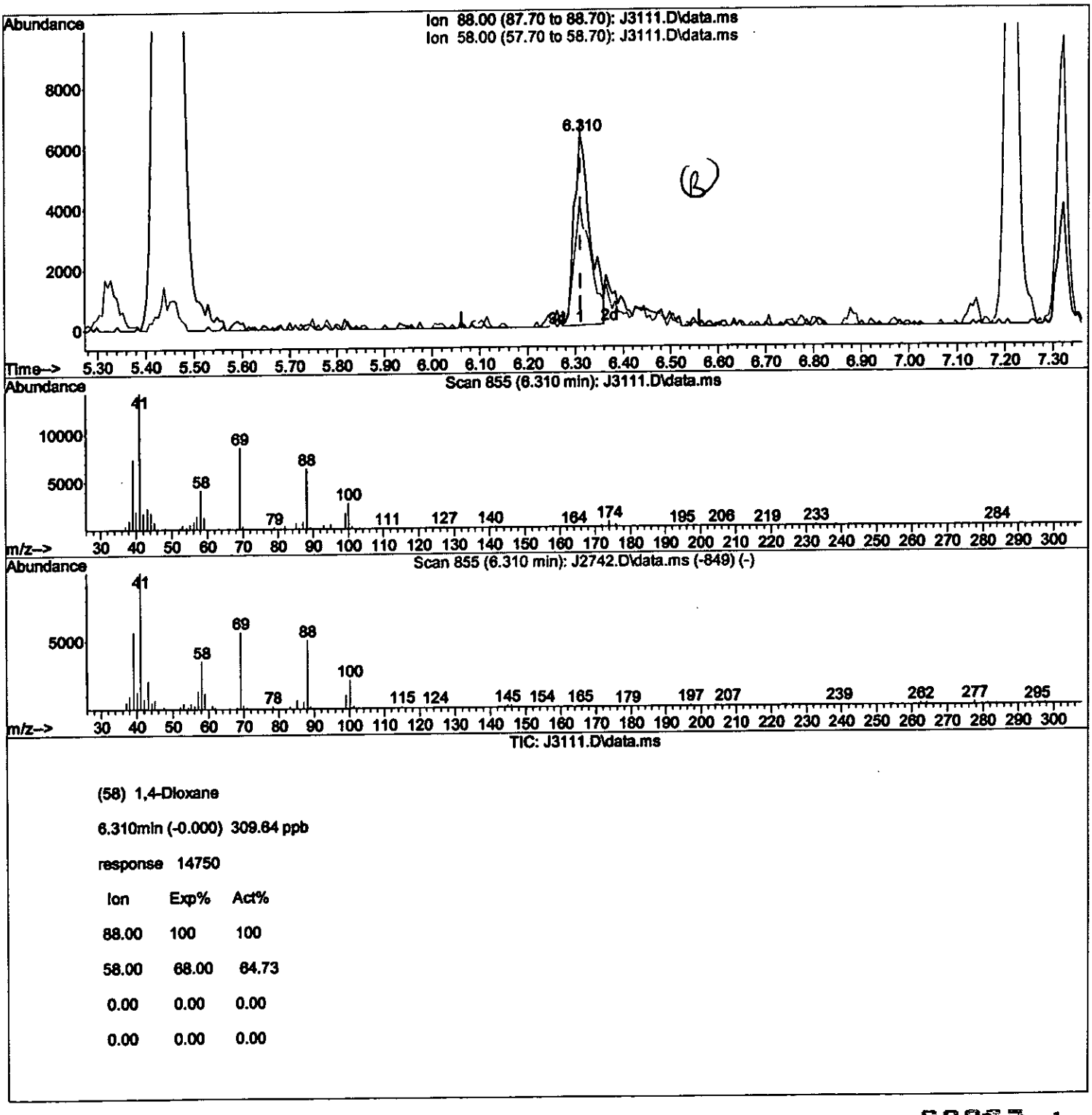
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.132	91	487376	19.64	ppb	98
98) 4-Chlorotoluene	10.169	91	567009	19.12	ppb	98
99) 1,3,5-Trimethylbenzene	10.169	105	545460	19.35	ppb	99
100) tert-Butylbenzene	10.437	119	443434	19.45	ppb	99
101) 1,2,4-Trimethylbenzene	10.474	105	551928	19.43	ppb	97
102) 3,4-DCBTF	10.535	214	146843	19.97	ppb	98
103) sec-Butylbenzene	10.620	105	641544	20.10	ppb	99
104) p-Isopropyltoluene	10.742	119	562001	20.05	ppb	99
105) 1,3-Dclbenz	10.693	146	312366	19.11	ppb	98
106) 1,4-Dclbenz	10.766	146	325967	19.17	ppb	99
107) 2,4-DCBTF	10.821	214	127213	19.37	ppb	93
108) 2,5-DCBTF	10.858	214	148625	19.60	ppb	96
109) n-Butylbenzene	11.065	91	506488	20.62	ppb	99
110) 1,2-Dclbenz	11.065	146	297495	18.97	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	21692	19.81	ppb	92
112) Trielution Dichlorotol...	11.729	125	774222	61.82	ppb	98
113) 1,3,5 Trichlorobenzene	11.778	180	215590	20.09	ppb	99
114) Coelution Dichlorotoluene	11.998	125	558051	42.06	ppb	97
115) 1,2,4-Tcbenzene	12.156	180	189878	20.64	ppb	97
116) Hexachlorobt	12.266	225	87214	22.20	ppb	99
117) Naphthalen	12.302	128	362542	21.85	ppb	98
118) 1,2,3-Tclbenzene	12.437	180	161397	21.46	ppb	97
119) 2,4,5-Trichlorotolene	12.851	159	129311	24.64	ppb	93
120) 2,3,6-Trichlorotoluene	12.912	159	120486	25.63	ppb	97

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

Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3111.D
Misc :
Acq On : 3 Feb 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 13:27:25 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



TIC: J3111.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 309.64 ppb

response 14750

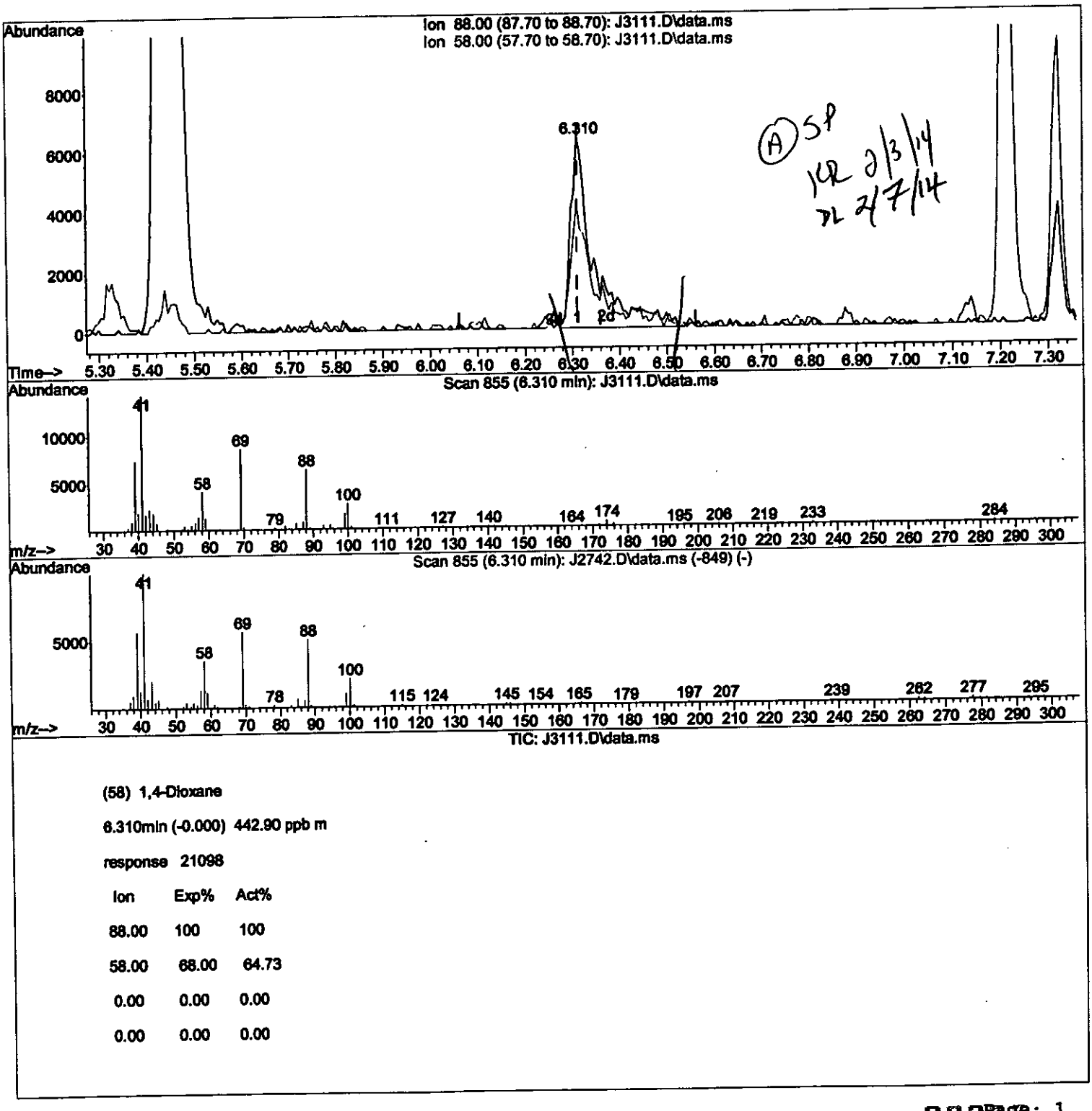
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	64.73
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Mon Feb 03 13:55:55 2014 Page: 1

Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\020314\J3111.D
Misc :
Acq On : 3 Feb 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 13:27:25 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



(58) 1,4-Dioxane

6.310min (-0.000) 442.90 ppb m

response 21098

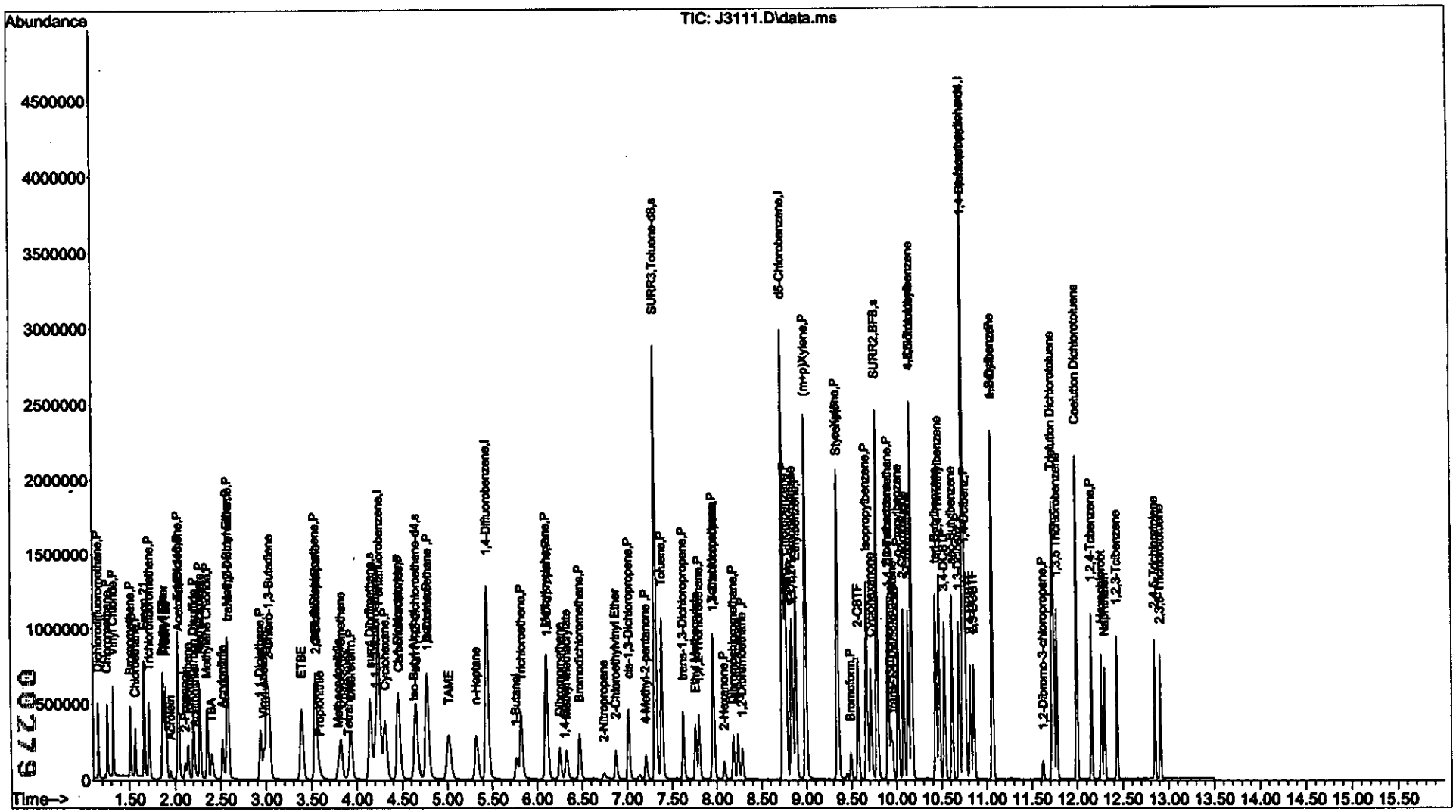
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	64.73
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Mon Feb 03 13:56:02 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\020314\J3111.D
Misc :
Acq On : 3 Feb 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 03 13:27:25 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration


Abundance
TIC: J3111.D\data.ms
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
Time-->
1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50 10.00 10.50 11.00 11.50 12.00 12.50 13.00 13.50 14.00 14.50 15.00 15.50
SURR3,Toluene-d8,s
d5-Chlorobenzene,I
(m+p)Xylene,P
SURR2,BFB,s
ETBE
TAME
n-Heptane
1,4-Difluorobenzene,I
Toluene,P
Bromoform,P
2-CBTF
Styrene,P
Isopropylbenzene,P
Coelution Dichlorotoluene
1,2,4-Tcbenzene,P
1,2,3-Tcbenzene
1,2-Dibromo-3-chloropropane,P
2-Nitropropene
4-Methyl-2-pentanone,P
2-Hexanone,P
trans-1,3-Dichloropropene,P
cis-1,3-Dichloropropene,P
Bromodichloromethane,P
Vinyl Acetate
Methyl Acrylonitrile
Propionitrile
Methacrylonitrile
Tert-Amyl Methyl Ether
Cyclohexane,P
Carbondisulfide,P
Isobutanol
Ethyl Methacrylate,P
Methyl Methacrylate,P
Acrolein
Acetonitrile
TBA
Dibromofluoromethane,S
Toluene-d8,S
4-Bromofluorobenzene,S
Dichlorodifluoromethane,P
Chloromethane,P
Vinyl Chloride,P
Bromomethane,P
Chloroethane,P
Trichlorofluoromethane,P
Acetone,P
Iodomethane,P
Carbon Disulfide,P
Allyl Chloride,P
Methylene Chloride,P
Acrylonitrile,P
trans-1,2-Dichloroethene,P
1,1-Dichloroethane,P
2,2-Dichloropropane,P
cis-1,2-Dichloroethene,P
2-Butanone,P
Bromochloromethane,P
Chloroform,P
1,1,1-Trichloroethane,P
1,1-Dichloropropene,P
Carbon Tetrachloride,P
1,2-Dichloroethane,P
Benzene,P
Trichloroethene,P
1,2-Dichloropropane,P
Dibromomethane,P
Bromodichloromethane,P
1,4-Dioxane,P
Methyl Isobutyl Ketone,P
Toluene,P
trans-1,3-Dichloropropene,P
Ethyl Methacrylate,P
1,1,2-Trichloroethane,P
Tetrachloroethene,P
2-Hexanone,P
1,3-Dichloropropane,P
Dibromochloromethane,P
1,2-Dibromoethane,P
Chlorobenzene,P
1,1,1,2-Tetrachloroethane,P
Ethylbenzene,P
(m+p)Xylene,P
o-Xylene,P
Styrene,P
Bromoform,P
Isopropylbenzene,P
Bromobenzene,P
1,1,2,2-Tetrachloroethane,P
1,2,3-Trichloropropane,P
n-Propylbenzene,P
2-Chlorotoluene,P
1,3,5-Trimethylbenzene,P
4-Chlorotoluene,P
tert-Butylbenzene,P
1,2,4-Trimethylbenzene,P
sec-Butylbenzene,P
1,3-Dichlorobenzene,P
4-Isopropyltoluene,P
1,4-Dichlorobenzene,P
n-Butylbenzene,P
1,2-Dichlorobenzene,P
1,2-Dibromo-3-chloropropane,P
1,2,4-Trichlorobenzene,P
Hexachlorobutadiene,P
Naphthalene,P
1,2,3-Trichlorobenzene,P
1,4-Dichlorobutane,P
2,3,5-Trichlorotoluene
2,3,6-Trichlorotoluene
1,2,3,4-Tetrachlorobenzene,P
1,2,3,5-Tetrachlorobenzene,P
Pentachloroethane,P
1,3-Dichloropropene,P
1,1,2,2-Tetrachloroethane,P
1,2,3-Trichloropropane,P
1,4-Dichlorobutane,P
1,2,4-Trichlorobenzene,P
Hexachlorobutadiene,P
Naphthalene,P
1,2,3-Trichlorobenzene

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/4/14 12:56
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1401146-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378884
Data File Name:	I:\ACQUDATA\msvoa12\Data\020414\J3137.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**19.7**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**20.3**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**22.0**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**21.2**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**20.4**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**22.7**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**23.4**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**23.4**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**21.6**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**22.7**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**20.8**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**20.7**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**21.9**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**20.7**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**19.2**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**20.8**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**20.9**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**20.9**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**20.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**20.7**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**21.7**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**20.0**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**20.6**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**18.5**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**20.7**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**21.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**19.6**		5.0	1.0	0.67	
67-64-1	Acetone	**16.3**		5.0	5.0	1.3	
71-43-2	Benzene	**20.6**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**20.7**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**22.0**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**20.9**		5.0	1.0	0.32	
75-25-2	Bromoform	**19.8**		5.0	1.0	0.42	
74-83-9	Bromomethane	**19.0**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**19.5**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	2/4/14 12:56
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1401146-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378884
Data File Name:	I:\ACQUDATA\msvoa12\Data\020414\J3137.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**21.1**		5.0	1.0	0.29	
75-00-3	Chloroethane	**21.1**		5.0	1.0	0.24	
67-66-3	Chloroform	**21.4**		5.0	1.0	0.25	
74-87-3	Chloromethane	**21.3**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**20.7**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**21.6**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**21.0**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**20.4**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**23.0**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21.2**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**20.5**		5.0	1.0	0.29	
91-20-3	Naphthalene	**24.3**		5.0	1.0	0.20	
100-42-5	Styrene	**21.0**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**20.8**		5.0	1.0	0.30	
108-88-3	Toluene	**21.6**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**21.2**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**19.6**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**21.7**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**20.7**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**20.4**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**41.9**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**21.9**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**21.6**		5.0	1.0	0.20	
95-47-6	o-Xylene	**20.8**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**21.5**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**20.9**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**21.6**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**21.0**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	75-120	2/4/14 12:56	
Dibromofluoromethane	100	85-115	2/4/14 12:56	
Toluene-d8	103	85-120	2/4/14 12:56	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3137.D
Misc :
Acq On : 4 Feb 2014 12:56 pm
Operator : K.Ruest
InstName : MSVOA-12 PO 1401146-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 13:11:53 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	845726	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1282011	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1212647	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	626711	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	374318	49.98	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.96%				
48) surr1,1,2-dichloroetha...	4.664	65	424740	47.09	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 94.18%				
65) SURR3,Toluene-d8	7.322	98	1635430	51.36	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.72%				
70) SURR2,BFB	9.791	95	613196	51.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	189277	21.64	ppb		99
3) Chloromethane	1.262	50	254023	21.31	ppb		100
4) Vinyl Chloride	1.323	62	251818	21.74	ppb		97
5) Bromomethane	1.512	94	148236	18.99	ppb		96
6) Chloroethane	1.567	64	147130	21.07	ppb		98
7) Freon 21	1.664	67	391042	22.98	ppb		98
8) Trichlorofluoromethane	1.719	101	254321	19.61	ppb		97
9) Diethyl Ether	1.878	59	116676	20.57	ppb		94
10) Freon 123a	1.871	67	200124	21.03	ppb		77
11) Freon 123	1.902	83	225978	22.25	ppb		97
12) Acrolein	1.951	56	26745	71.46	ppb		90
13) 1,1-Diclethene	2.036	96	137181	22.67	ppb		94
14) Freon 113	2.036	101	131166	20.49	ppb		88
15) Acetone	2.048	43	28520	16.34	ppb		95
16) 2-Propanol	2.115	45	106462	404.64	ppb		98
17) Iodomethane	2.146	142	164059	19.02	ppb		98
18) Carbon Disulfide	2.207	76	405927	17.95	ppb		100
19) Acetonitrile	2.225	40	26496	95.31	ppb		99
20) Allyl Chloride	2.274	76	87016	20.34	ppb	#	77
21) Methyl Acetate	2.274	43	69472	18.74	ppb		97
22) Methylene Chloride	2.359	84	153381	20.95	ppb		94
23) TBA	2.408	59	183731	417.43	ppb		99
24) Acrylonitrile	2.524	53	177061	100.60	ppb		96
25) Methyl-t-Butyl Ether	2.579	73	387371	20.45	ppb		96
26) trans-1,2-Dichloroethene	2.585	96	159513	21.57	ppb		93
28) 1,1-Diclethane	2.944	63	291287	20.43	ppb		99
29) Vinyl Acetate	2.975	86	22524	20.74	ppb	#	96
30) DIPE	3.011	45	545565	19.21	ppb		99
31) 2-Chloro-1,3-Butadiene	3.042	53	253360	17.09	ppb		91
32) ETBE	3.396	59	471348	20.25	ppb		98
33) 2,2-Dichloropropane	3.554	77	254430	21.73	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	178344	20.71	ppb		94
35) 2-Butanone	3.548	43	45329	20.02	ppb		99
36) Propionitrile	3.591	54	65765	104.43	ppb		87
37) Bromochloromethane	3.828	130	99710	21.96	ppb	#	87

2/4/14

W011514.M Tue Feb 04 13:11:55 2014 Page: 1

00282

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3137.D
Misc :
Acq On : 4 Feb 2014 12:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 13:11:53 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.798	67	42427	20.96 ppb	92
39) Tetrahydrofuran	3.914	42	32407	19.80 ppb	91
40) Chloroform	3.938	83	286192	21.36 ppb	97
41) 1,1,1-Trichloroethane	4.213	97	249273	20.31 ppb	99
42) TAME	5.023	73	398964	20.81 ppb	96
44) Cyclohexane	4.310	41	147450	17.77 ppb	94
46) Carbontetrachloride	4.469	121	62180	19.53 ppb	96
47) 1,1-Dichloropropene	4.462	75	230316	23.36 ppb	97
49) Benzene	4.779	78	655529	20.55 ppb	96
50) 1,2-Dichloroethane	4.786	62	202386	19.22 ppb	97
51) Iso-Butyl Alcohol	4.639	43	85878	404.83 ppb	97
52) n-Heptane	5.328	43	181775	21.09 ppb	91
53) 1-Butanol	5.773	56	120218	1070.45 ppb	94
54) Trichloroethene	5.828	130	173288	21.21 ppb	93
55) Methylcyclohexane	6.102	55	172052	19.03 ppb	97
56) 1,2-Diclpropane	6.115	63	168439	20.76 ppb	97
57) Dibromomethane	6.255	93	79356	21.02 ppb	99
58) 1,4-Dioxane	6.310	88	21578 ~~20261~~ (R) ~~434.06~~	ppb 442.28	95
59) Methyl Methacrylate	6.328	69	75581	20.37 ppb	90
60) Bromodichloromethane	6.474	83	206419	20.85 ppb	99
61) 2-Nitropropane	6.742	41	24531	18.74 ppb	95
62) 2-Chloroethylvinyl Ether	6.877	63	72958	25.94 ppb	94
63) cis-1,3-Dichloropropene	7.023	75	241124	20.44 ppb	98
64) 4-Methyl-2-pentanone	7.212	43	99568	19.55 ppb	98
66) Toluene	7.395	91	722841	21.64 ppb	99
67) trans-1,3-Dichloropropene	7.633	75	200761	20.95 ppb	94
68) Ethyl Methacrylate	7.767	69	165672	21.84 ppb	88
69) 1,1,2-Trichloroethane	7.809	97	117932	21.23 ppb	96
72) Tetrachloroethene	7.962	164	131919	20.75 ppb	98
73) 2-Hexanone	8.084	43	66480	18.52 ppb	98
74) 1,3-Dichloropropane	7.968	76	215760	20.37 ppb	95
75) Dibromochloromethane	8.187	129	130823	20.72 ppb	97
76) N-Butyl Acetate	8.236	43	184172	20.63 ppb	96
77) 1,2-Dibromoethane	8.285	107	118000	21.89 ppb	97
78) Chlorobenzene	8.766	112	463125	21.13 ppb	98
79) 3-CBTF	8.785	180	217546	19.85 ppb	96
80) 4-CBTF	8.834	180	192683	19.76 ppb	94
81) 1,1,1,2-Tetrachloroethane	8.852	131	149383	19.73 ppb	96
82) Ethylbenzene	8.888	106	239587	20.38 ppb	94
83) (m+p)Xylene	8.998	106	597869	41.92 ppb	98
84) o-Xylene	9.346	106	296197	20.79 ppb	99
85) Styrene	9.358	104	488484	20.96 ppb	93
87) Bromoform	9.498	173	67141	19.81 ppb	93
88) 2-CBTF	9.577	180	204459	19.33 ppb	96
89) Isopropylbenzene	9.669	105	697066	21.24 ppb	100
90) Cyclohexanone	9.718	55	255007	728.73 ppb	88
91) trans-1,4-Dichloro-2-B...	9.961	53	37934	27.72 ppb	97
92) 1,1,2,2-Tetrachloroethane	9.913	83	141323	22.01 ppb	97
93) Bromobenzene	9.906	156	190230	20.70 ppb	91
94) 1,2,3-Trichloropropane	9.943	110	42268	21.62 ppb	97
95) n-Propylbenzene	10.022	91	815814	21.57 ppb	96
96) 2-Chlorotoluene	10.083	91	493637	20.57 ppb	96

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3137.D
Misc :
Acq On : 4 Feb 2014 12:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 13:11:53 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.132	91	484270	19.78	ppb	98
98) 4-Chlorotoluene	10.175	91	604927	20.68	ppb	99
99) 1,3,5-Trimethylbenzene	10.169	105	580158	20.86	ppb	98
100) tert-Butylbenzene	10.437	119	469147	20.85	ppb	99
101) 1,2,4-Trimethylbenzene	10.480	105	583408	20.82	ppb	99
102) 3,4-DCBTF	10.534	214	149102	20.56	ppb	97
103) sec-Butylbenzene	10.620	105	676513	21.49	ppb	98
104) p-Isopropyltoluene	10.742	119	597190	21.60	ppb	98
105) 1,3-Dclbenz	10.693	146	337358	20.92	ppb	99
106) 1,4-Dclbenz	10.766	146	347548	20.72	ppb	98
107) 2,4-DCBTF	10.821	214	128659	19.85	ppb	94
108) 2,5-DCBTF	10.858	214	149988	20.05	ppb	95
109) n-Butylbenzene	11.065	91	531084	21.92	ppb	98
110) 1,2-Dclbenz	11.065	146	320455	20.71	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	22411	20.74	ppb	91
112) Trielution Dichlorotol...	11.729	125	778626	63.02	ppb	96
113) 1,3,5 Trichlorobenzene	11.778	180	214482	20.27	ppb	100
114) Coelution Dichlorotoluene	11.998	125	562051	42.94	ppb	99
115) 1,2,4-Tcbenzene	12.156	180	205592	22.65	ppb	97
116) Hexachlorobt	12.266	225	89267	23.03	ppb	90
117) Naphthalen	12.302	128	397432	24.28	ppb	98
118) 1,2,3-Tclbenzene	12.437	180	173295	23.35	ppb	95
119) 2,4,5-Trichlorotolene 12.451	~~12.912~~	159 131 300	~~110701~~ (74)	~~22.93~~	ppb 25.36	94
120) 2,3,6-Trichlorotoluene	12.912	159	118701	25.59	ppb	96

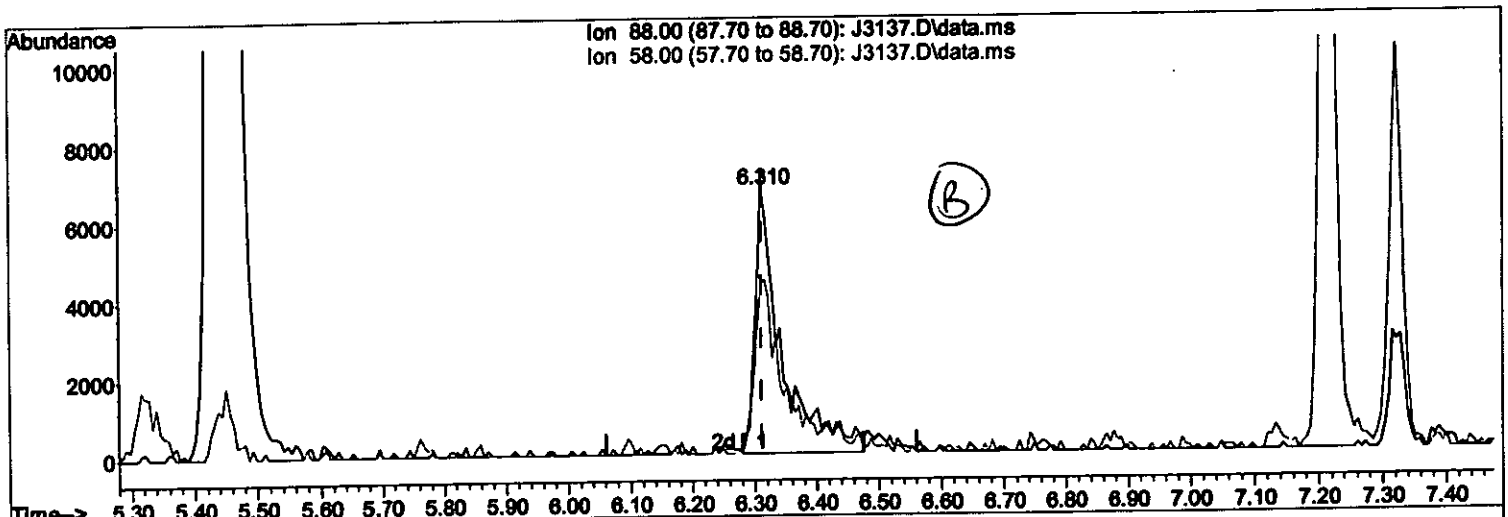
(#) = qualifier out of range (m) = manual integration (+) = signals summed

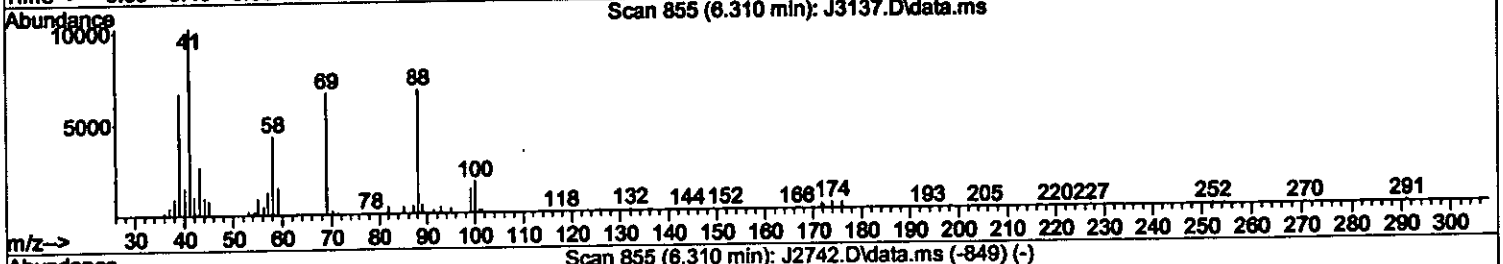
W011514.M Tue Feb 04 13:11:55 2014 00284 Page: 3

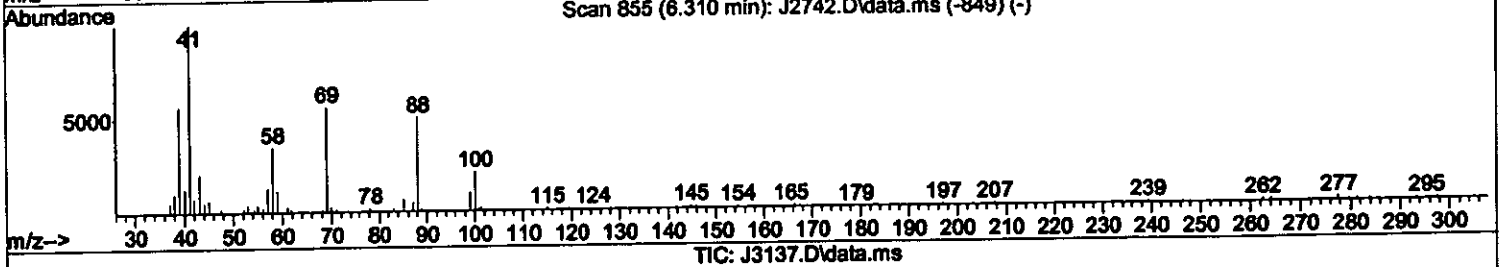
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3137.D
Misc :
Acq On : 4 Feb 2014 12:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 13:11:53 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3137.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 434.06 ppb

response 20261

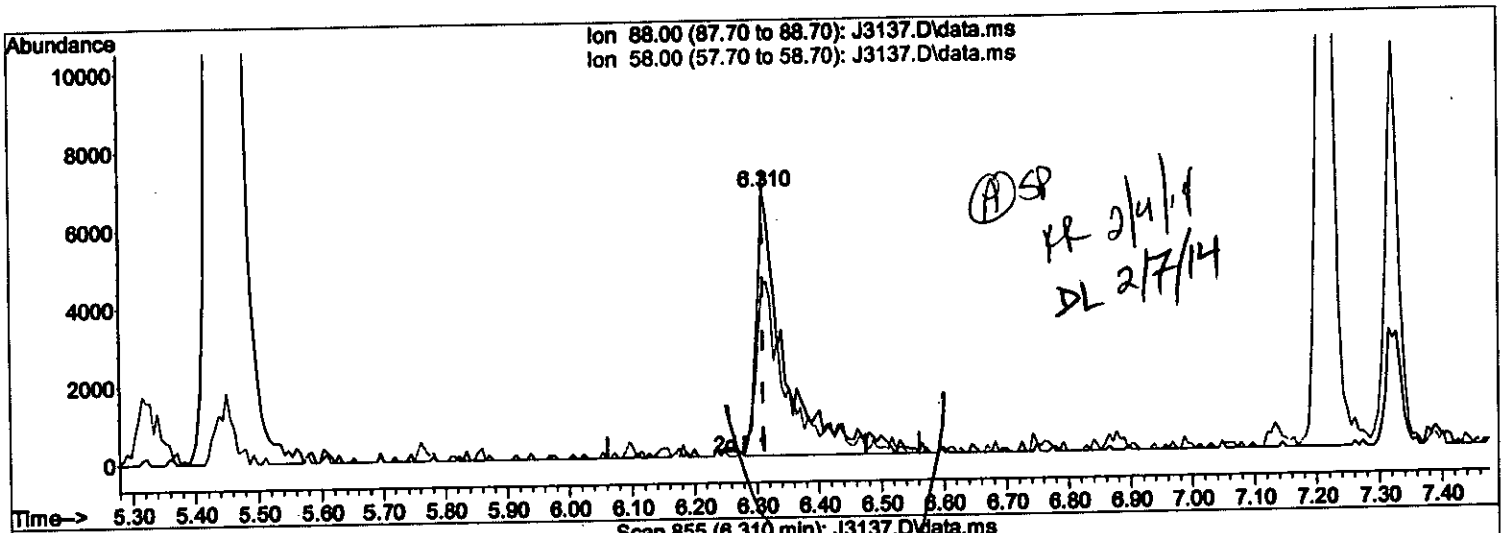
Ion	Exp%	Act%
88.00	100	100
58.00	66.00	63.83
0.00	0.00	0.00
0.00	0.00	0.00

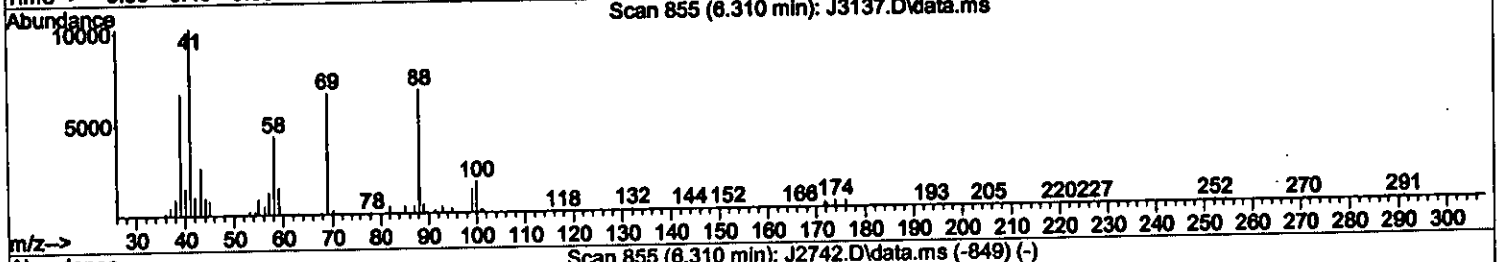
W011514.M Tue Feb 04 13:31:48 2014 00285 Page: 1

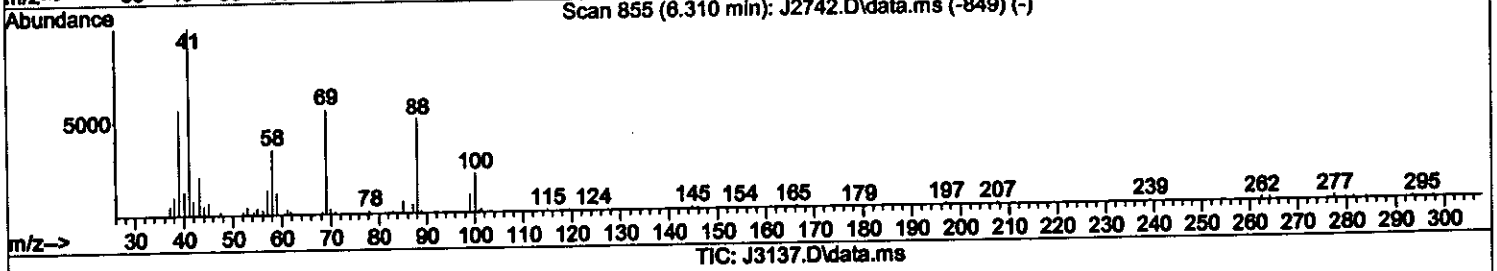
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3137.D
Misc :
Acq On : 4 Feb 2014 12:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 13:11:53 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3137.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 462.28 ppb m

response 21578

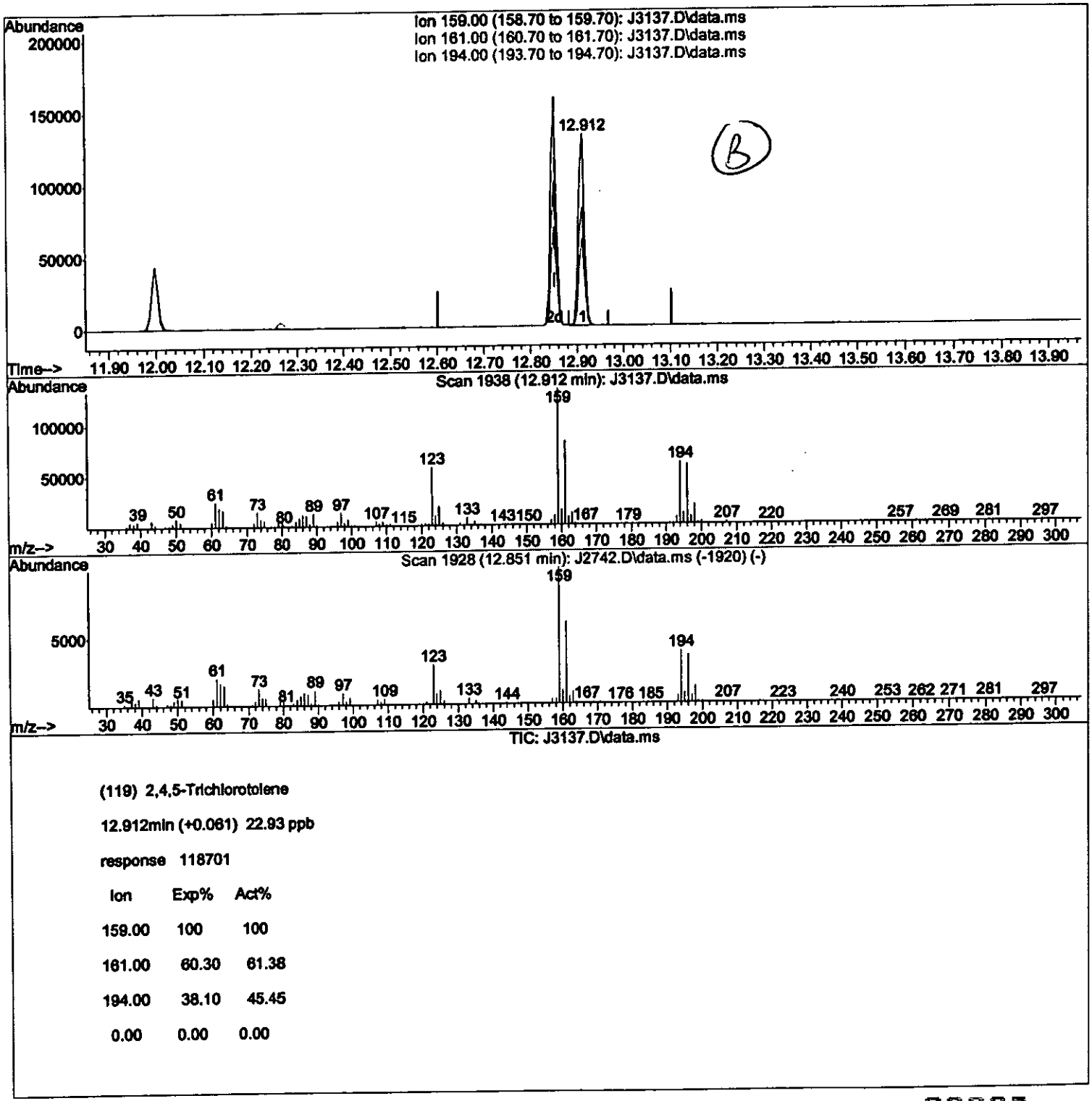
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	63.83
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Tue Feb 04 13:31:55 2014 Page: 1

Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3137.D
Misc :
Acq On : 4 Feb 2014 12:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 13:11:53 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



(119) 2,4,5-Trichlorotolene

12.912min (+0.061) 22.93 ppb

response 118701

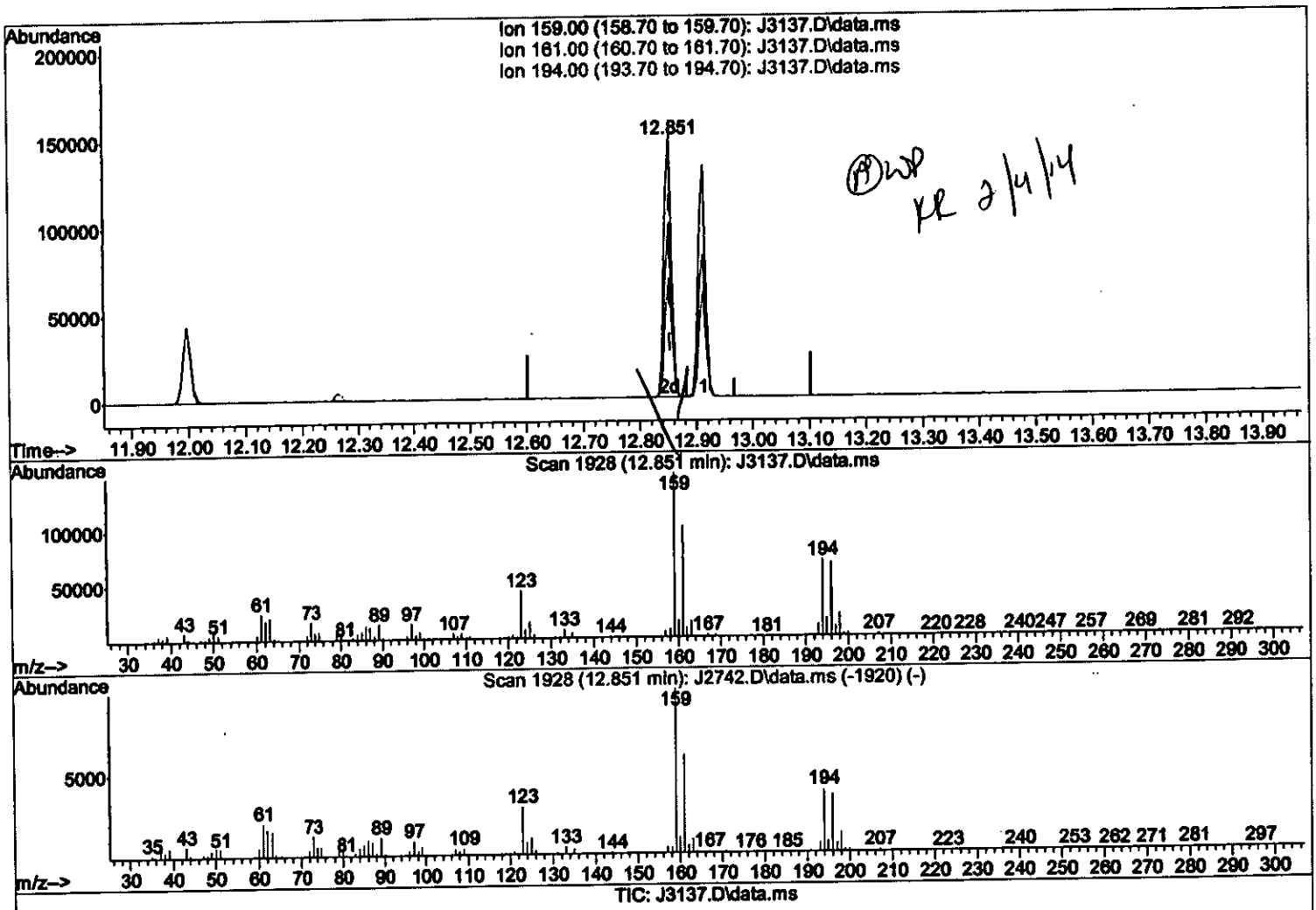
Ion	Exp%	Act%
159.00	100	100
161.00	60.30	61.38
194.00	38.10	45.45
0.00	0.00	0.00

W011514.M Tue Feb 04 13:32:31 2014 Page: 1

Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3137.D
Misc :
Acq On : 4 Feb 2014 12:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 13:11:53 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



(119) 2,4,5-Trichlorotolene

12.851min (-0.000) 25.36 ppb m

response 131300

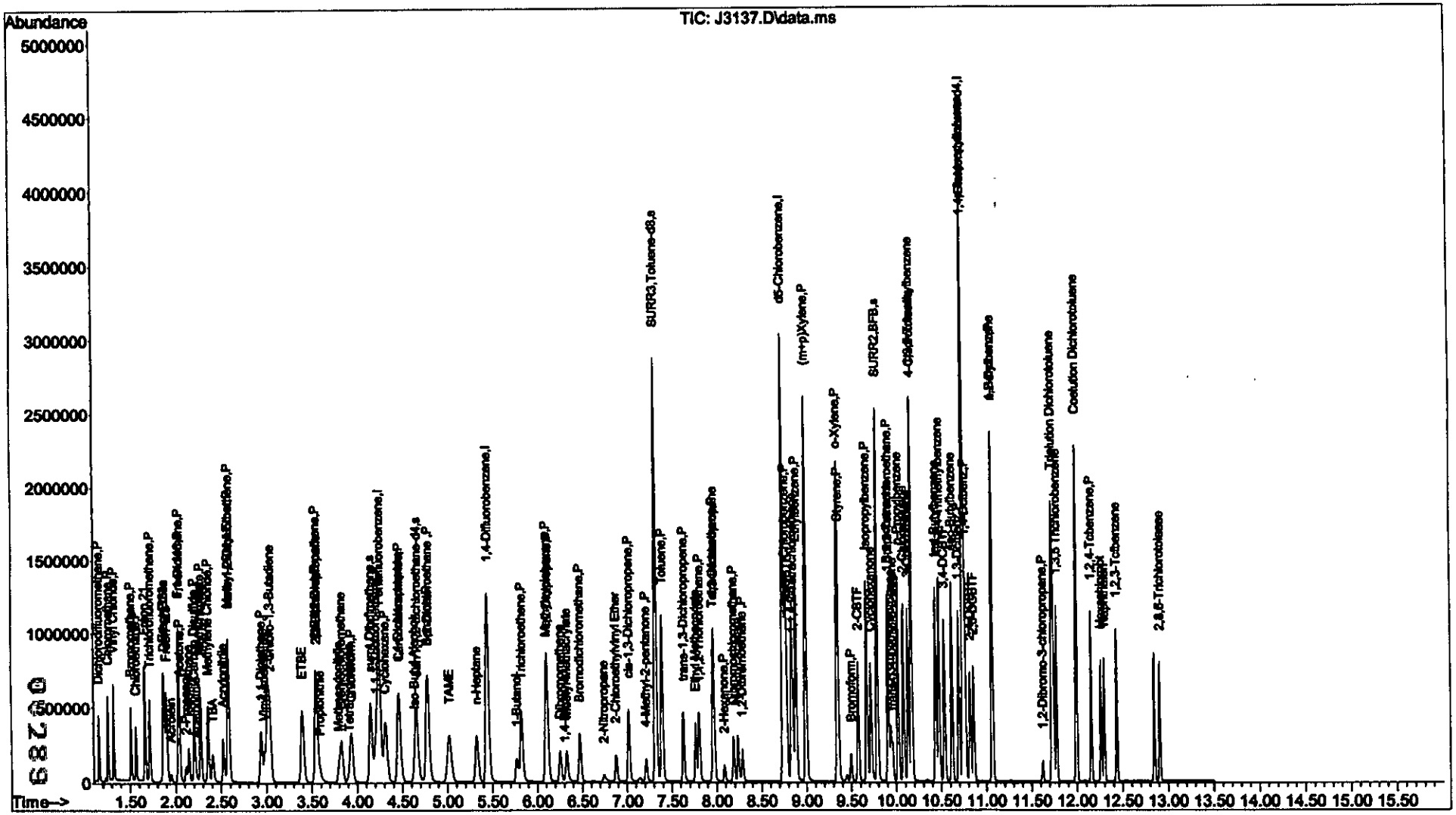
Ion	Exp%	Act%
159.00	100	100
161.00	60.30	67.68
194.00	38.10	46.25#
0.00	0.00	0.00

W011514.M Tue Feb 04 13:32:36 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3137.D
Misc :
Acq On : 4 Feb 2014 12:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 13:11:53 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1120
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/4/14 14:41
Sample Name:	FTMM-22-GW-CW1MW31-13	**Units:**	µg/L
Lab Code:	RQ1401146-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378884
Data File Name:	I:\ACQUDATA\msvoa12\Data\020414\J3140.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**48.4**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**48.3**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**50.2**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**49.7**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**47.5**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**55.3**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**54.9**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**48.0**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**48.1**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**49.1**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**45.3**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**49.5**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**49.1**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**48.7**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**45.8**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**48.3**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**46.7**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**49.9**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**47.0**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**49.5**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**52.7**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**46.2**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**48.9**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**43.5**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**49.6**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**51.5**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**47.1**		5.0	1.0	0.67	
67-64-1	Acetone	**37.3**		5.0	5.0	1.3	
71-43-2	Benzene	**48.5**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**49.1**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**51.0**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**49.9**		5.0	1.0	0.32	
75-25-2	Bromoform	**49.0**		5.0	1.0	0.42	
74-83-9	Bromomethane	**42.9**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**46.7**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1120
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/4/14 14:41
Sample Name:	FTMM-22-GW-CW1MW31-13	**Units:**	µg/L
Lab Code:	RQ1401146-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378884
Data File Name:	I:\ACQUDATA\msvoa12\Data\020414\J3140.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**50.2**		5.0	1.0	0.29	
75-00-3	Chloroethane	**50.7**		5.0	1.0	0.24	
67-66-3	Chloroform	**50.1**		5.0	1.0	0.25	
74-87-3	Chloromethane	**51.5**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**48.4**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**52.7**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**48.3**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**48.2**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**52.2**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**50.6**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**46.4**		5.0	1.0	0.29	
91-20-3	Naphthalene	**48.7**		5.0	1.0	0.20	
100-42-5	Styrene	**41.2**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**49.4**		5.0	1.0	0.30	
108-88-3	Toluene	**51.7**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**55.5**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**47.5**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**53.5**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**52.1**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**48.6**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**98.8**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**52.8**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**50.8**		5.0	1.0	0.20	
95-47-6	o-Xylene	**48.5**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**51.4**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**50.5**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**51.7**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**50.6**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75-120	2/4/14 14:41	
Dibromofluoromethane	100	85-115	2/4/14 14:41	
Toluene-d8	103	85-120	2/4/14 14:41	

Quantitation Report (Not Reviewed)

Sample : R1400634-001MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3140.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 2:41 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ 1401146-05

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:56:56 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	831497	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1266914	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1215380	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	622264	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	369256	49.89	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.78%				
48) surr1,1,2-dichloroetha...	4.658	65	410937	46.10	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 92.20%				
65) SURR3,Toluene-d8	7.322	98	1621973	51.54	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.08%				
70) SURR2,BFB	9.785	95	604764	51.69	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	453623	52.74	ppb		98
3) Chloromethane	1.256	50	603312	51.47	ppb		99
4) Vinyl Chloride	1.323	62	608748	53.45	ppb		98
5) Bromomethane	1.512	94	329296	42.91	ppb		98
6) Chloroethane	1.567	64	348105	50.71	ppb		100
7) Freon 21	1.664	67	987531	59.03	ppb		100
8) Trichlorofluoromethane	1.719	101	605635	47.50	ppb		99
9) Diethyl Ether	1.878	59	259199	46.49	ppb		95
10) Freon 123a	1.866	67	512369	54.75	ppb		89
11) Freon 123	1.902	83	562858	56.37	ppb		97
12) Acrolein	1.951	56	62529	155.37	ppb		95
13) 1,1-Diclethene	2.036	96	329186	55.32	ppb		93
14) Freon 113	2.036	101	306086	48.64	ppb		89
15) Acetone	2.042	43	64081	37.34	ppb		92
16) 2-Propanol	2.110	45	243140	939.95	ppb		97
17) Iodomethane	2.146	142	446604	52.67	ppb		97
18) Carbon Disulfide	2.207	76	919165	41.35	ppb		99
19) Acetonitrile	2.219	40	59453	217.51	ppb		95
20) Allyl Chloride	2.274	76	195406	46.46	ppb	#	78
21) Methyl Acetate	2.274	43	167120	45.86	ppb		98
22) Methylene Chloride	2.353	84	347351	48.25	ppb		95
23) TBA	2.402	59	377087	871.38	ppb		99
24) Acrylonitrile	2.524	53	377551	218.19	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	864675	46.42	ppb		99
26) trans-1,2-Dichloroethene	2.579	96	375654	51.66	ppb		95
28) 1,1-Diclethane	2.939	63	665248	47.45	ppb		99
29) Vinyl Acetate	2.975	86	54029	50.59	ppb	#	83
30) DIPE	3.012	45	1314115	47.06	ppb		98
31) 2-Chloro-1,3-Butadiene	3.036	53	597042	40.97	ppb		95
32) ETBE	3.396	59	1130812	49.41	ppb		98
33) 2,2-Dichloropropane	3.554	77	607089	52.74	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	440888	52.07	ppb		92
35) 2-Butanone	3.548	43	102850	46.20	ppb		97
36) Propionitrile	3.591	54	137708	222.41	ppb		99
37) Bromochloromethane	3.829	130	227896	51.04	ppb		93

KB 2/6/14

W011514.M Tue Feb 04 14:57:00 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1400634-001MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3140.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 2:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:56:56 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.798	67	94247	47.36 ppb	93
39) Tetrahydrofuran	3.902	42	64037	39.80 ppb	98
40) Chloroform	3.938	83	660007	50.11 ppb	96
41) 1,1,1-Trichloroethane	4.213	97	582205	48.25 ppb	93
42) TAME	5.024	73	956008	50.73 ppb	97
44) Cyclohexane	4.316	41	363495	44.34 ppb	96
46) Carbontetrachloride	4.469	121	146910	46.69 ppb	90
47) 1,1-Dichloropropene	4.463	75	534536	54.85 ppb	97
49) Benzene	4.780	78	1529859	48.53 ppb	97
50) 1,2-Dichloroethane	4.786	62	476627	45.81 ppb	98
51) Iso-Butyl Alcohol	4.639	43	176350	841.21 ppb	98
52) n-Heptane	5.328	43	413606	48.56 ppb	97
53) 1-Butanol	5.767	56	274672	2474.89 ppb	98
54) Trichloroethene	5.828	130	447881	55.48 ppb	95
55) Methylcyclohexane	6.103	55	430478	48.18 ppb	96
56) 1,2-Diclpropane	6.115	63	387617	48.34 ppb	100
57) Dibromomethane	6.255	93	188289	50.46 ppb	96
58) 1,4-Dioxane	6.310	88	44235 ~~41017~~	~~889.20~~ ppb	95.97 98
59) Methyl Methacrylate	6.328	69	172029	46.91 ppb	96
60) Bromodichloromethane	6.474	83	487849	49.85 ppb	99
61) 2-Nitropropane	6.749	41	56284	43.50 ppb	92
62) 2-Chloroethylvinyl Ether	6.883	63	1758	0.63 ppb	83
63) cis-1,3-Dichloropropene	7.023	75	566572	48.61 ppb	98
64) 4-Methyl-2-pentanone	7.212	43	237179	47.12 ppb	93
66) Toluene	7.395	91	1707758	51.73 ppb	99
67) trans-1,3-Dichloropropene	7.627	75	479107	50.59 ppb	96
68) Ethyl Methacrylate	7.767	69	369857	49.33 ppb	93
69) 1,1,2-Trichloroethane	7.810	97	272979	49.73 ppb	99
72) Tetrachloroethene	7.962	164	314543	49.36 ppb	98
73) 2-Hexanone	8.084	43	156532	43.52 ppb	96
74) 1,3-Dichloropropane	7.968	76	498685	46.98 ppb	96
75) Dibromochloromethane	8.188	129	306211	48.39 ppb	95
76) N-Butyl Acetate	8.236	43	448119	50.09 ppb	99
77) 1,2-Dibromoethane	8.285	107	265155	49.08 ppb	99
78) Chlorobenzene	8.767	112	1101492	50.15 ppb	99
79) 3-CBTF	8.785	180	534074	48.62 ppb	98
80) 4-CBTF	8.834	180	480767	49.20 ppb	96
81) 1,1,1,2-Tetrachloroethane	8.852	131	366945	48.36 ppb	100
82) Ethylbenzene	8.889	106	568183	48.22 ppb	98
83) (m+p)Xylene	8.998	106	1412224	98.79 ppb	99
84) o-Xylene	9.346	106	692872	48.52 ppb	97
85) Styrene	9.352	104	963092	41.23 ppb	97
87) Bromoform	9.498	173	164991	49.03 ppb	98
88) 2-CBTF	9.578	180	511979	48.76 ppb	98
89) Isopropylbenzene	9.669	105	1649972	50.64 ppb	98
90) Cyclohexanone	9.718	55	132032	380.00 ppb	92
91) trans-1,4-Dichloro-2-B...	9.962	53	88467	65.10 ppb	99
92) 1,1,2,2-Tetrachloroethane	9.913	83	320270	50.23 ppb	96
93) Bromobenzene	9.907	156	448244	49.13 ppb	91
94) 1,2,3-Trichloropropane	9.943	110	93366	48.11 ppb	99
95) n-Propylbenzene	10.023	91	1909128	50.84 ppb	99
96) 2-Chlorotoluene	10.084	91	1165743	48.92 ppb	96

W011514.M Tue Feb 04 14:57:00 2014 Page 2

Quantitation Report (Not Reviewed)

Sample : R1400634-001MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3140.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 2:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:56:56 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

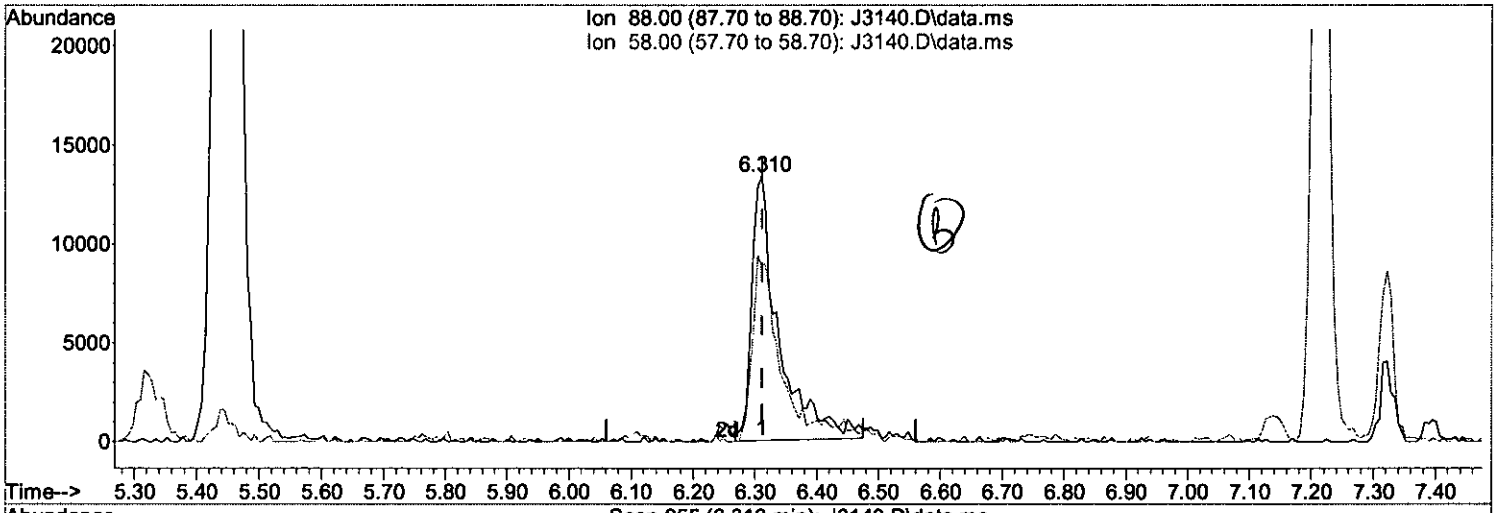
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1192463	49.06	ppb	98
98)	4-Chlorotoluene	10.169	91	1439929	49.58	ppb	97
99)	1,3,5-Trimethylbenzene	10.169	105	1289946	46.72	ppb	98
100)	tert-Butylbenzene	10.437	119	1126945	50.45	ppb	99
101)	1,2,4-Trimethylbenzene	10.474	105	1259192	45.26	ppb	99
102)	3,4-DCBTF	10.535	214	357602	49.66	ppb	98
103)	sec-Butylbenzene	10.620	105	1607923	51.44	ppb	99
104)	p-Isopropyltoluene	10.742	119	1414436	51.52	ppb	98
105)	1,3-Dclbenz	10.693	146	799427	49.93	ppb	97
106)	1,4-Dclbenz	10.766	146	825001	49.54	ppb	99
107)	2,4-DCBTF	10.821	214	323121	50.22	ppb	96
108)	2,5-DCBTF	10.858	214	362363	48.79	ppb	97
109)	n-Butylbenzene	11.065	91	1270028	52.80	ppb	99
110)	1,2-Dclbenz	11.065	146	748397	48.71	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	53105	49.50	ppb	88
112)	Trielution Dichlorotol...	11.730	125	1841297	150.09	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	497574	47.35	ppb	99
114)	Coelution Dichlorotoluene	11.998	125	1293731	99.54	ppb	97
115)	1,2,4-Tcbenzene	12.156	180	442263	49.08	ppb	97
116)	Hexachlorobt	12.266	225	200911	52.21	ppb	97
117)	Naphthalen	12.303	128	790518	48.65	ppb	97
118)	1,2,3-Tclbenzene	12.437	180	353522	47.98	ppb	96
119)	2,4,5-Trichlorotolene	12.851	159	253541	49.33	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	222748	48.37	ppb	99

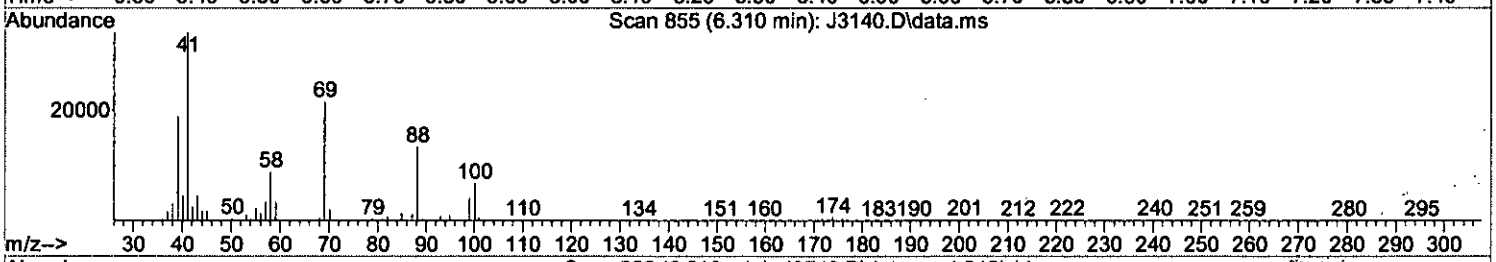
(#) = qualifier out of range (m) = manual integration (+) = signals summed

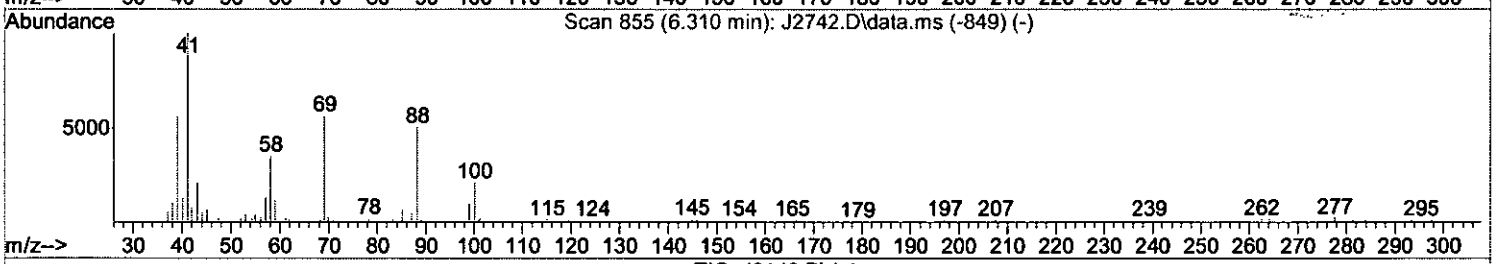
Quantitation Report (Qedit)

Sample : R1400634-001MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3140.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 2:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:56:56 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3140.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 889.20 ppb

response 41017

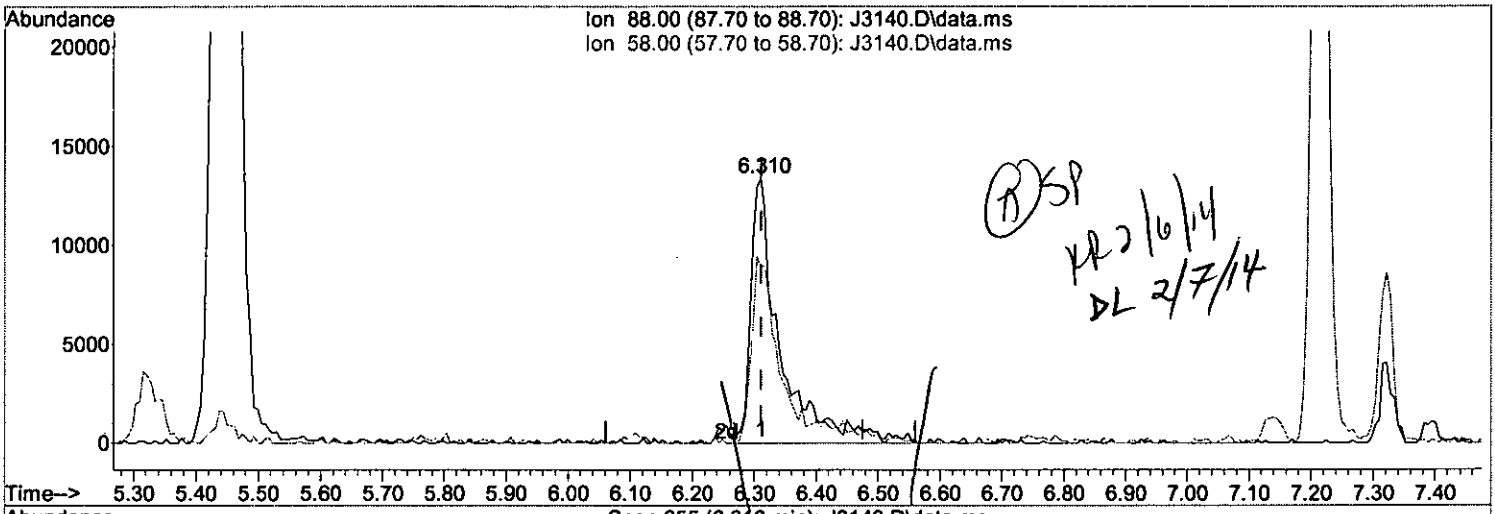
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	66.29
0.00	0.00	0.00
0.00	0.00	0.00

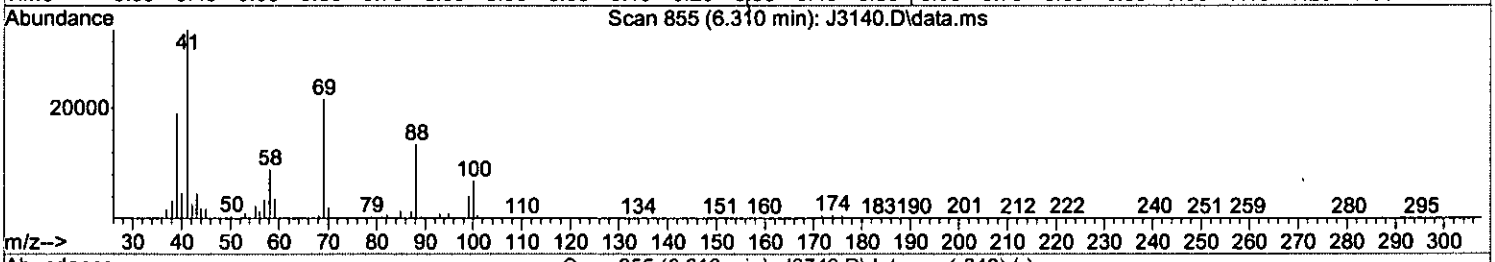
W011514.M Thu Feb 06 11:44:39 2014 00285 Page: 1

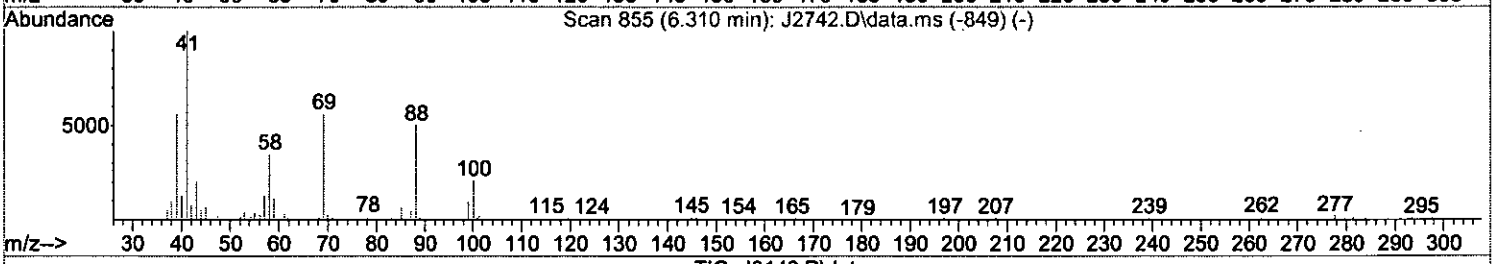
Quantitation Report (Qedit)

Sample : R1400634-001MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3140.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 2:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:56:56 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3140.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 958.97 ppb m

response 44235

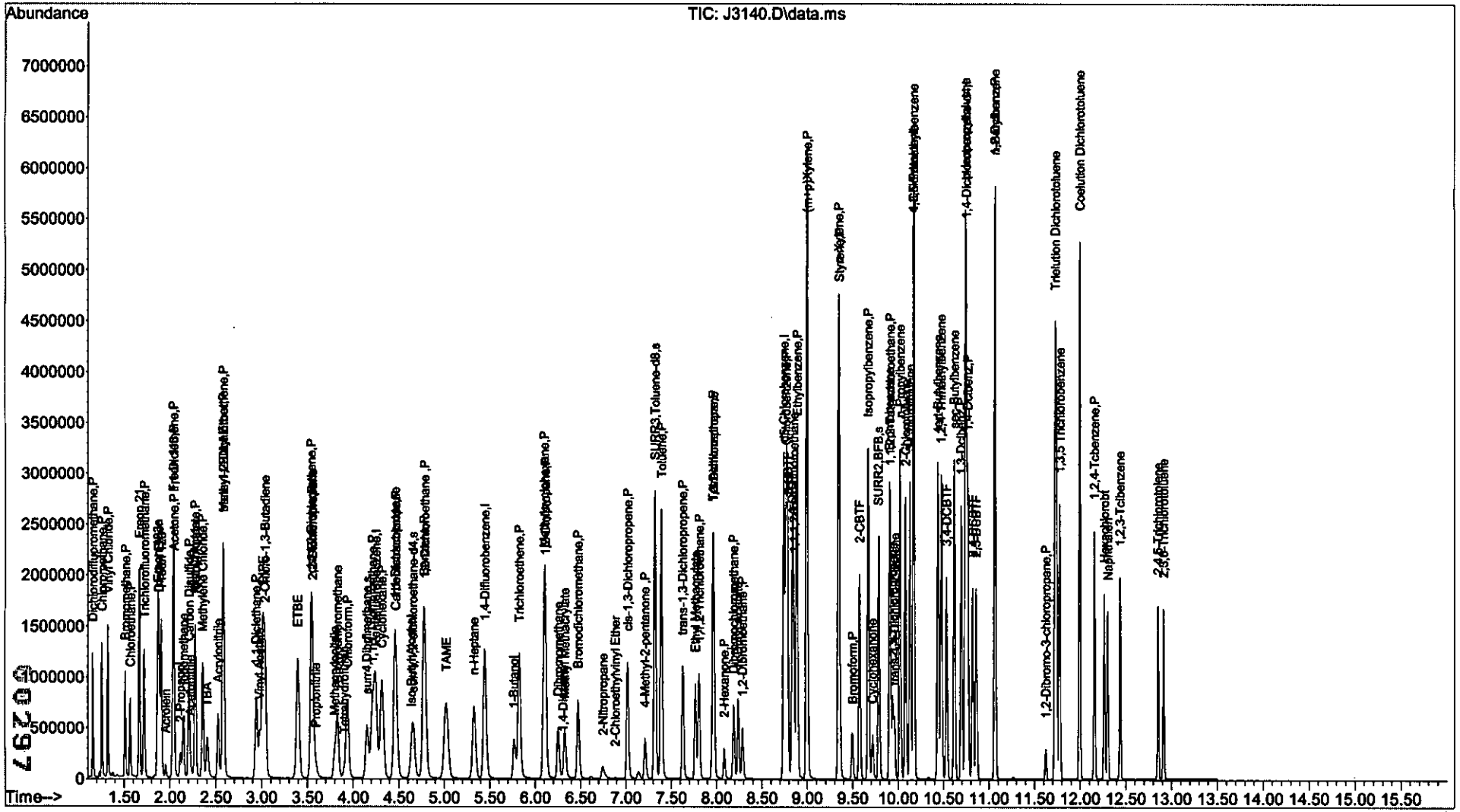
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	66.29
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Feb 06 11:44:59 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1400634-001MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3140.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 2:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 14:56:56 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



W011514.M Tue Feb 04 14:57:02 2014 Page: 4

Quantitation Report (Not Reviewed)

Sample : R1400634-001DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3141.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 3:14 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1401146-06

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 15:29:17 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	860154	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1318414	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1245555	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	645527	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	390178	50.66	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.32%				
48) surr1,1,2-dichloroetha...	4.664	65	426390	45.96	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 91.92%				
65) SURR3,Toluene-d8	7.322	98	1681020	51.33	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.66%				
70) SURR2,BFB	9.785	95	623380	51.20	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.40%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	465301	52.30	ppb		96
3) Chloromethane	1.256	50	618982	51.05	ppb		100
4) Vinyl Chloride	1.323	62	624510	53.01	ppb		97
5) Bromomethane	1.512	94	354951	44.71	ppb		100
6) Chloroethane	1.567	64	365846	51.52	ppb		99
7) Freon 21	1.664	67	1012852	58.53	ppb		99
8) Trichlorofluoromethane	1.719	101	630330	47.79	ppb		96
9) Diethyl Ether	1.878	59	275284	47.73	ppb		91
10) Freon 123a	1.866	67	530523	54.80	ppb		92
11) Freon 123	1.902	83	580921	56.24	ppb		99
12) Acrolein	1.951	56	63228	152.34	ppb		98
13) 1,1-Diclethene	2.036	96	352437	57.25	ppb		91
14) Freon 113	2.036	101	320124	49.18	ppb		91
15) Acetone	2.042	43	67684	38.13	ppb		96
16) 2-Propanol	2.109	45	255271	953.97	ppb		97
17) Iodomethane	2.146	142	499123	56.91	ppb		98
18) Carbon Disulfide	2.207	76	755735	32.86	ppb		100
19) Acetonitrile	2.219	40	63233	223.63	ppb		97
20) Allyl Chloride	2.274	76	192821	44.32	ppb	#	83
21) Methyl Acetate	2.274	43	179308	47.57	ppb		96
22) Methylene Chloride	2.353	84	378433	50.81	ppb		95
23) TBA	2.408	59	426918	953.66	ppb		95
24) Acrylonitrile	2.524	53	~~397780~~ 400	~~222.22~~ 234.70	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	947620 100	49.18	ppb		98
26) trans-1,2-Dichloroethene	2.579	96	400342	53.22	ppb		96
28) 1,1-Diclethane	2.938	63	716868	49.43	ppb		100
29) Vinyl Acetate	2.975	86	59487	53.85	ppb	#	93
30) DIPE	3.012	45	1442229	49.93	ppb		99
31) 2-Chloro-1,3-Butadiene	3.036	53	631245	41.87	ppb		92
32) ETBE	3.396	59	1227380	51.85	ppb		97
33) 2,2-Dichloropropane	3.554	77	634493	53.29	ppb		97
34) cis-1,2-Dichloroethene	3.542	96	470709	53.74	ppb		91
35) 2-Butanone	3.548	43	108727	47.22	ppb		96
36) Propionitrile	3.591	54	158260	247.09	ppb		99
37) Bromochloromethane	3.829	130	240790	52.14	ppb		93

KK 2/6/14

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1120
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/4/14 15:14
Sample Name:	FTMM-22-GW-CW1MW31-13	**Units:**	µg/L
Lab Code:	RQ1401146-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378884
Data File Name:	I:\ACQUDATA\msvoa12\Data\020414\J3141.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**49.7**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**49.4**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**51.6**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**50.9**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**49.4**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**57.3**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**56.3**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**50.6**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**49.8**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**50.1**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**46.7**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**50.9**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**51.2**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**49.2**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**46.3**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**49.8**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**47.7**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**49.9**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**48.5**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**49.4**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**53.3**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**47.2**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**49.4**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**45.7**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**50.1**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**50.8**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**48.3**		5.0	1.0	0.67	
67-64-1	Acetone	**38.1**		5.0	5.0	1.3	
71-43-2	Benzene	**50.2**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**49.7**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**52.1**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**49.3**		5.0	1.0	0.32	
75-25-2	Bromoform	**45.5**		5.0	1.0	0.42	
74-83-9	Bromomethane	**44.7**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**48.0**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1400634
Project:	FTMM Quarterly Groundwater Sampling Event/748810-03000	**Date Collected:**	1/24/14 1120
Sample Matrix:	Water	**Date Received:**	1/25/14
		Date Analyzed:	2/4/14 15:14
Sample Name:	FTMM-22-GW-CW1MW31-13	**Units:**	µg/L
Lab Code:	RQ1401146-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	378884
Data File Name:	I:\ACQUDATA\msvoa12\Data\020414\J3141.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**51.2**		5.0	1.0	0.29	
75-00-3	Chloroethane	**51.5**		5.0	1.0	0.24	
67-66-3	Chloroform	**52.3**		5.0	1.0	0.25	
74-87-3	Chloromethane	**51.1**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**49.7**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**52.3**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**50.8**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**49.5**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**50.1**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**51.1**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**49.2**		5.0	1.0	0.29	
91-20-3	Naphthalene	**53.3**		5.0	1.0	0.20	
100-42-5	Styrene	**43.2**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**50.9**		5.0	1.0	0.30	
108-88-3	Toluene	**52.7**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**56.6**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**47.8**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**53.0**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**53.7**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**49.9**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**102**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**52.5**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**51.0**		5.0	1.0	0.20	
95-47-6	o-Xylene	**50.1**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**50.8**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**49.8**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**53.2**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**50.5**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	2/4/14 15:14	
Dibromofluoromethane	101	85-115	2/4/14 15:14	
Toluene-d8	103	85-120	2/4/14 15:14	

Quantitation Report (Not Reviewed)

Sample : R1400634-001DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3141.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 3:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 15:29:17 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	105442	51.22	ppb		90
39) Tetrahydrofuran	3.902	42	72848	43.77	ppb		98
40) Chloroform	3.938	83	712400	52.29	ppb		93
41) 1,1,1-Trichloroethane	4.213	97	616173	49.36	ppb		94
42) TAME	5.023	73	1013583	51.99	ppb		94
44) Cyclohexane	4.310	41	381858	44.76	ppb		91
46) Carbontetrachloride	4.475	121	157099	47.98	ppb		92
47) 1,1-Dichloropropene	4.463	75	570915	56.30	ppb		95
49) Benzene	4.780	78	1646927	50.20	ppb		97
50) 1,2-Dichloroethane	4.786	62	501732	46.34	ppb		100
51) Iso-Butyl Alcohol	4.633	43	191349	877.11	ppb		95
52) n-Heptane	5.328	43	420498	47.44	ppb		95
53) 1-Butanol	5.767	56	294241	2547.65	ppb		99
54) Trichloroethene	5.828	130	475039	56.55	ppb		94
55) Methylcyclohexane	6.102	55	447539	48.13	ppb		88
56) 1,2-Diclpropane	6.115	63	415371	49.77	ppb		97
57) Dibromomethane	6.255	93	194556	50.10	ppb		97
58) 1,4-Dioxane	6.316	88	47041741877	872.39	ppb	980.09	82
59) Methyl Methacrylate	6.328	69	185835	48.69	ppb		95
60) Bromodichloromethane	6.474	83	501795	49.27	ppb		99
61) 2-Nitropropane	6.743	41	61260	45.50	ppb		99
62) 2-Chloroethylvinyl Ether	6.840	63	741	0.26	ppb	#	51
63) cis-1,3-Dichloropropene	7.023	75	605225	49.90	ppb		98
64) 4-Methyl-2-pentanone	7.212	43	253098	48.32	ppb		94
66) Toluene	7.389	91	1809719	52.68	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	497696	50.50	ppb		94
68) Ethyl Methacrylate	7.767	69	399737	51.24	ppb		92
69) 1,1,2-Trichloroethane	7.809	97	290480	50.85	ppb		98
72) Tetrachloroethene	7.962	164	332303	50.88	ppb		97
73) 2-Hexanone	8.084	43	168563	45.72	ppb		92
74) 1,3-Dichloropropane	7.968	76	527065	48.45	ppb		96
75) Dibromochloromethane	8.187	129	322499	49.73	ppb		98
76) N-Butyl Acetate	8.236	43	469351	51.20	ppb		98
77) 1,2-Dibromoethane	8.285	107	283348	51.18	ppb		92
78) Chlorobenzene	8.767	112	1152093	51.19	ppb		100
79) 3-CBTF	8.785	180	568620	50.51	ppb		99
80) 4-CBTF	8.834	180	518817	51.80	ppb		94
81) 1,1,1,2-Tetrachloroethane	8.846	131	386407	49.69	ppb		95
82) Ethylbenzene	8.889	106	597713	49.50	ppb		97
83) (m+p)Xylene	8.998	106	1487650	101.54	ppb		97
84) o-Xylene	9.346	106	733577	50.12	ppb		94
85) Styrene	9.352	104	1034638	43.21	ppb		97
87) Bromoform	9.492	173	158790	45.48	ppb		99
88) 2-CBTF	9.577	180	550786	50.56	ppb		98
89) Isopropylbenzene	9.669	105	1728510	51.14	ppb		99
90) Cyclohexanone	9.718	55	136102	377.60	ppb		98
91) trans-1,4-Dichloro-2-B...	9.961	53	86225	61.16	ppb		94
92) 1,1,2,2-Tetrachloroethane	9.913	83	341038	51.56	ppb		97
93) Bromobenzene	9.907	156	470028	49.66	ppb	#	88
94) 1,2,3-Trichloropropane	9.943	110	100332	49.83	ppb		97
95) n-Propylbenzene	10.022	91	1986238	50.99	ppb		98
96) 2-Chlorotoluene	10.077	91	1220683	49.38	ppb		98

Quantitation Report (Not Reviewed)

Sample : R1400634-001DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3141.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 3:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 15:29:17 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration

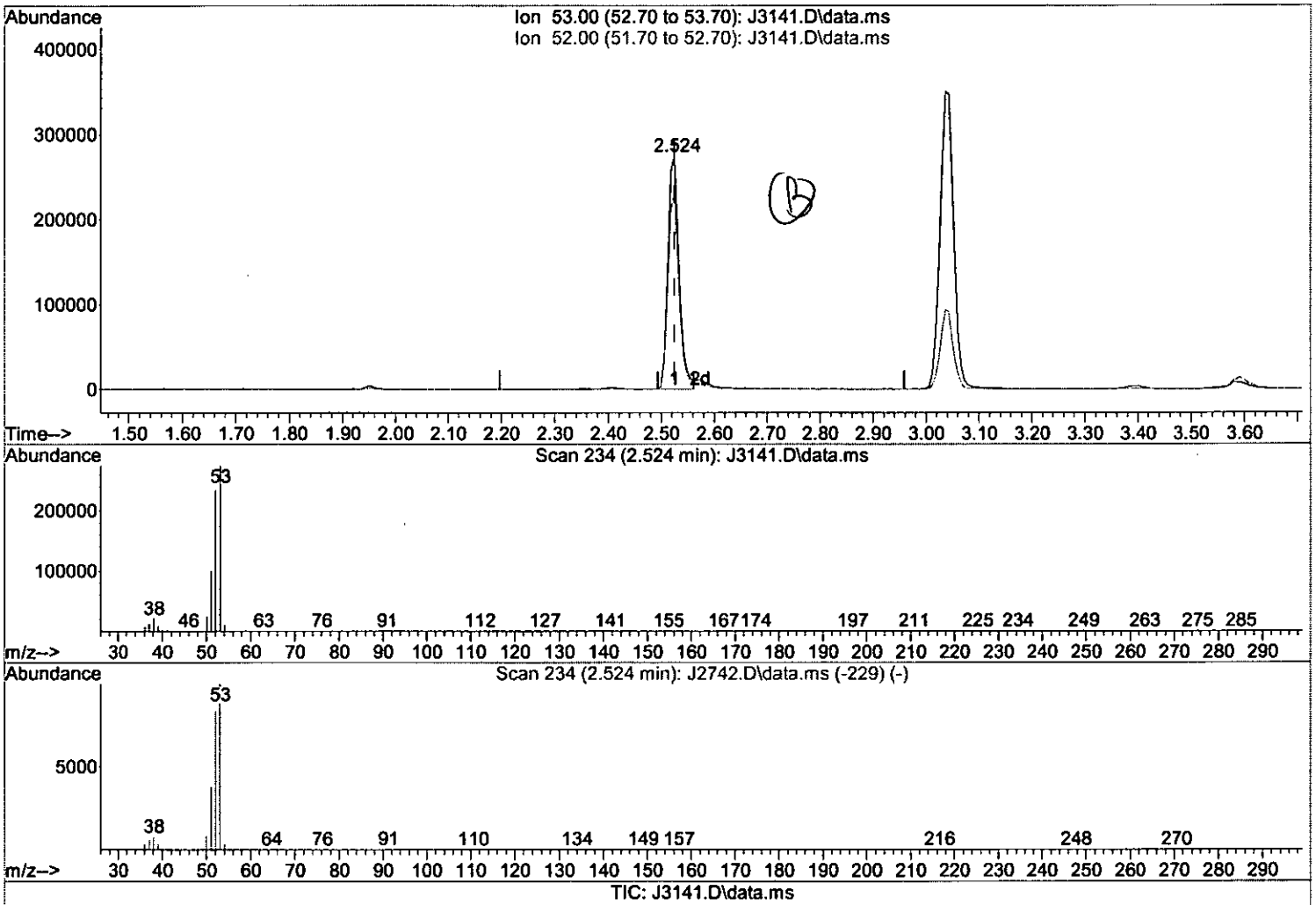
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1280493	50.79	ppb	97
98)	4-Chlorotoluene	10.169	91	1507732	50.05	ppb	98
99)	1,3,5-Trimethylbenzene	10.169	105	1365111	47.66	ppb	99
100)	tert-Butylbenzene	10.437	119	1153380	49.78	ppb	99
101)	1,2,4-Trimethylbenzene	10.474	105	1346475	46.65	ppb	98
102)	3,4-DCBTF	10.535	214	381642	51.09	ppb	99
103)	sec-Butylbenzene	10.620	105	1647957	50.82	ppb	99
104)	p-Isopropyltoluene	10.742	119	1446356	50.78	ppb	98
105)	1,3-Dclbenz	10.693	146	829465	49.94	ppb	96
106)	1,4-Dclbenz	10.766	146	854121	49.44	ppb	98
107)	2,4-DCBTF	10.821	214	344452	51.61	ppb	95
108)	2,5-DCBTF	10.858	214	383673	49.80	ppb	97
109)	n-Butylbenzene	11.065	91	1309665	52.48	ppb	98
110)	1,2-Dclbenz	11.065	146	784030	49.19	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	56614	50.87	ppb	92
112)	Trielution Dichlorotol...	11.729	125	1969873	154.79	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	538143	49.36	ppb	99
114)	Coelution Dichlorotoluene	11.998	125	1398878	103.75	ppb	97
115)	1,2,4-Tcbenzene	12.156	180	468668	50.14	ppb	95
116)	Hexachlorobt	12.266	225	199776	50.05	ppb	96
117)	Naphthalen	12.303	128	898280	53.29	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	387033	50.64	ppb	95
119)	2,4,5-Trichlorotolene	12.851	159	283709	53.21	ppb	94
120)	2,3,6-Trichlorotoluene	12.912	159	253430	53.05	ppb	99

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

Quantitation Report (Qedit)

Sample : R1400634-001DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3141.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 3:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 15:29:17 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



TIC: J3141.D\data.ms

(24) Acrylonitrile

2.524min (-0.000) 222.22 ppb

response 397780

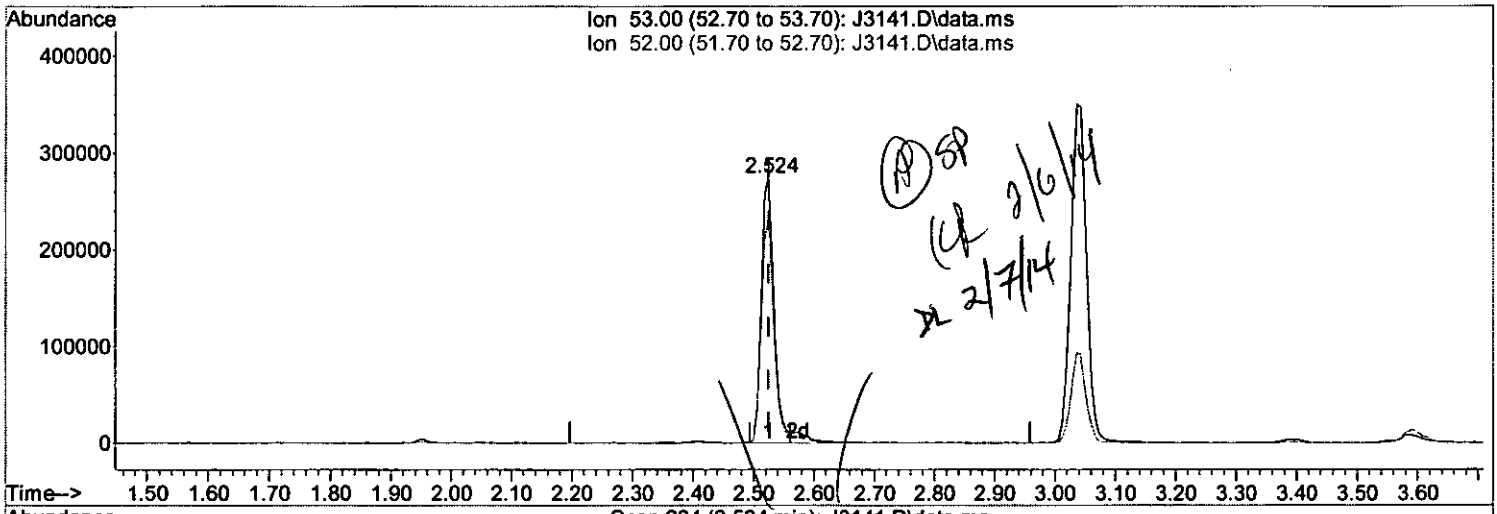
Ion	Exp%	Act%
53.00	100	100
52.00	83.10	84.85
0.00	0.00	0.00
0.00	0.00	0.00

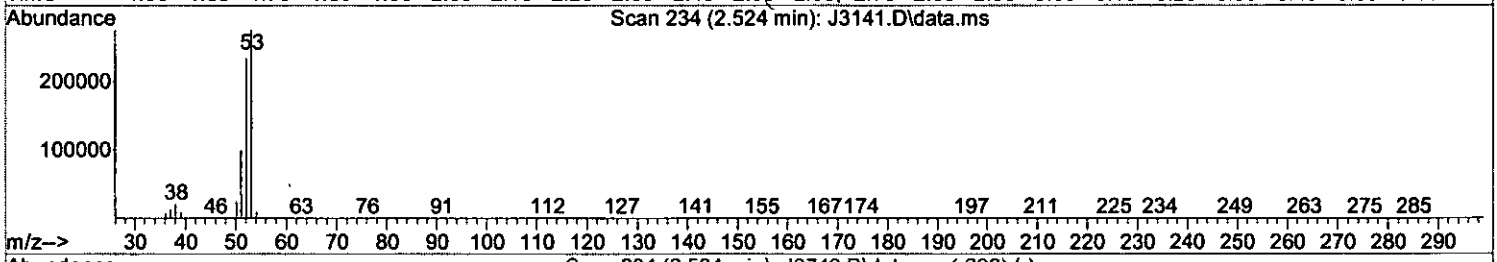
W011514.M Thu Feb 06 11:47:11 2014 Page: 1

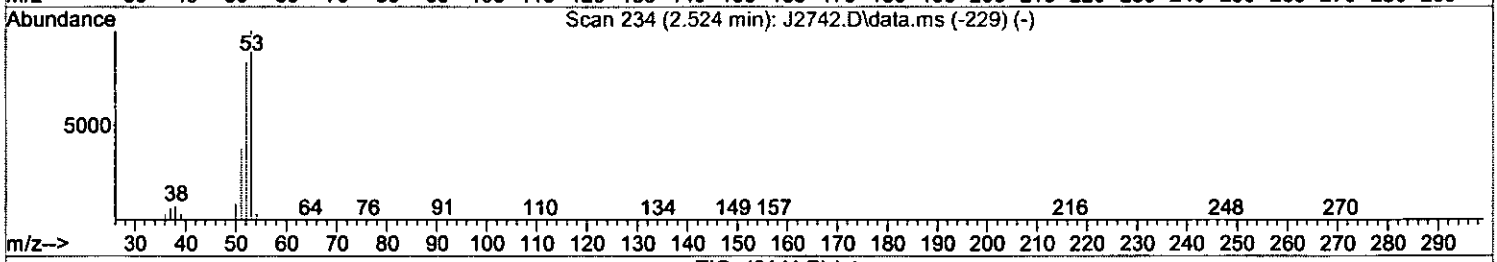
Quantitation Report (Qedit)

Sample : R1400634-001DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3141.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 3:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 15:29:17 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3141.D\data.ms

(24) Acrylonitrile

2.524min (-0.000) 234.70 ppb m

response 420106

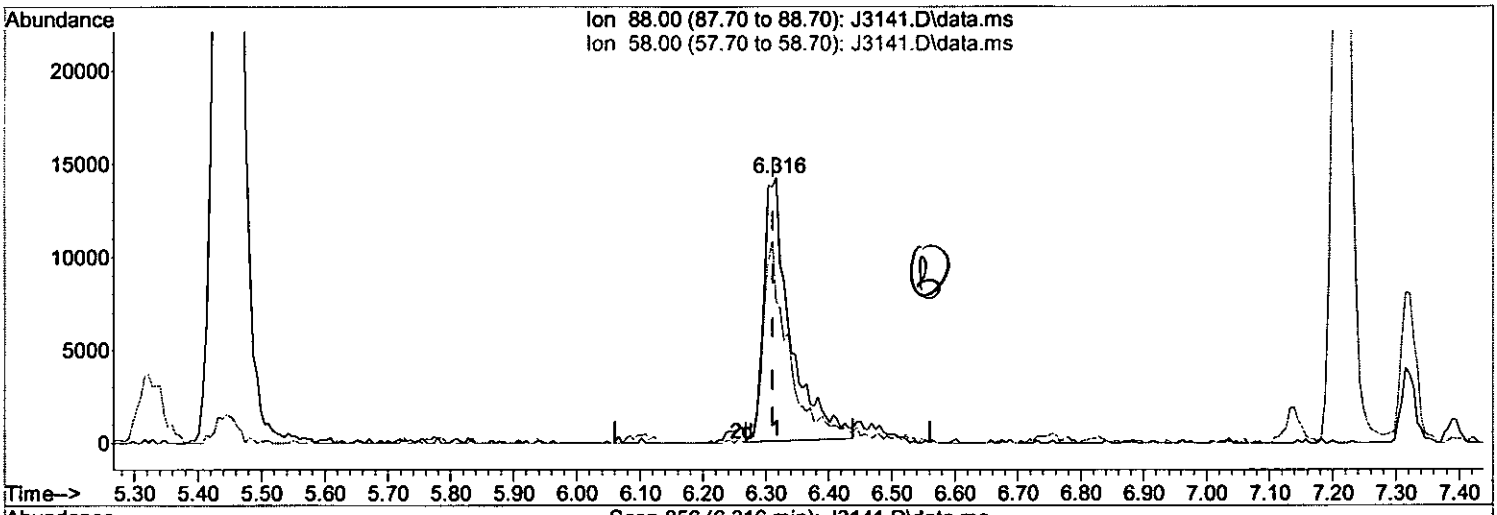
Ion	Exp%	Act%
53.00	100	100
52.00	83.10	84.85
0.00	0.00	0.00
0.00	0.00	0.00

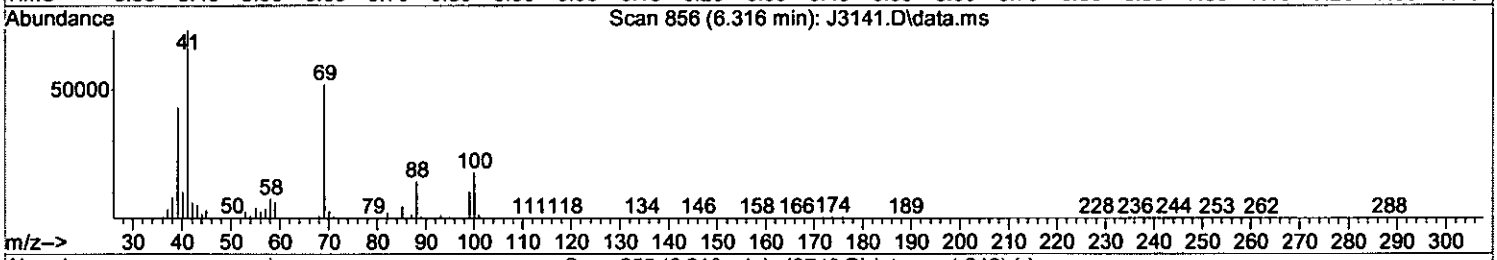
W011514.M Thu Feb 06 11:47:16 2014 003 Page: 1

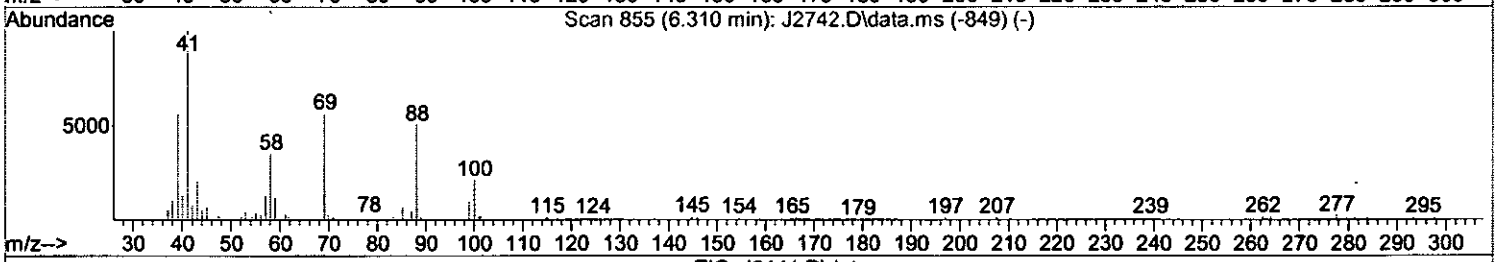
Quantitation Report (Qedit)

Sample : R1400634-001DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3141.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 3:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 15:29:17 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3141.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 872.39 ppb

response 41877

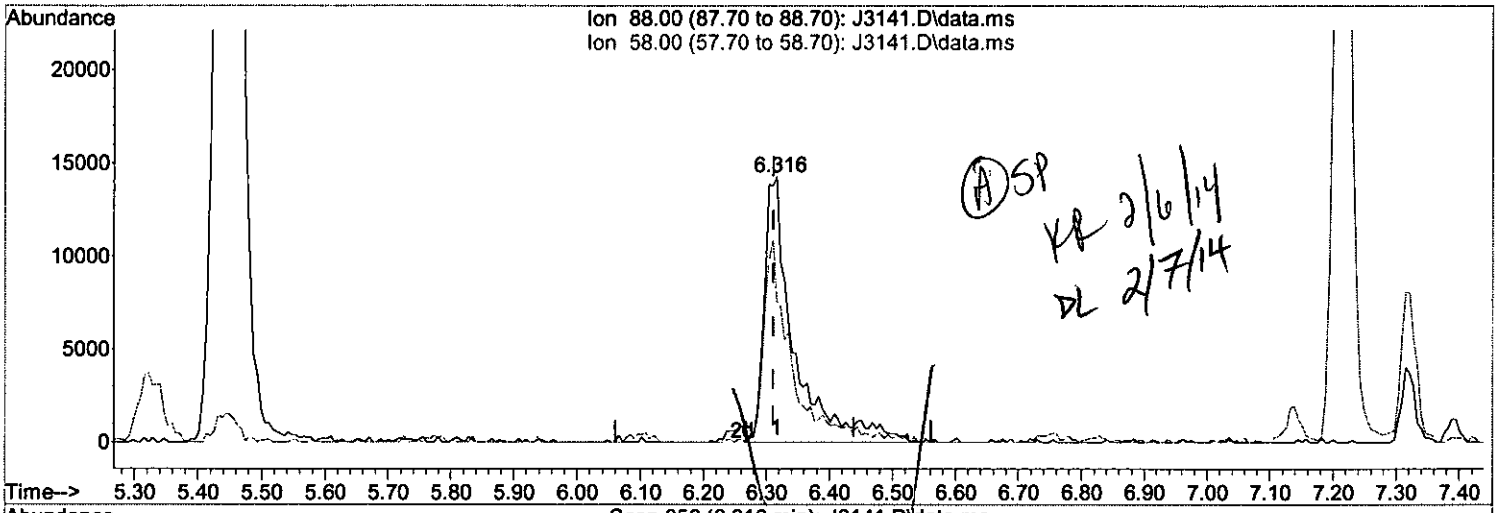
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	53.29
0.00	0.00	0.00
0.00	0.00	0.00

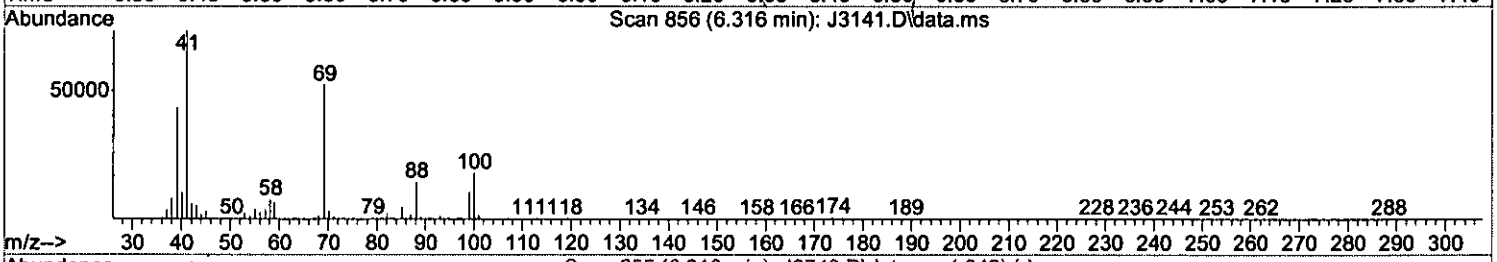
W011514.M Thu Feb 06 11:47:50 2014 Page: 1

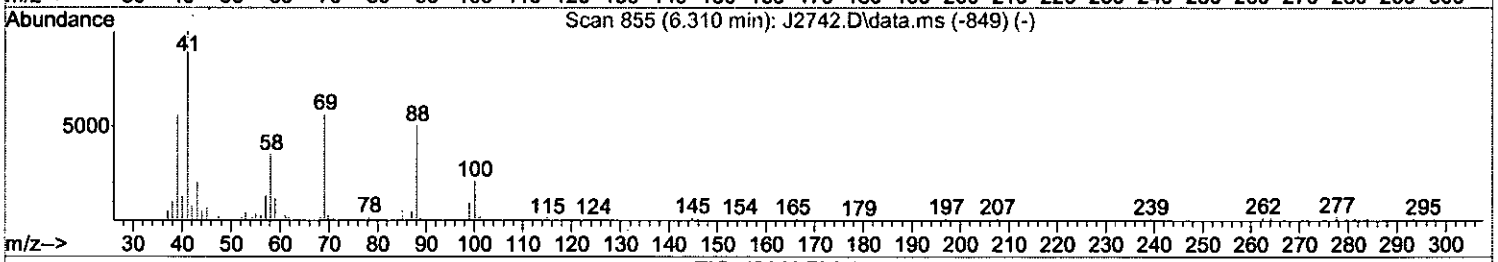
Quantitation Report (Qedit)

Sample : R1400634-001DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\020414\J3141.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 3:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 15:29:17 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration







TIC: J3141.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 980.09 ppb m

response 47047

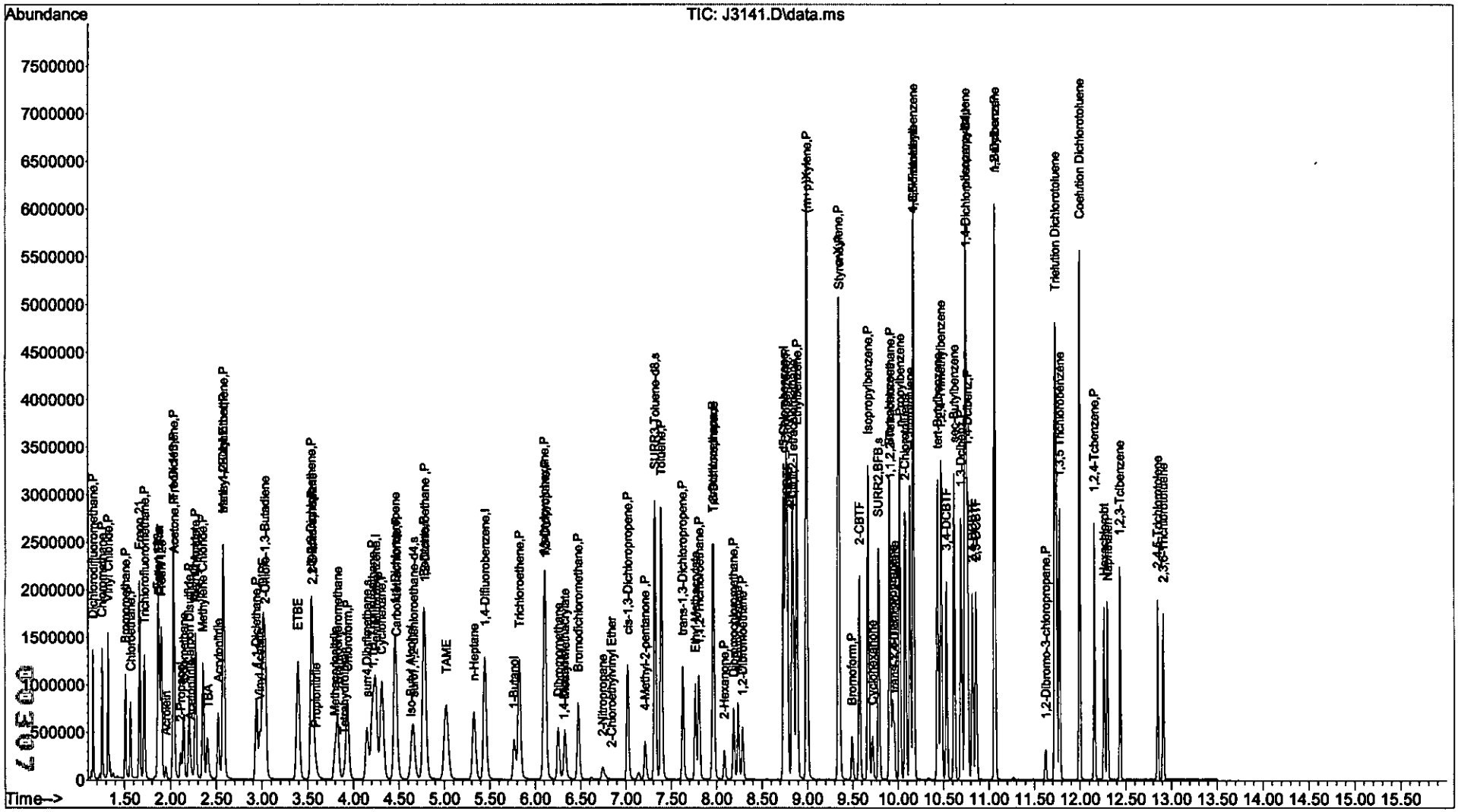
Ion	Exp%	Act%
88.00	100	100
58.00	68.00	53.29
0.00	0.00	0.00
0.00	0.00	0.00

W011514.M Thu Feb 06 11:47:57 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1400634-001DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\020414\J3141.D
Misc : PARSONS 9913 T4
Acq On : 4 Feb 2014 3:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W011514.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Feb 04 15:29:17 2014
QLast Update : Thu Jan 16 12:02:56 2014
Response via : Initial Calibration



W011514.M Tue Feb 04 15:29:22 2014 Page: 4

(VV)

Analysis: ~~Kquest~~ 8260 Waters | Analyst: Kquest | Tune Method: W011514
Date: 1/15/14 | Data Path: j:\acqudata\msvoa1\2011514 | Run Method: ↓
Instr. 12 | * post-cleaning, new trap * | LIMS Run#: -ICAL-

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								J2719		
1	↓								J2720		new 15/5h
1	↓								J2721		(mtune)
2	TUNE (carbon is bk)								J2722	YT	auto
1	IBLK	5ppm	500ppm FV						J2723	YB	
1	0.5 ppb	5ml	— 50mlx10						J2724	(N)	8260 water ICAL
2	1.0	10ml	—						J2725		Acrolein response increases
3	2.0	20ml	—						J2726		throughout ICAL -
4	5.0	50ml	—						J2727		re-shoot curve!
5	20	—	2ml						J2728		
6	50	—	5ml						J2729		
7	100	—	10ml						J2730		
8	200	—	20ml ↓						J2731	↓	↓
9	BLK								J2732	—	
10	↓								J2733	—	
11	↓								J2734	—	
12	~~TUNE (carbon is bk)~~	BLK							J2735	—	
13	~~IBLK~~ TUNE								J2736	YT	(auto) RS 54
14	IBLK	5ppm	500ppm FV						J2737	YB	
15	0.5 ppb	5ml	— 50mlx10						J2738	Y	8260 water ICAL
16	1.0	10ml	—						J2739	Y	
17	2.0	20ml	—						J2740	Y	
18	5.0	50ml	—						J2741	Y	
19	20	—	2ml						J2742	Y	
20	50	—	5ml						J2743	Y	
21	100	—	10ml						J2744	Y	
22	200	—	20ml ↓						J2745	Y	↓
23	BLK								J2746	—	
24	↓								J2747	—	
25	↓								J2748	—	
26	↓								J2749	—	

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

8260

Primary OCL : 66009
Primary HBO : 66037
Primary Frt : 66036 10ml → 1.0ml MeOH
Primary TG : 66185 = 5ppm
HSL 66183

Secondary :
Secondary :
Secondary :
Secondary :

Combined IS/Surr 500 : 66179
Surrogate :
Internal Std :

Runlog-MSVOAr1 12/5/12
Page 96

Analysis: 8260 waters Analyst: KDuerst Tune Method: 011514
Date: 1/16/14 Data Path: j:\acqudata\msvoa\2011614\ Run Method: ↓
Instr. 12 LIMS Run# :

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	200ppb (old vial)								J2750		(IW) (1/15 directory)
2	Purge + clean lb								J2751		↓ ↓
3	BLANK								J2752		
1	BLK								J2753		
0	↓								J2791		
1	TUNE (on bon 15/5h)								J2755	YT	(auto) 11:36
1	CCV								J2756	YC	Acrolein ↑
1	ICV/LCS								J2757	YB	2 clevs ↑ trans; MDK2BT ↑
1	VBLK								J2758	(N)	not c/o
2	↓								J2759	YB	
1	RQ1400421-01	1.0	TCLPBLK 1/15	[redacted]	6080	2	1		J2760	Y	PCE = 160016! TCLP's
2	RQ1400446-01	1.0	↓ 1/16				1		J2761		
3	R1400242-001	100	1/100mls				1		J2762		
4	009	10	5/50mls				1		J2763		

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary OCC : 69009
Primary HBO : 660137
Primary FrT : 660136 5ml → 50mls
Primary TG : 660185 = 50ppb CCV
HSL 660183

200 Secondary FrT : 663603 - 12.5ml
500 Secondary HBO : 660139
Secondary OCC : 655010 5ml
Secondary TG : 655996
HSL 69006
50mls = ICV/LCS

Combined IS/Surr 500 : 660179
Surrogate :
Internal Std :

Runlog-MSVOAr1 12/5/12
Page 97

Analysis: 8260 waters Analyst: Y Duest Tune Method: W011514
Date: 2/3/14 Data Path: j:\acqudata\msvoa1\20203l4 Run Method: ↓
Instr. 12 LIMS Run#: 378753

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								53106		
2	↓								53107		
3	JUNE (carbons/BN)		RQ1401053-01						53108	YT	(auto) 11:03
1	CCV		—						53109	Y	DCBFM, BrMd (for DOD) opt
1	CCV		02						53110	YC	F113↓ (new T/C)
1	LCS		03						53111	YQ	OK DOD limits
2	VBLK		—						53112	N	not ID
3	↓		04						53113	YB	
1	R1400660-001	1.0		[redacted]	9443	2	1	12	53114	Y	
2	R1400611-006	1.0			9913	4	1	12	53115	Y	
3	007	1.0					1	12	53116	Y	
4	011	1.0					1	12	53117	Y	
5	012	1.0					1	12	53118	Y	
6	013	1.0					1	12	53119	Y	
7	014	1.0					1	12	53120	Y	
8	015	1.0					1	12	53121	Y	
9	016	1.0					1	12	53122	Y	
10	017	1.0					1	12	53123	Y	
11	R1400634-002	1.0					1	12	53124	Y	
12	003	1.0					1	12	53125	Y	
13	005	1.0					1	12	53126	Y	
(12) 14	MB 001	1.0					1	12	53127	Y	
15	MS 001	1.0	RQ1401053-05				2	12	53128	N	- many cmpds↓ - reshoot
16	MSD 001	1.0	06				3		53129	N	22:52 ✓
17	HIGH GASES								53130		
18	BLK								53131		

EOD 2/3/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary CCC : 66713
Primary MB : 66837
Primary Frt : 66036 5ml → 50mls
Primary TG : 66956 = CCV (66913) (12)
HSL 66678

200 Secondary Frt : 66689 - 5ml - 10.6ml
500 Secondary CCC : 66714
Secondary MB : 66139 2ml
Secondary TG : 65596 50mls = LCS
HSL 66703

4.2ml
42ml vial = MSD

Combined IS/Surr 500: 66693
Surrogate :
Internal Std :

Runlog-MSVOAr1 12/5/12
Page 112

Analysis: 8260D Waters Analyst: KPriest Tune Method: W011514
Date: 2/4/14 Data Path: j:\acqudata\msvoa12\0204\14 Run Method: ↓
Instr. 12 LIMS Run#: 378484

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								53132		
2	↓								53133		
3	TUNE (carbon 15/44)		LQ1401146-01						53134	YT	5 scans - 1419 11:00
1	CCV		—						53135	(N)	HSL exp - reprep. repeat.
2	CCV		02						53136	YC	Acet↑ F113L VM↑ 2dwn↑
3	LCS		03						53137	YQ	
4	VBLK								53138	(N)	ND+1.0
5	↓		04						53139	(N)	↓ (PD) YB (1.0 NT's)
KR 6									53140		KR
1	R1400634-001	1.0	MS 05	[redacted]	0913	4	4	12	53140	YQ	
2	↓ 001	1.0	MSD ↓ 06	↓	↓	↓	5	12	53141	YQ	
3	BLK						(PE)	—	53142	—	
4	R1400662-001	1.0		[redacted]	9443	2	21	12	53143	Y	
5	R1400[redacted]-001	1.0					1	12	53144	Y	
6	(PD) 051 002	1.0					1	12	53145	Y	
7	003	1.0					1	12	53146	Y	
8	004	1.0					1	12	53147	Y	
9	005	1.0					1	12	53148	Y	
10	↓ 006	1.0		↓	↓	↓	↓ 1	12	53149	Y	
11	R1400655-001	1.0					1	12	53150	Y	
12	002	1.0					1	12	53151	Y	
13	003	1.0					1	12	53152	(N)	ND 1.0 (F113 hit)
14	004	1.0					1	12	53153	(N)	↓ ↓
15	006	1.0					1	12	53154	Y	
16	↓ 005	5.0	10/50mls	↓	↓	↓	↓ 1	12	53155	(N)	ND 1.0 22:44 ✓
17	HIGH CO8ES						(PE)		53156		
18	BLK								53157		
											EOD
											KR 2/4/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary Occ : 66713
Primary HBO : 66137
Primary Frt : 66934 5mL→50mls
Primary TO : 66913 = CCV
HSL 66[redacted] 66916 (PE)

200 Secondary Frt : 66929 - 5mL
500 Secondary Occ : 66714
Secondary HBO : 66139 2mL
Secondary HSL : 66703
TO 66[redacted]

50mls = CCV | -10.6mL | 41.2mL
41.2mL vial = MS/D

Combined IS/Surr 500 : 66693
Surrogate :
Internal Std :

Runlog-MSVOA\1 12/5/12
Page 113

April 01, 2014 Service Request No: R1401764

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 1Q2014/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on March 13, 2014. For your reference, these analyses have been assigned our service request number **R1401764**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 FAX 585-288-8475
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www.alsglobal.com
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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1401764
Project:	FTMM 1Q 2014	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	3/13/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 3/12/14 and received in good condition at cooler temperatures of 4.8°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Eleven water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes.

The following CCVs were >20 % and have been flagged with an "*":

- 3/1914: 2-Hexanone was >20% (<40%)

No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable except 1,2,3-Trichlorobenzene was outside limits high on the 03/17/14 LCS and has been flagged with an "*". No data was affected.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-53-GW-699MW01-10.55 as requested. Various MS/MSD recoveries were outside limits and have been flagged with an "*". All RPD's were acceptable.

Various compounds for FTMM-53-GW-699RW03-11.4 have been flagged with an "E" as being outside the calibration range of the instrument. The sample was repeated at a dilution and both sets of data have been reported out.

The Method Blanks associated with these samples were free of contamination except the 03/18/14 and 03/19/14 blanks had low level detections for 1,2,4-Trichlorobenzsene, Hexachlorobutadiene and Naphthalene and the 03/19/14 blank also contained Bromomethane. No data was affected.

Service Request R1401764
Page 2

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes		Date Revised:
Submission: R1401764	Diskette Requested: No		Date Due: 4/3/14
Client: Parsons Engineering Science	Date: 3/13/14		Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:		Shipping No.:
Project: FTMM 1Q2014	Chain of Custody: Present/Absent:		SDG #: FTMM-53-GW-699RW03-11.4

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1401764-001	FTMM-53-GW-699RW03-11.4	Water	8260C	3/12/14	3/13/14			
R1401764-002QC	FTMM-53-GW-699MW01-10.5 5	Water	8260C	3/12/14	3/13/14			
R1401764-003	FTMM-53-GW-699MW101-10. 5	Water	8260C	3/12/14	3/13/14			
R1401764-004	FTMM-53-GW-699MW09-8	Water	8260C	3/12/14	3/13/14			
R1401764-005	FTMM-53-GW-699MW16-8.5	Water	8260C	3/12/14	3/13/14			
R1401764-006	FTMM-53-GW-699MW06-10	Water	8260C	3/12/14	3/13/14			
R1401764-007	FTMM-53-GW-699RW05-8.6	Water	8260C	3/12/14	3/13/14			
R1401764-008	FTMM-TB031214	Water	8260C	3/12/14	3/13/14			
R1401764-009	FTMM-EB031214	Water	8260C	3/12/14	3/13/14			
R1401764-010	FTMM-53-GW-699RW11-11.1	Water	8260C	3/12/14	3/13/14			
R1401764-011	FTMM-53-GW-699MW04-10.3	Water	8260C	3/12/14	3/13/14			

Folder Comments:

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

Columbia Analytical Services
800.695.7222
www.caslab.com

CHAIN of CUSTODY

Page 1 of 1

Client: Parsons
Project: FTMM 1Q2014
Project Manager: Chris Greene
Telephone No.: 6174491573
Fax No.:
Method of Shipment: UPS
Special Detection Limit/Reporting: ERPIMS Txt NJDEP HazSite EDS

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Water	Air	Other	Prsv.: Yes	No	Sampling Date	Sampling Time	VOCs + TICs 8260C	Turn Around Time (working days)
FTMM-53-GW-699RW03-11.4		3		X			✓		3/12/14	1355	X	Standard
FTMM-53-GW-699MW01-10.55		3		X			✓		3/12/14	1230	X	
FTMM-53-GW-699MW01-10.55MS		3		X			✓		3/12/14	1230	X	
FTMM-53-GW-699MW01-10.55MSD		3		X			✓		3/12/14	1230	X	
FTMM-53-GW-699MW01-10.5		3		X			✓		3/12/14	1245	X	
FTMM-53-GW-699MW09-8		3		X			✓		3/13/14	1205	X	
FTMM-53-GW-699MW16-8.5		3		X			✓		3/13/14	1300	X	
FTMM-53-GW-699MW06-10		3		X			✓		3/13/14	1410	X	
FTMM-53-GW-699RW05-8.6		3		X			✓		3/13/14	1520	X	
FTMM-TB 031214		3		X			✓		3/12/14	1000	X	
FTMM-EB 031214		3		X			✓		3/12/14	1315	X	
FTMM-53-GW-699RW11-11.1		3		X			✓		3/12/14	1510	X	
FTMM-53-GW-699MW04-10.3		3		X			✓		3/12/14	1555	X	

MARKS

Sample Received Intact: Yes No
Temperature received: Ice No Ice

	Date	Time		
Relinq. by sampler (Sign & Print Name): Nick Loizos	3/12/14	@ 1640	Received by (Sign & Print Name):	
Relinquished by	Date	Time	Received by	
Relinquished by	Date	Time	Received by	
Relinquished by	Date	Time	Received by laboratory	Date 3/13/14 Time 1010

Lab Work No.

R1401764 5
Parsons, Inc.
FTMM 1Q2014

Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number 14-1764

Cooler received on 3/13/14 by: JP COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	~~NO~~	
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO	
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO	
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	(YES)	NO	N/A (2 vials)
5.	Were **Ice** or **Ice packs** present?	(YES)	NO	
6.	Where did the bottles originate?	(ALS/ROC)	CLIENT	

7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore	Lab5035set	(N/A)
8.	Temperature of cooler(s) upon receipt:	4.8°				
	Is the temperature within 0° - 6° C?:	(Y) N	Y N	Y N	Y N	Y N

If No, Explain Below Date/Time Temperatures Taken: 3/13/14 1026

Thermometer ID (IR GUN#3) / IR GUN#4 Reading From: (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location R-002 by JP on 3/13/14 at 1030
5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: JMS 3/14/14

Cooler Breakdown: Date: 3/14/14 Time: 1453 by: JF

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp
≥12	NaOH				
≤2	HNO_3				
≤2	H_2SO_4				
<4	$NaHSO_4$				
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)	
	$Na_2S_2O_3$	-	-		
	Zn Aceta	-	-		
	HCl	*	*	411120	2/15

Sample ID	Vol. Added	Lot Added	Final pH

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 3-294-003
Other Comments:

PC Secondary Review: JMS 3/28/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

G:\SMODOCS\Cooler Receipt 6.doc 11/6/12

00007

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1355
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 02:14
Sample Name:	FTMM-53-GW-699RW03-11.4	**Units:**	µg/L
Lab Code:	R1401764-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4001.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**200**	E	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**32**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**3.2**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**4.8**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1355
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 02:14
Sample Name:	FTMM-53-GW-699RW03-11.4	**Units:**	µg/L
Lab Code:	R1401764-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4001.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	**0.47**	J	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	**0.29**	J	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**50**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**29**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**1.7**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**71**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**12**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**34**		5.0	1.0	0.20	
95-47-6	o-Xylene	**90**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**7.4**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.68**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	3/18/14 02:14	
Dibromofluoromethane	98	85-115	3/18/14 02:14	
Toluene-d8	94	85-120	3/18/14 02:14	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14 0214

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-11.4
Lab Code: R1401764-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	2.40	**19.3**	J
000096-14-0	Pentane, 3-methyl-	2.60	**27.7**	JN
000096-37-7	Cyclopentane, methyl-	3.46	**25.6**	JN
000565-59-3	Pentane, 2,3-dimethyl-	4.39	**26.8**	JN
002532-58-3	Cyclopentane, 1,3-dimethyl-, cis-	4.91	**15.5**	JN
	unknown	5.01	**27.4**	J
000108-87-2	Cyclohexane, methyl-	6.10	**24.7**	JN
000560-21-4	Pentane, 2,3,3-trimethyl-	6.80	**17.1**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.10	**63.5**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.11	**35.3**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.33	**93.0**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**85.5**	JN
	unknown	10.97	**72.7**	J
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**35.7**	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl	11.28	**22.3**	JN
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.33	**34.4**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**47.6**	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	11.61	**51.4**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.65	**41.5**	JN
	unknown	11.92	**46.0**	J

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1355
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 18:54
Sample Name:	FTMM-53-GW-699RW03-11.4	**Units:**	µg/L
Lab Code:	R1401764-001	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	10	2.0	0.44	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	10	2.0	0.72	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	10	2.0	0.50	
79-00-5	1,1,2-Trichloroethane	ND	U	10	2.0	0.68	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	10	2.0	0.40	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	10	2.0	1.2	
563-58-6	1,1-Dichloropropene	ND	U	10	2.0	0.58	
87-61-6	1,2,3-Trichlorobenzene	ND	U	10	2.0	1.7	
96-18-4	1,2,3-Trichloropropane	ND	U	10	2.0	1.4	
120-82-1	1,2,4-Trichlorobenzene	ND	U	10	2.0	0.46	
95-63-6	1,2,4-Trimethylbenzene	**130**	D	10	2.0	0.40	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	10	2.0	1.5	
106-93-4	1,2-Dibromoethane	ND	U	10	2.0	0.48	
95-50-1	1,2-Dichlorobenzene	ND	U	10	2.0	0.42	
107-06-2	1,2-Dichloroethane	ND	U	10	2.0	0.72	
78-87-5	1,2-Dichloropropane	ND	U	10	2.0	0.40	
108-67-8	1,3,5-Trimethylbenzene	**16**	D	10	2.0	0.40	
541-73-1	1,3-Dichlorobenzene	ND	U	10	2.0	0.40	
142-28-9	1,3-Dichloropropane	ND	U	10	2.0	0.54	
106-46-7	1,4-Dichlorobenzene	ND	U	10	2.0	0.40	
594-20-7	2,2-Dichloropropane	ND	U	10	2.0	0.54	
78-93-3	2-Butanone (MEK)	ND	U	10	2.0	1.7	
95-49-8	2-Chlorotoluene	ND	U	10	2.0	0.40	
591-78-6	2-Hexanone	ND	U	10	10	3.4	
106-43-4	4-Chlorotoluene	ND	U	10	2.0	0.48	
99-87-6	p-Isopropyltoluene	**2.8**	DJ	10	2.0	0.40	
108-10-1	4-Methyl-2-pentanone	ND	U	10	2.0	1.4	
67-64-1	Acetone	ND	U	10	10	2.5	
71-43-2	Benzene	**5.1**	DJ	10	2.0	0.40	
108-86-1	Bromobenzene	ND	U	10	2.0	0.56	
74-97-5	Bromochloromethane	ND	U	10	2.0	0.64	
75-27-4	Bromodichloromethane	ND	U	10	2.0	0.64	
75-25-2	Bromoform	ND	U	10	2.0	0.84	
74-83-9	Bromomethane	ND	U	10	2.0	0.58	
56-23-5	Carbon Tetrachloride	ND	U	10	2.0	0.90	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1355
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 18:54
Sample Name:	FTMM-53-GW-699RW03-11.4	**Units:**	µg/L
Lab Code:	R1401764-001	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	10	2.0	0.58	
75-00-3	Chloroethane	**1.8**	DJ	10	2.0	0.48	
67-66-3	Chloroform	ND	U	10	2.0	0.50	
74-87-3	Chloromethane	**1.2**	DJ	10	2.0	0.42	
124-48-1	Dibromochloromethane	ND	U	10	2.0	0.62	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	10	2.0	0.92	
75-09-2	Methylene Chloride	ND	U	10	2.0	0.64	
100-41-4	Ethylbenzene	**46**	D	10	2.0	0.40	
87-68-3	Hexachlorobutadiene	ND	U	10	2.0	1.3	
98-82-8	Isopropylbenzene (Cumene)	**20**	D	10	2.0	0.40	
1634-04-4	Methyl tert-Butyl Ether	ND	U	10	2.0	0.58	
91-20-3	Naphthalene	**30**	D	10	2.0	0.40	
100-42-5	Styrene	ND	U	10	2.0	0.40	
127-18-4	Tetrachloroethene (PCE)	ND	U	10	2.0	0.60	
108-88-3	Toluene	**1.6**	DJ	10	2.0	0.40	
79-01-6	Trichloroethene (TCE)	ND	U	10	2.0	0.44	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	10	2.0	0.40	
75-01-4	Vinyl Chloride	ND	U	10	2.0	0.64	
156-59-2	cis-1,2-Dichloroethene	ND	U	10	2.0	0.60	
10061-01-5	cis-1,3-Dichloropropene	ND	U	10	2.0	0.48	
179601-23-1	m,p-Xylenes	**54**	D	20	4.0	0.66	
104-51-8	n-Butylbenzene	**11**	D	10	2.0	0.42	
103-65-1	n-Propylbenzene	**34**	D	10	2.0	0.40	
95-47-6	o-Xylene	**71**	D	10	2.0	0.40	
135-98-8	sec-Butylbenzene	**7.3**	DJ	10	2.0	0.54	
98-06-6	tert-Butylbenzene	**0.80**	DJ	10	2.0	0.40	
156-60-5	trans-1,2-Dichloroethene	ND	U	10	2.0	0.66	
10061-02-6	trans-1,3-Dichloropropene	ND	U	10	2.0	0.40	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	3/19/14 18:54	
Dibromofluoromethane	103	85-115	3/19/14 18:54	
Toluene-d8	91	85-120	3/19/14 18:54	

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Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/19/14 1854

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-11.4DL
Lab Code: R1401764-001
Run Type: Dilution

Analytical Method: 8260C

Units: µg/L
Basis: NA

CAS #	Analyte Name	RT	Result	Q
	unknown	2.40	**24.2**	J
000096-14-0	Pentane, 3-methyl-	2.60	**32.7**	JN
000096-37-7	Cyclopentane, methyl-	3.46	**32.3**	JN
000565-59-3	Pentane, 2,3-dimethyl-	4.40	**31.1**	JN
	unknown	4.91	**15.7**	J
	unknown	5.00	**26.8**	J
000108-87-2	Cyclohexane, methyl-	6.10	**24.8**	JN
000560-21-4	Pentane, 2,3,3-trimethyl-	6.80	**16.2**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.10	**51.0**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.33	**81.1**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**51.3**	JN
	unknown	10.98	**56.1**	J
001074-17-5	Benzene, 1-methyl-2-propyl-	11.19	**11.8**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**22.8**	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl	11.28	**14.4**	JN
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.33	**22.1**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**37.9**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**33.1**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.65	**15.8**	JN
	unknown	11.93	**20.1**	J

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1230
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 17:49
Sample Name:	FTMM-53-GW-699MW01-10.55	**Units:**	µg/L
Lab Code:	R1401764-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4066.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.31**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14 1230
Date Received: 3/13/14
Date Analyzed: 3/19/14 17:49

Sample Name: FTMM-53-GW-699MW01-10.55
Lab Code: R1401764-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\031914\J4066.D\

Analysis Lot: 384408
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.55**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.25**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.42**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/19/14 17:49	
Dibromofluoromethane	101	85-115	3/19/14 17:49	
Toluene-d8	95	85-120	3/19/14 17:49	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/19/14 1749

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW01-10.55
Lab Code: R1401764-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1245
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 18:21
Sample Name:	FTMM-53-GW-699MW101-10.5	**Units:**	µg/L
Lab Code:	R1401764-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4067.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.26**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1245
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 18:21
Sample Name:	FTMM-53-GW-699MW101-10.5	**Units:**	µg/L
Lab Code:	R1401764-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4067.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.59**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.28**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.43**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/19/14 18:21	
Dibromofluoromethane	100	85-115	3/19/14 18:21	
Toluene-d8	95	85-120	3/19/14 18:21	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 1821

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW101-10.5	**Units:**	µg/L
Lab Code:	R1401764-003	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1205
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 03:18
Sample Name:	FTMM-53-GW-699MW09-8	**Units:**	µg/L
Lab Code:	R1401764-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4003.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1205
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 03:18
Sample Name:	FTMM-53-GW-699MW09-8	**Units:**	µg/L
Lab Code:	R1401764-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4003.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.26**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 03:18	
Dibromofluoromethane	98	85-115	3/18/14 03:18	
Toluene-d8	94	85-120	3/18/14 03:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0318

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW09-8	**Units:**	µg/L
Lab Code:	R1401764-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1300
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 03:50
Sample Name:	FTMM-53-GW-699MW16-8.5	**Units:**	µg/L
Lab Code:	R1401764-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4004.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1300
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 03:50
Sample Name:	FTMM-53-GW-699MW16-8.5	**Units:**	µg/L
Lab Code:	R1401764-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4004.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**5.2**		5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.90**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 03:50	
Dibromofluoromethane	100	85-115	3/18/14 03:50	
Toluene-d8	95	85-120	3/18/14 03:50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14 0350

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW16-8.5
Lab Code: R1401764-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1410
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 04:22
Sample Name:	FTMM-53-GW-699MW06-10	**Units:**	µg/L
Lab Code:	R1401764-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4005.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.80**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1410
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 04:22
Sample Name:	FTMM-53-GW-699MW06-10	**Units:**	µg/L
Lab Code:	R1401764-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4005.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**1.5**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.23**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.23**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**1.2**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.24**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.31**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 04:22	
Dibromofluoromethane	98	85-115	3/18/14 04:22	
Toluene-d8	90	85-120	3/18/14 04:22	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0422

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW06-10	**Units:**	µg/L
Lab Code:	R1401764-006	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1520
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 05:58
Sample Name:	FTMM-53-GW-699RW05-8.6	**Units:**	µg/L
Lab Code:	R1401764-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4008.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	25	5.0	1.1	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	25	5.0	1.8	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	25	5.0	1.3	
79-00-5	1,1,2-Trichloroethane	ND	U	25	5.0	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	25	5.0	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	25	5.0	2.9	
563-58-6	1,1-Dichloropropene	ND	U	25	5.0	1.5	
87-61-6	1,2,3-Trichlorobenzene	ND	U	25	5.0	4.1	
96-18-4	1,2,3-Trichloropropane	ND	U	25	5.0	3.5	
120-82-1	1,2,4-Trichlorobenzene	ND	U	25	5.0	1.2	
95-63-6	1,2,4-Trimethylbenzene	**790**		25	5.0	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	25	5.0	3.7	
106-93-4	1,2-Dibromoethane	ND	U	25	5.0	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	25	5.0	1.1	
107-06-2	1,2-Dichloroethane	ND	U	25	5.0	1.8	
78-87-5	1,2-Dichloropropane	ND	U	25	5.0	1.0	
108-67-8	1,3,5-Trimethylbenzene	**160**		25	5.0	1.0	
541-73-1	1,3-Dichlorobenzene	ND	U	25	5.0	1.0	
142-28-9	1,3-Dichloropropane	ND	U	25	5.0	1.4	
106-46-7	1,4-Dichlorobenzene	ND	U	25	5.0	1.0	
594-20-7	2,2-Dichloropropane	ND	U	25	5.0	1.4	
78-93-3	2-Butanone (MEK)	ND	U	25	5.0	4.1	
95-49-8	2-Chlorotoluene	ND	U	25	5.0	1.0	
591-78-6	2-Hexanone	ND	U	25	25	8.3	
106-43-4	4-Chlorotoluene	ND	U	25	5.0	1.2	
99-87-6	p-Isopropyltoluene	**3.7**	J	25	5.0	1.0	
108-10-1	4-Methyl-2-pentanone	ND	U	25	5.0	3.4	
67-64-1	Acetone	ND	U	25	25	6.2	
71-43-2	Benzene	**7.2**	J	25	5.0	1.0	
108-86-1	Bromobenzene	ND	U	25	5.0	1.5	
74-97-5	Bromochloromethane	ND	U	25	5.0	1.6	
75-27-4	Bromodichloromethane	ND	U	25	5.0	1.6	
75-25-2	Bromoform	ND	U	25	5.0	2.1	
74-83-9	Bromomethane	ND	U	25	5.0	1.5	
56-23-5	Carbon Tetrachloride	ND	U	25	5.0	2.3	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1520
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 05:58
Sample Name:	FTMM-53-GW-699RW05-8.6	**Units:**	µg/L
Lab Code:	R1401764-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4008.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	25	5.0	1.5	
75-00-3	Chloroethane	**1.6**	J	25	5.0	1.2	
67-66-3	Chloroform	ND	U	25	5.0	1.3	
74-87-3	Chloromethane	ND	U	25	5.0	1.1	
124-48-1	Dibromochloromethane	ND	U	25	5.0	1.6	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	25	5.0	2.4	
75-09-2	Methylene Chloride	ND	U	25	5.0	1.6	
100-41-4	Ethylbenzene	**700**		25	5.0	1.0	
87-68-3	Hexachlorobutadiene	ND	U	25	5.0	3.1	
98-82-8	Isopropylbenzene (Cumene)	**52**		25	5.0	1.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	25	5.0	1.5	
91-20-3	Naphthalene	**270**		25	5.0	1.0	
100-42-5	Styrene	ND	U	25	5.0	1.0	
127-18-4	Tetrachloroethene (PCE)	ND	U	25	5.0	1.5	
108-88-3	Toluene	**23**	J	25	5.0	1.0	
79-01-6	Trichloroethene (TCE)	ND	U	25	5.0	1.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	25	5.0	1.0	
75-01-4	Vinyl Chloride	ND	U	25	5.0	1.6	
156-59-2	cis-1,2-Dichloroethene	ND	U	25	5.0	1.5	
10061-01-5	cis-1,3-Dichloropropene	ND	U	25	5.0	1.2	
179601-23-1	m,p-Xylenes	**1600**		50	10	1.7	
104-51-8	n-Butylbenzene	ND	U	25	5.0	1.1	
103-65-1	n-Propylbenzene	**100**		25	5.0	1.0	
95-47-6	o-Xylene	**810**		25	5.0	1.0	
135-98-8	sec-Butylbenzene	**6.3**	J	25	5.0	1.4	
98-06-6	tert-Butylbenzene	ND	U	25	5.0	1.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	25	5.0	1.7	
10061-02-6	trans-1,3-Dichloropropene	ND	U	25	5.0	1.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	3/18/14 05:58	
Dibromofluoromethane	101	85-115	3/18/14 05:58	
Toluene-d8	92	85-120	3/18/14 05:58	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14 0558

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-8.6
Lab Code: R1401764-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000109-66-0	Pentane	1.76	**65.0**	JN
000107-83-5	Pentane, 2-methyl-	2.40	**159.4**	JN
	unknown	2.44	**60.8**	J
000096-14-0	Pentane, 3-methyl-	2.60	**97.8**	JN
	unknown	2.84	**32.6**	J
000096-37-7	Cyclopentane, methyl-	3.46	**257.7**	JN
000565-59-3	Pentane, 2,3-dimethyl-	4.40	**34.9**	JN
000108-87-2	Cyclohexane, methyl-	6.10	**52.2**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.10	**365.3**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.33	**264.9**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**249.6**	JN
	unknown	10.97	**280.7**	J
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.05	**60.8**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**44.2**	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	11.33	**69.0**	JN
000768-49-0	Benzene, (2-methyl-1-propenyl)-	11.41	**47.9**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**44.6**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.65	**41.5**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.82	**32.1**	JN
000767-58-8	Indan, 1-methyl-	11.93	**77.0**	JN

Comments:

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1000
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 01:09
Sample Name:	FTMM-TB031214	**Units:**	µg/L
Lab Code:	R1401764-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J3999.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.28**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1000
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 01:09
Sample Name:	FTMM-TB031214	**Units:**	µg/L
Lab Code:	R1401764-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J3999.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.68**	**J**	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.21**	**J**	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 01:09	
Dibromofluoromethane	100	85-115	3/18/14 01:09	
Toluene-d8	93	85-120	3/18/14 01:09	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0109

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB031214	**Units:**	µg/L
Lab Code:	R1401764-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1315
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 01:41
Sample Name:	FTMM-EB031214	**Units:**	µg/L
Lab Code:	R1401764-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4000.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1315
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 01:41
Sample Name:	FTMM-EB031214	**Units:**	µg/L
Lab Code:	R1401764-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4000.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 01:41	
Dibromofluoromethane	99	85-115	3/18/14 01:41	
Toluene-d8	93	85-120	3/18/14 01:41	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0141

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB031214	**Units:**	µg/L
Lab Code:	R1401764-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1510
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 04:54
Sample Name:	FTMM-53-GW-699RW11-11.1	**Units:**	µg/L
Lab Code:	R1401764-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4006.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	0.24	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	11		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1510
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 04:54
Sample Name:	FTMM-53-GW-699RW11-11.1	**Units:**	µg/L
Lab Code:	R1401764-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4006.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	**0.23**	J	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.45**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**8.9**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**1.5**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.37**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.45**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**9.4**		5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.6**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.36**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	3/18/14 04:54	
Dibromofluoromethane	99	85-115	3/18/14 04:54	
Toluene-d8	90	85-120	3/18/14 04:54	

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Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14 0454

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW11-11.1
Lab Code: R1401764-010

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	2.06	**5.7**	J
000079-29-8	Butane, 2,3-dimethyl-	2.37	**17.8**	JN
000096-14-0	Pentane, 3-methyl-	2.60	**12.3**	JN
	unknown	3.46	**9.8**	J
000565-59-3	Pentane, 2,3-dimethyl-	4.40	**14.3**	JN
	unknown	5.00	**7.3**	J
	unknown	6.80	**6.9**	J
	unknown	10.98	**12.5**	J
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**17.1**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**6.8**	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11.82	**7.3**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.93	**15.4**	JN
017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethy	12.22	**5.1**	JN

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1555
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 05:26
Sample Name:	FTMM-53-GW-699MW04-10.3	**Units:**	µg/L
Lab Code:	R1401764-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4007.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1555
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 05:26
Sample Name:	FTMM-53-GW-699MW04-10.3	**Units:**	µg/L
Lab Code:	R1401764-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4007.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 05:26	
Dibromofluoromethane	99	85-115	3/18/14 05:26	
Toluene-d8	89	85-120	3/18/14 05:26	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0526

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW04-10.3	**Units:**	µg/L
Lab Code:	R1401764-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/18/14 00:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402375-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J3998.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.45**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/18/14 00:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402375-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J3998.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**1.1**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.36**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	3/18/14 00:37	
Dibromofluoromethane	100	85-115	3/18/14 00:37	
Toluene-d8	96	85-120	3/18/14 00:37	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/18/14 0037

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402375-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/19/14 15:07
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402508-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4061.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.30**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.34**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/19/14 15:07
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402508-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4061.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.88**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.26**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/19/14 15:07	
Dibromofluoromethane	99	85-115	3/19/14 15:07	
Toluene-d8	100	85-120	3/19/14 15:07	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/19/14 1507

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402508-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW01-10.55
Lab Code: R1401764-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW01-10.5 5MS Matrix Spike RQ1402375-05			FTMM-53-GW-699MW01-10.5 5DMS Duplicate Matrix Spike RQ1402375-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	51.7	50.0	103	52.2	50.0	104	80 - 130	<1	30
1,1,1-Trichloroethane (TCA)	ND	48.2	50.0	96	48.7	50.0	97	65 - 130	1	30
1,1,2,2-Tetrachloroethane	ND	47.3	50.0	95	46.7	50.0	93	65 - 130	1	30
1,1,2-Trichloroethane	ND	50.8	50.0	102	50.1	50.0	100	75 - 125	2	30
1,1-Dichloroethane (1,1-DCA)	ND	44.8	50.0	90	45.7	50.0	91	70 - 135	2	30
1,1-Dichloroethene (1,1-DCE)	ND	53.8	50.0	108	54.3	50.0	109	70 - 130	<1	30
1,1-Dichloropropene	ND	55.2	50.0	110	55.9	50.0	112	75 - 130	1	30
1,2,3-Trichlorobenzene	ND	50.8	50.0	102	53.9	50.0	108	75 - 125	6	30
1,2,3-Trichloropropane	ND	50.1	50.0	100	49.1	50.0	98	75 - 125	2	30
1,2,4-Trichlorobenzene	ND	50.9	50.0	102	53.3	50.0	107	65 - 135	5	30
1,2,4-Trimethylbenzene	0.31	39.2	50.0	78	38.6	50.0	77	75 - 130	1	30
1,2-Dibromo-3-chloropropane (DBC	ND	60.0	50.0	120	57.8	50.0	116	50 - 130	4	30
1,2-Dibromoethane	ND	53.2	50.0	106	52.7	50.0	105	80 - 120	<1	30
1,2-Dichlorobenzene	ND	50.2	50.0	100	51.1	50.0	102	70 - 120	2	30
1,2-Dichloroethane	ND	48.2	50.0	96	47.7	50.0	95	70 - 130	1	30
1,2-Dichloropropane	ND	47.7	50.0	95	48.4	50.0	97	75 - 125	1	30
1,3,5-Trimethylbenzene	ND	37.0	50.0	74 *	36.0	50.0	72 *	75 - 130	3	30
1,3-Dichlorobenzene	ND	50.6	50.0	101	51.6	50.0	103	75 - 125	2	30
1,3-Dichloropropane	ND	48.4	50.0	97	47.7	50.0	95	75 - 125	2	30
1,4-Dichlorobenzene	ND	49.0	50.0	98	50.2	50.0	100	75 - 125	2	30
2,2-Dichloropropane	ND	32.6	50.0	65 *	33.4	50.0	67 *	70 - 135	2	30
2-Butanone (MEK)	ND	45.7	50.0	91	44.4	50.0	89	30 - 150	3	30
2-Chlorotoluene	ND	46.9	50.0	94	48.0	50.0	96	75 - 125	2	30
2-Hexanone	ND	51.3	50.0	103	48.7	50.0	97	55 - 130	5	30
4-Chlorotoluene	ND	45.5	50.0	91	46.1	50.0	92	75 - 130	1	30
p-Isopropyltoluene	ND	47.6	50.0	95	48.8	50.0	98	75 - 130	3	30
4-Methyl-2-pentanone	ND	51.8	50.0	104	50.4	50.0	101	60 - 135	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW01-10.55
Lab Code: R1401764-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-53-GW-699MW01-10.5 5MS Matrix Spike RQ1402375-05 Result	Spike Amount	% Rec	FTMM-53-GW-699MW01-10.5 5DMS Duplicate Matrix Spike RQ1402375-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Acetone	ND	44.4	50.0	89	43.0	50.0	86	40 - 140	3	30
Benzene	ND	49.1	50.0	98	49.8	50.0	100	80 - 120	1	30
Bromobenzene	ND	50.3	50.0	101	51.3	50.0	103	75 - 125	2	30
Bromochloromethane	ND	47.8	50.0	96	48.0	50.0	96	65 - 130	<1	30
Bromodichloromethane	ND	49.8	50.0	100	51.1	50.0	102	75 - 120	3	30
Bromoform	ND	50.1	50.0	100	50.5	50.0	101	70 - 130	<1	30
Bromomethane	ND	41.1	50.0	82	43.9	50.0	88	30 - 145	6	30
Carbon Tetrachloride	ND	50.1	50.0	100	51.5	50.0	103	65 - 140	3	30
Chlorobenzene	ND	50.3	50.0	101	51.1	50.0	102	80 - 120	1	30
Chloroethane	ND	44.7	50.0	89	45.4	50.0	91	60 - 135	2	30
Chloroform	ND	45.6	50.0	91	46.6	50.0	93	65 - 135	2	30
Chloromethane	ND	40.5	50.0	81	40.4	50.0	81	40 - 125	<1	30
Dibromochloromethane	ND	51.1	50.0	102	52.2	50.0	104	60 - 135	2	30
Dichlorodifluoromethane (CFC 12)	ND	36.6	50.0	73	37.0	50.0	74	30 - 155	1	30
Methylene Chloride	ND	45.3	50.0	91	45.5	50.0	91	55 - 140	<1	30
Ethylbenzene	0.55	50.2	50.0	99	50.4	50.0	100	75 - 125	<1	30
Hexachlorobutadiene	ND	48.1	50.0	96	51.6	50.0	103	50 - 140	7	30
Isopropylbenzene (Cumene)	0.25	48.9	50.0	97	49.9	50.0	99	75 - 125	2	30
Methyl tert-Butyl Ether	ND	48.3	50.0	97	47.6	50.0	95	65 - 125	2	30
Naphthalene	ND	54.4	50.0	109	55.8	50.0	112	55 - 140	3	30
Styrene	ND	35.8	50.0	72	34.2	50.0	68	65 - 135	5	30
Tetrachloroethene (PCE)	ND	52.4	50.0	105	53.5	50.0	107	45 - 150	2	30
Toluene	ND	48.8	50.0	98	49.2	50.0	98	75 - 120	<1	30
Trichloroethene (TCE)	ND	53.8	50.0	108	54.5	50.0	109	70 - 125	1	30
Trichlorofluoromethane (CFC 11)	ND	45.6	50.0	91	46.5	50.0	93	60 - 145	2	30
Vinyl Chloride	ND	44.6	50.0	89	44.9	50.0	90	50 - 145	<1	30
cis-1,2-Dichloroethene	ND	46.7	50.0	93	47.1	50.0	94	70 - 125	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW01-10.55
Lab Code: R1401764-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW01-10.55MS Matrix Spike RQ1402375-05			FTMM-53-GW-699MW01-10.55DMS Duplicate Matrix Spike RQ1402375-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,3-Dichloropropene	ND	45.9	50.0	92	46.7	50.0	93	70 - 130	2	30
m,p-Xylenes	ND	94.9	100	95	94.7	100	95	75 - 130	<1	30
n-Butylbenzene	ND	45.4	50.0	91	47.0	50.0	94	70 - 135	4	30
n-Propylbenzene	0.42	46.4	50.0	92	47.2	50.0	94	70 - 130	2	30
o-Xylene	ND	46.9	50.0	94	46.2	50.0	92	80 - 120	2	30
sec-Butylbenzene	ND	47.0	50.0	94	48.0	50.0	96	70 - 125	2	30
tert-Butylbenzene	ND	48.2	50.0	96	49.4	50.0	99	70 - 130	2	30
trans-1,2-Dichloroethene	ND	47.8	50.0	96	48.0	50.0	96	60 - 140	<1	30
trans-1,3-Dichloropropene	ND	48.1	50.0	96	48.5	50.0	97	55 - 140	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/17/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 383996

Lab Control Sample
RQ1402375-03

Analyte Name	Result	Spike Amount	% Rec		% Rec Limits
1,1,1,2-Tetrachloroethane	22.1	20.0	111		80 - 130
1,1,1-Trichloroethane (TCA)	20.3	20.0	102		65 - 130
1,1,2,2-Tetrachloroethane	18.5	20.0	93		65 - 130
1,1,2-Trichloroethane	21.4	20.0	107		75 - 125
1,1-Dichloroethane (1,1-DCA)	19.5	20.0	97		70 - 135
1,1-Dichloroethene (1,1-DCE)	23.5	20.0	117		70 - 130
1,1-Dichloropropene	24.2	20.0	121		75 - 130
1,2,3-Trichlorobenzene	25.8	20.0	129	*	75 - 125
1,2,3-Trichloropropane	21.4	20.0	107		75 - 125
1,2,4-Trichlorobenzene	24.4	20.0	122		65 - 135
1,2,4-Trimethylbenzene	21.5	20.0	107		75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	24.0	20.0	120		50 - 130
1,2-Dibromoethane	23.1	20.0	116		80 - 120
1,2-Dichlorobenzene	22.1	20.0	110		70 - 120
1,2-Dichloroethane	20.8	20.0	104		70 - 130
1,2-Dichloropropane	20.2	20.0	101		75 - 125
1,3,5-Trimethylbenzene	21.6	20.0	108		75 - 130
1,3-Dichlorobenzene	22.2	20.0	111		75 - 125
1,3-Dichloropropane	20.7	20.0	103		75 - 125
1,4-Dichlorobenzene	21.3	20.0	107		75 - 125
2,2-Dichloropropane	18.6	20.0	93		70 - 135
2-Butanone (MEK)	20.5	20.0	103		30 - 150
2-Chlorotoluene	21.0	20.0	105		75 - 125
2-Hexanone	21.4	20.0	107		55 - 130
4-Chlorotoluene	20.9	20.0	104		75 - 130
p-Isopropyltoluene	22.3	20.0	112		75 - 130
4-Methyl-2-pentanone	21.7	20.0	109		60 - 135
Acetone	18.5	20.0	93		40 - 140
Benzene	21.1	20.0	106		80 - 120
Bromobenzene	22.0	20.0	110		75 - 125
Bromochloromethane	20.9	20.0	105		65 - 130
Bromodichloromethane	21.6	20.0	108		75 - 120
Bromoform	23.6	20.0	118		70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/17/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 383996

Lab Control Sample
RQ1402375-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	20.6	20.0	103	30 - 145
Carbon Tetrachloride	21.7	20.0	108	65 - 140
Chlorobenzene	21.9	20.0	109	80 - 120
Chloroethane	19.0	20.0	95	60 - 135
Chloroform	19.8	20.0	99	65 - 135
Chloromethane	17.2	20.0	86	40 - 125
Dibromochloromethane	23.4	20.0	117	60 - 135
Dichlorodifluoromethane (CFC 12)	16.0	20.0	80	30 - 155
Methylene Chloride	19.5	20.0	98	55 - 140
Ethylbenzene	21.6	20.0	108	75 - 125
Hexachlorobutadiene	25.3	20.0	126	50 - 140
Isopropylbenzene (Cumene)	21.8	20.0	109	75 - 125
Methyl tert-Butyl Ether	20.8	20.0	104	65 - 125
Naphthalene	25.7	20.0	128	55 - 140
Styrene	22.7	20.0	113	65 - 135
Tetrachloroethene (PCE)	23.5	20.0	118	45 - 150
Toluene	21.6	20.0	108	75 - 120
Trichloroethene (TCE)	24.4	20.0	122	70 - 125
Trichlorofluoromethane (CFC 11)	20.0	20.0	100	60 - 145
Vinyl Chloride	19.2	20.0	96	50 - 145
cis-1,2-Dichloroethene	20.0	20.0	100	70 - 125
cis-1,3-Dichloropropene	20.8	20.0	104	70 - 130
m,p-Xylenes	44.9	40.0	112	75 - 130
n-Butylbenzene	21.5	20.0	108	70 - 135
n-Propylbenzene	20.9	20.0	104	70 - 130
o-Xylene	21.8	20.0	109	80 - 120
sec-Butylbenzene	21.7	20.0	109	70 - 125
tert-Butylbenzene	21.3	20.0	106	70 - 130
trans-1,2-Dichloroethene	20.9	20.0	105	60 - 140
trans-1,3-Dichloropropene	21.3	20.0	107	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/19/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 384408

Analyte Name	Lab Control Sample RQ1402508-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	21.3	20.0	106	80 - 130
1,1,1-Trichloroethane (TCA)	20.1	20.0	100	65 - 130
1,1,2,2-Tetrachloroethane	21.4	20.0	107	65 - 130
1,1,2-Trichloroethane	19.8	20.0	99	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.4	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	22.6	20.0	113	70 - 130
1,1-Dichloropropene	23.2	20.0	116	75 - 130
1,2,3-Trichlorobenzene	23.4	20.0	117	75 - 125
1,2,3-Trichloropropane	21.6	20.0	108	75 - 125
1,2,4-Trichlorobenzene	22.4	20.0	112	65 - 135
1,2,4-Trimethylbenzene	21.2	20.0	106	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	23.1	20.0	116	50 - 130
1,2-Dibromoethane	21.8	20.0	109	80 - 120
1,2-Dichlorobenzene	20.8	20.0	104	70 - 120
1,2-Dichloroethane	20.8	20.0	104	70 - 130
1,2-Dichloropropane	20.8	20.0	104	75 - 125
1,3,5-Trimethylbenzene	21.9	20.0	109	75 - 130
1,3-Dichlorobenzene	21.1	20.0	105	75 - 125
1,3-Dichloropropane	21.0	20.0	105	75 - 125
1,4-Dichlorobenzene	20.9	20.0	104	75 - 125
2,2-Dichloropropane	21.6	20.0	108	70 - 135
2-Butanone (MEK)	23.9	20.0	120	30 - 150
2-Chlorotoluene	20.9	20.0	104	75 - 125
2-Hexanone	24.7	20.0	124	55 - 130
4-Chlorotoluene	21.9	20.0	110	75 - 130
p-Isopropyltoluene	22.1	20.0	110	75 - 130
4-Methyl-2-pentanone	23.2	20.0	116	60 - 135
Acetone	23.2	20.0	116	40 - 140
Benzene	20.2	20.0	101	80 - 120
Bromobenzene	20.7	20.0	104	75 - 125
Bromochloromethane	19.9	20.0	100	65 - 130
Bromodichloromethane	21.1	20.0	106	75 - 120
Bromoform	21.5	20.0	108	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/19/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 384408

Analyte Name	Lab Control Sample RQ1402508-03 Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	22.8	20.0	114	30 - 145
Carbon Tetrachloride	19.3	20.0	97	65 - 140
Chlorobenzene	20.4	20.0	102	80 - 120
Chloroethane	22.6	20.0	113	60 - 135
Chloroform	20.4	20.0	102	65 - 135
Chloromethane	22.6	20.0	113	40 - 125
Dibromochloromethane	21.5	20.0	108	60 - 135
Dichlorodifluoromethane (CFC 12)	21.2	20.0	106	30 - 155
Methylene Chloride	20.3	20.0	101	55 - 140
Ethylbenzene	20.7	20.0	103	75 - 125
Hexachlorobutadiene	21.6	20.0	108	50 - 140
Isopropylbenzene (Cumene)	21.6	20.0	108	75 - 125
Methyl tert-Butyl Ether	21.9	20.0	110	65 - 125
Naphthalene	25.1	20.0	125	55 - 140
Styrene	21.7	20.0	108	65 - 135
Tetrachloroethene (PCE)	19.7	20.0	98	45 - 150
Toluene	20.4	20.0	102	75 - 120
Trichloroethene (TCE)	20.1	20.0	100	70 - 125
Trichlorofluoromethane (CFC 11)	19.8	20.0	99	60 - 145
Vinyl Chloride	24.2	20.0	121	50 - 145
cis-1,2-Dichloroethene	20.1	20.0	100	70 - 125
cis-1,3-Dichloropropene	20.7	20.0	104	70 - 130
m,p-Xylenes	42.1	40.0	105	75 - 130
n-Butylbenzene	22.4	20.0	112	70 - 135
n-Propylbenzene	21.5	20.0	107	70 - 130
o-Xylene	20.6	20.0	103	80 - 120
sec-Butylbenzene	21.5	20.0	108	70 - 125
tert-Butylbenzene	20.9	20.0	105	70 - 130
trans-1,2-Dichloroethene	20.3	20.0	101	60 - 140
trans-1,3-Dichloropropene	22.0	20.0	110	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

April 01, 2014 Service Request No: R1401764

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 1Q2014/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on March 13, 2014. For your reference, these analyses have been assigned our service request number **R1401764**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

Page 1 of 479

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00001

Parsons, Inc.
R1401764

TABLE OF CONTENTS

SECTION	***PAGE***
SDG Narrative	00002
Chains of Custody	00007
VOA QC Summary	00014
VOA Sample Data	00034
VOA Standards Data	00258
VOA Raw QC Data	00417

ALS Environmental

SDG NARRATIVE

ALS Environmental - Rochester, NY
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00002

CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1401764
Project:	FTMM 1Q 2014	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	3/13/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 3/12/14 and received in good condition at cooler temperatures of 4.8°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Eleven water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes.

The following CCVs were >20 % and have been flagged with an "*":

- 3/1914: 2-Hexanone was >20% (<40%)

No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable except 1,2,3-Trichlorobenzene was outside limits high on the 03/17/14 LCS and has been flagged with an "*". No data was affected.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-53-GW-699MW01-10.55 as requested. Various MS/MSD recoveries were outside limits and have been flagged with an "*". All RPD's were acceptable.

Various compounds for FTMM-53-GW-699RW03-11.4 have been flagged with an "E" as being outside the calibration range of the instrument. The sample was repeated at a dilution and both sets of data have been reported out.

The Method Blanks associated with these samples were free of contamination except the 03/18/14 and 03/19/14 blanks had low level detections for 1,2,4-Trichlorobenzsene, Hexachlorobutadiene and Naphthalene and the 03/19/14 blank also contained Bromomethane. No data was affected.

00003

Service Request R1401764
Page 2

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1401764	Diskette Requested: No	Date Due: 4/3/14
Client: Parsons Engineering Science	Date: 3/13/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 1Q2014	Chain of Custody: Present/Absent:	SDG #: FTMM-53-GW-699RW03-11.4

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1401764-001	FTMM-53-GW-699RW03-11.4	Water	8260C	3/12/14	3/13/14			
R1401764-002QC	FTMM-53-GW-699MW01-10.5 5	Water	8260C	3/12/14	3/13/14			
R1401764-003	FTMM-53-GW-699MW101-10. 5	Water	8260C	3/12/14	3/13/14			
R1401764-004	FTMM-53-GW-699MW09-8	Water	8260C	3/12/14	3/13/14			
R1401764-005	FTMM-53-GW-699MW16-8.5	Water	8260C	3/12/14	3/13/14			
R1401764-006	FTMM-53-GW-699MW06-10	Water	8260C	3/12/14	3/13/14			
R1401764-007	FTMM-53-GW-699RW05-8.6	Water	8260C	3/12/14	3/13/14			
R1401764-008	FTMM-TB031214	Water	8260C	3/12/14	3/13/14			
R1401764-009	FTMM-EB031214	Water	8260C	3/12/14	3/13/14			
R1401764-010	FTMM-53-GW-699RW11-11.1	Water	8260C	3/12/14	3/13/14			
R1401764-011	FTMM-53-GW-699MW04-10.3	Water	8260C	3/12/14	3/13/14			

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Folder Comments:

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads -

ALS Environmental

CHAINS OF CUSTODY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00007

Columbia Analytical Services
800.695.7222
www.caslab.com

CHAIN of CUSTODY

Page 1 of 1

Client: Parsons
Project: FTMM 1Q2014
Project Manager: Chris Greene
Telephone No.: 617 449 1573
Fax No.:
Method of Shipment: UPS
Special Detection Limit/Reporting: ERPIMS Txt NJDEP HazSite EDS

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Water	Air	Other	Prsv.: Yes	No	Sampling Date	Sampling Time	VOCs + TICs 8260C													Turn Around Time (working days) Standard
FTMM-53-GW-699RW03-11.4		3		X			✓		3/12/14	1355	X													X
FTMM-53-GW-699MW01-10.55		3		X			✓		3/12/14	1230	X													X
FTMM-53-GW-699MW01-10.55MS		3		X			✓		3/12/14	1230	X													X
FTMM-53-GW-699MW01-10.55MSD		3		X			✓		3/12/14	1230	X													X
FTMM-53-GW-699MW01-10.5		3		X			✓		3/12/14	1245	X													X
FTMM-53-GW-699MW09-8		3		X			✓		3/13/14	1205	X													X
FTMM-53-GW-699MW16-8.5		3		X			✓		3/13/14	1300	X													X
FTMM-53-GW-699MW06-10		3		X			✓		3/13/14	1410	X													X
FTMM-53-GW-699RW05-8.6		3		X			✓		3/13/14	1520	X													X
FTMM-TB 031214		3		X			✓		3/12/14	1000	X													X
FTMM-EB 031214		3		X			✓		3/12/14	1315	X													X
FTMM-53-GW-699RW11-11.1		3		X			✓		3/12/14	1510	X													X
FTMM-53-GW-699MW04-10.3		3		X			✓		3/12/14	1555	X													X

MARKS

Sample Received Intact: Yes No
Temperature received: Ice No ice

Relinq. by sampler (Sign & Print Name): Nick Loizos	Date/Time: 3/13/14 @ 1640	Received by (Sign & Print Name):	Lab Work No.
Relinquished by	Date/Time	Received by	
Relinquished by	Date/Time	Received by	
Relinquished by	Date/Time	Received by laboratory	Date: 3/13/14 Time: 1010

R1401764 5
Parsons, Inc.
FTMM 1Q2014

Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number 14-1764.

Cooler received on 3/13/14 by: [illegible] COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	~~NO~~	
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO	
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO	
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	(YES)	NO	N/A (2 vials)
5.	Were **Ice** or **Ice packs** present?	(YES)	NO	
6.	Where did the bottles originate?	(ALS/ROC)	CLIENT	

7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore	Lab5035set	(N/A)
8.	Temperature of cooler(s) upon receipt:	4.8°				
	Is the temperature within 0° - 6° C?:	(Y) N	Y N	Y N	Y N	Y N

If No, Explain Below Date/Time Temperatures Taken: 3/13/14 1026

Thermometer ID (IR GUN#3) / IR GUN#4 Reading From: (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location Room by [illegible] on 3/13/14 at 1030

5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: [illegible] 3/13/14

Cooler Breakdown: Date: 3/14/14 Time: 1453 by: JFS

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp
≥12	NaOH				
≤2	HNO_3				
≤2	H_2SO_4				
<4	$NaHSO_4$				
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)	
	$Na_2S_2O_3$	-	-		
	Zn Aceta	-	-		
	HCl	*	*	411220	2/15

Sample ID	Vol. Added	Lot Added	Final pH

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 3-294-003

Other Comments:

PC Secondary Review: JMS 3/28/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

G:\SMODOCS\Cooler Receipt 6.doc 11/6/12

00009

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1401764-001.01					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1459	In Lab / KRUEST	
		3/17/14	1503	R-001-S12 / KRUEST	
R1401764-001.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/19/14	1455	In Lab / KRUEST	
		3/19/14	1502	R-001-S12 / KRUEST	
R1401764-001.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-002.01					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1459	In Lab / KRUEST	
		3/17/14	1504	R-001-S12 / KRUEST	
R1401764-002.02					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/19/14	1456	In Lab / KRUEST	
		3/19/14	1501	R-001-S12 / KRUEST	
R1401764-002.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-002.04					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-002.05					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-002.06					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-002.07					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1401764-002.08					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-002.09					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-003.01					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1459	In Lab / KRUEST	
		3/17/14	1503	R-001-S12 / KRUEST	
R1401764-003.02					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/19/14	1456	In Lab / KRUEST	
		3/19/14	1501	R-001-S12 / KRUEST	
R1401764-003.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-004.01					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1459	In Lab / KRUEST	
		3/17/14	1503	R-001-S12 / KRUEST	
R1401764-004.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-004.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-005.01					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1459	In Lab / KRUEST	
		3/17/14	1503	R-001-S12 / KRUEST	
R1401764-005.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1401764-005.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-006.01					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1459	In Lab / KRUEST	
		3/17/14	1503	R-001-S12 / KRUEST	
R1401764-006.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-006.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-007.01					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1500	In Lab / KRUEST	
		3/17/14	1504	R-001-S12 / KRUEST	
R1401764-007.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-007.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-008.01					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1500	In Lab / KRUEST	
		3/17/14	1503	R-001-S12 / KRUEST	
R1401764-008.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-008.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-009.01					
	8260C				

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1500	In Lab / KRUEST	
		3/17/14	1503	R-001-S12 / KRUEST	
R1401764-009.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-009.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-010.01					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1500	In Lab / KRUEST	
		3/17/14	1503	R-001-S12 / KRUEST	
R1401764-010.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-010.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-011.01					
	8260C				
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
		3/17/14	1500	In Lab / KRUEST	
		3/17/14	1504	R-001-S12 / KRUEST	
R1401764-011.02					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	
R1401764-011.03					
		3/14/14	1459	SMO / JSEWARD	
		3/14/14	1459	R-001 / JSEWARD	

ALS Environmental

VOLATILE ORGANICS QC SUMMARY

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW01-10.55
Lab Code: R1401764-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-53-GW-699MW01-10.5 5MS Matrix Spike RQ1402375-05 Result	Spike Amount	% Rec		FTMM-53-GW-699MW01-10.5 5DMS Duplicate Matrix Spike RQ1402375-06 Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	51.7	50.0	103		52.2	50.0	104		80 - 130	<1	30
1,1,1-Trichloroethane (TCA)	ND	48.2	50.0	96		48.7	50.0	97		65 - 130	1	30
1,1,2,2-Tetrachloroethane	ND	47.3	50.0	95		46.7	50.0	93		65 - 130	1	30
1,1,2-Trichloroethane	ND	50.8	50.0	102		50.1	50.0	100		75 - 125	2	30
1,1-Dichloroethane (1,1-DCA)	ND	44.8	50.0	90		45.7	50.0	91		70 - 135	2	30
1,1-Dichloroethene (1,1-DCE)	ND	53.8	50.0	108		54.3	50.0	109		70 - 130	<1	30
1,1-Dichloropropene	ND	55.2	50.0	110		55.9	50.0	112		75 - 130	1	30
1,2,3-Trichlorobenzene	ND	50.8	50.0	102		53.9	50.0	108		75 - 125	6	30
1,2,3-Trichloropropane	ND	50.1	50.0	100		49.1	50.0	98		75 - 125	2	30
1,2,4-Trichlorobenzene	ND	50.9	50.0	102		53.3	50.0	107		65 - 135	5	30
1,2,4-Trimethylbenzene	0.31	39.2	50.0	78		38.6	50.0	77		75 - 130	1	30
1,2-Dibromo-3-chloropropane (DBC	ND	60.0	50.0	120		57.8	50.0	116		50 - 130	4	30
1,2-Dibromoethane	ND	53.2	50.0	106		52.7	50.0	105		80 - 120	<1	30
1,2-Dichlorobenzene	ND	50.2	50.0	100		51.1	50.0	102		70 - 120	2	30
1,2-Dichloroethane	ND	48.2	50.0	96		47.7	50.0	95		70 - 130	1	30
1,2-Dichloropropane	ND	47.7	50.0	95		48.4	50.0	97		75 - 125	1	30
1,3,5-Trimethylbenzene	ND	37.0	50.0	74	*	36.0	50.0	72	*	75 - 130	3	30
1,3-Dichlorobenzene	ND	50.6	50.0	101		51.6	50.0	103		75 - 125	2	30
1,3-Dichloropropane	ND	48.4	50.0	97		47.7	50.0	95		75 - 125	2	30
1,4-Dichlorobenzene	ND	49.0	50.0	98		50.2	50.0	100		75 - 125	2	30
2,2-Dichloropropane	ND	32.6	50.0	65	*	33.4	50.0	67	*	70 - 135	2	30
2-Butanone (MEK)	ND	45.7	50.0	91		44.4	50.0	89		30 - 150	3	30
2-Chlorotoluene	ND	46.9	50.0	94		48.0	50.0	96		75 - 125	2	30
2-Hexanone	ND	51.3	50.0	103		48.7	50.0	97		55 - 130	5	30
4-Chlorotoluene	ND	45.5	50.0	91		46.1	50.0	92		75 - 130	1	30
p-Isopropyltoluene	ND	47.6	50.0	95		48.8	50.0	98		75 - 130	3	30
4-Methyl-2-pentanone	ND	51.8	50.0	104		50.4	50.0	101		60 - 135	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW01-10.55
Lab Code: R1401764-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-53-GW-699MW01-10.5 5MS Matrix Spike RQ1402375-05 Result	Spike Amount	% Rec	FTMM-53-GW-699MW01-10.5 5DMS Duplicate Matrix Spike RQ1402375-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Acetone	ND	44.4	50.0	89	43.0	50.0	86	40 - 140	3	30
Benzene	ND	49.1	50.0	98	49.8	50.0	100	80 - 120	1	30
Bromobenzene	ND	50.3	50.0	101	51.3	50.0	103	75 - 125	2	30
Bromochloromethane	ND	47.8	50.0	96	48.0	50.0	96	65 - 130	<1	30
Bromodichloromethane	ND	49.8	50.0	100	51.1	50.0	102	75 - 120	3	30
Bromoform	ND	50.1	50.0	100	50.5	50.0	101	70 - 130	<1	30
Bromomethane	ND	41.1	50.0	82	43.9	50.0	88	30 - 145	6	30
Carbon Tetrachloride	ND	50.1	50.0	100	51.5	50.0	103	65 - 140	3	30
Chlorobenzene	ND	50.3	50.0	101	51.1	50.0	102	80 - 120	1	30
Chloroethane	ND	44.7	50.0	89	45.4	50.0	91	60 - 135	2	30
Chloroform	ND	45.6	50.0	91	46.6	50.0	93	65 - 135	2	30
Chloromethane	ND	40.5	50.0	81	40.4	50.0	81	40 - 125	<1	30
Dibromochloromethane	ND	51.1	50.0	102	52.2	50.0	104	60 - 135	2	30
Dichlorodifluoromethane (CFC 12)	ND	36.6	50.0	73	37.0	50.0	74	30 - 155	1	30
Methylene Chloride	ND	45.3	50.0	91	45.5	50.0	91	55 - 140	<1	30
Ethylbenzene	0.55	50.2	50.0	99	50.4	50.0	100	75 - 125	<1	30
Hexachlorobutadiene	ND	48.1	50.0	96	51.6	50.0	103	50 - 140	7	30
Isopropylbenzene (Cumene)	0.25	48.9	50.0	97	49.9	50.0	99	75 - 125	2	30
Methyl tert-Butyl Ether	ND	48.3	50.0	97	47.6	50.0	95	65 - 125	2	30
Naphthalene	ND	54.4	50.0	109	55.8	50.0	112	55 - 140	3	30
Styrene	ND	35.8	50.0	72	34.2	50.0	68	65 - 135	5	30
Tetrachloroethene (PCE)	ND	52.4	50.0	105	53.5	50.0	107	45 - 150	2	30
Toluene	ND	48.8	50.0	98	49.2	50.0	98	75 - 120	<1	30
Trichloroethene (TCE)	ND	53.8	50.0	108	54.5	50.0	109	70 - 125	1	30
Trichlorofluoromethane (CFC 11)	ND	45.6	50.0	91	46.5	50.0	93	60 - 145	2	30
Vinyl Chloride	ND	44.6	50.0	89	44.9	50.0	90	50 - 145	<1	30
cis-1,2-Dichloroethene	ND	46.7	50.0	93	47.1	50.0	94	70 - 125	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW01-10.55
Lab Code: R1401764-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW01-10.5 5MS Matrix Spike RQ1402375-05			FTMM-53-GW-699MW01-10.5 5DMS Duplicate Matrix Spike RQ1402375-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,3-Dichloropropene	ND	45.9	50.0	92	46.7	50.0	93	70 - 130	2	30
m,p-Xylenes	ND	94.9	100	95	94.7	100	95	75 - 130	<1	30
n-Butylbenzene	ND	45.4	50.0	91	47.0	50.0	94	70 - 135	4	30
n-Propylbenzene	0.42	46.4	50.0	92	47.2	50.0	94	70 - 130	2	30
o-Xylene	ND	46.9	50.0	94	46.2	50.0	92	80 - 120	2	30
sec-Butylbenzene	ND	47.0	50.0	94	48.0	50.0	96	70 - 125	2	30
tert-Butylbenzene	ND	48.2	50.0	96	49.4	50.0	99	70 - 130	2	30
trans-1,2-Dichloroethene	ND	47.8	50.0	96	48.0	50.0	96	60 - 140	<1	30
trans-1,3-Dichloropropene	ND	48.1	50.0	96	48.5	50.0	97	55 - 140	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/17/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 383996

Analyte Name	Lab Control Sample RQ1402375-03 Result	Spike Amount	% Rec		% Rec Limits
1,1,1,2-Tetrachloroethane	22.1	20.0	111		80 - 130
1,1,1-Trichloroethane (TCA)	20.3	20.0	102		65 - 130
1,1,2,2-Tetrachloroethane	18.5	20.0	93		65 - 130
1,1,2-Trichloroethane	21.4	20.0	107		75 - 125
1,1-Dichloroethane (1,1-DCA)	19.5	20.0	97		70 - 135
1,1-Dichloroethene (1,1-DCE)	23.5	20.0	117		70 - 130
1,1-Dichloropropene	24.2	20.0	121		75 - 130
1,2,3-Trichlorobenzene	25.8	20.0	129	*	75 - 125
1,2,3-Trichloropropane	21.4	20.0	107		75 - 125
1,2,4-Trichlorobenzene	24.4	20.0	122		65 - 135
1,2,4-Trimethylbenzene	21.5	20.0	107		75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	24.0	20.0	120		50 - 130
1,2-Dibromoethane	23.1	20.0	116		80 - 120
1,2-Dichlorobenzene	22.1	20.0	110		70 - 120
1,2-Dichloroethane	20.8	20.0	104		70 - 130
1,2-Dichloropropane	20.2	20.0	101		75 - 125
1,3,5-Trimethylbenzene	21.6	20.0	108		75 - 130
1,3-Dichlorobenzene	22.2	20.0	111		75 - 125
1,3-Dichloropropane	20.7	20.0	103		75 - 125
1,4-Dichlorobenzene	21.3	20.0	107		75 - 125
2,2-Dichloropropane	18.6	20.0	93		70 - 135
2-Butanone (MEK)	20.5	20.0	103		30 - 150
2-Chlorotoluene	21.0	20.0	105		75 - 125
2-Hexanone	21.4	20.0	107		55 - 130
4-Chlorotoluene	20.9	20.0	104		75 - 130
p-Isopropyltoluene	22.3	20.0	112		75 - 130
4-Methyl-2-pentanone	21.7	20.0	109		60 - 135
Acetone	18.5	20.0	93		40 - 140
Benzene	21.1	20.0	106		80 - 120
Bromobenzene	22.0	20.0	110		75 - 125
Bromochloromethane	20.9	20.0	105		65 - 130
Bromodichloromethane	21.6	20.0	108		75 - 120
Bromoform	23.6	20.0	118		70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/17/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 383996

Lab Control Sample
RQ1402375-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	20.6	20.0	103	30 - 145
Carbon Tetrachloride	21.7	20.0	108	65 - 140
Chlorobenzene	21.9	20.0	109	80 - 120
Chloroethane	19.0	20.0	95	60 - 135
Chloroform	19.8	20.0	99	65 - 135
Chloromethane	17.2	20.0	86	40 - 125
Dibromochloromethane	23.4	20.0	117	60 - 135
Dichlorodifluoromethane (CFC 12)	16.0	20.0	80	30 - 155
Methylene Chloride	19.5	20.0	98	55 - 140
Ethylbenzene	21.6	20.0	108	75 - 125
Hexachlorobutadiene	25.3	20.0	126	50 - 140
Isopropylbenzene (Cumene)	21.8	20.0	109	75 - 125
Methyl tert-Butyl Ether	20.8	20.0	104	65 - 125
Naphthalene	25.7	20.0	128	55 - 140
Styrene	22.7	20.0	113	65 - 135
Tetrachloroethene (PCE)	23.5	20.0	118	45 - 150
Toluene	21.6	20.0	108	75 - 120
Trichloroethene (TCE)	24.4	20.0	122	70 - 125
Trichlorofluoromethane (CFC 11)	20.0	20.0	100	60 - 145
Vinyl Chloride	19.2	20.0	96	50 - 145
cis-1,2-Dichloroethene	20.0	20.0	100	70 - 125
cis-1,3-Dichloropropene	20.8	20.0	104	70 - 130
m,p-Xylenes	44.9	40.0	112	75 - 130
n-Butylbenzene	21.5	20.0	108	70 - 135
n-Propylbenzene	20.9	20.0	104	70 - 130
o-Xylene	21.8	20.0	109	80 - 120
sec-Butylbenzene	21.7	20.0	109	70 - 125
tert-Butylbenzene	21.3	20.0	106	70 - 130
trans-1,2-Dichloroethene	20.9	20.0	105	60 - 140
trans-1,3-Dichloropropene	21.3	20.0	107	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/19/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 384408

Analyte Name	Lab Control Sample RQ1402508-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	21.3	20.0	106	80 - 130
1,1,1-Trichloroethane (TCA)	20.1	20.0	100	65 - 130
1,1,2,2-Tetrachloroethane	21.4	20.0	107	65 - 130
1,1,2-Trichloroethane	19.8	20.0	99	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.4	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	22.6	20.0	113	70 - 130
1,1-Dichloropropene	23.2	20.0	116	75 - 130
1,2,3-Trichlorobenzene	23.4	20.0	117	75 - 125
1,2,3-Trichloropropane	21.6	20.0	108	75 - 125
1,2,4-Trichlorobenzene	22.4	20.0	112	65 - 135
1,2,4-Trimethylbenzene	21.2	20.0	106	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	23.1	20.0	116	50 - 130
1,2-Dibromoethane	21.8	20.0	109	80 - 120
1,2-Dichlorobenzene	20.8	20.0	104	70 - 120
1,2-Dichloroethane	20.8	20.0	104	70 - 130
1,2-Dichloropropane	20.8	20.0	104	75 - 125
1,3,5-Trimethylbenzene	21.9	20.0	109	75 - 130
1,3-Dichlorobenzene	21.1	20.0	105	75 - 125
1,3-Dichloropropane	21.0	20.0	105	75 - 125
1,4-Dichlorobenzene	20.9	20.0	104	75 - 125
2,2-Dichloropropane	21.6	20.0	108	70 - 135
2-Butanone (MEK)	23.9	20.0	120	30 - 150
2-Chlorotoluene	20.9	20.0	104	75 - 125
2-Hexanone	24.7	20.0	124	55 - 130
4-Chlorotoluene	21.9	20.0	110	75 - 130
p-Isopropyltoluene	22.1	20.0	110	75 - 130
4-Methyl-2-pentanone	23.2	20.0	116	60 - 135
Acetone	23.2	20.0	116	40 - 140
Benzene	20.2	20.0	101	80 - 120
Bromobenzene	20.7	20.0	104	75 - 125
Bromochloromethane	19.9	20.0	100	65 - 130
Bromodichloromethane	21.1	20.0	106	75 - 120
Bromoform	21.5	20.0	108	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/19/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 384408

Analyte Name	Lab Control Sample RQ1402508-03 Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	22.8	20.0	114	30 - 145
Carbon Tetrachloride	19.3	20.0	97	65 - 140
Chlorobenzene	20.4	20.0	102	80 - 120
Chloroethane	22.6	20.0	113	60 - 135
Chloroform	20.4	20.0	102	65 - 135
Chloromethane	22.6	20.0	113	40 - 125
Dibromochloromethane	21.5	20.0	108	60 - 135
Dichlorodifluoromethane (CFC 12)	21.2	20.0	106	30 - 155
Methylene Chloride	20.3	20.0	101	55 - 140
Ethylbenzene	20.7	20.0	103	75 - 125
Hexachlorobutadiene	21.6	20.0	108	50 - 140
Isopropylbenzene (Cumene)	21.6	20.0	108	75 - 125
Methyl tert-Butyl Ether	21.9	20.0	110	65 - 125
Naphthalene	25.1	20.0	125	55 - 140
Styrene	21.7	20.0	108	65 - 135
Tetrachloroethene (PCE)	19.7	20.0	98	45 - 150
Toluene	20.4	20.0	102	75 - 120
Trichloroethene (TCE)	20.1	20.0	100	70 - 125
Trichlorofluoromethane (CFC 11)	19.8	20.0	99	60 - 145
Vinyl Chloride	24.2	20.0	121	50 - 145
cis-1,2-Dichloroethene	20.1	20.0	100	70 - 125
cis-1,3-Dichloropropene	20.7	20.0	104	70 - 130
m,p-Xylenes	42.1	40.0	105	75 - 130
n-Butylbenzene	22.4	20.0	112	70 - 135
n-Propylbenzene	21.5	20.0	107	70 - 130
o-Xylene	20.6	20.0	103	80 - 120
sec-Butylbenzene	21.5	20.0	108	70 - 125
tert-Butylbenzene	20.9	20.0	105	70 - 130
trans-1,2-Dichloroethene	20.3	20.0	101	60 - 140
trans-1,3-Dichloropropene	22.0	20.0	110	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/18/14 00:37

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1402375-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\031714\J3998.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1402375-03	I:\ACQUDATA\msvoa12\Data\031714\J3996.D\	3/17/14 23:33
FTMM-TB031214	R1401764-008	I:\ACQUDATA\msvoa12\Data\031714\J3999.D\	3/18/14 01:09
FTMM-EB031214	R1401764-009	I:\ACQUDATA\msvoa12\Data\031714\J4000.D\	3/18/14 01:41
FTMM-53-GW-699RW03-11.4	R1401764-001	I:\ACQUDATA\msvoa12\Data\031714\J4001.D\	3/18/14 02:14
FTMM-53-GW-699MW09-8	R1401764-004	I:\ACQUDATA\msvoa12\Data\031714\J4003.D\	3/18/14 03:18
FTMM-53-GW-699MW16-8.5	R1401764-005	I:\ACQUDATA\msvoa12\Data\031714\J4004.D\	3/18/14 03:50
FTMM-53-GW-699MW06-10	R1401764-006	I:\ACQUDATA\msvoa12\Data\031714\J4005.D\	3/18/14 04:22
FTMM-53-GW-699RW11-11.1	R1401764-010	I:\ACQUDATA\msvoa12\Data\031714\J4006.D\	3/18/14 04:54
FTMM-53-GW-699MW04-10.3	R1401764-011	I:\ACQUDATA\msvoa12\Data\031714\J4007.D\	3/18/14 05:26
FTMM-53-GW-699RW05-8.6	R1401764-007	I:\ACQUDATA\msvoa12\Data\031714\J4008.D\	3/18/14 05:58
FTMM-53-GW-699MW01-10.55MS	RQ1402375-05	I:\ACQUDATA\msvoa12\Data\031714\J4010.D\	3/18/14 07:02
FTMM-53-GW-699MW01-10.55DMS	RQ1402375-06	I:\ACQUDATA\msvoa12\Data\031714\J4011.D\	3/18/14 07:35

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Analyzed: 3/19/14 15:07

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1402508-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\MSVOA12\DATA\031914\J4061.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1402508-03	I:\ACQUDATA\MSVOA12\DATA\031914\J4059.D\	3/19/14 13:12
FTMM-53-GW-699MW01-10.55	R1401764-002	I:\ACQUDATA\MSVOA12\DATA\031914\J4066.D\	3/19/14 17:49
FTMM-53-GW-699MW101-10.5	R1401764-003	I:\ACQUDATA\MSVOA12\DATA\031914\J4067.D\	3/19/14 18:21
FTMM-53-GW-699RW03-11.4DL	R1401764-001	I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D\	3/19/14 18:54

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/12/14 09:41

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031214\J3873.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 215801

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.96	83285	Pass
75	95	30	60	49.54	217600	Pass
95	95	100	100	100.00	439232	Pass
96	95	5	9	6.84	30035	Pass
173	174	0	2	1.18	3907	Pass
174	95	50	120	75.24	330475	Pass
175	174	5	9	7.57	25003	Pass
176	174	95	101	100.37	331712	Pass
177	176	5	9	6.54	21696	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3875.D\	3/12/14 10:45	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3876.D\	3/12/14 11:17	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3877.D\	3/12/14 11:49	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3878.D\	3/12/14 12:21	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3879.D\	3/12/14 12:53	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3880.D\	3/12/14 13:26	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3881.D\	3/12/14 13:58	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3882.D\	3/12/14 14:30	

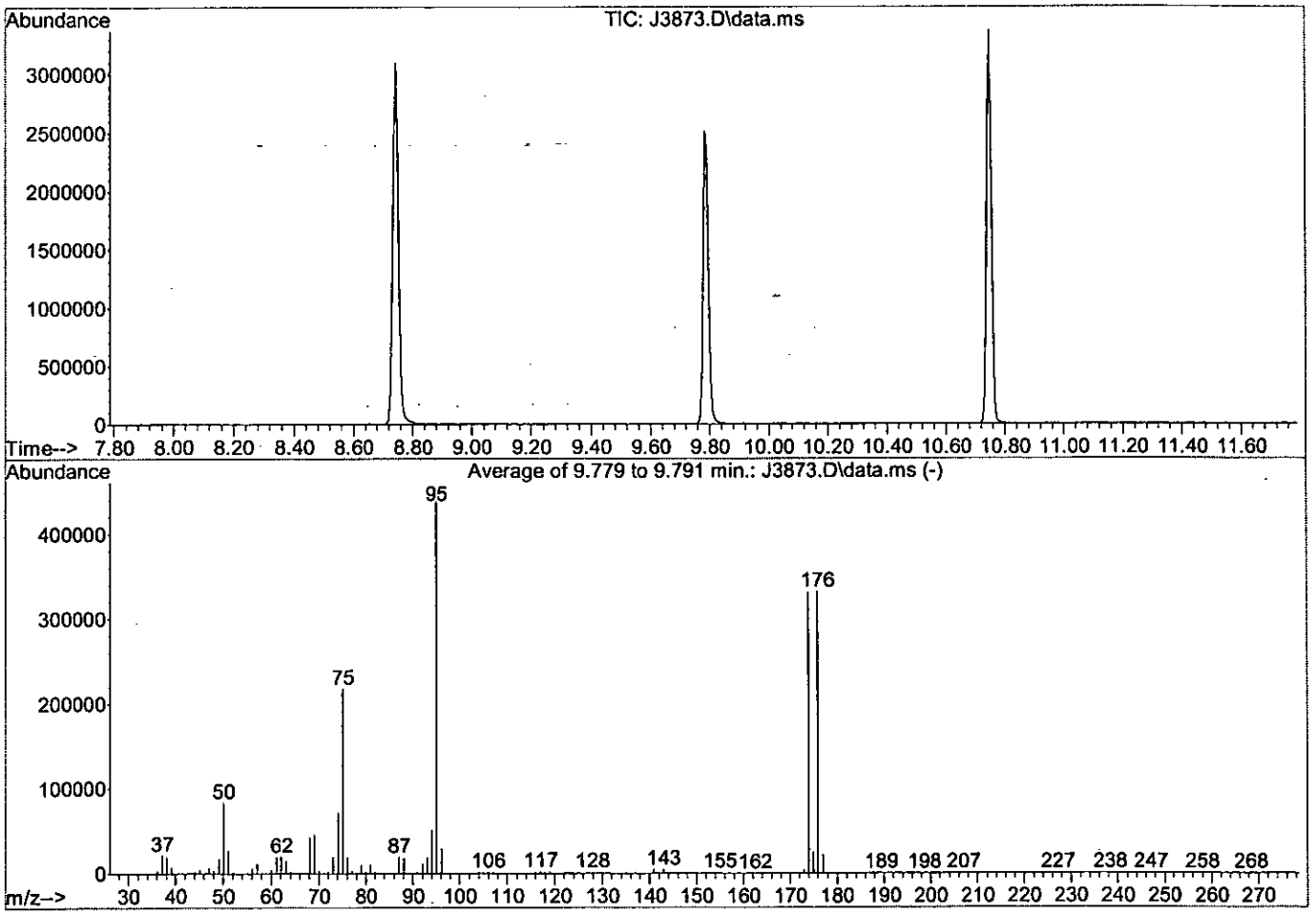
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\031214\
Data File : J3873.D
Acq On : 12 Mar 2014 9:41 am
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP60.P

KR 3/12/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Jan 16 12:02:56 2014



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	83285	PASS
75	95	30	60	49.5	217600	PASS
95	95	100	100	100.0	439232	PASS
96	95	5	9	6.8	30035	PASS
173	174	0.00	2	1.2	3907	PASS
174	95	50	120	75.2	330475	PASS
175	174	5	9	7.6	25003	PASS
176	174	95	101	100.4	331712	PASS
177	176	5	9	6.5	21696	PASS

W031214.M Wed Mar 12 10:00:02 2014 Page: 1

00025

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science **Service Request:** R1401764
Project: FTMM 1Q2014/748810-03000 **Date Analyzed:** 3/17/14 22:29

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031714\J3994.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 383996

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.74	70875	Pass
75	95	30	60	48.03	191872	Pass
95	95	100	100	100.00	399488	Pass
96	95	5	9	6.58	26299	Pass
173	174	0	2	0.95	3234	Pass
174	95	50	120	84.78	338688	Pass
175	174	5	9	7.81	26446	Pass
176	174	95	101	97.24	329344	Pass
177	176	5	9	7.04	23172	Pass

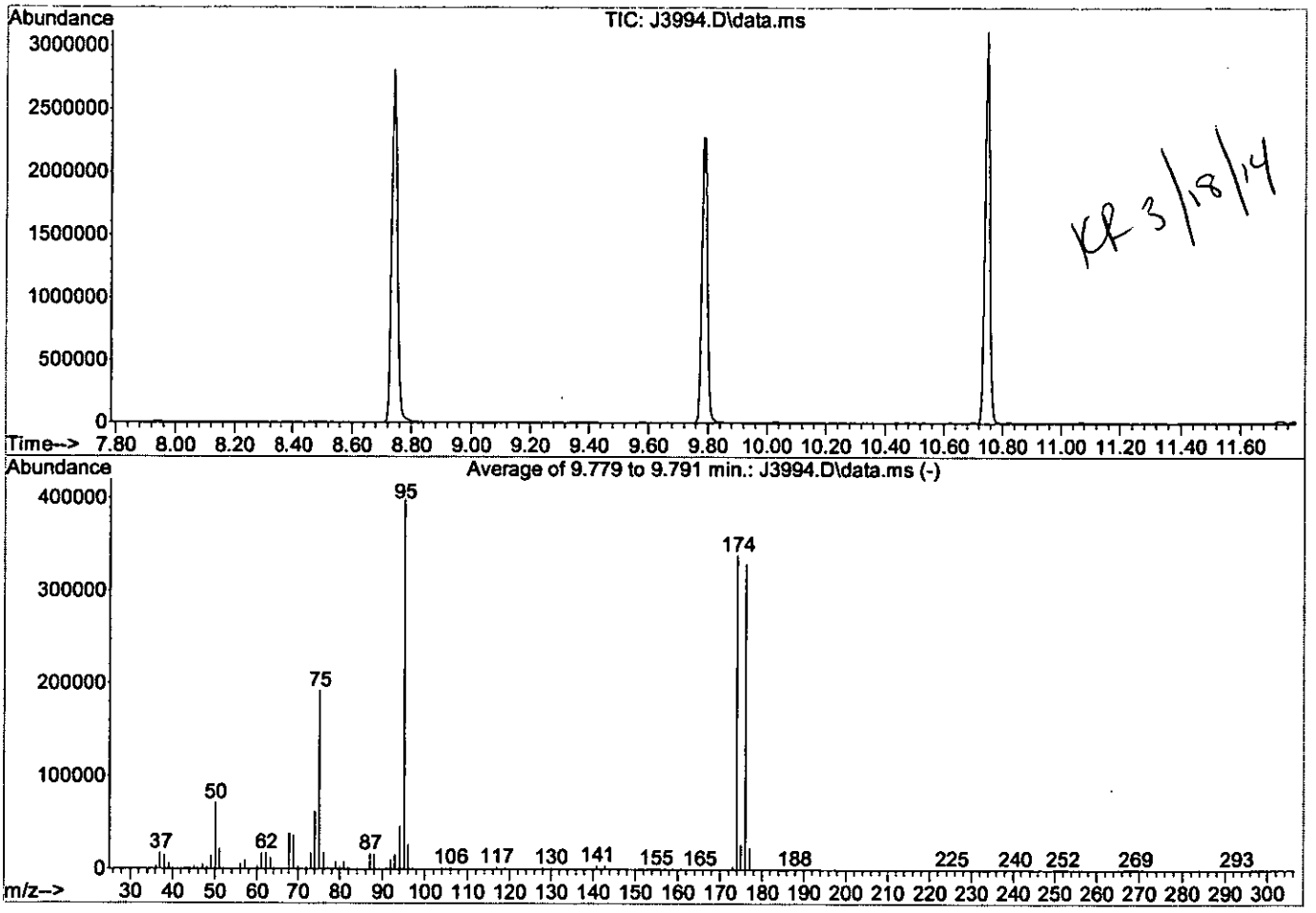
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1402375-02	I:\ACQUDATA\msvoa12\Data\031714\J3995.D\	3/17/14 23:01	
Lab Control Sample	RQ1402375-03	I:\ACQUDATA\msvoa12\Data\031714\J3996.D\	3/17/14 23:33	
Method Blank	RQ1402375-04	I:\ACQUDATA\msvoa12\Data\031714\J3998.D\	3/18/14 00:37	
FTMM-TB031214	R1401764-008	I:\ACQUDATA\msvoa12\Data\031714\J3999.D\	3/18/14 01:09	
FTMM-EB031214	R1401764-009	I:\ACQUDATA\msvoa12\Data\031714\J4000.D\	3/18/14 01:41	
FTMM-53-GW-699RW03-11.4	R1401764-001	I:\ACQUDATA\msvoa12\Data\031714\J4001.D\	3/18/14 02:14	
FTMM-53-GW-699MW09-8	R1401764-004	I:\ACQUDATA\msvoa12\Data\031714\J4003.D\	3/18/14 03:18	
FTMM-53-GW-699MW16-8.5	R1401764-005	I:\ACQUDATA\msvoa12\Data\031714\J4004.D\	3/18/14 03:50	
FTMM-53-GW-699MW06-10	R1401764-006	I:\ACQUDATA\msvoa12\Data\031714\J4005.D\	3/18/14 04:22	
FTMM-53-GW-699RW11-11.1	R1401764-010	I:\ACQUDATA\msvoa12\Data\031714\J4006.D\	3/18/14 04:54	
FTMM-53-GW-699MW04-10.3	R1401764-011	I:\ACQUDATA\msvoa12\Data\031714\J4007.D\	3/18/14 05:26	
FTMM-53-GW-699RW05-8.6	R1401764-007	I:\ACQUDATA\msvoa12\Data\031714\J4008.D\	3/18/14 05:58	
FTMM-53-GW-699MW01-10.55MS	RQ1402375-05	I:\ACQUDATA\msvoa12\Data\031714\J4010.D\	3/18/14 07:02	
FTMM-53-GW-699MW01-10.55DMS	RQ1402375-06	I:\ACQUDATA\msvoa12\Data\031714\J4011.D\	3/18/14 07:35	

BFB

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J3994.D
Acq On : 17 Mar 2014 10:29 pm
Operator : K.Ruest
Sample : TUNE LQ1402375-01
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014



KR 3/18/14

AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	70875	PASS
75	95	30	60	48.0	191872	PASS
95	95	100	100	100.0	399488	PASS
96	95	5	9	6.6	26299	PASS
173	174	0.00	2	1.0	3234	PASS
174	95	50	120	84.8	338688	PASS
175	174	5	9	7.8	26446	PASS
176	174	95	101	97.2	329344	PASS
177	176	5	9	7.0	23172	PASS

00027

W031214.M Tue Mar 18 09:46:31 2014 Page: 1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/19/14 12:06

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031914\J4057.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 384408

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.73	80557	Pass
75	95	30	60	50.07	204416	Pass
95	95	100	100	100.00	408235	Pass
96	95	5	9	6.65	27139	Pass
173	174	0	2	1.14	3591	Pass
174	95	50	120	77.21	315200	Pass
175	174	5	9	7.60	23963	Pass
176	174	95	101	97.17	306283	Pass
177	176	5	9	6.56	20094	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1402508-02	I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D\	3/19/14 12:39	
Lab Control Sample	RQ1402508-03	I:\ACQUDATA\MSVOA12\DATA\031914\J4059.D\	3/19/14 13:12	
Method Blank	RQ1402508-04	I:\ACQUDATA\MSVOA12\DATA\031914\J4061.D\	3/19/14 15:07	
FTMM-53-GW-699MW01-10.55	R1401764-002	I:\ACQUDATA\MSVOA12\DATA\031914\J4066.D\	3/19/14 17:49	
FTMM-53-GW-699MW101-10.5	R1401764-003	I:\ACQUDATA\MSVOA12\DATA\031914\J4067.D\	3/19/14 18:21	
FTMM-53-GW-699RW03-11.4DL	R1401764-001	I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D\	3/19/14 18:54	

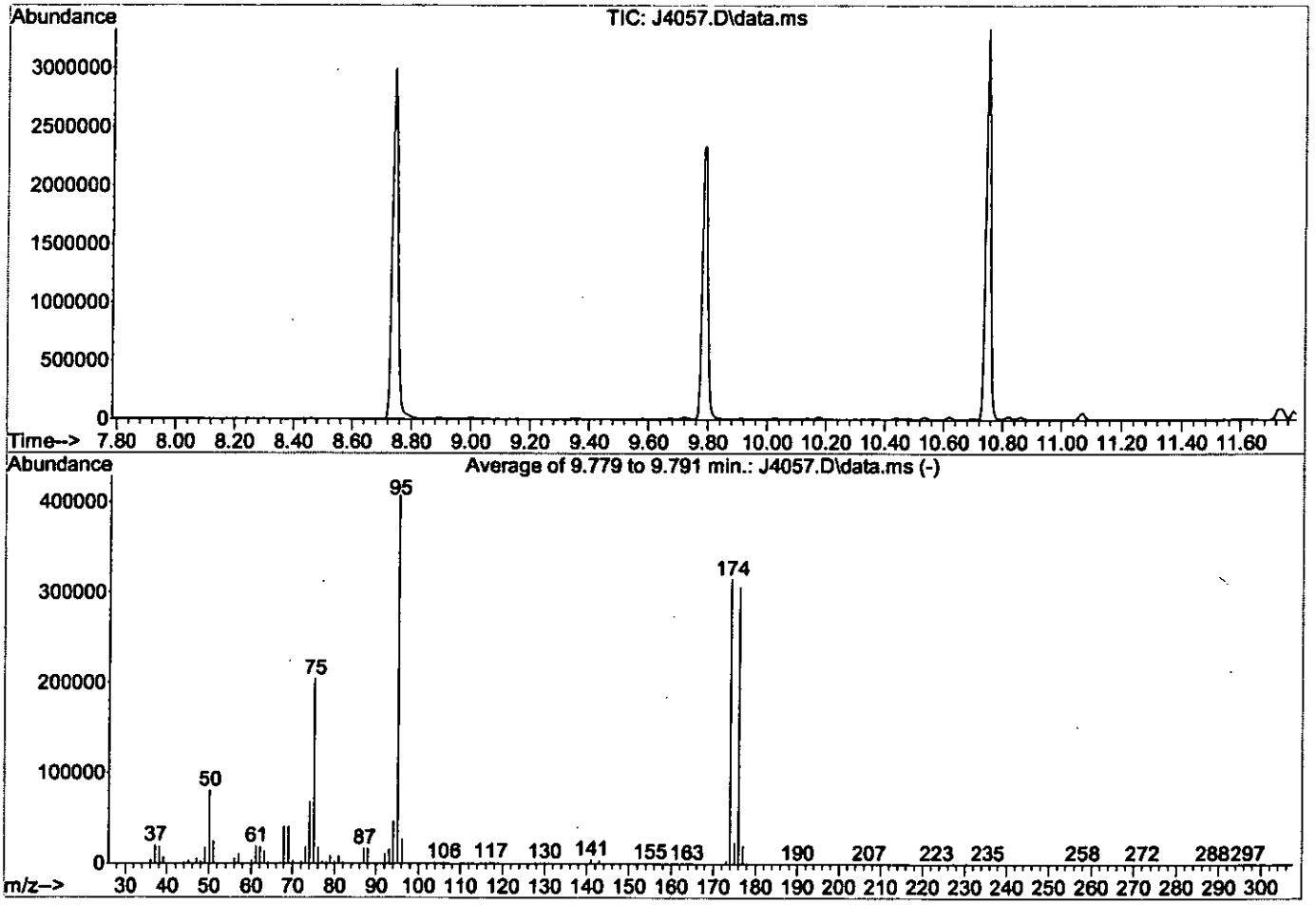
BFB

```
Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4057.D
Acq On    : 19 Mar 2014  12:06 pm
Operator  : K.Ruest
Sample    : TUNE RQ1402508-01
Misc      :
ALS Vial  : 1   Sample Multiplier: 1

Integration File: INTP60.P

Method    : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title     : MS#12 - 8260B WATERS 10mL Purge
Last Update  : Thu Mar 13 11:21:13 2014
```

KF 3/19/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	80557	PASS
75	95	30	60	50.1	204416	PASS
95	95	100	100	100.0	408235	PASS
96	95	5	9	6.6	27139	PASS
173	174	0.00	2	1.1	3591	PASS
174	95	50	120	77.2	315200	PASS
175	174	5	9	7.6	23963	PASS
176	174	95	101	97.2	306283	PASS
177	176	5	9	6.6	20094	PASS

00029

W031214.M Wed Mar 19 13:14:04 2014 Page: 1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/17/14 23:01

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031714\J3995.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1402375-02
Analysis Lot: 383996
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	653,851	10.75	1,322,682	5.45	1,225,607	8.74
	Upper Limit ==>	1,307,702	11.25	2,645,364	5.95	2,451,214	9.24
	Lower Limit ==>	326,926	10.25	661,341	4.95	612,804	8.24
	ICAL Result ==>	670,106	10.75	1,455,324	5.45	1,331,361	8.74
Associated Analyses							
Lab Control Sample	RQ1402375-03	632,484	10.75	1,319,230	5.45	1,218,026	8.74
Method Blank	RQ1402375-04	611,223	10.75	1,319,824	5.45	1,221,984	8.74
FTMM-TB031214	R1401764-008	586,545	10.75	1,309,431	5.45	1,195,565	8.74
FTMM-EB031214	R1401764-009	599,470	10.75	1,318,356	5.45	1,208,263	8.74
FTMM-53-GW-699RW03-11.4	R1401764-001	628,980	10.75	1,299,709	5.45	1,210,300	8.74
FTMM-53-GW-699MW09-8	R1401764-004	611,036	10.75	1,335,327	5.45	1,229,264	8.74
FTMM-53-GW-699MW16-8.5	R1401764-005	607,709	10.75	1,316,514	5.45	1,213,606	8.74
FTMM-53-GW-699MW06-10	R1401764-006	603,700	10.75	1,314,215	5.45	1,217,215	8.74
FTMM-53-GW-699RW11-11.1	R1401764-010	613,735	10.75	1,302,585	5.45	1,196,268	8.74
FTMM-53-GW-699MW04-10.3	R1401764-011	607,351	10.75	1,316,033	5.45	1,211,910	8.74
FTMM-53-GW-699RW05-8.6	R1401764-007	629,413	10.75	1,297,256	5.45	1,207,368	8.74
FTMM-53-GW-699MW01-10.55MS	RQ1402375-05	645,814	10.75	1,318,556	5.45	1,228,848	8.74
FTMM-53-GW-699MW01-10.55DMS	RQ1402375-06	641,517	10.75	1,311,685	5.45	1,232,241	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/17/14 23:01

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031714\J3995.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1402375-02
Analysis Lot: 383996
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	906,437	4.25
	Upper Limit ==>	1,812,874	4.75
	Lower Limit ==>	453,219	3.75
	ICAL Result ==>	937,657	4.25
Associated Analyses			
Lab Control Sample	RQ1402375-03	898,662	4.25
Method Blank	RQ1402375-04	919,355	4.25
FTMM-TB031214	R1401764-008	902,177	4.24
FTMM-EB031214	R1401764-009	897,433	4.25
FTMM-53-GW-699RW03-11.4	R1401764-001	895,721	4.25
FTMM-53-GW-699MW09-8	R1401764-004	905,408	4.25
FTMM-53-GW-699MW16-8.5	R1401764-005	910,779	4.25
FTMM-53-GW-699MW06-10	R1401764-006	904,665	4.25
FTMM-53-GW-699RW11-11.1	R1401764-010	904,968	4.25
FTMM-53-GW-699MW04-10.3	R1401764-011	908,157	4.25
FTMM-53-GW-699RW05-8.6	R1401764-007	907,936	4.25
FTMM-53-GW-699MW01-10.55MS	RQ1402375-05	910,637	4.24
FTMM-53-GW-699MW01-10.55DMS	RQ1402375-06	909,101	4.24

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/19/14 12:39

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1402508-02
Analysis Lot: 384408
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	627,839	10.75	1,385,871	5.45	1,257,554	8.74
	Upper Limit ==>	1,255,678	11.25	2,771,742	5.95	2,515,108	9.24
	Lower Limit ==>	313,920	10.25	692,936	4.95	628,777	8.24
	ICAL Result ==>	670,106	10.75	1,455,324	5.45	1,331,361	8.74
Associated Analyses							
Lab Control Sample	RQ1402508-03	618,046	10.75	1,398,901	5.45	1,258,259	8.74
Method Blank	RQ1402508-04	594,180	10.75	1,394,630	5.45	1,253,608	8.74
FTMM-53-GW-699MW01-10.55	R1401764-002	571,371	10.75	1,356,548	5.45	1,221,399	8.74
FTMM-53-GW-699MW101-10.5	R1401764-003	576,506	10.75	1,364,116	5.45	1,228,000	8.74
FTMM-53-GW-699RW03-11.4	R1401764-001	594,429	10.75	1,324,841	5.45	1,221,655	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/19/14 12:39

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1402508-02
Analysis Lot: 384408
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	894,449	4.25
	Upper Limit ==>	1,788,898	4.75
	Lower Limit ==>	447,225	3.75
	ICAL Result ==>	937,657	4.25
Associated Analyses			
Lab Control Sample	RQ1402508-03	892,848	4.25
Method Blank	RQ1402508-04	889,105	4.25
FTMM-53-GW-699MW01-10.55	R1401764-002	865,888	4.25
FTMM-53-GW-699MW101-10.5	R1401764-003	880,777	4.25
FTMM-53-GW-699RW03-11.4	R1401764-001	869,359	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

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Form 2B

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SuperSet Reference: 14-0000283442 rev 00

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1355
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 02:14
Sample Name:	FTMM-53-GW-699RW03-11.4	**Units:**	µg/L
Lab Code:	R1401764-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4001.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**200**	E	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**32**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**3.2**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**4.8**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1355
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 02:14
Sample Name:	FTMM-53-GW-699RW03-11.4	**Units:**	µg/L
Lab Code:	R1401764-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4001.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	**0.47**	J	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	**0.29**	J	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**50**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**29**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**1.7**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**71**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**12**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**34**		5.0	1.0	0.20	
95-47-6	o-Xylene	**90**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**7.4**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.68**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	3/18/14 02:14	
Dibromofluoromethane	98	85-115	3/18/14 02:14	
Toluene-d8	94	85-120	3/18/14 02:14	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14 0214

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-11.4
Lab Code: R1401764-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	2.40	**19.3**	J
000096-14-0	Pentane, 3-methyl-	2.60	**27.7**	JN
000096-37-7	Cyclopentane, methyl-	3.46	**25.6**	JN
000565-59-3	Pentane, 2,3-dimethyl-	4.39	**26.8**	JN
002532-58-3	Cyclopentane, 1,3-dimethyl-, cis-	4.91	**15.5**	JN
	unknown	5.01	**27.4**	J
000108-87-2	Cyclohexane, methyl-	6.10	**24.7**	JN
000560-21-4	Pentane, 2,3,3-trimethyl-	6.80	**17.1**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.10	**63.5**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.11	**35.3**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.33	**93.0**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**85.5**	JN
	unknown	10.97	**72.7**	J
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**35.7**	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl	11.28	**22.3**	JN
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.33	**34.4**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**47.6**	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	11.61	**51.4**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.65	**41.5**	JN
	unknown	11.92	**46.0**	J

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4001.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 2:14 am
Operator : K.Ruest
InstName : MSVOA-12

mpt 2.0

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 02:29:06 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	895721	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1299709	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1210300	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	628980	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	370549	49.25	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.50%				
48) surr1,1,2-dichloroetha...	4.658	65	407371	47.53	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 95.06%				
65) SURR3,Toluene-d8	7.322	98	1493896	47.25	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.50%				
70) SURR2,BFB	9.791	95	584639	49.56	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.12%				
Target Compounds							Qvalue
3) Chloromethane	1.256	50	2708	0.29	ppb		97
6) Chloroethane	1.567	64	2406	0.47	ppb		72
~~12) Acrolein~~	~~1.963~~	~~56~~	~~220~~	~~Below Cal~~	~~#~~		~~1~~
~~15) Acetone~~	~~2.054~~	~~43~~	~~60720~~	~~34.17 ppb~~	~~#~~		~~64~~
~~16) 2 Propanol~~	~~2.115~~	~~45~~	~~563~~	~~1.95 ppb~~	~~#~~		~~1~~
18) Carbon Disulfide	2.201	76	4622	0.20	ppb		89
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~4621~~	~~1.04 ppb~~	~~#~~		~~1~~
21) Methyl Acetate	2.310	43	4389	1.10	ppb	#	60
23) TBA	2.402	59	2009	4.04	ppb	#	1
24) Acrylonitrile	2.597	53	16846	8.46	ppb	#	28
25) Methyl-t-Butyl Ether	2.579	73	24917	1.21	ppb	#	1
35) 2-Butanone	3.560	43	13182	5.29	ppb	#	3
36) Propionitrile	3.530	54	345	0.48	ppb	#	1
38) Methacrylonitrile	3.780	67	519	0.22	ppb		86
~~39) Tetrahydrofuran~~	~~3.975~~	~~42~~	~~482~~	~~0.28 ppb~~			~~93~~
44) Cyclohexane	4.304	41	84389	12.00	ppb		98 MD
49) Benzene	4.779	78	154820	4.84	ppb		97
~~51) Iso-Butyl Alcohol~~	~~4.554~~	~~43~~	~~131445~~	~~597.83 ppb~~			~~79~~
52) n-Heptane	5.328	43	16626	2.08	ppb		95 MD
~~53) 1 Butanol~~	~~5.810~~	~~56~~	~~492~~	~~4.07 ppb~~			~~89~~
55) Methylcyclohexane	6.102	55	217586	26.11	ppb		97 MD
~~59) Methyl Methacrylate~~	~~6.365~~	~~69~~	~~44876~~	~~11.66 ppb~~	~~#~~		~~36~~
~~61) 2 Nitropropane~~	~~6.803~~	~~41~~	~~72258~~	~~70.30 ppb~~	~~#~~		~~1~~
~~62) 2 Chloroethylvinyl Ether~~	~~6.803~~	~~63~~	~~1010~~	~~0.28 ppb~~	~~#~~		~~48~~
~~64) 4 Methyl 2 pentanone~~	~~7.218~~	~~43~~	~~2322~~	~~0.47 ppb~~			~~79~~
66) Toluene	7.395	91	54905	1.66	ppb		96
~~68) Ethyl Methacrylate~~	~~7.791~~	~~69~~	~~14752~~	~~1.98 ppb~~	~~#~~		~~16~~
~~69) 1,1,2 Trichloroethane~~	~~7.791~~	~~97~~	~~58737~~	~~10.18 ppb~~	~~#~~		~~18~~
~~73) 2 Hexanone~~	~~8.126~~	~~43~~	~~1253~~	~~0.37 ppb~~			~~72~~
82) Ethylbenzene	8.888	106	566020	50.44	ppb		95
83) (m+p)Xylene	8.998	106	936819	71.04	ppb		95
84) o-Xylene	9.346	106	1208357	89.79	ppb		92
~~85) Styrene~~	~~9.346~~	~~104~~	~~59204~~	~~2.75 ppb~~	~~#~~		~~1~~
89) Isopropylbenzene	9.669	105	666598	20.53	ppb		98
~~90) Cyclohexanone~~	~~9.718~~	~~55~~	~~1120~~	~~2.22 ppb~~			~~77~~

KR 3/18/14

DL 3/21/14

Quantitation Report (Not Reviewed)

Sample : R1401764-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4001.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 2:14 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 02:29:06 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
~~91) trans-1,4-Dichloro-2-B...~~	~~9.974~~	~~53~~	~~2633~~	~~1.56~~	~~ppb~~	~~#~~	~~31~~	
~~92) 1,1,2,2-Tetrachloroethane~~	~~9.852~~	~~83~~	~~1500~~	~~0.21~~	~~ppb~~		~~76~~	
95) n-Propylbenzene	10.022	91	1276516	33.61	ppb		98	
~~96) 2-Chlorotoluene~~	~~10.096~~	~~91~~	~~237316~~	~~9.95~~	~~ppb~~	~~#~~	~~61~~	
~~97) 3-Chlorotoluene~~	~~10.096~~	~~91~~	~~357428~~	~~14.40~~	~~ppb~~	~~#~~	~~43~~	
~~98) 4-Chlorotoluene~~	~~10.169~~	~~91~~	~~87451~~	~~3.11~~	~~ppb~~	~~#~~	~~45~~	
99) 1,3,5-Trimethylbenzene	10.169	105	858118	32.39	ppb		98	
100) tert-Butylbenzene	10.437	119	15093	0.68	ppb		97	
101) 1,2,4-Trimethylbenzene	10.480	105	5464366	200.50	ppb		88	(E)
103) sec-Butylbenzene	10.620	105	229748	7.40	ppb		98	
104) p-Isopropyltoluene	10.742	119	83994	3.20	ppb		99	
109) n-Butylbenzene	11.065	91	287840	12.17	ppb	#	76	
~~111) 1,2-Dibromo-3-chloropr...~~	~~11.620~~	~~157~~	~~699~~	~~0.63~~	~~ppb~~	~~#~~	~~1~~	
116) Hexachlorobt	12.266	225	1098	0.27	ppb	#	77	
117) Naphthalen	12.302	128	485167	29.06	ppb		99	
119) 2,4,5-Trichlorotolene	12.851	159	2718	0.54	ppb	#	69	MMD
120) 2,3,6-Trichlorotoluene	12.912	159	2152	0.47	ppb	#	85	↓

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

Quantitation Report (Not Reviewed)

```
Sample     : R1401764-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4001.D
Misc       : PARSONS 9913 T4
Acq On     : 18 Mar 2014   2:14 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 02:29:06 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration
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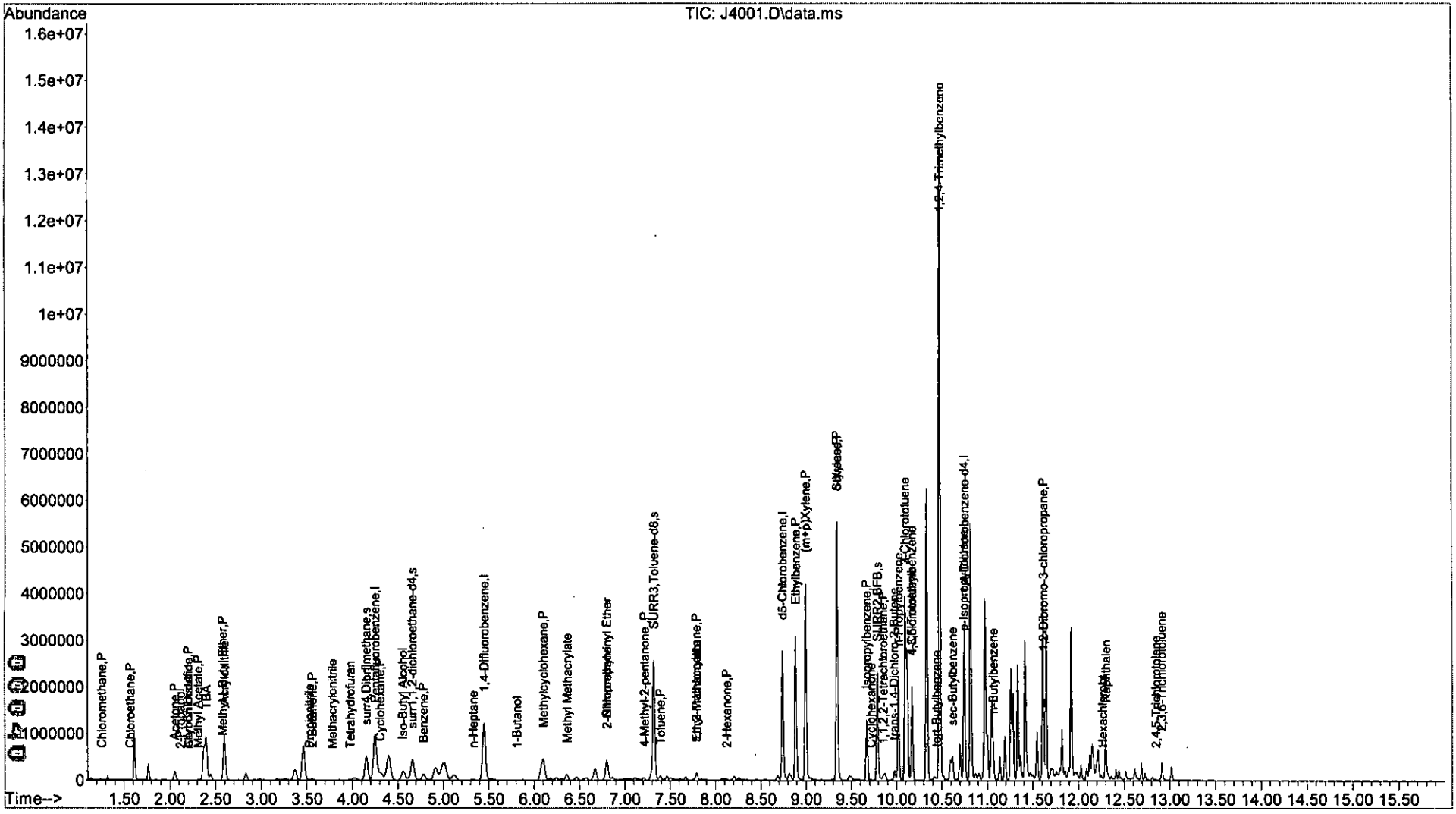
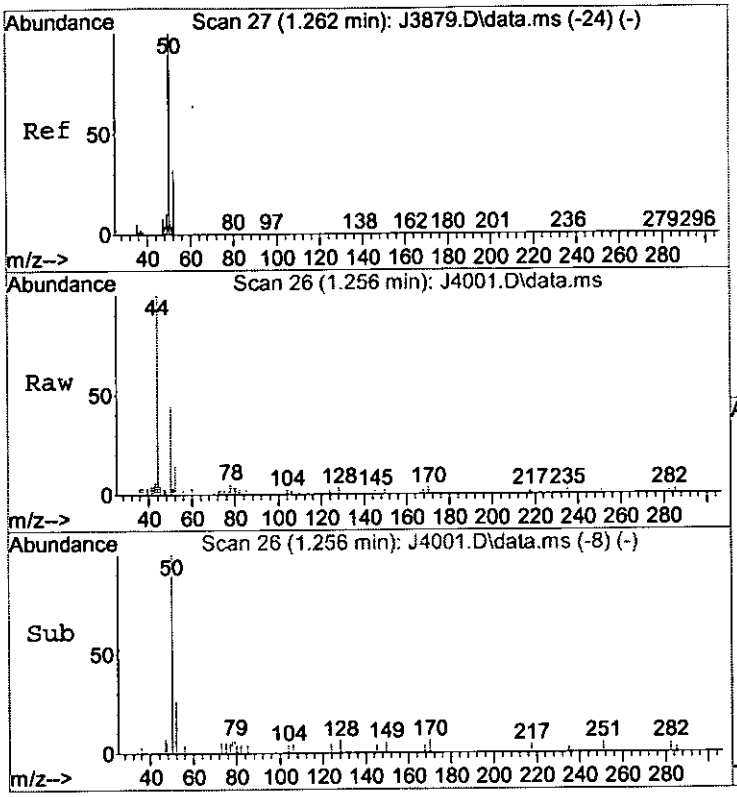


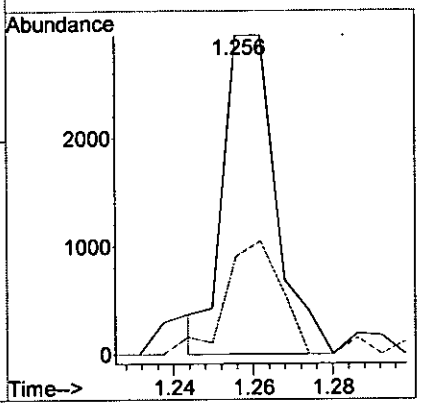
W031214.M Tue Mar 18 02:29:13 2014 Page: 3

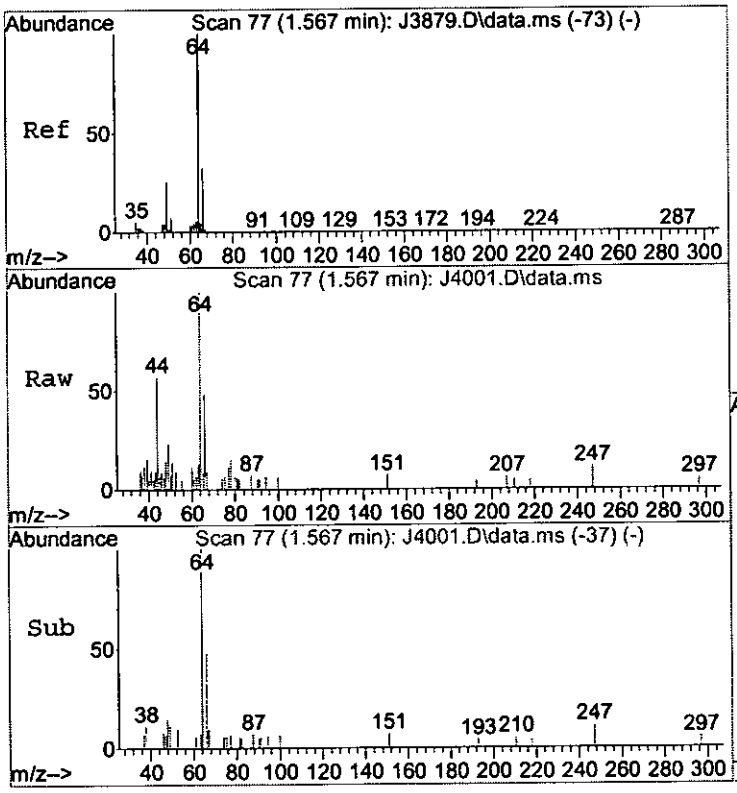


#3
Chloromethane
Concen: 0.29 ppb
RT: 1.256 min Scan# 26
Delta R.T. -0.006 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion: 50 Resp: 2708

Ion	Ratio	Lower	Upper
50	100		
52	30.7	12.2	52.2

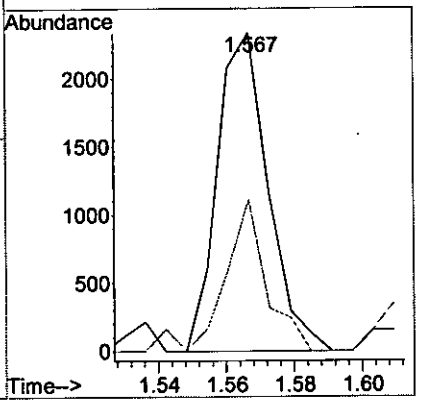




#6
Chloroethane
Concen: 0.47 ppb
RT: 1.567 min Scan# 77
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

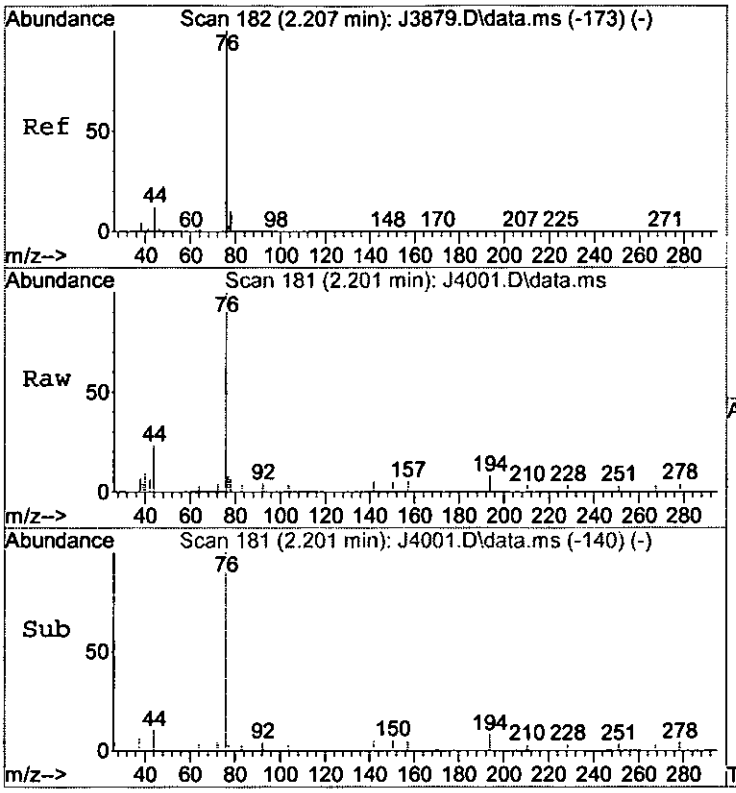
Tgt Ion: 64 Resp: 2406

Ion	Ratio	Lower	Upper
64	100		
66	47.6	12.2	52.2



J4001.D W031214.M Tue Mar 18 14:54:50 2014 Page 3

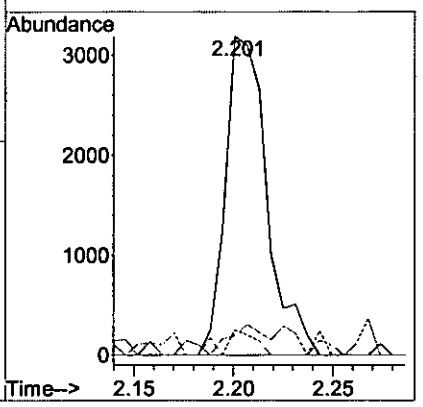
00041

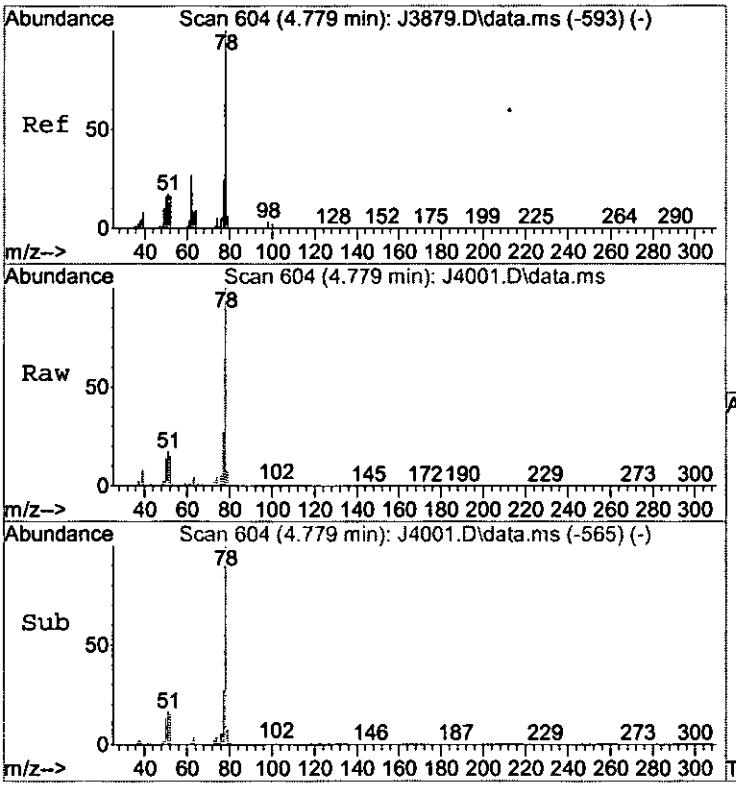


#18
Carbon Disulfide
Concen: 0.20 ppb
RT: 2.201 min Scan# 181
Delta R.T. -0.006 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion: 76 Resp: 4622

Ion	Ratio	Lower	Upper
76	100		
78	6.2	0.0	29.6
77	8.0	0.0	22.6

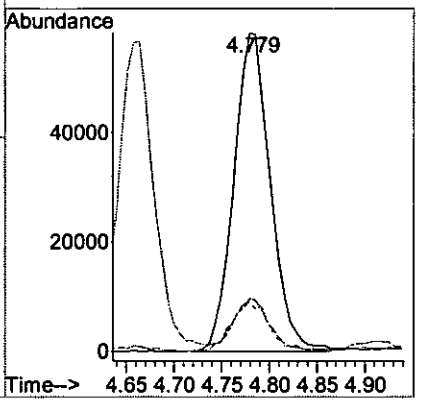


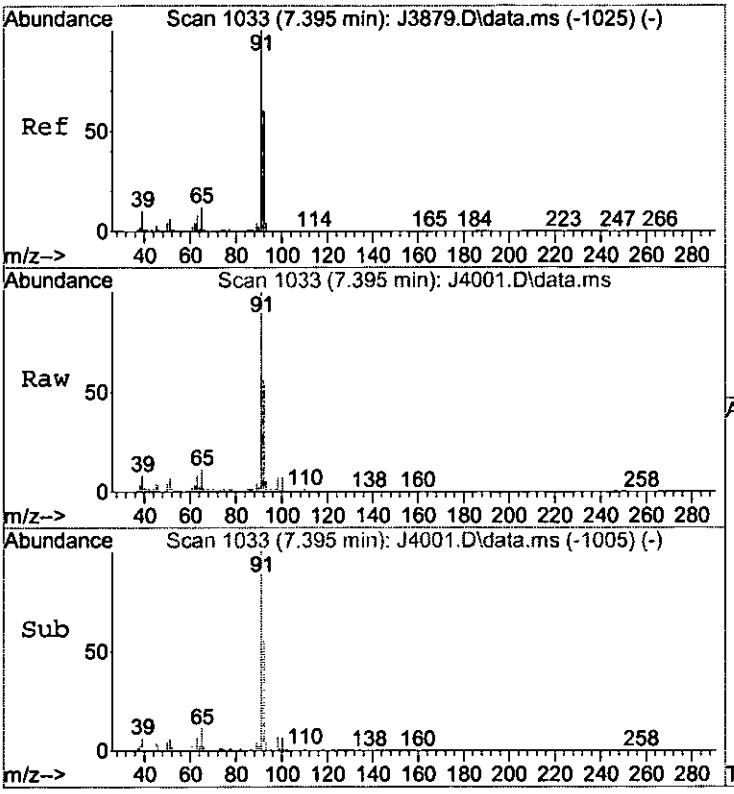


#49
Benzene
Concen: 4.84 ppb
RT: 4.779 min Scan# 604
Delta R.T. -0.006 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion: 78 Resp: 154820

Ion	Ratio	Lower	Upper
78	100		
51	16.6	0.0	38.2
52	15.4	0.0	36.1

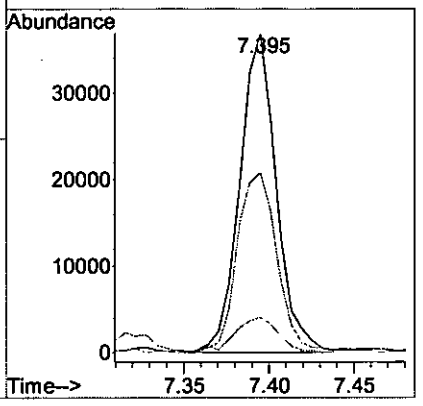


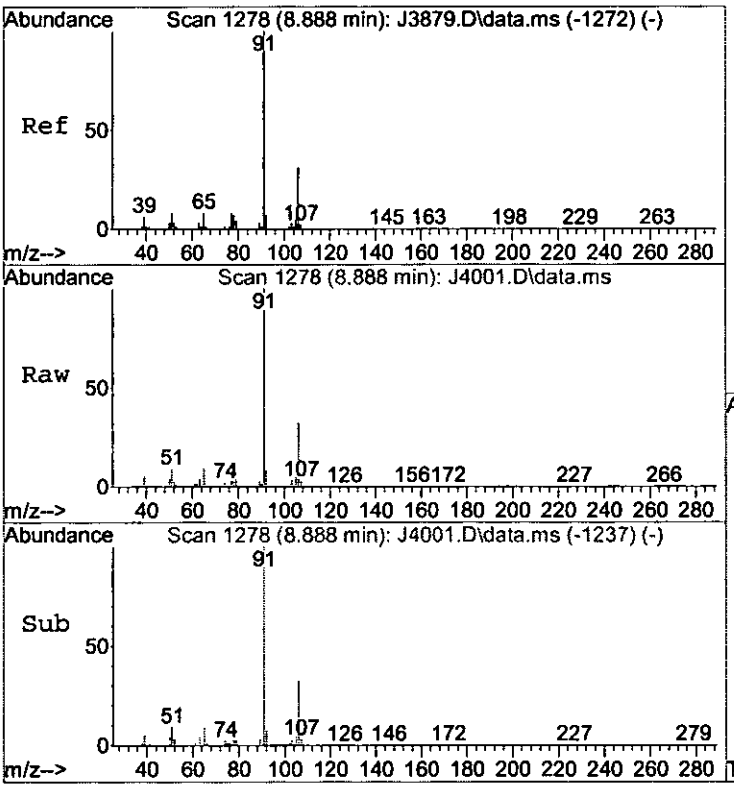


#66
Toluene
Concen: 1.66 ppb
RT: 7.395 min Scan# 1033
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion: 91 Resp: 54905

Ion	Ratio	Lower	Upper
91	100		
92	56.4	39.9	79.9
65	11.0	0.0	32.3

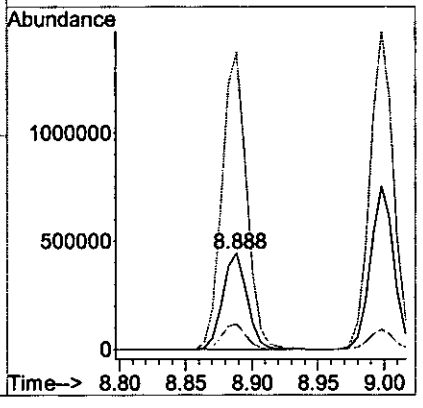




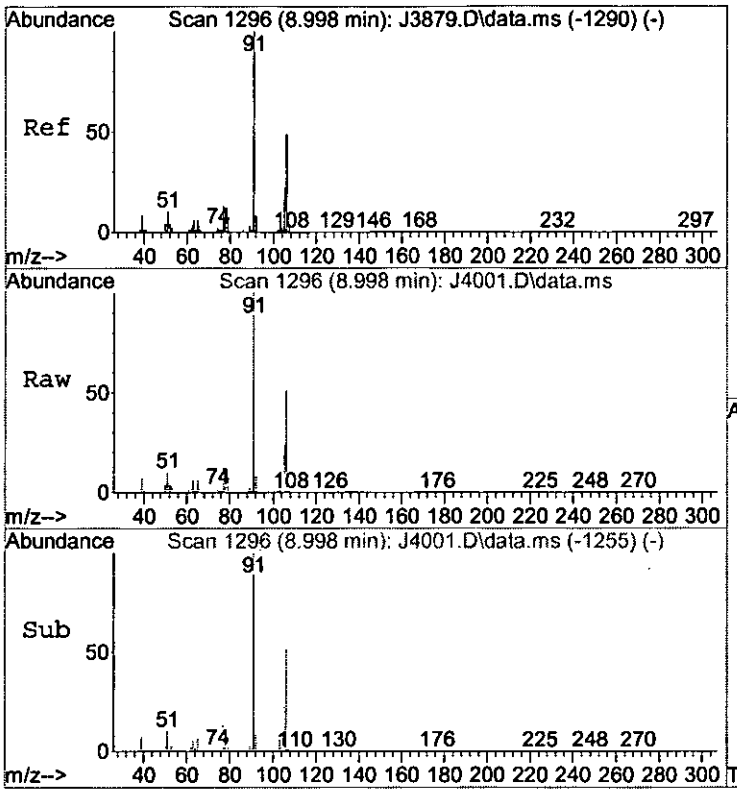
#82
Ethylbenzene
Concen: 50.44 ppb
RT: 8.888 min Scan# 1278
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:106 Resp: 566020

Ion	Ratio	Lower	Upper
106	100		
91	310.1	300.3	340.3
65	26.4	6.6	46.6



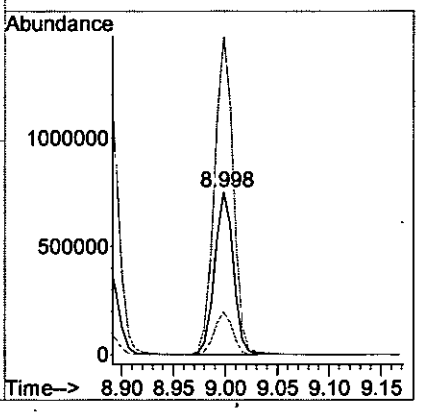
J4001.D W031214.M Tue Mar 18 14:54:54 2014 00043 Page 5

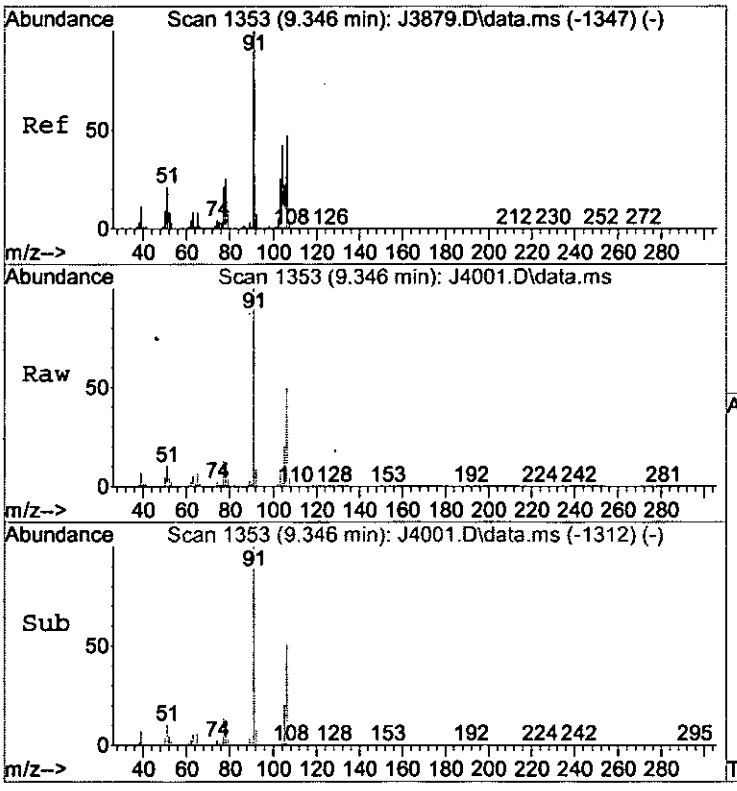


#83
(m+p)Xylene
Concen: 71.04 ppb
RT: 8.998 min Scan# 1296
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:106 Resp: 936819

Ion	Ratio	Lower	Upper
106	100		
91	195.0	182.8	222.8
77	26.3	7.2	47.2

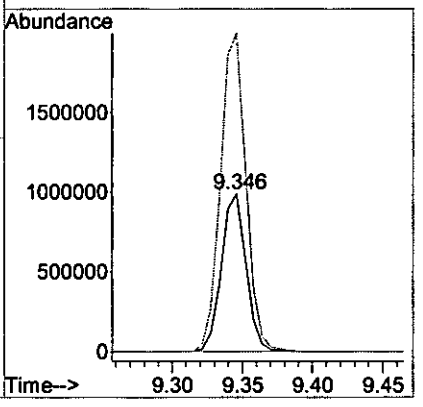




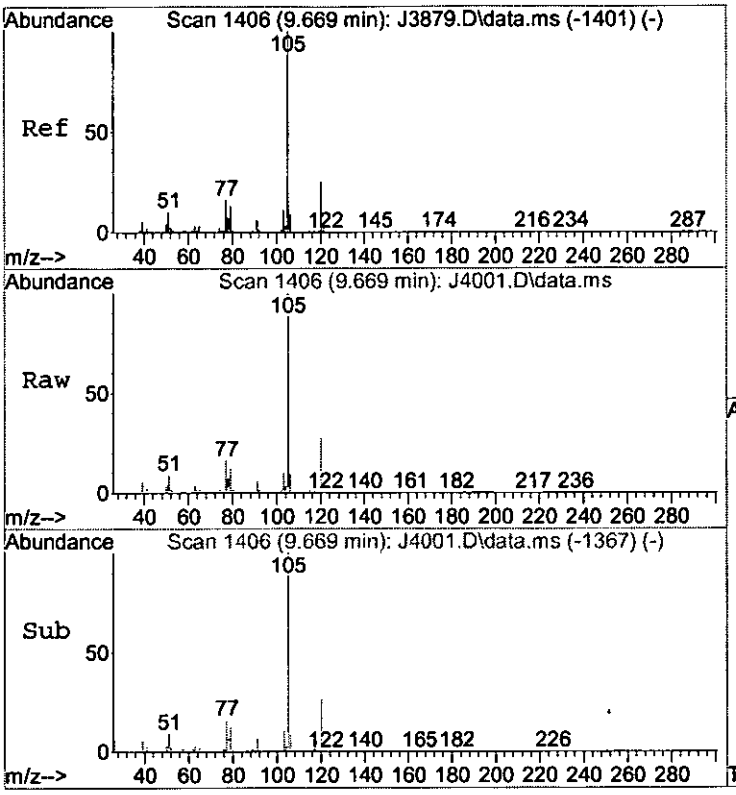
#84
o-Xylene
Concen: 89.79 ppb
RT: 9.346 min Scan# 1353
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:106 Resp: 1208357

Ion	Ratio	Lower	Upper
106	100		
91	202.0	193.9	233.9



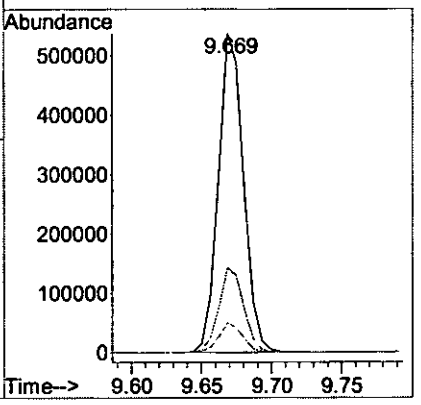
J4001.D W031214.M Tue Mar 18 14:54:56 2014 0004 Page 6

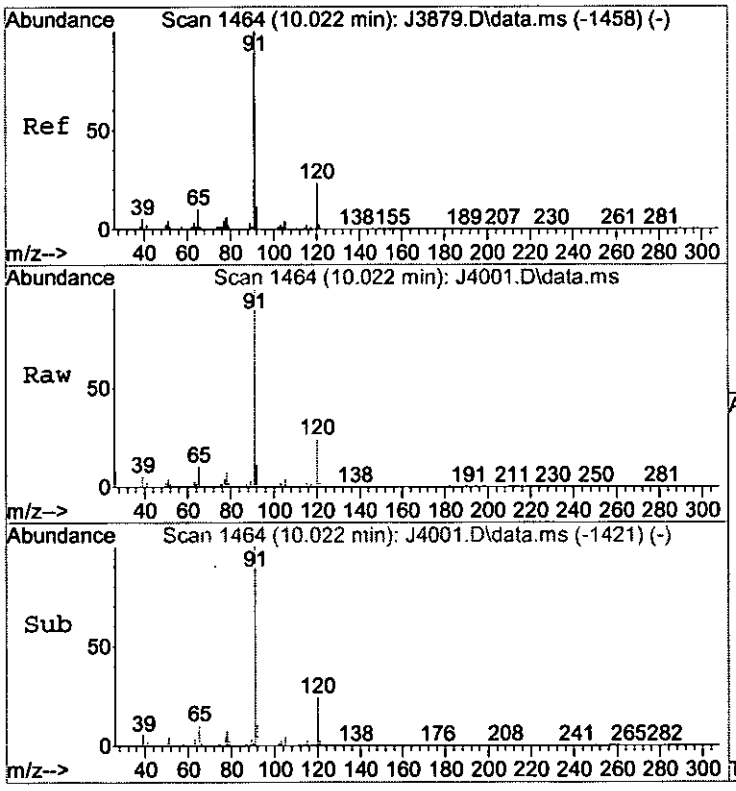


#89
Isopropylbenzene
Concen: 20.53 ppb
RT: 9.669 min Scan# 1406
Delta R.T. -0.006 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:105 Resp: 666598

Ion	Ratio	Lower	Upper
105	100		
120	26.7	5.4	45.4
106	9.4	0.0	28.6

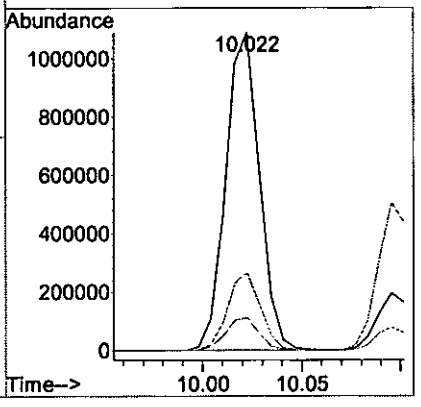




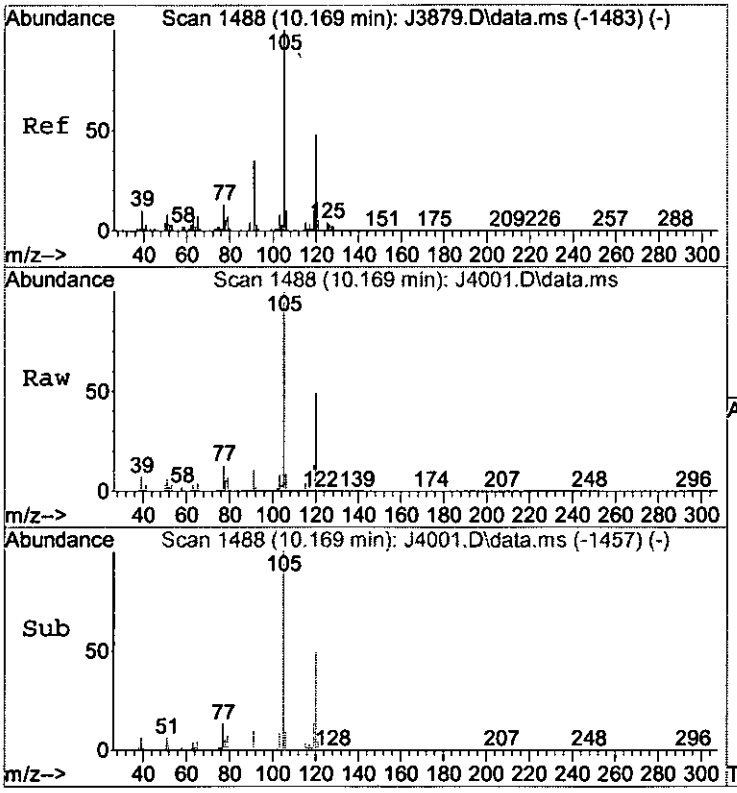
#95
n-Propylbenzene
Concen: 33.61 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion: 91 Resp: 1276516

Ion	Ratio	Lower	Upper
91	100		
120	24.5	3.1	43.1
65	10.3	0.0	30.1



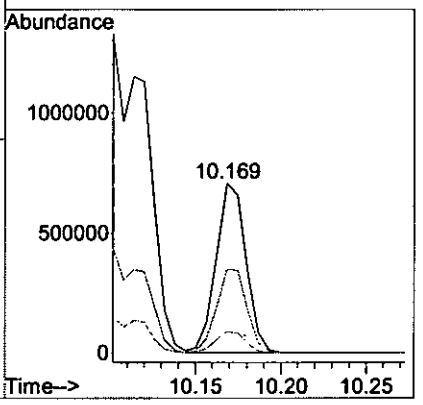
J4001.D W031214.M Tue Mar 18 14:54:58 2014 0004 Page 7

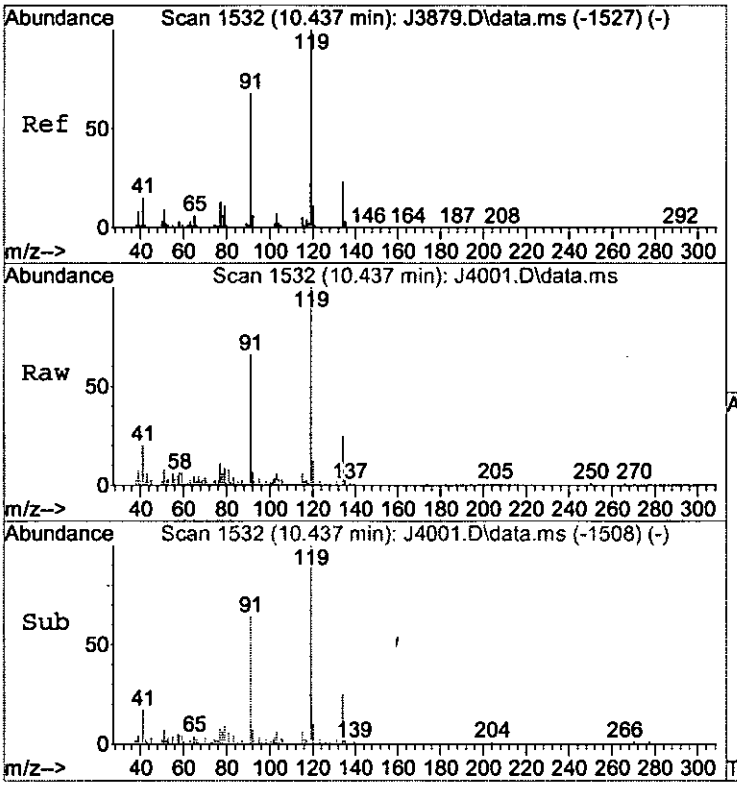


#99
1,3,5-Trimethylbenzene
Concen: 32.39 ppb
RT: 10.169 min Scan# 1488
Delta R.T. -0.006 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:105 Resp: 858118

Ion	Ratio	Lower	Upper
105	100		
120	49.5	27.7	67.7
77	12.8	0.0	33.6

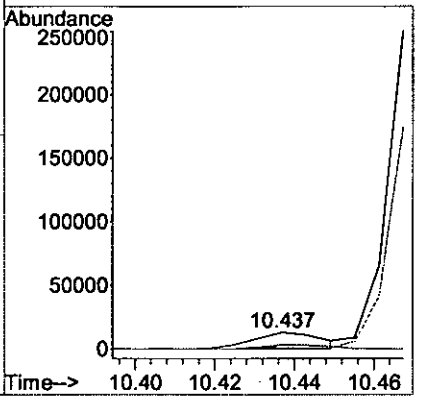




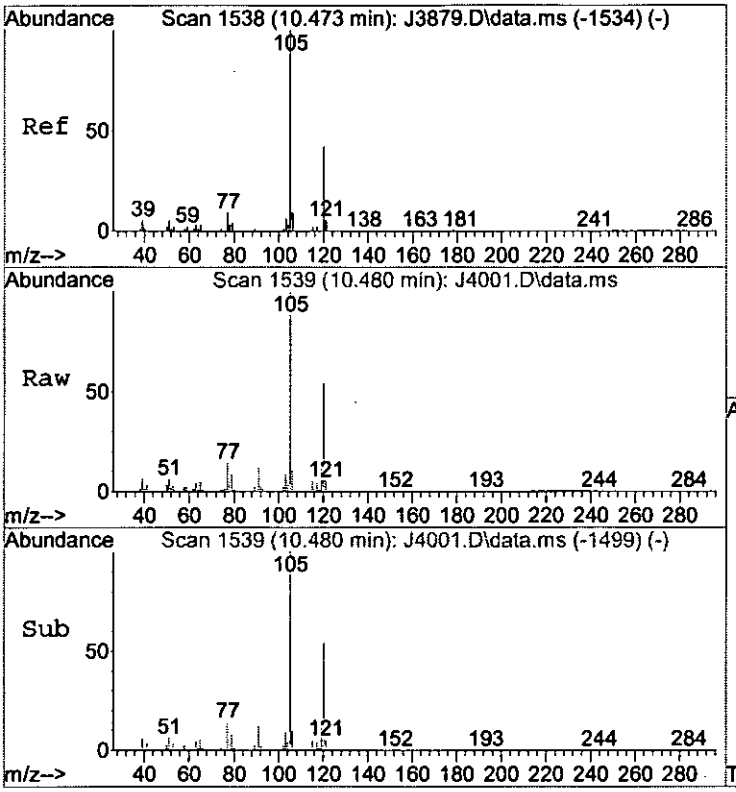
#100
tert-Butylbenzene
Concen: 0.68 ppb
RT: 10.437 min Scan# 1532
Delta R.T. -0.006 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:119 Resp: 15093

Ion	Ratio	Lower	Upper
119	100		
134	24.8	3.5	43.5
103	6.4	0.0	27.3



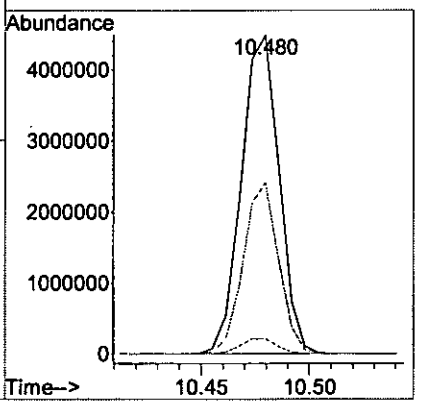
J4001.D W031214.M Tue Mar 18 14:55:00 2014 00048 Page 8

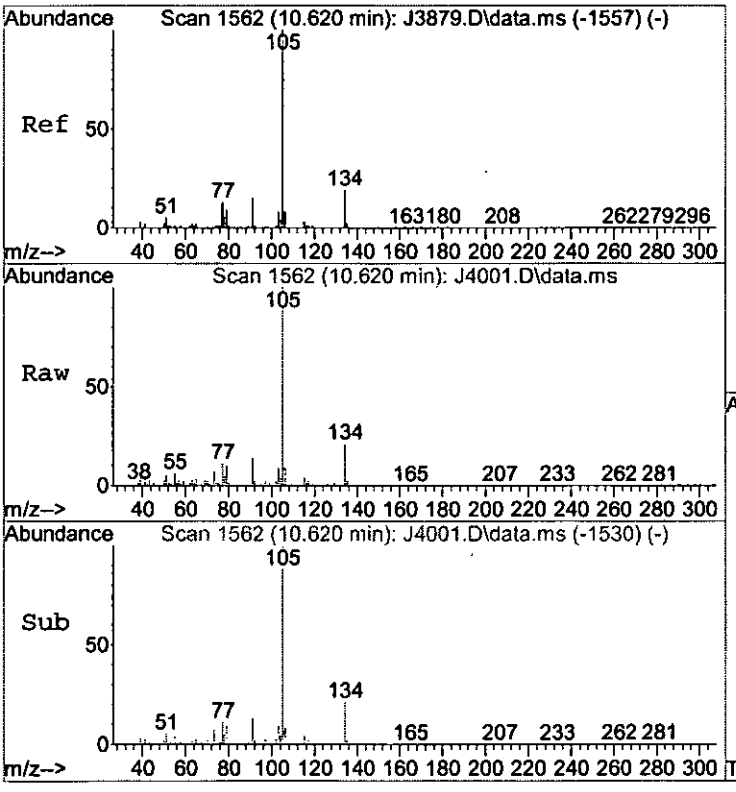


#101
1,2,4-Trimethylbenzene
Concen: 200.50 ppb
RT: 10.480 min Scan# 1539
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:105 Resp: 5464366

Ion	Ratio	Lower	Upper
105	100		
120	53.8	25.3	65.3
65	4.7	0.0	24.3

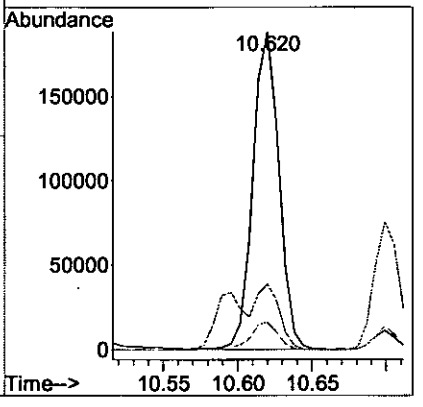




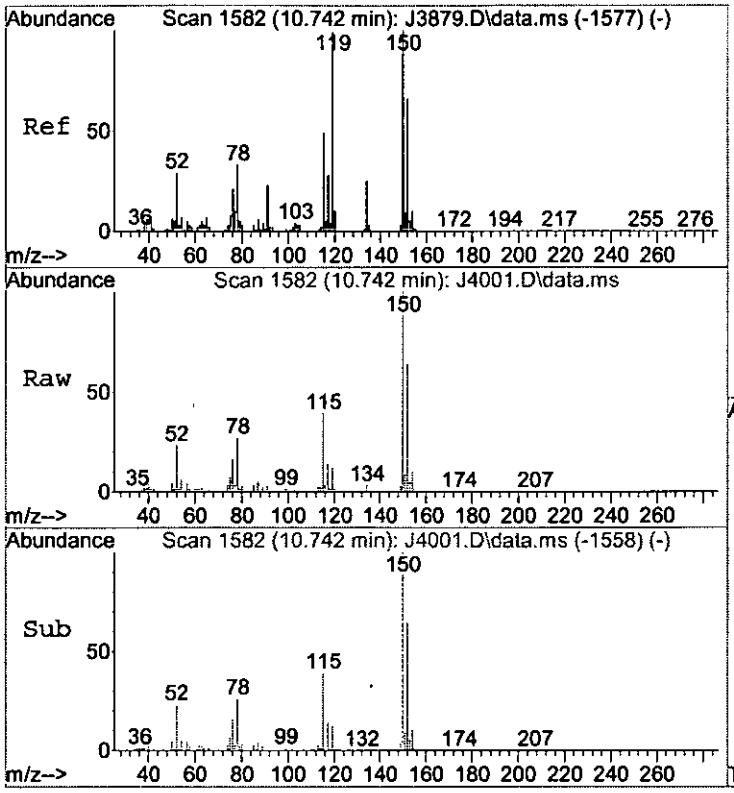
#103
sec-Butylbenzene
Concen: 7.40 ppb
RT: 10.620 min Scan# 1562
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:105 Resp: 229748

Ion	Ratio	Lower	Upper
105	100		
134	20.6	0.0	39.3
103	8.7	0.0	28.3



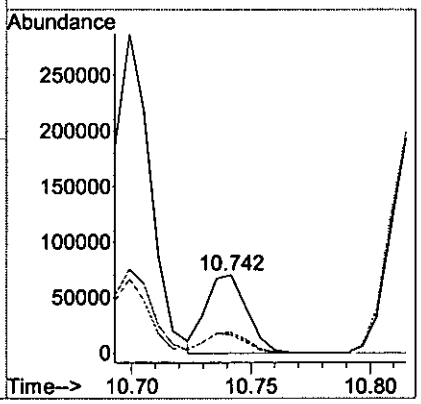
J4001.D W031214.M Tue Mar 18 14:55:01 2014 00047 Page 9

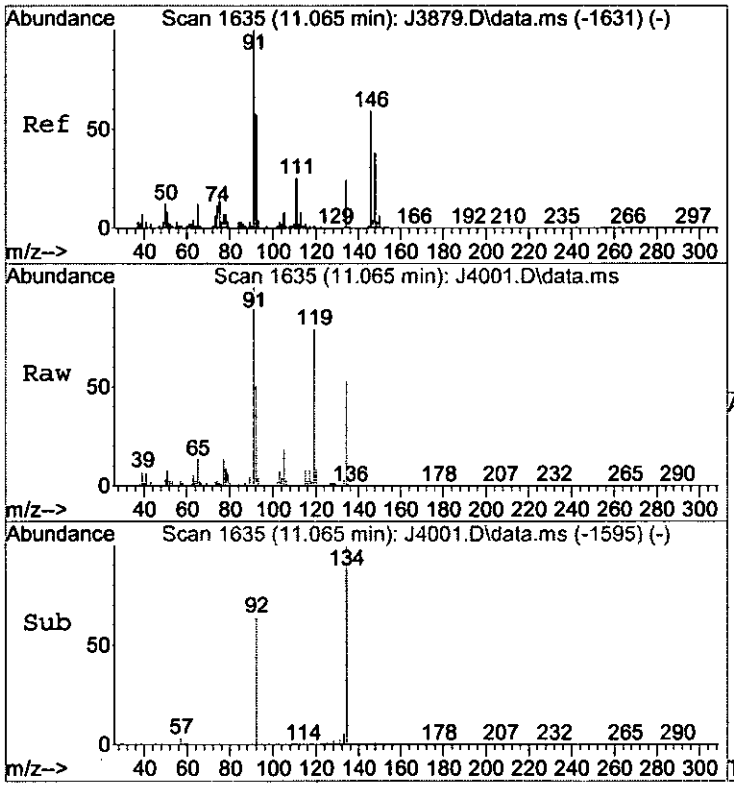


#104
p-Isopropyltoluene
Concen: 3.20 ppb
RT: 10.742 min Scan# 1582
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:119 Resp: 83994

Ion	Ratio	Lower	Upper
119	100		
134	26.5	5.6	45.6
91	23.0	3.2	43.2

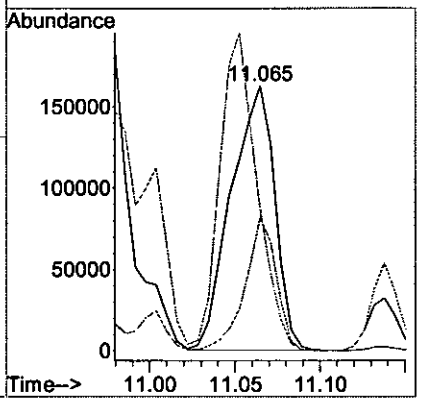




#109
n-Butylbenzene
Concen: 12.17 ppb
RT: 11.065 min Scan# 1635
Delta R.T. -0.006 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

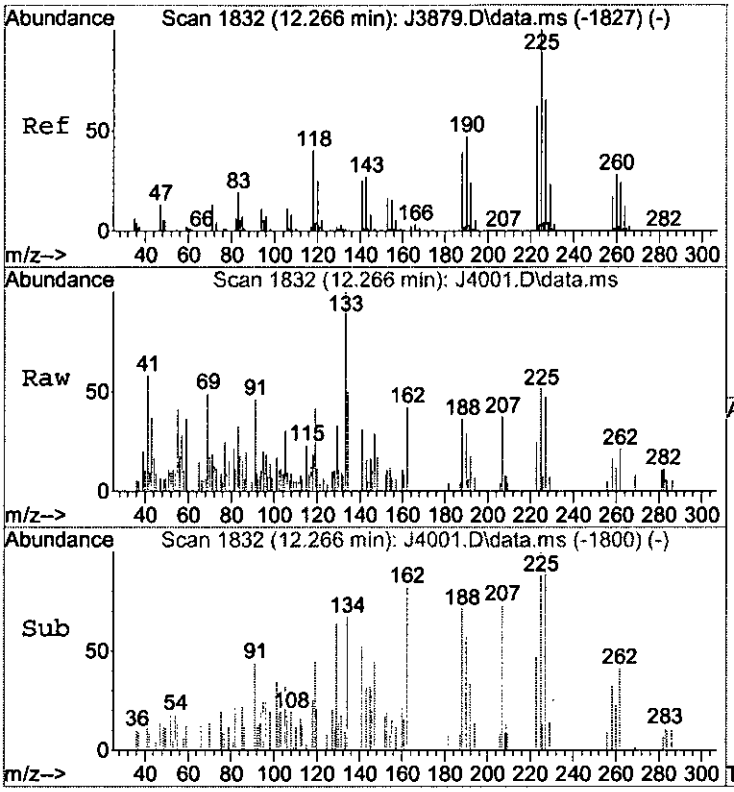
Tgt Ion: 91 Resp: 287840

Ion	Ratio	Lower	Upper
91	100		
92	50.1	36.7	76.7
134	53.2	4.5	44.5#



J4001.D W031214.M Tue Mar 18 14:55:03 2014 Page 10

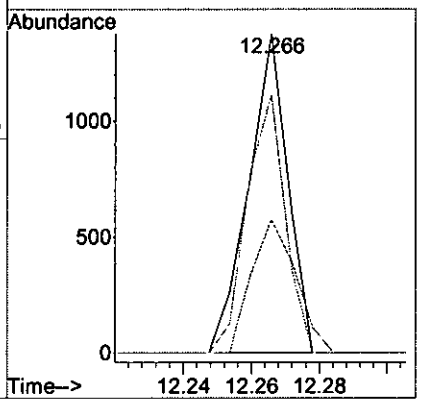
00048

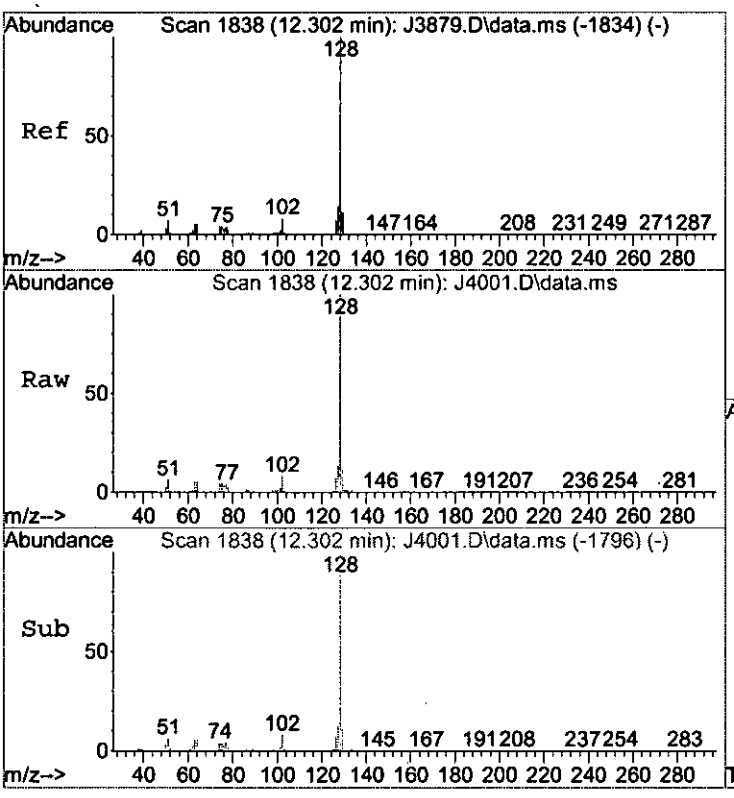


#116
Hexachlorobt
Concen: 0.27 ppb
RT: 12.266 min Scan# 1832
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:225 Resp: 1098

Ion	Ratio	Lower	Upper
225	100		
223	41.8	42.4	82.4#
227	80.9	44.9	84.9

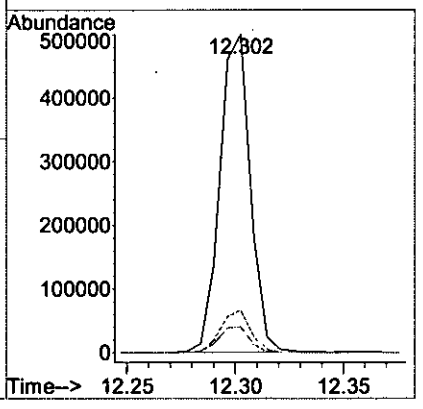




#117
Naphthalen
Concen: 29.06 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4001.D
Acq: 18 Mar 2014 2:14 am

Tgt Ion:128 Resp: 485167

Ion	Ratio	Lower	Upper
128	100		
127	13.3	0.0	33.8
102	8.1	0.0	28.5



J4001.D W031214.M Tue Mar 18 14:55:05 2014 Page 11

00049

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On : 18 Mar 2014 2:14 am
Operator : K.Ruest
Sample : R1401764-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4001.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.615	80	85	96	rBV	1024970	1094724	6.86%	0.763%
2	1.768	105	110	117	rVB	346507	386563	2.42%	0.269%
3	2.054	151	157	164	rBV	186951	285915	1.79%	0.199%
4	2.396	211	213	218	rVB2	886904	1187912	7.45%	0.828%
5	2.445	218	221	231	rVB	125032	194459	1.22%	0.136%
6	2.597	237	246	258	rBV	954116	1705311	10.69%	1.189%
7	2.835	277	285	292	rBV	151416	264950	1.66%	0.185%
8	3.371	363	373	380	rBV	224856	513254	3.22%	0.358%
9	3.463	380	388	398	rVV	723609	1578631	9.90%	1.100%
10	4.024	467	480	492	rVB4	44751	163538	1.03%	0.114%
11	4.152	492	501	509	rVV	517943	1225388	7.68%	0.854%
12	4.249	509	517	533	rVV	980100	3078028	19.30%	2.145%
13	4.395	533	541	557	rVV	528395	1651525	10.35%	1.151%
14	4.560	557	568	575	rVV2	200769	607185	3.81%	0.423%
15	4.658	576	584	596	rVV	440422	1214119	7.61%	0.846%
16	4.780	596	604	613	rVV2	128565	358320	2.25%	0.250%
17	4.914	615	626	632	rVV2	271405	888493	5.57%	0.619%
18	5.011	632	642	652	rVV5	374394	1568539	9.83%	1.093%
19	5.115	652	659	675	rVB2	115761	370133	2.32%	0.258%
20	5.450	703	714	725	rBV	1216523	2866401	17.97%	1.998%
21	6.102	807	821	829	rBV3	463788	1414954	8.87%	0.986%
22	6.358	858	863	872	rVB	123776	250914	1.57%	0.175%
23	6.675	905	915	925	rVB	257574	582189	3.65%	0.406%
24	6.803	925	936	943	rBV2	430160	982822	6.16%	0.685%
25	7.322	1009	1021	1029	rBV	2573751	4223253	26.48%	2.944%
26	7.791	1088	1098	1104	rBV2	151890	291779	1.83%	0.203%
27	8.742	1249	1254	1262	rVV	2762362	3528436	22.12%	2.459%
28	8.815	1262	1266	1273	rVB2	145217	243089	1.52%	0.169%
29	8.888	1273	1278	1289	rVB	3087652	4012254	25.15%	2.797%
30	8.998	1289	1296	1303	rBV	4206111	5306848	33.27%	3.699%
31	9.346	1347	1353	1364	rVB	5527772	6987175	43.80%	4.870%
32	9.480	1369	1375	1382	rBV4	98985	239708	1.50%	0.167%
33	9.669	1401	1406	1412	rBV	1291640	1586579	9.95%	1.106%
34	9.791	1420	1426	1433	rBV	2302650	2943180	18.45%	2.051%
35	9.870	1433	1439	1445	rVV3	143117	294151	1.84%	0.205%

W031214.M Tue Mar 18 14:55:27 2014 Page: 1

00050

MSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On : 18 Mar 2014 2:14 am
Operator : K.Ruest
Sample : R1401764-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	9.980	1448	1457	1460	rBV	209836	292558	1.83%	0.204%
37	10.022	1460	1464	1471	rVV	2200313	2608559	16.35%	1.818%
38	10.096	1471	1476	1478	rVV	3942087	4875095	30.56%	3.398%
39	10.114	1478	1479	1484	rVV	2797595	2708477	16.98%	1.888%
40	10.169	1484	1488	1495	rVB	2003675	2430402	15.24%	1.694%
41	10.333	1510	1515	1523	rBV	6256408	7145173	44.79%	4.980%
42	10.480	1534	1539	1543	rBV	13489982	15951815	100.00%	11.118%
43	10.595	1553	1558	1559	rBV	427965	524499	3.29%	0.366%
44	10.614	1559	1561	1568	rVB2	508545	680531	4.27%	0.474%
45	10.699	1570	1575	1579	rBV	760435	853796	5.35%	0.595%
46	10.748	1579	1583	1589	rVB	3323114	3839873	24.07%	2.676%
47	10.815	1589	1594	1600	rBV	5492567	6565893	41.16%	4.576%
48	10.973	1613	1620	1624	rBV2	3866444	5581365	34.99%	3.890%
49	11.004	1624	1625	1628	rVB	930315	564119	3.54%	0.393%
50	11.053	1628	1633	1642	rVB3	1658297	2670320	16.74%	1.861%
51	11.138	1642	1647	1651	rBV	495773	546688	3.43%	0.381%
52	11.193	1651	1656	1661	rVB	946969	1032937	6.48%	0.720%
53	11.260	1661	1667	1669	rBV	2392904	2742637	17.19%	1.912%
54	11.284	1669	1671	1675	rVB	1838653	1711298	10.73%	1.193%
55	11.333	1675	1679	1682	rBV	2451915	2644617	16.58%	1.843%
56	11.364	1682	1684	1688	rVB	473798	484105	3.03%	0.337%
57	11.412	1688	1692	1699	rBV2	2930180	3656537	22.92%	2.549%
58	11.546	1709	1714	1719	rVB2	1027621	1139182	7.14%	0.794%
59	11.614	1719	1725	1728	rBV	3897118	3944832	24.73%	2.750%
60	11.650	1728	1731	1735	rVB	3207129	3184210	19.96%	2.219%
61	11.705	1735	1740	1741	rBV2	224452	317490	1.99%	0.221%
62	11.821	1756	1759	1762	rVB	966078	901182	5.65%	0.628%
63	11.894	1767	1771	1772	rBV2	226248	239795	1.50%	0.167%
64	11.924	1772	1776	1780	rVB2	3178073	3533338	22.15%	2.463%
65	12.028	1790	1793	1799	rVB	326258	335095	2.10%	0.234%
66	12.089	1799	1803	1806	rBV2	248595	321614	2.02%	0.224%
67	12.126	1806	1809	1811	rVV	473005	539063	3.38%	0.376%
68	12.150	1811	1813	1818	rVV2	706921	1013622	6.35%	0.706%
69	12.217	1818	1824	1827	rVB2	619501	960251	6.02%	0.669%
70	12.302	1832	1838	1841	rBV	960997	1090777	6.84%	0.760%
71	12.412	1852	1856	1859	rBV	215088	197420	1.24%	0.138%
72	12.443	1859	1861	1870	rVB	206836	232971	1.46%	0.162%
73	12.522	1870	1874	1876	rBV	183804	177702	1.11%	0.124%

Lse Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On : 18 Mar 2014 2:14 am
Operator : K.Ruest
Sample : R1401764-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

74	12.619	1887	1890	1894	rBV	214559	226361	1.42%	0.158%
75	12.693	1899	1902	1905	rVB	348530	285336	1.79%	0.199%
76	12.912	1935	1938	1942	rBV	353731	330344	2.07%	0.230%
77	13.022	1952	1956	1962	rVB	289207	299288	1.88%	0.209%

Sum of corrected areas: 143471886

W031214.M Tue Mar 18 14:55:27 2014 Page: 3

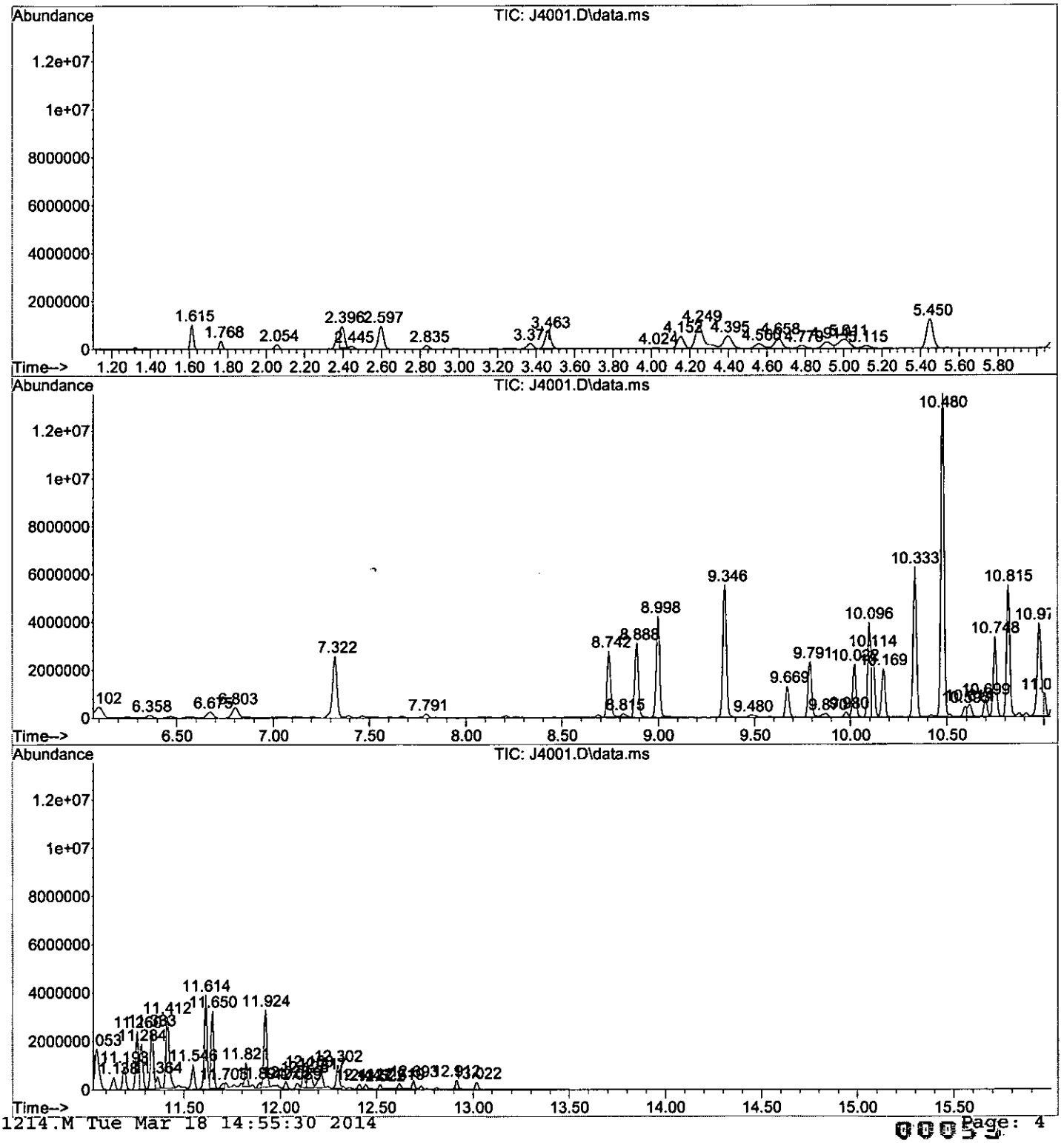
00052

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On : 18 Mar 2014 2:14 am
Operator : K.Ruest
Sample : R1401764-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Mar 18 14:55:30 2014 Page: 4

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On    : 18 Mar 2014    2:14 am
Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

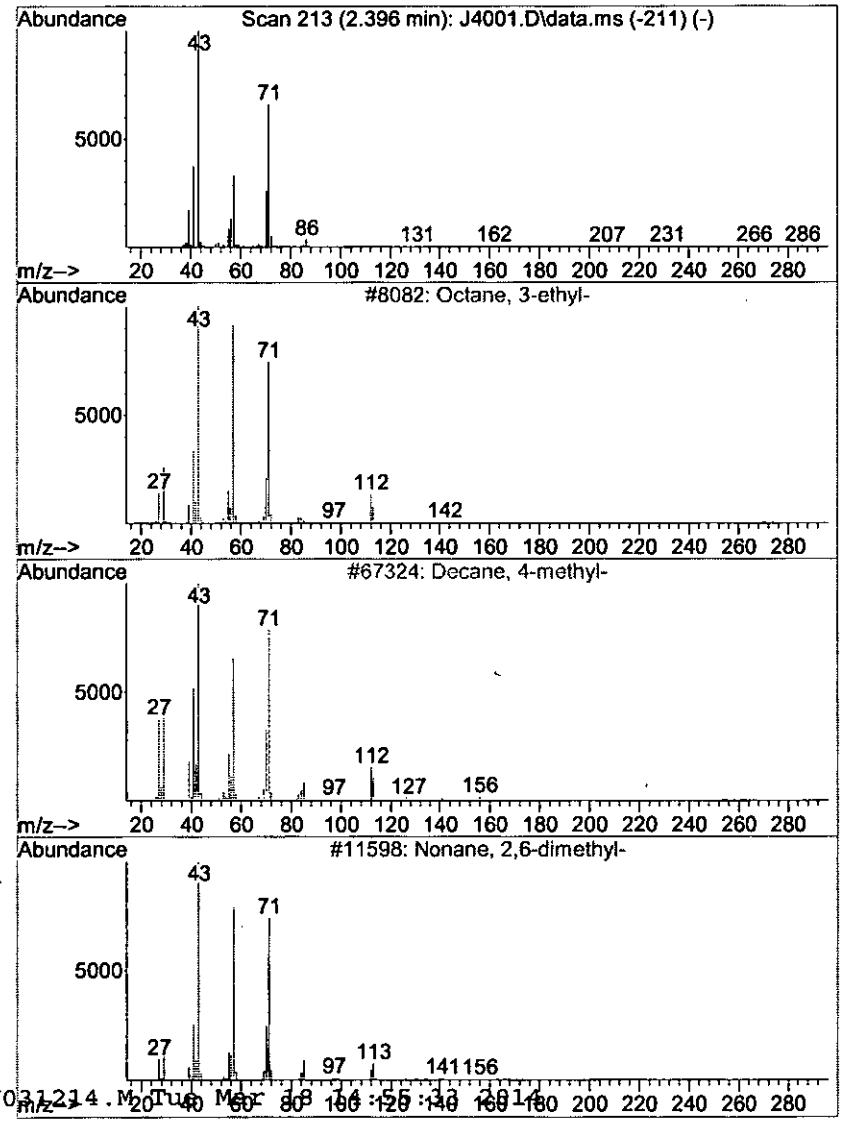
****

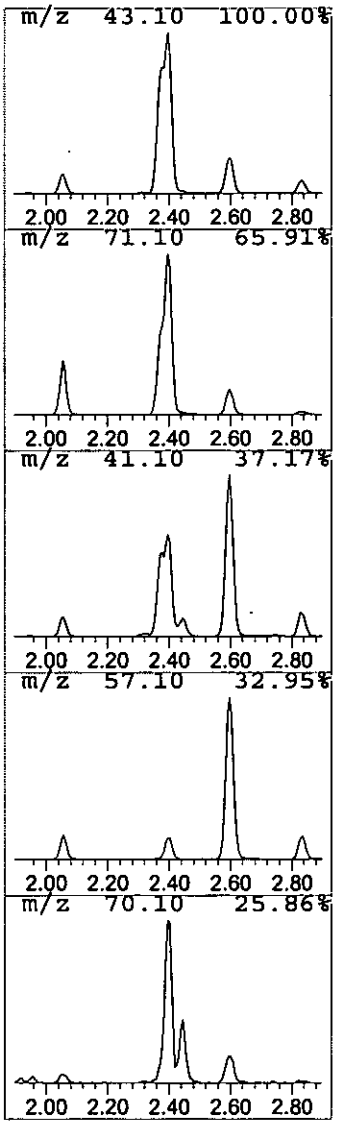
Peak Number 1 Octane, 3-ethyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.396	19.30 ppb	1187910	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-ethyl-	142	C10H22	005881-17-4	40
2	Decane, 4-methyl-	156	C11H24	002847-72-5	40
3	Nonane, 2,6-dimethyl-	156	C11H24	017302-28-2	40
4	Decane, 4-methyl-	156	C11H24	002847-72-5	40
5	Decane, 4-methyl-	156	C11H24	002847-72-5	40

unknown





W031214.M Tue Mar 18 14:55:32 2014 Page: 5

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On : 18 Mar 2014 2:14 am
Operator : K.Ruest
Sample : R1401764-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

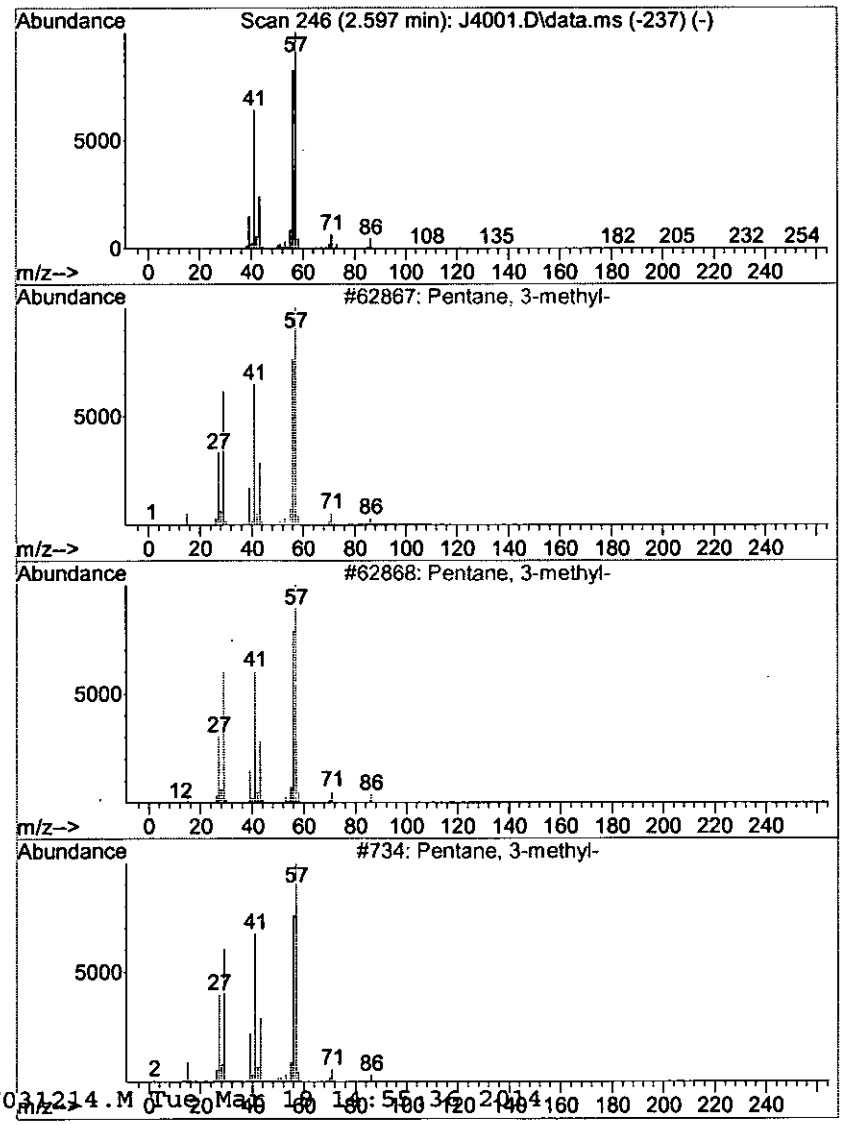
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

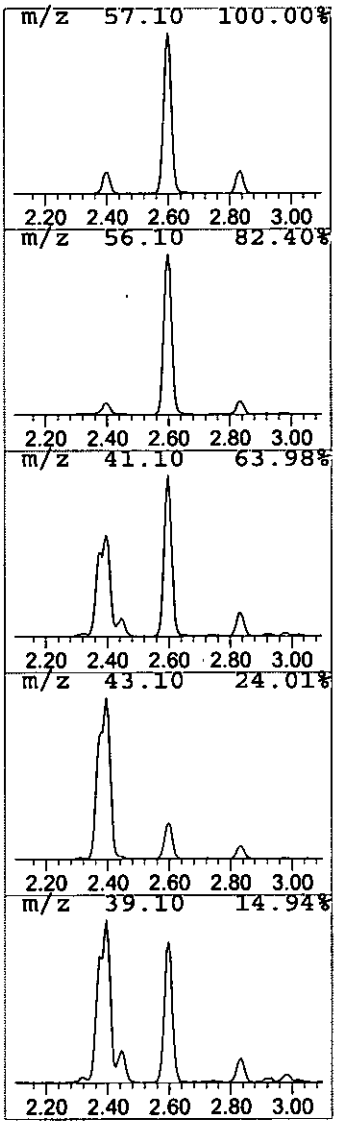
****

Peak Number 2 Pentane, 3-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.597	27.70 ppb	1705310	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
4	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	64
5	Oxirane, (1-methylethyl)-	86	C5H10O	001438-14-8	64





W031214.M Tue Mar 18 14:56:36 2014 Page: 6

00055

Library Search Compound Report

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Data File : J4001.D
Acq On    : 18 Mar 2014    2:14 am
Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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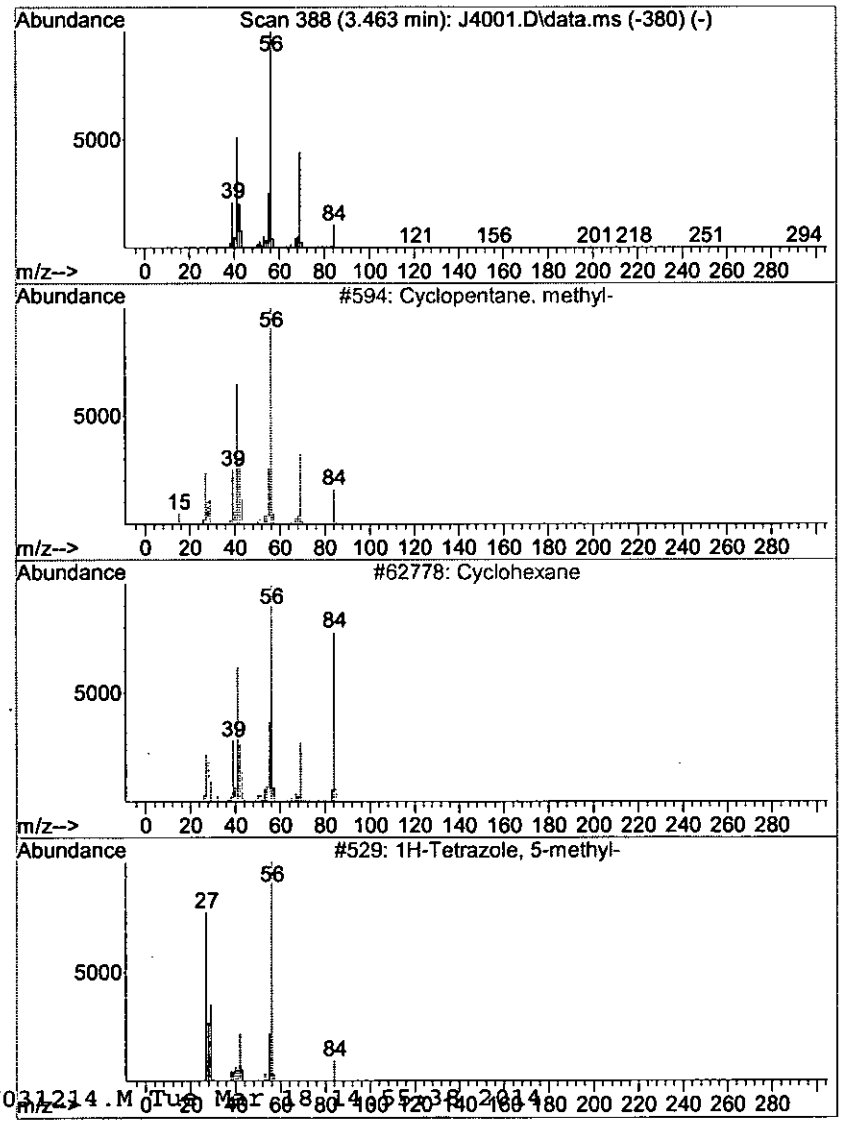
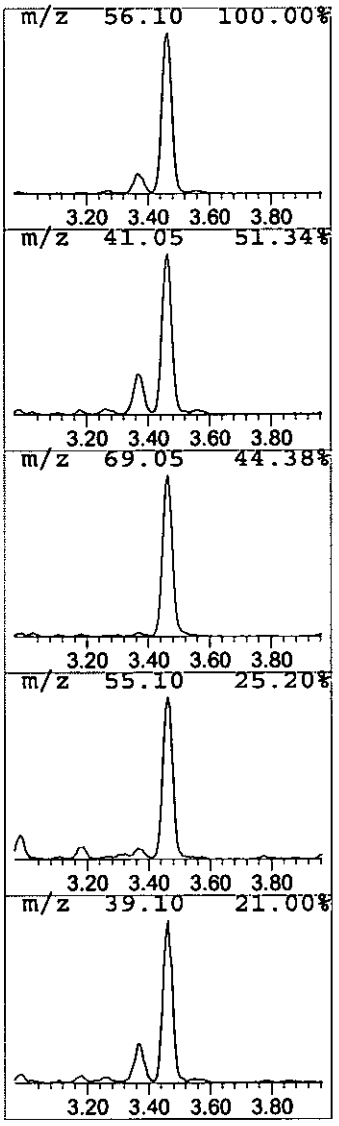
****

Peak Number 3 Cyclopentane, methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.463	25.64 ppb	1578630	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	90
2	Cyclohexane	84	C6H12	000110-82-7	86
3	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	72
4	Cyclohexane	84	C6H12	000110-82-7	64
5	Cyclobutane, ethyl-	84	C6H12	004806-61-5	64





Library Search Compound Report

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Data File : J4001.D
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Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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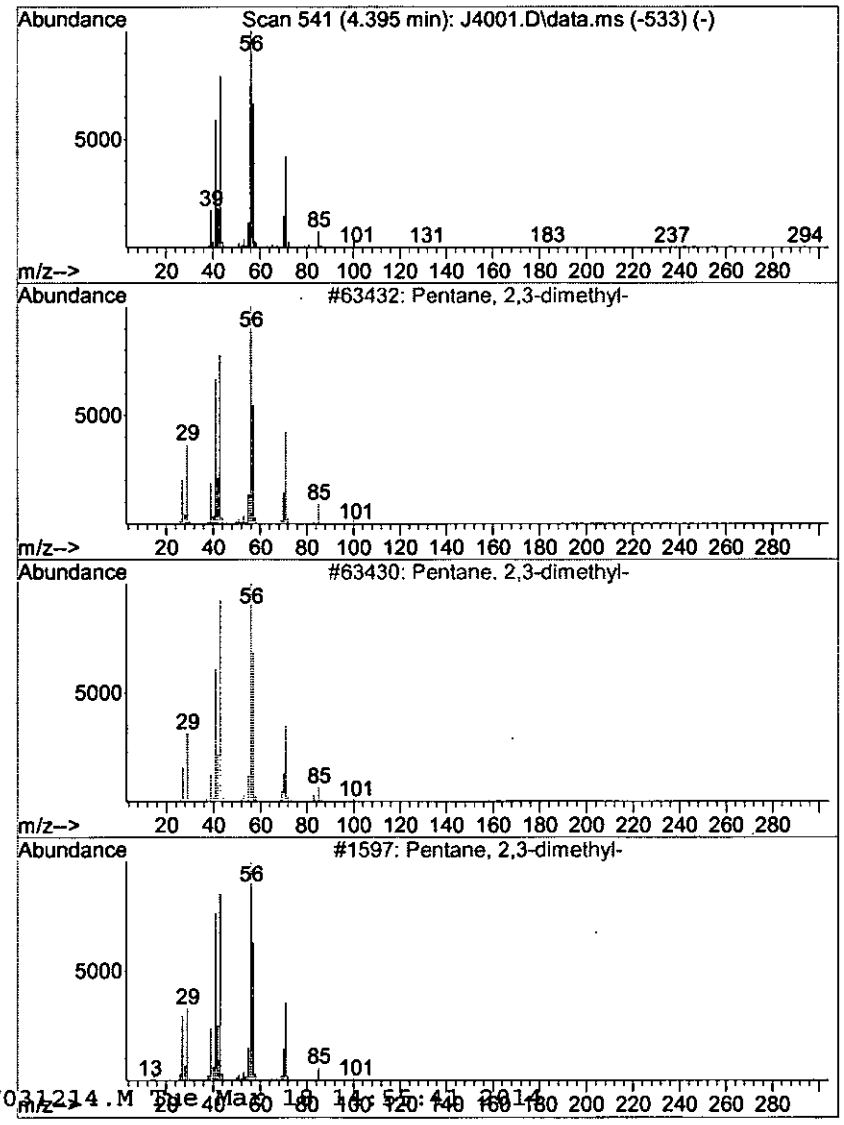
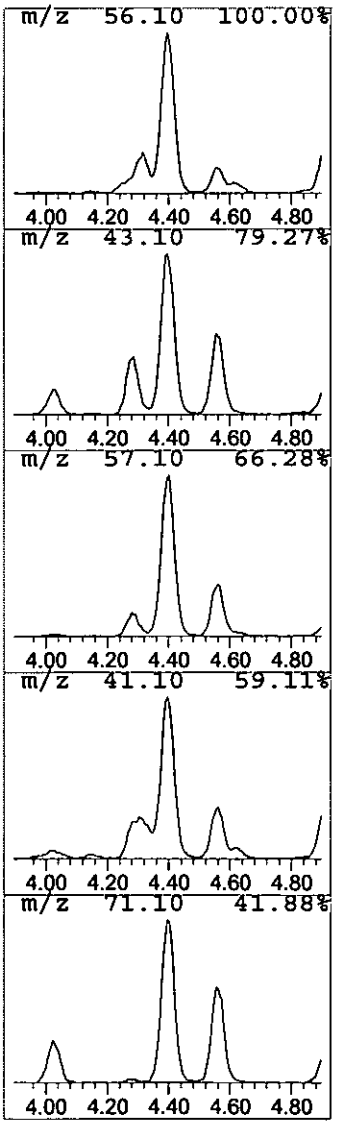
****

Peak Number 4 Pentane, 2,3-dimethyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.395	26.83 ppb	1651530	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
2	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
3	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	90
4	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	87
5	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	87





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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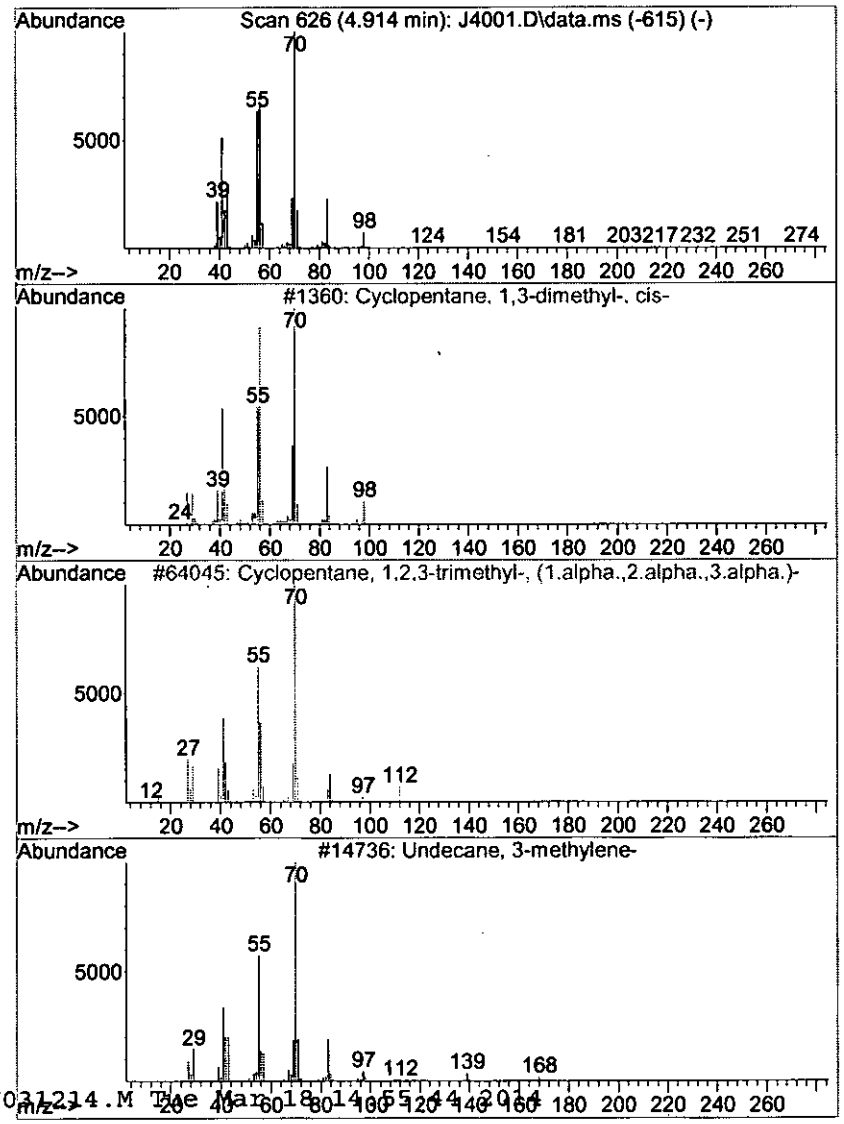
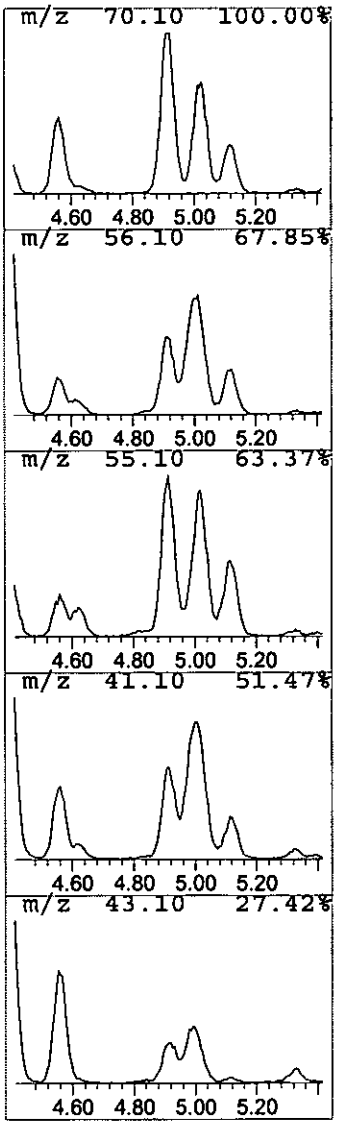
****

Peak Number 5 Cyclopentane, 1,3-dimethyl-... Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.914	15.50 ppb	888493	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, 1,3-dimethyl-, cis-	98	C7H14	002532-58-3	86
2	Cyclopentane, 1,2,3-trimethyl-, ...	112	C8H16	002613-69-6	59
3	Undecane, 3-methylene-	168	C12H24	071138-64-2	53
4	Cyclobutane, 2-ethyl-1-methyl-3-...	140	C10H20	061233-72-5	53
5	Cyclopentane, 1,3-dimethyl-, trans-	98	C7H14	001759-58-6	52





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 6 1-Butanol, 2-methyl-, (S)- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.011	27.36 ppb	1568540	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Butanol, 2-methyl-, (S)-	88	C5H12O	001565-80-6	72
2	Cyclopentane, 1,2-dimethyl-	98	C7H14	002452-99-5	64
3	1-Butanol, 2-methyl-	88	C5H12O	000137-32-6	56
4	Cyclopentane, 1,2-dimethyl-, trans-	98	C7H14	000822-50-4	56
5	1-Hexene, 4-methyl-	98	C7H14	003769-23-1	53

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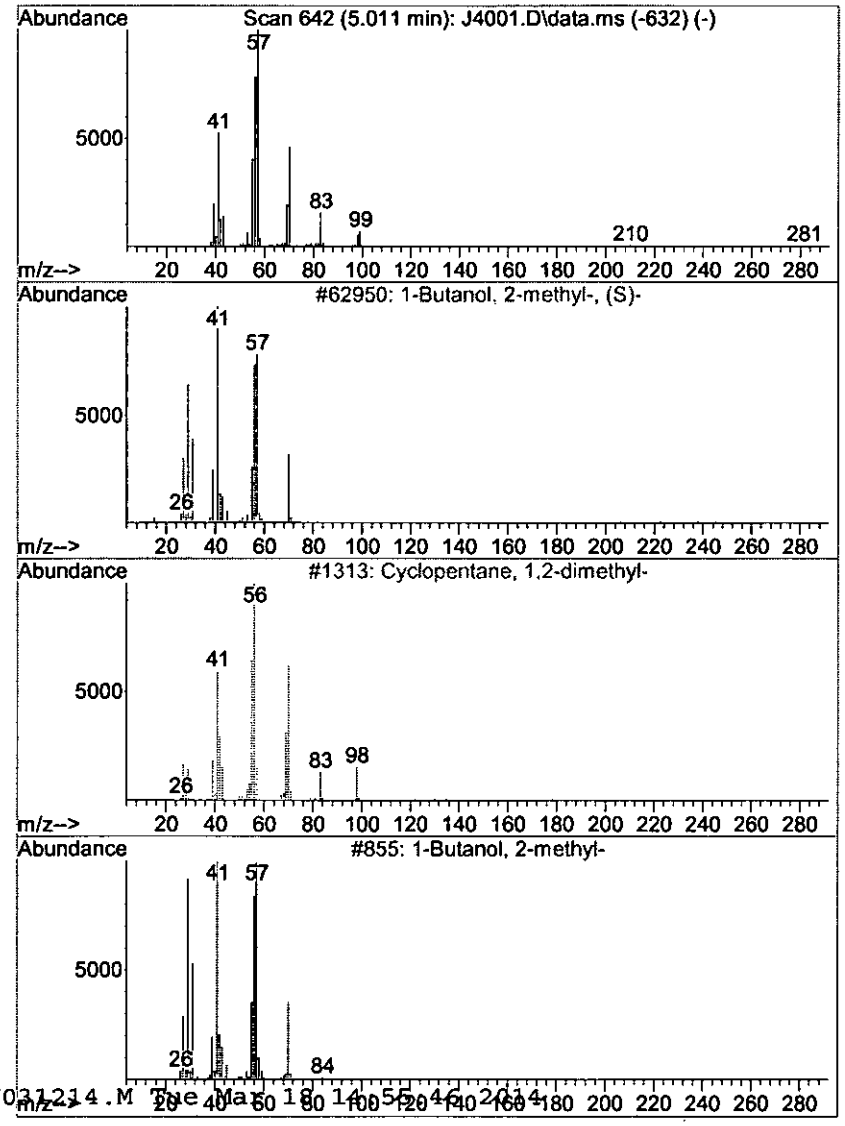

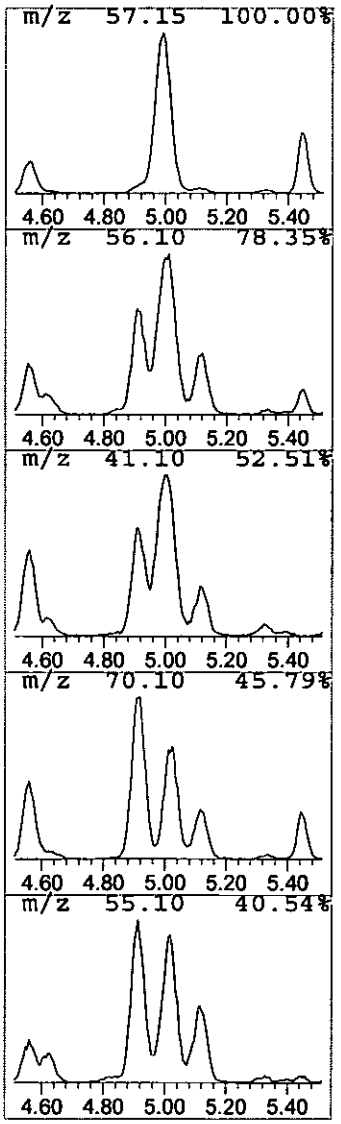

W031214.M Tue Mar 18 14:55:46 2014 Page: 10

00059

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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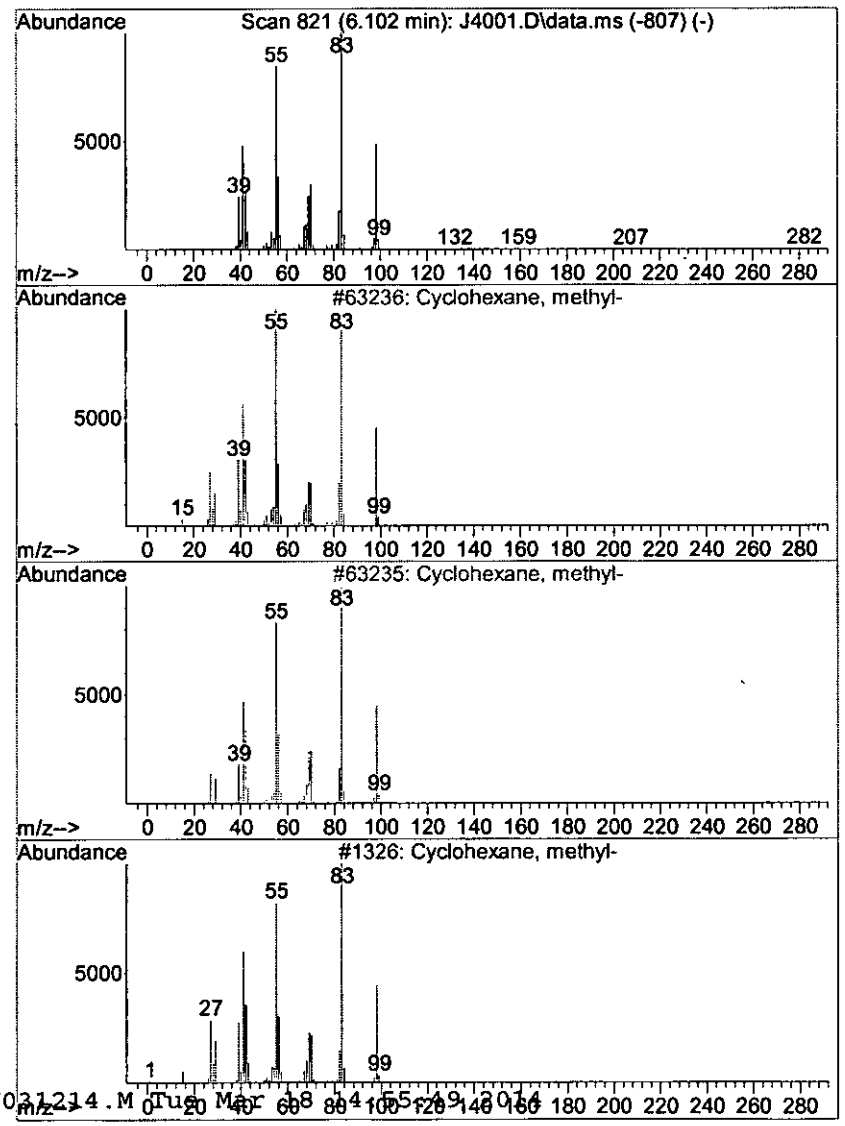
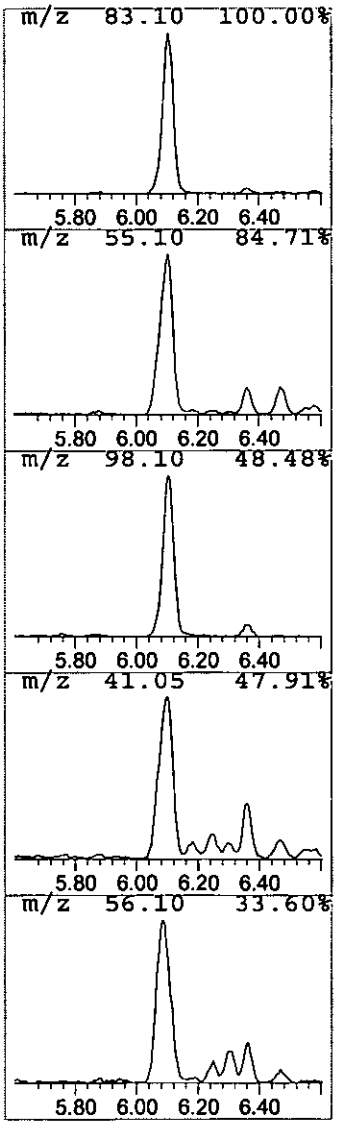
****

Peak Number 7 Cyclohexane, methyl- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.102	24.68 ppb	1414950	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	95
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	95
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	93
4	2-Pentene, 2,4-dimethyl-	98	C7H14	000625-65-0	58
5	1H-Pyrazole, 4,5-dihydro-4,5-dim...	98	C5H10N2	028019-94-5	58





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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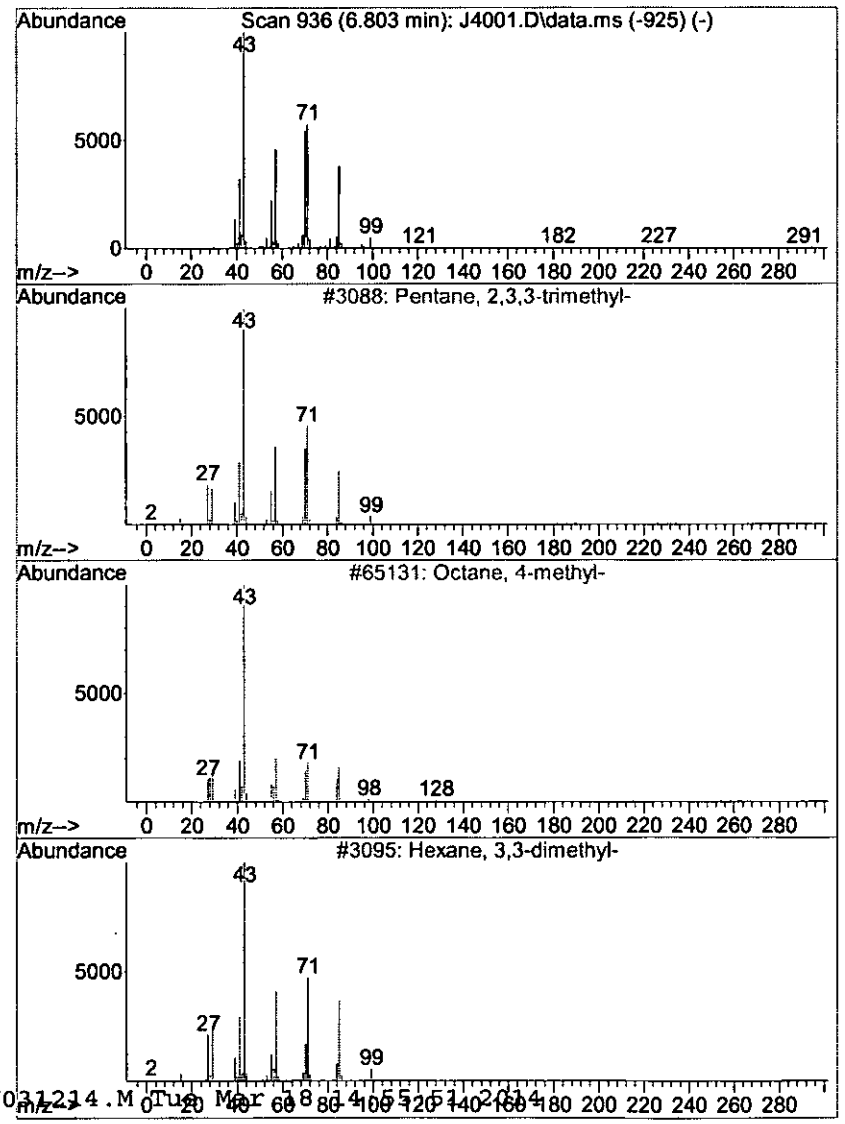
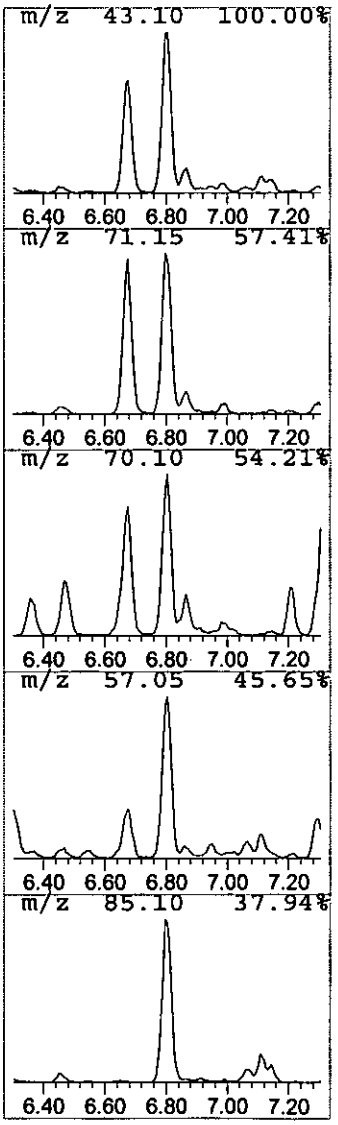
Peak Number 8 Pentane, 2,3,3-trimethyl- Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.803	17.14 ppb	982822	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3,3-trimethyl-	114	C8H18	000560-21-4	90
2	Octane, 4-methyl-	128	C9H20	002216-34-4	78
3	Hexane, 3,3-dimethyl-	114	C8H18	000563-16-6	59
4	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	59
5	Hexane, 2,3-dimethyl-	114	C8H18	000584-94-1	59





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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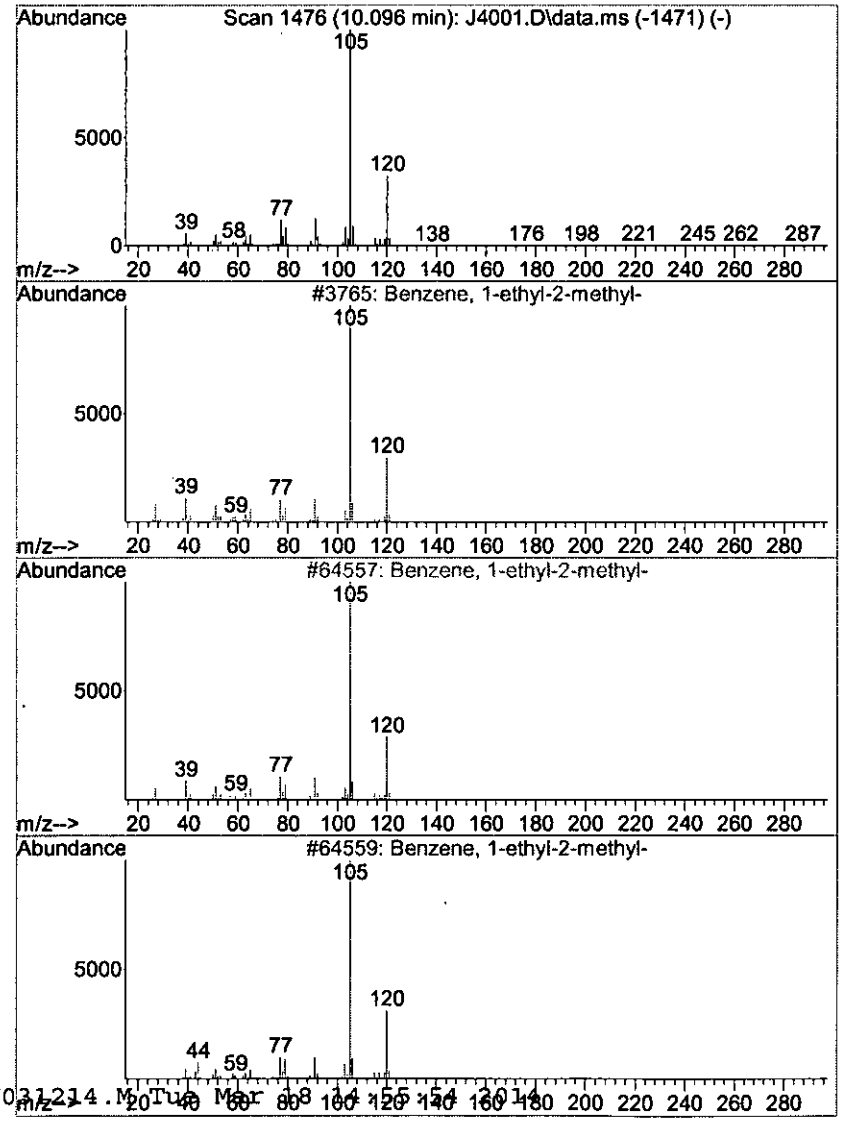
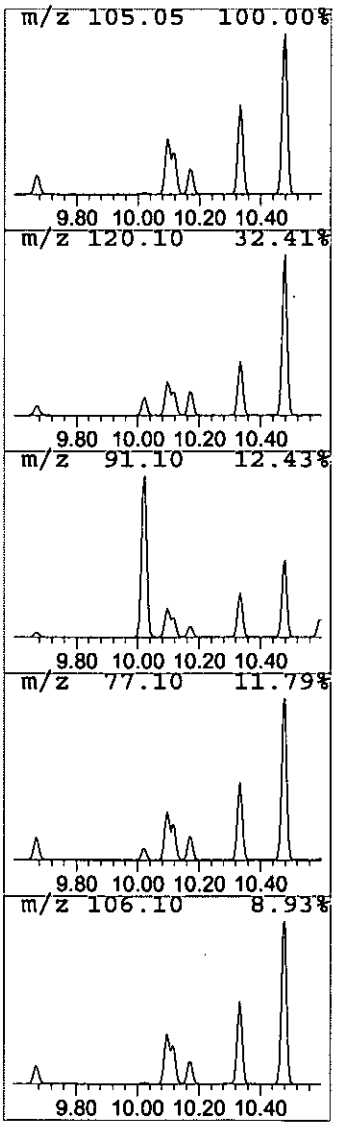
****

Peak Number 9 Benzene, 1-ethyl-2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.095	63.48 ppb	4875100	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	95
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95





W031214.M Tue Mar 18 14:55:54 2014 Page: 13

00062

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 10 Benzene, 1-ethyl-2-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.114	35.27 ppb	2708480	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	90
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	87
5	Benzene, (1-methylethyl)-	120	C9H12	000098-82-8	87

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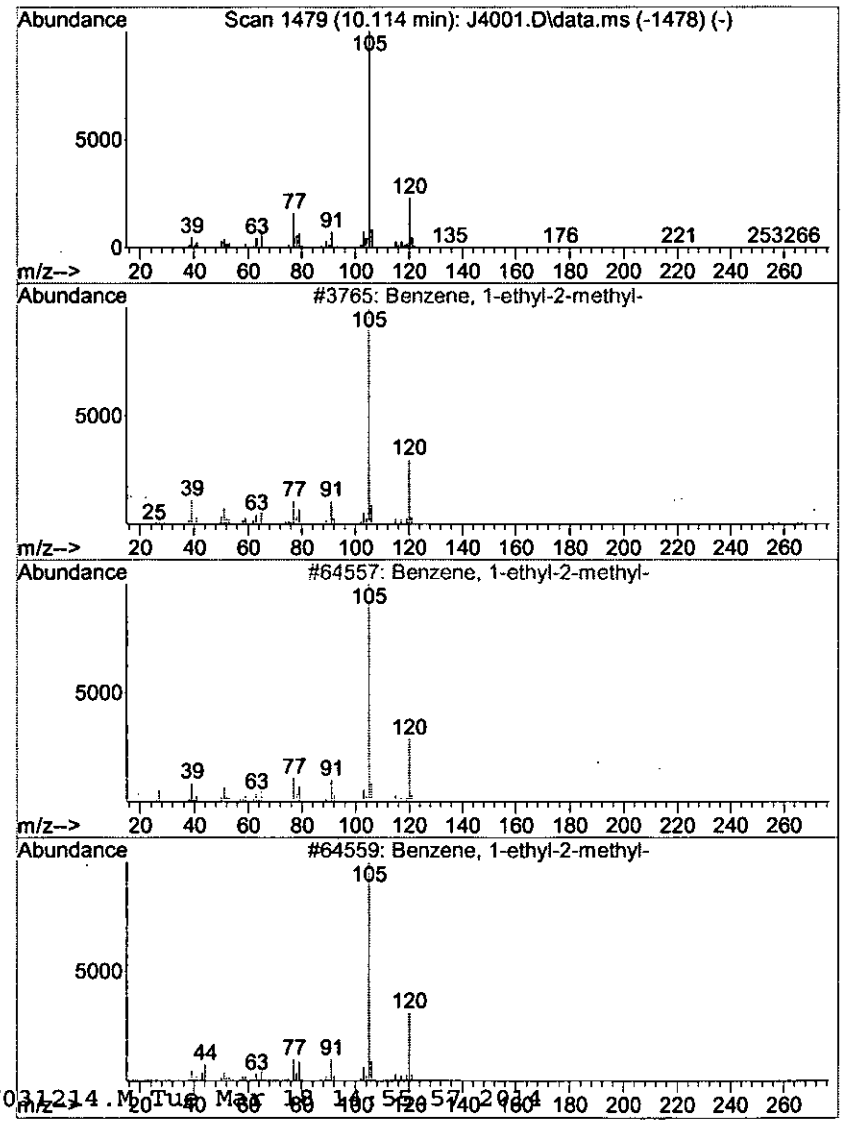

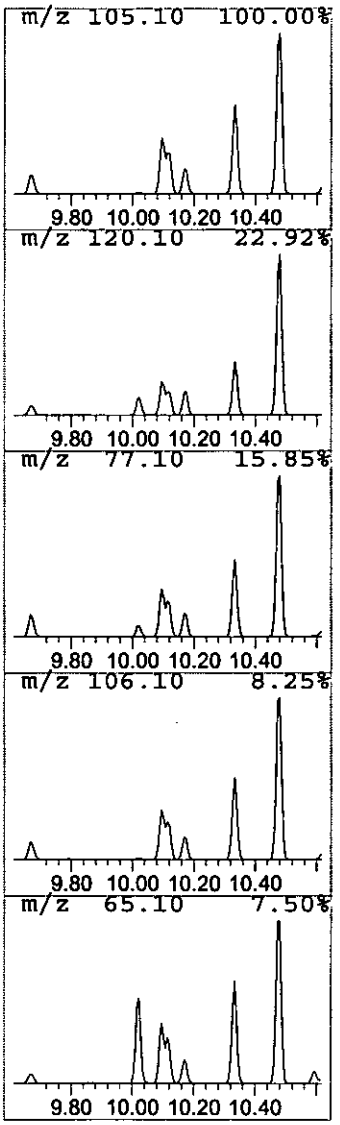

W031214.M Tue Mar 18 14:55:57 2014 Page: 14

Library Search Compound Report

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Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 11 Benzene, 1-ethyl-2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.333	93.04 ppb	7145170	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	93
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	90

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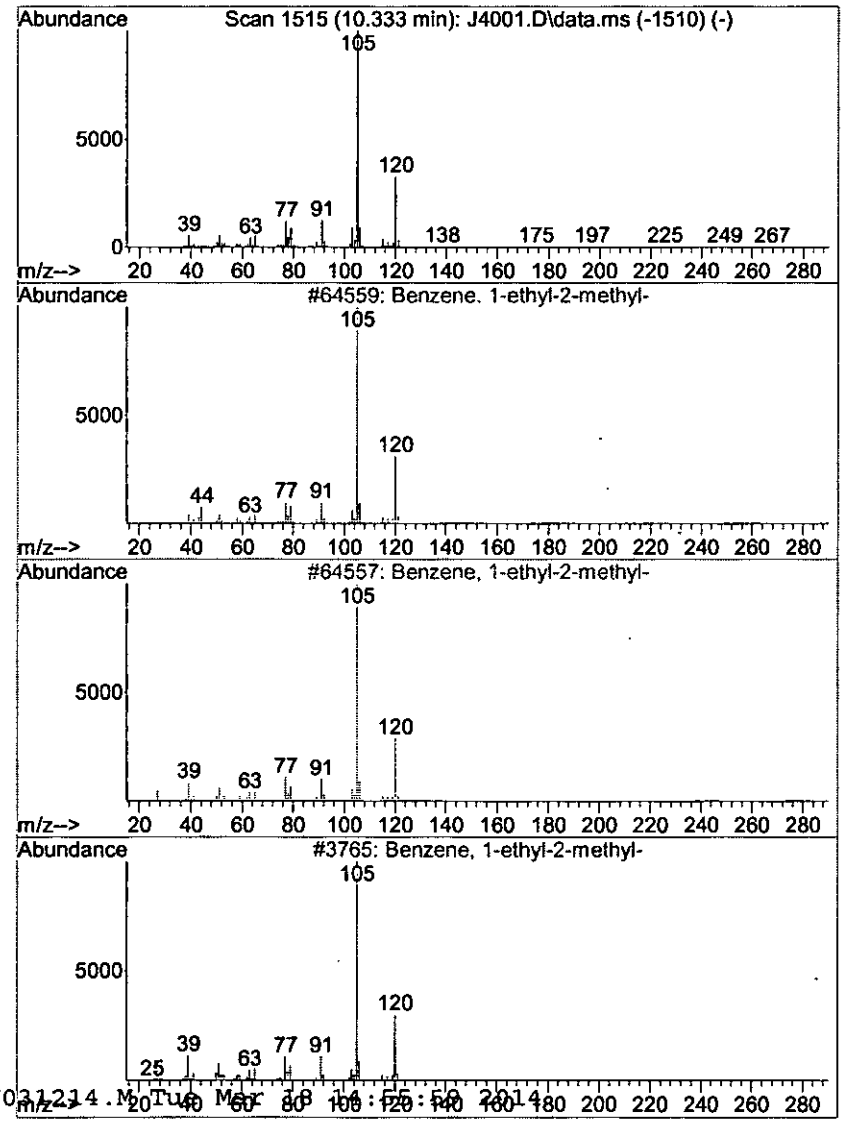

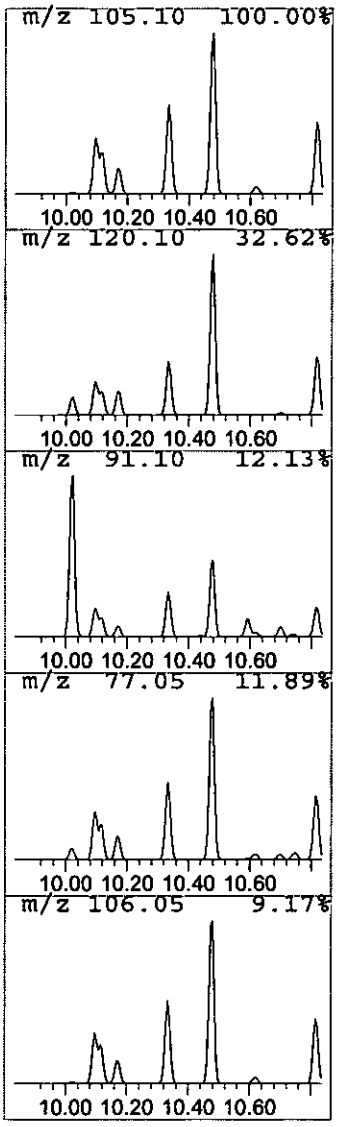

W031214.M Tue Mar 18 14:55:50 2014 Page: 15

Library Search Compound Report

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Sample : R1401764-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

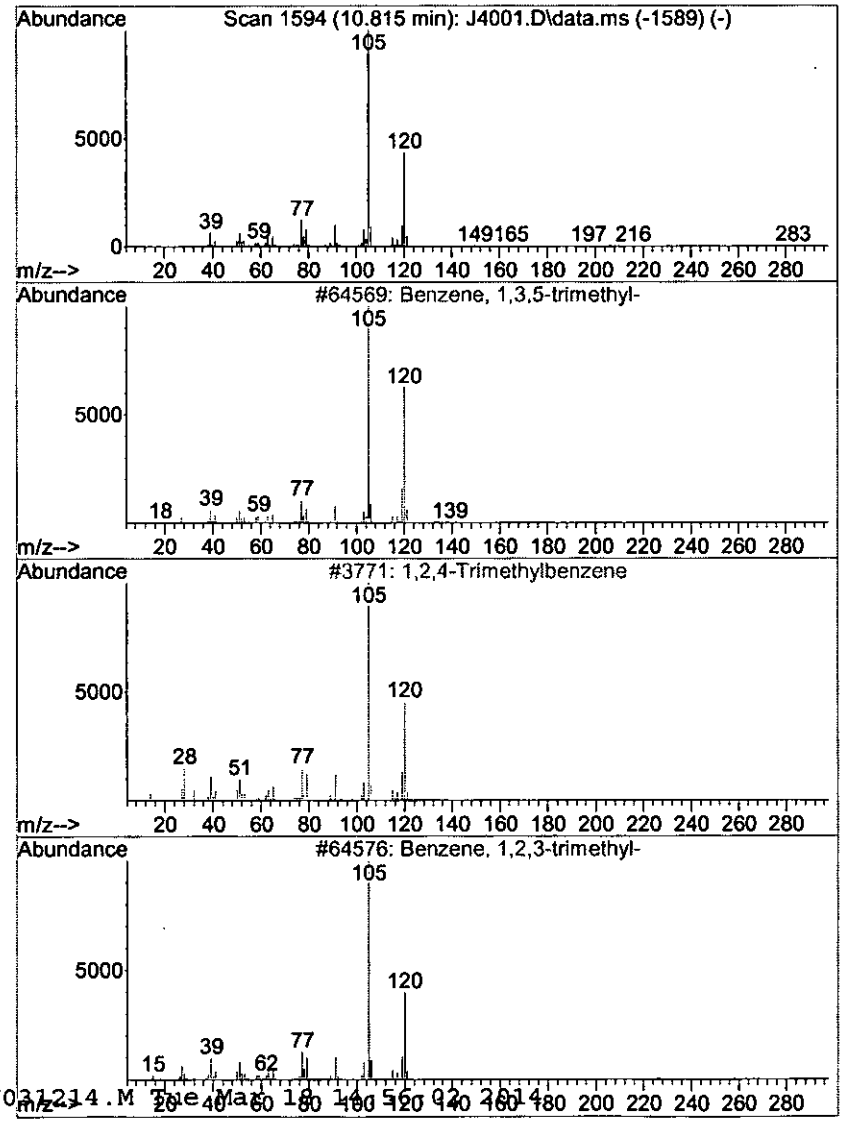
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

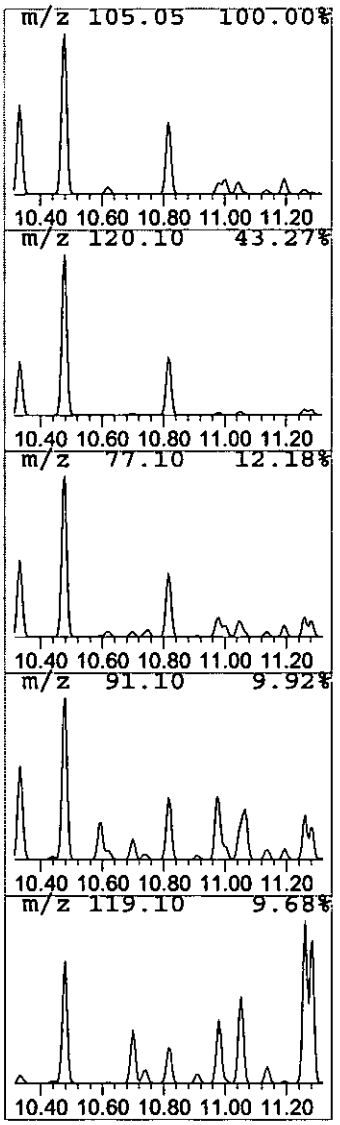
****
Peak Number 12 Benzene, 1,3,5-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.815	85.50 ppb	6565890	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
2	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	94
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94

Targets





W031214.M Tue Mar 18 14:56:02 2014 Page: 16

Library Search Compound Report

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Data File : J4001.D
Acq On : 18 Mar 2014 2:14 am
Operator : K.Ruest
Sample : R1401764-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 13 Indane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.973	72.68 ppb	5581370	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	64
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	62
3	Indane	118	C9H10	000496-11-7	58
4	Benzene, 1-propenyl-	118	C9H10	000637-50-3	53
5	Benzene, cyclopropyl-	118	C9H10	000873-49-4	52

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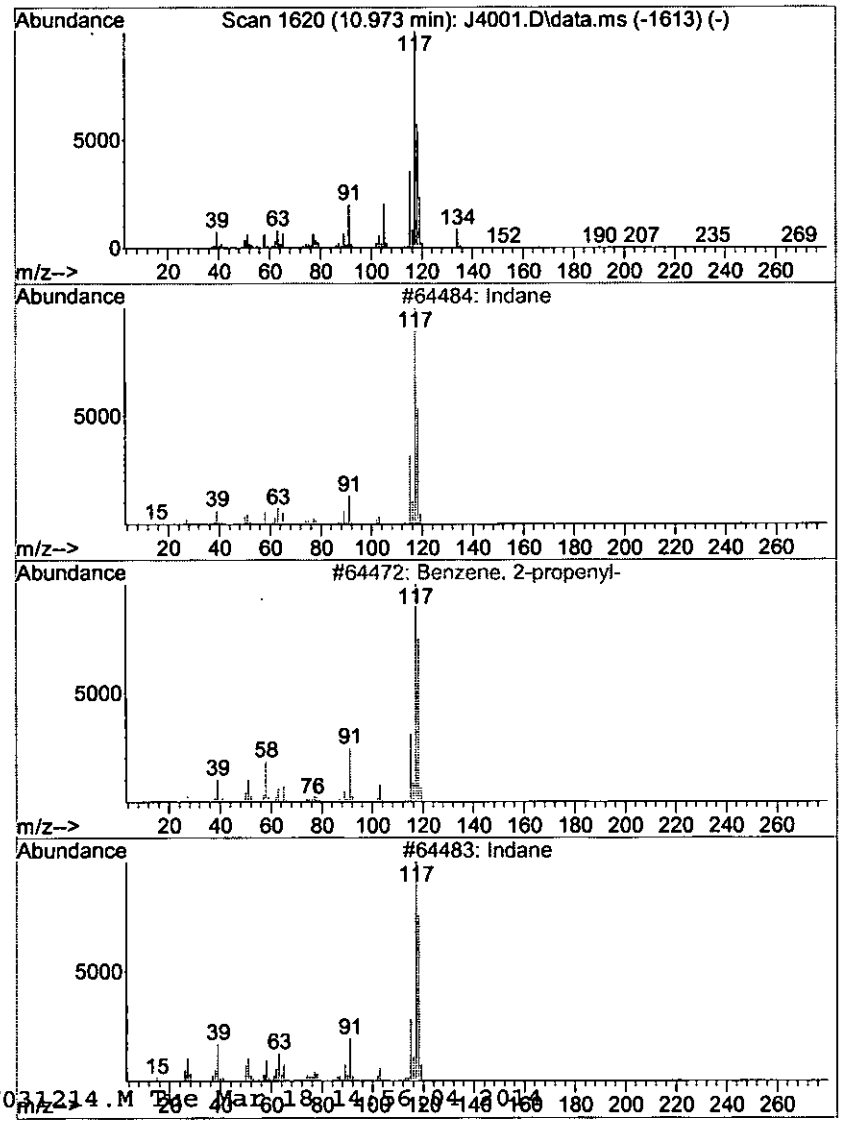

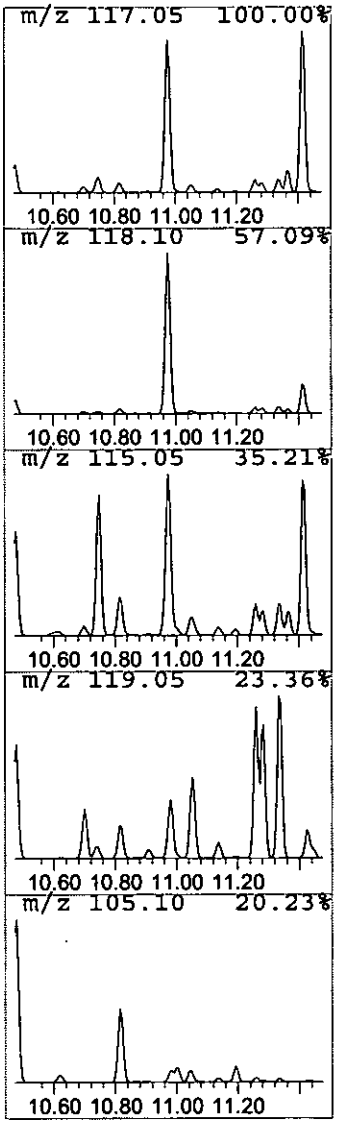

W031214.M Tue Mar 18 14:56:04 2014 Page: 17

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

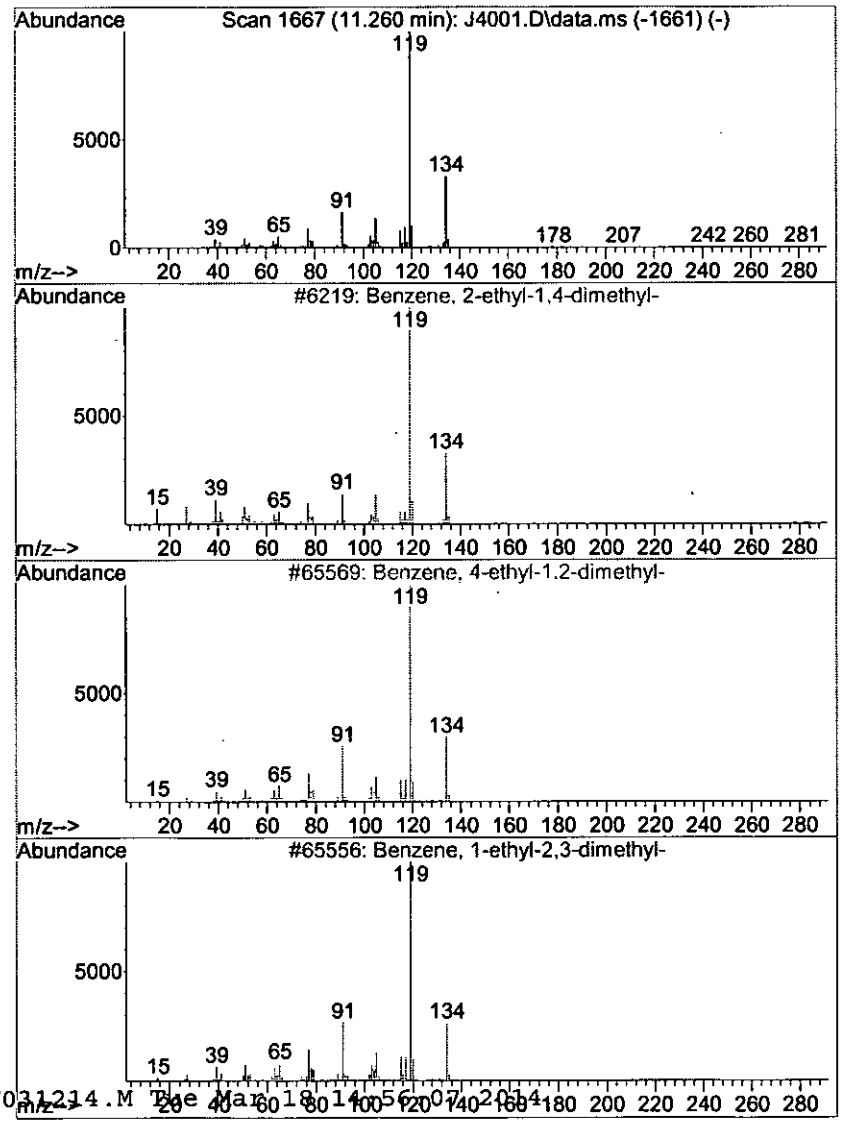
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

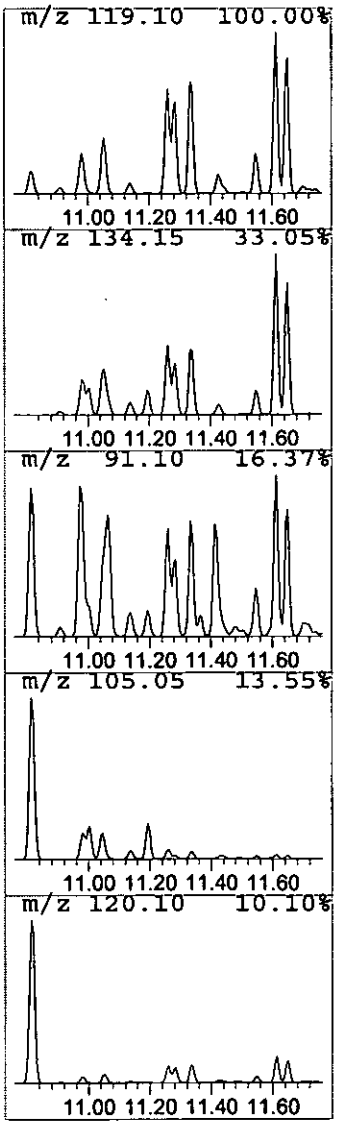
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 14  Benzene, 2-ethyl-1,4-dimethyl-  Concentration Rank  9
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.260	35.71 ppb	2742640	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	97
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	96
3	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	96
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95





W031214.M Tue Mar 18 14:56:07 2014 Page: 18

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On    : 18 Mar 2014    2:14 am
Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

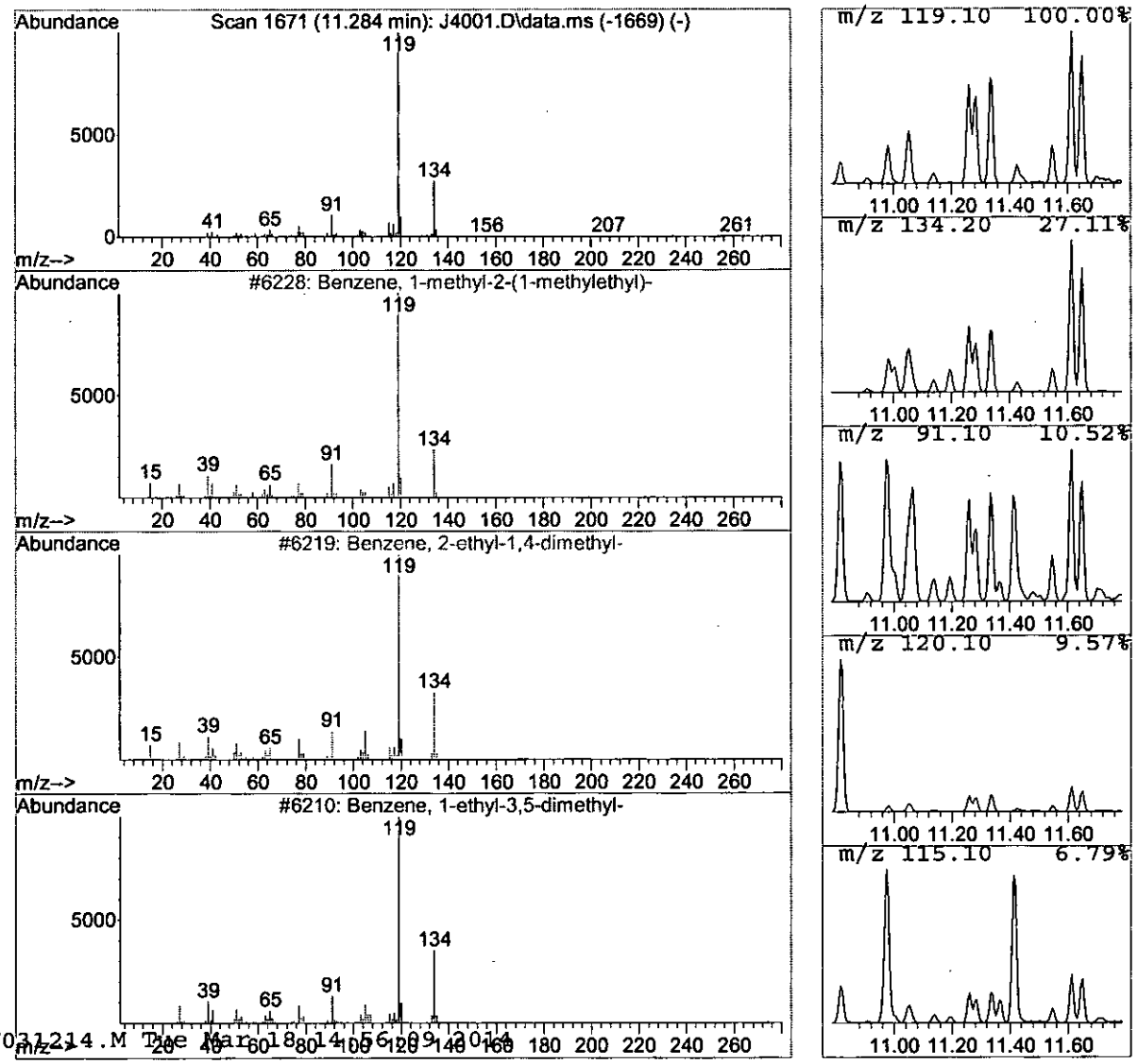
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 15  Benzene, 1-methyl-2-(1-meth...  Concentration Rank 17
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.284	22.28 ppb	1711300	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	91
3	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	91
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	91
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	91



Library Search Compound Report

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Data File : J4001.D
Acq On    : 18 Mar 2014    2:14 am
Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

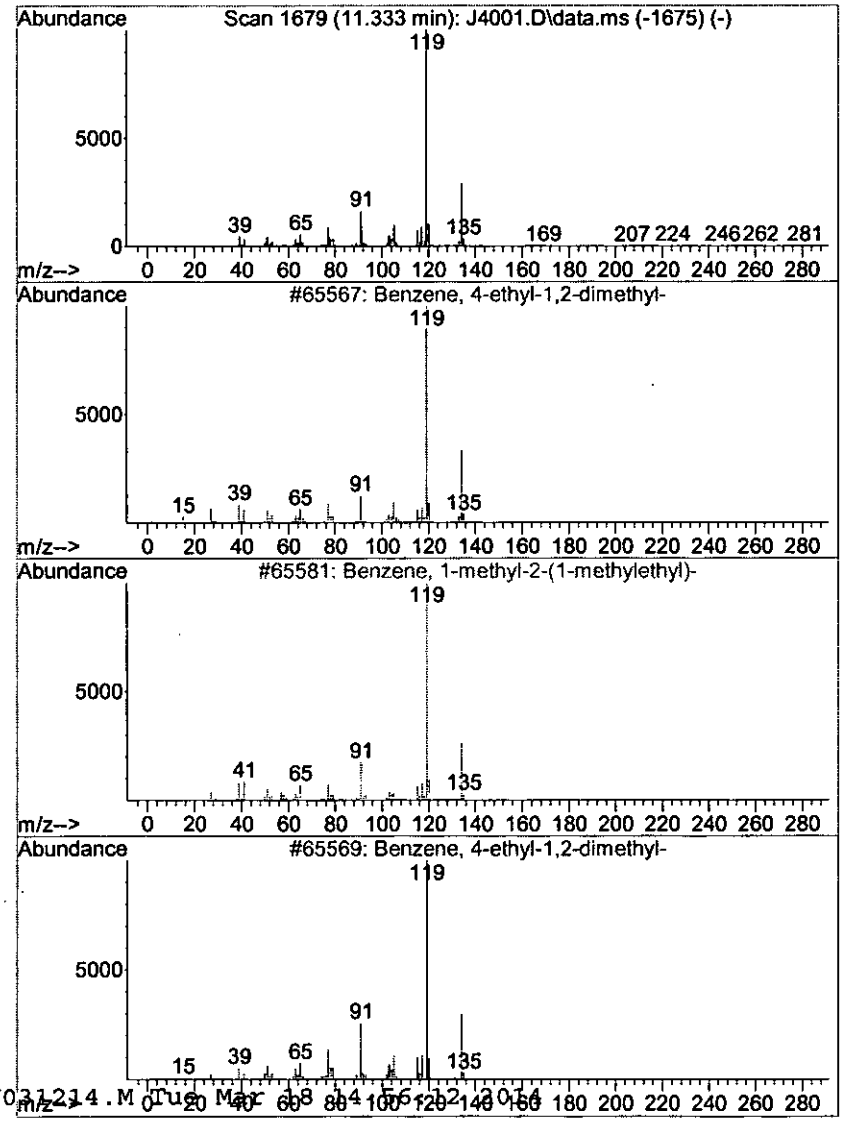
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

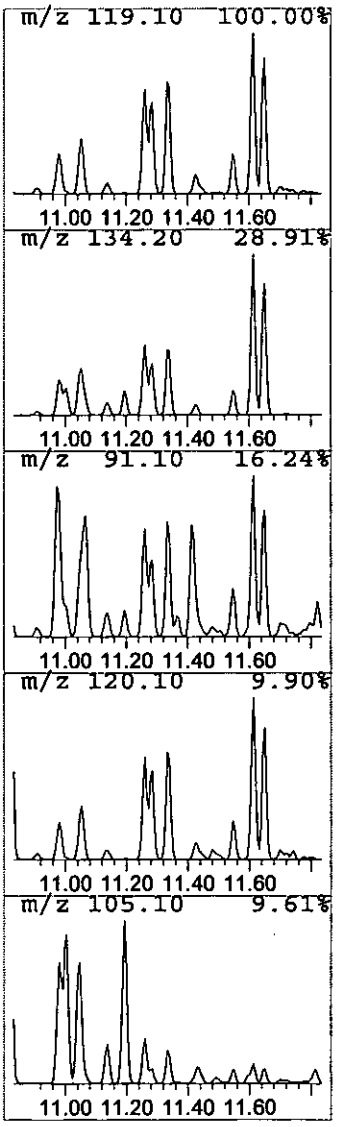
****

Peak Number 16 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.333	34.44 ppb	2644620	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
2	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
3	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
4	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95
5	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	94





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On    : 18 Mar 2014    2:14 am
Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

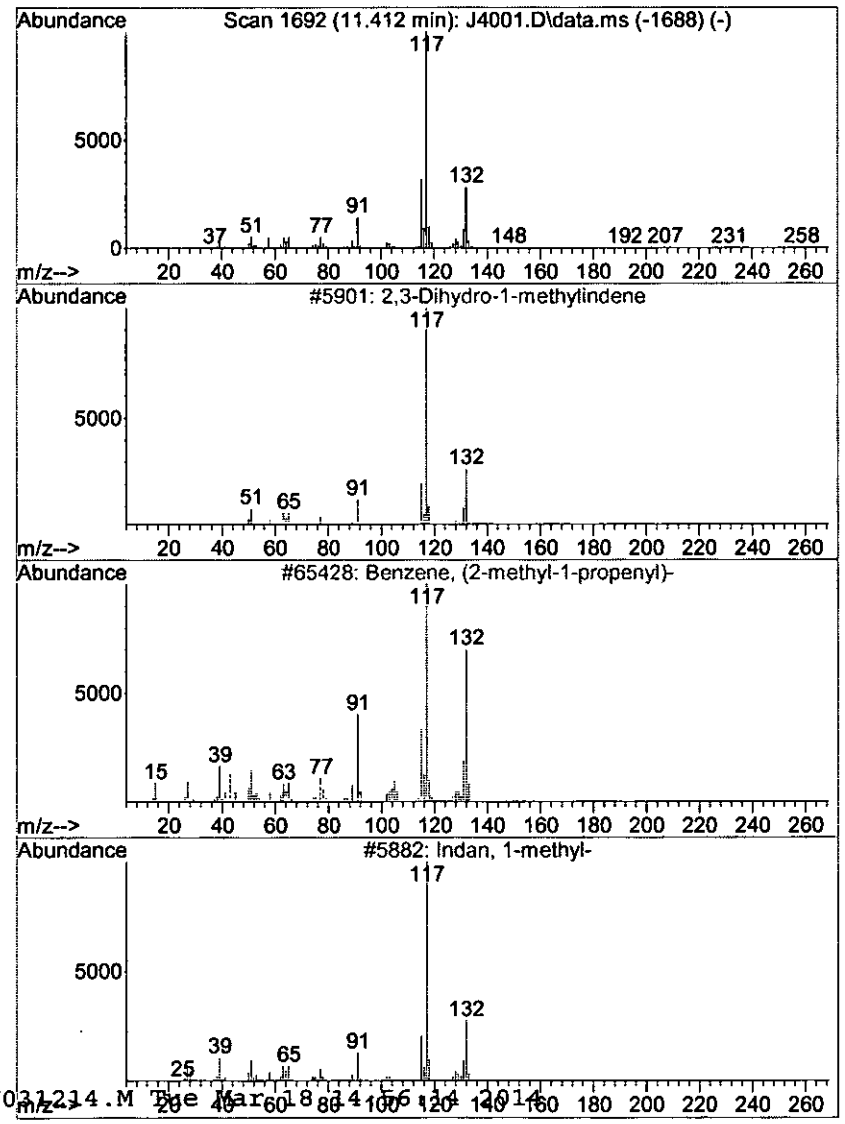
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

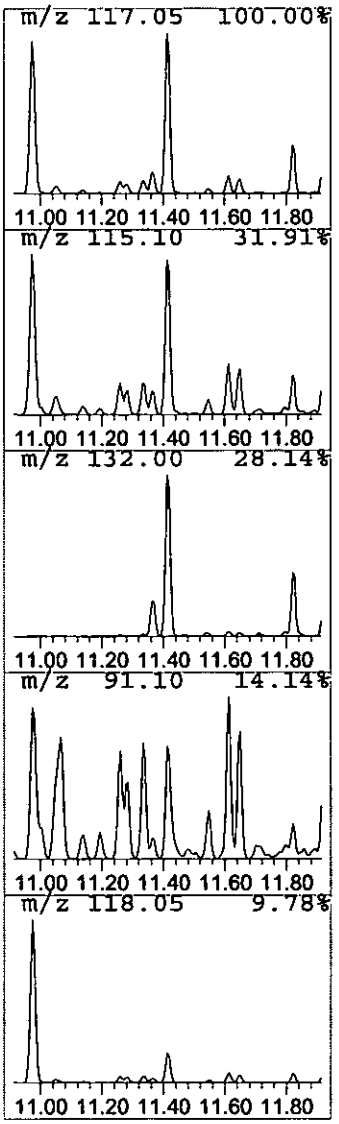
****

Peak Number 17 2,3-Dihydro-1-methylindene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.412	47.61 ppb	3656540	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	91
2	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	90
3	Indan, 1-methyl-	132	C10H12	000767-58-8	90
4	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	87





W031214.M Tue Mar 18 14:56:14 2014 Page: 21

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On    : 18 Mar 2014    2:14 am
Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

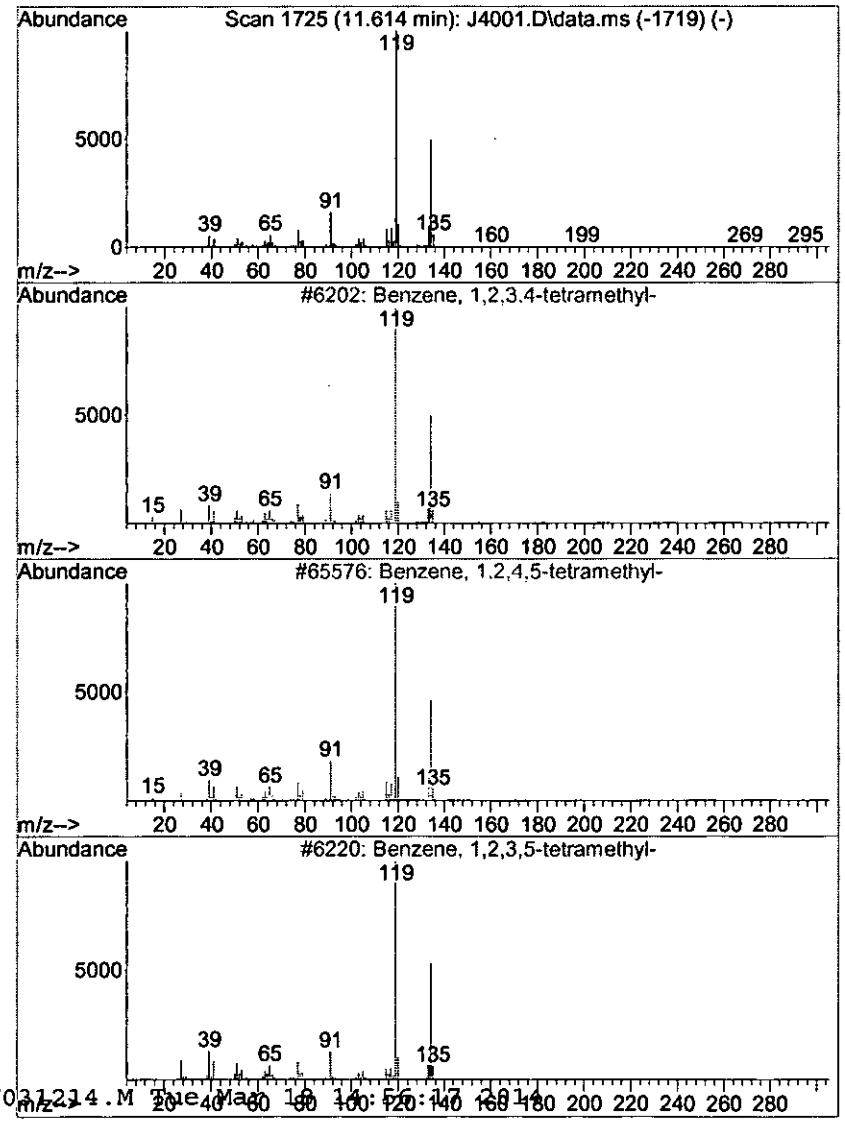
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

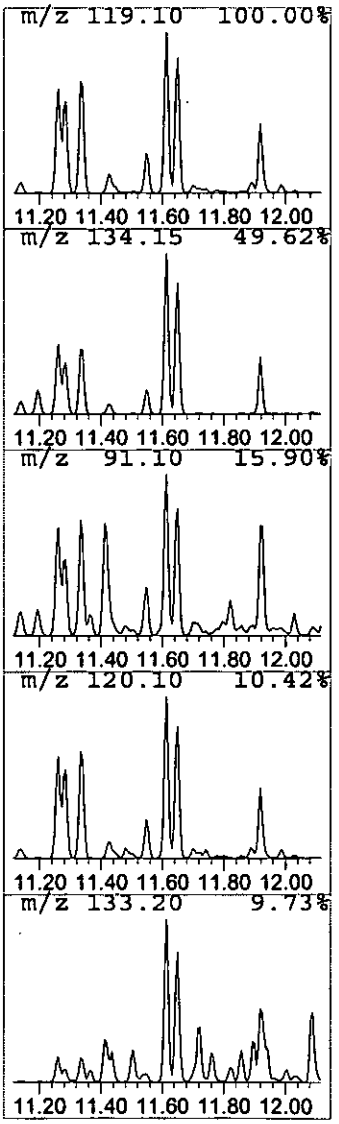
****

Peak Number 18 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.614	51.37 ppb	3944830	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	96
4	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On    : 18 Mar 2014    2:14 am
Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

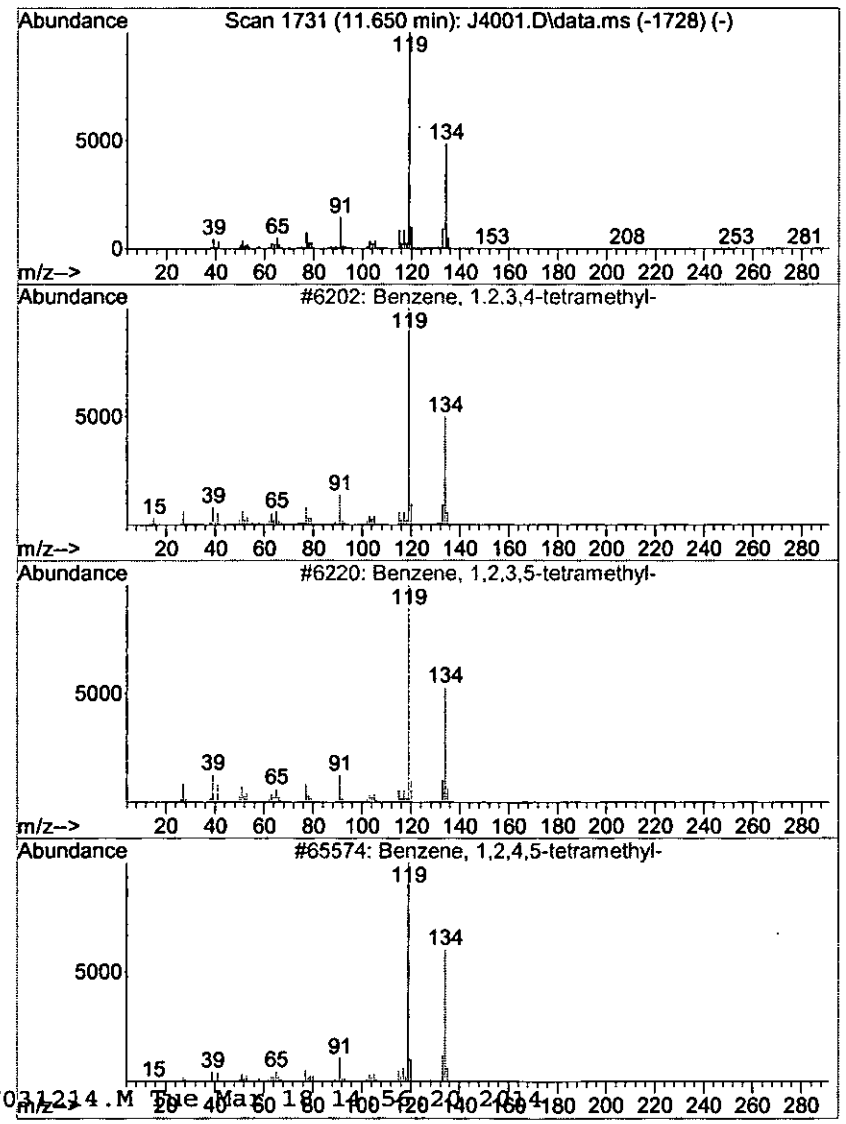
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

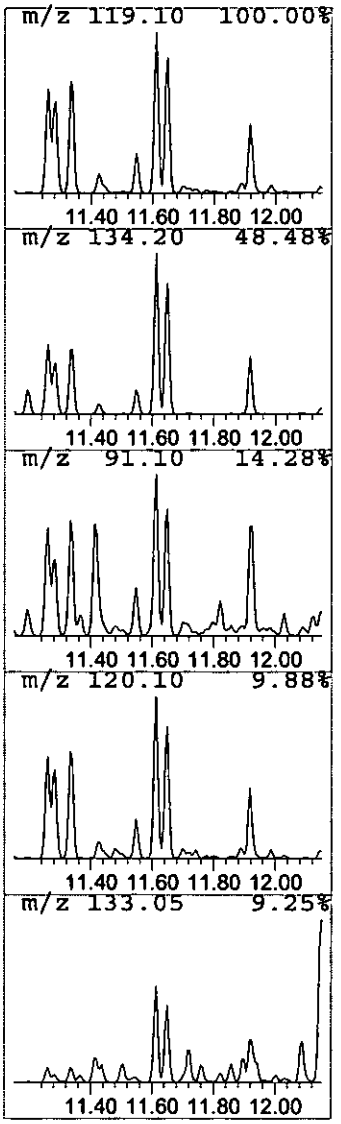
**********************************************************************
Peak Number 19  Benzene, 1,2,3,4-tetramethyl-   Concentration Rank  8
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	41.46 ppb	3184210	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
3	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95

already called





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4001.D
Acq On    : 18 Mar 2014    2:14 am
Operator  : K.Ruest
Sample    : R1401764-001|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

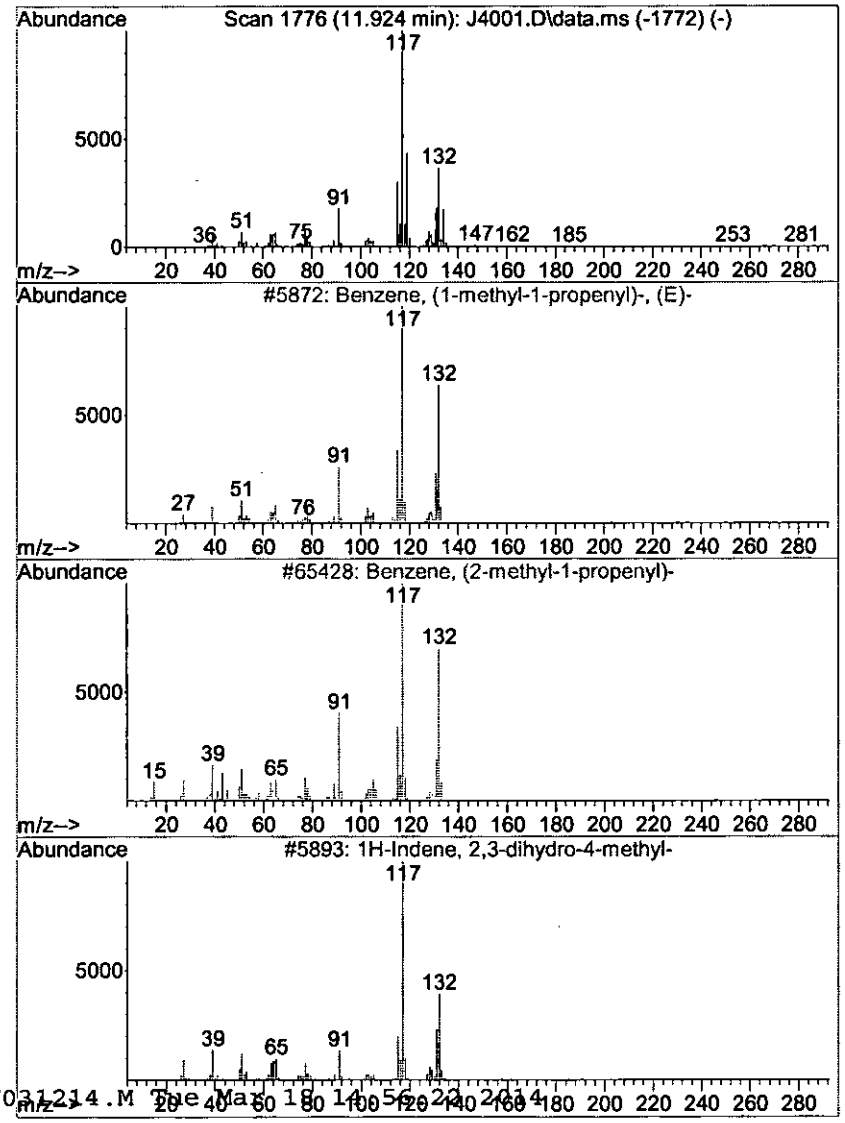
****

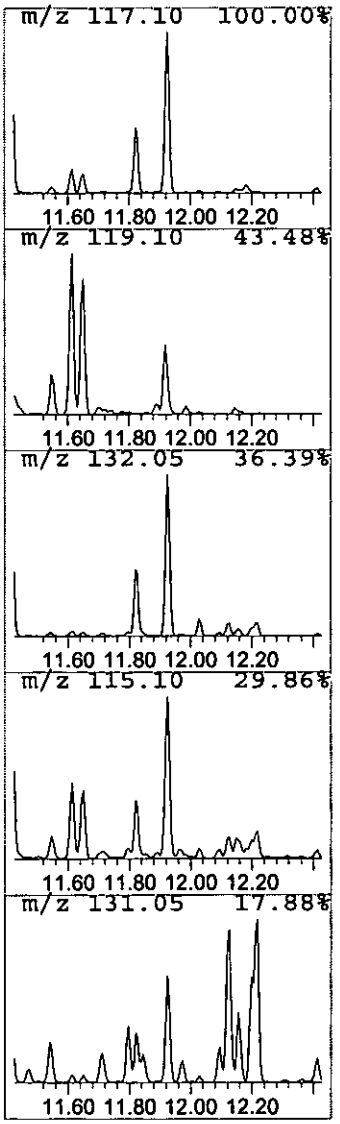
Peak Number 20 Benzene, (1-methyl-1-propen... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.924	46.01 ppb	3533340	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	70
2	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	70
3	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	70
4	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	70
5	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	70

unknown





W031214.M Tue Mar 18 14:56:22 2014 Page: 24

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1355
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 18:54
Sample Name:	FTMM-53-GW-699RW03-11.4	**Units:**	µg/L
Lab Code:	R1401764-001	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	10	2.0	0.44	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	10	2.0	0.72	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	10	2.0	0.50	
79-00-5	1,1,2-Trichloroethane	ND	U	10	2.0	0.68	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	10	2.0	0.40	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	10	2.0	1.2	
563-58-6	1,1-Dichloropropene	ND	U	10	2.0	0.58	
87-61-6	1,2,3-Trichlorobenzene	ND	U	10	2.0	1.7	
96-18-4	1,2,3-Trichloropropane	ND	U	10	2.0	1.4	
120-82-1	1,2,4-Trichlorobenzene	ND	U	10	2.0	0.46	
95-63-6	1,2,4-Trimethylbenzene	**130**	D	10	2.0	0.40	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	10	2.0	1.5	
106-93-4	1,2-Dibromoethane	ND	U	10	2.0	0.48	
95-50-1	1,2-Dichlorobenzene	ND	U	10	2.0	0.42	
107-06-2	1,2-Dichloroethane	ND	U	10	2.0	0.72	
78-87-5	1,2-Dichloropropane	ND	U	10	2.0	0.40	
108-67-8	1,3,5-Trimethylbenzene	**16**	D	10	2.0	0.40	
541-73-1	1,3-Dichlorobenzene	ND	U	10	2.0	0.40	
142-28-9	1,3-Dichloropropane	ND	U	10	2.0	0.54	
106-46-7	1,4-Dichlorobenzene	ND	U	10	2.0	0.40	
594-20-7	2,2-Dichloropropane	ND	U	10	2.0	0.54	
78-93-3	2-Butanone (MEK)	ND	U	10	2.0	1.7	
95-49-8	2-Chlorotoluene	ND	U	10	2.0	0.40	
591-78-6	2-Hexanone	ND	U	10	10	3.4	
106-43-4	4-Chlorotoluene	ND	U	10	2.0	0.48	
99-87-6	p-Isopropyltoluene	**2.8**	DJ	10	2.0	0.40	
108-10-1	4-Methyl-2-pentanone	ND	U	10	2.0	1.4	
67-64-1	Acetone	ND	U	10	10	2.5	
71-43-2	Benzene	**5.1**	DJ	10	2.0	0.40	
108-86-1	Bromobenzene	ND	U	10	2.0	0.56	
74-97-5	Bromochloromethane	ND	U	10	2.0	0.64	
75-27-4	Bromodichloromethane	ND	U	10	2.0	0.64	
75-25-2	Bromoform	ND	U	10	2.0	0.84	
74-83-9	Bromomethane	ND	U	10	2.0	0.58	
56-23-5	Carbon Tetrachloride	ND	U	10	2.0	0.90	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1355
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 18:54
Sample Name:	FTMM-53-GW-699RW03-11.4	**Units:**	µg/L
Lab Code:	R1401764-001	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	10	2.0	0.58	
75-00-3	Chloroethane	**1.8**	DJ	10	2.0	0.48	
67-66-3	Chloroform	ND	U	10	2.0	0.50	
74-87-3	Chloromethane	**1.2**	DJ	10	2.0	0.42	
124-48-1	Dibromochloromethane	ND	U	10	2.0	0.62	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	10	2.0	0.92	
75-09-2	Methylene Chloride	ND	U	10	2.0	0.64	
100-41-4	Ethylbenzene	**46**	D	10	2.0	0.40	
87-68-3	Hexachlorobutadiene	ND	U	10	2.0	1.3	
98-82-8	Isopropylbenzene (Cumene)	**20**	D	10	2.0	0.40	
1634-04-4	Methyl tert-Butyl Ether	ND	U	10	2.0	0.58	
91-20-3	Naphthalene	**30**	D	10	2.0	0.40	
100-42-5	Styrene	ND	U	10	2.0	0.40	
127-18-4	Tetrachloroethene (PCE)	ND	U	10	2.0	0.60	
108-88-3	Toluene	**1.6**	DJ	10	2.0	0.40	
79-01-6	Trichloroethene (TCE)	ND	U	10	2.0	0.44	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	10	2.0	0.40	
75-01-4	Vinyl Chloride	ND	U	10	2.0	0.64	
156-59-2	cis-1,2-Dichloroethene	ND	U	10	2.0	0.60	
10061-01-5	cis-1,3-Dichloropropene	ND	U	10	2.0	0.48	
179601-23-1	m,p-Xylenes	**54**	D	20	4.0	0.66	
104-51-8	n-Butylbenzene	**11**	D	10	2.0	0.42	
103-65-1	n-Propylbenzene	**34**	D	10	2.0	0.40	
95-47-6	o-Xylene	**71**	D	10	2.0	0.40	
135-98-8	sec-Butylbenzene	**7.3**	DJ	10	2.0	0.54	
98-06-6	tert-Butylbenzene	**0.80**	DJ	10	2.0	0.40	
156-60-5	trans-1,2-Dichloroethene	ND	U	10	2.0	0.66	
10061-02-6	trans-1,3-Dichloropropene	ND	U	10	2.0	0.40	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	3/19/14 18:54	
Dibromofluoromethane	103	85-115	3/19/14 18:54	
Toluene-d8	91	85-120	3/19/14 18:54	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/19/14 1854

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-11.4DL
Lab Code: R1401764-001
Run Type: Dilution

Analytical Method: 8260C

Units: µg/L
Basis: NA

CAS #	Analyte Name	RT	Result	Q
	unknown	2.40	**24.2**	J
000096-14-0	Pentane, 3-methyl-	2.60	**32.7**	JN
000096-37-7	Cyclopentane, methyl-	3.46	**32.3**	JN
000565-59-3	Pentane, 2,3-dimethyl-	4.40	**31.1**	JN
	unknown	4.91	**15.7**	J
	unknown	5.00	**26.8**	J
000108-87-2	Cyclohexane, methyl-	6.10	**24.8**	JN
000560-21-4	Pentane, 2,3,3-trimethyl-	6.80	**16.2**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.10	**51.0**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.33	**81.1**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**51.3**	JN
	unknown	10.98	**56.1**	J
001074-17-5	Benzene, 1-methyl-2-propyl-	11.19	**11.8**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**22.8**	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl	11.28	**14.4**	JN
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.33	**22.1**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**37.9**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**33.1**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.65	**15.8**	JN
	unknown	11.93	**20.1**	J

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-001|2.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D
Misc : PARSONS 9913 T4
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 19:09:15 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	869359	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1324841	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1221655	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	594429	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	393534	51.31	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.62%				
48) surr1,1,2-dichloroetha...	4.664	65	477839	54.69	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 109.38%				
65) SURR3,Toluene-d8	7.322	98	1458981	45.27	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 90.54%				
70) SURR2,BFB	9.791	95	606225	50.42	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.84%				
Target Compounds							Qvalue
3) Chloromethane	1.262	50	5307	0.59	ppb		96
5) Bromomethane	1.512	94	1339	0.27	ppb		98
6) Chloroethane	1.567	64	4368	0.88	ppb		82
~~12) Acrolein~~	~~1.859~~	~~56~~	~~200~~	~~Below Cal~~	~~#~~		~~1~~
15) Acetone	2.054	43	37321	21.64	ppb		75
16) 2-Propanol	2.115	45	1008	3.60	ppb	#	15
17) Iodomethane	2.146	142	4800	0.57	ppb		79 NTD
20) Allyl Chloride	2.207	76	3177	0.73	ppb	#	1
21) Methyl Acetate	2.304	43	2233	0.57	ppb	#	60
23) TBA	2.408	59	1266	2.63	ppb	#	1
24) Acrylonitrile	2.603	53	9289	4.81	ppb	#	35
25) Methyl-t-Butyl Ether	2.579	73	14346	0.72	ppb	#	1
35) 2-Butanone	3.566	43	9190	3.80	ppb	#	35
36) Propionitrile	3.548	54	261	0.37	ppb	#	1
~~39) Tetrahydrofuran~~	~~3.957~~	~~42~~	~~350~~	~~0.21~~	~~ppb~~	~~#~~	~~45~~
44) Cyclohexane	4.310	41	49464	6.90	ppb		96 NTD
49) Benzene	4.786	78	83054	2.55	ppb		93
~~51) Iso Butyl Alcohol~~	~~4.566~~	~~43~~	~~73598~~	~~328.38~~	~~ppb~~		~~81~~
52) n-Heptane	5.334	43	9296	1.14	ppb		86 NTD
~~53) 1-Butanol~~	~~5.804~~	~~56~~	~~341~~	~~2.77~~	~~ppb~~		~~85~~
55) Methylcyclohexane	6.102	55	121060	14.25	ppb		85 NTD
~~59) Methyl Methacrylate~~	~~6.365~~	~~69~~	~~24999~~	~~6.37~~	~~ppb~~	~~#~~	~~40~~
~~61) 2-Nitropropane~~	~~6.804~~	~~41~~	~~38673~~	~~36.91~~	~~ppb~~	~~#~~	~~1~~
~~64) 4-Methyl-2-pentanone~~	~~7.218~~	~~43~~	~~1774~~	~~0.35~~	~~ppb~~		~~72~~
66) Toluene	7.395	91	26119	0.78	ppb		95
~~68) Ethyl Methacrylate~~	~~7.791~~	~~69~~	~~7488~~	~~0.99~~	~~ppb~~	~~#~~	~~1~~
~~69) 1,1,2-Trichloroethane~~	~~7.797~~	~~97~~	~~29994~~	~~5.10~~	~~ppb~~	~~#~~	~~18~~
~~73) 2-Hexanone~~	~~8.096~~	~~43~~	~~3748~~	~~1.08~~	~~ppb~~	~~#~~	~~52~~
82) Ethylbenzene	8.889	106	258830	22.85	ppb		99
83) (m+p)Xylene	8.998	106	359482	27.01	ppb		96
84) o-Xylene	9.346	106	484220	35.65	ppb		99
~~85) Styrene~~	~~9.346~~	~~104~~	~~23418~~	~~1.08~~	~~ppb~~	~~#~~	~~1~~
89) Isopropylbenzene	9.675	105	313455	10.21	ppb		100
~~90) Cyclohexanone~~	~~9.718~~	~~55~~	~~542~~	~~1.14~~	~~ppb~~	~~#~~	~~51~~
95) n-Propylbenzene	10.022	91	610044	16.99	ppb		99

W031214.M Wed Mar 19 19:09:19 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1401764-001|2.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D
Misc : PARSONS 9913 T4
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 19:09:15 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

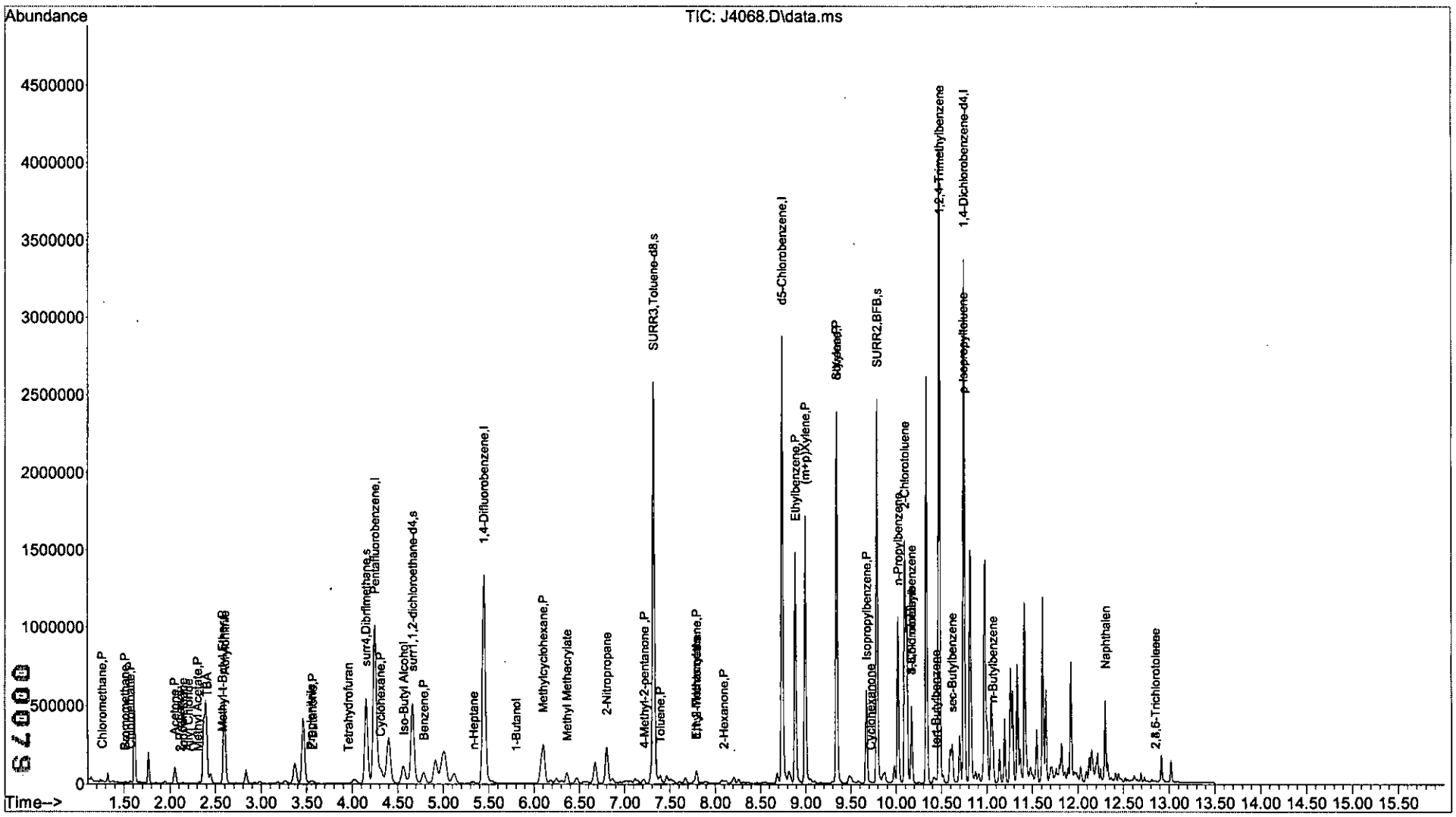
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
~~96) 2-Chlorotoluene~~	~~10.096~~	~~91~~	~~92883~~	~~4.12~~	~~ppb #~~	~~62~~
~~97) 3-Chlorotoluene~~	~~10.169~~	~~91~~	~~23206~~	~~0.99~~	~~ppb #~~	~~39~~
~~98) 4-Chlorotoluene~~	~~10.169~~	~~91~~	~~22269~~	~~0.84~~	~~ppb #~~	~~43~~
99) 1,3,5-Trimethylbenzene	10.169	105	200741	8.02	ppb	100
100) tert-Butylbenzene	10.437	119	8473	0.40	ppb	96
101) 1,2,4-Trimethylbenzene	10.480	105	1714066	66.55	ppb	97
103) sec-Butylbenzene	10.620	105	106798	3.64	ppb	97
104) p-Isopropyltoluene	10.742	119	35288	1.42	ppb	94
109) n-Butylbenzene	11.065	91	121307	5.43	ppb	83
117) Naphthalen	12.302	128	235075	14.90	ppb	98
119) 2,4,5-Trichlorotolene	12.851	159	1040	0.22	ppb	92
120) 2,3,6-Trichlorotoluene	12.851	159	1040	0.24	ppb	95

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

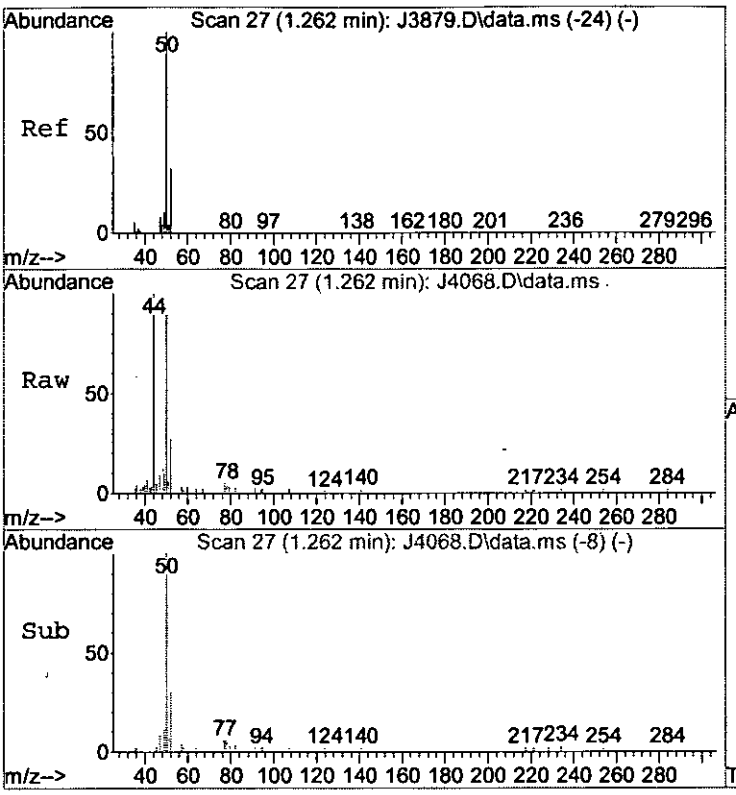
Quantitation Report (Not Reviewed)

Sample : R1401764-001|2.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4068.D
Misc : PARSONS 9913 T4
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 19:09:15 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



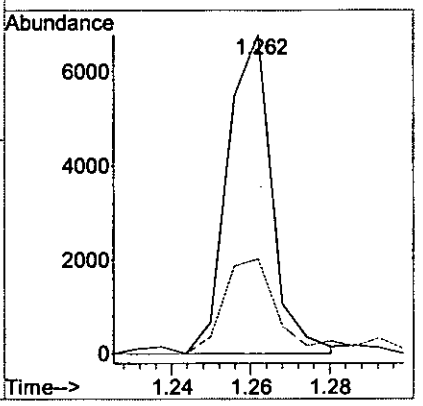
W031214.M Wed Mar 19 19:09:23 2014 Page: 3

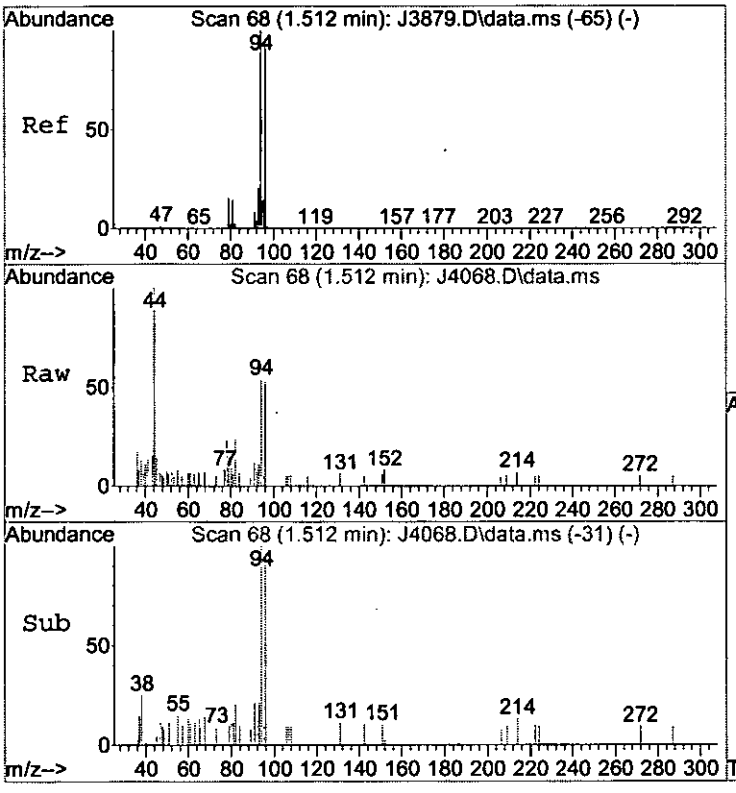


#3
Chloromethane
Concen: 0.59 ppb
RT: 1.262 min Scan# 27
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion: 50 Resp: 5307

Ion	Ratio	Lower	Upper
50	100		
52	29.9	12.2	52.2

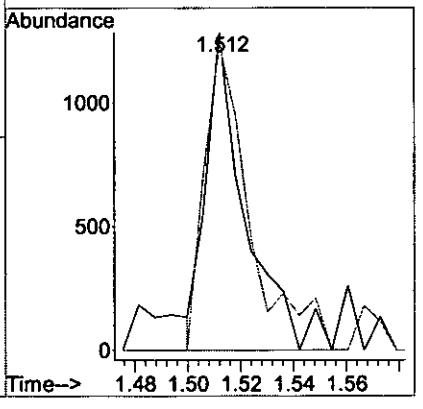


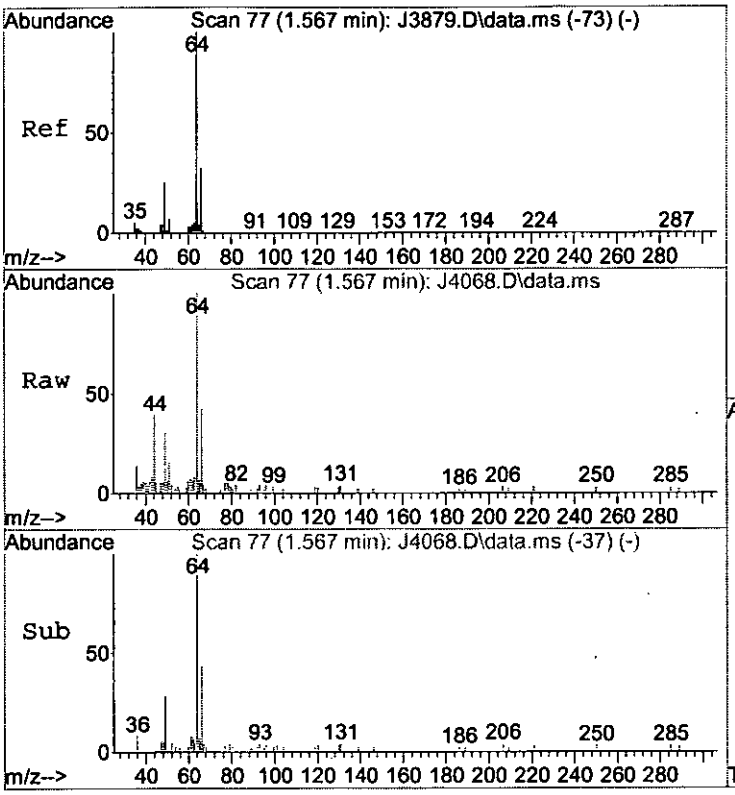


#5
Bromomethane
Concen: 0.27 ppb
RT: 1.512 min Scan# 68
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion: 94 Resp: 1339

Ion	Ratio	Lower	Upper
94	100		
96	96.1	73.8	113.8

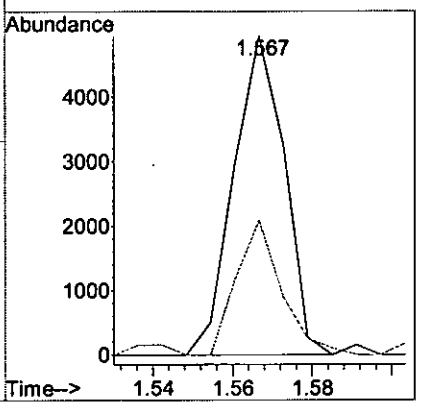


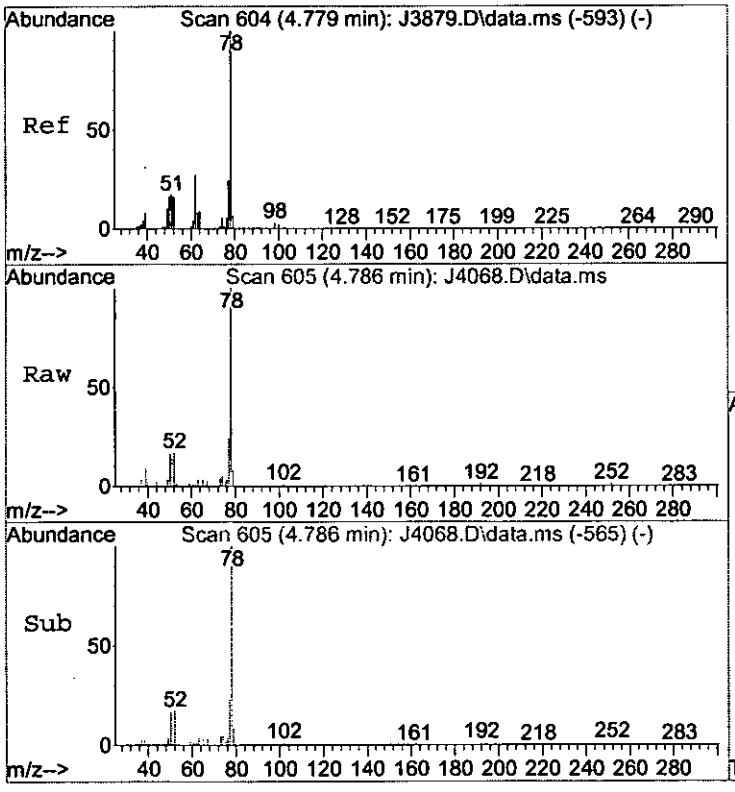


#6
Chloroethane
Concen: 0.88 ppb
RT: 1.567 min Scan# 77
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion: 64 Resp: 4368

Ion	Ratio	Lower	Upper
64	100		
66	42.3	12.2	52.2

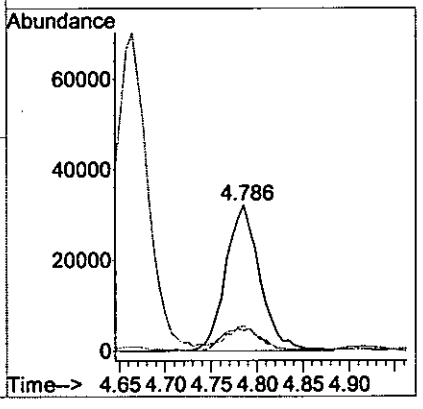


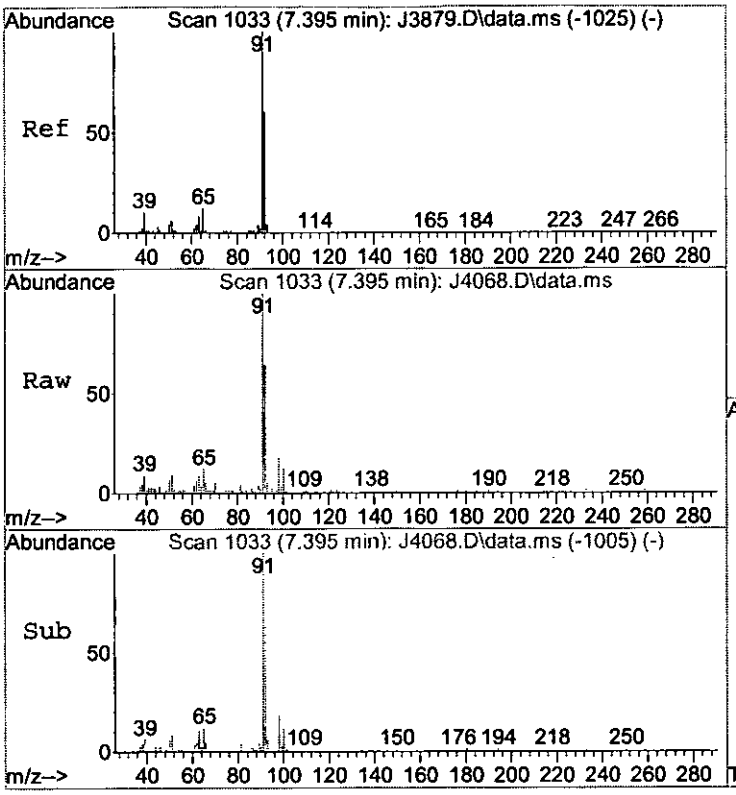


#49
Benzene
Concen: 2.55 ppb
RT: 4.786 min Scan# 605
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion: 78 Resp: 83054

Ion	Ratio	Lower	Upper
78	100		
51	13.6	0.0	38.2
52	17.2	0.0	36.1

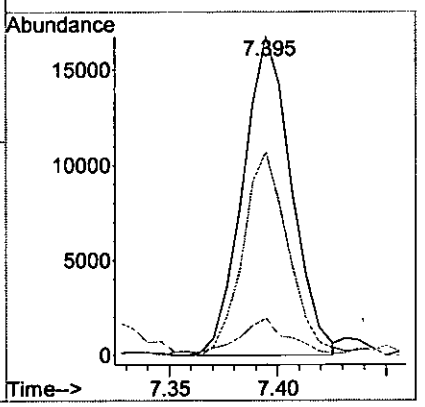


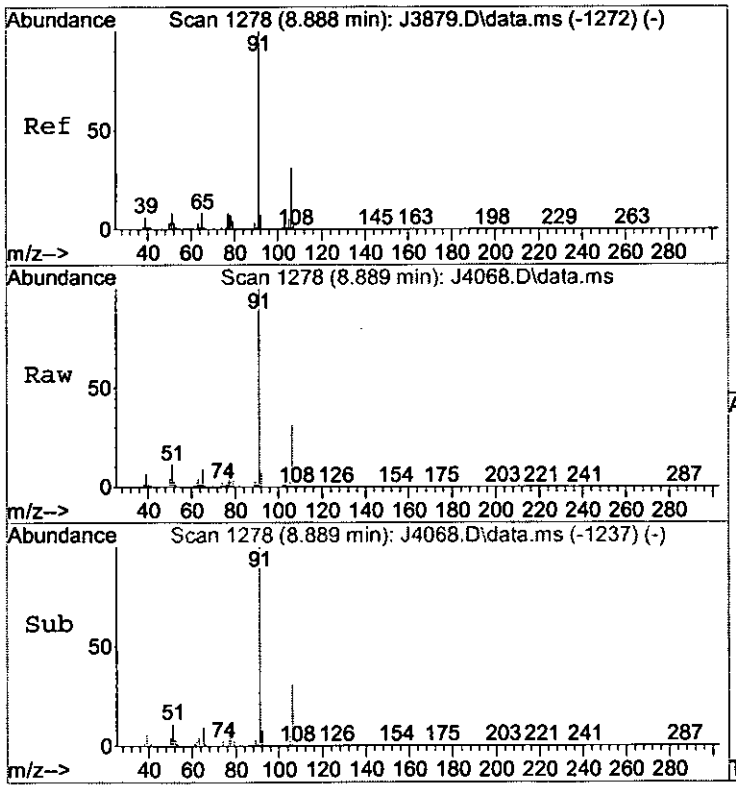


#66
Toluene
Concen: 0.78 ppb
RT: 7.395 min Scan# 1033
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion: 91 Resp: 26119

Ion	Ratio	Lower	Upper
91	100		
92	63.9	39.9	79.9
65	11.6	0.0	32.3

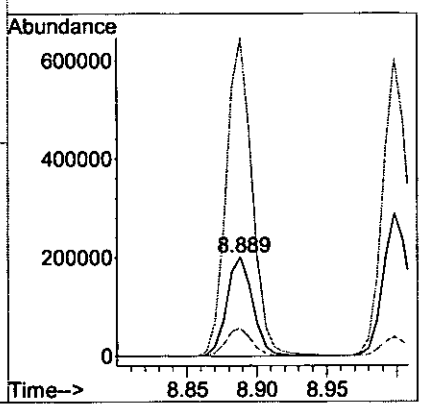


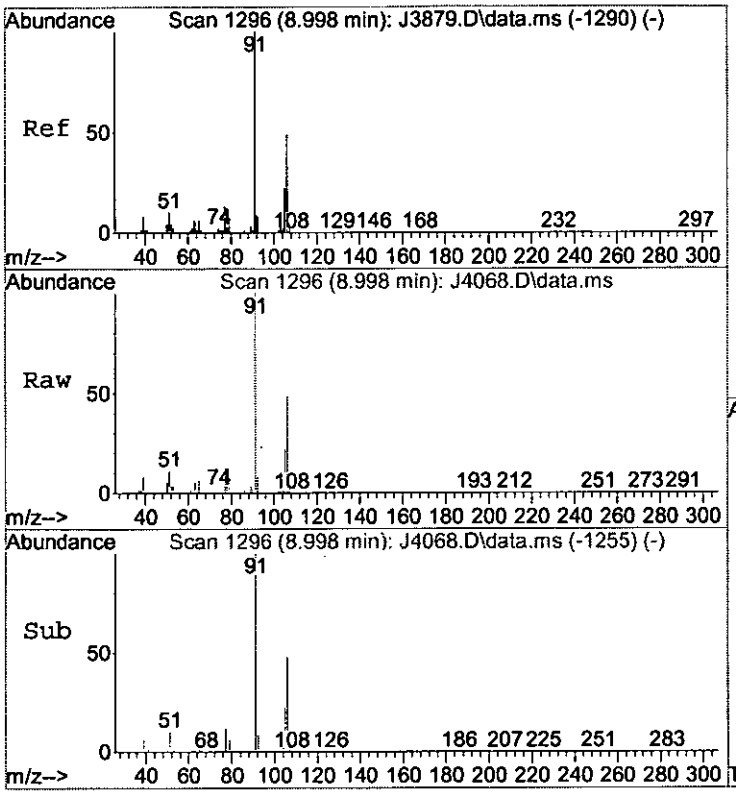


#82
Ethylbenzene
Concen: 22.85 ppb
RT: 8.889 min Scan# 1278
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:106 Resp: 258830

Ion	Ratio	Lower	Upper
106	100		
91	322.3	300.3	340.3
65	28.2	6.6	46.6

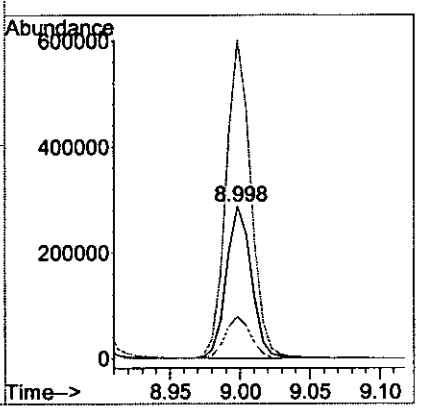


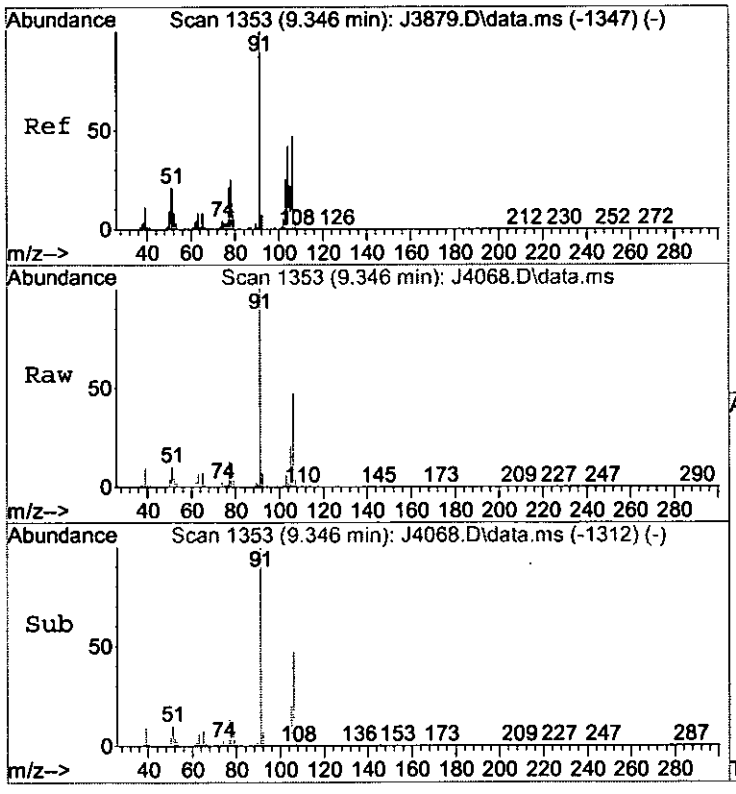


#83
(m+p)Xylene
Concen: 27.01 ppb
RT: 8.998 min Scan# 1296
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:106 Resp: 359482

Ion	Ratio	Lower	Upper
106	100		
91	208.9	182.8	222.8
77	27.6	7.2	47.2

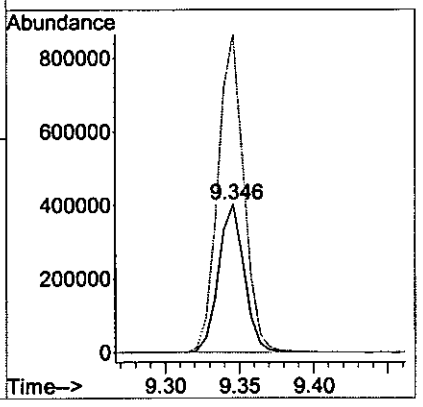




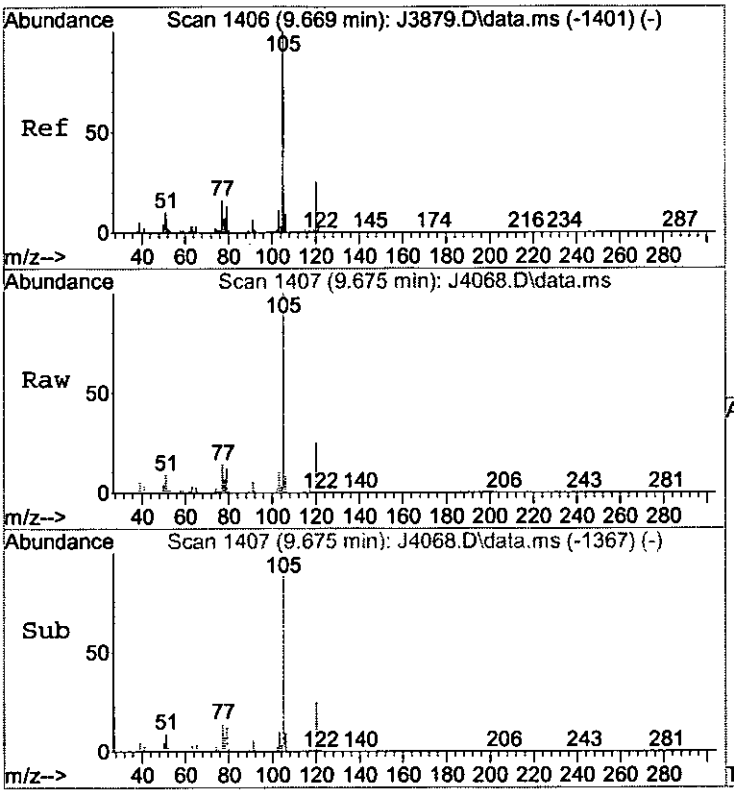
#84
o-Xylene
Concen: 35.65 ppb
RT: 9.346 min Scan# 1353
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:106 Resp: 484220

Ion	Ratio	Lower	Upper
106	100		
91	214.8	193.9	233.9



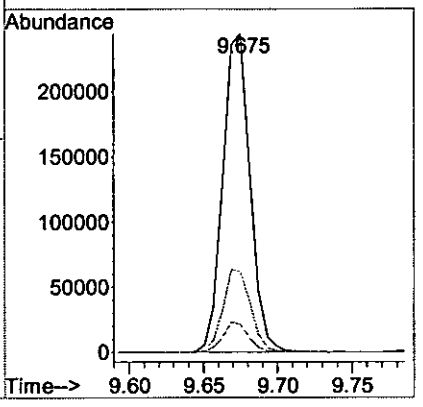
J4068.D W031214.M Thu Mar 20 16:14:27 2014 Page 6

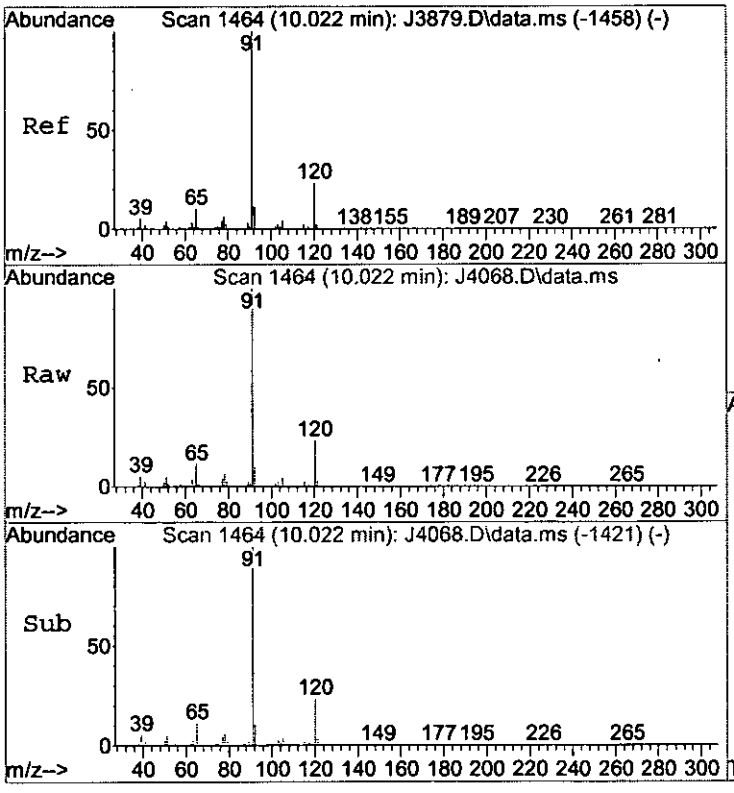


#89
Isopropylbenzene
Concen: 10.21 ppb
RT: 9.675 min Scan# 1407
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:105 Resp: 313455

Ion	Ratio	Lower	Upper
105	100		
120	25.3	5.4	45.4
106	8.8	0.0	28.6

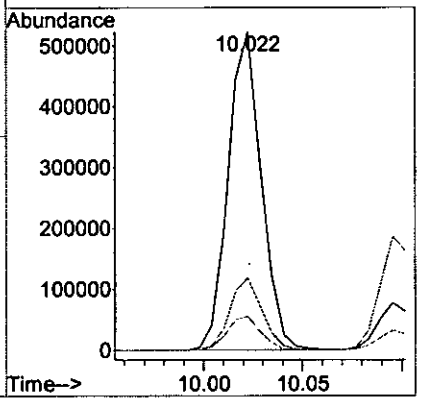


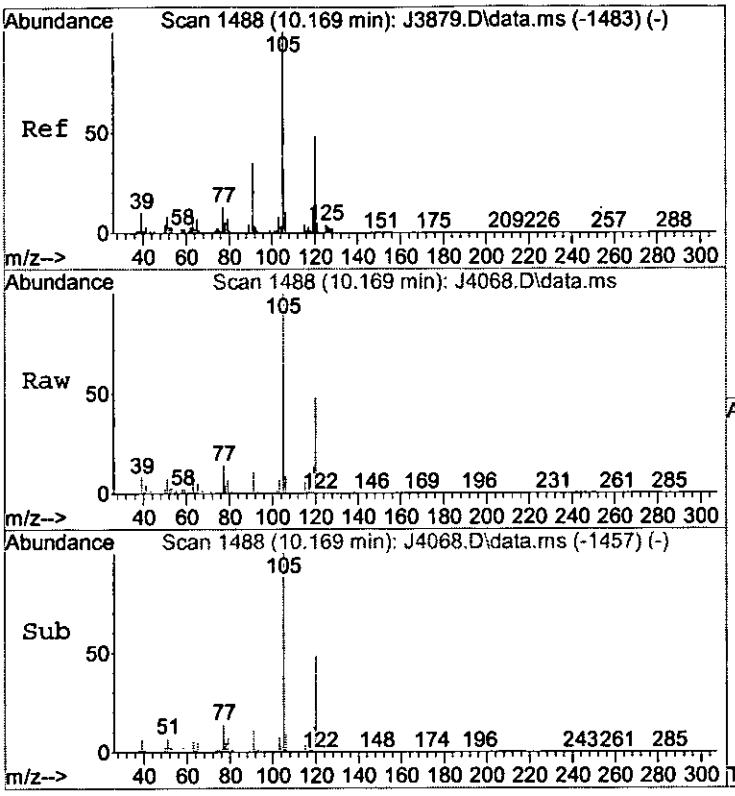


#95
n-Propylbenzene
Concen: 16.99 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion: 91 Resp: 610044

Ion	Ratio	Lower	Upper
91	100		
120	22.6	3.1	43.1
65	10.6	0.0	30.1

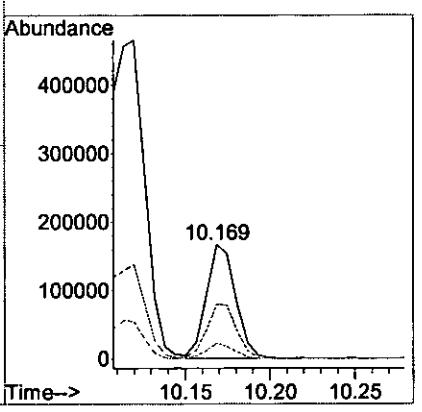


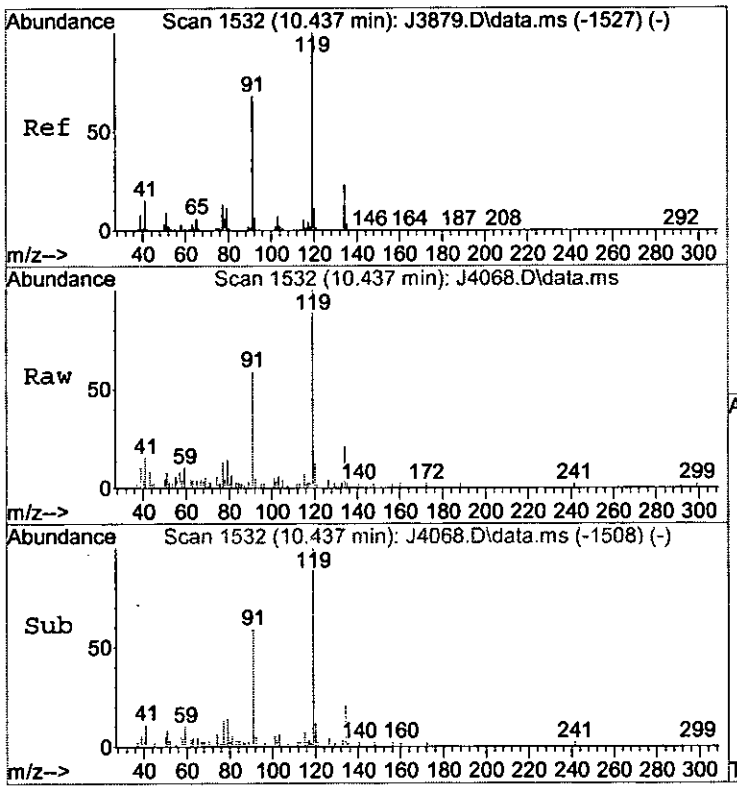


#99
1,3,5-Trimethylbenzene
Concen: 8.02 ppb
RT: 10.169 min Scan# 1488
Delta R.T. -0.006 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:105 Resp: 200741

Ion	Ratio	Lower	Upper
105	100		
120	47.8	27.7	67.7
77	13.6	0.0	33.6

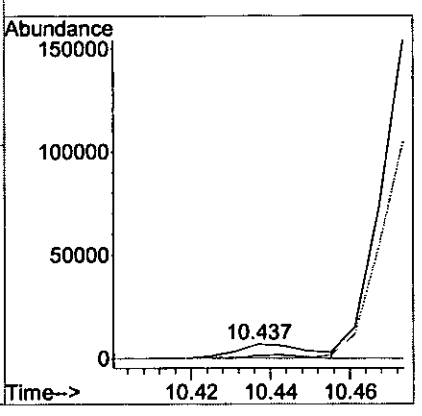




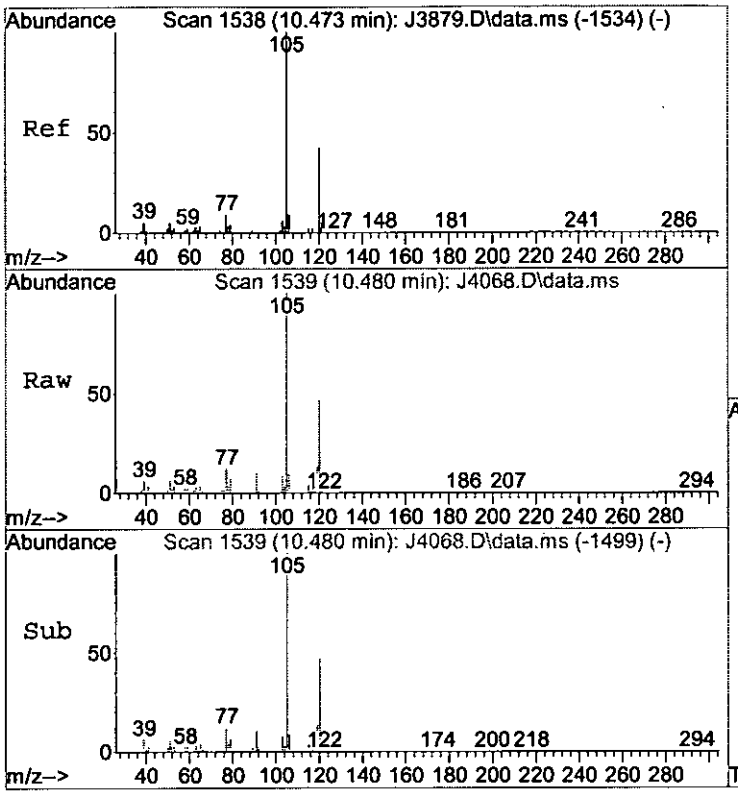
#100
tert-Butylbenzene
Concen: 0.40 ppb
RT: 10.437 min Scan# 1532
Delta R.T. -0.006 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:119 Resp: 8473

Ion	Ratio	Lower	Upper
119	100		
134	21.1	3.5	43.5
103	6.4	0.0	27.3



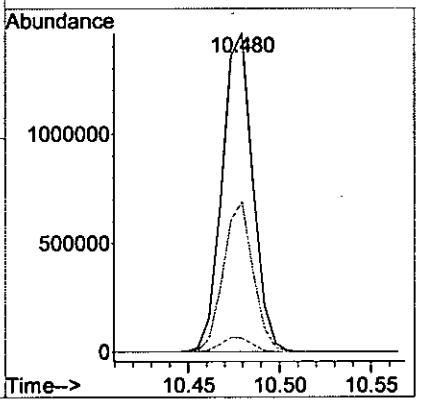
J4068.D W031214.M Thu Mar 20 16:14:30 2014 00085 Page 8

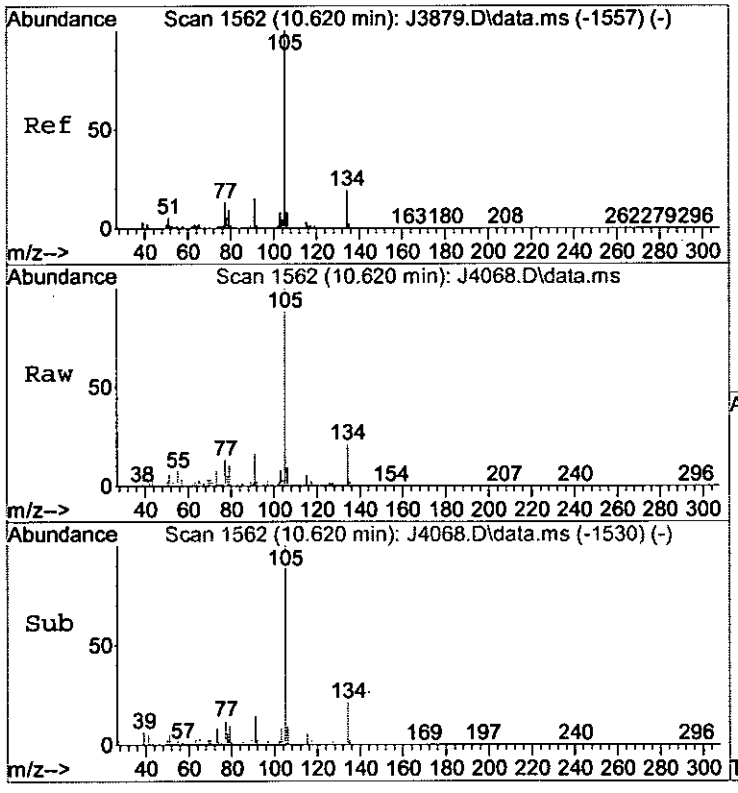


#101
1,2,4-Trimethylbenzene
Concen: 66.55 ppb
RT: 10.480 min Scan# 1539
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:105 Resp: 1714066

Ion	Ratio	Lower	Upper
105	100		
120	47.2	25.3	65.3
65	4.4	0.0	24.3

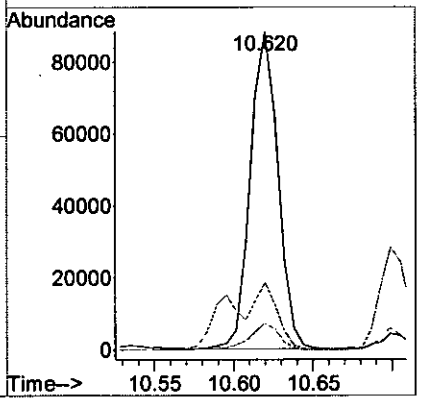




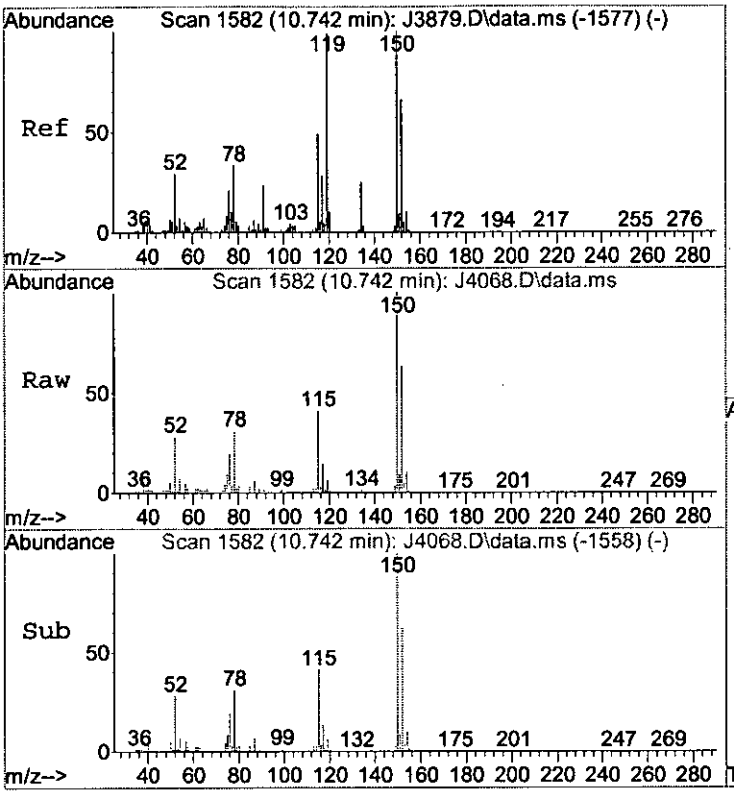
#103
sec-Butylbenzene
Concen: 3.64 ppb
RT: 10.620 min Scan# 1562
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:105 Resp: 106798

Ion	Ratio	Lower	Upper
105	100		
134	21.1	0.0	39.3
103	8.3	0.0	28.3



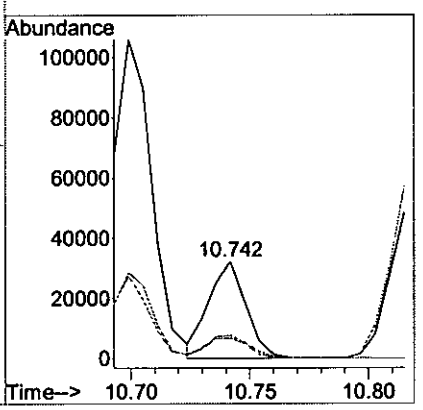
J4068.D W031214.M Thu Mar 20 16:14:32 2014 Page 9

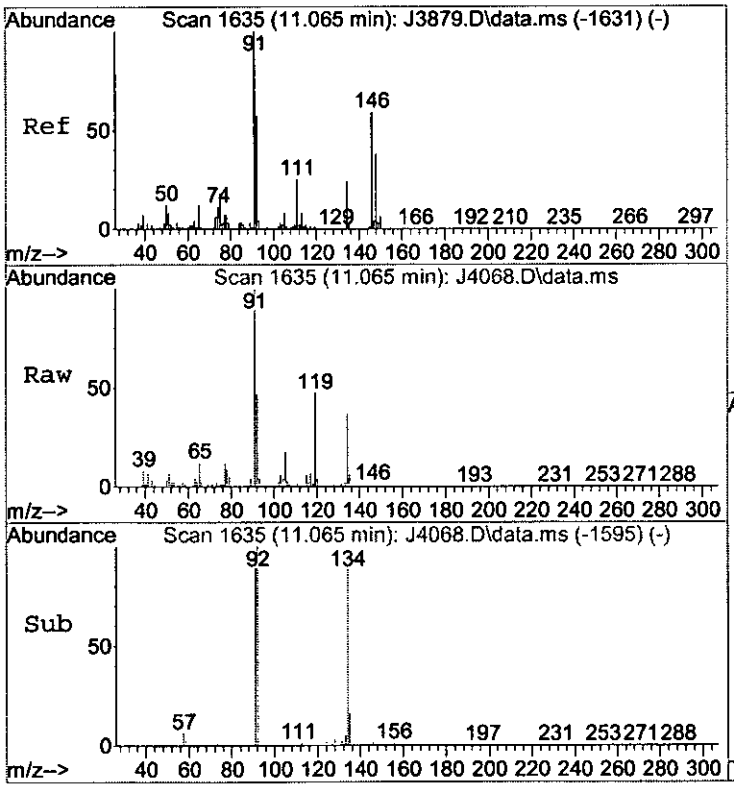


#104
p-Isopropyltoluene
Concen: 1.42 ppb
RT: 10.742 min Scan# 1582
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:119 Resp: 35288

Ion	Ratio	Lower	Upper
119	100		
134	20.9	5.6	45.6
91	24.0	3.2	43.2

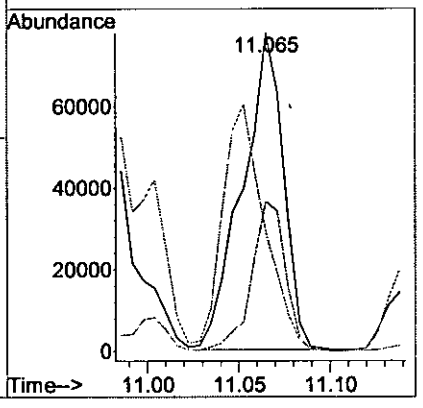




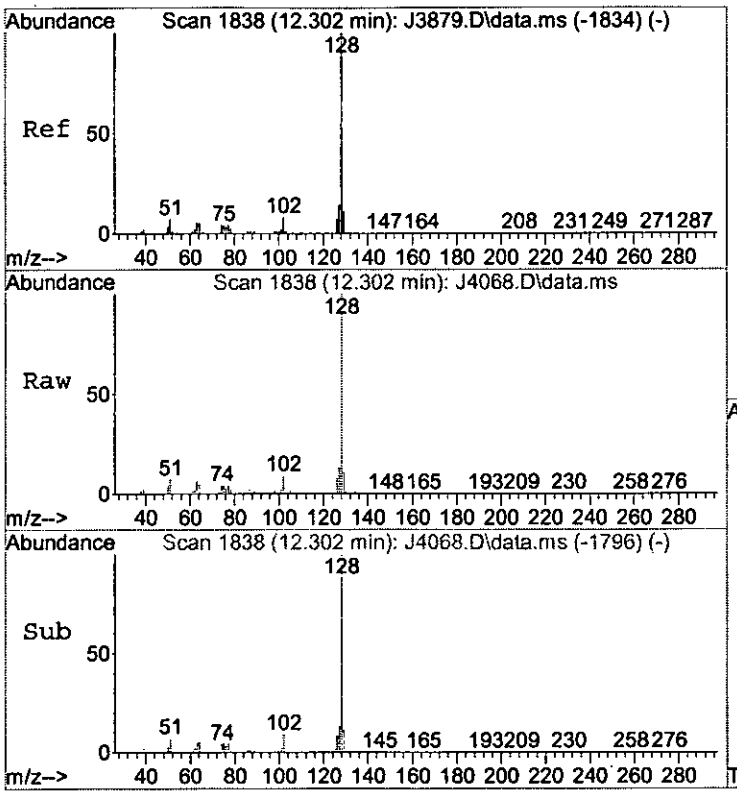
#109
n-Butylbenzene
Concen: 5.43 ppb
RT: 11.065 min Scan# 1635
Delta R.T. -0.006 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion: 91 Resp: 121307

Ion	Ratio	Lower	Upper
91	100		
92	47.1	36.7	76.7
134	37.1	4.5	44.5



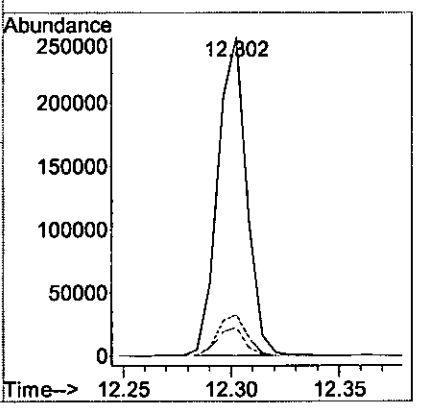
J4068.D W031214.M Thu Mar 20 16:14:34 2014 00087 Page 10



#117
Naphthalen
Concen: 14.90 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4068.D
Acq: 19 Mar 2014 6:54 pm

Tgt Ion:128 Resp: 235075

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	33.8
102	8.9	0.0	28.5



J4068.D W031214.M Thu Mar 20 16:14:35 2014 Page 11

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4068.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.323	32	37	40	rBV	60721	50554	1.04%	0.072%
2	1.616	81	85	93	rVB	651911	664694	13.73%	0.941%
3	1.768	106	110	116	rVB	199174	218942	4.52%	0.310%
4	2.054	151	157	163	rBV	105626	164194	3.39%	0.232%
5	2.396	211	213	218	rVB	494216	692793	14.31%	0.980%
6	2.445	218	221	228	rVB2	61211	99079	2.05%	0.140%
7	2.597	239	246	256	rBV	528218	936023	19.34%	1.325%
8	2.835	278	285	294	rVB2	85429	139053	2.87%	0.197%
9	3.268	347	356	364	rBV4	16877	54210	1.12%	0.077%
10	3.371	364	373	381	rVV2	131739	315426	6.52%	0.446%
11	3.463	381	388	398	rVV	417925	924515	19.10%	1.308%
12	4.030	469	481	491	rVB4	25376	85025	1.76%	0.120%
13	4.152	491	501	509	rBV	542886	1272054	26.28%	1.800%
14	4.249	509	517	533	rVV	1008746	2860349	59.09%	4.048%
15	4.402	534	542	557	rVV2	292114	889564	18.38%	1.259%
16	4.560	558	568	576	rVV4	108649	336443	6.95%	0.476%
17	4.664	576	585	597	rVV	511021	1349257	27.87%	1.909%
18	4.786	598	605	616	rVV2	71638	201827	4.17%	0.286%
19	4.914	616	626	633	rVV2	150294	485120	10.02%	0.686%
20	5.005	633	641	652	rVV7	206469	827282	17.09%	1.171%
21	5.127	652	661	669	rVB3	61588	196452	4.06%	0.278%
22	5.450	704	714	726	rBV	1332117	3081828	63.67%	4.361%
23	6.102	808	821	829	rBV3	248625	765125	15.81%	1.083%
24	6.249	839	845	850	rBV3	28468	52012	1.07%	0.074%
25	6.365	858	864	874	rVB	67516	140070	2.89%	0.198%
26	6.474	874	882	889	rVB4	37314	82790	1.71%	0.117%
27	6.676	904	915	924	rVB	139479	316441	6.54%	0.448%
28	6.804	924	936	942	rBV	232196	500179	10.33%	0.708%
29	6.865	942	946	952	rVB2	28469	52733	1.09%	0.075%
30	7.114	983	987	996	rVB4	29617	66920	1.38%	0.095%
31	7.212	997	1003	1009	rVB3	28005	56391	1.16%	0.080%
32	7.322	1009	1021	1029	rBV	2581184	4050396	83.67%	5.732%
33	7.395	1029	1033	1039	rVB	47488	77544	1.60%	0.110%
34	7.462	1039	1044	1049	rBV3	44066	76720	1.58%	0.109%
35	7.669	1074	1078	1088	rVB3	35480	61707	1.27%	0.087%

W031214.M Thu Mar 20 16:14:57 2014 Page: 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	7.797	1088	1099	1103	rBV2	81168	152737	3.16%	0.216%
37	8.212	1160	1167	1171	rBV4	39936	72776	1.50%	0.103%
38	8.687	1240	1245	1249	rBV3	65720	97343	2.01%	0.138%
39	8.742	1249	1254	1263	rVV	2869134	3755394	77.58%	5.314%
40	8.815	1263	1266	1273	rVB3	73892	141666	2.93%	0.200%
41	8.889	1273	1278	1290	rVB	1476974	1921583	39.70%	2.719%
42	8.998	1290	1296	1304	rBV	1713587	2161065	44.64%	3.058%
43	9.346	1347	1353	1365	rVB	2388087	2934472	60.62%	4.152%
44	9.486	1371	1376	1383	rBV5	46155	117318	2.42%	0.166%
45	9.669	1402	1406	1412	rBV	592519	769765	15.90%	1.089%
46	9.791	1421	1426	1433	rBV	2465431	2937282	60.68%	4.156%
47	9.876	1433	1440	1444	rVB4	65890	144861	2.99%	0.205%
48	9.980	1452	1457	1460	rBV	109833	139805	2.89%	0.198%
49	10.022	1460	1464	1471	rVV	1059569	1259159	26.01%	1.782%
50	10.096	1471	1476	1478	rVV	1555171	1913844	39.54%	2.708%
51	10.120	1478	1480	1484	rVV	1127175	1161911	24.00%	1.644%
52	10.169	1484	1488	1498	rVB	491822	606867	12.54%	0.859%
53	10.333	1510	1515	1523	rBV	2609302	3042405	62.85%	4.305%
54	10.419	1524	1529	1531	rBV3	35781	54545	1.13%	0.077%
55	10.480	1534	1539	1543	rVV	4061663	4840640	100.00%	6.850%
56	10.516	1543	1545	1551	rVB	50291	55678	1.15%	0.079%
57	10.595	1553	1558	1559	rBV	213055	245742	5.08%	0.348%
58	10.620	1559	1562	1568	rVB2	241709	328310	6.78%	0.465%
59	10.699	1570	1575	1579	rBV	297939	352362	7.28%	0.499%
60	10.748	1579	1583	1589	rVB	3361029	3749994	77.47%	5.306%
61	10.815	1589	1594	1601	rBV	1483425	1924358	39.75%	2.723%
62	10.876	1601	1604	1606	rVV	57430	61991	1.28%	0.088%
63	10.906	1606	1609	1613	rVB	53738	66512	1.37%	0.094%
64	10.980	1613	1621	1624	rBV2	1419331	2103280	43.45%	2.976%
65	11.047	1628	1632	1640	rVB3	555097	975163	20.15%	1.380%
66	11.138	1643	1647	1652	rBV	208202	228527	4.72%	0.323%
67	11.193	1652	1656	1662	rVB	403906	443967	9.17%	0.628%
68	11.260	1662	1667	1669	rBV	729587	854388	17.65%	1.209%
69	11.284	1669	1671	1675	rVB	573942	539343	11.14%	0.763%
70	11.333	1675	1679	1682	rBV	741363	827595	17.10%	1.171%
71	11.364	1682	1684	1689	rVV	187581	200075	4.13%	0.283%
72	11.412	1689	1692	1699	rVV	1121821	1420297	29.34%	2.010%
73	11.479	1699	1703	1706	rVV4	67713	95973	1.98%	0.136%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

74	11.547	1709	1714	1718	rVB2	337962	403144	8.33%	0.570%
75	11.614	1718	1725	1728	rBV	1183094	1241897	25.66%	1.757%
76	11.650	1728	1731	1735	rVB	581541	590916	12.21%	0.836%
77	11.705	1735	1740	1745	rBV5	90200	197630	4.08%	0.280%
78	11.760	1745	1749	1753	rBV4	64744	82936	1.71%	0.117%
79	11.796	1753	1755	1757	rVV	80391	82670	1.71%	0.117%
80	11.821	1757	1759	1762	rVV	211593	205080	4.24%	0.290%
81	11.857	1762	1765	1767	rVB3	43753	50088	1.03%	0.071%
82	11.894	1767	1771	1772	rBV2	71040	72409	1.50%	0.102%
83	11.925	1772	1776	1780	rVB2	723387	755423	15.61%	1.069%
84	12.028	1790	1793	1799	rVB	98990	117971	2.44%	0.167%
85	12.089	1799	1803	1806	rBV2	66522	87534	1.81%	0.124%
86	12.126	1806	1809	1811	rVV	152795	178119	3.68%	0.252%
87	12.150	1811	1813	1818	rVV2	201273	304390	6.29%	0.431%
88	12.217	1818	1824	1827	rVV2	178001	296077	6.12%	0.419%
89	12.248	1827	1829	1832	rVV	79006	62878	1.30%	0.089%
90	12.302	1832	1838	1840	rVV	508084	545138	11.26%	0.771%
91	12.327	1840	1842	1845	rVB	111532	96538	1.99%	0.137%
92	12.412	1853	1856	1859	rVB2	56686	53059	1.10%	0.075%
93	12.443	1859	1861	1864	rBV	50344	53628	1.11%	0.076%
94	12.693	1899	1902	1905	rVB	59961	52625	1.09%	0.074%
95	12.918	1935	1939	1941	rBV	165670	153060	3.16%	0.217%
96	13.022	1952	1956	1962	rVB	140090	143123	2.96%	0.203%

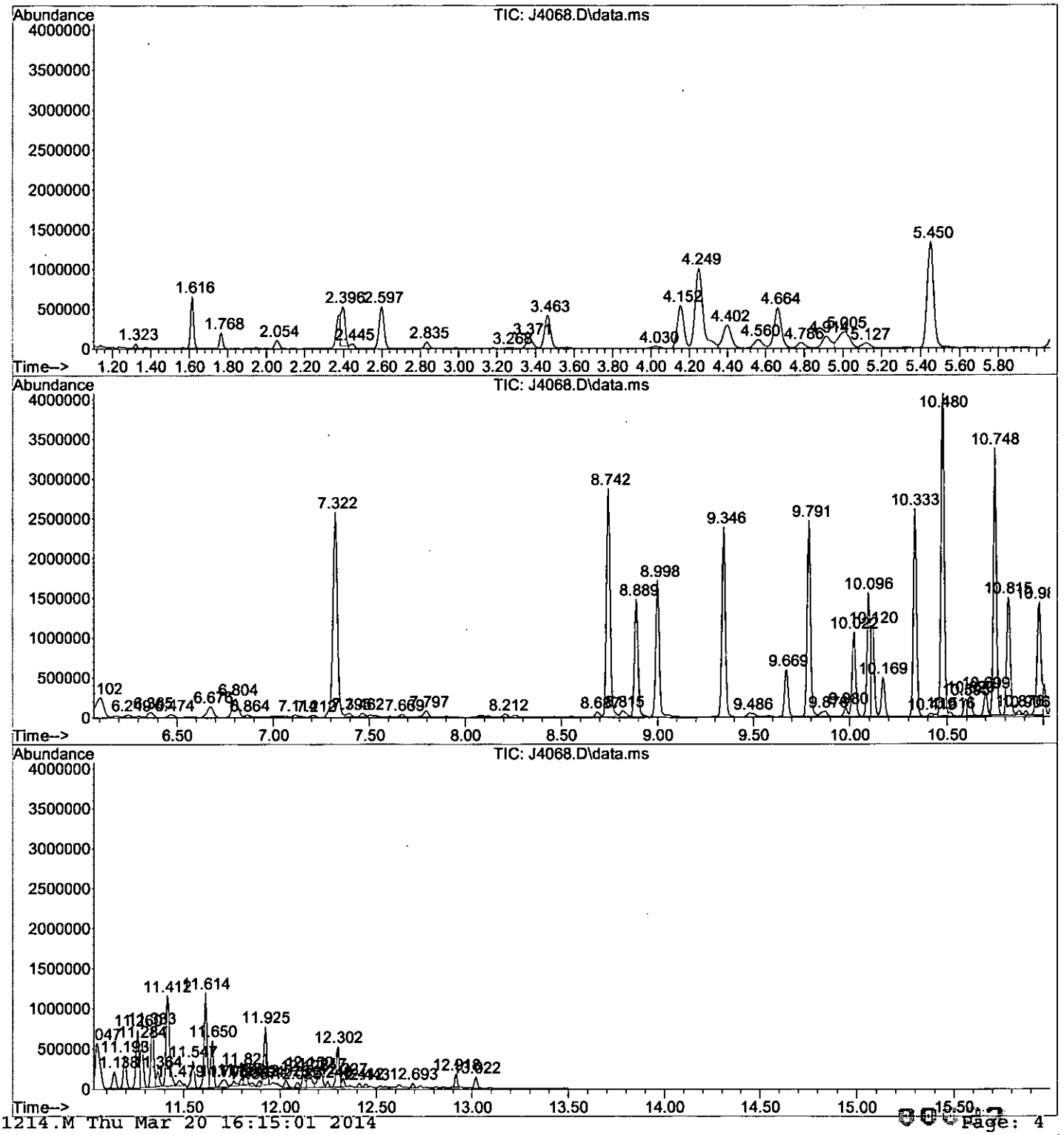
Sum of corrected areas: 70669038

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Thu Mar 20 16:15:01 2014 Page: 4

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

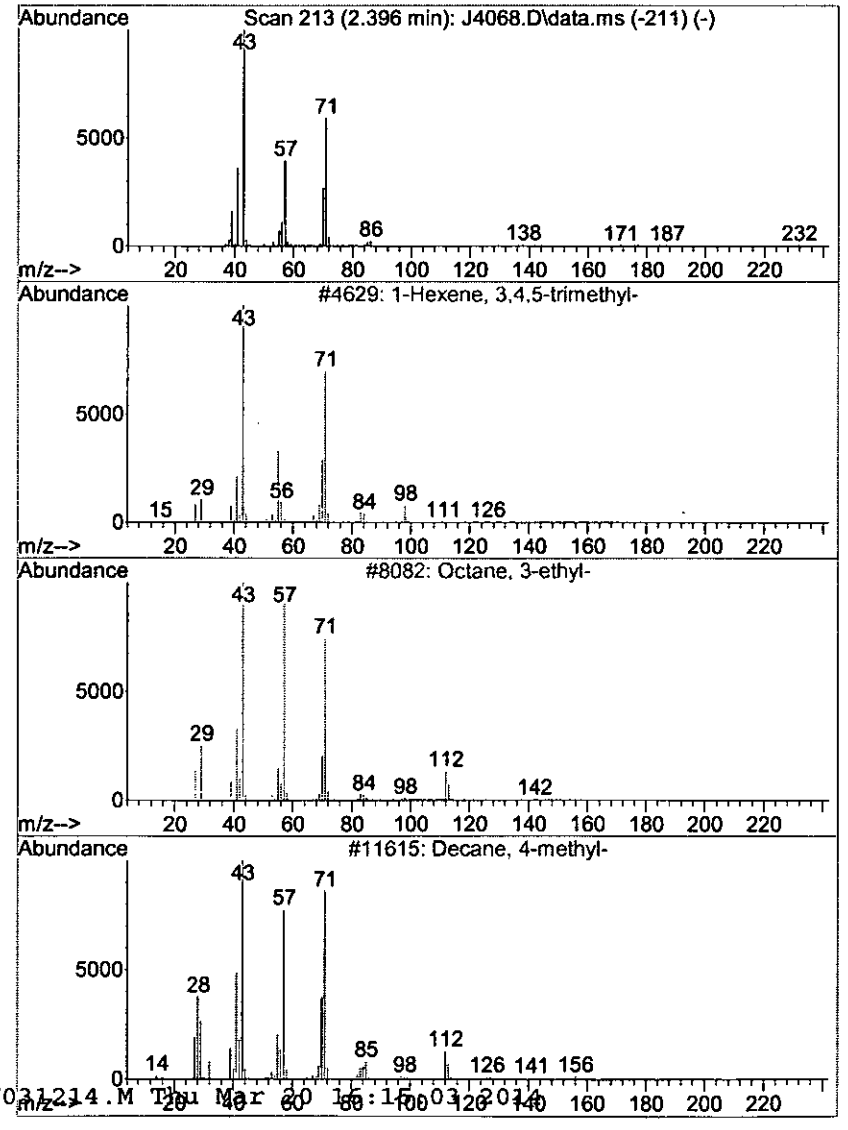
****

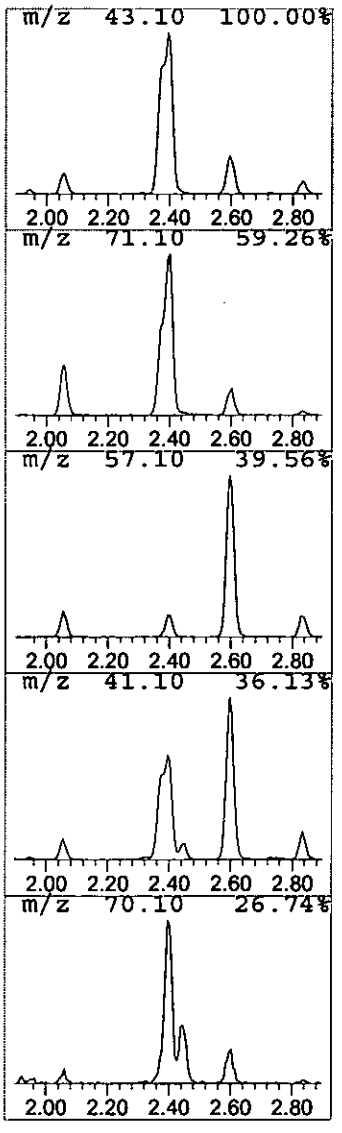
Peak Number 1 1-Hexene, 3,4,5-trimethyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.396	12.11 ppb	692793	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Hexene, 3,4,5-trimethyl-	126	C9H18	056728-10-0	50
2	Octane, 3-ethyl-	142	C10H22	005881-17-4	45
3	Decane, 4-methyl-	156	C11H24	002847-72-5	39
4	Octane, 3,3-dimethyl-	142	C10H22	004110-44-5	39
5	Nonane, 2,6-dimethyl-	156	C11H24	017302-28-2	39

unknown





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

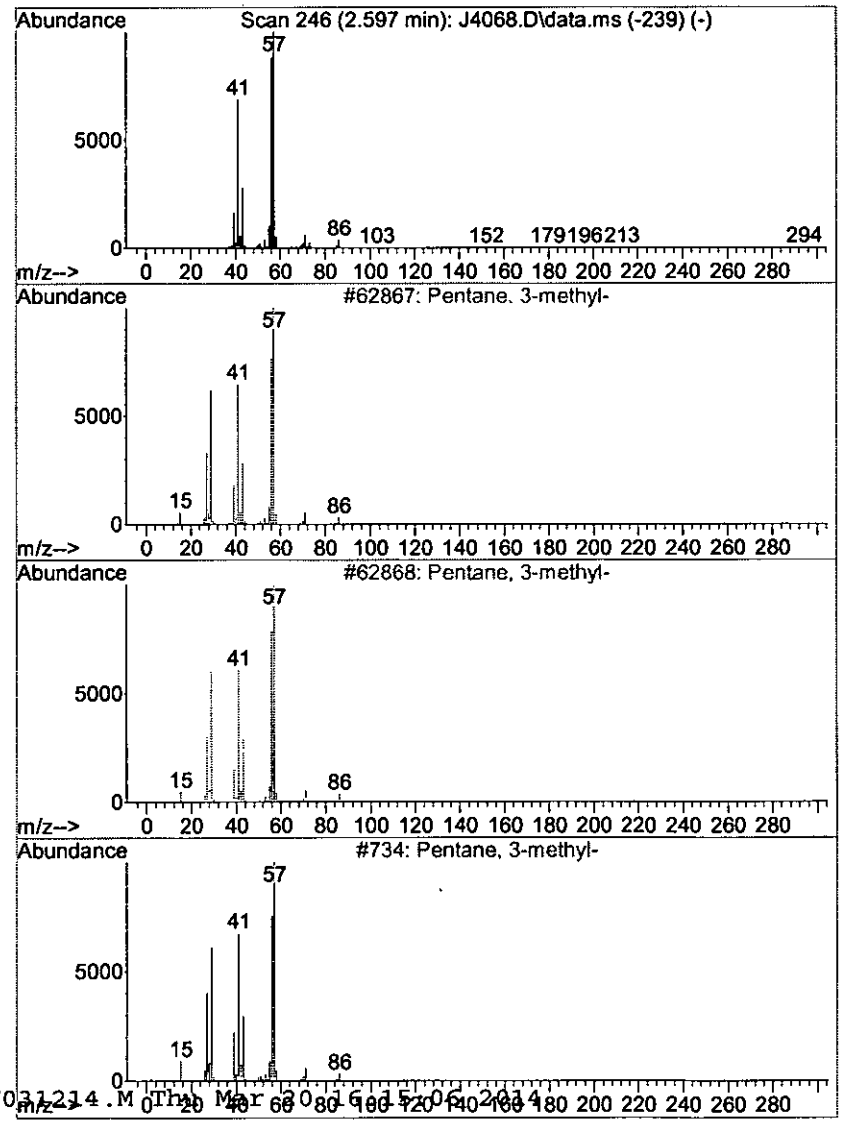
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

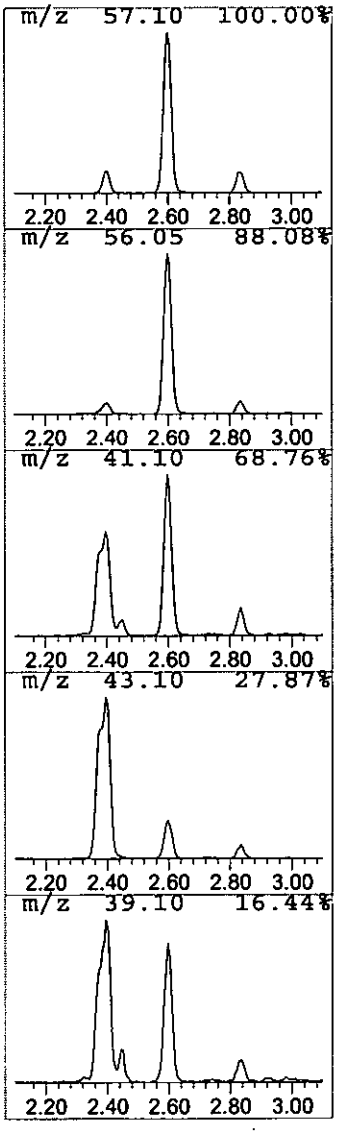
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Pentane, 3-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.597	16.36 ppb	936023	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
4	Pentane, 3-ethyl-2,2-dimethyl-	128	C9H20	016747-32-3	56
5	Oxirane, (1-methylethyl)-	86	C5H10O	001438-14-8	45





W031214.M Thu Mar 20 16:15:06 2014 Page: 6

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

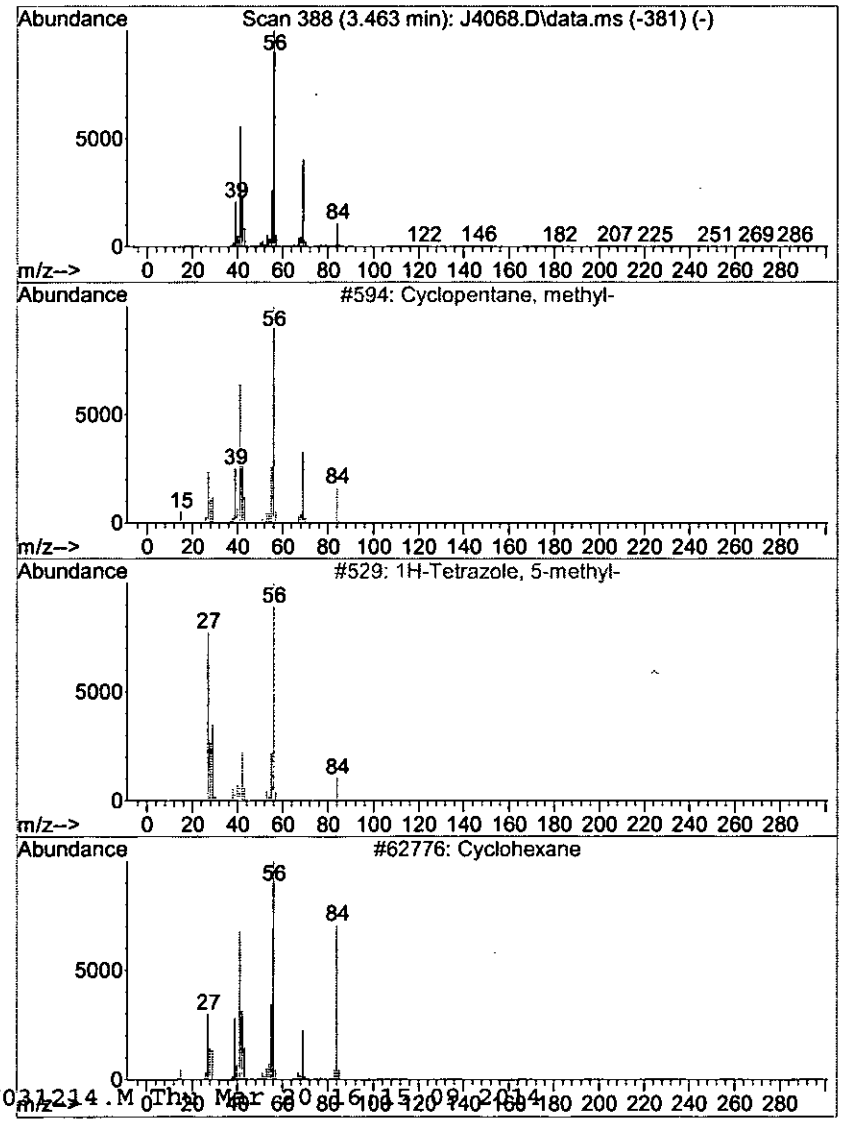
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

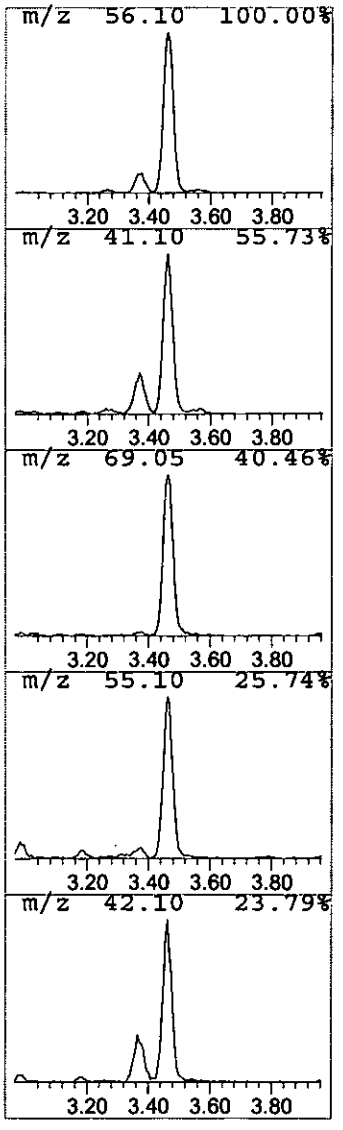
****

Peak Number 3 Cyclopentane, methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.463	16.16 ppb	924515	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	80
3	Cyclohexane	84	C6H12	000110-82-7	78
4	Cyclohexane	84	C6H12	000110-82-7	72
5	Cyclohexane	84	C6H12	000110-82-7	64





W031214.M Thu Mar 20 16:15:09 2014 Page: 7

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

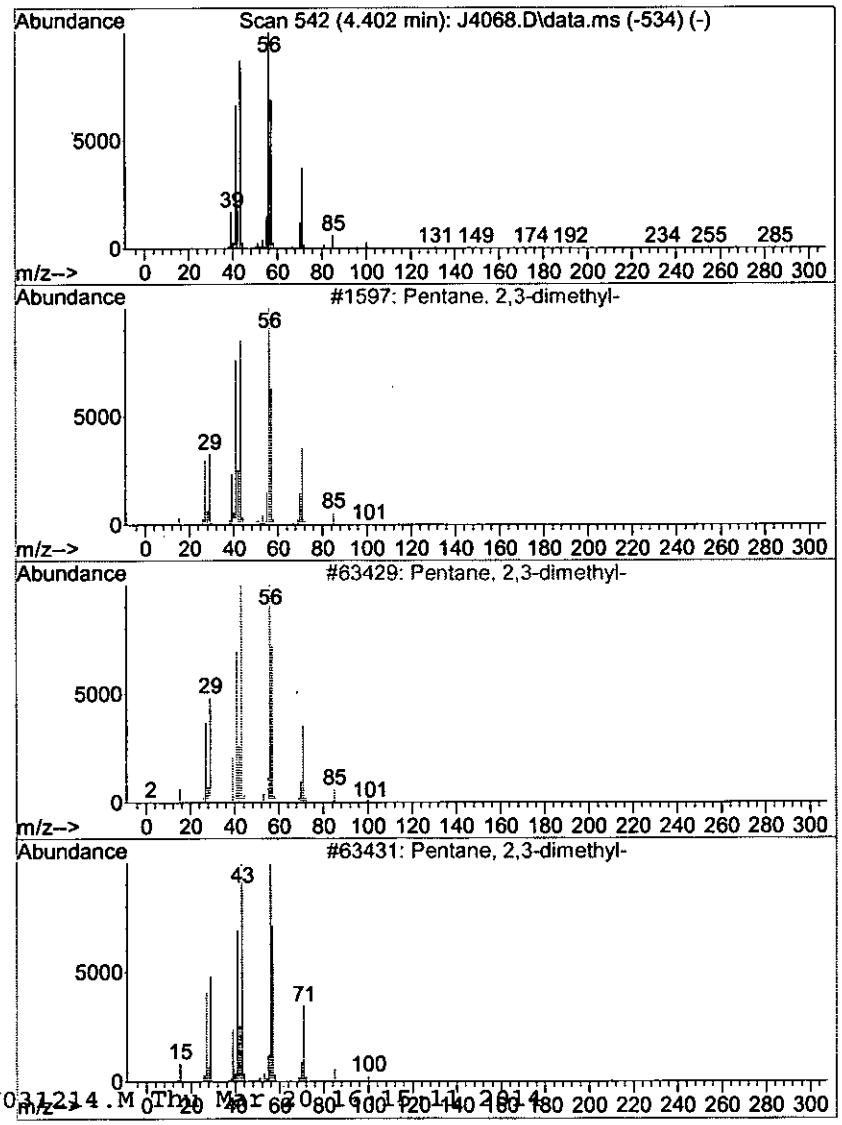
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

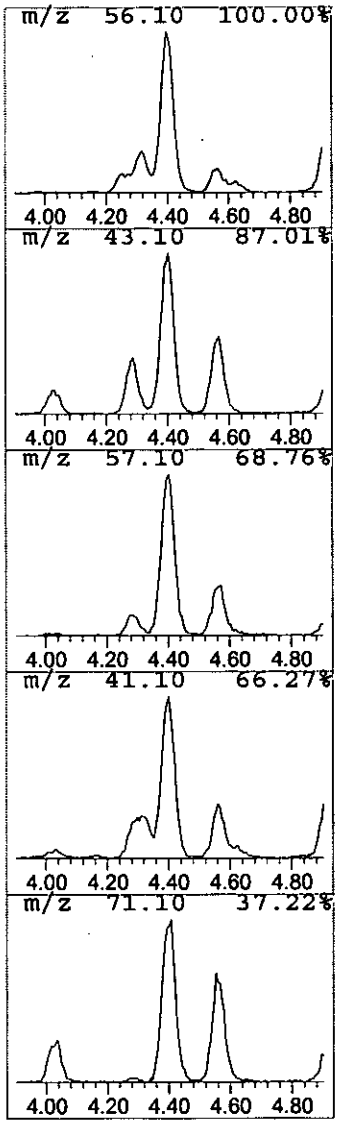
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Pentane, 2,3-dimethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.402	15.55 ppb	889564	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	94
2	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
3	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
4	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
5	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 5 Cyclopentane, 1,3-dimethyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.914	7.87 ppb	485120	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, 1,3-dimethyl-	98	C7H14	002453-00-1	83
2	Heptanol	116	C7H16O	053535-33-4	72
3	Cyclopentane, 1,3-dimethyl-, cis-	98	C7H14	002532-58-3	64
4	Cyclopentane, 1,2,3-trimethyl-	112	C8H16	002815-57-8	64
5	Cyclopentane, 1,2-dimethyl-, cis-	98	C7H14	001192-18-3	52

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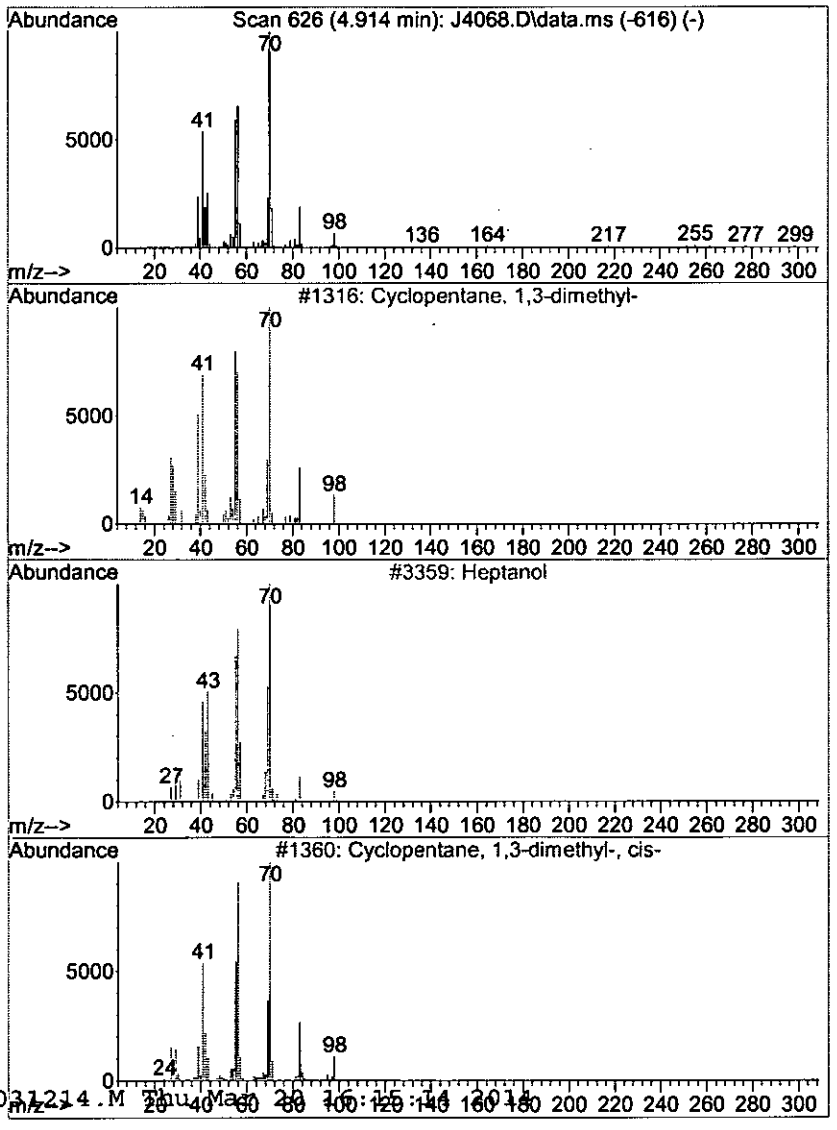

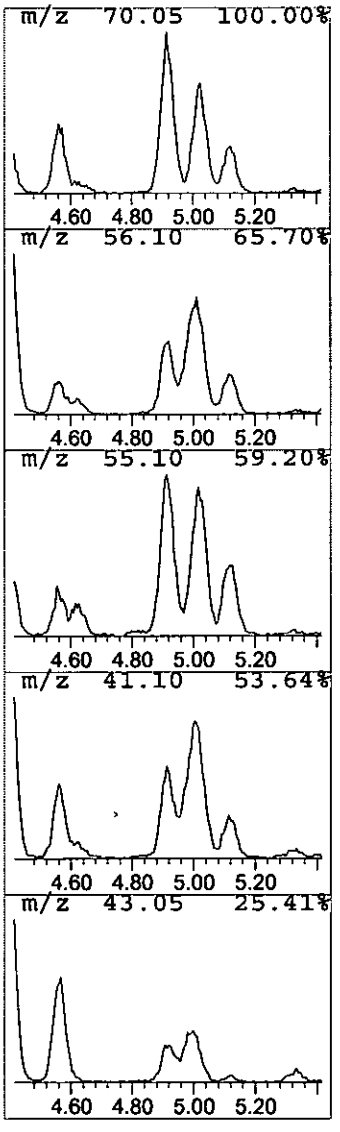

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 6 Heptane, 2,2-dimethyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.005	13.42 ppb	827282	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,2-dimethyl-	128	C9H20	001071-26-7	37
2	Butane, 2-azido-2,3,3-trimethyl-	141	C7H15N3	051677-41-9	28
3	1-Hexanol, 2-ethyl-	130	C8H18O	000104-76-7	28
4	Heptane, 1,1'-oxybis-	214	C14H30O	000629-64-1	28
5	1-Hexanol, 2-ethyl-	130	C8H18O	000104-76-7	25

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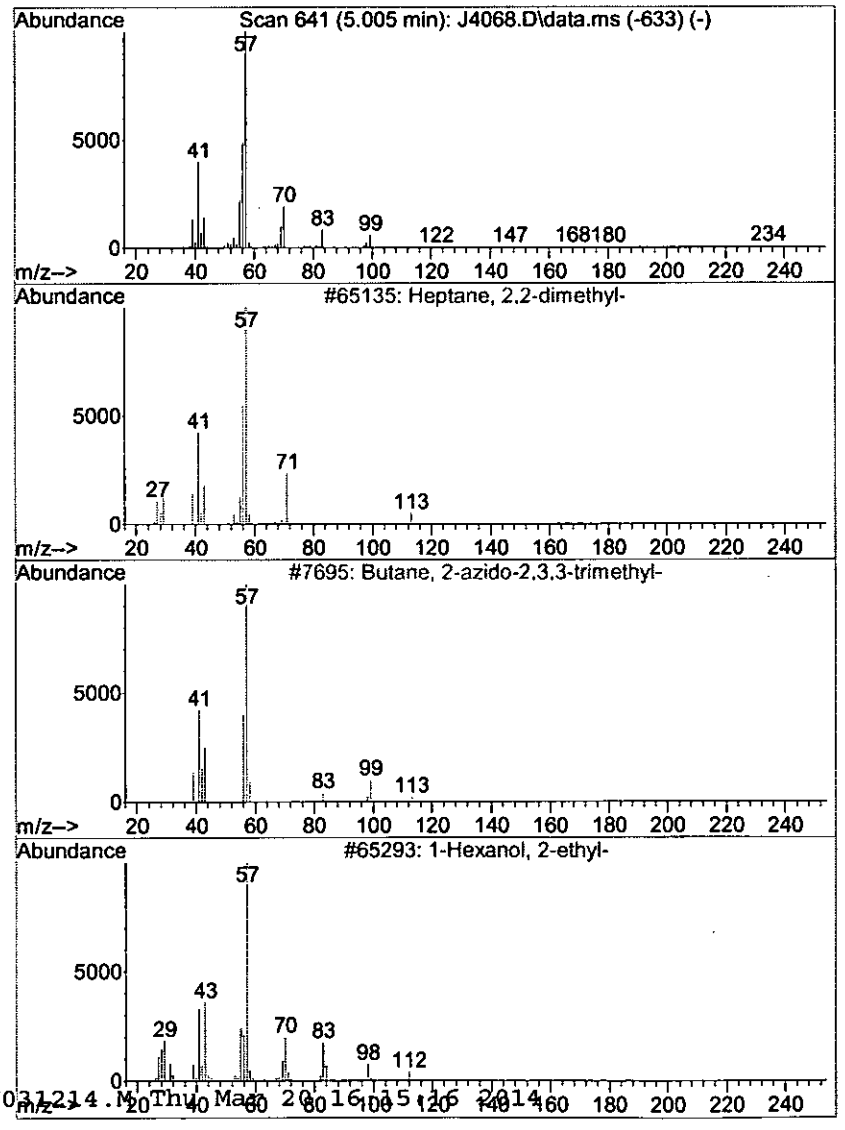

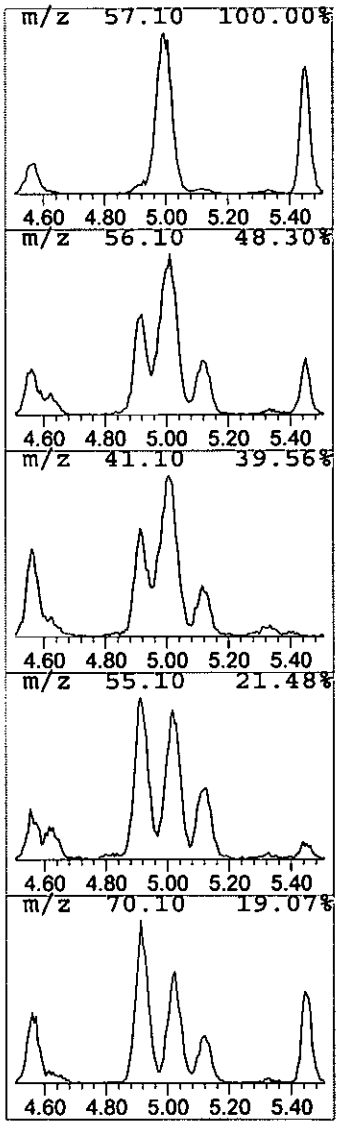

W031214.M Thu Mar 20 16:15:16 2014 Page: 10

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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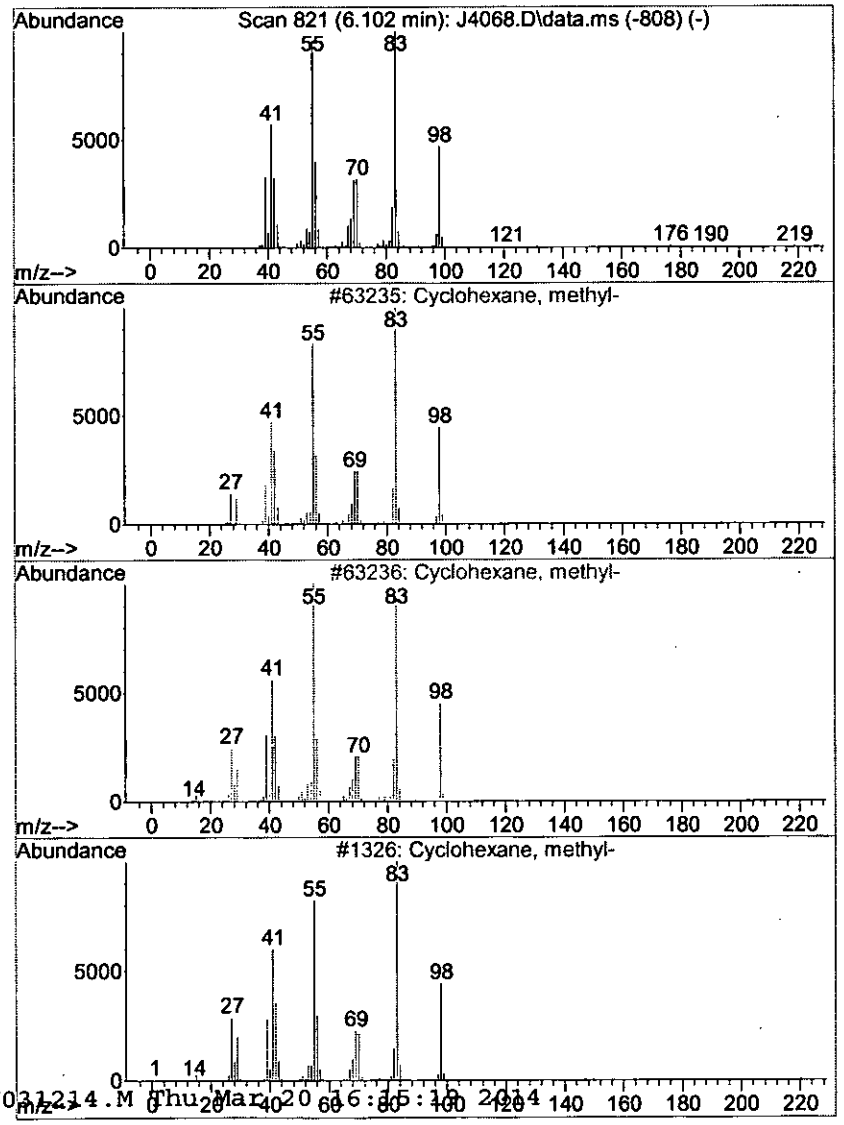
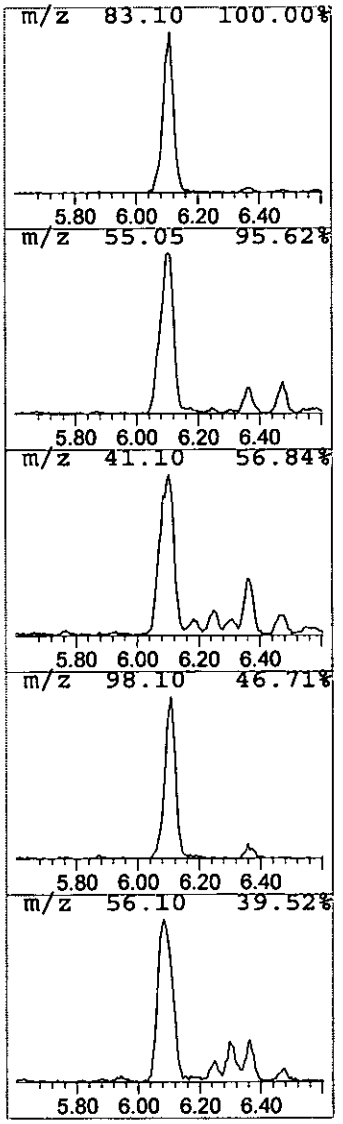
****

Peak Number 7 Cyclohexane, methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.102	12.41 ppb	765125	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	97
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	95
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	91
4	Cycloheptane	98	C7H14	000291-64-5	64
5	1H-Pyrazole, 4,5-dihydro-4,5-dim...	98	C5H10N2	028019-94-5	58





W031214.M Thu Mar 20 16:35:18 2014 Page: 11

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

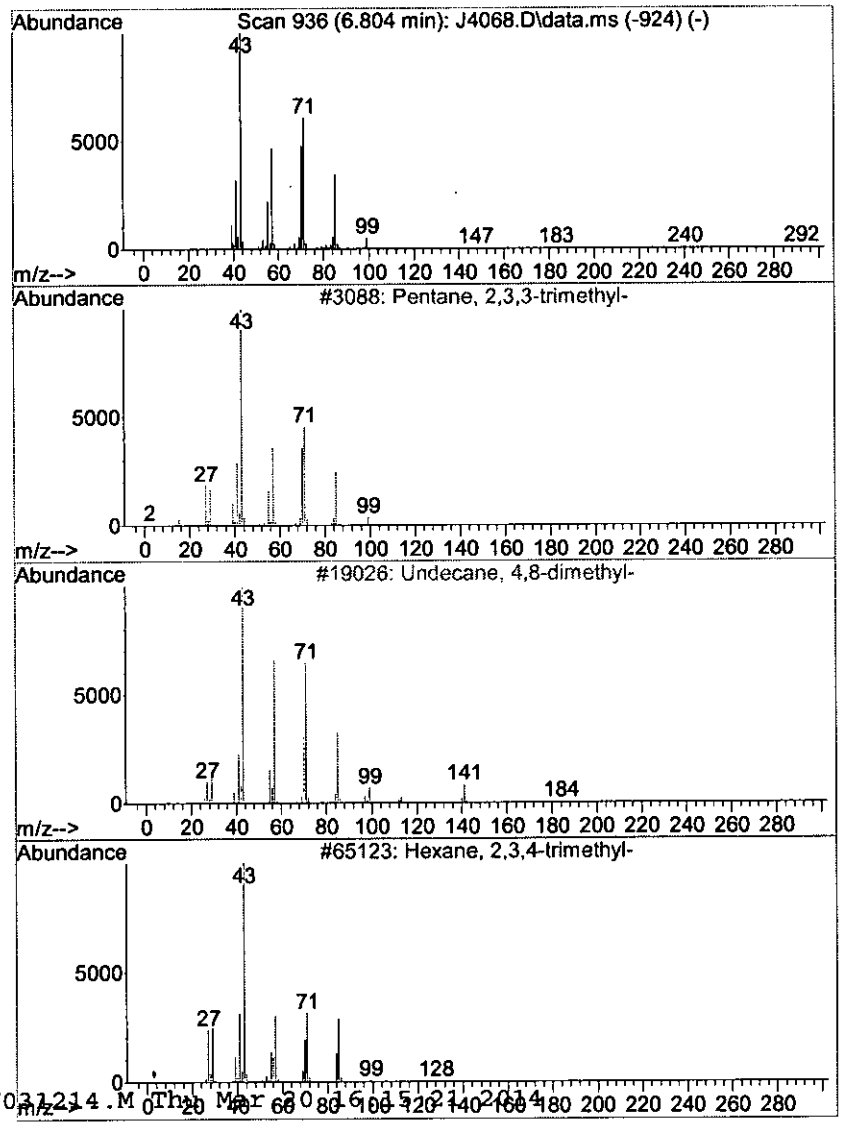
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

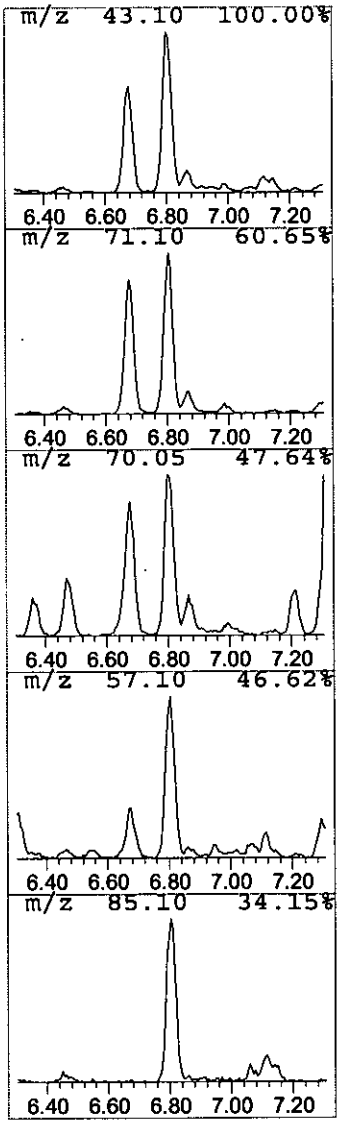
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number  8  Pentane, 2,3,3-trimethyl-      Concentration Rank 16
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.804	8.11 ppb	500179	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3,3-trimethyl-	114	C8H18	000560-21-4	90
2	Undecane, 4,8-dimethyl-	184	C13H28	017301-33-6	64
3	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	59
4	trans-2,3-Epoxydecane	156	C10H20O	054125-39-2	53
5	Hexane, 3,3-dimethyl-	114	C8H18	000563-16-6	53





W031214.M Thu Mar 20 16:15:21 2014 Page: 12

Library Search Compound Report

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Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

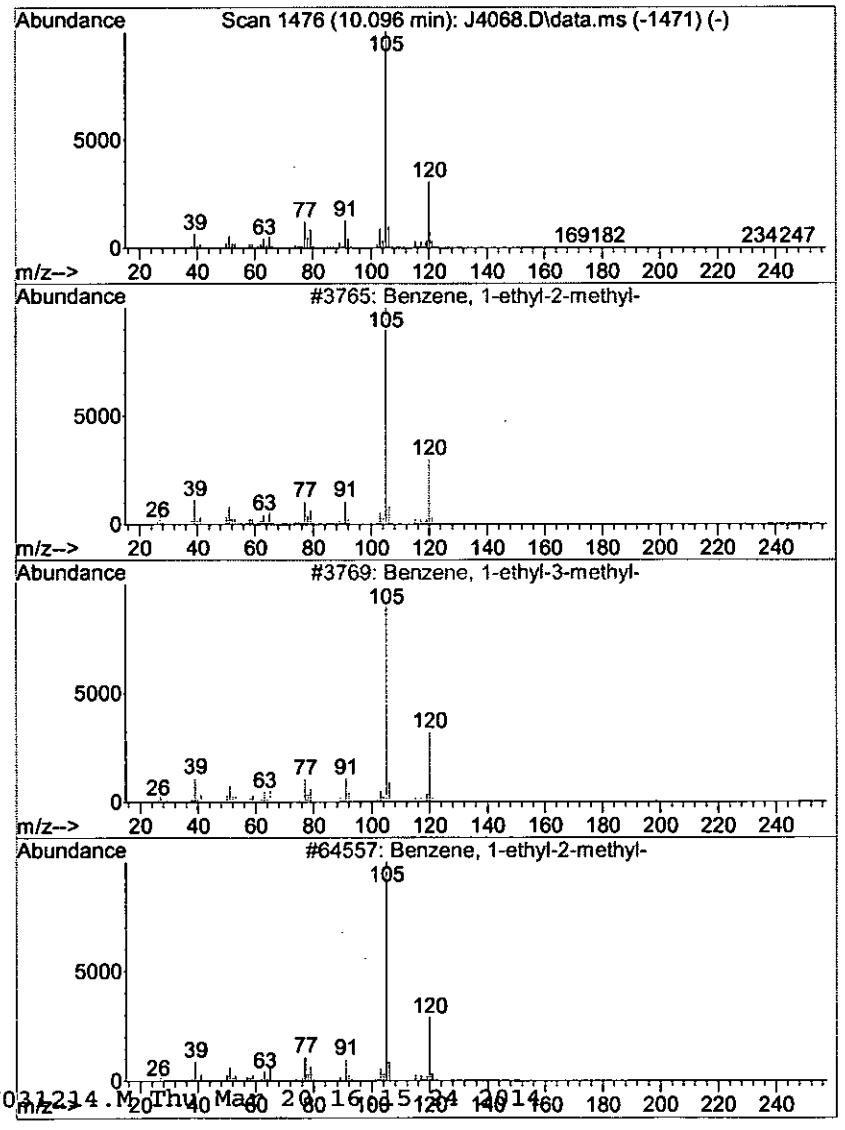
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

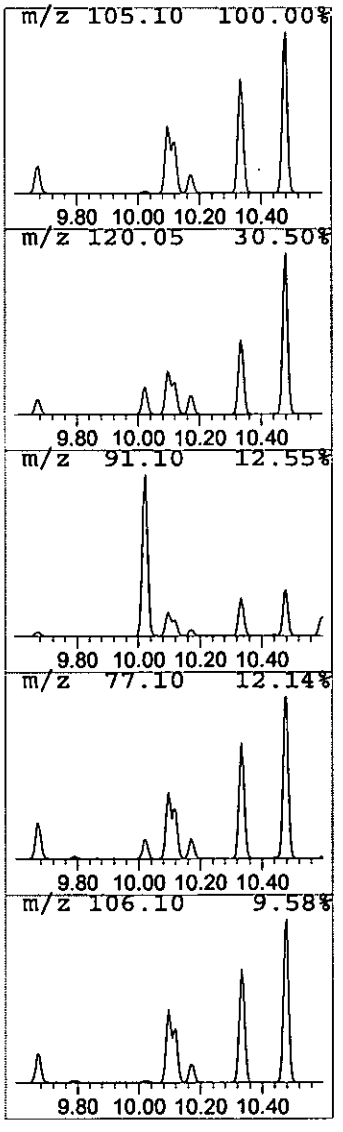
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number  9  Benzene, 1-ethyl-2-methyl-      Concentration Rank  4
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.096	25.52 ppb	1913840	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 10 Benzene, 1-ethyl-2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.333	40.57 ppb	3042410	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
(4)	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91

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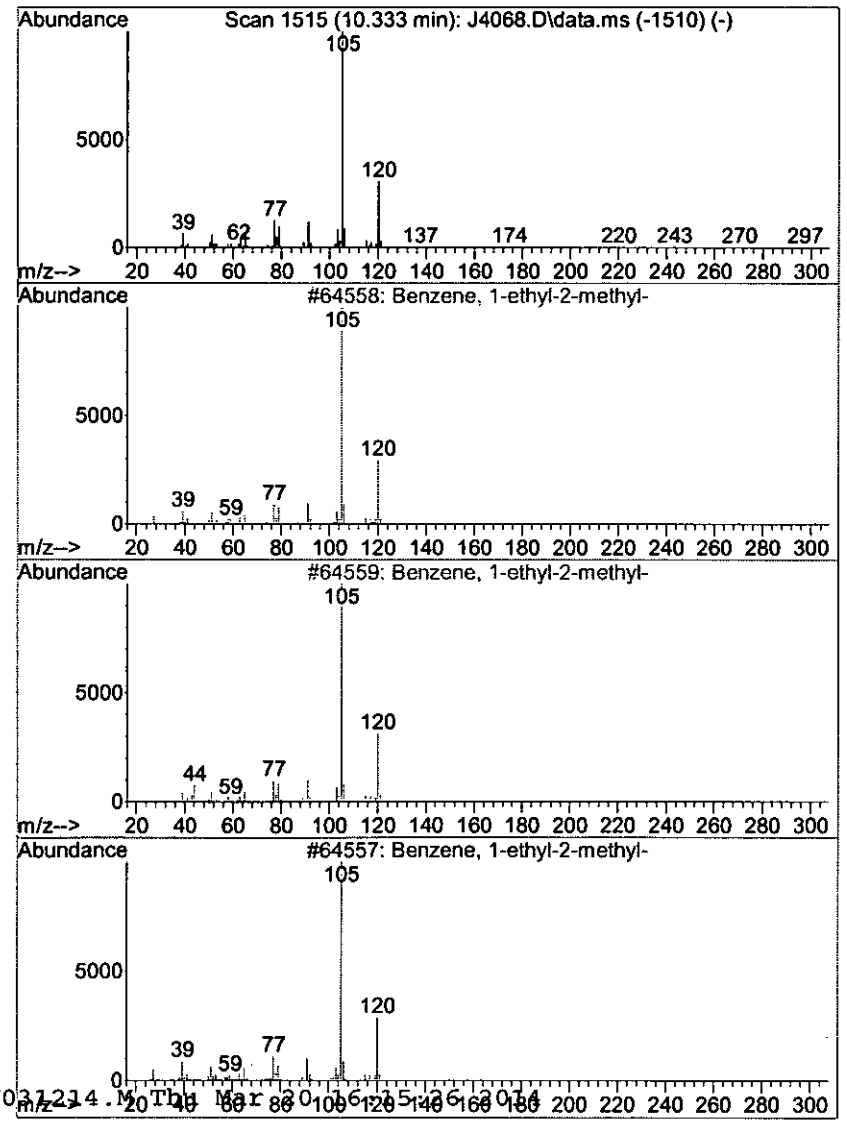

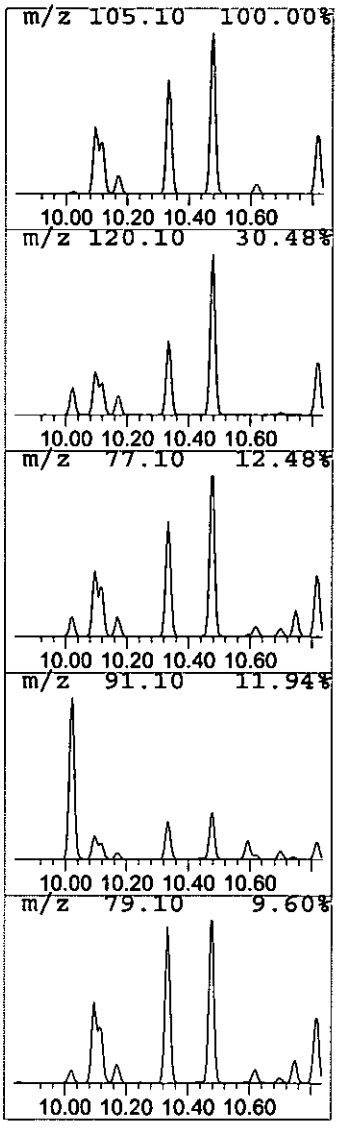

W031214.M Thu Mar 20 06:25:26 2014 Page: 14

Library Search Compound Report

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Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

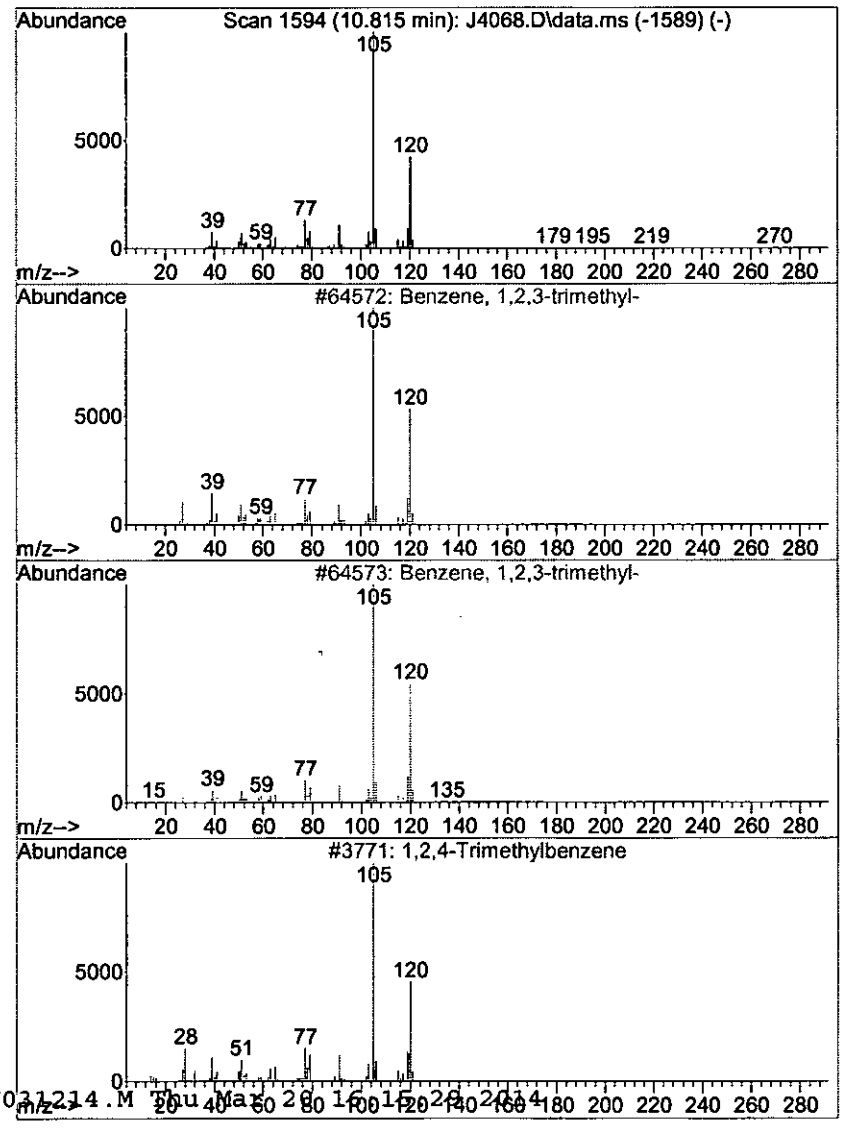
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

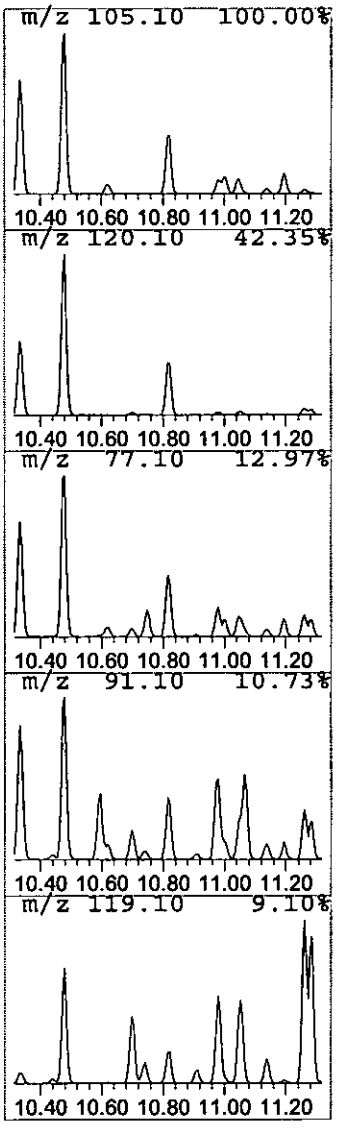
****

Peak Number 11 Benzene, 1,2,3-trimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.815	25.66 ppb	1924360	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	94
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94





W031214.M Thu Mar 20 16:15:20 2014 001 Page: 15

Library Search Compound Report

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Acq On : 19 Mar 2014 6:54 pm
Operator : K.Ruest
Sample : R1401764-001|2.0
Misc : PARSONS 9913 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 12 Benzene, 1-propenyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.980	28.04 ppb	2103280	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-propenyl-	118	C9H10	000637-50-3	55
2	Indane	118	C9H10	000496-11-7	55
3	Benzene, cyclopropyl-	118	C9H10	000873-49-4	55
4	Benzene, 2-propenyl-	118	C9H10	000300-57-2	55
5	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	55

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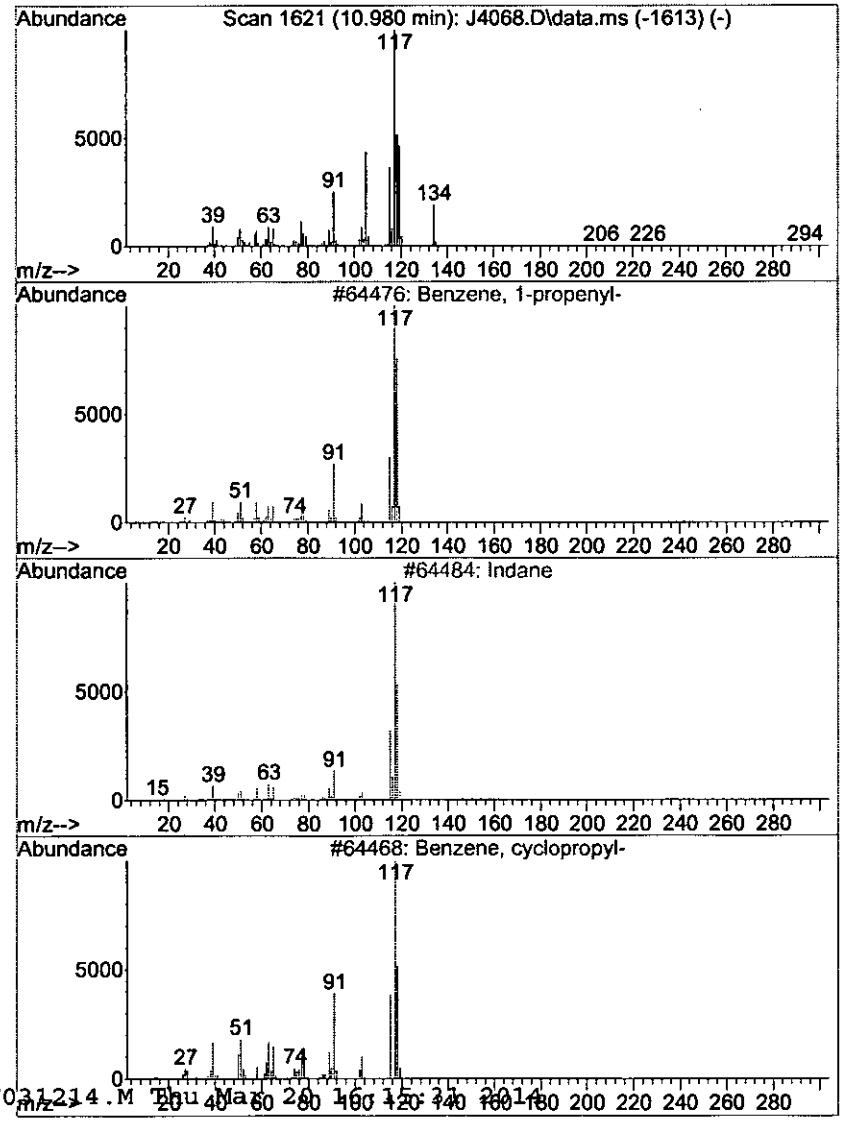

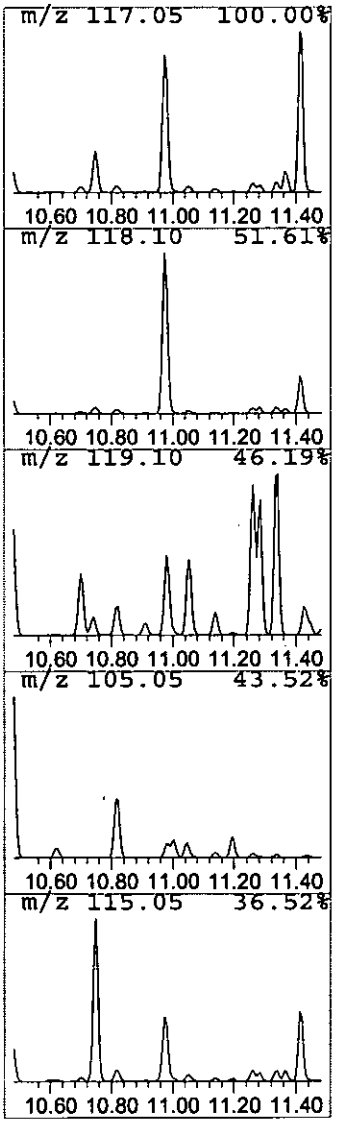

W031214.M Thu Mar 20 16:15:31 2014 001 Page: 16

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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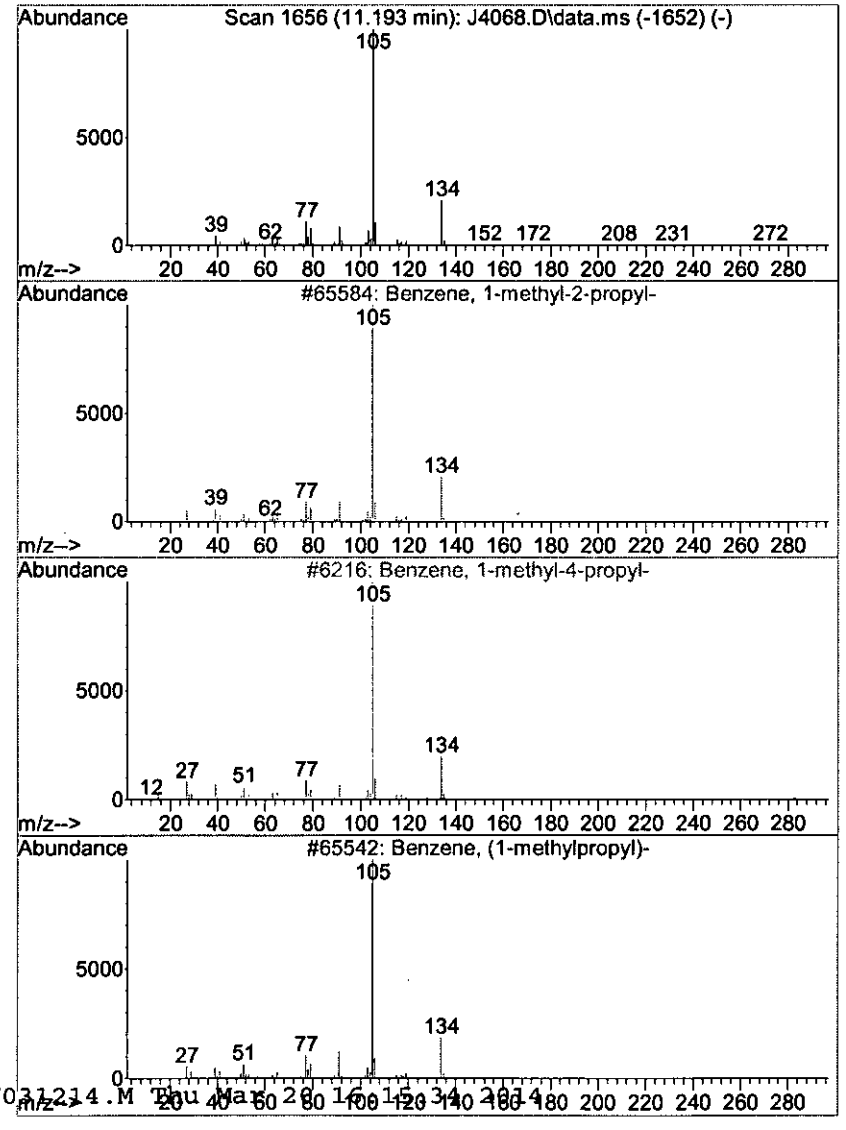
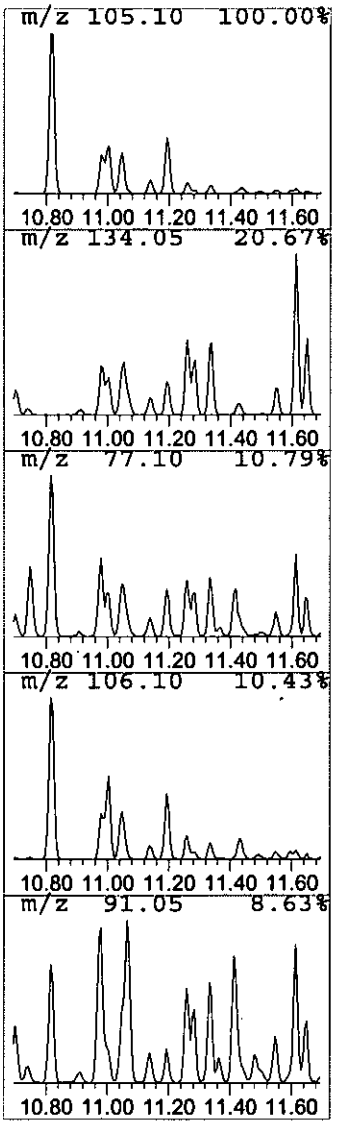
****

Peak Number 13 Benzene, 1-methyl-2-propyl- Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.193	5.92 ppb	443967	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	94
2	Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	91
3	Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	91
4	Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	90
5	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	90





Library Search Compound Report

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Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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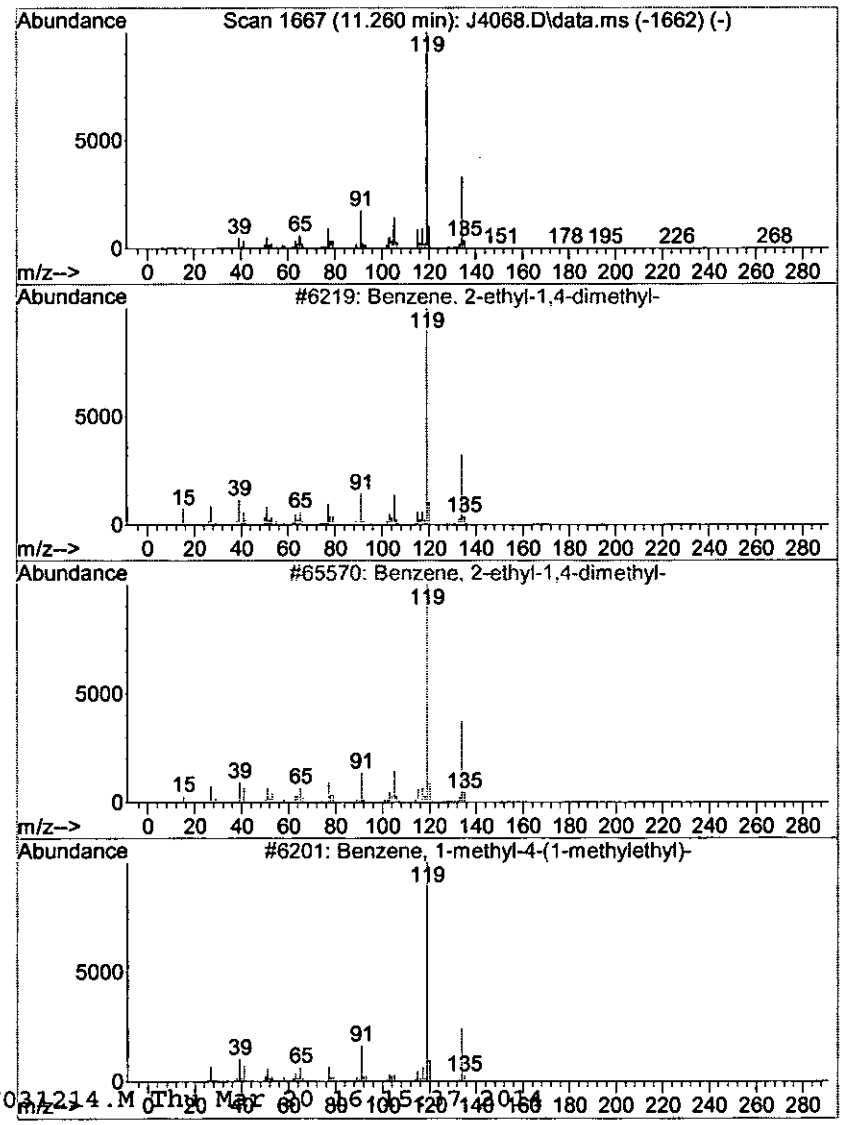
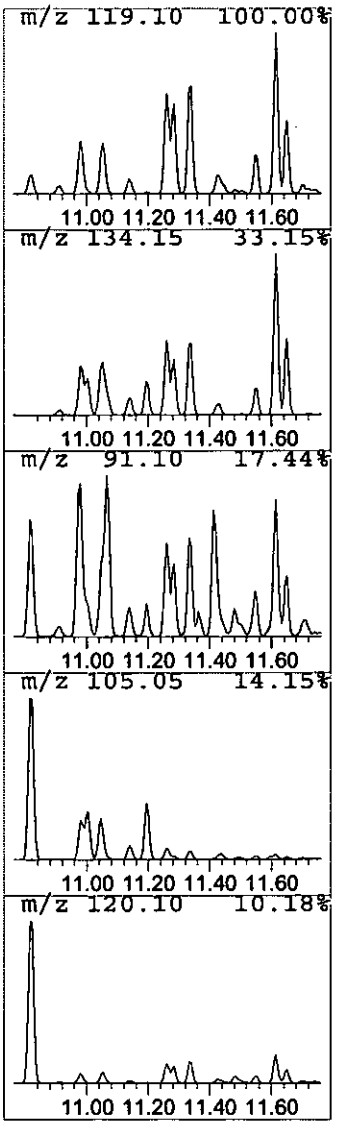
****

Peak Number 14 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.260	11.39 ppb	854388	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	97
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95





Library Search Compound Report

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Data File : J4068.D
Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

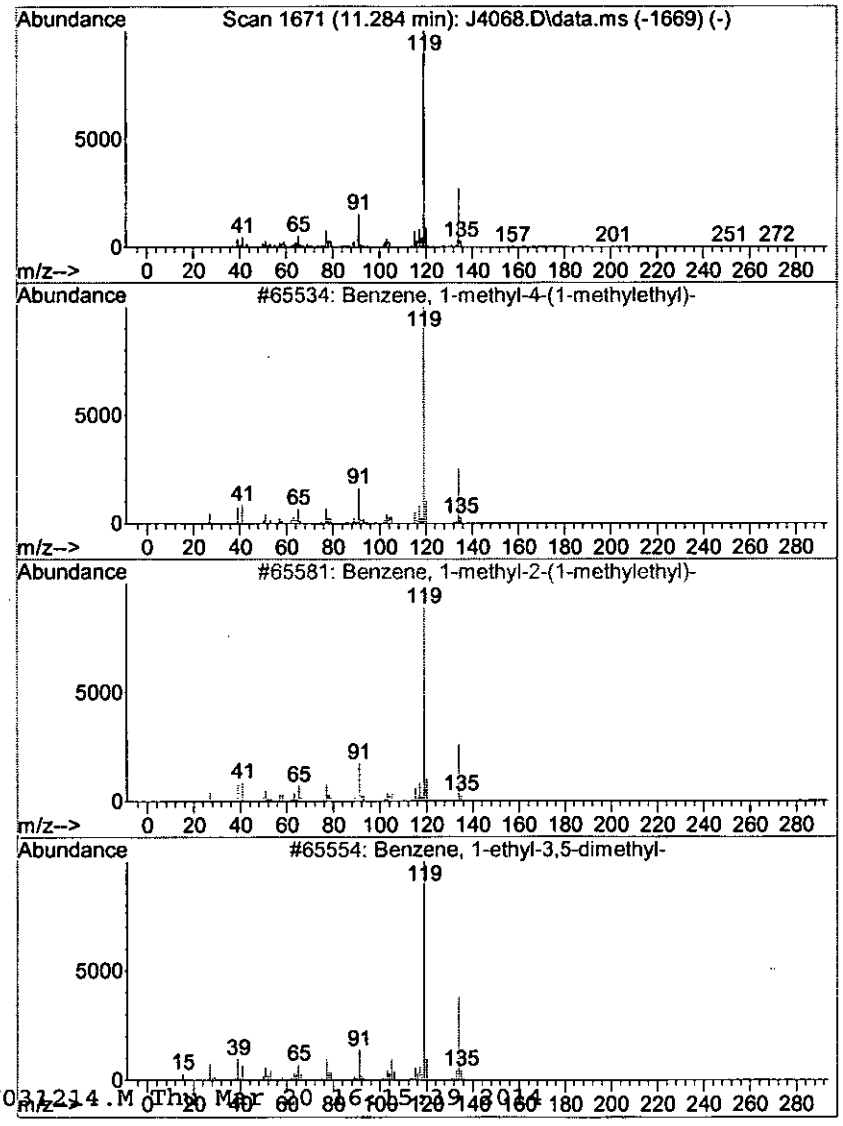
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

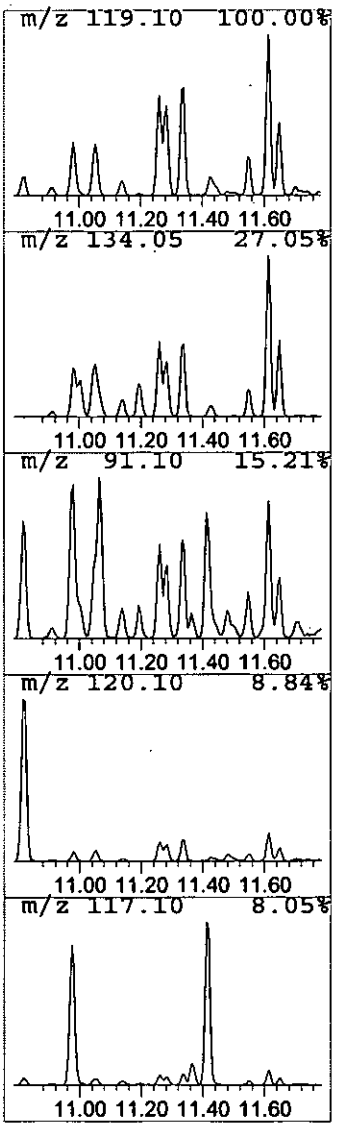
****

Peak Number 15 Benzene, 1-methyl-4-(1-meth... Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.284	7.19 ppb	539343	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
2	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
3	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	91
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	91
5	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	91





W031214.M Thu Mar 20 16:05:39 2014 Page: 19

Library Search Compound Report

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Data File : J4068.D
Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

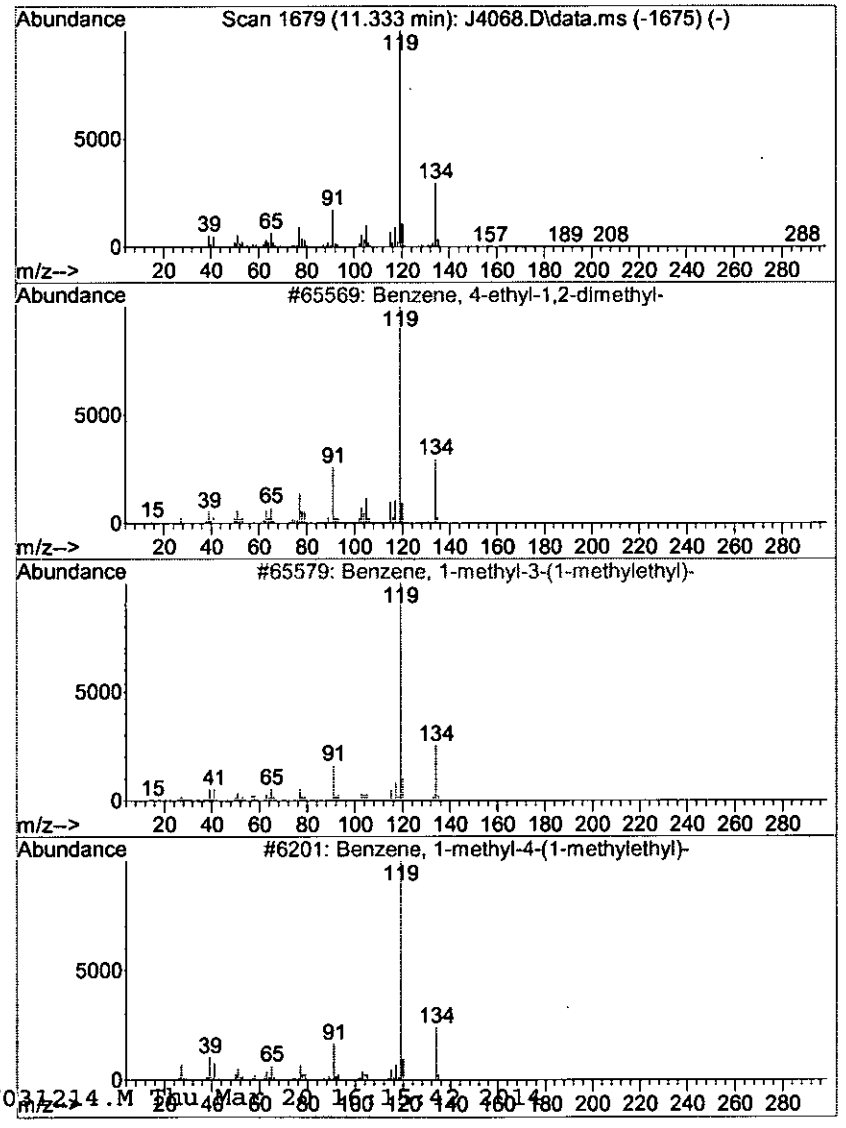
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

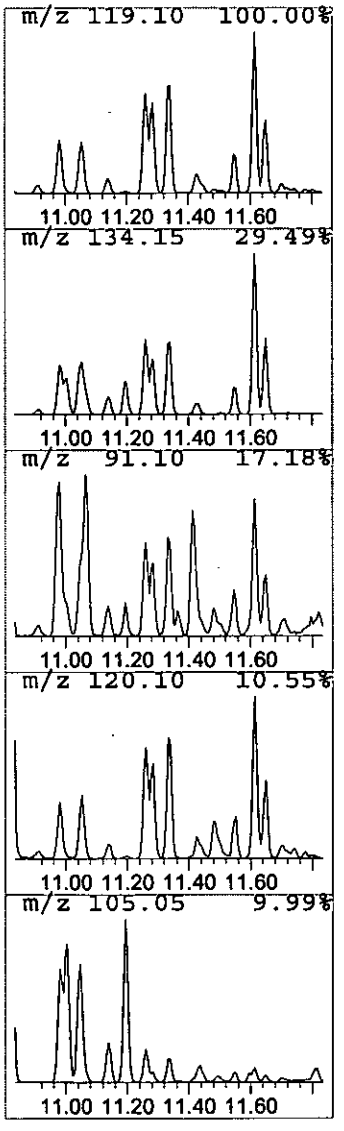
****

Peak Number 16 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.333	11.03 ppb	827595	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
4	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
5	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94





W031214.M Thu Mar 20 16:15:42 2014 Page: 20

00106

Library Search Compound Report

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Data File : J4068.D
Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

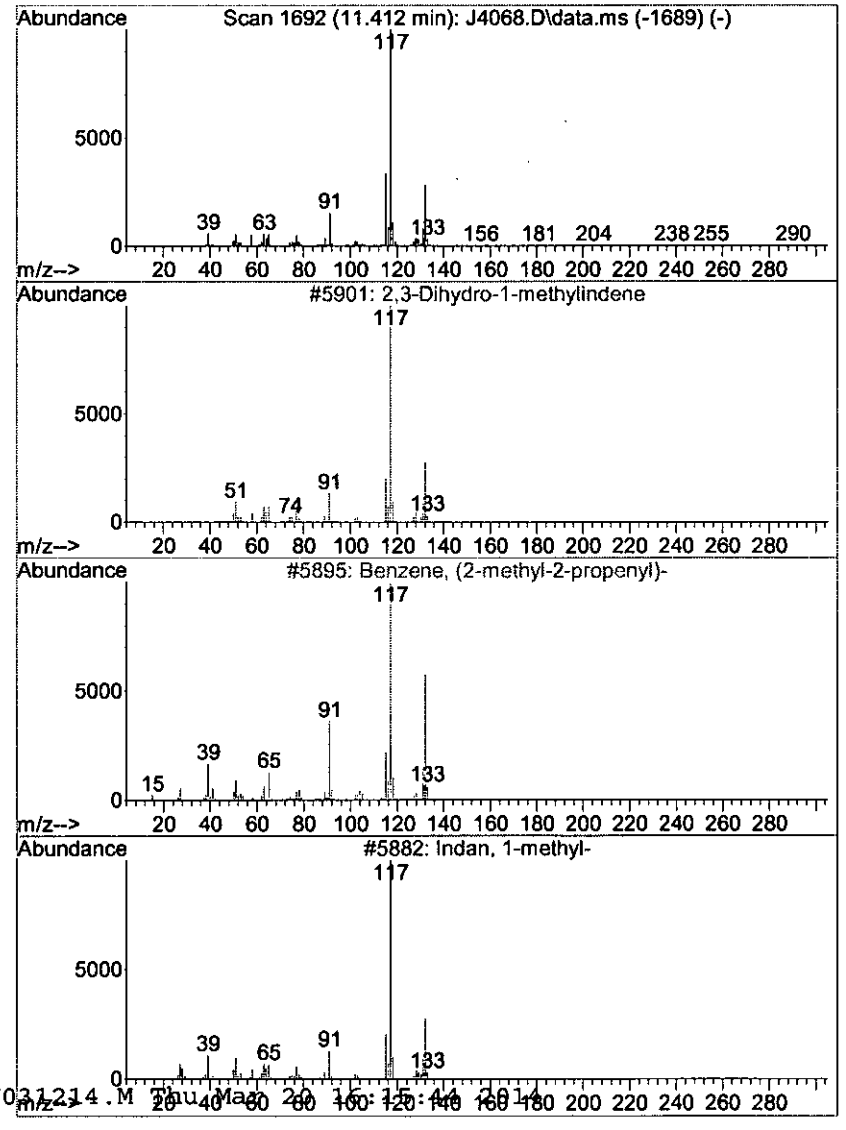
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

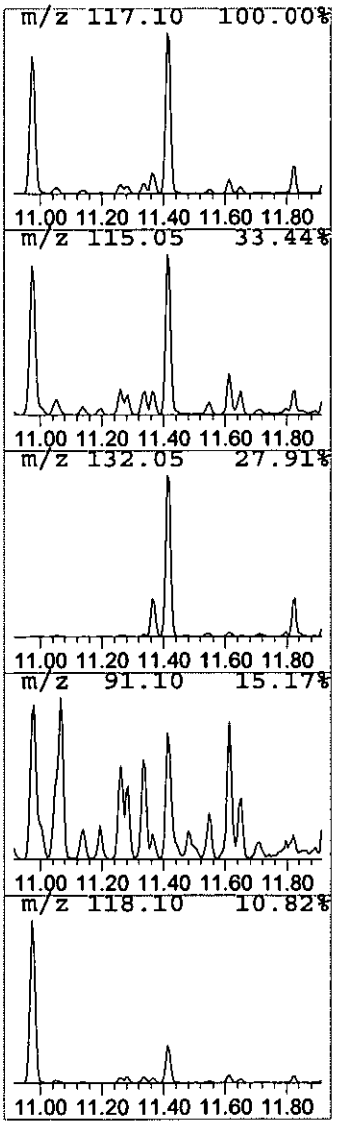
****

Peak Number 17 2,3-Dihydro-1-methylindene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.412	18.94 ppb	1420300	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	90
2	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
3	Indan, 1-methyl-	132	C10H12	000767-58-8	87
4	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	83
5	Indan, 1-methyl-	132	C10H12	000767-58-8	81





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

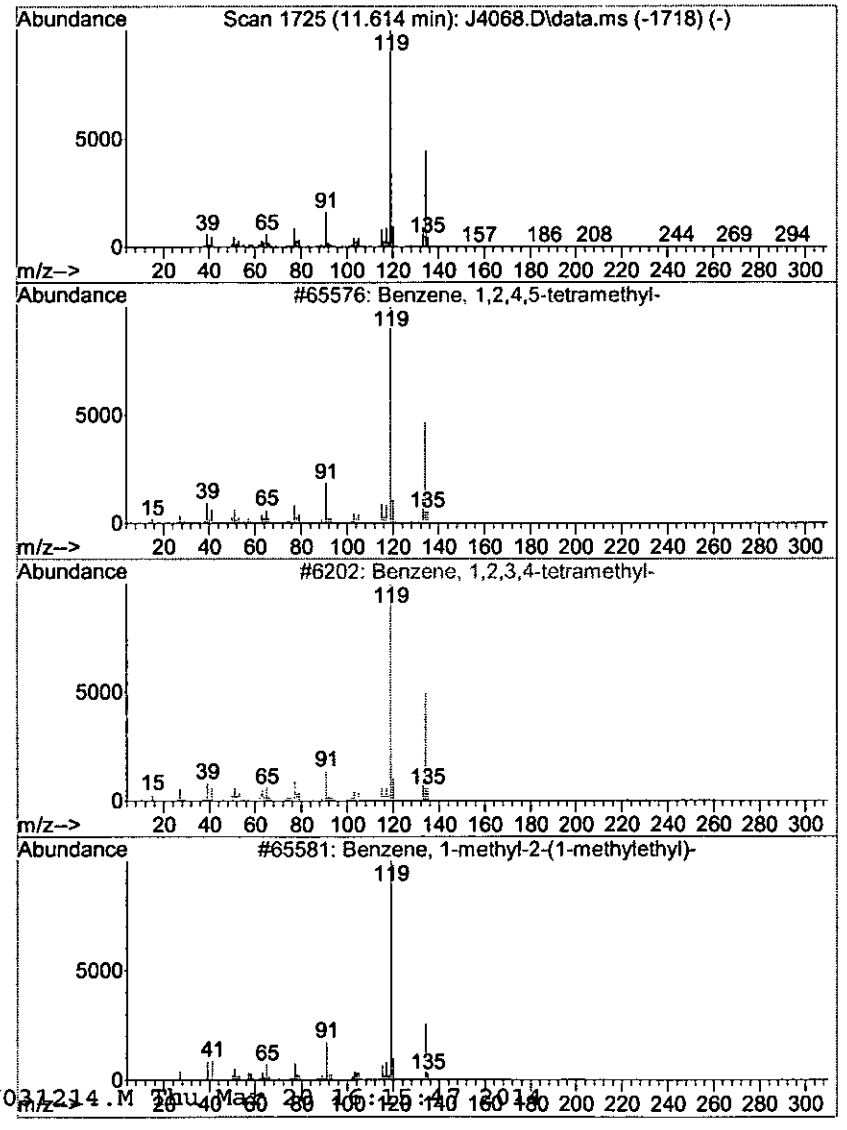
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

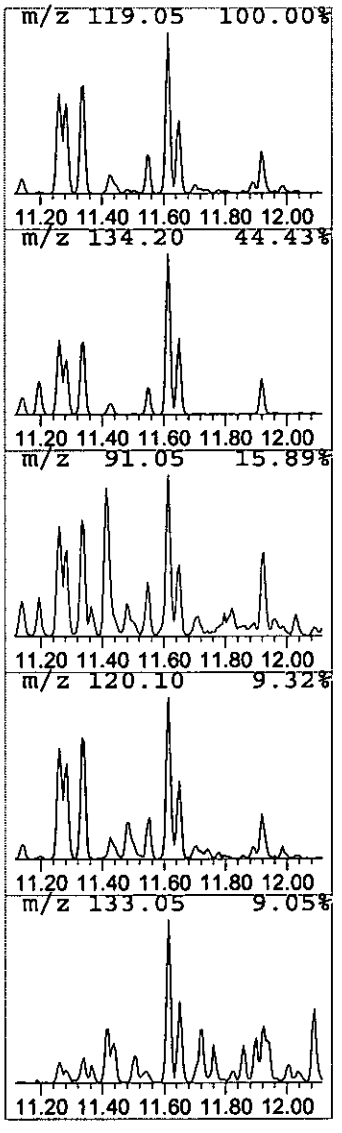
****

Peak Number 18 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.614	16.56 ppb	1241900	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
4	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94
5	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

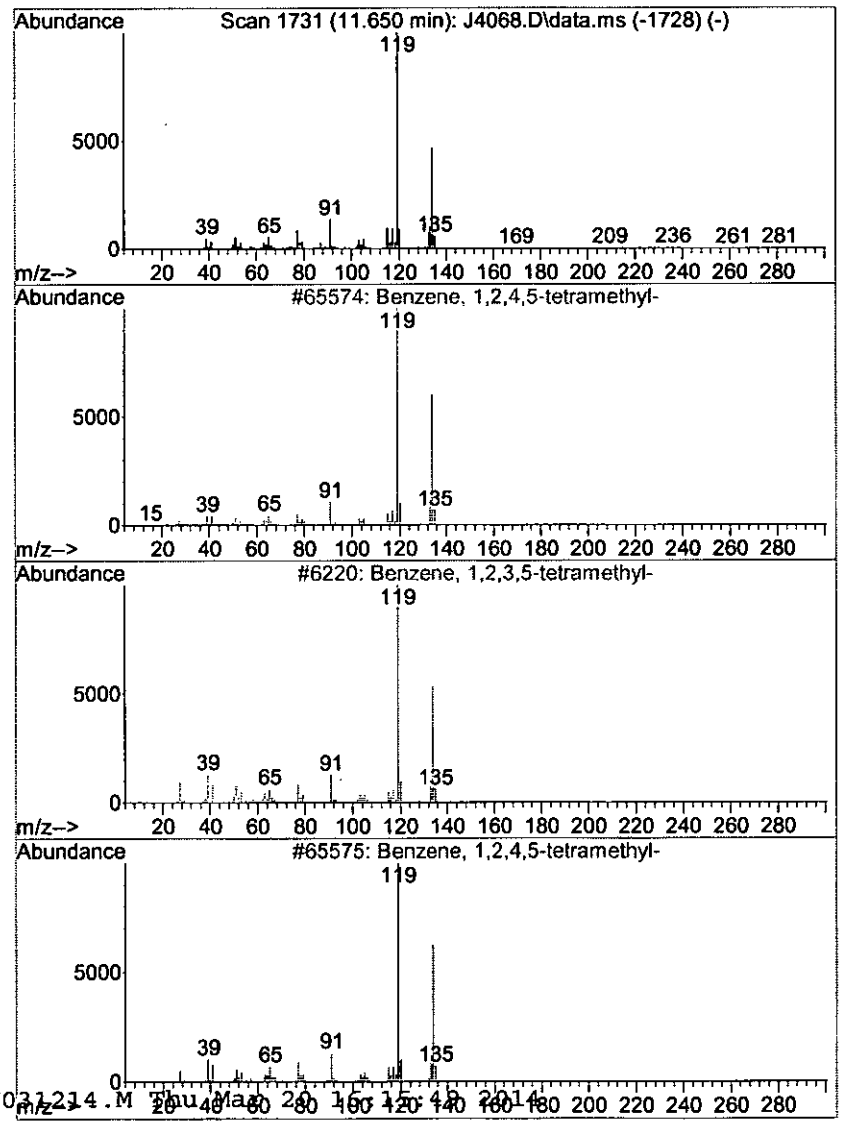
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

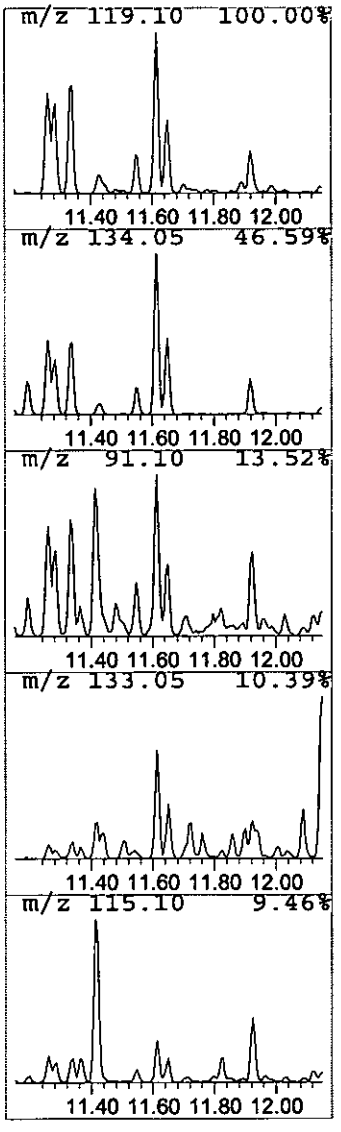
**********
Peak Number 19  Benzene, 1,2,4,5-tetramethyl-   Concentration Rank 17
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	7.88 ppb	590916	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94
3	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	92
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	91

already called





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4068.D
Acq On    : 19 Mar 2014    6:54 pm
Operator  : K.Ruest
Sample    : R1401764-001|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

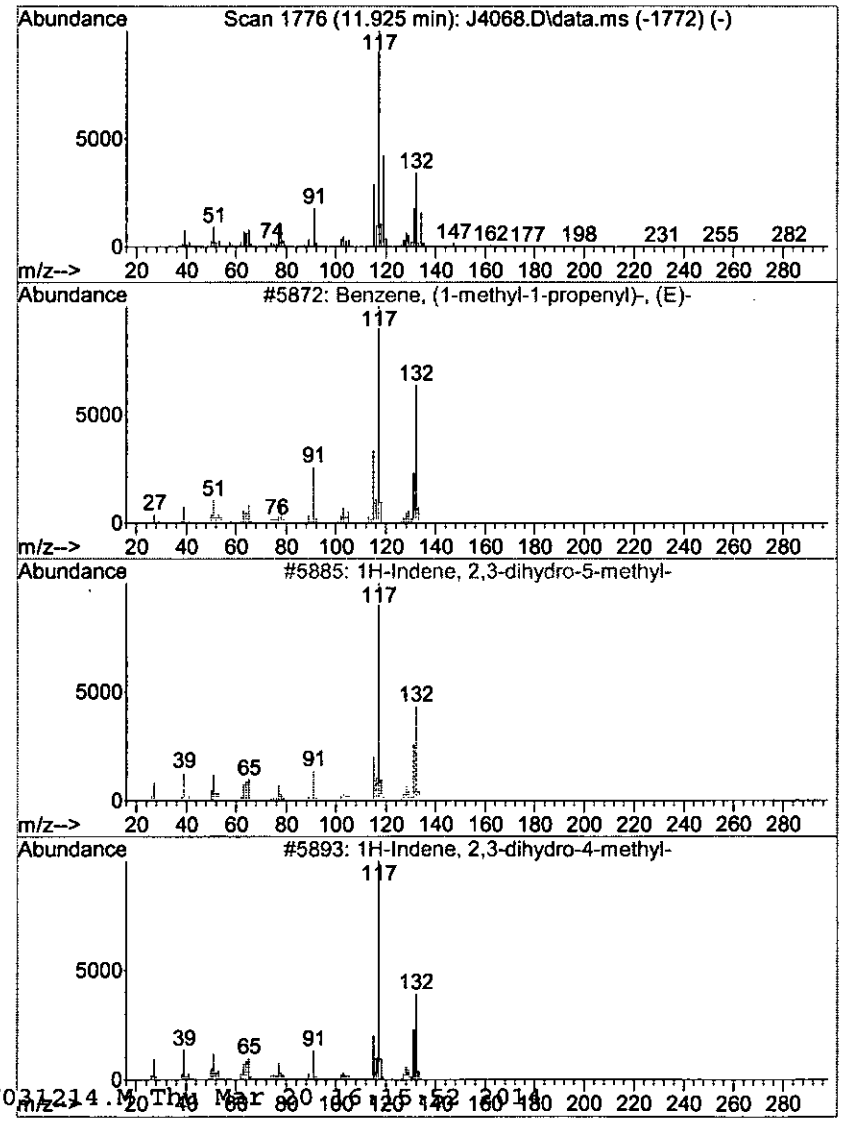
****

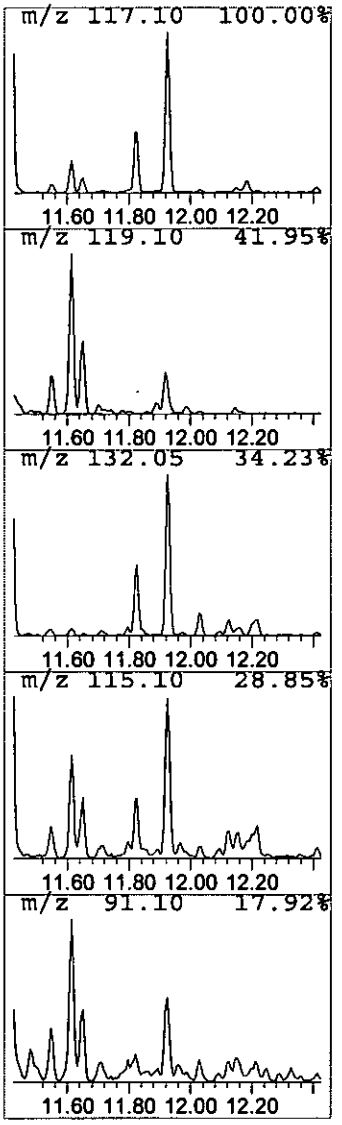
Peak Number 20 Benzene, (1-methyl-1-propen... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.925	10.07 ppb	755423	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	70
2	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	70
3	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	70
4	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	70
5	Indan, 1-methyl-	132	C10H12	000767-58-8	70

unknown





W031214.M Thu Mar 20 16:15:52 2014

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1230
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 17:49
Sample Name:	FTMM-53-GW-699MW01-10.55	**Units:**	µg/L
Lab Code:	R1401764-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4066.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.31**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1230
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 17:49
Sample Name:	FTMM-53-GW-699MW01-10.55	**Units:**	µg/L
Lab Code:	R1401764-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4066.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.55**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.25**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.42**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/19/14 17:49	
Dibromofluoromethane	101	85-115	3/19/14 17:49	
Toluene-d8	95	85-120	3/19/14 17:49	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 1749

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-10.55	**Units:**	µg/L
Lab Code:	R1401764-002	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-002|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4066.D
Misc : PARSONS 9913 T4
Acq On : 19 Mar 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 18:04:39 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	865888	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1356548	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1221399	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	571371	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	396217	50.45	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.90%				
48) surr1,1,2-dichloroetha...	4.664	65	468570	52.38	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 104.76%				
65) SURR3,Toluene-d8	7.322	98	1567857	47.51	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.02%				
70) SURR2,BFB	9.791	95	596881	48.48	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.96%				
Target Compounds							Qvalue
15) Acetone	2.049	43	3123	1.82	ppb		~~72~~
20) Allyl Chloride	2.207	76	1692	~~0.39~~	ppb	#	1
21) Methyl Acetate	2.372	43	~~17586~~	4.55	ppb	#	60
24) Acrylonitrile	~~2.609~~	53	531	0.28	ppb	#	7
51) Iso-Butyl Alcohol	4.566	43	1765	7.69	ppb	#	69
61) 2-Nitropropane	6.810	41	2379	2.22	ppb	#	1
~~69) 1,1,2-Trichloroethane~~	~~7.797~~	~~97~~	~~1572~~	~~0.26~~	~~ppb~~	~~#~~	~~12~~
82) Ethylbenzene	8.889	106	6234	0.55	ppb	#	87
89) Isopropylbenzene	9.675	105	7509	0.25	ppb		86
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1475~~	~~3.22~~	~~ppb~~	~~#~~	~~14~~
95) n-Propylbenzene	10.023	91	14342	0.42	ppb		98
101) 1,2,4-Trimethylbenzene	10.480	105	7673	0.31	ppb		87
119) 2,4,5-Trichlorotolene	12.851	159	1216	0.27	ppb	#	43

KR 3/20/14

NND

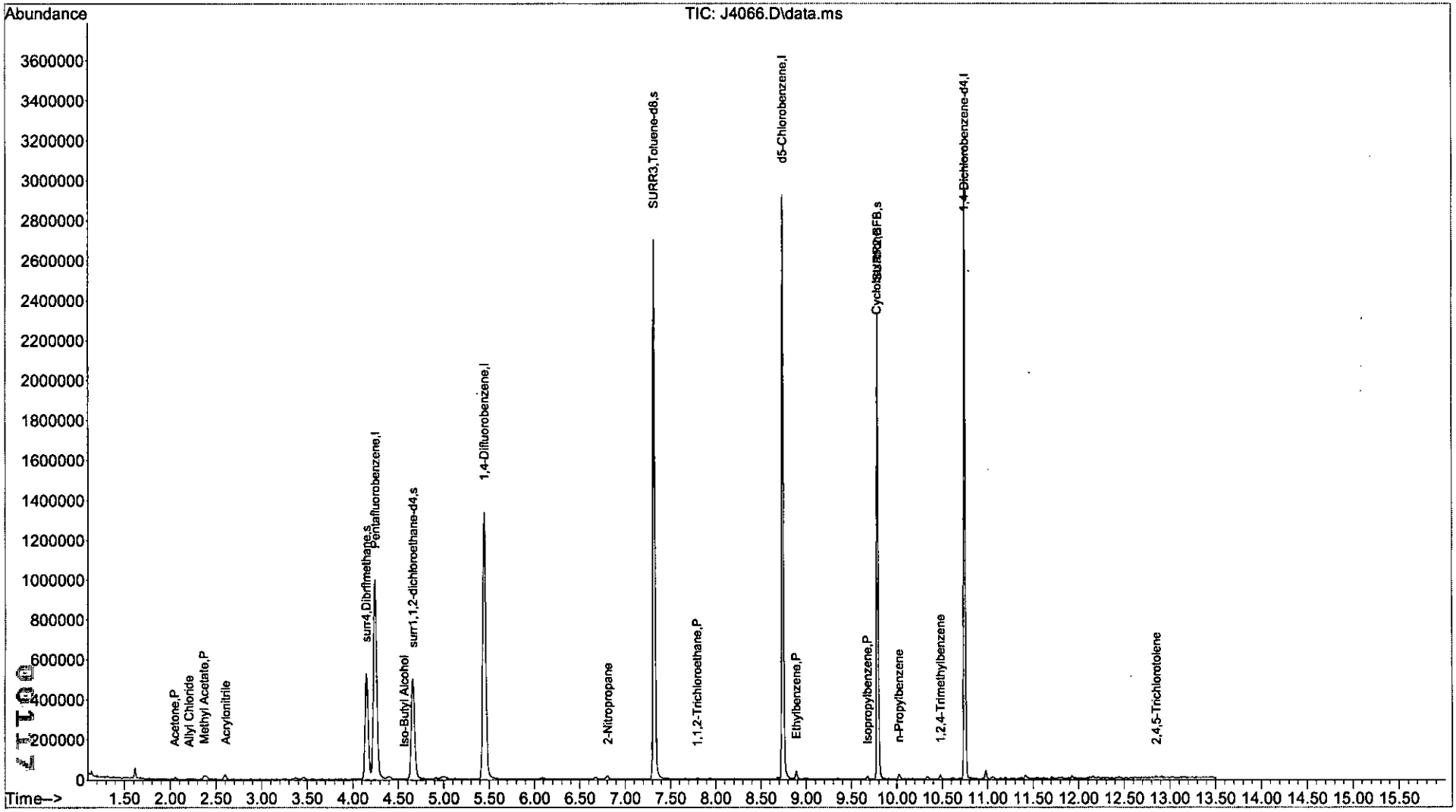
(#) = qualifier out of range (m) = manual integration (+) = signals summed

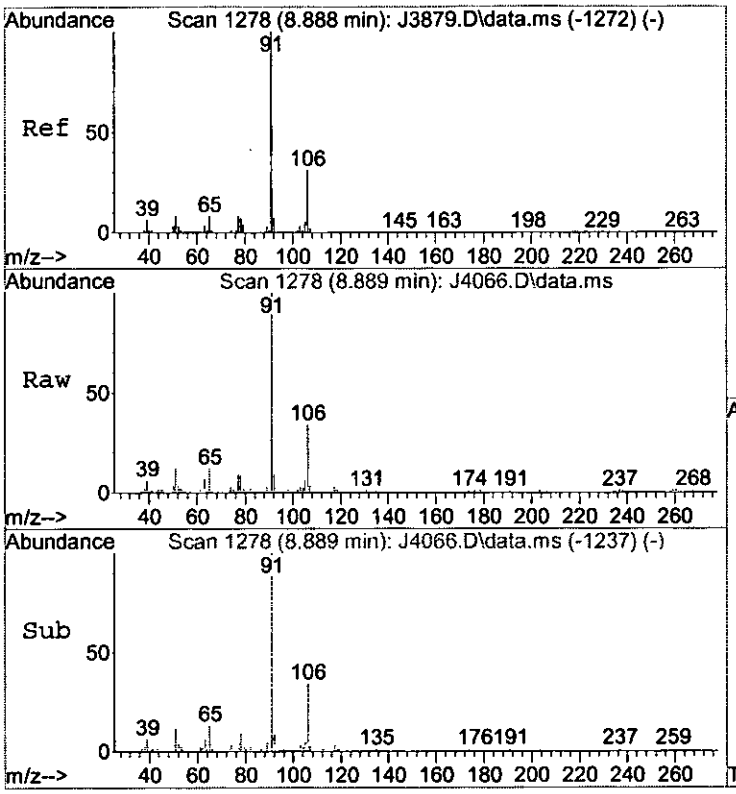
W031214.M Wed Mar 19 18:04:43 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1401764-002|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4066.D
Misc : PARSONS 9913 T4
Acq On : 19 Mar 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 18:04:39 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

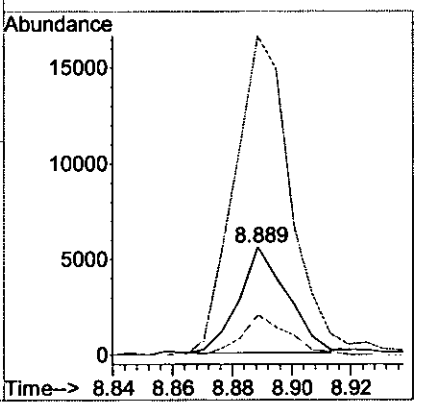


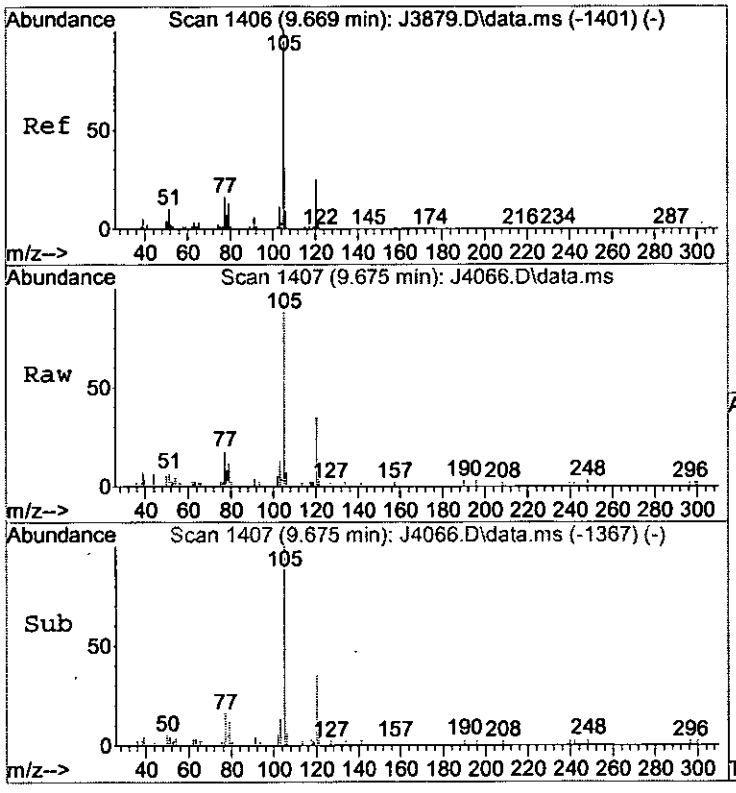


#82
Ethylbenzene
Concen: 0.55 ppb
RT: 8.889 min Scan# 1278
Delta R.T. 0.000 min
Lab File: J4066.D
Acq: 19 Mar 2014 5:49 pm

Tgt Ion:106 Resp: 6234

Ion	Ratio	Lower	Upper
106	100		
91	295.9	300.3	340.3#
65	37.0	6.6	46.6

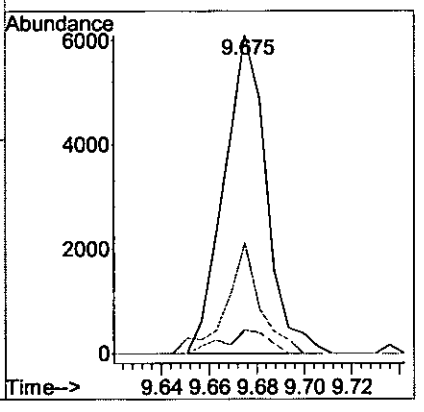




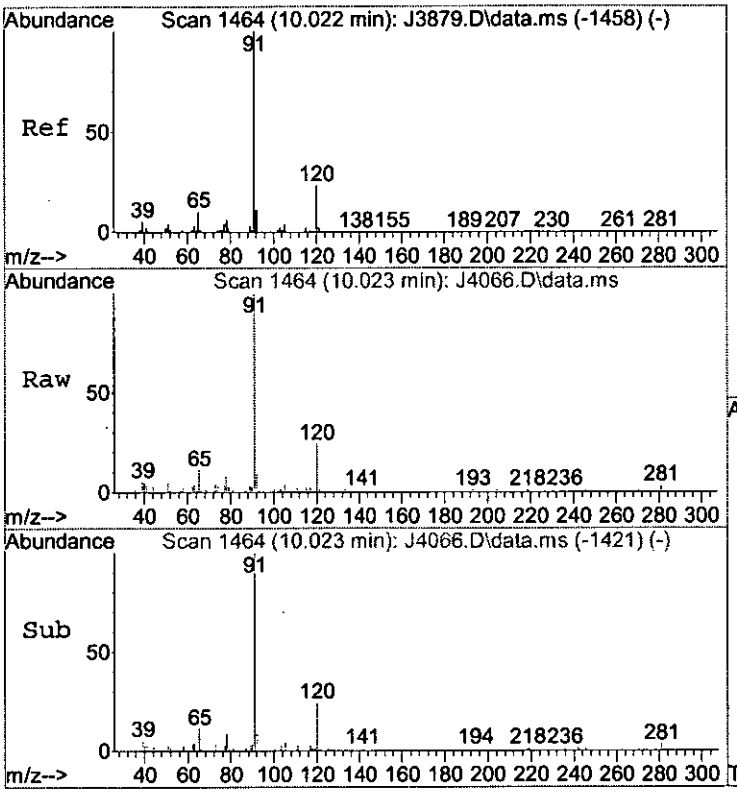
#89
Isopropylbenzene
Concen: 0.25 ppb
RT: 9.675 min Scan# 1407
Delta R.T. 0.000 min
Lab File: J4066.D
Acq: 19 Mar 2014 5:49 pm

Tgt Ion:105 Resp: 7509

Ion	Ratio	Lower	Upper
105	100		
120	34.6	5.4	45.4
106	7.4	0.0	28.6



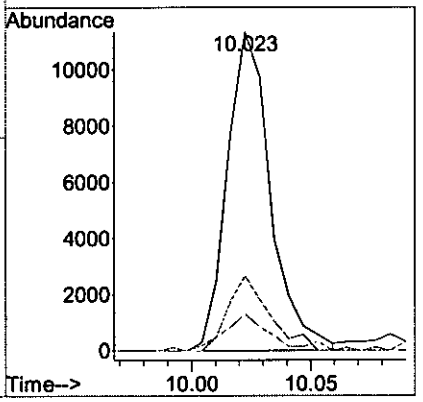
J4066.D W031214.M Thu Mar 20 16:04:45 2014 0011 Page 3

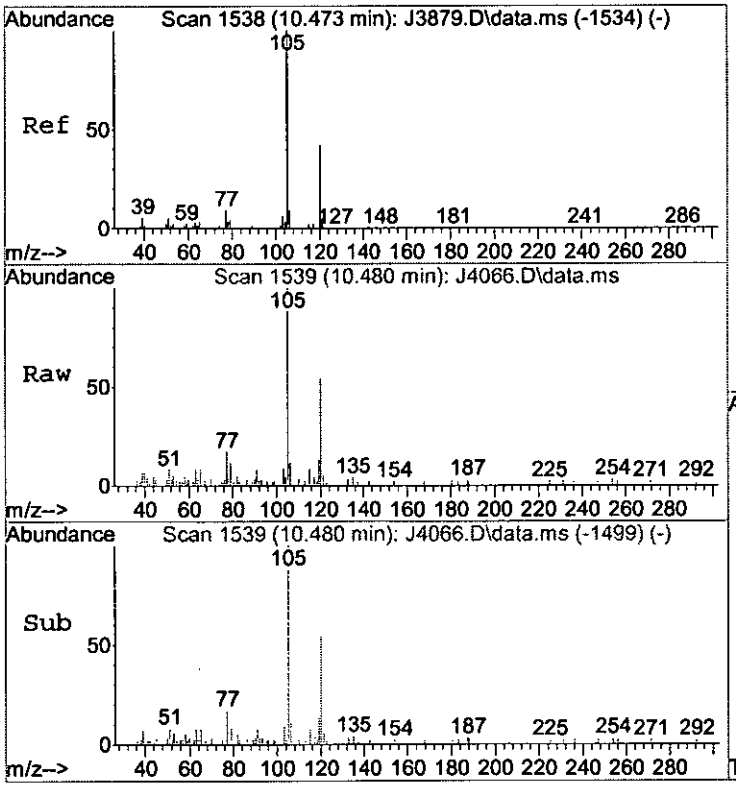


#95
n-Propylbenzene
Concen: 0.42 ppb
RT: 10.023 min Scan# 1464
Delta R.T. 0.000 min
Lab File: J4066.D
Acq: 19 Mar 2014 5:49 pm

Tgt Ion: 91 Resp: 14342

Ion	Ratio	Lower	Upper
91	100		
120	23.5	3.1	43.1
65	11.4	0.0	30.1

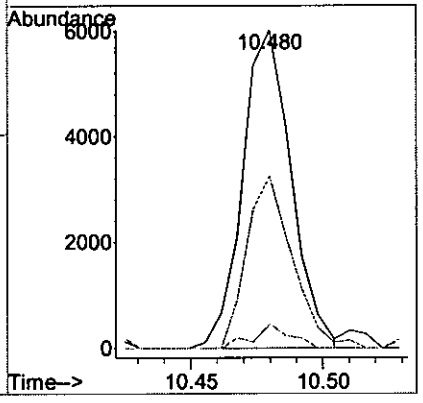




#101
1,2,4-Trimethylbenzene
Concen: 0.31 ppb
RT: 10.480 min Scan# 1539
Delta R.T. 0.000 min
Lab File: J4066.D
Acq: 19 Mar 2014 5:49 pm

Tgt Ion:105 Resp: 7673

Ion	Ratio	Lower	Upper
105	100		
120	54.0	25.3	65.3
65	7.6	0.0	24.3



J4066.D W031214.M Thu Mar 20 16:04:47 2014 0011 Page 4

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4066.D
Acq On : 19 Mar 2014 5:49 pm
Operator : K.Ruest
Sample : R1401764-002|1.0
Misc : PARSONS 9913 T4
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4066.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.616	81	85	88	rBV	51339	52242	1.26%	0.229%
2	4.152	491	501	509	rBV	529079	1264188	30.51%	5.551%
3	4.249	509	517	534	rVV	1000582	2531654	61.09%	11.117%
4	4.396	537	541	552	rVB7	15095	43892	1.06%	0.193%
5	4.664	574	585	602	rBV	500010	1300907	31.39%	5.712%
6	5.450	703	714	730	rBV	1338737	3146688	75.93%	13.818%
7	7.322	1013	1021	1038	rBV	2699023	4143988	100.00%	18.197%
8	8.742	1249	1254	1266	rBV	2922778	3746633	90.41%	16.452%
9	8.889	1273	1278	1286	rBV	41558	55720	1.34%	0.245%
10	9.791	1421	1426	1439	rVB	2335950	2871244	69.29%	12.608%
11	10.748	1578	1583	1592	rBV	3155261	3545374	85.55%	15.568%
12	10.980	1613	1621	1627	rVB2	45255	70618	1.70%	0.310%

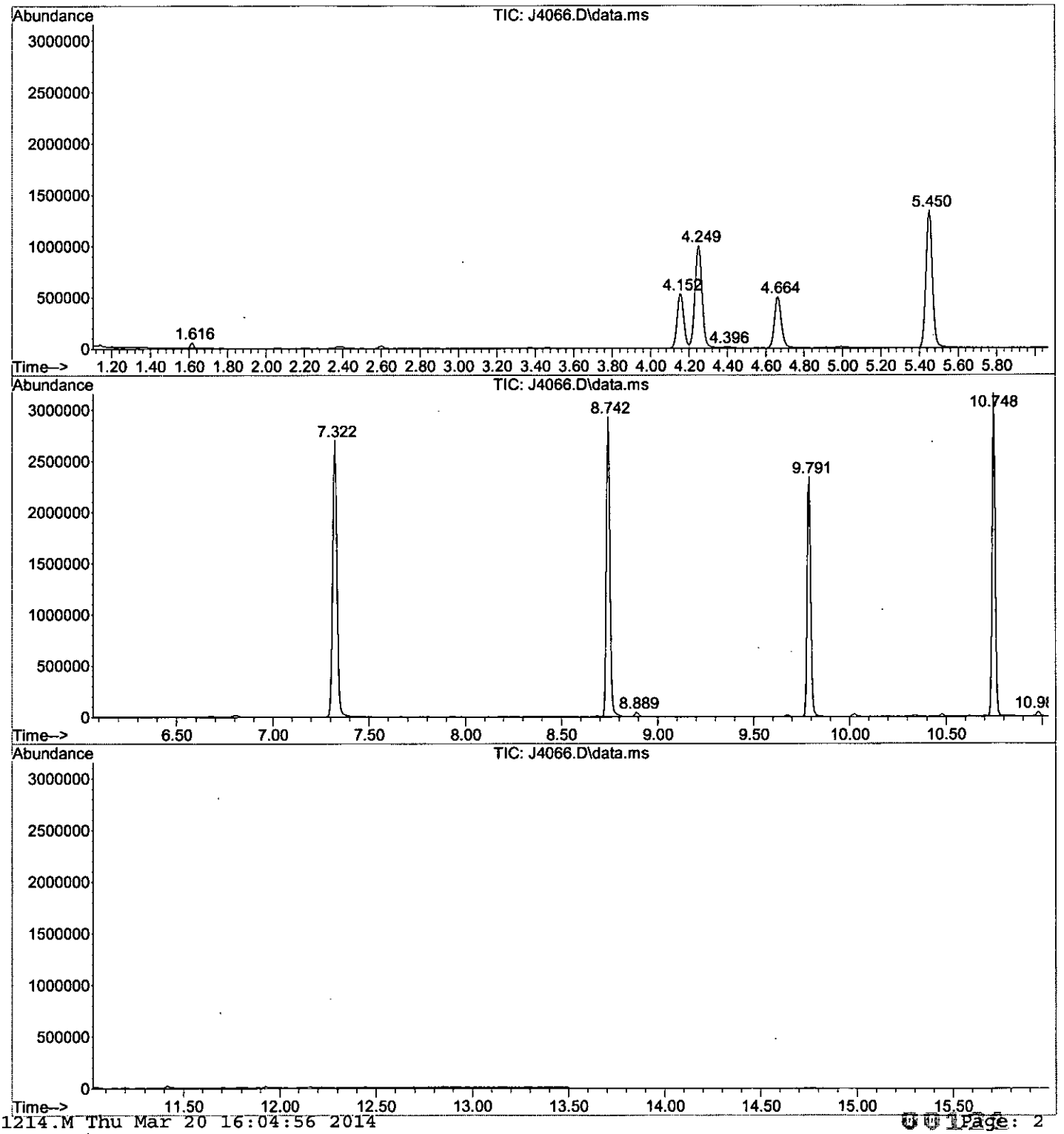
Sum of corrected areas: 22773148

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4066.D
Acq On : 19 Mar 2014 5:49 pm
Operator : K.Ruest
Sample : R1401764-002|1.0
Misc : PARSONS 9913 T4
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Thu Mar 20 16:04:56 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031914\\
Data File : J4066.D
Acq On : 19 Mar 2014 5:49 pmm
Operator : K.Ruestt
Sample : R1401764-002|1.00
Misc : PARSONS 9913 T44
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1245
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 18:21
Sample Name:	FTMM-53-GW-699MW101-10.5	**Units:**	µg/L
Lab Code:	R1401764-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4067.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.26**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14 1245
Date Received: 3/13/14
Date Analyzed: 3/19/14 18:21

Sample Name: FTMM-53-GW-699MW101-10.5
Lab Code: R1401764-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\031914\J4067.D\

Analysis Lot: 384408
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.59**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.28**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.43**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/19/14 18:21	
Dibromofluoromethane	100	85-115	3/19/14 18:21	
Toluene-d8	95	85-120	3/19/14 18:21	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/19/14 1821

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW101-10.5	**Units:**	µg/L
Lab Code:	R1401764-003	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Printed 03/31/2014 11:27 Form 1B 00125

\\alprews001\starlims$\LIMSReps\AnalyticalTICReport.rpt SuperSet Reference: 14-0000283442 rev 00

Quantitation Report (Not Reviewed)

Sample : R1401764-003|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4067.D
Misc : PARSONS 9913 T4
Acq On : 19 Mar 2014 6:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 18:36:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	880777	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1364116	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1228000	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	576506	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	393983	49.89	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.78%				
48) surr1,1,2-dichloroetha...	4.664	65	471569	52.42	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 104.84%				
65) SURR3,Toluene-d8	7.322	98	1575691	47.48	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.96%				
70) SURR2,BFB	9.785	95	602819	48.69	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.38%				
Target Compounds							Qvalue
15) Acetone	2.048	43	3521	2.01	ppb		89
16) 2-Propanol	2.189	45	164	0.58	ppb	#	4
19) Acetonitrile	2.237	40	586	2.05	ppb	#	1
20) Allyl Chloride	2.201	76	1640	0.37	ppb	#	1
24) Acrylonitrile	2.597	53	506	0.26	ppb	#	7
51) Iso-Butyl Alcohol	4.572	43	1326	5.75	ppb		91
61) 2-Nitropropane	6.785	41	744	0.69	ppb	#	34
69) 1,1,2 Trichloroethane	7.797	97	1771	0.29	ppb	#	19
82) Ethylbenzene	8.895	106	6727	0.59	ppb	#	83
89) Isopropylbenzene	9.675	105	8397	0.28	ppb		94
90) Cyclohexanone	9.785	55	1384	2.99	ppb	#	14
95) n-Propylbenzene	10.022	91	15128	0.43	ppb		93
101) 1,2,4-Trimethylbenzene	10.480	105	6588	0.26	ppb		94
119) 2,4,5-Trichlorotolene	12.851	159	1000	0.22	ppb	#	68

RPD

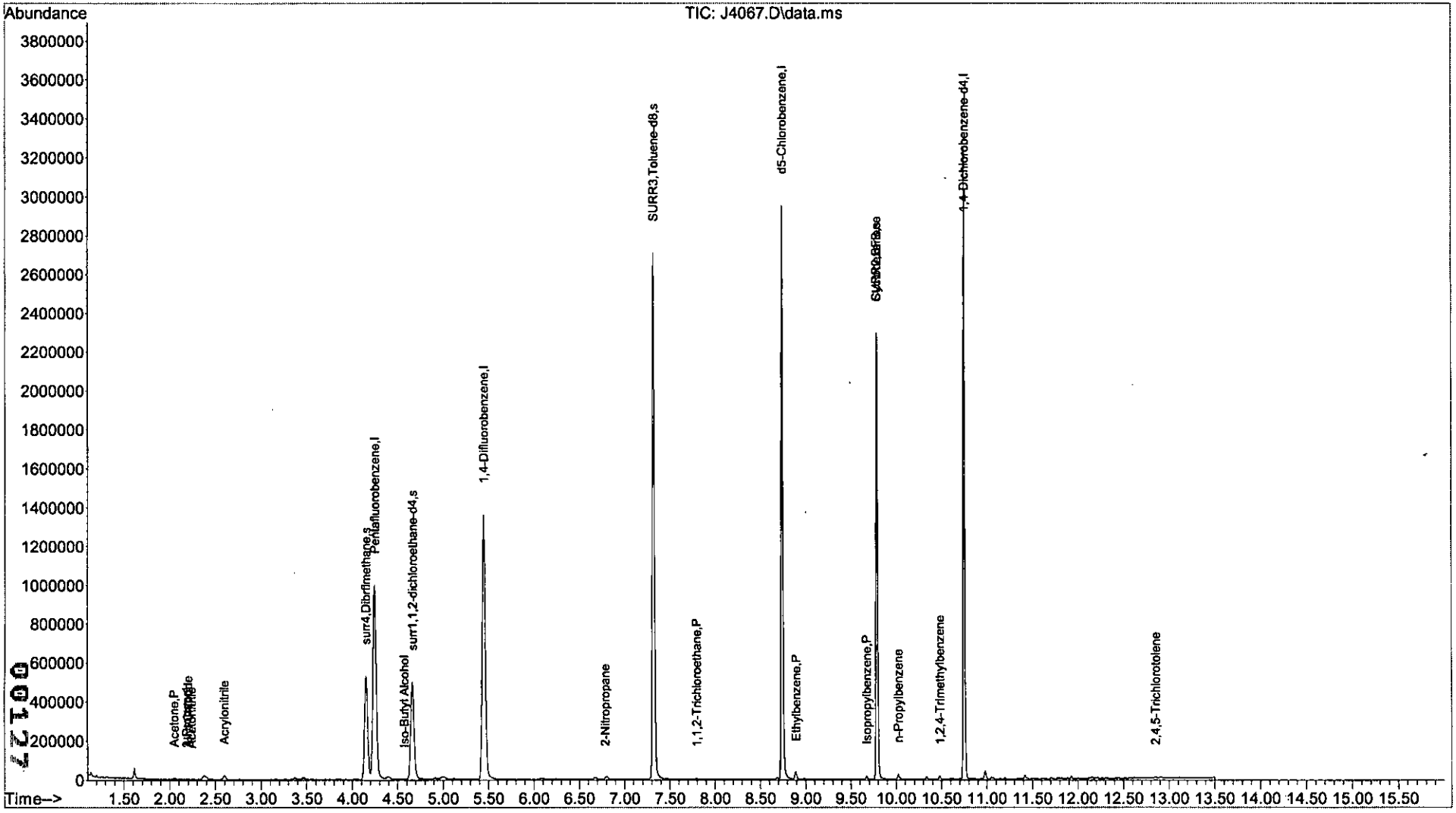
KP 3/20/14

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

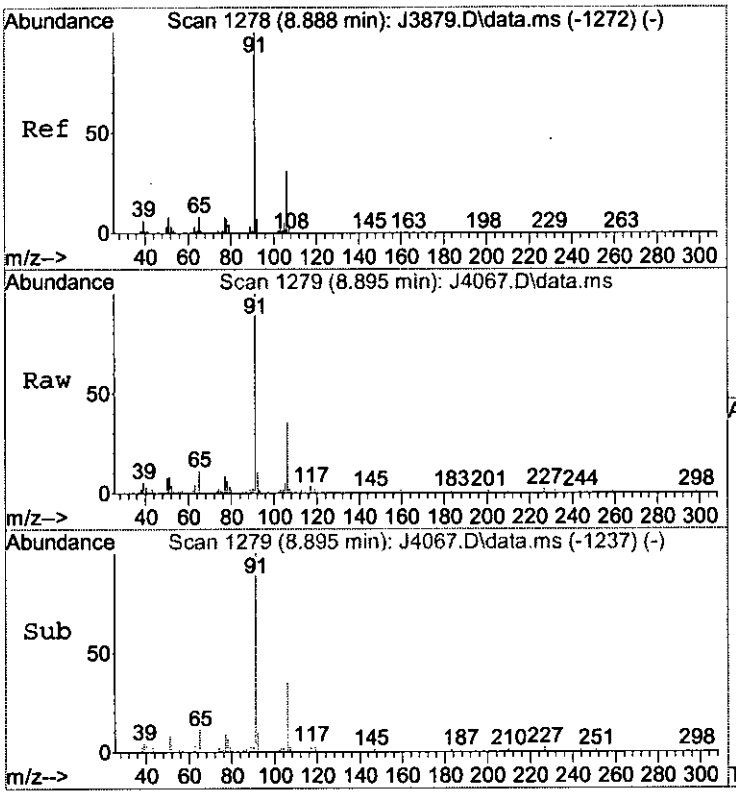
Quantitation Report (Not Reviewed)

Sample : R1401764-003|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4067.D
Misc : PARSONS 9913 T4
Acq On : 19 Mar 2014 6:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 18:36:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



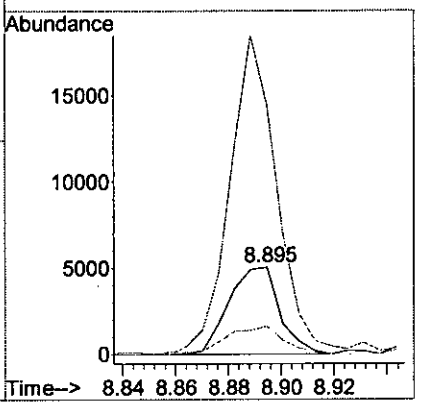
W031214.M Wed Mar 19 18:37:03 2014 Page: 2

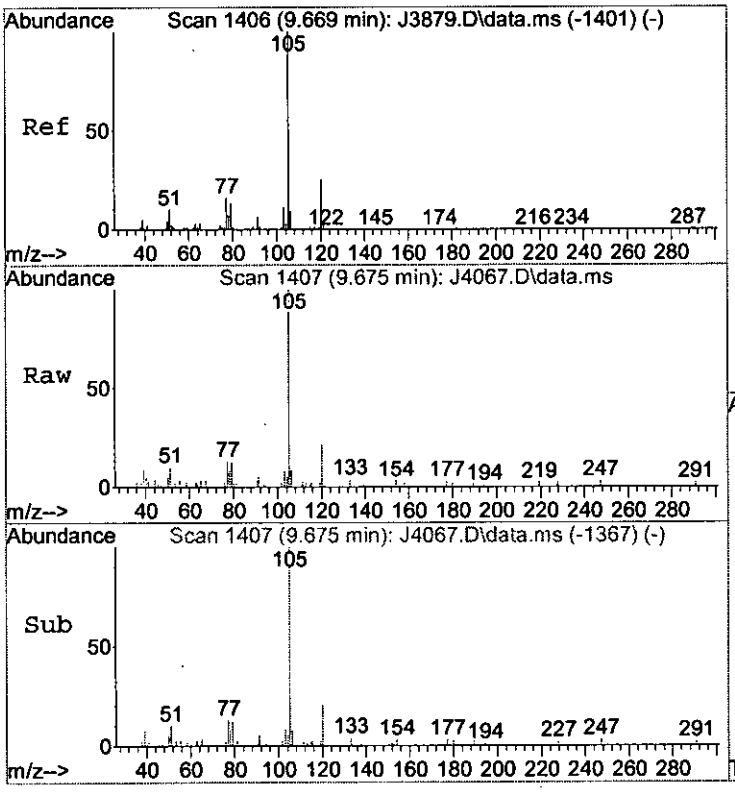


#82
Ethylbenzene
Concen: 0.59 ppb
RT: 8.895 min Scan# 1279
Delta R.T. 0.006 min
Lab File: J4067.D
Acq: 19 Mar 2014 6:21 pm

Tgt Ion:106 Resp: 6727

Ion	Ratio	Lower	Upper
106	100		
91	285.5	300.3	340.3#
65	32.2	6.6	46.6

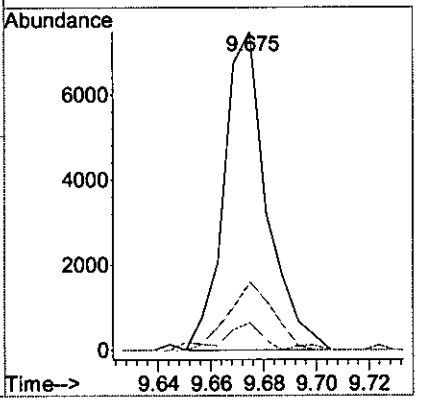




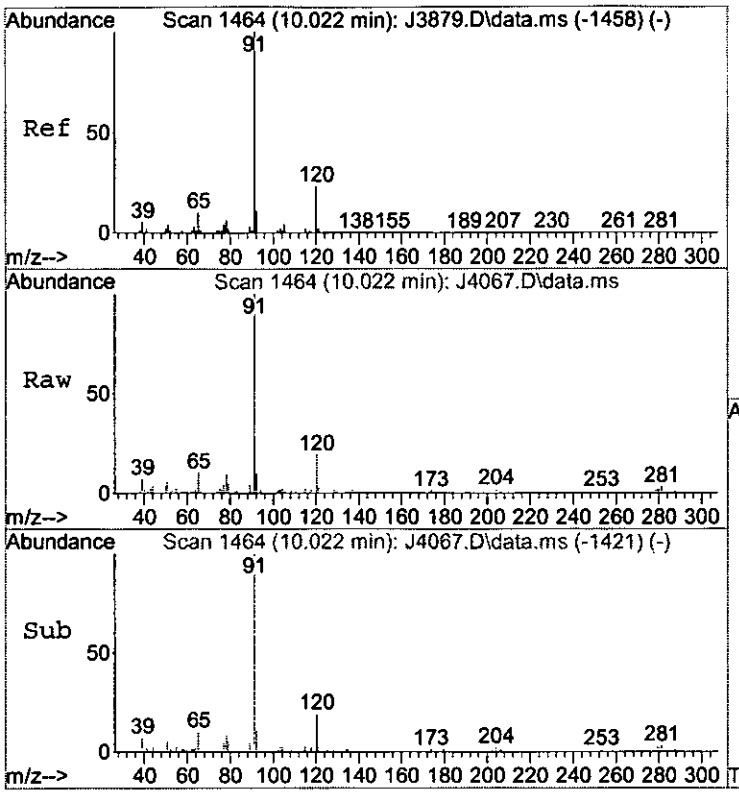
#89
Isopropylbenzene
Concen: 0.28 ppb
RT: 9.675 min Scan# 1407
Delta R.T. -0.000 min
Lab File: J4067.D
Acq: 19 Mar 2014 6:21 pm

Tgt Ion:105 Resp: 8397

Ion	Ratio	Lower	Upper
105	100		
120	21.2	5.4	45.4
106	8.5	0.0	28.6



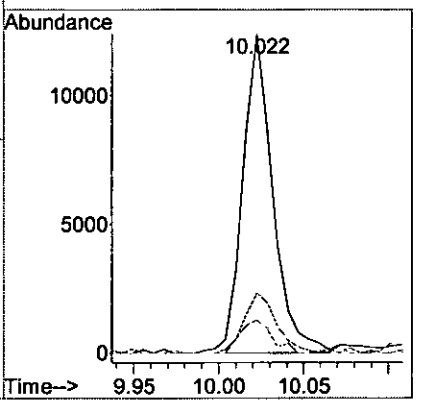
J4067.D W031214.M Thu Mar 20 16:07:27 2014 00128 Page 3

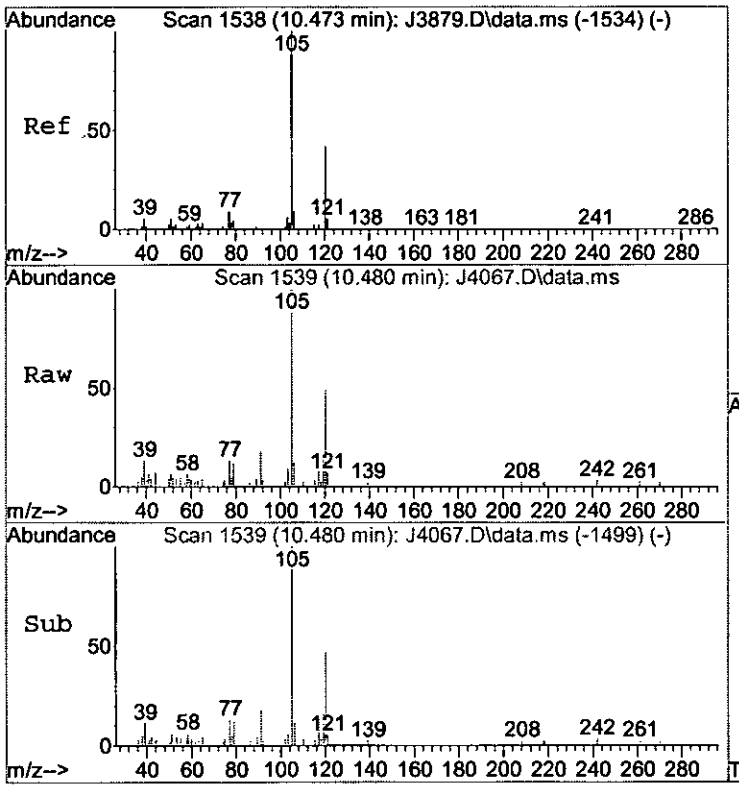


#95
n-Propylbenzene
Concen: 0.43 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.000 min
Lab File: J4067.D
Acq: 19 Mar 2014 6:21 pm

Tgt Ion: 91 Resp: 15128

Ion	Ratio	Lower	Upper
91	100		
120	18.7	3.1	43.1
65	10.4	0.0	30.1

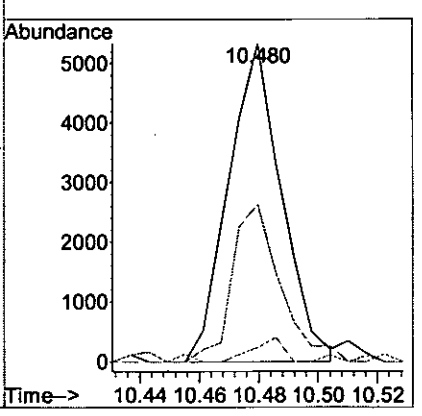




#101
1,2,4-Trimethylbenzene
Concen: 0.26 ppb
RT: 10.480 min Scan# 1539
Delta R.T. -0.000 min
Lab File: J4067.D
Acq: 19 Mar 2014 6:21 pm

Tgt Ion:105 Resp: 6588

Ion	Ratio	Lower	Upper
105	100		
120	49.4	25.3	65.3
65	4.4	0.0	24.3



J4067.D W031214.M Thu Mar 20 16:07:29 2014 00125 Page 4

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4067.D
Acq On : 19 Mar 2014 6:21 pm
Operator : K.Ruest
Sample : R1401764-003|1.0
Misc : PARSONS 9913 T4
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4067.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.616	81	85	90	rVB	53130	55275	1.33%	0.240%
2	2.603	238	247	251	rBV2	23753	46140	1.11%	0.201%
3	4.152	490	501	509	rBV	532902	1272298	30.54%	5.530%
4	4.249	509	517	535	rVB	995578	2537004	60.89%	11.027%
5	4.664	575	585	600	rBV	498653	1293587	31.05%	5.622%
6	4.993	633	639	654	rVB6	12700	45989	1.10%	0.200%
7	5.450	702	714	735	rBV	1362098	3208163	77.00%	13.944%
8	7.322	1012	1021	1033	rBV	2708753	4166446	100.00%	18.109%
9	8.742	1249	1254	1273	rVB	2950365	3783436	90.81%	16.444%
10	8.889	1273	1278	1286	rBV	40821	56216	1.35%	0.244%
11	9.785	1420	1425	1434	rBV	2297770	2907599	69.79%	12.638%
12	10.748	1578	1583	1591	rBV	3242016	3577242	85.86%	15.548%
13	10.980	1617	1621	1626	rVB2	42548	58061	1.39%	0.252%

Sum of corrected areas: 23007456

W031214.M Thu Mar 20 16:07:37 2014 Page: 1

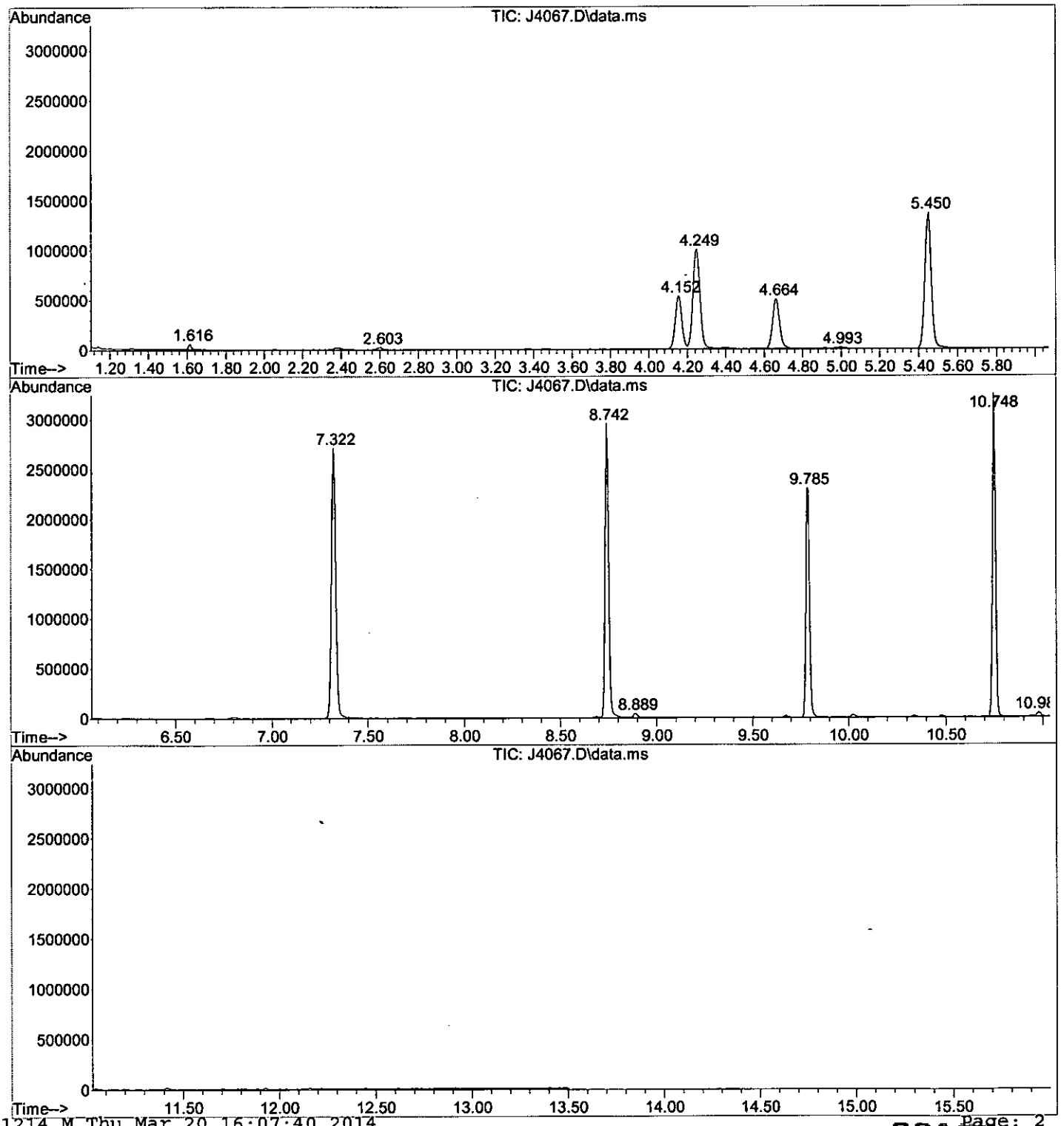
00130

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4067.D
Acq On : 19 Mar 2014 6:21 pm
Operator : K.Ruest
Sample : R1401764-003|1.0
Misc : PARSONS 9913 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Thu Mar 20 16:07:40 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031914\\
Data File : J4067.D
Acq On : 19 Mar 2014 6:21 pmm
Operator : K.Ruestt
Sample : R1401764-003|1.00
Misc : PARSONS 9913 T44
ALS Vial : 6 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Thu Mar 20 16:07:41 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1205
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 03:18
Sample Name:	FTMM-53-GW-699MW09-8	**Units:**	µg/L
Lab Code:	R1401764-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4003.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14 1205
Date Received: 3/13/14
Date Analyzed: 3/18/14 03:18

Sample Name: FTMM-53-GW-699MW09-8
Lab Code: R1401764-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\031714\J4003.D\

Analysis Lot: 383996
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.26**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 03:18	
Dibromofluoromethane	98	85-115	3/18/14 03:18	
Toluene-d8	94	85-120	3/18/14 03:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0318

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW09-8	**Units:**	µg/L
Lab Code:	R1401764-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-004|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4003.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 3:18 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 03:33:28 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	905408	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1335327	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1229264	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	611036	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	377787	48.87	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.74%			
48) surr1,1,2-dichloroetha...	4.658	65	405641	46.06	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 92.12%			
65) SURR3,Toluene-d8	7.322	98	1519138	46.77	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 93.54%			
70) SURR2,BFB	9.785	95	585567	48.32	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.64%			
Target Compounds						Qvalue
15) Acetone	2.055	43	1425	0.79	ppb	88
~~16) 2-Propanol~~	~~2.146~~	~~45~~	~~183~~	~~0.63~~	~~ppb~~	~~# 25~~
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~1046~~	~~0.23~~	~~ppb~~	~~# 1~~
~~52) n Heptane~~	~~5.341~~	~~43~~	~~1701~~	~~0.21~~	~~ppb~~	~~# 24~~
~~90) Cyclohexanone~~	~~9.742~~	~~55~~	~~273~~	~~0.56~~	~~ppb~~	~~# 14~~
117) Naphthalen	12.303	128	4247	0.26	ppb	92

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

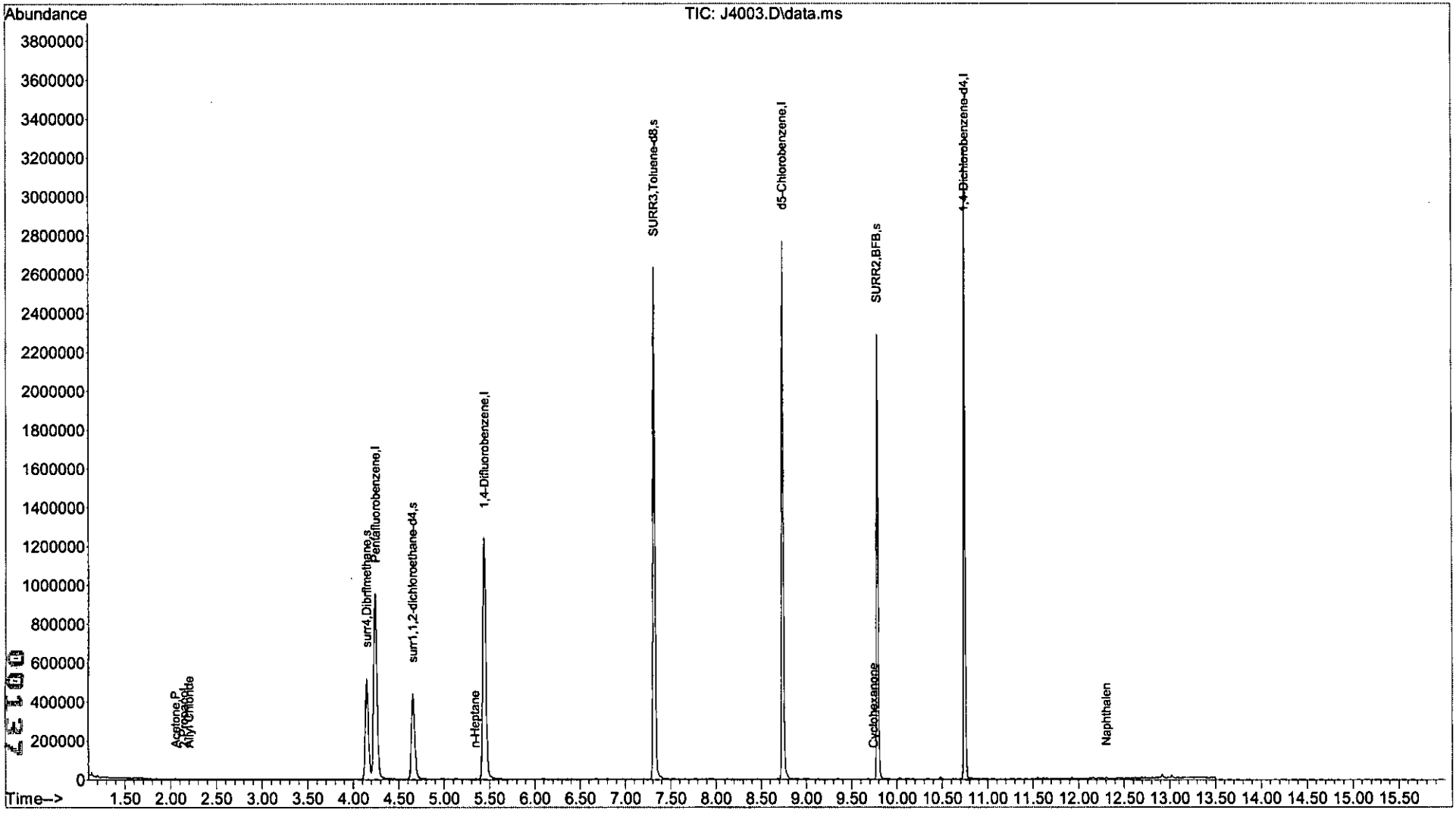
KR 3/18/14

W031214.M Tue Mar 18 03:33:30 2014 Page: 1

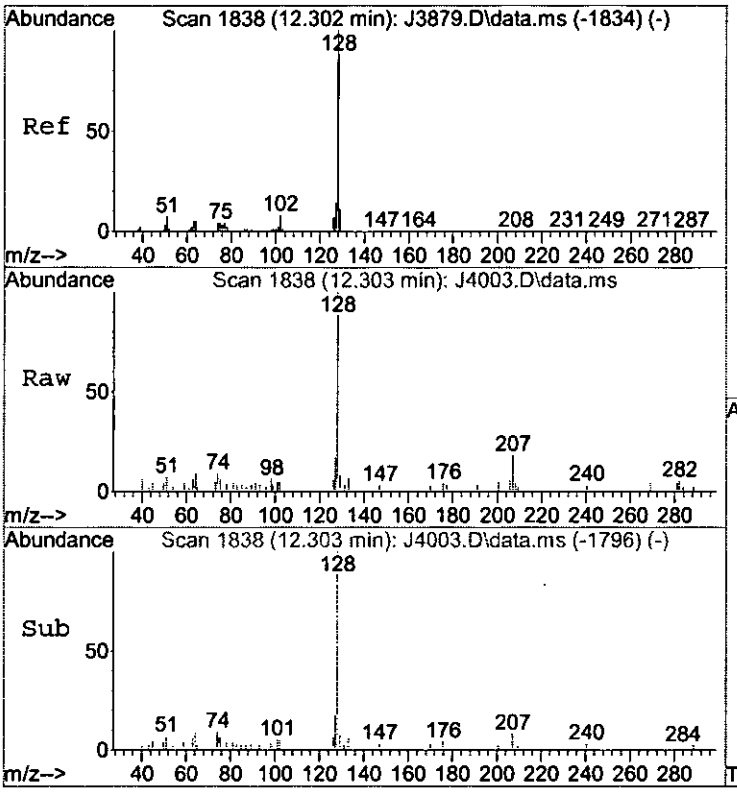
Quantitation Report (Not Reviewed)

Sample : R1401764-004|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4003.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 3:18 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 03:33:28 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



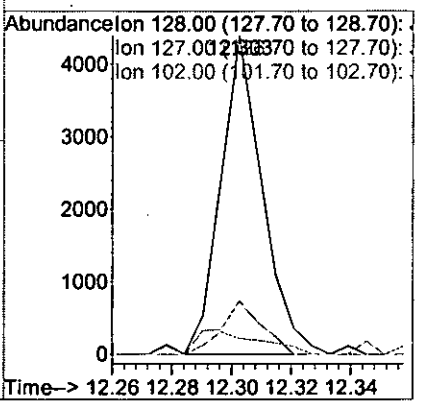
W031214.M Tue Mar 18 03:33:33 2014 Page: 2



#117
Naphthalen
Concen: 0.26 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4003.D
Acq: 18 Mar 2014 3:18 am

Tgt Ion:128 Resp: 4247

Ion	Ratio	Lower	Upper
128	100		
127	16.7	0.0	33.8
102	4.8	0.0	28.5



J4003.D W031214.M Tue Mar 18 15:09:05 2014 Page 1

00138

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4003.D
Acq On : 18 Mar 2014 3:18 am
Operator : K.Ruest
Sample : R1401764-004|1.0
Misc : PARSONS 9913 T4
ALS Vial : 36 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4003.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	519620	1229397	30.89%	5.647%
2	4.249	509	517	533	rVB	952361	2438897	61.29%	11.204%
3	4.658	575	584	599	rBV	439231	1135896	28.54%	5.218%
4	5.444	701	713	730	rBV	1244951	2950832	74.15%	13.555%
5	7.322	1009	1021	1042	rBV	2634164	3979360	100.00%	18.280%
6	8.742	1248	1254	1270	rVB	2766808	3579502	89.95%	16.443%
7	9.785	1420	1425	1438	rBV	2289671	2882140	72.43%	13.240%
8	10.748	1578	1583	1591	rBV	3242907	3572860	89.78%	16.413%

Sum of corrected areas: 21768884

W031214.M Tue Mar 18 15:09:13 2014 Page: 1

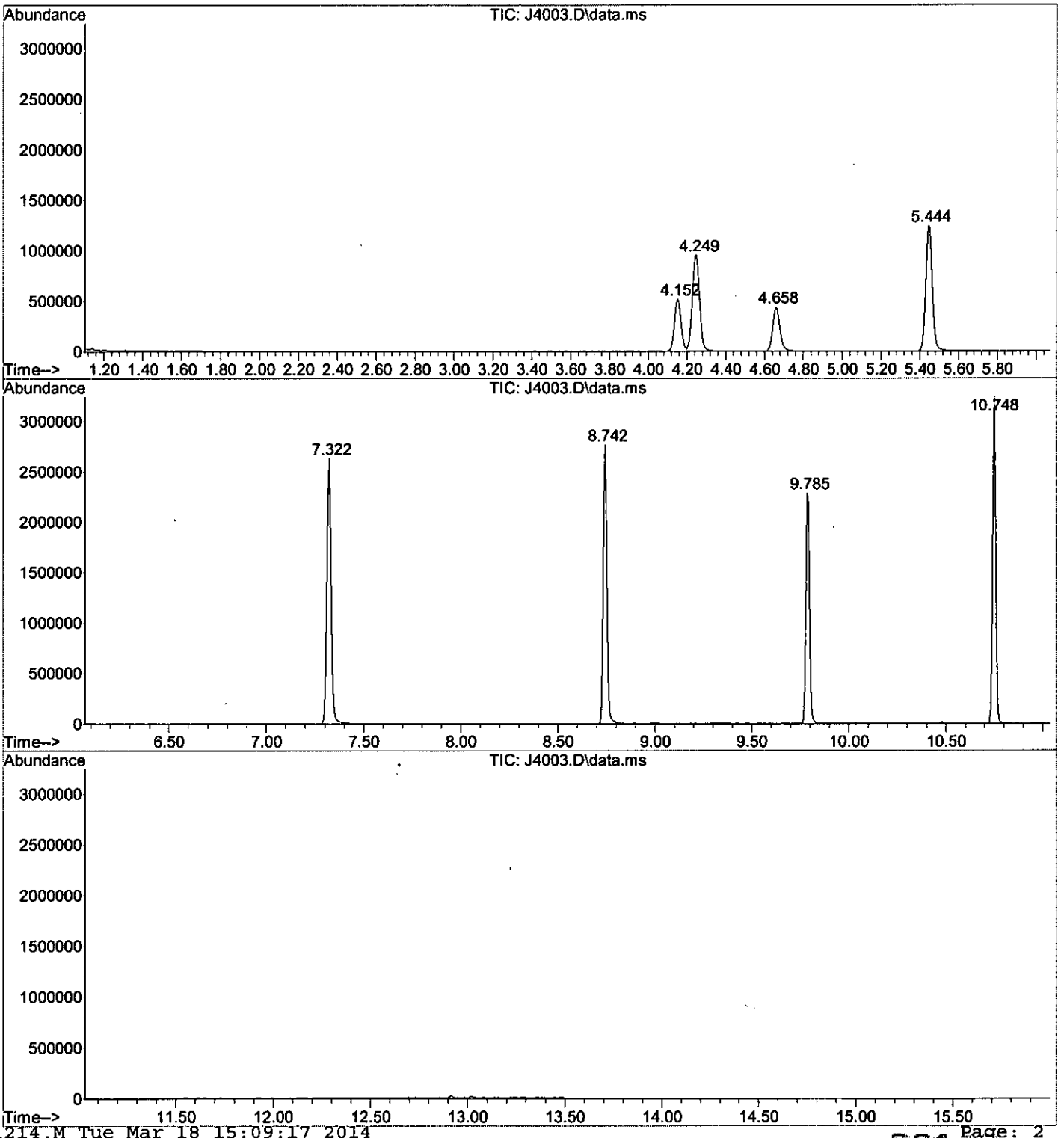
00135

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4003.D
Acq On : 18 Mar 2014 3:18 am
Operator : K.Ruest
Sample : R1401764-004|1.0
Misc : PARSONS 9913 T4
ALS Vial : 36 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Mar 18 15:09:17 2014 Page: 2

00140

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031714\\
Data File : J4003.D
Acq On : 18 Mar 2014 3:18 amm
Operator : K.Ruestt
Sample : R1401764-004|1.00
Misc : PARSONS 9913 T44
ALS Vial : 36 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1300
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 03:50
Sample Name:	FTMM-53-GW-699MW16-8.5	**Units:**	µg/L
Lab Code:	R1401764-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4004.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1300
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 03:50
Sample Name:	FTMM-53-GW-699MW16-8.5	**Units:**	µg/L
Lab Code:	R1401764-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\U4004.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**5.2**		5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.90**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 03:50	
Dibromofluoromethane	100	85-115	3/18/14 03:50	
Toluene-d8	95	85-120	3/18/14 03:50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0350

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW16-8.5	**Units:**	µg/L
Lab Code:	R1401764-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-005|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4004.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 3:50 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 04:05:38 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	910779	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1316514	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1213606	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	607709	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	379470	49.79	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.58%				
48) surr1,1,2-dichloroetha...	4.658	65	407902	46.98	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 93.96%				
65) SURR3,Toluene-d8	7.322	98	1525665	47.64	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.28%				
70) SURR2,BFB	9.785	95	581375	48.66	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.32%				
Target Compounds							Qvalue
~~15) Acetone~~	~~2.042~~	~~43~~	~~1057~~	~~0.58~~	~~ppb~~	~~#~~	~~52~~
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~993~~	~~0.22~~	~~ppb~~	~~#~~	~~1~~
40) Chloroform	3.938	83	77722	5.15	ppb		96
72) Tetrachloroethene	7.962	164	~~5430~~ 5626 0.90	~~0.87~~	ppb	m (KR)	94
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1518~~	~~3.11~~	~~ppb~~	~~#~~	~~14~~

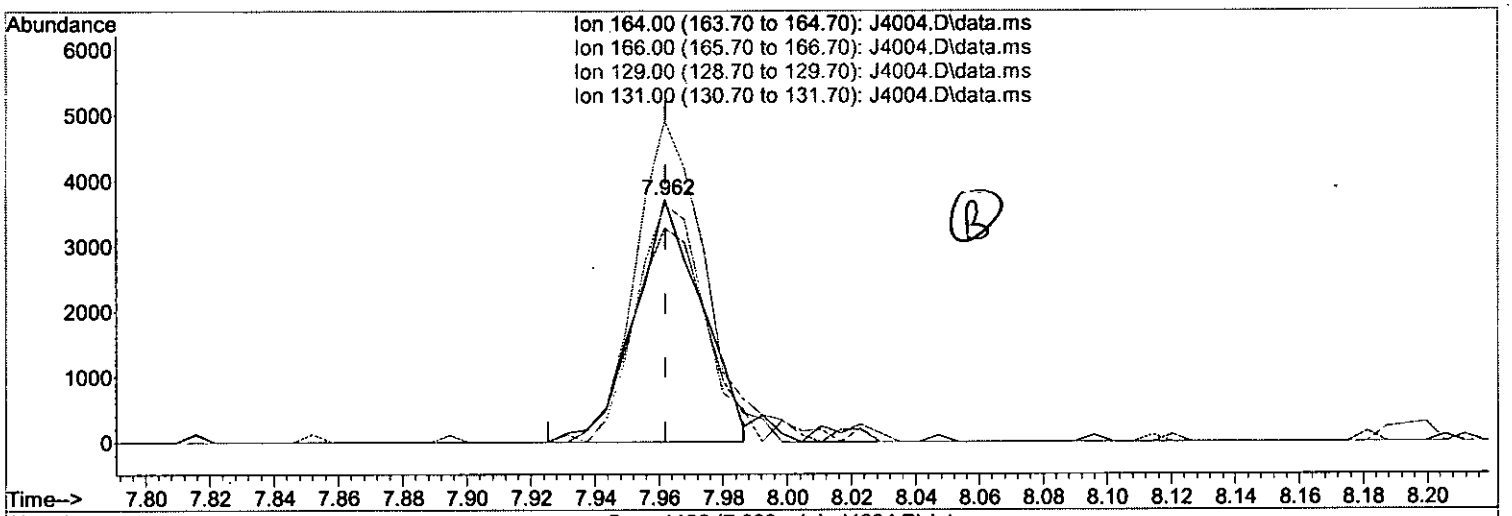
KR 3/14/14

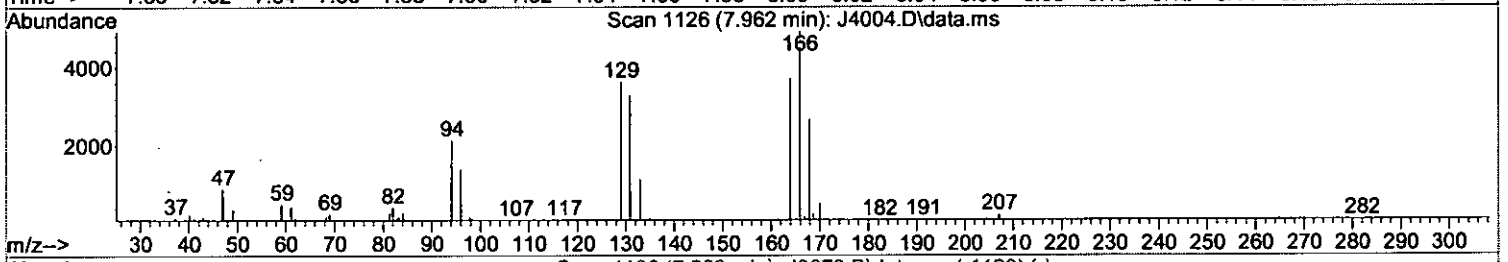
(#) = qualifier out of range (m) = manual integration (+) = signals summed

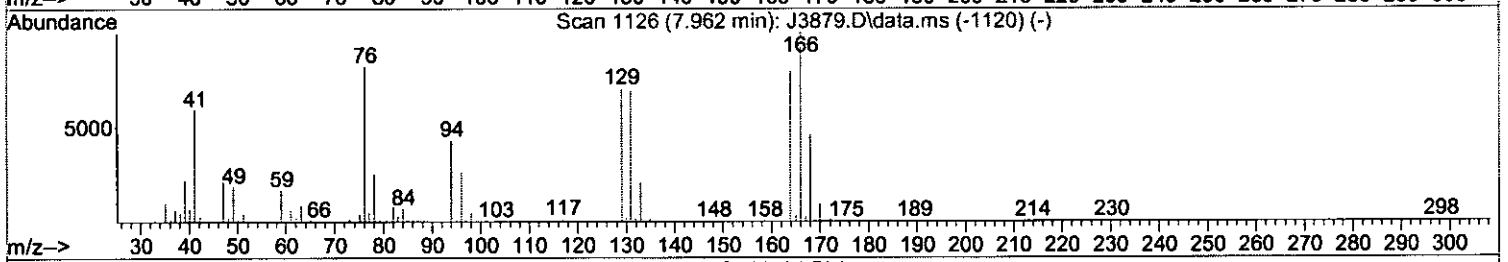
Quantitation Report (Qedit)

Sample : R1401764-005|1.0
Data File: I:\ACQUDATA\msvoa12\Data\031714\J4004.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 3:50 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 04:05:38 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4004.D\data.ms

(72) Tetrachloroethene (P)

7.962min (-0.000) 0.87 ppb

response 5430

Ion	Exp%	Act%
164.00	100	100
166.00	125.90	132.26
129.00	88.60	97.58
131.00	86.60	88.18

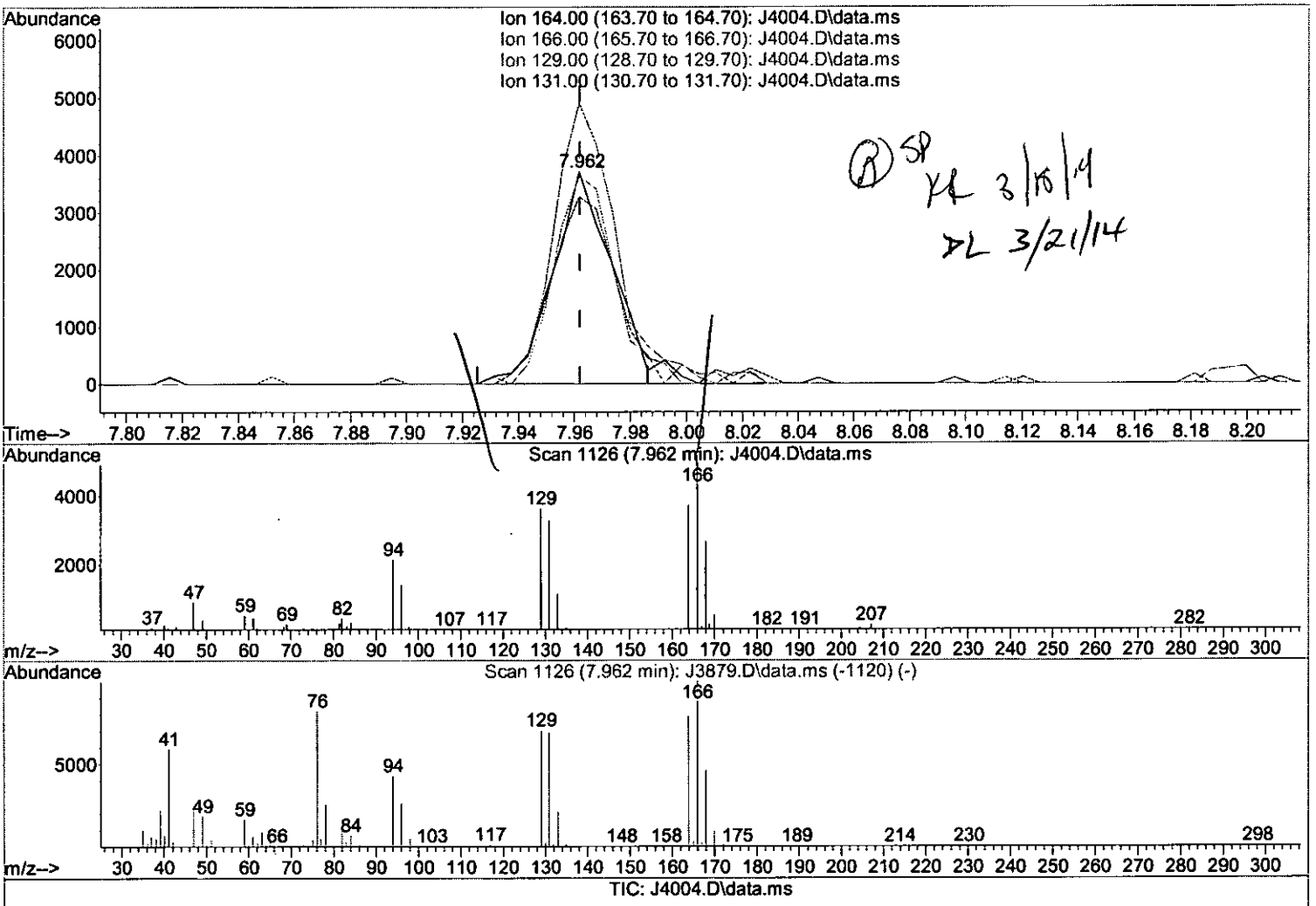
W031214.M Tue Mar 18 15:10:11 2014 Page: 1

00146

Quantitation Report (Qedit)

Sample : R1401764-005|1.0
Data File: I:\ACQUDATA\msvoa12\Data\031714\J4004.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 3:50 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 04:05:38 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4004.D\data.ms

(72) Tetrachloroethene (P)

7.962min (-0.000) 0.90 ppb m

response 5626

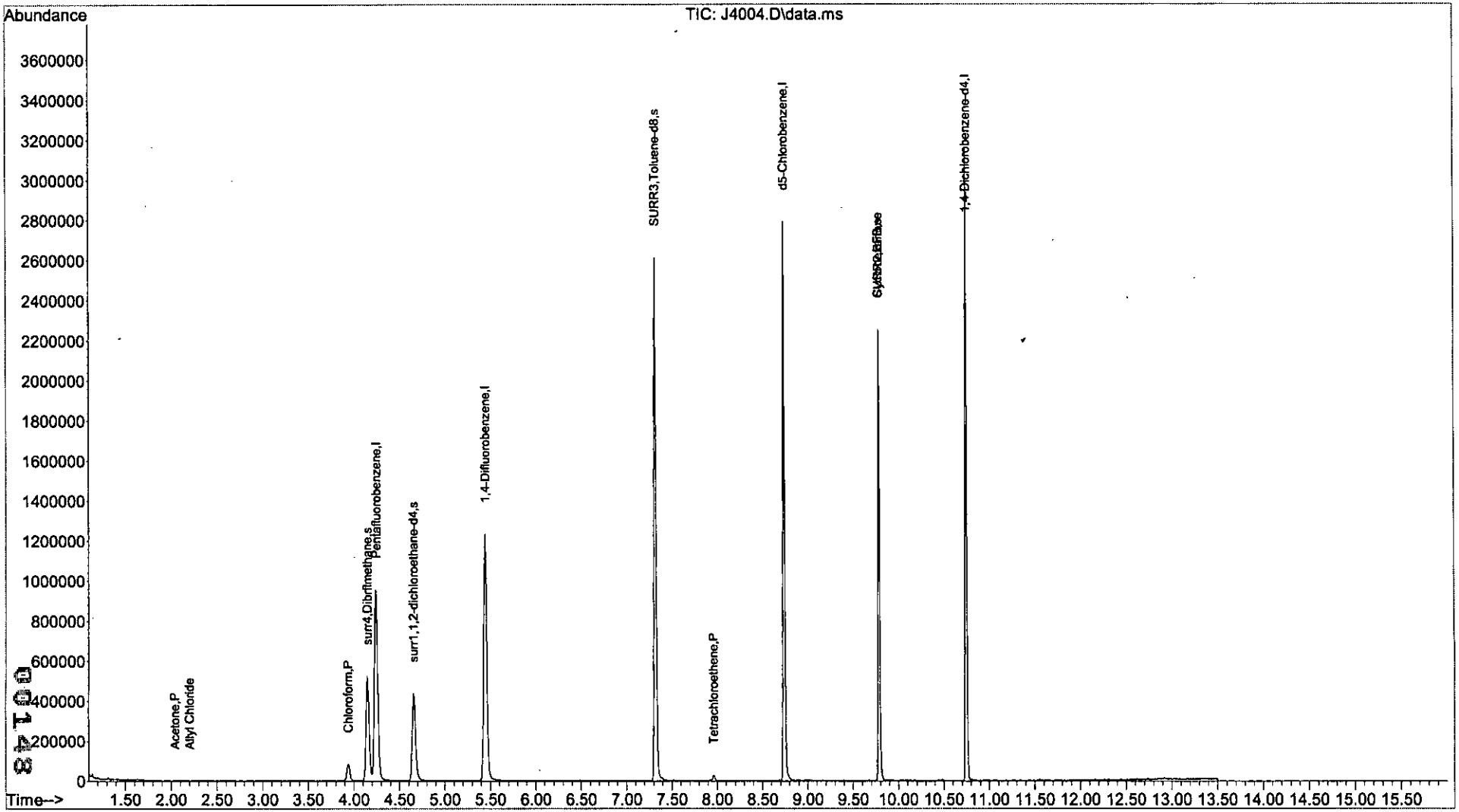
Ion	Exp%	Act%
164.00	100	100
166.00	125.90	132.26
129.00	88.60	97.58
131.00	86.60	88.18

W031214.M Tue Mar 18 15:10:20 2014 Page: 1

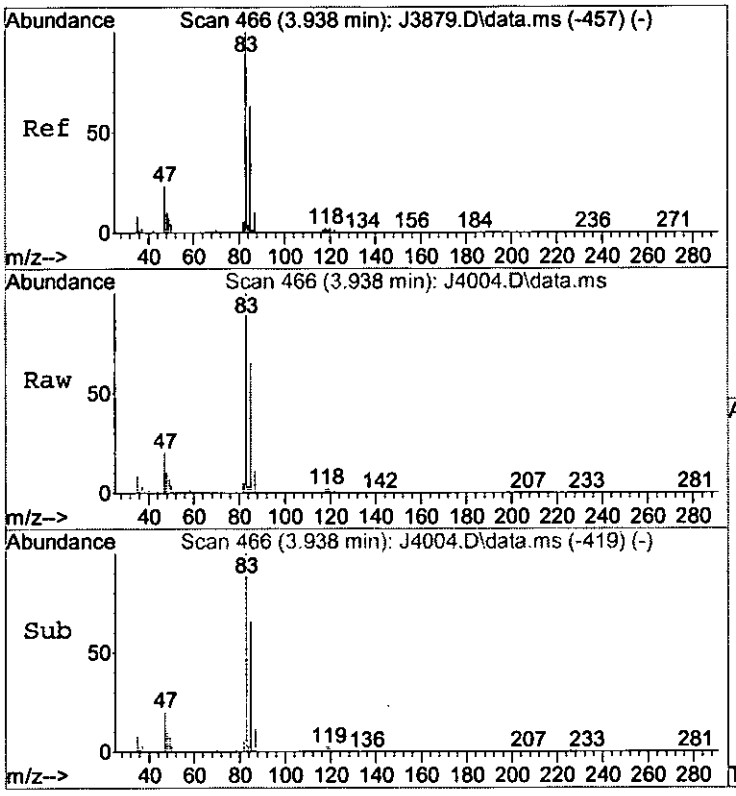
Quantitation Report (Not Reviewed)

Sample : R1401764-005|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4004.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 3:50 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 04:05:38 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



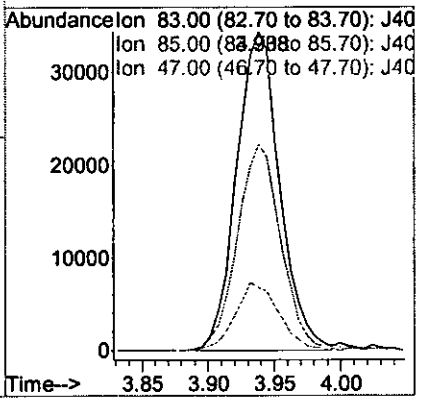
W031214.M Tue Mar 18 04:05:43 2014 Page: 2



#40
Chloroform
Concen: 5.15 ppb
RT: 3.938 min Scan# 466
Delta R.T. -0.000 min
Lab File: J4004.D
Acq: 18 Mar 2014 3:50 am

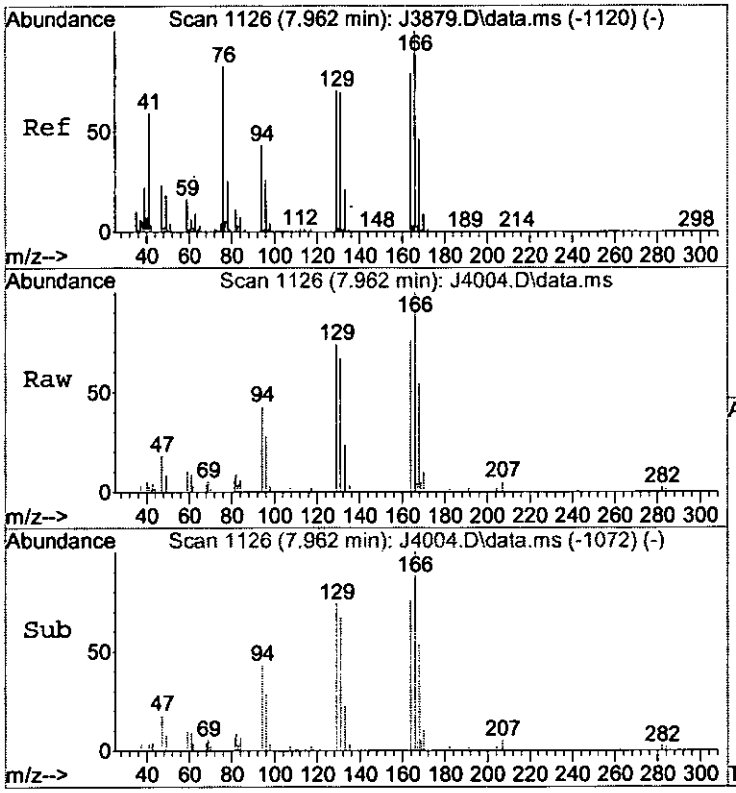
Tgt Ion: 83 Resp: 77722

Ion	Ratio	Lower	Upper
83	100		
85	64.6	42.6	82.6
47	19.7	3.4	43.4



J4004.D W031214.M Tue Mar 18 15:12:14 2014 Page 1

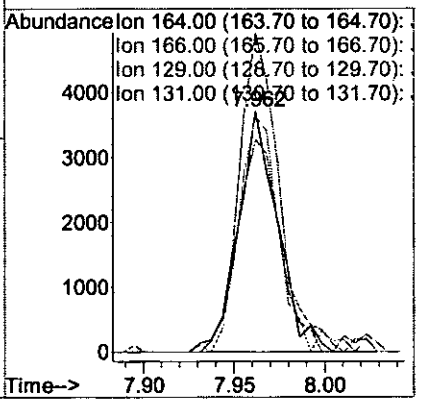
0014



#72
Tetrachloroethene
Concen: 0.90 ppb m
RT: 7.962 min Scan# 1126
Delta R.T. -0.000 min
Lab File: J4004.D
Acq: 18 Mar 2014 3:50 am

Tgt Ion:164 Resp: 5626

Ion	Ratio	Lower	Upper
164	100		
166	132.3	105.9	145.9
129	97.6	68.6	108.6
131	88.2	66.6	106.6



J4004.D W031214.M Tue Mar 18 15:12:22 2014 0015 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4004.D
Acq On : 18 Mar 2014 3:50 am
Operator : K.Ruest
Sample : R1401764-005|1.0
Misc : PARSONS 9913 T4
ALS Vial : 37 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4004.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.938	456	466	477	rBV2	84892	199070	5.04%	0.910%
2	4.152	491	501	508	rBV2	523926	1211939	30.67%	5.540%
3	4.249	508	517	535	rVB	952763	2444824	61.87%	11.175%
4	4.658	574	584	600	rBV	437514	1132332	28.66%	5.176%
5	5.450	702	714	729	rBV	1231335	2926547	74.06%	13.377%
6	7.322	1014	1021	1038	rBV	2610054	3951538	100.00%	18.062%
7	7.962	1117	1126	1135	rBV4	28426	52895	1.34%	0.242%
8	8.742	1249	1254	1271	rVB	2788937	3557636	90.03%	16.262%
9	9.785	1420	1425	1437	rBV	2252056	2845788	72.02%	13.008%
10	10.748	1578	1583	1592	rBV	3150122	3554851	89.96%	16.249%

Sum of corrected areas: 21877420

W031214.M Tue Mar 18 15:12:29 2014 Page: 1

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4004.D
Acq On    : 18 Mar 2014    3:50 am
Operator  : K.Ruest
Sample    : R1401764-005|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 37   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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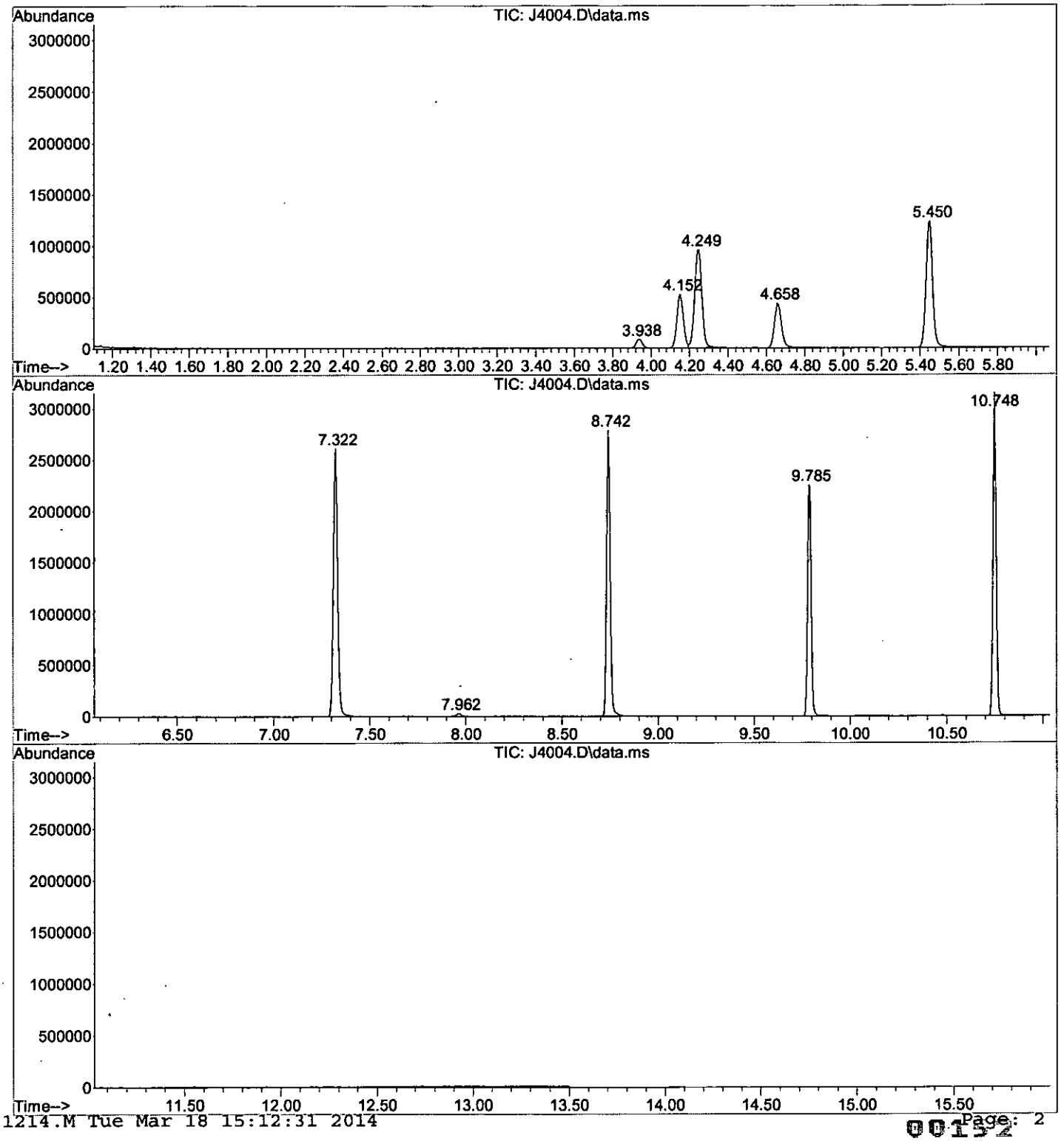


W031214.M Tue Mar 18 15:12:31 2014 Page: 2

00152

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031714\\
Data File : J4004.D
Acq On : 18 Mar 2014 3:50 amm
Operator : K.Ruestt
Sample : R1401764-005|1.00
Misc : PARSONS 9913 T44
ALS Vial : 37 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Tue Mar 18 15:12:32 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1410
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 04:22
Sample Name:	FTMM-53-GW-699MW06-10	**Units:**	µg/L
Lab Code:	R1401764-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4005.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.80**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1410
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 04:22
Sample Name:	FTMM-53-GW-699MW06-10	**Units:**	µg/L
Lab Code:	R1401764-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4005.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**1.5**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.23**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.23**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**1.2**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.24**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.31**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 04:22	
Dibromofluoromethane	98	85-115	3/18/14 04:22	
Toluene-d8	90	85-120	3/18/14 04:22	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0422

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW06-10	**Units:**	µg/L
Lab Code:	R1401764-006	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-006|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4005.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 4:22 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 04:37:43 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	904665	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1314215	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1217215	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	603700	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	373673	49.12	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.24%			
48) surr1,1,2-dichloroetha...	4.658	65	417215	48.14	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 96.28%			
65) SURR3,Toluene-d8	7.322	98	1434618	44.87	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 89.74%			
70) SURR2,BFB	9.785	95	578668	48.52	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.04%			
Target Compounds						Qvalue
15) Acetone	2.048	43	1938	1.08	ppb	81
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~1151~~	~~0.26~~	~~ppb~~	~~# 1~~
~~21) Methyl Acetate~~	~~2.365~~	~~43~~	~~1426~~	~~0.35~~	~~ppb~~	~~# 60~~
~~61) 2-Nitropropane~~	~~6.785~~	~~41~~	~~577~~	~~0.56~~	~~ppb~~	~~88~~
82) Ethylbenzene	8.888	106	16386	1.45	ppb	93
83) (m+p)Xylene	8.998	106	15836	1.19	ppb	88
84) o-Xylene	9.346	106	4143	0.31	ppb	89
89) Isopropylbenzene	9.669	105	7300	0.23	ppb	97
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1291~~	~~2.67~~	~~ppb~~	~~# 26~~
95) n-Propylbenzene	10.022	91	8627	0.24	ppb	96
~~96) 2-Chlorotoluene~~	~~10.022~~	~~91~~	~~8627~~	~~0.38~~	~~ppb~~	~~# 48~~
101) 1,2,4-Trimethylbenzene	10.474	105	20925	0.80	ppb	99
117) Naphthalen	12.302	128	3714	0.23	ppb	93

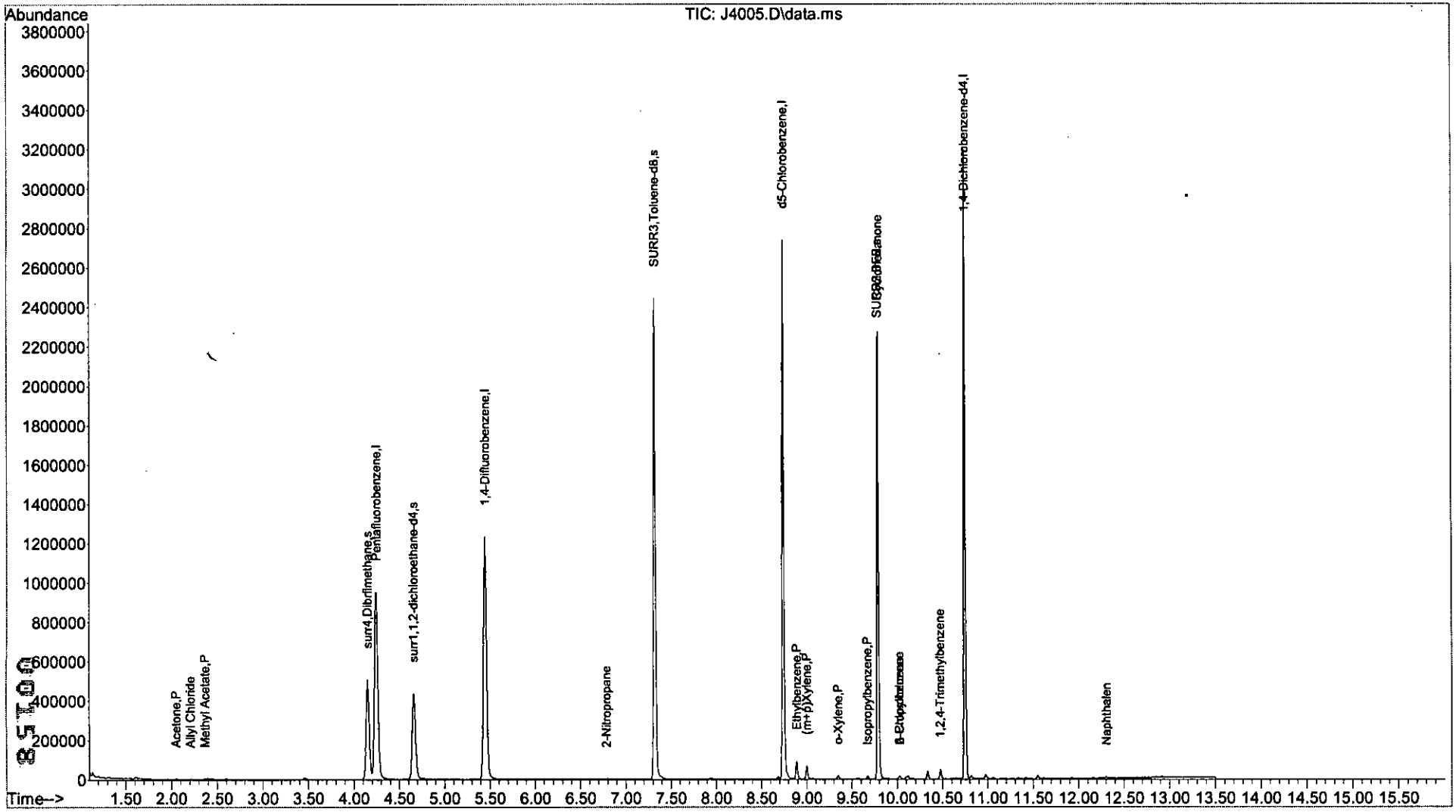
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 3/18/14

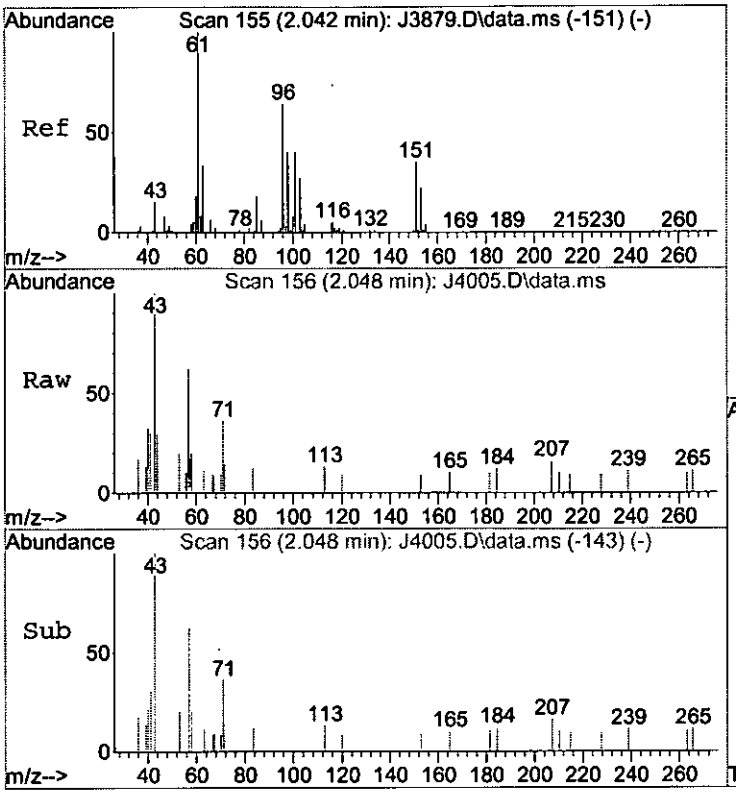
Quantitation Report (Not Reviewed)

Sample : R1401764-006|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4005.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 4:22 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 04:37:43 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



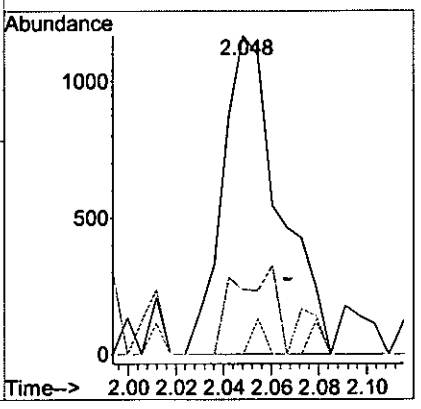
W031214.M Tue Mar 18 04:37:49 2014 Page: 2

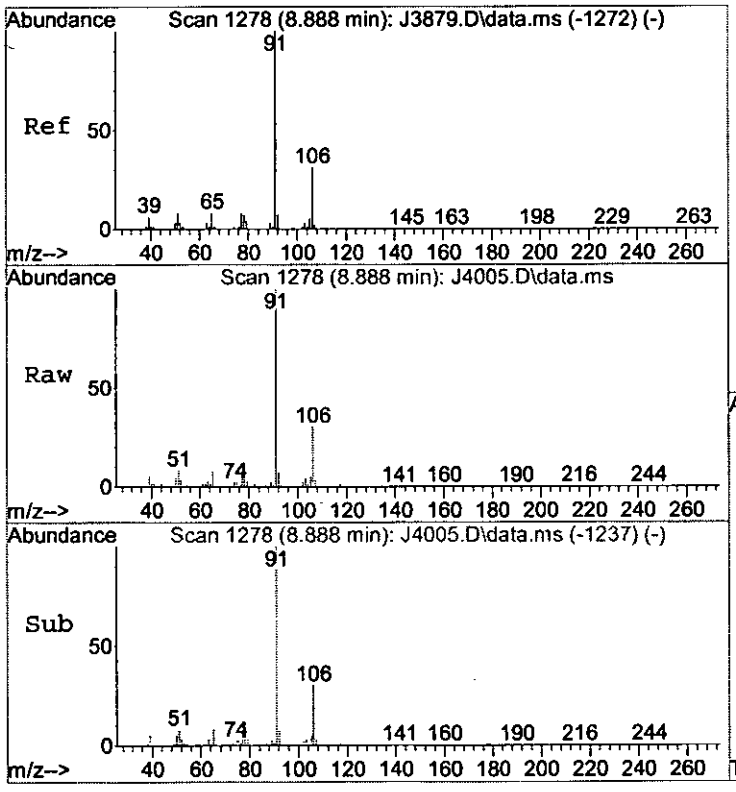


#15
Acetone
Concen: 1.08 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: J4005.D
Acq: 18 Mar 2014 4:22 am

Tgt Ion: 43 Resp: 1938

Ion	Ratio	Lower	Upper
43	100		
58	20.2	9.7	49.7
42	0.0	0.0	27.9

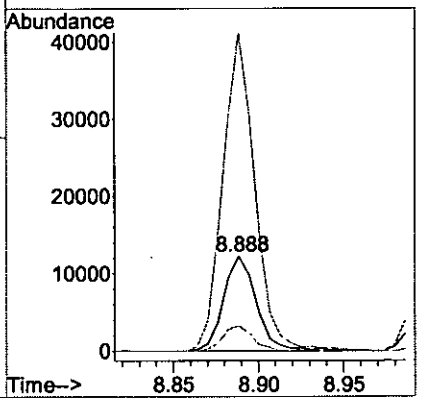




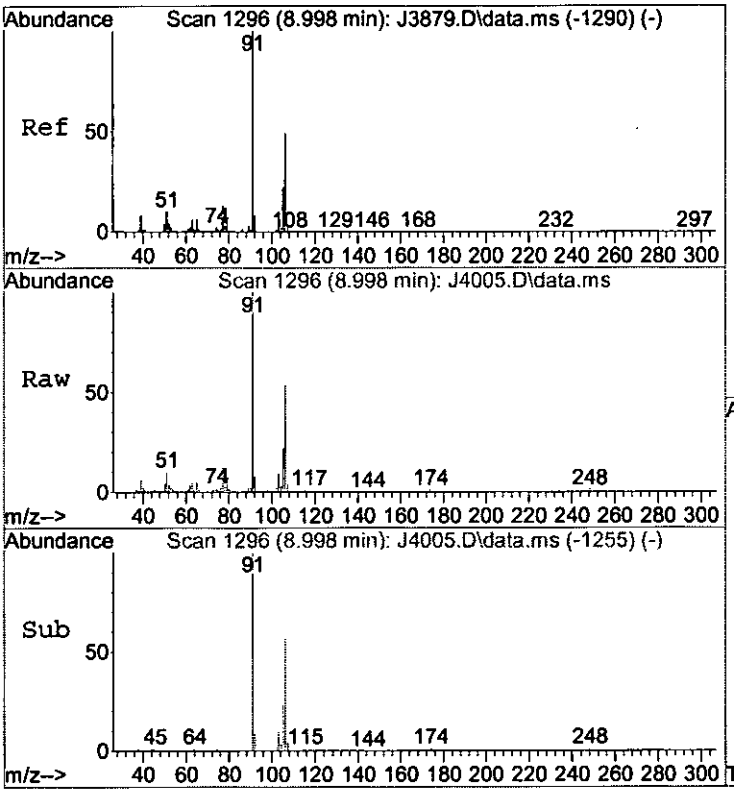
#82
Ethylbenzene
Concen: 1.45 ppb
RT: 8.888 min Scan# 1278
Delta R.T. -0.000 min
Lab File: J4005.D
Acq: 18 Mar 2014 4:22 am

Tgt Ion:106 Resp: 16386

Ion	Ratio	Lower	Upper
106	100		
91	336.2	300.3	340.3
65	26.6	6.6	46.6



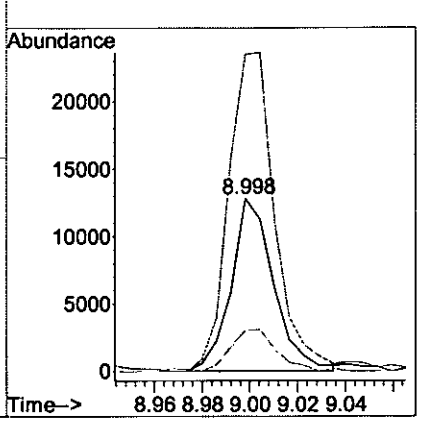
J4005.D W031214.M Tue Mar 18 15:15:53 2014 00155 Page 3

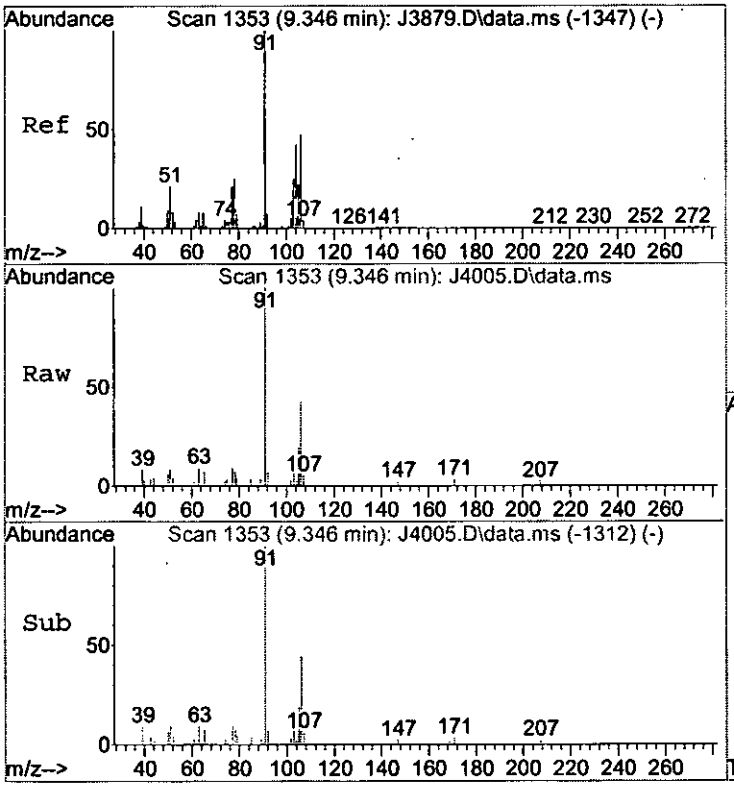


#83
(m+p)Xylene
Concen: 1.19 ppb
RT: 8.998 min Scan# 1296
Delta R.T. -0.000 min
Lab File: J4005.D
Acq: 18 Mar 2014 4:22 am

Tgt Ion:106 Resp: 15836

Ion	Ratio	Lower	Upper
106	100		
91	183.5	182.8	222.8
77	23.4	7.2	47.2

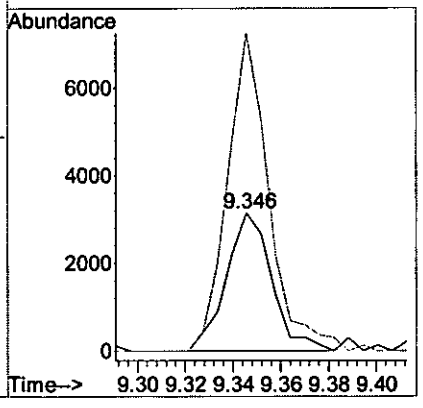




#84
o-Xylene
Concen: 0.31 ppb
RT: 9.346 min Scan# 1353
Delta R.T. -0.000 min
Lab File: J4005.D
Acq: 18 Mar 2014 4:22 am

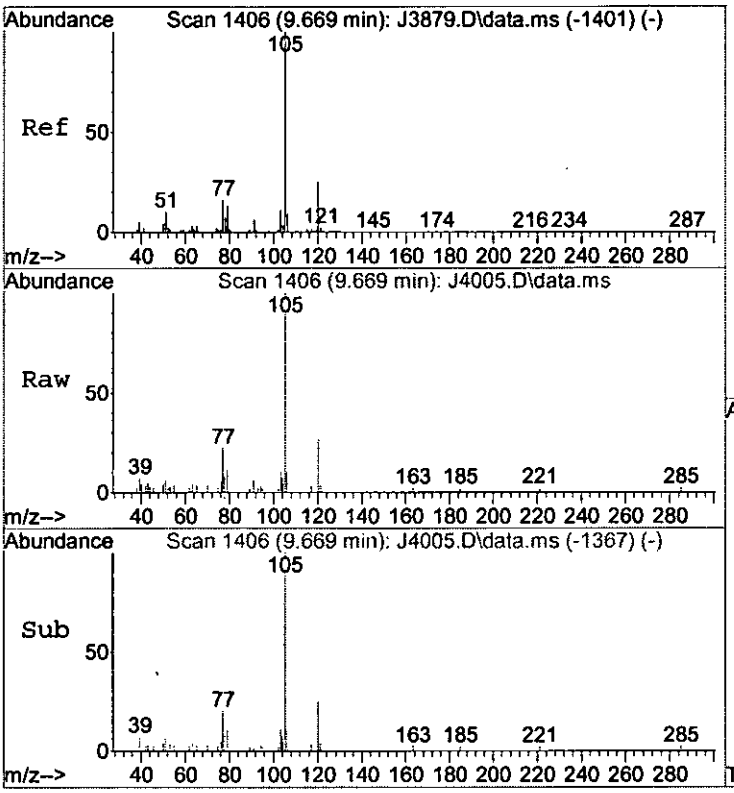
Tgt Ion:106 Resp: 4143

Ion	Ratio	Lower	Upper
106	100		
91	231.1	193.9	233.9



J4005.D W031214.M Tue Mar 18 15:15:55 2014 Page 4

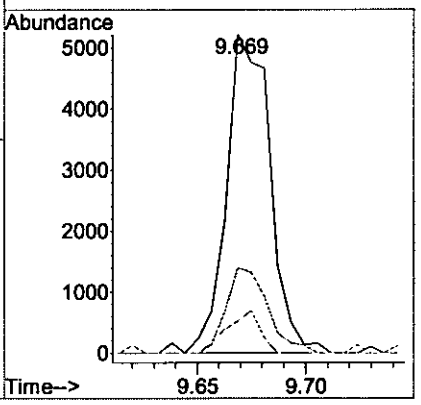
00160

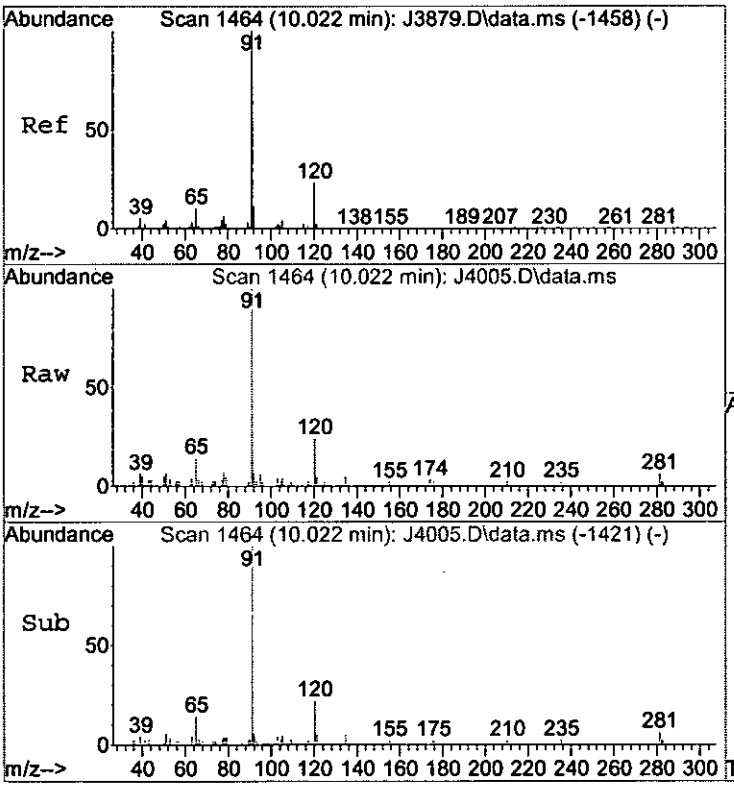


#89
Isopropylbenzene
Concen: 0.23 ppb
RT: 9.669 min Scan# 1406
Delta R.T. -0.006 min
Lab File: J4005.D
Acq: 18 Mar 2014 4:22 am

Tgt Ion:105 Resp: 7300

Ion	Ratio	Lower	Upper
105	100		
120	26.8	5.4	45.4
106	10.1	0.0	28.6

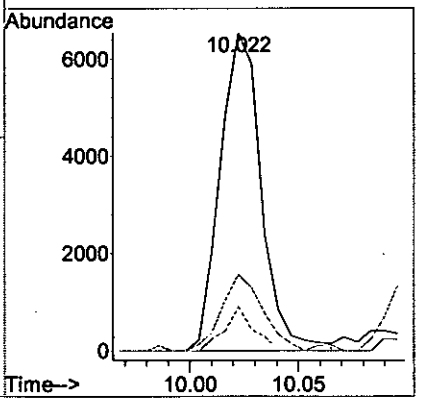




#95
n-Propylbenzene
Concen: 0.24 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.000 min
Lab File: J4005.D
Acq: 18 Mar 2014 4:22 am

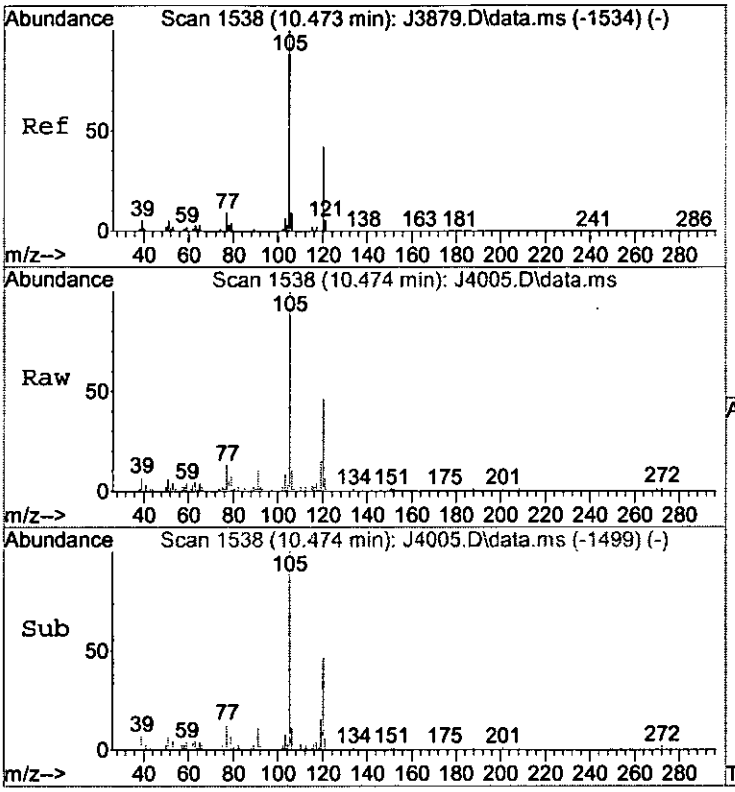
Tgt Ion: 91 Resp: 8627

Ion	Ratio	Lower	Upper
91	100		
120	23.9	3.1	43.1
65	13.8	0.0	30.1



J4005.D W031214.M Tue Mar 18 15:15:57 2014 Page 5

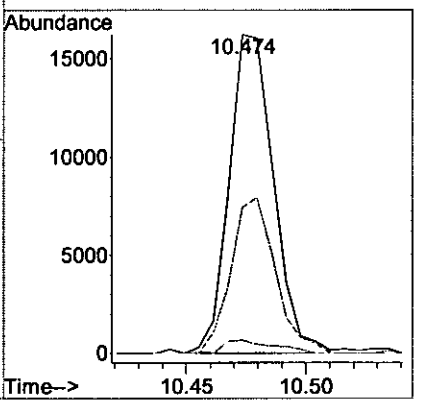
00161

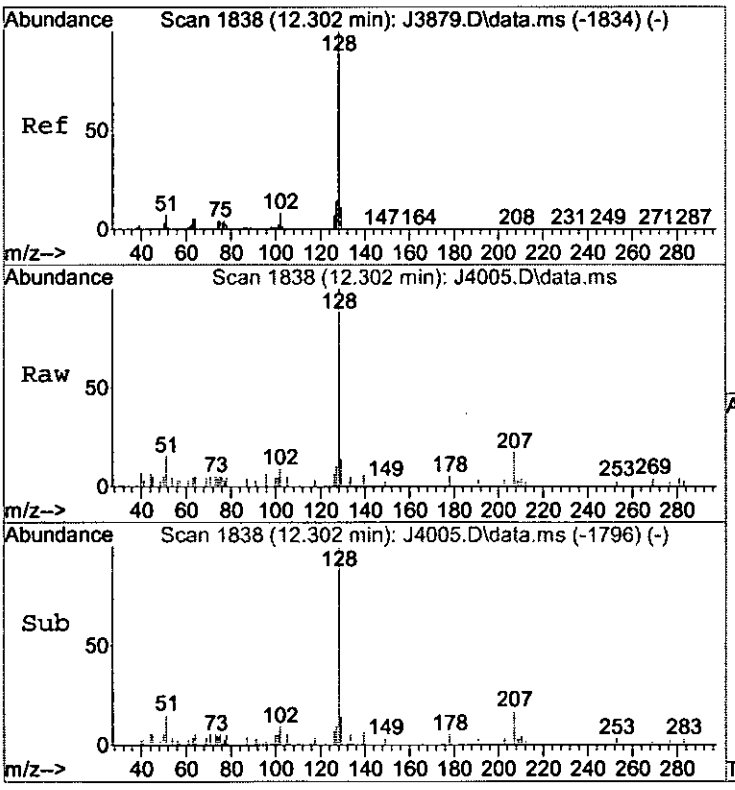


#101
1,2,4-Trimethylbenzene
Concen: 0.80 ppb
RT: 10.474 min Scan# 1538
Delta R.T. -0.006 min
Lab File: J4005.D
Acq: 18 Mar 2014 4:22 am

Tgt Ion:105 Resp: 20925

Ion	Ratio	Lower	Upper
105	100		
120	45.8	25.3	65.3
65	4.0	0.0	24.3

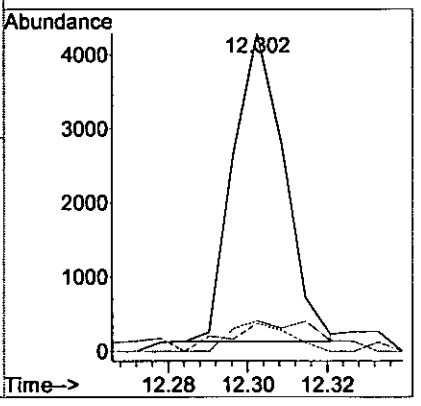




#117
Naphthalen
Concen: 0.23 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4005.D
Acq: 18 Mar 2014 4:22 am

Tgt Ion:128 Resp: 3714

Ion	Ratio	Lower	Upper
128	100		
127	9.5	0.0	33.8
102	8.7	0.0	28.5



J4005.D W031214.M Tue Mar 18 15:15:59 2014 Page 6

00162

MSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4005.D
Acq On : 18 Mar 2014 4:22 am
Operator : K.Ruest
Sample : R1401764-006|1.0
Misc : PARSONS 9913 T4
ALS Vial : 38 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4005.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV2	509078	1216687	32.72%	5.612%
2	4.249	509	517	534	rVB	947642	2429314	65.34%	11.205%
3	4.658	572	584	599	rBV	437523	1148876	30.90%	5.299%
4	5.444	702	713	731	rBV	1231819	2922398	78.60%	13.480%
5	7.322	1014	1021	1038	rBV	2443005	3718123	100.00%	17.150%
6	8.742	1249	1254	1271	rVB	2737149	3535470	95.09%	16.308%
7	8.888	1274	1278	1288	rVB	89981	119973	3.23%	0.553%
8	8.998	1291	1296	1303	rBV	67037	92618	2.49%	0.427%
9	9.791	1420	1426	1437	rBV	2275034	2841110	76.41%	13.105%
10	10.333	1511	1515	1522	rBV	43345	54110	1.46%	0.250%
11	10.474	1534	1538	1545	rVB	49860	62184	1.67%	0.287%
12	10.748	1578	1583	1591	rBV	3196142	3538841	95.18%	16.323%

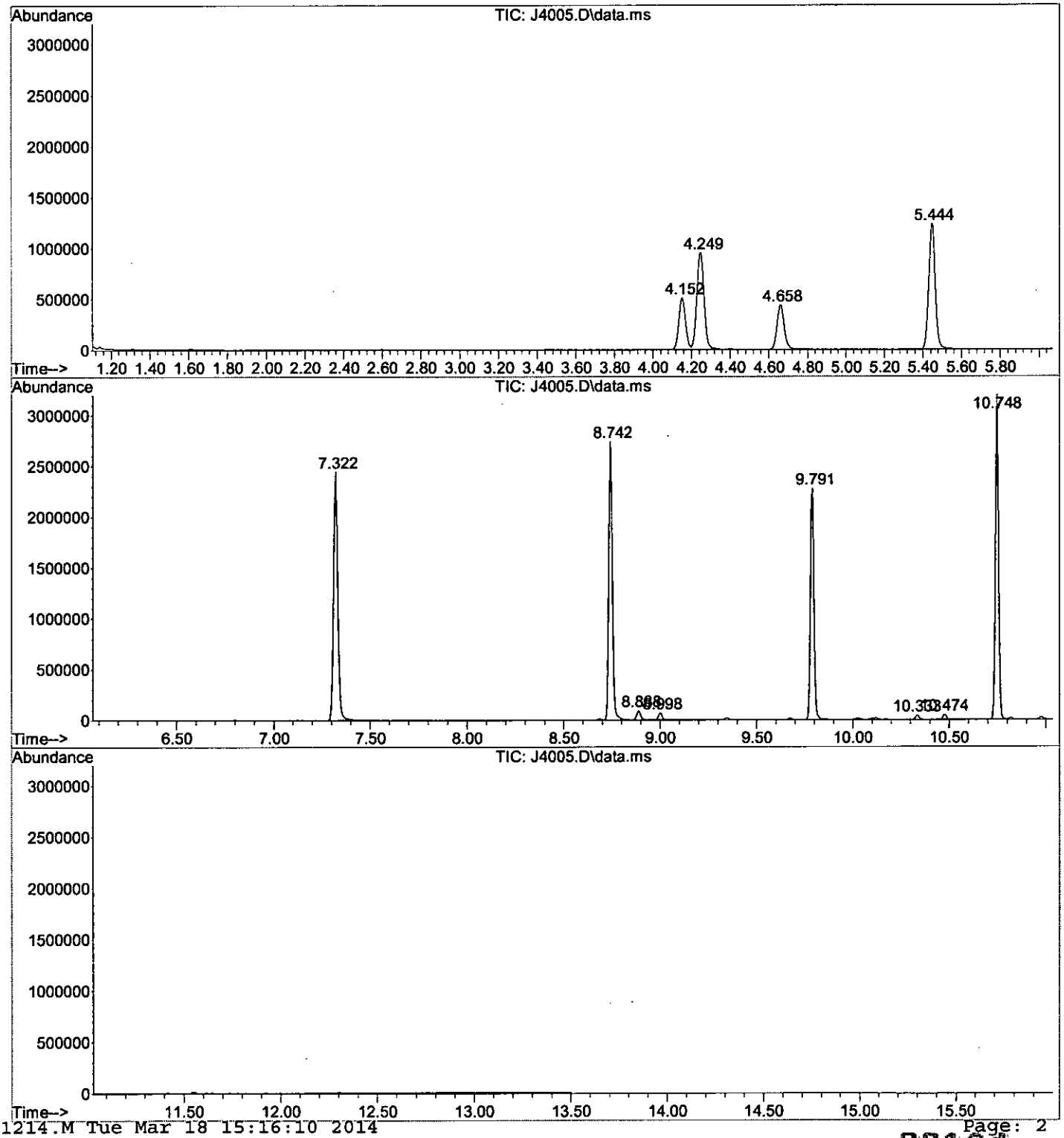
Sum of corrected areas: 21679704

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4005.D
Acq On : 18 Mar 2014 4:22 am
Operator : K.Ruest
Sample : R1401764-006|1.0
Misc : PARSONS 9913 T4
ALS Vial : 38 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Mar 18 15:16:10 2014 Page: 2

00164

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031714\\
Data File : J4005.D
Acq On : 18 Mar 2014 4:22 am
Operator : K.Ruestt
Sample : R1401764-006|1.00
Misc : PARSONS 9913 T44
ALS Vial : 38 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Tue Mar 18 15:16:11 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1520
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 05:58
Sample Name:	FTMM-53-GW-699RW05-8.6	**Units:**	µg/L
Lab Code:	R1401764-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4008.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	25	5.0	1.1	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	25	5.0	1.8	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	25	5.0	1.3	
79-00-5	1,1,2-Trichloroethane	ND	U	25	5.0	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	25	5.0	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	25	5.0	2.9	
563-58-6	1,1-Dichloropropene	ND	U	25	5.0	1.5	
87-61-6	1,2,3-Trichlorobenzene	ND	U	25	5.0	4.1	
96-18-4	1,2,3-Trichloropropane	ND	U	25	5.0	3.5	
120-82-1	1,2,4-Trichlorobenzene	ND	U	25	5.0	1.2	
95-63-6	1,2,4-Trimethylbenzene	**790**		25	5.0	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	25	5.0	3.7	
106-93-4	1,2-Dibromoethane	ND	U	25	5.0	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	25	5.0	1.1	
107-06-2	1,2-Dichloroethane	ND	U	25	5.0	1.8	
78-87-5	1,2-Dichloropropane	ND	U	25	5.0	1.0	
108-67-8	1,3,5-Trimethylbenzene	**160**		25	5.0	1.0	
541-73-1	1,3-Dichlorobenzene	ND	U	25	5.0	1.0	
142-28-9	1,3-Dichloropropane	ND	U	25	5.0	1.4	
106-46-7	1,4-Dichlorobenzene	ND	U	25	5.0	1.0	
594-20-7	2,2-Dichloropropane	ND	U	25	5.0	1.4	
78-93-3	2-Butanone (MEK)	ND	U	25	5.0	4.1	
95-49-8	2-Chlorotoluene	ND	U	25	5.0	1.0	
591-78-6	2-Hexanone	ND	U	25	25	8.3	
106-43-4	4-Chlorotoluene	ND	U	25	5.0	1.2	
99-87-6	p-Isopropyltoluene	**3.7**	J	25	5.0	1.0	
108-10-1	4-Methyl-2-pentanone	ND	U	25	5.0	3.4	
67-64-1	Acetone	ND	U	25	25	6.2	
71-43-2	Benzene	**7.2**	J	25	5.0	1.0	
108-86-1	Bromobenzene	ND	U	25	5.0	1.5	
74-97-5	Bromochloromethane	ND	U	25	5.0	1.6	
75-27-4	Bromodichloromethane	ND	U	25	5.0	1.6	
75-25-2	Bromoform	ND	U	25	5.0	2.1	
74-83-9	Bromomethane	ND	U	25	5.0	1.5	
56-23-5	Carbon Tetrachloride	ND	U	25	5.0	2.3	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1520
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 05:58
Sample Name:	FTMM-53-GW-699RW05-8.6	**Units:**	µg/L
Lab Code:	R1401764-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4008.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	25	5.0	1.5	
75-00-3	Chloroethane	**1.6**	J	25	5.0	1.2	
67-66-3	Chloroform	ND	U	25	5.0	1.3	
74-87-3	Chloromethane	ND	U	25	5.0	1.1	
124-48-1	Dibromochloromethane	ND	U	25	5.0	1.6	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	25	5.0	2.4	
75-09-2	Methylene Chloride	ND	U	25	5.0	1.6	
100-41-4	Ethylbenzene	**700**		25	5.0	1.0	
87-68-3	Hexachlorobutadiene	ND	U	25	5.0	3.1	
98-82-8	Isopropylbenzene (Cumene)	**52**		25	5.0	1.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	25	5.0	1.5	
91-20-3	Naphthalene	**270**		25	5.0	1.0	
100-42-5	Styrene	ND	U	25	5.0	1.0	
127-18-4	Tetrachloroethene (PCE)	ND	U	25	5.0	1.5	
108-88-3	Toluene	**23**	J	25	5.0	1.0	
79-01-6	Trichloroethene (TCE)	ND	U	25	5.0	1.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	25	5.0	1.0	
75-01-4	Vinyl Chloride	ND	U	25	5.0	1.6	
156-59-2	cis-1,2-Dichloroethene	ND	U	25	5.0	1.5	
10061-01-5	cis-1,3-Dichloropropene	ND	U	25	5.0	1.2	
179601-23-1	m,p-Xylenes	**1600**		50	10	1.7	
104-51-8	n-Butylbenzene	ND	U	25	5.0	1.1	
103-65-1	n-Propylbenzene	**100**		25	5.0	1.0	
95-47-6	o-Xylene	**810**		25	5.0	1.0	
135-98-8	sec-Butylbenzene	**6.3**	J	25	5.0	1.4	
98-06-6	tert-Butylbenzene	ND	U	25	5.0	1.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	25	5.0	1.7	
10061-02-6	trans-1,3-Dichloropropene	ND	U	25	5.0	1.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	3/18/14 05:58	
Dibromofluoromethane	101	85-115	3/18/14 05:58	
Toluene-d8	92	85-120	3/18/14 05:58	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14 0558

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-8.6
Lab Code: R1401764-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000109-66-0	Pentane	1.76	**65.0**	JN
000107-83-5	Pentane, 2-methyl-	2.40	**159.4**	JN
	unknown	2.44	**60.8**	J
000096-14-0	Pentane, 3-methyl-	2.60	**97.8**	JN
	unknown	2.84	**32.6**	J
000096-37-7	Cyclopentane, methyl-	3.46	**257.7**	JN
000565-59-3	Pentane, 2,3-dimethyl-	4.40	**34.9**	JN
000108-87-2	Cyclohexane, methyl-	6.10	**52.2**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.10	**365.3**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.33	**264.9**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**249.6**	JN
	unknown	10.97	**280.7**	J
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.05	**60.8**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**44.2**	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	11.33	**69.0**	JN
000768-49-0	Benzene, (2-methyl-1-propenyl)-	11.41	**47.9**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**44.6**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.65	**41.5**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.82	**32.1**	JN
000767-58-8	Indan, 1-methyl-	11.93	**77.0**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-007|5.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4008.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 5:58 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 06:14:01 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	907936	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1297256	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1207368	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	629413	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	381025	50.74	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.48%				
48) surr1,1,2-dichloroetha...	4.658	65	407688	47.65	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 95.30%				
65) SURR3,Toluene-d8	7.322	98	1449957	45.95	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 91.90%				
70) SURR2,BFB	9.785	95	579222	49.20	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.40%				
Target Compounds							Qvalue
6) Chloroethane	1.567	64	1678	0.32	ppb		86
~~12) Acrolein~~	~~1.957~~	~~56~~	~~533~~	~~2.59~~	~~ppb~~	~~#~~	~~1~~
~~15) Acetone~~	~~2.055~~	~~43~~	~~31640~~	~~17.56~~	~~ppb~~	~~#~~	~~63~~
~~16) 2-Propanol~~	~~2.109~~	~~45~~	~~255~~	~~0.87~~	~~ppb~~	~~#~~	~~1~~
18) Carbon Disulfide	2.201	76	5111	0.22	ppb		75
~~19) Acetonitrile~~	~~2.213~~	~~40~~	~~637~~	~~2.16~~	~~ppb~~	~~#~~	~~17~~
20) Allyl Chloride	2.201	76	4603	1.02	ppb	#	1
21) Methyl Acetate	2.311	43	5581	1.38	ppb		70
22) Methylene Chloride	2.323	84	4239	0.49	ppb	#	12
24) Acrylonitrile	2.591	53	9497	4.71	ppb	#	32
33) 2,2-Dichloropropane	3.457	77	4988	0.41	ppb	#	27
35) 2-Butanone	3.560	43	3566	1.41	ppb	#	23
~~36) Propionitrile~~	~~3.621~~	~~54~~	~~302~~	~~0.41~~	~~ppb~~	~~#~~	~~3~~
44) Cyclohexane	4.310	41	77582	11.05	ppb		95 MD
49) Benzene	4.780	78	46149	1.44	ppb		99
~~51) Iso-Butyl Alcohol~~	~~4.554~~	~~43~~	~~41010~~	~~186.87~~	~~ppb~~		~~77~~
52) n-Heptane	5.334	43	10057	1.26	ppb		85 MD
~~53) 1 Butanol~~	~~5.749~~	~~56~~	~~737~~	~~6.11~~	~~ppb~~		~~90~~
55) Methylcyclohexane	6.103	55	92226	11.09	ppb		96 MD
~~59) Methyl Methacrylate~~	~~6.353~~	~~69~~	~~18332~~	~~4.77~~	~~ppb~~	~~#~~	~~31~~
~~61) 2-Nitropropane~~	~~6.761~~	~~41~~	~~337~~	~~0.33~~	~~ppb~~	~~#~~	~~1~~
66) Toluene	7.389	91	151009	4.59	ppb		98
~~69) 1,1,2-Trichloroethane~~	~~7.803~~	~~97~~	~~6381~~	~~1.11~~	~~ppb~~	~~#~~	~~17~~
82) Ethylbenzene	8.889	106	1577274	140.91	ppb	#	84
83) (m+p)Xylene	8.998	106	4090710	310.97	ppb	#	78
84) o-Xylene	9.346	106	2187018	162.91	ppb		88
~~85) Styrene~~	~~9.346~~	~~104~~	~~107938~~	~~5.03~~	~~ppb~~	~~#~~	~~1~~
89) Isopropylbenzene	9.669	105	336809	10.36	ppb		97
~~90) Cyclohexanone~~	~~9.681~~	~~55~~	~~269~~	~~0.53~~	~~ppb~~		~~97~~
95) n-Propylbenzene	10.023	91	785575	20.67	ppb		98
~~96) 2-Chlorotoluene~~	~~10.096~~	~~91~~	~~259680~~	~~10.88~~	~~ppb~~	~~#~~	~~62~~
~~97) 3-Chlorotoluene~~	~~10.096~~	~~91~~	~~362339~~	~~14.59~~	~~ppb~~	~~#~~	~~43~~
~~98) 4-Chlorotoluene~~	~~10.169~~	~~91~~	~~87502~~	~~3.11~~	~~ppb~~	~~#~~	~~46~~
99) 1,3,5-Trimethylbenzene	10.169	105	853855	32.21	ppb		99
101) 1,2,4-Trimethylbenzene	10.480	105	4331573	158.82	ppb		92

KR 3/15/14
PL 3/21/14

Quantitation Report (Not Reviewed)

Sample : R1401764-007|5.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4008.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 5:58 am
Operator : K.Ruest
InstName : MSVOA-12

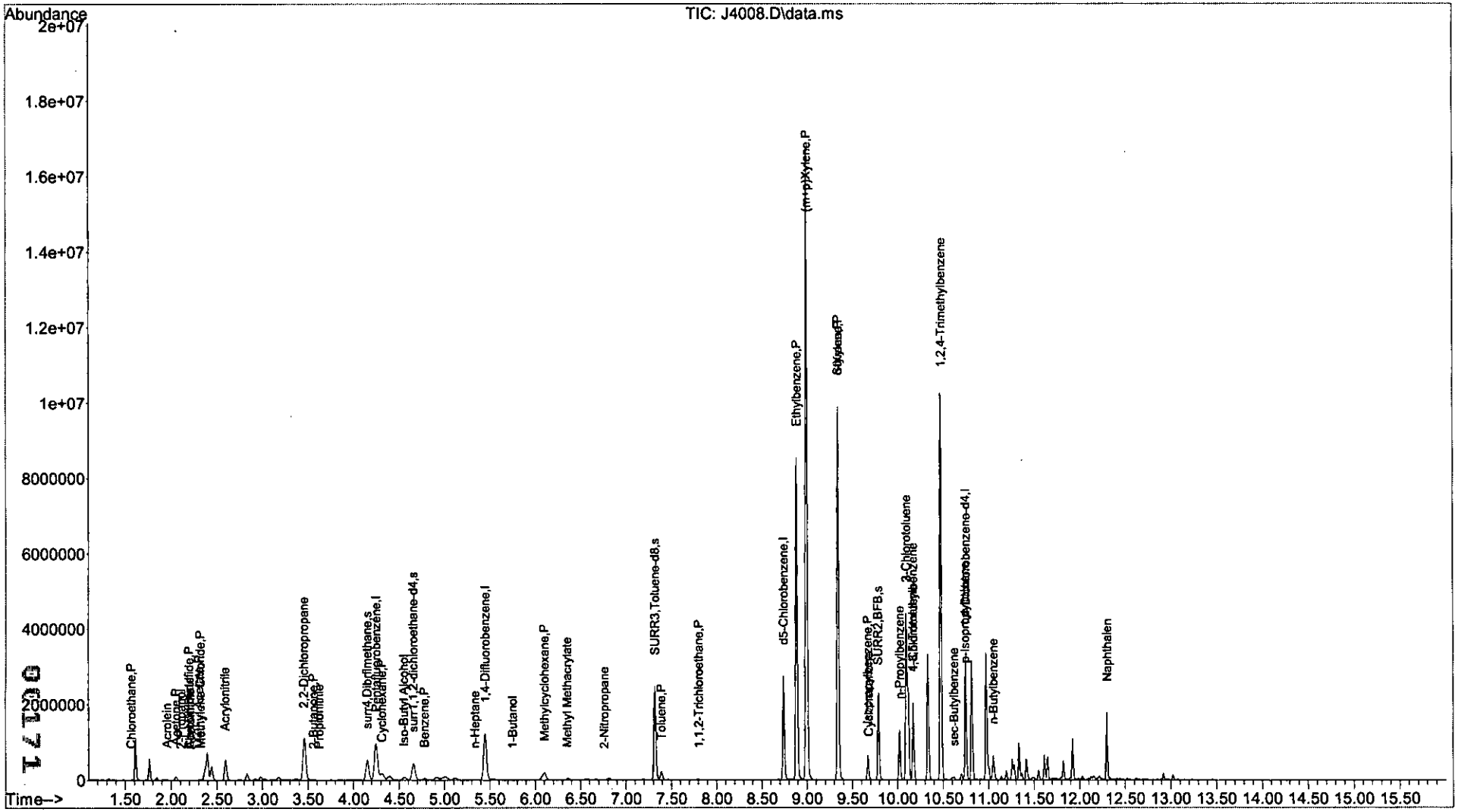
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 06:14:01 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
103) sec-Butylbenzene	10.620	105	38893	1.25	ppb		96
104) p-Isopropyltoluene	10.742	119	19111	0.73	ppb		85
~~109) n-Butylbenzene~~	~~11.053~~	~~91~~	~~76619~~	~~3.24~~	~~ppb~~	~~#~~	~~1~~
117) Naphthalen	12.303	128	890306	53.29	ppb		99

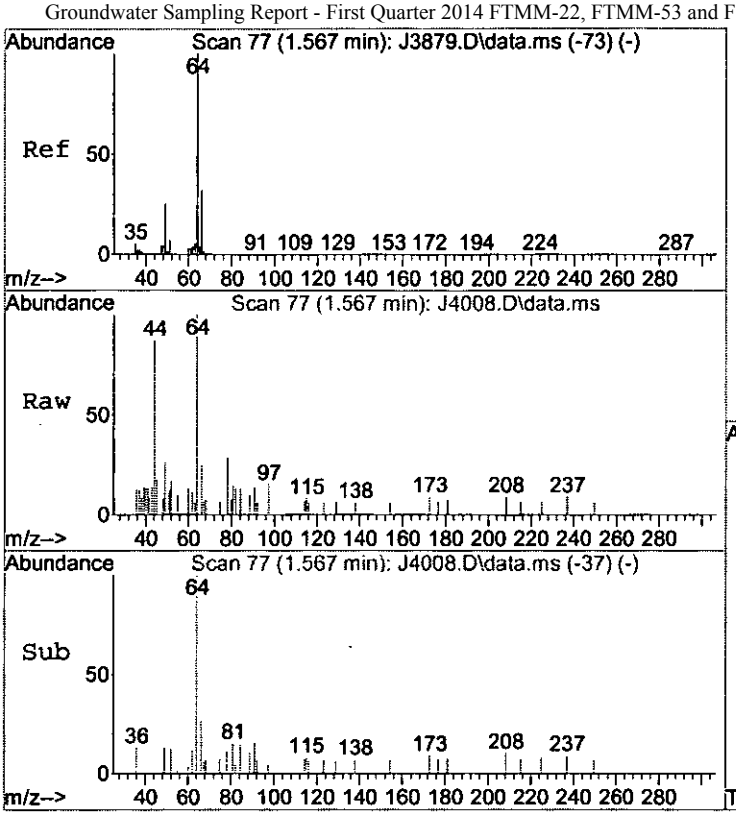
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : R1401764-007|5.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4008.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 5:58 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 06:14:01 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



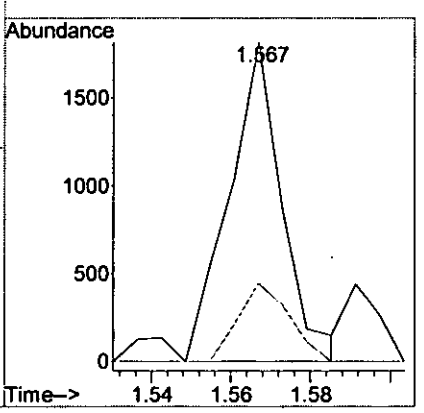
W031214.M Tue Mar 18 06:14:08 2014 Page: 3

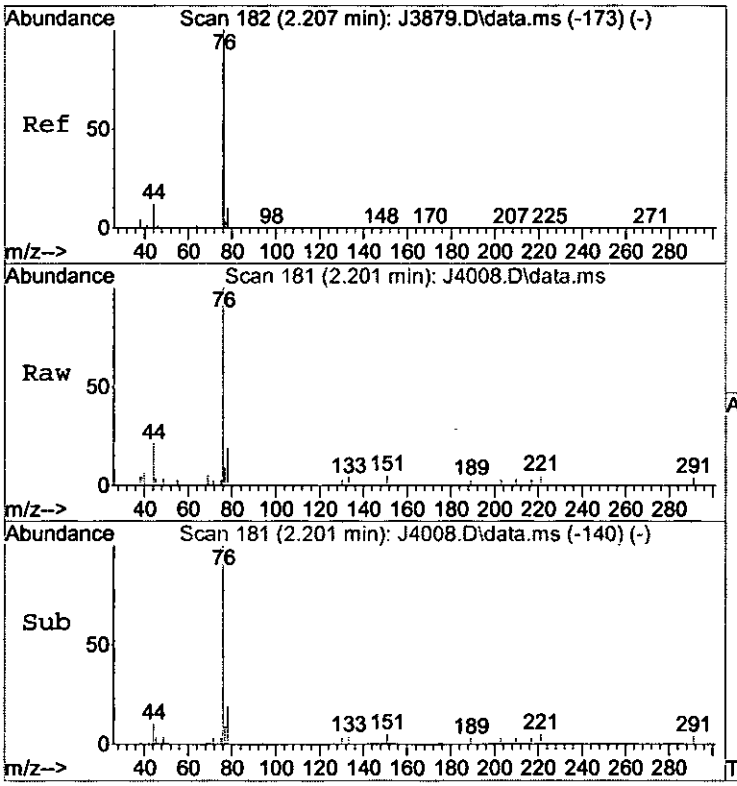


#6
Chloroethane
Concen: 0.32 ppb
RT: 1.567 min Scan# 77
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion: 64 Resp: 1678

Ion	Ratio	Lower	Upper
64	100		
66	24.5	12.2	52.2

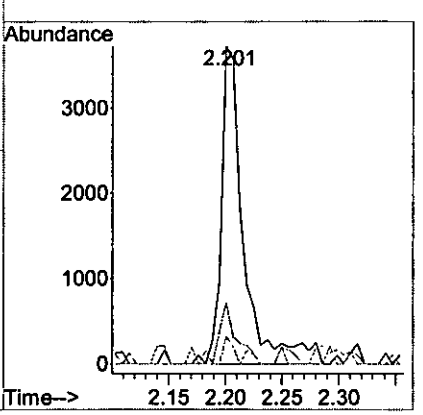




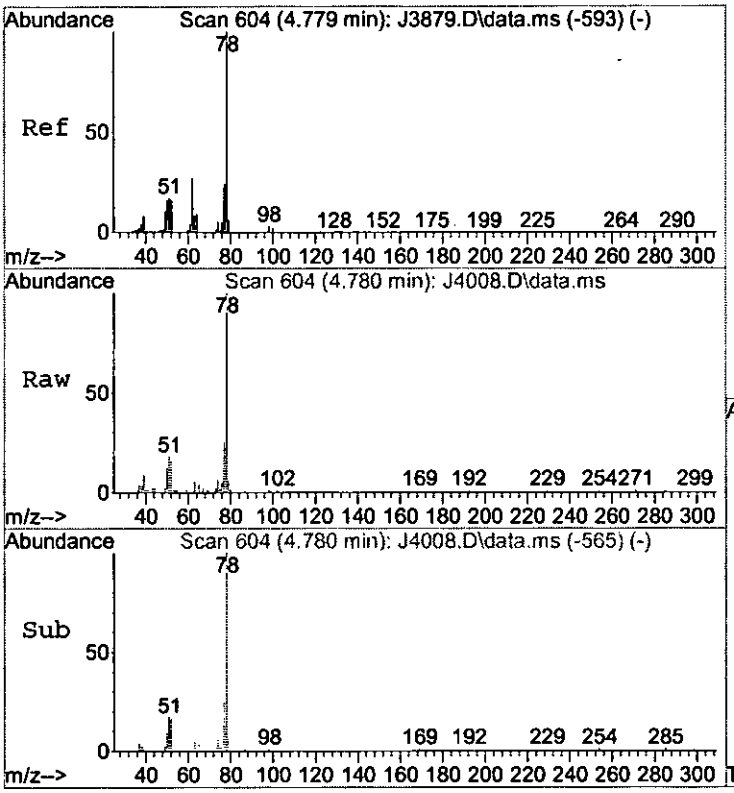
#18
Carbon Disulfide
Concen: 0.22 ppb
RT: 2.201 min Scan# 181
Delta R.T. -0.006 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion: 76 Resp: 5111

Ion	Ratio	Lower	Upper
76	100		
78	19.4	0.0	29.6
77	8.6	0.0	22.6



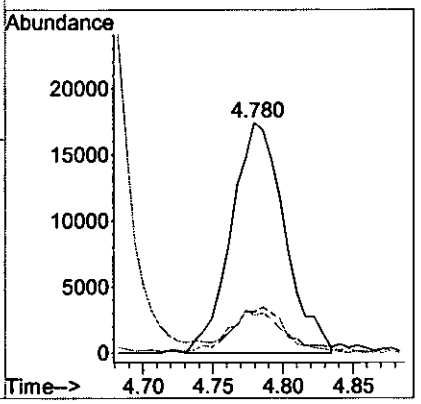
J4008.D W031214.M Tue Mar 18 16:06:17 2014 00172 Page 3

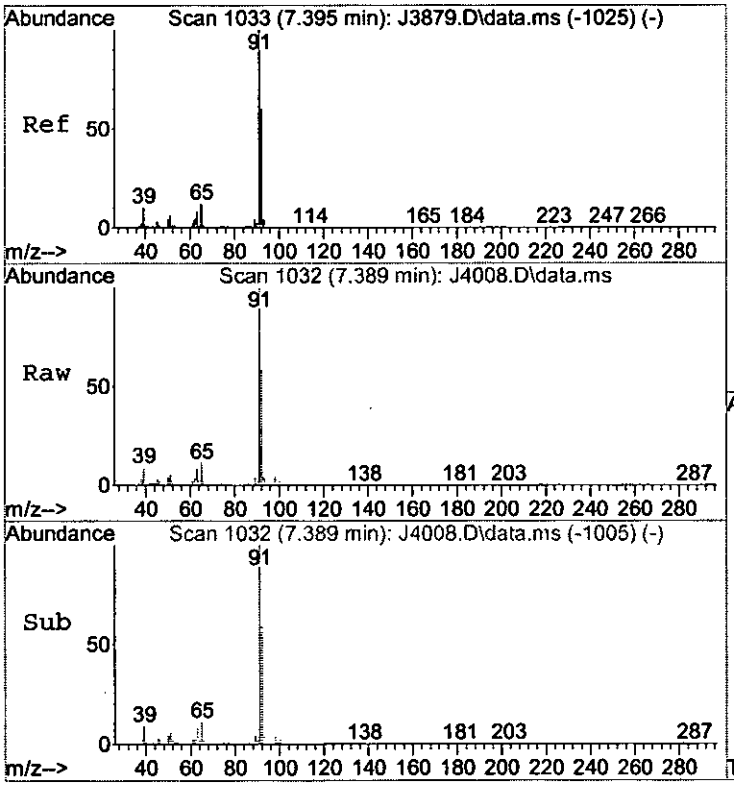


#49
Benzene
Concen: 1.44 ppb
RT: 4.780 min Scan# 604
Delta R.T. -0.006 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion: 78 Resp: 46149

Ion	Ratio	Lower	Upper
78	100		
51	17.7	0.0	38.2
52	16.5	0.0	36.1

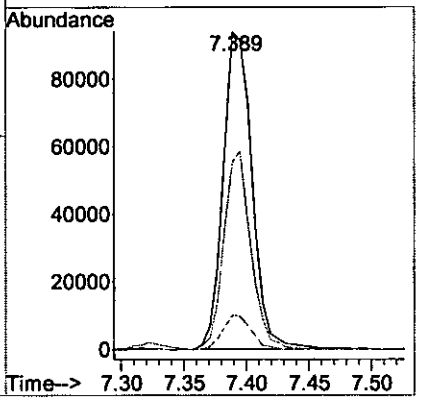




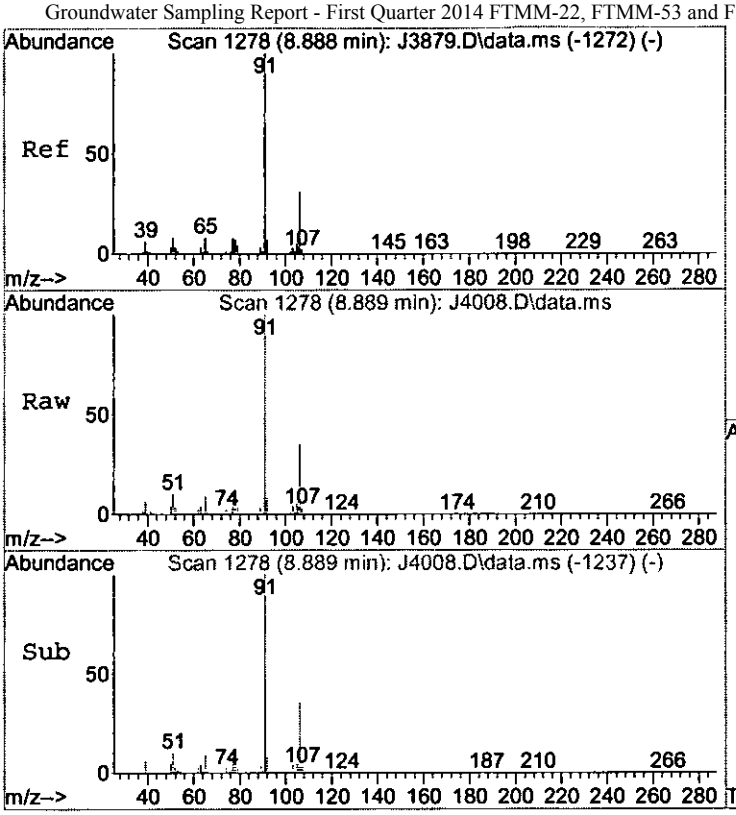
#66
Toluene
Concen: 4.59 ppb
RT: 7.389 min Scan# 1032
Delta R.T. -0.006 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion: 91 Resp: 151009

Ion	Ratio	Lower	Upper
91	100		
92	58.8	39.9	79.9
65	10.7	0.0	32.3



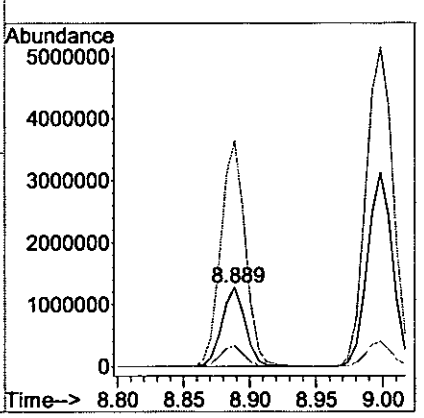
J4008.D W031214.M Tue Mar 18 16:06:19 2014 00175 Page 4

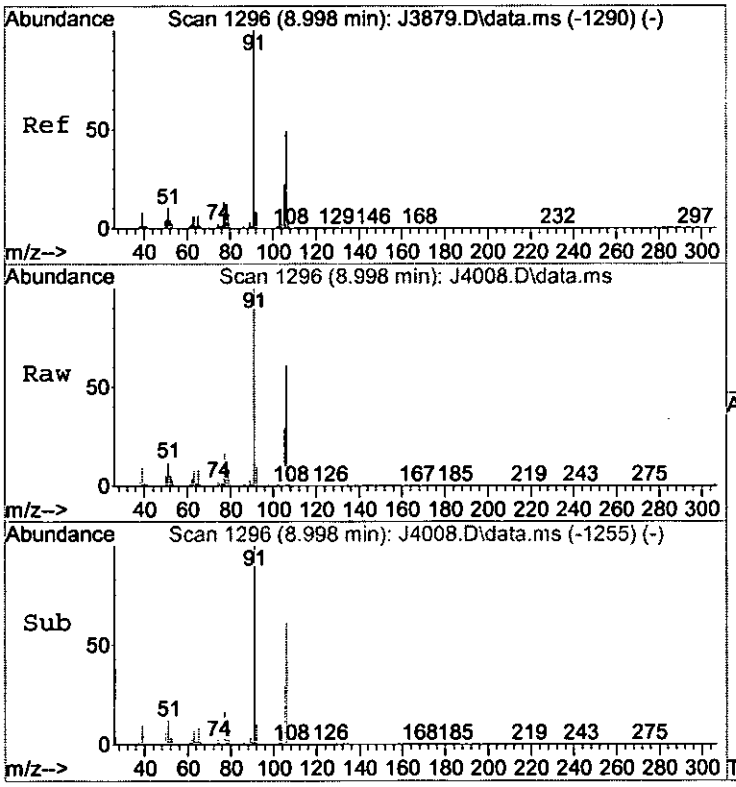


#82
Ethylbenzene
Concen: 140.91 ppb
RT: 8.889 min Scan# 1278
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion:106 Resp: 1577274

Ion	Ratio	Lower	Upper
106	100		
91	284.6	300.3	340.3#
65	25.8	6.6	46.6

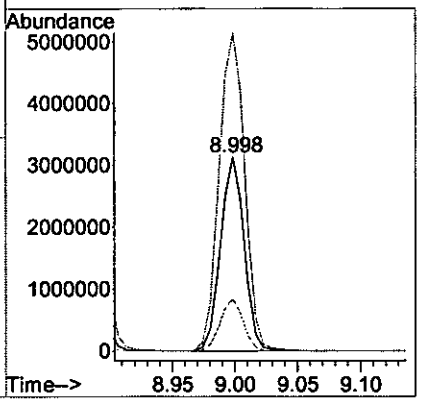




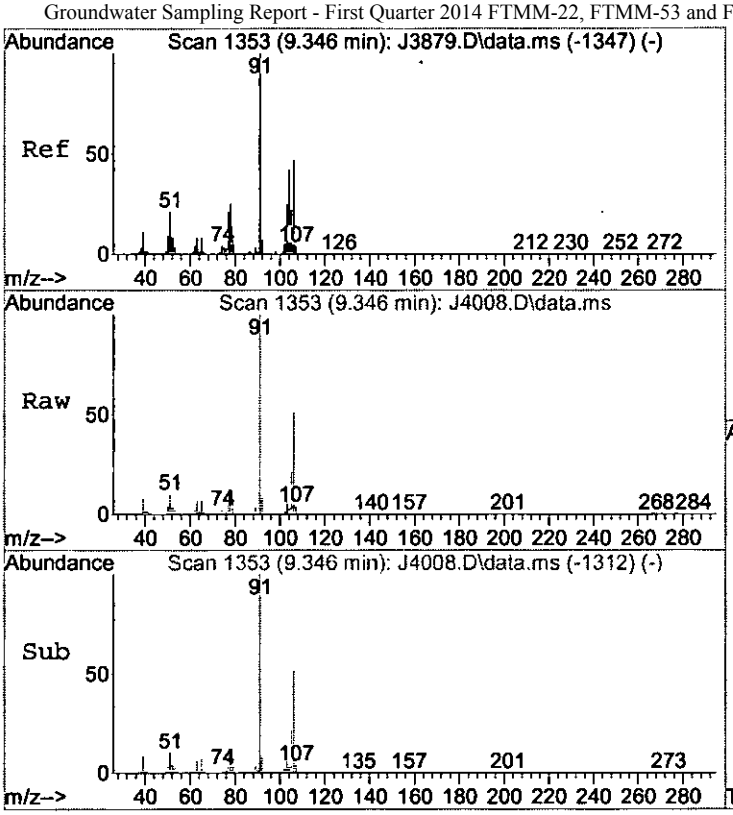
#83
(m+p)Xylene
Concen: 310.97 ppb
RT: 8.998 min Scan# 1296
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion:106 Resp: 4090710

Ion	Ratio	Lower	Upper
106	100		
91	164.1	182.8	222.8#
77	26.6	7.2	47.2



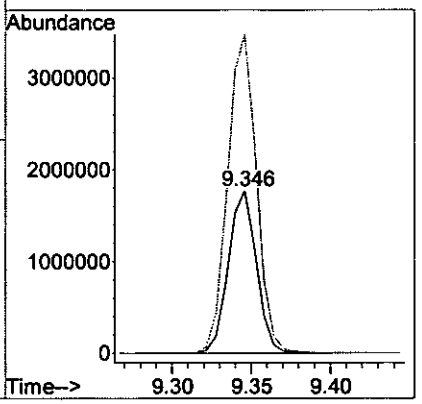
J4008.D W031214.M Tue Mar 18 16:06:21 2014 0017 Page 5

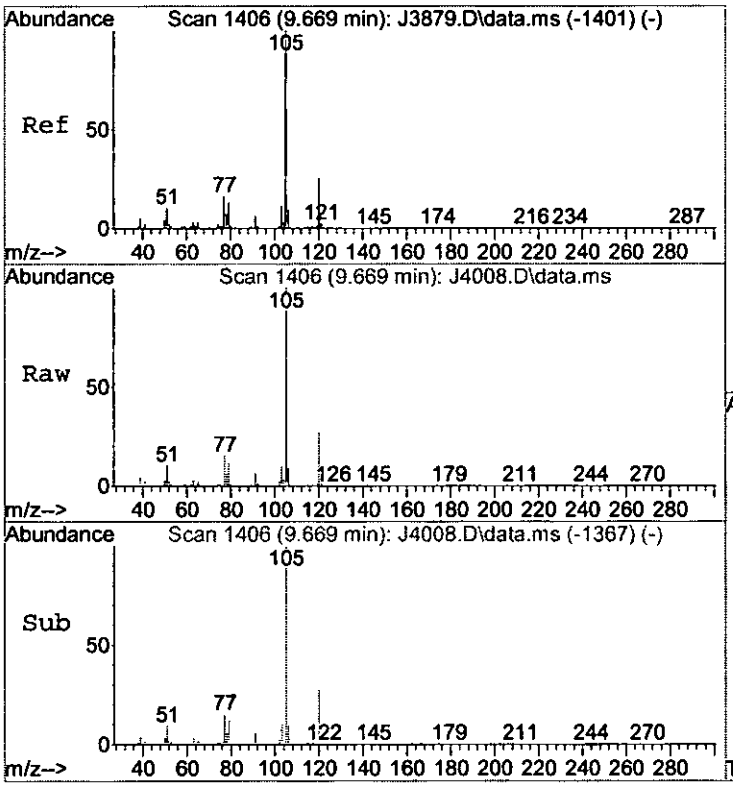


#84
o-Xylene
Concen: 162.91 ppb
RT: 9.346 min Scan# 1353
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion:106 Resp: 2187018

Ion	Ratio	Lower	Upper
106	100		
91	195.7	193.9	233.9

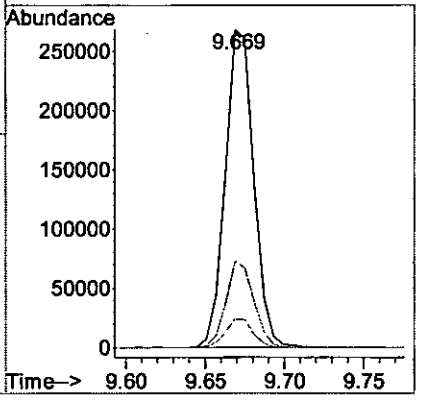


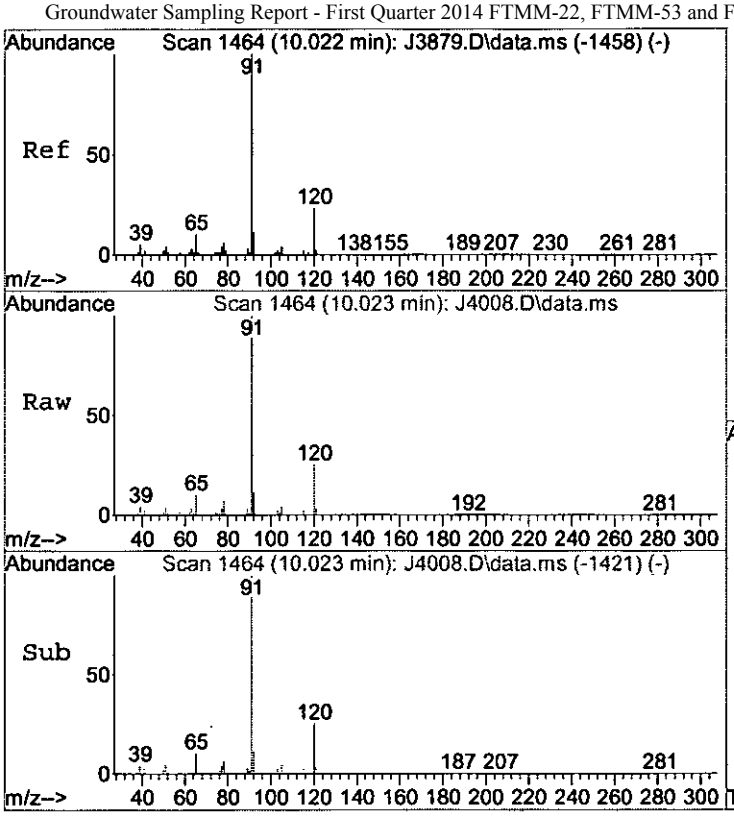


#89
Isopropylbenzene
Concen: 10.36 ppb
RT: 9.669 min Scan# 1406
Delta R.T. -0.006 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion:105 Resp: 336809

Ion	Ratio	Lower	Upper
105	100		
120	27.1	5.4	45.4
106	9.0	0.0	28.6

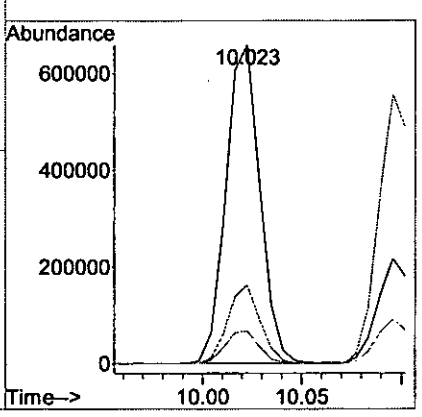


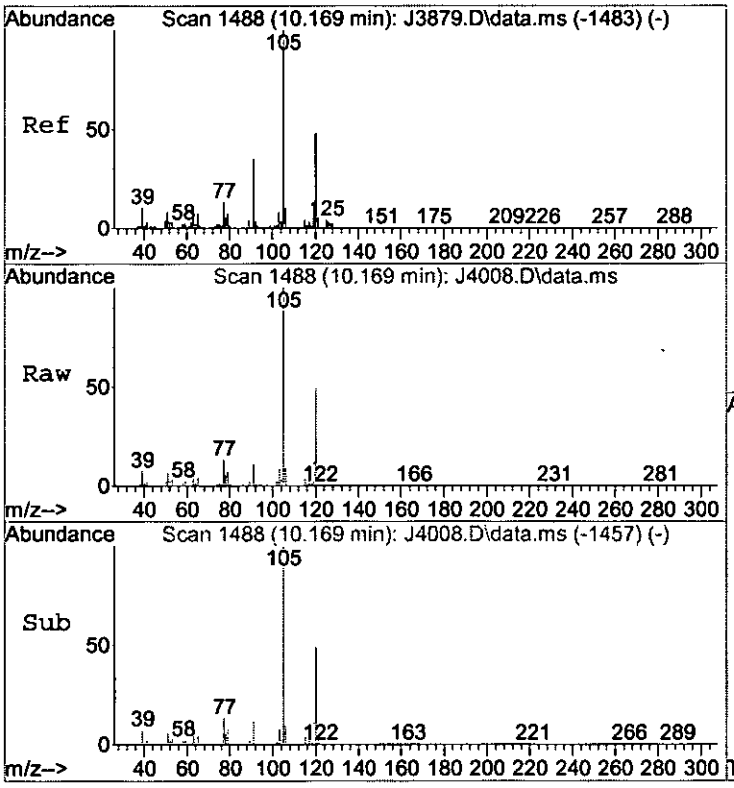


#95
n-Propylbenzene
Concen: 20.67 ppb
RT: 10.023 min Scan# 1464
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion: 91 Resp: 785575

Ion	Ratio	Lower	Upper
91	100		
120	24.7	3.1	43.1
65	10.3	0.0	30.1

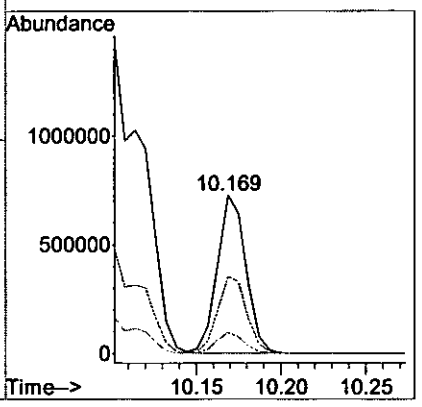




#99
1,3,5-Trimethylbenzene
Concen: 32.21 ppb
RT: 10.169 min Scan# 1488
Delta R.T. -0.006 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

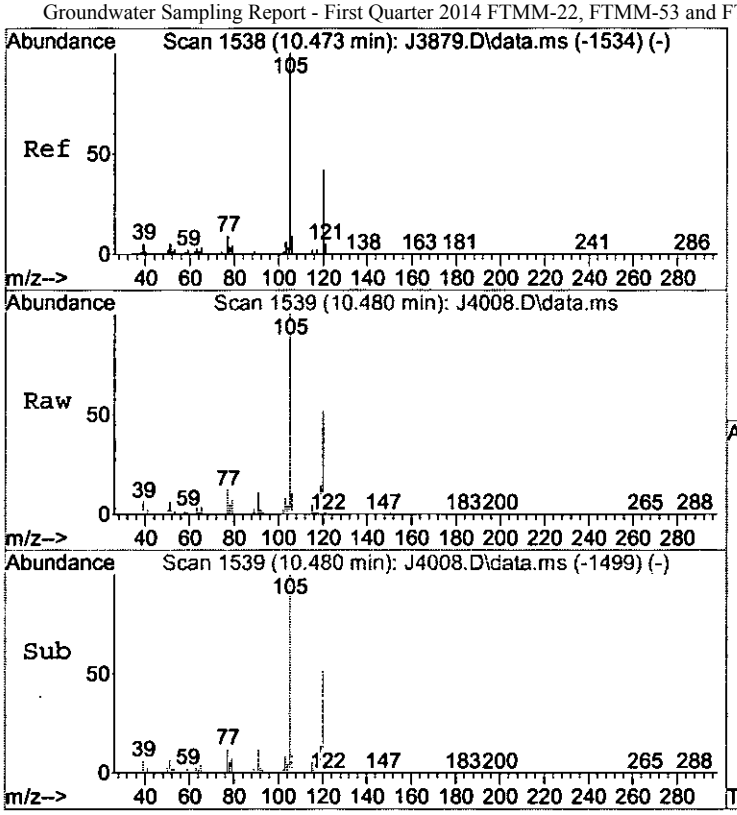
Tgt Ion:105 Resp: 853855

Ion	Ratio	Lower	Upper
105	100		
120	48.6	27.7	67.7
77	13.3	0.0	33.6



J4008.D W031214.M Tue Mar 18 16:06:24 2014 Page 7

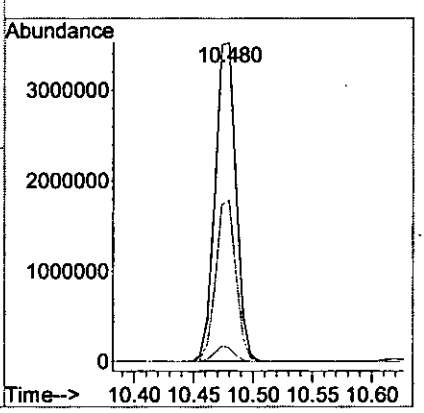
00176

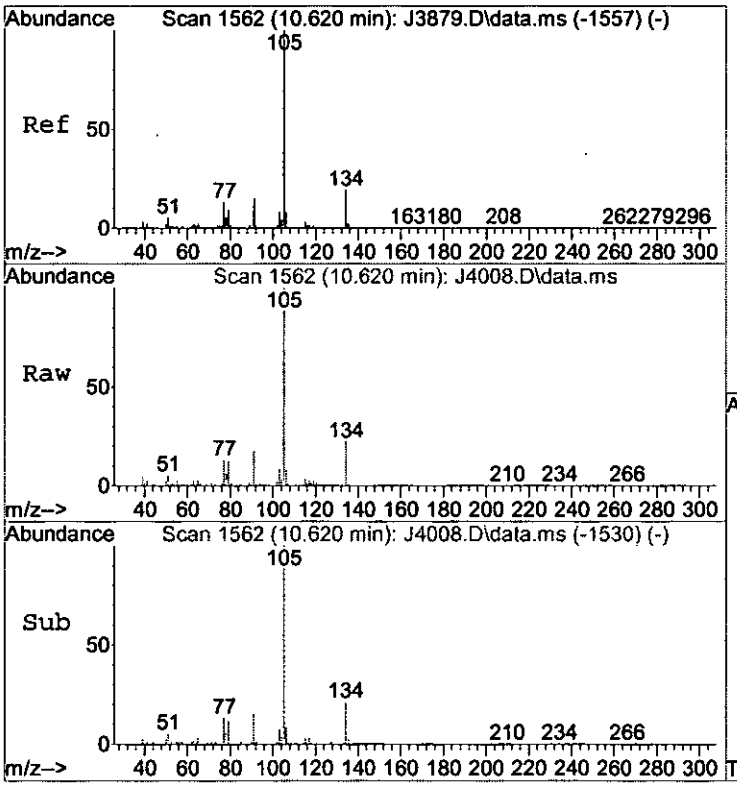


#101
1,2,4-Trimethylbenzene
Concen: 158.82 ppb
RT: 10.480 min Scan# 1539
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion:105 Resp: 4331573

Ion	Ratio	Lower	Upper
105	100		
120	50.7	25.3	65.3
65	4.4	0.0	24.3

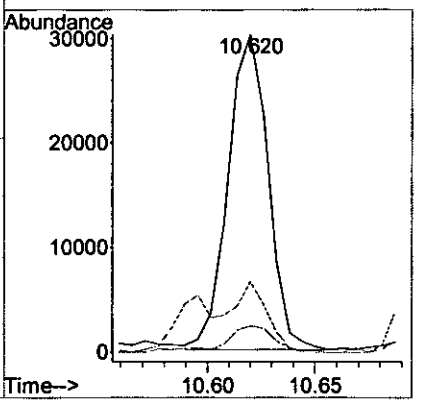




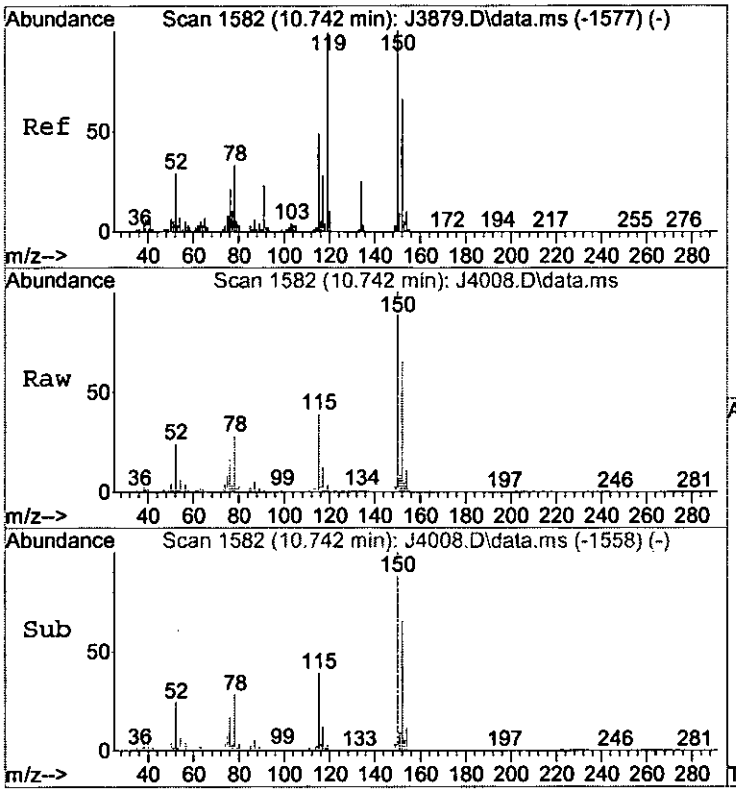
#103
sec-Butylbenzene
Concen: 1.25 ppb
RT: 10.620 min Scan# 1562
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion:105 Resp: 38893

Ion	Ratio	Lower	Upper
105	100		
134	22.1	0.0	39.3
103	8.3	0.0	28.3



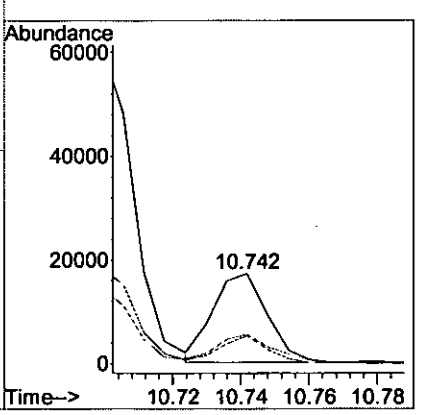
J4008.D W031214.M Tue Mar 18 16:06:26 2014 0017 Page 8

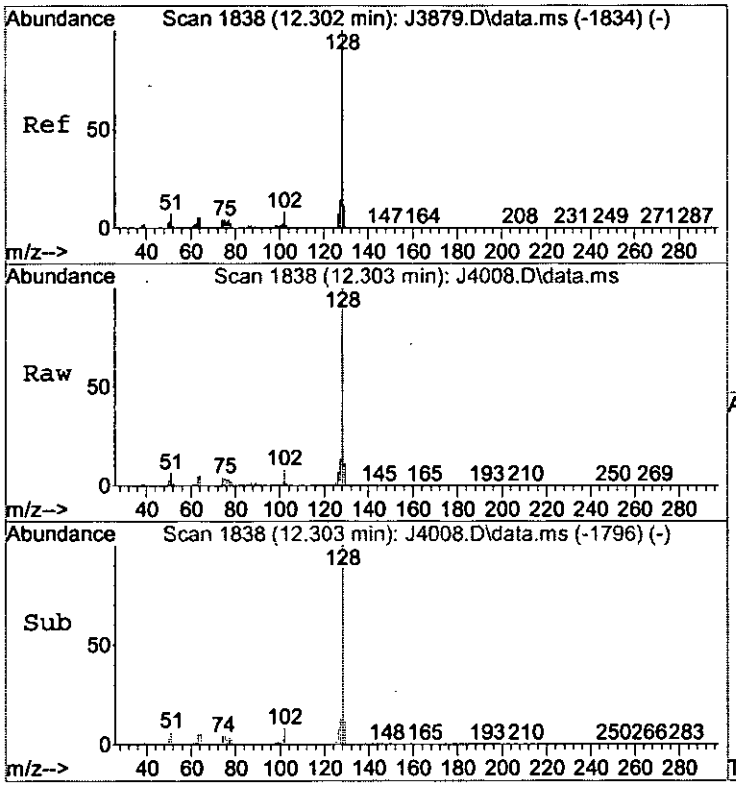


#104
p-Isopropyltoluene
Concen: 0.73 ppb
RT: 10.742 min Scan# 1582
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion:119 Resp: 19111

Ion	Ratio	Lower	Upper
119	100		
134	30.9	5.6	45.6
91	32.8	3.2	43.2

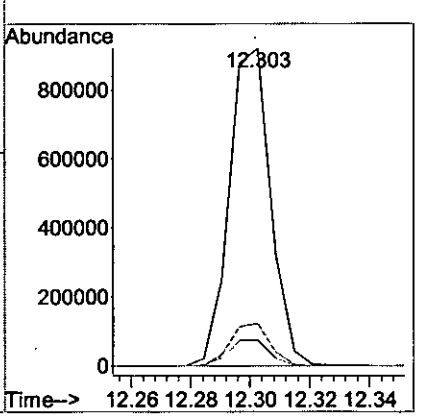




#117
Naphthalen
Concen: 53.29 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4008.D
Acq: 18 Mar 2014 5:58 am

Tgt Ion:128 Resp: 890306

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	33.8
102	8.1	0.0	28.5



J4008.D W031214.M Tue Mar 18 16:06:28 2014 0017 Page 9

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4008.D
Acq On : 18 Mar 2014 5:58 am
Operator : K.Ruest
Sample : R1401764-007|5.0
Misc : PARSONS 9913 T4
ALS Vial : 41 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4008.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.616	80	85	94	rVB	1076272	1139165	5.10%	0.959%
2	1.762	106	109	115	rVB	560902	623920	2.79%	0.525%
3	2.396	204	213	217	rBV	721494	1529815	6.85%	1.288%
4	2.445	217	221	231	rVB	364104	583536	2.61%	0.491%
5	2.597	238	246	254	rBV	539470	937841	4.20%	0.789%
6	2.835	278	285	291	rBV	180327	312745	1.40%	0.263%
7	3.463	379	388	401	rBV	1123079	2472518	11.07%	2.081%
8	4.152	492	501	508	rBV	526609	1224452	5.48%	1.031%
9	4.249	508	517	524	rBV	935607	2398988	10.74%	2.019%
10	4.396	535	541	556	rVB7	99916	334313	1.50%	0.281%
11	4.658	576	584	596	rVB	431735	1108438	4.96%	0.933%
12	5.450	700	714	723	rBV	1219265	2870222	12.85%	2.416%
13	6.103	808	821	832	rBV3	209412	599267	2.68%	0.504%
14	7.322	1011	1021	1028	rBV	2481332	3758495	16.83%	3.164%
15	7.389	1028	1032	1039	rVB	225561	369318	1.65%	0.311%
16	8.742	1249	1254	1264	rBV	2747770	3498724	15.66%	2.945%
17	8.889	1272	1278	1290	rBV	8542170	10864128	48.63%	9.145%
18	8.998	1290	1296	1309	rVB	16719002	22338208	100.00%	18.804%
19	9.346	1347	1353	1364	rBV	9902955	12437285	55.68%	10.470%
20	9.669	1401	1406	1416	rVB	642091	803380	3.60%	0.676%
21	9.791	1420	1426	1436	rBV	2301444	2854864	12.78%	2.403%
22	10.023	1459	1464	1471	rVB	1304131	1564042	7.00%	1.317%
23	10.096	1471	1476	1478	rBV	4411849	5348003	23.94%	4.502%
24	10.169	1484	1488	1494	rVB	2032953	2377385	10.64%	2.001%
25	10.333	1510	1515	1524	rVB	3327476	3878844	17.36%	3.265%
26	10.474	1533	1538	1544	rBV	10265617	12351682	55.29%	10.398%
27	10.748	1578	1583	1589	rVB	3230551	3660637	16.39%	3.082%
28	10.815	1589	1594	1600	rBV	3157309	3654129	16.36%	3.076%
29	10.974	1615	1620	1624	rBV	3353174	4109746	18.40%	3.460%
30	11.053	1628	1633	1643	rVB2	643293	889725	3.98%	0.749%
31	11.193	1652	1656	1662	rVB	238284	261318	1.17%	0.220%
32	11.260	1662	1667	1669	rBV	549432	646110	2.89%	0.544%
33	11.278	1669	1670	1675	rVB	394101	372755	1.67%	0.314%
34	11.333	1675	1679	1682	rBV	967660	1009453	4.52%	0.850%
35	11.413	1688	1692	1699	rBV2	557318	701091	3.14%	0.590%

W031214.M Tue Mar 18 16:06:51 2014 Page: 1

00179

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4008.D
Acq On : 18 Mar 2014 5:58 am
Operator : K.Ruest
Sample : R1401764-007|5.0
Misc : PARSONS 9913 T4
ALS Vial : 41 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	11.547	1710	1714	1719	rVB	257449	271095	1.21%	0.228%
37	11.614	1719	1725	1728	rBV	648245	652863	2.92%	0.550%
38	11.650	1728	1731	1735	rVB	605874	607408	2.72%	0.511%
39	11.821	1756	1759	1763	rVB	489649	469656	2.10%	0.395%
40	11.925	1772	1776	1781	rVB2	1073617	1127158	5.05%	0.949%
41	12.297	1834	1837	1841	rBV	1776913	1779359	7.97%	1.498%

Sum of corrected areas: 118792081

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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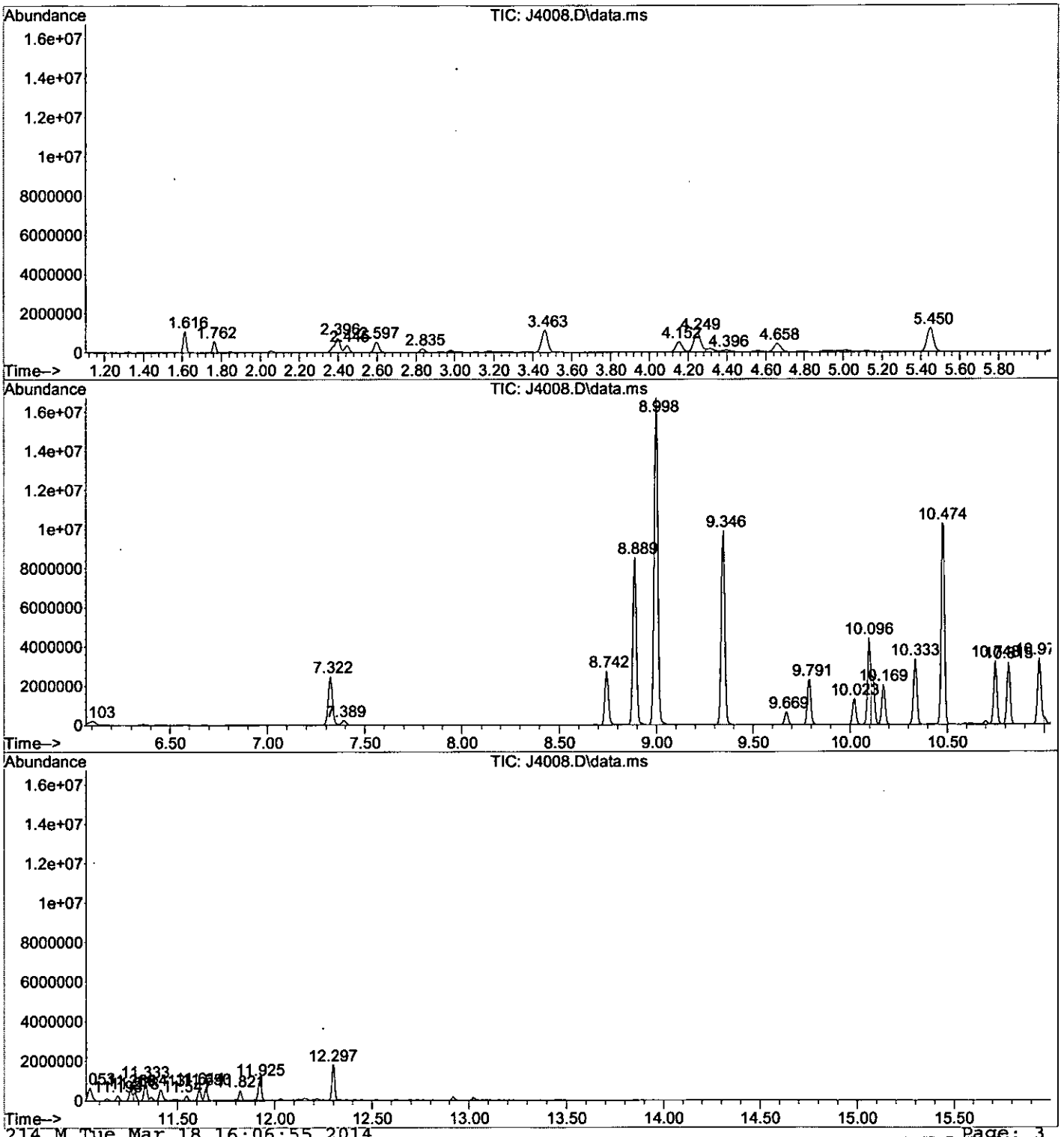

W031214.M Tue Mar 18 16:06:55 2014 Page: 3

00181

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

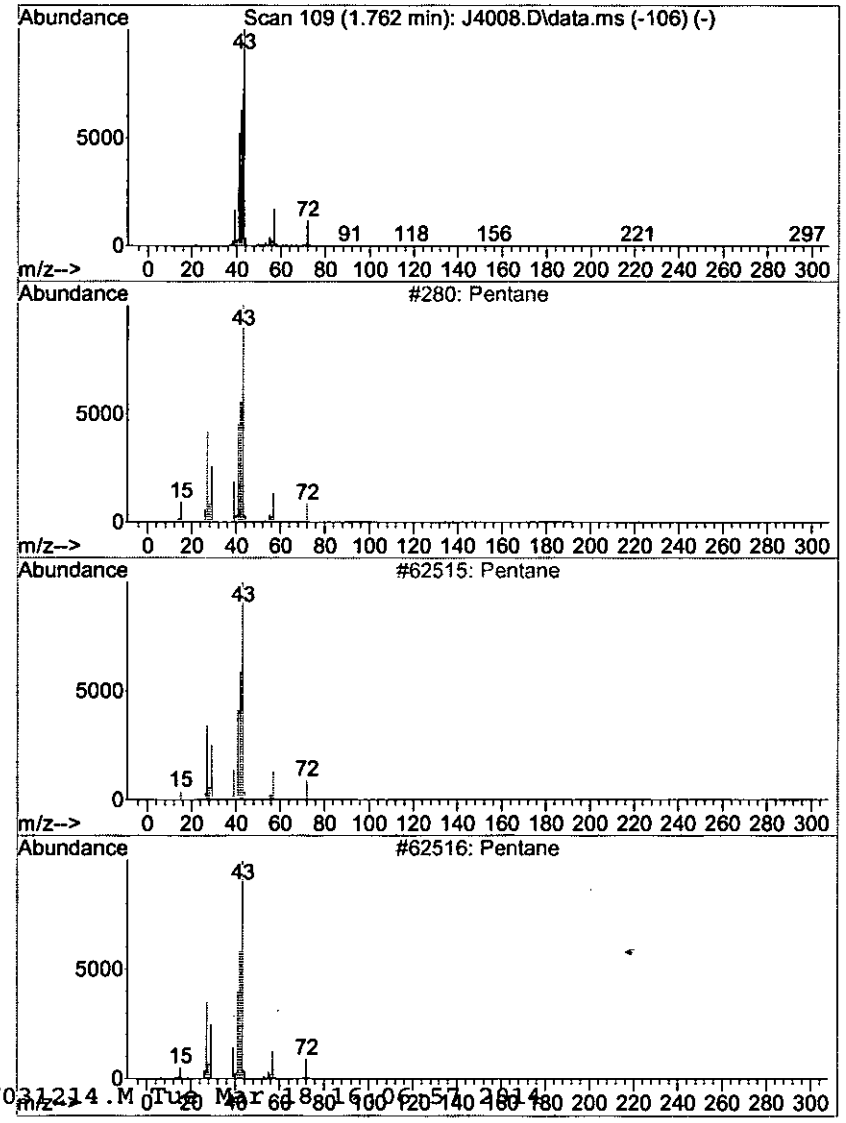
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

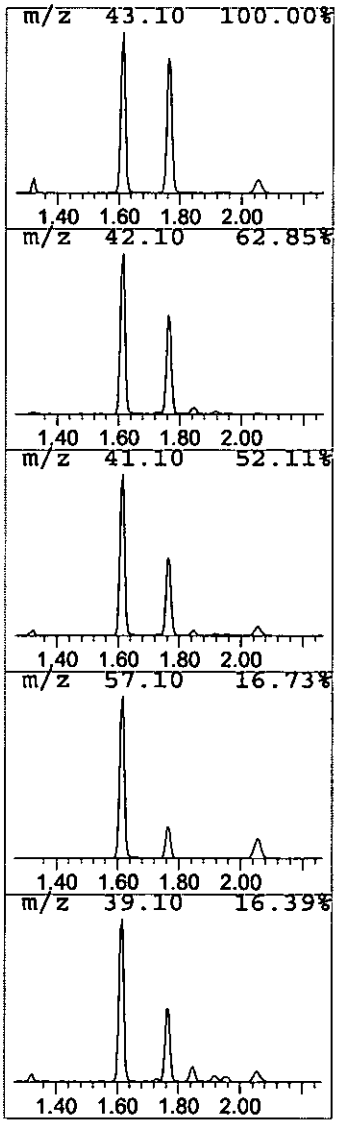
****

Peak Number 1 Pentane Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.762	13.00 ppb	623920	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	90
2	Pentane	72	C5H12	000109-66-0	90
3	Pentane	72	C5H12	000109-66-0	86
4	Oxirane, ethyl-	72	C4H8O	000106-88-7	42
5	Butane, 2-methyl-	72	C5H12	000078-78-4	36





W031214.M Tue Mar 18 16:06:57 2014 Page: 4

00182

Library Search Compound Report

```
Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

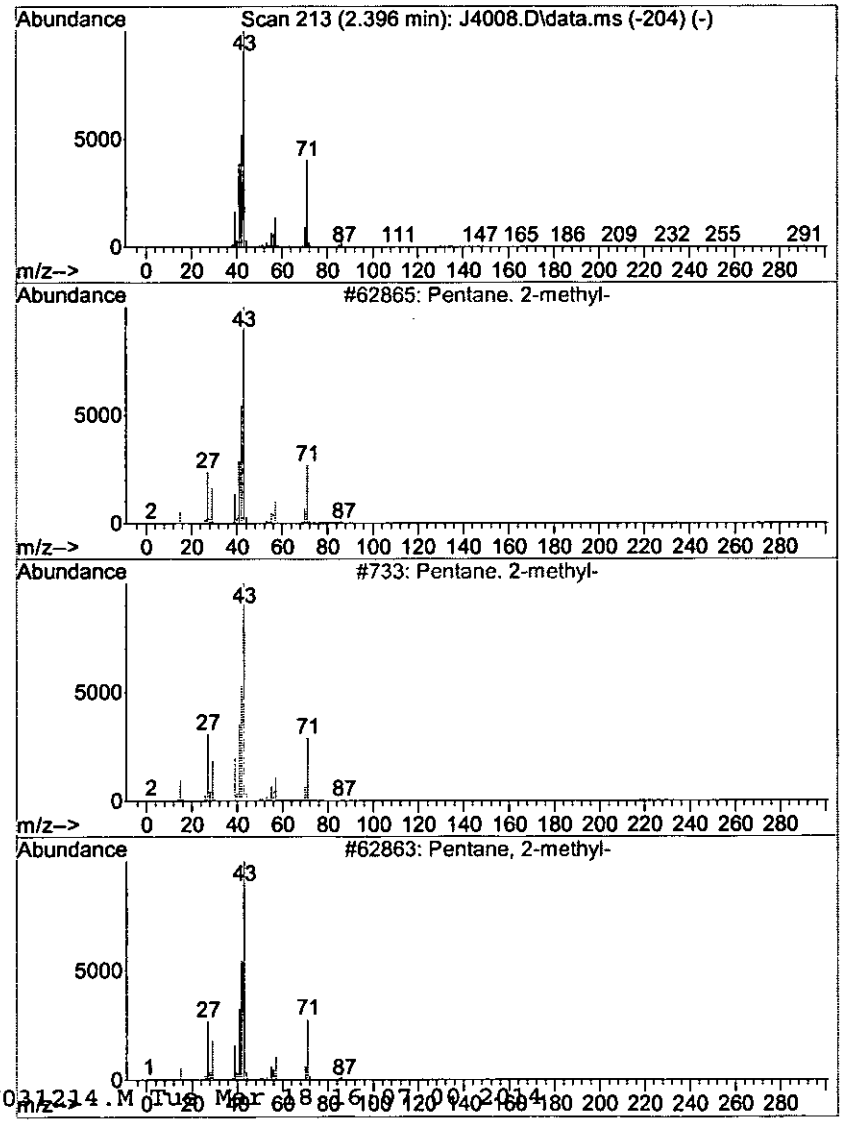
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

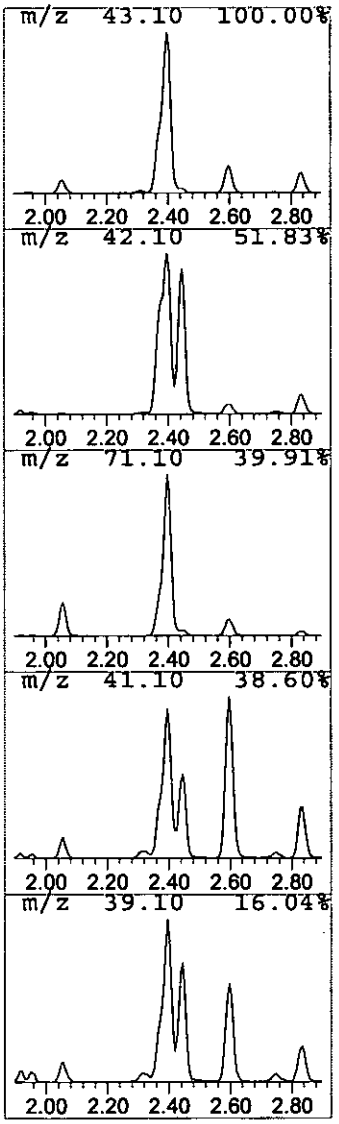
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number  2  Pentane, 2-methyl-              Concentration Rank  6
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.396	31.88 ppb	1529820	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	72
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	52





Library Search Compound Report

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Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 3 1-Pentene Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.445	12.16 ppb	583536	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene	70	C5H10	000109-67-1	72
2	Cyclopentane	70	C5H10	000287-92-3	72
3	Cyclobutane, methyl-	70	C5H10	000598-61-8	53
4	1-Pentene	70	C5H10	000109-67-1	50
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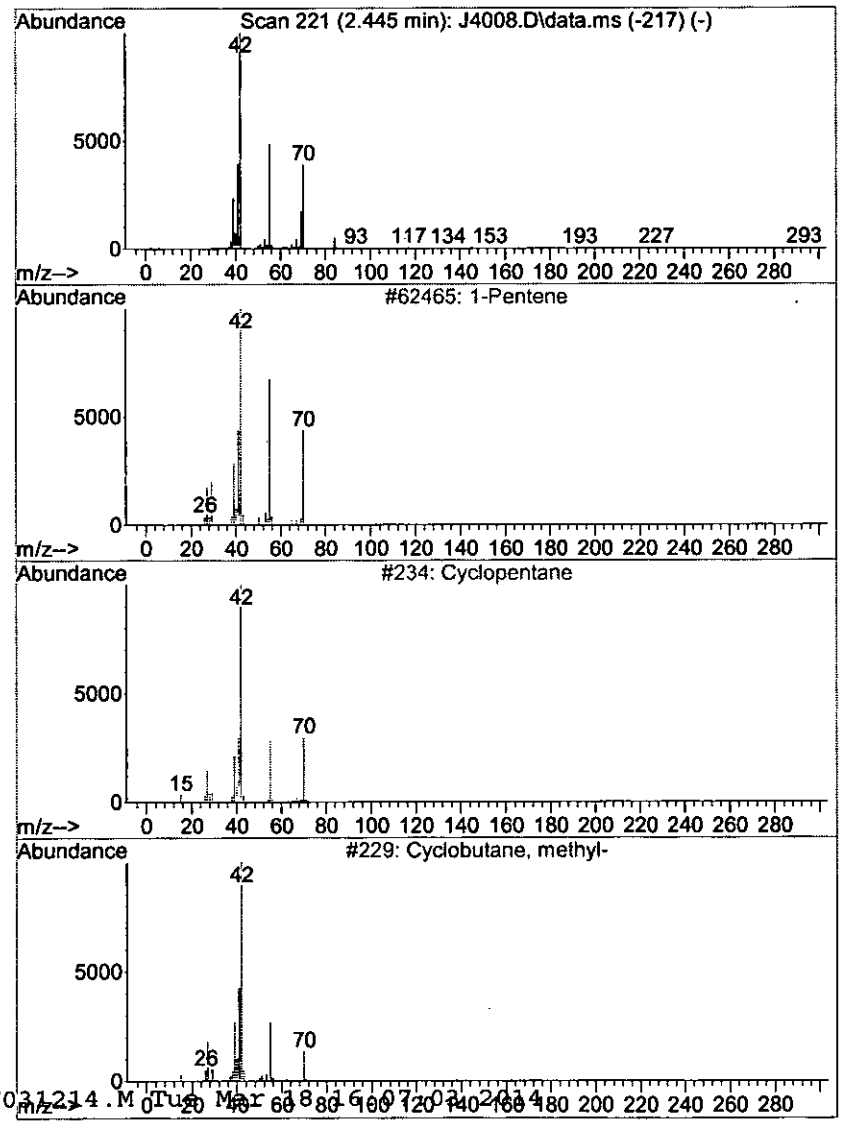

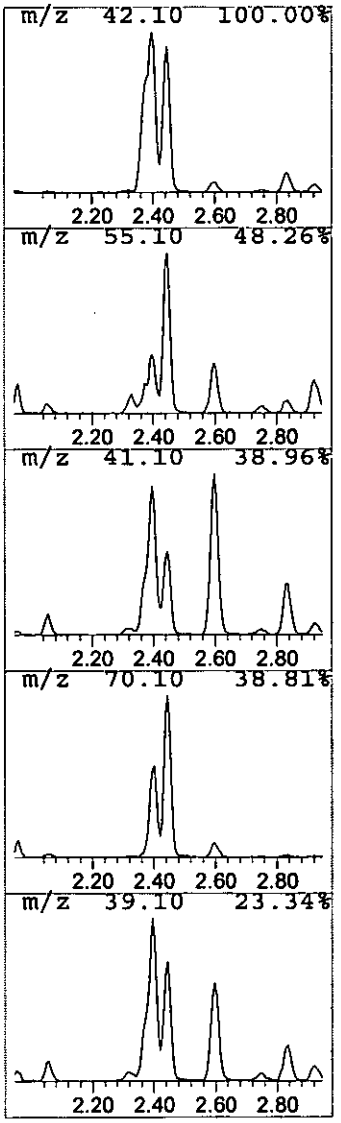

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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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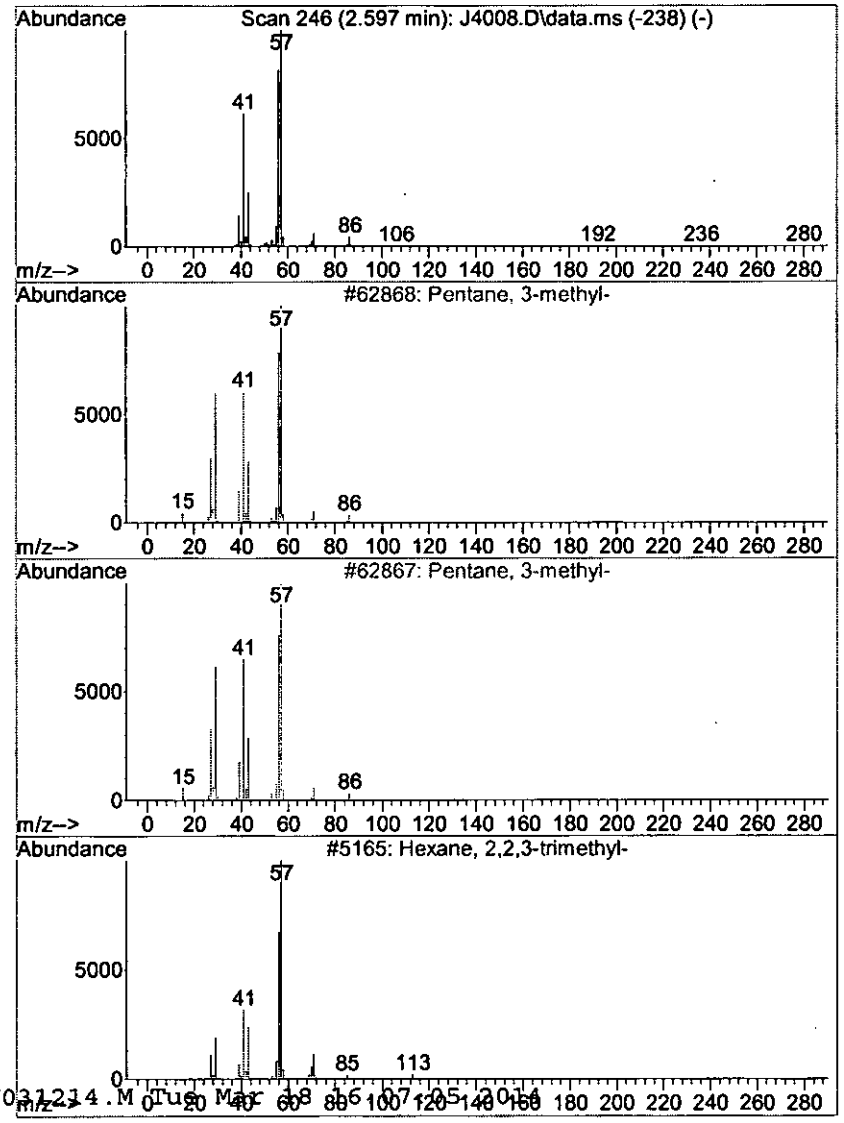
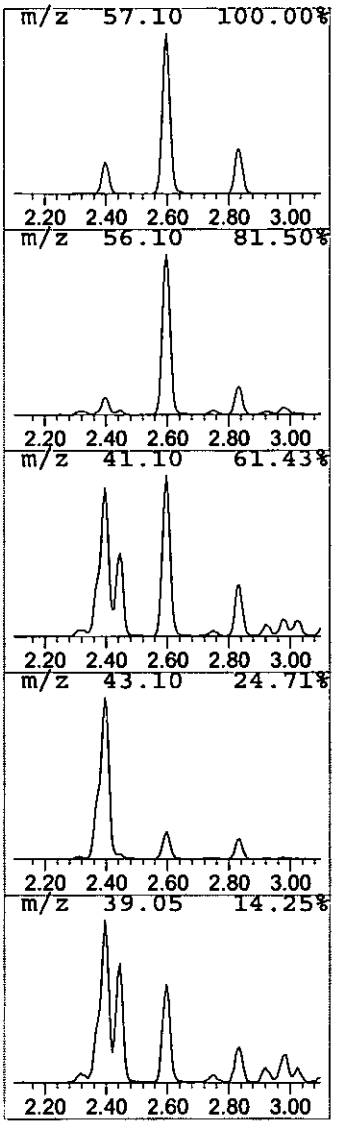
Peak Number 4 Pentane, 3-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.597	19.55 ppb	937841	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
3	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	56
4	Pentane, 3-methyl-	86	C6H14	000096-14-0	50
5	Pentane, 2,2,3-trimethyl-	114	C8H18	000564-02-3	50





Library Search Compound Report

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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

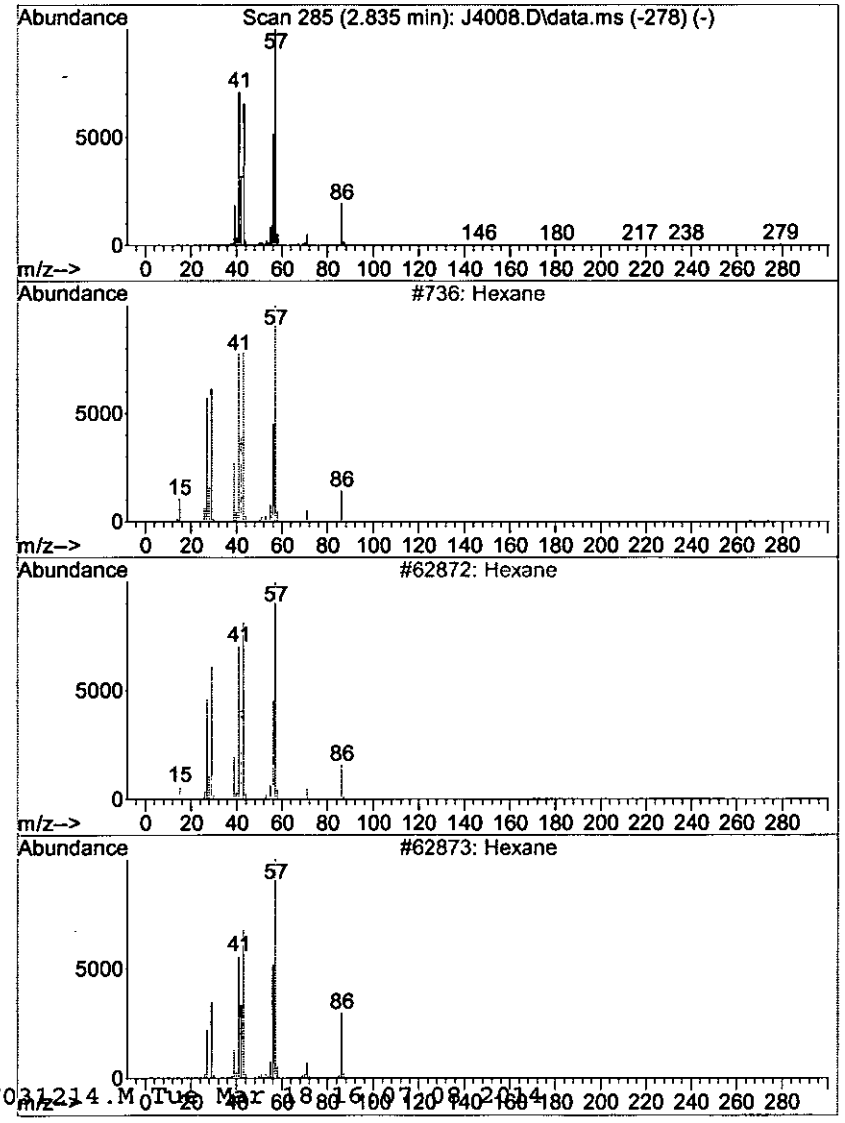
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

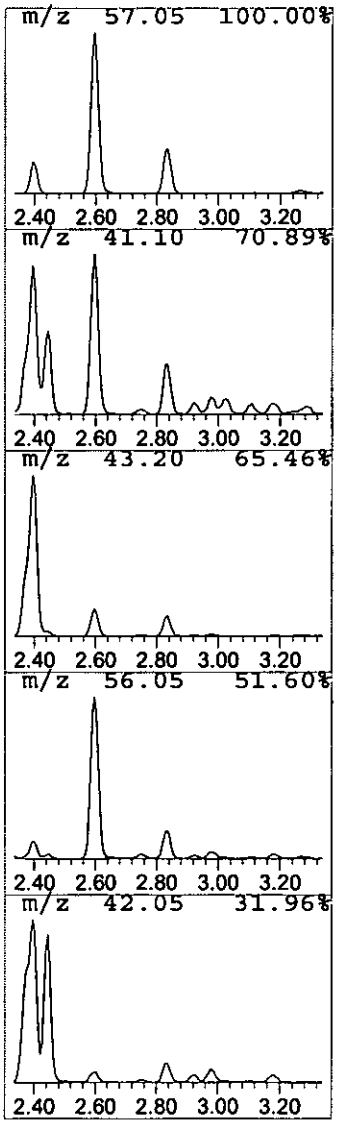
**********************************************************************
Peak Number  5  Hexane                              Concentration Rank 19
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.835	6.52 ppb	312745	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane	86	C6H14	000110-54-3	53
2	Hexane	86	C6H14	000110-54-3	53
3	Hexane	86	C6H14	000110-54-3	49
4	1-Butanol	74	C4H10O	000071-36-3	43
5	Hexane	86	C6H14	000110-54-3	42

unknown





W031214.M Tue Mar 18 16:07:08 2014

Library Search Compound Report

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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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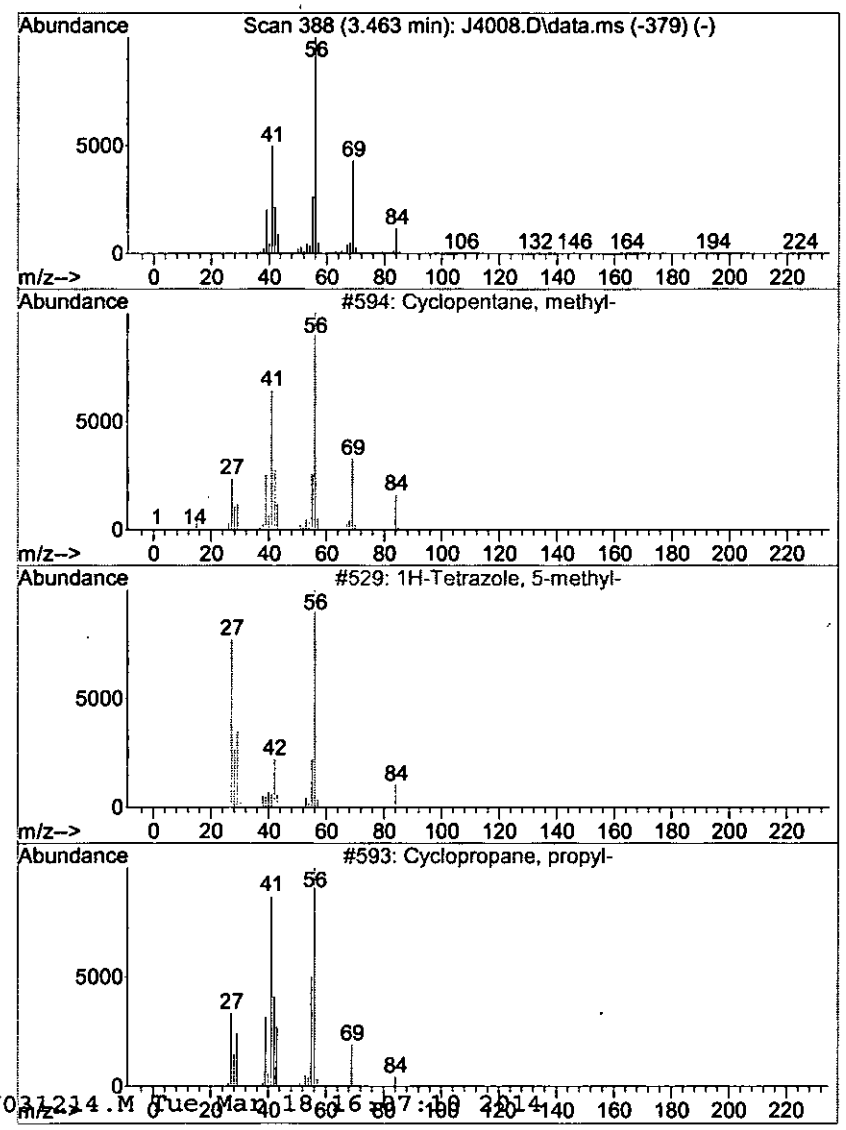
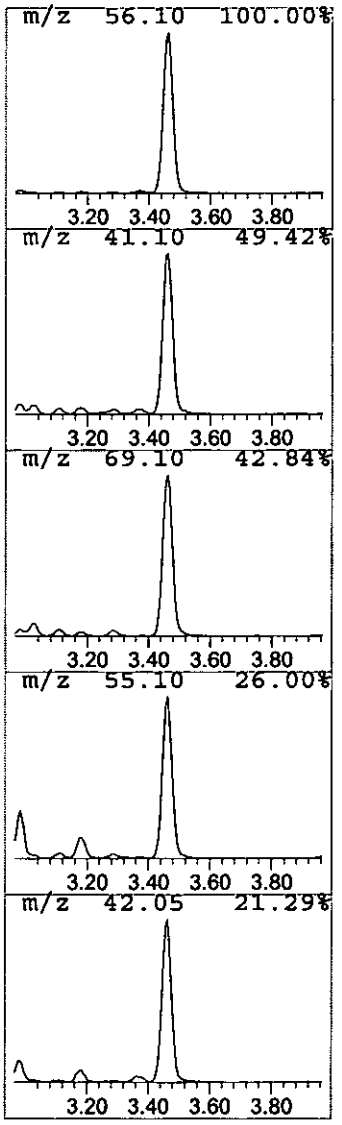
Peak Number 6 Cyclopentane, methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.463	51.53 ppb	2472520	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	80
3	Cyclopropane, propyl-	84	C6H12	002415-72-7	78
4	Cyclohexane	84	C6H12	000110-82-7	72
5	Cyclobutane, ethyl-	84	C6H12	004806-61-5	64





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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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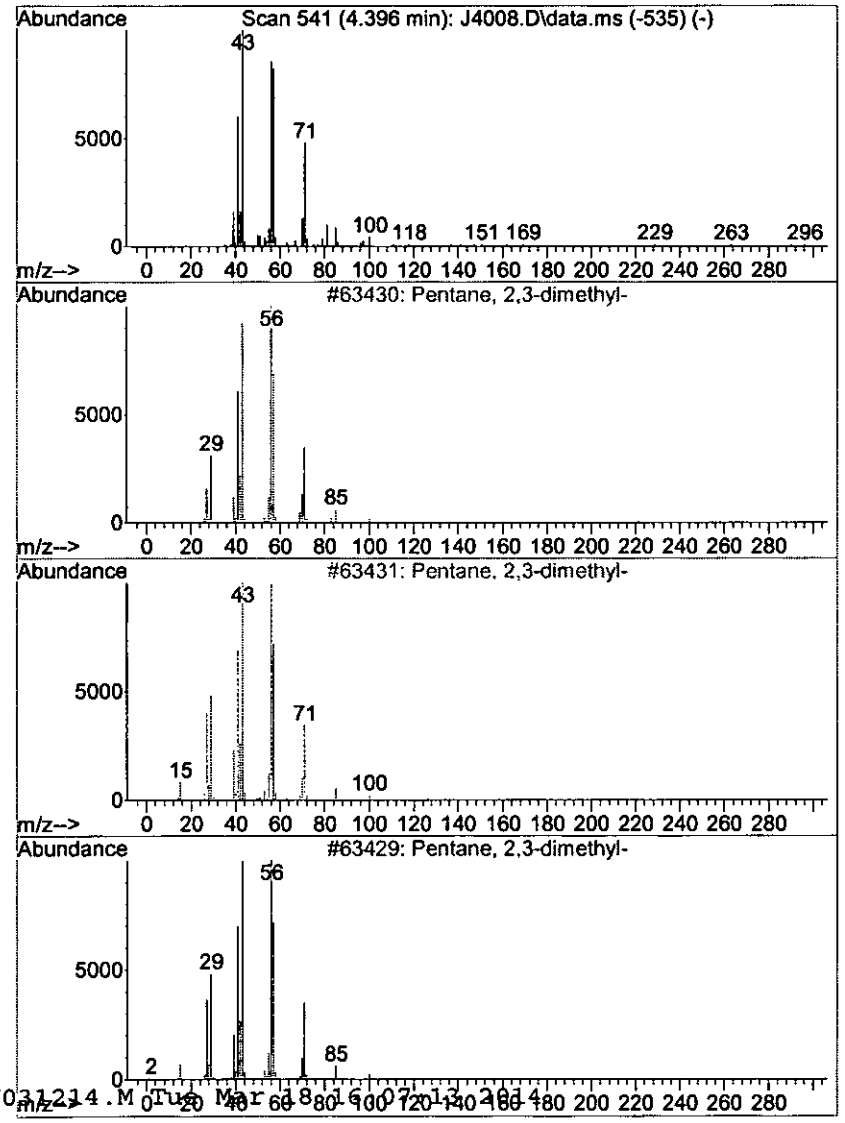
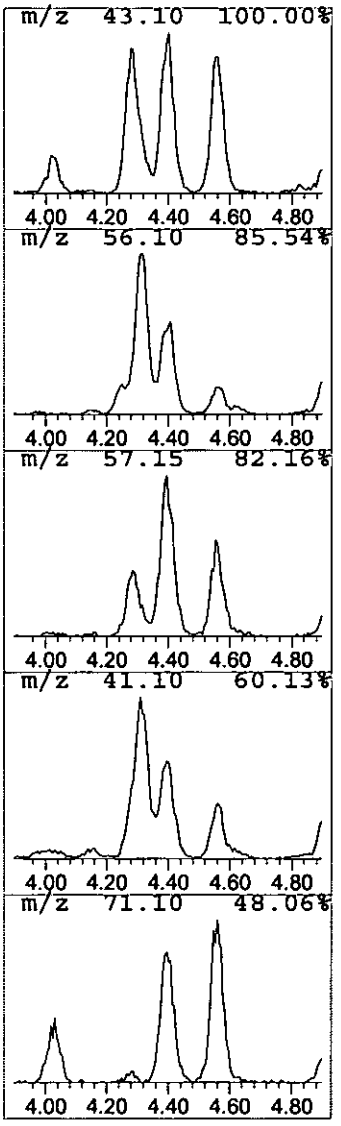
****

Peak Number 7 Pentane, 2,3-dimethyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.396	6.97 ppb	334313	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	87
2	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	59
3	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	59
4	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	53
5	Hexane, 3-methyl-	100	C7H16	000589-34-4	46





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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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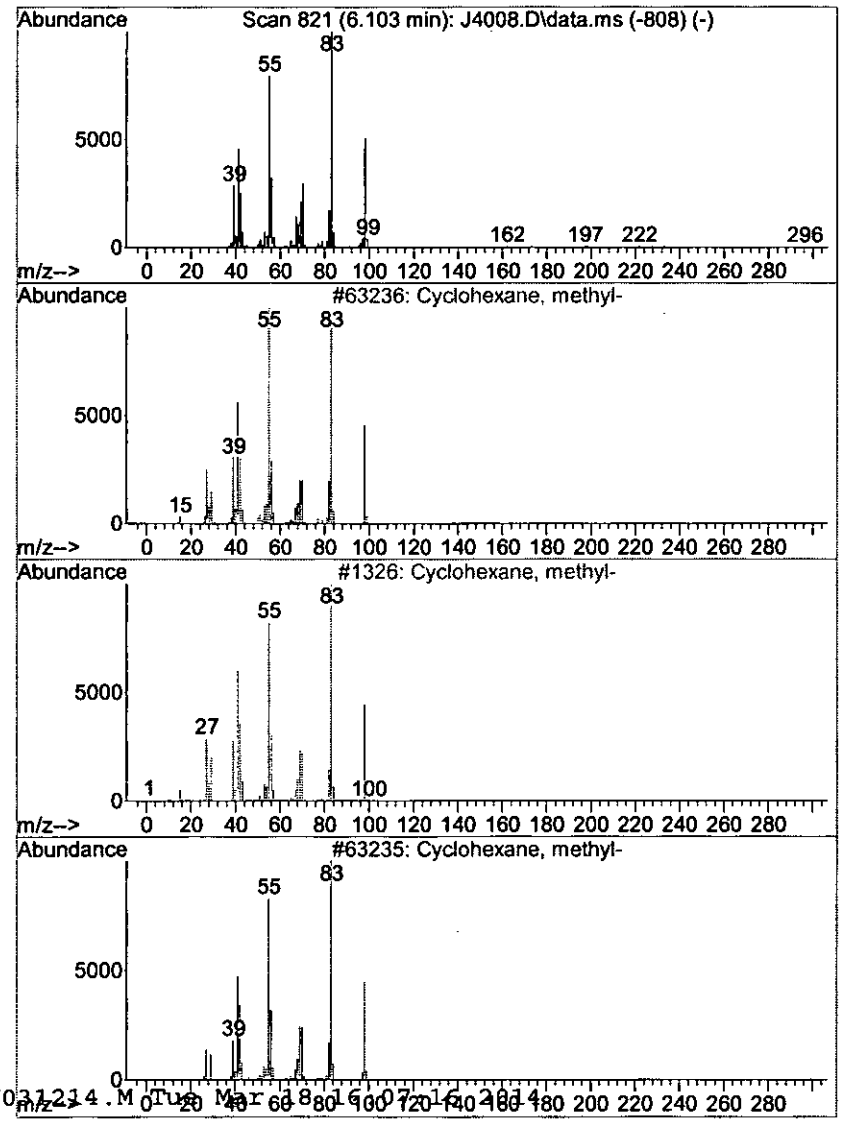
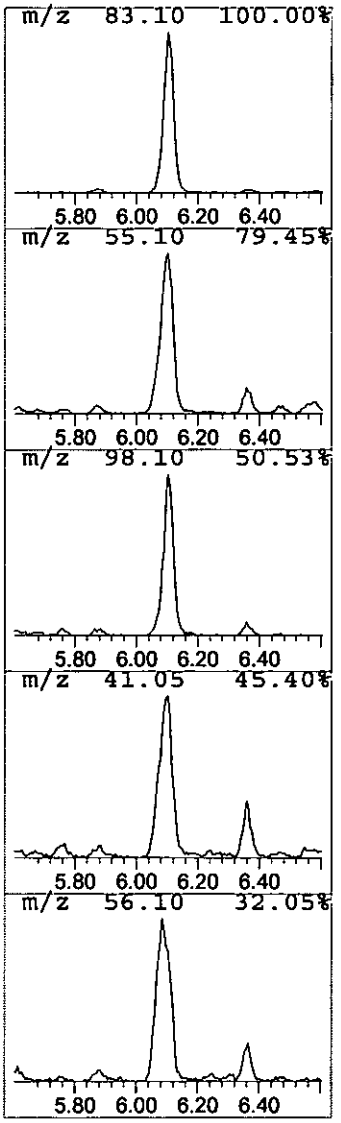
Peak Number 8 Cyclohexane, methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.103	10.44 ppb	599267	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	94
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	94
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	94
4	2-Pentene, 4,4-dimethyl-, (E)-	98	C7H14	000690-08-4	58
5	2-Pentene, 3,4-dimethyl-, (Z)-	98	C7H14	004914-91-4	53





Library Search Compound Report

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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

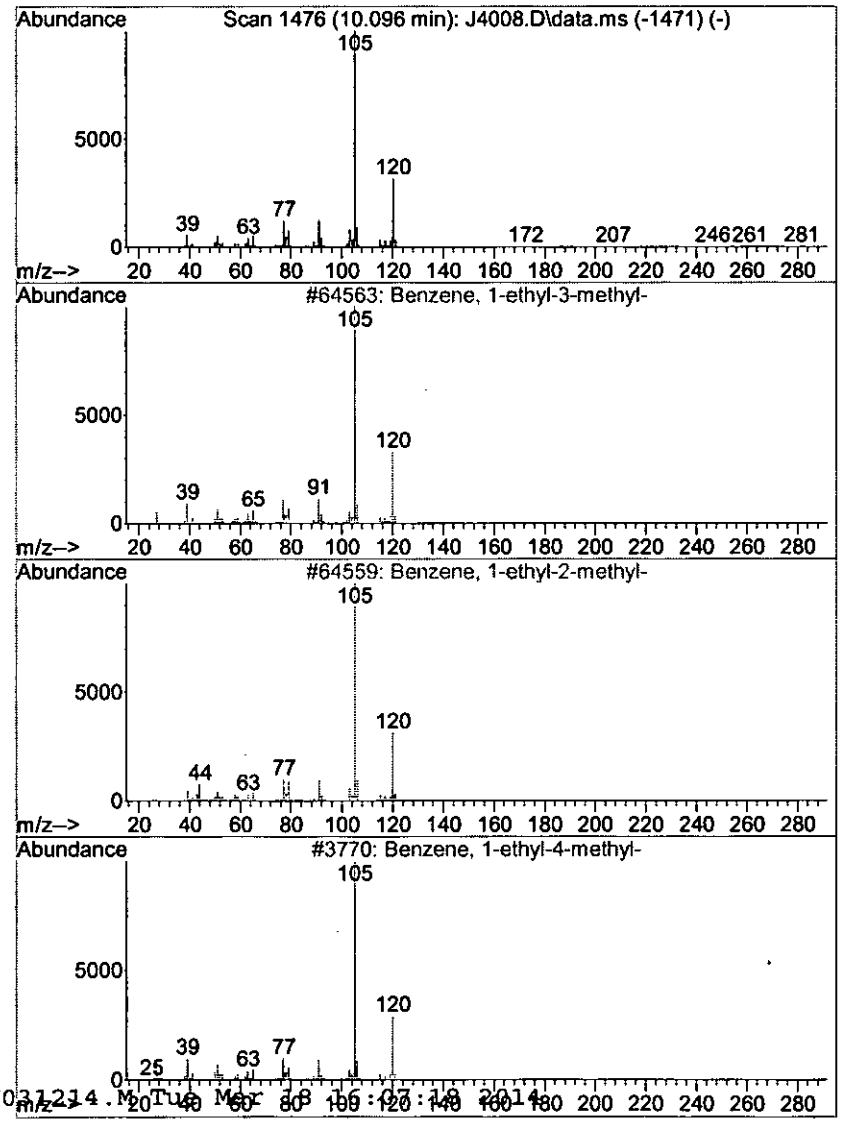
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

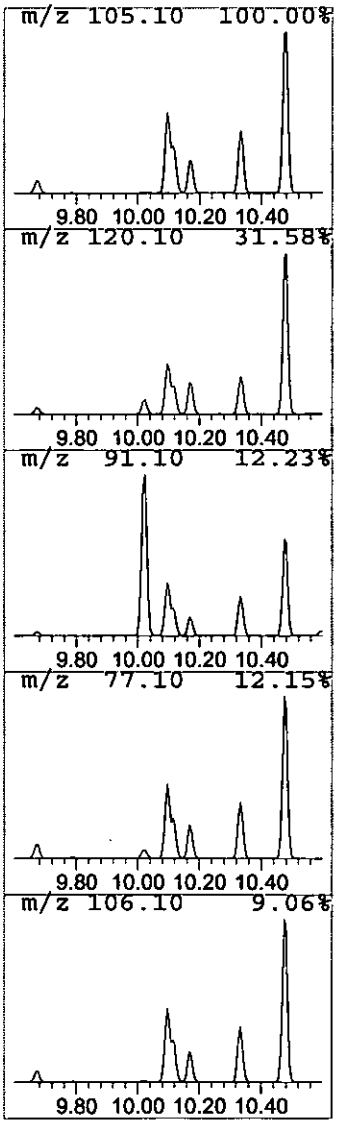
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number  9  Benzene, 1-ethyl-3-methyl-      Concentration Rank  1
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.096	73.05 ppb	5348000	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	95
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95





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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

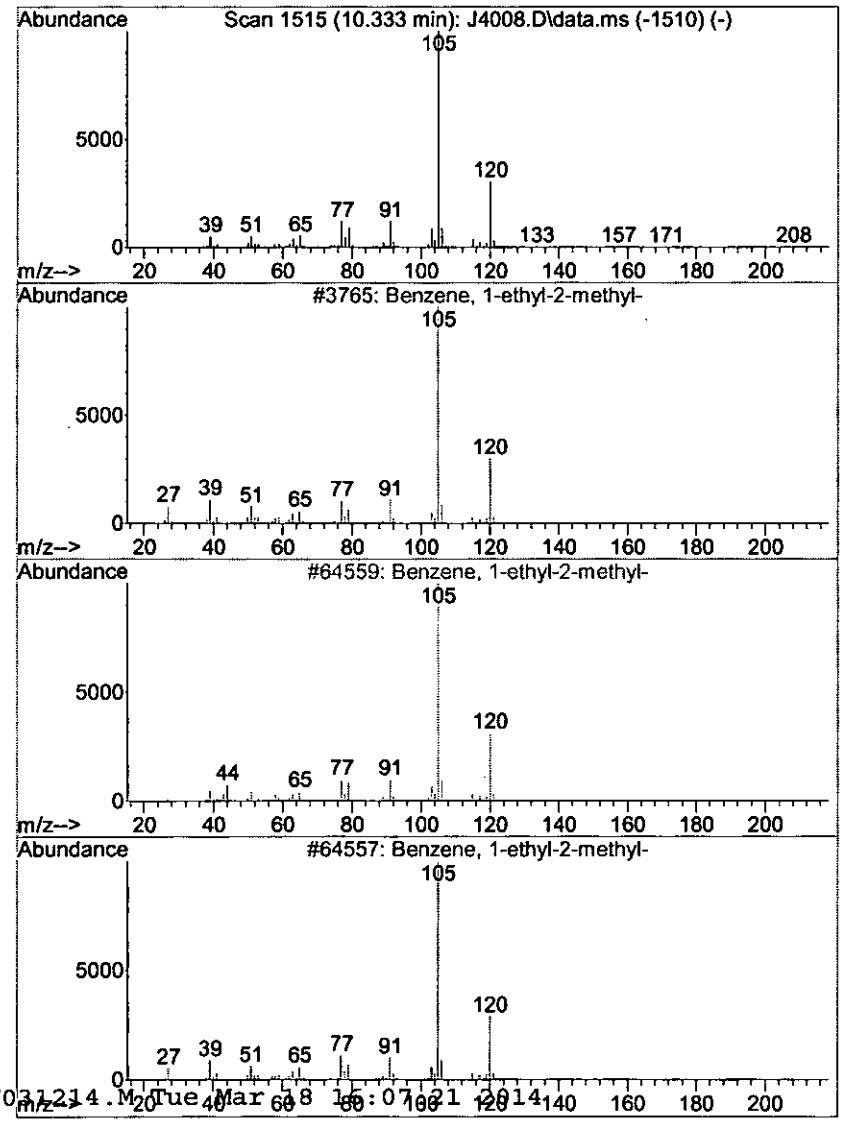
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

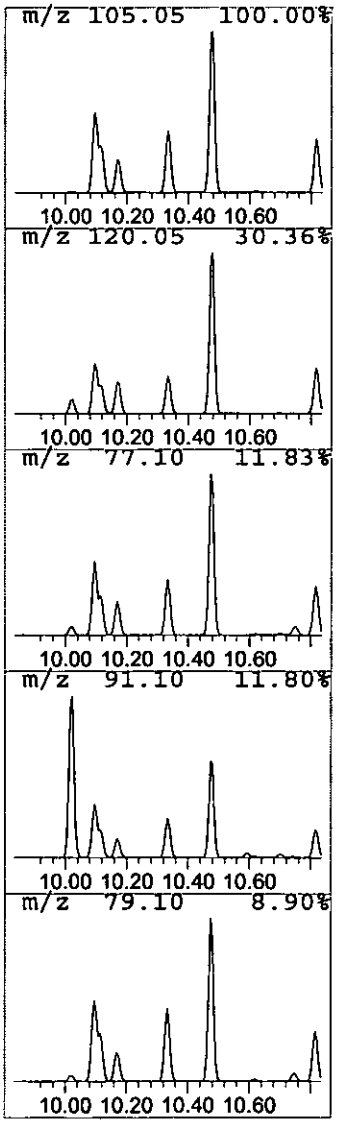
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 10  Benzene, 1-ethyl-2-methyl-      Concentration Rank  3
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.334	52.98 ppb	3878840	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
(1)	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91





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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

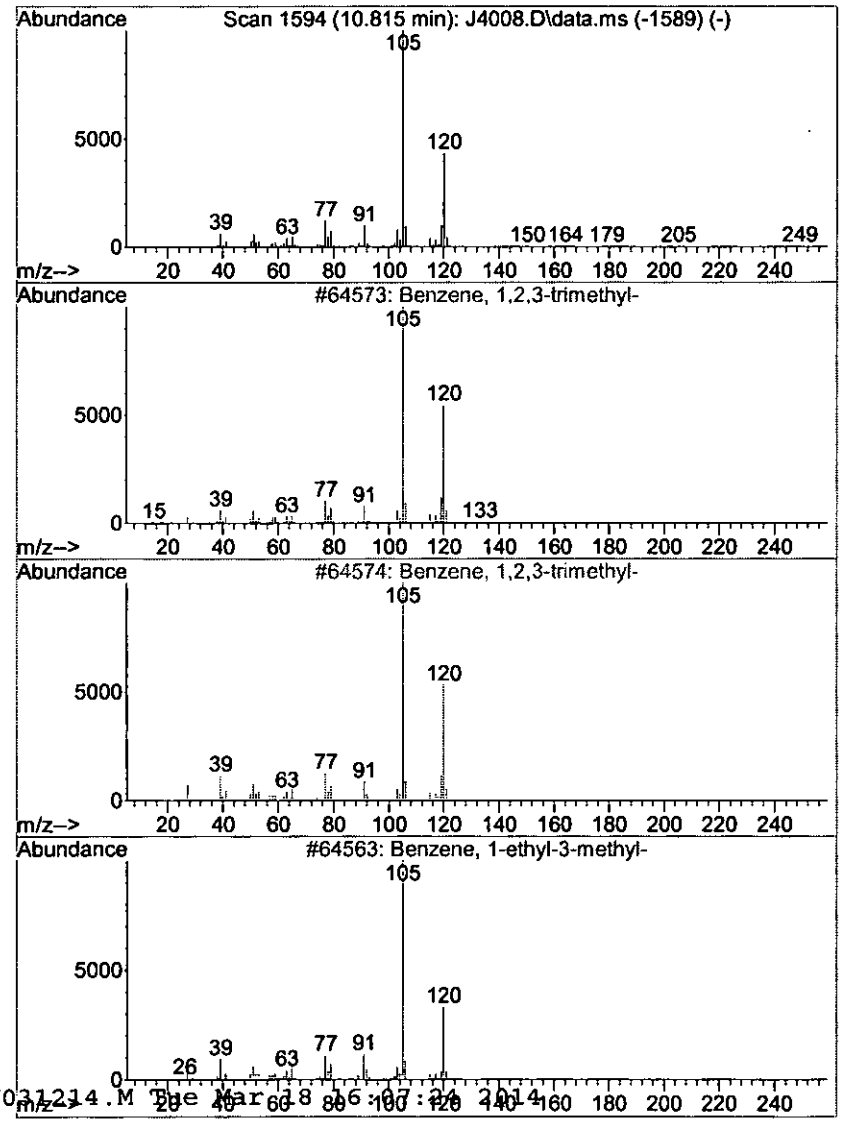
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

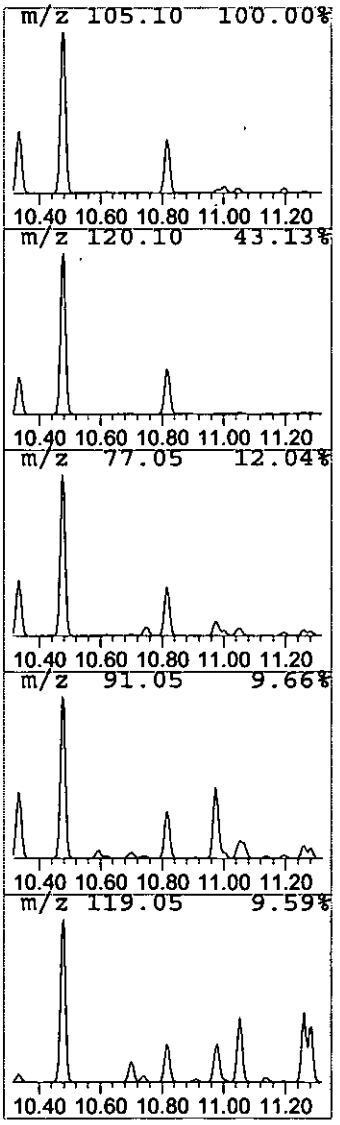
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number 11  Benzene, 1,2,3-trimethyl-       Concentration Rank  5
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.815	49.91 ppb	3654130	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
5	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	94





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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 12 Indane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.974	56.13 ppb	4109750	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	81
2	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	74
3	Benzene, cyclopropyl-	118	C9H10	000873-49-4	64
4	Benzene, 1-ethenyl-4-methyl-	118	C9H10	000622-97-9	60
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	53

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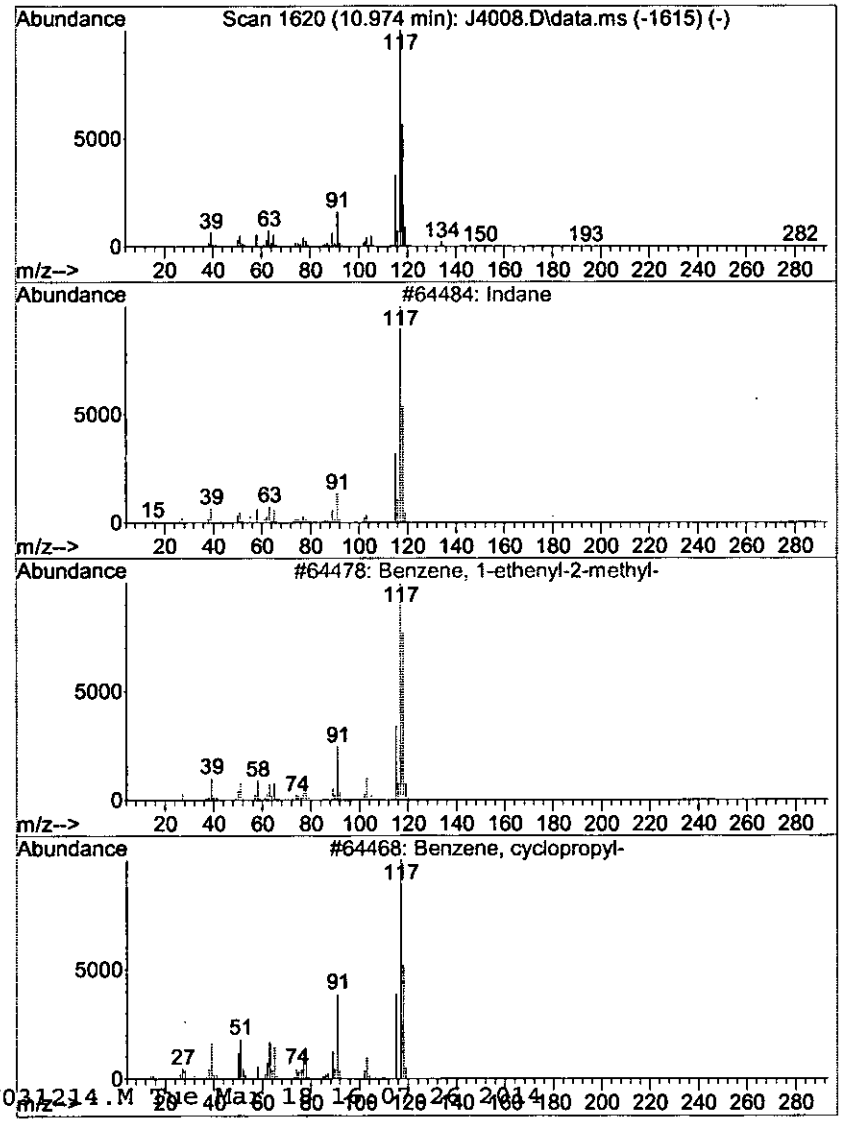

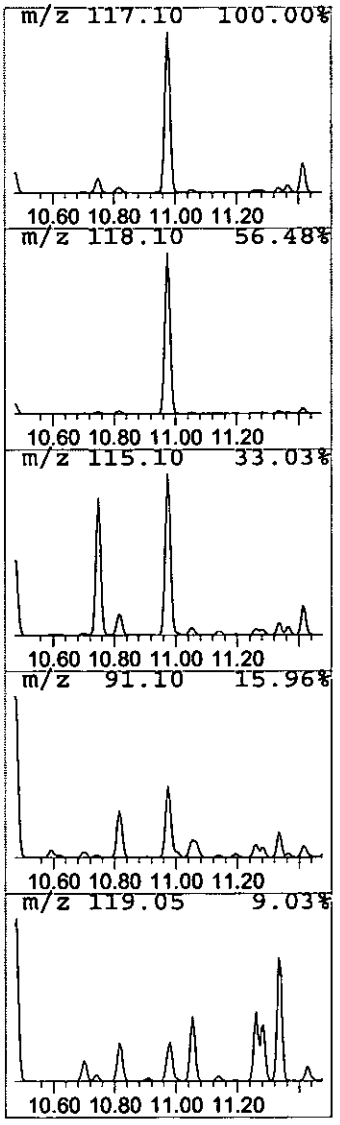

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Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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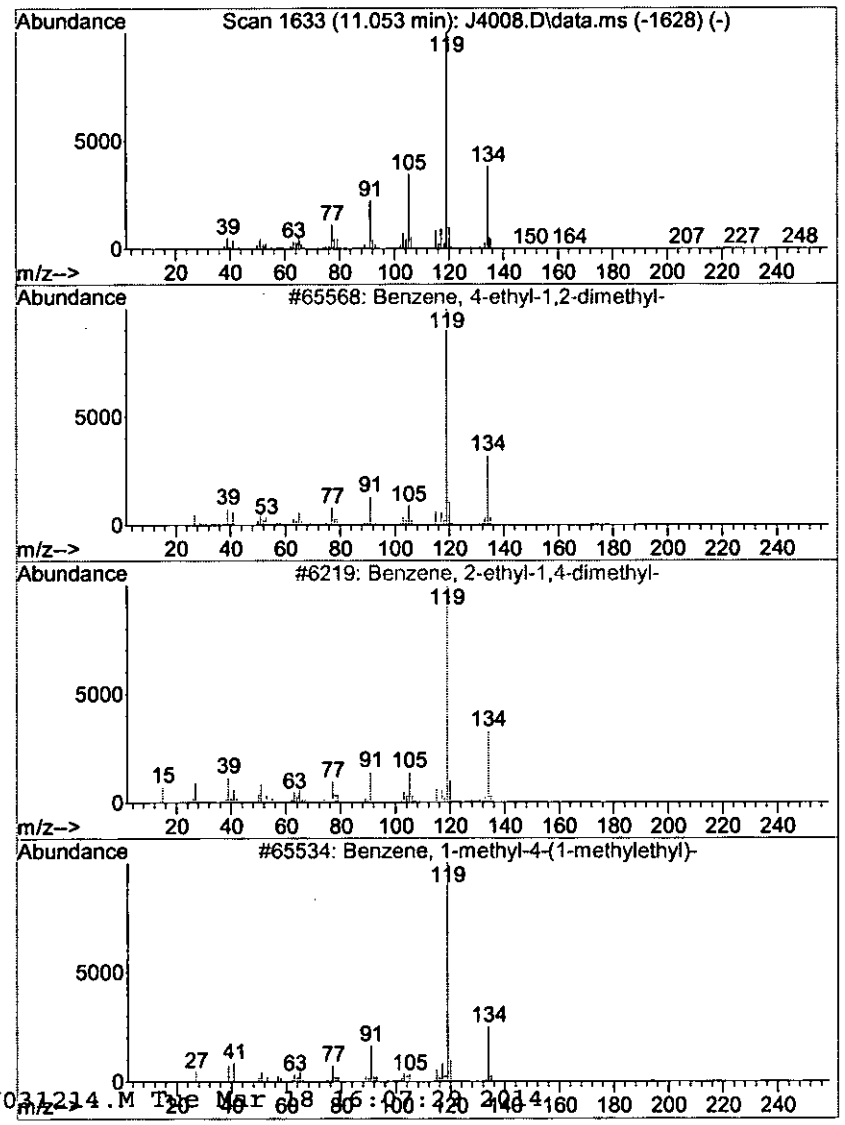
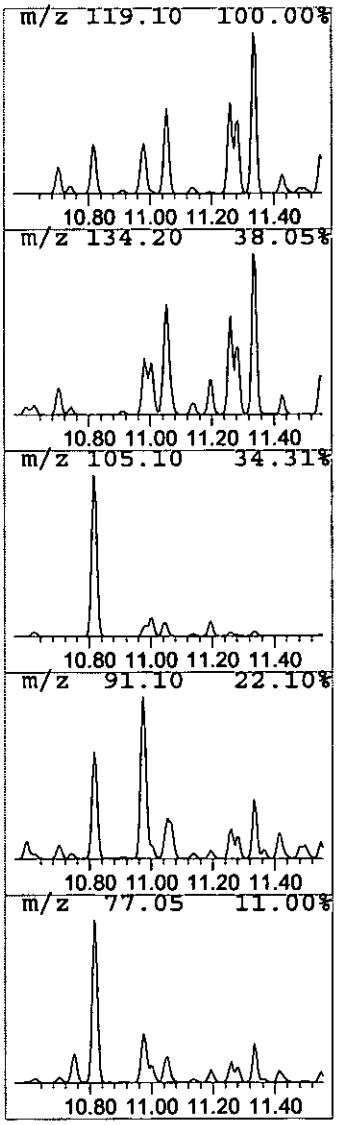
****

Peak Number 13 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.053	12.15 ppb	889725	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	93
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	93
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	93
5	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	91





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Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

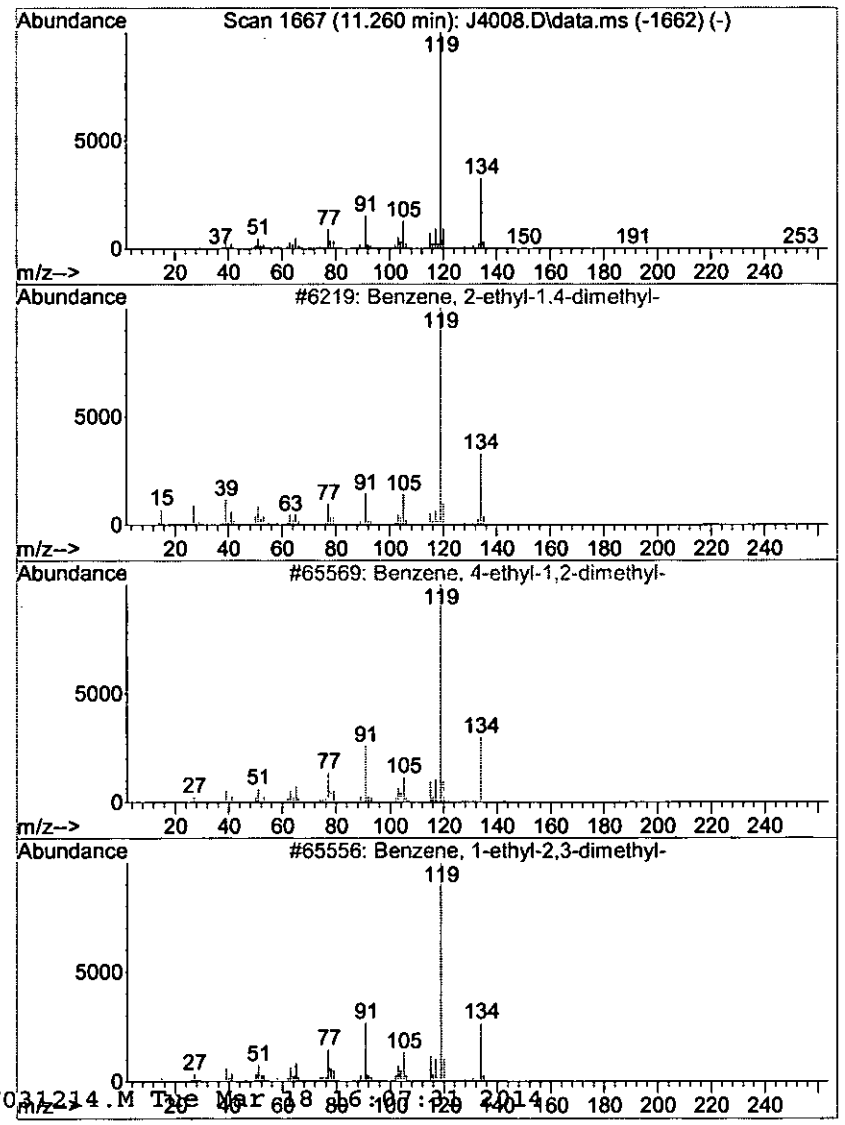
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

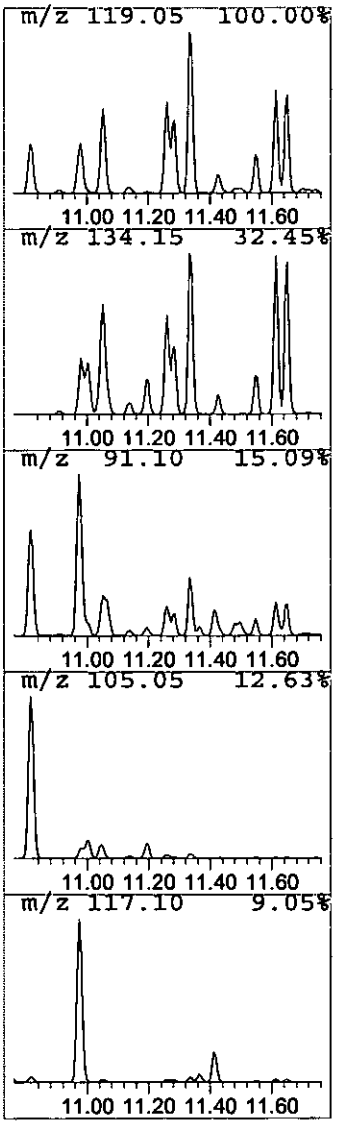
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number 14  Benzene, 2-ethyl-1,4-dimethyl-  Concentration Rank 16
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.260	8.83 ppb	646110	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	97
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	96
3	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	96
4	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

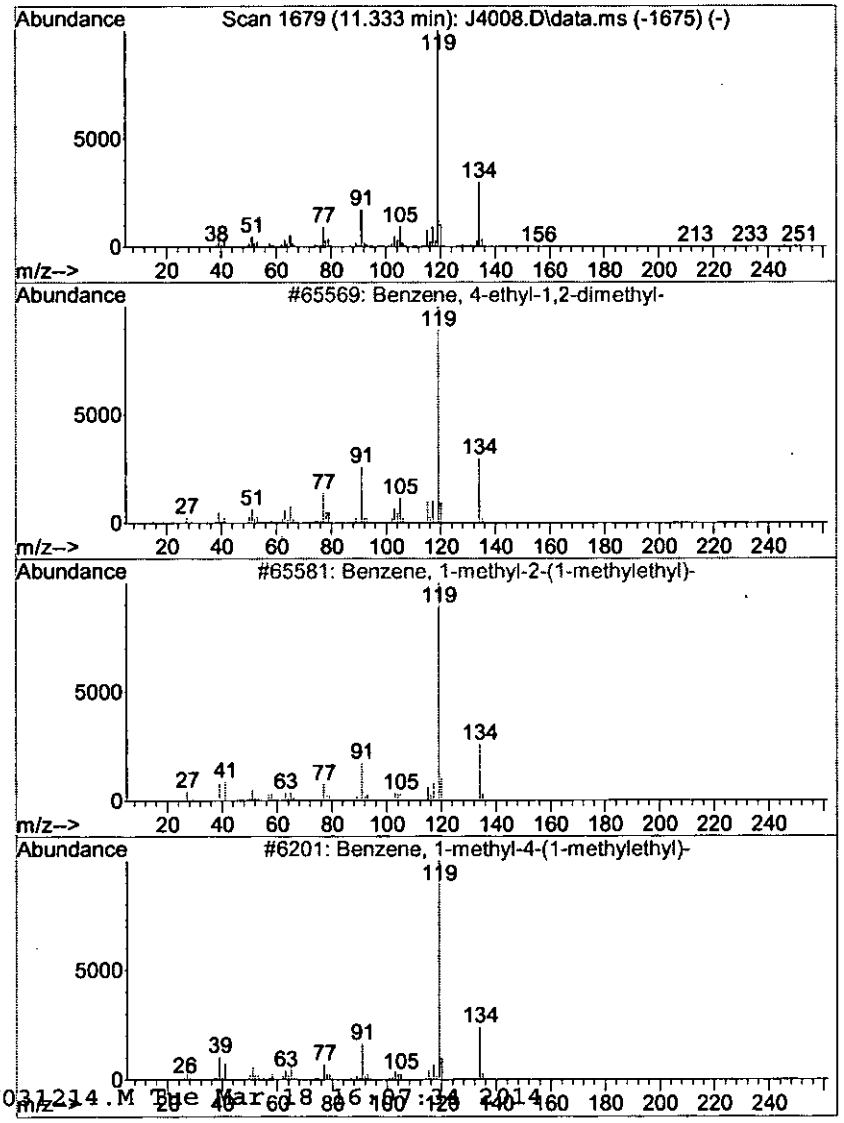
****

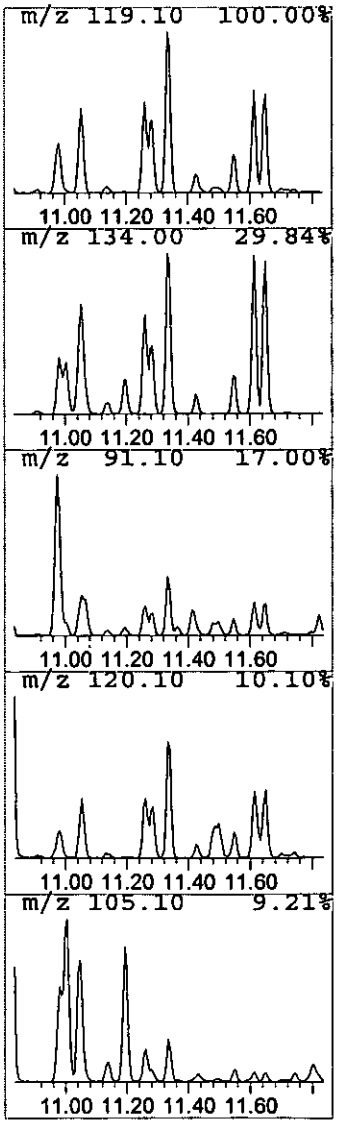
Peak Number 15 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.333	13.79 ppb	1009450	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
2	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
4	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95
5	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	94

already called





W031214.M Tue Mar 18 16:07:24 2014 Page: 18

Library Search Compound Report

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Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

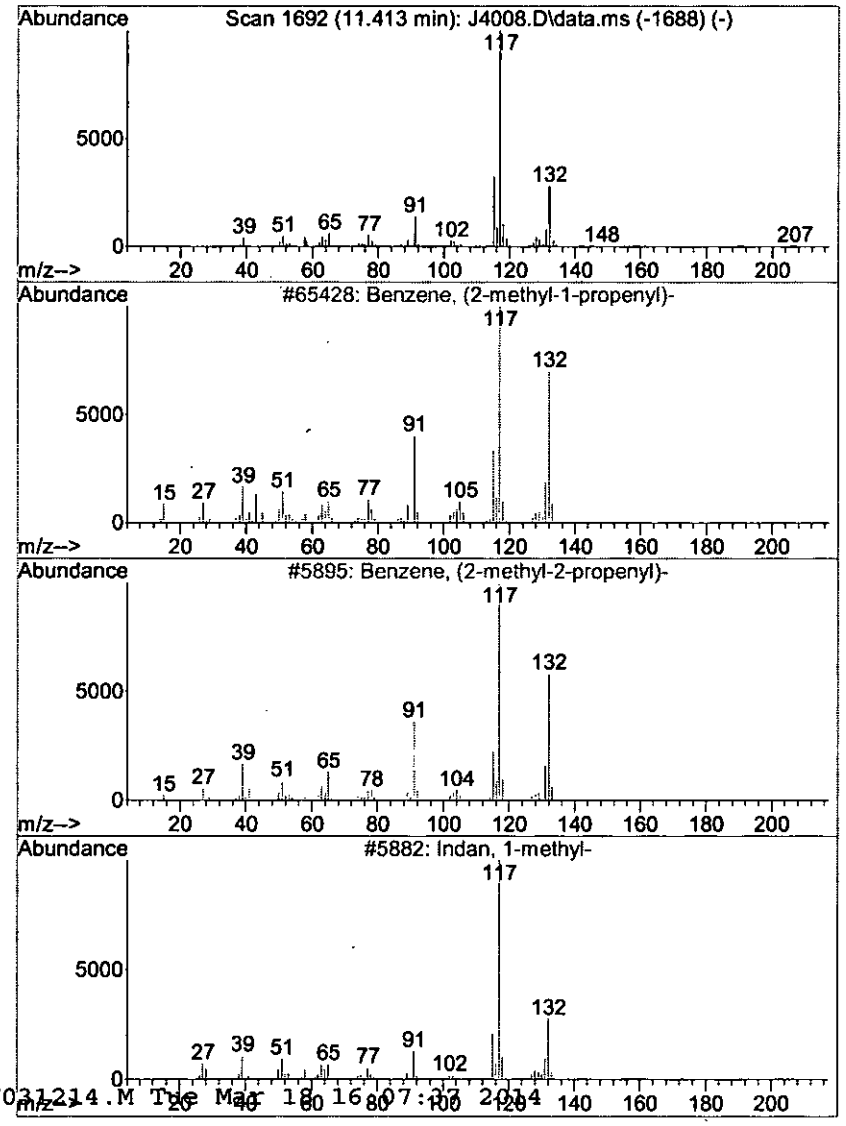
TIC Library  : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

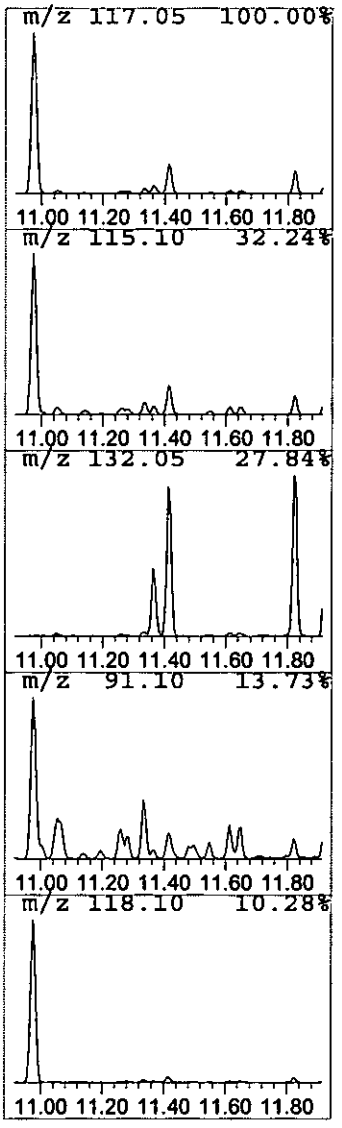
****

Peak Number 16 Benzene, (2-methyl-1-propen... Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.413	9.58 ppb	701091	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	90
2	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
3	Indan, 1-methyl-	132	C10H12	000767-58-8	87
4	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	83





W031214.M Tue Mar 18 16:07:27 2014 Page: 19

Library Search Compound Report

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Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

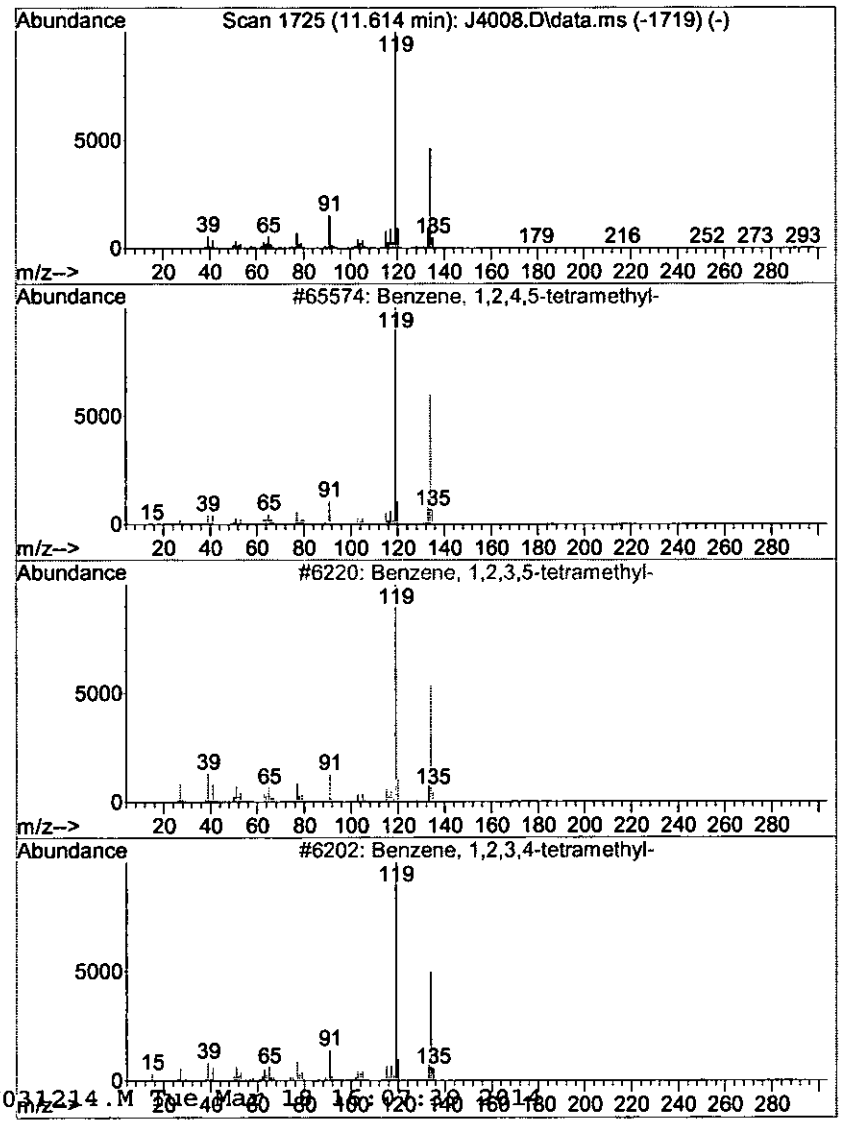
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

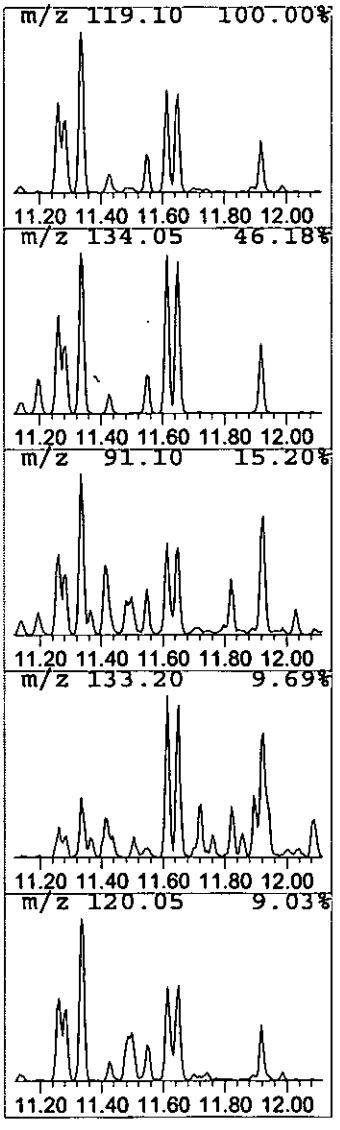
****

Peak Number 17 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.614	8.92 ppb	652863	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
(1)	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94





W031214.M Tue Mar 18 16:07:20 2014 Page: 20

00198

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

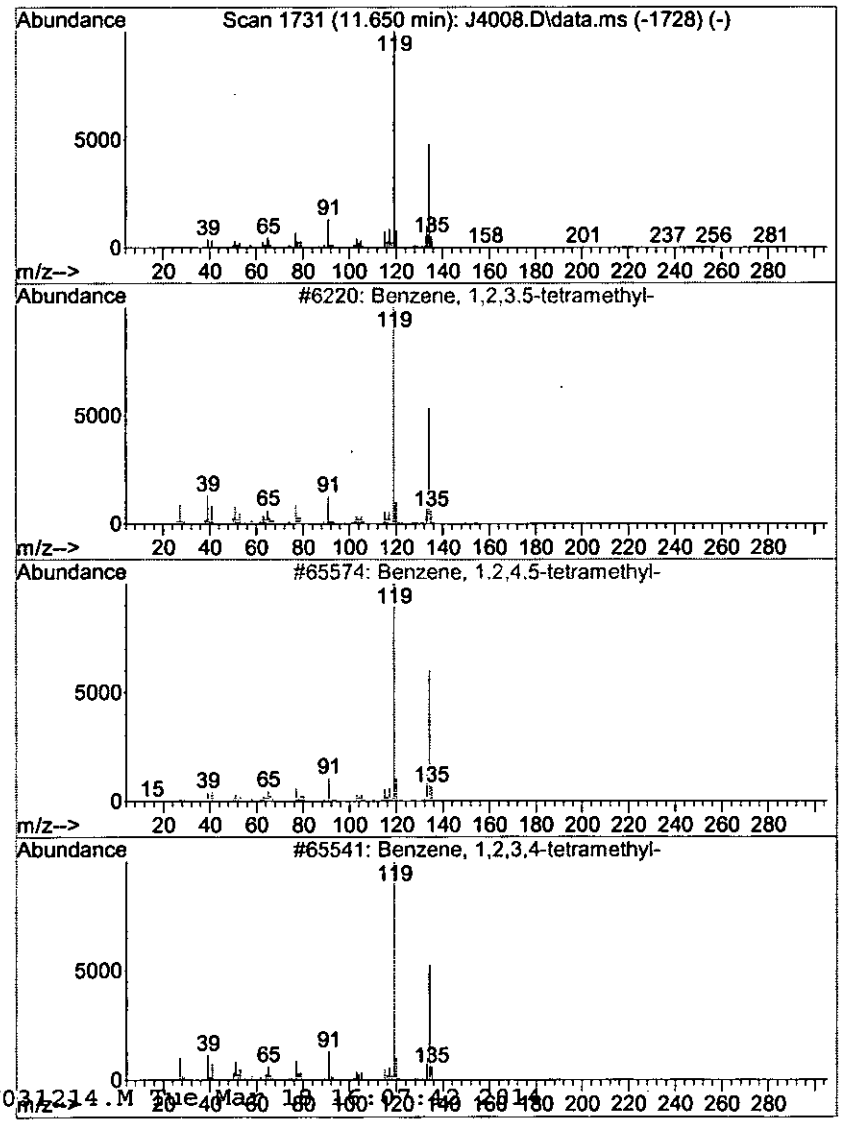
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

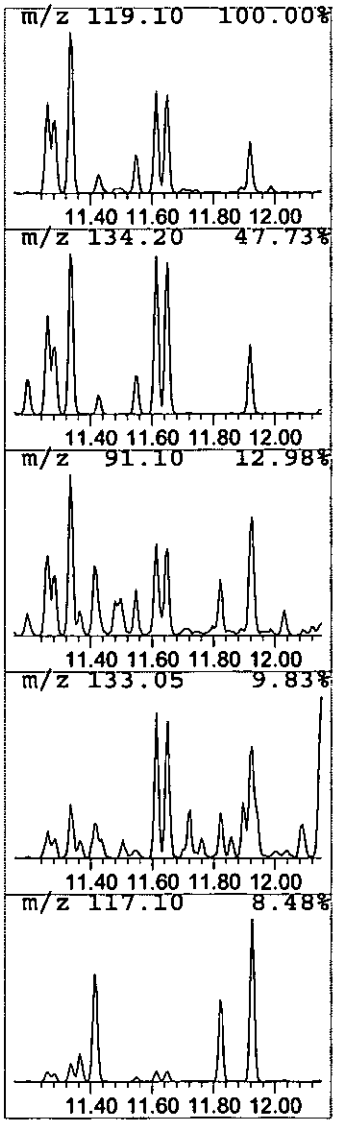
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 18  Benzene, 1,2,3,5-tetramethyl-   Concentration Rank 17
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	8.30 ppb	607408	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
4	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
5	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	94





Library Search Compound Report

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Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

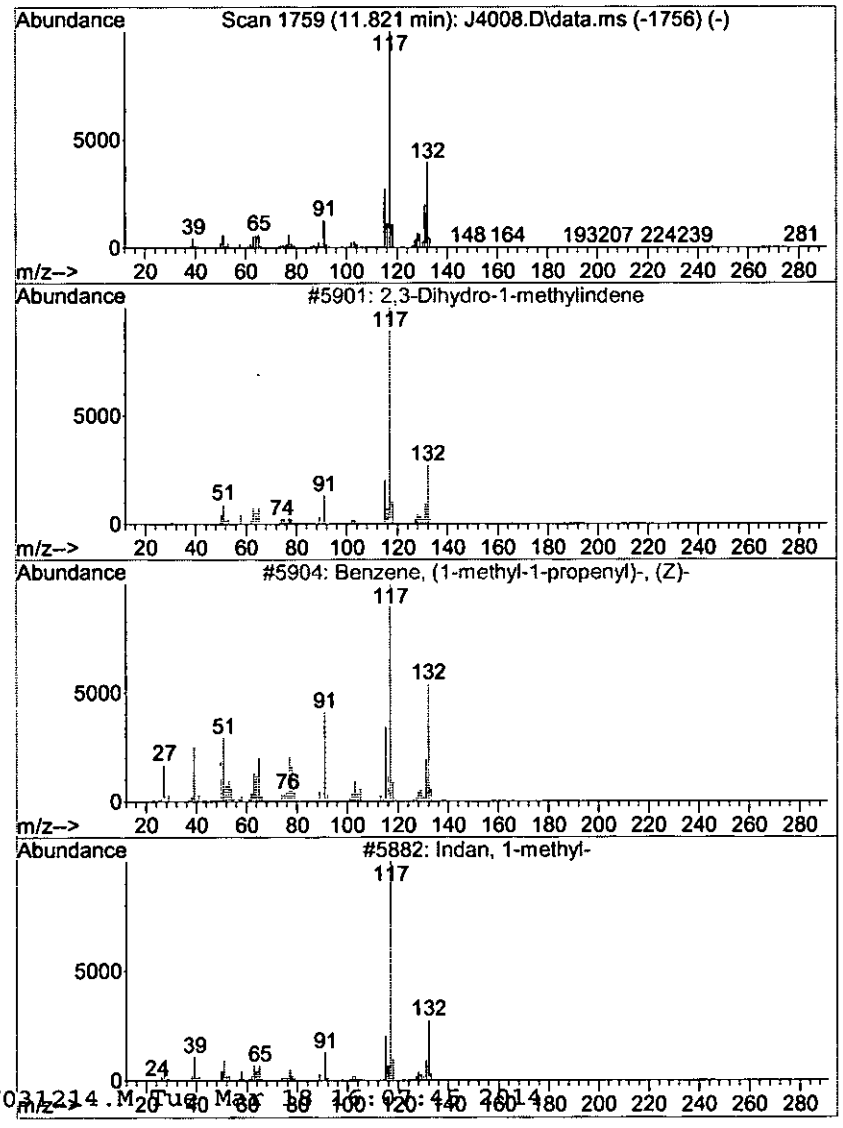
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

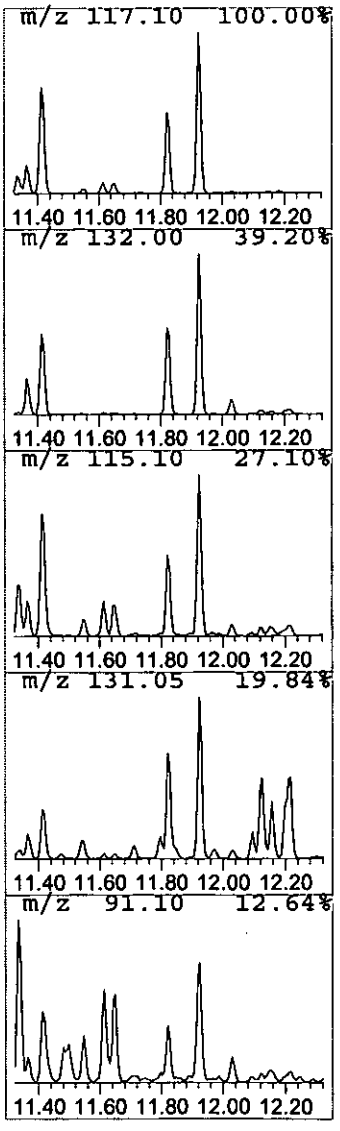
****

Peak Number 19 2,3-Dihydro-1-methylindene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.821	6.41 ppb	469656	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	93
2	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000767-99-7	91
3	Indan, 1-methyl-	132	C10H12	000767-58-8	90
4	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	90
5	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	90





W031214.M Tue Mar 18 16:07:45 2014 Page: 22

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4008.D
Acq On    : 18 Mar 2014    5:58 am
Operator  : K.Ruest
Sample    : R1401764-007|5.0
Misc      : PARSONS 9913 T4
ALS Vial  : 41   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

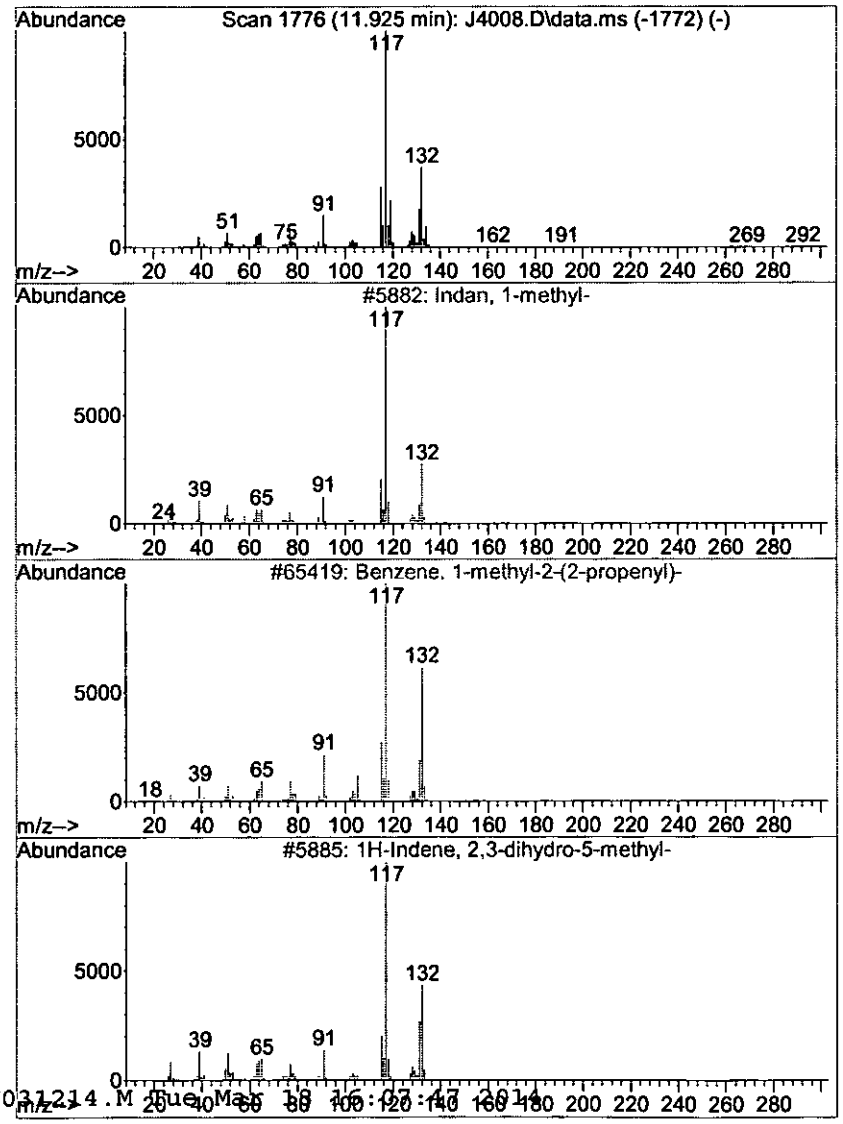
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

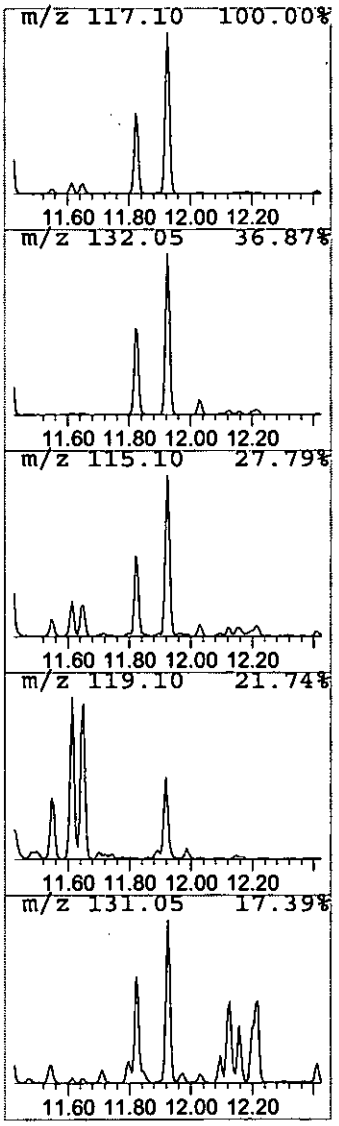
****

Peak Number 20 Indan, 1-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.925	15.40 ppb	1127160	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indan, 1-methyl-	132	C10H12	000767-58-8	87
2	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	83
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	81
4	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000767-99-7	80
5	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	76





W031214.M Tue Mar 18 16:07:47 2014

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1000
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 01:09
Sample Name:	FTMM-TB031214	**Units:**	µg/L
Lab Code:	R1401764-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J3999.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.28**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14 1000
Date Received: 3/13/14
Date Analyzed: 3/18/14 01:09

Sample Name: FTMM-TB031214
Lab Code: R1401764-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\031714\J3999.D\

Analysis Lot: 383996
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.68**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.21**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 01:09	
Dibromofluoromethane	100	85-115	3/18/14 01:09	
Toluene-d8	93	85-120	3/18/14 01:09	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0109

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB031214	**Units:**	µg/L
Lab Code:	R1401764-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-008|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3999.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 1:09 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 01:24:58 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	902177	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1309431	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1195565	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	586545	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	379024	50.00	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.00%				
48) surr1,1,2-dichloroetha...	4.658	65	412869	47.81	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 95.62%				
65) SURR3,Toluene-d8	7.322	98	1488661	46.73	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 93.46%				
70) SURR2,BFB	9.785	95	573847	48.29	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.58%				
Target Compounds							Qvalue
5) Bromomethane	1.512	94	1450	0.28	ppb		99 <
15) Acetone	2.049	43	1425	0.80	ppb		79 <
~~16) 2-Propanol~~	~~2.122~~	~~45~~	~~668~~	~~2.30~~	~~ppb~~		~~93~~
~~19) Acetonitrile~~	~~2.189~~	~~40~~	~~590~~	~~2.02~~	~~ppb~~	~~#~~	~~1~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~1876~~	~~0.42~~	~~ppb~~	~~#~~	~~1~~
~~90) Cyclohexanone~~	~~9.718~~	~~55~~	~~318~~	~~0.68~~	~~ppb~~		~~95~~
115) 1,2,4-Tcbenzene	12.162	180	2457	0.28	ppb		95
116) Hexachlorobt	12.266	225	2577	0.68	ppb		87
117) Naphthalen	12.303	128	3196	0.21	ppb		98
118) 1,2,3-Tclbenzene	12.443	180	2641	0.37	ppb	#	76 <
119) 2,4,5-Trichlorotolene	12.857	159	1544	0.33	ppb	#	58 MTD
120) 2,3,6-Trichlorotoluene	12.912	159	1170	0.27	ppb	#	83 ↓

KR 3/19/14

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

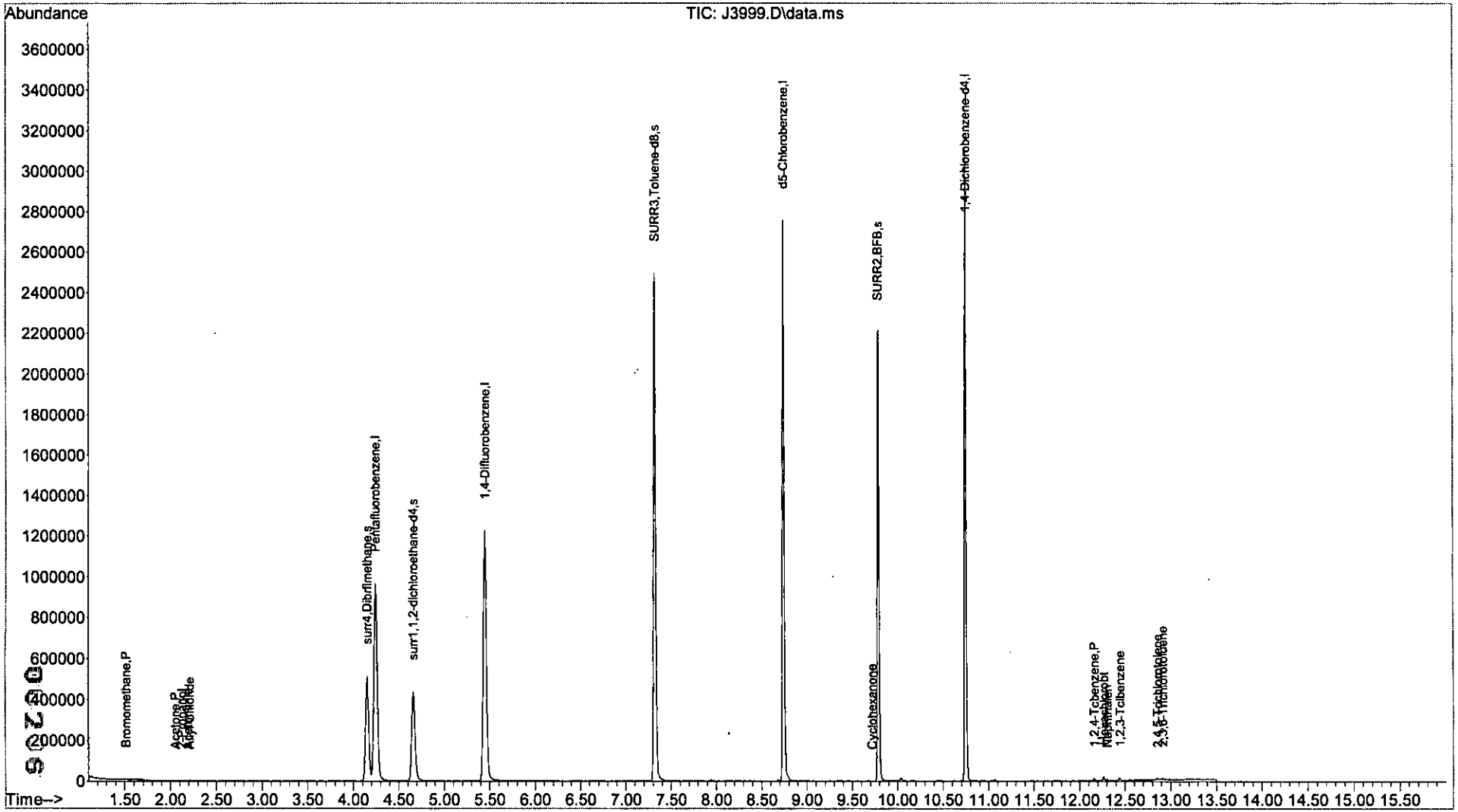
W031214.M Tue Mar 18 01:25:01 2014

00205

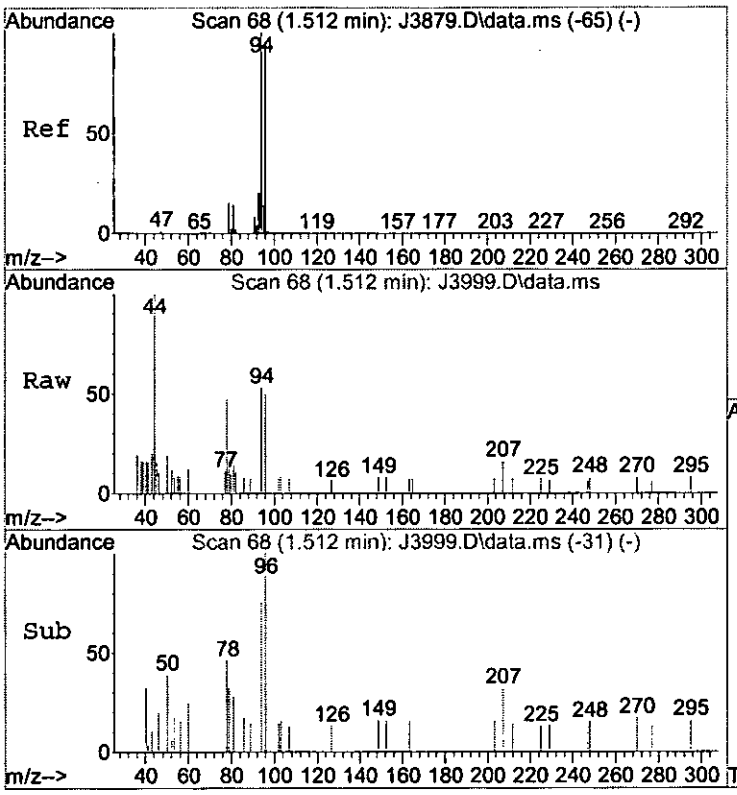
Quantitation Report (Not Reviewed)

Sample : R1401764-008|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3999.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 1:09 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 01:24:58 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



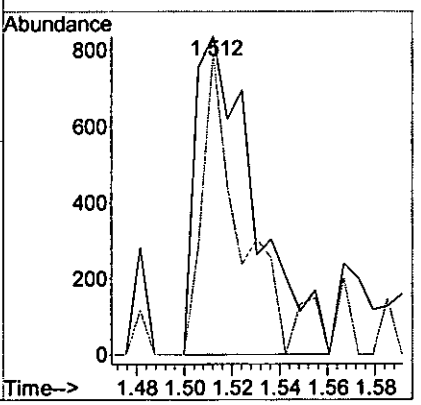
W031214.M Tue Mar 18 01:25:04 2014 Page: 2

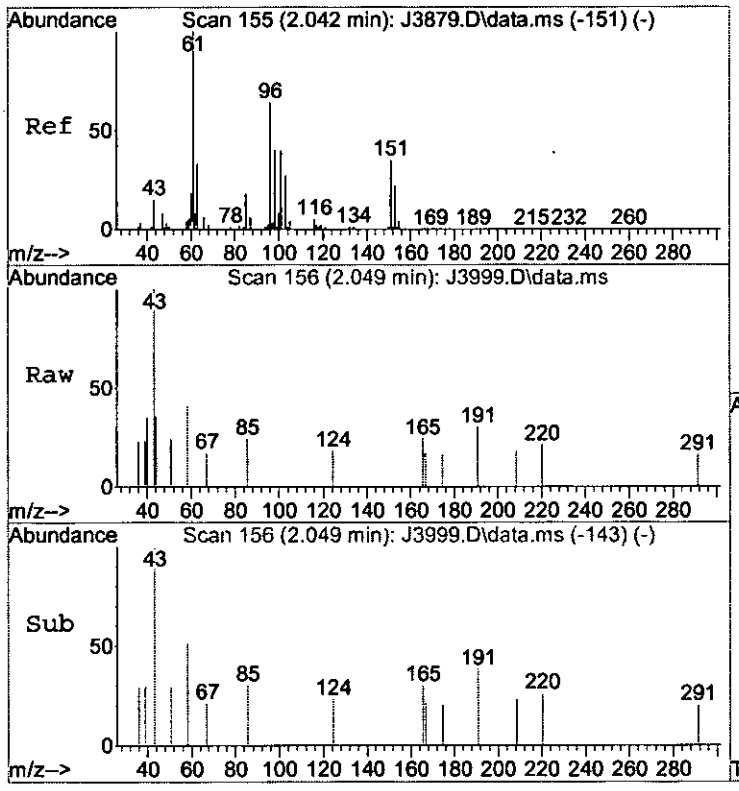


#5
Bromomethane
Concen: 0.28 ppb
RT: 1.512 min Scan# 68
Delta R.T. 0.000 min
Lab File: J3999.D
Acq: 18 Mar 2014 1:09 am

Tgt Ion: 94 Resp: 1450

Ion	Ratio	Lower	Upper
94	100		
96	94.6	73.8	113.8

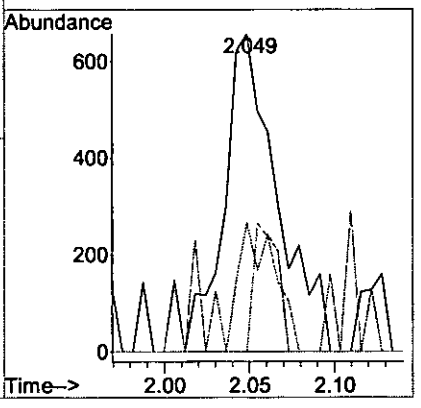


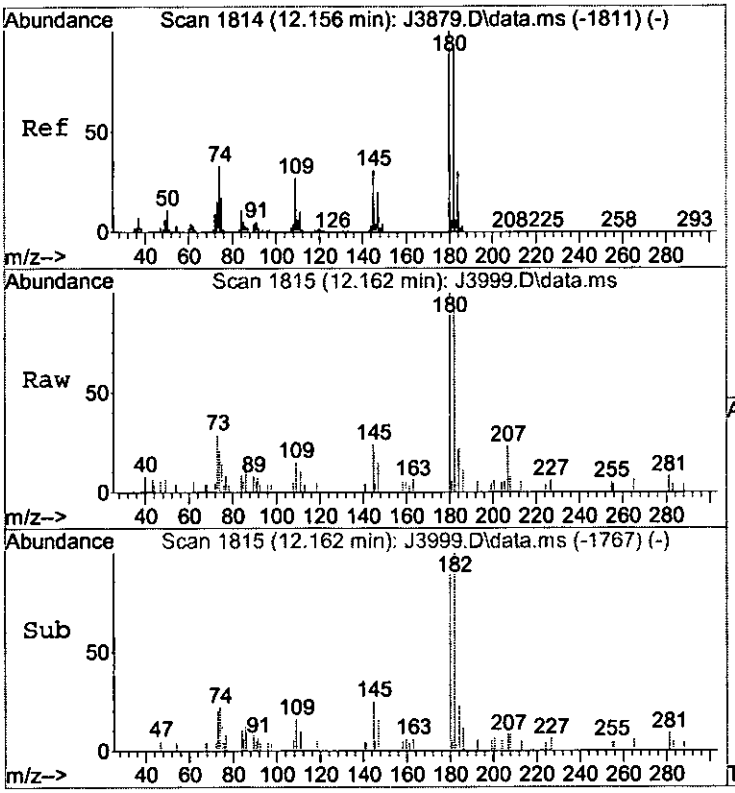


#15
Acetone
Concen: 0.80 ppb
RT: 2.049 min Scan# 156
Delta R.T. 0.006 min
Lab File: J3999.D
Acq: 18 Mar 2014 1:09 am

Tgt Ion: 43 Resp: 1425

Ion	Ratio	Lower	Upper
43	100		
58	40.6	9.7	49.7
42	0.0	0.0	27.9

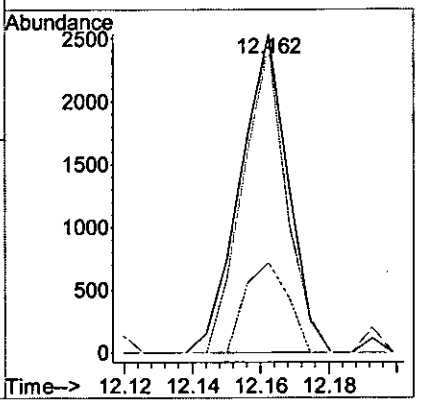


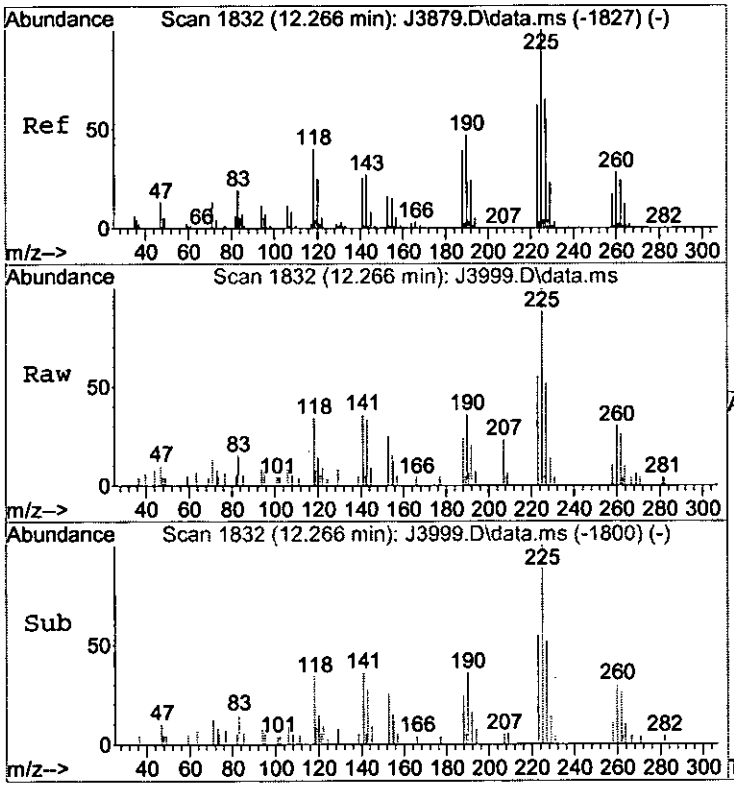


#115
1,2,4-Tcbenzene
Concen: 0.28 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: J3999.D
Acq: 18 Mar 2014 1:09 am

Tgt Ion:180 Resp: 2457

Ion	Ratio	Lower	Upper
180	100		
182	96.5	72.2	112.2
145	28.2	11.4	51.4

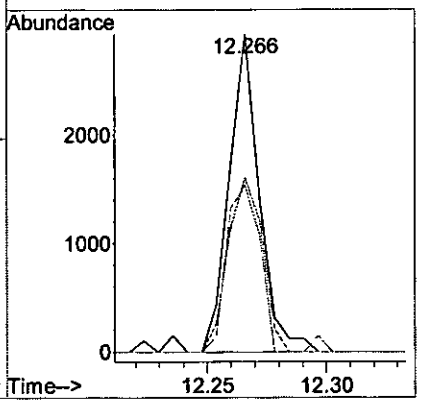




#116
Hexachlorobt
Concen: 0.68 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: J3999.D
Acq: 18 Mar 2014 1:09 am

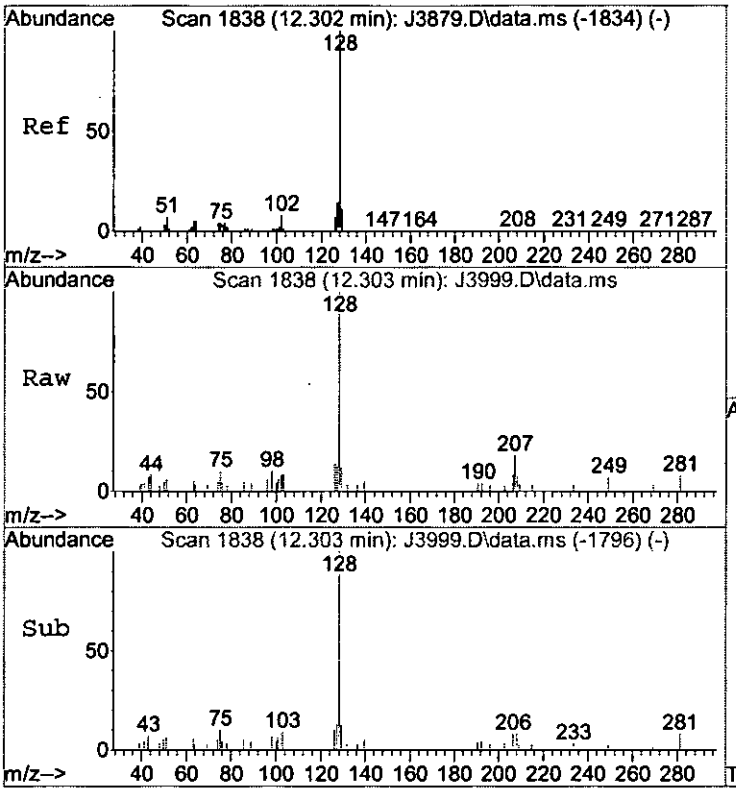
Tgt Ion:225 Resp: 2577

Ion	Ratio	Lower	Upper
225	100		
223	54.7	42.4	82.4
227	52.2	44.9	84.9



}

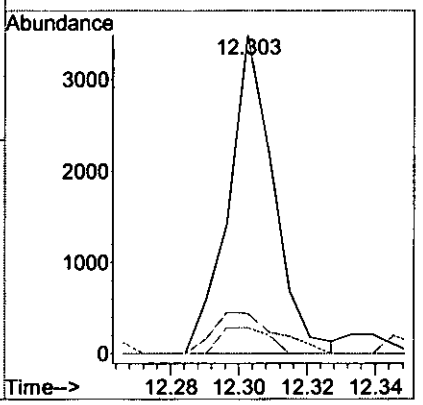
J3999.D W031214.M Tue Mar 18 14:43:38 2014 Page 4

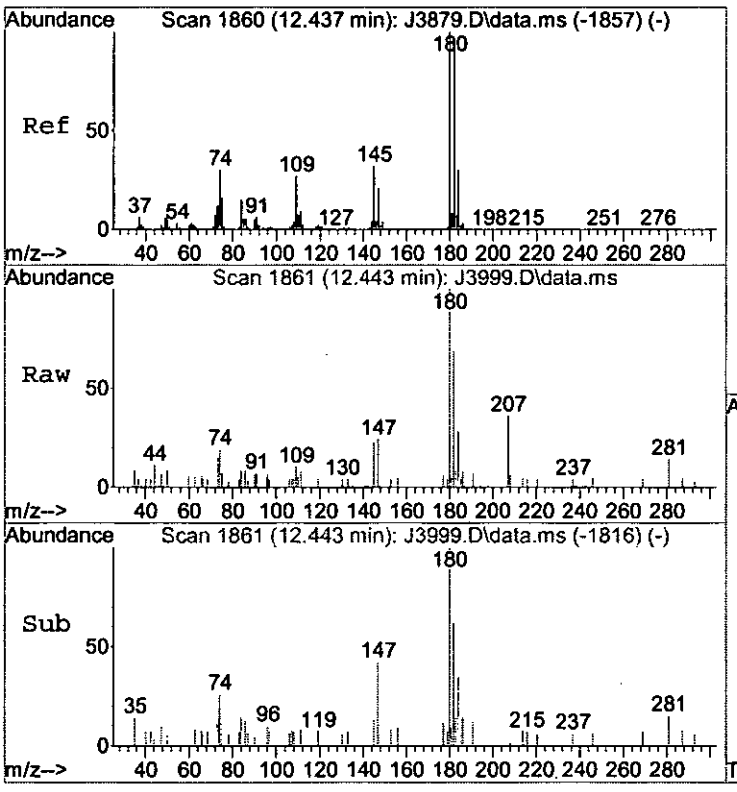


#117
Naphthalen
Concen: 0.21 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J3999.D
Acq: 18 Mar 2014 1:09 am

Tgt Ion:128 Resp: 3196

Ion	Ratio	Lower	Upper
128	100		
127	12.8	0.0	33.8
102	8.3	0.0	28.5

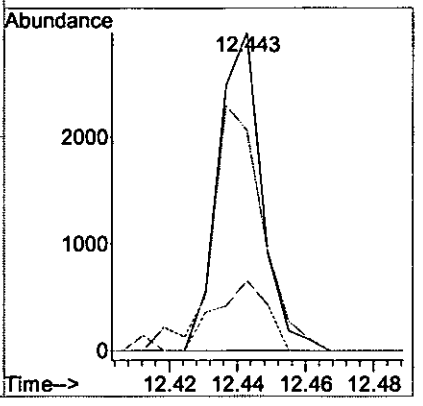




#118
1,2,3-Tclbenzene
Concen: 0.37 ppb
RT: 12.443 min Scan# 1861
Delta R.T. 0.006 min
Lab File: J3999.D
Acq: 18 Mar 2014 1:09 am

Tgt Ion:180 Resp: 2641

Ion	Ratio	Lower	Upper
180	100		
182	69.3	75.2	115.2#
145	22.0	11.9	51.9



J3999.D W031214.M Tue Mar 18 14:43:40 2014 00208 Page 5

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J3999.D
Acq On : 18 Mar 2014 1:09 am
Operator : K.Ruest
Sample : R1401764-008|1.0
Misc : PARSONS 9913 T4
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J3999.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	490	501	509	rBV	515044	1220306	31.57%	5.712%
2	4.243	509	516	534	rVB	963260	2435441	63.00%	11.400%
3	4.658	575	584	599	rBV2	437397	1146214	29.65%	5.365%
4	5.450	703	714	733	rBV	1224347	2926382	75.70%	13.697%
5	7.322	1014	1021	1040	rBV	2496109	3865656	100.00%	18.094%
6	8.742	1249	1254	1268	rBV	2756335	3523480	91.15%	16.492%
7	9.791	1420	1426	1435	rBV	2217034	2816521	72.86%	13.183%
8	10.748	1578	1583	1593	rBV	3108895	3430359	88.74%	16.056%

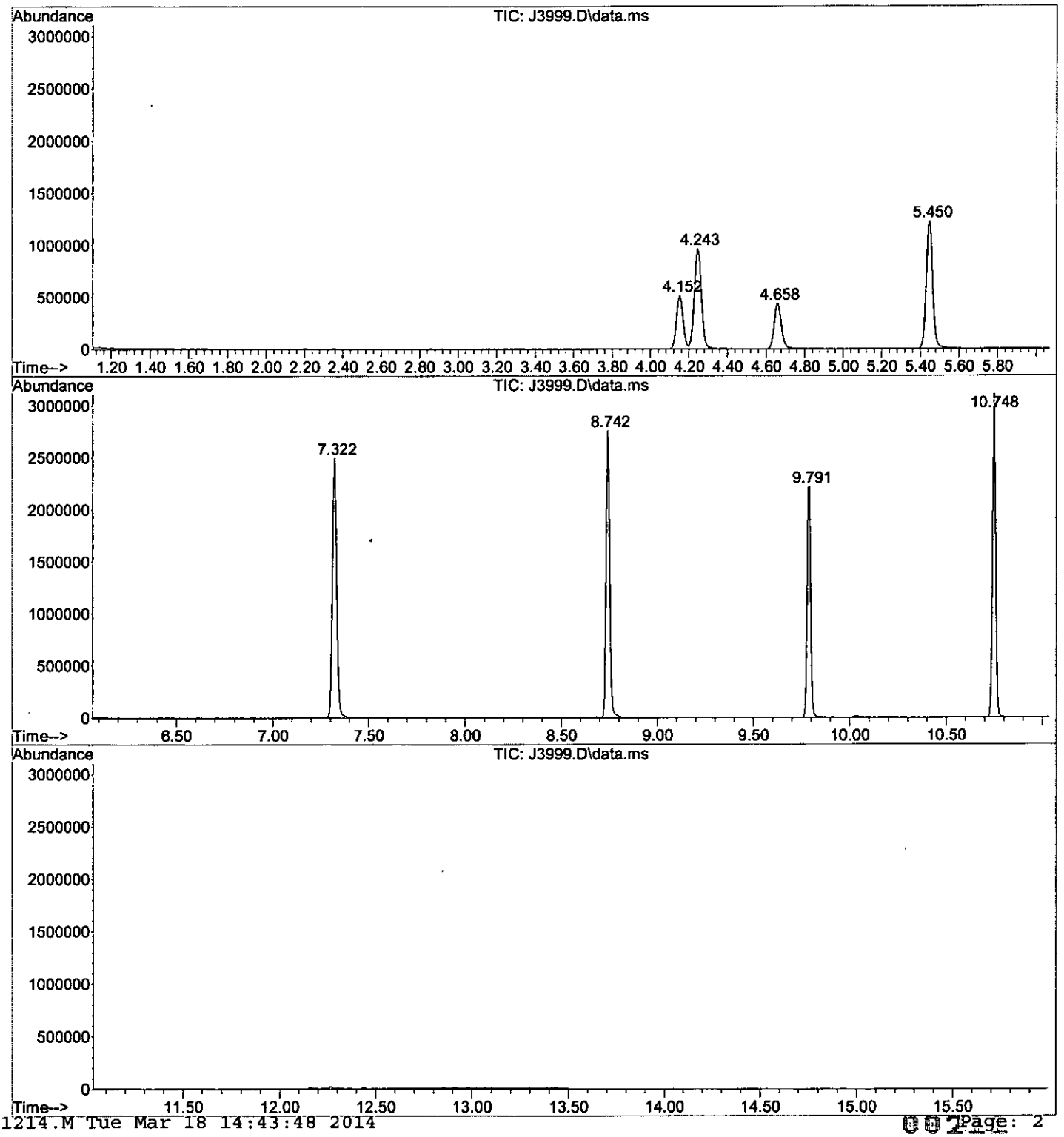
Sum of corrected areas: 21364359

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J3999.D
Acq On : 18 Mar 2014 1:09 am
Operator : K.Ruest
Sample : R1401764-008|1.0
Misc : PARSONS 9913 T4
ALS Vial : 32 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Mar 18 14:43:48 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031714\\
Data File : J3999.D
Acq On : 18 Mar 2014 1:09 amm
Operator : K.Ruestt
Sample : R1401764-008|1.00
Misc : PARSONS 9913 T44
ALS Vial : 32 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Tue Mar 18 14:43:49 2014 Page: 3

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1315
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 01:41
Sample Name:	FTMM-EB031214	**Units:**	µg/L
Lab Code:	R1401764-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4000.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1315
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 01:41
Sample Name:	FTMM-EB031214	**Units:**	µg/L
Lab Code:	R1401764-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\U4000.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 01:41	
Dibromofluoromethane	99	85-115	3/18/14 01:41	
Toluene-d8	93	85-120	3/18/14 01:41	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0141

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB031214	**Units:**	µg/L
Lab Code:	R1401764-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-009|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4000.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 1:41 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 01:56:58 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	897433	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1318356	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1208263	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	599470	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	377077	49.41	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.82%				
48) surr1,1,2-dichloroetha...	4.658	65	418911	48.18	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 96.36%				
65) SURR3,Toluene-d8	7.322	98	1492724	46.54	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 93.08%				
70) SURR2,BFB	9.785	95	581354	48.59	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.18%				
Target Compounds							Qvalue
12) Acrolein	1.975	56	271	0.38	ppb		~~85~~
15) Acetone	2.054	43	701	0.39	ppb	#	52
16) 2-Propanol	~~2.121~~	45	181	0.63	ppb	#	24
20) Allyl Chloride	2.207	76	1446	0.32	ppb	#	1
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1132~~	~~2.35~~	~~ppb~~	~~#~~	~~14~~
116) Hexachlorobt	12.266	225	1397	0.36	ppb		94
118) 1,2,3-Tclbenzene	12.443	180	1547	0.21	ppb		95
119) 2,4,5-Trichlorotolene	12.845	159	1098	0.23	ppb	#	90
120) 2,3,6-Trichlorotoluene	12.912	159	1208	0.28	ppb		93

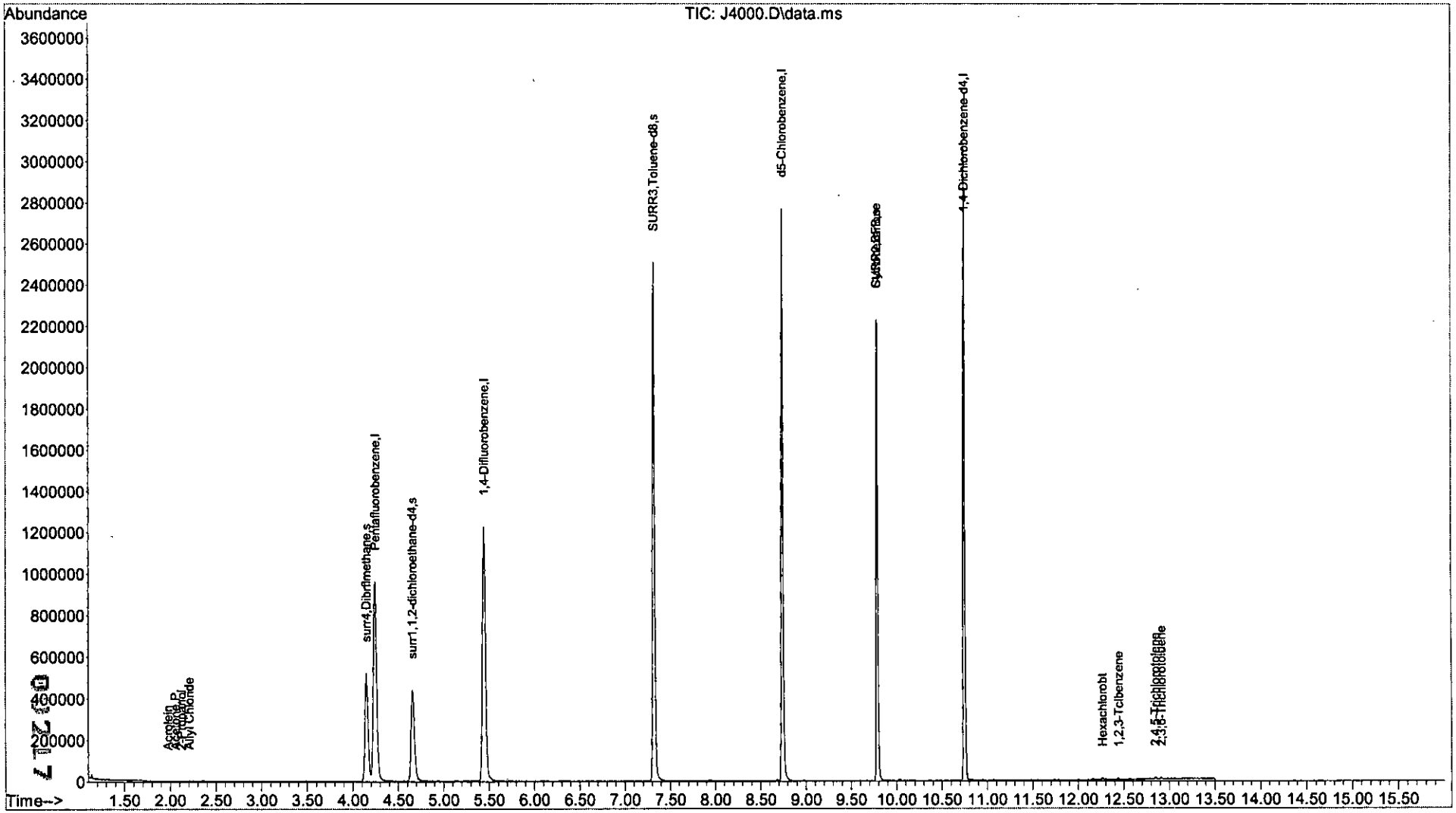
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 3/19/14

Quantitation Report (Not Reviewed)

Sample : R1401764-009|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4000.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 1:41 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 01:56:58 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Mar 18 01:57:04 2014 Page: 2

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4000.D
Acq On : 18 Mar 2014 1:41 am
Operator : K.Ruest
Sample : R1401764-009|1.0
Misc : PARSONS 9913 T4
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4000.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	508	rBV	520516	1210582	31.14%	5.633%
2	4.249	508	517	539	rVB	959483	2447731	62.97%	11.389%
3	4.658	575	584	598	rBV	437511	1133910	29.17%	5.276%
4	5.450	704	714	732	rBV	1223221	2908089	74.81%	13.531%
5	7.322	1014	1021	1041	rBV	2506854	3887237	100.00%	18.087%
6	8.742	1248	1254	1269	rBV	2769955	3550977	91.35%	16.522%
7	9.785	1420	1425	1437	rBV	2230682	2845600	73.20%	13.240%
8	10.748	1578	1583	1596	rBV	3059037	3507715	90.24%	16.321%

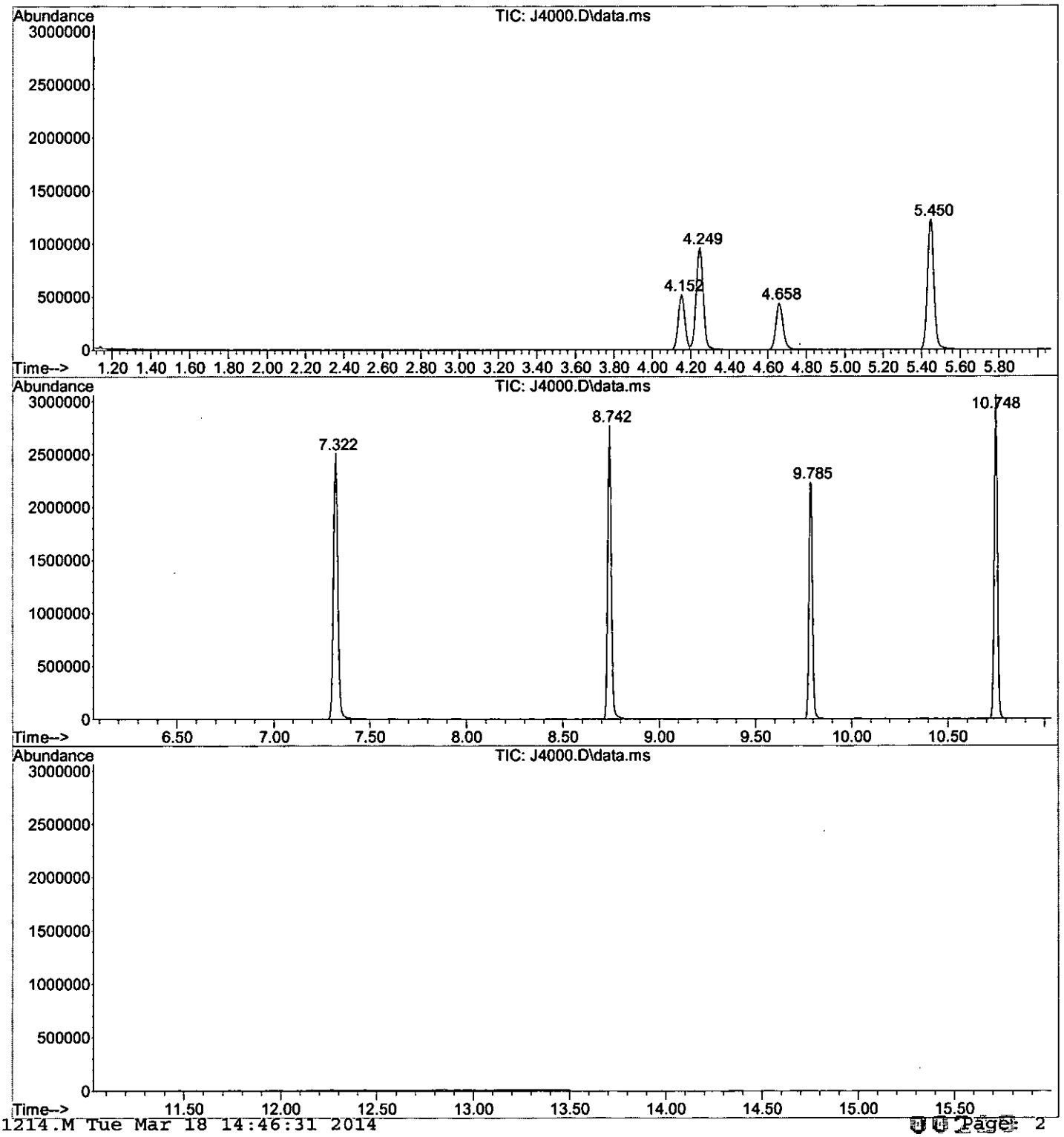
Sum of corrected areas: 21491841

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4000.D
Acq On : 18 Mar 2014 1:41 am
Operator : K.Ruest
Sample : R1401764-009|1.0
Misc : PARSONS 9913 T4
ALS Vial : 33 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Mar 18 14:46:31 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031714\\
Data File : J4000.D
Acq On : 18 Mar 2014 1:41 amm
Operator : K.Ruestt
Sample : R1401764-009|1.00
Misc : PARSONS 9913 T44
ALS Vial : 33 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Tue Mar 18 14:46:31 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1510
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 04:54
Sample Name:	FTMM-53-GW-699RW11-11.1	**Units:**	µg/L
Lab Code:	R1401764-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4006.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.24**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**11**		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1510
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 04:54
Sample Name:	FTMM-53-GW-699RW11-11.1	**Units:**	µg/L
Lab Code:	R1401764-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4006.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	**0.23**	J	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.45**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**8.9**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**1.5**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.37**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.45**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**9.4**		5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.6**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.36**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	3/18/14 04:54	
Dibromofluoromethane	99	85-115	3/18/14 04:54	
Toluene-d8	90	85-120	3/18/14 04:54	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000
Sample Matrix: Water

Service Request: R1401764
Date Collected: 3/12/14
Date Received: 3/13/14
Date Analyzed: 3/18/14 0454

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW11-11.1
Lab Code: R1401764-010

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	2.06	**5.7**	J
000079-29-8	Butane, 2,3-dimethyl-	2.37	**17.8**	JN
000096-14-0	Pentane, 3-methyl-	2.60	**12.3**	JN
	unknown	3.46	**9.8**	J
000565-59-3	Pentane, 2,3-dimethyl-	4.40	**14.3**	JN
	unknown	5.00	**7.3**	J
	unknown	6.80	**6.9**	J
	unknown	10.98	**12.5**	J
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**17.1**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**6.8**	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11.82	**7.3**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.93	**15.4**	JN
017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethy	12.22	**5.1**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-010|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4006.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 4:54 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 05:09:53 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	904968	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1302585	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1196268	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	613735	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	372313	49.37	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.74%				
48) surr1,1,2-dichloroetha...	4.658	65	415897	48.41	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 96.82%				
65) SURR3,Toluene-d8	7.322	98	1432872	45.22	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 90.44%				
70) SURR2,BFB	9.785	95	586122	49.58	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.16%				
Target Compounds							Qvalue
3) Chloromethane	1.262	50	2163	0.23	ppb		87
6) Chloroethane	1.567	64	1162	0.23	ppb		84
~~15) Acetone~~	~~2.048~~	~~43~~	~~58070~~	~~32.34~~	~~ppb~~	~~#~~	~~65~~
20) Allyl Chloride	2.201	76	1864	0.41	ppb	#	1
21) Methyl Acetate	2.372	43	263190	65.09	ppb	#	60
23) TBA	2.408	59	1760	3.51	ppb	#	1
24) Acrylonitrile	2.597	53	5331	2.65	ppb	#	22
25) Methyl-t-Butyl Ether	2.585	73	21454	1.03	ppb	#	1
35) 2-Butanone	3.554	43	15471	6.15	ppb	#	35
~~39) Tetrahydrofuran~~	~~3.908~~	~~42~~	~~418~~	~~0.24~~	~~ppb~~	~~#~~	~~45~~
44) Cyclohexane	4.316	41	15834	2.25	ppb		97
49) Benzene	4.780	78	340938	10.63	ppb		93
~~50) 1,2 Dichloroethane~~	~~4.780~~	~~62~~	~~3041~~	~~0.31~~	~~ppb~~	~~#~~	~~1~~
~~51) Iso Butyl Alcohol~~	~~4.560~~	~~43~~	~~6734~~	~~30.56~~	~~ppb~~		~~89~~
~~52) n Heptane~~	~~5.310~~	~~43~~	~~6369~~	~~0.79~~	~~ppb~~	~~#~~	~~31~~
~~53) 1 Butanol~~	~~5.749~~	~~56~~	~~249~~	~~2.06~~	~~ppb~~	~~#~~	~~1~~
55) Methylcyclohexane	6.078	55	29470	3.53	ppb	#	33
~~61) 2 Nitropropane~~	~~6.737~~	~~41~~	~~298~~	~~0.29~~	~~ppb~~		~~95~~
~~64) 4 Methyl 2 pentanone~~	~~7.212~~	~~43~~	~~1689~~	~~0.34~~	~~ppb~~	~~#~~	~~66~~
66) Toluene	7.395	91	12381	0.37	ppb		90
~~69) 1,1,2 Trichloroethane~~	~~7.791~~	~~97~~	~~17554~~	~~3.03~~	~~ppb~~	~~#~~	~~17~~
~~73) 2 Hexanone~~	~~8.108~~	~~43~~	~~3350~~	~~0.99~~	~~ppb~~		~~73~~
82) Ethylbenzene	8.889	106	4947	0.45	ppb	#	69
83) (m+p)Xylene	8.998	106	5833	0.45	ppb		90
89) Isopropylbenzene	9.669	105	280701	8.86	ppb		97
~~90) Cyclohexanone~~	~~9.669~~	~~55~~	~~978~~	~~1.99~~	~~ppb~~		~~86~~
95) n-Propylbenzene	10.023	91	348928	9.41	ppb		97
~~96) 2 Chlorotoluene~~	~~10.023~~	~~91~~	~~348928~~	~~14.99~~	~~ppb~~	~~#~~	~~49~~
~~99) 1,3,5 Trimethylbenzene~~	~~10.120~~	~~105~~	~~13004~~	~~0.50~~	~~ppb~~		~~78~~
100) tert-Butylbenzene	10.443	119	7866	0.36	ppb		95
101) 1,2,4-Trimethylbenzene	10.474	105	6362	0.24	ppb		92
103) sec-Butylbenzene	10.620	105	49257	1.63	ppb		94
~~109) n-Butylbenzene~~	~~11.047~~	~~91~~	~~37642~~	~~1.63~~	~~ppb~~	~~#~~	~~1~~
~~111) 1,2-Dibromo-3-chloropr...~~	~~11.626~~	~~157~~	~~1395~~	~~1.30~~	~~ppb~~	~~#~~	~~15~~
117) Naphthalen	12.303	128	24285	1.49	ppb		98

KR 3/18/14

W031214.M Tue Mar 18 05:09:56 2014 00224 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1401764-010|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4006.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 4:54 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 05:09:53 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

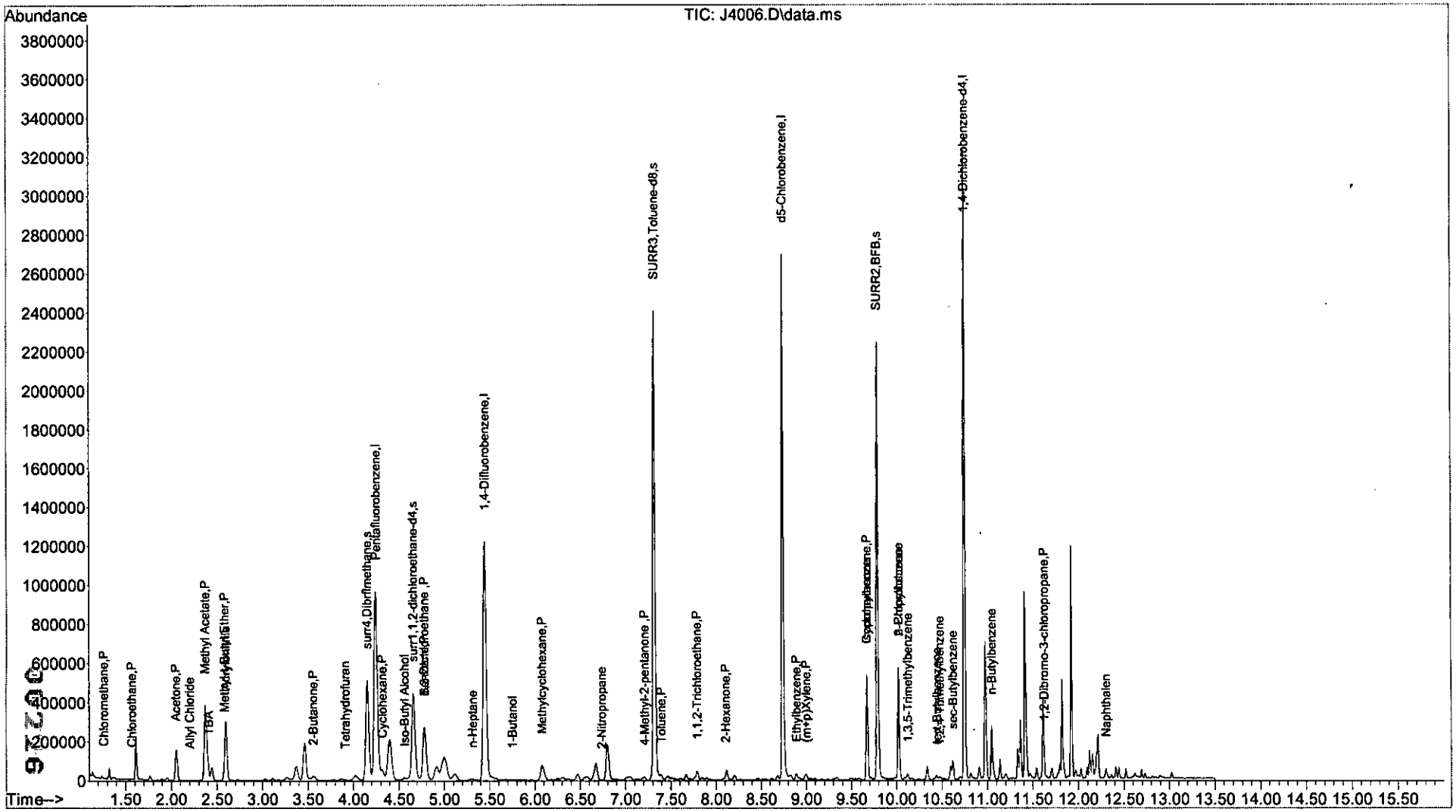
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

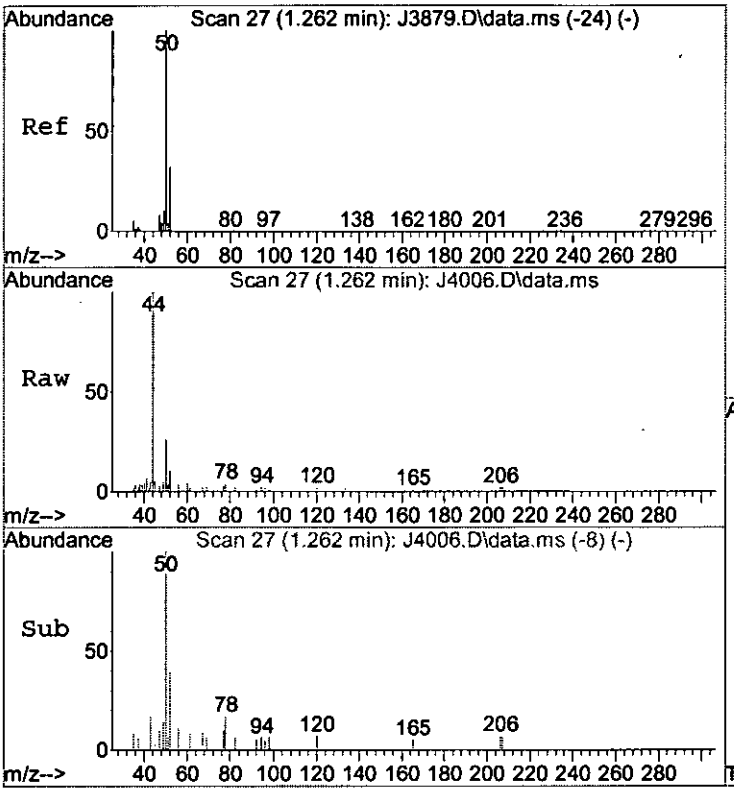
Quantitation Report (Not Reviewed)

Sample : R1401764-010|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4006.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 4:54 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 05:09:53 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



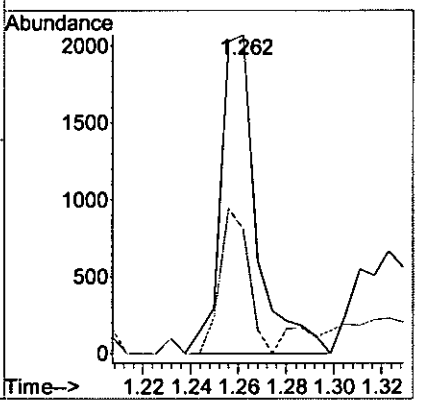
W031214.M Tue Mar 18 05:09:59 2014 Page: 3

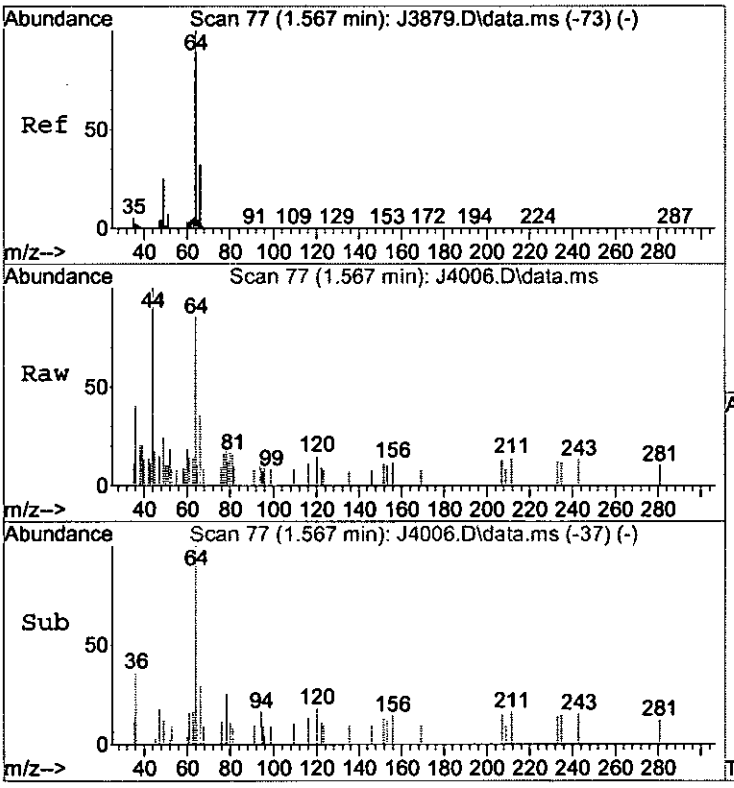


#3
Chloromethane
Concen: 0.23 ppb
RT: 1.262 min Scan# 27
Delta R.T. 0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion: 50 Resp: 2163

Ion	Ratio	Lower	Upper
50	100		
52	39.2	12.2	52.2

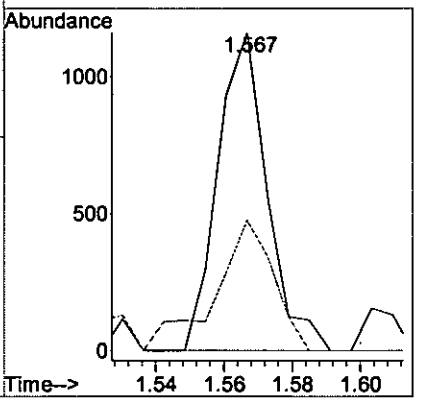




#6
Chloroethane
Concen: 0.23 ppb
RT: 1.567 min Scan# 77
Delta R.T. 0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

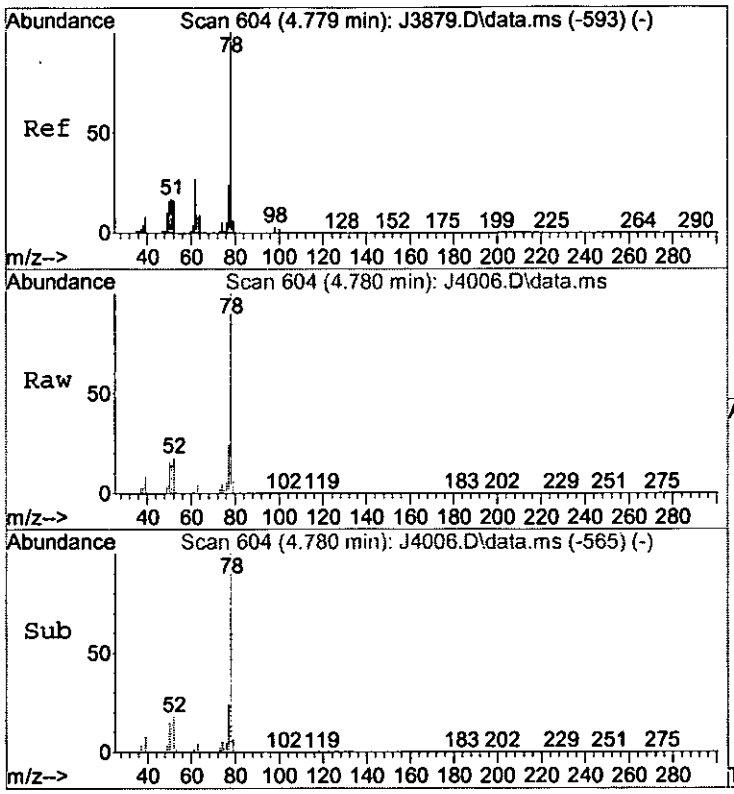
Tgt Ion: 64 Resp: 1162

Ion	Ratio	Lower	Upper
64	100		
66	40.9	12.2	52.2



J4006.D W031214.M Tue Mar 18 15:21:21 2014 Page 3

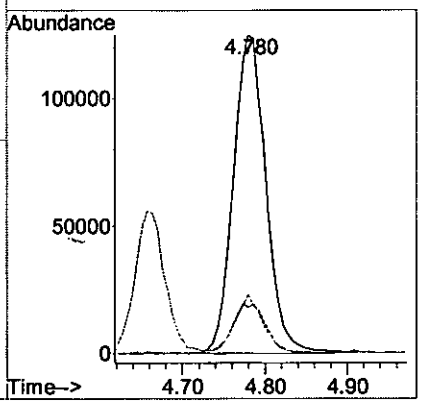
00227

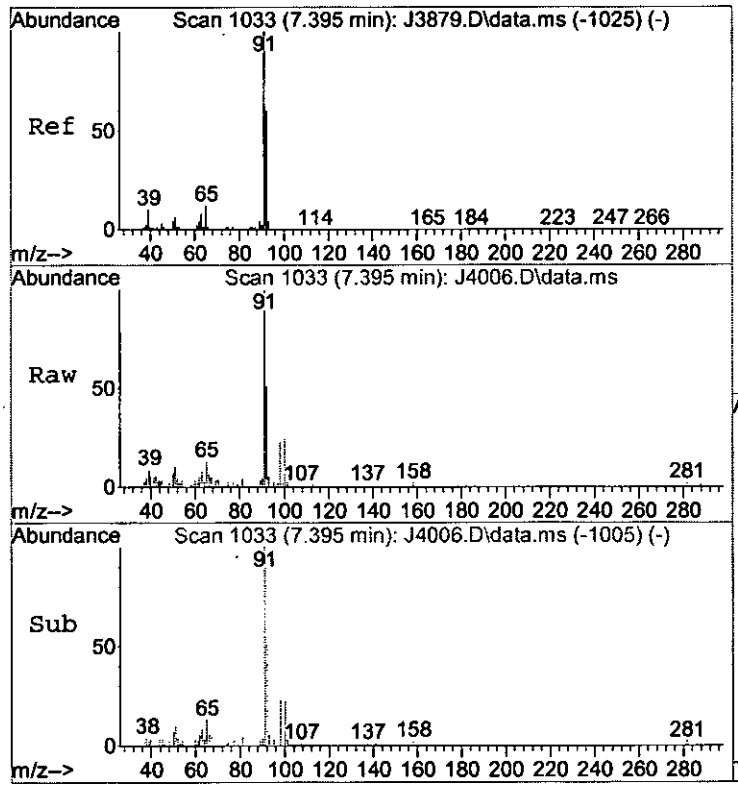


#49
Benzene
Concen: 10.63 ppb
RT: 4.780 min Scan# 604
Delta R.T. -0.006 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion: 78 Resp: 340938

Ion	Ratio	Lower	Upper
78	100		
51	14.4	0.0	38.2
52	18.3	0.0	36.1

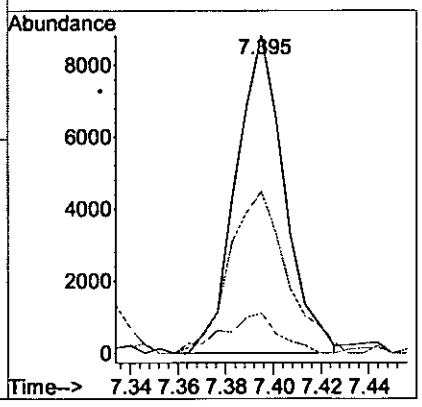




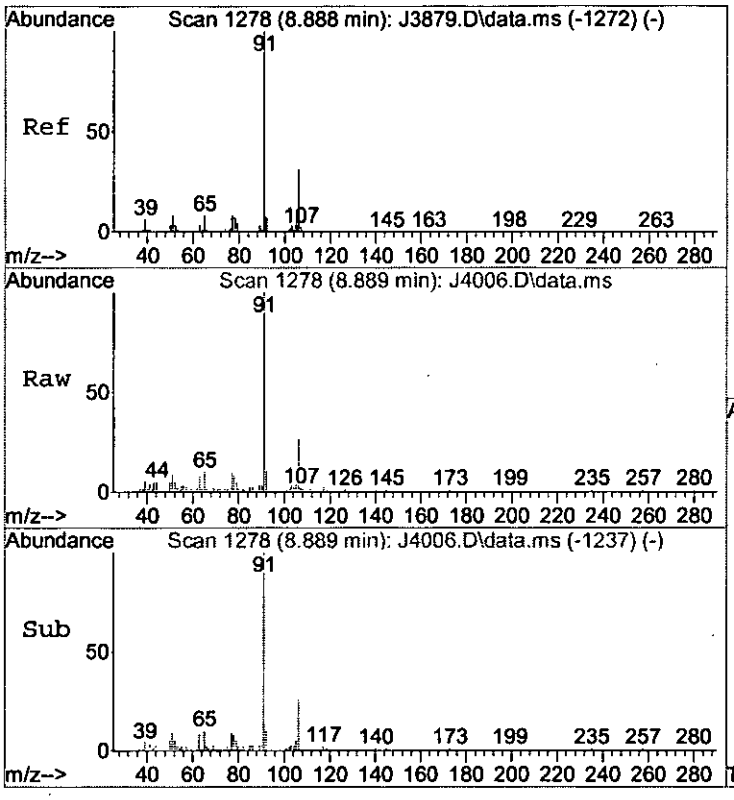
#66
Toluene
Concen: 0.37 ppb
RT: 7.395 min Scan# 1033
Delta R.T. 0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion: 91 Resp: 12381

Ion	Ratio	Lower	Upper
91	100		
92	50.6	39.9	79.9
65	12.6	0.0	32.3



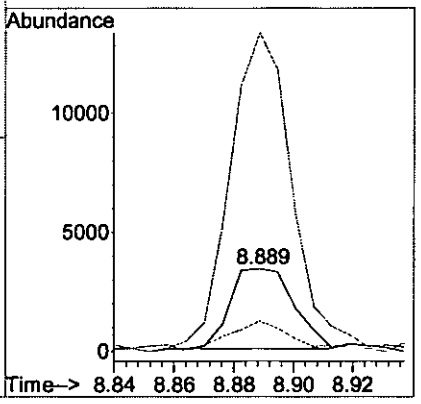
J4006.D W031214.M Tue Mar 18 15:21:23 2014 0022 Page 4

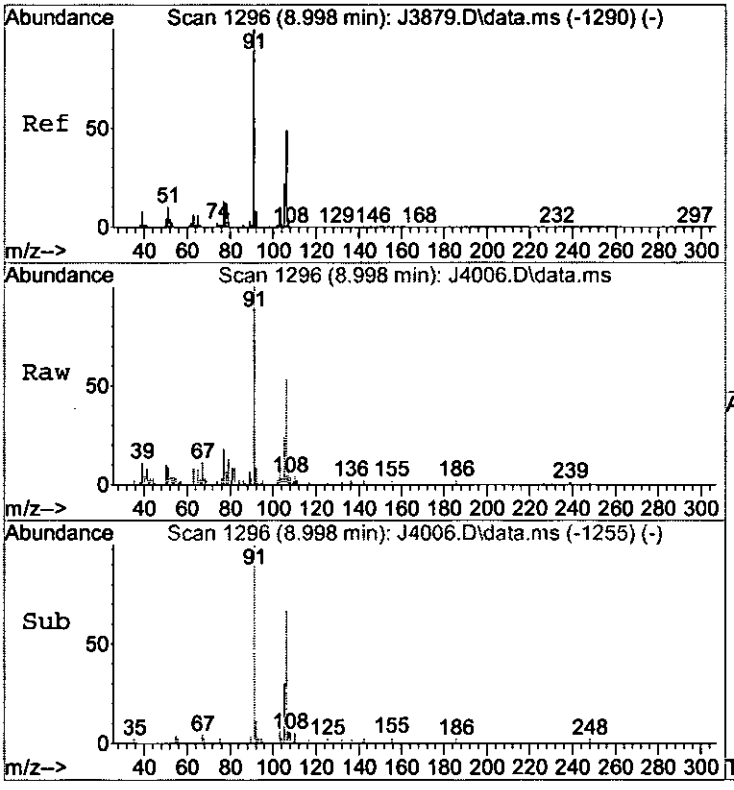


#82
Ethylbenzene
Concen: 0.45 ppb
RT: 8.889 min Scan# 1278
Delta R.T. -0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion:106 Resp: 4947

Ion	Ratio	Lower	Upper
106	100		
91	384.9	300.3	340.3#
65	36.7	6.6	46.6

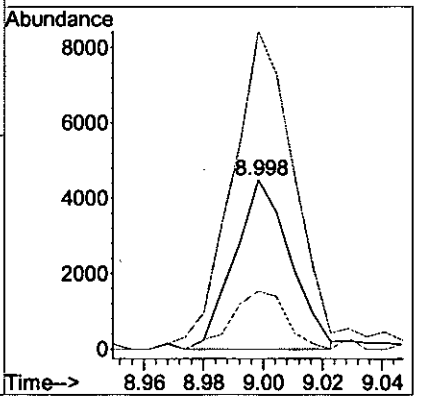




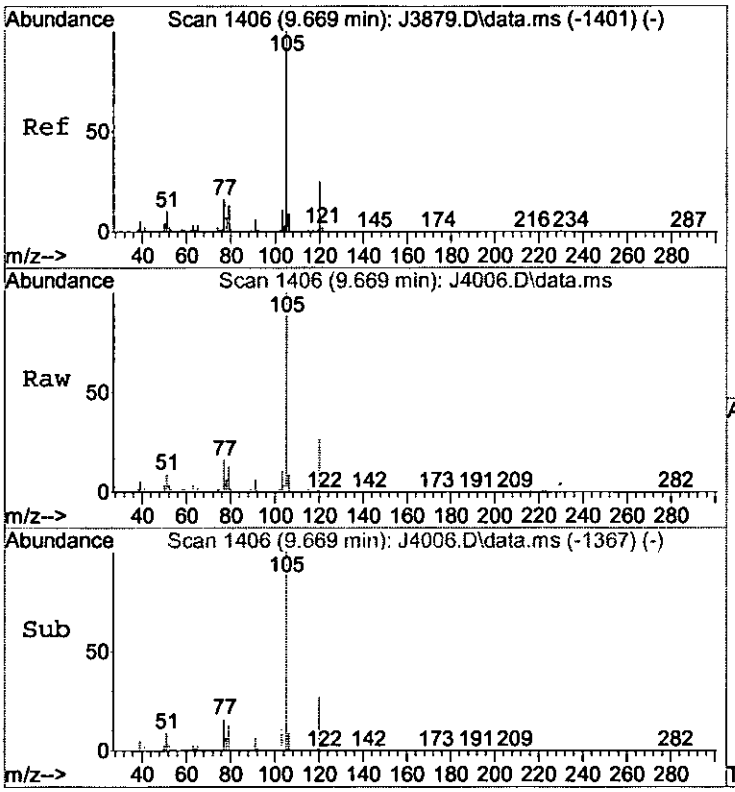
#83
(m+p)Xylene
Concen: 0.45 ppb
RT: 8.998 min Scan# 1296
Delta R.T. -0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion:106 Resp: 5833

Ion	Ratio	Lower	Upper
106	100		
91	188.0	182.8	222.8
77	34.2	7.2	47.2



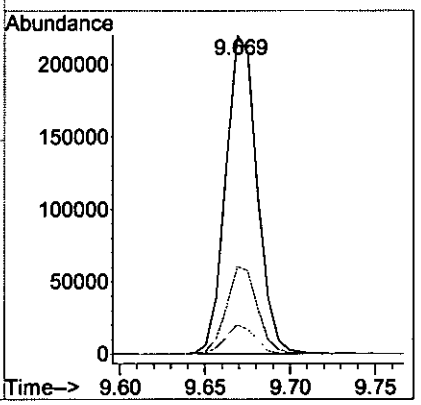
J4006.D W031214.M Tue Mar 18 15:21:25 2014 Page 5

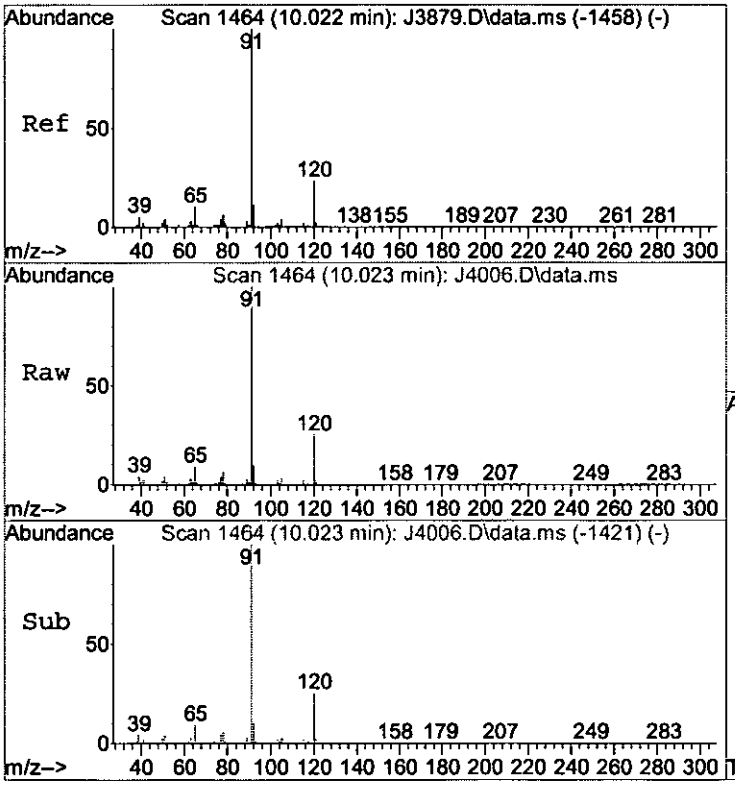


#89
Isopropylbenzene
Concen: 8.86 ppb
RT: 9.669 min Scan# 1406
Delta R.T. -0.006 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion:105 Resp: 280701

Ion	Ratio	Lower	Upper
105	100		
120	27.4	5.4	45.4
106	9.2	0.0	28.6

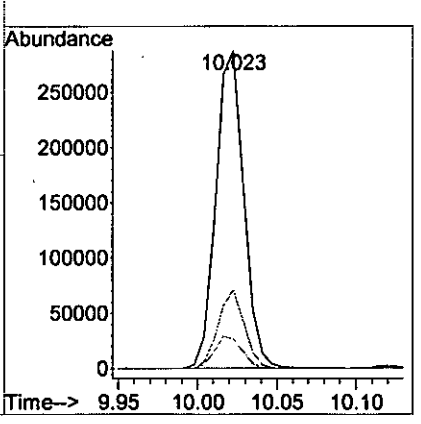




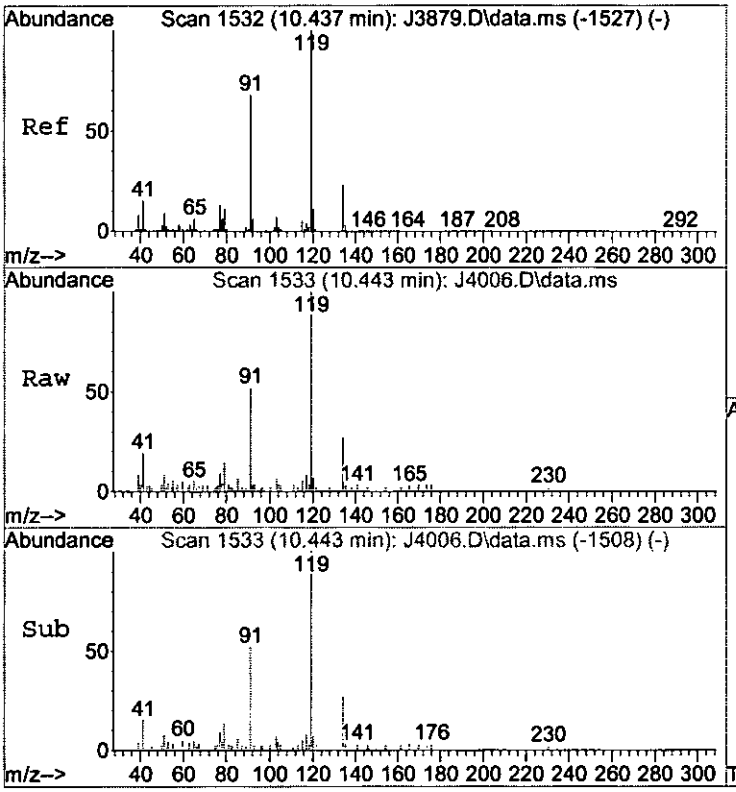
#95
n-Propylbenzene
Concen: 9.41 ppb
RT: 10.023 min Scan# 1464
Delta R.T. 0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion: 91 Resp: 348928

Ion	Ratio	Lower	Upper
91	100		
120	24.7	3.1	43.1
65	9.3	0.0	30.1



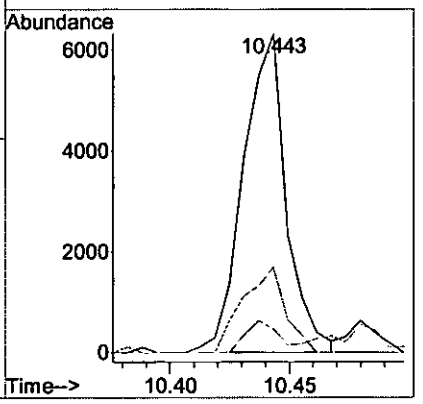
J4006.D W031214.M Tue Mar 18 15:21:27 2014 00230 Page 6

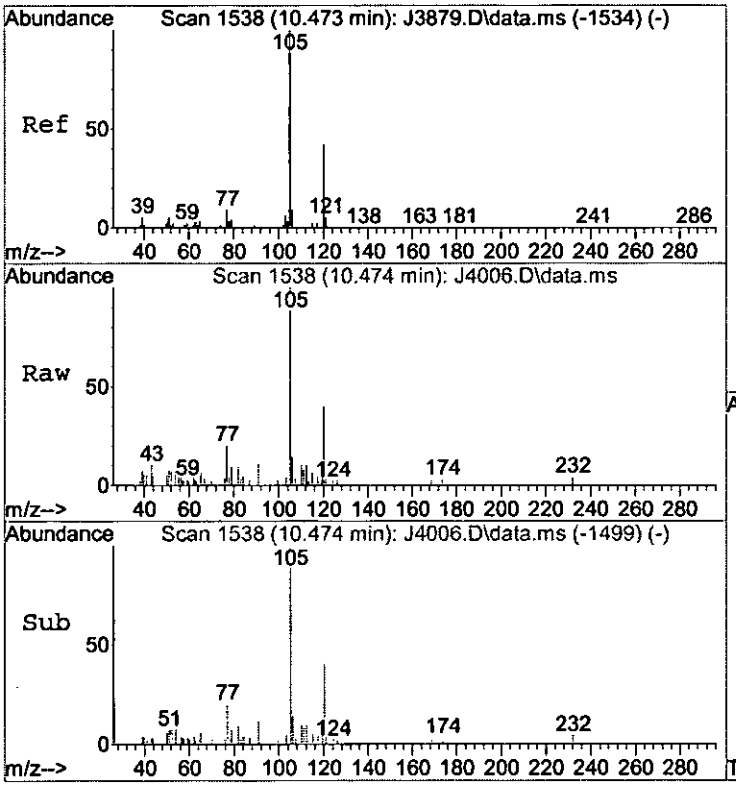


#100
tert-Butylbenzene
Concen: 0.36 ppb
RT: 10.443 min Scan# 1533
Delta R.T. 0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion:119 Resp: 7866

Ion	Ratio	Lower	Upper
119	100		
134	26.7	3.5	43.5
103	7.2	0.0	27.3

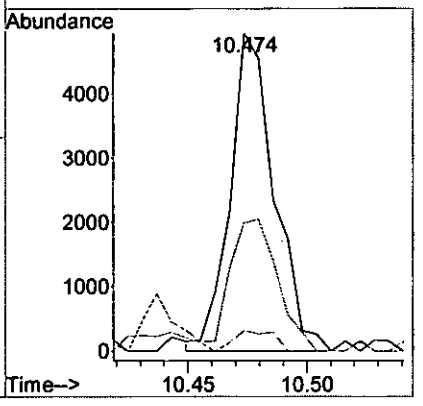




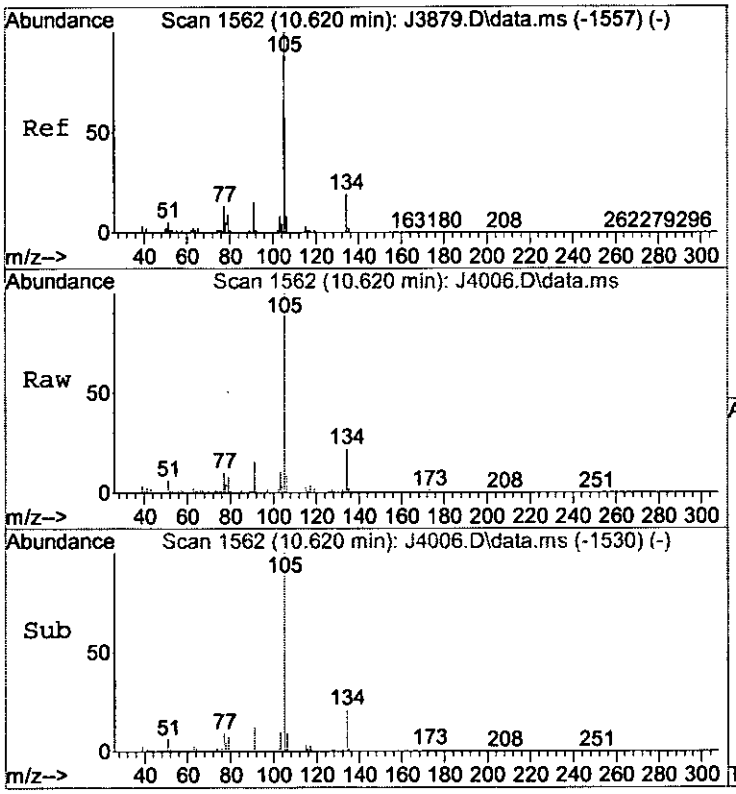
#101
1,2,4-Trimethylbenzene
Concen: 0.24 ppb
RT: 10.474 min Scan# 1538
Delta R.T. -0.006 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion:105 Resp: 6362

Ion	Ratio	Lower	Upper
105	100		
120	40.3	25.3	65.3
65	6.4	0.0	24.3



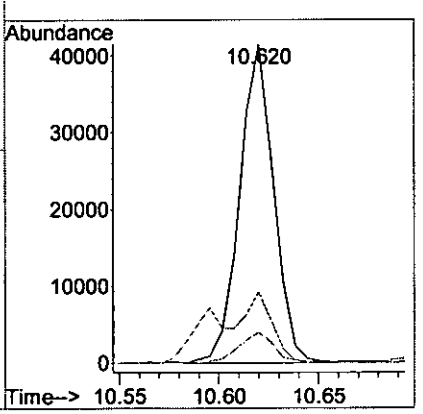
J4006.D W031214.M Tue Mar 18 15:21:29 2014 0023 Page 7

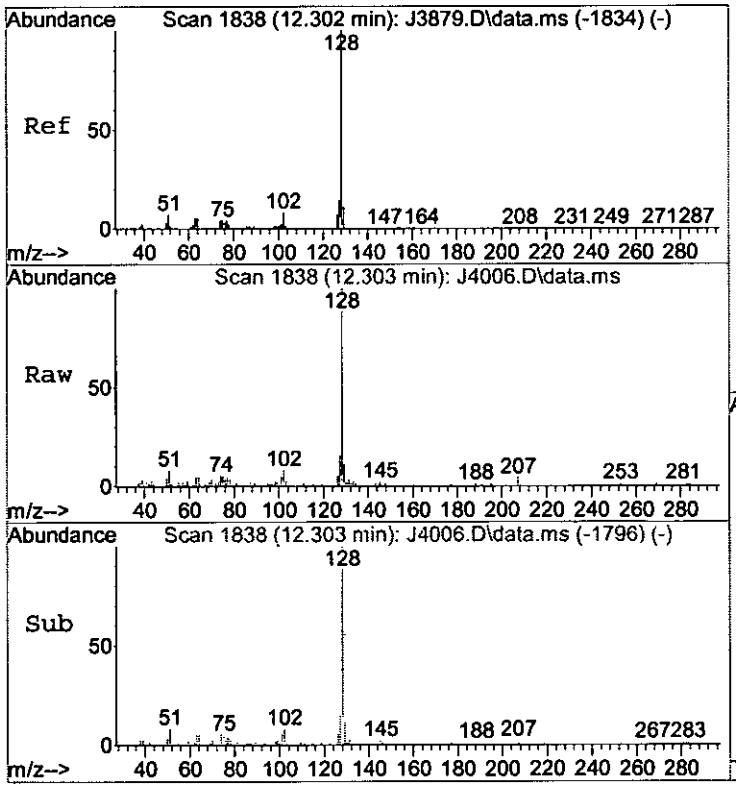


#103
sec-Butylbenzene
Concen: 1.63 ppb
RT: 10.620 min Scan# 1562
Delta R.T. -0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion:105 Resp: 49257

Ion	Ratio	Lower	Upper
105	100		
134	22.3	0.0	39.3
103	9.6	0.0	28.3

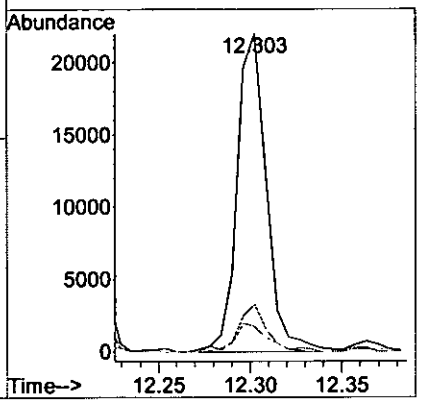




#117
Naphthalen
Concen: 1.49 ppb
RT: 12.303 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4006.D
Acq: 18 Mar 2014 4:54 am

Tgt Ion:128 Resp: 24285

Ion	Ratio	Lower	Upper
128	100		
127	14.7	0.0	33.8
102	7.8	0.0	28.5



J4006.D W031214.M Tue Mar 18 15:21:31 2014 00232 Page 8

Use Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4006.D
Acq On : 18 Mar 2014 4:54 am
Operator : K.Ruest
Sample : R1401764-010|1.0
Misc : PARSONS 9913 T4
ALS Vial : 39 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4006.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.323	32	37	40	rBV	55728	46769	1.23%	0.130%
2	1.616	81	85	89	rBV	215138	221630	5.85%	0.616%
3	2.055	151	157	165	rBV	159036	257433	6.79%	0.716%
4	2.372	202	209	217	rBV	384421	807231	21.30%	2.245%
5	2.445	217	221	228	rVB	66759	109043	2.88%	0.303%
6	2.597	235	246	257	rBV2	302933	557962	14.72%	1.552%
7	3.268	348	356	362	rBV5	14961	43467	1.15%	0.121%
8	3.371	366	373	380	rVV2	71906	178845	4.72%	0.497%
9	3.463	380	388	399	rVV	188907	444624	11.73%	1.237%
10	3.560	399	404	414	rVB3	20707	56883	1.50%	0.158%
11	4.018	470	479	489	rBV4	24317	87325	2.30%	0.243%
12	4.152	492	501	508	rBV3	510390	1193309	31.48%	3.319%
13	4.249	508	517	525	rBV	934537	2262316	59.68%	6.292%
14	4.396	533	541	556	rVB2	207809	645521	17.03%	1.795%
15	4.658	573	584	595	rBV	435955	1107232	29.21%	3.080%
16	4.780	595	604	615	rVB2	265965	709557	18.72%	1.974%
17	4.914	617	626	631	rBV4	63074	191526	5.05%	0.533%
18	4.999	631	640	651	rVB4	112190	429003	11.32%	1.193%
19	5.450	702	714	739	rBV	1221753	2935758	77.45%	8.165%
20	6.078	806	817	830	rBV4	77938	225219	5.94%	0.626%
21	6.468	873	881	888	rBV2	32017	72990	1.93%	0.203%
22	6.670	905	914	925	rVB2	86367	215757	5.69%	0.600%
23	6.804	927	936	946	rBV	182595	406928	10.74%	1.132%
24	7.206	995	1002	1009	rVB5	19420	45019	1.19%	0.125%
25	7.322	1009	1021	1029	rBV	2406108	3790468	100.00%	10.543%
26	7.669	1073	1078	1083	rBV2	25751	40317	1.06%	0.112%
27	7.791	1090	1098	1104	rBV2	46114	92259	2.43%	0.257%
28	8.120	1140	1152	1160	rBV	51989	100177	2.64%	0.279%
29	8.206	1160	1166	1171	rVB5	25406	44683	1.18%	0.124%
30	8.681	1239	1244	1249	rBV4	21694	40773	1.08%	0.113%
31	8.742	1249	1254	1264	rVV	2694665	3522443	92.93%	9.797%
32	8.828	1264	1268	1274	rVB5	20360	43751	1.15%	0.122%
33	8.889	1274	1278	1290	rVB	33671	65649	1.73%	0.183%
34	8.998	1290	1296	1300	rBV2	30858	60016	1.58%	0.167%
35	9.669	1401	1406	1411	rBV	534783	671483	17.72%	1.868%

W031214.M Tue Mar 18 15:21:51 2014 Page: 1

MSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4006.D
Acq On : 18 Mar 2014 4:54 am
Operator : K.Ruest
Sample : R1401764-010|1.0
Misc : PARSONS 9913 T4
ALS Vial : 39 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	9.785	1421	1425	1441	rVB	2240135	2870040	75.72%	7.983%
37	10.023	1459	1464	1471	rVB	573045	722093	19.05%	2.008%
38	10.333	1511	1515	1523	rVB	68170	92969	2.45%	0.259%
39	10.443	1523	1533	1535	rBV2	21583	41433	1.09%	0.115%
40	10.596	1552	1558	1559	rBV	68743	84696	2.23%	0.236%
41	10.620	1559	1562	1568	rVB	96819	122037	3.22%	0.339%
42	10.748	1578	1583	1591	rBV	3224147	3578060	94.40%	9.952%
43	10.815	1591	1594	1603	rVB	29403	39704	1.05%	0.110%
44	10.906	1606	1609	1613	rVV	61205	74318	1.96%	0.207%
45	10.980	1616	1621	1628	rVB2	701274	893214	23.56%	2.484%
46	11.047	1628	1632	1640	rVB2	271990	351425	9.27%	0.977%
47	11.138	1643	1647	1651	rBV	98370	107004	2.82%	0.298%
48	11.199	1653	1657	1662	rVB4	27831	47584	1.26%	0.132%
49	11.333	1675	1679	1682	rBV	149873	179382	4.73%	0.499%
50	11.364	1682	1684	1688	rVV	298167	296491	7.82%	0.825%
51	11.412	1688	1692	1699	rVV2	952125	1220978	32.21%	3.396%
52	11.467	1699	1701	1708	rVB3	26536	38296	1.01%	0.107%
53	11.541	1708	1713	1718	rVB	59196	76830	2.03%	0.214%
54	11.614	1718	1725	1730	rBV2	412715	484146	12.77%	1.347%
55	11.711	1736	1741	1745	rVB2	54608	74563	1.97%	0.207%
56	11.797	1745	1755	1757	rBV2	77898	123031	3.25%	0.342%
57	11.821	1757	1759	1766	rVB	505425	519550	13.71%	1.445%
58	11.925	1772	1776	1780	rVB	1183062	1102617	29.09%	3.067%
59	11.967	1780	1783	1787	rVV3	36678	49029	1.29%	0.136%
60	12.028	1791	1793	1797	rVB	52203	47773	1.26%	0.133%
61	12.095	1800	1804	1806	rBV	56487	54715	1.44%	0.152%
62	12.126	1806	1809	1811	rVV	138788	149161	3.94%	0.415%
63	12.156	1811	1814	1817	rVV2	121847	148999	3.93%	0.414%
64	12.217	1817	1824	1829	rVB2	224801	362437	9.56%	1.008%
65	12.303	1832	1838	1845	rVB	50008	73100	1.93%	0.203%
66	12.412	1851	1856	1859	rBV2	62085	69446	1.83%	0.193%
67	12.443	1859	1861	1864	rVB	57816	50240	1.33%	0.140%
68	12.522	1870	1874	1877	rBV	50075	46009	1.21%	0.128%
69	12.693	1899	1902	1906	rVB	44462	39043	1.03%	0.109%

Sum of corrected areas: 35953779

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4006.D
Acq On    : 18 Mar 2014    4:54 am
Operator  : K.Ruest
Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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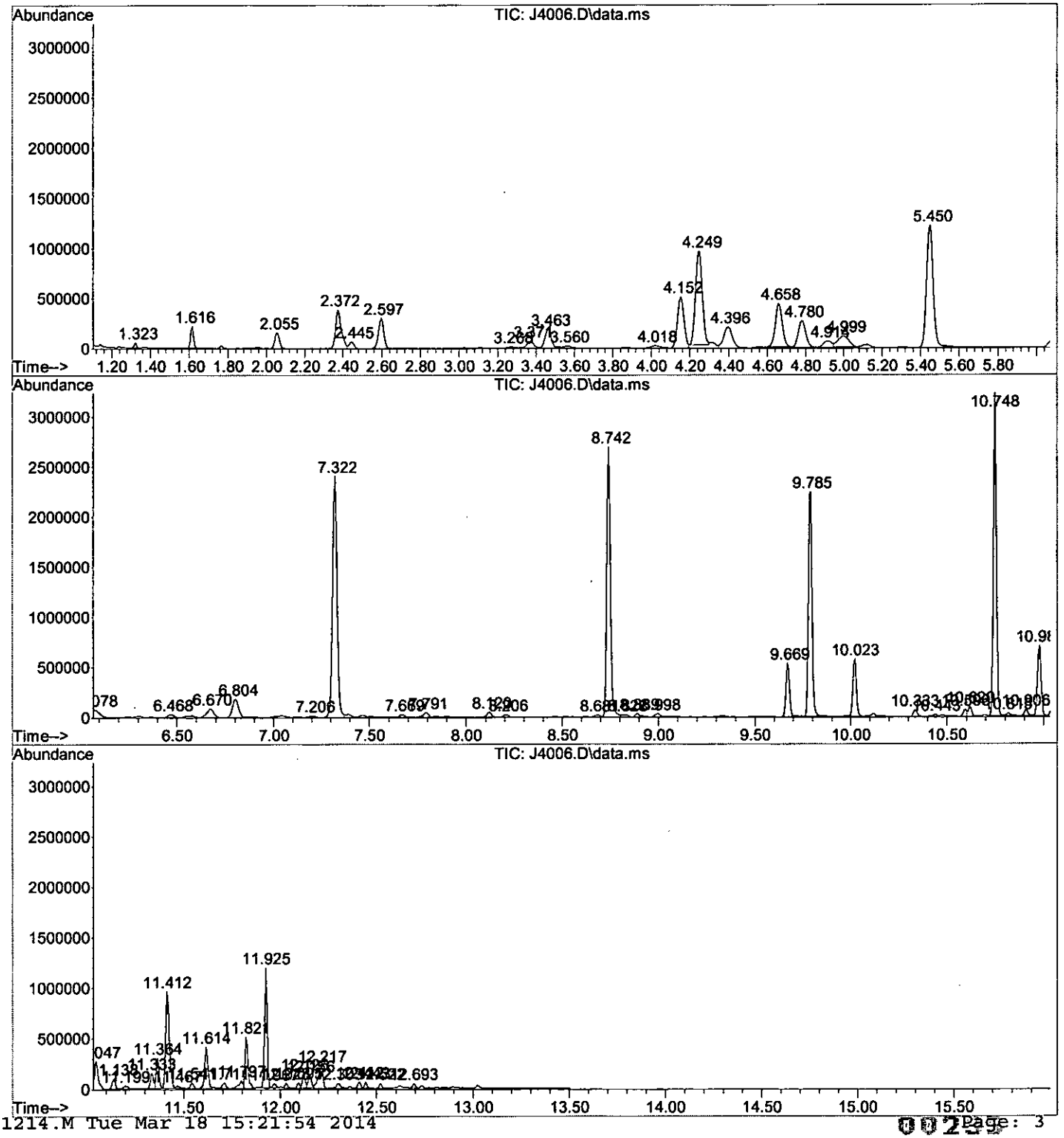

W031214.M Tue Mar 18 15:21:54 2014 Page: 3

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4006.D
Acq On    : 18 Mar 2014    4:54 am
Operator  : K.Ruest
Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number  1  Butane, 2,2-dimethyl-          Concentration Rank 12
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.055	5.69 ppb	257433	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
2	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
3	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	64
4	Hexane, 2,4,4-trimethyl-	128	C9H20	016747-30-1	64
5	Heptane, 3-ethyl-5-methyl-	142	C10H22	052896-90-9	50

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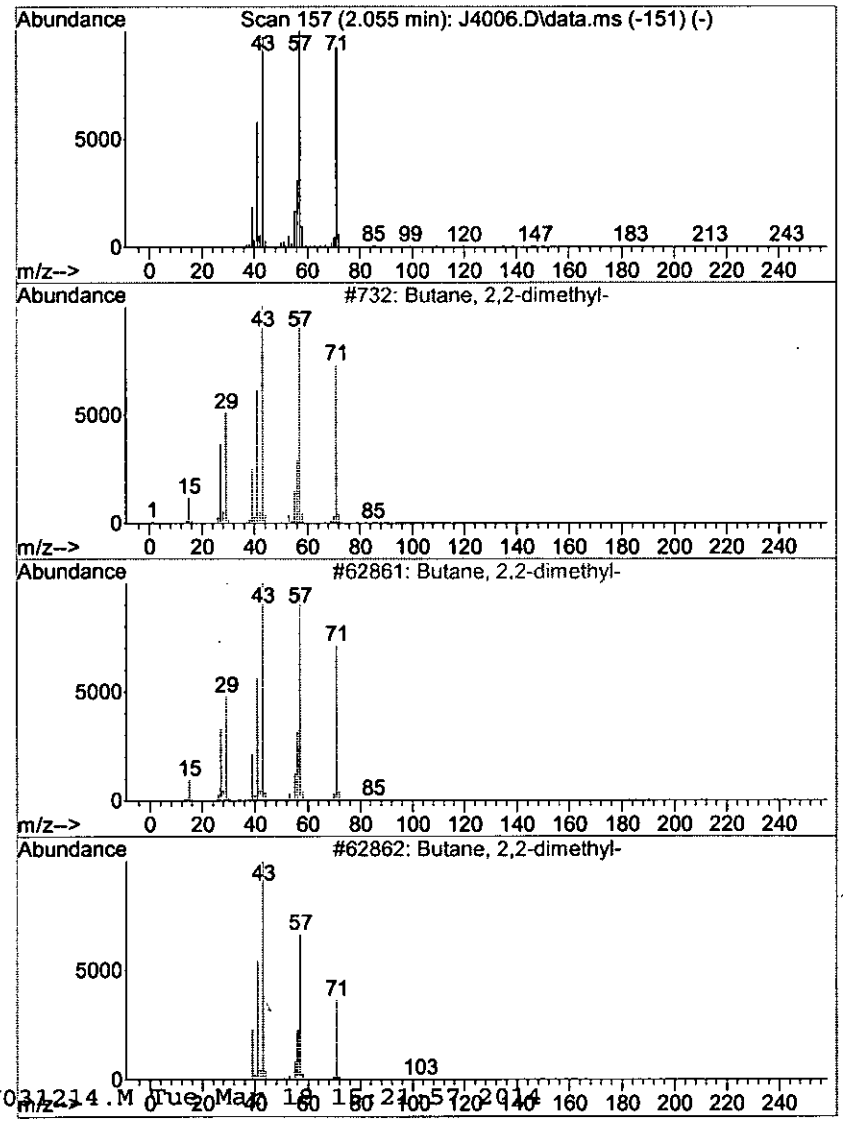

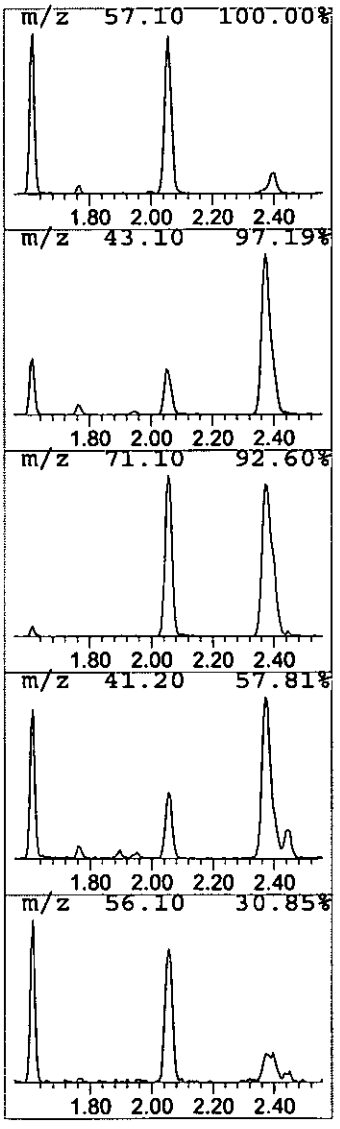

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Data File : J4006.D
Acq On    : 18 Mar 2014    4:54 am
Operator  : K.Ruest
Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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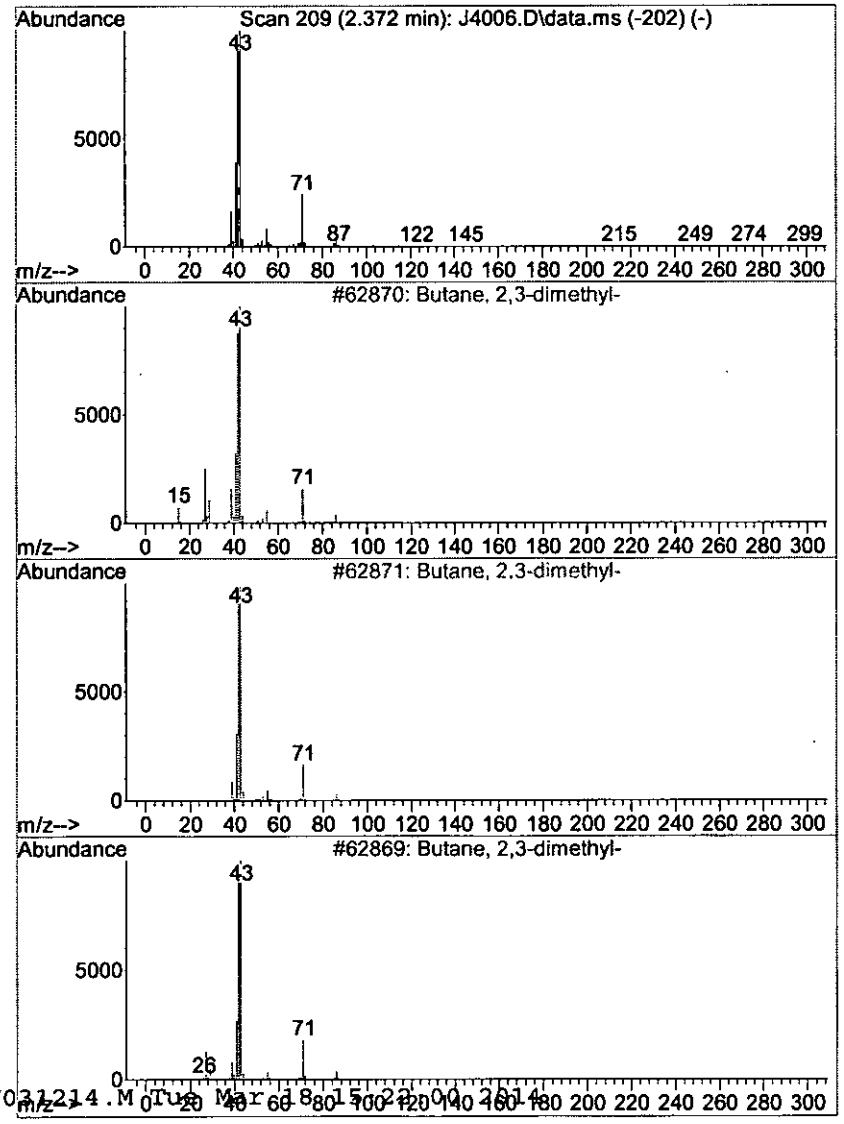
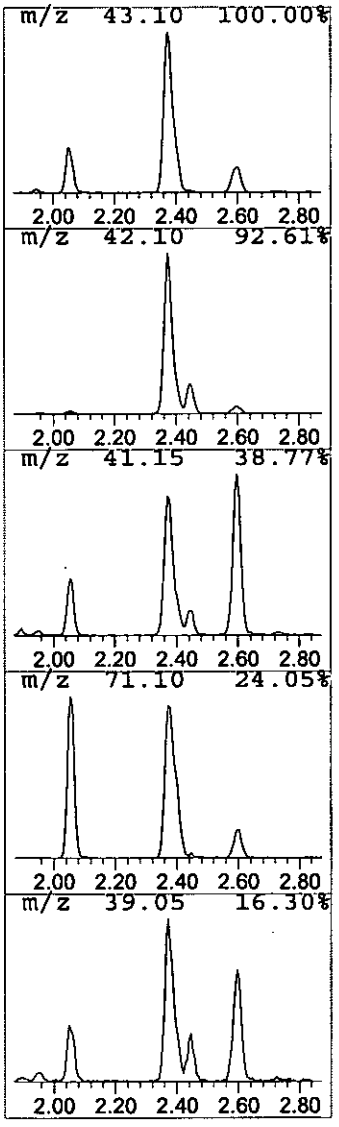
****

Peak Number 2 Butane, 2,3-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.372	17.84 ppb	807231	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	90
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	72
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	52





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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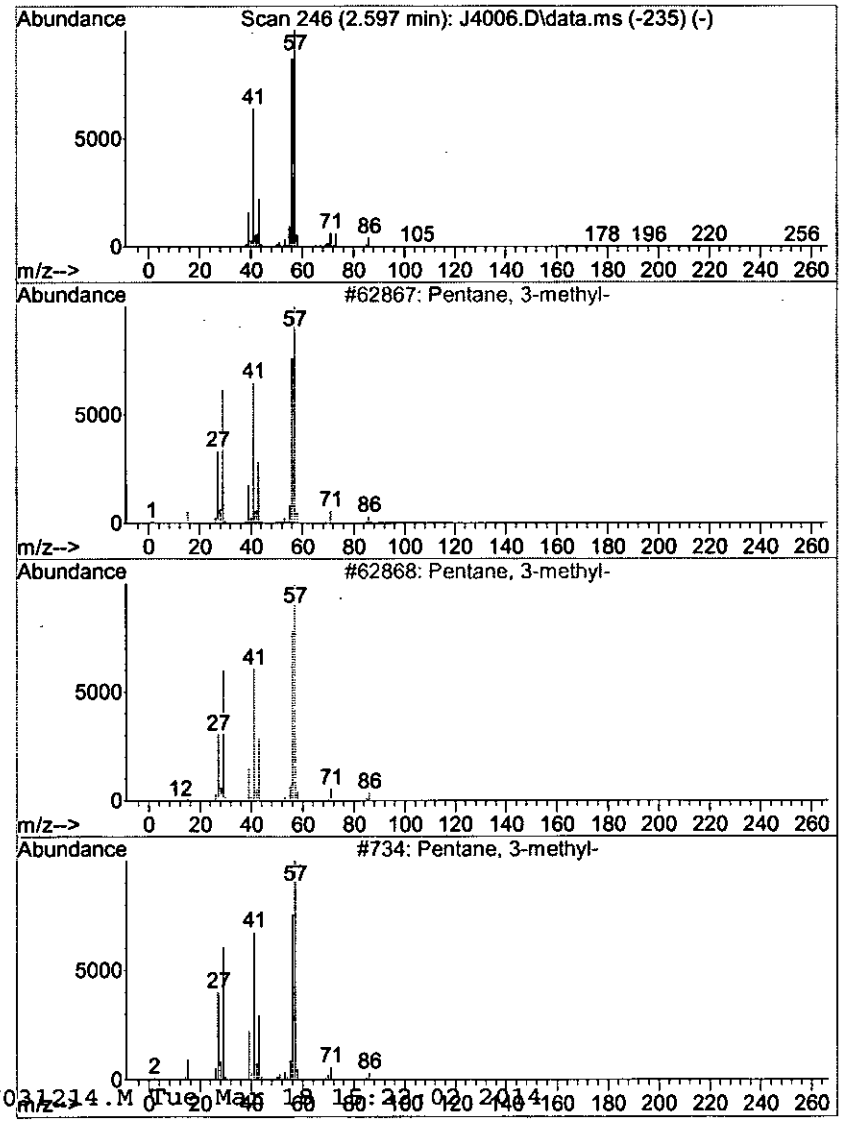
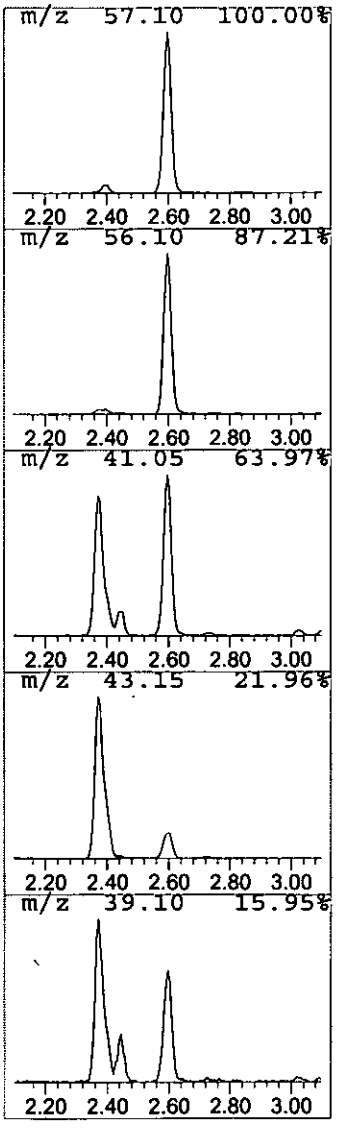
****

Peak Number 3 Pentane, 3-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.597	12.33 ppb	557962	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	87
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	87
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
4	1-Butanol, 2-methyl-	88	C5H12O	000137-32-6	64
5	Pentane, 3-ethyl-2,2-dimethyl-	128	C9H20	016747-32-3	50





Library Search Compound Report

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Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 4 1H-Tetrazole, 5-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.463	9.83 ppb	444624	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	72
2	Cyclobutane, ethyl-	84	C6H12	004806-61-5	64
3	Heptane, 4-methylene-	112	C8H16	015918-08-8	64
4	Cyclopentane, methyl-	84	C6H12	000096-37-7	52
5	Cyclopentane, methyl-	84	C6H12	000096-37-7	52

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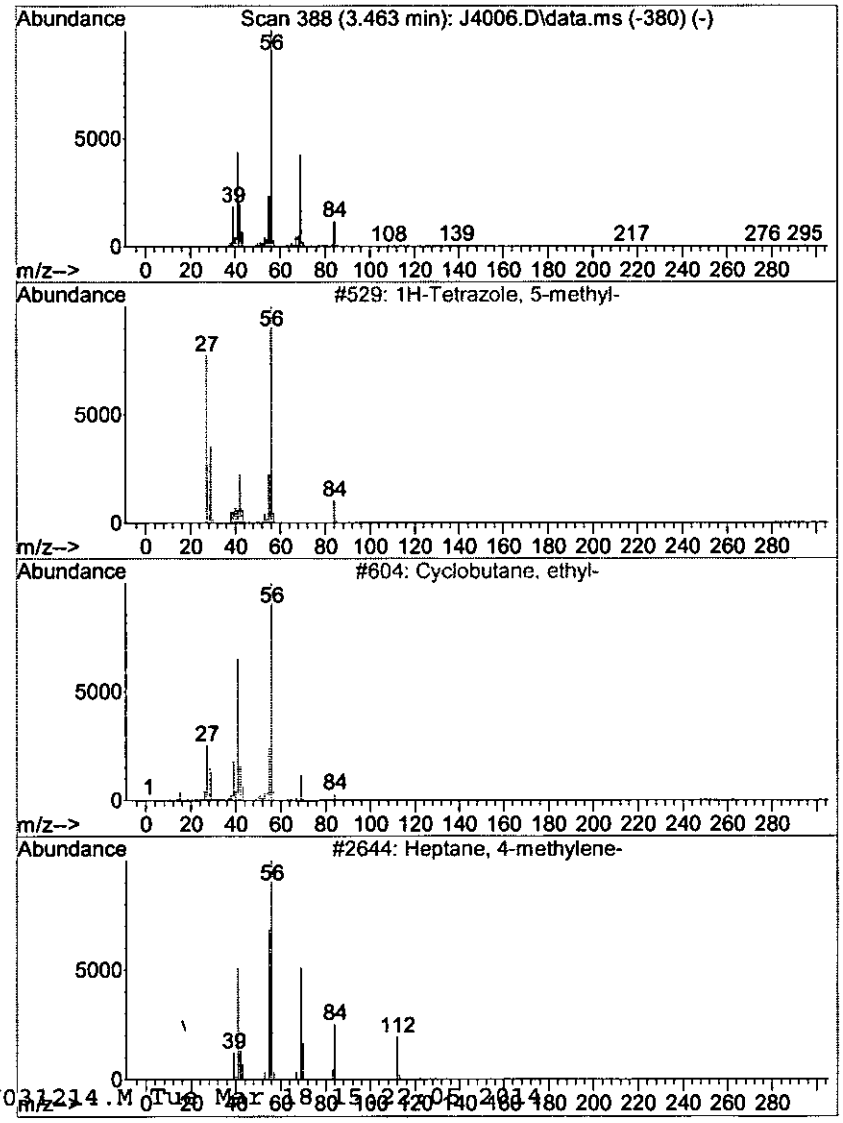

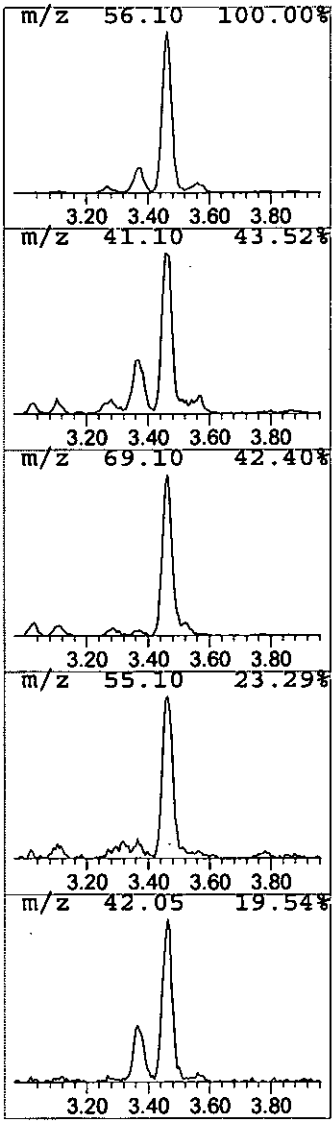

W031214.M Tue Mar 18 15:22:05 2014

Library Search Compound Report

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Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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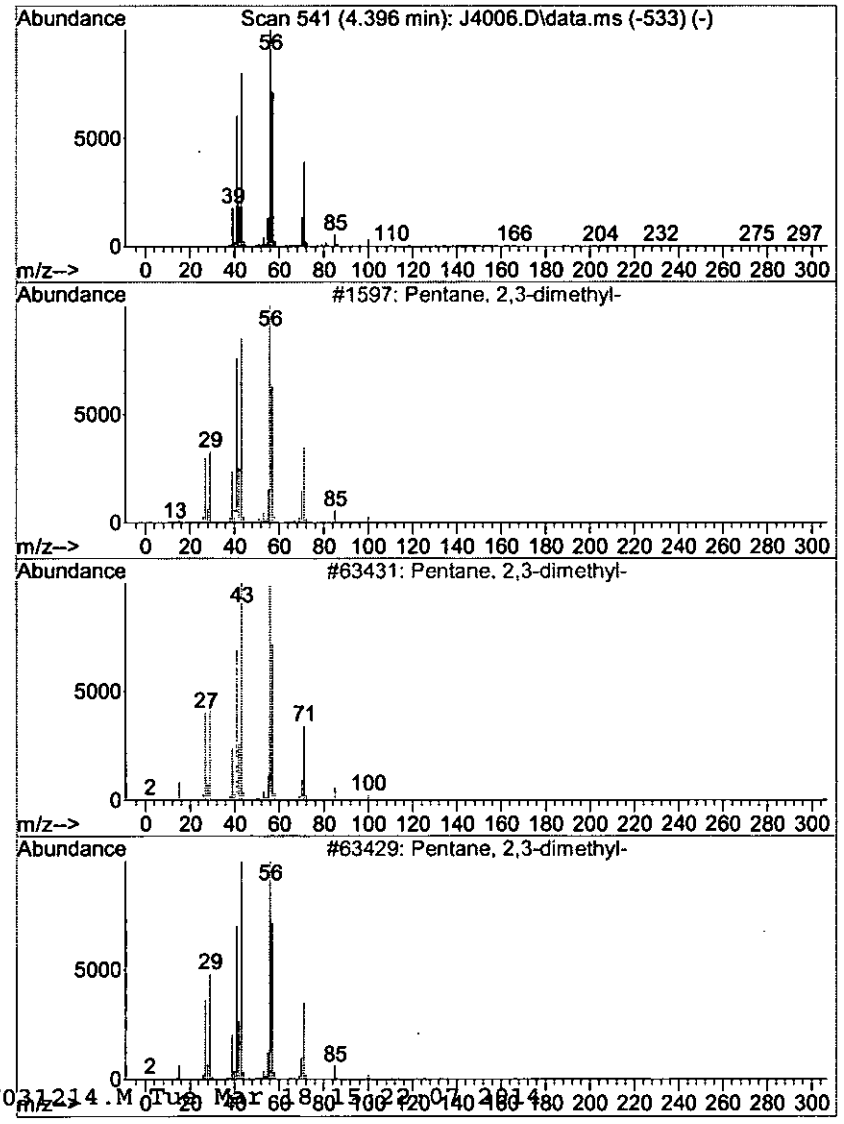
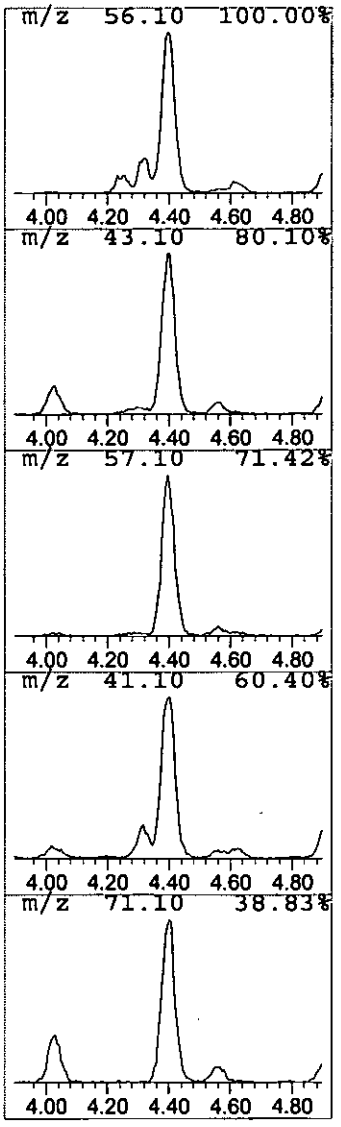
****

Peak Number 5 Pentane, 2,3-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.396	14.27 ppb	645521	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	94
2	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
3	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
4	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	90
5	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	83





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number  6  Heptane, 2,2-dimethyl-          Concentration Rank  8
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.999	7.31 ppb	429003	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,2-dimethyl-	128	C9H20	001071-26-7	40
2	Methane, isocyanato-	57	C2H3NO	000624-83-9	40
3	Pentane, 2,2,4-trimethyl-	114	C8H18	000540-84-1	38
4	Pentane, 2,2,4,4-tetramethyl-	128	C9H20	001070-87-7	33
5	Heptane, 2,2,4,6,6-pentamethyl-	170	C12H26	013475-82-6	33

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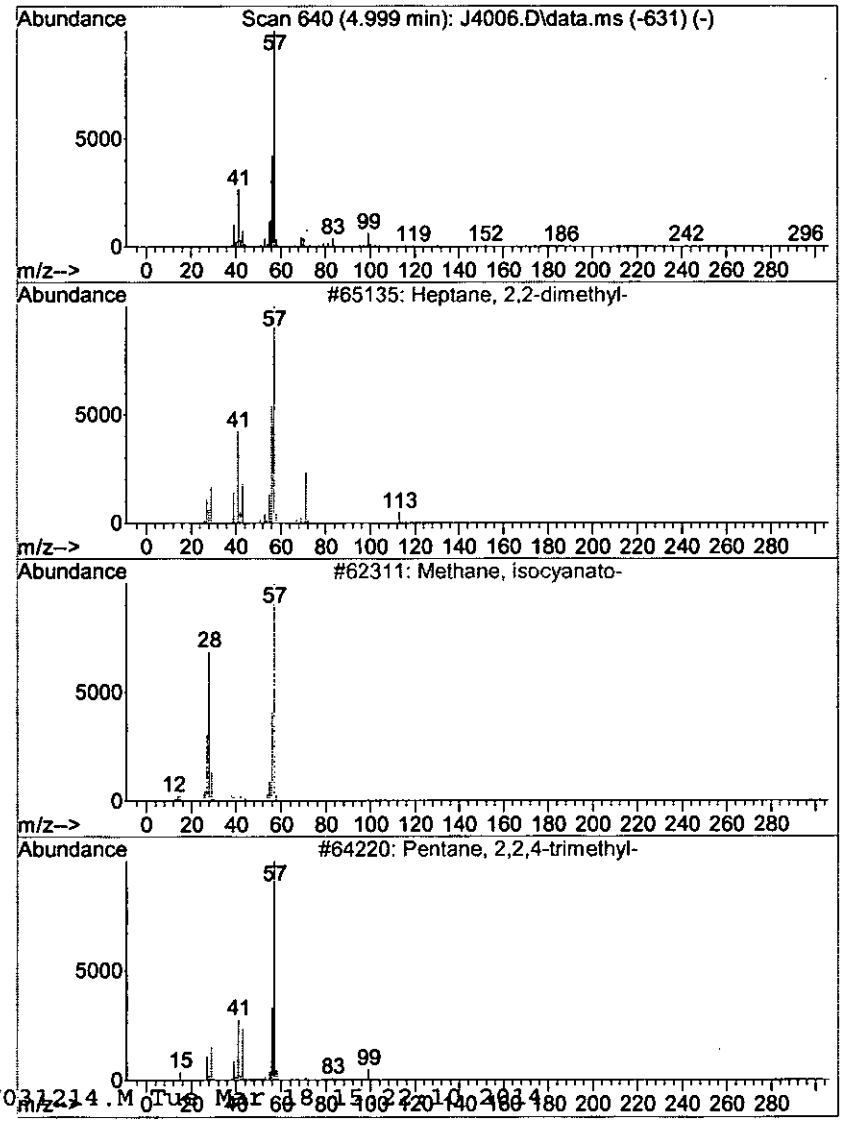

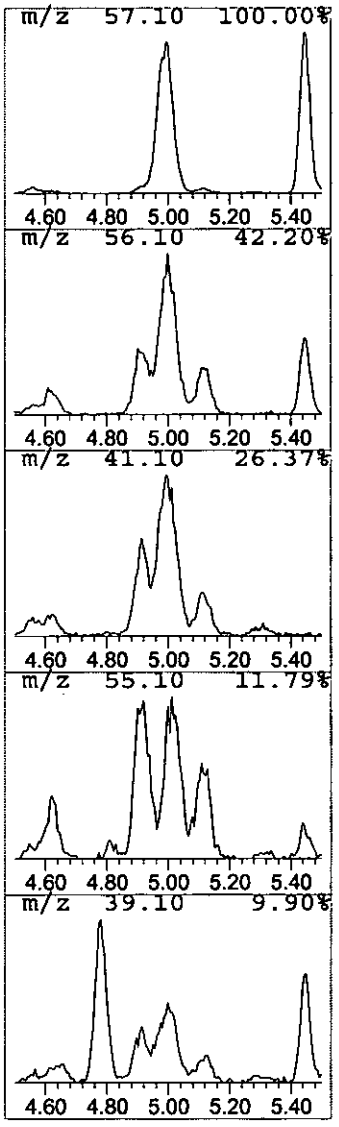

W031214.M Tue Mar 18 15:22:10 2014 002 Page: 9

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Operator  : K.Ruest
Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number  7  Pentane, 2,3,3-trimethyl-       Concentration Rank 10
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.804	6.93 ppb	406928	1,4-Difluorobenzene	5.450

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3,3-trimethyl-	114	C8H18	000560-21-4	83
2	Octane, 4-methyl-	128	C9H20	002216-34-4	78
3	Hexane, 3,3-dimethyl-	114	C8H18	000563-16-6	64
4	Hexane, 2,3-dimethyl-	114	C8H18	000584-94-1	59
5	Hexane, 3,3,4-trimethyl-	128	C9H20	016747-31-2	53

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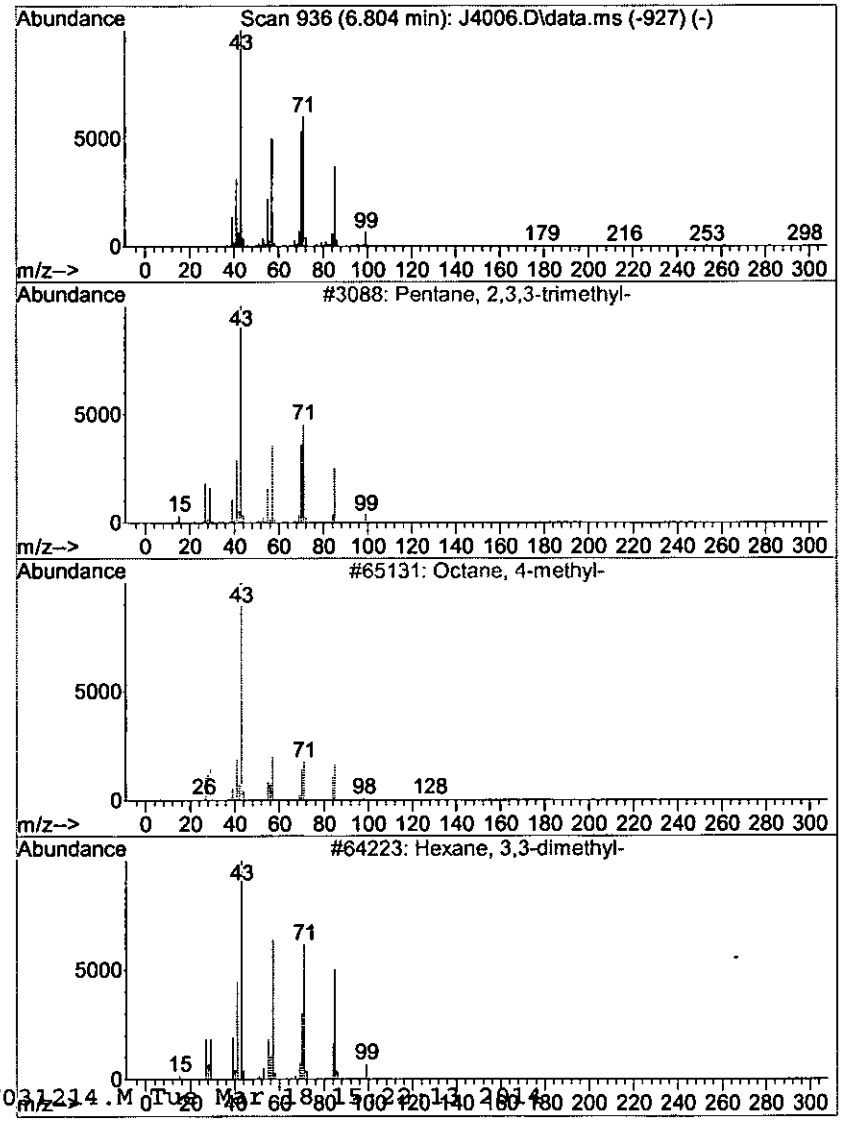

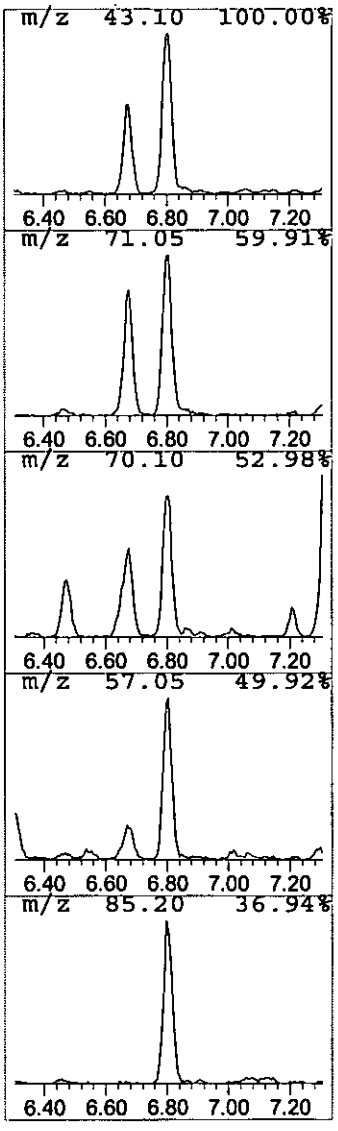

Library Search Compound Report

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Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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****

Peak Number 8 Benzene, 1,4-diethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.980	12.48 ppb	893214	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,4-diethyl-	134	C10H14	000105-05-5	55
2	Benzene, 1,4-diethyl-	134	C10H14	000105-05-5	55
3	Benzene, 1,2-diethyl-	134	C10H14	000135-01-3	55
4	Benzene, 1,3-diethyl-	134	C10H14	000141-93-5	55
5	Benzene, 1,3-diethyl-	134	C10H14	000141-93-5	50

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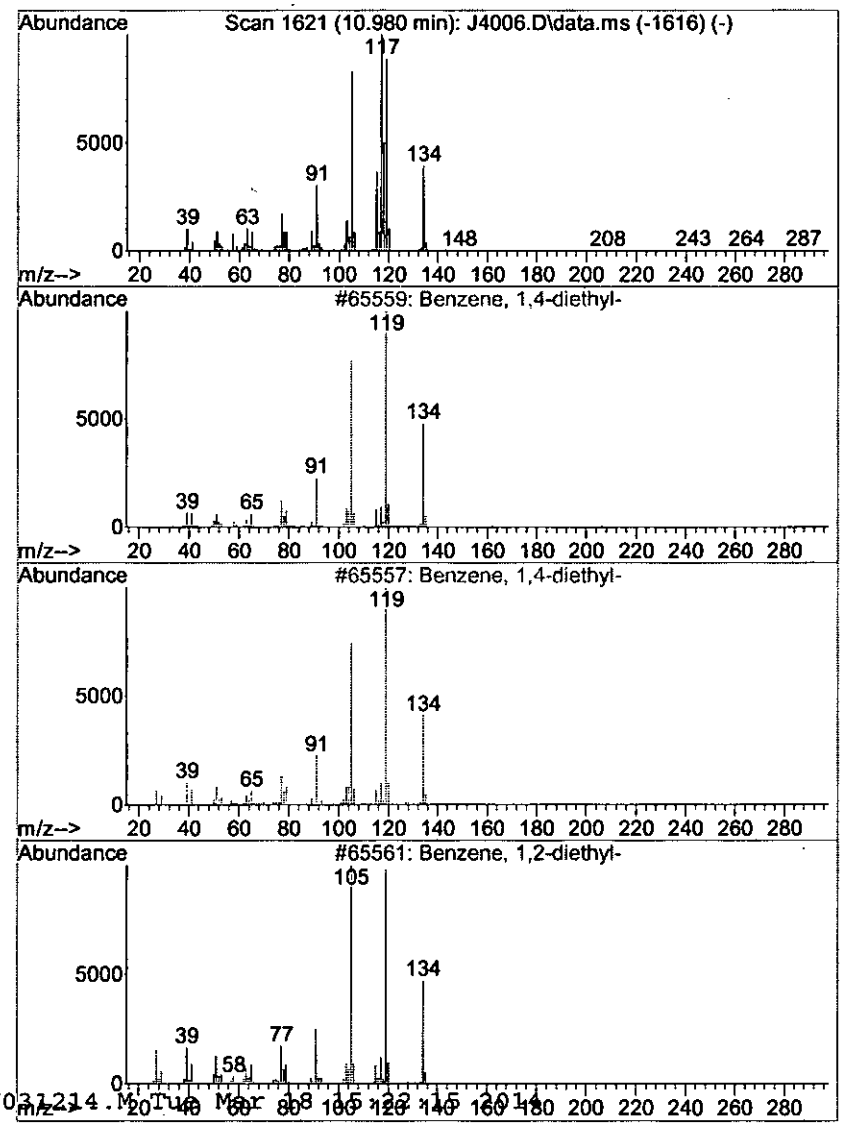

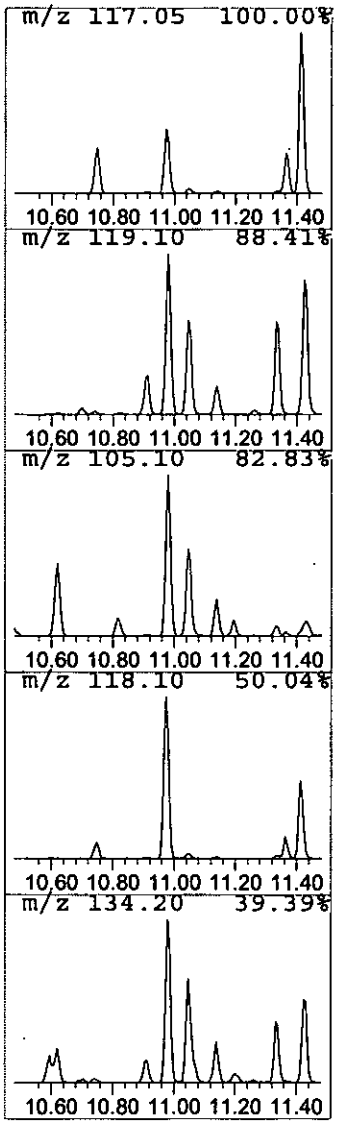

W031214.M Tue Mar 18 15:22:15 2014 Page: 11

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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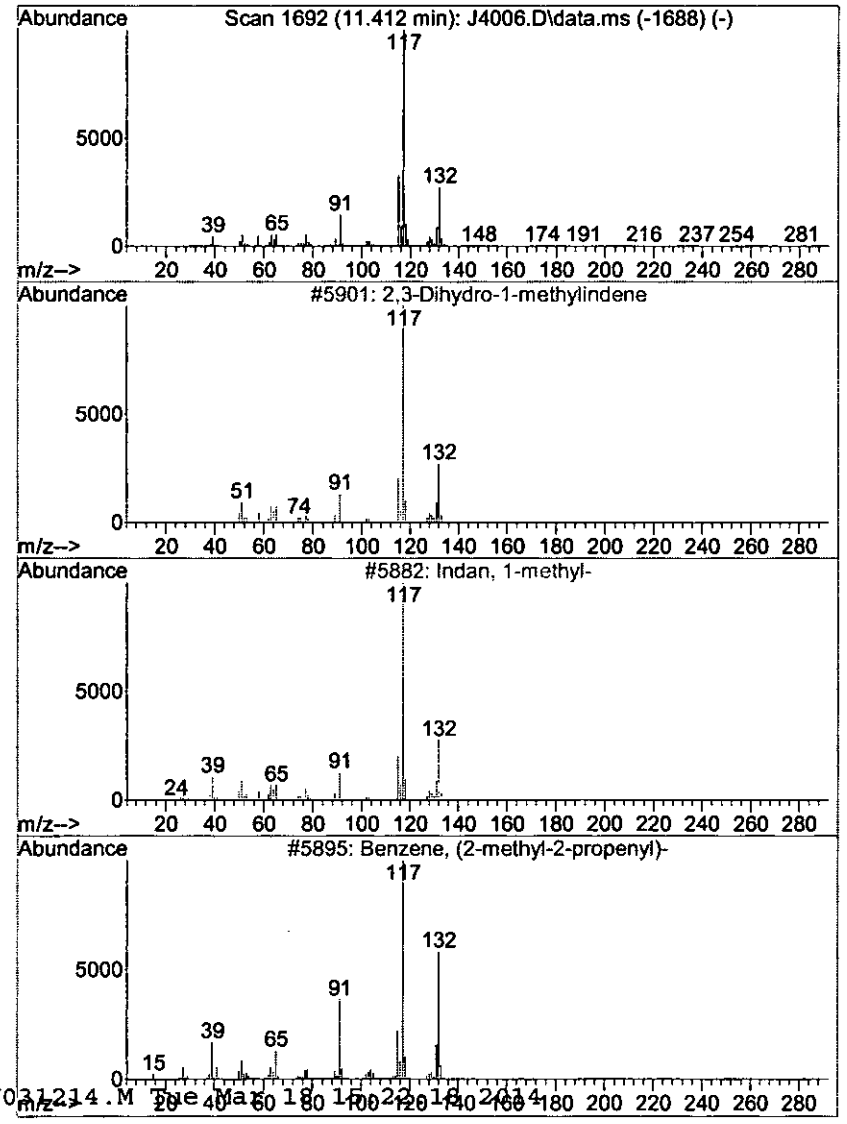
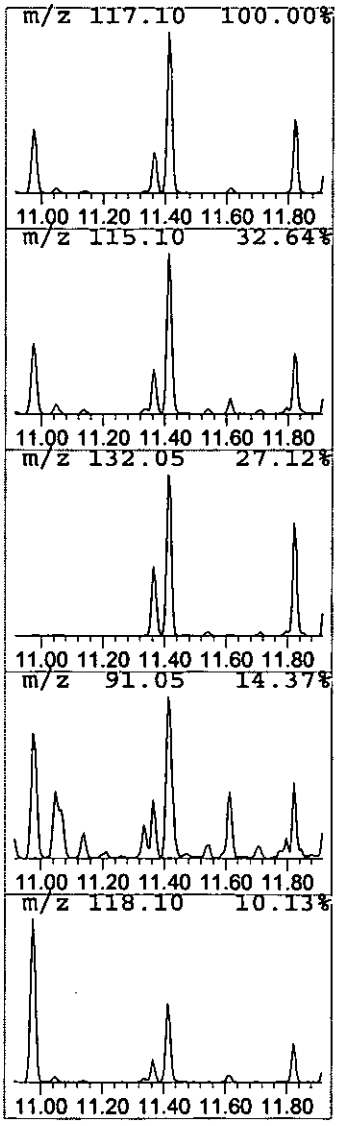
****

Peak Number 9 2,3-Dihydro-1-methylindene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.413	17.06 ppb	1220980	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	91
2	Indan, 1-methyl-	132	C10H12	000767-58-8	87
3	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	86
4	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	83
5	Indan, 1-methyl-	132	C10H12	000767-58-8	81





W031214.M Tue Mar 18 15:22:18 2014 002 Page: 12

Library Search Compound Report

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Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

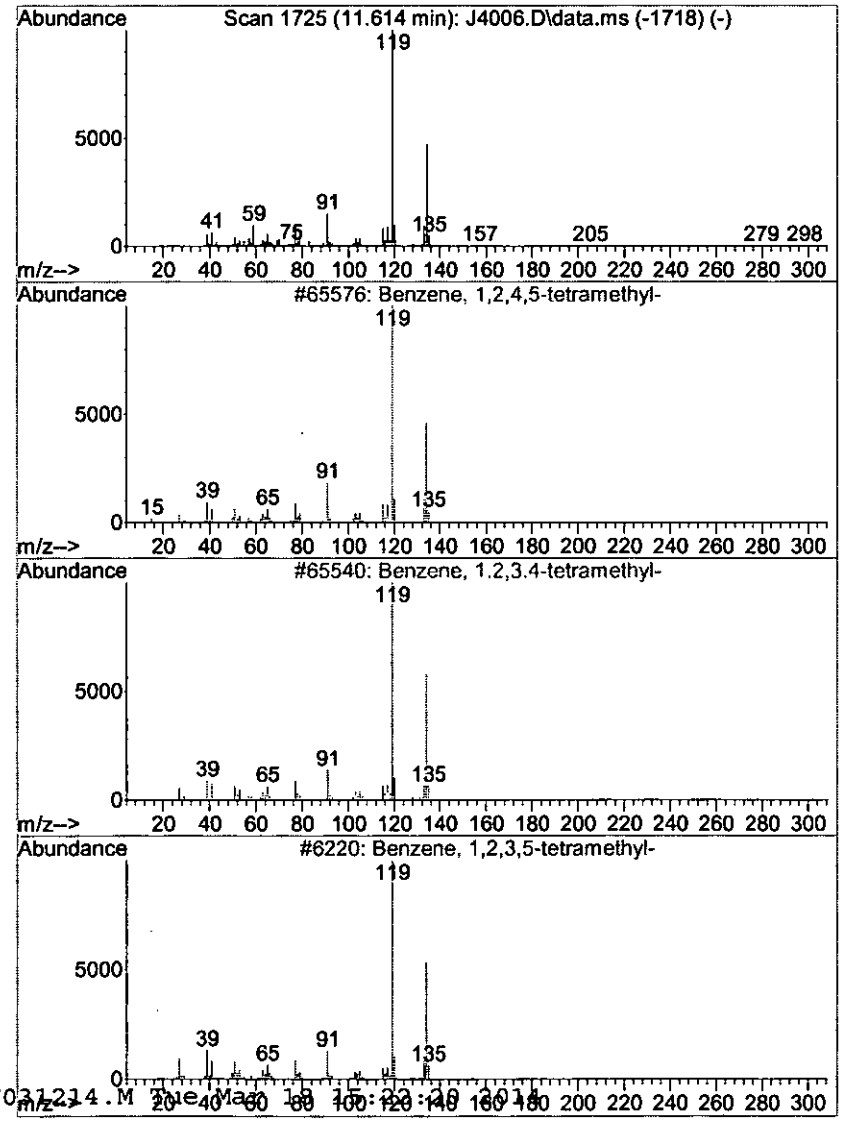
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

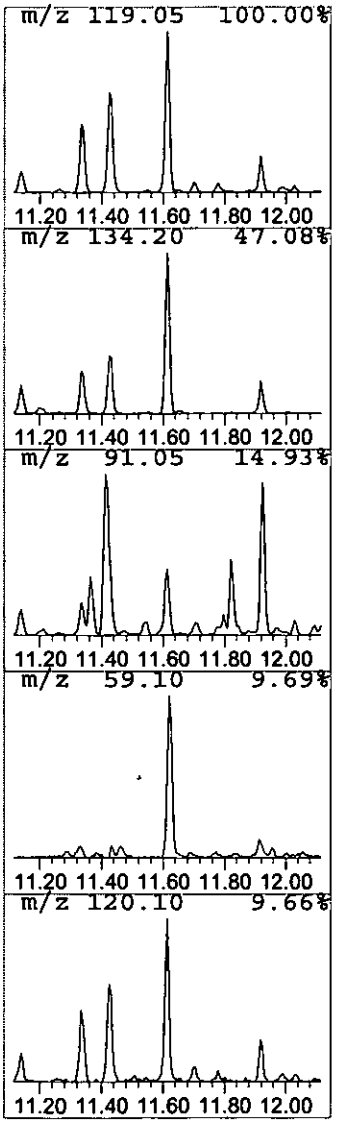
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number 10  Benzene, 1,2,4,5-tetramethyl-   Concentration Rank 11
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.614	6.77 ppb	484146	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94





W031214.M Tue Mar 18 15:22:20 2014 Page: 13

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Operator : K.Ruest
Sample : R1401764-010|1.0
Misc : PARSONS 9913 T4
ALS Vial : 39 Sample Multiplier: 1

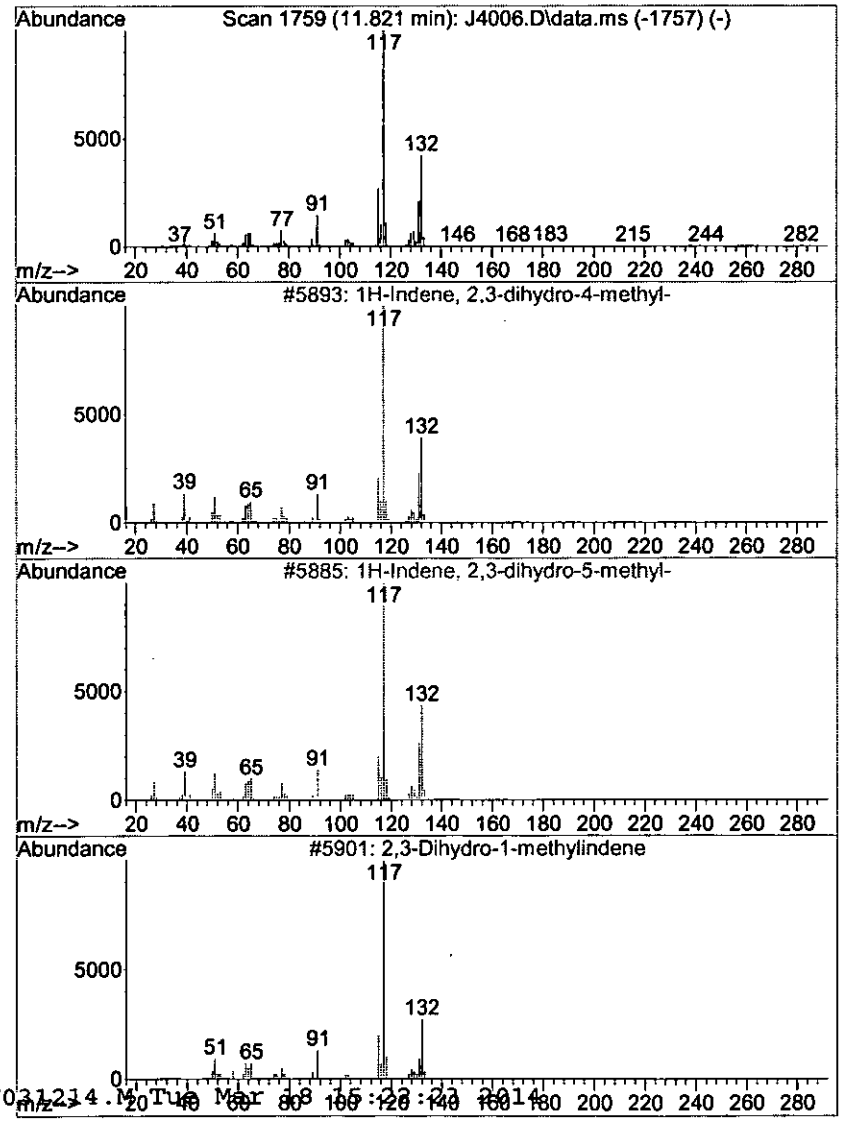
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

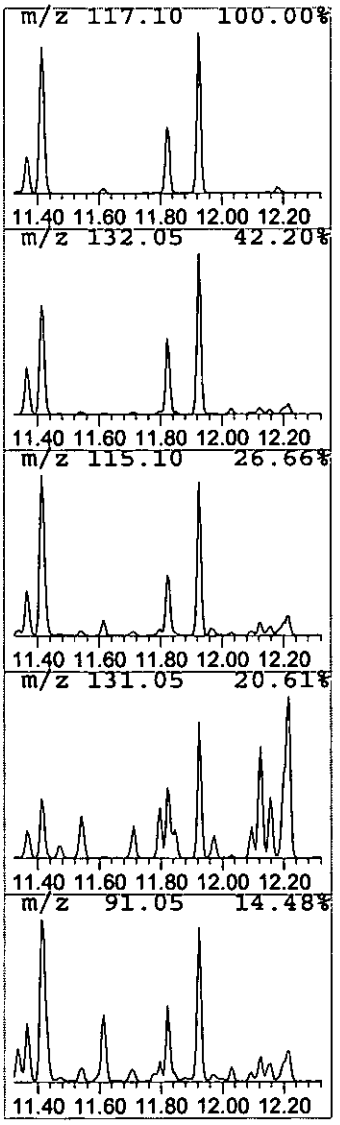
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 11 1H-Indene, 2,3-dihydro-4-me... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.821	7.26 ppb	519550	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	94
2	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	90
3	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
4	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	83
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	81





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Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

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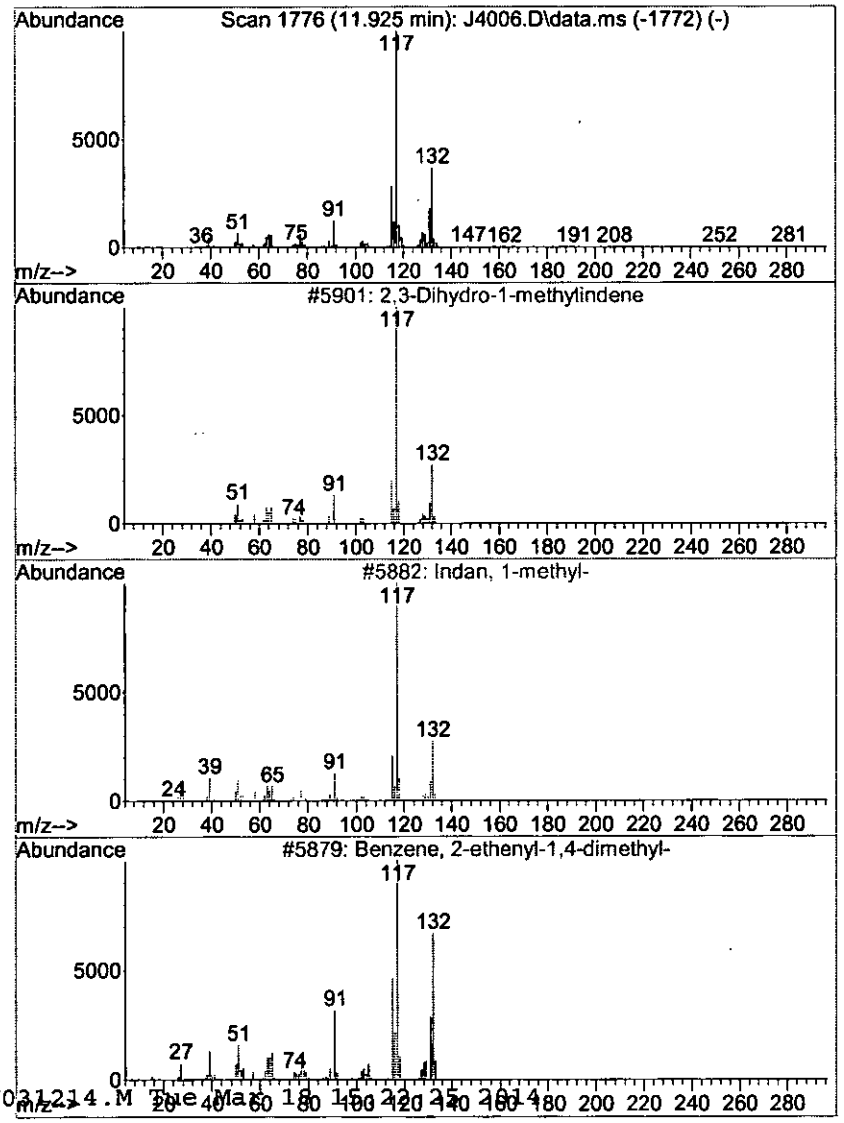
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

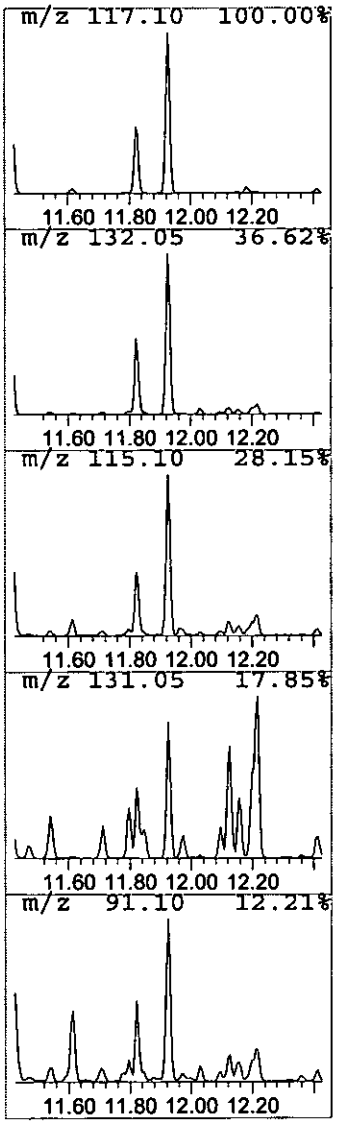
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number 12  2,3-Dihydro-1-methylindene      Concentration Rank  3
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.925	15.41 ppb	1102620	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	96
2	Indan, 1-methyl-	132	C10H12	000767-58-8	94
3	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	92
4	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	91
5	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	91





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Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4006.D
Acq On    : 18 Mar 2014    4:54 am
Operator  : K.Ruest
Sample    : R1401764-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 39   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

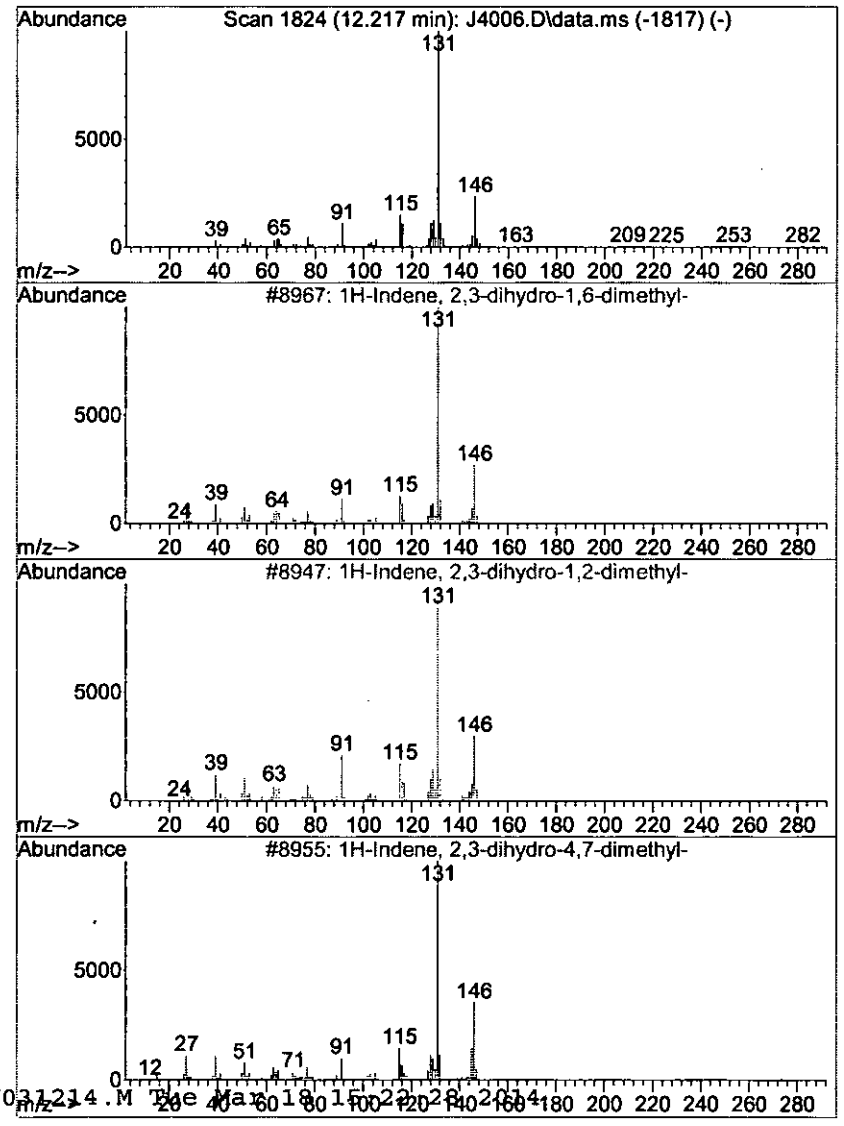
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

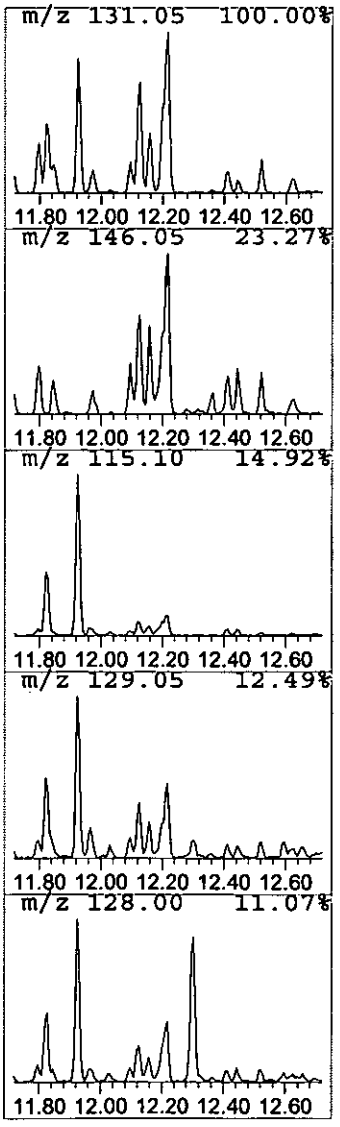
****

Peak Number 13 1H-Indene, 2,3-dihydro-1,6-... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.217	5.06 ppb	362437	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-1,6-dimet...	146	C11H14	017059-48-2	92
2	1H-Indene, 2,3-dihydro-1,2-dimet...	146	C11H14	017057-82-8	91
3	1H-Indene, 2,3-dihydro-4,7-dimet...	146	C11H14	006682-71-9	90
4	1H-Indene, 2,3-dihydro-5,6-dimet...	146	C11H14	001075-22-5	87
5	Benzene, (1,1-dimethyl-2-propenyl)-	146	C11H14	018321-36-3	87





W031214.M Tue Mar 18 15:22:28 2014

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1555
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 05:26
Sample Name:	FTMM-53-GW-699MW04-10.3	**Units:**	µg/L
Lab Code:	R1401764-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4007.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1555
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 05:26
Sample Name:	FTMM-53-GW-699MW04-10.3	**Units:**	µg/L
Lab Code:	R1401764-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4007.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/18/14 05:26	
Dibromofluoromethane	99	85-115	3/18/14 05:26	
Toluene-d8	89	85-120	3/18/14 05:26	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 0526

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW04-10.3	**Units:**	µg/L
Lab Code:	R1401764-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1401764-011|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4007.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 5:26 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 05:41:52 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	908157	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1316033	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1211910	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	607351	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	375773	49.32	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.64%			
48) surr1,1,2-dichloroetha...	4.658	65	411038	47.36	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 94.72%			
65) SURR3,Toluene-d8	7.322	98	1424431	44.49	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 88.98%			
70) SURR2,BFB	9.785	95	577640	48.36	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.72%			
Target Compounds						Qvalue
15) Acetone	2.049	43	2648	1.47	ppb	82
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~1249~~	~~0.28~~	~~ppb #~~	~~1~~
~~61) 2-Nitropropane~~	~~6.798~~	~~41~~	~~1393~~	~~1.34~~	~~ppb #~~	~~1~~
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1202~~	~~2.47~~	~~ppb #~~	~~14~~

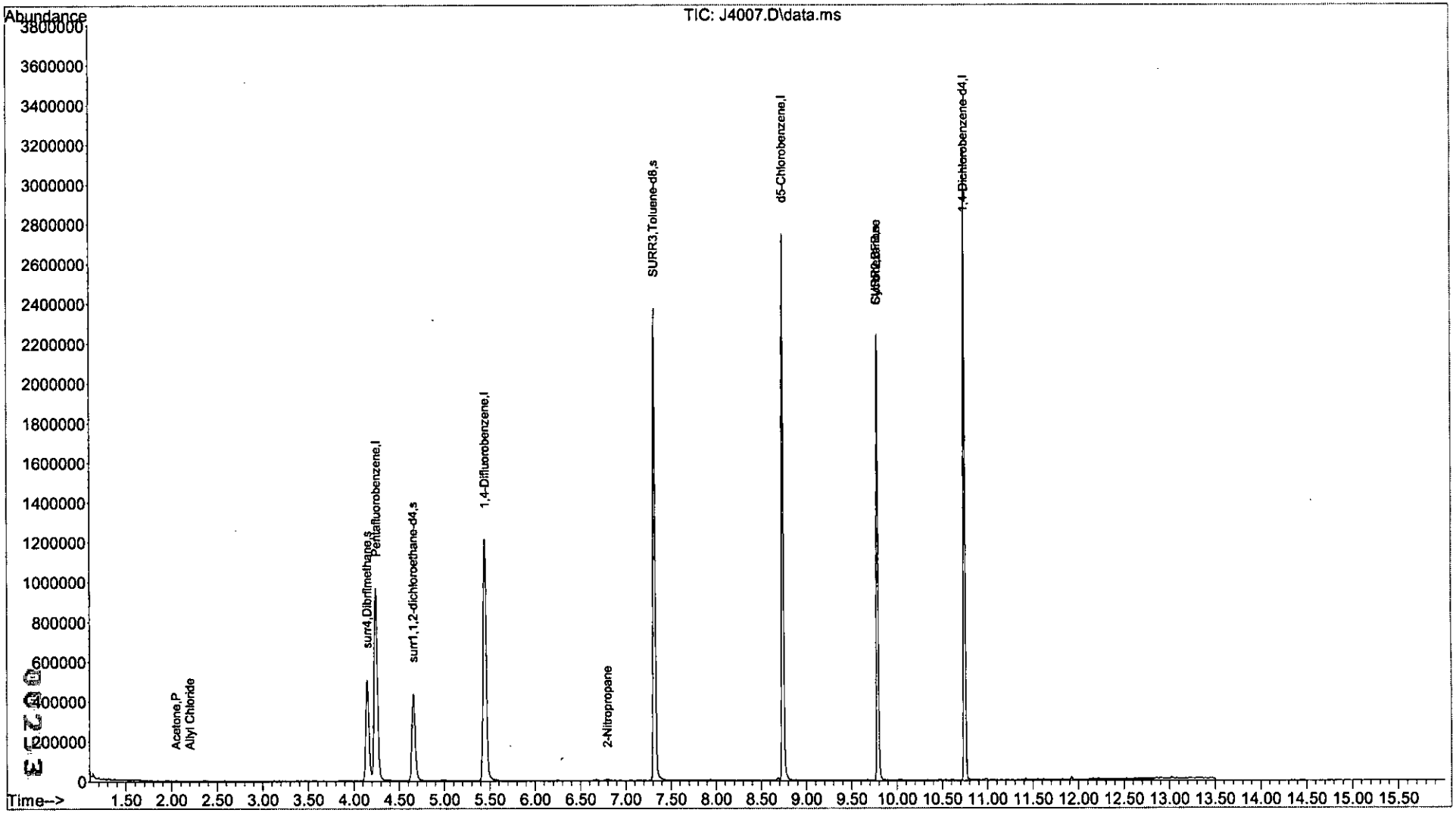
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 3/18/14

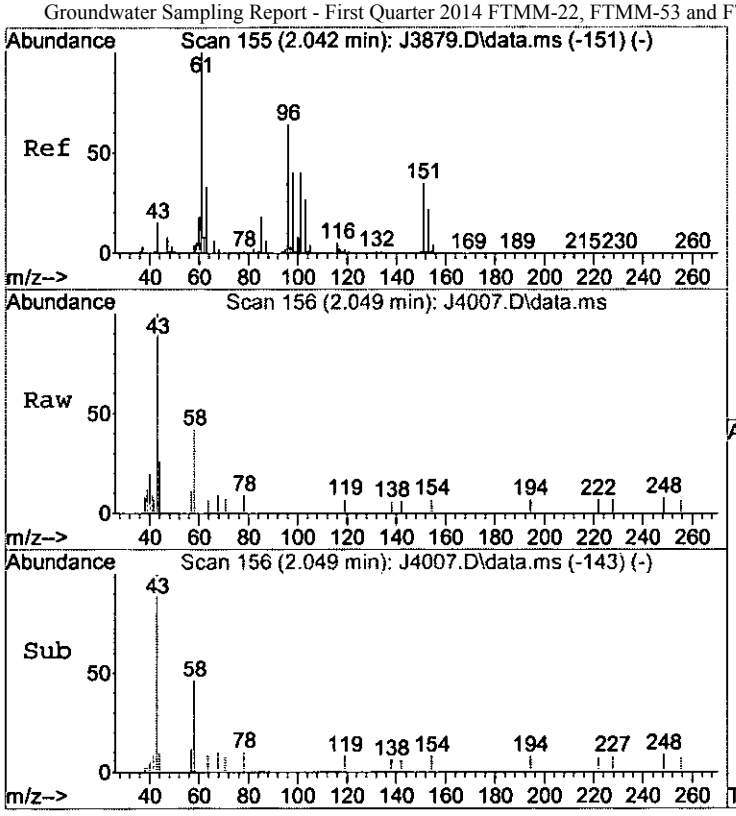
Quantitation Report (Not Reviewed)

Sample : R1401764-011|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4007.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 5:26 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 05:41:52 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



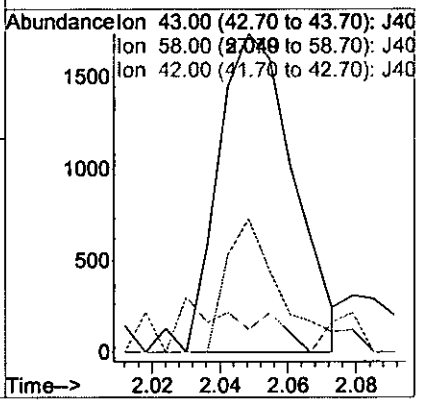
W031214.M Tue Mar 18 05:41:57 2014 Page: 2



#15
Acetone
Concen: 1.47 ppb
RT: 2.049 min Scan# 156
Delta R.T. 0.006 min
Lab File: J4007.D
Acq: 18 Mar 2014 5:26 am

Tgt Ion: 43 Resp: 2648

Ion	Ratio	Lower	Upper
43	100		
58	41.9	9.7	49.7
42	7.2	0.0	27.9



J4007.D W031214.M Tue Mar 18 16:00:29 2014 0025 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4007.D
Acq On : 18 Mar 2014 5:26 am
Operator : K.Ruest
Sample : R1401764-011|1.0
Misc : PARSONS 9913 T4
ALS Vial : 40 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4007.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	508	rBV2	508822	1199053	32.52%	5.614%
2	4.249	508	517	530	rVB	963480	2448383	66.39%	11.464%
3	4.658	574	584	601	rBV	439146	1140825	30.94%	5.342%
4	5.444	704	713	732	rBV	1214742	2916679	79.09%	13.657%
5	7.322	1013	1021	1037	rBV	2372365	3687607	100.00%	17.267%
6	8.742	1248	1254	1267	rBV	2744178	3555533	96.42%	16.648%
7	9.791	1420	1426	1437	rBV	2243947	2851104	77.32%	13.350%
8	10.748	1578	1583	1592	rBV	3169003	3557588	96.47%	16.658%

Sum of corrected areas: 21356772

W031214.M Tue Mar 18 16:00:38 2014 Page: 1

00295

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J4007.D
Acq On    : 18 Mar 2014    5:26 am
Operator  : K.Ruest
Sample    : R1401764-011|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 40   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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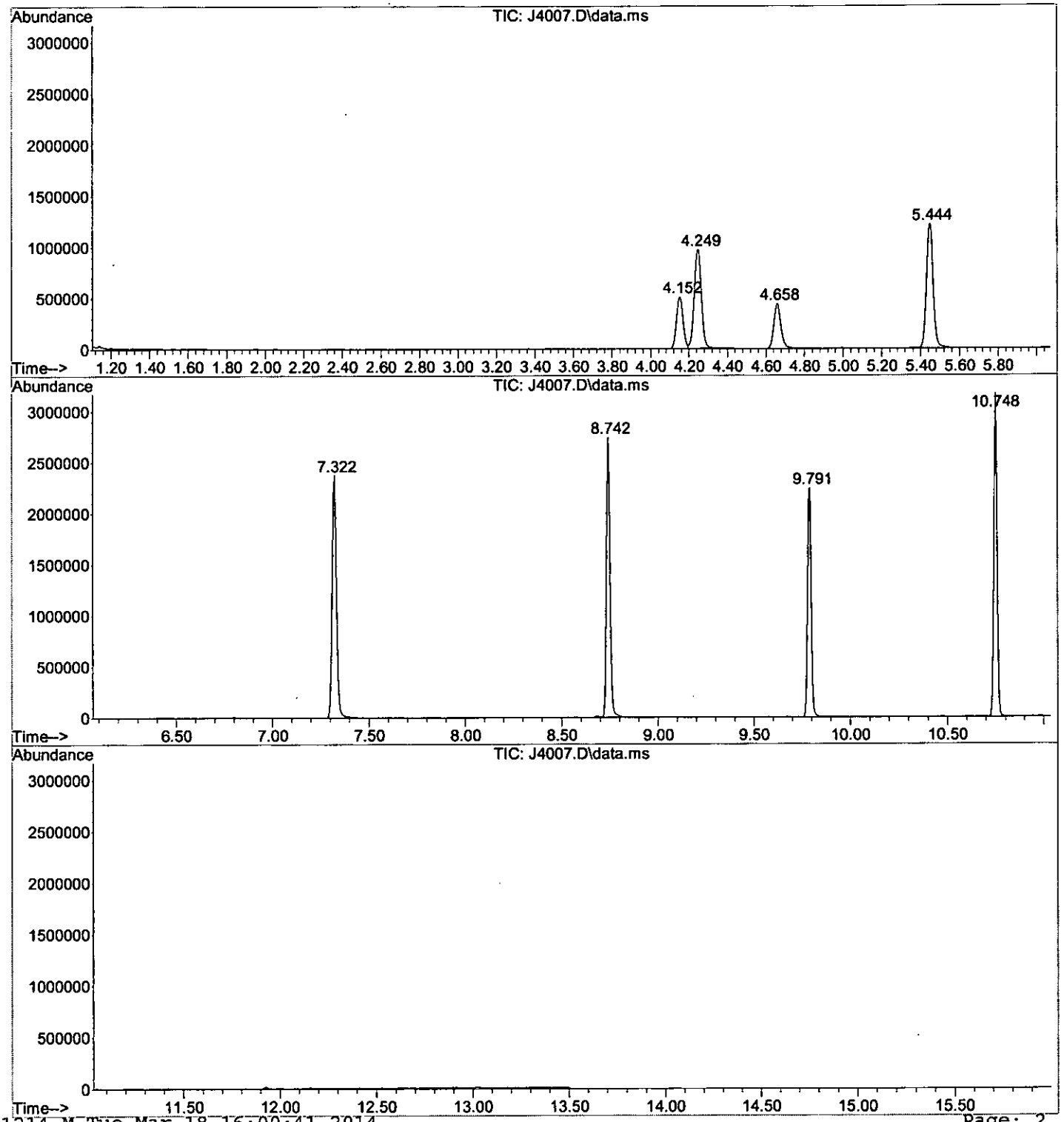

W031214.M Tue Mar 18 16:00:41 2014 Page: 2

00256

Data Path : I:\ACQUDATA\msvoa12\Data\031714\\
Data File : J4007.D
Acq On : 18 Mar 2014 5:26 amm
Operator : K.Ruestt
Sample : R1401764-011|1.00
Misc : PARSONS 9913 T44
ALS Vial : 40 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00258

3/13/14

Initial Calibration - Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12

W031214 8260 Waters **Column Name:** 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3058	<=20	7.3
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.7112	<=20	2.2
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5726	<=20	5.4
1,1,2-Trichloroethane	T	Average RF		0.100	0.2220	<=20	5.6
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3971	<=20	1.9
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.8461	<=20	3.1
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3628	<=20	3.7
1,1-Dichloropropene	T	Average RF			0.3693	<=20	4.9
1,2,3-Trichlorobenzene	T	Average RF			0.6036	<=20	8.2
1,2,3-Trichloropropane	T	Average RF			0.1713	<=20	7.2
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.7372	<=20	6.4
1,2,4-Trimethylbenzene	T	Average RF			2.167	<=20	7.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08773	<=20	12.9
1,2-Dibromoethane	T	Average RF		0.100	0.2312	<=20	5.1
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5388	<=20	4.7
1,2-Dichlorobenzene	T	Average RF		0.400	1.206	<=20	3.3
1,2-Dichloroethane	T	Average RF		0.100	0.3737	<=20	3.9
1,2-Dichloropropane	T	Average RF		0.100	0.3148	<=20	4.5
1,3,5-Trichlorobenzene	T	Average RF			0.8315	<=20	4.0
1,3,5-Trimethylbenzene	T	Average RF			2.106	<=20	6.0
1,3-Dichlorobenzene	T	Average RF		0.600	1.252	<=20	4.2
1,3-Dichloropropane	T	Average RF			0.4501	<=20	2.3
1,4-Dichlorobenzene	T	Average RF		0.500	1.332	<=20	8.0
1,4-Dioxane	T	Average RF			0.002062	<=20	6.8
1-Butanol	T	Average RF			0.004645	<=20	18.2
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.3856	<=20	7.0
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6154	<=20	3.4
2,2-Dichloropropane	T	Average RF			0.6713	<=20	3.9
2,3,6-Trichlorotoluene	T	Average RF			0.3641	<=20	7.5
2,4,5-Trichlorotoluene	T	Average RF			0.3978	<=20	7.2
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.9535	<=20	5.8
2,4-Dichlorobenzotrifluoride	T	Average RF			0.5359	<=20	4.0
2,5-Dichlorobenzotrifluoride	T	Average RF			0.6128	<=20	3.4
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1390	<=20	1.9
2-Chloro-1,3-butadiene	T	Average RF			0.7288	<=20	7.9
2-Chlorobenzotrifluoride	T	Average RF			0.8330	<=20	4.8
2-Chloroethyl Vinyl Ether	T	Average RF			0.1412	<=20	5.8
2-Chlorotoluene	T	Average RF			1.896	<=20	5.7
2-Hexanone	T	Average RF		0.05	0.1416	<=20	9.6
2-Methyl-1-propanol	T	Average RF			0.008458	<=20	8.6
2-Methyl-2-propanol	T	Average RF			0.02773	<=20	8.6
2-Nitropropane	T	Average RF			0.03954	<=20	10.8
2-Propanol	T	Average RF			0.01610	<=20	13.7
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.010	<=20	7.1
3,4-Dichlorobenzotrifluoride	T	Average RF			0.6160	<=20	4.0
3-Chloro-1-propene	T	Average RF			0.2488	<=20	4.3
3-Chlorobenzotrifluoride	T	Average RF			0.4304	<=20	7.2
3-Chlorotoluene	T	Average RF			1.973	<=20	5.3
4-Chlorotoluene	T	Average RF			2.236	<=20	8.4
4-Isopropyltoluene	T	Average RF			2.086	<=20	6.7
4-Methyl-2-pentanone	T	Average RF		0.05	0.1899	<=20	6.0

Initial Calibration - Summary Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.09920	<=20	6.0
Acetonitrile	T	Average RF			0.01622	<=20	13.2
Acrolein	T	Quadratic	1/X2		0.01717	>=0.99	0.9978
Acrylonitrile	T	Average RF			0.1111	<=20	5.0
Benzene	T	Average RF		0.500	1.231	<=20	2.6
Bromobenzene	T	Average RF			0.7355	<=20	3.3
Bromochloromethane	T	Average RF			0.2832	<=20	8.2
Bromodichloromethane	T	Average RF		0.200	0.3677	<=20	5.4
Bromoform	T	Average RF		0.100	0.2840	<=20	15.6
Bromomethane	T	Average RF		0.100	0.2881	<=20	6.8
Carbon Disulfide	T	Average RF		0.100	1.262	<=20	4.8
Carbon Tetrachloride	T	Average RF		0.05	0.1199	<=20	6.9
Chlorobenzene	T	Average RF		0.500	0.8701	<=20	2.8
Chloroethane	T	Average RF		0.100	0.2851	<=20	8.6
Chloroform	T	Average RF		0.200	0.8292	<=20	4.7
Chloromethane	T	Average RF		0.100	0.5146	<=20	2.8
Cyclohexane	T	Average RF		0.100	0.2705	<=20	5.1
Cyclohexanone	T	Average RF			0.04011	<=20	5.9
Dibromochloromethane	T	Average RF		0.100	0.2588	<=20	11.9
Dibromomethane	T	Average RF			0.1497	<=20	3.1
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5939	<=20	7.1
Dichlorofluoromethane (CFC 21)	T	Average RF			0.7211	<=20	4.4
Dichloromethane	T	Average RF		0.100	0.4753	<=20	5.4
Diethyl Ether	T	Average RF			0.3614	<=20	6.8
Diisopropyl Ether	T	Average RF			1.648	<=20	5.1
Ethyl Methacrylate	T	Average RF			0.2861	<=20	15.5
Ethyl tert-Butyl Ether	T	Average RF			1.379	<=20	4.3
Ethylbenzene	T	Average RF		0.100	0.4636	<=20	3.9
Hexachlorobutadiene	T	Average RF			0.3218	<=20	5.3
Iodomethane	T	Average RF			0.4820	<=20	15.6
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.581	<=20	6.3
Methacrylonitrile	T	Average RF			0.1295	<=20	10.3
Methyl Acetate	T	Average RF		0.100	0.2234	<=20	6.0
Methyl Methacrylate	T	Average RF			0.1481	<=20	9.0
Methyl tert-Butyl Ether	T	Average RF		0.100	1.153	<=20	3.5
Methylcyclohexane	T	Average RF		0.100	0.3206	<=20	5.3
Naphthalene	T	Average RF			1.327	<=20	6.2
Propionitrile	T	Average RF			0.04013	<=20	8.9
Styrene	T	Average RF		0.300	0.8888	<=20	9.8
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2583	<=20	7.1
Tetrahydrofuran (THF)	T	Average RF			0.09716	<=20	4.0
Toluene	T	Average RF		0.400	1.269	<=20	4.0
Trichloroethene (TCE)	T	Average RF		0.200	0.2982	<=20	2.1
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.7340	<=20	4.6
Vinyl Acetate	T	Average RF			0.07534	<=20	7.4
Vinyl Chloride	T	Average RF		0.100	0.4781	<=20	2.7
cis-1,2-Dichloroethene	T	Average RF		0.100	0.5073	<=20	2.9
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4363	<=20	8.8
m,p-Xylenes	T	Average RF		0.100	0.5448	<=20	5.7
n-Butyl Acetate	T	Average RF			0.3502	<=20	8.0
n-Butylbenzene	T	Average RF			1.881	<=20	7.7
n-Heptane	T	Average RF			0.3075	<=20	4.6

Initial Calibration - Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.020	<=20	7.6
o-Xylene	T	Average RF		0.300	0.5559	<=20	4.6
sec-Butylbenzene	T	Average RF			2.467	<=20	7.2
tert-Amyl Methyl Ether	T	Average RF			1.164	<=20	4.4
tert-Butylbenzene	T	Average RF			1.773	<=20	4.3
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4546	<=20	2.9
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3517	<=20	12.9
trans-1,4-Dichloro-2-butene	T	Average RF			0.1346	<=20	13.1
1,2-Dichloroethane-d4	S	Average RF			0.3297	<=20	1.6
4-Bromofluorobenzene	S	Average RF			0.4538	<=20	1.8
Dibromofluoromethane	S	Average RF			0.2895	<=20	0.8
Toluene-d8	S	Average RF			1.216	<=20	0.5

KR 3/13/14

Initial Calibration - Detailed Report

Calibration ID:	RC1400023 WOB1214 8260 waters	**Instrument ID:**	R-MS-12
		Signal ID:	1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400023-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\031214\U3875.D	3/12/14 10:45
02	RC1400023-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\031214\U3876.D	3/12/14 11:17
03	RC1400023-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\031214\U3877.D	3/12/14 11:49
04	RC1400023-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\031214\U3878.D	3/12/14 12:21
05	RC1400023-05	20ppb	I:\ACQUDATA\msvoa12\Data\031214\U3879.D	3/12/14 12:53
06	RC1400023-06	50ppb	I:\ACQUDATA\msvoa12\Data\031214\U3880.D	3/12/14 13:26
07	RC1400023-07	100ppb	I:\ACQUDATA\msvoa12\Data\031214\U3881.D	3/12/14 13:58
08	RC1400023-08	200ppb	I:\ACQUDATA\msvoa12\Data\031214\U3882.D	3/12/14 14:30

Analyte **Curve Fit** **Weighting**

1,1,1,2-Tetrachloroethane Average RF RSD = 7.3 Average RF = 0.3058

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2983	02	1.000	0.2715	03	2.000	0.2857	04	5.000	0.2953
05	20.000	0.3181	06	50.000	0.3125	07	100.000	0.3237	08	200.000	0.3409

1,1,1-Trichloroethane (TCA) Average RF RSD = 2.2 Average RF = 0.7112

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7063	02	1.000	0.6868	03	2.000	0.7026	04	5.000	0.7079
05	20.000	0.7266	06	50.000	0.7019	07	100.000	0.7348	08	200.000	0.7228

1,1,2,2-Tetrachloroethane Average RF RSD = 5.4 Average RF = 0.5726

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5677	02	1.000	0.6326	03	2.000	0.5516	04	5.000	0.5900
05	20.000	0.5885	06	50.000	0.5657	07	100.000	0.5510	08	200.000	0.5336

1,1,2-Trichloroethane Average RF RSD = 5.6 Average RF = 0.2220

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2390	02	1.000	0.2102	03	2.000	0.2004	04	5.000	0.2220
05	20.000	0.2356	06	50.000	0.2226	07	100.000	0.2210	08	200.000	0.2255

1,1,2-Trichlorotrifluoroethane Average RF RSD = 1.9 Average RF = 0.3971

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3985	02	1.000	0.4016	03	2.000	0.3970	04	5.000	0.3992
05	20.000	0.4053	06	50.000	0.3807	07	100.000	0.4011	08	200.000	0.3932

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 3.1 Average RF = 0.8461

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8237	02	1.000	0.8387	03	2.000	0.8602	04	5.000	0.8635
05	20.000	0.8933	06	50.000	0.8250	07	100.000	0.8497	08	200.000	0.8151

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 3.7 Average RF = 0.3628

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3377	02	1.000	0.3500	03	2.000	0.3712	04	5.000	0.3711
05	20.000	0.3724	06	50.000	0.3567	07	100.000	0.3750	08	200.000	0.3686

1,1-Dichloropropene Average RF RSD = 4.9 Average RF = 0.3693

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3820	02	1.000	0.3361	03	2.000	0.3482	04	5.000	0.3787
05	20.000	0.3890	06	50.000	0.3660	07	100.000	0.3762	08	200.000	0.3780

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting

1,2,3-Trichlorobenzene Average RF RSD = 8.2 Average RF = 0.6036

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7120	02	1.000	0.5898	03	2.000	0.6049	04	5.000	0.6154
05	20.000	0.6087	06	50.000	0.5765	07	100.000	0.5812	08	200.000	0.5407

1,2,3-Trichloropropane Average RF RSD = 7.2 Average RF = 0.1713

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1594	02	1.000	0.1952	03	2.000	0.1804	04	5.000	0.1712
05	20.000	0.1757	06	50.000	0.1662	07	100.000	0.1640	08	200.000	0.1587

1,2,4-Trichlorobenzene Average RF RSD = 6.4 Average RF = 0.7372

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8384	02	1.000	0.7195	03	2.000	0.7193	04	5.000	0.7561
05	20.000	0.7459	06	50.000	0.7248	07	100.000	0.7187	08	200.000	0.6751

1,2,4-Trimethylbenzene Average RF RSD = 7.0 Average RF = 2.167

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.954	02	1.000	2.105	03	2.000	2.150	04	5.000	2.333
05	20.000	2.369	06	50.000	2.219	07	100.000	2.224	08	200.000	1.979

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 12.9 Average RF = 0.08773

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08527	03	2.000	0.06938	04	5.000	0.07609	05	20.000	0.09250
06	50.000	0.09478	07	100.000	0.09971	08	200.000	0.09639			

1,2-Dibromoethane Average RF RSD = 5.1 Average RF = 0.2312

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2119	02	1.000	0.2166	03	2.000	0.2300	04	5.000	0.2285
05	20.000	0.2450	06	50.000	0.2376	07	100.000	0.2391	08	200.000	0.2411

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 4.7 Average RF = 0.5388

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5609	02	1.000	0.5284	03	2.000	0.5735	04	5.000	0.5565
05	20.000	0.5532	06	50.000	0.5082	07	100.000	0.5150	08	200.000	0.5148

1,2-Dichlorobenzene Average RF RSD = 3.3 Average RF = 1.206

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.165	02	1.000	1.167	03	2.000	1.163	04	5.000	1.250
05	20.000	1.266	06	50.000	1.199	07	100.000	1.231	08	200.000	1.203

1,2-Dichloroethane Average RF RSD = 3.9 Average RF = 0.3737

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3944	02	1.000	0.3897	03	2.000	0.3680	04	5.000	0.3712
05	20.000	0.3872	06	50.000	0.3620	07	100.000	0.3583	08	200.000	0.3591

1,2-Dichloroethane-d4 Average RF RSD = 1.6 Average RF = 0.3297

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	50.000	0.3313	01	50.000	0.3343	04	50.000	0.3305	02	50.000	0.3375
03	50.000	0.3311	08	50.000	0.3218	06	50.000	0.3278	07	50.000	0.3236

1,2-Dichloropropane Average RF RSD = 4.5 Average RF = 0.3148

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3353	02	1.000	0.2940	03	2.000	0.3243	04	5.000	0.3023
05	20.000	0.3306	06	50.000	0.3099	07	100.000	0.3114	08	200.000	0.3104

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,3,5-Trichlorobenzene Average RF RSD = 4.0 Average RF = 0.8315

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8430	02	1.000	0.8020	03	2.000	0.8458	04	5.000	0.8426
05	20.000	0.8737	06	50.000	0.8561	07	100.000	0.8199	08	200.000	0.7691

1,3,5-Trimethylbenzene Average RF RSD = 6.0 Average RF = 2.106

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.951	02	1.000	2.012	03	2.000	2.092	04	5.000	2.238
05	20.000	2.297	06	50.000	2.125	07	100.000	2.170	08	200.000	1.961

1,3-Dichlorobenzene Average RF RSD = 4.2 Average RF = 1.252

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.191	02	1.000	1.211	03	2.000	1.210	04	5.000	1.307
05	20.000	1.338	06	50.000	1.240	07	100.000	1.287	08	200.000	1.232

1,3-Dichloropropane Average RF RSD = 2.3 Average RF = 0.4501

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4445	02	1.000	0.4607	03	2.000	0.4426	04	5.000	0.4577
05	20.000	0.4682	06	50.000	0.4441	07	100.000	0.4414	08	200.000	0.4419

1,4-Dichlorobenzene Average RF RSD = 8.0 Average RF = 1.332

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.577	02	1.000	1.283	03	2.000	1.282	04	5.000	1.332
05	20.000	1.369	06	50.000	1.267	07	100.000	1.303	08	200.000	1.246

1,4-Dioxane Average RF RSD = 6.8 Average RF = 0.002062

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.001810	04	100.000	0.002154	05	400.000	0.002159	06	1000.000	0.001977
07	2000.000	0.002122	08	4000.000	0.002147						

1-Butanol Average RF RSD = 18.2 Average RF = 0.004645

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.003924	03	100.000	0.003663	04	250.000	0.003764	05	1000.000	0.004882
06	2500.000	0.005182	07	5000.000	0.005452	08	10000.000	0.005652			

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 7.0 Average RF = 0.3856

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4167	02	1.000	0.3463	03	2.000	0.3464	04	5.000	0.3768
05	20.000	0.4086	06	50.000	0.3969	07	100.000	0.3909	08	200.000	0.4026

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 3.4 Average RF = 0.6154

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6207	02	1.000	0.6330	03	2.000	0.6327	04	5.000	0.6228
05	20.000	0.6351	06	50.000	0.5779	07	100.000	0.5931	08	200.000	0.6081

2,2-Dichloropropane Average RF RSD = 3.9 Average RF = 0.6713

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6675	02	1.000	0.6452	03	2.000	0.6422	04	5.000	0.6446
05	20.000	0.6968	06	50.000	0.6701	07	100.000	0.7082	08	200.000	0.6961

2,3,6-Trichlorotoluene Average RF RSD = 7.5 Average RF = 0.3641

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3875	03	2.000	0.3415	04	5.000	0.3913	05	20.000	0.3742
06	50.000	0.3804	07	100.000	0.3565	08	200.000	0.3172			

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting									
2,4,5-Trichlorotoluene	Average RF			RSD = 7.2		Average RF = 0.3978					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4329	03	2.000	0.3944	04	5.000	0.4078	05	20.000	0.4165
06	50.000	0.4041	07	100.000	0.3861	08	200.000	0.3424			
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut	Average RF			RSD = 5.8		Average RF = 0.9535					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	0.9770	02	3.000	0.9010	03	6.000	0.9234	04	15.000	0.9868
05	60.000	1.023	06	150.000	0.9986	07	300.000	0.9600	08	600.000	0.8584
2,4-Dichlorobenzotrifluoride	Average RF			RSD = 4.0		Average RF = 0.5359					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5110	02	1.000	0.5339	03	2.000	0.5084	04	5.000	0.5409
05	20.000	0.5693	06	50.000	0.5540	07	100.000	0.5471	08	200.000	0.5228
2,5-Dichlorobenzotrifluoride	Average RF			RSD = 3.4		Average RF = 0.6128					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5718	02	1.000	0.6247	03	2.000	0.6037	04	5.000	0.6225
05	20.000	0.6361	06	50.000	0.6241	07	100.000	0.6228	08	200.000	0.5964
2-Butanone (MEK)	Average RF			RSD = 1.9		Average RF = 0.1390					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1352	04	5.000	0.1415	05	20.000	0.1414	06	50.000	0.1412
07	100.000	0.1376	08	200.000	0.1370						
2-Chloro-1,3-butadiene	Average RF			RSD = 7.9		Average RF = 0.7288					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6913	02	1.000	0.6222	03	2.000	0.7311	04	5.000	0.7347
05	20.000	0.8048	06	50.000	0.7974	07	100.000	0.7220	08	200.000	0.7268
2-Chlorobenzotrifluoride	Average RF			RSD = 4.8		Average RF = 0.8330					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9100	02	1.000	0.7769	03	2.000	0.8291	04	5.000	0.8420
05	20.000	0.8570	06	50.000	0.8319	07	100.000	0.8212	08	200.000	0.7957
2-Chloroethyl Vinyl Ether	Average RF			RSD = 5.8		Average RF = 0.1412					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1322	03	2.000	0.1312	04	5.000	0.1351	05	20.000	0.1468
06	50.000	0.1488	07	100.000	0.1433	08	200.000	0.1509			
2-Chlorotoluene	Average RF			RSD = 5.7		Average RF = 1.896					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.848	02	1.000	1.801	03	2.000	1.996	04	5.000	2.046
05	20.000	1.995	06	50.000	1.865	07	100.000	1.892	08	200.000	1.729
2-Hexanone	Average RF			RSD = 9.6		Average RF = 0.1416					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1254	04	5.000	0.1240	05	20.000	0.1460	06	50.000	0.1528
07	100.000	0.1465	08	200.000	0.1549						
2-Methyl-1-propanol	Average RF			RSD = 8.6		Average RF = 0.008458					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.008567	03	40.000	0.007652	04	100.000	0.007321	05	400.000	0.008520
06	1000.000	0.008757	07	2000.000	0.009084	08	4000.000	0.009309			

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting

2-Methyl-2-propanol Average RF RSD = 8.6 Average RF = 0.02773

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.02497	02	20.000	0.02534	03	40.000	0.02495	04	100.000	0.02725
05	400.000	0.03012	06	1000.000	0.02929	07	2000.000	0.03011	08	4000.000	0.02980

2-Nitropropane Average RF RSD = 10.8 Average RF = 0.03954

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.03696	03	4.000	0.03746	04	10.000	0.03400	05	40.000	0.03718
06	100.000	0.04155	07	200.000	0.04375	08	400.000	0.04587			

2-Propanol Average RF RSD = 13.7 Average RF = 0.01610

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01427	03	40.000	0.01247	04	100.000	0.01533	05	400.000	0.01663
06	1000.000	0.01714	07	2000.000	0.01837	08	4000.000	0.01848			

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 7.1 Average RF = 1.010

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9169	02	2.000	1.022	03	4.000	1.034	04	10.000	1.049
05	40.000	1.078	06	100.000	1.071	07	200.000	1.025	08	400.000	0.8819

3,4-Dichlorobenzotrifluoride Average RF RSD = 4.0 Average RF = 0.6160

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6560	02	1.000	0.5832	03	2.000	0.5958	04	5.000	0.5956
05	20.000	0.6406	06	50.000	0.6265	07	100.000	0.6205	08	200.000	0.6097

3-Chloro-1-propene Average RF RSD = 4.3 Average RF = 0.2488

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2545	02	1.000	0.2473	03	2.000	0.2453	04	5.000	0.2512
05	20.000	0.2640	06	50.000	0.2506	07	100.000	0.2510	08	200.000	0.2265

3-Chlorobenzotrifluoride Average RF RSD = 7.2 Average RF = 0.4304

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4930	02	1.000	0.4036	03	2.000	0.3943	04	5.000	0.4118
05	20.000	0.4381	06	50.000	0.4241	07	100.000	0.4325	08	200.000	0.4460

3-Chlorotoluene Average RF RSD = 5.3 Average RF = 1.973

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.001	02	1.000	1.930	03	2.000	1.972	04	5.000	2.097
05	20.000	2.101	06	50.000	1.984	07	100.000	1.919	08	200.000	1.777

4-Bromofluorobenzene Average RF RSD = 1.8 Average RF = 0.4538

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4590	03	50.000	0.4407	08	50.000	0.4674	07	50.000	0.4608
04	50.000	0.4514	05	50.000	0.4534	02	50.000	0.4484	01	50.000	0.4493

4-Chlorotoluene Average RF RSD = 8.4 Average RF = 2.236

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.971	02	1.000	2.210	03	2.000	2.368	04	5.000	2.461
05	20.000	2.434	06	50.000	2.215	07	100.000	2.253	08	200.000	1.976

4-Isopropyltoluene Average RF RSD = 6.7 Average RF = 2.086

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.941	02	1.000	1.967	03	2.000	2.058	04	5.000	2.230
05	20.000	2.299	06	50.000	2.107	07	100.000	2.167	08	200.000	1.919

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

4-Methyl-2-pentanone Average RF RSD = 6.0 Average RF = 0.1899

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1760	04	5.000	0.1760	05	20.000	0.1895	06	50.000	0.2006
07	100.000	0.1966	08	200.000	0.2005						

Acetone Average RF RSD = 6.0 Average RF = 0.09920

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1085	05	20.000	0.09976	06	50.000	0.09387	07	100.000	0.09976
08	200.000	0.09415									

Acetonitrile Average RF RSD = 13.2 Average RF = 0.01622

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.01228	04	25.000	0.01658	05	100.000	0.01837	06	250.000	0.01583
07	500.000	0.01782	08	1000.000	0.01645						

Acrolein Quadratic 1/X2 COD = 0.9978 $Y = 0.001887 X^2 + 0.006327 X + 2.544E-4$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.009244	03	10.000	0.007990	04	25.000	0.006781	05	100.000	0.01026
06	250.000	0.01513	07	500.000	0.02775	08	1000.000	0.04302			

Acrylonitrile Average RF RSD = 5.0 Average RF = 0.1111

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1077	02	5.000	0.1122	03	10.000	0.1002	04	25.000	0.1111
05	100.000	0.1195	06	250.000	0.1138	07	500.000	0.1144	08	1000.000	0.1102

Benzene Average RF RSD = 2.6 Average RF = 1.231

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.221	02	1.000	1.217	03	2.000	1.225	04	5.000	1.254
05	20.000	1.300	06	50.000	1.211	07	100.000	1.224	08	200.000	1.195

Bromobenzene Average RF RSD = 3.3 Average RF = 0.7355

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7129	02	1.000	0.7415	03	2.000	0.7707	04	5.000	0.7655
05	20.000	0.7457	06	50.000	0.7029	07	100.000	0.7271	08	200.000	0.7180

Bromochloromethane Average RF RSD = 8.2 Average RF = 0.2832

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3308	02	1.000	0.2864	03	2.000	0.2904	04	5.000	0.2917
05	20.000	0.2808	06	50.000	0.2647	07	100.000	0.2644	08	200.000	0.2567

Bromodichloromethane Average RF RSD = 5.4 Average RF = 0.3677

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3523	02	1.000	0.3364	03	2.000	0.3520	04	5.000	0.3636
05	20.000	0.3899	06	50.000	0.3744	07	100.000	0.3831	08	200.000	0.3898

Bromoform Average RF RSD = 15.6 Average RF = 0.2840

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2211	02	1.000	0.2672	03	2.000	0.2277	04	5.000	0.2700
05	20.000	0.3081	06	50.000	0.3125	07	100.000	0.3291	08	200.000	0.3360

Bromomethane Average RF RSD = 6.8 Average RF = 0.2881

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3114	02	1.000	0.3113	03	2.000	0.3091	04	5.000	0.2746
05	20.000	0.2750	06	50.000	0.2618	07	100.000	0.2769	08	200.000	0.2848

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

Carbon Disulfide Average RF RSD = 4.8 Average RF = 1.262

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.321	02	1.000	1.229	03	2.000	1.255	04	5.000	1.251
05	20.000	1.345	06	50.000	1.316	07	100.000	1.214	08	200.000	1.165

Carbon Tetrachloride Average RF RSD = 6.9 Average RF = 0.1199

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1354	02	1.000	0.1124	03	2.000	0.1161	04	5.000	0.1107
05	20.000	0.1197	06	50.000	0.1149	07	100.000	0.1233	08	200.000	0.1266

Chlorobenzene Average RF RSD = 2.8 Average RF = 0.8701

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8993	02	1.000	0.8337	03	2.000	0.8881	04	5.000	0.8811
05	20.000	0.8966	06	50.000	0.8431	07	100.000	0.8626	08	200.000	0.8563

Chloroethane Average RF RSD = 8.6 Average RF = 0.2851

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3345	02	1.000	0.2800	03	2.000	0.3023	04	5.000	0.2604
05	20.000	0.2953	06	50.000	0.2692	07	100.000	0.2737	08	200.000	0.2659

Chloroform Average RF RSD = 4.7 Average RF = 0.8292

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9097	02	1.000	0.8178	03	2.000	0.8517	04	5.000	0.8211
05	20.000	0.8358	06	50.000	0.7809	07	100.000	0.8189	08	200.000	0.7975

Chloromethane Average RF RSD = 2.8 Average RF = 0.5146

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4949	02	1.000	0.4996	03	2.000	0.5223	04	5.000	0.5099
05	20.000	0.5393	06	50.000	0.5065	07	100.000	0.5248	08	200.000	0.5198

Cyclohexane Average RF RSD = 5.1 Average RF = 0.2705

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2907	02	1.000	0.2754	03	2.000	0.2782	04	5.000	0.2787
05	20.000	0.2755	06	50.000	0.2513	07	100.000	0.2524	08	200.000	0.2620

Cyclohexanone Average RF RSD = 5.9 Average RF = 0.04011

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.03932	02	20.000	0.04338	03	40.000	0.03616	04	100.000	0.04035
05	400.000	0.04332	06	1000.000	0.03960	07	2000.000	0.03940	08	4000.000	0.03932

Dibromochloromethane Average RF RSD = 11.9 Average RF = 0.2588

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2176	02	1.000	0.2186	03	2.000	0.2418	04	5.000	0.2536
05	20.000	0.2761	06	50.000	0.2780	07	100.000	0.2876	08	200.000	0.2973

Dibromofluoromethane Average RF RSD = 0.8 Average RF = 0.2895

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	50.000	0.2865	04	50.000	0.2929	05	50.000	0.2925	03	50.000	0.2876
07	50.000	0.2897	06	50.000	0.2889	02	50.000	0.2871	08	50.000	0.2905

Dibromomethane Average RF RSD = 3.1 Average RF = 0.1497

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1523	02	1.000	0.1548	03	2.000	0.1407	04	5.000	0.1454
05	20.000	0.1530	06	50.000	0.1495	07	100.000	0.1494	08	200.000	0.1529

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte	Curve Fit	Weighting									
Dichlorodifluoromethane (CFC 12)	Average RF			RSD = 7.1		Average RF = 0.5939					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6564	02	1.000	0.5571	03	2.000	0.5697	04	5.000	0.5297
05	20.000	0.6394	06	50.000	0.6016	07	100.000	0.6140	08	200.000	0.5832
Dichlorofluoromethane (CFC 21)	Average RF			RSD = 4.4		Average RF = 0.7211					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7556	02	1.000	0.6951	03	2.000	0.7583	04	5.000	0.7429
05	20.000	0.7444	06	50.000	0.6873	07	100.000	0.6945	08	200.000	0.6902
Dichloromethane	Average RF			RSD = 5.4		Average RF = 0.4753					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5085	02	1.000	0.5094	03	2.000	0.4869	04	5.000	0.4756
05	20.000	0.4769	06	50.000	0.4443	07	100.000	0.4568	08	200.000	0.4445
Diethyl Ether	Average RF			RSD = 6.8		Average RF = 0.3614					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4086	02	1.000	0.3830	03	2.000	0.3609	04	5.000	0.3461
05	20.000	0.3686	06	50.000	0.3426	07	100.000	0.3471	08	200.000	0.3343
Diisopropyl Ether	Average RF			RSD = 5.1		Average RF = 1.648					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.729	02	1.000	1.591	03	2.000	1.636	04	5.000	1.690
05	20.000	1.772	06	50.000	1.654	07	100.000	1.605	08	200.000	1.507
Ethyl Methacrylate	Average RF			RSD = 15.5		Average RF = 0.2861					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2214	02	1.000	0.2595	03	2.000	0.2383	04	5.000	0.2676
05	20.000	0.3183	06	50.000	0.3215	07	100.000	0.3296	08	200.000	0.3324
Ethyl tert-Butyl Ether	Average RF			RSD = 4.3		Average RF = 1.379					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.331	02	1.000	1.327	03	2.000	1.322	04	5.000	1.427
05	20.000	1.484	06	50.000	1.412	07	100.000	1.390	08	200.000	1.339
Ethylbenzene	Average RF			RSD = 3.9		Average RF = 0.4636					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4482	02	1.000	0.4359	03	2.000	0.4451	04	5.000	0.4764
05	20.000	0.4791	06	50.000	0.4624	07	100.000	0.4794	08	200.000	0.4820
Hexachlorobutadiene	Average RF			RSD = 5.3		Average RF = 0.3218					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3384	02	1.000	0.3239	03	2.000	0.3162	04	5.000	0.3323
05	20.000	0.3461	06	50.000	0.3150	07	100.000	0.3098	08	200.000	0.2924
Iodomethane	Average RF			RSD = 15.6		Average RF = 0.4820					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3823	03	2.000	0.4095	04	5.000	0.4186	05	20.000	0.5370
06	50.000	0.5636	07	100.000	0.5381	08	200.000	0.5244			
Isopropylbenzene (Cumene)	Average RF			RSD = 6.3		Average RF = 2.581					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.502	02	1.000	2.497	03	2.000	2.636	04	5.000	2.757
05	20.000	2.786	06	50.000	2.599	07	100.000	2.599	08	200.000	2.274

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Methacrylonitrile Average RF RSD = 10.3 Average RF = 0.1295

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1006	03	2.000	0.1396	04	5.000	0.1260	05	20.000	0.1361
06	50.000	0.1347	07	100.000	0.1355	08	200.000	0.1337			

Methyl Acetate Average RF RSD = 6.0 Average RF = 0.2234

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2217	03	2.000	0.2075	04	5.000	0.2513	05	20.000	0.2242
06	50.000	0.2221	07	100.000	0.2205	08	200.000	0.2164			

Methyl Methacrylate Average RF RSD = 9.0 Average RF = 0.1481

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1473	02	1.000	0.1523	03	2.000	0.1206	04	5.000	0.1367
05	20.000	0.1542	06	50.000	0.1553	07	100.000	0.1575	08	200.000	0.1609

Methyl tert-Butyl Ether Average RF RSD = 3.5 Average RF = 1.153

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.207	02	1.000	1.153	03	2.000	1.131	04	5.000	1.188
05	20.000	1.196	06	50.000	1.120	07	100.000	1.134	08	200.000	1.097

Methylcyclohexane Average RF RSD = 5.3 Average RF = 0.3206

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3497	02	1.000	0.3166	03	2.000	0.3314	04	5.000	0.3258
05	20.000	0.3280	06	50.000	0.2955	07	100.000	0.3050	08	200.000	0.3126

Naphthalene Average RF RSD = 6.2 Average RF = 1.327

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.282	02	1.000	1.208	03	2.000	1.290	04	5.000	1.337
05	20.000	1.433	06	50.000	1.412	07	100.000	1.404	08	200.000	1.252

Propionitrile Average RF RSD = 8.9 Average RF = 0.04013

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.03731	02	5.000	0.03607	03	10.000	0.03612	04	25.000	0.03788
05	100.000	0.04399	06	250.000	0.04311	07	500.000	0.04402	08	1000.000	0.04254

Styrene Average RF RSD = 9.8 Average RF = 0.8888

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7897	02	1.000	0.7703	03	2.000	0.8089	04	5.000	0.8868
05	20.000	0.9769	06	50.000	0.9522	07	100.000	0.9751	08	200.000	0.9503

Tetrachloroethene (PCE) Average RF RSD = 7.1 Average RF = 0.2583

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2988	02	1.000	0.2495	03	2.000	0.2623	04	5.000	0.2415
05	20.000	0.2595	06	50.000	0.2416	07	100.000	0.2508	08	200.000	0.2622

Tetrahydrofuran (THF) Average RF RSD = 4.0 Average RF = 0.09716

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1013	04	5.000	0.09869	05	20.000	0.1010	06	50.000	0.09666
07	100.000	0.09237	08	200.000	0.09300						

Toluene Average RF RSD = 4.0 Average RF = 1.269

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.205	02	1.000	1.271	03	2.000	1.311	04	5.000	1.307
05	20.000	1.336	06	50.000	1.268	07	100.000	1.262	08	200.000	1.193

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** RSD = 0.5 Average RF = 1.216

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	50.000	1.204	06	50.000	1.220	08	50.000	1.221	07	50.000	1.213
05	50.000	1.220	03	50.000	1.218	02	50.000	1.221	04	50.000	1.214

Trichloroethene (TCE) Average RF RSD = 2.1 Average RF = 0.2982

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2923	02	1.000	0.2995	03	2.000	0.3063	04	5.000	0.2926
05	20.000	0.3006	06	50.000	0.2890	07	100.000	0.2996	08	200.000	0.3055

Trichlorofluoromethane (CFC 11) Average RF RSD = 4.6 Average RF = 0.7340

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7891	02	1.000	0.6969	03	2.000	0.7375	04	5.000	0.7530
05	20.000	0.7674	06	50.000	0.7080	07	100.000	0.7178	08	200.000	0.7019

Vinyl Acetate Average RF RSD = 7.4 Average RF = 0.07534

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.07194	03	2.000	0.06926	04	5.000	0.07091	05	20.000	0.07224
06	50.000	0.08228	07	100.000	0.07850	08	200.000	0.08228			

Vinyl Chloride Average RF RSD = 2.7 Average RF = 0.4781

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4876	02	1.000	0.4588	03	2.000	0.4759	04	5.000	0.4785
05	20.000	0.5000	06	50.000	0.4710	07	100.000	0.4854	08	200.000	0.4672

cis-1,2-Dichloroethene Average RF RSD = 2.9 Average RF = 0.5073

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5046	02	1.000	0.5269	03	2.000	0.4837	04	5.000	0.5042
05	20.000	0.5261	06	50.000	0.4971	07	100.000	0.5129	08	200.000	0.5029

cis-1,3-Dichloropropene Average RF RSD = 8.8 Average RF = 0.4363

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4197	02	1.000	0.3855	03	2.000	0.3916	04	5.000	0.4116
05	20.000	0.4720	06	50.000	0.4630	07	100.000	0.4716	08	200.000	0.4751

m,p-Xylenes Average RF RSD = 5.7 Average RF = 0.5448

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5131	02	2.000	0.4867	03	4.000	0.5378	04	10.000	0.5580
05	40.000	0.5792	06	100.000	0.5587	07	200.000	0.5735	08	400.000	0.5512

n-Butyl Acetate Average RF RSD = 8.0 Average RF = 0.3502

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3279	03	2.000	0.3075	04	5.000	0.3315	05	20.000	0.3613
06	50.000	0.3756	07	100.000	0.3653	08	200.000	0.3822			

n-Butylbenzene Average RF RSD = 7.7 Average RF = 1.881

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.692	02	1.000	1.717	03	2.000	1.958	04	5.000	1.989
05	20.000	2.081	06	50.000	1.909	07	100.000	1.964	08	200.000	1.737

n-Heptane Average RF RSD = 4.6 Average RF = 0.3075

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3265	02	1.000	0.3132	03	2.000	0.3120	04	5.000	0.2963
05	20.000	0.3264	06	50.000	0.2915	07	100.000	0.2994	08	200.000	0.2950

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte	**Curve Fit**	**Weighting**									
n-Propylbenzene	Average RF				RSD = 7.6		Average RF = 3.020				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.002	02	1.000	2.968	03	2.000	3.195	04	5.000	3.243
05	20.000	3.234	06	50.000	3.001	07	100.000	2.987	08	200.000	2.527
o-Xylene	Average RF				RSD = 4.6		Average RF = 0.5559				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5120	02	1.000	0.5633	03	2.000	0.5236	04	5.000	0.5596
05	20.000	0.5829	06	50.000	0.5560	07	100.000	0.5740	08	200.000	0.5761
sec-Butylbenzene	Average RF				RSD = 7.2		Average RF = 2.467				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.329	02	1.000	2.417	03	2.000	2.554	04	5.000	2.693
05	20.000	2.671	06	50.000	2.428	07	100.000	2.485	08	200.000	2.157
tert-Amyl Methyl Ether	Average RF				RSD = 4.4		Average RF = 1.164				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.073	02	1.000	1.129	03	2.000	1.131	04	5.000	1.168
05	20.000	1.233	06	50.000	1.200	07	100.000	1.201	08	200.000	1.179
tert-Butylbenzene	Average RF				RSD = 4.3		Average RF = 1.773				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.737	02	1.000	1.773	03	2.000	1.823	04	5.000	1.856
05	20.000	1.857	06	50.000	1.734	07	100.000	1.773	08	200.000	1.627
trans-1,2-Dichloroethene	Average RF				RSD = 2.9		Average RF = 0.4546				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4714	02	1.000	0.4543	03	2.000	0.4433	04	5.000	0.4407
05	20.000	0.4725	06	50.000	0.4404	07	100.000	0.4632	08	200.000	0.4510
trans-1,3-Dichloropropene	Average RF				RSD = 12.9		Average RF = 0.3517				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2943	02	1.000	0.3052	03	2.000	0.3144	04	5.000	0.3292
05	20.000	0.3845	06	50.000	0.3833	07	100.000	0.3985	08	200.000	0.4039
trans-1,4-Dichloro-2-butene	Average RF				RSD = 13.1		Average RF = 0.1346				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1173	02	1.000	0.1068	03	2.000	0.1274	04	5.000	0.1249
05	20.000	0.1488	06	50.000	0.1511	07	100.000	0.1497	08	200.000	0.1507

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	0.89	-11.2	03	2.000	1.87	-6.5
04	5.000	4.83	-3.4	05	20.000	20.81	4.1	06	50.000	51.10	2.2
07	100.000	105.88	5.9	08	200.000	223.01	11.5				

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.7	02	1.000	0.97	-3.4	03	2.000	1.98	-1.2
04	5.000	4.98	-0.5	05	20.000	20.43	2.2	06	50.000	49.34	-1.3
07	100.000	103.32	3.3	08	200.000	203.25	1.6				

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	1.10	10.5	03	2.000	1.93	-3.7
04	5.000	5.15	3.0	05	20.000	20.56	2.8	06	50.000	49.40	-1.2
07	100.000	96.23	-3.8	08	200.000	186.37	-6.8				

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.6	02	1.000	0.95	-5.3	03	2.000	1.81	-9.7
04	5.000	5.00	0.0	05	20.000	21.22	6.1	06	50.000	50.13	0.3
07	100.000	99.52	-0.5	08	200.000	203.16	1.6				

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.4	02	1.000	1.01	1.1	03	2.000	2.00	0.0
04	5.000	5.03	0.5	05	20.000	20.41	2.1	06	50.000	47.94	-4.1
07	100.000	101.02	1.0	08	200.000	198.05	-1.0				

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.6	02	1.000	0.99	-0.9	03	2.000	2.03	1.7
04	5.000	5.10	2.0	05	20.000	21.11	5.6	06	50.000	48.75	-2.5
07	100.000	100.42	0.4	08	200.000	192.67	-3.7				

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.96	-3.5	03	2.000	2.05	2.3
04	5.000	5.11	2.3	05	20.000	20.53	2.6	06	50.000	49.15	-1.7
07	100.000	103.36	3.4	08	200.000	203.15	1.6				

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.4	02	1.000	0.91	-9.0	03	2.000	1.89	-5.7
04	5.000	5.13	2.5	05	20.000	21.07	5.4	06	50.000	49.56	-0.9
07	100.000	101.88	1.9	08	200.000	204.71	2.4				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.9	02	1.000	0.98	-2.3	03	2.000	2.00	0.2
04	5.000	5.10	1.9	05	20.000	20.17	0.8	06	50.000	47.75	-4.5
07	100.000	96.28	-3.7	08	200.000	179.15	-10.4				

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-7.0	02	1.000	1.14	13.9	03	2.000	2.11	5.3
04	5.000	5.00	-0.1	05	20.000	20.51	2.5	06	50.000	48.51	-3.0
07	100.000	95.69	-4.3	08	200.000	185.19	-7.4				

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.7	02	1.000	0.98	-2.4	03	2.000	1.95	-2.4
04	5.000	5.13	2.6	05	20.000	20.24	1.2	06	50.000	49.15	-1.7
07	100.000	97.49	-2.5	08	200.000	183.13	-8.4				

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.8	02	1.000	0.97	-2.9	03	2.000	1.98	-0.8
04	5.000	5.38	7.7	05	20.000	21.87	9.3	06	50.000	51.22	2.4
07	100.000	102.65	2.7	08	200.000	182.67	-8.7				

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.97	-2.8	03	2.000	1.58	-20.9	04	5.000	4.34	-13.3
05	20.000	21.09	5.4	06	50.000	54.02	8.0	07	100.000	113.65	13.7
08	200.000	219.74	9.9								

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.3	02	1.000	0.94	-6.3	03	2.000	1.99	-0.5
04	5.000	4.94	-1.2	05	20.000	21.19	5.9	06	50.000	51.38	2.8
07	100.000	103.39	3.4	08	200.000	208.54	4.3				

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.1	02	1.000	0.98	-1.9	03	2.000	2.13	6.4
04	5.000	5.16	3.3	05	20.000	20.53	2.7	06	50.000	47.16	-5.7
07	100.000	95.58	-4.4	08	200.000	191.07	-4.5				

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.3	02	1.000	0.97	-3.2	03	2.000	1.93	-3.5
04	5.000	5.18	3.7	05	20.000	21.00	5.0	06	50.000	49.72	-0.6
07	100.000	102.13	2.1	08	200.000	199.61	-0.2				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.5	02	1.000	1.04	4.3	03	2.000	1.97	-1.5
04	5.000	4.97	-0.7	05	20.000	20.72	3.6	06	50.000	48.43	-3.1
07	100.000	95.88	-4.1	08	200.000	192.18	-3.9				

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	50.000	50.24	0.5	01	50.000	50.69	1.4	04	50.000	50.11	0.2
02	50.000	51.17	2.3	03	50.000	50.20	0.4	08	50.000	48.80	-2.4
06	50.000	49.71	-0.6	07	50.000	49.07	-1.9				

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	0.93	-6.6	03	2.000	2.06	3.0
04	5.000	4.80	-4.0	05	20.000	21.01	5.0	06	50.000	49.23	-1.5
07	100.000	98.93	-1.1	08	200.000	197.23	-1.4				

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.4	02	1.000	0.96	-3.5	03	2.000	2.03	1.7
04	5.000	5.07	1.3	05	20.000	21.02	5.1	06	50.000	51.48	3.0
07	100.000	98.60	-1.4	08	200.000	184.97	-7.5				

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.4	02	1.000	0.96	-4.5	03	2.000	1.99	-0.7
04	5.000	5.31	6.3	05	20.000	21.82	9.1	06	50.000	50.45	0.9
07	100.000	103.05	3.1	08	200.000	186.29	-6.9				

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.97	-3.3	03	2.000	1.93	-3.3
04	5.000	5.22	4.4	05	20.000	21.37	6.9	06	50.000	49.50	-1.0
07	100.000	102.83	2.8	08	200.000	196.81	-1.6				

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.3	02	1.000	1.02	2.3	03	2.000	1.97	-1.7
04	5.000	5.08	1.7	05	20.000	20.80	4.0	06	50.000	49.33	-1.3
07	100.000	98.06	-1.9	08	200.000	196.34	-1.8				

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.4	02	1.000	0.96	-3.7	03	2.000	1.92	-3.8
04	5.000	5.00	0.0	05	20.000	20.55	2.7	06	50.000	47.54	-4.9
07	100.000	97.81	-2.2	08	200.000	187.07	-6.5				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	35.12	-12.2	04	100.000	104.49	4.5	05	400.000	418.98	4.7
06	1000.000	959.13	-4.1	07	2000.000	2,058.38	2.9	08	4000.000	4,165.10	4.1

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	42.23	-15.5	03	100.000	78.84	-21.2	04	250.000	202.55	-19.0
05	1000.000	1,050.85	5.1	06	2500.000	2,788.88	11.6	07	5000.000	5,867.93	17.4
08	10000.000	12,167.14	21.7								

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	0.90	-10.2	03	2.000	1.80	-10.2
04	5.000	4.89	-2.3	05	20.000	21.19	5.9	06	50.000	51.46	2.9
07	100.000	101.37	1.4	08	200.000	208.77	4.4				

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.9	02	1.000	1.03	2.9	03	2.000	2.06	2.8
04	5.000	5.06	1.2	05	20.000	20.64	3.2	06	50.000	46.95	-6.1
07	100.000	96.38	-3.6	08	200.000	197.61	-1.2				

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.96	-3.9	03	2.000	1.91	-4.3
04	5.000	4.80	-4.0	05	20.000	20.76	3.8	06	50.000	49.91	-0.2
07	100.000	105.49	5.5	08	200.000	207.38	3.7				

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.06	6.4	03	2.000	1.88	-6.2	04	5.000	5.37	7.5
05	20.000	20.56	2.8	06	50.000	52.24	4.5	07	100.000	97.93	-2.1
08	200.000	174.22	-12.9								

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.09	8.8	03	2.000	1.98	-0.8	04	5.000	5.13	2.5
05	20.000	20.94	4.7	06	50.000	50.79	1.6	07	100.000	97.07	-2.9
08	200.000	172.15	-13.9								

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.54	2.5	02	3.000	2.84	-5.5	03	6.000	5.81	-3.2
04	15.000	15.52	3.5	05	60.000	64.35	7.3	06	150.000	157.11	4.7
07	300.000	302.05	0.7	08	600.000	540.19	-10.0				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	1.00	-0.4	03	2.000	1.90	-5.1
04	5.000	5.05	0.9	05	20.000	21.25	6.2	06	50.000	51.68	3.4
07	100.000	102.08	2.1	08	200.000	195.09	-2.5				

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.7	02	1.000	1.02	1.9	03	2.000	1.97	-1.5
04	5.000	5.08	1.6	05	20.000	20.76	3.8	06	50.000	50.93	1.9
07	100.000	101.64	1.6	08	200.000	194.66	-2.7				

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.95	-2.7	04	5.000	5.09	1.8	05	20.000	20.35	1.7
06	50.000	50.79	1.6	07	100.000	99.04	-1.0	08	200.000	197.13	-1.4

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.1	02	1.000	0.85	-14.6	03	2.000	2.01	0.3
04	5.000	5.04	0.8	05	20.000	22.09	10.4	06	50.000	54.71	9.4
07	100.000	99.07	-0.9	08	200.000	199.45	-0.3				

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.2	02	1.000	0.93	-6.7	03	2.000	1.99	-0.5
04	5.000	5.05	1.1	05	20.000	20.58	2.9	06	50.000	49.93	-0.1
07	100.000	98.59	-1.4	08	200.000	191.05	-4.5				

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-6.3	03	2.000	1.86	-7.1	04	5.000	4.78	-4.3
05	20.000	20.79	4.0	06	50.000	52.70	5.4	07	100.000	101.53	1.5
08	200.000	213.74	6.9								

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	0.95	-5.0	03	2.000	2.10	5.2
04	5.000	5.39	7.9	05	20.000	21.04	5.2	06	50.000	49.16	-1.7
07	100.000	99.77	-0.2	08	200.000	182.32	-8.8				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.77	-11.4	04	5.000	4.38	-12.4	05	20.000	20.62	3.1
06	50.000	53.96	7.9	07	100.000	103.46	3.5	08	200.000	218.80	9.4

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	20.26	1.3	03	40.000	36.19	-9.5	04	100.000	86.55	-13.5
05	400.000	402.89	0.7	06	1000.000	1,035.32	3.5	07	2000.000	2,147.81	7.4
08	4000.000	4,402.14	10.1								

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.01	-9.9	02	20.000	18.28	-8.6	03	40.000	35.99	-10.0
04	100.000	98.27	-1.7	05	400.000	434.45	8.6	06	1000.000	1,056.46	5.6
07	2000.000	2,171.61	8.6	08	4000.000	4,298.58	7.5				

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	1.87	-6.5	03	4.000	3.79	-5.3	04	10.000	8.60	-14.0
05	40.000	37.61	-6.0	06	100.000	105.09	5.1	07	200.000	221.31	10.7
08	400.000	464.07	16.0								

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	17.73	-11.3	03	40.000	30.98	-22.6	04	100.000	95.25	-4.8
05	400.000	413.14	3.3	06	1000.000	1,064.76	6.5	07	2000.000	2,281.69	14.1
08	4000.000	4,592.40	14.8								

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.91	-9.2	02	2.000	2.02	1.2	03	4.000	4.10	2.4
04	10.000	10.39	3.9	05	40.000	42.72	6.8	06	100.000	106.06	6.1
07	200.000	203.02	1.5	08	400.000	349.39	-12.7				

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	0.95	-5.3	03	2.000	1.93	-3.3
04	5.000	4.83	-3.3	05	20.000	20.80	4.0	06	50.000	50.85	1.7
07	100.000	100.73	0.7	08	200.000	197.96	-1.0				

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.3	02	1.000	0.99	-0.6	03	2.000	1.97	-1.4
04	5.000	5.05	1.0	05	20.000	21.22	6.1	06	50.000	50.37	0.7
07	100.000	100.89	0.9	08	200.000	182.08	-9.0				

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.5	02	1.000	0.94	-6.2	03	2.000	1.83	-8.4
04	5.000	4.78	-4.3	05	20.000	20.35	1.8	06	50.000	49.26	-1.5
07	100.000	100.49	0.5	08	200.000	207.26	3.6				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.4	02	1.000	0.98	-2.2	03	2.000	2.00	0.0
04	5.000	5.31	6.3	05	20.000	21.30	6.5	06	50.000	50.29	0.6
07	100.000	97.29	-2.7	08	200.000	180.14	-9.9				

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.57	1.1	03	50.000	48.55	-2.9	08	50.000	51.50	3.0
07	50.000	50.78	1.6	04	50.000	49.74	-0.5	05	50.000	49.96	-0.1
02	50.000	49.40	-1.2	01	50.000	49.50	-1.0				

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.8	02	1.000	0.99	-1.2	03	2.000	2.12	5.9
04	5.000	5.50	10.1	05	20.000	21.77	8.8	06	50.000	49.53	-0.9
07	100.000	100.78	0.8	08	200.000	176.70	-11.6				

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.94	-5.7	03	2.000	1.97	-1.3
04	5.000	5.34	6.9	05	20.000	22.04	10.2	06	50.000	50.51	1.0
07	100.000	103.87	3.9	08	200.000	184.01	-8.0				

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.85	-7.3	04	5.000	4.63	-7.3	05	20.000	19.96	-0.2
06	50.000	52.83	5.7	07	100.000	103.54	3.5	08	200.000	211.20	5.6

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.47	9.3	05	20.000	20.11	0.6	06	50.000	47.31	-5.4
07	100.000	100.57	0.6	08	200.000	189.81	-5.1				

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	7.57	-24.3	04	25.000	25.55	2.2	05	100.000	113.23	13.2
06	250.000	244.00	-2.4	07	500.000	549.38	9.9	08	1000.000	1,014.22	1.4

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	5.14	2.8	03	10.000	10.02	0.2	04	25.000	21.92	-12.3
05	100.000	100.21	0.2	06	250.000	243.13	-2.7	07	500.000	528.00	5.6
08	1000.000	986.83	-1.3								

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.42	-3.1	02	5.000	5.05	1.0	03	10.000	9.02	-9.8
04	25.000	24.98	-0.1	05	100.000	107.48	7.5	06	250.000	256.05	2.4
07	500.000	514.53	2.9	08	1000.000	991.85	-0.8				

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	0.99	-1.1	03	2.000	1.99	-0.5
04	5.000	5.09	1.9	05	20.000	21.13	5.6	06	50.000	49.18	-1.6
07	100.000	99.46	-0.5	08	200.000	194.13	-2.9				

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.1	02	1.000	1.01	0.8	03	2.000	2.10	4.8
04	5.000	5.20	4.1	05	20.000	20.28	1.4	06	50.000	47.78	-4.4
07	100.000	98.85	-1.1	08	200.000	195.22	-2.4				

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.8	02	1.000	1.01	1.1	03	2.000	2.05	2.5
04	5.000	5.15	3.0	05	20.000	19.83	-0.9	06	50.000	46.72	-6.6
07	100.000	93.36	-6.6	08	200.000	181.24	-9.4				

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.2	02	1.000	0.91	-8.5	03	2.000	1.91	-4.3
04	5.000	4.94	-1.1	05	20.000	21.21	6.0	06	50.000	50.92	1.8
07	100.000	104.18	4.2	08	200.000	212.04	6.0				

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.1	02	1.000	0.94	-5.9	03	2.000	1.60	-19.8
04	5.000	4.75	-4.9	05	20.000	21.70	8.5	06	50.000	55.02	10.0
07	100.000	115.90	15.9	08	200.000	236.66	18.3				

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	1.08	8.0	03	2.000	2.15	7.3
04	5.000	4.77	-4.7	05	20.000	19.09	-4.5	06	50.000	45.43	-9.1
07	100.000	96.11	-3.9	08	200.000	197.68	-1.2				

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	0.97	-2.6	03	2.000	1.99	-0.6
04	5.000	4.96	-0.9	05	20.000	21.31	6.6	06	50.000	52.12	4.2
07	100.000	96.23	-3.8	08	200.000	184.69	-7.7				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.9	02	1.000	0.94	-6.3	03	2.000	1.94	-3.1
04	5.000	4.62	-7.7	05	20.000	19.97	-0.1	06	50.000	47.92	-4.2
07	100.000	102.86	2.9	08	200.000	211.15	5.6				

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.4	02	1.000	0.96	-4.2	03	2.000	2.04	2.1
04	5.000	5.06	1.3	05	20.000	20.61	3.0	06	50.000	48.45	-3.1
07	100.000	99.14	-0.9	08	200.000	196.84	-1.6				

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.3	02	1.000	0.98	-1.8	03	2.000	2.12	6.0
04	5.000	4.57	-8.7	05	20.000	20.71	3.6	06	50.000	47.20	-5.6
07	100.000	95.98	-4.0	08	200.000	186.51	-6.7				

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.7	02	1.000	0.99	-1.4	03	2.000	2.05	2.7
04	5.000	4.95	-1.0	05	20.000	20.16	0.8	06	50.000	47.09	-5.8
07	100.000	98.76	-1.2	08	200.000	192.36	-3.8				

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.8	02	1.000	0.97	-2.9	03	2.000	2.03	1.5
04	5.000	4.95	-0.9	05	20.000	20.96	4.8	06	50.000	49.21	-1.6
07	100.000	101.97	2.0	08	200.000	201.99	1.0				

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	1.02	1.8	03	2.000	2.06	2.9
04	5.000	5.15	3.0	05	20.000	20.37	1.8	06	50.000	46.44	-7.1
07	100.000	93.29	-6.7	08	200.000	193.68	-3.2				

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.80	-2.0	02	20.000	21.63	8.2	03	40.000	36.06	-9.9
04	100.000	100.61	0.6	05	400.000	432.04	8.0	06	1000.000	987.46	-1.3
07	2000.000	1,964.96	-1.8	08	4000.000	3,921.50	-2.0				

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-15.9	02	1.000	0.84	-15.6	03	2.000	1.87	-6.6
04	5.000	4.90	-2.0	05	20.000	21.34	6.7	06	50.000	53.71	7.4
07	100.000	111.12	11.1	08	200.000	229.69	14.8				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	50.000	49.49	-1.0	04	50.000	50.59	1.2	05	50.000	50.53	1.1
03	50.000	49.68	-0.6	07	50.000	50.04	0.1	06	50.000	49.90	-0.2
02	50.000	49.59	-0.8	08	50.000	50.18	0.4				

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.7	02	1.000	1.03	3.3	03	2.000	1.88	-6.0
04	5.000	4.86	-2.9	05	20.000	20.44	2.2	06	50.000	49.91	-0.2
07	100.000	99.77	-0.2	08	200.000	204.16	2.1				

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.5	02	1.000	0.94	-6.2	03	2.000	1.92	-4.1
04	5.000	4.46	-10.8	05	20.000	21.53	7.7	06	50.000	50.65	1.3
07	100.000	103.38	3.4	08	200.000	196.42	-1.8				

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.8	02	1.000	0.96	-3.6	03	2.000	2.10	5.2
04	5.000	5.15	3.0	05	20.000	20.65	3.2	06	50.000	47.66	-4.7
07	100.000	96.32	-3.7	08	200.000	191.44	-4.3				

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	7.0	02	1.000	1.07	7.2	03	2.000	2.05	2.4
04	5.000	5.00	0.1	05	20.000	20.07	0.3	06	50.000	46.73	-6.5
07	100.000	96.09	-3.9	08	200.000	187.03	-6.5				

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.1	02	1.000	1.06	6.0	03	2.000	2.00	-0.1
04	5.000	4.79	-4.2	05	20.000	20.40	2.0	06	50.000	47.40	-5.2
07	100.000	96.03	-4.0	08	200.000	184.99	-7.5				

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.9	02	1.000	0.97	-3.4	03	2.000	1.99	-0.7
04	5.000	5.13	2.6	05	20.000	21.50	7.5	06	50.000	50.17	0.3
07	100.000	97.38	-2.6	08	200.000	182.91	-8.5				

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.6	02	1.000	0.91	-9.3	03	2.000	1.67	-16.7
04	5.000	4.68	-6.5	05	20.000	22.25	11.3	06	50.000	56.19	12.4
07	100.000	115.22	15.2	08	200.000	232.41	16.2				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.5	02	1.000	0.96	-3.8	03	2.000	1.92	-4.2
04	5.000	5.17	3.4	05	20.000	21.53	7.6	06	50.000	51.19	2.4
07	100.000	100.82	0.8	08	200.000	194.19	-2.9				

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.3	02	1.000	0.94	-6.0	03	2.000	1.92	-4.0
04	5.000	5.14	2.8	05	20.000	20.67	3.4	06	50.000	49.88	-0.2
07	100.000	103.42	3.4	08	200.000	207.95	4.0				

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.2	02	1.000	1.01	0.7	03	2.000	1.97	-1.7
04	5.000	5.16	3.3	05	20.000	21.51	7.6	06	50.000	48.95	-2.1
07	100.000	96.30	-3.7	08	200.000	181.73	-9.1				

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.79	-20.7	03	2.000	1.70	-15.0	04	5.000	4.34	-13.2
05	20.000	22.28	11.4	06	50.000	58.48	17.0	07	100.000	111.66	11.7
08	200.000	217.63	8.8								

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.1	02	1.000	0.97	-3.3	03	2.000	2.04	2.1
04	5.000	5.34	6.8	05	20.000	21.58	7.9	06	50.000	50.35	0.7
07	100.000	100.68	0.7	08	200.000	176.21	-11.9				

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.78	-22.3	03	2.000	2.16	7.8	04	5.000	4.87	-2.7
05	20.000	21.02	5.1	06	50.000	52.02	4.0	07	100.000	104.67	4.7
08	200.000	206.57	3.3								

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.99	-0.8	03	2.000	1.86	-7.1	04	5.000	5.62	12.5
05	20.000	20.07	0.4	06	50.000	49.71	-0.6	07	100.000	98.72	-1.3
08	200.000	193.74	-3.1								

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.03	2.8	03	2.000	1.63	-18.6
04	5.000	4.62	-7.7	05	20.000	20.83	4.1	06	50.000	52.44	4.9
07	100.000	106.30	6.3	08	200.000	217.30	8.7				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	1.00	0.0	03	2.000	1.96	-1.9
04	5.000	5.15	3.0	05	20.000	20.75	3.7	06	50.000	48.54	-2.9
07	100.000	98.35	-1.7	08	200.000	190.27	-4.9				

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.1	02	1.000	0.99	-1.2	03	2.000	2.07	3.4
04	5.000	5.08	1.6	05	20.000	20.46	2.3	06	50.000	46.09	-7.8
07	100.000	95.15	-4.8	08	200.000	195.02	-2.5				

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.4	02	1.000	0.91	-9.0	03	2.000	1.94	-2.8
04	5.000	5.04	0.8	05	20.000	21.59	7.9	06	50.000	53.18	6.4
07	100.000	105.76	5.8	08	200.000	188.67	-5.7				

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.32	-7.0	02	5.000	4.49	-10.1	03	10.000	9.00	-10.0
04	25.000	23.60	-5.6	05	100.000	109.63	9.6	06	250.000	268.54	7.4
07	500.000	548.49	9.7	08	1000.000	1,059.97	6.0				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.1	02	1.000	0.87	-13.3	03	2.000	1.82	-9.0
04	5.000	4.99	-0.2	05	20.000	21.98	9.9	06	50.000	53.57	7.1
07	100.000	109.72	9.7	08	200.000	213.85	6.9				

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	15.7	02	1.000	0.97	-3.4	03	2.000	2.03	1.6
04	5.000	4.67	-6.5	05	20.000	20.09	0.5	06	50.000	46.76	-6.5
07	100.000	97.11	-2.9	08	200.000	203.04	1.5				

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.08	4.2	04	5.000	5.08	1.6	05	20.000	20.78	3.9
06	50.000	49.74	-0.5	07	100.000	95.07	-4.9	08	200.000	191.44	-4.3

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.0	02	1.000	1.00	0.1	03	2.000	2.07	3.3
04	5.000	5.15	3.0	05	20.000	21.05	5.3	06	50.000	49.96	-0.1
07	100.000	99.46	-0.5	08	200.000	187.96	-6.0				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	50.000	49.50	-1.0	06	50.000	50.17	0.3	08	50.000	50.19	0.4
07	50.000	49.84	-0.3	05	50.000	50.14	0.3	03	50.000	50.08	0.2
02	50.000	50.18	0.4	04	50.000	49.89	-0.2				

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.0	02	1.000	1.00	0.4	03	2.000	2.05	2.7
04	5.000	4.91	-1.9	05	20.000	20.16	0.8	06	50.000	48.46	-3.1
07	100.000	100.49	0.5	08	200.000	204.93	2.5				

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	0.95	-5.0	03	2.000	2.01	0.5
04	5.000	5.13	2.6	05	20.000	20.91	4.6	06	50.000	48.23	-3.5
07	100.000	97.79	-2.2	08	200.000	191.27	-4.4				

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.95	-4.5	03	2.000	1.84	-8.1	04	5.000	4.71	-5.9
05	20.000	19.18	-4.1	06	50.000	54.60	9.2	07	100.000	104.19	4.2
08	200.000	218.41	9.2								

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.0	02	1.000	0.96	-4.0	03	2.000	1.99	-0.4
04	5.000	5.00	0.1	05	20.000	20.92	4.6	06	50.000	49.26	-1.5
07	100.000	101.54	1.5	08	200.000	195.46	-2.3				

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.04	3.9	03	2.000	1.91	-4.7
04	5.000	4.97	-0.6	05	20.000	20.74	3.7	06	50.000	49.00	-2.0
07	100.000	101.10	1.1	08	200.000	198.26	-0.9				

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.8	02	1.000	0.88	-11.6	03	2.000	1.80	-10.2
04	5.000	4.72	-5.7	05	20.000	21.64	8.2	06	50.000	53.07	6.1
07	100.000	108.11	8.1	08	200.000	217.79	8.9				

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.94	-5.8	02	2.000	1.79	-10.7	03	4.000	3.95	-1.3
04	10.000	10.24	2.4	05	40.000	42.53	6.3	06	100.000	102.56	2.6
07	200.000	210.55	5.3	08	400.000	404.74	1.2				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-6.4	03	2.000	1.76	-12.2	04	5.000	4.73	-5.3
05	20.000	20.64	3.2	06	50.000	53.63	7.3	07	100.000	104.33	4.3
08	200.000	218.28	9.1								

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.1	02	1.000	0.91	-8.7	03	2.000	2.08	4.1
04	5.000	5.29	5.8	05	20.000	22.12	10.6	06	50.000	50.75	1.5
07	100.000	104.42	4.4	08	200.000	184.71	-7.6				

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	1.02	1.8	03	2.000	2.03	1.5
04	5.000	4.82	-3.6	05	20.000	21.23	6.1	06	50.000	47.40	-5.2
07	100.000	97.34	-2.7	08	200.000	191.82	-4.1				

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.98	-1.7	03	2.000	2.12	5.8
04	5.000	5.37	7.4	05	20.000	21.42	7.1	06	50.000	49.69	-0.6
07	100.000	98.92	-1.1	08	200.000	167.40	-16.3				

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.9	02	1.000	1.01	1.3	03	2.000	1.88	-5.8
04	5.000	5.03	0.7	05	20.000	20.97	4.8	06	50.000	50.01	0.0
07	100.000	103.24	3.2	08	200.000	207.27	3.6				

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.6	02	1.000	0.98	-2.0	03	2.000	2.07	3.5
04	5.000	5.46	9.2	05	20.000	21.65	8.3	06	50.000	49.21	-1.6
07	100.000	100.74	0.7	08	200.000	174.91	-12.5				

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.9	02	1.000	0.97	-3.0	03	2.000	1.94	-2.8
04	5.000	5.02	0.3	05	20.000	21.17	5.9	06	50.000	51.52	3.0
07	100.000	103.19	3.2	08	200.000	202.60	1.3				

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.0	02	1.000	1.00	0.0	03	2.000	2.06	2.8
04	5.000	5.23	4.7	05	20.000	20.95	4.8	06	50.000	48.91	-2.2
07	100.000	100.05	0.1	08	200.000	183.63	-8.2				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	1.00	-0.1	03	2.000	1.95	-2.5
04	5.000	4.85	-3.1	05	20.000	20.79	3.9	06	50.000	48.44	-3.1
07	100.000	101.89	1.9	08	200.000	198.42	-0.8				

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.3	02	1.000	0.87	-13.2	03	2.000	1.79	-10.6
04	5.000	4.68	-6.4	05	20.000	21.87	9.3	06	50.000	54.50	9.0
07	100.000	113.32	13.3	08	200.000	229.69	14.8				

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-12.8	02	1.000	0.79	-20.6	03	2.000	1.89	-5.3
04	5.000	4.64	-7.2	05	20.000	22.12	10.6	06	50.000	56.13	12.3
07	100.000	111.21	11.2	08	200.000	223.88	11.9				

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	911333	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1438759	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1294400	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	612947	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	412193	49.49	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.98%				
48) surr1,1,2-dichloroetha...	4.664	65	480981	50.69	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 101.38%				
65) SURR3,Toluene-d8	7.322	98	1732405	49.50	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.00%				
70) SURR2,BFB	9.791	95	646398	49.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.00%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	5982	0.55	ppb		93
3) Chloromethane	1.262	50	4510	0.48	ppb		84
4) Vinyl Chloride	1.323	62	4444	0.51	ppb		74
5) Bromomethane	1.512	94	2838	0.54	ppb		85
6) Chloroethane	1.567	64	3048m	0.56	ppb		
7) Freon 21	1.664	67	6886	0.52	ppb		94
8) Trichlorofluoromethane	1.719	101	7191	0.54	ppb		85
9) Diethyl Ether	1.884	59	3724	0.57	ppb		89
10) Freon 123a	1.866	67	5112	0.52	ppb		94
11) Freon 123	1.902	83	5657	0.50	ppb		98
13) 1,1-Diclethene	2.036	96	3078	0.47	ppb	#	80
14) Freon 113	2.036	101	3632	0.50	ppb		84
16) 2-Propanol	2.116	45	3340m	11.20	ppb		
17) Iodomethane	2.146	142	3362	0.38	ppb		92
18) Carbon Disulfide	2.207	76	12036	0.52	ppb		99
19) Acetonitrile	2.231	40	1554	5.26	ppb	#	32
20) Allyl Chloride	2.274	76	2319	0.51	ppb	#	84
21) Methyl Acetate	2.274	43	2240	0.55	ppb		93
22) Methylene Chloride	2.359	84	4634	0.53	ppb	#	76
23) TBA	2.408	59	4551	9.01	ppb		73
24) Acrylonitrile	2.530	53	4907	2.42	ppb	#	76
25) Methyl-t-Butyl Ether	2.579	73	11002	0.52	ppb		96
26) trans-1,2-Dichloroethene	2.585	96	4296	0.52	ppb	#	89
28) 1,1-Diclethane	2.939	63	7507	0.49	ppb		88
29) Vinyl Acetate	2.981	86	707	0.51	ppb	#	1
30) DIPE	3.018	45	15755	0.52	ppb		78
31) 2-Chloro-1,3-Butadiene	3.042	53	6300	0.47	ppb		99
32) ETBE	3.402	59	12134	0.48	ppb		89
33) 2,2-Dichloropropane	3.554	77	6083	0.50	ppb		92
34) cis-1,2-Dichloroethene	3.548	96	4599	0.50	ppb		92
36) Propionitrile	3.609	54	1700m	2.39	ppb		
37) Bromochloromethane	3.829	130	3015	0.58	ppb	#	73
38) Methacrylonitrile	3.810	67	1375	0.58	ppb	#	74
39) Tetrahydrofuran	3.932	42	1275	0.72	ppb		97
40) Chloroform	3.938	83	8290	0.55	ppb		93

KR 3/13/14

W031214.M Thu Mar 13 10:12:06 2014 00288 Page: 1

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) 1,1,1-Trichloroethane	4.207	97	6437	0.50	ppb	#	1
42) TAME	5.036	73	9777	0.46	ppb		89
44) Cyclohexane	4.310	41	4183	0.54	ppb		90
46) Carbontetrachloride	4.463	121	1948m	0.56	ppb		
47) 1,1-Dichloropropene	4.463	75	5496m	0.52	ppb		
49) Benzene	4.780	78	17569m	0.50	ppb		
50) 1,2-Dichloroethane	4.792	62	5674	0.53	ppb		88
52) n-Heptane	5.328	43	4698	0.53	ppb		96
53) 1-Butanol	5.792	56	3060m	22.75	ppb		
54) Trichloroethene	5.828	130	4205m	0.49	ppb		
55) Methylcyclohexane	6.109	55	5031	0.55	ppb		94
56) 1,2-Diclpropane	6.121	63	4824	0.53	ppb		74
57) Dibromomethane	6.261	93	2191	0.51	ppb	#	84
59) Methyl Methacrylate	6.340	69	2120m	0.50	ppb		
60) Bromodichloromethane	6.474	83	5069	0.48	ppb		92
62) 2-Chloroethylvinyl Ether	6.889	63	1661m	0.41	ppb		
63) cis-1,3-Dichloropropene	7.029	75	6038	0.48	ppb		88
66) Toluene	7.395	91	17343	0.47	ppb		88
67) trans-1,3-Dichloropropene	7.639	75	4234	0.42	ppb	#	48
68) Ethyl Methacrylate	7.779	69	3186	0.39	ppb		99
69) 1,1,2-Trichloroethane	7.810	97	3438	0.54	ppb		91
72) Tetrachloroethene	7.962	164	3868	0.58	ppb		88
74) 1,3-Dichloropropane	7.974	76	5753	0.49	ppb		90
75) Dibromochloromethane	8.188	129	2817	0.42	ppb		89
76) N-Butyl Acetate	8.255	43	3648m	0.40	ppb		
77) 1,2-Dibromoethane	8.291	107	2743	0.46	ppb		94
78) Chlorobenzene	8.773	112	11641	0.52	ppb		92
79) 3-CBTF	8.785	180	6381	0.57	ppb	#	93
80) 4-CBTF	8.840	180	5394	0.54	ppb		89
81) 1,1,1,2-Tetrachloroethane	8.852	131	3861	0.49	ppb		97
82) Ethylbenzene	8.889	106	5801	0.48	ppb		91
83) (m+p)Xylene	8.998	106	13282	0.94	ppb		98
84) o-Xylene	9.346	106	6627	0.46	ppb	#	70
85) Styrene	9.358	104	10222	0.44	ppb		98
87) Bromoform	9.498	173	1355	0.39	ppb		78
88) 2-CBTF	9.578	180	5578	0.55	ppb	#	90
89) Isopropylbenzene	9.675	105	15336	0.48	ppb		98
90) Cyclohexanone	9.724	55	4820	9.81	ppb		81
91) trans-1,4-Dichloro-2-B...	9.962	53	719	0.44	ppb	#	58
92) 1,1,2,2-Tetrachloroethane	9.913	83	3480	0.50	ppb		84
93) Bromobenzene	9.913	156	4370	0.48	ppb		93
94) 1,2,3-Trichloropropane	9.943	110	977	0.47	ppb	#	55
95) n-Propylbenzene	10.023	91	18398	0.50	ppb		95
96) 2-Chlorotoluene	10.084	91	11329	0.49	ppb		92
97) 3-Chlorotoluene	10.132	91	12265	0.51	ppb		98
98) 4-Chlorotoluene	10.175	91	12083	0.44	ppb		91
99) 1,3,5-Trimethylbenzene	10.169	105	11958	0.46	ppb		96
100) tert-Butylbenzene	10.443	119	10646	0.49	ppb		98
101) 1,2,4-Trimethylbenzene	10.480	105	11976	0.45	ppb		81
102) 3,4-DCBTF	10.535	214	4021	0.53	ppb	#	89
103) sec-Butylbenzene	10.620	105	14277	0.47	ppb		96
104) p-Isopropyltoluene	10.742	119	11898	0.47	ppb		78

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

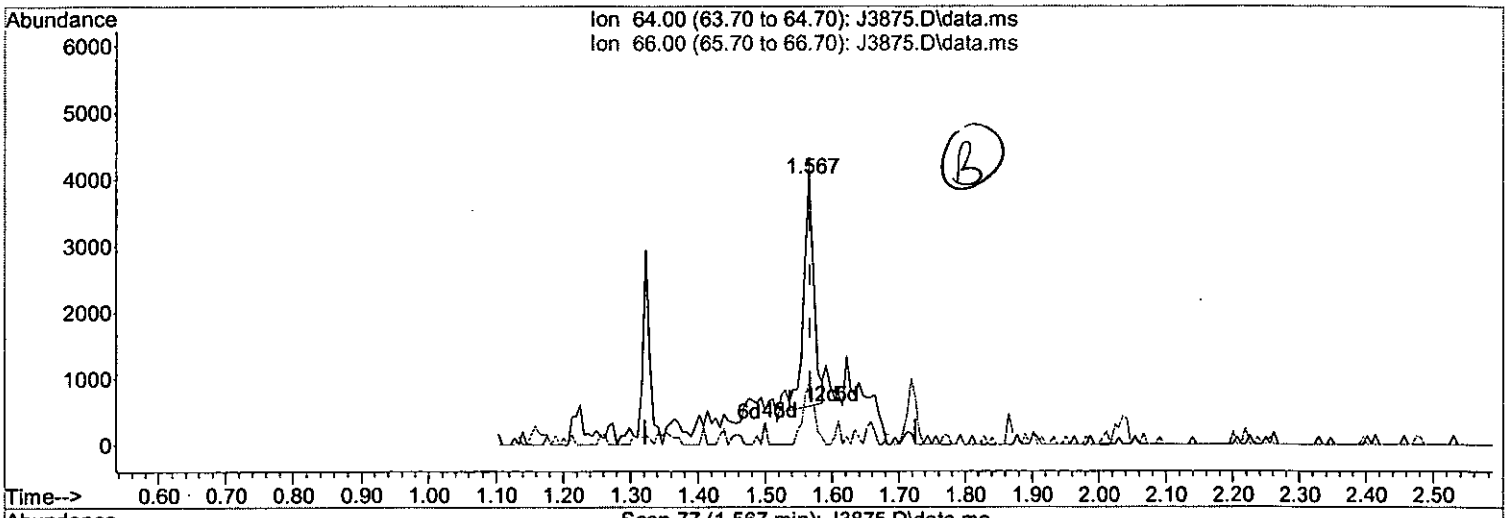
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
105) 1,3-Dclbenz	10.699	146	7301	0.48	ppb		80
106) 1,4-Dclbenz	10.766	146	9668	0.59	ppb		95
107) 2,4-DCBTF	10.821	214	3132	0.48	ppb	#	74
108) 2,5-DCBTF	10.864	214	3505	0.47	ppb		90
109) n-Butylbenzene	11.071	91	10369	0.45	ppb		96
110) 1,2-Dclbenz	11.065	146	7143	0.48	ppb		99
111) 1,2-Dibromo-3-chloropr...	11.626	157	705	0.66	ppb	#	83
112) Trielution Dichlorotol...	11.736	125	17965	1.54	ppb		99
113) 1,3,5 Trichlorobenzene	11.778	180	5167	0.51	ppb		95
114) Coelution Dichlorotoluene	11.998	125	11240	0.91	ppb		97
115) 1,2,4-Tcbenzene	12.162	180	5139	0.57	ppb		96
116) Hexachlorobt	12.266	225	2074	0.53	ppb		95
117) Naphthalen	12.303	128	7858	0.48	ppb		93
118) 1,2,3-Tclbenzene	12.443	180	4364	0.59	ppb		80
119) 2,4,5-Trichlorotolene	12.851	159	2375m	0.49	ppb		
120) 2,3,6-Trichlorotoluene	12.912	159	2541	0.57	ppb	#	87

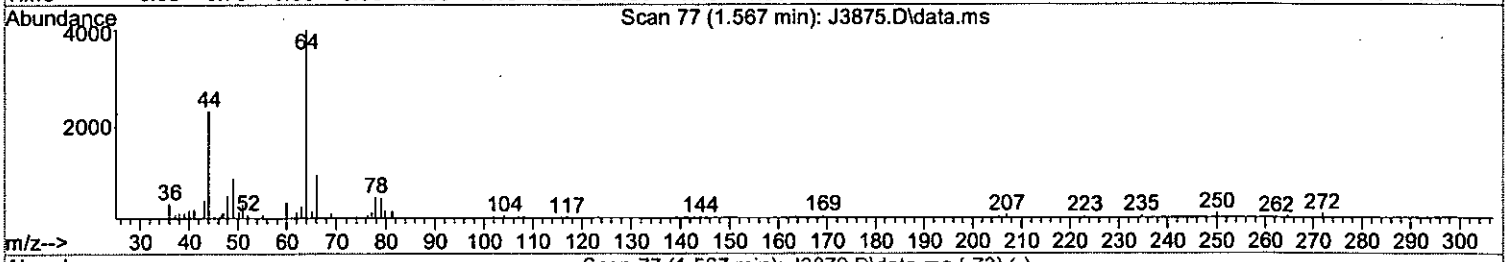
(#) = qualifier out of range (m) = manual integration (+) = signals summed

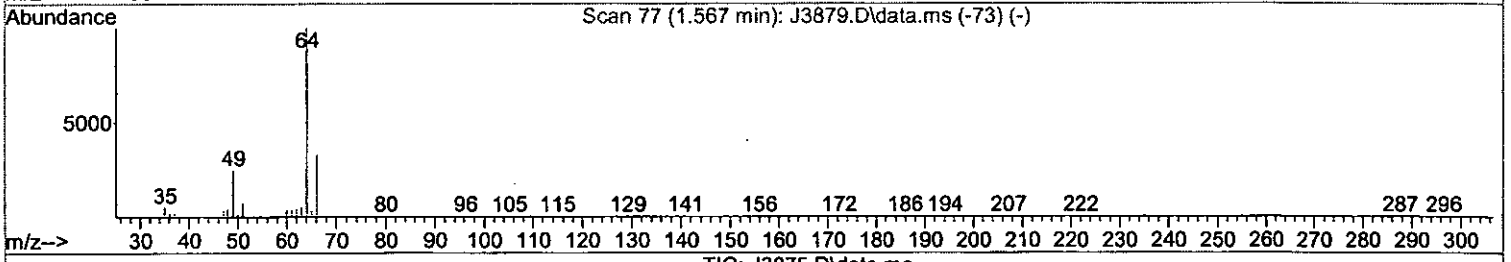
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(6) Chloroethane (P)

1.567min (+0.000) 0.66 ppb

response 3602

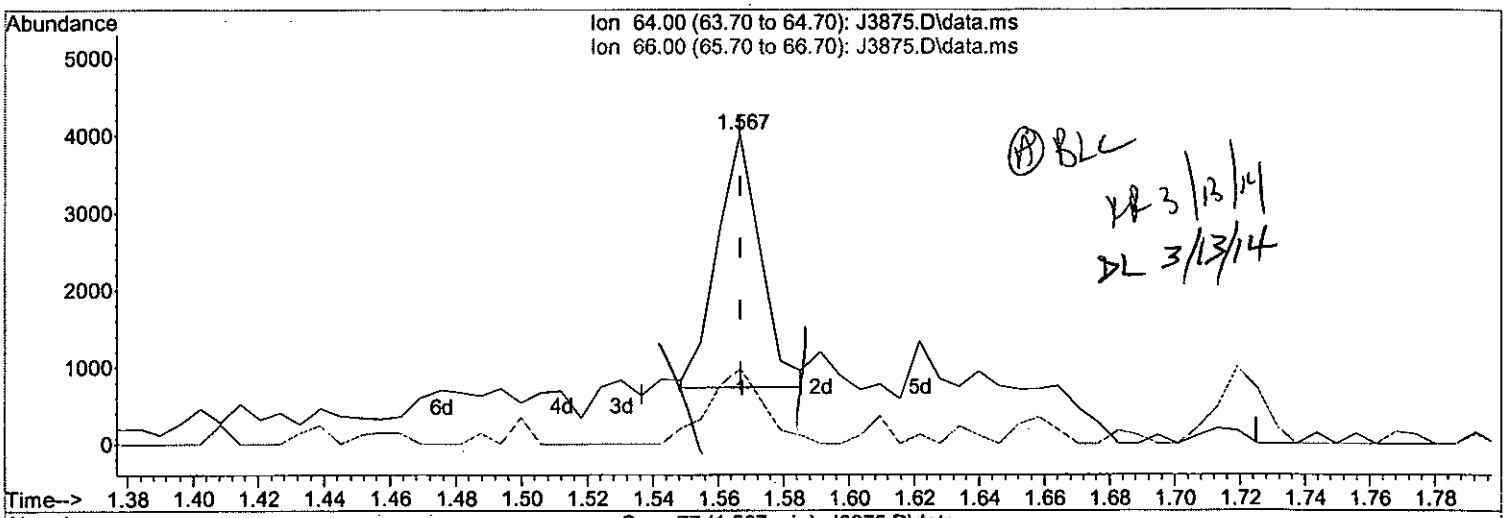
Ion	Exp%	Act%
64.00	100	100
66.00	32.20	24.20
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:04:32 2014 Page: 1

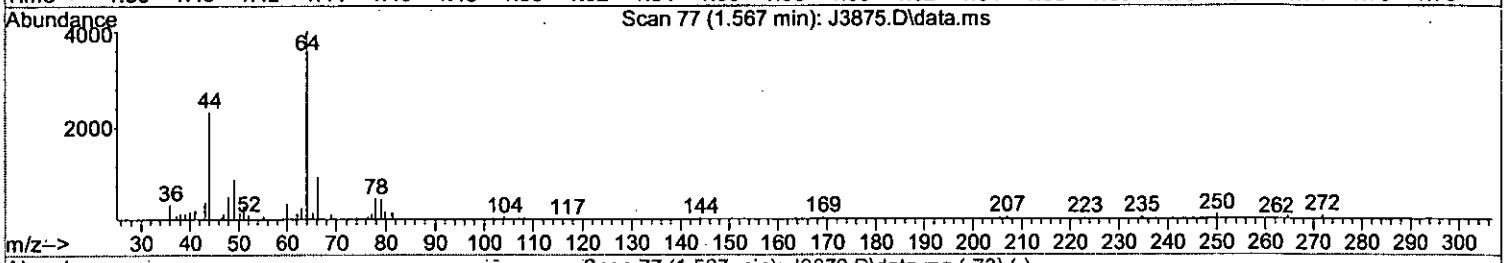
Quantitation Report (Qedit)

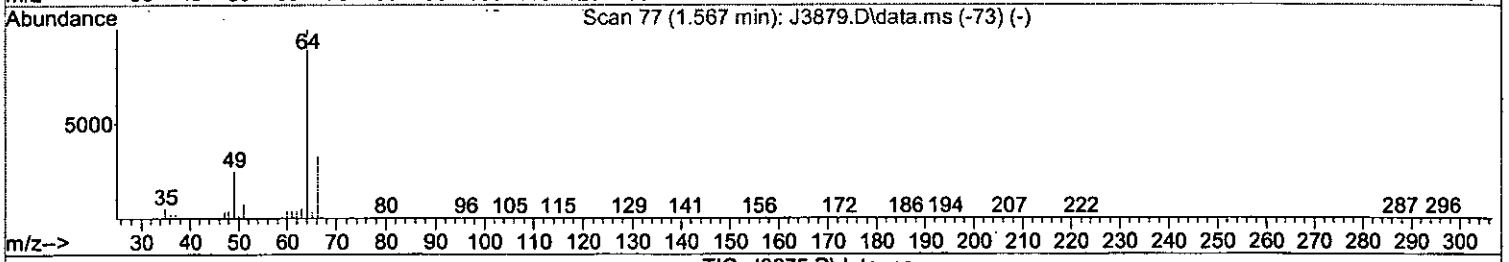
Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



BLC 3/13/14
DL 3/13/14





TIC: J3875.D\data.ms

(6) Chloroethane (P)

1.567min (+0.000) 0.56 ppb m

response 3048

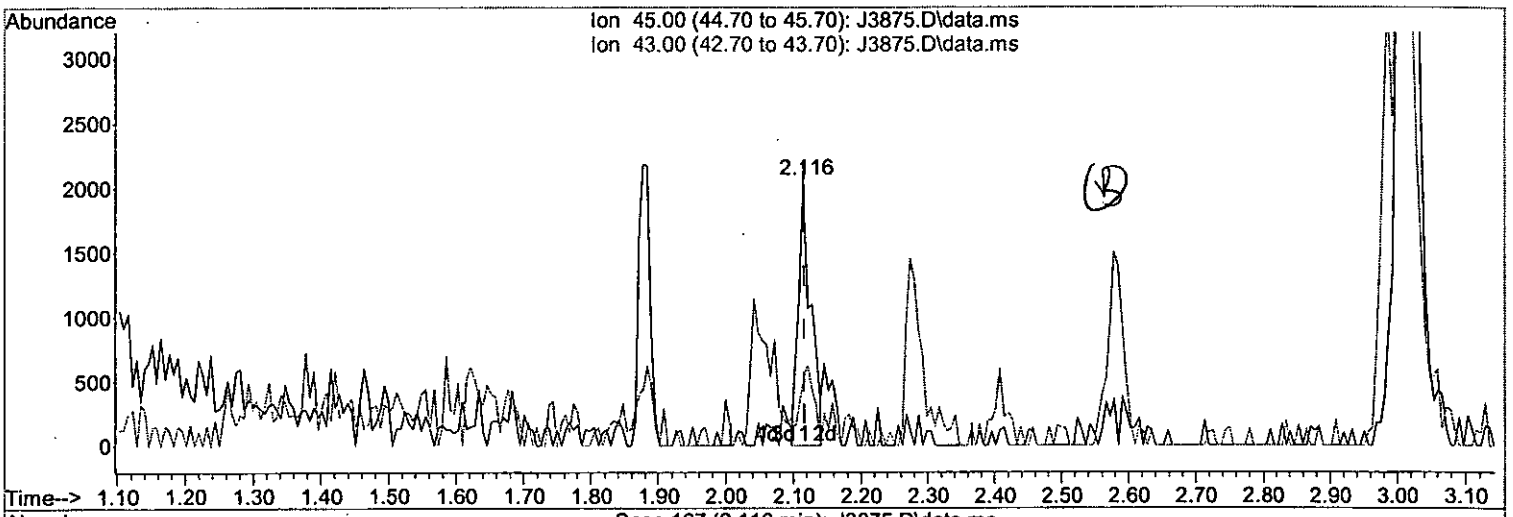
Ion	Exp%	Act%
64.00	100	100
66.00	32.20	24.20
0.00	0.00	0.00
0.00	0.00	0.00

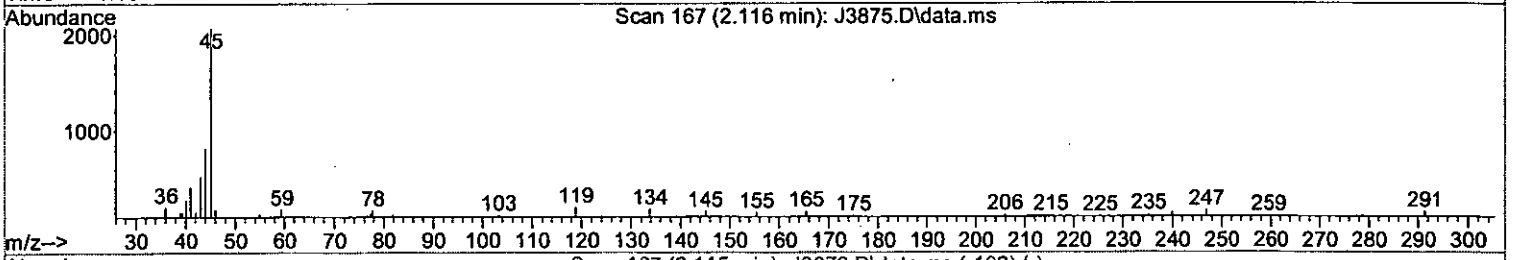
W031214.M Thu Mar 13 10:04:50 2014 Page: 1

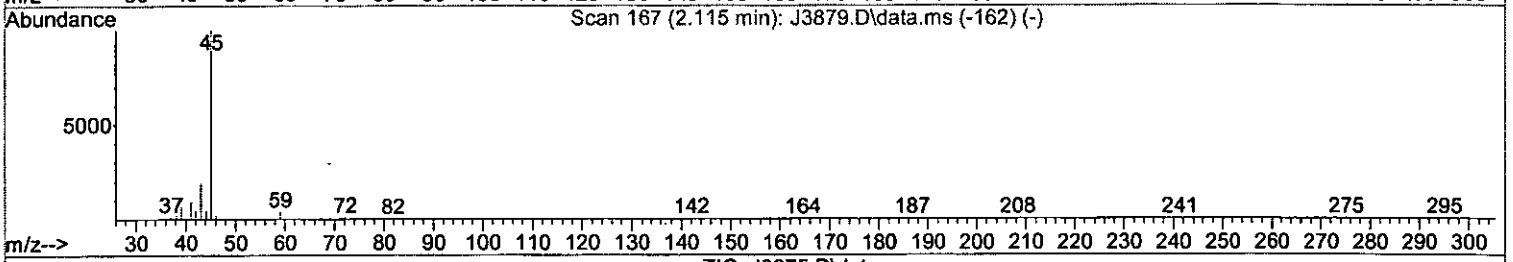
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(16) 2-Propanol

2.116min (+0.000) 8.89 ppb

response 2651

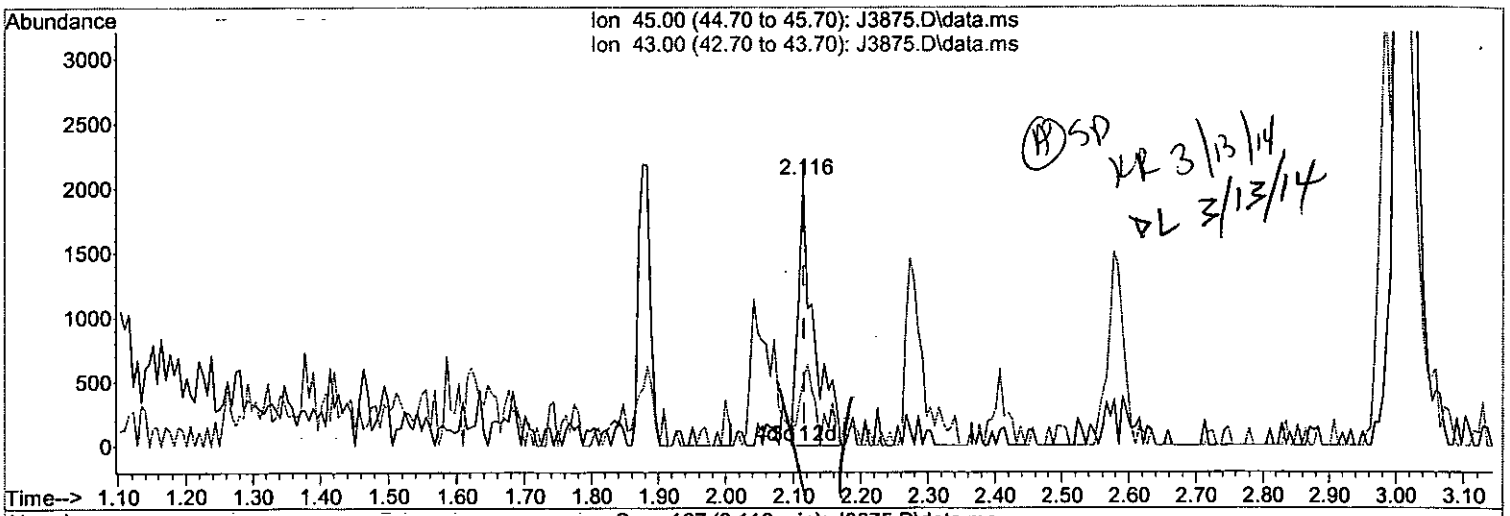
Ion	Exp%	Act%
45.00	100	100
43.00	21.30	25.30
0.00	0.00	0.00
0.00	0.00	0.00

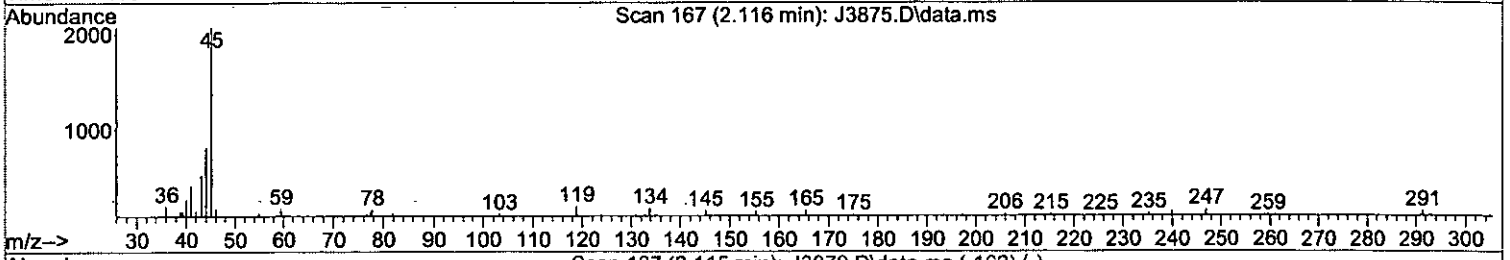
W031214.M Thu Mar 13 10:05:14 2014 Page: 1

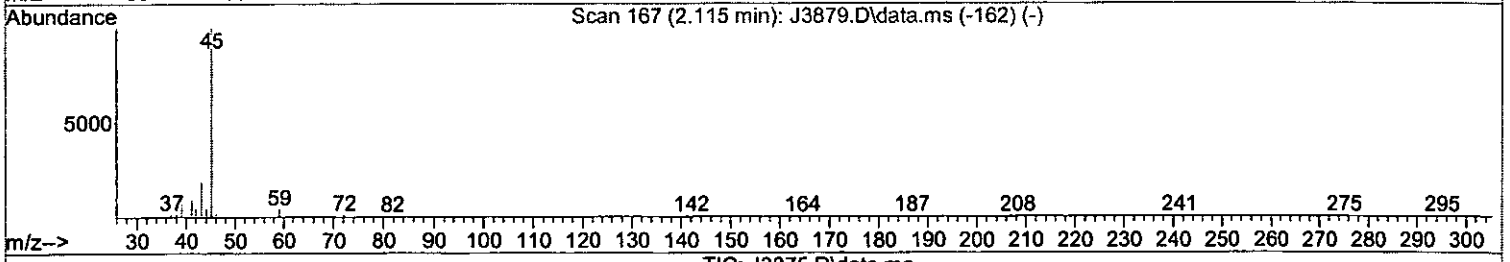
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(16) 2-Propanol

2.116min (+0.000) 11.20 ppb m

response 3340

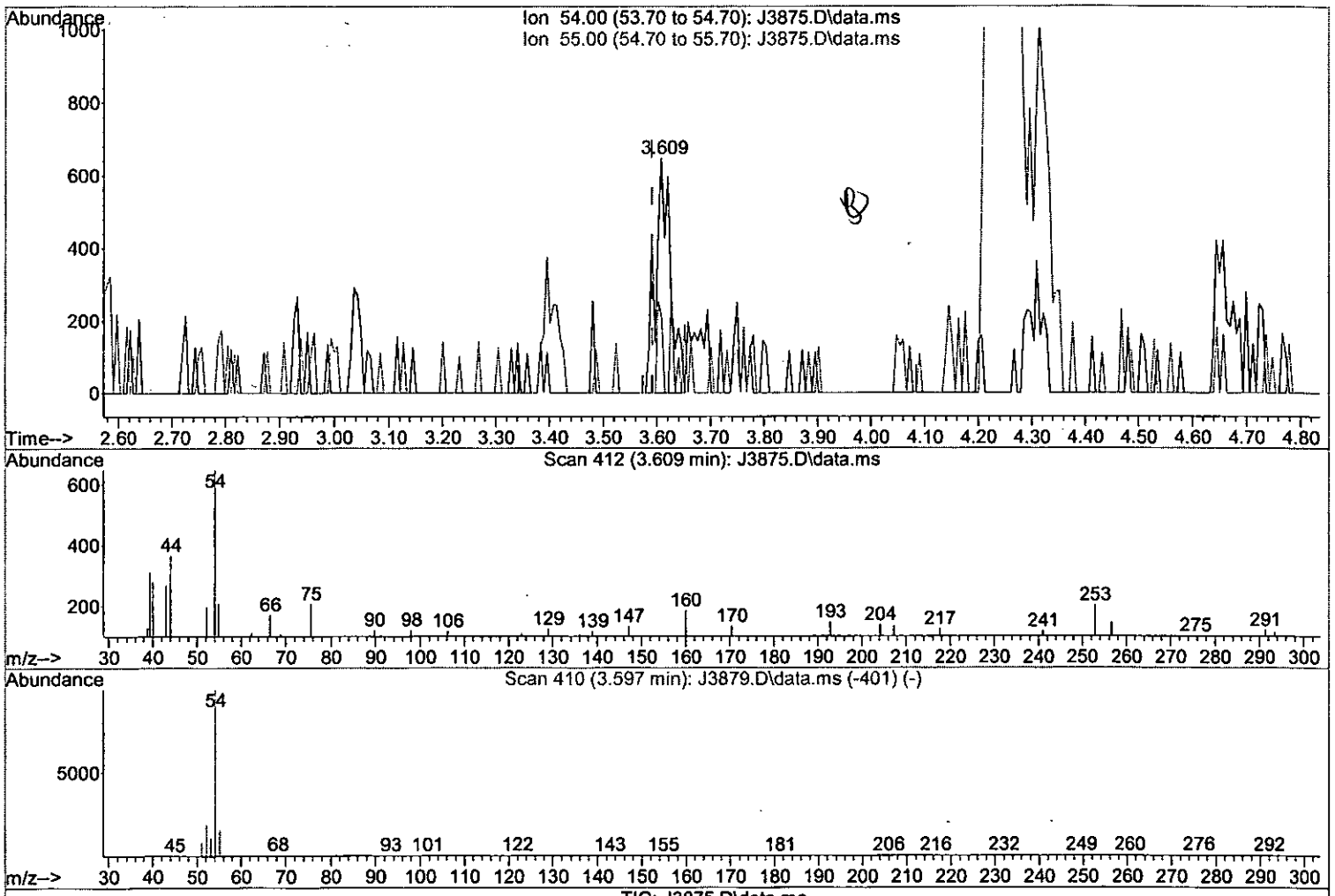
Ion	Exp%	Act%
45.00	100	100
43.00	21.30	25.30
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:05:23 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(36) Propionitrile

3.609min (+0.018) 1.79 ppb

response 1271

Ion	Exp%	Act%
54.00	100	100
55.00	16.00	32.10
0.00	0.00	0.00
0.00	0.00	0.00

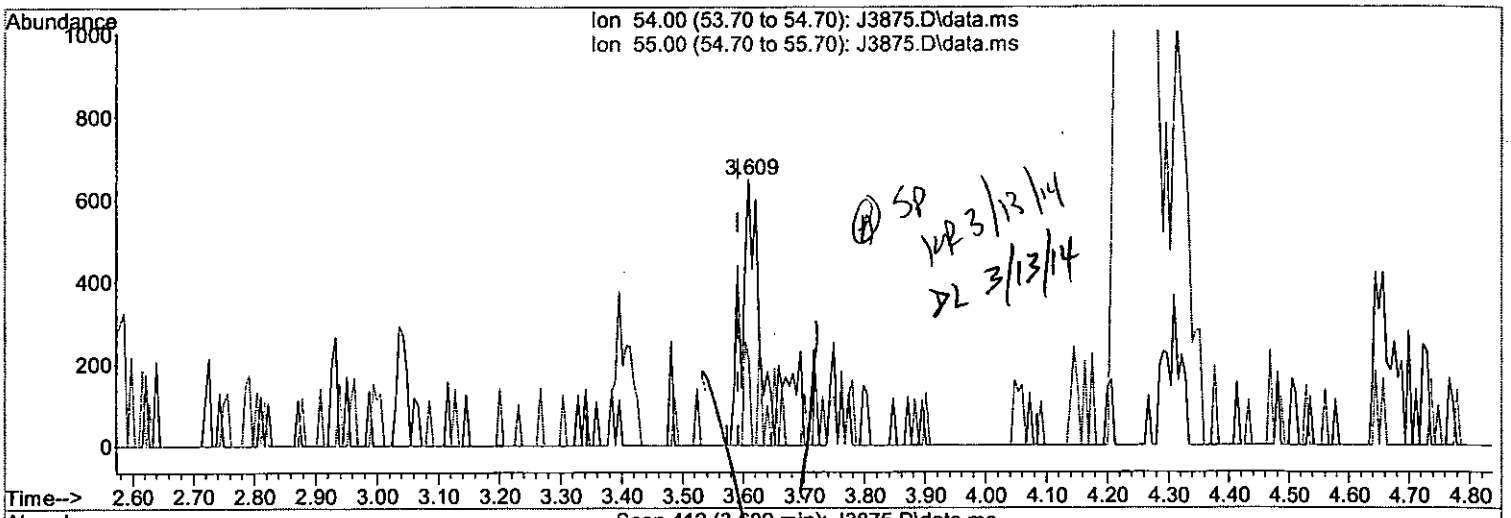
W031214.M Thu Mar 13 10:06:01 2014 Page: 1

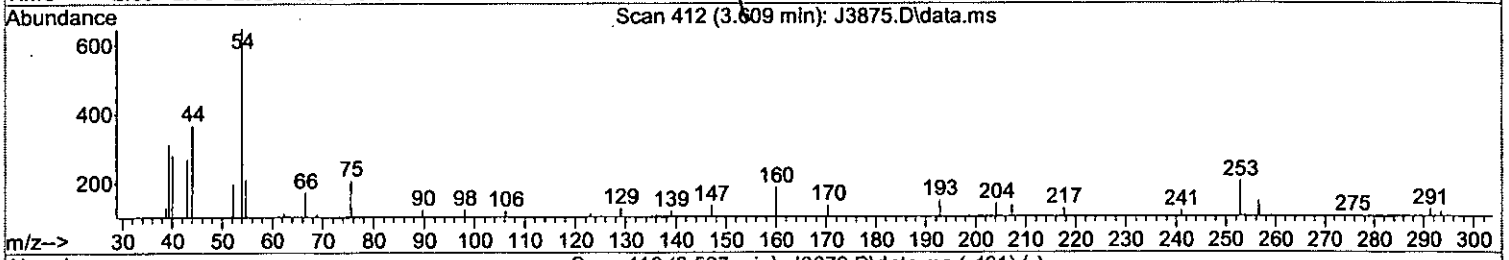
00285

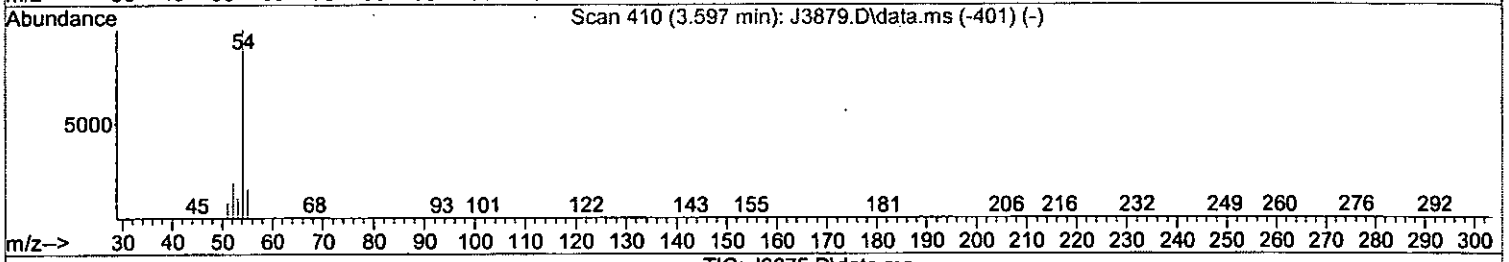
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(36) Propionitrile

3.609min (+0.018) 2.39 ppb m

response 1700

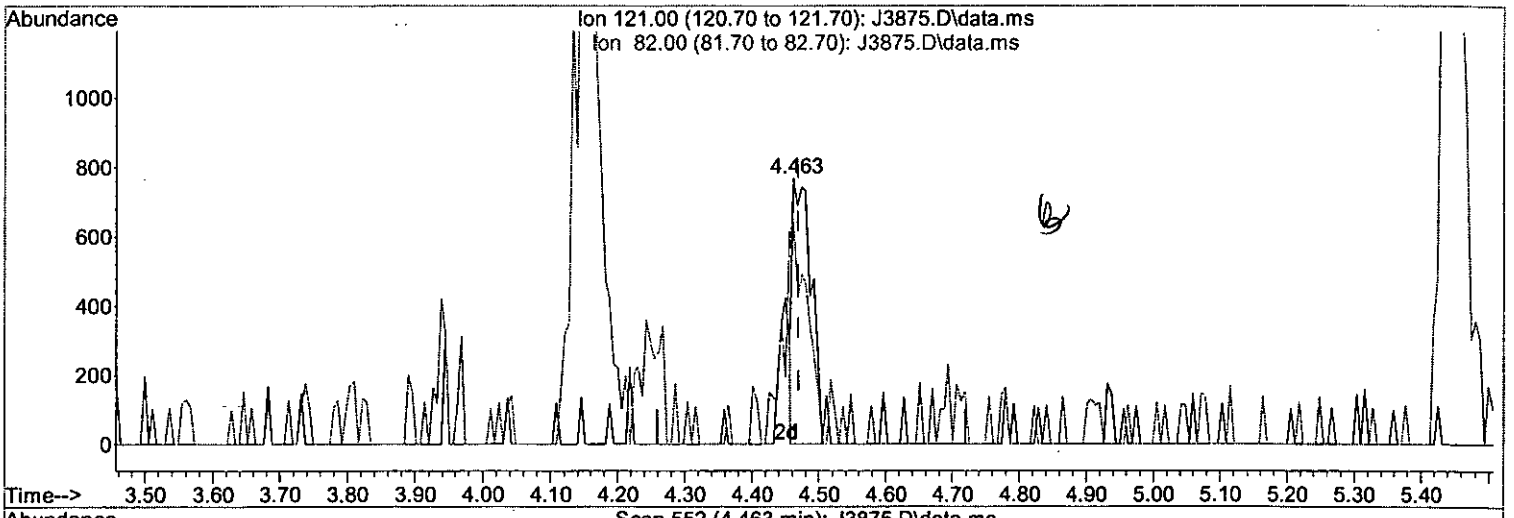
Ion	Exp%	Act%
54.00	100	100
55.00	16.00	32.10
0.00	0.00	0.00
0.00	0.00	0.00

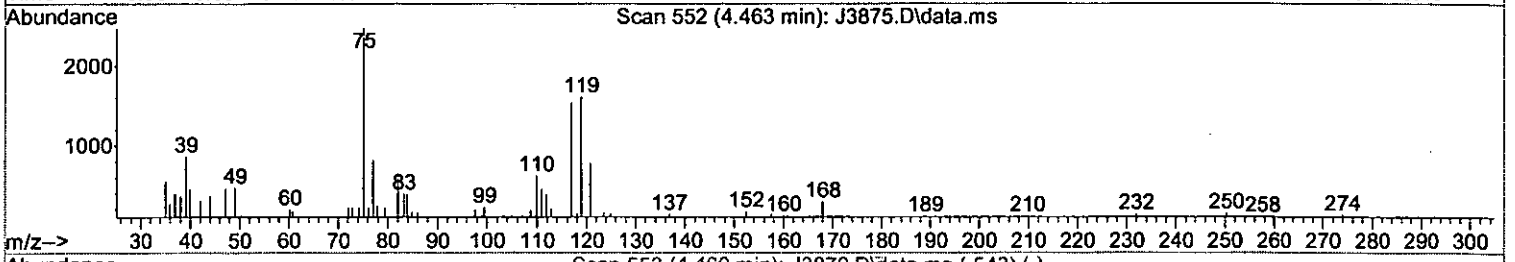
W031214.M Thu Mar 13 10:06:10 2014 Page: 1

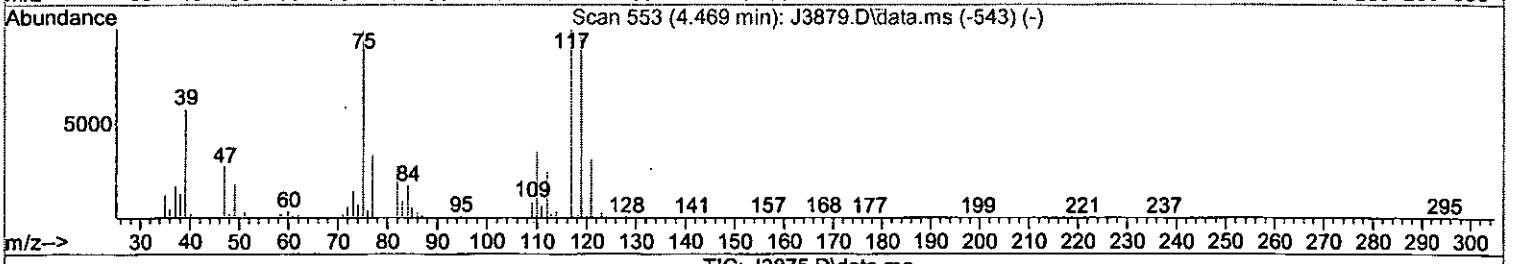
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(46) Carbontetrachloride (P)

4.463min (-0.006) 0.43 ppb

response 1497

Ion	Exp%	Act%
121.00	100	100
82.00	87.50	83.12
0.00	0.00	0.00
0.00	0.00	0.00

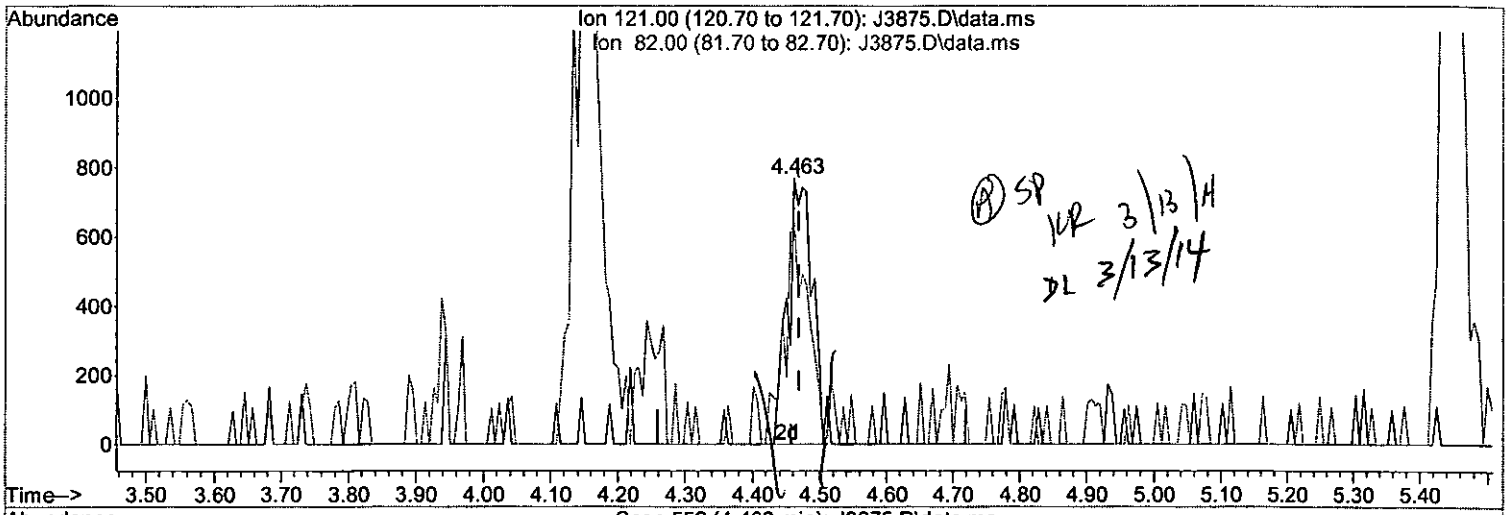
W031214.M Thu Mar 13 10:06:29 2014 Page: 1

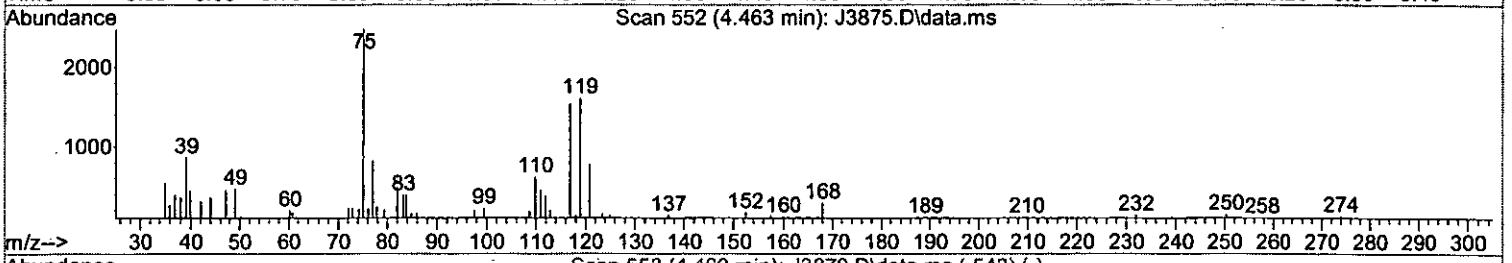
00287

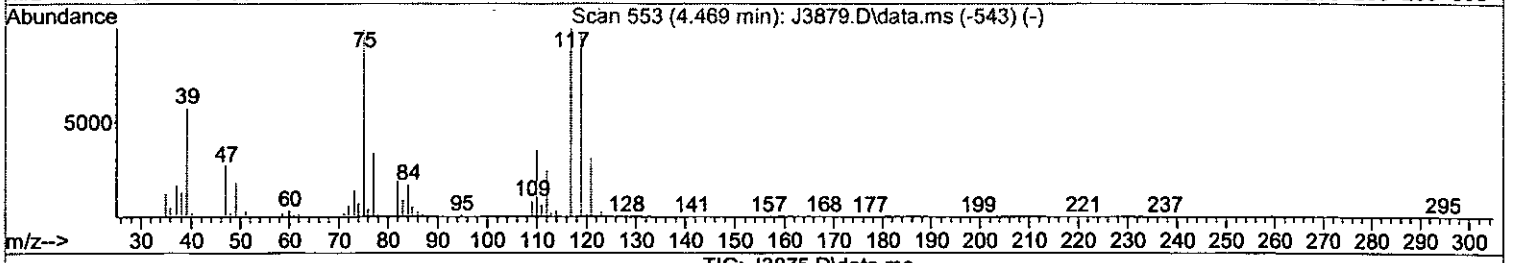
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(46) Carbontetrachloride (P)

4.463min (-0.006) 0.56 ppb m

response 1948

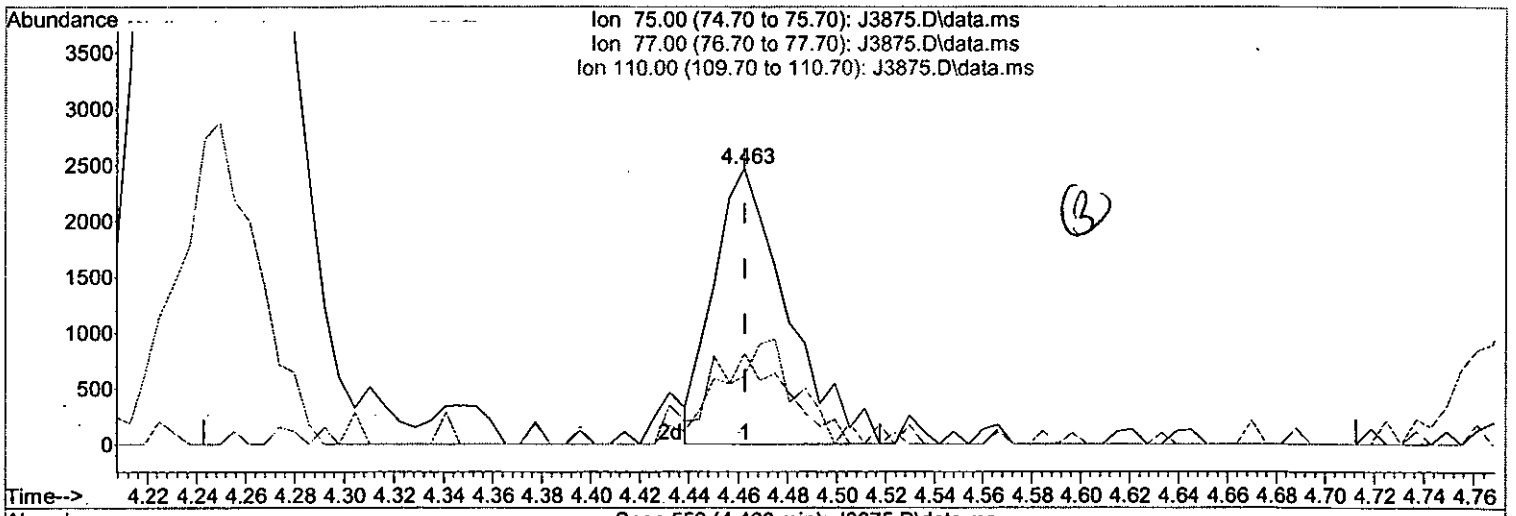
Ion	Exp%	Act%
121.00	100	100
82.00	87.50	83.12
0.00	0.00	0.00
0.00	0.00	0.00

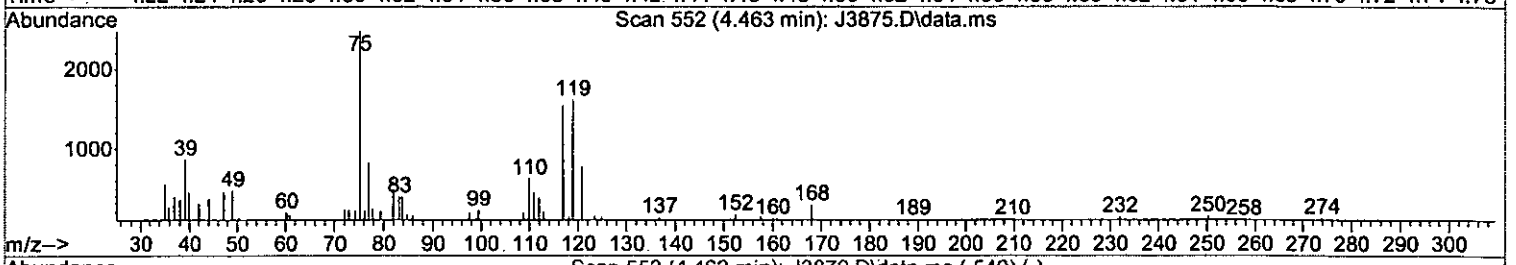
W031214.M Thu Mar 13 10:06:38 2014 Page: 1

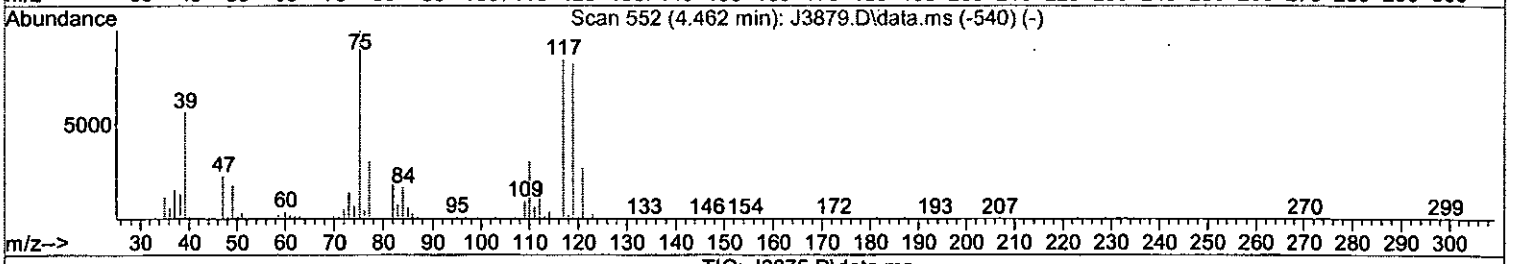
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(47) 1,1-Dichloropropene

4.463min (+0.000) 0.49 ppb

response 5116

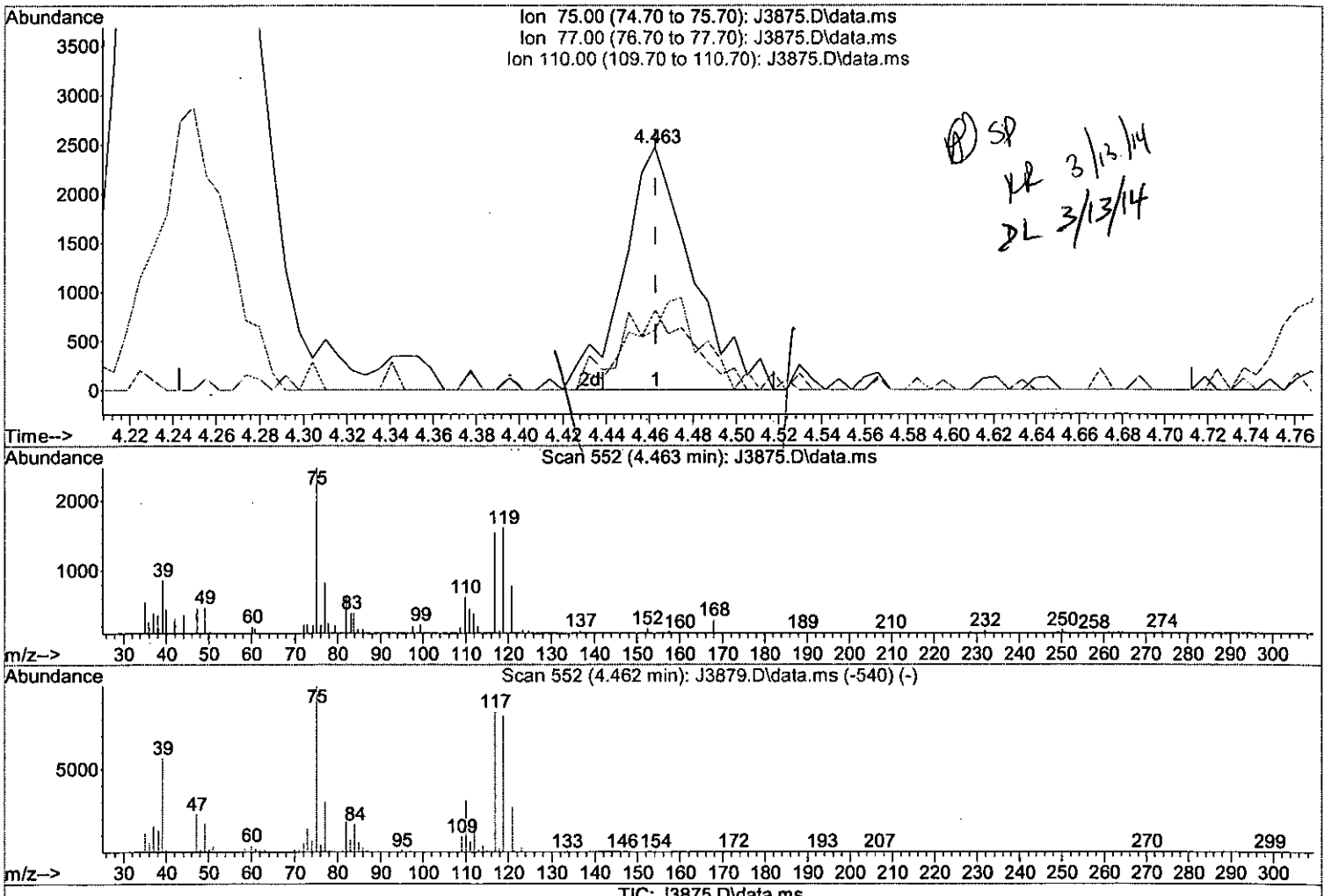
Ion	Exp%	Act%
75.00	100	100
77.00	29.90	32.96
110.00	30.90	24.83
0.00	0.00	0.00

W031214.M Thu Mar 13 10:06:58 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(47) 1,1-Dichloropropene

4.463min (+0.000) 0.52 ppb m

response 5496

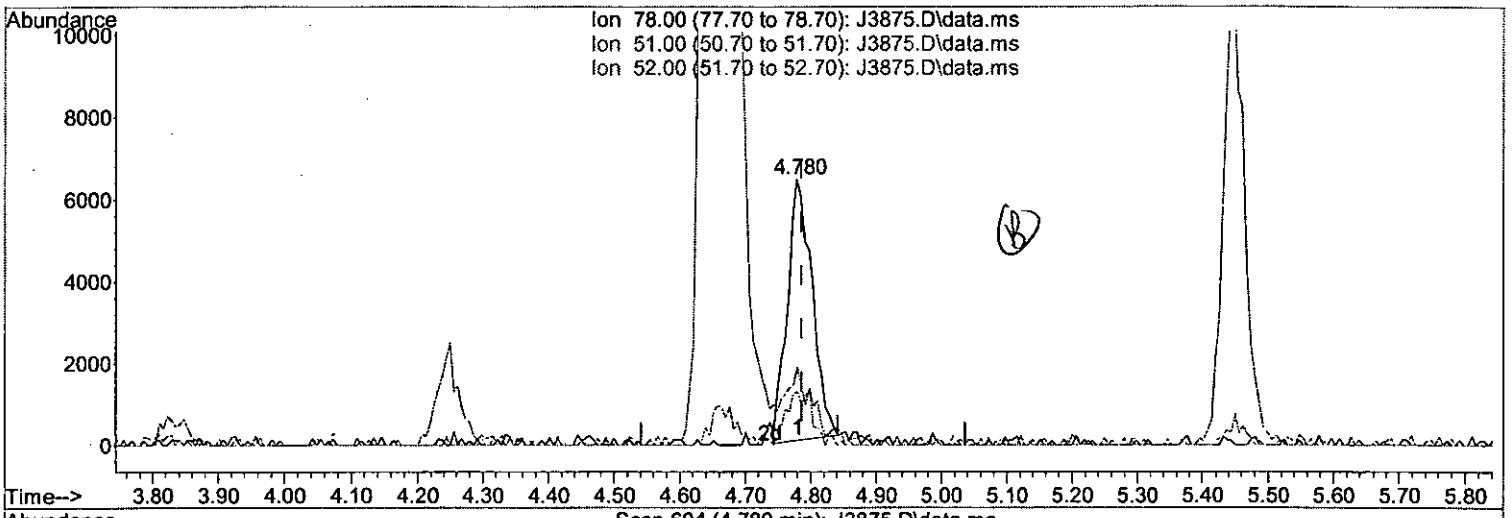
Ion	Exp%	Act%
75.00	100	100
77.00	29.90	32.96
110.00	30.90	24.83
0.00	0.00	0.00

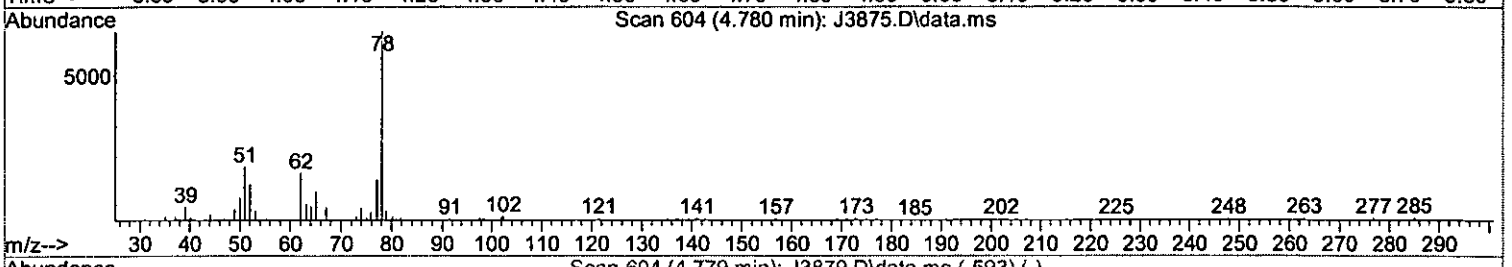
W031214.M Thu Mar 13 10:07:07 2014 Page: 1

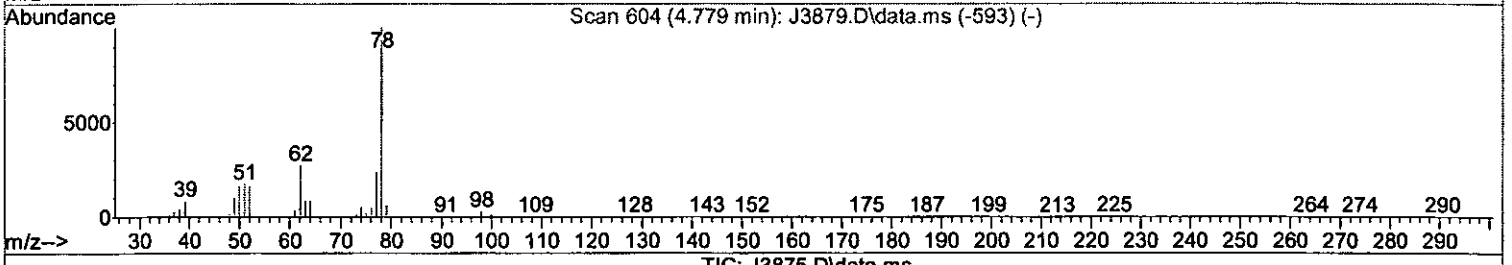
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(49) Benzene (P)

4.780min (-0.006) 0.47 ppb

response 16749

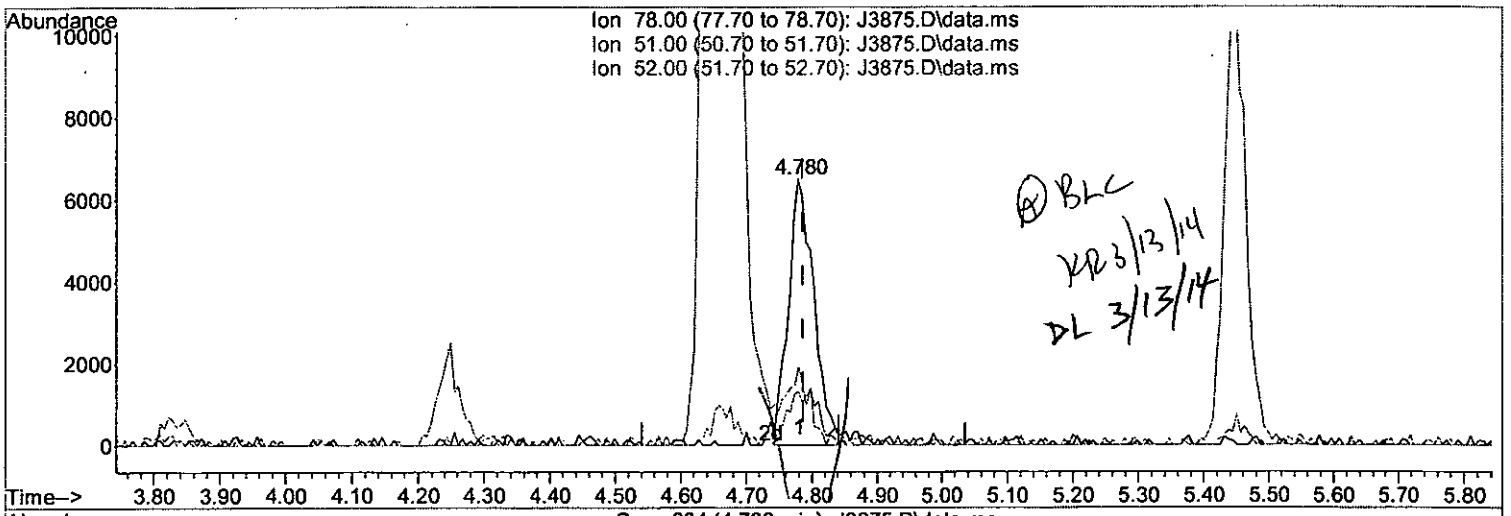
Ion	Exp%	Act%
78.00	100	100
51.00	18.20	29.35
52.00	16.10	20.11
0.00	0.00	0.00

W031214.M Thu Mar 13 10:07:15 2014 Page: 1

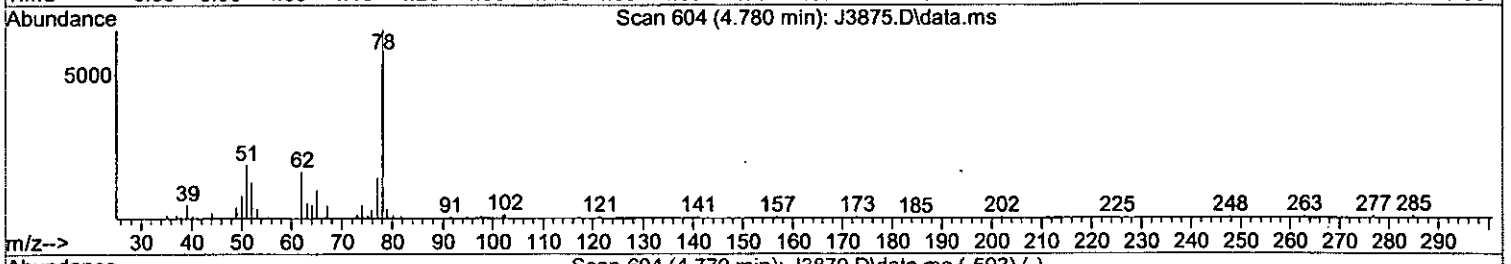
Quantitation Report (Qedit)

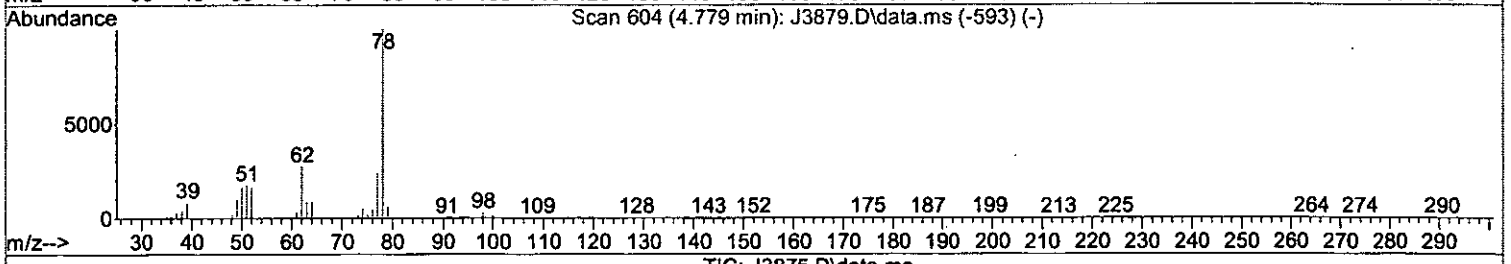
Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



BLC KR 3/13/14 DL 3/13/14





TIC: J3875.D\data.ms

(49) Benzene (P)

4.780min (-0.006) 0.50 ppb m

response 17569

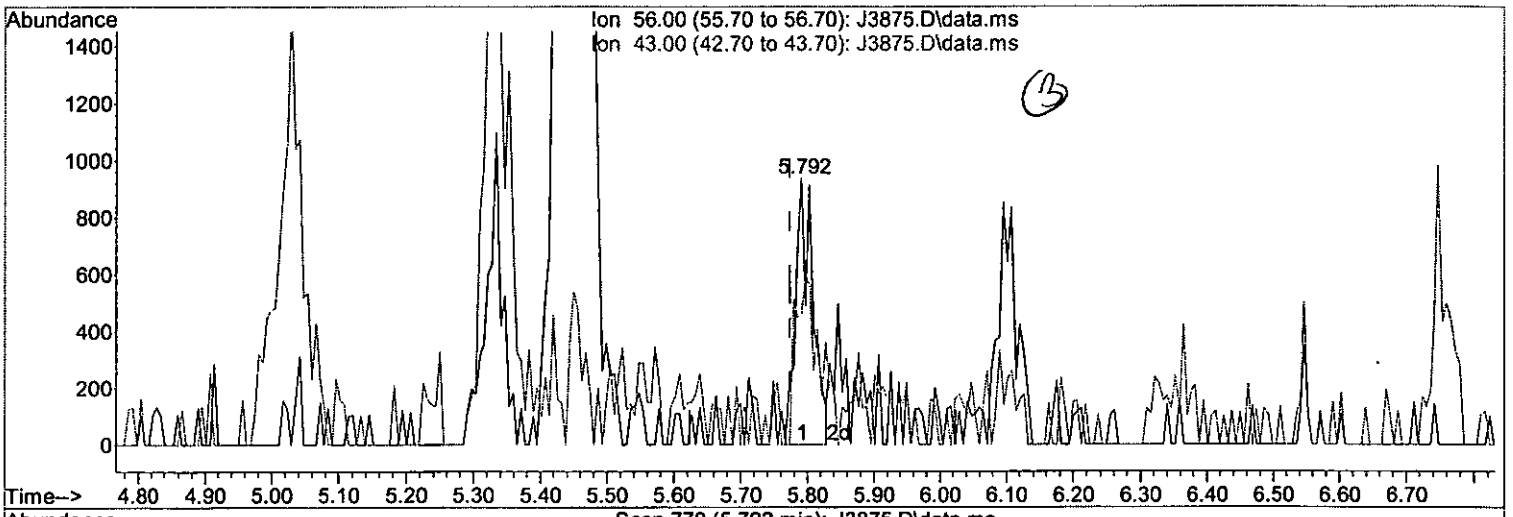
Ion	Exp%	Act%
78.00	100	100
51.00	18.20	29.35
52.00	16.10	20.11
0.00	0.00	0.00

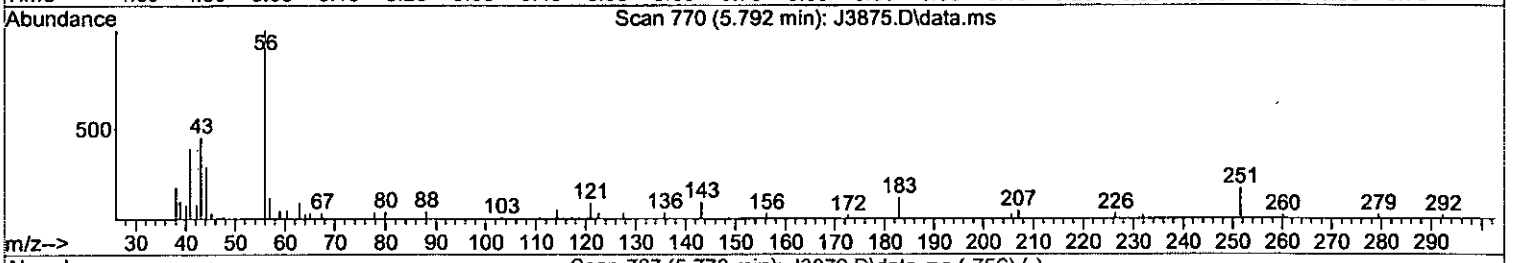
W031214.M Thu Mar 13 10:07:24 2014 Page: 1

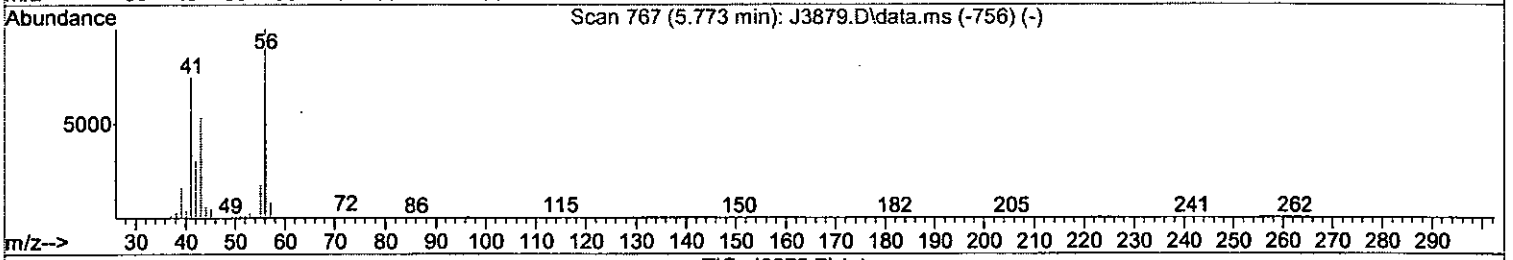
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(53) 1-Butanol

5.792min (+0.018) 12.55 ppb

response 1688

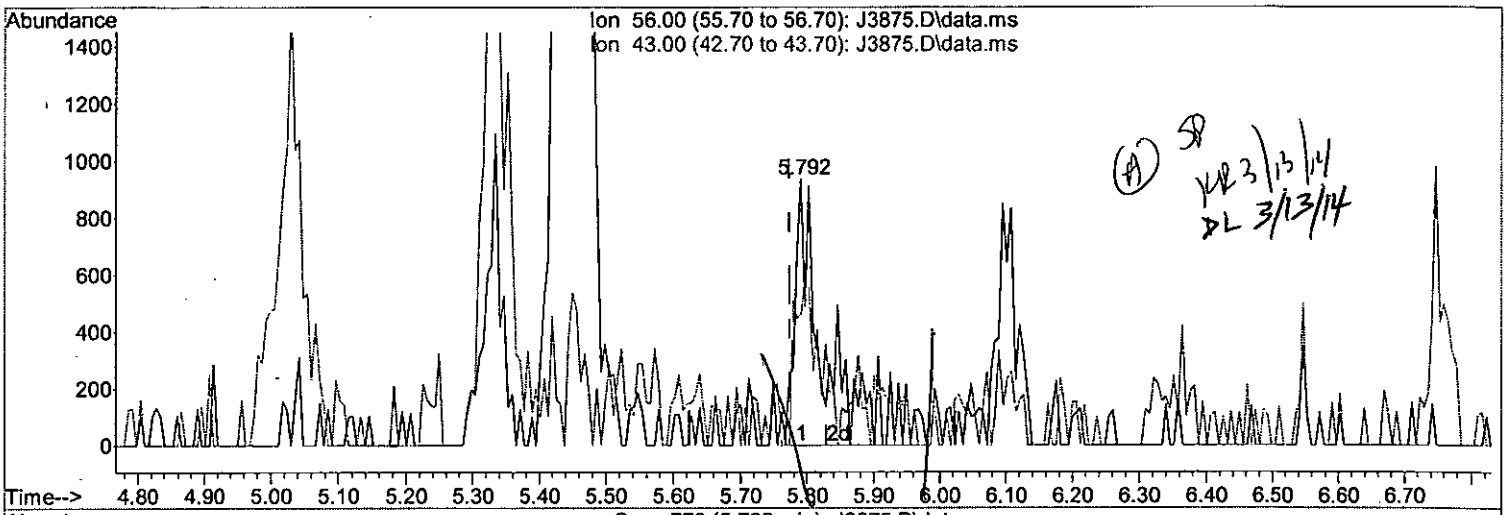
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	90.17#
0.00	0.00	0.00
0.00	0.00	0.00

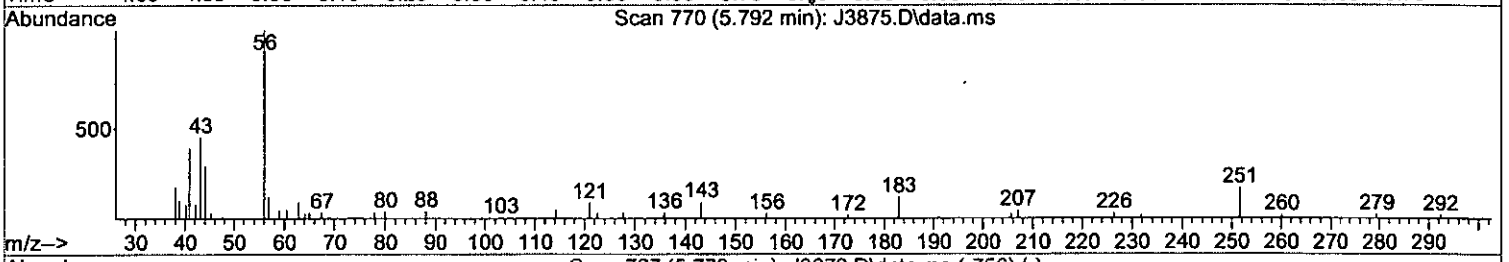
W031214.M Thu Mar 13 10:07:52 2014 00387 Page: 1

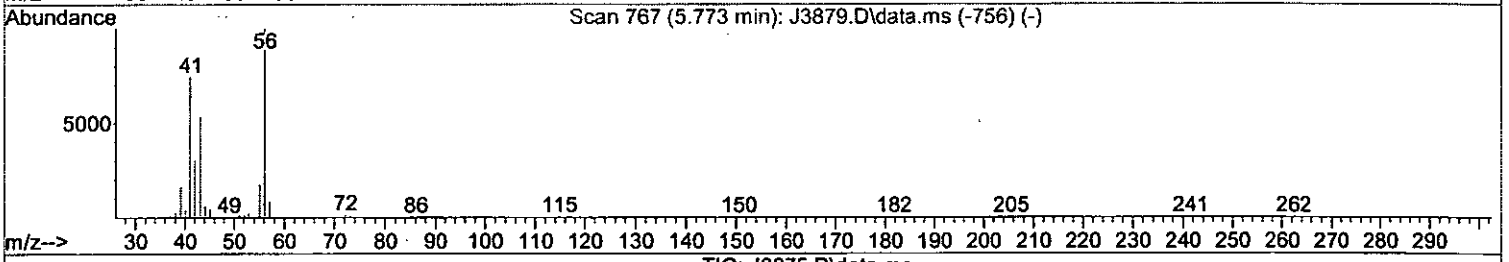
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(53) 1-Butanol

5.792min (+0.018) 22.75 ppb m

response 3060

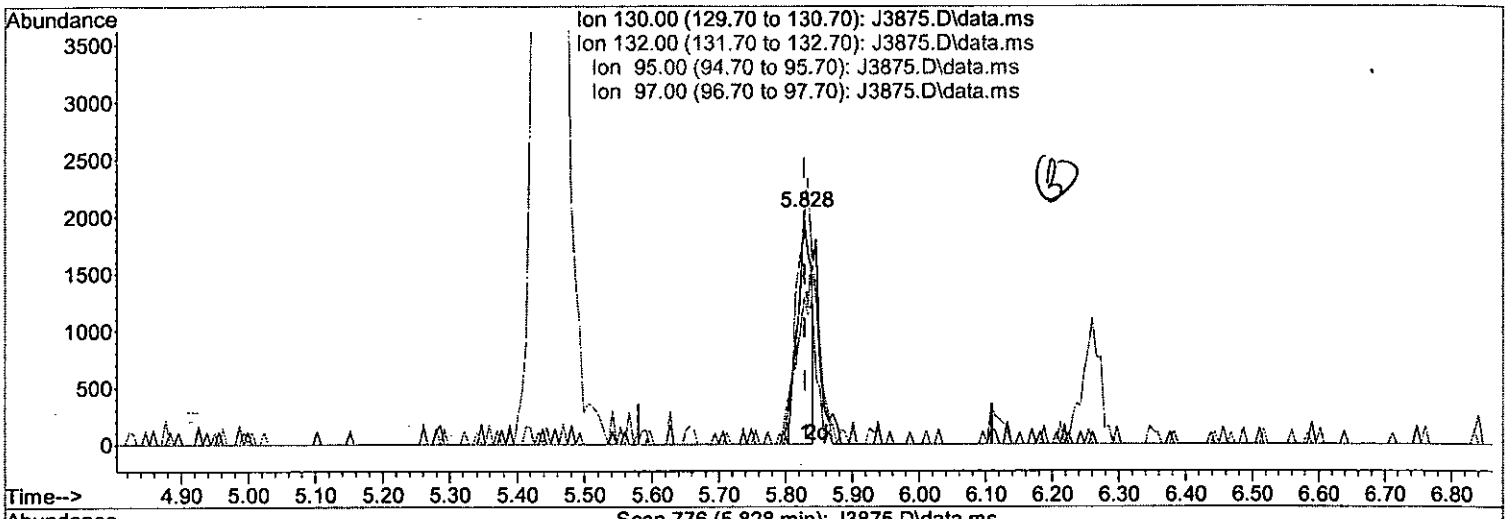
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	49.74
0.00	0.00	0.00
0.00	0.00	0.00

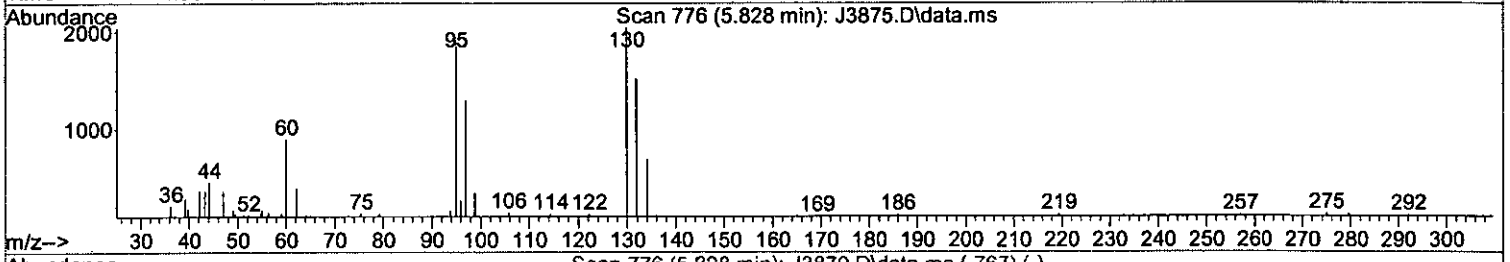
W031214.M Thu Mar 13 10:08:08 2014 Page: 1

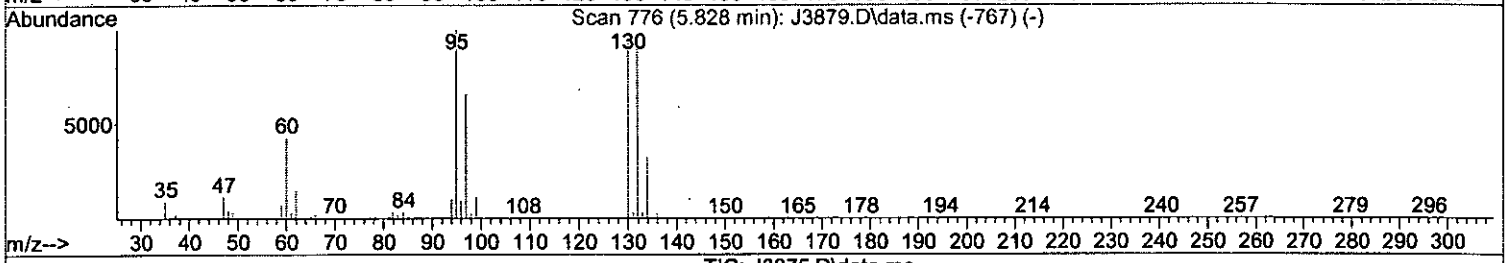
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(54) Trichloroethene (P)

5.828min (+0.000) 0.34 ppb

response 2913

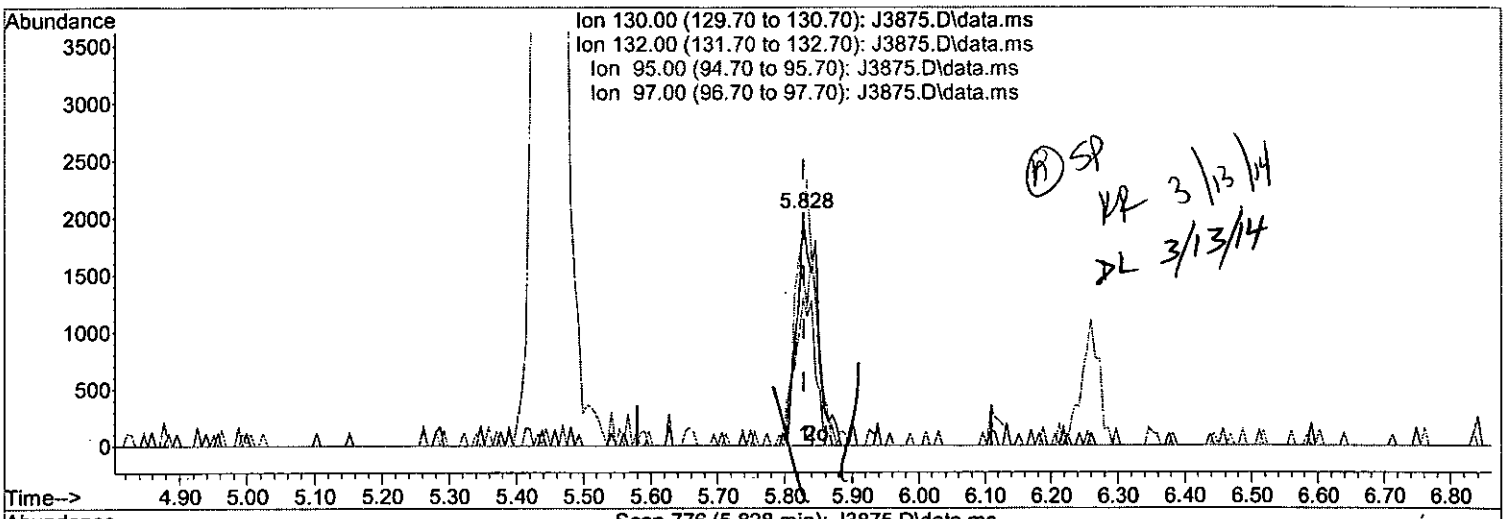
Ion	Exp%	Act%
130.00	100	100
132.00	98.30	74.47#
95.00	103.00	93.24
97.00	67.30	63.20

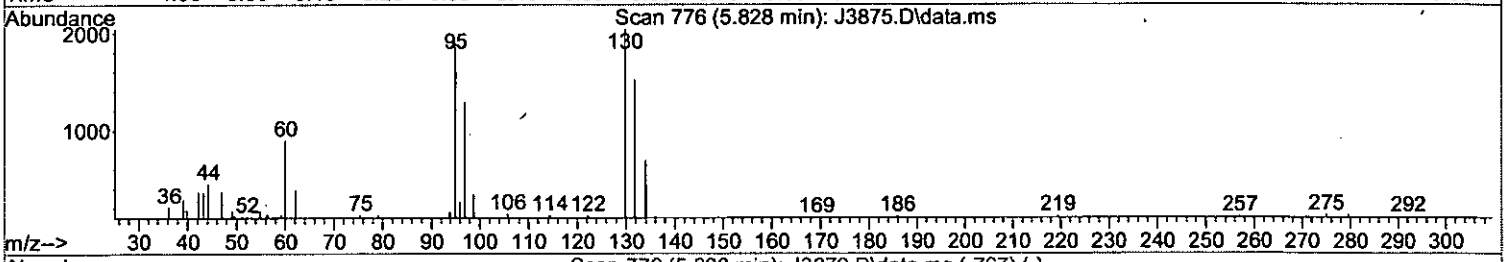
W031214.M Thu Mar 13 10:09:10 2014 00385 Page: 1

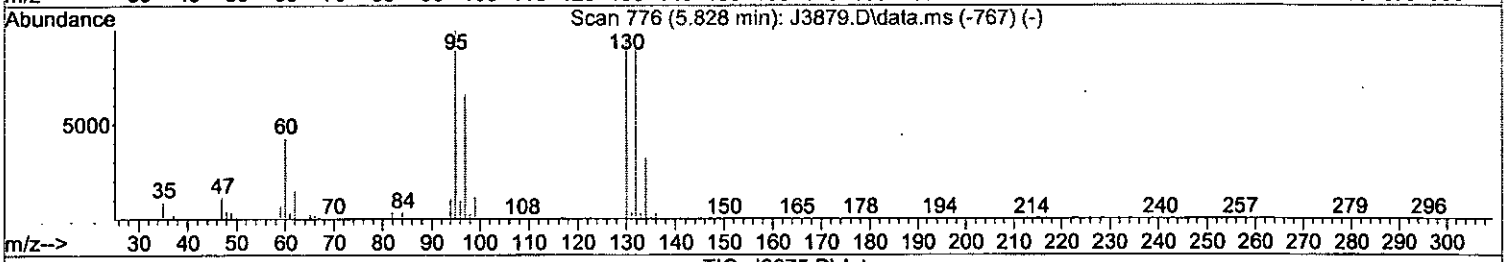
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(54) Trichloroethene (P)

5.828min (+0.000) 0.49 ppb m

response 4205

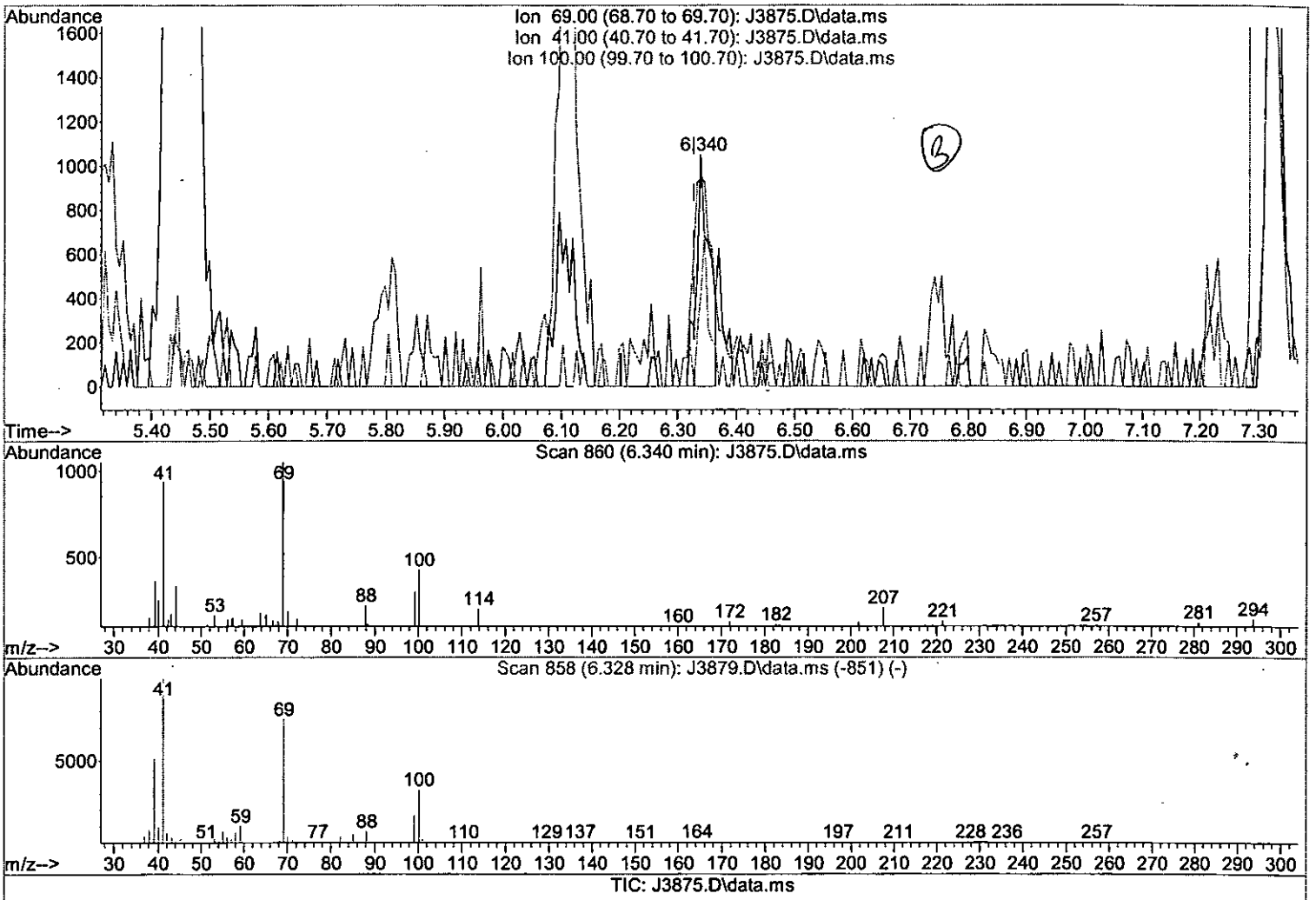
Ion	Exp%	Act%
130.00	100	100
132.00	98.30	74.47#
95.00	103.00	93.24
97.00	67.30	63.20

W031214.M Thu Mar 13 10:09:18 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(59) Methyl Methacrylate

6.340min (+0.012) 0.38 ppb

response 1630

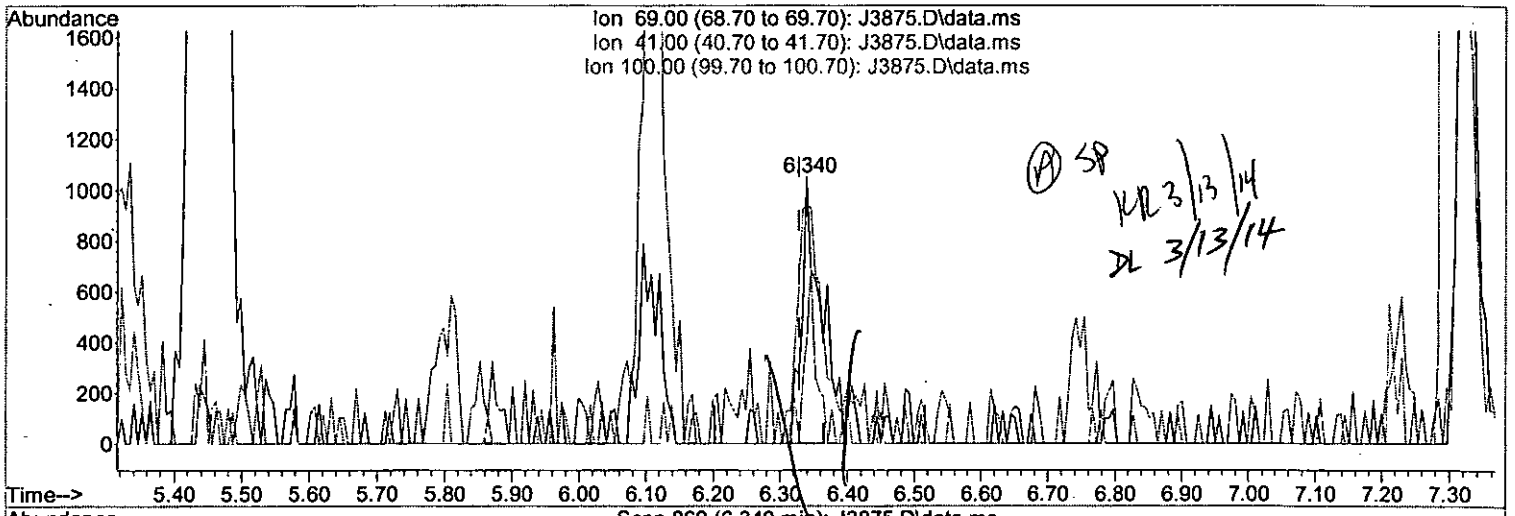
Ion	Exp%	Act%
69.00	100	100
41.00	134.40	89.33#
100.00	42.90	40.48
0.00	0.00	0.00

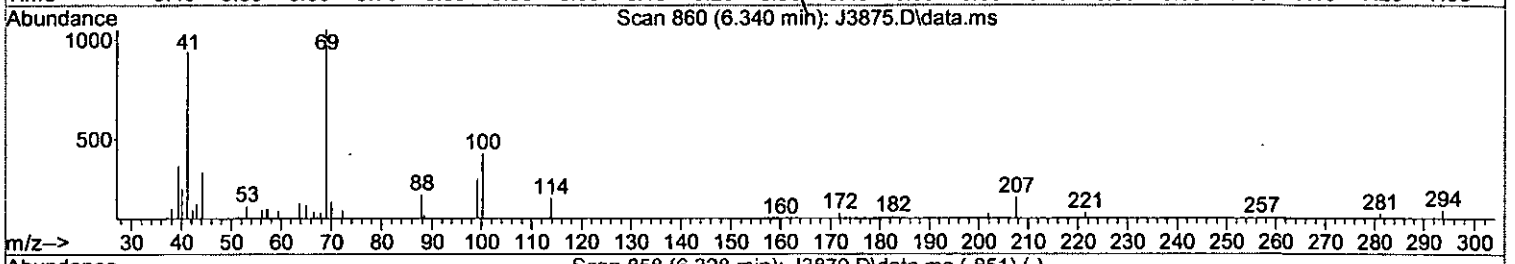
W031214.M Thu Mar 13 10:09:46 2014 Page: 1

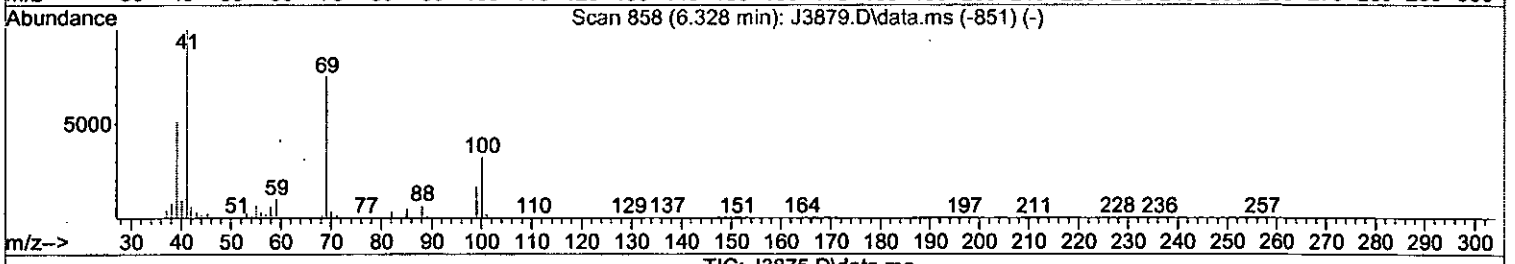
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(59) Methyl Methacrylate

6.340min (+0.012) 0.50 ppb m

response 2120

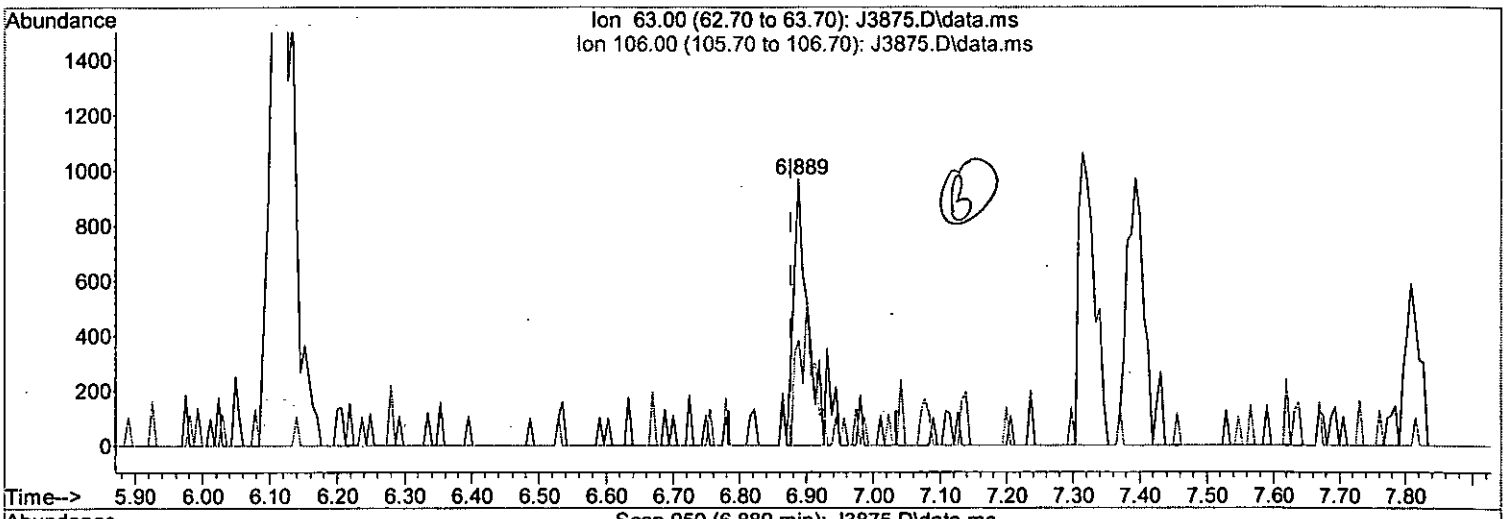
Ion	Exp%	Act%
69.00	100	100
41.00	134.40	89.33#
100.00	42.90	40.48
0.00	0.00	0.00

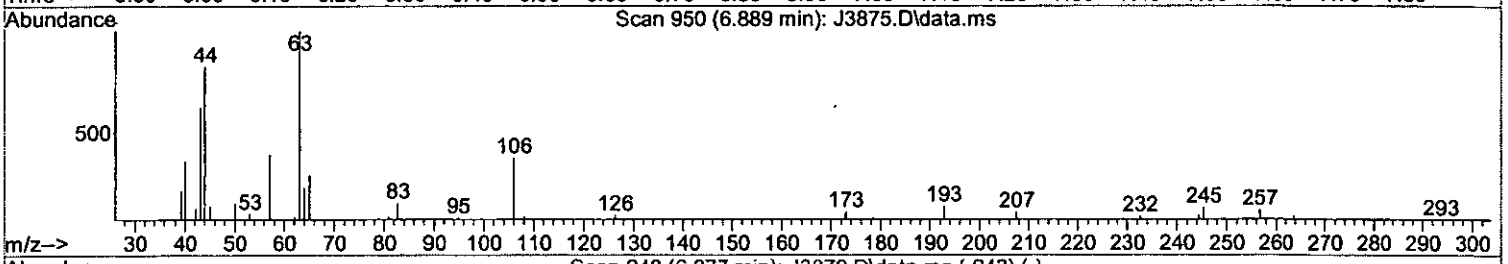
W031214.M Thu Mar 13 10:09:55 2014 Page: 1

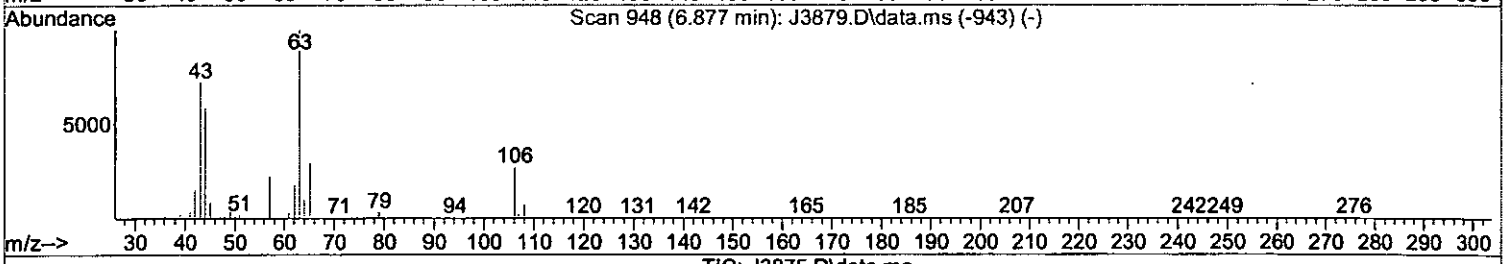
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.889min (+0.012) 0.35 ppb

response 1414

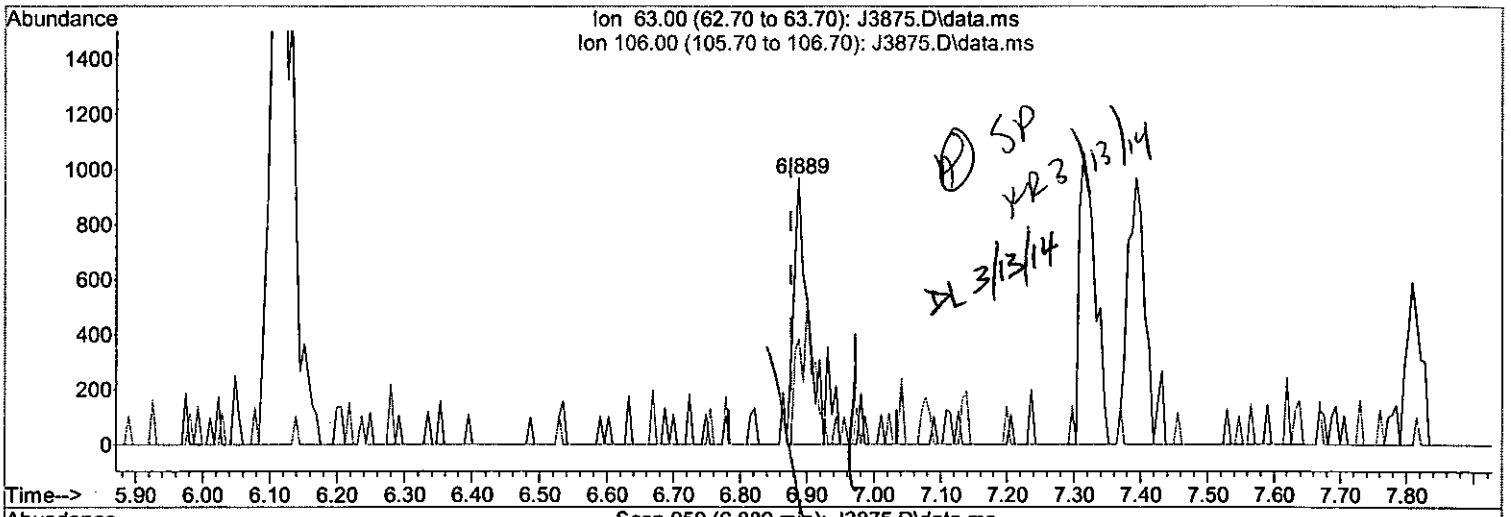
Ion	Exp%	Act%
63.00	100	100
106.00	27.00	39.53
0.00	0.00	0.00
0.00	0.00	0.00

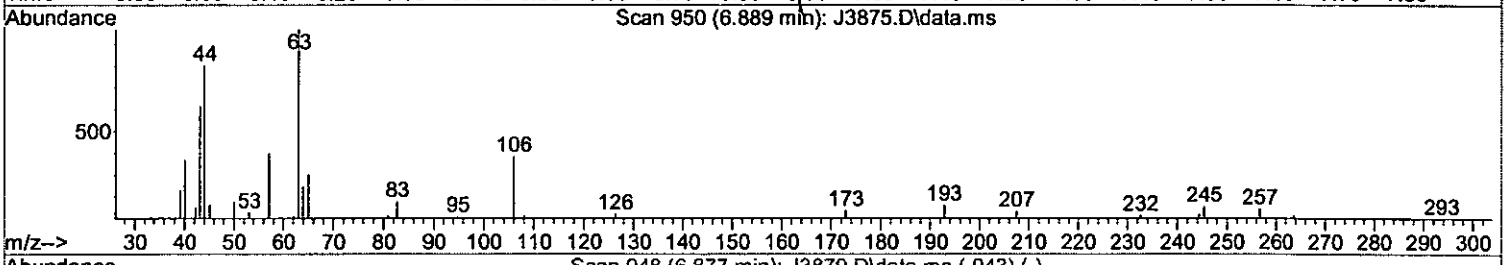
W031214.M Thu Mar 13 10:10:25 2014 Page: 1

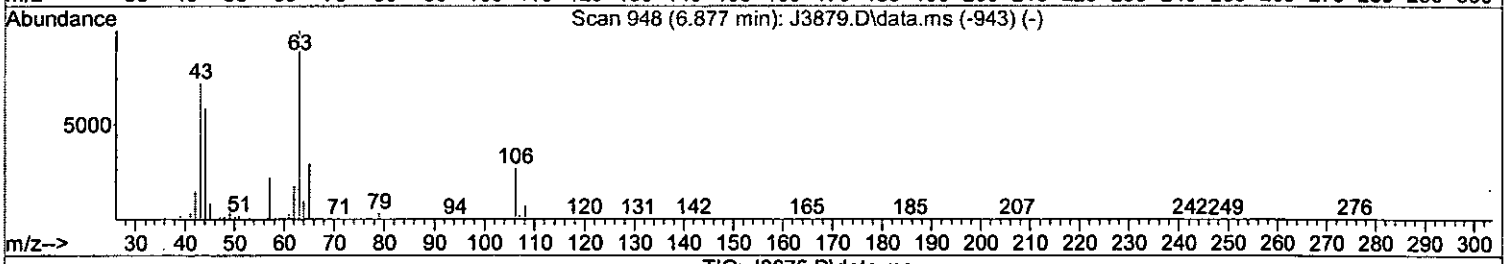
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.889min (+0.012) 0.41 ppb m

response 1661

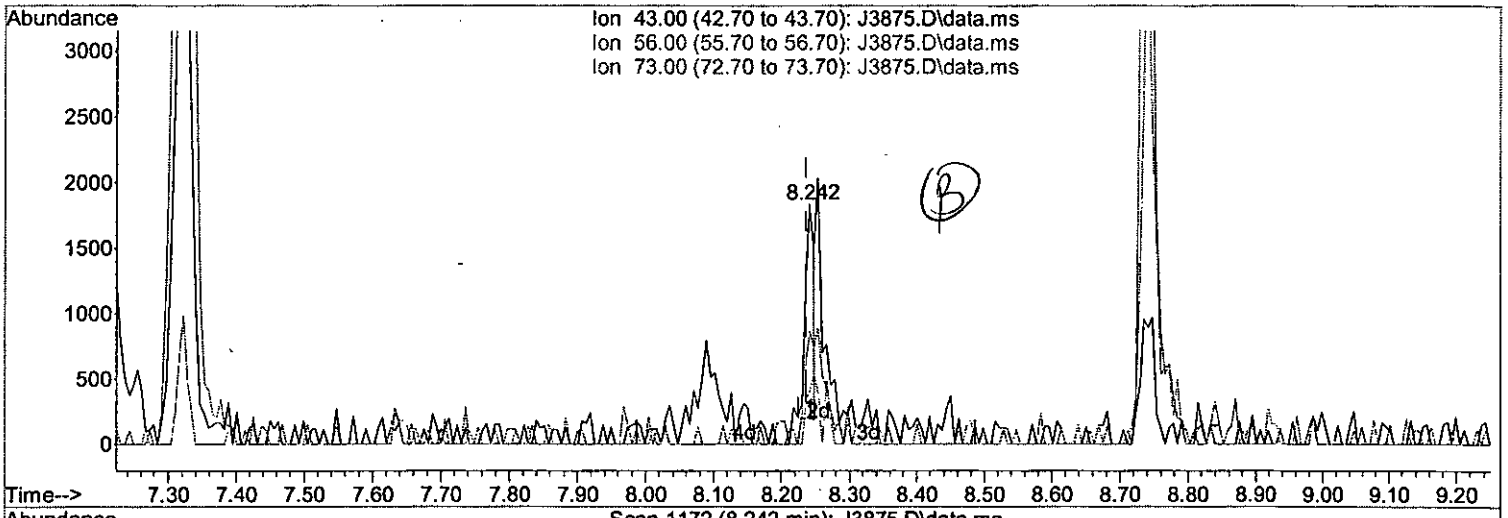
Ion	Exp%	Act%
63.00	100	100
106.00	27.00	39.53
0.00	0.00	0.00
0.00	0.00	0.00

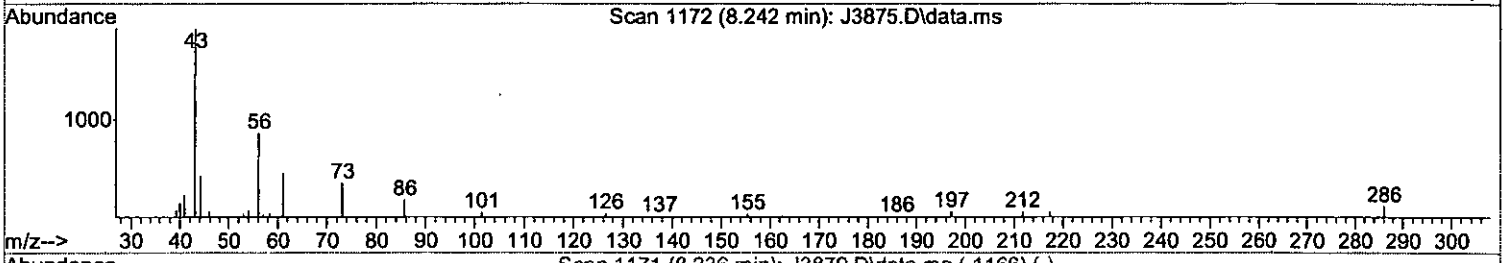
W031214.M Thu Mar 13 10:10:32 2014 00348 Page: 1

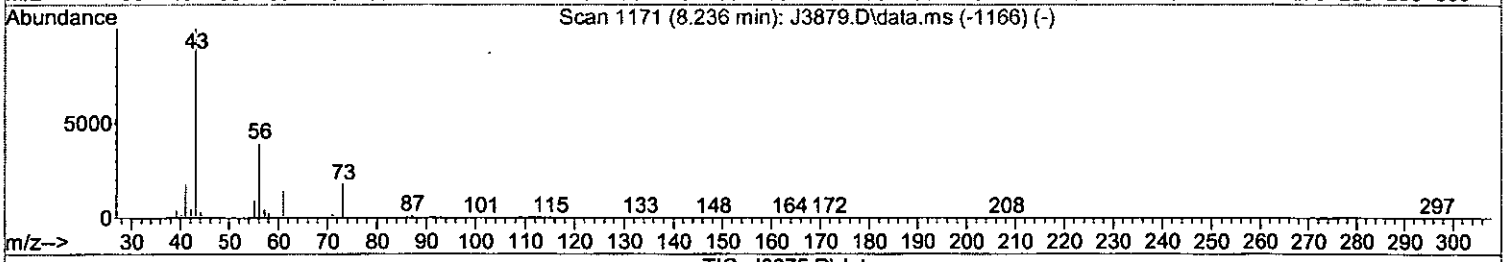
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(76) N-Butyl Acetate

8.242min (+0.006) 0.17 ppb

response 1498

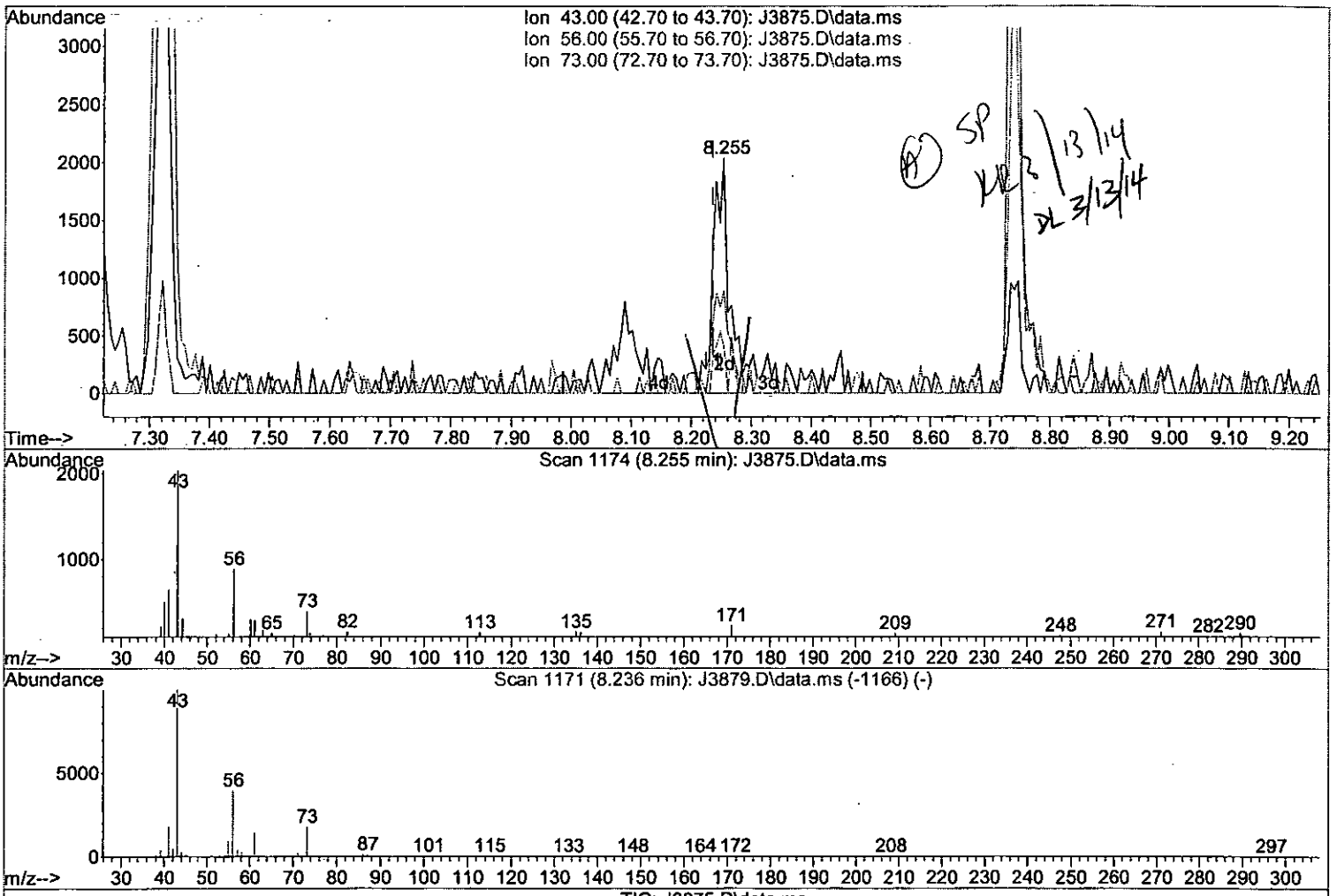
Ion	Exp%	Act%
43.00	100	100
56.00	39.70	47.57
73.00	17.70	22.56
0.00	0.00	0.00

W031214.M Thu Mar 13 10:11:09 2014 00311 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(76) N-Butyl Acetate

8.255min (+0.018) 0.40 ppb m

response 3648

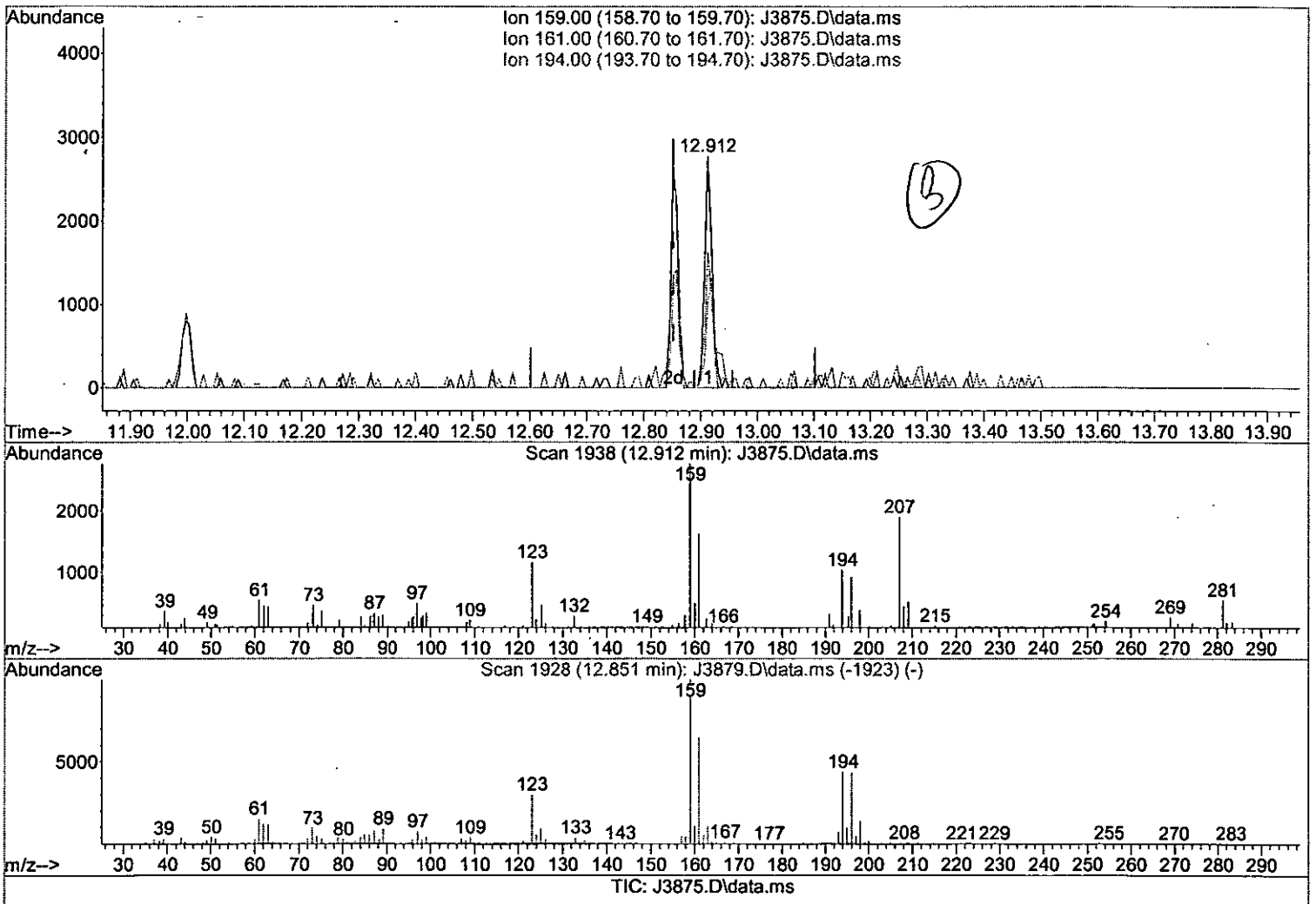
Ion	Exp%	Act%
43.00	100	100
56.00	39.70	43.69
73.00	17.70	19.34
0.00	0.00	0.00

W031214.M Thu Mar 13 10:11:16 2014 00317 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(119) 2,4,5-Trichlorotolene

12.912min (+0.061) 0.52 ppb

response 2541

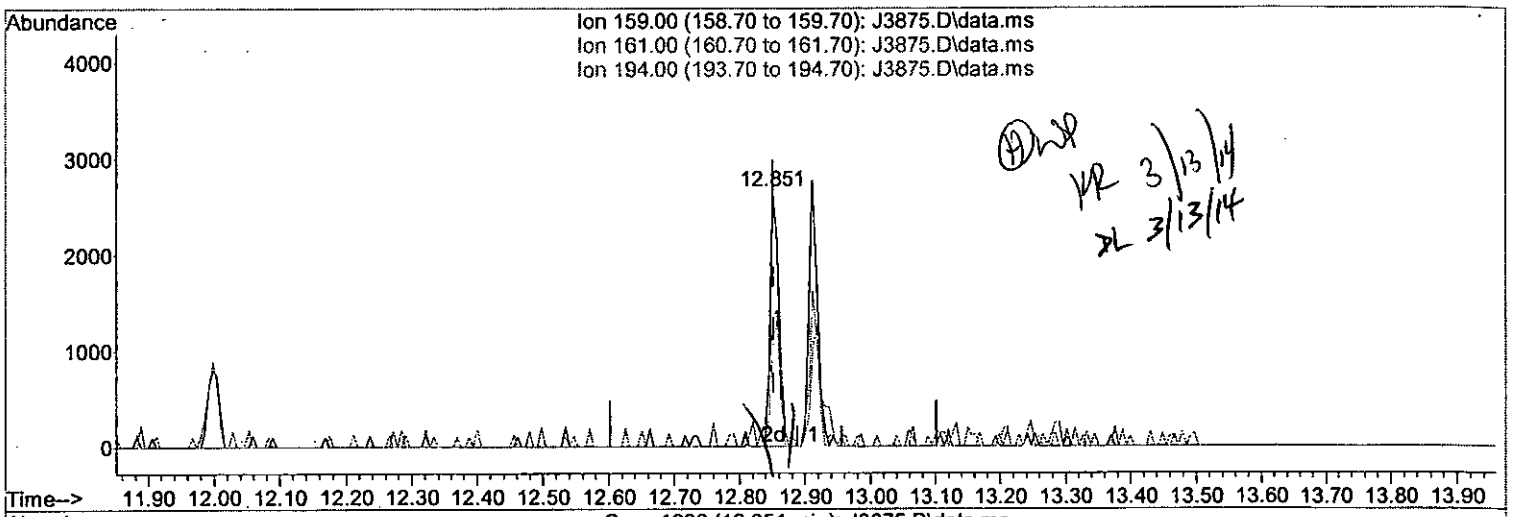
Ion	Exp%	Act%
159.00	100	100
161.00	64.60	58.59
194.00	43.80	37.34
0.00	0.00	0.00

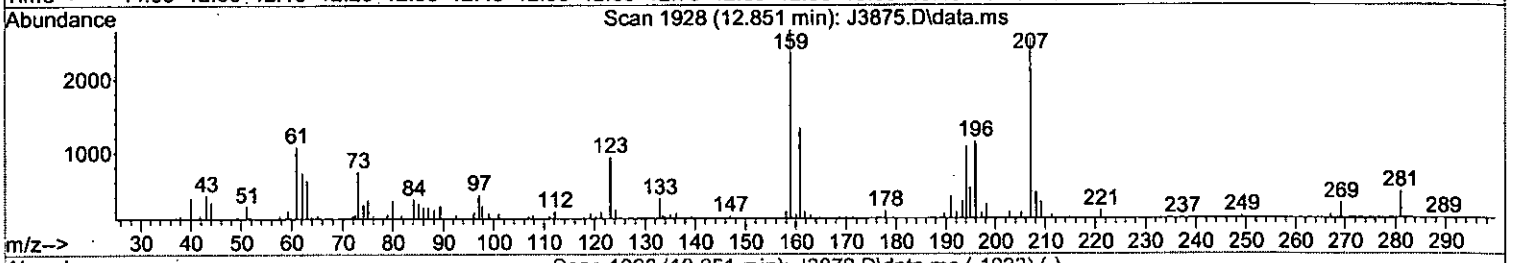
W031214.M Thu Mar 13 10:11:45 2014 Page: 1

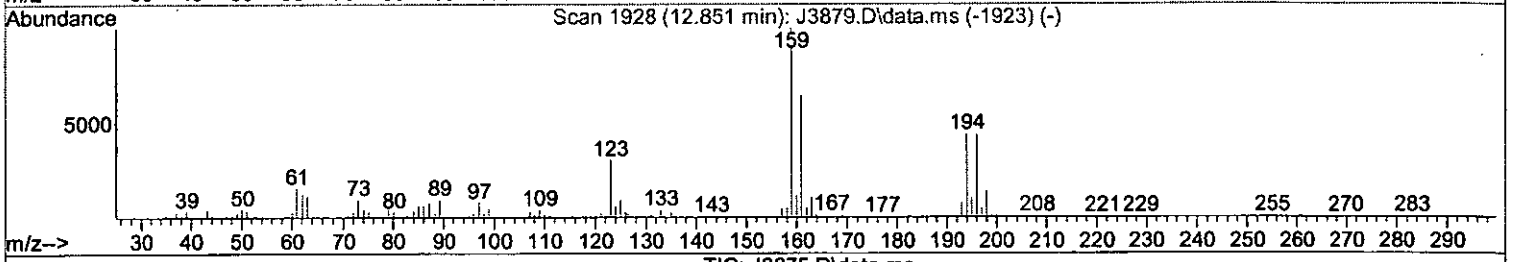
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (+0.000) 0.49 ppb m

response 2375

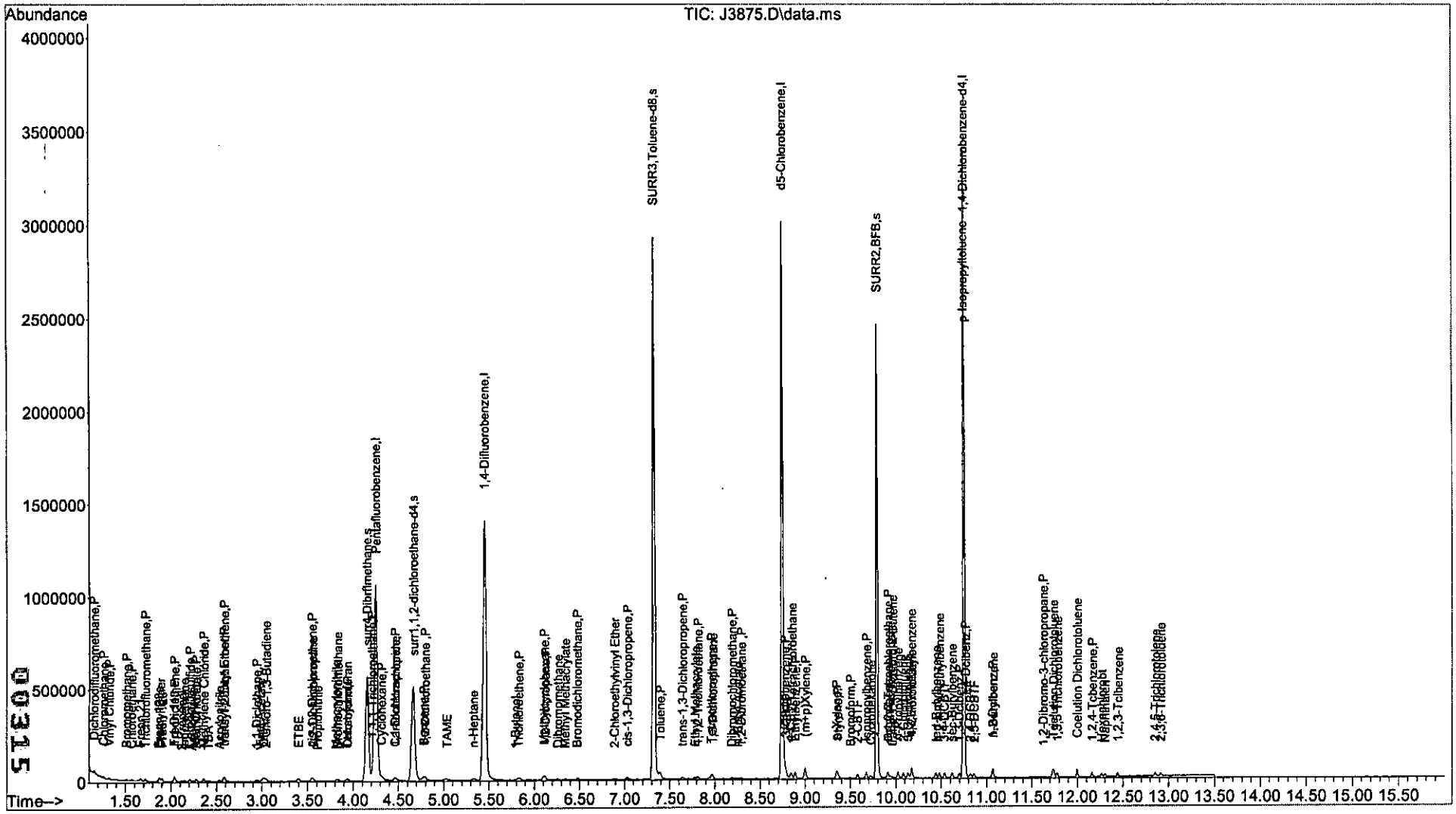
Ion	Exp%	Act%
159.00	100	100
161.00	64.60	49.83#
194.00	43.80	40.46
0.00	0.00	0.00

W031214.M Thu Mar 13 10:11:52 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:12:09 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909776	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1428738	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1289121	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	616857	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	410160	49.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.18%				
48) surr1,1,2-dichloroetha...	4.664	65	482134	51.17	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.34%				
65) SURR3,Toluene-d8	7.322	98	1743990	50.18	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.36%				
70) SURR2,BFB	9.785	95	640602	49.40	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	10136	0.94	ppb		93
3) Chloromethane	1.256	50	9090	0.97	ppb		98
4) Vinyl Chloride	1.323	62	8349	0.96	ppb		100
5) Bromomethane	1.512	94	5664	1.08	ppb		100
6) Chloroethane	1.567	64	5094m	0.94	ppb		
7) Freon 21	1.664	67	12648	0.96	ppb		93
8) Trichlorofluoromethane	1.719	101	12681	0.95	ppb		98
9) Diethyl Ether	1.884	59	6969	1.06	ppb		94
10) Freon 123a	1.872	67	9615	0.98	ppb		89
11) Freon 123	1.902	83	11518	1.03	ppb		92
12) Acrolein	1.957	56	841m	2.67	ppb		
13) 1,1-Diclethene	2.042	96	6368	0.96	ppb		94
14) Freon 113	2.036	101	7307	1.01	ppb		93
15) Acetone	2.048	43	2625	1.45	ppb		79
16) 2-Propanol	2.109	45	5194	17.45	ppb		82
17) Iodomethane	2.146	142	6957	0.79	ppb		89
18) Carbon Disulfide	2.207	76	22369	0.97	ppb		97
19) Acetonitrile	2.225	40	879	2.98	ppb	#	80
20) Allyl Chloride	2.274	76	4499	0.99	ppb	#	82
21) Methyl Acetate	2.280	43	4034	0.99	ppb		84
22) Methylene Chloride	2.359	84	9268	1.07	ppb		89
23) TBA	2.408	59	9223	18.28	ppb		98
24) Acrylonitrile	2.530	53	10212	5.05	ppb		83
25) Methyl-t-Butyl Ether	2.579	73	20977	1.00	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	8267	1.00	ppb		95
28) 1,1-Diclethane	2.945	63	15260	0.99	ppb		94
29) Vinyl Acetate	2.987	86	1309m	0.95	ppb		
30) DIPE	3.018	45	28957	0.97	ppb		90
31) 2-Chloro-1,3-Butadiene	3.042	53	11321	0.85	ppb		98
32) ETBE	3.396	59	24145	0.96	ppb		95
33) 2,2-Dichloropropane	3.554	77	11739	0.96	ppb		97
34) cis-1,2-Dichloroethene	3.542	96	9588	1.04	ppb		85
36) Propionitrile	3.609	54	3282	4.63	ppb		92
37) Bromochloromethane	3.835	130	5212	1.01	ppb	#	77
38) Methacrylonitrile	3.810	67	1831	0.78	ppb	#	52

KR 3/13/14

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) Tetrahydrofuran	3.914	42	2184	1.24	ppb	#	49
40) Chloroform	3.944	83	14880	0.99	ppb		89
41) 1,1,1-Trichloroethane	4.213	97	12496	0.97	ppb	#	1
42) TAME	5.023	73	20545	0.97	ppb		95
44) Cyclohexane	4.316	41	7870	1.02	ppb		97
46) Carbontetrachloride	4.463	121	3211	0.94	ppb		79
47) 1,1-Dichloropropene	4.463	75	9605	0.92	ppb		77
49) Benzene	4.786	78	34783	0.99	ppb		96
50) 1,2-Dichloroethane	4.792	62	11135	1.04	ppb		90
51) Iso-Butyl Alcohol	4.645	43	4896m	20.70	ppb		
52) n-Heptane	5.334	43	8949	1.02	ppb		89
53) 1-Butanol	5.785	56	5606m	41.98	ppb		
54) Trichloroethene	5.828	130	8557	1.00	ppb	#	77
55) Methylcyclohexane	6.109	55	9048	0.99	ppb		93
56) 1,2-Diclpropane	6.115	63	8401	0.93	ppb		94
57) Dibromomethane	6.255	93	4422	1.03	ppb		82
59) Methyl Methacrylate	6.346	69	4351m	1.03	ppb		
60) Bromodichloromethane	6.480	83	9613	0.91	ppb		96
61) 2-Nitropropane	6.743	41	2112	1.87	ppb		91
62) 2-Chloroethylvinyl Ether	6.889	63	3778	0.94	ppb		100
63) cis-1,3-Dichloropropene	7.029	75	11016	0.88	ppb		93
64) 4-Methyl-2-pentanone	7.218	43	4894	0.90	ppb		88
66) Toluene	7.395	91	36309	1.00	ppb		97
67) trans-1,3-Dichloropropene	7.633	75	8721	0.87	ppb		99
68) Ethyl Methacrylate	7.773	69	7414m	0.92	ppb		
69) 1,1,2-Trichloroethane	7.809	97	6006	0.95	ppb		94
72) Tetrachloroethene	7.962	164	6434	0.97	ppb		90
73) 2-Hexanone	8.096	43	3196	0.88	ppb		99
74) 1,3-Dichloropropane	7.974	76	11877	1.02	ppb		88
75) Dibromochloromethane	8.187	129	5635	0.84	ppb		87
76) N-Butyl Acetate	8.242	43	8454	0.94	ppb		93
77) 1,2-Dibromoethane	8.291	107	5584	0.94	ppb		98
78) Chlorobenzene	8.773	112	21495	0.96	ppb		93
79) 3-CBTF	8.785	180	10407	0.94	ppb		96
80) 4-CBTF	8.834	180	8928	0.90	ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	6999	0.89	ppb		97
82) Ethylbenzene	8.889	106	11238	0.94	ppb		95
83) (m+p)Xylene	8.998	106	25096	1.79	ppb		95
84) o-Xylene	9.346	106	14523	1.01	ppb	#	81
85) Styrene	9.358	104	19861	0.87	ppb		90
87) Bromoform	9.498	173	3297	0.94	ppb		100
88) 2-CBTF	9.577	180	9585	0.93	ppb		91
89) Isopropylbenzene	9.669	105	30809	0.97	ppb		98
90) Cyclohexanone	9.724	55	10704	21.64	ppb		87
91) trans-1,4-Dichloro-2-B...	9.962	53	1318	0.79	ppb		95
92) 1,1,2,2-Tetrachloroethane	9.913	83	7805	1.10	ppb		96
93) Bromobenzene	9.907	156	9148	1.01	ppb		96
94) 1,2,3-Trichloropropane	9.943	110	2408	1.14	ppb	#	71
95) n-Propylbenzene	10.022	91	36616	0.98	ppb		97
96) 2-Chlorotoluene	10.083	91	22220	0.95	ppb		99
97) 3-Chlorotoluene	10.132	91	23805	0.98	ppb		92
98) 4-Chlorotoluene	10.175	91	27266	0.99	ppb		95

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

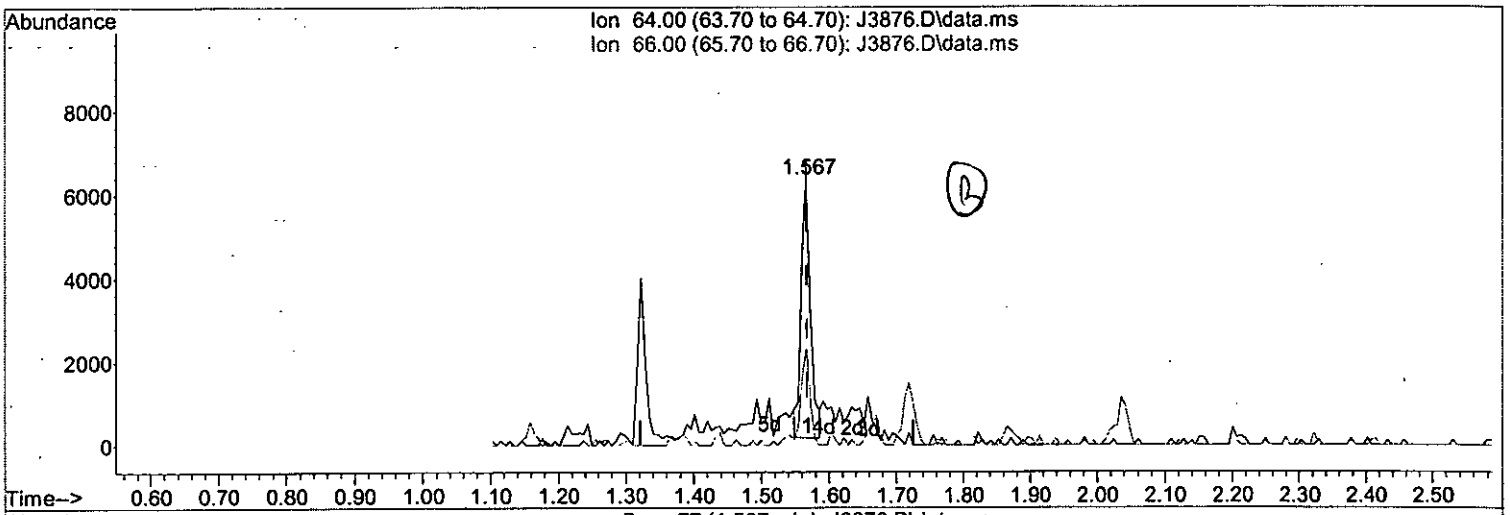
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	1,3,5-Trimethylbenzene	10.169	105	24817	0.96	ppb		92
100)	tert-Butylbenzene	10.437	119	21877	1.00	ppb		90
101)	1,2,4-Trimethylbenzene	10.480	105	25964	0.97	ppb		100
102)	3,4-DCBTF	10.535	214	7195	0.95	ppb		94
103)	sec-Butylbenzene	10.620	105	29824	0.98	ppb		97
104)	p-Isopropyltoluene	10.742	119	24266	0.94	ppb		84
105)	1,3-Dclbenz	10.699	146	14936	0.97	ppb		90
106)	1,4-Dclbenz	10.766	146	15823	0.96	ppb		94
107)	2,4-DCBTF	10.821	214	6587	1.00	ppb	#	70
108)	2,5-DCBTF	10.858	214	7707	1.02	ppb	#	77
109)	n-Butylbenzene	11.071	91	21185	0.91	ppb		97
110)	1,2-Dclbenz	11.065	146	14396	0.97	ppb		97
111)	1,2-Dibromo-3-chloropr...	11.626	157	1052	0.97	ppb	#	55
112)	Trielution Dichlorotol...	11.742	125	33349	2.84	ppb		93
113)	1,3,5 Trichlorobenzene	11.778	180	9895	0.96	ppb	#	93
114)	Coelution Dichlorotoluene	11.998	125	25211	2.02	ppb		96
115)	1,2,4-Tcbenzene	12.162	180	8877	0.98	ppb		93
116)	Hexachlorobt	12.266	225	3996	1.01	ppb		88
117)	Naphthalen	12.303	128	14907	0.91	ppb		96
118)	1,2,3-Tclbenzene	12.443	180	7276	0.98	ppb		91
119)	2,4,5-Trichlorotolene	12.851	159	5341	1.09	ppb	#	79
120)	2,3,6-Trichlorotoluene	12.912	159	4781	1.06	ppb	#	91

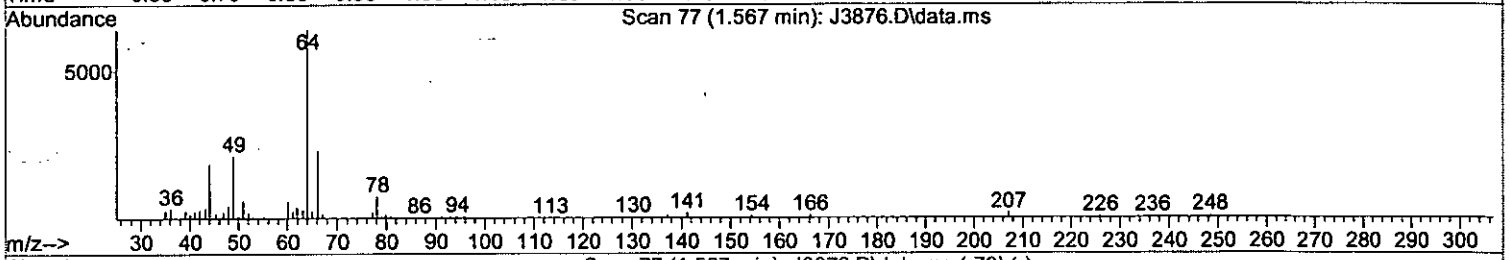
(#) = qualifier out of range (m) = manual integration (+) = signals summed

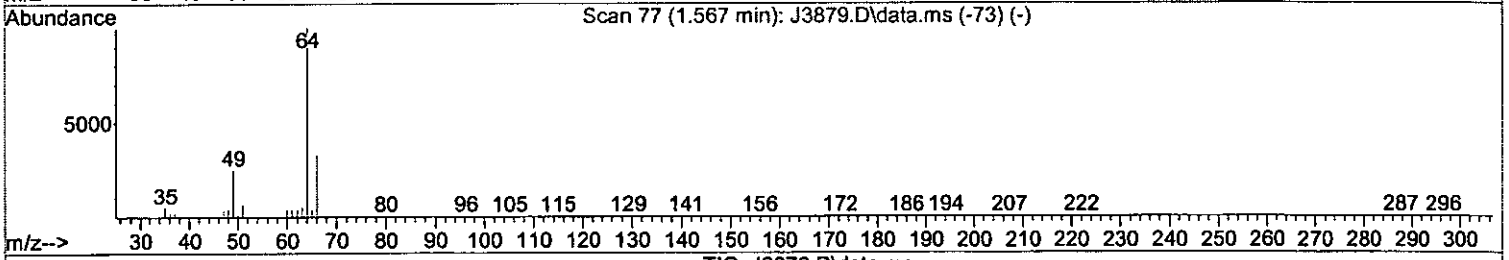
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(6) Chloroethane (P)

1.567min (-0.000) 1.07 ppb

response 5774

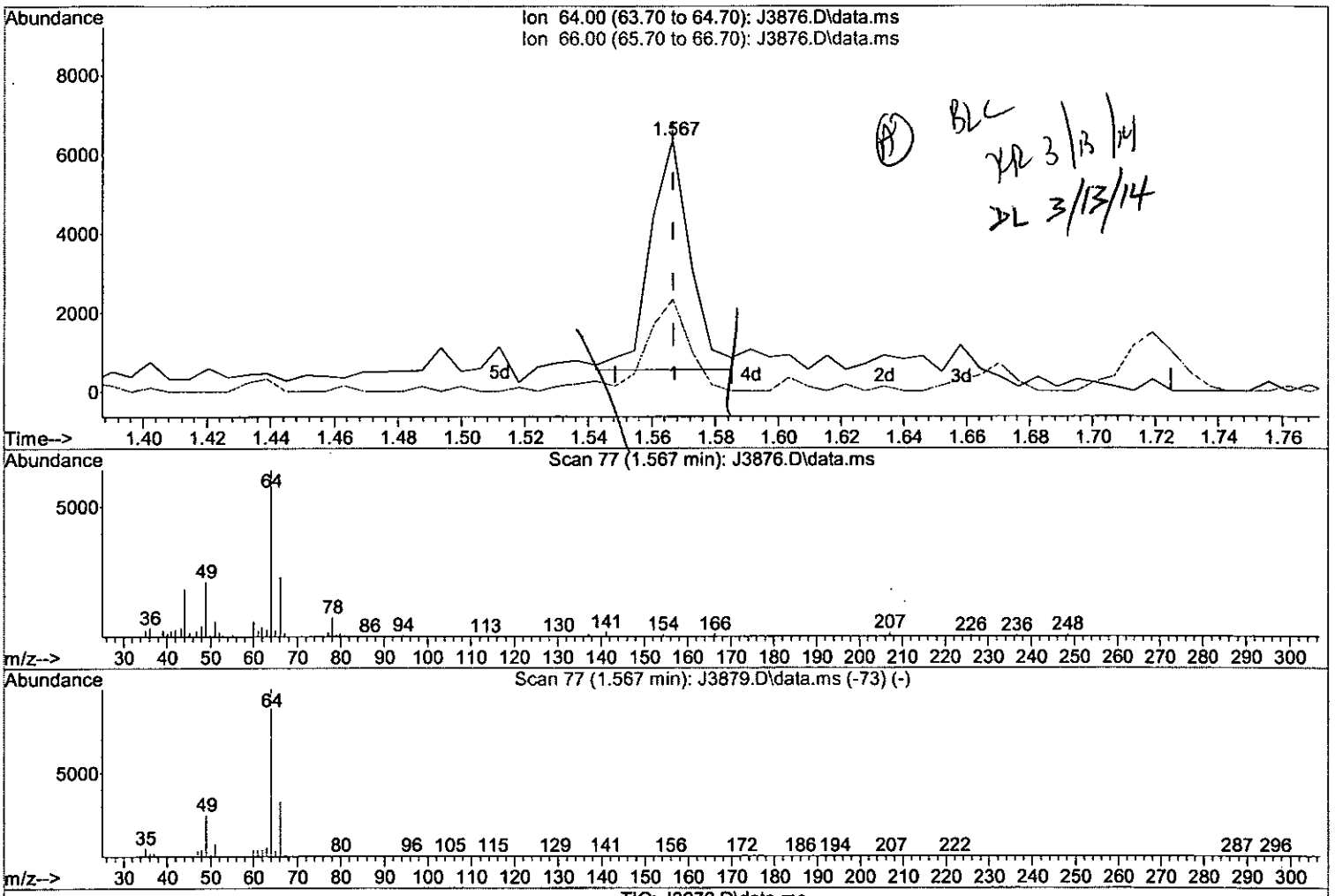
Ion	Exp%	Act%
64.00	100	100
66.00	32.20	36.64
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:12:48 2014 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(6) Chloroethane (P)

1.567min (-0.000) 0.94 ppb m

response 5094

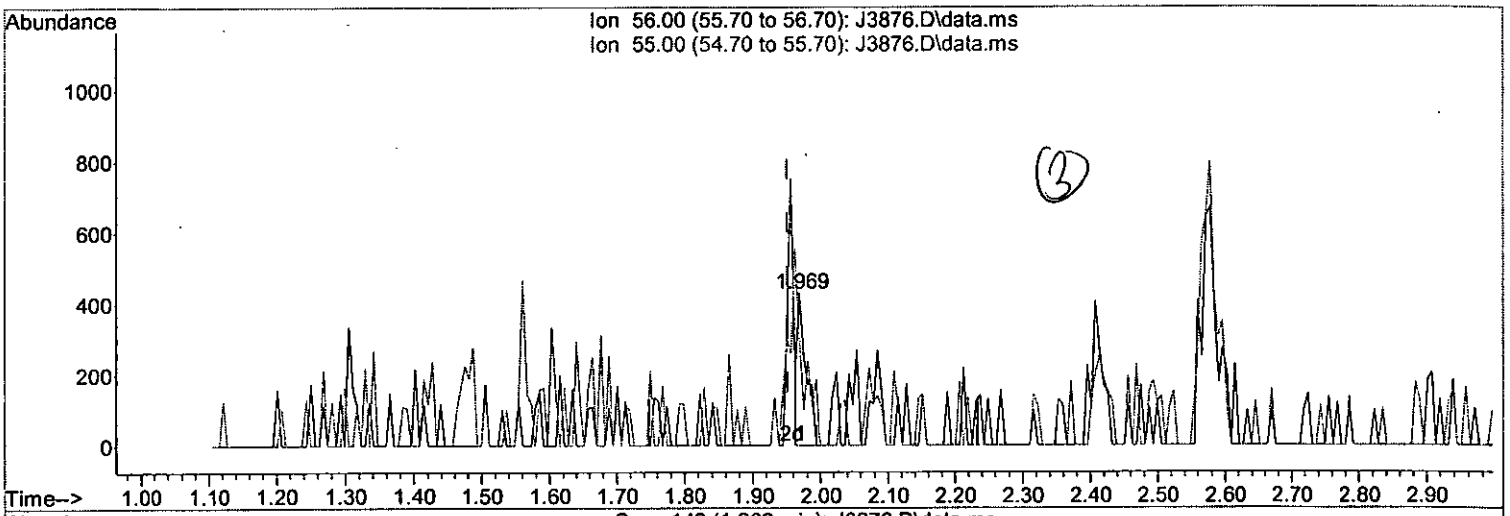
Ion	Exp%	Act%
64.00	100	100
66.00	32.20	36.64
0.00	0.00	0.00
0.00	0.00	0.00

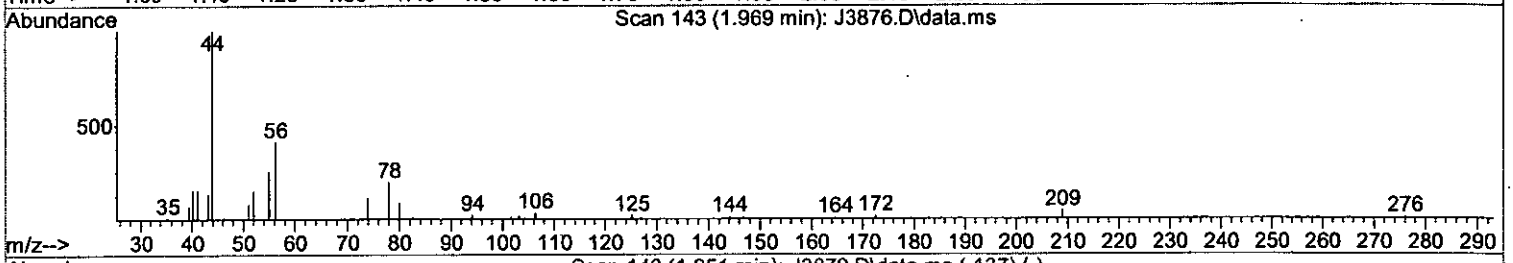
W031214.M Thu Mar 13 10:13:07 2014 Page: 1

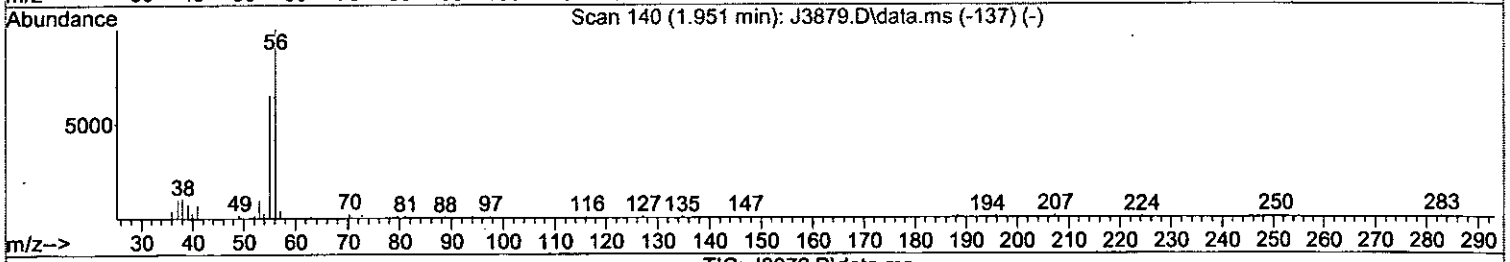
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(12) Acrolein

1.969min (+0.018) 1.19 ppb

response 373

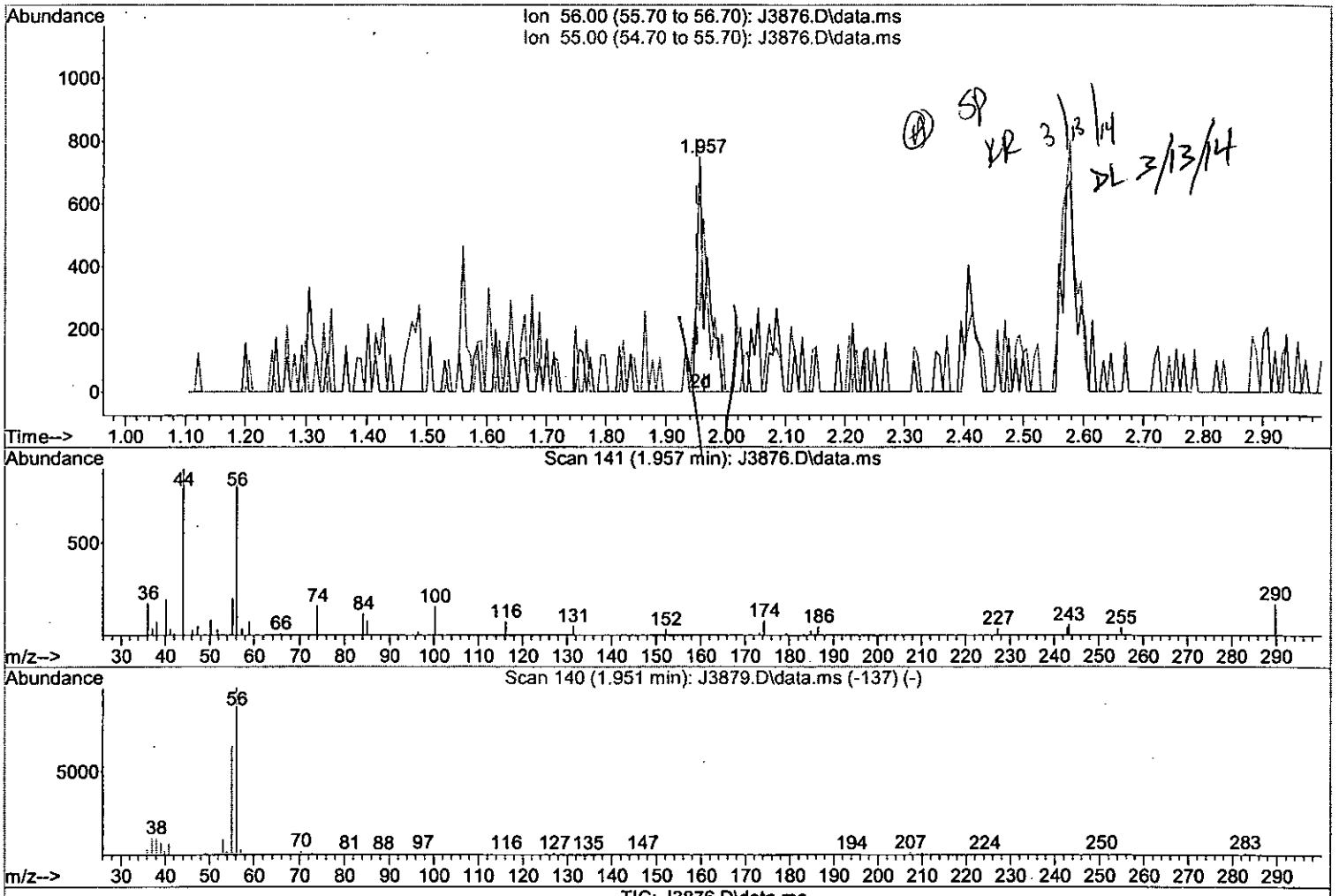
Ion	Exp%	Act%
56.00	100	100
55.00	66.20	70.63
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:13:19 2014 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(12) Acrolein

1.957min (+0.006) 2.67 ppb m

response 841

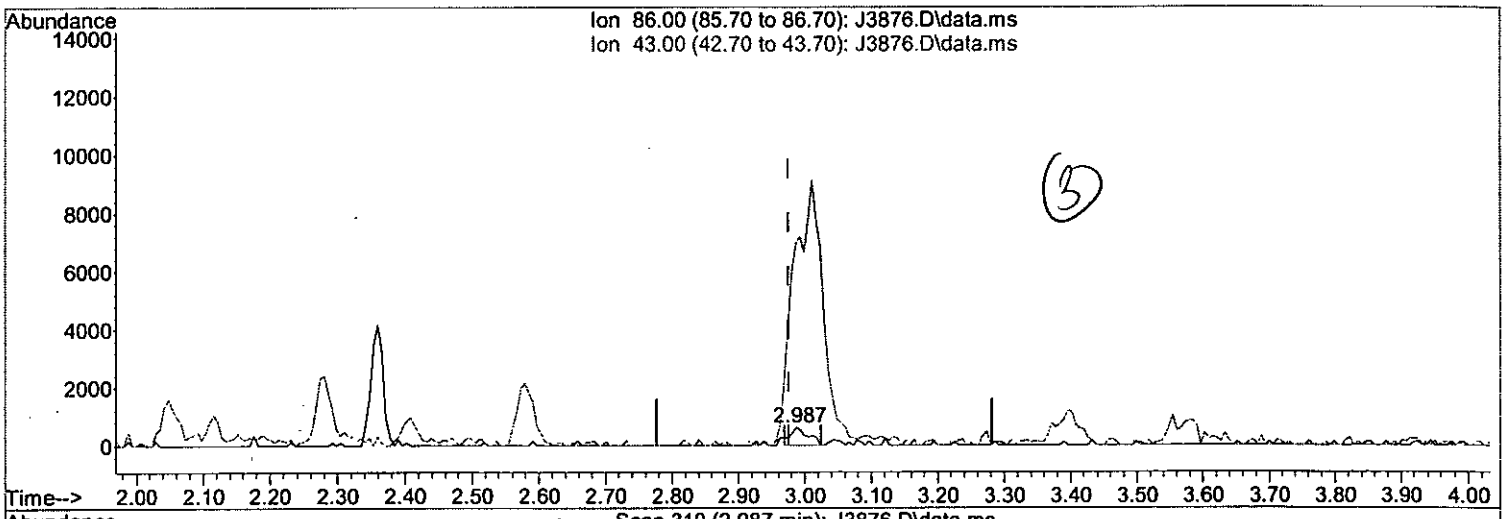
Ion	Exp%	Act%
56.00	100	100
55.00	66.20	34.53#
0.00	0.00	0.00
0.00	0.00	0.00

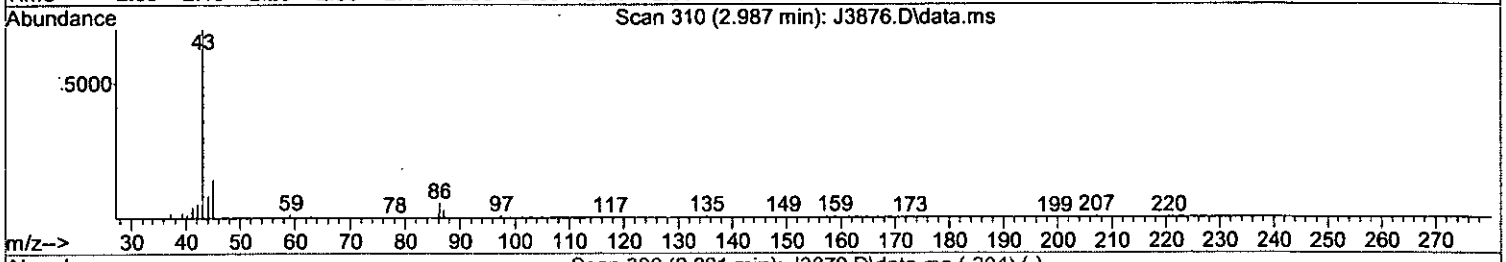
W031214.M Thu Mar 13 10:13:28 2014 00322 Page: 1

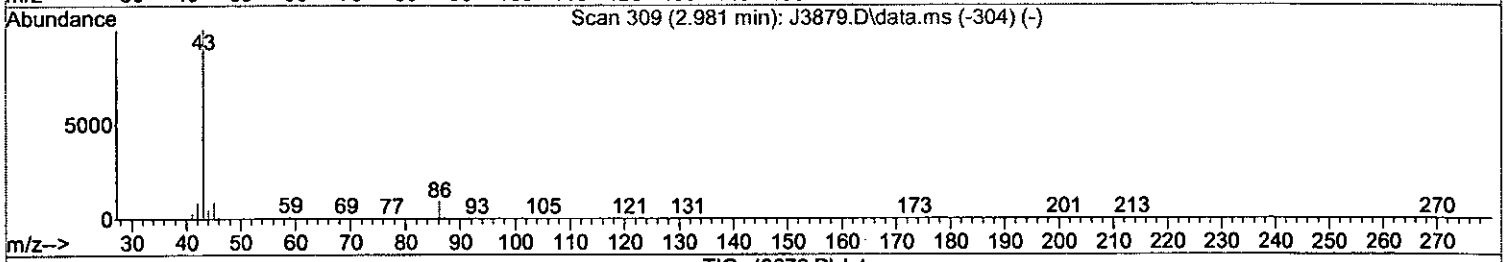
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(29) Vinyl Acetate

2.987min (+0.012) 0.82 ppb

response 1125

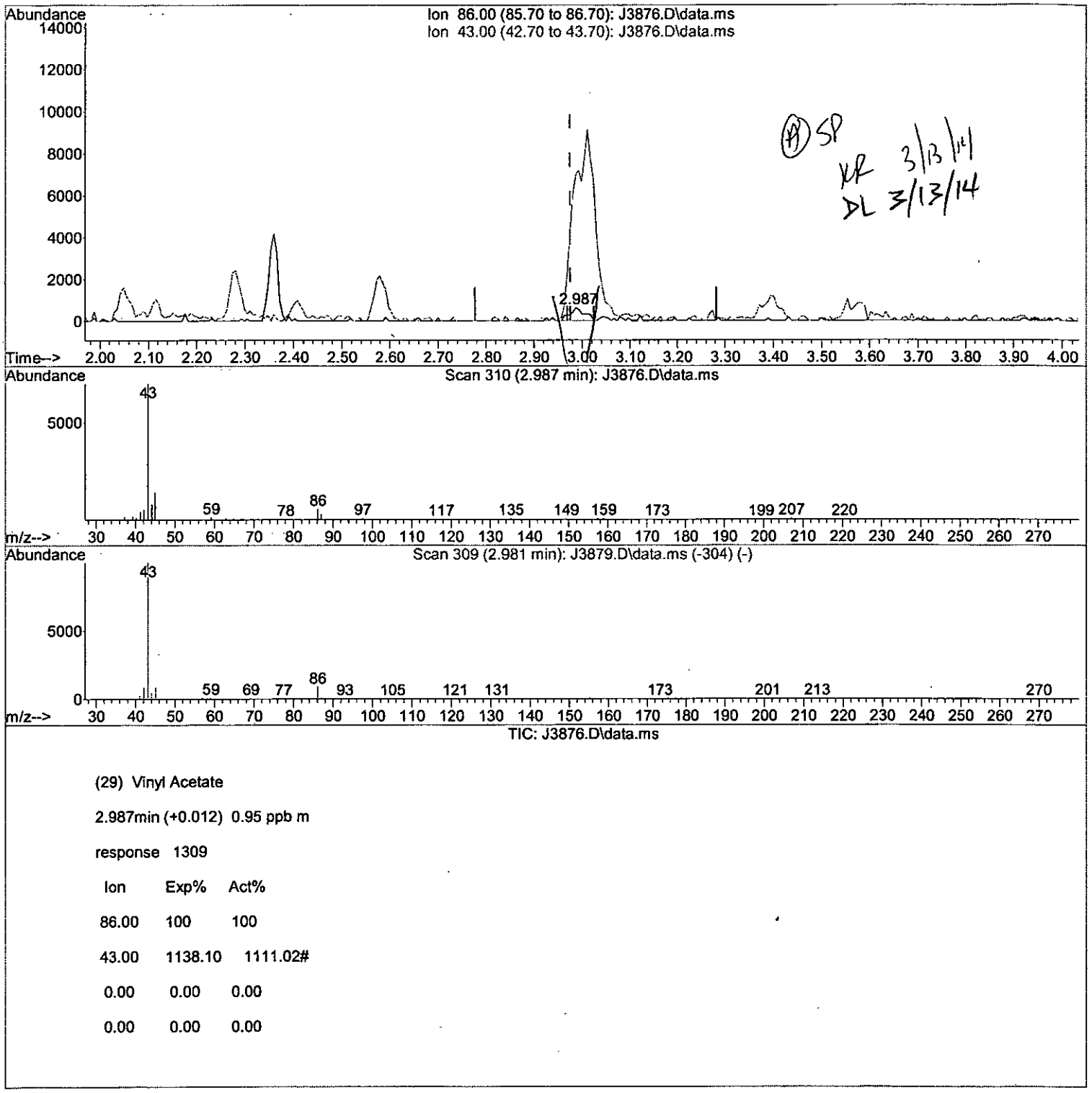
Ion	Exp%	Act%
86.00	100	100
43.00	1138.10	1111.02#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:14:12 2014 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(29) Vinyl Acetate

2.987min (+0.012) 0.95 ppb m

response 1309

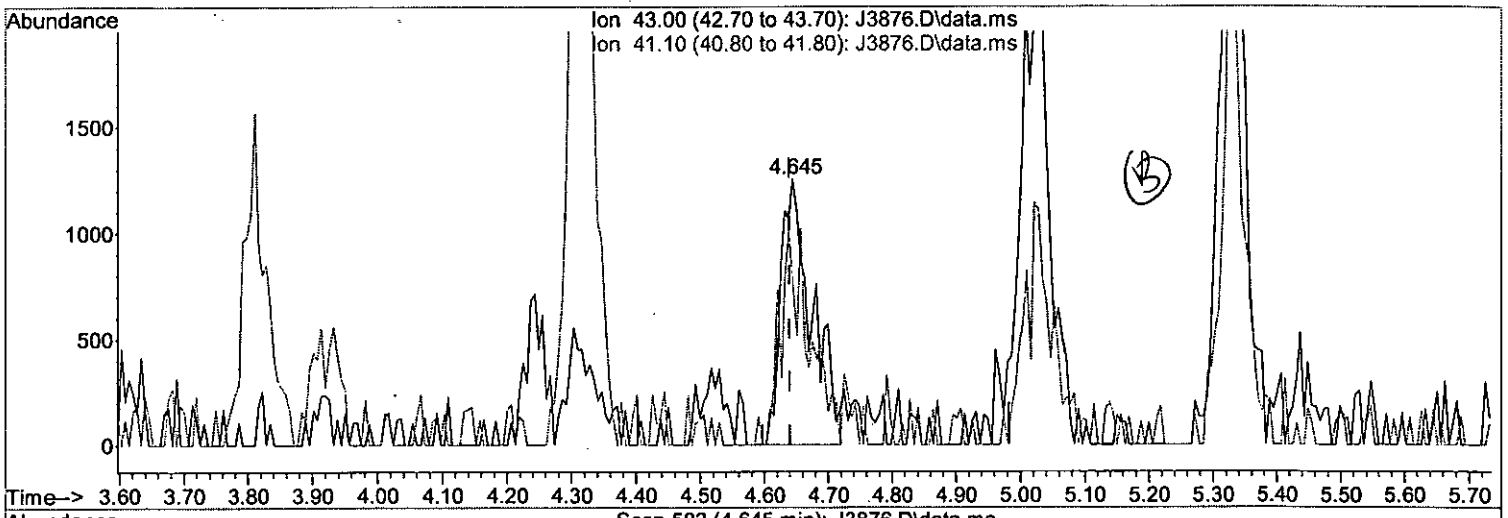
Ion	Exp%	Act%
86.00	100	100
43.00	1138.10	1111.02#
0.00	0.00	0.00
0.00	0.00	0.00

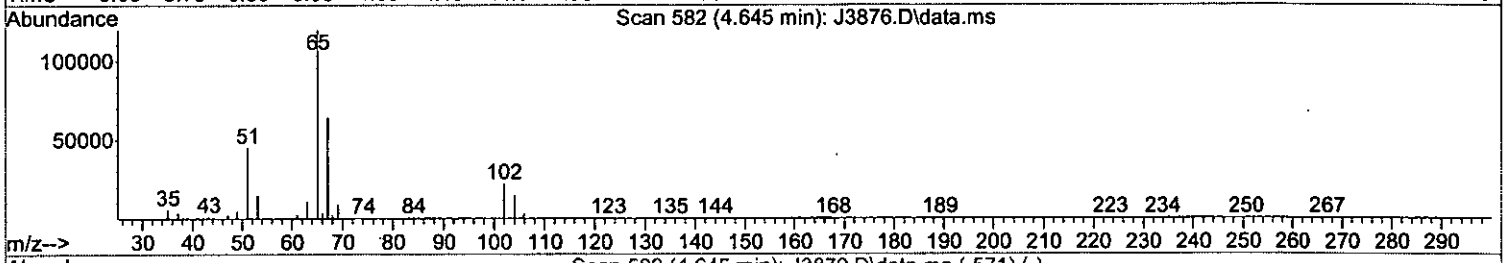
W031214.M Thu Mar 13 10:14:20 2014 Page: 1

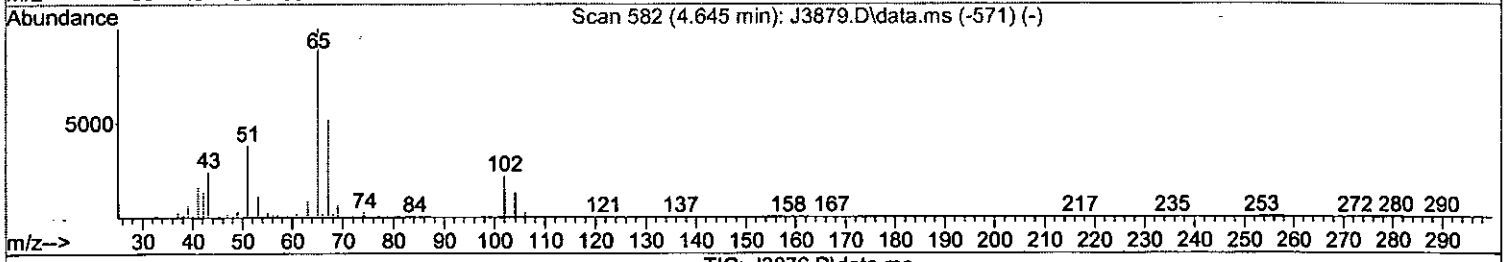
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 17.90 ppb

response 4235

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	60.99
0.00	0.00	0.00
0.00	0.00	0.00

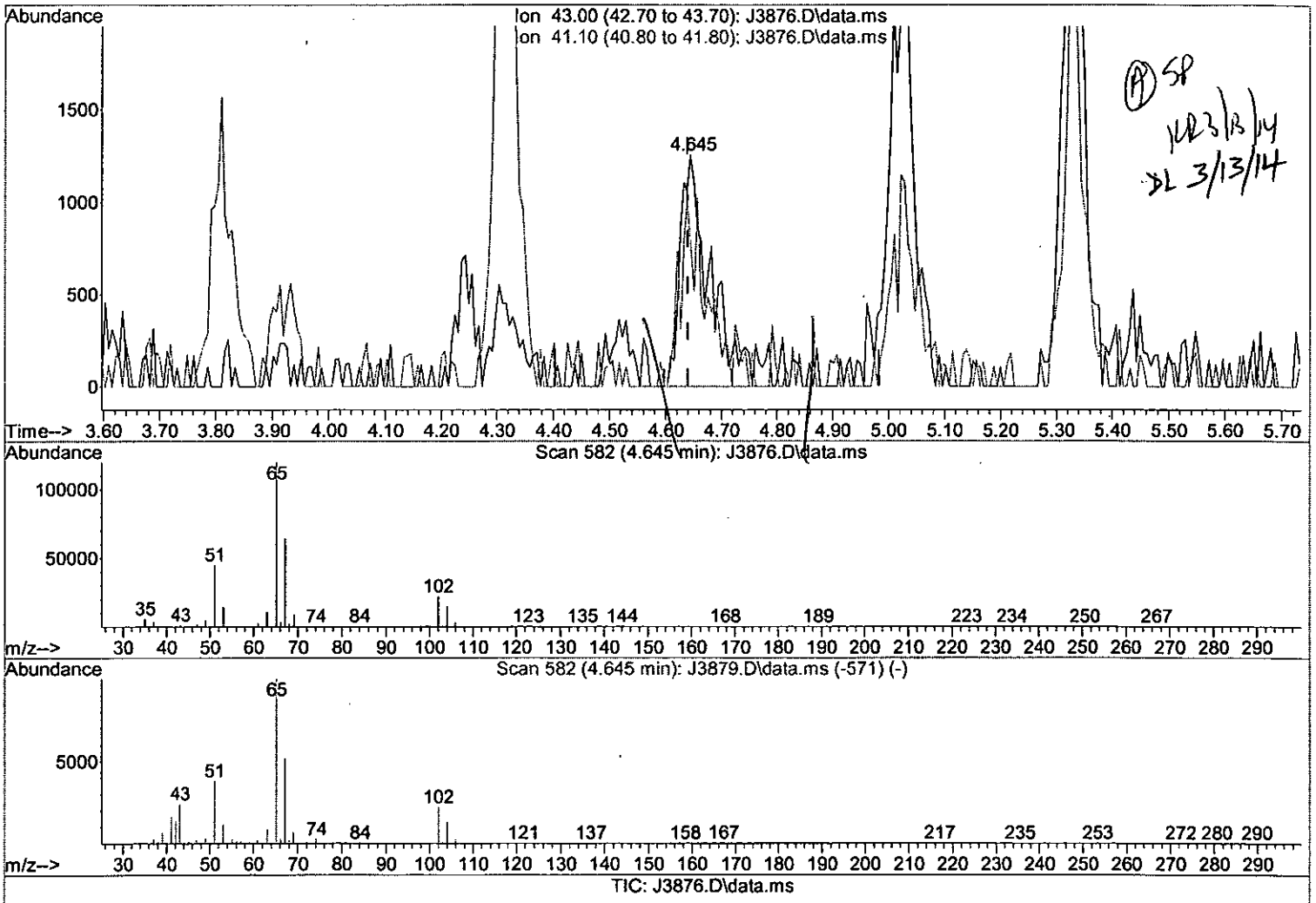
W031214.M Thu Mar 13 10:15:02 2014 Page: 1

00325

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 20.70 ppb m

response 4896

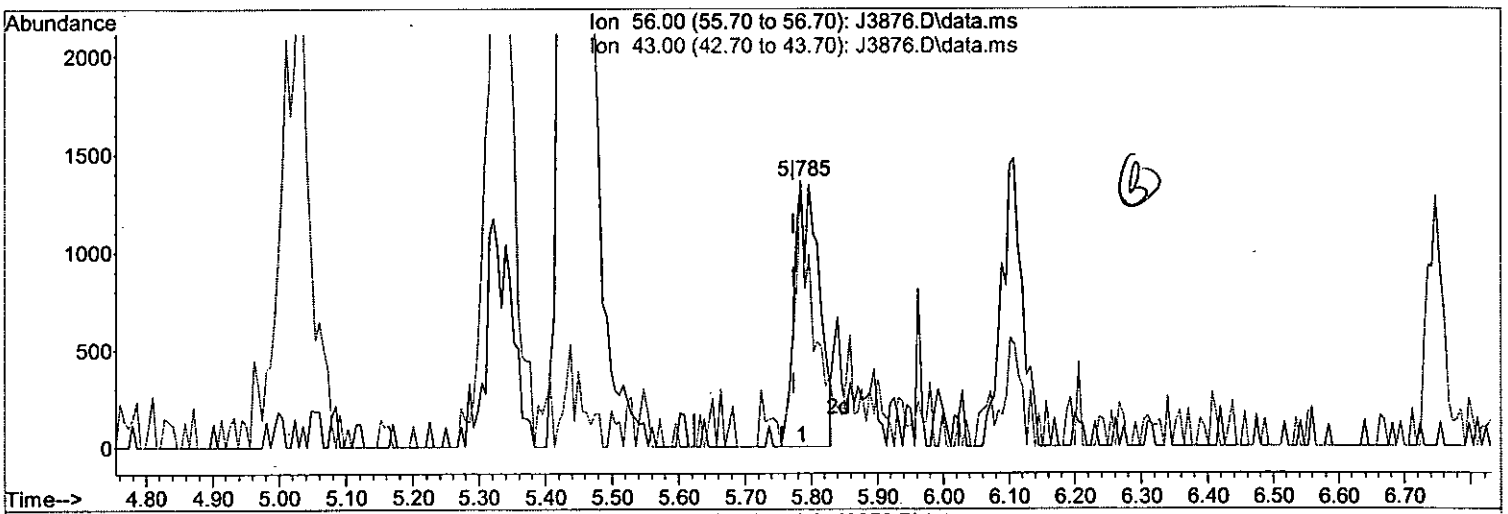
Ion	Exp%	Act%
43.00	100	100
41.10	68.40	60.99
0.00	0.00	0.00
0.00	0.00	0.00

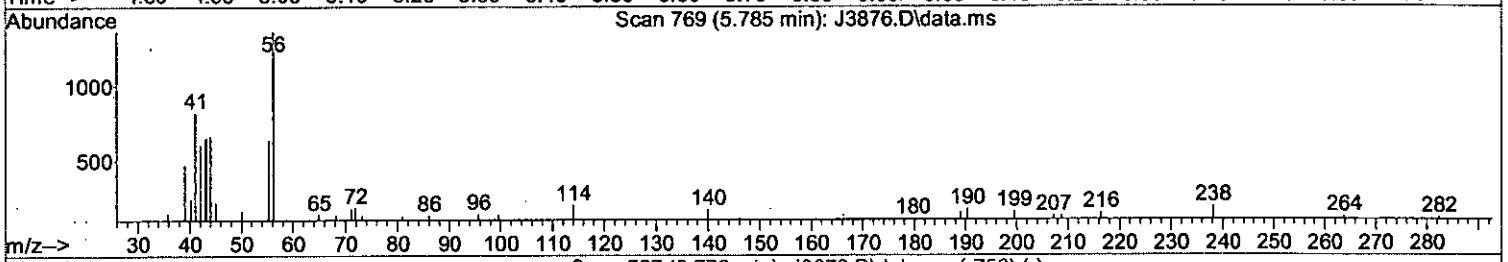
W031214.M Thu Mar 13 10:15:12 2014 Page: 1

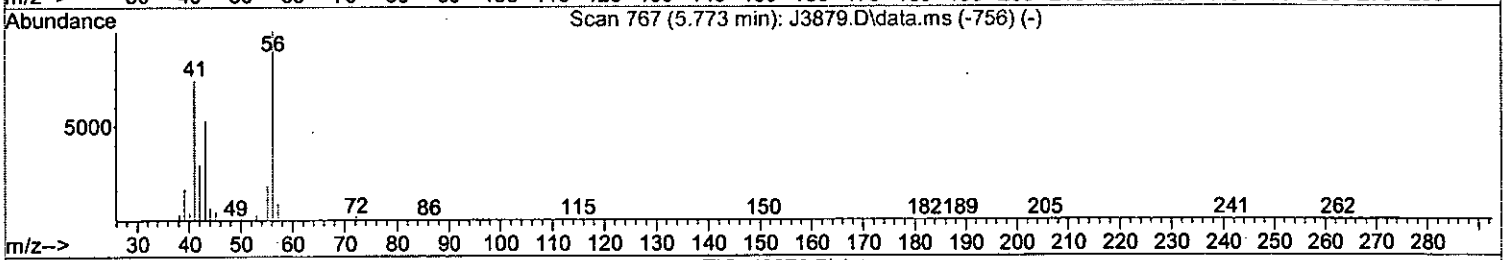
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(53) 1-Butanol

5.785min (+0.012) 25.83 ppb

response 3450

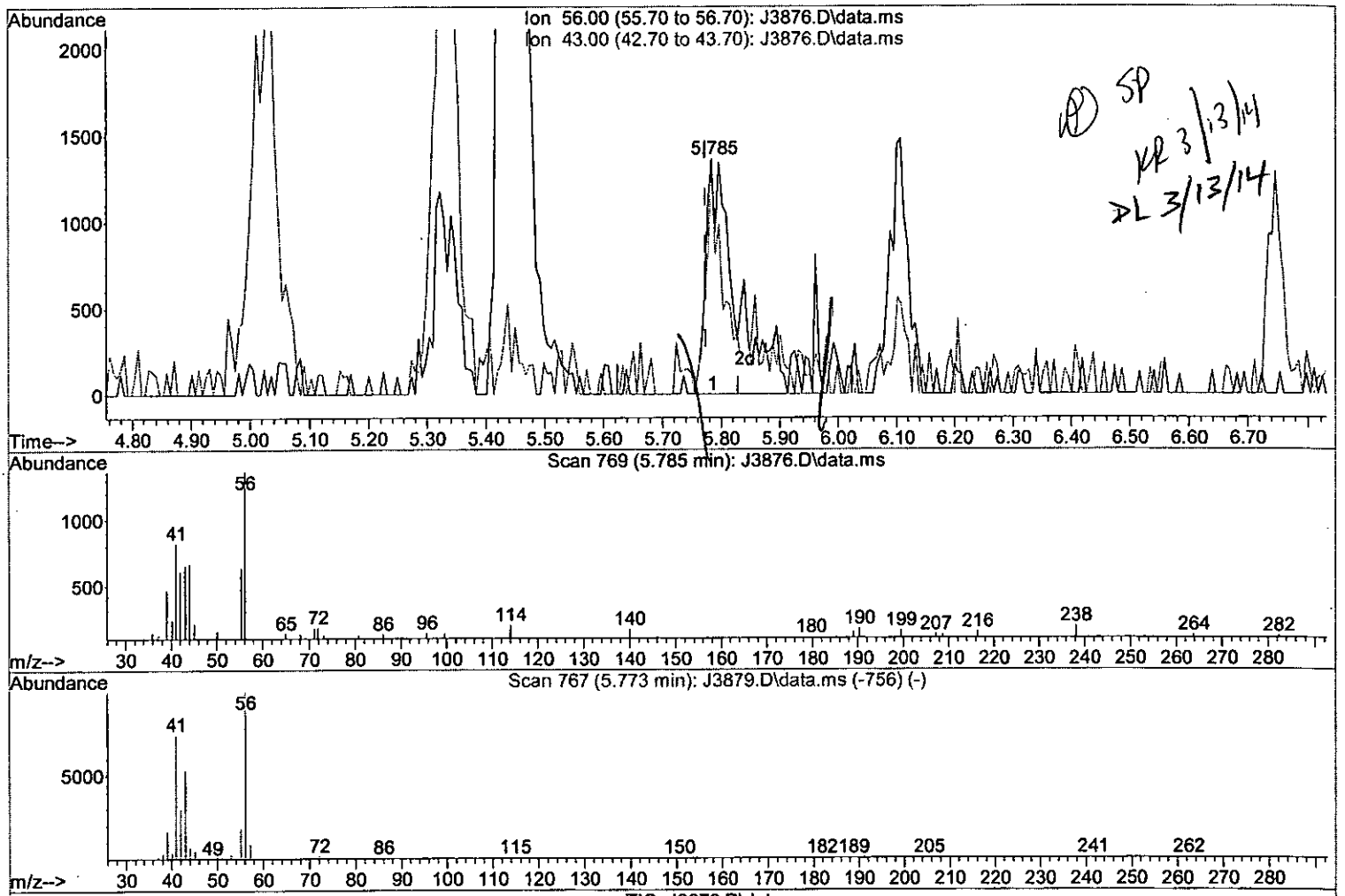
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	81.22#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:15:20 2014 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(53) 1-Butanol

5.785min (+0.012) 41.98 ppb m

response 5606

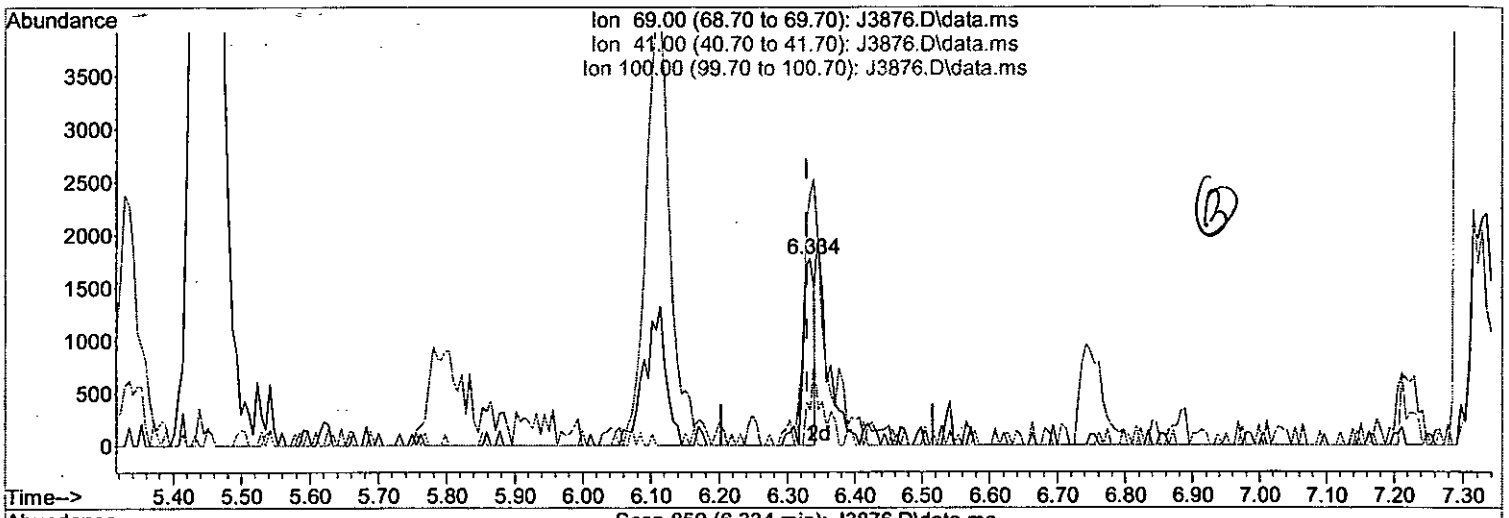
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	49.98
0.00	0.00	0.00
0.00	0.00	0.00

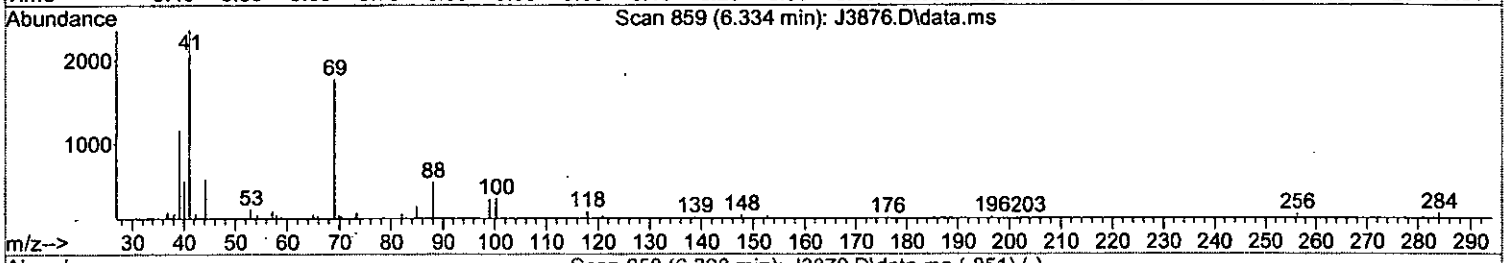
W031214.M Thu Mar 13 10:15:32 2014 00388 Page: 1

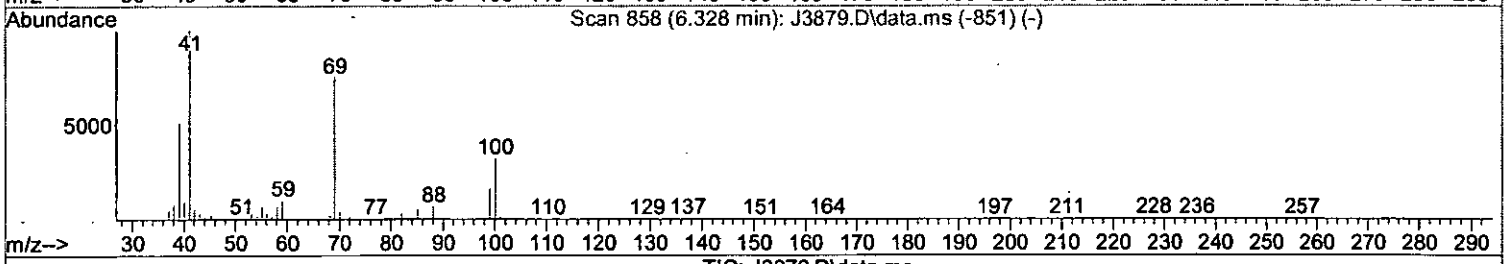
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(59) Methyl Methacrylate

6.334min (+0.006) 0.49 ppb

response 2074

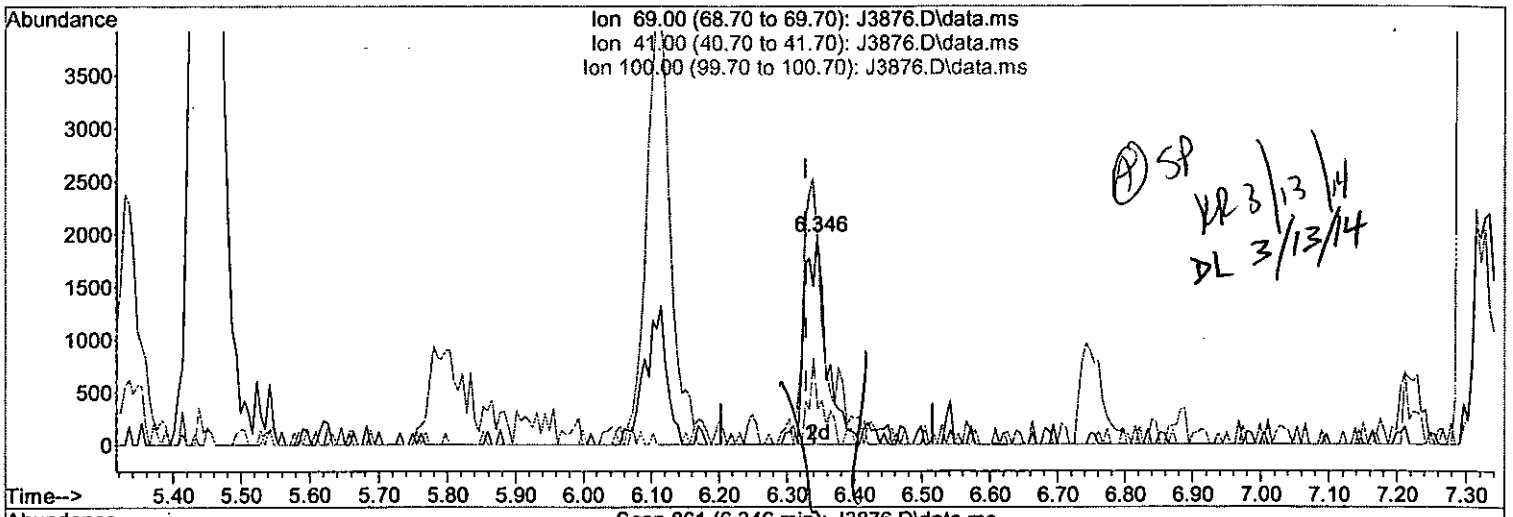
Ion	Exp%	Act%
69.00	100	100
41.00	134.40	133.56
100.00	42.90	18.84#
0.00	0.00	0.00

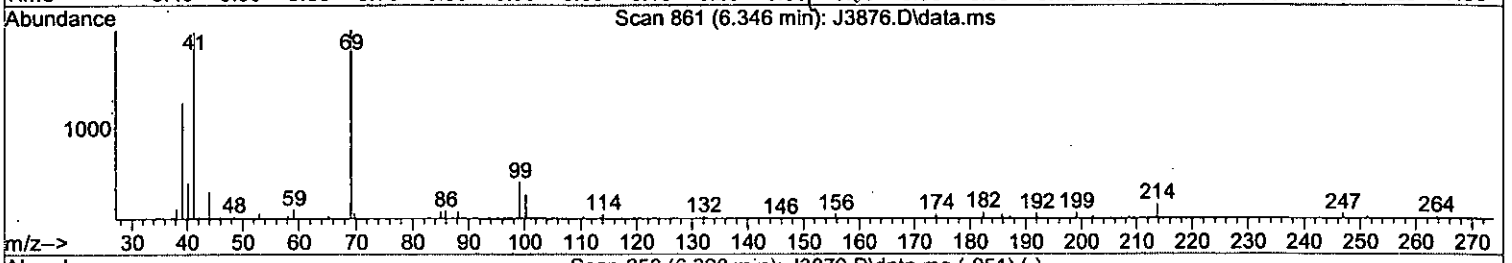
W031214.M Thu Mar 13 10:15:55 2014 00328 Page: 1

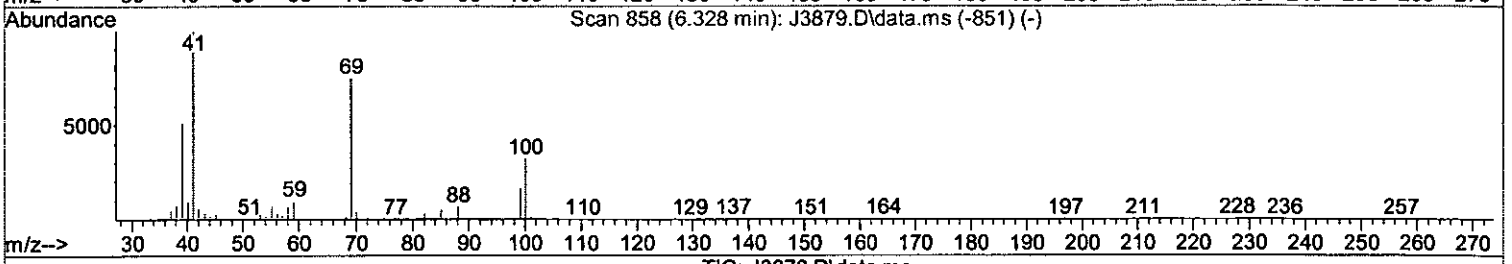
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(59) Methyl Methacrylate

6.346min (+0.018) 1.03 ppb m

response 4351

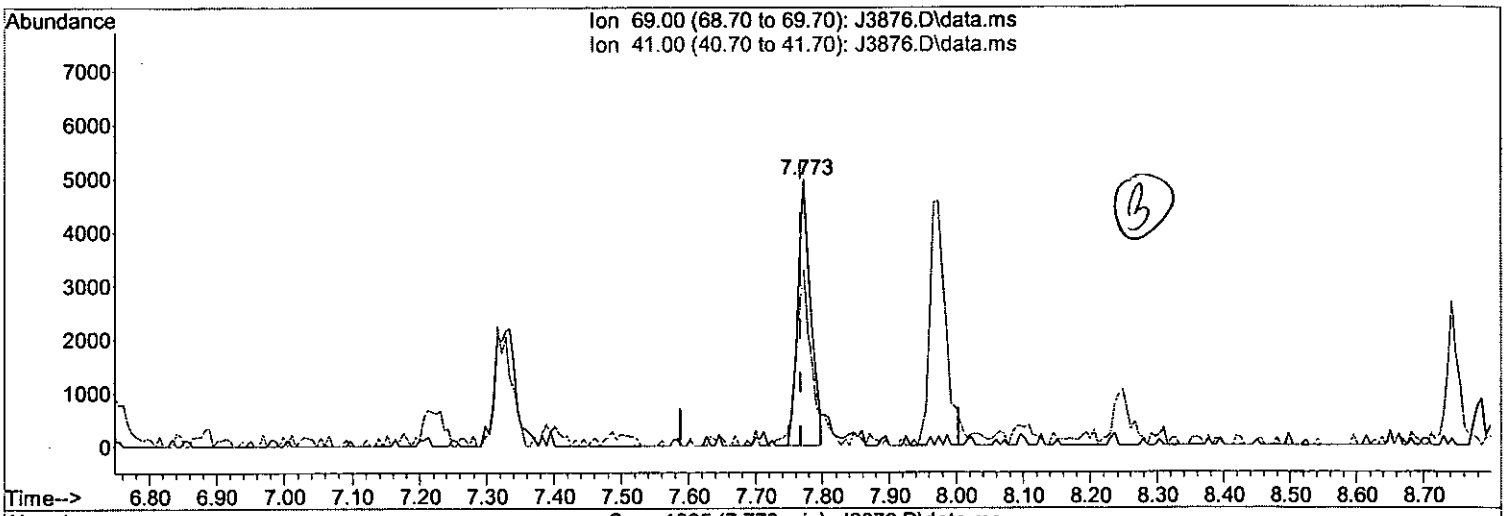
Ion	Exp%	Act%
69.00	100	100
41.00	134.40	98.68#
100.00	42.90	16.94#
0.00	0.00	0.00

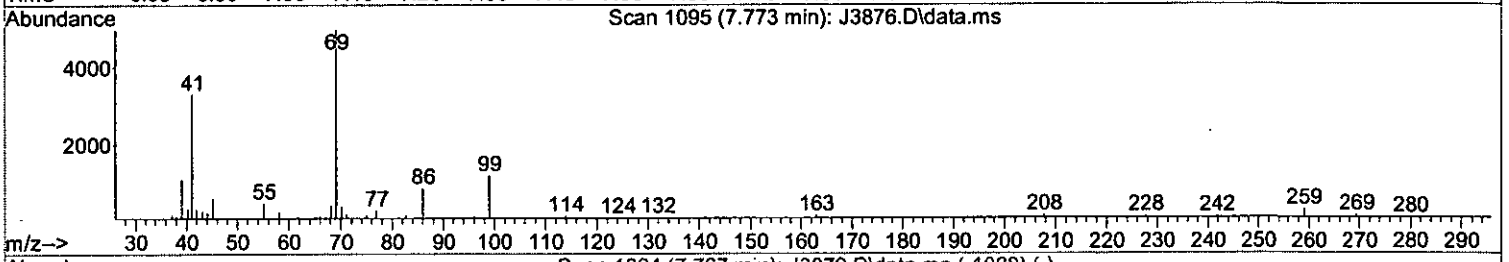
W031214.M Thu Mar 13 10:16:03 2014 Page: 1

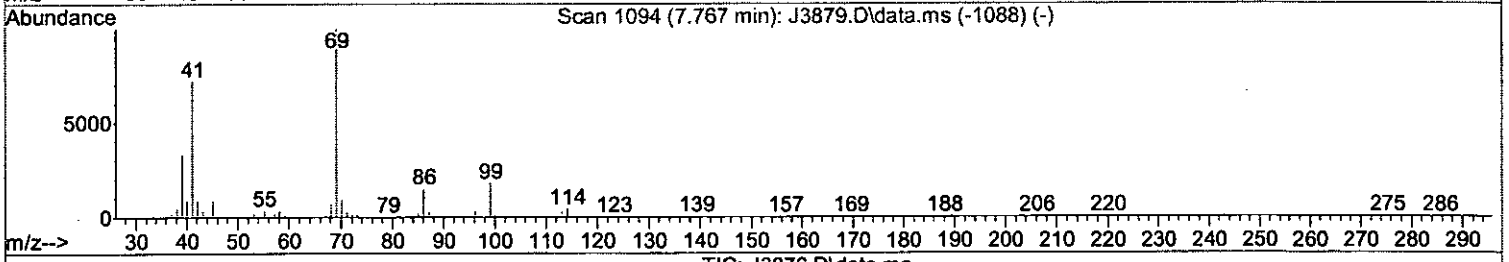
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(68) Ethyl Methacrylate

7.773min (+0.006) 0.84 ppb

response 6810

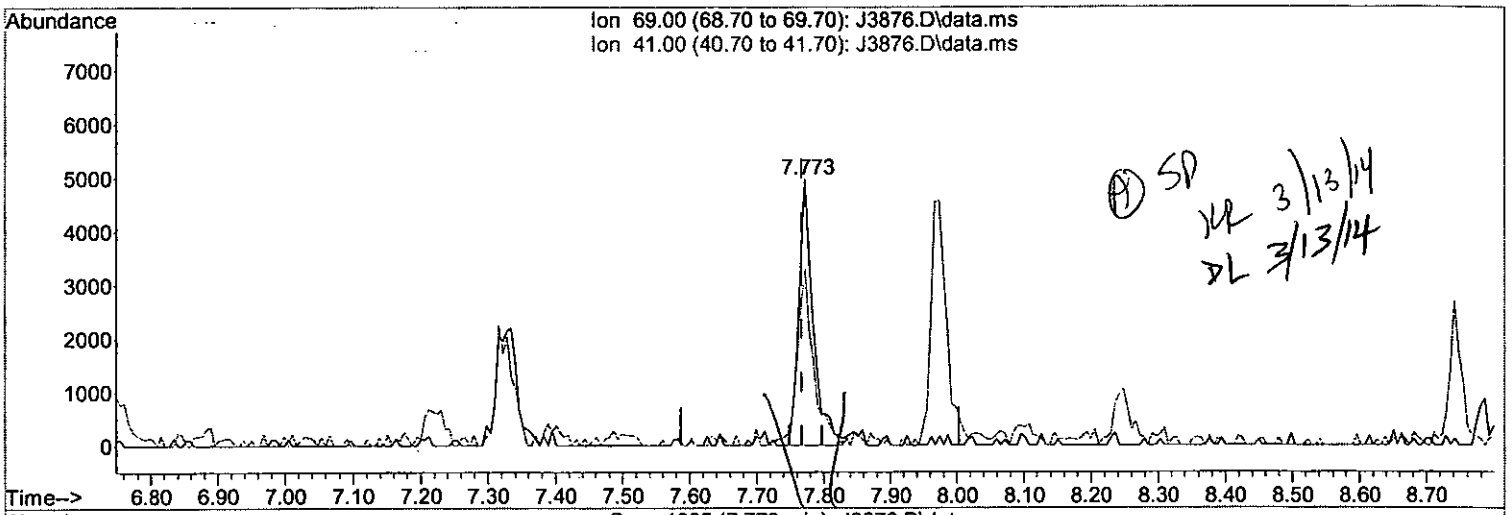
Ion	Exp%	Act%
69.00	100	100
41.00	72.10	66.39
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:16:16 2014 Page: 1

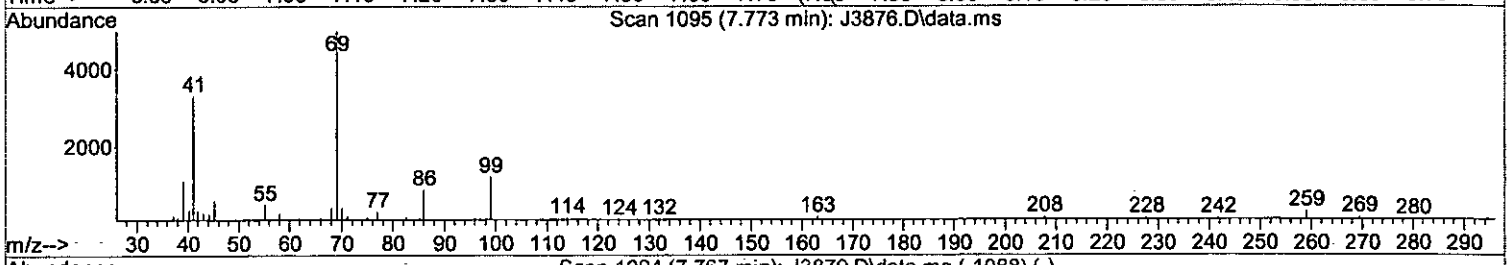
Quantitation Report (Qedit)

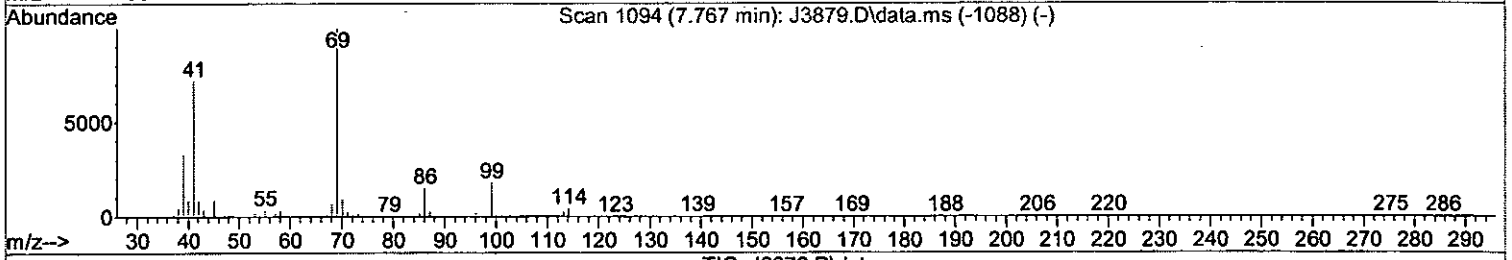
Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



SP 3/13/14
JL 3/13/14





TIC: J3876.D\data.ms

(68) Ethyl Methacrylate

7.773min (+0.006) 0.92 ppb m

response 7414

Ion	Exp%	Act%
69.00	100	100
41.00	72.10	66.39
0.00	0.00	0.00
0.00	0.00	0.00

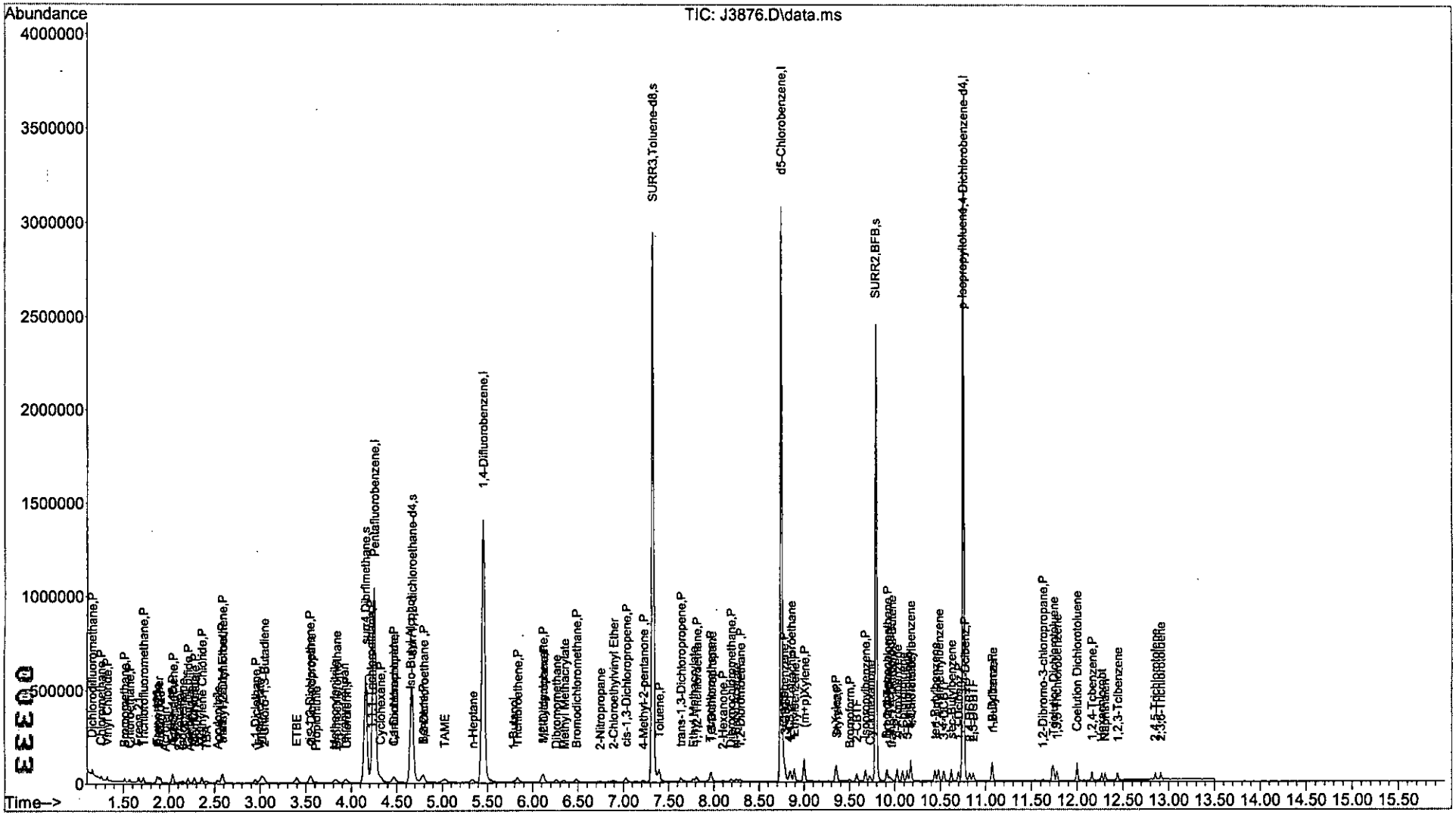
W031214.M Thu Mar 13 10:16:23 2014 Page: 1

00337

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:17:23 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909918	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1430134	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1288124	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	610738	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	411288	49.68	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.36%				
48) surr1,1,2-dichloroetha...	4.658	65	473496	50.20	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.40%				
65) SURR3,Toluene-d8	7.322	98	1742443	50.08	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.16%				
70) SURR2,BFB	9.785	95	630193	48.55	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	20735	1.92	ppb		98
3) Chloromethane	1.262	50	19011	2.03	ppb		95
4) Vinyl Chloride	1.323	62	17323	1.99	ppb		99
5) Bromomethane	1.512	94	11249	2.15	ppb		92
6) Chloroethane	1.567	64	11004	2.03	ppb		97
7) Freon 21	1.664	67	27600	2.10	ppb		100
8) Trichlorofluoromethane	1.719	101	26842	2.01	ppb		99
9) Diethyl Ether	1.878	59	13135	2.00	ppb		98
10) Freon 123a	1.872	67	20874	2.13	ppb		96
11) Freon 123	1.902	83	23028	2.06	ppb		97
12) Acrolein	1.957	56	1454m	4.62	ppb		
13) 1,1-Diclethene	2.036	96	13512	2.05	ppb		92
14) Freon 113	2.036	101	14449	2.00	ppb		95
15) Acetone	2.048	43	4756	2.63	ppb	#	65
16) 2-Propanol	2.115	45	9075	30.48	ppb		94
17) Iodomethane	2.146	142	14905	1.70	ppb		93
18) Carbon Disulfide	2.207	76	45666	1.99	ppb		97
19) Acetonitrile	2.225	40	2234	7.57	ppb		96
20) Allyl Chloride	2.274	76	8927	1.97	ppb	#	88
21) Methyl Acetate	2.280	43	7554	1.86	ppb		94
22) Methylene Chloride	2.359	84	17720	2.05	ppb		92
23) TBA	2.408	59	18160	35.99	ppb		100
24) Acrylonitrile	2.524	53	18242	9.02	ppb		94
25) Methyl-t-Butyl Ether	2.585	73	41163	1.96	ppb		95
26) trans-1,2-Dichloroethene	2.585	96	16136	1.95	ppb		99
28) 1,1-Diclethane	2.938	63	31309	2.03	ppb		93
29) Vinyl Acetate	2.987	86	2521	1.84	ppb	#	27
30) DIPE	3.012	45	59555	1.99	ppb		87
31) 2-Chloro-1,3-Butadiene	3.042	53	26608	2.01	ppb		92
32) ETBE	3.396	59	48108	1.92	ppb		99
33) 2,2-Dichloropropane	3.560	77	23375	1.91	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	17604	1.91	ppb		85
35) 2-Butanone	3.566	43	4922	1.95	ppb		85
36) Propionitrile	3.597	54	6574	9.27	ppb		90
37) Bromochloromethane	3.835	130	10569	2.05	ppb		90

KR 3/13/14

W031214.M Thu Mar 13 10:28:44 2014 00334 Page: 1

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.804	67	5081	2.16	ppb	#	58
39)	Tetrahydrofuran	3.914	42	3686	2.08	ppb		80
40)	Chloroform	3.938	83	30998	2.05	ppb		98
41)	1,1,1-Trichloroethane	4.219	97	25573	1.98	ppb	#	1
42)	TAME	5.023	73	41178	1.94	ppb		98
44)	Cyclohexane	4.316	41	15916m	2.06	ppb		
46)	Carbontetrachloride	4.469	121	6643m	1.94	ppb		
47)	1,1-Dichloropropene	4.462	75	19919	1.90	ppb		95
49)	Benzene	4.786	78	70084	1.99	ppb		91
50)	1,2-Dichloroethane	4.792	62	21052	1.97	ppb		90
51)	Iso-Butyl Alcohol	4.645	43	8755m	36.97	ppb		
52)	n-Heptane	5.334	43	17849	2.03	ppb		94
53)	1-Butanol	5.779	56	10476m	78.36	ppb		
54)	Trichloroethene	5.834	130	17521	2.05	ppb		84
55)	Methylcyclohexane	6.108	55	18955	2.07	ppb		86
56)	1,2-Diclpropane	6.115	63	18552	2.04	ppb		98
57)	Dibromomethane	6.255	93	8051	1.88	ppb		94
58)	1,4-Dioxane	6.328	88	2071m	36.08	ppb		
59)	Methyl Methacrylate	6.340	69	6901	1.63	ppb		90
60)	Bromodichloromethane	6.480	83	20138	1.91	ppb		95
61)	2-Nitropropane	6.743	41	4286m	3.79	ppb		
62)	2-Chloroethylvinyl Ether	6.889	63	7503	1.86	ppb		88
63)	cis-1,3-Dichloropropene	7.023	75	22401	1.80	ppb		94
64)	4-Methyl-2-pentanone	7.212	43	10071	1.85	ppb		89
66)	Toluene	7.395	91	74992	2.07	ppb		97
67)	trans-1,3-Dichloropropene	7.633	75	17986	1.79	ppb		96
68)	Ethyl Methacrylate	7.767	69	13634	1.68	ppb		94
69)	1,1,2-Trichloroethane	7.809	97	11464	1.81	ppb		99
72)	Tetrachloroethene	7.962	164	13515	2.03	ppb		96
73)	2-Hexanone	8.090	43	6463	1.77	ppb	#	74
74)	1,3-Dichloropropane	7.974	76	22806	1.97	ppb		93
75)	Dibromochloromethane	8.193	129	12460	1.87	ppb		99
76)	N-Butyl Acetate	8.242	43	15842	1.76	ppb		98
77)	1,2-Dibromoethane	8.291	107	11853	1.99	ppb		91
78)	Chlorobenzene	8.767	112	45758	2.04	ppb		100
79)	3-CBTF	8.785	180	20314	1.83	ppb		98
80)	4-CBTF	8.840	180	17849	1.80	ppb		91
81)	1,1,1,2-Tetrachloroethane	8.852	131	14723	1.87	ppb		92
82)	Ethylbenzene	8.888	106	22933	1.92	ppb		91
83)	(m+p)Xylene	8.998	106	55419	3.95	ppb		96
84)	o-Xylene	9.346	106	26979	1.88	ppb		97
85)	Styrene	9.358	104	41678	1.82	ppb		92
87)	Bromoform	9.492	173	5562	1.60	ppb		83
88)	2-CBTF	9.577	180	20255	1.99	ppb		98
89)	Isopropylbenzene	9.675	105	64407	2.04	ppb		98
90)	Cyclohexanone	9.718	55	17665	36.07	ppb		96
91)	trans-1,4-Dichloro-2-B...	9.967	53	3112	1.89	ppb		94
92)	1,1,2,2-Tetrachloroethane	9.913	83	13476	1.93	ppb		95
93)	Bromobenzene	9.913	156	18829	2.10	ppb	#	77
94)	1,2,3-Trichloropropane	9.943	110	4408	2.11	ppb	#	80
95)	n-Propylbenzene	10.022	91	78055	2.12	ppb		95
96)	2-Chlorotoluene	10.083	91	48755	2.10	ppb		98

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

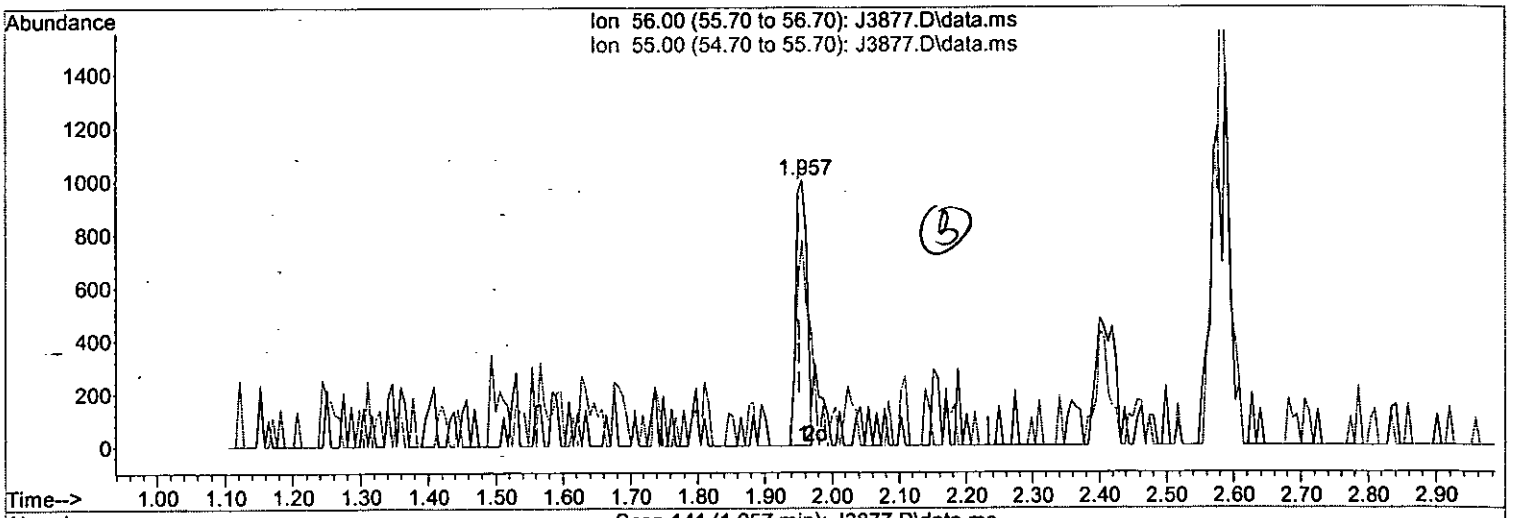
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	48185	2.00	ppb		97
98)	4-Chlorotoluene	10.175	91	57852	2.12	ppb		96
99)	1,3,5-Trimethylbenzene	10.169	105	51100	1.99	ppb		94
100)	tert-Butylbenzene	10.437	119	44524	2.06	ppb		97
101)	1,2,4-Trimethylbenzene	10.480	105	52516	1.98	ppb		100
102)	3,4-DCBTF	10.534	214	14555	1.93	ppb		96
103)	sec-Butylbenzene	10.620	105	62384	2.07	ppb		98
104)	p-Isopropyltoluene	10.742	119	50277	1.97	ppb		97
105)	1,3-Dclbenz	10.699	146	29567	1.93	ppb		95
106)	1,4-Dclbenz	10.766	146	31312	1.92	ppb		90
107)	2,4-DCBTF	10.821	214	12420	1.90	ppb	#	88
108)	2,5-DCBTF	10.864	214	14748	1.97	ppb		98
109)	n-Butylbenzene	11.065	91	47827	2.08	ppb		93
110)	1,2-Dclbenz	11.065	146	28414	1.93	ppb		99
111)	1,2-Dibromo-3-chloropr...	11.626	157	1695	1.58	ppb	#	67
112)	Trielution Dichlorotol...	11.729	125	67672	5.81	ppb		97
113)	1,3,5 Trichlorobenzene	11.778	180	20663	2.03	ppb		97
114)	Coelution Dichlorotoluene	11.998	125	50516	4.10	ppb		96
115)	1,2,4-Tcbenzene	12.162	180	17573	1.95	ppb		95
116)	Hexachlorobt	12.266	225	7725	1.97	ppb		97
117)	Naphthalen	12.302	128	31525	1.94	ppb		99
118)	1,2,3-Tclbenzene	12.437	180	14777	2.00	ppb		97
119)	2,4,5-Trichlorotolene	12.851	159	9636m	1.98	ppb		
120)	2,3,6-Trichlorotoluene	12.912	159	8342	1.88	ppb		97

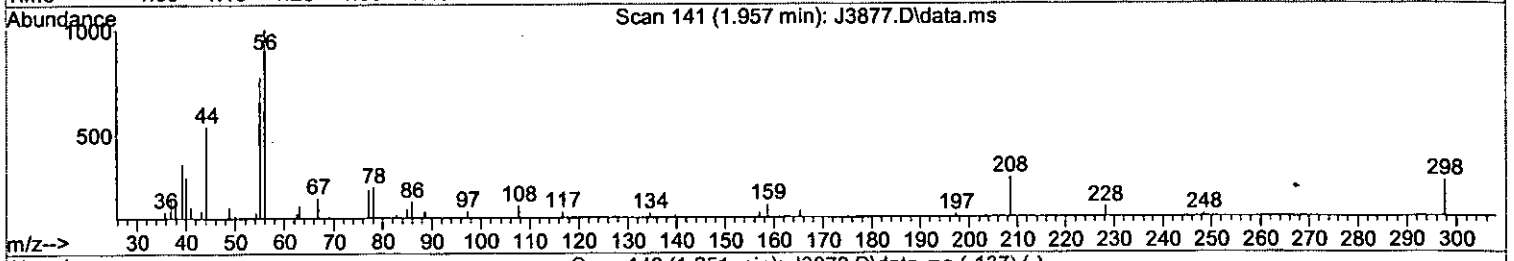
(#) = qualifier out of range (m) = manual integration (+) = signals summed

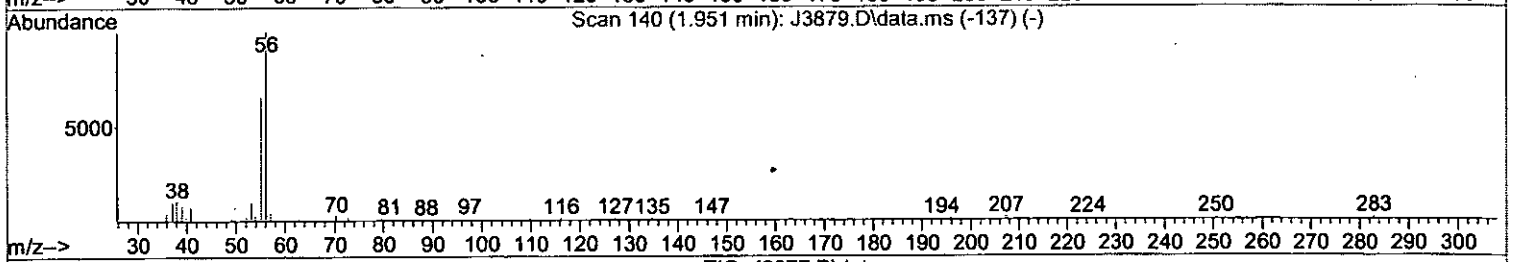
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(12) Acrolein

1.957min (+0.006) 3.70 ppb

response 1163

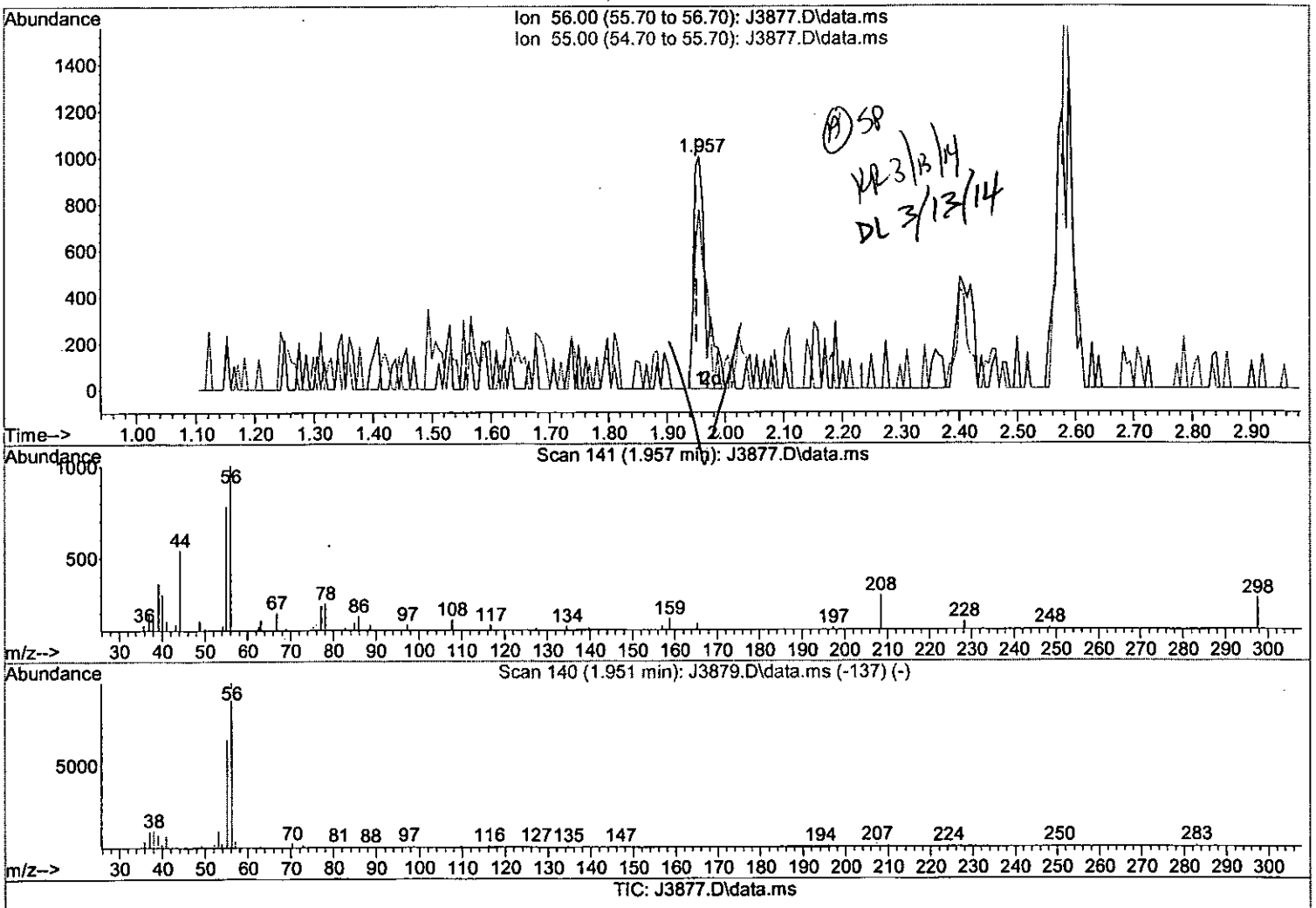
Ion	Exp%	Act%
56.00	100	100
55.00	66.20	77.47
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:24:41 2014 00337 Page: 1

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(12) Acrolein

1.957min (+0.006) 4.62 ppb m

response 1454

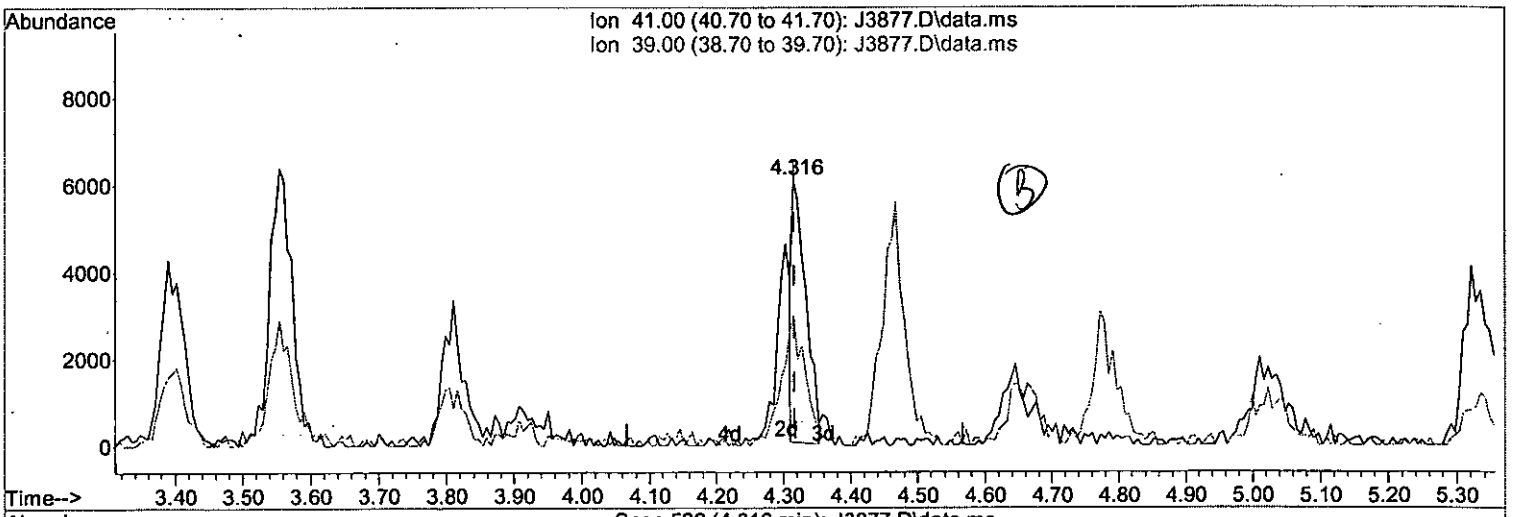
Ion	Exp%	Act%
56.00	100	100
55.00	66.20	77.47
0.00	0.00	0.00
0.00	0.00	0.00

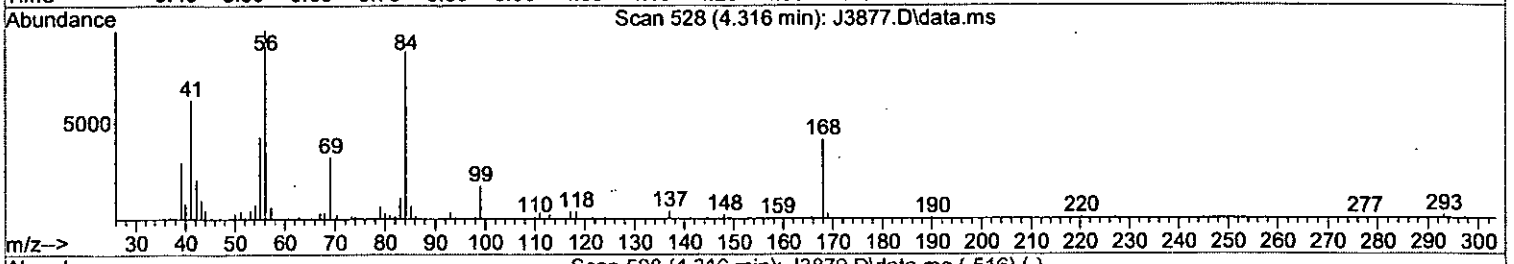
W031214.M Thu Mar 13 10:24:48 2014 Page: 1

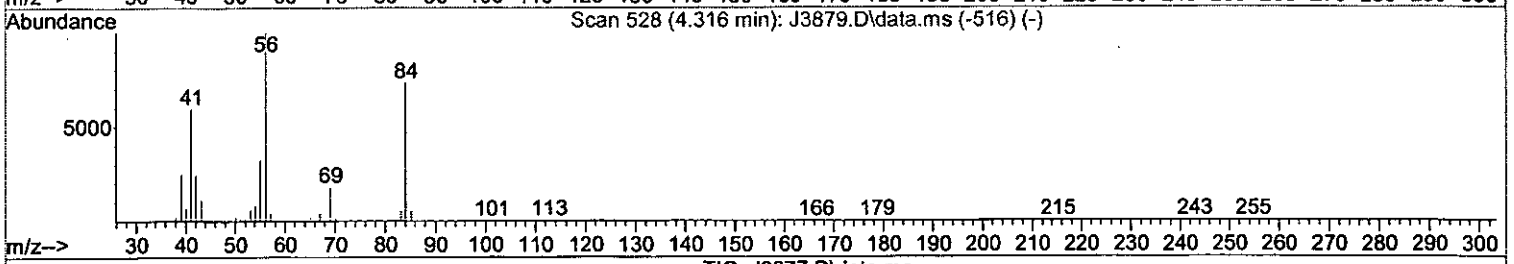
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(44) Cyclohexane (P)

4.316min (-0.000) 1.12 ppb

response 8699

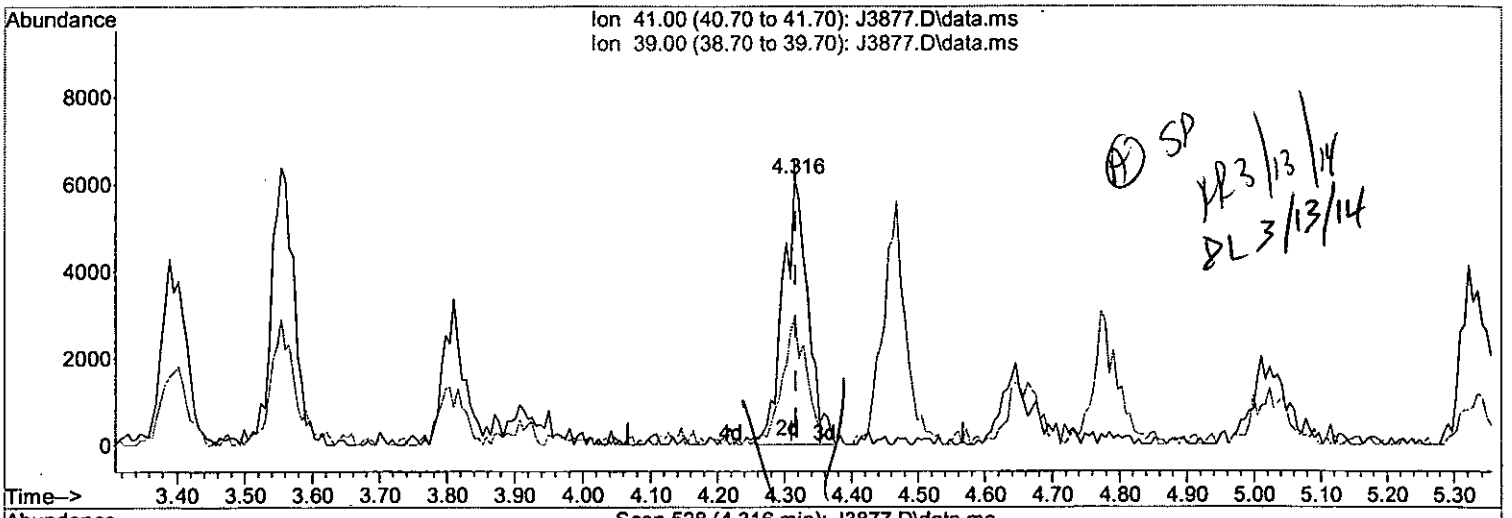
Ion	Exp%	Act%
41.00	100	100
39.00	41.90	48.62
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:25:25 2014 Page: 1

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(44) Cyclohexane (P)

4.316min (-0.000) 2.06 ppb m

response 15916

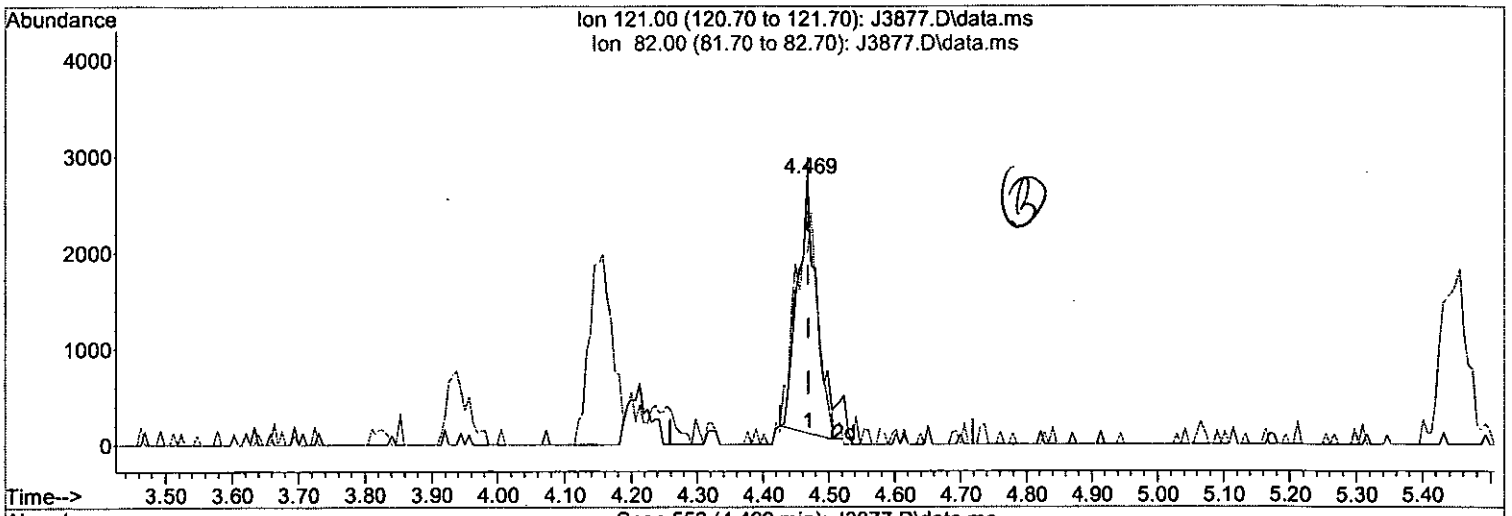
Ion	Exp%	Act%
41.00	100	100
39.00	41.90	48.62
0.00	0.00	0.00
0.00	0.00	0.00

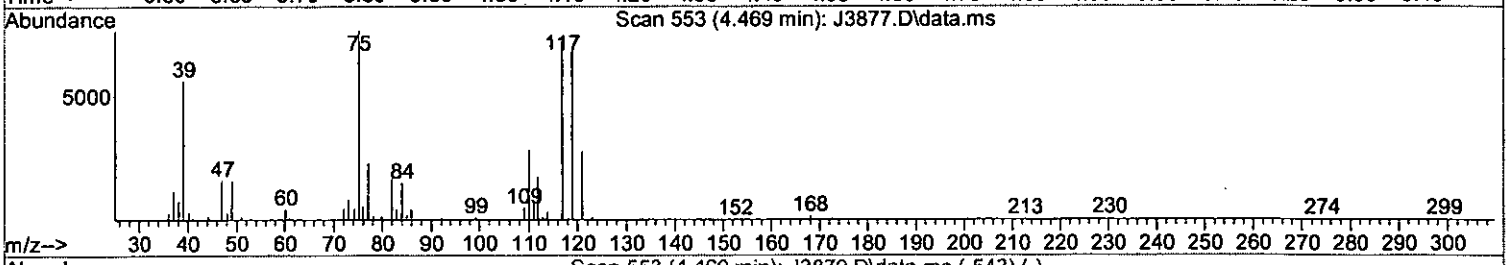
W031214.M Thu Mar 13 10:25:33 2014 Page: 1

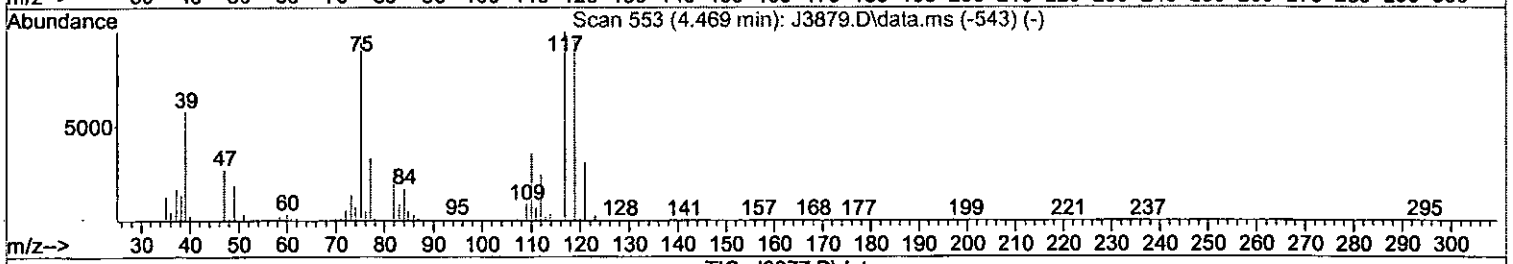
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(46) Carbontetrachloride (P)

4.469min (-0.000) 1.57 ppb

response 5374

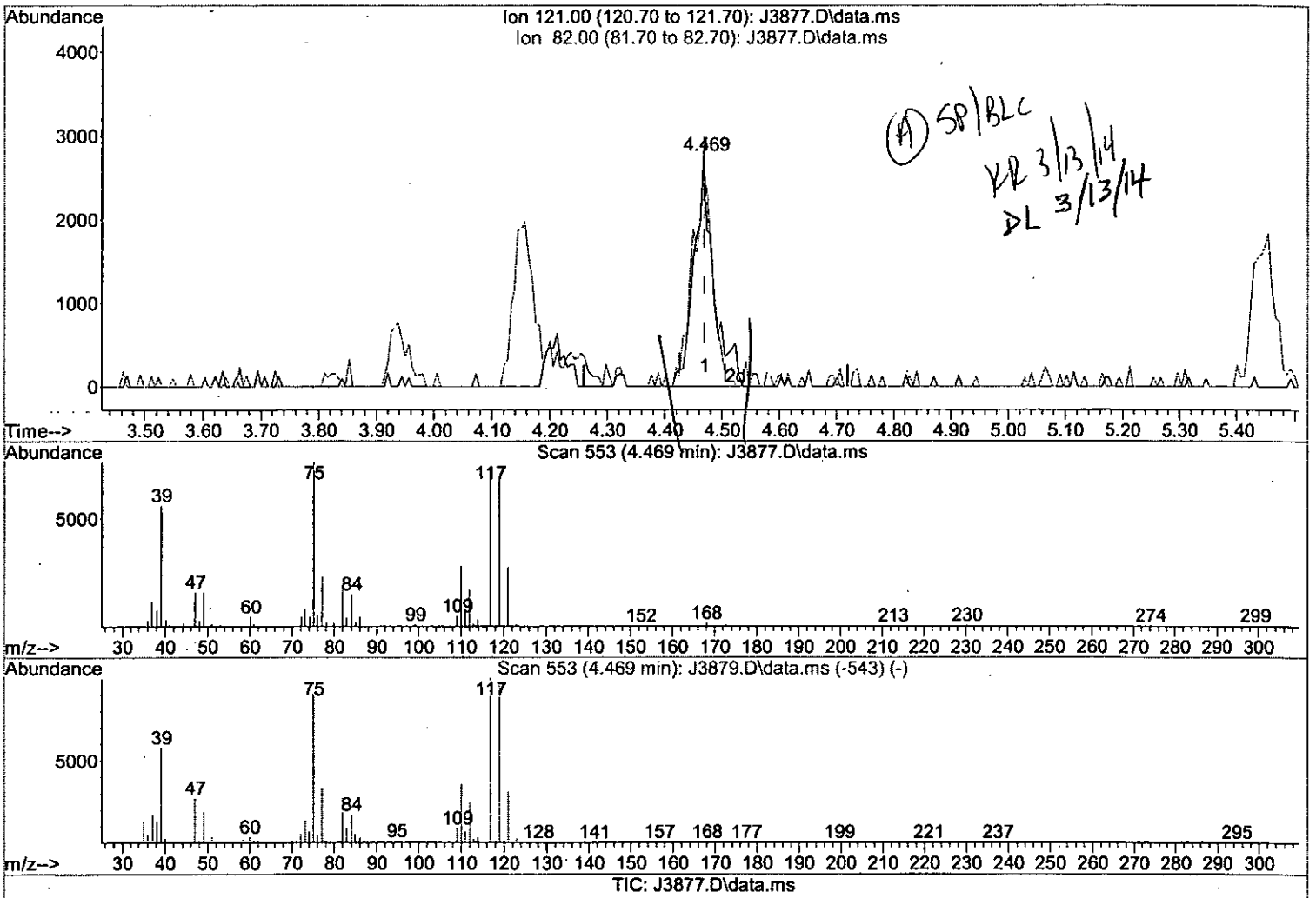
Ion	Exp%	Act%
121.00	100	100
82.00	87.50	72.27
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:25:42 2014 00341 Page: 1

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(46) Carbontetrachloride (P)

4.469min (-0.000) 1.94 ppb m

response 6643

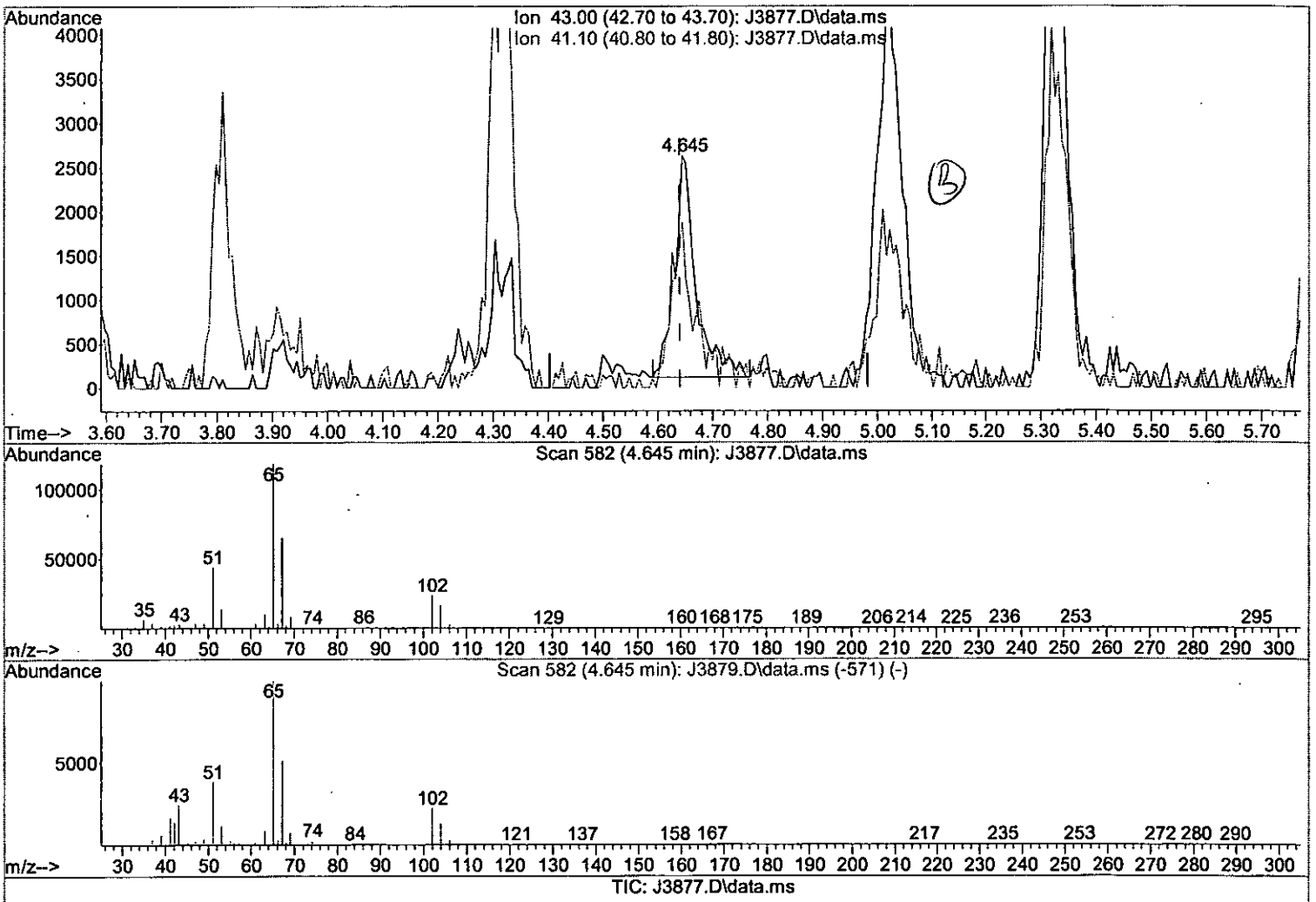
Ion	Exp%	Act%
121.00	100	100
82.00	87.50	72.27
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:25:55 2014 Page: 1

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 29.57 ppb

response 7003

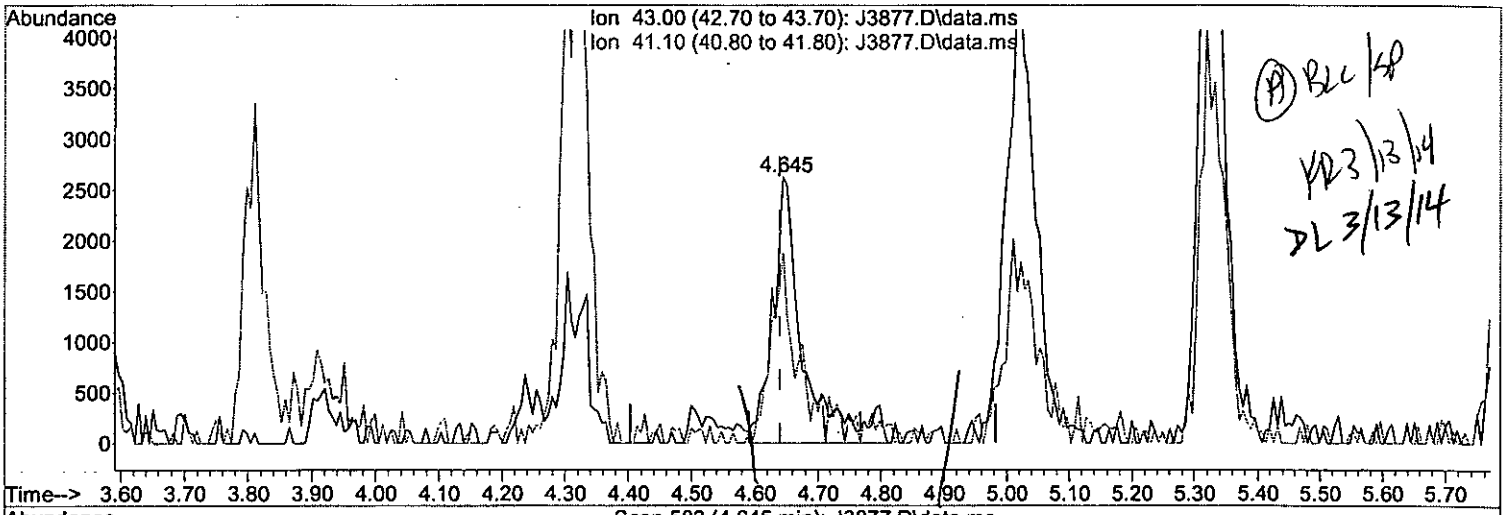
Ion	Exp%	Act%
43.00	100	100
41.10	68.40	71.74
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:26:19 2014 00343 Page: 1

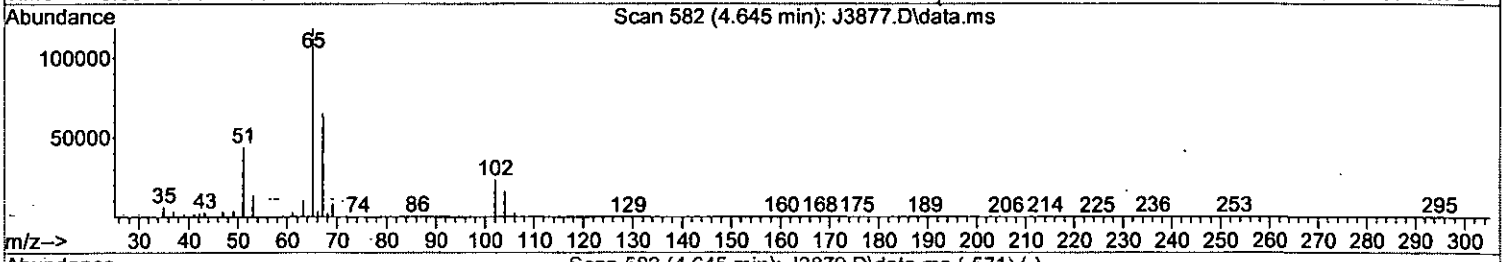
Quantitation Report (Qedit)

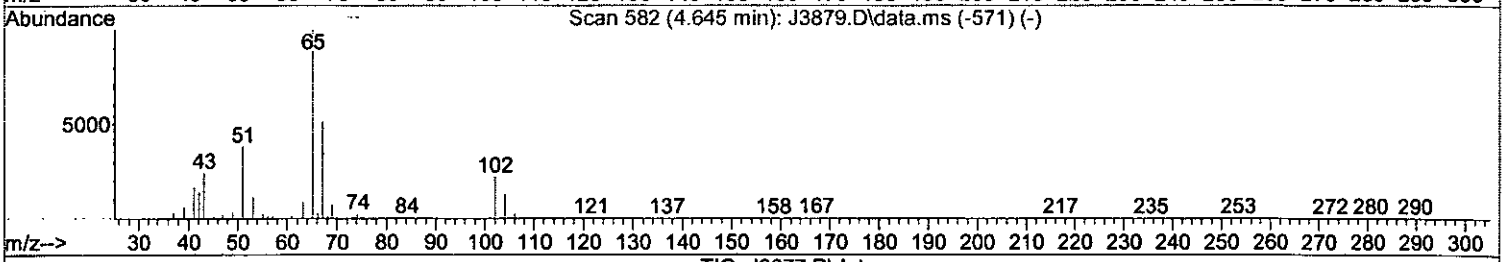
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(A) BLC 3/13/14
KR 3/13/14
DL 3/13/14





TIC: J3877.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 36.97 ppb m

response 8755

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	71.74
0.00	0.00	0.00
0.00	0.00	0.00

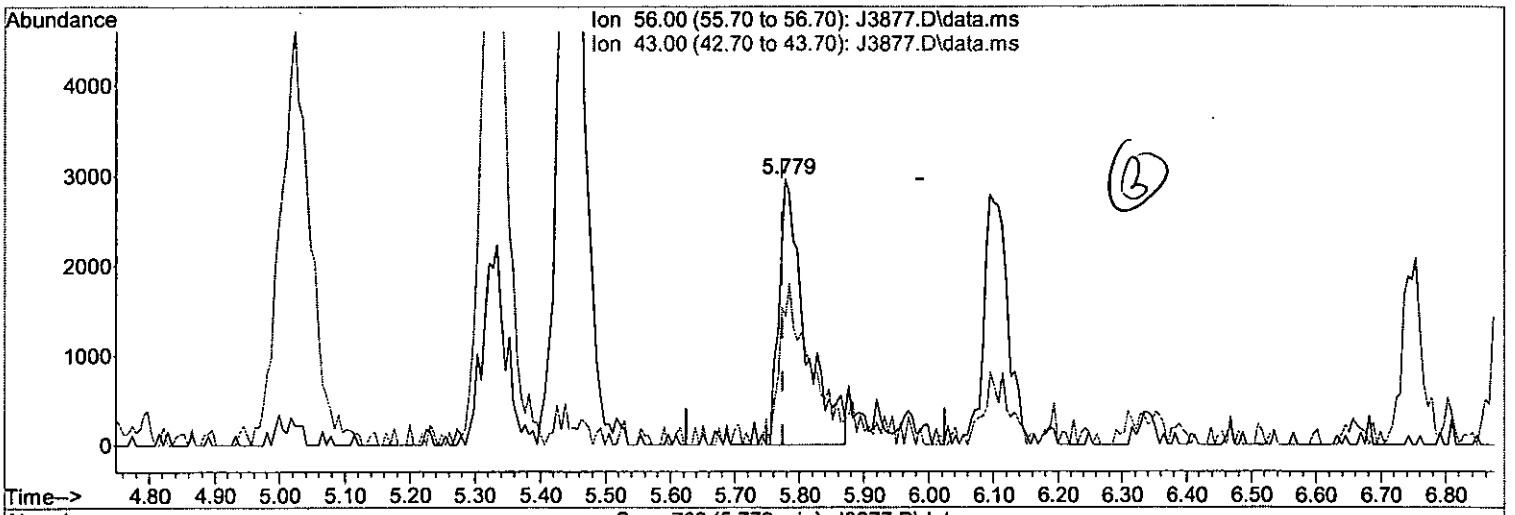
W031214.M Thu Mar 13 10:26:26 2014 Page: 1

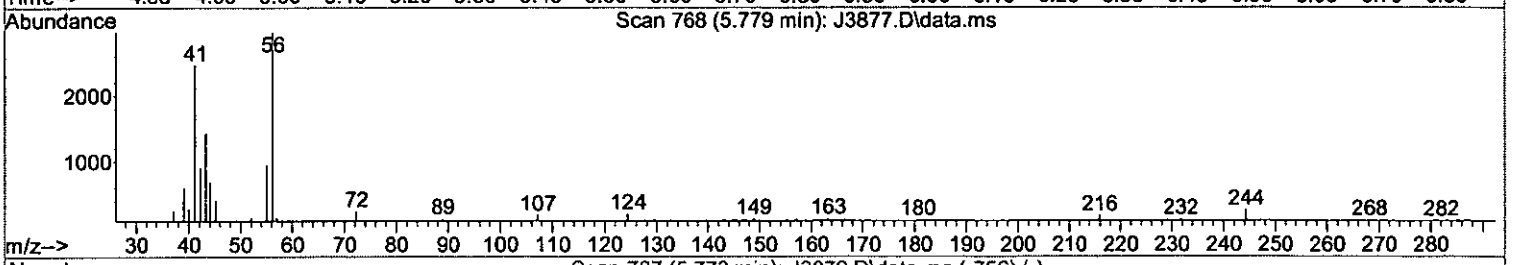
00344

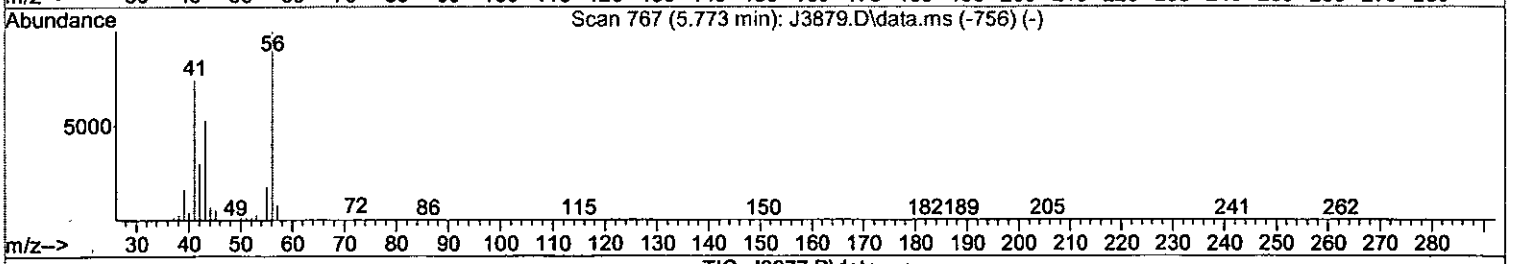
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(53) 1-Butanol

5.779min (+0.006) 63.08 ppb

response 8433

Ion	Exp%	Act%
56.00	100	100
43.00	55.80	71.53
0.00	0.00	0.00
0.00	0.00	0.00

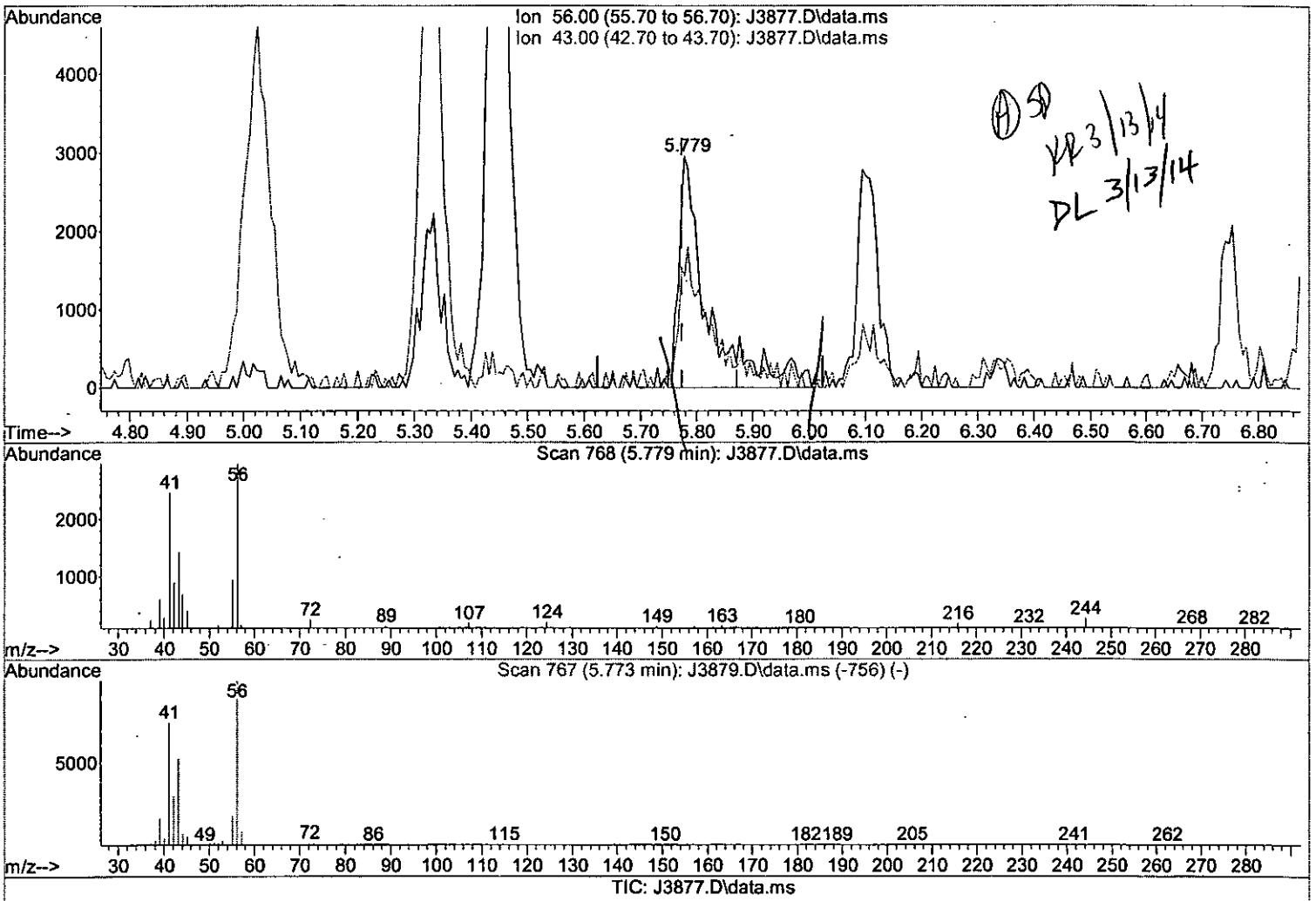
W031214.M Thu Mar 13 10:26:36 2014 Page: 1

00345

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(53) 1-Butanol

5.779min (+0.006) 78.36 ppb m

response 10476

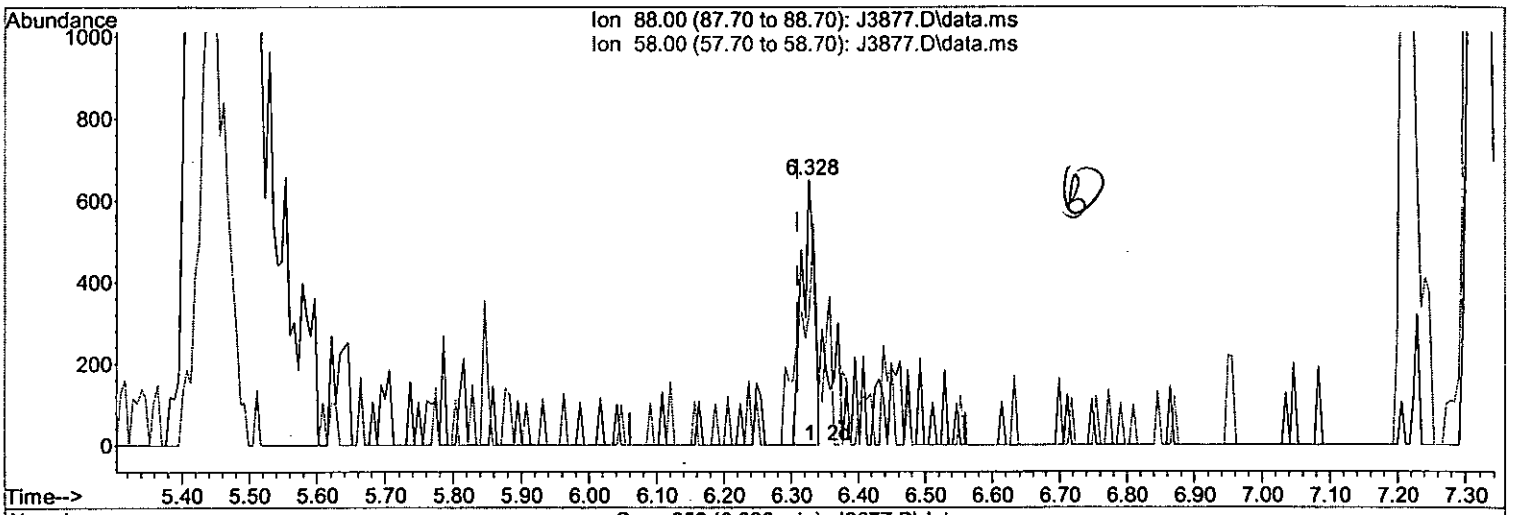
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	57.58
0.00	0.00	0.00
0.00	0.00	0.00

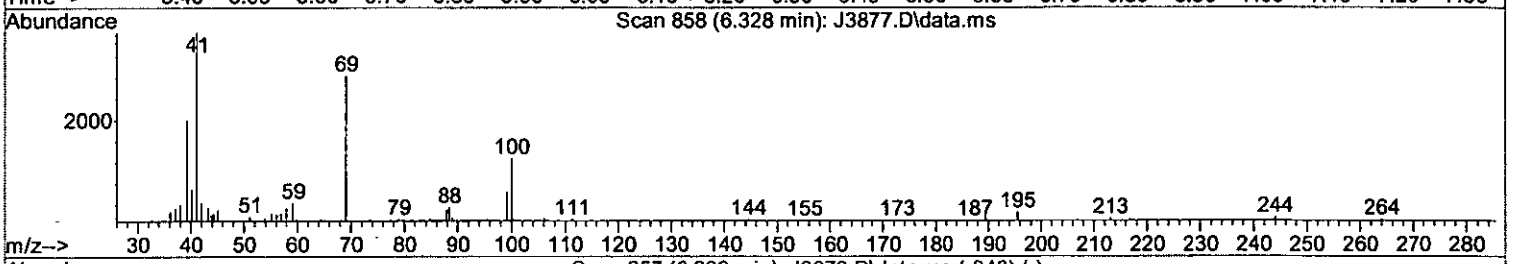
W031214.M Thu Mar 13 10:26:44 2014 Page: 1

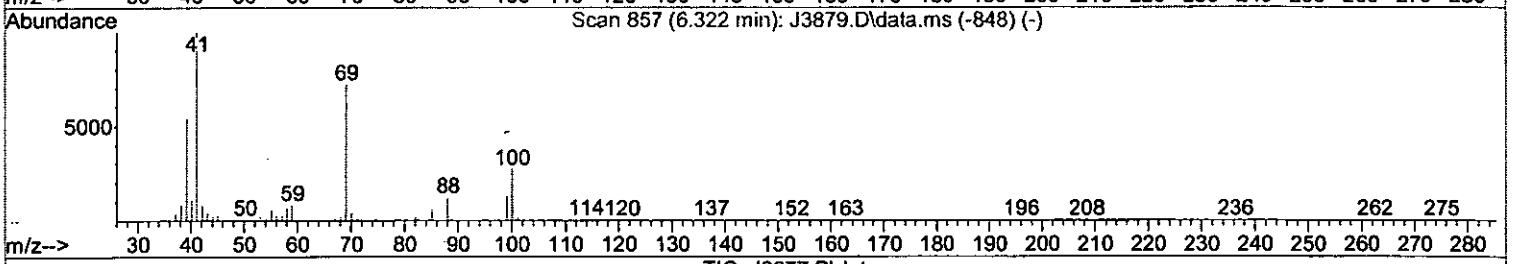
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(58) 1,4-Dioxane

6.328min (+0.018) 14.23 ppb

response 817

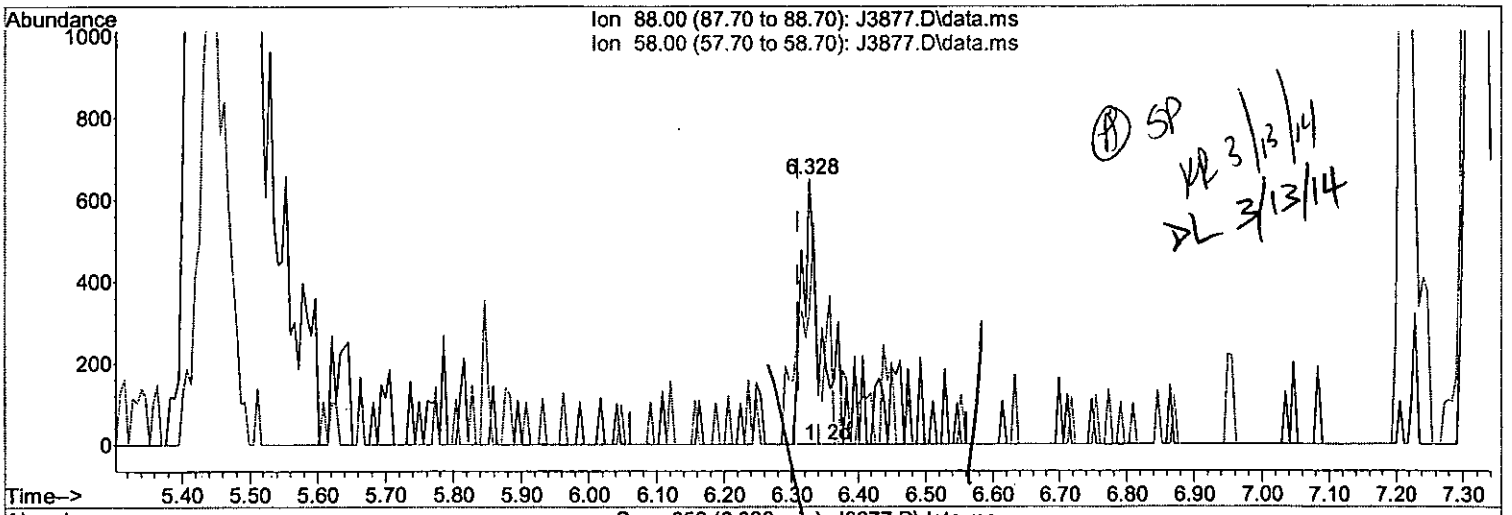
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	51.84
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:26:56 2014 00347 Page: 1

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(58) 1,4-Dioxane

6.328min (+0.018) 36.08 ppb m

response 2071

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	96.57#
0.00	0.00	0.00
0.00	0.00	0.00

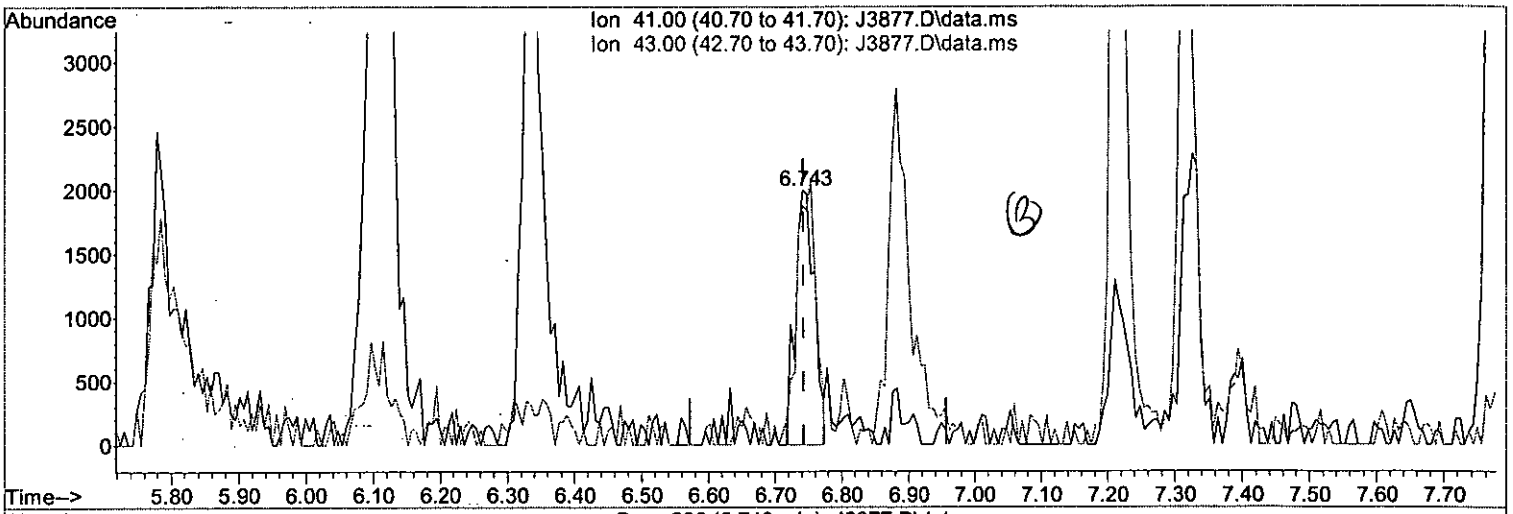
W031214.M Thu Mar 13 10:27:14 2014 Page: 1

00348

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(61) 2-Nitropropane

6.743min (-0.000) 3.49 ppb

response 3946

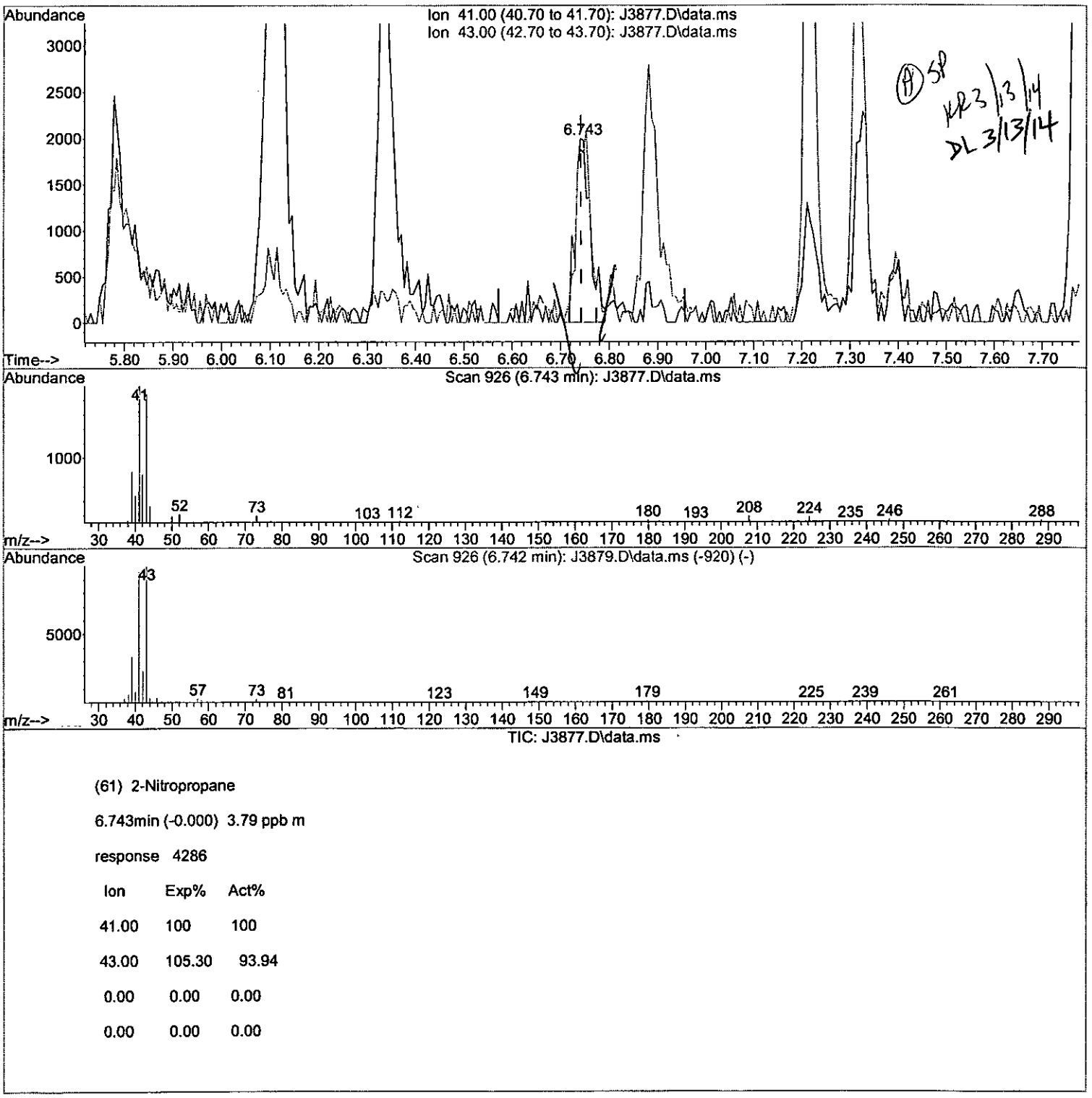
Ion	Exp%	Act%
41.00	100	100
43.00	105.30	93.94
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:27:33 2014 003 Page: 1

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(61) 2-Nitropropane

6.743min (-0.000) 3.79 ppb m

response 4286

Ion	Exp%	Act%
41.00	100	100
43.00	105.30	93.94
0.00	0.00	0.00
0.00	0.00	0.00

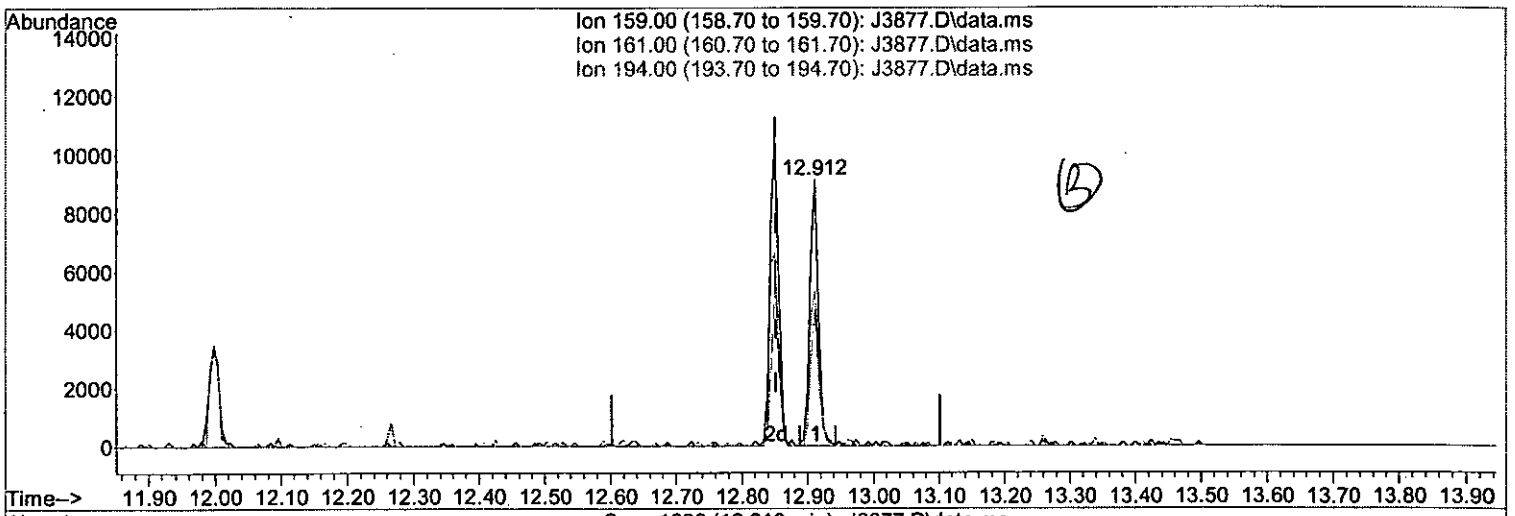
W031214.M Thu Mar 13 10:27:41 2014 Page: 1

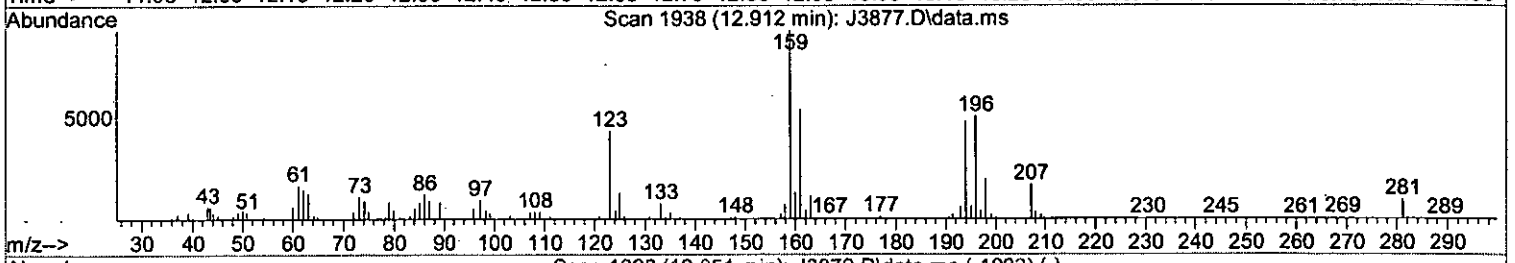
00358

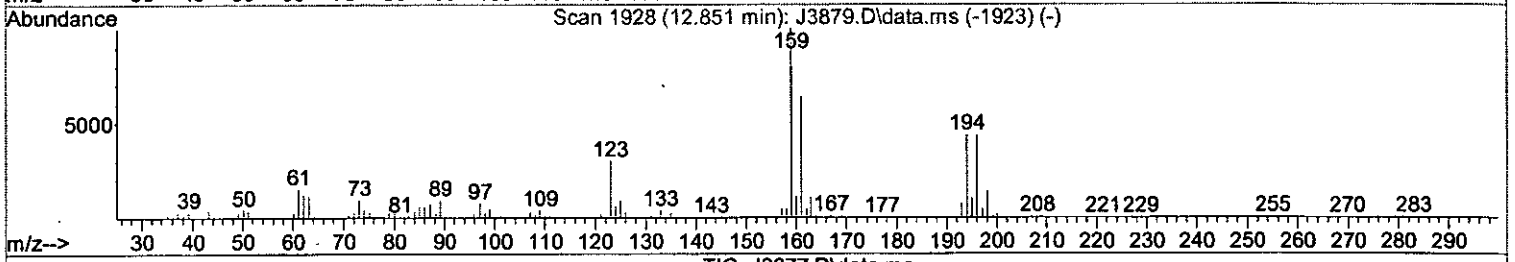
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(119) 2,4,5-Trichlorotolene

12.912min (+0.061) 1.71 ppb

response 8342

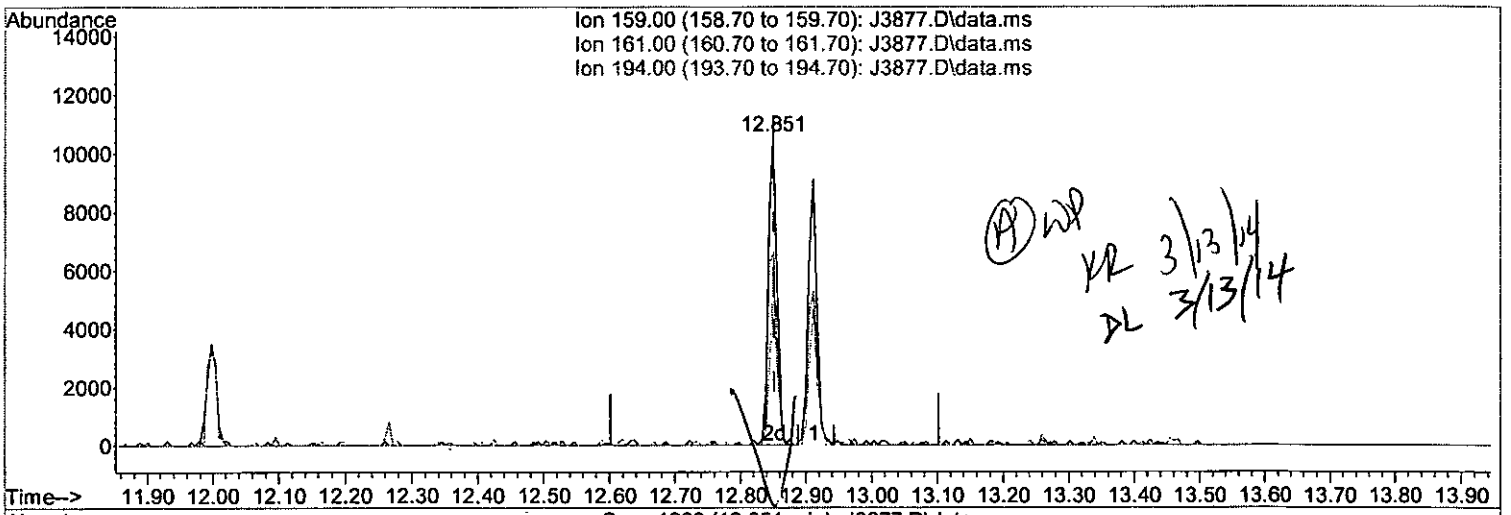
Ion	Exp%	Act%
159.00	100	100
161.00	64.60	58.14
194.00	43.80	51.93
0.00	0.00	0.00

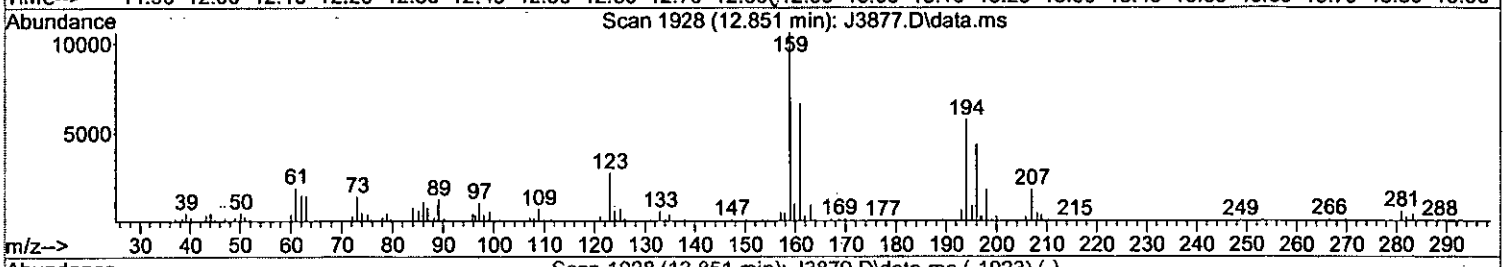
W031214.M Thu Mar 13 10:28:23 2014 003 Page: 1

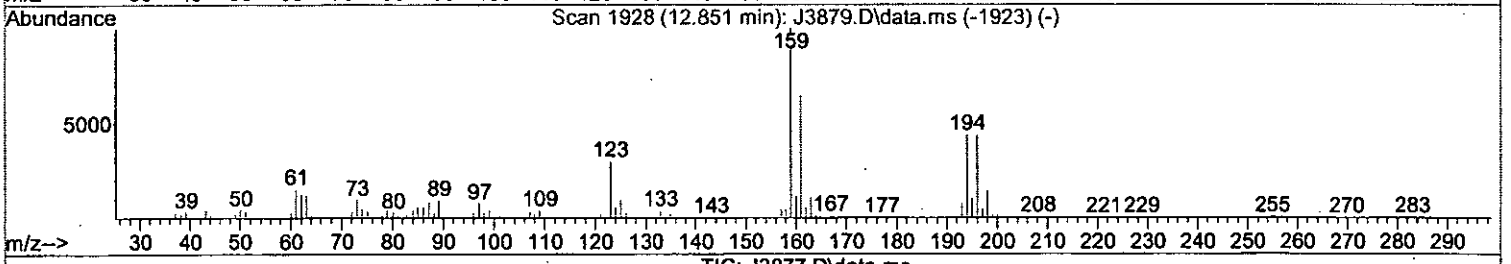
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (-0.000) 1.98 ppb m

response 9636

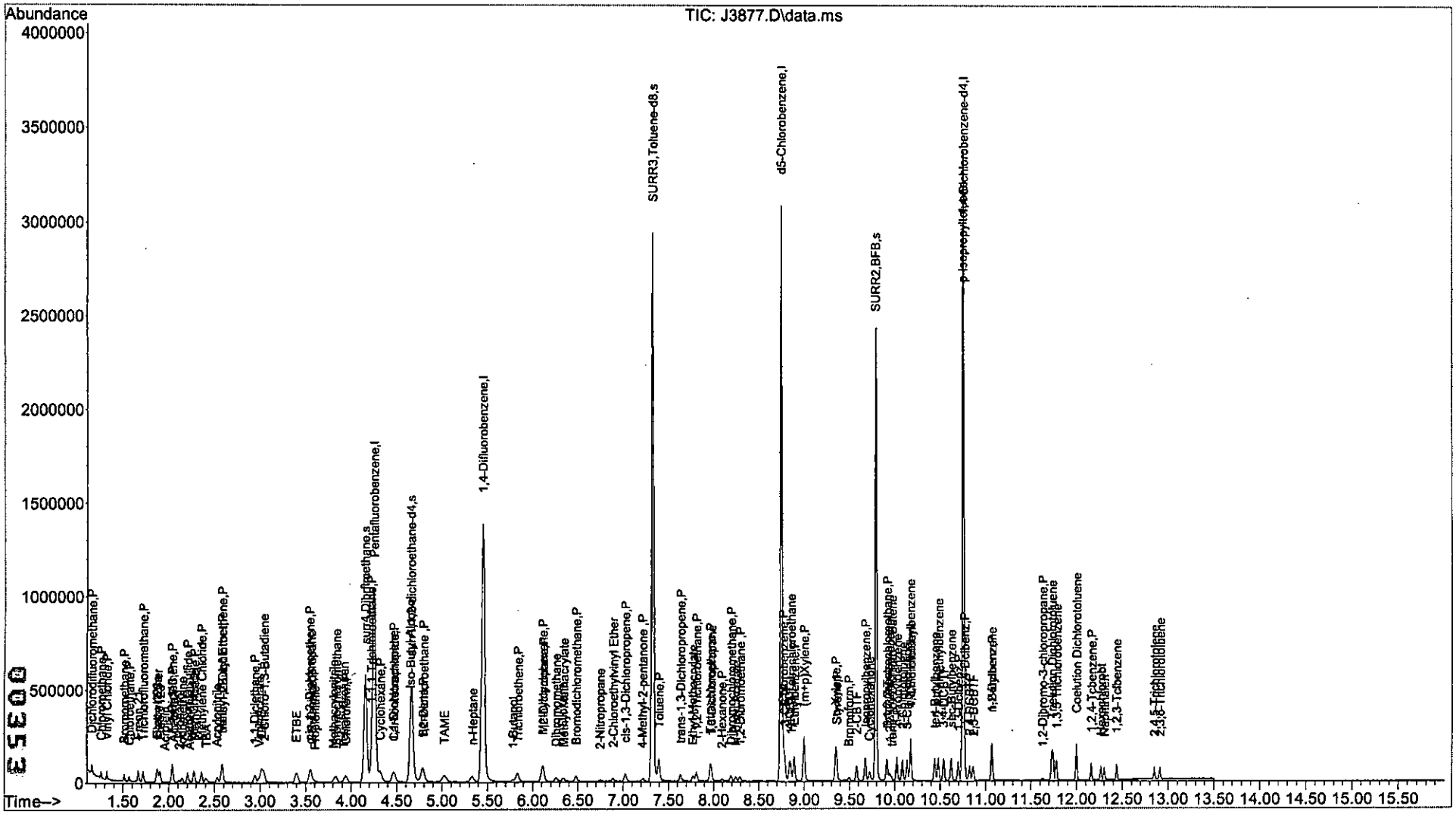
Ion	Exp%	Act%
159.00	100	100
161.00	64.60	62.31
194.00	43.80	53.92#
0.00	0.00	0.00

W031214.M Thu Mar 13 10:28:31 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:28:48 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909636	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1434063	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1295117	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	613774	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	419968	50.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.18%				
48) surr1,1,2-dichloroetha...	4.658	65	473956	50.11	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.22%				
65) SURR3,Toluene-d8	7.322	98	1740484	49.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.78%				
70) SURR2,BFB	9.785	95	647335	49.74	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	48185	4.46	ppb		99
3) Chloromethane	1.256	50	46384	4.94	ppb		94
4) Vinyl Chloride	1.323	62	43530	5.00	ppb		99
5) Bromomethane	1.512	94	24980	4.77	ppb		95
6) Chloroethane	1.567	64	23684	4.38	ppb		92
7) Freon 21	1.664	67	67580	5.15	ppb		100
8) Trichlorofluoromethane	1.719	101	68500	5.13	ppb		98
9) Diethyl Ether	1.878	59	31483	4.79	ppb		92
10) Freon 123a	1.866	67	50620	5.16	ppb		91
11) Freon 123	1.902	83	56653	5.06	ppb		97
12) Acrolein	1.951	56	3084	9.81	ppb		98
13) 1,1-Diclethene	2.036	96	33755	5.11	ppb		95
14) Freon 113	2.036	101	36313	5.03	ppb		92
15) Acetone	2.048	43	9867	5.47	ppb		81
16) 2-Propanol	2.116	45	27896	93.73	ppb		91
17) Iodomethane	2.146	142	38074	4.34	ppb		95
18) Carbon Disulfide	2.207	76	113819	4.96	ppb		98
19) Acetonitrile	2.225	40	7540	25.55	ppb		96
20) Allyl Chloride	2.274	76	22847	5.05	ppb		98
21) Methyl Acetate	2.274	43	22856	5.62	ppb		99
22) Methylene Chloride	2.353	84	43263	5.00	ppb		98
23) TBA	2.408	59	49570	98.27	ppb		96
24) Acrylonitrile	2.524	53	50514	24.98	ppb		93
25) Methyl-t-Butyl Ether	2.579	73	108080	5.15	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	40087	4.85	ppb		93
28) 1,1-Diclethane	2.939	63	78544	5.10	ppb		98
29) Vinyl Acetate	2.975	86	6450	4.71	ppb	#	57
30) DIPE	3.018	45	153755	5.13	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	66829	5.04	ppb		89
32) ETBE	3.396	59	129769	5.17	ppb		96
33) 2,2-Dichloropropane	3.560	77	58638	4.80	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	45860	4.97	ppb		95
35) 2-Butanone	3.554	43	12867	5.09	ppb		92
36) Propionitrile	3.591	54	17228	24.31	ppb		96
37) Bromochloromethane	3.835	130	26538	5.15	ppb	#	73

KR 3/13/14

W031214.M Thu Mar 13 10:36:04 2014 Page: 1

0035

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	11464	4.87	ppb		95
39) Tetrahydrofuran	3.908	42	8977	5.08	ppb		87
40) Chloroform	3.938	83	74686	4.95	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	64390	4.98	ppb	#	37
42) TAME	5.023	73	106230	5.02	ppb		98
44) Cyclohexane	4.310	41	39966	5.15	ppb		94
46) Carbontetrachloride	4.469	121	15872	4.62	ppb		90
47) 1,1-Dichloropropene	4.463	75	54305	5.17	ppb		93
49) Benzene	4.780	78	179829	5.09	ppb		95
50) 1,2-Dichloroethane	4.780	62	53239	4.97	ppb		94
51) Iso-Butyl Alcohol	4.633	43	20997	88.43	ppb		94
52) n-Heptane	5.322	43	42494	4.82	ppb		93
53) 1-Butanol	5.773	56	26987	201.32	ppb		95
54) Trichloroethene	5.828	130	41962	4.91	ppb		92
55) Methylcyclohexane	6.103	55	46721	5.08	ppb		91
56) 1,2-Diclpropane	6.115	63	43350	4.76	ppb		100
57) Dibromomethane	6.261	93	20852	4.86	ppb		93
58) 1,4-Dioxane	6.322	88	6178m	107.34	ppb		
59) Methyl Methacrylate	6.334	69	19608	4.62	ppb		98
60) Bromodichloromethane	6.474	83	52141	4.94	ppb		95
61) 2-Nitropropane	6.743	41	9752	8.60	ppb		93
62) 2-Chloroethylvinyl Ether	6.877	63	19373	4.78	ppb		94
63) cis-1,3-Dichloropropene	7.023	75	59020	4.72	ppb		92
64) 4-Methyl-2-pentanone	7.218	43	25233	4.63	ppb		94
66) Toluene	7.389	91	187487	5.15	ppb		93
67) trans-1,3-Dichloropropene	7.633	75	47205	4.68	ppb		99
68) Ethyl Methacrylate	7.767	69	38371	4.72	ppb		95
69) 1,1,2-Trichloroethane	7.803	97	31839	5.00	ppb		94
72) Tetrachloroethene	7.962	164	31272	4.67	ppb		93
73) 2-Hexanone	8.090	43	16065	4.38	ppb		94
74) 1,3-Dichloropropane	7.974	76	59278	5.08	ppb		96
75) Dibromochloromethane	8.188	129	32842	4.90	ppb		93
76) N-Butyl Acetate	8.236	43	42929	4.73	ppb		94
77) 1,2-Dibromoethane	8.285	107	29591	4.94	ppb		94
78) Chlorobenzene	8.767	112	114107	5.06	ppb		95
79) 3-CBTF	8.785	180	53330	4.78	ppb		96
80) 4-CBTF	8.834	180	48803	4.89	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.846	131	38239	4.83	ppb		94
82) Ethylbenzene	8.889	106	61699	5.14	ppb		98
83) (m+p)Xylene	8.998	106	144528	10.24	ppb		98
84) o-Xylene	9.346	106	72480	5.03	ppb		100
85) Styrene	9.358	104	114854	4.99	ppb		92
87) Bromoform	9.492	173	16573	4.75	ppb		96
88) 2-CBTF	9.577	180	51681	5.05	ppb		95
89) Isopropylbenzene	9.669	105	169239	5.34	ppb		96
90) Cyclohexanone	9.718	55	49534	100.63	ppb		97
91) trans-1,4-Dichloro-2-B...	9.962	53	7667	4.64	ppb		92
92) 1,1,2,2-Tetrachloroethane	9.913	83	36213	5.15	ppb		98
93) Bromobenzene	9.913	156	46987	5.20	ppb	#	86
94) 1,2,3-Trichloropropane	9.943	110	10506	5.00	ppb	#	86
95) n-Propylbenzene	10.023	91	199054	5.37	ppb		99
96) 2-Chlorotoluene	10.083	91	125591	5.39	ppb		97

W031214.M Thu Mar 13 10:36:04 2014 Page: 2

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

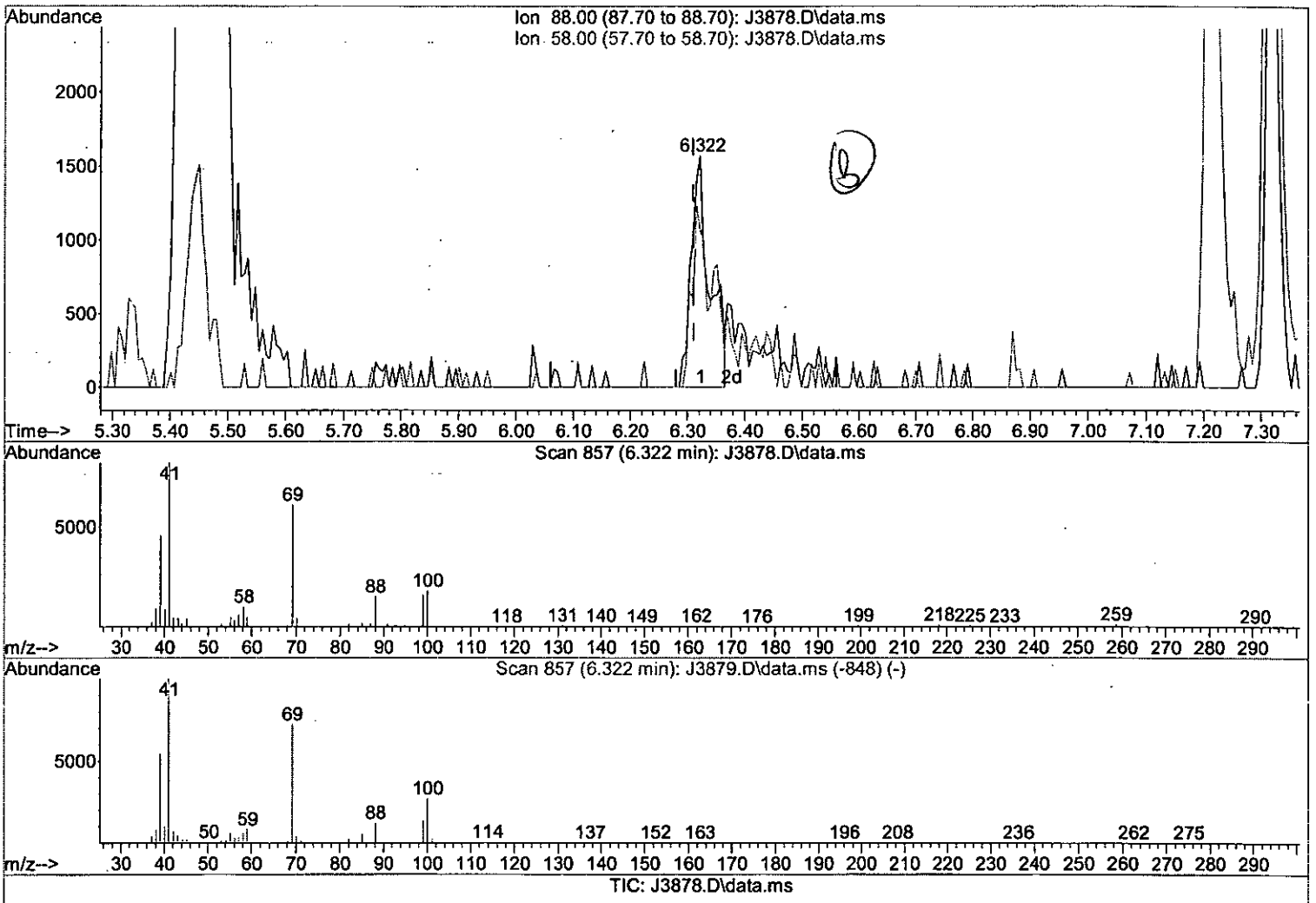
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	128681	5.31	ppb		97
98)	4-Chlorotoluene	10.169	91	151049	5.50	ppb		96
99)	1,3,5-Trimethylbenzene	10.169	105	137380	5.31	ppb		99
100)	tert-Butylbenzene	10.437	119	113901	5.23	ppb		99
101)	1,2,4-Trimethylbenzene	10.474	105	143214	5.38	ppb		98
102)	3,4-DCBTF	10.535	214	36559	4.83	ppb		98
103)	sec-Butylbenzene	10.620	105	165306	5.46	ppb		97
104)	p-Isopropyltoluene	10.742	119	136851	5.34	ppb		97
105)	1,3-Dclbenz	10.693	146	80200	5.22	ppb		99
106)	1,4-Dclbenz	10.766	146	81727	5.00	ppb		90
107)	2,4-DCBTF	10.821	214	33202	5.05	ppb		98
108)	2,5-DCBTF	10.864	214	38208	5.08	ppb		97
109)	n-Butylbenzene	11.065	91	122103	5.29	ppb		96
110)	1,2-Dclbenz	11.065	146	76727	5.18	ppb		96
111)	1,2-Dibromo-3-chloropr...	11.626	157	4670	4.34	ppb	#	79
112)	Trielution Dichlorotol...	11.730	125	181694	15.52	ppb		99
113)	1,3,5 Trichlorobenzene	11.778	180	51719	5.07	ppb		96
114)	Coelution Dichlorotoluene	11.998	125	128721	10.39	ppb		98
115)	1,2,4-Tcbenzene	12.162	180	46406	5.13	ppb		98
116)	Hexachlorobt	12.266	225	20395	5.16	ppb		96
117)	Naphthalen	12.303	128	82080	5.04	ppb		98
118)	1,2,3-Tclbenzene	12.437	180	37771	5.10	ppb		96
119)	2,4,5-Trichlorotolene	12.851	159	25032	5.12	ppb		96
120)	2,3,6-Trichlorotoluene	12.912	159	24018	5.37	ppb		89

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

Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:50 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3878.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 61.75 ppb

response 3554

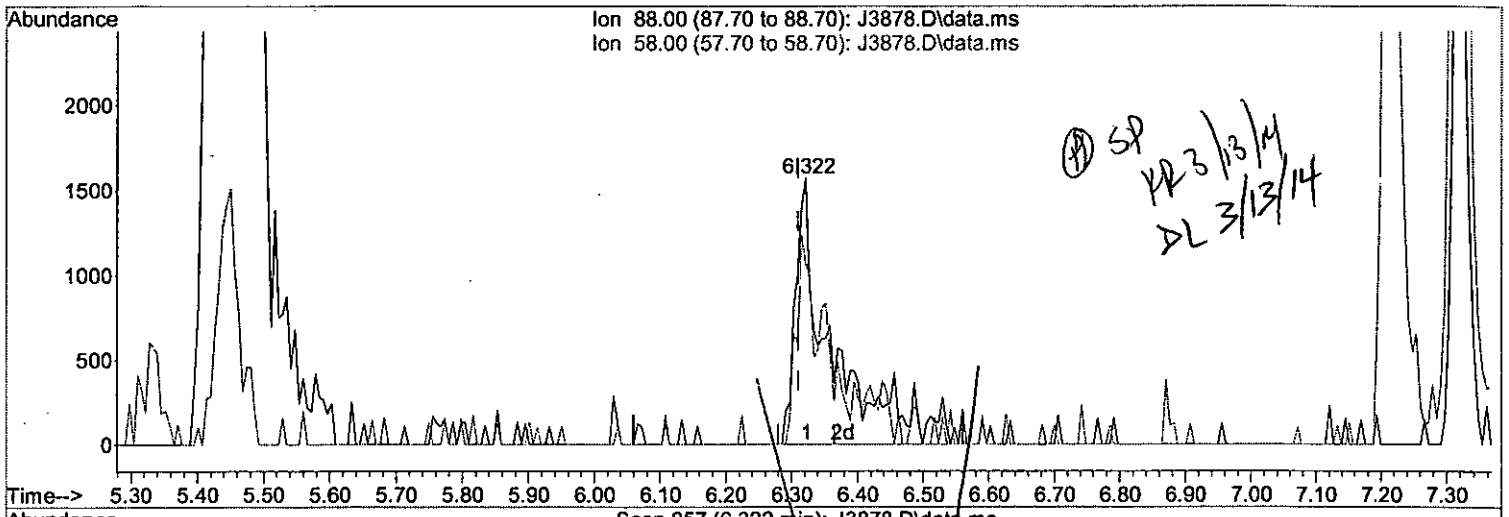
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.98
0.00	0.00	0.00
0.00	0.00	0.00

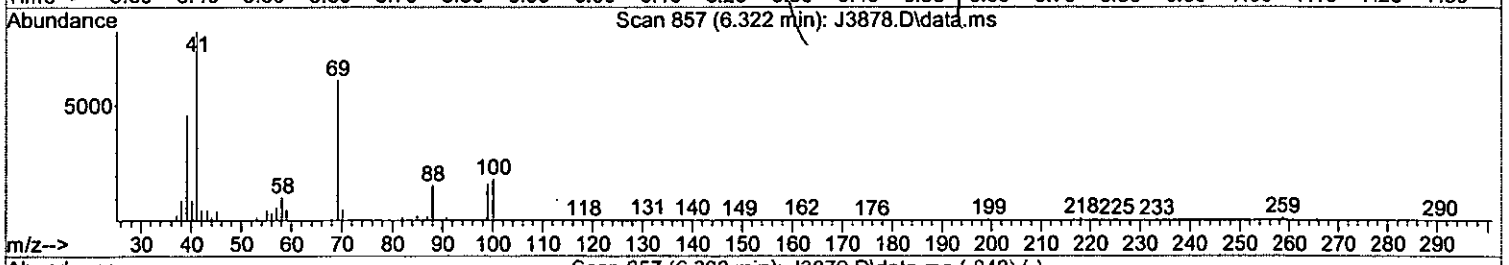
W031214.M Thu Mar 13 10:34:25 2014 Page: 1

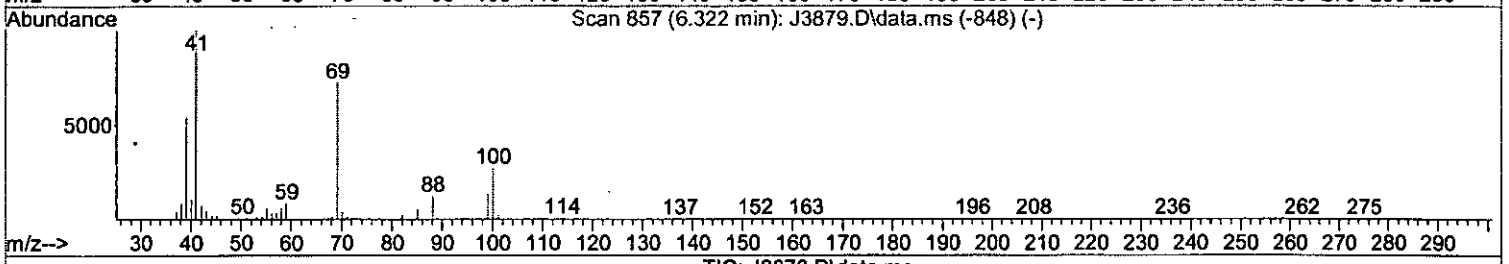
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:50 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3878.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 107.34 ppb m

response 6178

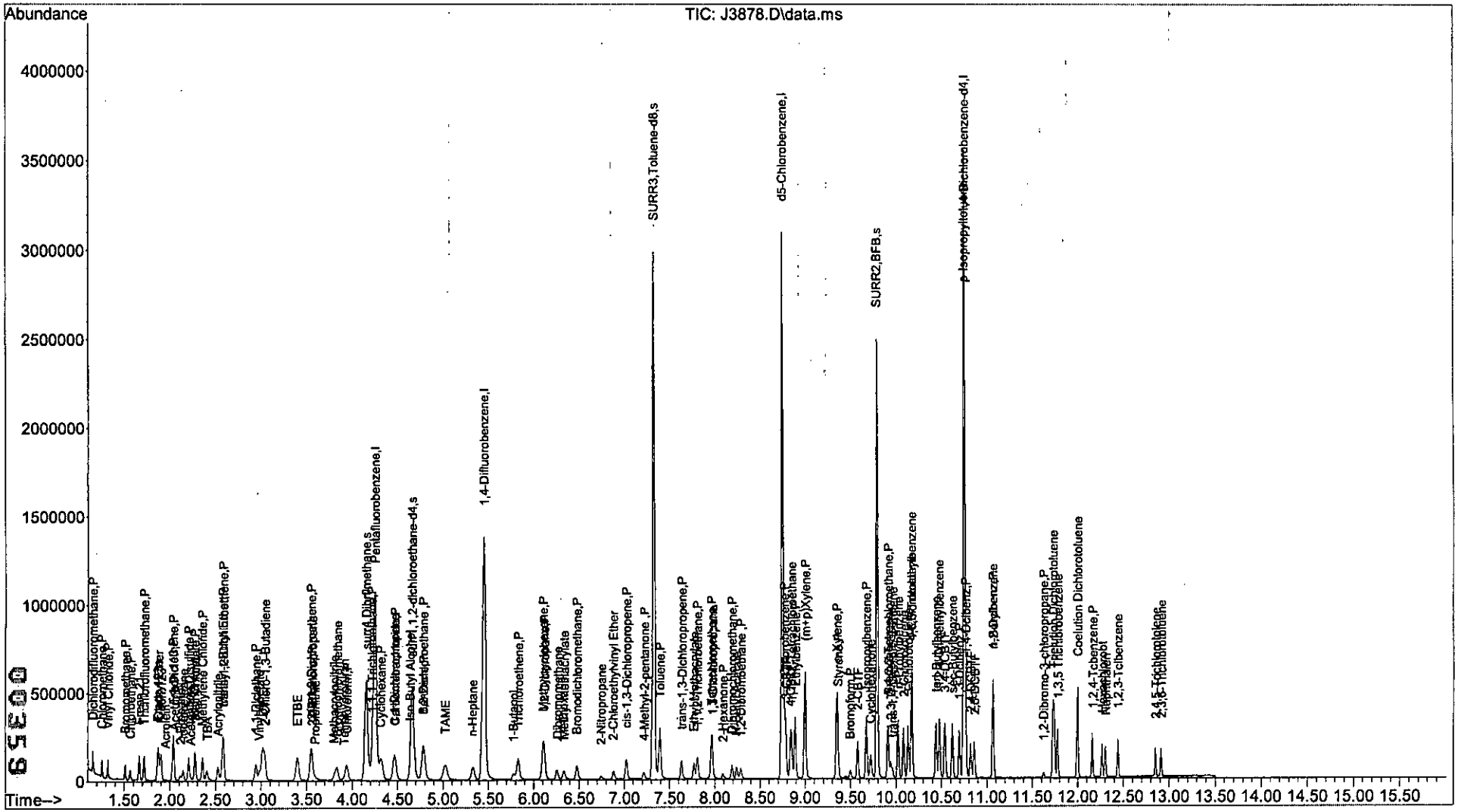
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.98
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:34:36 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:36:07 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	922799	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1437195	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1313495	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	644479	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	420420	50.53	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.06%			
48) surr1,1,2-dichloroetha...	4.664	65	476208	50.24	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.48%			
65) SURR3,Toluene-d8	7.322	98	1753103	50.14	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.28%			
70) SURR2,BFB	9.785	95	651604	49.96	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.158	85	236007	21.53	ppb	100
3) Chloromethane	1.262	50	199071	20.91	ppb	100
4) Vinyl Chloride	1.323	62	184578	20.92	ppb	100
5) Bromomethane	1.512	94	101510	19.09	ppb	100
6) Chloroethane	1.567	64	108989	19.86	ppb	100
7) Freon 21	1.664	67	274791	20.65	ppb	100
8) Trichlorofluoromethane	1.719	101	283252	20.91	ppb	100
9) Diethyl Ether	1.878	59	136065	20.40	ppb	100
10) Freon 123a	1.865	67	204196	20.53	ppb	100
11) Freon 123	1.902	83	234424	20.64	ppb	100
12) Acrolein	1.951	56	18931	59.34	ppb	100
13) 1,1-Diclethene	2.036	96	137460	20.53	ppb	100
14) Freon 113	2.036	101	149593	20.41	ppb	100
15) Acetone	2.042	43	36823	20.11	ppb	100
16) 2-Propanol	2.115	45	122751	406.54	ppb	100
17) Iodomethane	2.146	142	198218	22.28	ppb	100
18) Carbon Disulfide	2.207	76	496357	21.31	ppb	100
19) Acetonitrile	2.225	40	33901	113.23	ppb	100
20) Allyl Chloride	2.274	76	97449	21.22	ppb	100
21) Methyl Acetate	2.274	43	82752	20.07	ppb	100
22) Methylene Chloride	2.359	84	176046	20.07	ppb	100
23) TBA	2.408	59	222324	434.45	ppb	100
24) Acrylonitrile	2.524	53	220459	107.48	ppb	100
25) Methyl-t-Butyl Ether	2.579	73	441594	20.75	ppb	100
26) trans-1,2-Dichloroethene	2.585	96	174413	20.79	ppb	100
28) 1,1-Diclethane	2.938	63	329721	21.11	ppb	100
29) Vinyl Acetate	2.981	86	26664	19.18	ppb	100
30) DIPE	3.012	45	654075	21.50	ppb	100
31) 2-Chloro-1,3-Butadiene	3.042	53	297059	22.09	ppb	100
32) ETBE	3.396	59	547952	21.53	ppb	100
33) 2,2-Dichloropropane	3.554	77	257201	20.76	ppb	100
34) cis-1,2-Dichloroethene	3.548	96	194189	20.74	ppb	100
35) 2-Butanone	3.548	43	52188	20.35	ppb	100
36) Propionitrile	3.597	54	81195	112.94	ppb	100
37) Bromochloromethane	3.828	130	103638	19.83	ppb	100

KR 3/13/14

W031214.M Thu Mar 13 10:46:01 2014 Page 1

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	50231	21.02	ppb	100
39) Tetrahydrofuran	3.908	42	37265	20.78	ppb	100
40) Chloroform	3.938	83	308523	20.16	ppb	100
41) 1,1,1-Trichloroethane	4.213	97	268217	20.43	ppb	100
42) TAME	5.023	73	454949	21.17	ppb	100
44) Cyclohexane	4.316	41	158361	20.37	ppb	100
46) Carbontetrachloride	4.469	121	68823	19.97	ppb	100
47) 1,1-Dichloropropene	4.462	75	223653	21.26	ppb	100
49) Benzene	4.779	78	747584	21.13	ppb	100
50) 1,2-Dichloroethane	4.786	62	222596	20.72	ppb	100
51) Iso-Butyl Alcohol	4.645	43	97955	411.63	ppb	100
52) n-Heptane	5.328	43	187647	21.23	ppb	100
53) 1-Butanol	5.773	56	140316	1044.44	ppb	100
54) Trichloroethene	5.828	130	172802	20.16	ppb	100
55) Methylcyclohexane	6.102	55	188533	20.46	ppb	100
56) 1,2-Diclpropane	6.115	63	190060	20.83	ppb	100
57) Dibromomethane	6.255	93	87964	20.44	ppb	100
58) 1,4-Dioxane	6.322	88	24827m	430.43	ppb	
59) Methyl Methacrylate	6.328	69	88674	20.83	ppb	100
60) Bromodichloromethane	6.474	83	224153	21.21	ppb	100
61) 2-Nitropropane	6.742	41	42750	37.61	ppb	100
62) 2-Chloroethylvinyl Ether	6.877	63	84368	20.79	ppb	100
63) cis-1,3-Dichloropropene	7.023	75	271354	21.64	ppb	100
64) 4-Methyl-2-pentanone	7.212	43	108953	19.96	ppb	100
66) Toluene	7.395	91	768079	21.05	ppb	100
67) trans-1,3-Dichloropropene	7.626	75	221059	21.87	ppb	100
68) Ethyl Methacrylate	7.767	69	182991	22.46	ppb	100
69) 1,1,2-Trichloroethane	7.803	97	135446	21.22	ppb	100
72) Tetrachloroethene	7.962	164	136336	20.09	ppb	100
73) 2-Hexanone	8.084	43	76704	20.62	ppb	100
74) 1,3-Dichloropropane	7.968	76	246006	20.80	ppb	100
75) Dibromochloromethane	8.187	129	145086	21.34	ppb	100
76) N-Butyl Acetate	8.236	43	189825	20.64	ppb	100
77) 1,2-Dibromoethane	8.285	107	128698	21.19	ppb	100
78) Chlorobenzene	8.767	112	471085	20.61	ppb	100
79) 3-CBTF	8.785	180	230152	20.35	ppb	100
80) 4-CBTF	8.840	180	214655	21.19	ppb	100
81) 1,1,1,2-Tetrachloroethane	8.852	131	167154	20.81	ppb	100
82) Ethylbenzene	8.888	106	251722	20.67	ppb	100
83) (m+p)Xylene	8.998	106	608659	42.53	ppb	100
84) o-Xylene	9.346	106	306257	20.97	ppb	100
85) Styrene	9.352	104	513247	21.98	ppb	100
87) Bromoform	9.492	173	79425	21.70	ppb	100
88) 2-CBTF	9.577	180	220924	20.58	ppb	100
89) Isopropylbenzene	9.669	105	718183	21.58	ppb	100
90) Cyclohexanone	9.718	55	223344	432.11	ppb	100
91) trans-1,4-Dichloro-2-B...	9.961	53	38370	22.12	ppb	100
92) 1,1,2,2-Tetrachloroethane	9.913	83	151723	20.56	ppb	100
93) Bromobenzene	9.907	156	192228	20.28	ppb	100
94) 1,2,3-Trichloropropane	9.943	110	45293	20.51	ppb	100
95) n-Propylbenzene	10.022	91	833670	21.42	ppb	100
96) 2-Chlorotoluene	10.083	91	514264	21.04	ppb	100

W031214.M Thu Mar 13 10:46:01 2014 Page 2

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

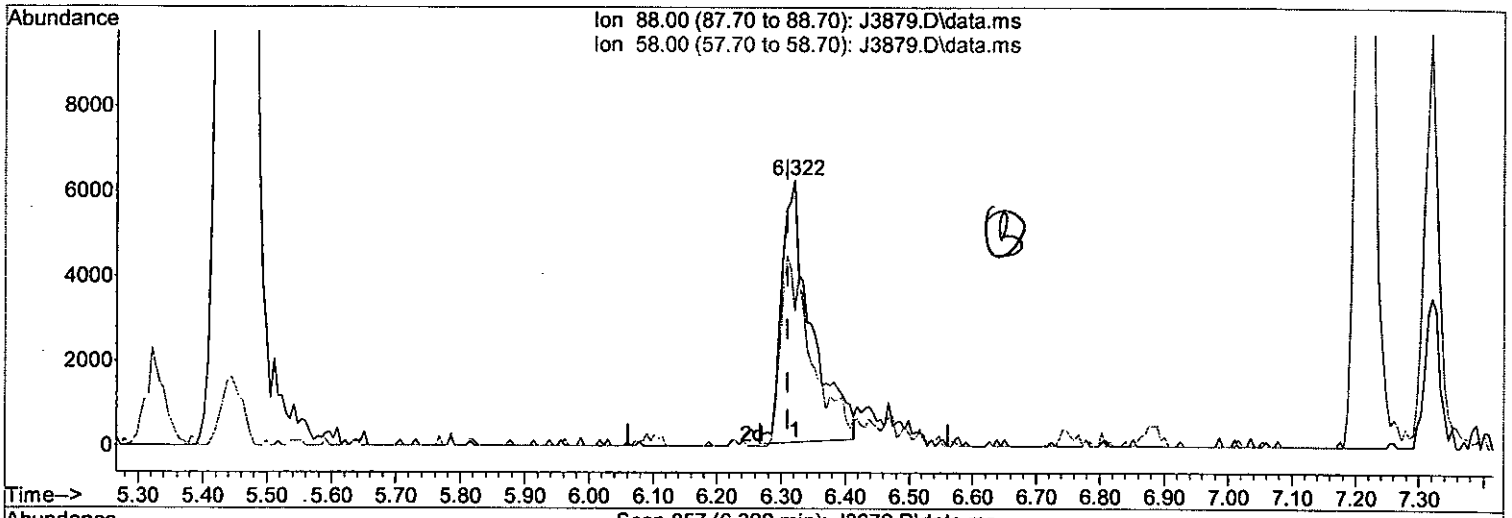
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	541594	21.30	ppb	100
98)	4-Chlorotoluene	10.175	91	627344	21.77	ppb	100
99)	1,3,5-Trimethylbenzene	10.169	105	592216	21.82	ppb	100
100)	tert-Butylbenzene	10.437	119	478689	20.95	ppb	100
101)	1,2,4-Trimethylbenzene	10.473	105	610669	21.87	ppb	100
102)	3,4-DCBTF	10.534	214	165151	20.80	ppb	100
103)	sec-Butylbenzene	10.620	105	688491	21.65	ppb	100
104)	p-Isopropyltoluene	10.742	119	592664	22.04	ppb	100
105)	1,3-Dclbenz	10.699	146	344896	21.37	ppb	100
106)	1,4-Dclbenz	10.766	146	352806	20.55	ppb	100
107)	2,4-DCBTF	10.821	214	146766	21.25	ppb	100
108)	2,5-DCBTF	10.864	214	163981	20.76	ppb	100
109)	n-Butylbenzene	11.065	91	536348	22.12	ppb	100
110)	1,2-Dclbenz	11.065	146	326326	21.00	ppb	100
111)	1,2-Dibromo-3-chloropr...	11.626	157	23847	21.09	ppb	100
112)	Trielution Dichlorotol...	11.729	125	790878	64.35	ppb	100
113)	1,3,5 Trichlorobenzene	11.778	180	225244	21.02	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	555902	42.72	ppb	100
115)	1,2,4-Tcbenzene	12.156	180	192297	20.24	ppb	100
116)	Hexachlorobt	12.266	225	89220	21.51	ppb	100
117)	Naphthalen	12.302	128	369318	21.59	ppb	100
118)	1,2,3-Tclbenzene	12.437	180	156926	20.17	ppb	100
119)	2,4,5-Trichlorotolene	12.851	159	107382	20.90	ppb	100
120)	2,3,6-Trichlorotoluene	12.912	159	96471	20.56	ppb	100

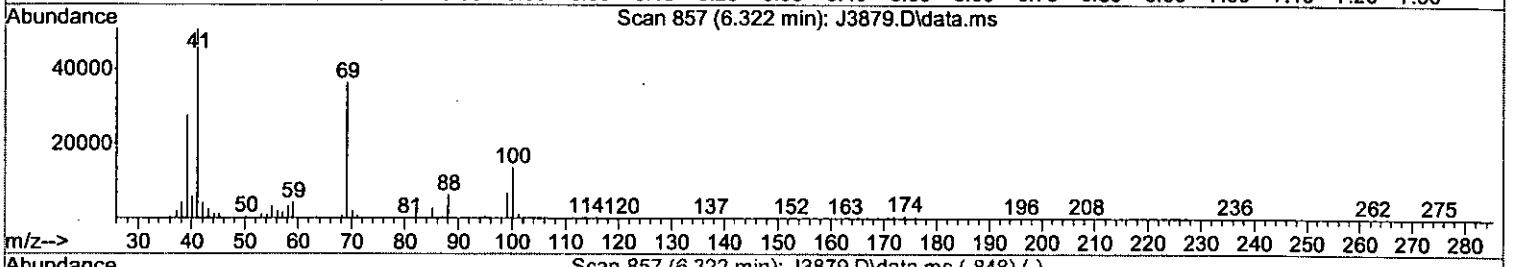
(#) = qualifier out of range (m) = manual integration (+) = signals summed

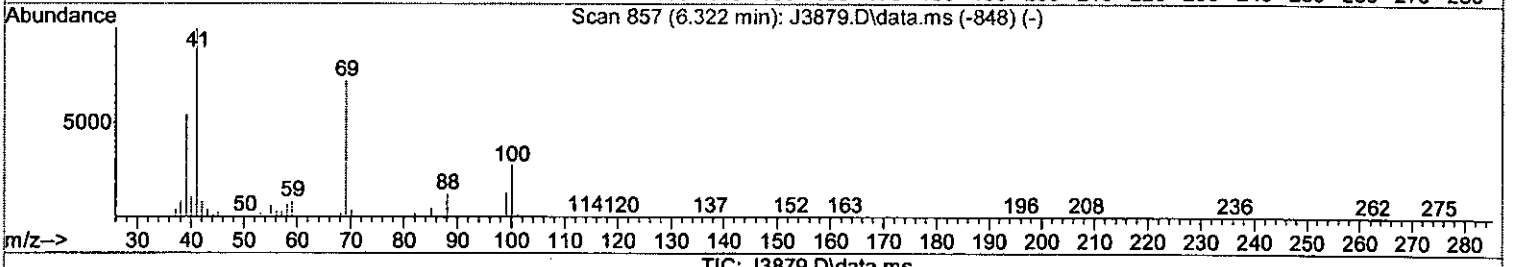
Quantitation Report (Qedit)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:55 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3879.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 345.93 ppb

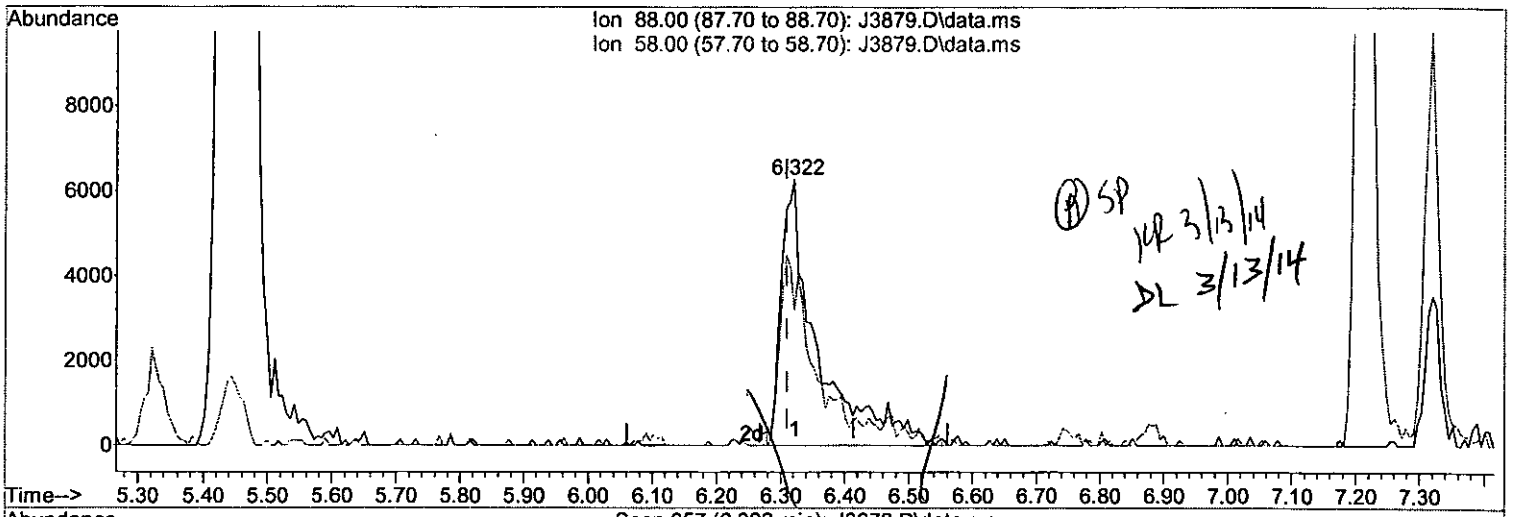
response 19953

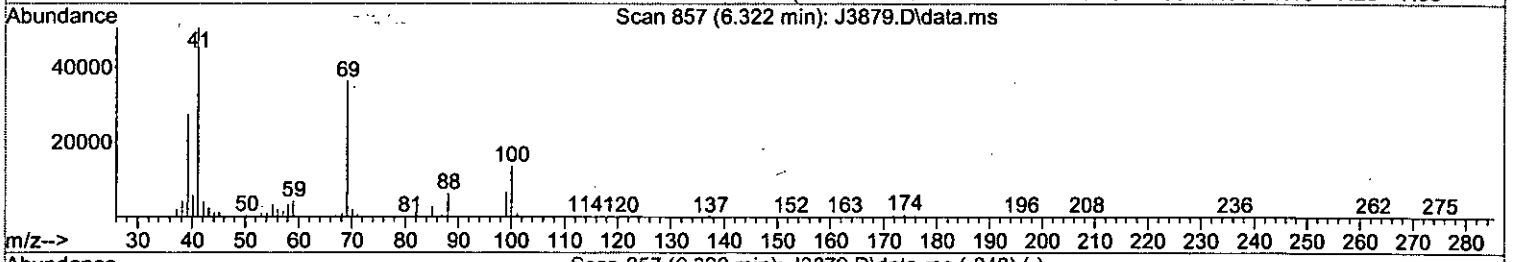
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	50.82
0.00	0.00	0.00
0.00	0.00	0.00

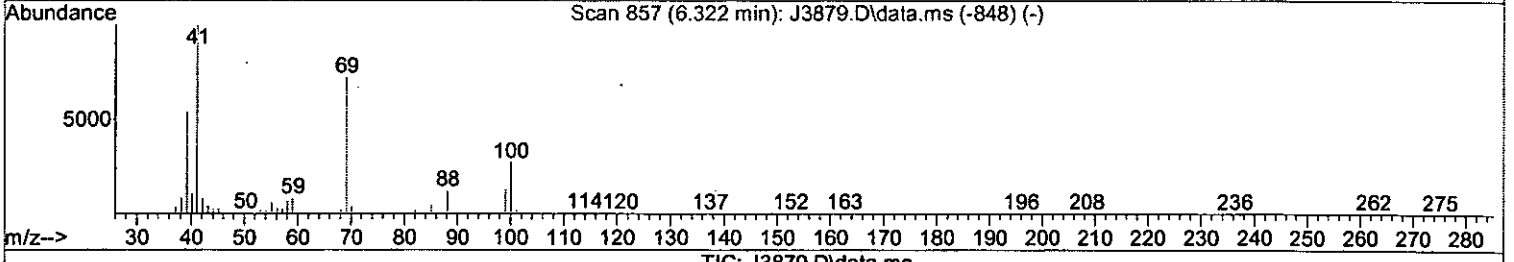
W031214.M Thu Mar 13 10:45:00 2014 Page: 1

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:55 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3879.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 430.43 ppb m

response 24827

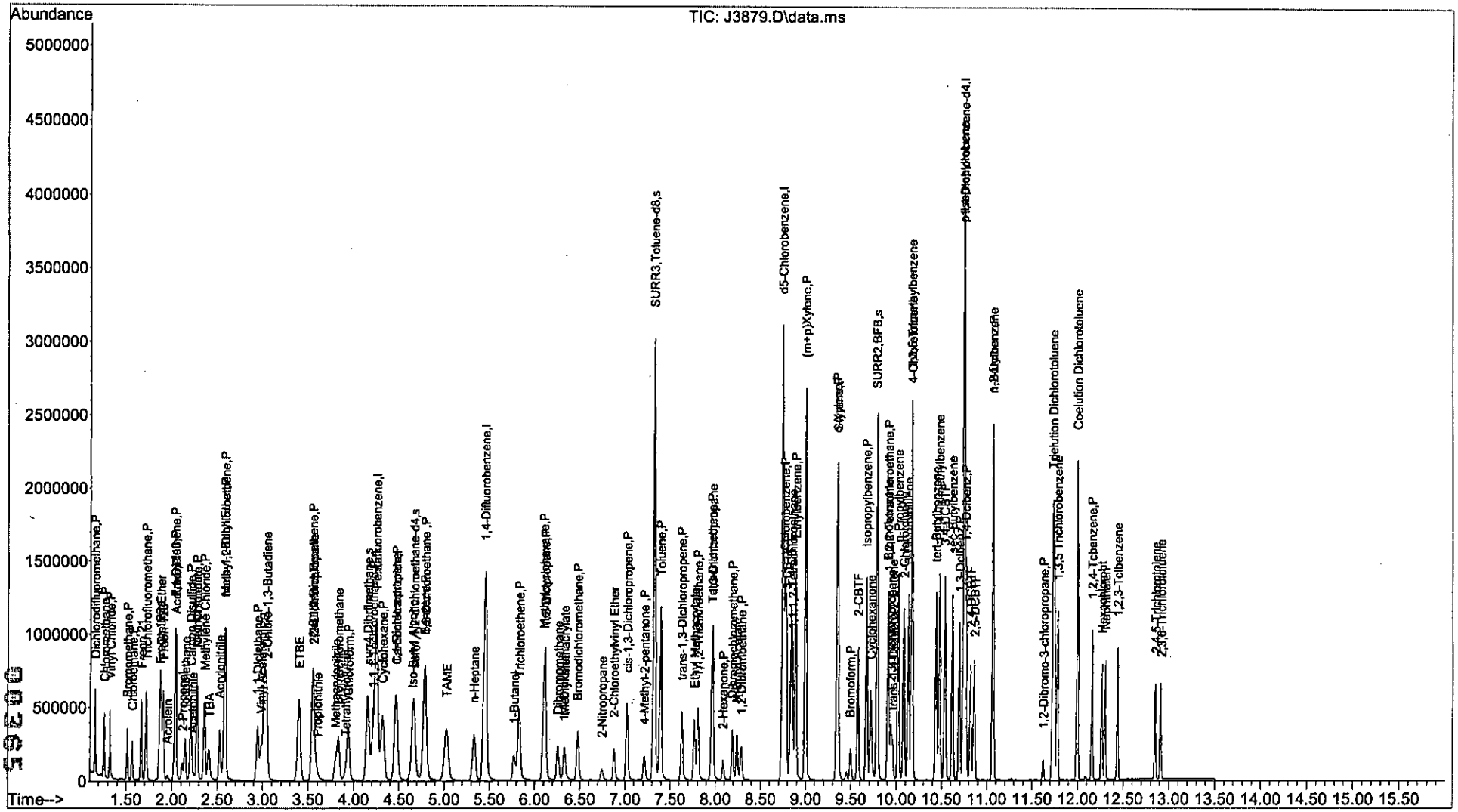
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	50.82
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:45:09 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:46:04 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	937657	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1455324	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1331361	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	670106	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	420448	49.90	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.80%				
48) surr1,1,2-dichloroetha...	4.658	65	477074	49.71	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.42%				
65) SURR3,Toluene-d8	7.322	98	1776183	50.17	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.34%				
70) SURR2,BFB	9.785	95	667990	50.57	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	564076	50.65	ppb		100
3) Chloromethane	1.262	50	474968	49.11	ppb		99
4) Vinyl Chloride	1.323	62	441606	49.26	ppb		99
5) Bromomethane	1.512	94	245467	45.43	ppb		99
6) Chloroethane	1.567	64	252379	45.25	ppb		98
7) Freon 21	1.664	67	644488	47.66	ppb		100
8) Trichlorofluoromethane	1.719	101	663901	48.23	ppb		100
9) Diethyl Ether	1.878	59	321286	47.40	ppb		97
10) Freon 123a	1.866	67	476539	47.15	ppb		97
11) Freon 123	1.902	83	541833	46.95	ppb		97
12) Acrolein	1.951	56	70930	218.82	ppb		93
13) 1,1-Diclethene	2.036	96	334465	49.15	ppb		97
14) Freon 113	2.036	101	357010	47.94	ppb		89
15) Acetone	2.042	43	88018	47.31	ppb		95
16) 2-Propanol	2.109	45	321452	1047.74	ppb		94
17) Iodomethane	2.146	142	528506	58.48	ppb		99
18) Carbon Disulfide	2.207	76	1233537	52.12	ppb		99
19) Acetonitrile	2.219	40	74229	244.00	ppb		95
20) Allyl Chloride	2.274	76	235013	50.37	ppb		98
21) Methyl Acetate	2.274	43	208249	49.71	ppb		98
22) Methylene Chloride	2.359	84	416569	46.73	ppb		97
23) TBA	2.402	59	549332	1056.46	ppb		100
24) Acrylonitrile	2.524	53	533681	256.05	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	1049984	48.54	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	412950	48.44	ppb		96
28) 1,1-Diclethane	2.939	63	773535	48.75	ppb		99
29) Vinyl Acetate	2.975	86	77152	54.60	ppb	#	88
30) DIPE	3.012	45	1550730	50.17	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	747718	54.71	ppb		95
32) ETBE	3.396	59	1323915	51.19	ppb		98
33) 2,2-Dichloropropane	3.554	77	628304	49.91	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	466155	49.00	ppb		98
35) 2-Butanone	3.542	43	132381	50.79	ppb		99
36) Propionitrile	3.591	54	202098	276.65	ppb		99
37) Bromochloromethane	3.829	130	248184	46.72	ppb		96

KR 3/13/14

W031214.M Thu Mar 13 10:48:05 2014 Page: 1

00366

Quantitation Report

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	126313	52.02	ppb	94
39) Tetrahydrofuran	3.902	42	90635	49.74	ppb	78
40) Chloroform	3.938	83	732190	47.09	ppb	98
41) 1,1,1-Trichloroethane	4.213	97	658125	49.34	ppb	90
42) TAME	5.023	73	1124934	51.52	ppb	99
44) Cyclohexane	4.316	41	365658	46.46	ppb	97
46) Carbontetrachloride	4.475	121	167213	47.92	ppb	94
47) 1,1-Dichloropropene	4.463	75	532677	50.00	ppb	97
49) Benzene	4.780	78	1762037	49.18	ppb	98
50) 1,2-Dichloroethane	4.786	62	526829	48.43	ppb	97
51) Iso-Butyl Alcohol	4.639	43	254891	1057.77	ppb	94
52) n-Heptane	5.328	43	424272	47.40	ppb	99
53) 1-Butanol	5.773	56	377086	2771.88	ppb	95
54) Trichloroethene	5.828	130	420559	48.46	ppb	98
55) Methylcyclohexane	6.103	55	430078	46.09	ppb	97
56) 1,2-Diclpropane	6.109	63	451018	48.80	ppb	99
57) Dibromomethane	6.255	93	217523	49.91	ppb	97
58) 1,4-Dioxane	6.316	88	57551m	985.34	ppb	
59) Methyl Methacrylate	6.328	69	226083	52.44	ppb	93
60) Bromodichloromethane	6.474	83	544940	50.92	ppb	97
61) 2-Nitropropane	6.743	41	120948	105.09	ppb	89
62) 2-Chloroethylvinyl Ether	6.877	63	216563	52.70	ppb	94
63) cis-1,3-Dichloropropene	7.023	75	673884	53.07	ppb	97
64) 4-Methyl-2-pentanone	7.212	43	291984	52.83	ppb	96
66) Toluene	7.389	91	1845581	49.96	ppb	98
67) trans-1,3-Dichloropropene	7.627	75	557858	54.50	ppb	97
68) Ethyl Methacrylate	7.767	69	467885	56.71	ppb	99
69) 1,1,2-Trichloroethane	7.810	97	323984	50.13	ppb	98
72) Tetrachloroethene	7.962	164	321606	46.76	ppb	100
73) 2-Hexanone	8.084	43	203476	53.96	ppb	99
74) 1,3-Dichloropropane	7.974	76	591305	49.33	ppb	97
75) Dibromochloromethane	8.187	129	370150	53.71	ppb	97
76) N-Butyl Acetate	8.236	43	500003	53.63	ppb	96
77) 1,2-Dibromoethane	8.285	107	316309	51.38	ppb	99
78) Chlorobenzene	8.767	112	1122450	48.45	ppb	99
79) 3-CBTF	8.785	180	564574	49.26	ppb	94
80) 4-CBTF	8.840	180	528416	51.46	ppb	99
81) 1,1,1,2-Tetrachloroethane	8.852	131	415996	51.10	ppb	96
82) Ethylbenzene	8.889	106	615664	49.88	ppb	98
83) (m+p)Xylene	8.998	106	1487671	102.56	ppb	95
84) o-Xylene	9.346	106	740250	50.01	ppb	97
85) Styrene	9.352	104	1267657	53.57	ppb	98
87) Bromoform	9.492	173	209385	55.02	ppb	98
88) 2-CBTF	9.577	180	557431	49.93	ppb	98
89) Isopropylbenzene	9.669	105	1741830	50.35	ppb	98
90) Cyclohexanone	9.718	55	530771	987.62	ppb	99
91) trans-1,4-Dichloro-2-B...	9.962	53	101239	56.13	ppb	89
92) 1,1,2,2-Tetrachloroethane	9.913	83	379084	49.40	ppb	99
93) Bromobenzene	9.907	156	470985	47.78	ppb	96
94) 1,2,3-Trichloropropane	9.943	110	111383	48.51	ppb	97
95) n-Propylbenzene	10.023	91	2010813	49.69	ppb	100
96) 2-Chlorotoluene	10.083	91	1249532	49.16	ppb	98

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

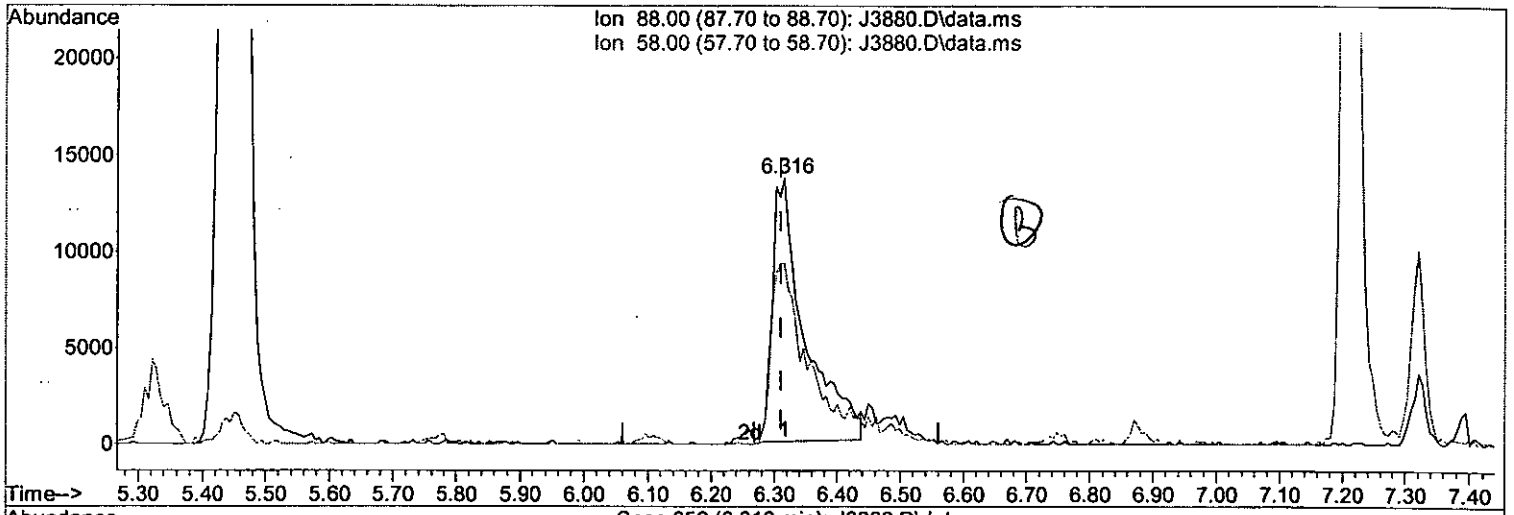
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

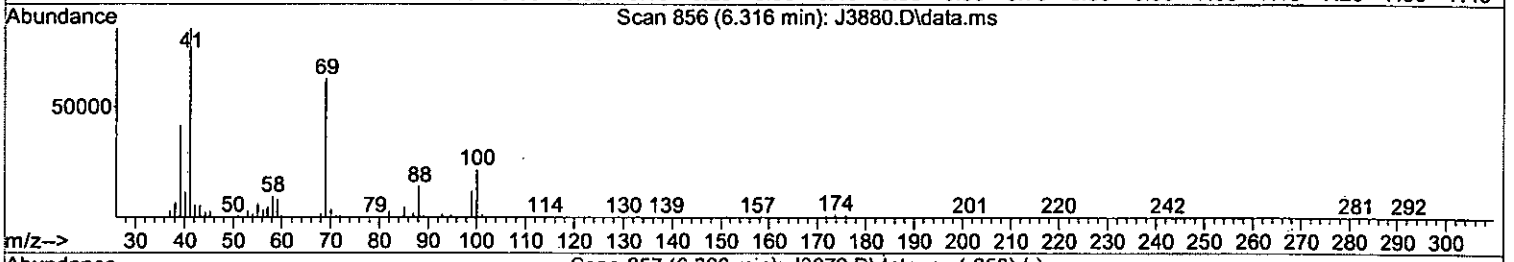
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1329412	50.29	ppb	98
98)	4-Chlorotoluene	10.169	91	1484176	49.53	ppb	98
99)	1,3,5-Trimethylbenzene	10.169	105	1423846	50.45	ppb	99
100)	tert-Butylbenzene	10.437	119	1162005	48.91	ppb	99
101)	1,2,4-Trimethylbenzene	10.480	105	1487149	51.22	ppb	100
102)	3,4-DCBTF	10.535	214	419830	50.85	ppb	98
103)	sec-Butylbenzene	10.620	105	1626721	49.21	ppb	99
104)	p-Isopropyltoluene	10.742	119	1412183	50.51	ppb	99
105)	1,3-Dclbenz	10.693	146	830616	49.50	ppb	98
106)	1,4-Dclbenz	10.766	146	848800	47.54	ppb	97
107)	2,4-DCBTF	10.821	214	371206	51.68	ppb	95
108)	2,5-DCBTF	10.858	214	418243	50.93	ppb	98
109)	n-Butylbenzene	11.065	91	1279244	50.75	ppb	98
110)	1,2-Dclbenz	11.065	146	803257	49.72	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	63513	54.02	ppb	96
112)	Trielution Dichlorotol...	11.729	125	2007597	157.11	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	573684	51.48	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1435061	106.06	ppb	98
115)	1,2,4-Tcbenzene	12.156	180	485670	49.15	ppb	96
116)	Hexachlorobt	12.266	225	211082	48.95	ppb	98
117)	Naphthalen	12.303	128	946078	53.18	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	386312	47.75	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	270768	50.69	ppb	97
120)	2,3,6-Trichlorotoluene	12.912	159	254890	52.24	ppb	96

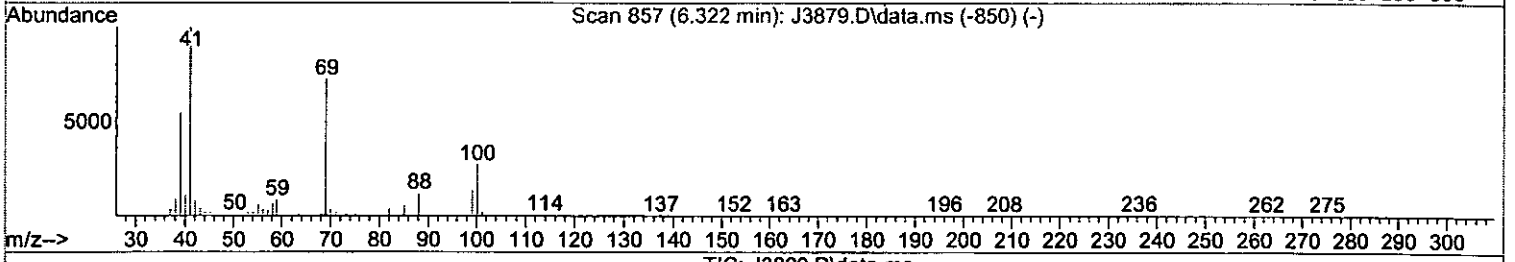
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:59 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3880.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 841.01 ppb

response 49121

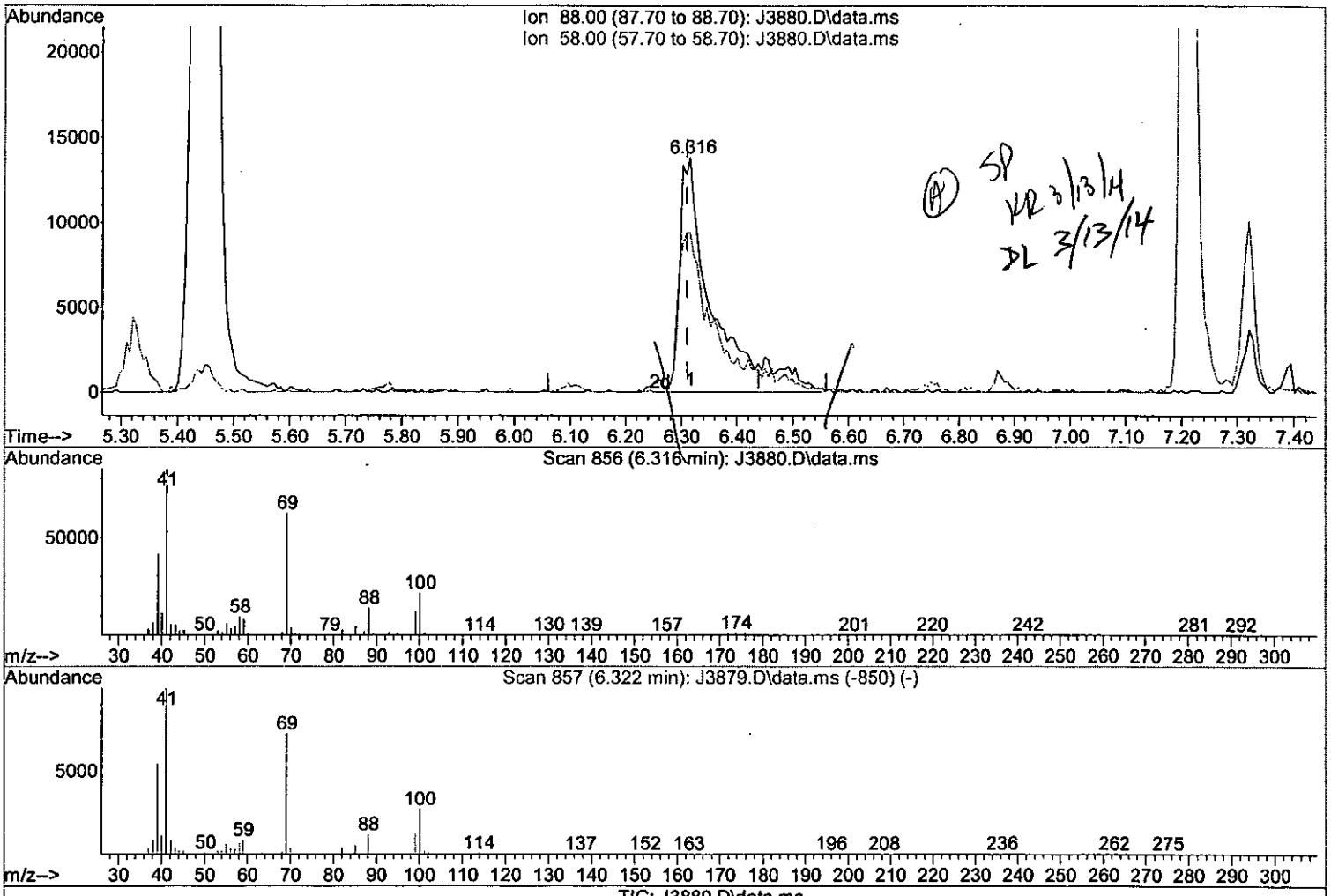
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.82
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:47:19 2014 Page: 1

00305

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:59 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3880.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 985.34 ppb m

response 57551

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.82
0.00	0.00	0.00
0.00	0.00	0.00

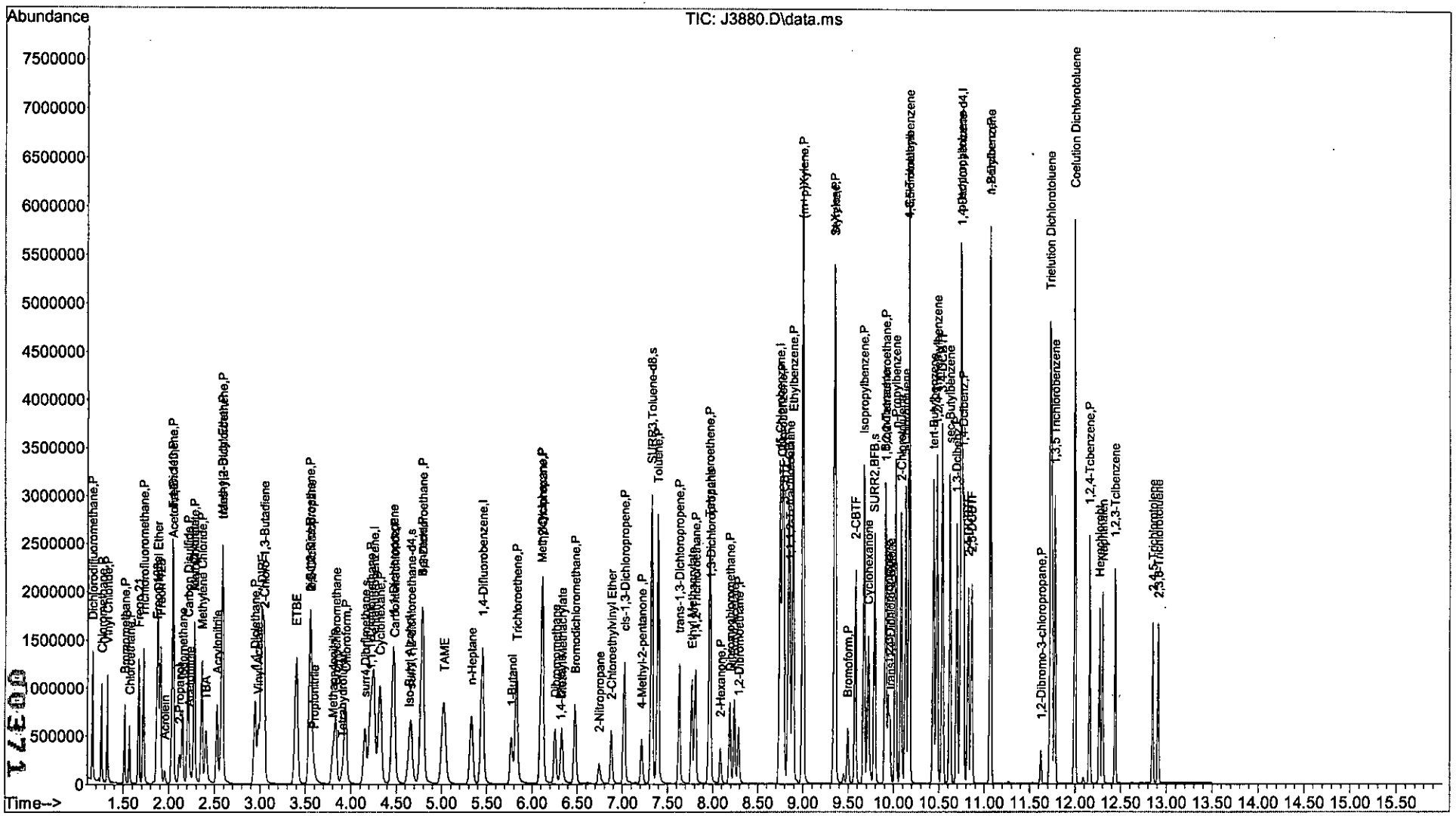
W031214.M Thu Mar 13 10:47:26 2014 Page: 1

00370

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:48:08 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	937973	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1484441	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1370021	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	701019	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	430044	50.04	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.08%				
48) surr1,1,2-dichloroetha...	4.658	65	480420	49.07	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 98.14%				
65) SURR3,Toluene-d8	7.322	98	1799950	49.84	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.68%				
70) SURR2,BFB	9.791	95	684103	50.78	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.56%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	1151799	103.38	ppb		98
3) Chloromethane	1.262	50	984445	101.75	ppb		98
4) Vinyl Chloride	1.323	62	910676	101.54	ppb		98
5) Bromomethane	1.512	94	519455	96.11	ppb		99
6) Chloroethane	1.567	64	513409	92.02	ppb		99
7) Freon 21	1.664	67	1302870	96.32	ppb		98
8) Trichlorofluoromethane	1.719	101	1346481	97.79	ppb		100
9) Diethyl Ether	1.878	59	651078	96.03	ppb		97
10) Freon 123a	1.872	67	966134	95.56	ppb		88
11) Freon 123	1.902	83	1112658	96.38	ppb		98
12) Acrolein	1.951	56	260329	802.83	ppb		93
13) 1,1-Diclethene	2.042	96	703538	103.36	ppb		91
14) Freon 113	2.036	101	752470	101.02	ppb		93
15) Acetone	2.042	43	187153	100.57	ppb		98
16) 2-Propanol	2.115	45	689079	2245.24	ppb		95
17) Iodomethane	2.146	142	1009536	111.66	ppb		98
18) Carbon Disulfide	2.207	76	2278103	96.23	ppb		99
19) Acetonitrile	2.219	40	167185	549.38	ppb		99
20) Allyl Chloride	2.274	76	470843	100.89	ppb		99
21) Methyl Acetate	2.274	43	413689	98.72	ppb		100
22) Methylene Chloride	2.359	84	856870	96.09	ppb		99
23) TBA	2.408	59	1129564	2171.61	ppb		99
24) Acrylonitrile	2.524	53	1072759	514.53	ppb		96
25) Methyl-t-Butyl Ether	2.579	73	2127883	98.35	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	868915	101.89	ppb		99
28) 1,1-Diclethane	2.945	63	1593999	100.42	ppb		99
29) Vinyl Acetate	2.981	86	147267	104.19	ppb	#	78
30) DIPE	3.018	45	3010668	97.38	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	1354355	99.07	ppb		98
32) ETBE	3.396	59	2608434	100.82	ppb		99
33) 2,2-Dichloropropane	3.554	77	1328467	105.49	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	962108	101.10	ppb		96
35) 2-Butanone	3.542	43	258220	99.04	ppb		96
36) Propionitrile	3.591	54	412919	565.06	ppb		94
37) Bromochloromethane	3.829	130	496052	93.36	ppb		95

KR 3/13/14

W031214.M Thu Mar 13 10:49:57 2014 Page 1

Quantitation Report

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	254231	104.67	ppb		98
39) Tetrahydrofuran	3.908	42	173277	95.07	ppb		76
40) Chloroform	3.938	83	1536180	98.76	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	1378473	103.32	ppb		86
42) TAME	5.023	73	2253915	103.19	ppb		99
44) Cyclohexane	4.316	41	749224	93.33	ppb		99
46) Carbontetrachloride	4.475	121	366099	102.86	ppb		97
47) 1,1-Dichloropropene	4.463	75	1116976	102.80	ppb		94
49) Benzene	4.780	78	3634712	99.46	ppb		98
50) 1,2-Dichloroethane	4.786	62	1063848	95.88	ppb		95
51) Iso-Butyl Alcohol	4.639	43	539363	2194.40	ppb		98
52) n-Heptane	5.328	43	888766	97.34	ppb		98
53) 1-Butanol	5.767	56	809280	5832.15	ppb		99
54) Trichloroethene	5.828	130	889519	100.49	ppb		98
55) Methylcyclohexane	6.103	55	905575	95.15	ppb		98
56) 1,2-Diclpropane	6.115	63	924592	98.08	ppb		94
57) Dibromomethane	6.255	93	443550	99.77	ppb		98
58) 1,4-Dioxane	6.310	88	125980m	2114.61	ppb		
59) Methyl Methacrylate	6.328	69	467460	106.30	ppb		94
60) Bromodichloromethane	6.480	83	1137327	104.18	ppb		97
61) 2-Nitropropane	6.749	41	259802	221.31	ppb		90
62) 2-Chloroethylvinyl Ether	6.877	63	425533	101.53	ppb		100
63) cis-1,3-Dichloropropene	7.023	75	1400196	108.11	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	583711	103.54	ppb		98
66) Toluene	7.395	91	3748008	99.46	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	1183119	113.32	ppb		98
68) Ethyl Methacrylate	7.767	69	978589	116.29	ppb		98
69) 1,1,2-Trichloroethane	7.809	97	656030	99.52	ppb		98
72) Tetrachloroethene	7.962	164	687266	97.11	ppb		98
73) 2-Hexanone	8.084	43	401480	103.46	ppb		98
74) 1,3-Dichloropropane	7.974	76	1209458	98.06	ppb		98
75) Dibromochloromethane	8.187	129	788086	111.12	ppb		98
76) N-Butyl Acetate	8.236	43	1000972	104.33	ppb		96
77) 1,2-Dibromoethane	8.285	107	655010	103.39	ppb		98
78) Chlorobenzene	8.767	112	2363650	99.14	ppb		99
79) 3-CBTF	8.785	180	1185107	100.49	ppb		96
80) 4-CBTF	8.840	180	1071141	101.37	ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	887066	105.88	ppb		97
82) Ethylbenzene	8.889	106	1313617	103.42	ppb	#	90
83) (m+p)Xylene	8.998	106	3142865	210.55	ppb	#	87
84) o-Xylene	9.346	106	1572694	103.24	ppb		92
85) Styrene	9.358	104	2671945	109.72	ppb		95
87) Bromoform	9.492	173	461418	115.90	ppb		98
88) 2-CBTF	9.577	180	1151393	98.59	ppb		99
89) Isopropylbenzene	9.675	105	3644119	100.68	ppb		95
90) Cyclohexanone	9.718	55	1104912	1965.28	ppb		99
91) trans-1,4-Dichloro-2-B...	9.961	53	209847	111.21	ppb		88
92) 1,1,2,2-Tetrachloroethane	9.913	83	772541	96.23	ppb		99
93) Bromobenzene	9.913	156	1019396	98.85	ppb	#	85
94) 1,2,3-Trichloropropane	9.943	110	229868	95.69	ppb		99
95) n-Propylbenzene	10.022	91	4188003	98.92	ppb		97
96) 2-Chlorotoluene	10.083	91	2652958	99.77	ppb		99

W031214.M Thu Mar 13 10:49:57 2014

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

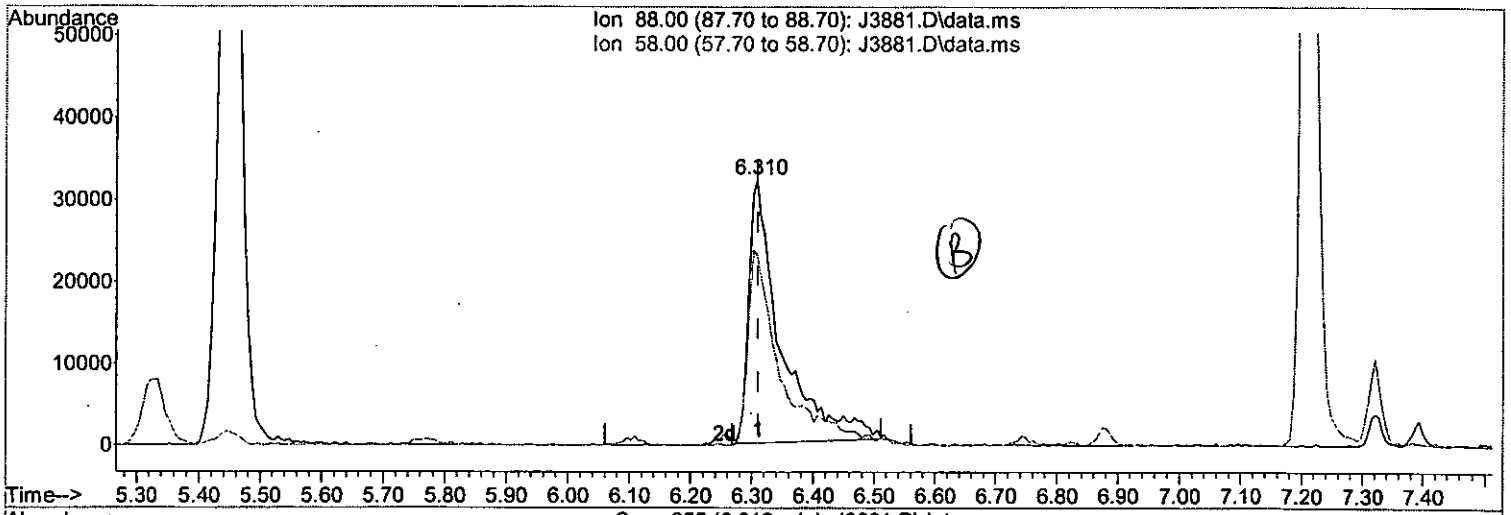
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

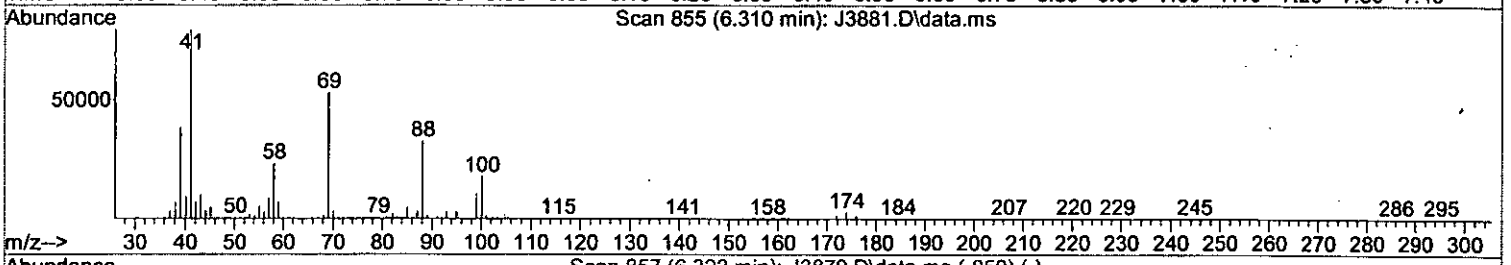
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	2690681	97.29	ppb	97
98)	4-Chlorotoluene	10.175	91	3159334	100.78	ppb	95
99)	1,3,5-Trimethylbenzene	10.175	105	3042400	103.05	ppb	95
100)	tert-Butylbenzene	10.437	119	2486489	100.05	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	3118106	102.65	ppb	97
102)	3,4-DCBTF	10.535	214	869988	100.73	ppb	97
103)	sec-Butylbenzene	10.620	105	3484191	100.74	ppb	97
104)	p-Isopropyltoluene	10.742	119	3038002	103.87	ppb	98
105)	1,3-Dclbenz	10.699	146	1804895	102.83	ppb	97
106)	1,4-Dclbenz	10.766	146	1826800	97.81	ppb	96
107)	2,4-DCBTF	10.821	214	767048	102.08	ppb	95
108)	2,5-DCBTF	10.864	214	873255	101.64	ppb	98
109)	n-Butylbenzene	11.065	91	2753475	104.42	ppb	98
110)	1,2-Dclbenz	11.065	146	1726213	102.13	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	139798	113.65	ppb	94
112)	Trielution Dichlorotol...	11.729	125	4037789	302.05	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	1149549	98.60	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	2873775	203.02	ppb	97
115)	1,2,4-Tcbenzene	12.162	180	1007657	97.49	ppb	95
116)	Hexachlorobt	12.266	225	434402	96.30	ppb	99
117)	Naphthalen	12.303	128	1968108	105.76	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	814869	96.28	ppb	99
119)	2,4,5-Trichlorotolene	12.851	159	541327	96.87	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	499889	97.93	ppb	97

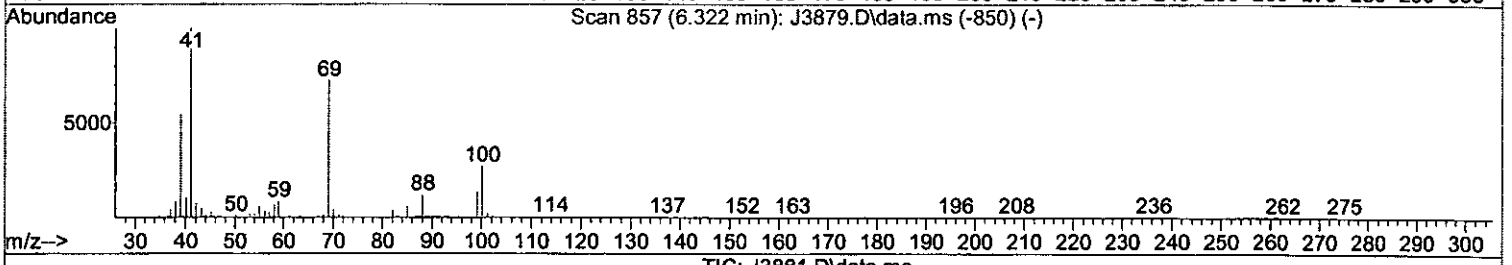
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3881.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 1971.52 ppb

response 117455

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	71.24#
0.00	0.00	0.00
0.00	0.00	0.00

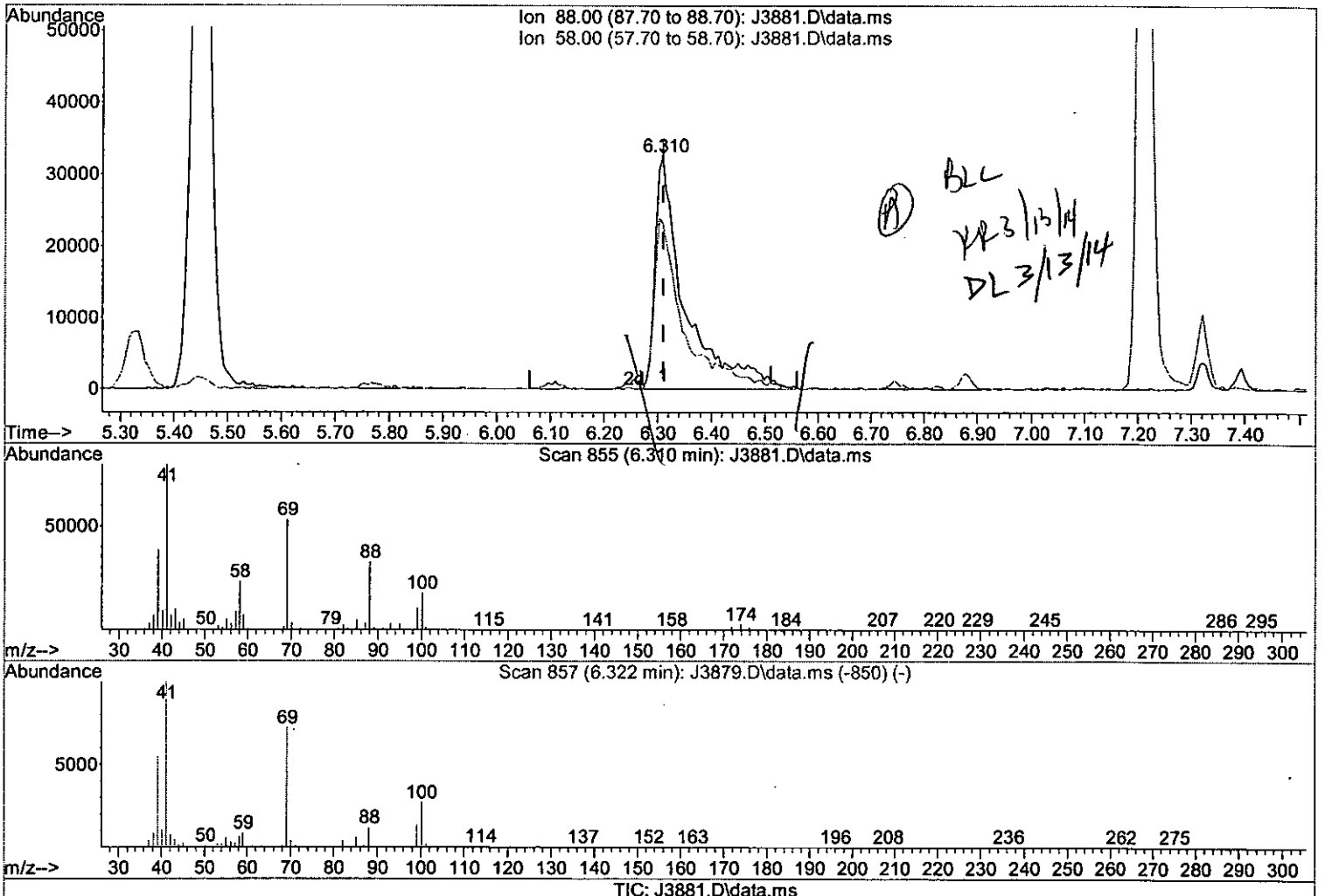
W031214.M Thu Mar 13 10:49:11 2014 Page: 1

00379

Quantitation Report (Qedit)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3881.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 2114.61 ppb m

response 125980

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	71.24#
0.00	0.00	0.00
0.00	0.00	0.00

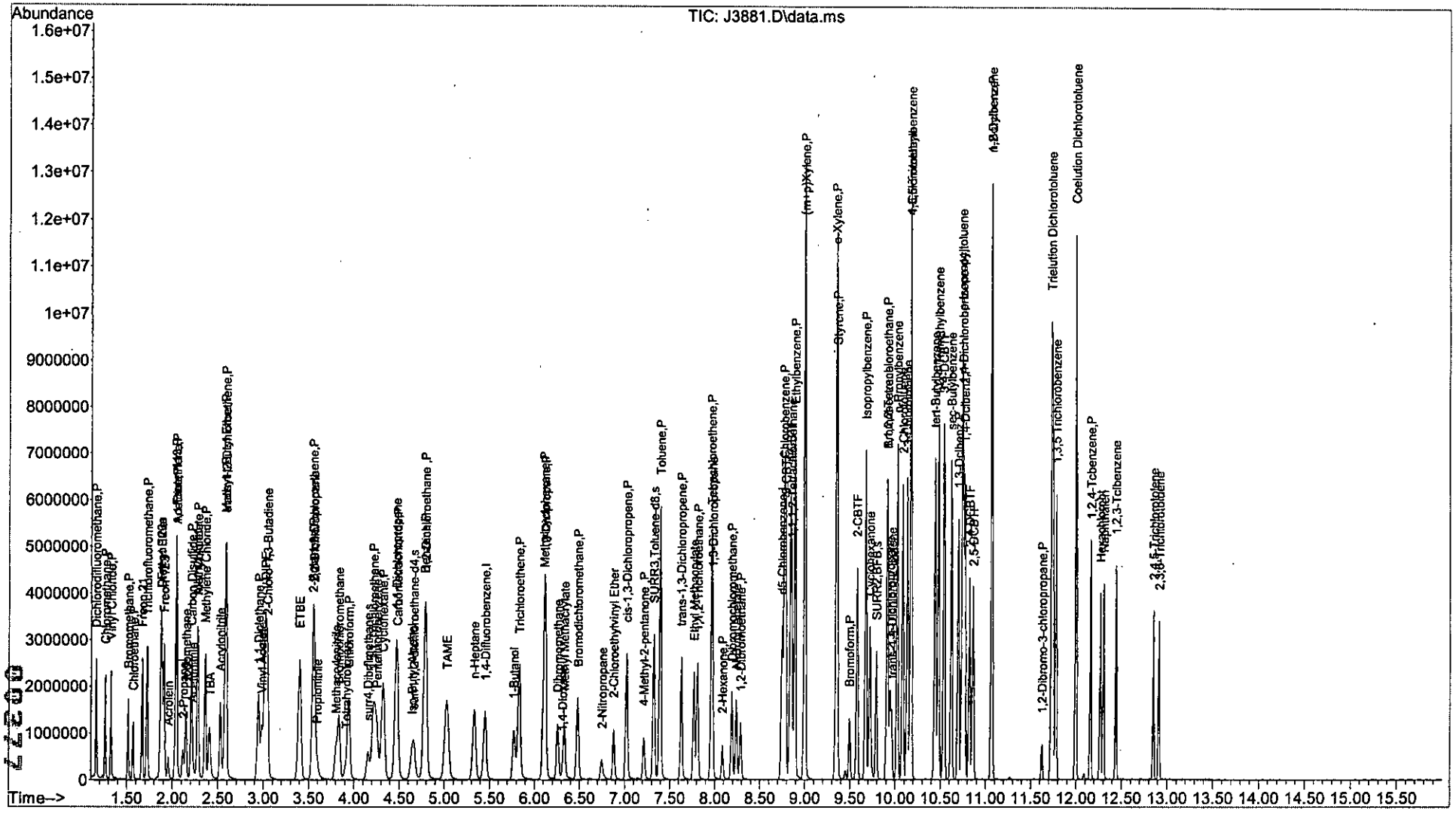
W031214.M Thu Mar 13 10:49:19 2014 Page: 1

00375

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	979999	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1518459	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1407424	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	759863	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	441101	50.18	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.36%				
48) surr1,1,2-dichloroetha...	4.664	65	488656	48.80	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 97.60%				
65) SURR3,Toluene-d8	7.322	98	1853938	50.19	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.38%				
70) SURR2,BFB	9.791	95	709699	51.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.00%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	2286283	196.42	ppb		96
3) Chloromethane	1.262	50	2037500	201.56	ppb		96
4) Vinyl Chloride	1.323	62	1831559	195.46	ppb		98
5) Bromomethane	1.512	94	1116290	197.68	ppb		99
6) Chloroethane	1.567	64	1042363	178.82	ppb		100
7) Freon 21	1.664	67	2705583	191.44	ppb		96
8) Trichlorofluoromethane	1.719	101	2751491	191.27	ppb		98
9) Diethyl Ether	1.878	59	1310397	184.99	ppb		96
10) Freon 123a	1.872	67	2017900m	191.04	ppb		
11) Freon 123	1.902	83	2383673	197.61	ppb		95
12) Acrolein	1.951	56	843142	2488.67	ppb		96
13) 1,1-Diclethene	2.036	96	1444716	203.15	ppb		95
14) Freon 113	2.036	101	1541423	198.05	ppb		90
15) Acetone	2.042	43	369068	189.81	ppb		99
16) 2-Propanol	2.116	45	1449061	4519.02	ppb		95
17) Iodomethane	2.146	142	2055775	217.63	ppb		96
18) Carbon Disulfide	2.207	76	4568264	184.69	ppb		98
19) Acetonitrile	2.219	40	322471	1014.22	ppb		94
20) Allyl Chloride	2.274	76	887879	182.08	ppb		95
21) Methyl Acetate	2.274	43	848257	193.74	ppb		99
22) Methylene Chloride	2.359	84	1742532	187.03	ppb		99
23) TBA	2.408	59	2336094	4298.58	ppb		95
24) Acrylonitrile	2.524	53	2160614	991.85	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	4301170	190.27	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	1768019	198.42	ppb		96
28) 1,1-Diclethane	2.939	63	3195225	192.67	ppb		100
29) Vinyl Acetate	2.975	86	322532	218.41	ppb	#	80
30) DIPE	3.018	45	5908636	182.91	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	2848864	199.45	ppb		97
32) ETBE	3.396	59	5248916	194.19	ppb		99
33) 2,2-Dichloropropane	3.554	77	2728713	207.38	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	1971351	198.26	ppb		97
35) 2-Butanone	3.548	43	536985	197.13	ppb		97
36) Propionitrile	3.591	54	833731	1091.99	ppb		98
37) Bromochloromethane	3.829	130	1006153	181.24	ppb		94

KR 3/13/14

W031214.M Thu Mar 13 10:52:01 2014 Page: 1

00378

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	524188	206.57	ppb		97
39) Tetrahydrofuran	3.902	42	364546	191.44	ppb		74
40) Chloroform	3.938	83	3126159	192.36	ppb		98
41) 1,1,1-Trichloroethane	4.213	97	2833193	203.25	ppb	#	84
42) TAME	5.023	73	4623300	202.60	ppb		99
44) Cyclohexane	4.316	41	1591117	193.76	ppb		99
46) Carbontetrachloride	4.469	121	768760	211.15	ppb		100
47) 1,1-Dichloropropene	4.463	75	2295867	206.56	ppb		94
49) Benzene	4.786	78	7257077	194.13	ppb		96
50) 1,2-Dichloroethane	4.792	62	2181265	192.18	ppb		97
51) Iso-Butyl Alcohol	4.639	43	1130810	4497.64	ppb		98
52) n-Heptane	5.328	43	1791526	191.82	ppb		97
53) 1-Butanol	5.773	56	1716496	12092.96	ppb		100
54) Trichloroethene	5.828	130	1855685	204.93	ppb		96
55) Methylcyclohexane	6.109	55	1898582	195.02	ppb		96
56) 1,2-Diclpropane	6.115	63	1885412	195.53	ppb		97
57) Dibromomethane	6.255	93	928427	204.16	ppb		97
58) 1,4-Dioxane	6.310	88	260761m	4278.89	ppb		
59) Methyl Methacrylate	6.328	69	977496	217.30	ppb		92
60) Bromodichloromethane	6.474	83	2367789	212.04	ppb		97
61) 2-Nitropropane	6.743	41	557263	464.07	ppb		83
62) 2-Chloroethylvinyl Ether	6.877	63	916396	213.74	ppb		100
63) cis-1,3-Dichloropropene	7.023	75	2885488	217.79	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	1217857	211.20	ppb		97
66) Toluene	7.395	91	7245118	187.96	ppb		93
67) trans-1,3-Dichloropropene	7.633	75	2452963	229.69	ppb		95
68) Ethyl Methacrylate	7.767	69	2019211	234.58	ppb		100
69) 1,1,2-Trichloroethane	7.810	97	1369904	203.16	ppb		97
72) Tetrachloroethene	7.962	164	1476158	203.04	ppb		98
73) 2-Hexanone	8.084	43	872249	218.80	ppb		99
74) 1,3-Dichloropropane	7.974	76	2487765	196.34	ppb		98
75) Dibromochloromethane	8.188	129	1673461	229.69	ppb		99
76) N-Butyl Acetate	8.236	43	2151476	218.28	ppb		97
77) 1,2-Dibromoethane	8.285	107	1357253	208.54	ppb		97
78) Chlorobenzene	8.773	112	4820919	196.84	ppb		95
79) 3-CBTF	8.785	180	2511010	207.26	ppb		95
80) 4-CBTF	8.840	180	2266329	208.77	ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	1919375	223.01	ppb		96
82) Ethylbenzene	8.889	106	2713368	207.95	ppb	#	70
83) (m+p)Xylene	8.998	106	6206404	404.74	ppb	#	67
84) o-Xylene	9.346	106	3243504	207.27	ppb	#	81
85) Styrene	9.358	104	5349928	213.85	ppb		99
87) Bromoform	9.498	173	1021268	236.66	ppb		99
88) 2-CBTF	9.577	180	2418474	191.05	ppb		98
89) Isopropylbenzene	9.675	105	6913118	176.21	ppb		86
90) Cyclohexanone	9.724	55	2390191	3922.16	ppb		97
91) trans-1,4-Dichloro-2-B...	9.962	53	457912	223.88	ppb		86
92) 1,1,2,2-Tetrachloroethane	9.913	83	1621835	186.37	ppb		98
93) Bromobenzene	9.913	156	2182175	195.22	ppb	#	82
94) 1,2,3-Trichloropropane	9.943	110	482217	185.19	ppb		97
95) n-Propylbenzene	10.023	91	7682061	167.40	ppb		87
96) 2-Chlorotoluene	10.083	91	5254597	182.32	ppb		93

W031214.M Thu Mar 13 10:52:01 2014 Page: 2

00379

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	5400136	180.14	ppb		92
98)	4-Chlorotoluene	10.175	91	6004495	176.70	ppb		84
99)	1,3,5-Trimethylbenzene	10.175	105	5961721	186.29	ppb		86
100)	tert-Butylbenzene	10.443	119	4946458	183.63	ppb		93
101)	1,2,4-Trimethylbenzene	10.480	105	6014450	182.67	ppb		88
102)	3,4-DCBTF	10.535	214	1853237	197.96	ppb		96
103)	sec-Butylbenzene	10.620	105	6557013	174.91	ppb		91
104)	p-Isopropyltoluene	10.742	119	5833378	184.01	ppb		90
105)	1,3-Dclbenz	10.699	146	3744521	196.81	ppb		96
106)	1,4-Dclbenz	10.772	146	3787265	187.07	ppb		95
107)	2,4-DCBTF	10.821	214	1588956	195.09	ppb		96
108)	2,5-DCBTF	10.864	214	1812827	194.66	ppb		98
109)	n-Butylbenzene	11.071	91	5279444	184.71	ppb		91
110)	1,2-Dclbenz	11.065	146	3657071	199.61	ppb		98
111)	1,2-Dibromo-3-chloropr...	11.626	157	292980	219.74	ppb		96
112)	Trielution Dichlorotol...	11.736	125	7827531	540.19	ppb	#	90
113)	1,3,5 Trichlorobenzene	11.778	180	2337530	184.97	ppb		99
114)	Coelution Dichlorotoluene	11.998	125	5360706	349.39	ppb	#	87
115)	1,2,4-Tcbenzene	12.162	180	2051796	183.13	ppb		94
116)	Hexachlorobt	12.266	225	888614	181.73	ppb		99
117)	Naphthalen	12.303	128	3805658	188.67	ppb		98
118)	1,2,3-Tclbenzene	12.437	180	1643433	179.15	ppb		99
119)	2,4,5-Trichlorotolene	12.851	159	1040596	171.79	ppb		97
120)	2,3,6-Trichlorotoluene	12.912	159	963982	174.22	ppb		97

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

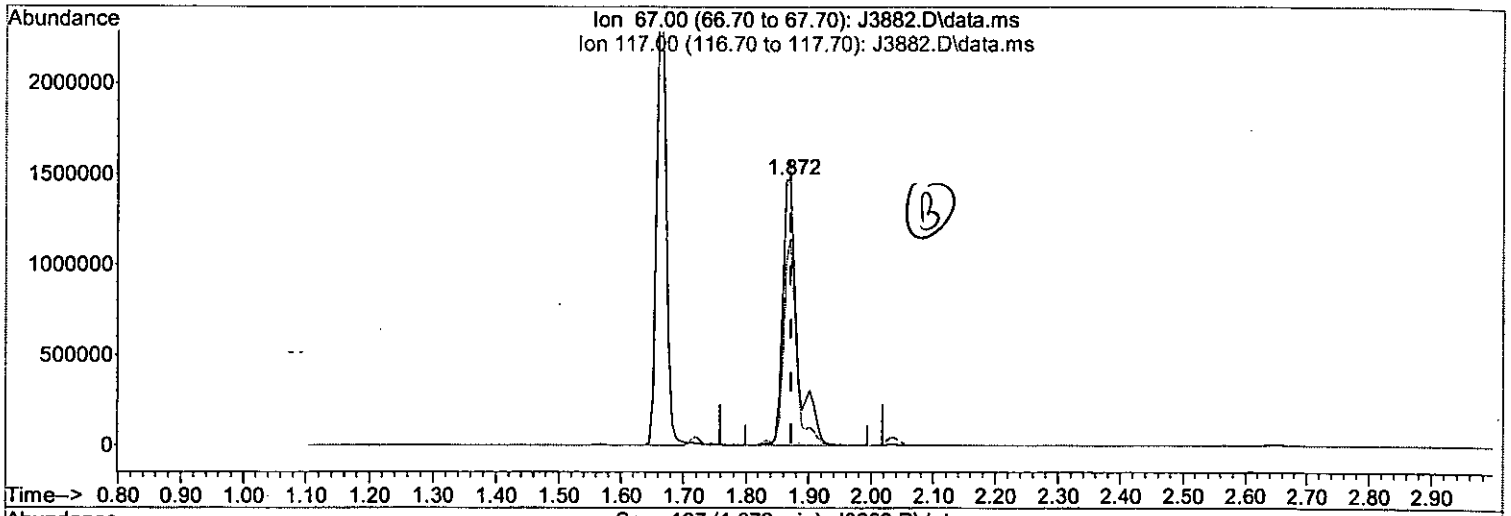
W031214.M Thu Mar 13 10:52:01 2014 Page: 3

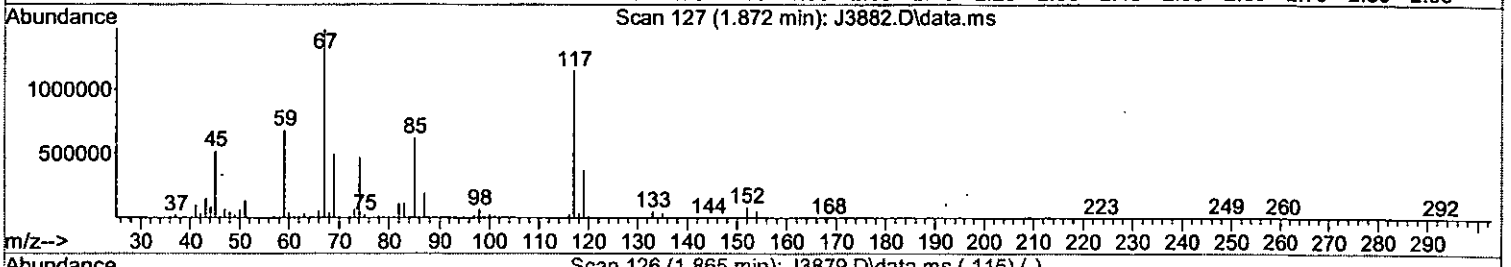
00380

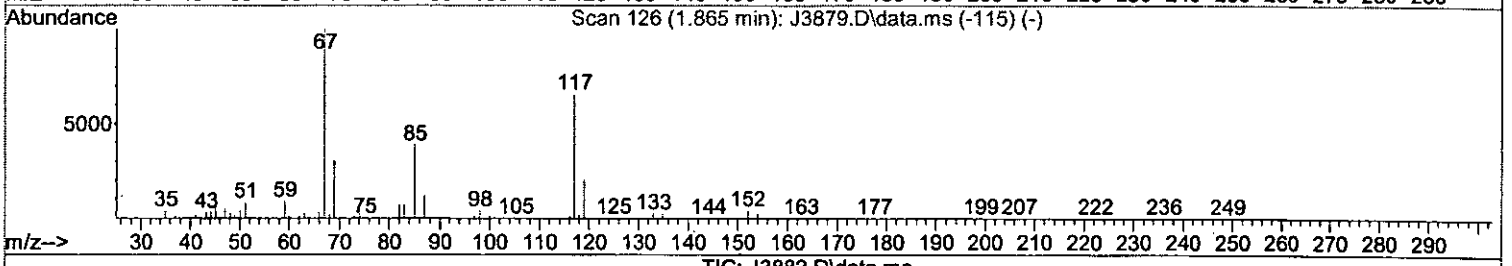
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3882.D\data.ms

(10) Freon 123a

1.872min (0.000) 225.75 ppb

response 2384527

Ion	Exp%	Act%
67.00	100	100
117.00	65.90	77.87
0.00	0.00	0.00
0.00	0.00	0.00

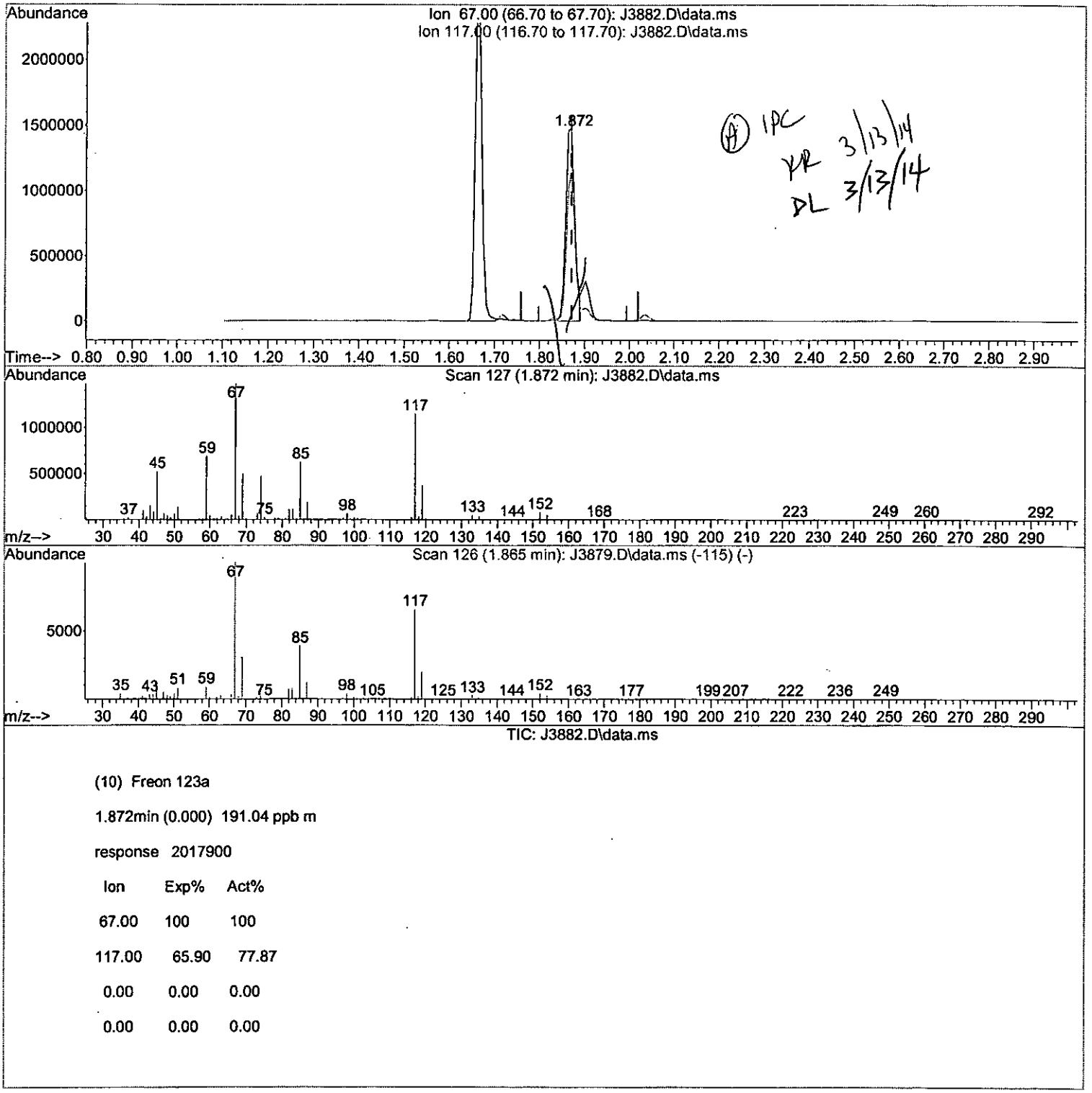
W031214.M Thu Mar 13 10:50:34 2014 Page: 1

00381

Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(A) IPC KR 3/13/14 DL 3/13/14

(10) Freon 123a

1.872min (0.000) 191.04 ppb m

response 2017900

Ion	Exp%	Act%
67.00	100	100
117.00	65.90	77.87
0.00	0.00	0.00
0.00	0.00	0.00

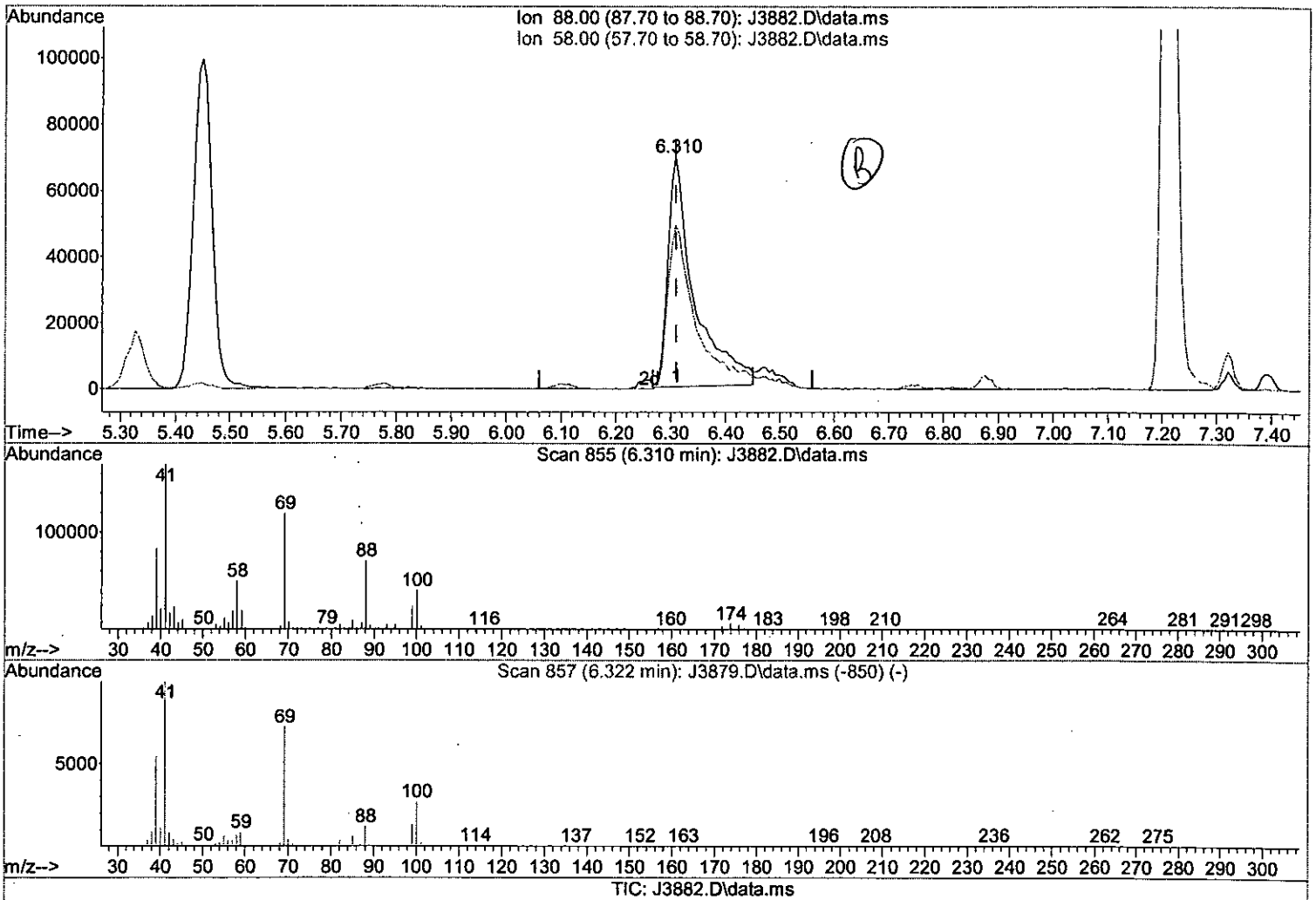
W031214.M Thu Mar 13 10:50:42 2014 Page: 1

00382

Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3882.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 3786.68 ppb

response 230765

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	70.35
0.00	0.00	0.00
0.00	0.00	0.00

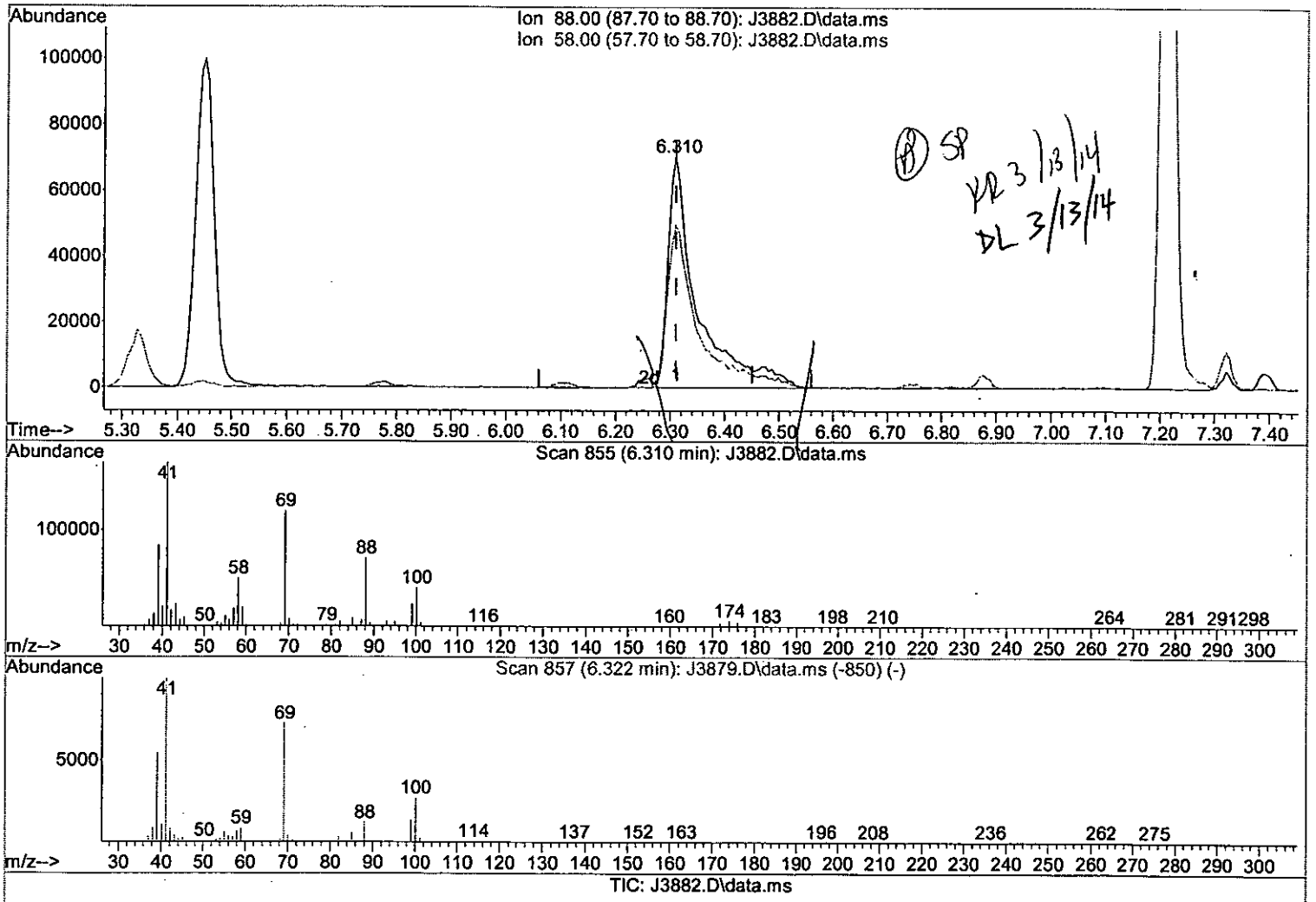
W031214.M Thu Mar 13 10:51:10 2014 Page: 1

00383

Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3882.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 4278.89 ppb m

response 260761

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	70.35
0.00	0.00	0.00
0.00	0.00	0.00

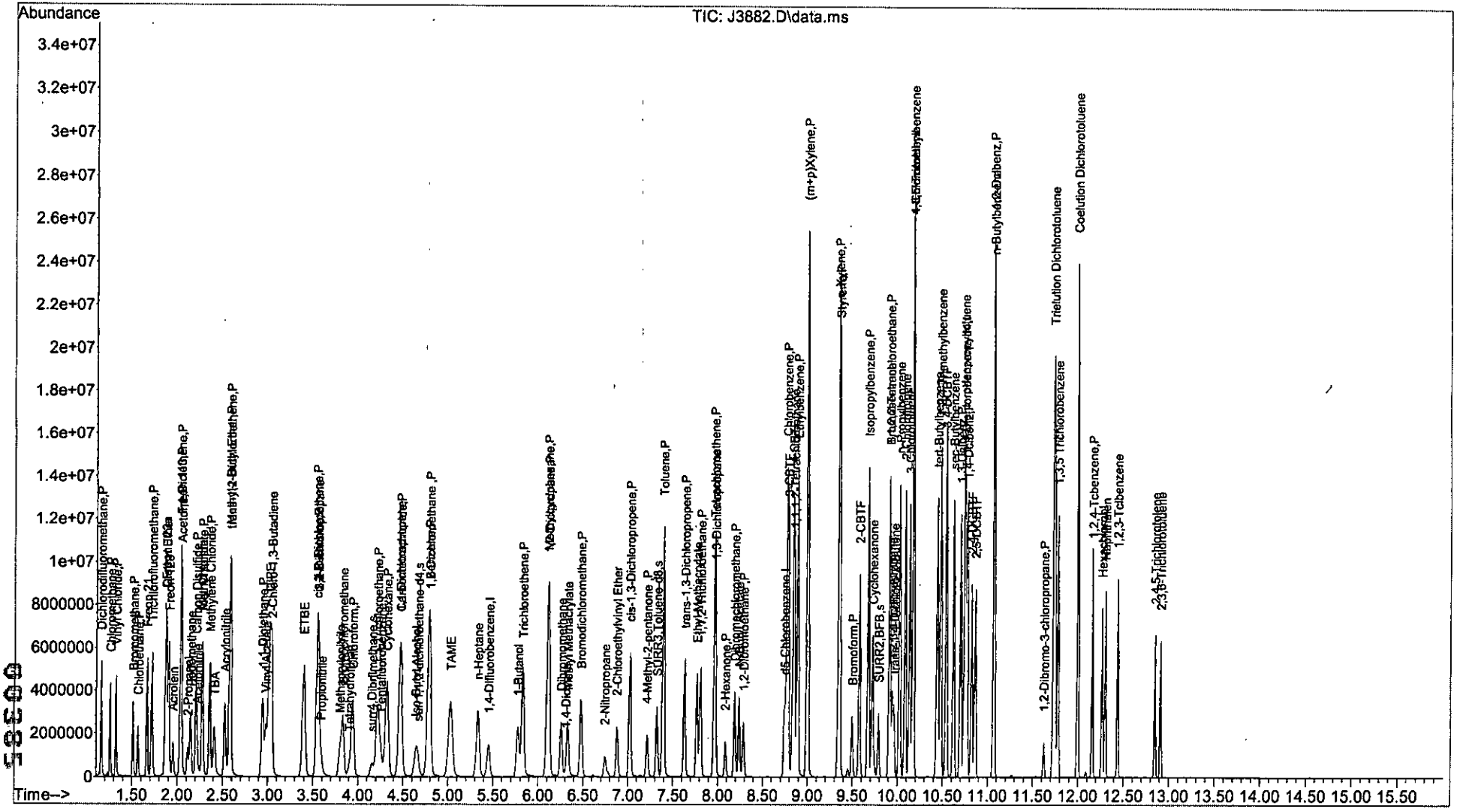
W031214.M Thu Mar 13 10:51:18 2014 Page: 1

00384

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:52:04 2014

Page: 4

Initial Calibration Verification Summary Report

KR 3/13/14

Calibration ID: RC1400023
WO31214 8260 Waters

Instrument ID: R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400023-09	T	Average RF	50	52.81	ppm	5.6	<=30
1,1,1-Trichloroethane (TCA)	RC1400023-09	T	Average RF	50	49.84	ppm	-0.3	<=30
1,1,2,2-Tetrachloroethane	RC1400023-09	T	Average RF	50	48.43	ppm	-3.1	<=30
1,1,2-Trichloroethane	RC1400023-09	T	Average RF	50	48.84	ppm	-2.3	<=30
1,1,2-Trichlorotrifluoroethane	RC1400023-09	T	Average RF	50	50.03	ppm	0.1	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400023-09	T	Average RF	50	48.94	ppm	-2.1	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400023-09	T	Average RF	50	57.52	ppm	15.0	<=30
1,1-Dichloropropene	RC1400023-09	T	Average RF	50	56.55	ppm	13.1	<=30
1,2,3-Trichlorobenzene	RC1400023-09	T	Average RF	50	50.70	ppm	1.4	<=30
1,2,3-Trichloropropane	RC1400023-09	T	Average RF	50	48.79	ppm	-2.4	<=30
1,2,4-Trichlorobenzene	RC1400023-09	T	Average RF	50	51.43	ppm	2.9	<=30
1,2,4-Trimethylbenzene	RC1400023-09	T	Average RF	50	52.17	ppm	4.3	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400023-09	T	Average RF	50	55.67	ppm	11.3	<=30
1,2-Dibromoethane	RC1400023-09	T	Average RF	50	52.14	ppm	4.3	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400023-09	T	Average RF	50	51.68	ppm	3.4	<=30
1,2-Dichlorobenzene	RC1400023-09	T	Average RF	50	50.95	ppm	1.9	<=30
1,2-Dichloroethane	RC1400023-09	T	Average RF	50	46.09	ppm	-7.8	<=30
1,2-Dichloropropane	RC1400023-09	T	Average RF	50	48.94	ppm	-2.1	<=30
1,3,5-Trichlorobenzene	RC1400023-09	T	Average RF	50	49.97	ppm	-0.1	<=30
1,3,5-Trimethylbenzene	RC1400023-09	T	Average RF	50	52.32	ppm	4.6	<=30
1,3-Dichlorobenzene	RC1400023-09	T	Average RF	50	51.41	ppm	2.8	<=30
1,3-Dichloropropane	RC1400023-09	T	Average RF	50	48.78	ppm	-2.4	<=30
1,4-Dichlorobenzene	RC1400023-09	T	Average RF	50	49.93	ppm	-0.1	<=30
1,4-Dioxane	RC1400023-09	T	Average RF	1000	938.8	ppm	-6.1	<=30
1-Butanol	RC1400023-09	T	Average RF	2500	2756	ppm	10.2	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400023-09	T	Average RF	50	51.02	ppm	2.0	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400023-09	T	Average RF	50	51.23	ppm	2.5	<=30
2,2-Dichloropropane	RC1400023-09	T	Average RF	50	53.03	ppm	6.1	<=30
2,3,6-Trichlorotoluene	RC1400023-09	T	Average RF	50	52.46	ppm	4.9	<=30
2,4,5-Trichlorotoluene	RC1400023-09	T	Average RF	50	53.89	ppm	7.8	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400023-09	T	Average RF	150	151.4	ppm	0.9	<=30
2,4-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.93	ppm	1.9	<=30
2,5-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.16	ppm	0.3	<=30
2-Butanone (MEK)	RC1400023-09	T	Average RF	50	45.55	ppm	-8.9	<=30
2-Chloro-1,3-butadiene	RC1400023-09	T	Average RF	50	49.33	ppm	-1.3	<=30
2-Chlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.08	ppm	0.2	<=30
2-Chloroethyl Vinyl Ether	RC1400023-09	T	Average RF	50	52.52	ppm	5.0	<=30
2-Chlorotoluene	RC1400023-09	T	Average RF	50	50.46	ppm	0.9	<=30
2-Hexanone	RC1400023-09	T	Average RF	50	49.41	ppm	-1.2	<=30
2-Methyl-1-propanol	RC1400023-09	T	Average RF	1000	1010	ppm	1.0	<=30
2-Methyl-2-propanol	RC1400023-09	T	Average RF	1000	978.2	ppm	-2.2	<=30
2-Nitropropane	RC1400023-09	T	Average RF	100	102.0	ppm	2.0	<=30
2-Propanol	RC1400023-09	T	Average RF	1000	1025	ppm	2.5	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400023-09	T	Average RF	100	103.6	ppm	3.6	<=30
3,4-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	49.78	ppm	-0.4	<=30
3-Chloro-1-propene	RC1400023-09	T	Average RF	50	50.79	ppm	1.6	<=30
3-Chlorobenzotrifluoride	RC1400023-09	T	Average RF	50	49.64	ppm	-0.7	<=30
3-Chlorotoluene	RC1400023-09	T	Average RF	50	48.80	ppm	-2.4	<=30
4-Chlorotoluene	RC1400023-09	T	Average RF	50	51.03	ppm	2.1	<=30
4-Isopropyltoluene	RC1400023-09	T	Average RF	50	53.38	ppm	6.8	<=30
4-Methyl-2-pentanone	RC1400023-09	T	Average RF	50	50.35	ppm	0.7	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400023-09	T	Average RF	50	39.48	ppm	-21.0	<=30
Acetonitrile	RC1400023-09	T	Average RF	250	225.5	ppm	-9.8	<=30
Acrolein	RC1400023-09	T	Quadratic	100	208.5	ppm	108.5	<=30
Acrylonitrile	RC1400023-09	T	Average RF	250	246.3	ppm	-1.5	<=30
Benzene	RC1400023-09	T	Average RF	50	49.93	ppm	-0.1	<=30
Bromobenzene	RC1400023-09	T	Average RF	50	49.66	ppm	-0.7	<=30
Bromochloromethane	RC1400023-09	T	Average RF	50	47.83	ppm	-4.3	<=30
Bromodichloromethane	RC1400023-09	T	Average RF	50	51.35	ppm	2.7	<=30
Bromoform	RC1400023-09	T	Average RF	50	54.02	ppm	8.0	<=30
Bromomethane	RC1400023-09	T	Average RF	50	47.24	ppm	-5.5	<=30
Carbon Disulfide	RC1400023-09	T	Average RF	50	47.03	ppm	-5.9	<=30
Carbon Tetrachloride	RC1400023-09	T	Average RF	50	50.06	ppm	0.1	<=30
Chlorobenzene	RC1400023-09	T	Average RF	50	50.84	ppm	1.7	<=30
Chloroethane	RC1400023-09	T	Average RF	50	45.68	ppm	-8.6	<=30
Chloroform	RC1400023-09	T	Average RF	50	48.21	ppm	-3.6	<=30
Chloromethane	RC1400023-09	T	Average RF	50	44.02	ppm	-12.0	<=30
Cyclohexane	RC1400023-09	T	Average RF	50	43.66	ppm	-12.7	<=30
Cyclohexanone	RC1400023-09	T	Average RF	1000	614.2	ppm	-38.6	<=30
Dibromochloromethane	RC1400023-09	T	Average RF	50	53.83	ppm	7.7	<=30
Dibromomethane	RC1400023-09	T	Average RF	50	49.61	ppm	-0.8	<=30
Dichlorodifluoromethane (CFC 12)	RC1400023-09	T	Average RF	50	38.90	ppm	-22.2	<=30
Dichlorofluoromethane (CFC 21)	RC1400023-09	T	Average RF	50	48.36	ppm	-3.3	<=30
Dichloromethane	RC1400023-09	T	Average RF	50	48.52	ppm	-3.0	<=30
Diethyl Ether	RC1400023-09	T	Average RF	50	49.25	ppm	-1.5	<=30
Diisopropyl Ether	RC1400023-09	T	Average RF	50	45.55	ppm	-8.9	<=30
Ethyl Methacrylate	RC1400023-09	T	Average RF	50	54.92	ppm	9.8	<=30
Ethyl tert-Butyl Ether	RC1400023-09	T	Average RF	50	47.03	ppm	-5.9	<=30
Ethylbenzene	RC1400023-09	T	Average RF	50	51.98	ppm	4.0	<=30
Hexachlorobutadiene	RC1400023-09	T	Average RF	50	52.06	ppm	4.1	<=30
Iodomethane	RC1400023-09	T	Average RF	50	55.23	ppm	10.5	<=30
Isopropylbenzene (Cumene)	RC1400023-09	T	Average RF	50	52.49	ppm	5.0	<=30
Methacrylonitrile	RC1400023-09	T	Average RF	50	49.67	ppm	-0.7	<=30
Methyl Acetate	RC1400023-09	T	Average RF	50	48.18	ppm	-3.6	<=30
Methyl Methacrylate	RC1400023-09	T	Average RF	50	50.68	ppm	1.4	<=30
Methyl tert-Butyl Ether	RC1400023-09	T	Average RF	50	49.16	ppm	-1.7	<=30
Methylcyclohexane	RC1400023-09	T	Average RF	50	44.63	ppm	-10.7	<=30
Naphthalene	RC1400023-09	T	Average RF	50	56.07	ppm	12.1	<=30
Propionitrile	RC1400023-09	T	Average RF	250	258.3	ppm	3.3	<=30
Styrene	RC1400023-09	T	Average RF	50	55.20	ppm	10.4	<=30
Tetrachloroethene (PCE)	RC1400023-09	T	Average RF	50	50.19	ppm	0.4	<=30
Tetrahydrofuran (THF)	RC1400023-09	T	Average RF	50	46.06	ppm	-7.9	<=30
Toluene	RC1400023-09	T	Average RF	50	50.32	ppm	0.6	<=30
Trichloroethene (TCE)	RC1400023-09	T	Average RF	50	51.42	ppm	2.8	<=30
Trichlorofluoromethane (CFC 11)	RC1400023-09	T	Average RF	50	45.53	ppm	-8.9	<=30
Vinyl Acetate	RC1400023-09	T	Average RF	50	47.09	ppm	-5.8	<=30
Vinyl Chloride	RC1400023-09	T	Average RF	50	46.08	ppm	-7.8	<=30
cis-1,2-Dichloroethene	RC1400023-09	T	Average RF	50	50.33	ppm	0.7	<=30
cis-1,3-Dichloropropene	RC1400023-09	T	Average RF	50	50.69	ppm	1.4	<=30
m,p-Xylenes	RC1400023-09	T	Average RF	100	107.8	ppm	7.8	<=30
n-Butyl Acetate	RC1400023-09	T	Average RF	50	52.20	ppm	4.4	<=30
n-Butylbenzene	RC1400023-09	T	Average RF	50	53.27	ppm	6.5	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400023-09	T	Average RF	50	47.14	ppm	-5.7	<=30
n-Propylbenzene	RC1400023-09	T	Average RF	50	51.09	ppm	2.2	<=30
o-Xylene	RC1400023-09	T	Average RF	50	52.18	ppm	4.4	<=30
sec-Butylbenzene	RC1400023-09	T	Average RF	50	51.80	ppm	3.6	<=30
tert-Amyl Methyl Ether	RC1400023-09	T	Average RF	50	49.25	ppm	-1.5	<=30
tert-Butylbenzene	RC1400023-09	T	Average RF	50	50.94	ppm	1.9	<=30
trans-1,2-Dichloroethene	RC1400023-09	T	Average RF	50	51.22	ppm	2.4	<=30
trans-1,3-Dichloropropene	RC1400023-09	T	Average RF	50	53.39	ppm	6.8	<=30
trans-1,4-Dichloro-2-butene	RC1400023-09	T	Average RF	50	50.06	ppm	0.1	<=30
1,2-Dichloroethane-d4	RC1400023-09	S	Average RF	50	47.74	ppm	-4.5	<=30
4-Bromofluorobenzene	RC1400023-09	S	Average RF	50	50.03	ppm	0.1	<=30
Dibromofluoromethane	RC1400023-09	S	Average RF	50	50.20	ppm	0.4	<=30
Toluene-d8	RC1400023-09	S	Average RF	50	49.47	ppm	-1.1	<=30

Exceptions

QAP	Method
CRA-OXY	8260C

Compound	Type	Criteria	Result
Acrolein	Percent Difference	<= 30	108.48
Cyclohexanone	Percent Difference	<= 30	-38.58

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	929881	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1444154	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1310348	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	668032	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	419672	50.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.40%				
48) surr1,1,2-dichloroetha...	4.658	65	454641	47.74	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 95.48%				
65) SURR3,Toluene-d8	7.322	98	1737832	49.47	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.94%				
70) SURR2,BFB	9.785	95	655712	50.03	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	429607	38.90	ppb		99
3) Chloromethane	1.262	50	421317	44.02	ppb		97
4) Vinyl Chloride	1.323	62	409710	46.08	ppb		99
5) Bromomethane	1.512	94	253110	47.24	ppb		100
6) Chloroethane	1.567	64	242226	45.68	ppb		100
7) Freon 21	1.664	67	648556	48.36	ppb		99
8) Trichlorofluoromethane	1.719	101	621513	45.53	ppb		100
9) Diethyl Ether	1.878	59	331013	49.25	ppb		95
10) Freon 123a	1.866	67	517883	51.68	ppb		97
11) Freon 123	1.902	83	586378	51.23	ppb		97
12) Acrolein	1.951	56	55280	208.48	ppb		86
13) 1,1-Diclethene	2.036	96	388120	57.52	ppb		94
14) Freon 113	2.036	101	369435	50.03	ppb		94
15) Acetone	2.042	43	72835	39.48	ppb		96
16) 2-Propanol	2.109	45	306969	1025.29	ppb		98
17) Iodomethane	2.146	142	495062	55.23	ppb		95
18) Carbon Disulfide	2.207	76	1103871	47.03	ppb		99
19) Acetonitrile	2.225	40	68032	225.50	ppb		97
20) Allyl Chloride	2.274	76	234992	50.79	ppb		98
21) Methyl Acetate	2.274	43	200165	48.18	ppb		99
22) Methylene Chloride	2.353	84	428950	48.52	ppb		97
23) TBA	2.402	59	504436	978.23	ppb		98
24) Acrylonitrile	2.524	53	509123	246.31	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	1054535	49.16	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	433069	51.22	ppb		97
28) 1,1-Diclethane	2.938	63	770101	48.94	ppb		99
29) Vinyl Acetate	2.975	86	65986	47.09	ppb	#	71
30) DIPE	3.012	45	1396139	45.55	ppb		98
31) 2-Chloro-1,3-Butadiene	3.036	53	668588	49.33	ppb		95
32) ETBE	3.396	59	1206134	47.03	ppb		98
33) 2,2-Dichloropropane	3.554	77	662135	53.03	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	474863	50.33	ppb		97
35) 2-Butanone	3.548	43	117744	45.55	ppb		98
36) Propionitrile	3.591	54	192749	258.26	ppb		100
37) Bromochloromethane	3.829	130	251979	47.83	ppb		89

KP 3/13/14

W031214.M Thu Mar 13 12:15:31 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	119599	49.67	ppb	98
39) Tetrahydrofuran	3.902	42	83220	46.06	ppb	78
40) Chloroform	3.938	83	743487	48.21	ppb	95
41) 1,1,1-Trichloroethane	4.213	97	659281	49.84	ppb	90
42) TAME	5.017	73	1066399	49.25	ppb	100
44) Cyclohexane	4.316	41	341159	43.66	ppb	98
46) Carbontetrachloride	4.469	121	173353	50.06	ppb	97
47) 1,1-Dichloropropene	4.463	75	603211	56.55	ppb	93
49) Benzene	4.780	78	1775123	49.93	ppb	100
50) 1,2-Dichloroethane	4.786	62	497561	46.09	ppb	96
51) Iso-Butyl Alcohol	4.639	43	246703	1009.81	ppb	98
52) n-Heptane	5.328	43	418693	47.14	ppb	98
53) 1-Butanol	5.767	56	369742	2755.71	ppb	98
54) Trichloroethene	5.828	130	442862	51.42	ppb	96
55) Methylcyclohexane	6.103	55	413194	44.63	ppb	96
56) 1,2-Diclpropane	6.115	63	444936	48.94	ppb	96
57) Dibromomethane	6.255	93	214572	49.61	ppb	97
58) 1,4-Dioxane	6.310	88	55901m	938.84	ppb	
59) Methyl Methacrylate	6.328	69	216807	50.68	ppb	99
60) Bromodichloromethane	6.474	83	545381	51.35	ppb	98
61) 2-Nitropropane	6.743	41	116523	102.03	ppb	89
62) 2-Chloroethylvinyl Ether	6.877	63	214137	52.52	ppb	100
63) cis-1,3-Dichloropropene	7.023	75	638673	50.69	ppb	98
64) 4-Methyl-2-pentanone	7.212	43	276149	50.35	ppb	96
66) Toluene	7.395	91	1844775	50.32	ppb	98
67) trans-1,3-Dichloropropene	7.627	75	542305	53.39	ppb	96
68) Ethyl Methacrylate	7.767	69	453829	54.92	ppb	98
69) 1,1,2-Trichloroethane	7.809	97	313249	48.84	ppb	98
72) Tetrachloroethene	7.962	164	339703	50.19	ppb	100
73) 2-Hexanone	8.084	43	183408	49.41	ppb	96
74) 1,3-Dichloropropane	7.968	76	575463	48.78	ppb	100
75) Dibromochloromethane	8.187	129	365103	53.83	ppb	96
76) N-Butyl Acetate	8.236	43	479039	52.20	ppb	97
77) 1,2-Dibromoethane	8.285	107	315951	52.14	ppb	97
78) Chlorobenzene	8.767	112	1159324	50.84	ppb	96
79) 3-CBTF	8.785	180	559968	49.64	ppb	98
80) 4-CBTF	8.840	180	515676	51.02	ppb	100
81) 1,1,1,2-Tetrachloroethane	8.846	131	423150	52.81	ppb	97
82) Ethylbenzene	8.889	106	631469	51.98	ppb	96
83) (m+p)Xylene	8.998	106	1538701	107.78	ppb	93
84) o-Xylene	9.346	106	760185	52.18	ppb	94
85) Styrene	9.352	104	1285835	55.20	ppb	97
87) Bromoform	9.492	173	204953	54.02	ppb	97
88) 2-CBTF	9.577	180	557312	50.08	ppb	96
89) Isopropylbenzene	9.669	105	1810564	52.49	ppb	98
90) Cyclohexanone	9.718	55	329122	614.21	ppb	98
91) trans-1,4-Dichloro-2-B...	9.961	53	90008	50.06	ppb	80
92) 1,1,2,2-Tetrachloroethane	9.913	83	370514	48.43	ppb	99
93) Bromobenzene	9.907	156	488033	49.66	ppb	97
94) 1,2,3-Trichloropropane	9.943	110	111696	48.79	ppb	97
95) n-Propylbenzene	10.022	91	2061187	51.09	ppb	99
96) 2-Chlorotoluene	10.077	91	1278494	50.46	ppb	97

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

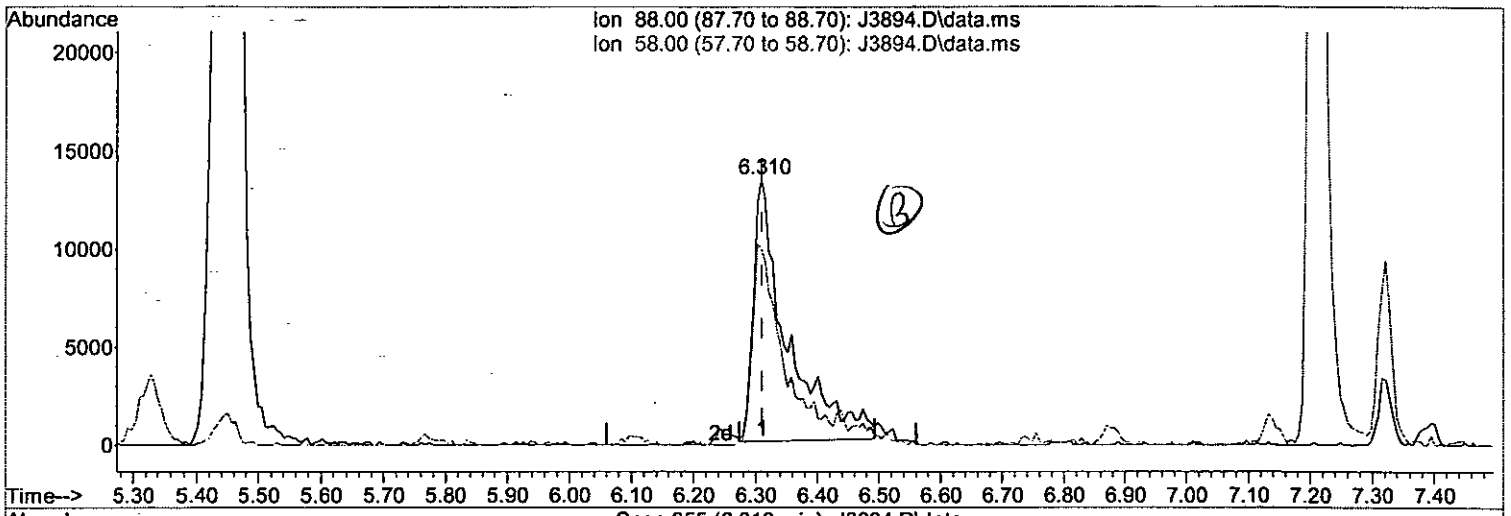
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1285999	48.80	ppb	98
98)	4-Chlorotoluene	10.169	91	1524341	51.03	ppb	99
99)	1,3,5-Trimethylbenzene	10.169	105	1471871	52.32	ppb	98
100)	tert-Butylbenzene	10.437	119	1206430	50.94	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	1510183	52.17	ppb	98
102)	3,4-DCBTF	10.535	214	409731	49.78	ppb	96
103)	sec-Butylbenzene	10.620	105	1707185	51.80	ppb	98
104)	p-Isopropyltoluene	10.742	119	1487810	53.38	ppb	98
105)	1,3-Dclbenz	10.693	146	859962	51.41	ppb	98
106)	1,4-Dclbenz	10.766	146	888598	49.93	ppb	98
107)	2,4-DCBTF	10.821	214	364683	50.93	ppb	96
108)	2,5-DCBTF	10.864	214	410704	50.16	ppb	97
109)	n-Butylbenzene	11.065	91	1338607	53.27	ppb	99
110)	1,2-Dclbenz	11.065	146	820587	50.95	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	65258	55.67	ppb	96
112)	Trielution Dichlorotol...	11.729	125	1928109	151.35	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	555108	49.97	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1397381	103.59	ppb	98
115)	1,2,4-Tcbenzene	12.156	180	506622	51.43	ppb	99
116)	Hexachlorobt	12.266	225	223796	52.06	ppb	97
117)	Naphthalen	12.303	128	994268	56.07	ppb	97
118)	1,2,3-Tclbenzene	12.437	180	408897	50.70	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	286396	53.89	ppb	99
120)	2,3,6-Trichlorotoluene	12.912	159	255170	52.46	ppb	98

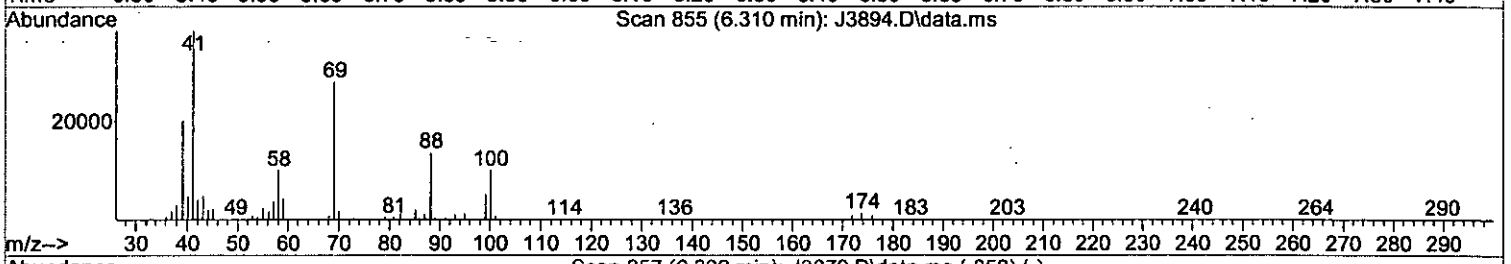
(#) = qualifier out of range (m) = manual integration (+) = signals summed

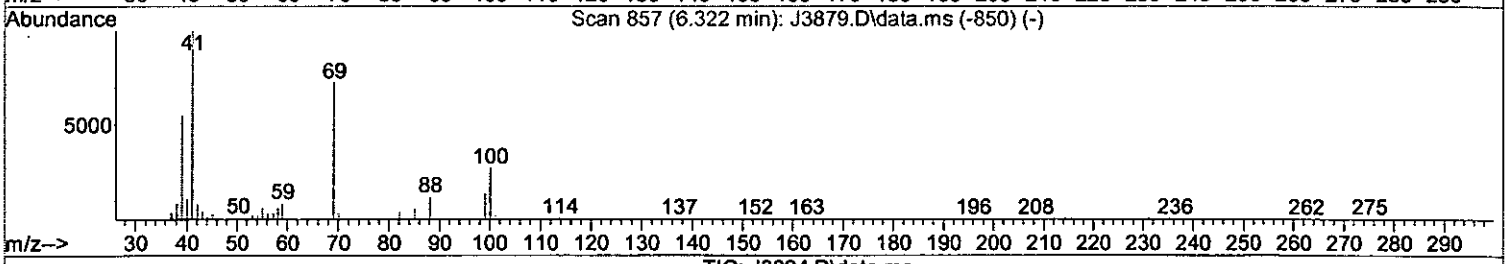
Quantitation Report (Qedit)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:12:46 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J3894.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 853.79 ppb

response 50837

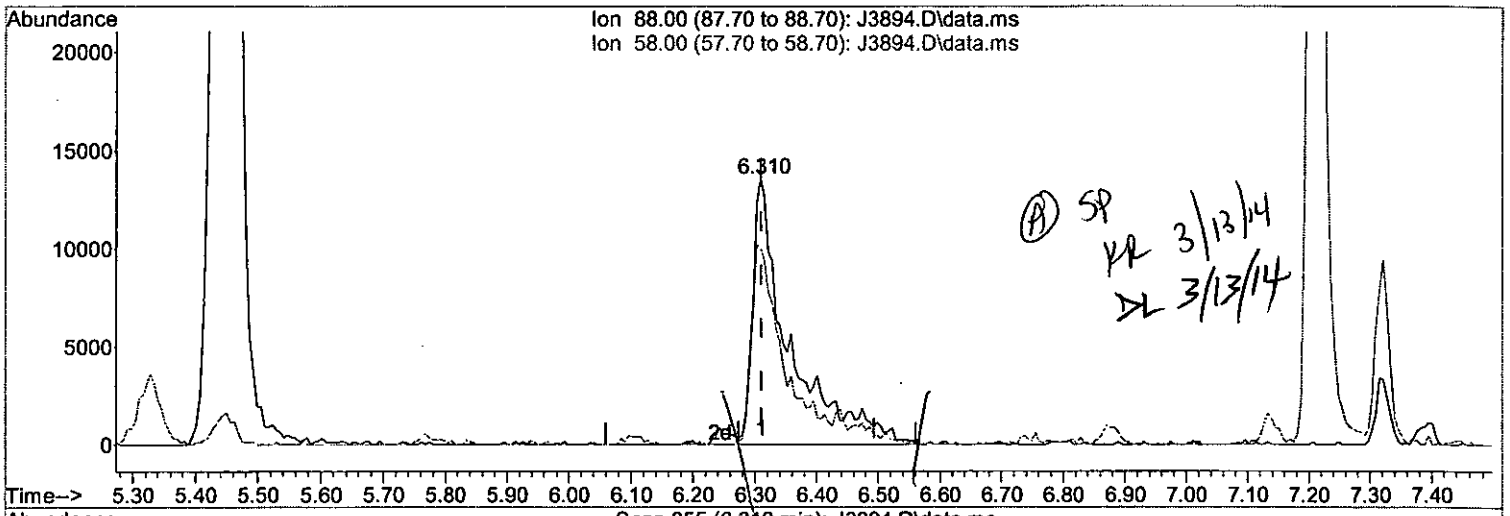
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	73.63#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 12:14:44 2014 Page: 1

Quantitation Report (Qedit)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:12:46 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J3894.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 938.84 ppb m

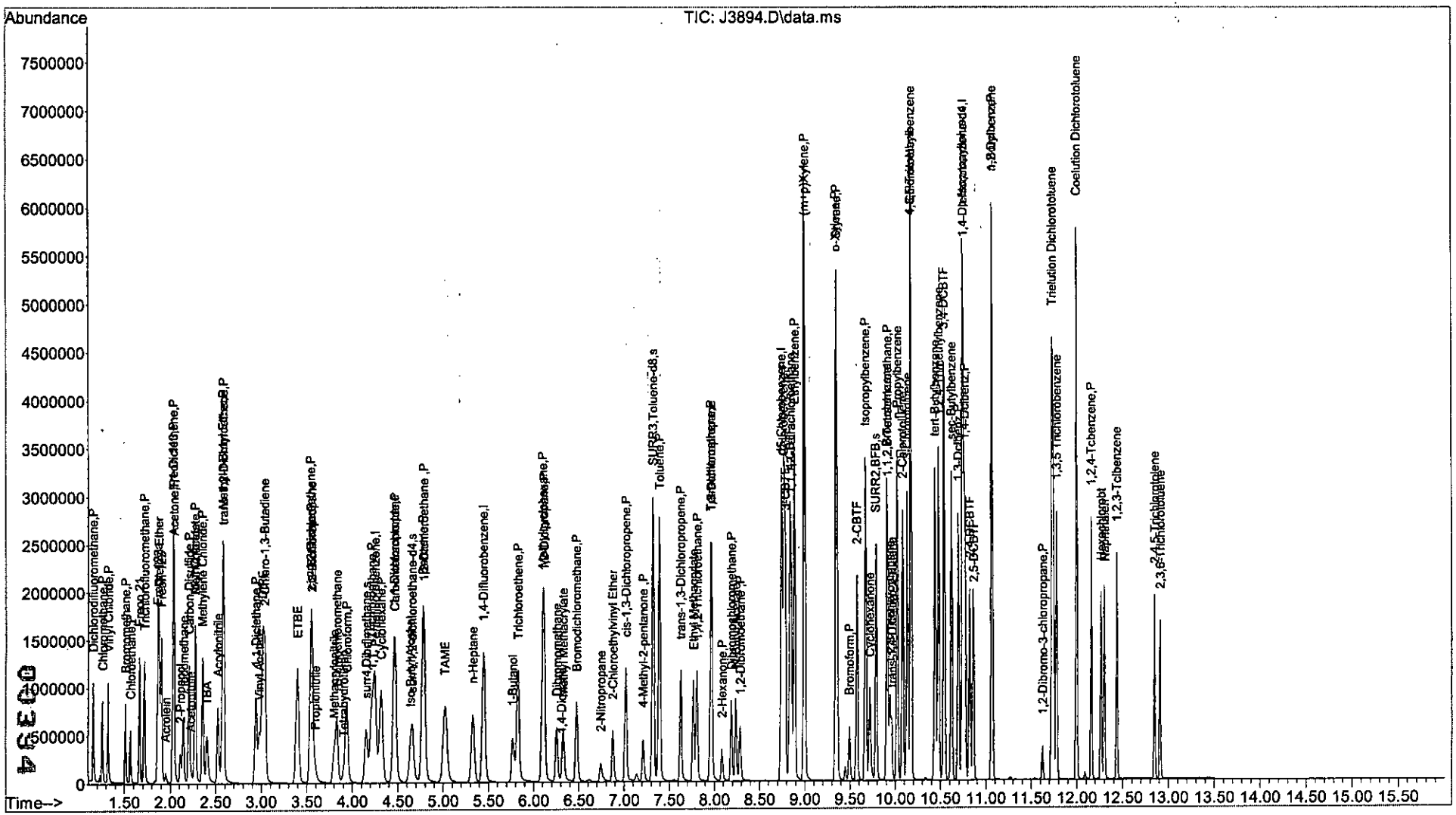
response 55901

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	73.63#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 12:14:52 2014 Page: 1

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 12:15:34 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/17/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\031714\J3995.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 383996
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	52.6	0.3058	0.3217	5.2	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	48.3	0.7112	0.6864	-3.5	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	41.4	0.5726	0.4744	-17.1	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	49.9	0.2220	0.2217	-0.1	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	44.9	0.8461	0.7604	-10.1	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	48.5	0.3628	0.3521	-3.0	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	49.3	0.3693	0.3644	-1.3	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	50.6	0.6036	0.6104	1.1	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	46.9	0.1713	0.1607	-6.2	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	49.2	0.7372	0.7258	-1.5	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	48.6	2.167	2.105	-2.9	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	54.4	0.08773	0.09550	8.8	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	52.4	0.2312	0.2422	4.7	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	50.4	1.206	1.215	0.8	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	48.0	0.3737	0.3588	-4.0	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	47.0	0.3148	0.2961	-5.9	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	48.7	2.106	2.050	-2.6	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	50.1	1.252	1.254	0.2	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	48.0	0.4501	0.4324	-3.9	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	48.0	1.332	1.279	-4.0	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	43.4	0.6713	0.5829	-13.2	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	45.2	0.1390	0.1256	-9.6	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	47.1	1.896	1.785	-5.9	NA	± 20 %	Average RF
2-Hexanone	50.0	49.8	0.1416	0.1412	-0.3	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	46.8	2.236	2.092	-6.4	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	49.7	2.086	2.075	-0.5	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	48.7	0.1899	0.1851	-2.5	NA	± 20 %	Average RF
Acetone	50.0	46.2	0.09920	0.09167	-7.6	NA	± 20 %	Average RF
Benzene	50.0	48.6	1.231	1.196	-2.9	NA	± 20 %	Average RF
Bromobenzene	50.0	49.7	0.7355	0.7313	-0.6	NA	± 20 %	Average RF
Bromochloromethane	50.0	46.5	0.2832	0.2635	-7.0	NA	± 20 %	Average RF
Bromodichloromethane	50.0	51.8	0.3677	0.3808	3.6	NA	± 20 %	Average RF
Bromoform	50.0	56.5	0.2840	0.3210	13.1	NA	± 20 %	Average RF
Bromomethane	50.0	49.3	0.2881	0.2842	-1.4	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	51.7	0.1199	0.1239	3.4	NA	± 20 %	Average RF
Chlorobenzene	50.0	50.1	0.8701	0.8714	0.1	NA	± 20 %	Average RF
Chloroethane	50.0	48.1	0.2851	0.2745	-3.7	NA	± 20 %	Average RF
Chloroform	50.0	45.1	0.8292	0.7485	-9.7	NA	± 20 %	Average RF
Chloromethane	50.0	43.8	0.5146	0.4510	-12.4	NA	± 20 %	Average RF
Dibromochloromethane	50.0	55.5	0.2588	0.2875	11.1	NA	± 20 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/17/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\031714\J3995.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 383996
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	48.6	0.5939	0.5777	-2.7	NA	± 20 %	Average RF
Methylene Chloride	50.0	43.9	0.4753	0.4172	-12.2	NA	± 20 %	Average RF
Ethylbenzene	50.0	50.7	0.4636	0.4699	1.4	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	50.2	0.3218	0.3231	0.4	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	48.7	2.581	2.515	-2.6	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	46.0	1.153	1.061	-8.0	NA	± 20 %	Average RF
Naphthalene	50.0	51.5	1.327	1.366	2.9	NA	± 20 %	Average RF
Styrene	50.0	54.3	0.8888	0.9650	8.6	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	52.9	0.2583	0.2731	5.7	NA	± 20 %	Average RF
Toluene	50.0	50.0	1.269	1.270	0.1	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	57.3	0.2982	0.3418	14.6	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	48.1	0.7340	0.7064	-3.8	NA	± 20 %	Average RF
Vinyl Chloride	50.0	48.0	0.4781	0.4589	-4.0	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	47.0	0.5073	0.4771	-6.0	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	51.3	0.4363	0.4473	2.5	NA	± 20 %	Average RF
m,p-Xylenes	100	105	0.5448	0.5710	4.8	NA	± 20 %	Average RF
n-Butylbenzene	50.0	47.0	1.881	1.767	-6.0	NA	± 20 %	Average RF
n-Propylbenzene	50.0	46.8	3.020	2.827	-6.4	NA	± 20 %	Average RF
o-Xylene	50.0	51.3	0.5559	0.5698	2.5	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	47.8	2.467	2.360	-4.3	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	48.1	1.773	1.704	-3.9	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	47.7	0.4546	0.4339	-4.6	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	52.5	0.3517	0.3693	5.0	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	49.6	0.4538	0.4506	-0.7	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.1	0.2895	0.2899	0.2	NA	± 20 %	Average RF
Toluene-d8	50.0	48.5	1.216	1.180	-3.0	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 09:51:54 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	97	0.00
2	P	Dichlorodifluoromethane	0.5939	0.5777	2.7	93	0.00
3	P	Chloromethane	0.5146	0.4510	12.4	86	0.00
4	P	Vinyl Chloride	0.4781	0.4589	4.0	94	0.00
5	P	Bromomethane	0.2881	0.2842	1.4	105	0.00
6	P	Chloroethane	0.2851	0.2745	3.7	99	0.00
7		Freon 21	0.7211	0.7029	2.5	99	0.00
8	P	Trichlorofluoromethane	0.7340	0.7064	3.8	96	0.00
9		Diethyl Ether	0.3614	0.3132	13.3	88	0.00
10		Freon 123a	0.5388	0.4886	9.3	93	0.00
11		Freon 123	0.6154	0.5698 (M)	7.4	95	0.00
12		Acrolein	0.0172	0.0285	-43.4 ~~-65.7#~~	182	0.00
13	P	1,1-Diclethene	0.3628	0.3521	2.9	95	0.00
14	P	Freon 113	0.3971	0.3724	6.2	95	0.00
15	P	Acetone	0.0992	0.0917	7.6	94	0.00
16		2-Propanol	0.0161	0.0168	-4.3	95	0.00
17		Iodomethane	0.4820	0.4999	-3.7	86	0.00
18	P	Carbon Disulfide	1.2620	1.1317	10.3	83	0.00
19		Acetonitrile	0.0162	0.0136	16.0	83	0.00
20		Allyl Chloride	0.2488	0.2105	15.4	81	0.00
21	P	Methyl Acetate	0.2234	0.1960	12.3	85	0.00
22	P	Methylene Chloride	0.4753	0.4172	12.2	91	0.00
23		TBA	0.0277	0.0280	-1.1	92	0.00
24		Acrylonitrile	0.1111	0.1014	8.7	86	0.00
25	P	Methyl-t-Butyl Ether	1.1534	1.0606	8.0	92	0.00
26	P	trans-1,2-Dichloroethene	0.4546	0.4339	4.6	95	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.8461	0.7604	10.1	89	0.00
29		Vinyl Acetate	0.0753	0.0433	NT 42.5#	51	0.00
~~30~~		~~DIPE~~	~~1.6481~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~0.02~~
31		2-Chloro-1,3-Butadiene	0.7288	0.6719	7.8	81	0.00
~~32~~		~~ETBE~~	~~1.3791~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~3.40#~~
33		2,2-Dichloropropane	0.6713	0.5829	13.2	84	0.00
34	P	cis-1,2-Dichloroethene	0.5073	0.4771	6.0	93	0.00
35	P	2-Butanone	0.1390	0.1256	9.6	86	0.00
36		Propionitrile	0.0401	0.0387	3.5	87	0.00
37		Bromochloromethane	0.2832	0.2635	7.0	96	0.00
38		Methacrylonitrile	0.1295	0.1200	7.3	86	0.00
39		Tetrahydrofuran	0.0972	0.0830	14.6	83	0.00
40	P	Chloroform	0.8292	0.7485	9.7	93	0.00
41	P	1,1,1-Trichloroethane	0.7112	0.6864	3.5	95	0.00
~~42~~		~~TAME~~	~~1.1643~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~5.02#~~
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	91	0.00
44	P	Cyclohexane	0.2705	0.2458	9.1	89	0.00
45	s	surr4,Dibrflmethane	0.2895	0.2899	-0.1	91	0.00
46	P	Carbontetrachloride	0.1199	0.1239	-3.3	98	0.00
47		1,1-Dichloropropene	0.3693	0.3644	1.3	90	0.00

00397

W031214.M Tue Mar 18 09:52:46 2014 Page: 1

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 09:51:54 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
48	s	surr1,1,2-dichloroethane-d4	0.3297	0.3093	6.2	86	0.00
49	P	Benzene	1.2310	1.1955	2.9	90	0.00
50	P	1,2-Dichloroethane	0.3737	0.3588	4.0	90	0.00
51		Iso-Butyl Alcohol	0.0085	0.0084	1.2	87	0.00
52		n-Heptane	0.3075	0.2609	15.2	81	0.00
~~53~~		~~1-Butanol~~	~~0.0046~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~5.77#~~
54	P	Trichloroethene	0.2982	0.3418	-14.6	107	0.00
55	P	Methylcyclohexane	0.3206	0.2952	7.9	91	0.00
56	P	1,2-Diclpropane	0.3148	0.2961	5.9	87	0.00
57		Dibromomethane	0.1497	0.1513	-1.1	92	0.00
58		1,4-Dioxane	0.0021	0.0022	-4.8	101	0.00
59		Methyl Methacrylate	0.1481	0.1514	-2.2	89	0.00
60	P	Bromodichloromethane	0.3677	0.3808	-3.6	92	0.00
61		2-Nitropropane	0.0395	0.0396	-0.3	87	0.00
62		2-Chloroethylvinyl Ether	0.1412	0.1315	6.9	80	0.00
63	P	cis-1,3-Dichloropropene	0.4363	0.4473	-2.5	88	0.00
64	P	4-Methyl-2-pentanone	0.1899	0.1851	2.5	84	0.00
65	s	SURR3,Toluene-d8	1.2163	1.1799	3.0	88	0.00
66	P	Toluene	1.2692	1.2701	-0.1	91	0.00
67	P	trans-1,3-Dichloropropene	0.3517	0.3693	-5.0	88	0.00
68		Ethyl Methacrylate	0.2861	0.3165	-10.6	89	0.00
69	P	1,1,2-Trichloroethane	0.2220	0.2217	0.1	91	0.00
70	s	SURR2,BFB	0.4538	0.4506	0.7	89	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	92	0.00
72	P	Tetrachloroethene	0.2583	0.2731	-5.7	104	0.00
73	P	2-Hexanone	0.1416	0.1412	0.3	85	0.00
74		1,3-Dichloropropane	0.4501	0.4324	3.9	90	0.00
75	P	Dibromochloromethane	0.2588	0.2875	-11.1	95	0.00
76		N-Butyl Acetate	0.3502	0.3456	1.3	85	0.00
77	P	1,2-Dibromoethane	0.2312	0.2422	-4.8	94	0.00
78	P	Chlorobenzene	0.8701	0.8714	-0.1	95	0.00
~~79~~		~~3-CBTF~~	~~0.4304~~	~~0.0005~~	~~99.9#~~	~~0#~~	~~0.00~~
~~80~~		~~4-CBTF~~	~~0.3856~~	~~0.0006~~	~~99.8#~~	~~0#~~	~~0.00~~
81		1,1,1,2-Tetrachloroethane	0.3058	0.3217	-5.2	95	0.00
82	P	Ethylbenzene	0.4636	0.4699	-1.4	94	0.00
83	P	(m+p)Xylene	0.5448	0.5710	-4.8	94	0.00
84	P	o-Xylene	0.5559	0.5698	-2.5	94	0.00
85	P	Styrene	0.8888	0.9650	-8.6	93	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	98	0.00
87	P	Bromoform	0.2840	0.3210	-13.0	100	0.00
~~88~~		~~2-CBTF~~	~~0.8330~~	~~0.0006~~	~~99.9#~~	~~0#~~	~~0.00~~
89	P	Isopropylbenzene	2.5815	2.5154	2.6	94	0.00
90		Cyclohexanone	0.0401	0.0536	M -33.7#	132	0.00
91		trans-1,4-Dichloro-2-Butene	0.1346	0.1154	14.3	75	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5726	0.4744	17.1	82	0.00
93		Bromobenzene	0.7355	0.7313	0.6	102	0.00

00398

W031214.M Tue Mar 18 09:52:46 2014 Page: 2

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 09:51:54 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
94		1,2,3-Trichloropropane	0.1713	0.1607	6.2	94	0.00
95		n-Propylbenzene	3.0196	2.8270	6.4	92	0.00
96		2-Chlorotoluene	1.8965	1.7848	5.9	93	0.00
~~97~~		~~3-Chlorotoluene~~	~~1.9725~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~10.13#~~
98		4-Chlorotoluene	2.2360	2.0922	6.4	92	0.00
99		1,3,5-Trimethylbenzene	2.1057	2.0502	2.6	94	0.00
100		tert-Butylbenzene	1.7725	1.7039	3.9	96	0.00
101		1,2,4-Trimethylbenzene	2.1665	2.1047	2.9	93	0.00
~~102~~		~~3,4-DCBTF~~	~~0.6160~~	~~0.0010~~	~~99.8#~~	~~0#~~	~~0.00~~
103		sec-Butylbenzene	2.4668	2.3599	4.3	95	0.00
104		p-Isopropyltoluene	2.0860	2.0752	0.5	96	0.00
105	P	1,3-Dclbenz	1.2519	1.2540	-0.2	99	0.00
106	P	1,4-Dclbenz	1.3322	1.2785	4.0	98	0.00
~~107~~		~~2,4-DCBTF~~	~~0.5359~~	~~0.0015~~	~~99.7#~~	~~0#~~	~~0.04~~
~~108~~		~~2,5-DCBTF~~	~~0.6128~~	~~0.0015~~	~~99.8#~~	~~0#~~	~~0.00~~
109		n-Butylbenzene	1.8808	1.7673	6.0	90	0.00
110	P	1,2-Dclbenz	1.2055	1.2147	-0.8	99	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0877	0.0955	-8.9	98	0.00
~~112~~		~~Trielution Dichlorotoluene~~	~~0.9535~~	~~0.0028~~	~~99.7#~~	~~0#~~	~~0.00~~
~~113~~		~~1,3,5 Trichlorobenzene~~	~~0.8315~~	~~0.0028~~	~~99.7#~~	~~0#~~	~~0.00~~
~~114~~		~~Coelution Dichlorotoluene~~	~~1.0096~~	~~0.0028~~	~~99.7#~~	~~0#~~	~~0.00~~
115	P	1,2,4-Tcbenzene	0.7372	0.7258	1.5	98	0.00
116		Hexachlorobt	0.3218	0.3231	-0.4	100	0.00
117		Naphthalen	1.3273	1.3664	-2.9	94	0.00
118		1,2,3-Tclbenzene	0.6036	0.6104	-1.1	103	0.00
~~119~~		~~2,4,5-Trichlorotolene~~	~~0.3978~~	~~0.0146~~	~~96.3#~~	~~4#~~	~~0.00~~
~~120~~		~~2,3,6-Trichlorotoluene~~	~~0.3641~~	~~0.0132~~	~~96.4#~~	~~3#~~	~~0.00~~

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

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1402375-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:16:31 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	906437	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1322682	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1225607	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	653851	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	383449	50.08	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.16%				
48) surr1,1,2-dichloroetha...	4.664	65	409147	46.90	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 93.80%				
65) SURR3,Toluene-d8	7.322	98	1560674	48.50	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.00%				
70) SURR2,BFB	9.785	95	595941	49.64	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.28%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	523611	48.63	ppb		98
3) Chloromethane	1.262	50	408777	43.81	ppb		96
4) Vinyl Chloride	1.323	62	415942	47.99	ppb		99
5) Bromomethane	1.512	94	257578	49.32	ppb		97
6) Chloroethane	1.567	64	248823	48.14	ppb		97
7) Freon 21	1.664	67	637176	48.74	ppb		99
8) Trichlorofluoromethane	1.719	101	640293	48.12	ppb		99
9) Diethyl Ether	1.878	59	283936	43.34	ppb		94
10) Freon 123a	1.865	67	442848	45.34	ppb		93
11) Freon 123	1.902	83	516509	46.30	ppb		93
12) Acrolein	1.951	56	129243	358.40	ppb		97
13) 1,1-Diclethene	2.036	96	319141	48.52	ppb		93
14) Freon 113	2.036	101	337533	46.89	ppb		86
15) Acetone	2.042	43	83093	46.20	ppb		98
16) 2-Propanol	2.115	45	304691	1044.00	ppb		96
17) Iodomethane	2.146	142	453105	51.86	ppb		97
18) Carbon Disulfide	2.207	76	1025803	44.84	ppb		99
19) Acetonitrile	2.219	40	61664	209.68	ppb		91
20) Allyl Chloride	2.274	76	190822	42.31	ppb	#	92
21) Methyl Acetate	2.274	43	177653	43.87	ppb		96
22) Methylene Chloride	2.353	84	378139	43.88	ppb		99
23) TBA	2.408	59	506718	1008.07	ppb		95
24) Acrylonitrile	2.524	53	459508	228.06	ppb		96
25) Methyl-t-Butyl Ether	2.579	73	961380	45.98	ppb		100
26) trans-1,2-Dichloroethene	2.585	96	393271	47.72	ppb		94
28) 1,1-Diclethane	2.938	63	689227	44.93	ppb		100
29) Vinyl Acetate	2.975	86	39249	28.73	ppb	#	70
31) 2-Chloro-1,3-Butadiene	3.036	53	609032	46.10	ppb		93
33) 2,2-Dichloropropane	3.554	77	528391	43.42	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	432447	47.02	ppb		95
35) 2-Butanone	3.542	43	113841	45.18	ppb		95
36) Propionitrile	3.591	54	175248	240.88	ppb		100
37) Bromochloromethane	3.828	130	238873	46.52	ppb		90
38) Methacrylonitrile	3.798	67	108781	46.35	ppb		89
39) Tetrahydrofuran	3.902	42	75240	42.72	ppb		80

KR 3/18/14

W031214.M Mon Mar 17 23:16:35 2014 00400 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:16:31 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) Chloroform	3.938	83	678508	45.14	ppb		97
41) 1,1,1-Trichloroethane	4.213	97	622187	48.26	ppb		90
44) Cyclohexane	4.316	41	325120	45.43	ppb		98
46) Carbontetrachloride	4.469	121	163920	51.69	ppb		92
47) 1,1-Dichloropropene	4.462	75	481929	49.33	ppb		93
49) Benzene	4.779	78	1581270	48.56	ppb		99
50) 1,2-Dichloroethane	4.786	62	474536	48.00	ppb		95
51) Iso-Butyl Alcohol	4.633	43	221158	988.38	ppb		96
52) n-Heptane	5.328	43	345141	42.42	ppb		94
~~53) 1-Butanol~~	~~5.871~~	~~56~~	~~237~~	~~1.93~~	~~ppb~~	~~#~~	~~1~~
54) Trichloroethene	5.828	130	452043	57.31	ppb		90
55) Methylcyclohexane	6.102	55	390484	46.05	ppb		96
56) 1,2-Diclpropane	6.108	63	391677	47.04	ppb		95
57) Dibromomethane	6.255	93	200139	50.53	ppb		87
58) 1,4-Dioxane	6.310	88 ~~58345~~	~~51132~~	~~937.61~~	ppb	10/0.24	100
59) Methyl Methacrylate	6.328	69	200274	51.11	ppb		86
60) Bromodichloromethane	6.474	83	503687	51.78	ppb		97
61) 2-Nitropropane	6.743	41	104805	100.20	ppb		96
62) 2-Chloroethylvinyl Ether	6.877	63	173982	46.59	ppb		98
63) cis-1,3-Dichloropropene	7.023	75	591677	51.27	ppb		98
64) 4-Methyl-2-pentanone	7.212	43	244789	48.73	ppb		92
66) Toluene	7.395	91	1679957	50.03	ppb		98
67) trans-1,3-Dichloropropene	7.626	75	488499	52.51	ppb		97
68) Ethyl Methacrylate	7.767	69	418654	55.32	ppb		92
69) 1,1,2-Trichloroethane	7.803	97	293246	49.93	ppb		97
72) Tetrachloroethene	7.962	164	334740	52.87	ppb		97
73) 2-Hexanone	8.084	43	173032	49.84	ppb		96
74) 1,3-Dichloropropane	7.968	76	529947	48.03	ppb		96
75) Dibromochloromethane	8.187	129	352368	55.54	ppb		98
76) N-Butyl Acetate	8.236	43	423621	49.35	ppb		96
77) 1,2-Dibromoethane	8.285	107	296821	52.37	ppb		100
78) Chlorobenzene	8.767	112	1067974	50.07	ppb		95
81) 1,1,1,2-Tetrachloroethane	8.852	131	394252	52.60	ppb		98
82) Ethylbenzene	8.888	106	575862	50.68	ppb		98
83) (m+p)Xylene	8.998	106	1399710	104.82	ppb		93
84) o-Xylene	9.346	106	698362	51.25	ppb		94
85) Styrene	9.352	104	1182761	54.29	ppb		98
87) Bromoform	9.492	173	209909	56.53	ppb		99
89) Isopropylbenzene	9.669	105	1644674	48.72	ppb		98
90) Cyclohexanone	9.718	55	700634	1335.88	ppb		95
91) trans-1,4-Dichloro-2-B...	9.961	53	75473	42.88	ppb		90
92) 1,1,2,2-Tetrachloroethane	9.913	83	310201	41.43	ppb		96
93) Bromobenzene	9.907	156	478167	49.71	ppb	#	90
94) 1,2,3-Trichloropropane	9.943	110	105073	46.90	ppb	#	89
95) n-Propylbenzene	10.022	91	1848434	46.81	ppb		97
96) 2-Chlorotoluene	10.083	91	1166996	47.06	ppb		98
~~97) 3-Chlorotoluene~~	~~10.169~~	~~91~~	~~1375600~~	~~53.33~~	~~ppb~~		~~94~~
98) 4-Chlorotoluene	10.169	91	1367961	46.78	ppb		98
99) 1,3,5-Trimethylbenzene	10.169	105	1340531	48.68	ppb		97
100) tert-Butylbenzene	10.437	119	1114118	48.06	ppb		97
101) 1,2,4-Trimethylbenzene	10.473	105	1376151	48.57	ppb		99
103) sec-Butylbenzene	10.620	105	1543055	47.83	ppb		97

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:16:31 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

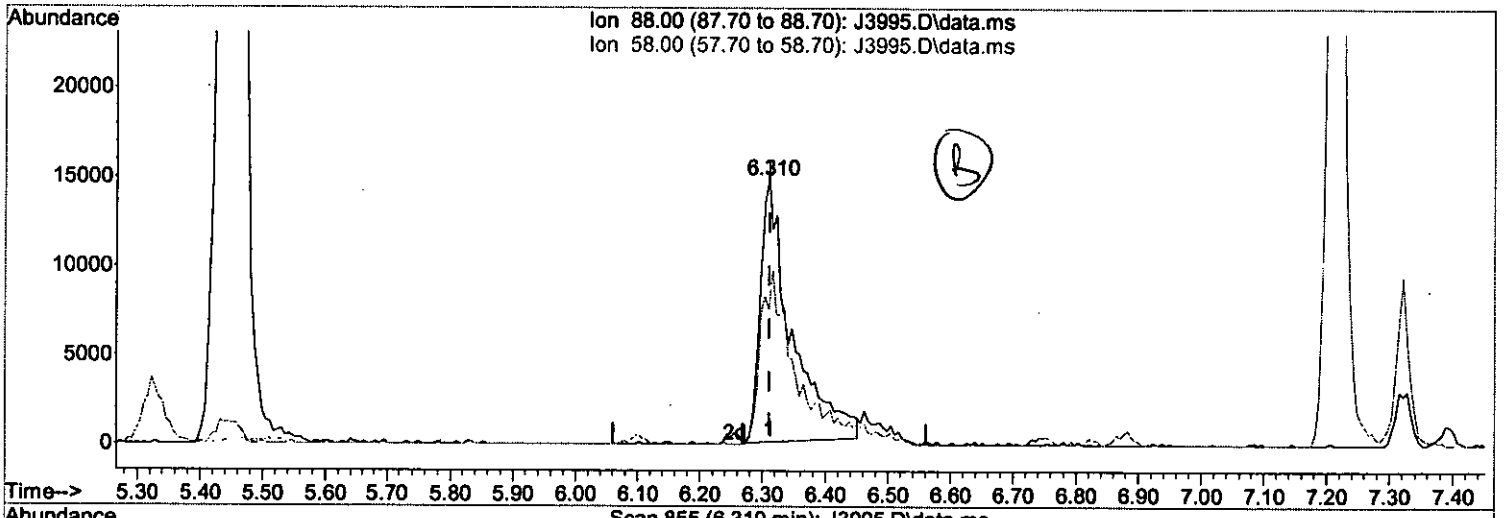
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
104) p-Isopropyltoluene	10.742	119	1356848	49.74	ppb		97
105) 1,3-Dclbenz	10.693	146	819953	50.08	ppb		98
106) 1,4-Dclbenz	10.766	146	835975	47.99	ppb		96
109) n-Butylbenzene	11.065	91	1155560	46.98	ppb		98
110) 1,2-Dclbenz	11.065	146	794255	50.38	ppb		97
111) 1,2-Dibromo-3-chloropr...	11.626	157	62440	54.42	ppb		95
112) Trielution Dichlorotol...	11.735	125	5427	0.44	ppb	#	86
114) Coelution Dichlorotoluene	11.998	125	3713	0.28	ppb	#	90
115) 1,2,4-Tcbenzene	12.156	180	474586	49.23	ppb		96
116) Hexachlorobt	12.266	225	211236	50.20	ppb		99
117) Naphthalen	12.302	128	893431	51.47	ppb		98
118) 1,2,3-Tclbenzene	12.437	180	399084	50.56	ppb		99
119) 2,4,5-Trichlorotolene	12.851	159	9555	1.84	ppb		99
120) 2,3,6-Trichlorotoluene	12.912	159	8621	1.81	ppb		94

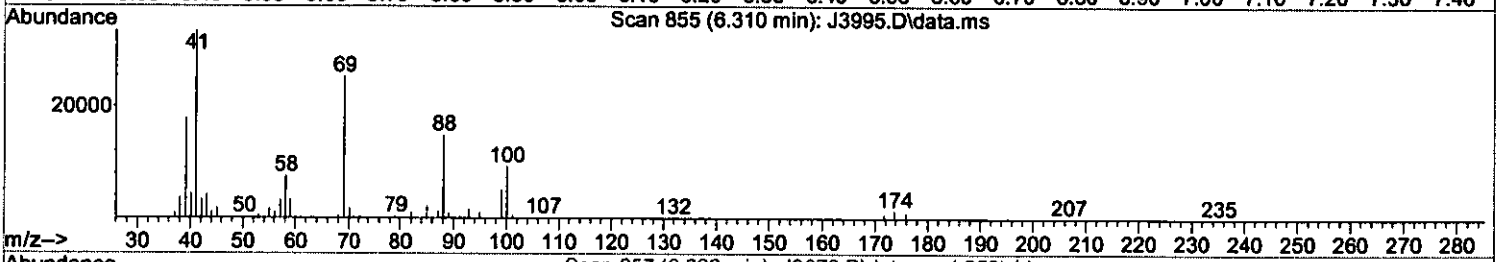
(#) = qualifier out of range (m) = manual integration (+) = signals summed

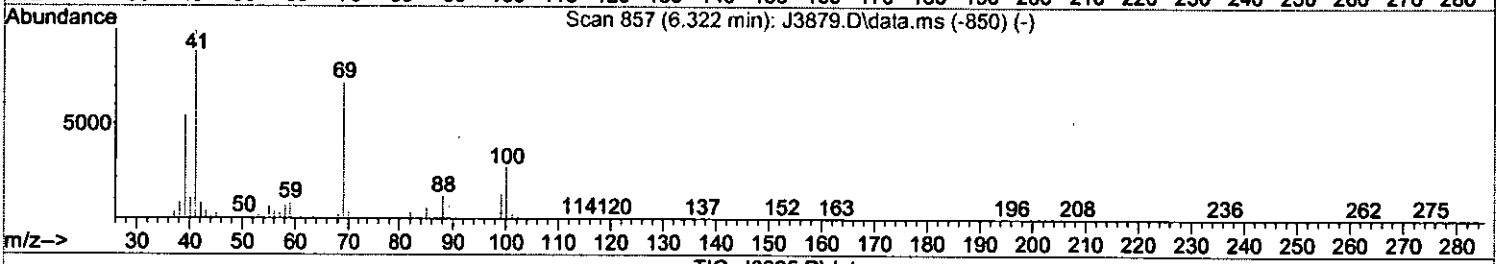
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:16:31 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J3995.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 937.61 ppb

response 51132

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	50.80
0.00	0.00	0.00
0.00	0.00	0.00

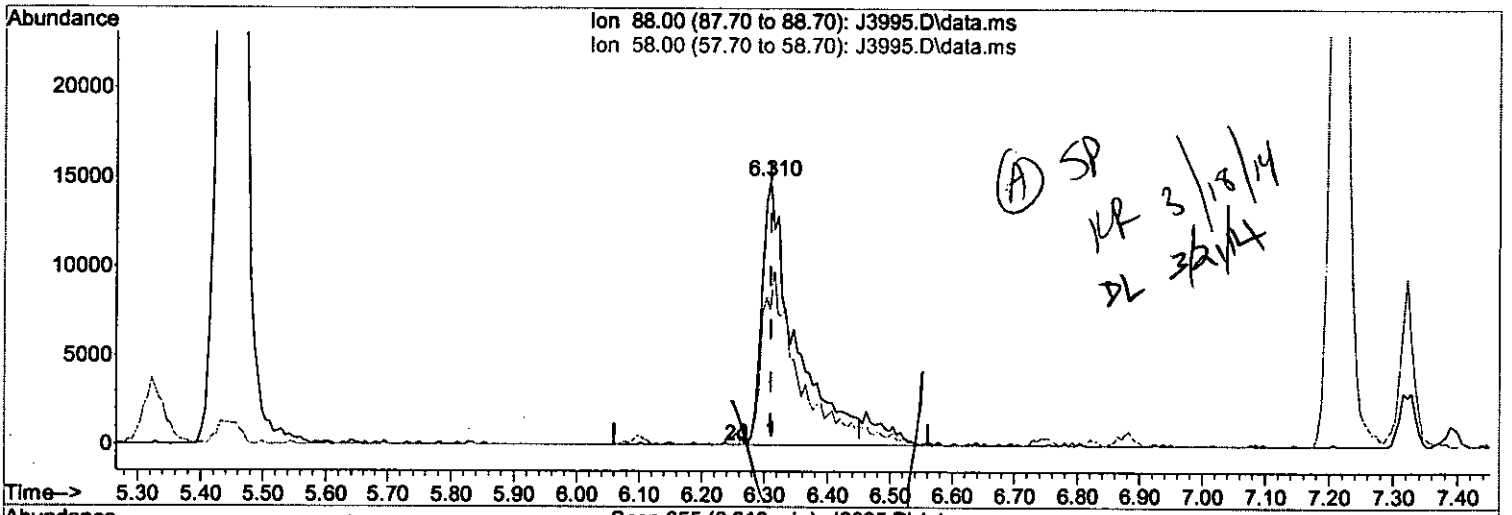
00403

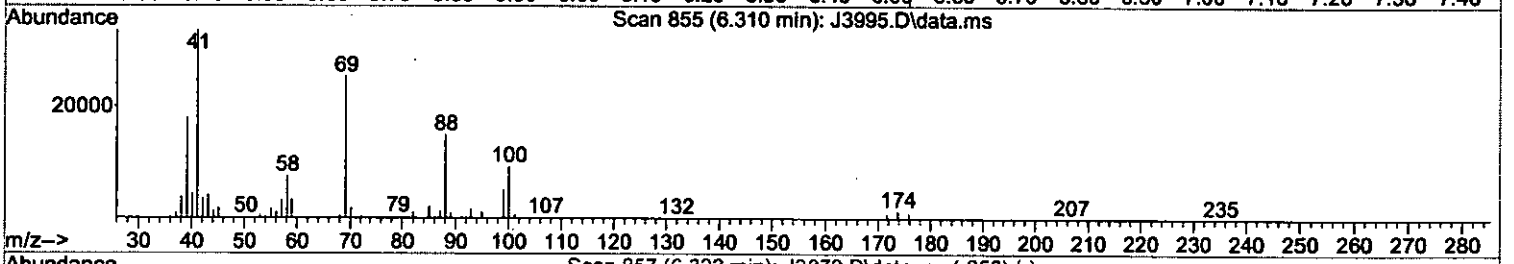
W031214.M Tue Mar 18 09:50:35 2014 Page: 1

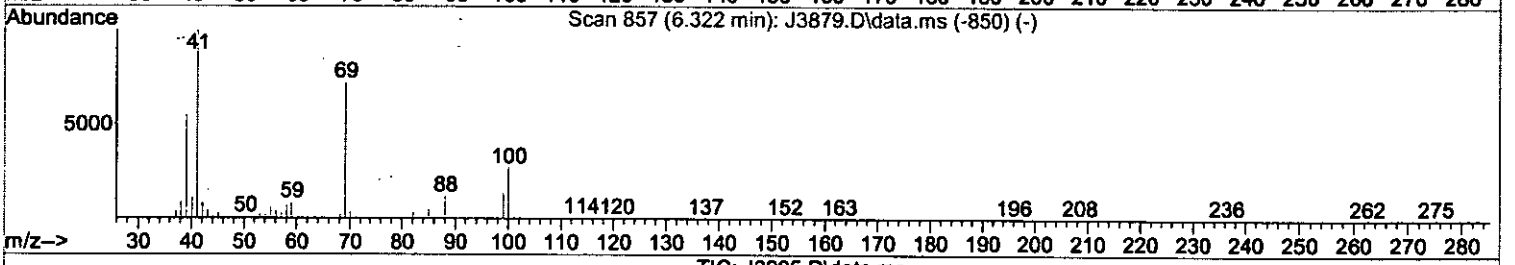
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:16:31 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J3995.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 1070.24 ppb m

response 58365

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	50.80
0.00	0.00	0.00
0.00	0.00	0.00

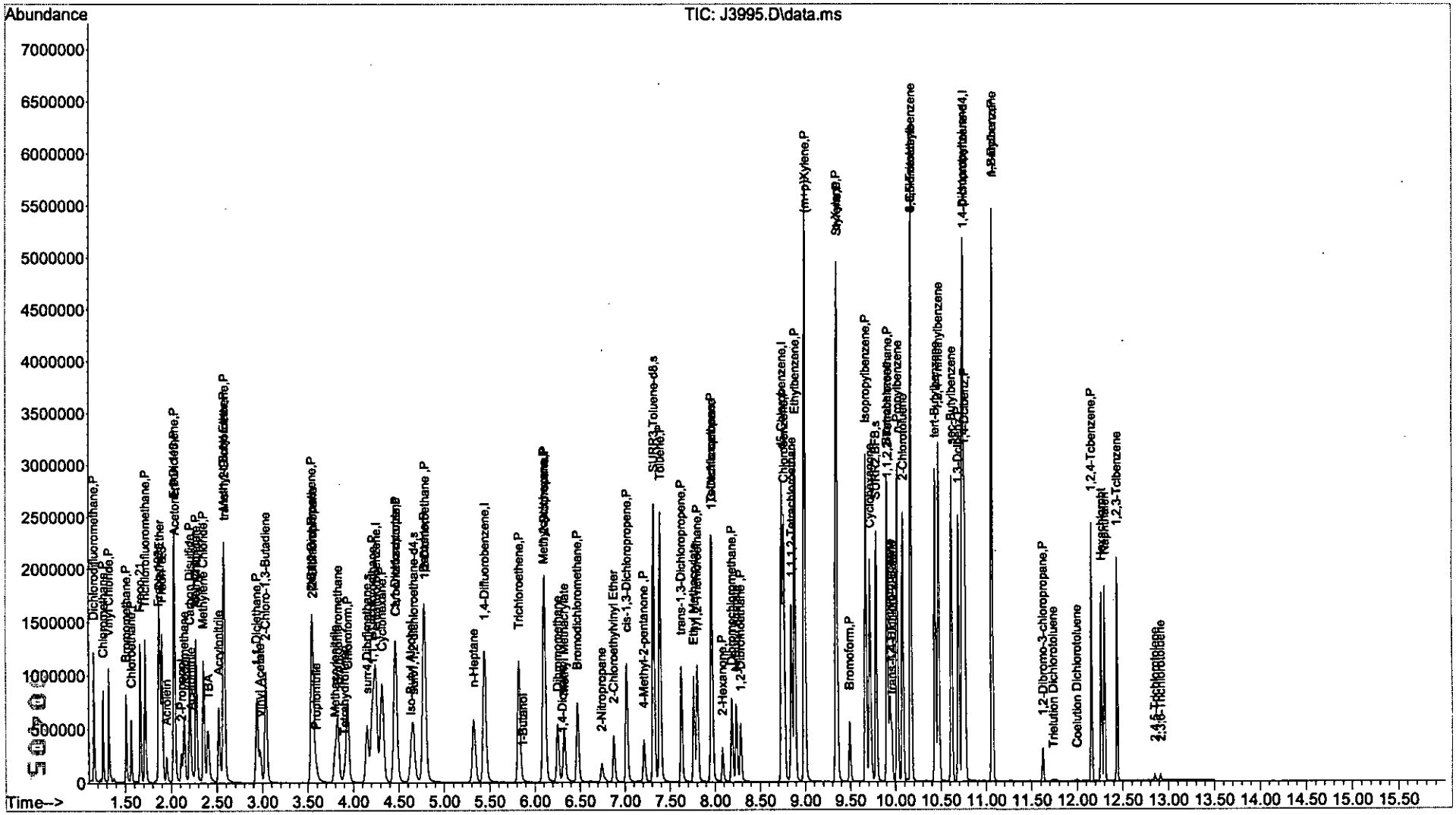
00404

W031214.M Tue Mar 18 09:50:50 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3995.D
Misc :
Acq On : 17 Mar 2014 11:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:16:31 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/19/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 384408
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	53.0	0.3058	0.3238	5.9	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	51.2	0.7112	0.7282	2.4	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	51.4	0.5726	0.5887	2.8	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	51.5	0.2220	0.2287	3.0	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	51.3	0.8461	0.8677	2.5	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	51.2	0.3628	0.3712	2.3	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	52.1	0.3693	0.3851	4.3	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	50.4	0.6036	0.6081	0.7	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	50.9	0.1713	0.1744	1.8	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	50.8	0.7372	0.7482	1.5	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	53.3	2.167	2.309	6.6	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	56.6	0.08773	0.09922	13.1	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	53.6	0.2312	0.2477	7.1	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	52.7	1.206	1.270	5.3	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	50.9	0.3737	0.3805	1.8	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	51.1	0.3148	0.3219	2.3	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	53.9	2.106	2.269	7.8	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	51.8	1.252	1.296	3.5	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	52.3	0.4501	0.4704	4.5	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	50.4	1.332	1.342	0.7	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	53.9	0.6713	0.7243	7.9	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	56.7	0.1390	0.1575	13.3	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	52.2	1.896	1.978	4.3	NA	± 20 %	Average RF
2-Hexanone	50.0	60.4	0.1416	0.1710	20.8 *	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	53.2	2.236	2.381	6.5	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	54.2	2.086	2.262	8.4	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	56.4	0.1899	0.2140	12.7	NA	± 20 %	Average RF
Acetone	50.0	54.6	0.09920	0.1083	9.2	NA	± 20 %	Average RF
Benzene	50.0	50.7	1.231	1.248	1.3	NA	± 20 %	Average RF
Bromobenzene	50.0	50.7	0.7355	0.7461	1.4	NA	± 20 %	Average RF
Bromochloromethane	50.0	48.5	0.2832	0.2748	-3.0	NA	± 20 %	Average RF
Bromodichloromethane	50.0	53.2	0.3677	0.3910	6.3	NA	± 20 %	Average RF
Bromoform	50.0	56.8	0.2840	0.3225	13.6	NA	± 20 %	Average RF
Bromomethane	50.0	56.2	0.2881	0.3241	12.5	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	51.7	0.1199	0.1239	3.3	NA	± 20 %	Average RF
Chlorobenzene	50.0	51.6	0.8701	0.8981	3.2	NA	± 20 %	Average RF
Chloroethane	50.0	57.3	0.2851	0.3267	14.6	NA	± 20 %	Average RF
Chloroform	50.0	50.3	0.8292	0.8337	0.5	NA	± 20 %	Average RF
Chloromethane	50.0	55.3	0.5146	0.5695	10.7	NA	± 20 %	Average RF
Dibromochloromethane	50.0	55.7	0.2588	0.2881	11.3	NA	± 20 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 1Q2014/748810-03000

Service Request: R1401764
Date Analyzed: 3/19/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 384408
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	51.8	0.5939	0.6146	3.5	NA	± 20 %	Average RF
Methylene Chloride	50.0	48.3	0.4753	0.4591	-3.4	NA	± 20 %	Average RF
Ethylbenzene	50.0	51.5	0.4636	0.4777	3.0	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	49.8	0.3218	0.3205	-0.4	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	53.5	2.581	2.762	7.0	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	51.2	1.153	1.181	2.4	NA	± 20 %	Average RF
Naphthalene	50.0	54.3	1.327	1.442	8.7	NA	± 20 %	Average RF
Styrene	50.0	56.3	0.8888	1.001	12.7	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	49.5	0.2583	0.2558	-1.0	NA	± 20 %	Average RF
Toluene	50.0	51.7	1.269	1.313	3.5	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	50.9	0.2982	0.3038	1.9	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	52.0	0.7340	0.7625	3.9	NA	± 20 %	Average RF
Vinyl Chloride	50.0	58.9	0.4781	0.5630	17.8	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	50.8	0.5073	0.5149	1.5	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	55.3	0.4363	0.4829	10.7	NA	± 20 %	Average RF
m,p-Xylenes	100	107	0.5448	0.5832	7.1	NA	± 20 %	Average RF
n-Butylbenzene	50.0	54.5	1.881	2.049	8.9	NA	± 20 %	Average RF
n-Propylbenzene	50.0	52.7	3.020	3.182	5.4	NA	± 20 %	Average RF
o-Xylene	50.0	52.1	0.5559	0.5790	4.1	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	52.9	2.467	2.607	5.7	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	51.4	1.773	1.821	2.7	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	50.8	0.4546	0.4618	1.6	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	57.7	0.3517	0.4061	15.5	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	49.7	0.4538	0.4509	-0.6	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.7	0.2895	0.2935	1.4	NA	± 20 %	Average RF
Toluene-d8	50.0	50.3	1.216	1.223	0.5	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:15:03 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

KR 3/19/14

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

		Compound	AvgRF	CCRF	%Dev Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0 95	0.00
2	P	Dichlorodifluoromethane	0.5939	0.6146	-3.5 97	0.00
3	P	Chloromethane	0.5146	0.5695	-10.7 107	0.00
4	P	Vinyl Chloride	0.4781	0.5630	-17.8 114	0.00
5	P	Bromomethane	0.2881	0.3241	-12.5 118	0.00
6	P	Chloroethane	0.2851	0.3267	-14.6 116	0.00
7		Freon 21	0.7211	0.8642	-19.8 120	0.00
8	P	Trichlorofluoromethane	0.7340	0.7625	-3.9 103	0.00
9		Diethyl Ether	0.3614	0.3566	1.3 99	0.00
10		Freon 123a	0.5388	0.5630	-4.5 106	0.00
11		Freon 123	0.6154	0.6483	-5.3 107	0.00
12		Acrolein	0.0172	0.0426	-81.5 ~~-147.7#~~ 269#	0.00 ⊗
13	P	1,1-Diclethene	0.3628	0.3712	-2.3 99	0.00
14	P	Freon 113	0.3971	0.3958	0.3 99	0.00
15	P	Acetone	0.0992	0.1083	-9.2 110	0.00
16		2-Propanol	0.0161	0.0198	-23.0# 110	0.00 ⊗
17		Iodomethane	0.4820	0.5283	-9.6 89	0.00
18	P	Carbon Disulfide	1.2620	1.2737	-0.9 92	0.00
19		Acetonitrile	0.0162	0.0160	1.2 96	0.00
20		Allyl Chloride	0.2488	0.2547	-2.4 97	0.00
21	P	Methyl Acetate	0.2234	0.2451	-9.7 105	0.00
22	P	Methylene Chloride	0.4753	0.4591	3.4 99	0.00
23		TBA	0.0277	0.0325	-17.3 106	0.00
24		Acrylonitrile	0.1111	0.1175	-5.8 98	0.00
25	P	Methyl-t-Butyl Ether	1.1534	1.1810	-2.4 101	0.00
26	P	trans-1,2-Dichloroethene	0.4546	0.4618	-1.6 100	0.00
27		Halothane	0.0000	0.0000	0.0 0#	-3.01#
28	P	1,1-Diclethane	0.8461	0.8677	-2.6 100	0.00
29		Vinyl Acetate	0.0753	0.0796	-5.7 92	0.00
30		DIPE	1.6481	1.7353	-5.3 100	0.00
31		2-Chloro-1,3-Butadiene	0.7288	0.8007	-9.9 96	0.00
32		ETBE	1.3791	1.4775	-7.1 100	0.00
33		2,2-Dichloropropane	0.6713	0.7243	-7.9 103	0.00
34	P	cis-1,2-Dichloroethene	0.5073	0.5149	-1.5 99	0.00
35	P	2-Butanone	0.1390	0.1575	-13.3 106	0.00
36		Propionitrile	0.0401	0.0439	-9.5 97	0.00
37		Bromochloromethane	0.2832	0.2748	3.0 99	0.00
38		Methacrylonitrile	0.1295	0.1368	-5.6 97	0.00
39		Tetrahydrofuran	0.0972	0.1004	-3.3 99	0.00
40	P	Chloroform	0.8292	0.8337	-0.5 102	0.00
41	P	1,1,1-Trichloroethane	0.7112	0.7282	-2.4 99	0.00
42		TAME	1.1643	1.2418	-6.7 99	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0 95	0.00
44	P	Cyclohexane	0.2705	0.2872	-6.2 109	0.00
45	s	surr4,Dibrflmethane	0.2895	0.2935	-1.4 97	0.00
46	P	Carbontetrachloride	0.1199	0.1239	-3.3 103	0.00
47		1,1-Dichloropropene	0.3693	0.3851	-4.3 100	0.00

00408

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:15:03 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
48	s	surr1,1,2-dichloroethane-d4	0.3297	0.3408	-3.4	99	0.00
49	P	Benzene	1.2310	1.2476	-1.3	98	0.00
50	P	1,2-Dichloroethane	0.3737	0.3805	-1.8	100	0.00
51		Iso-Butyl Alcohol	0.0085	0.0098	-15.3	107	0.00
52		n-Heptane	0.3075	0.3178	-3.3	104	0.00
53		1-Butanol	0.0046	0.0060	-30.4#	109	0.00
54	P	Trichloroethene	0.2982	0.3038	-1.9	100	0.00
55	P	Methylcyclohexane	0.3206	0.3451	-7.6	111	0.00
56	P	1,2-Diclpropane	0.3148	0.3219	-2.3	99	0.00
57		Dibromomethane	0.1497	0.1525	-1.9	97	0.00
58		1,4-Dioxane	0.0021	0.0021	0.0	103	0.00
59		Methyl Methacrylate	0.1481	0.1602	-8.2	98	0.00
60	P	Bromodichloromethane	0.3677	0.3910	-6.3	99	0.00
61		2-Nitropropane	0.0395	0.0467	-18.2	107	0.00
62		2-Chloroethylvinyl Ether	0.1412	0.1530	-8.4	98	0.00
63	P	cis-1,3-Dichloropropene	0.4363	0.4829	-10.7	99	0.00
64	P	4-Methyl-2-pentanone	0.1899	0.2140	-12.7	102	0.00
65	s	SURR3,Toluene-d8	1.2163	1.2230	-0.6	95	0.00
66	P	Toluene	1.2692	1.3135	-3.5	99	0.00
67	P	trans-1,3-Dichloropropene	0.3517	0.4061	-15.5	101	0.00
68		Ethyl Methacrylate	0.2861	0.3352	-17.2	99	0.00
69	P	1,1,2-Trichloroethane	0.2220	0.2287	-3.0	98	0.00
70	s	SURR2,BFB	0.4538	0.4509	0.6	94	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	94	0.00
72	P	Tetrachloroethene	0.2583	0.2558	1.0	100	0.00
73	P	2-Hexanone	0.1416	0.1710	-20.8#	106	0.00
74		1,3-Dichloropropane	0.4501	0.4704	-4.5	100	0.00
75	P	Dibromochloromethane	0.2588	0.2881	-11.3	98	0.00
76		N-Butyl Acetate	0.3502	0.4187	-19.6	105	0.00
77	P	1,2-Dibromoethane	0.2312	0.2477	-7.1	98	0.00
78	P	Chlorobenzene	0.8701	0.8981	-3.2	101	0.00
79		3-CBTF	0.4304	0.4485	-4.2	100	0.00
80		4-CBTF	0.3856	0.4074	-5.7	97	0.00
81		1,1,1,2-Tetrachloroethane	0.3058	0.3238	-5.9	98	0.00
82	P	Ethylbenzene	0.4636	0.4777	-3.0	98	0.00
83	P	(m+p)Xylene	0.5448	0.5832	-7.0	99	0.00
84	P	o-Xylene	0.5559	0.5790	-4.2	98	0.00
85	P	Styrene	0.8888	1.0013	-12.7	99	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	94	0.00
87	P	Bromoform	0.2840	0.3225	-13.6	97	0.00
88		2-CBTF	0.8330	0.8682	-4.2	98	0.00
89	P	Isopropylbenzene	2.5815	2.7622	-7.0	100	0.00
90		Cyclohexanone	0.0401	0.0641	-59.9#	152	0.00
91		trans-1,4-Dichloro-2-Butene	0.1346	0.1474	-9.5	91	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5726	0.5887	-2.8	98	0.00
93		Bromobenzene	0.7355	0.7461	-1.4	99	0.00

00409

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:15:03 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
94		1,2,3-Trichloropropane	0.1713	0.1744	-1.8	98	0.00
95		n-Propylbenzene	3.0196	3.1824	-5.4	99	0.00
96		2-Chlorotoluene	1.8965	1.9782	-4.3	99	0.00
97		3-Chlorotoluene	1.9725	2.0723	-5.1	98	0.00
98		4-Chlorotoluene	2.2360	2.3810	-6.5	101	0.00
99		1,3,5-Trimethylbenzene	2.1057	2.2690	-7.8	100	0.00
100		tert-Butylbenzene	1.7725	1.8209	-2.7	98	0.00
101		1,2,4-Trimethylbenzene	2.1665	2.3086	-6.6	97	0.00
102		3,4-DCBTF	0.6160	0.6274	-1.9	94	0.00
103		sec-Butylbenzene	2.4668	2.6072	-5.7	101	0.00
104		p-Isopropyltoluene	2.0860	2.2621	-8.4	101	0.00
105	P	1,3-Dclbenz	1.2519	1.2964	-3.6	98	0.00
106	P	1,4-Dclbenz	1.3322	1.3418	-0.7	99	0.00
107		2,4-DCBTF	0.5359	0.5647	-5.4	96	0.00
108		2,5-DCBTF	0.6128	0.6447	-5.2	97	0.00
109		n-Butylbenzene	1.8808	2.0491	-8.9	101	0.00
110	P	1,2-Dclbenz	1.2055	1.2696	-5.3	99	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0877	0.0992	-13.1	98	0.00
112		Trielution Dichlorotoluene	0.9535	1.0145	-6.4	95	0.00
113		1,3,5 Trichlorobenzene	0.8315	0.8606	-3.5	94	0.00
114		Coelution Dichlorotoluene	1.0096	1.1002	-9.0	96	0.00
115	P	1,2,4-Tcbenzene	0.7372	0.7482	-1.5	97	0.00
116		Hexachlorobt	0.3218	0.3205	0.4	95	0.00
117		Naphthalen	1.3273	1.4423	-8.7	96	0.00
118		1,2,3-Tclbenzene	0.6036	0.6081	-0.7	99	0.00
119		2,4,5-Trichlorotolene	0.3978	0.4136	-4.0	96	0.00
120		2,3,6-Trichlorotoluene	0.3641	0.3786	-4.0	93	0.00

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

00410

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1402508-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 12:54:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	894449	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1385871	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1257554	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	627839	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	406726	50.70	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.40%				
48) surr1,1,2-dichloroetha...	4.658	65	472339	51.68	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.36%				
65) SURR3,Toluene-d8	7.322	98	1694883	50.27	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.54%				
70) SURR2,BFB	9.791	95	624948	49.69	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	549756	51.75	ppb		98
3) Chloromethane	1.262	50	509353	55.33	ppb		98
4) Vinyl Chloride	1.323	62	503588	58.88	ppb		99
5) Bromomethane	1.512	94	289857	56.24	ppb		99
6) Chloroethane	1.567	64	292229	57.29	ppb		99
7) Freon 21	1.664	67	772939	59.92	ppb		99
8) Trichlorofluoromethane	1.719	101	682024	51.95	ppb		100
9) Diethyl Ether	1.878	59	318944	49.33	ppb		97
10) Freon 123a	1.865	67	503606	52.25	ppb		100
11) Freon 123	1.902	83	579900	52.67	ppb		98
12) Acrolein	1.951	56	190629	453.76	ppb		91
13) 1,1-Diclethene	2.036	96	332047	51.16	ppb		98
14) Freon 113	2.036	101	354025	49.84	ppb		95
15) Acetone	2.042	43	96879	54.59	ppb		97
16) 2-Propanol	2.115	45	355032	1232.79	ppb		94
17) Iodomethane	2.146	142	472499	54.80	ppb		96
18) Carbon Disulfide	2.207	76	1139244	50.46	ppb		99
19) Acetonitrile	2.225	40	71415	246.09	ppb		91
20) Allyl Chloride	2.274	76	227846	51.20	ppb		91
21) Methyl Acetate	2.274	43	219248	54.86	ppb		94
22) Methylene Chloride	2.359	84	410657	48.29	ppb		96
23) TBA	2.408	59	580512	1170.35	ppb		98
24) Acrylonitrile	2.524	53	525395	264.26	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	1056355	51.20	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	413030	50.79	ppb		98
28) 1,1-Diclethane	2.938	63	776122	51.27	ppb		99
29) Vinyl Acetate	2.975	86	71205	52.83	ppb	#	93
30) DIPE	3.018	45	1552133	52.65	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	716226	54.94	ppb		90
32) ETBE	3.396	59	1321567	53.57	ppb		99
33) 2,2-Dichloropropane	3.554	77	647814	53.94	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	460533	50.75	ppb		96
35) 2-Butanone	3.542	43	140899	56.67	ppb		96
36) Propionitrile	3.591	54	196181	273.27	ppb		95
37) Bromochloromethane	3.828	130	245791	48.51	ppb		96

3/19/14

00411

W031214.M Wed Mar 19 12:54:09 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 12:54:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
38) Methacrylonitrile	3.798	67	122324	52.81 ppb		98
39) Tetrahydrofuran	3.908	42	89807	51.67 ppb		77
40) Chloroform	3.938	83	745704	50.27 ppb		99
41) 1,1,1-Trichloroethane	4.212	97	651382	51.20 ppb		88
42) TAME	5.023	73	1110687	53.33 ppb		99
44) Cyclohexane	4.316	41	397982	53.08 ppb		99
46) Carbontetrachloride	4.469	121	171696	51.67 ppb		99
47) 1,1-Dichloropropene	4.462	75	533721	52.14 ppb		94
49) Benzene	4.779	78	1728979	50.67 ppb		97
50) 1,2-Dichloroethane	4.786	62	527332	50.90 ppb		96
51) Iso-Butyl Alcohol	4.639	43	271459	1157.87 ppb		96
52) n-Heptane	5.328	43	440434	51.67 ppb		97
53) 1-Butanol	5.773	56	412460	3203.38 ppb		97
54) Trichloroethene	5.828	130	421008	50.94 ppb		98
55) Methylcyclohexane	6.108	55	478231	53.82 ppb		98
56) 1,2-Diclpropane	6.115	63	446095	51.13 ppb		97
57) Dibromomethane	6.255	93	211372	50.93 ppb		92
58) 1,4-Dioxane	6.316	88	~~57281~~	~~1002.48~~ ppb	m~#	61 1037.35
59) Methyl Methacrylate	6.334	69	222035	54.08 ppb		95
60) Bromodichloromethane	6.474	83	541830	53.16 ppb		98
61) 2-Nitropropane	6.749	41	129451	118.12 ppb		84
62) 2-Chloroethylvinyl Ether	6.877	63	212000	54.18 ppb		92
63) cis-1,3-Dichloropropene	7.023	75	669213	55.34 ppb		99
64) 4-Methyl-2-pentanone	7.212	43	296605	56.36 ppb		97
66) Toluene	7.395	91	1820308	51.74 ppb		98
67) trans-1,3-Dichloropropene	7.633	75	562776	57.74 ppb		98
68) Ethyl Methacrylate	7.767	69	464555	58.59 ppb		96
69) 1,1,2-Trichloroethane	7.809	97	316907	51.49 ppb		97
72) Tetrachloroethene	7.962	164	321653	49.52 ppb		100
73) 2-Hexanone	8.084	43	215090	60.38 ppb		96
74) 1,3-Dichloropropane	7.974	76	591538	52.25 ppb		98
75) Dibromochloromethane	8.187	129	362291	55.65 ppb		98
76) N-Butyl Acetate	8.236	43	526598	59.79 ppb		98
77) 1,2-Dibromoethane	8.285	107	311442	53.56 ppb		97
78) Chlorobenzene	8.766	112	1129374	51.61 ppb		100
79) 3-CBTF	8.785	180	563990	52.10 ppb		97
80) 4-CBTF	8.840	180	512348	52.82 ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	407199	52.95 ppb		95
82) Ethylbenzene	8.888	106	600700	51.52 ppb		96
83) (m+p)Xylene	8.998	106	1466897	107.06 ppb		97
84) o-Xylene	9.346	106	728096	52.07 ppb		98
85) Styrene	9.358	104	1259157	56.33 ppb		94
87) Bromoform	9.498	173	202451	56.78 ppb		100
88) 2-CBTF	9.577	180	545074	52.11 ppb		96
89) Isopropylbenzene	9.675	105	1734222	53.50 ppb		97
90) Cyclohexanone	9.718	55	805294	1599.05 ppb		97
91) trans-1,4-Dichloro-2-B...	9.961	53	92560	54.77 ppb		89
92) 1,1,2,2-Tetrachloroethane	9.913	83	369634	51.41 ppb		98
93) Bromobenzene	9.913	156	468454	50.72 ppb	#	88
94) 1,2,3-Trichloropropane	9.943	110	109496	50.89 ppb		96
95) n-Propylbenzene	10.022	91	1998058	52.70 ppb		100
96) 2-Chlorotoluene	10.083	91	1242009	52.16 ppb		99

00412

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 12:54:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1301098	52.53	ppb	97
98)	4-Chlorotoluene	10.175	91	1494900	53.24	ppb	96
99)	1,3,5-Trimethylbenzene	10.169	105	1424597	53.88	ppb	99
100)	tert-Butylbenzene	10.437	119	1143252	51.37	ppb	99
101)	1,2,4-Trimethylbenzene	10.480	105	1449454	53.28	ppb	98
102)	3,4-DCBTF	10.534	214	393896	50.92	ppb	97
103)	sec-Butylbenzene	10.620	105	1636915	52.85	ppb	99
104)	p-Isopropyltoluene	10.742	119	1420224	54.22	ppb	99
105)	1,3-Dclbenz	10.693	146	813908	51.77	ppb	99
106)	1,4-Dclbenz	10.766	146	842459	50.36	ppb	99
107)	2,4-DCBTF	10.821	214	354518	52.68	ppb	96
108)	2,5-DCBTF	10.864	214	404793	52.61	ppb	97
109)	n-Butylbenzene	11.065	91	1286494	54.47	ppb	99
110)	1,2-Dclbenz	11.065	146	797088	52.66	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	62297	56.55	ppb	96
112)	Trielution Dichlorotol...	11.729	125	1910769	159.59	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	540340	51.75	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1381504	108.97	ppb	99
115)	1,2,4-Tcbenzene	12.156	180	469764	50.75	ppb	99
116)	Hexachlorobt	12.266	225	201209	49.80	ppb	99
117)	Naphthalen	12.302	128	905515	54.33	ppb	100
118)	1,2,3-Tclbenzene	12.437	180	381768	50.37	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	259657	51.99	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	237691	51.99	ppb	96

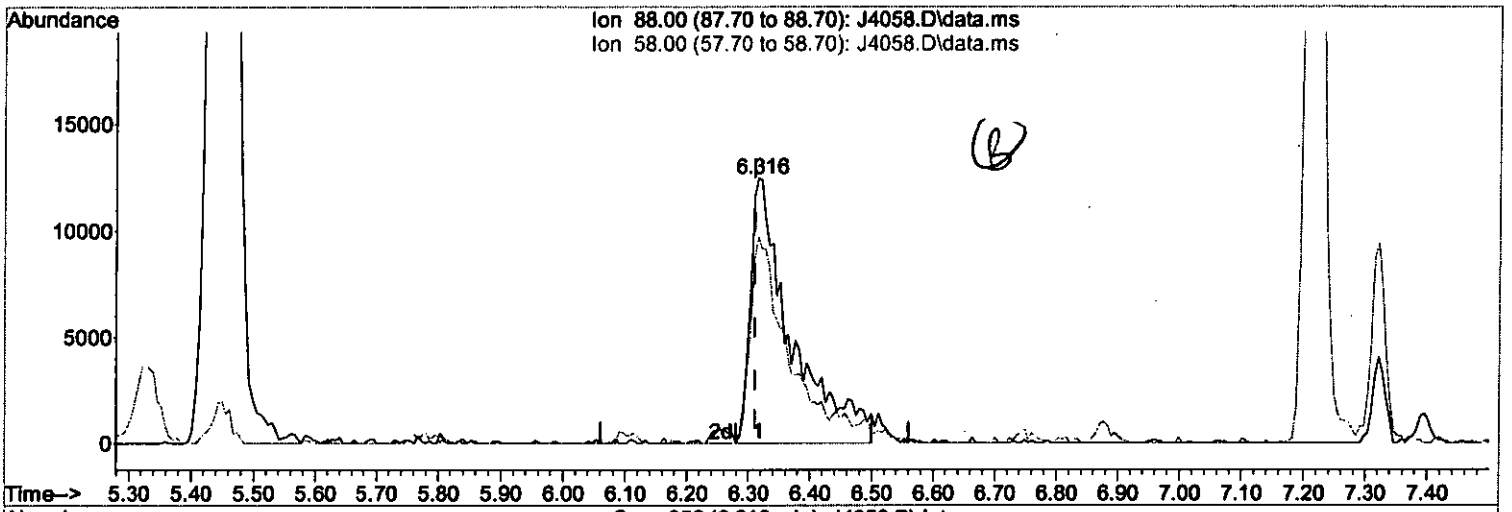
(#) = qualifier out of range (m) = manual integration (+) = signals summed

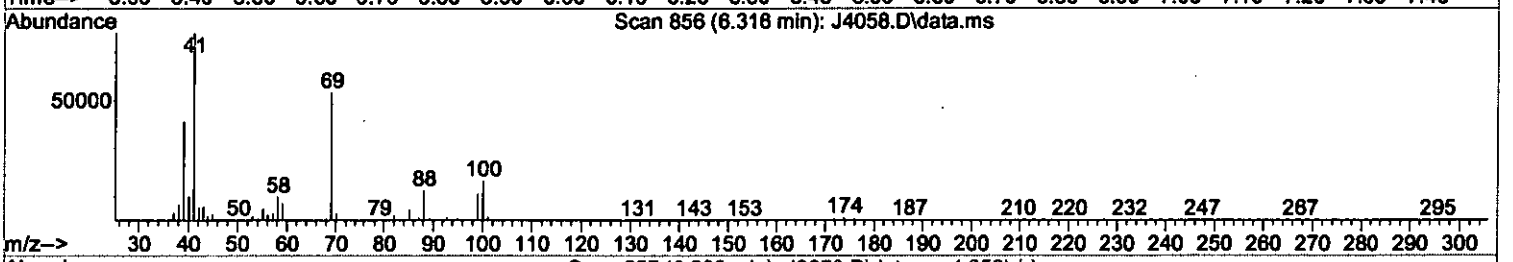
00413

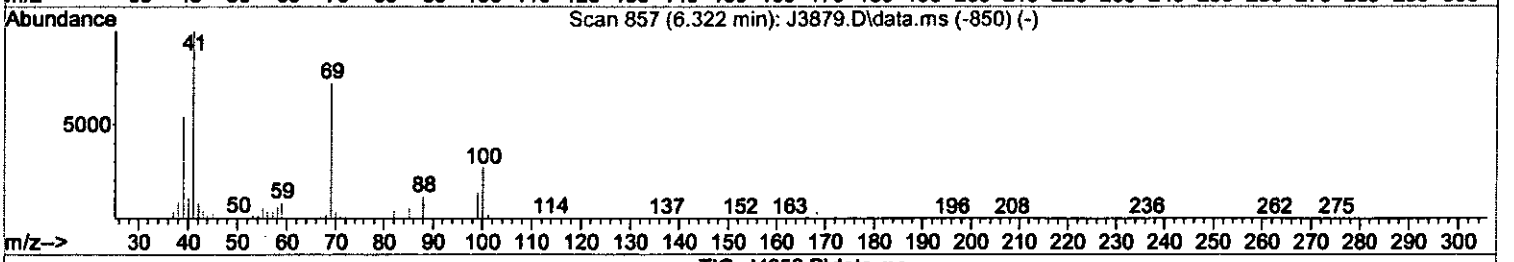
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 12:54:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4058.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 1002.48 ppb

response 57281

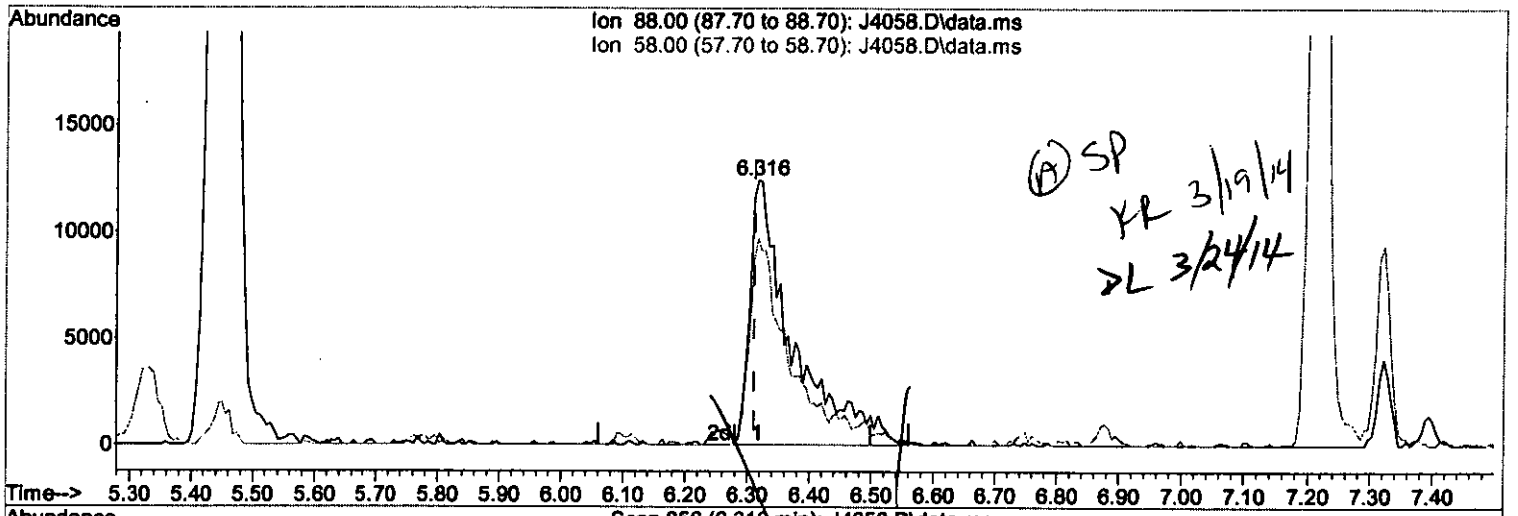
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	77.85#
0.00	0.00	0.00
0.00	0.00	0.00

0414

Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 12:54:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



(A) SP 3/19/14
KR 3/19/14
RL 3/24/14

TIC: J4058.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 1033.35 ppb m

response 59045

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	77.85#
0.00	0.00	0.00
0.00	0.00	0.00

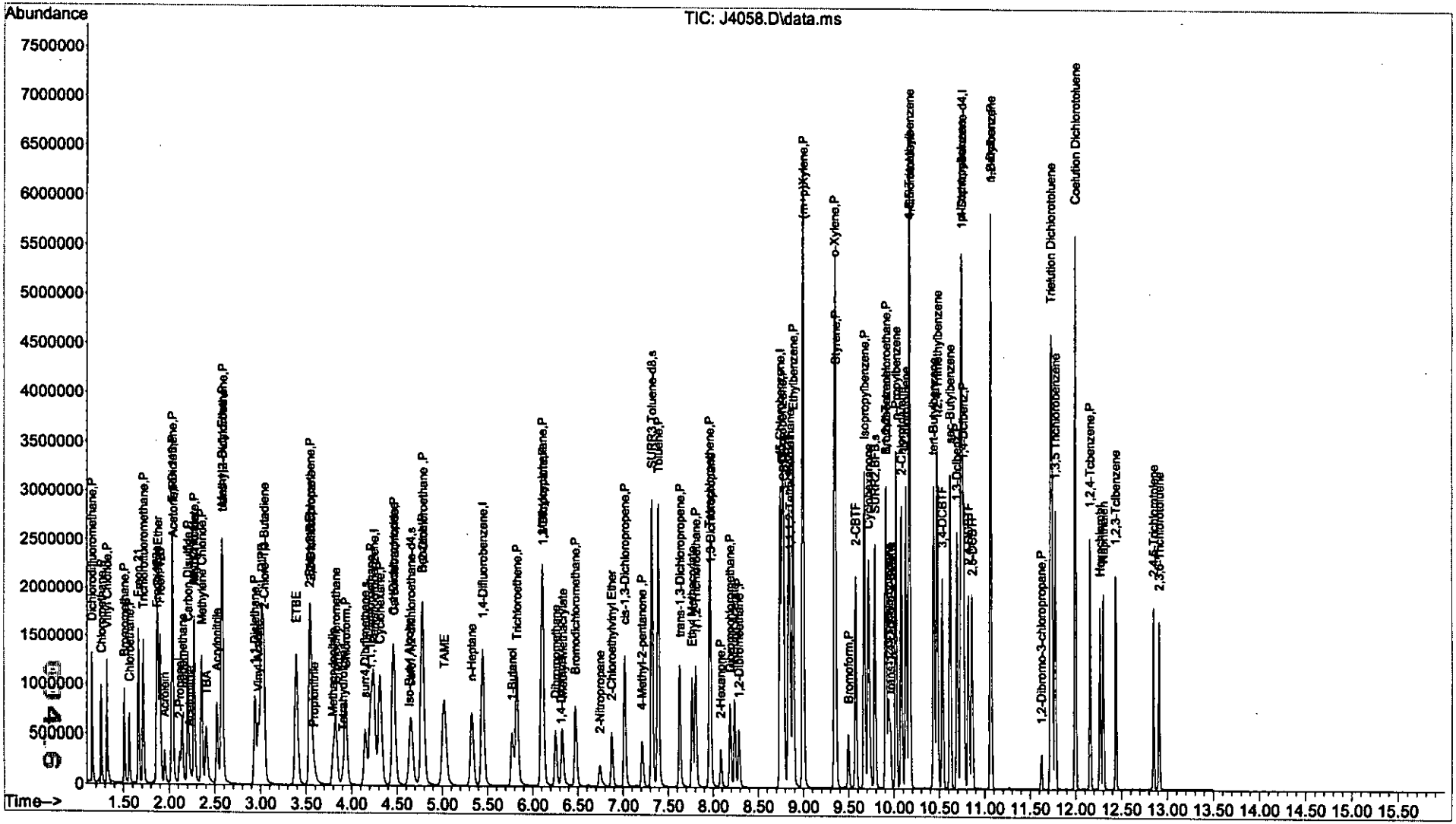
00415

W031214.M Wed Mar 19 13:15:06 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4058.D
Misc :
Acq On : 19 Mar 2014 12:39 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 12:54:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Wed Mar 19 12:54:13 2014 Page: 4

ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
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00417

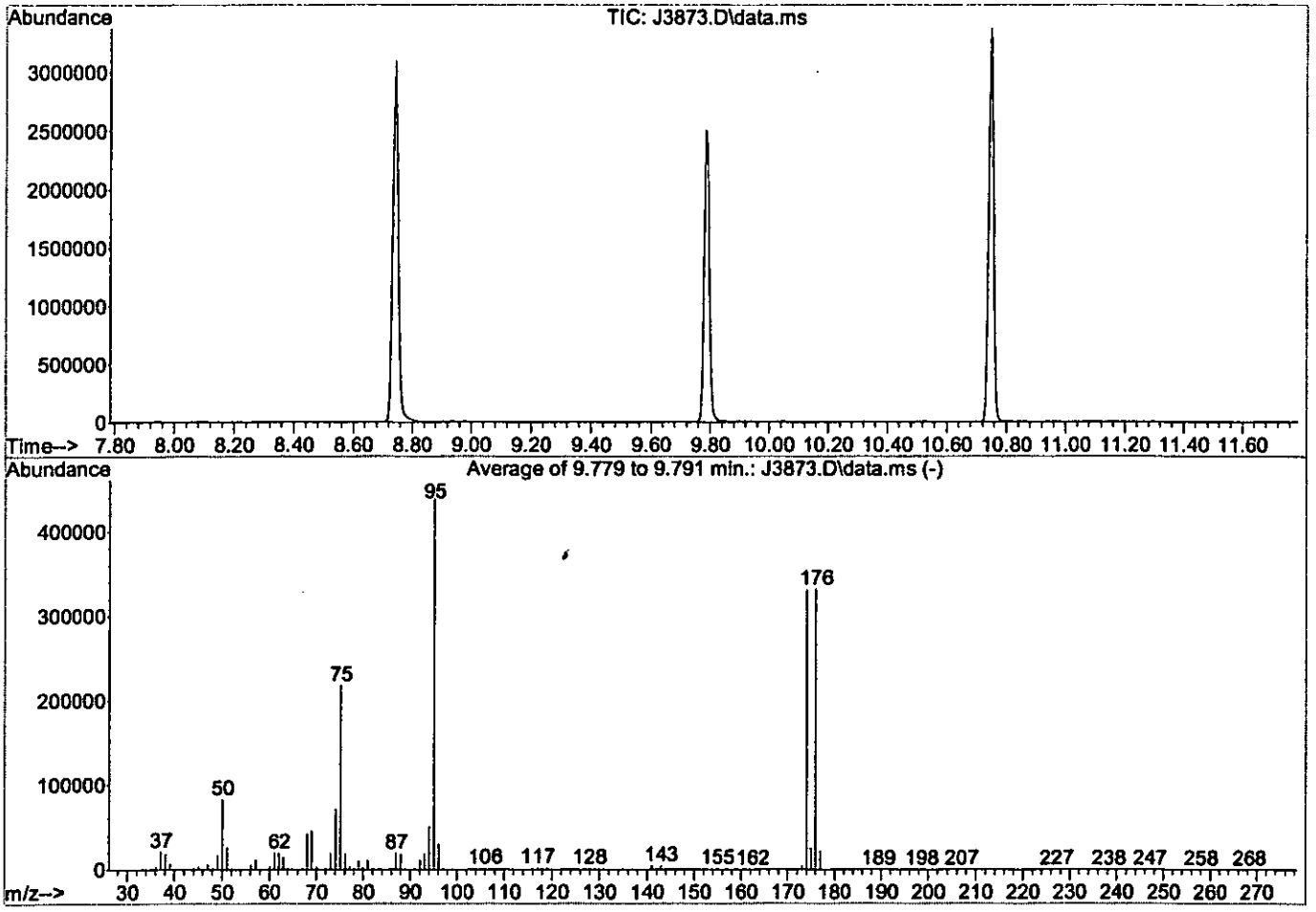
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\031214\
Data File : J3873.D
Acq On : 12 Mar 2014 9:41 am
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

KR 3/12/14

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Jan 16 12:02:56 2014



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	83285	PASS
75	95	30	60	49.5	217600	PASS
95	95	100	100	100.0	439232	PASS
96	95	5	9	6.8	30035	PASS
173	174	0.00	2	1.2	3907	PASS
174	95	50	120	75.2	330475	PASS
175	174	5	9	7.6	25003	PASS
176	174	95	101	100.4	331712	PASS
177	176	5	9	6.5	21696	PASS

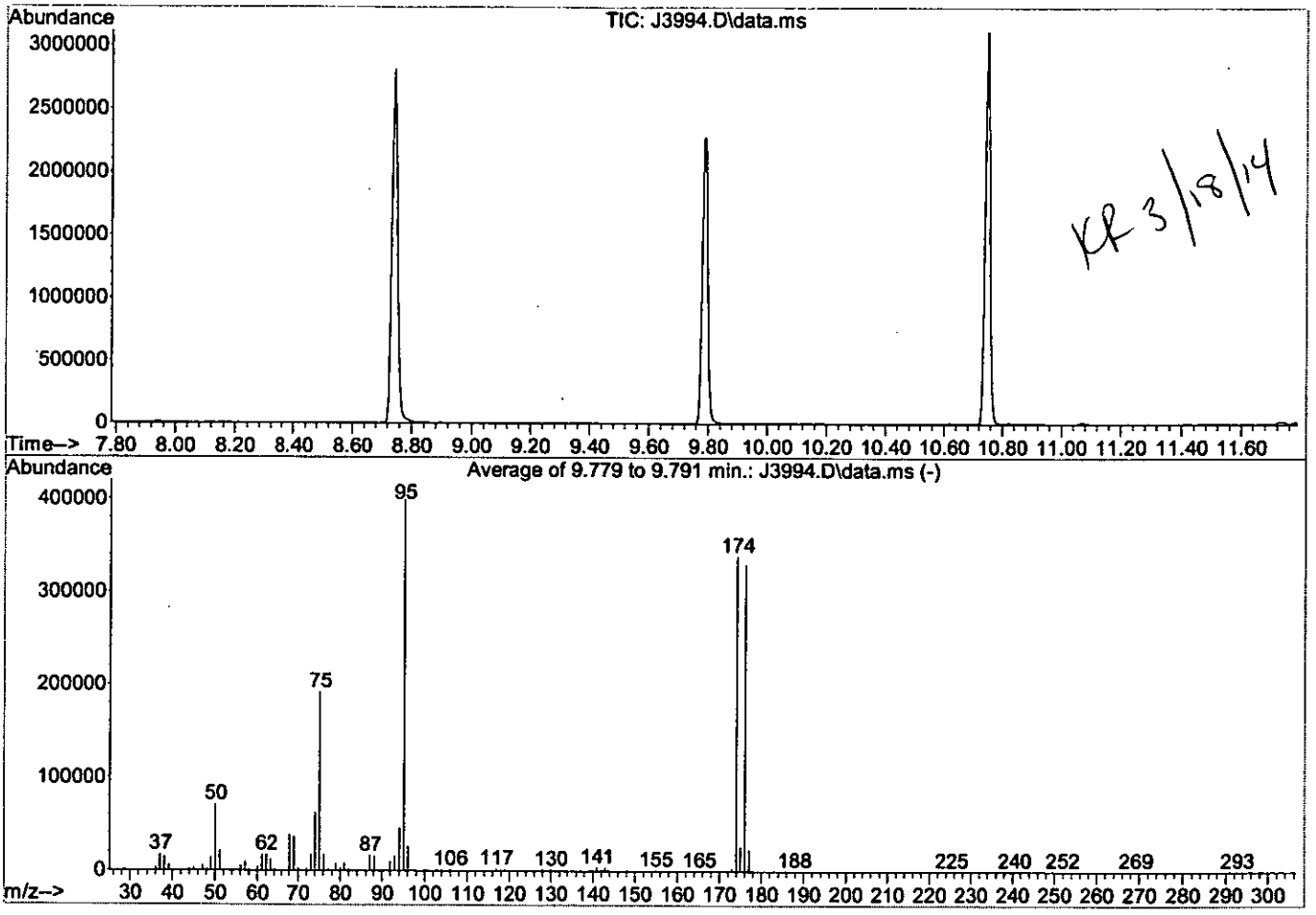
W031214.M Wed Mar 12 10:00:02 2014 00418 Page: 1

BFB

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J3994.D
Acq On : 17 Mar 2014 10:29 pm
Operator : K.Ruest
Sample : TUNE R9140237S-01
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	70875	PASS
75	95	30	60	48.0	191872	PASS
95	95	100	100	100.0	399488	PASS
96	95	5	9	6.6	26299	PASS
173	174	0.00	2	1.0	3234	PASS
174	95	50	120	84.8	338688	PASS
175	174	5	9	7.8	26446	PASS
176	174	95	101	97.2	329344	PASS
177	176	5	9	7.0	23172	PASS

W031214.M Tue Mar 18 09:46:31 2014

00419
Page: 1

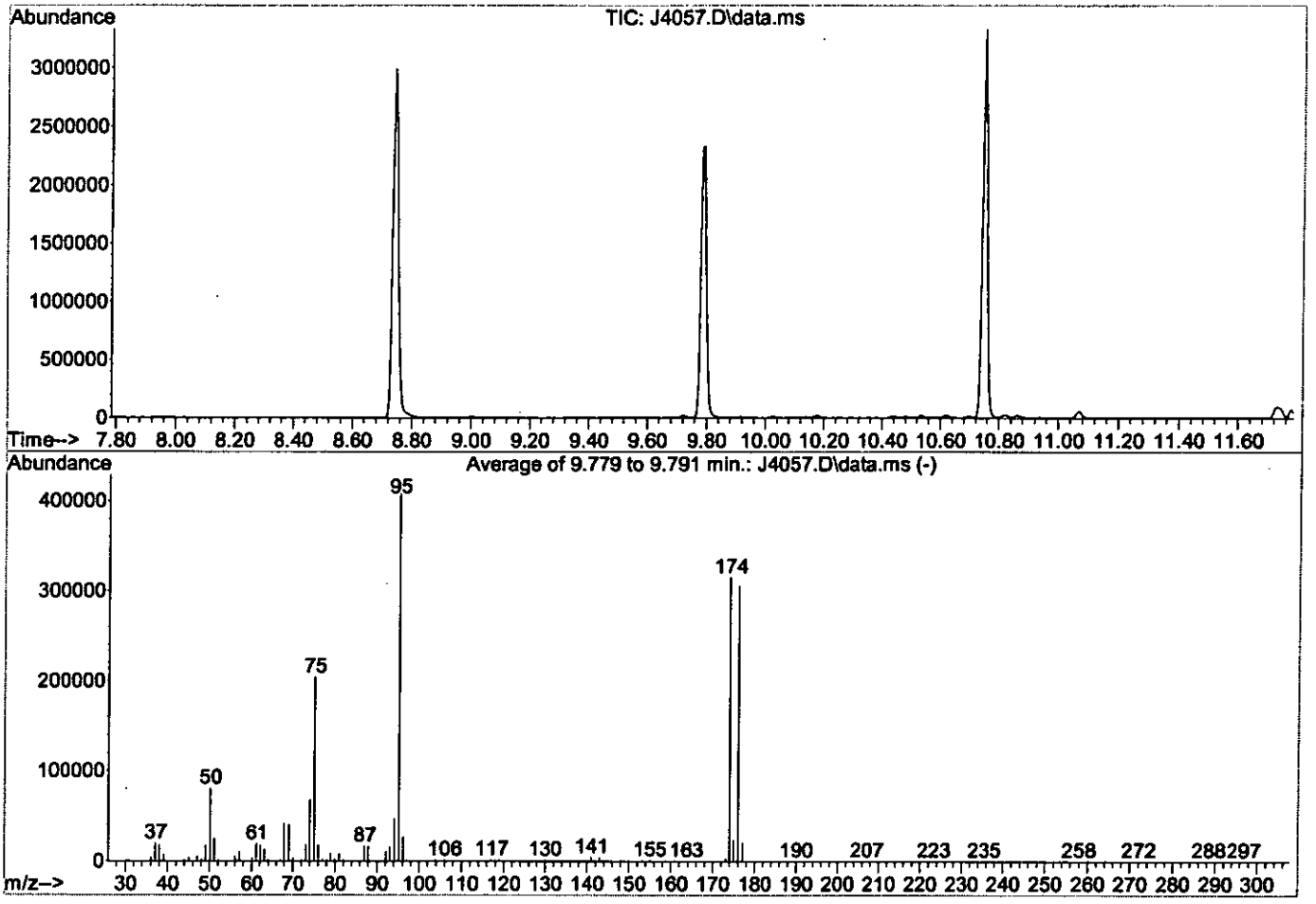
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4057.D
Acq On : 19 Mar 2014 12:06 pm
Operator : K.Ruest
Sample : TUNE RQ1402508-01
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP60.P

KR 3/19/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	80557	PASS
75	95	30	60	50.1	204416	PASS
95	95	100	100	100.0	408235	PASS
96	95	5	9	6.6	27139	PASS
173	174	0.00	2	1.1	3591	PASS
174	95	50	120	77.2	315200	PASS
175	174	5	9	7.6	23963	PASS
176	174	95	101	97.2	306283	PASS
177	176	5	9	6.6	20094	PASS

00420

W031214.M Wed Mar 19 13:14:04 2014 Page: 1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/18/14 00:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402375-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\U3998.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.45**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/18/14 00:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402375-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J3998.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**1.1**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.36**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	3/18/14 00:37	
Dibromofluoromethane	100	85-115	3/18/14 00:37	
Toluene-d8	96	85-120	3/18/14 00:37	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/18/14 0037

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402375-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3998.D
Misc :
Acq On : 18 Mar 2014 12:37 am
Operator : K.Ruest
InstName : MSVOA-12 RQ1402375-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 00:52:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	919355	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1319824	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1221984	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	611223	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	383662	50.21	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.42%				
48) surr1,1,2-dichloroetha...	4.664	65	412365	47.38	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 94.76%				
65) SURR3,Toluene-d8	7.322	98	1545604	48.14	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.28%				
70) SURR2,BFB	9.785	95	587560	49.05	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.10%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1238	0.23	ppb	#	75 <
~~12) Acrolein~~	~~1.969~~	~~56~~	~~230~~	~~Below Cal~~		~~#~~	~~17~~
~~15) Acetone~~	~~2.054~~	~~43~~	~~615~~	~~0.34~~	~~ppb~~	~~#~~	~~52~~
17) Iodomethane	2.152	142	1926	0.22	ppb		98 MTD
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~1401~~	~~0.31~~	~~ppb~~	~~#~~	~~1~~
52) n-Heptane	5.340	43	2921	0.36	ppb	#	55 MTD
~~90) Cyclohexanone~~	~~9.736~~	~~55~~	~~242~~	~~0.49~~	~~ppb~~	~~#~~	~~65~~
115) 1,2,4-Tcbenzene	12.162	180	4062	0.45	ppb		96 J
116) Hexachlorobt	12.266	225	4247	1.08	ppb		97 J
117) Naphthalen	12.302	128	5801	0.36	ppb		96 J
118) 1,2,3-Tclbenzene	12.443	180	4479	0.61	ppb		95 <
119) 2,4,5-Trichlorotolene	12.851	159	1787	0.37	ppb	#	64 MTD
120) 2,3,6-Trichlorotoluene	12.912	159	1611	0.36	ppb	#	82 ↓

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

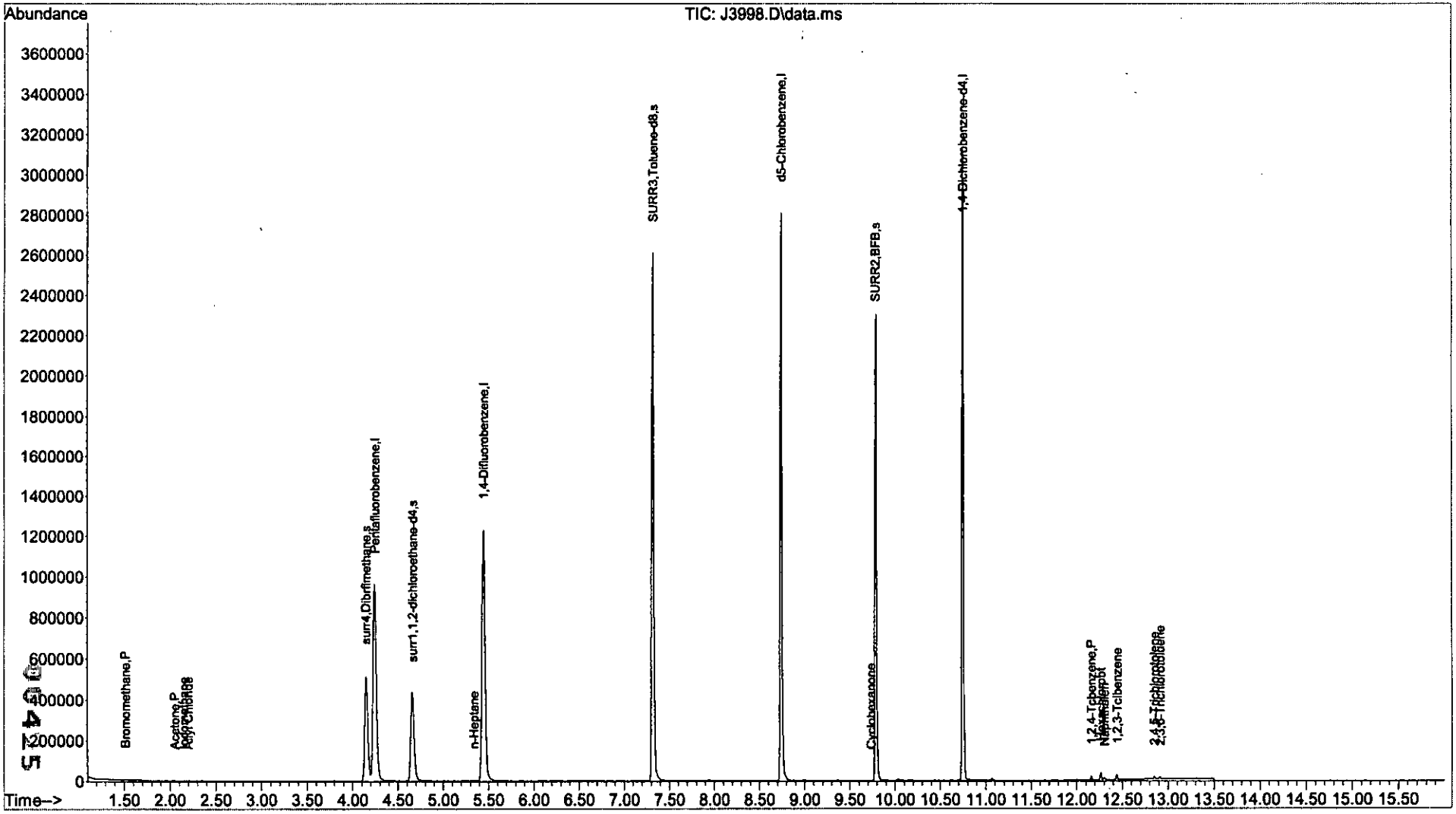
KR 3/18/14

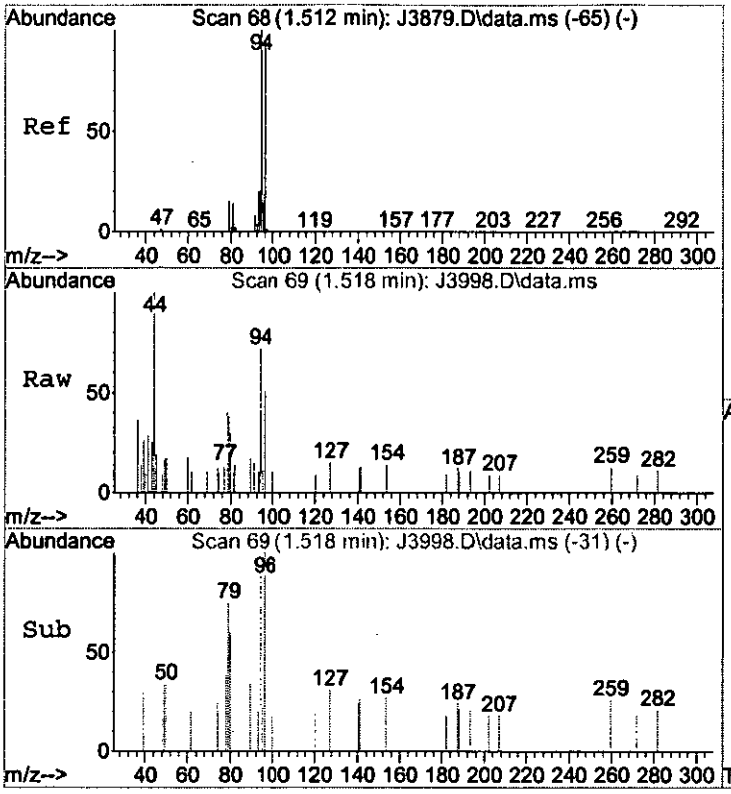
W031214.M Tue Mar 18 00:52:52 2014 00424 Page: 1

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3998.D
Misc :
Acq On : 18 Mar 2014 12:37 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 00:52:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

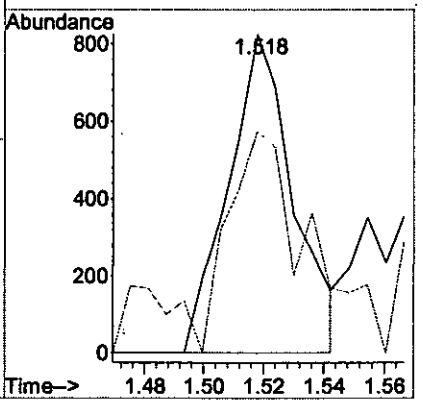


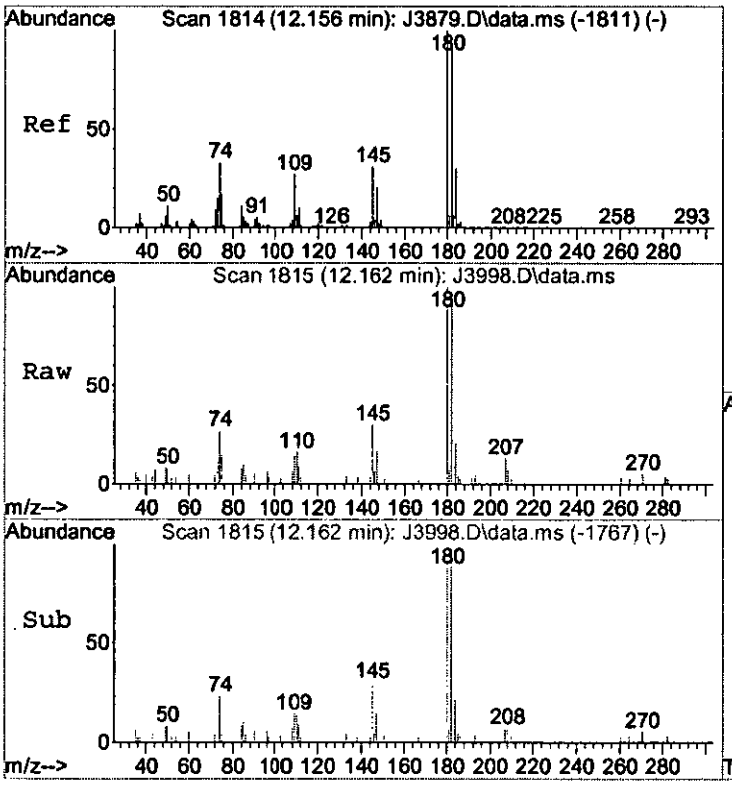


#5
Bromomethane
Concen: 0.23 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J3998.D
Acq: 18 Mar 2014 12:37 am

Tgt Ion: 94 Resp: 1238

Ion	Ratio	Lower	Upper
94	100		
96	69.9	73.8	113.8#

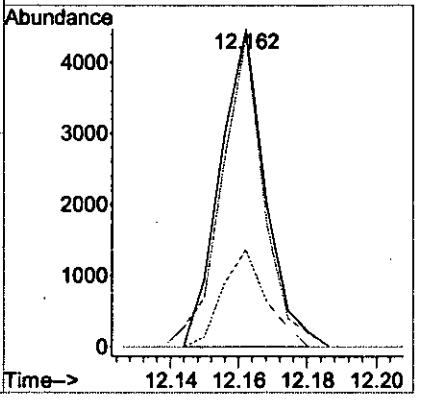


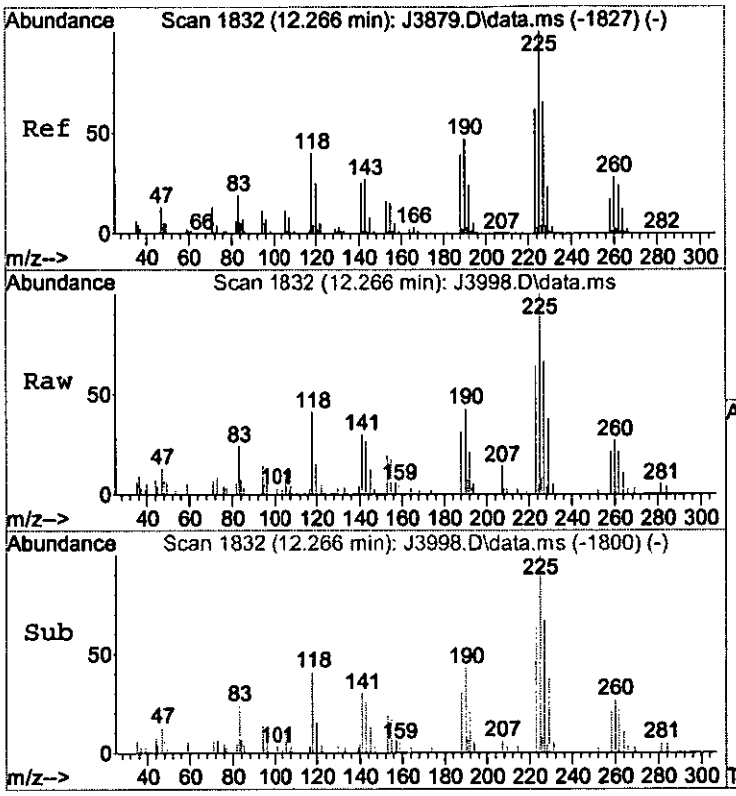


#115
1,2,4-Tcbenzene
Concen: 0.45 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J3998.D
Acq: 18 Mar 2014 12:37 am

Tgt Ion:180 Resp: 4062

Ion	Ratio	Lower	Upper
180	100		
182	97.2	72.2	112.2
145	30.5	11.4	51.4

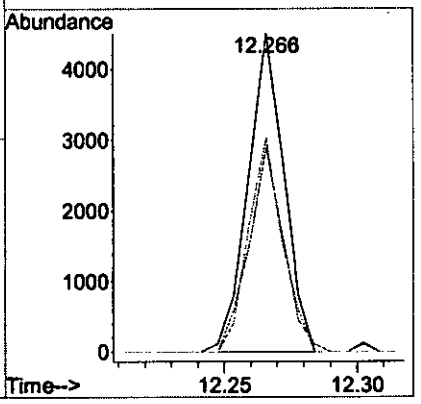


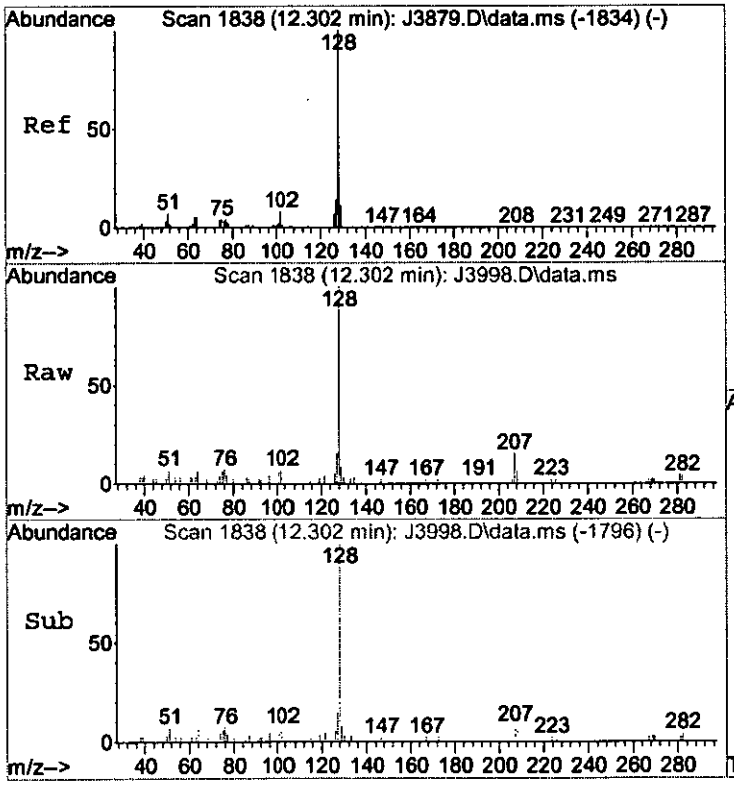


#116
Hexachlorobt
Concen: 1.08 ppb
RT: 12.266 min Scan# 1832
Delta R.T. -0.000 min
Lab File: J3998.D
Acq: 18 Mar 2014 12:37 am

Tgt Ion:225 Resp: 4247

Ion	Ratio	Lower	Upper
225	100		
223	64.5	42.4	82.4
227	67.3	44.9	84.9

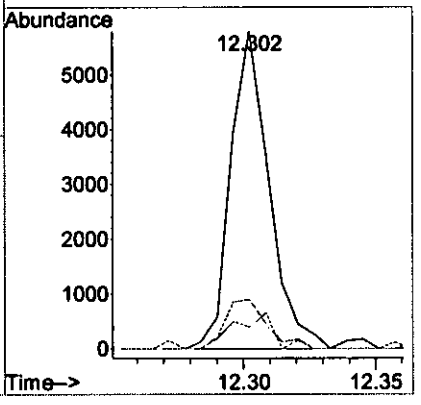


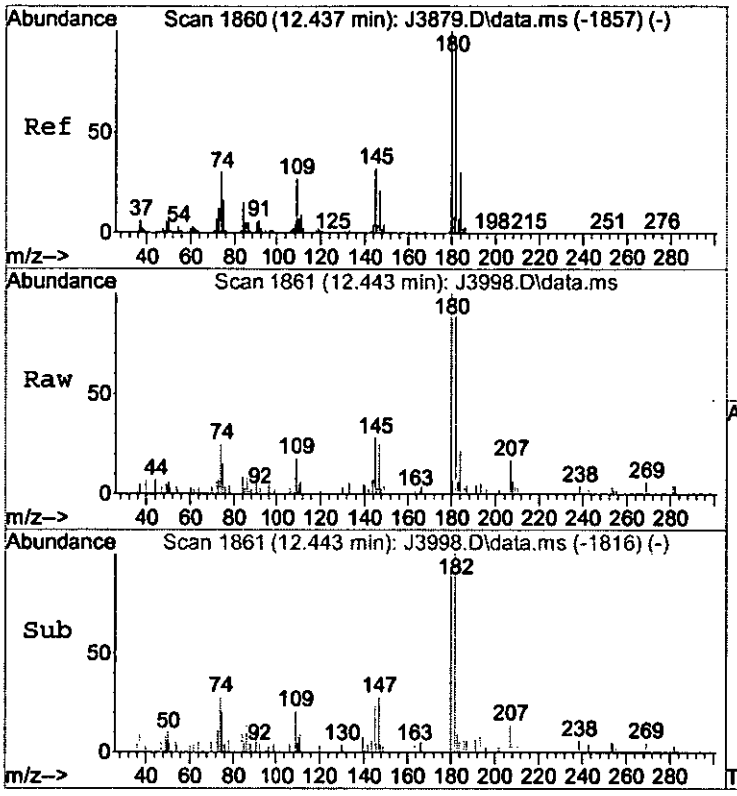


#117
Naphthalen
Concen: 0.36 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J3998.D
Acq: 18 Mar 2014 12:37 am

Tgt Ion:128 Resp: 5801

Ion	Ratio	Lower	Upper
128	100		
127	15.3	0.0	33.8
102	6.7	0.0	28.5

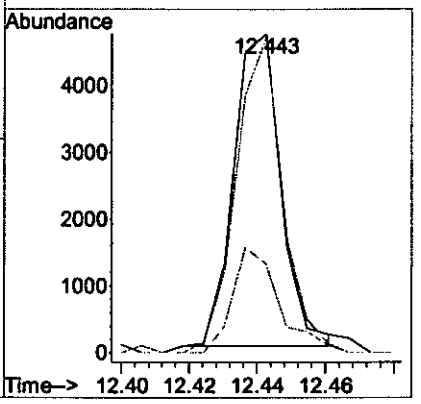




#118
1,2,3-Tclbenzene
Concen: 0.61 ppb
RT: 12.443 min Scan# 1861
Delta R.T. 0.006 min
Lab File: J3998.D
Acq: 18 Mar 2014 12:37 am

Tgt Ion:180 Resp: 4479

Ion	Ratio	Lower	Upper
180	100		
182	98.8	75.2	115.2
145	27.9	11.9	51.9



J3998.D W031214.M Tue Mar 18 14:40:32 2014 00428 Page 5

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J3998.D
Acq On : 18 Mar 2014 12:37 am
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J3998.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	508	rBV2	516841	1216292	30.37%	5.573%
2	4.243	508	516	534	rVB	962465	2458355	61.38%	11.264%
3	4.658	575	584	598	rBV	436806	1125637	28.10%	5.158%
4	5.450	703	714	732	rBV	1230375	2946752	73.57%	13.502%
5	7.322	1014	1021	1039	rBV	2612299	4005179	100.00%	18.352%
6	8.742	1248	1254	1269	rBV	2811790	3584833	89.50%	16.426%
7	9.791	1420	1426	1438	rBV	2308194	2888822	72.13%	13.237%
8	10.748	1578	1583	1598	rBV	3126965	3598574	89.85%	16.489%

Sum of corrected areas: 21824444

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\031714\
Data File : J3998.D
Acq On    : 18 Mar 2014  12:37 am
Operator  : K.Ruest
Sample    : VBLK
Misc      :
ALS Vial  : 31   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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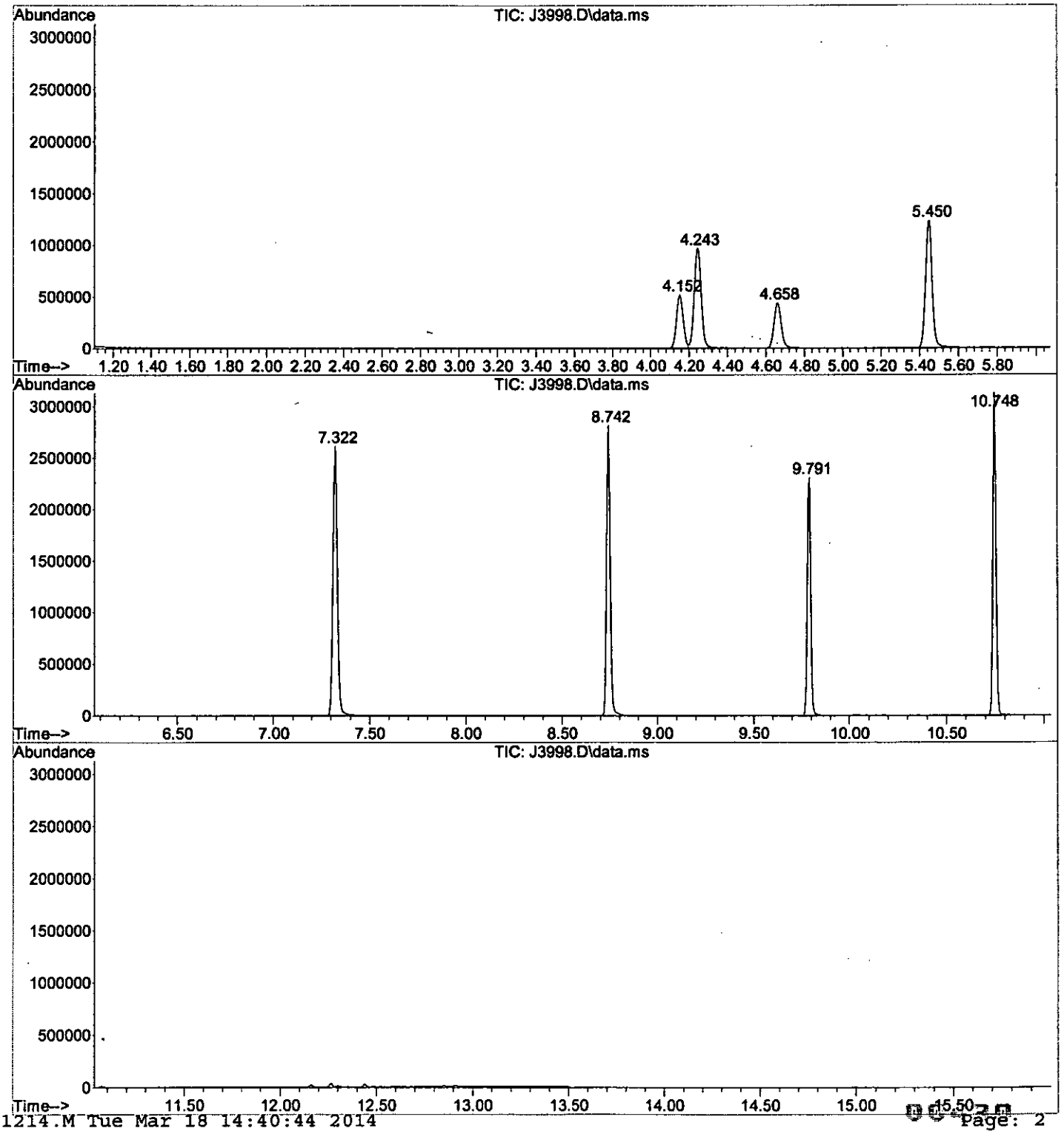


W031214.M Tue Mar 18 14:40:44 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031714\\
Data File : J3998.D
Acq On : 18 Mar 2014 12:37 amm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 31 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/19/14 15:07
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402508-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4061.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.30**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.34**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/19/14 15:07
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402508-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4061.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.88**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.26**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	3/19/14 15:07	
Dibromofluoromethane	99	85-115	3/19/14 15:07	
Toluene-d8	100	85-120	3/19/14 15:07	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/19/14 1507

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1402508-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Printed 03/31/2014 11:27 Form 1B 00434

\\alprews001\starlims$\LIMSReps\AnalyticalTICReport.rpt SuperSet Reference: 14-0000283442 rev 00

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4061.D
Misc :
Acq On : 19 Mar 2014 3:07 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ 1402508-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 15:22:59 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	889105	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1394630	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1253608	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	594180	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	398663	49.38	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.76%				
48) surr1,1,2-dichloroetha...	4.658	65	474438	51.58	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.16%				
65) SURR3,Toluene-d8	7.322	98	1701799	50.16	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.32%				
70) SURR2,BFB	9.785	95	614483	48.55	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.10%				
Target Compounds							Qvalue
5) Bromomethane	1.512	94	1737	0.34	ppb		93 J
~~12) Acrolein~~	~~1.963~~	~~56~~	~~263~~	~~0.32~~	~~ppb~~	~~#~~	~~45~~
~~15) Acetone~~	~~2.054~~	~~43~~	~~392~~	~~0.22~~	~~ppb~~	~~#~~	~~55~~
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~1845~~	~~0.42~~	~~ppb~~	~~#~~	~~1~~
22) Methylene Chloride	2.359	84	1705	0.20	ppb	#	84 <
90) Cyclohexanone	9.724	55	398	0.84	ppb		83 SP/NTD
112) Trielution Dichlorotol...	11.729	125	4376	0.39	ppb	#	85 NTD
114) Coelution Dichlorotoluene	11.998	125	4001	0.33	ppb	#	71 ↓
115) 1,2,4-Tcbenzene	12.162	180	2586	0.30	ppb		93 J
116) Hexachlorobt	12.266	225	3362	0.88	ppb		83 J
117) Naphthalen	12.302	128	4151	0.26	ppb		85 J
118) 1,2,3-Tclbenzene	12.443	180	2751	0.38	ppb		96 <
119) 2,4,5-Trichlorotolene	12.851	159	8390	1.78	ppb		94 NTD
120) 2,3,6-Trichlorotoluene WP	12.851	159	8390	1.94	ppb		97 NTD

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

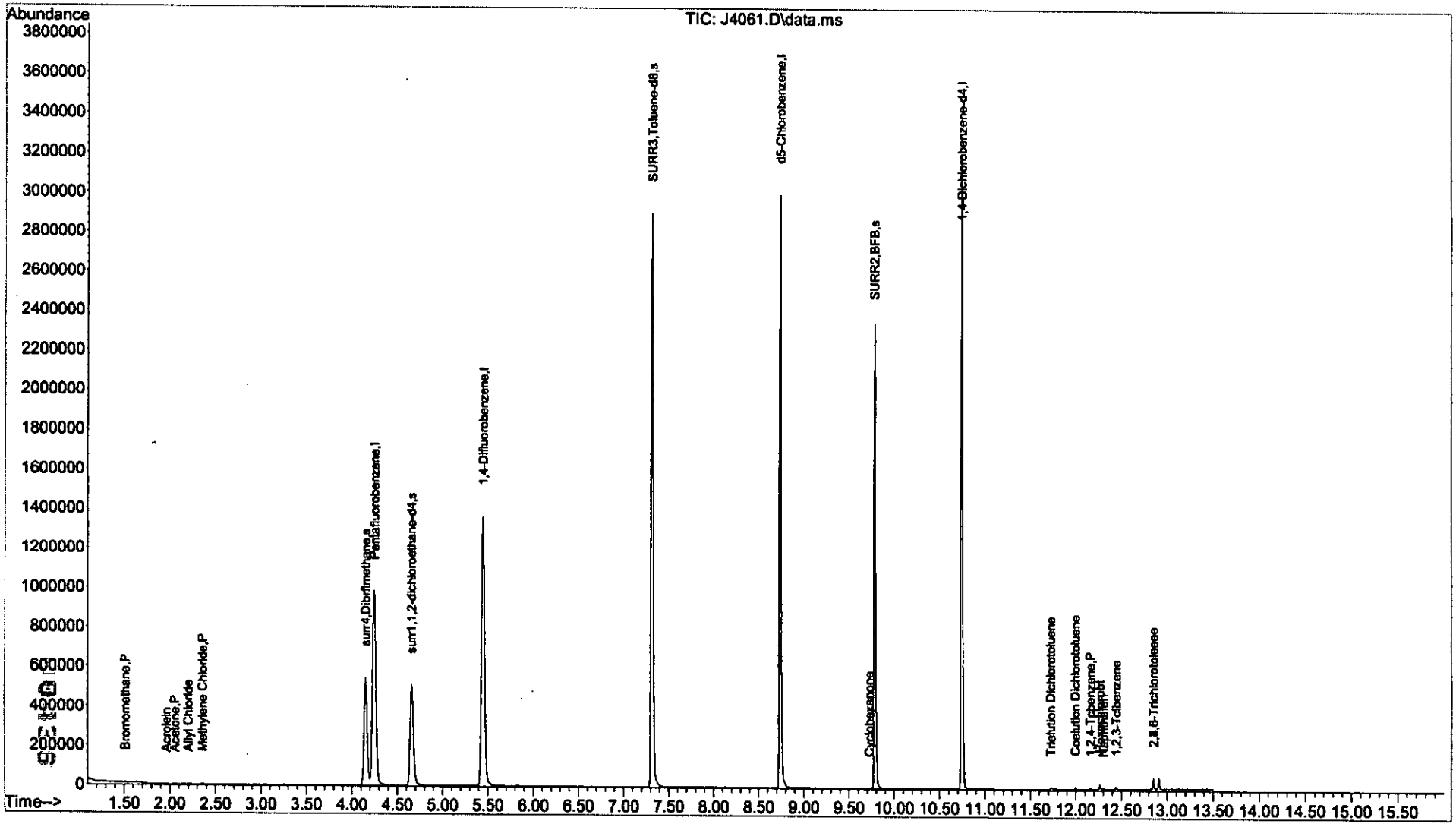
KP 3/20/14

00435

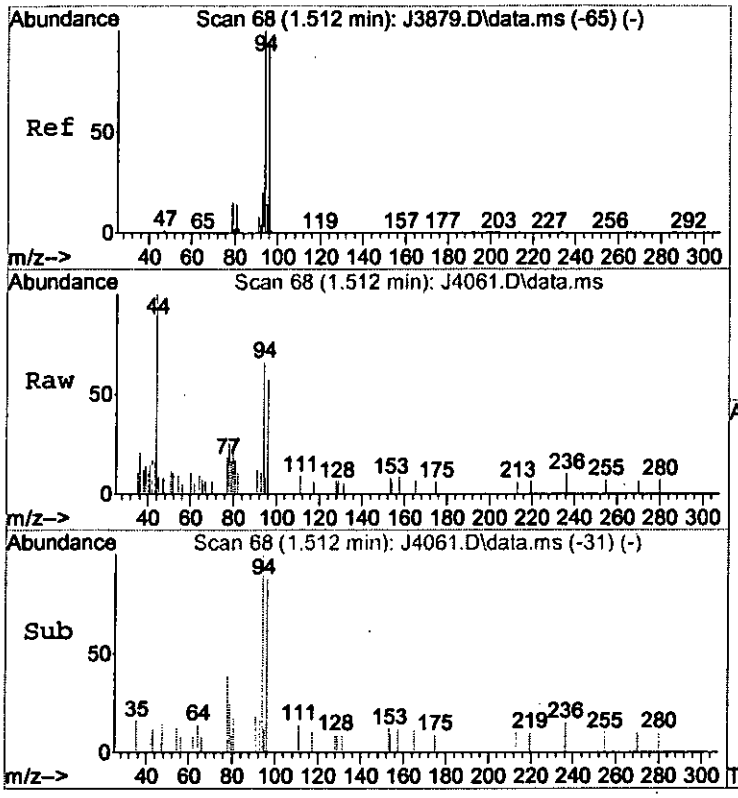
Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4061.D
Misc :
Acq On : 19 Mar 2014 3:07 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 15:22:59 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



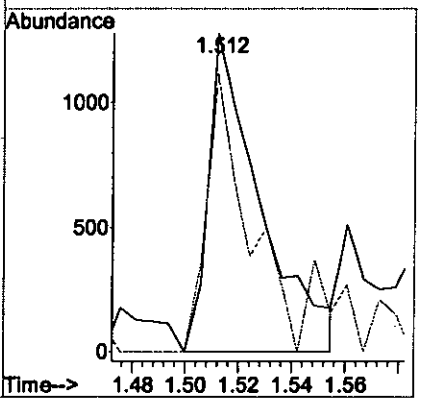
W031214.M Wed Mar 19 15:23:07 2014 Page: 2

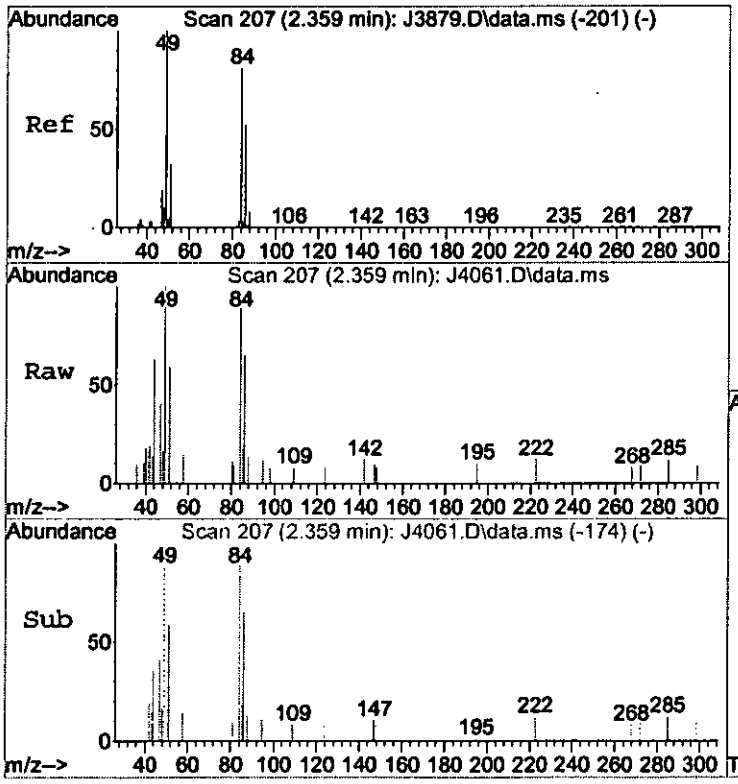


#5
Bromomethane
Concen: 0.34 ppb
RT: 1.512 min Scan# 68
Delta R.T. -0.000 min
Lab File: J4061.D
Acq: 19 Mar 2014 3:07 pm

Tgt Ion: 94 Resp: 1737

Ion	Ratio	Lower	Upper
94	100		
96	87.2	73.8	113.8

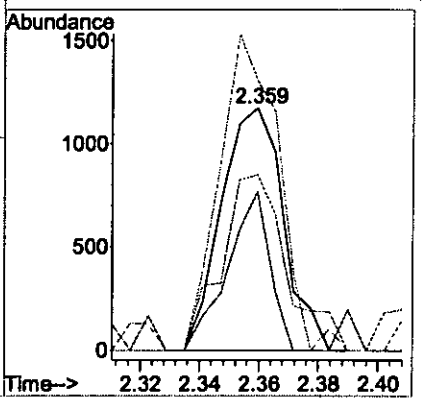




#22
Methylene Chloride
Concen: 0.20 ppb
RT: 2.359 min Scan# 207
Delta R.T. -0.000 min
Lab File: J4061.D
Acq: 19 Mar 2014 3:07 pm

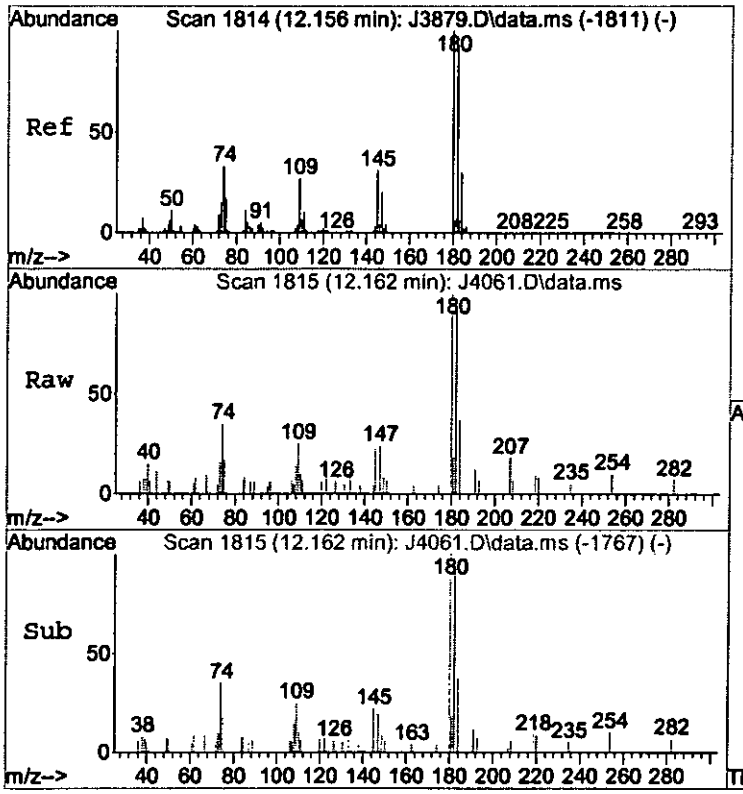
Tgt Ion: 84 Resp: 1705

Ion	Ratio	Lower	Upper
84	100		
86	72.4	44.0	84.0
49	111.2	102.8	142.8
51	65.4	19.2	59.2#



00437

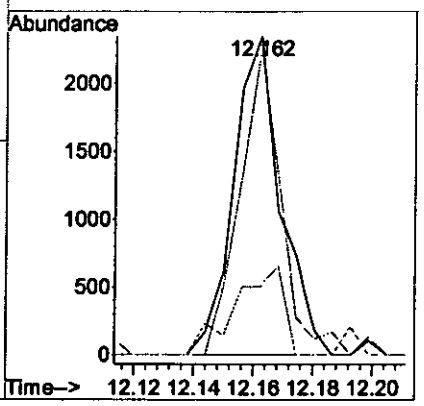
J4061.D W031214.M Thu Mar 20 14:59:32 2014 Page 3

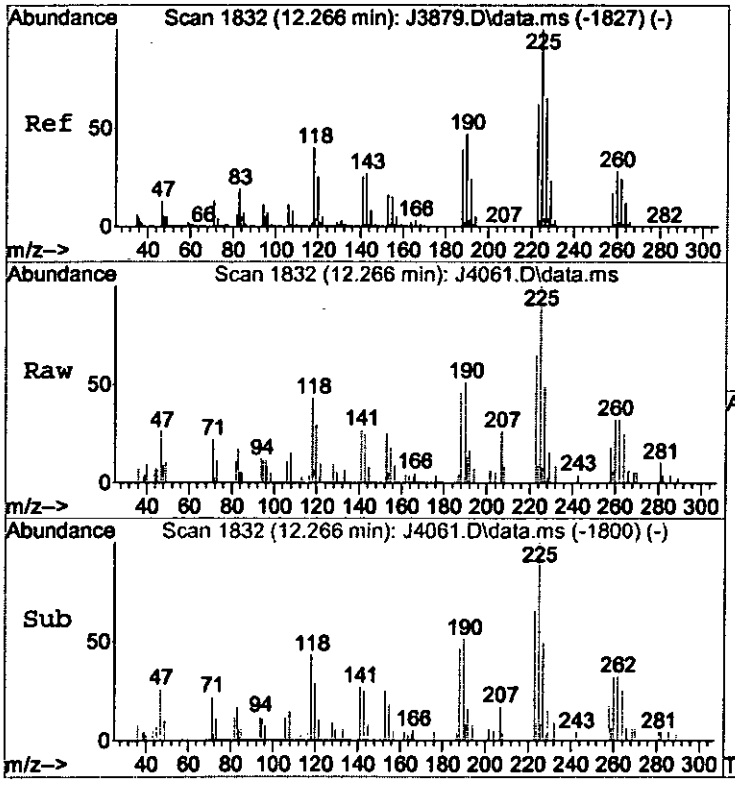


#115
1,2,4-Tcbenzene
Concen: 0.30 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J4061.D
Acq: 19 Mar 2014 3:07 pm

Tgt Ion:180 Resp: 2586

Ion	Ratio	Lower	Upper
180	100		
182	95.7	72.2	112.2
145	21.5	11.4	51.4

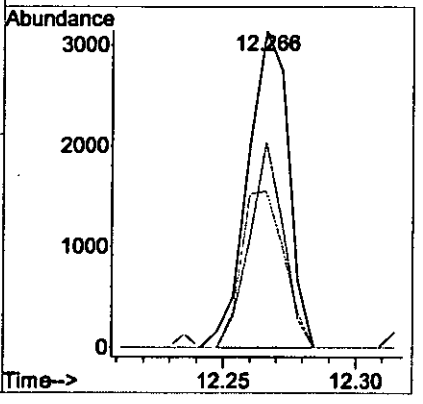


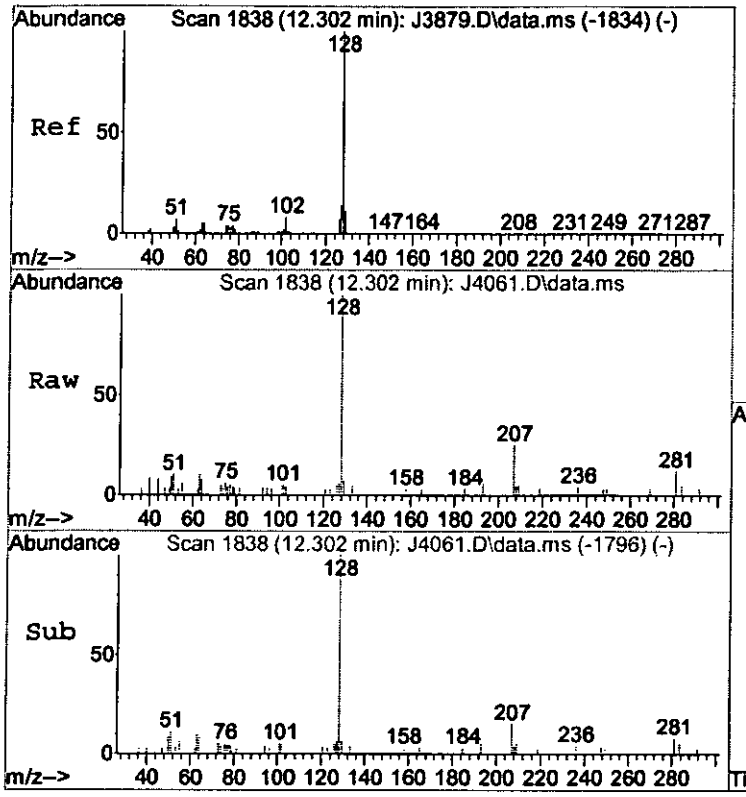


#116
Hexachlorobt
Concen: 0.88 ppb
RT: 12.266 min Scan# 1832
Delta R.T. -0.000 min
Lab File: J4061.D
Acq: 19 Mar 2014 3:07 pm

Tgt Ion:225 Resp: 3362

Ion	Ratio	Lower	Upper
225	100		
223	74.0	42.4	82.4
227	49.3	44.9	84.9

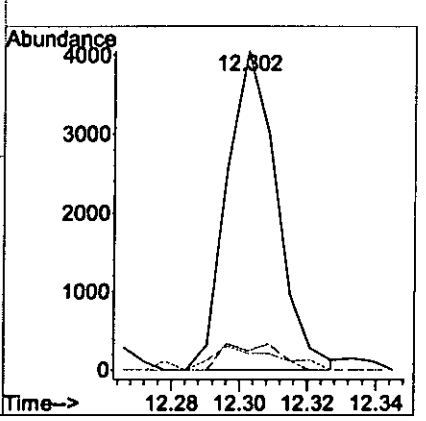


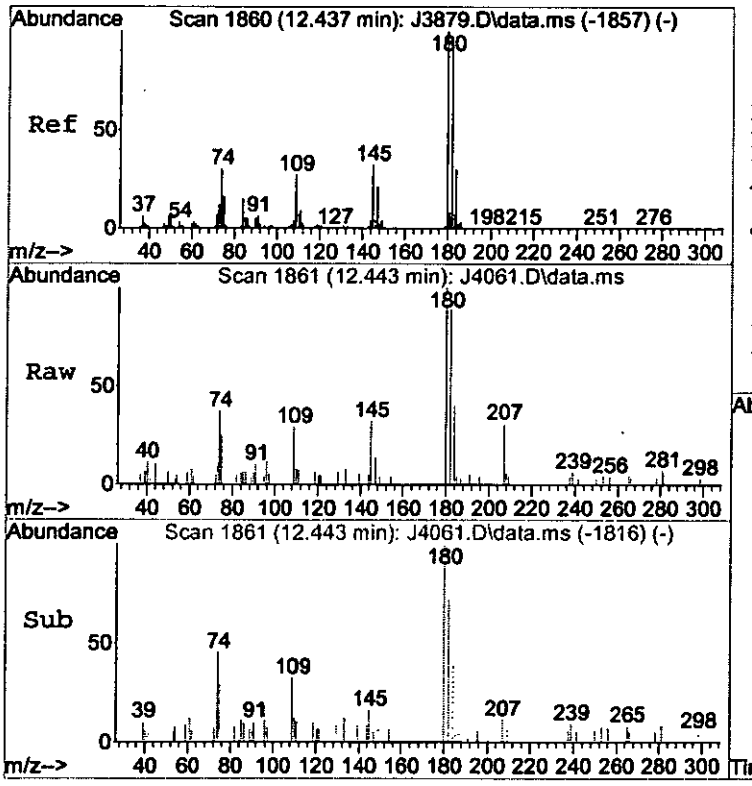


#117
Naphthalen
Concen: 0.26 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4061.D
Acq: 19 Mar 2014 3:07 pm

Tgt Ion:128 Resp: 4151

Ion	Ratio	Lower	Upper
128	100		
127	6.1	0.0	33.8
102	5.3	0.0	28.5

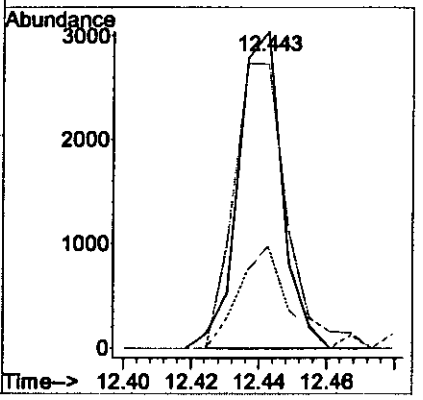




#118
1,2,3-Tclbenzene
Concen: 0.38 ppb
RT: 12.443 min Scan# 1861
Delta R.T. 0.006 min
Lab File: J4061.D
Acq: 19 Mar 2014 3:07 pm

Tgt Ion:180 Resp: 2751

Ion	Ratio	Lower	Upper
180	100		
182	89.8	75.2	115.2
145	32.0	11.9	51.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4061.D
Acq On : 19 Mar 2014 3:07 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4061.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV2	544301	1291668	28.73%	5.499%
2	4.243	509	516	536	rVB	984027	2560171	56.94%	10.899%
3	4.658	573	584	599	rBV	509399	1320780	29.38%	5.623%
4	5.450	702	714	735	rBV	1362378	3250234	72.29%	13.837%
5	7.322	1011	1021	1035	rBV	2905048	4495989	100.00%	19.141%
6	8.742	1249	1254	1267	rBV	2996001	3839272	85.39%	16.345%
7	9.791	1421	1426	1435	rBV	2343743	2945973	65.52%	12.542%
8	10.748	1578	1583	1593	rBV	3197218	3683561	81.93%	15.682%
9	12.851	1925	1928	1932	rVB	56782	50484	1.12%	0.215%
10	12.912	1934	1938	1941	rVV	57626	51240	1.14%	0.218%

Sum of corrected areas: 23489372

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\031914\
Data File : J4061.D
Acq On    : 19 Mar 2014    3:07 pm
Operator  : K.Ruest
Sample    : VBLK
Misc      :
ALS Vial  : 2   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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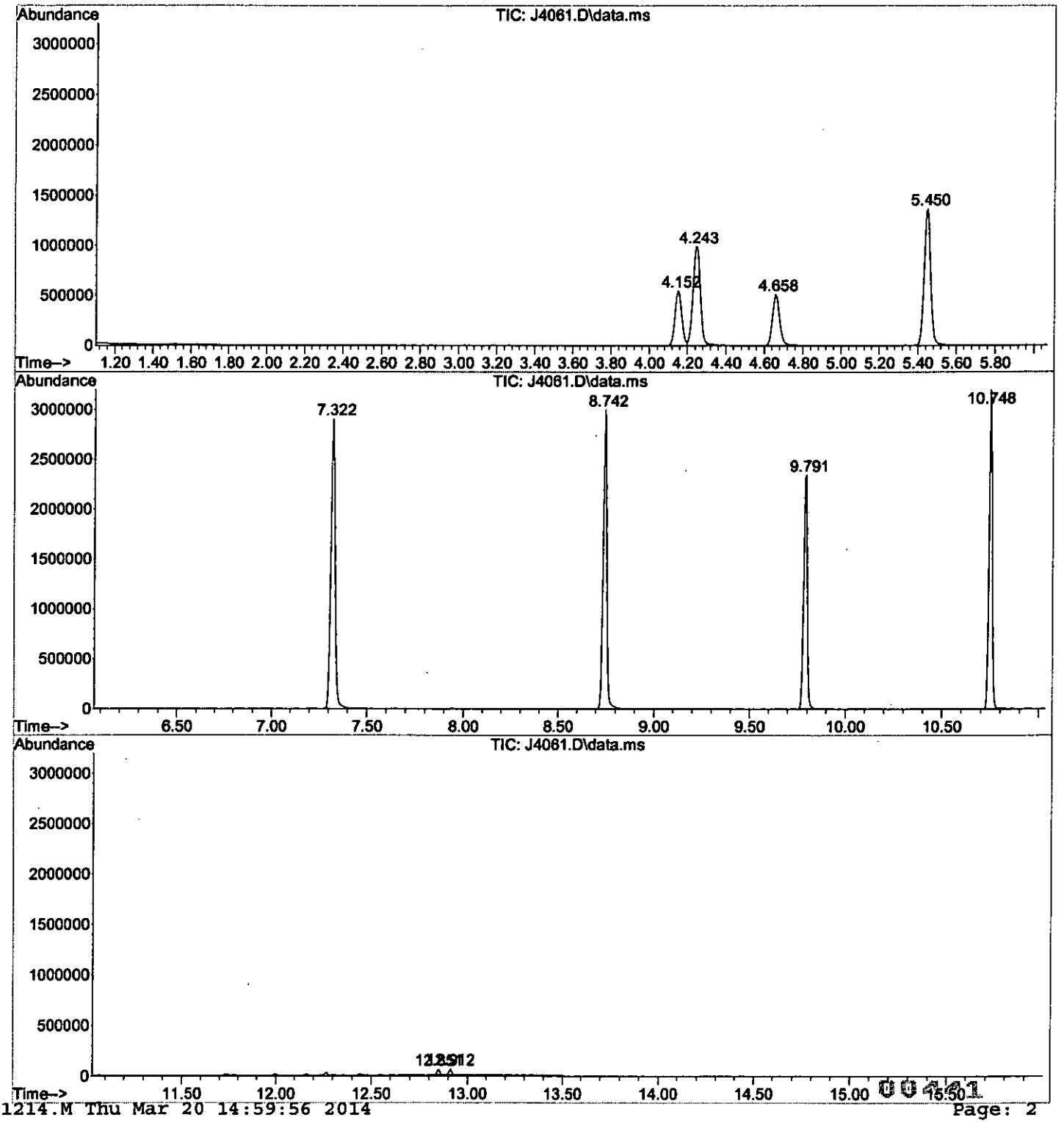


Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031914\\
Data File : J406I.D
Acq On : 19 Mar 2014 3:07 pmm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 2 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/17/14 23:33
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1402375-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J3996.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**22.1**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**20.3**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**18.5**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**21.4**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**19.5**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**23.5**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**24.2**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**25.8**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**21.4**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**24.4**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**21.5**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**24.0**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**23.1**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**22.1**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**20.8**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**20.2**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**21.6**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**22.2**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**20.7**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**21.3**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**18.6**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**20.5**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**21.0**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**21.4**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**20.9**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**22.3**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**21.7**		5.0	1.0	0.67	
67-64-1	Acetone	**18.5**		5.0	5.0	1.3	
71-43-2	Benzene	**21.1**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**22.0**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**20.9**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**21.6**		5.0	1.0	0.32	
75-25-2	Bromoform	**23.6**		5.0	1.0	0.42	
74-83-9	Bromomethane	**20.6**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**21.7**		5.0	1.0	0.45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/17/14 23:33
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1402375-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J3996.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**21.9**		5.0	1.0	0.29	
75-00-3	Chloroethane	**19.0**		5.0	1.0	0.24	
67-66-3	Chloroform	**19.8**		5.0	1.0	0.25	
74-87-3	Chloromethane	**17.2**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**23.4**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**16.0**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**19.5**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**21.6**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**25.3**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21.8**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**20.8**		5.0	1.0	0.29	
91-20-3	Naphthalene	**25.7**		5.0	1.0	0.20	
100-42-5	Styrene	**22.7**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**23.5**		5.0	1.0	0.30	
108-88-3	Toluene	**21.6**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**24.4**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**20.0**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**19.2**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**20.0**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**20.8**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**44.9**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**21.5**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**20.9**		5.0	1.0	0.20	
95-47-6	o-Xylene	**21.8**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**21.7**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**21.3**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**20.9**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**21.3**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	3/17/14 23:33	
Dibromofluoromethane	100	85-115	3/17/14 23:33	
Toluene-d8	97	85-120	3/17/14 23:33	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3996.D
Misc :
Acq On : 17 Mar 2014 11:33 pm
Operator : K.Ruest
InstName : MSVOA-12 LQ1402375-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:48:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	898662	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1319230	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1218026	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	632484	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	381015	49.89	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.78%				
48) surr1,1,2-dichloroetha...	4.658	65	404172	46.46	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 92.92%				
65) SURR3,Toluene-d8	7.322	98	1554624	48.44	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.88%				
70) SURR2,BFB	9.785	95	598873	50.02	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.04%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	170788	16.00	ppb		98
3) Chloromethane	1.262	50	159167	17.21	ppb		100
4) Vinyl Chloride	1.323	62	164925	19.19	ppb		100
5) Bromomethane	1.512	94	106759	20.62	ppb		98
6) Chloroethane	1.567	64	97564	19.04	ppb		96
7) Freon 21	1.664	67	267135	20.61	ppb		99
8) Trichlorofluoromethane	1.719	101	264370	20.04	ppb		98
9) Diethyl Ether	1.878	59	128406	19.77	ppb		96
10) Freon 123a	1.866	67	197173	20.36	ppb		88
11) Freon 123	1.902	83	223415	20.20	ppb		93
12) Acrolein	1.951	56	18868	101.93	ppb		92
13) 1,1-Diclethene	2.036	96	152930	23.45	ppb		94
14) Freon 113	2.036	101	148323	20.78	ppb		89
15) Acetone	2.042	43	33039	18.53	ppb		99
16) 2-Propanol	2.116	45	126817	438.29	ppb		95
17) Iodomethane	2.146	142	172609	19.93	ppb		94
18) Carbon Disulfide	2.207	76	416098	18.34	ppb		99
19) Acetonitrile	2.225	40	25865	88.71	ppb		95
20) Allyl Chloride	2.274	76	86106	19.26	ppb		97
21) Methyl Acetate	2.274	43	71523	17.81	ppb		98
22) Methylene Chloride	2.359	84	166621	19.50	ppb		95
23) TBA	2.408	59	218523	438.49	ppb		96
24) Acrylonitrile	2.524	53	201733	100.99	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	431529	20.82	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	171102	20.94	ppb		93
28) 1,1-Diclethane	2.939	63	295791	19.45	ppb		100
29) Vinyl Acetate	2.975	86	16089	11.88	ppb	#	55
31) 2-Chloro-1,3-Butadiene	3.036	53	256828	19.61	ppb		96
33) 2,2-Dichloropropane	3.554	77	223903	18.56	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	181872	19.95	ppb		98
35) 2-Butanone	3.548	43	51293	20.53	ppb		99
36) Propionitrile	3.591	54	74849	103.77	ppb		87
37) Bromochloromethane	3.829	130	106458	20.91	ppb	#	87
38) Methacrylonitrile	3.798	67	48264	20.74	ppb		86
39) Tetrahydrofuran	3.908	42	34383	19.69	ppb		84

KK 3/18/14

00445

W031214.M Mon Mar 17 23:48:46 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3996.D
Misc :
Acq On : 17 Mar 2014 11:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:48:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chloroform	3.938	83	294405	19.76 ppb	97
41) 1,1,1-Trichloroethane	4.213	97	259470	20.30 ppb	95
44) Cyclohexane	4.316	41	130741	18.32 ppb	96
46) Carbontetrachloride	4.475	121	68578	21.68 ppb	86
47) 1,1-Dichloropropene	4.463	75	235296	24.15 ppb	94
49) Benzene	4.780	78	685677	21.11 ppb	99
50) 1,2-Dichloroethane	4.786	62	204579	20.75 ppb	96
51) Iso-Butyl Alcohol	4.633	43	95675	428.70 ppb	99
52) n-Heptane	5.328	43	146271	18.03 ppb	94
~~53) 1-Butanol~~	~~5.792~~	~~56~~	~~570~~	~~4.65 ppb~~	~~85~~
54) Trichloroethene	5.828	130	191827	24.38 ppb	94
55) Methylcyclohexane	6.103	55	156985	18.56 ppb	92
56) 1,2-Diclpropane	6.109	63	167591	20.18 ppb	95
57) Dibromomethane	6.255	93	87421	22.13 ppb	90
58) 1,4-Dioxane	6.310	88	~~21312~~	~~391.82~~ ppb 473.86	84
59) Methyl Methacrylate	6.328	69	81255	20.79 ppb	96
60) Bromodichloromethane	6.474	83	209101	21.55 ppb	99
61) 2-Nitropropane	6.743	41	42420	40.66 ppb	89
62) 2-Chloroethylvinyl Ether	6.877	63	80272	21.55 ppb	95
63) cis-1,3-Dichloropropene	7.023	75	239108	20.77 ppb	98
64) 4-Methyl-2-pentanone	7.212	43	108878	21.73 ppb	97
66) Toluene	7.389	91	723056	21.59 ppb	98
67) trans-1,3-Dichloropropene	7.627	75	197685	21.31 ppb	95
68) Ethyl Methacrylate	7.767	69	173475	22.98 ppb	91
69) 1,1,2-Trichloroethane	7.810	97	125539	21.43 ppb	98
72) Tetrachloroethene	7.962	164	147934	23.51 ppb	94
73) 2-Hexanone	8.084	43	73711	21.36 ppb	90
74) 1,3-Dichloropropane	7.974	76	226580	20.66 ppb	93
75) Dibromochloromethane	8.188	129	147337	23.37 ppb	95
76) N-Butyl Acetate	8.236	43	173761	20.37 ppb	97
77) 1,2-Dibromoethane	8.285	107	130271	23.13 ppb	95
78) Chlorobenzene	8.767	112	463426	21.86 ppb	95
81) 1,1,1,2-Tetrachloroethane	8.846	131	164705	22.11 ppb	97
82) Ethylbenzene	8.889	106	244278	21.63 ppb	95
83) (m+p)Xylene	8.998	106	596322	44.93 ppb	98
84) o-Xylene	9.346	106	295228	21.80 ppb	98
85) Styrene	9.352	104	490438	22.65 ppb	95
87) Bromoform	9.492	173	84587	23.55 ppb	96
89) Isopropylbenzene	9.669	105	711110	21.78 ppb	98
90) Cyclohexanone	9.718	55	273410	538.91 ppb	98
91) trans-1,4-Dichloro-2-B...	9.962	53	27975	16.43 ppb	84
92) 1,1,2,2-Tetrachloroethane	9.913	83	134269	18.54 ppb	95
93) Bromobenzene	9.907	156	204952	22.03 ppb	90
94) 1,2,3-Trichloropropane	9.943	110	46389	21.40 ppb	92
95) n-Propylbenzene	10.023	91	796413	20.85 ppb	98
96) 2-Chlorotoluene	10.077	91	504269	21.02 ppb	99
~~97) 3-Chlorotoluene~~	~~10.169~~	~~91~~	~~592336~~	~~23.74 ppb~~	~~95~~
98) 4-Chlorotoluene	10.169	91	590975	20.89 ppb	98
99) 1,3,5-Trimethylbenzene	10.169	105	576526	21.64 ppb	97
100) tert-Butylbenzene	10.437	119	477507	21.30 ppb	98
101) 1,2,4-Trimethylbenzene	10.474	105	587875	21.45 ppb	100
103) sec-Butylbenzene	10.620	105	677571	21.71 ppb	98

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3996.D
Misc :
Acq On : 17 Mar 2014 11:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:48:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

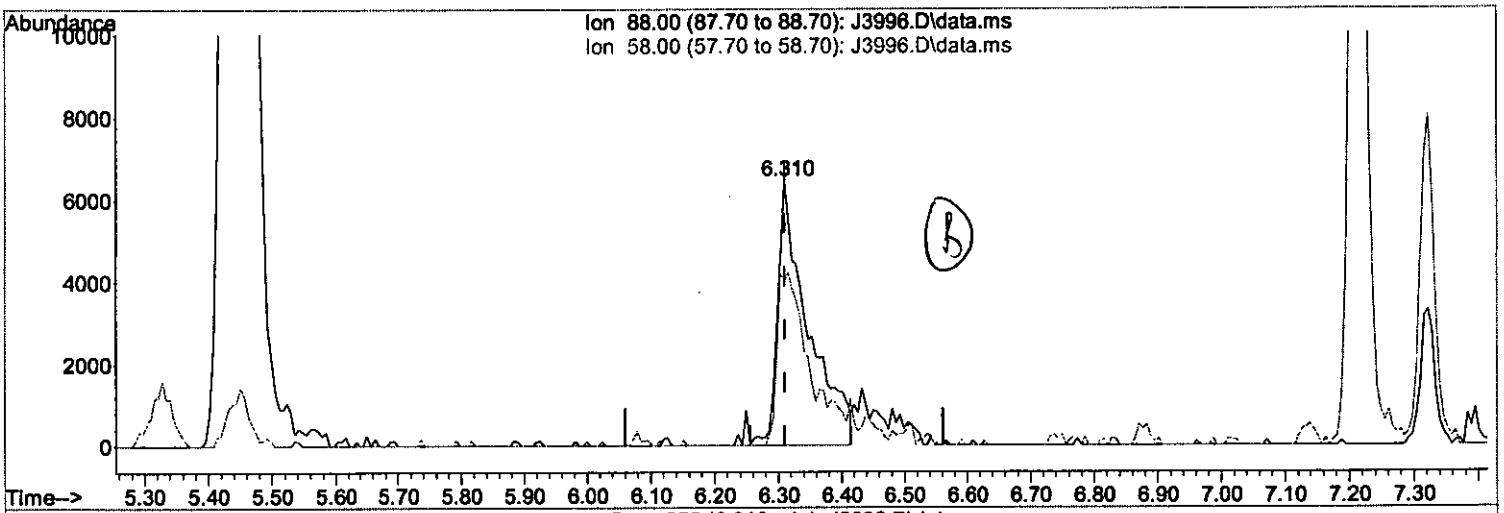
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
104) p-Isopropyltoluene	10.736	119	589470	22.34	ppb		98
105) 1,3-Dclbenz	10.693	146	350951	22.16	ppb		97
106) 1,4-Dclbenz	10.766	146	359429	21.33	ppb		98
109) n-Butylbenzene	11.065	91	511881	21.52	ppb		96
110) 1,2-Dclbenz	11.065	146	336421	22.06	ppb		97
111) 1,2-Dibromo-3-chloropr...	11.626	157	26581	23.95	ppb		89
112) Trielution Dichlorotol...	11.736	125	3039	0.25	ppb	#	82
115) 1,2,4-Tcbenzene	12.156	180	227714	24.42	ppb		98
116) Hexachlorobt	12.266	225	102904	25.28	ppb		98
117) Naphthalen	12.303	128	431243	25.68	ppb		98
118) 1,2,3-Tclbenzene	12.437	180	197335	25.84	ppb		99
119) 2,4,5-Trichlorotolene	12.845	159	5243	1.04	ppb		95
120) 2,3,6-Trichlorotoluene	12.912	159	4321	0.94	ppb		91

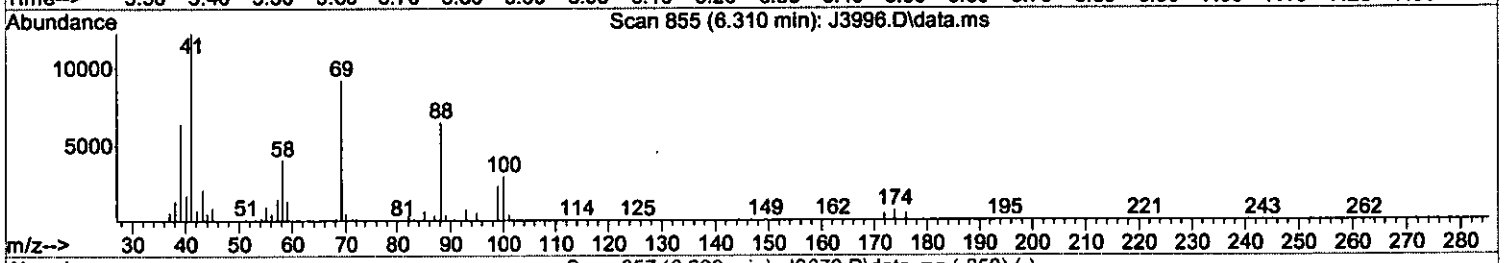
(#) = qualifier out of range (m) = manual integration (+) = signals summed

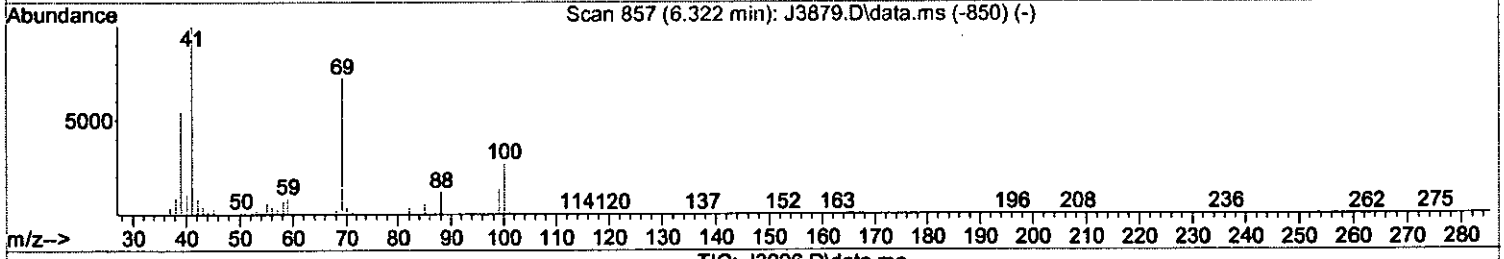
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\031714\J3996.D
Misc :
Acq On : 17 Mar 2014 11:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:48:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J3996.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 391.82 ppb

response 21312

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	62.05
0.00	0.00	0.00
0.00	0.00	0.00

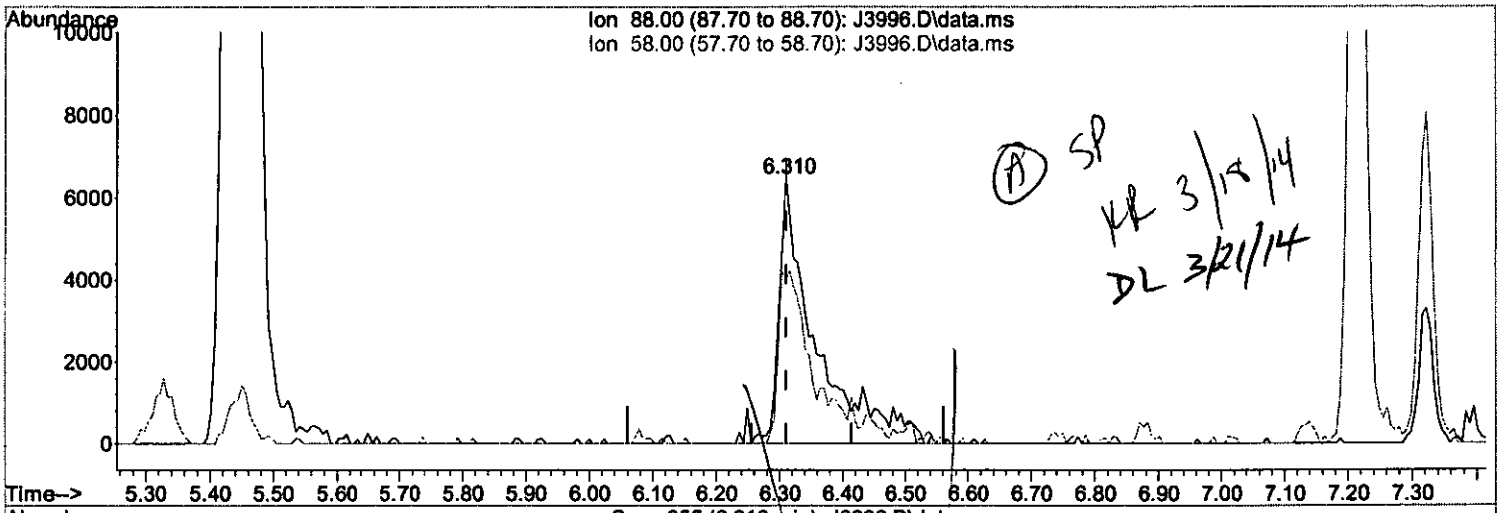
00448

W031214.M Tue Mar 18 09:54:22 2014 Page: 1

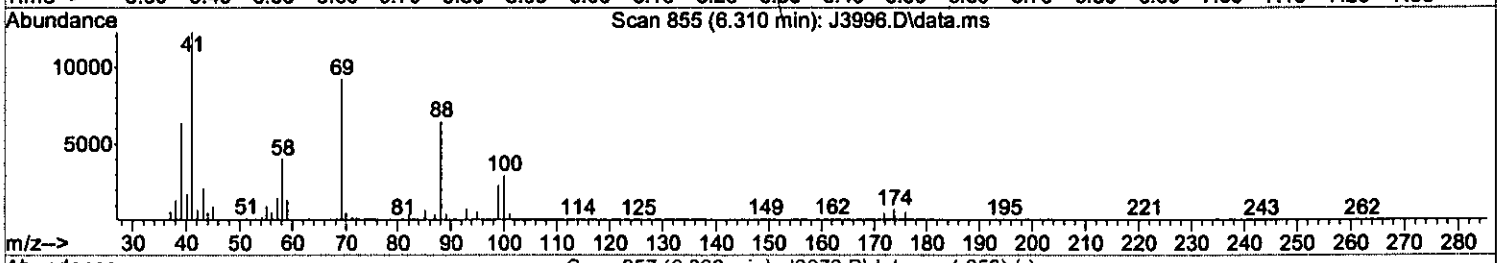
Quantitation Report (Qedit)

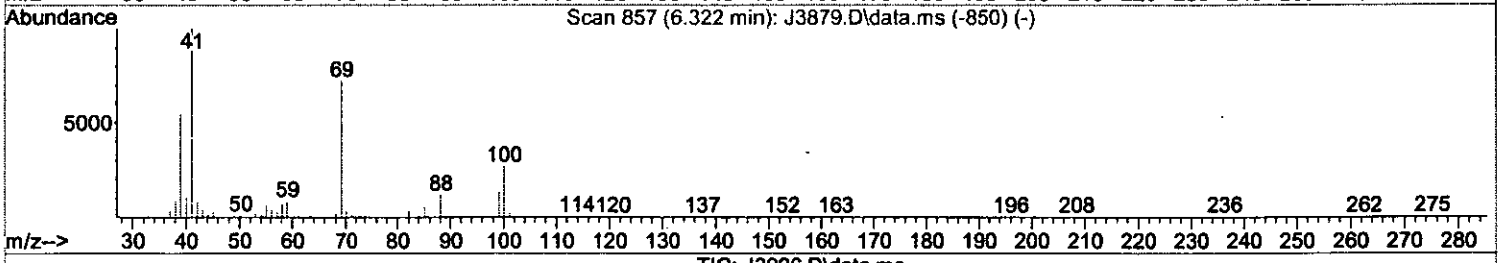
Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\031714\J3996.D
Misc :
Acq On : 17 Mar 2014 11:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:48:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



(A) SP KR 3/18/14 DL 3/21/14





TIC: J3996.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 473.86 ppb m

response 25774

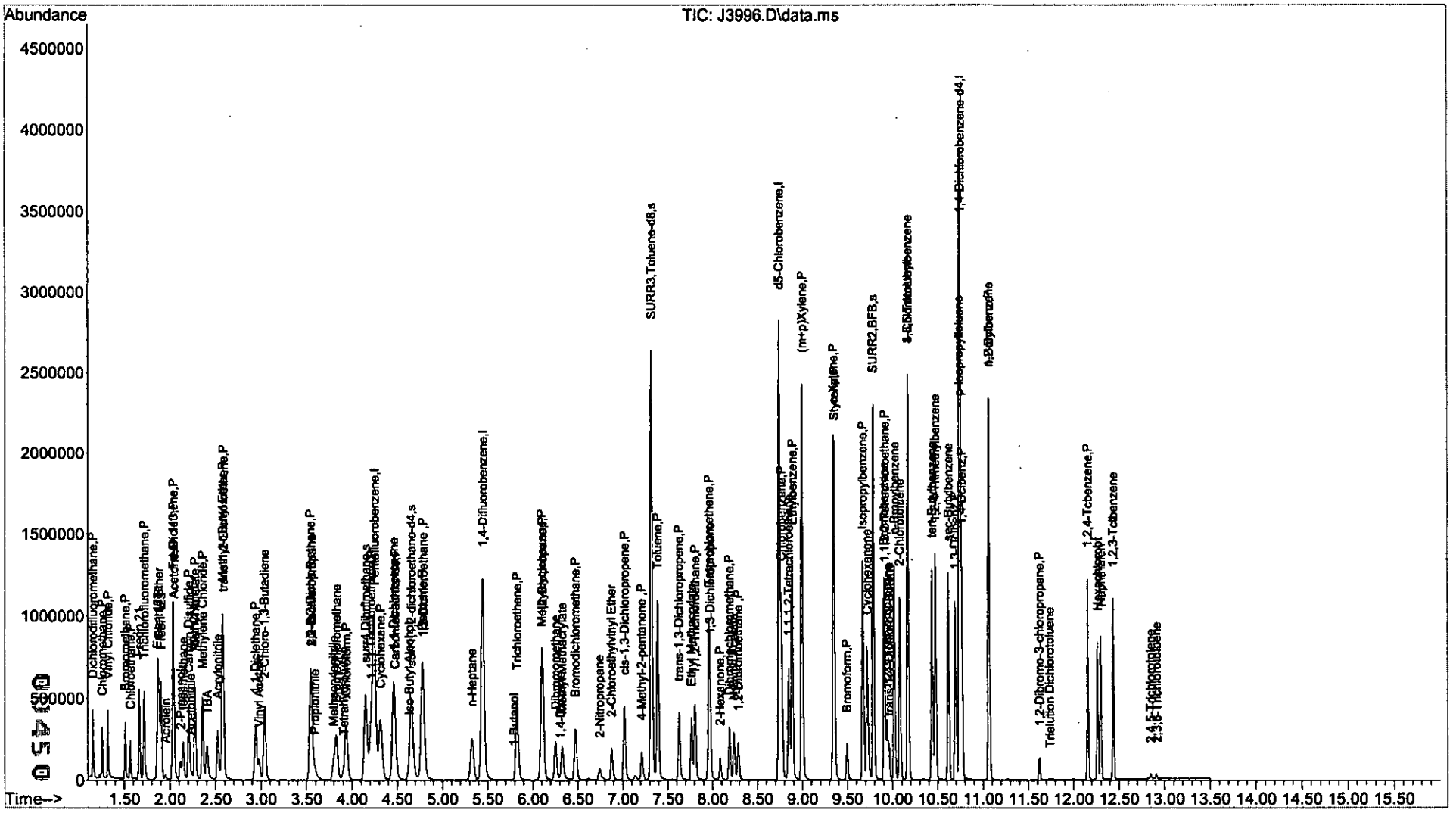
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	62.05
0.00	0.00	0.00
0.00	0.00	0.00

00449

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J3996.D
Misc :
Acq On : 17 Mar 2014 11:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 17 23:48:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Mon Mar 17 23:48:51 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/19/14 13:12
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1402508-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4059.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**21.3**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**20.1**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**21.4**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**19.8**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**20.4**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**22.6**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**23.2**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**23.4**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**21.6**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**22.4**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**21.2**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**23.1**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**21.8**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**20.8**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**20.8**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**20.8**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**21.9**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**21.1**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**21.0**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**20.9**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**21.6**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**23.9**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**20.9**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**24.7**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**21.9**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**22.1**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**23.2**		5.0	1.0	0.67	
67-64-1	Acetone	**23.2**		5.0	5.0	1.3	
71-43-2	Benzene	**20.2**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**20.7**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**19.9**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**21.1**		5.0	1.0	0.32	
75-25-2	Bromoform	**21.5**		5.0	1.0	0.42	
74-83-9	Bromomethane	**22.8**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**19.3**		5.0	1.0	0.45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	3/19/14 13:12
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1402508-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	384408
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\031914\J4059.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**20.4**		5.0	1.0	0.29	
75-00-3	Chloroethane	**22.6**		5.0	1.0	0.24	
67-66-3	Chloroform	**20.4**		5.0	1.0	0.25	
74-87-3	Chloromethane	**22.6**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**21.5**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**21.2**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**20.3**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**20.7**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**21.6**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21.6**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**21.9**		5.0	1.0	0.29	
91-20-3	Naphthalene	**25.1**		5.0	1.0	0.20	
100-42-5	Styrene	**21.7**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**19.7**		5.0	1.0	0.30	
108-88-3	Toluene	**20.4**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**20.1**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**19.8**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**24.2**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**20.1**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**20.7**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**42.1**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**22.4**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**21.5**		5.0	1.0	0.20	
95-47-6	o-Xylene	**20.6**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**21.5**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**20.9**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**20.3**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**22.0**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	3/19/14 13:12	
Dibromofluoromethane	100	85-115	3/19/14 13:12	
Toluene-d8	99	85-120	3/19/14 13:12	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4059.D
Misc :
Acq On : 19 Mar 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1402508-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:27:12 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	892848	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1398901	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1258259	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	618046	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	404407	49.94	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.88%				
48) surr1,1,2-dichloroetha...	4.658	65	470869	51.04	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.08%				
65) SURR3,Toluene-d8	7.322	98	1689263	49.64	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.28%				
70) SURR2,BFB	9.785	95	632198	49.79	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.58%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	224951	21.21	ppb		99
3) Chloromethane	1.262	50	207308	22.56	ppb		98
4) Vinyl Chloride	1.323	62	206798	24.22	ppb		98
5) Bromomethane	1.512	94	117499	22.84	ppb		100
6) Chloroethane	1.567	64	115139	22.61	ppb		100
7) Freon 21	1.664	67	304064	23.61	ppb		99
8) Trichlorofluoromethane	1.719	101	259736	19.82	ppb		99
9) Diethyl Ether	1.878	59	138174	21.41	ppb		98
10) Freon 123a	1.865	67	213787	22.22	ppb		98
11) Freon 123	1.902	83	240257	21.86	ppb		96
12) Acrolein	1.957	56	26940	132.19	ppb		98
13) 1,1-Diclethene	2.036	96	146261	22.57	ppb		97
14) Freon 113	2.036	101	148009	20.87	ppb		95
15) Acetone	2.048	43	41072	23.19	ppb		92
16) 2-Propanol	2.128	45	154746	538.30	ppb		98
17) Iodomethane	2.146	142	167923	19.51	ppb		97
18) Carbon Disulfide	2.207	76	448195	19.89	ppb		99
19) Acetonitrile	2.225	40	29547	102.00	ppb		98
20) Allyl Chloride	2.274	76	92934	20.92	ppb		98
21) Methyl Acetate	2.274	43	87176	21.85	ppb		97
22) Methylene Chloride	2.359	84	172149	20.28	ppb		97
23) TBA	2.414	59	245748	496.33	ppb		98
24) Acrylonitrile	2.524	53	230803	116.29	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	451305	21.91	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	164466	20.26	ppb		97
28) 1,1-Diclethane	2.938	63	307994	20.38	ppb		97
29) Vinyl Acetate	2.981	86	26458	19.67	ppb	#	75
30) DIPE	3.012	45	612740	20.82	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	288615	22.18	ppb		91
32) ETBE	3.396	59	527372	21.41	ppb		99
33) 2,2-Dichloropropane	3.554	77	258723	21.58	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	181611	20.05	ppb		96
35) 2-Butanone	3.548	43	59334	23.91	ppb		96
36) Propionitrile	3.597	54	83833	116.98	ppb		99
37) Bromochloromethane	3.829	130	100762	19.92	ppb		97

KR 3/19/14

00453

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4059.D
Misc :
Acq On : 19 Mar 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:27:12 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	52286	22.62	ppb	#	84
39) Tetrahydrofuran	3.914	42	36682	21.14	ppb		82
40) Chloroform	3.938	83	302064	20.40	ppb		97
41) 1,1,1-Trichloroethane	4.213	97	254955	20.08	ppb		97
42) TAME	5.023	73	454584	21.86	ppb		98
44) Cyclohexane	4.316	41	147267	19.46	ppb		91
46) Carbontetrachloride	4.469	121	64763	19.31	ppb		97
47) 1,1-Dichloropropene	4.463	75	239704	23.20	ppb		94
49) Benzene	4.780	78	695291	20.19	ppb		98
50) 1,2-Dichloroethane	4.786	62	217853	20.83	ppb		98
51) Iso-Butyl Alcohol	4.645	43	113445	479.38	ppb		98
52) n-Heptane	5.328	43	183052	21.27	ppb		99
53) 1-Butanol	5.779	56	174914	1345.82	ppb		99
54) Trichloroethene	5.828	130	167332	20.06	ppb		96
55) Methylcyclohexane	6.102	55	180030	20.07	ppb		98
56) 1,2-Diclpropane	6.115	63	183446	20.83	ppb		99
57) Dibromomethane	6.255	93	87146	20.80	ppb		96
58) 1,4-Dioxane	6.334	88	27556 22006	~~381.54~~	ppb	#	52 477.06
59) Methyl Methacrylate	6.334	69	87726	21.17	ppb		91
60) Bromodichloromethane	6.480	83	217120	21.10	ppb		97
61) 2-Nitropropane	6.749	41	49470	44.72	ppb		92
62) 2-Chloroethylvinyl Ether	6.877	63	88057	22.29	ppb		98
63) cis-1,3-Dichloropropene	7.023	75	253200	20.74	ppb		100
64) 4-Methyl-2-pentanone	7.212	43	123035	23.16	ppb		98
66) Toluene	7.395	91	725341	20.43	ppb		98
67) trans-1,3-Dichloropropene	7.627	75	215952	21.95	ppb		99
68) Ethyl Methacrylate	7.767	69	185070	23.12	ppb		98
69) 1,1,2-Trichloroethane	7.809	97	123159	19.83	ppb		97
72) Tetrachloroethene	7.962	164	127943	19.68	ppb		100
73) 2-Hexanone	8.090	43	88137	24.73	ppb		94
74) 1,3-Dichloropropane	7.974	76	238313	21.04	ppb		96
75) Dibromochloromethane	8.187	129	140172	21.52	ppb		96
76) N-Butyl Acetate	8.242	43	202922	23.03	ppb		94
77) 1,2-Dibromoethane	8.285	107	126719	21.78	ppb		95
78) Chlorobenzene	8.767	112	447504	20.44	ppb		99
79) 3-CBTF	8.785	180	228822	21.13	ppb		97
80) 4-CBTF	8.840	180	203556	20.97	ppb		99
81) 1,1,1,2-Tetrachloroethane	8.852	131	163647	21.27	ppb		98
82) Ethylbenzene	8.889	106	241031	20.66	ppb		96
83) (m+p)Xylene	8.998	106	577559	42.13	ppb		100
84) o-Xylene	9.346	106	287739	20.57	ppb		99
85) Styrene	9.352	104	484396	21.66	ppb		100
87) Bromoform	9.498	173	75488	21.51	ppb		100
88) 2-CBTF	9.577	180	217056	21.08	ppb		95
89) Isopropylbenzene	9.675	105	690408	21.64	ppb		99
90) Cyclohexanone	9.718	55	311438	628.21	ppb		98
91) trans-1,4-Dichloro-2-B...	9.961	53	32814	19.72	ppb		95
92) 1,1,2,2-Tetrachloroethane	9.913	83	151137	21.35	ppb		97
93) Bromobenzene	9.913	156	188503	20.73	ppb	#	86
94) 1,2,3-Trichloropropane	9.943	110	45831	21.64	ppb		97
95) n-Propylbenzene	10.022	91	801581	21.48	ppb		99
96) 2-Chlorotoluene	10.083	91	488713	20.85	ppb		99

00454

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4059.D
Misc :
Acq On : 19 Mar 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:27:12 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	521234	21.38	ppb	98
98)	4-Chlorotoluene	10.175	91	605686	21.91	ppb	99
99)	1,3,5-Trimethylbenzene	10.169	105	568750	21.85	ppb	99
100)	tert-Butylbenzene	10.437	119	458630	20.93	ppb	99
101)	1,2,4-Trimethylbenzene	10.480	105	568607	21.23	ppb	99
102)	3,4-DCBTF	10.535	214	158375	20.80	ppb	98
103)	sec-Butylbenzene	10.620	105	656264	21.52	ppb	99
104)	p-Isopropyltoluene	10.742	119	569537	22.09	ppb	99
105)	1,3-Dclbenz	10.699	146	326059	21.07	ppb	96
106)	1,4-Dclbenz	10.766	146	343520	20.86	ppb	97
107)	2,4-DCBTF	10.821	214	142841	21.56	ppb	94
108)	2,5-DCBTF	10.864	214	160865	21.24	ppb	98
109)	n-Butylbenzene	11.065	91	520004	22.37	ppb	97
110)	1,2-Dclbenz	11.065	146	309507	20.77	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	25090	23.14	ppb	93
112)	Trielution Dichlorotol...	11.729	125	785953	66.69	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	226842	22.07	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	573721	45.97	ppb	99
115)	1,2,4-Tcbenzene	12.156	180	204042	22.39	ppb	99
116)	Hexachlorobt	12.266	225	85936	21.61	ppb	97
117)	Naphthalen	12.302	128	411690	25.09	ppb	98
118)	1,2,3-Tclbenzene	12.443	180	174392	23.37	ppb	97
119)	2,4,5-Trichlorotolene	12.851	159	132463	26.94	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	122442	27.21	ppb	94

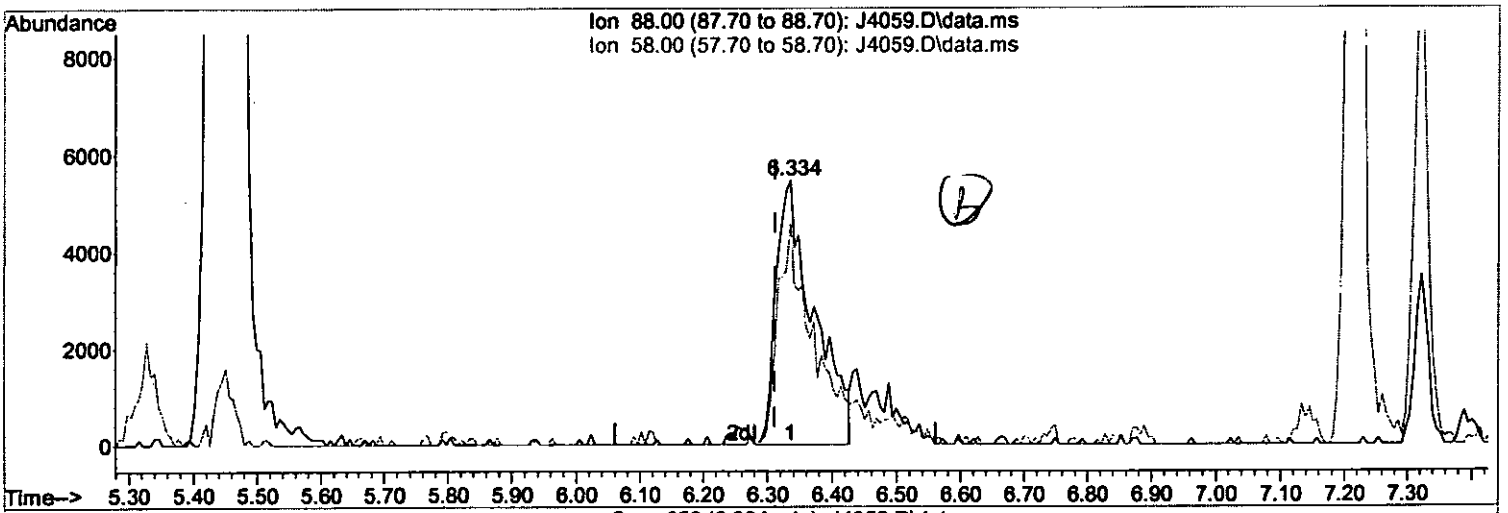
(#) = qualifier out of range (m) = manual integration (+) = signals summed

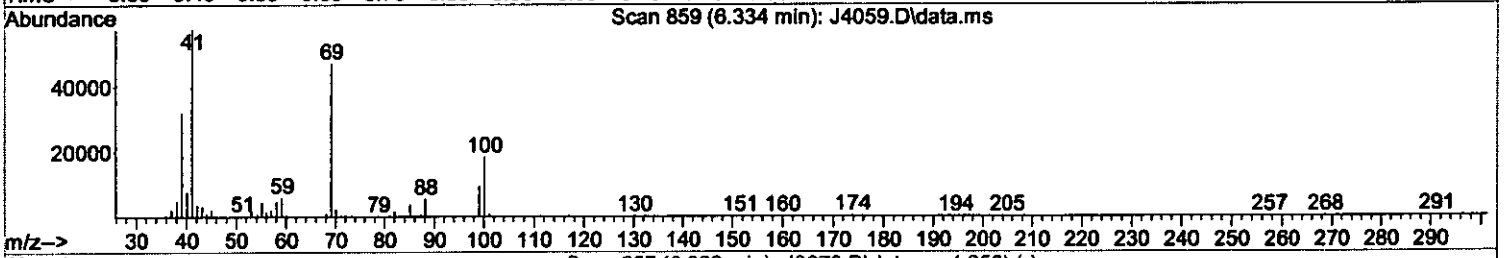
00455

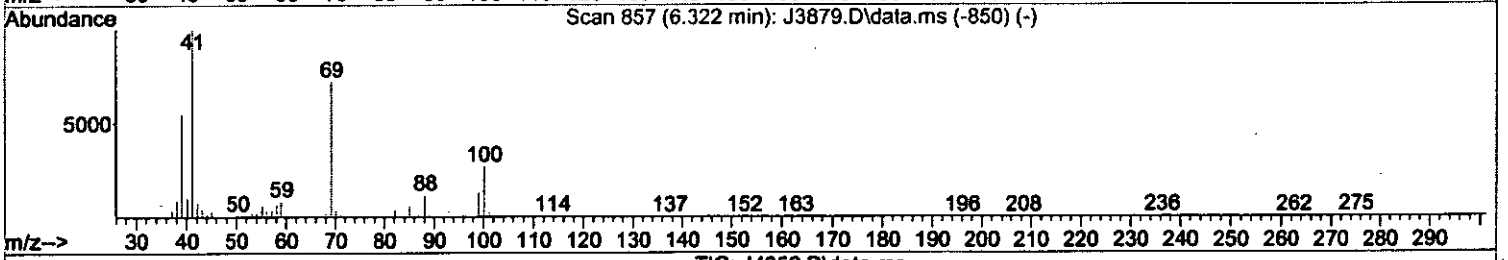
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\031914\J4059.D
Misc :
Acq On : 19 Mar 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:27:12 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4059.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.024) 381.54 ppb

response 22006

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	83.85#
0.00	0.00	0.00
0.00	0.00	0.00

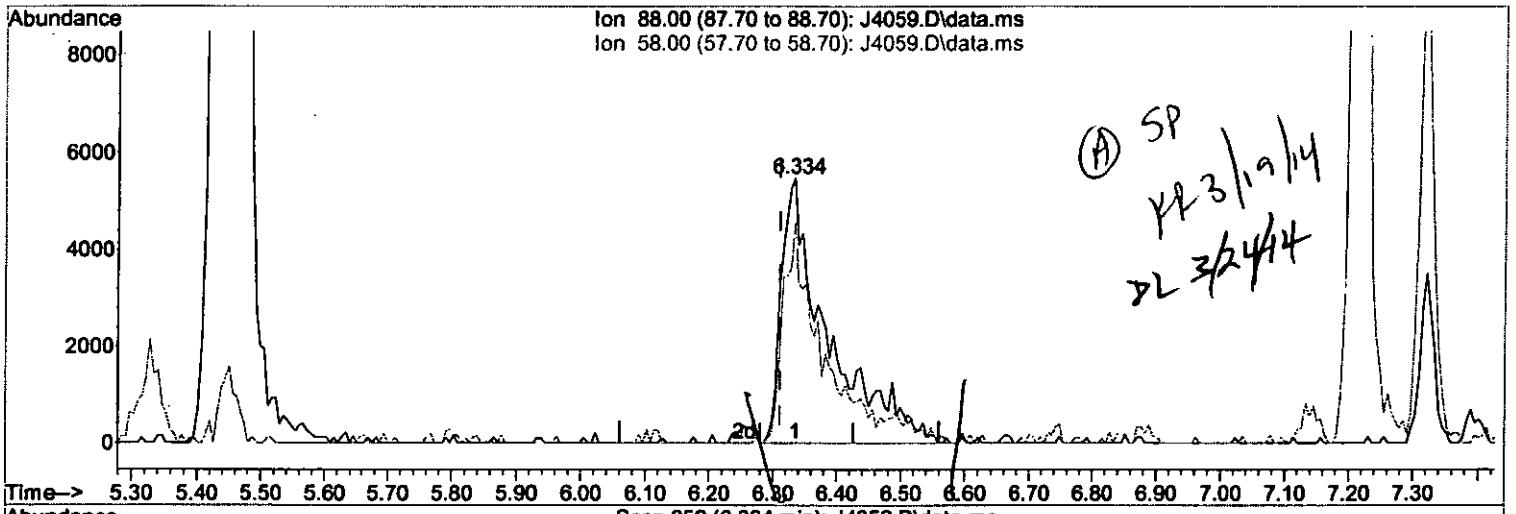
0045C

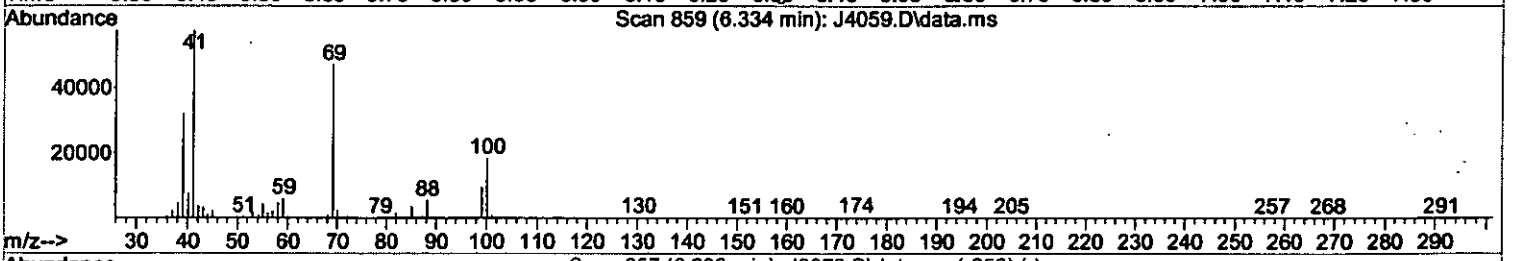
W031214.M Wed Mar 19 15:10:06 2014 Page: 1

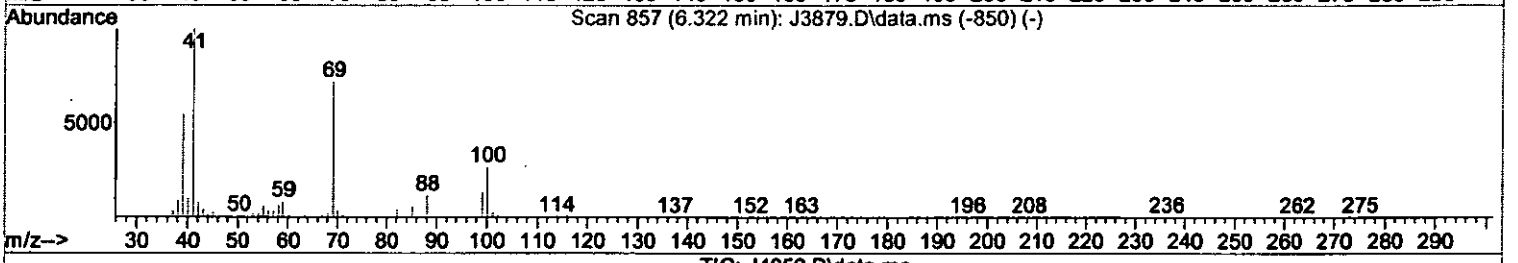
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\031914\J4059.D
Misc :
Acq On : 19 Mar 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:27:12 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4059.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.024) 477.06 ppb m

response 27515

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	83.85#
0.00	0.00	0.00
0.00	0.00	0.00

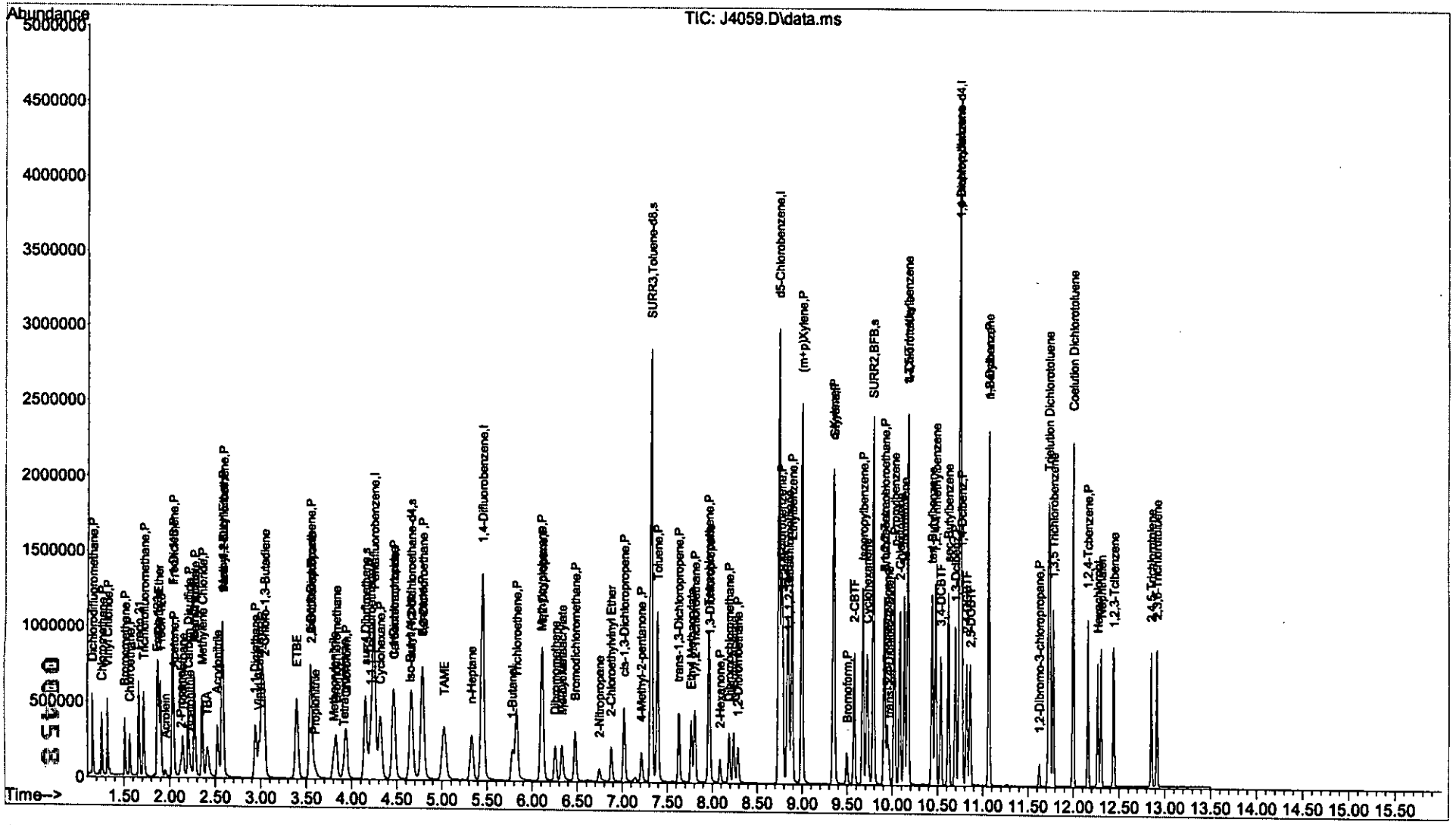
00457

W031214.M Wed Mar 19 15:10:14 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\031914\J4059.D
Misc :
Acq On : 19 Mar 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 19 13:27:12 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Wed Mar 19 13:27:05 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1230
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 07:02
Sample Name:	FTMM-53-GW-699MW01-10.55	**Units:**	µg/L
Lab Code:	RQ1402375-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4010.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**51.7**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**48.2**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**47.3**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**50.8**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**44.8**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**53.8**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**55.2**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**50.8**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**50.1**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**50.9**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**39.2**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**60.0**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**53.2**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**50.2**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**48.2**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**47.7**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**37.0**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**50.6**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**48.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**49.0**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**32.6**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**45.7**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**46.9**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**51.3**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**45.5**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**47.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**51.8**		5.0	1.0	0.67	
67-64-1	Acetone	**44.4**		5.0	5.0	1.3	
71-43-2	Benzene	**49.1**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**50.3**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**47.8**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**49.8**		5.0	1.0	0.32	
75-25-2	Bromoform	**50.1**		5.0	1.0	0.42	
74-83-9	Bromomethane	**41.1**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**50.1**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1230
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 07:02
Sample Name:	FTMM-53-GW-699MW01-10.55	**Units:**	µg/L
Lab Code:	RQ1402375-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4010.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**50.3**		5.0	1.0	0.29	
75-00-3	Chloroethane	**44.7**		5.0	1.0	0.24	
67-66-3	Chloroform	**45.6**		5.0	1.0	0.25	
74-87-3	Chloromethane	**40.5**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**51.1**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**36.6**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**45.3**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**50.2**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**48.1**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**48.9**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**48.3**		5.0	1.0	0.29	
91-20-3	Naphthalene	**54.4**		5.0	1.0	0.20	
100-42-5	Styrene	**35.8**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**52.4**		5.0	1.0	0.30	
108-88-3	Toluene	**48.8**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**53.8**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**45.6**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**44.6**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**46.7**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**45.9**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**94.9**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**45.4**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**46.4**		5.0	1.0	0.20	
95-47-6	o-Xylene	**46.9**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**47.0**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**48.2**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**47.8**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**48.1**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	3/18/14 07:02	
Dibromofluoromethane	101	85-115	3/18/14 07:02	
Toluene-d8	95	85-120	3/18/14 07:02	

Quantitation Report (Not Reviewed)

Sample : R1401764-002MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4010.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:02 am
Operator : K.Ruest
InstName : MSVOA-12 RQ1402375-05

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:18:00 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	910637	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1318556	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1228848	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	645814	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	384223	50.34	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.68%				
48) surr1,1,2-dichloroetha...	4.658	65	415414	47.77	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 95.54%				
65) SURR3,Toluene-d8	7.322	98	1528675	47.66	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.32%				
70) SURR2,BFB	9.785	95	600106	50.15	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	395606	36.58	ppb		97
3) Chloromethane	1.262	50	380006	40.54	ppb		100
4) Vinyl Chloride	1.323	62	387889	44.55	ppb		98
5) Bromomethane	1.512	94	215634	41.10	ppb		100
6) Chloroethane	1.567	64	232129	44.70	ppb		100
7) Freon 21	1.664	67	671339	51.12	ppb		100
8) Trichlorofluoromethane	1.719	101	609606	45.60	ppb		99
9) Diethyl Ether	1.878	59	304409	46.25	ppb		93
10) Freon 123a	1.866	67	494255	50.37	ppb		86
11) Freon 123	1.902	83	578334	51.60	ppb		96
12) Acrolein	1.951	56	36886	161.84	ppb		98
13) 1,1-Diclethene	2.036	96	355734	53.83	ppb		91
14) Freon 113	2.036	101	342032	47.29	ppb		88
15) Acetone	2.042	43	80260	44.42	ppb		94
16) 2-Propanol	2.109	45	304981	1040.17	ppb		98
17) Iodomethane	2.146	142	430359	49.03	ppb		95
18) Carbon Disulfide	2.207	76	673178	29.29	ppb		98
19) Acetonitrile	2.219	40	62687	212.18	ppb		99
20) Allyl Chloride	2.274	76	171355	37.82	ppb	#	89
21) Methyl Acetate	2.274	43	141438	34.76	ppb		97
22) Methylene Chloride	2.353	84	392044	45.28	ppb		99
23) TBA	2.402	59	525079	1039.78	ppb		99
24) Acrylonitrile	2.524	53	472773	233.56	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	1015509	48.34	ppb		99
26) trans-1,2-Dichloroethene	2.579	96	396042	47.83	ppb		97
28) 1,1-Diclethane	2.939	63	690016	44.78	ppb		99
29) Vinyl Acetate	2.975	86	42623	31.06	ppb	#	47
31) 2-Chloro-1,3-Butadiene	3.042	53	512796	38.63	ppb		96
33) 2,2-Dichloropropane	3.554	77	398631	32.60	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	431809	46.74	ppb		89
35) 2-Butanone	3.548	43	115541	45.65	ppb		99
36) Propionitrile	3.591	54	181223	247.95	ppb		95
37) Bromochloromethane	3.829	130	246535	47.79	ppb	#	83
38) Methacrylonitrile	3.798	67	111760	47.40	ppb		88
39) Tetrahydrofuran	3.902	42	78848	44.56	ppb		83

KK 3/16/14

Quantitation Report (Not Reviewed)

Sample : R1401764-002MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4010.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:02 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:18:00 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) Chloroform	3.938	83	688420	45.59	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	623996	48.17	ppb		90
44) Cyclohexane	4.310	41	318924	44.71	ppb		96
46) Carbontetrachloride	4.469	121	158507	50.14	ppb		100
47) 1,1-Dichloropropene	4.463	75	537600	55.20	ppb		92
49) Benzene	4.780	78	1593750	49.10	ppb		99
50) 1,2-Dichloroethane	4.786	62	475031	48.20	ppb		96
51) Iso-Butyl Alcohol	4.639	43	218890	981.31	ppb		99
52) n-Heptane	5.328	43	281538	34.71	ppb		97
~~53) 1-Butanol~~	~~5.792~~	~~56~~	~~1339~~	~~10.93~~	~~ppb~~		~~91~~
54) Trichloroethene	5.828	130	422917	53.79	ppb		95
55) Methylcyclohexane	6.103	55	375294	44.39	ppb		88
56) 1,2-Diclpropane	6.109	63	396026	47.71	ppb		97
57) Dibromomethane 6.255	~~6.310~~	93	~~2108~~	~~0.53~~	ppb		88
58) 1,4-Dioxane	6.310	88	~~47890~~	~~880.91~~	ppb		93
59) Methyl Methacrylate	6.328	69	192864	49.37	ppb		92
60) Bromodichloromethane	6.474	83	482959	49.81	ppb		97
61) 2-Nitropropane	6.743	41	109351	104.87	ppb		86
63) cis-1,3-Dichloropropene	7.023	75	527448	45.85	ppb		98
64) 4-Methyl-2-pentanone	7.212	43	259324	51.79	ppb		94
66) Toluene	7.389	91	1634254	48.83	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	446234	48.12	ppb		97
68) Ethyl Methacrylate	7.767	69	400847	53.13	ppb		95
69) 1,1,2-Trichloroethane	7.803	97	297586	50.82	ppb		96
72) Tetrachloroethene	7.962	164	332748	52.42	ppb		98
73) 2-Hexanone	8.084	43	178569	51.30	ppb		98
74) 1,3-Dichloropropane	7.968	76	535917	48.44	ppb		99
75) Dibromochloromethane	8.188	129	324800	51.06	ppb		100
76) N-Butyl Acetate	8.236	43	334658	38.89	ppb		94
77) 1,2-Dibromoethane	8.285	107	302484	53.23	ppb		97
78) Chlorobenzene	8.767	112	1076459	50.34	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.846	131	388819	51.74	ppb		95
82) Ethylbenzene	8.889	106	571401	50.15	ppb		94
83) (m+p)Xylene	8.998	106	1270410	94.89	ppb		94
84) o-Xylene	9.346	106	641199	46.93	ppb		96
85) Styrene	9.352	104	781414	35.77	ppb		98
87) Bromoform	9.492	173	183761	50.10	ppb		100
89) Isopropylbenzene	9.669	105	1631824	48.94	ppb		98
90) Cyclohexanone	9.718	55	161468	311.70	ppb		94
91) trans-1,4-Dichloro-2-B...	9.962	53	49107	28.25	ppb		81
92) 1,1,2,2-Tetrachloroethane	9.913	83	350079	47.33	ppb		98
93) Bromobenzene	9.907	156	478242	50.34	ppb	#	90
94) 1,2,3-Trichloropropane	9.943	110	110924	50.12	ppb		91
95) n-Propylbenzene	10.023	91	1808900	46.38	ppb		97
96) 2-Chlorotoluene	10.084	91	1149645	46.93	ppb		97
~~97) 3-Chlorotoluene~~	~~10.169~~	~~91~~	~~1316241~~	~~51.66~~	~~ppb~~		~~96~~
98) 4-Chlorotoluene	10.169	91	1315302	45.54	ppb		97
99) 1,3,5-Trimethylbenzene	10.169	105	1007124	37.03	ppb		97
100) tert-Butylbenzene	10.437	119	1104330	48.24	ppb		96
101) 1,2,4-Trimethylbenzene	10.474	105	1097225	39.21	ppb		99
103) sec-Butylbenzene	10.620	105	1496070	46.96	ppb		97
104) p-Isopropyltoluene	10.742	119	1281559	47.56	ppb		96

Quantitation Report (Not Reviewed)

Sample : R1401764-002MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4010.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:02 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:18:00 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

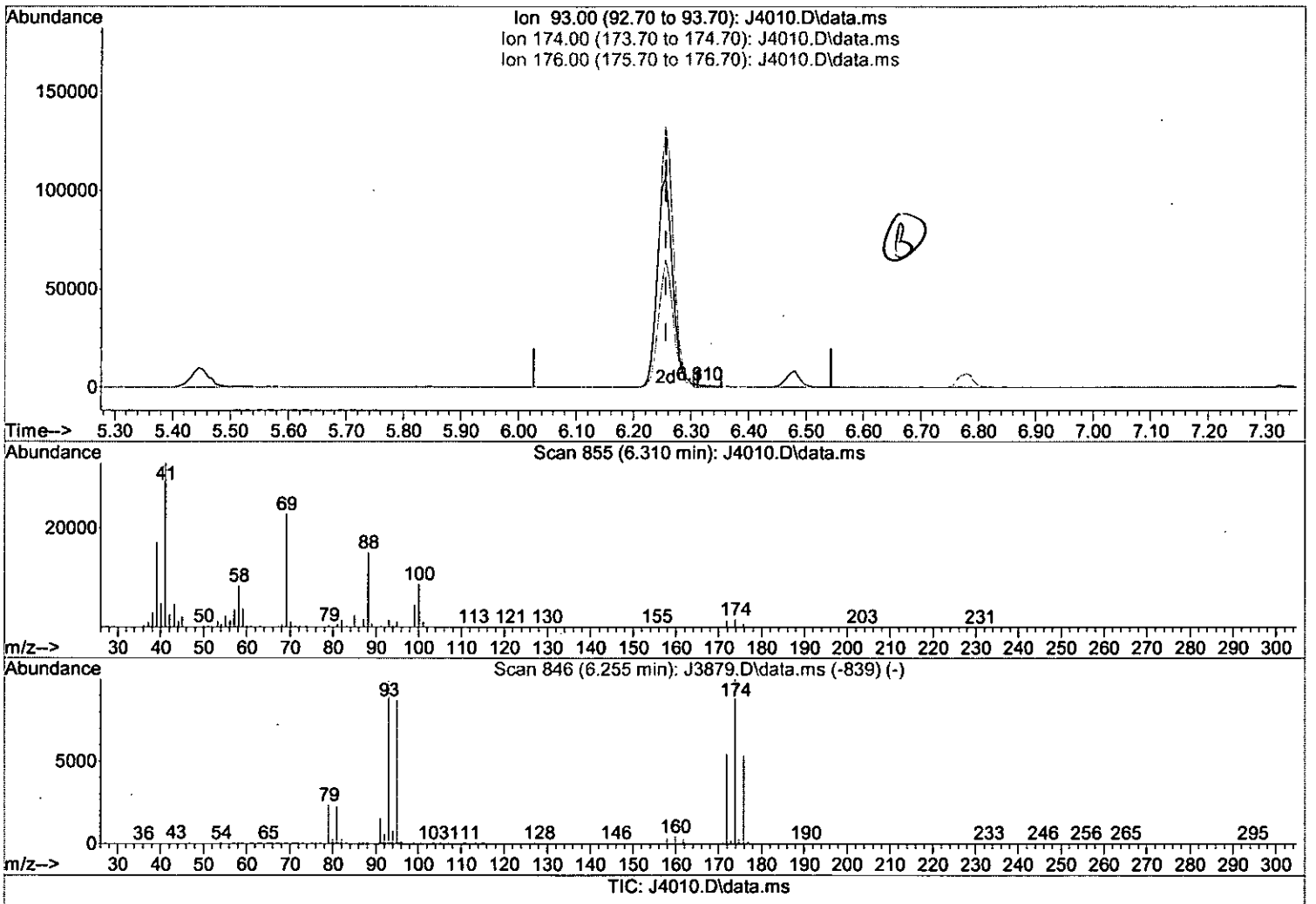
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	10.693	146	818816	50.64	ppb	99
106) 1,4-Dclbenz	10.766	146	842308	48.95	ppb	97
109) n-Butylbenzene	11.065	91	1102024	45.36	ppb	98
110) 1,2-Dclbenz	11.065	146	781708	50.20	ppb	97
111) 1,2-Dibromo-3-chloropr...	11.626	157	68037	60.04	ppb	94
115) 1,2,4-Tcbenzene	12.156	180	484761	50.91	ppb	98
116) Hexachlorobt	12.266	225	199846	48.09	ppb	98
117) Naphthalen	12.303	128	932758	54.41	ppb	98
118) 1,2,3-Tclbenzene	12.437	180	396125	50.81	ppb	99

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

Quantitation Report (Qedit)

Sample : R1401764-002MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\031714\J4010.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:02 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:18:00 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



(57) Dibromomethane

6.310min (+0.055) 0.53 ppb

response 2108

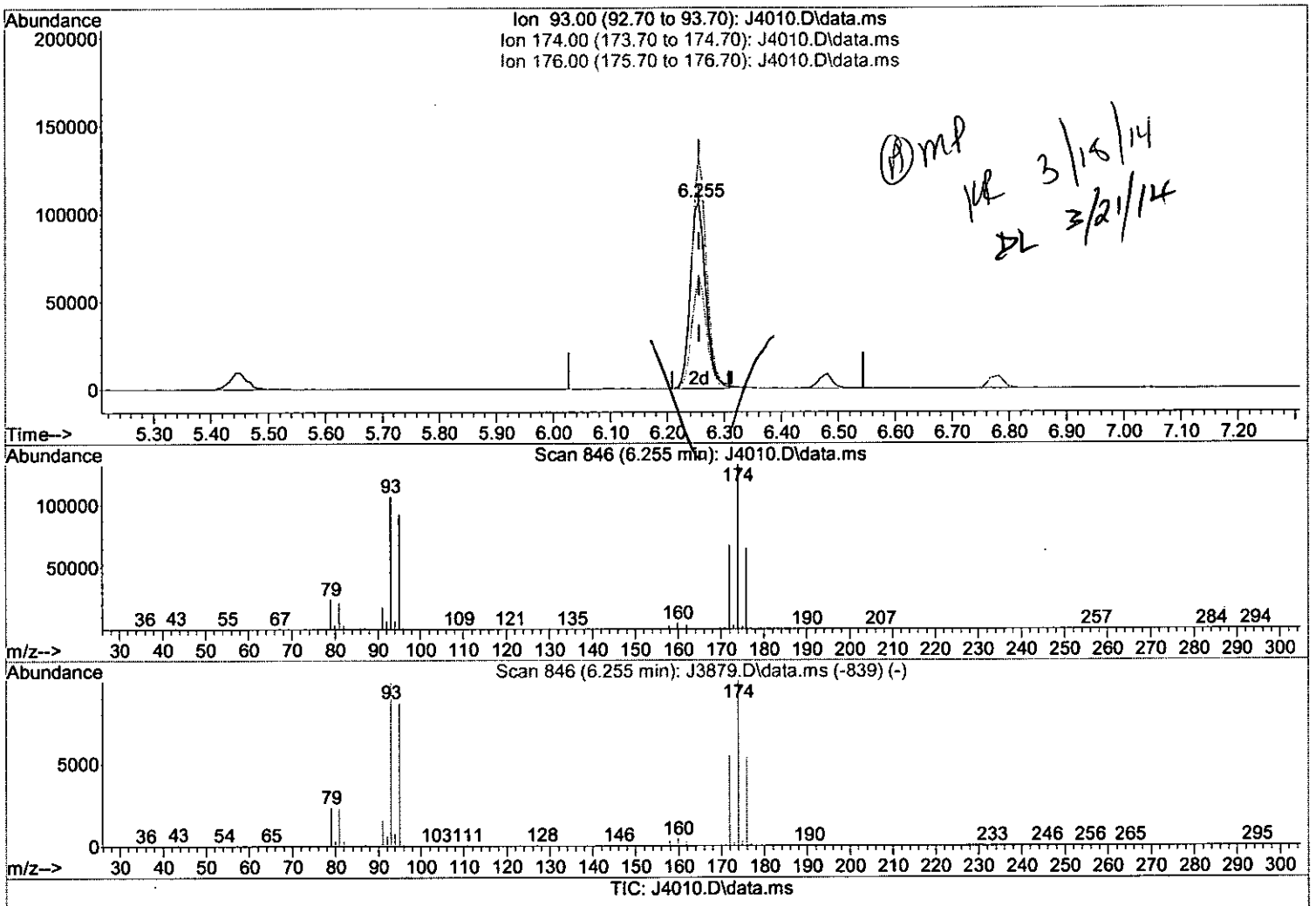
Ion	Exp%	Act%
93.00	100	100
174.00	101.40	113.91
176.00	53.90	44.85
0.00	0.00	0.00

W031214.M Tue Mar 18 16:26:36 2014 004 Page: 1

Quantitation Report (Qedit)

Sample : R1401764-002MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\031714\J4010.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:02 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:18:00 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4010.D\data.ms

(57) Dibromomethane

6.255min (+0.000) 50.82 ppb m

response 200693

Ion	Exp%	Act%
93.00	100	100
174.00	101.40	123.61#
176.00	53.90	60.74
0.00	0.00	0.00

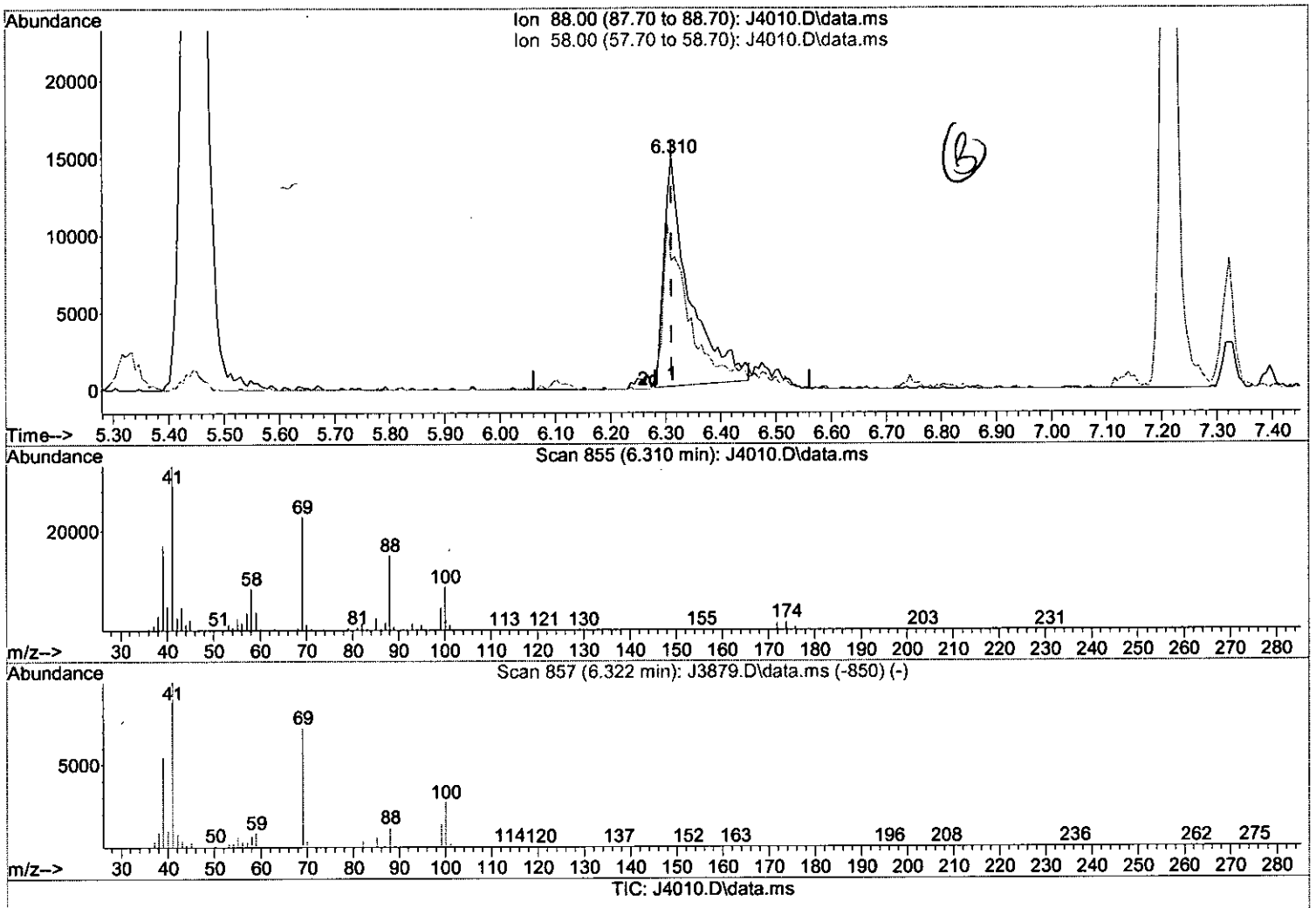
W031214.M Tue Mar 18 16:26:44 2014 Page: 1

00469

Quantitation Report (Qedit)

Sample : R1401764-002MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\031714\J4010.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:02 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:18:00 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4010.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 880.91 ppb

response 47890

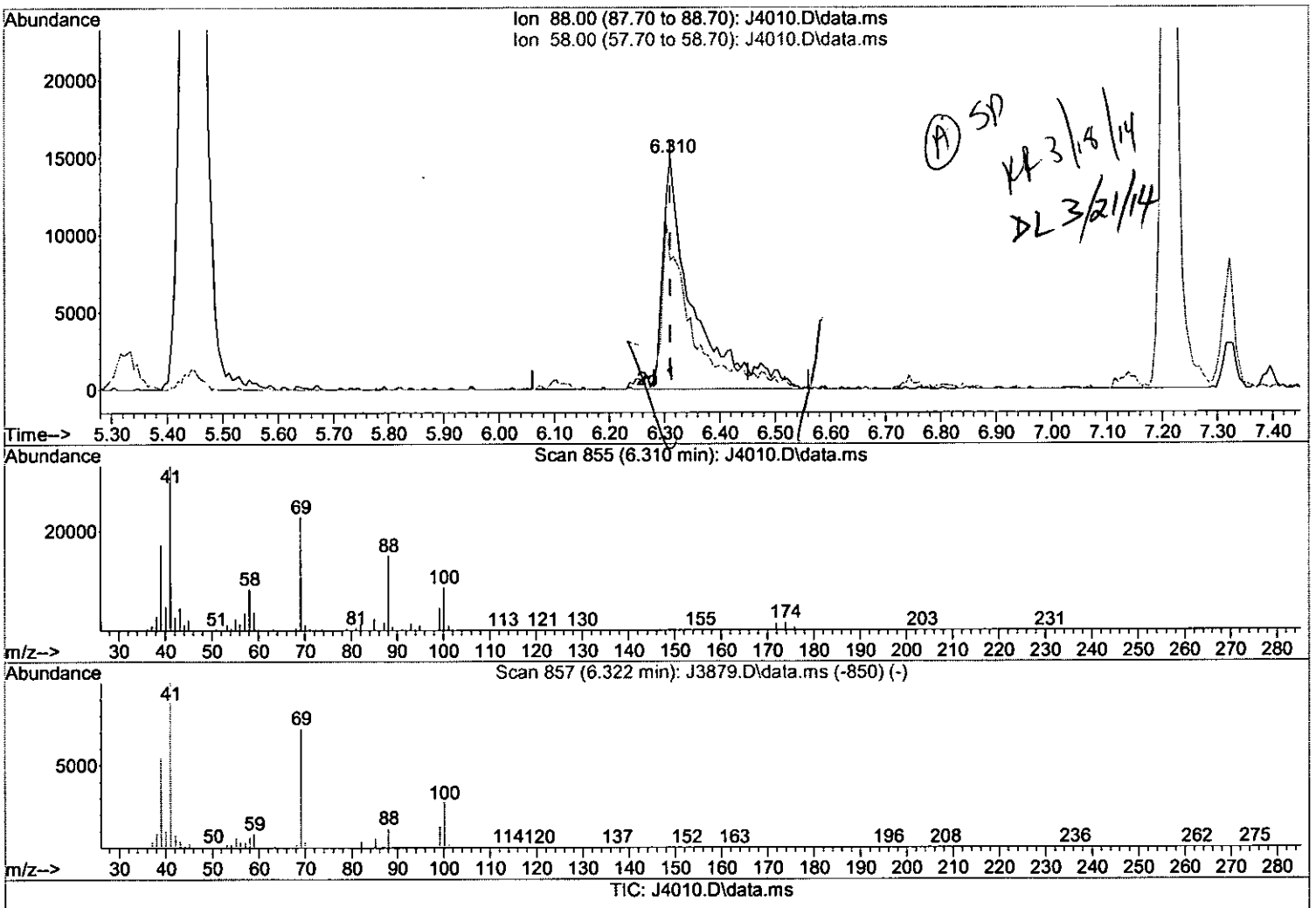
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	55.62
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Mar 18 16:27:11 2014 Page: 1

Quantitation Report (Qedit)

Sample : R1401764-002MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\031714\J4010.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:02 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:18:00 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4010.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 1040.19 ppb m

response 56549

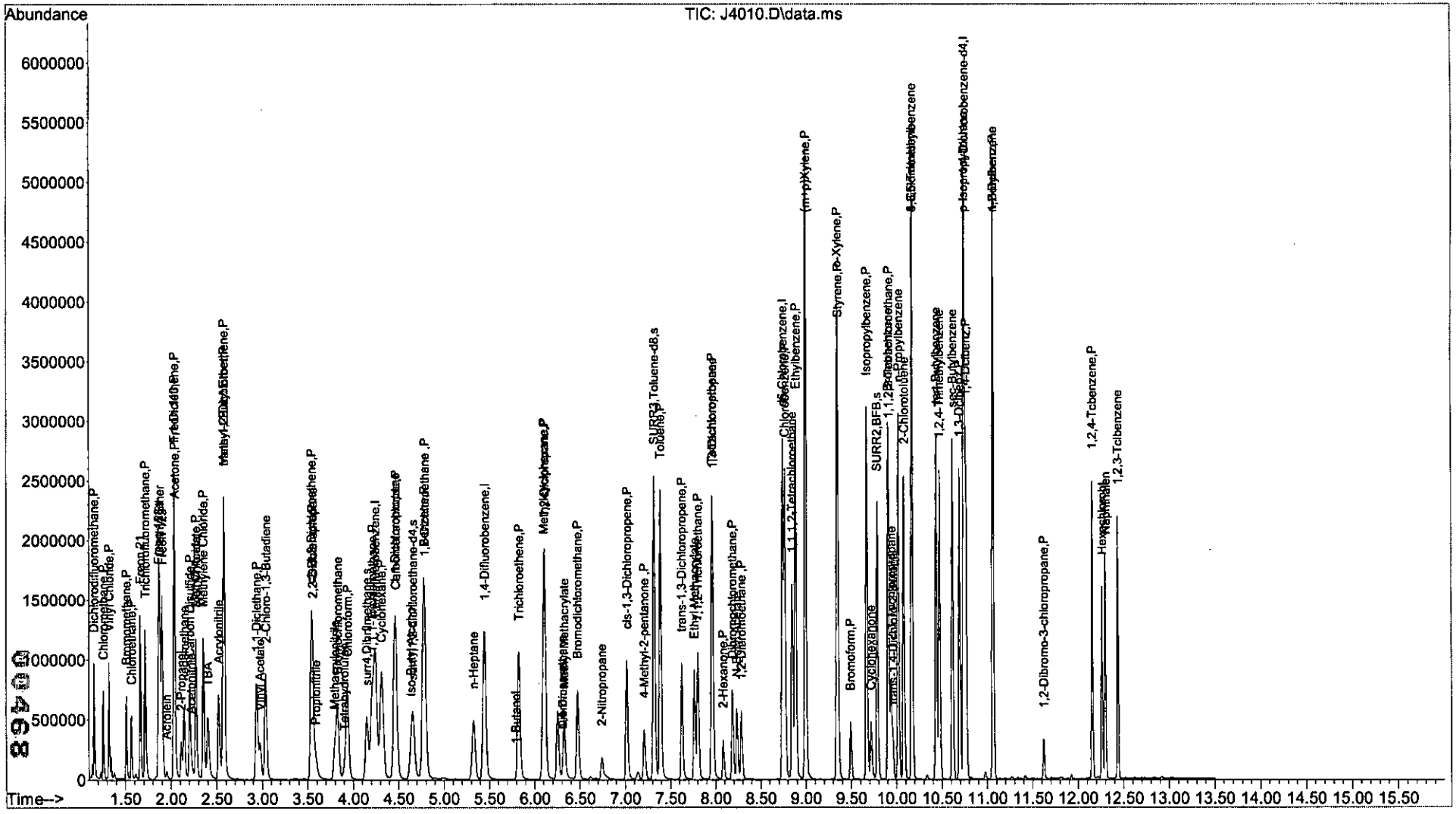
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	55.62
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Mar 18 16:27:18 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1401764-002MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4010.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:02 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:18:00 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Mar 18 07:18:07 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1230
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 07:35
Sample Name:	FTMM-53-GW-699MW01-10.55	**Units:**	µg/L
Lab Code:	RQ1402375-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4011.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**52.2**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**48.7**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**46.7**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**50.1**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**45.7**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**54.3**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**55.9**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**53.9**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**49.1**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**53.3**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**38.6**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**57.8**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**52.7**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**51.1**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**47.7**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**48.4**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**36.0**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**51.6**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**47.7**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**50.2**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**33.4**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**44.4**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**48.0**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**48.7**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**46.1**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**48.8**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**50.4**		5.0	1.0	0.67	
67-64-1	Acetone	**43.0**		5.0	5.0	1.3	
71-43-2	Benzene	**49.8**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**51.3**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**48.0**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**51.1**		5.0	1.0	0.32	
75-25-2	Bromoform	**50.5**		5.0	1.0	0.42	
74-83-9	Bromomethane	**43.9**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**51.5**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1401764
Project:	FTMM 1Q2014/748810-03000	**Date Collected:**	3/12/14 1230
Sample Matrix:	Water	**Date Received:**	3/13/14
		Date Analyzed:	3/18/14 07:35
Sample Name:	FTMM-53-GW-699MW01-10.55	**Units:**	µg/L
Lab Code:	RQ1402375-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	383996
Data File Name:	I:\ACQUDATA\msvoa12\Data\031714\J4011.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**51.1**		5.0	1.0	0.29	
75-00-3	Chloroethane	**45.4**		5.0	1.0	0.24	
67-66-3	Chloroform	**46.6**		5.0	1.0	0.25	
74-87-3	Chloromethane	**40.4**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**52.2**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**37.0**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**45.5**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**50.4**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**51.6**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**49.9**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**47.6**		5.0	1.0	0.29	
91-20-3	Naphthalene	**55.8**		5.0	1.0	0.20	
100-42-5	Styrene	**34.2**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**53.5**		5.0	1.0	0.30	
108-88-3	Toluene	**49.2**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**54.5**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**46.5**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**44.9**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**47.1**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**46.7**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**94.7**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**47.0**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**47.2**		5.0	1.0	0.20	
95-47-6	o-Xylene	**46.2**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**48.0**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**49.4**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**48.0**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**48.5**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	3/18/14 07:35	
Dibromofluoromethane	102	85-115	3/18/14 07:35	
Toluene-d8	96	85-120	3/18/14 07:35	

Quantitation Report (Not Reviewed)

Sample : R1401764-002DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4011.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:35 am
Operator : K.Ruest RQ1402375-06
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:50:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	909101	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1311685	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1232241	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	641517	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	386880	50.95	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.90%				
48) surr1,1,2-dichloroetha...	4.658	65	403765	46.68	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 93.36%				
65) SURR3,Toluene-d8	7.322	98	1528739	47.91	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.82%				
70) SURR2,BFB	9.785	95	595431	50.02	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.04%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	399846	37.03	ppb		99
3) Chloromethane	1.262	50	377774	40.37	ppb		99
4) Vinyl Chloride	1.323	62	390552	44.93	ppb		98
5) Bromomethane	1.512	94	229707	43.85	ppb		97
6) Chloroethane	1.567	64	235330	45.39	ppb		99
7) Freon 21	1.664	67	670886	51.17	ppb		99
8) Trichlorofluoromethane	1.719	101	620740	46.52	ppb		97
9) Diethyl Ether	1.878	59	299875	45.64	ppb		93
10) Freon 123a	1.865	67	486307	49.64	ppb		89
11) Freon 123	1.902	83	570694	51.00	ppb		94
12) Acrolein	1.951	56	36347	160.42	ppb		98
13) 1,1-Diclethene	2.036	96	358474	54.34	ppb		91
14) Freon 113	2.036	101	347274	48.10	ppb		87
15) Acetone	2.042	43	77604	43.02	ppb		98
16) 2-Propanol	2.115	45	302307	1032.80	ppb		98
17) Iodomethane	2.146	142	468387	53.45	ppb		94
18) Carbon Disulfide	2.207	76	688738	30.02	ppb		99
19) Acetonitrile	2.219	40	65169	220.95	ppb		96
20) Allyl Chloride	2.274	76	169480	37.47	ppb	#	90
21) Methyl Acetate	2.274	43	133196	32.79	ppb		97
22) Methylene Chloride	2.359	84	392965	45.47	ppb		96
23) TBA	2.408	59	497400	986.63	ppb		95
24) Acrylonitrile	2.524	53	454772	225.05	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	998504	47.61	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	396686	47.99	ppb		93
28) 1,1-Diclethane	2.938	63	703199	45.71	ppb		98
29) Vinyl Acetate	2.981	86	38303	27.96	ppb	#	49
31) 2-Chloro-1,3-Butadiene	3.042	53	511493	38.60	ppb		99
33) 2,2-Dichloropropane	3.554	77	407708	33.40	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	434415	47.10	ppb		90
35) 2-Butanone	3.548	43	112286	44.44	ppb		97
36) Propionitrile	3.591	54	171113	234.51	ppb		97
37) Bromochloromethane	3.828	130	247142	47.99	ppb	#	87
38) Methacrylonitrile	3.798	67	108999	46.30	ppb		93
39) Tetrahydrofuran	3.908	42	73222	41.45	ppb		82

KP 3/18/14

W031214.M Tue Mar 18 07:50:12 2014 Page: 1

00471

Quantitation Report (Not Reviewed)

Sample : R1401764-002DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4011.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:35 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:50:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) Chloroform	3.938	83	701755	46.55	ppb		98
41) 1,1,1-Trichloroethane	4.213	97	629961	48.72	ppb		89
44) Cyclohexane	4.316	41	315299	44.43	ppb		95
46) Carbontetrachloride	4.469	121	161929	51.49	ppb		96
47) 1,1-Dichloropropene	4.462	75	541870	55.93	ppb		93
49) Benzene	4.779	78	1607497	49.78	ppb		100
50) 1,2-Dichloroethane	4.786	62	467196	47.65	ppb		95
51) Iso-Butyl Alcohol	4.633	43	212828	959.13	ppb		98
52) n-Heptane	5.328	43	288093	35.71	ppb		92
~~53) 1-Butanol~~	~~5.785~~	~~56~~	~~1536~~	~~12.60~~	~~ppb~~		~~76~~
54) Trichloroethene	5.828	130	426173	54.48	ppb		94
55) Methylcyclohexane	6.102	55	378411	45.00	ppb		92
56) 1,2-Diclpropane	6.109	63	399415	48.37	ppb		95
57) Dibromomethane	6.255	93	203014	51.68	ppb		89
58) 1,4-Dioxane	6.304	88	~~414918~~	~~830.57~~	ppb		79
59) Methyl Methacrylate	6.328	69	182887	47.07	ppb		93
60) Bromodichloromethane	6.474	83	492708	51.08	ppb		97
61) 2-Nitropropane	6.743	41	100703	97.08	ppb		93
63) cis-1,3-Dichloropropene	7.023	75	534660	46.72	ppb		97
64) 4-Methyl-2-pentanone	7.212	43	251063	50.40	ppb		95
66) Toluene	7.395	91	1639245	49.23	ppb		98
67) trans-1,3-Dichloropropene	7.627	75	447757	48.54	ppb		97
68) Ethyl Methacrylate	7.767	69	389490	51.90	ppb		94
69) 1,1,2-Trichloroethane	7.809	97	291541	50.05	ppb		96
72) Tetrachloroethene	7.962	164	340658	53.52	ppb		97
73) 2-Hexanone	8.084	43	170015	48.71	ppb		92
74) 1,3-Dichloropropane	7.968	76	529170	47.70	ppb		97
75) Dibromochloromethane	8.187	129	332724	52.16	ppb		98
76) N-Butyl Acetate	8.236	43	315079	36.51	ppb		95
77) 1,2-Dibromoethane	8.285	107	300429	52.72	ppb		97
78) Chlorobenzene	8.767	112	1095341	51.08	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.852	131	393064	52.16	ppb		96
82) Ethylbenzene	8.888	106	575658	50.39	ppb		95
83) (m+p)Xylene	8.998	106	1270746	94.65	ppb		93
84) o-Xylene	9.346	106	632874	46.19	ppb		95
85) Styrene	9.352	104	748559	34.17	ppb		98
87) Bromoform	9.492	173	183931	50.48	ppb		100
89) Isopropylbenzene	9.669	105	1652588	49.89	ppb		97
90) Cyclohexanone	9.718	55	152874	297.09	ppb		96
91) trans-1,4-Dichloro-2-B...	9.961	53	47200	27.33	ppb		80
92) 1,1,2,2-Tetrachloroethane	9.913	83	342807	46.66	ppb		96
93) Bromobenzene	9.907	156	483886	51.27	ppb	#	90
94) 1,2,3-Trichloropropane	9.943	110	107830	49.05	ppb		94
95) n-Propylbenzene	10.022	91	1829819	47.23	ppb		98
96) 2-Chlorotoluene	10.083	91	1166907	47.96	ppb		97
~~97) 3-Chlorotoluene~~	~~10.175~~	~~91~~	~~1327945~~	~~52.47~~	~~ppb~~		~~99~~
98) 4-Chlorotoluene	10.175	91	1321811	46.08	ppb		92
99) 1,3,5-Trimethylbenzene	10.169	105	972546	36.00	ppb		97
100) tert-Butylbenzene	10.437	119	1122632	49.36	ppb		98
101) 1,2,4-Trimethylbenzene	10.480	105	1074114	38.64	ppb		99
103) sec-Butylbenzene	10.620	105	1519776	48.02	ppb		97
104) p-Isopropyltoluene	10.742	119	1305765	48.79	ppb		96

Quantitation Report (Not Reviewed)

Sample : R1401764-002DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4011.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:35 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:50:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

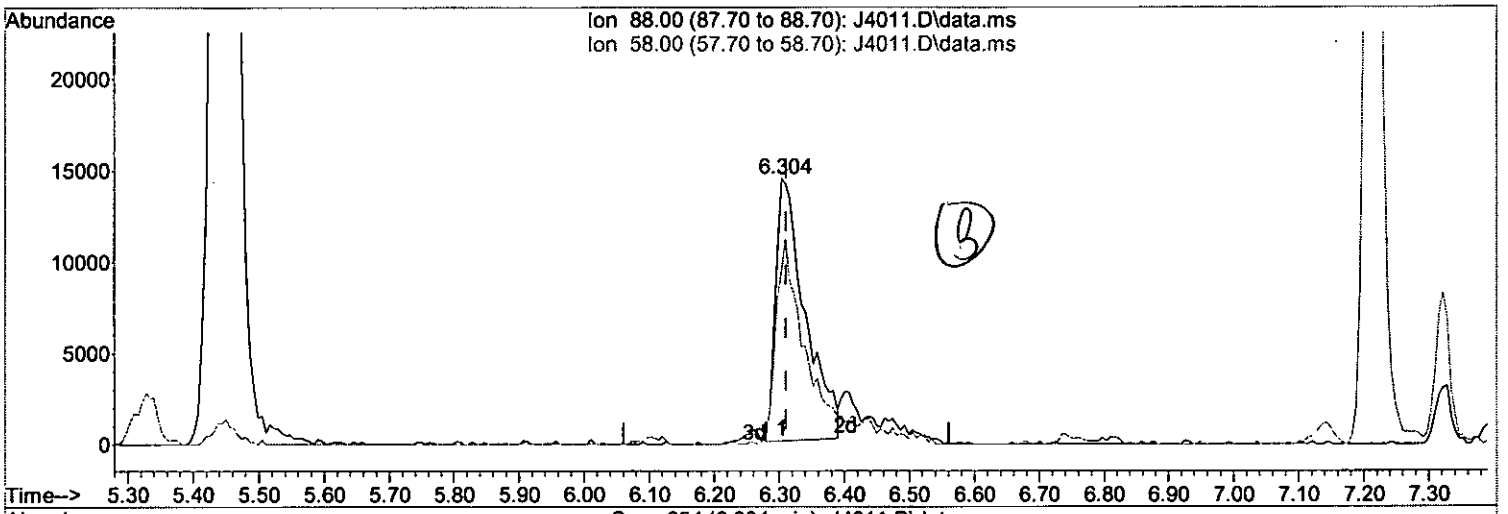
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	10.693	146	828713	51.59	ppb	99
106) 1,4-Dclbenz	10.766	146	857696	50.18	ppb	98
109) n-Butylbenzene	11.065	91	1134610	47.02	ppb	97
110) 1,2-Dclbenz	11.065	146	789602	51.05	ppb	98
111) 1,2-Dibromo-3-chloropr...	11.626	157	65049	57.79	ppb	92
115) 1,2,4-Tcbenzene	12.156	180	504452	53.33	ppb	97
116) Hexachlorobt	12.266	225	213171	51.64	ppb	98
117) Naphthalen	12.302	128	950678	55.82	ppb	98
118) 1,2,3-Tclbenzene	12.437	180	417226	53.87	ppb	98

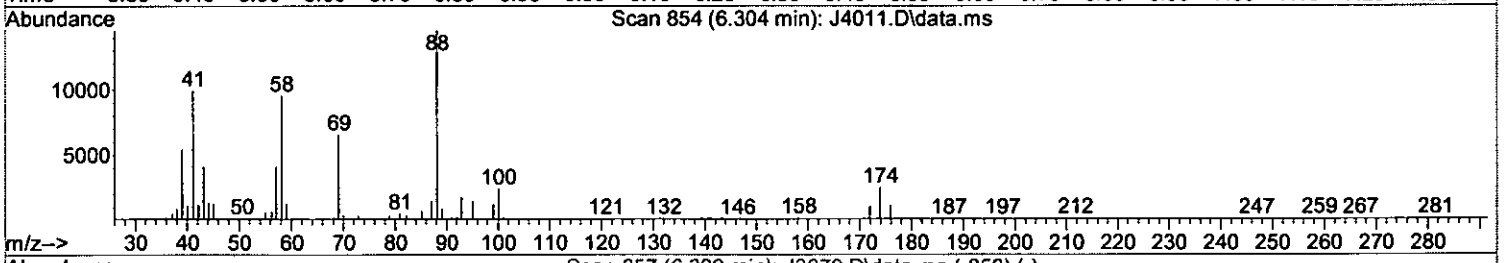
(#) = qualifier out of range (m) = manual integration (+) = signals summed

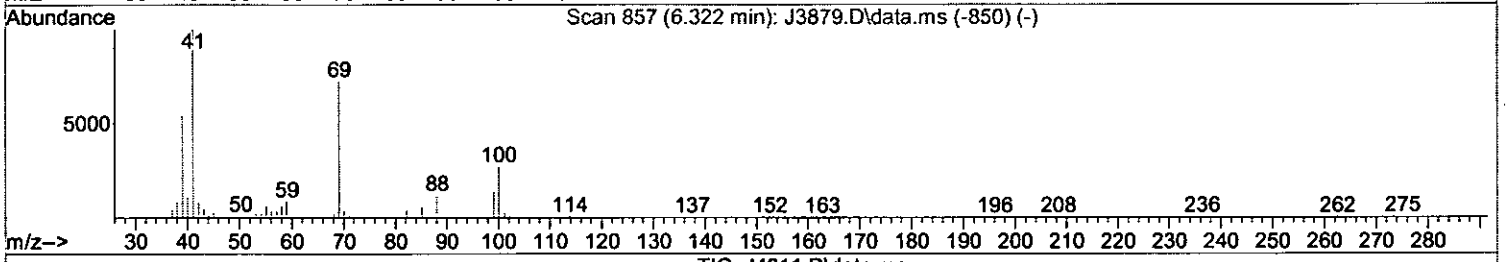
Quantitation Report (Qedit)

Sample : R1401764-002DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\031714\J4011.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:35 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:50:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4011.D\data.ms

(58) 1,4-Dioxane

6.304min (-0.006) 830.57 ppb

response 44918

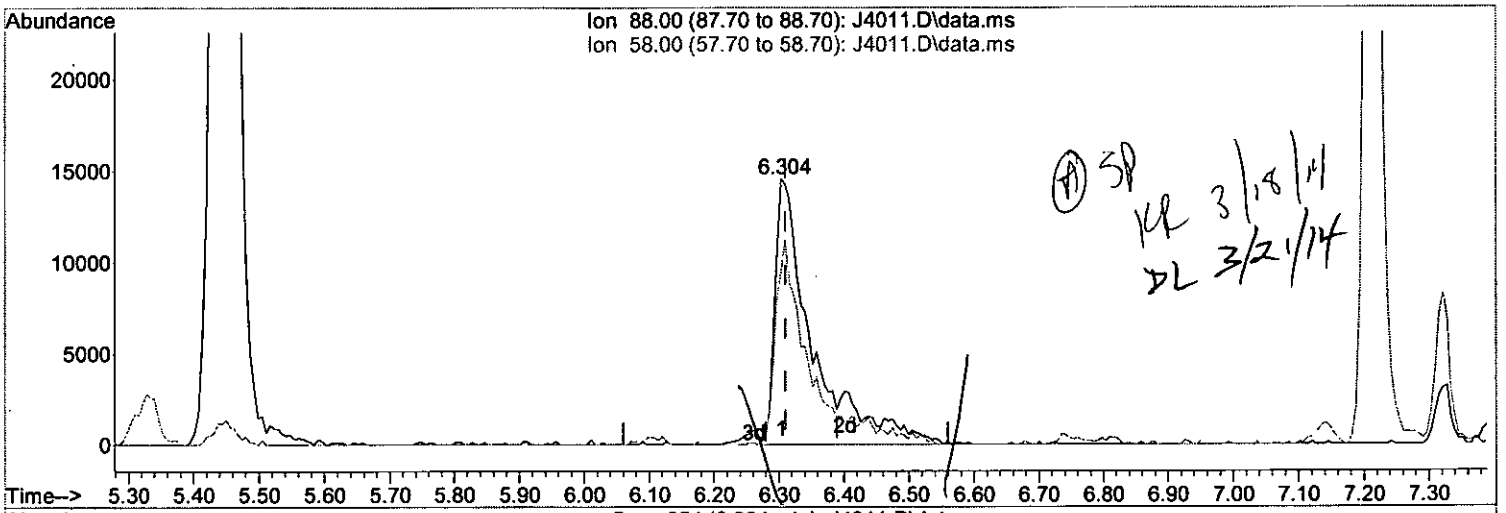
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	65.64
0.00	0.00	0.00
0.00	0.00	0.00

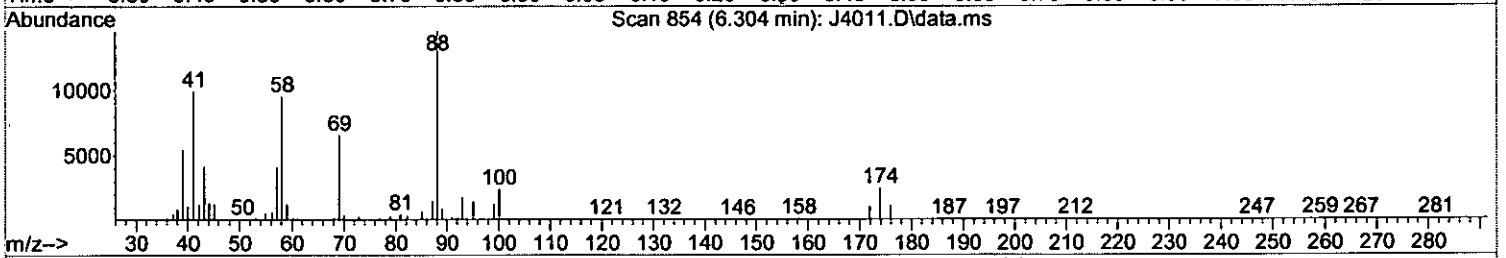
W031214.M Tue Mar 18 16:29:25 2014 Page: 1

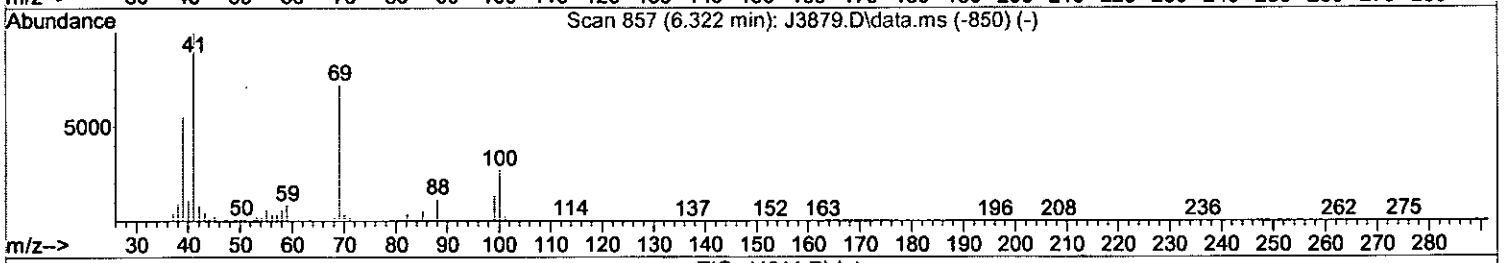
Quantitation Report (Qedit)

Sample : R1401764-002DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\031714\J4011.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:35 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:50:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4011.D\data.ms

(58) 1,4-Dioxane

6.304min (-0.006) 1069.84 ppb m

response 57858

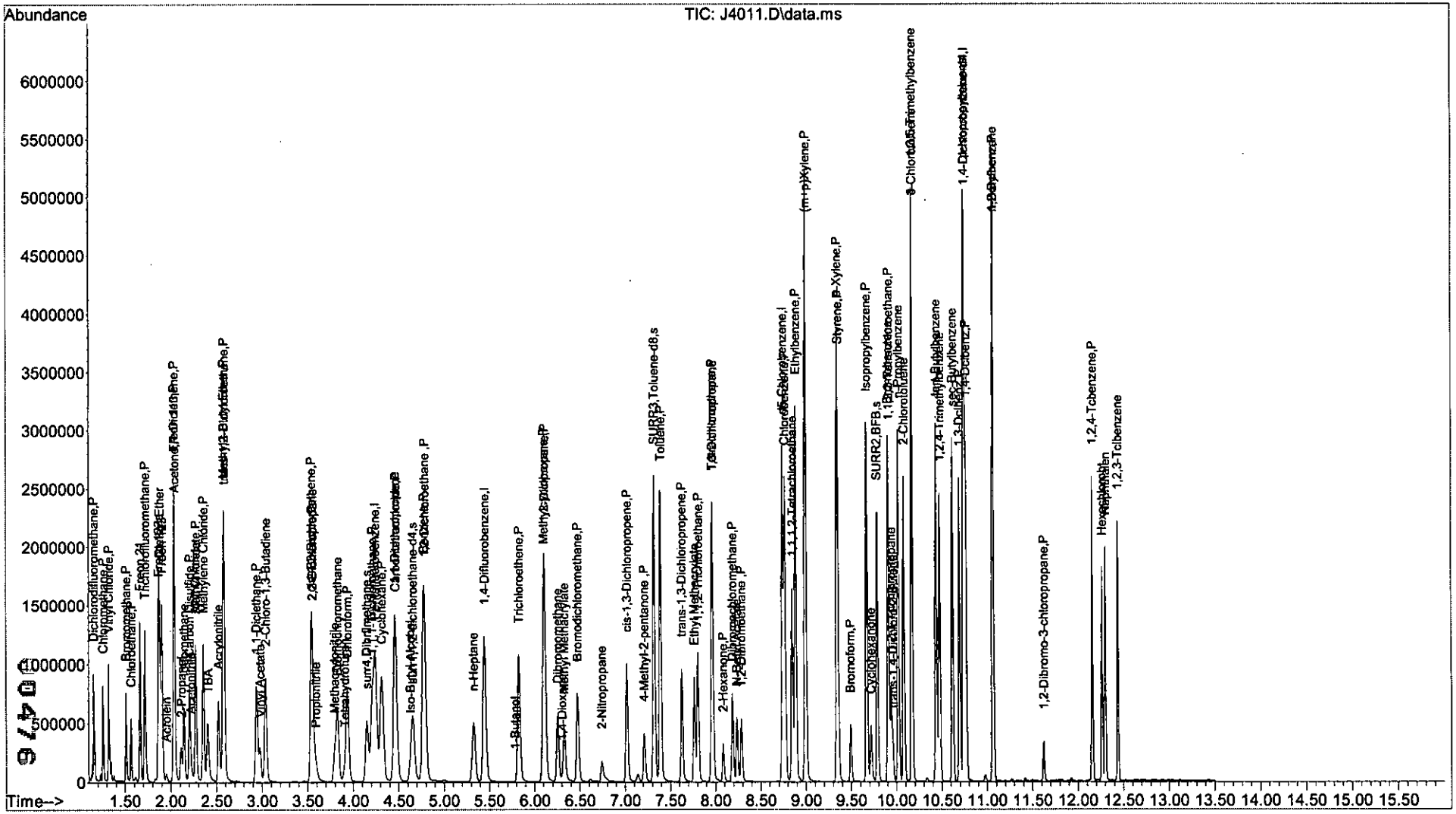
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	65.64
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Mar 18 16:29:31 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1401764-002DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\031714\J4011.D
Misc : PARSONS 9913 T4
Acq On : 18 Mar 2014 7:35 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 18 07:50:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Mar 18 07:50:16 2014 Page: 4

Analysis: 8260 Waters | Analyst: K. Priest | Tune Method: W031214
Date: 3/12/14 | Data Path: j:\acqudata\msvoa1\21 031214 | Run Method: V
Instr. 12 | LIMS Run# : ICAL

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								53872		
(W) 1	TUNE								53873	YT	(auto) 9:41
									53874	YB	
2	1 BLK	5ppm	500ppm FV						53875	Y	8260 water ICAL
1	0.5	5ml	— 50mls						53876	Y	
2	1.0	10ml	—						53877	Y	
3	2.0	20ml	—						53878	Y	
4	5.0	50ml	—						53879	Y	
5	20	—	2ml						53880	Y	
6	50	—	5ml						53881	Y	
7	100	—	10ml						53882	Y	
8	200	—	20ml						53883	—	
9	BLK								53884	—	
10									53885	—	
11									53886	—	
12									53887		
13	1.0 ppb LOD		K1401347-017						53888		
14	5.0 ppb LOQ								53889		
15	10 ppb LOQ										

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary OCL : 67739
Primary HBO : 068188
Primary Frt : 67761 | 10ml → 1.0ml MeOH = 5ppm std
Primary HSL : 068234
TG 68233

Secondary :
Secondary :
Secondary :
Secondary :

Combined IS/Surr 500 : 68182
Surrogate :
Internal Std :

Runlog-MSVOAr1 12/5/12
Page 148

KR 3/12/14

Analysis: 8260 waters | Analyst: L. Quest | Tune Method: W031214
Date: 3/17/14 - Run#2 | Data Path: j:\acqudata\msvoa12\031714 | Run Method: ↓
Instr. 12 | LIMS Run#: 363996

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
27	DUVE (carbon tetra)		R1402375-01						J3994	YT	20:29 (auto)
28	CCV		02						J3995	YC	
29	LCS		03						J3996	YQ	123 TCB↑ DOD
30	MBLK		—						J3997	(N)	rpt 1.0
31	↓		04						J3998	YB	12 DCETCB, HBD, naph = J
32	R1401764-008	1.0		[redacted]	0913	4	1	12	J3999	Y	(fics) (DOD)
33	009	1.0					1	12	J4000	Y	
34	001	1.0					1	12	J4001	(N)	rpt 2.0
35	003	1.0					1	12	J4002	(N)	rpt 1.0
36	004	1.0					1	12	J4003	Y	
37	005	1.0					1	12	J4004	Y	
38	006	1.0					1	12	J4005	Y	
39	010	1.0					1	12	J4006	Y	
40	011	1.0					1	12	J4007	Y	
41	007	5.0	10/50mls				1	12	J4008	Y	
42	002	1.0					1	12	J4009	(N)	rpt 1.0
43	MS 002	1.0	R1402375-05				2	12	J4010	YQ	
44	MSD 002	1.0	06				3	12	J4011	YQ	7:35 ✓
45	BLK								J4012		

EOD
PP 3/18/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary Fr+ : 67761
↓ Primary HSL : 68234 | 5mL → 50mls
Primary TG : 68233 | = CCV
Primary :
Primary :

200 Secondary Fr+ : 67576 - 5mL
500 Secondary TG : 67852 | 2mL
↓ Secondary HSL : 67660
Secondary :
Secondary :

50mls = LCS | -10.6mL | 4.2mL
4.2mL vial = MS/MSD

Combined IS/Surr 500 : 68182
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13
Page 4

00478

Analysis: 8260 Waters | Analyst: KQuest | Tune Method: WO31214
Date: 3/19/14 | Data Path: j:\acqudata\msvoa12\03194\ | Run Method: ↓
Instr. 12 | LIMS Run#: 384408

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								J4053		(mntune)
1	↓								J4054		(mntune)
1	TUNE (carbon is/sh)								J4055	YT	(auto) 10:54
1	CCV								J4056	(Y)	↑short? - mntune - new IS/SH, restart.
1	TUNE (carbon is/sh)		RQ1402508-01						J4057	YT	(auto) (2:06)
1	CCV		02						J4058	YC	Acetone↑ 2-but↑ hexanone↑
1	LCS		03						J4059	YQ	VC↑(60-130)
1	VBLK		—						J4060	(N)	DD+C/O
2	↓		↓ 04						J4061	YB	Bm=5
1	R1401601-001	1.0		[redacted]	68083	2	2	<2	J4062	Y	
2	004	1.0					2	<2	J4063	Y	
3	005	1.0					2	<2	J4064	Y	
4	006	1.0		↓	↓	↓	2	<2	J4065	Y	
5	R1401761-002	1.0		[redacted]	9913	4	2	<2	J4066	Y	DOD+tics
6	003	1.0					2	<2	J4067	Y	↓
7	↓ 001	2.0	25/50mls	↓	↓	↓	2	<2	J4068	(Y)	DL (weak)
8	R1401615-001	1.0		[redacted]	9443	2	1	<2	J4069	Y	
9	002	1.0					1	<2	J4070	Y	
10	003	1.0					1	<2	J4071	Y	
11	005	1.0					1	<2	J4072	Y	
12	006	1.0					1	<2	J4073	Y	
13	↓ 004	5.0	10/50mls	↓	↓	↓	1	<2	J4074	Y	
14	R1401614-003	200	1/200mls	[redacted]	9443	2	2	<2	J4075	(Y)	DL
15	R1401601-001	1.0	MS RQ1402508-05	[redacted]	68083	2	5	<2	J4076	YQ	
16	↓ 001	1.0	MSD ↓ 06	↓	↓	↓	6	<2	J4077	YQ	23:45 ✓
17	BLK							—	J4078	—	
											EOD
											PR 3/19/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary HBO: 681486
Primary OCC: 677739
Primary Fr+: 677761 5ml → 50mls = CCV
Primary T6: 686233
Primary HSL: 685234

200 Secondary Fr+: 675576-5ml
500 Secondary T6: 684099
Secondary OCC: 677763 2ml
Secondary HBO: 682916
Secondary HSL: 677666

50mls = LCS

- 10.6ml
4.2ml
42ml vial = ms10

500 Combined IS/Surr: 685521
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13
Page 7

April 18, 2014 Service Request No: R1402225

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM-1Q 2014/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on April 1, 2014. For your reference, these analyses have been assigned our service request number **R1402225**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company
www.alsglobal.com
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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1402225
Project:	FTMM 1Q 2014	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	4/01/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 3/31/14 and received in good condition at a cooler temperature of 2.4°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Twenty water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-53-GW-699MW06-10.20 as requested. All MS/MSD recoveries and RPD's were acceptable.

Various compounds for FTMM-68-GW-565MW01D-22.31 have been flagged with an "E" as being outside the calibration range of the instrument. The sample was repeated at a dilution and both sets of data have been reported out.

The Method Blanks associated with these samples were free of contamination except the 04/08/14 blank (Run # 387044) had a low level detection for Bromomethane and the 04/08/14 (Run #387236) and 04/10/14 blanks had low level detections for 1,2,4-Trichlorobenzene, Hexachlorobutadiene, Bromomethane and Naphthalene and the 03/19/14 blank also contained Bromomethane. No data was affected.

Service Request R1402225
Page 2

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1402225	Diskette Requested: No	Date Due: 4/22/14
Client: Parsons Engineering Science	Date: 4/3/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM-1Q 2014	Chain of Custody: Present/Absent:	SDG #: FTMM-53-DI-03312014

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1402225-001	FTMM-DI-03312014	Water	8260C	3/31/14	4/1/14			
R1402225-002	FTMM-53-EB-03312014	Water	8260C	3/31/14	4/1/14			
R1402225-003	FTMM-TB-03312014	Water	8260C	3/31/14	4/1/14			
R1402225-004	FTMM-53-GW-699MW09-7.70	Water	8260C	3/31/14	4/1/14			
R1402225-005	FTMM-53-GW-699MW16-11.5	Water	8260C	3/31/14	4/1/14			
R1402225-006	FTMM-53-GW-699RW05-4.8	Water	8260C	3/31/14	4/1/14			
R1402225-007QC	FTMM-53-GW-699MW06-10.20	Water	8260C	3/31/14	4/1/14			
R1402225-008	FTMM-53-GW-699MW16-6.5	Water	8260C	3/31/14	4/1/14			
R1402225-009	FTMM-53-GW-699MW04-6.85	Water	8260C	3/31/14	4/1/14			
R1402225-010	FTMM-68-GW-565MW01D-22.31	Water	8260C	3/31/14	4/1/14			
R1402225-011	FTMM-53-GW-699MW01-12.5	Water	8260C	3/31/14	4/1/14			
R1402225-012	FTMM-53-GW-699RW03-14.59	Water	8260C	3/31/14	4/1/14			
R1402225-013	FTMM-53-GW-699MW01-7.5	Water	8260C	3/31/14	4/1/14			
R1402225-014	FTMM-53-GW-699MW04-13.85	Water	8260C	3/31/14	4/1/14			
R1402225-015	FTMM-53-GW-699RW05-9.80	Water	8260C	3/31/14	4/1/14			
R1402225-016	FTMM-68-GW-565MW01-11.99	Water	8260C	3/31/14	4/1/14			
R1402225-017	FTMM-68-GW-565MW101D-22.31	Water	8260C	3/31/14	4/1/14			
R1402225-018	FTMM-53-GW-699RW11-8.03	Water	8260C	3/31/14	4/1/14			
R1402225-019	FTMM-53-GW-699RW11-14.08	Water	8260C	3/31/14	4/1/14			
R1402225-020	FTMM-53-GW-699RW03-8.20	Water	8260C	3/31/14	4/1/14			

Folder Comments:

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

14632

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE _____ OF _____

Project Name: FTMM- 1Q 2014	Project Number: 748810-63000
Project Manager: Chris Greene	Report CC:
Company/Address: 100 High Street, Boston, MA 02110	
Phone #: 617 449 1573	Email: Chris.Greene@parsons.com
Sampler's Signature:	Sampler's Printed Name: C. WATSON / M. Bruno

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-DI-03312014		3/31/14	0910	GW	3	X							
FTMM-53-EB-03312014		3/31/14	0900	GW	3								
FTMM-TB-03312014		3/31/14	1201	TB	2								
FTMM-53-GW-699MW09-7.75			1120	GW	3								
FTMM-53-GW-699MW16-11.5			1135	GW	3								
FTMM-53-GW-699MW06-4.8			1150	GW	3								
FTMM-53-GW-699MW06-10.20-MS			1110	GW	2								
FTMM-53-GW-699MW16-6.5			1130	GW	3								
FTMM-53-GW-699MW06-10.20-MSD			1110	GW	2								
FTMM-53-GW-699MW04-6.85			1045	GW	3								
FTMM-68-GW-565MW01D-22.31			1225	GW	3								

Preservative Key
0. NONE
1. HCl
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
~~Metals~~

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
REQUESTED REPORT DATE
AS PER SOW

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
AS PER SOW
Edata ____Yes ____No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: M. Bruno	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 7/31 : 1606	Date/Time: 7/1/14 1005	Date/Time	Date/Time	Date/Time	Date/Time

R1402225 5
Parsons, Inc.
FTMM-1Q 2014

Distribution: White - Lab Copy; Yellow - Return to Originator

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 14633

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE _____ OF _____

Project Name: FTMM-1Q 2014	Project Number: 748310-03000
Project Manager: Chris Greene	Report CC:
Company/Address: 100 High Street, Boston, MA 02210	
Phone #: 617 449 1573	Email: Chris.Greene@Parsons.com
Sampler's Signature:	Sampler's Printed Name: C. Watson, M. Bruno

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ◦ 8260 ◦ 624 ◦ CLP	GC/MS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-53-GW-699MW01-12.6		3/31/14	1040	GW	3	X							
FTMM-53-GW-699RW03-14.59			1025	GW	3								
FTMM-53-GW-699MW01-7.5			1035	GW	3								
FTMM-53-GW-699MW04-13.85			1050	GW	3								
FTMM-53-GW-699RW05-9.80			1155	GW	3								
FTMM-53-GW-699MW06-10.20			1110	GW	3								
FTMM-68-GW-565MW01-11.99			1220	GW	3								
FTMM-68-GW-565MW10D-22.31			1200	GW	2								
FTMM-53-GW-699RW11-8.03			1055	GW	3								
FTMM-53-GW-699RW11-14.08			1100	GW	3								
FTMM-57-GW-699RW03-8.20			1015	GW	3								

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
~~Metals~~

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: NJ

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
REQUESTED REPORT DATE: AS PER SOW

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
AS PER SOW
Edata ____Yes ____No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: M. Bruno	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name
Firm: PARSONS	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 3/31 : 1600	Date/Time: 4/1/14 1005	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R14-2225

Cooler received on 4/1/14 by: AD COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	NO	
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO	
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO	
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	(NO)	N/A
5.	Were **Ice** or **Ice packs** present?	(YES)	NO	
6.	Where did the bottles originate?	(ALS/ROC), CLIENT		
7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore Lab5035set (N/A)
8.	Temperature of cooler(s) upon receipt:	2.4°		
	Is the temperature within 0° - 6° C?:	(Y) N	Y N	Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 4/1/14 1025

Thermometer ID: (IR GUN#3) / IR GUN#4 Reading From: (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location R-002 by AD on 4/1/14 at 1027
5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: DLM 4/1/14

Cooler Breakdown: Date: 4/1/14 Time: 1350 by: DLM

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp
≥12	NaOH				
≤2	HNO_3				
≤2	H_2SO_4				
<4	$NaHSO_4$				
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)	
	$Na_2S_2O_3$	-	-		
	Zn Aceta	-	-		
	HCl	*	*	Client label	

Sample ID	Vol. Added	Lot Added	Final pH

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 14-002-003
Other Comments:

PC Secondary Review: DLM 4/2/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

G:\SMODOCS\Cooler Receipt 6.doc 11/6/12

00008

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 0910
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 15:18
Sample Name:	FTMM-DI-03312014	**Units:**	µg/L
Lab Code:	R1402225-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4573.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 0910
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 15:18
Sample Name:	FTMM-DI-03312014	**Units:**	µg/L
Lab Code:	R1402225-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4573.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**0.30**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**2.8**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.72**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 15:18	
Dibromofluoromethane	102	85-115	4/8/14 15:18	
Toluene-d8	98	85-120	4/8/14 15:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1518

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-DI-03312014	**Units:**	µg/L
Lab Code:	R1402225-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 0900
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 04:26
Sample Name:	FTMM-53-EB-03312014	**Units:**	µg/L
Lab Code:	R1402225-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4553.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.40**	**J**	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 0900
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 04:26
Sample Name:	FTMM-53-EB-03312014	**Units:**	µg/L
Lab Code:	R1402225-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4553.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 04:26	
Dibromofluoromethane	101	85-115	4/8/14 04:26	
Toluene-d8	95	85-120	4/8/14 04:26	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0426

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-EB-03312014	**Units:**	µg/L
Lab Code:	R1402225-002	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1201
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 04:59
Sample Name:	FTMM-TB-03312014	**Units:**	µg/L
Lab Code:	R1402225-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4554.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1201
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 04:59
Sample Name:	FTMM-TB-03312014	**Units:**	µg/L
Lab Code:	R1402225-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4554.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 04:59	
Dibromofluoromethane	100	85-115	4/8/14 04:59	
Toluene-d8	97	85-120	4/8/14 04:59	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/8/14 0459

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-TB-03312014
Lab Code: R1402225-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1120
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 05:31
Sample Name:	FTMM-53-GW-699MW09-7.70	**Units:**	µg/L
Lab Code:	R1402225-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4555.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.34**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1120
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 05:31
Sample Name:	FTMM-53-GW-699MW09-7.70	**Units:**	µg/L
Lab Code:	R1402225-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4555.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	0.25	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75-120	4/8/14 05:31	
Dibromofluoromethane	102	85-115	4/8/14 05:31	
Toluene-d8	97	85-120	4/8/14 05:31	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0531

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW09-7.70	**Units:**	µg/L
Lab Code:	R1402225-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1135
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 06:03
Sample Name:	FTMM-53-GW-699MW16-11.5	**Units:**	µg/L
Lab Code:	R1402225-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4556.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.7**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.34**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1135
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 06:03
Sample Name:	FTMM-53-GW-699MW16-11.5	**Units:**	µg/L
Lab Code:	R1402225-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4556.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**8.0**		5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.47**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 06:03	
Dibromofluoromethane	100	85-115	4/8/14 06:03	
Toluene-d8	98	85-120	4/8/14 06:03	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0603

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW16-11.5	**Units:**	µg/L
Lab Code:	R1402225-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1150
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 20:41
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1402225-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	10	2.0	0.44	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	10	2.0	0.72	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	10	2.0	0.50	
79-00-5	1,1,2-Trichloroethane	ND	U	10	2.0	0.68	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	10	2.0	0.40	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	10	2.0	1.2	
563-58-6	1,1-Dichloropropene	ND	U	10	2.0	0.58	
87-61-6	1,2,3-Trichlorobenzene	ND	U	10	2.0	1.7	
96-18-4	1,2,3-Trichloropropane	ND	U	10	2.0	1.4	
120-82-1	1,2,4-Trichlorobenzene	ND	U	10	2.0	0.46	
95-63-6	1,2,4-Trimethylbenzene	**150**		10	2.0	0.40	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	10	2.0	1.5	
106-93-4	1,2-Dibromoethane	ND	U	10	2.0	0.48	
95-50-1	1,2-Dichlorobenzene	ND	U	10	2.0	0.42	
107-06-2	1,2-Dichloroethane	ND	U	10	2.0	0.72	
78-87-5	1,2-Dichloropropane	ND	U	10	2.0	0.40	
108-67-8	1,3,5-Trimethylbenzene	**30**		10	2.0	0.40	
541-73-1	1,3-Dichlorobenzene	ND	U	10	2.0	0.40	
142-28-9	1,3-Dichloropropane	ND	U	10	2.0	0.54	
106-46-7	1,4-Dichlorobenzene	ND	U	10	2.0	0.40	
594-20-7	2,2-Dichloropropane	ND	U	10	2.0	0.54	
78-93-3	2-Butanone (MEK)	ND	U	10	2.0	1.7	
95-49-8	2-Chlorotoluene	ND	U	10	2.0	0.40	
591-78-6	2-Hexanone	ND	U	10	10	3.4	
106-43-4	4-Chlorotoluene	ND	U	10	2.0	0.48	
99-87-6	p-Isopropyltoluene	ND	U	10	2.0	0.40	
108-10-1	4-Methyl-2-pentanone	ND	U	10	2.0	1.4	
67-64-1	Acetone	ND	U	10	10	2.5	
71-43-2	Benzene	**2.8**	J	10	2.0	0.40	
108-86-1	Bromobenzene	ND	U	10	2.0	0.56	
74-97-5	Bromochloromethane	ND	U	10	2.0	0.64	
75-27-4	Bromodichloromethane	ND	U	10	2.0	0.64	
75-25-2	Bromoform	ND	U	10	2.0	0.84	
74-83-9	Bromomethane	ND	U	10	2.0	0.58	
56-23-5	Carbon Tetrachloride	ND	U	10	2.0	0.90	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1150
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 20:41
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1402225-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	10	2.0	0.58	
75-00-3	Chloroethane	ND	U	10	2.0	0.48	
67-66-3	Chloroform	ND	U	10	2.0	0.50	
74-87-3	Chloromethane	ND	U	10	2.0	0.42	
124-48-1	Dibromochloromethane	ND	U	10	2.0	0.62	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	10	2.0	0.92	
75-09-2	Methylene Chloride	ND	U	10	2.0	0.64	
100-41-4	Ethylbenzene	**150**		10	2.0	0.40	
87-68-3	Hexachlorobutadiene	ND	U	10	2.0	1.3	
98-82-8	Isopropylbenzene (Cumene)	**7.4**	J	10	2.0	0.40	
1634-04-4	Methyl tert-Butyl Ether	ND	U	10	2.0	0.58	
91-20-3	Naphthalene	**60**		10	2.0	0.40	
100-42-5	Styrene	ND	U	10	2.0	0.40	
127-18-4	Tetrachloroethene (PCE)	ND	U	10	2.0	0.60	
108-88-3	Toluene	**7.1**	J	10	2.0	0.40	
79-01-6	Trichloroethene (TCE)	ND	U	10	2.0	0.44	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	10	2.0	0.40	
75-01-4	Vinyl Chloride	ND	U	10	2.0	0.64	
156-59-2	cis-1,2-Dichloroethene	ND	U	10	2.0	0.60	
10061-01-5	cis-1,3-Dichloropropene	ND	U	10	2.0	0.48	
179601-23-1	m,p-Xylenes	**430**		20	4.0	0.66	
104-51-8	n-Butylbenzene	ND	U	10	2.0	0.42	
103-65-1	n-Propylbenzene	**8.9**	J	10	2.0	0.40	
95-47-6	o-Xylene	**290**		10	2.0	0.40	
135-98-8	sec-Butylbenzene	ND	U	10	2.0	0.54	
98-06-6	tert-Butylbenzene	ND	U	10	2.0	0.40	
156-60-5	trans-1,2-Dichloroethene	ND	U	10	2.0	0.66	
10061-02-6	trans-1,3-Dichloropropene	ND	U	10	2.0	0.40	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 20:41	
Dibromofluoromethane	101	85-115	4/8/14 20:41	
Toluene-d8	98	85-120	4/8/14 20:41	

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Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/8/14 2041

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-4.8
Lab Code: R1402225-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	1.62	**35.5**	J
000109-66-0	Pentane	1.77	**15.0**	JN
000107-83-5	Pentane, 2-methyl-	2.40	**14.6**	JN
	unknown	2.44	**21.7**	J
000096-37-7	Cyclopentane, methyl-	3.46	**48.7**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.10	**58.8**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.33	**60.0**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**67.2**	JN
000496-11-7	Indane	10.97	**83.5**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.93	**12.8**	JN

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1110
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 14:45
Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	R1402225-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4572.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.26**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.2**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.43**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1110
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 14:45
Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	R1402225-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4572.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/8/14 14:45	
Dibromofluoromethane	102	85-115	4/8/14 14:45	
Toluene-d8	97	85-120	4/8/14 14:45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1445

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	R1402225-007	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1130
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 06:35
Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1402225-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4557.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.4**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1130
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 06:35
Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1402225-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4557.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**7.7**		5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.34**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	75-120	4/8/14 06:35	
Dibromofluoromethane	100	85-115	4/8/14 06:35	
Toluene-d8	97	85-120	4/8/14 06:35	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0635

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1402225-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1045
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 07:08
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1402225-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4558.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**2.3**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**0.99**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.23**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.47**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1045
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 07:08
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1402225-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4558.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**1.1**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.52**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**3.4**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**2.5**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 07:08	
Dibromofluoromethane	99	85-115	4/8/14 07:08	
Toluene-d8	97	85-120	4/8/14 07:08	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0708

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1402225-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1225
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 07:40
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4559.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**0.67**	J	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.33**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1225
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 07:40
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4559.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1700**	E	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**110**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**6.1**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**140**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**1.4**	J	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 07:40	
Dibromofluoromethane	101	85-115	4/8/14 07:40	
Toluene-d8	98	85-120	4/8/14 07:40	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0740

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1225
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 21:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	50	10	2.2	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	50	10	3.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	50	10	2.5	
79-00-5	1,1,2-Trichloroethane	ND	U	50	10	3.5	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	50	10	2.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	50	10	5.7	
563-58-6	1,1-Dichloropropene	ND	U	50	10	2.9	
87-61-6	1,2,3-Trichlorobenzene	ND	U	50	10	8.2	
96-18-4	1,2,3-Trichloropropane	ND	U	50	10	7.0	
120-82-1	1,2,4-Trichlorobenzene	ND	U	50	10	2.4	
95-63-6	1,2,4-Trimethylbenzene	**3.1**	DJ	50	10	2.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	50	10	7.4	
106-93-4	1,2-Dibromoethane	ND	U	50	10	2.4	
95-50-1	1,2-Dichlorobenzene	ND	U	50	10	2.1	
107-06-2	1,2-Dichloroethane	ND	U	50	10	3.6	
78-87-5	1,2-Dichloropropane	ND	U	50	10	2.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	50	10	2.0	
541-73-1	1,3-Dichlorobenzene	ND	U	50	10	2.0	
142-28-9	1,3-Dichloropropane	ND	U	50	10	2.7	
106-46-7	1,4-Dichlorobenzene	ND	U	50	10	2.0	
594-20-7	2,2-Dichloropropane	ND	U	50	10	2.7	
78-93-3	2-Butanone (MEK)	ND	U	50	10	8.2	
95-49-8	2-Chlorotoluene	ND	U	50	10	2.0	
591-78-6	2-Hexanone	ND	U	50	50	17	
106-43-4	4-Chlorotoluene	ND	U	50	10	2.4	
99-87-6	p-Isopropyltoluene	ND	U	50	10	2.0	
108-10-1	4-Methyl-2-pentanone	ND	U	50	10	6.7	
67-64-1	Acetone	ND	U	50	50	13	
71-43-2	Benzene	ND	U	50	10	2.0	
108-86-1	Bromobenzene	ND	U	50	10	2.9	
74-97-5	Bromochloromethane	ND	U	50	10	3.2	
75-27-4	Bromodichloromethane	ND	U	50	10	3.2	
75-25-2	Bromoform	ND	U	50	10	4.2	
74-83-9	Bromomethane	ND	U	50	10	2.9	
56-23-5	Carbon Tetrachloride	ND	U	50	10	4.5	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1225
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 21:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	50	10	2.9	
75-00-3	Chloroethane	ND	U	50	10	2.4	
67-66-3	Chloroform	ND	U	50	10	2.5	
74-87-3	Chloromethane	ND	U	50	10	2.1	
124-48-1	Dibromochloromethane	ND	U	50	10	3.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	50	10	4.7	
75-09-2	Methylene Chloride	ND	U	50	10	3.2	
100-41-4	Ethylbenzene	ND	U	50	10	2.0	
87-68-3	Hexachlorobutadiene	ND	U	50	10	6.2	
98-82-8	Isopropylbenzene (Cumene)	ND	U	50	10	2.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	50	10	2.9	
91-20-3	Naphthalene	**8.6**	DJ	50	10	2.0	
100-42-5	Styrene	ND	U	50	10	2.0	
127-18-4	Tetrachloroethene (PCE)	**1500**	D	50	10	3.0	
108-88-3	Toluene	ND	U	50	10	2.0	
79-01-6	Trichloroethene (TCE)	**97**	D	50	10	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	50	10	2.0	
75-01-4	Vinyl Chloride	**5.5**	DJ	50	10	3.2	
156-59-2	cis-1,2-Dichloroethene	**120**	D	50	10	3.0	
10061-01-5	cis-1,3-Dichloropropene	ND	U	50	10	2.4	
179601-23-1	m,p-Xylenes	ND	U	100	20	3.4	
104-51-8	n-Butylbenzene	ND	U	50	10	2.1	
103-65-1	n-Propylbenzene	ND	U	50	10	2.0	
95-47-6	o-Xylene	ND	U	50	10	2.0	
135-98-8	sec-Butylbenzene	ND	U	50	10	2.7	
98-06-6	tert-Butylbenzene	ND	U	50	10	2.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	50	10	3.4	
10061-02-6	trans-1,3-Dichloropropene	ND	U	50	10	2.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 21:45	
Dibromofluoromethane	101	85-115	4/8/14 21:45	
Toluene-d8	98	85-120	4/8/14 21:45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 2145

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01D-22.31DL	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA
Run Type:	Dilution		
Analytical Method:	8260C		

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1040
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 15:50
Sample Name:	FTMM-53-GW-699MW01-12.5	**Units:**	µg/L
Lab Code:	R1402225-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4574.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.32**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1040
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 15:50
Sample Name:	FTMM-53-GW-699MW01-12.5	**Units:**	µg/L
Lab Code:	R1402225-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4574.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/8/14 15:50	
Dibromofluoromethane	101	85-115	4/8/14 15:50	
Toluene-d8	97	85-120	4/8/14 15:50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1550

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-12.5	**Units:**	µg/L
Lab Code:	R1402225-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1025
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 19:04
Sample Name:	FTMM-53-GW-699RW03-14.59	**Units:**	µg/L
Lab Code:	R1402225-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**120**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**17**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**0.91**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**3.7**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1025
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 19:04
Sample Name:	FTMM-53-GW-699RW03-14.59	**Units:**	µg/L
Lab Code:	R1402225-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**49**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**14**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**19**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**1.4**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**62**		10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**18**		5.0	1.0	0.20	
95-47-6	o-Xylene	**78**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.9**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.26**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	4/8/14 19:04	
Dibromofluoromethane	101	85-115	4/8/14 19:04	
Toluene-d8	97	85-120	4/8/14 19:04	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/8/14 1904

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-14.59
Lab Code: R1402225-012

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.62	**18.6**	JN
000109-66-0	Pentane	1.77	**5.3**	JN
000079-29-8	Butane, 2,3-dimethyl-	2.38	**7.7**	JN
000096-14-0	Pentane, 3-methyl-	2.60	**9.4**	JN
000096-37-7	Cyclopentane, methyl-	3.46	**19.1**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.10	**38.9**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.12	**22.5**	JN
	unknown	10.33	**61.8**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**53.5**	JN
000611-15-4	Benzene, 1-ethenyl-2-methyl-	10.97	**43.9**	JN
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl	11.05	**7.7**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**8.9**	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl	11.28	**5.9**	JN
000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	11.34	**8.3**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**19.4**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**8.0**	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	11.65	**9.2**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.92	**13.9**	JN

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1035
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 16:22
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1402225-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4575.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1035
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 16:22
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1402225-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4575.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/8/14 16:22	
Dibromofluoromethane	99	85-115	4/8/14 16:22	
Toluene-d8	97	85-120	4/8/14 16:22	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1622

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1402225-013	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1050
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 17:27
Sample Name:	FTMM-53-GW-699MW04-13.85	**Units:**	µg/L
Lab Code:	R1402225-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4577.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**1.9**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**0.78**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.23**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.33**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1050
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 17:27
Sample Name:	FTMM-53-GW-699MW04-13.85	**Units:**	µg/L
Lab Code:	R1402225-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4577.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.87**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**1.5**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**3.0**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**2.4**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 17:27	
Dibromofluoromethane	100	85-115	4/8/14 17:27	
Toluene-d8	96	85-120	4/8/14 17:27	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1727

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW04-13.85	**Units:**	µg/L
Lab Code:	R1402225-014	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1155
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 14:51
Sample Name:	FTMM-53-GW-699RW05-9.80	**Units:**	µg/L
Lab Code:	R1402225-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4655.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	ND	U	13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	13	2.5	1.5	
563-58-6	1,1-Dichloropropene	ND	U	13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	ND	U	13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	ND	U	13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	U	13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	**130**		13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	13	2.5	1.9	
106-93-4	1,2-Dibromoethane	ND	U	13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	ND	U	13	2.5	0.53	
107-06-2	1,2-Dichloroethane	ND	U	13	2.5	0.90	
78-87-5	1,2-Dichloropropane	ND	U	13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	**23**		13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	ND	U	13	2.5	0.50	
142-28-9	1,3-Dichloropropane	ND	U	13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	ND	U	13	2.5	0.50	
594-20-7	2,2-Dichloropropane	ND	U	13	2.5	0.68	
78-93-3	2-Butanone (MEK)	ND	U	13	2.5	2.1	
95-49-8	2-Chlorotoluene	ND	U	13	2.5	0.50	
591-78-6	2-Hexanone	ND	U	13	13	4.2	
106-43-4	4-Chlorotoluene	ND	U	13	2.5	0.60	
99-87-6	p-Isopropyltoluene	ND	U	13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	ND	U	13	2.5	1.7	
67-64-1	Acetone	ND	U	13	13	3.1	
71-43-2	Benzene	**3.1**	J	13	2.5	0.50	
108-86-1	Bromobenzene	ND	U	13	2.5	0.71	
74-97-5	Bromochloromethane	ND	U	13	2.5	0.80	
75-27-4	Bromodichloromethane	ND	U	13	2.5	0.80	
75-25-2	Bromoform	ND	U	13	2.5	1.1	
74-83-9	Bromomethane	**0.88**	J	13	2.5	0.73	
56-23-5	Carbon Tetrachloride	ND	U	13	2.5	1.2	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1155
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 14:51
Sample Name:	FTMM-53-GW-699RW05-9.80	**Units:**	µg/L
Lab Code:	R1402225-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4655.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	13	2.5	0.73	
75-00-3	Chloroethane	ND	U	13	2.5	0.60	
67-66-3	Chloroform	ND	U	13	2.5	0.63	
74-87-3	Chloromethane	ND	U	13	2.5	0.53	
124-48-1	Dibromochloromethane	ND	U	13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	13	2.5	1.2	
75-09-2	Methylene Chloride	ND	U	13	2.5	0.80	
100-41-4	Ethylbenzene	**160**		13	2.5	0.50	
87-68-3	Hexachlorobutadiene	ND	U	13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	**8.1**	J	13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	U	13	2.5	0.73	
91-20-3	Naphthalene	**54**		13	2.5	0.50	
100-42-5	Styrene	ND	U	13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	**0.80**	J	13	2.5	0.75	
108-88-3	Toluene	**7.0**	J	13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	ND	U	13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	13	2.5	0.50	
75-01-4	Vinyl Chloride	ND	U	13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	ND	U	13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	ND	U	13	2.5	0.60	
179601-23-1	m,p-Xylenes	**390**		25	5.0	0.83	
104-51-8	n-Butylbenzene	ND	U	13	2.5	0.53	
103-65-1	n-Propylbenzene	**9.7**	J	13	2.5	0.50	
95-47-6	o-Xylene	**270**		13	2.5	0.50	
135-98-8	sec-Butylbenzene	ND	U	13	2.5	0.68	
98-06-6	tert-Butylbenzene	ND	U	13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	ND	U	13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	ND	U	13	2.5	0.50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/10/14 14:51	
Dibromofluoromethane	102	85-115	4/10/14 14:51	
Toluene-d8	93	85-120	4/10/14 14:51	

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Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/10/14 1451

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-9.80
Lab Code: R1402225-015

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.62	**33.5**	JN
000109-66-0	Pentane	1.76	**13.6**	JN
000107-83-5	Pentane, 2-methyl-	2.40	**14.2**	JN
	unknown	2.44	**20.0**	J
000096-37-7	Cyclopentane, methyl-	3.46	**46.8**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.10	**54.9**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.33	**58.4**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**55.1**	JN
000496-11-7	Indane	10.97	**72.9**	JN

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1220
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 15:23
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1402225-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4656.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	ND	U	13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**2.0**	J	13	2.5	1.5	
563-58-6	1,1-Dichloropropene	ND	U	13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	ND	U	13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	ND	U	13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	U	13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	**0.83**	J	13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	13	2.5	1.9	
106-93-4	1,2-Dibromoethane	ND	U	13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	ND	U	13	2.5	0.53	
107-06-2	1,2-Dichloroethane	ND	U	13	2.5	0.90	
78-87-5	1,2-Dichloropropane	ND	U	13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	ND	U	13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	ND	U	13	2.5	0.50	
142-28-9	1,3-Dichloropropane	ND	U	13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	ND	U	13	2.5	0.50	
594-20-7	2,2-Dichloropropane	ND	U	13	2.5	0.68	
78-93-3	2-Butanone (MEK)	ND	U	13	2.5	2.1	
95-49-8	2-Chlorotoluene	ND	U	13	2.5	0.50	
591-78-6	2-Hexanone	ND	U	13	13	4.2	
106-43-4	4-Chlorotoluene	ND	U	13	2.5	0.60	
99-87-6	p-Isopropyltoluene	ND	U	13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	ND	U	13	2.5	1.7	
67-64-1	Acetone	ND	U	13	13	3.1	
71-43-2	Benzene	ND	U	13	2.5	0.50	
108-86-1	Bromobenzene	ND	U	13	2.5	0.71	
74-97-5	Bromochloromethane	ND	U	13	2.5	0.80	
75-27-4	Bromodichloromethane	ND	U	13	2.5	0.80	
75-25-2	Bromoform	ND	U	13	2.5	1.1	
74-83-9	Bromomethane	ND	U	13	2.5	0.73	
56-23-5	Carbon Tetrachloride	ND	U	13	2.5	1.2	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1220
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 15:23
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1402225-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4656.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	13	2.5	0.73	
75-00-3	Chloroethane	ND	U	13	2.5	0.60	
67-66-3	Chloroform	**0.85**	J	13	2.5	0.63	
74-87-3	Chloromethane	ND	U	13	2.5	0.53	
124-48-1	Dibromochloromethane	ND	U	13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	13	2.5	1.2	
75-09-2	Methylene Chloride	ND	U	13	2.5	0.80	
100-41-4	Ethylbenzene	ND	U	13	2.5	0.50	
87-68-3	Hexachlorobutadiene	ND	U	13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	ND	U	13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	U	13	2.5	0.73	
91-20-3	Naphthalene	**4.8**	J	13	2.5	0.50	
100-42-5	Styrene	ND	U	13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	**440**		13	2.5	0.75	
108-88-3	Toluene	ND	U	13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	**230**		13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	13	2.5	0.50	
75-01-4	Vinyl Chloride	**18**		13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	**270**		13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	ND	U	13	2.5	0.60	
179601-23-1	m,p-Xylenes	ND	U	25	5.0	0.83	
104-51-8	n-Butylbenzene	ND	U	13	2.5	0.53	
103-65-1	n-Propylbenzene	ND	U	13	2.5	0.50	
95-47-6	o-Xylene	**0.58**	J	13	2.5	0.50	
135-98-8	sec-Butylbenzene	ND	U	13	2.5	0.68	
98-06-6	tert-Butylbenzene	ND	U	13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	**1.9**	J	13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	ND	U	13	2.5	0.50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/10/14 15:23	
Dibromofluoromethane	100	85-115	4/10/14 15:23	
Toluene-d8	97	85-120	4/10/14 15:23	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/10/14 1523

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1402225-016	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1200
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 14:19
Sample Name:	FTMM-68-GW-565MW101D-22.31	**Units:**	µg/L
Lab Code:	R1402225-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4654.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	50	10	2.2	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	50	10	3.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	50	10	2.5	
79-00-5	1,1,2-Trichloroethane	ND	U	50	10	3.5	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	50	10	2.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	50	10	5.7	
563-58-6	1,1-Dichloropropene	ND	U	50	10	2.9	
87-61-6	1,2,3-Trichlorobenzene	ND	U	50	10	8.2	
96-18-4	1,2,3-Trichloropropane	ND	U	50	10	7.0	
120-82-1	1,2,4-Trichlorobenzene	ND	U	50	10	2.4	
95-63-6	1,2,4-Trimethylbenzene	**4.6**	J	50	10	2.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	50	10	7.4	
106-93-4	1,2-Dibromoethane	ND	U	50	10	2.4	
95-50-1	1,2-Dichlorobenzene	ND	U	50	10	2.1	
107-06-2	1,2-Dichloroethane	ND	U	50	10	3.6	
78-87-5	1,2-Dichloropropane	ND	U	50	10	2.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	50	10	2.0	
541-73-1	1,3-Dichlorobenzene	ND	U	50	10	2.0	
142-28-9	1,3-Dichloropropane	ND	U	50	10	2.7	
106-46-7	1,4-Dichlorobenzene	ND	U	50	10	2.0	
594-20-7	2,2-Dichloropropane	ND	U	50	10	2.7	
78-93-3	2-Butanone (MEK)	ND	U	50	10	8.2	
95-49-8	2-Chlorotoluene	ND	U	50	10	2.0	
591-78-6	2-Hexanone	ND	U	50	50	17	
106-43-4	4-Chlorotoluene	ND	U	50	10	2.4	
99-87-6	p-Isopropyltoluene	ND	U	50	10	2.0	
108-10-1	4-Methyl-2-pentanone	ND	U	50	10	6.7	
67-64-1	Acetone	ND	U	50	50	13	
71-43-2	Benzene	ND	U	50	10	2.0	
108-86-1	Bromobenzene	ND	U	50	10	2.9	
74-97-5	Bromochloromethane	ND	U	50	10	3.2	
75-27-4	Bromodichloromethane	ND	U	50	10	3.2	
75-25-2	Bromoform	ND	U	50	10	4.2	
74-83-9	Bromomethane	ND	U	50	10	2.9	
56-23-5	Carbon Tetrachloride	ND	U	50	10	4.5	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1200
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 14:19
Sample Name:	FTMM-68-GW-565MW101D-22.31	**Units:**	µg/L
Lab Code:	R1402225-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4654.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	50	10	2.9	
75-00-3	Chloroethane	ND	U	50	10	2.4	
67-66-3	Chloroform	**2.7**	J	50	10	2.5	
74-87-3	Chloromethane	ND	U	50	10	2.1	
124-48-1	Dibromochloromethane	ND	U	50	10	3.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	50	10	4.7	
75-09-2	Methylene Chloride	ND	U	50	10	3.2	
100-41-4	Ethylbenzene	ND	U	50	10	2.0	
87-68-3	Hexachlorobutadiene	ND	U	50	10	6.2	
98-82-8	Isopropylbenzene (Cumene)	ND	U	50	10	2.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	50	10	2.9	
91-20-3	Naphthalene	**12**	J	50	10	2.0	
100-42-5	Styrene	ND	U	50	10	2.0	
127-18-4	Tetrachloroethene (PCE)	**1500**		50	10	3.0	
108-88-3	Toluene	ND	U	50	10	2.0	
79-01-6	Trichloroethene (TCE)	**96**		50	10	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	50	10	2.0	
75-01-4	Vinyl Chloride	**5.5**	J	50	10	3.2	
156-59-2	cis-1,2-Dichloroethene	**120**		50	10	3.0	
10061-01-5	cis-1,3-Dichloropropene	ND	U	50	10	2.4	
179601-23-1	m,p-Xylenes	ND	U	100	20	3.4	
104-51-8	n-Butylbenzene	ND	U	50	10	2.1	
103-65-1	n-Propylbenzene	ND	U	50	10	2.0	
95-47-6	o-Xylene	ND	U	50	10	2.0	
135-98-8	sec-Butylbenzene	ND	U	50	10	2.7	
98-06-6	tert-Butylbenzene	ND	U	50	10	2.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	50	10	3.4	
10061-02-6	trans-1,3-Dichloropropene	ND	U	50	10	2.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/10/14 14:19	
Dibromofluoromethane	100	85-115	4/10/14 14:19	
Toluene-d8	98	85-120	4/10/14 14:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/10/14 1419

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW101D-22.31	**Units:**	µg/L
Lab Code:	R1402225-017	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1055
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 17:59
Sample Name:	FTMM-53-GW-699RW11-8.03	**Units:**	µg/L
Lab Code:	R1402225-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4578.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**6.5**		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.29**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1055
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 17:59
Sample Name:	FTMM-53-GW-699RW11-8.03	**Units:**	µg/L
Lab Code:	R1402225-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4578.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.25**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**1.2**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.75**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.36**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.35**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.68**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	4/8/14 17:59	
Dibromofluoromethane	101	85-115	4/8/14 17:59	
Toluene-d8	98	85-120	4/8/14 17:59	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1759

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699RW11-8.03	**Units:**	µg/L
Lab Code:	R1402225-018	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1100
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 18:31
Sample Name:	FTMM-53-GW-699RW11-14.08	**Units:**	µg/L
Lab Code:	R1402225-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\U4579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**6.5**		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.35**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1100
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 18:31
Sample Name:	FTMM-53-GW-699RW11-14.08	**Units:**	µg/L
Lab Code:	R1402225-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.26**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**1.2**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.61**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.30**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.33**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.71**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 18:31	
Dibromofluoromethane	101	85-115	4/8/14 18:31	
Toluene-d8	97	85-120	4/8/14 18:31	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1831

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699RW11-14.08	**Units:**	µg/L
Lab Code:	R1402225-019	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1015
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 13:46
Sample Name:	FTMM-53-GW-699RW03-8.20	**Units:**	µg/L
Lab Code:	R1402225-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4653.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.27**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**110**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**16**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**0.80**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**3.5**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.33**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1015
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 13:46
Sample Name:	FTMM-53-GW-699RW03-8.20	**Units:**	µg/L
Lab Code:	R1402225-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4653.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**46**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**13**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**15**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**1.3**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**59**		10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**16**		5.0	1.0	0.20	
95-47-6	o-Xylene	**76**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.6**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.29**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/10/14 13:46	
Dibromofluoromethane	101	85-115	4/10/14 13:46	
Toluene-d8	96	85-120	4/10/14 13:46	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/10/14 1346

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-8.20
Lab Code: R1402225-020

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.62	**17.4**	JN
	unknown	2.37	**6.8**	J
000096-14-0	Pentane, 3-methyl-	2.60	**7.6**	JN
000110-82-7	Cyclohexane	3.46	**16.7**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.10	**36.1**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.33	**56.6**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**51.3**	JN
000300-57-2	Benzene, 2-propenyl-	10.97	**41.2**	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl	11.05	**6.9**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**8.0**	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl	11.29	**5.1**	JN
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.34	**7.4**	JN
000767-58-8	Indan, 1-methyl-	11.41	**17.2**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**7.3**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.65	**8.5**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.93	**13.0**	JN

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 03:22
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403255-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4551.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.42**	**J**	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 03:22
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403255-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4551.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 03:22	
Dibromofluoromethane	99	85-115	4/8/14 03:22	
Toluene-d8	98	85-120	4/8/14 03:22	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 0322

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403255-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 14:13
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403327-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4571.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.32**	**J**	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.51**	**J**	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 14:13
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403327-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4571.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.94**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.44**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 14:13	
Dibromofluoromethane	101	85-115	4/8/14 14:13	
Toluene-d8	98	85-120	4/8/14 14:13	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 1413

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403327-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/10/14 13:12
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403454-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4652.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.34**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.44**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: NA
Date Received: NA
Date Analyzed: 4/10/14 13:12

Sample Name: Method Blank
Lab Code: RQ1403454-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\041014\J4652.D\

Analysis Lot: 387653
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.93**	**J**	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.37**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/10/14 13:12	
Dibromofluoromethane	102	85-115	4/10/14 13:12	
Toluene-d8	98	85-120	4/10/14 13:12	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/10/14 1312

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403454-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/ 8/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.20
Lab Code: R1402225-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW06-10.20MS Matrix Spike RQ1403327-05			FTMM-53-GW-699MW06-10.20DMS Duplicate Matrix Spike RQ1403327-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	53.3	50.0	106	52.6	50.0	105	80 - 130	1	30
1,1,1-Trichloroethane (TCA)	ND	49.9	50.0	100	48.8	50.0	98	65 - 130	2	30
1,1,2,2-Tetrachloroethane	ND	53.1	50.0	106	50.6	50.0	101	65 - 130	5	30
1,1,2-Trichloroethane	ND	52.5	50.0	105	51.6	50.0	103	75 - 125	2	30
1,1-Dichloroethane (1,1-DCA)	ND	47.5	50.0	95	46.6	50.0	93	70 - 135	2	30
1,1-Dichloroethene (1,1-DCE)	ND	55.3	50.0	111	54.3	50.0	108	70 - 130	2	30
1,1-Dichloropropene	ND	57.7	50.0	115	57.1	50.0	114	75 - 130	<1	30
1,2,3-Trichlorobenzene	ND	54.3	50.0	109	54.1	50.0	108	75 - 125	<1	30
1,2,3-Trichloropropane	ND	54.3	50.0	109	51.9	50.0	104	75 - 125	5	30
1,2,4-Trichlorobenzene	0.26	52.3	50.0	104	52.8	50.0	105	65 - 135	1	30
1,2,4-Trimethylbenzene	ND	50.5	50.0	101	49.6	50.0	99	75 - 130	2	30
1,2-Dibromo-3-chloropropane (DBC	ND	64.8	50.0	130	61.9	50.0	124	50 - 130	5	30
1,2-Dibromoethane	ND	55.8	50.0	112	54.2	50.0	108	80 - 120	3	30
1,2-Dichlorobenzene	ND	52.0	50.0	104	51.2	50.0	102	70 - 120	2	30
1,2-Dichloroethane	ND	52.5	50.0	105	51.2	50.0	102	70 - 130	2	30
1,2-Dichloropropane	ND	48.4	50.0	97	47.7	50.0	95	75 - 125	1	30
1,3,5-Trimethylbenzene	ND	50.6	50.0	101	49.6	50.0	99	75 - 130	2	30
1,3-Dichlorobenzene	ND	51.8	50.0	104	51.4	50.0	103	75 - 125	<1	30
1,3-Dichloropropane	ND	51.5	50.0	103	50.4	50.0	101	75 - 125	2	30
1,4-Dichlorobenzene	ND	50.2	50.0	100	49.5	50.0	99	75 - 125	1	30
2,2-Dichloropropane	ND	47.7	50.0	95	45.7	50.0	91	70 - 135	4	30
2-Butanone (MEK)	ND	50.6	50.0	101	53.1	50.0	106	30 - 150	5	30
2-Chlorotoluene	ND	49.6	50.0	99	48.4	50.0	97	75 - 125	2	30
2-Hexanone	ND	56.6	50.0	113	56.9	50.0	114	55 - 130	<1	30
4-Chlorotoluene	ND	51.1	50.0	102	49.7	50.0	99	75 - 130	3	30
p-Isopropyltoluene	ND	52.0	50.0	104	51.6	50.0	103	75 - 130	<1	30
4-Methyl-2-pentanone	ND	59.2	50.0	118	58.0	50.0	116	60 - 135	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/ 8/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.20
Lab Code: R1402225-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-53-GW-699MW06-10.20MS Matrix Spike RQ1403327-05 Result	Spike Amount	% Rec	FTMM-53-GW-699MW06-10.20DMS Duplicate Matrix Spike RQ1403327-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Acetone	2.2	49.1	50.0	94	47.5	50.0	91	40 - 140	3	30
Benzene	ND	50.2	50.0	100	49.1	50.0	98	80 - 120	2	30
Bromobenzene	ND	51.5	50.0	103	50.6	50.0	101	75 - 125	2	30
Bromochloromethane	ND	48.6	50.0	97	46.5	50.0	93	65 - 130	4	30
Bromodichloromethane	ND	51.5	50.0	103	50.2	50.0	100	75 - 120	3	30
Bromoform	ND	49.9	50.0	100	46.8	50.0	94	70 - 130	6	30
Bromomethane	0.43	33.7	50.0	66	41.5	50.0	82	30 - 145	21	30
Carbon Tetrachloride	ND	50.2	50.0	100	48.9	50.0	98	65 - 140	3	30
Chlorobenzene	ND	51.3	50.0	102	50.5	50.0	101	80 - 120	2	30
Chloroethane	ND	50.4	50.0	101	48.5	50.0	97	60 - 135	4	30
Chloroform	ND	48.7	50.0	97	47.3	50.0	95	65 - 135	3	30
Chloromethane	ND	43.0	50.0	86	41.7	50.0	83	40 - 125	3	30
Dibromochloromethane	ND	51.2	50.0	102	50.8	50.0	102	60 - 135	<1	30
Dichlorodifluoromethane (CFC 12)	ND	41.9	50.0	84	41.2	50.0	82	30 - 155	2	30
Methylene Chloride	ND	47.1	50.0	94	46.1	50.0	92	55 - 140	2	30
Ethylbenzene	ND	51.7	50.0	103	51.4	50.0	103	75 - 125	<1	30
Hexachlorobutadiene	ND	47.2	50.0	94	48.1	50.0	96	50 - 140	2	30
Isopropylbenzene (Cumene)	ND	51.7	50.0	103	50.1	50.0	100	75 - 125	3	30
Methyl tert-Butyl Ether	ND	53.0	50.0	106	51.6	50.0	103	65 - 125	3	30
Naphthalene	ND	60.8	50.0	122	60.5	50.0	121	55 - 140	<1	30
Styrene	ND	52.3	50.0	105	52.1	50.0	104	65 - 135	<1	30
Tetrachloroethene (PCE)	ND	52.6	50.0	105	51.3	50.0	103	45 - 150	3	30
Toluene	ND	50.8	50.0	102	50.2	50.0	100	75 - 120	1	30
Trichloroethene (TCE)	ND	52.7	50.0	105	53.1	50.0	106	70 - 125	<1	30
Trichlorofluoromethane (CFC 11)	ND	48.7	50.0	97	47.7	50.0	95	60 - 145	2	30
Vinyl Chloride	ND	51.8	50.0	104	50.7	50.0	101	50 - 145	2	30
cis-1,2-Dichloroethene	ND	48.4	50.0	97	47.8	50.0	96	70 - 125	1	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/ 8/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.20
Lab Code: R1402225-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-53-GW-699MW06-10.20MS Matrix Spike RQ1403327-05 Result	Spike Amount	% Rec	FTMM-53-GW-699MW06-10.20DMS Duplicate Matrix Spike RQ1403327-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	ND	49.3	50.0	99	48.6	50.0	97	70 - 130	1	30
m,p-Xylenes	ND	107	100	107	105	100	105	75 - 130	1	30
n-Butylbenzene	ND	49.9	50.0	100	49.8	50.0	100	70 - 135	<1	30
n-Propylbenzene	ND	50.2	50.0	100	49.0	50.0	98	70 - 130	2	30
o-Xylene	ND	51.6	50.0	103	50.4	50.0	101	80 - 120	2	30
sec-Butylbenzene	ND	50.1	50.0	100	49.5	50.0	99	70 - 125	1	30
tert-Butylbenzene	ND	49.4	50.0	99	48.9	50.0	98	70 - 130	1	30
trans-1,2-Dichloroethene	ND	48.9	50.0	98	48.1	50.0	96	60 - 140	2	30
trans-1,3-Dichloropropene	ND	53.7	50.0	107	53.1	50.0	106	55 - 140	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387044

Analyte Name	Lab Control Sample RQ1403255-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.3	20.0	96	80 - 130
1,1,1-Trichloroethane (TCA)	19.6	20.0	98	65 - 130
1,1,2,2-Tetrachloroethane	17.3	20.0	87	65 - 130
1,1,2-Trichloroethane	20.4	20.0	102	75 - 125
1,1-Dichloroethane (1,1-DCA)	19.0	20.0	95	70 - 135
1,1-Dichloroethene (1,1-DCE)	21.4	20.0	107	70 - 130
1,1-Dichloropropene	22.4	20.0	112	75 - 130
1,2,3-Trichlorobenzene	23.1	20.0	116	75 - 125
1,2,3-Trichloropropane	20.2	20.0	101	75 - 125
1,2,4-Trichlorobenzene	21.7	20.0	109	65 - 135
1,2,4-Trimethylbenzene	19.4	20.0	97	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	24.1	20.0	120	50 - 130
1,2-Dibromoethane	21.0	20.0	105	80 - 120
1,2-Dichlorobenzene	19.6	20.0	98	70 - 120
1,2-Dichloroethane	20.6	20.0	103	70 - 130
1,2-Dichloropropane	19.3	20.0	96	75 - 125
1,3,5-Trimethylbenzene	19.5	20.0	98	75 - 130
1,3-Dichlorobenzene	19.5	20.0	98	75 - 125
1,3-Dichloropropane	19.4	20.0	97	75 - 125
1,4-Dichlorobenzene	19.2	20.0	96	75 - 125
2,2-Dichloropropane	16.6	20.0	83	70 - 135
2-Butanone (MEK)	22.5	20.0	112	30 - 150
2-Chlorotoluene	19.1	20.0	96	75 - 125
2-Hexanone	22.4	20.0	112	55 - 130
4-Chlorotoluene	19.5	20.0	97	75 - 130
p-Isopropyltoluene	20.0	20.0	100	75 - 130
4-Methyl-2-pentanone	22.1	20.0	111	60 - 135
Acetone	21.9	20.0	110	40 - 140
Benzene	19.7	20.0	98	80 - 120
Bromobenzene	19.4	20.0	97	75 - 125
Bromochloromethane	19.4	20.0	97	65 - 130
Bromodichloromethane	20.9	20.0	105	75 - 120
Bromoform	21.4	20.0	107	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387044

Lab Control Sample
RQ1403255-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	19.4	20.0	97	30 - 145
Carbon Tetrachloride	19.8	20.0	99	65 - 140
Chlorobenzene	19.3	20.0	97	80 - 120
Chloroethane	20.4	20.0	102	60 - 135
Chloroform	19.3	20.0	97	65 - 135
Chloromethane	17.7	20.0	88	40 - 125
Dibromochloromethane	20.8	20.0	104	60 - 135
Dichlorodifluoromethane (CFC 12)	16.7	20.0	84	30 - 155
Methylene Chloride	18.8	20.0	94	55 - 140
Ethylbenzene	19.2	20.0	96	75 - 125
Hexachlorobutadiene	20.4	20.0	102	50 - 140
Isopropylbenzene (Cumene)	19.8	20.0	99	75 - 125
Methyl tert-Butyl Ether	20.8	20.0	104	65 - 125
Naphthalene	24.2	20.0	121	55 - 140
Styrene	20.0	20.0	100	65 - 135
Tetrachloroethene (PCE)	19.1	20.0	96	45 - 150
Toluene	19.8	20.0	99	75 - 120
Trichloroethene (TCE)	22.4	20.0	112	70 - 125
Trichlorofluoromethane (CFC 11)	19.6	20.0	98	60 - 145
Vinyl Chloride	20.3	20.0	101	50 - 145
cis-1,2-Dichloroethene	18.9	20.0	95	70 - 125
cis-1,3-Dichloropropene	19.0	20.0	95	70 - 130
m,p-Xylenes	40.2	40.0	101	75 - 130
n-Butylbenzene	19.4	20.0	97	70 - 135
n-Propylbenzene	19.2	20.0	96	70 - 130
o-Xylene	19.3	20.0	96	80 - 120
sec-Butylbenzene	19.4	20.0	97	70 - 125
tert-Butylbenzene	19.1	20.0	95	70 - 130
trans-1,2-Dichloroethene	19.6	20.0	98	60 - 140
trans-1,3-Dichloropropene	21.1	20.0	105	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387236

Analyte Name	Lab Control Sample RQ1403327-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	20.6	20.0	103	80 - 130
1,1,1-Trichloroethane (TCA)	19.4	20.0	97	65 - 130
1,1,2,2-Tetrachloroethane	19.4	20.0	97	65 - 130
1,1,2-Trichloroethane	19.5	20.0	97	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.3	20.0	91	70 - 135
1,1-Dichloroethene (1,1-DCE)	21.3	20.0	106	70 - 130
1,1-Dichloropropene	22.3	20.0	111	75 - 130
1,2,3-Trichlorobenzene	24.0	20.0	120	75 - 125
1,2,3-Trichloropropane	19.6	20.0	98	75 - 125
1,2,4-Trichlorobenzene	22.5	20.0	113	65 - 135
1,2,4-Trimethylbenzene	20.6	20.0	103	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	22.0	20.0	110	50 - 130
1,2-Dibromoethane	20.5	20.0	102	80 - 120
1,2-Dichlorobenzene	20.5	20.0	103	70 - 120
1,2-Dichloroethane	20.2	20.0	101	70 - 130
1,2-Dichloropropane	19.1	20.0	96	75 - 125
1,3,5-Trimethylbenzene	20.7	20.0	103	75 - 130
1,3-Dichlorobenzene	20.9	20.0	104	75 - 125
1,3-Dichloropropane	19.4	20.0	97	75 - 125
1,4-Dichlorobenzene	20.0	20.0	100	75 - 125
2,2-Dichloropropane	20.2	20.0	101	70 - 135
2-Butanone (MEK)	22.1	20.0	111	30 - 150
2-Chlorotoluene	19.9	20.0	100	75 - 125
2-Hexanone	24.1	20.0	120	55 - 130
4-Chlorotoluene	20.6	20.0	103	75 - 130
p-Isopropyltoluene	21.6	20.0	108	75 - 130
4-Methyl-2-pentanone	21.5	20.0	107	60 - 135
Acetone	24.6	20.0	123	40 - 140
Benzene	19.3	20.0	96	80 - 120
Bromobenzene	19.9	20.0	99	75 - 125
Bromochloromethane	18.7	20.0	93	65 - 130
Bromodichloromethane	20.5	20.0	103	75 - 120
Bromoform	20.5	20.0	102	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387236

Lab Control Sample
RQ1403327-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	17.8	20.0	89	30 - 145
Carbon Tetrachloride	19.6	20.0	98	65 - 140
Chlorobenzene	19.8	20.0	99	80 - 120
Chloroethane	19.1	20.0	96	60 - 135
Chloroform	18.8	20.0	94	65 - 135
Chloromethane	17.1	20.0	85	40 - 125
Dibromochloromethane	21.5	20.0	108	60 - 135
Dichlorodifluoromethane (CFC 12)	16.9	20.0	84	30 - 155
Methylene Chloride	18.3	20.0	92	55 - 140
Ethylbenzene	19.7	20.0	98	75 - 125
Hexachlorobutadiene	22.7	20.0	114	50 - 140
Isopropylbenzene (Cumene)	20.8	20.0	104	75 - 125
Methyl tert-Butyl Ether	19.9	20.0	99	65 - 125
Naphthalene	24.4	20.0	122	55 - 140
Styrene	21.0	20.0	105	65 - 135
Tetrachloroethene (PCE)	20.3	20.0	101	45 - 150
Toluene	19.9	20.0	99	75 - 120
Trichloroethene (TCE)	20.5	20.0	103	70 - 125
Trichlorofluoromethane (CFC 11)	18.8	20.0	94	60 - 145
Vinyl Chloride	20.0	20.0	100	50 - 145
cis-1,2-Dichloroethene	18.9	20.0	94	70 - 125
cis-1,3-Dichloropropene	19.4	20.0	97	70 - 130
m,p-Xylenes	42.1	40.0	105	75 - 130
n-Butylbenzene	21.1	20.0	106	70 - 135
n-Propylbenzene	20.2	20.0	101	70 - 130
o-Xylene	20.4	20.0	102	80 - 120
sec-Butylbenzene	20.7	20.0	104	70 - 125
tert-Butylbenzene	20.2	20.0	101	70 - 130
trans-1,2-Dichloroethene	19.2	20.0	96	60 - 140
trans-1,3-Dichloropropene	20.6	20.0	103	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/10/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387653

Analyte Name	Lab Control Sample RQ1403454-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	20.8	20.0	104	80 - 130
1,1,1-Trichloroethane (TCA)	19.4	20.0	97	65 - 130
1,1,2,2-Tetrachloroethane	19.8	20.0	99	65 - 130
1,1,2-Trichloroethane	19.6	20.0	98	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.4	20.0	92	70 - 135
1,1-Dichloroethene (1,1-DCE)	21.2	20.0	106	70 - 130
1,1-Dichloropropene	22.6	20.0	113	75 - 130
1,2,3-Trichlorobenzene	23.9	20.0	119	75 - 125
1,2,3-Trichloropropane	20.6	20.0	103	75 - 125
1,2,4-Trichlorobenzene	23.1	20.0	116	65 - 135
1,2,4-Trimethylbenzene	20.7	20.0	103	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	22.7	20.0	113	50 - 130
1,2-Dibromoethane	20.5	20.0	103	80 - 120
1,2-Dichlorobenzene	21.0	20.0	105	70 - 120
1,2-Dichloroethane	20.3	20.0	102	70 - 130
1,2-Dichloropropane	18.9	20.0	95	75 - 125
1,3,5-Trimethylbenzene	20.9	20.0	104	75 - 130
1,3-Dichlorobenzene	21.1	20.0	105	75 - 125
1,3-Dichloropropane	19.3	20.0	97	75 - 125
1,4-Dichlorobenzene	20.6	20.0	103	75 - 125
2,2-Dichloropropane	20.1	20.0	101	70 - 135
2-Butanone (MEK)	22.4	20.0	112	30 - 150
2-Chlorotoluene	19.7	20.0	99	75 - 125
2-Hexanone	23.6	20.0	118	55 - 130
4-Chlorotoluene	20.4	20.0	102	75 - 130
p-Isopropyltoluene	21.7	20.0	108	75 - 130
4-Methyl-2-pentanone	20.7	20.0	103	60 - 135
Acetone	24.5	20.0	122	40 - 140
Benzene	19.3	20.0	96	80 - 120
Bromobenzene	20.2	20.0	101	75 - 125
Bromochloromethane	19.1	20.0	95	65 - 130
Bromodichloromethane	20.3	20.0	101	75 - 120
Bromoform	21.2	20.0	106	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/10/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387653

Lab Control Sample
RQ1403454-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	17.3	20.0	86	30 - 145
Carbon Tetrachloride	20.3	20.0	101	65 - 140
Chlorobenzene	20.1	20.0	100	80 - 120
Chloroethane	19.2	20.0	96	60 - 135
Chloroform	18.6	20.0	93	65 - 135
Chloromethane	16.9	20.0	84	40 - 125
Dibromochloromethane	21.5	20.0	107	60 - 135
Dichlorodifluoromethane (CFC 12)	16.1	20.0	81	30 - 155
Methylene Chloride	18.0	20.0	90	55 - 140
Ethylbenzene	20.3	20.0	102	75 - 125
Hexachlorobutadiene	22.4	20.0	112	50 - 140
Isopropylbenzene (Cumene)	21.0	20.0	105	75 - 125
Methyl tert-Butyl Ether	20.0	20.0	100	65 - 125
Naphthalene	24.6	20.0	123	55 - 140
Styrene	20.7	20.0	104	65 - 135
Tetrachloroethene (PCE)	20.6	20.0	103	45 - 150
Toluene	20.2	20.0	101	75 - 120
Trichloroethene (TCE)	20.6	20.0	103	70 - 125
Trichlorofluoromethane (CFC 11)	19.3	20.0	97	60 - 145
Vinyl Chloride	19.2	20.0	96	50 - 145
cis-1,2-Dichloroethene	18.7	20.0	93	70 - 125
cis-1,3-Dichloropropene	20.2	20.0	101	70 - 130
m,p-Xylenes	41.8	40.0	105	75 - 130
n-Butylbenzene	20.9	20.0	105	70 - 135
n-Propylbenzene	20.4	20.0	102	70 - 130
o-Xylene	20.0	20.0	100	80 - 120
sec-Butylbenzene	20.8	20.0	104	70 - 125
tert-Butylbenzene	20.5	20.0	102	70 - 130
trans-1,2-Dichloroethene	19.2	20.0	96	60 - 140
trans-1,3-Dichloropropene	21.0	20.0	105	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

April 18, 2014 Service Request No: R1402225

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM-1Q 2014/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on April 1, 2014. For your reference, these analyses have been assigned our service request number **R1402225**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

Page 1 of 620

Parsons Inc.
R1402225

TABLE OF CONTENTS

SECTION	***PAGE***
SDG Narrative	00002
Chains of Custody	00007
VOA QC Summary	00018
VOA Sample Data	00045
VOA Standards Data	00364
VOA Raw QC Data	00534

00001A

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SDG NARRATIVE

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00002

CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1402225
Project:	FTMM 1Q 2014	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	4/01/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 3/31/14 and received in good condition at a cooler temperature of 2.4°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Twenty water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

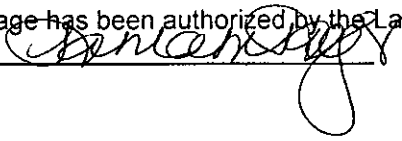
The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-53-GW-699MW06-10.20 as requested. All MS/MSD recoveries and RPD's were acceptable.

Various compounds for FTMM-68-GW-565MW01D-22.31 have been flagged with an "E" as being outside the calibration range of the instrument. The sample was repeated at a dilution and both sets of data have been reported out.

The Method Blanks associated with these samples were free of contamination except the 04/08/14 blank (Run # 387044) had a low level detection for Bromomethane and the 04/08/14 (Run #387236) and 04/10/14 blanks had low level detections for 1,2,4-Trichlorobenzene, Hexachlorobutadiene, Bromomethane and Naphthalene and the 03/19/14 blank also contained Bromomethane. No data was affected.

Service Request R1402225
Page 2

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature. 

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #:	748810-03000	Batch Complete:	Yes	Date Revised:	
Submission:	R1402225	Diskette Requested:	No	Date Due:	4/22/14
Client:	Parsons Engineering Science	Date:	4/3/14	Protocol:	SW846
Client Rep:	JJAEGER	Custody Seal: Present/Absent:		Shipping No.:	
Project:	FTMM-1Q 2014	Chain of Custody: Present/Absent:		SDG #:	FTMM-53-DI-03312014

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1402225-001	FTMM-DI-03312014	Water	8260C	3/31/14	4/1/14			
R1402225-002	FTMM-53-EB-03312014	Water	8260C	3/31/14	4/1/14			
R1402225-003	FTMM-TB-03312014	Water	8260C	3/31/14	4/1/14			
R1402225-004	FTMM-53-GW-699MW09-7.70	Water	8260C	3/31/14	4/1/14			
R1402225-005	FTMM-53-GW-699MW16-11.5	Water	8260C	3/31/14	4/1/14			
R1402225-006	FTMM-53-GW-699RW05-4.8	Water	8260C	3/31/14	4/1/14			
R1402225-007QC	FTMM-53-GW-699MW06-10.20	Water	8260C	3/31/14	4/1/14			
R1402225-008	FTMM-53-GW-699MW16-6.5	Water	8260C	3/31/14	4/1/14			
R1402225-009	FTMM-53-GW-699MW04-6.85	Water	8260C	3/31/14	4/1/14			
R1402225-010	FTMM-68-GW-565MW01D-22.31	Water	8260C	3/31/14	4/1/14			
R1402225-011	FTMM-53-GW-699MW01-12.5	Water	8260C	3/31/14	4/1/14			
R1402225-012	FTMM-53-GW-699RW03-14.59	Water	8260C	3/31/14	4/1/14			
R1402225-013	FTMM-53-GW-699MW01-7.5	Water	8260C	3/31/14	4/1/14			
R1402225-014	FTMM-53-GW-699MW04-13.85	Water	8260C	3/31/14	4/1/14			
R1402225-015	FTMM-53-GW-699RW05-9.80	Water	8260C	3/31/14	4/1/14			
R1402225-016	FTMM-68-GW-565MW01-11.99	Water	8260C	3/31/14	4/1/14			
R1402225-017	FTMM-68-GW-565MW101D-22.31	Water	8260C	3/31/14	4/1/14			
R1402225-018	FTMM-53-GW-699RW11-8.03	Water	8260C	3/31/14	4/1/14			
R1402225-019	FTMM-53-GW-699RW11-14.08	Water	8260C	3/31/14	4/1/14			
R1402225-020	FTMM-53-GW-699RW03-8.20	Water	8260C	3/31/14	4/1/14			

5000

Folder Comments:

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REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads -

ALS Environmental

CHAINS OF CUSTODY

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

14632

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE _____ OF _____

Project Name: FTMM-1Q 2014	Project Number: 748810-63000
Project Manager: Chris Greene	Report CC:
Company/Address: 100 High Street, Boston, MA 02210	
Phone #: 617 449 1573	Email: Chris.Greene@persons.com
Sampler's Signature:	Sampler's Printed Name: C. WATSON / M. Bruno

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs • 8260 • 624 • CLP	GCMS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-DZ-03312014		3/31/14	0910	GW	3	X							
FTMM-53-EB-03312014		3/31/14	0900	GW	3								
FTMM-TB-03312014		3/31/14	1201	TB	2								
FTMM-53-GW-699MW09-7.75			1120	GW	3								
FTMM-53-GW-699MW16-11.5			1135	GW	3								
FTMM-53-GW-699MW05-4.8			1150	GW	3								
FTMM-53-GW-699MW06-10.20-MS			1110	GW	2								
FTMM-53-GW-699MW16-6.5			1130	GW	3								
FTMM-53-GW-699MW06-10.20-MSD			1110	GW	2								
FTMM-53-GW-699MW04-6.85			1045	GW	3								
FTMM-68-GW-565MW01D-22.31			1225	GW	3								

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
~~Metals~~

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
REQUESTED REPORT DATE
AS PER SOW

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
AS PER SOW
Edata ___Yes ___No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: M. BRUNO	Printed Name	Printed Name	Printed Name	Printed Name	
Firm: PARSONS	Firm: ALS	Firm	Firm	Firm	
Date/Time: 7/31 : 1606	Date/Time: 4/1/14 1005	Date/Time	Date/Time	Date/Time	

R1402225 5
Persons, Inc.
FTMM-1Q 2014

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 14633

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Project Name: FTMM-1Q 2014	Project Number: 748210-03000
Project Manager: Chris Grenz	Report CC:
Company/Address: 100 High Street, Boston, MA 02210	
Phone #: 617 449 1573	Email: Chris.Grenz@parsons.com
Sampler's Signature:	Sampler's Printed Name: C. Watson, M. Bruno

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: /

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-53-GW-699MW01-12.6		3/31/14	1041	GW	3	X							
FTMM-53-GW-699RW03-14.59			1025	GW	3								
FTMM-53-GW-699MW01-7.5			1035	GW	3								
FTMM-53-GW-699MW04-13.85			1050	GW	3								
FTMM-53-GW-699RW05-9.80			1155	GW	3								
FTMM-53-GW-699MW06-10.20			1110	GW	3								
FTMM-68-GW-585MW01-11.99			1220	GW	3								
FTMM-68-GW-585MW10D-22.31			1200	GW	3								
FTMM-53-GW-699RW11-8.03			1055	GW	3								
FTMM-53-GW-699RW11-14.08			1100	GW	3								
FTMM-53-GW-699RW03-8.20			1015	GW	3								

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
~~Metals~~

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: NJ

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day

REQUESTED REPORT DATE: AS PER SOW

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
AS PER SOW
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #:
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: M. Bruno	Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: PARSONS	Firm: ALS	Firm:	Firm:	Firm:	Firm:
Date/Time: 3/31 : 1600	Date/Time: 4/1/14 1005	Date/Time:	Date/Time:	Date/Time:	Date/Time:

60000

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R14-2225

Cooler received on 4/1/14 by: AD COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	NO	
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO	
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO	
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	(NO)	N/A
5.	Were **Ice** or **Ice packs** present?	(YES)	NO	
6.	Where did the bottles originate?	(ALS/ROC), CLIENT		
7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore Lab5035set (N/A)
8.	Temperature of cooler(s) upon receipt:	3.4°		
	Is the temperature within 0° - 6° C?:	(Y) N	Y N	Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 4/1/14 1025

Thermometer ID: (IR GUN#3) / IR GUN#4 Reading From: (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples: _____

All Samples held in storage location R-002 by AD on 4/1/14 at 1027
5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: [redacted] 4/1/14
4/1/14

Cooler Breakdown: Date: 4/1/14 4/1/14 Time: 1350 by: DM

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated (N/A)

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*	client label					

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 14-002-003
Other Comments:

PC Secondary Review: JMJ 4/2/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

G:\SMODOCS\Cooler Receipt 6.doc 11/6/12

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ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1402225-001.01					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1600	R-001-S12 / KRUEST	
R1402225-001.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-001.03					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1422	In Lab / KRUEST	
		4/7/14	1425	R-001-S12 / KRUEST	
R1402225-002.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-002.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-002.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1422	In Lab / KRUEST	
		4/7/14	1425	R-001-S12 / KRUEST	
R1402225-003.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-003.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-003.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1422	In Lab / KRUEST	
		4/7/14	1425	R-001-S12 / KRUEST	
R1402225-004.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1402225-004.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-004.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1422	In Lab / KRUEST	
		4/7/14	1425	R-001-S12 / KRUEST	
R1402225-005.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-005.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-005.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1422	In Lab / KRUEST	
		4/7/14	1425	R-001-S12 / KRUEST	
R1402225-006.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-006.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-006.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1422	In Lab / KRUEST	
		4/7/14	1425	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1601	R-001-S12 / KRUEST	
R1402225-007.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-007.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1402225-007.03					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-007.04					
		4/1/14	1352	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-007.05					
	8260C				
		4/1/14	1352	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1423	In Lab / KRUEST	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1600	R-001-S12 / KRUEST	
R1402225-007.06					
		4/1/14	1352	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-008.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-008.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-008.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1423	In Lab / KRUEST	
		4/7/14	1426	R-001-S12 / KRUEST	
R1402225-009.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-009.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-009.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1423	In Lab / KRUEST	
		4/7/14	1426	R-001-S12 / KRUEST	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1402225-010.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-010.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-010.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1423	In Lab / KRUEST	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1601	R-001-S12 / KRUEST	
R1402225-011.01					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1600	R-001-S12 / KRUEST	
R1402225-011.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-011.03					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1423	In Lab / KRUEST	
		4/7/14	1426	R-001-S12 / KRUEST	
R1402225-012.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-012.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-012.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1423	In Lab / KRUEST	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1601	R-001-S12 / KRUEST	

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Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1402225-013.01					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1600	R-001-S12 / KRUEST	
R1402225-013.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-013.03					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1424	In Lab / KRUEST	
		4/7/14	1426	R-001-S12 / KRUEST	
R1402225-014.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-014.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-014.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1600	R-001-S12 / KRUEST	
R1402225-015.01					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/10/14	1509	In Lab / KRUEST	
		4/10/14	1514	R-001-S12 / KRUEST	
R1402225-015.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-015.03					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	

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Chain of Custody Report

Client: Parsons, Inc. **Service Request:** R1402225
Project: FTMM-1Q 2014/748810-03000

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		4/8/14	1601	R-001-S12 / KRUEST	
R1402225-016.01					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/10/14	1509	In Lab / KRUEST	
		4/10/14	1514	R-001-S12 / KRUEST	
R1402225-016.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-016.03					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1601	R-001-S12 / KRUEST	
R1402225-017.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1601	R-001-S12 / KRUEST	
R1402225-017.02					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/10/14	1509	In Lab / KRUEST	
		4/10/14	1514	R-001-S12 / KRUEST	
R1402225-018.01					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1600	R-001-S12 / KRUEST	
R1402225-018.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-018.03					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	

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Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1402225-019.01					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-019.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-019.03					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1600	R-001-S12 / KRUEST	
R1402225-020.01					
	8260C				
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/10/14	1509	In Lab / KRUEST	
		4/10/14	1514	R-001-S12 / KRUEST	
R1402225-020.02					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
R1402225-020.03					
		4/1/14	1351	SMO / GLAFORCE	
		4/1/14	1352	R-001 / GLAFORCE	
		4/7/14	1426	R-001-S12 / KRUEST	
		4/8/14	1558	In Lab / KRUEST	
		4/8/14	1601	R-001-S12 / KRUEST	

ALS Environmental

VOLATILE ORGANICS QC SUMMARY

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/ 8/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.20
Lab Code: R1402225-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-53-GW-699MW06-10.20MS Matrix Spike RQ1403327-05 Result	Spike Amount	% Rec	FTMM-53-GW-699MW06-10.20DMS Duplicate Matrix Spike RQ1403327-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	53.3	50.0	106	52.6	50.0	105	80 - 130	1	30
1,1,1-Trichloroethane (TCA)	ND	49.9	50.0	100	48.8	50.0	98	65 - 130	2	30
1,1,2,2-Tetrachloroethane	ND	53.1	50.0	106	50.6	50.0	101	65 - 130	5	30
1,1,2-Trichloroethane	ND	52.5	50.0	105	51.6	50.0	103	75 - 125	2	30
1,1-Dichloroethane (1,1-DCA)	ND	47.5	50.0	95	46.6	50.0	93	70 - 135	2	30
1,1-Dichloroethene (1,1-DCE)	ND	55.3	50.0	111	54.3	50.0	108	70 - 130	2	30
1,1-Dichloropropene	ND	57.7	50.0	115	57.1	50.0	114	75 - 130	<1	30
1,2,3-Trichlorobenzene	ND	54.3	50.0	109	54.1	50.0	108	75 - 125	<1	30
1,2,3-Trichloropropane	ND	54.3	50.0	109	51.9	50.0	104	75 - 125	5	30
1,2,4-Trichlorobenzene	0.26	52.3	50.0	104	52.8	50.0	105	65 - 135	1	30
1,2,4-Trimethylbenzene	ND	50.5	50.0	101	49.6	50.0	99	75 - 130	2	30
1,2-Dibromo-3-chloropropane (DBC	ND	64.8	50.0	130	61.9	50.0	124	50 - 130	5	30
1,2-Dibromoethane	ND	55.8	50.0	112	54.2	50.0	108	80 - 120	3	30
1,2-Dichlorobenzene	ND	52.0	50.0	104	51.2	50.0	102	70 - 120	2	30
1,2-Dichloroethane	ND	52.5	50.0	105	51.2	50.0	102	70 - 130	2	30
1,2-Dichloropropane	ND	48.4	50.0	97	47.7	50.0	95	75 - 125	1	30
1,3,5-Trimethylbenzene	ND	50.6	50.0	101	49.6	50.0	99	75 - 130	2	30
1,3-Dichlorobenzene	ND	51.8	50.0	104	51.4	50.0	103	75 - 125	<1	30
1,3-Dichloropropane	ND	51.5	50.0	103	50.4	50.0	101	75 - 125	2	30
1,4-Dichlorobenzene	ND	50.2	50.0	100	49.5	50.0	99	75 - 125	1	30
2,2-Dichloropropane	ND	47.7	50.0	95	45.7	50.0	91	70 - 135	4	30
2-Butanone (MEK)	ND	50.6	50.0	101	53.1	50.0	106	30 - 150	5	30
2-Chlorotoluene	ND	49.6	50.0	99	48.4	50.0	97	75 - 125	2	30
2-Hexanone	ND	56.6	50.0	113	56.9	50.0	114	55 - 130	<1	30
4-Chlorotoluene	ND	51.1	50.0	102	49.7	50.0	99	75 - 130	3	30
p-Isopropyltoluene	ND	52.0	50.0	104	51.6	50.0	103	75 - 130	<1	30
4-Methyl-2-pentanone	ND	59.2	50.0	118	58.0	50.0	116	60 - 135	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/ 8/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.20
Lab Code: R1402225-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-53-GW-699MW06-10.20MS Matrix Spike RQ1403327-05 Result	Spike Amount	% Rec	FTMM-53-GW-699MW06-10.20DMS Duplicate Matrix Spike RQ1403327-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Acetone	2.2	49.1	50.0	94	47.5	50.0	91	40 - 140	3	30
Benzene	ND	50.2	50.0	100	49.1	50.0	98	80 - 120	2	30
Bromobenzene	ND	51.5	50.0	103	50.6	50.0	101	75 - 125	2	30
Bromochloromethane	ND	48.6	50.0	97	46.5	50.0	93	65 - 130	4	30
Bromodichloromethane	ND	51.5	50.0	103	50.2	50.0	100	75 - 120	3	30
Bromoform	ND	49.9	50.0	100	46.8	50.0	94	70 - 130	6	30
Bromomethane	0.43	33.7	50.0	66	41.5	50.0	82	30 - 145	21	30
Carbon Tetrachloride	ND	50.2	50.0	100	48.9	50.0	98	65 - 140	3	30
Chlorobenzene	ND	51.3	50.0	102	50.5	50.0	101	80 - 120	2	30
Chloroethane	ND	50.4	50.0	101	48.5	50.0	97	60 - 135	4	30
Chloroform	ND	48.7	50.0	97	47.3	50.0	95	65 - 135	3	30
Chloromethane	ND	43.0	50.0	86	41.7	50.0	83	40 - 125	3	30
Dibromochloromethane	ND	51.2	50.0	102	50.8	50.0	102	60 - 135	<1	30
Dichlorodifluoromethane (CFC 12)	ND	41.9	50.0	84	41.2	50.0	82	30 - 155	2	30
Methylene Chloride	ND	47.1	50.0	94	46.1	50.0	92	55 - 140	2	30
Ethylbenzene	ND	51.7	50.0	103	51.4	50.0	103	75 - 125	<1	30
Hexachlorobutadiene	ND	47.2	50.0	94	48.1	50.0	96	50 - 140	2	30
Isopropylbenzene (Cumene)	ND	51.7	50.0	103	50.1	50.0	100	75 - 125	3	30
Methyl tert-Butyl Ether	ND	53.0	50.0	106	51.6	50.0	103	65 - 125	3	30
Naphthalene	ND	60.8	50.0	122	60.5	50.0	121	55 - 140	<1	30
Styrene	ND	52.3	50.0	105	52.1	50.0	104	65 - 135	<1	30
Tetrachloroethene (PCE)	ND	52.6	50.0	105	51.3	50.0	103	45 - 150	3	30
Toluene	ND	50.8	50.0	102	50.2	50.0	100	75 - 120	1	30
Trichloroethene (TCE)	ND	52.7	50.0	105	53.1	50.0	106	70 - 125	<1	30
Trichlorofluoromethane (CFC 11)	ND	48.7	50.0	97	47.7	50.0	95	60 - 145	2	30
Vinyl Chloride	ND	51.8	50.0	104	50.7	50.0	101	50 - 145	2	30
cis-1,2-Dichloroethene	ND	48.4	50.0	97	47.8	50.0	96	70 - 125	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/ 8/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.20
Lab Code: R1402225-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-53-GW-699MW06-10.20MS Matrix Spike RQ1403327-05 Result	Spike Amount	% Rec	FTMM-53-GW-699MW06-10.20DMS Duplicate Matrix Spike RQ1403327-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	ND	49.3	50.0	99	48.6	50.0	97	70 - 130	1	30
m,p-Xylenes	ND	107	100	107	105	100	105	75 - 130	1	30
n-Butylbenzene	ND	49.9	50.0	100	49.8	50.0	100	70 - 135	<1	30
n-Propylbenzene	ND	50.2	50.0	100	49.0	50.0	98	70 - 130	2	30
o-Xylene	ND	51.6	50.0	103	50.4	50.0	101	80 - 120	2	30
sec-Butylbenzene	ND	50.1	50.0	100	49.5	50.0	99	70 - 125	1	30
tert-Butylbenzene	ND	49.4	50.0	99	48.9	50.0	98	70 - 130	1	30
trans-1,2-Dichloroethene	ND	48.9	50.0	98	48.1	50.0	96	60 - 140	2	30
trans-1,3-Dichloropropene	ND	53.7	50.0	107	53.1	50.0	106	55 - 140	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387044

Lab Control Sample
RQ1403255-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.3	20.0	96	80 - 130
1,1,1-Trichloroethane (TCA)	19.6	20.0	98	65 - 130
1,1,2,2-Tetrachloroethane	17.3	20.0	87	65 - 130
1,1,2-Trichloroethane	20.4	20.0	102	75 - 125
1,1-Dichloroethane (1,1-DCA)	19.0	20.0	95	70 - 135
1,1-Dichloroethene (1,1-DCE)	21.4	20.0	107	70 - 130
1,1-Dichloropropene	22.4	20.0	112	75 - 130
1,2,3-Trichlorobenzene	23.1	20.0	116	75 - 125
1,2,3-Trichloropropane	20.2	20.0	101	75 - 125
1,2,4-Trichlorobenzene	21.7	20.0	109	65 - 135
1,2,4-Trimethylbenzene	19.4	20.0	97	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	24.1	20.0	120	50 - 130
1,2-Dibromoethane	21.0	20.0	105	80 - 120
1,2-Dichlorobenzene	19.6	20.0	98	70 - 120
1,2-Dichloroethane	20.6	20.0	103	70 - 130
1,2-Dichloropropane	19.3	20.0	96	75 - 125
1,3,5-Trimethylbenzene	19.5	20.0	98	75 - 130
1,3-Dichlorobenzene	19.5	20.0	98	75 - 125
1,3-Dichloropropane	19.4	20.0	97	75 - 125
1,4-Dichlorobenzene	19.2	20.0	96	75 - 125
2,2-Dichloropropane	16.6	20.0	83	70 - 135
2-Butanone (MEK)	22.5	20.0	112	30 - 150
2-Chlorotoluene	19.1	20.0	96	75 - 125
2-Hexanone	22.4	20.0	112	55 - 130
4-Chlorotoluene	19.5	20.0	97	75 - 130
p-Isopropyltoluene	20.0	20.0	100	75 - 130
4-Methyl-2-pentanone	22.1	20.0	111	60 - 135
Acetone	21.9	20.0	110	40 - 140
Benzene	19.7	20.0	98	80 - 120
Bromobenzene	19.4	20.0	97	75 - 125
Bromochloromethane	19.4	20.0	97	65 - 130
Bromodichloromethane	20.9	20.0	105	75 - 120
Bromoform	21.4	20.0	107	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387044

Lab Control Sample
RQ1403255-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	19.4	20.0	97	30 - 145
Carbon Tetrachloride	19.8	20.0	99	65 - 140
Chlorobenzene	19.3	20.0	97	80 - 120
Chloroethane	20.4	20.0	102	60 - 135
Chloroform	19.3	20.0	97	65 - 135
Chloromethane	17.7	20.0	88	40 - 125
Dibromochloromethane	20.8	20.0	104	60 - 135
Dichlorodifluoromethane (CFC 12)	16.7	20.0	84	30 - 155
Methylene Chloride	18.8	20.0	94	55 - 140
Ethylbenzene	19.2	20.0	96	75 - 125
Hexachlorobutadiene	20.4	20.0	102	50 - 140
Isopropylbenzene (Cumene)	19.8	20.0	99	75 - 125
Methyl tert-Butyl Ether	20.8	20.0	104	65 - 125
Naphthalene	24.2	20.0	121	55 - 140
Styrene	20.0	20.0	100	65 - 135
Tetrachloroethene (PCE)	19.1	20.0	96	45 - 150
Toluene	19.8	20.0	99	75 - 120
Trichloroethene (TCE)	22.4	20.0	112	70 - 125
Trichlorofluoromethane (CFC 11)	19.6	20.0	98	60 - 145
Vinyl Chloride	20.3	20.0	101	50 - 145
cis-1,2-Dichloroethene	18.9	20.0	95	70 - 125
cis-1,3-Dichloropropene	19.0	20.0	95	70 - 130
m,p-Xylenes	40.2	40.0	101	75 - 130
n-Butylbenzene	19.4	20.0	97	70 - 135
n-Propylbenzene	19.2	20.0	96	70 - 130
o-Xylene	19.3	20.0	96	80 - 120
sec-Butylbenzene	19.4	20.0	97	70 - 125
tert-Butylbenzene	19.1	20.0	95	70 - 130
trans-1,2-Dichloroethene	19.6	20.0	98	60 - 140
trans-1,3-Dichloropropene	21.1	20.0	105	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387236

Analyte Name	Lab Control Sample RQ1403327-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	20.6	20.0	103	80 - 130
1,1,1-Trichloroethane (TCA)	19.4	20.0	97	65 - 130
1,1,2,2-Tetrachloroethane	19.4	20.0	97	65 - 130
1,1,2-Trichloroethane	19.5	20.0	97	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.3	20.0	91	70 - 135
1,1-Dichloroethene (1,1-DCE)	21.3	20.0	106	70 - 130
1,1-Dichloropropene	22.3	20.0	111	75 - 130
1,2,3-Trichlorobenzene	24.0	20.0	120	75 - 125
1,2,3-Trichloropropane	19.6	20.0	98	75 - 125
1,2,4-Trichlorobenzene	22.5	20.0	113	65 - 135
1,2,4-Trimethylbenzene	20.6	20.0	103	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	22.0	20.0	110	50 - 130
1,2-Dibromoethane	20.5	20.0	102	80 - 120
1,2-Dichlorobenzene	20.5	20.0	103	70 - 120
1,2-Dichloroethane	20.2	20.0	101	70 - 130
1,2-Dichloropropane	19.1	20.0	96	75 - 125
1,3,5-Trimethylbenzene	20.7	20.0	103	75 - 130
1,3-Dichlorobenzene	20.9	20.0	104	75 - 125
1,3-Dichloropropane	19.4	20.0	97	75 - 125
1,4-Dichlorobenzene	20.0	20.0	100	75 - 125
2,2-Dichloropropane	20.2	20.0	101	70 - 135
2-Butanone (MEK)	22.1	20.0	111	30 - 150
2-Chlorotoluene	19.9	20.0	100	75 - 125
2-Hexanone	24.1	20.0	120	55 - 130
4-Chlorotoluene	20.6	20.0	103	75 - 130
p-Isopropyltoluene	21.6	20.0	108	75 - 130
4-Methyl-2-pentanone	21.5	20.0	107	60 - 135
Acetone	24.6	20.0	123	40 - 140
Benzene	19.3	20.0	96	80 - 120
Bromobenzene	19.9	20.0	99	75 - 125
Bromochloromethane	18.7	20.0	93	65 - 130
Bromodichloromethane	20.5	20.0	103	75 - 120
Bromoform	20.5	20.0	102	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387236

Lab Control Sample
RQ1403327-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	17.8	20.0	89	30 - 145
Carbon Tetrachloride	19.6	20.0	98	65 - 140
Chlorobenzene	19.8	20.0	99	80 - 120
Chloroethane	19.1	20.0	96	60 - 135
Chloroform	18.8	20.0	94	65 - 135
Chloromethane	17.1	20.0	85	40 - 125
Dibromochloromethane	21.5	20.0	108	60 - 135
Dichlorodifluoromethane (CFC 12)	16.9	20.0	84	30 - 155
Methylene Chloride	18.3	20.0	92	55 - 140
Ethylbenzene	19.7	20.0	98	75 - 125
Hexachlorobutadiene	22.7	20.0	114	50 - 140
Isopropylbenzene (Cumene)	20.8	20.0	104	75 - 125
Methyl tert-Butyl Ether	19.9	20.0	99	65 - 125
Naphthalene	24.4	20.0	122	55 - 140
Styrene	21.0	20.0	105	65 - 135
Tetrachloroethene (PCE)	20.3	20.0	101	45 - 150
Toluene	19.9	20.0	99	75 - 120
Trichloroethene (TCE)	20.5	20.0	103	70 - 125
Trichlorofluoromethane (CFC 11)	18.8	20.0	94	60 - 145
Vinyl Chloride	20.0	20.0	100	50 - 145
cis-1,2-Dichloroethene	18.9	20.0	94	70 - 125
cis-1,3-Dichloropropene	19.4	20.0	97	70 - 130
m,p-Xylenes	42.1	40.0	105	75 - 130
n-Butylbenzene	21.1	20.0	106	70 - 135
n-Propylbenzene	20.2	20.0	101	70 - 130
o-Xylene	20.4	20.0	102	80 - 120
sec-Butylbenzene	20.7	20.0	104	70 - 125
tert-Butylbenzene	20.2	20.0	101	70 - 130
trans-1,2-Dichloroethene	19.2	20.0	96	60 - 140
trans-1,3-Dichloropropene	20.6	20.0	103	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/10/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387653

Analyte Name	Lab Control Sample RQ1403454-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	20.8	20.0	104	80 - 130
1,1,1-Trichloroethane (TCA)	19.4	20.0	97	65 - 130
1,1,2,2-Tetrachloroethane	19.8	20.0	99	65 - 130
1,1,2-Trichloroethane	19.6	20.0	98	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.4	20.0	92	70 - 135
1,1-Dichloroethene (1,1-DCE)	21.2	20.0	106	70 - 130
1,1-Dichloropropene	22.6	20.0	113	75 - 130
1,2,3-Trichlorobenzene	23.9	20.0	119	75 - 125
1,2,3-Trichloropropane	20.6	20.0	103	75 - 125
1,2,4-Trichlorobenzene	23.1	20.0	116	65 - 135
1,2,4-Trimethylbenzene	20.7	20.0	103	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	22.7	20.0	113	50 - 130
1,2-Dibromoethane	20.5	20.0	103	80 - 120
1,2-Dichlorobenzene	21.0	20.0	105	70 - 120
1,2-Dichloroethane	20.3	20.0	102	70 - 130
1,2-Dichloropropane	18.9	20.0	95	75 - 125
1,3,5-Trimethylbenzene	20.9	20.0	104	75 - 130
1,3-Dichlorobenzene	21.1	20.0	105	75 - 125
1,3-Dichloropropane	19.3	20.0	97	75 - 125
1,4-Dichlorobenzene	20.6	20.0	103	75 - 125
2,2-Dichloropropane	20.1	20.0	101	70 - 135
2-Butanone (MEK)	22.4	20.0	112	30 - 150
2-Chlorotoluene	19.7	20.0	99	75 - 125
2-Hexanone	23.6	20.0	118	55 - 130
4-Chlorotoluene	20.4	20.0	102	75 - 130
p-Isopropyltoluene	21.7	20.0	108	75 - 130
4-Methyl-2-pentanone	20.7	20.0	103	60 - 135
Acetone	24.5	20.0	122	40 - 140
Benzene	19.3	20.0	96	80 - 120
Bromobenzene	20.2	20.0	101	75 - 125
Bromochloromethane	19.1	20.0	95	65 - 130
Bromodichloromethane	20.3	20.0	101	75 - 120
Bromoform	21.2	20.0	106	70 - 130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/10/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 387653

Analyte Name	Lab Control Sample RQ1403454-03 Result	Spike Amount	% Rec	% Rec Limits
Bromomethane	17.3	20.0	86	30 - 145
Carbon Tetrachloride	20.3	20.0	101	65 - 140
Chlorobenzene	20.1	20.0	100	80 - 120
Chloroethane	19.2	20.0	96	60 - 135
Chloroform	18.6	20.0	93	65 - 135
Chloromethane	16.9	20.0	84	40 - 125
Dibromochloromethane	21.5	20.0	107	60 - 135
Dichlorodifluoromethane (CFC 12)	16.1	20.0	81	30 - 155
Methylene Chloride	18.0	20.0	90	55 - 140
Ethylbenzene	20.3	20.0	102	75 - 125
Hexachlorobutadiene	22.4	20.0	112	50 - 140
Isopropylbenzene (Cumene)	21.0	20.0	105	75 - 125
Methyl tert-Butyl Ether	20.0	20.0	100	65 - 125
Naphthalene	24.6	20.0	123	55 - 140
Styrene	20.7	20.0	104	65 - 135
Tetrachloroethene (PCE)	20.6	20.0	103	45 - 150
Toluene	20.2	20.0	101	75 - 120
Trichloroethene (TCE)	20.6	20.0	103	70 - 125
Trichlorofluoromethane (CFC 11)	19.3	20.0	97	60 - 145
Vinyl Chloride	19.2	20.0	96	50 - 145
cis-1,2-Dichloroethene	18.7	20.0	93	70 - 125
cis-1,3-Dichloropropene	20.2	20.0	101	70 - 130
m,p-Xylenes	41.8	40.0	105	75 - 130
n-Butylbenzene	20.9	20.0	105	70 - 135
n-Propylbenzene	20.4	20.0	102	70 - 130
o-Xylene	20.0	20.0	100	80 - 120
sec-Butylbenzene	20.8	20.0	104	70 - 125
tert-Butylbenzene	20.5	20.0	102	70 - 130
trans-1,2-Dichloroethene	19.2	20.0	96	60 - 140
trans-1,3-Dichloropropene	21.0	20.0	105	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/8/14 03:22

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1403255-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\040714\J4551.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1403255-03	I:\ACQUDATA\msvoa12\Data\040714\J4548.D\	4/8/14 01:45
FTMM-53-EB-03312014	R1402225-002	I:\ACQUDATA\msvoa12\Data\040714\J4553.D\	4/8/14 04:26
FTMM-TB-03312014	R1402225-003	I:\ACQUDATA\msvoa12\Data\040714\J4554.D\	4/8/14 04:59
FTMM-53-GW-699MW09-7.70	R1402225-004	I:\ACQUDATA\msvoa12\Data\040714\J4555.D\	4/8/14 05:31
FTMM-53-GW-699MW16-11.5	R1402225-005	I:\ACQUDATA\msvoa12\Data\040714\J4556.D\	4/8/14 06:03
FTMM-53-GW-699MW16-6.5	R1402225-008	I:\ACQUDATA\msvoa12\Data\040714\J4557.D\	4/8/14 06:35
FTMM-53-GW-699MW04-6.85	R1402225-009	I:\ACQUDATA\msvoa12\Data\040714\J4558.D\	4/8/14 07:08
FTMM-68-GW-565MW01D-22.31	R1402225-010	I:\ACQUDATA\msvoa12\Data\040714\J4559.D\	4/8/14 07:40

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Analyzed: 4/8/14 14:13

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1403327-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\MSVOA12\DATA\040814\J4571.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1403327-03	I:\ACQUDATA\MSVOA12\DATA\040814\J4569.D\	4/8/14 13:08
FTMM-53-GW-699MW06-10.20	R1402225-007	I:\ACQUDATA\MSVOA12\DATA\040814\J4572.D\	4/8/14 14:45
FTMM-DI-03312014	R1402225-001	I:\ACQUDATA\MSVOA12\DATA\040814\J4573.D\	4/8/14 15:18
FTMM-53-GW-699MW01-12.5	R1402225-011	I:\ACQUDATA\MSVOA12\DATA\040814\J4574.D\	4/8/14 15:50
FTMM-53-GW-699MW01-7.5	R1402225-013	I:\ACQUDATA\MSVOA12\DATA\040814\J4575.D\	4/8/14 16:22
FTMM-53-GW-699MW04-13.85	R1402225-014	I:\ACQUDATA\MSVOA12\DATA\040814\J4577.D\	4/8/14 17:27
FTMM-53-GW-699RW11-8.03	R1402225-018	I:\ACQUDATA\MSVOA12\DATA\040814\J4578.D\	4/8/14 17:59
FTMM-53-GW-699RW11-14.08	R1402225-019	I:\ACQUDATA\MSVOA12\DATA\040814\J4579.D\	4/8/14 18:31
FTMM-53-GW-699RW03-14.59	R1402225-012	I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D\	4/8/14 19:04
FTMM-53-GW-699RW05-4.8	R1402225-006	I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D\	4/8/14 20:41
FTMM-68-GW-565MW01D-22.31DL	R1402225-010	I:\ACQUDATA\MSVOA12\DATA\040814\J4585.D\	4/8/14 21:45
FTMM-53-GW-699MW06-10.20MS	RQ1403327-05	I:\ACQUDATA\MSVOA12\DATA\040814\J4587.D\	4/8/14 22:50
FTMM-53-GW-699MW06-10.20DMS	RQ1403327-06	I:\ACQUDATA\MSVOA12\DATA\040814\J4588.D\	4/8/14 23:22

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Analyzed:**	4/10/14 13:12
Sample Matrix:	Water		

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-12
Lab Code:	RQ1403454-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\041014\J4652.D\
Analytical Method:	8260C		

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1403454-03	I:\ACQUDATA\msvoa12\Data\041014\J4650.D\	4/10/14 12:05
FTMM-53-GW-699RW03-8.20	R1402225-020	I:\ACQUDATA\msvoa12\Data\041014\J4653.D\	4/10/14 13:46
FTMM-68-GW-565MW101D-22.31	R1402225-017	I:\ACQUDATA\msvoa12\Data\041014\J4654.D\	4/10/14 14:19
FTMM-53-GW-699RW05-9.80	R1402225-015	I:\ACQUDATA\msvoa12\Data\041014\J4655.D\	4/10/14 14:51
FTMM-68-GW-565MW01-11.99	R1402225-016	I:\ACQUDATA\msvoa12\Data\041014\J4656.D\	4/10/14 15:23

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 3/12/14 09:41

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031214\J3873.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 215801

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.96	83285	Pass
75	95	30	60	49.54	217600	Pass
95	95	100	100	100.00	439232	Pass
96	95	5	9	6.84	30035	Pass
173	174	0	2	1.18	3907	Pass
174	95	50	120	75.24	330475	Pass
175	174	5	9	7.57	25003	Pass
176	174	95	101	100.37	331712	Pass
177	176	5	9	6.54	21696	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3875.D\	3/12/14 10:45	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3876.D\	3/12/14 11:17	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3877.D\	3/12/14 11:49	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3878.D\	3/12/14 12:21	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3879.D\	3/12/14 12:53	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3880.D\	3/12/14 13:26	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3881.D\	3/12/14 13:58	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa12\Data\031214\J3882.D\	3/12/14 14:30	

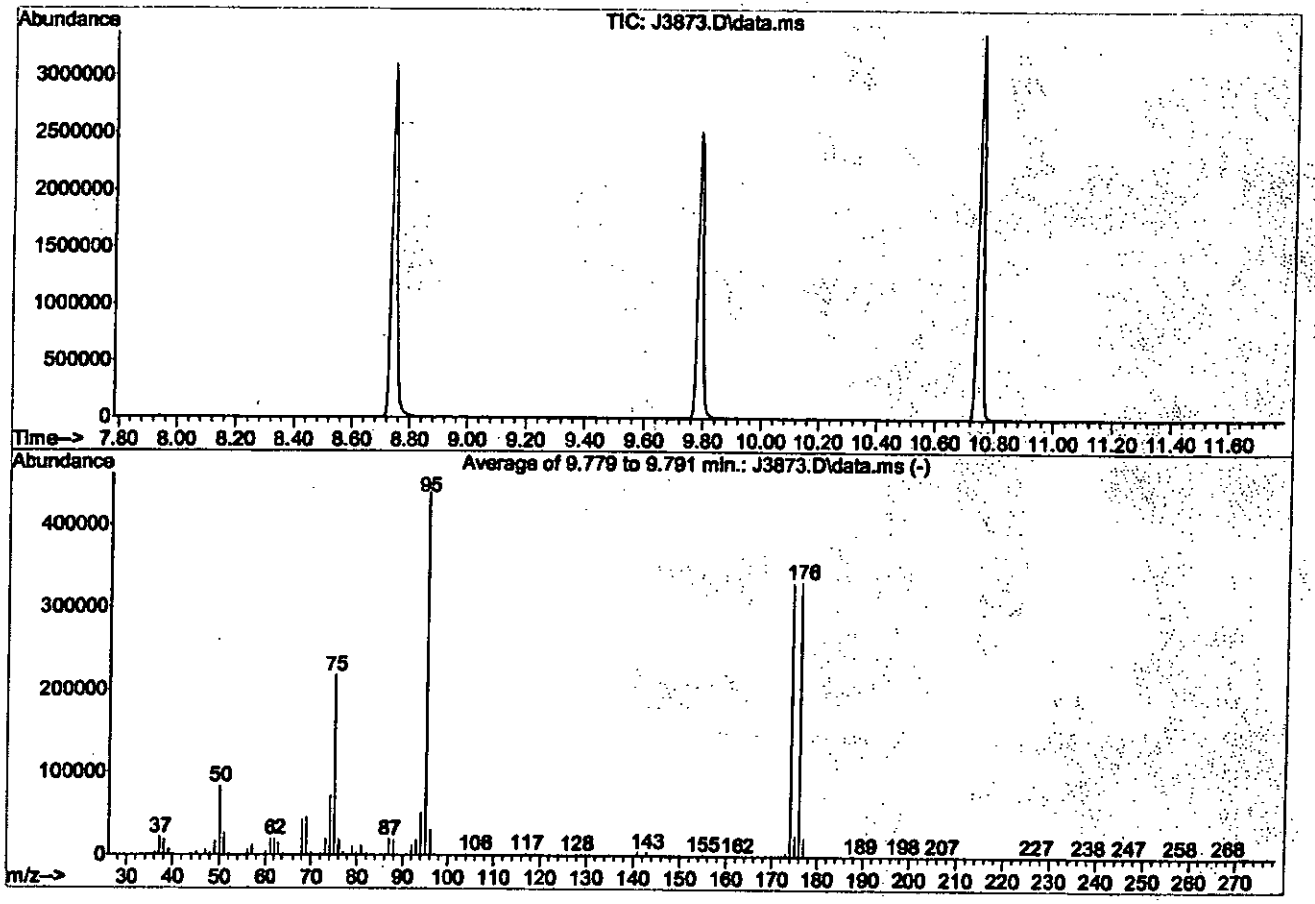
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\031214\
Data File : J3873.D
Acq On : 12 Mar 2014 9:41 am
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP60.P

KR 3/12/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Jan 16 12:02:56 2014



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	83285	PASS
75	95	30	60	49.5	217600	PASS
95	95	100	100	100.0	439232	PASS
96	95	5	9	6.8	30035	PASS
173	174	0.00	2	1.2	3907	PASS
174	95	50	120	75.2	330475	PASS
175	174	5	9	7.6	25003	PASS
176	174	95	101	100.4	331712	PASS
177	176	5	9	6.5	21696	PASS

W031214.M Wed Mar 12 10:00:02 2014

Page: 1
00032

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/8/14 00:40

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\040714\J4546.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 387044

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.83	69123	Pass
75	95	30	60	48.90	189629	Pass
95	95	100	100	100.00	387755	Pass
96	95	5	9	6.44	24975	Pass
173	174	0	2	1.03	3574	Pass
174	95	50	120	89.90	348587	Pass
175	174	5	9	7.31	25477	Pass
176	174	95	101	96.89	337749	Pass
177	176	5	9	6.28	21195	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1403255-02	I:\ACQUDATA\msvoa12\Data\040714\J4547.D\	4/8/14 01:13	
Lab Control Sample	RQ1403255-03	I:\ACQUDATA\msvoa12\Data\040714\J4548.D\	4/8/14 01:45	
Method Blank	RQ1403255-04	I:\ACQUDATA\msvoa12\Data\040714\J4551.D\	4/8/14 03:22	
FTMM-53-EB-03312014	R1402225-002	I:\ACQUDATA\msvoa12\Data\040714\J4553.D\	4/8/14 04:26	
FTMM-TB-03312014	R1402225-003	I:\ACQUDATA\msvoa12\Data\040714\J4554.D\	4/8/14 04:59	
FTMM-53-GW-699MW09-7.70	R1402225-004	I:\ACQUDATA\msvoa12\Data\040714\J4555.D\	4/8/14 05:31	
FTMM-53-GW-699MW16-11.5	R1402225-005	I:\ACQUDATA\msvoa12\Data\040714\J4556.D\	4/8/14 06:03	
FTMM-53-GW-699MW16-6.5	R1402225-008	I:\ACQUDATA\msvoa12\Data\040714\J4557.D\	4/8/14 06:35	
FTMM-53-GW-699MW04-6.85	R1402225-009	I:\ACQUDATA\msvoa12\Data\040714\J4558.D\	4/8/14 07:08	
FTMM-68-GW-565MW01D-22.31	R1402225-010	I:\ACQUDATA\msvoa12\Data\040714\J4559.D\	4/8/14 07:40	

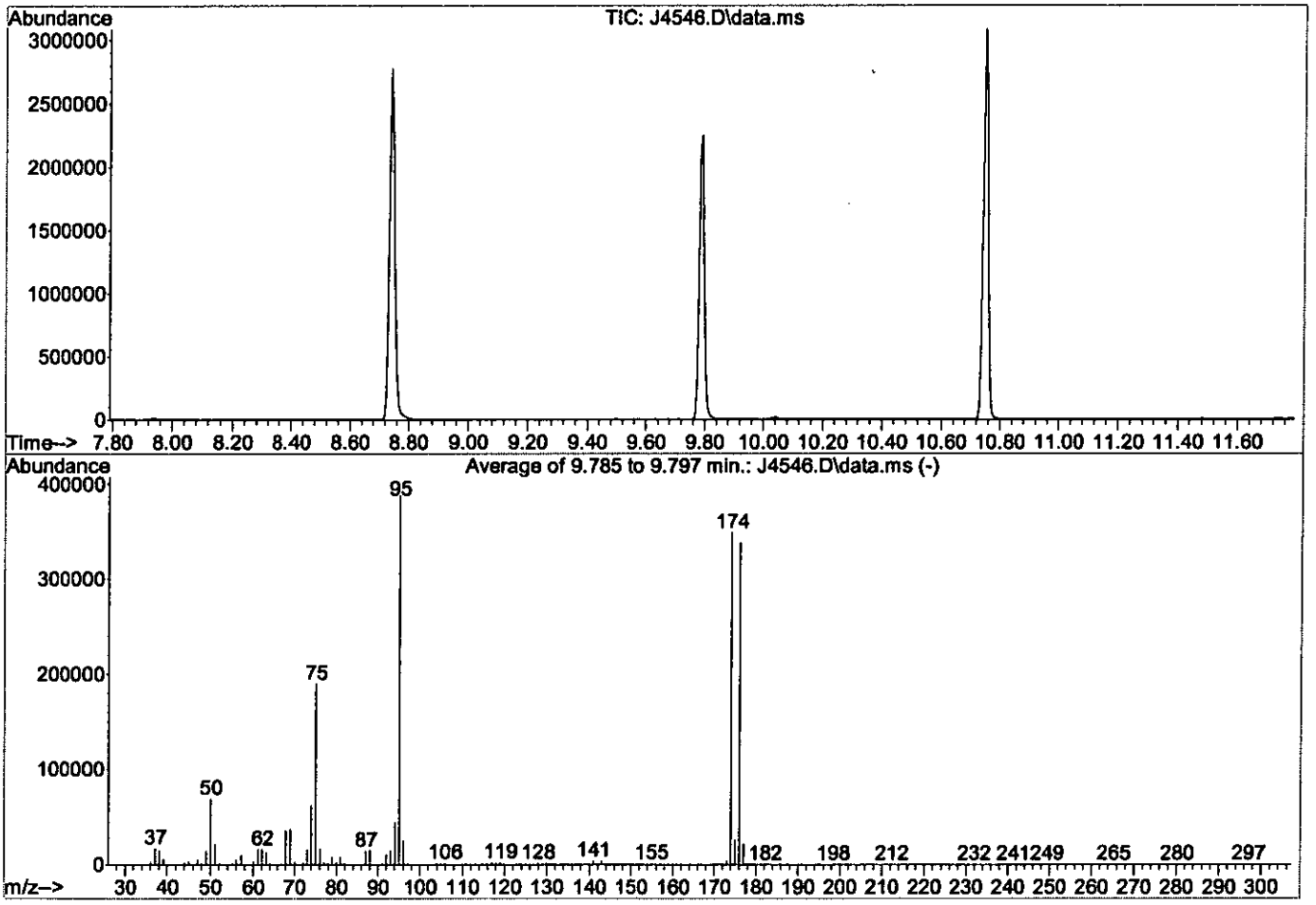
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4546.D
Acq On : 8 Apr 2014 12:40 am
Operator : K.Ruest
Sample : TUNE RQ1403255-01
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014

pfu 4/8/14



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	69123	PASS
75	95	30	60	48.9	189629	PASS
95	95	100	100	100.0	387755	PASS
96	95	5	9	6.4	24975	PASS
173	174	0.00	2	1.0	3574	PASS
174	95	50	120	89.9	348587	PASS
175	174	5	9	7.3	25477	PASS
176	174	95	101	96.9	337749	PASS
177	176	5	9	6.3	21195	PASS

W031214.M Tue Apr 08 09:47:10 2014 00034 Page: 1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/8/14 12:00

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\040814\J4567.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 387236

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.60	67157	Pass
75	95	30	60	49.28	188045	Pass
95	95	100	100	100.00	381593	Pass
96	95	5	9	6.61	25206	Pass
173	174	0	2	1.10	3697	Pass
174	95	50	120	87.72	334741	Pass
175	174	5	9	7.78	26040	Pass
176	174	95	101	97.37	325931	Pass
177	176	5	9	6.35	20699	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1403327-02	I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D\	4/8/14 12:36	
Lab Control Sample	RQ1403327-03	I:\ACQUDATA\MSVOA12\DATA\040814\J4569.D\	4/8/14 13:08	
Method Blank	RQ1403327-04	I:\ACQUDATA\MSVOA12\DATA\040814\J4571.D\	4/8/14 14:13	
FTMM-53-GW-699MW06-10.20	R1402225-007	I:\ACQUDATA\MSVOA12\DATA\040814\J4572.D\	4/8/14 14:45	
FTMM-DI-03312014	R1402225-001	I:\ACQUDATA\MSVOA12\DATA\040814\J4573.D\	4/8/14 15:18	
FTMM-53-GW-699MW01-12.5	R1402225-011	I:\ACQUDATA\MSVOA12\DATA\040814\J4574.D\	4/8/14 15:50	
FTMM-53-GW-699MW01-7.5	R1402225-013	I:\ACQUDATA\MSVOA12\DATA\040814\J4575.D\	4/8/14 16:22	
FTMM-53-GW-699MW04-13.85	R1402225-014	I:\ACQUDATA\MSVOA12\DATA\040814\J4577.D\	4/8/14 17:27	
FTMM-53-GW-699RW11-8.03	R1402225-018	I:\ACQUDATA\MSVOA12\DATA\040814\J4578.D\	4/8/14 17:59	
FTMM-53-GW-699RW11-14.08	R1402225-019	I:\ACQUDATA\MSVOA12\DATA\040814\J4579.D\	4/8/14 18:31	
FTMM-53-GW-699RW03-14.59	R1402225-012	I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D\	4/8/14 19:04	
FTMM-53-GW-699RW05-4.8	R1402225-006	I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D\	4/8/14 20:41	
FTMM-68-GW-565MW01D-22.31DL	R1402225-010	I:\ACQUDATA\MSVOA12\DATA\040814\J4585.D\	4/8/14 21:45	
FTMM-53-GW-699MW06-10.20MS	RQ1403327-05	I:\ACQUDATA\MSVOA12\DATA\040814\J4587.D\	4/8/14 22:50	
FTMM-53-GW-699MW06-10.20DMS	RQ1403327-06	I:\ACQUDATA\MSVOA12\DATA\040814\J4588.D\	4/8/14 23:22	

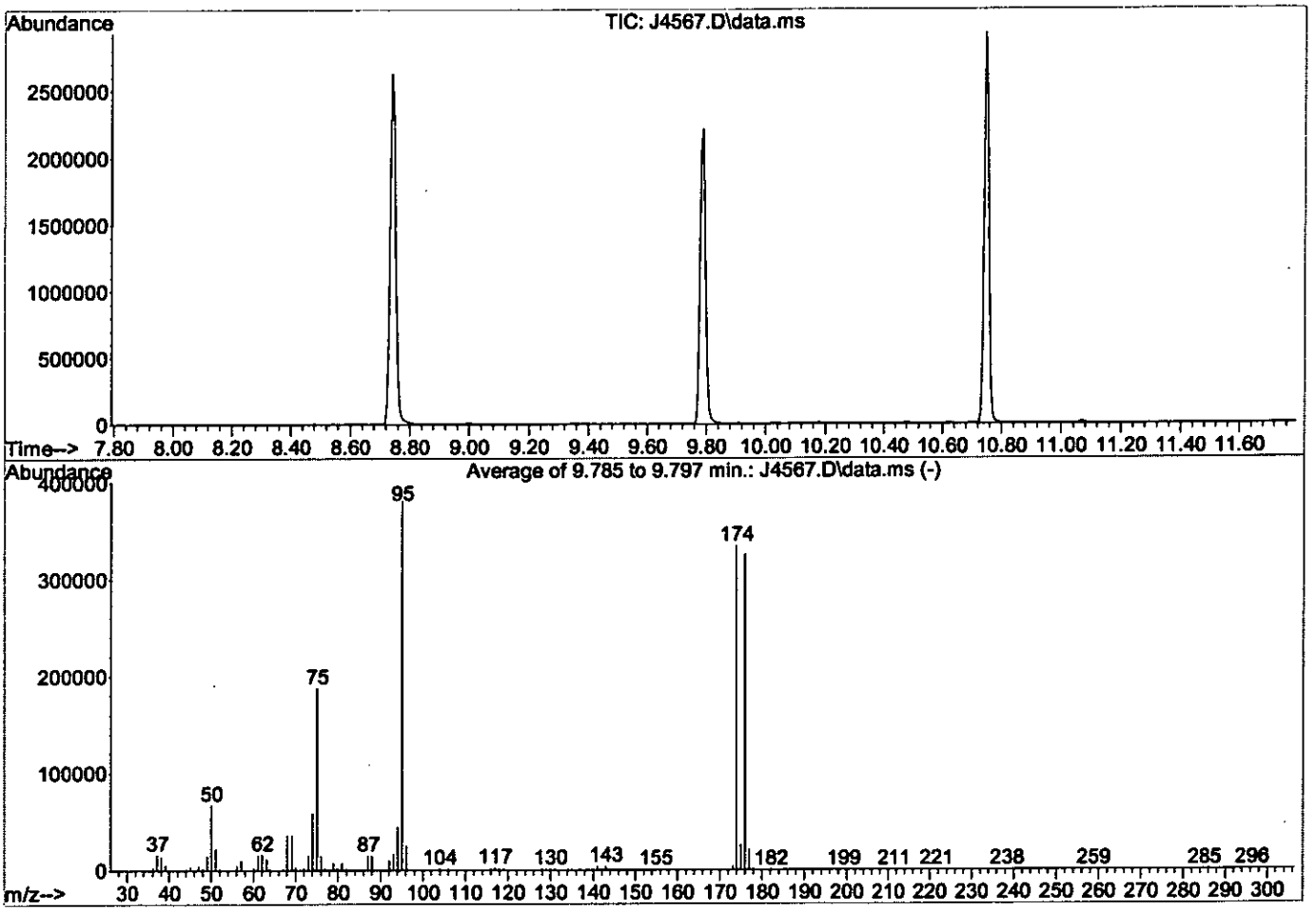
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4567.D
Acq On : 8 Apr 2014 12:00 pm
Operator : K.Ruest
Sample : TUNE RQ1403327-01
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014

KR 4/8/14



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	67157	PASS
75	95	30	60	49.3	188045	PASS
95	95	100	100	100.0	381593	PASS
96	95	5	9	6.6	25206	PASS
173	174	0.00	2	1.1	3697	PASS
174	95	50	120	87.7	334741	PASS
175	174	5	9	7.8	26040	PASS
176	174	95	101	97.4	325931	PASS
177	176	5	9	6.4	20699	PASS

W031214.M Tue Apr 08 12:27:49 2014 00036 Page: 1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/10/14 10:54

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\041014\J4648.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 387653

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.13	63216	Pass
75	95	30	60	48.56	179173	Pass
95	95	100	100	100.00	368981	Pass
96	95	5	9	6.68	24655	Pass
173	174	0	2	1.01	3414	Pass
174	95	50	120	91.48	337557	Pass
175	174	5	9	7.56	25504	Pass
176	174	95	101	99.15	334677	Pass
177	176	5	9	6.59	22061	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1403454-02	I:\ACQUDATA\msvoa12\Data\041014\J4649.D\	4/10/14 11:33	
Lab Control Sample	RQ1403454-03	I:\ACQUDATA\msvoa12\Data\041014\J4650.D\	4/10/14 12:05	
Method Blank	RQ1403454-04	I:\ACQUDATA\msvoa12\Data\041014\J4652.D\	4/10/14 13:12	
FTMM-53-GW-699RW03-8.20	R1402225-020	I:\ACQUDATA\msvoa12\Data\041014\J4653.D\	4/10/14 13:46	
FTMM-68-GW-565MW101D-22.31	R1402225-017	I:\ACQUDATA\msvoa12\Data\041014\J4654.D\	4/10/14 14:19	
FTMM-53-GW-699RW05-9.80	R1402225-015	I:\ACQUDATA\msvoa12\Data\041014\J4655.D\	4/10/14 14:51	
FTMM-68-GW-565MW01-11.99	R1402225-016	I:\ACQUDATA\msvoa12\Data\041014\J4656.D\	4/10/14 15:23	

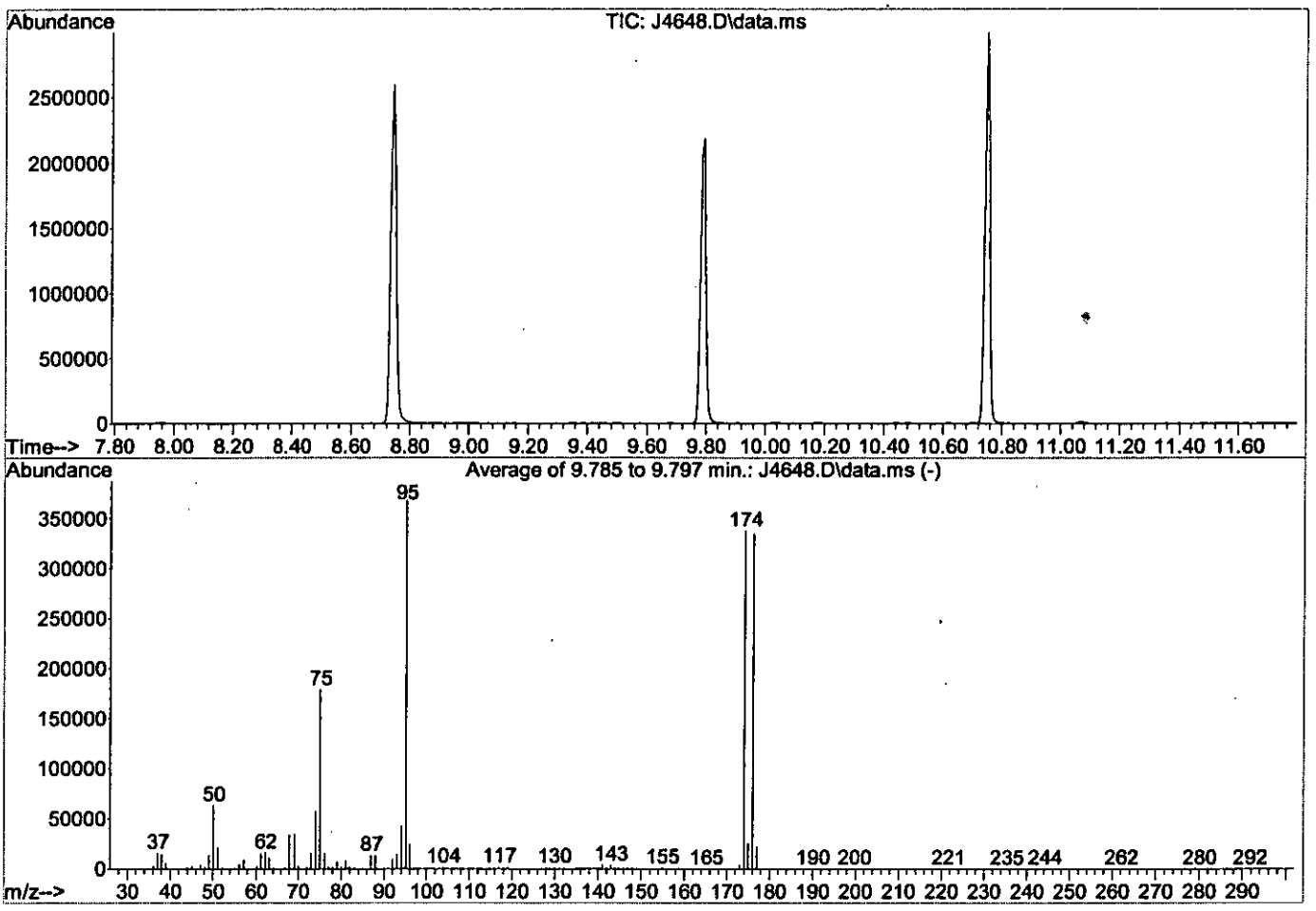
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4648.D
Acq On : 10 Apr 2014 10:54 am
Operator : K.Ruest
Sample : TUNE RQ1403451-01
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP60.P

KR 4/10/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	63216	PASS
75	95	30	60	48.6	179173	PASS
95	95	100	100	100.0	368981	PASS
96	95	5	9	6.7	24655	PASS
173	174	0.00	2	1.0	3414	PASS
174	95	50	120	91.5	337557	PASS
175	174	5	9	7.6	25504	PASS
176	174	95	101	99.1	334677	PASS
177	176	5	9	6.6	22061	PASS

W031214.M Thu Apr 10 11:13:01 2014 00038 Page: 1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/8/14 01:13

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\040714\J4547.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1403255-02
Analysis Lot: 387044
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	621,359	10.75	1,244,693	5.45	1,168,204	8.74
	Upper Limit ==>	1,242,718	11.25	2,489,386	5.95	2,336,408	9.24
	Lower Limit ==>	310,680	10.25	622,347	4.95	584,102	8.24
	ICAL Result ==>	670,106	10.75	1,455,324	5.45	1,331,361	8.74
Associated Analyses							
Lab Control Sample	RQ1403255-03	606,439	10.75	1,254,047	5.45	1,195,842	8.74
Method Blank	RQ1403255-04	584,989	10.75	1,239,658	5.45	1,162,152	8.74
FTMM-53-EB-03312014	R1402225-002	577,175	10.75	1,227,867	5.45	1,157,870	8.74
FTMM-TB-03312014	R1402225-003	568,791	10.75	1,209,421	5.45	1,147,810	8.74
FTMM-53-GW-699MW09-7.70	R1402225-004	576,007	10.75	1,205,655	5.45	1,154,380	8.74
FTMM-53-GW-699MW16-11.5	R1402225-005	579,713	10.75	1,212,274	5.45	1,140,141	8.74
FTMM-53-GW-699MW16-6.5	R1402225-008	577,172	10.75	1,211,348	5.45	1,146,345	8.74
FTMM-53-GW-699MW04-6.85	R1402225-009	573,051	10.75	1,209,525	5.45	1,131,343	8.74
FTMM-68-GW-565MW01D-22.31	R1402225-010	579,559	10.75	1,204,287	5.45	1,145,967	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/8/14 01:13

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\040714\J4547.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1403255-02
Analysis Lot: 387044
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	825,372	4.25
	Upper Limit ==>	1,650,744	4.75
	Lower Limit ==>	412,686	3.75
	ICAL Result ==>	937,657	4.25
Associated Analyses			
Lab Control Sample	RQ1403255-03	833,618	4.25
Method Blank	RQ1403255-04	823,826	4.25
FTMM-53-EB-03312014	R1402225-002	807,223	4.25
FTMM-TB-03312014	R1402225-003	800,038	4.25
FTMM-53-GW-699MW09-7.70	R1402225-004	811,941	4.25
FTMM-53-GW-699MW16-11.5	R1402225-005	796,052	4.25
FTMM-53-GW-699MW16-6.5	R1402225-008	797,087	4.25
FTMM-53-GW-699MW04-6.85	R1402225-009	795,912	4.25
FTMM-68-GW-565MW01D-22.31	R1402225-010	794,068	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/8/14 12:36

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1403327-02
Analysis Lot: 387236
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	598,089	10.75	1,267,860	5.45	1,169,242	8.74
	Upper Limit ==>	1,196,178	11.25	2,535,720	5.95	2,338,484	9.24
	Lower Limit ==>	299,045	10.25	633,930	4.95	584,621	8.24
	ICAL Result ==>	670,106	10.75	1,455,324	5.45	1,331,361	8.74
Associated Analyses							
Lab Control Sample	RQ1403327-03	595,020	10.75	1,270,359	5.45	1,158,790	8.74
Method Blank	RQ1403327-04	575,343	10.75	1,263,995	5.45	1,150,225	8.74
FTMM-53-GW-699MW06-10.20	R1402225-007	545,088	10.75	1,254,744	5.45	1,144,904	8.74
FTMM-DI-03312014	R1402225-001	553,637	10.75	1,243,913	5.45	1,140,366	8.74
FTMM-53-GW-699MW01-12.5	R1402225-011	557,588	10.75	1,237,916	5.45	1,145,984	8.74
FTMM-53-GW-699MW01-7.5	R1402225-013	561,265	10.75	1,256,309	5.45	1,151,917	8.74
FTMM-53-GW-699MW04-13.85	R1402225-014	561,864	10.75	1,241,754	5.45	1,139,070	8.74
FTMM-53-GW-699RW11-8.03	R1402225-018	564,922	10.75	1,251,923	5.45	1,151,161	8.74
FTMM-53-GW-699RW11-14.08	R1402225-019	557,638	10.75	1,249,481	5.45	1,134,064	8.74
FTMM-53-GW-699RW03-14.59	R1402225-012	569,945	10.75	1,237,318	5.45	1,135,735	8.74
FTMM-53-GW-699RW05-4.8	R1402225-006	580,968	10.75	1,248,314	5.45	1,141,719	8.74
FTMM-68-GW-565MW01D-22.31	R1402225-010	564,192	10.75	1,256,818	5.45	1,148,170	8.74
FTMM-53-GW-699MW06-10.20MS	RQ1403327-05	595,578	10.75	1,253,922	5.45	1,161,971	8.74
FTMM-53-GW-699MW06-10.20DMS	RQ1403327-06	616,636	10.75	1,274,176	5.45	1,175,630	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/8/14 12:36

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1403327-02
Analysis Lot: 387236
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	839,906	4.25
	Upper Limit ==>	1,679,812	4.75
	Lower Limit ==>	419,953	3.75
	ICAL Result ==>	937,657	4.25
Associated Analyses			
Lab Control Sample	RQ1403327-03	852,681	4.25
Method Blank	RQ1403327-04	844,068	4.25
FTMM-53-GW-699MW06-10.20	R1402225-007	850,249	4.25
FTMM-DI-03312014	R1402225-001	829,491	4.25
FTMM-53-GW-699MW01-12.5	R1402225-011	835,633	4.25
FTMM-53-GW-699MW01-7.5	R1402225-013	845,406	4.25
FTMM-53-GW-699MW04-13.85	R1402225-014	836,301	4.25
FTMM-53-GW-699RW11-8.03	R1402225-018	839,705	4.25
FTMM-53-GW-699RW11-14.08	R1402225-019	831,240	4.25
FTMM-53-GW-699RW03-14.59	R1402225-012	839,322	4.25
FTMM-53-GW-699RW05-4.8	R1402225-006	830,389	4.25
FTMM-68-GW-565MW01D-22.31	R1402225-010	830,632	4.25
FTMM-53-GW-699MW06-10.20MS	RQ1403327-05	840,375	4.25
FTMM-53-GW-699MW06-10.20DMS	RQ1403327-06	858,092	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/10/14 11:33

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\041014\J4649.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1403454-02
Analysis Lot: 387653
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	592,812	10.75	1,231,191	5.45	1,138,266	8.74
	Upper Limit ==>	1,185,624	11.25	2,462,382	5.95	2,276,532	9.24
	Lower Limit ==>	296,406	10.25	615,596	4.95	569,133	8.24
	ICAL Result ==>	670,106	10.75	1,455,324	5.45	1,331,361	8.74
Associated Analyses							
Lab Control Sample	RQ1403454-03	579,627	10.75	1,232,617	5.45	1,142,149	8.74
Method Blank	RQ1403454-04	566,359	10.75	1,224,934	5.45	1,133,069	8.74
FTMM-53-GW-699RW03-8.20	R1402225-020	557,433	10.75	1,237,277	5.45	1,119,557	8.74
FTMM-68-GW-565MW101D-22.31	R1402225-017	548,419	10.75	1,242,209	5.45	1,143,900	8.74
FTMM-53-GW-699RW05-9.80	R1402225-015	565,491	10.75	1,250,435	5.45	1,147,598	8.74
FTMM-68-GW-565MW01-11.99	R1402225-016	548,955	10.75	1,228,276	5.45	1,127,732	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/10/14 11:33

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\041014\J4649.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1403454-02
Analysis Lot: 387653
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	834,712	4.25
	Upper Limit ==>	1,669,424	4.75
	Lower Limit ==>	417,356	3.75
	ICAL Result ==>	937,657	4.25
Associated Analyses			
Lab Control Sample	RQ1403454-03	835,777	4.25
Method Blank	RQ1403454-04	836,187	4.25
FTMM-53-GW-699RW03-8.20	R1402225-020	837,813	4.25
FTMM-68-GW-565MW101D-22.31	R1402225-017	837,060	4.25
FTMM-53-GW-699RW05-9.80	R1402225-015	850,525	4.25
FTMM-68-GW-565MW01-11.99	R1402225-016	828,853	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
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Phone (585) 288-5380 Fax (585) 288-8475
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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 0910
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 15:18
Sample Name:	FTMM-DI-03312014	**Units:**	µg/L
Lab Code:	R1402225-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4573.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 0910
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 15:18
Sample Name:	FTMM-DI-03312014	**Units:**	µg/L
Lab Code:	R1402225-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4573.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**0.30**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**2.8**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.72**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 15:18	
Dibromofluoromethane	102	85-115	4/8/14 15:18	
Toluene-d8	98	85-120	4/8/14 15:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1518

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-DI-03312014	**Units:**	µg/L
Lab Code:	R1402225-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4573.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 3:18 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 15:33:19 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	829491	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1243913	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1140366	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	553637	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	367913	51.09	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.18%				
48) surr1,1,2-dichloroetha...	4.664	65	429375	52.34	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 104.68%				
65) SURR3,Toluene-d8	7.322	98	1476023	48.78	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.56%				
70) SURR2,BFB	9.791	95	552000	48.90	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.80%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1329	0.28	ppb		90
15) Acetone	2.067	43	1606	0.98	ppb		82
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~2290~~	~~0.55~~	~~ppb~~	~~#~~	~~1~~
22) Methylene Chloride	2.365	84	2041	0.26	ppb	#	73
40) Chloroform	3.938	83	39082	2.84	ppb		94
66) Toluene	7.395	91	22751	0.72	ppb		97
78) Chlorobenzene	8.767	112	6027	0.30	ppb		97
~~90) Cyclohexanone~~	~~9.730~~	~~55~~	~~344~~	~~0.77~~	~~ppb~~	~~#~~	~~64~~
116) Hexachlorobt	12.272	225	1205	0.34	ppb		85
118) 1,2,3-Tclbenzene	12.437	180	1351	0.20	ppb	#	76
119) 2,4,5-Trichlorotolene WP	12.912	159	2281	0.52	ppb		96 RPD
120) 2,3,6-Trichlorotoluene	12.912	159	2281	0.57	ppb	#	88

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

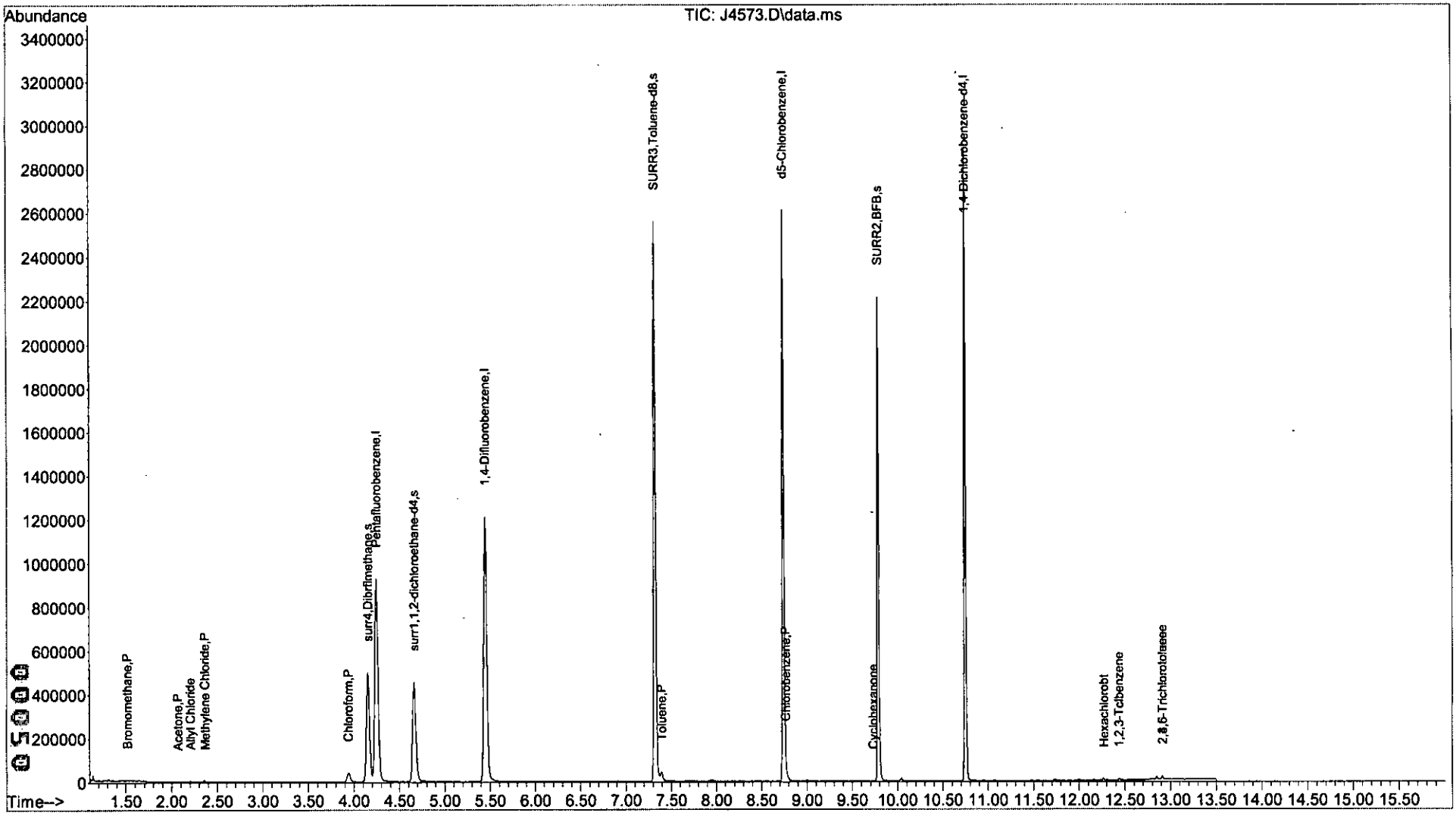
KP 4/9/14

W031214.M Tue Apr 08 15:33:23 2014 Page: 1

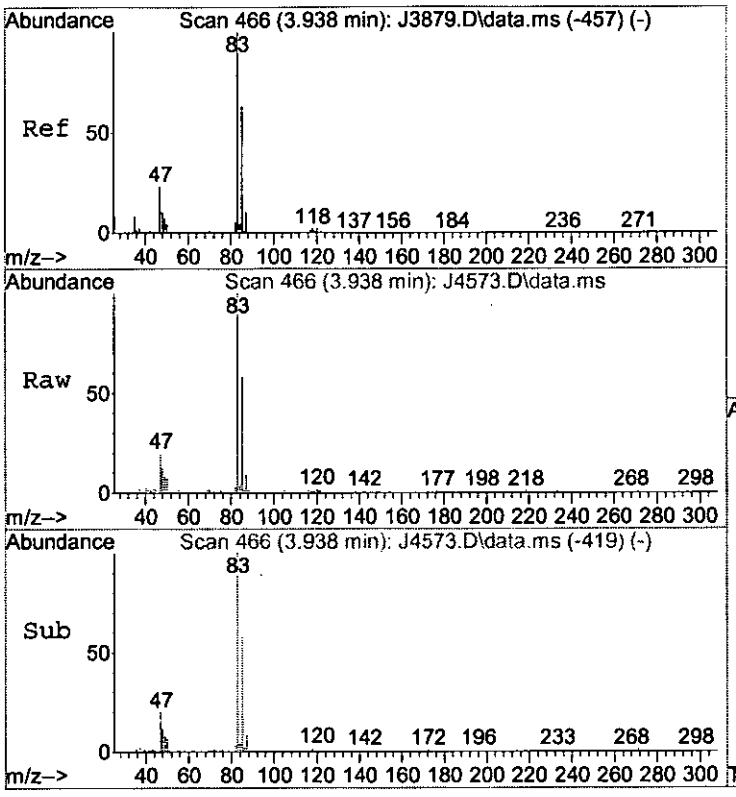
Quantitation Report (Not Reviewed)

Sample : R1402225-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4573.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 3:18 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 15:33:19 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



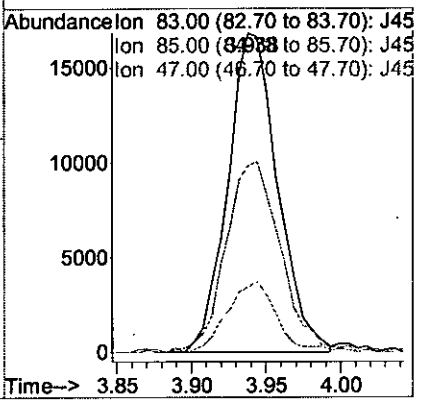
W031214.M Tue Apr 08 15:33:25 2014 Page: 2



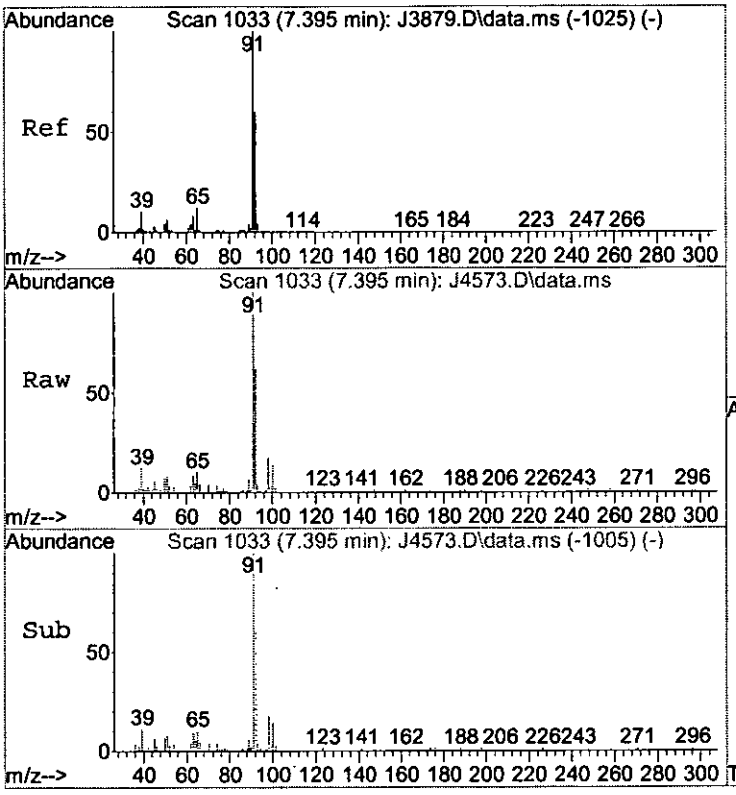
#40
Chloroform
Concen: 2.84 ppb
RT: 3.938 min Scan# 466
Delta R.T. -0.000 min
Lab File: J4573.D
Acq: 8 Apr 2014 3:18 pm

Tgt Ion: 83 Resp: 39082

Ion	Ratio	Lower	Upper
83	100		
85	58.5	42.6	82.6
47	20.4	3.4	43.4



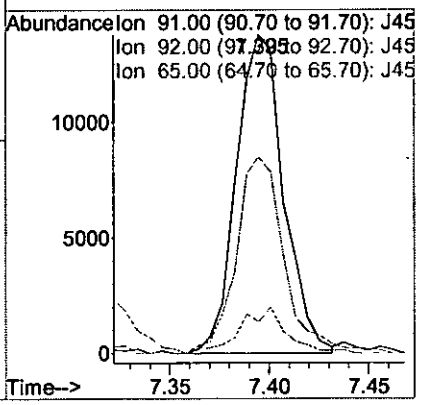
J4573.D W031214.M Wed Apr 09 09:42:07 2014 0005 Page 1



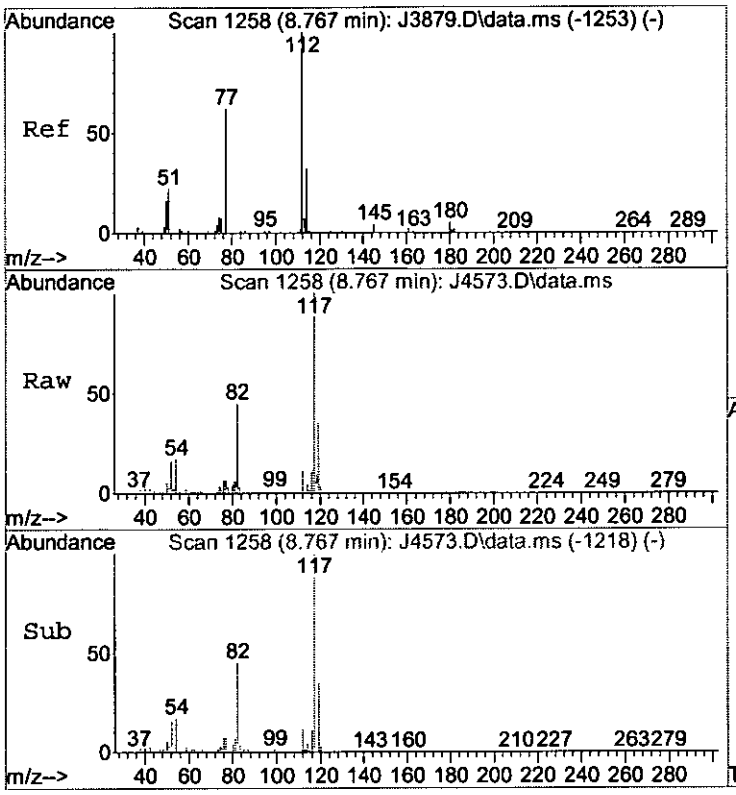
#66
Toluene
Concen: 0.72 ppb
RT: 7.395 min Scan# 1033
Delta R.T. -0.000 min
Lab File: J4573.D
Acq: 8 Apr 2014 3:18 pm

Tgt Ion: 91 Resp: 22751

Ion	Ratio	Lower	Upper
91	100		
92	61.7	39.9	79.9
65	10.0	0.0	32.3



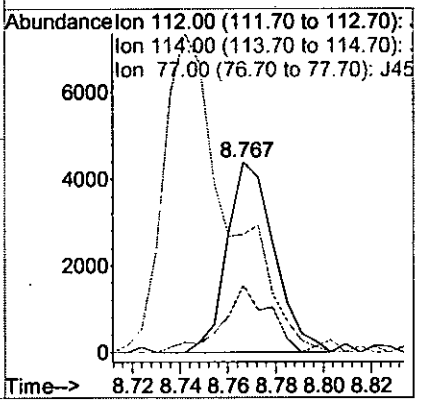
J4573.D W031214.M Wed Apr 09 09:42:13 2014 0005 Page 1



#78
Chlorobenzene
Concen: 0.30 ppb
RT: 8.767 min Scan# 1258
Delta R.T. -0.006 min
Lab File: J4573.D
Acq: 8 Apr 2014 3:18 pm

Tgt Ion:112 Resp: 6027

Ion	Ratio	Lower	Upper
112	100		
114	35.1	12.2	52.2
77	62.0	44.1	84.1



J4573.D W031214.M Wed Apr 09 09:42:19 2014 0005 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4573.D
Acq On : 8 Apr 2014 3:18 pm
Operator : K.Ruest
Sample : R1402225-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4573.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.938	459	466	476	rBV	41511	101823	2.64%	0.485%
2	4.158	493	502	509	rBV	499612	1182348	30.62%	5.631%
3	4.249	509	517	530	rVB	925212	2292835	59.38%	10.920%
4	4.664	575	585	598	rBV	454939	1163721	30.14%	5.542%
5	5.450	704	714	738	rBV	1210126	2839907	73.55%	13.526%
6	7.322	1014	1021	1030	rBV	2558209	3861282	100.00%	18.390%
7	7.395	1030	1033	1043	rVB2	42435	73356	1.90%	0.349%
8	8.742	1249	1254	1268	rBV	2608445	3429715	88.82%	16.335%
9	9.791	1421	1426	1437	rVB	2212243	2699951	69.92%	12.859%
10	10.748	1578	1583	1593	rBV	2883968	3351452	86.80%	15.962%

Sum of corrected areas: 20996390

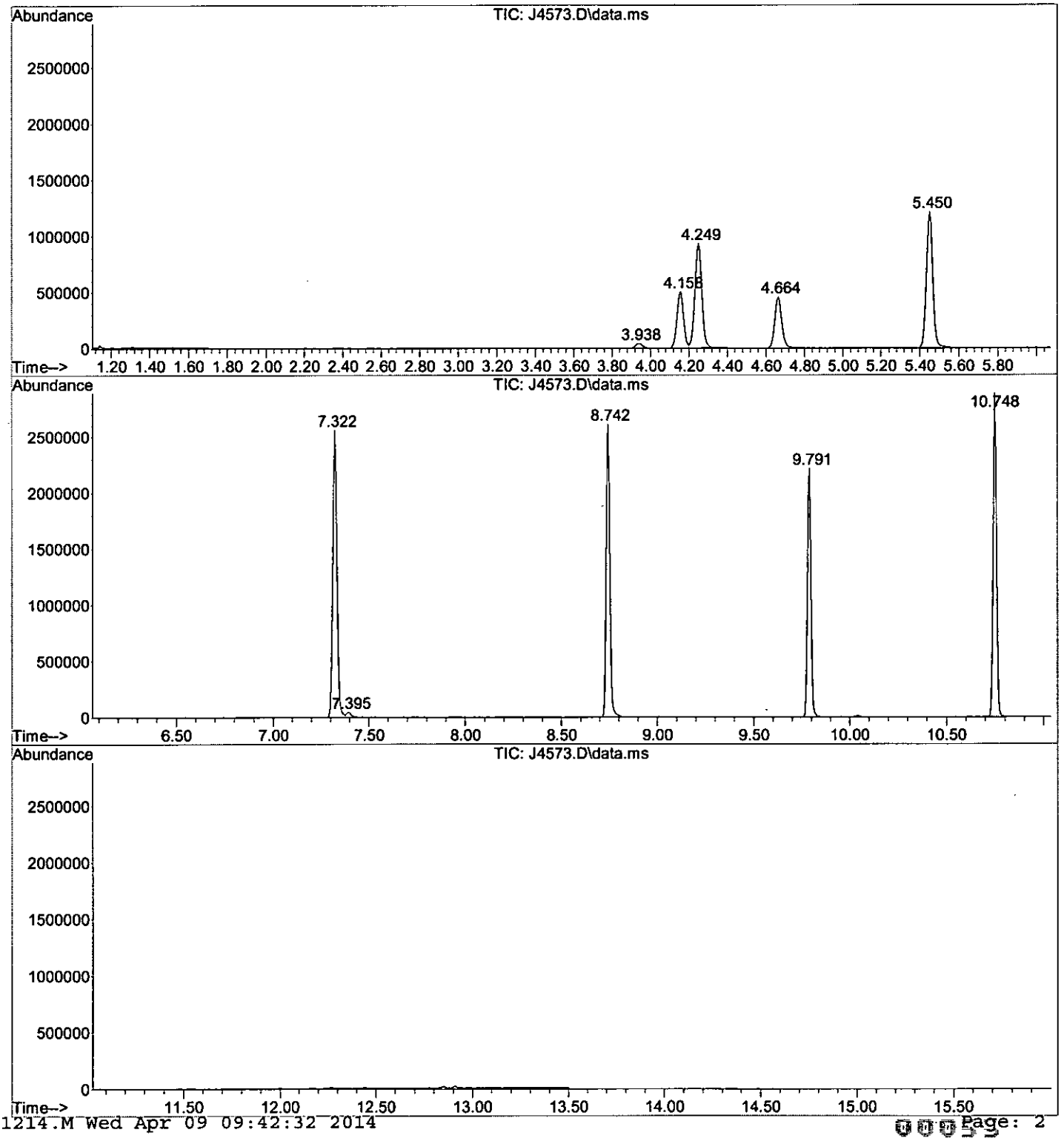
W031214.M Wed Apr 09 09:42:31 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4573.D
Acq On : 8 Apr 2014 3:18 pm
Operator : K.Ruest
Sample : R1402225-001|1.0
Misc : PARSONS 9913 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 09:42:32 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4573.D
Acq On : 8 Apr 2014 3:18 pmm
Operator : K.Ruestt
Sample : R1402225-001|1.00
Misc : PARSONS 9913 T44
ALS Vial : 4 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 0900
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 04:26
Sample Name:	FTMM-53-EB-03312014	**Units:**	µg/L
Lab Code:	R1402225-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4553.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	0.40	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 0900
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 04:26
Sample Name:	FTMM-53-EB-03312014	**Units:**	µg/L
Lab Code:	R1402225-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4553.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 04:26	
Dibromofluoromethane	101	85-115	4/8/14 04:26	
Toluene-d8	95	85-120	4/8/14 04:26	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0426

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-EB-03312014	**Units:**	µg/L
Lab Code:	R1402225-002	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-002|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4553.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 4:26 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 04:41:58 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	807223	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1227867	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1157870	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	577175	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	357552	50.30	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.60%				
48) surr1,1,2-dichloroetha...	4.664	65	416621	51.45	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.90%				
65) SURR3,Toluene-d8	7.322	98	1421061	47.58	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.16%				
70) SURR2,BFB	9.791	95	565498	50.75	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.50%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1880	0.40	ppb		82
~~15) Acetone~~	~~2.061~~	~~43~~	~~1363~~	~~0.85~~	~~ppb~~		~~78~~
~~16) 2-Propanol~~	~~2.152~~	~~45~~	~~289~~	~~1.11~~	~~ppb~~	~~#~~	~~55~~
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1266~~	~~2.73~~	~~ppb~~	~~#~~	~~37~~

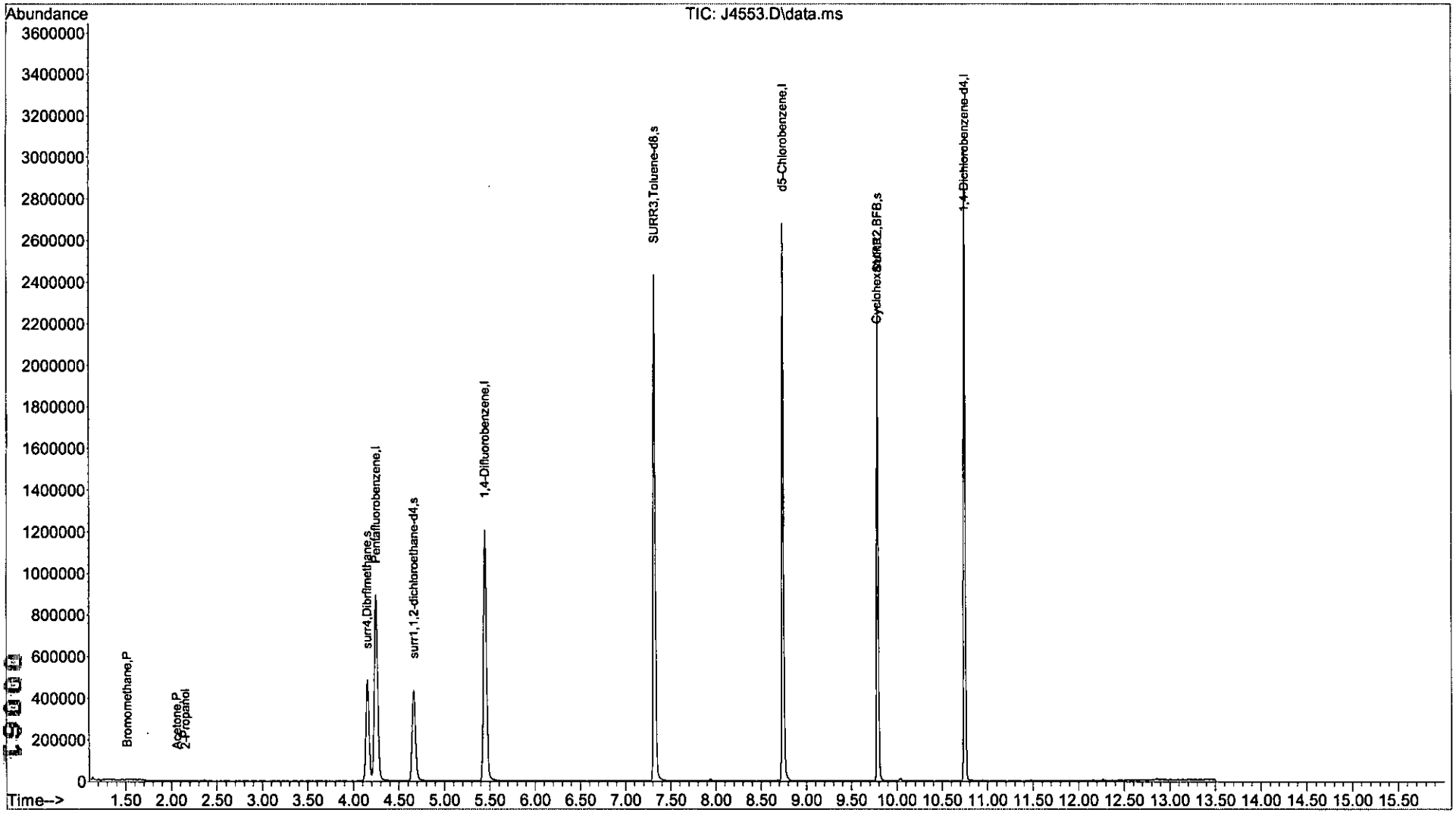
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 4/8/14

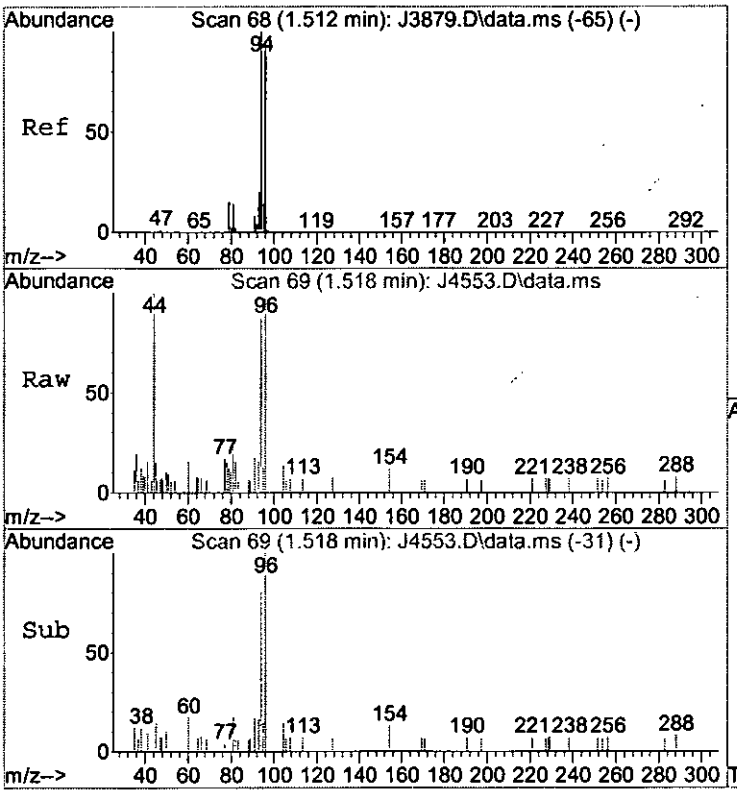
Quantitation Report (Not Reviewed)

Sample : R1402225-002|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4553.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 4:26 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 04:41:58 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



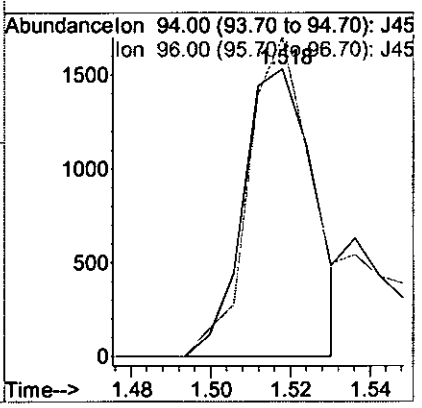
W031214.M Tue Apr 08 04:42:00 2014 Page: 2



#5
Bromomethane
Concen: 0.40 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4553.D
Acq: 8 Apr 2014 4:26 am

Tgt Ion: 94 Resp: 1880

Ion	Ratio	Lower	Upper
94	100		
96	111.0	73.8	113.8



J4553.D W031214.M Tue Apr 08 16:28:24 2014 Page 1

00062

LSC Area Percent Report

Data Path : I:\ACQUDATA\MSVOA12\DATA\040714\
Data File : J4553.D
Acq On : 8 Apr 2014 4:26 am
Operator : K.Ruest
Sample : R1402225-002|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4553.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.158	489	502	509	rBV	489064	1160348	30.87%	5.564%
2	4.249	509	517	535	rVB	892770	2261246	60.17%	10.843%
3	4.664	574	585	606	rBV2	437301	1160583	30.88%	5.565%
4	5.450	704	714	729	rBV	1206381	2793086	74.32%	13.394%
5	7.322	1014	1021	1039	rBV	2431561	3758336	100.00%	18.022%
6	8.742	1249	1254	1269	rBV	2678534	3472044	92.38%	16.649%
7	9.791	1421	1426	1435	rBV	2291816	2765654	73.59%	13.262%
8	10.748	1578	1583	1594	rBV	3036906	3482744	92.67%	16.701%

Sum of corrected areas: 20854041

W031214.M Tue Apr 08 16:28:28 2014 Page: 1

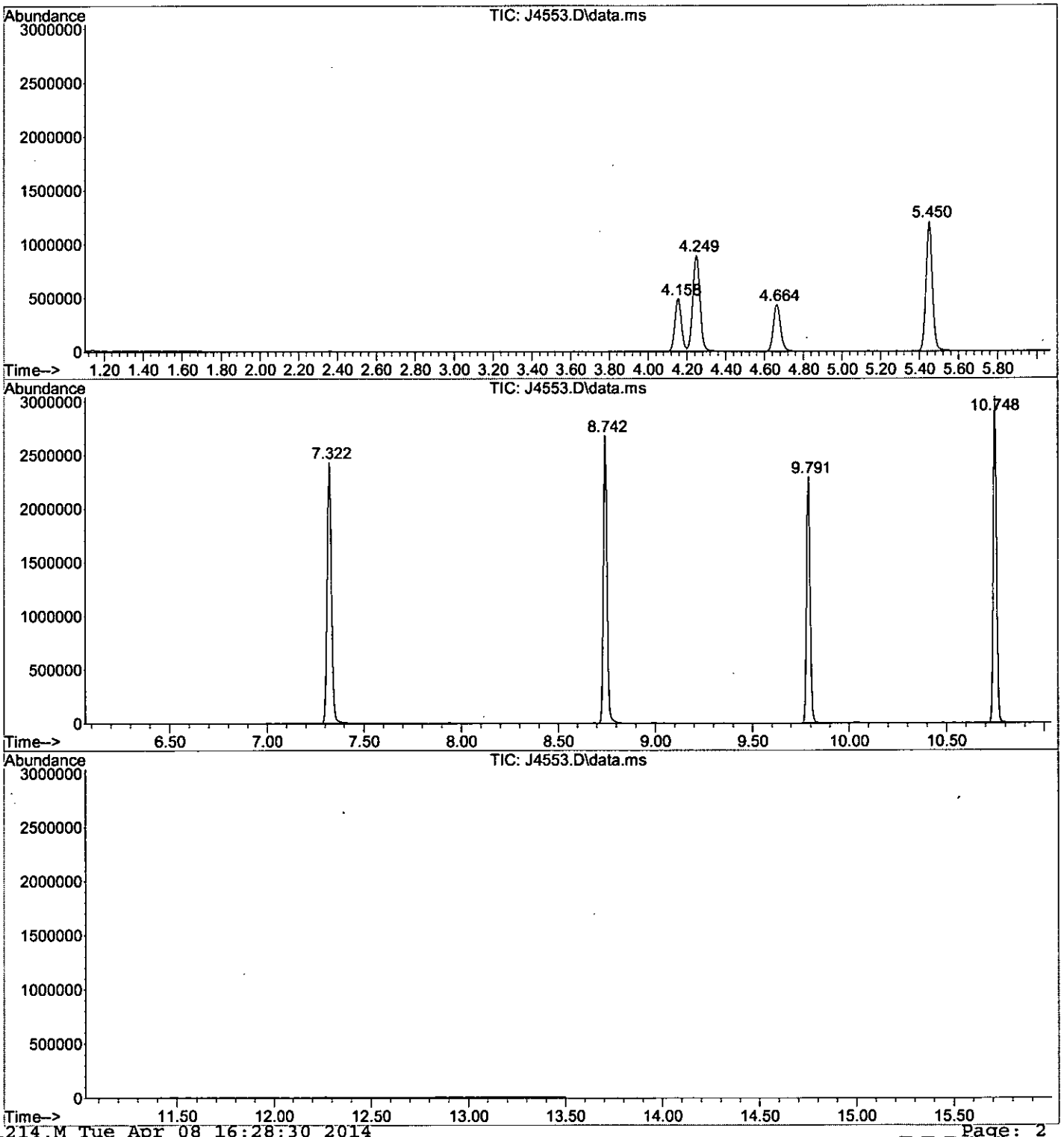
00063

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\MSVOA12\DATA\040714\
Data File : J4553.D
Acq On : 8 Apr 2014 4:26 am
Operator : K.Ruest
Sample : R1402225-002|1.0
Misc : PARSONS 9913 T4
ALS Vial : 34 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Apr 08 16:28:30 2014 Page: 2

00064

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\MSVOA12\DATA\040714\\
Data File : J4553.D
Acq On : 8 Apr 2014 4:26 am
Operator : K.Ruestt
Sample : R1402225-002|1.00
Misc : PARSONS 9913 T44
ALS Vial : 34 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1201
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 04:59
Sample Name:	FTMM-TB-03312014	**Units:**	µg/L
Lab Code:	R1402225-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4554.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1201
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 04:59
Sample Name:	FTMM-TB-03312014	**Units:**	µg/L
Lab Code:	R1402225-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\U4554.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 04:59	
Dibromofluoromethane	100	85-115	4/8/14 04:59	
Toluene-d8	97	85-120	4/8/14 04:59	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0459

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-03312014	**Units:**	µg/L
Lab Code:	R1402225-003	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-003|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4554.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 4:59 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 05:14:13 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	800038	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1209421	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1147810	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	568791	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.158	113	350882	50.12	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.24%			
48) surr1,1,2-dichloroetha...	4.664	65	411552	51.60	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.20%			
65) SURR3,Toluene-d8	7.322	98	1424579	48.42	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.84%			
70) SURR2,BFB	9.791	95	561115	51.12	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.24%			
Target Compounds						Qvalue
5) Bromomethane	1.512	94	1015	0.22	ppb	96
~~15) Acetone~~	~~2.048~~	~~43~~	~~882~~	~~0.56~~	~~ppb~~	~~92~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~3107~~	~~0.78~~	~~ppb #~~	~~1~~
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1494~~	~~3.27~~	~~ppb #~~	~~14~~

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

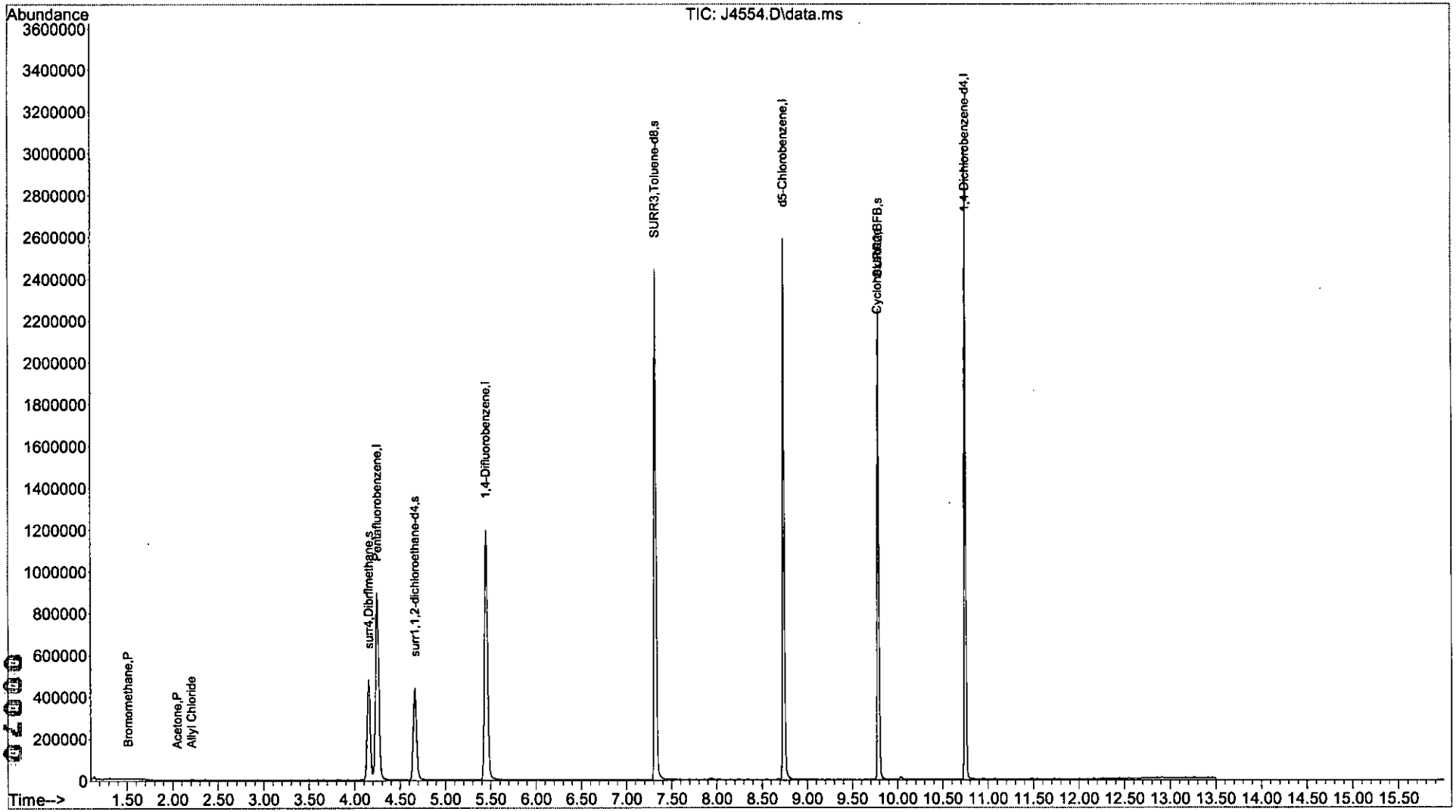
KR 4/8/14

W031214.M Tue Apr 08 05:14:16 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1402225-003|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4554.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 4:59 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 05:14:13 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Apr 08 05:14:17 2014 Page: 2

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4554.D
Acq On : 8 Apr 2014 4:59 am
Operator : K.Ruest
Sample : R1402225-003|1.0
Misc : PARSONS 9913 T4
ALS Vial : 35 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4554.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.158	492	502	509	rBV	479708	1134649	30.28%	5.488%
2	4.249	509	517	530	rVB	893714	2222864	59.33%	10.751%
3	4.664	574	585	600	rBV	441262	1141365	30.46%	5.520%
4	5.450	705	714	728	rBV	1196617	2771072	73.96%	13.402%
5	7.322	1015	1021	1037	rBV	2443083	3746671	100.00%	18.121%
6	8.742	1249	1254	1267	rBV	2587458	3429679	91.54%	16.588%
7	9.791	1420	1426	1440	rBV	2255638	2768129	73.88%	13.388%
8	10.748	1578	1583	1593	rBV	3018901	3461685	92.39%	16.742%

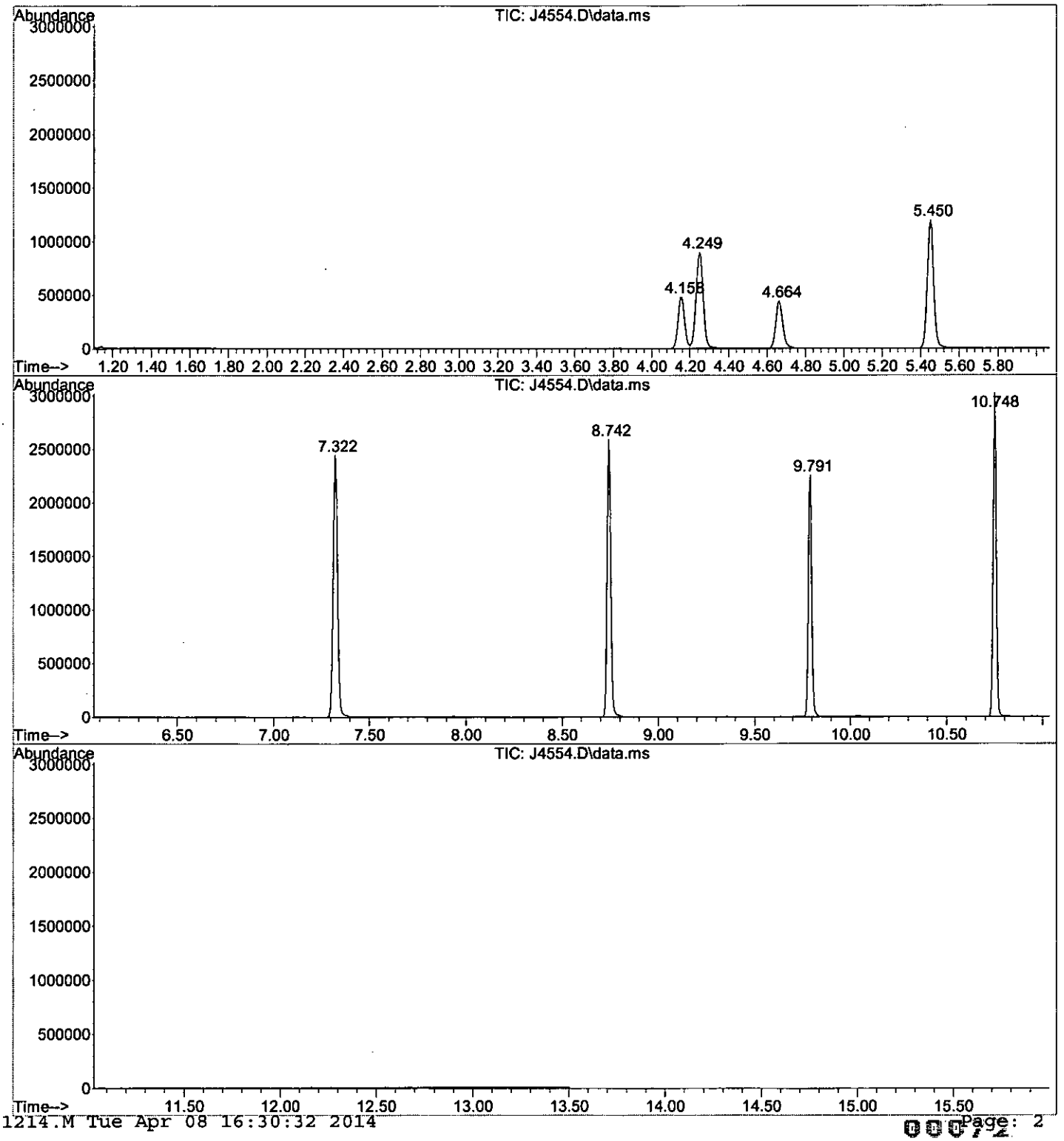
Sum of corrected areas: 20676114

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4554.D
Acq On : 8 Apr 2014 4:59 am
Operator : K.Ruest
Sample : R1402225-003|1.0
Misc : PARSONS 9913 T4
ALS Vial : 35 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Apr 08 16:30:32 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040714\\
Data File : J4554.D
Acq On : 8 Apr 2014 4:59 amm
Operator : K.Ruestt
Sample : R1402225-003|1.00
Misc : PARSONS 9913 T44
ALS Vial : 35 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Tue Apr 08 16:30:32 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1120
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 05:31
Sample Name:	FTMM-53-GW-699MW09-7.70	**Units:**	µg/L
Lab Code:	R1402225-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4555.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.34**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1120
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 05:31
Sample Name:	FTMM-53-GW-699MW09-7.70	**Units:**	µg/L
Lab Code:	R1402225-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4555.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	0.25	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75-120	4/8/14 05:31	
Dibromofluoromethane	102	85-115	4/8/14 05:31	
Toluene-d8	97	85-120	4/8/14 05:31	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0531

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW09-7.70	**Units:**	µg/L
Lab Code:	R1402225-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-004|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4555.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:31 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 05:46:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	811941	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1205655	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1154380	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	576007	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	354499	50.79	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.58%				
48) surr1,1,2-dichloroetha...	4.664	65	419832	52.80	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 105.60%				
65) SURR3,Toluene-d8	7.322	98	1421984	48.48	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.96%				
70) SURR2,BFB	9.791	95	562745	51.43	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.86%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1592 ~~1123~~	0.34 ~~0.24~~	ppb	m KP	99
15) Acetone	2.061	43	2438	1.51	ppb		87
~~16) 2-Propanol~~	~~2.073~~	~~45~~	~~212~~	~~0.81~~	~~ppb~~	~~#~~	~~1~~
20) Allyl Chloride	2.207	76	2915	0.72	ppb	#	1
39) Tetrahydrofuran	3.938	42	406	0.26	ppb		85
~~90) Cyclohexanone~~	9.785	55	1347	2.92	ppb	#	14
40) chloroform	3.950		3381	0.25		m KP	

KP 4/16/14

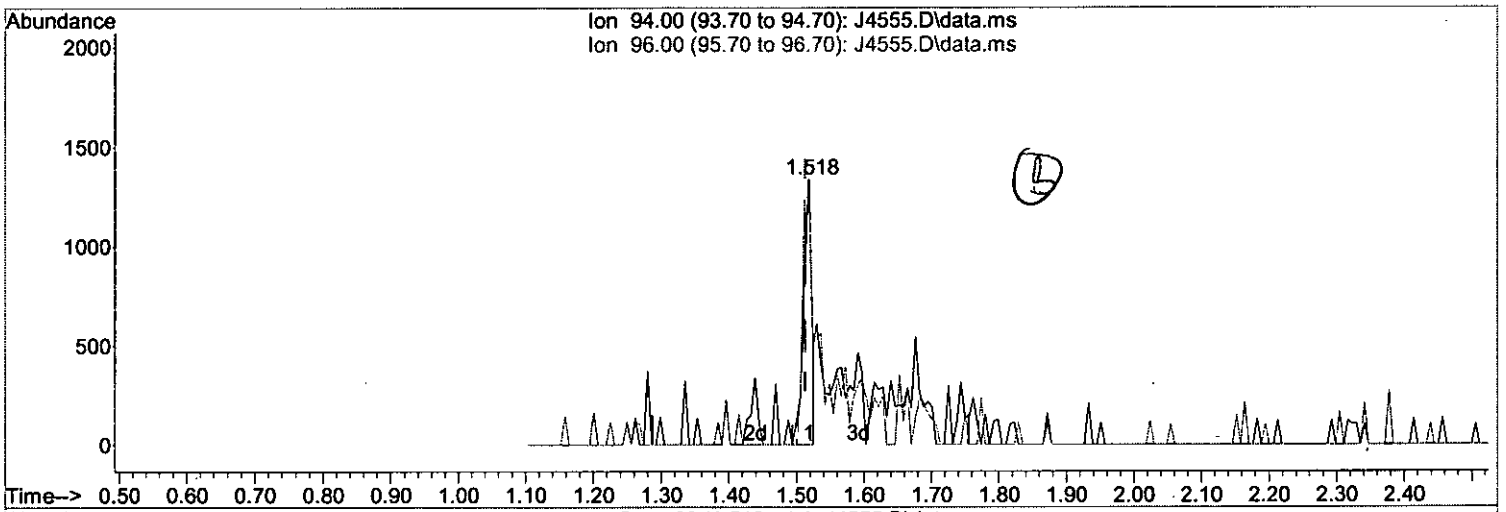
(#) = qualifier out of range (m) = manual integration (+) = signals summed

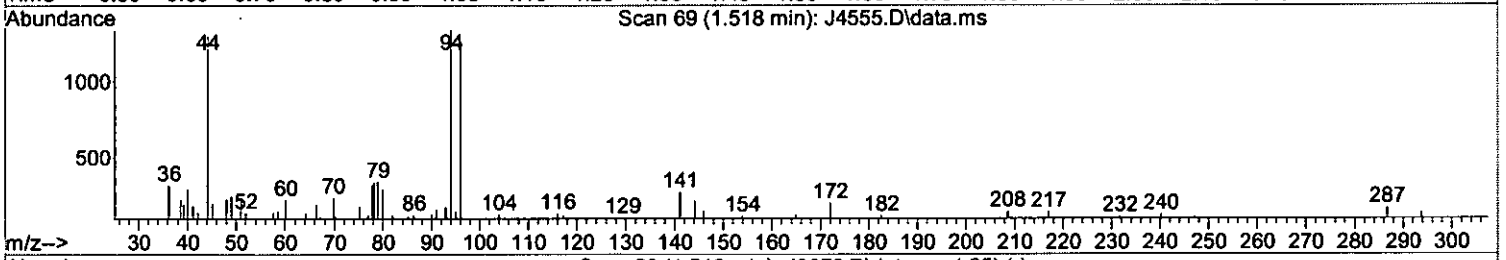
W031214.M Tue Apr 08 05:46:38 2014 Page: 1

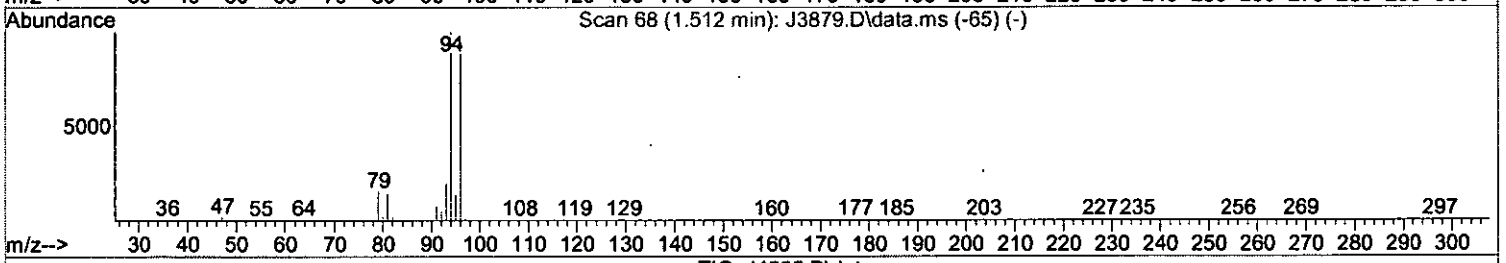
Quantitation Report (Qedit)

Sample : R1402225-004|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4555.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:31 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 05:46:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4555.D\data.ms

(5) Bromomethane (P)

1.518min (+0.006) 0.24 ppb

response 1123

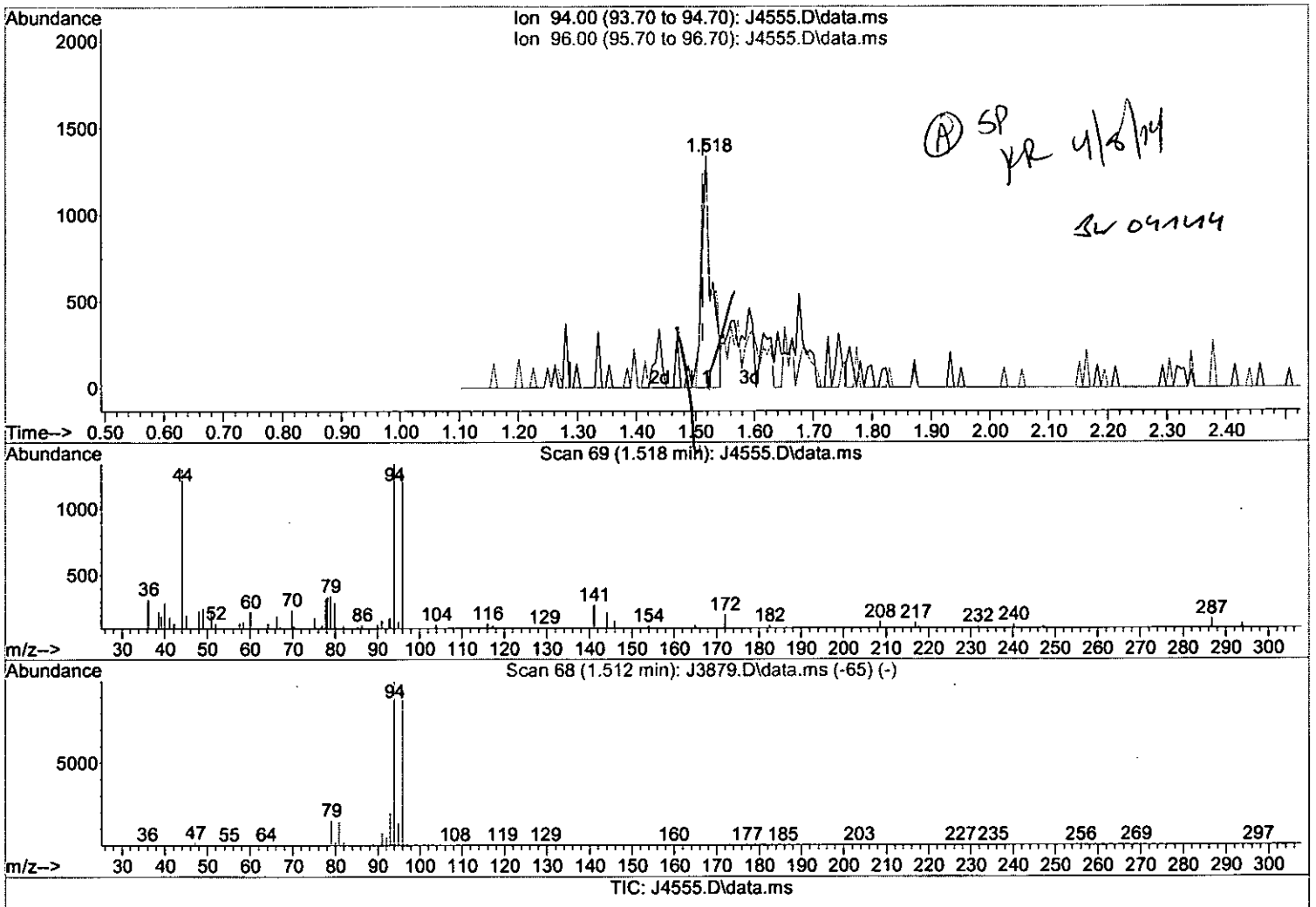
Ion	Exp%	Act%
94.00	100	100
96.00	93.80	94.39
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Apr 08 16:31:25 2014 Page: 1

Quantitation Report (Qedit)

Sample : R1402225-004|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4555.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:31 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 05:46:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4555.D\data.ms

(5) Bromomethane (P)

1.518min (+0.006) 0.34 ppb m

response 1592

Ion	Exp%	Act%
94.00	100	100
96.00	93.80	94.39
0.00	0.00	0.00
0.00	0.00	0.00

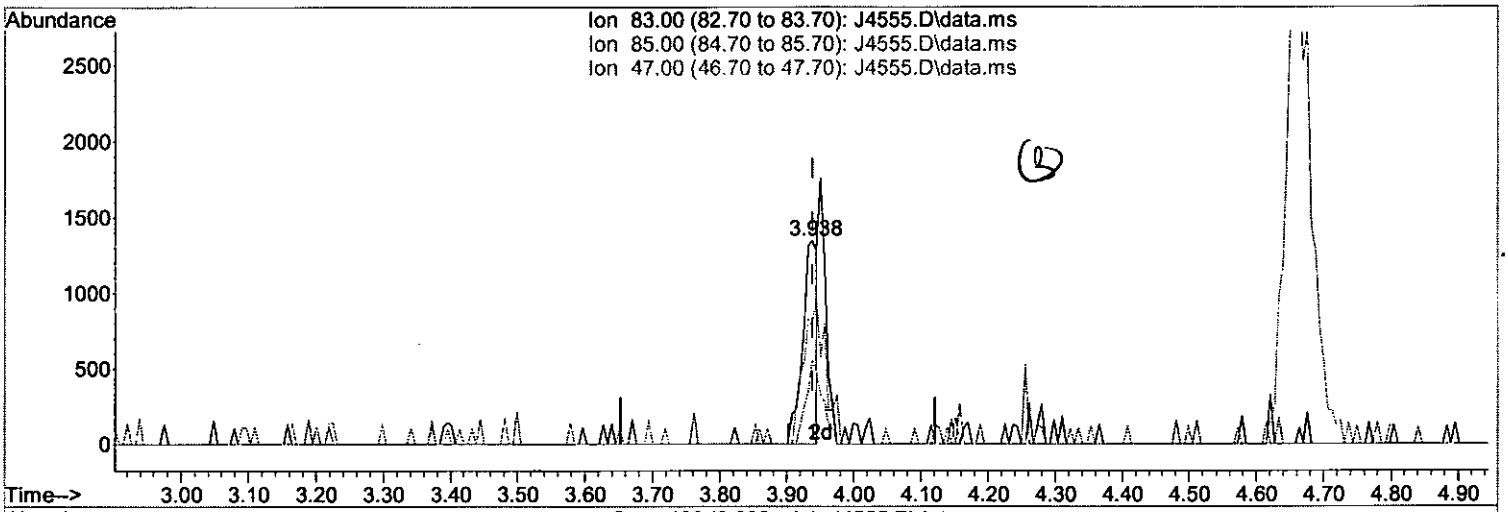
W031214.M Tue Apr 08 16:31:31 2014 Page: 1

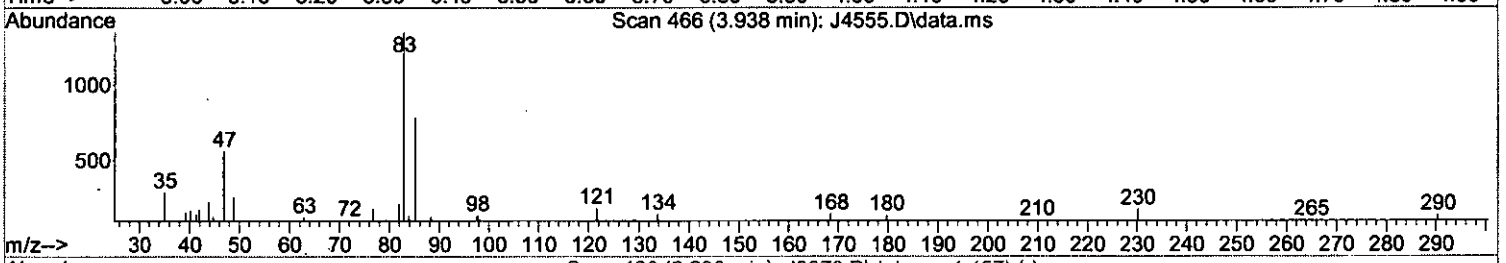
00079

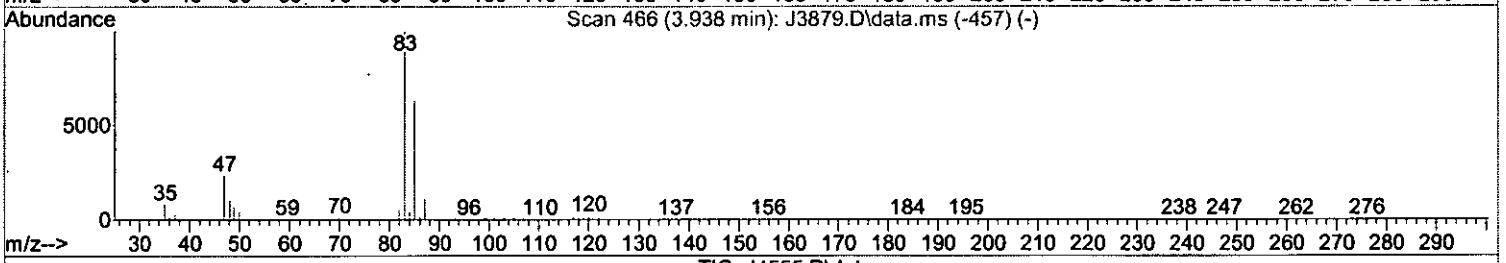
Quantitation Report (Qedit)

Sample : R1402225-004|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4555.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:31 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 05:46:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4555.D\data.ms

(40) Chloroform (P)

3.938min (-0.000) 0.15 ppb

response 2047

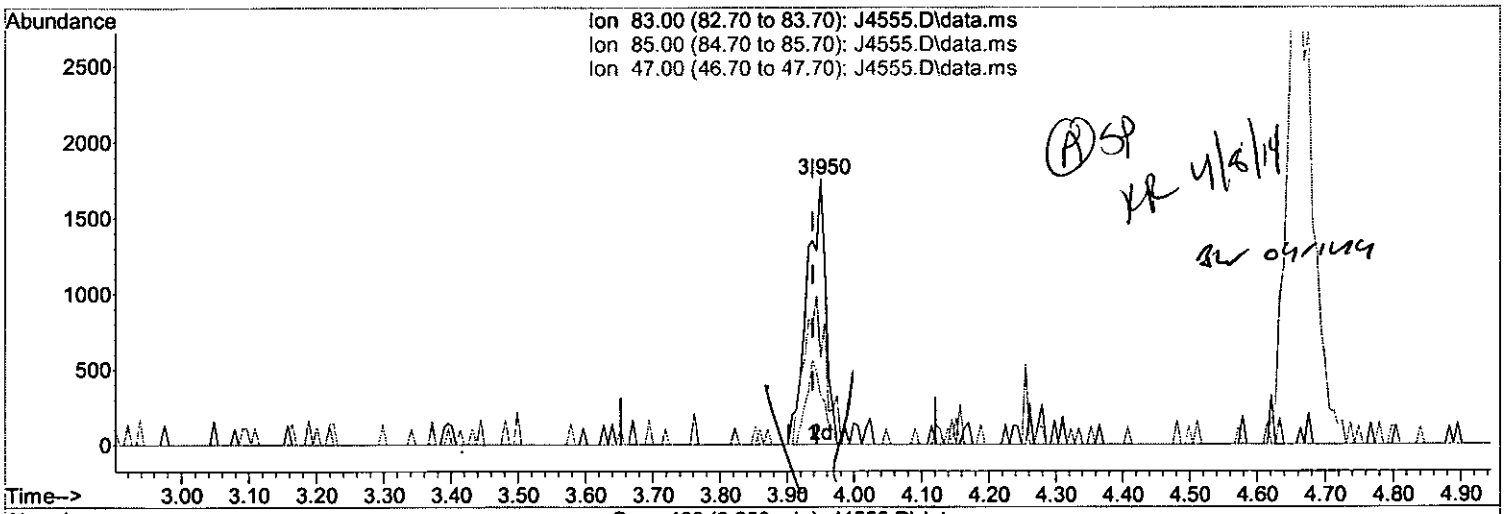
Ion	Exp%	Act%
83.00	100	100
85.00	62.60	58.16
47.00	23.40	41.62
0.00	0.00	0.00

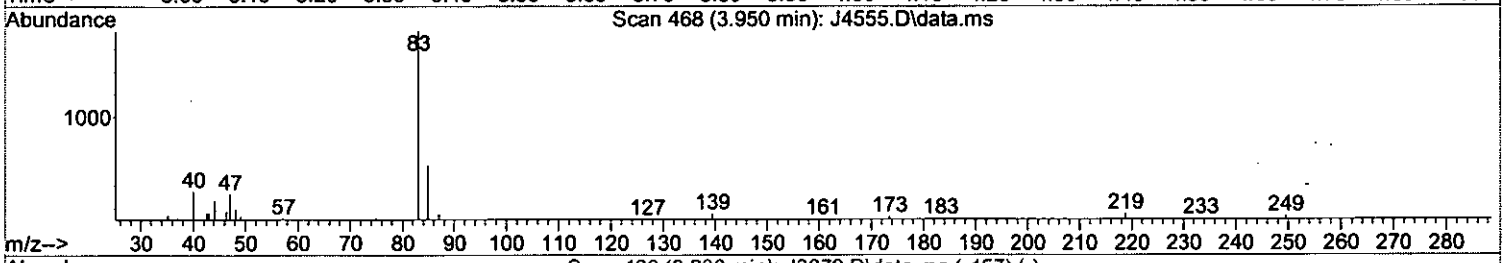
W031214.M Tue Apr 08 16:32:48 2014 Page: 1

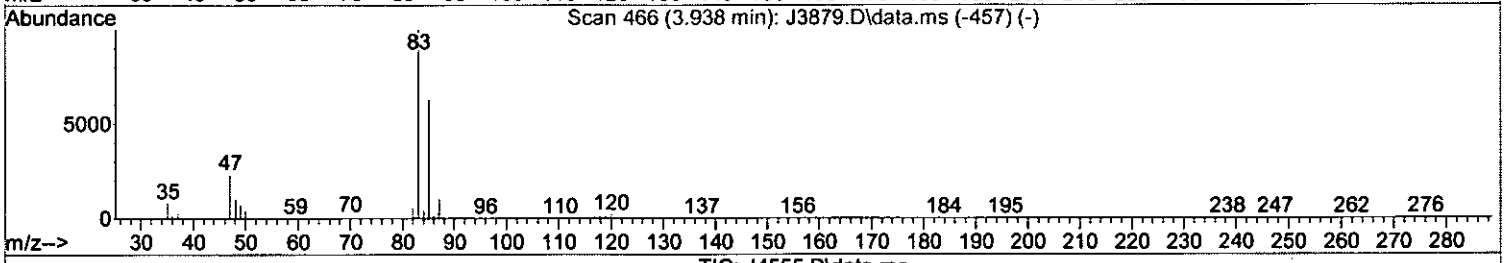
Quantitation Report (Qedit)

Sample : R1402225-004|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4555.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:31 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 05:46:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4555.D\data.ms

(40) Chloroform (P)

3.950min (+0.012) 0.25 ppb m

response 3384

Ion	Exp%	Act%
83.00	100	100
85.00	62.60	32.46#
47.00	23.40	18.39
0.00	0.00	0.00

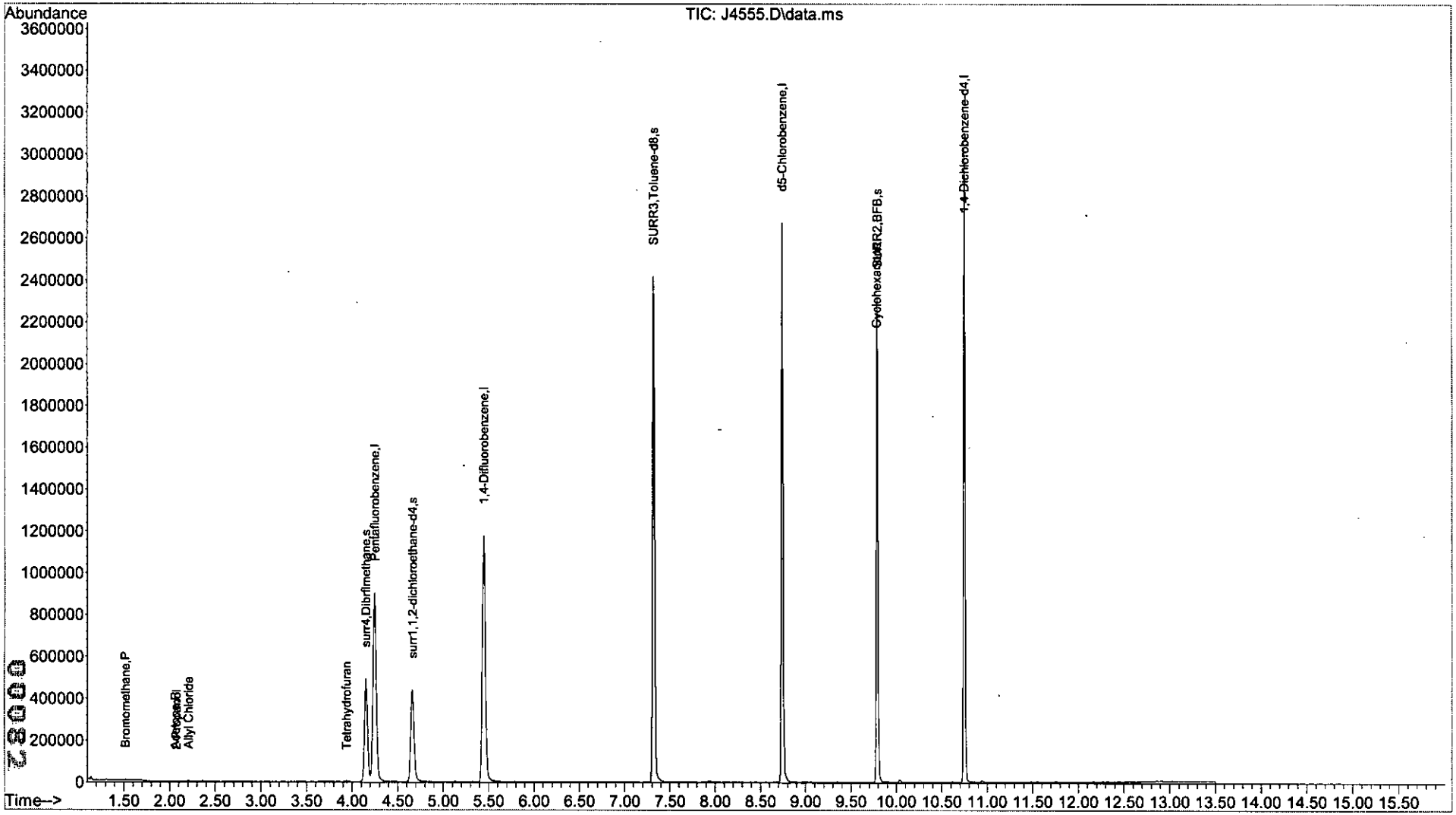
W031214.M Tue Apr 08 16:32:53 2014 Page: 1

00081

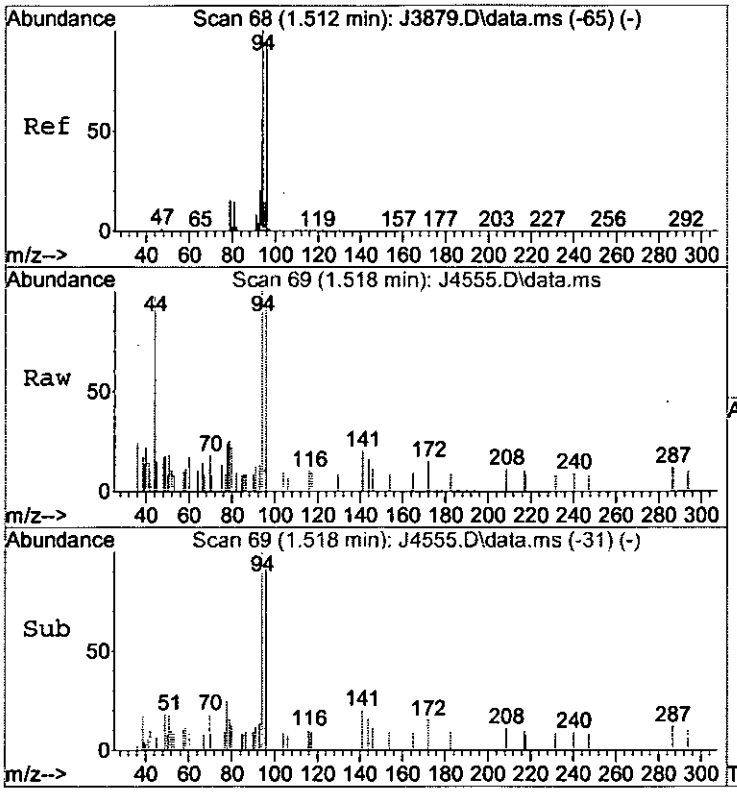
Quantitation Report (Not Reviewed)

Sample : R1402225-004|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4555.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:31 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 05:46:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



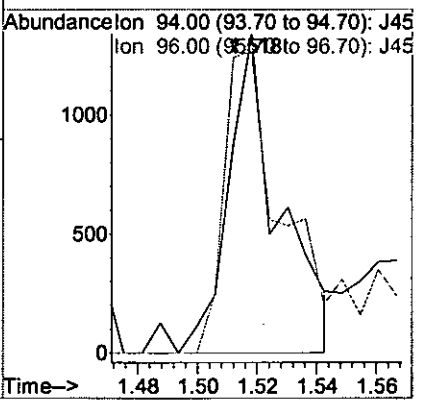
W031214.M Tue Apr 08 05:46:39 2014 Page: 2



#5
Bromomethane
Concen: 0.34 ppb m
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4555.D
Acq: 8 Apr 2014 5:31 am

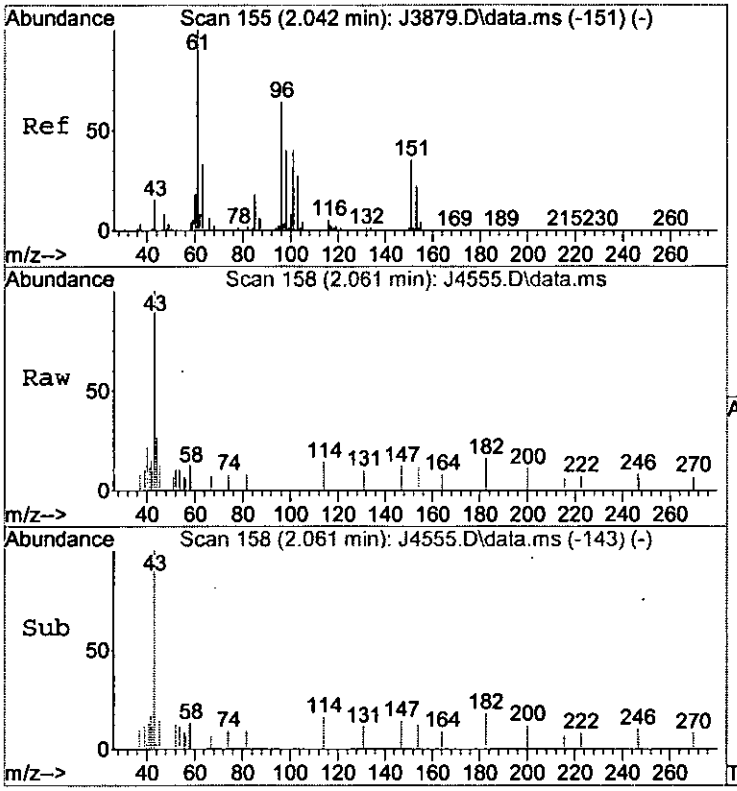
Tgt Ion: 94 Resp: 1592

Ion	Ratio	Lower	Upper
94	100		
96	94.4	73.8	113.8



J4555.D W031214.M Tue Apr 08 16:34:08 2014 Page 1

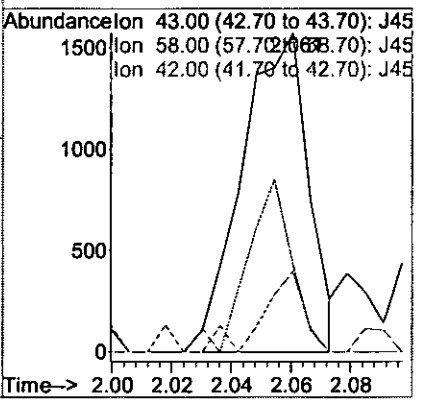
00083



#15
Acetone
Concen: 1.51 ppb
RT: 2.061 min Scan# 158
Delta R.T. 0.018 min
Lab File: J4555.D
Acq: 8 Apr 2014 5:31 am

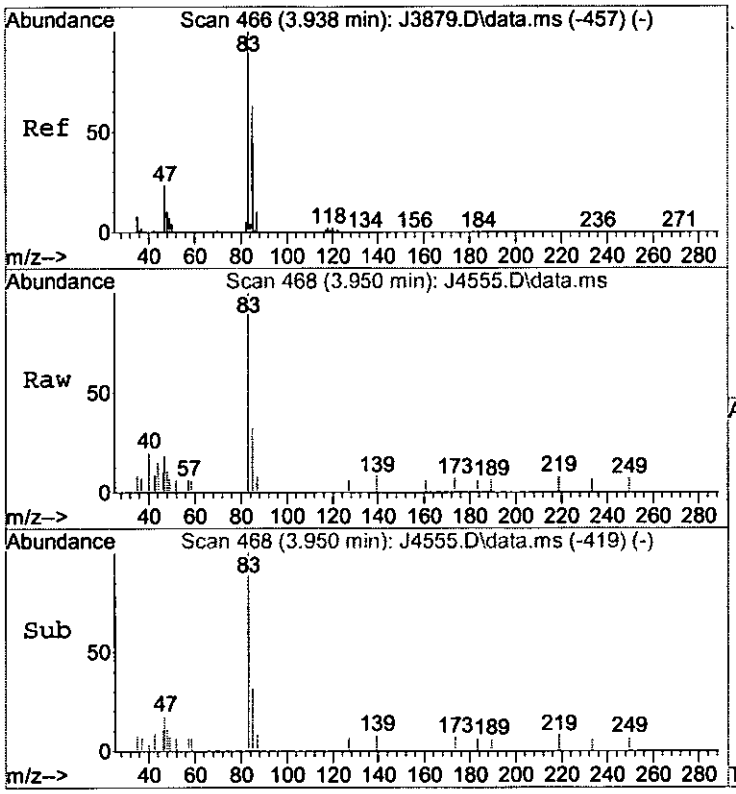
Tgt Ion: 43 Resp: 2438

Ion	Ratio	Lower	Upper
43	100		
58	27.6	9.7	49.7
42	25.2	0.0	27.9



J4555.D W031214.M Tue Apr 08 16:34:13 2014 Page 1

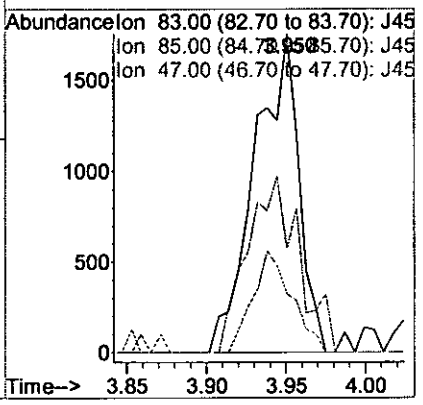
00084



#40
Chloroform
Concen: 0.25 ppb m
RT: 3.950 min Scan# 468
Delta R.T. 0.012 min
Lab File: J4555.D
Acq: 8 Apr 2014 5:31 am

Tgt Ion: 83 Resp: 3384

Ion	Ratio	Lower	Upper
83	100		
85	32.5	42.6	82.6#
47	18.4	3.4	43.4



J4555.D W031214.M Tue Apr 08 16:34:18 2014 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4555.D
Acq On : 8 Apr 2014 5:31 am
Operator : K.Ruest
Sample : R1402225-004|1.0
Misc : PARSONS 9913 T4
ALS Vial : 36 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4555.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	493	501	509	rBV2	489812	1142383	30.40%	5.503%
2	4.249	509	517	536	rVB	900387	2254405	59.98%	10.859%
3	4.664	575	585	599	rBV	438719	1136304	30.23%	5.473%
4	5.450	703	714	731	rBV	1176411	2775468	73.85%	13.369%
5	7.322	1014	1021	1037	rBV	2415784	3758359	100.00%	18.103%
6	8.742	1249	1254	1269	rBV	2669445	3455072	91.93%	16.643%
7	9.791	1421	1426	1438	rVB	2305437	2767422	73.63%	13.330%
8	10.748	1578	1583	1594	rBV	3020990	3471068	92.36%	16.720%

Sum of corrected areas: 20760481

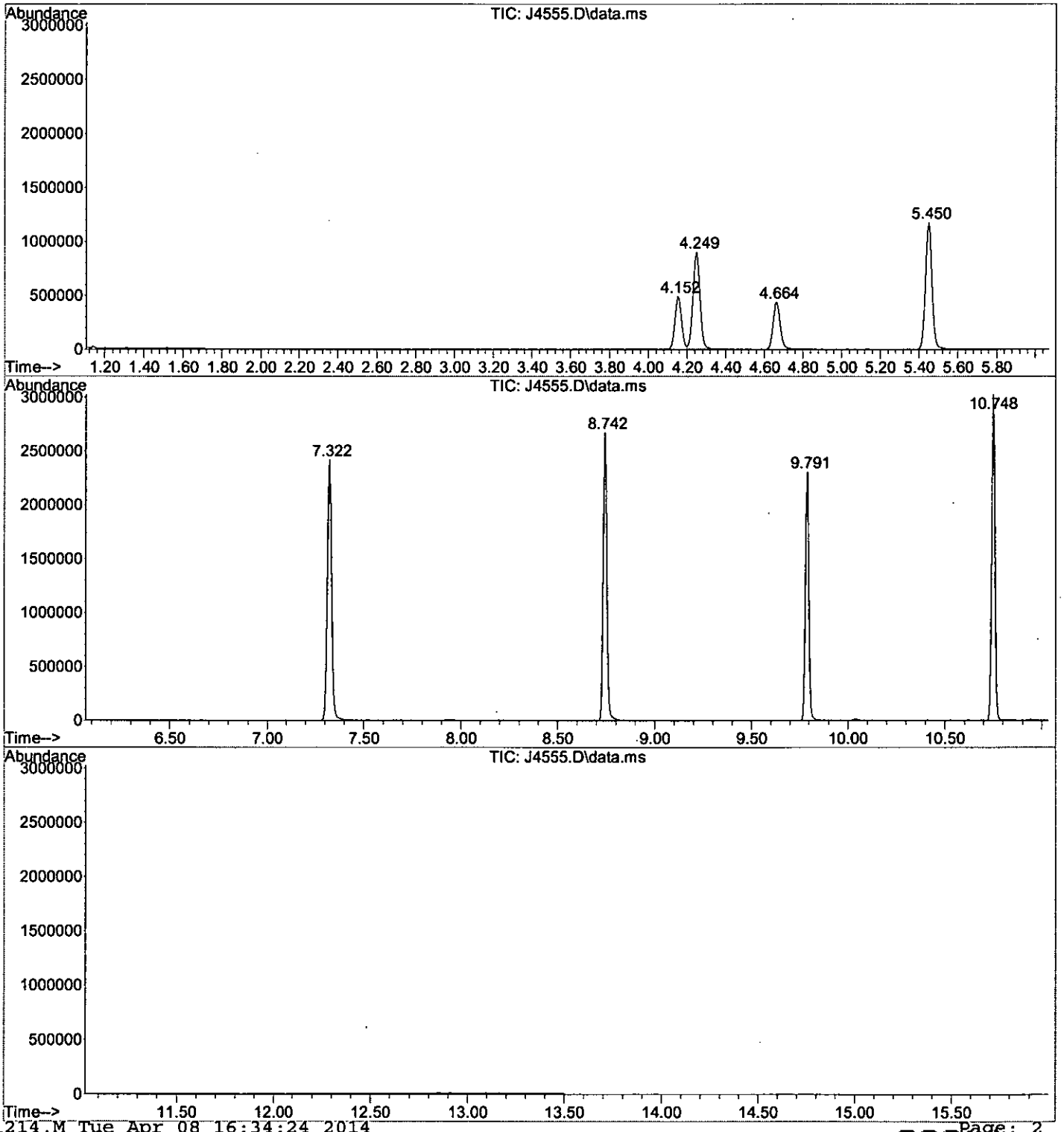
W031214.M Tue Apr 08 16:34:23 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4555.D
Acq On : 8 Apr 2014 5:31 am
Operator : K.Ruest
Sample : R1402225-004|1.0
Misc : PARSONS 9913 T4
ALS Vial : 36 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Apr 08 16:34:24 2014 Page: 2

00087

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040714\\
Data File : J4555.D
Acq On : 8 Apr 2014 5:31 amm
Operator : K.Ruestt
Sample : R1402225-004|1.00
Misc : PARSONS 9913 T44
ALS Vial : 36 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Tue Apr 08 16:34:25 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1135
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 06:03
Sample Name:	FTMM-53-GW-699MW16-11.5	**Units:**	µg/L
Lab Code:	R1402225-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4556.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.7**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.34**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1135
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 06:03
Sample Name:	FTMM-53-GW-699MW16-11.5	**Units:**	µg/L
Lab Code:	R1402225-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4556.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**8.0**		5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.47**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 06:03	
Dibromofluoromethane	100	85-115	4/8/14 06:03	
Toluene-d8	98	85-120	4/8/14 06:03	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0603

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW16-11.5	**Units:**	µg/L
Lab Code:	R1402225-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-005|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4556.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 6:03 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 06:18:45 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	796052	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1212274	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1140141	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	579713	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	350064	49.88	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.76%				
48) surr1,1,2-dichloroetha...	4.664	65	419712	52.50	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 105.00%				
65) SURR3,Toluene-d8	7.322	98	1442312	48.91	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.82%				
70) SURR2,BFB	9.791	95	562185	51.10	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.20%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1558	0.34	ppb	#	44
15) Acetone	2.048	43	2605	1.65	ppb	#	63
~~16) 2-Propanol~~	~~2.116~~	~~45~~	~~321~~	~~1.25~~	~~ppb~~	~~#~~	~~55~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~2480~~	~~0.63~~	~~ppb~~	~~#~~	~~1~~
~~39) Tetrahydrofuran~~	~~3.932~~	~~42~~	~~537~~	~~0.35~~	~~ppb~~		~~81~~
40) Chloroform	3.938	83	105824	8.02	ppb		96
60) Bromodichloromethane	6.481	83	2234	0.25	ppb		76
72) Tetrachloroethene	7.968	164	2773	0.47	ppb	#	85
~~90) Cyclohexanone~~	~~9.779~~	~~55~~	~~1311~~	~~2.82~~	~~ppb~~	~~#~~	~~14~~

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

KF 4/16/14

Bromoform

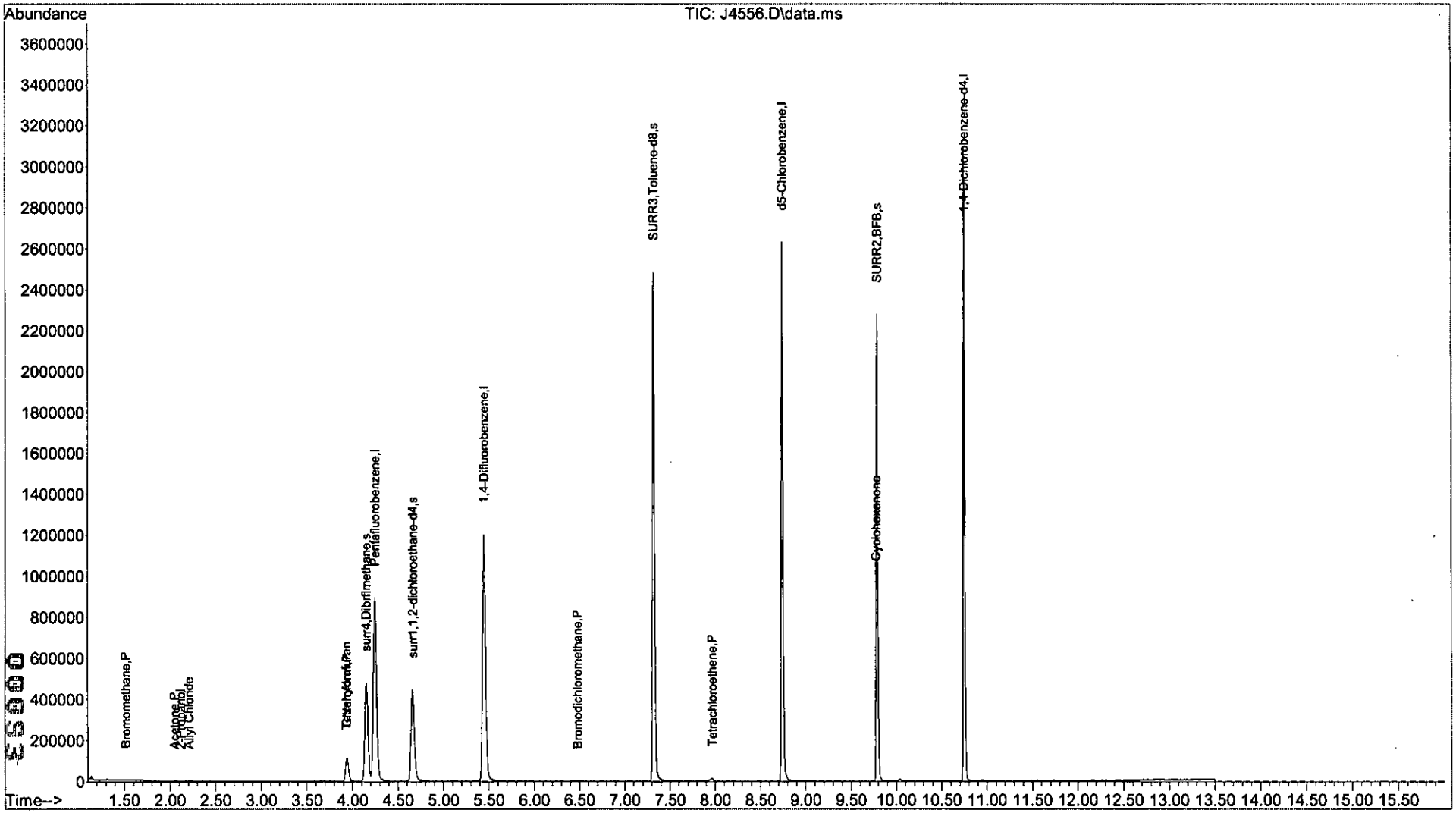
W031214.M Tue Apr 08 06:18:48 2014 Page: 1

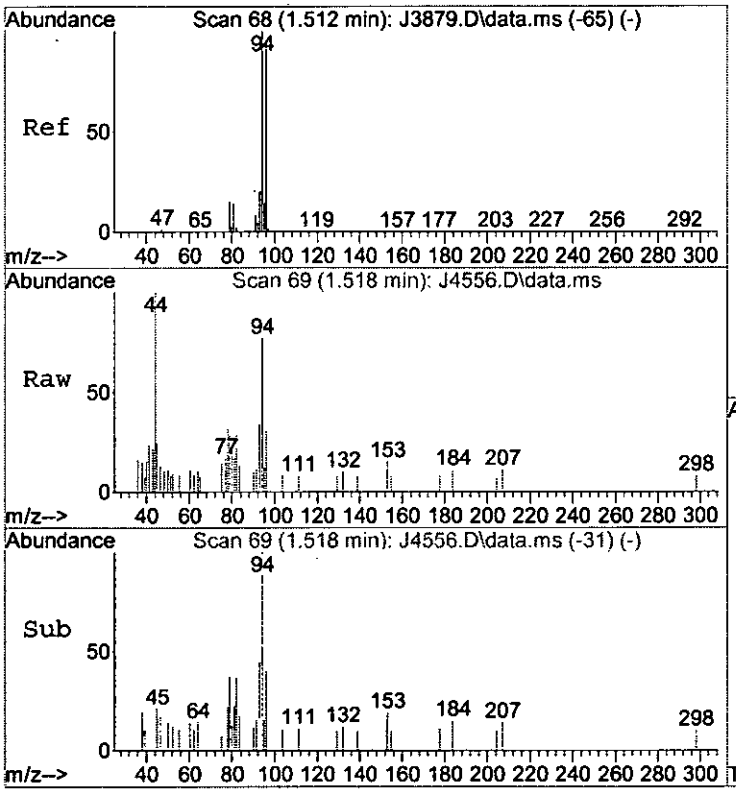
00052

Quantitation Report (Not Reviewed)

Sample : R1402225-005|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4556.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 6:03 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 06:18:45 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

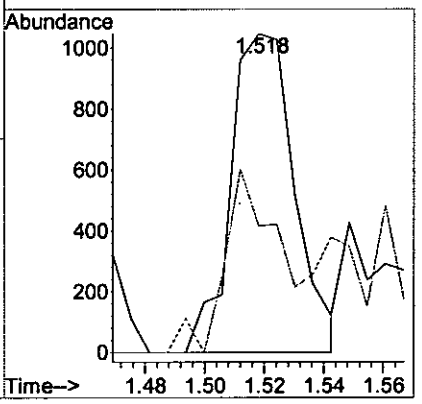


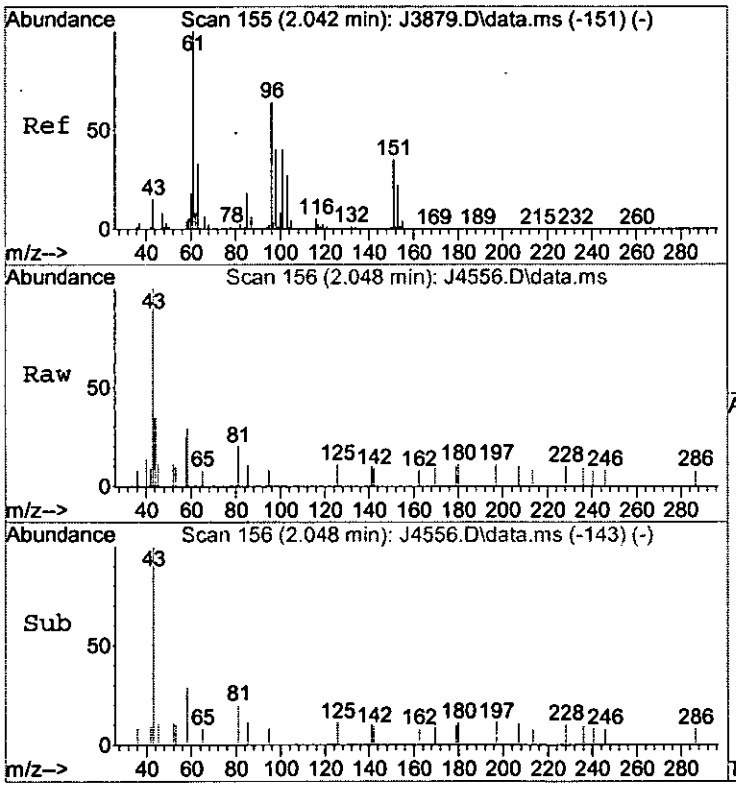


#5
Bromomethane
Concen: 0.34 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4556.D
Acq: 8 Apr 2014 6:03 am

Tgt Ion: 94 Resp: 1558

Ion	Ratio	Lower	Upper
94	100		
96	39.8	73.8	113.8#

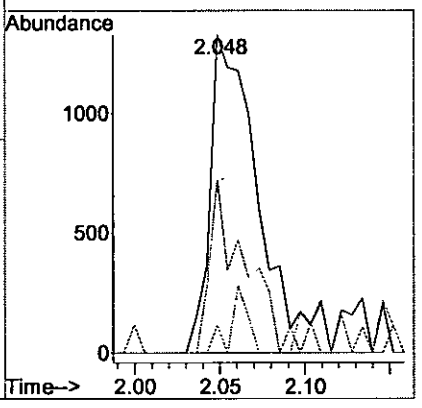




#15
Acetone
Concen: 1.65 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: J4556.D
Acq: 8 Apr 2014 6:03 am

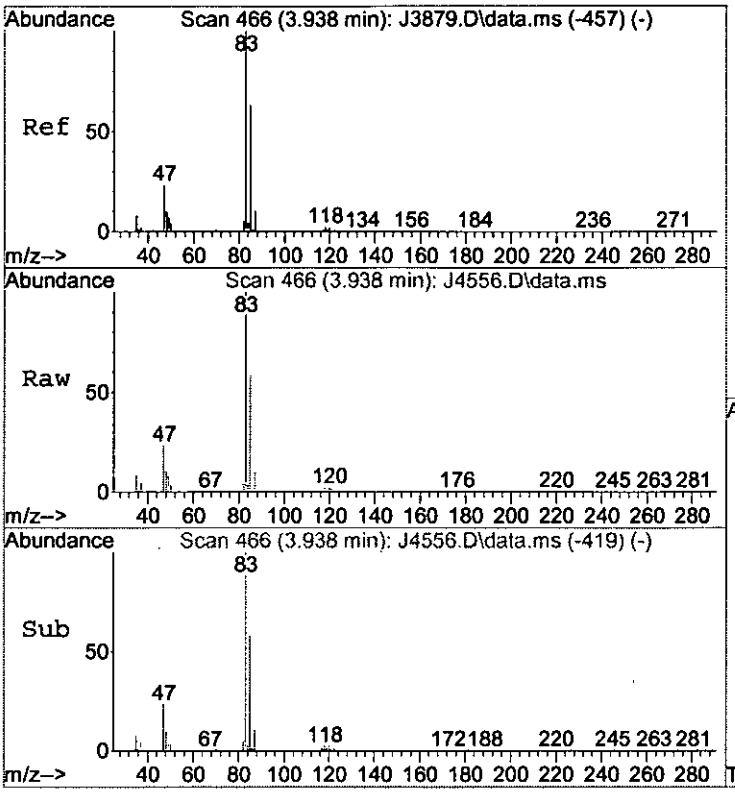
Tgt Ion: 43 Resp: 2605

Ion	Ratio	Lower	Upper
43	100		
58	54.7	9.7	49.7#
42	8.8	0.0	27.9



J4556.D W031214.M Tue Apr 08 16:37:16 2014 Page 3

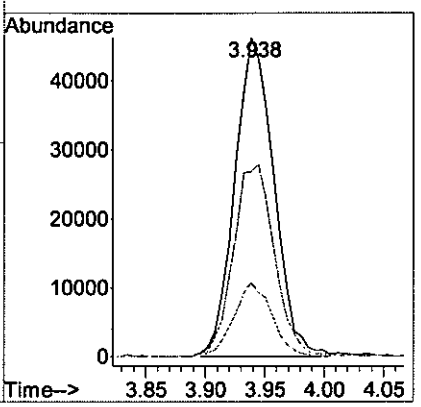
00094

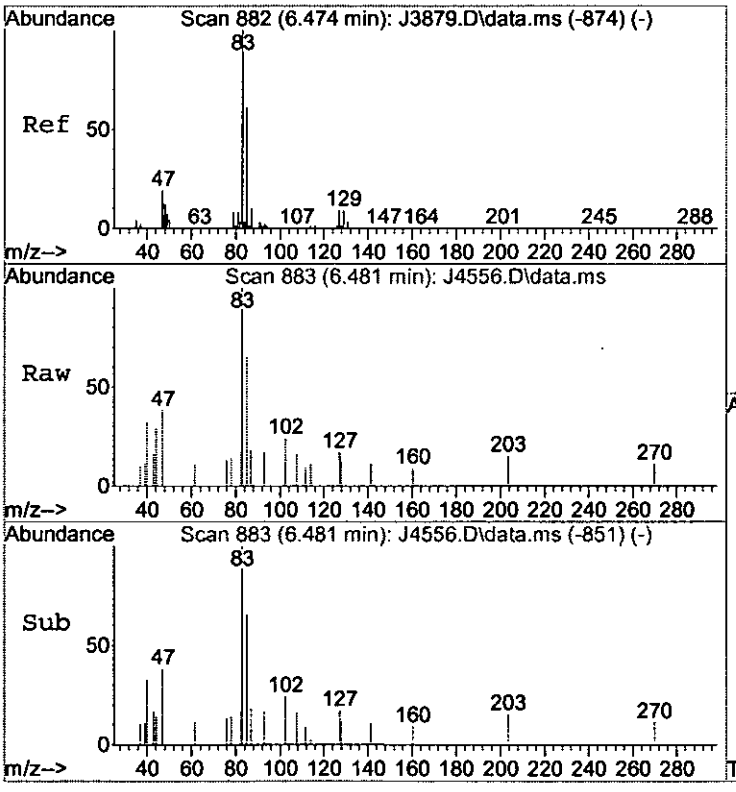


#40
Chloroform
Concen: 8.02 ppb
RT: 3.938 min Scan# 466
Delta R.T. 0.000 min
Lab File: J4556.D
Acq: 8 Apr 2014 6:03 am

Tgt Ion: 83 Resp: 105824

Ion	Ratio	Lower	Upper
83	100		
85	58.0	42.6	82.6
47	23.2	3.4	43.4

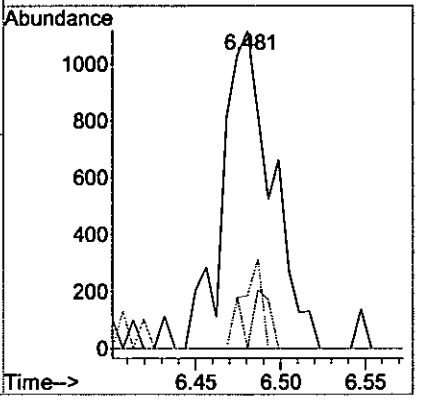


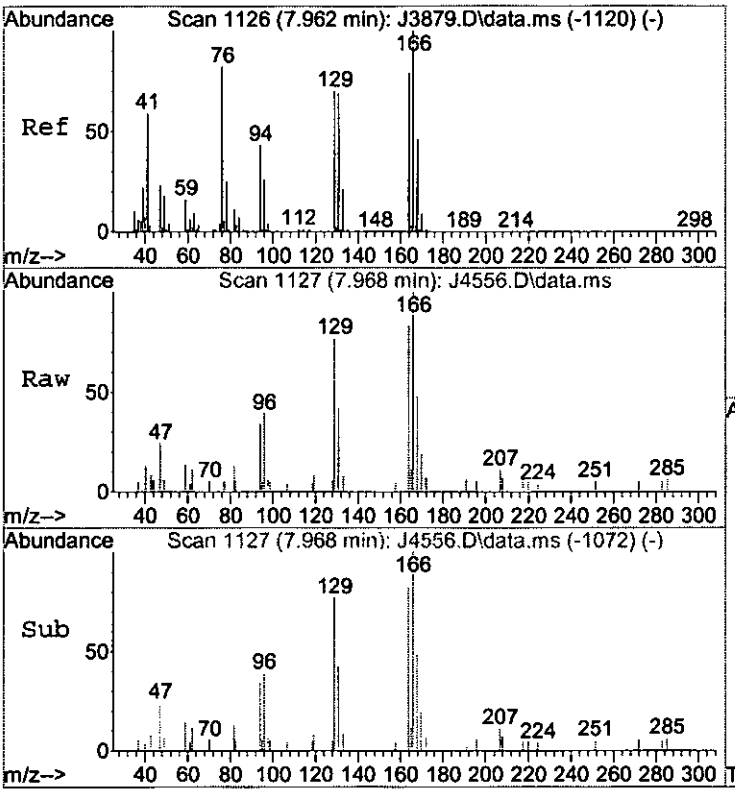


#60
Bromodichloromethane
Concen: 0.25 ppb
RT: 6.481 min Scan# 883
Delta R.T. 0.006 min
Lab File: J4556.D
Acq: 8 Apr 2014 6:03 am

Tgt Ion: 83 Resp: 2234

Ion	Ratio	Lower	Upper
83	100		
129	0.0	0.0	29.3
127	16.5	0.0	28.7

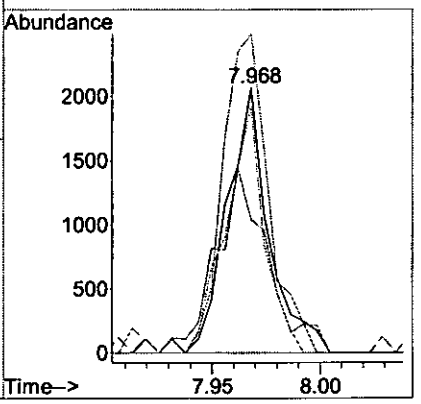




#72
Tetrachloroethene
Concen: 0.47 ppb
RT: 7.968 min Scan# 1127
Delta R.T. 0.006 min
Lab File: J4556.D
Acq: 8 Apr 2014 6:03 am

Tgt Ion:164 Resp: 2773

Ion	Ratio	Lower	Upper
164	100		
166	120.2	105.9	145.9
129	93.0	68.6	108.6
131	50.4	66.6	106.6#



J4556.D W031214.M Tue Apr 08 16:37:18 2014 Page 5

00096

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4556.D
Acq On : 8 Apr 2014 6:03 am
Operator : K.Ruest
Sample : R1402225-005|1.0
Misc : PARSONS 9913 T4
ALS Vial : 37 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4556.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.938	459	466	479	rVB	111886	259150	6.87%	1.237%
2	4.152	492	501	509	rBV	477908	1142613	30.28%	5.453%
3	4.249	509	517	532	rVB	890284	2225333	58.96%	10.621%
4	4.664	574	585	599	rBV	446851	1144128	30.32%	5.461%
5	5.450	702	714	729	rBV	1199918	2758850	73.10%	13.167%
6	7.322	1014	1021	1041	rBV	2482345	3774070	100.00%	18.012%
7	8.742	1249	1254	1269	rBV	2629356	3428267	90.84%	16.362%
8	9.791	1421	1426	1436	rBV	2276351	2736017	72.50%	13.058%
9	10.748	1578	1583	1596	rBV	3085581	3484108	92.32%	16.629%

Sum of corrected areas: 20952536

W031214.M Tue Apr 08 16:37:23 2014 Page: 1

00097

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040714\\
Data File : J4556.D
Acq On : 8 Apr 2014 6:03 amm
Operator : K.Ruestt
Sample : R1402225-005|1.00
Misc : PARSONS 9913 T44
ALS Vial : 37 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Tue Apr 08 16:37:24 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1150
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 20:41
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1402225-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	10	2.0	0.44	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	10	2.0	0.72	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	10	2.0	0.50	
79-00-5	1,1,2-Trichloroethane	ND	U	10	2.0	0.68	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	10	2.0	0.40	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	10	2.0	1.2	
563-58-6	1,1-Dichloropropene	ND	U	10	2.0	0.58	
87-61-6	1,2,3-Trichlorobenzene	ND	U	10	2.0	1.7	
96-18-4	1,2,3-Trichloropropane	ND	U	10	2.0	1.4	
120-82-1	1,2,4-Trichlorobenzene	ND	U	10	2.0	0.46	
95-63-6	1,2,4-Trimethylbenzene	**150**		10	2.0	0.40	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	10	2.0	1.5	
106-93-4	1,2-Dibromoethane	ND	U	10	2.0	0.48	
95-50-1	1,2-Dichlorobenzene	ND	U	10	2.0	0.42	
107-06-2	1,2-Dichloroethane	ND	U	10	2.0	0.72	
78-87-5	1,2-Dichloropropane	ND	U	10	2.0	0.40	
108-67-8	1,3,5-Trimethylbenzene	**30**		10	2.0	0.40	
541-73-1	1,3-Dichlorobenzene	ND	U	10	2.0	0.40	
142-28-9	1,3-Dichloropropane	ND	U	10	2.0	0.54	
106-46-7	1,4-Dichlorobenzene	ND	U	10	2.0	0.40	
594-20-7	2,2-Dichloropropane	ND	U	10	2.0	0.54	
78-93-3	2-Butanone (MEK)	ND	U	10	2.0	1.7	
95-49-8	2-Chlorotoluene	ND	U	10	2.0	0.40	
591-78-6	2-Hexanone	ND	U	10	10	3.4	
106-43-4	4-Chlorotoluene	ND	U	10	2.0	0.48	
99-87-6	p-Isopropyltoluene	ND	U	10	2.0	0.40	
108-10-1	4-Methyl-2-pentanone	ND	U	10	2.0	1.4	
67-64-1	Acetone	ND	U	10	10	2.5	
71-43-2	Benzene	**2.8**	J	10	2.0	0.40	
108-86-1	Bromobenzene	ND	U	10	2.0	0.56	
74-97-5	Bromochloromethane	ND	U	10	2.0	0.64	
75-27-4	Bromodichloromethane	ND	U	10	2.0	0.64	
75-25-2	Bromoform	ND	U	10	2.0	0.84	
74-83-9	Bromomethane	ND	U	10	2.0	0.58	
56-23-5	Carbon Tetrachloride	ND	U	10	2.0	0.90	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1150
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 20:41
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1402225-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	10	2.0	0.58	
75-00-3	Chloroethane	ND	U	10	2.0	0.48	
67-66-3	Chloroform	ND	U	10	2.0	0.50	
74-87-3	Chloromethane	ND	U	10	2.0	0.42	
124-48-1	Dibromochloromethane	ND	U	10	2.0	0.62	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	10	2.0	0.92	
75-09-2	Methylene Chloride	ND	U	10	2.0	0.64	
100-41-4	Ethylbenzene	**150**		10	2.0	0.40	
87-68-3	Hexachlorobutadiene	ND	U	10	2.0	1.3	
98-82-8	Isopropylbenzene (Cumene)	**7.4**	J	10	2.0	0.40	
1634-04-4	Methyl tert-Butyl Ether	ND	U	10	2.0	0.58	
91-20-3	Naphthalene	**60**		10	2.0	0.40	
100-42-5	Styrene	ND	U	10	2.0	0.40	
127-18-4	Tetrachloroethene (PCE)	ND	U	10	2.0	0.60	
108-88-3	Toluene	**7.1**	J	10	2.0	0.40	
79-01-6	Trichloroethene (TCE)	ND	U	10	2.0	0.44	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	10	2.0	0.40	
75-01-4	Vinyl Chloride	ND	U	10	2.0	0.64	
156-59-2	cis-1,2-Dichloroethene	ND	U	10	2.0	0.60	
10061-01-5	cis-1,3-Dichloropropene	ND	U	10	2.0	0.48	
179601-23-1	m,p-Xylenes	**430**		20	4.0	0.66	
104-51-8	n-Butylbenzene	ND	U	10	2.0	0.42	
103-65-1	n-Propylbenzene	**8.9**	J	10	2.0	0.40	
95-47-6	o-Xylene	**290**		10	2.0	0.40	
135-98-8	sec-Butylbenzene	ND	U	10	2.0	0.54	
98-06-6	tert-Butylbenzene	ND	U	10	2.0	0.40	
156-60-5	trans-1,2-Dichloroethene	ND	U	10	2.0	0.66	
10061-02-6	trans-1,3-Dichloropropene	ND	U	10	2.0	0.40	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 20:41	
Dibromofluoromethane	101	85-115	4/8/14 20:41	
Toluene-d8	98	85-120	4/8/14 20:41	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/8/14 2041

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-4.8
Lab Code: R1402225-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	1.62	**35.5**	J
000109-66-0	Pentane	1.77	**15.0**	JN
000107-83-5	Pentane, 2-methyl-	2.40	**14.6**	JN
	unknown	2.44	**21.7**	J
000096-37-7	Cyclopentane, methyl-	3.46	**48.7**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.10	**58.8**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.33	**60.0**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**67.2**	JN
000496-11-7	Indane	10.97	**83.5**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.93	**12.8**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-006|2.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 20:56:07 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	830389	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1248314	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1141719	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	580968	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	366136	50.67	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.34%				
48) surr1,1,2-dichloroetha...	4.664	65	433638	52.67	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 105.34%				
65) SURR3,Toluene-d8	7.322	98	1486905	48.96	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.92%				
70) SURR2,BFB	9.791	95	555174	49.00	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.00%				
Target Compounds							Qvalue
5) Bromomethane	1.512	94	1168	0.24	ppb	#	71
~~12) Acrolein~~	~~1.957~~	~~56~~	~~770~~	~~5.16~~	~~ppb~~	~~#~~	~~1~~
15) Acetone	2.055	43	11389	6.91	ppb	#	66
16) 2-Propanol	2.116	45	203	0.76	ppb	#	1
19) Acetonitrile	2.238	40	825	3.06	ppb	#	3
20) Allyl Chloride	2.207	76	3442	0.83	ppb	#	1
21) Methyl Acetate	2.311	43	3837	1.03	ppb	#	60
24) Acrylonitrile	2.445	53	6053	3.28	ppb	#	18
~~31) 2-Chloro 1,3 Butadiene~~	~~3.024~~	~~53~~	~~3212~~	~~0.27~~	~~ppb~~	~~#~~	~~21~~
44) Cyclohexane	4.316	41	29137	4.31	ppb		99 MMD
49) Benzene	4.786	78	43165	1.40	ppb		95
~~51) Iso Butyl Alcohol~~	~~4.572~~	~~43~~	~~2195~~	~~10.39~~	~~ppb~~	~~#~~	~~66~~
~~53) 1 Butanol~~	~~5.676~~	~~56~~	~~284~~	~~2.45~~	~~ppb~~		~~77~~
55) Methylcyclohexane	6.097	55	12070	1.51	ppb	#	79 MMD
~~59) Methyl Methacrylate~~	~~6.359~~	~~69~~	~~1389~~	~~0.38~~	~~ppb~~	~~#~~	~~39~~
~~61) 2 Nitropropane~~	~~6.816~~	~~41~~	~~691~~	~~0.70~~	~~ppb~~	~~#~~	~~46~~
66) Toluene	7.395	91	113199	3.57	ppb		98
72) Tetrachloroethene	7.962	164	1504	0.26	ppb	#	84
82) Ethylbenzene	8.889	106	798516	75.44	ppb		98
83) (m+p)Xylene	8.998	106	2680859	215.51	ppb		90
84) o-Xylene	9.346	106	1828482	144.04	ppb		93
~~85) Styrene~~	~~9.346~~	~~104~~	~~90030~~	~~4.44~~	~~ppb~~	~~#~~	~~1~~
89) Isopropylbenzene	9.675	105	110306	3.68	ppb		95
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1526~~	~~3.27~~	~~ppb~~	~~#~~	~~14~~
~~91) trans-1,4-Dichloro-2-B...~~	~~10.016~~	~~53~~	~~864~~	~~0.55~~	~~ppb~~	~~#~~	~~1~~
95) n-Propylbenzene	10.023	91	156886	4.47	ppb		99
~~96) 2-Chlorotoluene~~	~~10.096~~	~~91~~	~~99193~~	~~4.50~~	~~ppb~~	~~#~~	~~59~~
~~97) 3-Chlorotoluene~~	~~10.096~~	~~91~~	~~141041~~	~~6.15~~	~~ppb~~	~~#~~	~~44~~
~~98) 4-Chlorotoluene~~	~~10.169~~	~~91~~	~~36796~~	~~1.42~~	~~ppb~~	~~#~~	~~47~~
99) 1,3,5-Trimethylbenzene	10.169	105	368072	15.04	ppb		99
101) 1,2,4-Trimethylbenzene	10.480	105	1910629	75.90	ppb		97
103) sec-Butylbenzene	10.620	105	6024	0.21	ppb		90
104) p-Isopropyltoluene 10.724	~~10.699~~	119	~~15394~~	0.19	~~0.64~~ ppb	m(e)	92
~~109) n-Butylbenzene~~	~~11.053~~	~~91~~	~~11487~~	~~0.53~~	~~ppb~~	~~#~~	~~1~~
117) Naphthalen	12.303	128	458826	29.75	ppb		99

4/9/14

Quantitation Report (Not Reviewed)

Sample : R1402225-006|2.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 20:56:07 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

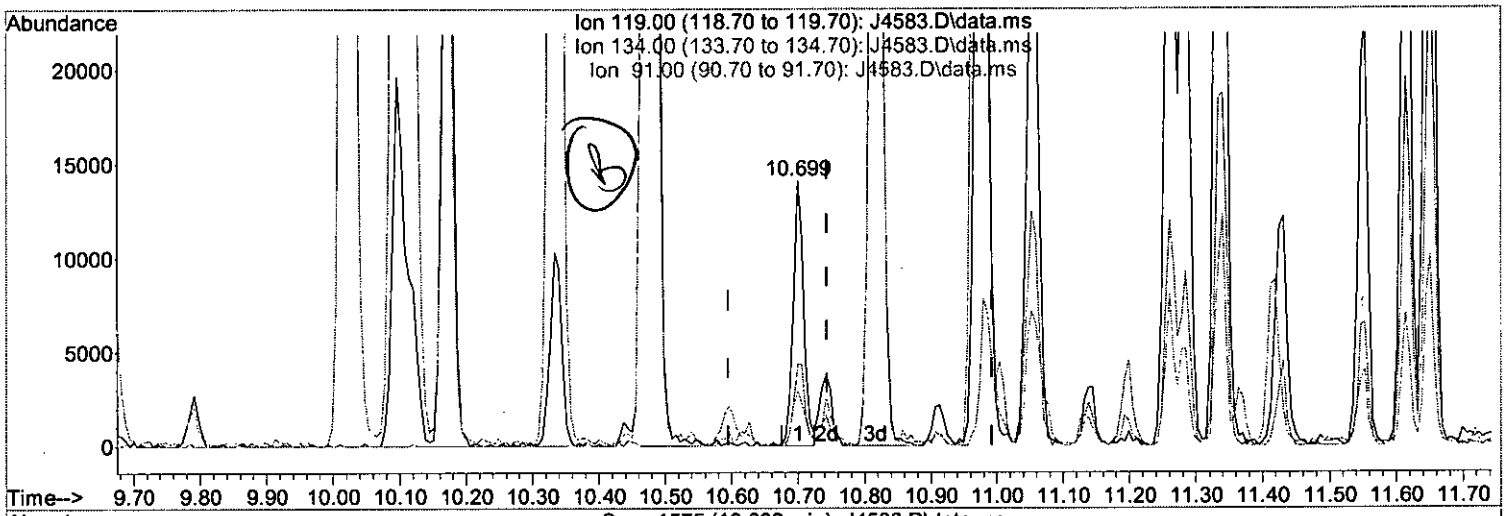
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

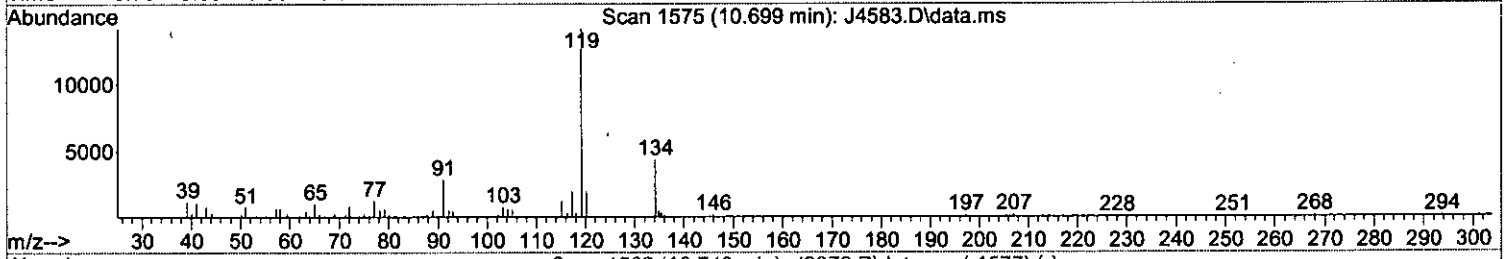
(#) = qualifier out of range (m) = manual integration (+) = signals summed

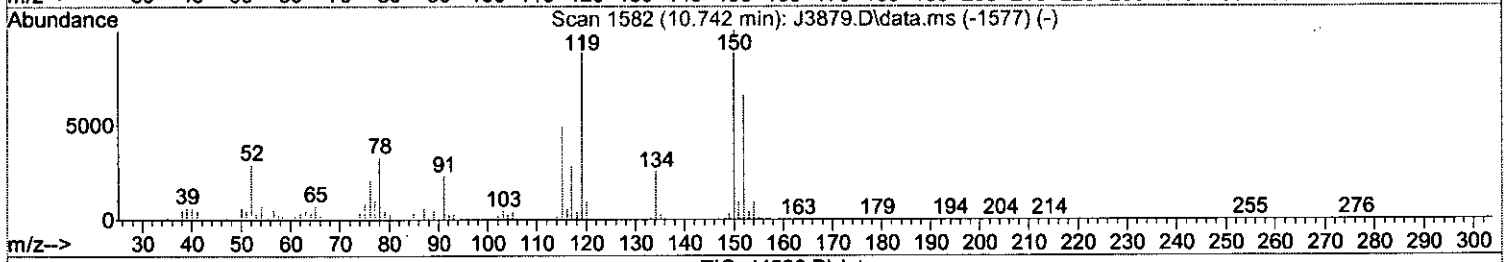
Quantitation Report (Qedit)

Sample : R1402225-006|2.0
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4583.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 20:56:07 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4583.D\data.ms

(104) p-Isopropyltoluene

10.699min (-0.043) 0.64 ppb

response 15394

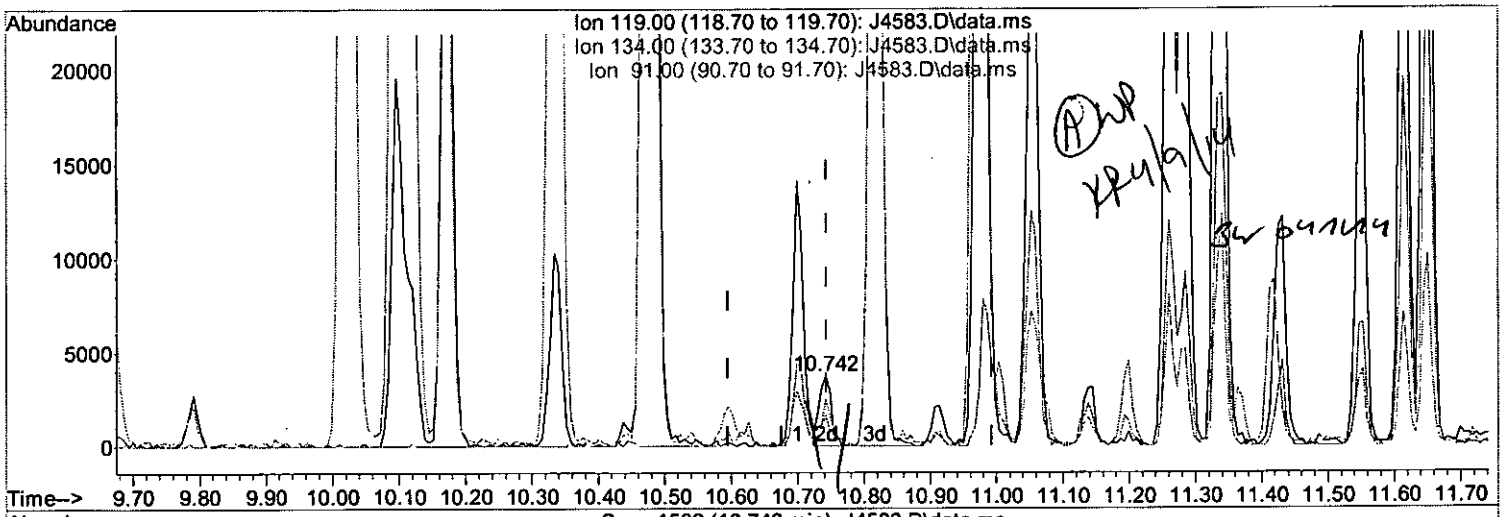
Ion	Exp%	Act%
119.00	100	100
134.00	25.60	30.75
91.00	23.20	20.31
0.00	0.00	0.00

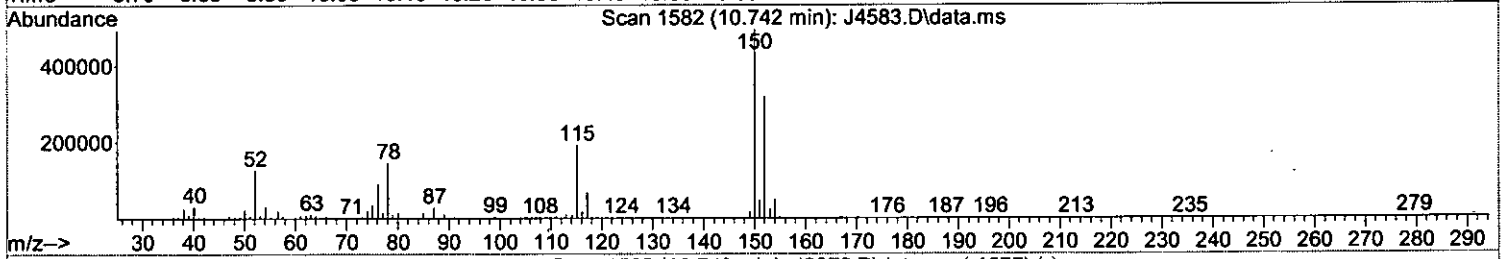
W031214.M Wed Apr 09 10:41:21 2014 001 Page: 1

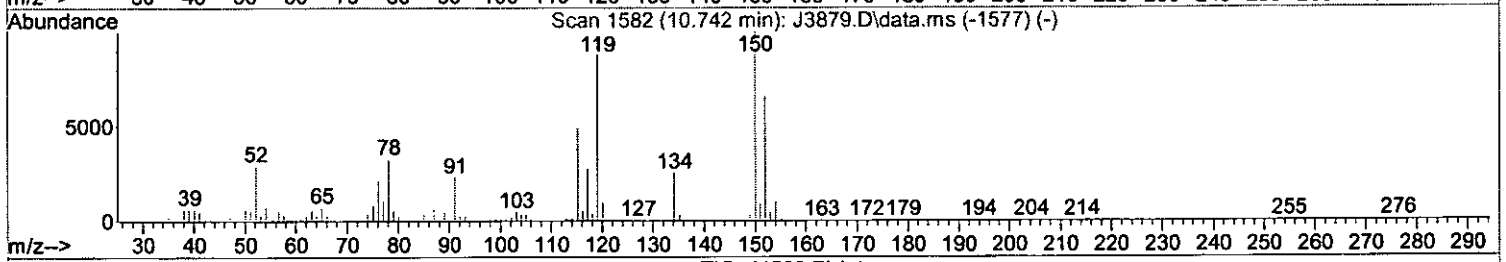
Quantitation Report (Qedit)

Sample : R1402225-006|2.0
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4583.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 20:56:07 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4583.D\data.ms

(104) p-Isopropyltoluene

10.742min (+0.000) 0.19 ppb m

response 4587

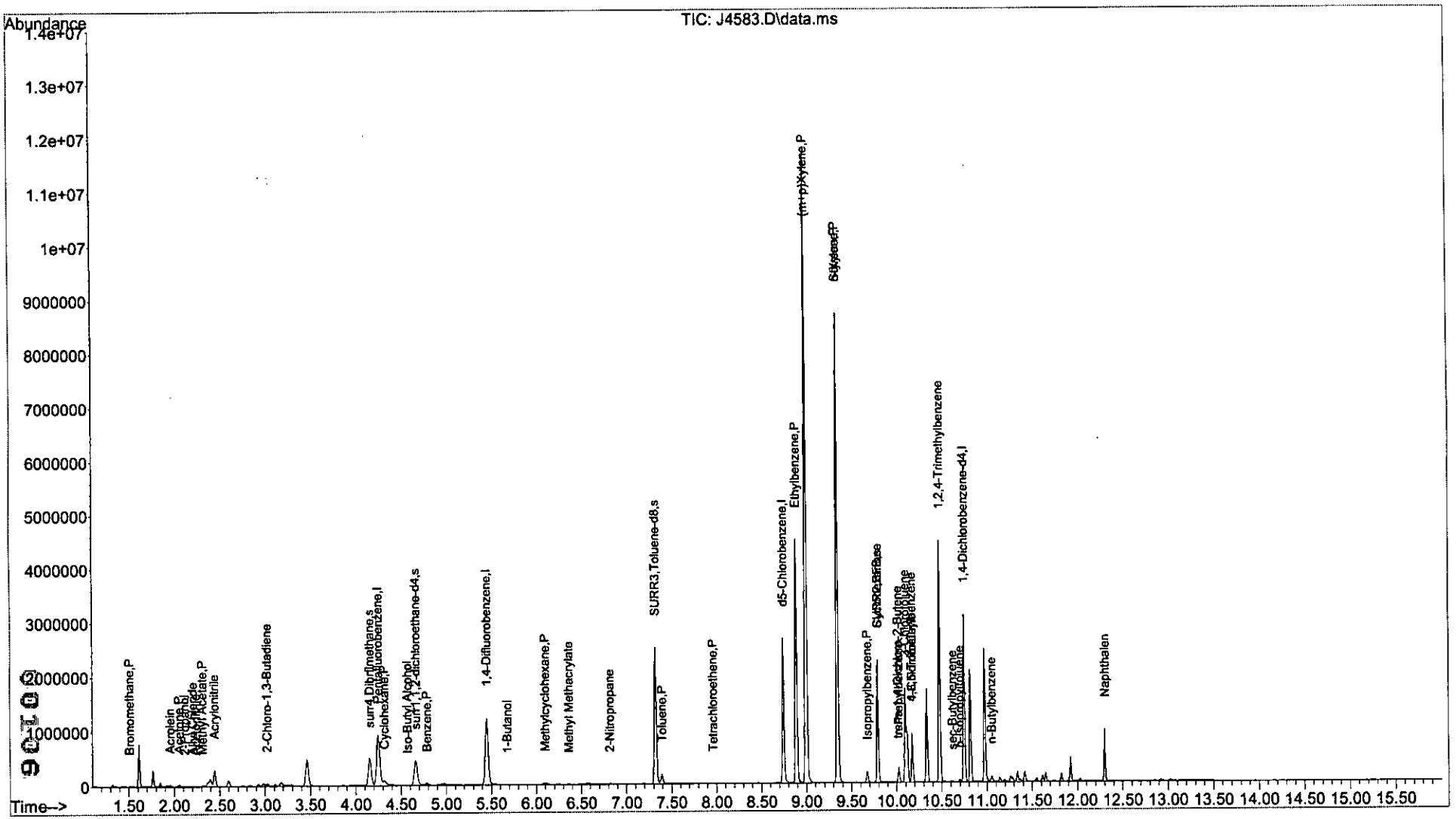
Ion	Exp%	Act%
119.00	100	100
134.00	25.60	42.98
91.00	23.20	67.20#
0.00	0.00	0.00

W031214.M Wed Apr 09 10:41:28 2014 Page: 1

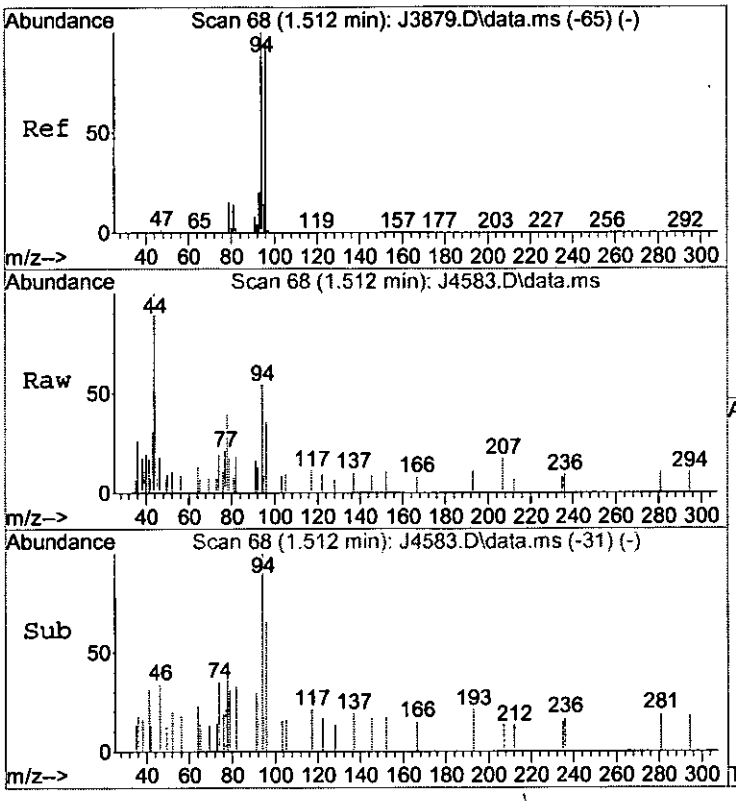
Quantitation Report (Not Reviewed)

Sample : R1402225-006|2.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4583.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 20:56:07 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



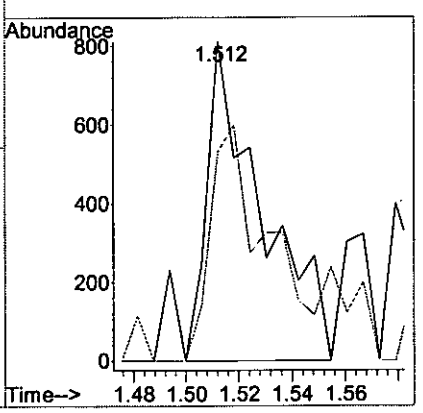
W031214.M Tue Apr 08 20:56:15 2014 Page: 3

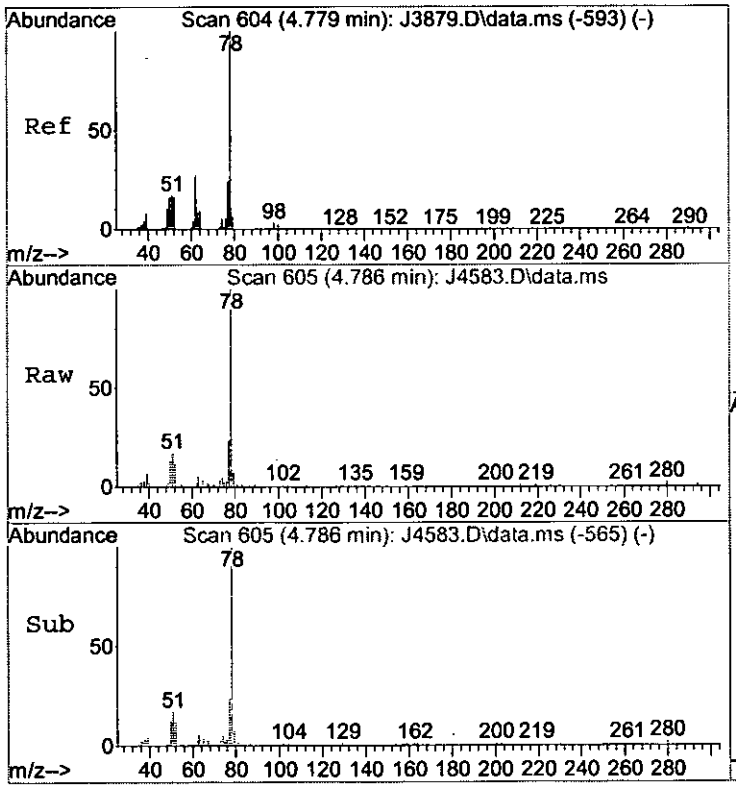


#5
Bromomethane
Concen: 0.24 ppb
RT: 1.512 min Scan# 68
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion: 94 Resp: 1168

Ion	Ratio	Lower	Upper
94	100		
96	65.7	73.8	113.8#

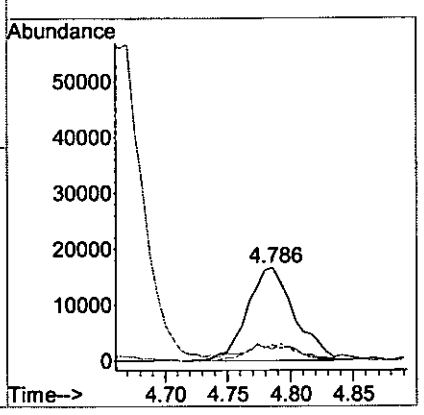




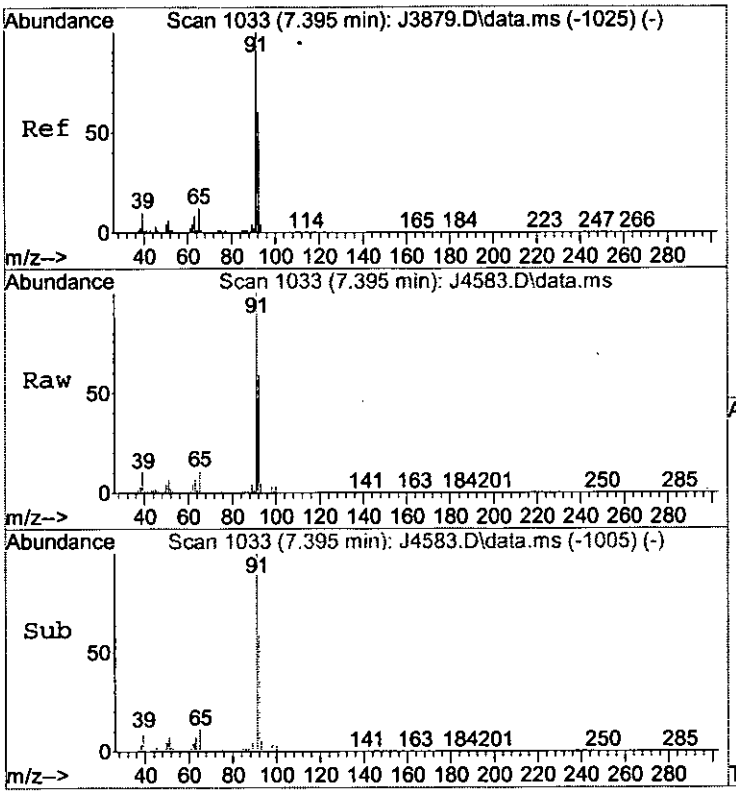
#49
Benzene
Concen: 1.40 ppb
RT: 4.786 min Scan# 605
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion: 78 Resp: 43165

Ion	Ratio	Lower	Upper
78	100		
51	17.3	0.0	38.2
52	12.2	0.0	36.1



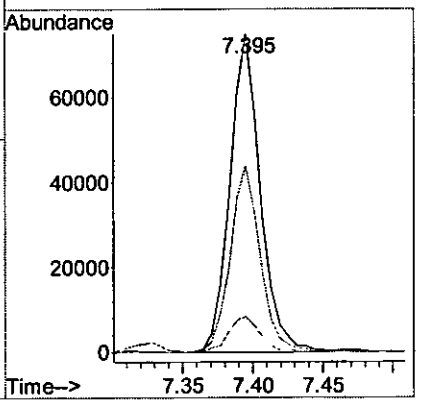
J4583.D W031214.M Wed Apr 09 10:43:26 2014 0010 Page 3

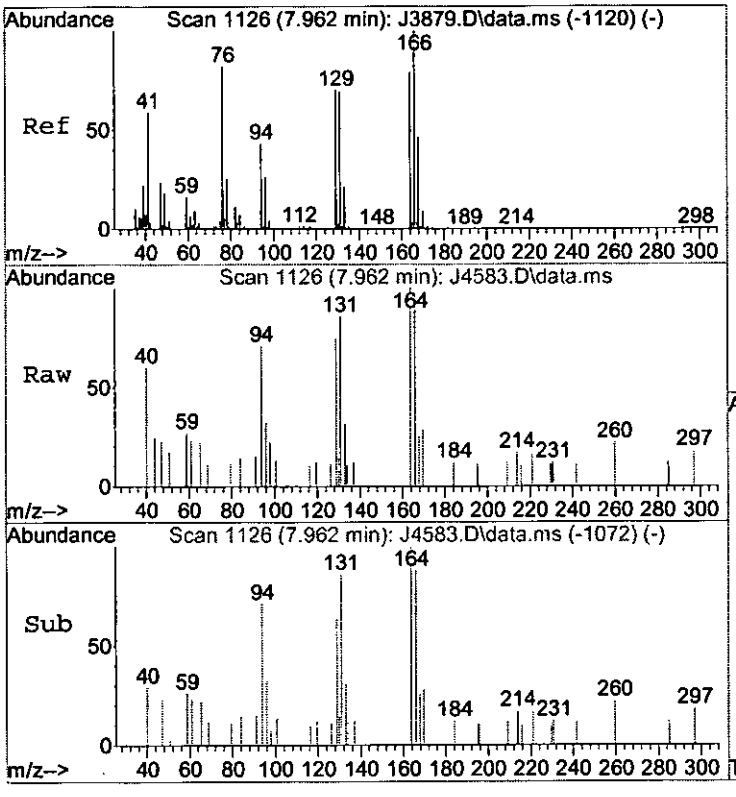


#66
Toluene
Concen: 3.57 ppb
RT: 7.395 min Scan# 1033
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion: 91 Resp: 113199

Ion	Ratio	Lower	Upper
91	100		
92	58.7	39.9	79.9
65	11.3	0.0	32.3

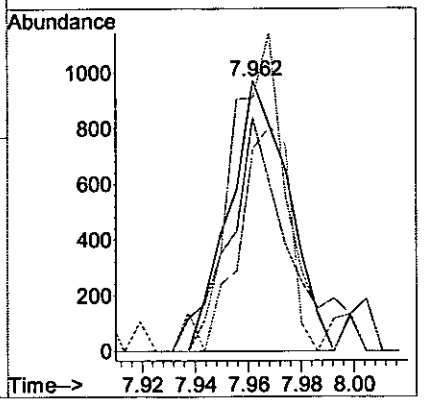




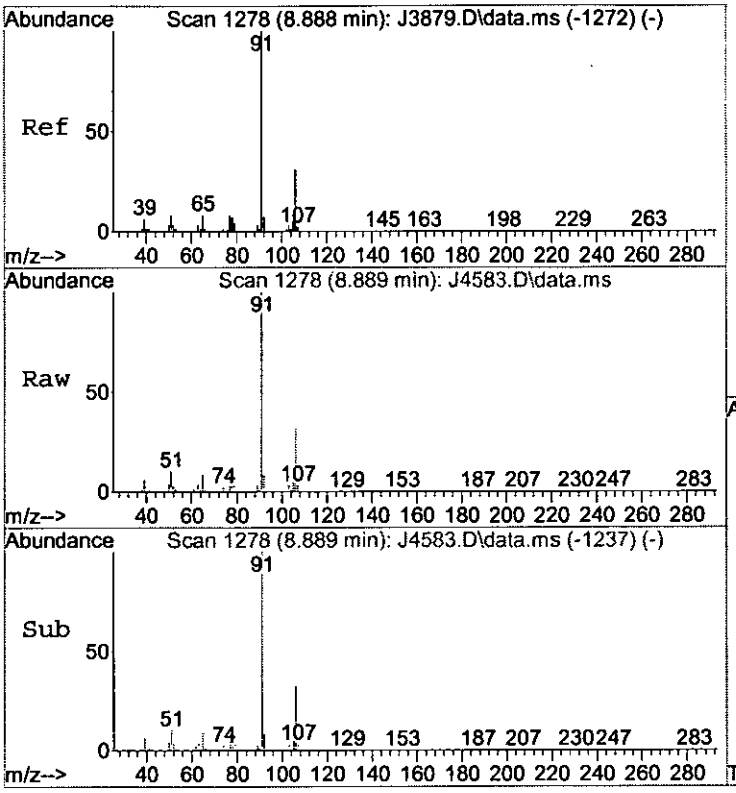
#72
Tetrachloroethene
Concen: 0.26 ppb
RT: 7.962 min Scan# 1126
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:164 Resp: 1504

Ion	Ratio	Lower	Upper
164	100		
166	93.5	105.9	145.9#
129	74.6	68.6	108.6
131	86.2	66.6	106.6



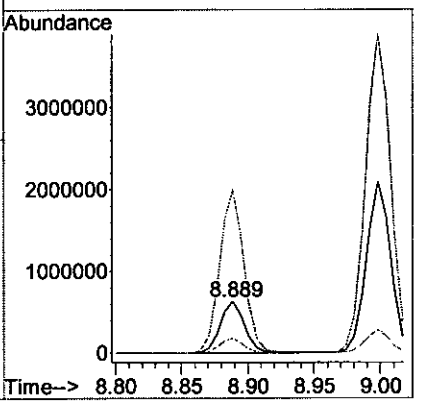
J4583.D W031214.M Wed Apr 09 10:43:27 2014 Page 4

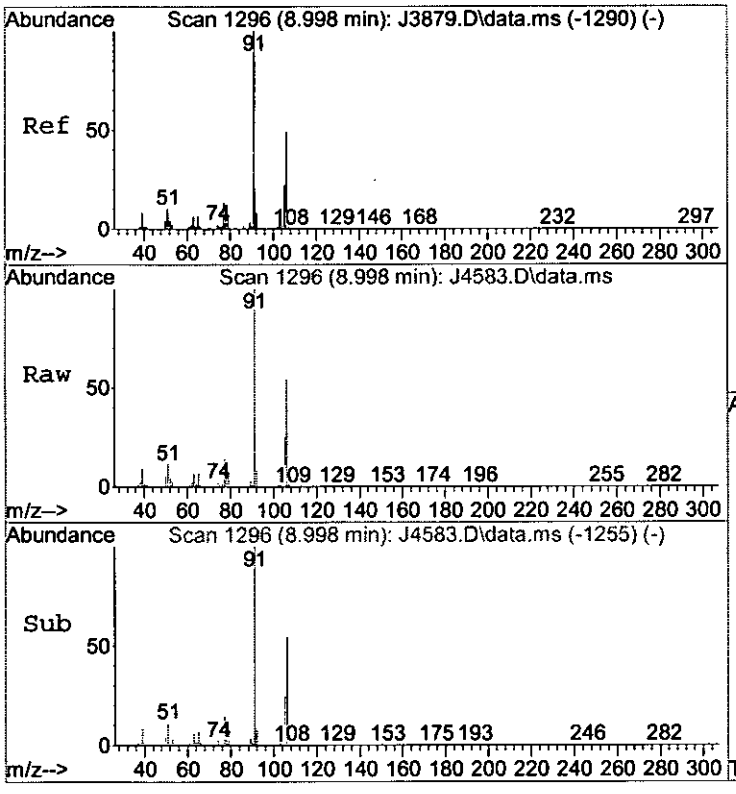


#82
Ethylbenzene
Concen: 75.44 ppb
RT: 8.889 min Scan# 1278
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:106 Resp: 798516

Ion	Ratio	Lower	Upper
106	100		
91	316.1	300.3	340.3
65	27.9	6.6	46.6

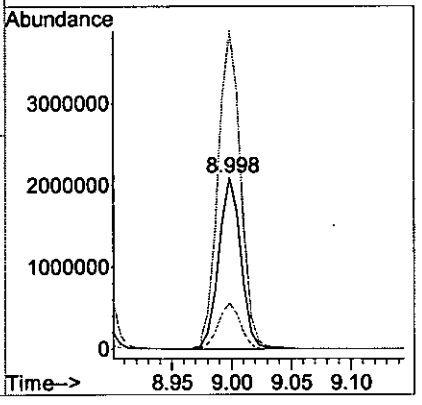


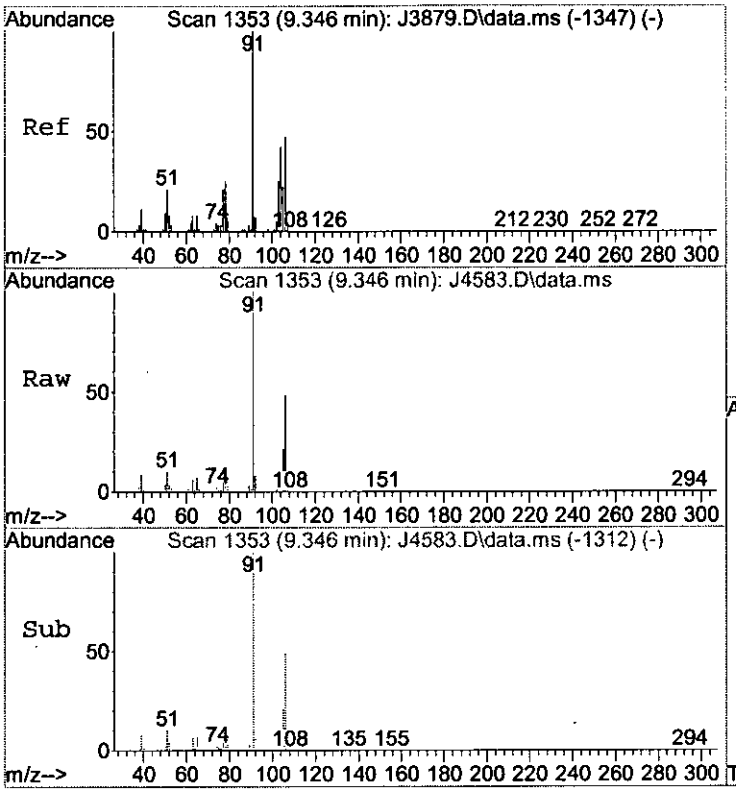


#83
(m+p)Xylene
Concen: 215.51 ppb
RT: 8.998 min Scan# 1296
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:106 Resp: 2680859

Ion	Ratio	Lower	Upper
106	100		
91	185.6	182.8	222.8
77	26.7	7.2	47.2

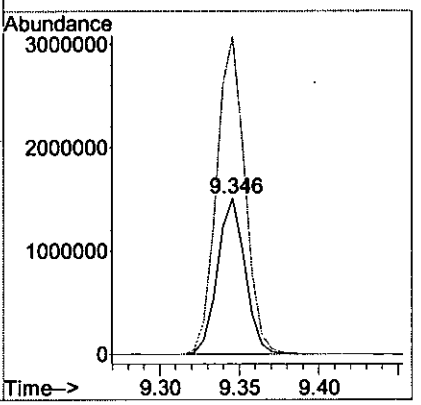


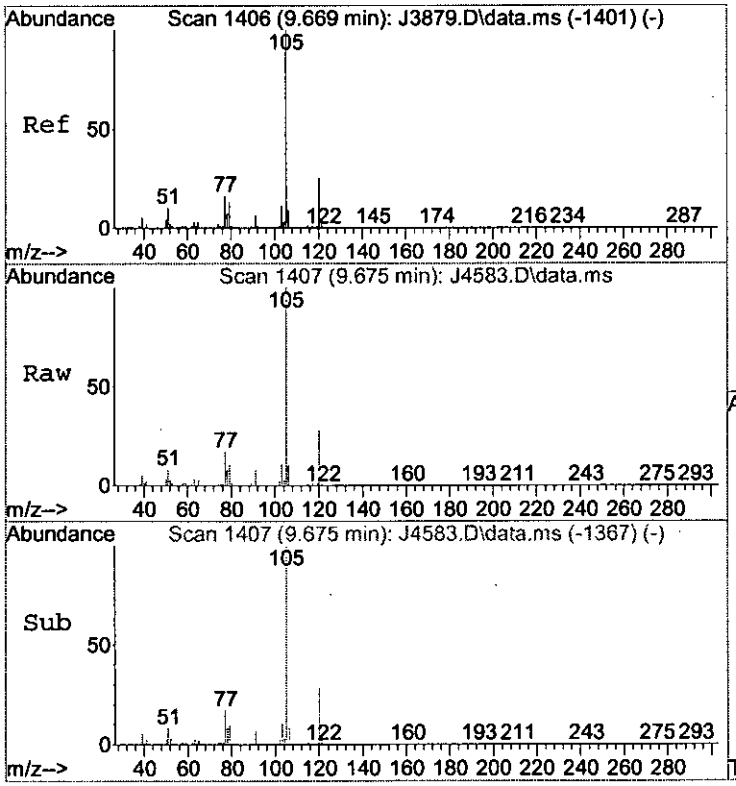


#84
o-Xylene
Concen: 144.04 ppb
RT: 9.346 min Scan# 1353
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:106 Resp: 1828482

Ion	Ratio	Lower	Upper
106	100		
91	203.6	193.9	233.9

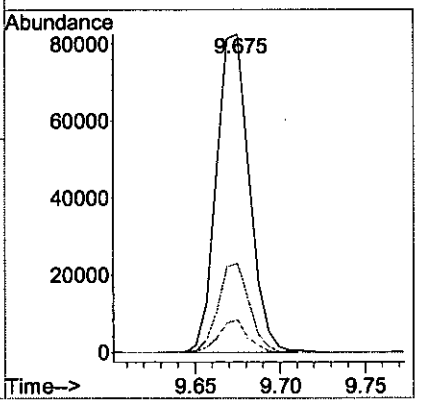


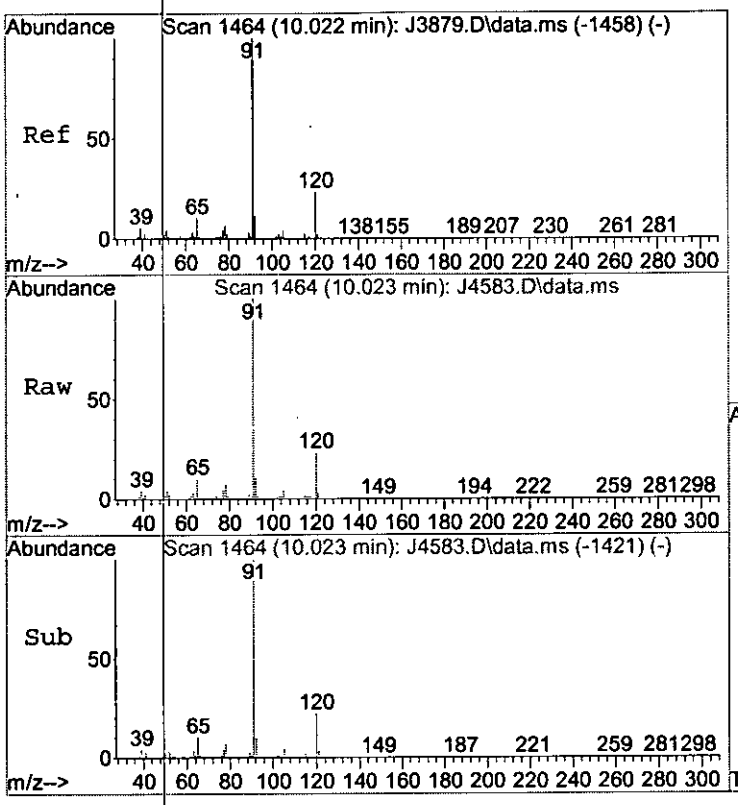


#89
Isopropylbenzene
Concen: 3.68 ppb
RT: 9.675 min Scan# 1407
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:105 Resp: 110306

Ion	Ratio	Lower	Upper
105	100		
120	27.9	5.4	45.4
106	10.0	0.0	28.6

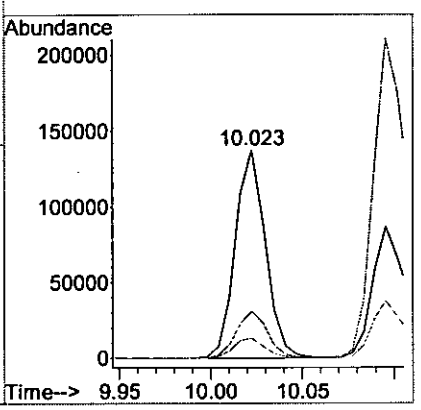


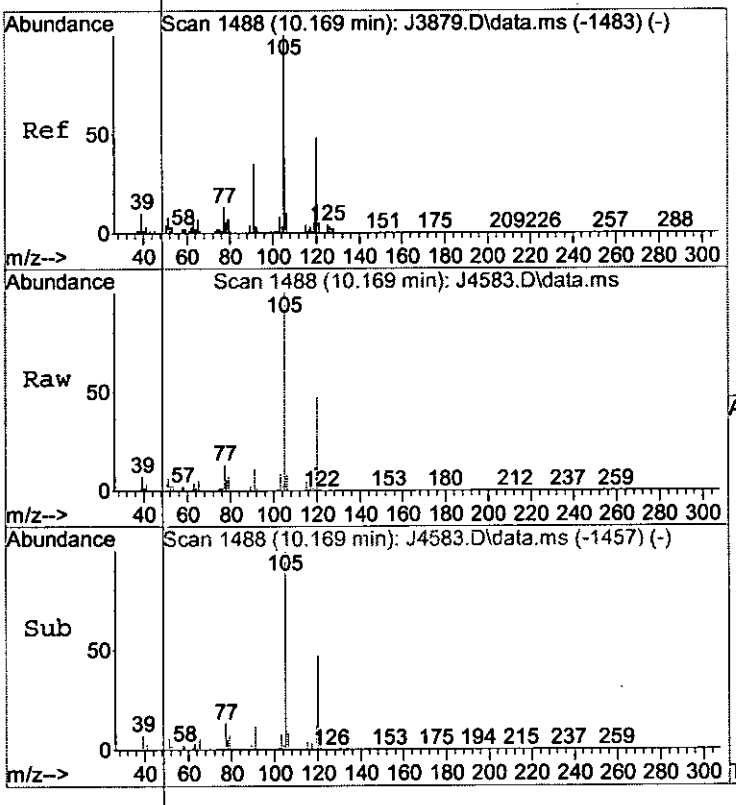


#95
n-Propylbenzene
Concen: 4.47 ppb
RT: 10.023 min Scan# 1464
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion: 91 Resp: 156886

Ion	Ratio	Lower	Upper
91	100		
120	22.5	3.1	43.1
65	9.6	0.0	30.1

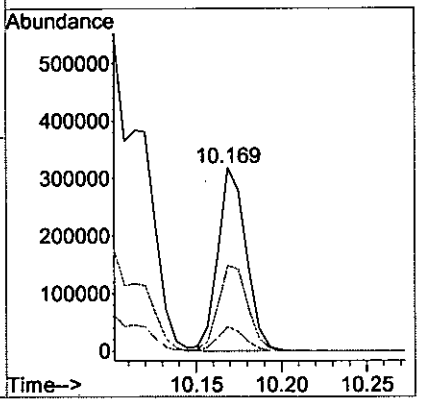




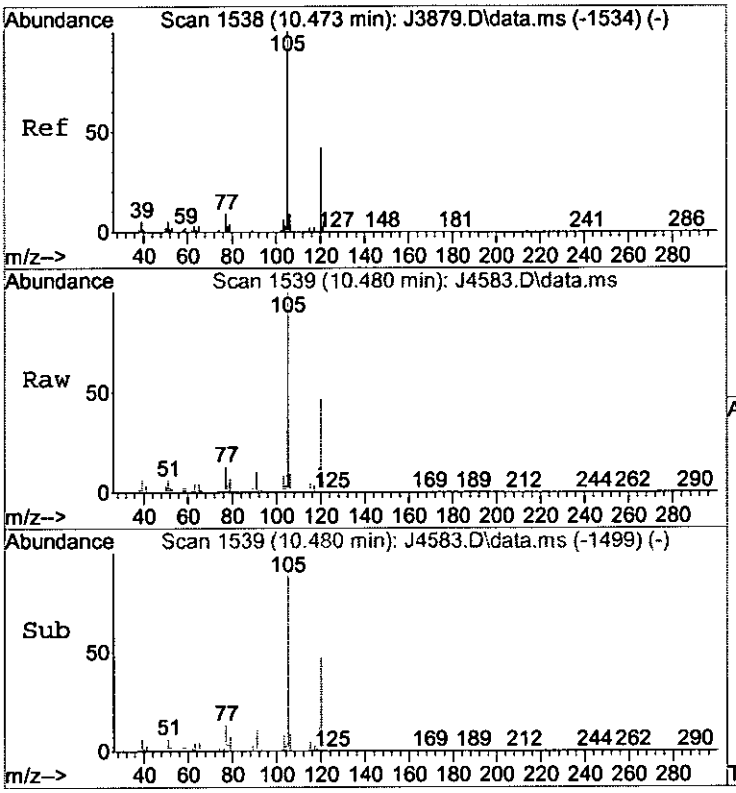
#99
1,3,5-Trimethylbenzene
Concen: 15.04 ppb
RT: 10.169 min Scan# 1488
Delta R.T. -0.006 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:105 Resp: 368072

Ion	Ratio	Lower	Upper
105	100		
120	46.6	27.7	67.7
77	13.4	0.0	33.6



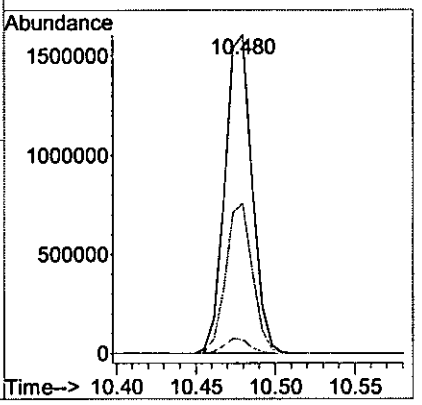
J4583.D W031214.M Wed Apr 09 10:43:31 2014 00111 Page 7

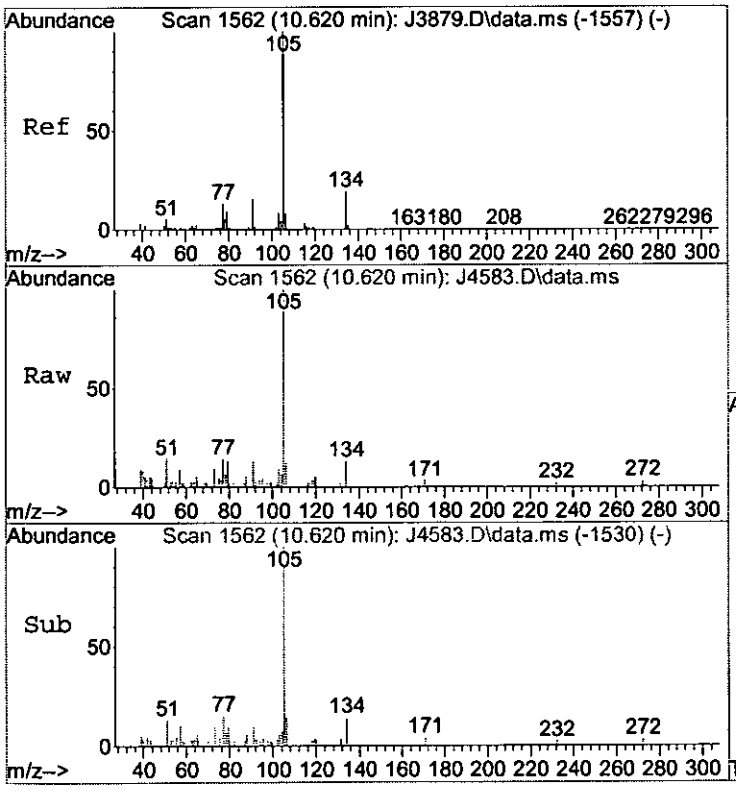


#101
1,2,4-Trimethylbenzene
Concen: 75.90 ppb
RT: 10.480 min Scan# 1539
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:105 Resp: 1910629

Ion	Ratio	Lower	Upper
105	100		
120	47.2	25.3	65.3
65	4.3	0.0	24.3

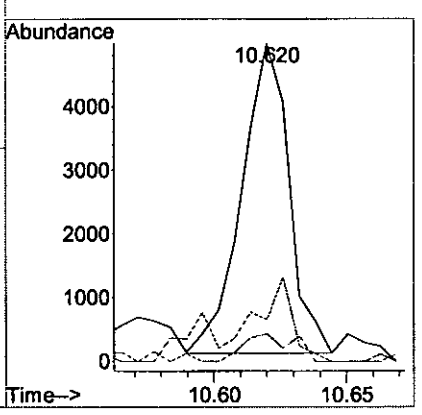




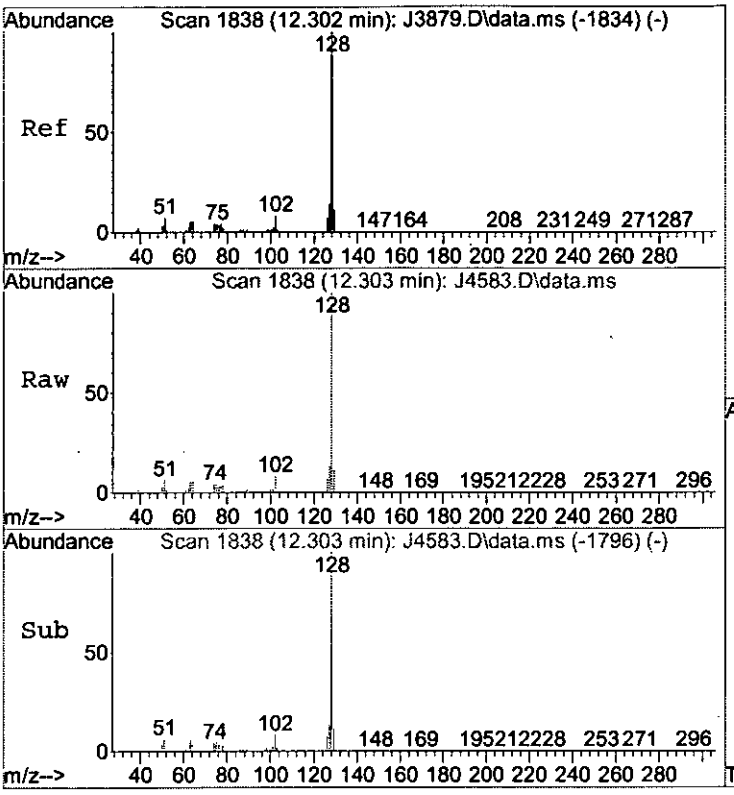
#103
sec-Butylbenzene
Concen: 0.21 ppb
RT: 10.620 min Scan# 1562
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:105 Resp: 6024

Ion	Ratio	Lower	Upper
105	100		
134	13.1	0.0	39.3
103	8.7	0.0	28.3



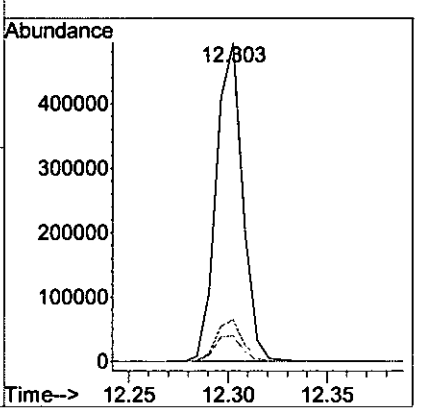
J4583.D W031214.M Wed Apr 09 10:43:32 2014 0011 Page 8



#117
Naphthalen
Concen: 29.75 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4583.D
Acq: 8 Apr 2014 8:41 pm

Tgt Ion:128 Resp: 458826

Ion	Ratio	Lower	Upper
128	100		
127	13.2	0.0	33.8
102	8.1	0.0	28.5



J4583.D W031214.M Wed Apr 09 10:43:32 2014 Page 9

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4583.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.616	81	85	89	rBV	761895	769385	5.09%	1.036%
2	1.768	106	110	115	rVB	296865	323834	2.14%	0.436%
3	2.396	204	213	217	rBV	131031	316489	2.09%	0.426%
4	2.445	217	221	233	rVB	294390	468879	3.10%	0.631%
5	2.597	237	246	254	rBV	109622	195427	1.29%	0.263%
6	3.463	378	388	398	rBV	480382	1053680	6.97%	1.418%
7	4.152	492	501	509	rBV	504373	1179231	7.79%	1.587%
8	4.249	509	517	524	rBV	894335	2164385	14.31%	2.914%
9	4.664	574	585	598	rBV	450570	1168957	7.73%	1.574%
10	5.450	704	714	728	rBV	1220558	2826960	18.69%	3.806%
11	7.322	1014	1021	1028	rBV	2503830	3869992	25.58%	5.210%
12	7.395	1028	1033	1042	rVB	181386	297225	1.96%	0.400%
13	8.742	1249	1254	1266	rBV	2665124	3411022	22.55%	4.592%
14	8.889	1272	1278	1290	rBV	4502007	5752676	38.03%	7.744%
15	8.998	1290	1296	1310	rVB	11672104	15128074	100.00%	20.366%
16	9.346	1347	1353	1365	rBV	8711519	10730571	70.93%	14.446%
17	9.669	1401	1406	1414	rVB	203970	271217	1.79%	0.365%
18	9.791	1421	1426	1435	rBV	2250181	2736764	18.09%	3.684%
19	10.023	1459	1464	1471	rBV	270204	322784	2.13%	0.435%
20	10.096	1471	1476	1478	rBV	1716115	2012632	13.30%	2.709%
21	10.169	1484	1488	1496	rVB	890376	1032091	6.82%	1.389%
22	10.334	1510	1515	1525	rBV	1707539	2052011	13.56%	2.762%
23	10.480	1534	1539	1545	rVB	4459734	5341052	35.31%	7.190%
24	10.748	1578	1583	1589	rVB	3072309	3421629	22.62%	4.606%
25	10.815	1589	1594	1599	rBV	2051758	2300679	15.21%	3.097%
26	10.974	1615	1620	1628	rVV	2441463	2858051	18.89%	3.848%
27	11.053	1628	1633	1642	rVB2	114819	153915	1.02%	0.207%
28	11.339	1675	1680	1682	rBV	188150	206496	1.36%	0.278%
29	11.419	1688	1693	1699	rBV2	189114	237514	1.57%	0.320%
30	11.650	1728	1731	1735	rVB	173201	171983	1.14%	0.232%
31	11.827	1756	1760	1763	rBV	150757	156032	1.03%	0.210%
32	11.925	1771	1776	1780	rVB2	432691	438676	2.90%	0.591%
33	12.303	1834	1838	1842	rBV	950719	912453	6.03%	1.228%

KP 4/9/14

W031214.M Wed Apr 09 10:43:46 2014 Page: 1

00114

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

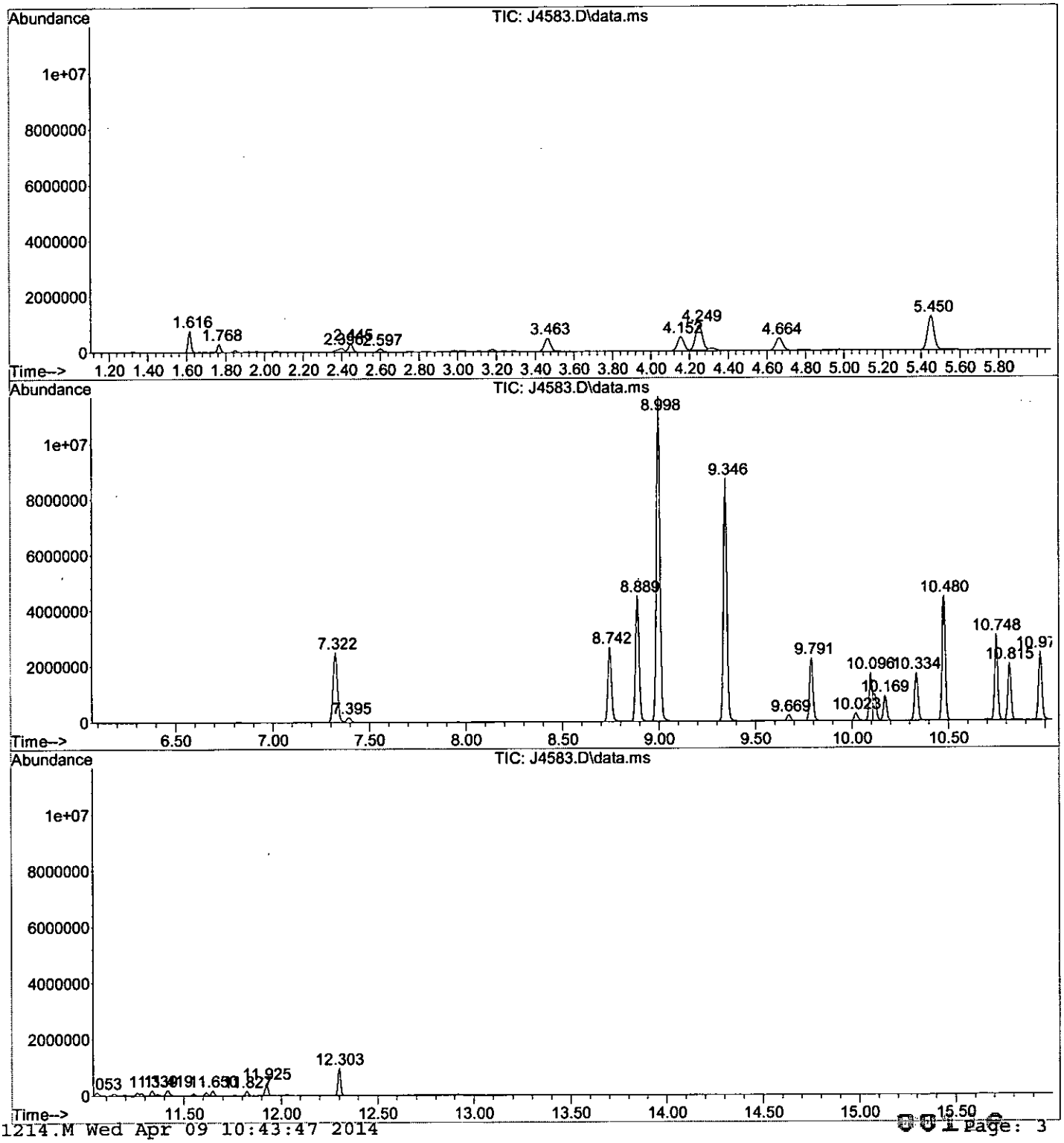
Sum of corrected areas: 74282766

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 10:43:47 2014 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

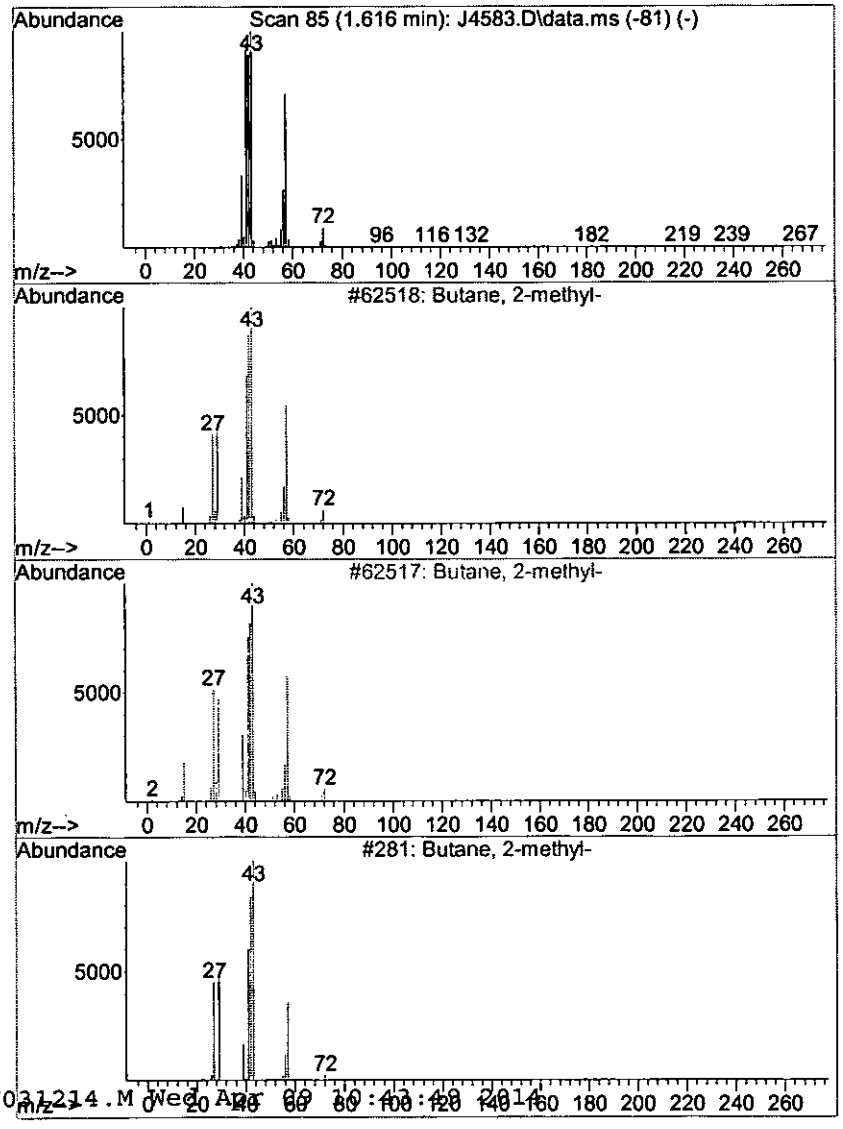
****

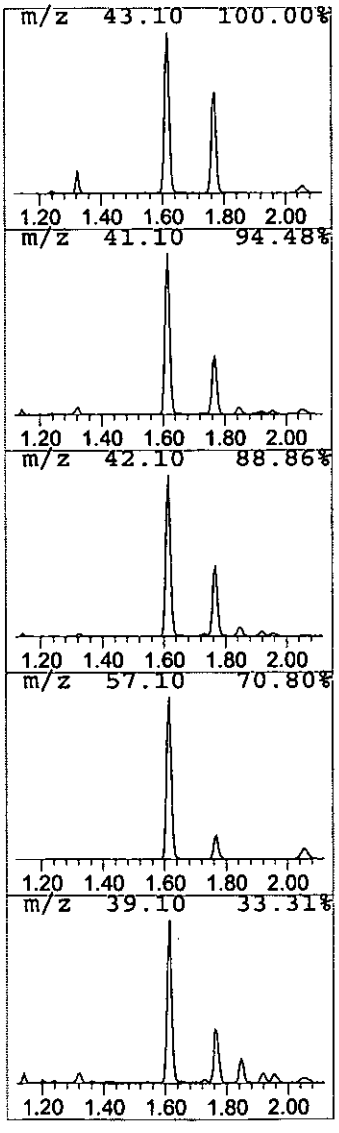
Peak Number 1 Butane, 2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.616	17.77 ppb	769385	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	80
2	Butane, 2-methyl-	72	C5H12	000078-78-4	80
3	Butane, 2-methyl-	72	C5H12	000078-78-4	80
4	3-Buten-1-ol	72	C4H8O	000627-27-0	47
5	1-Butene	56	C4H8	000106-98-9	14

unknown





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

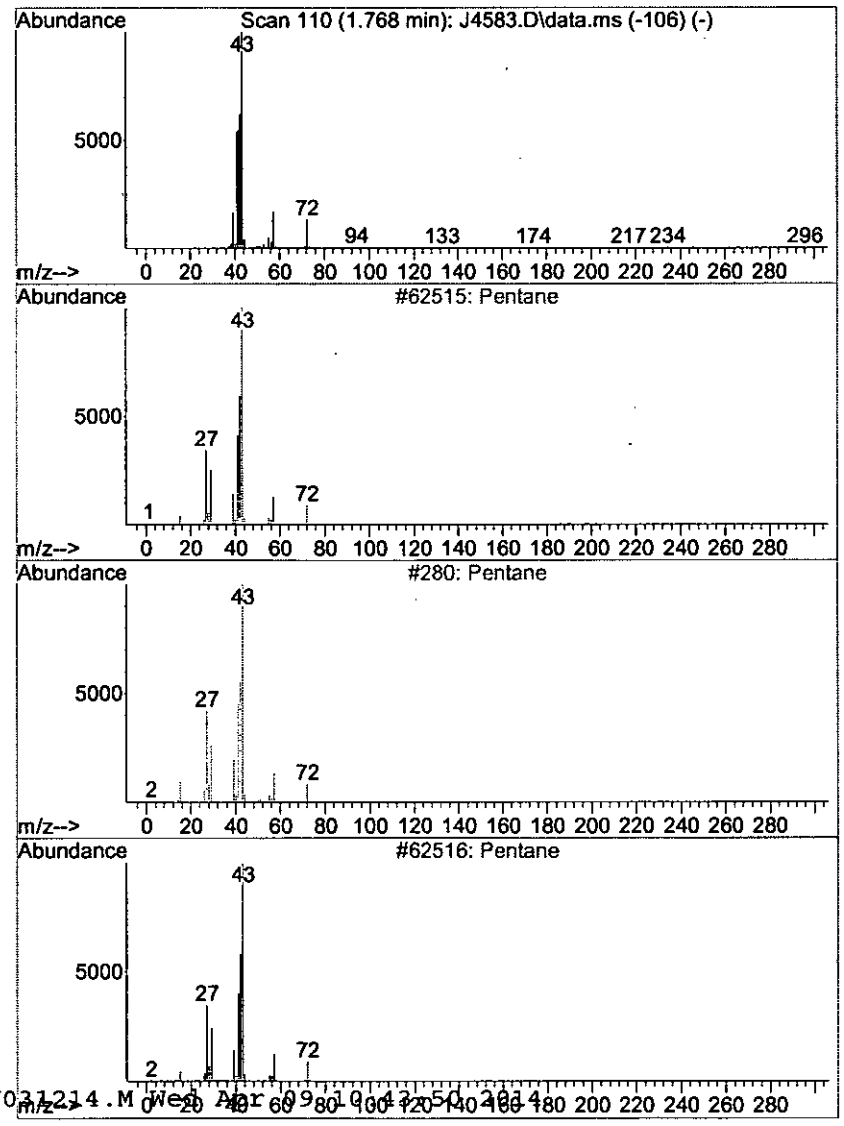
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

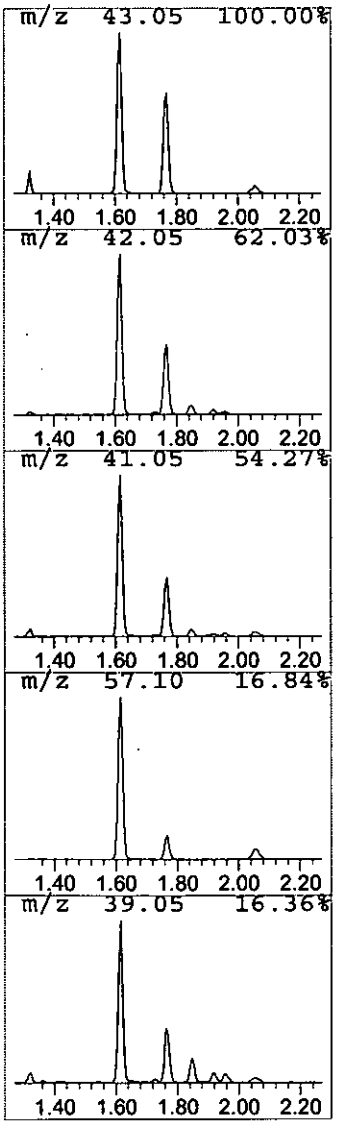
****

Peak Number 2 Pentane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.768	7.48 ppb	323834	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	90
2	Pentane	72	C5H12	000109-66-0	86
3	Pentane	72	C5H12	000109-66-0	86
4	Butane, 2-methyl-	72	C5H12	000078-78-4	50
5	Oxirane, ethyl-	72	C4H8O	000106-88-7	42





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On    :  8 Apr 2014    8:41 pm
Operator  : K.Ruest
Sample    : R1402225-006|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 14   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

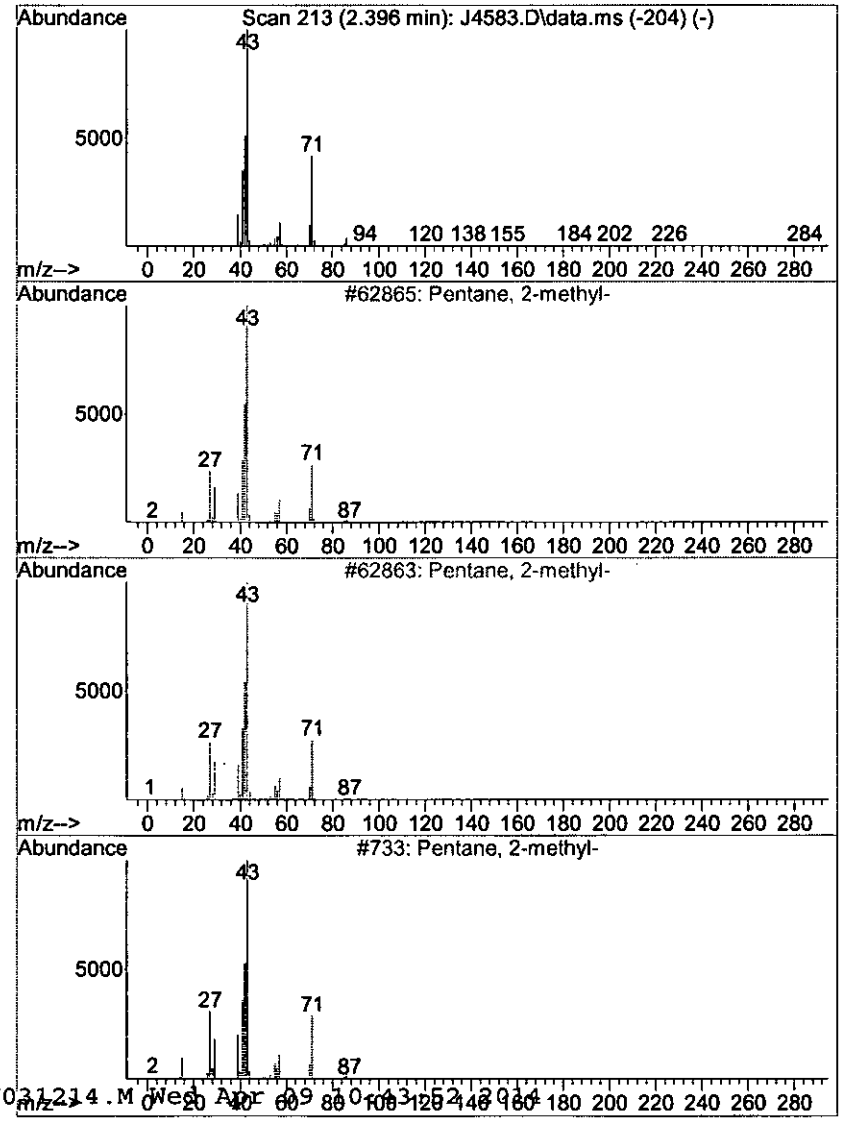
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

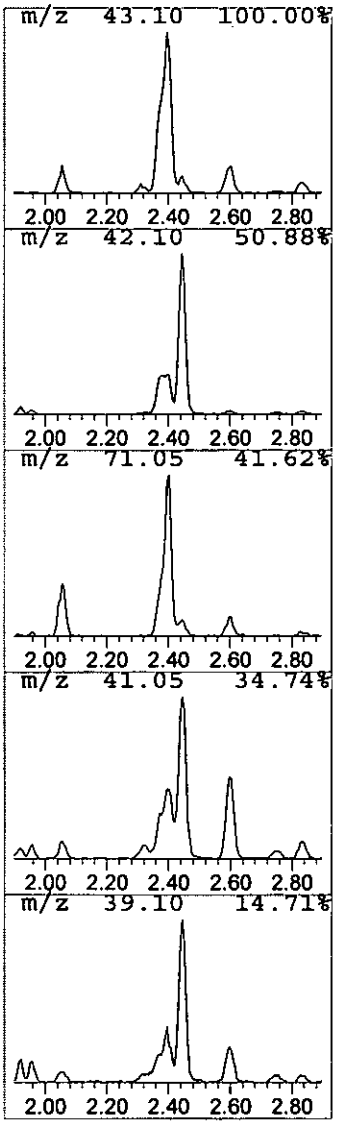
****

Peak Number 3 Pentane, 2-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.396	7.31 ppb	316489	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	87
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	87
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	86
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	72
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	58





W031214.M Wed Apr 09 10:43:52 2014 Page: 6

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 4 Cyclopentane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.445	10.83 ppb	468879	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane	70	C5H10	000287-92-3	80
2	Cyclopropane, ethyl-	70	C5H10	001191-96-4	50
3	Cyclopropane, ethyl-	70	C5H10	001191-96-4	39
4	2H-Tetrazole, 2,5-dimethyl-	98	C3H6N4	004135-93-7	39
5	1-Pentene	70	C5H10	000109-67-1	38

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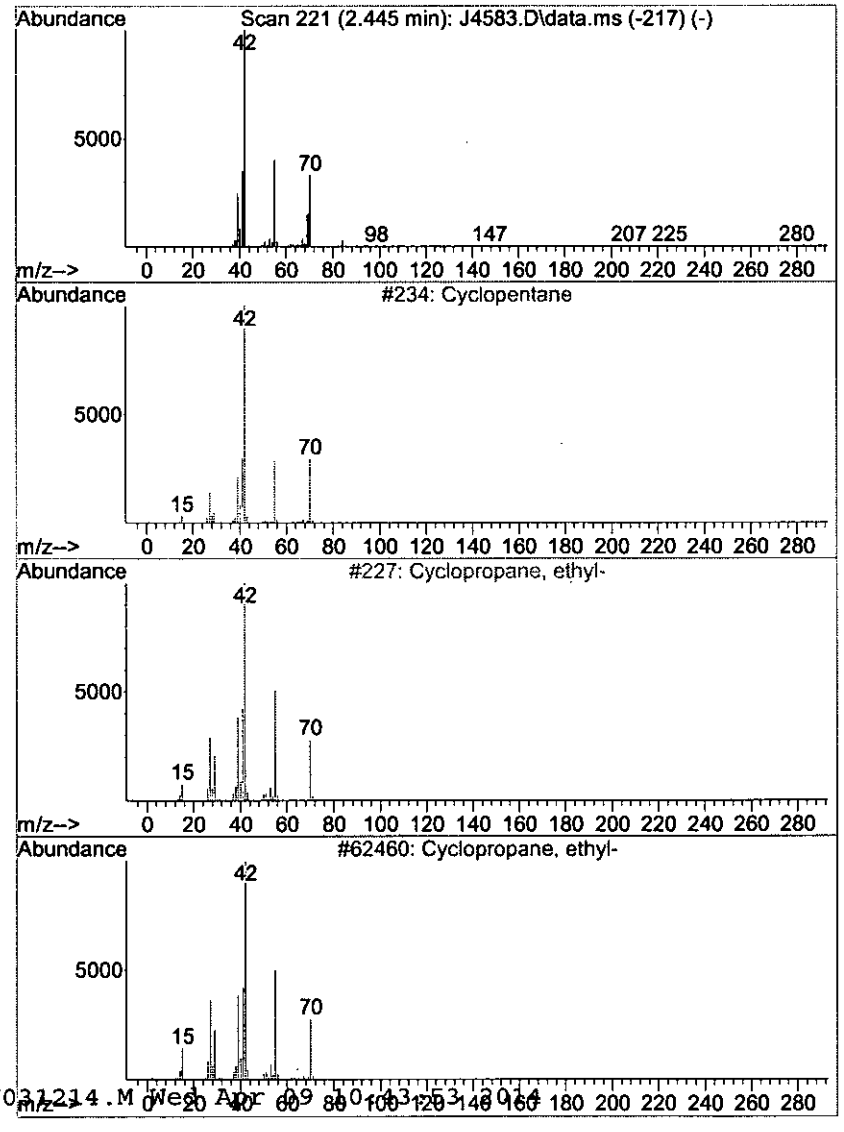

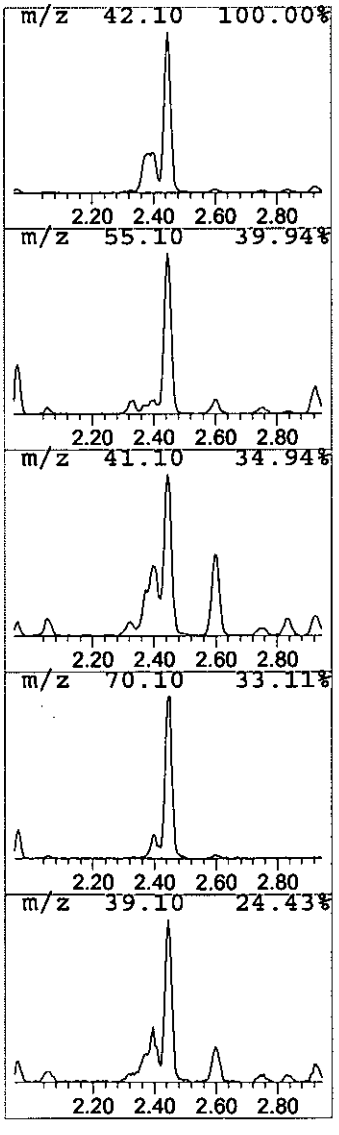

W031214.M Wed Apr 09 10:43:53 2014 001 Page: 7

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On    :  8 Apr 2014    8:41 pm
Operator  : K.Ruest
Sample    : R1402225-006|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 14   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

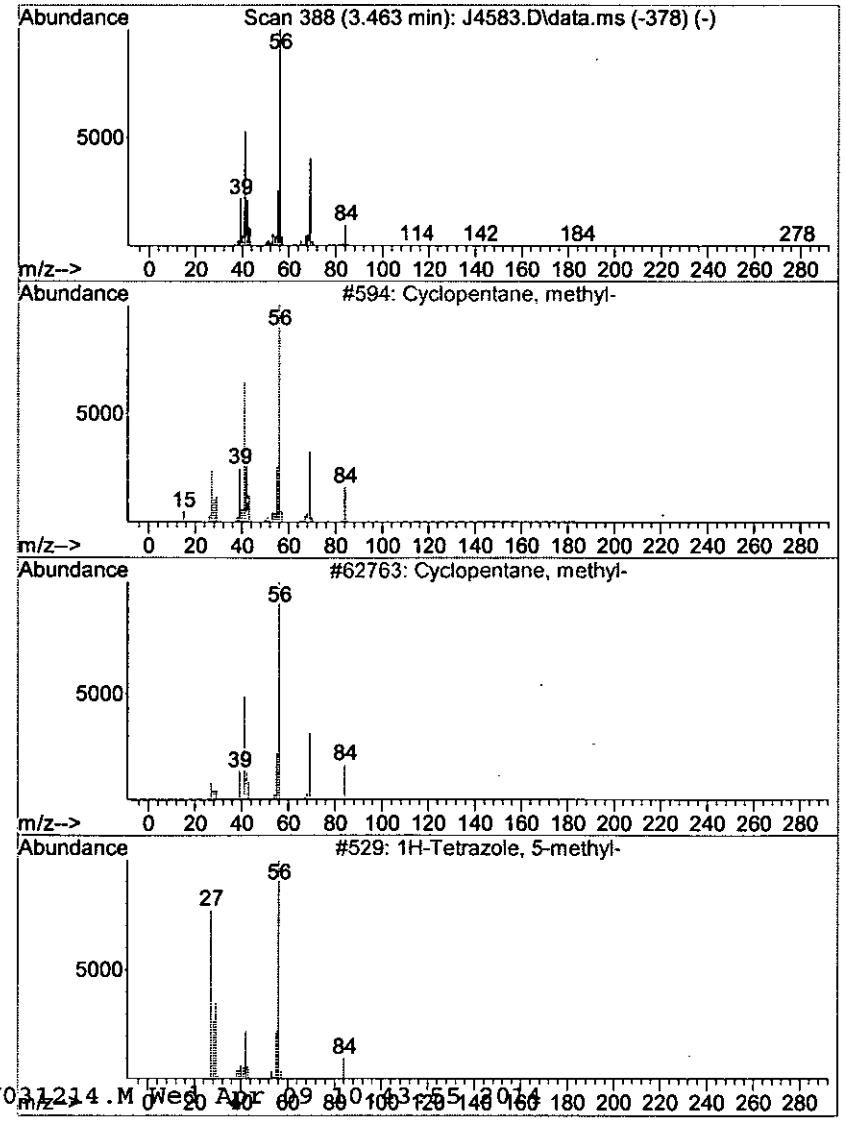
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

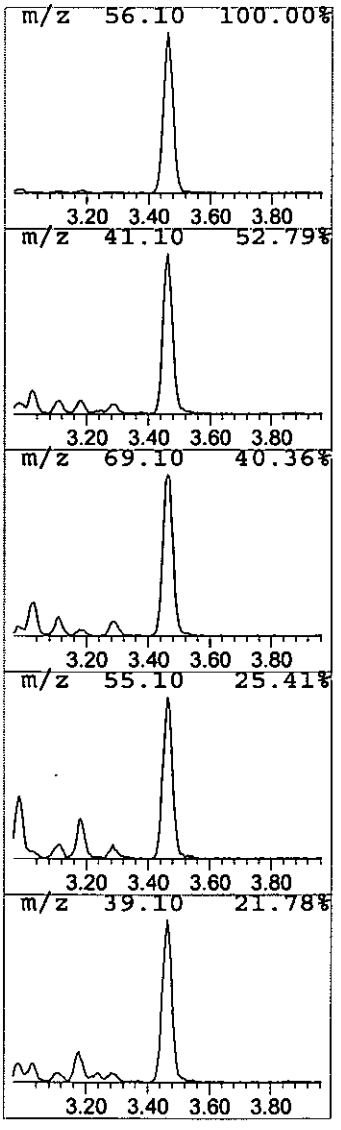
****

Peak Number 5 Cyclopentane, methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.463	24.34 ppb	1053680	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	87
3	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	80
4	Cyclobutane, ethyl-	84	C6H12	004806-61-5	64
5	Cyclobutane	56	C4H8	000287-23-0	53





W031214.M Wed Apr 09 10:43:55 2014 001 Page: 8

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

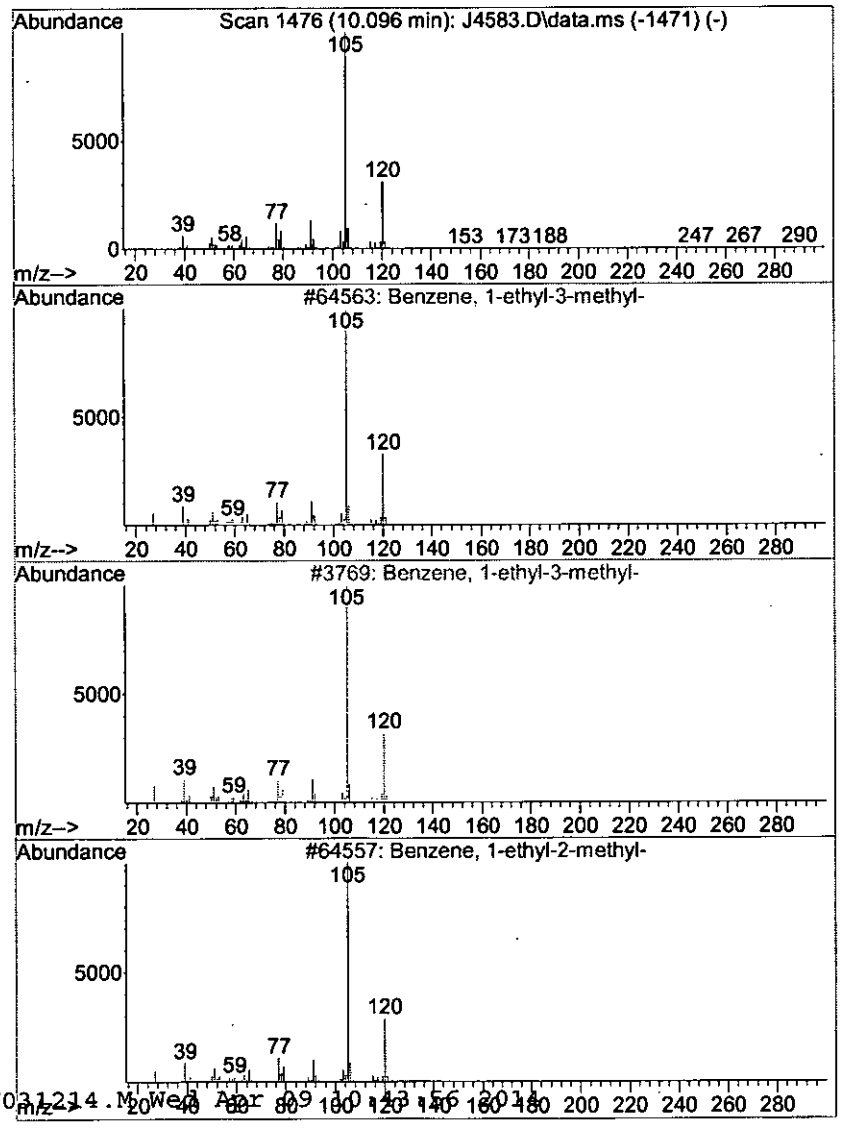
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

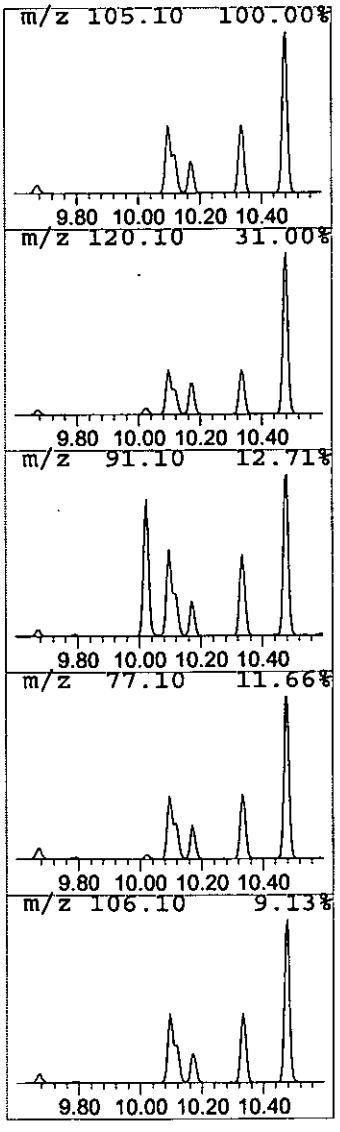
****

Peak Number 6 Benzene, 1-ethyl-3-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.096	29.41 ppb	2012630	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
2	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95





W031214.M Wed Apr 09 10:43:56 2014 Page: 9

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

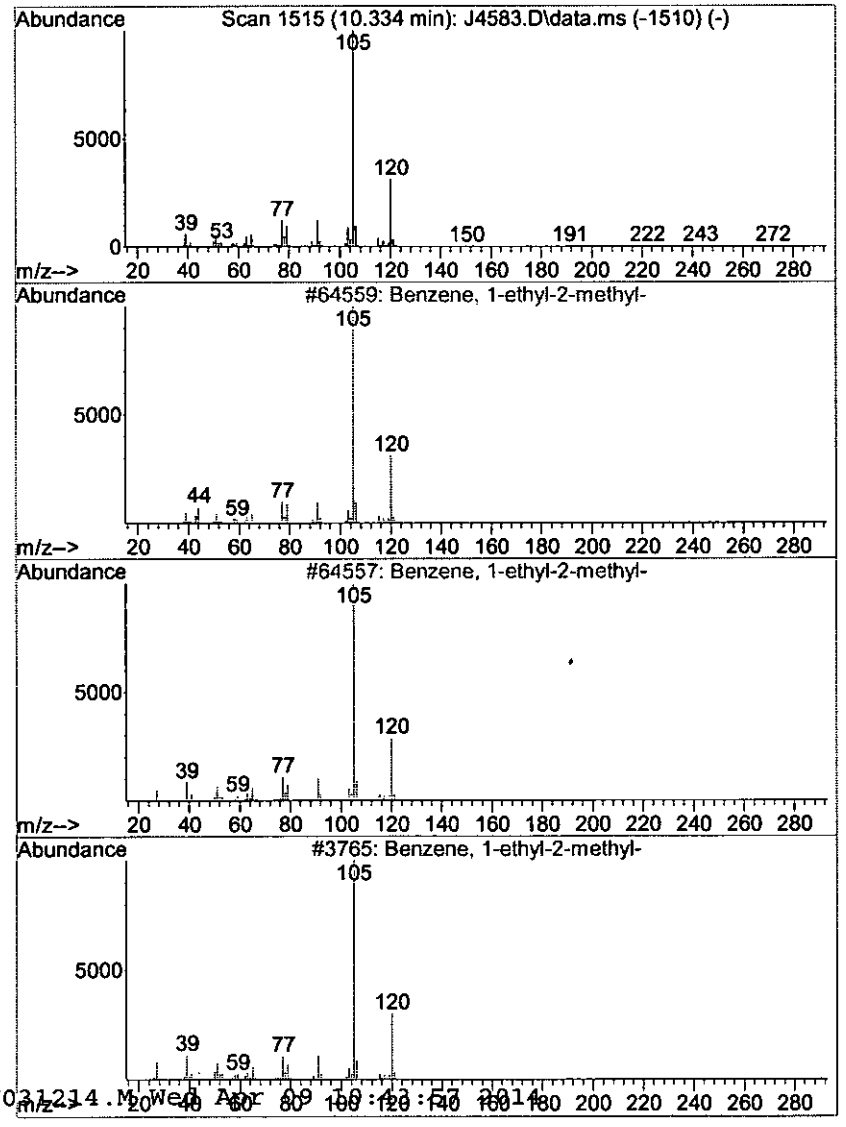
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

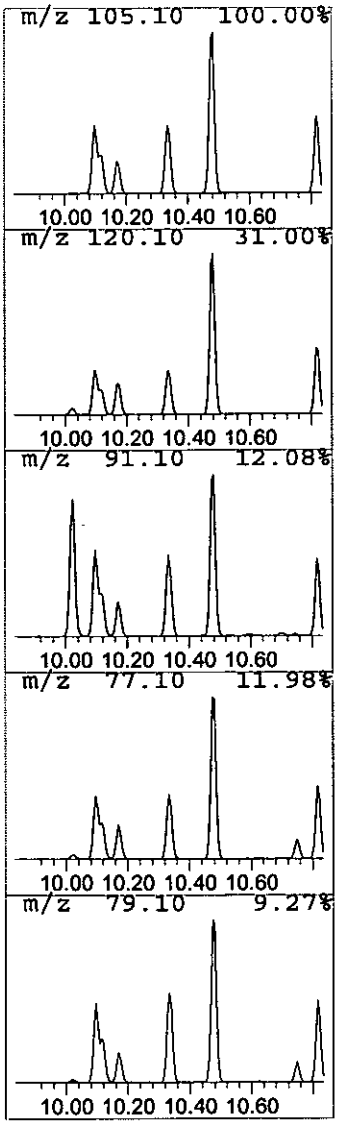
****

Peak Number 7 Benzene, 1-ethyl-2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.334	29.99 ppb	2052010	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
5	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94





W031214.M Wed Apr 09 10:43:57 2014 Page: 10

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On    :  8 Apr 2014    8:41 pm
Operator  : K.Ruest
Sample    : R1402225-006|2.0
Misc      : PARSONS 9913 T4
ALS Vial  : 14   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

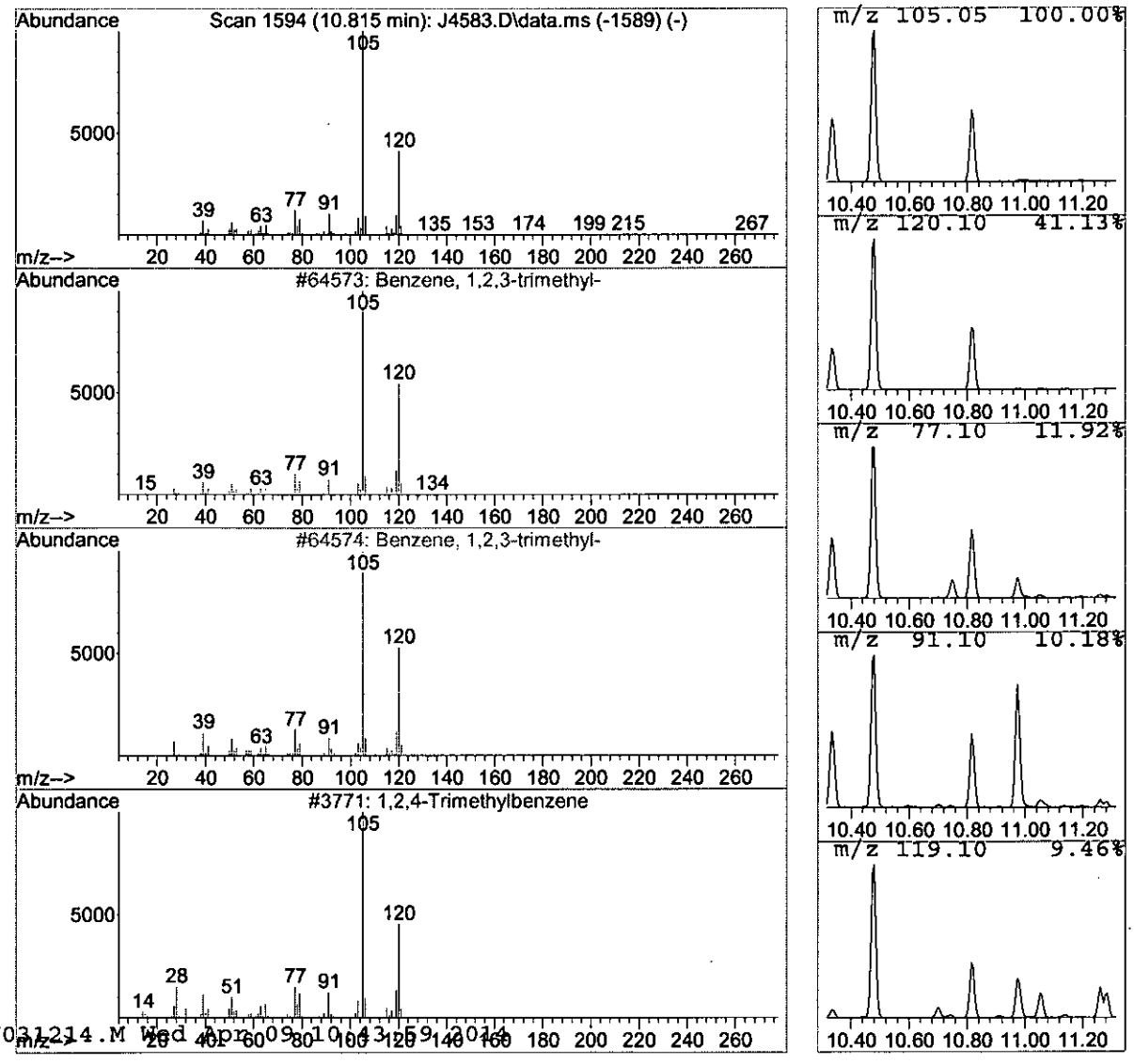
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

****

Peak Number 8 Benzene, 1,2,3-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.815	33.62 ppb	2300680	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
3	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	94
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

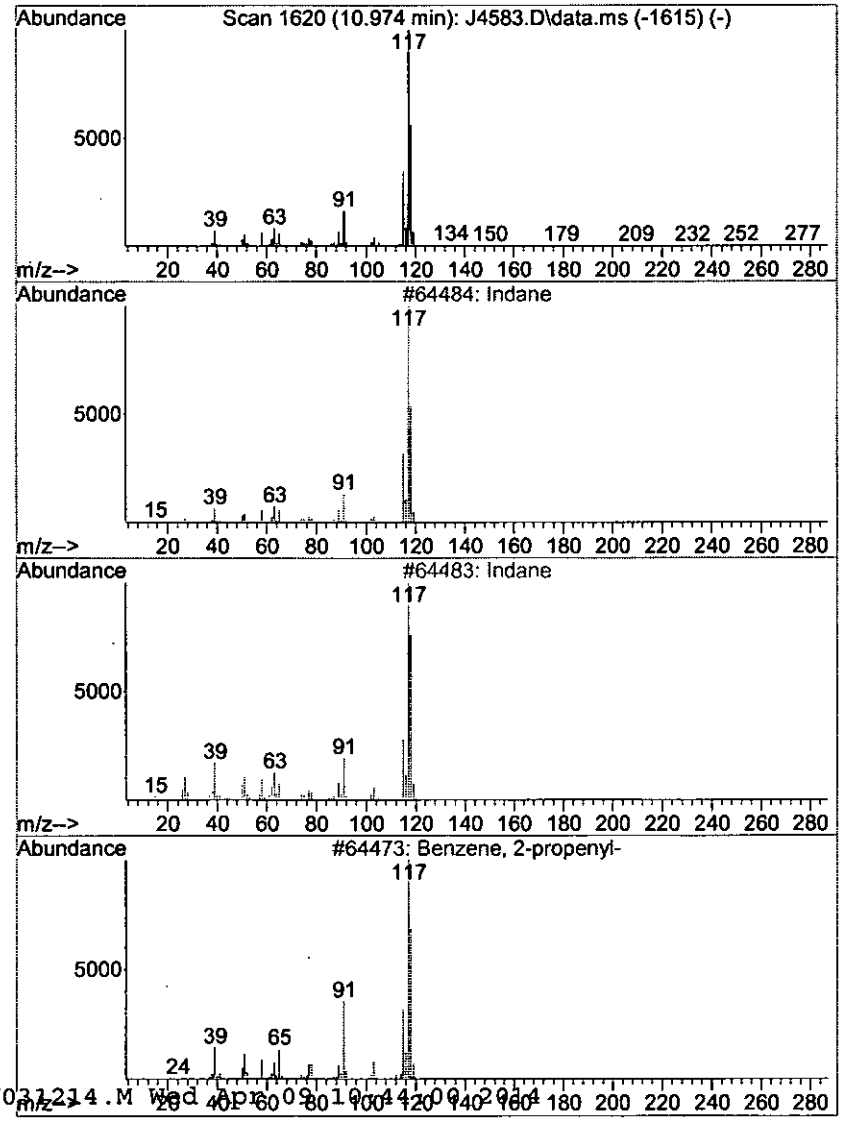
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

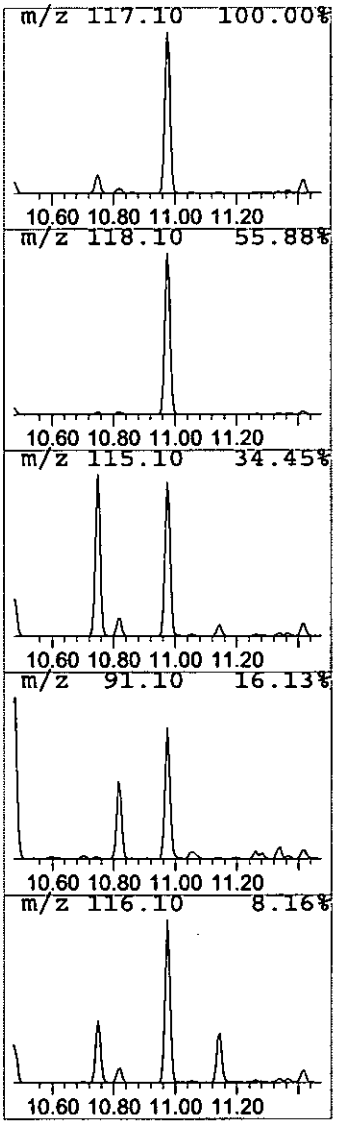
****

Peak Number 9 Indane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.974	41.76 ppb	2858050	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	93
2	Indane	118	C9H10	000496-11-7	90
3	Benzene, 2-propenyl-	118	C9H10	000300-57-2	83
4	Benzene, 1,1'-(1-ethenyl-1,3-pro...	222	C17H18	061141-97-7	74
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	72





W031214.M Wed Apr 09 10:44:00 2014 Page: 12

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4583.D
Acq On : 8 Apr 2014 8:41 pm
Operator : K.Ruest
Sample : R1402225-006|2.0
Misc : PARSONS 9913 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

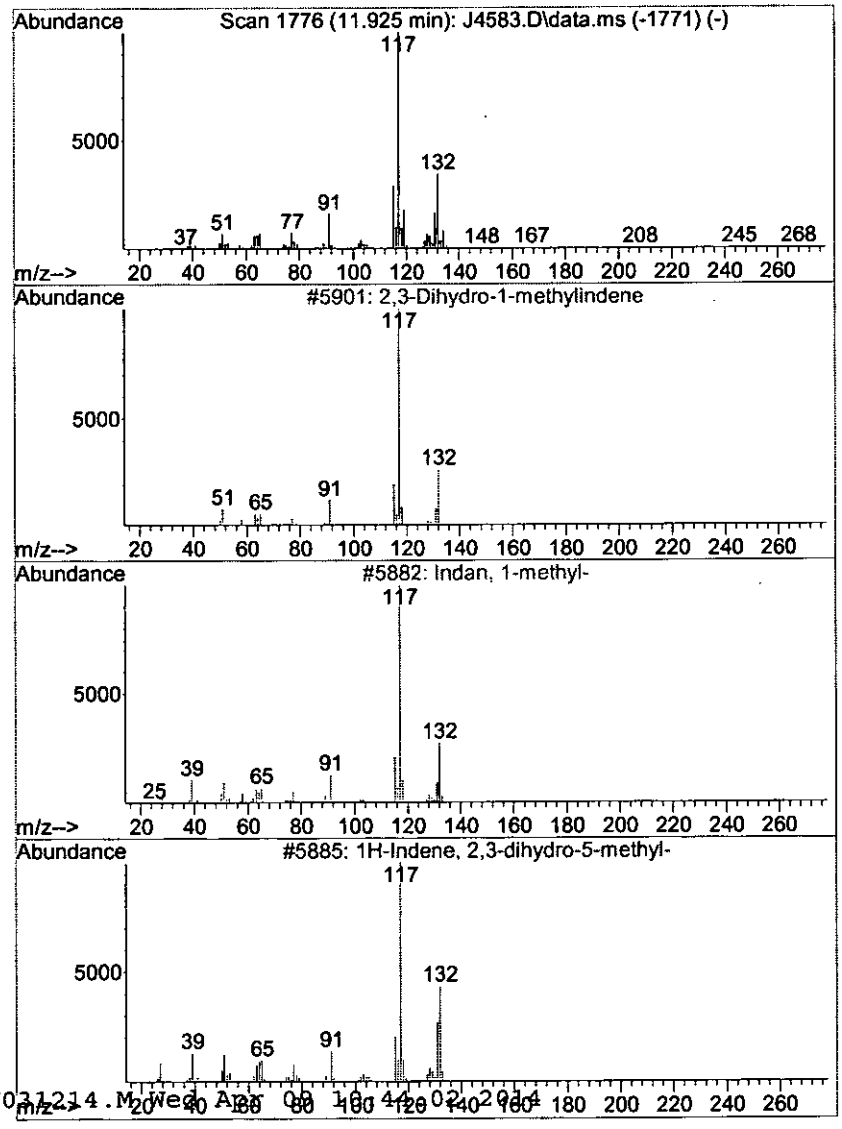
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

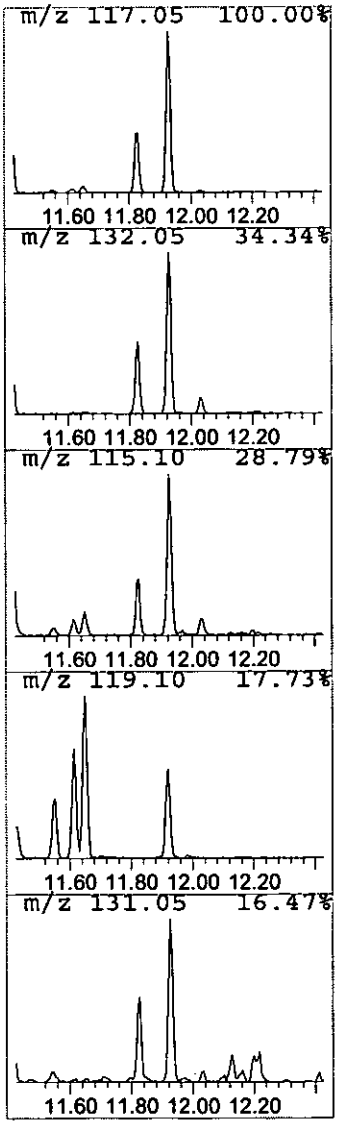
****

Peak Number 10 2,3-Dihydro-1-methylindene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.925	6.41 ppb	438676	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	93
2	Indan, 1-methyl-	132	C10H12	000767-58-8	91
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	87
4	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	87
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	83





Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1110
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 14:45
Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	R1402225-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4572.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.26**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.2**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.43**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1110
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 14:45
Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	R1402225-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4572.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/8/14 14:45	
Dibromofluoromethane	102	85-115	4/8/14 14:45	
Toluene-d8	97	85-120	4/8/14 14:45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1445

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	R1402225-007	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-007|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4572.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 2:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 15:00:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	850249	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1254744	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1144904	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	545088	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	369904	50.92	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.84%				
48) surr1,1,2-dichloroetha...	4.664	65	431023	52.09	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 104.18%				
65) SURR3,Toluene-d8	7.322	98	1473316	48.27	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.54%				
70) SURR2,BFB	9.791	95	551462	48.43	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.86%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	2130	0.43	ppb		87 (S)
15) Acetone	2.054	43	3703	2.20	ppb		92 (S)
~~19) Acetonitrile~~	~~2.231~~	~~40~~	~~607~~	~~2.20~~	~~ppb~~	~~#~~	~~1~~
20) Allyl Chloride	2.207	76	3781	0.89	ppb	#	1
35) 2-Butanone	3.640	43	4213	1.78	ppb	#	52
58) 1,4-Dioxane	6.377	88	247	4.77	ppb		88
~~90) Cyclohexanone~~	~~9.730~~	~~55~~	~~300~~	~~0.69~~	~~ppb~~		~~78~~
112) Trielution Dichlorotol...	11.736	125	2647	0.25	ppb	#	53 (m)
114) Coelution Dichlorotoluene	11.998	125	2562	0.23	ppb	#	92 ↓
115) 1,2,4-Tcbenzene	12.162	180	2114	0.26	ppb		96 (J)
116) Hexachlorobt	12.266	225	2030	0.58	ppb		96 <
118) 1,2,3-Tclbenzene	12.443	180	1902	0.29	ppb		79 <
119) 2,4,5-Trichlorotolene	12.851	159	4459	1.03	ppb	#	79 (m)
120) 2,3,6-Trichlorotoluene	12.912	159	3630	0.91	ppb	#	85 ↓

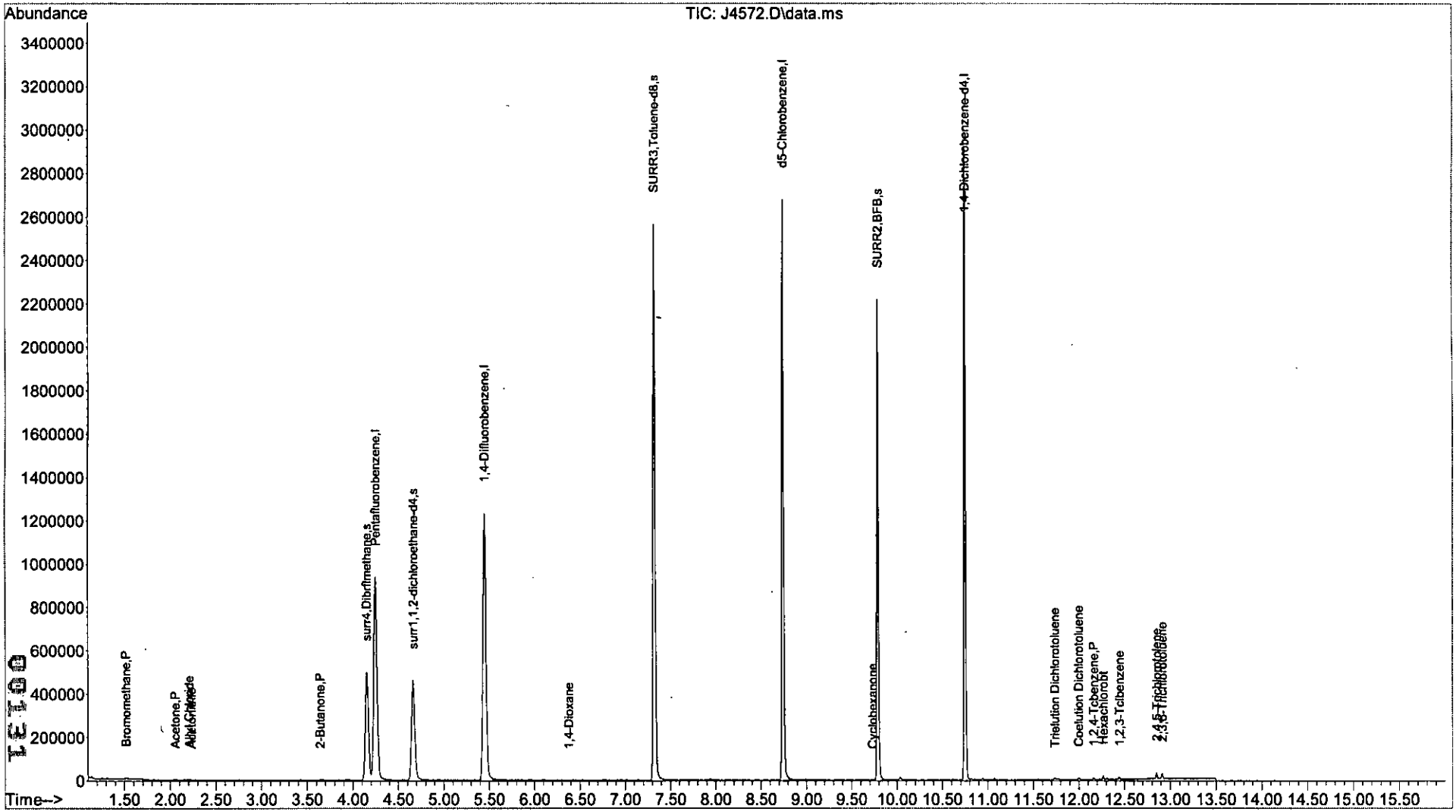
(#) = qualifier out of range (m) = manual integration (+) = signals summed

JLP 4/9/14

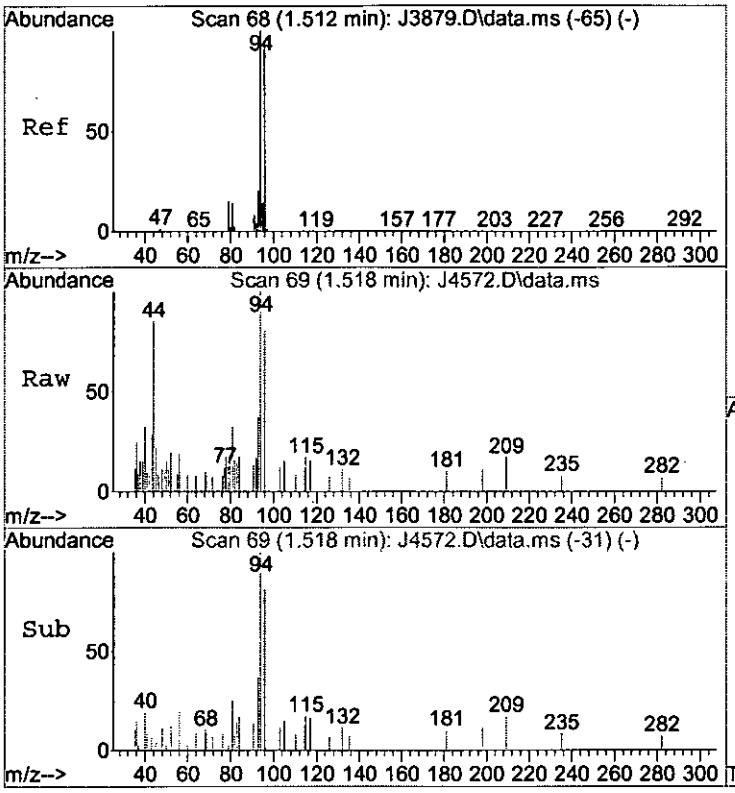
Quantitation Report (Not Reviewed)

Sample : R1402225-007|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4572.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 2:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 15:00:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



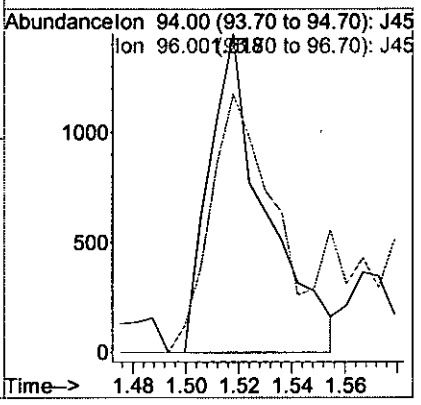
W031214.M Tue Apr 08 15:01:01 2014 Page: 2



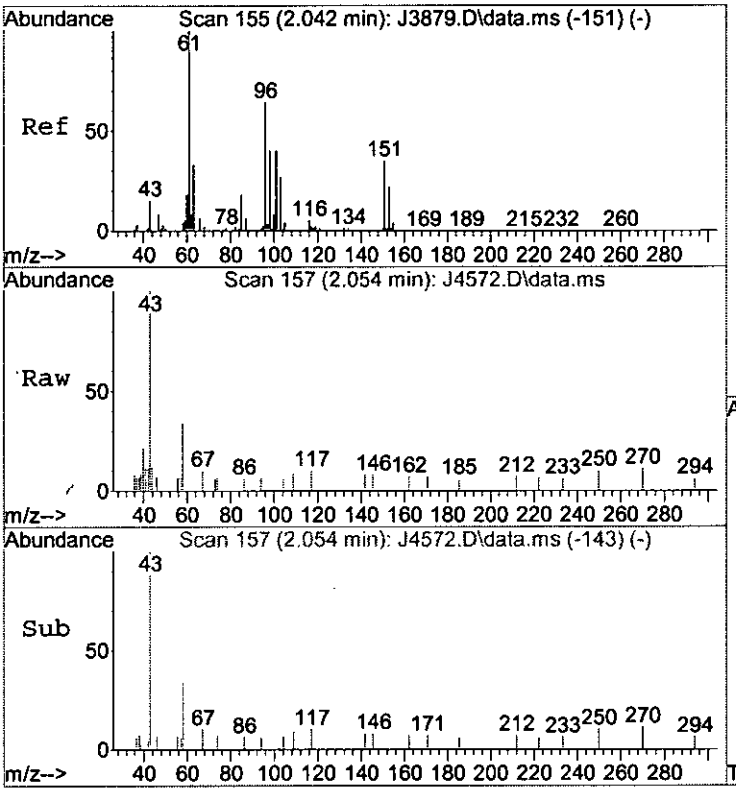
#5
Bromomethane
Concen: 0.43 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4572.D
Acq: 8 Apr 2014 2:45 pm

Tgt Ion: 94 Resp: 2130

Ion	Ratio	Lower	Upper
94	100		
96	81.1	73.8	113.8



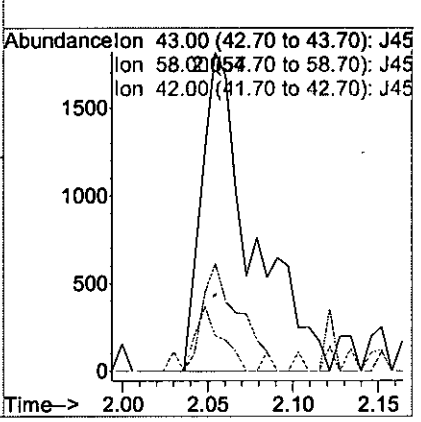
J4572.D W031214.M Wed Apr 09 09:39:19 2014 00132 Page 1



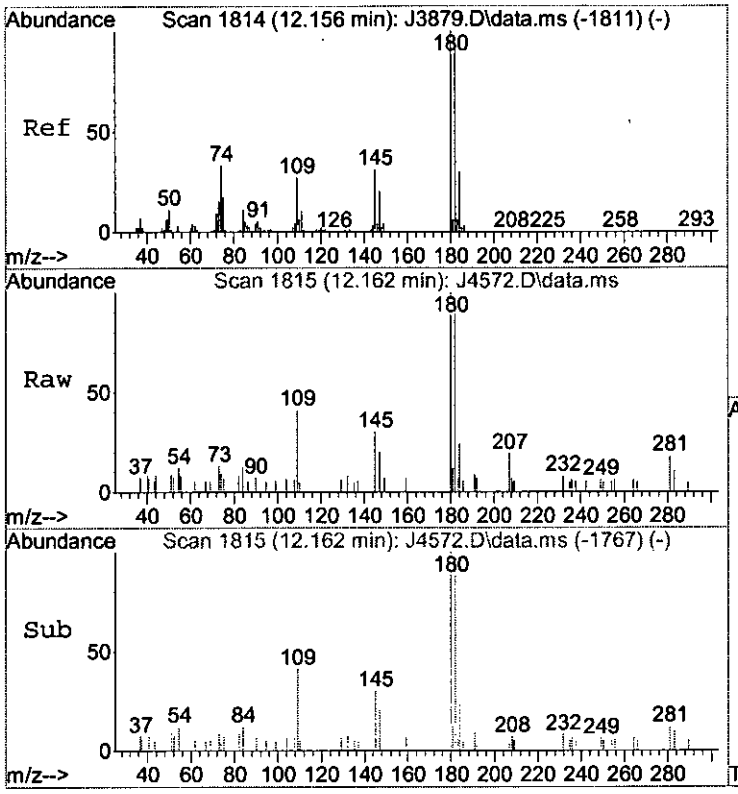
#15
Acetone
Concen: 2.20 ppb
RT: 2.054 min Scan# 157
Delta R.T. 0.012 min
Lab File: J4572.D
Acq: 8 Apr 2014 2:45 pm

Tgt Ion: 43 Resp: 3703

Ion	Ratio	Lower	Upper
43	100		
58	33.9	9.7	49.7
42	11.1	0.0	27.9



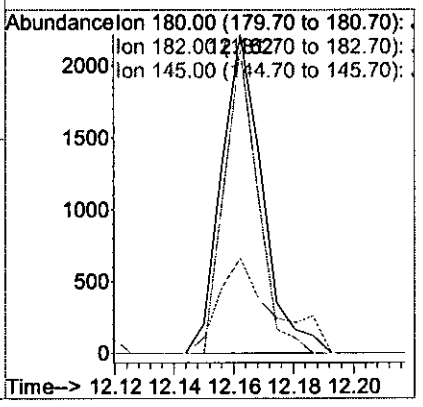
J4572.D W031214.M Wed Apr 09 09:39:03 2014 00133 Page 1



#115
1,2,4-Tcbenzene
Concen: 0.26 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J4572.D
Acq: 8 Apr 2014 2:45 pm

Tgt Ion:180 Resp: 2114

Ion	Ratio	Lower	Upper
180	100		
182	95.8	72.2	112.2
145	29.9	11.4	51.4



J4572.D W031214.M Wed Apr 09 09:39:11 2014 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4572.D
Acq On : 8 Apr 2014 2:45 pm
Operator : K.Ruest
Sample : R1402225-007|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4572.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	498372	1189232	30.75%	5.704%
2	4.249	509	517	534	rVB	934150	2353677	60.86%	11.289%
3	4.664	575	585	601	rBV	461549	1173700	30.35%	5.630%
4	5.450	703	714	733	rBV	1230774	2871470	74.25%	13.773%
5	7.322	1014	1021	1032	rBV	2566500	3867129	100.00%	18.549%
6	8.742	1249	1254	1269	rBV	2677845	3421320	88.47%	16.410%
7	9.791	1421	1426	1435	rBV	2216409	2684881	69.43%	12.878%
8	10.748	1578	1583	1593	rBV	2911246	3287035	85.00%	15.766%

Sum of corrected areas: 20848444

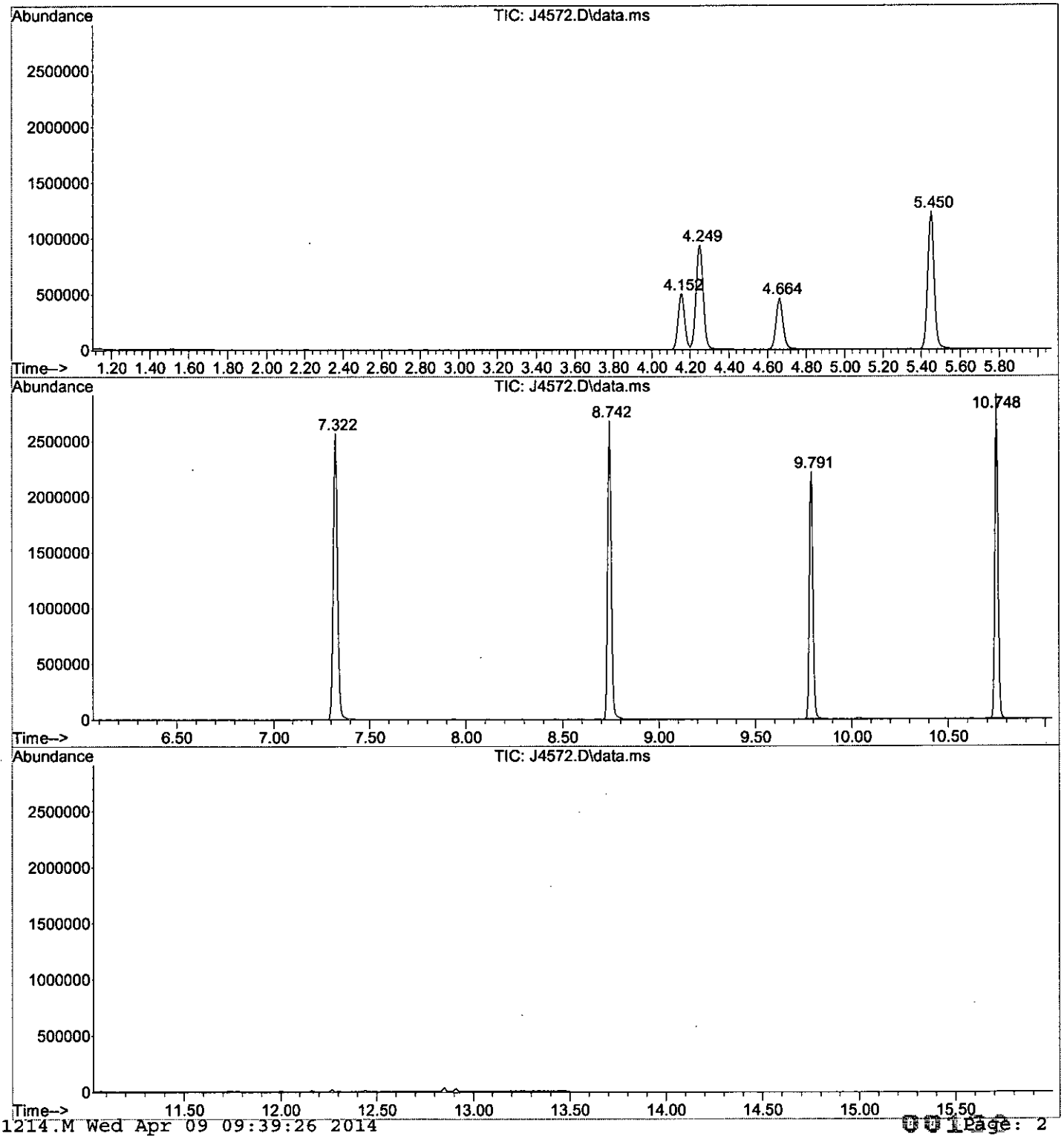
W031214.M Wed Apr 09 09:39:24 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4572.D
Acq On : 8 Apr 2014 2:45 pm
Operator : K.Ruest
Sample : R1402225-007|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 09:39:26 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4572.D
Acq On : 8 Apr 2014 2:45 pmm
Operator : K.Ruestt
Sample : R1402225-007|1.00
Misc : PARSONS 9913 T44
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Wed Apr 09 09:39:26 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1130
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 06:35
Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1402225-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4557.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.4	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1130
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 06:35
Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1402225-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4557.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	7.7		5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	0.34	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	75-120	4/8/14 06:35	
Dibromofluoromethane	100	85-115	4/8/14 06:35	
Toluene-d8	97	85-120	4/8/14 06:35	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0635

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1402225-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-008|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4557.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 6:35 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 06:50:53 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	797087	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1211348	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1146345	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	577172	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	351688	50.15	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.30%				
48) surr1,1,2-dichloroetha...	4.658	65	411257	51.48	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.96%				
65) SURR3,Toluene-d8	7.322	98	1436313	48.74	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.48%				
70) SURR2,BFB	9.791	95	571806	52.01	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.02%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1283	0.28	ppb		88 <
15) Acetone	2.048	43	2258	1.43	ppb		82
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~2333~~	~~0.59~~	~~ppb~~	~~#~~	~~1~~
~~39) Tetrahydrofuran~~	~~3.944~~	~~42~~	~~763~~	~~0.49~~	~~ppb~~	~~#~~	~~59~~
40) Chloroform	3.938	83	101816	7.70	ppb		99
60) Bromodichloromethane	6.474	83	2384	0.27	ppb		80 <
72) Tetrachloroethene	7.962	164	2040	0.34	ppb	#	64
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1364~~	~~2.95~~	~~ppb~~	~~#~~	~~26~~

KP 4/16/14

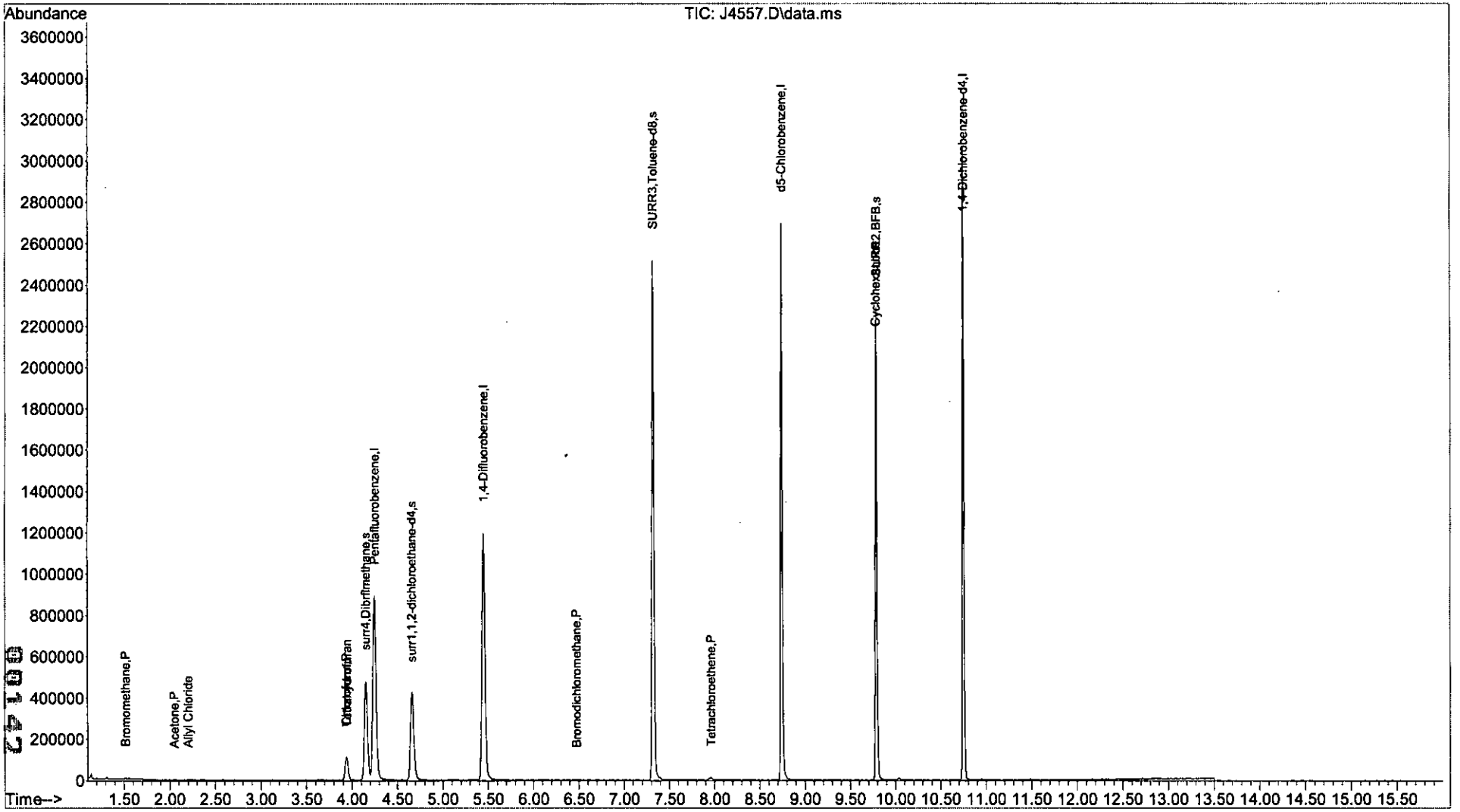
(#) = qualifier out of range (m) = manual integration (+) = signals summed

W031214.M Tue Apr 08 06:50:56 2014 001 Page: 1

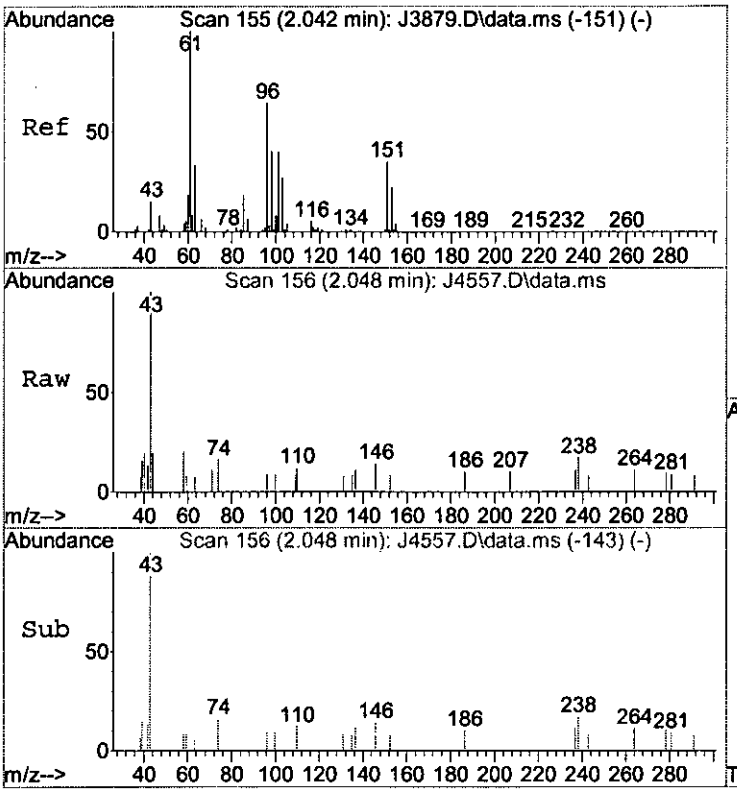
Quantitation Report (Not Reviewed)

Sample : R1402225-008|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4557.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 6:35 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 06:50:53 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



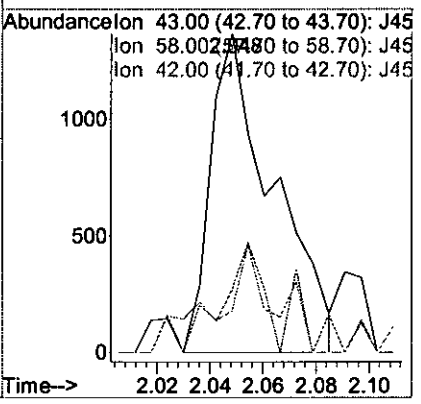
W031214.M Tue Apr 08 06:50:58 2014 Page: 2



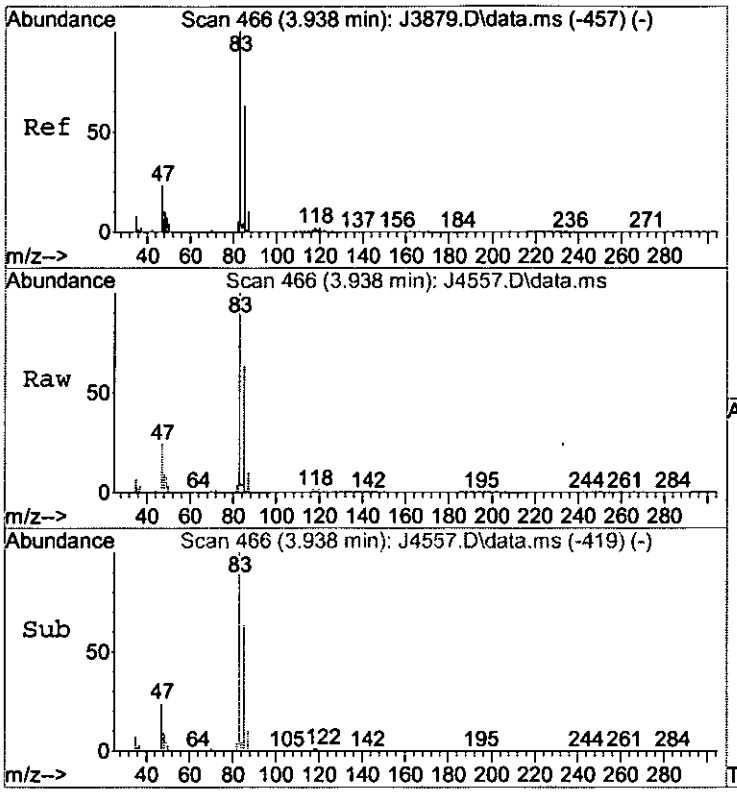
#15
Acetone
Concen: 1.43 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: J4557.D
Acq: 8 Apr 2014 6:35 am

Tgt Ion: 43 Resp: 2258

Ion	Ratio	Lower	Upper
43	100		
58	19.6	9.7	49.7
42	13.0	0.0	27.9



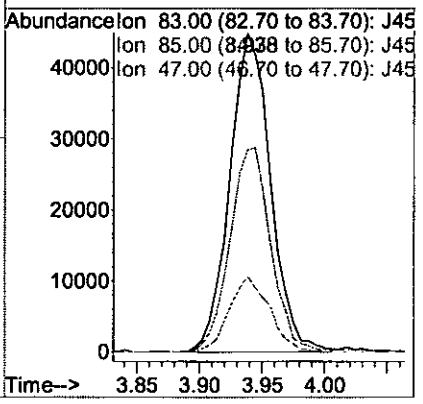
J4557.D W031214.M Tue Apr 08 16:39:59 2014 00143 Page 1



#40
Chloroform
Concen: 7.70 ppb
RT: 3.938 min Scan# 466
Delta R.T. -0.000 min
Lab File: J4557.D
Acq: 8 Apr 2014 6:35 am

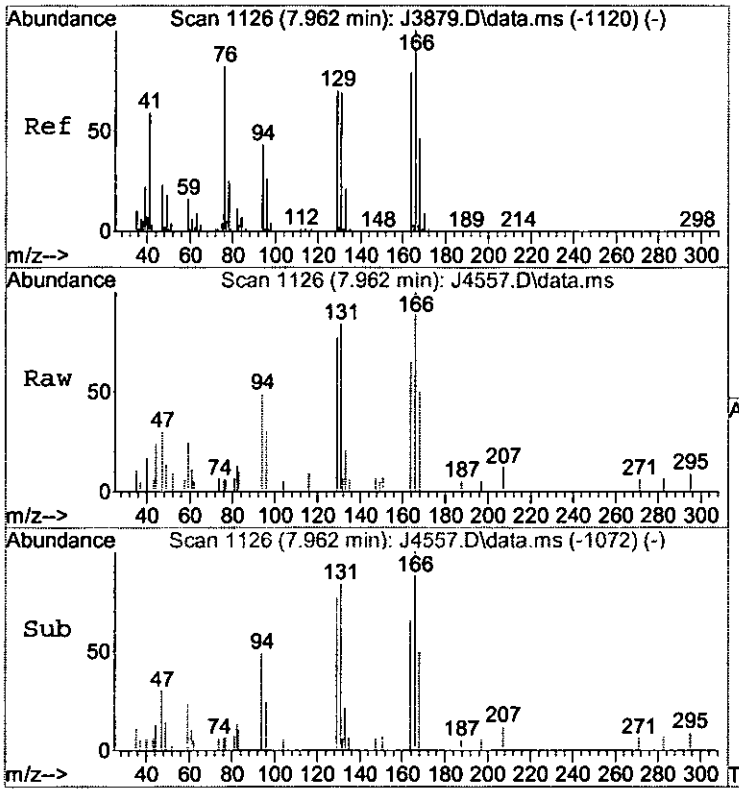
Tgt Ion: 83 Resp: 101816

Ion	Ratio	Lower	Upper
83	100		
85	63.3	42.6	82.6
47	23.8	3.4	43.4



J4557.D W031214.M Tue Apr 08 16:39:48 2014 Page 1

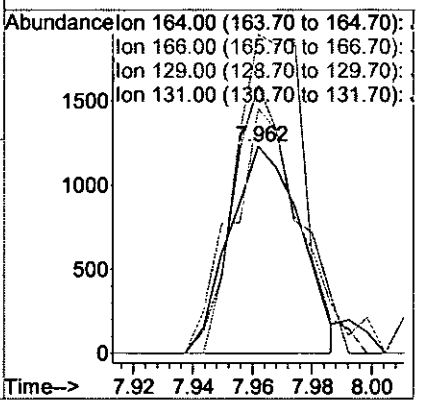
00144



#72
Tetrachloroethene
Concen: 0.34 ppb
RT: 7.962 min Scan# 1126
Delta R.T. -0.000 min
Lab File: J4557.D
Acq: 8 Apr 2014 6:35 am

Tgt Ion:164 Resp: 2040

Ion	Ratio	Lower	Upper
164	100		
166	153.7	105.9	145.9#
129	117.9	68.6	108.6#
131	138.4	66.6	106.6#



J4557.D W031214.M Tue Apr 08 16:39:53 2014 Page 1

00145

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4557.D
Acq On : 8 Apr 2014 6:35 am
Operator : K.Ruest
Sample : R1402225-008|1.0
Misc : PARSONS 9913 T4
ALS Vial : 38 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4557.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.938	456	466	476	rBV	111285	259548	6.88%	1.236%
2	4.152	492	501	509	rBV	477561	1143255	30.31%	5.445%
3	4.249	509	517	540	rVB	890268	2246812	59.57%	10.702%
4	4.664	573	585	600	rBV2	425610	1124462	29.81%	5.356%
5	5.450	704	714	731	rBV	1192887	2768159	73.39%	13.185%
6	7.322	1014	1021	1040	rBV	2515190	3771832	100.00%	17.966%
7	8.742	1249	1254	1268	rBV	2692894	3458642	91.70%	16.474%
8	9.791	1420	1426	1437	rBV	2286730	2767796	73.38%	13.183%
9	10.748	1578	1583	1594	rBV	3056662	3454092	91.58%	16.452%

Sum of corrected areas: 20994598

W031214.M Tue Apr 08 16:40:03 2014 Page: 1

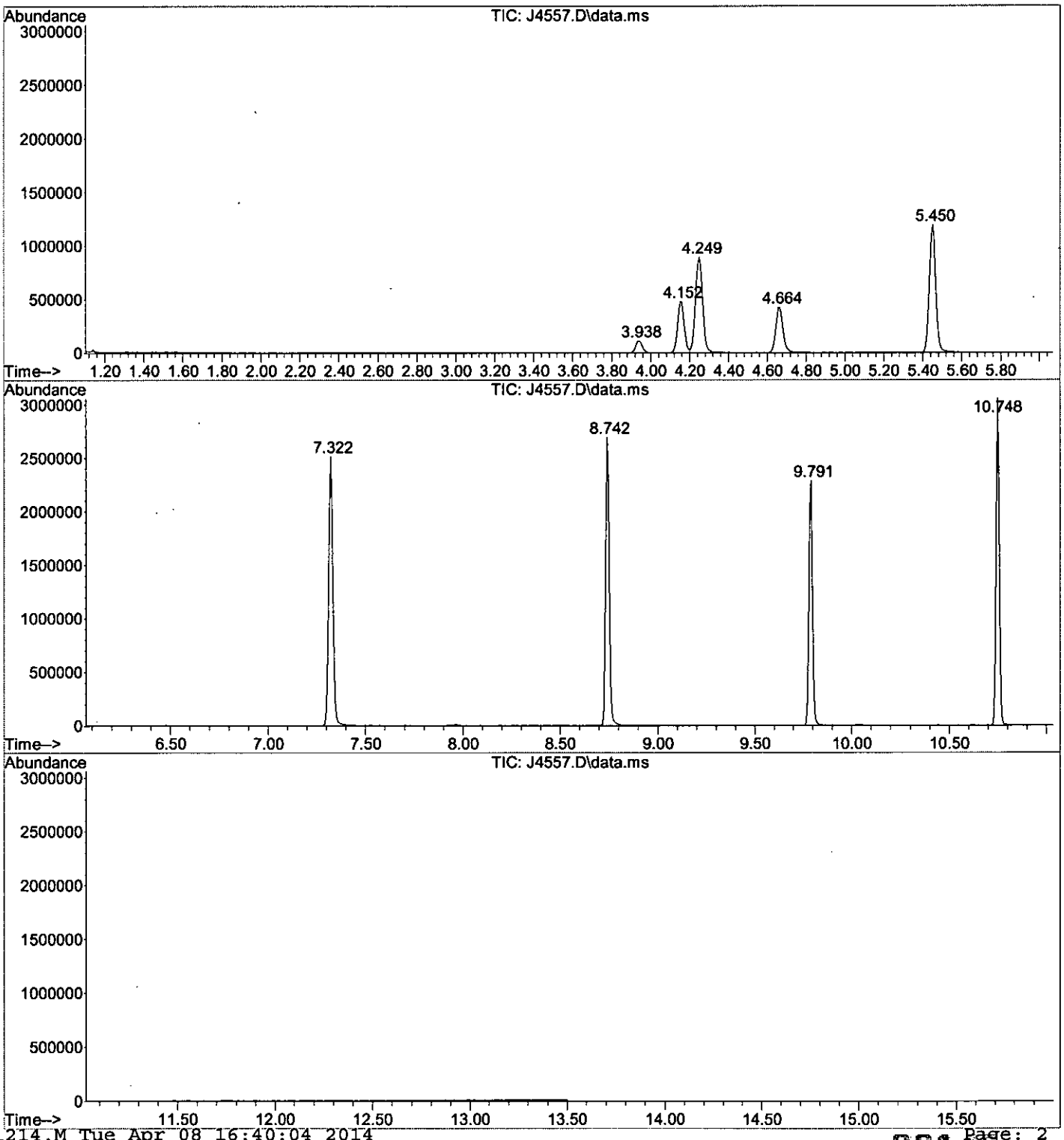
00145

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4557.D
Acq On : 8 Apr 2014 6:35 am
Operator : K.Ruest
Sample : R1402225-008|1.0
Misc : PARSONS 9913 T4
ALS Vial : 38 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Apr 08 16:40:04 2014 Page: 2

00147

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040714\\
Data File : J4557.D
Acq On : 8 Apr 2014 6:35 amm
Operator : K.Ruestt
Sample : R1402225-008|1.00
Misc : PARSONS 9913 T44
ALS Vial : 38 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1045
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 07:08
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1402225-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4558.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**2.3**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**0.99**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.23**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.47**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1045
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 07:08
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1402225-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4558.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**1.1**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.52**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**3.4**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**2.5**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 07:08	
Dibromofluoromethane	99	85-115	4/8/14 07:08	
Toluene-d8	97	85-120	4/8/14 07:08	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0708

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1402225-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-009|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4558.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 7:08 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 07:23:11 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	795912	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1209525	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1131343	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	573051	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	346703	49.51	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.02%				
48) surr1,1,2-dichloroetha...	4.664	65	415798	52.13	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 104.26%				
65) SURR3,Toluene-d8	7.322	98	1426029	48.47	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.94%				
70) SURR2,BFB	9.791	95	560884	51.09	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.18%				
Target Compounds							Qvalue
5) Bromomethane	1.512	94	2146	0.47	ppb	#	70
~~15) Acetone~~	~~2.048~~	~~43~~	~~3600~~	~~2.28~~	~~ppb~~		~~77~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~2422~~	~~0.61~~	~~ppb~~	~~#~~	~~1~~
~~21) Methyl Acetate~~	~~2.371~~	~~43~~	~~3017~~	~~0.85~~	~~ppb~~	~~#~~	~~60~~
49) Benzene	4.786	78	6764	0.23	ppb		94
82) Ethylbenzene	8.888	106	11221	1.07	ppb		97
83) (m+p)Xylene	8.998	106	42235	3.43	ppb		94
84) o-Xylene	9.346	106	31732	2.52	ppb		97
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1319~~	~~2.87~~	~~ppb~~	~~#~~	~~14~~
99) 1,3,5-Trimethylbenzene	10.175	105	23806	0.99	ppb		96
~~100) tert-Butylbenzene~~	~~10.480~~	~~119~~	~~6782~~	~~0.33~~	~~ppb~~	~~#~~	~~23~~
101) 1,2,4-Trimethylbenzene	10.480	105	57871	2.33	ppb		99
117) Naphthalen	12.302	128	7943	0.52	ppb		91

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

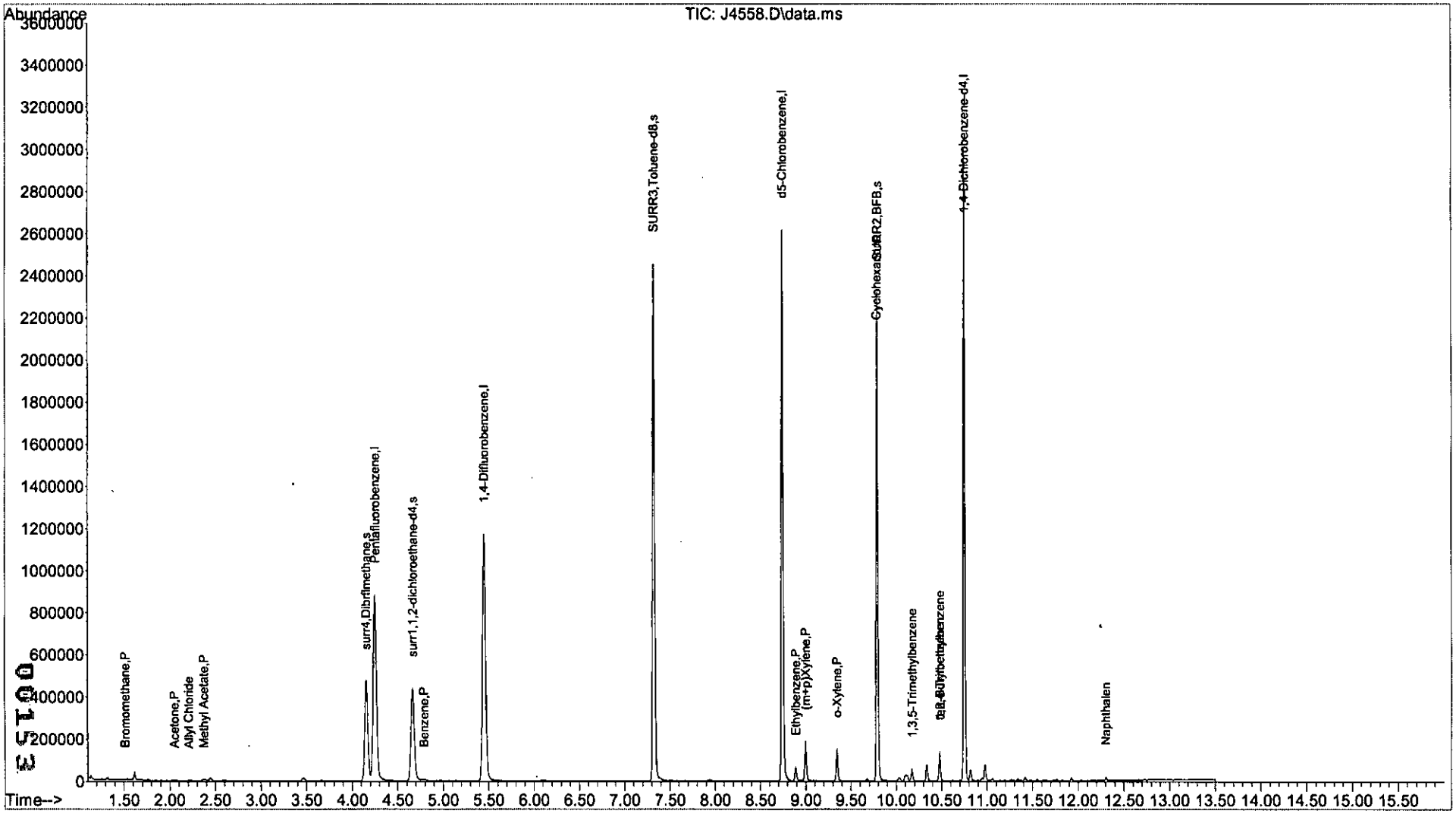
JLR 4/8/14

W031214.M Tue Apr 08 07:23:15 2014 Page: 1

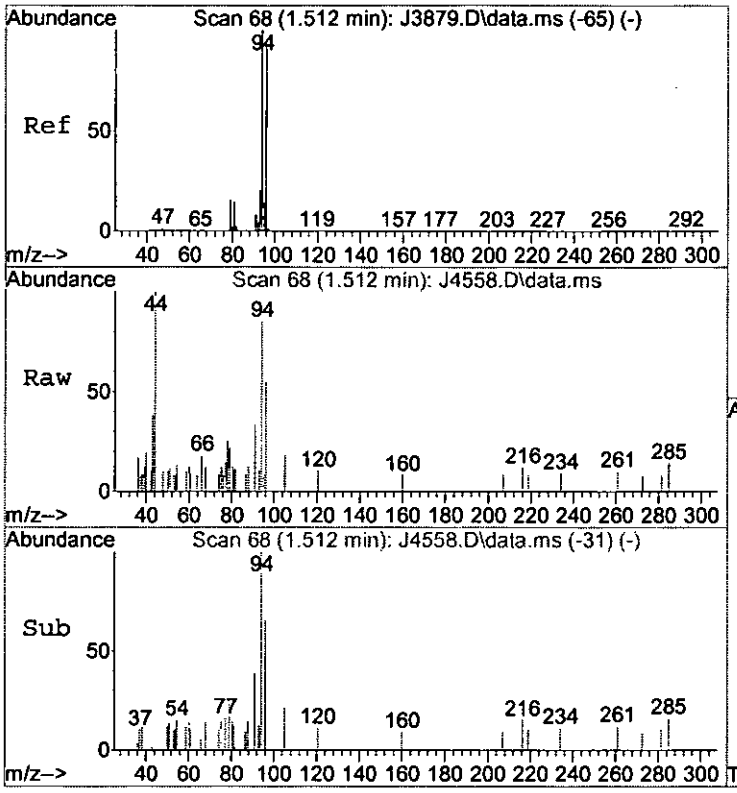
Quantitation Report (Not Reviewed)

Sample : R1402225-009|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4558.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 7:08 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 07:23:11 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



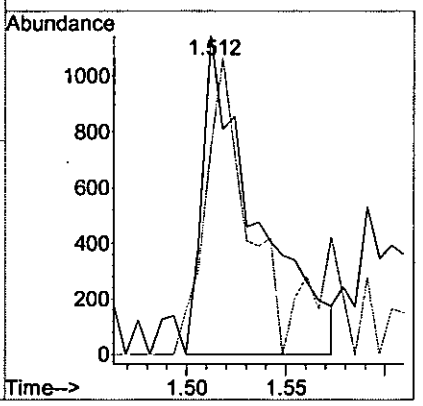
W031214.M Tue Apr 08 07:23:17 2014 Page: 2

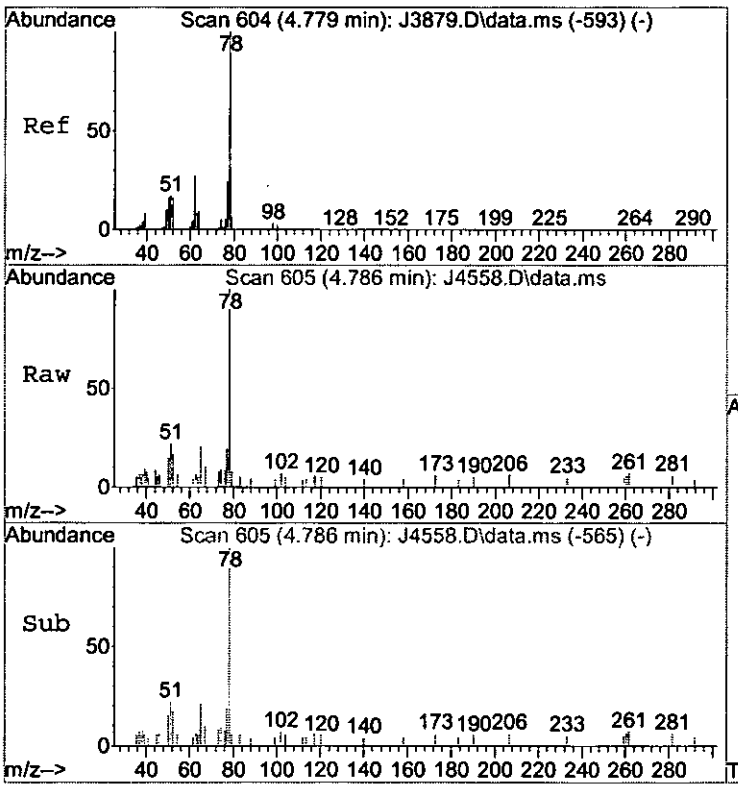


#5
Bromomethane
Concen: 0.47 ppb
RT: 1.512 min Scan# 68
Delta R.T. -0.000 min
Lab File: J4558.D
Acq: 8 Apr 2014 7:08 am

Tgt Ion: 94 Resp: 2146

Ion	Ratio	Lower	Upper
94	100		
96	64.7	73.8	113.8#

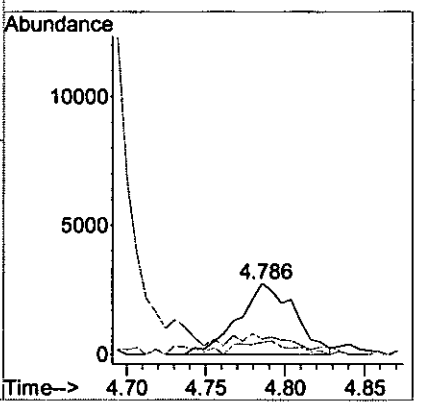




#49
Benzene
Concen: 0.23 ppb
RT: 4.786 min Scan# 605
Delta R.T. -0.000 min
Lab File: J4558.D
Acq: 8 Apr 2014 7:08 am

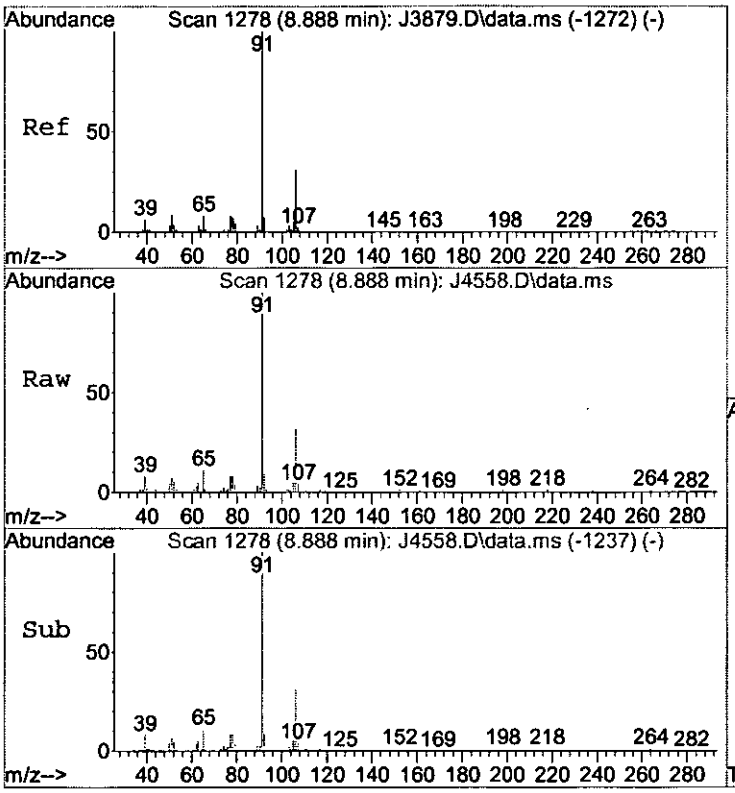
Tgt Ion: 78 Resp: 6764

Ion	Ratio	Lower	Upper
78	100		
51	22.1	0.0	38.2
52	17.4	0.0	36.1



J4558.D W031214.M Tue Apr 08 16:47:42 2014 Page 3

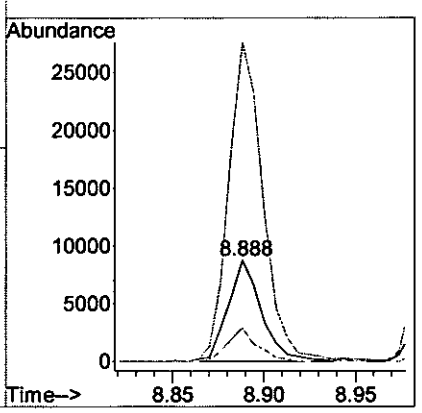
0015.4

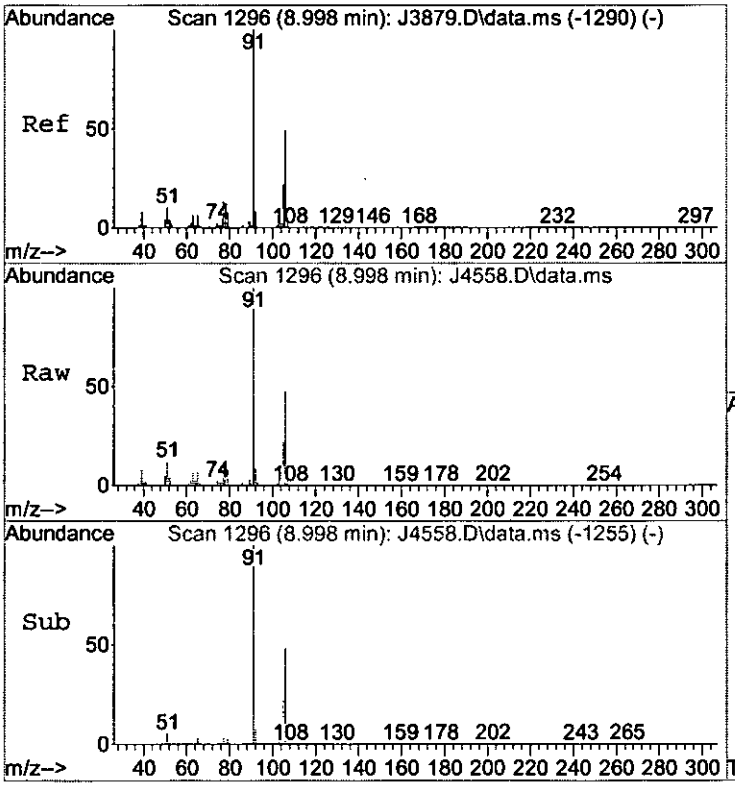


#82
Ethylbenzene
Concen: 1.07 ppb
RT: 8.888 min Scan# 1278
Delta R.T. -0.000 min
Lab File: J4558.D
Acq: 8 Apr 2014 7:08 am

Tgt Ion:106 Resp: 11221

Ion	Ratio	Lower	Upper
106	100		
91	314.9	300.3	340.3
65	33.1	6.6	46.6

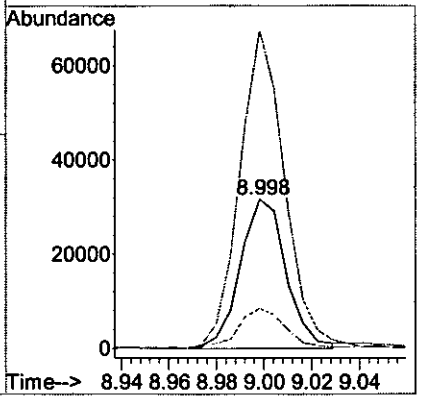


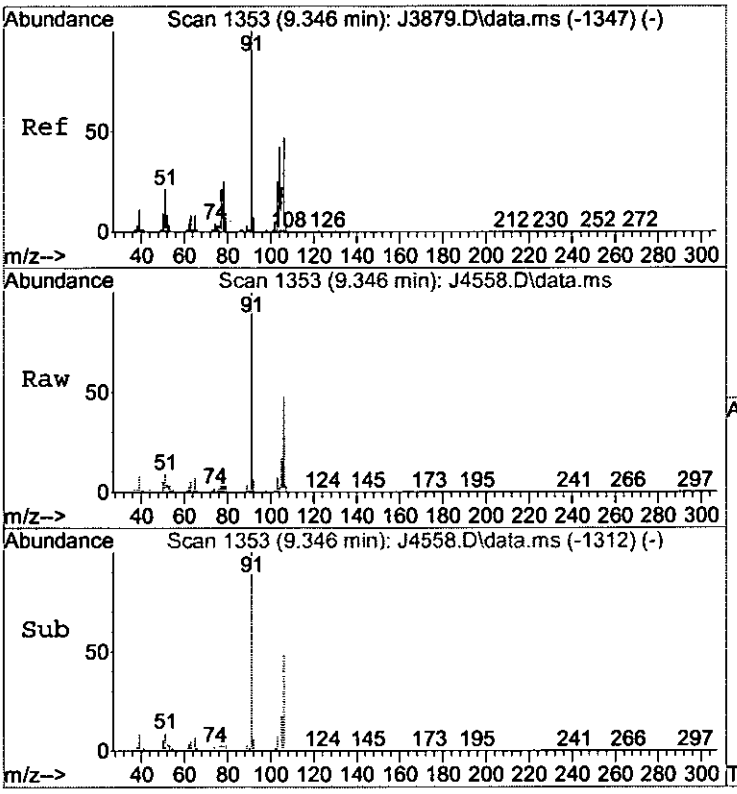


#83
(m+p)Xylene
Concen: 3.43 ppb
RT: 8.998 min Scan# 1296
Delta R.T. -0.000 min
Lab File: J4558.D
Acq: 8 Apr 2014 7:08 am

Tgt Ion:106 Resp: 42235

Ion	Ratio	Lower	Upper
106	100		
91	213.8	182.8	222.8
77	26.6	7.2	47.2

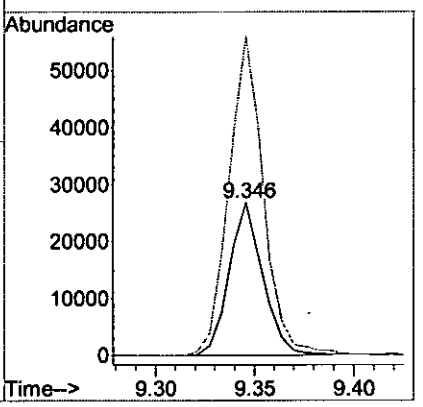


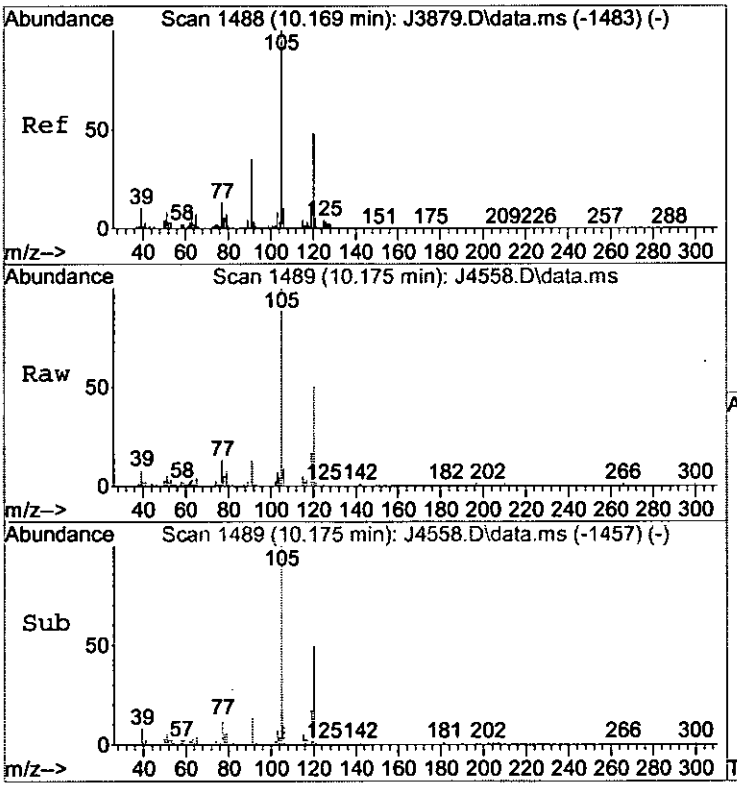


#84
o-Xylene
Concen: 2.52 ppb
RT: 9.346 min Scan# 1353
Delta R.T. -0.000 min
Lab File: J4558.D
Acq: 8 Apr 2014 7:08 am

Tgt Ion:106 Resp: 31732

Ion	Ratio	Lower	Upper
106	100		
91	208.4	193.9	233.9

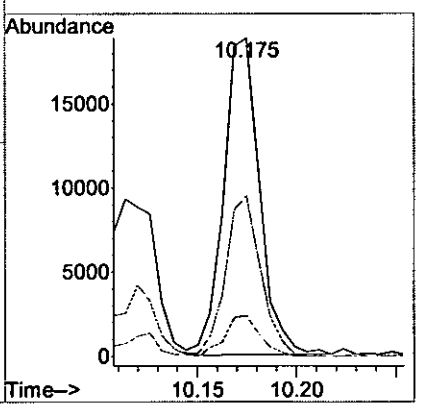




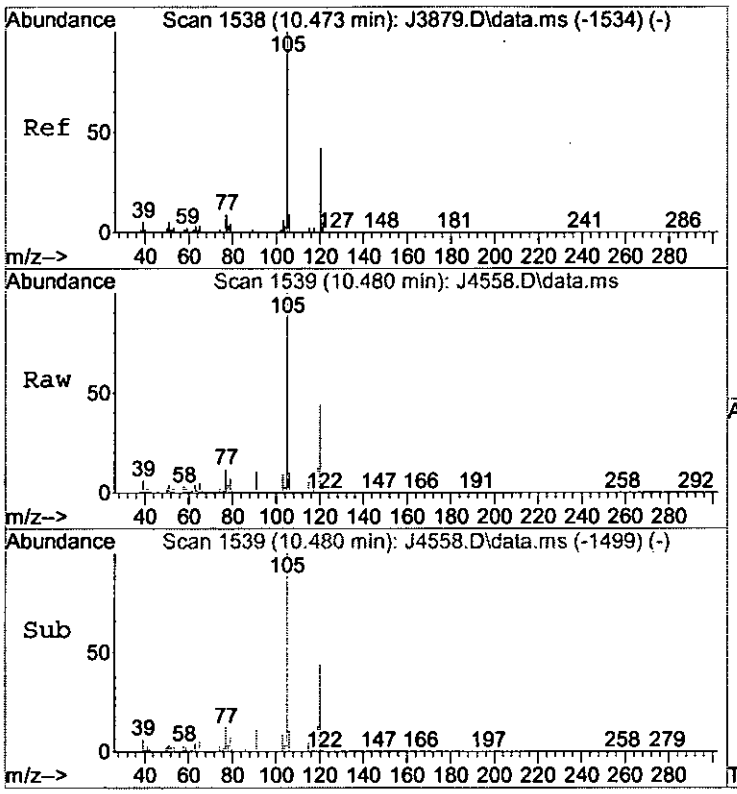
#99
1,3,5-Trimethylbenzene
Concen: 0.99 ppb
RT: 10.175 min Scan# 1489
Delta R.T. -0.000 min
Lab File: J4558.D
Acq: 8 Apr 2014 7:08 am

Tgt Ion:105 Resp: 23806

Ion	Ratio	Lower	Upper
105	100		
120	50.4	27.7	67.7
77	12.7	0.0	33.6



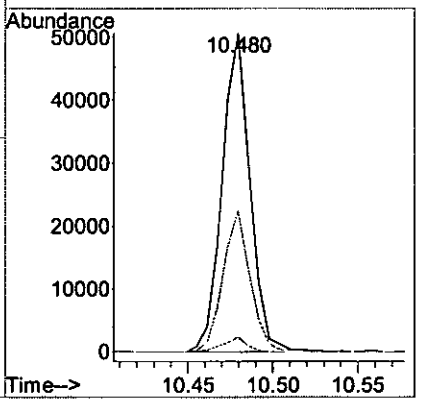
J4558.D W031214.M Tue Apr 08 16:47:44 2014 0015 Page 5

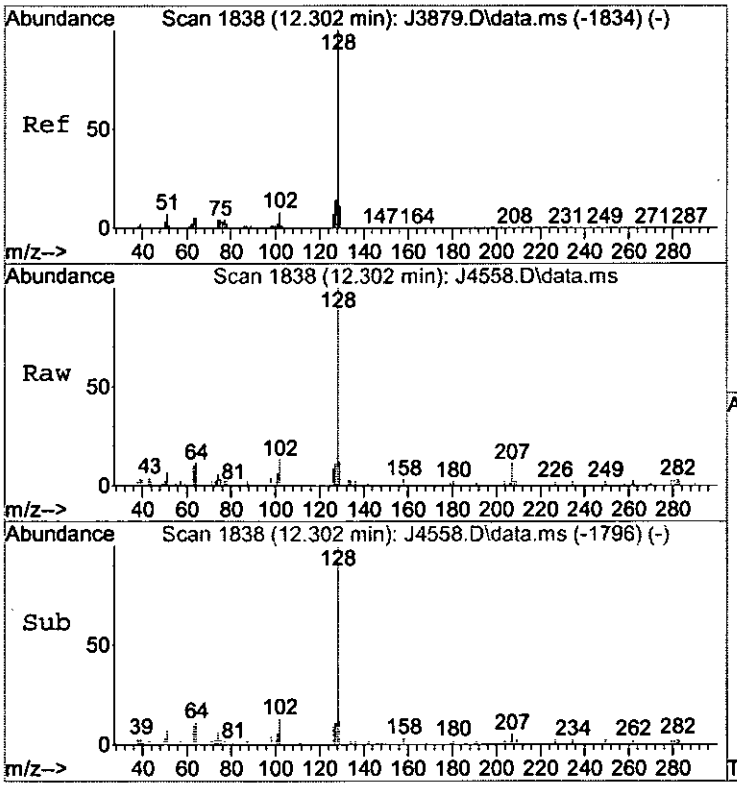


#101
1,2,4-Trimethylbenzene
Concen: 2.33 ppb
RT: 10.480 min Scan# 1539
Delta R.T. -0.000 min
Lab File: J4558.D
Acq: 8 Apr 2014 7:08 am

Tgt Ion:105 Resp: 57871

Ion	Ratio	Lower	Upper
105	100		
120	44.3	25.3	65.3
65	4.7	0.0	24.3

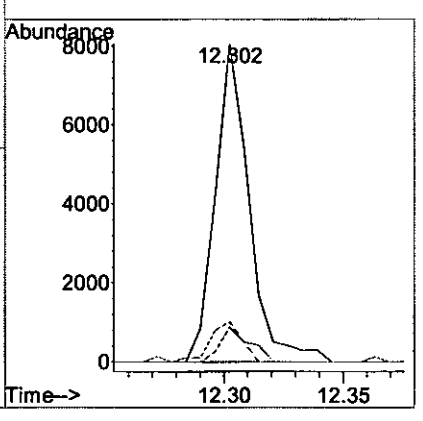




#117
Naphthalen
Concen: 0.52 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4558.D
Acq: 8 Apr 2014 7:08 am

Tgt Ion:128 Resp: 7943

Ion	Ratio	Lower	Upper
128	100		
127	10.9	0.0	33.8
102	12.6	0.0	28.5



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4558.D
Acq On : 8 Apr 2014 7:08 am
Operator : K.Ruest
Sample : R1402225-009|1.0
Misc : PARSONS 9913 T4
ALS Vial : 39 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4558.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.158	492	502	509	rBV	477207	1131352	29.99%	5.227%
2	4.249	509	517	539	rVB	882071	2234674	59.24%	10.325%
3	4.664	575	585	600	rBV	438425	1125102	29.82%	5.198%
4	5.450	701	714	729	rBV	1172444	2748825	72.86%	12.700%
5	7.322	1013	1021	1039	rBV	2456176	3772542	100.00%	17.430%
6	8.742	1249	1254	1267	rBV	2614979	3412662	90.46%	15.767%
7	8.888	1273	1278	1286	rBV	65324	83776	2.22%	0.387%
8	8.998	1290	1296	1303	rBV	188411	257085	6.81%	1.188%
9	9.346	1348	1353	1357	rBV	151310	182717	4.84%	0.844%
10	9.791	1421	1426	1439	rVB	2319824	2756880	73.08%	12.738%
11	10.169	1484	1488	1493	rVB	55380	73052	1.94%	0.338%
12	10.333	1509	1515	1522	rBV	78310	101291	2.68%	0.468%
13	10.480	1535	1539	1544	rBV	139209	154456	4.09%	0.714%
14	10.748	1578	1583	1591	rBV	2996332	3448967	91.42%	15.935%
15	10.815	1591	1594	1598	rVB	52258	63120	1.67%	0.292%
16	10.980	1617	1621	1628	rVB	74768	97276	2.58%	0.449%

Sum of corrected areas: 21643777

W031214.M Tue Apr 08 16:47:50 2014 Page: 1

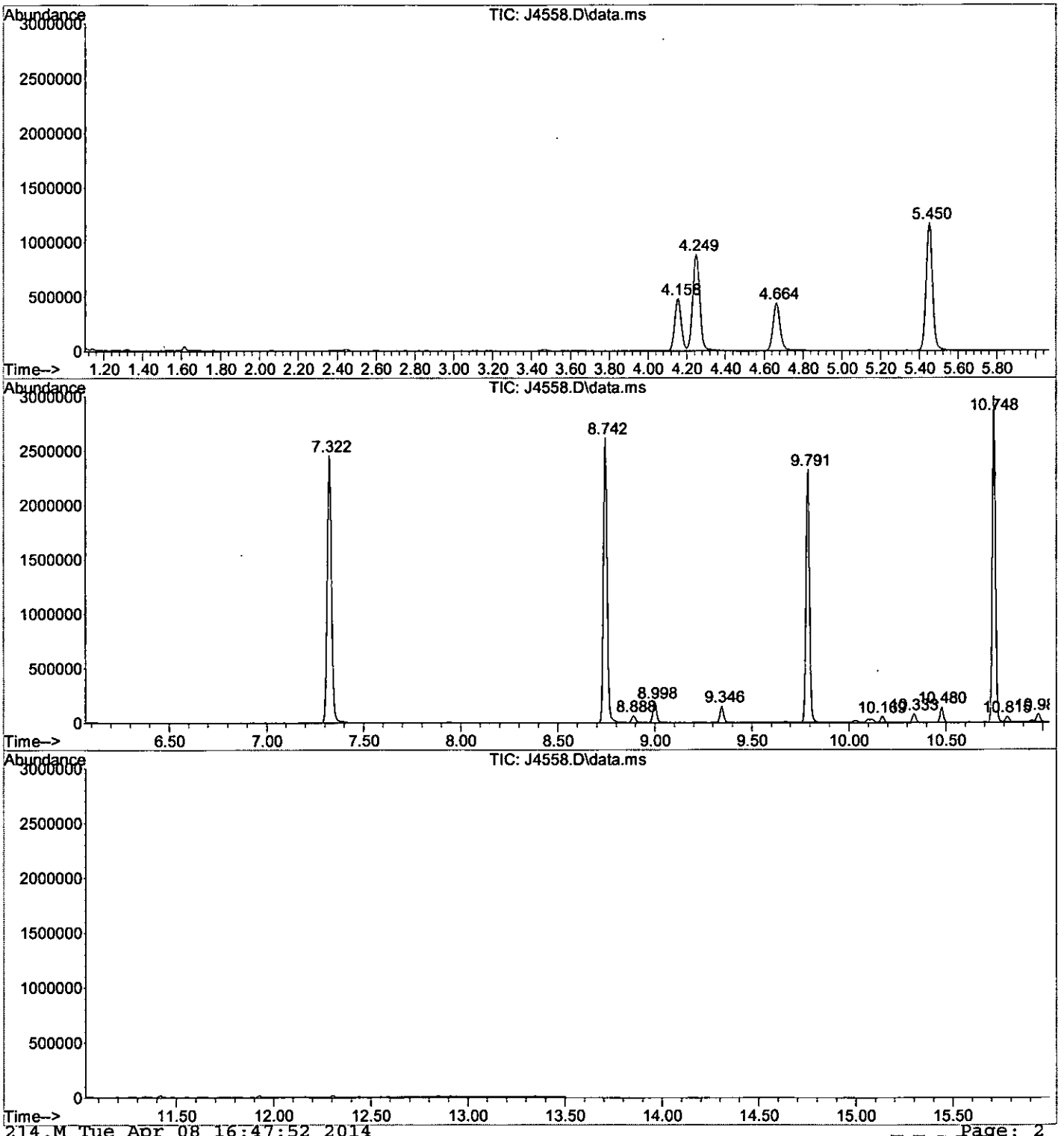
00159

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4558.D
Acq On : 8 Apr 2014 7:08 am
Operator : K.Ruest
Sample : R1402225-009|1.0
Misc : PARSONS 9913 T4
ALS Vial : 39 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Apr 08 16:47:52 2014 Page: 2

00153

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040714\\
Data File : J4558.D
Acq On : 8 Apr 2014 7:08 amm
Operator : K.Ruestt
Sample : R1402225-009|1.00
Misc : PARSONS 9913 T44
ALS Vial : 39 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1225
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 07:40
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4559.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**0.67**	J	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.33**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1225
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 07:40
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4559.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1700**	E	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**110**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**6.1**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**140**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**1.4**	J	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 07:40	
Dibromofluoromethane	101	85-115	4/8/14 07:40	
Toluene-d8	98	85-120	4/8/14 07:40	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 0740

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-010|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4559.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 7:40 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 07:55:24 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	794068	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1204287	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1145967	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	579559	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	350808	50.32	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.64%				
48) surr1,1,2-dichloroetha...	4.664	65	410013	51.63	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.26%				
65) SURR3,Toluene-d8	7.322	98	1437974	49.08	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.16%				
70) SURR2,BFB	9.791	95	559306	51.17	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.34%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.323	62	45915	6.05	ppb		95
5) Bromomethane	1.512	94	1527	0.33	ppb		97
13) 1,1-Diclethene	2.042	96	3835	0.67	ppb		94
15) Acetone	2.055	43	2337	1.48	ppb		93
~~16) 2-Propanol~~	~~2.116~~	~~45~~	~~267~~	~~1.04~~	~~ppb~~	~~#~~	~~23~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~2858~~	~~0.72~~	~~ppb~~	~~#~~	~~1~~
26) trans-1,2-Dichloroethene	2.585	96	9982	1.38	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	1095976	136.03	ppb		88
54) Trichloroethene	5.828	130	786632	109.54	ppb		95
72) Tetrachloroethene	7.968	164	10328482	1744.81	ppb		92 (E)
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1412~~	~~3.04~~	~~ppb~~	~~#~~	~~14~~

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

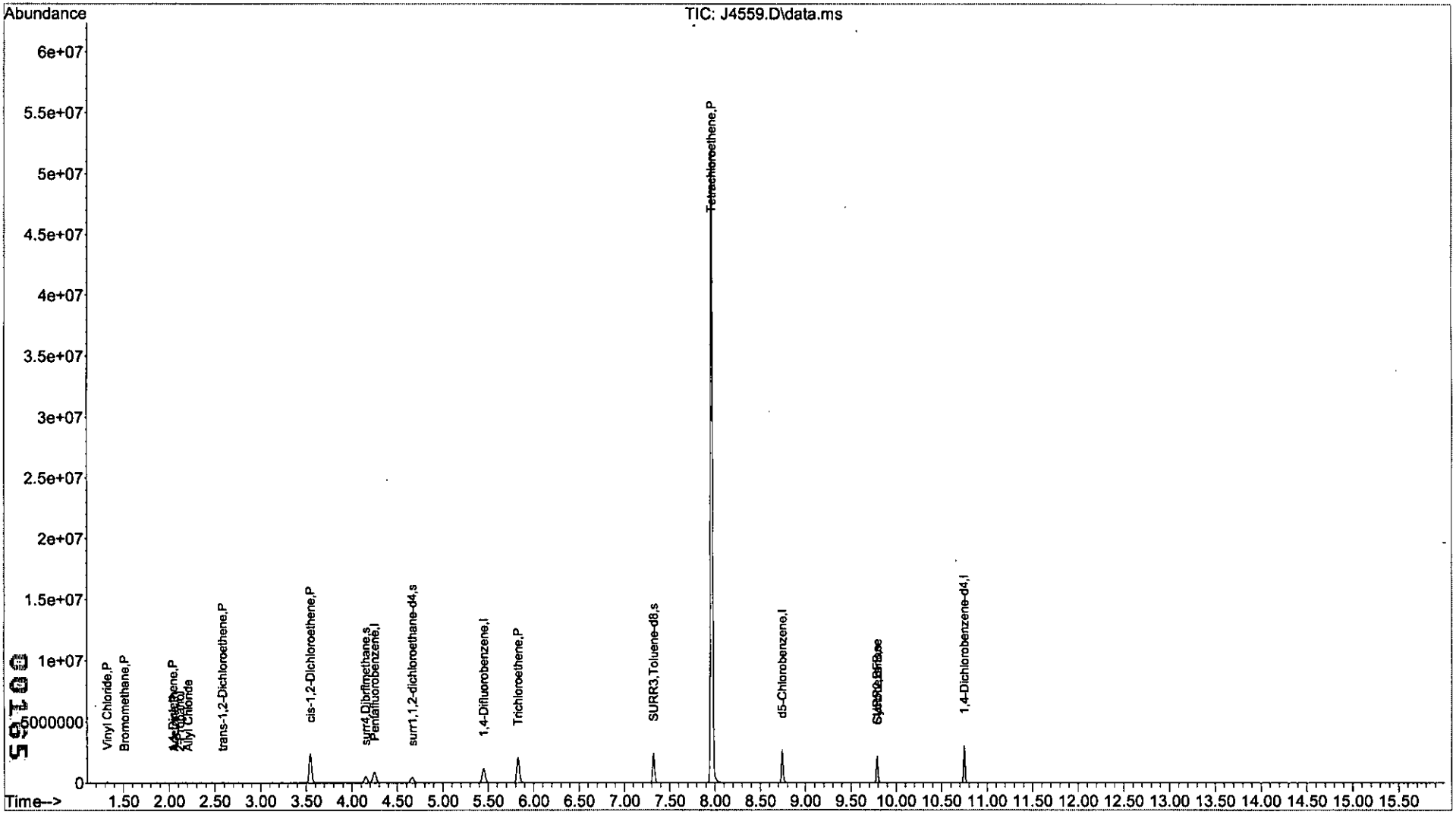
KR 4/8/14

BR 04/11/14

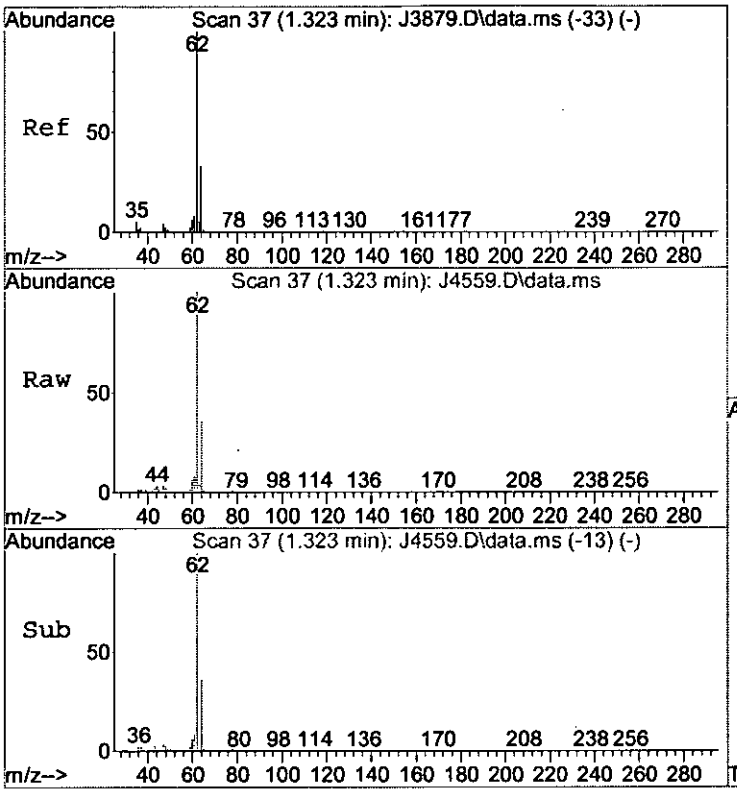
Quantitation Report (Not Reviewed)

Sample : R1402225-010|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4559.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 7:40 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 07:55:24 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



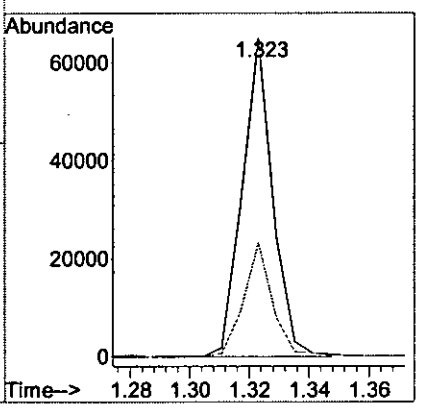
W031214.M Tue Apr 08 07:55:29 2014 Page: 2

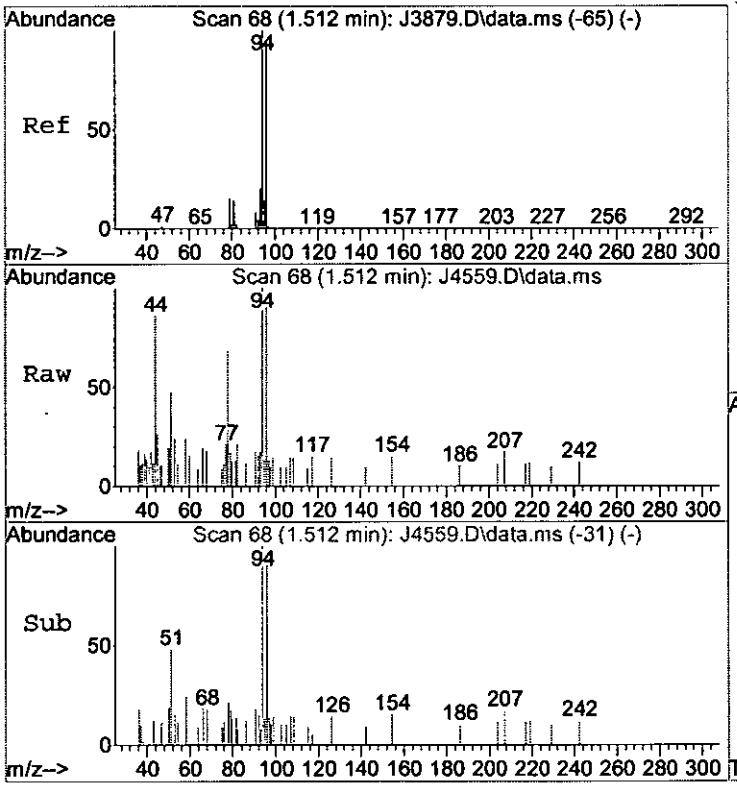


#4
Vinyl Chloride
Concen: 6.05 ppb
RT: 1.323 min Scan# 37
Delta R.T. 0.000 min
Lab File: J4559.D
Acq: 8 Apr 2014 7:40 am

Tgt Ion: 62 Resp: 45915

Ion	Ratio	Lower	Upper
62	100		
64	35.8	12.9	52.9

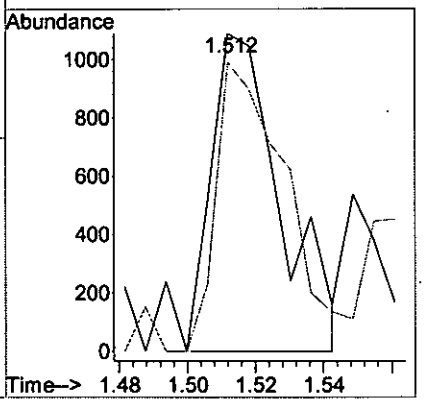




#5
Bromomethane
Concen: 0.33 ppb
RT: 1.512 min Scan# 68
Delta R.T. 0.000 min
Lab File: J4559.D
Acq: 8 Apr 2014 7:40 am

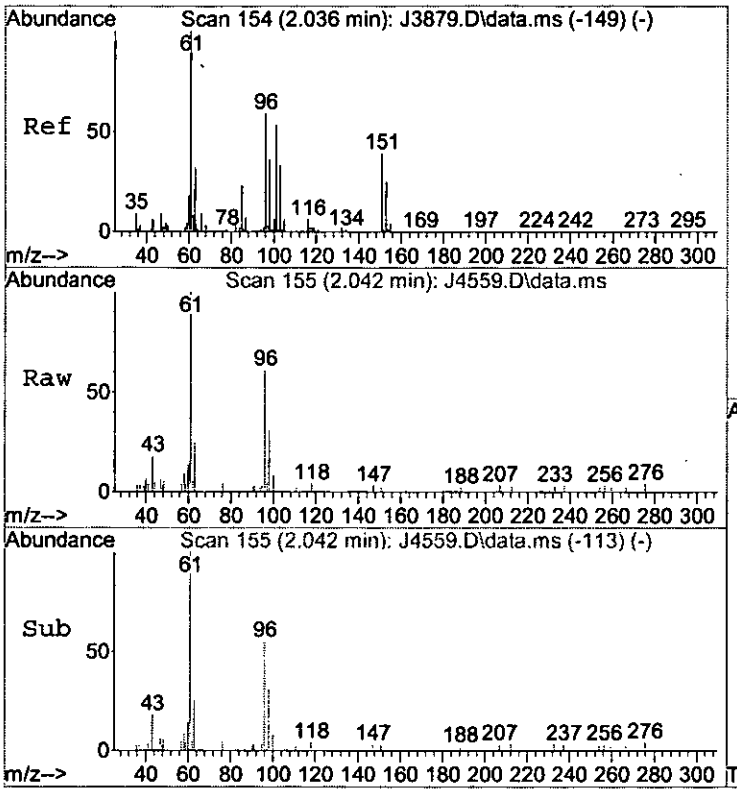
Tgt Ion: 94 Resp: 1527

Ion	Ratio	Lower	Upper
94	100		
96	90.8	73.8	113.8



J4559.D W031214.M Tue Apr 08 16:50:03 2014 Page 3

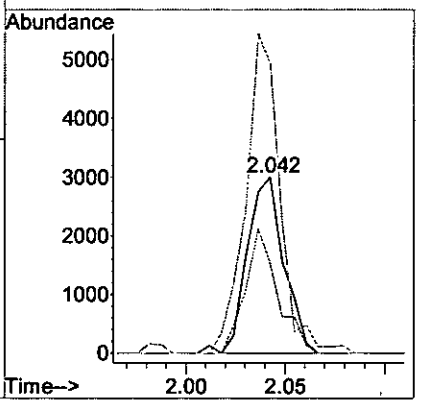
00166

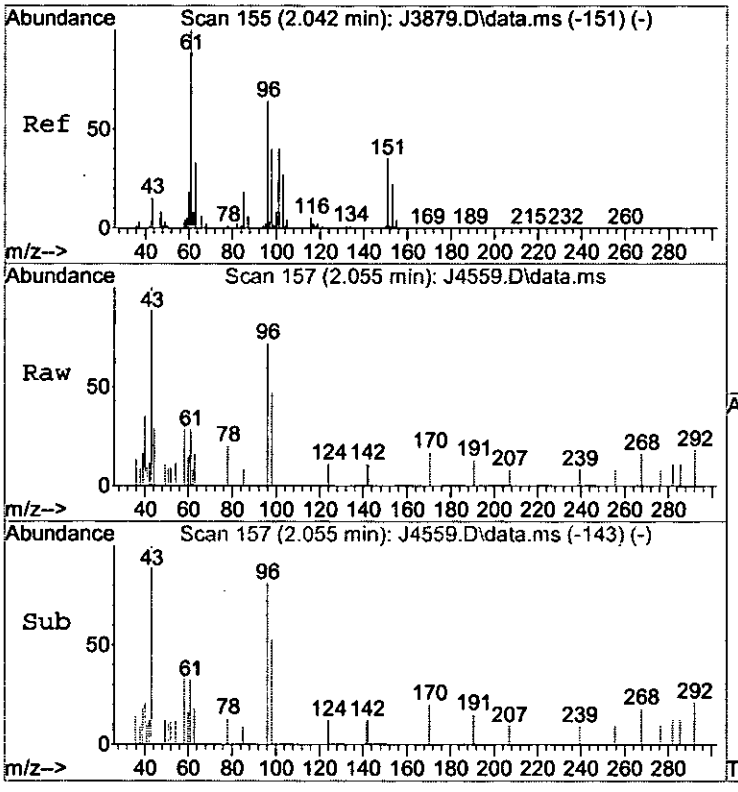


#13
1,1-Diclethene
Concen: 0.67 ppb
RT: 2.042 min Scan# 155
Delta R.T. 0.006 min
Lab File: J4559.D
Acq: 8 Apr 2014 7:40 am

Tgt Ion: 96 Resp: 3835

Ion	Ratio	Lower	Upper
96	100		
98	51.4	40.7	80.7
61	164.4	150.5	190.5

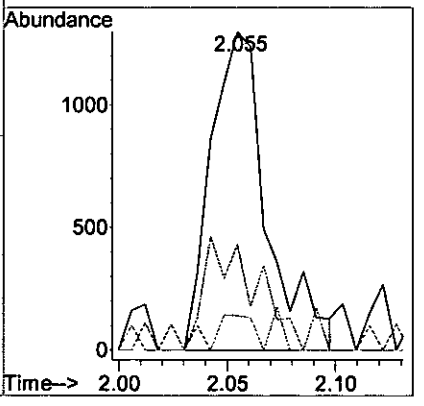


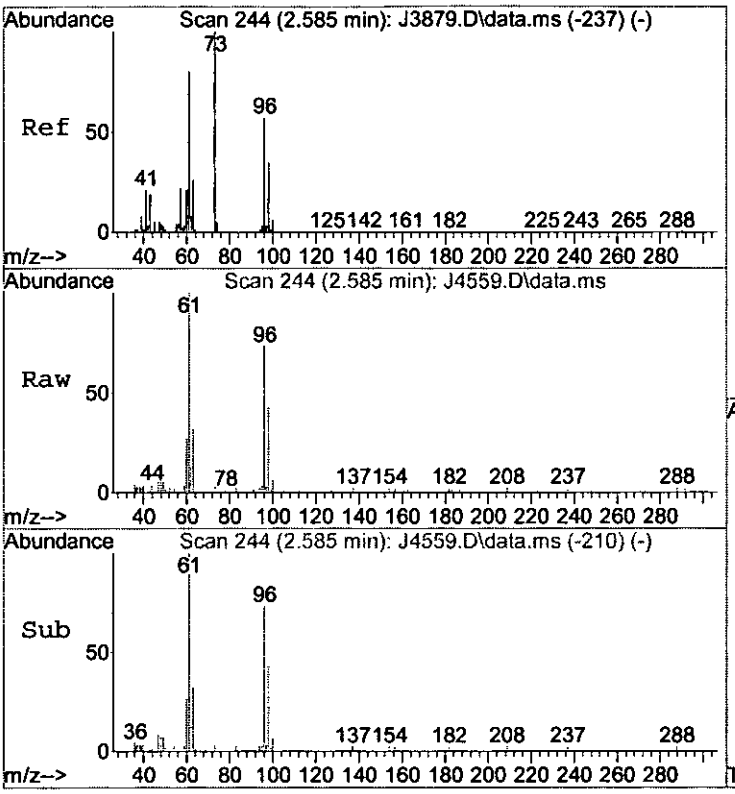


#15
Acetone
Concen: 1.48 ppb
RT: 2.055 min Scan# 157
Delta R.T. 0.012 min
Lab File: J4559.D
Acq: 8 Apr 2014 7:40 am

Tgt Ion: 43 Resp: 2337

Ion	Ratio	Lower	Upper
43	100		
58	33.0	9.7	49.7
42	10.8	0.0	27.9

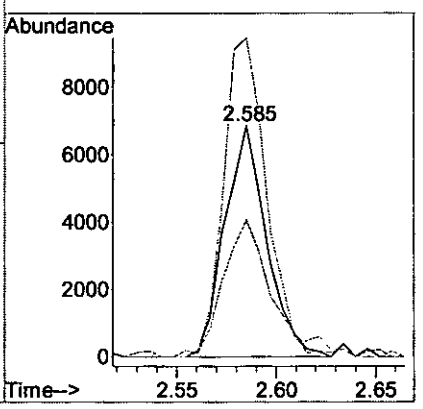


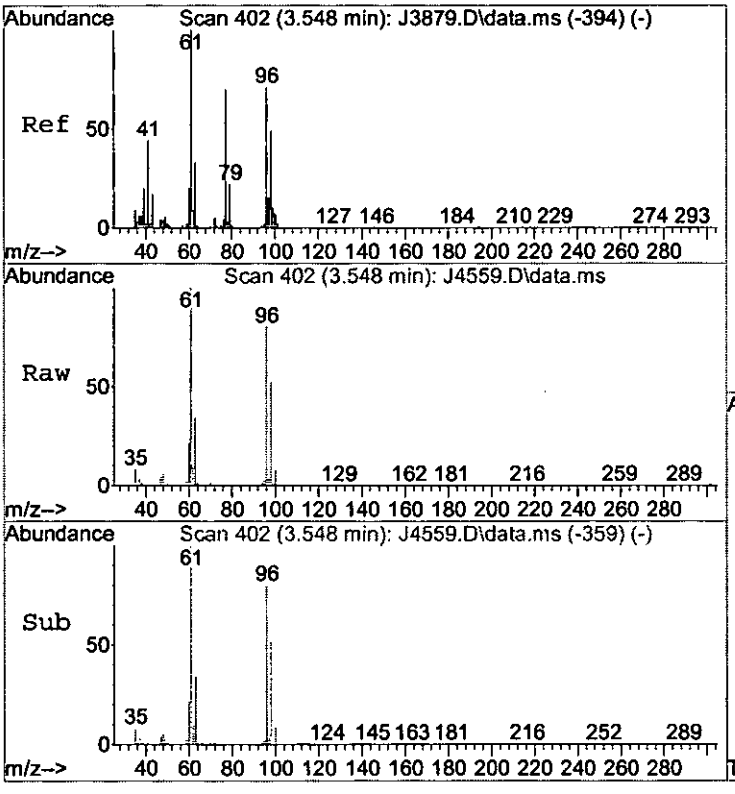


#26
trans-1,2-Dichloroethene
Concen: 1.38 ppb
RT: 2.585 min Scan# 244
Delta R.T. 0.000 min
Lab File: J4559.D
Acq: 8 Apr 2014 7:40 am

Tgt Ion: 96 Resp: 9982

Ion	Ratio	Lower	Upper
96	100		
98	59.3	41.6	81.6
61	137.8	119.2	159.2

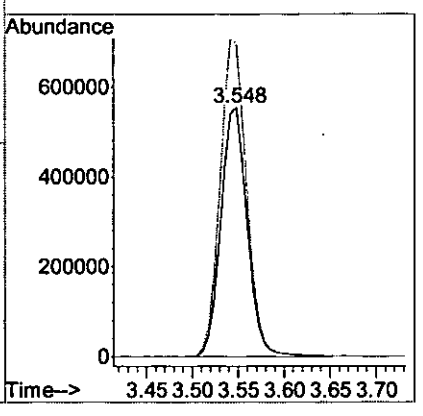


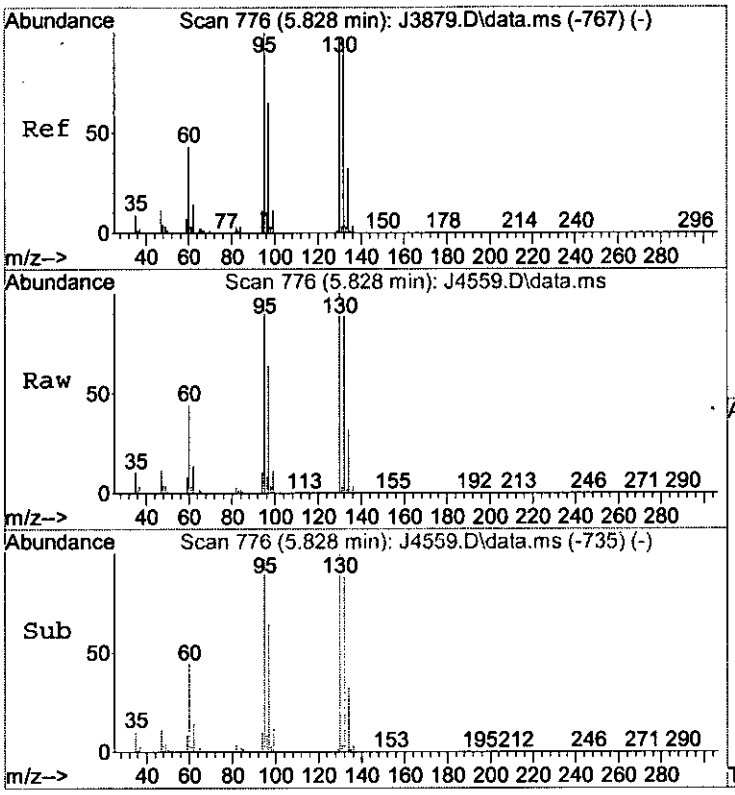


#34
cis-1,2-Dichloroethene
Concen: 136.03 ppb
RT: 3.548 min Scan# 402
Delta R.T. 0.006 min
Lab File: J4559.D
Acq: 8 Apr 2014 7:40 am

Tgt Ion: 96 Resp: 1095976

Ion	Ratio	Lower	Upper
96	100		
61	125.4	120.1	160.1

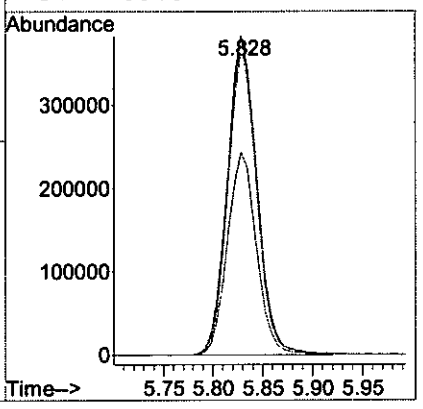


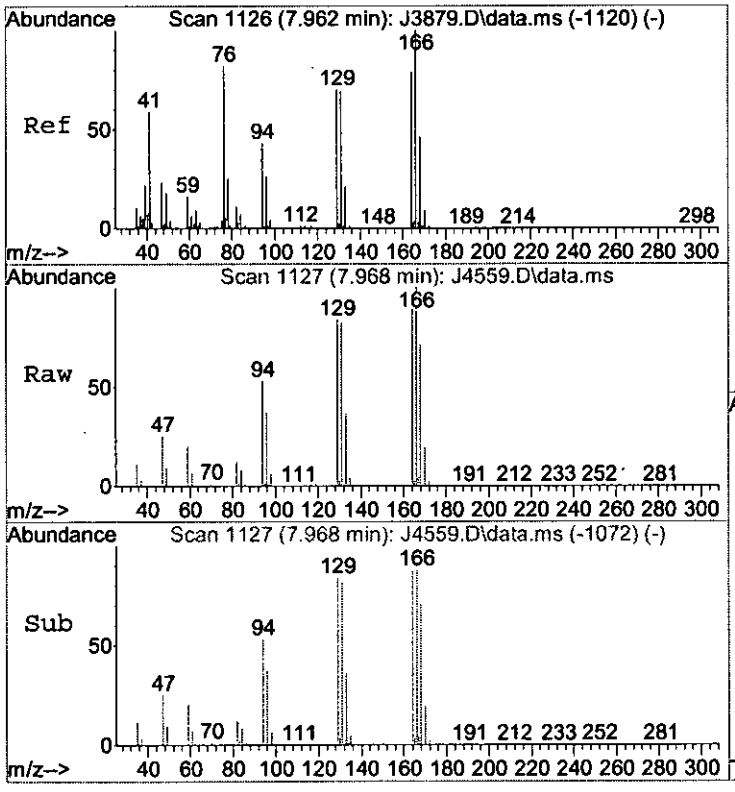


#54
Trichloroethene
Concen: 109.54 ppb
RT: 5.828 min Scan# 776
Delta R.T. 0.000 min
Lab File: J4559.D
Acq: 8 Apr 2014 7:40 am

Tgt Ion:130 Resp: 786632

Ion	Ratio	Lower	Upper
130	100		
132	95.5	78.3	118.3
95	97.0	83.0	123.0
97	63.5	47.3	87.3

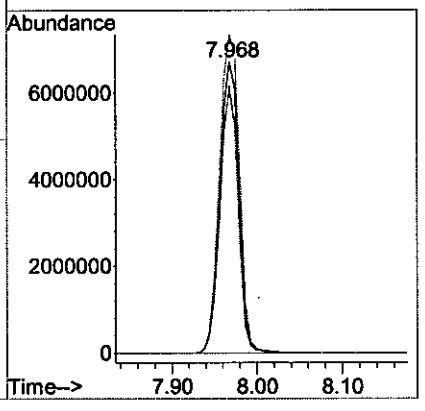




#72
Tetrachloroethene
Concen: 1744.81 ppb
RT: 7.968 min Scan# 1127
Delta R.T. 0.006 min
Lab File: J4559.D
Acq: 8 Apr 2014 7:40 am

Tgt Ion:164 Resp:10328482

Ion	Ratio	Lower	Upper
164	100		
166	109.4	105.9	145.9
129	91.7	68.6	108.6
131	90.2	66.6	106.6



J4559.D W031214.M Tue Apr 08 16:50:06 2014 Page 6

00169

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4559.D
Acq On : 8 Apr 2014 7:40 am
Operator : K.Ruest
Sample : R1402225-010|1.0
Misc : PARSONS 9913 T4
ALS Vial : 40 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4559.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.542	392	401	420	rBV	2371686	4746884	6.22%	4.476%
2	4.152	491	501	509	rBV	485534	1145017	1.50%	1.080%
3	4.249	509	517	533	rVB	871498	2216605	2.90%	2.090%
4	4.664	575	585	598	rBV	436107	1105488	1.45%	1.042%
5	5.450	704	714	727	rBV	1189286	2746564	3.60%	2.590%
6	5.828	767	776	800	rBV	2094237	4320369	5.66%	4.074%
7	7.322	1014	1021	1040	rBV	2461773	3770210	4.94%	3.555%
8	7.968	1119	1127	1148	rBV	52027987	76344132	100.00%	71.990%
9	8.742	1249	1254	1268	rBV	2710054	3436136	4.50%	3.240%
10	9.791	1421	1426	1435	rBV	2202700	2733232	3.58%	2.577%
11	10.748	1578	1583	1593	rBV	3062110	3483313	4.56%	3.285%

Sum of corrected areas: 106047950

W031214.M Tue Apr 08 16:50:10 2014 Page: 1

00179

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4559.D
Acq On    :  8 Apr 2014    7:40 am
Operator  : K.Ruest
Sample    : R1402225-010|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 40   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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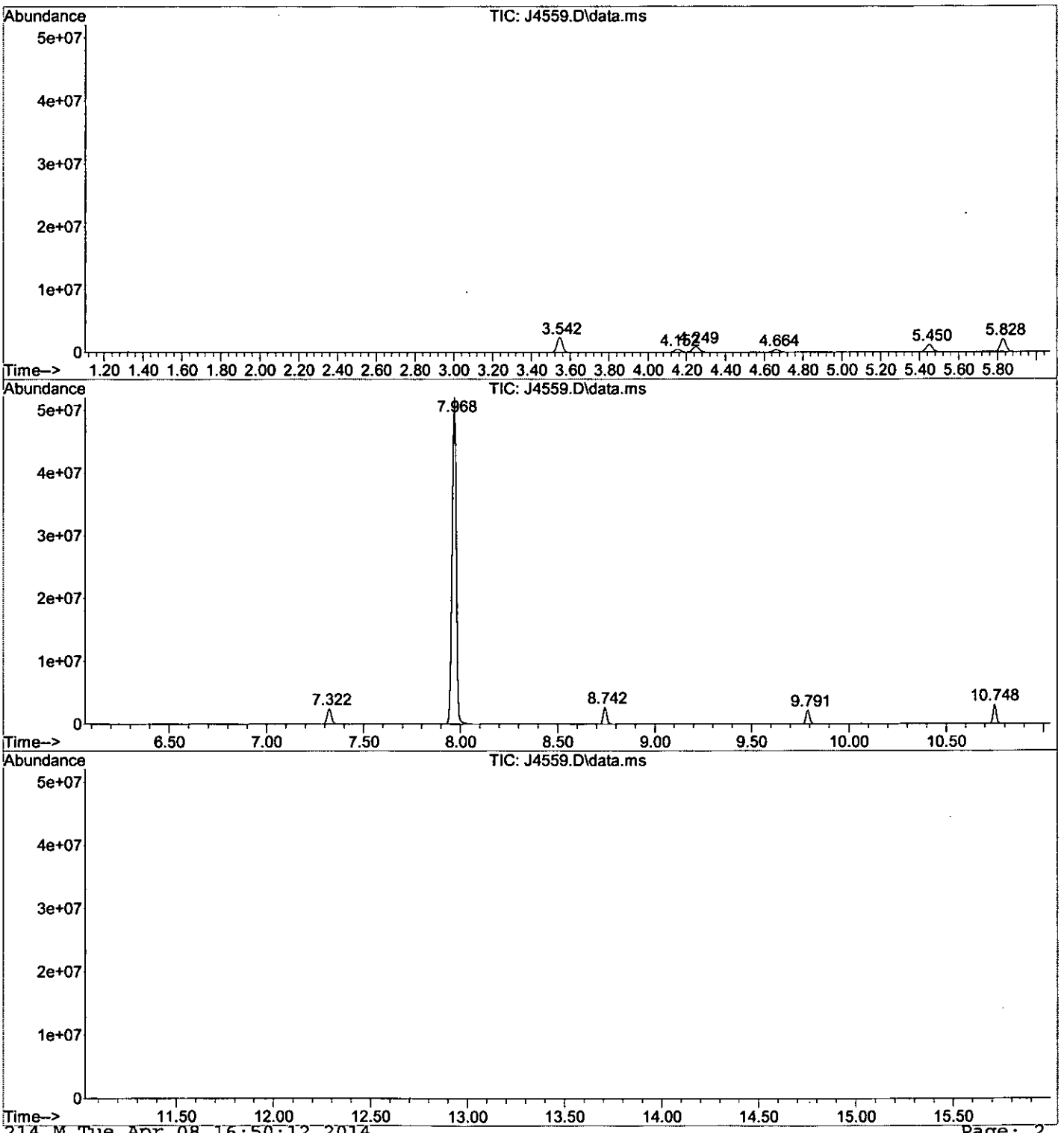


W031214.M Tue Apr 08 16:50:12 2014 Page: 2

00171

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040714\\
Data File : J4559.D
Acq On : 8 Apr 2014 7:40 amm
Operator : K.Ruestt
Sample : R1402225-010|1.00
Misc : PARSONS 9913 T44
ALS Vial : 40 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

W031214.M Tue Apr 08 16:50:12 2014 Page: 3

00172

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1225
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 21:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	50	10	2.2	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	50	10	3.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	50	10	2.5	
79-00-5	1,1,2-Trichloroethane	ND	U	50	10	3.5	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	50	10	2.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	50	10	5.7	
563-58-6	1,1-Dichloropropene	ND	U	50	10	2.9	
87-61-6	1,2,3-Trichlorobenzene	ND	U	50	10	8.2	
96-18-4	1,2,3-Trichloropropane	ND	U	50	10	7.0	
120-82-1	1,2,4-Trichlorobenzene	ND	U	50	10	2.4	
95-63-6	1,2,4-Trimethylbenzene	**3.1**	DJ	50	10	2.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	50	10	7.4	
106-93-4	1,2-Dibromoethane	ND	U	50	10	2.4	
95-50-1	1,2-Dichlorobenzene	ND	U	50	10	2.1	
107-06-2	1,2-Dichloroethane	ND	U	50	10	3.6	
78-87-5	1,2-Dichloropropane	ND	U	50	10	2.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	50	10	2.0	
541-73-1	1,3-Dichlorobenzene	ND	U	50	10	2.0	
142-28-9	1,3-Dichloropropane	ND	U	50	10	2.7	
106-46-7	1,4-Dichlorobenzene	ND	U	50	10	2.0	
594-20-7	2,2-Dichloropropane	ND	U	50	10	2.7	
78-93-3	2-Butanone (MEK)	ND	U	50	10	8.2	
95-49-8	2-Chlorotoluene	ND	U	50	10	2.0	
591-78-6	2-Hexanone	ND	U	50	50	17	
106-43-4	4-Chlorotoluene	ND	U	50	10	2.4	
99-87-6	p-Isopropyltoluene	ND	U	50	10	2.0	
108-10-1	4-Methyl-2-pentanone	ND	U	50	10	6.7	
67-64-1	Acetone	ND	U	50	50	13	
71-43-2	Benzene	ND	U	50	10	2.0	
108-86-1	Bromobenzene	ND	U	50	10	2.9	
74-97-5	Bromochloromethane	ND	U	50	10	3.2	
75-27-4	Bromodichloromethane	ND	U	50	10	3.2	
75-25-2	Bromoform	ND	U	50	10	4.2	
74-83-9	Bromomethane	ND	U	50	10	2.9	
56-23-5	Carbon Tetrachloride	ND	U	50	10	4.5	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1225
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 21:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	50	10	2.9	
75-00-3	Chloroethane	ND	U	50	10	2.4	
67-66-3	Chloroform	ND	U	50	10	2.5	
74-87-3	Chloromethane	ND	U	50	10	2.1	
124-48-1	Dibromochloromethane	ND	U	50	10	3.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	50	10	4.7	
75-09-2	Methylene Chloride	ND	U	50	10	3.2	
100-41-4	Ethylbenzene	ND	U	50	10	2.0	
87-68-3	Hexachlorobutadiene	ND	U	50	10	6.2	
98-82-8	Isopropylbenzene (Cumene)	ND	U	50	10	2.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	50	10	2.9	
91-20-3	Naphthalene	**8.6**	DJ	50	10	2.0	
100-42-5	Styrene	ND	U	50	10	2.0	
127-18-4	Tetrachloroethene (PCE)	**1500**	D	50	10	3.0	
108-88-3	Toluene	ND	U	50	10	2.0	
79-01-6	Trichloroethene (TCE)	**97**	D	50	10	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	50	10	2.0	
75-01-4	Vinyl Chloride	**5.5**	DJ	50	10	3.2	
156-59-2	cis-1,2-Dichloroethene	**120**	D	50	10	3.0	
10061-01-5	cis-1,3-Dichloropropene	ND	U	50	10	2.4	
179601-23-1	m,p-Xylenes	ND	U	100	20	3.4	
104-51-8	n-Butylbenzene	ND	U	50	10	2.1	
103-65-1	n-Propylbenzene	ND	U	50	10	2.0	
95-47-6	o-Xylene	ND	U	50	10	2.0	
135-98-8	sec-Butylbenzene	ND	U	50	10	2.7	
98-06-6	tert-Butylbenzene	ND	U	50	10	2.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	50	10	3.4	
10061-02-6	trans-1,3-Dichloropropene	ND	U	50	10	2.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 21:45	
Dibromofluoromethane	101	85-115	4/8/14 21:45	
Toluene-d8	98	85-120	4/8/14 21:45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 2145

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01D-22.31DL	**Units:**	µg/L
Lab Code:	R1402225-010	**Basis:**	NA
Run Type:	Dilution		
Analytical Method:	8260C		

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-010|10
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4585.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 9:45 pm
Operator : K.Ruest
InstName : MSVOA-12

DL

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 22:00:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound		R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards								
1) Pentafluorobenzene		4.249	168	830632	50.00	ppb		0.00
43) 1,4-Difluorobenzene		5.450	114	1256818	50.00	ppb		0.00
71) d5-Chlorobenzene		8.742	117	1148170	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4		10.748	152	564192	50.00	ppb		0.00
System Monitoring Compounds								
45) surr4,Dibrflmethane		4.152	113	365969	50.30	ppb		0.00
Spiked Amount	50.000	Range 89 - 119		Recovery =	100.60%			
48) surr1,1,2-dichloroetha...		4.658	65	431215	52.03	ppb		0.00
Spiked Amount	50.000	Range 65 - 130		Recovery =	104.06%			
65) SURR3,Toluene-d8		7.322	98	1502289	49.14	ppb		0.00
Spiked Amount	50.000	Range 87 - 121		Recovery =	98.28%			
70) SURR2,BFB		9.785	95	559332	49.04	ppb		0.00
Spiked Amount	50.000	Range 85 - 122		Recovery =	98.08%			
Target Compounds								Qvalue
4) Vinyl Chloride		1.323	62	4338	0.55	ppb		90
5) Bromomethane		1.512	94	1038	0.22	ppb	#	74
15) Acetone		2.055	43	1028	0.62	ppb		84
~~16) 2-Propanol~~		~~2.122~~	~~45~~	~~199~~	~~0.74~~	~~ppb~~	~~#~~	~~55~~
~~20) Allyl Chloride~~		~~2.207~~	~~76~~	~~1943~~	~~0.47~~	~~ppb~~	~~#~~	~~1~~
34) cis-1,2-Dichloroethene		3.548	96	98739	11.72	ppb		86
54) Trichloroethene		5.828	130	72509	9.67	ppb		96
72) Tetrachloroethene		7.962	164	886119	149.41	ppb		98
~~90) Cyclohexanone~~		~~9.791~~	~~55~~	~~1185~~	~~2.62~~	~~ppb~~	~~#~~	~~14~~
101) 1,2,4-Trimethylbenzene		10.480	105	7487	0.31	ppb		94
117) Naphthalen		12.303	128	12888	0.86	ppb		97

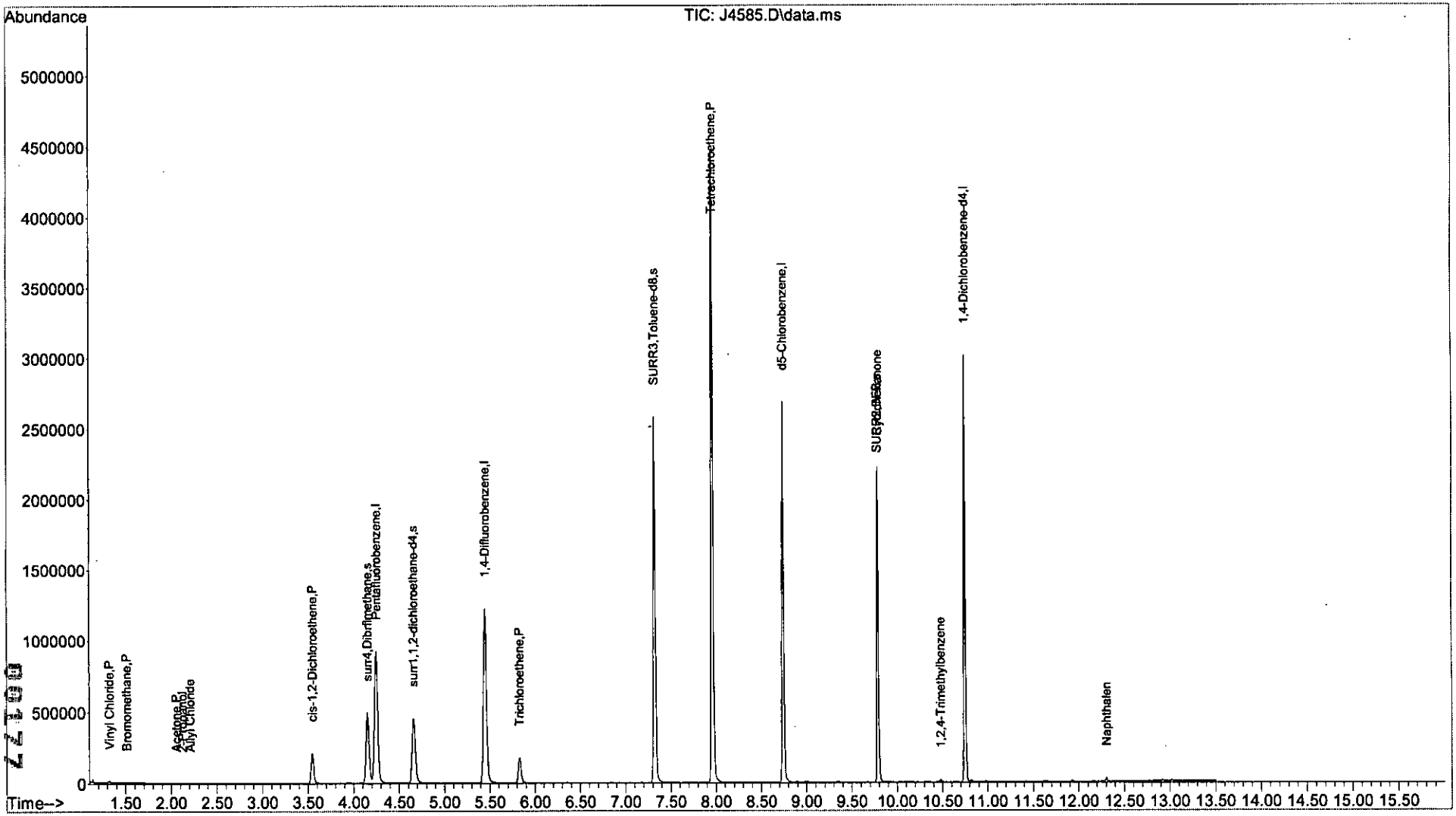
KR 4/9/14

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

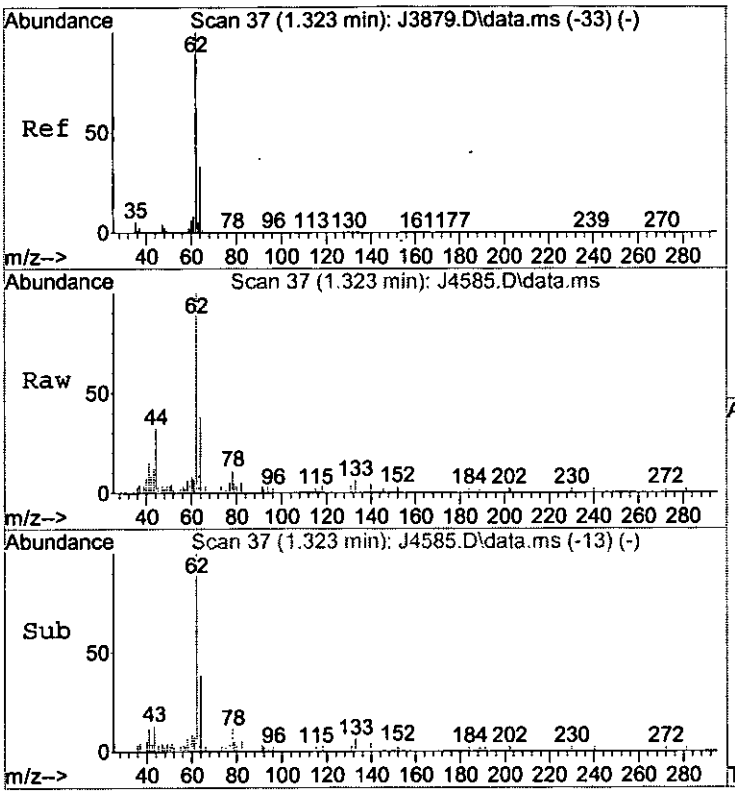
Quantitation Report (Not Reviewed)

Sample : R1402225-010|10
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4585.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 9:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 22:00:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



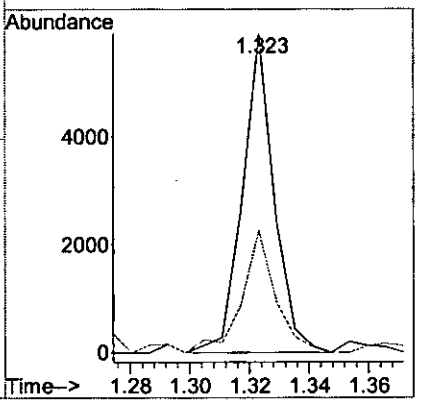
W031214.M Tue Apr 08 22:00:48 2014 Page: 2

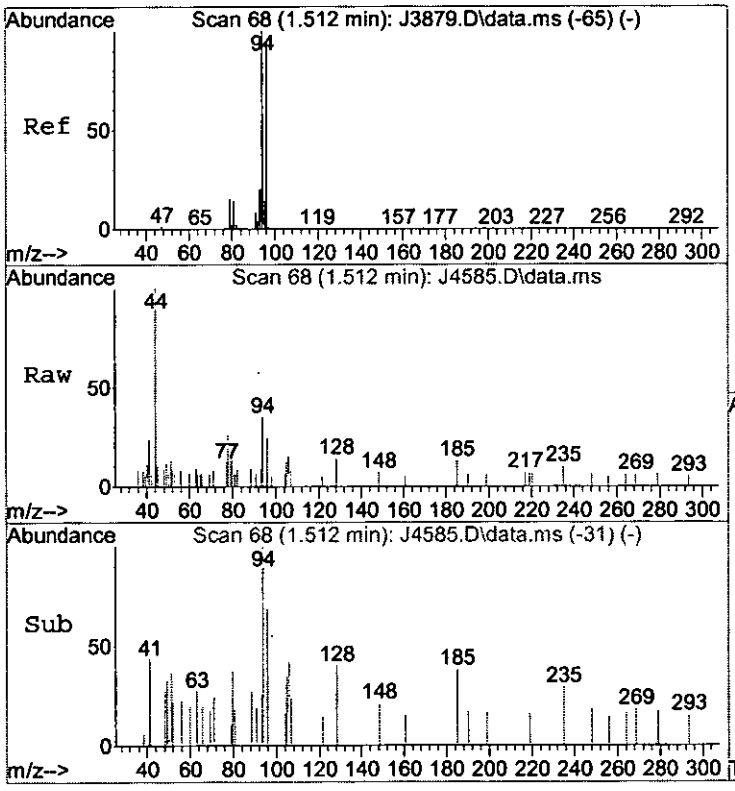


#4
Vinyl Chloride
Concen: 0.55 ppb
RT: 1.323 min Scan# 37
Delta R.T. 0.000 min
Lab File: J4585.D
Acq: 8 Apr 2014 9:45 pm

Tgt Ion: 62 Resp: 4338

Ion	Ratio	Lower	Upper
62	100		
64	38.4	12.9	52.9

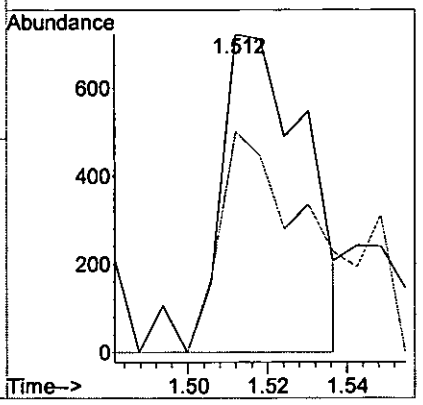


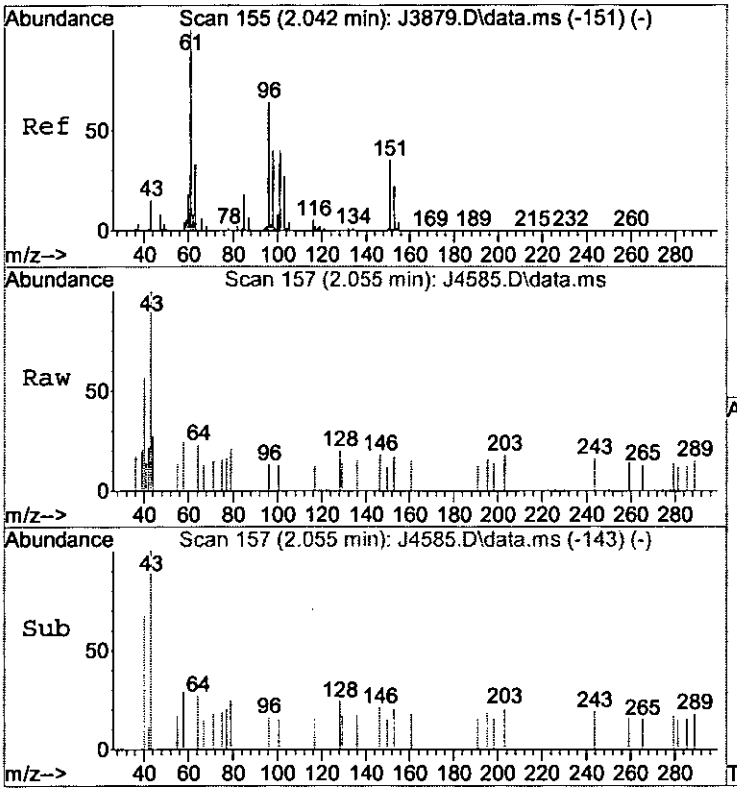


#5
Bromomethane
Concen: 0.22 ppb
RT: 1.512 min Scan# 68
Delta R.T. 0.000 min
Lab File: J4585.D
Acq: 8 Apr 2014 9:45 pm

Tgt Ion: 94 Resp: 1038

Ion	Ratio	Lower	Upper
94	100		
96	69.2	73.8	113.8#

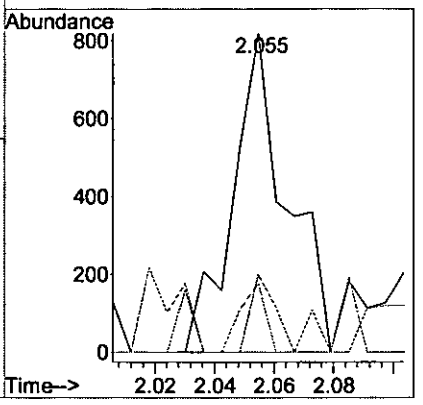


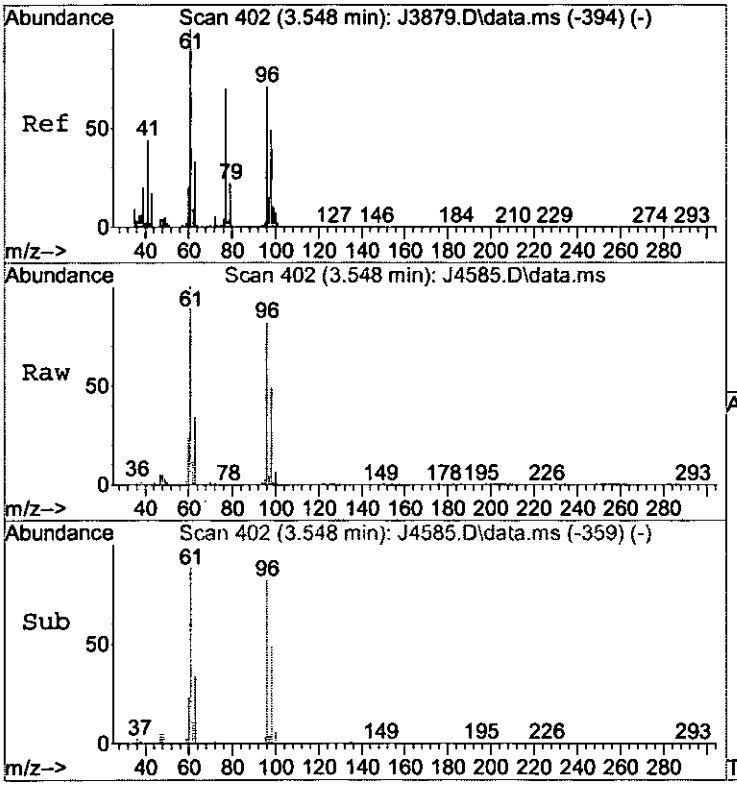


#15
Acetone
Concen: 0.62 ppb
RT: 2.055 min Scan# 157
Delta R.T. 0.012 min
Lab File: J4585.D
Acq: 8 Apr 2014 9:45 pm

Tgt Ion: 43 Resp: 1028

Ion	Ratio	Lower	Upper
43	100		
58	24.4	9.7	49.7
42	21.8	0.0	27.9

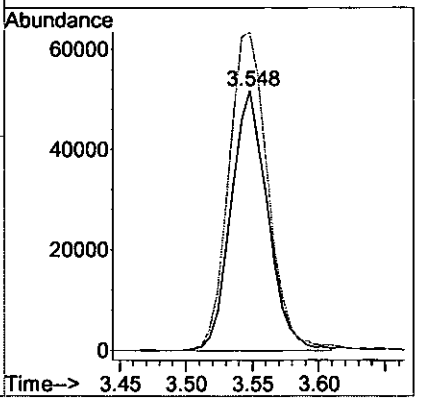


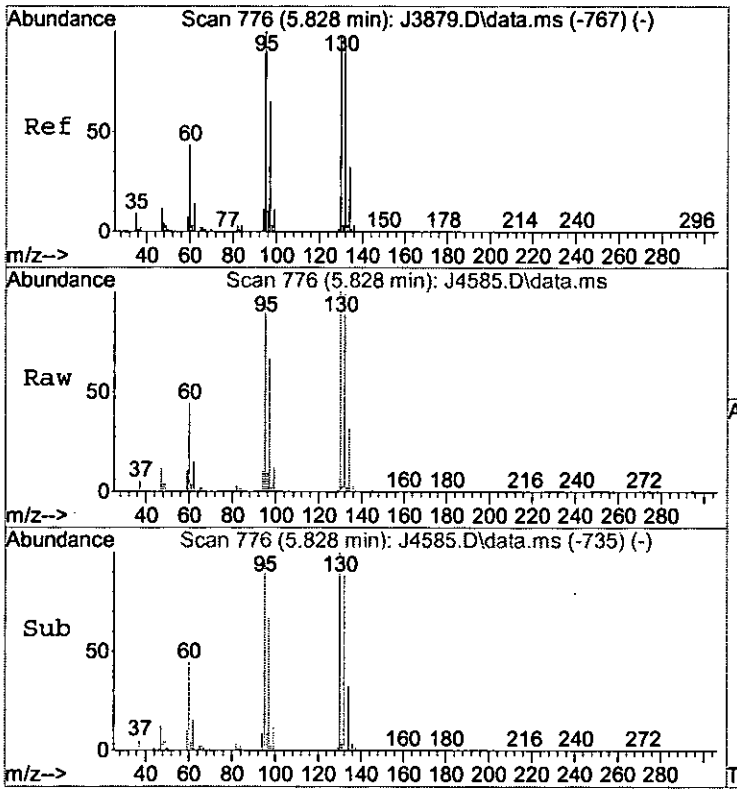


#34
cis-1,2-Dichloroethene
Concen: 11.72 ppb
RT: 3.548 min Scan# 402
Delta R.T. 0.006 min
Lab File: J4585.D
Acq: 8 Apr 2014 9:45 pm

Tgt Ion: 96 Resp: 98739

Ion	Ratio	Lower	Upper
96	100		
61	122.6	120.1	160.1

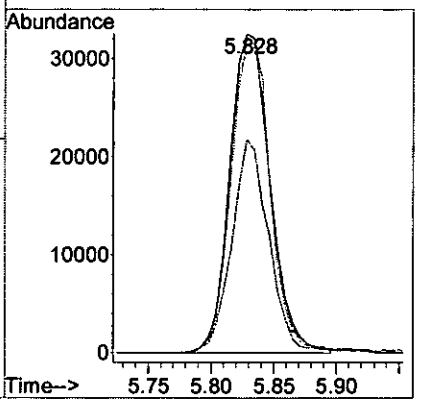


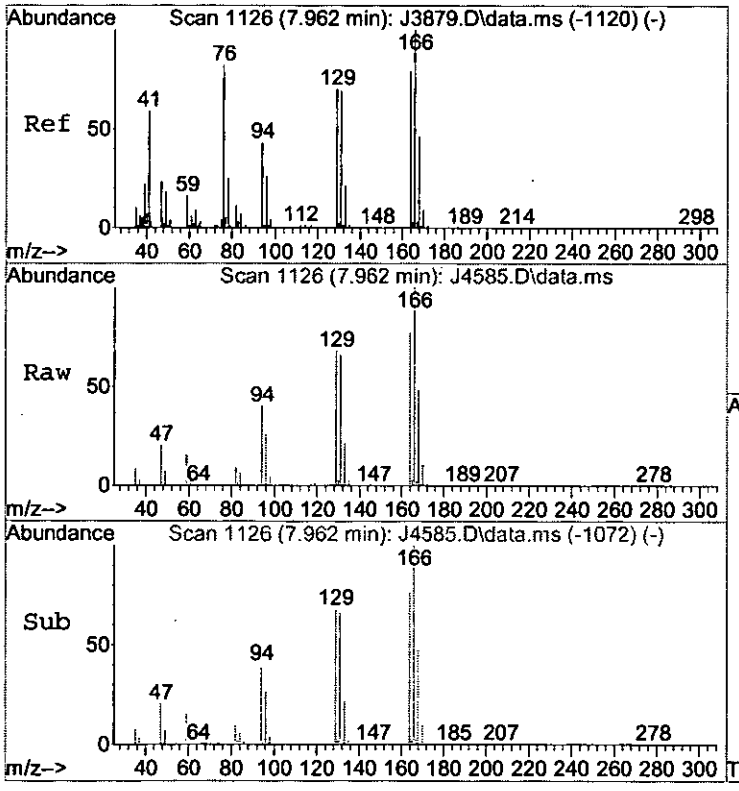


#54
Trichloroethene
Concen: 9.67 ppb
RT: 5.828 min Scan# 776
Delta R.T. 0.000 min
Lab File: J4585.D
Acq: 8 Apr 2014 9:45 pm

Tgt Ion:130 Resp: 72509

Ion	Ratio	Lower	Upper
130	100		
132	98.7	78.3	118.3
95	94.3	83.0	123.0
97	66.9	47.3	87.3

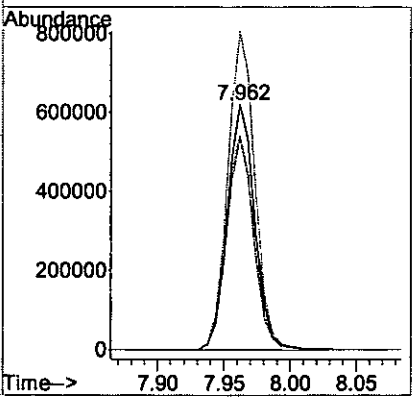




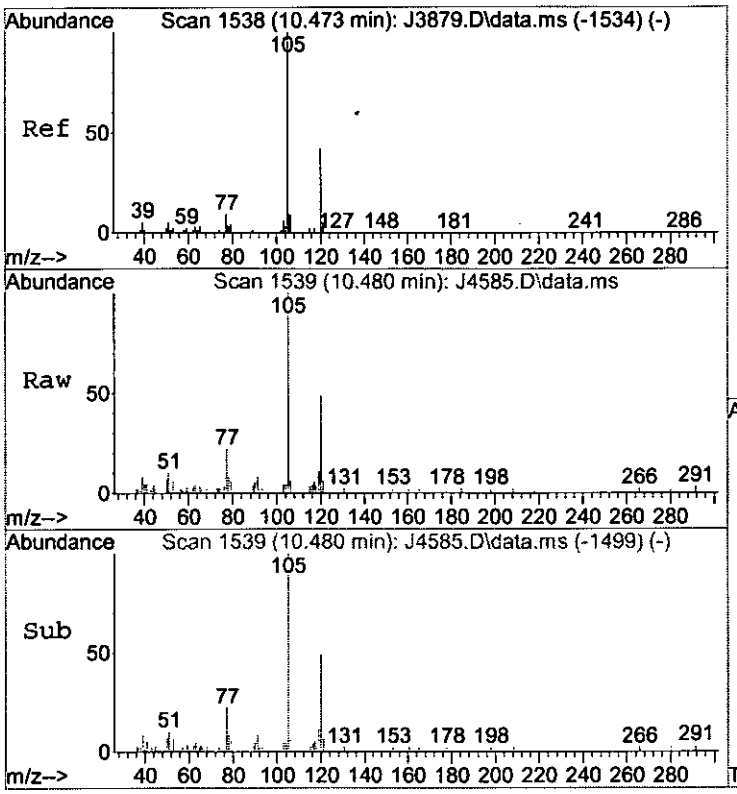
#72
Tetrachloroethene
Concen: 149.41 ppb
RT: 7.962 min Scan# 1126
Delta R.T. 0.000 min
Lab File: J4585.D
Acq: 8 Apr 2014 9:45 pm

Tgt Ion:164 Resp: 886119

Ion	Ratio	Lower	Upper
164	100		
166	129.9	105.9	145.9
129	87.8	68.6	108.6
131	86.1	66.6	106.6



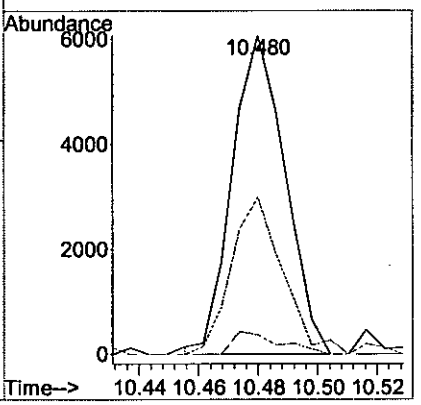
J4585.D W031214.M Wed Apr 09 10:46:23 2014 Page 5

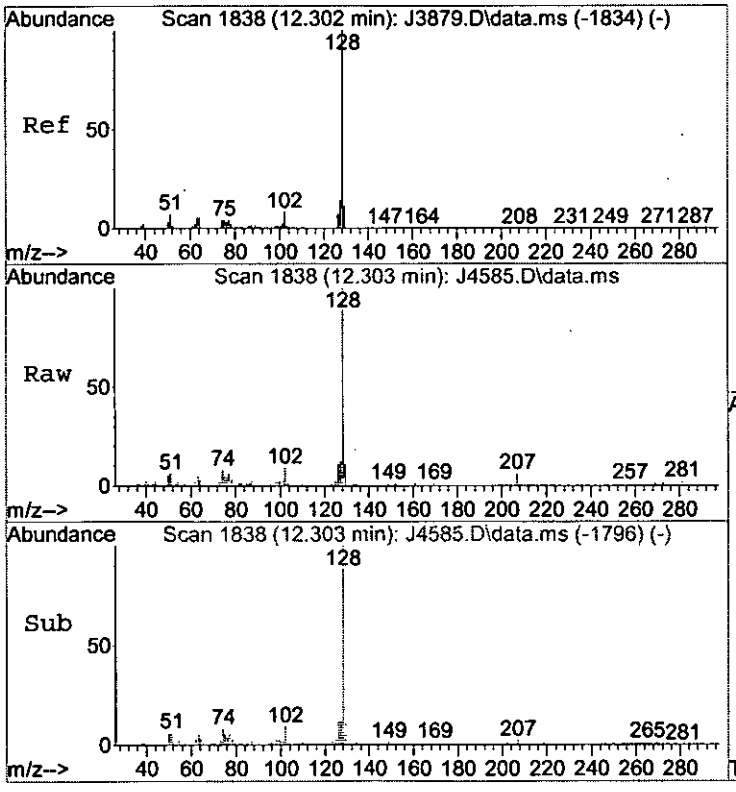


#101
1,2,4-Trimethylbenzene
Concen: 0.31 ppb
RT: 10.480 min Scan# 1539
Delta R.T. 0.000 min
Lab File: J4585.D
Acq: 8 Apr 2014 9:45 pm

Tgt Ion:105 Resp: 7487

Ion	Ratio	Lower	Upper
105	100		
120	49.3	25.3	65.3
65	6.1	0.0	24.3

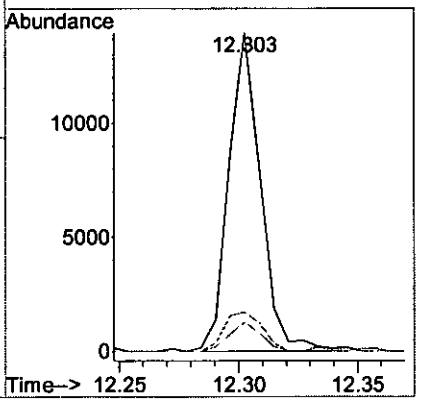




#117
Naphthalen
Concen: 0.86 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4585.D
Acq: 8 Apr 2014 9:45 pm

Tgt Ion:128 Resp: 12888

Ion	Ratio	Lower	Upper
128	100		
127	12.2	0.0	33.8
102	9.1	0.0	28.5



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4585.D
Acq On : 8 Apr 2014 9:45 pm
Operator : K.Ruest
Sample : R1402225-010|10
Misc : PARSONS 9913 T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4585.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.548	395	402	416	rBV	213638	436317	6.78%	1.546%
2	4.152	491	501	509	rBV	494880	1177726	18.29%	4.172%
3	4.249	509	517	531	rVB	918973	2301076	35.74%	8.152%
4	4.658	575	584	598	rBV	453851	1169105	18.16%	4.142%
5	5.450	703	714	734	rBV	1222219	2871337	44.60%	10.172%
6	5.828	768	776	787	rBV2	178504	394479	6.13%	1.398%
7	7.322	1015	1021	1035	rBV	2583102	3911765	60.76%	13.858%
8	7.962	1119	1126	1144	rBV	4468617	6437701	100.00%	22.807%
9	8.742	1249	1254	1270	rVB	2684478	3429830	53.28%	12.151%
10	9.791	1421	1426	1436	rBV	2223260	2708864	42.08%	9.597%
11	10.748	1578	1583	1591	rBV	3011556	3389225	52.65%	12.007%

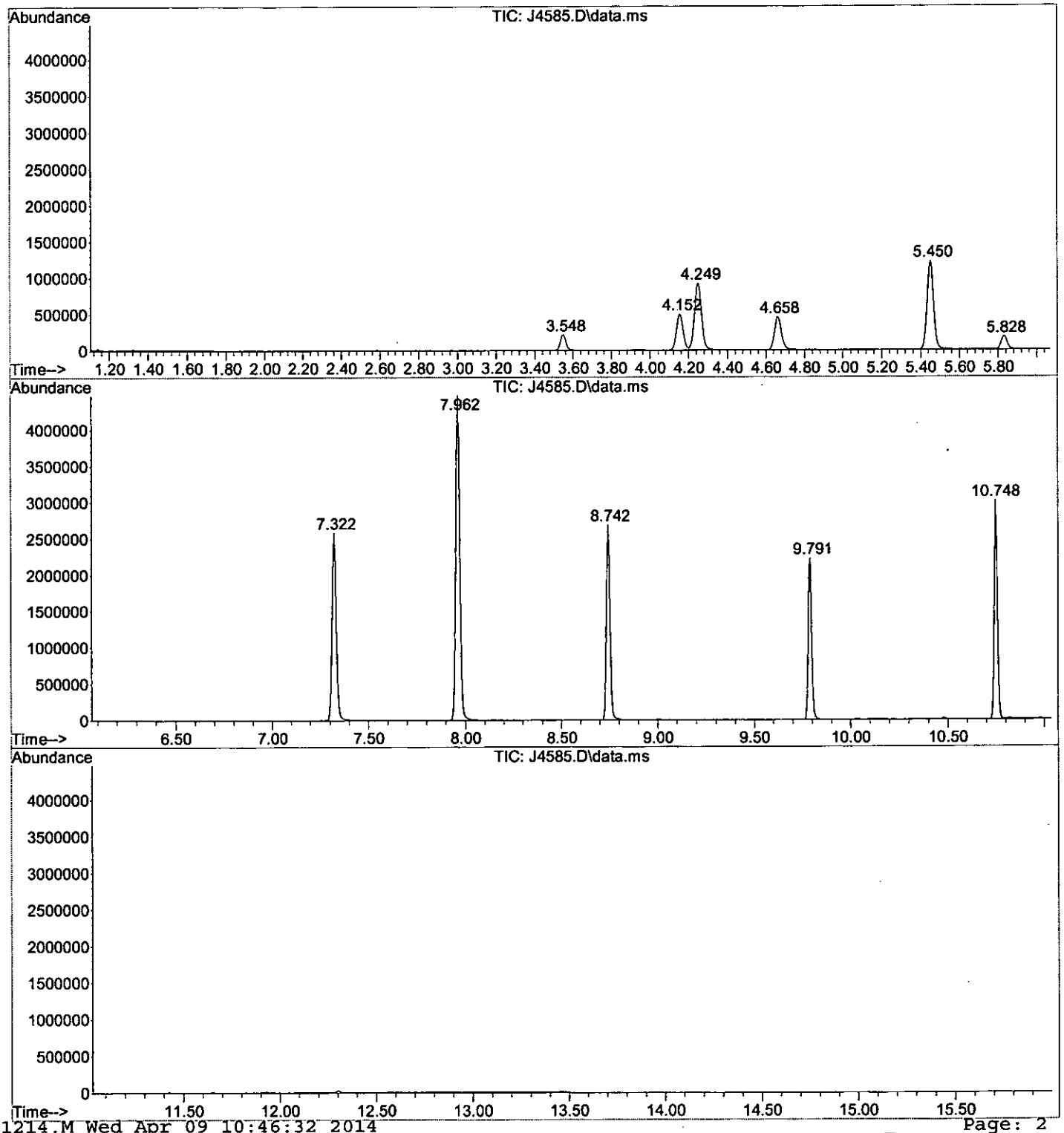
Sum of corrected areas: 28227425

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4585.D
Acq On : 8 Apr 2014 9:45 pm
Operator : K.Ruest
Sample : R1402225-010|10
Misc : PARSONS 9913 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 10:46:32 2014 Page: 2

00183

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4585.D
Acq On : 8 Apr 2014 9:45 pmm
Operator : K.Ruestt
Sample : R1402225-010|100
Misc : PARSONS 9913 T44
ALS Vial : 16 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1040
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 15:50
Sample Name:	FTMM-53-GW-699MW01-12.5	**Units:**	µg/L
Lab Code:	R1402225-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4574.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.32**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1040
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 15:50
Sample Name:	FTMM-53-GW-699MW01-12.5	**Units:**	µg/L
Lab Code:	R1402225-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4574.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/8/14 15:50	
Dibromofluoromethane	101	85-115	4/8/14 15:50	
Toluene-d8	97	85-120	4/8/14 15:50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1550

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-12.5	**Units:**	µg/L
Lab Code:	R1402225-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-011|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4574.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 3:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 16:05:31 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	835633	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1237916	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1145984	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	557588	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	363451	50.72	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.44%				
48) surr1,1,2-dichloroetha...	4.658	65	422389	51.74	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.48%				
65) SURR3,Toluene-d8	7.322	98	1465326	48.66	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.32%				
70) SURR2,BFB	9.791	95	543309	48.36	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.72%				
Target Compounds							Qvalue
5) Bromomethane	1.512	94	1518	0.32	ppb	#	76
15) Acetone	2.055	43	1743	1.05	ppb	#	62 <
~~90) Cyclohexanone~~	~~9.724~~	~~55~~	~~376~~	~~0.84~~	~~ppb~~	~~#~~	~~14~~
116) Hexachlorobt	12.266	225	847	0.24	ppb	#	65 <
119) 2,4,5-Trichlorotolene	12.851	159	1561	0.35	ppb	#	88 NTD
120) 2,3,6-Trichlorotoluene	12.912	159	1774	0.44	ppb	#	89 ↓

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

KF 4/9/14

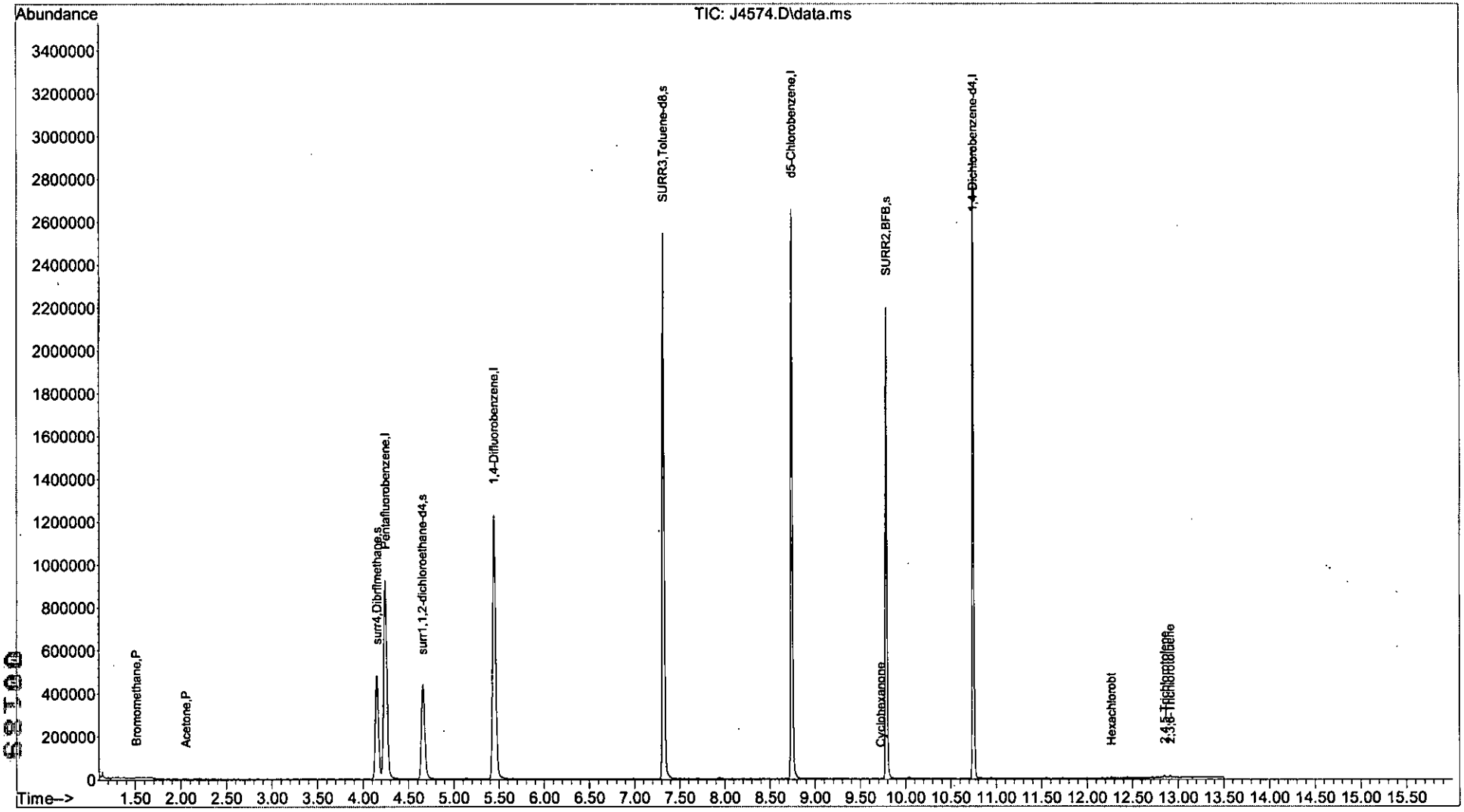
W031214.M Tue Apr 08 16:05:35 2014 Page: 1

00185

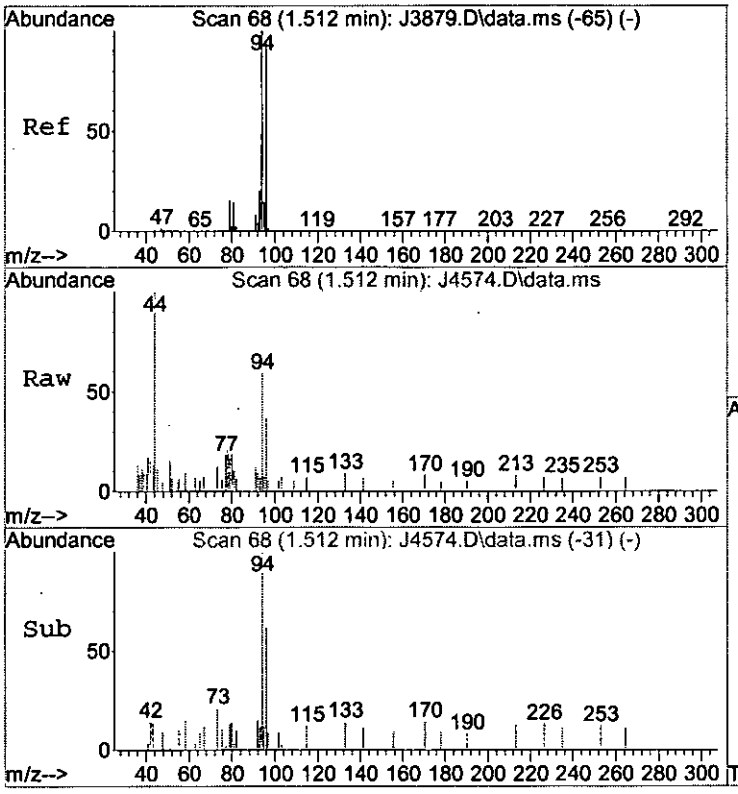
Quantitation Report (Not Reviewed)

Sample : R1402225-011|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4574.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 3:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 16:05:31 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



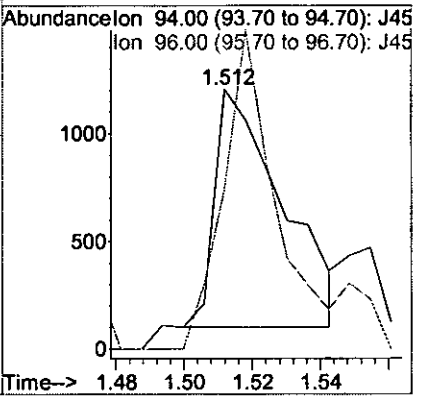
W031214.M Tue Apr 08 16:05:37 2014 Page: 2



#5
Bromomethane
Concen: 0.32 ppb
RT: 1.512 min Scan# 68
Delta R.T. -0.000 min
Lab File: J4574.D
Acq: 8 Apr 2014 3:50 pm

Tgt Ion: 94 Resp: 1518

Ion	Ratio	Lower	Upper
94	100		
96	70.4	73.8	113.8#



J4574.D W031214.M Wed Apr 09 09:46:06 2014 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4574.D
Acq On : 8 Apr 2014 3:50 pm
Operator : K.Ruest
Sample : R1402225-011|1.0
Misc : PARSONS 9913 T4
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4574.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	484479	1173699	30.49%	5.668%
2	4.249	509	517	531	rVB	920916	2287158	59.41%	11.045%
3	4.664	575	585	599	rBV	442569	1160342	30.14%	5.603%
4	5.450	703	714	727	rBV	1227982	2823191	73.33%	13.634%
5	7.322	1014	1021	1033	rBV	2543226	3850000	100.00%	18.592%
6	8.742	1249	1254	1267	rBV	2654781	3405018	88.44%	16.443%
7	9.791	1420	1426	1434	rBV	2200374	2691641	69.91%	12.998%
8	10.748	1578	1583	1593	rBV	2938949	3316541	86.14%	16.016%

Sum of corrected areas: 20707590

W031214.M Wed Apr 09 09:46:10 2014 Page: 1

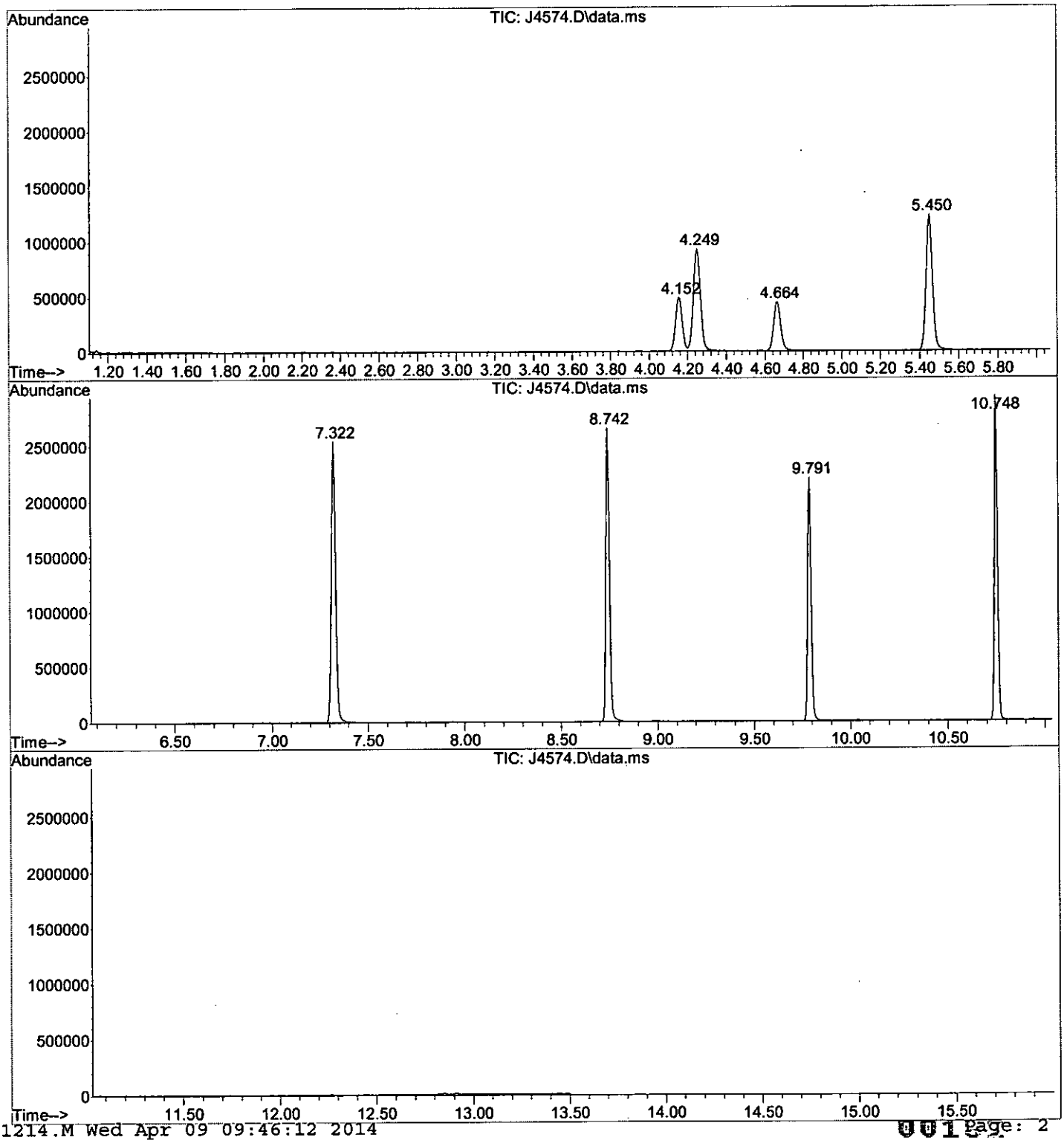
00191

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4574.D
Acq On : 8 Apr 2014 3:50 pm
Operator : K.Ruest
Sample : R1402225-011|1.0
Misc : PARSONS 9913 T4
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 09:46:12 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4574.D
Acq On : 8 Apr 2014 3:50 pmm
Operator : K.Ruestt
Sample : R1402225-011|1.00
Misc : PARSONS 9913 T44
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1025
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 19:04
Sample Name:	FTMM-53-GW-699RW03-14.59	**Units:**	µg/L
Lab Code:	R1402225-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**120**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**17**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**0.91**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**3.7**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1025
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 19:04
Sample Name:	FTMM-53-GW-699RW03-14.59	**Units:**	µg/L
Lab Code:	R1402225-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**49**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**14**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**19**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**1.4**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**62**		10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**18**		5.0	1.0	0.20	
95-47-6	o-Xylene	**78**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.9**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.26**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	4/8/14 19:04	
Dibromofluoromethane	101	85-115	4/8/14 19:04	
Toluene-d8	97	85-120	4/8/14 19:04	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/8/14 1904

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-14.59
Lab Code: R1402225-012

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.62	**18.6**	JN
000109-66-0	Pentane	1.77	**5.3**	JN
000079-29-8	Butane, 2,3-dimethyl-	2.38	**7.7**	JN
000096-14-0	Pentane, 3-methyl-	2.60	**9.4**	JN
000096-37-7	Cyclopentane, methyl-	3.46	**19.1**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.10	**38.9**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.12	**22.5**	JN
	unknown	10.33	**61.8**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**53.5**	JN
000611-15-4	Benzene, 1-ethenyl-2-methyl-	10.97	**43.9**	JN
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl	11.05	**7.7**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**8.9**	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl	11.28	**5.9**	JN
000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	11.34	**8.3**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**19.4**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**8.0**	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	11.65	**9.2**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.92	**13.9**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-012|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 19:19:11 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	839322	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1237318	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1135735	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	569945	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	360126	50.28	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.56%				
48) surr1,1,2-dichloroetha...	4.664	65	422857	51.82	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.64%				
65) SURR3,Toluene-d8	7.322	98	1464043	48.64	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.28%				
70) SURR2,BFB	9.791	95	555886	49.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.00%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1044	0.22	ppb		99
~~15) Acetone~~	~~2.054~~	~~43~~	~~26361~~	~~15.83~~	~~ppb~~	~~#~~	~~66~~
20) Allyl Chloride	2.207	76	3526	0.84	ppb	#	1
21) Methyl Acetate	2.317	43	3120	0.83	ppb	#	60
22) Methylene Chloride	2.335	84	1664	0.21	ppb	#	19
24) Acrylonitrile	2.597	53	3890	2.09	ppb	#	29
~~35) 2-Butanone~~	~~3.572~~	~~43~~	~~1944~~	~~0.83~~	~~ppb~~	~~#~~	~~24~~
44) Cyclohexane	4.322	41	33783	5.05	ppb		96 MD
49) Benzene	4.786	78	112449	3.69	ppb		99
~~51) Iso Butyl Alcohol~~	~~4.566~~	~~43~~	~~7558~~	~~36.11~~	~~ppb~~		~~80~~
~~53) 1-Butanol~~	~~5.761~~	~~56~~	~~352~~	~~3.06~~	~~ppb~~	~~#~~	~~53~~
55) Methylcyclohexane	6.108	55	37603	4.74	ppb		90 MD
~~59) Methyl Methacrylate~~	~~6.364~~	~~69~~	~~5509~~	~~1.50~~	~~ppb~~	~~#~~	~~47~~
~~61) 2-Nitropropane~~	~~6.797~~	~~41~~	~~3360~~	~~3.43~~	~~ppb~~	~~#~~	~~1~~
66) Toluene	7.395	91	43478	1.38	ppb		88
~~69) 1,1,2-Trichloroethane~~	~~7.797~~	~~97~~	~~2594~~	~~0.47~~	~~ppb~~	~~#~~	~~12~~
82) Ethylbenzene	8.888	106	513372	48.76	ppb		97
83) (m+p)Xylene	8.998	106	761948	61.57	ppb		100
84) o-Xylene	9.346	106	982285	77.79	ppb		97
~~85) Styrene~~	~~9.346~~	~~104~~	~~47540~~	~~2.35~~	~~ppb~~	~~#~~	~~1~~
89) Isopropylbenzene	9.675	105	425876	14.47	ppb		99
~~90) Cyclohexanone~~	~~9.748~~	~~55~~	~~215~~	~~0.47~~	~~ppb~~	~~#~~	~~14~~
~~91) trans-1,4-Dichloro-2-B...~~	~~9.992~~	~~53~~	~~357~~	~~0.23~~	~~ppb~~	~~#~~	~~31~~
~~92) 1,1,2,2-Tetrachloroethane~~	~~9.980~~	~~83~~	~~1652~~	~~0.25~~	~~ppb~~	~~#~~	~~26~~
95) n-Propylbenzene	10.022	91	635614	18.47	ppb		100
~~96) 2-Chlorotoluene~~	~~10.095~~	~~91~~	~~132002~~	~~6.11~~	~~ppb~~	~~#~~	~~62~~
~~97) 3-Chlorotoluene~~	~~10.095~~	~~91~~	~~202391~~	~~9.00~~	~~ppb~~	~~#~~	~~43~~
~~98) 4-Chlorotoluene~~	~~10.175~~	~~91~~	~~42077~~	~~1.65~~	~~ppb~~	~~#~~	~~44~~
99) 1,3,5-Trimethylbenzene	10.175	105	412775	17.20	ppb		97
100) tert-Butylbenzene	10.437	119	5194	0.26	ppb		93
101) 1,2,4-Trimethylbenzene	10.480	105	2892133	117.11	ppb		95
103) sec-Butylbenzene	10.620	105	54180	1.93	ppb		93
104) p-Isopropyltoluene	10.742	119	21605	0.91	ppb		97
~~109) n-Butylbenzene~~	~~11.065~~	~~91~~	~~51737~~	~~2.41~~	~~ppb~~	~~#~~	~~62~~
~~111) 1,2-Dibromo-3-chloropr...~~	~~11.620~~	~~157~~	~~210~~	~~0.21~~	~~ppb~~	~~#~~	~~1~~

KP 4/9/14

Bromomethane

W031214.M Tue Apr 08 19:19:16 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1402225-012|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 19:19:11 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

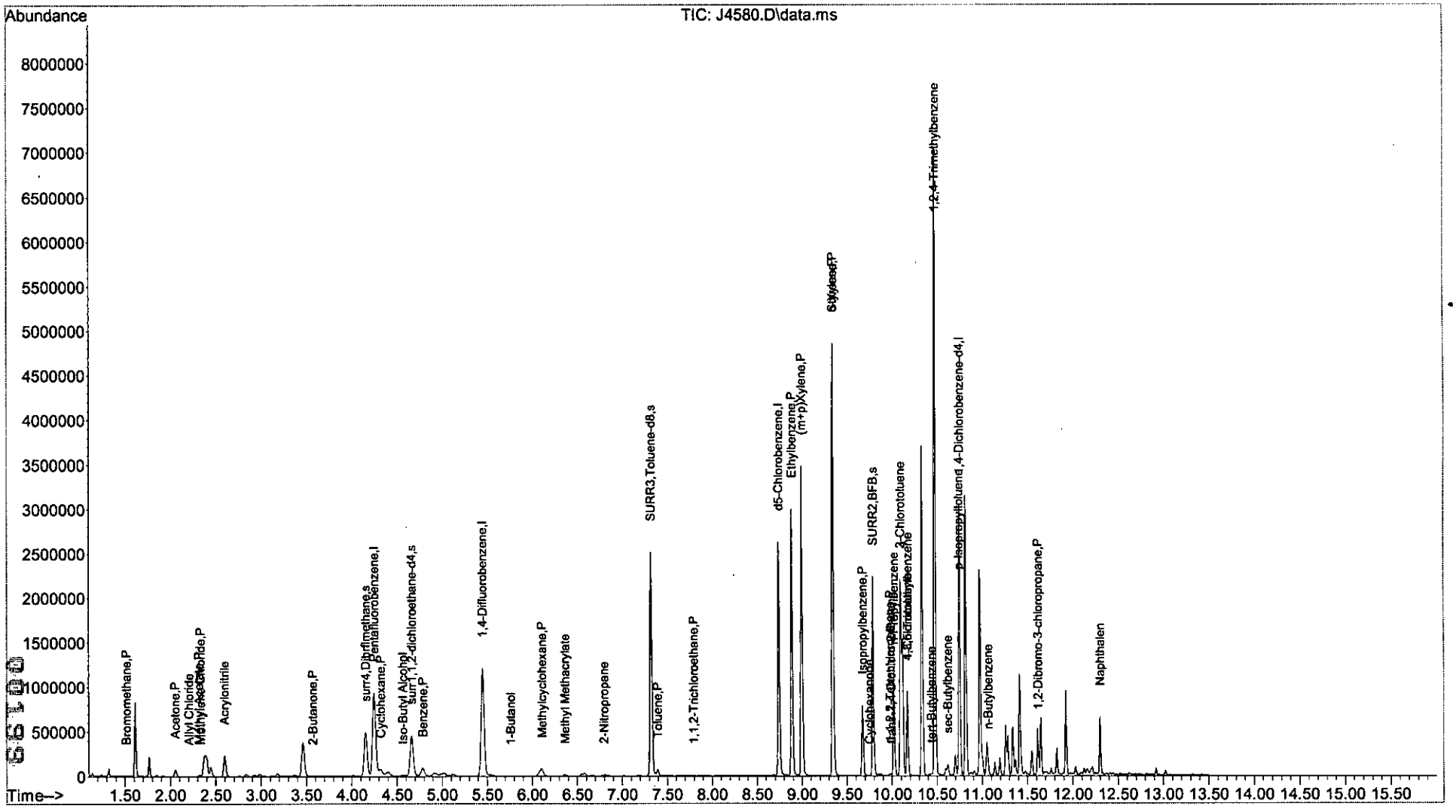
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
117) Naphthalen	12.302	128	293856	19.42	ppb	98

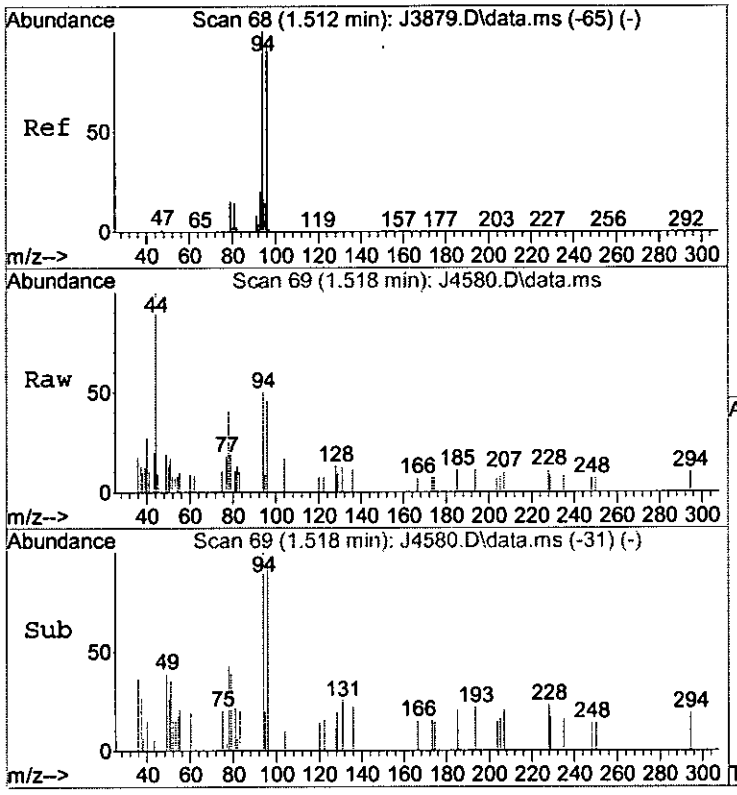
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Sample : R1402225-012|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4580.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 19:19:11 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

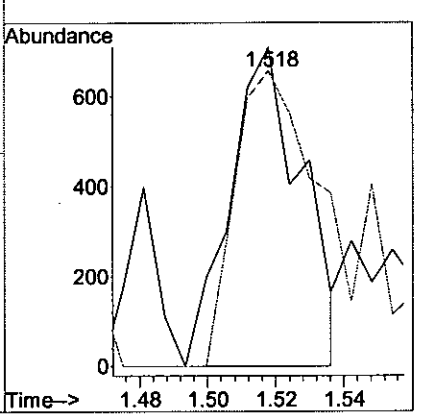


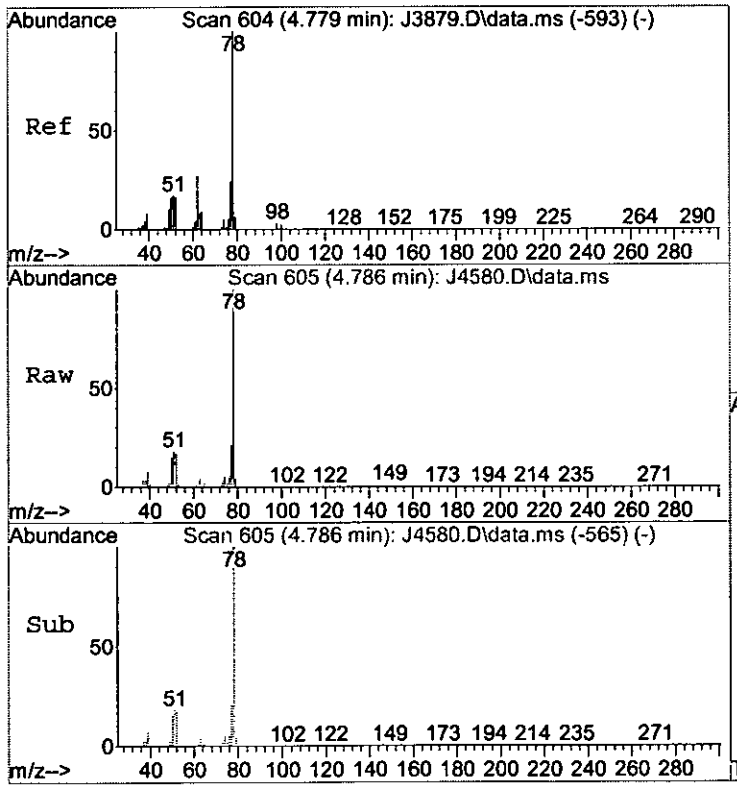


#5
Bromomethane
Concen: 0.22 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion: 94 Resp: 1044

Ion	Ratio	Lower	Upper
94	100		
96	92.7	73.8	113.8

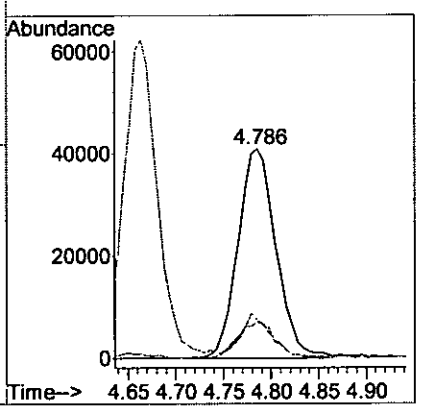


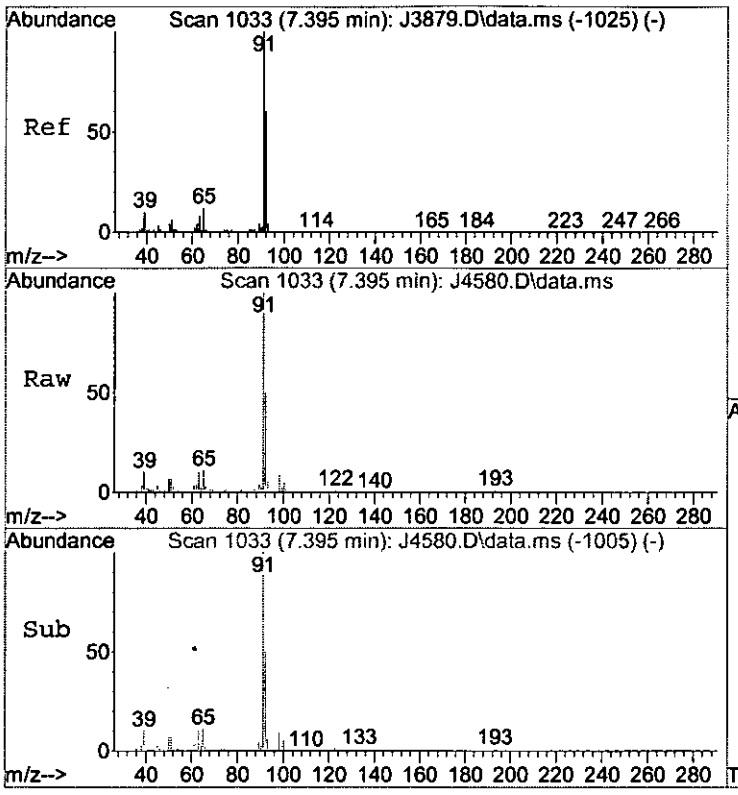


#49
Benzene
Concen: 3.69 ppb
RT: 4.786 min Scan# 605
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion: 78 Resp: 112449

Ion	Ratio	Lower	Upper
78	100		
51	18.0	0.0	38.2
52	17.2	0.0	36.1

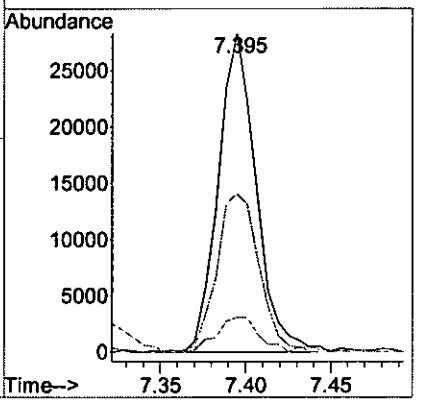


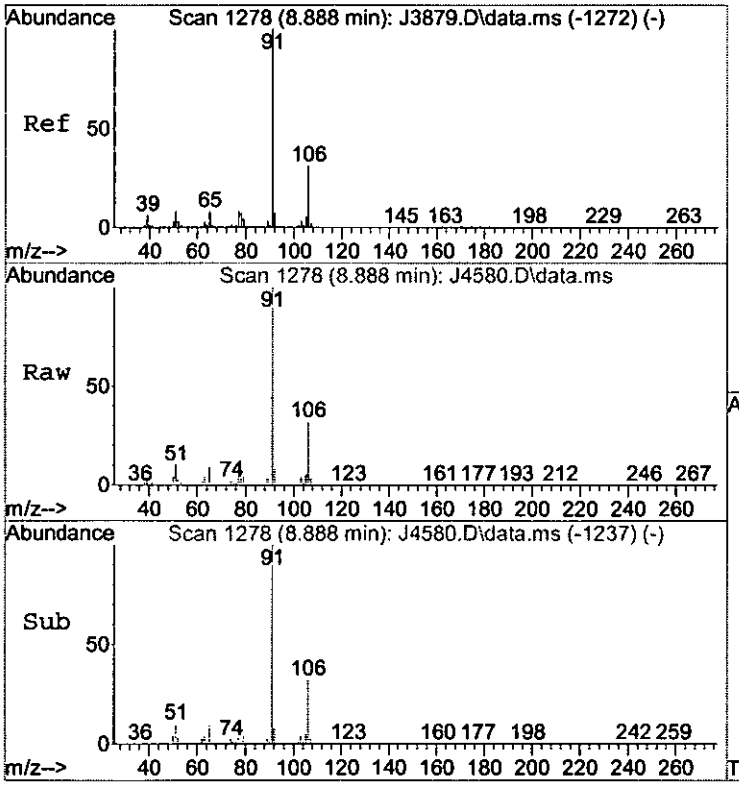


#66
Toluene
Concen: 1.38 ppb
RT: 7.395 min Scan# 1033
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion: 91 Resp: 43478

Ion	Ratio	Lower	Upper
91	100		
92	49.8	39.9	79.9
65	11.0	0.0	32.3

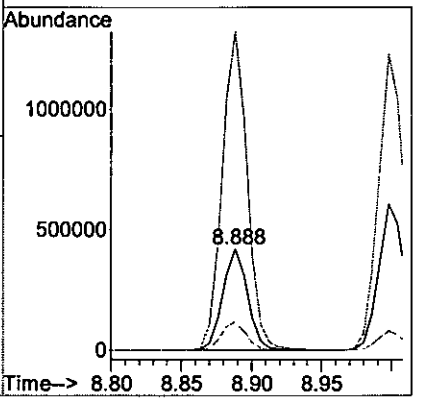


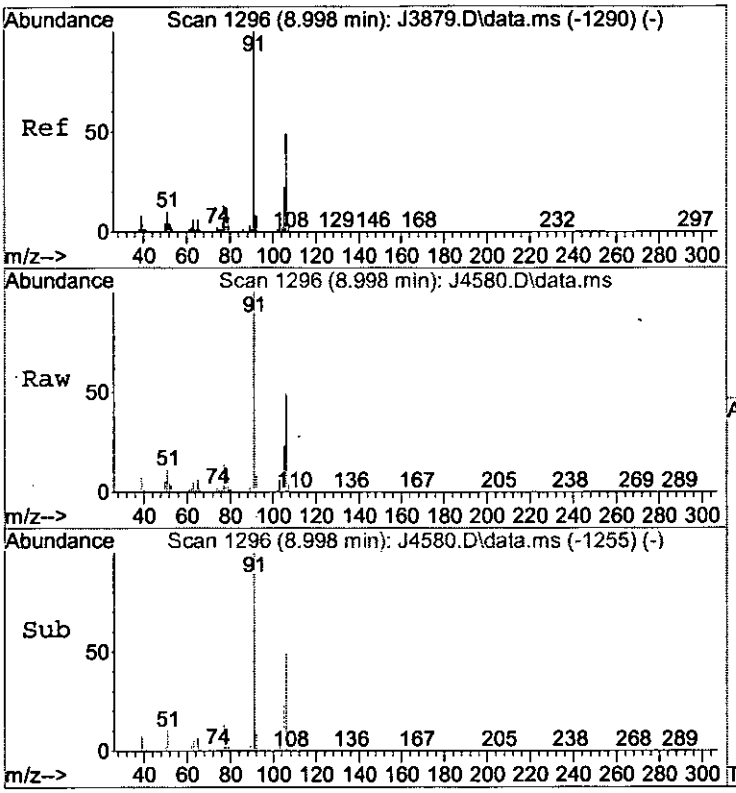


#82
Ethylbenzene
Concen: 48.76 ppb
RT: 8.888 min Scan# 1278
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:106 Resp: 513372

Ion	Ratio	Lower	Upper
106	100		
91	314.9	300.3	340.3
65	27.9	6.6	46.6

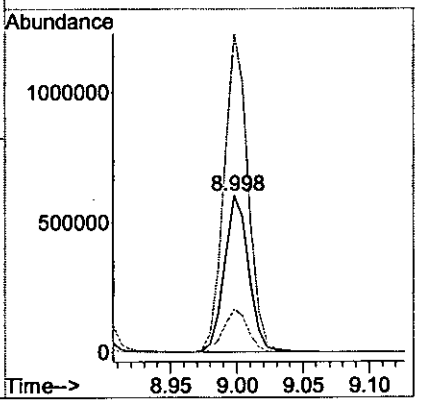


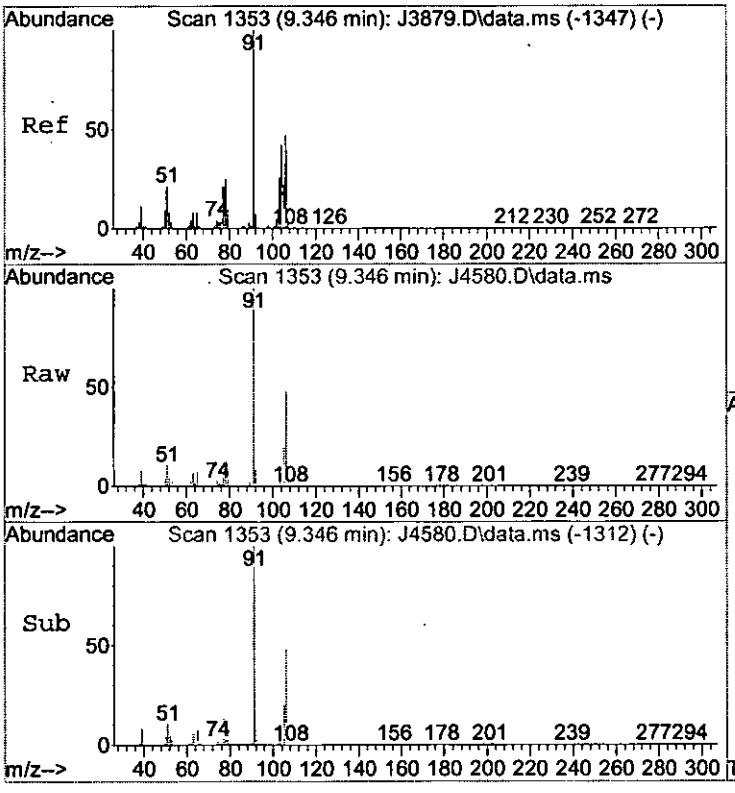


#83
(m+p)Xylene
Concen: 61.57 ppb
RT: 8.998 min Scan# 1296
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:106 Resp: 761948

Ion	Ratio	Lower	Upper
106	100		
91	202.9	182.8	222.8
77	27.5	7.2	47.2

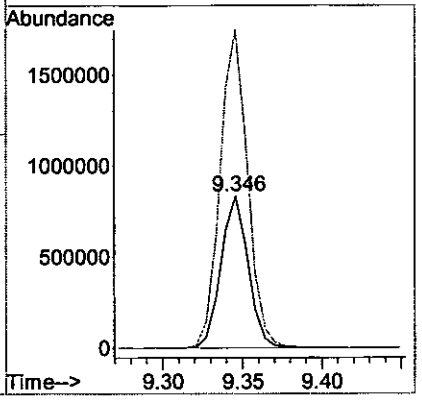


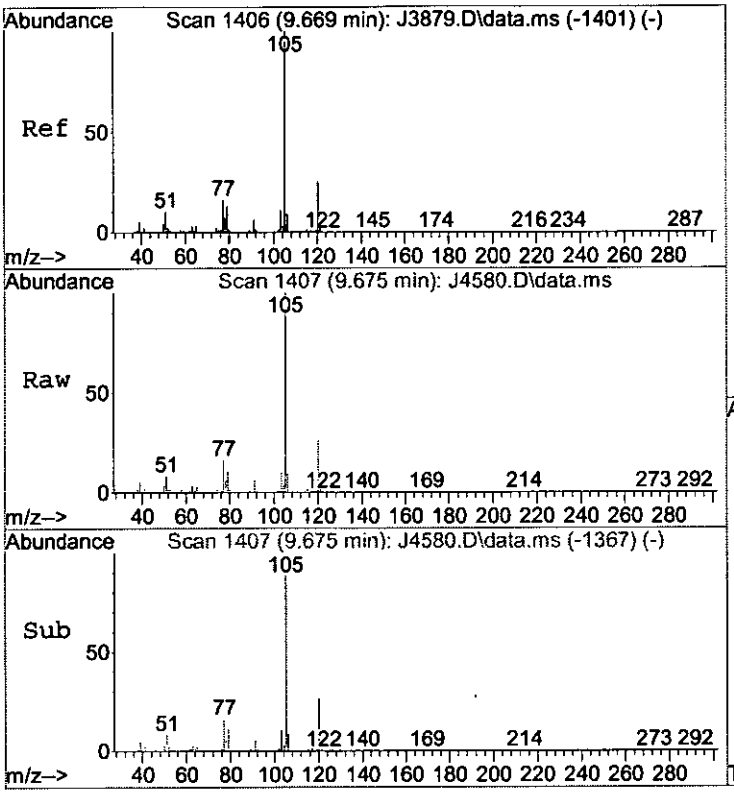


#84
o-Xylene
Concen: 77.79 ppb
RT: 9.346 min Scan# 1353
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:106 Resp: 982285

Ion	Ratio	Lower	Upper
106	100		
91	209.4	193.9	233.9

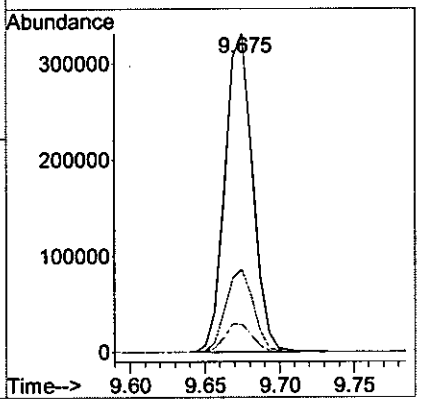


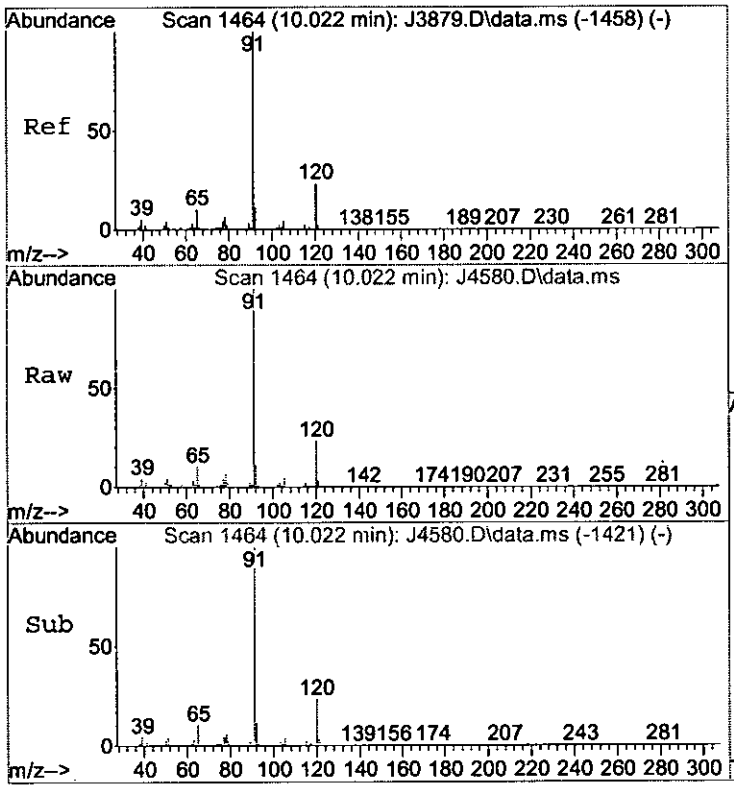


#89
Isopropylbenzene
Concen: 14.47 ppb
RT: 9.675 min Scan# 1407
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:105 Resp: 425876

Ion	Ratio	Lower	Upper
105	100		
120	26.0	5.4	45.4
106	8.8	0.0	28.6

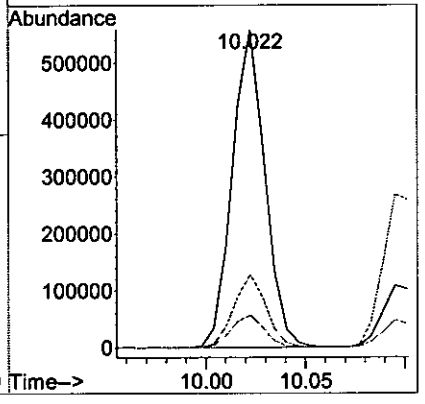


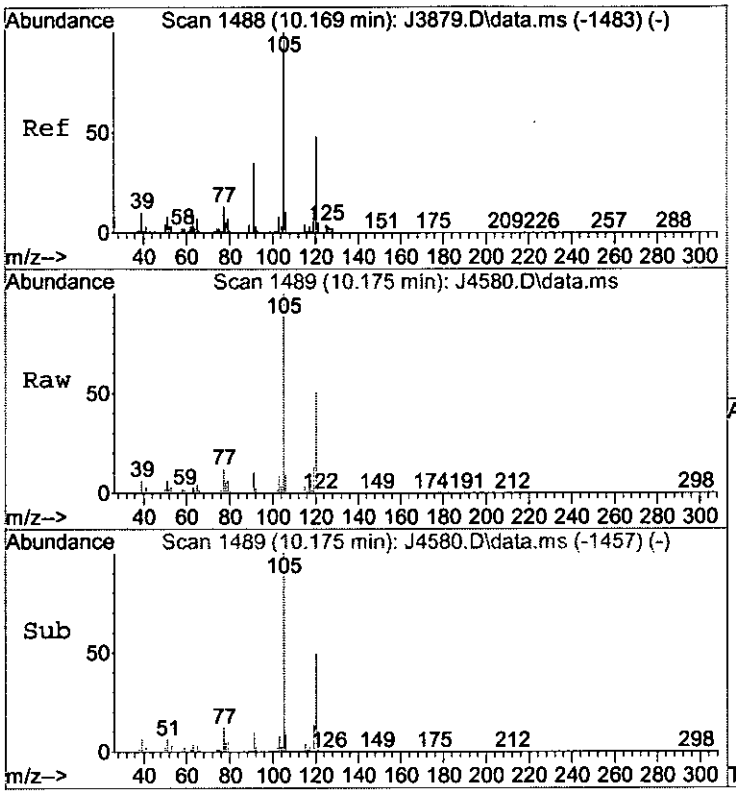


#95
n-Propylbenzene
Concen: 18.47 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion: 91 Resp: 635614

Ion	Ratio	Lower	Upper
91	100		
120	23.0	3.1	43.1
65	10.2	0.0	30.1

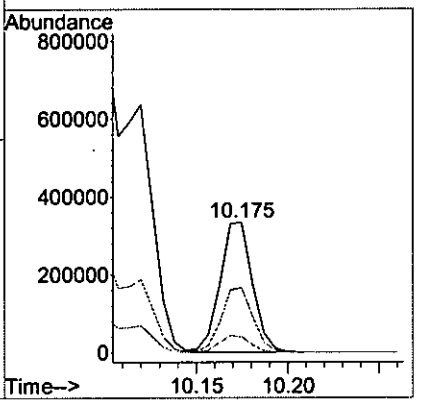


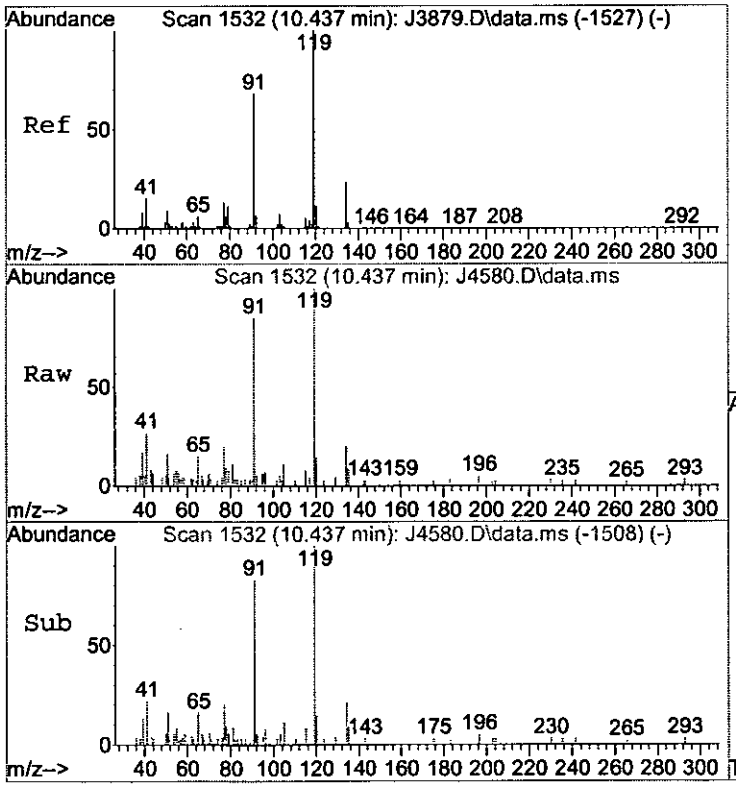


#99
1,3,5-Trimethylbenzene
Concen: 17.20 ppb
RT: 10.175 min Scan# 1489
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:105 Resp: 412775

Ion	Ratio	Lower	Upper
105	100		
120	49.9	27.7	67.7
77	12.3	0.0	33.6

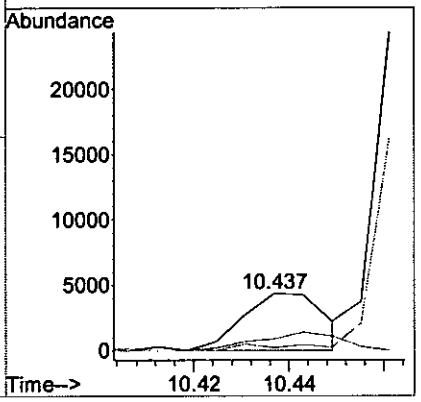




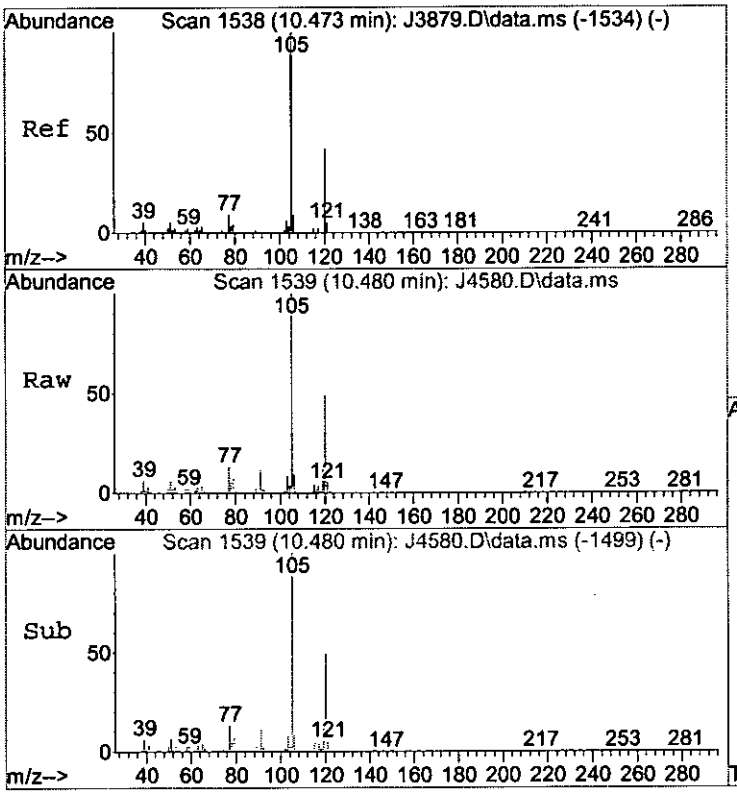
#100
tert-Butylbenzene
Concen: 0.26 ppb
RT: 10.437 min Scan# 1532
Delta R.T. -0.006 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:119 Resp: 5194

Ion	Ratio	Lower	Upper
119	100		
134	20.2	3.5	43.5
103	4.8	0.0	27.3



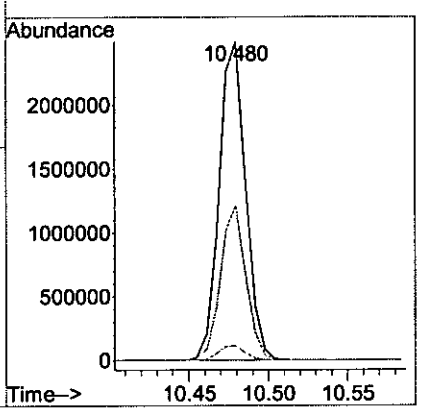
J4580.D W031214.M Wed Apr 09 10:32:18 2014 00204 Page 7

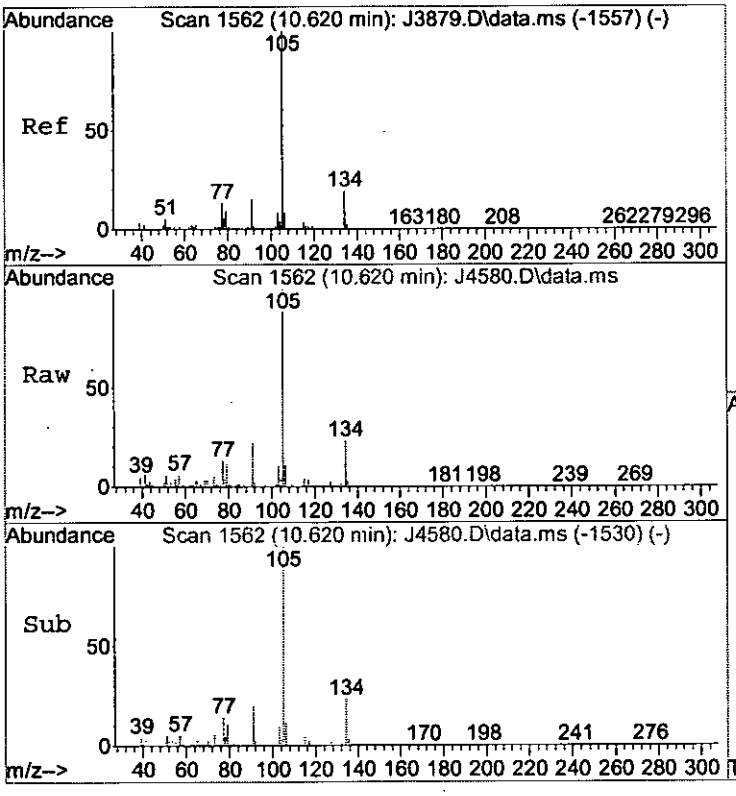


#101
1,2,4-Trimethylbenzene
Concen: 117.11 ppb
RT: 10.480 min Scan# 1539
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:105 Resp: 2892133

Ion	Ratio	Lower	Upper
105	100		
120	48.6	25.3	65.3
65	4.4	0.0	24.3

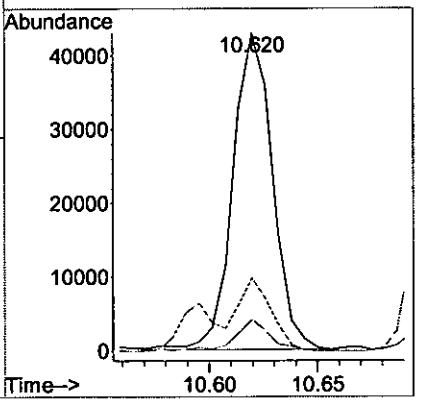


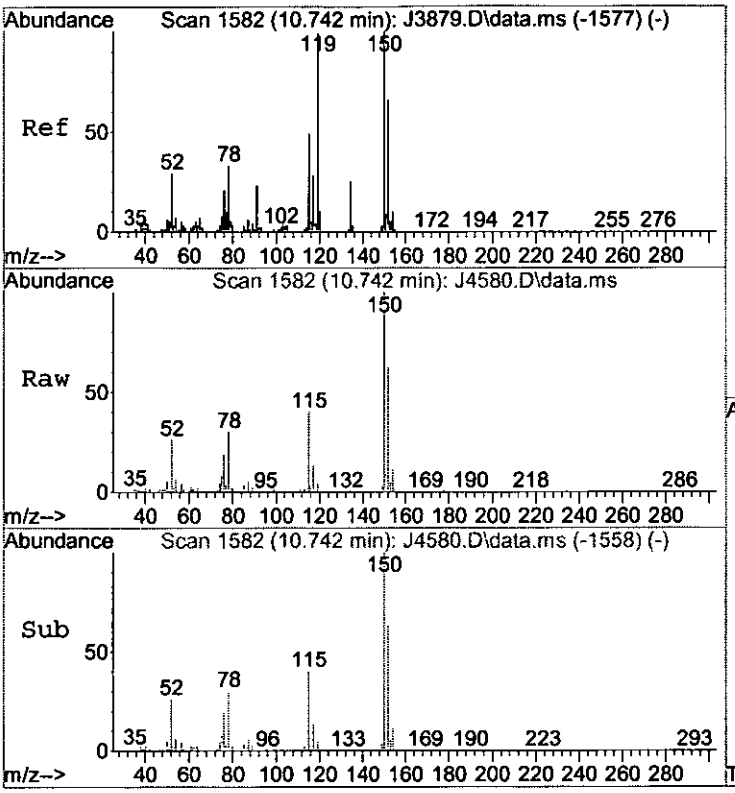


#103
sec-Butylbenzene
Concen: 1.93 ppb
RT: 10.620 min Scan# 1562
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:105 Resp: 54180

Ion	Ratio	Lower	Upper
105	100		
134	22.9	0.0	39.3
103	9.9	0.0	28.3

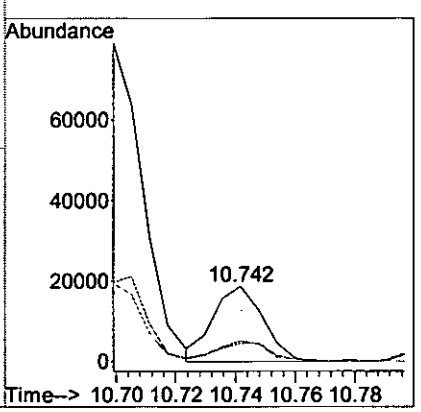


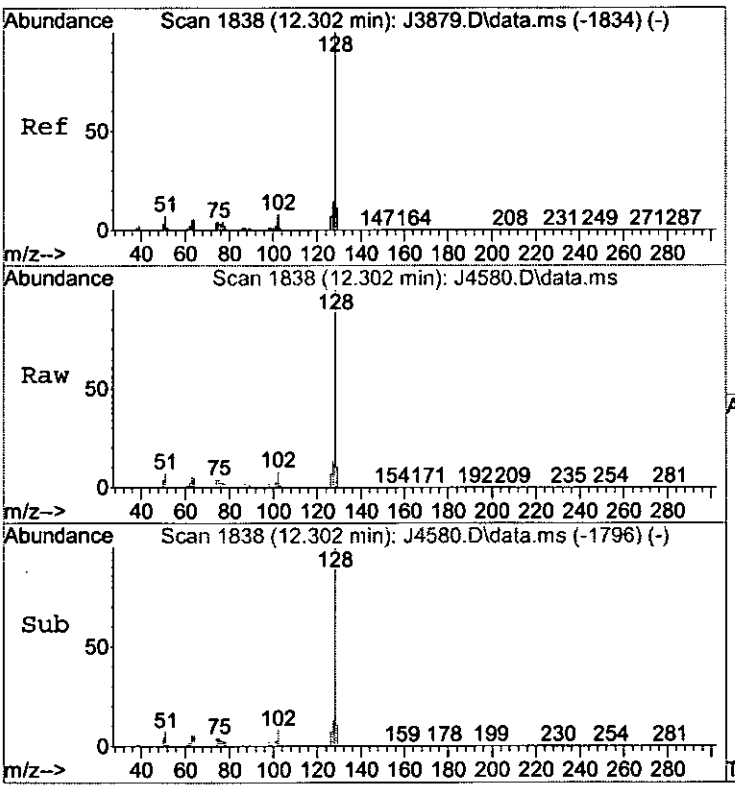


#104
p-Isopropyltoluene
Concen: 0.91 ppb
RT: 10.742 min Scan# 1582
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:119 Resp: 21605

Ion	Ratio	Lower	Upper
119	100		
134	27.5	5.6	45.6
91	23.8	3.2	43.2

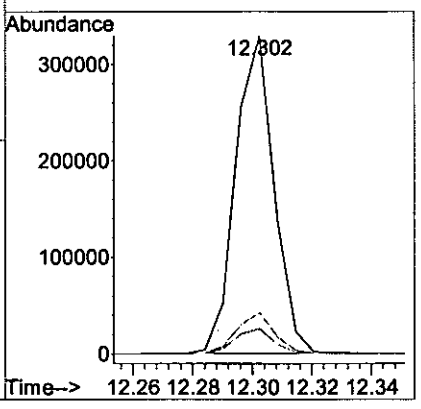




#117
Naphthalen
Concen: 19.42 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4580.D
Acq: 8 Apr 2014 7:04 pm

Tgt Ion:128 Resp: 293856

Ion	Ratio	Lower	Upper
128	100		
127	12.8	0.0	33.8
102	7.9	0.0	28.5



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4580.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.615	81	85	92	rBV	818350	822685	10.16%	1.124%
2	1.768	106	110	115	rVB	219733	235661	2.91%	0.322%
3	2.054	150	157	164	rBV	78003	126863	1.57%	0.173%
4	2.377	204	210	211	rBV	222626	340527	4.21%	0.465%
5	2.445	218	221	228	rVB	106861	162765	2.01%	0.222%
6	2.597	238	246	253	rBV	232514	413502	5.11%	0.565%
7	3.463	380	388	401	rBV	379856	844427	10.43%	1.154%
8	4.158	493	502	509	rBV	486875	1165979	14.40%	1.593%
9	4.249	509	517	525	rBV	903922	2207005	27.26%	3.016%
10	4.401	536	542	552	rVB6	46285	148279	1.83%	0.203%
11	4.664	574	585	597	rBV	450762	1133278	14.00%	1.549%
12	4.779	597	604	614	rVB3	85918	224450	2.77%	0.307%
13	4.920	619	627	633	rBV4	32935	103421	1.28%	0.141%
14	5.450	704	714	724	rBV	1203788	2792001	34.49%	3.815%
15	6.102	810	821	832	rBV5	85245	257988	3.19%	0.353%
16	7.322	1013	1021	1029	rBV	2510265	3828954	47.30%	5.232%
17	7.395	1029	1033	1041	rVB	71788	124655	1.54%	0.170%
18	8.742	1249	1254	1265	rBV	2623565	3387978	41.85%	4.630%
19	8.888	1273	1278	1289	rVV	2993279	3685355	45.53%	5.036%
20	8.998	1291	1296	1310	rVB	3475035	4372912	54.02%	5.976%
21	9.346	1347	1353	1366	rBV	4853366	5777864	71.38%	7.895%
22	9.675	1401	1407	1415	rBV	783496	1021150	12.61%	1.395%
23	9.791	1421	1426	1434	rBV	2230164	2743777	33.90%	3.749%
24	10.022	1459	1464	1471	rVB	1112007	1278237	15.79%	1.747%
25	10.095	1471	1476	1478	rVV	2194982	2703005	33.39%	3.694%
26	10.120	1478	1480	1484	rVV	1531807	1566298	19.35%	2.140%
27	10.175	1484	1489	1497	rVB	937765	1168517	14.44%	1.597%
28	10.333	1510	1515	1524	rVB	3691280	4297189	53.09%	5.872%
29	10.480	1534	1539	1544	rBV	7020944	8094882	100.00%	11.062%
30	10.620	1559	1562	1568	rVB	121725	155902	1.93%	0.213%
31	10.699	1571	1575	1579	rBV	221437	261361	3.23%	0.357%
32	10.748	1579	1583	1589	rVB	3021775	3476942	42.95%	4.751%
33	10.815	1589	1594	1601	rBV	3132704	3723102	45.99%	5.088%
34	10.973	1613	1620	1629	rBV2	2295667	3051202	37.69%	4.169%
35	11.053	1629	1633	1640	rVB3	370905	536773	6.63%	0.734%

KF 4/9/14

W031214.M Wed Apr 09 10:32:38 2014 Page: 1

00207

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	11.138	1642	1647	1651	rBV	140066	155044	1.92%	0.212%
37	11.193	1651	1656	1661	rVB	191239	221312	2.73%	0.302%
38	11.260	1663	1667	1669	rBV	552847	616795	7.62%	0.843%
39	11.284	1669	1671	1676	rVB	432435	410864	5.08%	0.561%
40	11.339	1676	1680	1682	rBV	527756	579879	7.16%	0.792%
41	11.364	1682	1684	1689	rVV	155468	180821	2.23%	0.247%
42	11.412	1689	1692	1699	rVB	1111871	1349857	16.68%	1.845%
43	11.546	1709	1714	1719	rVB2	266557	321676	3.97%	0.440%
44	11.613	1719	1725	1728	rBV	518882	556601	6.88%	0.761%
45	11.650	1728	1731	1735	rVB	634071	642397	7.94%	0.878%
46	11.827	1757	1760	1763	rVB	278921	265698	3.28%	0.363%
47	11.924	1772	1776	1780	rVB2	932877	964779	11.92%	1.318%
48	12.028	1790	1793	1800	rVB	91863	105515	1.30%	0.144%
49	12.302	1834	1838	1842	rVB	628292	573252	7.08%	0.783%

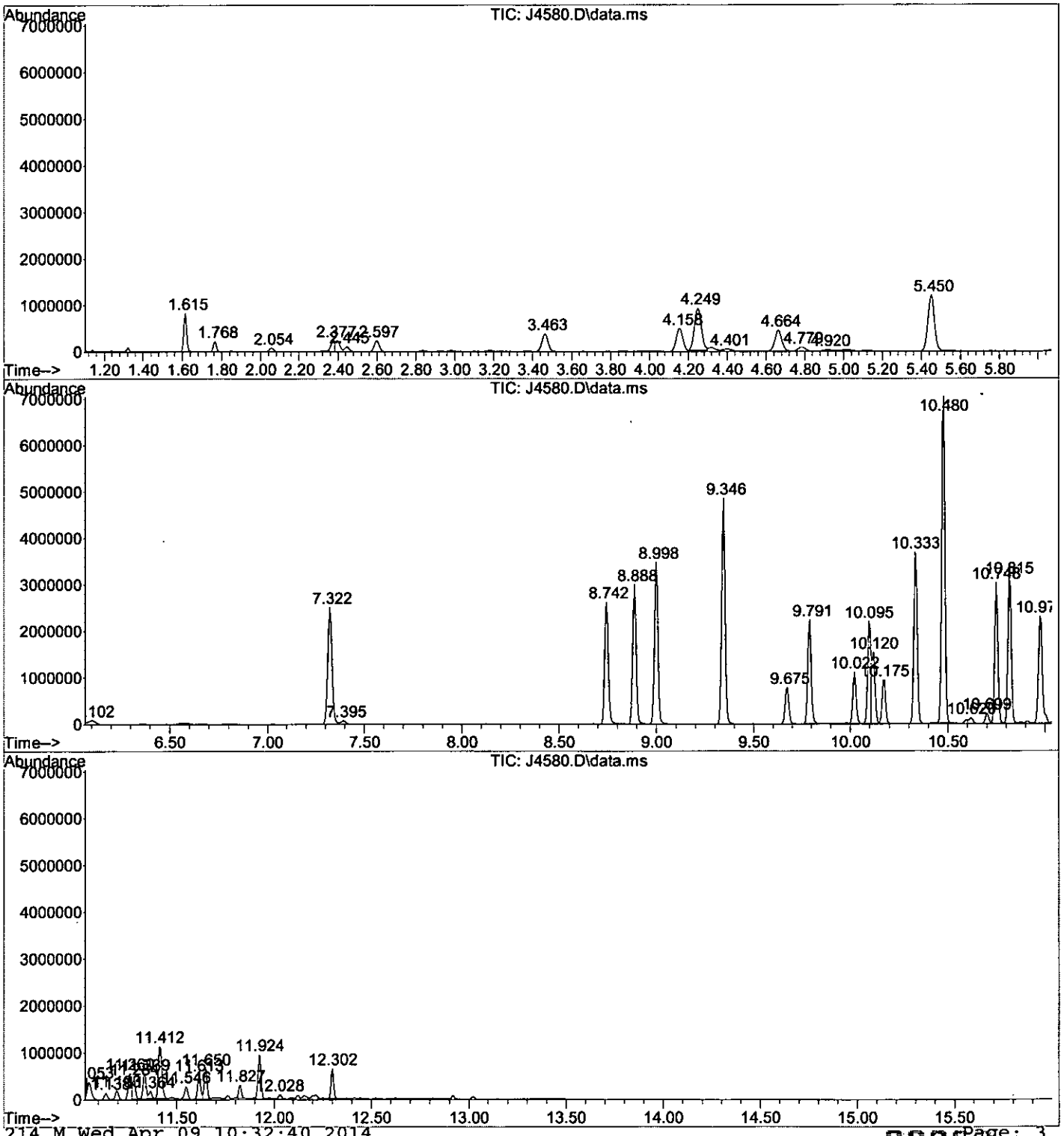
Sum of corrected areas: 73179376

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 10:32:40 2014 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

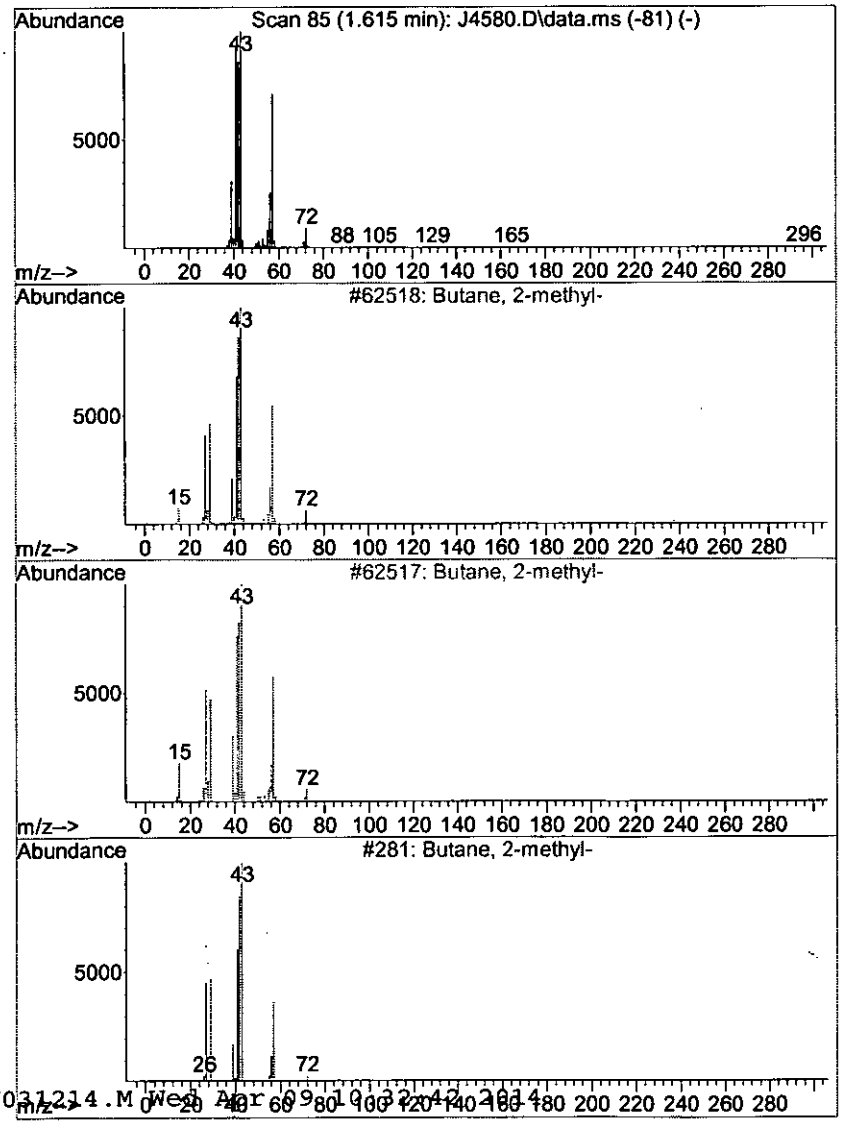
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

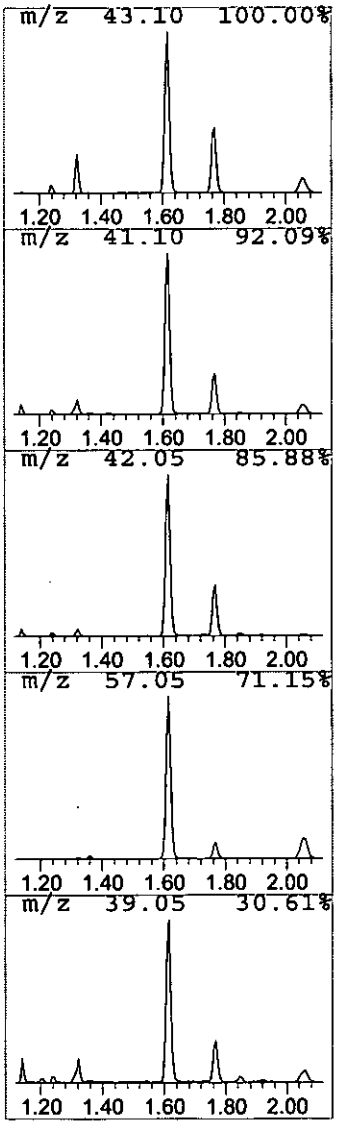
****

Peak Number 1 Butane, 2-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.615	18.64 ppb	822685	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	91
2	Butane, 2-methyl-	72	C5H12	000078-78-4	86
3	Butane, 2-methyl-	72	C5H12	000078-78-4	80
4	3-Buten-1-ol	72	C4H8O	000627-27-0	47
5	Pentane	72	C5H12	000109-66-0	45





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On    :  8 Apr 2014    7:04 pm
Operator  : K.Ruest
Sample    : R1402225-012|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

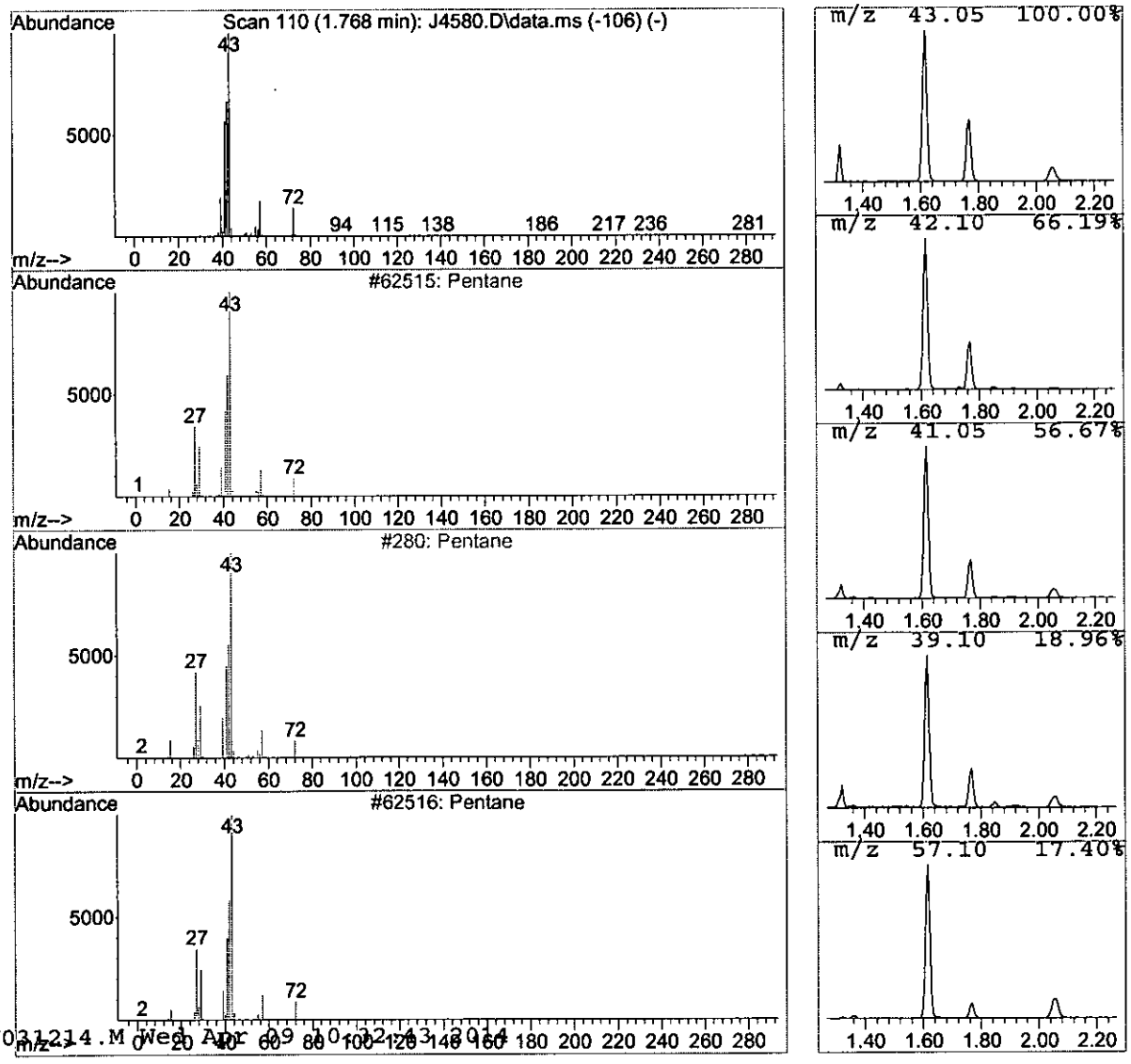
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

****

Peak Number 2 Pentane Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.768	5.34 ppb	235661	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	90
2	Pentane	72	C5H12	000109-66-0	86
3	Pentane	72	C5H12	000109-66-0	86
4	Oxirane, ethyl-	72	C4H8O	000106-88-7	42
5	Oxirane, ethyl-	72	C4H8O	000106-88-7	42



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

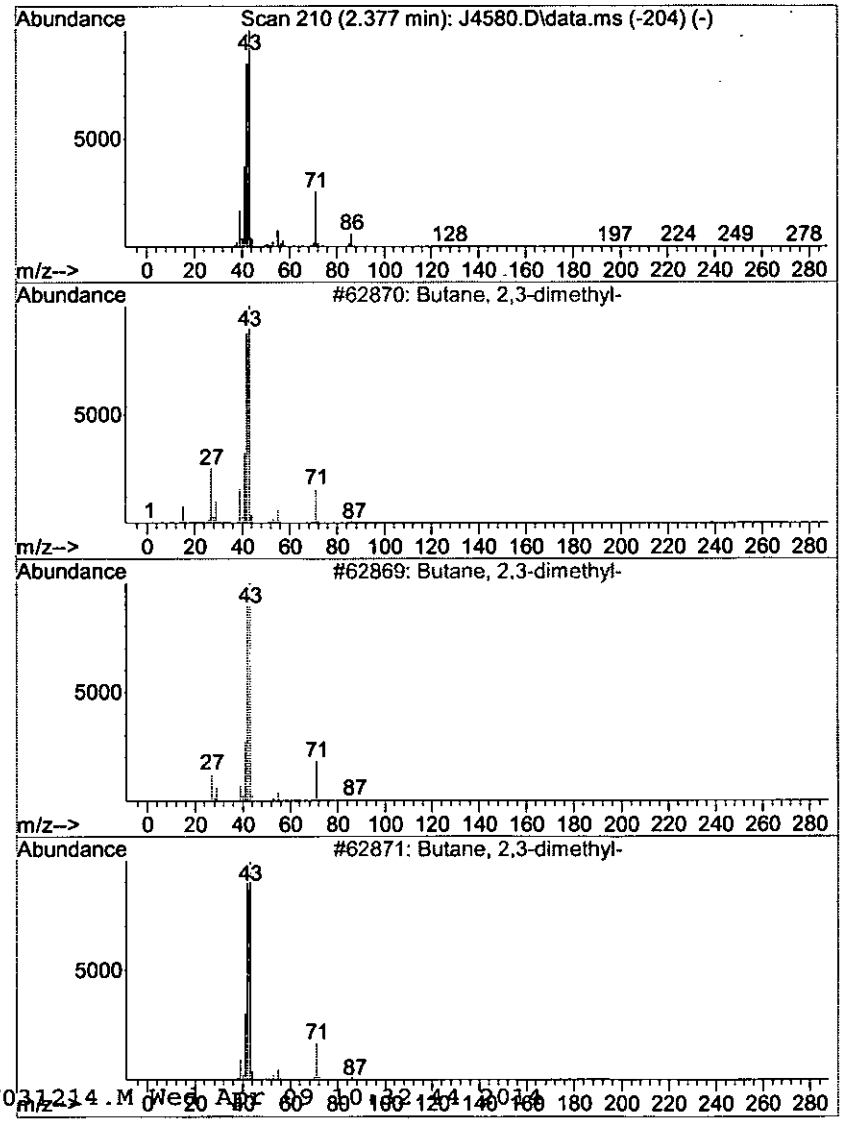
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

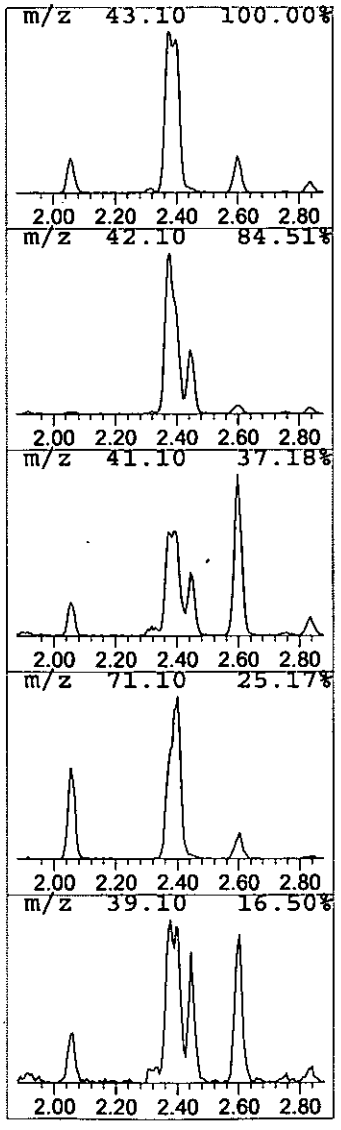
****

Peak Number 3 Butane, 2,3-dimethyl- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.377	7.71 ppb	340527	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	80
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	46
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	40





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On    :  8 Apr 2014    7:04 pm
Operator  : K.Ruest
Sample    : R1402225-012|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

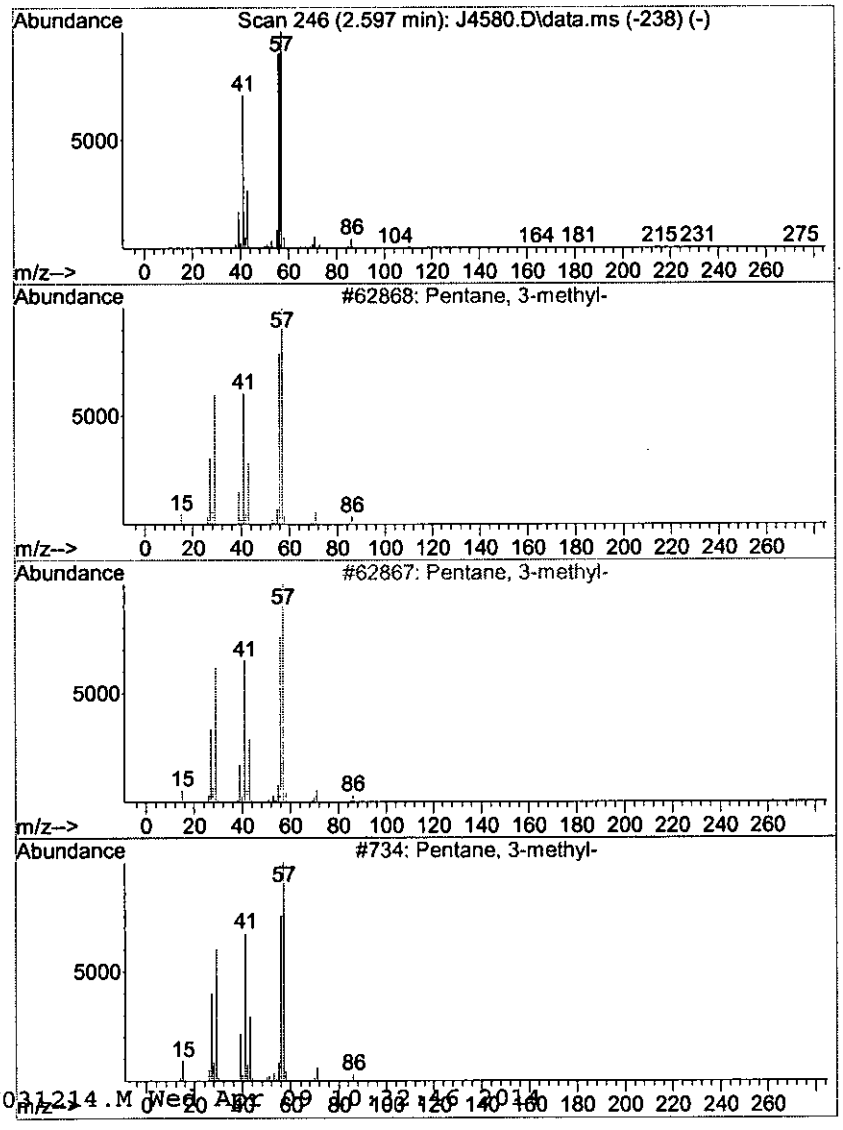
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

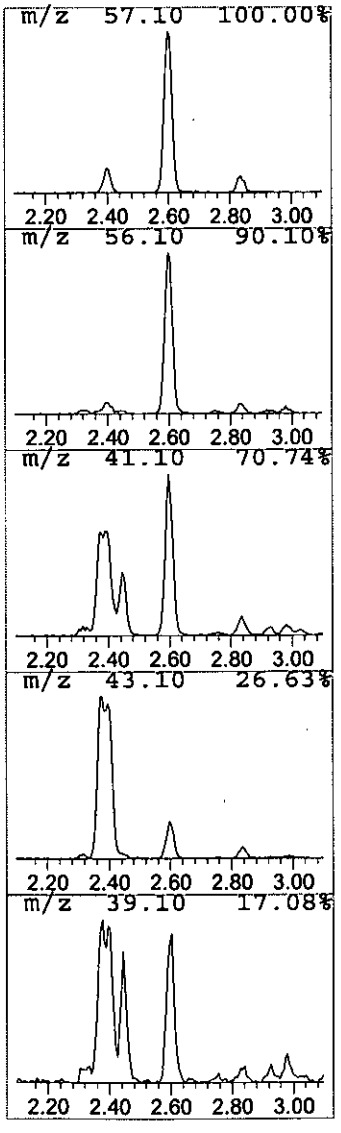
****

Peak Number 4 Pentane, 3-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.597	9.37 ppb	413502	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
4	Oxirane, (1-methylethyl)-	86	C5H10O	001438-14-8	45
5	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	40





W031214.M Wed Apr 09 10:12:46 2014 0021 Page: 7

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

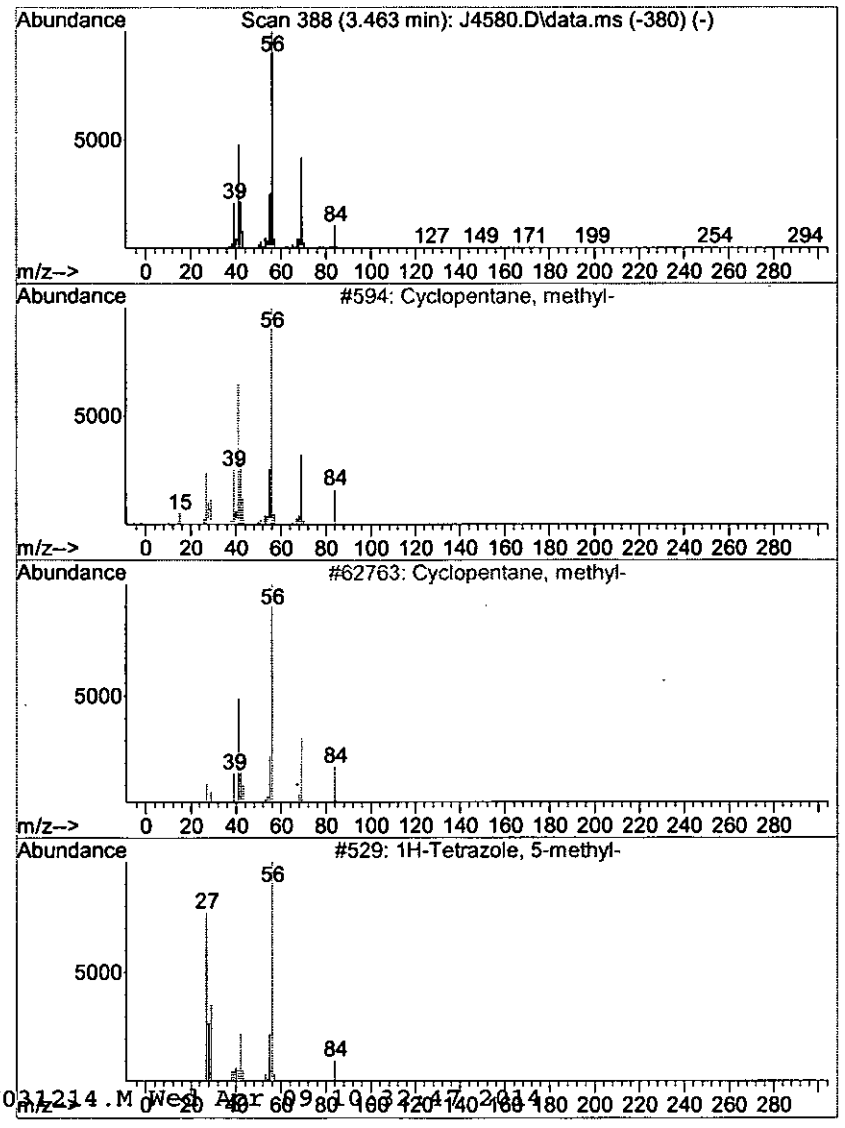
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

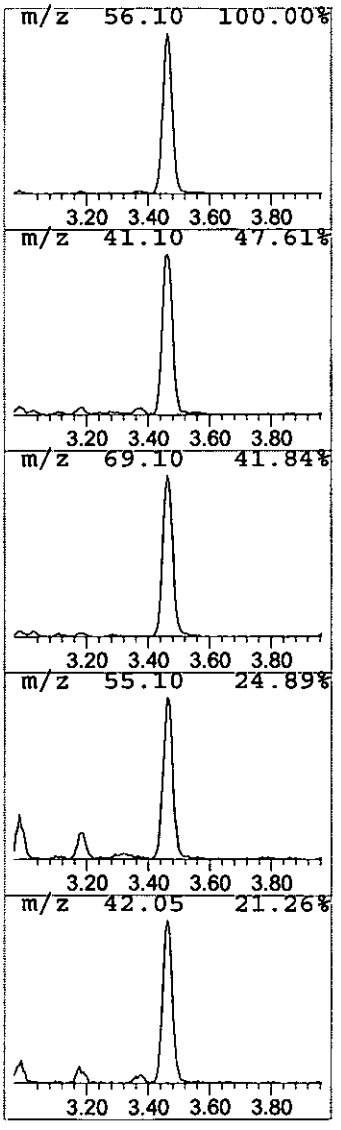
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Cyclopentane, methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.463	19.13 ppb	844427	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	86
3	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	72
4	Cyclobutane, ethyl-	84	C6H12	004806-61-5	64
5	Cyclohexane	84	C6H12	000110-82-7	50





Library Search Compound Report

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Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

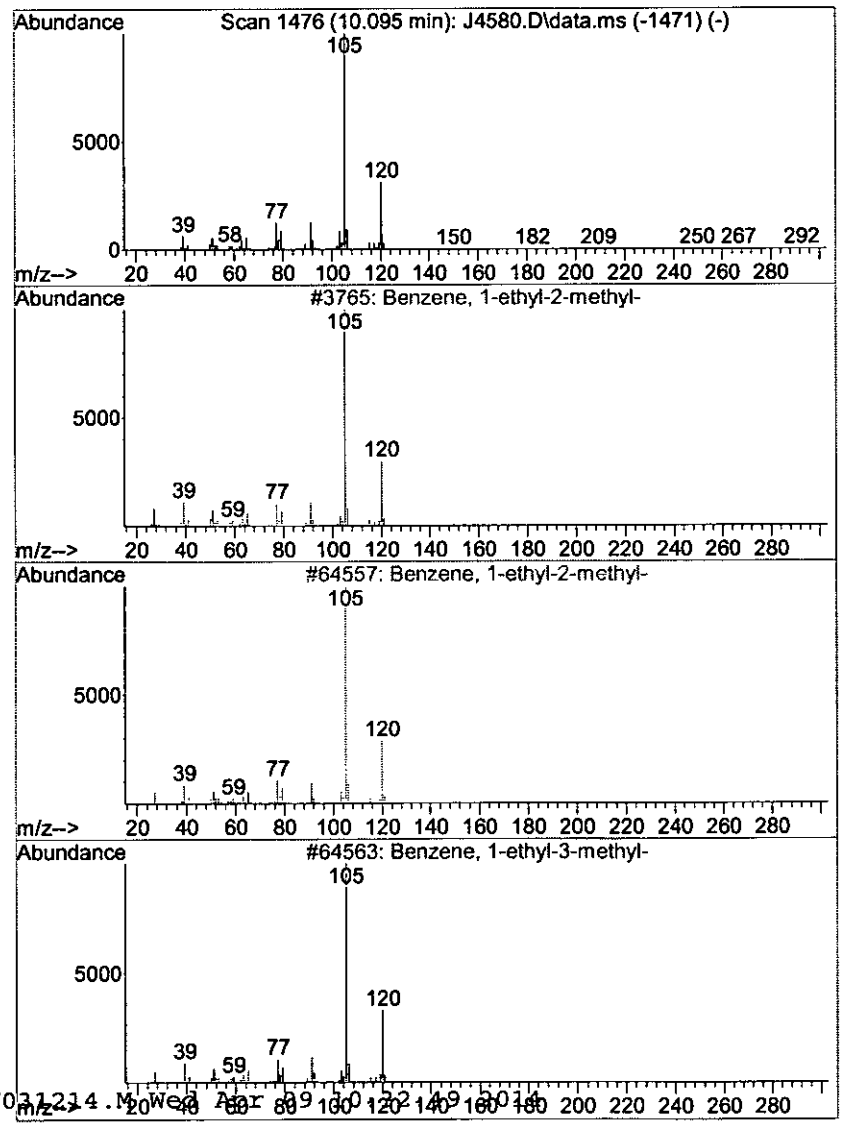
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

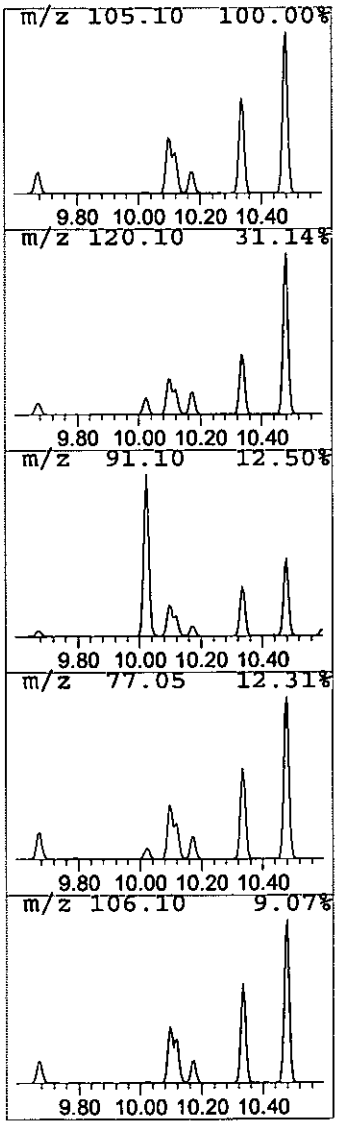
****

Peak Number 6 Benzene, 1-ethyl-2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.095	38.87 ppb	2703010	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
5	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94





Library Search Compound Report

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Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

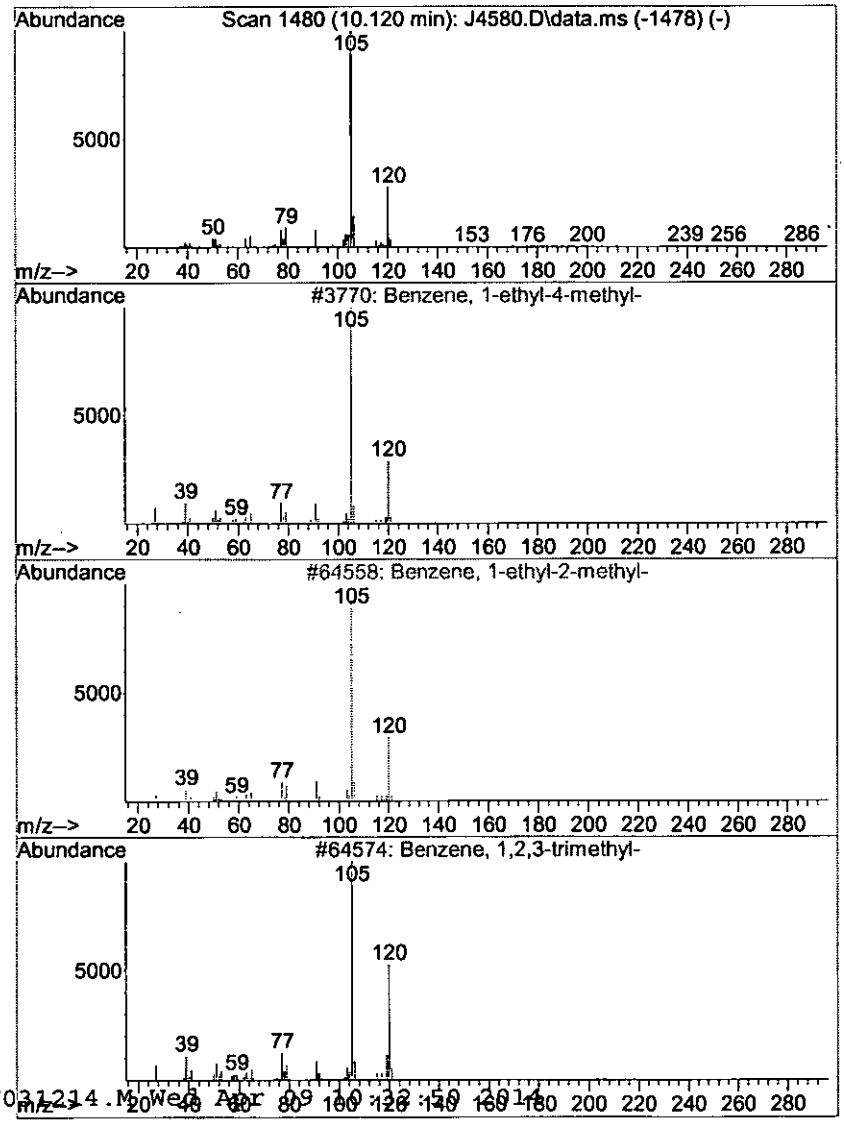
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

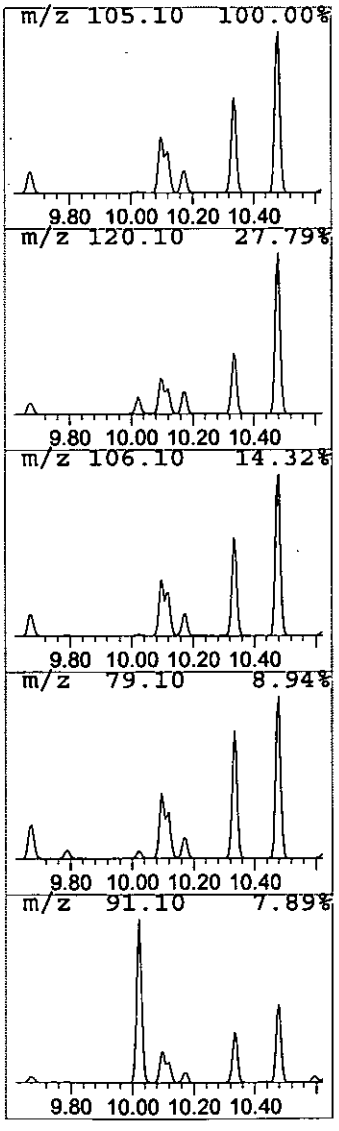
****

Peak Number 7 Benzene, 1-ethyl-4-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.120	22.52 ppb	1566300	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	90
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	90
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	90
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	87
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	87





W031214.M Wed Apr 09 10:12:50 2014 Page: 10

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1402225-012|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

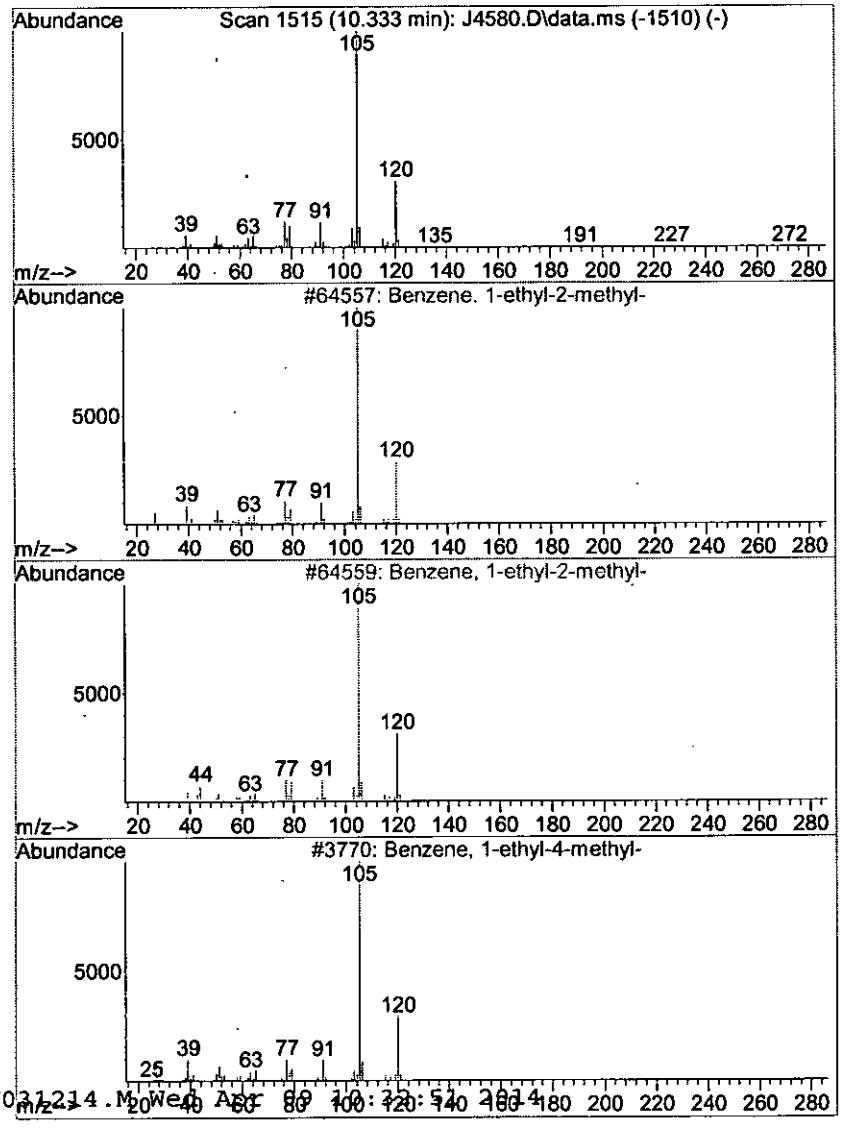
**********
Peak Number  8  Benzene, 1-ethyl-2-methyl-      Concentration Rank  1
```

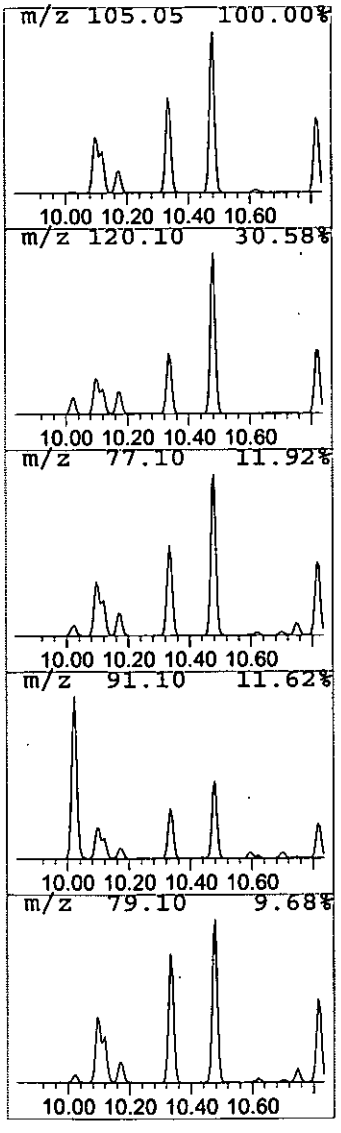
R.T.	EstConc	Area	Relative to ISTD	R.T.
10.333	61.80 ppb	4297190	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	91

already called unknown KP 4/11/13

(all already called)





W031214.M Wed Apr 09 10:25:51 2014 Page: 11

Library Search Compound Report

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Data File : J4580.D
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Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

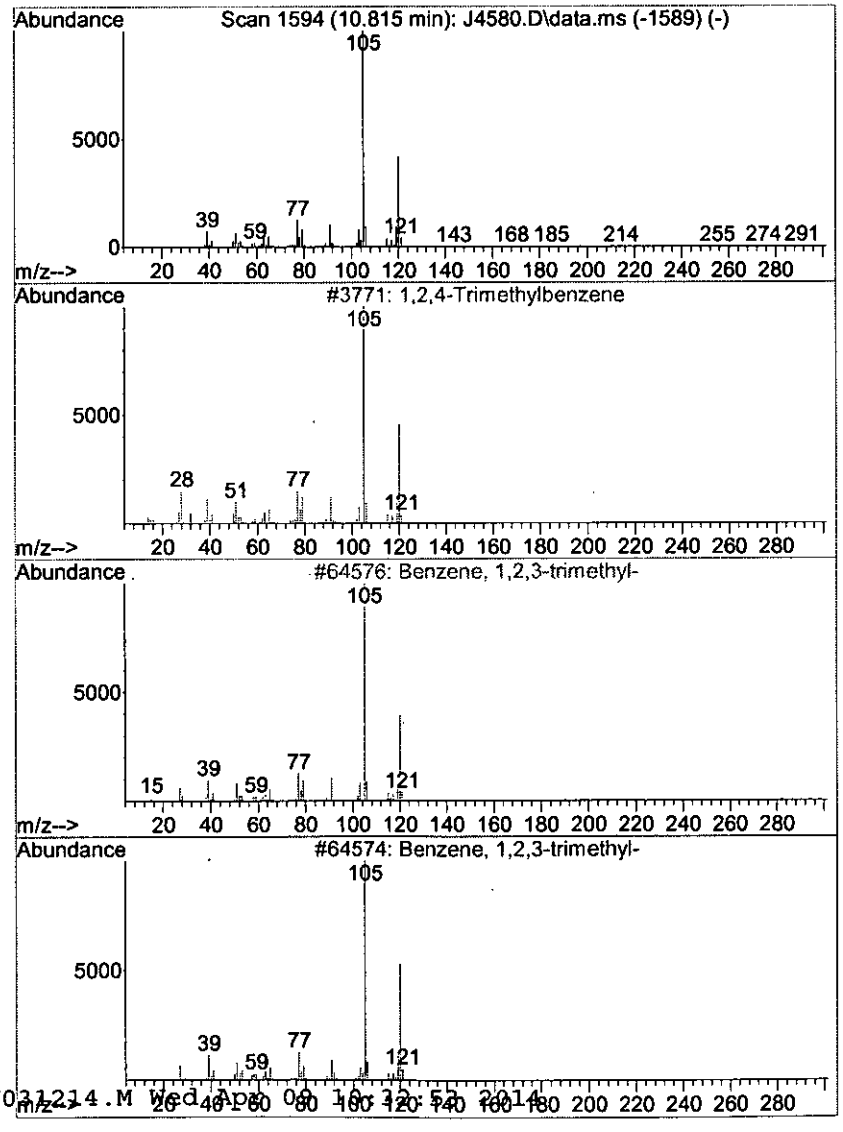
****

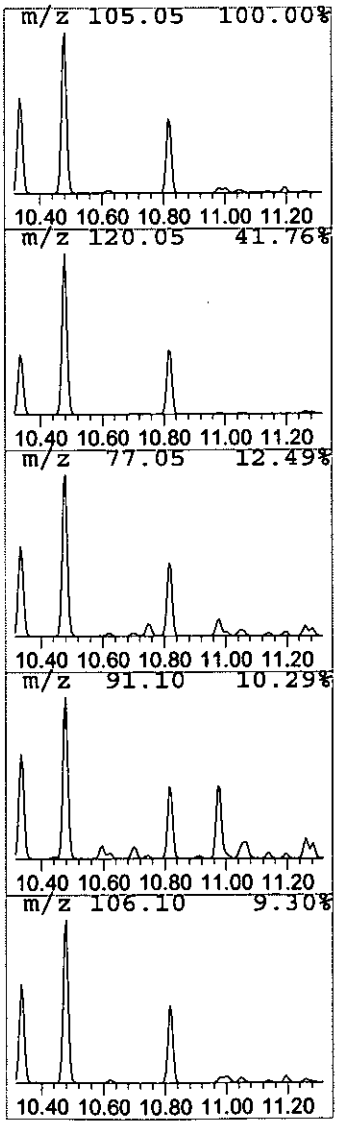
Peak Number 9 1,2,4-Trimethylbenzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.815	53.54 ppb	3723100	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	97
(2)	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93

known RT





W031214.M Wed Apr 09 10:32:52 2014 0012 Page: 12

Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1402225-012|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

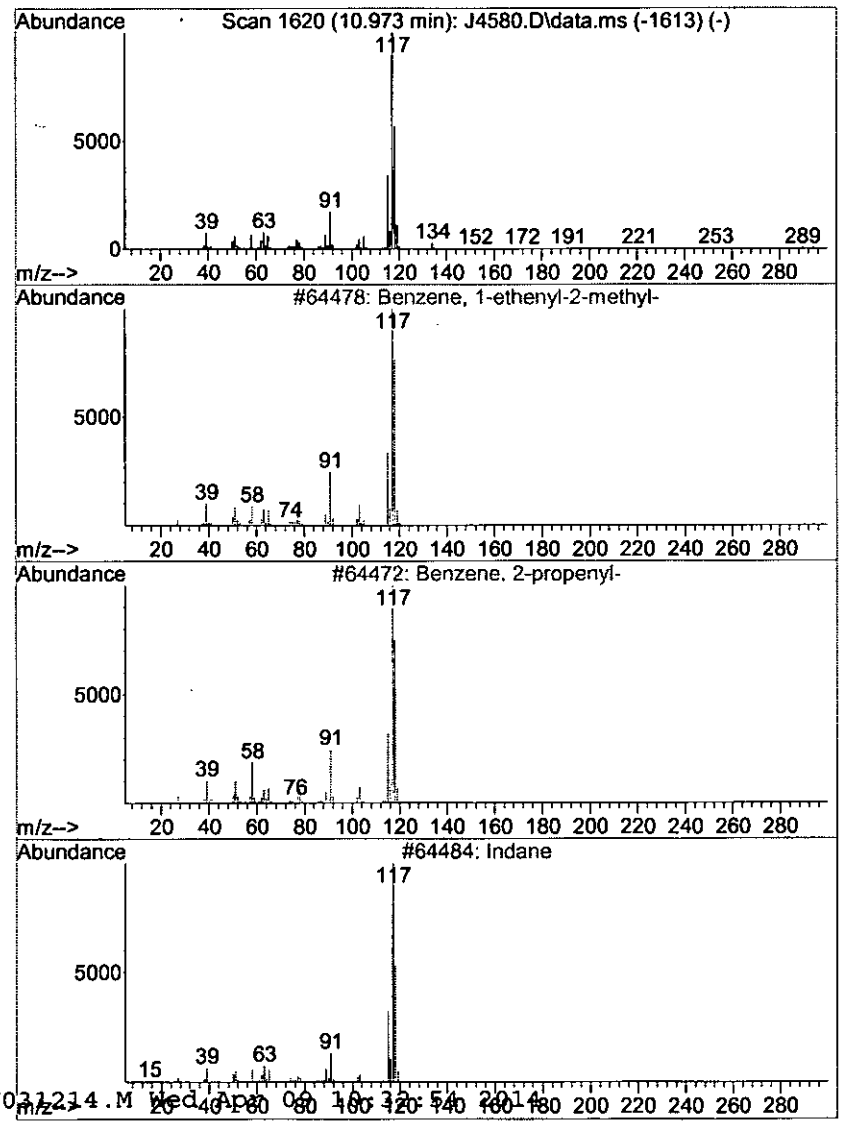
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

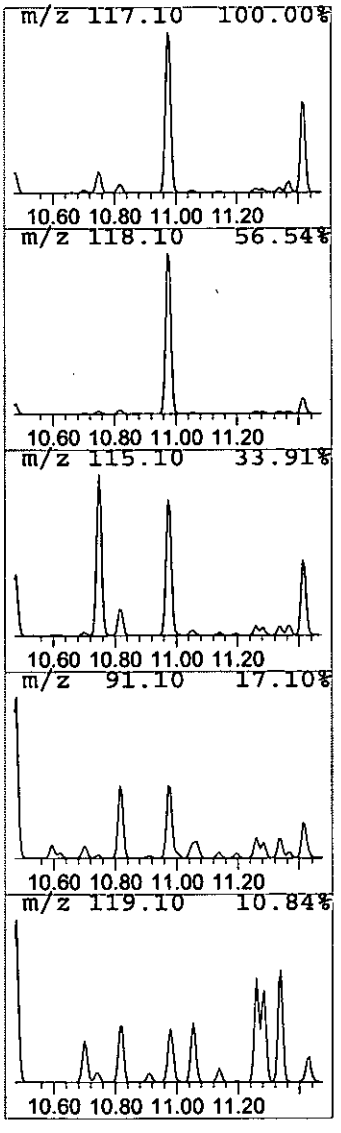
****

Peak Number 10 Benzene, 1-ethenyl-2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.973	43.88 ppb	3051200	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	89
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	87
3	Indane	118	C9H10	000496-11-7	81
4	Benzene, cyclopropyl-	118	C9H10	000873-49-4	76
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	72





Library Search Compound Report

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Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

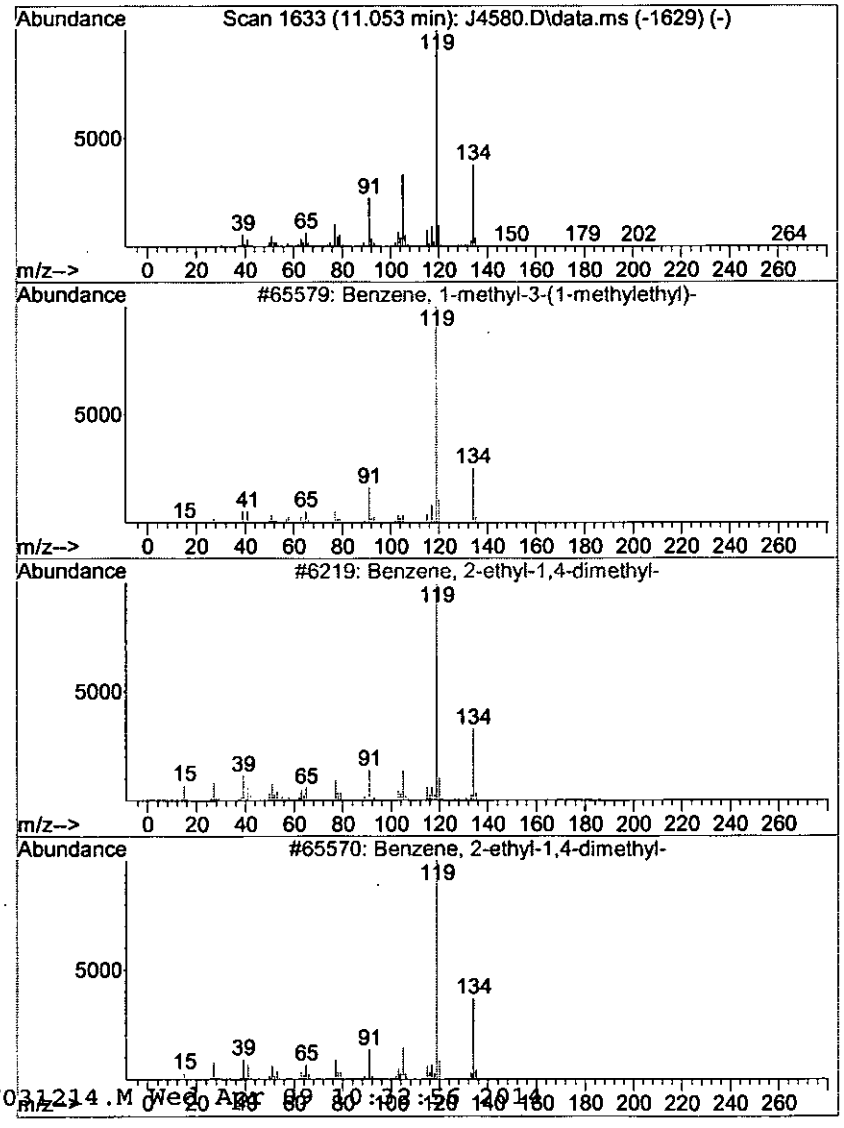
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

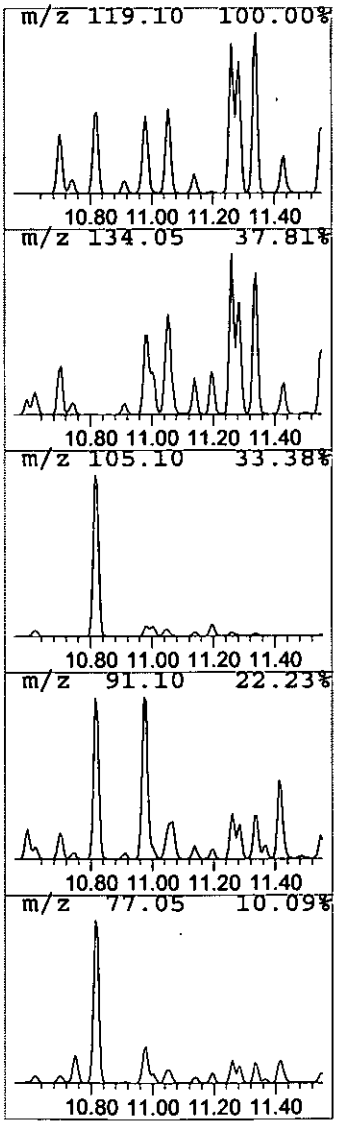
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 11 Benzene, 1-methyl-3-(1-meth... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.053	7.72 ppb	536773	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	90
3	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	90
4	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	90
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	90





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1402225-012|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 11   Sample Multiplier: 1

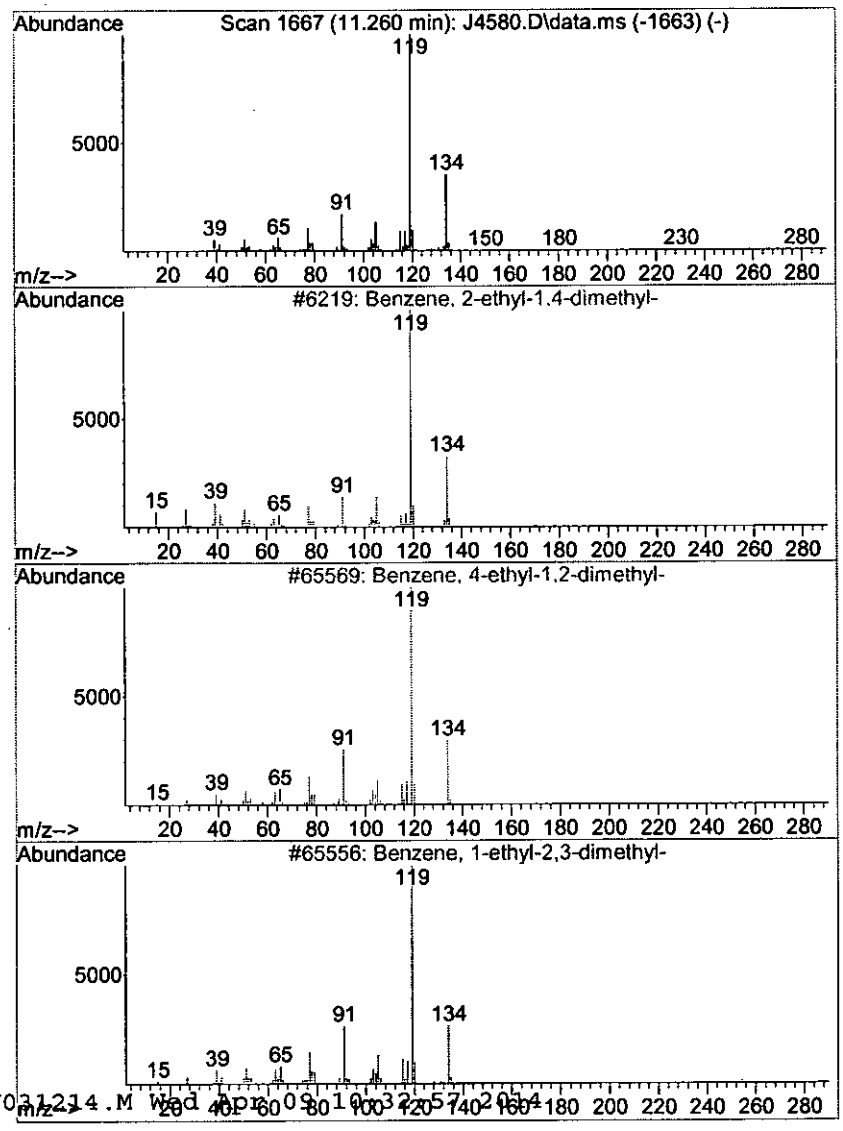
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

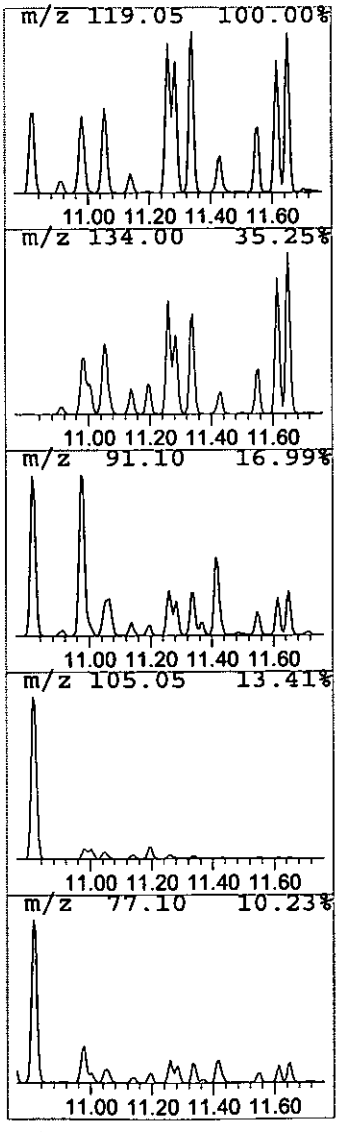
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number 12  Benzene, 2-ethyl-1,4-dimethyl-  Concentration Rank 12
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.260	8.87 ppb	616795	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
3	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	94





Library Search Compound Report

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Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

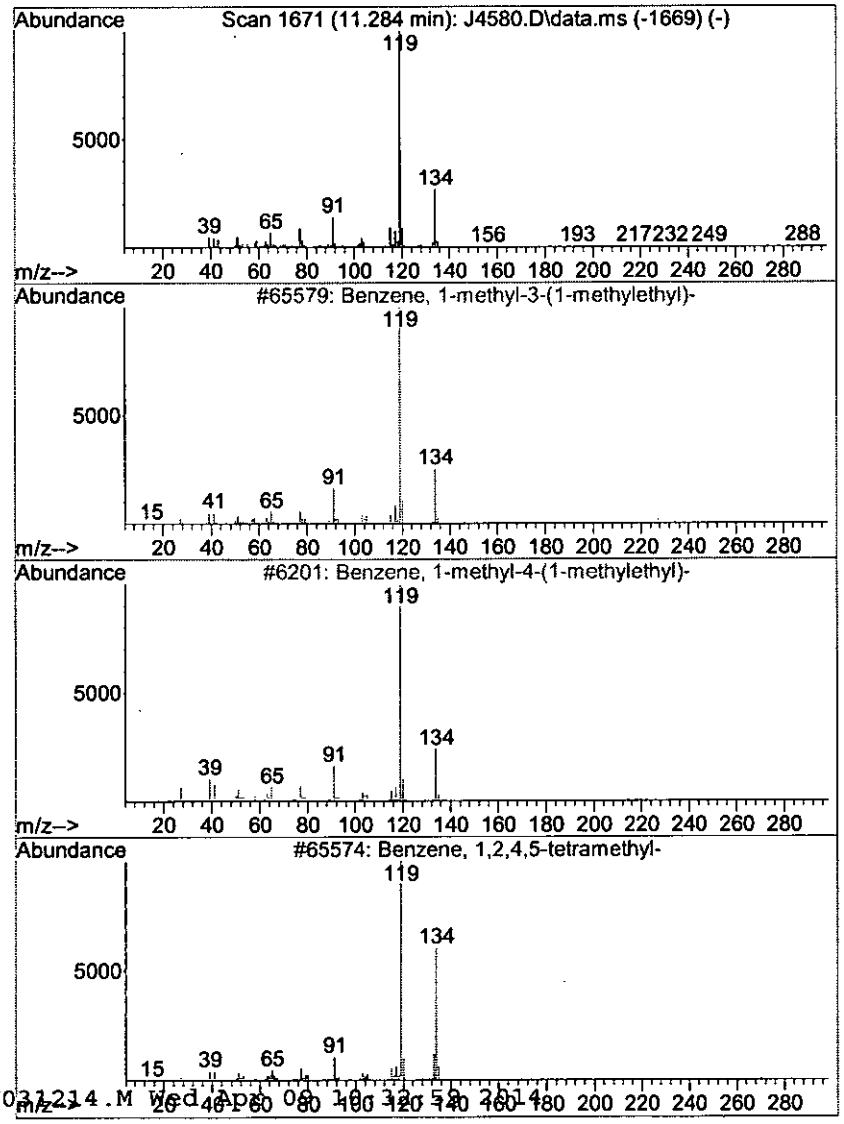
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

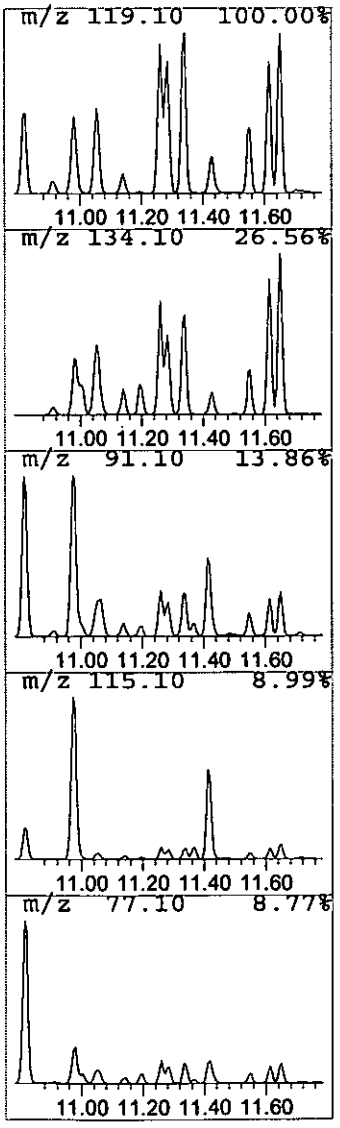
****
Peak Number 13 Benzene, 1-methyl-3-(1-meth... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.284	5.91 ppb	410864	1,4-Dichlorobenzene-d4	10.748

LW 04/11/14 CE

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
3	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	91
4	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	91
5	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91





W031214.M Wed Apr 09 10:13:58 2014 00237 Page: 16

Library Search Compound Report

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Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

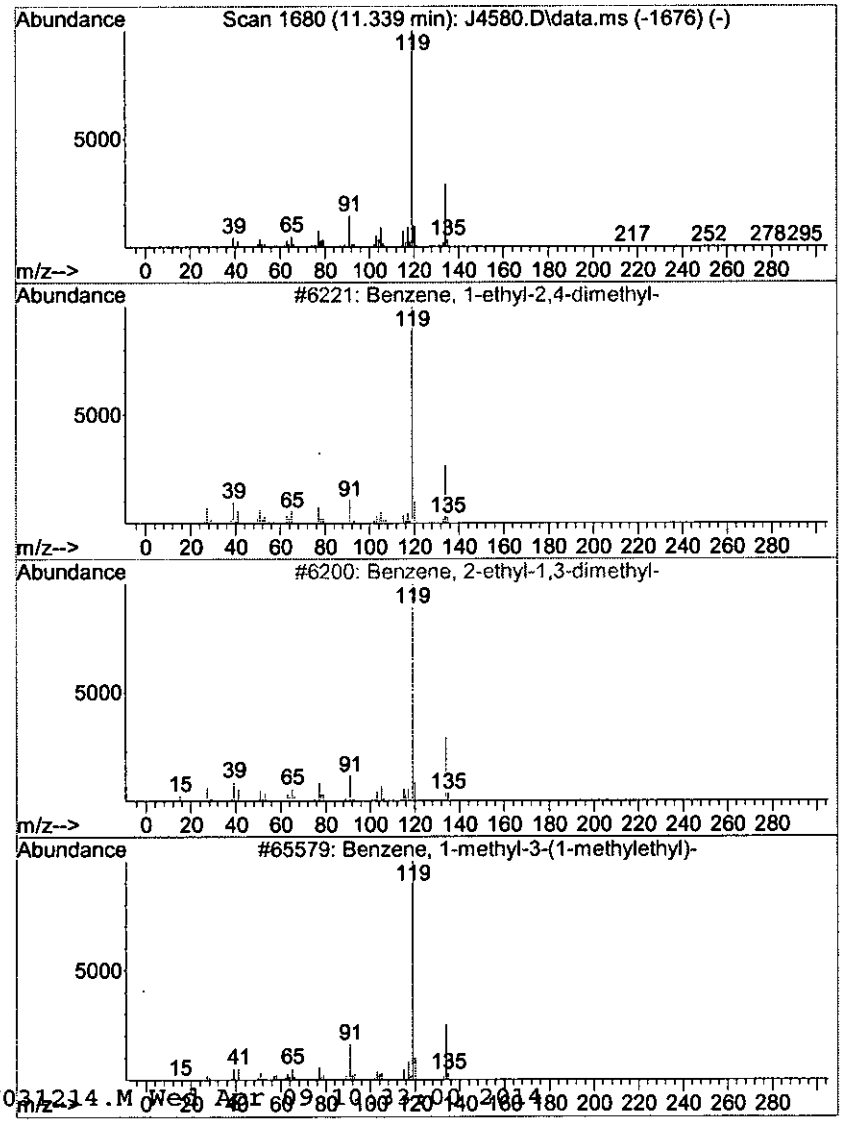
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

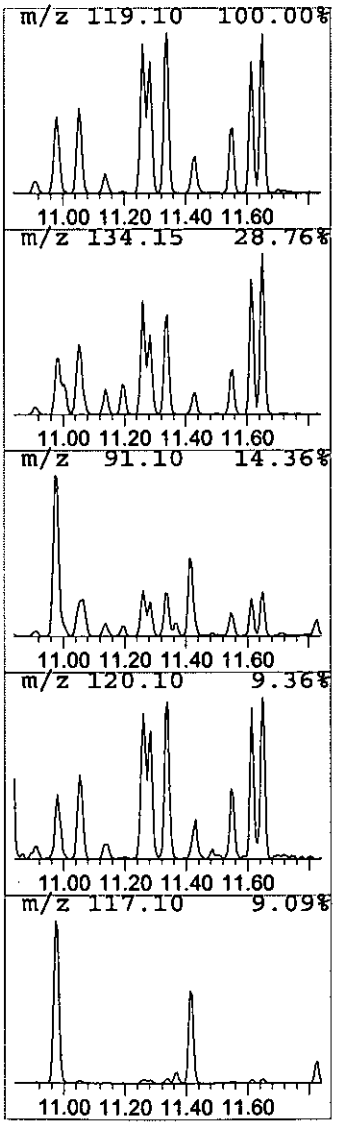
****

Peak Number 14 Benzene, 1-ethyl-2,4-dimethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.339	8.34 ppb	579879	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	95
2	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	95
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	95
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95





Library Search Compound Report

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Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

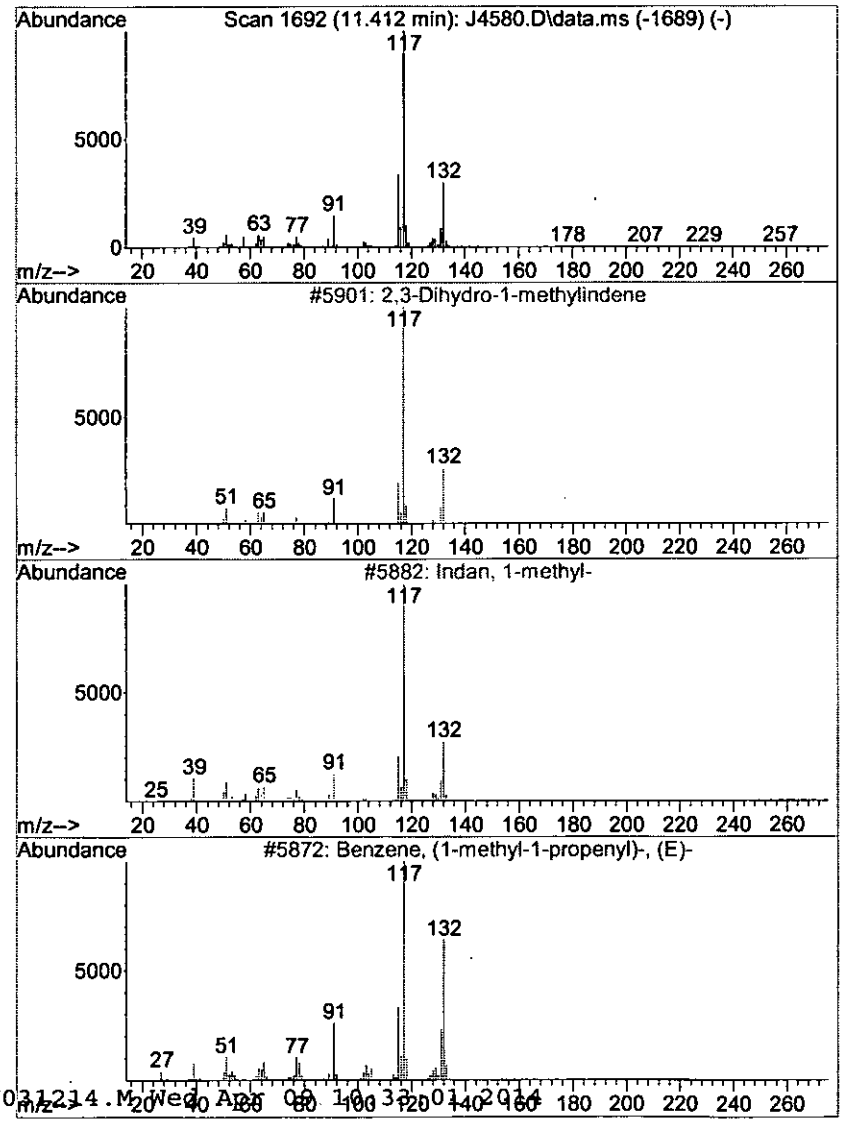
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

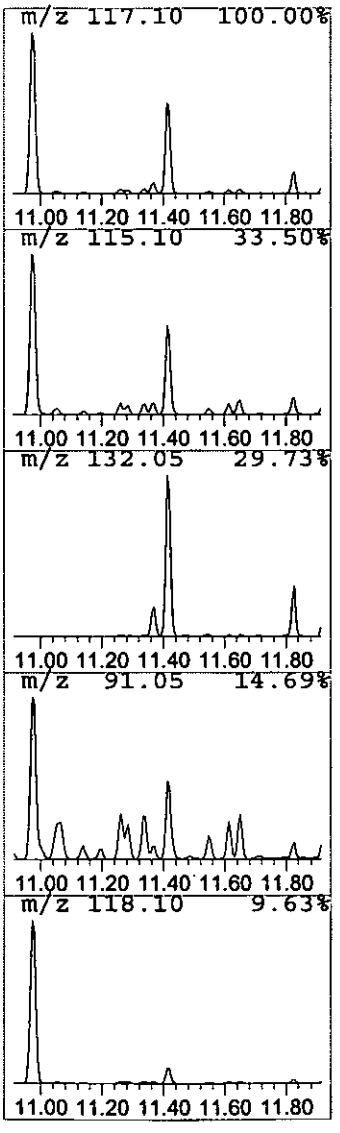
****

Peak Number 15 2,3-Dihydro-1-methylindene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.412	19.41 ppb	1349860	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	90
2	Indan, 1-methyl-	132	C10H12	000767-58-8	87
3	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	83
4	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	80
5	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	78





W031214.M Wed Apr 09 10:33:01 2014 Page: 18

00224

Library Search Compound Report

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Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

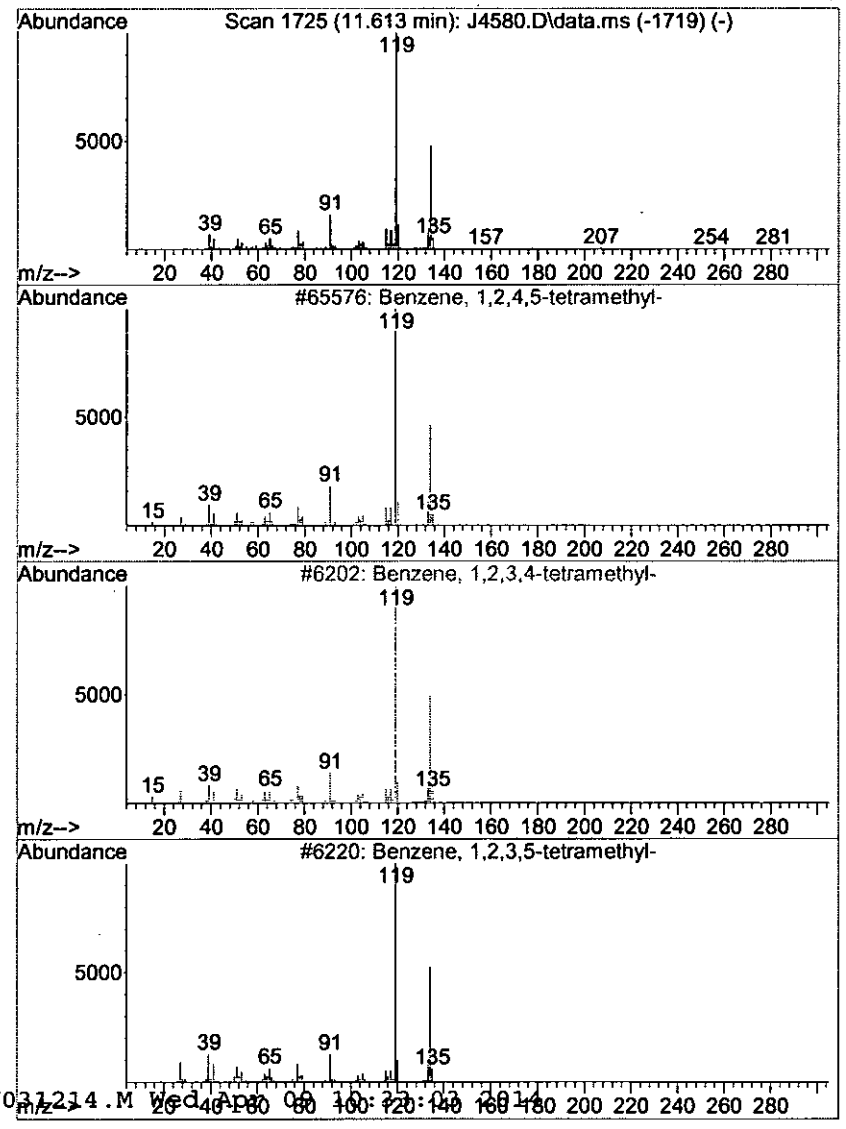
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

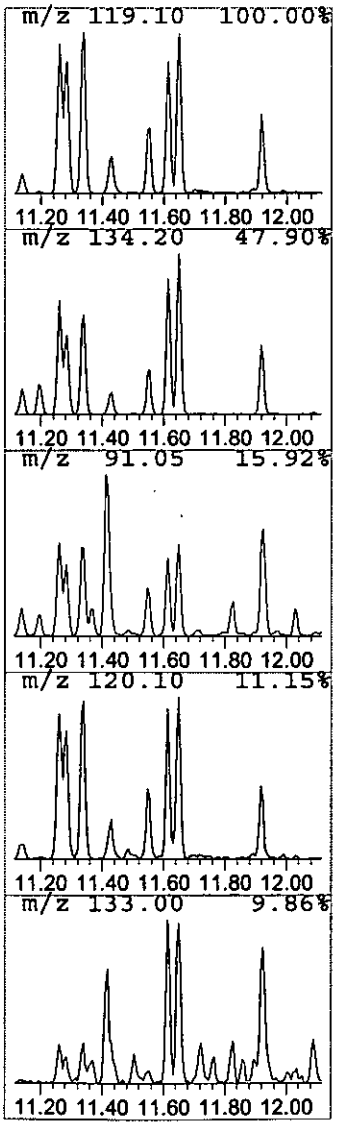
****

Peak Number 16 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.614	8.00 ppb	556601	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On : 8 Apr 2014 7:04 pm
Operator : K.Ruest
Sample : R1402225-012|1.0
Misc : PARSONS 9913 T4
ALS Vial : 11 Sample Multiplier: 1

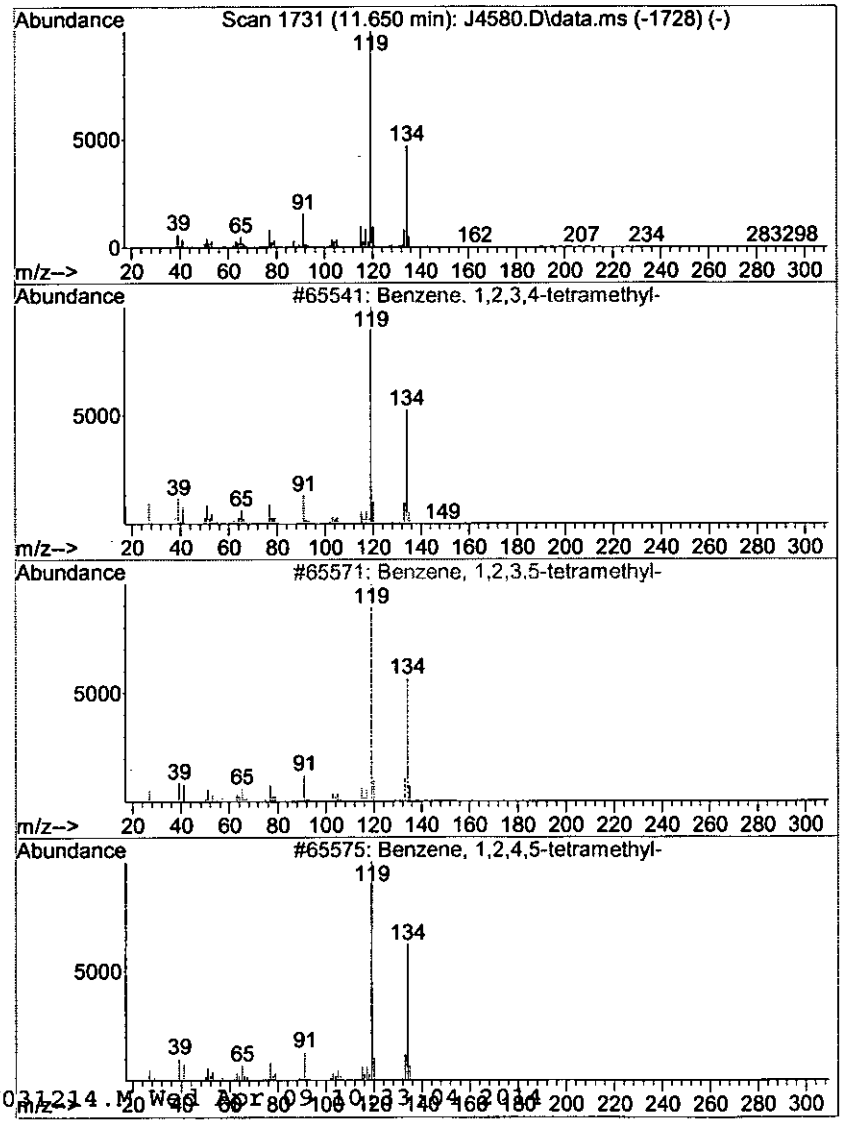
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

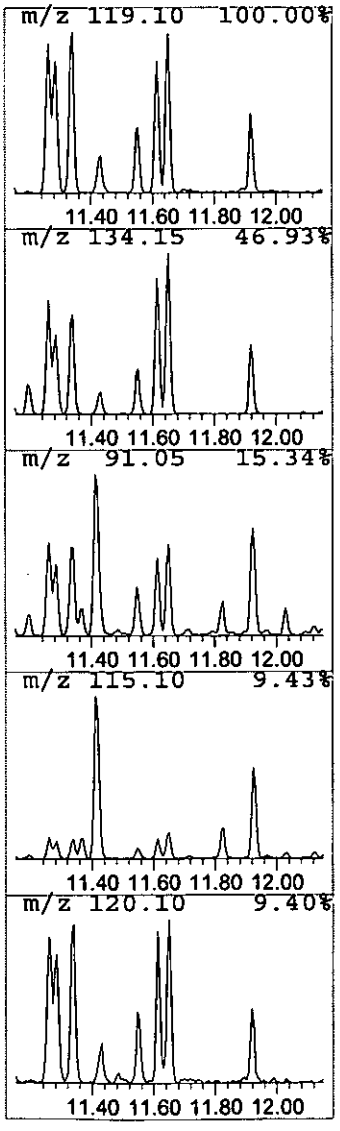
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 17 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	9.24 ppb	642397	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94
3	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94
5	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94





W031214.M Wed Apr 09 10:33:04 2014 00276 Page: 20

Library Search Compound Report

```
Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4580.D
Acq On    :  8 Apr 2014    7:04 pm
Operator  : K.Ruest
Sample    : R1402225-012|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

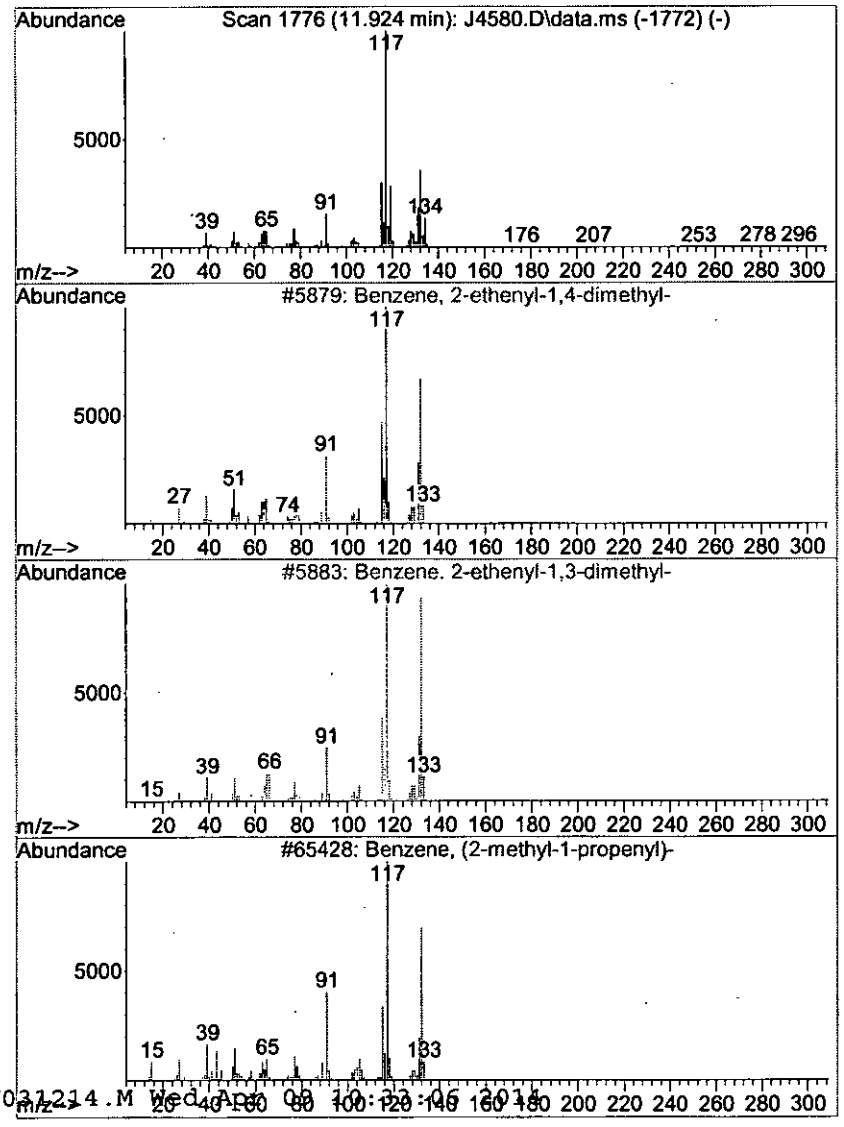
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

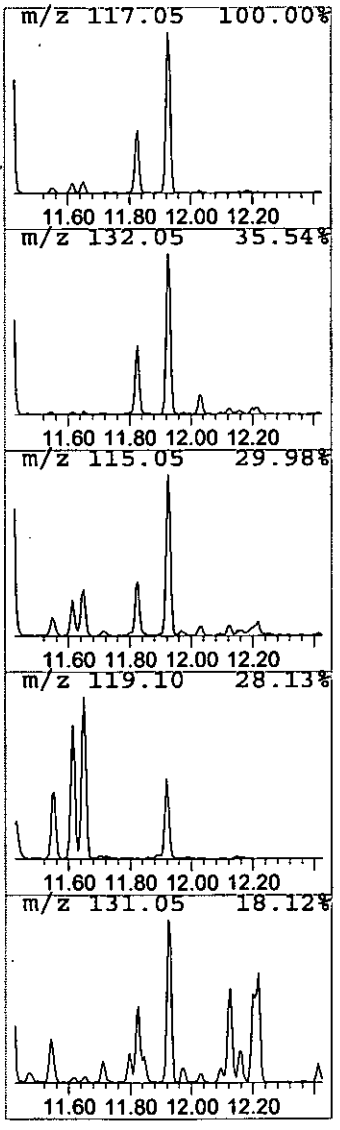
****

Peak Number 18 Benzene, 2-ethenyl-1,4-dime... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.924	13.87 ppb	964779	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	95
2	Benzene, 2-ethenyl-1,3-dimethyl-	132	C10H12	002039-90-9	93
3	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	83
4	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	83
5	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	81





W031214.M Wed Apr 09 10:32:06 2014 Page: 21

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1035
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 16:22
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1402225-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4575.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1035
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 16:22
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1402225-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4575.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/8/14 16:22	
Dibromofluoromethane	99	85-115	4/8/14 16:22	
Toluene-d8	97	85-120	4/8/14 16:22	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1622

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1402225-013	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-~~003~~ 013 | 1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4575.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 4:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 16:37:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	845406	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1256309	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1151917	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	561265	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	359874	49.48	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.96%			
48) surr1,1,2-dichloroetha...	4.658	65	422839	51.04	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.08%			
65) SURR3,Toluene-d8	7.322	98	1488524	48.71	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.42%			
70) SURR2,BFB	9.791 ~~9.850~~	95	~~355~~ 5001 3	0 ~~.03~~	ppb	48.26 0.07
Spiked Amount 50.000	Range 85 - 122		Recovery =	~~0.06~~%	#	96.52 %
Target Compounds						Qvalue
5) Bromomethane	1.518	94	1320	0.27	ppb	# 74
15) Acetone	2.048	43	1284	0.77	ppb	78
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~2208~~	~~0.52~~	~~ppb~~	~~# 1~~
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1591~~	~~3.53~~	~~ppb~~	~~# 14~~
119) 2,4,5-Trichlorotolene	12.912	159	1066	0.24	ppb	97
120) 2,3,6-Trichlorotoluene	12.912	159	1066	0.26	ppb	94

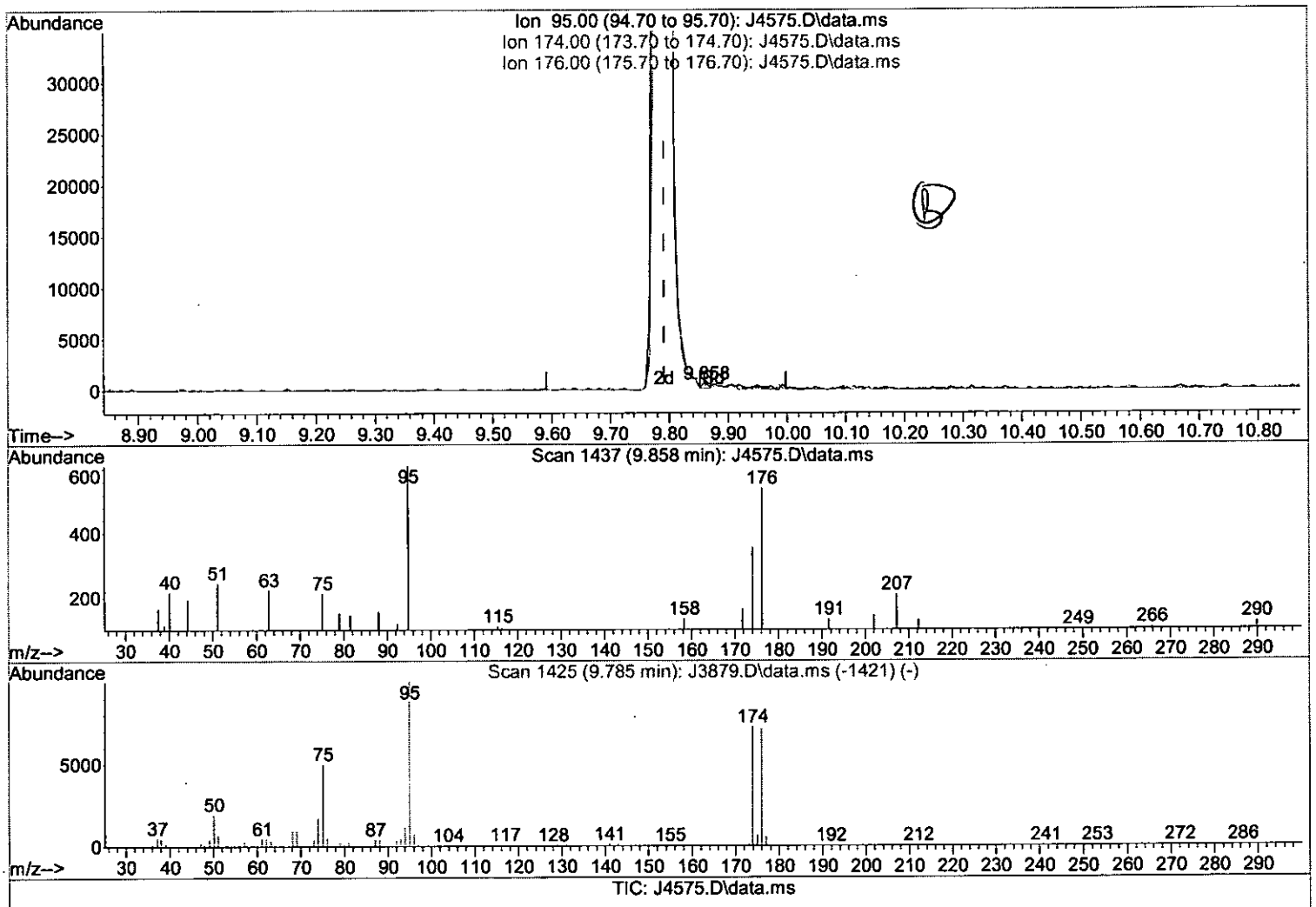
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/9/14

Quantitation Report (Qedit)

Sample : R1402225-013|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4575.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 4:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 16:37:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4575.D\data.ms

(70) SURR2,BFB (s)

9.858min (+0.067) 0.03 ppb

response 355

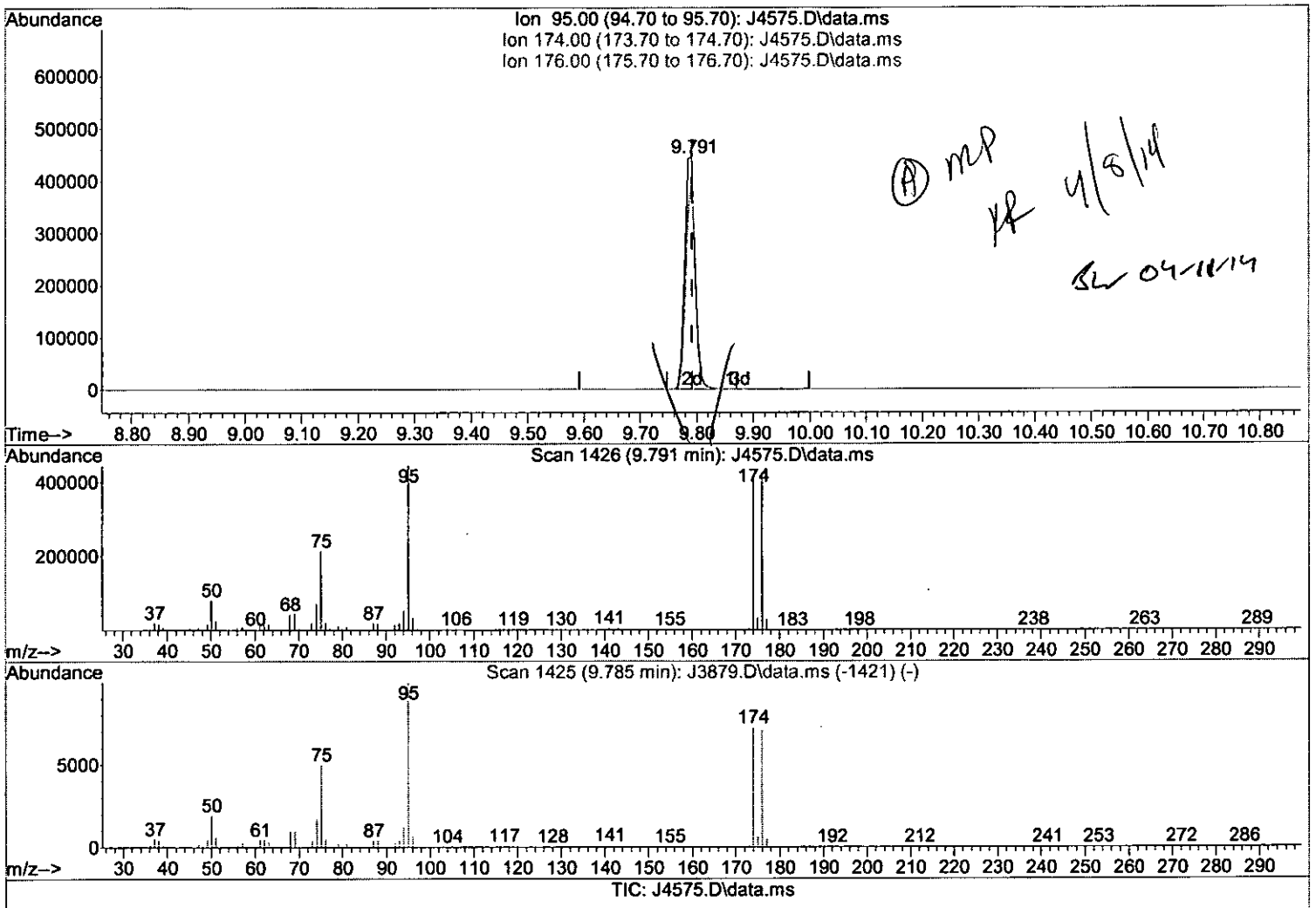
Ion	Exp%	Act%
95.00	100	100
174.00	72.40	58.13
176.00	70.70	88.34
0.00	0.00	0.00

W031214.M Tue Apr 08 16:43:51 2014 Page: 1

Quantitation Report (Qedit)

Sample : R1402225-013|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4575.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 4:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 16:37:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4575.D\data.ms

(70) SURR2,BFB (s)

9.791min (+0.000) 48.26 ppb m

response 550213

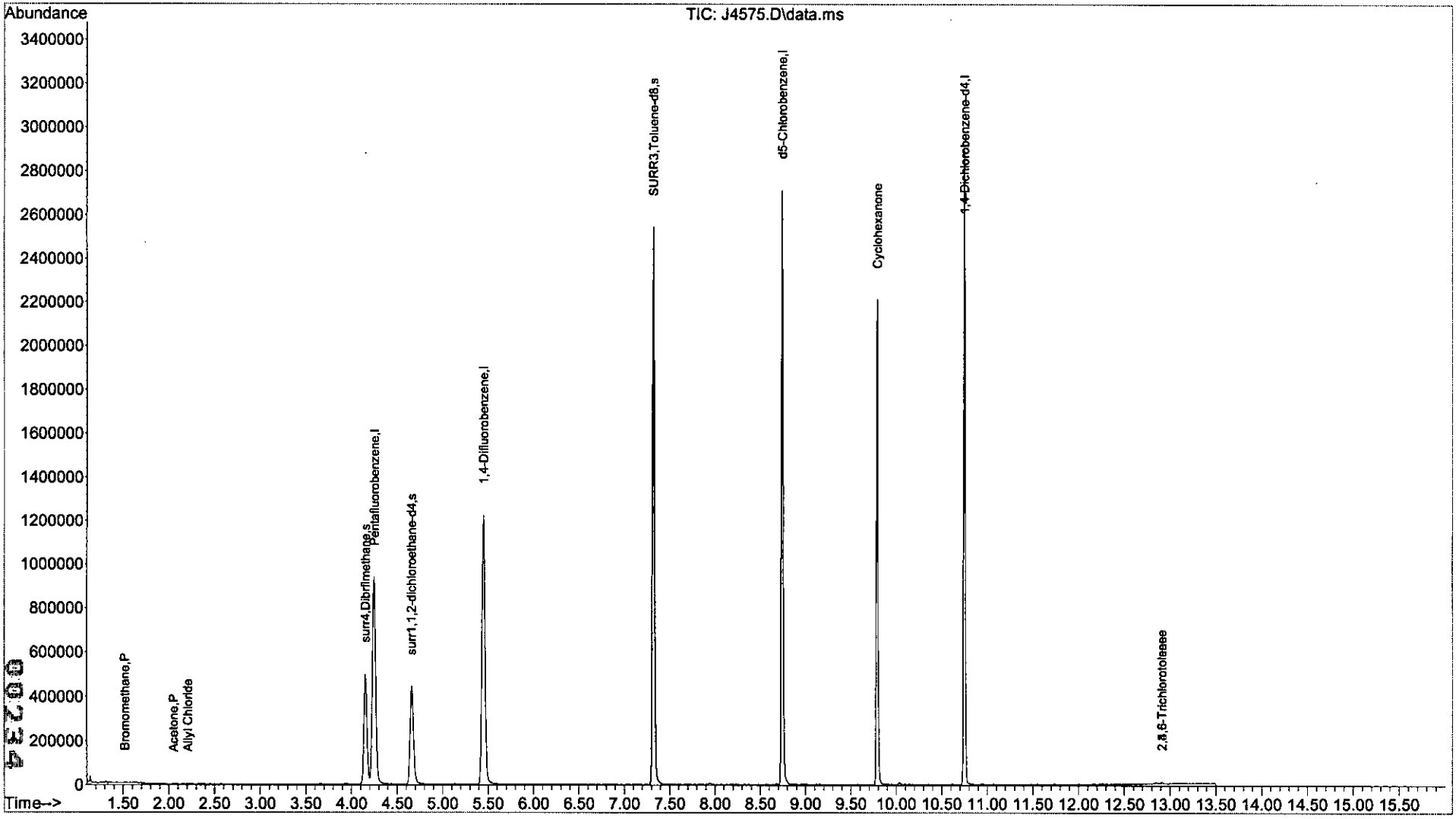
Ion	Exp%	Act%
95.00	100	100
174.00	72.40	93.00#
176.00	70.70	92.25#
0.00	0.00	0.00

W031214.M Tue Apr 08 16:44:02 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1402225-003|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4575.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 4:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 16:37:40 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Apr 08 16:37:46 2014 Page: 2

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4575.D
Acq On : 8 Apr 2014 4:22 pm
Operator : K.Ruest
Sample : R1402225-013|1.0
Misc : PARSONS 9913 T4
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4575.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	497390	1174651	30.20%	5.623%
2	4.249	509	517	535	rVB	935050	2340623	60.17%	11.205%
3	4.664	574	585	596	rBV	444444	1152096	29.62%	5.515%
4	5.450	704	714	726	rBV	1221626	2836218	72.91%	13.578%
5	7.322	1014	1021	1038	rBV	2541379	3890036	100.00%	18.623%
6	8.742	1249	1254	1268	rBV	2709551	3443298	88.52%	16.484%
7	9.791	1421	1426	1439	rVB	2208541	2703530	69.50%	12.943%
8	10.748	1578	1583	1594	rBV	2893835	3348171	86.07%	16.029%

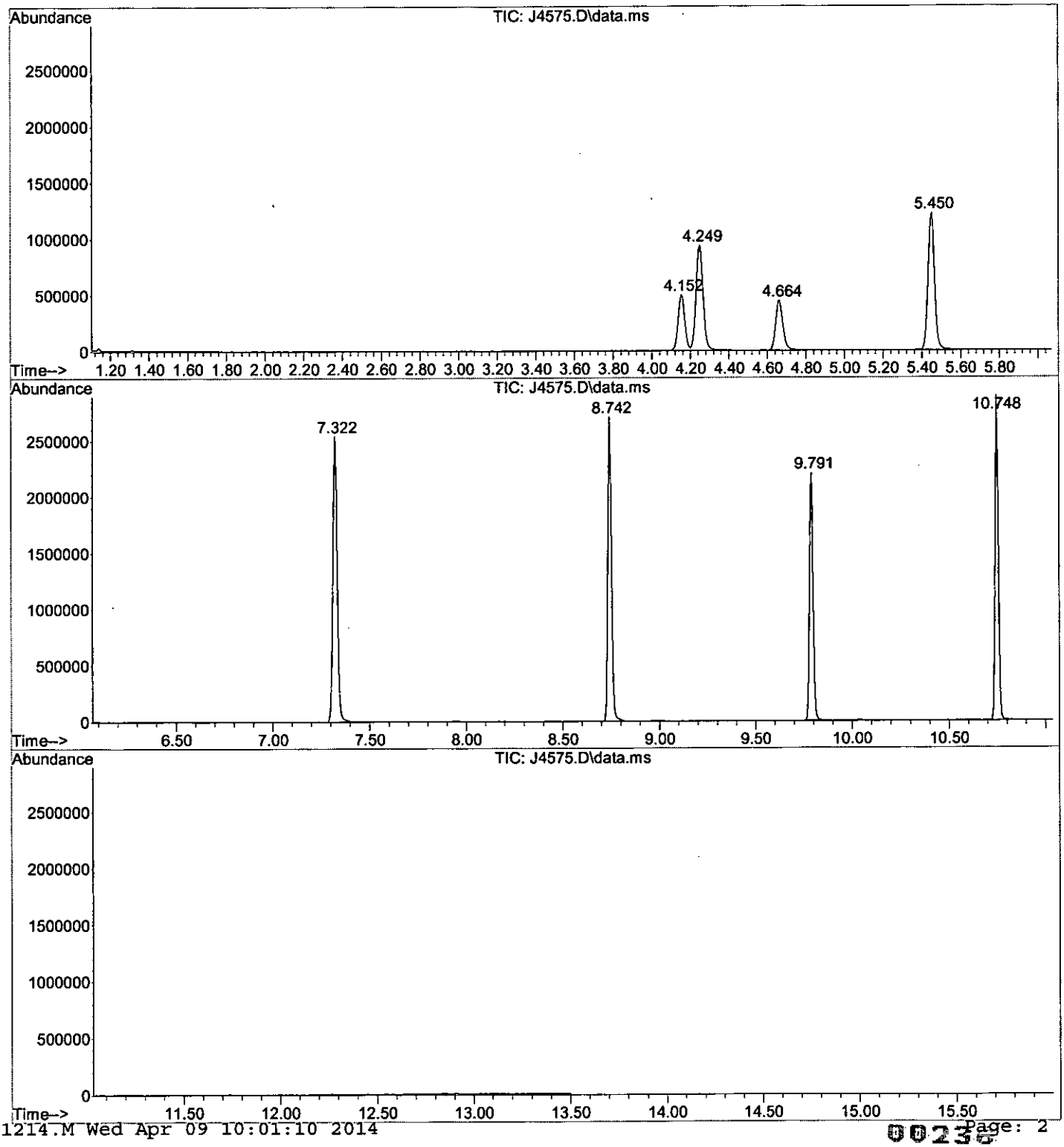
Sum of corrected areas: 20888623

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4575.D
Acq On : 8 Apr 2014 4:22 pm
Operator : K.Ruest
Sample : R1402225-013|1.0
Misc : PARSONS 9913 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 10:01:10 2014 Page: 2

00236

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4575.D
Acq On : 8 Apr 2014 4:22 pmm
Operator : K.Ruestt
Sample : R1402225-013|1.00
Misc : PARSONS 9913 T44
ALS Vial : 6 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1050
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 17:27
Sample Name:	FTMM-53-GW-699MW04-13.85	**Units:**	µg/L
Lab Code:	R1402225-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4577.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**1.9**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**0.78**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.23**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.33**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1050
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 17:27
Sample Name:	FTMM-53-GW-699MW04-13.85	**Units:**	µg/L
Lab Code:	R1402225-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4577.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.87**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**1.5**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**3.0**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**2.4**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 17:27	
Dibromofluoromethane	100	85-115	4/8/14 17:27	
Toluene-d8	96	85-120	4/8/14 17:27	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1727

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW04-13.85	**Units:**	µg/L
Lab Code:	R1402225-014	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-014|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4577.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:27 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 17:42:14 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	836301	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1241754	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1139070	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	561864	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	361208	50.25	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.50%				
48) surr1,1,2-dichloroetha...	4.664	65	418144	51.06	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.12%				
65) SURR3,Toluene-d8	7.322	98	1447143	47.91	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.82%				
70) SURR2,BFB	9.785	95	553085	49.08	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.16%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1587	0.33	ppb		81
~~15) Acetone~~	~~2.055~~	~~43~~	~~3186~~	~~1.92~~	~~ppb~~		~~96~~
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~2021~~	~~0.49~~	~~ppb~~	~~#~~	~~1~~
~~21) Methyl Acetate~~	~~2.372~~	~~43~~	~~2579~~	~~0.69~~	~~ppb~~	~~#~~	~~60~~
49) Benzene	4.780	78	7058	0.23	ppb		83
82) Ethylbenzene	8.889	106	9145	0.87	ppb	#	87
83) (m+p)Xylene	8.998	106	37056	2.99	ppb		94
84) o-Xylene	9.346	106	30058	2.37	ppb		88
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1545~~	~~3.43~~	~~ppb~~	~~#~~	~~14~~
99) 1,3,5-Trimethylbenzene	10.175	105	18464	0.78	ppb		91
101) 1,2,4-Trimethylbenzene	10.480	105	46791	1.92	ppb		95
117) Naphthalen	12.303	128	22725	1.52	ppb		98

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

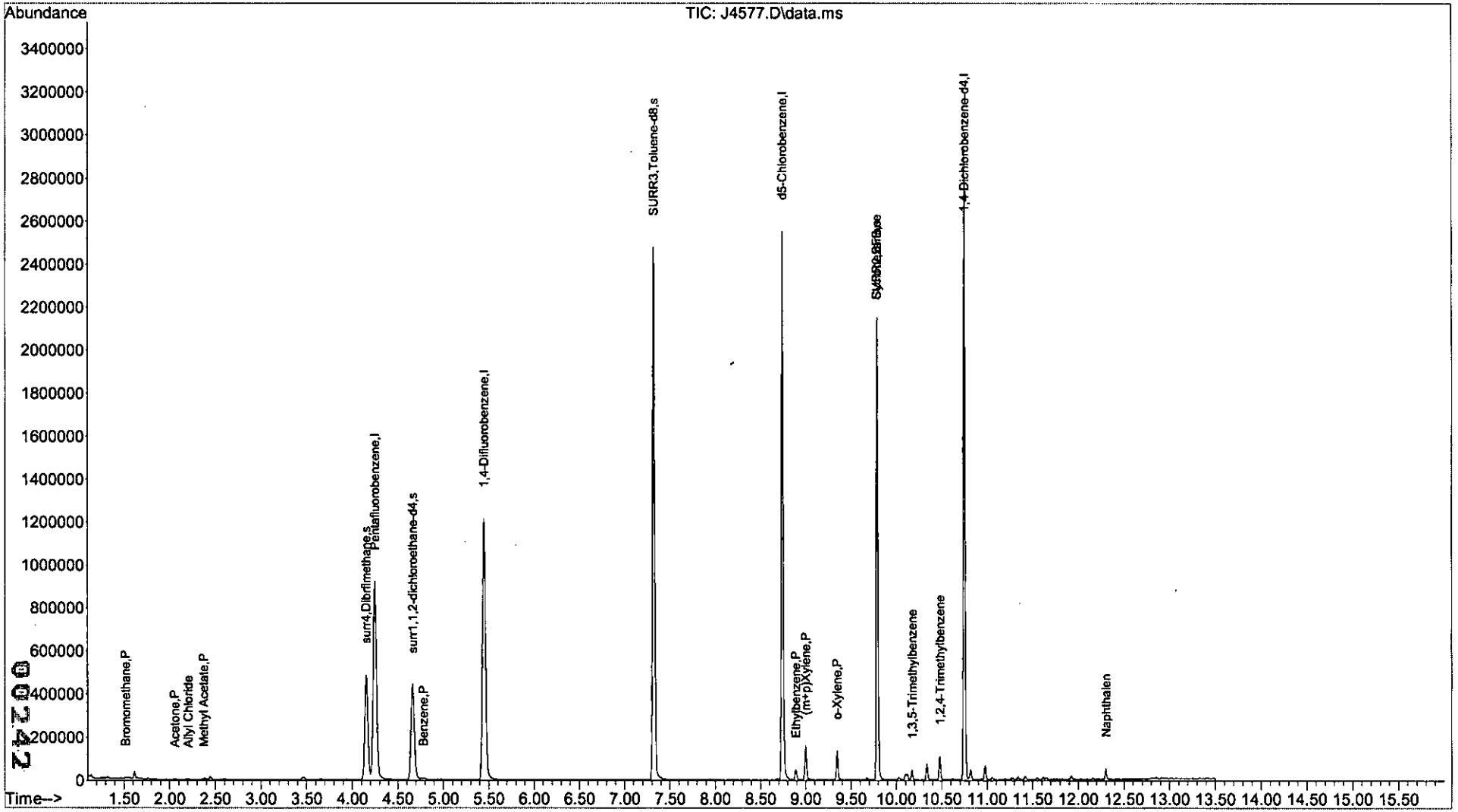
KR 4/9/14

W031214.M Tue Apr 08 17:42:19 2014 Page: 1

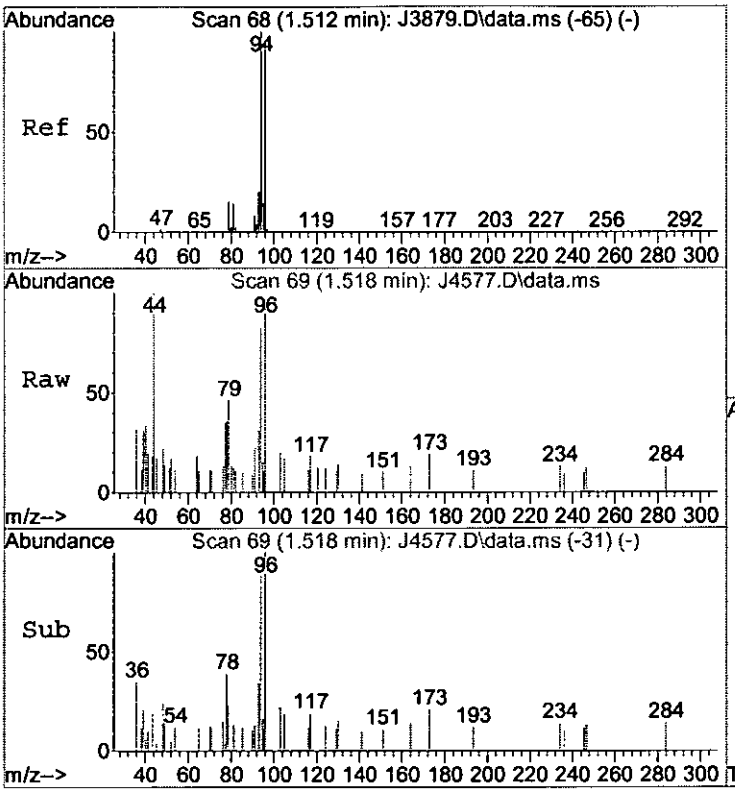
Quantitation Report (Not Reviewed)

Sample : R1402225-014|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4577.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:27 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 17:42:14 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



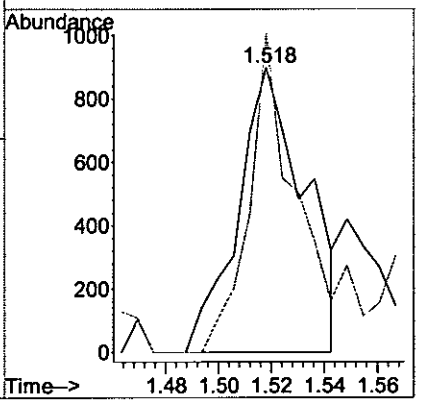
W031214.M Tue Apr 08 17:42:20 2014 Page: 2

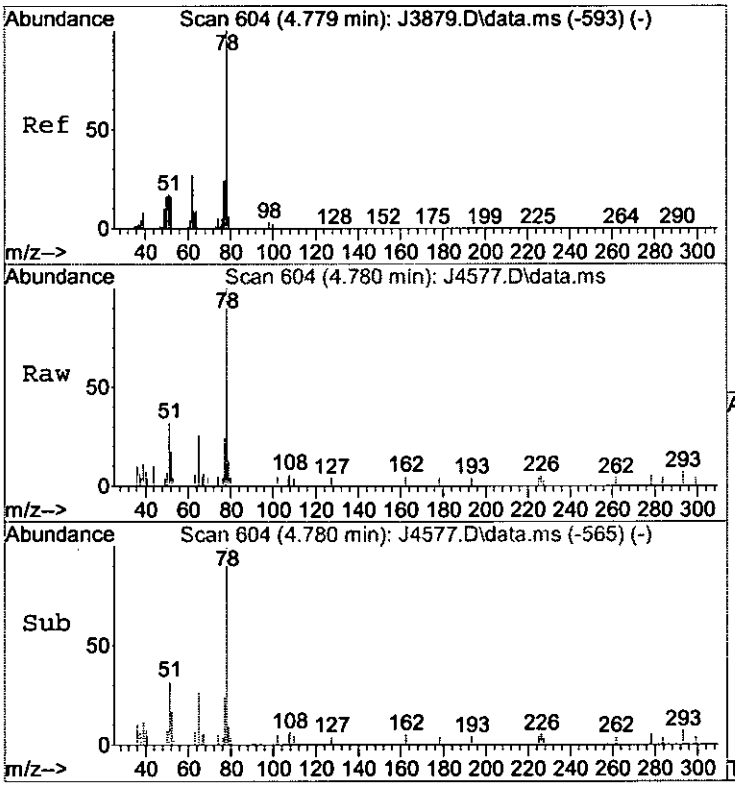


#5
Bromomethane
Concen: 0.33 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4577.D
Acq: 8 Apr 2014 5:27 pm

Tgt Ion: 94 Resp: 1587

Ion	Ratio	Lower	Upper
94	100		
96	111.8	73.8	113.8

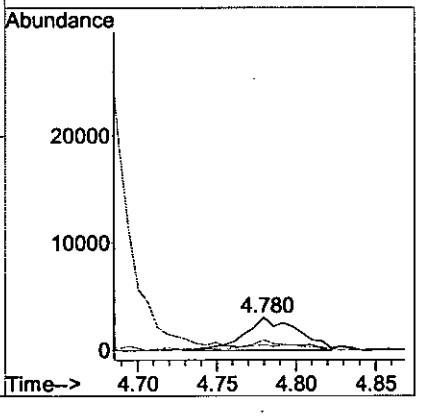




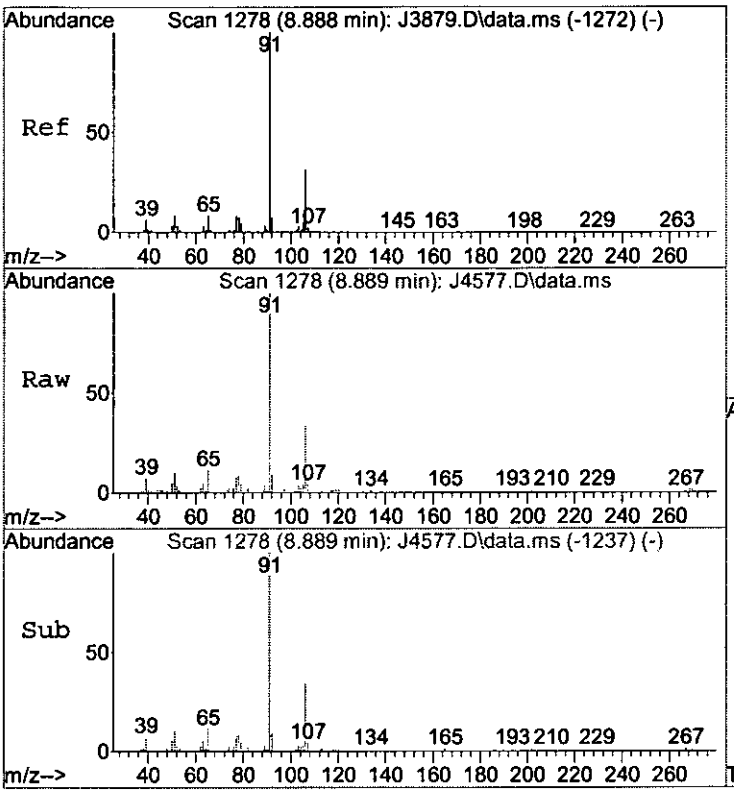
#49
Benzene
Concen: 0.23 ppb
RT: 4.780 min Scan# 604
Delta R.T. -0.006 min
Lab File: J4577.D
Acq: 8 Apr 2014 5:27 pm

Tgt Ion: 78 Resp: 7058

Ion	Ratio	Lower	Upper
78	100		
51	31.5	0.0	38.2
52	17.5	0.0	36.1



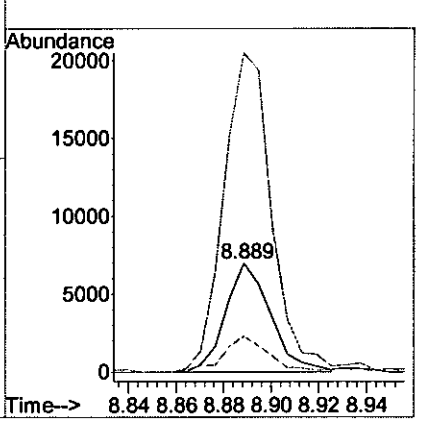
J4577.D W031214.M Wed Apr 09 10:17:19 2014 00243 Page 3

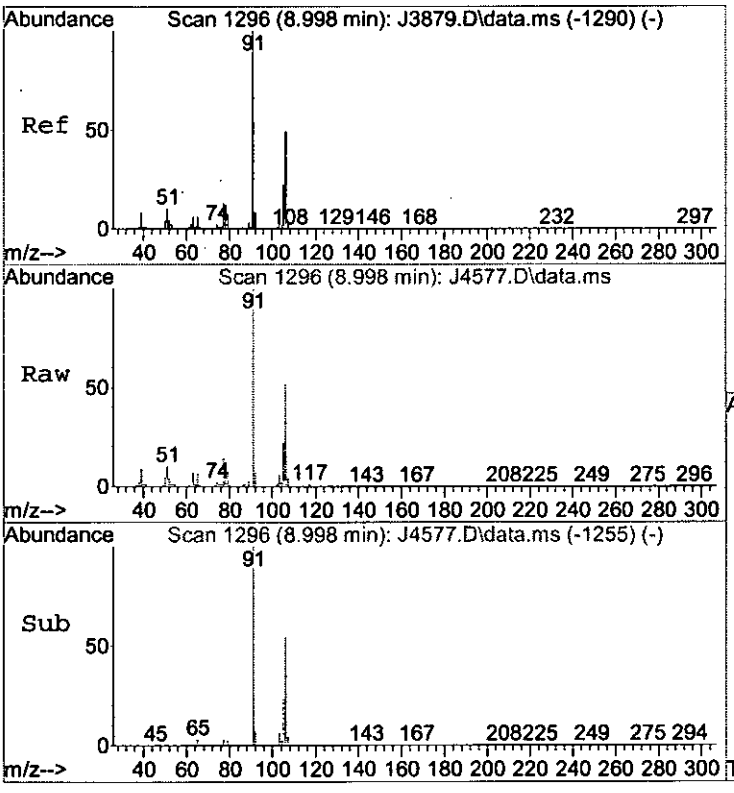


#82
Ethylbenzene
Concen: 0.87 ppb
RT: 8.889 min Scan# 1278
Delta R.T. 0.000 min
Lab File: J4577.D
Acq: 8 Apr 2014 5:27 pm

Tgt Ion:106 Resp: 9145

Ion	Ratio	Lower	Upper
106	100		
91	292.8	300.3	340.3#
65	32.8	6.6	46.6

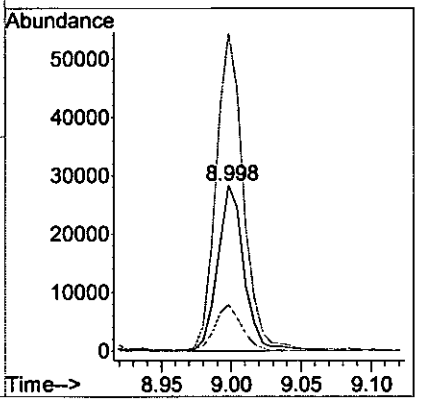


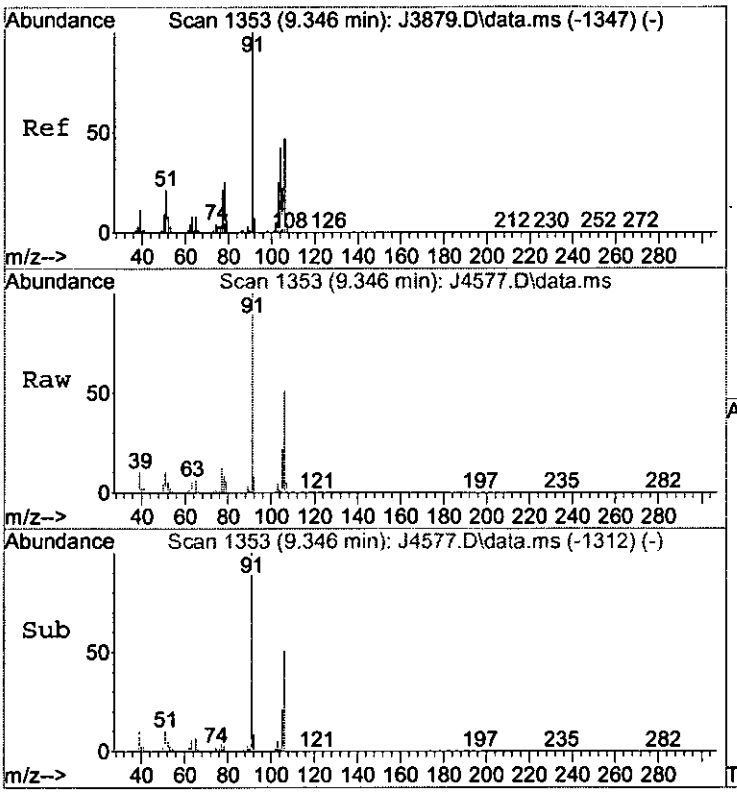


#83
(m+p)Xylene
Concen: 2.99 ppb
RT: 8.998 min Scan# 1296
Delta R.T. 0.000 min
Lab File: J4577.D
Acq: 8 Apr 2014 5:27 pm

Tgt Ion:106 Resp: 37056

Ion	Ratio	Lower	Upper
106	100		
91	192.3	182.8	222.8
77	27.6	7.2	47.2

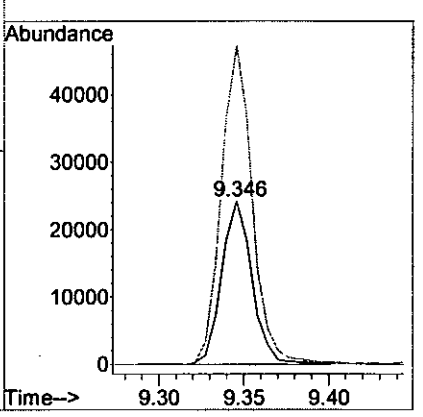


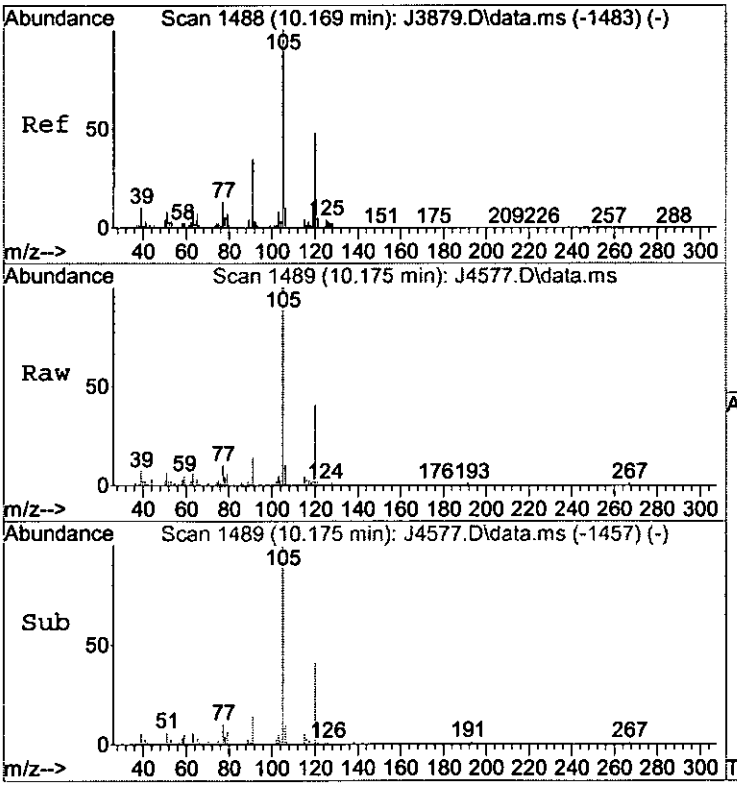


#84
o-Xylene
Concen: 2.37 ppb
RT: 9.346 min Scan# 1353
Delta R.T. 0.000 min
Lab File: J4577.D
Acq: 8 Apr 2014 5:27 pm

Tgt Ion:106 Resp: 30058

Ion	Ratio	Lower	Upper
106	100		
91	194.7	193.9	233.9

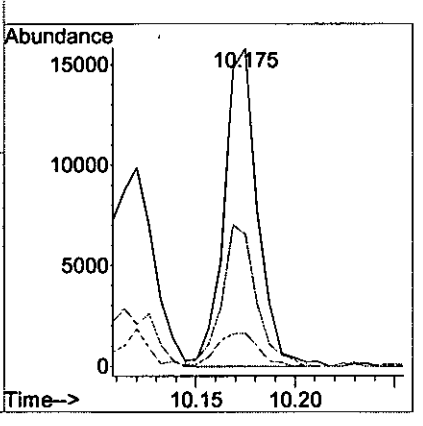


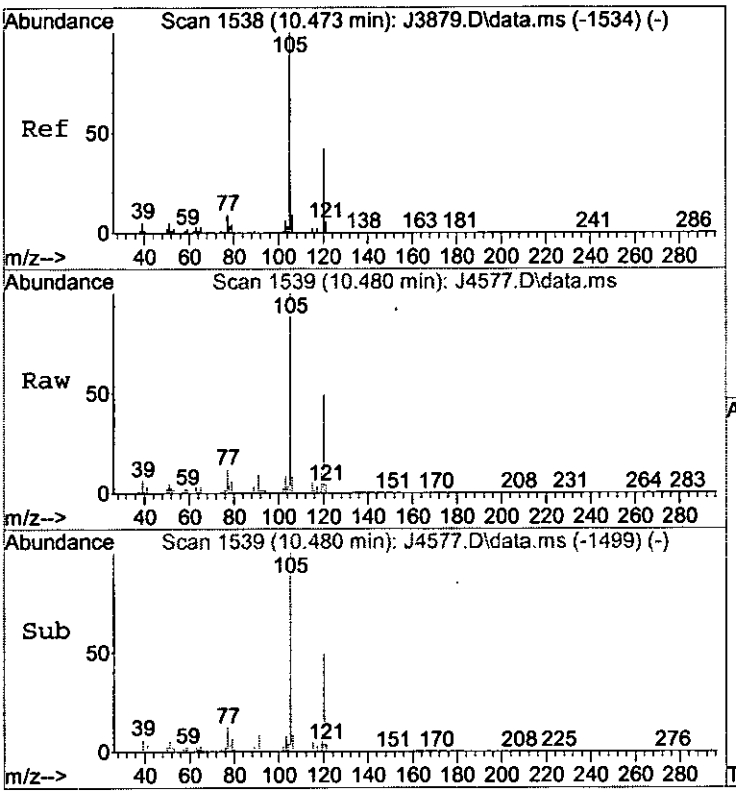


#99
1,3,5-Trimethylbenzene
Concen: 0.78 ppb
RT: 10.175 min Scan# 1489
Delta R.T. 0.000 min
Lab File: J4577.D
Acq: 8 Apr 2014 5:27 pm

Tgt Ion:105 Resp: 18464

Ion	Ratio	Lower	Upper
105	100		
120	41.5	27.7	67.7
77	10.4	0.0	33.6

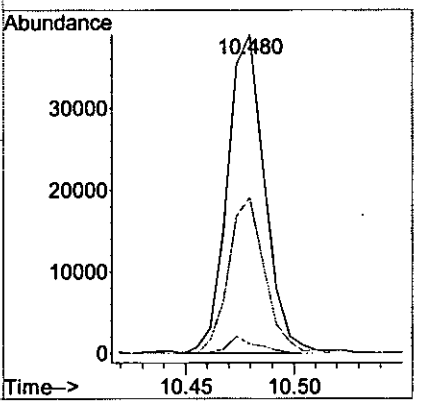


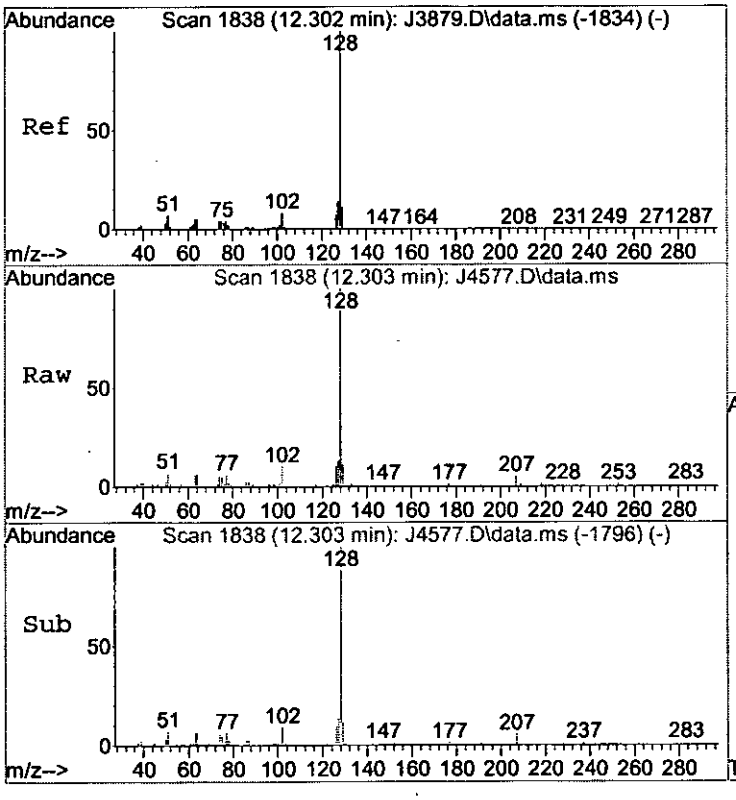


#101
1,2,4-Trimethylbenzene
Concen: 1.92 ppb
RT: 10.480 min Scan# 1539
Delta R.T. 0.000 min
Lab File: J4577.D
Acq: 8 Apr 2014 5:27 pm

Tgt Ion:105 Resp: 46791

Ion	Ratio	Lower	Upper
105	100		
120	48.9	25.3	65.3
65	2.8	0.0	24.3

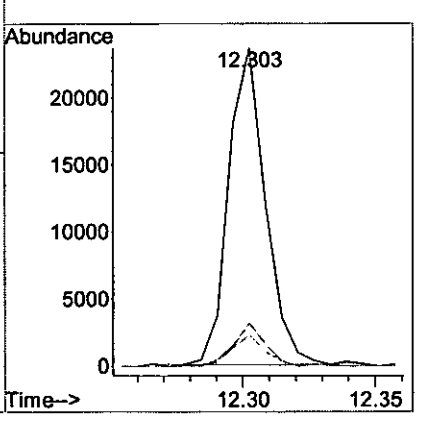




#117
Naphthalen
Concen: 1.52 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4577.D
Acq: 8 Apr 2014 5:27 pm

Tgt Ion:128 Resp: 22725

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	33.8
102	9.6	0.0	28.5



J4577.D W031214.M Wed Apr 09 10:17:22 2014 00246 Page 6

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4577.D
Acq On : 8 Apr 2014 5:27 pm
Operator : K.Ruest
Sample : R1402225-014|1.0
Misc : PARSONS 9913 T4
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4577.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	485673	1170871	30.74%	5.399%
2	4.249	509	517	535	rVB	919770	2325410	61.06%	10.722%
3	4.664	575	585	598	rBV	441721	1147516	30.13%	5.291%
4	5.450	703	714	728	rBV	1213973	2816593	73.96%	12.987%
5	7.322	1014	1021	1037	rBV	2475872	3808466	100.00%	17.560%
6	8.742	1249	1254	1268	rBV	2548933	3393283	89.10%	15.646%
7	8.889	1273	1278	1284	rBV	47850	69677	1.83%	0.321%
8	8.998	1290	1296	1301	rBV	155735	210903	5.54%	0.972%
9	9.346	1348	1353	1362	rBV	135024	173585	4.56%	0.800%
10	9.791	1421	1426	1438	rVB	2148204	2713066	71.24%	12.509%
11	10.169	1485	1488	1493	rVB	44475	54743	1.44%	0.252%
12	10.333	1511	1515	1521	rVB	73990	91861	2.41%	0.424%
13	10.480	1534	1539	1545	rVB	108890	133163	3.50%	0.614%
14	10.748	1578	1583	1590	rBV	2933592	3380553	88.76%	15.587%
15	10.815	1590	1594	1601	rVB	47148	62326	1.64%	0.287%
16	10.980	1616	1621	1627	rVB	65377	84273	2.21%	0.389%
17	12.303	1834	1838	1841	rBV	50167	51860	1.36%	0.239%

Sum of corrected areas: 21688149

W031214.M Wed Apr 09 10:17:27 2014 Page: 1

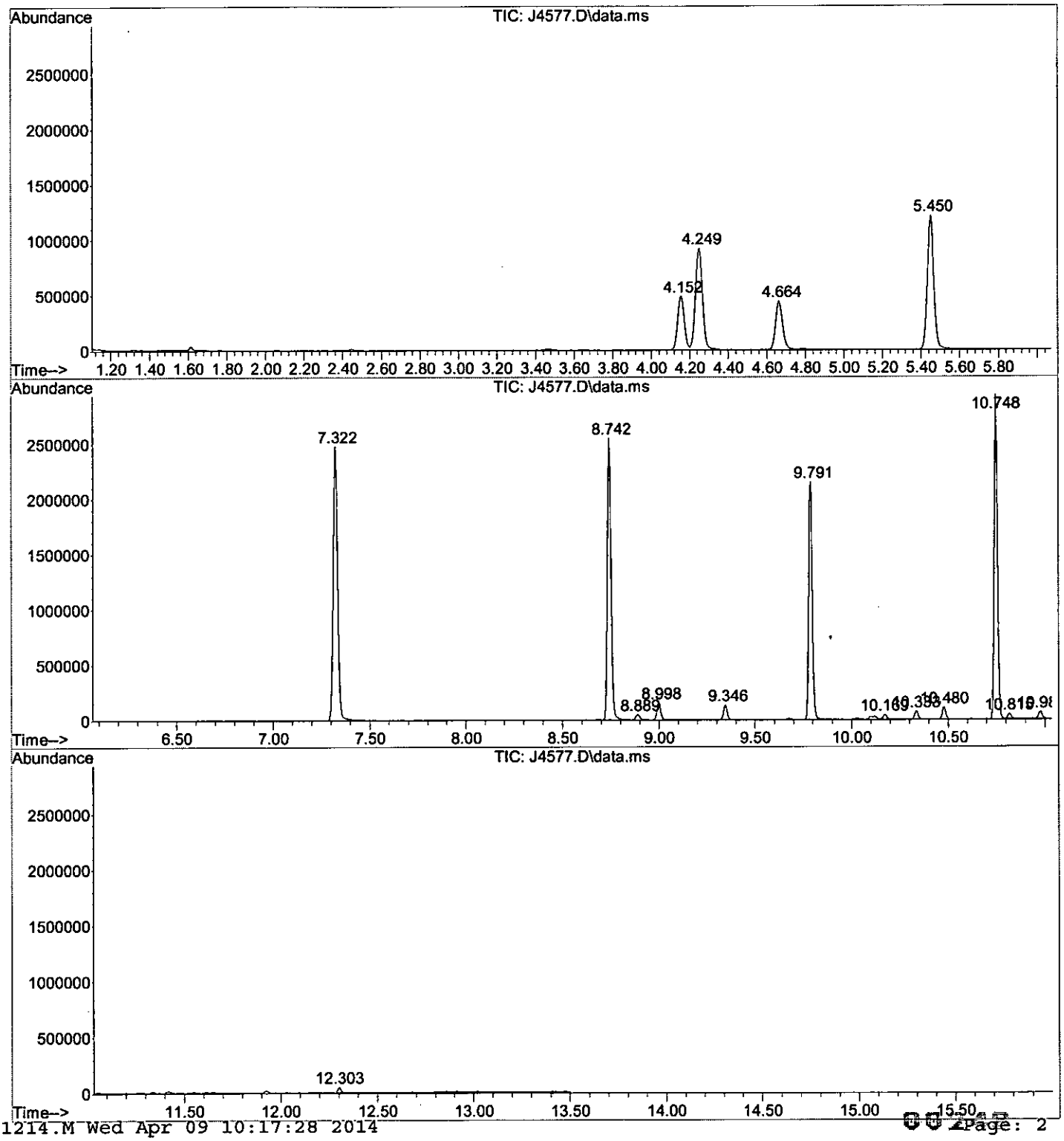
00247

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4577.D
Acq On : 8 Apr 2014 5:27 pm
Operator : K.Ruest
Sample : R1402225-014|1.0
Misc : PARSONS 9913 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 10:17:28 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4577.D
Acq On : 8 Apr 2014 5:27 pmm
Operator : K.Ruestt
Sample : R1402225-014|1.00
Misc : PARSONS 9913 T44
ALS Vial : 8 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1155
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 14:51
Sample Name:	FTMM-53-GW-699RW05-9.80	**Units:**	µg/L
Lab Code:	R1402225-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4655.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	ND	U	13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	13	2.5	1.5	
563-58-6	1,1-Dichloropropene	ND	U	13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	ND	U	13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	ND	U	13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	U	13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	**130**		13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	13	2.5	1.9	
106-93-4	1,2-Dibromoethane	ND	U	13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	ND	U	13	2.5	0.53	
107-06-2	1,2-Dichloroethane	ND	U	13	2.5	0.90	
78-87-5	1,2-Dichloropropane	ND	U	13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	**23**		13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	ND	U	13	2.5	0.50	
142-28-9	1,3-Dichloropropane	ND	U	13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	ND	U	13	2.5	0.50	
594-20-7	2,2-Dichloropropane	ND	U	13	2.5	0.68	
78-93-3	2-Butanone (MEK)	ND	U	13	2.5	2.1	
95-49-8	2-Chlorotoluene	ND	U	13	2.5	0.50	
591-78-6	2-Hexanone	ND	U	13	13	4.2	
106-43-4	4-Chlorotoluene	ND	U	13	2.5	0.60	
99-87-6	p-Isopropyltoluene	ND	U	13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	ND	U	13	2.5	1.7	
67-64-1	Acetone	ND	U	13	13	3.1	
71-43-2	Benzene	**3.1**	J	13	2.5	0.50	
108-86-1	Bromobenzene	ND	U	13	2.5	0.71	
74-97-5	Bromochloromethane	ND	U	13	2.5	0.80	
75-27-4	Bromodichloromethane	ND	U	13	2.5	0.80	
75-25-2	Bromoform	ND	U	13	2.5	1.1	
74-83-9	Bromomethane	**0.88**	J	13	2.5	0.73	
56-23-5	Carbon Tetrachloride	ND	U	13	2.5	1.2	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1155
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 14:51
Sample Name:	FTMM-53-GW-699RW05-9.80	**Units:**	µg/L
Lab Code:	R1402225-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4655.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	13	2.5	0.73	
75-00-3	Chloroethane	ND	U	13	2.5	0.60	
67-66-3	Chloroform	ND	U	13	2.5	0.63	
74-87-3	Chloromethane	ND	U	13	2.5	0.53	
124-48-1	Dibromochloromethane	ND	U	13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	13	2.5	1.2	
75-09-2	Methylene Chloride	ND	U	13	2.5	0.80	
100-41-4	Ethylbenzene	**160**		13	2.5	0.50	
87-68-3	Hexachlorobutadiene	ND	U	13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	**8.1**	J	13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	U	13	2.5	0.73	
91-20-3	Naphthalene	**54**		13	2.5	0.50	
100-42-5	Styrene	ND	U	13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	**0.80**	J	13	2.5	0.75	
108-88-3	Toluene	**7.0**	J	13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	ND	U	13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	13	2.5	0.50	
75-01-4	Vinyl Chloride	ND	U	13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	ND	U	13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	ND	U	13	2.5	0.60	
179601-23-1	m,p-Xylenes	**390**		25	5.0	0.83	
104-51-8	n-Butylbenzene	ND	U	13	2.5	0.53	
103-65-1	n-Propylbenzene	**9.7**	J	13	2.5	0.50	
95-47-6	o-Xylene	**270**		13	2.5	0.50	
135-98-8	sec-Butylbenzene	ND	U	13	2.5	0.68	
98-06-6	tert-Butylbenzene	ND	U	13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	ND	U	13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	ND	U	13	2.5	0.50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/10/14 14:51	
Dibromofluoromethane	102	85-115	4/10/14 14:51	
Toluene-d8	93	85-120	4/10/14 14:51	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/10/14 1451

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-9.80
Lab Code: R1402225-015

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.62	**33.5**	JN
000109-66-0	Pentane	1.76	**13.6**	JN
000107-83-5	Pentane, 2-methyl-	2.40	**14.2**	JN
	unknown	2.44	**20.0**	J
000096-37-7	Cyclopentane, methyl-	3.46	**46.8**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.10	**54.9**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.33	**58.4**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**55.1**	JN
000496-11-7	Indane	10.97	**72.9**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-015|~~252.5~~ (MP)
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4655.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:06:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	850525	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1250435	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1147598	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	565491	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	367766	50.80	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.60%				
48) surr1,1,2-dichloroetha...	4.664	65	421268	51.08	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.16%				
65) SURR3,Toluene-d8	7.322	98	1416136	46.55	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 93.10%				
70) SURR2,BFB	9.785	95	553986	48.82	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.64%				
Target Compounds							Qvalue
5) Bromomethane	1.512	94	1717	0.35	ppb	#	76
~~12) Acrolein~~	~~1.957~~	~~56~~	~~283~~	~~0.62~~	~~ppb~~	~~#~~	~~1~~
15) Acetone	2.055	43	10817	6.41	ppb	#	69
16) 2-Propanol	2.134	45	213	0.78	ppb	#	56
19) Acetonitrile	2.195	40	691	2.50	ppb	#	1
20) Allyl Chloride	2.207	76	2855	0.67	ppb	#	1
21) Methyl Acetate	2.317	43	3279	0.86	ppb	#	60
24) Acrylonitrile	2.591	53	1680	0.89	ppb	#	55
~~35) 2-Butanone~~	~~3.560~~	~~43~~	~~578~~	~~0.24~~	~~ppb~~	~~#~~	~~25~~
40) Chloroform	3.944	83	3392	0.24	ppb		86
44) Cyclohexane	4.316	41	23906	3.53	ppb		86 MD
49) Benzene	4.780	78	37607	1.22	ppb		88
55) Methylcyclohexane	6.096	55	9321	1.16	ppb		83 MD
~~59) Methyl Methacrylate~~	~~6.346~~	~~69~~	~~797~~	~~0.22~~	~~ppb~~	~~#~~	~~29~~
~~61) 2-Nitropropane~~	~~6.822~~	~~41~~	~~436~~	~~0.44~~	~~ppb~~	~~#~~	~~41~~
66) Toluene	7.395	91	88757	2.80	ppb		99
72) Tetrachloroethene	7.962	164	1887	0.32	ppb		91
82) Ethylbenzene	8.889	106	679239	63.84	ppb		92
83) (m+p)Xylene	8.998	106	1972394	157.75	ppb		93
84) o-Xylene	9.346	106	1375396	107.79	ppb		94
~~85) Styrene~~	~~9.346~~	~~104~~	~~67909~~	~~3.33~~	~~ppb~~	~~#~~	~~1~~
89) Isopropylbenzene	9.669	105	94583	3.24	ppb		98
~~90) Cyclohexanone~~	~~9.724~~	~~55~~	~~271~~	~~0.60~~	~~ppb~~		~~95~~
~~91) trans-1,4-Dichloro-2-B...~~	~~10.023~~	~~53~~	~~734~~	~~0.48~~	~~ppb~~	~~#~~	~~1~~
95) n-Propylbenzene	10.023	91	132495	3.88	ppb		99
~~96) 2-Chlorotoluene~~	~~10.096~~	~~91~~	~~72700~~	~~3.39~~	~~ppb~~	~~#~~	~~60~~
~~97) 3-Chlorotoluene~~	~~10.096~~	~~91~~	~~107016~~	~~4.80~~	~~ppb~~	~~#~~	~~43~~
~~98) 4-Chlorotoluene~~	~~10.175~~	~~91~~	~~24389~~	~~0.96~~	~~ppb~~	~~#~~	~~46~~
99) 1,3,5-Trimethylbenzene	10.169	105	221997	9.32	ppb		99
101) 1,2,4-Trimethylbenzene	10.474	105	1291612	52.71	ppb		98
103) sec-Butylbenzene	10.620	105	6405	0.23	ppb		94
104) p-Isopropyltoluene 10.742	~~10.699~~	119	~~4945~~ ~~11764~~	0.19	~~0.50~~ ppb	m (MP)	85
~~109) n-Butylbenzene~~	~~11.053~~	~~91~~	~~9286~~	~~0.44~~	~~ppb~~	~~#~~	~~1~~
117) Naphthalen	12.303	128	323333	21.54	ppb		99
119) 2,4,5-Trichlorotolene	12.851	159	2015	0.45	ppb		96 MD

MP 4/10/14
DL 4/14/14

W031214.M Thu Apr 10 15:06:32 2014 00253 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1402225-015|~~25~~ 25.5 @
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4655.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:06:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

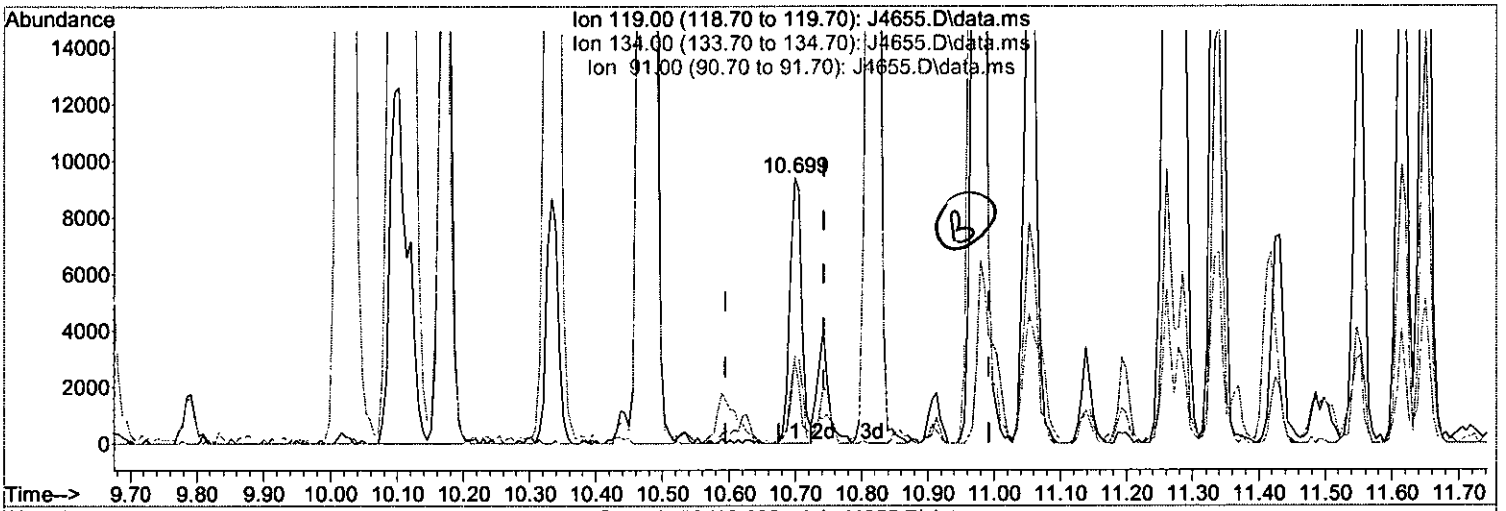
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
120) 2,3,6-Trichlorotoluene	12.912	159	1771	0.43	ppb	#	83	MD

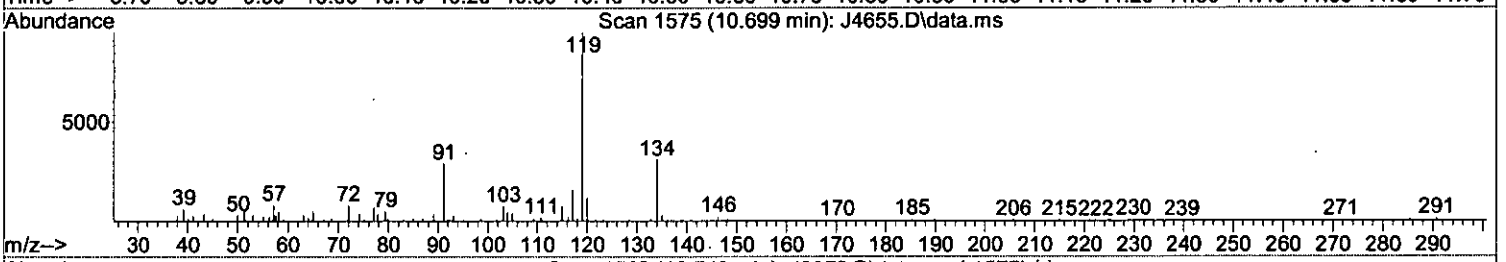
(#) = qualifier out of range (m) = manual integration (+) = signals summed

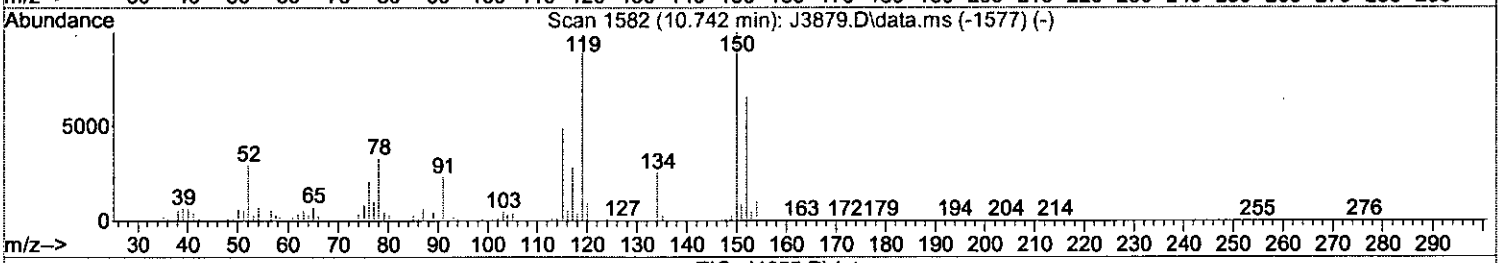
Quantitation Report (Qedit)

Sample : R1402225-015|~~25~~).5(D)
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4655.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:06:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4655.D\data.ms

(104) p-Isopropyltoluene

10.699min (-0.043) 0.50 ppb

response 11764

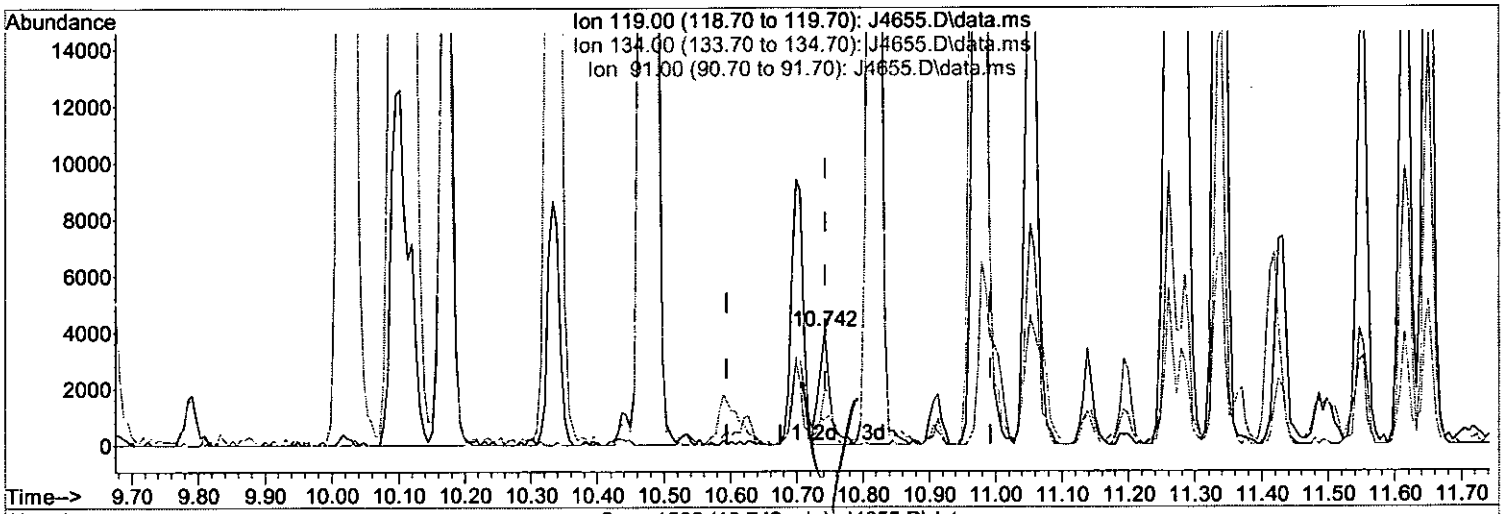
Ion	Exp%	Act%
119.00	100	100
134.00	25.60	33.01
91.00	23.20	30.99
0.00	0.00	0.00

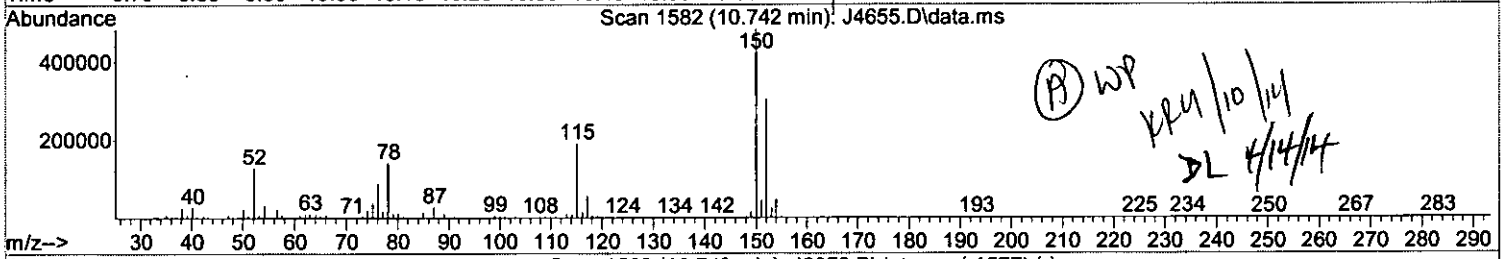
W031214.M Thu Apr 10 16:45:40 2014 00255 Page: 1

Quantitation Report (Qedit)

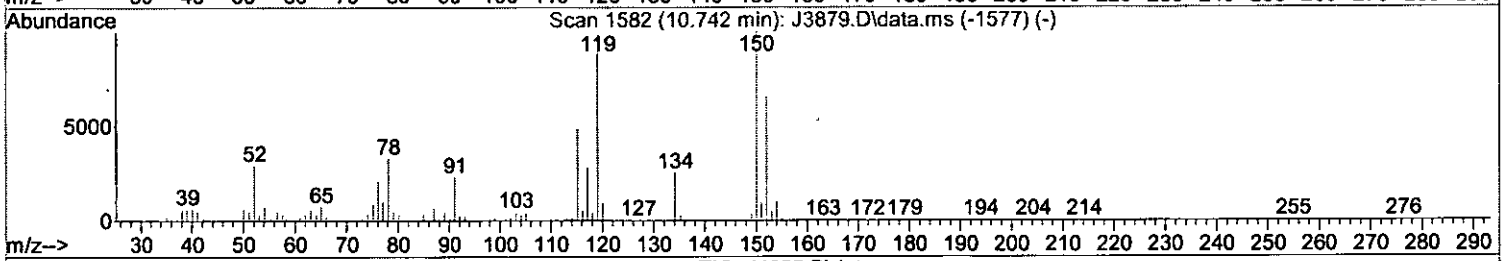
Sample : R1402225-015|~~252~~ (D)
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4655.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:06:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration





(B) WP KRK 4/10/14 DL 4/14/14



TIC: J4655.D\data.ms

(104) p-Isopropyltoluene

10.742min (+0.000) 0.19 ppb m

response 4545

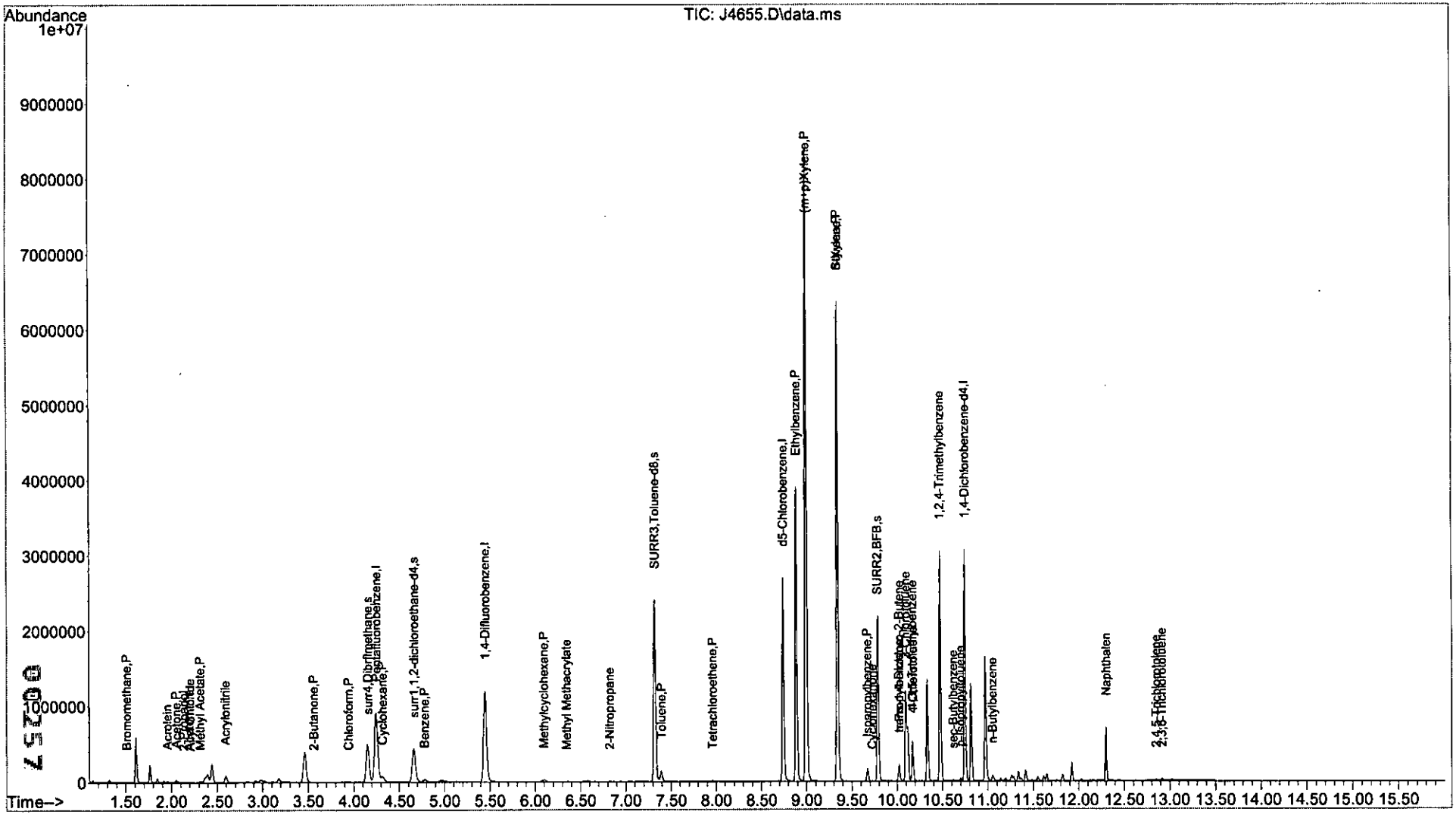
Ion	Exp%	Act%
119.00	100	100
134.00	25.60	21.25
91.00	23.20	50.06#
0.00	0.00	0.00

W031214.M Thu Apr 10 16:45:49 2014 00256 Page: 1

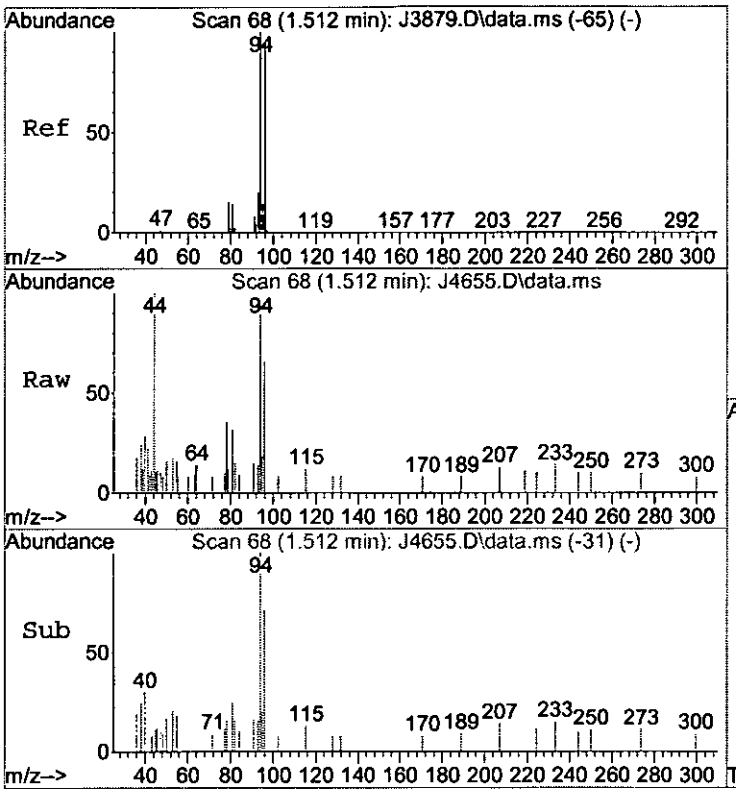
Quantitation Report (Not Reviewed)

Sample : R1402225-015 25 (2)
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4655.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:06:55 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



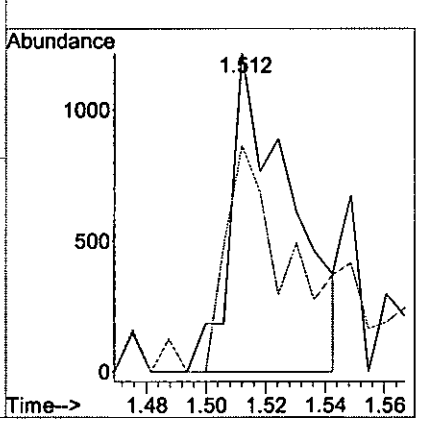
W031214.M Thu Apr 10 15:06:36 2014 Page: 3

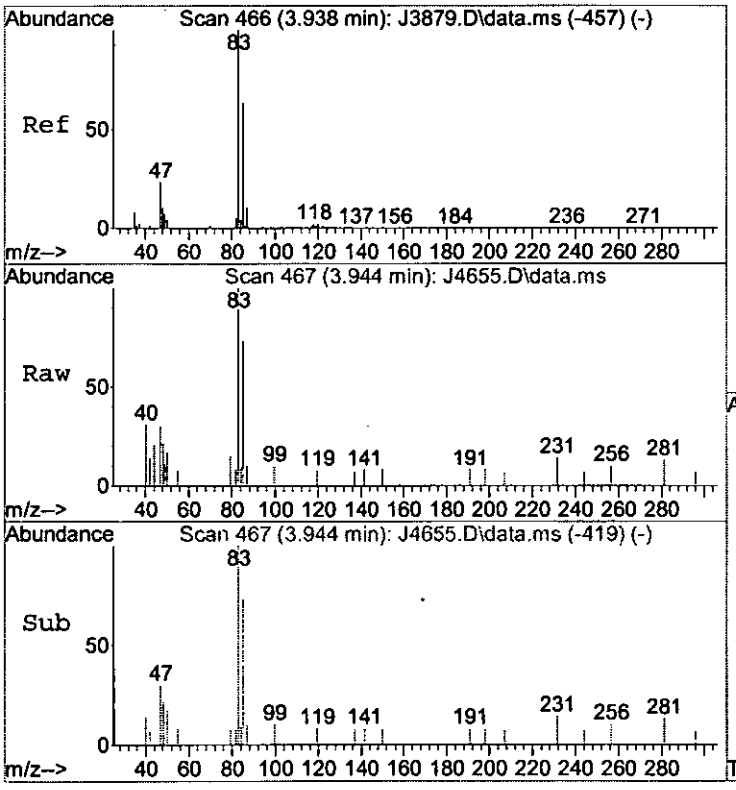


#5
Bromomethane
Concen: 0.35 ppb
RT: 1.512 min Scan# 68
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion: 94 Resp: 1717

Ion	Ratio	Lower	Upper
94	100		
96	71.1	73.8	113.8#

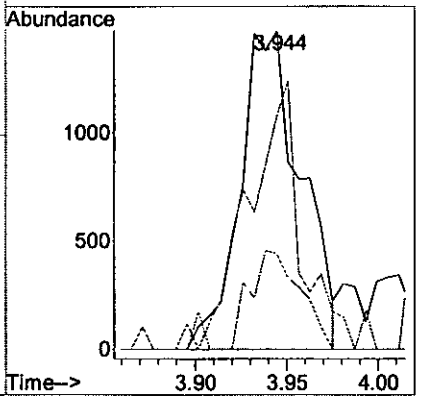


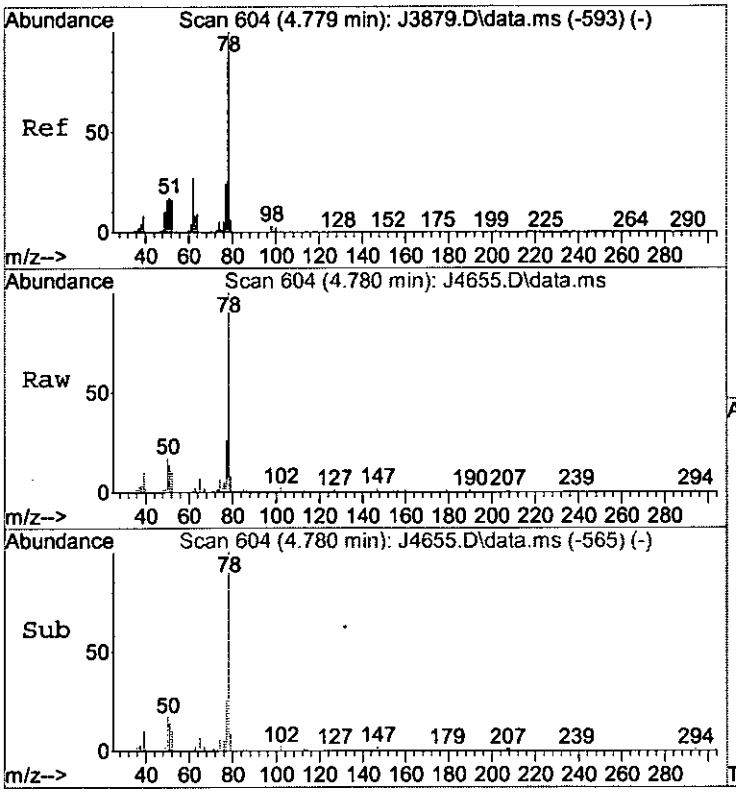


#40
Chloroform
Concen: 0.24 ppb
RT: 3.944 min Scan# 467
Delta R.T. 0.006 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion: 83 Resp: 3392

Ion	Ratio	Lower	Upper
83	100		
85	73.2	42.6	82.6
47	30.0	3.4	43.4

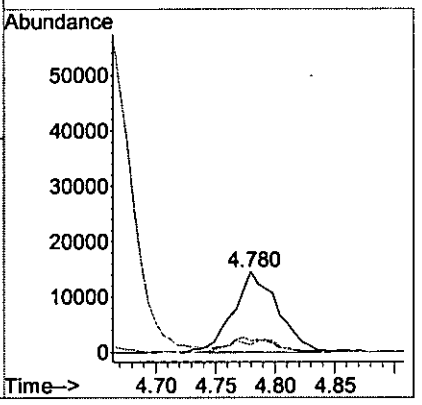


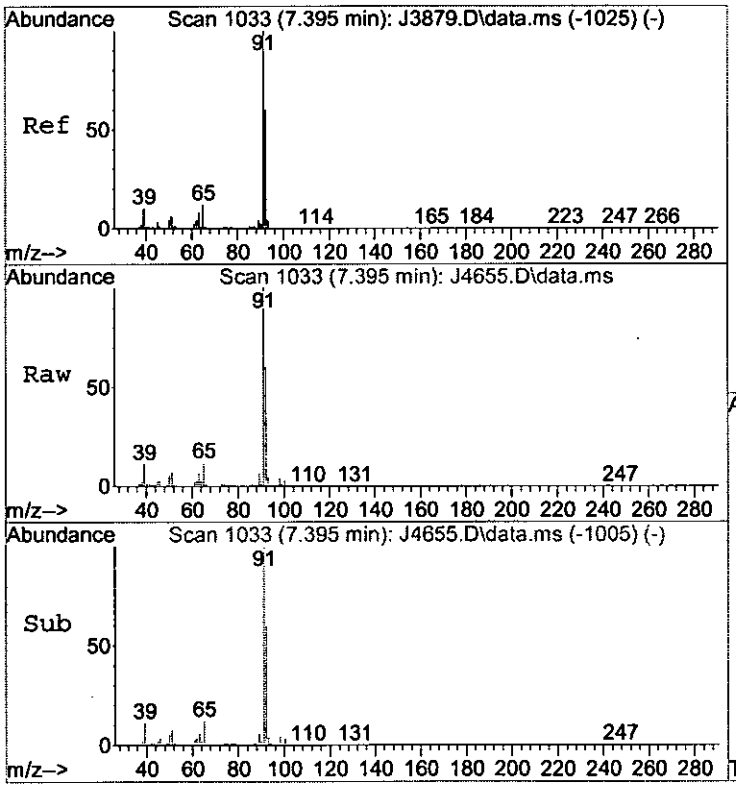


#49
Benzene
Concen: 1.22 ppb
RT: 4.780 min Scan# 604
Delta R.T. -0.006 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion: 78 Resp: 37607

Ion	Ratio	Lower	Upper
78	100		
51	13.9	0.0	38.2
52	9.7	0.0	36.1

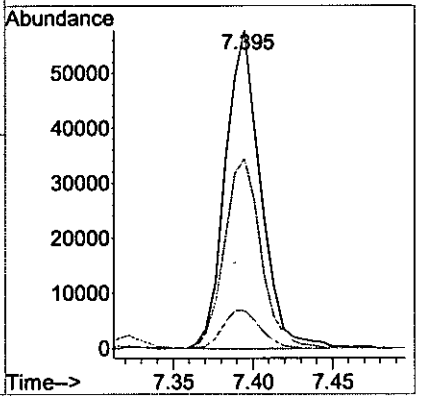


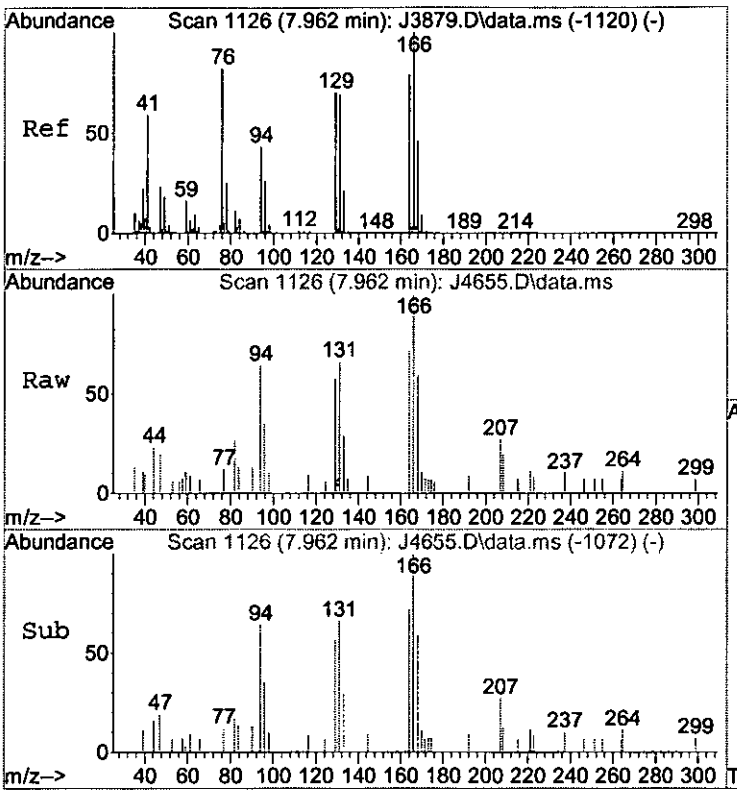


#66
Toluene
Concen: 2.80 ppb
RT: 7.395 min Scan# 1033
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion: 91 Resp: 88757

Ion	Ratio	Lower	Upper
91	100		
92	59.6	39.9	79.9
65	11.8	0.0	32.3

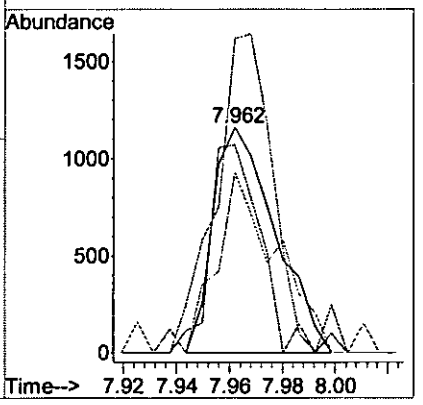


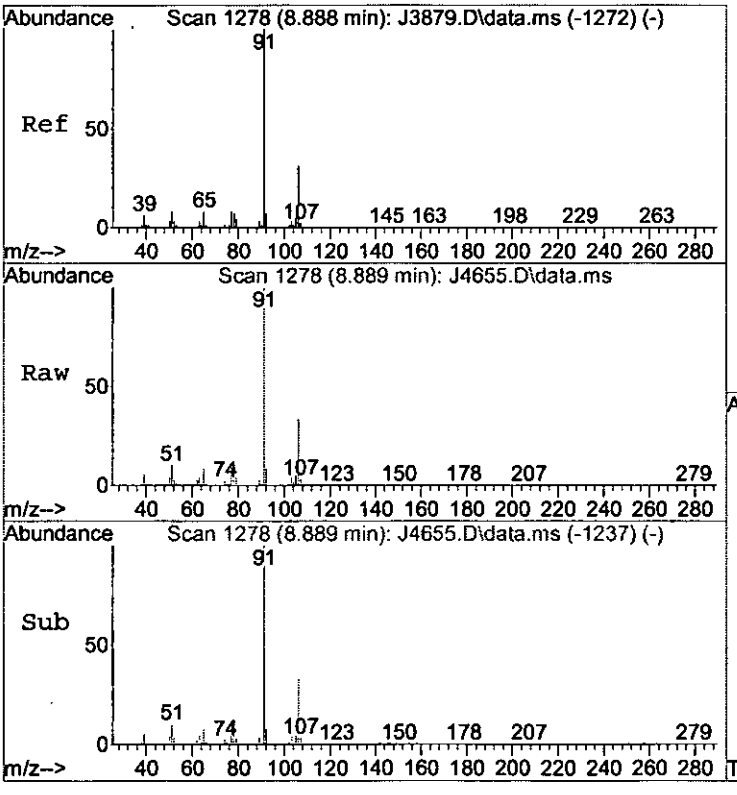


#72
Tetrachloroethene
Concen: 0.32 ppb
RT: 7.962 min Scan# 1126
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:164 Resp: 1887

Ion	Ratio	Lower	Upper
164	100		
166	139.4	105.9	145.9
129	80.0	68.6	108.6
131	92.3	66.6	106.6

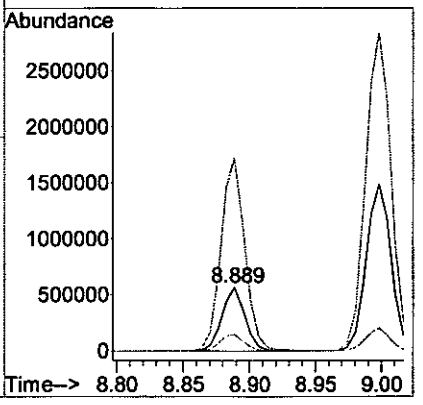


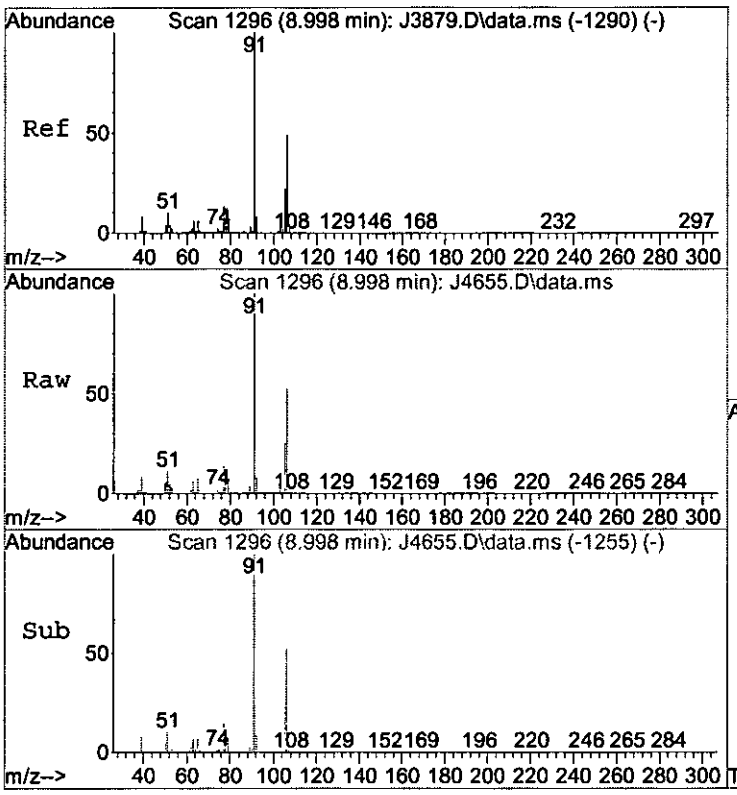


#82
Ethylbenzene
Concen: 63.84 ppb
RT: 8.889 min Scan# 1278
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:106 Resp: 679239

Ion	Ratio	Lower	Upper
106	100		
91	303.1	300.3	340.3
65	25.8	6.6	46.6

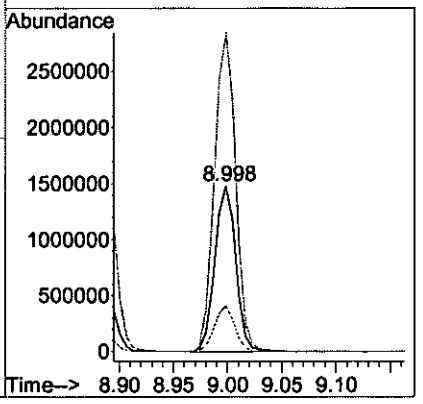


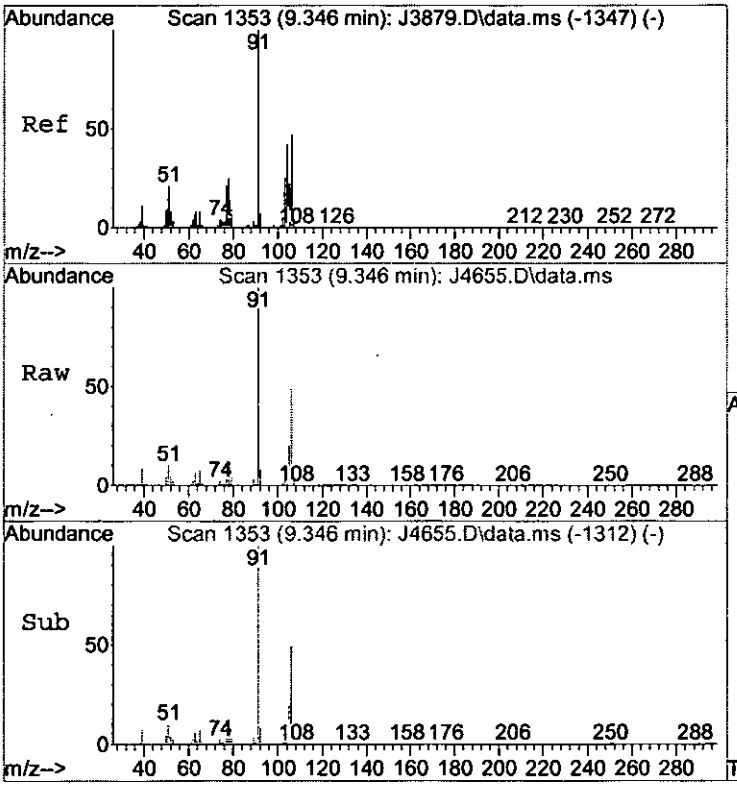


#83
(m+p)Xylene
Concen: 157.75 ppb
RT: 8.998 min Scan# 1296
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:106 Resp: 1972394

Ion	Ratio	Lower	Upper
106	100		
91	191.6	182.8	222.8
77	27.6	7.2	47.2

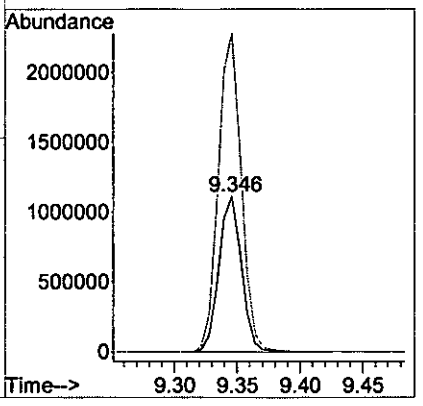


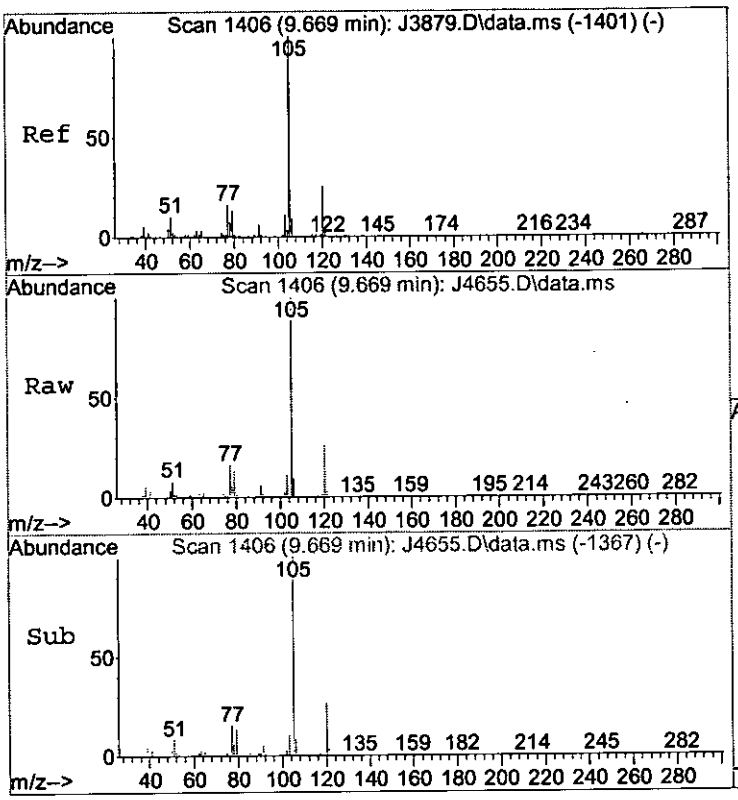


#84
o-Xylene
Concen: 107.79 ppb
RT: 9.346 min Scan# 1353
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:106 Resp: 1375396

Ion	Ratio	Lower	Upper
106	100		
91	205.2	193.9	233.9

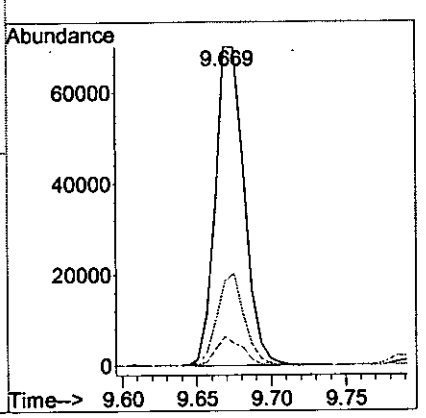


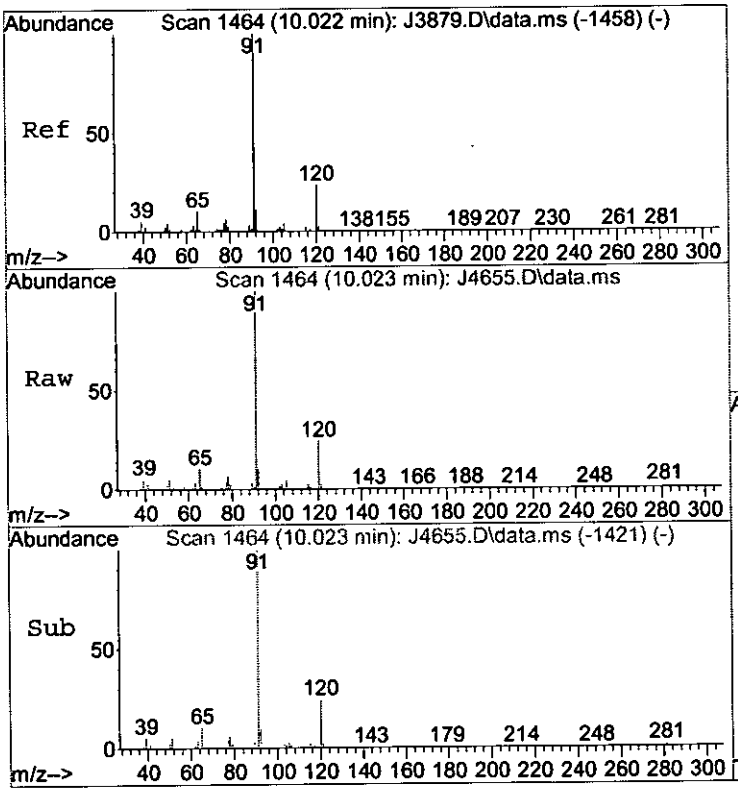


#89
Isopropylbenzene
Concen: 3.24 ppb
RT: 9.669 min Scan# 1406
Delta R.T. -0.006 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:105 Resp: 94583

Ion	Ratio	Lower	Upper
105	100		
120	26.4	5.4	45.4
106	9.0	0.0	28.6

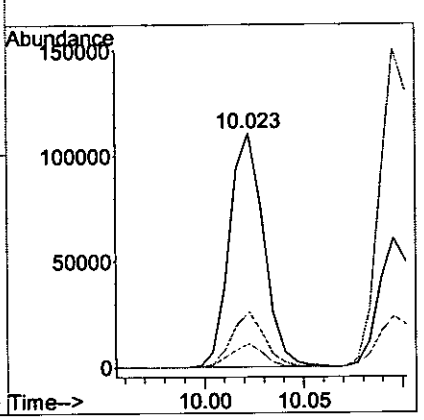


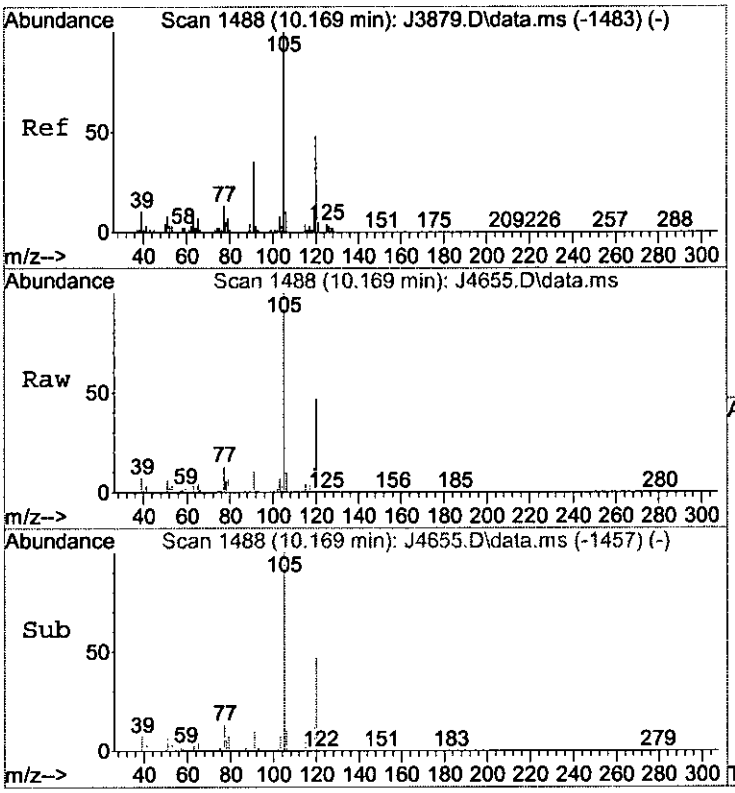


#95
n-Propylbenzene
Concen: 3.88 ppb
RT: 10.023 min Scan# 1464
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion: 91 Resp: 132495

Ion	Ratio	Lower	Upper
91	100		
120	23.7	3.1	43.1
65	10.0	0.0	30.1

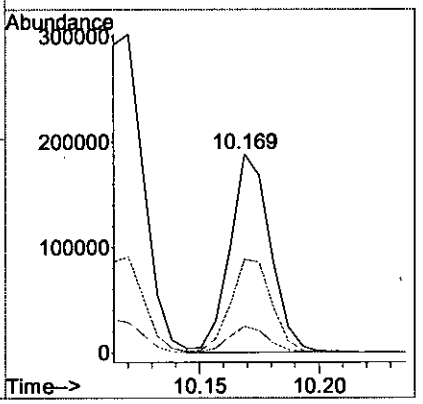


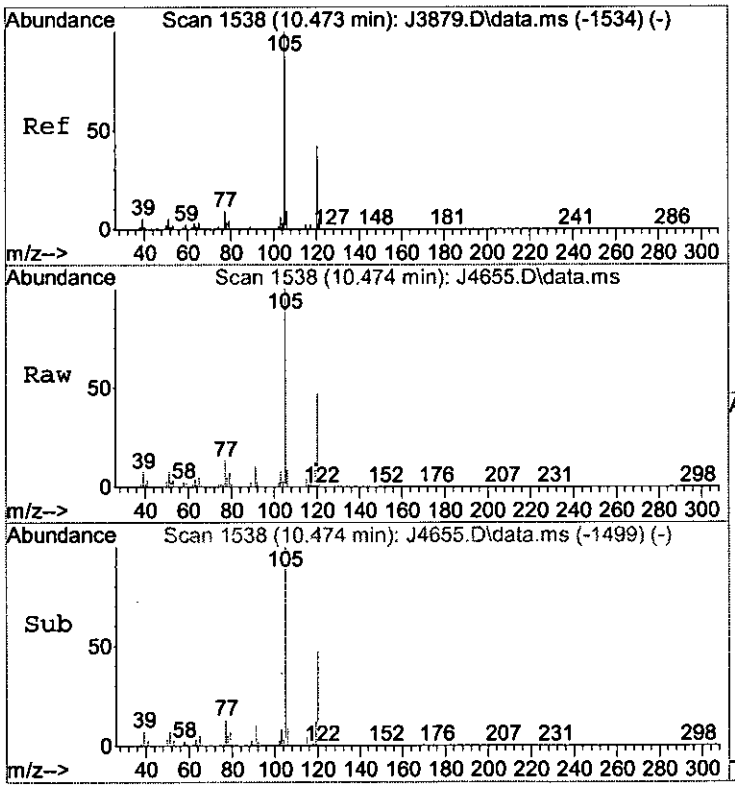


#99
1,3,5-Trimethylbenzene
Concen: 9.32 ppb
RT: 10.169 min Scan# 1488
Delta R.T. -0.006 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:105 Resp: 221997

Ion	Ratio	Lower	Upper
105	100		
120	46.9	27.7	67.7
77	13.3	0.0	33.6

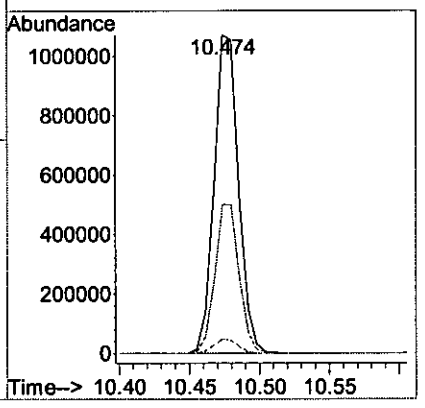


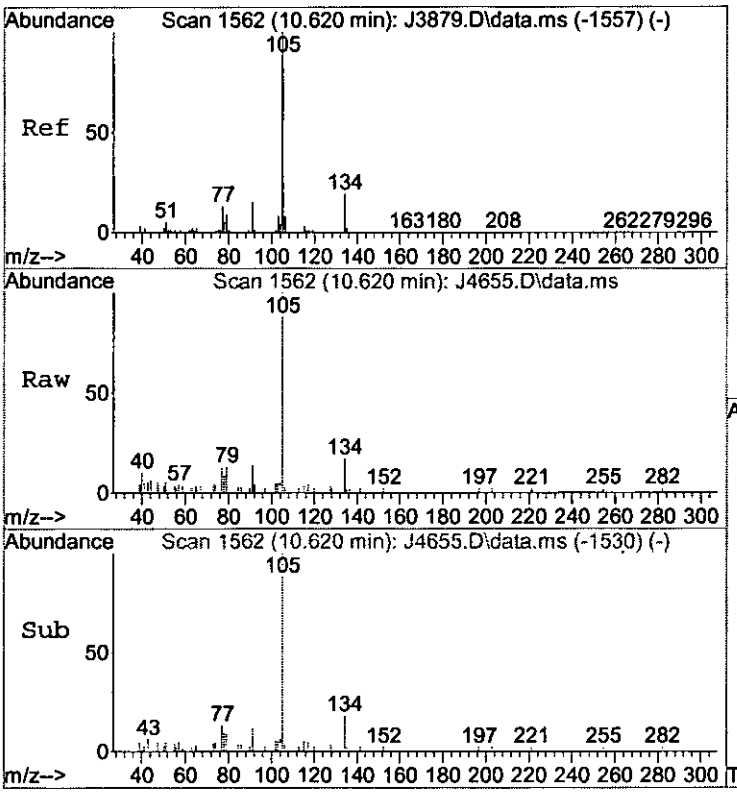


#101
1,2,4-Trimethylbenzene
Concen: 52.71 ppb
RT: 10.474 min Scan# 1538
Delta R.T. -0.006 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:105 Resp: 1291612

Ion	Ratio	Lower	Upper
105	100		
120	46.7	25.3	65.3
65	4.6	0.0	24.3

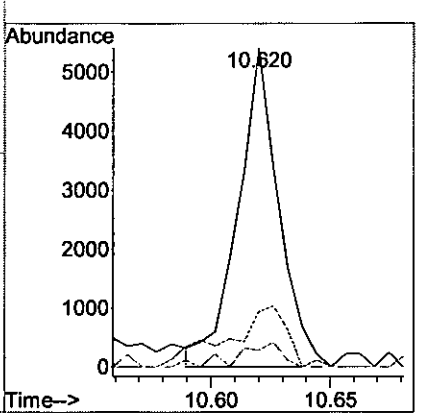


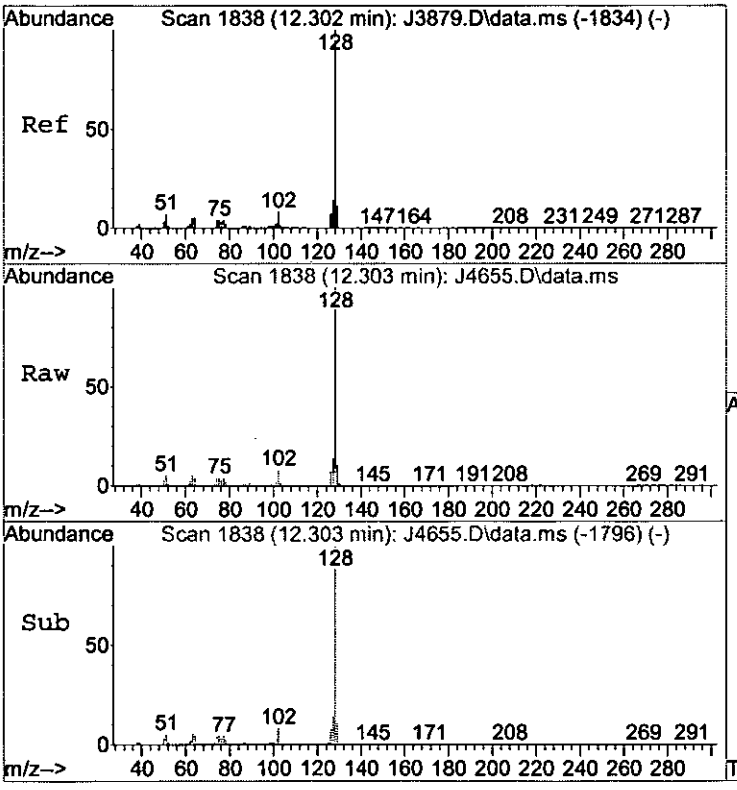


#103
sec-Butylbenzene
Concen: 0.23 ppb
RT: 10.620 min Scan# 1562
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:105 Resp: 6405

Ion	Ratio	Lower	Upper
105	100		
134	17.2	0.0	39.3
103	5.2	0.0	28.3

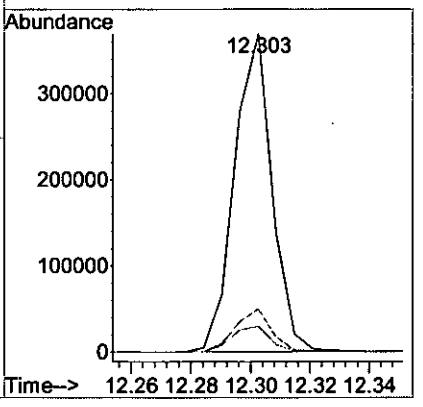




#117
Naphthalen
Concen: 21.54 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4655.D
Acq: 10 Apr 2014 2:51 pm

Tgt Ion:128 Resp: 323333

Ion	Ratio	Lower	Upper
128	100		
127	13.5	0.0	33.8
102	8.0	0.0	28.5



J4655.D W031214.M Thu Apr 10 16:48:19 2014 00264 Page 9

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~252.5~~ QB
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4655.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.616	81	85	91	rVB	579353	621653	5.58%	1.038%
2	1.762	106	109	114	rVB	227019	251941	2.26%	0.421%
3	2.396	204	213	217	rBV3	103819	262788	2.36%	0.439%
4	2.445	217	221	233	rVB2	240004	372115	3.34%	0.621%
5	2.597	240	246	254	rVB2	88118	156369	1.40%	0.261%
6	3.463	377	388	400	rBV	390642	869809	7.80%	1.452%
7	4.152	492	501	509	rBV	499537	1184624	10.63%	1.977%
8	4.249	509	517	525	rVV	905265	2322348	20.84%	3.876%
9	4.310	525	527	539	rVB2	66680	147188	1.32%	0.246%
10	4.658	575	584	596	rBV	436892	1137420	10.21%	1.899%
11	5.450	703	714	728	rBV	1198566	2829862	25.39%	4.723%
12	7.322	1014	1021	1028	rBV	2404121	3703955	33.24%	6.182%
13	7.395	1028	1033	1043	rVB	143252	246353	2.21%	0.411%
14	8.742	1249	1254	1265	rBV	2691429	3400662	30.51%	5.676%
15	8.889	1272	1278	1290	rBV	3900900	4849904	43.52%	8.095%
16	8.998	1290	1296	1310	rVB	8376879	11144659	100.00%	18.602%
17	9.346	1347	1353	1366	rVB	6364341	7981041	71.61%	13.322%
18	9.669	1402	1406	1414	rBV	165772	225025	2.02%	0.376%
19	9.791	1420	1426	1435	rBV	2189658	2712731	24.34%	4.528%
20	10.023	1459	1464	1471	rVB	223739	277512	2.49%	0.463%
21	10.096	1471	1476	1478	rBV	1202677	1466074	13.15%	2.447%
22	10.169	1484	1488	1495	rVB	530259	629703	5.65%	1.051%
23	10.333	1510	1515	1523	rBV	1349726	1561204	14.01%	2.606%
24	10.474	1534	1538	1545	rBV	3039837	3586805	32.18%	5.987%
25	10.748	1578	1583	1590	rBV	3062504	3341425	29.98%	5.577%
26	10.815	1590	1594	1599	rVV	1285479	1473738	13.22%	2.460%
27	10.974	1615	1620	1628	rVV	1643554	1948986	17.49%	3.253%
28	11.333	1675	1679	1682	rBV	125234	142538	1.28%	0.238%
29	11.413	1688	1692	1699	rVB2	143292	179742	1.61%	0.300%
30	11.925	1772	1776	1780	rBV2	243894	241364	2.17%	0.403%
31	12.303	1834	1838	1842	rBV	703787	641332	5.75%	1.070%

KP 4/10/14

Sum of corrected areas: 59910870

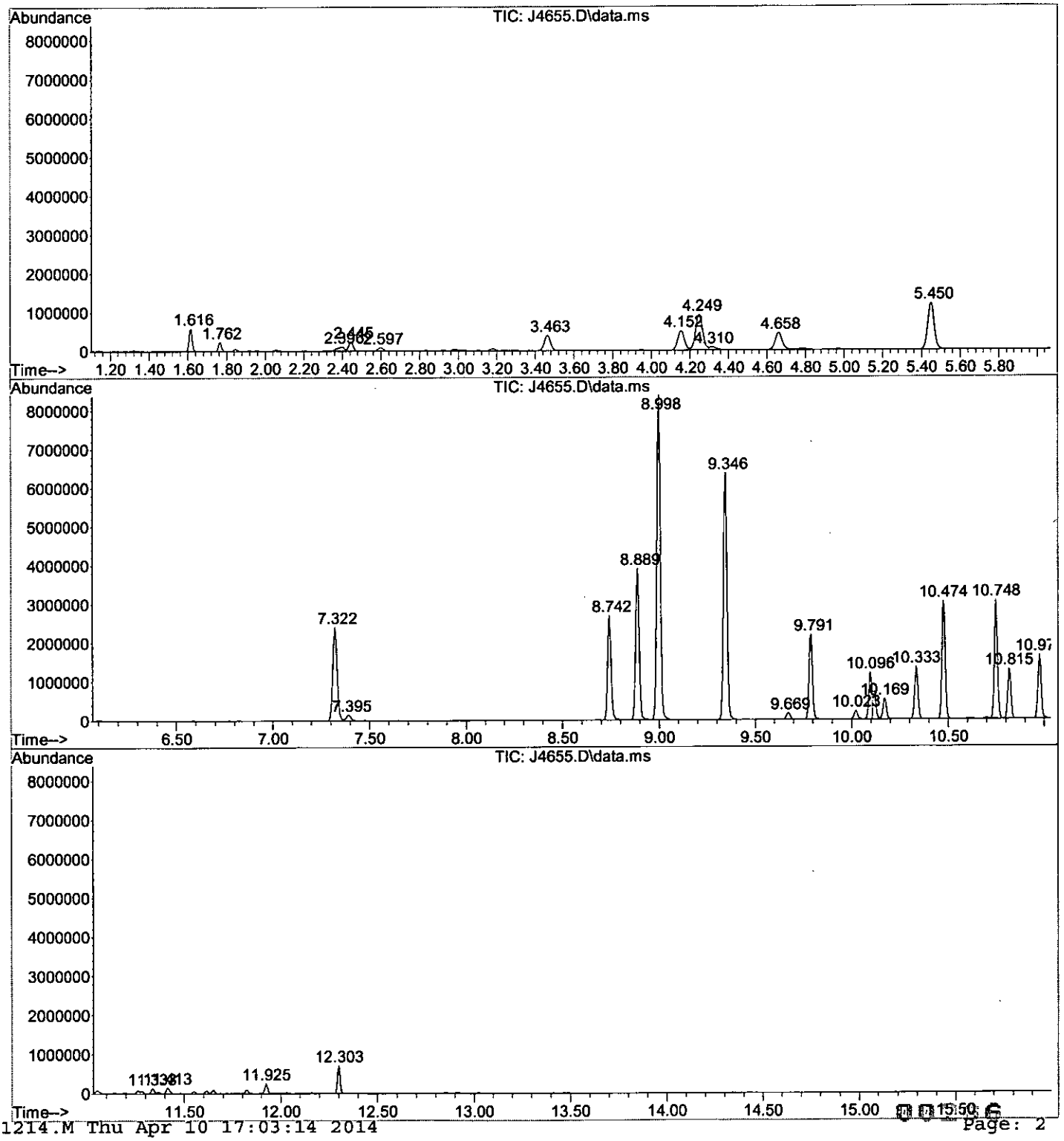
W031214.M Thu Apr 10 17:03:08 2014 00265 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~25~~ 25 2.5 VL
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Thu Apr 10 17:03:14 2014 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~25~~ 5 µl
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

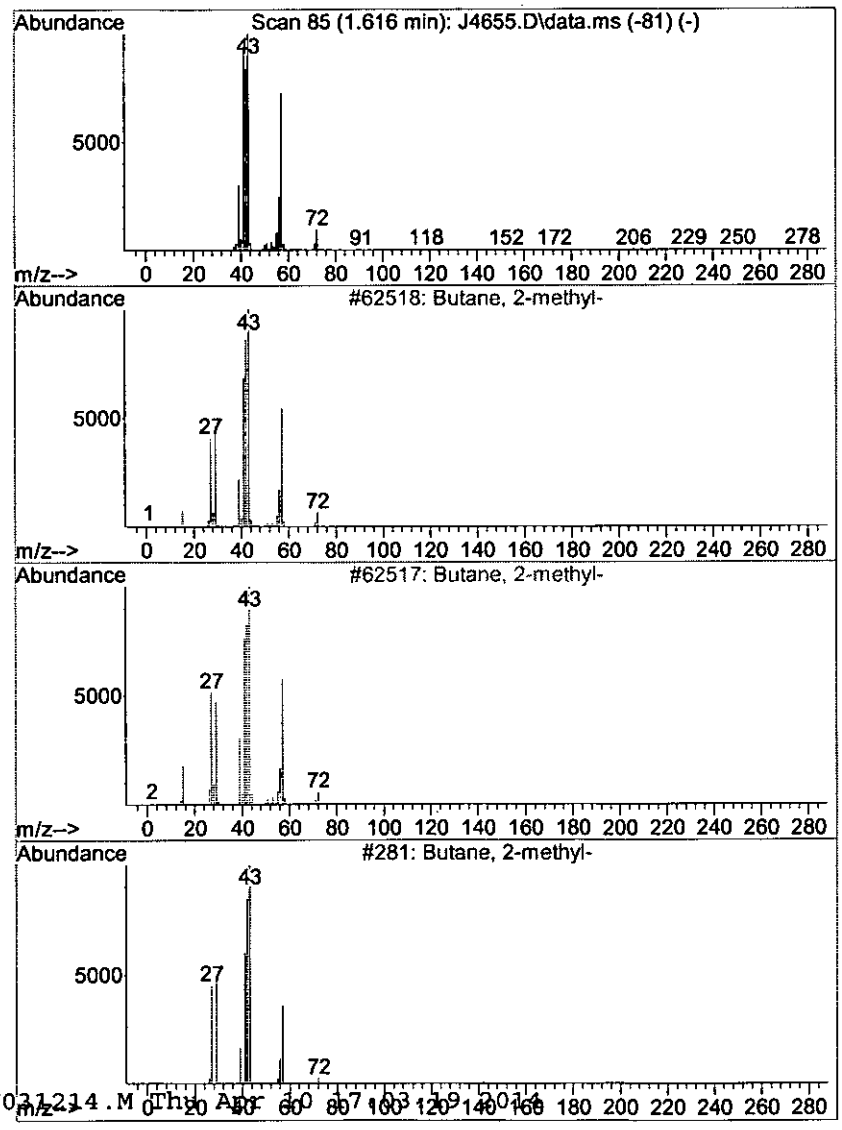
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

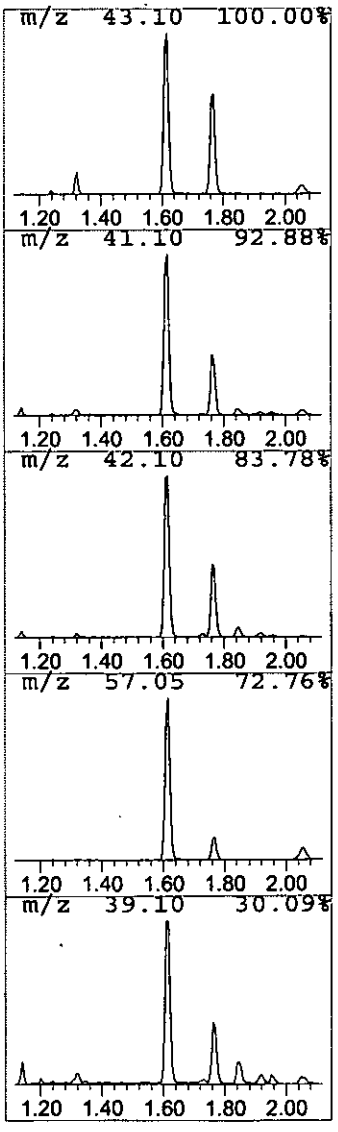
****

Peak Number 1 Butane, 2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.616	13.38 ppb	621653	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	91
2	Butane, 2-methyl-	72	C5H12	000078-78-4	90
3	Butane, 2-methyl-	72	C5H12	000078-78-4	80
4	3-Buten-1-ol	72	C4H8O	000627-27-0	47
5	1-Butene	56	C4H8	000106-98-9	10





W031214.M Thu Apr 10 17:03:19 2014

00267

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|25 2.5 uP
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

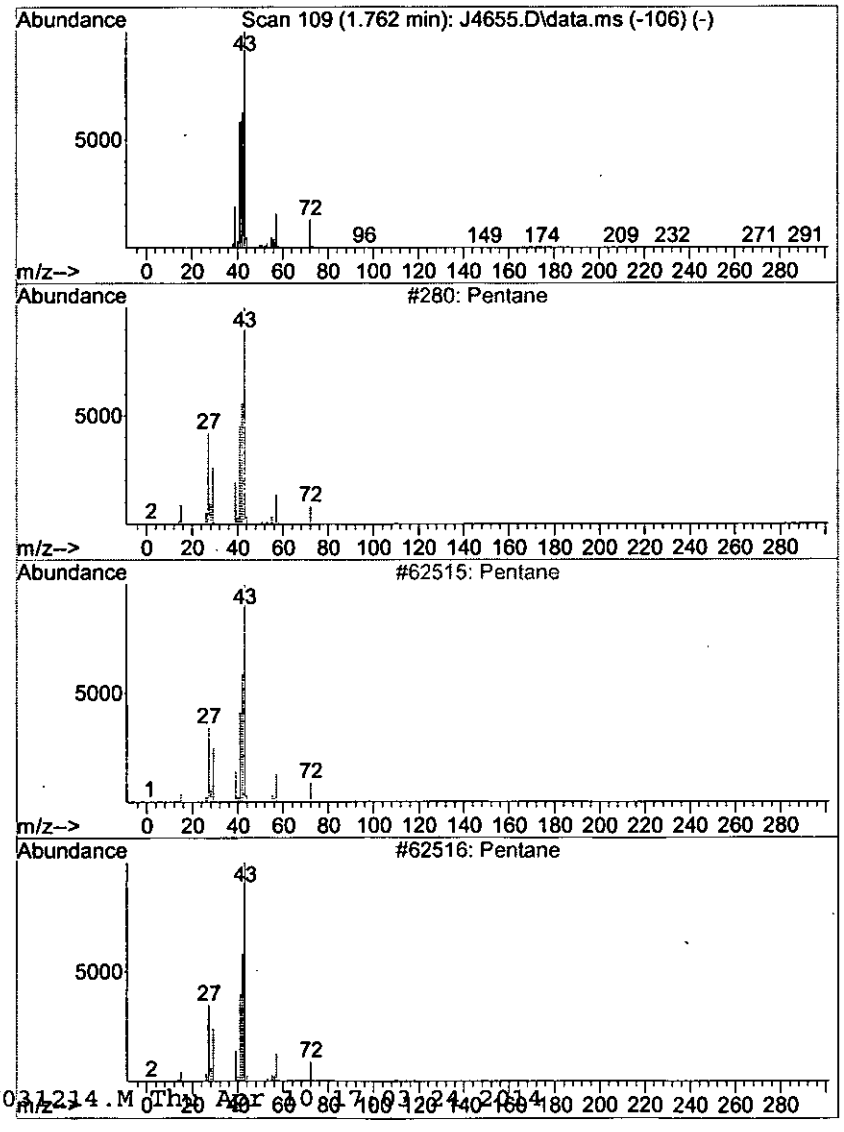
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

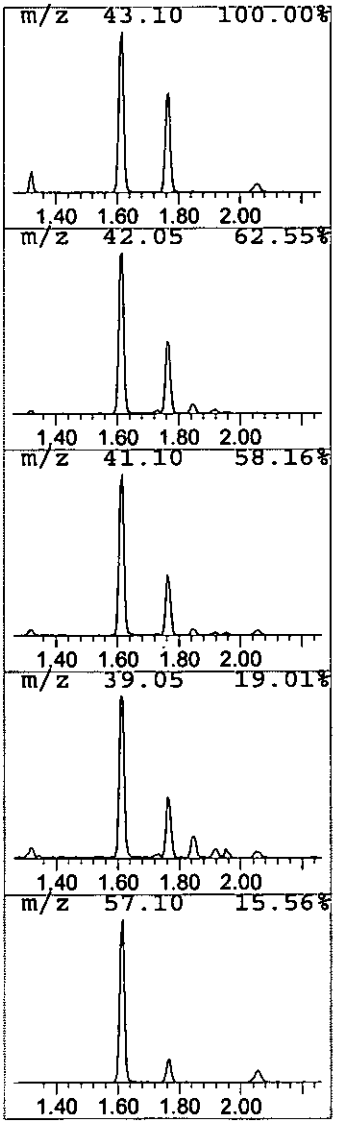
****

Peak Number 2 Pentane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.762	5.42 ppb	251941	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	90
2	Pentane	72	C5H12	000109-66-0	90
3	Pentane	72	C5H12	000109-66-0	86
4	Oxirane, ethyl-	72	C4H8O	000106-88-7	50
5	1-Propanol, 2-methyl-	74	C4H10O	000078-83-1	39





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~25~~
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

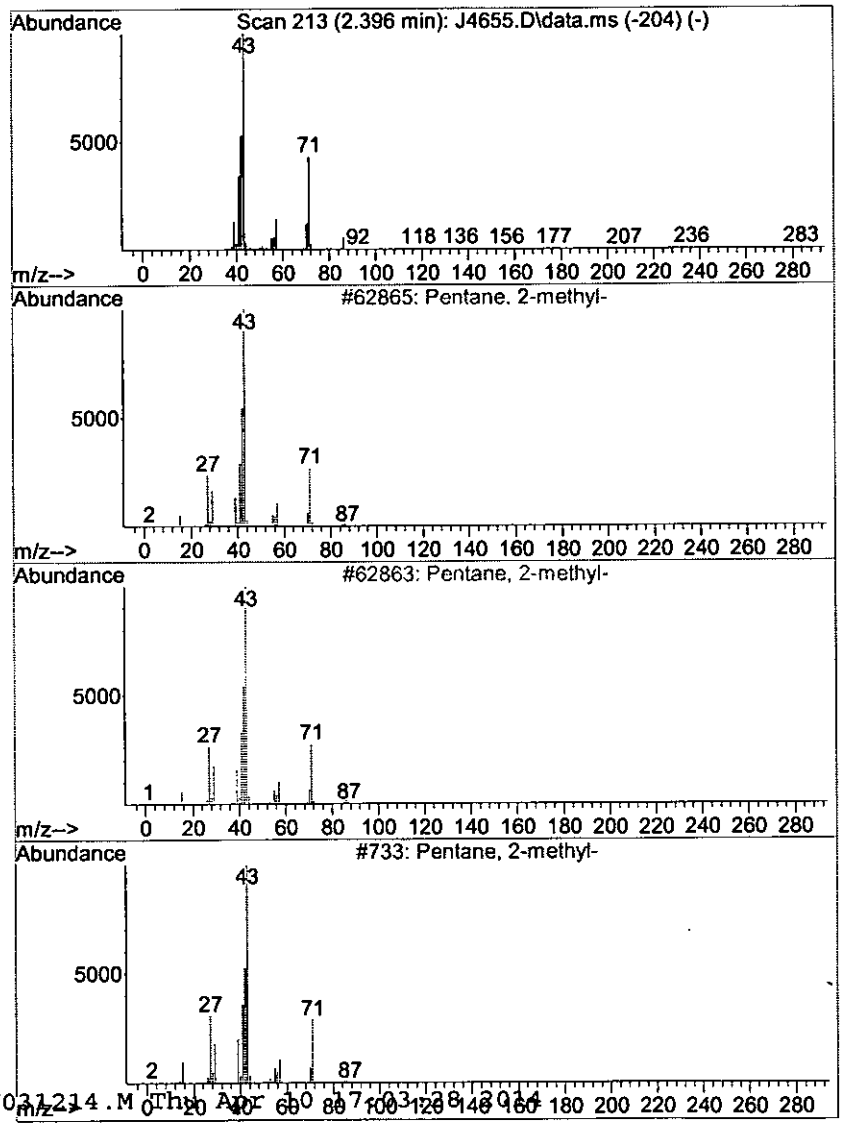
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

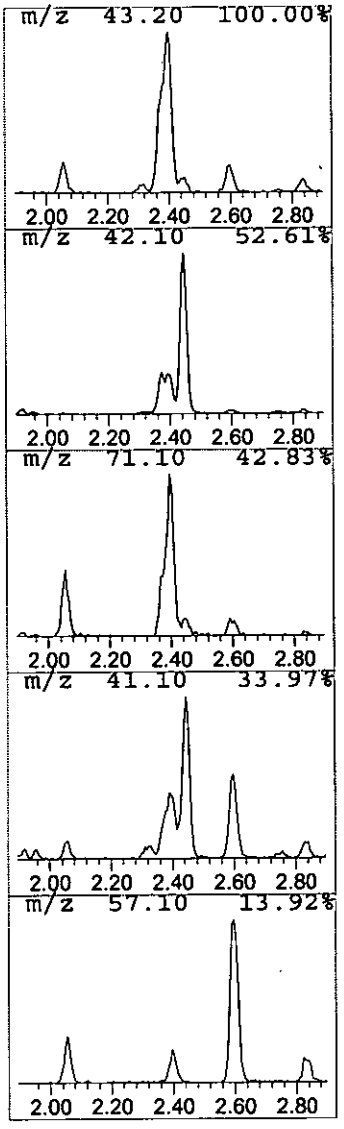
****

Peak Number 3 Pentane, 2-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.396	5.66 ppb	262788	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	78
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	72
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	64





W031214.M Thu Apr 10 17:03:28 2014 00269 Page: 5

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~252.5~~ 10
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

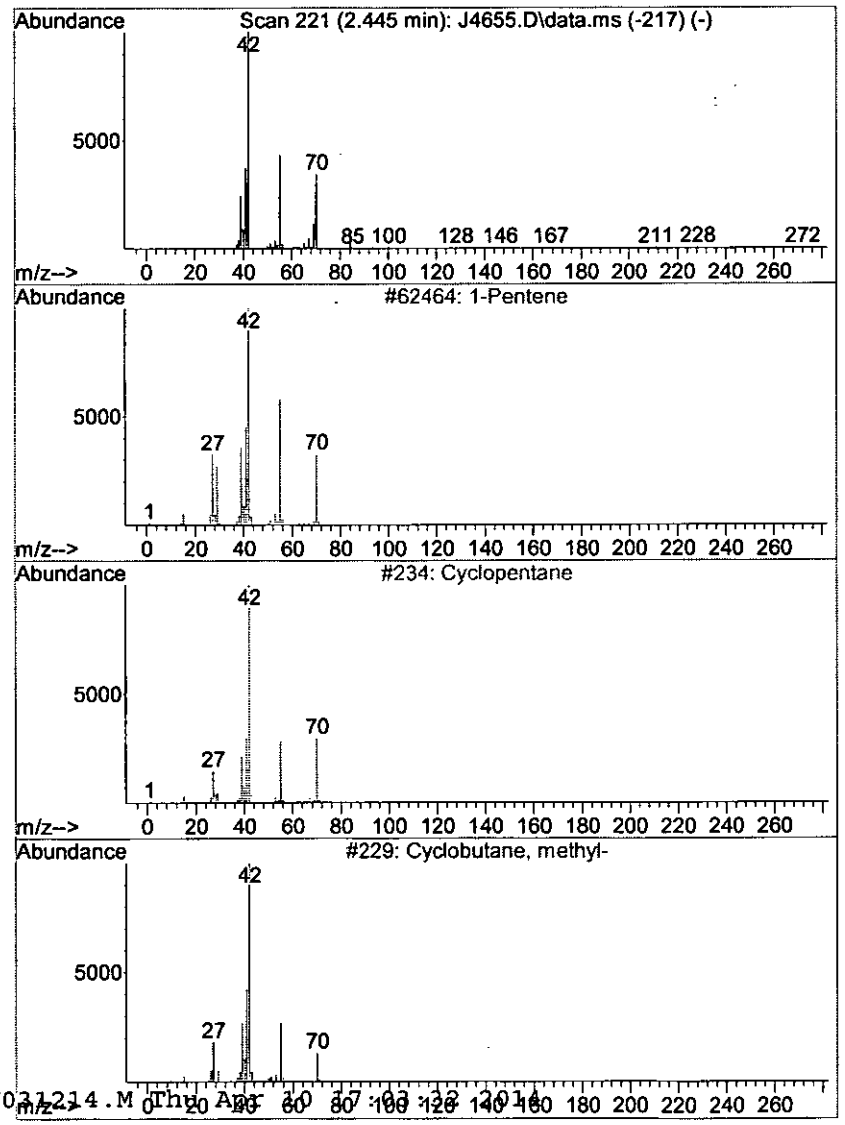
****

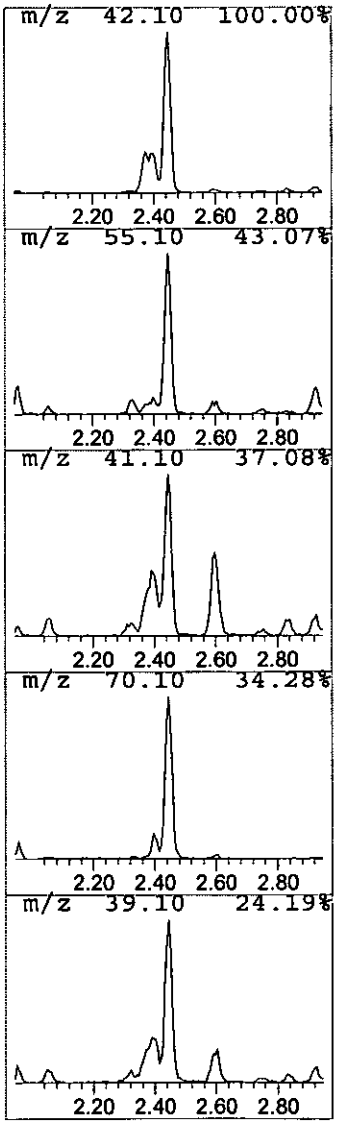
Peak Number 4 1-Pentene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.445	8.01 ppb	372115	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene	70	C5H10	000109-67-1	80
2	Cyclopentane	70	C5H10	000287-92-3	72
3	Cyclobutane, methyl-	70	C5H10	000598-61-8	64
4	Cyclopropane, ethyl-	70	C5H10	001191-96-4	50
5	1-Pentene	70	C5H10	000109-67-1	50

unknown





W031214.M Thu Apr 10 17:03:28 2014 00270 Page: 6

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~25~~).5 ml
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

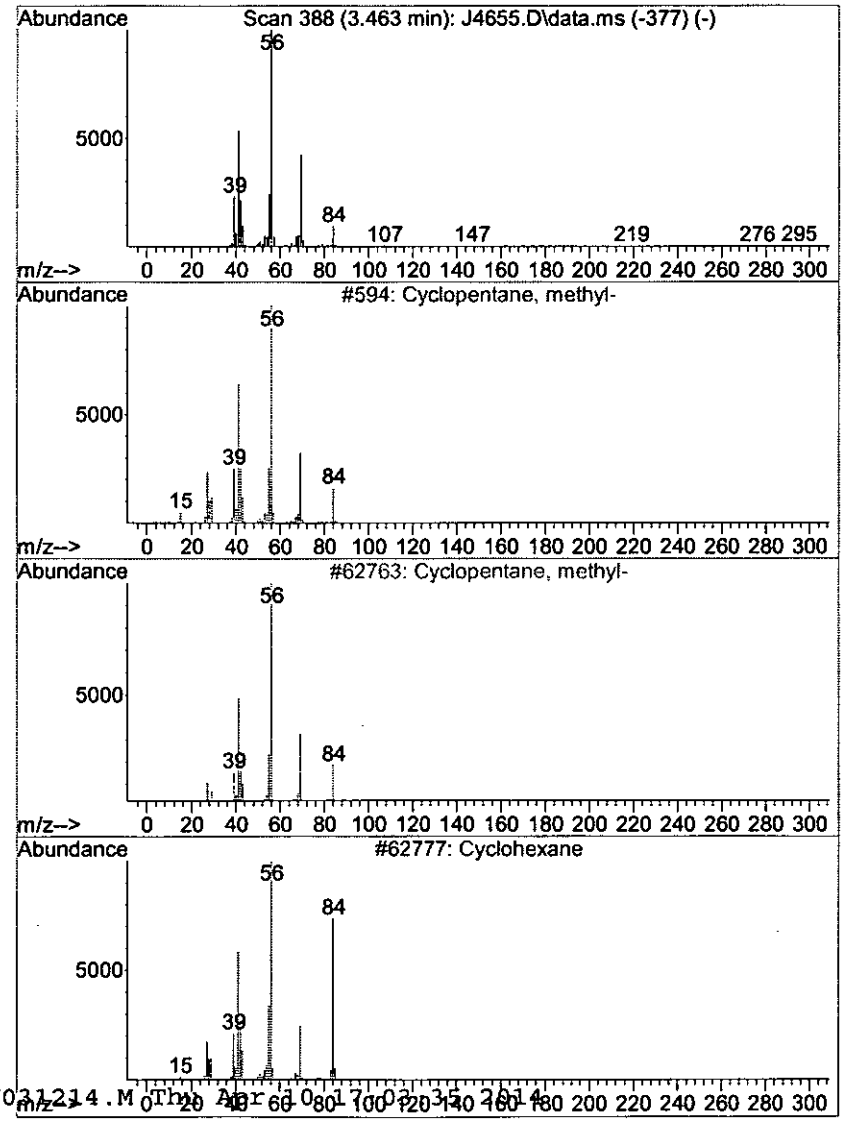
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

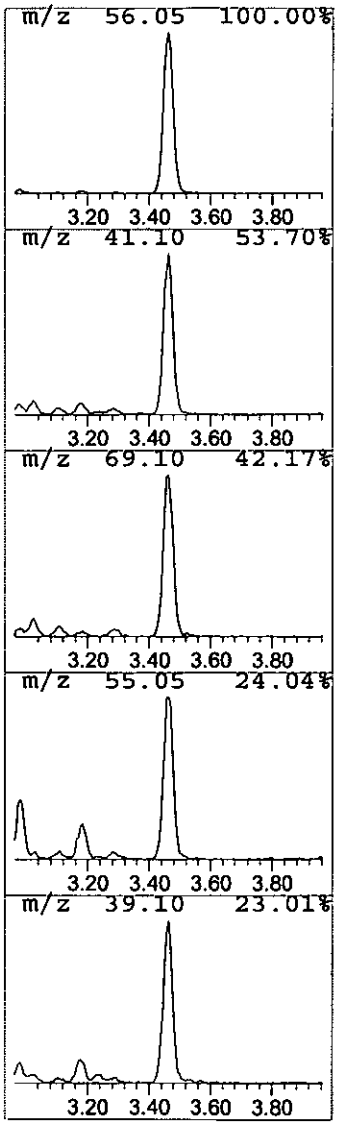
****

Peak Number 5 Cyclopentane, methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.463	18.73 ppb	869809	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	90
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	86
3	Cyclohexane	84	C6H12	000110-82-7	83
4	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	80
5	Cyclobutane, ethyl-	84	C6H12	004806-61-5	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~25~~ 2.5 ml
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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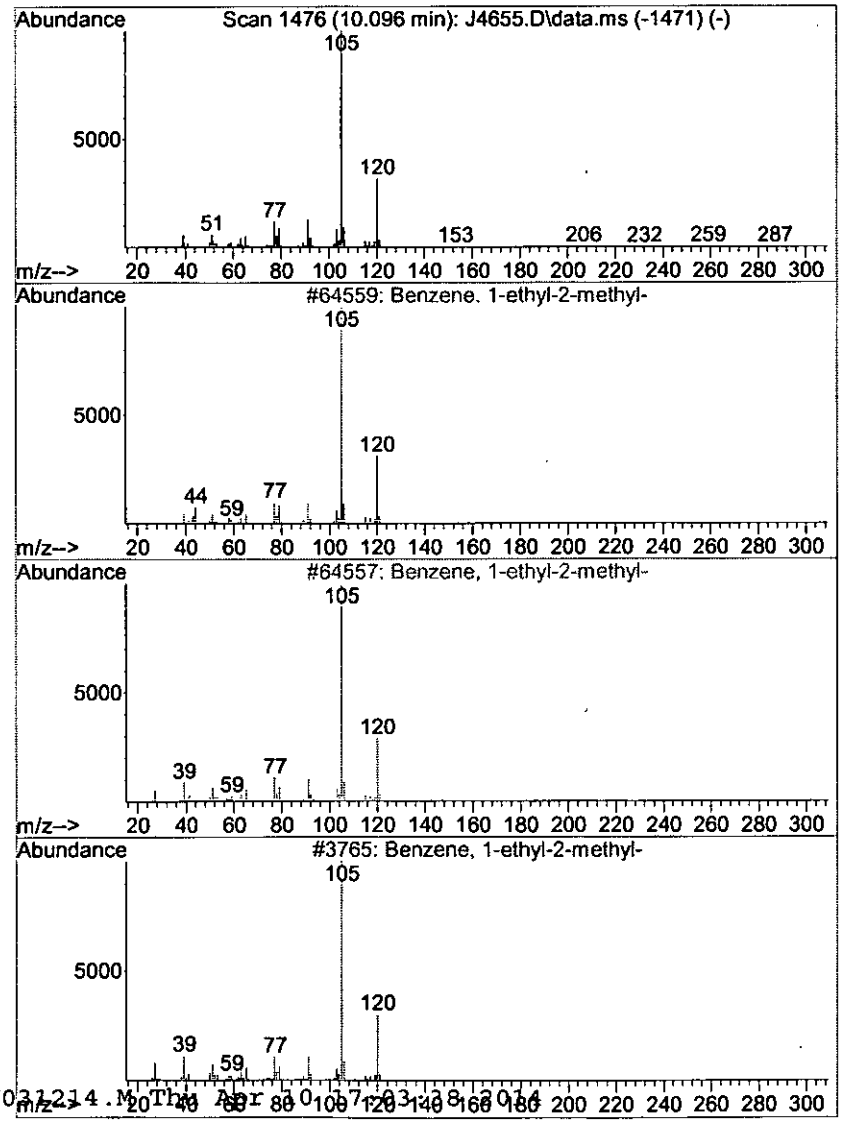
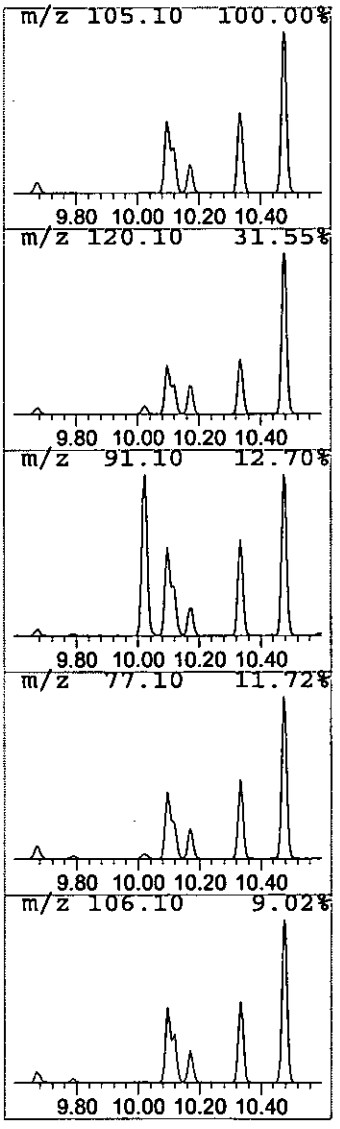
Peak Number 6 Benzene, 1-ethyl-2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.096	21.94 ppb	1466070	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94





W031214.M Thu Apr 10 17:03:38 2014 00272 Page: 8

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~25~~ 23.6 ppb
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

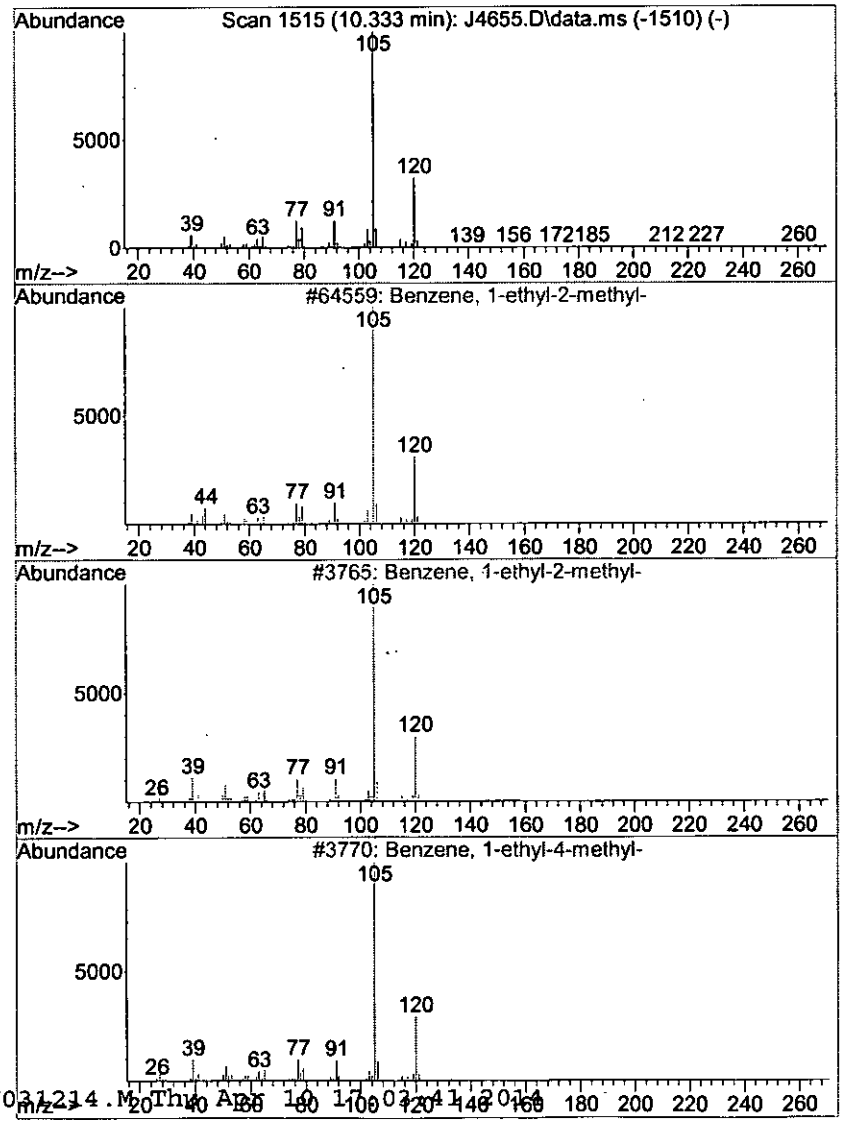
****

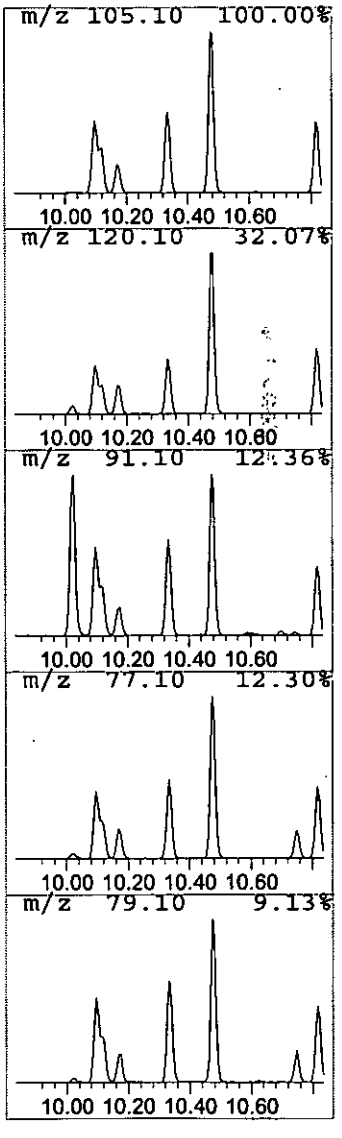
Peak Number 7 Benzene, 1-ethyl-2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.334	23.36 ppb	1561200	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
③	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
5	Benzene, (1-methylethyl)-	120	C9H12	000098-82-8	91

Kappa already called





W031214.M Thu Apr 10 17:03:41 2014 00273 Page: 9

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|~~25~~ 5 ul
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

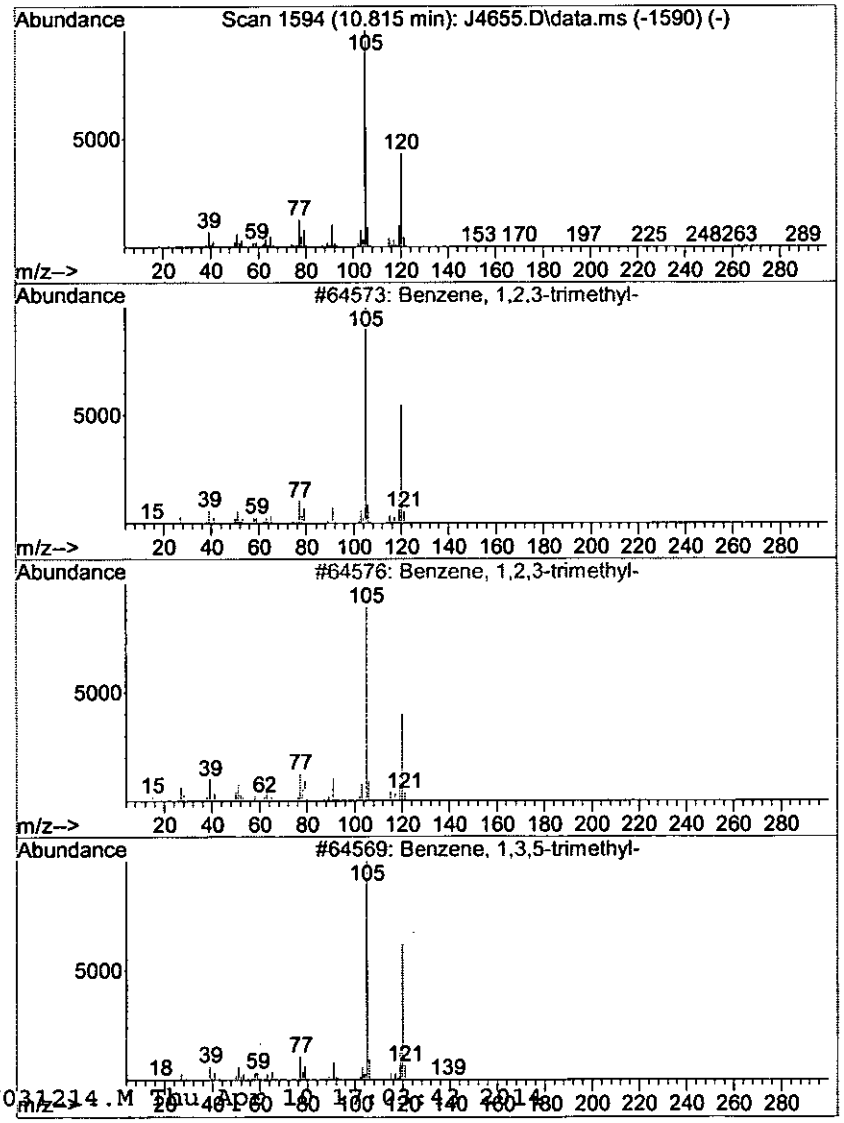
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

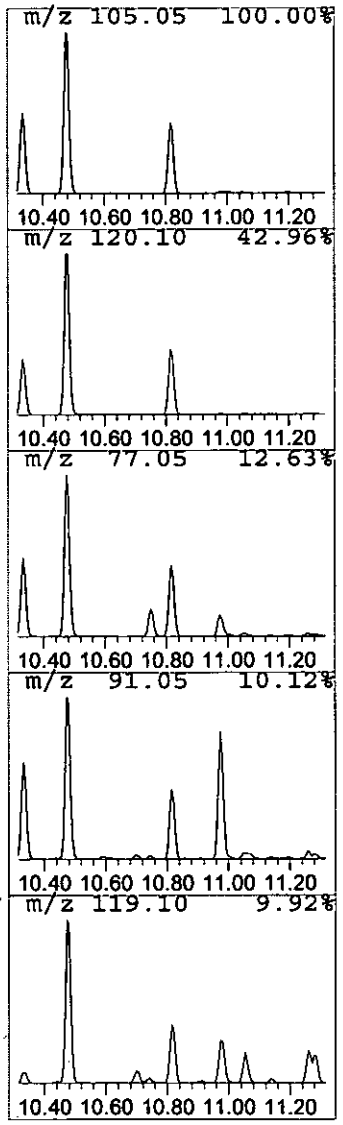
****

Peak Number 8 Benzene, 1,2,3-trimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.815	22.05 ppb	1473740	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
4	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	94
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94





W031214.M Thu Apr 10 17:03:42 2014

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4655.D
Acq On : 10 Apr 2014 2:51 pm
Operator : K.Ruest
Sample : R1402225-015|252.5 ug
Misc : PARSONS 9913 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

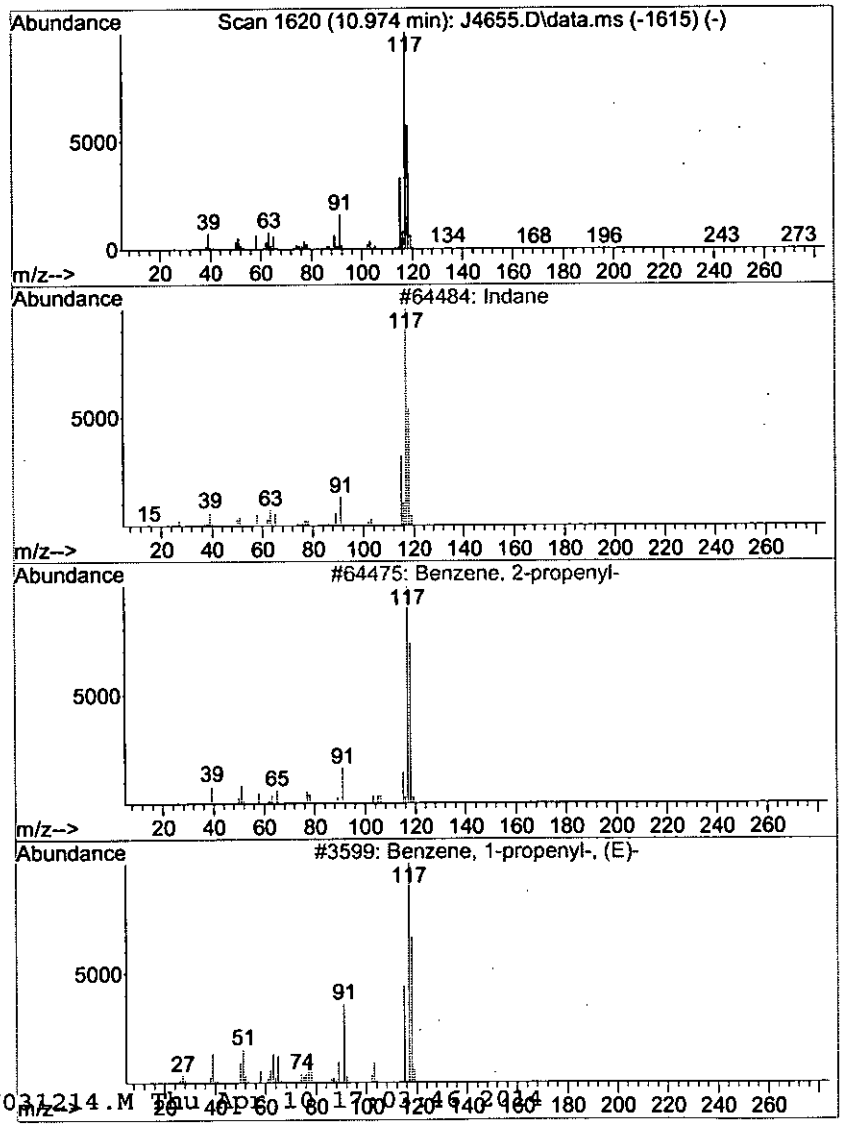
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

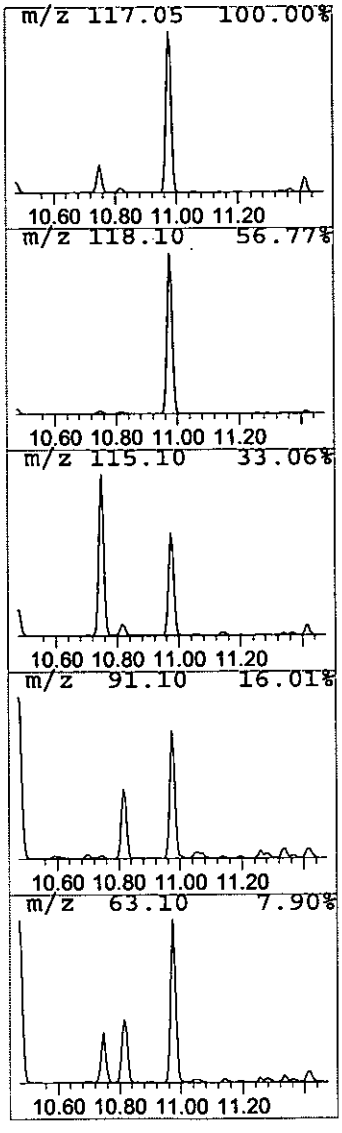
****

Peak Number 9 Indane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.974	29.16 ppb	1948990	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	93
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	72
3	Benzene, 1-propenyl-, (E)-	118	C9H10	000873-66-5	64
4	Indane	118	C9H10	000496-11-7	59
5	Benzene, 1-propenyl-	118	C9H10	000637-50-3	53





ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1220
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 15:23
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1402225-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4656.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	ND	U	13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**2.0**	J	13	2.5	1.5	
563-58-6	1,1-Dichloropropene	ND	U	13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	ND	U	13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	ND	U	13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	U	13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	**0.83**	J	13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	13	2.5	1.9	
106-93-4	1,2-Dibromoethane	ND	U	13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	ND	U	13	2.5	0.53	
107-06-2	1,2-Dichloroethane	ND	U	13	2.5	0.90	
78-87-5	1,2-Dichloropropane	ND	U	13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	ND	U	13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	ND	U	13	2.5	0.50	
142-28-9	1,3-Dichloropropane	ND	U	13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	ND	U	13	2.5	0.50	
594-20-7	2,2-Dichloropropane	ND	U	13	2.5	0.68	
78-93-3	2-Butanone (MEK)	ND	U	13	2.5	2.1	
95-49-8	2-Chlorotoluene	ND	U	13	2.5	0.50	
591-78-6	2-Hexanone	ND	U	13	13	4.2	
106-43-4	4-Chlorotoluene	ND	U	13	2.5	0.60	
99-87-6	p-Isopropyltoluene	ND	U	13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	ND	U	13	2.5	1.7	
67-64-1	Acetone	ND	U	13	13	3.1	
71-43-2	Benzene	ND	U	13	2.5	0.50	
108-86-1	Bromobenzene	ND	U	13	2.5	0.71	
74-97-5	Bromochloromethane	ND	U	13	2.5	0.80	
75-27-4	Bromodichloromethane	ND	U	13	2.5	0.80	
75-25-2	Bromoform	ND	U	13	2.5	1.1	
74-83-9	Bromomethane	ND	U	13	2.5	0.73	
56-23-5	Carbon Tetrachloride	ND	U	13	2.5	1.2	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1220
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 15:23
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1402225-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4656.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	13	2.5	0.73	
75-00-3	Chloroethane	ND	U	13	2.5	0.60	
67-66-3	Chloroform	**0.85**	J	13	2.5	0.63	
74-87-3	Chloromethane	ND	U	13	2.5	0.53	
124-48-1	Dibromochloromethane	ND	U	13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	13	2.5	1.2	
75-09-2	Methylene Chloride	ND	U	13	2.5	0.80	
100-41-4	Ethylbenzene	ND	U	13	2.5	0.50	
87-68-3	Hexachlorobutadiene	ND	U	13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	ND	U	13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	U	13	2.5	0.73	
91-20-3	Naphthalene	**4.8**	J	13	2.5	0.50	
100-42-5	Styrene	ND	U	13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	**440**		13	2.5	0.75	
108-88-3	Toluene	ND	U	13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	**230**		13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	13	2.5	0.50	
75-01-4	Vinyl Chloride	**18**		13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	**270**		13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	ND	U	13	2.5	0.60	
179601-23-1	m,p-Xylenes	ND	U	25	5.0	0.83	
104-51-8	n-Butylbenzene	ND	U	13	2.5	0.53	
103-65-1	n-Propylbenzene	ND	U	13	2.5	0.50	
95-47-6	o-Xylene	**0.58**	J	13	2.5	0.50	
135-98-8	sec-Butylbenzene	ND	U	13	2.5	0.68	
98-06-6	tert-Butylbenzene	ND	U	13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	**1.9**	J	13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	ND	U	13	2.5	0.50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/10/14 15:23	
Dibromofluoromethane	100	85-115	4/10/14 15:23	
Toluene-d8	97	85-120	4/10/14 15:23	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/10/14 1523

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1402225-016	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-016 | ~~25~~ 0.5 VP
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4656.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 3:23 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:39:16 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	828853	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1228276	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1127732	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	548955	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	357216	50.24	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.48%				
48) surr1,1,2-dichloroetha...	4.658	65	416265	51.39	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.78%				
65) SURR3,Toluene-d8	7.322	98	1448819	48.49	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.98%				
70) SURR2,BFB	9.791 ~~9.846~~		95916961 ~~618 49.07~~	~~0.06~~	ppb	m VP	0.05
Spiked Amount 50.000	Range 85 - 122		Recovery =	~~0.12%# 49.04~~			
Target Compounds							Qvalue
4) Vinyl Chloride	1.323	62	55596	7.02	ppb		94
13) 1,1-Diclethene	2.042	96	4708	0.78	ppb	#	83
15) Acetone	2.055	43	1538	0.94	ppb		82
~~16) 2-Propanol~~	~~2.134~~	~~45~~	~~208~~	~~0.78~~	~~ppb~~	~~#~~	~~1~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~1973~~	~~0.48~~	~~ppb~~	~~#~~	~~1~~
26) trans-1,2-Dichloroethene	2.585	96	5649	0.75	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	922484	109.69	ppb		87
~~39) Tetrahydrofuran~~	~~3.914~~	~~42~~	~~373~~	~~0.23~~	~~ppb~~	~~#~~	~~45~~
40) Chloroform	3.938	83	4627	0.34	ppb		92
54) Trichloroethene	5.828	130	669312	91.38	ppb		96
72) Tetrachloroethene	7.962	164	1019215	174.96	ppb		98
83) (m+p)Xylene	8.998	106	3856	0.31	ppb	#	74
84) o-Xylene	9.352	106	2870	0.23	ppb	#	58
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1173~~	~~2.66~~	~~ppb~~	~~#~~	~~14~~
101) 1,2,4-Trimethylbenzene	10.480	105	7744	0.33	ppb		99
117) Naphthalen	12.303	128	27625	1.90	ppb		99
119) 2,4,5-Trichlorotolene	12.912	159	1115	0.26	ppb		93 MTO
120) 2,3,6-Trichlorotoluene	12.912	159	1115	0.28	ppb		97

98.14%

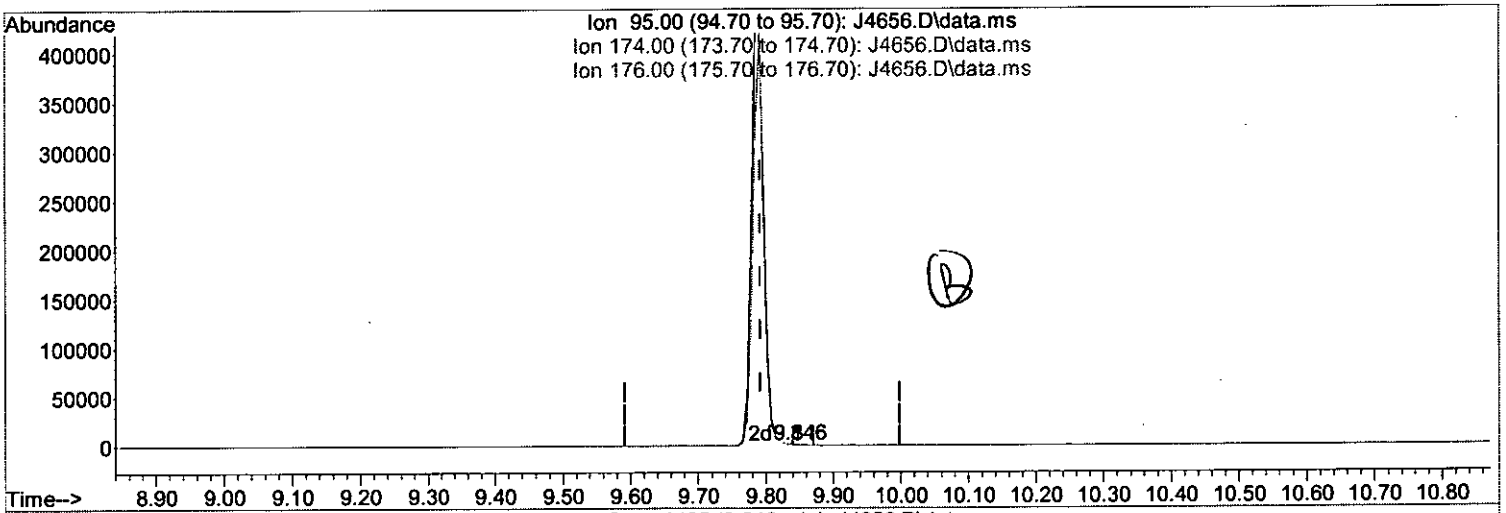
VP 4/10/14

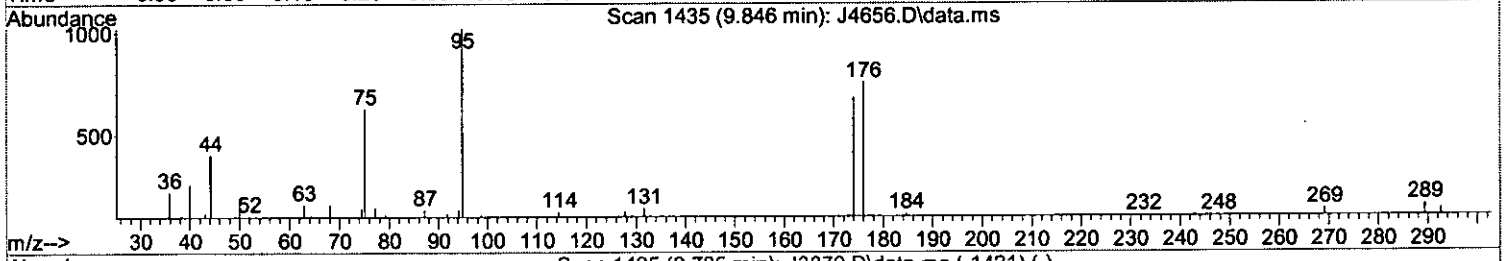
(#) = qualifier out of range (m) = manual integration (+) = signals summed

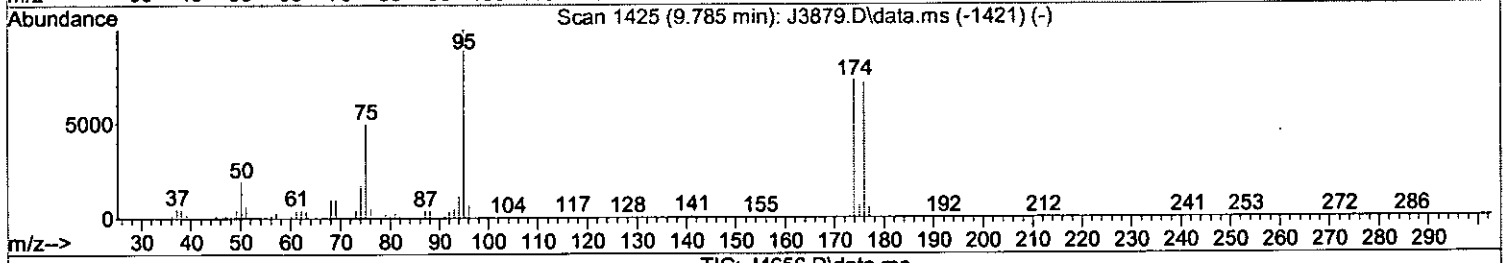
Quantitation Report (Qedit)

Sample : R1402225-016|~~252~~ 5 MP
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4656.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 3:23 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:39:16 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4656.D\data.ms

(70) SURR2,BFB (s)

9.846min (+0.055) 0.06 ppb

response 618

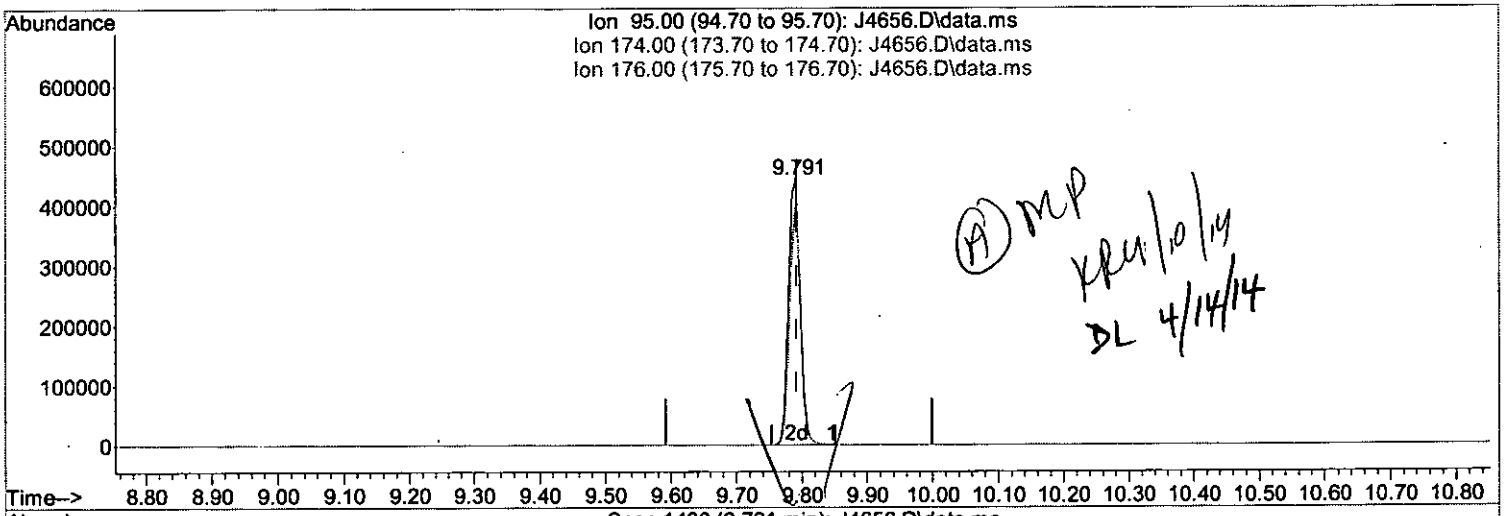
Ion	Exp%	Act%
95.00	100	100
174.00	72.40	66.83
176.00	70.70	73.90
0.00	0.00	0.00

W031214.M Thu Apr 10 16:48:33 2014 00280 Page: 1

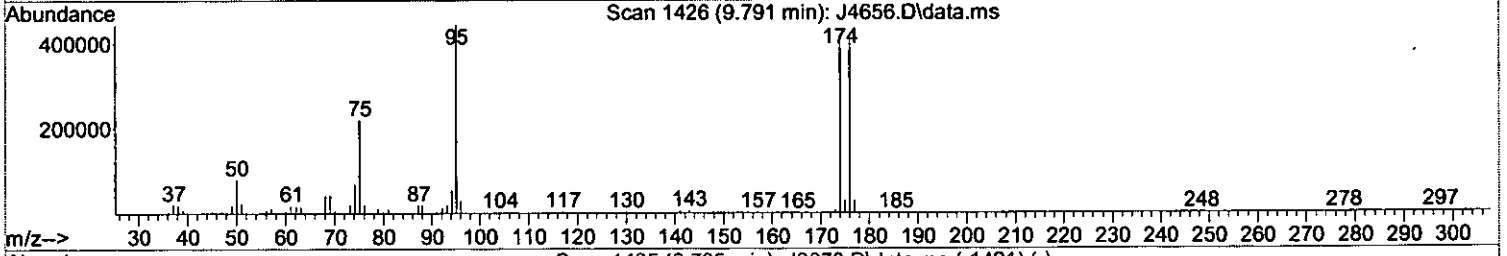
Quantitation Report (Qedit)

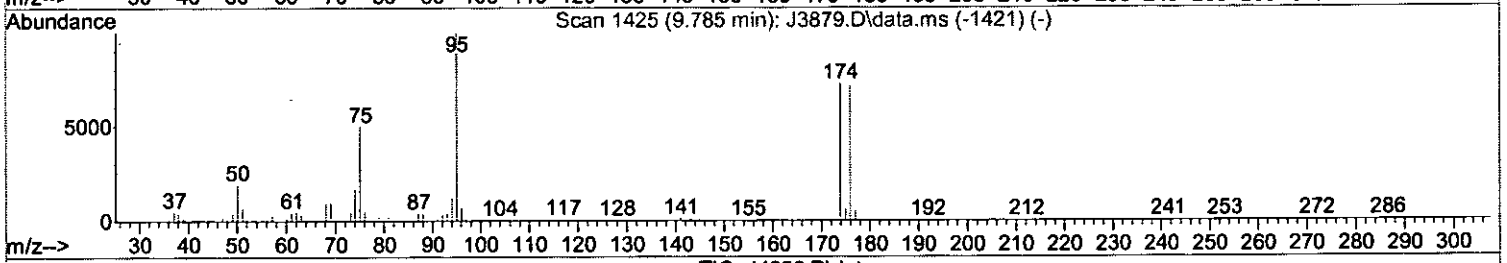
Sample : R1402225-016|~~25~~2.5 HP
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4656.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 3:23 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:39:16 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



(A) MP 4/10/14 DL 4/14/14





TIC: J4656.D\data.ms

(70) SURR2,BFB (s)

9.791min (+0.000) 49.07 ppb m

response 546961

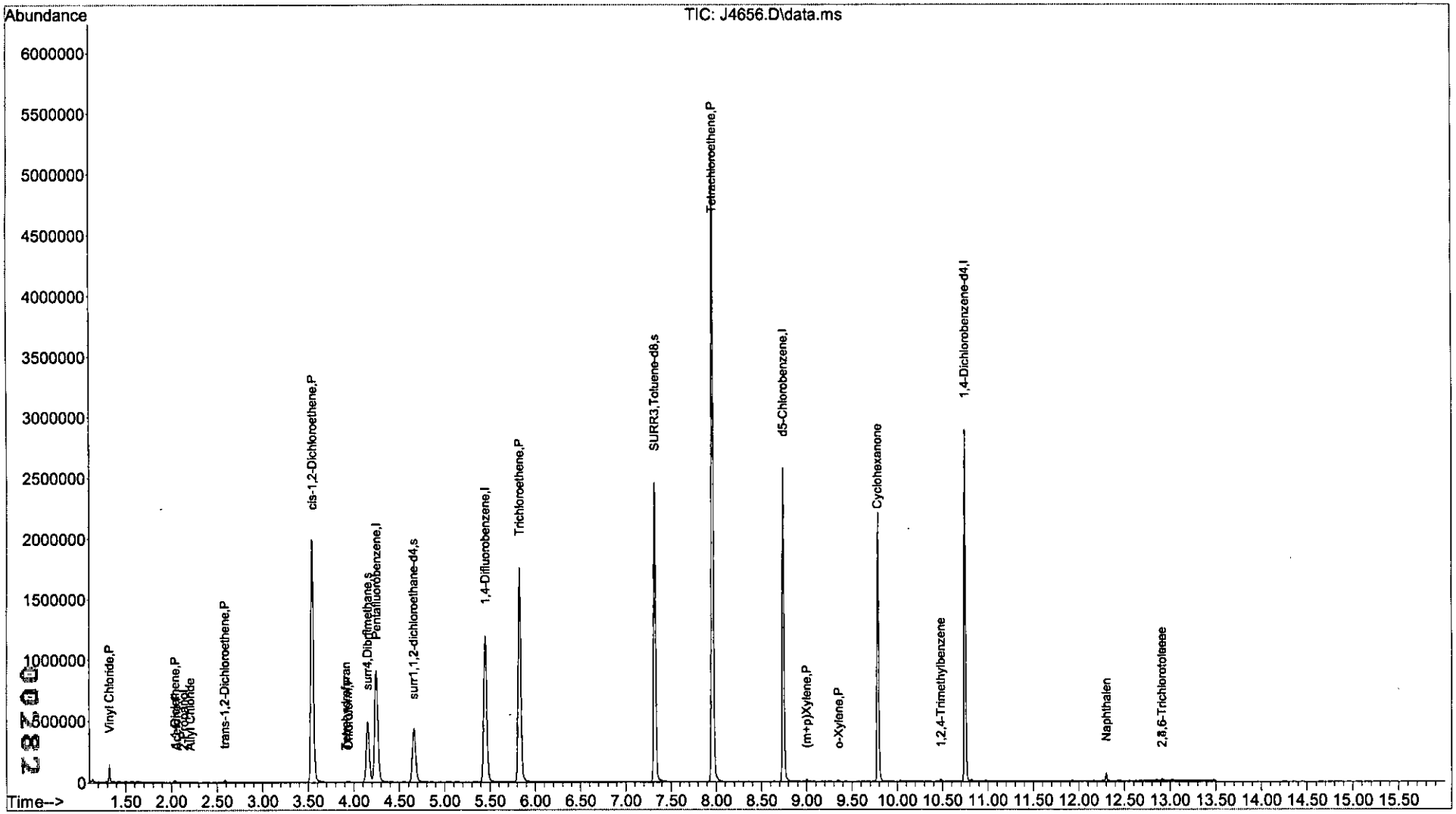
Ion	Exp%	Act%
95.00	100	100
174.00	72.40	94.05#
176.00	70.70	90.90#
0.00	0.00	0.00

W031214.M Thu Apr 10 16:48:42 2014 00281 Page: 1

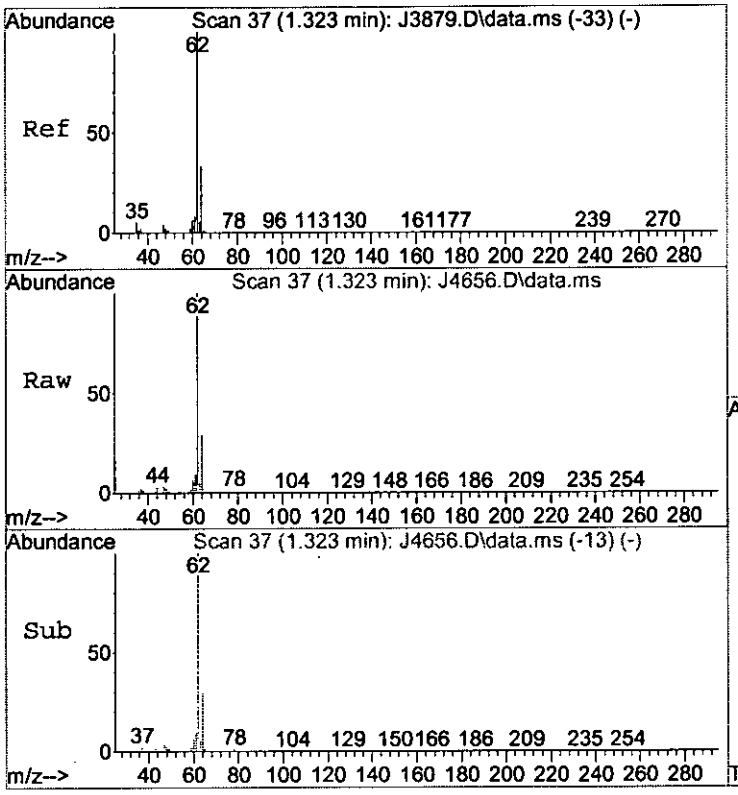
Quantitation Report (Not Reviewed)

Sample : R1402225-016|25 2.5YR
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4656.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 3:23 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 15:39:16 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



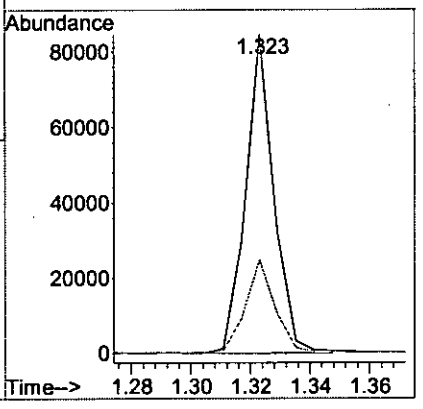
W031214.M Thu Apr 10 15:38:55 2014 Page: 2

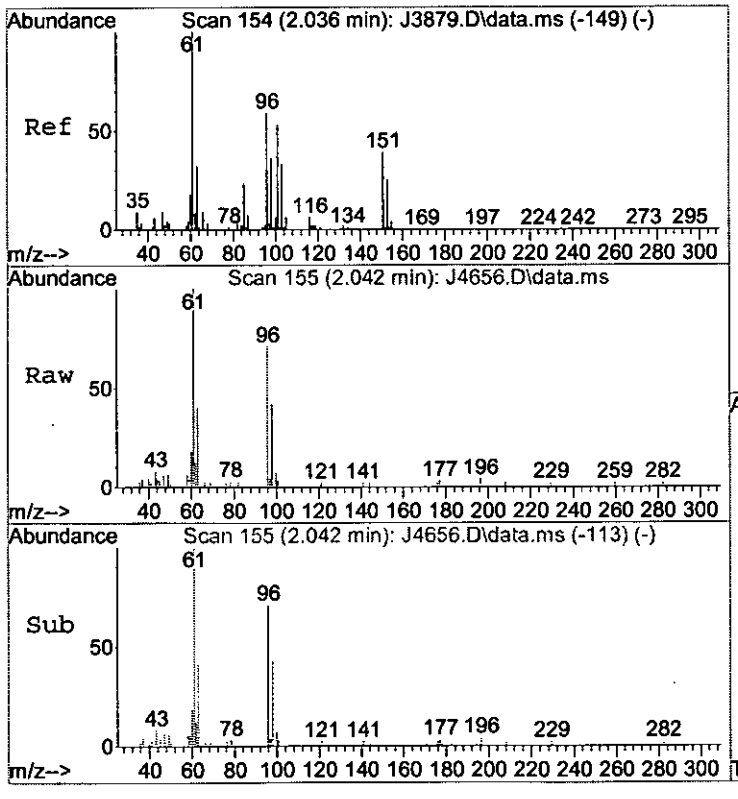


#4
Vinyl Chloride
Concen: 7.02 ppb
RT: 1.323 min Scan# 37
Delta R.T. 0.000 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion: 62 Resp: 55596

Ion	Ratio	Lower	Upper
62	100		
64	29.4	12.9	52.9

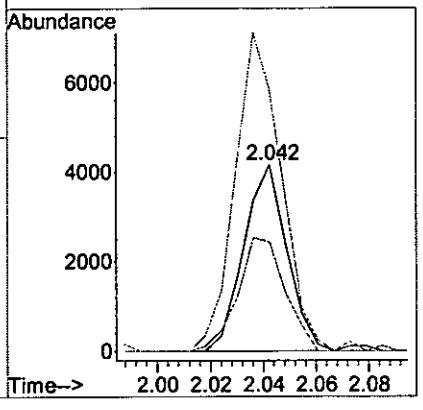




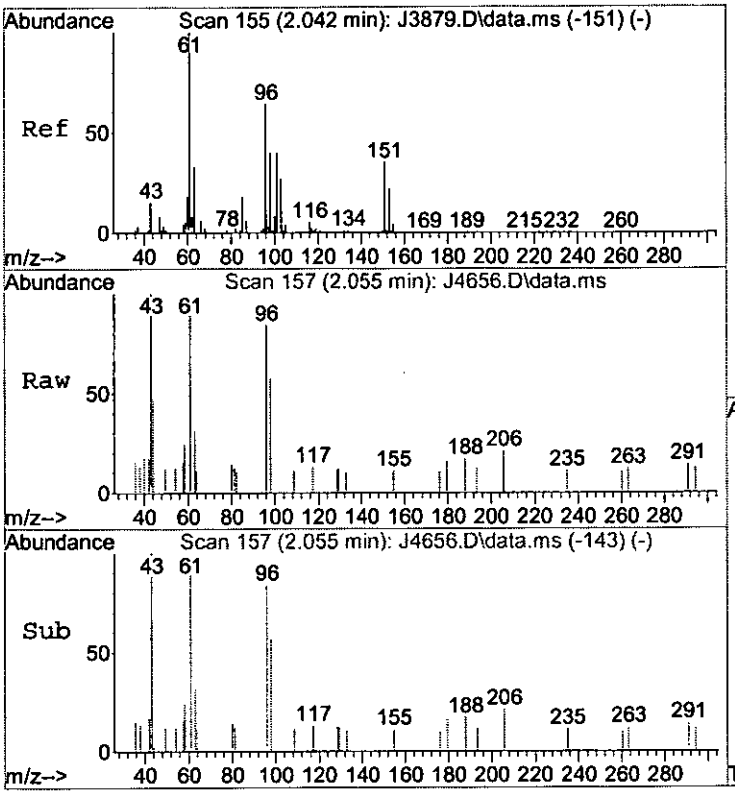
#13
1,1-Diclethene
Concen: 0.78 ppb
RT: 2.042 min Scan# 155
Delta R.T. 0.006 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion: 96 Resp: 4708

Ion	Ratio	Lower	Upper
96	100		
98	58.3	40.7	80.7
61	140.2	150.5	190.5#



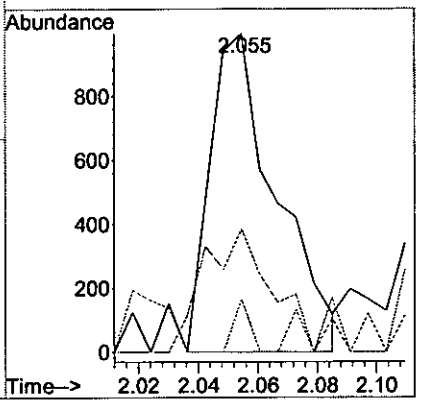
J4656.D W031214.M Thu Apr 10 16:52:14 2014 00283 Page 3

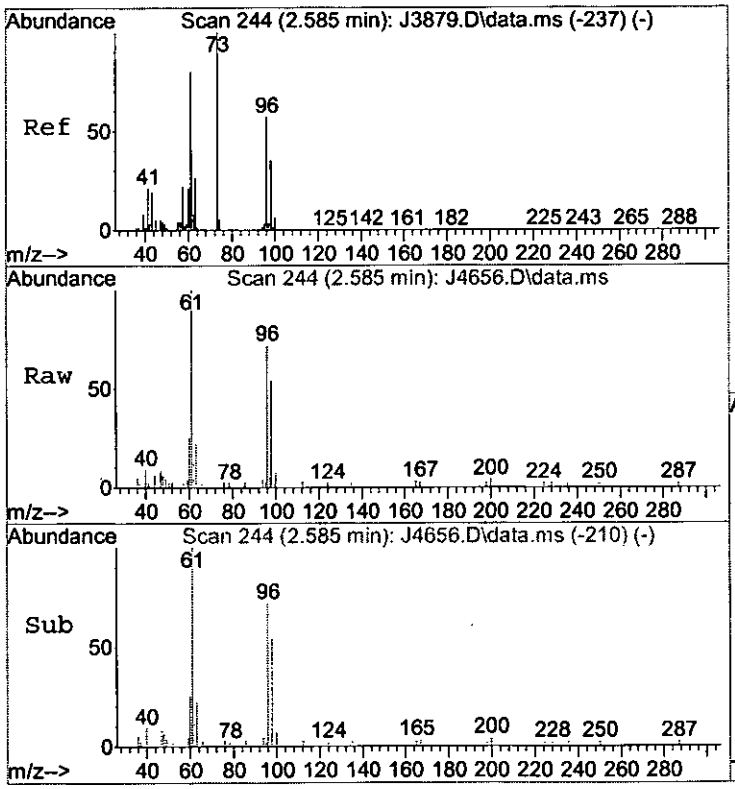


#15
Acetone
Concen: 0.94 ppb
RT: 2.055 min Scan# 157
Delta R.T. 0.012 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion: 43 Resp: 1538

Ion	Ratio	Lower	Upper
43	100		
58	38.7	9.7	49.7
42	16.7	0.0	27.9

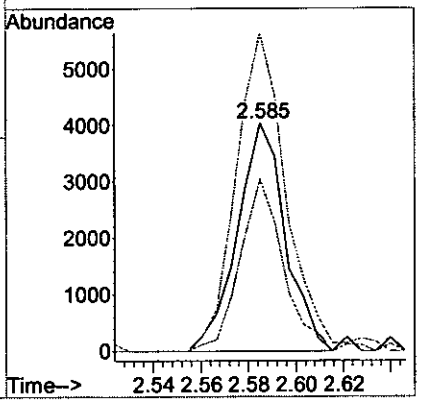




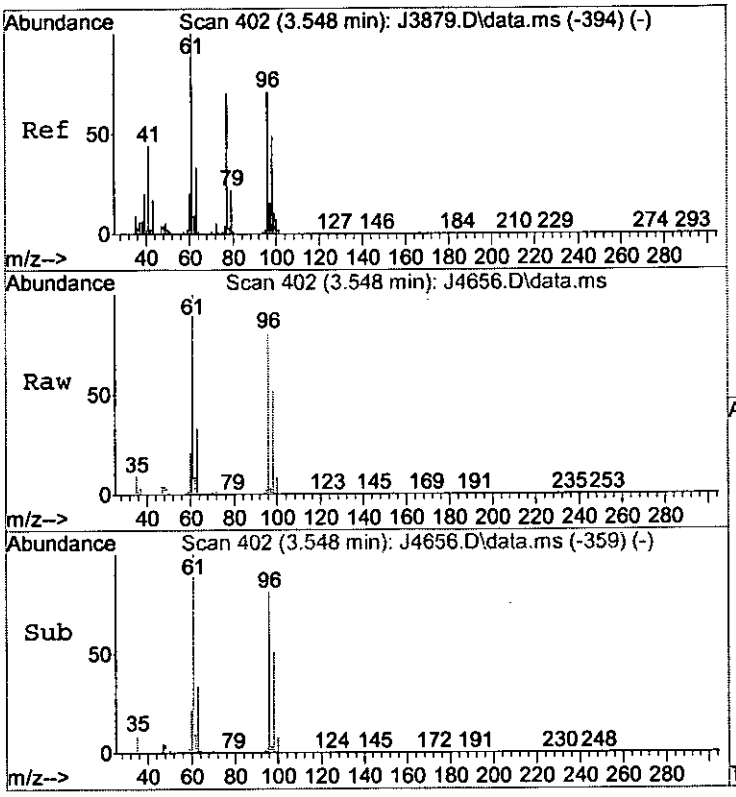
#26
trans-1,2-Dichloroethene
Concen: 0.75 ppb
RT: 2.585 min Scan# 244
Delta R.T. 0.000 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion: 96 Resp: 5649

Ion	Ratio	Lower	Upper
96	100		
98	75.4	41.6	81.6
61	139.6	119.2	159.2



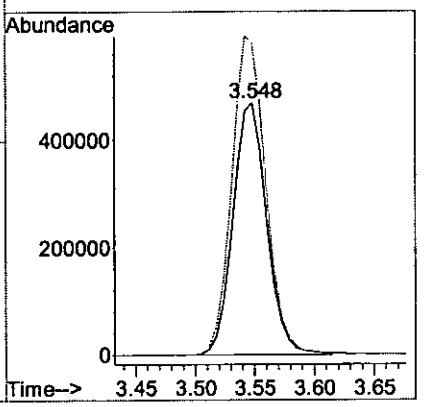
J4656.D W031214.M Thu Apr 10 16:52:16 2014 00284 Page 4

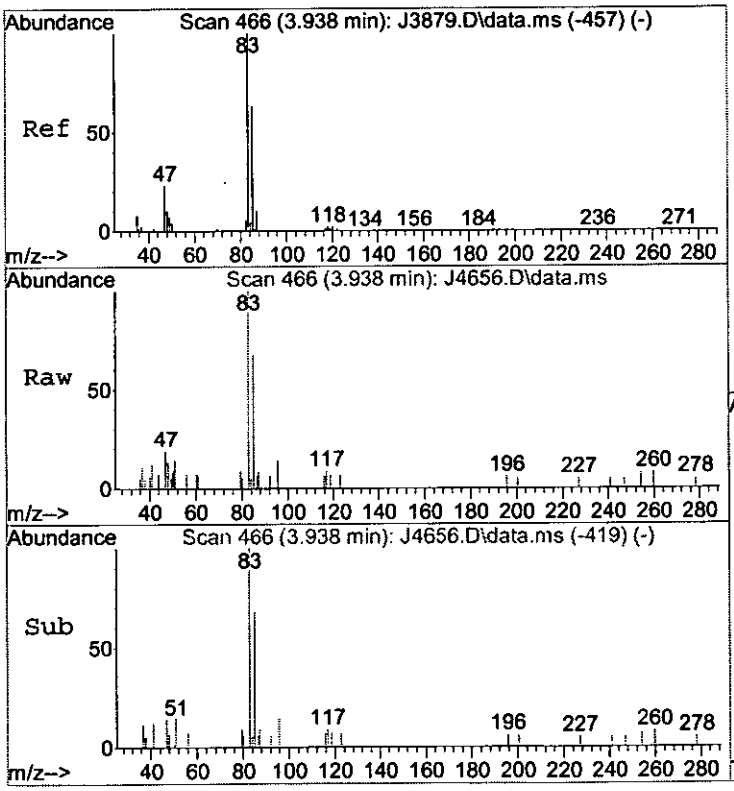


#34
cis-1,2-Dichloroethene
Concen: 109.69 ppb
RT: 3.548 min Scan# 402
Delta R.T. 0.006 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion: 96 Resp: 922484

Ion	Ratio	Lower	Upper
96	100		
61	123.9	120.1	160.1

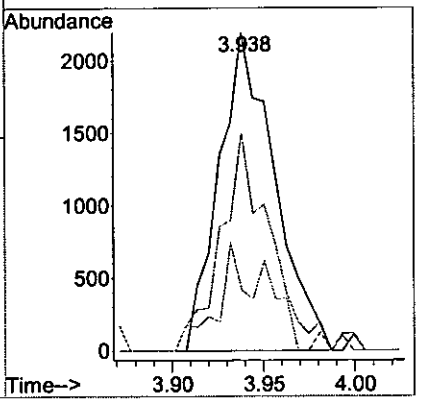


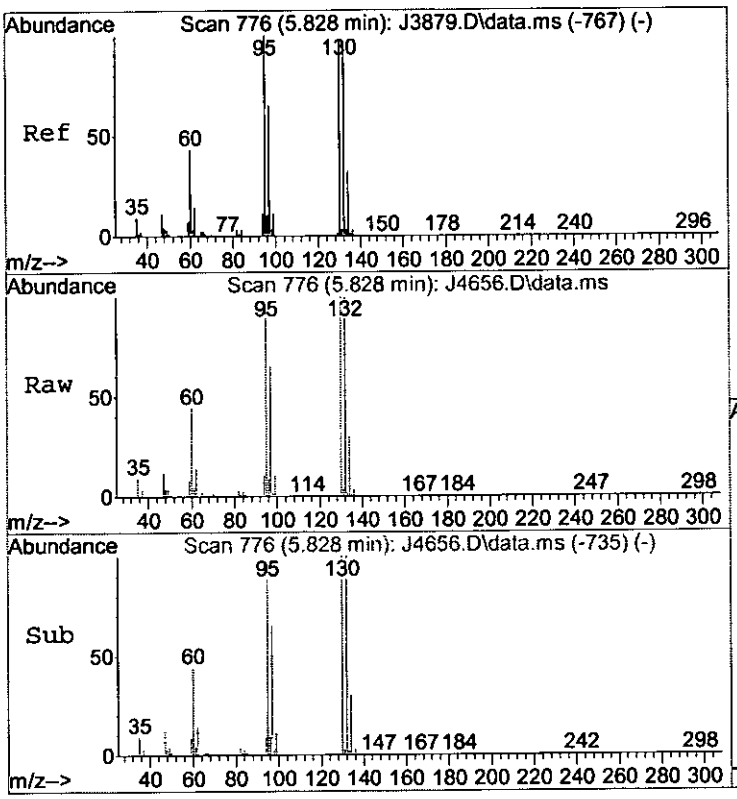


#40
Chloroform
Concen: 0.34 ppb
RT: 3.938 min Scan# 466
Delta R.T. 0.000 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion: 83 Resp: 4627

Ion	Ratio	Lower	Upper
83	100		
85	68.2	42.6	82.6
47	18.9	3.4	43.4

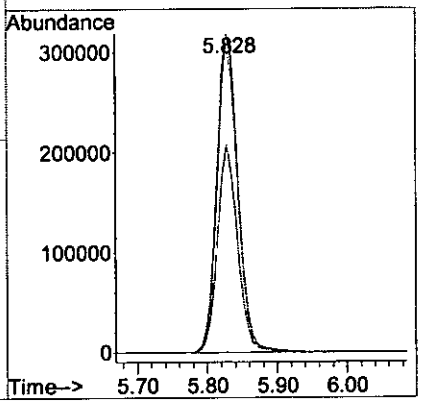


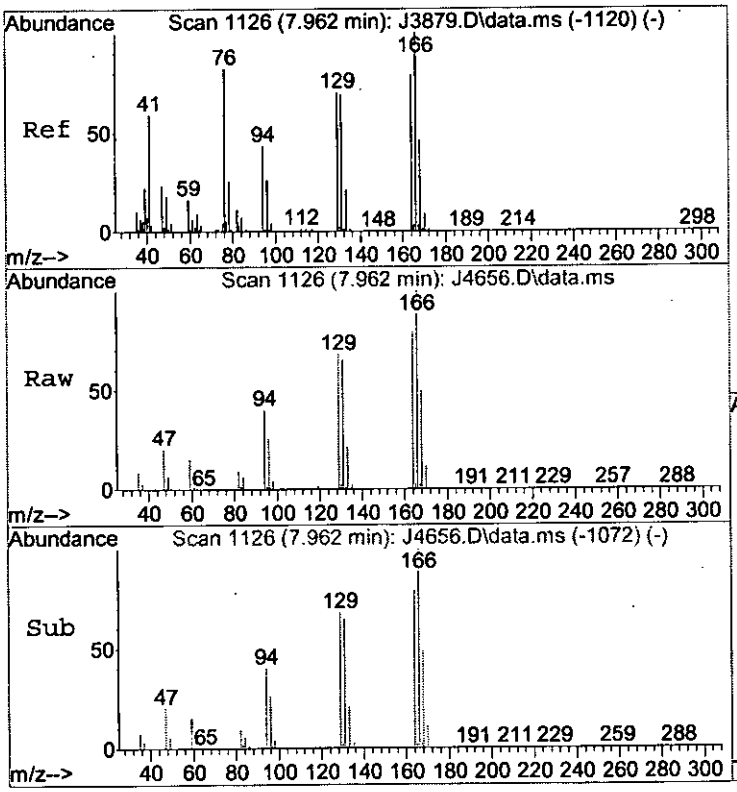


#54
Trichloroethene
Concen: 91.38 ppb
RT: 5.828 min Scan# 776
Delta R.T. 0.000 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion:130 Resp: 669312

Ion	Ratio	Lower	Upper
130	100		
132	100.2	78.3	118.3
95	96.5	83.0	123.0
97	65.4	47.3	87.3

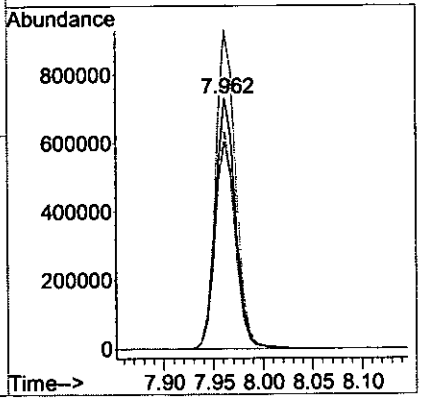


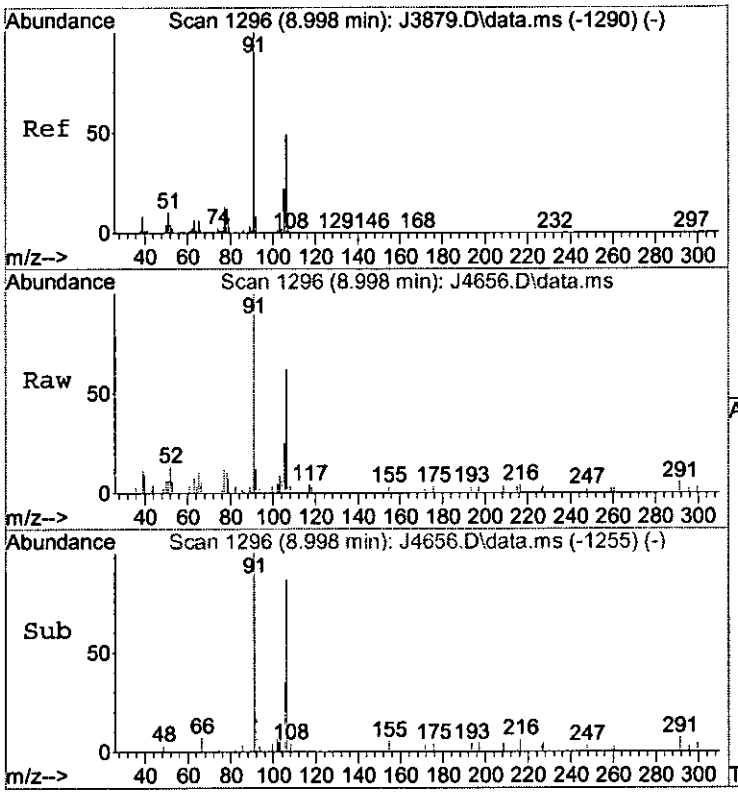


#72
Tetrachloroethene
Concen: 174.96 ppb
RT: 7.962 min Scan# 1126
Delta R.T. 0.000 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion:164 Resp: 1019215

Ion	Ratio	Lower	Upper
164	100		
166	127.1	105.9	145.9
129	86.8	68.6	108.6
131	82.4	66.6	106.6

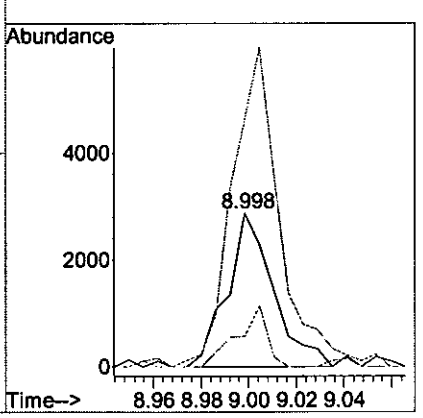


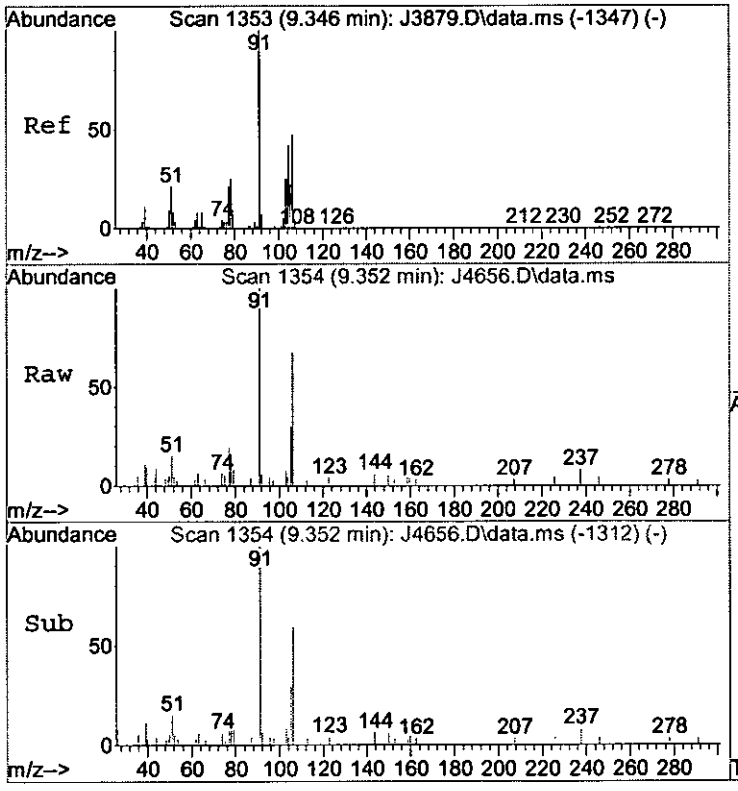


#83
(m+p)Xylene
Concen: 0.31 ppb
RT: 8.998 min Scan# 1296
Delta R.T. 0.000 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion:106 Resp: 3856

Ion	Ratio	Lower	Upper
106	100		
91	160.2	182.8	222.8#
77	19.7	7.2	47.2

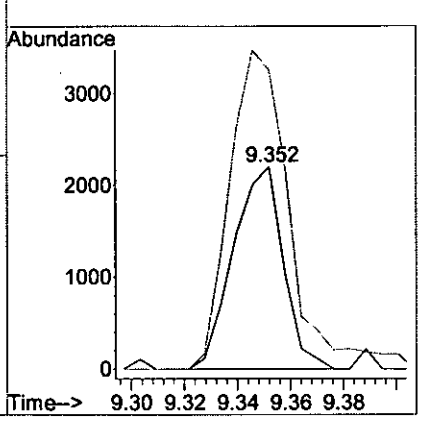


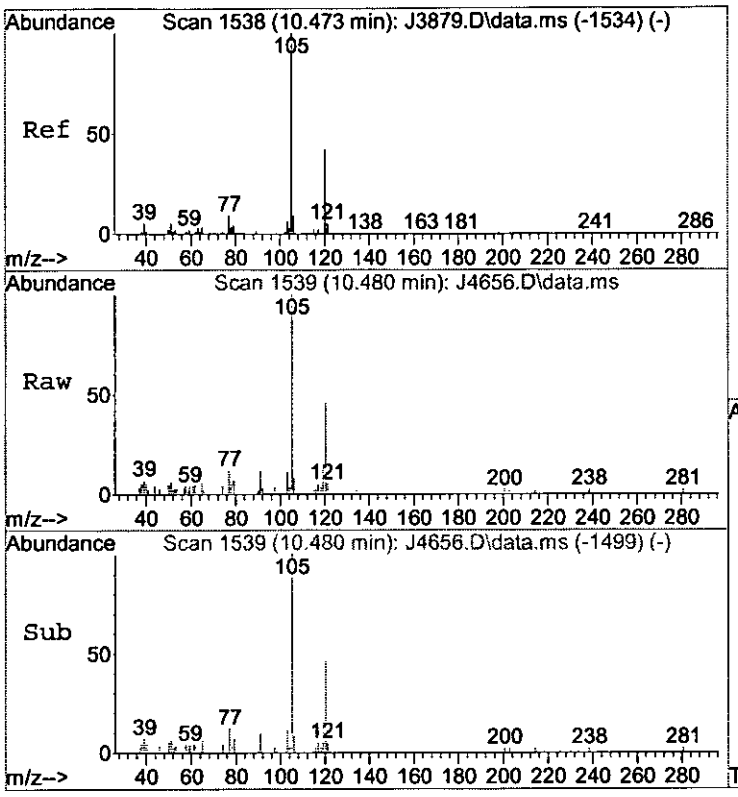


#84
o-Xylene
Concen: 0.23 ppb
RT: 9.352 min Scan# 1354
Delta R.T. 0.006 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion:106 Resp: 2870

Ion	Ratio	Lower	Upper
106	100		
91	147.9	193.9	233.9#

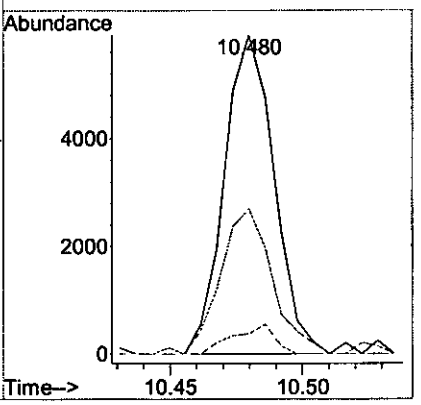


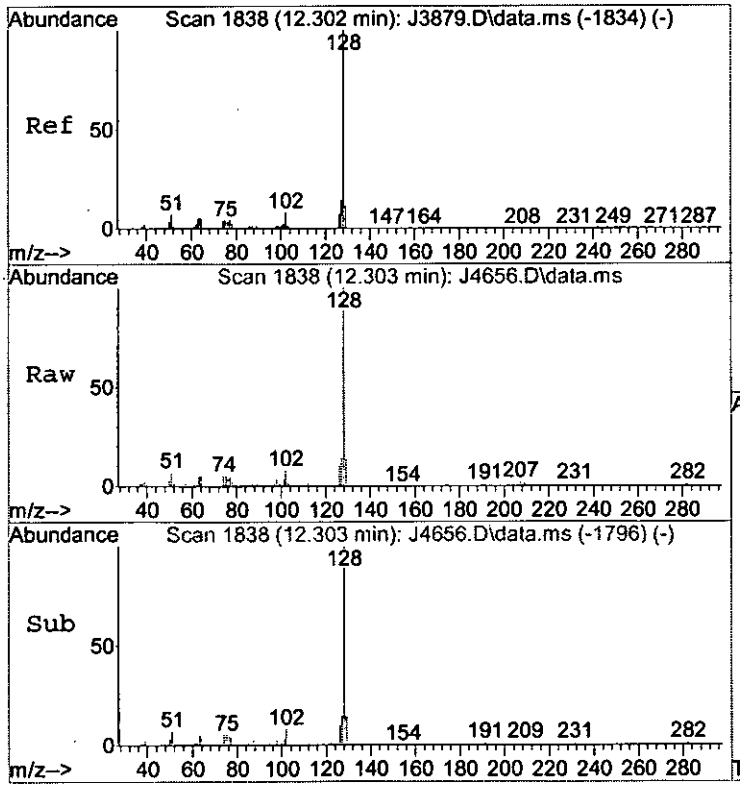


#101
1,2,4-Trimethylbenzene
Concen: 0.33 ppb
RT: 10.480 min Scan# 1539
Delta R.T. 0.000 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion:105 Resp: 7744

Ion	Ratio	Lower	Upper
105	100		
120	45.7	25.3	65.3
65	6.3	0.0	24.3

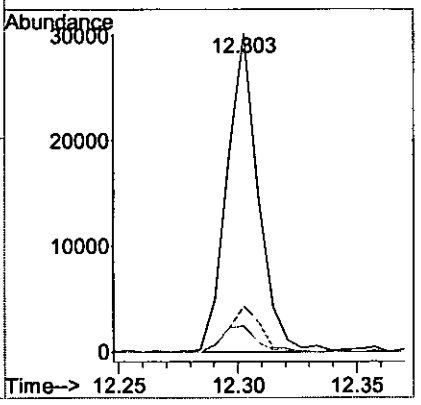




#117
Naphthalen
Concen: 1.90 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4656.D
Acq: 10 Apr 2014 3:23 pm

Tgt Ion:128 Resp: 27625

Ion	Ratio	Lower	Upper
128	100		
127	14.4	0.0	33.8
102	8.1	0.0	28.5



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4656.D
Acq On : 10 Apr 2014 3:23 pm
Operator : K.Ruest
Sample : R1402225-016|~~25~~06
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4656.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.323	32	37	40	rBV	138336	98423	1.34%	0.277%
2	3.542	393	401	417	rBV	1993838	3956360	54.03%	11.150%
3	4.152	492	501	509	rBV	493320	1157744	15.81%	3.263%
4	4.249	509	517	534	rVB	904453	2280479	31.14%	6.427%
5	4.664	575	585	609	rBV	439471	1149387	15.70%	3.239%
6	5.450	705	714	732	rBV	1193288	2778915	37.95%	7.831%
7	5.828	766	776	795	rBV	1761511	3623473	49.49%	10.212%
8	7.322	1014	1021	1038	rBV	2457455	3794494	51.82%	10.694%
9	7.962	1117	1126	1145	rBV	5198496	7322341	100.00%	20.636%
10	8.742	1248	1254	1269	rBV	2575129	3375842	46.10%	9.514%
11	9.791	1421	1426	1434	rBV	2204216	2658166	36.30%	7.491%
12	10.748	1578	1583	1591	rBV	2887023	3288200	44.91%	9.267%

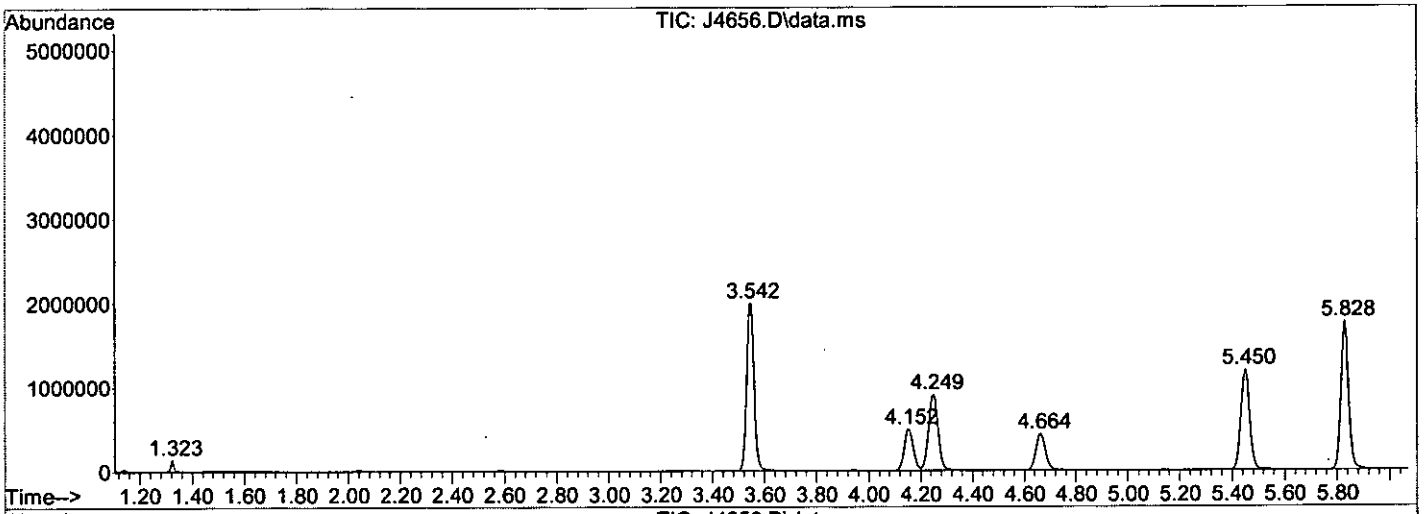
Sum of corrected areas: 35483824

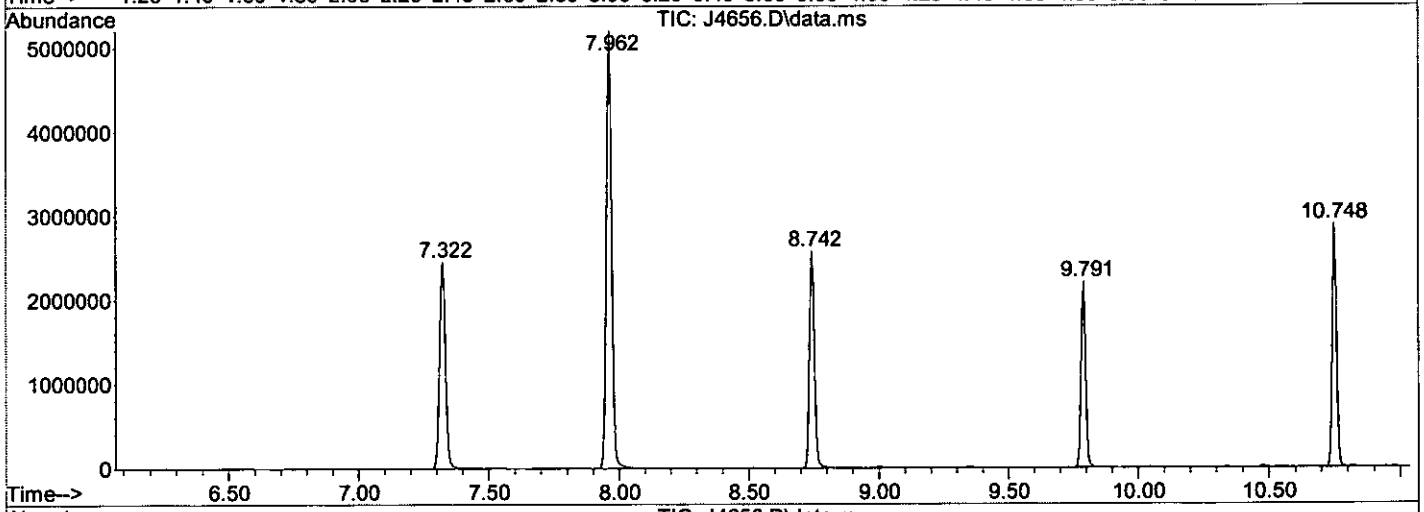
LSC Report - Integrated Chromatogram

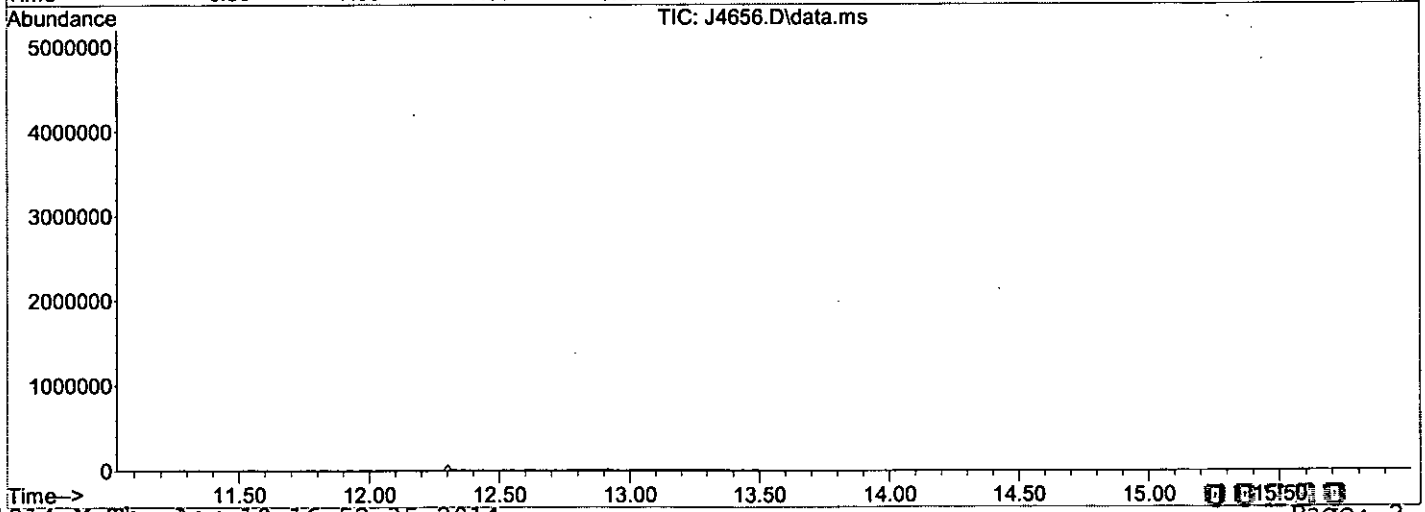
Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4656.D
Acq On : 10 Apr 2014 3:23 pm
Operator : K.Ruest
Sample : R1402225-016|25
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P







W031214.M Thu Apr 10 16:52:35 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\041014\\
Data File : J4656.D
Acq On : 10 Apr 2014 3:23 pmm
Operator : K.Ruestt
Sample : R1402225-016 | 255 2.5
Misc : PARSONS 9913 T44
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1200
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 14:19
Sample Name:	FTMM-68-GW-565MW101D-22.31	**Units:**	µg/L
Lab Code:	R1402225-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\U4654.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	50	10	2.2	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	50	10	3.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	50	10	2.5	
79-00-5	1,1,2-Trichloroethane	ND	U	50	10	3.5	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	50	10	2.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	50	10	5.7	
563-58-6	1,1-Dichloropropene	ND	U	50	10	2.9	
87-61-6	1,2,3-Trichlorobenzene	ND	U	50	10	8.2	
96-18-4	1,2,3-Trichloropropane	ND	U	50	10	7.0	
120-82-1	1,2,4-Trichlorobenzene	ND	U	50	10	2.4	
95-63-6	1,2,4-Trimethylbenzene	**4.6**	J	50	10	2.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	50	10	7.4	
106-93-4	1,2-Dibromoethane	ND	U	50	10	2.4	
95-50-1	1,2-Dichlorobenzene	ND	U	50	10	2.1	
107-06-2	1,2-Dichloroethane	ND	U	50	10	3.6	
78-87-5	1,2-Dichloropropane	ND	U	50	10	2.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	50	10	2.0	
541-73-1	1,3-Dichlorobenzene	ND	U	50	10	2.0	
142-28-9	1,3-Dichloropropane	ND	U	50	10	2.7	
106-46-7	1,4-Dichlorobenzene	ND	U	50	10	2.0	
594-20-7	2,2-Dichloropropane	ND	U	50	10	2.7	
78-93-3	2-Butanone (MEK)	ND	U	50	10	8.2	
95-49-8	2-Chlorotoluene	ND	U	50	10	2.0	
591-78-6	2-Hexanone	ND	U	50	50	17	
106-43-4	4-Chlorotoluene	ND	U	50	10	2.4	
99-87-6	p-Isopropyltoluene	ND	U	50	10	2.0	
108-10-1	4-Methyl-2-pentanone	ND	U	50	10	6.7	
67-64-1	Acetone	ND	U	50	50	13	
71-43-2	Benzene	ND	U	50	10	2.0	
108-86-1	Bromobenzene	ND	U	50	10	2.9	
74-97-5	Bromochloromethane	ND	U	50	10	3.2	
75-27-4	Bromodichloromethane	ND	U	50	10	3.2	
75-25-2	Bromoform	ND	U	50	10	4.2	
74-83-9	Bromomethane	ND	U	50	10	2.9	
56-23-5	Carbon Tetrachloride	ND	U	50	10	4.5	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1200
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 14:19
Sample Name:	FTMM-68-GW-565MW101D-22.31	**Units:**	µg/L
Lab Code:	R1402225-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4654.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	50	10	2.9	
75-00-3	Chloroethane	ND	U	50	10	2.4	
67-66-3	Chloroform	**2.7**	J	50	10	2.5	
74-87-3	Chloromethane	ND	U	50	10	2.1	
124-48-1	Dibromochloromethane	ND	U	50	10	3.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	50	10	4.7	
75-09-2	Methylene Chloride	ND	U	50	10	3.2	
100-41-4	Ethylbenzene	ND	U	50	10	2.0	
87-68-3	Hexachlorobutadiene	ND	U	50	10	6.2	
98-82-8	Isopropylbenzene (Cumene)	ND	U	50	10	2.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	50	10	2.9	
91-20-3	Naphthalene	**12**	J	50	10	2.0	
100-42-5	Styrene	ND	U	50	10	2.0	
127-18-4	Tetrachloroethene (PCE)	**1500**		50	10	3.0	
108-88-3	Toluene	ND	U	50	10	2.0	
79-01-6	Trichloroethene (TCE)	**96**		50	10	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	50	10	2.0	
75-01-4	Vinyl Chloride	**5.5**	J	50	10	3.2	
156-59-2	cis-1,2-Dichloroethene	**120**		50	10	3.0	
10061-01-5	cis-1,3-Dichloropropene	ND	U	50	10	2.4	
179601-23-1	m,p-Xylenes	ND	U	100	20	3.4	
104-51-8	n-Butylbenzene	ND	U	50	10	2.1	
103-65-1	n-Propylbenzene	ND	U	50	10	2.0	
95-47-6	o-Xylene	ND	U	50	10	2.0	
135-98-8	sec-Butylbenzene	ND	U	50	10	2.7	
98-06-6	tert-Butylbenzene	ND	U	50	10	2.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	50	10	3.4	
10061-02-6	trans-1,3-Dichloropropene	ND	U	50	10	2.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/10/14 14:19	
Dibromofluoromethane	100	85-115	4/10/14 14:19	
Toluene-d8	98	85-120	4/10/14 14:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/10/14 1419

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW101D-22.31	**Units:**	µg/L
Lab Code:	R1402225-017	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-017|10
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4654.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 2:19 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 14:34:38 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	837060	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1242209	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1143900	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	548419	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	360372	50.11	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.22%				
48) surr1,1,2-dichloroetha...	4.664	65	419686	51.23	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.46%				
65) SURR3,Toluene-d8	7.322	98	1479417	48.96	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.92%				
70) SURR2,BFB	9.785	95	546774	48.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.00%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.323	62	4417	0.55	ppb		99
5) Bromomethane	1.518	94	1301	0.27	ppb	#	74
~~12) Acrolein~~	~~1.969~~	~~56~~	~~210~~	~~Below Cal~~		#	~~17~~
~~15) Acetone~~	~~2.073~~	~~43~~	~~334~~	~~0.20 ppb~~			~~85~~
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~1580~~	~~0.38 ppb~~		#	~~1~~
34) cis-1,2-Dichloroethene	3.542	96	98989	11.66	ppb		94
40) Chloroform	3.938	83	3817	0.27	ppb		87
54) Trichloroethene	5.828	130	71137	9.60	ppb		95
72) Tetrachloroethene	7.962	164	899930	152.30	ppb		98
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1546~~	~~3.51 ppb~~		#	~~14~~
101) 1,2,4-Trimethylbenzene	10.480	105	10862	0.46	ppb		91
112) Trielution Dichlorotol...	11.736	125	2094	0.20	ppb	#	66 MTD
116) Hexachlorobt	12.266	225	1101	0.31	ppb		93
117) Naphthalen	12.303	128	17217	1.18	ppb		96
119) 2,4,5-Trichlorotolene	12.851	159	2589	0.59	ppb		93 MTD
120) 2,3,6-Trichlorotoluene	12.912	159	1710	0.43	ppb	#	84

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

JR 4/10/14

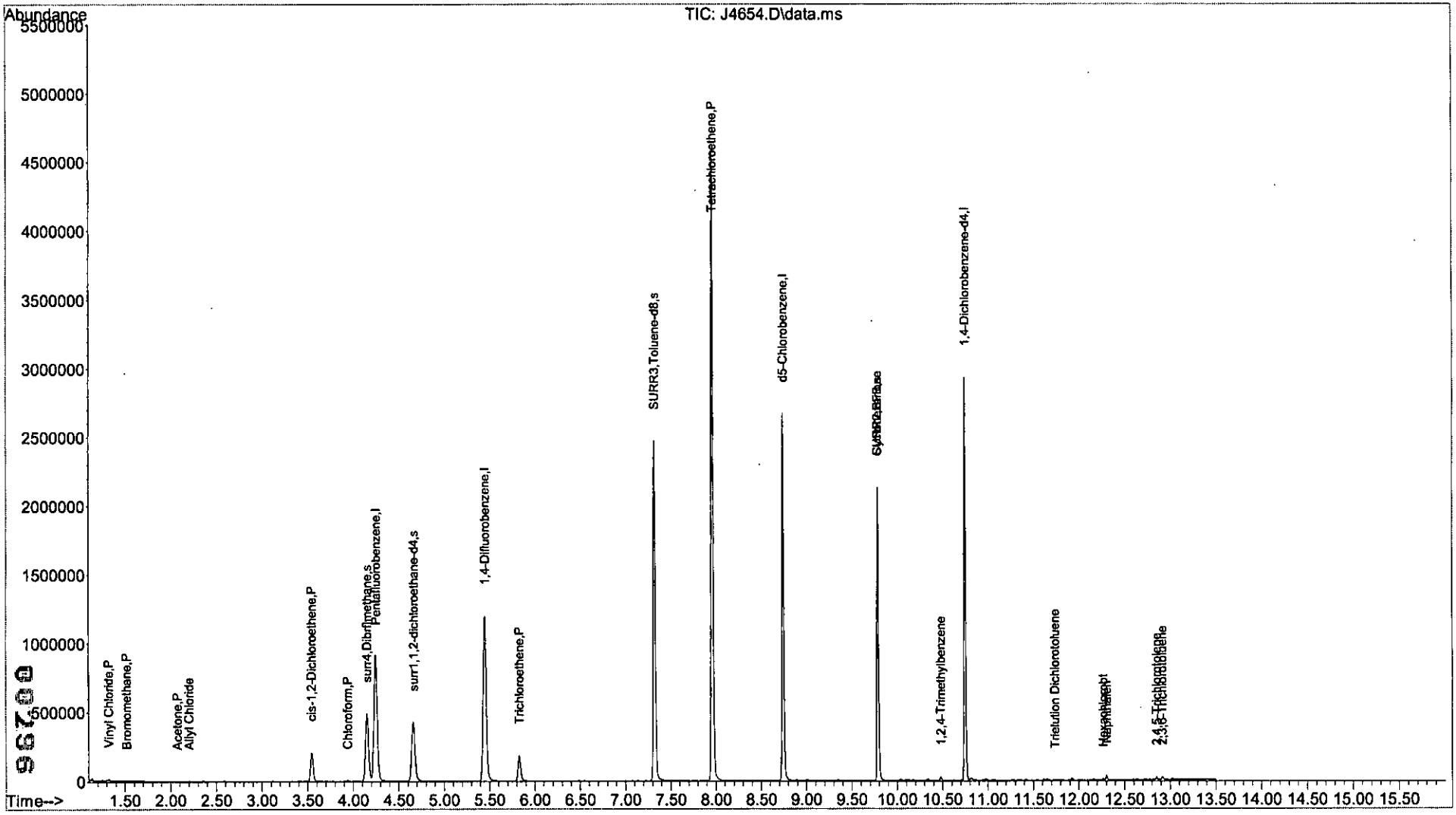
W031214.M Thu Apr 10 14:34:24 2014 Page: 1

00295

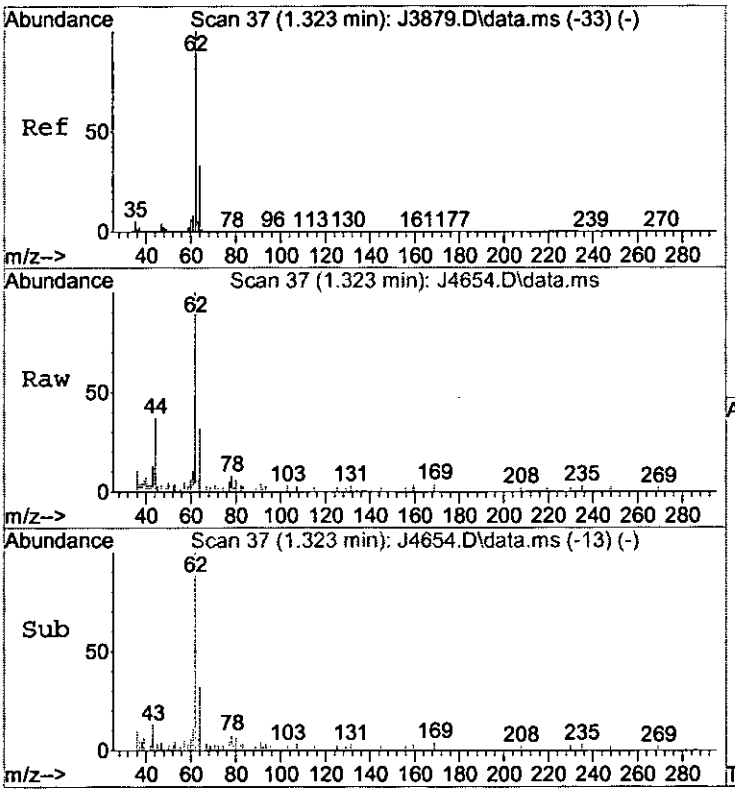
Quantitation Report (Not Reviewed)

Sample : R1402225-017|10
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4654.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 2:19 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 14:34:38 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



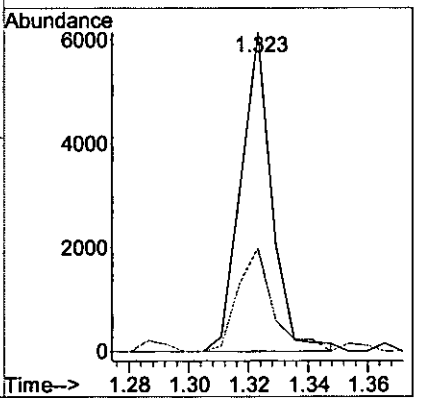
W031214.M Thu Apr 10 14:34:27 2014 Page: 2

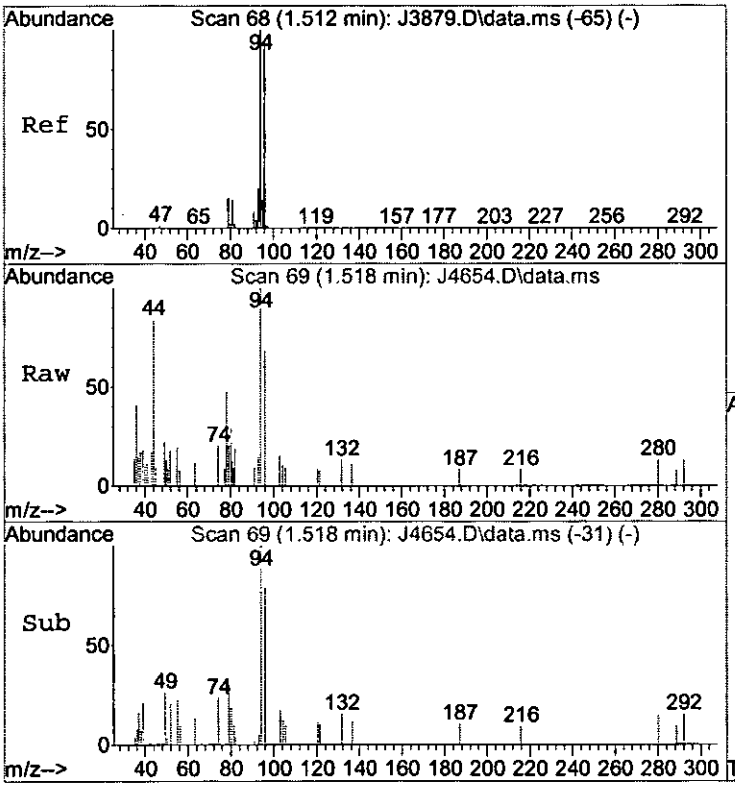


#4
Vinyl Chloride
Concen: 0.55 ppb
RT: 1.323 min Scan# 37
Delta R.T. 0.000 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion: 62 Resp: 4417

Ion	Ratio	Lower	Upper
62	100		
64	32.4	12.9	52.9

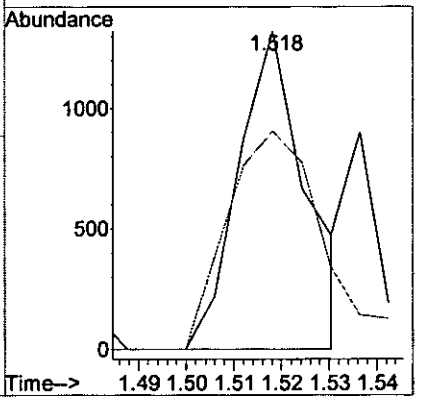


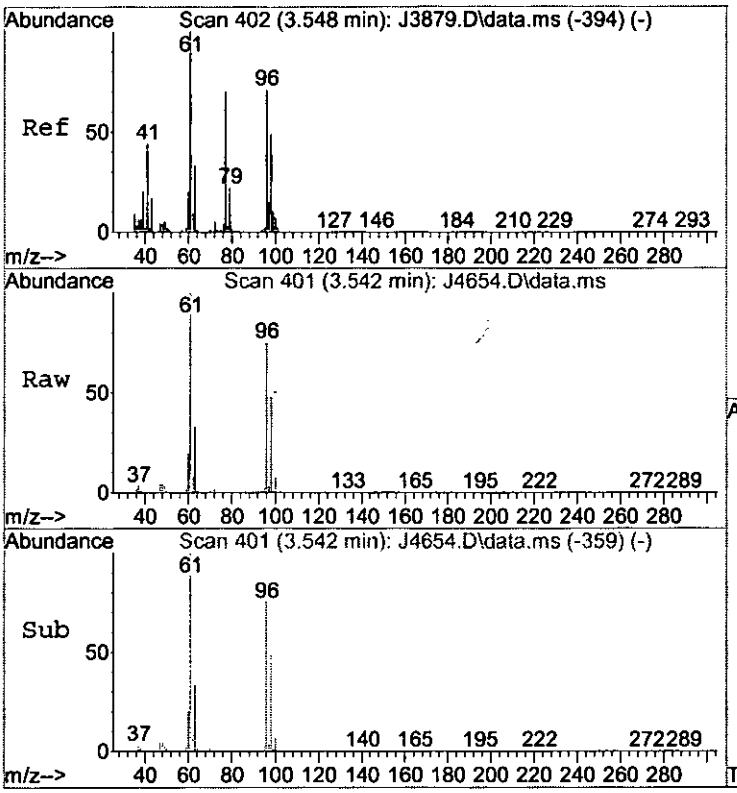


#5
Bromomethane
Concen: 0.27 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion: 94 Resp: 1301

Ion	Ratio	Lower	Upper
94	100		
96	68.4	73.8	113.8#

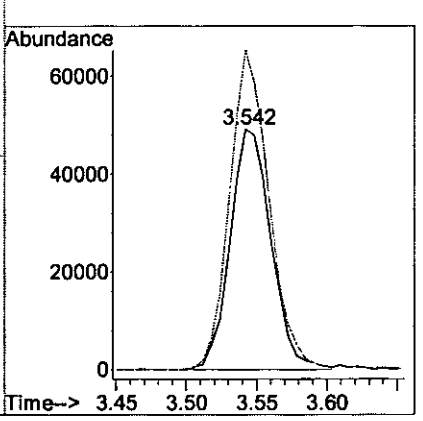


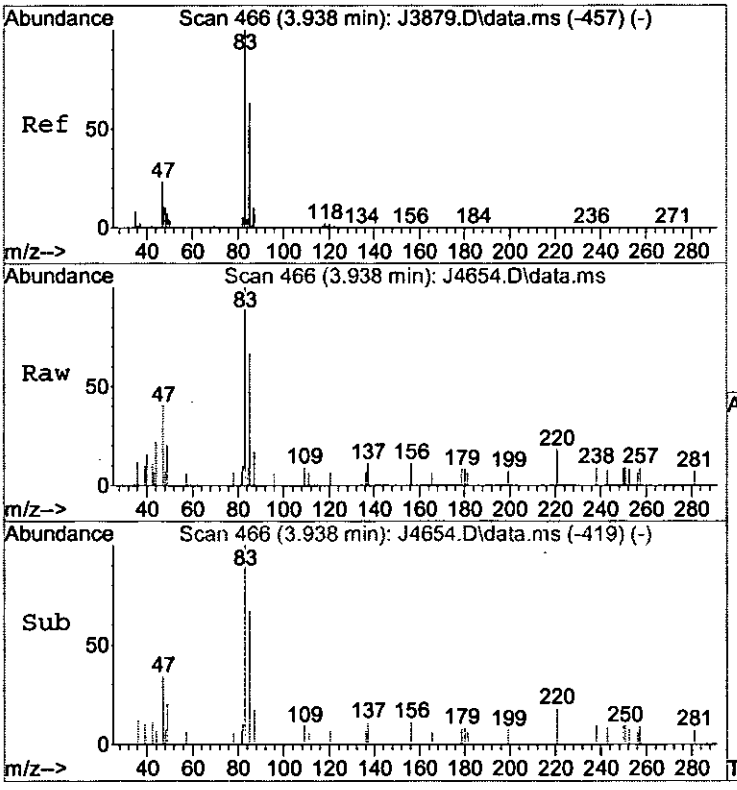


#34
cis-1,2-Dichloroethene
Concen: 11.66 ppb
RT: 3.542 min Scan# 401
Delta R.T. 0.000 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion: 96 Resp: 98989

Ion	Ratio	Lower	Upper
96	100		
61	132.6	120.1	160.1

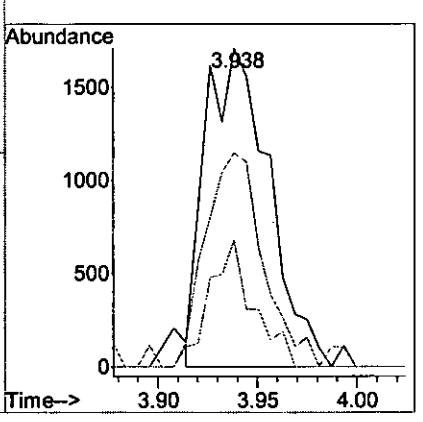




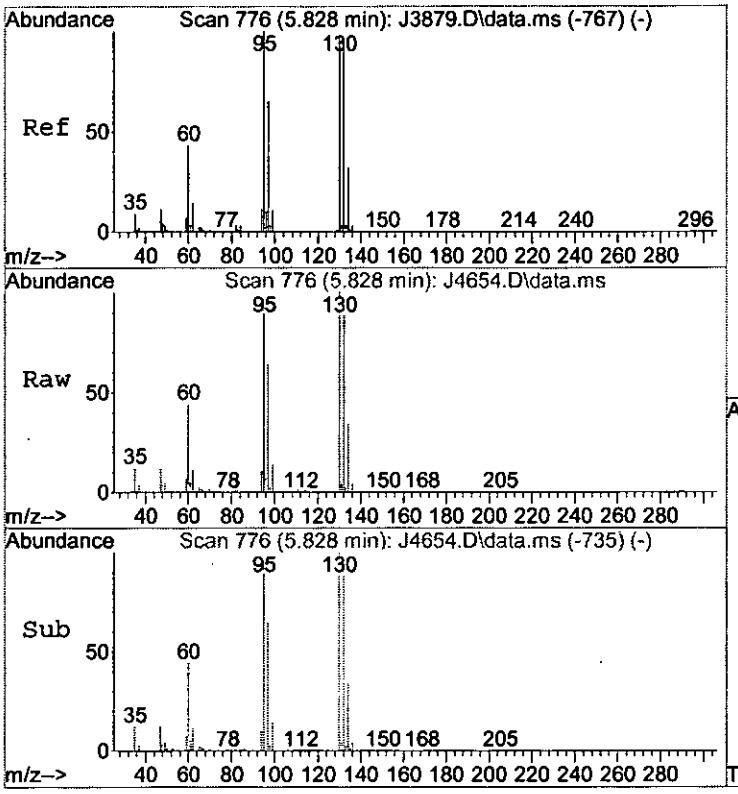
#40
Chloroform
Concen: 0.27 ppb
RT: 3.938 min Scan# 466
Delta R.T. 0.000 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion: 83 Resp: 3817

Ion	Ratio	Lower	Upper
83	100		
85	67.1	42.6	82.6
47	39.6	3.4	43.4



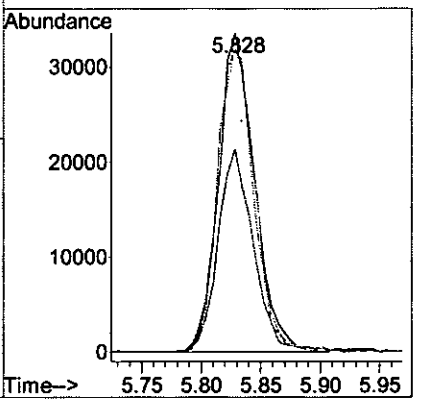
J4654.D W031214.M Thu Apr 10 16:42:13 2014 00298 Page 4

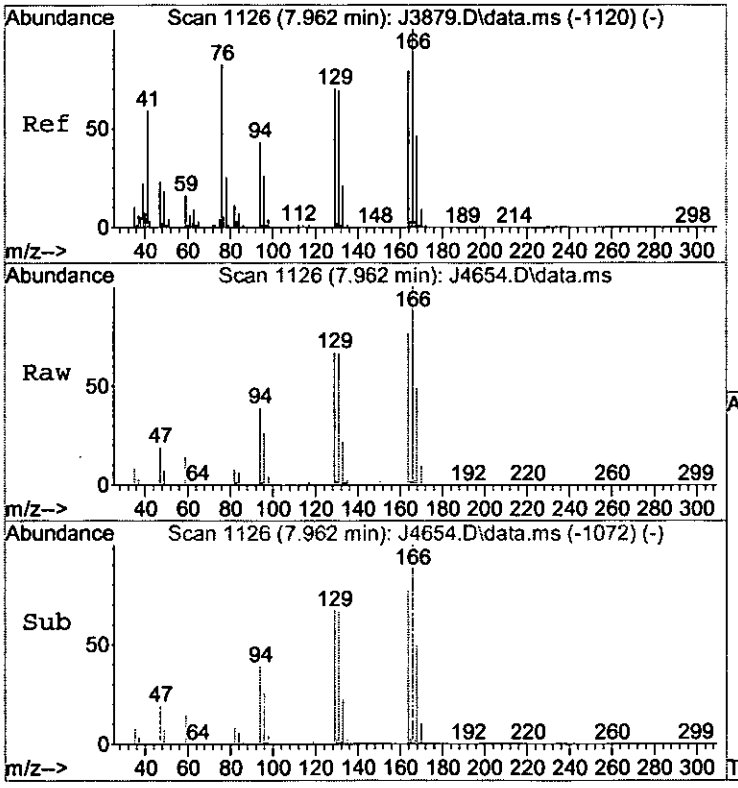


#54
Trichloroethene
Concen: 9.60 ppb
RT: 5.828 min Scan# 776
Delta R.T. 0.000 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion:130 Resp: 71137

Ion	Ratio	Lower	Upper
130	100		
132	95.3	78.3	118.3
95	96.0	83.0	123.0
97	63.8	47.3	87.3

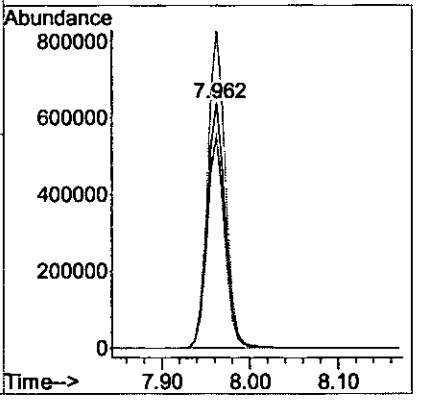


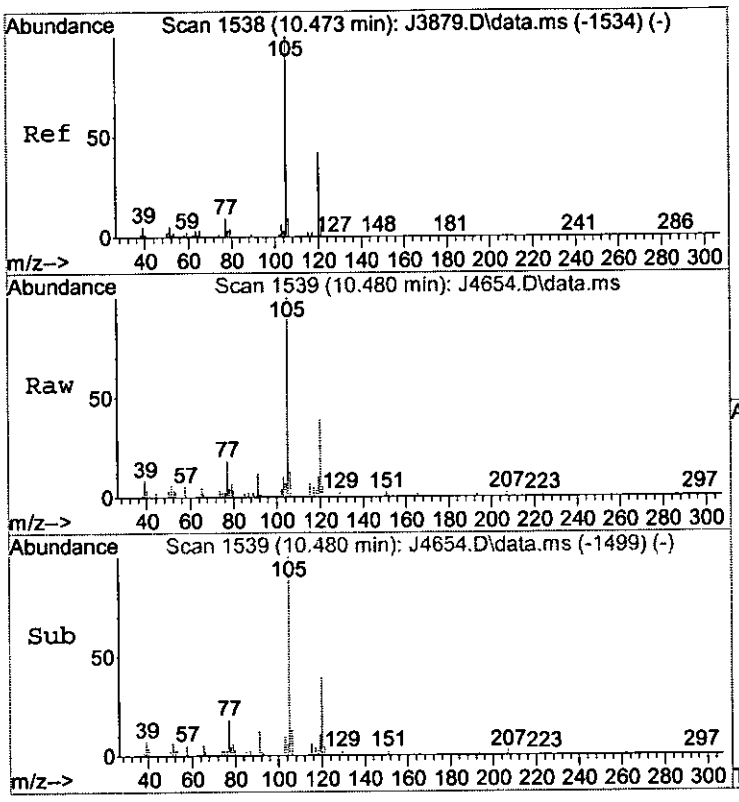


#72
Tetrachloroethene
Concen: 152.30 ppb
RT: 7.962 min Scan# 1126
Delta R.T. 0.000 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion:164 Resp: 899930

Ion	Ratio	Lower	Upper
164	100		
166	129.8	105.9	145.9
129	87.6	68.6	108.6
131	86.3	66.6	106.6

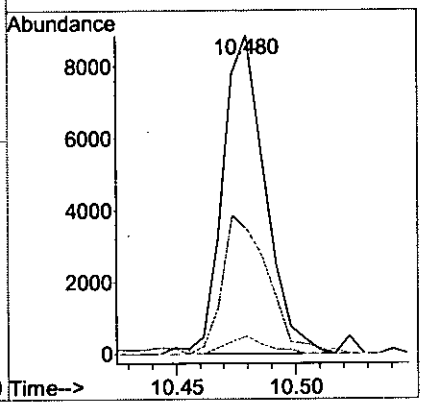


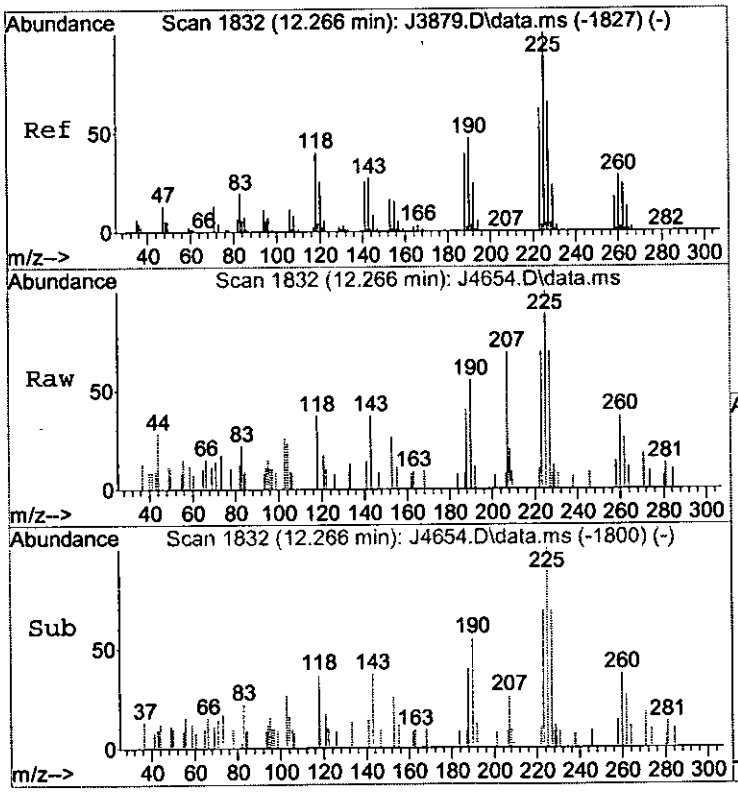


#101
1,2,4-Trimethylbenzene
Concen: 0.46 ppb
RT: 10.480 min Scan# 1539
Delta R.T. 0.000 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion:105 Resp: 10862

Ion	Ratio	Lower	Upper
105	100		
120	39.3	25.3	65.3
65	5.5	0.0	24.3

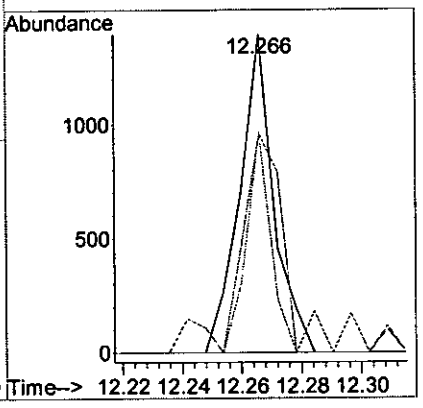


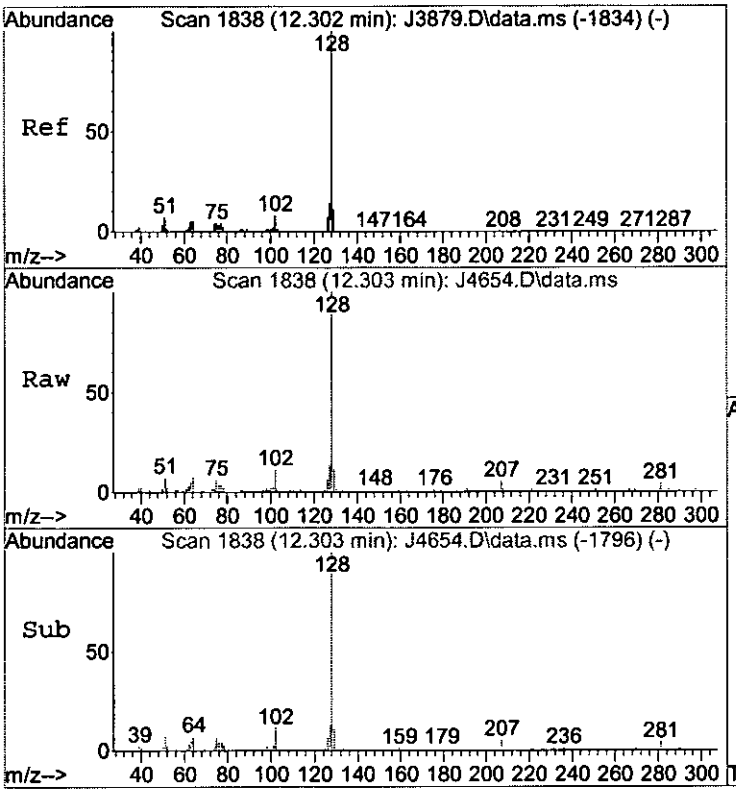


#116
Hexachlorobt
Concen: 0.31 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion:225 Resp: 1101

Ion	Ratio	Lower	Upper
225	100		
223	68.6	42.4	82.4
227	69.0	44.9	84.9

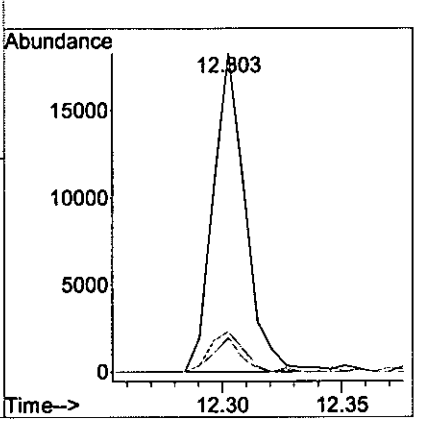




#117
Naphthalen
Concen: 1.18 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4654.D
Acq: 10 Apr 2014 2:19 pm

Tgt Ion:128 Resp: 17217

Ion	Ratio	Lower	Upper
128	100		
127	12.6	0.0	33.8
102	10.7	0.0	28.5



J4654.D W031214.M Thu Apr 10 16:42:18 2014 00301 Page 7

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4654.D
Acq On : 10 Apr 2014 2:19 pm
Operator : K.Ruest
Sample : R1402225-017|10
Misc : PARSONS 9913 T4
ALS Vial : 1 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4654.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.542	394	401	413	rBV	208059	420781	6.49%	1.504%
2	4.152	490	501	509	rBV2	491585	1183198	18.24%	4.229%
3	4.243	509	516	532	rVB	915646	2303953	35.52%	8.235%
4	4.658	574	584	599	rBV	429325	1127842	17.39%	4.031%
5	5.450	704	714	730	rBV	1198448	2817255	43.43%	10.070%
6	5.828	769	776	786	rBV2	186147	388931	6.00%	1.390%
7	7.322	1014	1021	1031	rBV	2471743	3855342	59.43%	13.780%
8	7.962	1118	1126	1144	rBV	4592125	6487188	100.00%	23.187%
9	8.742	1249	1254	1268	rVB	2671625	3412451	52.60%	12.197%
10	9.785	1421	1425	1436	rBV	2132687	2676662	41.26%	9.567%
11	10.748	1578	1583	1591	rBV	2932821	3304474	50.94%	11.811%

Sum of corrected areas: 27978077

KR 4/10/14

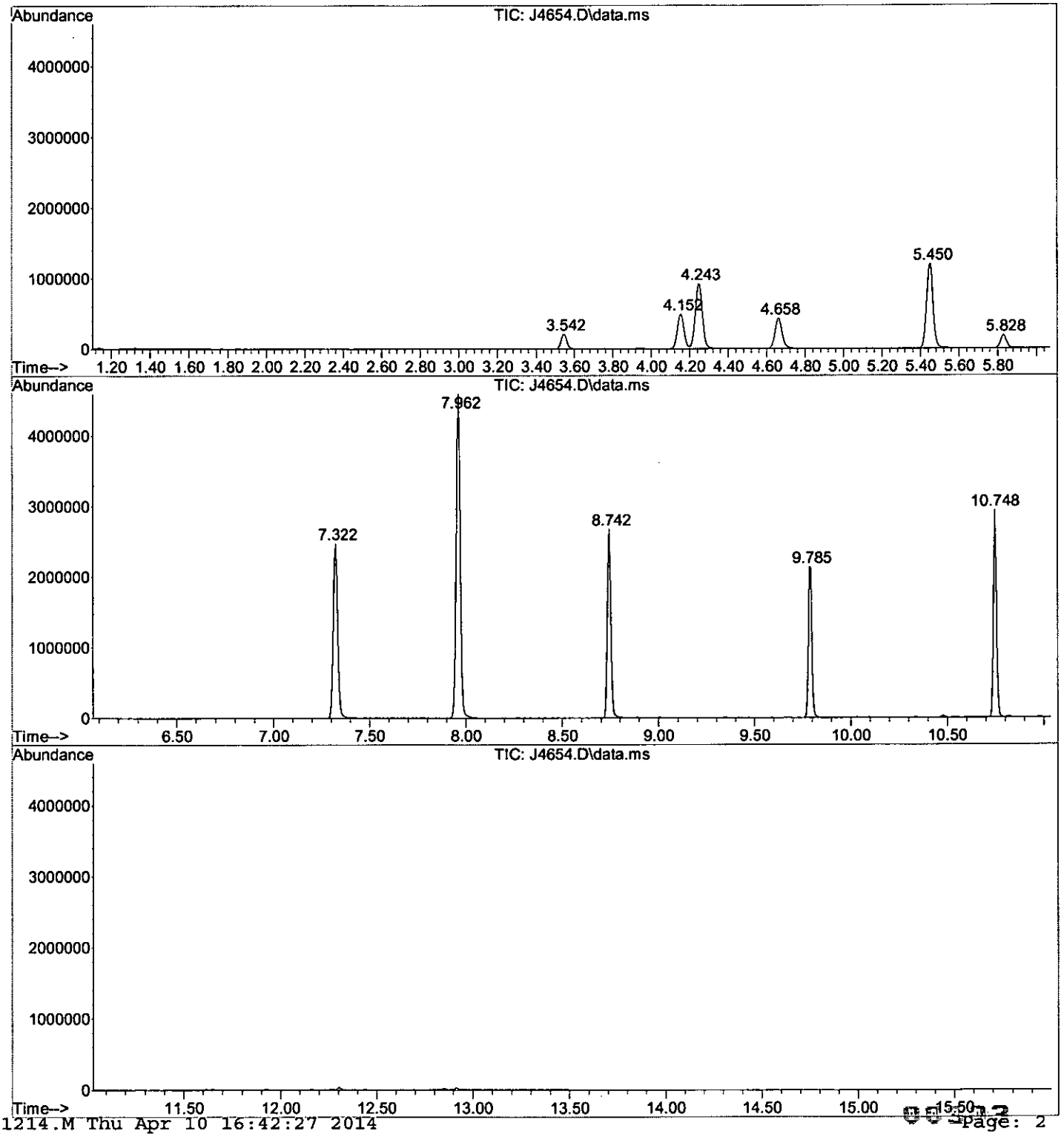
W031214.M Thu Apr 10 16:42:24 2014 00302 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4654.D
Acq On : 10 Apr 2014 2:19 pm
Operator : K.Ruest
Sample : R1402225-017|10
Misc : PARSONS 9913 T4
ALS Vial : 1 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Thu Apr 10 16:42:27 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\041014\\
Data File : J4654.D
Acq On : 10 Apr 2014 2:19 pmm
Operator : K.Ruestt
Sample : R1402225-017|100
Misc : PARSONS 9913 T44
ALS Vial : 1 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1055
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 17:59
Sample Name:	FTMM-53-GW-699RW11-8.03	**Units:**	µg/L
Lab Code:	R1402225-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4578.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**6.5**		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.29**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1055
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 17:59
Sample Name:	FTMM-53-GW-699RW11-8.03	**Units:**	µg/L
Lab Code:	R1402225-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4578.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.25**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**1.2**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.75**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.36**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.35**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.68**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	4/8/14 17:59	
Dibromofluoromethane	101	85-115	4/8/14 17:59	
Toluene-d8	98	85-120	4/8/14 17:59	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1759

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699RW11-8.03	**Units:**	µg/L
Lab Code:	R1402225-018	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-018|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4578.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 18:14:28 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	839705	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1251923	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1151161	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	564922	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	366054	50.51	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.02%				
48) surr1,1,2-dichloroetha...	4.664	65	424255	51.39	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.78%				
65) SURR3,Toluene-d8	7.322	98	1490329	48.94	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.88%				
70) SURR2,BFB	9.791	95	545460	48.01	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.02%				
Target Compounds							Qvalue
5) Bromomethane	1.512	94	1399	0.29	ppb		84
~~12) Acrolein~~	~~1.951~~	~~56~~	~~260~~	~~0.44~~	~~ppb~~	~~#~~	~~1~~
15) Acetone	2.048	43	11333	6.80	ppb		73
19) Acetonitrile	2.164	40	530	1.95	ppb	#	1
20) Allyl Chloride	2.207	76	2434	0.58	ppb	#	1
21) Methyl Acetate	2.372	43	29072	7.75	ppb	#	60
24) Acrylonitrile	2.445	53	978	0.52	ppb	#	61
~~35) 2-Butanone~~	~~3.579~~	~~43~~	~~1412~~	~~0.60~~	~~ppb~~	~~#~~	~~44~~
44) Cyclohexane	4.310	41	4520	0.67	ppb		91 NTD
49) Benzene	4.786	78	199626	6.48	ppb		98
~~50) 1,2-Dichloroethane~~	~~4.774~~	~~62~~	~~2033~~	~~0.22~~	~~ppb~~	~~#~~	~~1~~
66) Toluene	7.401	91	11319	0.36	ppb		91
~~73) 2-Hexanone~~	~~8.120~~	~~43~~	~~888~~	~~0.27~~	~~ppb~~	~~#~~	~~85~~
82) Ethylbenzene	8.882	106	2692	0.25	ppb	#	44
83) (m+p)Xylene	8.998	106	4393	0.35	ppb	#	70
89) Isopropylbenzene	9.675	105	33984	1.17	ppb		95
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~2278~~	~~5.03~~	~~ppb~~	~~#~~	~~14~~
~~91) trans-1,4-Dichloro-2-B...~~	~~10.016~~	~~53~~	~~332~~	~~0.22~~	~~ppb~~	~~#~~	~~1~~
95) n-Propylbenzene	10.022	91	23103	0.68	ppb		96
~~111) 1,2-Dibromo-3-chloropr...~~	~~11.620~~	~~157~~	~~215~~	~~0.22~~	~~ppb~~	~~#~~	~~32~~
117) Naphthalen	12.303	128	11182	0.75	ppb		96

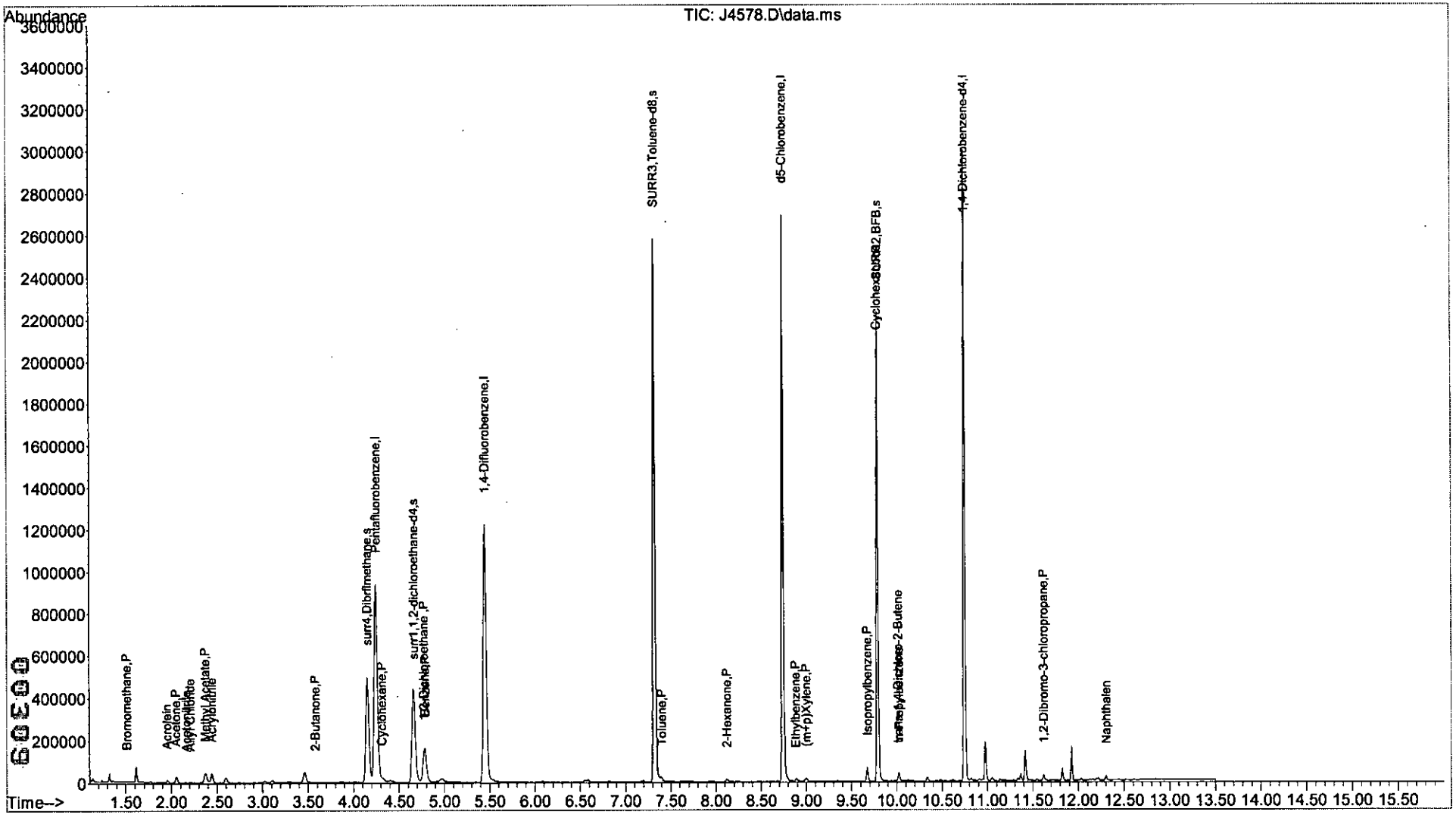
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 4/9/14

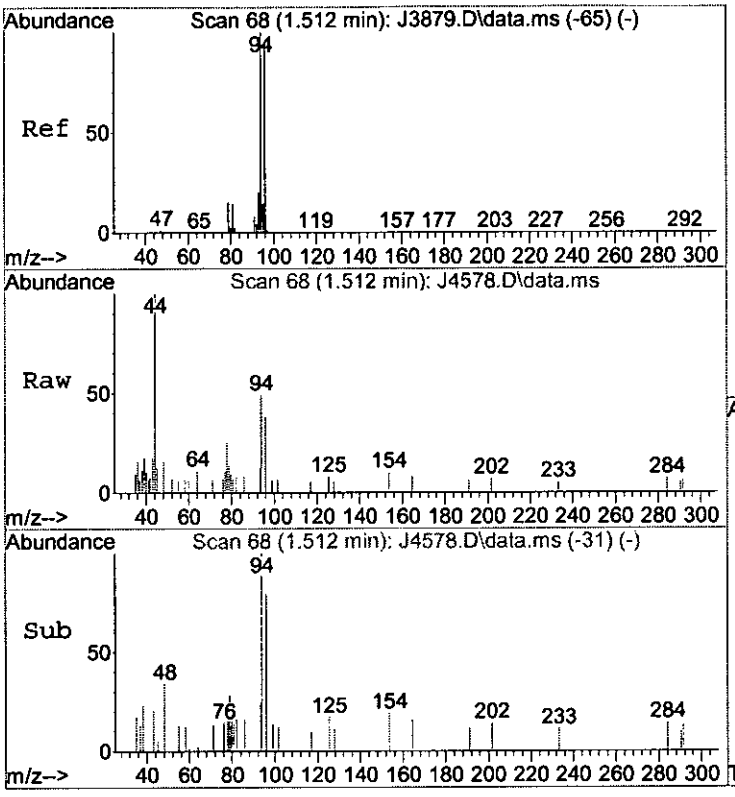
Quantitation Report (Not Reviewed)

Sample : R1402225-018|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4578.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 5:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 18:14:28 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



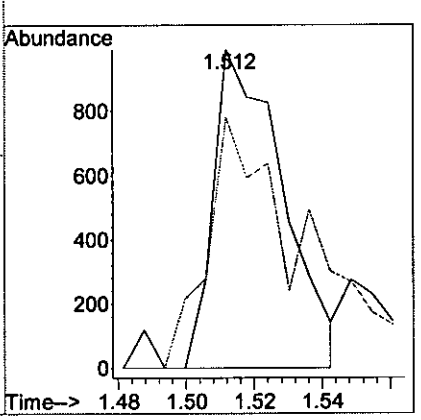
W031214.M Tue Apr 08 18:14:34 2014 Page: 2

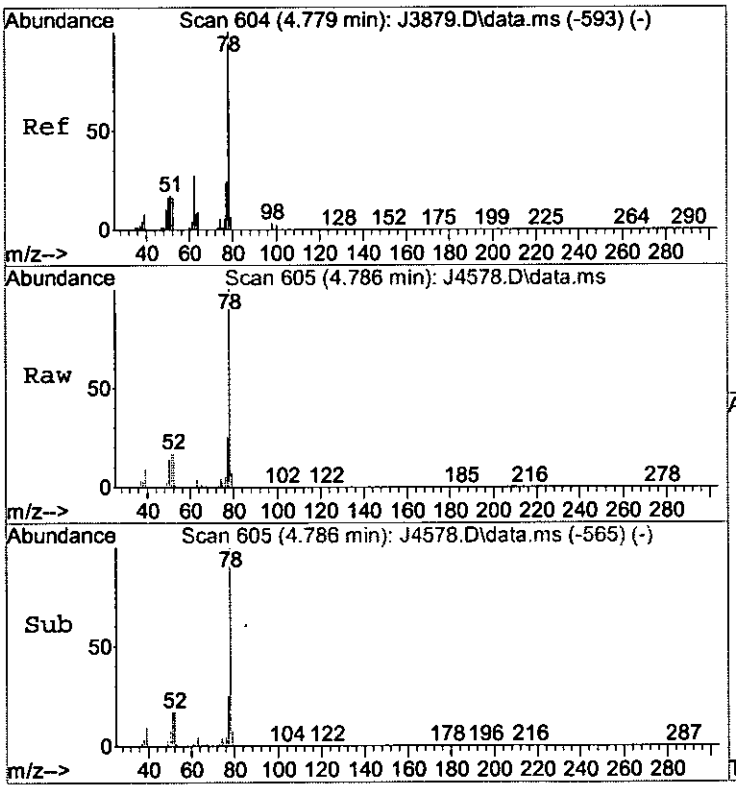


#5
Bromomethane
Concen: 0.29 ppb
RT: 1.512 min Scan# 68
Delta R.T. -0.000 min
Lab File: J4578.D
Acq: 8 Apr 2014 5:59 pm

Tgt Ion: 94 Resp: 1399

Ion	Ratio	Lower	Upper
94	100		
96	78.8	73.8	113.8

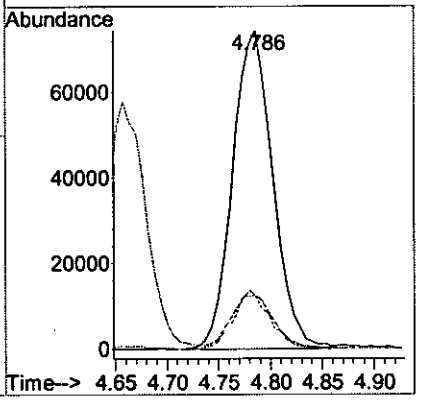


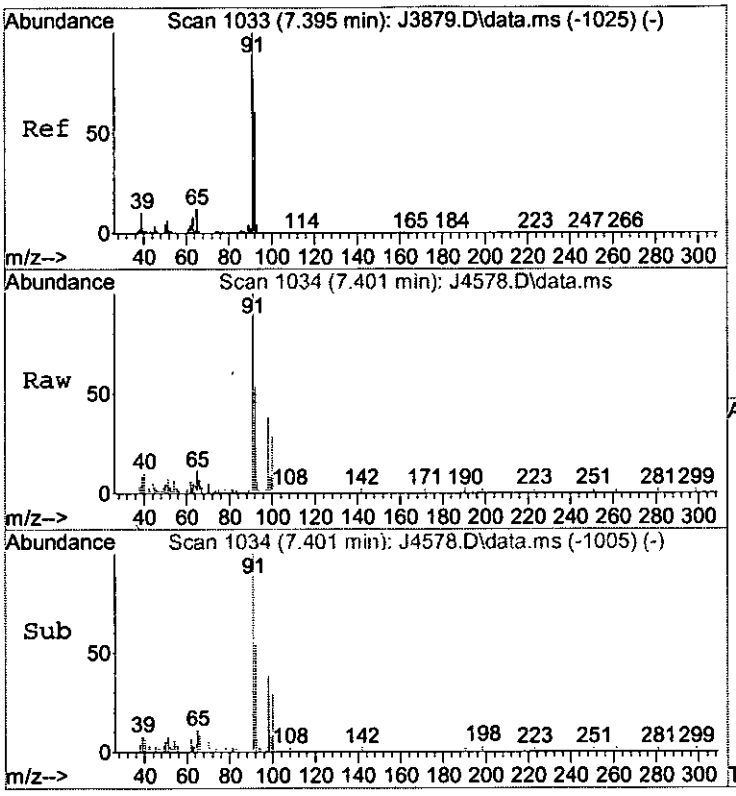


#49
Benzene
Concen: 6.48 ppb
RT: 4.786 min Scan# 605
Delta R.T. -0.000 min
Lab File: J4578.D
Acq: 8 Apr 2014 5:59 pm

Tgt Ion: 78 Resp: 199626

Ion	Ratio	Lower	Upper
78	100		
51	16.8	0.0	38.2
52	16.7	0.0	36.1

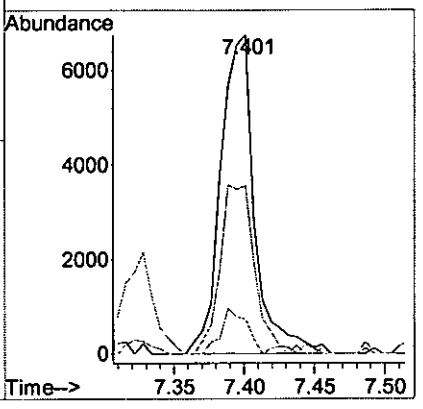


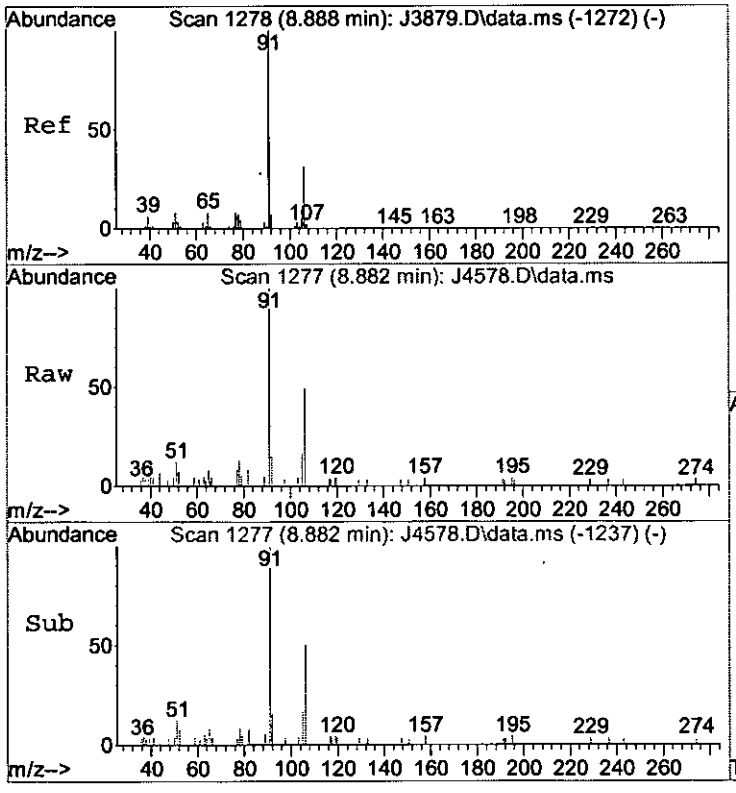


#66
Toluene
Concen: 0.36 ppb
RT: 7.401 min Scan# 1034
Delta R.T. 0.006 min
Lab File: J4578.D
Acq: 8 Apr 2014 5:59 pm

Tgt Ion: 91 Resp: 11319

Ion	Ratio	Lower	Upper
91	100		
92	52.7	39.9	79.9
65	10.8	0.0	32.3

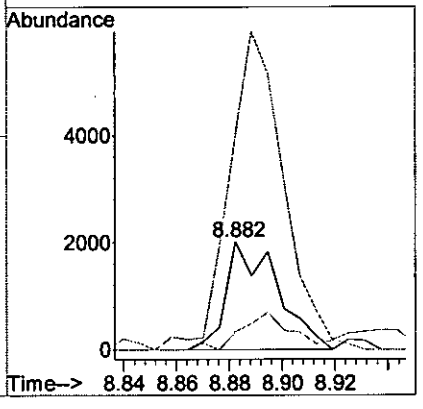




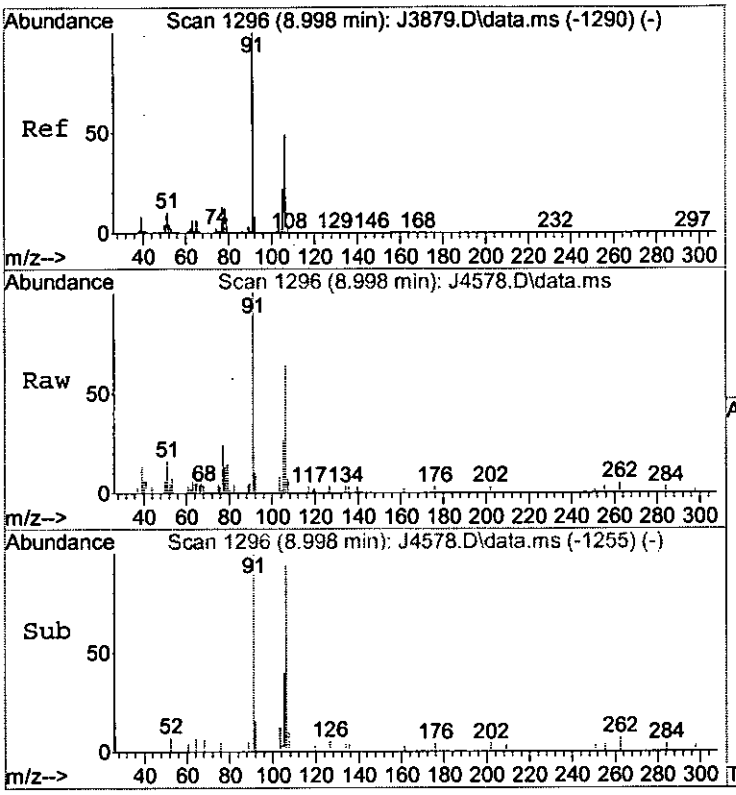
#82
Ethylbenzene
Concen: 0.25 ppb
RT: 8.882 min Scan# 1277
Delta R.T. -0.006 min
Lab File: J4578.D
Acq: 8 Apr 2014 5:59 pm

Tgt Ion:106 Resp: 2692

Ion	Ratio	Lower	Upper
106	100		
91	199.4	300.3	340.3#
65	16.7	6.6	46.6



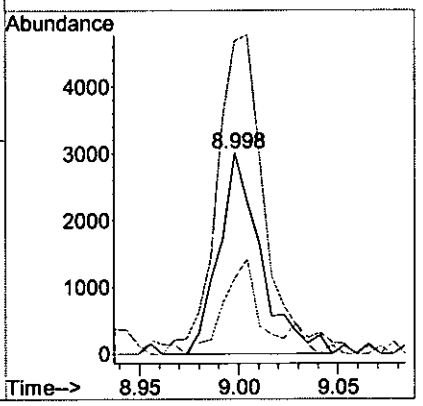
J4578.D W031214.M Wed Apr 09 10:21:11 2014 0031 Page 4

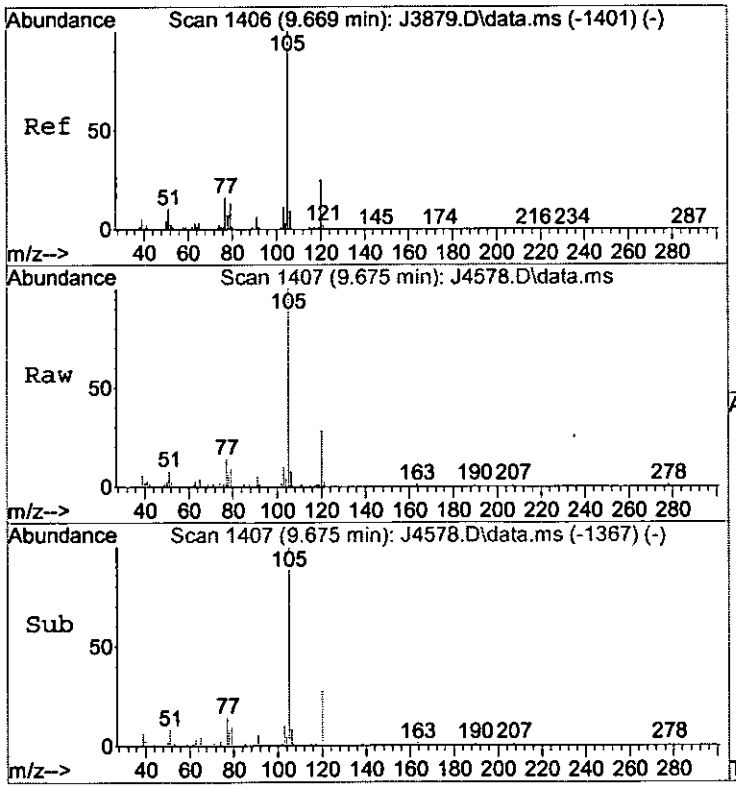


#83
(m+p)Xylene
Concen: 0.35 ppb
RT: 8.998 min Scan# 1296
Delta R.T. -0.000 min
Lab File: J4578.D
Acq: 8 Apr 2014 5:59 pm

Tgt Ion:106 Resp: 4393

Ion	Ratio	Lower	Upper
106	100		
91	155.7	182.8	222.8#
77	37.8	7.2	47.2

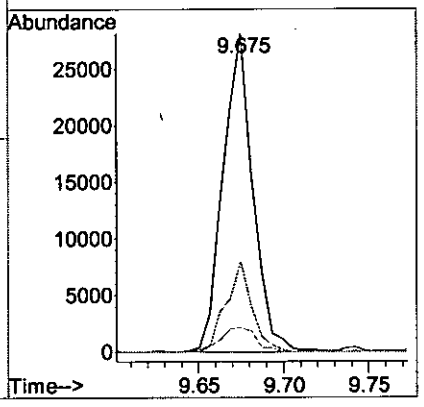


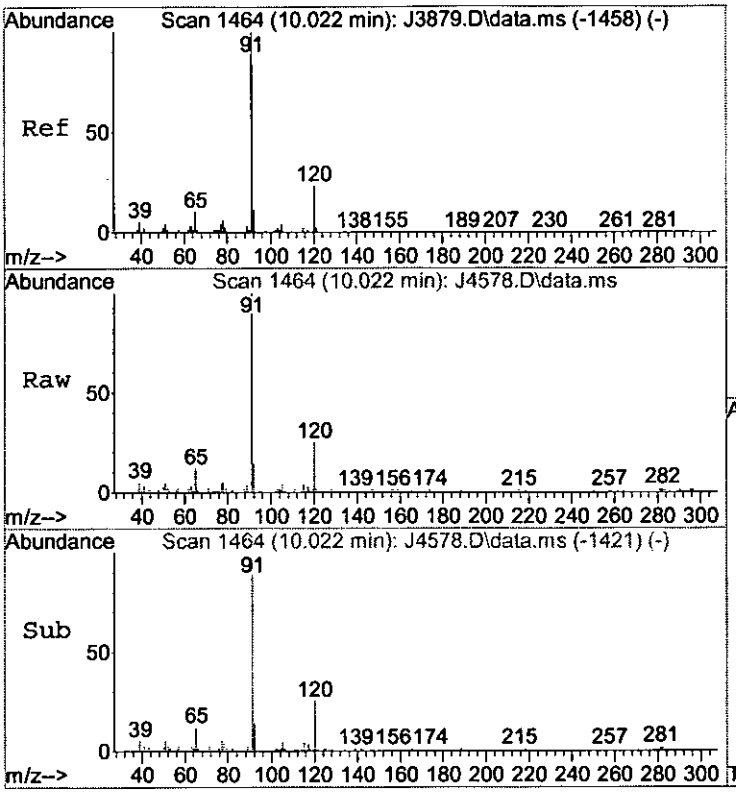


#89
Isopropylbenzene
Concen: 1.17 ppb
RT: 9.675 min Scan# 1407
Delta R.T. -0.000 min
Lab File: J4578.D
Acq: 8 Apr 2014 5:59 pm

Tgt Ion:105 Resp: 33984

Ion	Ratio	Lower	Upper
105	100		
120	28.5	5.4	45.4
106	7.6	0.0	28.6

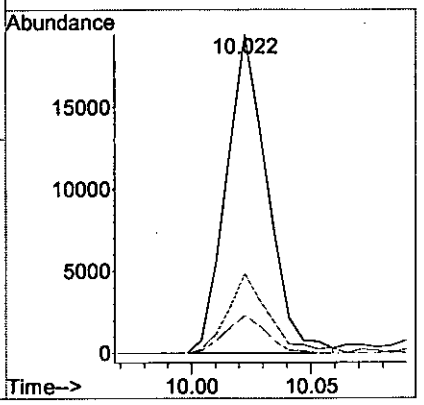


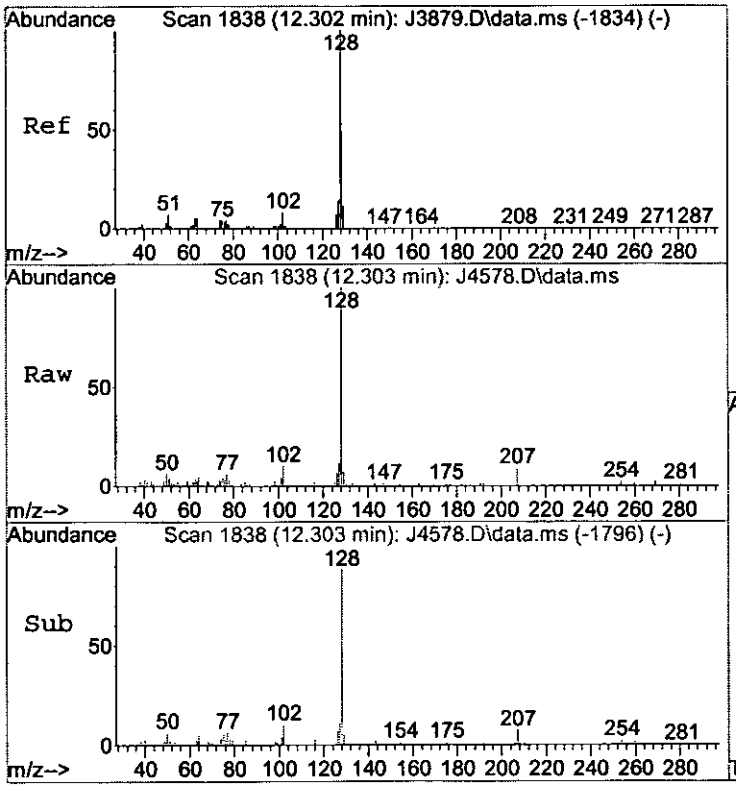


#95
n-Propylbenzene
Concen: 0.68 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.000 min
Lab File: J4578.D
Acq: 8 Apr 2014 5:59 pm

Tgt Ion: 91 Resp: 23103

Ion	Ratio	Lower	Upper
91	100		
120	24.9	3.1	43.1
65	11.7	0.0	30.1

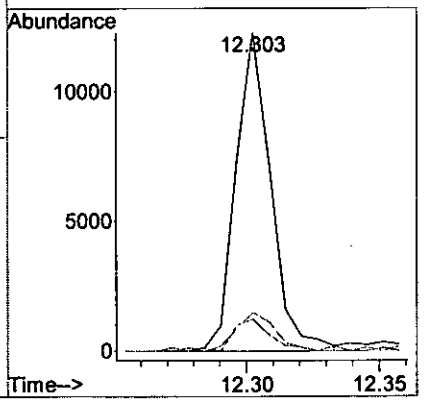




#117
Naphthalen
Concen: 0.75 ppb
RT: 12.303 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4578.D
Acq: 8 Apr 2014 5:59 pm

Tgt Ion:128 Resp: 11182

Ion	Ratio	Lower	Upper
128	100		
127	12.1	0.0	33.8
102	10.0	0.0	28.5



J4578.D W031214.M Wed Apr 09 10:21:14 2014 00313 Page 6

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4578.D
Acq On : 8 Apr 2014 5:59 pm
Operator : K.Ruest
Sample : R1402225-018|1.0
Misc : PARSONS 9913 T4
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4578.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.616	81	85	92	rBV	74255	82119	2.12%	0.362%
2	2.055	150	157	165	rBV2	30056	52310	1.35%	0.231%
3	2.372	202	209	216	rBV2	44053	96081	2.47%	0.423%
4	2.445	216	221	227	rVB2	43909	76104	1.96%	0.335%
5	2.597	238	246	255	rBV	25814	52301	1.35%	0.230%
6	3.463	380	388	396	rBV	47093	101823	2.62%	0.449%
7	4.152	492	501	509	rBV	497774	1184224	30.50%	5.219%
8	4.249	509	517	531	rVB	929511	2309065	59.48%	10.176%
9	4.658	574	584	596	rBV	439223	1150504	29.64%	5.070%
10	4.786	596	605	619	rVB	160299	441772	11.38%	1.947%
11	5.450	704	714	731	rBV	1222081	2880520	74.20%	12.694%
12	7.322	1014	1021	1030	rBV	2578576	3882208	100.00%	17.108%
13	8.742	1249	1254	1269	rVB	2690289	3433802	88.45%	15.132%
14	9.675	1401	1407	1413	rBV	68158	88452	2.28%	0.390%
15	9.791	1421	1426	1437	rBV	2232591	2721755	70.11%	11.994%
16	10.022	1460	1464	1470	rVB	41829	54718	1.41%	0.241%
17	10.748	1578	1583	1591	rBV	3000160	3390241	87.33%	14.940%
18	10.974	1616	1620	1627	rVB2	185356	242932	6.26%	1.071%
19	11.419	1689	1693	1698	rBV2	141626	173582	4.47%	0.765%
20	11.620	1722	1726	1735	rVB2	30992	47072	1.21%	0.207%
21	11.827	1756	1760	1767	rVB	58498	65182	1.68%	0.287%
22	11.925	1772	1776	1780	rBV	160933	165580	4.27%	0.730%

Sum of corrected areas: 22692347

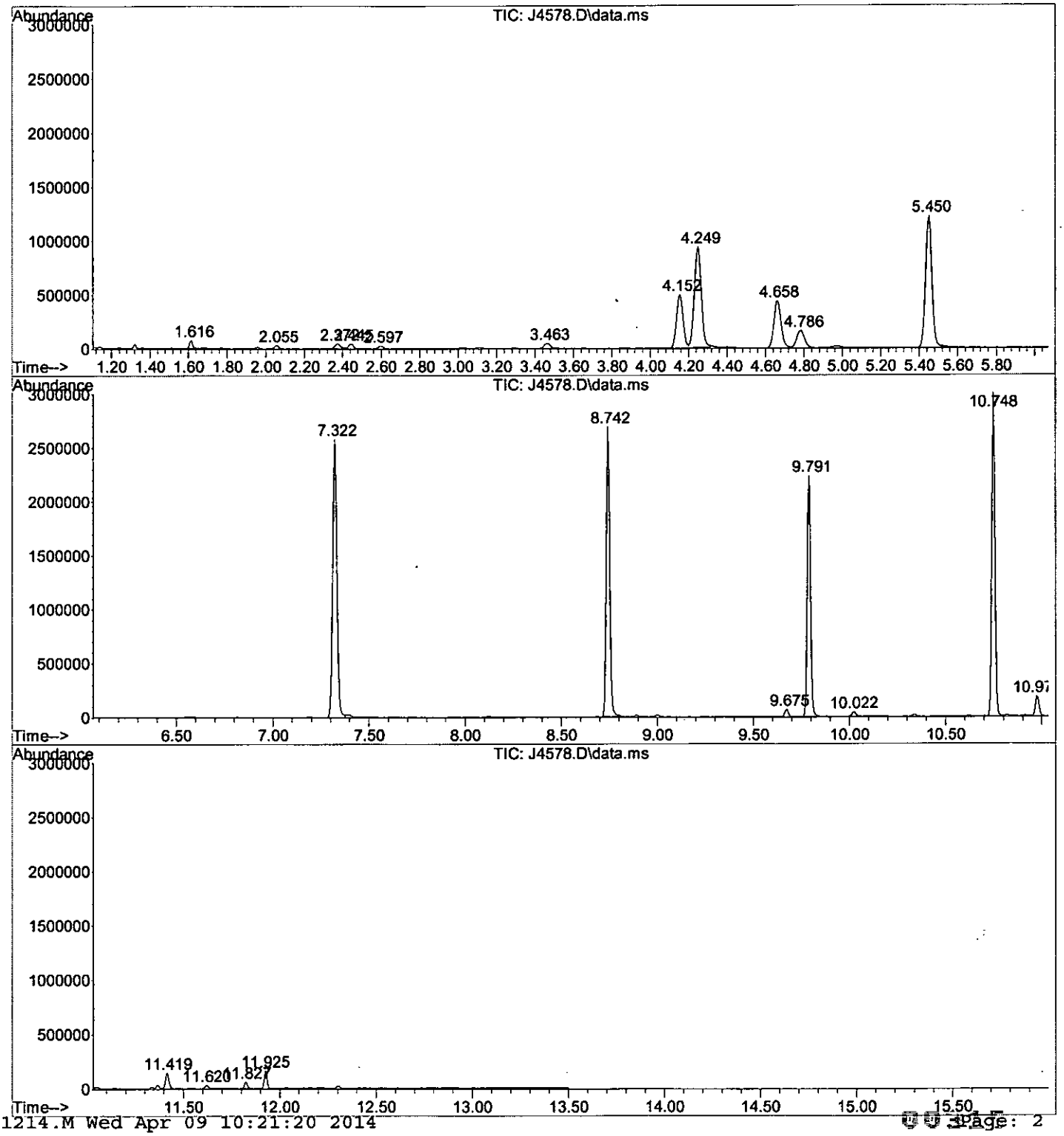
W031214.M Wed Apr 09 10:21:18 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4578.D
Acq On : 8 Apr 2014 5:59 pm
Operator : K.Ruest
Sample : R1402225-018|1.0
Misc : PARSONS 9913 T4
ALS Vial : 9 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 10:21:20 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4578.D
Acq On : 8 Apr 2014 5:59 pmm
Operator : K.Ruestt
Sample : R1402225-018|1.00
Misc : PARSONS 9913 T44
ALS Vial : 9 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1100
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 18:31
Sample Name:	FTMM-53-GW-699RW11-14.08	**Units:**	µg/L
Lab Code:	R1402225-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**6.5**		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.35**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1100
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 18:31
Sample Name:	FTMM-53-GW-699RW11-14.08	**Units:**	µg/L
Lab Code:	R1402225-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.26**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**1.2**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.61**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.30**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.33**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.71**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 18:31	
Dibromofluoromethane	101	85-115	4/8/14 18:31	
Toluene-d8	97	85-120	4/8/14 18:31	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14
Sample Matrix:	Water	**Date Received:**	4/1/14
		Date Analyzed:	4/8/14 1831

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699RW11-14.08	**Units:**	µg/L
Lab Code:	R1402225-019	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-019|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4579.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 6:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 18:46:53 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	831240	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1249481	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1134064	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	557638	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	364296	50.36	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.72%				
48) surr1,1,2-dichloroetha...	4.664	65	422037	51.22	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.44%				
65) SURR3,Toluene-d8	7.322	98	1479823	48.69	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.38%				
70) SURR2,BFB	9.791	95	553098	48.77	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.54%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1699	0.35	ppb		92
~~15) Acetone~~	~~2.054~~	~~43~~	~~10869~~	~~6.59~~	~~ppb~~		~~70~~
20) Allyl Chloride	2.207	76	2092	0.51	ppb	#	1
21) Methyl Acetate	~~2.371~~	43	27983	7.53	ppb	#	60
24) Acrylonitrile	2.451	53	575	0.31	ppb	#	33
~~35) 2-Butanone~~	~~3.554~~	~~43~~	~~546~~	~~0.24~~	~~ppb~~	~~#~~	~~38~~
40) Chloroform	3.938	83	2955	0.21	ppb	#	79
44) Cyclohexane	4.328	41	1900	0.28	ppb		98 MD
49) Benzene	4.786	78	199392	6.48	ppb		98
~~61) 2-Nitropropane~~	~~6.810~~	~~41~~	~~299~~	~~0.30~~	~~ppb~~	~~#~~	~~75~~
66) Toluene	7.395	91	9671	0.30	ppb		95
82) Ethylbenzene	8.901	106	2718	0.26	ppb	#	26
83) (m+p)Xylene	9.004	106	4067	0.33	ppb		87
89) Isopropylbenzene	9.675	105	33140	1.15	ppb		98
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1087~~	~~2.43~~	~~ppb~~	~~#~~	~~14~~
95) n-Propylbenzene	10.022	91	23815	0.71	ppb		97
~~111) 1,2-Dibromo-3-chloropr...~~	~~11.620~~	~~157~~	~~270~~	~~0.28~~	~~ppb~~	~~#~~	~~44~~
117) Naphthalen	12.302	128	9040	0.61	ppb		97

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

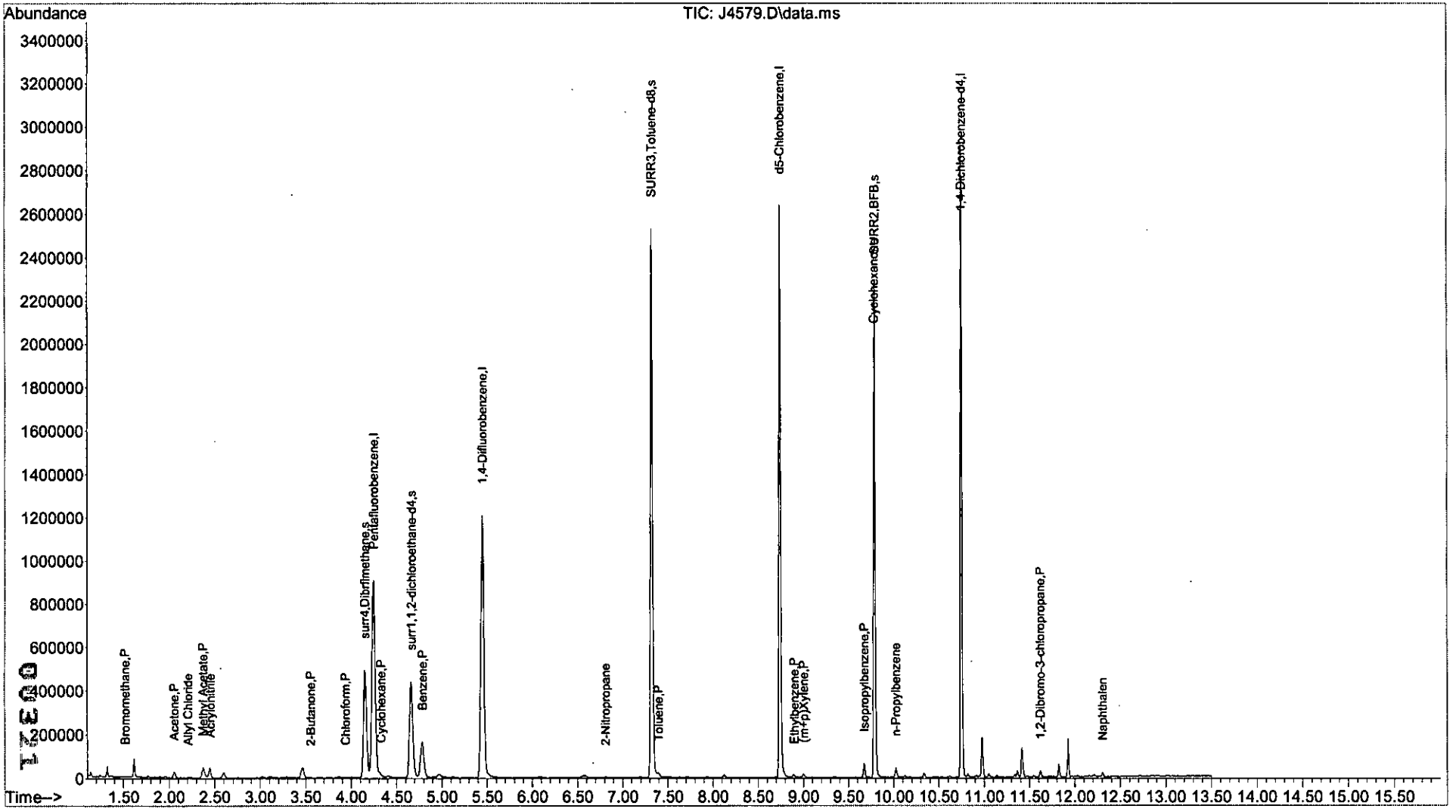
KR 4/9/14

W031214.M Tue Apr 08 18:46:57 2014 Page: 1

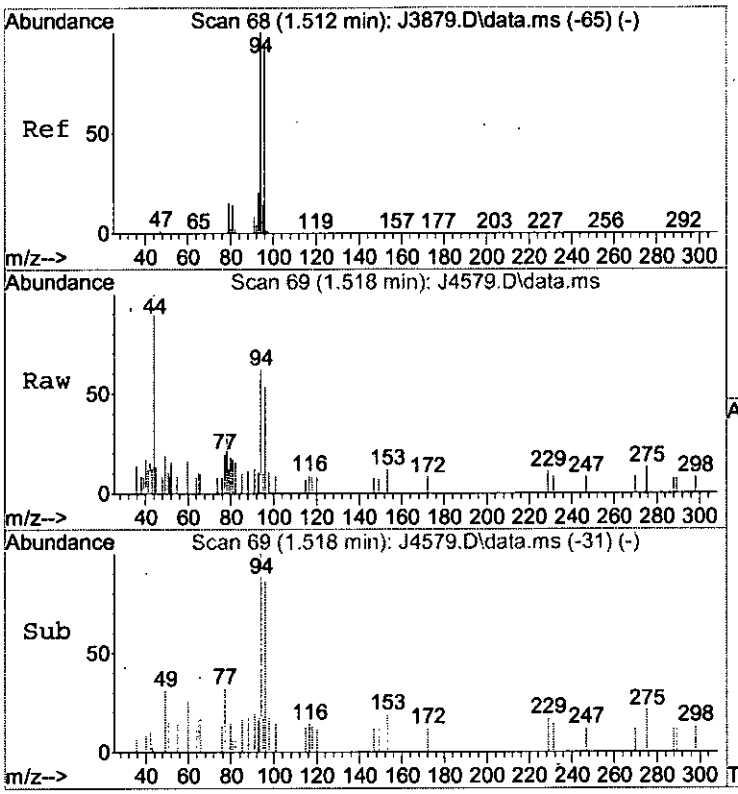
Quantitation Report (Not Reviewed)

Sample : R1402225-019|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4579.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 6:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 18:46:53 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



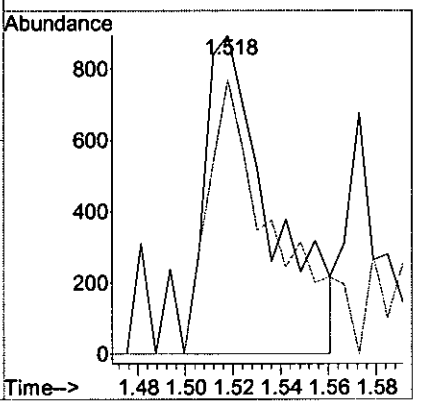
W031214.M Tue Apr 08 18:46:59 2014 Page: 2

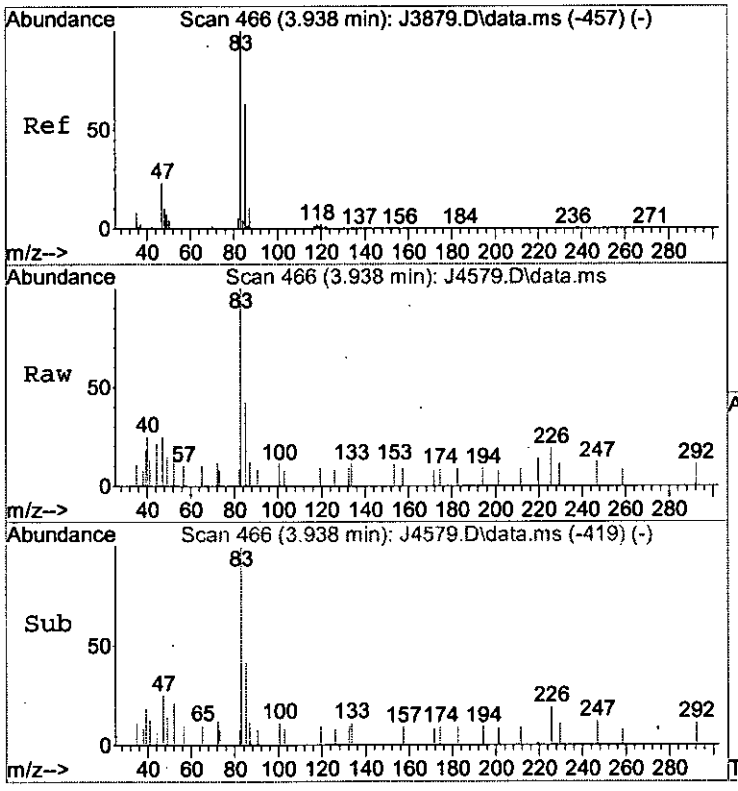


#5
Bromomethane
Concen: 0.35 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion: 94 Resp: 1699

Ion	Ratio	Lower	Upper
94	100		
96	86.0	73.8	113.8

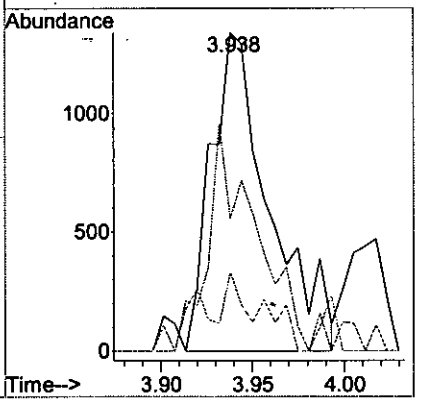


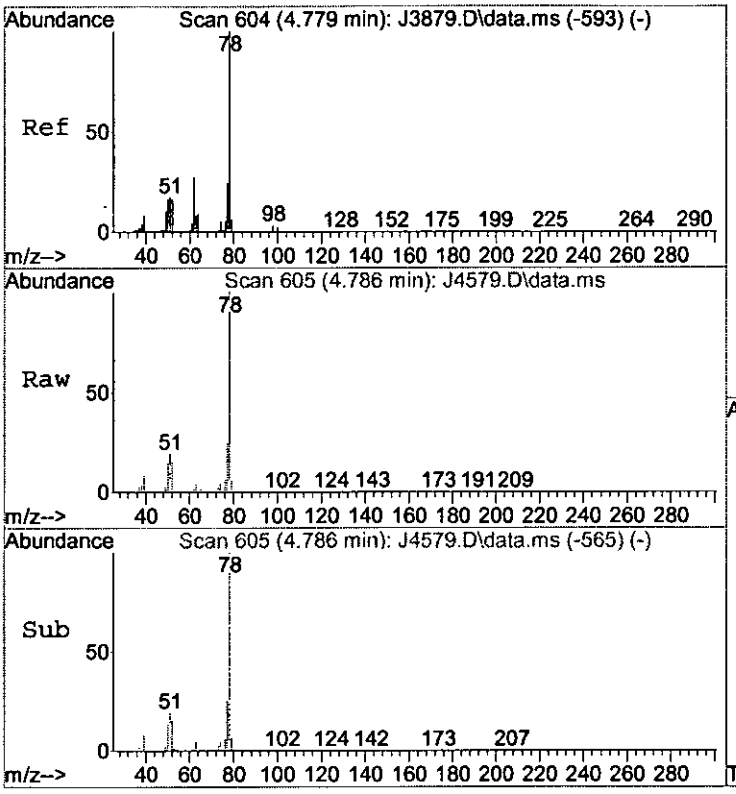


#40
Chloroform
Concen: 0.21 ppb
RT: 3.938 min Scan# 466
Delta R.T. -0.000 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion: 83 Resp: 2955

Ion	Ratio	Lower	Upper
83	100		
85	41.5	42.6	82.6#
47	24.8	3.4	43.4

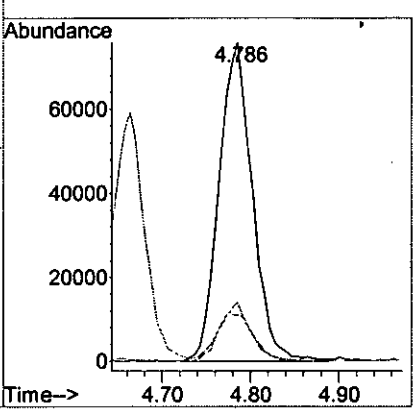


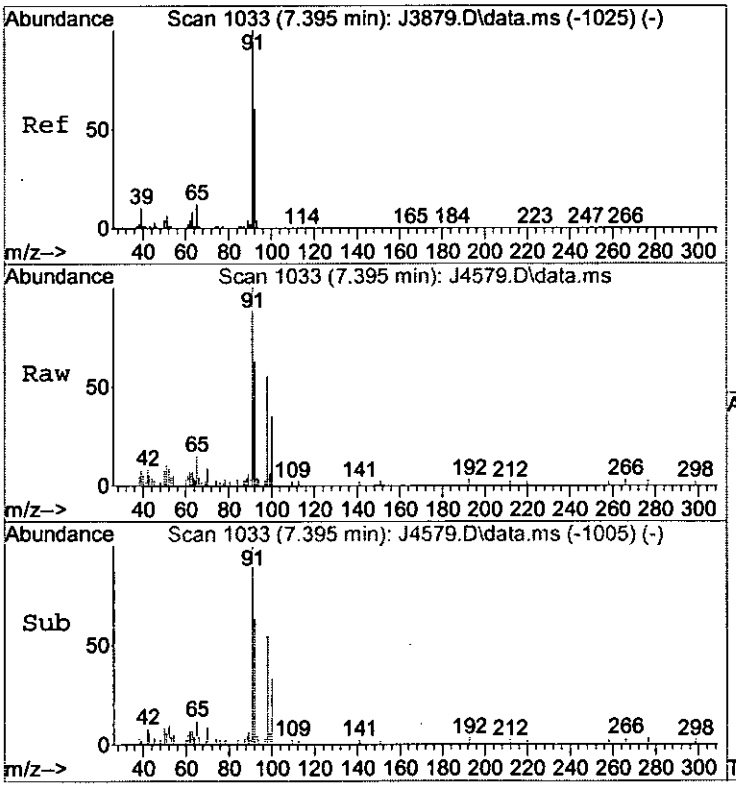


#49
Benzene
Concen: 6.48 ppb
RT: 4.786 min Scan# 605
Delta R.T. -0.000 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion: 78 Resp: 199392

Ion	Ratio	Lower	Upper
78	100		
51	18.5	0.0	38.2
52	14.6	0.0	36.1

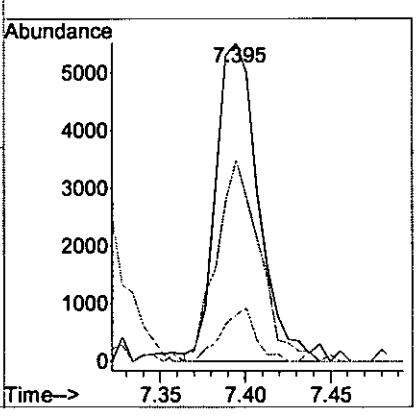




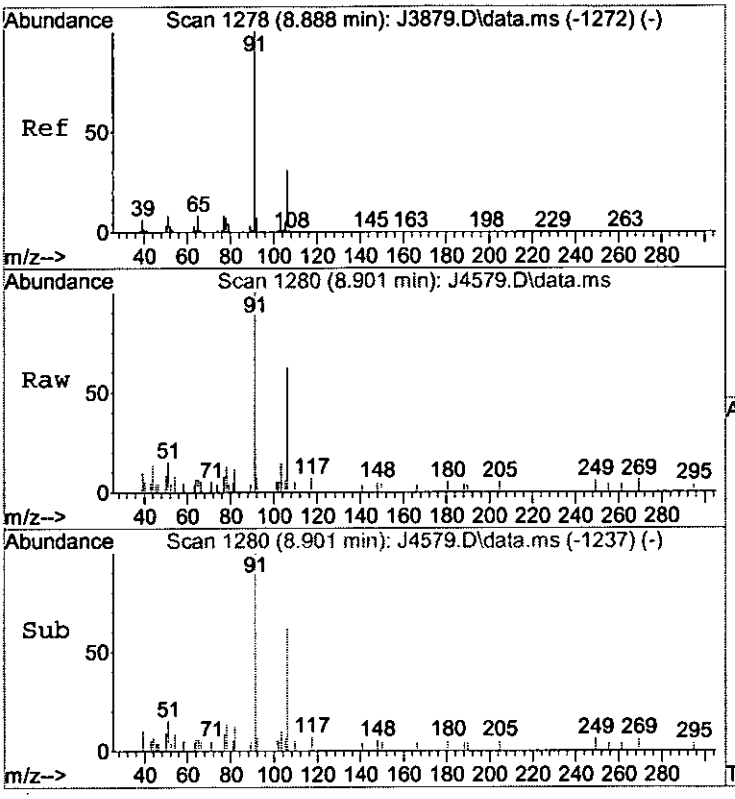
#66
Toluene
Concen: 0.30 ppb
RT: 7.395 min Scan# 1033
Delta R.T. -0.000 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion: 91 Resp: 9671

Ion	Ratio	Lower	Upper
91	100		
92	63.2	39.9	79.9
65	14.6	0.0	32.3



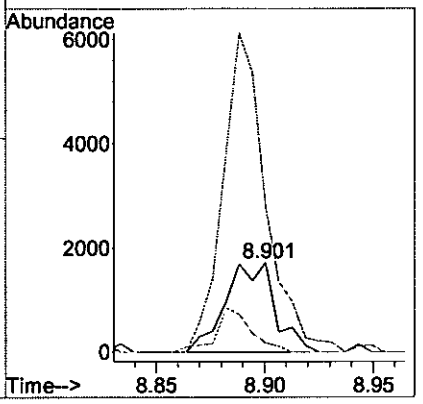
J4579.D W031214.M Wed Apr 09 10:24:29 2014 00323 Page 4

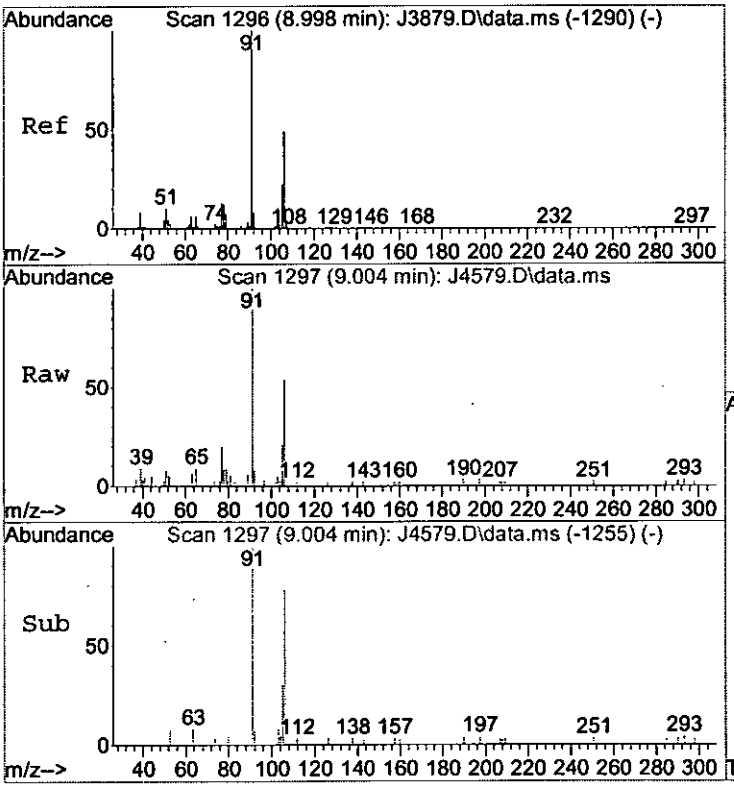


#82
Ethylbenzene
Concen: 0.26 ppb
RT: 8.901 min Scan# 1280
Delta R.T. 0.012 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion:106 Resp: 2718

Ion	Ratio	Lower	Upper
106	100		
91	162.5	300.3	340.3#
65	10.1	6.6	46.6

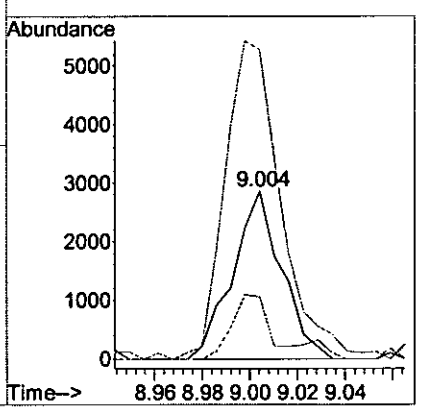




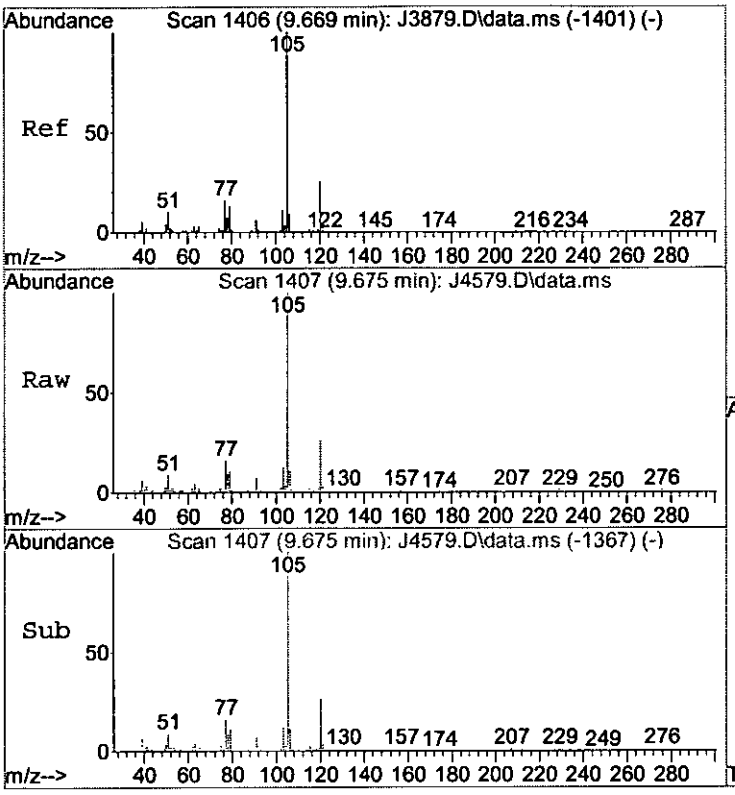
#83
(m+p)Xylene
Concen: 0.33 ppb
RT: 9.004 min Scan# 1297
Delta R.T. 0.006 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion:106 Resp: 4067

Ion	Ratio	Lower	Upper
106	100		
91	184.4	182.8	222.8
77	36.9	7.2	47.2



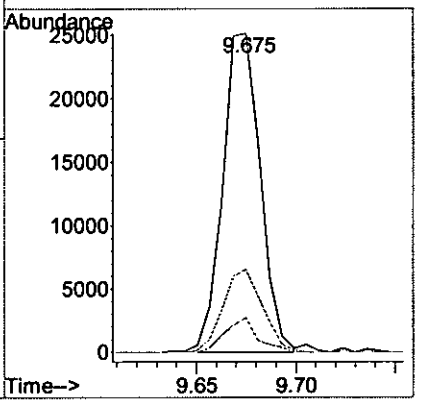
J4579.D W031214.M Wed Apr 09 10:24:30 2014 00324 Page 5

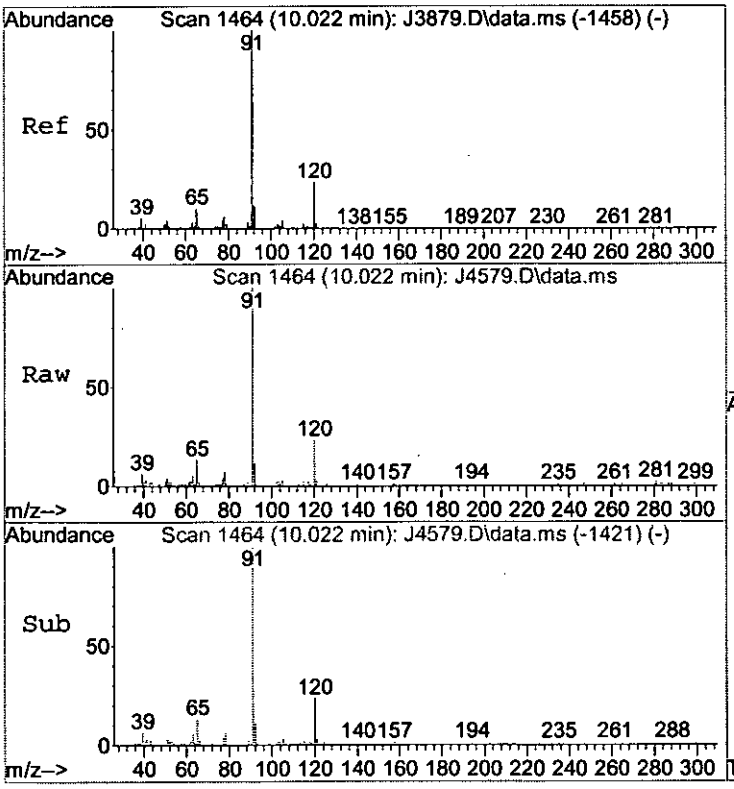


#89
Isopropylbenzene
Concen: 1.15 ppb
RT: 9.675 min Scan# 1407
Delta R.T. -0.000 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion:105 Resp: 33140

Ion	Ratio	Lower	Upper
105	100		
120	26.0	5.4	45.4
106	10.8	0.0	28.6

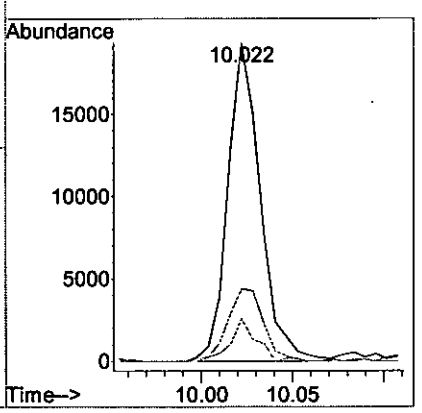




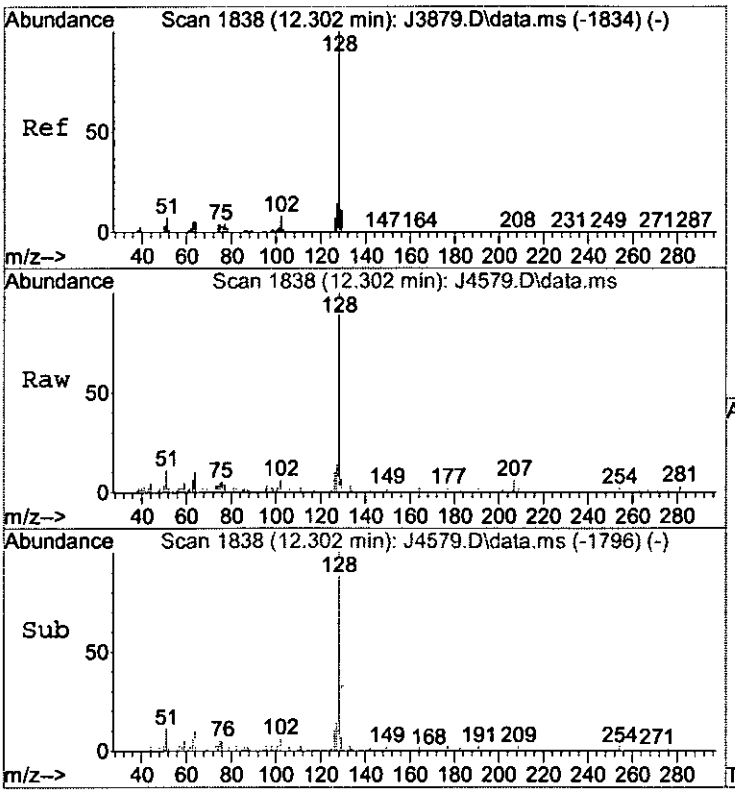
#95
n-Propylbenzene
Concen: 0.71 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.000 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion: 91 Resp: 23815

Ion	Ratio	Lower	Upper
91	100		
120	22.8	3.1	43.1
65	13.3	0.0	30.1



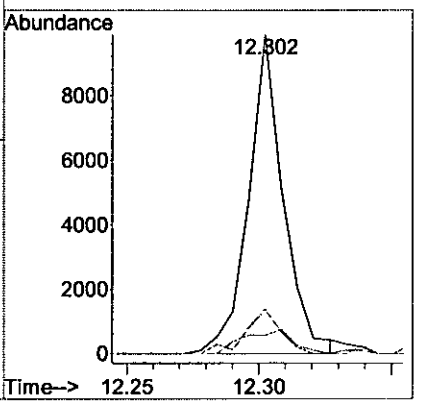
J4579.D W031214.M Wed Apr 09 10:24:31 2014 00325 Page 6



#117
Naphthalen
Concen: 0.61 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4579.D
Acq: 8 Apr 2014 6:31 pm

Tgt Ion:128 Resp: 9040

Ion	Ratio	Lower	Upper
128	100		
127	13.9	0.0	33.8
102	5.7	0.0	28.5



J4579.D W031214.M Wed Apr 09 10:24:32 2014 00326 Page 7

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4579.D
Acq On : 8 Apr 2014 6:31 pm
Operator : K.Ruest
Sample : R1402225-019|1.0
Misc : PARSONS 9913 T4
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4579.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.615	81	85	91	rVB	81591	83453	2.16%	0.370%
2	2.054	151	157	166	rBV3	27450	47168	1.22%	0.209%
3	2.371	202	209	216	rBV	45506	93107	2.41%	0.413%
4	2.445	216	221	232	rVB	46080	76283	1.97%	0.339%
5	2.603	239	247	252	rBV2	24875	47932	1.24%	0.213%
6	3.469	380	389	397	rBV2	45740	107576	2.78%	0.477%
7	4.152	490	501	509	rBV	493971	1170331	30.25%	5.194%
8	4.249	509	517	536	rVB	903964	2326498	60.12%	10.325%
9	4.664	574	585	596	rBV	438971	1139170	29.44%	5.056%
10	4.786	596	605	619	rVB2	162762	444689	11.49%	1.974%
11	5.450	704	714	729	rBV	1207822	2836668	73.31%	12.589%
12	7.322	1014	1021	1031	rBV	2531209	3869440	100.00%	17.173%
13	8.742	1249	1254	1271	rBV	2635762	3404867	87.99%	15.111%
14	9.675	1400	1407	1414	rBV	65449	89256	2.31%	0.396%
15	9.791	1421	1426	1436	rBV	2265032	2704046	69.88%	12.001%
16	10.022	1459	1464	1469	rVB	43317	60201	1.56%	0.267%
17	10.748	1578	1583	1592	rBV	2899945	3339877	86.31%	14.823%
18	10.979	1616	1621	1626	rVB2	179828	234752	6.07%	1.042%
19	11.418	1688	1693	1699	rBV2	134715	172831	4.47%	0.767%
20	11.620	1719	1726	1732	rBV3	29426	46276	1.20%	0.205%
21	11.821	1756	1759	1767	rVB	61246	70169	1.81%	0.311%
22	11.924	1772	1776	1780	rVB	172658	167702	4.33%	0.744%

Sum of corrected areas: 22532292

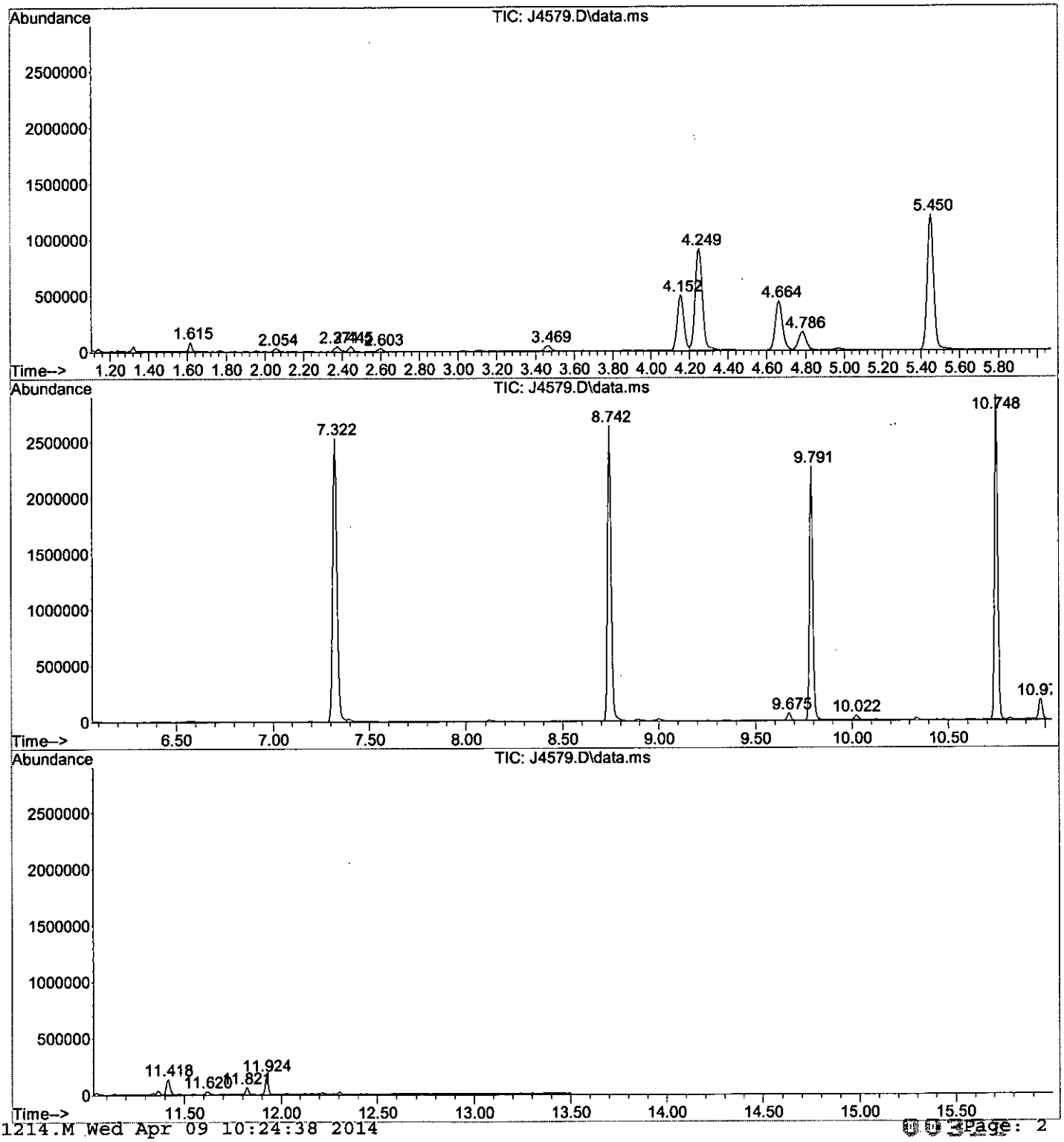
W031214.M Wed Apr 09 10:24:37 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4579.D
Acq On : 8 Apr 2014 6:31 pm
Operator : K.Ruest
Sample : R1402225-019|1.0
Misc : PARSONS 9913 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Wed Apr 09 10:24:38 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4579.D
Acq On : 8 Apr 2014 6:31 pmm
Operator : K.Ruestt
Sample : R1402225-019|1.00
Misc : PARSONS 9913 T44
ALS Vial : 10 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1015
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 13:46
Sample Name:	FTMM-53-GW-699RW03-8.20	**Units:**	µg/L
Lab Code:	R1402225-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4653.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.27**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**110**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**16**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**0.80**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**3.5**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.33**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1015
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/10/14 13:46
Sample Name:	FTMM-53-GW-699RW03-8.20	**Units:**	µg/L
Lab Code:	R1402225-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4653.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**46**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**13**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**15**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**1.3**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**59**		10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**16**		5.0	1.0	0.20	
95-47-6	o-Xylene	**76**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.6**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.29**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	4/10/14 13:46	
Dibromofluoromethane	101	85-115	4/10/14 13:46	
Toluene-d8	96	85-120	4/10/14 13:46	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000
Sample Matrix: Water

Service Request: R1402225
Date Collected: 3/31/14
Date Received: 4/1/14
Date Analyzed: 4/10/14 1346

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-8.20
Lab Code: R1402225-020

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.62	**17.4**	JN
	unknown	2.37	**6.8**	J
000096-14-0	Pentane, 3-methyl-	2.60	**7.6**	JN
000110-82-7	Cyclohexane	3.46	**16.7**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.10	**36.1**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.33	**56.6**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.82	**51.3**	JN
000300-57-2	Benzene, 2-propenyl-	10.97	**41.2**	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl	11.05	**6.9**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.26	**8.0**	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl	11.29	**5.1**	JN
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.34	**7.4**	JN
000767-58-8	Indan, 1-methyl-	11.41	**17.2**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.61	**7.3**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.65	**8.5**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.93	**13.0**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1402225-020|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4653.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 14:02:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	837813	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1237277	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1119557	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	557433	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	360215	50.29	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.58%				
48) surr1,1,2-dichloroetha...	4.658	65	405922	49.75	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.50%				
65) SURR3,Toluene-d8	7.322	98	1441306	47.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.78%				
70) SURR2,BFB	9.791	95	544483	48.49	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.98%				
Target Compounds							Qvalue
5) Bromomethane	1.512	94	1581	0.33	ppb		99
~~12) Acrolein~~	~~1.853~~	~~56~~	~~654~~	~~4.06~~	~~ppb~~	~~#~~	~~1~~
~~15) Acetone~~	~~2.055~~	~~43~~	~~22551~~	~~13.57~~	~~ppb~~	~~#~~	~~63~~
~~17) Iodomethane~~	~~2.146~~	~~142~~	~~1663~~	~~0.21~~	~~ppb~~		~~75~~ MTD
18) Carbon Disulfide	2.207	76	5249	0.25	ppb		81
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~5211~~	~~1.25~~	~~ppb~~	~~#~~	~~1~~
21) Methyl Acetate	2.311	43	3042	0.81	ppb	#	60
22) Methylene Chloride	~~2.335~~	~~84~~	1721	0.22	ppb	#	6
24) Acrylonitrile	2.603	53	3415	1.83	ppb	#	46
~~35) 2-Butanone~~	~~3.560~~	~~43~~	~~1762~~	~~0.76~~	~~ppb~~	~~#~~	~~1~~
44) Cyclohexane	4.322	41	25260	3.77	ppb		100 MTD
49) Benzene	4.786	78	105471	3.46	ppb		91
~~51) Iso Butyl Alcohol~~	~~4.572~~	~~43~~	~~5382~~	~~25.71~~	~~ppb~~	~~#~~	~~49~~
53) 1-Butanol	5.871	56	567	4.93	ppb	#	23
55) Methylcyclohexane	6.103	55	29621	3.73	ppb		97 MTD
59) Methyl Methacrylate	6.359	69	4154	1.13	ppb	#	50
~~61) 2 Nitropropane~~	~~6.791~~	~~41~~	~~1014~~	~~1.04~~	~~ppb~~	~~#~~	~~48~~
66) Toluene	7.395	91	41926	1.33	ppb		87
~~69) 1,1,2-Trichloroethane~~	~~7.797~~	~~97~~	~~2177~~	~~0.40~~	~~ppb~~	~~#~~	~~21~~
82) Ethylbenzene	8.889	106	477686	46.02	ppb		94
83) (m+p)Xylene	8.998	106	714809	58.60	ppb		99
84) o-Xylene	9.346	106	940180	75.53	ppb		95
~~85) Styrene~~	~~9.346~~	~~104~~	~~47998~~	~~2.41~~	~~ppb~~	~~#~~	~~1~~
89) Isopropylbenzene	9.675	105	380043	13.21	ppb		99
~~90) Cyclohexanone~~	~~9.724~~	~~55~~	~~506~~	~~1.13~~	~~ppb~~		~~81~~
~~91) trans-1,4-Dichloro-2-B...~~	~~9.974~~	~~53~~	~~410~~	~~0.27~~	~~ppb~~	~~#~~	~~32~~
~~92) 1,1,2,2-Tetrachloroethane~~	~~9.980~~	~~83~~	~~1290~~	~~0.20~~	~~ppb~~	~~#~~	~~50~~
95) n-Propylbenzene	10.023	91	537034	15.95	ppb		99
~~96) 2-Chlorotoluene~~	~~10.096~~	~~91~~	~~118665~~	~~5.61~~	~~ppb~~	~~#~~	~~62~~
~~97) 3-Chlorotoluene~~	~~10.096~~	~~91~~	~~178195~~	~~8.10~~	~~ppb~~	~~#~~	~~42~~
~~98) 4-Chlorotoluene~~	~~10.169~~	~~91~~	~~39115~~	~~1.57~~	~~ppb~~	~~#~~	~~45~~
99) 1,3,5-Trimethylbenzene	10.169	105	378311	16.11	ppb		99
100) tert-Butylbenzene	10.437	119	5821	0.29	ppb		94
101) 1,2,4-Trimethylbenzene	10.480	105	2567056	106.28	ppb		96
103) sec-Butylbenzene	10.620	105	42515	1.55	ppb		94

KR 4/10/14

DL 4/14/14

W031214.M Thu Apr 10 14:02:06 2014 Page: 1

00333

Quantitation Report (Not Reviewed)

Sample : R1402225-020|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4653.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 14:02:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

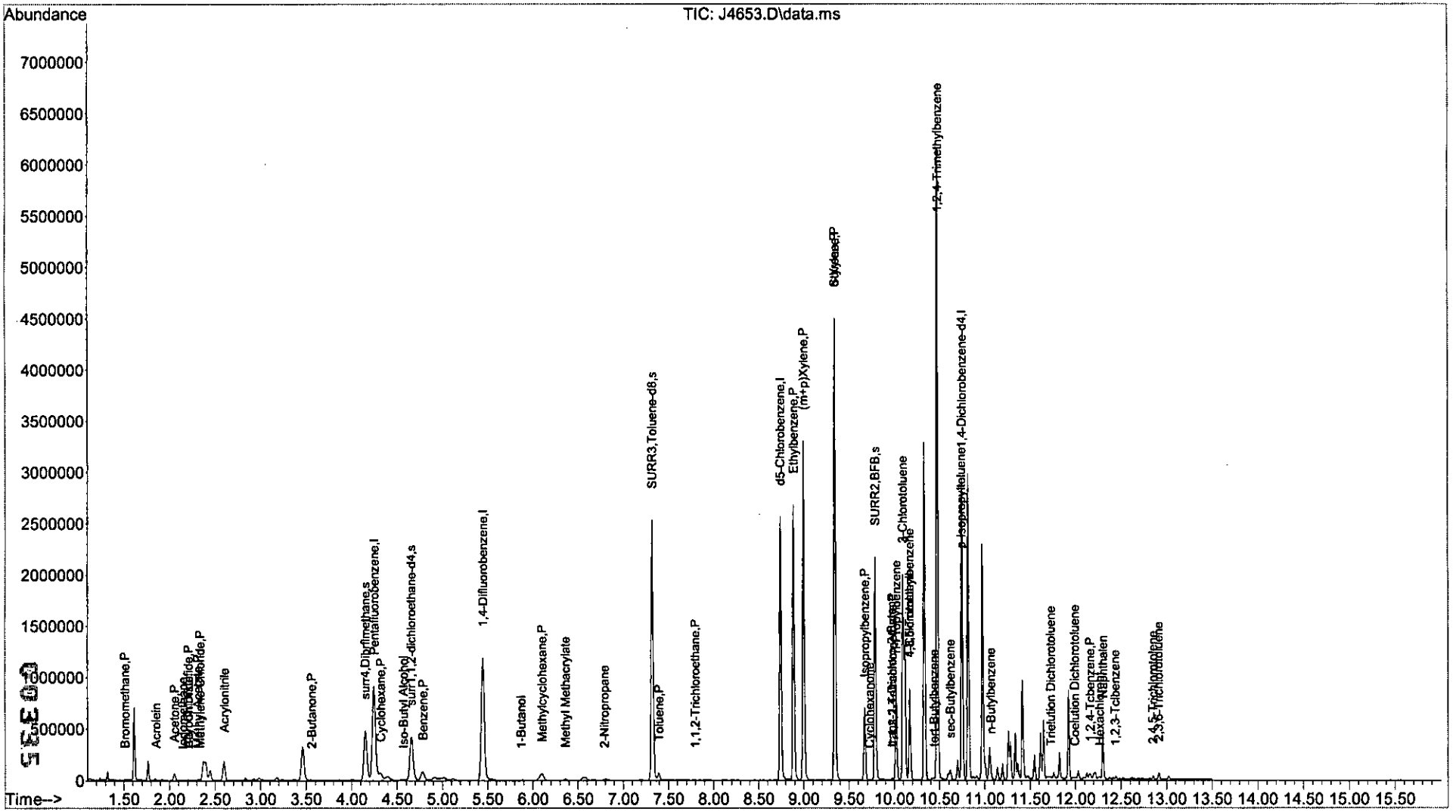
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
104) p-Isopropyltoluene	10.742	119	18535	0.80	ppb		91
~~109) n-Butylbenzene~~	~~11.065~~	~~91~~	~~44234~~	~~2.11~~	~~ppb~~	~~#~~	~~57~~
112) Trielution Dichlorotol...	11.729	125	3574	0.34	ppb	#	58 MTD
114) Coelution Dichlorotoluene	11.992	125	3203	0.28	ppb	#	82 ↓
115) 1,2,4-Tcbenzene	12.162	180	2200	0.27	ppb	#	65
116) Hexachlorobt	12.266	225	2067	0.58	ppb		84
117) Naphthalen	12.303	128	226480	15.31	ppb		97
118) 1,2,3-Tclbenzene	12.437	180	2224	0.33	ppb		77
119) 2,4,5-Trichlorotolene	12.851	159	5340	1.20	ppb		99 MTD
120) 2,3,6-Trichlorotoluene	12.912	159	4529	1.12	ppb	#	92 ↓

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

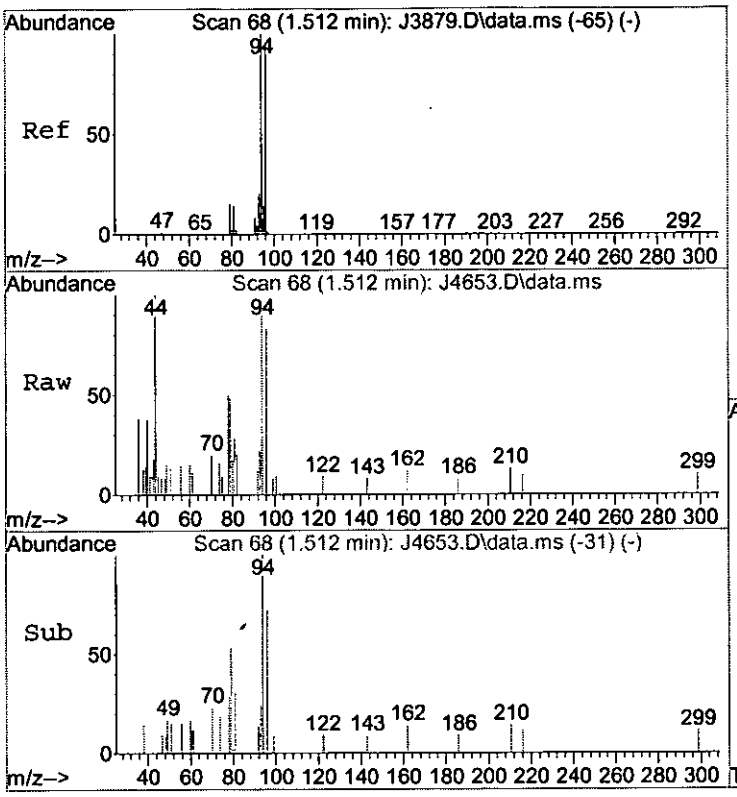
Quantitation Report (Not Reviewed)

Sample : R1402225-020|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4653.D
Misc : PARSONS 9913 T4
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 14:02:05 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



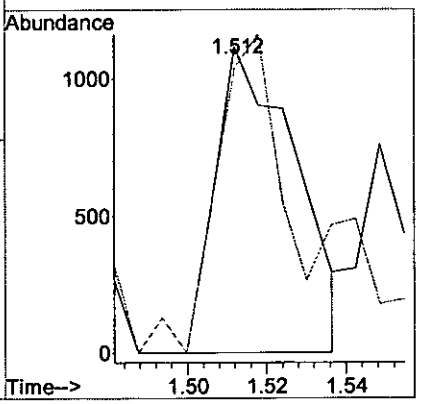
W031214.M Thu Apr 10 14:02:10 2014 Page: 3

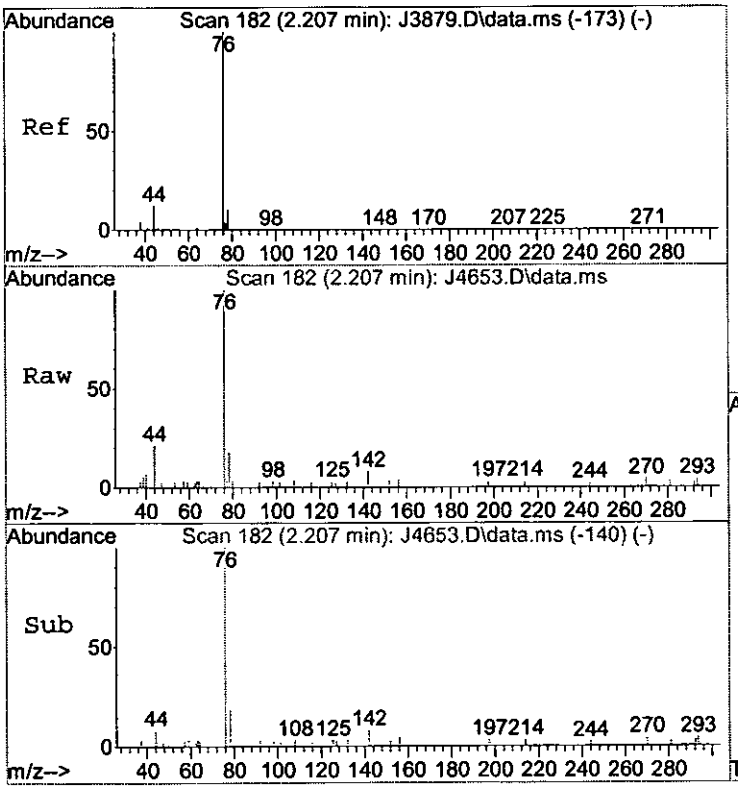


#5
Bromomethane
Concen: 0.33 ppb
RT: 1.512 min Scan# 68
Delta R.T. 0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion: 94 Resp: 1581

Ion	Ratio	Lower	Upper
94	100		
96	92.9	73.8	113.8

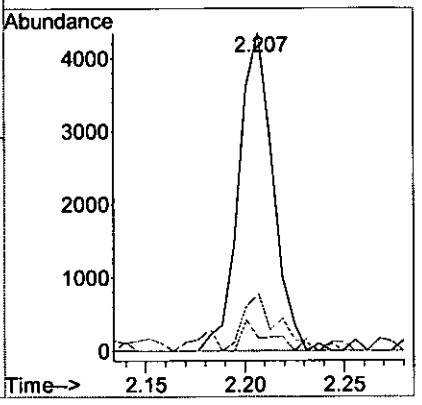




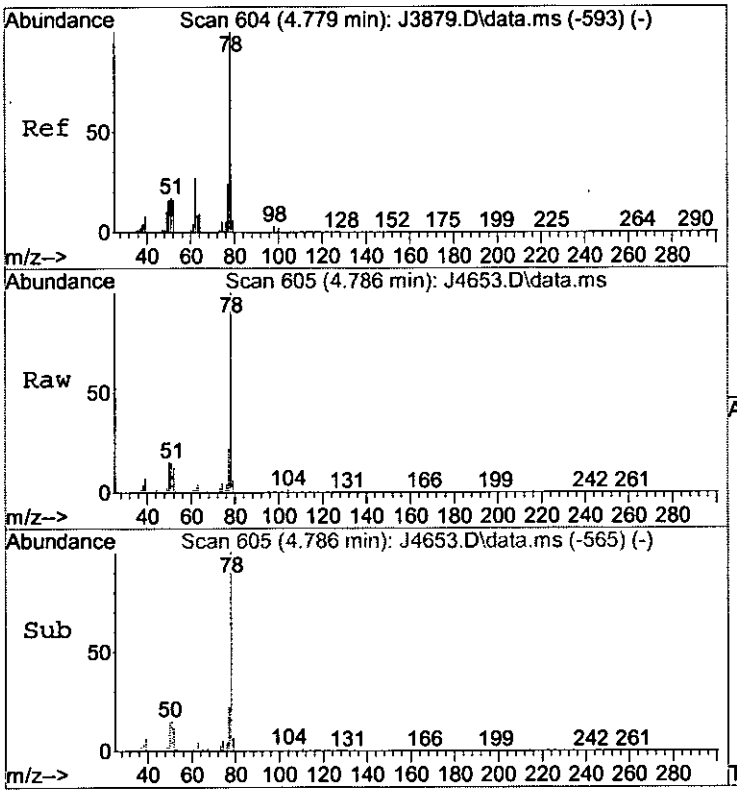
#18
Carbon Disulfide
Concen: 0.25 ppb
RT: 2.207 min Scan# 182
Delta R.T. 0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion: 76 Resp: 5249

Ion	Ratio	Lower	Upper
76	100		
78	17.9	0.0	29.6
77	4.0	0.0	22.6



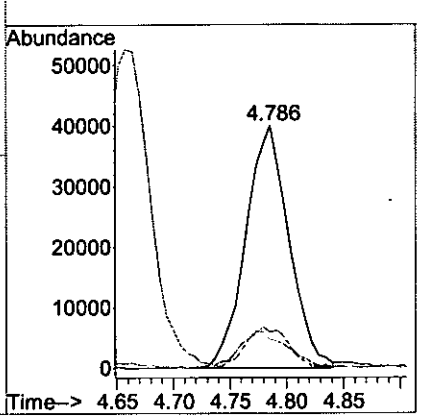
J4653.D W031214.M Thu Apr 10 16:35:28 2014 00336 Page 3

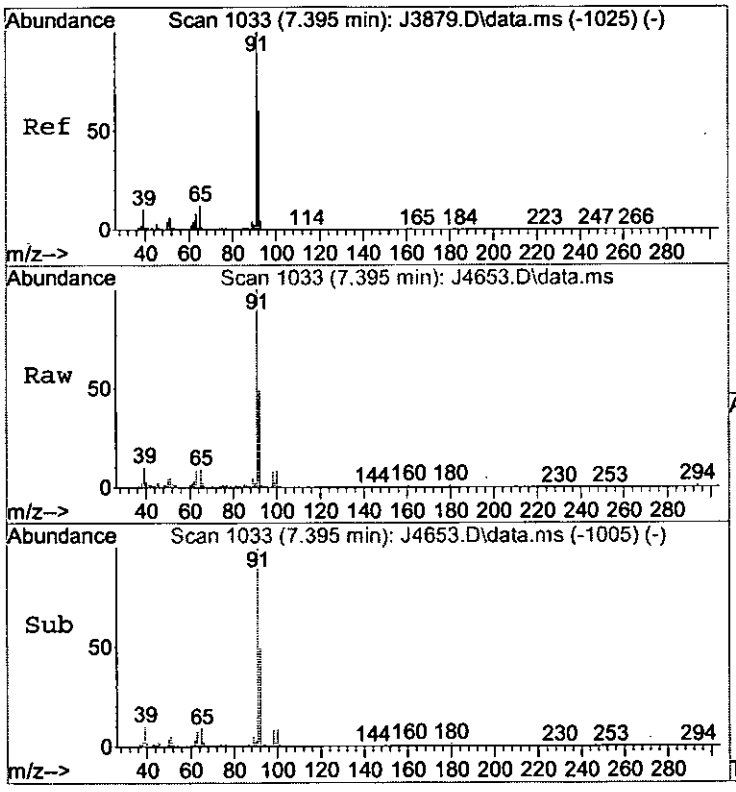


#49
Benzene
Concen: 3.46 ppb
RT: 4.786 min Scan# 605
Delta R.T. 0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion: 78 Resp: 105471

Ion	Ratio	Lower	Upper
78	100		
51	14.8	0.0	38.2
52	11.8	0.0	36.1

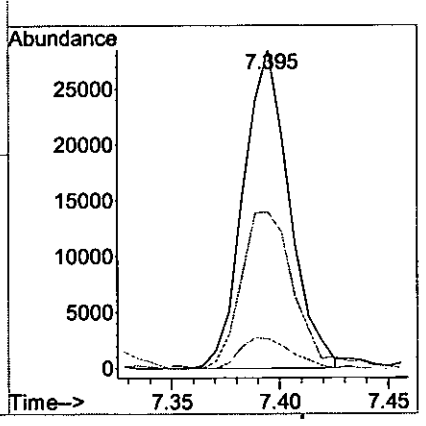




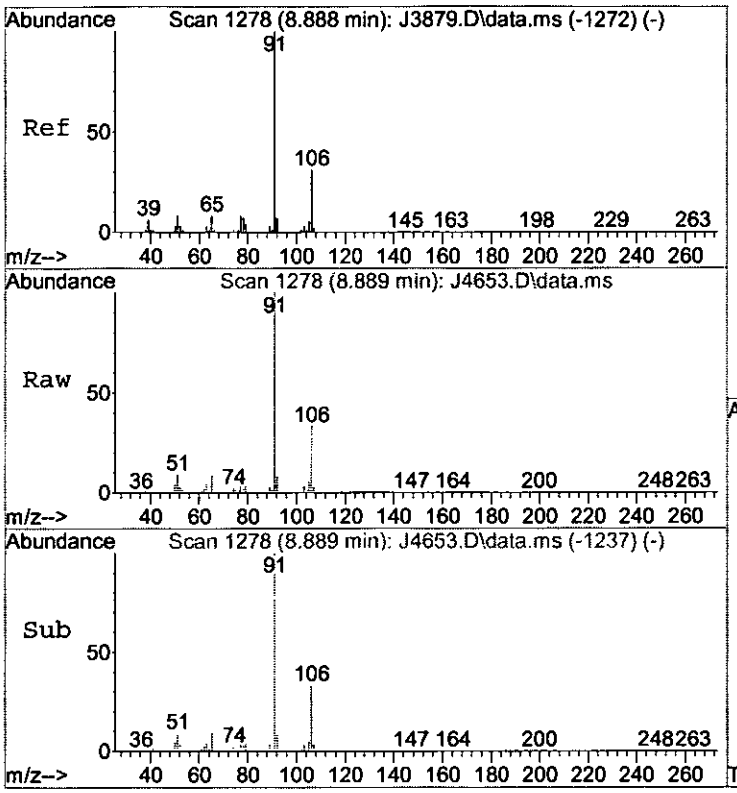
#66
Toluene
Concen: 1.33 ppb
RT: 7.395 min Scan# 1033
Delta R.T. 0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion: 91 Resp: 41926

Ion	Ratio	Lower	Upper
91	100		
92	48.8	39.9	79.9
65	9.2	0.0	32.3



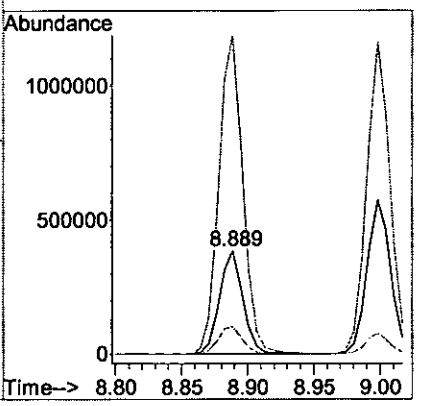
J4653.D W031214.M Thu Apr 10 16:35:30 2014 00337 Page 4

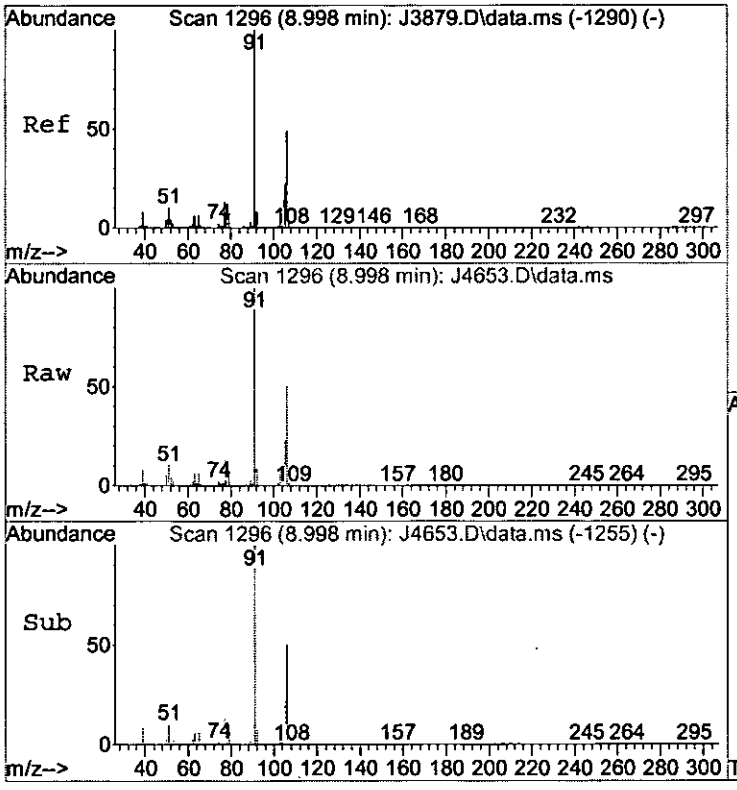


#82
Ethylbenzene
Concen: 46.02 ppb
RT: 8.889 min Scan# 1278
Delta R.T. -0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:106 Resp: 477686

Ion	Ratio	Lower	Upper
106	100		
91	307.2	300.3	340.3
65	26.7	6.6	46.6

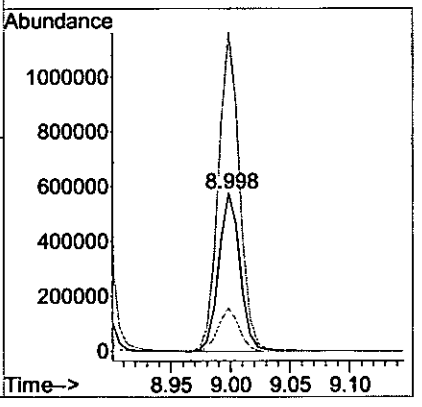




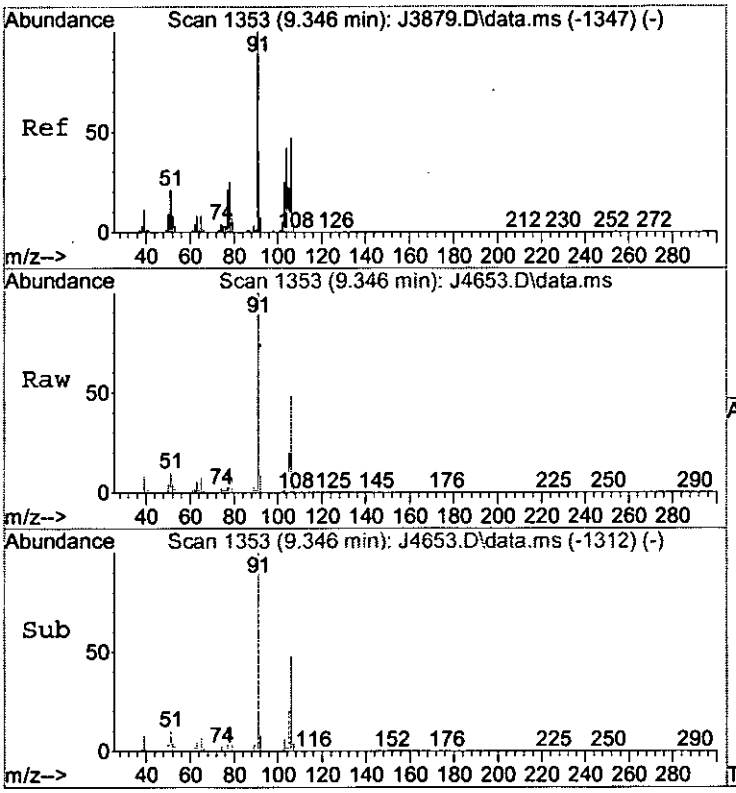
#83
(m+p)Xylene
Concen: 58.60 ppb
RT: 8.998 min Scan# 1296
Delta R.T. -0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:106 Resp: 714809

Ion	Ratio	Lower	Upper
106	100		
91	202.0	182.8	222.8
77	27.1	7.2	47.2



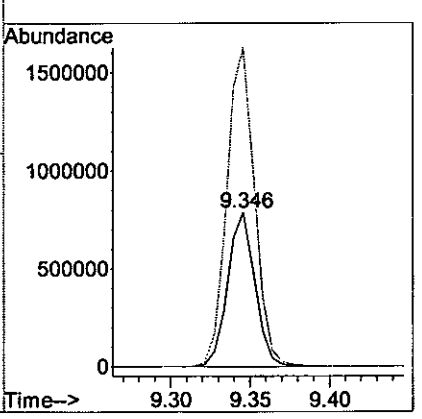
J4653.D W031214.M Thu Apr 10 16:35:32 2014 00338 Page 5

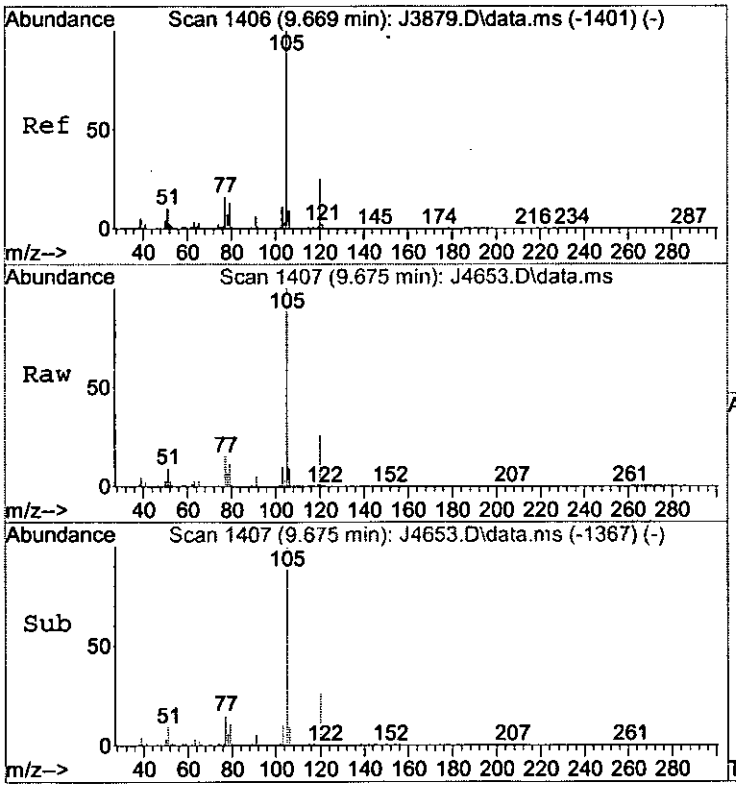


#84
o-Xylene
Concen: 75.53 ppb
RT: 9.346 min Scan# 1353
Delta R.T. 0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:106 Resp: 940180

Ion	Ratio	Lower	Upper
106	100		
91	206.6	193.9	233.9

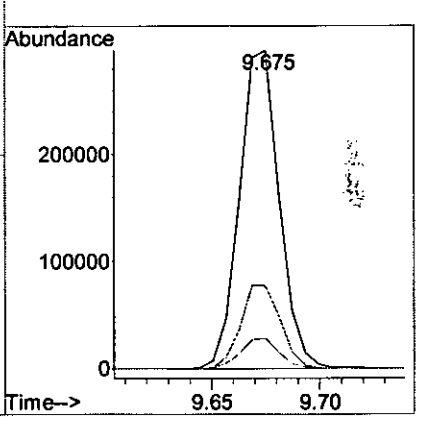


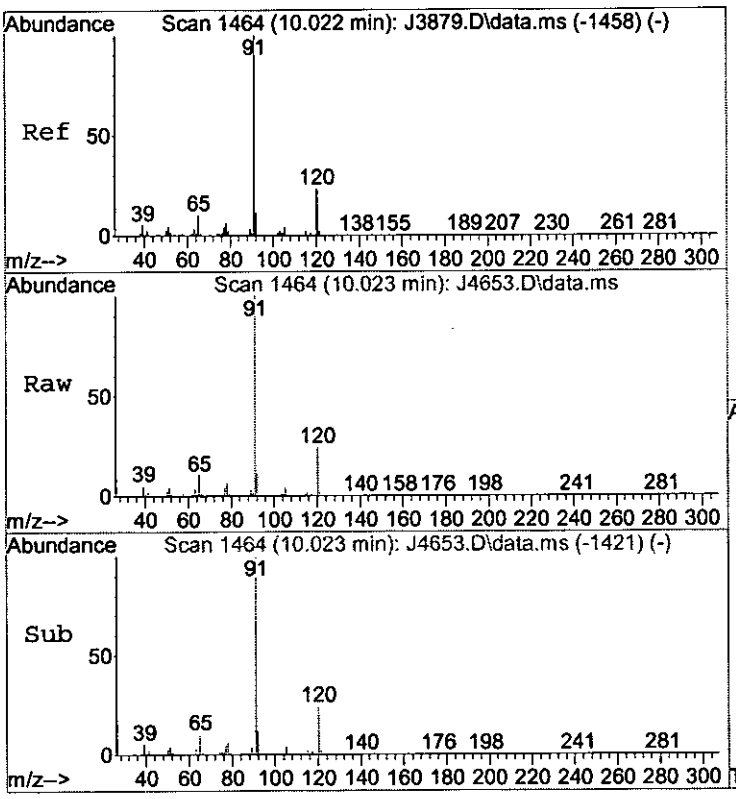


#89
Isopropylbenzene
Concen: 13.21 ppb
RT: 9.675 min Scan# 1407
Delta R.T. -0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:105 Resp: 380043

Ion	Ratio	Lower	Upper
105	100		
120	25.8	5.4	45.4
106	9.3	0.0	28.6

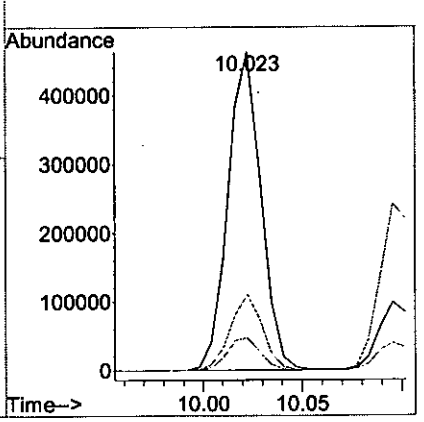


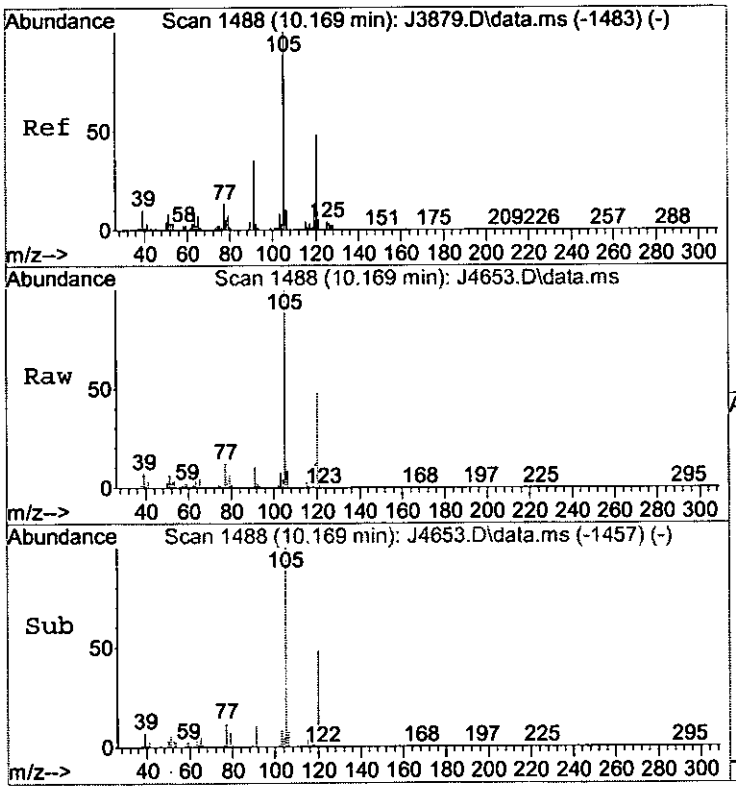


#95
n-Propylbenzene
Concen: 15.95 ppb
RT: 10.023 min Scan# 1464
Delta R.T. 0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion: 91 Resp: 537034

Ion	Ratio	Lower	Upper
91	100		
120	23.8	3.1	43.1
65	10.2	0.0	30.1

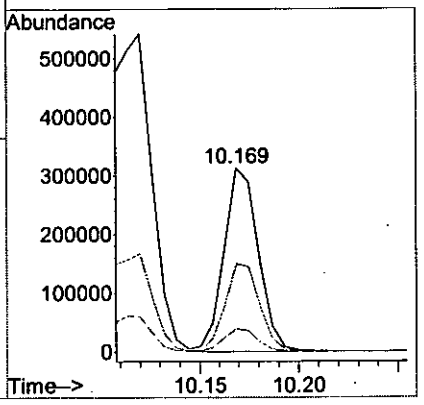


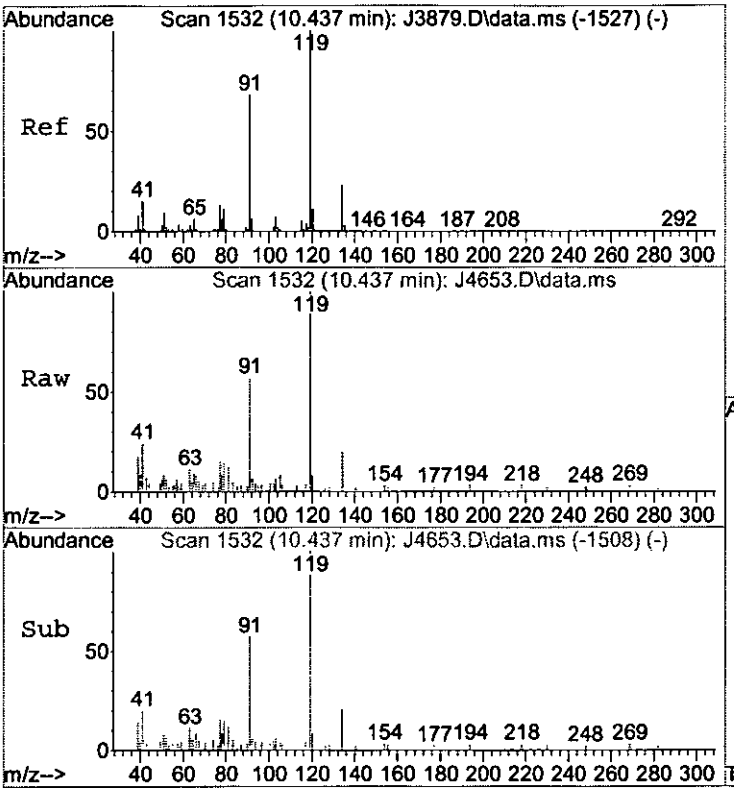


#99
1,3,5-Trimethylbenzene
Concen: 16.11 ppb
RT: 10.169 min Scan# 1488
Delta R.T. -0.006 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:105 Resp: 378311

Ion	Ratio	Lower	Upper
105	100		
120	47.8	27.7	67.7
77	12.4	0.0	33.6

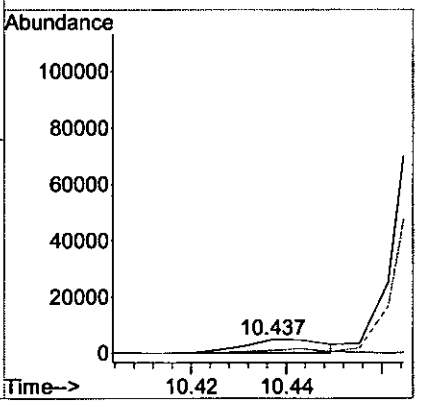


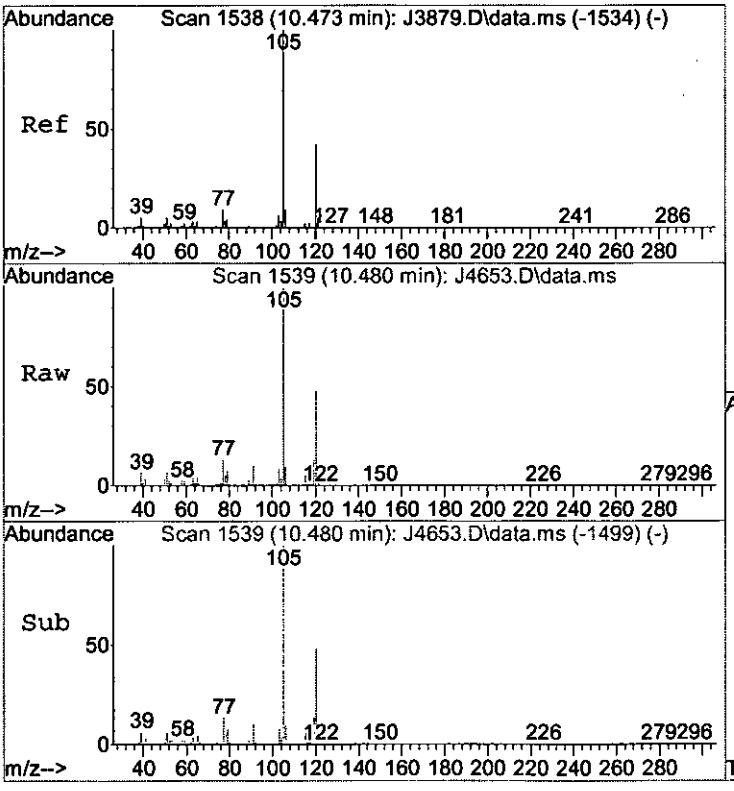


#100
tert-Butylbenzene
Concen: 0.29 ppb
RT: 10.437 min Scan# 1532
Delta R.T. -0.006 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:119 Resp: 5821

Ion	Ratio	Lower	Upper
119	100		
134	20.4	3.5	43.5
103	8.6	0.0	27.3

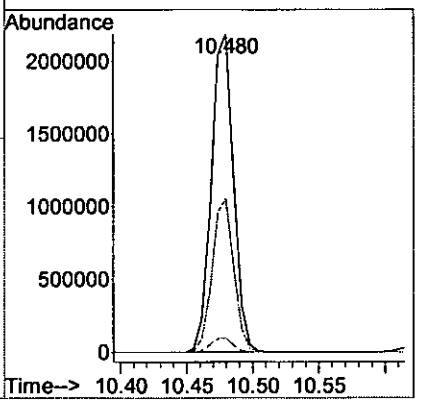




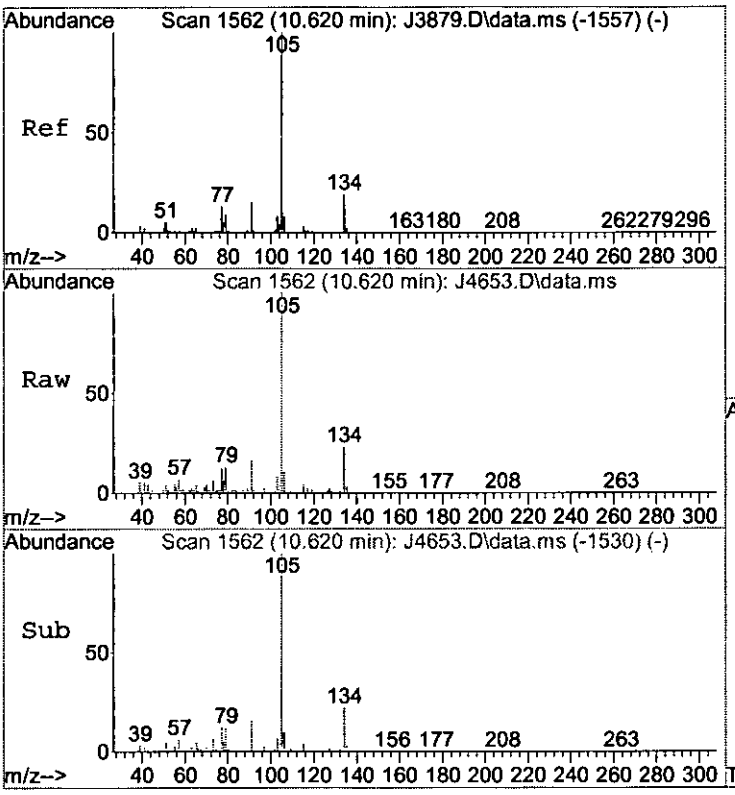
#101
1,2,4-Trimethylbenzene
Concen: 106.28 ppb
RT: 10.480 min Scan# 1539
Delta R.T. -0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:105 Resp: 2567056

Ion	Ratio	Lower	Upper
105	100		
120	48.3	25.3	65.3
65	4.3	0.0	24.3



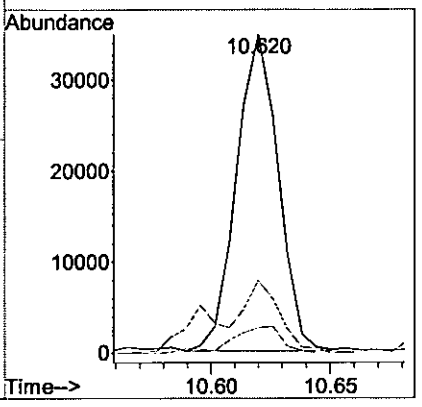
J4653.D W031214.M Thu Apr 10 16:35:39 2014 00341 Page 8

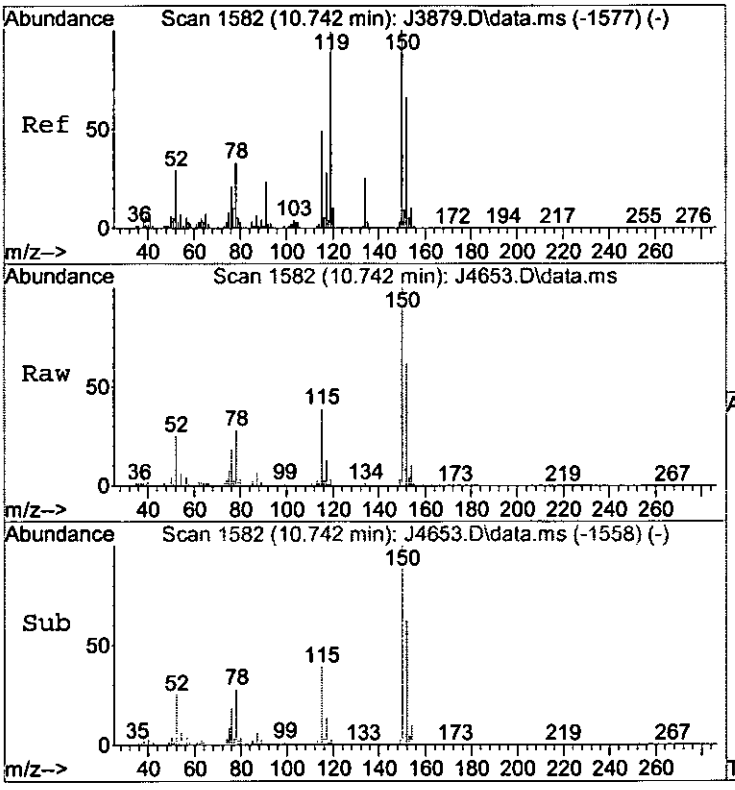


#103
sec-Butylbenzene
Concen: 1.55 ppb
RT: 10.620 min Scan# 1562
Delta R.T. -0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:105 Resp: 42515

Ion	Ratio	Lower	Upper
105	100		
134	22.8	0.0	39.3
103	8.0	0.0	28.3

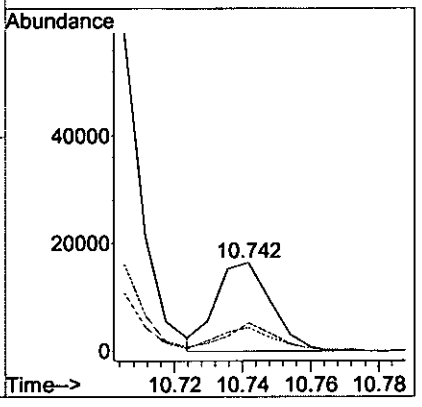




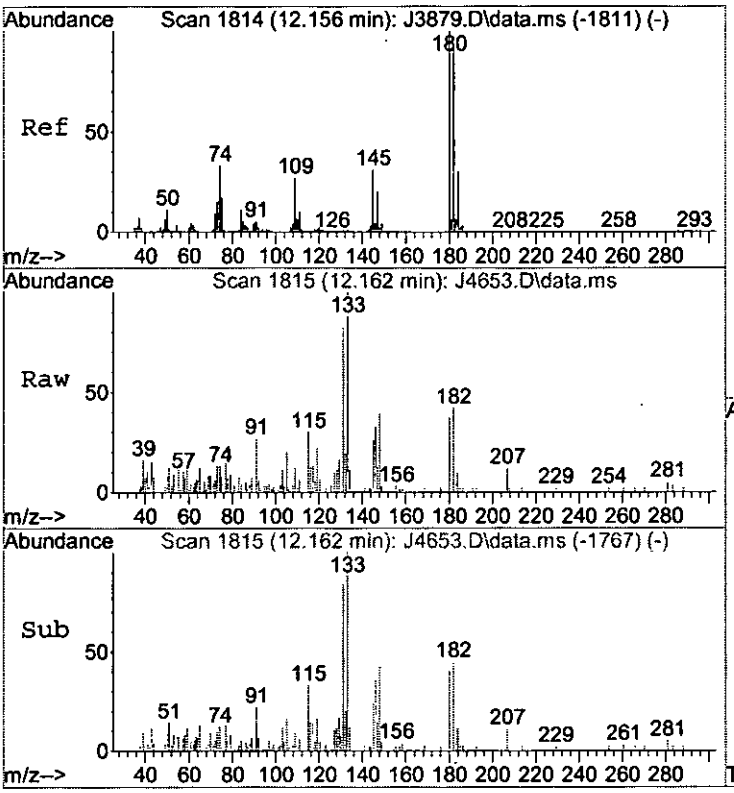
#104
p-Isopropyltoluene
Concen: 0.80 ppb
RT: 10.742 min Scan# 1582
Delta R.T. -0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:119 Resp: 18535

Ion	Ratio	Lower	Upper
119	100		
134	31.7	5.6	45.6
91	26.5	3.2	43.2



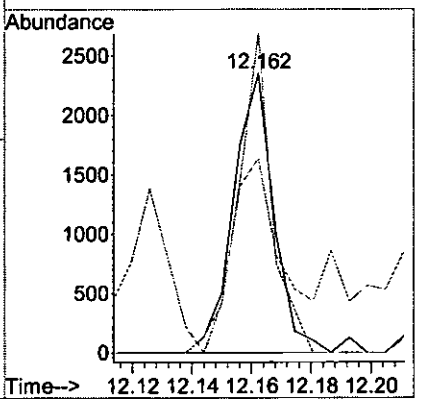
J4653.D W031214.M Thu Apr 10 16:35:42 2014 00342 Page 9

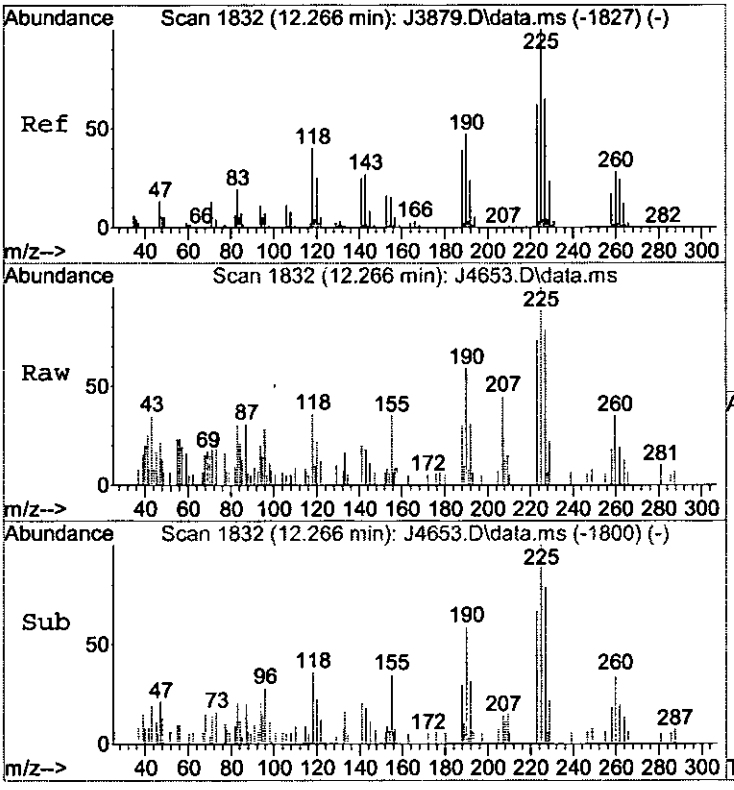


#115
1,2,4-Tcbenzene
Concen: 0.27 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:180 Resp: 2200

Ion	Ratio	Lower	Upper
180	100		
182	114.1	72.2	112.2#
145	69.7	11.4	51.4#

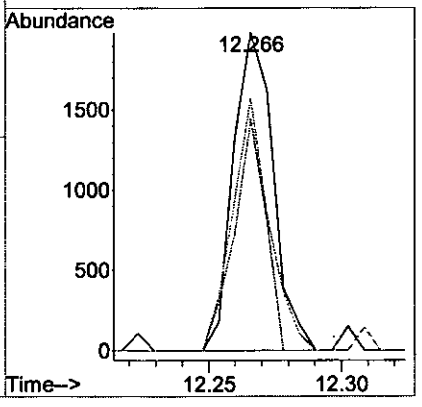


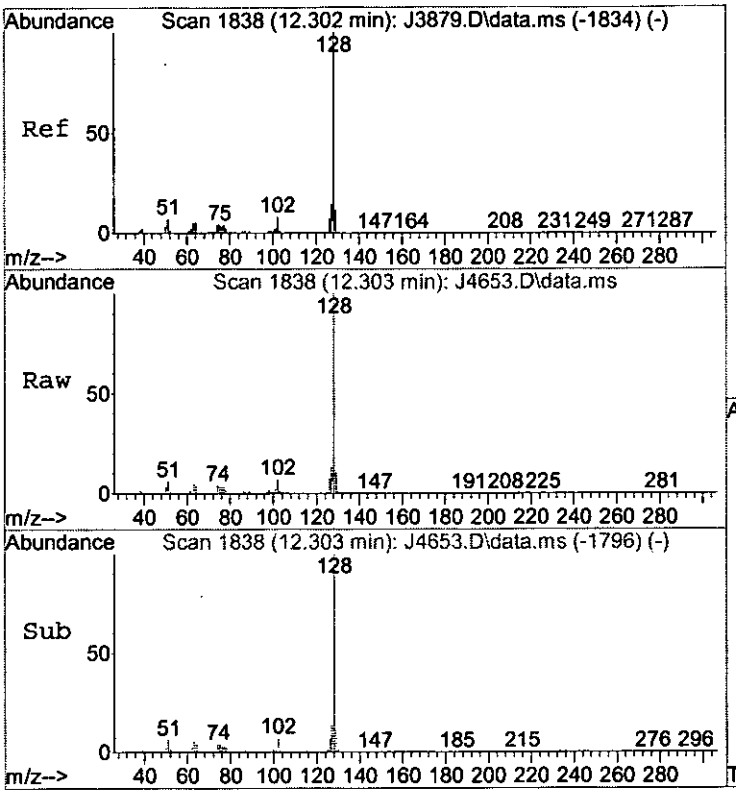


#116
Hexachlorobt
Concen: 0.58 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:225 Resp: 2067

Ion	Ratio	Lower	Upper
225	100		
223	72.9	42.4	82.4
227	79.2	44.9	84.9

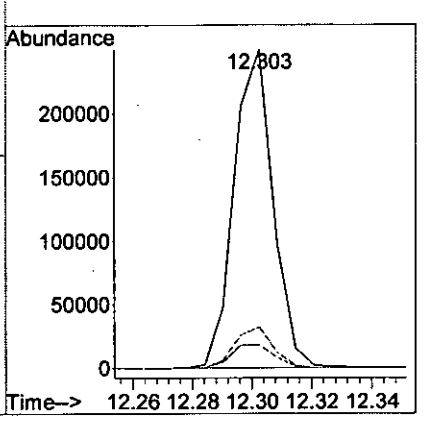


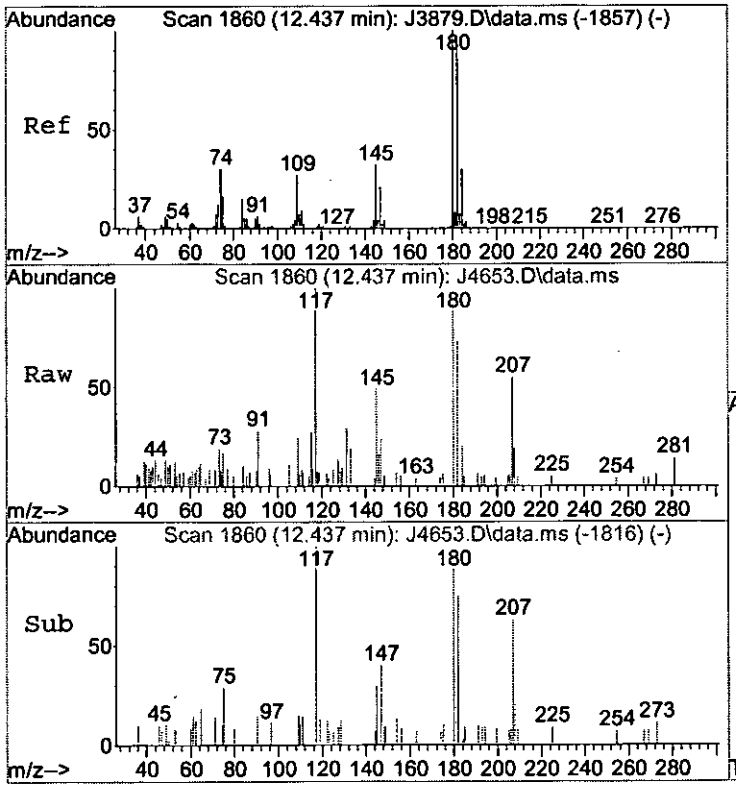


#117
Naphthalen
Concen: 15.31 ppb
RT: 12.303 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:128 Resp: 226480

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	33.8
102	7.3	0.0	28.5

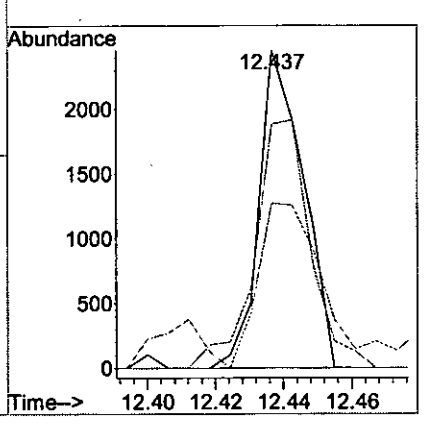




#118
1,2,3-Tclbenzene
Concen: 0.33 ppb
RT: 12.437 min Scan# 1860
Delta R.T. 0.000 min
Lab File: J4653.D
Acq: 10 Apr 2014 1:46 pm

Tgt Ion:180 Resp: 2224

Ion	Ratio	Lower	Upper
180	100		
182	76.7	75.2	115.2
145	51.7	11.9	51.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4653.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.616	80	85	90	rBV	698187	744337	10.35%	1.103%
2	1.762	105	109	116	rVB	185902	208269	2.89%	0.309%
3	2.055	149	157	166	rBV2	67498	111830	1.55%	0.166%
4	2.372	203	209	211	rBV2	176390	293448	4.08%	0.435%
5	2.445	217	221	230	rVB	98812	158967	2.21%	0.236%
6	2.597	239	246	255	rBV	185686	324036	4.50%	0.480%
7	3.463	378	388	398	rBV	325118	714335	9.93%	1.058%
8	4.152	492	501	509	rBV	479432	1163753	16.18%	1.724%
9	4.249	509	517	525	rBV	878449	2145648	29.82%	3.179%
10	4.389	536	540	553	rVB6	34909	114201	1.59%	0.169%
11	4.658	573	584	596	rBV	412627	1081297	15.03%	1.602%
12	4.786	596	605	616	rVB3	79194	221388	3.08%	0.328%
13	4.914	618	626	633	rBV5	25858	81326	1.13%	0.121%
14	5.450	702	714	725	rBV	1181973	2780485	38.65%	4.120%
15	6.103	806	821	831	rBV6	65331	209706	2.91%	0.311%
16	7.322	1012	1021	1029	rBV	2531906	3792443	52.72%	5.619%
17	7.395	1029	1033	1039	rVB	68186	114300	1.59%	0.169%
18	8.742	1249	1254	1266	rBV	2560052	3343974	46.48%	4.955%
19	8.889	1272	1278	1289	rBV	2676056	3416376	47.49%	5.062%
20	8.998	1290	1296	1309	rVB	3298955	4081042	56.73%	6.047%
21	9.346	1347	1353	1365	rVB	4494248	5462469	75.93%	8.094%
22	9.669	1401	1406	1417	rBV	698164	910807	12.66%	1.350%
23	9.791	1420	1426	1434	rBV	2166041	2696523	37.48%	3.995%
24	10.023	1459	1464	1471	rVB	918063	1084759	15.08%	1.607%
25	10.096	1471	1476	1478	rVV	1993052	2414035	33.56%	3.577%
26	10.120	1478	1480	1484	rVV	1315012	1315145	18.28%	1.949%
27	10.169	1484	1488	1497	rVB	880084	1068004	14.85%	1.582%
28	10.333	1510	1515	1525	rVB	3283946	3783160	52.59%	5.606%
29	10.480	1534	1539	1544	rBV	6132912	7194224	100.00%	10.660%
30	10.620	1559	1562	1570	rVB	97817	131796	1.83%	0.195%
31	10.699	1570	1575	1578	rBV	188419	224215	3.12%	0.332%
32	10.748	1578	1583	1589	rVB	2917203	3341428	46.45%	4.951%
33	10.815	1589	1594	1600	rBV	2969841	3425687	47.62%	5.076%
34	10.974	1613	1620	1628	rBV	2280984	2755822	38.31%	4.083%
35	11.053	1628	1633	1643	rVB3	314373	462049	6.42%	0.685%

KK 4/10/14

W031214.M Thu Apr 10 16:36:07 2014 Page: 1

00345

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	11.138	1643	1647	1652	rBV2	121633	138953	1.93%	0.206%
37	11.193	1652	1656	1661	rVB	154072	179789	2.50%	0.266%
38	11.260	1661	1667	1669	rBV	470630	537149	7.47%	0.796%
39	11.284	1669	1671	1676	rVB	356766	343664	4.78%	0.509%
40	11.339	1676	1680	1682	rBV	442023	490898	6.82%	0.727%
41	11.364	1682	1684	1688	rVV	144625	149261	2.07%	0.221%
42	11.412	1688	1692	1699	rVB	947816	1152082	16.01%	1.707%
43	11.547	1709	1714	1719	rVB	236466	272161	3.78%	0.403%
44	11.614	1719	1725	1728	rBV	449147	490702	6.82%	0.727%
45	11.650	1728	1731	1735	rVB	565341	569070	7.91%	0.843%
46	11.821	1756	1759	1763	rVB	240613	237769	3.30%	0.352%
47	11.925	1772	1776	1780	rVB2	852136	869904	12.09%	1.289%
48	12.028	1790	1793	1799	rVB	81107	93244	1.30%	0.138%
49	12.217	1818	1824	1827	rVB2	68681	118955	1.65%	0.176%
50	12.303	1834	1838	1846	rVB	474648	474541	6.60%	0.703%

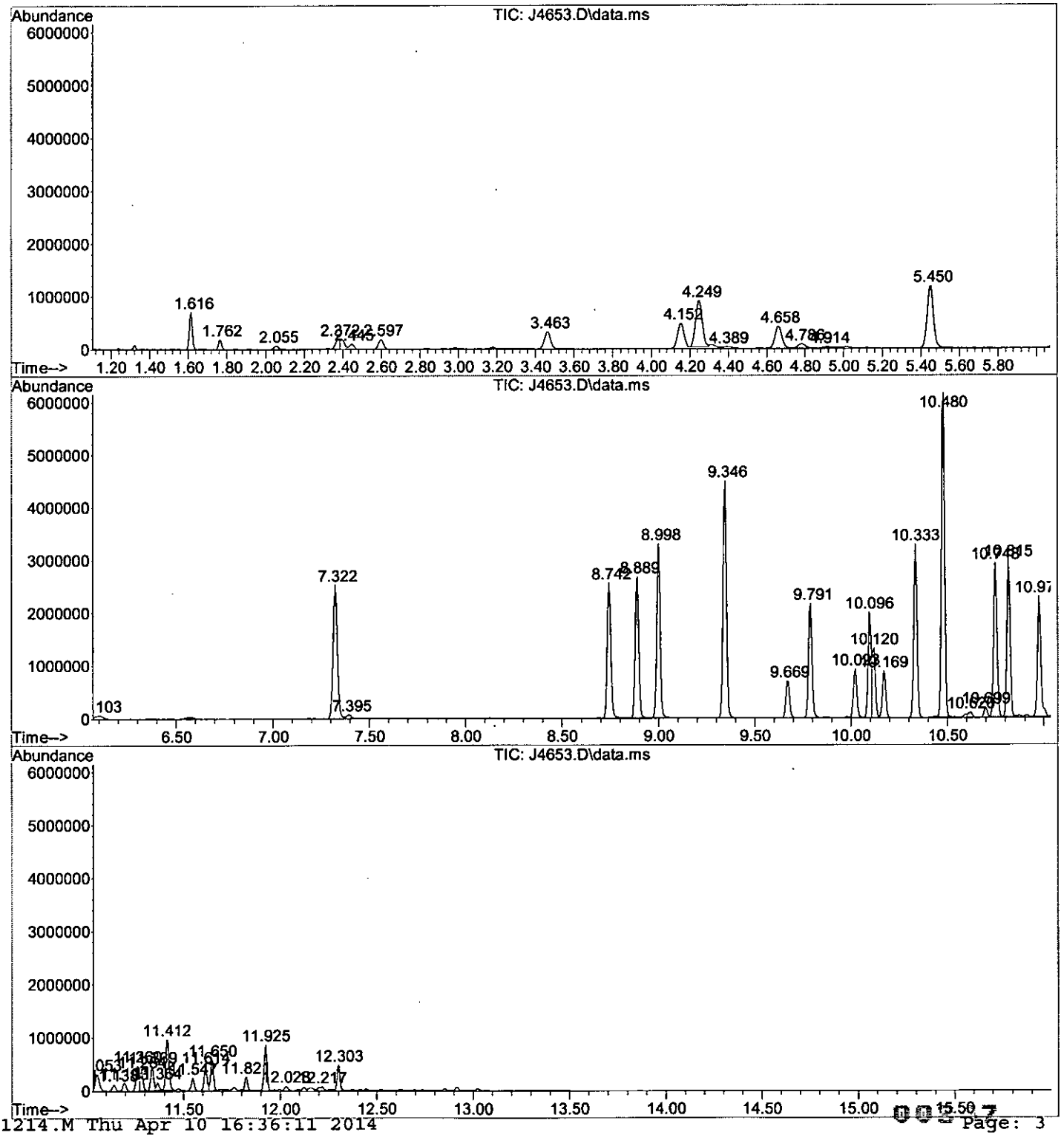
Sum of corrected areas: 67489426

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Thu Apr 10 16:36:11 2014 Page: 3

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On    : 10 Apr 2014    1:46 pm
Operator  : K.Ruest
Sample    : R1402225-020|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 3   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

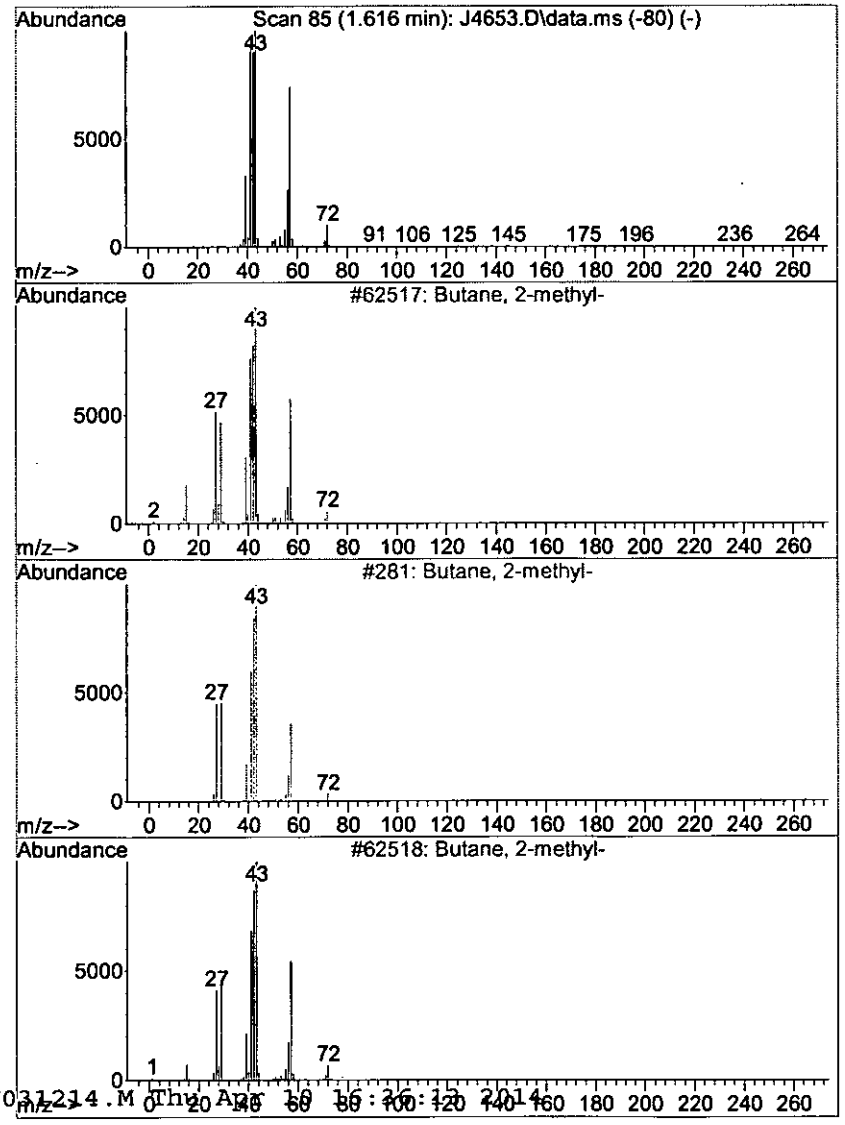
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

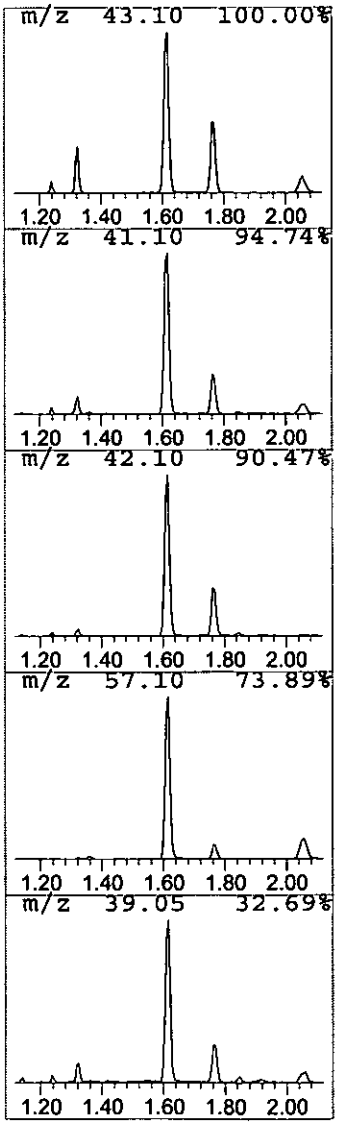
****

Peak Number 1 Butane, 2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.616	17.35 ppb	744337	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	86
2	Butane, 2-methyl-	72	C5H12	000078-78-4	86
3	Butane, 2-methyl-	72	C5H12	000078-78-4	86
4	3-Buten-1-ol	72	C4H8O	000627-27-0	43
5	Butane, 1-chloro-2-methyl-	106	C5H11Cl	000616-13-7	12





Library Search Compound Report

```
Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On    : 10 Apr 2014    1:46 pm
Operator  : K.Ruest
Sample    : R1402225-020|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 3   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

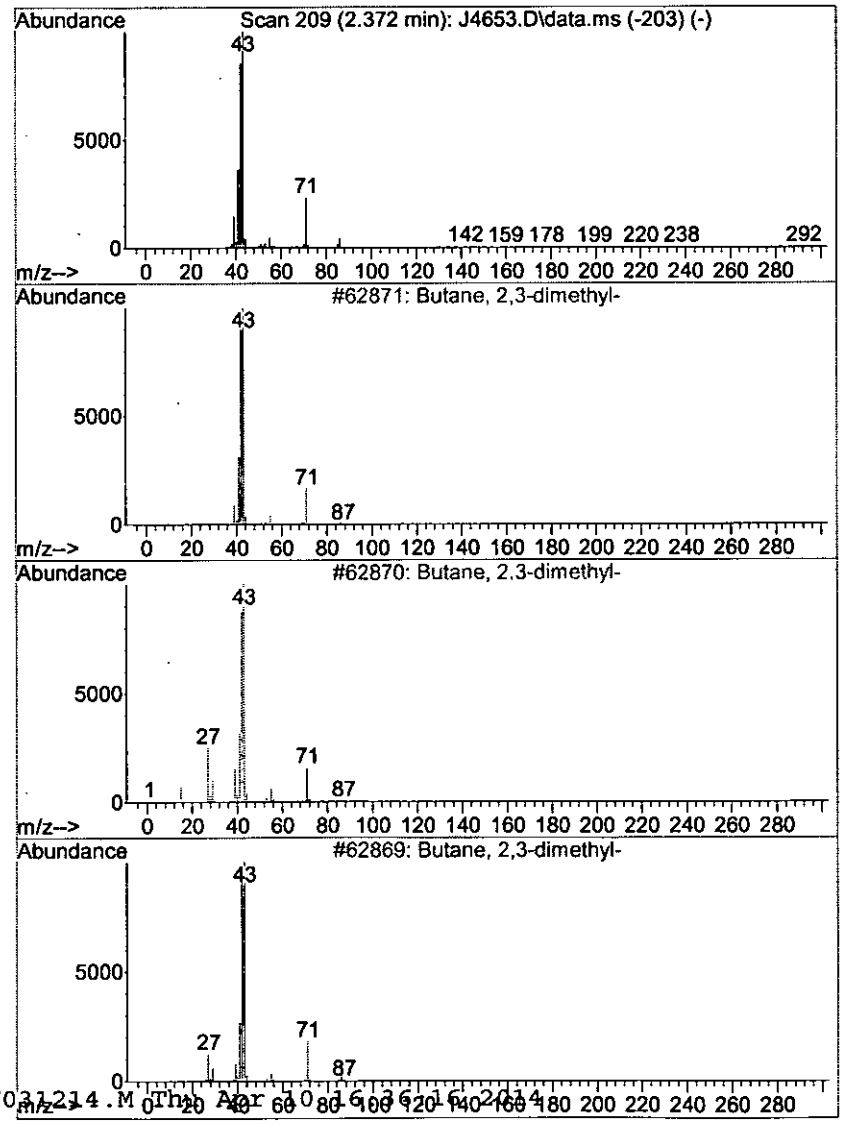
****

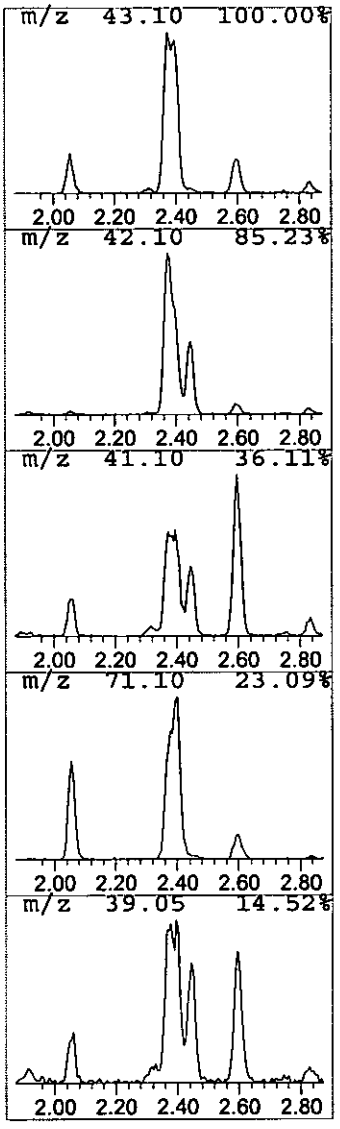
Peak Number 2 Butane, 2,3-dimethyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.372	6.84 ppb	293448	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	80
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	80
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	72
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	50
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	50

unknown





W031214.M Thu Apr 10 16:36:16 2014 00349 Page: 5

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

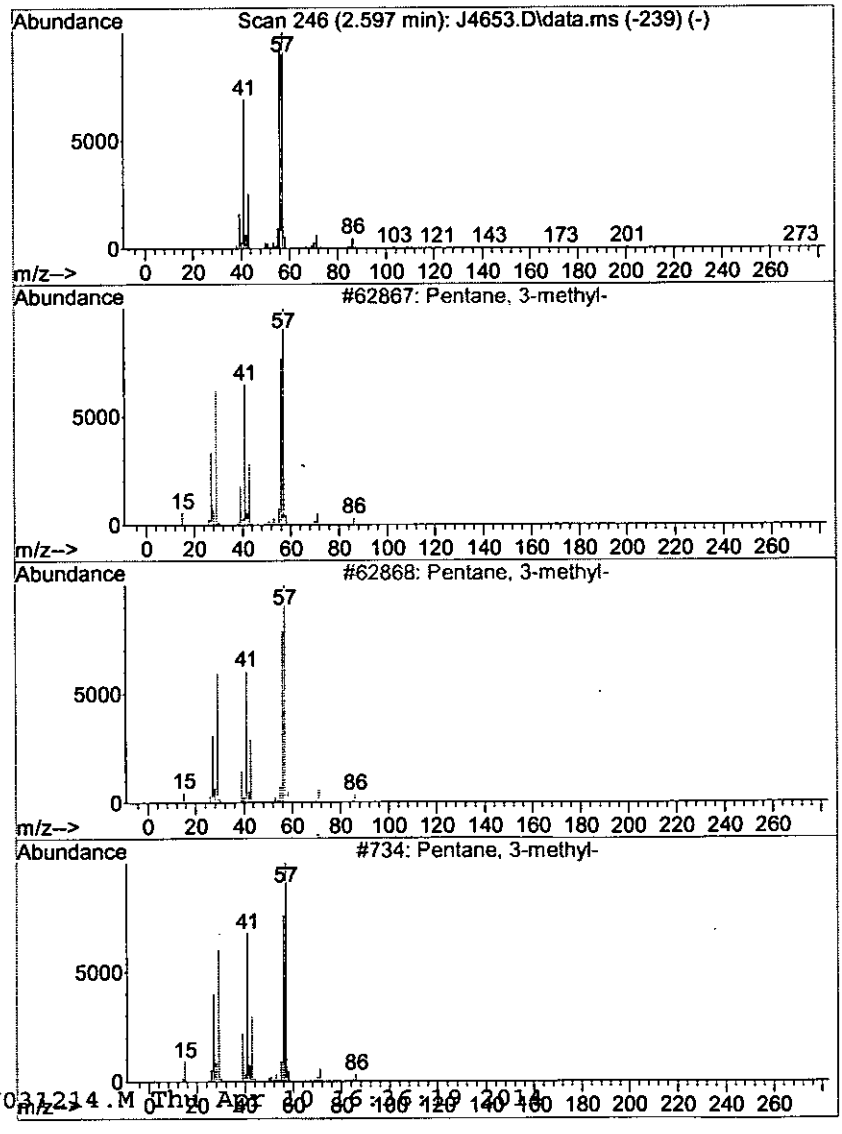
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

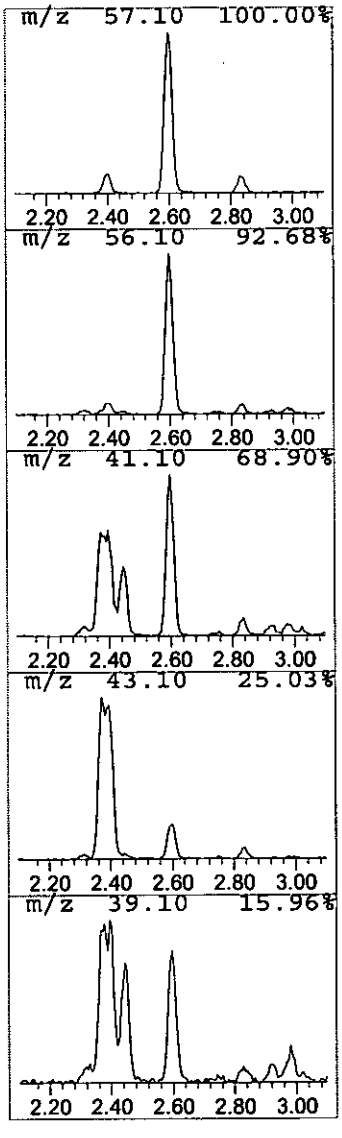
****

Peak Number 3 Pentane, 3-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.597	7.55 ppb	324036	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
4	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	64
5	1-Butanol, 2-methyl-	88	C5H12O	000137-32-6	50





W031214.M Thu Apr 10 16:16:19 2014 Page: 6

Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On    : 10 Apr 2014    1:46 pm
Operator  : K.Ruest
Sample    : R1402225-020|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 3   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

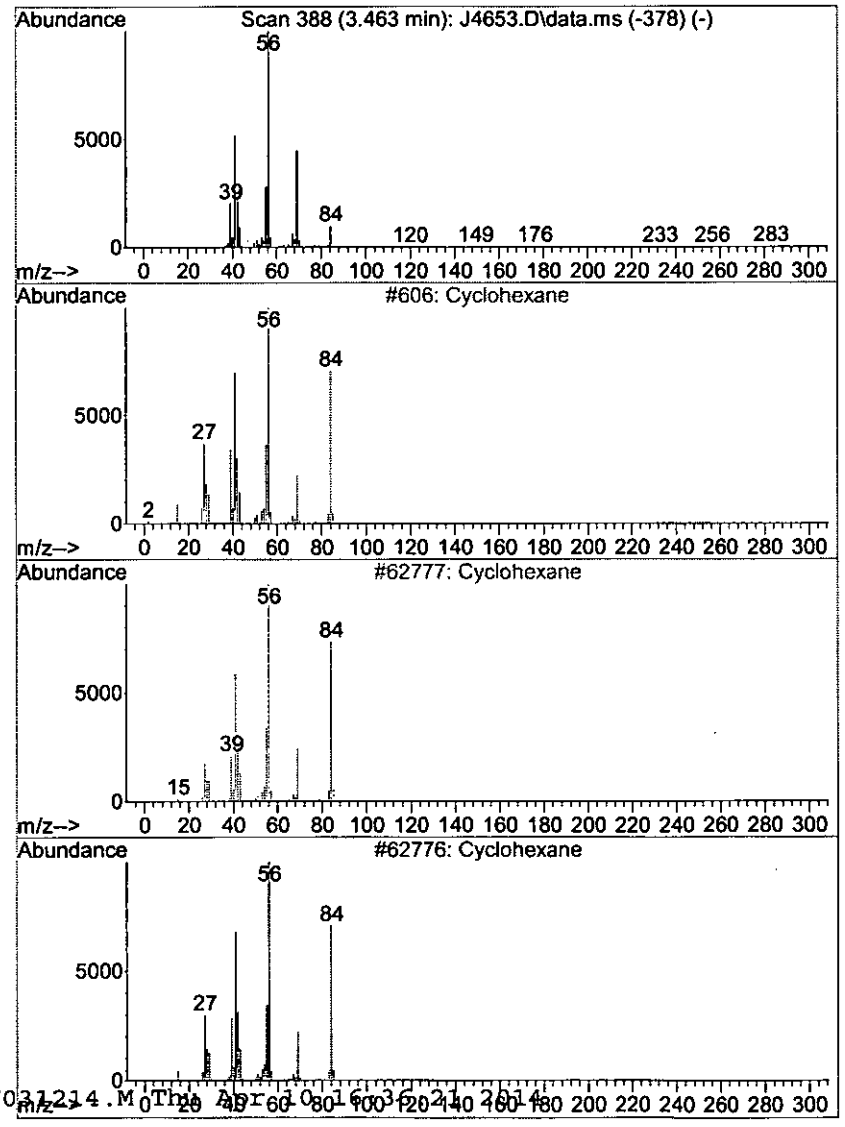
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

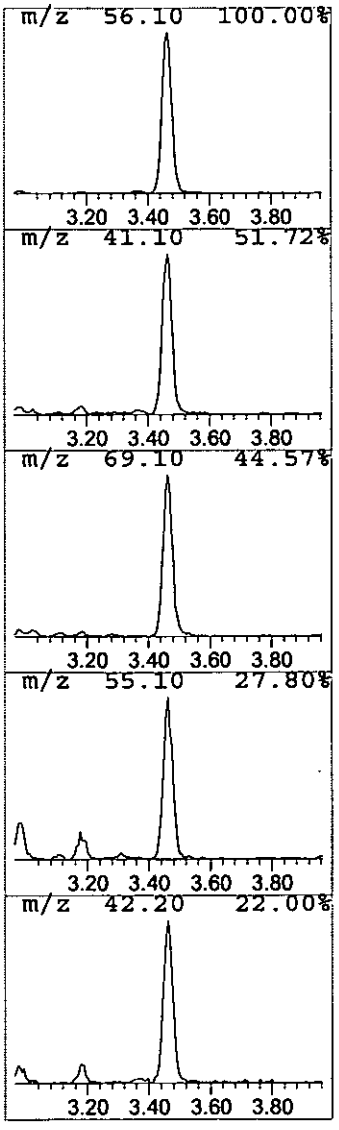
****

Peak Number 4 Cyclohexane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.463	16.65 ppb	714335	Pentafluorobenzene	4.249

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane	84	C6H12	000110-82-7	86
2	Cyclohexane	84	C6H12	000110-82-7	83
3	Cyclohexane	84	C6H12	000110-82-7	83
4	Cyclohexane	84	C6H12	000110-82-7	72
5	Cyclopropane, propyl-	84	C6H12	002415-72-7	72





W031214.M Thu Apr 10 16:36:21 2014 Page: 7

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

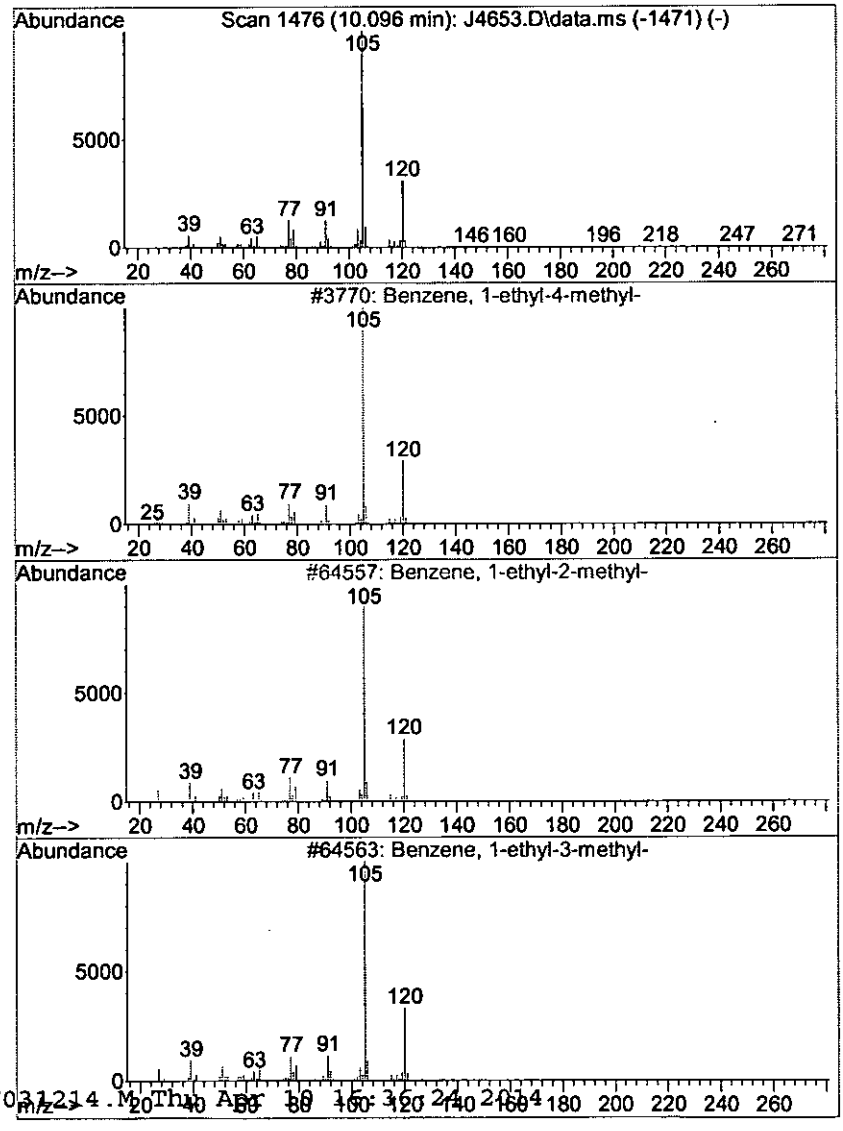
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

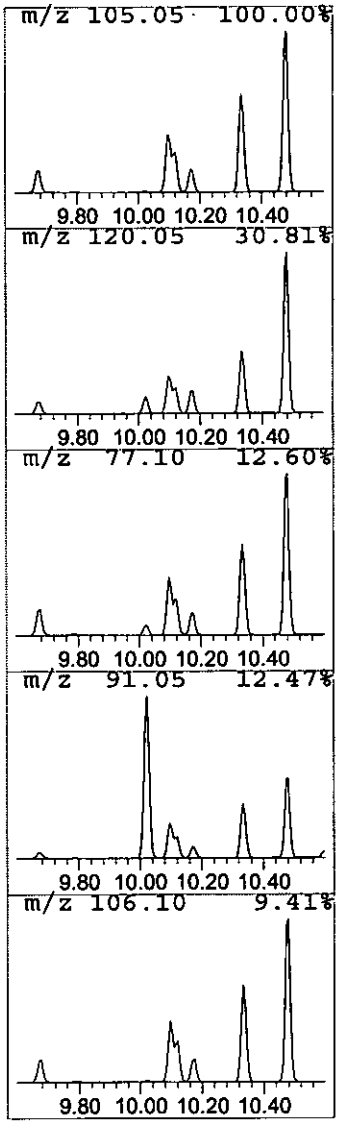
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Benzene, 1-ethyl-4-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.096	36.12 ppb	2414040	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95





W031214.M Thu Apr 10 15:32:24 2014

00352

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

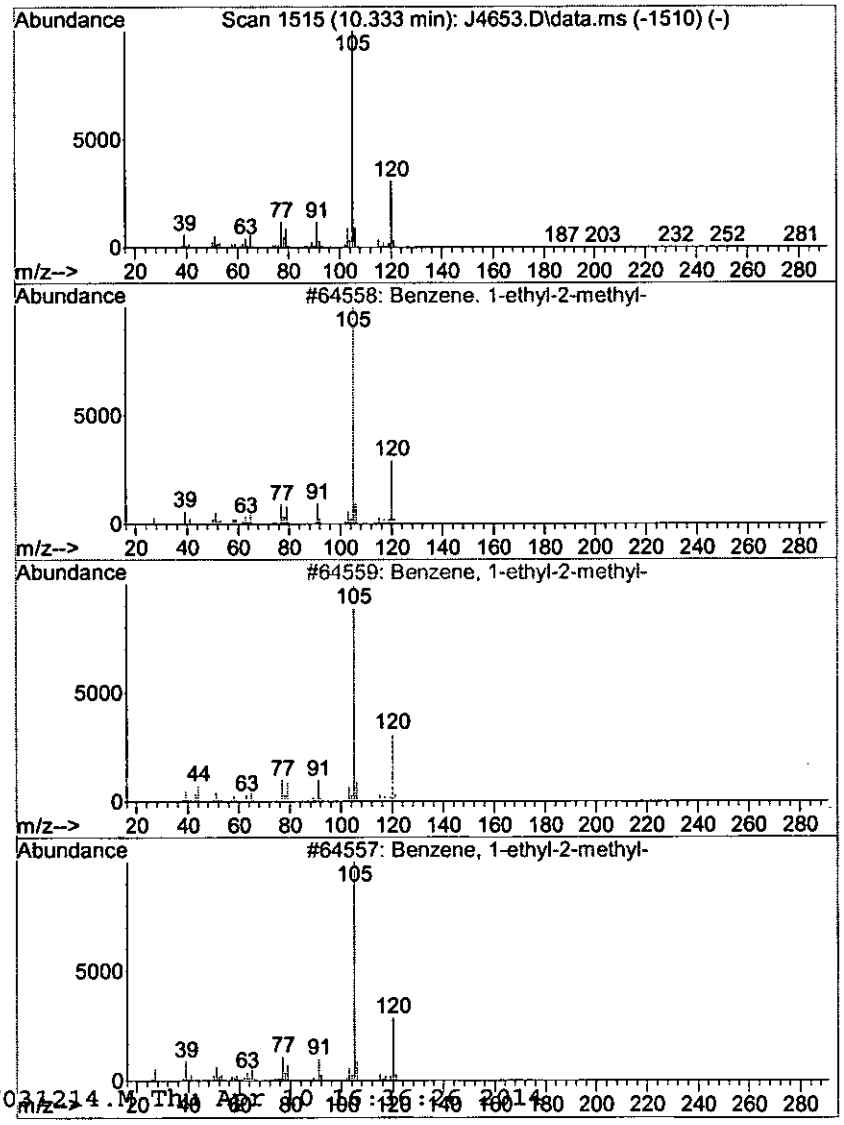
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

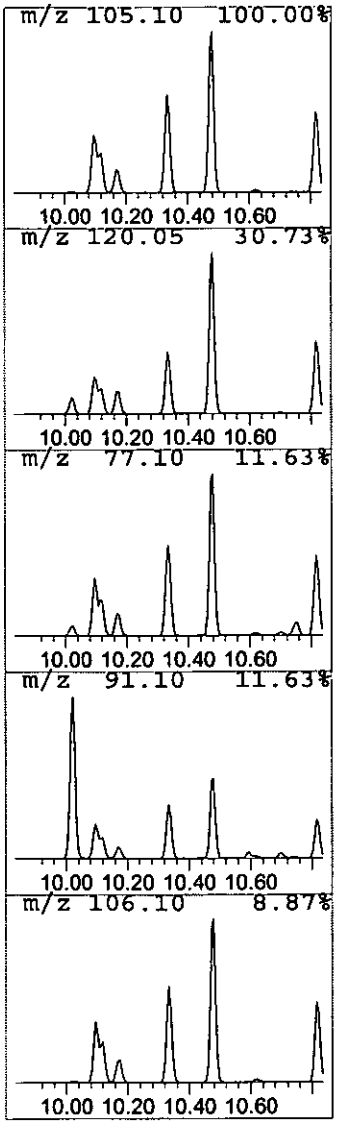
****

Peak Number 6 Benzene, 1-ethyl-2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.333	56.61 ppb	3783160	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
5	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	93





W031214.M Thu Apr 10 15:26:26 2014

00353

Library Search Compound Report

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Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

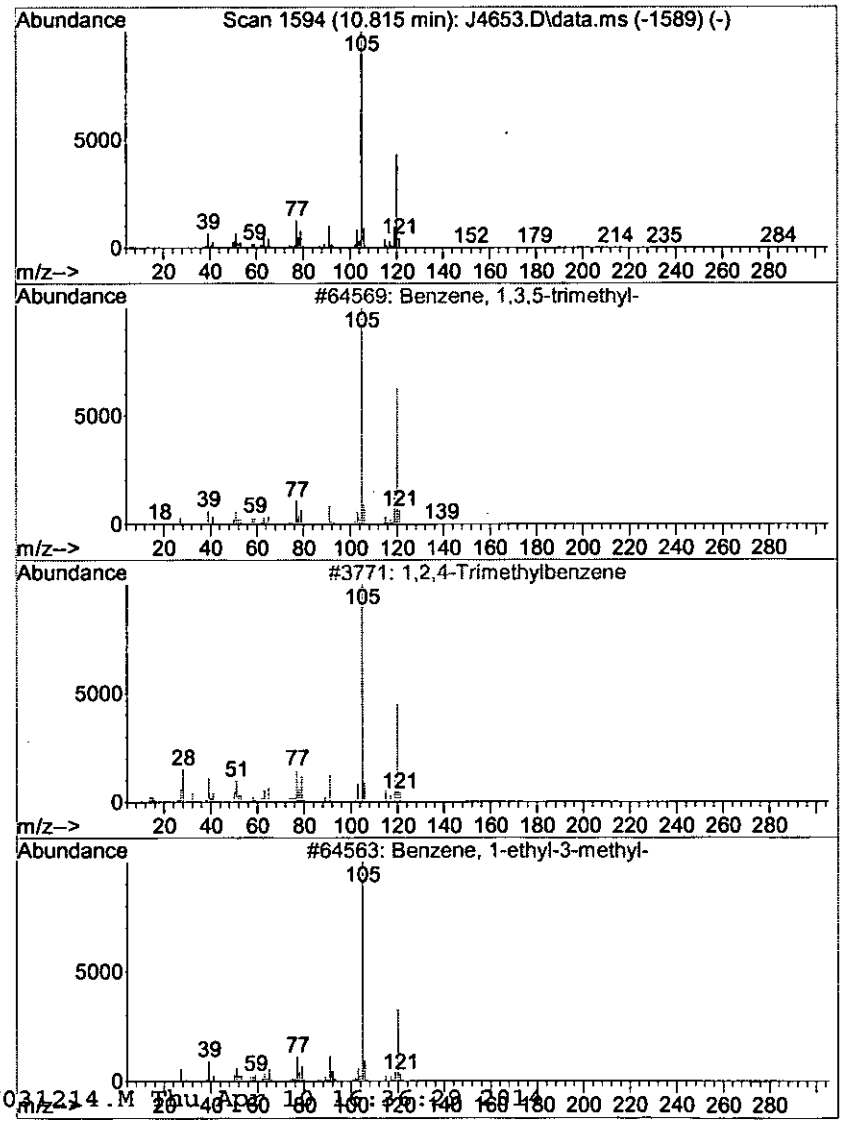
****

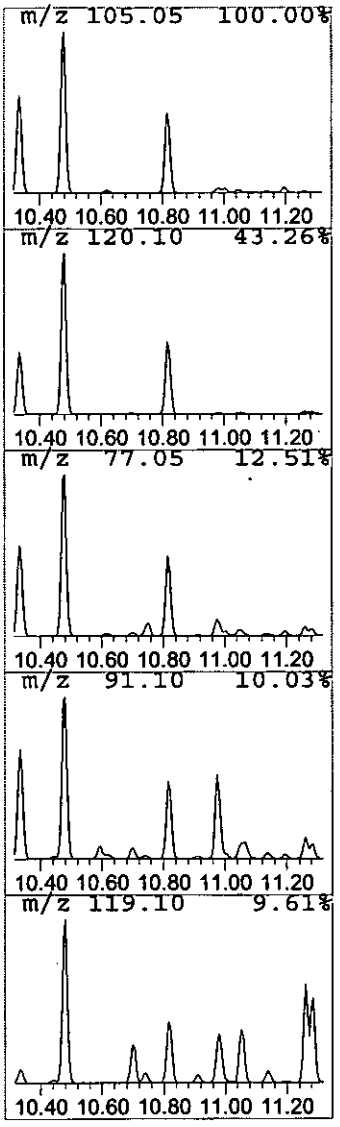
Peak Number 7 Benzene, 1,3,5-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.815	51.26 ppb	3425690	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
2	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	94
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94

Known RT





W031214.M Thu Apr 10 16:26:29 2014

00354

Library Search Compound Report

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Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

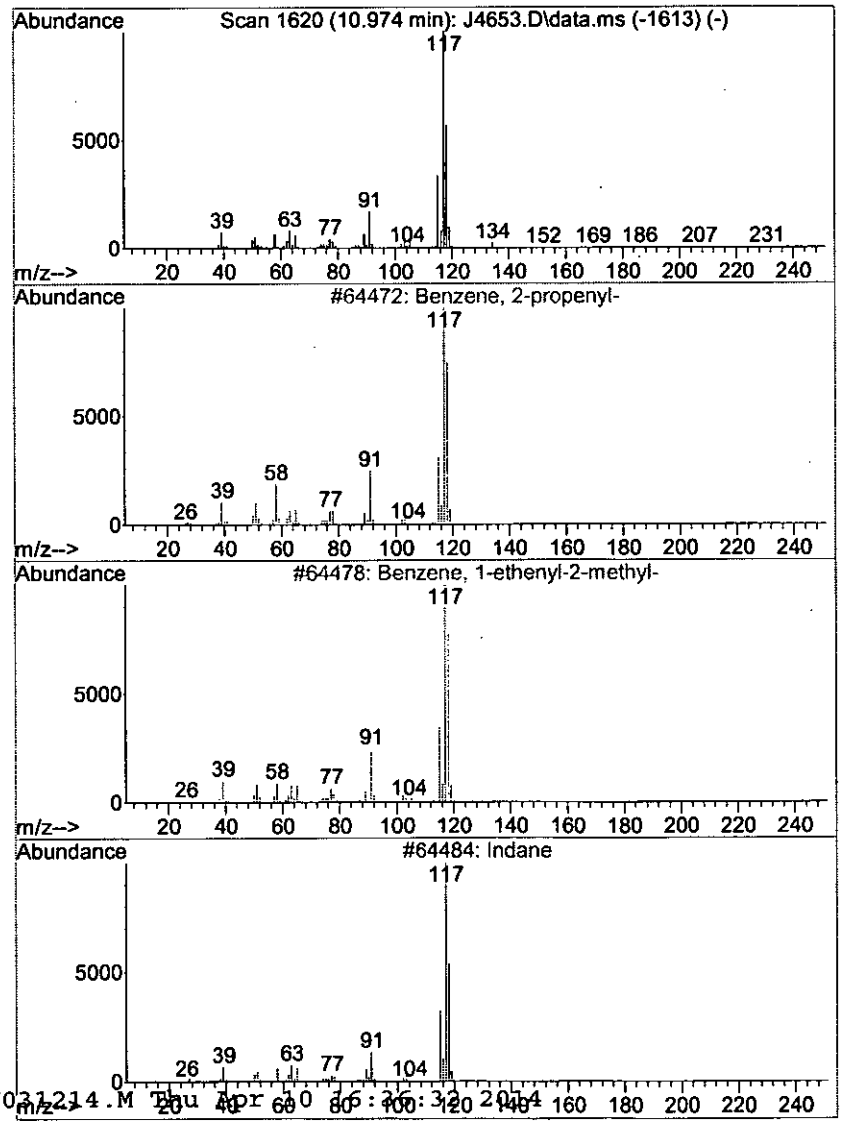
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

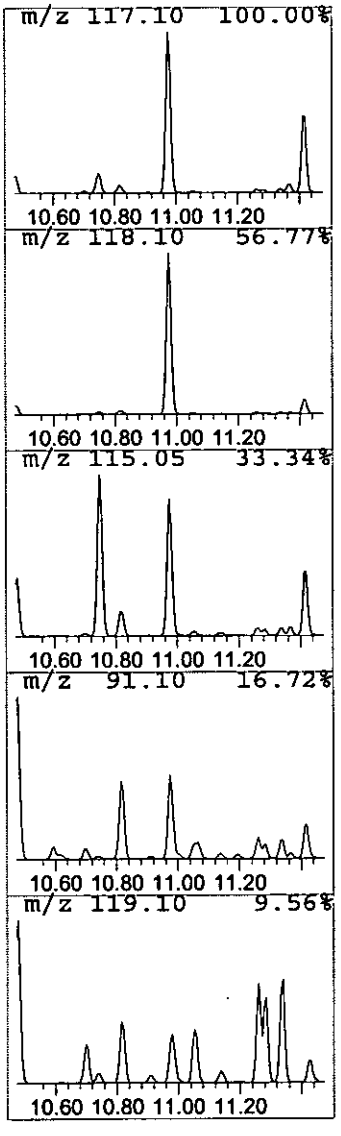
****

Peak Number 8 Benzene, 2-propenyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.974	41.24 ppb	2755820	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-propenyl-	118	C9H10	000300-57-2	87
2	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	81
3	Indane	118	C9H10	000496-11-7	76
4	Benzene, cyclopropyl-	118	C9H10	000873-49-4	68
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	64





Library Search Compound Report

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Operator  : K.Ruest
Sample    : R1402225-020|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 3   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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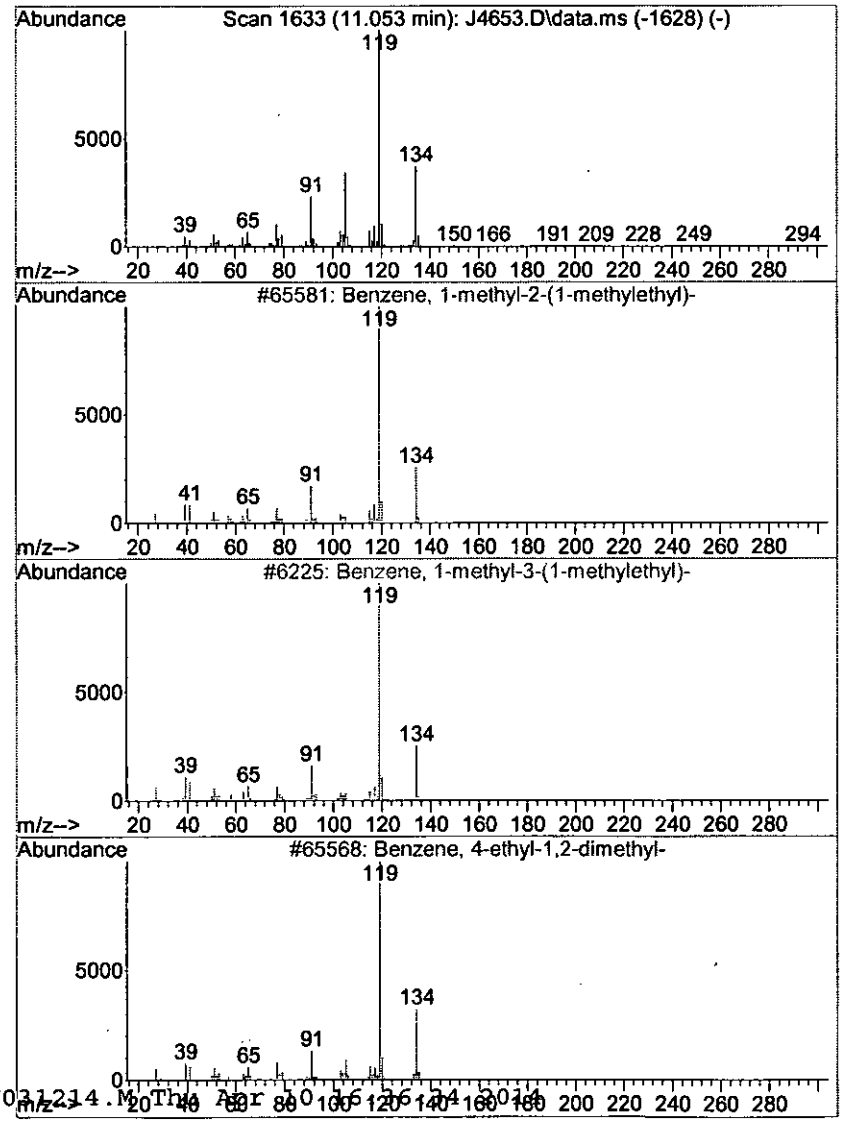
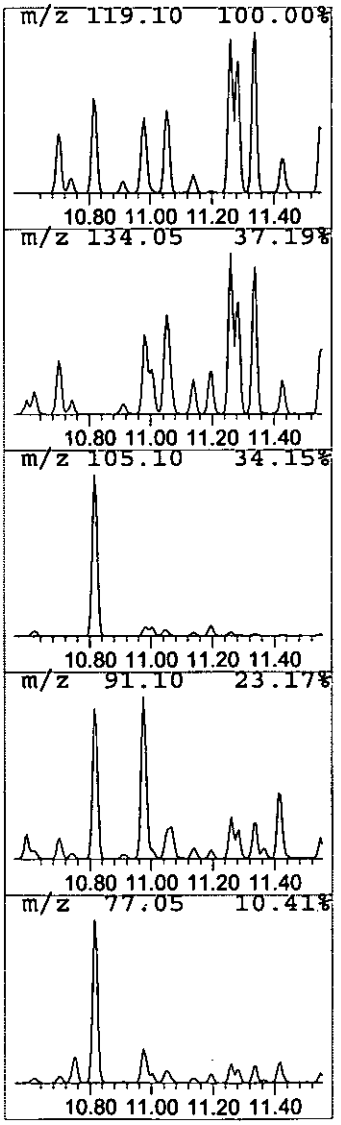
****

Peak Number 9 Benzene, 1-methyl-2-(1-meth... Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.053	6.91 ppb	462049	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
(1)	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94
3	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
4	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
5	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	93





Library Search Compound Report

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Data File : J4653.D
Acq On    : 10 Apr 2014    1:46 pm
Operator  : K.Ruest
Sample    : R1402225-020|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 3   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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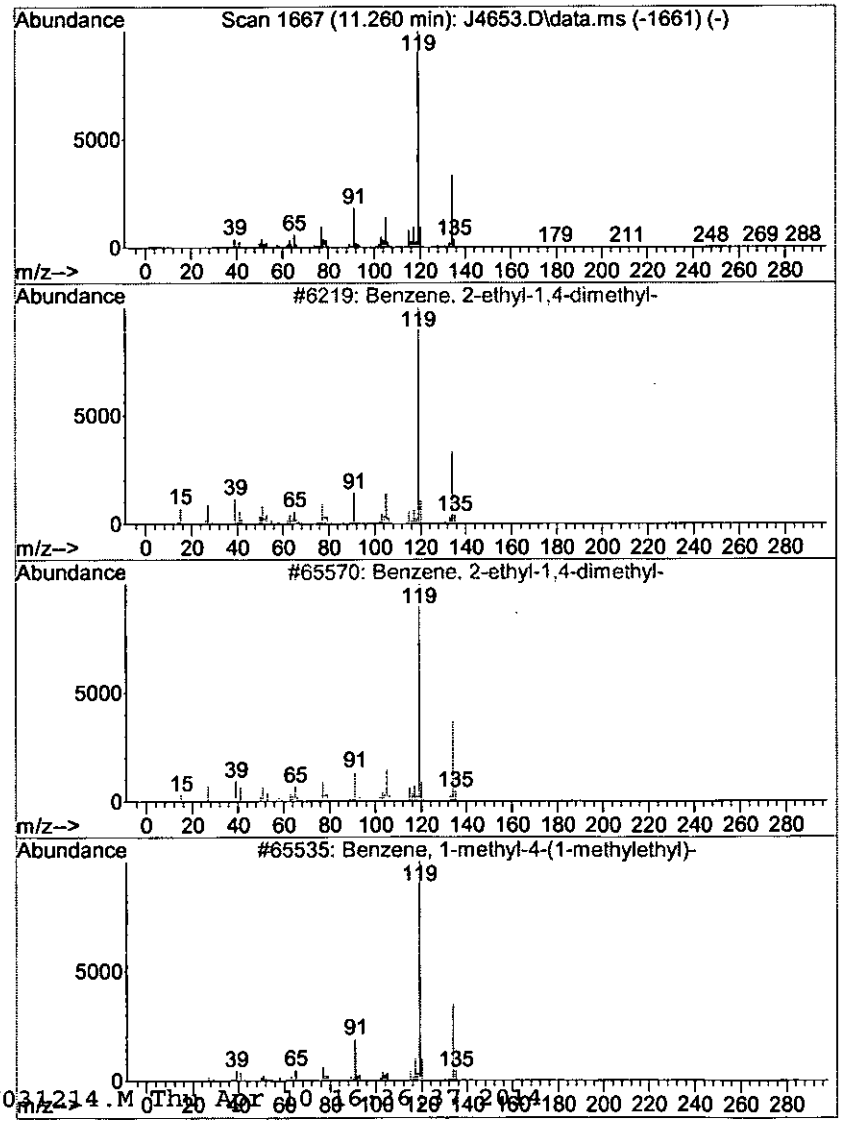
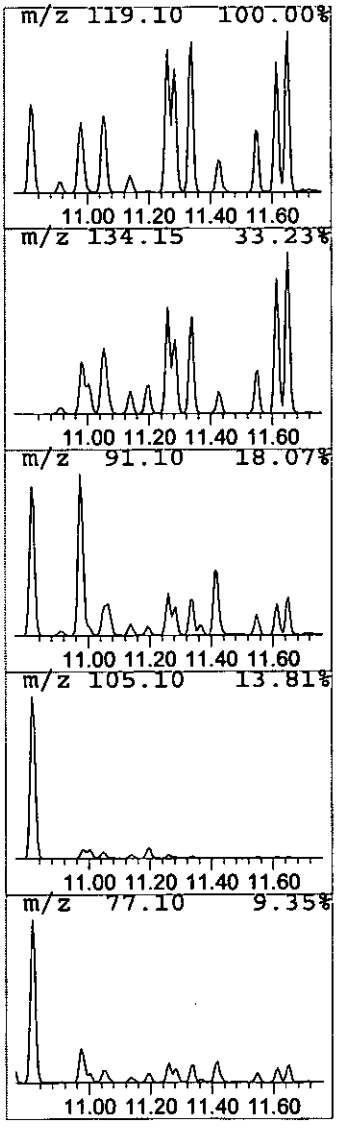
****

Peak Number 10 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.260	8.04 ppb	537149	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	97
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

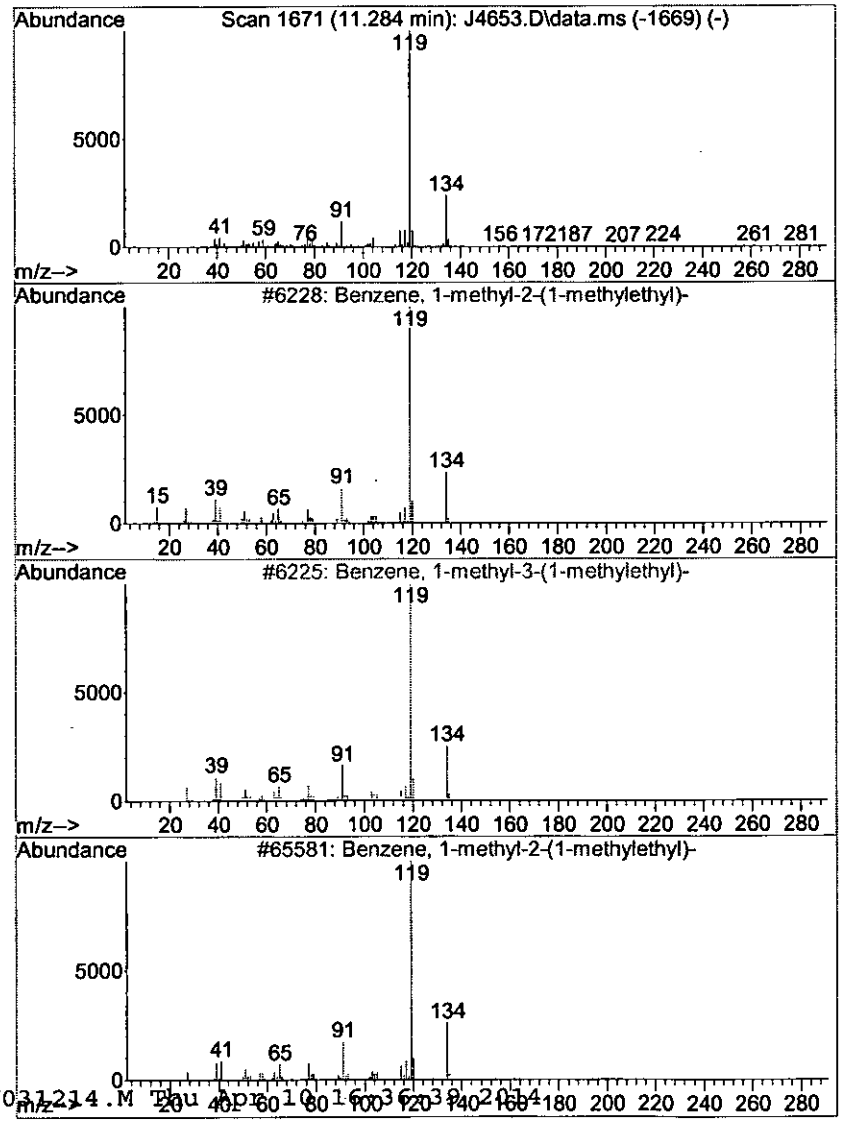
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

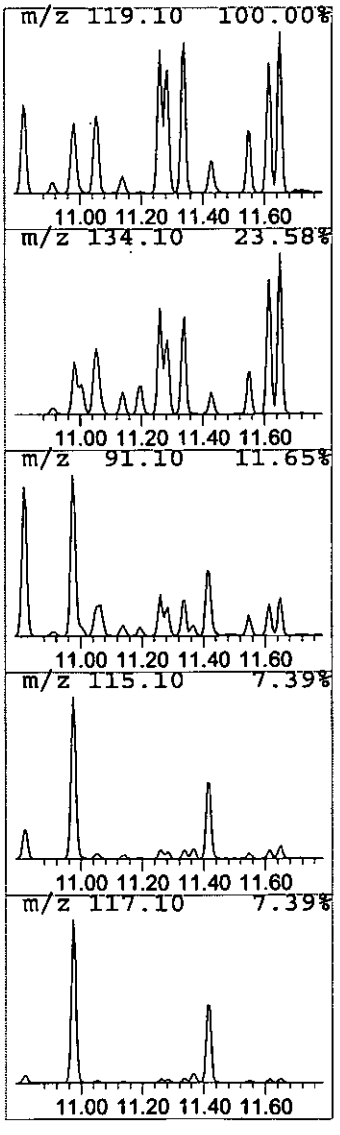
****

Peak Number 11 Benzene, 1-methyl-2-(1-meth... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.285	5.14 ppb	343664	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	91
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	91
4	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	91
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	91





Library Search Compound Report

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Data File : J4653.D
Acq On    : 10 Apr 2014    1:46 pm
Operator  : K.Ruest
Sample    : R1402225-020|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 3   Sample Multiplier: 1

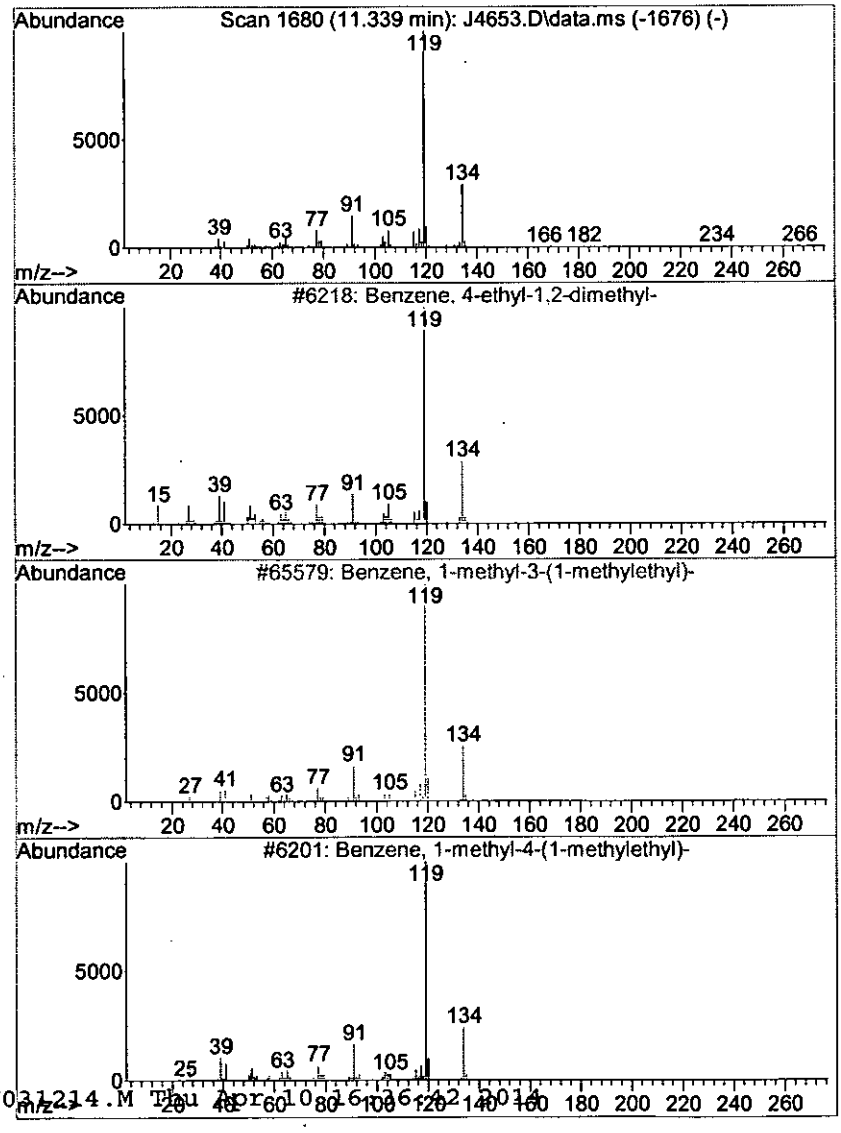
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

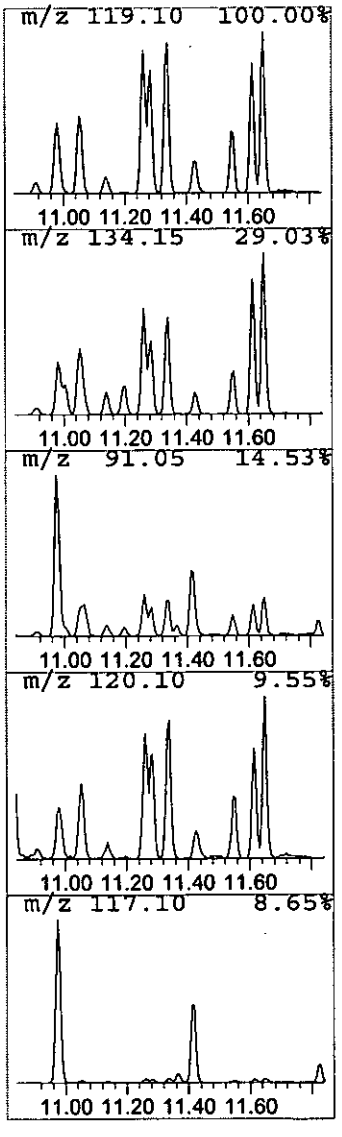
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number 12  Benzene, 4-ethyl-1,2-dimethyl-  Concentration Rank 12
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.339	7.35 ppb	490898	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	95
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

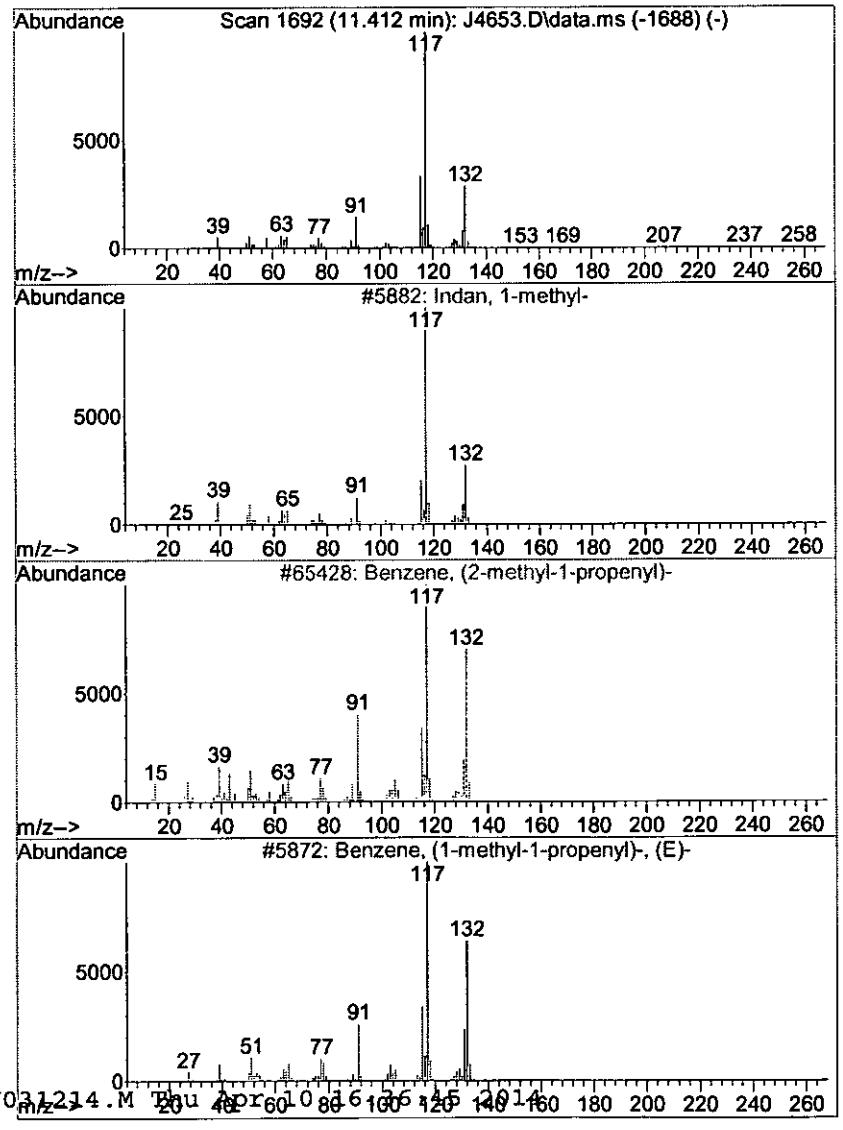
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

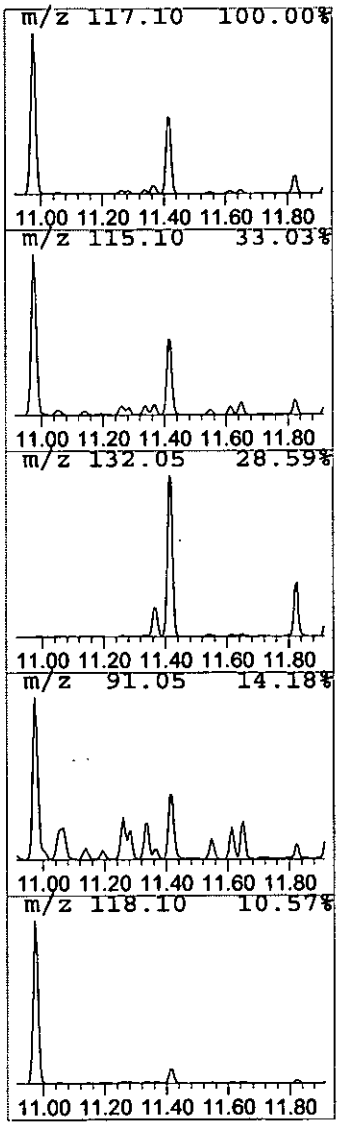
****

Peak Number 13 Indan, 1-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.413	17.24 ppb	1152080	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indan, 1-methyl-	132	C10H12	000767-58-8	91
2	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	90
3	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	87
4	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
5	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

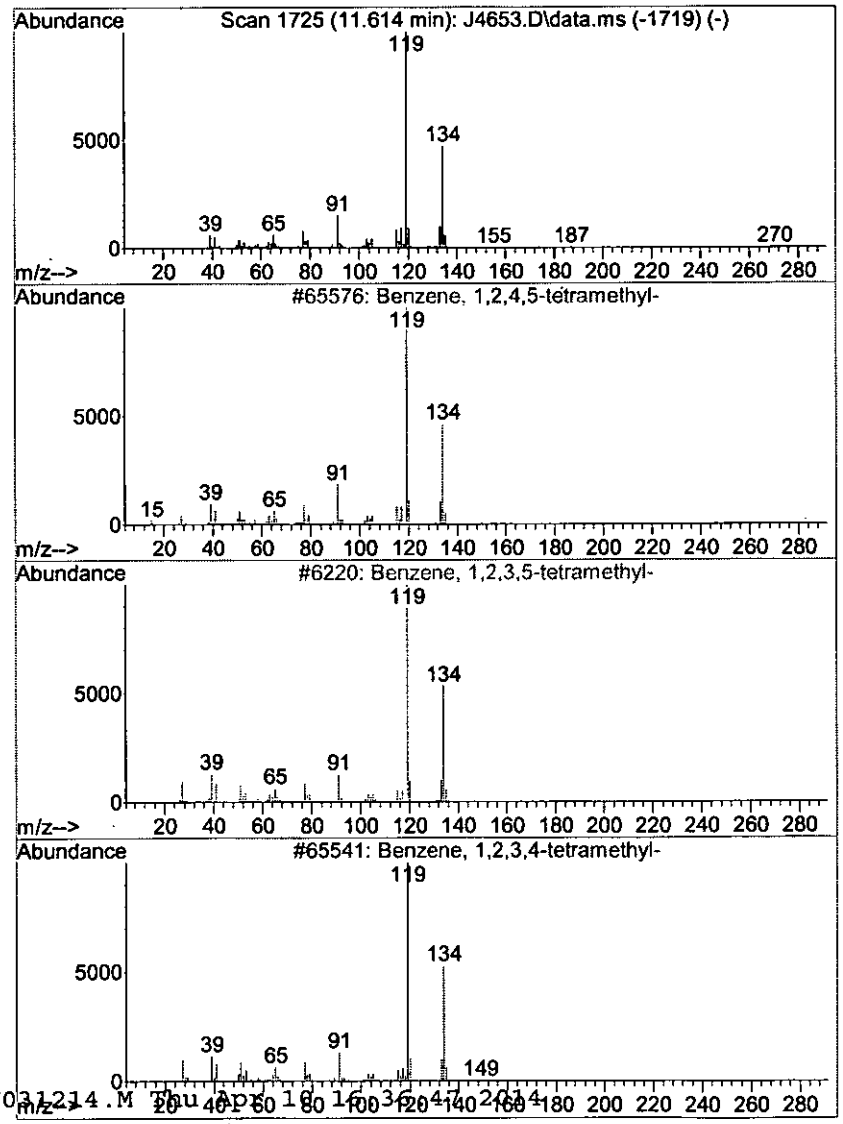
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

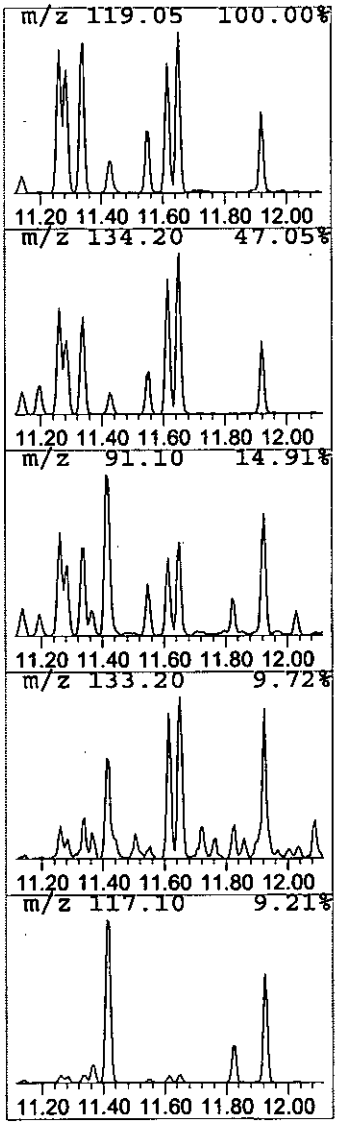
****

Peak Number 14 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.614	7.34 ppb	490702	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
4	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95





W031214.M Thu Apr 10 16:36:47 2014 Page: 17

00361

Library Search Compound Report

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Acq On    : 10 Apr 2014    1:46 pm
Operator  : K.Ruest
Sample    : R1402225-020|1.0
Misc      : PARSONS 9913 T4
ALS Vial  : 3   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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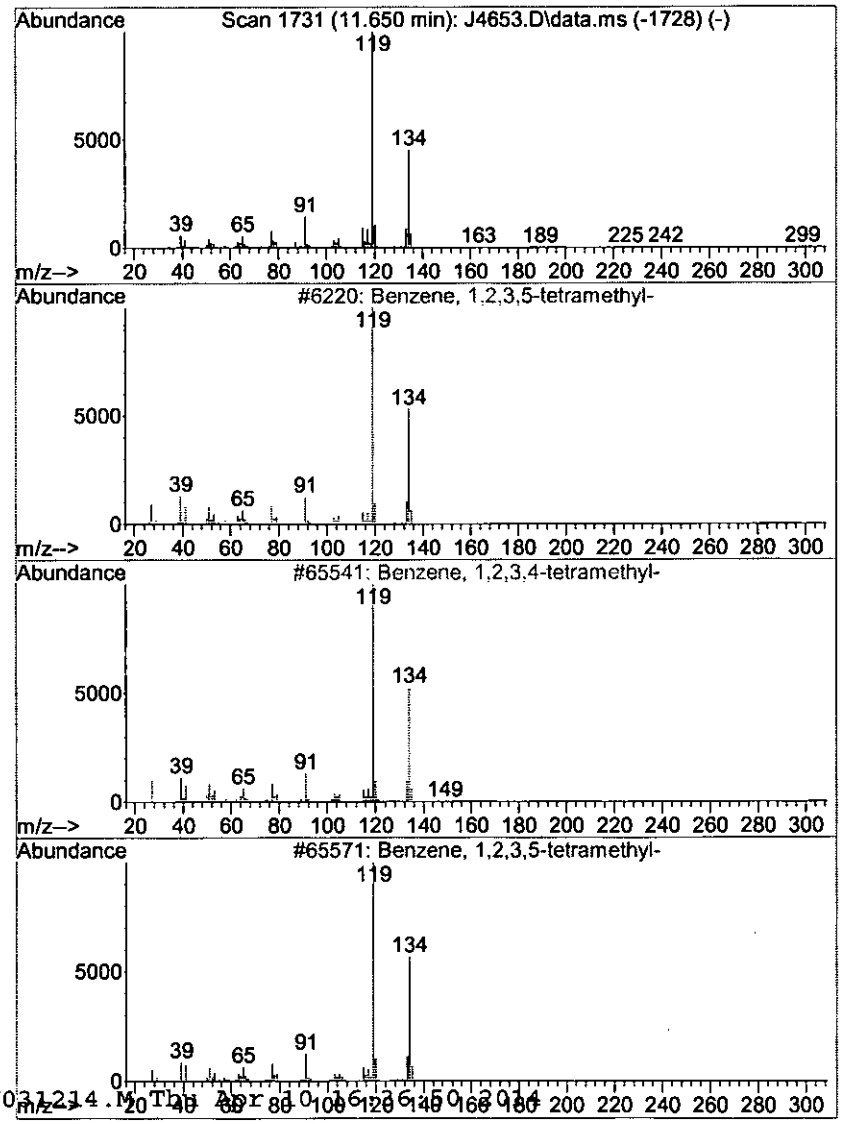
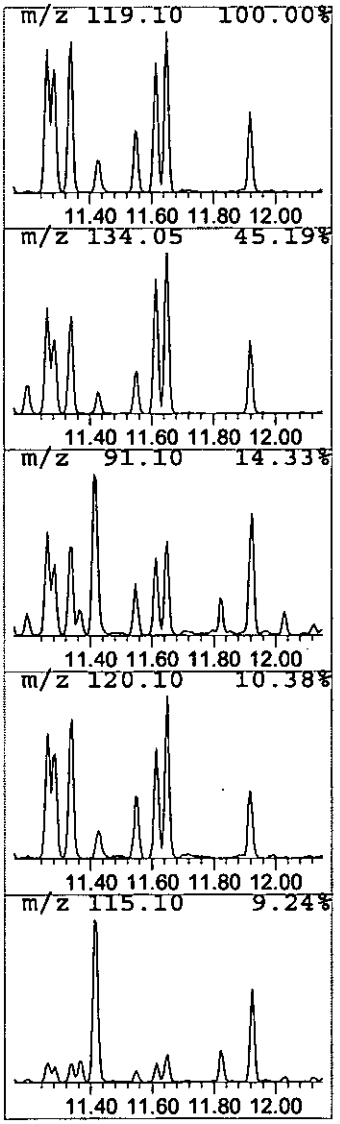
****

Peak Number 15 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	8.52 ppb	569070	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94





W031214.M Thu Apr 10 16:26:50 2014 Page: 18

00362

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4653.D
Acq On : 10 Apr 2014 1:46 pm
Operator : K.Ruest
Sample : R1402225-020|1.0
Misc : PARSONS 9913 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

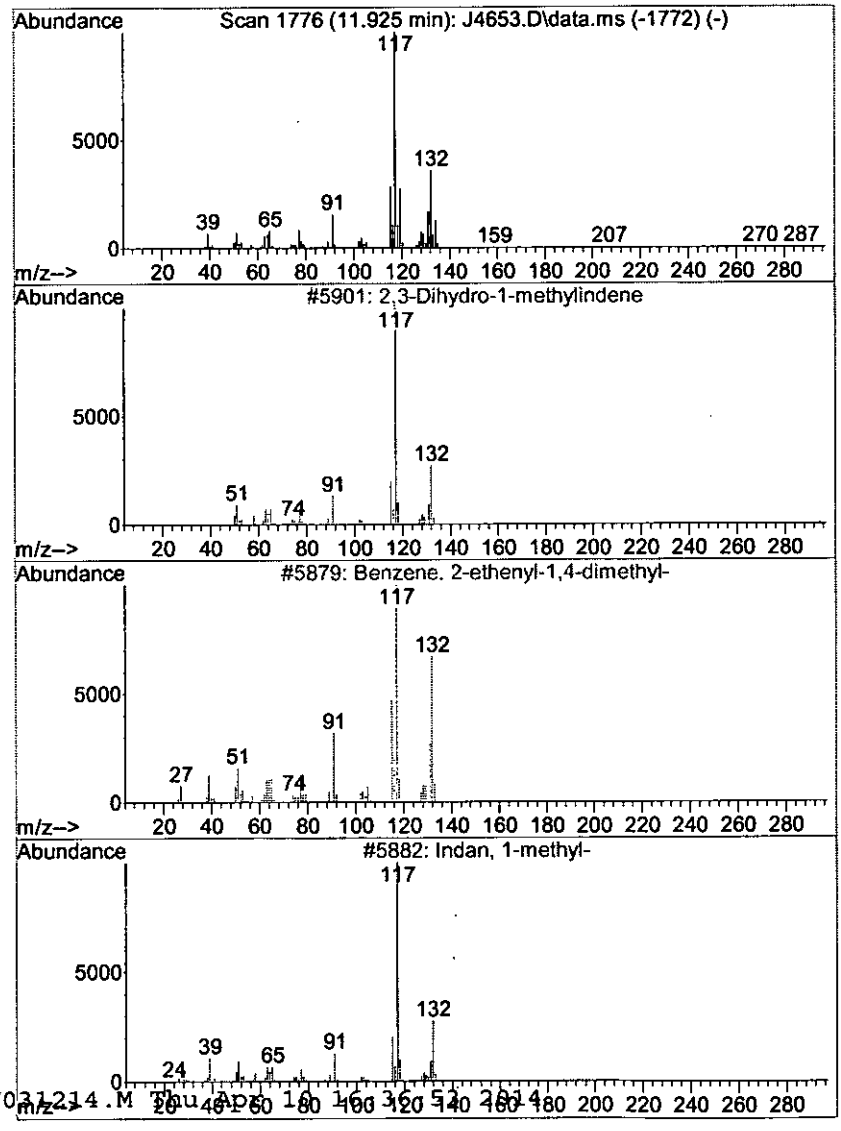
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

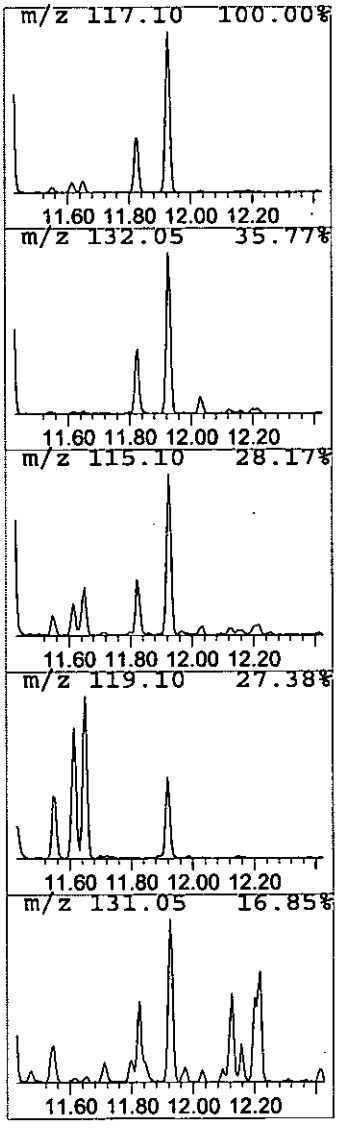
****

Peak Number 16 2,3-Dihydro-1-methylindene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.925	13.02 ppb	869904	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	95
2	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	90
3	Indan, 1-methyl-	132	C10H12	000767-58-8	87
4	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	87
5	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	81





ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

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00364

Initial Calibration - Summary Report

KF 3/13/14

Calibration ID: RC1400023 W031214 8260 Waters **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3058	<=20	7.3
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.7112	<=20	2.2
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5726	<=20	5.4
1,1,2-Trichloroethane	T	Average RF		0.100	0.2220	<=20	5.6
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3971	<=20	1.9
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.8461	<=20	3.1
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3628	<=20	3.7
1,1-Dichloropropene	T	Average RF			0.3693	<=20	4.9
1,2,3-Trichlorobenzene	T	Average RF			0.6036	<=20	8.2
1,2,3-Trichloropropane	T	Average RF			0.1713	<=20	7.2
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.7372	<=20	6.4
1,2,4-Trimethylbenzene	T	Average RF			2.167	<=20	7.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08773	<=20	12.9
1,2-Dibromoethane	T	Average RF		0.100	0.2312	<=20	5.1
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5388	<=20	4.7
1,2-Dichlorobenzene	T	Average RF		0.400	1.206	<=20	3.3
1,2-Dichloroethane	T	Average RF		0.100	0.3737	<=20	3.9
1,2-Dichloropropane	T	Average RF		0.100	0.3148	<=20	4.5
1,3,5-Trichlorobenzene	T	Average RF			0.8315	<=20	4.0
1,3,5-Trimethylbenzene	T	Average RF			2.106	<=20	6.0
1,3-Dichlorobenzene	T	Average RF		0.600	1.252	<=20	4.2
1,3-Dichloropropane	T	Average RF			0.4501	<=20	2.3
1,4-Dichlorobenzene	T	Average RF		0.500	1.332	<=20	8.0
1,4-Dioxane	T	Average RF			0.002062	<=20	6.8
1-Butanol	T	Average RF			0.004645	<=20	18.2
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.3856	<=20	7.0
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6154	<=20	3.4
2,2-Dichloropropane	T	Average RF			0.6713	<=20	3.9
2,3,6-Trichlorotoluene	T	Average RF			0.3641	<=20	7.5
2,4,5-Trichlorotoluene	T	Average RF			0.3978	<=20	7.2
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.9535	<=20	5.8
2,4-Dichlorobenzotrifluoride	T	Average RF			0.5359	<=20	4.0
2,5-Dichlorobenzotrifluoride	T	Average RF			0.6128	<=20	3.4
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1390	<=20	1.9
2-Chloro-1,3-butadiene	T	Average RF			0.7288	<=20	7.9
2-Chlorobenzotrifluoride	T	Average RF			0.8330	<=20	4.8
2-Chloroethyl Vinyl Ether	T	Average RF			0.1412	<=20	5.8
2-Chlorotoluene	T	Average RF			1.896	<=20	5.7
2-Hexanone	T	Average RF		0.05	0.1416	<=20	9.6
2-Methyl-1-propanol	T	Average RF			0.008458	<=20	8.6
2-Methyl-2-propanol	T	Average RF			0.02773	<=20	8.6
2-Nitropropane	T	Average RF			0.03954	<=20	10.8
2-Propanol	T	Average RF			0.01610	<=20	13.7
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.010	<=20	7.1
3,4-Dichlorobenzotrifluoride	T	Average RF			0.6160	<=20	4.0
3-Chloro-1-propene	T	Average RF			0.2488	<=20	4.3
3-Chlorobenzotrifluoride	T	Average RF			0.4304	<=20	7.2
3-Chlorotoluene	T	Average RF			1.973	<=20	5.3
4-Chlorotoluene	T	Average RF			2.236	<=20	8.4
4-Isopropyltoluene	T	Average RF			2.086	<=20	6.7
4-Methyl-2-pentanone	T	Average RF		0.05	0.1899	<=20	6.0

00365

Initial Calibration - Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.09920	<=20	6.0
Acetonitrile	T	Average RF			0.01622	<=20	13.2
Acrolein	T	Quadratic	1/X2		0.01717	>=0.99	0.9978
Acrylonitrile	T	Average RF			0.1111	<=20	5.0
Benzene	T	Average RF		0.500	1.231	<=20	2.6
Bromobenzene	T	Average RF			0.7355	<=20	3.3
Bromochloromethane	T	Average RF			0.2832	<=20	8.2
Bromodichloromethane	T	Average RF		0.200	0.3677	<=20	5.4
Bromoform	T	Average RF		0.100	0.2840	<=20	15.6
Bromomethane	T	Average RF		0.100	0.2881	<=20	6.8
Carbon Disulfide	T	Average RF		0.100	1.262	<=20	4.8
Carbon Tetrachloride	T	Average RF		0.05	0.1199	<=20	6.9
Chlorobenzene	T	Average RF		0.500	0.8701	<=20	2.8
Chloroethane	T	Average RF		0.100	0.2851	<=20	8.6
Chloroform	T	Average RF		0.200	0.8292	<=20	4.7
Chloromethane	T	Average RF		0.100	0.5146	<=20	2.8
Cyclohexane	T	Average RF		0.100	0.2705	<=20	5.1
Cyclohexanone	T	Average RF			0.04011	<=20	5.9
Dibromochloromethane	T	Average RF		0.100	0.2588	<=20	11.9
Dibromomethane	T	Average RF			0.1497	<=20	3.1
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5939	<=20	7.1
Dichlorofluoromethane (CFC 21)	T	Average RF			0.7211	<=20	4.4
Dichloromethane	T	Average RF		0.100	0.4753	<=20	5.4
Diethyl Ether	T	Average RF			0.3614	<=20	6.8
Diisopropyl Ether	T	Average RF			1.648	<=20	5.1
Ethyl Methacrylate	T	Average RF			0.2861	<=20	15.5
Ethyl tert-Butyl Ether	T	Average RF			1.379	<=20	4.3
Ethylbenzene	T	Average RF		0.100	0.4636	<=20	3.9
Hexachlorobutadiene	T	Average RF			0.3218	<=20	5.3
Iodomethane	T	Average RF			0.4820	<=20	15.6
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.581	<=20	6.3
Methacrylonitrile	T	Average RF			0.1295	<=20	10.3
Methyl Acetate	T	Average RF		0.100	0.2234	<=20	6.0
Methyl Methacrylate	T	Average RF			0.1481	<=20	9.0
Methyl tert-Butyl Ether	T	Average RF		0.100	1.153	<=20	3.5
Methylcyclohexane	T	Average RF		0.100	0.3206	<=20	5.3
Naphthalene	T	Average RF			1.327	<=20	6.2
Propionitrile	T	Average RF			0.04013	<=20	8.9
Styrene	T	Average RF		0.300	0.8888	<=20	9.8
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2583	<=20	7.1
Tetrahydrofuran (THF)	T	Average RF			0.09716	<=20	4.0
Toluene	T	Average RF		0.400	1.269	<=20	4.0
Trichloroethene (TCE)	T	Average RF		0.200	0.2982	<=20	2.1
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.7340	<=20	4.6
Vinyl Acetate	T	Average RF			0.07534	<=20	7.4
Vinyl Chloride	T	Average RF		0.100	0.4781	<=20	2.7
cis-1,2-Dichloroethene	T	Average RF		0.100	0.5073	<=20	2.9
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4363	<=20	8.8
m,p-Xylenes	T	Average RF		0.100	0.5448	<=20	5.7
n-Butyl Acetate	T	Average RF			0.3502	<=20	8.0
n-Butylbenzene	T	Average RF			1.881	<=20	7.7
n-Heptane	T	Average RF			0.3075	<=20	4.6

Initial Calibration - Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.020	<=20	7.6
o-Xylene	T	Average RF		0.300	0.5559	<=20	4.6
sec-Butylbenzene	T	Average RF			2.467	<=20	7.2
tert-Amyl Methyl Ether	T	Average RF			1.164	<=20	4.4
tert-Butylbenzene	T	Average RF			1.773	<=20	4.3
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4546	<=20	2.9
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3517	<=20	12.9
trans-1,4-Dichloro-2-butene	T	Average RF			0.1346	<=20	13.1
1,2-Dichloroethane-d4	S	Average RF			0.3297	<=20	1.6
4-Bromofluorobenzene	S	Average RF			0.4538	<=20	1.8
Dibromofluoromethane	S	Average RF			0.2895	<=20	0.8
Toluene-d8	S	Average RF			1.216	<=20	0.5

KR 3/13/14

Initial Calibration - Detailed Report

Calibration ID: RC1400023 WOB1214 8260 waters **Instrument ID:** R-MS-12
Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400023-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\031214\J3875.D	3/12/14 10:45
02	RC1400023-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\031214\J3876.D	3/12/14 11:17
03	RC1400023-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\031214\J3877.D	3/12/14 11:49
04	RC1400023-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\031214\J3878.D	3/12/14 12:21
05	RC1400023-05	20ppb	I:\ACQUDATA\msvoa12\Data\031214\J3879.D	3/12/14 12:53
06	RC1400023-06	50ppb	I:\ACQUDATA\msvoa12\Data\031214\J3880.D	3/12/14 13:26
07	RC1400023-07	100ppb	I:\ACQUDATA\msvoa12\Data\031214\J3881.D	3/12/14 13:58
08	RC1400023-08	200ppb	I:\ACQUDATA\msvoa12\Data\031214\J3882.D	3/12/14 14:30

Analyte **Curve Fit** Average RF **Weighting** 1/RF

1,1,1,2-Tetrachloroethane Average RF RSD = 7.3 Average RF = 0.3058

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2983	02	1.000	0.2715	03	2.000	0.2857	04	5.000	0.2953
05	20.000	0.3181	06	50.000	0.3125	07	100.000	0.3237	08	200.000	0.3409

1,1,1-Trichloroethane (TCA) Average RF RSD = 2.2 Average RF = 0.7112

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7063	02	1.000	0.6868	03	2.000	0.7026	04	5.000	0.7079
05	20.000	0.7266	06	50.000	0.7019	07	100.000	0.7348	08	200.000	0.7228

1,1,2,2-Tetrachloroethane Average RF RSD = 5.4 Average RF = 0.5726

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5677	02	1.000	0.6326	03	2.000	0.5516	04	5.000	0.5900
05	20.000	0.5885	06	50.000	0.5657	07	100.000	0.5510	08	200.000	0.5336

1,1,2-Trichloroethane Average RF RSD = 5.6 Average RF = 0.2220

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2390	02	1.000	0.2102	03	2.000	0.2004	04	5.000	0.2220
05	20.000	0.2356	06	50.000	0.2226	07	100.000	0.2210	08	200.000	0.2255

1,1,2-Trichlorotrifluoroethane Average RF RSD = 1.9 Average RF = 0.3971

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3985	02	1.000	0.4016	03	2.000	0.3970	04	5.000	0.3992
05	20.000	0.4053	06	50.000	0.3807	07	100.000	0.4011	08	200.000	0.3932

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 3.1 Average RF = 0.8461

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8237	02	1.000	0.8387	03	2.000	0.8602	04	5.000	0.8635
05	20.000	0.8933	06	50.000	0.8250	07	100.000	0.8497	08	200.000	0.8151

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 3.7 Average RF = 0.3628

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3377	02	1.000	0.3500	03	2.000	0.3712	04	5.000	0.3711
05	20.000	0.3724	06	50.000	0.3567	07	100.000	0.3750	08	200.000	0.3686

1,1-Dichloropropene Average RF RSD = 4.9 Average RF = 0.3693

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3820	02	1.000	0.3361	03	2.000	0.3482	04	5.000	0.3787
05	20.000	0.3890	06	50.000	0.3660	07	100.000	0.3762	08	200.000	0.3780

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Weighting

1,2,3-Trichlorobenzene Average RF RSD = 8.2 Average RF = 0.6036

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7120	02	1.000	0.5898	03	2.000	0.6049	04	5.000	0.6154
05	20.000	0.6087	06	50.000	0.5765	07	100.000	0.5812	08	200.000	0.5407

1,2,3-Trichloropropane Average RF RSD = 7.2 Average RF = 0.1713

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1594	02	1.000	0.1952	03	2.000	0.1804	04	5.000	0.1712
05	20.000	0.1757	06	50.000	0.1662	07	100.000	0.1640	08	200.000	0.1587

1,2,4-Trichlorobenzene Average RF RSD = 6.4 Average RF = 0.7372

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8384	02	1.000	0.7195	03	2.000	0.7193	04	5.000	0.7561
05	20.000	0.7459	06	50.000	0.7248	07	100.000	0.7187	08	200.000	0.6751

1,2,4-Trimethylbenzene Average RF RSD = 7.0 Average RF = 2.167

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.954	02	1.000	2.105	03	2.000	2.150	04	5.000	2.333
05	20.000	2.369	06	50.000	2.219	07	100.000	2.224	08	200.000	1.979

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 12.9 Average RF = 0.08773

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08527	03	2.000	0.06938	04	5.000	0.07609	05	20.000	0.09250
06	50.000	0.09478	07	100.000	0.09971	08	200.000	0.09639			

1,2-Dibromoethane Average RF RSD = 5.1 Average RF = 0.2312

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2119	02	1.000	0.2166	03	2.000	0.2300	04	5.000	0.2285
05	20.000	0.2450	06	50.000	0.2376	07	100.000	0.2391	08	200.000	0.2411

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 4.7 Average RF = 0.5388

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5609	02	1.000	0.5284	03	2.000	0.5735	04	5.000	0.5565
05	20.000	0.5532	06	50.000	0.5082	07	100.000	0.5150	08	200.000	0.5148

1,2-Dichlorobenzene Average RF RSD = 3.3 Average RF = 1.206

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.165	02	1.000	1.167	03	2.000	1.163	04	5.000	1.250
05	20.000	1.266	06	50.000	1.199	07	100.000	1.231	08	200.000	1.203

1,2-Dichloroethane Average RF RSD = 3.9 Average RF = 0.3737

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3944	02	1.000	0.3897	03	2.000	0.3680	04	5.000	0.3712
05	20.000	0.3872	06	50.000	0.3620	07	100.000	0.3583	08	200.000	0.3591

1,2-Dichloroethane-d4 Average RF RSD = 1.6 Average RF = 0.3297

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	50.000	0.3313	01	50.000	0.3343	04	50.000	0.3305	02	50.000	0.3375
03	50.000	0.3311	08	50.000	0.3218	06	50.000	0.3278	07	50.000	0.3236

1,2-Dichloropropane Average RF RSD = 4.5 Average RF = 0.3148

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3353	02	1.000	0.2940	03	2.000	0.3243	04	5.000	0.3023
05	20.000	0.3306	06	50.000	0.3099	07	100.000	0.3114	08	200.000	0.3104

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,3,5-Trichlorobenzene Average RF RSD = 4.0 Average RF = 0.8315

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8430	02	1.000	0.8020	03	2.000	0.8458	04	5.000	0.8426
05	20.000	0.8737	06	50.000	0.8561	07	100.000	0.8199	08	200.000	0.7691

1,3,5-Trimethylbenzene Average RF RSD = 6.0 Average RF = 2.106

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.951	02	1.000	2.012	03	2.000	2.092	04	5.000	2.238
05	20.000	2.297	06	50.000	2.125	07	100.000	2.170	08	200.000	1.961

1,3-Dichlorobenzene Average RF RSD = 4.2 Average RF = 1.252

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.191	02	1.000	1.211	03	2.000	1.210	04	5.000	1.307
05	20.000	1.338	06	50.000	1.240	07	100.000	1.287	08	200.000	1.232

1,3-Dichloropropane Average RF RSD = 2.3 Average RF = 0.4501

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4445	02	1.000	0.4607	03	2.000	0.4426	04	5.000	0.4577
05	20.000	0.4682	06	50.000	0.4441	07	100.000	0.4414	08	200.000	0.4419

1,4-Dichlorobenzene Average RF RSD = 8.0 Average RF = 1.332

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.577	02	1.000	1.283	03	2.000	1.282	04	5.000	1.332
05	20.000	1.369	06	50.000	1.267	07	100.000	1.303	08	200.000	1.246

1,4-Dioxane Average RF RSD = 6.8 Average RF = 0.002062

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.001810	04	100.000	0.002154	05	400.000	0.002159	06	1000.000	0.001977
07	2000.000	0.002122	08	4000.000	0.002147						

1-Butanol Average RF RSD = 18.2 Average RF = 0.004645

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.003924	03	100.000	0.003663	04	250.000	0.003764	05	1000.000	0.004882
06	2500.000	0.005182	07	5000.000	0.005452	08	10000.000	0.005652			

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 7.0 Average RF = 0.3856

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4167	02	1.000	0.3463	03	2.000	0.3464	04	5.000	0.3768
05	20.000	0.4086	06	50.000	0.3969	07	100.000	0.3909	08	200.000	0.4026

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 3.4 Average RF = 0.6154

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6207	02	1.000	0.6330	03	2.000	0.6327	04	5.000	0.6228
05	20.000	0.6351	06	50.000	0.5779	07	100.000	0.5931	08	200.000	0.6081

2,2-Dichloropropane Average RF RSD = 3.9 Average RF = 0.6713

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6675	02	1.000	0.6452	03	2.000	0.6422	04	5.000	0.6446
05	20.000	0.6968	06	50.000	0.6701	07	100.000	0.7082	08	200.000	0.6961

2,3,6-Trichlorotoluene Average RF RSD = 7.5 Average RF = 0.3641

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3875	03	2.000	0.3415	04	5.000	0.3913	05	20.000	0.3742
06	50.000	0.3804	07	100.000	0.3565	08	200.000	0.3172			

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2,4,5-Trichlorotoluene Average RF RSD = 7.2 Average RF = 0.3978

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4329	03	2.000	0.3944	04	5.000	0.4078	05	20.000	0.4165
06	50.000	0.4041	07	100.000	0.3861	08	200.000	0.3424			

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut Average RF RSD = 5.8 Average RF = 0.9535

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	0.9770	02	3.000	0.9010	03	6.000	0.9234	04	15.000	0.9868
05	60.000	1.023	06	150.000	0.9986	07	300.000	0.9600	08	600.000	0.8584

2,4-Dichlorobenzotrifluoride Average RF RSD = 4.0 Average RF = 0.5359

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5110	02	1.000	0.5339	03	2.000	0.5084	04	5.000	0.5409
05	20.000	0.5693	06	50.000	0.5540	07	100.000	0.5471	08	200.000	0.5228

2,5-Dichlorobenzotrifluoride Average RF RSD = 3.4 Average RF = 0.6128

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5718	02	1.000	0.6247	03	2.000	0.6037	04	5.000	0.6225
05	20.000	0.6361	06	50.000	0.6241	07	100.000	0.6228	08	200.000	0.5964

2-Butanone (MEK) Average RF RSD = 1.9 Average RF = 0.1390

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1352	04	5.000	0.1415	05	20.000	0.1414	06	50.000	0.1412
07	100.000	0.1376	08	200.000	0.1370						

2-Chloro-1,3-butadiene Average RF RSD = 7.9 Average RF = 0.7288

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6913	02	1.000	0.6222	03	2.000	0.7311	04	5.000	0.7347
05	20.000	0.8048	06	50.000	0.7974	07	100.000	0.7220	08	200.000	0.7268

2-Chlorobenzotrifluoride Average RF RSD = 4.8 Average RF = 0.8330

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9100	02	1.000	0.7769	03	2.000	0.8291	04	5.000	0.8420
05	20.000	0.8570	06	50.000	0.8319	07	100.000	0.8212	08	200.000	0.7957

2-Chloroethyl Vinyl Ether Average RF RSD = 5.8 Average RF = 0.1412

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1322	03	2.000	0.1312	04	5.000	0.1351	05	20.000	0.1468
06	50.000	0.1488	07	100.000	0.1433	08	200.000	0.1509			

2-Chlorotoluene Average RF RSD = 5.7 Average RF = 1.896

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.848	02	1.000	1.801	03	2.000	1.996	04	5.000	2.046
05	20.000	1.995	06	50.000	1.865	07	100.000	1.892	08	200.000	1.729

2-Hexanone Average RF RSD = 9.6 Average RF = 0.1416

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1254	04	5.000	0.1240	05	20.000	0.1460	06	50.000	0.1528
07	100.000	0.1465	08	200.000	0.1549						

2-Methyl-1-propanol Average RF RSD = 8.6 Average RF = 0.008458

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.008567	03	40.000	0.007652	04	100.000	0.007321	05	400.000	0.008520
06	1000.000	0.008757	07	2000.000	0.009084	08	4000.000	0.009309			

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

2-Methyl-2-propanol Average RF RSD = 8.6 Average RF = 0.02773

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.02497	02	20.000	0.02534	03	40.000	0.02495	04	100.000	0.02725
05	400.000	0.03012	06	1000.000	0.02929	07	2000.000	0.03011	08	4000.000	0.02980

2-Nitropropane Average RF RSD = 10.8 Average RF = 0.03954

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.03696	03	4.000	0.03746	04	10.000	0.03400	05	40.000	0.03718
06	100.000	0.04155	07	200.000	0.04375	08	400.000	0.04587			

2-Propanol Average RF RSD = 13.7 Average RF = 0.01610

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01427	03	40.000	0.01247	04	100.000	0.01533	05	400.000	0.01663
06	1000.000	0.01714	07	2000.000	0.01837	08	4000.000	0.01848			

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 7.1 Average RF = 1.010

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9169	02	2.000	1.022	03	4.000	1.034	04	10.000	1.049
05	40.000	1.078	06	100.000	1.071	07	200.000	1.025	08	400.000	0.8819

3,4-Dichlorobenzotrifluoride Average RF RSD = 4.0 Average RF = 0.6160

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6560	02	1.000	0.5832	03	2.000	0.5958	04	5.000	0.5956
05	20.000	0.6406	06	50.000	0.6265	07	100.000	0.6205	08	200.000	0.6097

3-Chloro-1-propene Average RF RSD = 4.3 Average RF = 0.2488

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2545	02	1.000	0.2473	03	2.000	0.2453	04	5.000	0.2512
05	20.000	0.2640	06	50.000	0.2506	07	100.000	0.2510	08	200.000	0.2265

3-Chlorobenzotrifluoride Average RF RSD = 7.2 Average RF = 0.4304

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4930	02	1.000	0.4036	03	2.000	0.3943	04	5.000	0.4118
05	20.000	0.4381	06	50.000	0.4241	07	100.000	0.4325	08	200.000	0.4460

3-Chlorotoluene Average RF RSD = 5.3 Average RF = 1.973

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.001	02	1.000	1.930	03	2.000	1.972	04	5.000	2.097
05	20.000	2.101	06	50.000	1.984	07	100.000	1.919	08	200.000	1.777

4-Bromofluorobenzene Average RF RSD = 1.8 Average RF = 0.4538

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4590	03	50.000	0.4407	08	50.000	0.4674	07	50.000	0.4608
04	50.000	0.4514	05	50.000	0.4534	02	50.000	0.4484	01	50.000	0.4493

4-Chlorotoluene Average RF RSD = 8.4 Average RF = 2.236

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.971	02	1.000	2.210	03	2.000	2.368	04	5.000	2.461
05	20.000	2.434	06	50.000	2.215	07	100.000	2.253	08	200.000	1.976

4-Isopropyltoluene Average RF RSD = 6.7 Average RF = 2.086

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.941	02	1.000	1.967	03	2.000	2.058	04	5.000	2.230
05	20.000	2.299	06	50.000	2.107	07	100.000	2.167	08	200.000	1.919

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting									
4-Methyl-2-pentanone	Average RF			RSD = 6.0		Average RF = 0.1899					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1760	04	5.000	0.1760	05	20.000	0.1895	06	50.000	0.2006
07	100.000	0.1966	08	200.000	0.2005						
Acetone	Average RF			RSD = 6.0		Average RF = 0.09920					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1085	05	20.000	0.09976	06	50.000	0.09387	07	100.000	0.09976
08	200.000	0.09415									
Acetonitrile	Average RF			RSD = 13.2		Average RF = 0.01622					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.01228	04	25.000	0.01658	05	100.000	0.01837	06	250.000	0.01583
07	500.000	0.01782	08	1000.000	0.01645						
Acrolein	Quadratic	1/X2		COD = 0.9978		Y = 0.001887 X^2 + 0.006327 X + 2.544E-4					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.009244	03	10.000	0.007990	04	25.000	0.006781	05	100.000	0.01026
06	250.000	0.01513	07	500.000	0.02775	08	1000.000	0.04302			
Acrylonitrile	Average RF			RSD = 5.0		Average RF = 0.1111					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1077	02	5.000	0.1122	03	10.000	0.1002	04	25.000	0.1111
05	100.000	0.1195	06	250.000	0.1138	07	500.000	0.1144	08	1000.000	0.1102
Benzene	Average RF			RSD = 2.6		Average RF = 1.231					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.221	02	1.000	1.217	03	2.000	1.225	04	5.000	1.254
05	20.000	1.300	06	50.000	1.211	07	100.000	1.224	08	200.000	1.195
Bromobenzene	Average RF			RSD = 3.3		Average RF = 0.7355					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7129	02	1.000	0.7415	03	2.000	0.7707	04	5.000	0.7655
05	20.000	0.7457	06	50.000	0.7029	07	100.000	0.7271	08	200.000	0.7180
Bromochloromethane	Average RF			RSD = 8.2		Average RF = 0.2832					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3308	02	1.000	0.2864	03	2.000	0.2904	04	5.000	0.2917
05	20.000	0.2808	06	50.000	0.2647	07	100.000	0.2644	08	200.000	0.2567
Bromodichloromethane	Average RF			RSD = 5.4		Average RF = 0.3677					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3523	02	1.000	0.3364	03	2.000	0.3520	04	5.000	0.3636
05	20.000	0.3899	06	50.000	0.3744	07	100.000	0.3831	08	200.000	0.3898
Bromoform	Average RF			RSD = 15.6		Average RF = 0.2840					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2211	02	1.000	0.2672	03	2.000	0.2277	04	5.000	0.2700
05	20.000	0.3081	06	50.000	0.3125	07	100.000	0.3291	08	200.000	0.3360
Bromomethane	Average RF			RSD = 6.8		Average RF = 0.2881					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3114	02	1.000	0.3113	03	2.000	0.3091	04	5.000	0.2746
05	20.000	0.2750	06	50.000	0.2618	07	100.000	0.2769	08	200.000	0.2848

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Carbon Disulfide Average RF RSD = 4.8 Average RF = 1.262

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.321	02	1.000	1.229	03	2.000	1.255	04	5.000	1.251
05	20.000	1.345	06	50.000	1.316	07	100.000	1.214	08	200.000	1.165

Carbon Tetrachloride Average RF RSD = 6.9 Average RF = 0.1199

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1354	02	1.000	0.1124	03	2.000	0.1161	04	5.000	0.1107
05	20.000	0.1197	06	50.000	0.1149	07	100.000	0.1233	08	200.000	0.1266

Chlorobenzene Average RF RSD = 2.8 Average RF = 0.8701

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8993	02	1.000	0.8337	03	2.000	0.8881	04	5.000	0.8811
05	20.000	0.8966	06	50.000	0.8431	07	100.000	0.8626	08	200.000	0.8563

Chloroethane Average RF RSD = 8.6 Average RF = 0.2851

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3345	02	1.000	0.2800	03	2.000	0.3023	04	5.000	0.2604
05	20.000	0.2953	06	50.000	0.2692	07	100.000	0.2737	08	200.000	0.2659

Chloroform Average RF RSD = 4.7 Average RF = 0.8292

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9097	02	1.000	0.8178	03	2.000	0.8517	04	5.000	0.8211
05	20.000	0.8358	06	50.000	0.7809	07	100.000	0.8189	08	200.000	0.7975

Chloromethane Average RF RSD = 2.8 Average RF = 0.5146

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4949	02	1.000	0.4996	03	2.000	0.5223	04	5.000	0.5099
05	20.000	0.5393	06	50.000	0.5065	07	100.000	0.5248	08	200.000	0.5198

Cyclohexane Average RF RSD = 5.1 Average RF = 0.2705

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2907	02	1.000	0.2754	03	2.000	0.2782	04	5.000	0.2787
05	20.000	0.2755	06	50.000	0.2513	07	100.000	0.2524	08	200.000	0.2620

Cyclohexanone Average RF RSD = 5.9 Average RF = 0.04011

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.03932	02	20.000	0.04338	03	40.000	0.03616	04	100.000	0.04035
05	400.000	0.04332	06	1000.000	0.03960	07	2000.000	0.03940	08	4000.000	0.03932

Dibromochloromethane Average RF RSD = 11.9 Average RF = 0.2588

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2176	02	1.000	0.2186	03	2.000	0.2418	04	5.000	0.2536
05	20.000	0.2761	06	50.000	0.2780	07	100.000	0.2876	08	200.000	0.2973

Dibromofluoromethane Average RF RSD = 0.8 Average RF = 0.2895

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	50.000	0.2865	04	50.000	0.2929	05	50.000	0.2925	03	50.000	0.2876
07	50.000	0.2897	06	50.000	0.2889	02	50.000	0.2871	08	50.000	0.2905

Dibromomethane Average RF RSD = 3.1 Average RF = 0.1497

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1523	02	1.000	0.1548	03	2.000	0.1407	04	5.000	0.1454
05	20.000	0.1530	06	50.000	0.1495	07	100.000	0.1494	08	200.000	0.1529

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Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Dichlorodifluoromethane (CFC 12) Average RF RSD = 7.1 Average RF = 0.5939

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6564	02	1.000	0.5571	03	2.000	0.5697	04	5.000	0.5297
05	20.000	0.6394	06	50.000	0.6016	07	100.000	0.6140	08	200.000	0.5832

Dichlorofluoromethane (CFC 21) Average RF RSD = 4.4 Average RF = 0.7211

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7556	02	1.000	0.6951	03	2.000	0.7583	04	5.000	0.7429
05	20.000	0.7444	06	50.000	0.6873	07	100.000	0.6945	08	200.000	0.6902

Dichloromethane Average RF RSD = 5.4 Average RF = 0.4753

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5085	02	1.000	0.5094	03	2.000	0.4869	04	5.000	0.4756
05	20.000	0.4769	06	50.000	0.4443	07	100.000	0.4568	08	200.000	0.4445

Diethyl Ether Average RF RSD = 6.8 Average RF = 0.3614

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4086	02	1.000	0.3830	03	2.000	0.3609	04	5.000	0.3461
05	20.000	0.3686	06	50.000	0.3426	07	100.000	0.3471	08	200.000	0.3343

Diisopropyl Ether Average RF RSD = 5.1 Average RF = 1.648

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.729	02	1.000	1.591	03	2.000	1.636	04	5.000	1.690
05	20.000	1.772	06	50.000	1.654	07	100.000	1.605	08	200.000	1.507

Ethyl Methacrylate Average RF RSD = 15.5 Average RF = 0.2861

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2214	02	1.000	0.2595	03	2.000	0.2383	04	5.000	0.2676
05	20.000	0.3183	06	50.000	0.3215	07	100.000	0.3296	08	200.000	0.3324

Ethyl tert-Butyl Ether Average RF RSD = 4.3 Average RF = 1.379

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.331	02	1.000	1.327	03	2.000	1.322	04	5.000	1.427
05	20.000	1.484	06	50.000	1.412	07	100.000	1.390	08	200.000	1.339

Ethylbenzene Average RF RSD = 3.9 Average RF = 0.4636

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4482	02	1.000	0.4359	03	2.000	0.4451	04	5.000	0.4764
05	20.000	0.4791	06	50.000	0.4624	07	100.000	0.4794	08	200.000	0.4820

Hexachlorobutadiene Average RF RSD = 5.3 Average RF = 0.3218

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3384	02	1.000	0.3239	03	2.000	0.3162	04	5.000	0.3323
05	20.000	0.3461	06	50.000	0.3150	07	100.000	0.3098	08	200.000	0.2924

Iodomethane Average RF RSD = 15.6 Average RF = 0.4820

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3823	03	2.000	0.4095	04	5.000	0.4186	05	20.000	0.5370
06	50.000	0.5636	07	100.000	0.5381	08	200.000	0.5244			

Isopropylbenzene (Cumene) Average RF RSD = 6.3 Average RF = 2.581

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.502	02	1.000	2.497	03	2.000	2.636	04	5.000	2.757
05	20.000	2.786	06	50.000	2.599	07	100.000	2.599	08	200.000	2.274

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Methacrylonitrile Average RF RSD = 10.3 Average RF = 0.1295

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1006	03	2.000	0.1396	04	5.000	0.1260	05	20.000	0.1361
06	50.000	0.1347	07	100.000	0.1355	08	200.000	0.1337			

Methyl Acetate Average RF RSD = 6.0 Average RF = 0.2234

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2217	03	2.000	0.2075	04	5.000	0.2513	05	20.000	0.2242
06	50.000	0.2221	07	100.000	0.2205	08	200.000	0.2164			

Methyl Methacrylate Average RF RSD = 9.0 Average RF = 0.1481

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1473	02	1.000	0.1523	03	2.000	0.1206	04	5.000	0.1367
05	20.000	0.1542	06	50.000	0.1553	07	100.000	0.1575	08	200.000	0.1609

Methyl tert-Butyl Ether Average RF RSD = 3.5 Average RF = 1.153

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.207	02	1.000	1.153	03	2.000	1.131	04	5.000	1.188
05	20.000	1.196	06	50.000	1.120	07	100.000	1.134	08	200.000	1.097

Methylcyclohexane Average RF RSD = 5.3 Average RF = 0.3206

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3497	02	1.000	0.3166	03	2.000	0.3314	04	5.000	0.3258
05	20.000	0.3280	06	50.000	0.2955	07	100.000	0.3050	08	200.000	0.3126

Naphthalene Average RF RSD = 6.2 Average RF = 1.327

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.282	02	1.000	1.208	03	2.000	1.290	04	5.000	1.337
05	20.000	1.433	06	50.000	1.412	07	100.000	1.404	08	200.000	1.252

Propionitrile Average RF RSD = 8.9 Average RF = 0.04013

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.03731	02	5.000	0.03607	03	10.000	0.03612	04	25.000	0.03788
05	100.000	0.04399	06	250.000	0.04311	07	500.000	0.04402	08	1000.000	0.04254

Styrene Average RF RSD = 9.8 Average RF = 0.8888

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7897	02	1.000	0.7703	03	2.000	0.8089	04	5.000	0.8868
05	20.000	0.9769	06	50.000	0.9522	07	100.000	0.9751	08	200.000	0.9503

Tetrachloroethene (PCE) Average RF RSD = 7.1 Average RF = 0.2583

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2988	02	1.000	0.2495	03	2.000	0.2623	04	5.000	0.2415
05	20.000	0.2595	06	50.000	0.2416	07	100.000	0.2508	08	200.000	0.2622

Tetrahydrofuran (THF) Average RF RSD = 4.0 Average RF = 0.09716

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1013	04	5.000	0.09869	05	20.000	0.1010	06	50.000	0.09666
07	100.000	0.09237	08	200.000	0.09300						

Toluene Average RF RSD = 4.0 Average RF = 1.269

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.205	02	1.000	1.271	03	2.000	1.311	04	5.000	1.307
05	20.000	1.336	06	50.000	1.268	07	100.000	1.262	08	200.000	1.193

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** RSD = 0.5 **Average RF = 1.216**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	50.000	1.204	06	50.000	1.220	08	50.000	1.221	07	50.000	1.213
05	50.000	1.220	03	50.000	1.218	02	50.000	1.221	04	50.000	1.214

Trichloroethene (TCE) Average RF RSD = 2.1 **Average RF = 0.2982**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2923	02	1.000	0.2995	03	2.000	0.3063	04	5.000	0.2926
05	20.000	0.3006	06	50.000	0.2890	07	100.000	0.2996	08	200.000	0.3055

Trichlorofluoromethane (CFC 11) Average RF RSD = 4.6 **Average RF = 0.7340**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7891	02	1.000	0.6969	03	2.000	0.7375	04	5.000	0.7530
05	20.000	0.7674	06	50.000	0.7080	07	100.000	0.7178	08	200.000	0.7019

Vinyl Acetate Average RF RSD = 7.4 **Average RF = 0.07534**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.07194	03	2.000	0.06926	04	5.000	0.07091	05	20.000	0.07224
06	50.000	0.08228	07	100.000	0.07850	08	200.000	0.08228			

Vinyl Chloride Average RF RSD = 2.7 **Average RF = 0.4781**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4876	02	1.000	0.4588	03	2.000	0.4759	04	5.000	0.4785
05	20.000	0.5000	06	50.000	0.4710	07	100.000	0.4854	08	200.000	0.4672

cis-1,2-Dichloroethene Average RF RSD = 2.9 **Average RF = 0.5073**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5046	02	1.000	0.5269	03	2.000	0.4837	04	5.000	0.5042
05	20.000	0.5261	06	50.000	0.4971	07	100.000	0.5129	08	200.000	0.5029

cis-1,3-Dichloropropene Average RF RSD = 8.8 **Average RF = 0.4363**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4197	02	1.000	0.3855	03	2.000	0.3916	04	5.000	0.4116
05	20.000	0.4720	06	50.000	0.4630	07	100.000	0.4716	08	200.000	0.4751

m,p-Xylenes Average RF RSD = 5.7 **Average RF = 0.5448**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5131	02	2.000	0.4867	03	4.000	0.5378	04	10.000	0.5580
05	40.000	0.5792	06	100.000	0.5587	07	200.000	0.5735	08	400.000	0.5512

n-Butyl Acetate Average RF RSD = 8.0 **Average RF = 0.3502**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3279	03	2.000	0.3075	04	5.000	0.3315	05	20.000	0.3613
06	50.000	0.3756	07	100.000	0.3653	08	200.000	0.3822			

n-Butylbenzene Average RF RSD = 7.7 **Average RF = 1.881**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.692	02	1.000	1.717	03	2.000	1.958	04	5.000	1.989
05	20.000	2.081	06	50.000	1.909	07	100.000	1.964	08	200.000	1.737

n-Heptane Average RF RSD = 4.6 **Average RF = 0.3075**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3265	02	1.000	0.3132	03	2.000	0.3120	04	5.000	0.2963
05	20.000	0.3264	06	50.000	0.2915	07	100.000	0.2994	08	200.000	0.2950

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting**

n-Propylbenzene Average RF RSD = 7.6 Average RF = 3.020

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.002	02	1.000	2.968	03	2.000	3.195	04	5.000	3.243
05	20.000	3.234	06	50.000	3.001	07	100.000	2.987	08	200.000	2.527

o-Xylene Average RF RSD = 4.6 Average RF = 0.5559

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5120	02	1.000	0.5633	03	2.000	0.5236	04	5.000	0.5596
05	20.000	0.5829	06	50.000	0.5560	07	100.000	0.5740	08	200.000	0.5761

sec-Butylbenzene Average RF RSD = 7.2 Average RF = 2.467

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.329	02	1.000	2.417	03	2.000	2.554	04	5.000	2.693
05	20.000	2.671	06	50.000	2.428	07	100.000	2.485	08	200.000	2.157

tert-Amyl Methyl Ether Average RF RSD = 4.4 Average RF = 1.164

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.073	02	1.000	1.129	03	2.000	1.131	04	5.000	1.168
05	20.000	1.233	06	50.000	1.200	07	100.000	1.201	08	200.000	1.179

tert-Butylbenzene Average RF RSD = 4.3 Average RF = 1.773

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.737	02	1.000	1.773	03	2.000	1.823	04	5.000	1.856
05	20.000	1.857	06	50.000	1.734	07	100.000	1.773	08	200.000	1.627

trans-1,2-Dichloroethene Average RF RSD = 2.9 Average RF = 0.4546

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4714	02	1.000	0.4543	03	2.000	0.4433	04	5.000	0.4407
05	20.000	0.4725	06	50.000	0.4404	07	100.000	0.4632	08	200.000	0.4510

trans-1,3-Dichloropropene Average RF RSD = 12.9 Average RF = 0.3517

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2943	02	1.000	0.3052	03	2.000	0.3144	04	5.000	0.3292
05	20.000	0.3845	06	50.000	0.3833	07	100.000	0.3985	08	200.000	0.4039

trans-1,4-Dichloro-2-butene Average RF RSD = 13.1 Average RF = 0.1346

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1173	02	1.000	0.1068	03	2.000	0.1274	04	5.000	0.1249
05	20.000	0.1488	06	50.000	0.1511	07	100.000	0.1497	08	200.000	0.1507

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: I

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	0.89	-11.2	03	2.000	1.87	-6.5
04	5.000	4.83	-3.4	05	20.000	20.81	4.1	06	50.000	51.10	2.2
07	100.000	105.88	5.9	08	200.000	223.01	11.5				

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.7	02	1.000	0.97	-3.4	03	2.000	1.98	-1.2
04	5.000	4.98	-0.5	05	20.000	20.43	2.2	06	50.000	49.34	-1.3
07	100.000	103.32	3.3	08	200.000	203.25	1.6				

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	1.10	10.5	03	2.000	1.93	-3.7
04	5.000	5.15	3.0	05	20.000	20.56	2.8	06	50.000	49.40	-1.2
07	100.000	96.23	-3.8	08	200.000	186.37	-6.8				

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.6	02	1.000	0.95	-5.3	03	2.000	1.81	-9.7
04	5.000	5.00	0.0	05	20.000	21.22	6.1	06	50.000	50.13	0.3
07	100.000	99.52	-0.5	08	200.000	203.16	1.6				

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.4	02	1.000	1.01	1.1	03	2.000	2.00	0.0
04	5.000	5.03	0.5	05	20.000	20.41	2.1	06	50.000	47.94	-4.1
07	100.000	101.02	1.0	08	200.000	198.05	-1.0				

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.6	02	1.000	0.99	-0.9	03	2.000	2.03	1.7
04	5.000	5.10	2.0	05	20.000	21.11	5.6	06	50.000	48.75	-2.5
07	100.000	100.42	0.4	08	200.000	192.67	-3.7				

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.96	-3.5	03	2.000	2.05	2.3
04	5.000	5.11	2.3	05	20.000	20.53	2.6	06	50.000	49.15	-1.7
07	100.000	103.36	3.4	08	200.000	203.15	1.6				

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.4	02	1.000	0.91	-9.0	03	2.000	1.89	-5.7
04	5.000	5.13	2.5	05	20.000	21.07	5.4	06	50.000	49.56	-0.9
07	100.000	101.88	1.9	08	200.000	204.71	2.4				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.9	02	1.000	0.98	-2.3	03	2.000	2.00	0.2
04	5.000	5.10	1.9	05	20.000	20.17	0.8	06	50.000	47.75	-4.5
07	100.000	96.28	-3.7	08	200.000	179.15	-10.4				

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-7.0	02	1.000	1.14	13.9	03	2.000	2.11	5.3
04	5.000	5.00	-0.1	05	20.000	20.51	2.5	06	50.000	48.51	-3.0
07	100.000	95.69	-4.3	08	200.000	185.19	-7.4				

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.7	02	1.000	0.98	-2.4	03	2.000	1.95	-2.4
04	5.000	5.13	2.6	05	20.000	20.24	1.2	06	50.000	49.15	-1.7
07	100.000	97.49	-2.5	08	200.000	183.13	-8.4				

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.8	02	1.000	0.97	-2.9	03	2.000	1.98	-0.8
04	5.000	5.38	7.7	05	20.000	21.87	9.3	06	50.000	51.22	2.4
07	100.000	102.65	2.7	08	200.000	182.67	-8.7				

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.97	-2.8	03	2.000	1.58	-20.9	04	5.000	4.34	-13.3
05	20.000	21.09	5.4	06	50.000	54.02	8.0	07	100.000	113.65	13.7
08	200.000	219.74	9.9								

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.3	02	1.000	0.94	-6.3	03	2.000	1.99	-0.5
04	5.000	4.94	-1.2	05	20.000	21.19	5.9	06	50.000	51.38	2.8
07	100.000	103.39	3.4	08	200.000	208.54	4.3				

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.1	02	1.000	0.98	-1.9	03	2.000	2.13	6.4
04	5.000	5.16	3.3	05	20.000	20.53	2.7	06	50.000	47.16	-5.7
07	100.000	95.58	-4.4	08	200.000	191.07	-4.5				

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.3	02	1.000	0.97	-3.2	03	2.000	1.93	-3.5
04	5.000	5.18	3.7	05	20.000	21.00	5.0	06	50.000	49.72	-0.6
07	100.000	102.13	2.1	08	200.000	199.61	-0.2				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.5	02	1.000	1.04	4.3	03	2.000	1.97	-1.5
04	5.000	4.97	-0.7	05	20.000	20.72	3.6	06	50.000	48.43	-3.1
07	100.000	95.88	-4.1	08	200.000	192.18	-3.9				

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	50.000	50.24	0.5	01	50.000	50.69	1.4	04	50.000	50.11	0.2
02	50.000	51.17	2.3	03	50.000	50.20	0.4	08	50.000	48.80	-2.4
06	50.000	49.71	-0.6	07	50.000	49.07	-1.9				

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	0.93	-6.6	03	2.000	2.06	3.0
04	5.000	4.80	-4.0	05	20.000	21.01	5.0	06	50.000	49.23	-1.5
07	100.000	98.93	-1.1	08	200.000	197.23	-1.4				

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.4	02	1.000	0.96	-3.5	03	2.000	2.03	1.7
04	5.000	5.07	1.3	05	20.000	21.02	5.1	06	50.000	51.48	3.0
07	100.000	98.60	-1.4	08	200.000	184.97	-7.5				

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.4	02	1.000	0.96	-4.5	03	2.000	1.99	-0.7
04	5.000	5.31	6.3	05	20.000	21.82	9.1	06	50.000	50.45	0.9
07	100.000	103.05	3.1	08	200.000	186.29	-6.9				

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.97	-3.3	03	2.000	1.93	-3.3
04	5.000	5.22	4.4	05	20.000	21.37	6.9	06	50.000	49.50	-1.0
07	100.000	102.83	2.8	08	200.000	196.81	-1.6				

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.3	02	1.000	1.02	2.3	03	2.000	1.97	-1.7
04	5.000	5.08	1.7	05	20.000	20.80	4.0	06	50.000	49.33	-1.3
07	100.000	98.06	-1.9	08	200.000	196.34	-1.8				

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.4	02	1.000	0.96	-3.7	03	2.000	1.92	-3.8
04	5.000	5.00	0.0	05	20.000	20.55	2.7	06	50.000	47.54	-4.9
07	100.000	97.81	-2.2	08	200.000	187.07	-6.5				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	35.12	-12.2	04	100.000	104.49	4.5	05	400.000	418.98	4.7
06	1000.000	959.13	-4.1	07	2000.000	2,058.38	2.9	08	4000.000	4,165.10	4.1

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	42.23	-15.5	03	100.000	78.84	-21.2	04	250.000	202.55	-19.0
05	1000.000	1,050.85	5.1	06	2500.000	2,788.88	11.6	07	5000.000	5,867.93	17.4
08	10000.000	12,167.14	21.7								

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	0.90	-10.2	03	2.000	1.80	-10.2
04	5.000	4.89	-2.3	05	20.000	21.19	5.9	06	50.000	51.46	2.9
07	100.000	101.37	1.4	08	200.000	208.77	4.4				

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.9	02	1.000	1.03	2.9	03	2.000	2.06	2.8
04	5.000	5.06	1.2	05	20.000	20.64	3.2	06	50.000	46.95	-6.1
07	100.000	96.38	-3.6	08	200.000	197.61	-1.2				

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.96	-3.9	03	2.000	1.91	-4.3
04	5.000	4.80	-4.0	05	20.000	20.76	3.8	06	50.000	49.91	-0.2
07	100.000	105.49	5.5	08	200.000	207.38	3.7				

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.06	6.4	03	2.000	1.88	-6.2	04	5.000	5.37	7.5
05	20.000	20.56	2.8	06	50.000	52.24	4.5	07	100.000	97.93	-2.1
08	200.000	174.22	-12.9								

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.09	8.8	03	2.000	1.98	-0.8	04	5.000	5.13	2.5
05	20.000	20.94	4.7	06	50.000	50.79	1.6	07	100.000	97.07	-2.9
08	200.000	172.15	-13.9								

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.54	2.5	02	3.000	2.84	-5.5	03	6.000	5.81	-3.2
04	15.000	15.52	3.5	05	60.000	64.35	7.3	06	150.000	157.11	4.7
07	300.000	302.05	0.7	08	600.000	540.19	-10.0				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	1.00	-0.4	03	2.000	1.90	-5.1
04	5.000	5.05	0.9	05	20.000	21.25	6.2	06	50.000	51.68	3.4
07	100.000	102.08	2.1	08	200.000	195.09	-2.5				

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.7	02	1.000	1.02	1.9	03	2.000	1.97	-1.5
04	5.000	5.08	1.6	05	20.000	20.76	3.8	06	50.000	50.93	1.9
07	100.000	101.64	1.6	08	200.000	194.66	-2.7				

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.95	-2.7	04	5.000	5.09	1.8	05	20.000	20.35	1.7
06	50.000	50.79	1.6	07	100.000	99.04	-1.0	08	200.000	197.13	-1.4

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.1	02	1.000	0.85	-14.6	03	2.000	2.01	0.3
04	5.000	5.04	0.8	05	20.000	22.09	10.4	06	50.000	54.71	9.4
07	100.000	99.07	-0.9	08	200.000	199.45	-0.3				

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.2	02	1.000	0.93	-6.7	03	2.000	1.99	-0.5
04	5.000	5.05	1.1	05	20.000	20.58	2.9	06	50.000	49.93	-0.1
07	100.000	98.59	-1.4	08	200.000	191.05	-4.5				

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-6.3	03	2.000	1.86	-7.1	04	5.000	4.78	-4.3
05	20.000	20.79	4.0	06	50.000	52.70	5.4	07	100.000	101.53	1.5
08	200.000	213.74	6.9								

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	0.95	-5.0	03	2.000	2.10	5.2
04	5.000	5.39	7.9	05	20.000	21.04	5.2	06	50.000	49.16	-1.7
07	100.000	99.77	-0.2	08	200.000	182.32	-8.8				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.77	-11.4	04	5.000	4.38	-12.4	05	20.000	20.62	3.1
06	50.000	53.96	7.9	07	100.000	103.46	3.5	08	200.000	218.80	9.4

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	20.26	1.3	03	40.000	36.19	-9.5	04	100.000	86.55	-13.5
05	400.000	402.89	0.7	06	1000.000	1,035.32	3.5	07	2000.000	2,147.81	7.4
08	4000.000	4,402.14	10.1								

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.01	-9.9	02	20.000	18.28	-8.6	03	40.000	35.99	-10.0
04	100.000	98.27	-1.7	05	400.000	434.45	8.6	06	1000.000	1,056.46	5.6
07	2000.000	2,171.61	8.6	08	4000.000	4,298.58	7.5				

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	1.87	-6.5	03	4.000	3.79	-5.3	04	10.000	8.60	-14.0
05	40.000	37.61	-6.0	06	100.000	105.09	5.1	07	200.000	221.31	10.7
08	400.000	464.07	16.0								

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	17.73	-11.3	03	40.000	30.98	-22.6	04	100.000	95.25	-4.8
05	400.000	413.14	3.3	06	1000.000	1,064.76	6.5	07	2000.000	2,281.69	14.1
08	4000.000	4,592.40	14.8								

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.91	-9.2	02	2.000	2.02	1.2	03	4.000	4.10	2.4
04	10.000	10.39	3.9	05	40.000	42.72	6.8	06	100.000	106.06	6.1
07	200.000	203.02	1.5	08	400.000	349.39	-12.7				

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	0.95	-5.3	03	2.000	1.93	-3.3
04	5.000	4.83	-3.3	05	20.000	20.80	4.0	06	50.000	50.85	1.7
07	100.000	100.73	0.7	08	200.000	197.96	-1.0				

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.3	02	1.000	0.99	-0.6	03	2.000	1.97	-1.4
04	5.000	5.05	1.0	05	20.000	21.22	6.1	06	50.000	50.37	0.7
07	100.000	100.89	0.9	08	200.000	182.08	-9.0				

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.5	02	1.000	0.94	-6.2	03	2.000	1.83	-8.4
04	5.000	4.78	-4.3	05	20.000	20.35	1.8	06	50.000	49.26	-1.5
07	100.000	100.49	0.5	08	200.000	207.26	3.6				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.4	02	1.000	0.98	-2.2	03	2.000	2.00	0.0
04	5.000	5.31	6.3	05	20.000	21.30	6.5	06	50.000	50.29	0.6
07	100.000	97.29	-2.7	08	200.000	180.14	-9.9				

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.57	1.1	03	50.000	48.55	-2.9	08	50.000	51.50	3.0
07	50.000	50.78	1.6	04	50.000	49.74	-0.5	05	50.000	49.96	-0.1
02	50.000	49.40	-1.2	01	50.000	49.50	-1.0				

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.8	02	1.000	0.99	-1.2	03	2.000	2.12	5.9
04	5.000	5.50	10.1	05	20.000	21.77	8.8	06	50.000	49.53	-0.9
07	100.000	100.78	0.8	08	200.000	176.70	-11.6				

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.94	-5.7	03	2.000	1.97	-1.3
04	5.000	5.34	6.9	05	20.000	22.04	10.2	06	50.000	50.51	1.0
07	100.000	103.87	3.9	08	200.000	184.01	-8.0				

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.85	-7.3	04	5.000	4.63	-7.3	05	20.000	19.96	-0.2
06	50.000	52.83	5.7	07	100.000	103.54	3.5	08	200.000	211.20	5.6

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.47	9.3	05	20.000	20.11	0.6	06	50.000	47.31	-5.4
07	100.000	100.57	0.6	08	200.000	189.81	-5.1				

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	7.57	-24.3	04	25.000	25.55	2.2	05	100.000	113.23	13.2
06	250.000	244.00	-2.4	07	500.000	549.38	9.9	08	1000.000	1,014.22	1.4

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	5.14	2.8	03	10.000	10.02	0.2	04	25.000	21.92	-12.3
05	100.000	100.21	0.2	06	250.000	243.13	-2.7	07	500.000	528.00	5.6
08	1000.000	986.83	-1.3								

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.42	-3.1	02	5.000	5.05	1.0	03	10.000	9.02	-9.8
04	25.000	24.98	-0.1	05	100.000	107.48	7.5	06	250.000	256.05	2.4
07	500.000	514.53	2.9	08	1000.000	991.85	-0.8				

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	0.99	-1.1	03	2.000	1.99	-0.5
04	5.000	5.09	1.9	05	20.000	21.13	5.6	06	50.000	49.18	-1.6
07	100.000	99.46	-0.5	08	200.000	194.13	-2.9				

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.1	02	1.000	1.01	0.8	03	2.000	2.10	4.8
04	5.000	5.20	4.1	05	20.000	20.28	1.4	06	50.000	47.78	-4.4
07	100.000	98.85	-1.1	08	200.000	195.22	-2.4				

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.8	02	1.000	1.01	1.1	03	2.000	2.05	2.5
04	5.000	5.15	3.0	05	20.000	19.83	-0.9	06	50.000	46.72	-6.6
07	100.000	93.36	-6.6	08	200.000	181.24	-9.4				

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.2	02	1.000	0.91	-8.5	03	2.000	1.91	-4.3
04	5.000	4.94	-1.1	05	20.000	21.21	6.0	06	50.000	50.92	1.8
07	100.000	104.18	4.2	08	200.000	212.04	6.0				

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.1	02	1.000	0.94	-5.9	03	2.000	1.60	-19.8
04	5.000	4.75	-4.9	05	20.000	21.70	8.5	06	50.000	55.02	10.0
07	100.000	115.90	15.9	08	200.000	236.66	18.3				

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	1.08	8.0	03	2.000	2.15	7.3
04	5.000	4.77	-4.7	05	20.000	19.09	-4.5	06	50.000	45.43	-9.1
07	100.000	96.11	-3.9	08	200.000	197.68	-1.2				

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	0.97	-2.6	03	2.000	1.99	-0.6
04	5.000	4.96	-0.9	05	20.000	21.31	6.6	06	50.000	52.12	4.2
07	100.000	96.23	-3.8	08	200.000	184.69	-7.7				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.9	02	1.000	0.94	-6.3	03	2.000	1.94	-3.1
04	5.000	4.62	-7.7	05	20.000	19.97	-0.1	06	50.000	47.92	-4.2
07	100.000	102.86	2.9	08	200.000	211.15	5.6				

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.4	02	1.000	0.96	-4.2	03	2.000	2.04	2.1
04	5.000	5.06	1.3	05	20.000	20.61	3.0	06	50.000	48.45	-3.1
07	100.000	99.14	-0.9	08	200.000	196.84	-1.6				

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.3	02	1.000	0.98	-1.8	03	2.000	2.12	6.0
04	5.000	4.57	-8.7	05	20.000	20.71	3.6	06	50.000	47.20	-5.6
07	100.000	95.98	-4.0	08	200.000	186.51	-6.7				

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.7	02	1.000	0.99	-1.4	03	2.000	2.05	2.7
04	5.000	4.95	-1.0	05	20.000	20.16	0.8	06	50.000	47.09	-5.8
07	100.000	98.76	-1.2	08	200.000	192.36	-3.8				

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.8	02	1.000	0.97	-2.9	03	2.000	2.03	1.5
04	5.000	4.95	-0.9	05	20.000	20.96	4.8	06	50.000	49.21	-1.6
07	100.000	101.97	2.0	08	200.000	201.99	1.0				

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	1.02	1.8	03	2.000	2.06	2.9
04	5.000	5.15	3.0	05	20.000	20.37	1.8	06	50.000	46.44	-7.1
07	100.000	93.29	-6.7	08	200.000	193.68	-3.2				

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.80	-2.0	02	20.000	21.63	8.2	03	40.000	36.06	-9.9
04	100.000	100.61	0.6	05	400.000	432.04	8.0	06	1000.000	987.46	-1.3
07	2000.000	1,964.96	-1.8	08	4000.000	3,921.50	-2.0				

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-15.9	02	1.000	0.84	-15.6	03	2.000	1.87	-6.6
04	5.000	4.90	-2.0	05	20.000	21.34	6.7	06	50.000	53.71	7.4
07	100.000	111.12	11.1	08	200.000	229.69	14.8				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	50.000	49.49	-1.0	04	50.000	50.59	1.2	05	50.000	50.53	1.1
03	50.000	49.68	-0.6	07	50.000	50.04	0.1	06	50.000	49.90	-0.2
02	50.000	49.59	-0.8	08	50.000	50.18	0.4				

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.7	02	1.000	1.03	3.3	03	2.000	1.88	-6.0
04	5.000	4.86	-2.9	05	20.000	20.44	2.2	06	50.000	49.91	-0.2
07	100.000	99.77	-0.2	08	200.000	204.16	2.1				

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.5	02	1.000	0.94	-6.2	03	2.000	1.92	-4.1
04	5.000	4.46	-10.8	05	20.000	21.53	7.7	06	50.000	50.65	1.3
07	100.000	103.38	3.4	08	200.000	196.42	-1.8				

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.8	02	1.000	0.96	-3.6	03	2.000	2.10	5.2
04	5.000	5.15	3.0	05	20.000	20.65	3.2	06	50.000	47.66	-4.7
07	100.000	96.32	-3.7	08	200.000	191.44	-4.3				

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	7.0	02	1.000	1.07	7.2	03	2.000	2.05	2.4
04	5.000	5.00	0.1	05	20.000	20.07	0.3	06	50.000	46.73	-6.5
07	100.000	96.09	-3.9	08	200.000	187.03	-6.5				

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.1	02	1.000	1.06	6.0	03	2.000	2.00	-0.1
04	5.000	4.79	-4.2	05	20.000	20.40	2.0	06	50.000	47.40	-5.2
07	100.000	96.03	-4.0	08	200.000	184.99	-7.5				

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.9	02	1.000	0.97	-3.4	03	2.000	1.99	-0.7
04	5.000	5.13	2.6	05	20.000	21.50	7.5	06	50.000	50.17	0.3
07	100.000	97.38	-2.6	08	200.000	182.91	-8.5				

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.6	02	1.000	0.91	-9.3	03	2.000	1.67	-16.7
04	5.000	4.68	-6.5	05	20.000	22.25	11.3	06	50.000	56.19	12.4
07	100.000	115.22	15.2	08	200.000	232.41	16.2				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.5	02	1.000	0.96	-3.8	03	2.000	1.92	-4.2
04	5.000	5.17	3.4	05	20.000	21.53	7.6	06	50.000	51.19	2.4
07	100.000	100.82	0.8	08	200.000	194.19	-2.9				

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.3	02	1.000	0.94	-6.0	03	2.000	1.92	-4.0
04	5.000	5.14	2.8	05	20.000	20.67	3.4	06	50.000	49.88	-0.2
07	100.000	103.42	3.4	08	200.000	207.95	4.0				

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.2	02	1.000	1.01	0.7	03	2.000	1.97	-1.7
04	5.000	5.16	3.3	05	20.000	21.51	7.6	06	50.000	48.95	-2.1
07	100.000	96.30	-3.7	08	200.000	181.73	-9.1				

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.79	-20.7	03	2.000	1.70	-15.0	04	5.000	4.34	-13.2
05	20.000	22.28	11.4	06	50.000	58.48	17.0	07	100.000	111.66	11.7
08	200.000	217.63	8.8								

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.1	02	1.000	0.97	-3.3	03	2.000	2.04	2.1
04	5.000	5.34	6.8	05	20.000	21.58	7.9	06	50.000	50.35	0.7
07	100.000	100.68	0.7	08	200.000	176.21	-11.9				

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.78	-22.3	03	2.000	2.16	7.8	04	5.000	4.87	-2.7
05	20.000	21.02	5.1	06	50.000	52.02	4.0	07	100.000	104.67	4.7
08	200.000	206.57	3.3								

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.99	-0.8	03	2.000	1.86	-7.1	04	5.000	5.62	12.5
05	20.000	20.07	0.4	06	50.000	49.71	-0.6	07	100.000	98.72	-1.3
08	200.000	193.74	-3.1								

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.03	2.8	03	2.000	1.63	-18.6
04	5.000	4.62	-7.7	05	20.000	20.83	4.1	06	50.000	52.44	4.9
07	100.000	106.30	6.3	08	200.000	217.30	8.7				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	1.00	0.0	03	2.000	1.96	-1.9
04	5.000	5.15	3.0	05	20.000	20.75	3.7	06	50.000	48.54	-2.9
07	100.000	98.35	-1.7	08	200.000	190.27	-4.9				

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.1	02	1.000	0.99	-1.2	03	2.000	2.07	3.4
04	5.000	5.08	1.6	05	20.000	20.46	2.3	06	50.000	46.09	-7.8
07	100.000	95.15	-4.8	08	200.000	195.02	-2.5				

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.4	02	1.000	0.91	-9.0	03	2.000	1.94	-2.8
04	5.000	5.04	0.8	05	20.000	21.59	7.9	06	50.000	53.18	6.4
07	100.000	105.76	5.8	08	200.000	188.67	-5.7				

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.32	-7.0	02	5.000	4.49	-10.1	03	10.000	9.00	-10.0
04	25.000	23.60	-5.6	05	100.000	109.63	9.6	06	250.000	268.54	7.4
07	500.000	548.49	9.7	08	1000.000	1,059.97	6.0				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.1	02	1.000	0.87	-13.3	03	2.000	1.82	-9.0
04	5.000	4.99	-0.2	05	20.000	21.98	9.9	06	50.000	53.57	7.1
07	100.000	109.72	9.7	08	200.000	213.85	6.9				

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	15.7	02	1.000	0.97	-3.4	03	2.000	2.03	1.6
04	5.000	4.67	-6.5	05	20.000	20.09	0.5	06	50.000	46.76	-6.5
07	100.000	97.11	-2.9	08	200.000	203.04	1.5				

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.08	4.2	04	5.000	5.08	1.6	05	20.000	20.78	3.9
06	50.000	49.74	-0.5	07	100.000	95.07	-4.9	08	200.000	191.44	-4.3

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.0	02	1.000	1.00	0.1	03	2.000	2.07	3.3
04	5.000	5.15	3.0	05	20.000	21.05	5.3	06	50.000	49.96	-0.1
07	100.000	99.46	-0.5	08	200.000	187.96	-6.0				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	50.000	49.50	-1.0	06	50.000	50.17	0.3	08	50.000	50.19	0.4
07	50.000	49.84	-0.3	05	50.000	50.14	0.3	03	50.000	50.08	0.2
02	50.000	50.18	0.4	04	50.000	49.89	-0.2				

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.0	02	1.000	1.00	0.4	03	2.000	2.05	2.7
04	5.000	4.91	-1.9	05	20.000	20.16	0.8	06	50.000	48.46	-3.1
07	100.000	100.49	0.5	08	200.000	204.93	2.5				

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	0.95	-5.0	03	2.000	2.01	0.5
04	5.000	5.13	2.6	05	20.000	20.91	4.6	06	50.000	48.23	-3.5
07	100.000	97.79	-2.2	08	200.000	191.27	-4.4				

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.95	-4.5	03	2.000	1.84	-8.1	04	5.000	4.71	-5.9
05	20.000	19.18	-4.1	06	50.000	54.60	9.2	07	100.000	104.19	4.2
08	200.000	218.41	9.2								

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.0	02	1.000	0.96	-4.0	03	2.000	1.99	-0.4
04	5.000	5.00	0.1	05	20.000	20.92	4.6	06	50.000	49.26	-1.5
07	100.000	101.54	1.5	08	200.000	195.46	-2.3				

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.04	3.9	03	2.000	1.91	-4.7
04	5.000	4.97	-0.6	05	20.000	20.74	3.7	06	50.000	49.00	-2.0
07	100.000	101.10	1.1	08	200.000	198.26	-0.9				

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.8	02	1.000	0.88	-11.6	03	2.000	1.80	-10.2
04	5.000	4.72	-5.7	05	20.000	21.64	8.2	06	50.000	53.07	6.1
07	100.000	108.11	8.1	08	200.000	217.79	8.9				

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.94	-5.8	02	2.000	1.79	-10.7	03	4.000	3.95	-1.3
04	10.000	10.24	2.4	05	40.000	42.53	6.3	06	100.000	102.56	2.6
07	200.000	210.55	5.3	08	400.000	404.74	1.2				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-6.4	03	2.000	1.76	-12.2	04	5.000	4.73	-5.3
05	20.000	20.64	3.2	06	50.000	53.63	7.3	07	100.000	104.33	4.3
08	200.000	218.28	9.1								

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.1	02	1.000	0.91	-8.7	03	2.000	2.08	4.1
04	5.000	5.29	5.8	05	20.000	22.12	10.6	06	50.000	50.75	1.5
07	100.000	104.42	4.4	08	200.000	184.71	-7.6				

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	1.02	1.8	03	2.000	2.03	1.5
04	5.000	4.82	-3.6	05	20.000	21.23	6.1	06	50.000	47.40	-5.2
07	100.000	97.34	-2.7	08	200.000	191.82	-4.1				

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.98	-1.7	03	2.000	2.12	5.8
04	5.000	5.37	7.4	05	20.000	21.42	7.1	06	50.000	49.69	-0.6
07	100.000	98.92	-1.1	08	200.000	167.40	-16.3				

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.9	02	1.000	1.01	1.3	03	2.000	1.88	-5.8
04	5.000	5.03	0.7	05	20.000	20.97	4.8	06	50.000	50.01	0.0
07	100.000	103.24	3.2	08	200.000	207.27	3.6				

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.6	02	1.000	0.98	-2.0	03	2.000	2.07	3.5
04	5.000	5.46	9.2	05	20.000	21.65	8.3	06	50.000	49.21	-1.6
07	100.000	100.74	0.7	08	200.000	174.91	-12.5				

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.9	02	1.000	0.97	-3.0	03	2.000	1.94	-2.8
04	5.000	5.02	0.3	05	20.000	21.17	5.9	06	50.000	51.52	3.0
07	100.000	103.19	3.2	08	200.000	202.60	1.3				

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.0	02	1.000	1.00	0.0	03	2.000	2.06	2.8
04	5.000	5.23	4.7	05	20.000	20.95	4.8	06	50.000	48.91	-2.2
07	100.000	100.05	0.1	08	200.000	183.63	-8.2				

00392

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	1.00	-0.1	03	2.000	1.95	-2.5
04	5.000	4.85	-3.1	05	20.000	20.79	3.9	06	50.000	48.44	-3.1
07	100.000	101.89	1.9	08	200.000	198.42	-0.8				

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.3	02	1.000	0.87	-13.2	03	2.000	1.79	-10.6
04	5.000	4.68	-6.4	05	20.000	21.87	9.3	06	50.000	54.50	9.0
07	100.000	113.32	13.3	08	200.000	229.69	14.8				

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-12.8	02	1.000	0.79	-20.6	03	2.000	1.89	-5.3
04	5.000	4.64	-7.2	05	20.000	22.12	10.6	06	50.000	56.13	12.3
07	100.000	111.21	11.2	08	200.000	223.88	11.9				

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	911333	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1438759	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1294400	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	612947	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	412193	49.49	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.98%				
48) surr1,1,2-dichloroetha	4.664	65	480981	50.69	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 101.38%				
65) SURR3,Toluene-d8	7.322	98	1732405	49.50	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.00%				
70) SURR2,BFB	9.791	95	646398	49.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.00%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	5982	0.55	ppb		93
3) Chloromethane	1.262	50	4510	0.48	ppb		84
4) Vinyl Chloride	1.323	62	4444	0.51	ppb		74
5) Bromomethane	1.512	94	2838	0.54	ppb		85
6) Chloroethane	1.567	64	3048m	0.56	ppb		
7) Freon 21	1.664	67	6886	0.52	ppb		94
8) Trichlorofluoromethane	1.719	101	7191	0.54	ppb		85
9) Diethyl Ether	1.884	59	3724	0.57	ppb		89
10) Freon 123a	1.866	67	5112	0.52	ppb		94
11) Freon 123	1.902	83	5657	0.50	ppb		98
13) 1,1-Diclethene	2.036	96	3078	0.47	ppb	#	80
14) Freon 113	2.036	101	3632	0.50	ppb		84
16) 2-Propanol	2.116	45	3340m	11.20	ppb		
17) Iodomethane	2.146	142	3362	0.38	ppb		92
18) Carbon Disulfide	2.207	76	12036	0.52	ppb		99
19) Acetonitrile	2.231	40	1554	5.26	ppb	#	32
20) Allyl Chloride	2.274	76	2319	0.51	ppb	#	84
21) Methyl Acetate	2.274	43	2240	0.55	ppb		93
22) Methylene Chloride	2.359	84	4634	0.53	ppb	#	76
23) TBA	2.408	59	4551	9.01	ppb		73
24) Acrylonitrile	2.530	53	4907	2.42	ppb	#	76
25) Methyl-t-Butyl Ether	2.579	73	11002	0.52	ppb		96
26) trans-1,2-Dichloroethene	2.585	96	4296	0.52	ppb	#	89
28) 1,1-Diclethane	2.939	63	7507	0.49	ppb		88
29) Vinyl Acetate	2.981	86	707	0.51	ppb	#	1
30) DIPE	3.018	45	15755	0.52	ppb		78
31) 2-Chloro-1,3-Butadiene	3.042	53	6300	0.47	ppb		99
32) ETBE	3.402	59	12134	0.48	ppb		89
33) 2,2-Dichloropropane	3.554	77	6083	0.50	ppb		92
34) cis-1,2-Dichloroethene	3.548	96	4599	0.50	ppb		92
36) Propionitrile	3.609	54	1700m	2.39	ppb		
37) Bromochloromethane	3.829	130	3015	0.58	ppb	#	73
38) Methacrylonitrile	3.810	67	1375	0.58	ppb	#	74
39) Tetrahydrofuran	3.932	42	1275	0.72	ppb		97
40) Chloroform	3.938	83	8290	0.55	ppb		93

KR 3/13/14

W031214.M Thu Mar 13 10:12:06 2014 Page: 1

00394

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) 1,1,1-Trichloroethane	4.207	97	6437	0.50	ppb	#	1
42) TAME	5.036	73	9777	0.46	ppb		89
44) Cyclohexane	4.310	41	4183	0.54	ppb		90
46) Carbontetrachloride	4.463	121	1948m	0.56	ppb		
47) 1,1-Dichloropropene	4.463	75	5496m	0.52	ppb		
49) Benzene	4.780	78	17569m	0.50	ppb		
50) 1,2-Dichloroethane	4.792	62	5674	0.53	ppb		88
52) n-Heptane	5.328	43	4698	0.53	ppb		96
53) 1-Butanol	5.792	56	3060m	22.75	ppb		
54) Trichloroethene	5.828	130	4205m	0.49	ppb		
55) Methylcyclohexane	6.109	55	5031	0.55	ppb		94
56) 1,2-Diclpropane	6.121	63	4824	0.53	ppb		74
57) Dibromomethane	6.261	93	2191	0.51	ppb	#	84
59) Methyl Methacrylate	6.340	69	2120m	0.50	ppb		
60) Bromodichloromethane	6.474	83	5069	0.48	ppb		92
62) 2-Chloroethylvinyl Ether	6.889	63	1661m	0.41	ppb		
63) cis-1,3-Dichloropropene	7.029	75	6038	0.48	ppb		88
66) Toluene	7.395	91	17343	0.47	ppb		88
67) trans-1,3-Dichloropropene	7.639	75	4234	0.42	ppb	#	48
68) Ethyl Methacrylate	7.779	69	3186	0.39	ppb		99
69) 1,1,2-Trichloroethane	7.810	97	3438	0.54	ppb		91
72) Tetrachloroethene	7.962	164	3868	0.58	ppb		88
74) 1,3-Dichloropropane	7.974	76	5753	0.49	ppb		90
75) Dibromochloromethane	8.188	129	2817	0.42	ppb		89
76) N-Butyl Acetate	8.255	43	3648m	0.40	ppb		
77) 1,2-Dibromoethane	8.291	107	2743	0.46	ppb		94
78) Chlorobenzene	8.773	112	11641	0.52	ppb		92
79) 3-CBTF	8.785	180	6381	0.57	ppb	#	93
80) 4-CBTF	8.840	180	5394	0.54	ppb		89
81) 1,1,1,2-Tetrachloroethane	8.852	131	3861	0.49	ppb		97
82) Ethylbenzene	8.889	106	5801	0.48	ppb		91
83) (m+p)Xylene	8.998	106	13282	0.94	ppb		98
84) o-Xylene	9.346	106	6627	0.46	ppb	#	70
85) Styrene	9.358	104	10222	0.44	ppb		98
87) Bromoform	9.498	173	1355	0.39	ppb		78
88) 2-CBTF	9.578	180	5578	0.55	ppb	#	90
89) Isopropylbenzene	9.675	105	15336	0.48	ppb		98
90) Cyclohexanone	9.724	55	4820	9.81	ppb		81
91) trans-1,4-Dichloro-2-B...	9.962	53	719	0.44	ppb	#	58
92) 1,1,2,2-Tetrachloroethane	9.913	83	3480	0.50	ppb		84
93) Bromobenzene	9.913	156	4370	0.48	ppb		93
94) 1,2,3-Trichloropropane	9.943	110	977	0.47	ppb	#	55
95) n-Propylbenzene	10.023	91	18398	0.50	ppb		95
96) 2-Chlorotoluene	10.084	91	11329	0.49	ppb		92
97) 3-Chlorotoluene	10.132	91	12265	0.51	ppb		98
98) 4-Chlorotoluene	10.175	91	12083	0.44	ppb		91
99) 1,3,5-Trimethylbenzene	10.169	105	11958	0.46	ppb		96
100) tert-Butylbenzene	10.443	119	10646	0.49	ppb		98
101) 1,2,4-Trimethylbenzene	10.480	105	11976	0.45	ppb		81
102) 3,4-DCBTF	10.535	214	4021	0.53	ppb	#	89
103) sec-Butylbenzene	10.620	105	14277	0.47	ppb		96
104) p-Isopropyltoluene	10.742	119	11898	0.47	ppb		78

W031214.M Thu Mar 13 10:12:06 2014 Page: 2

00395

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
105) 1,3-Dclbenz	10.699	146	7301	0.48	ppb		80
106) 1,4-Dclbenz	10.766	146	9668	0.59	ppb		95
107) 2,4-DCBTF	10.821	214	3132	0.48	ppb	#	74
108) 2,5-DCBTF	10.864	214	3505	0.47	ppb		90
109) n-Butylbenzene	11.071	91	10369	0.45	ppb		96
110) 1,2-Dclbenz	11.065	146	7143	0.48	ppb		99
111) 1,2-Dibromo-3-chloropr...	11.626	157	705	0.66	ppb	#	83
112) Trielution Dichlorotol...	11.736	125	17965	1.54	ppb		99
113) 1,3,5 Trichlorobenzene	11.778	180	5167	0.51	ppb		95
114) Coelution Dichlorotoluene	11.998	125	11240	0.91	ppb		97
115) 1,2,4-Tcbenzene	12.162	180	5139	0.57	ppb		96
116) Hexachlorobt	12.266	225	2074	0.53	ppb		95
117) Naphthalen	12.303	128	7858	0.48	ppb		93
118) 1,2,3-Tclbenzene	12.443	180	4364	0.59	ppb		80
119) 2,4,5-Trichlorotolene	12.851	159	2375m	0.49	ppb		
120) 2,3,6-Trichlorotoluene	12.912	159	2541	0.57	ppb	#	87

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

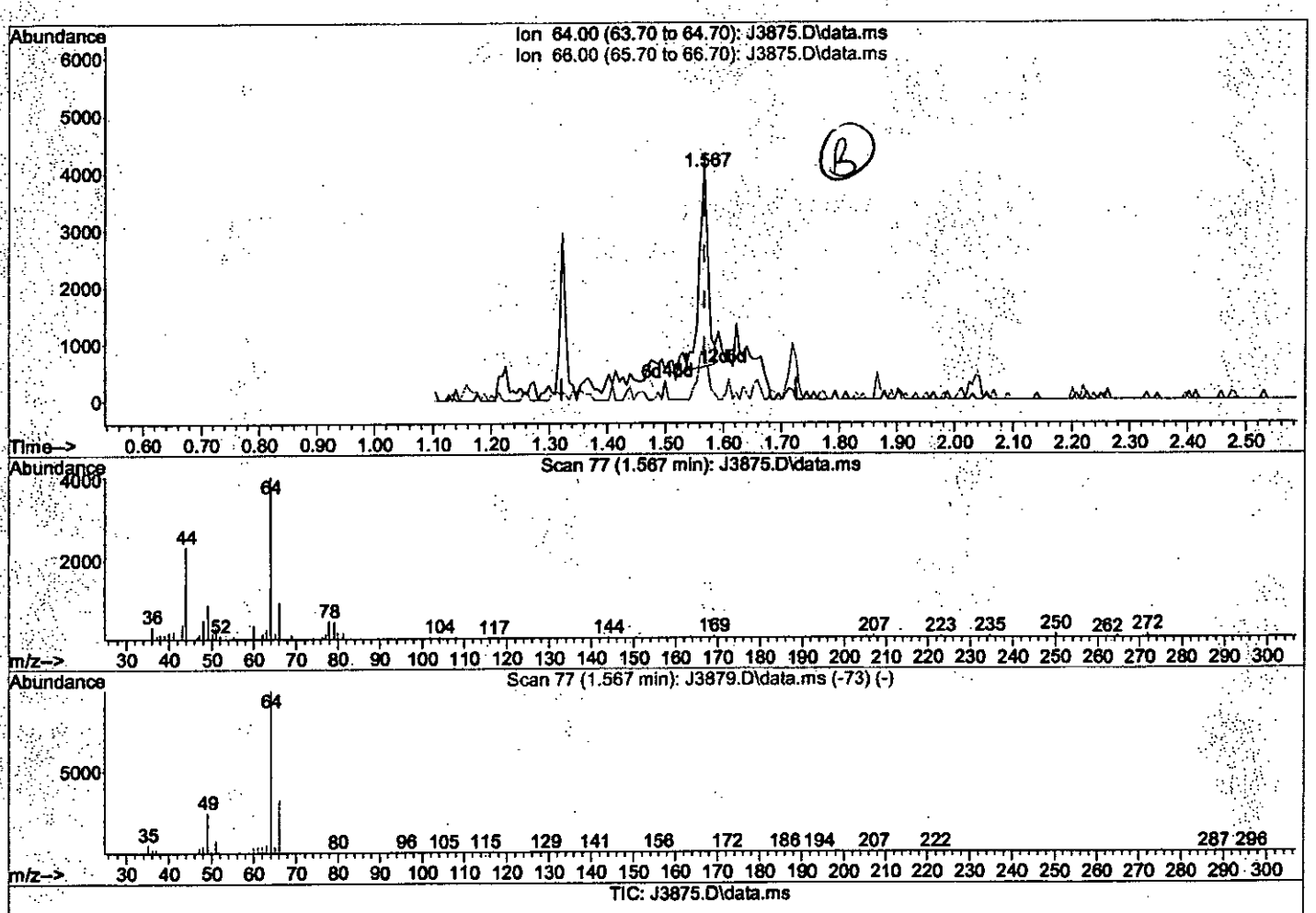
W031214.M Thu Mar 13 10:12:06 2014 Page: 3

C0396

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(6) Chloroethane (P)

1.567min (+0.000) 0.66 ppb

response 3602

Ion	Exp%	Act%
64.00	100	100
66.00	32.20	24.20
0.00	0.00	0.00
0.00	0.00	0.00

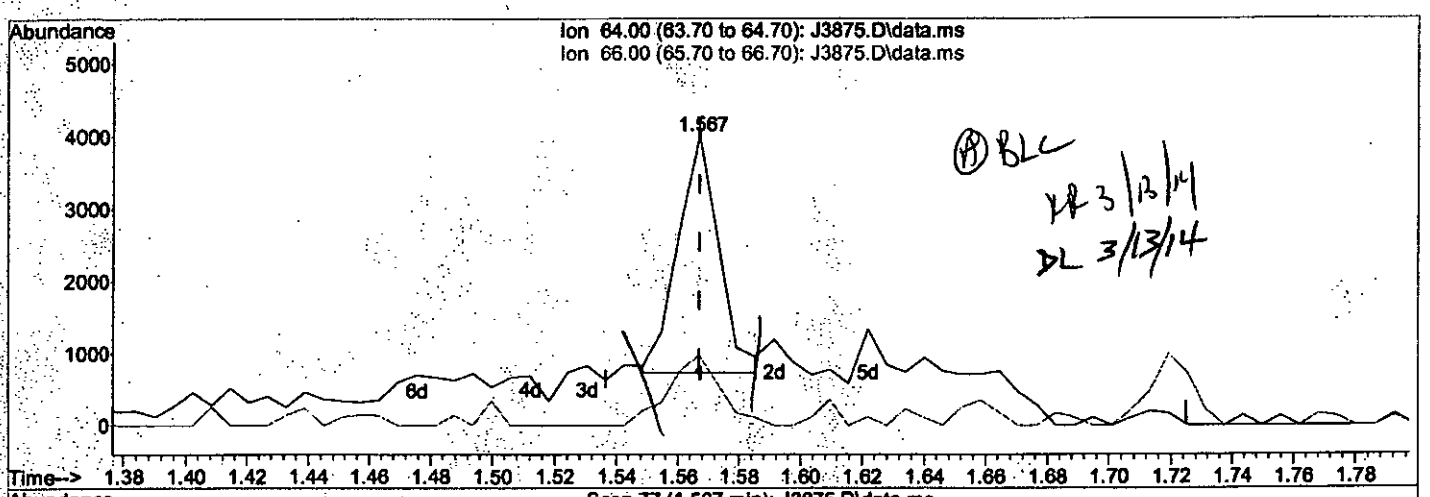
W031214.M Thu Mar 13 10:04:32 2014 Page: 1

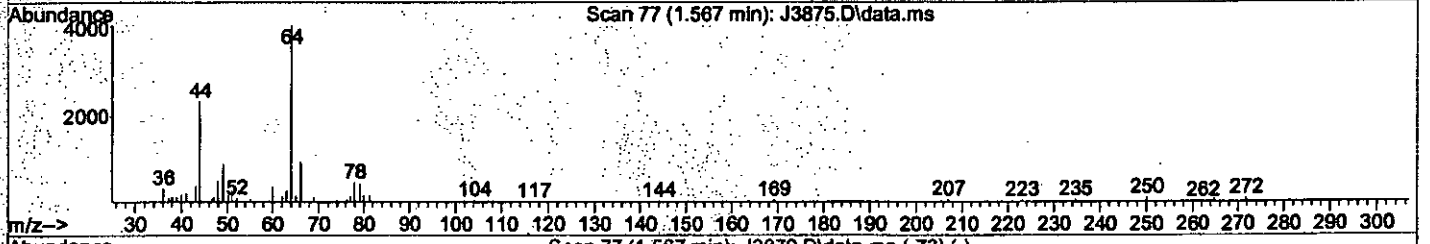
00397

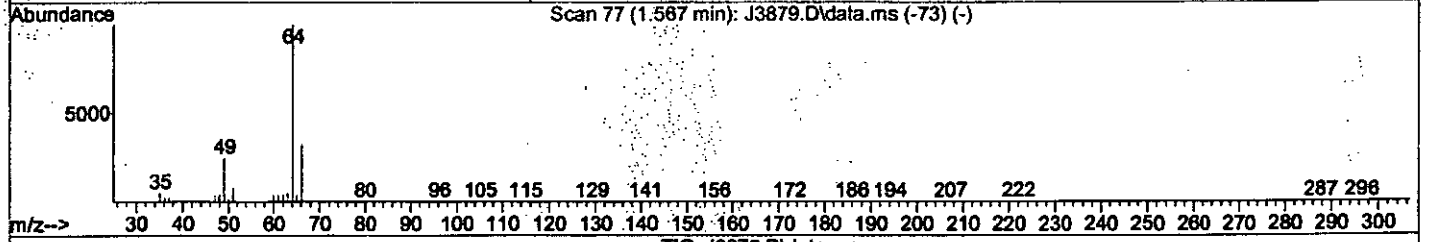
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(6) Chloroethane (P)

1.567min (+0.000) 0.56 ppb m

response 3048

Ion	Exp%	Act%
64.00	100	100
66.00	32.20	24.20
0.00	0.00	0.00
0.00	0.00	0.00

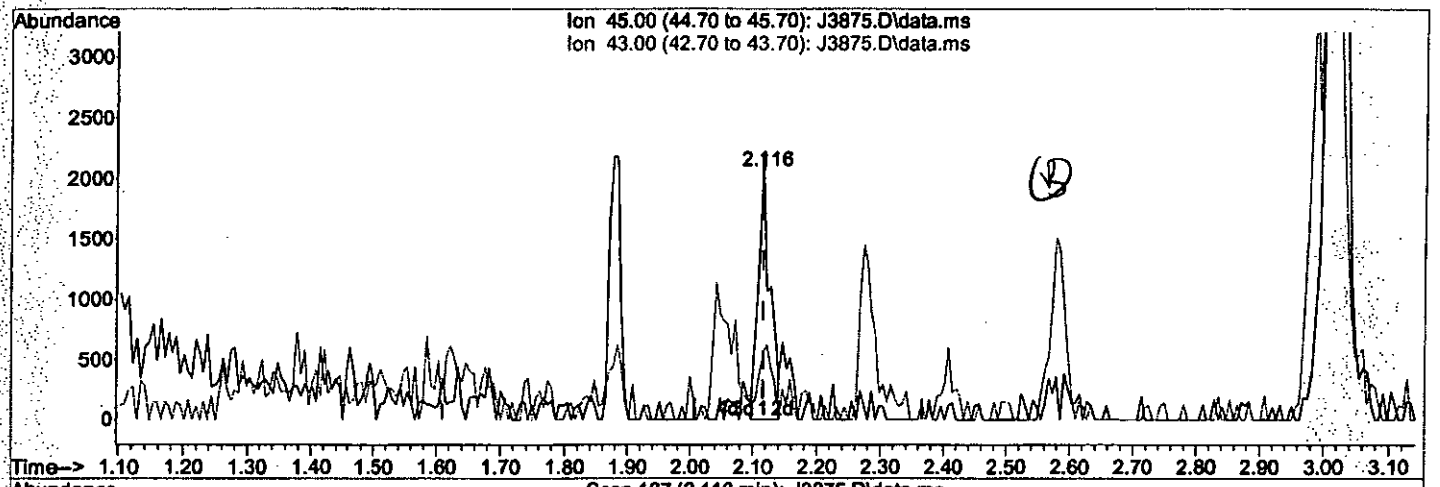
W031214.M Thu Mar 13 10:04:50 2014 Page: 1

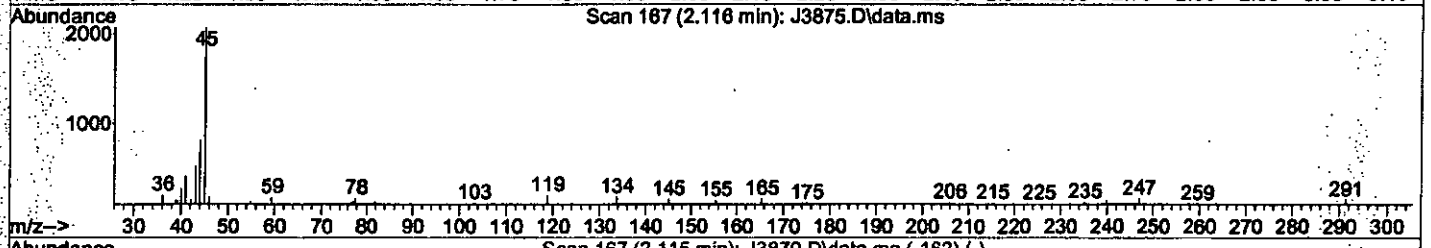
00393

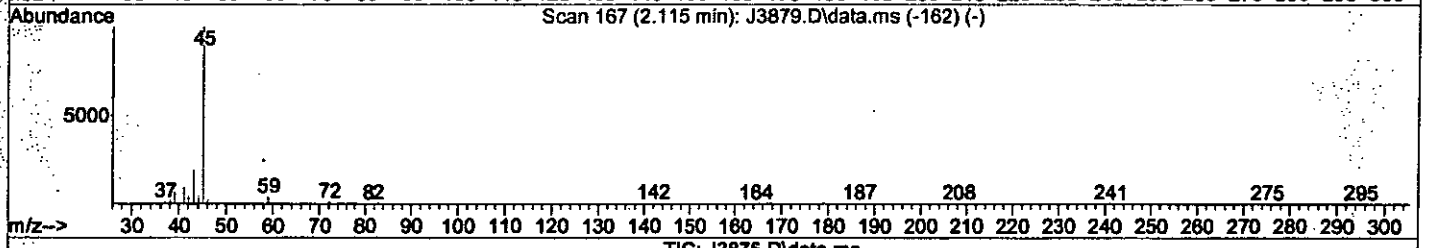
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(16) 2-Propanol

2.116min (+0.000) 8.89 ppb

response 2651

Ion	Exp%	Act%
45.00	100	100
43.00	21.30	25.30
0.00	0.00	0.00
0.00	0.00	0.00

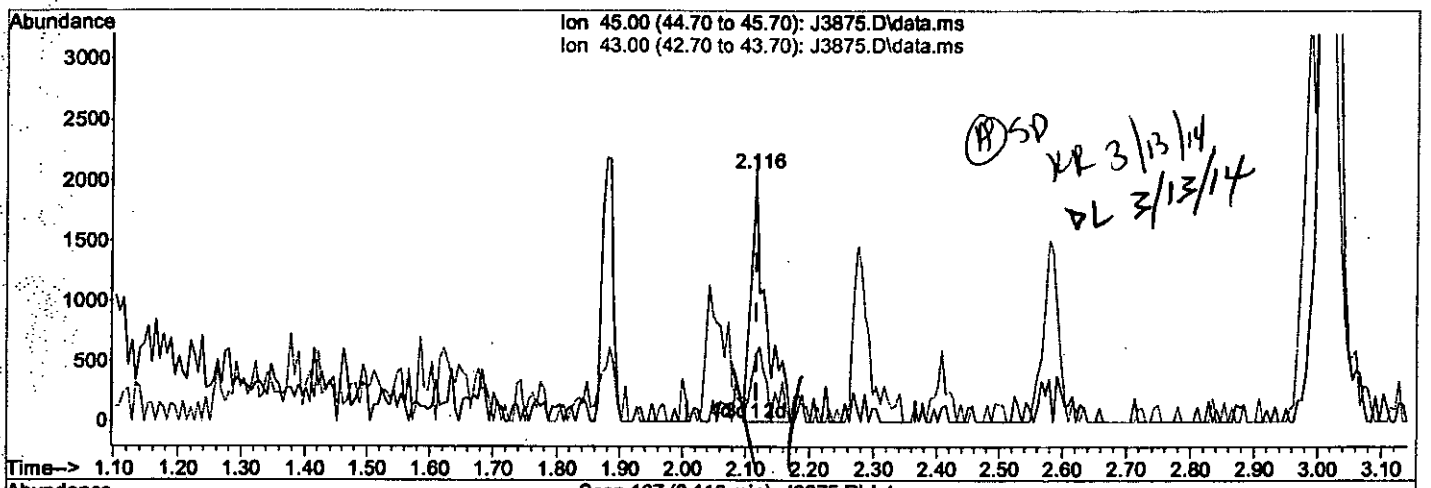
W031214.M Thu Mar 13 10:05:14 2014 Page: 1

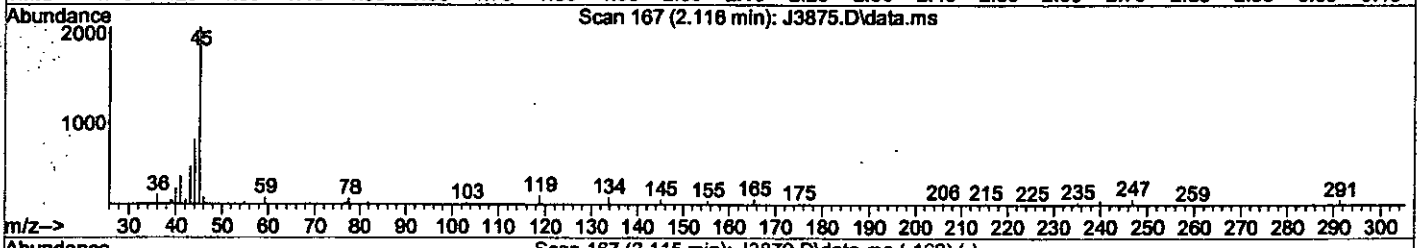
00399

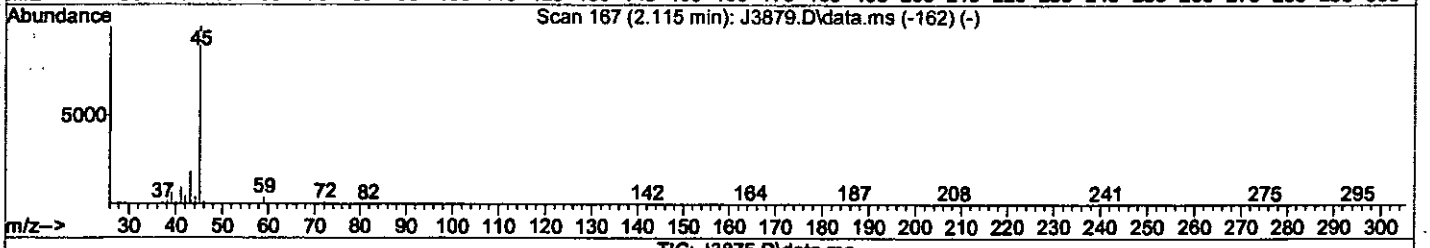
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(16) 2-Propanol

2.116min (+0.000) 11.20 ppb m

response 3340

Ion	Exp%	Act%
45.00	100	100
43.00	21.30	25.30
0.00	0.00	0.00
0.00	0.00	0.00

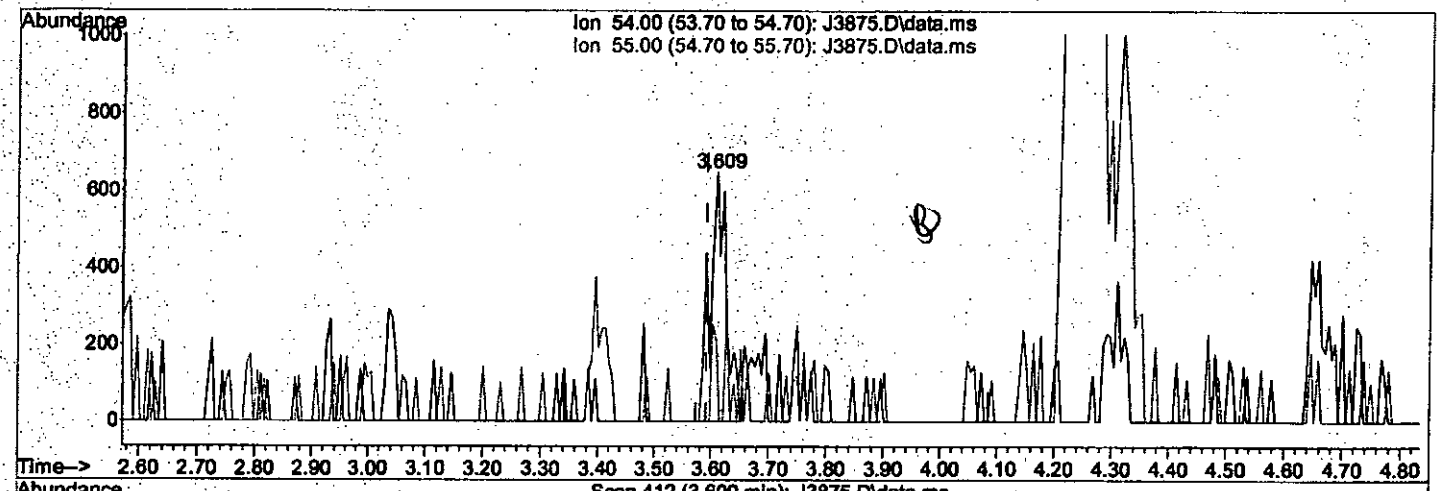
W031214.M Thu Mar 13 10:05:23 2014 Page: 1

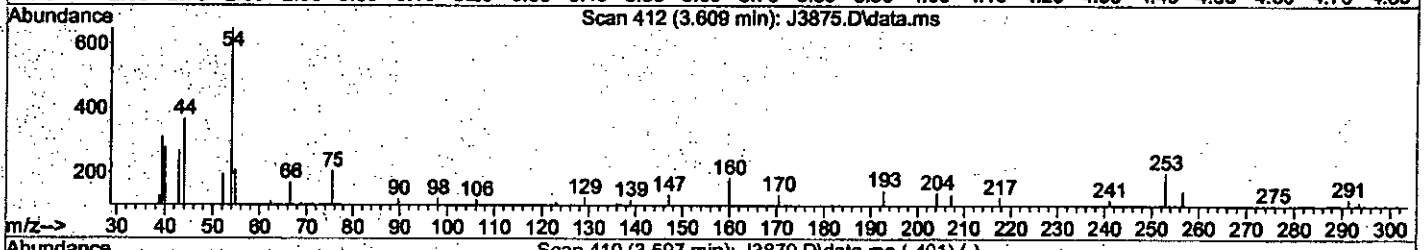
00400

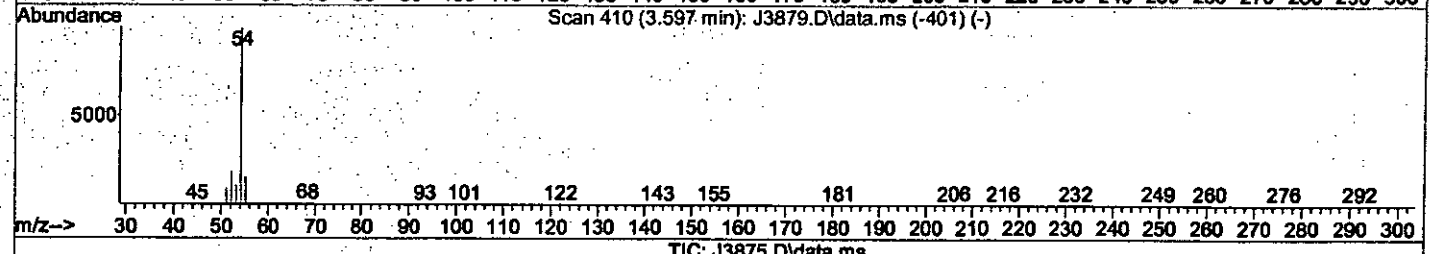
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(36) Propionitrile

3.609min (+0.018) 1.79 ppb

response 1271

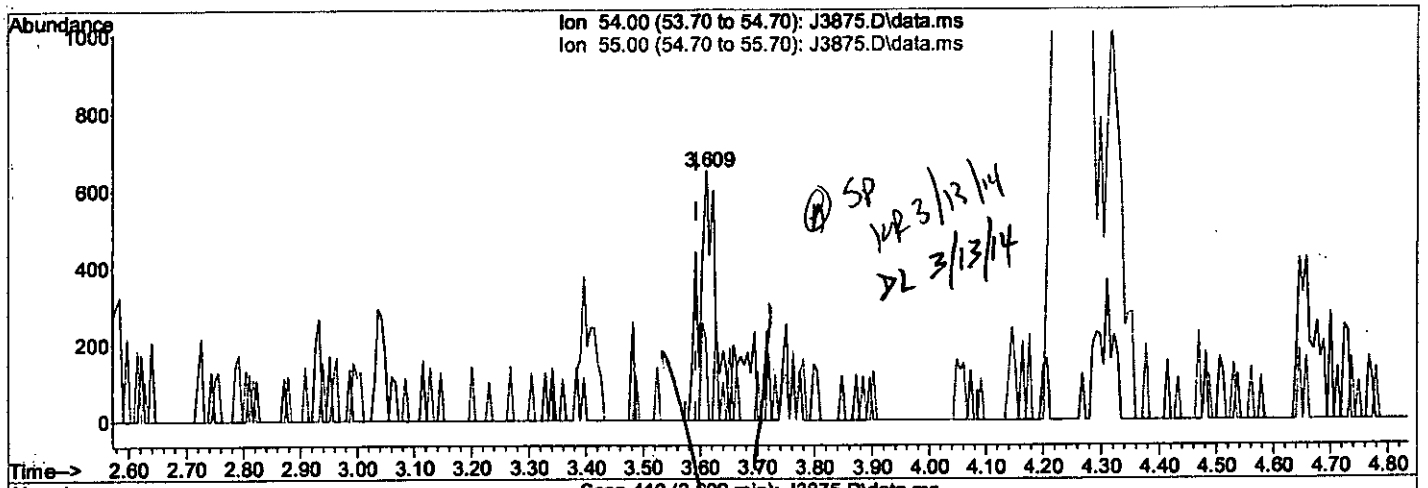
Ion	Exp%	Act%
54.00	100	100
55.00	16.00	32.10
0.00	0.00	0.00
0.00	0.00	0.00

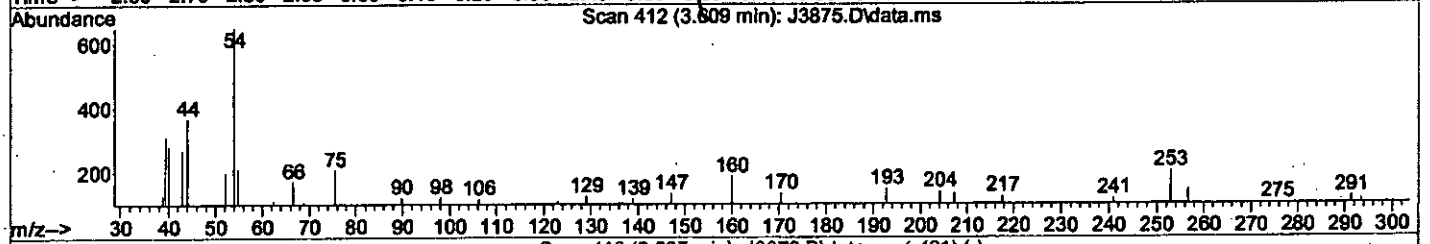
W031214.M Thu Mar 13 10:06:01 2014 Page: 1

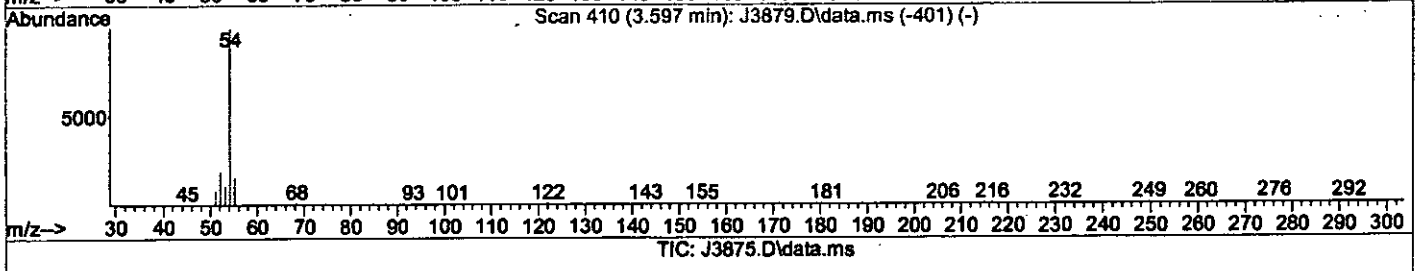
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(38) Propionitrile

3.609min (+0.018) 2.39 ppb m

response 1700

Ion	Exp%	Act%
54.00	100	100
55.00	16.00	32.10
0.00	0.00	0.00
0.00	0.00	0.00

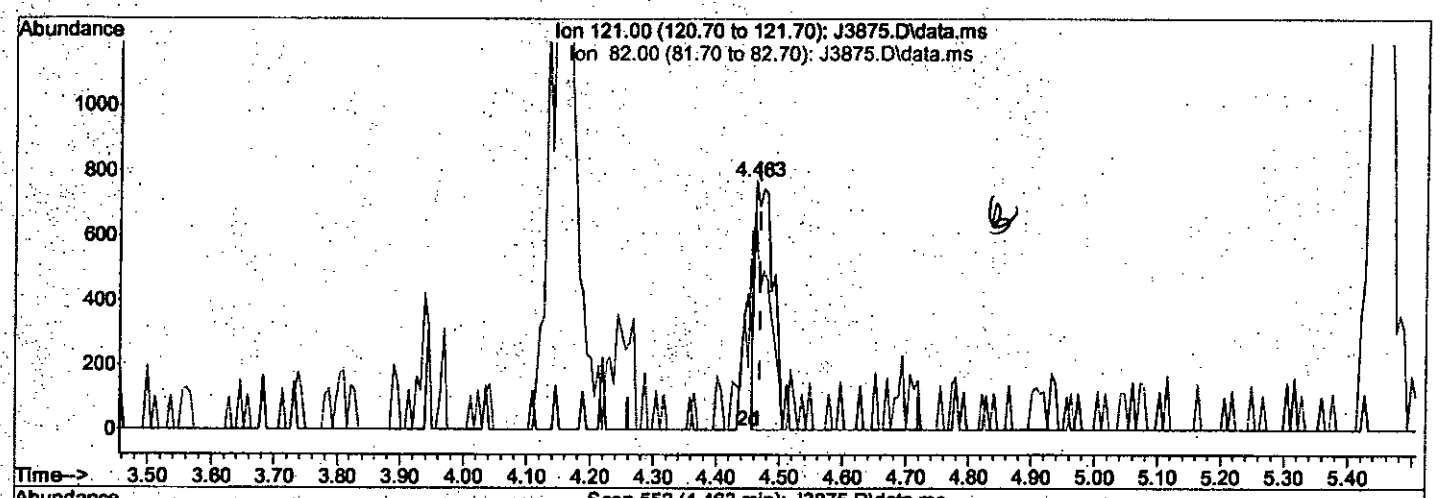
W031214.M Thu Mar 13 10:06:10 2014 Page: 1

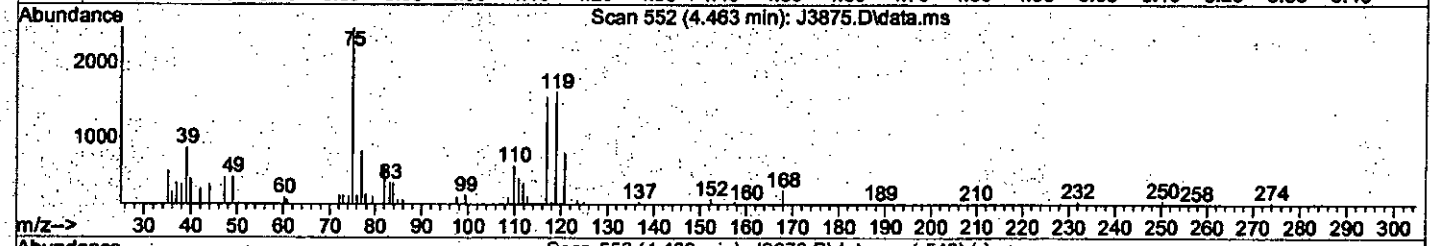
00402

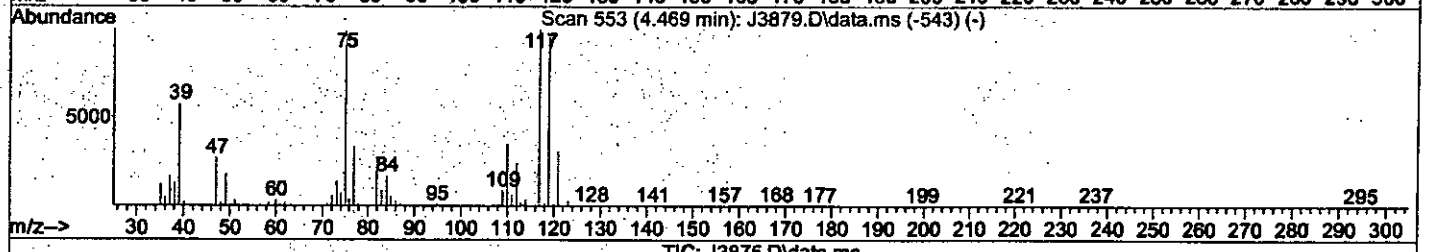
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(46) Carbontetrachloride (P)

4.463min (-0.006) 0.43 ppb

response 1497

Ion	Exp%	Act%
121.00	100	100
82.00	87.50	83.12
0.00	0.00	0.00
0.00	0.00	0.00

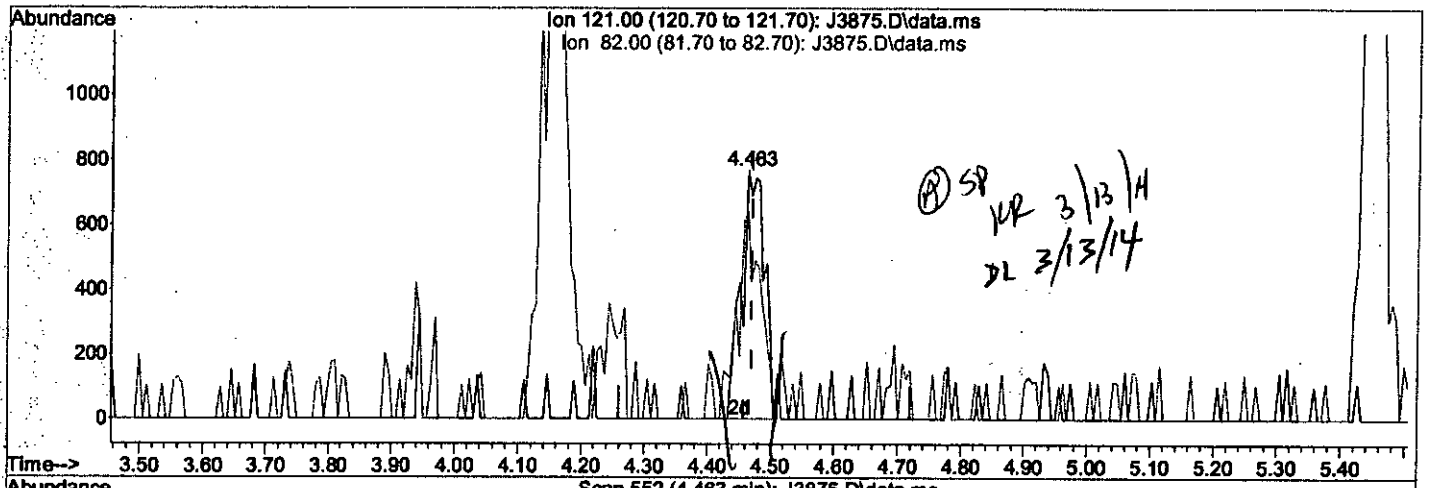
W031214.M Thu Mar 13 10:06:29 2014 Page: 1

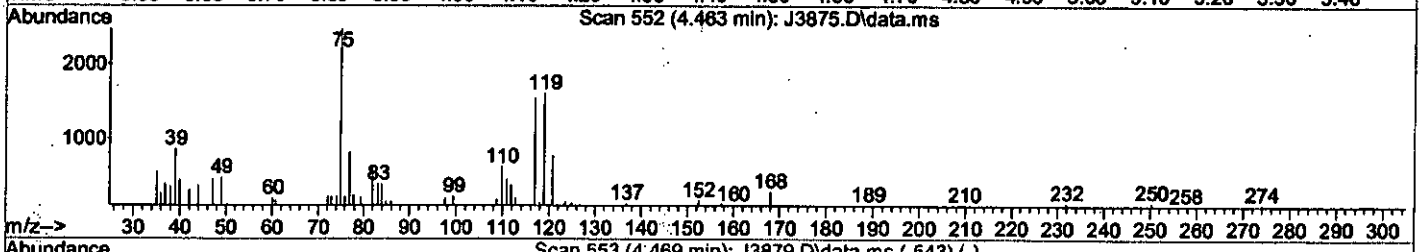
00403

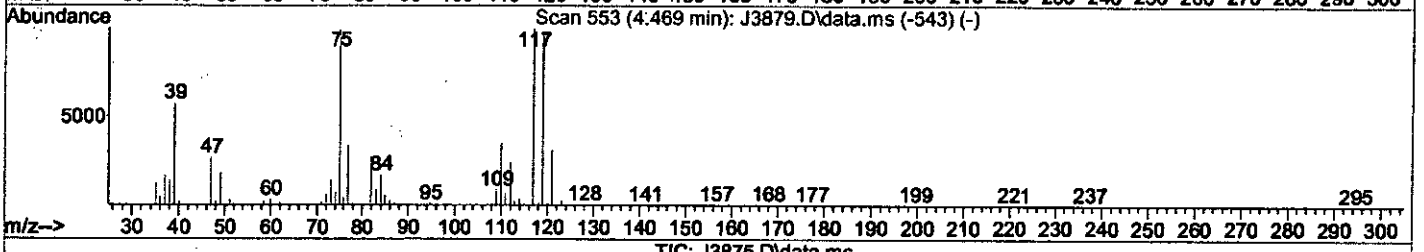
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(46) Carbontetrachloride (P)

4.463min (-0.006) 0.56 ppb m

response 1948

Ion	Exp%	Act%
121.00	100	100
82.00	87.50	83.12
0.00	0.00	0.00
0.00	0.00	0.00

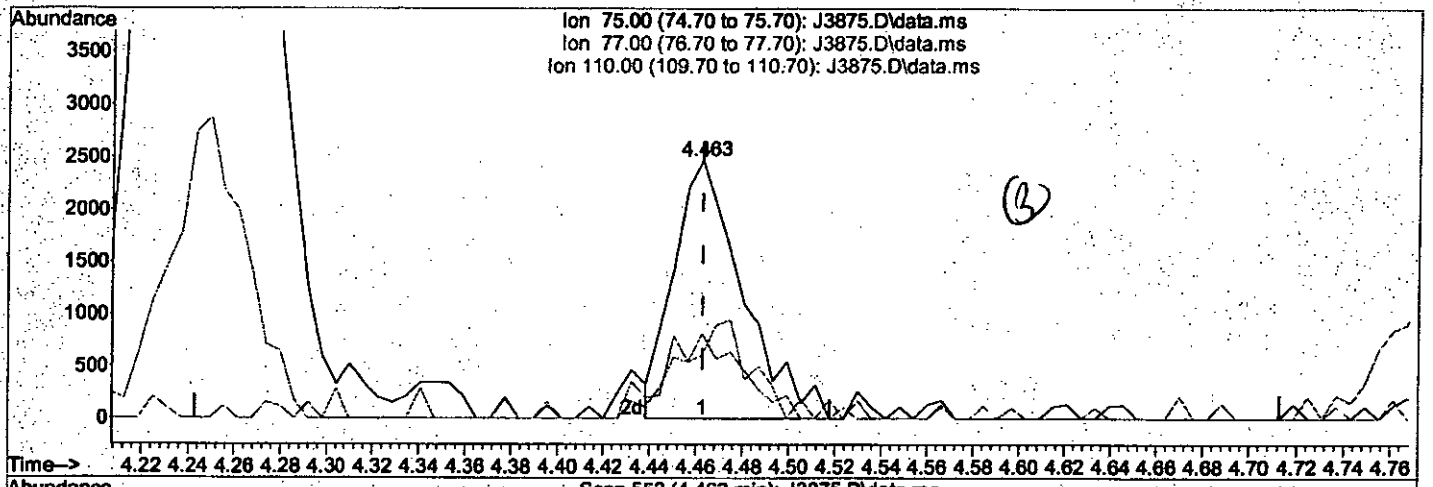
W031214.M Thu Mar 13 10:06:38 2014 Page: 1

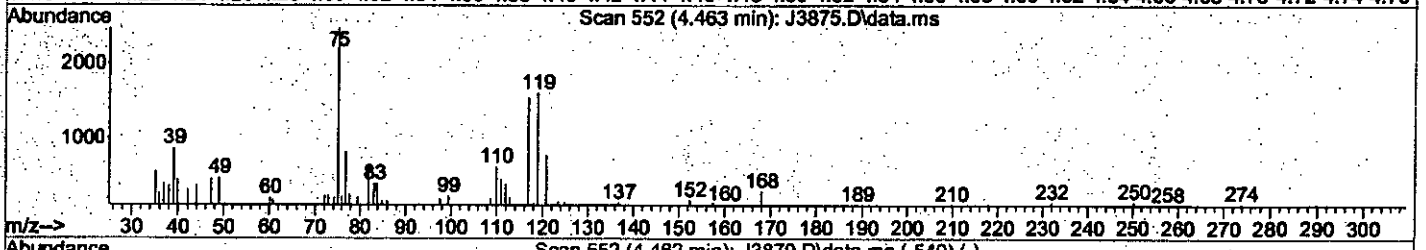
00404

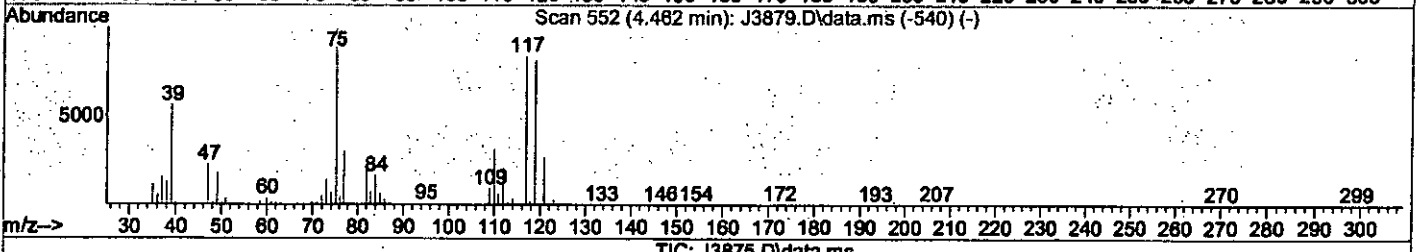
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(47) 1,1-Dichloropropene

4.463min (+0.000) 0.49 ppb

response 5116

Ion	Exp%	Act%
75.00	100	100
77.00	29.90	32.96
110.00	30.90	24.83
0.00	0.00	0.00

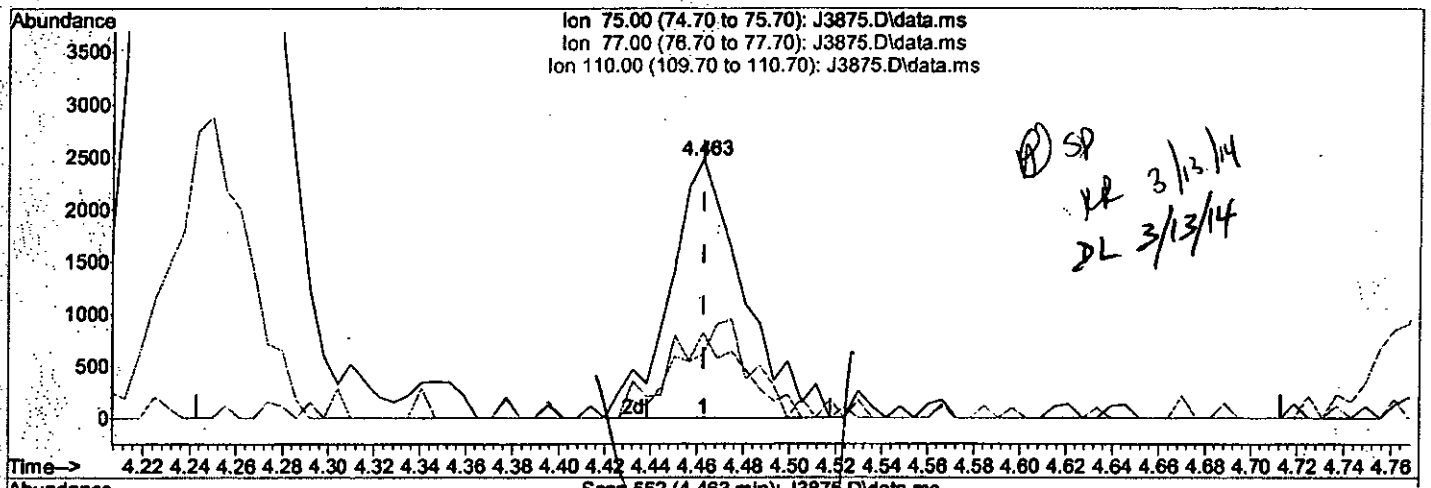
W031214.M Thu Mar 13 10:06:58 2014 Page: 1

03405

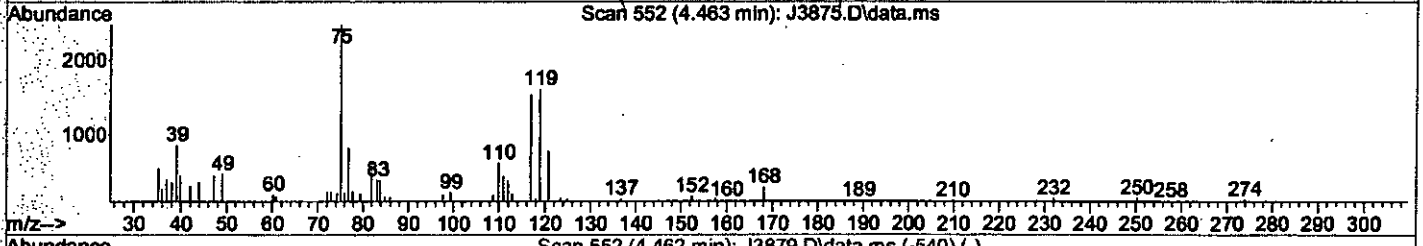
Quantitation Report (Qedit)

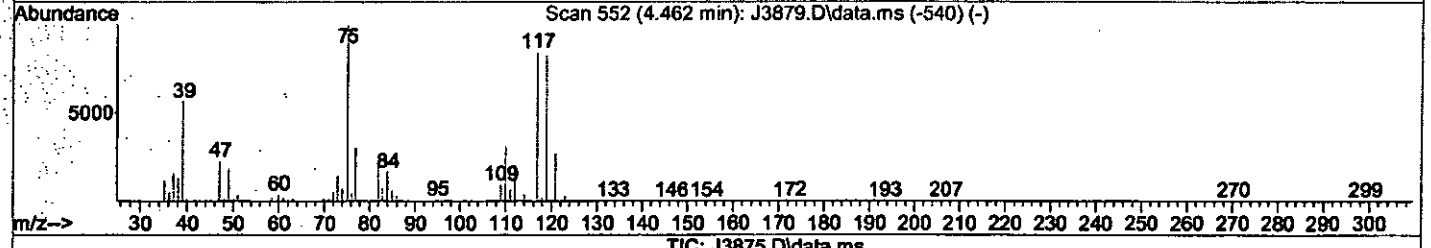
Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



SP 3/13/14
KR 3/13/14
DL 3/13/14





TIC: J3875.D\data.ms

(47) 1,1-Dichloropropene

4.463min (+0.000) 0.52 ppb m

response 5496

Ion	Exp%	Act%
75.00	100	100
77.00	29.90	32.98
110.00	30.90	24.83
0.00	0.00	0.00

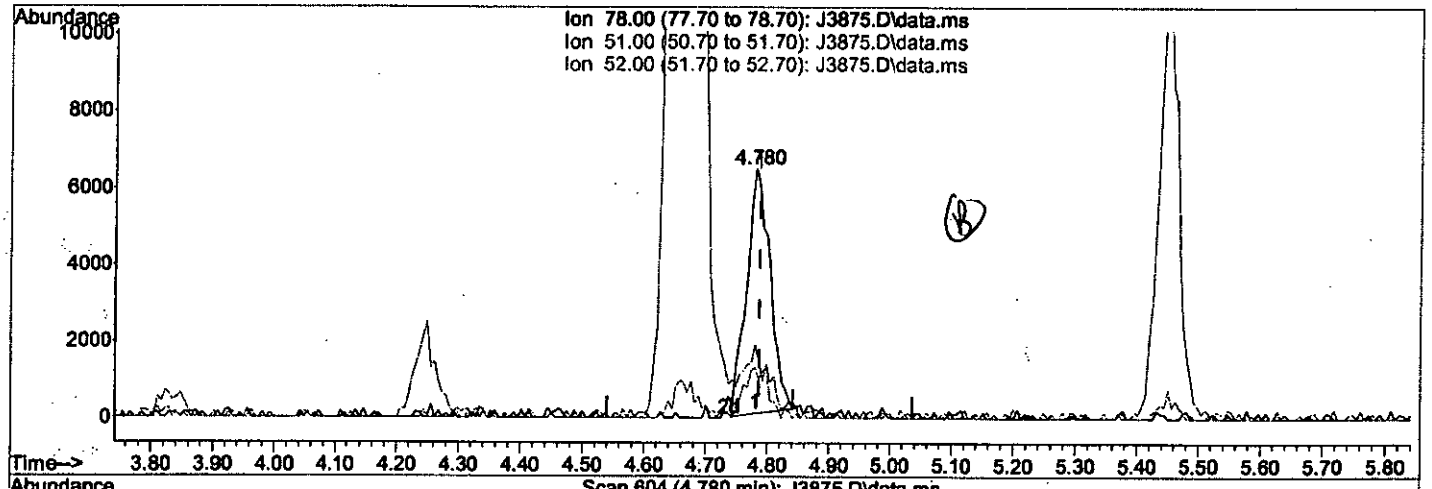
W031214.M Thu Mar 13 10:07:07 2014 Page: 1

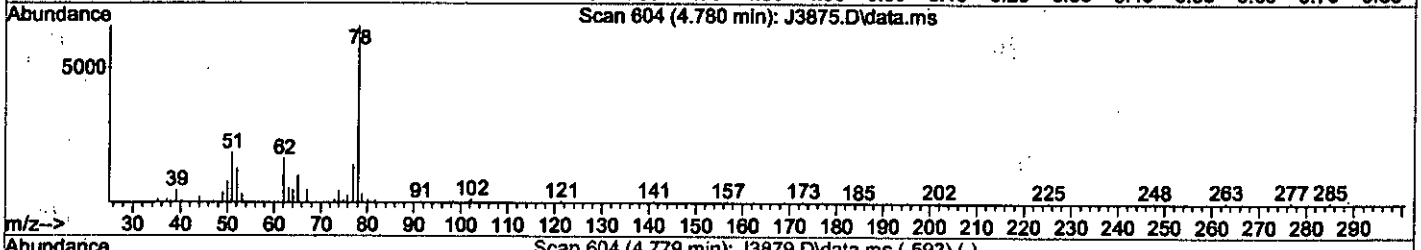
00406

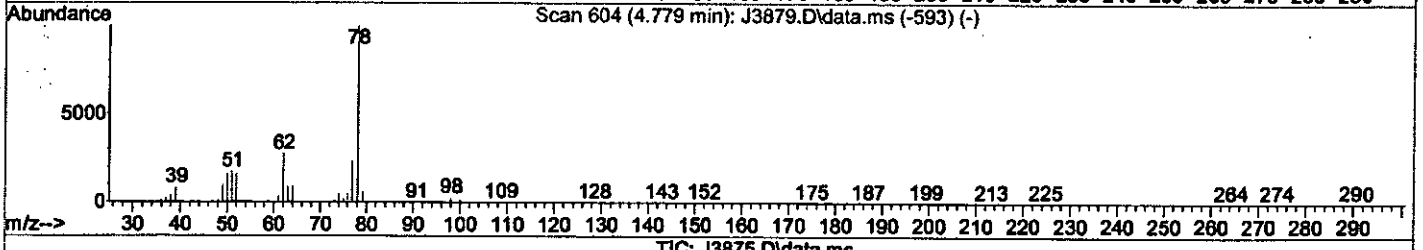
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(49) Benzene (P)

4.780min (-0.006) 0.47 ppb

response 16749

Ion	Exp%	Act%
78.00	100	100
51.00	18.20	29.35
52.00	16.10	20.11
0.00	0.00	0.00

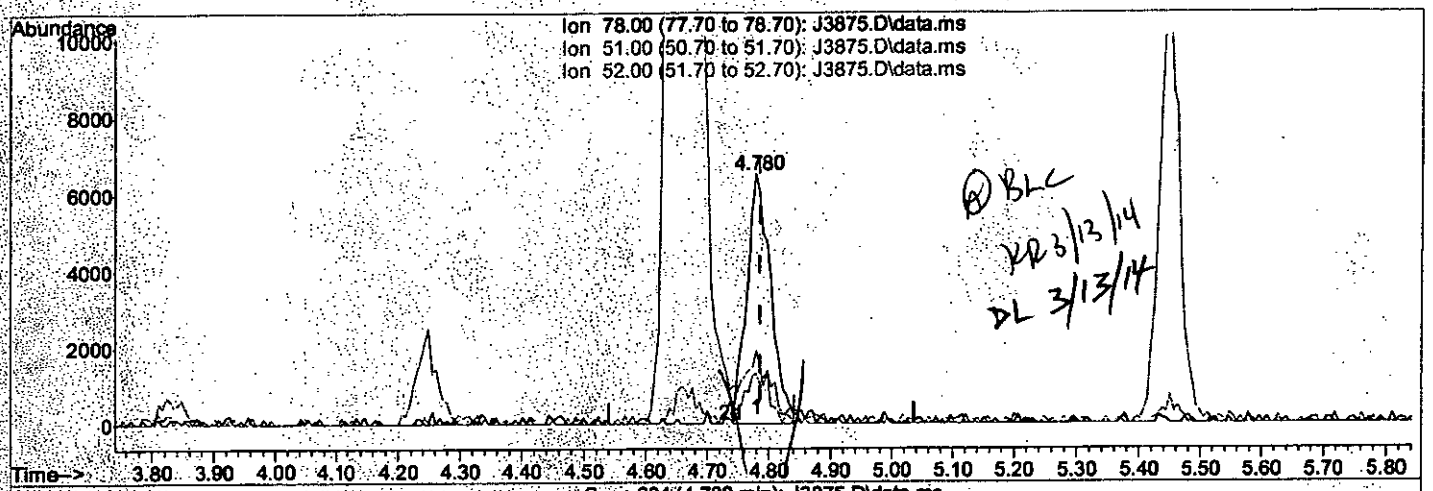
W031214.M Thu Mar 13 10:07:15 2014 Page: 1

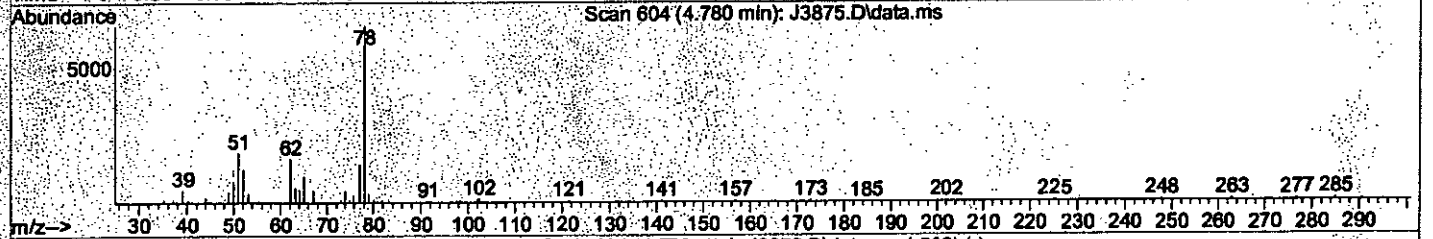
00407

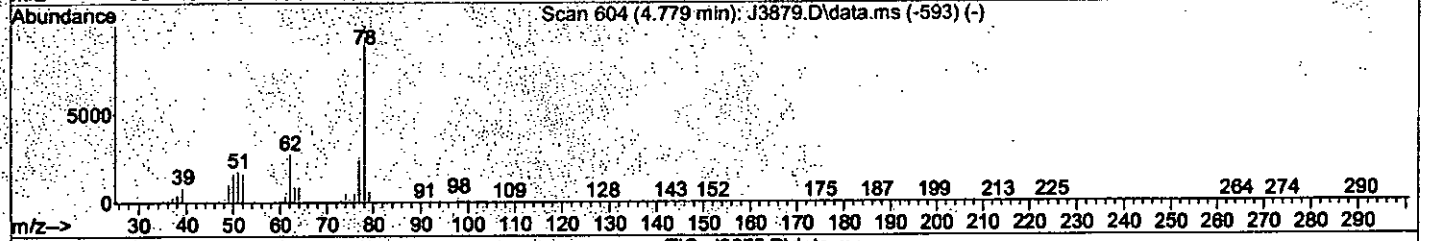
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(49) Benzene (P)

4.780min (-0.006) 0.50 ppb m

response 17569

Ion	Exp%	Act%
78.00	100	100
51.00	18.20	29.35
52.00	16.10	20.11
0.00	0.00	0.00

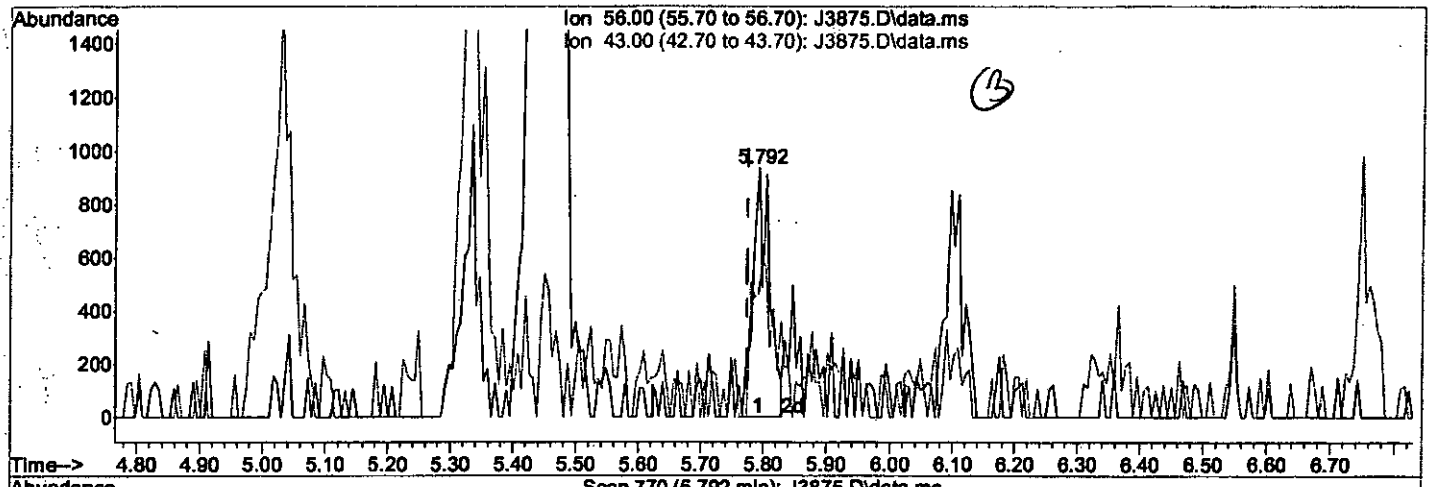
W031214.M Thu Mar 13 10:07:24 2014 Page: 1

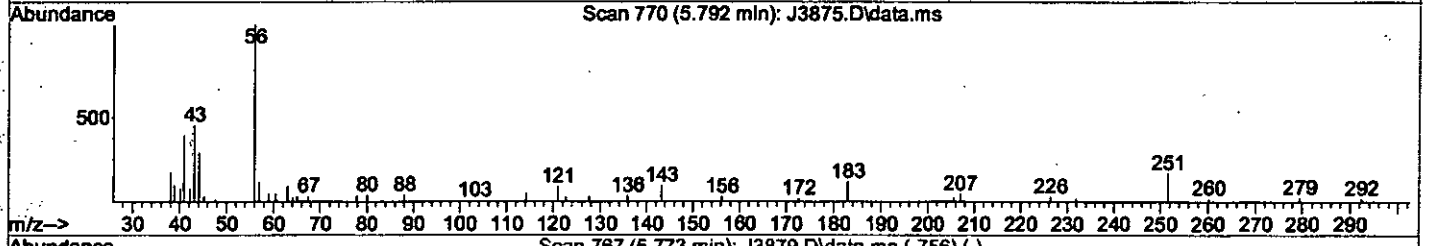
00408

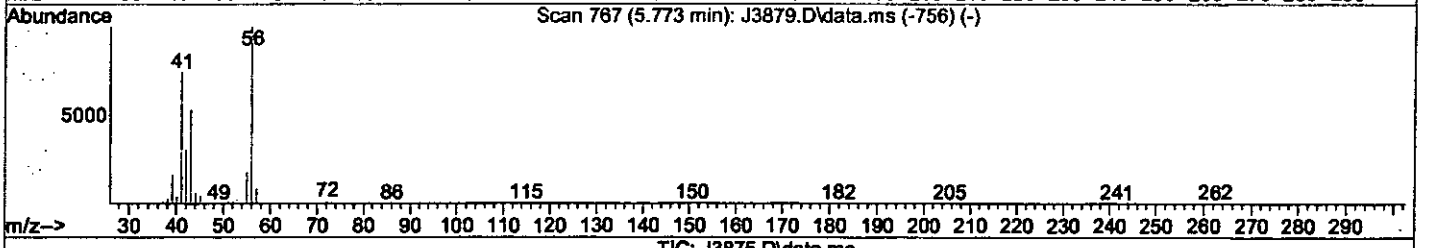
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(53) 1-Butanol

5.792min (+0.018) 12.55 ppb

response 1688

Ion	Exp%	Act%
56.00	100	100
43.00	55.80	90.17#
0.00	0.00	0.00
0.00	0.00	0.00

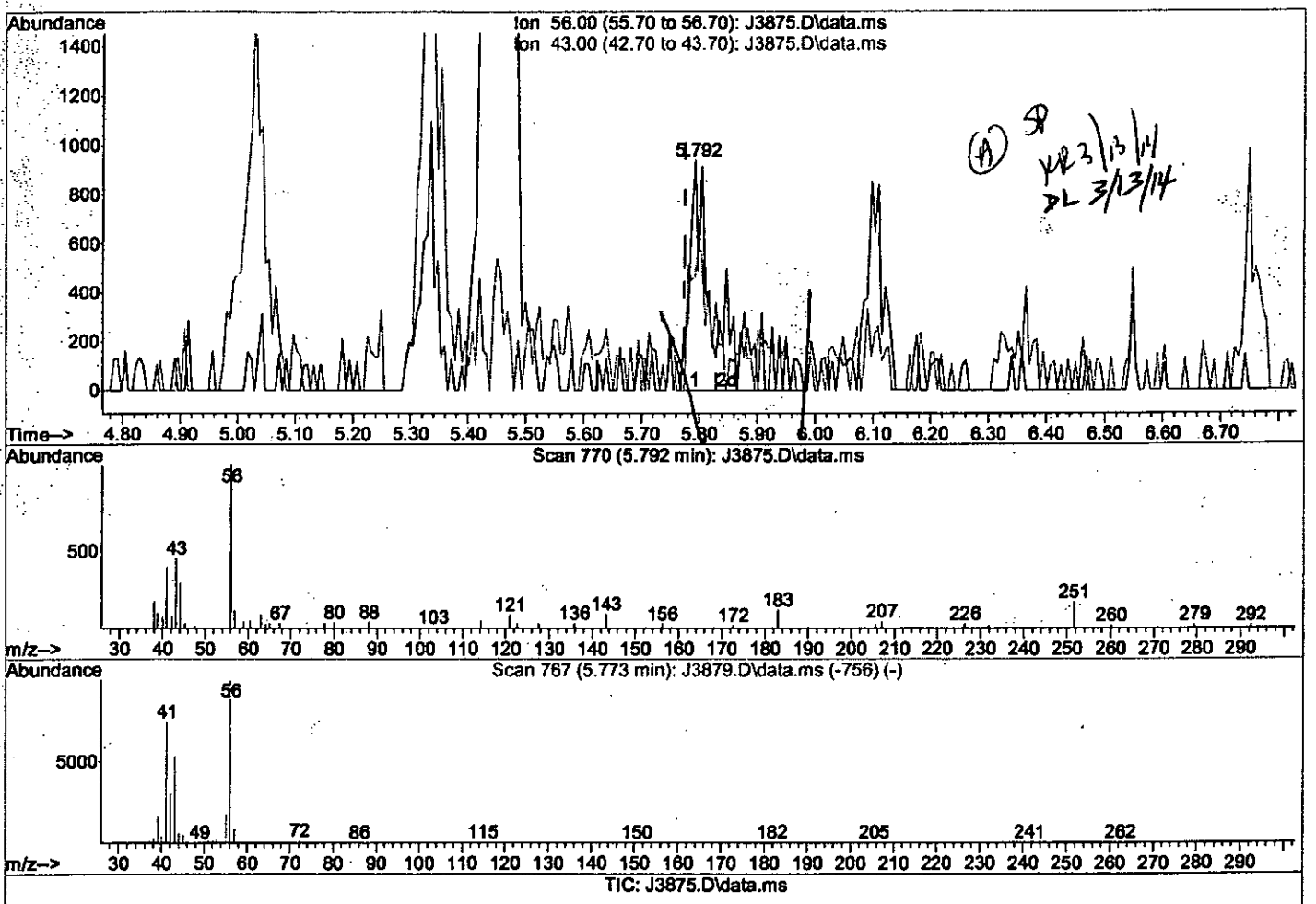
W031214.M Thu Mar 13 10:07:52 2014 Page: 1

00409

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(53) 1-Butanol

5.792min (+0.018) 22.75 ppb m

response 3060

Ion	Exp%	Act%
56.00	100	100
43.00	55.80	49.74
0.00	0.00	0.00
0.00	0.00	0.00

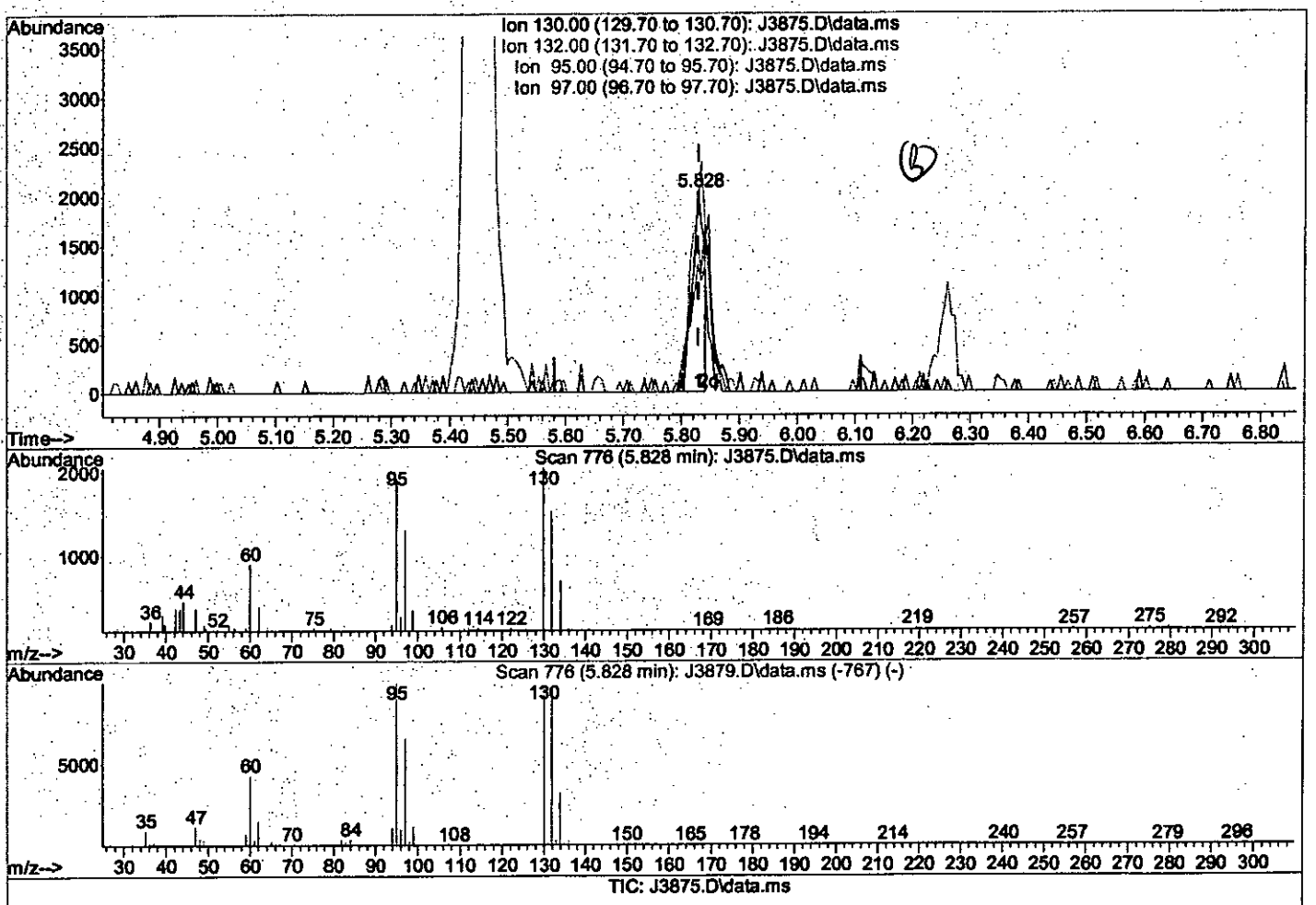
W031214.M Thu Mar 13 10:08:08 2014 Page: 1

00410

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(54) Trichloroethene (P)

5.828min (+0.000) 0.34 ppb

response 2913

Ion	Exp%	Act%
130.00	100	100
132.00	98.30	74.47#
95.00	103.00	93.24
97.00	67.30	63.20

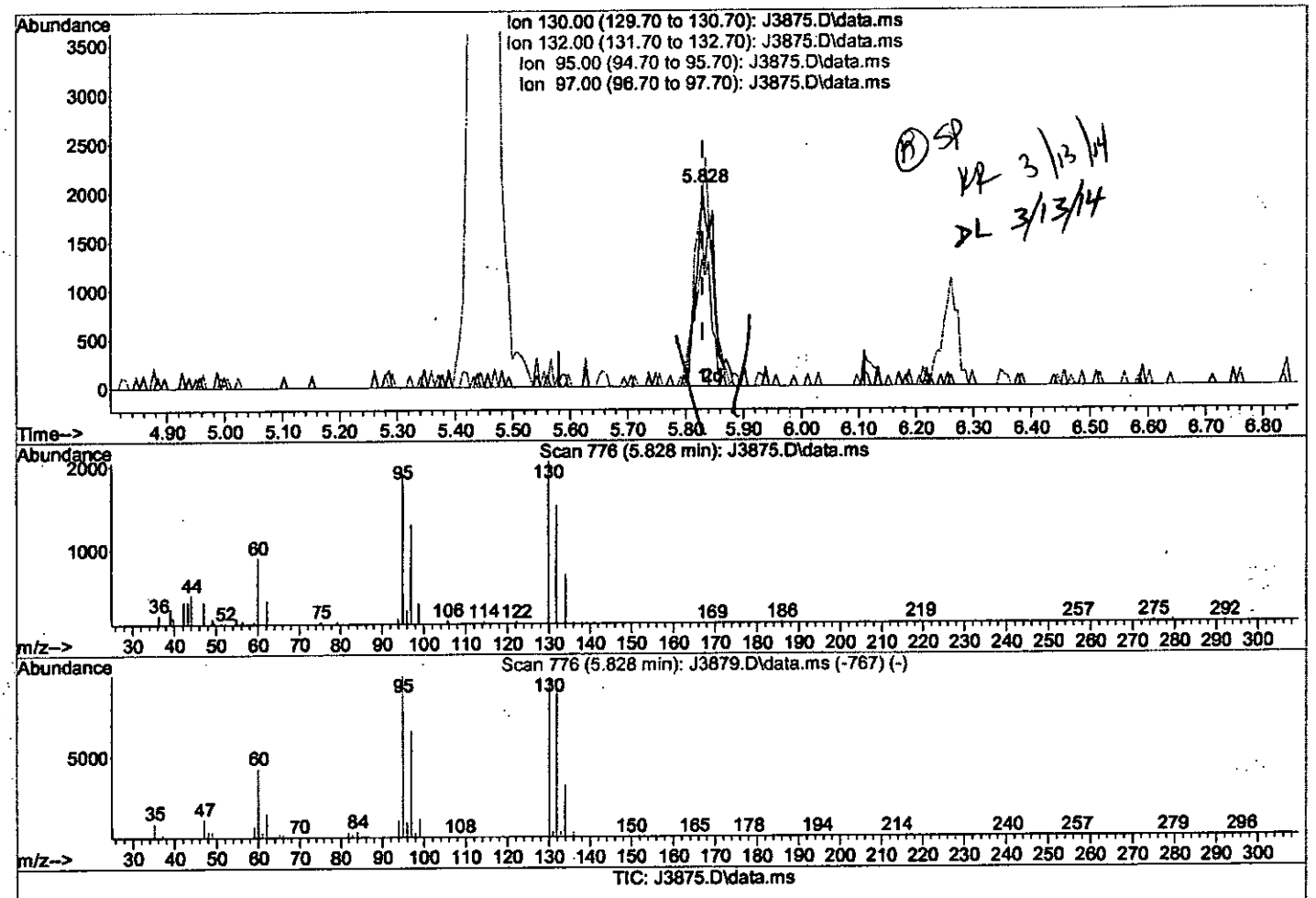
W031214.M Thu Mar 13 10:09:10 2014 Page: 1

00411

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(54) Trichloroethene (P)

5.828min (+0.000) 0.49 ppb m

response 4205

Ion	Exp%	Act%
130.00	100	100
132.00	98.30	74.47#
95.00	103.00	93.24
97.00	67.30	63.20

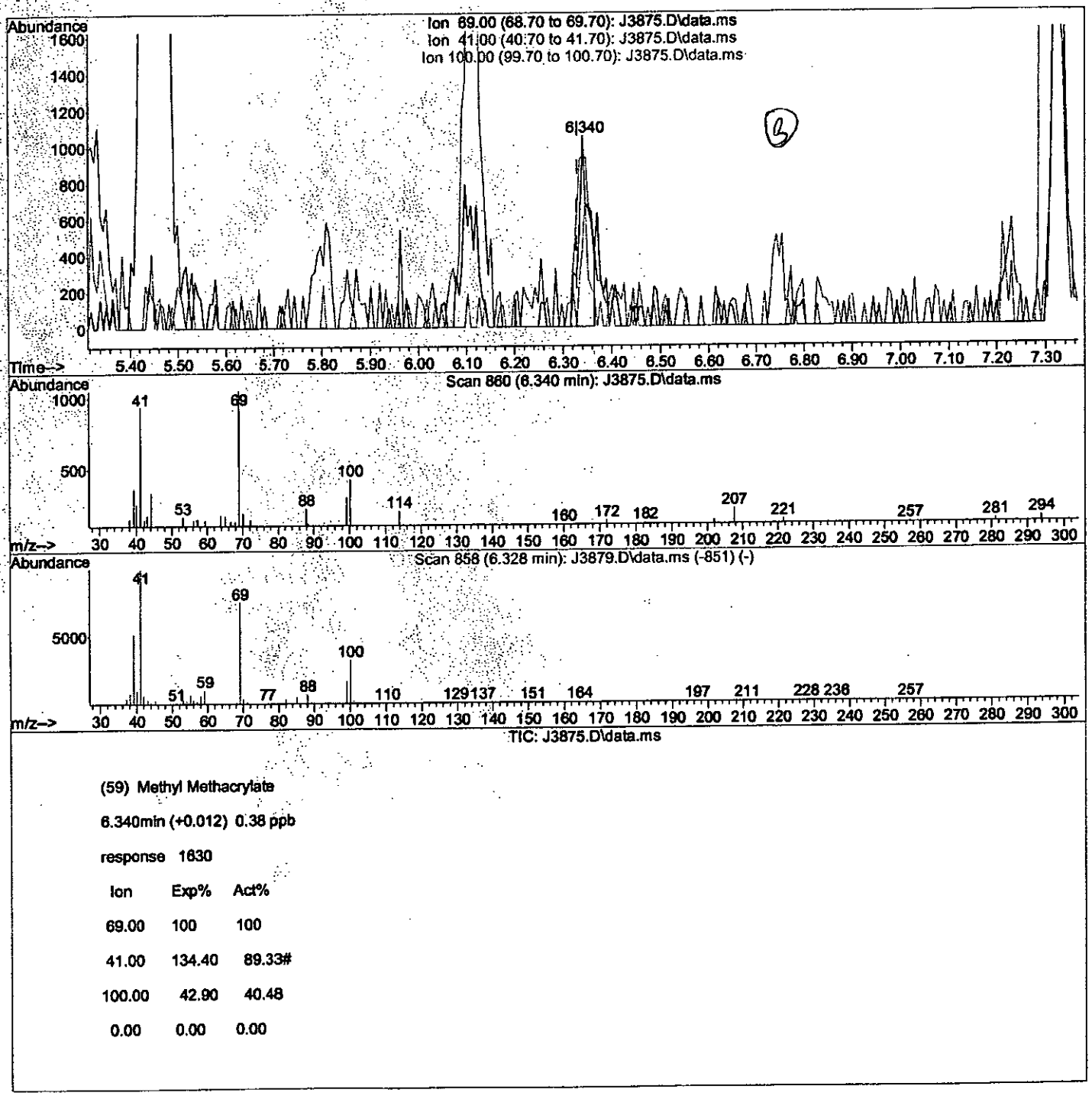
W031214.M Thu Mar 13 10:09:18 2014 Page: 1

00412

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(59) Methyl Methacrylate

6.340min (+0.012) 0.38 ppb

response 1630

Ion	Exp%	Act%
69.00	100	100
41.00	134.40	89.33#
100.00	42.90	40.48
0.00	0.00	0.00

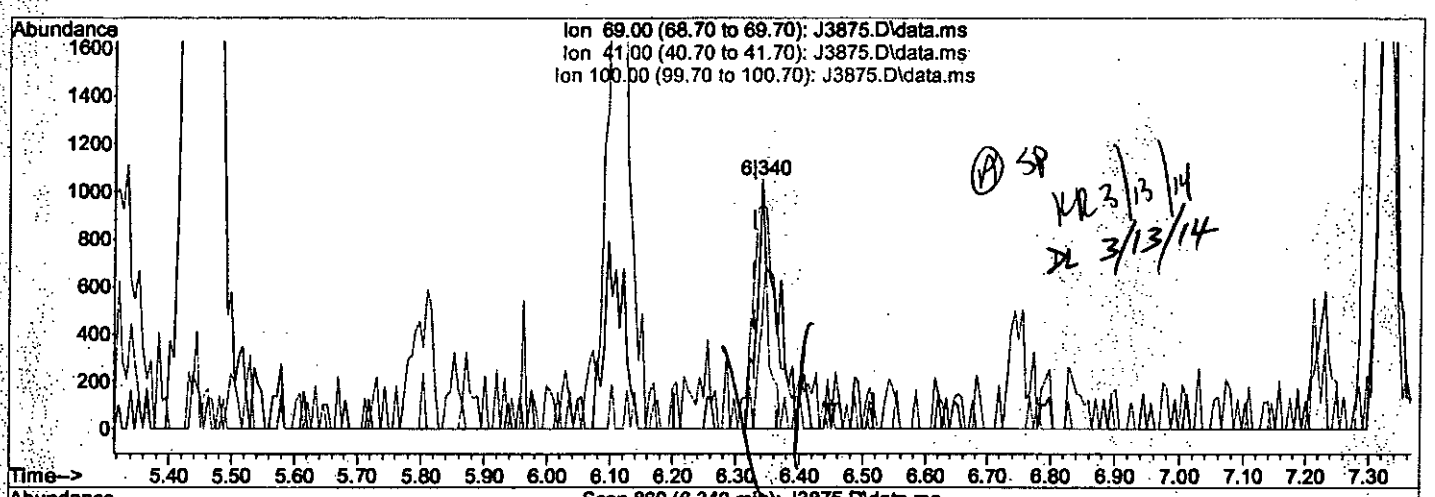
W031214.M Thu Mar 13 10:09:46 2014 Page: 1

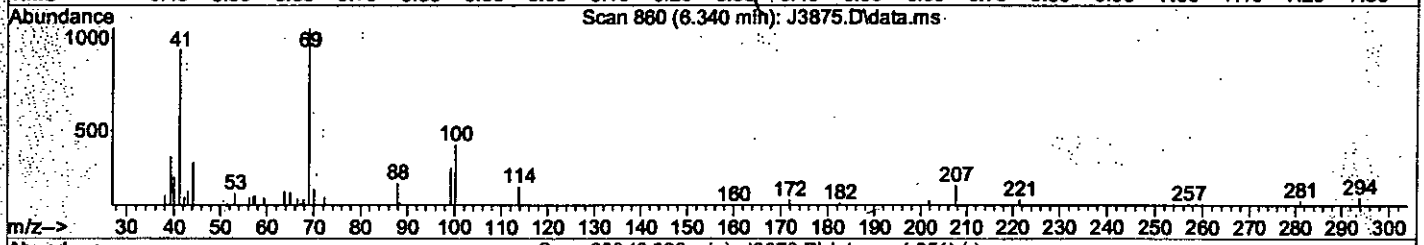
00413

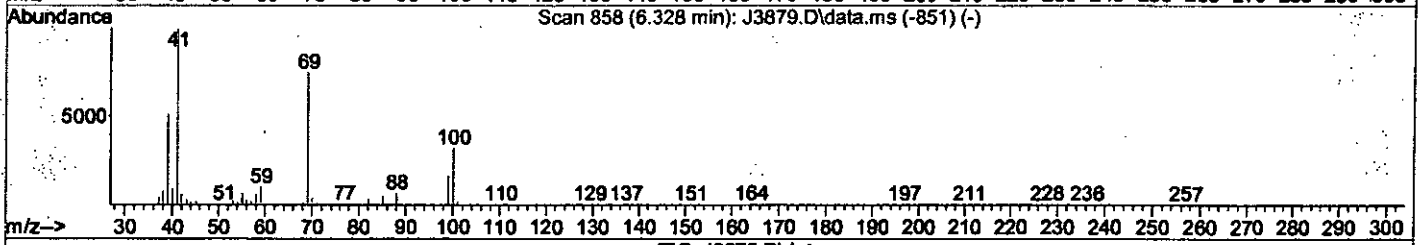
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(59) Methyl Methacrylate

6.340min (+0.012) 0.50 ppb m

response 2120

Ion	Exp%	Act%
69.00	100	100
41.00	134.40	89.33#
100.00	42.90	40.48
0.00	0.00	0.00

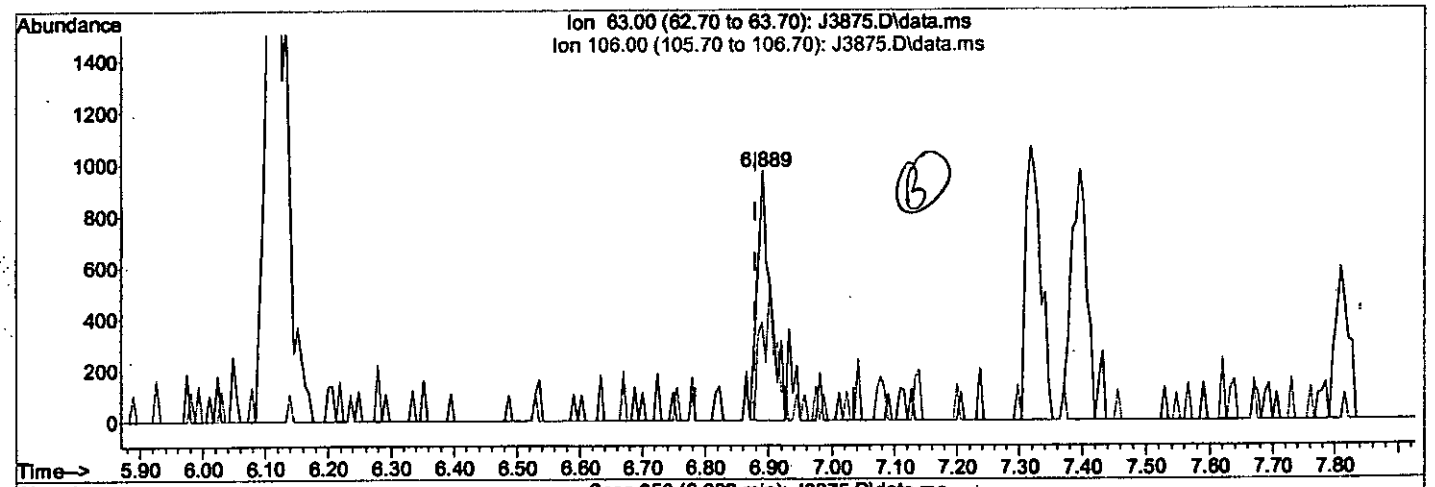
W031214.M Thu Mar 13 10:09:55 2014 Page: 1

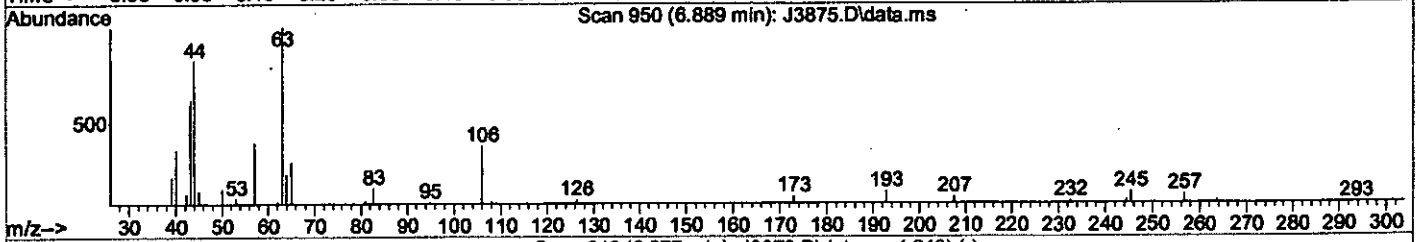
00414

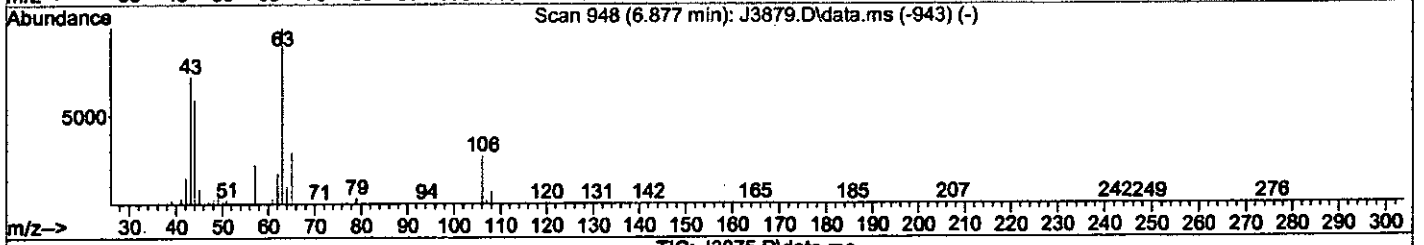
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.889min (+0.012) 0.35 ppb

response 1414

Ion	Exp%	Act%
63.00	100	100
106.00	27.00	39.53
0.00	0.00	0.00
0.00	0.00	0.00

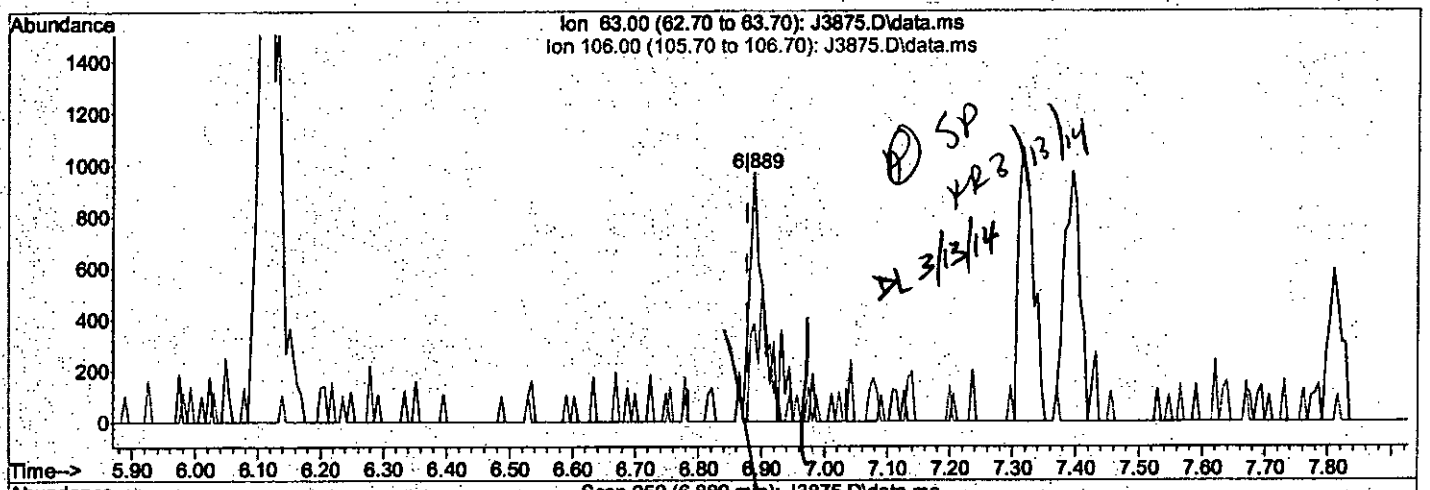
W031214.M Thu Mar 13 10:10:25 2014 Page: 1

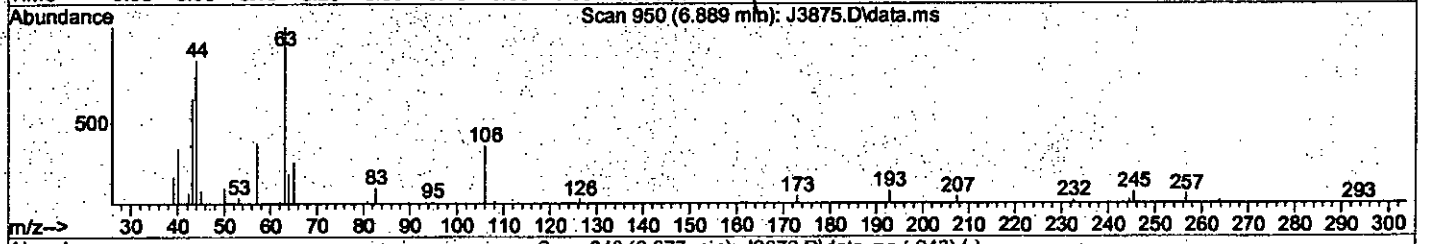
00415

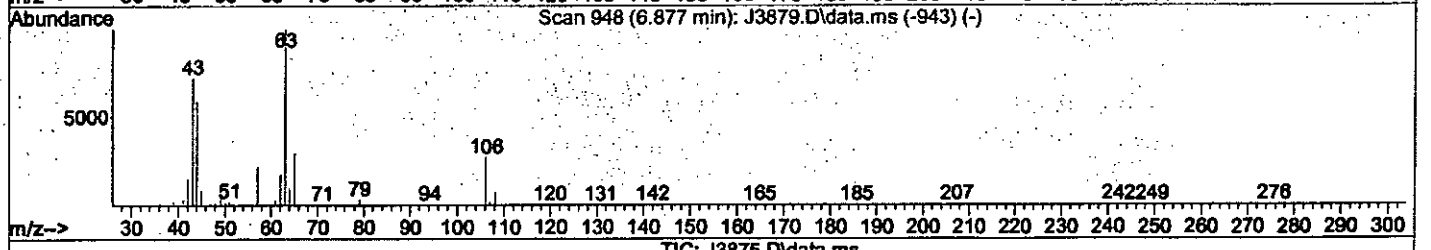
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.889min (+0.012) 0.41 ppb m

response 1661

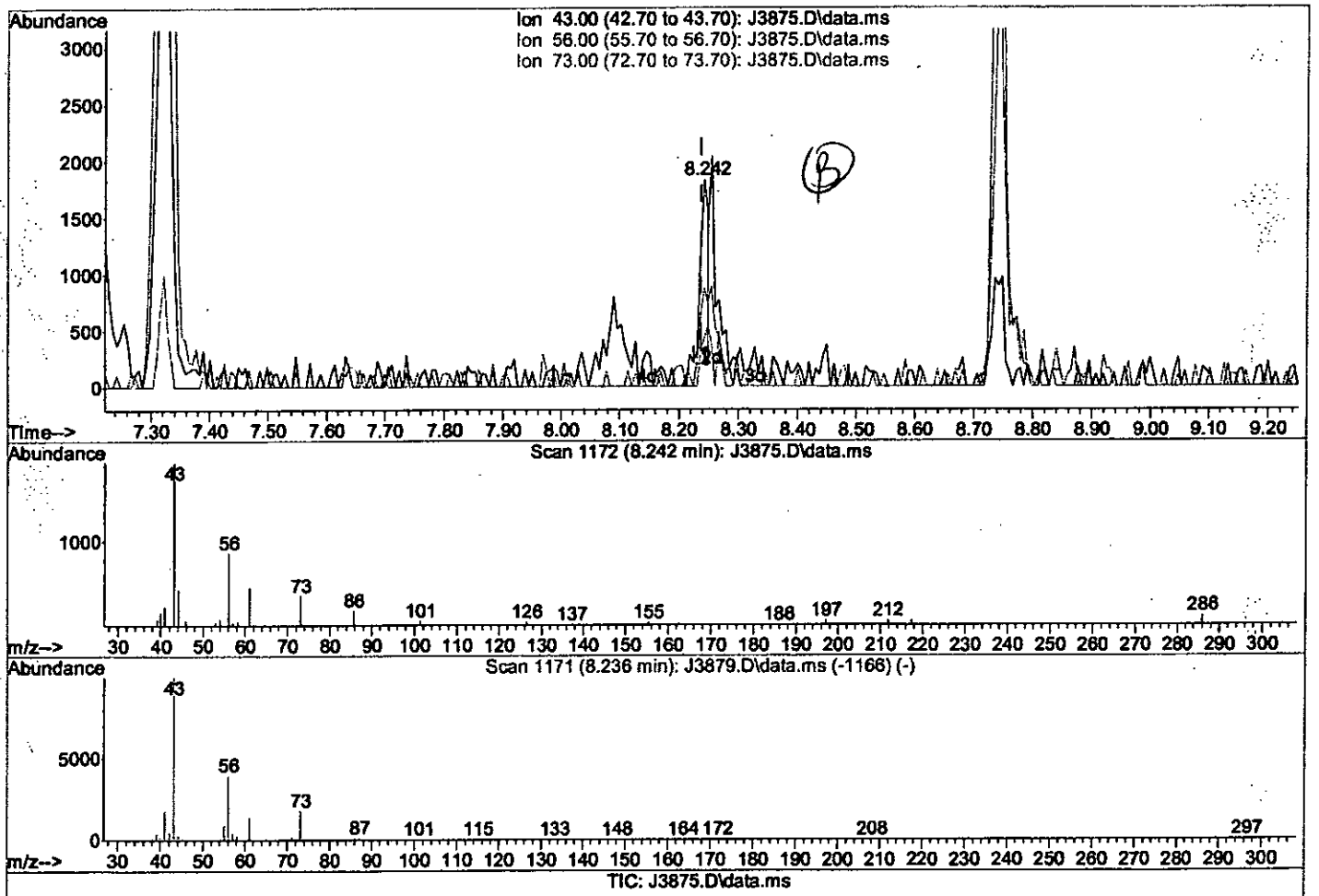
Ion	Exp%	Act%
63.00	100	100
106.00	27.00	39.53
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:10:32 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(76) N-Butyl Acetate

8.242min (+0.006) 0.17 ppb

response 1498

Ion	Exp%	Act%
43.00	100	100
56.00	39.70	47.57
73.00	17.70	22.56
0.00	0.00	0.00

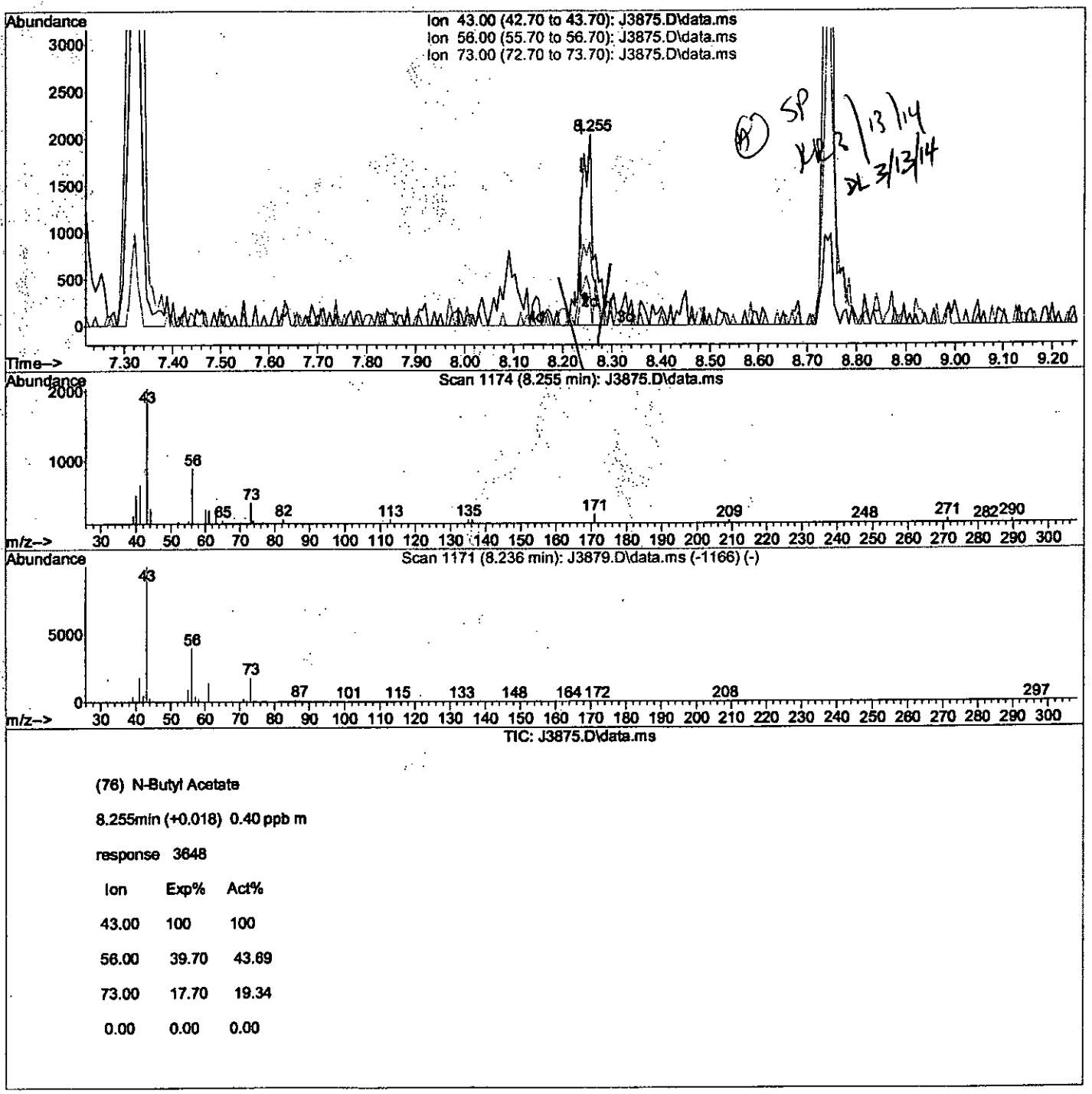
W031214.M Thu Mar 13 10:11:09 2014 Page: 1

00417

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(76) N-Butyl Acetate

8.255min (+0.018) 0.40 ppb m

response 3648

Ion	Exp%	Act%
43.00	100	100
56.00	39.70	43.69
73.00	17.70	19.34
0.00	0.00	0.00

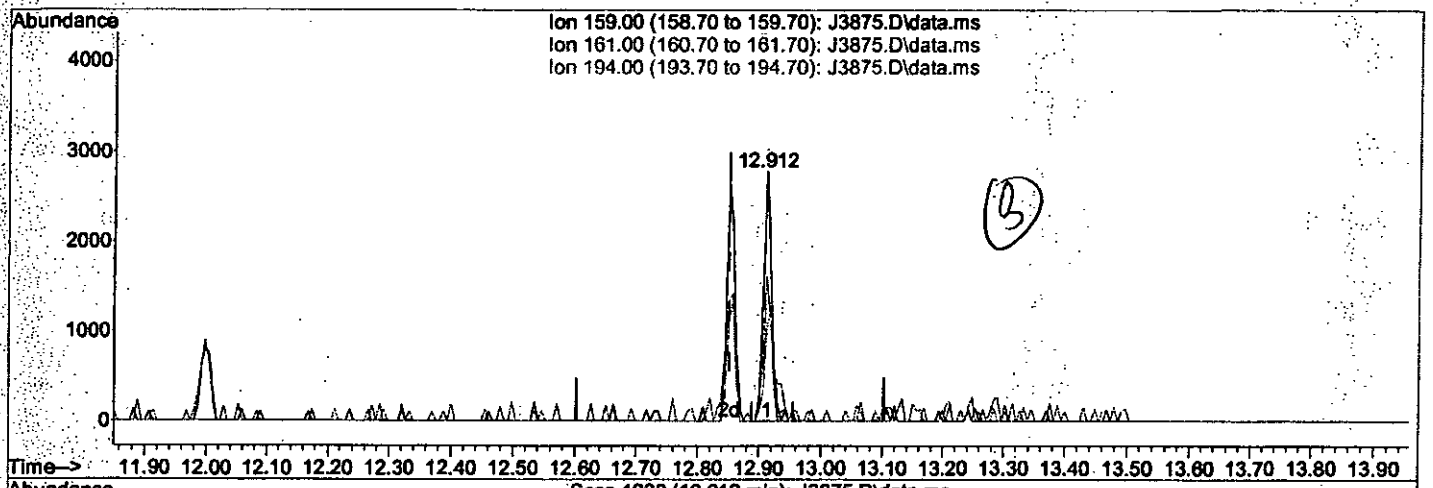
W031214.M Thu Mar 13 10:11:16 2014 Page: 1

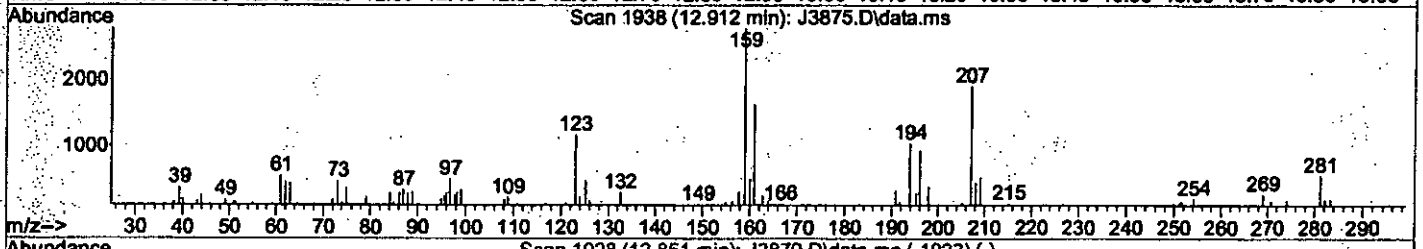
00418

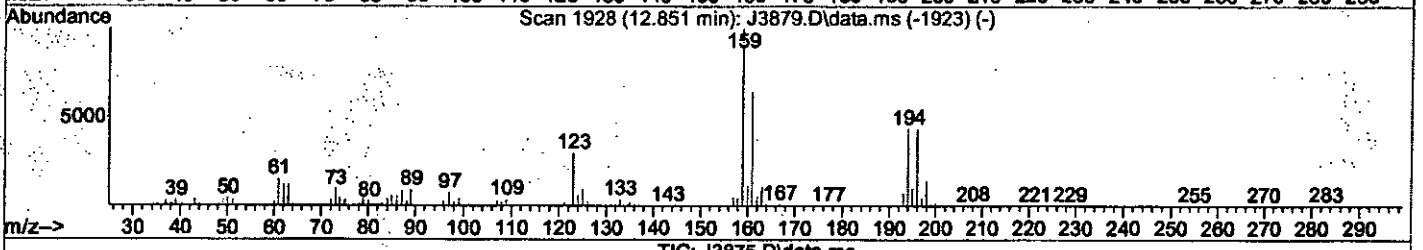
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(119) 2,4,5-Trichlorotoluene

12.912min (+0.061) 0.52 ppb

response 2541

Ion	Exp%	Act%
159.00	100	100
161.00	64.60	58.59
194.00	43.80	37.34
0.00	0.00	0.00

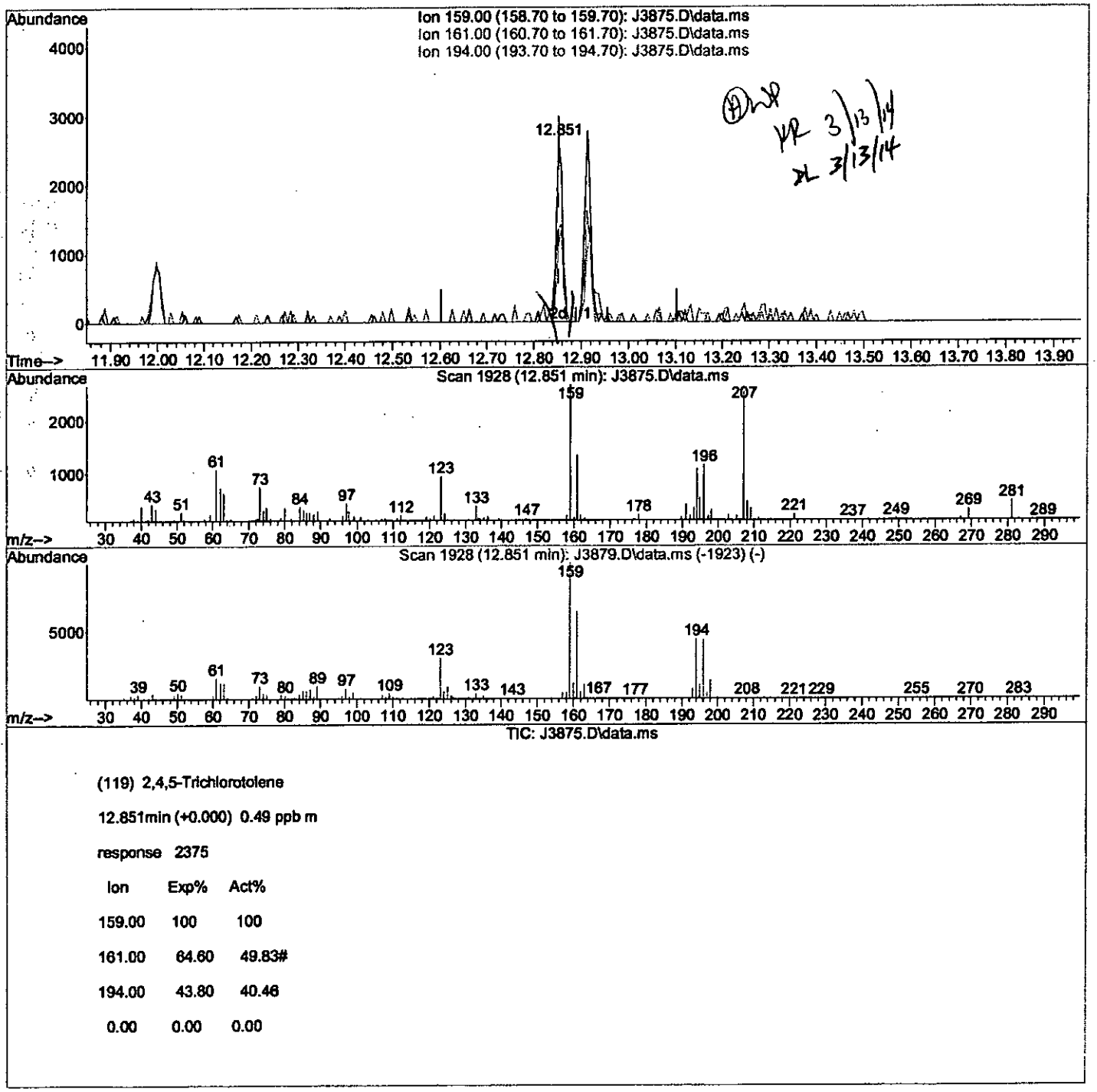
W031214.M Thu Mar 13 10:11:45 2014 Page: 1

00419

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (+0.000) 0.49 ppb m

response 2375

Ion	Exp%	Act%
159.00	100	100
161.00	64.60	49.83#
194.00	43.80	40.46
0.00	0.00	0.00

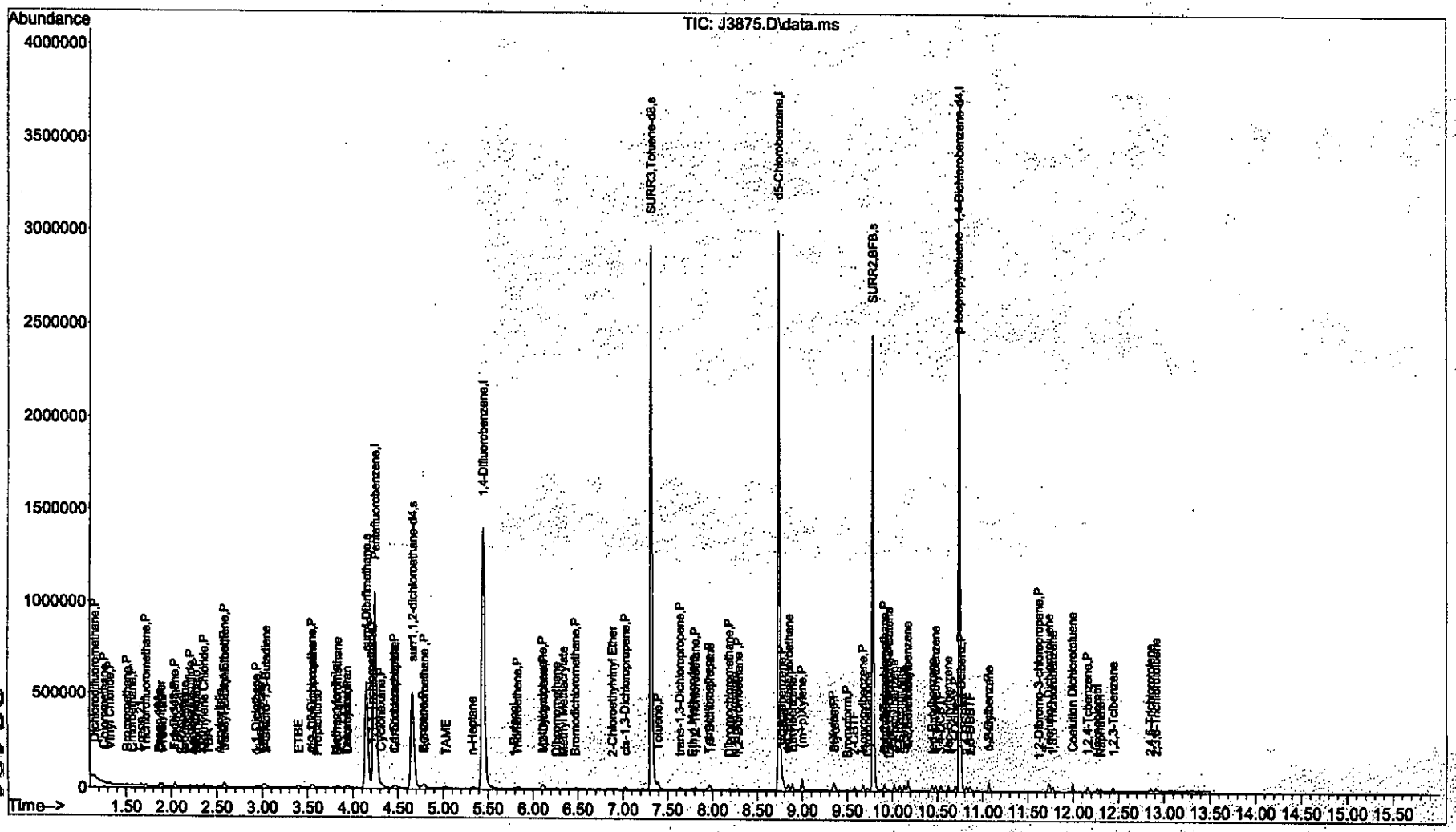
W031214.M Thu Mar 13 10:11:52 2014 Page: 1

00420

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:12:09 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909776	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1428738	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1289121	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	616857	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	410160	49.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.18%				
48) surr1,1,2-dichloroetha...	4.664	65	482134	51.17	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.34%				
65) SURR3,Toluene-d8	7.322	98	1743990	50.18	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.36%				
70) SURR2,BFB	9.785	95	640602	49.40	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	10136	0.94	ppb		93
3) Chloromethane	1.256	50	9090	0.97	ppb		98
4) Vinyl Chloride	1.323	62	8349	0.96	ppb		100
5) Bromomethane	1.512	94	5664	1.08	ppb		100
6) Chloroethane	1.567	64	5094m	0.94	ppb		
7) Freon 21	1.664	67	12648	0.96	ppb		93
8) Trichlorofluoromethane	1.719	101	12681	0.95	ppb		98
9) Diethyl Ether	1.884	59	6969	1.06	ppb		94
10) Freon 123a	1.872	67	9615	0.98	ppb		89
11) Freon 123	1.902	83	11518	1.03	ppb		92
12) Acrolein	1.957	56	841m	2.67	ppb		
13) 1,1-Diclethene	2.042	96	6368	0.96	ppb		94
14) Freon 113	2.036	101	7307	1.01	ppb		93
15) Acetone	2.048	43	2625	1.45	ppb		79
16) 2-Propanol	2.109	45	5194	17.45	ppb		82
17) Iodomethane	2.146	142	6957	0.79	ppb		89
18) Carbon Disulfide	2.207	76	22369	0.97	ppb		97
19) Acetonitrile	2.225	40	879	2.98	ppb	#	80
20) Allyl Chloride	2.274	76	4499	0.99	ppb	#	82
21) Methyl Acetate	2.280	43	4034	0.99	ppb		84
22) Methylene Chloride	2.359	84	9268	1.07	ppb		89
23) TBA	2.408	59	9223	18.28	ppb		98
24) Acrylonitrile	2.530	53	10212	5.05	ppb		83
25) Methyl-t-Butyl Ether	2.579	73	20977	1.00	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	8267	1.00	ppb		95
28) 1,1-Diclethane	2.945	63	15260	0.99	ppb		94
29) Vinyl Acetate	2.987	86	1309m	0.95	ppb		
30) DIPE	3.018	45	28957	0.97	ppb		90
31) 2-Chloro-1,3-Butadiene	3.042	53	11321	0.85	ppb		98
32) ETBE	3.396	59	24145	0.96	ppb		95
33) 2,2-Dichloropropane	3.554	77	11739	0.96	ppb		97
34) cis-1,2-Dichloroethene	3.542	96	9588	1.04	ppb		85
36) Propionitrile	3.609	54	3282	4.63	ppb		92
37) Bromochloromethane	3.835	130	5212	1.01	ppb	#	77
38) Methacrylonitrile	3.810	67	1831	0.78	ppb	#	52

KR 3/18/14

W031214.M Thu Mar 13 10:17:20 2014 Page: 1

00422

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
39) Tetrahydrofuran	3.914	42	2184	1.24 ppb	#	49
40) Chloroform	3.944	83	14880	0.99 ppb		89
41) 1,1,1-Trichloroethane	4.213	97	12496	0.97 ppb	#	1
42) TAME	5.023	73	20545	0.97 ppb		95
44) Cyclohexane	4.316	41	7870	1.02 ppb		97
46) Carbontetrachloride	4.463	121	3211	0.94 ppb		79
47) 1,1-Dichloropropene	4.463	75	9605	0.92 ppb		77
49) Benzene	4.786	78	34783	0.99 ppb		96
50) 1,2-Dichloroethane	4.792	62	11135	1.04 ppb		90
51) Iso-Butyl Alcohol	4.645	43	4896m	20.70 ppb		
52) n-Heptane	5.334	43	8949	1.02 ppb		89
53) 1-Butanol	5.785	56	5606m	41.98 ppb		
54) Trichloroethene	5.828	130	8557	1.00 ppb	#	77
55) Methylcyclohexane	6.109	55	9048	0.99 ppb		93
56) 1,2-Diclpropane	6.115	63	8401	0.93 ppb		94
57) Dibromomethane	6.255	93	4422	1.03 ppb		82
59) Methyl Methacrylate	6.346	69	4351m	1.03 ppb		
60) Bromodichloromethane	6.480	83	9613	0.91 ppb		96
61) 2-Nitropropane	6.743	41	2112	1.87 ppb		91
62) 2-Chloroethylvinyl Ether	6.889	63	3778	0.94 ppb		100
63) cis-1,3-Dichloropropene	7.029	75	11016	0.88 ppb		93
64) 4-Methyl-2-pentanone	7.218	43	4894	0.90 ppb		88
66) Toluene	7.395	91	36309	1.00 ppb		97
67) trans-1,3-Dichloropropene	7.633	75	8721	0.87 ppb		99
68) Ethyl Methacrylate	7.773	69	7414m	0.92 ppb		
69) 1,1,2-Trichloroethane	7.809	97	6006	0.95 ppb		94
72) Tetrachloroethene	7.962	164	6434	0.97 ppb		90
73) 2-Hexanone	8.096	43	3196	0.88 ppb		99
74) 1,3-Dichloropropane	7.974	76	11877	1.02 ppb		88
75) Dibromochloromethane	8.187	129	5635	0.84 ppb		87
76) N-Butyl Acetate	8.242	43	8454	0.94 ppb		93
77) 1,2-Dibromoethane	8.291	107	5584	0.94 ppb		98
78) Chlorobenzene	8.773	112	21495	0.96 ppb		93
79) 3-CBTF	8.785	180	10407	0.94 ppb		96
80) 4-CBTF	8.834	180	8928	0.90 ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	6999	0.89 ppb		97
82) Ethylbenzene	8.889	106	11238	0.94 ppb		95
83) (m+p)Xylene	8.998	106	25096	1.79 ppb		95
84) o-Xylene	9.346	106	14523	1.01 ppb	#	81
85) Styrene	9.358	104	19861	0.87 ppb		90
87) Bromoform	9.498	173	3297	0.94 ppb		100
88) 2-CBTF	9.577	180	9585	0.93 ppb		91
89) Isopropylbenzene	9.669	105	30809	0.97 ppb		98
90) Cyclohexanone	9.724	55	10704	21.64 ppb		87
91) trans-1,4-Dichloro-2-B...	9.962	53	1318	0.79 ppb		95
92) 1,1,2,2-Tetrachloroethane	9.913	83	7805	1.10 ppb		96
93) Bromobenzene	9.907	156	9148	1.01 ppb		96
94) 1,2,3-Trichloropropane	9.943	110	2408	1.14 ppb	#	71
95) n-Propylbenzene	10.022	91	36616	0.98 ppb		97
96) 2-Chlorotoluene	10.083	91	22220	0.95 ppb		99
97) 3-Chlorotoluene	10.132	91	23805	0.98 ppb		92
98) 4-Chlorotoluene	10.175	91	27266	0.99 ppb		95

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	1,3,5-Trimethylbenzene	10.169	105	24817	0.96	ppb		92
100)	tert-Butylbenzene	10.437	119	21877	1.00	ppb		90
101)	1,2,4-Trimethylbenzene	10.480	105	25964	0.97	ppb		100
102)	3,4-DCBTF	10.535	214	7195	0.95	ppb		94
103)	sec-Butylbenzene	10.620	105	29824	0.98	ppb		97
104)	p-Isopropyltoluene	10.742	119	24266	0.94	ppb		84
105)	1,3-Dclbenz	10.699	146	14936	0.97	ppb		90
106)	1,4-Dclbenz	10.766	146	15823	0.96	ppb		94
107)	2,4-DCBTF	10.821	214	6587	1.00	ppb	#	70
108)	2,5-DCBTF	10.858	214	7707	1.02	ppb	#	77
109)	n-Butylbenzene	11.071	91	21185	0.91	ppb		97
110)	1,2-Dclbenz	11.065	146	14396	0.97	ppb		97
111)	1,2-Dibromo-3-chloropr...	11.626	157	1052	0.97	ppb	#	55
112)	Trielution Dichlorotol...	11.742	125	33349	2.84	ppb		93
113)	1,3,5 Trichlorobenzene	11.778	180	9895	0.96	ppb	#	93
114)	Coelution Dichlorotoluene	11.998	125	25211	2.02	ppb		96
115)	1,2,4-Tcbenzene	12.162	180	8877	0.98	ppb		93
116)	Hexachlorobt	12.266	225	3996	1.01	ppb		88
117)	Naphthalen	12.303	128	14907	0.91	ppb		96
118)	1,2,3-Tclbenzene	12.443	180	7276	0.98	ppb		91
119)	2,4,5-Trichlorotolene	12.851	159	5341	1.09	ppb	#	79
120)	2,3,6-Trichlorotoluene	12.912	159	4781	1.06	ppb	#	91

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

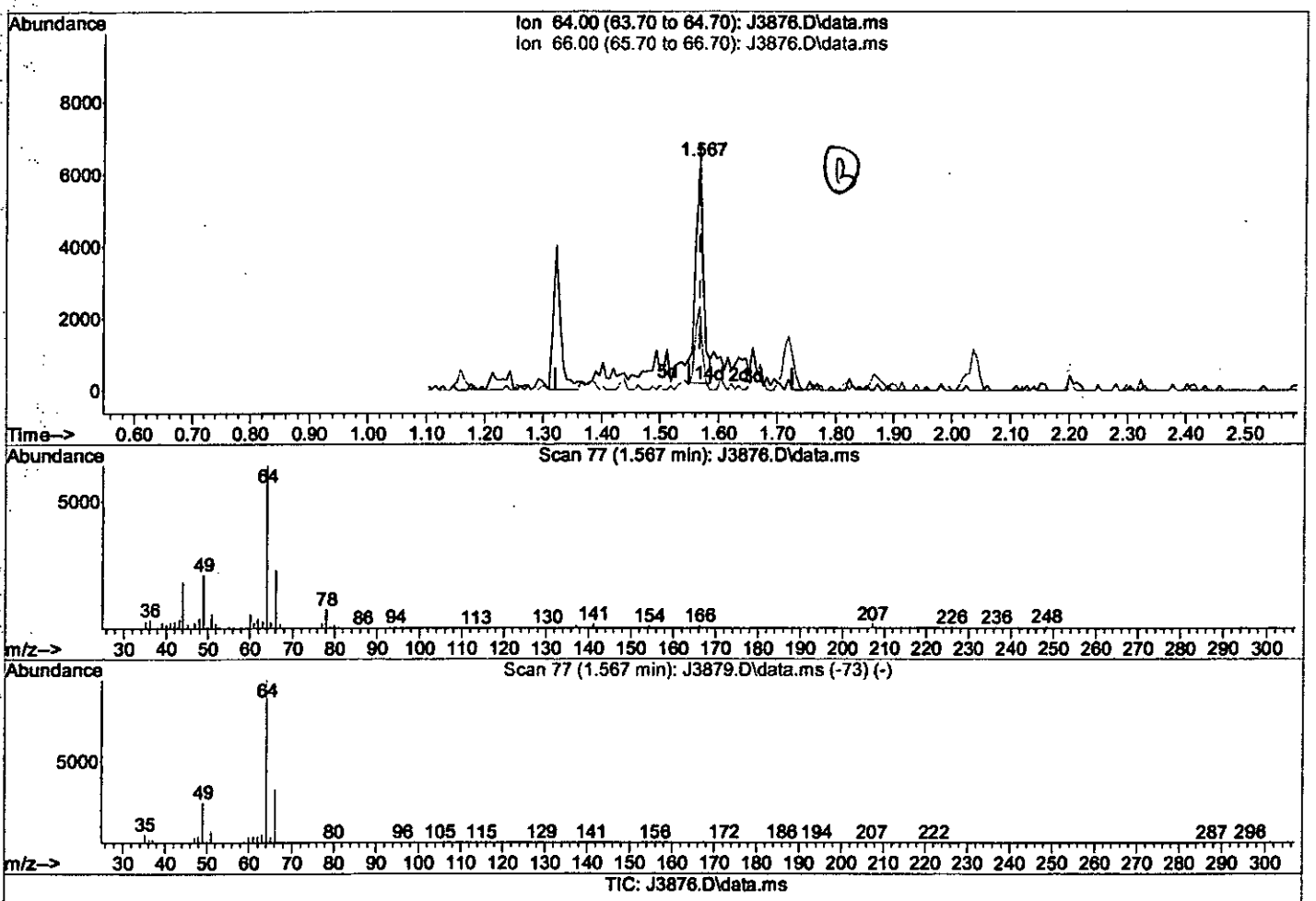
W031214.M Thu Mar 13 10:17:20 2014 Page: 3

00424

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(6) Chloroethane (P)

1.567min (-0.000) 1.07 ppb

response 5774

Ion	Exp%	Act%
64.00	100	100
66.00	32.20	36.64
0.00	0.00	0.00
0.00	0.00	0.00

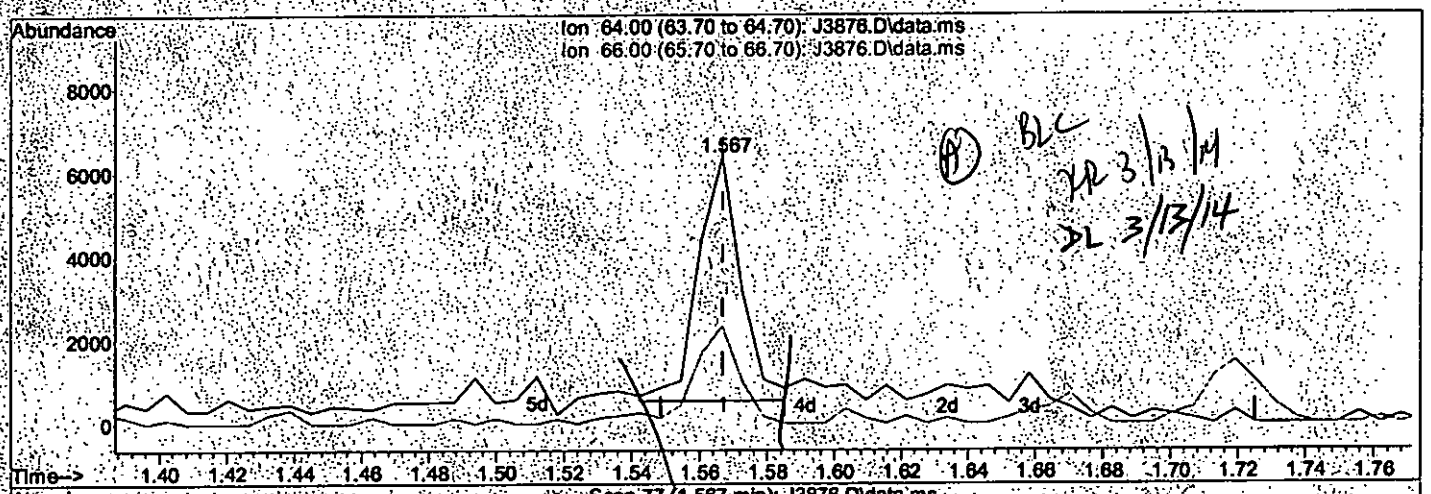
W031214.M Thu Mar 13 10:12:48 2014 Page: 1

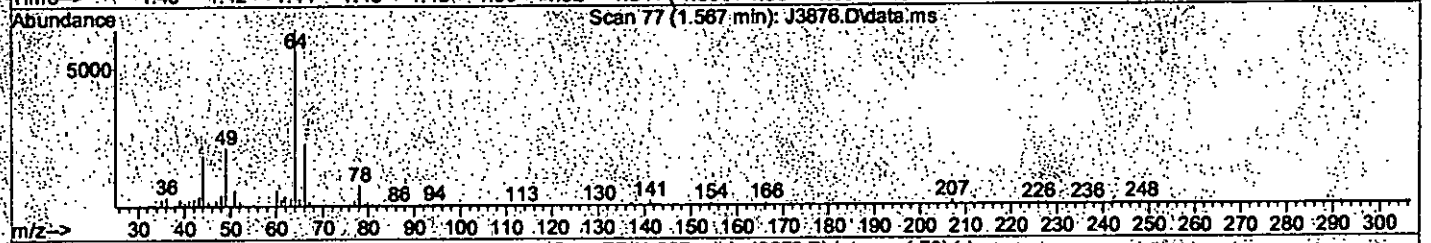
00425

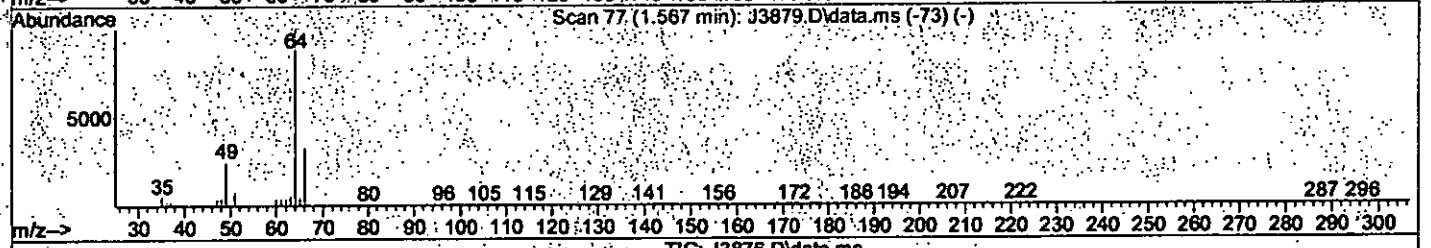
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(6) Chloroethane (P)

1.567min (-0.000) 0.94 ppb m

response 5094

Ion	Exp%	Act%
64.00	100	100
66.00	32.20	36.64
0.00	0.00	0.00
0.00	0.00	0.00

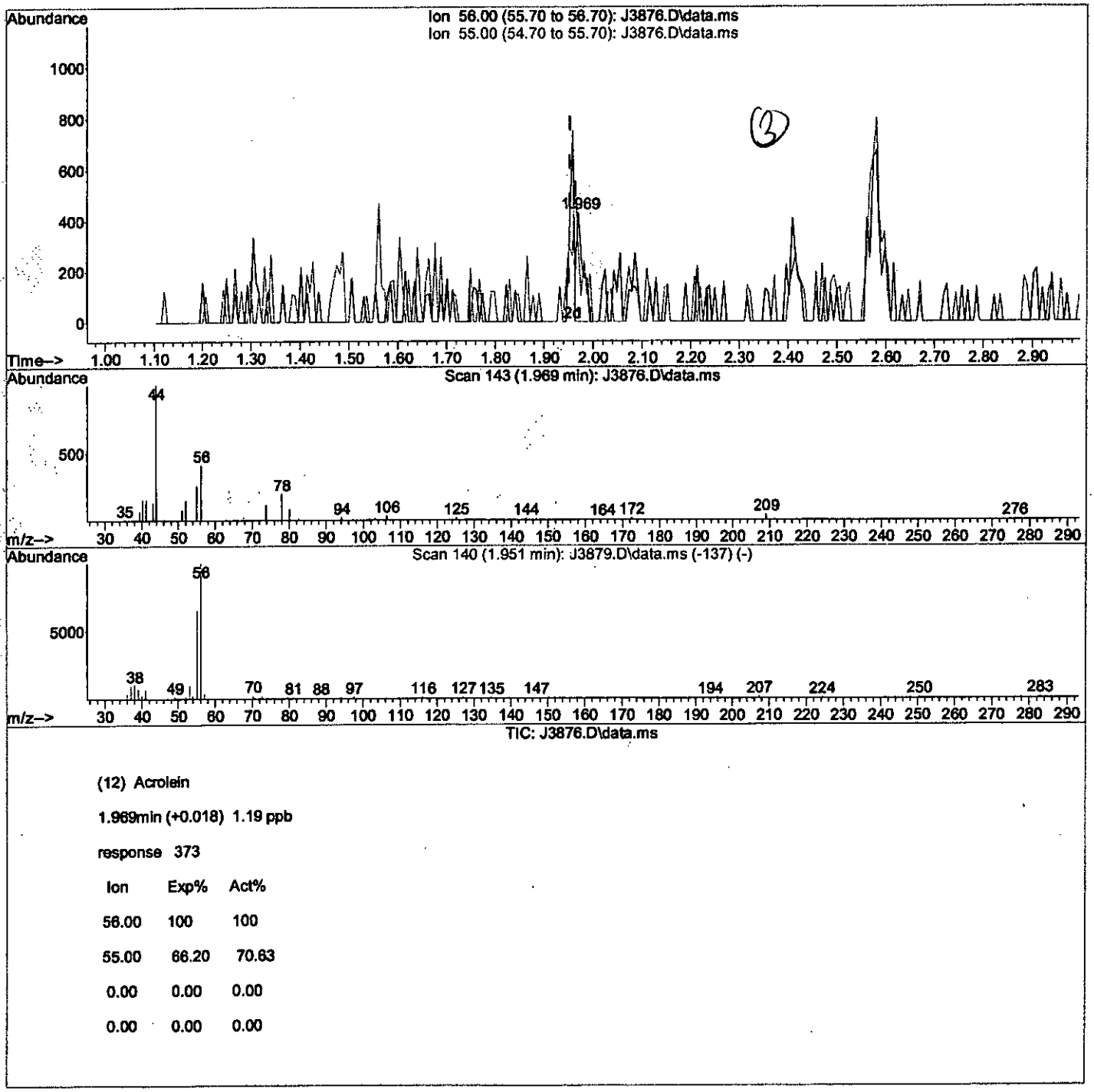
W031214.M Thu Mar 13 10:13:07 2014 Page: 1

00426

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(12) Acrolein

1.969min (+0.018) 1.19 ppb

response 373

Ion	Exp%	Act%
56.00	100	100
55.00	66.20	70.63
0.00	0.00	0.00
0.00	0.00	0.00

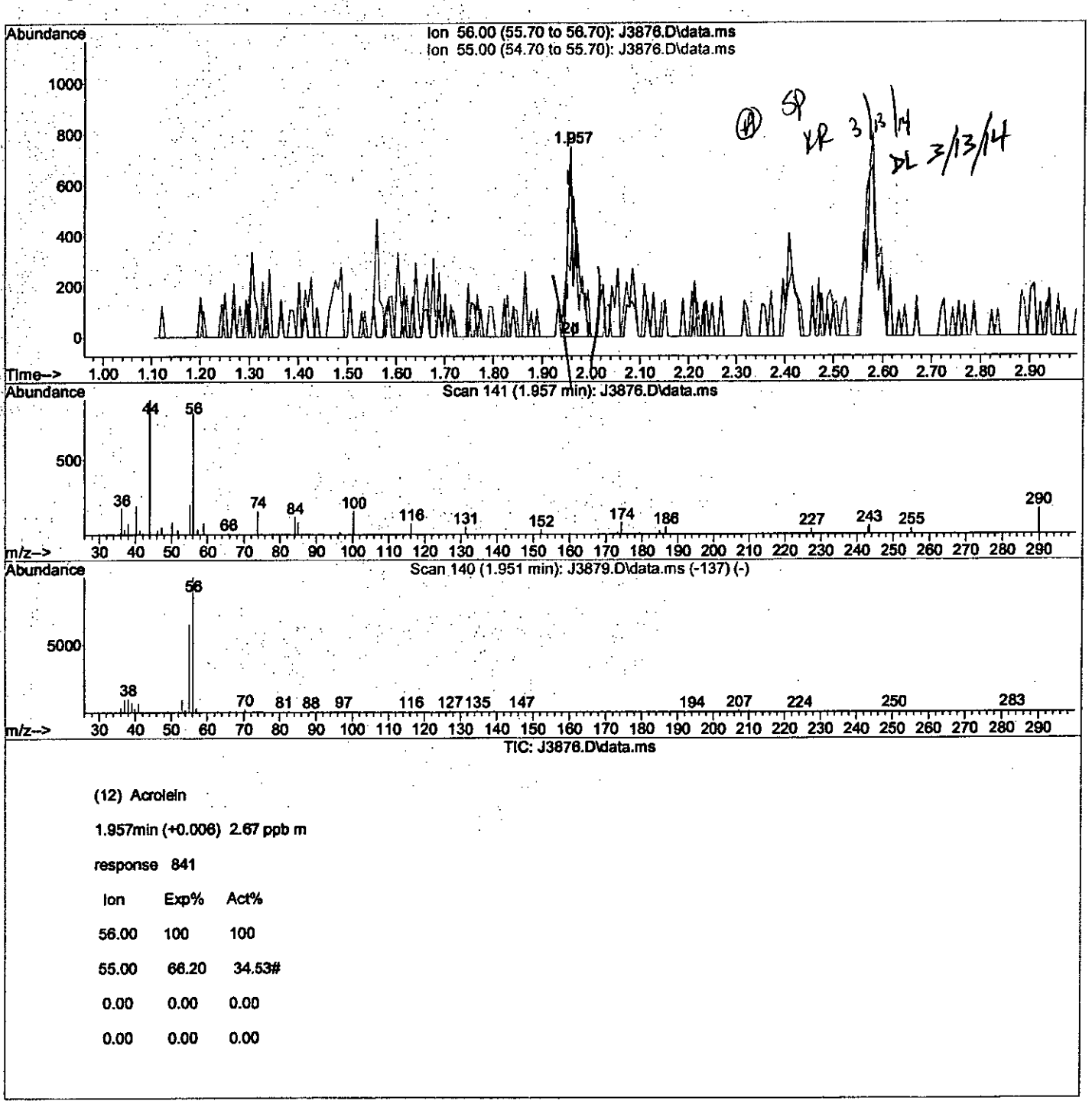
W031214.M Thu Mar 13 10:13:19 2014 Page: 1

00427

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(12) Acrolein

1.957min (+0.006) 2.67 ppb m

response 841

Ion	Exp%	Act%
56.00	100	100
55.00	66.20	34.53#
0.00	0.00	0.00
0.00	0.00	0.00

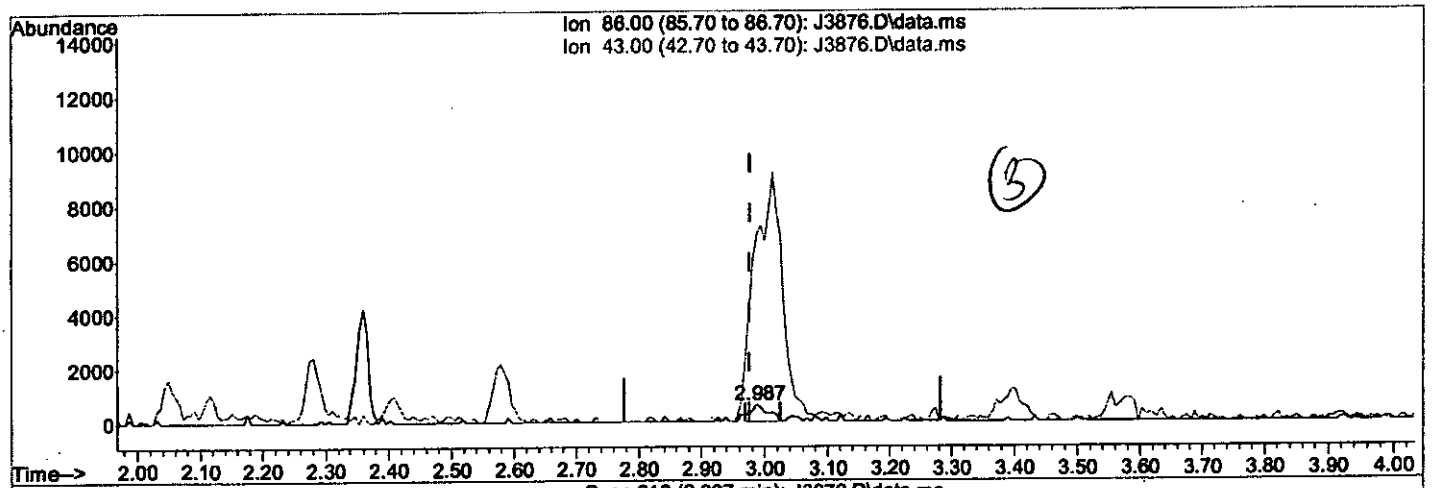
W031214.M Thu Mar 13 10:13:28 2014 Page: 1

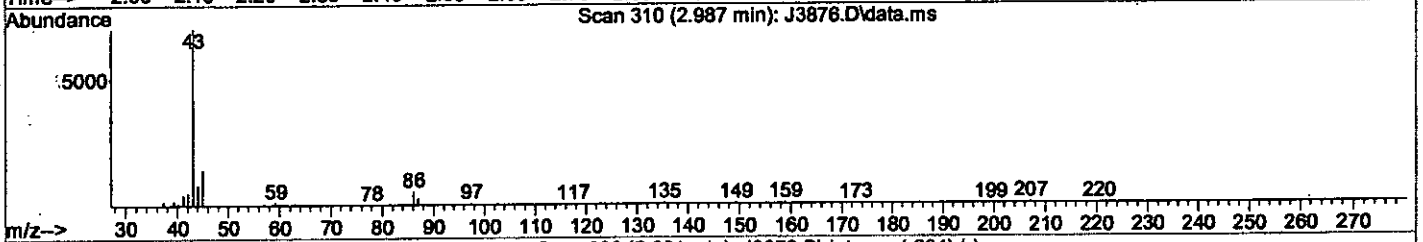
00428

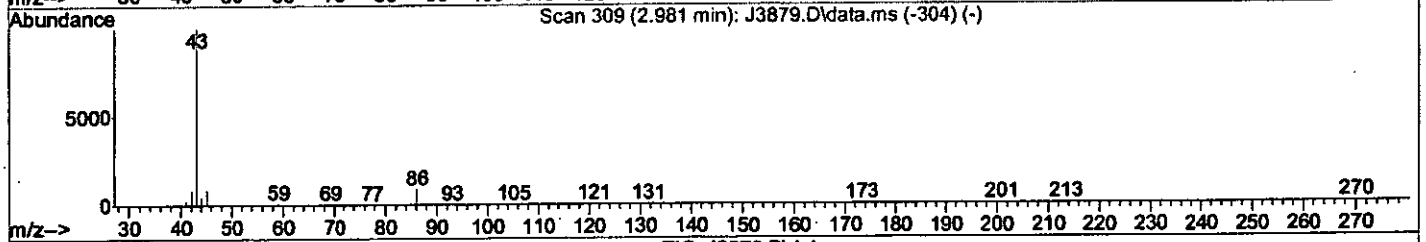
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(29) Vinyl Acetate

2.987min (+0.012) 0.82 ppb

response 1125

Ion	Exp%	Act%
86.00	100	100
43.00	1138.10	1111.02#
0.00	0.00	0.00
0.00	0.00	0.00

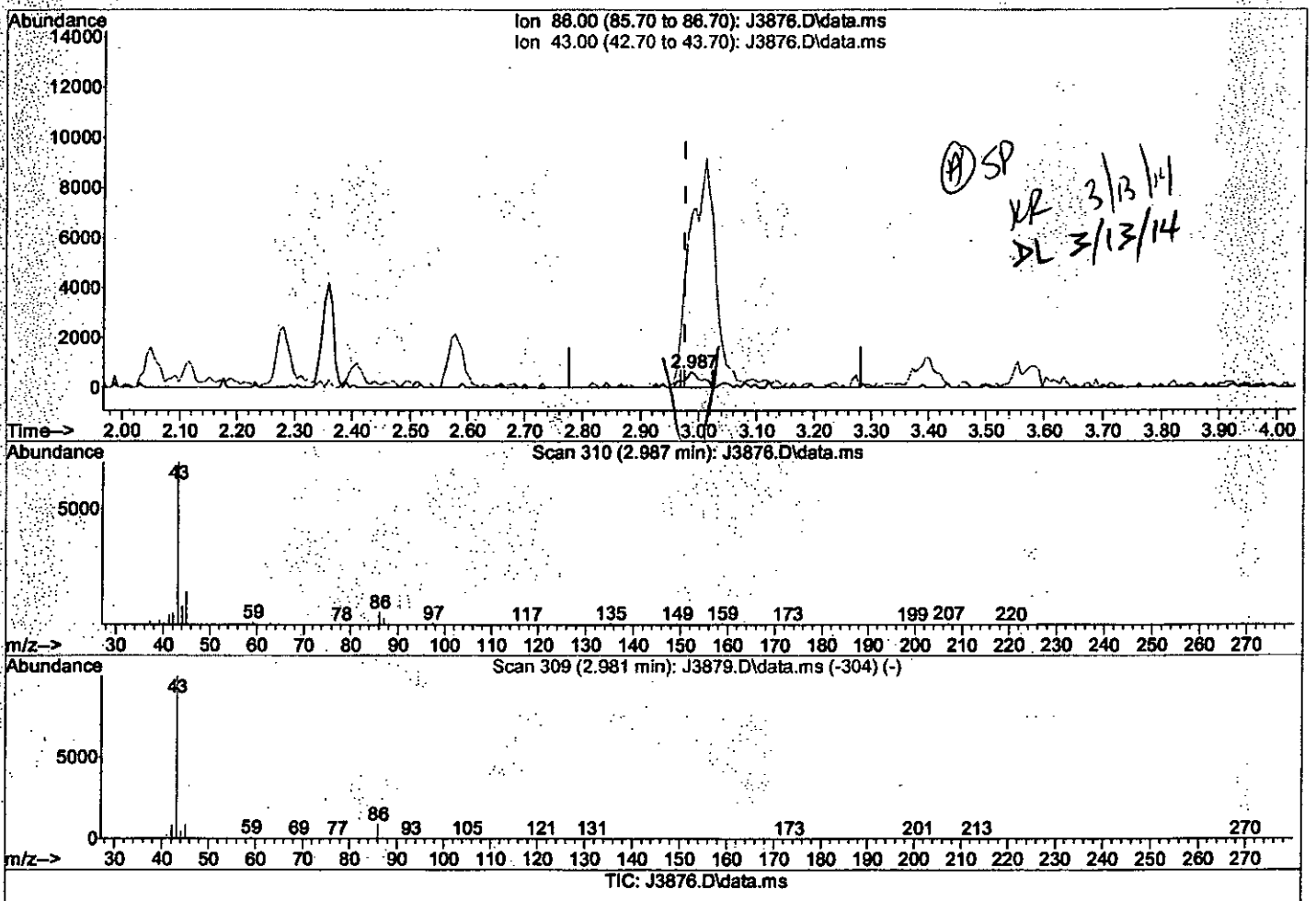
W031214.M Thu Mar 13 10:14:12 2014 Page: 1

00429

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(29) Vinyl Acetate

2.987min (+0.012) 0.95 ppb m

response 1309

Ion	Exp%	Act%
86.00	100	100
43.00	1138.10	1111.02#
0.00	0.00	0.00
0.00	0.00	0.00

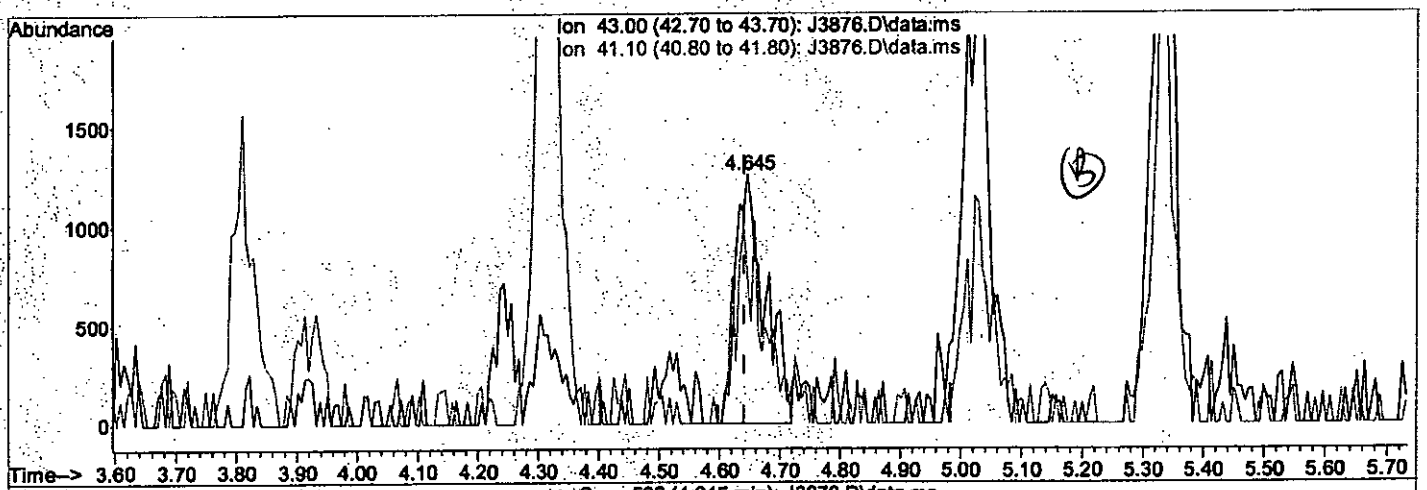
W031214.M Thu Mar 13 10:14:20 2014 Page: 1

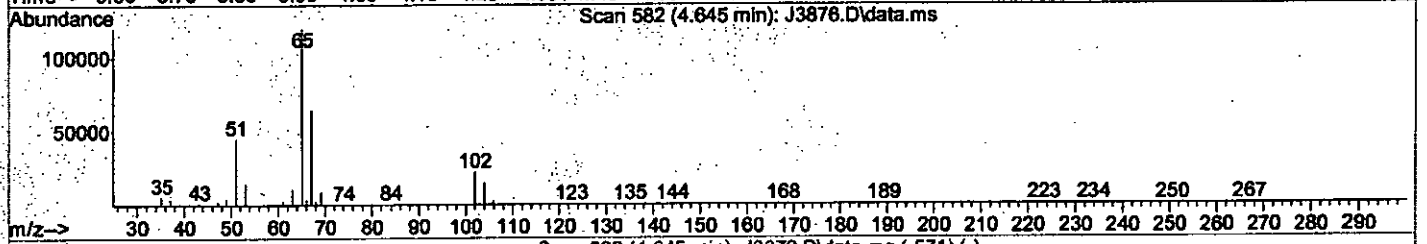
00430

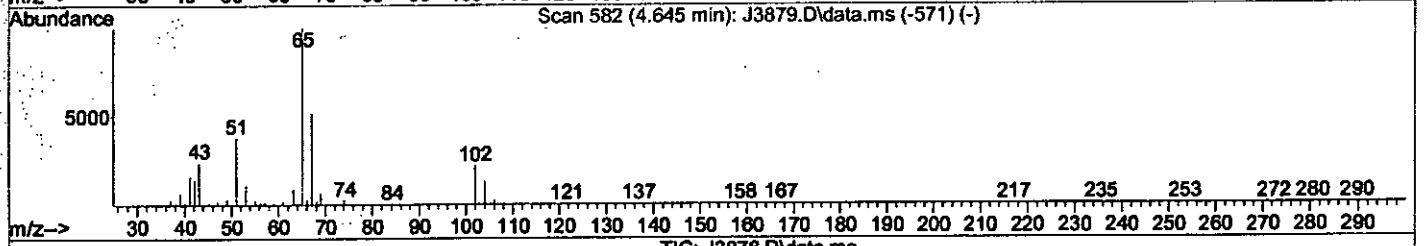
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 17.90 ppb

response 4235

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	60.99
0.00	0.00	0.00
0.00	0.00	0.00

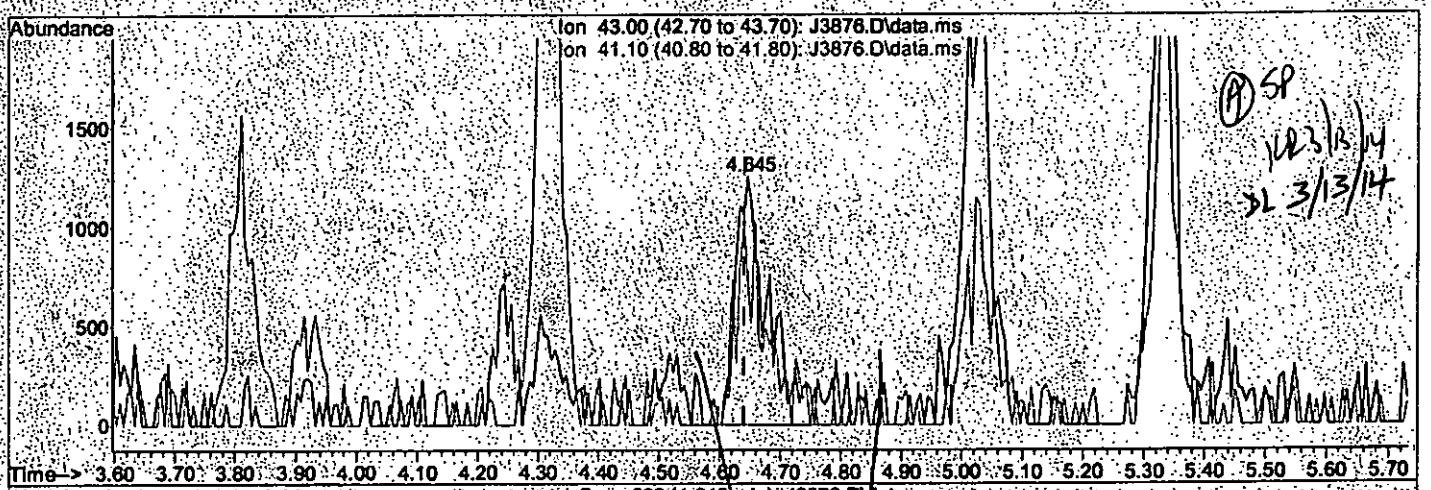
W031214.M Thu Mar 13 10:15:02 2014 Page: 1

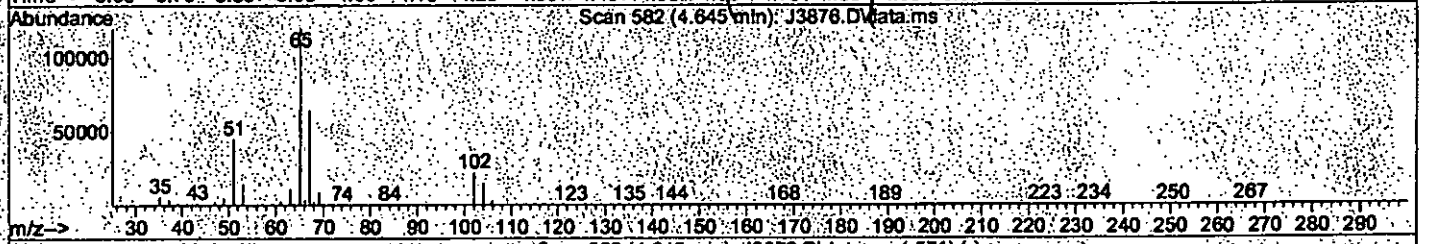
00431

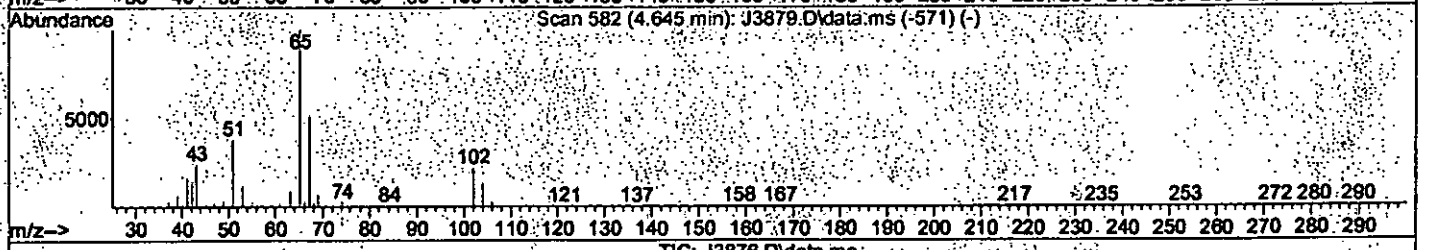
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 20.70 ppb m

response 4896

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	60.99
0.00	0.00	0.00
0.00	0.00	0.00

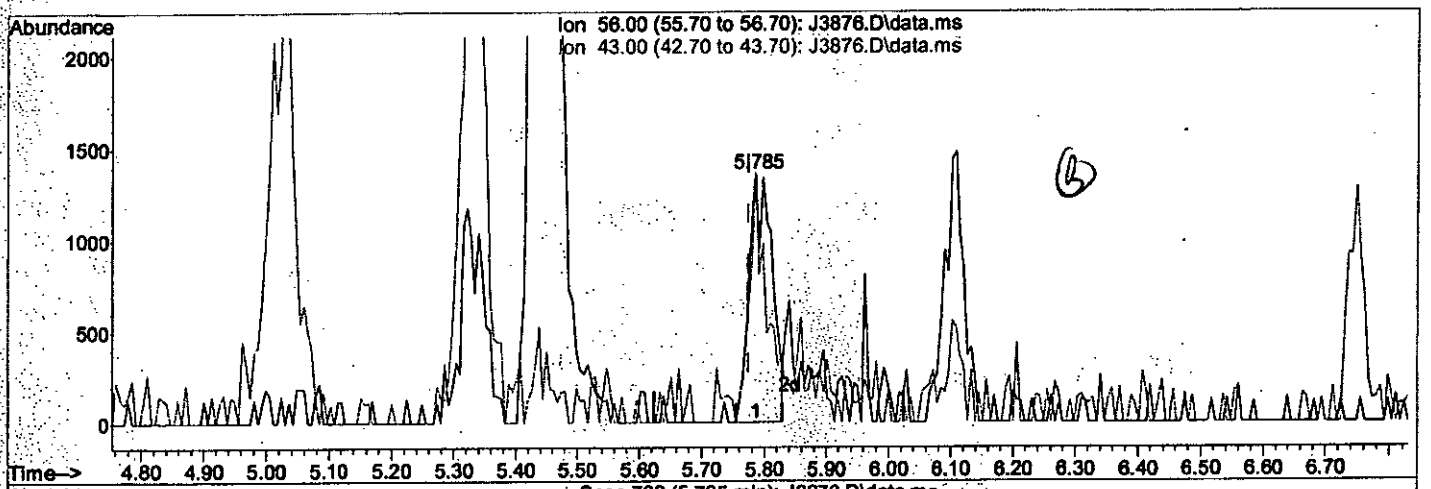
W031214.M Thu Mar 13 10:15:12 2014 Page: 1

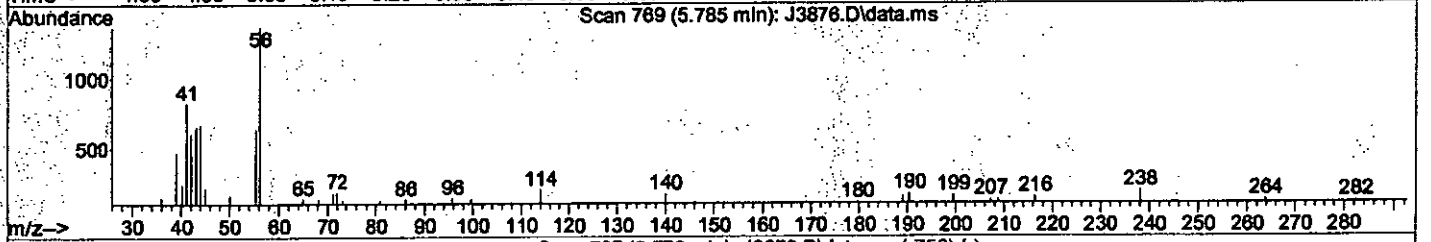
00432

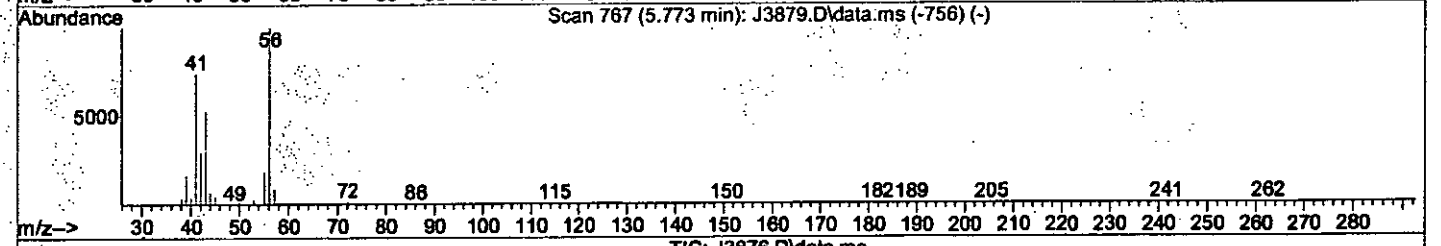
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(53) 1-Butanol

5.785min (+0.012) 25.83 ppb

response 3450

Ion	Exp%	Act%
56.00	100	100
43.00	55.80	81.22#
0.00	0.00	0.00
0.00	0.00	0.00

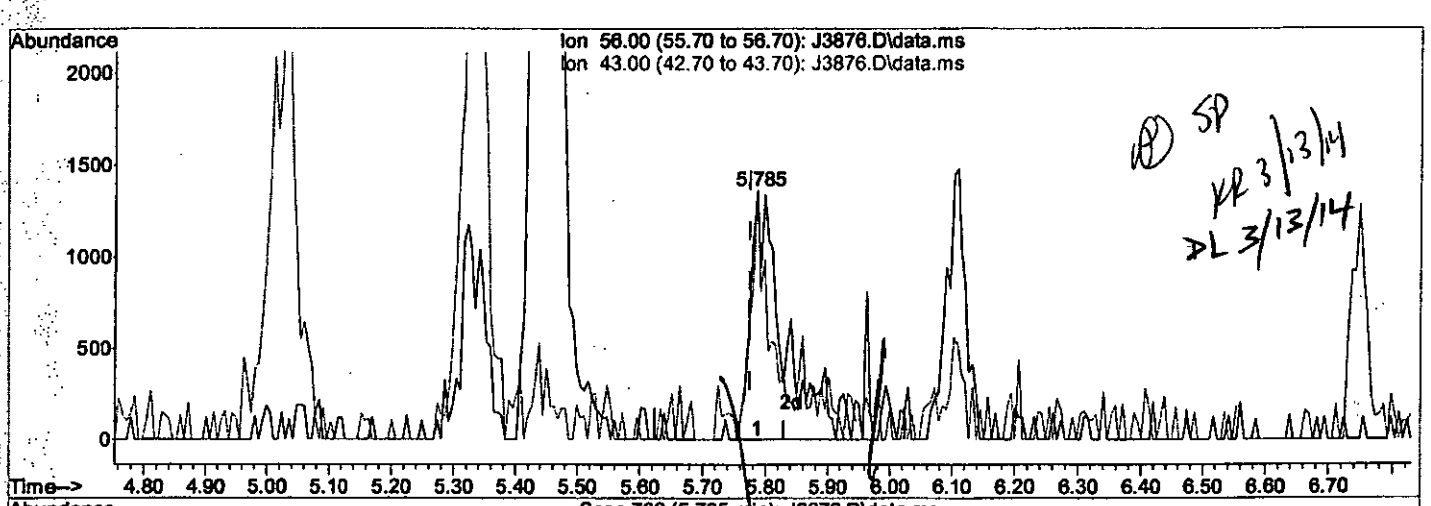
W031214.M Thu Mar 13 10:15:20 2014 Page: 1

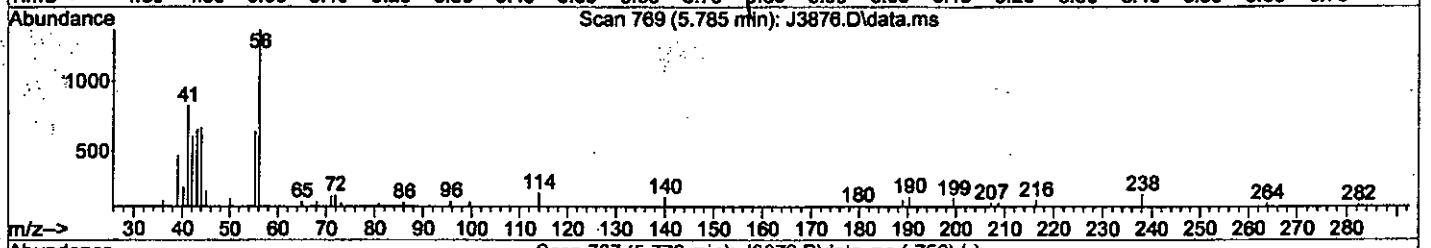
00433

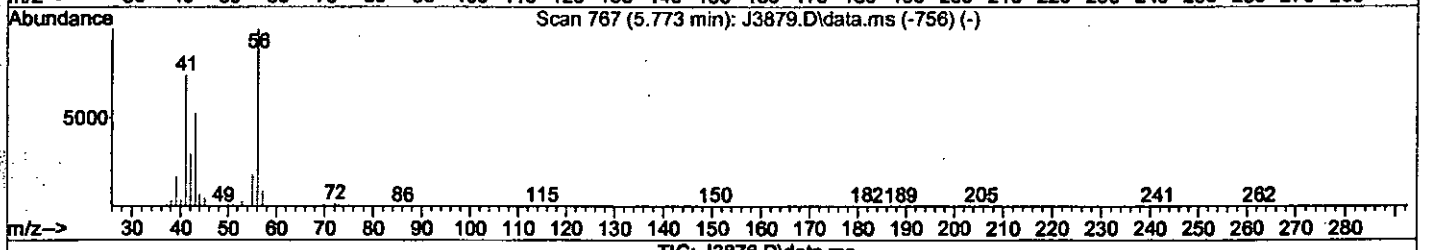
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(53) 1-Butanol

5.785min (+0.012) 41.98 ppb m

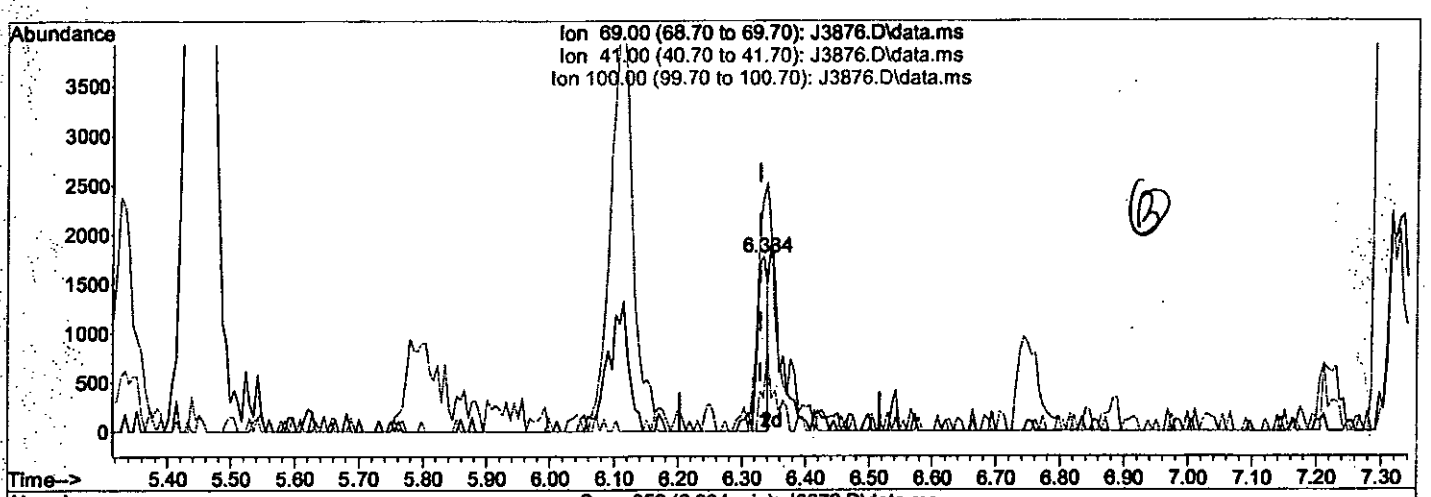
response 5606

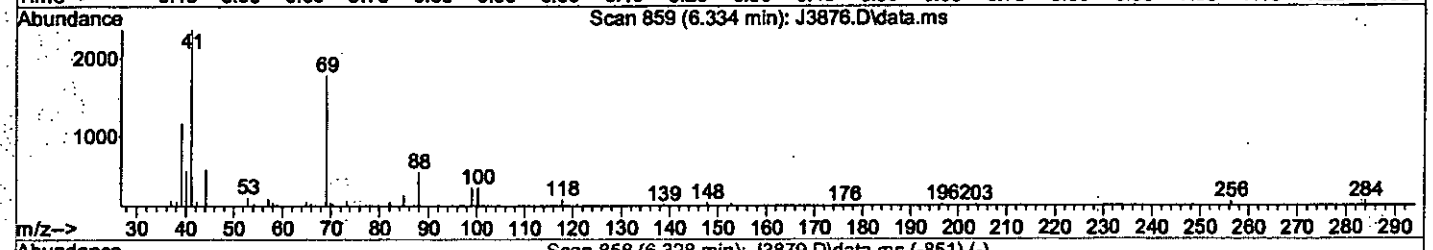
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	49.98
0.00	0.00	0.00
0.00	0.00	0.00

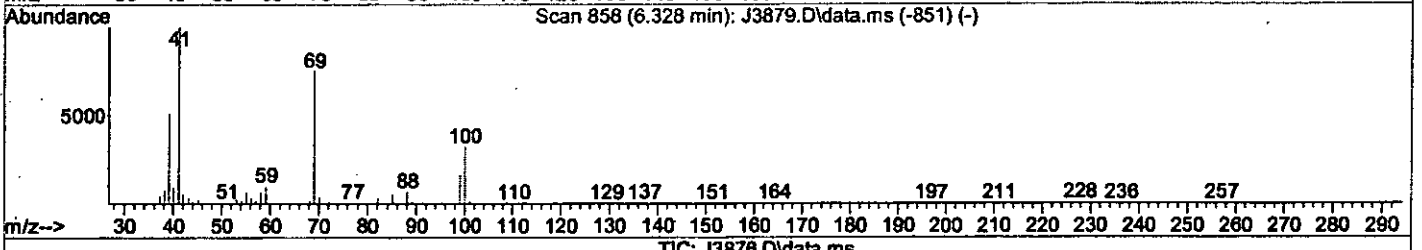
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(59) Methyl Methacrylate

6.334min (+0.006) 0.49 ppb

response 2074

Ion	Exp%	Act%
69.00	100	100
41.00	134.40	133.56
100.00	42.90	18.84#
0.00	0.00	0.00

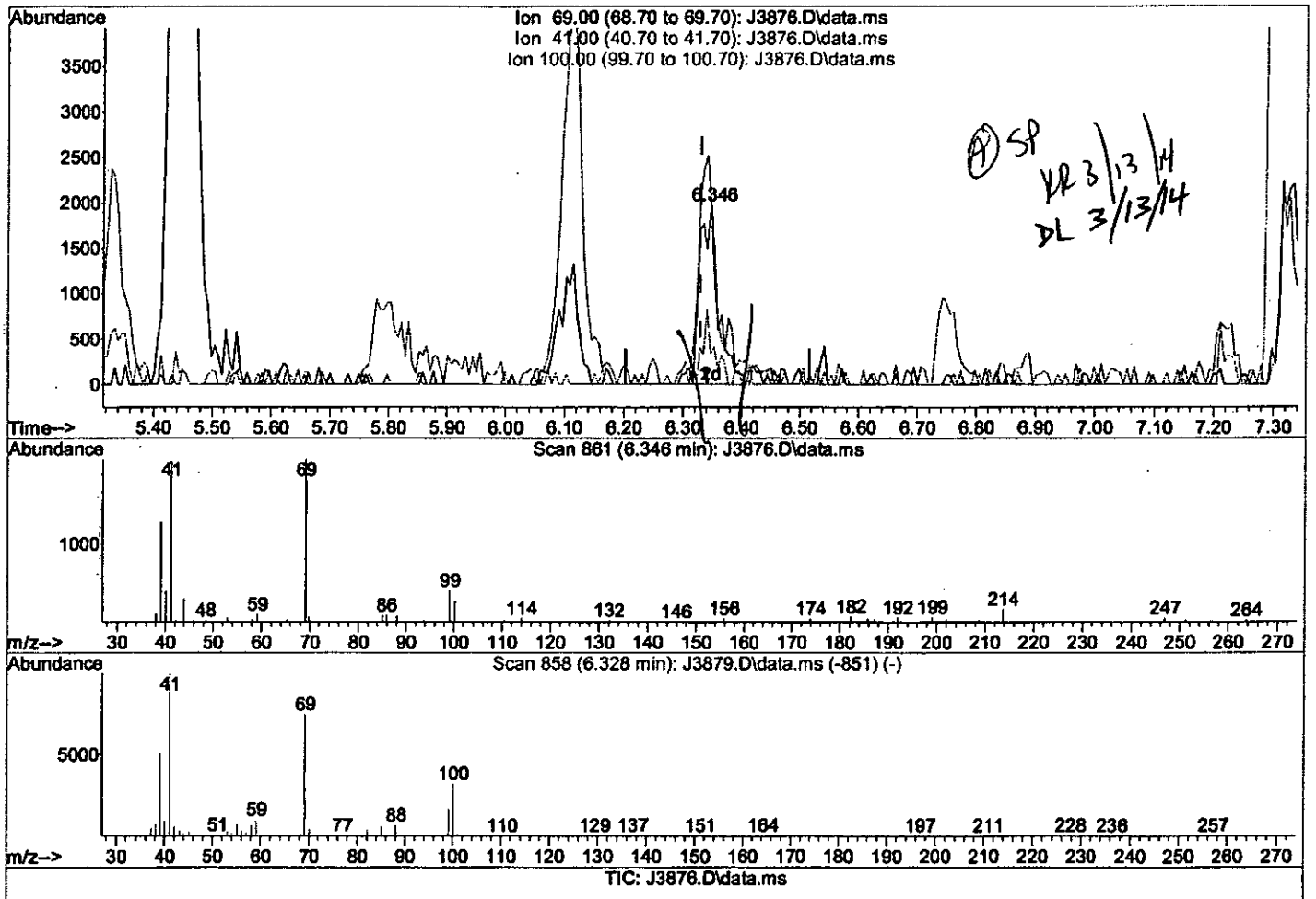
W031214.M Thu Mar 13 10:15:55 2014 Page: 1

00435

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(59) Methyl Methacrylate

6.346min (+0.018) 1.03 ppb m

response 4351

Ion	Exp%	Act%
69.00	100	100
41.00	134.40	98.68#
100.00	42.90	16.94#
0.00	0.00	0.00

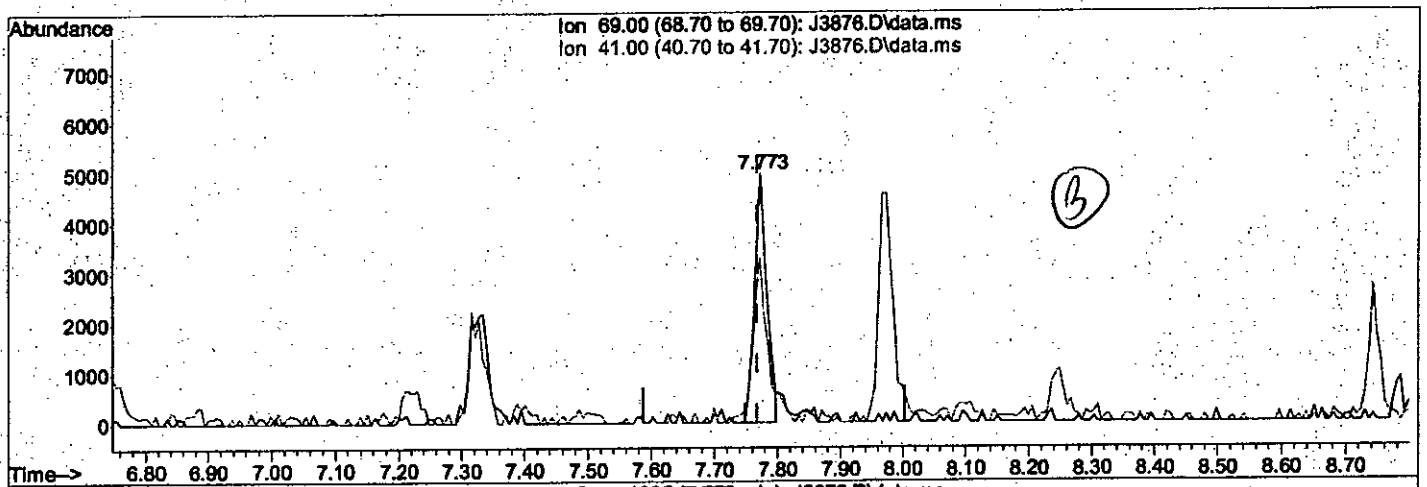
W031214.M Thu Mar 13 10:16:03 2014 Page: 1

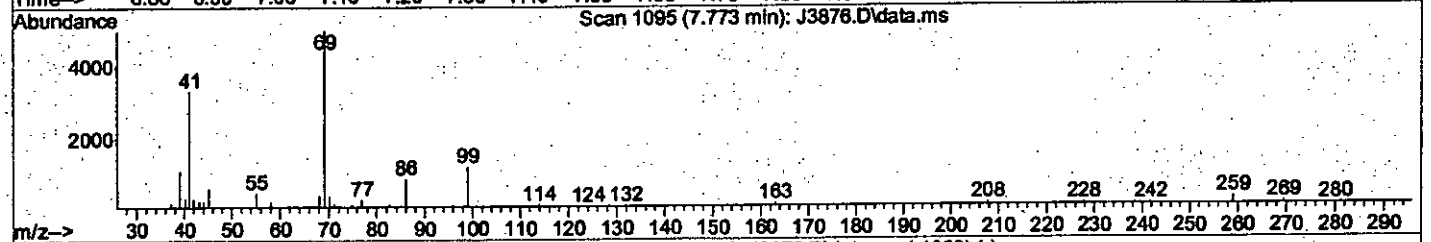
00436

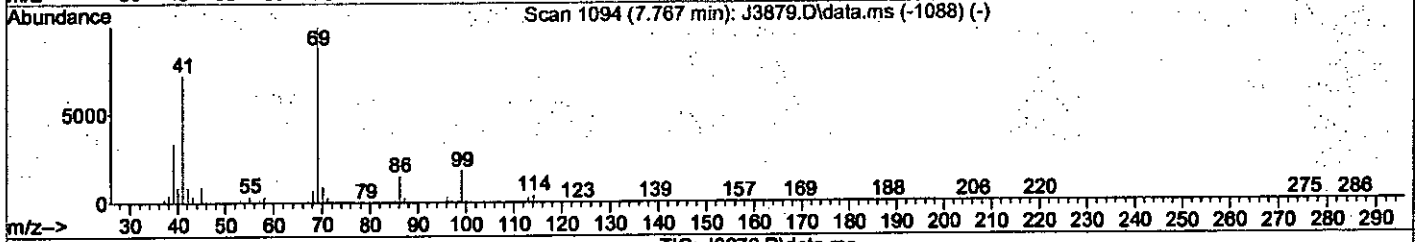
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(68) Ethyl Methacrylate

7.773min (+0.006) 0.84 ppb

response 6810

Ion	Exp%	Act%
69.00	100	100
41.00	72.10	66.39
0.00	0.00	0.00
0.00	0.00	0.00

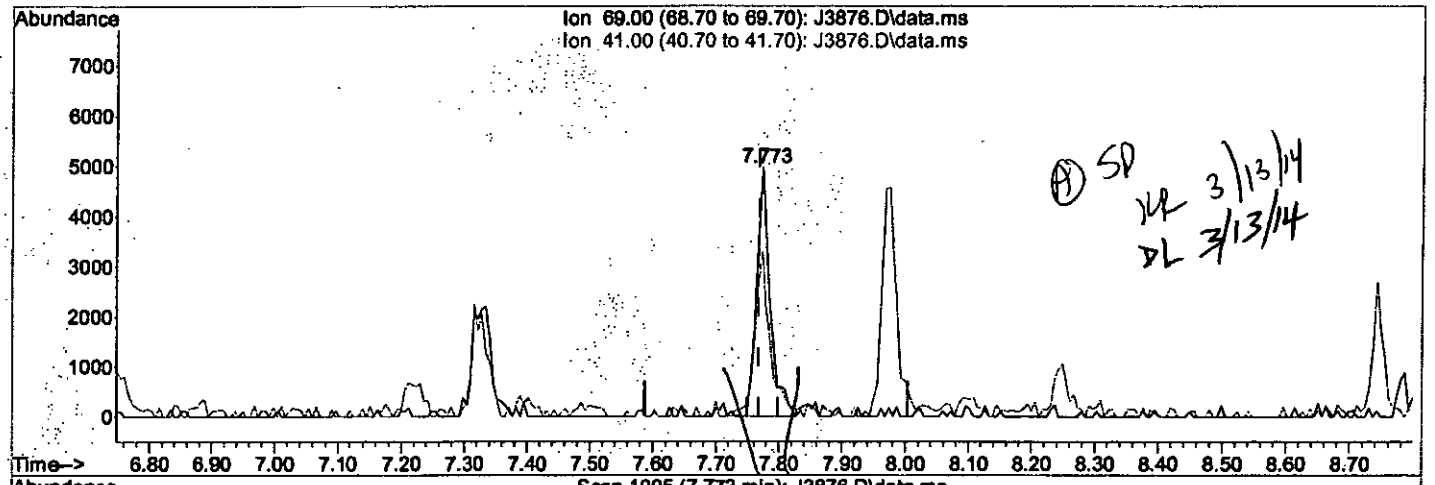
W031214.M Thu Mar 13 10:16:16 2014 Page: 1

00437

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(68) Ethyl Methacrylate

7.773min (+0.006) 0.92 ppb m

response 7414

Ion	Exp%	Act%
69.00	100	100
41.00	72.10	66.39
0.00	0.00	0.00
0.00	0.00	0.00

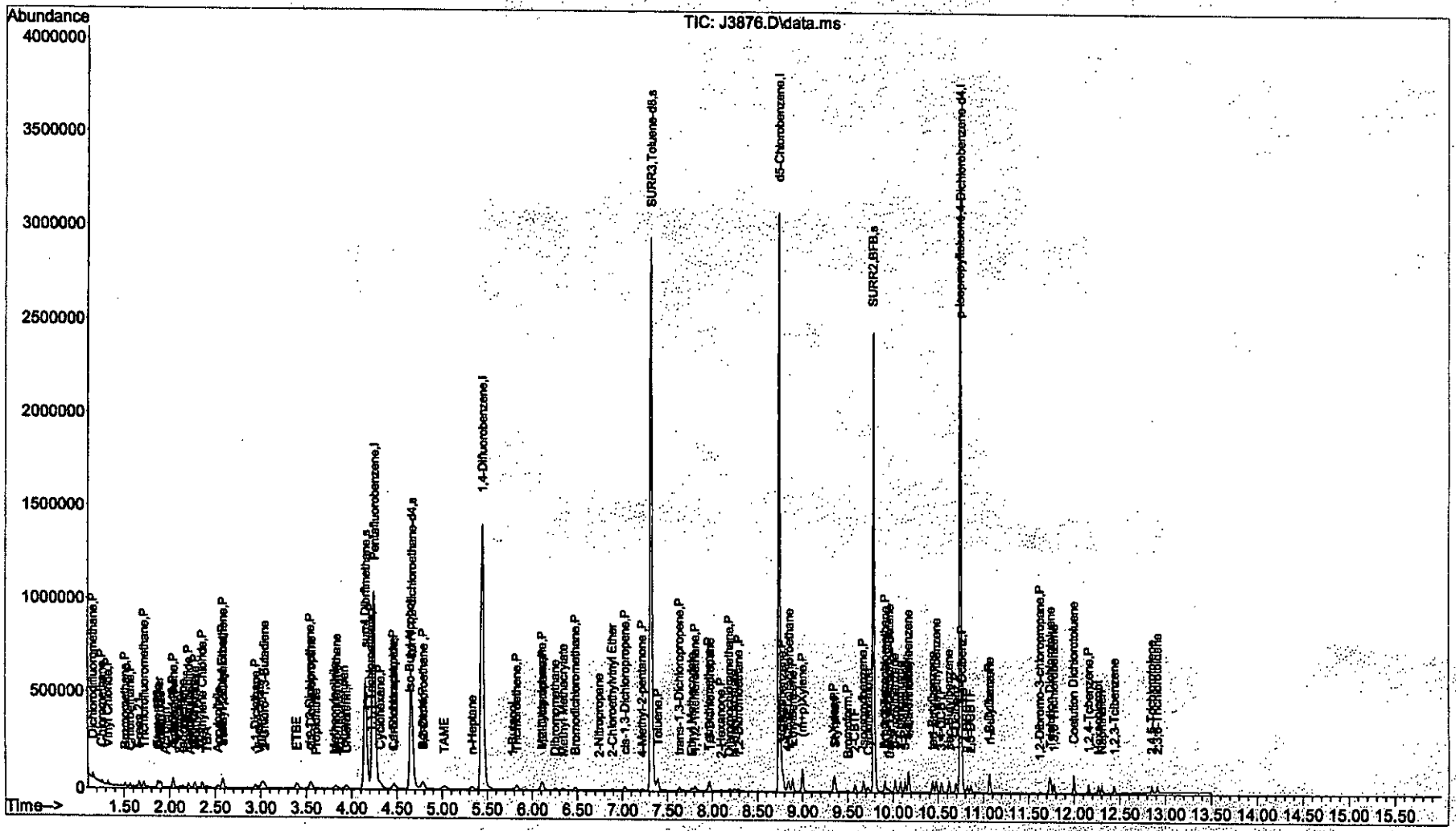
W031214.M Thu Mar 13 10:16:23 2014 Page: 1

00438

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



0439

W031214.M Thu Mar 13 10:17:23 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909918	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1430134	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1288124	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	610738	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	411288	49.68	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.36%				
48) surr1,1,2-dichloroetha...	4.658	65	473496	50.20	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.40%				
65) SURR3,Toluene-d8	7.322	98	1742443	50.08	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.16%				
70) SURR2,BFB	9.785	95	630193	48.55	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	20735	1.92	ppb		98
3) Chloromethane	1.262	50	19011	2.03	ppb		95
4) Vinyl Chloride	1.323	62	17323	1.99	ppb		99
5) Bromomethane	1.512	94	11249	2.15	ppb		92
6) Chloroethane	1.567	64	11004	2.03	ppb		97
7) Freon 21	1.664	67	27600	2.10	ppb		100
8) Trichlorofluoromethane	1.719	101	26842	2.01	ppb		99
9) Diethyl Ether	1.878	59	13135	2.00	ppb		98
10) Freon 123a	1.872	67	20874	2.13	ppb		96
11) Freon 123	1.902	83	23028	2.06	ppb		97
12) Acrolein	1.957	56	1454m	4.62	ppb		
13) 1,1-Diclethene	2.036	96	13512	2.05	ppb		92
14) Freon 113	2.036	101	14449	2.00	ppb		95
15) Acetone	2.048	43	4756	2.63	ppb	#	65
16) 2-Propanol	2.115	45	9075	30.48	ppb		94
17) Iodomethane	2.146	142	14905	1.70	ppb		93
18) Carbon Disulfide	2.207	76	45666	1.99	ppb		97
19) Acetonitrile	2.225	40	2234	7.57	ppb		96
20) Allyl Chloride	2.274	76	8927	1.97	ppb	#	88
21) Methyl Acetate	2.280	43	7554	1.86	ppb		94
22) Methylene Chloride	2.359	84	17720	2.05	ppb		92
23) TBA	2.408	59	18160	35.99	ppb		100
24) Acrylonitrile	2.524	53	18242	9.02	ppb		94
25) Methyl-t-Butyl Ether	2.585	73	41163	1.96	ppb		95
26) trans-1,2-Dichloroethene	2.585	96	16136	1.95	ppb		99
28) 1,1-Diclethane	2.938	63	31309	2.03	ppb		93
29) Vinyl Acetate	2.987	86	2521	1.84	ppb	#	27
30) DIPE	3.012	45	59555	1.99	ppb		87
31) 2-Chloro-1,3-Butadiene	3.042	53	26608	2.01	ppb		92
32) ETBE	3.396	59	48108	1.92	ppb		99
33) 2,2-Dichloropropane	3.560	77	23375	1.91	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	17604	1.91	ppb		85
35) 2-Butanone	3.566	43	4922	1.95	ppb		85
36) Propionitrile	3.597	54	6574	9.27	ppb		90
37) Bromochloromethane	3.835	130	10569	2.05	ppb		90

KR 3/13/14

W031214.M Thu Mar 13 10:28:44 2014 Page: 1

00440

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
38) Methacrylonitrile	3.804	67	5081	2.16 ppb	#	58
39) Tetrahydrofuran	3.914	42	3686	2.08 ppb		80
40) Chloroform	3.938	83	30998	2.05 ppb		98
41) 1,1,1-Trichloroethane	4.219	97	25573	1.98 ppb	#	1
42) TAME	5.023	73	41178	1.94 ppb		98
44) Cyclohexane	4.316	41	15916m	2.06 ppb		
46) Carbontetrachloride	4.469	121	6643m	1.94 ppb		
47) 1,1-Dichloropropene	4.462	75	19919	1.90 ppb		95
49) Benzene	4.786	78	70084	1.99 ppb		91
50) 1,2-Dichloroethane	4.792	62	21052	1.97 ppb		90
51) Iso-Butyl Alcohol	4.645	43	8755m	36.97 ppb		
52) n-Heptane	5.334	43	17849	2.03 ppb		94
53) 1-Butanol	5.779	56	10476m	78.36 ppb		
54) Trichloroethene	5.834	130	17521	2.05 ppb		84
55) Methylcyclohexane	6.108	55	18955	2.07 ppb		86
56) 1,2-Diclpropane	6.115	63	18552	2.04 ppb		98
57) Dibromomethane	6.255	93	8051	1.88 ppb		94
58) 1,4-Dioxane	6.328	88	2071m	36.08 ppb		
59) Methyl Methacrylate	6.340	69	6901	1.63 ppb		90
60) Bromodichloromethane	6.480	83	20138	1.91 ppb		95
61) 2-Nitropropane	6.743	41	4286m	3.79 ppb		
62) 2-Chloroethylvinyl Ether	6.889	63	7503	1.86 ppb		88
63) cis-1,3-Dichloropropene	7.023	75	22401	1.80 ppb		94
64) 4-Methyl-2-pentanone	7.212	43	10071	1.85 ppb		89
66) Toluene	7.395	91	74992	2.07 ppb		97
67) trans-1,3-Dichloropropene	7.633	75	17986	1.79 ppb		96
68) Ethyl Methacrylate	7.767	69	13634	1.68 ppb		94
69) 1,1,2-Trichloroethane	7.809	97	11464	1.81 ppb		99
72) Tetrachloroethene	7.962	164	13515	2.03 ppb		96
73) 2-Hexanone	8.090	43	6463	1.77 ppb	#	74
74) 1,3-Dichloropropane	7.974	76	22806	1.97 ppb		93
75) Dibromochloromethane	8.193	129	12460	1.87 ppb		99
76) N-Butyl Acetate	8.242	43	15842	1.76 ppb		98
77) 1,2-Dibromoethane	8.291	107	11853	1.99 ppb		91
78) Chlorobenzene	8.767	112	45758	2.04 ppb		100
79) 3-CBTF	8.785	180	20314	1.83 ppb		98
80) 4-CBTF	8.840	180	17849	1.80 ppb		91
81) 1,1,1,2-Tetrachloroethane	8.852	131	14723	1.87 ppb		92
82) Ethylbenzene	8.888	106	22933	1.92 ppb		91
83) (m+p)Xylene	8.998	106	55419	3.95 ppb		96
84) o-Xylene	9.346	106	26979	1.88 ppb		97
85) Styrene	9.358	104	41678	1.82 ppb		92
87) Bromoform	9.492	173	5562	1.60 ppb		83
88) 2-CBTF	9.577	180	20255	1.99 ppb		98
89) Isopropylbenzene	9.675	105	64407	2.04 ppb		98
90) Cyclohexanone	9.718	55	17665	36.07 ppb		96
91) trans-1,4-Dichloro-2-B...	9.967	53	3112	1.89 ppb		94
92) 1,1,2,2-Tetrachloroethane	9.913	83	13476	1.93 ppb		95
93) Bromobenzene	9.913	156	18829	2.10 ppb	#	77
94) 1,2,3-Trichloropropane	9.943	110	4408	2.11 ppb	#	80
95) n-Propylbenzene	10.022	91	78055	2.12 ppb		95
96) 2-Chlorotoluene	10.083	91	48755	2.10 ppb		98

W031214.M Thu Mar 13 10:28:44 2014 Page: 2

00441

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	48185	2.00	ppb		97
98)	4-Chlorotoluene	10.175	91	57852	2.12	ppb		96
99)	1,3,5-Trimethylbenzene	10.169	105	51100	1.99	ppb		94
100)	tert-Butylbenzene	10.437	119	44524	2.06	ppb		97
101)	1,2,4-Trimethylbenzene	10.480	105	52516	1.98	ppb		100
102)	3,4-DCBTF	10.534	214	14555	1.93	ppb		96
103)	sec-Butylbenzene	10.620	105	62384	2.07	ppb		98
104)	p-Isopropyltoluene	10.742	119	50277	1.97	ppb		97
105)	1,3-Dclbenz	10.699	146	29567	1.93	ppb		95
106)	1,4-Dclbenz	10.766	146	31312	1.92	ppb		90
107)	2,4-DCBTF	10.821	214	12420	1.90	ppb	#	88
108)	2,5-DCBTF	10.864	214	14748	1.97	ppb		98
109)	n-Butylbenzene	11.065	91	47827	2.08	ppb		93
110)	1,2-Dclbenz	11.065	146	28414	1.93	ppb		99
111)	1,2-Dibromo-3-chloropr...	11.626	157	1695	1.58	ppb	#	67
112)	Trielution Dichlorotol...	11.729	125	67672	5.81	ppb		97
113)	1,3,5 Trichlorobenzene	11.778	180	20663	2.03	ppb		97
114)	Coelution Dichlorotoluene	11.998	125	50516	4.10	ppb		96
115)	1,2,4-Tcbenzene	12.162	180	17573	1.95	ppb		95
116)	Hexachlorobt	12.266	225	7725	1.97	ppb		97
117)	Naphthalen	12.302	128	31525	1.94	ppb		99
118)	1,2,3-Tclbenzene	12.437	180	14777	2.00	ppb		97
119)	2,4,5-Trichlorotolene	12.851	159	9636m	1.98	ppb		
120)	2,3,6-Trichlorotoluene	12.912	159	8342	1.88	ppb		97

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

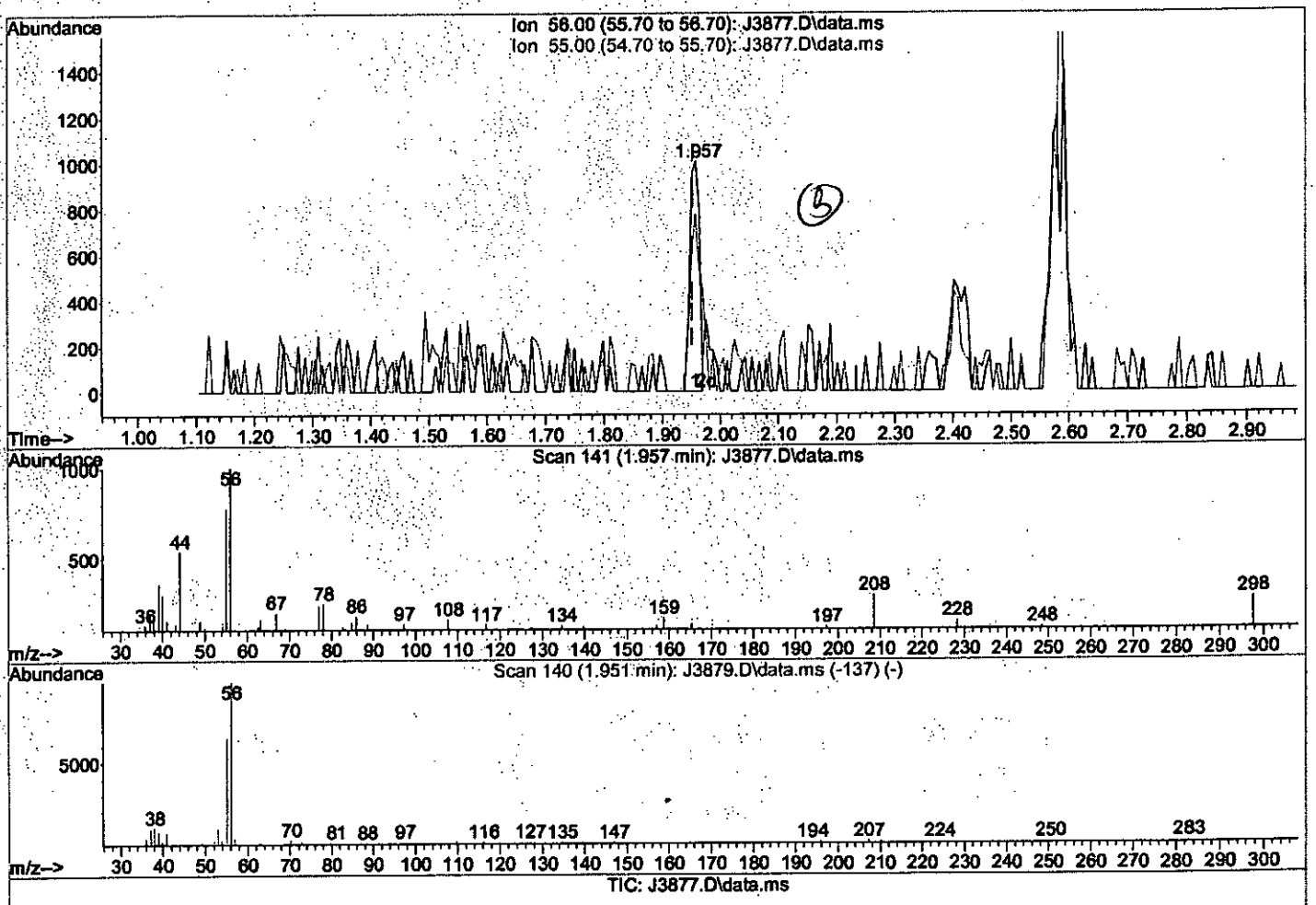
W031214.M Thu Mar 13 10:28:44 2014 Page: 3

06442

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(12) Acrolein

1.957min (+0.008) 3.70 ppb

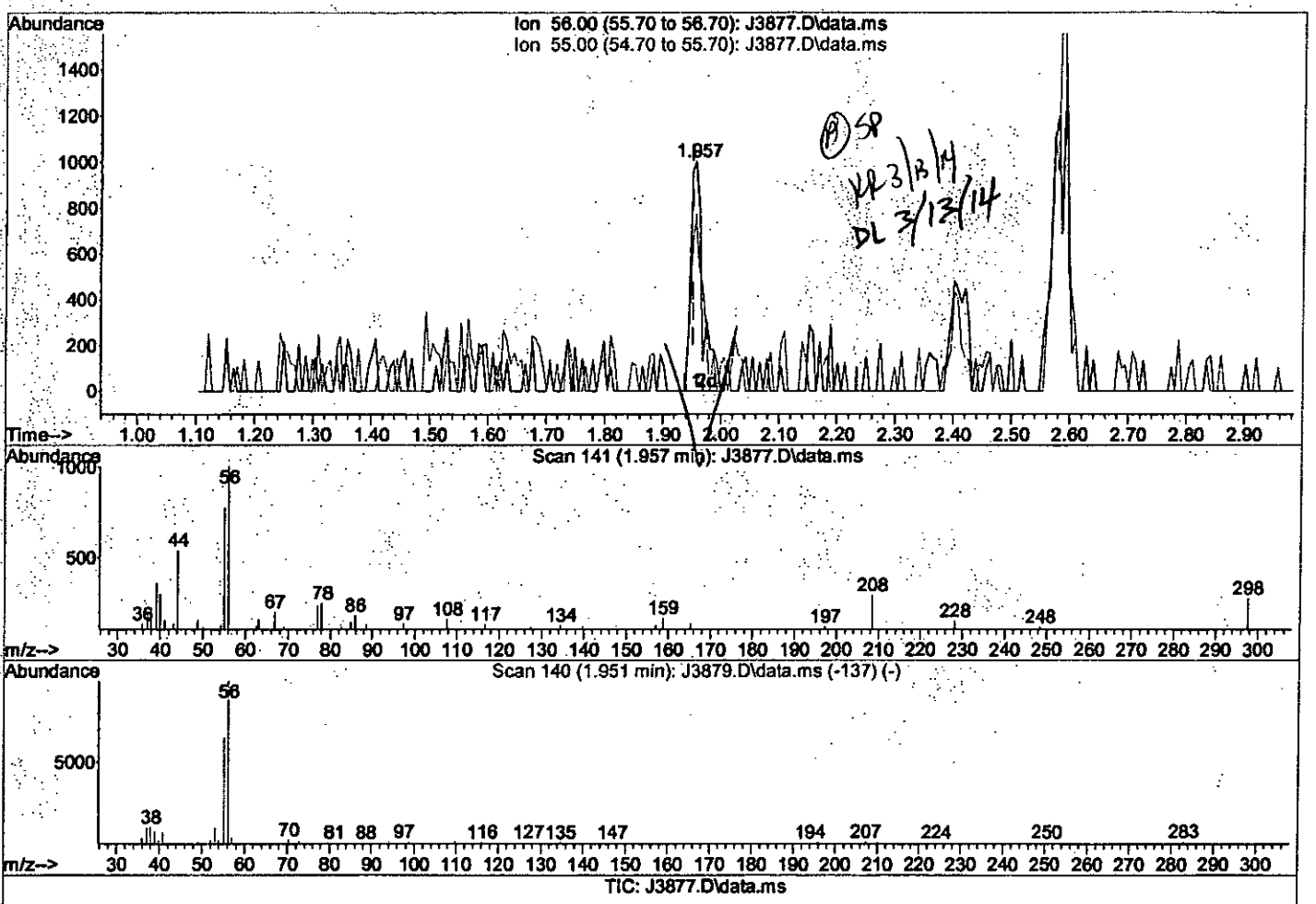
response 1163

Ion	Exp%	Act%
56.00	100	100
55.00	66.20	77.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(12) Acrolein

1.957min (+0.006) 4.62 ppb m

response 1454

Ion	Exp%	Act%
56.00	100	100
55.00	66.20	77.47
0.00	0.00	0.00
0.00	0.00	0.00

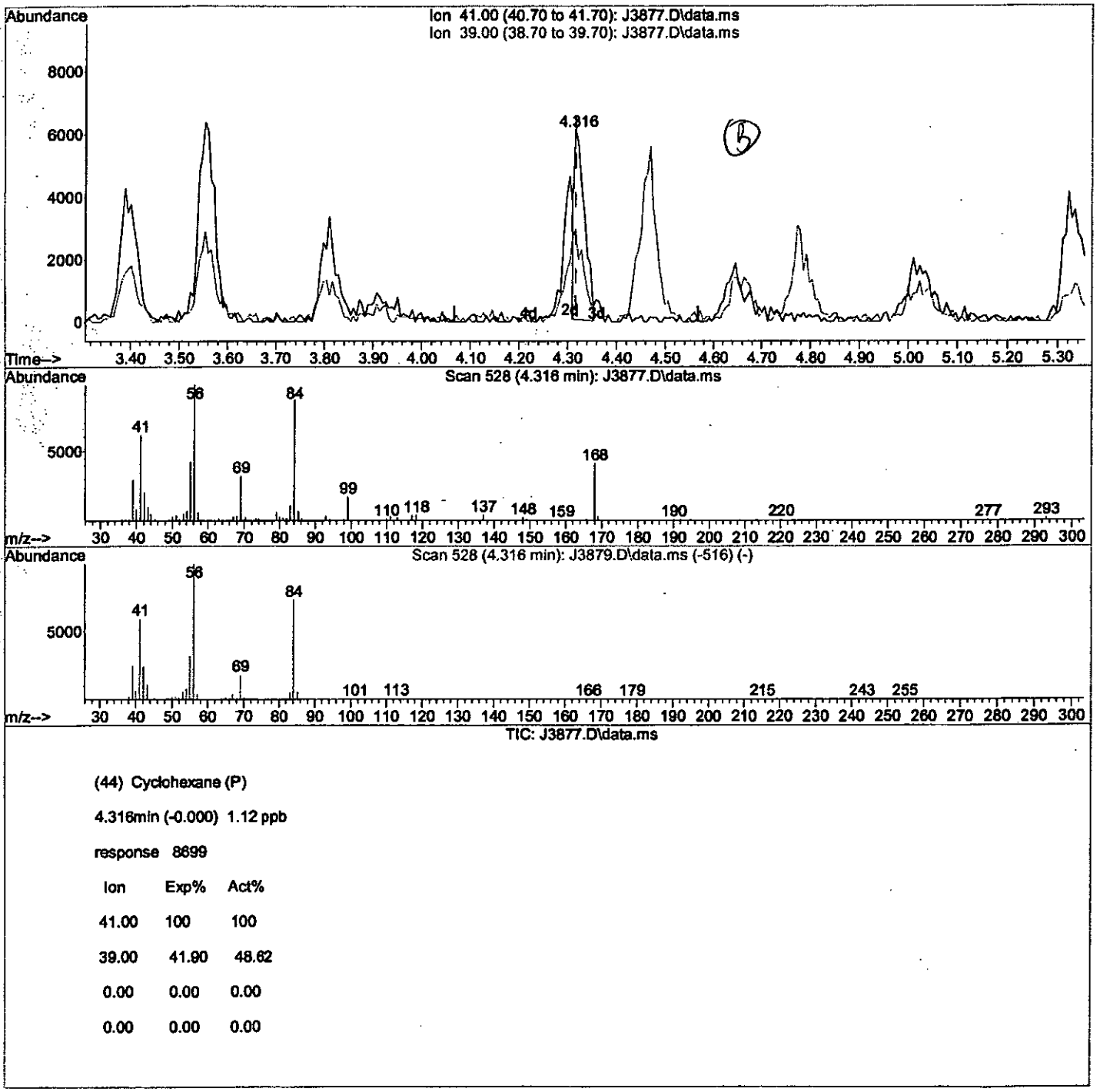
W031214.M Thu Mar 13 10:24:48 2014 Page: 1

00444

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(44) Cyclohexane (P)

4.316min (-0.000) 1.12 ppb

response 8699

Ion	Exp%	Act%
41.00	100	100
39.00	41.90	48.62
0.00	0.00	0.00
0.00	0.00	0.00

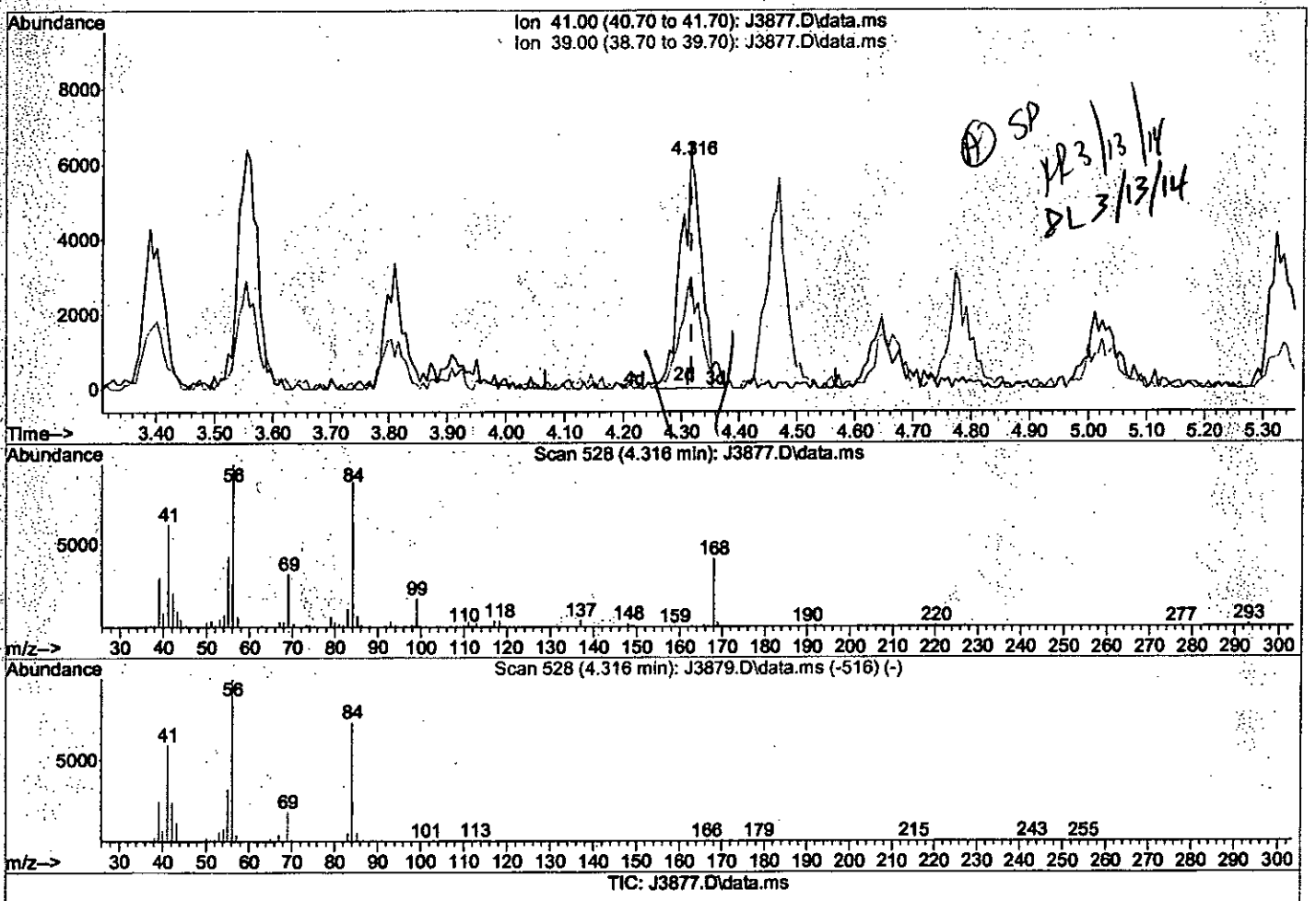
W031214.M Thu Mar 13 10:25:25 2014 Page: 1

00445

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(44) Cyclohexane (P)

4.316min (-0.000) 2.06 ppb m

response 15916

Ion	Exp%	Act%
41.00	100	100
39.00	41.90	48.62
0.00	0.00	0.00
0.00	0.00	0.00

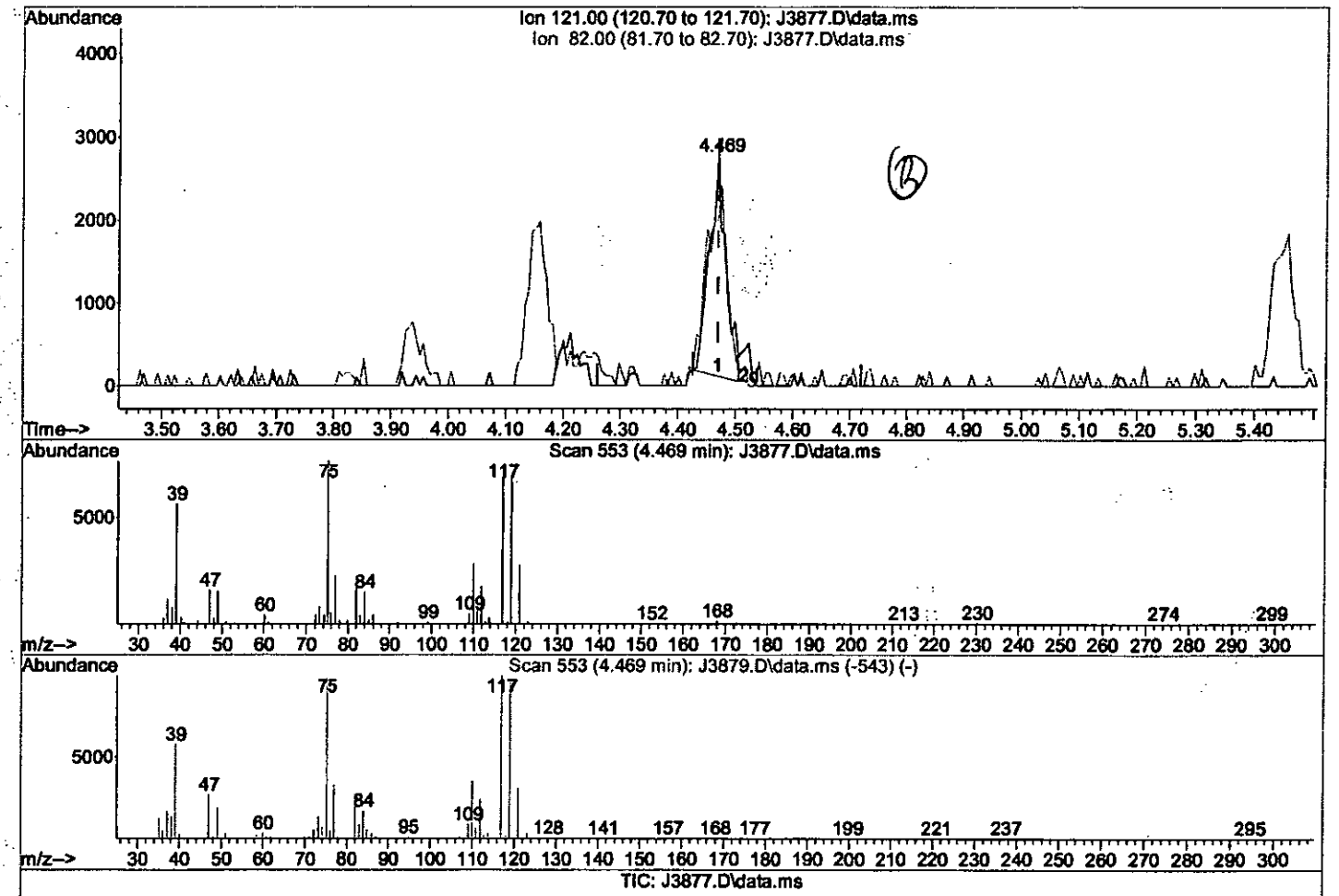
W031214.M Thu Mar 13 10:25:33 2014 Page: 1

00446

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(46) Carbontetrachloride (P)

4.469min (-0.000) 1.57 ppb

response 5374

Ion	Exp%	Act%
121.00	100	100
82.00	87.50	72.27
0.00	0.00	0.00
0.00	0.00	0.00

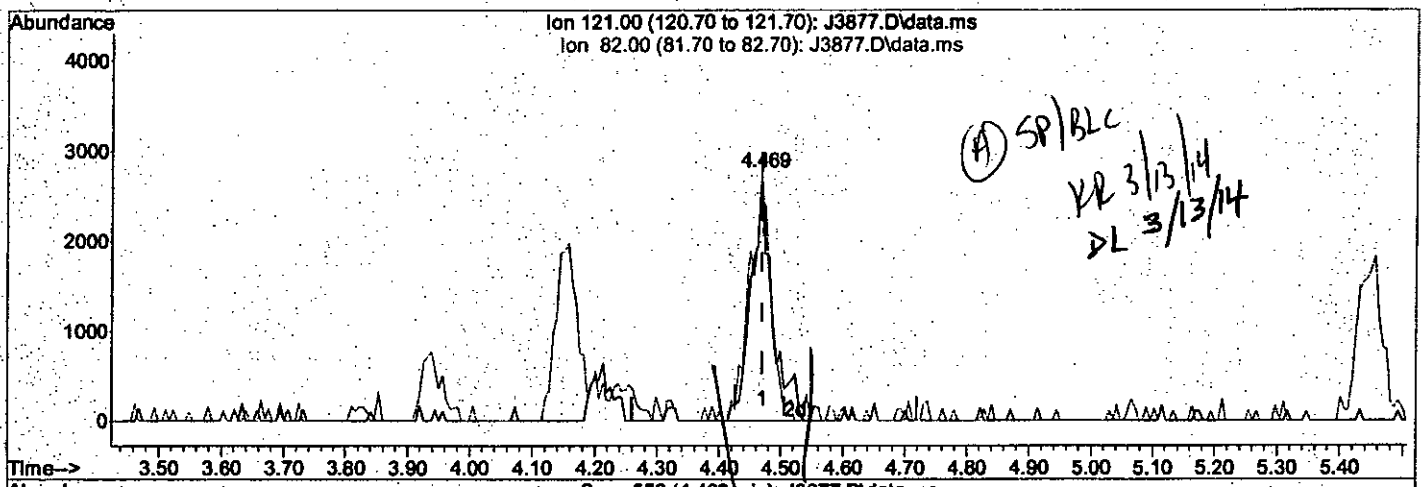
W031214.M Thu Mar 13 10:25:42 2014 Page: 1

00447

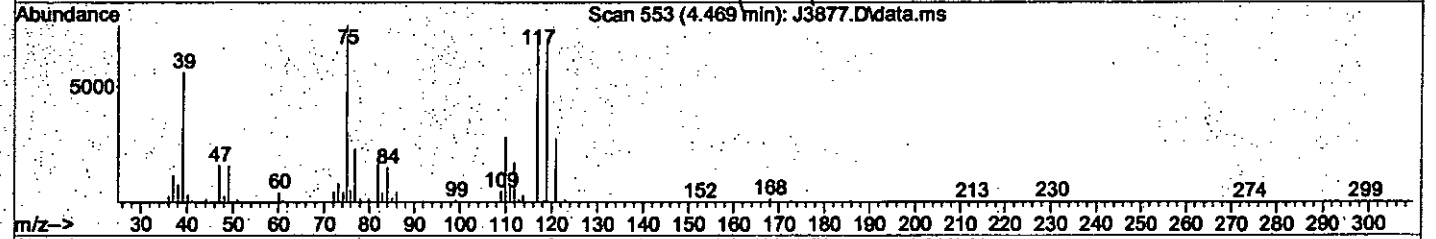
Quantitation Report (Qedit)

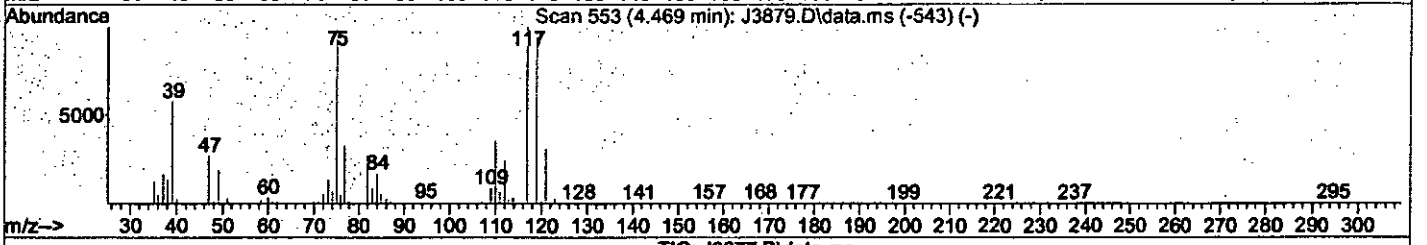
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(A) SP/BLC KR 3/13/14 DL 3/13/14





TIC: J3877.D\data.ms

(46) Carbontetrachloride (P)

4.469min (-0.000) 1.94 ppb m

response 6643

Ion	Exp%	Act%
121.00	100	100
82.00	87.50	72.27
0.00	0.00	0.00
0.00	0.00	0.00

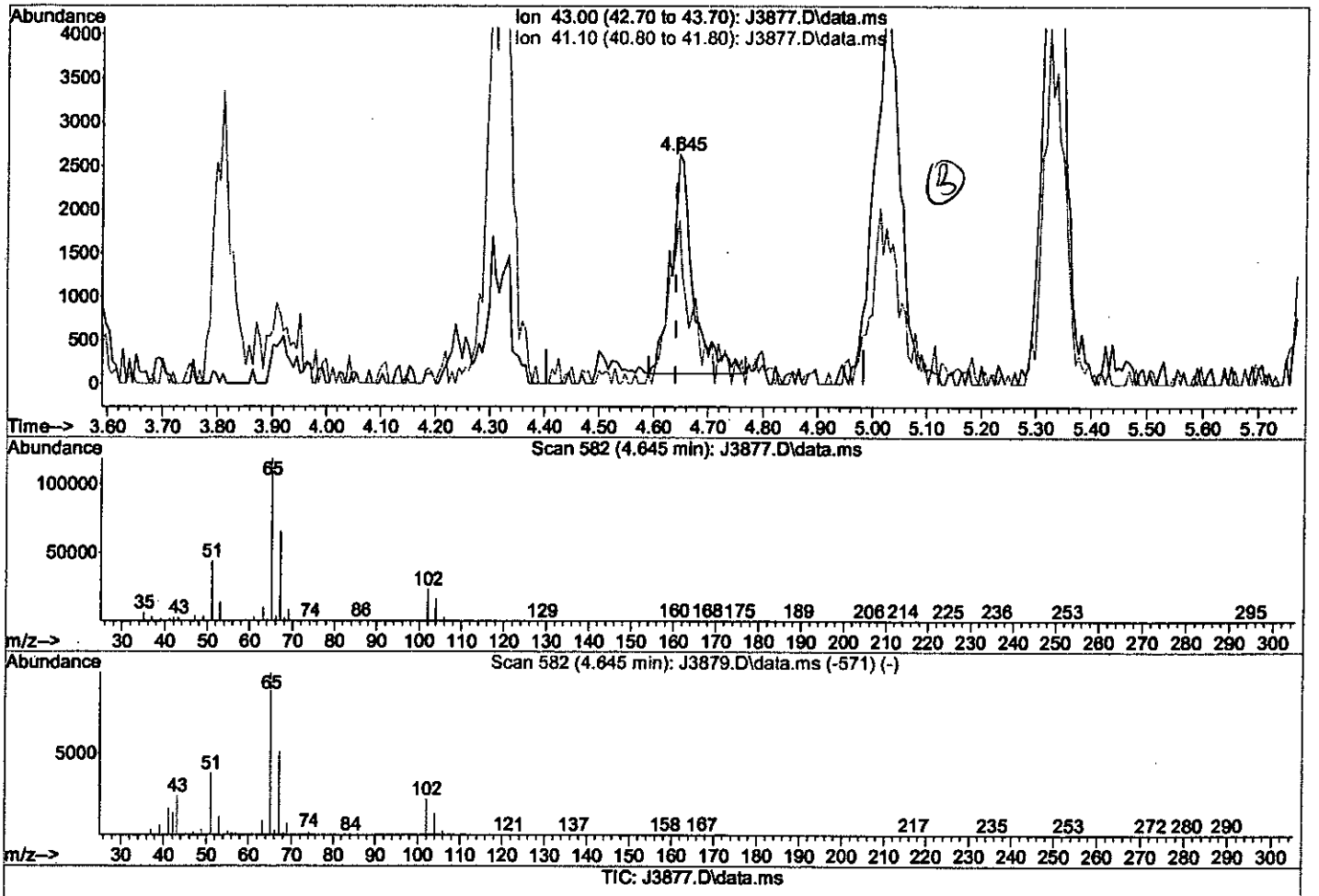
W031214.M Thu Mar 13 10:25:55 2014 Page: 1

00443

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 29.57 ppb

response 7003

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	71.74
0.00	0.00	0.00
0.00	0.00	0.00

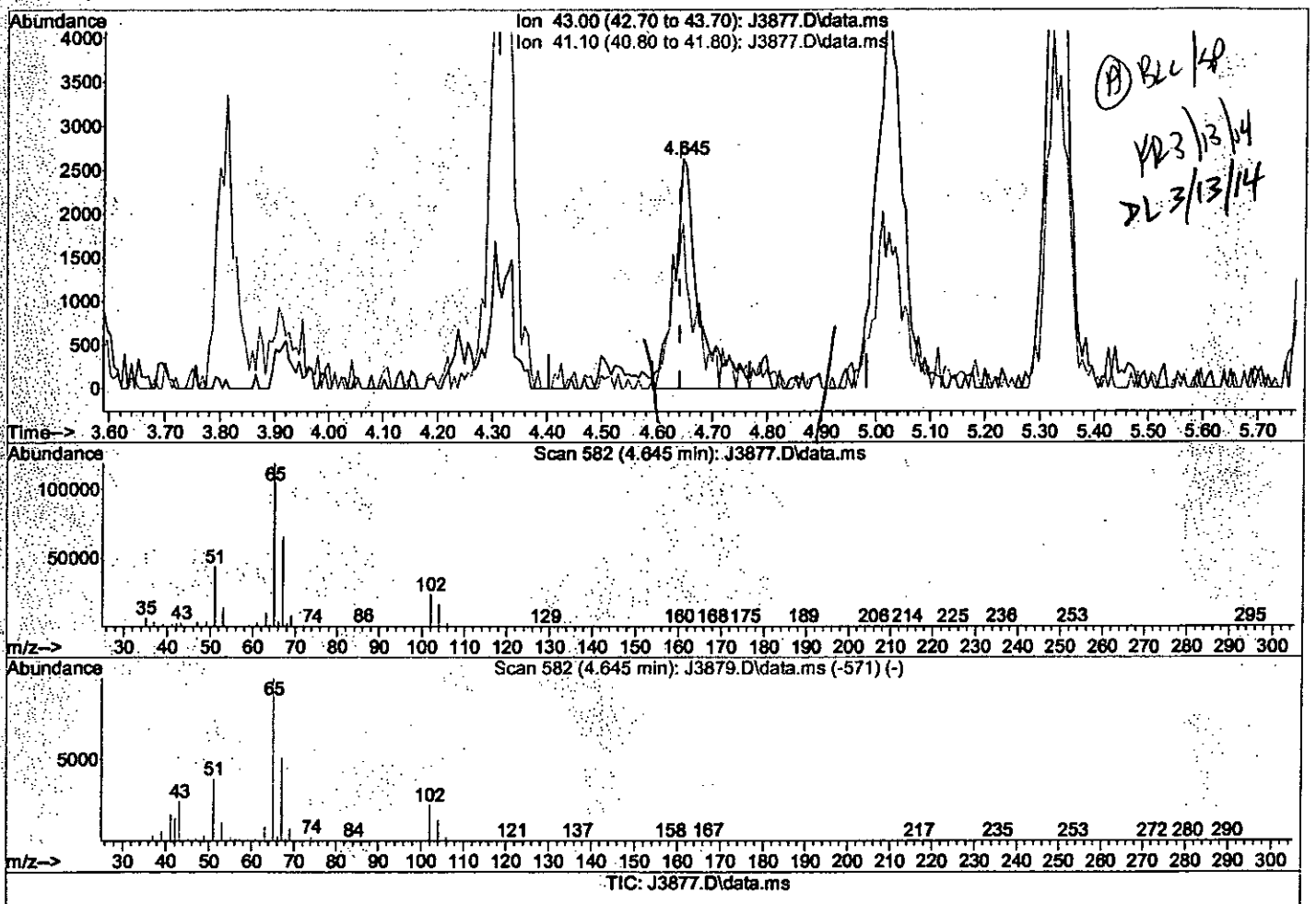
W031214.M Thu Mar 13 10:26:19 2014 Page: 1

00449

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 36.97 ppb m

response 8755

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	71.74
0.00	0.00	0.00
0.00	0.00	0.00

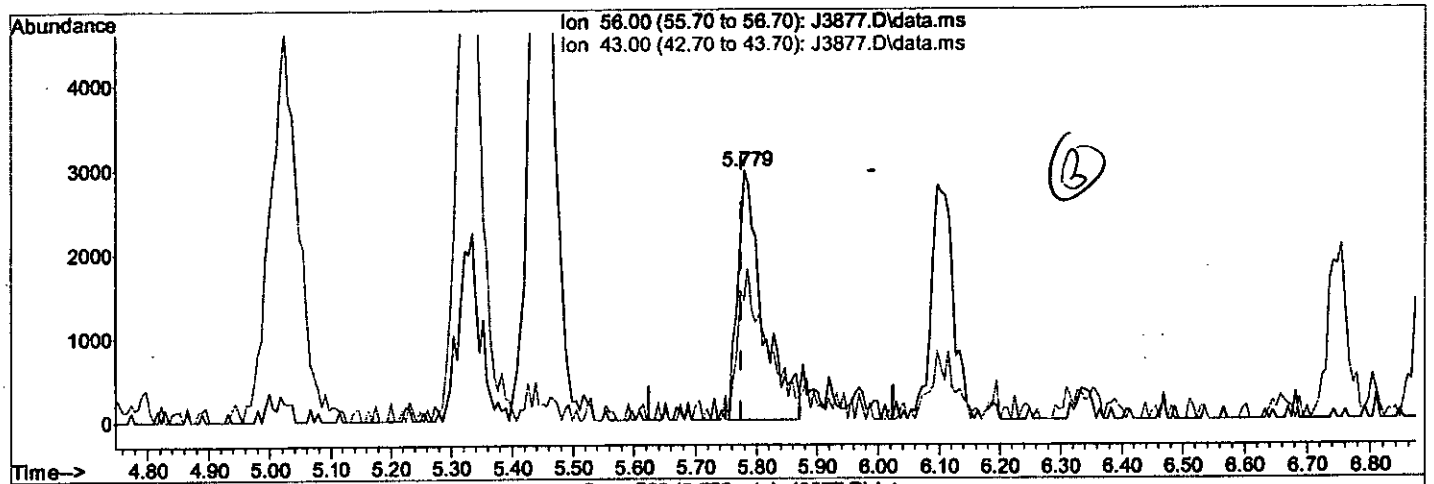
W031214.M Thu Mar 13 10:26:26 2014 Page: 1

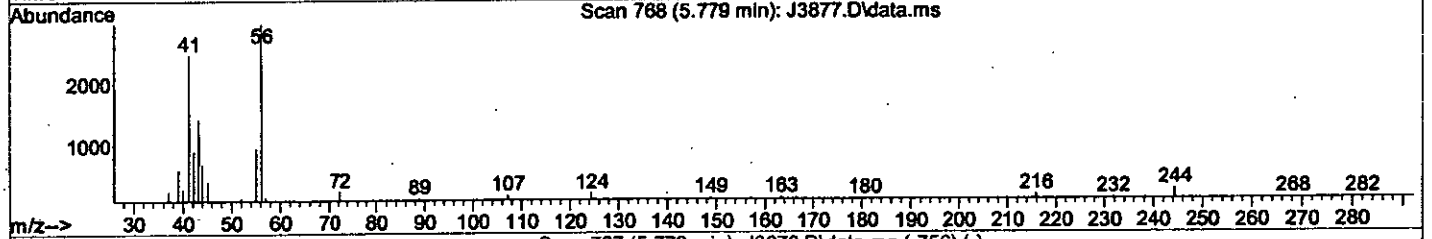
00450

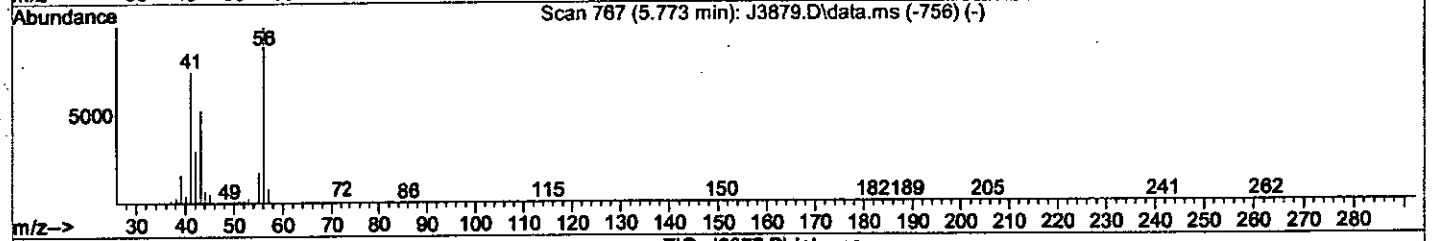
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(53) 1-Butanol

5.779min (+0.006) 63.08 ppb

response 8433

Ion	Exp%	Act%
56.00	100	100
43.00	55.80	71.53
0.00	0.00	0.00
0.00	0.00	0.00

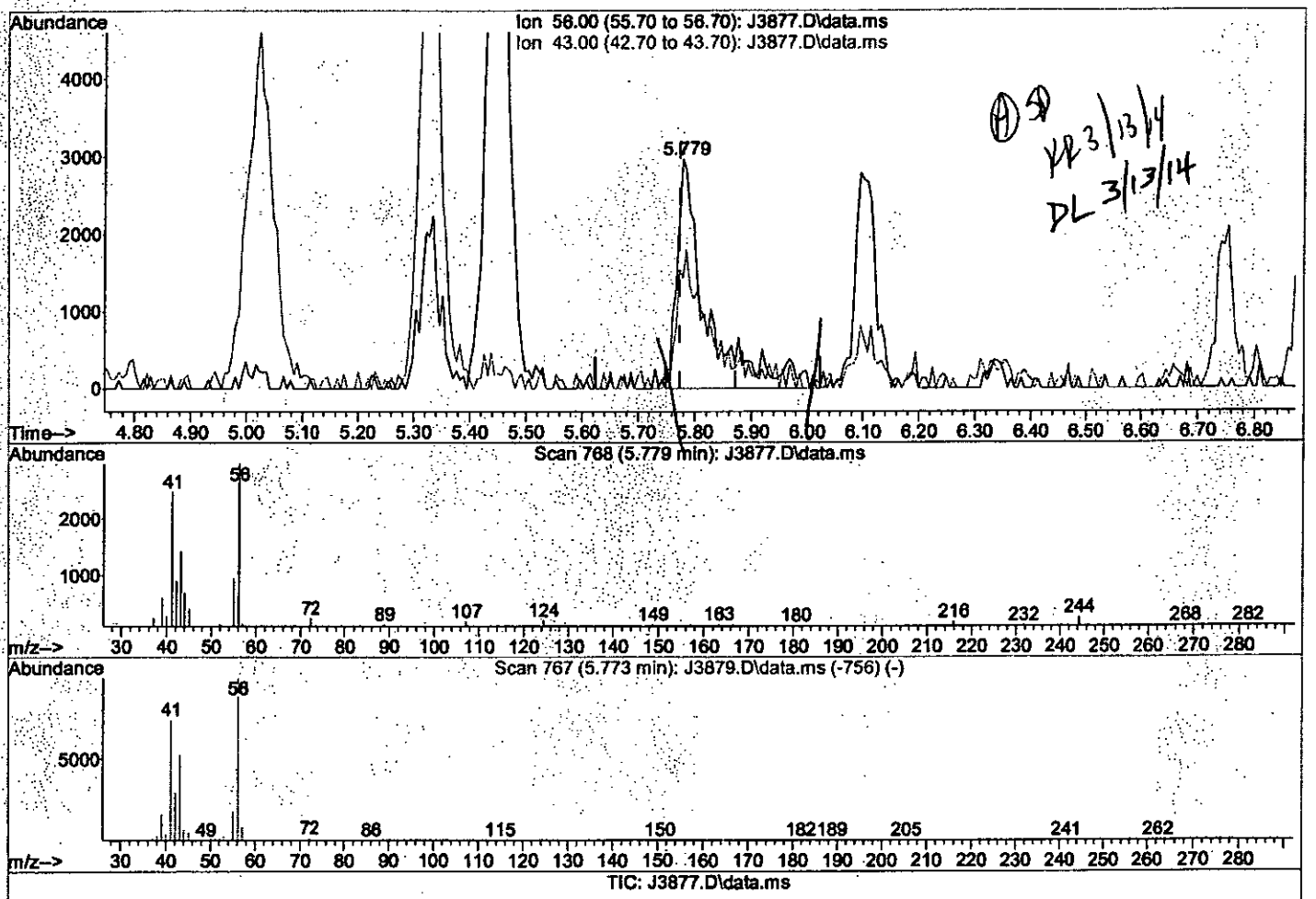
W031214.M Thu Mar 13 10:26:36 2014 Page: 1

00451

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(53) 1-Butanol

5.779min (+0.006) 78.38 ppb m

response 10476

Ion	Exp%	Act%
56.00	100	100
43.00	55.80	57.58
0.00	0.00	0.00
0.00	0.00	0.00

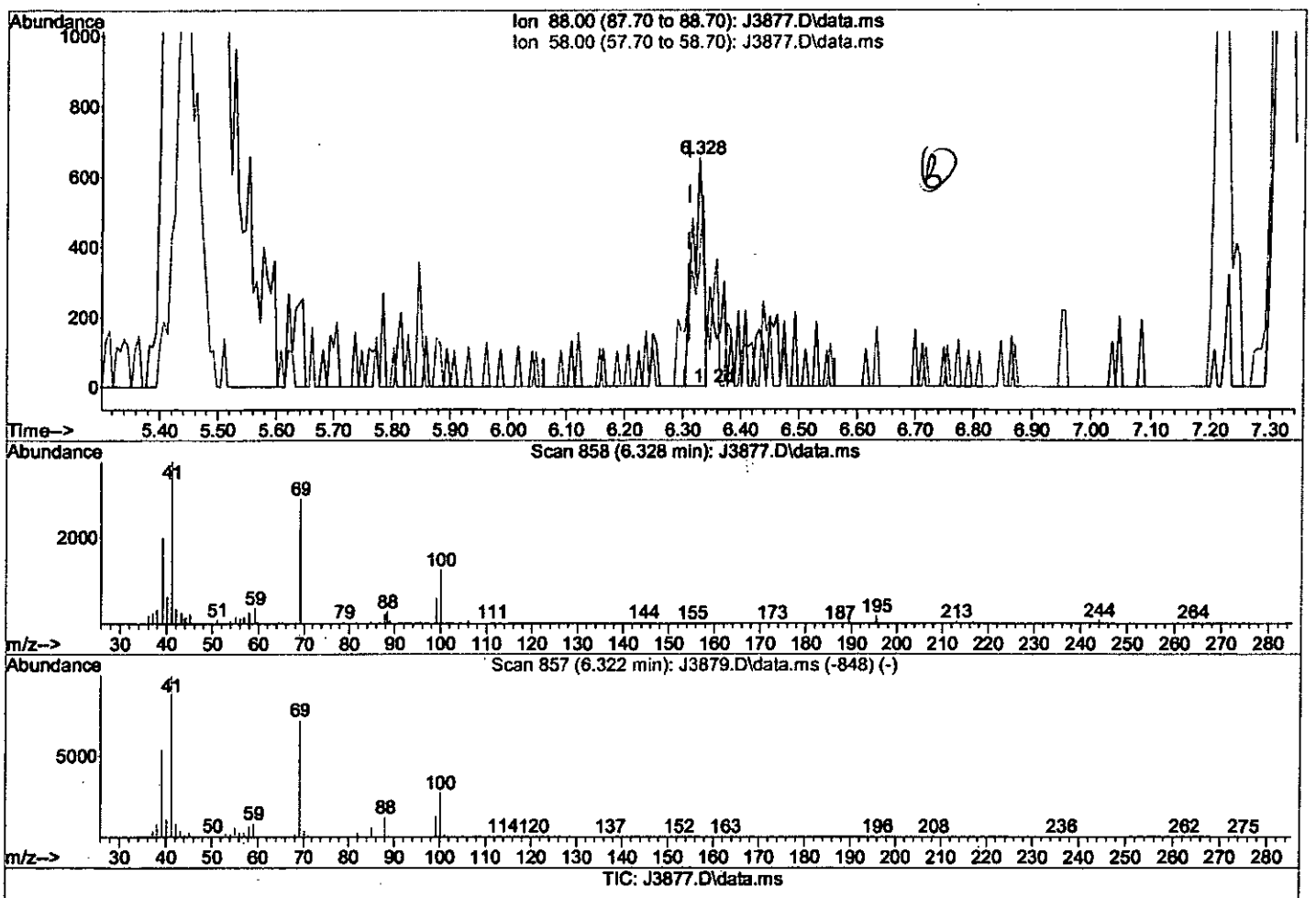
W031214.M Thu Mar 13 10:26:44 2014 Page: 1

00452

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(58) 1,4-Dioxane

6.328min (+0.018) 14.23 ppb

response 817

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	51.84
0.00	0.00	0.00
0.00	0.00	0.00

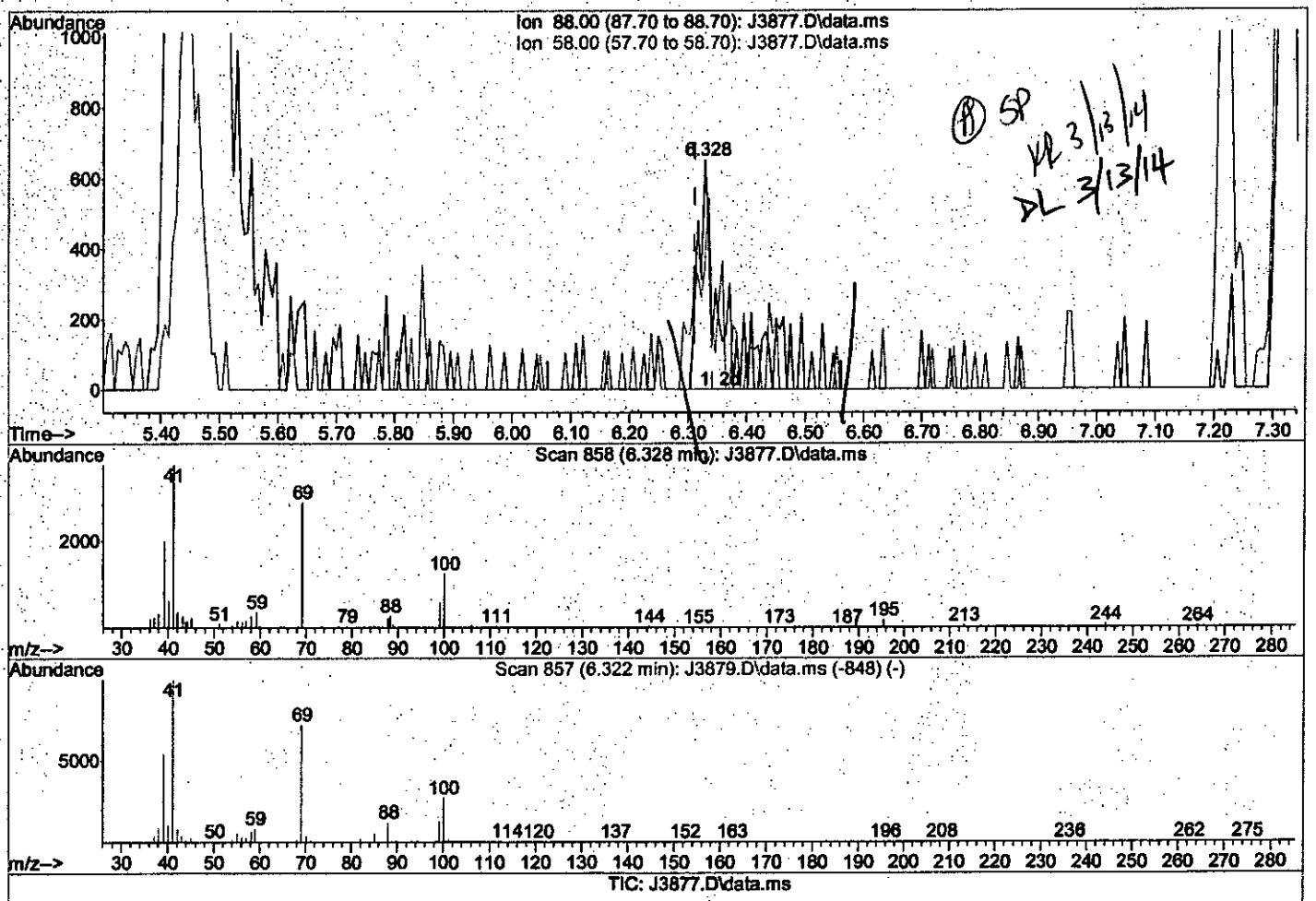
W031214.M Thu Mar 13 10:26:56 2014 Page: 1

00453

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(58) 1,4-Dioxane

6.328min (+0.018) 36.08 ppb m

response 2071

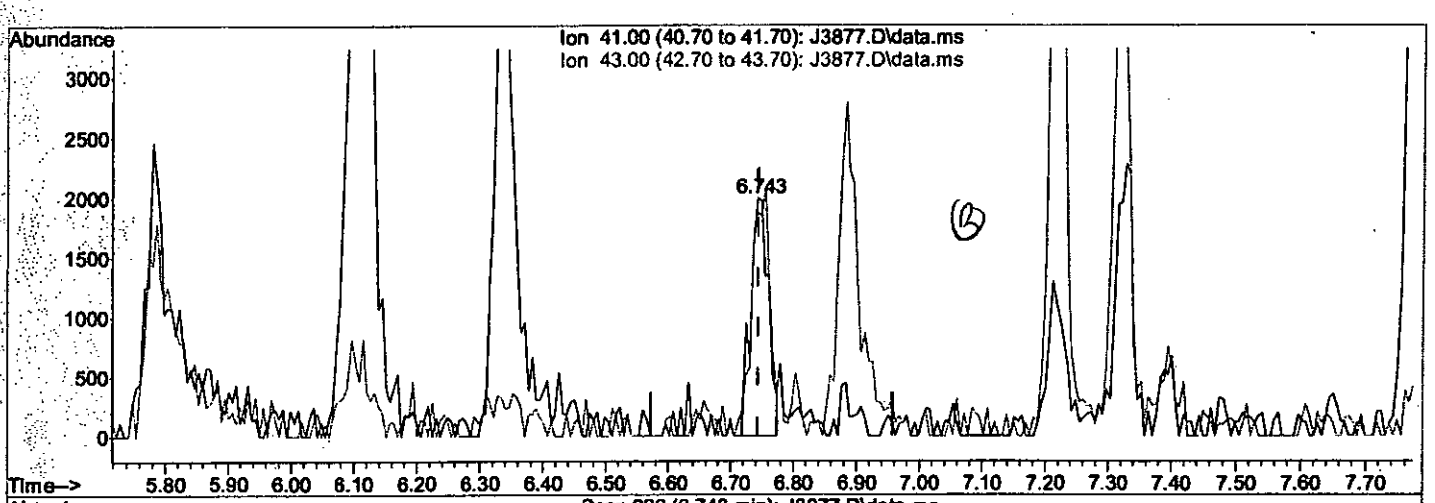
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	96.57#
0.00	0.00	0.00
0.00	0.00	0.00

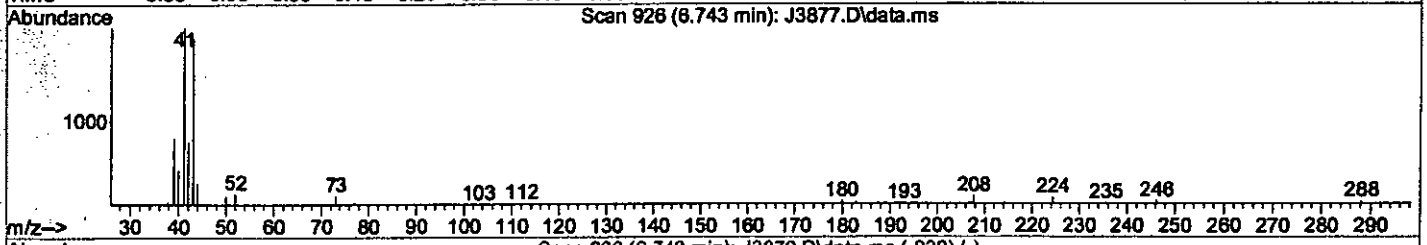
W031214.M Thu Mar 13 10:27:14 2014 Page: 1

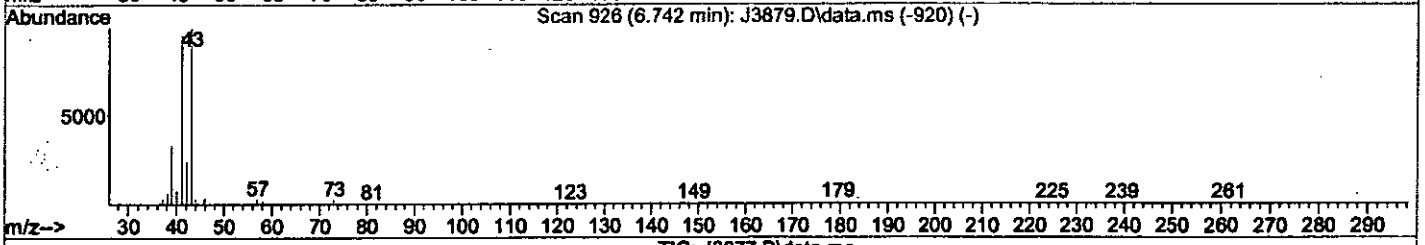
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(61) 2-Nitropropane

6.743min (-0.000) 3.49 ppb

response 3946

Ion	Exp%	Act%
41.00	100	100
43.00	105.30	93.94
0.00	0.00	0.00
0.00	0.00	0.00

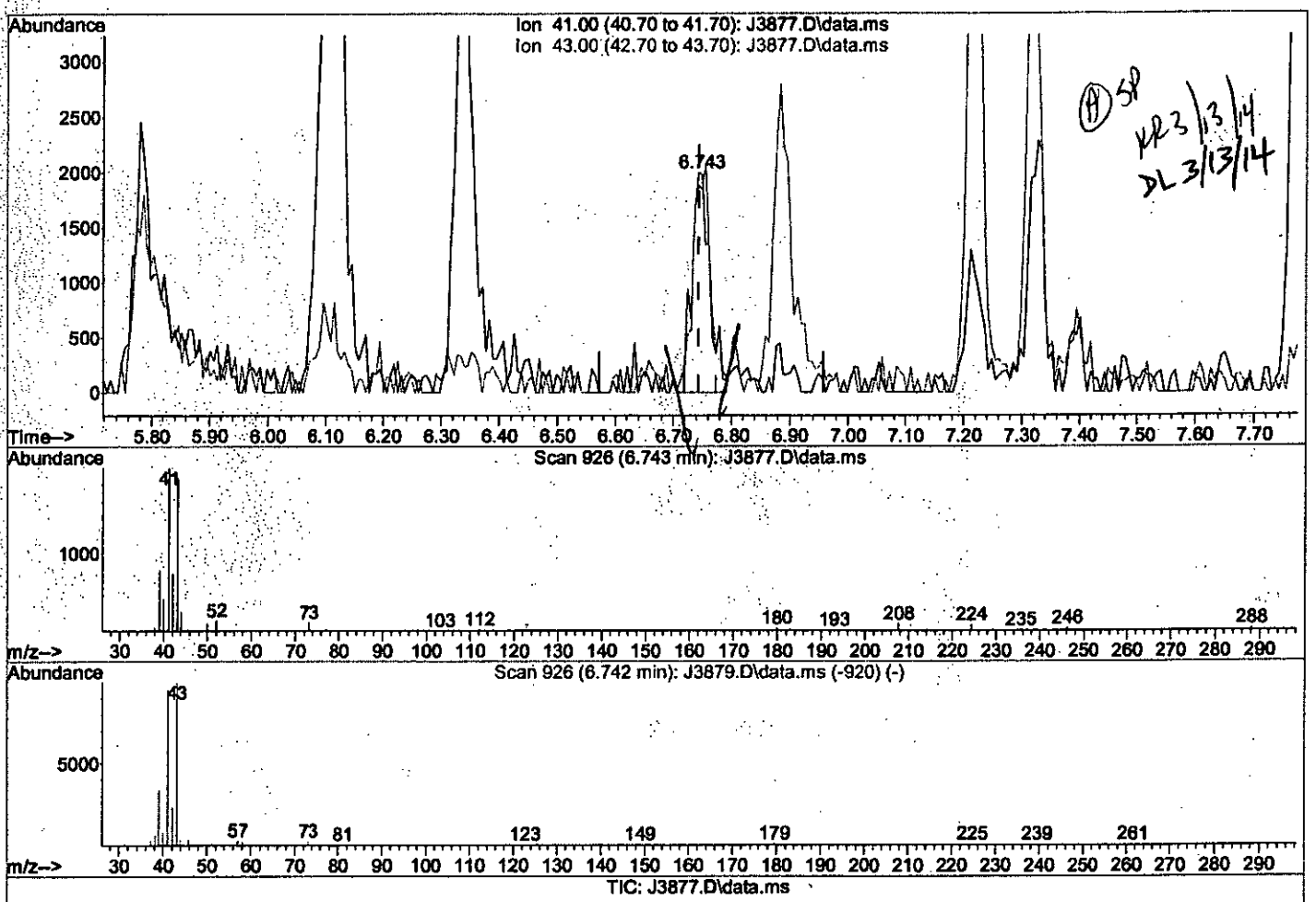
W031214.M Thu Mar 13 10:27:33 2014 Page: 1

00455

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(61) 2-Nitropropane

6.743min (-0.000) 3.79 ppb m

response 4286

Ion	Exp%	Act%
41.00	100	100
43.00	105.30	93.94
0.00	0.00	0.00
0.00	0.00	0.00

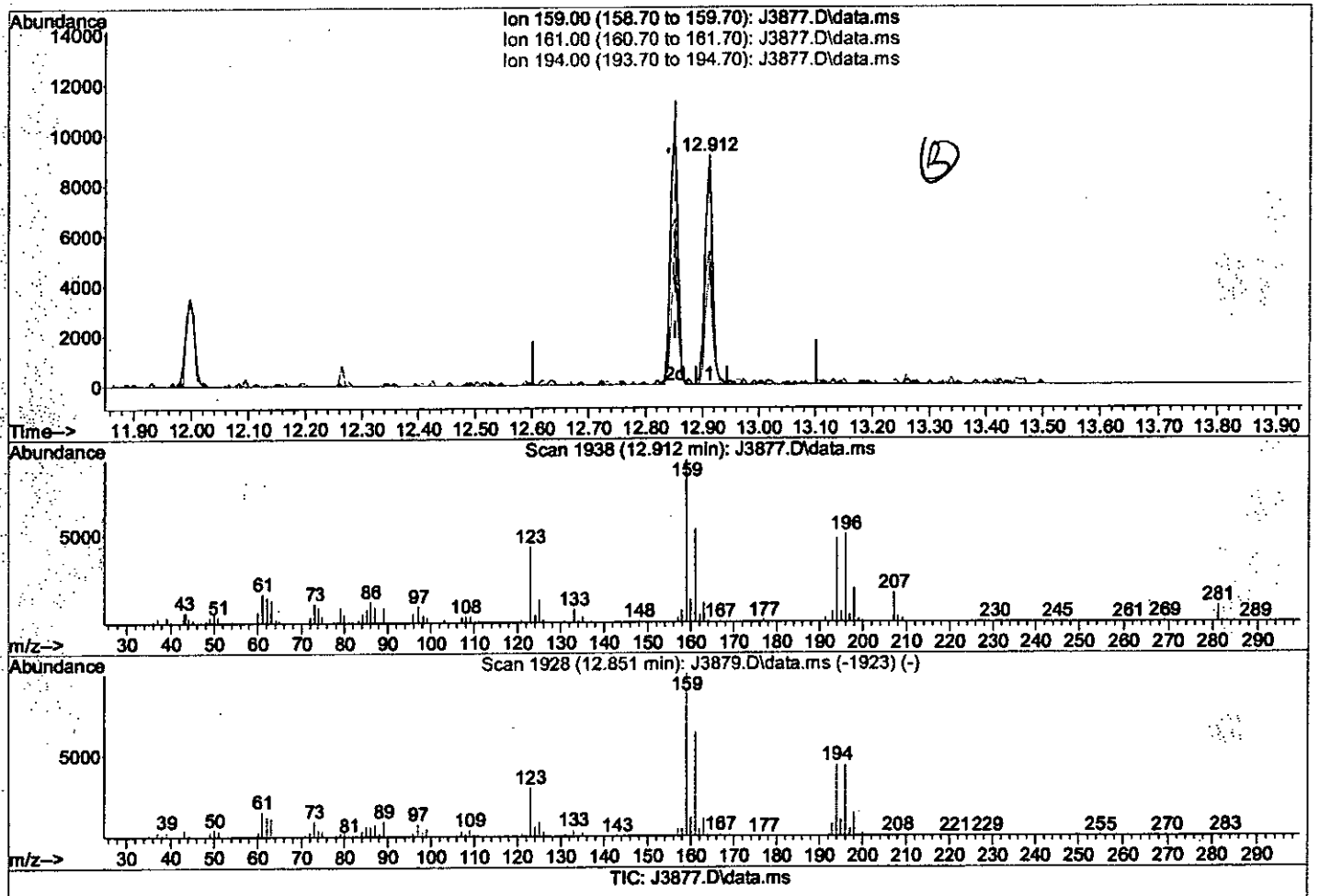
W031214.M Thu Mar 13 10:27:41 2014 Page: 1

00456

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(119) 2,4,5-Trichlorotolene

12.912min (+0.061) 1.71 ppb

response 8342

Ion	Exp%	Act%
159.00	100	100
161.00	64.60	58.14
194.00	43.80	51.93
0.00	0.00	0.00

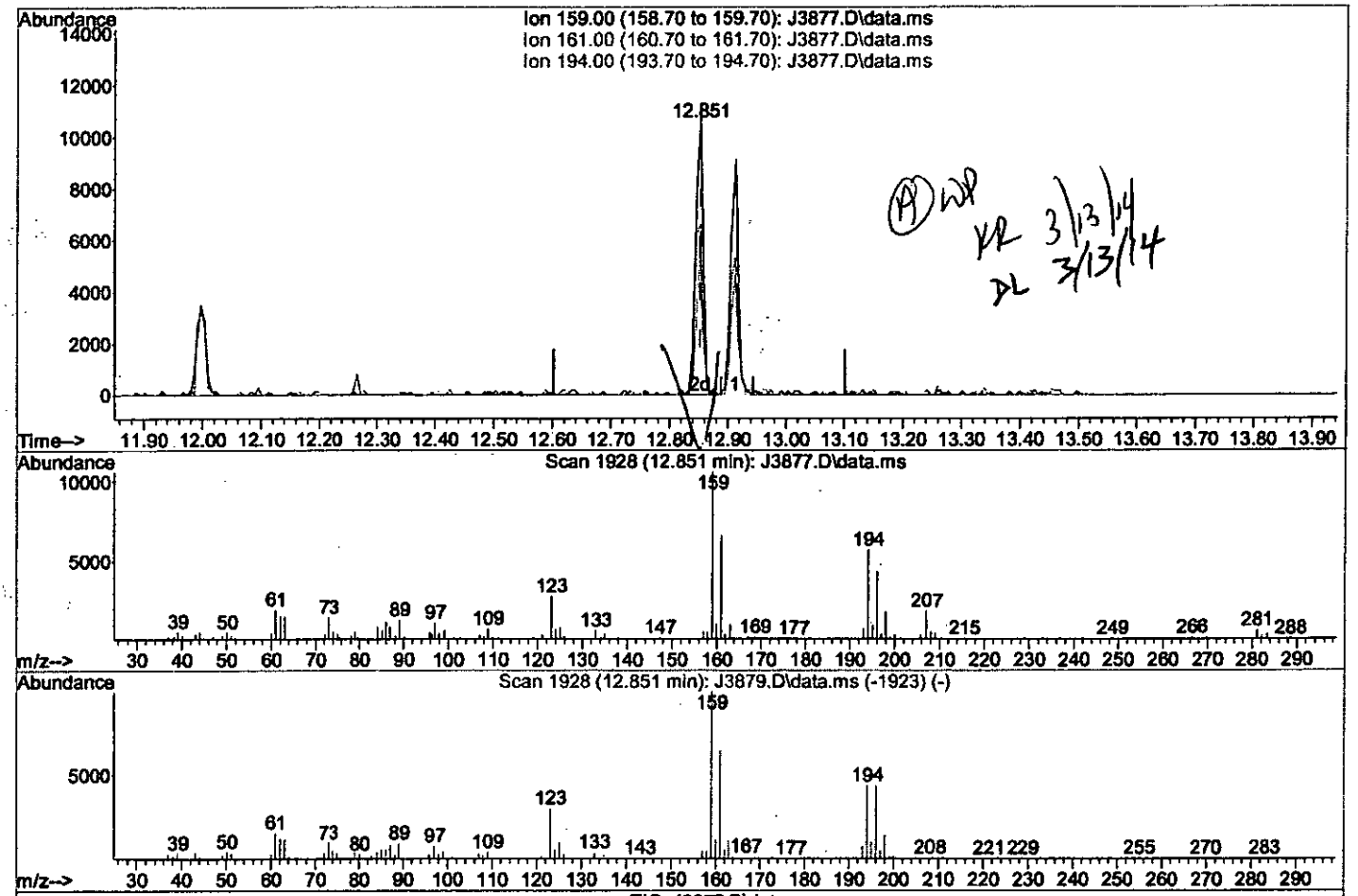
W031214.M Thu Mar 13 10:28:23 2014 Page: 1

00457

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (-0.000) 1.98 ppb m

response 9636

Ion	Exp%	Act%
159.00	100	100
161.00	64.80	62.31
194.00	43.80	53.92#
0.00	0.00	0.00

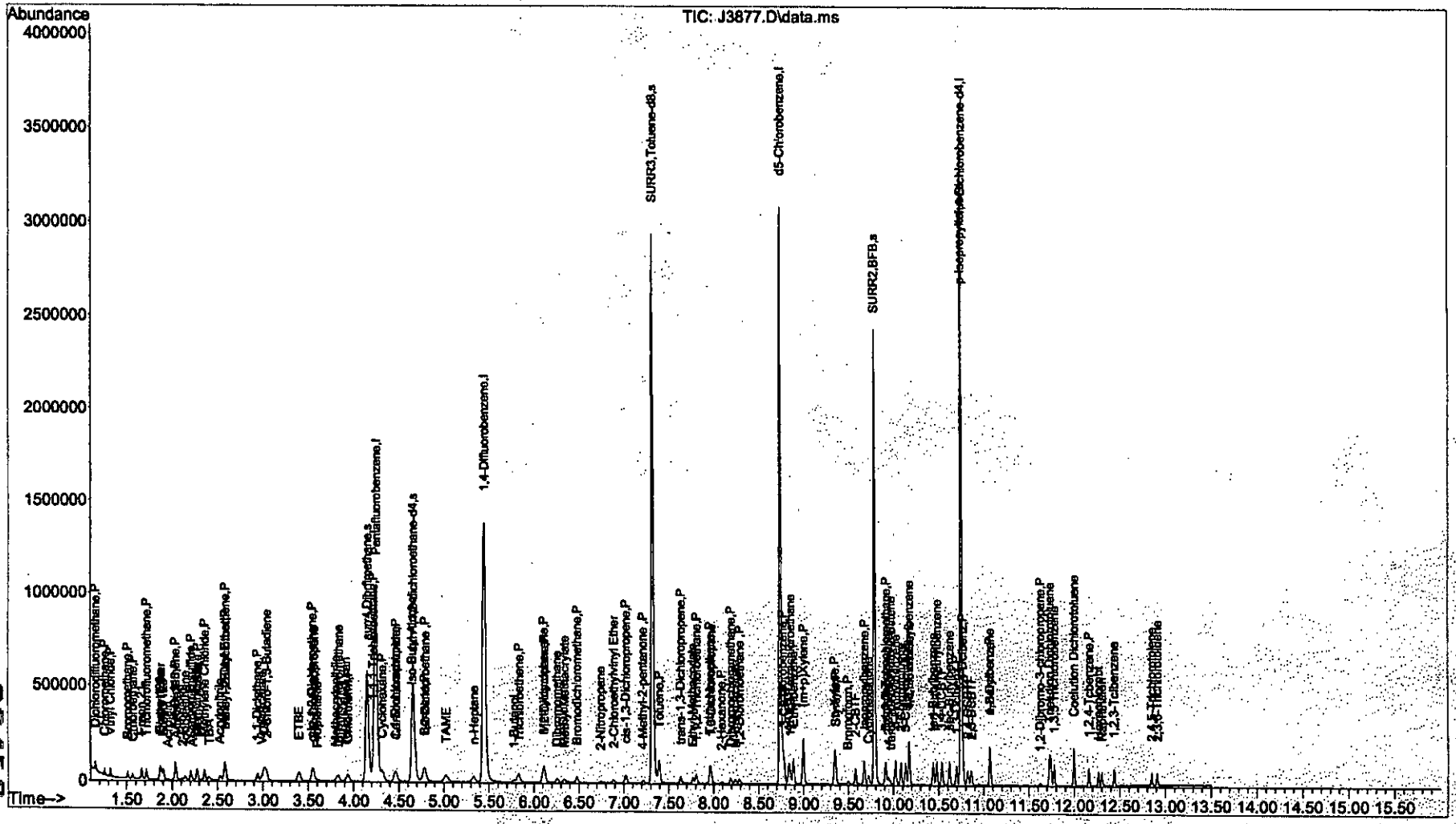
W031214.M Thu Mar 13 10:28:31 2014 Page: 1

00458

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:28:48 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909636	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1434063	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1295117	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	613774	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	419968	50.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.18%				
48) surr1,1,2-dichloroetha...	4.658	65	473956	50.11	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.22%				
65) SURR3,Toluene-d8	7.322	98	1740484	49.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.78%				
70) SURR2,BFB	9.785	95	647335	49.74	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	48185	4.46	ppb		99
3) Chloromethane	1.256	50	46384	4.94	ppb		94
4) Vinyl Chloride	1.323	62	43530	5.00	ppb		99
5) Bromomethane	1.512	94	24980	4.77	ppb		95
6) Chloroethane	1.567	64	23684	4.38	ppb		92
7) Freon 21	1.664	67	67580	5.15	ppb		100
8) Trichlorofluoromethane	1.719	101	68500	5.13	ppb		98
9) Diethyl Ether	1.878	59	31483	4.79	ppb		92
10) Freon 123a	1.866	67	50620	5.16	ppb		91
11) Freon 123	1.902	83	56653	5.06	ppb		97
12) Acrolein	1.951	56	3084	9.81	ppb		98
13) 1,1-Diclethene	2.036	96	33755	5.11	ppb		95
14) Freon 113	2.036	101	36313	5.03	ppb		92
15) Acetone	2.048	43	9867	5.47	ppb		81
16) 2-Propanol	2.116	45	27896	93.73	ppb		91
17) Iodomethane	2.146	142	38074	4.34	ppb		95
18) Carbon Disulfide	2.207	76	113819	4.96	ppb		98
19) Acetonitrile	2.225	40	7540	25.55	ppb		96
20) Allyl Chloride	2.274	76	22847	5.05	ppb		98
21) Methyl Acetate	2.274	43	22856	5.62	ppb		99
22) Methylene Chloride	2.353	84	43263	5.00	ppb		98
23) TBA	2.408	59	49570	98.27	ppb		96
24) Acrylonitrile	2.524	53	50514	24.98	ppb		93
25) Methyl-t-Butyl Ether	2.579	73	108080	5.15	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	40087	4.85	ppb		93
28) 1,1-Diclethane	2.939	63	78544	5.10	ppb		98
29) Vinyl Acetate	2.975	86	6450	4.71	ppb	#	57
30) DIPE	3.018	45	153755	5.13	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	66829	5.04	ppb		89
32) ETBE	3.396	59	129769	5.17	ppb		96
33) 2,2-Dichloropropane	3.560	77	58638	4.80	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	45860	4.97	ppb		95
35) 2-Butanone	3.554	43	12867	5.09	ppb		92
36) Propionitrile	3.591	54	17228	24.31	ppb		96
37) Bromochloromethane	3.835	130	26538	5.15	ppb	#	73

KR 3/13/14

W031214.M Thu Mar 13 10:36:04 2014 Page: 1

00460

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	11464	4.87	ppb		95
39) Tetrahydrofuran	3.908	42	8977	5.08	ppb		87
40) Chloroform	3.938	83	74686	4.95	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	64390	4.98	ppb	#	37
42) TAME	5.023	73	106230	5.02	ppb		98
44) Cyclohexane	4.310	41	39966	5.15	ppb		94
46) Carbontetrachloride	4.469	121	15872	4.62	ppb		90
47) 1,1-Dichloropropene	4.463	75	54305	5.17	ppb		93
49) Benzene	4.780	78	179829	5.09	ppb		95
50) 1,2-Dichloroethane	4.780	62	53239	4.97	ppb		94
51) Iso-Butyl Alcohol	4.633	43	20997	88.43	ppb		94
52) n-Heptane	5.322	43	42494	4.82	ppb		93
53) 1-Butanol	5.773	56	26987	201.32	ppb		95
54) Trichloroethene	5.828	130	41962	4.91	ppb		92
55) Methylcyclohexane	6.103	55	46721	5.08	ppb		91
56) 1,2-Diclpropane	6.115	63	43350	4.76	ppb		100
57) Dibromomethane	6.261	93	20852	4.86	ppb		93
58) 1,4-Dioxane	6.322	88	6178m	107.34	ppb		
59) Methyl Methacrylate	6.334	69	19608	4.62	ppb		98
60) Bromodichloromethane	6.474	83	52141	4.94	ppb		95
61) 2-Nitropropane	6.743	41	9752	8.60	ppb		93
62) 2-Chloroethylvinyl Ether	6.877	63	19373	4.78	ppb		94
63) cis-1,3-Dichloropropene	7.023	75	59020	4.72	ppb		92
64) 4-Methyl-2-pentanone	7.218	43	25233	4.63	ppb		94
66) Toluene	7.389	91	187487	5.15	ppb		93
67) trans-1,3-Dichloropropene	7.633	75	47205	4.68	ppb		99
68) Ethyl Methacrylate	7.767	69	38371	4.72	ppb		95
69) 1,1,2-Trichloroethane	7.803	97	31839	5.00	ppb		94
72) Tetrachloroethene	7.962	164	31272	4.67	ppb		93
73) 2-Hexanone	8.090	43	16065	4.38	ppb		94
74) 1,3-Dichloropropane	7.974	76	59278	5.08	ppb		96
75) Dibromochloromethane	8.188	129	32842	4.90	ppb		93
76) N-Butyl Acetate	8.236	43	42929	4.73	ppb		94
77) 1,2-Dibromoethane	8.285	107	29591	4.94	ppb		94
78) Chlorobenzene	8.767	112	114107	5.06	ppb		95
79) 3-CBTF	8.785	180	53330	4.78	ppb		96
80) 4-CBTF	8.834	180	48803	4.89	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.846	131	38239	4.83	ppb		94
82) Ethylbenzene	8.889	106	61699	5.14	ppb		98
83) (m+p)Xylene	8.998	106	144528	10.24	ppb		98
84) o-Xylene	9.346	106	72480	5.03	ppb		100
85) Styrene	9.358	104	114854	4.99	ppb		92
87) Bromoform	9.492	173	16573	4.75	ppb		96
88) 2-CBTF	9.577	180	51681	5.05	ppb		95
89) Isopropylbenzene	9.669	105	169239	5.34	ppb		96
90) Cyclohexanone	9.718	55	49534	100.63	ppb		97
91) trans-1,4-Dichloro-2-B...	9.962	53	7667	4.64	ppb		92
92) 1,1,2,2-Tetrachloroethane	9.913	83	36213	5.15	ppb		98
93) Bromobenzene	9.913	156	46987	5.20	ppb	#	86
94) 1,2,3-Trichloropropane	9.943	110	10506	5.00	ppb	#	86
95) n-Propylbenzene	10.023	91	199054	5.37	ppb		99
96) 2-Chlorotoluene	10.083	91	125591	5.39	ppb		97

W031214.M Thu Mar 13 10:36:04 2014 Page: 2

00461

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	128681	5.31	ppb		97
98)	4-Chlorotoluene	10.169	91	151049	5.50	ppb		96
99)	1,3,5-Trimethylbenzene	10.169	105	137380	5.31	ppb		99
100)	tert-Butylbenzene	10.437	119	113901	5.23	ppb		99
101)	1,2,4-Trimethylbenzene	10.474	105	143214	5.38	ppb		98
102)	3,4-DCBTF	10.535	214	36559	4.83	ppb		98
103)	sec-Butylbenzene	10.620	105	165306	5.46	ppb		97
104)	p-Isopropyltoluene	10.742	119	136851	5.34	ppb		97
105)	1,3-Dclbenz	10.693	146	80200	5.22	ppb		99
106)	1,4-Dclbenz	10.766	146	81727	5.00	ppb		90
107)	2,4-DCBTF	10.821	214	33202	5.05	ppb		98
108)	2,5-DCBTF	10.864	214	38208	5.08	ppb		97
109)	n-Butylbenzene	11.065	91	122103	5.29	ppb		96
110)	1,2-Dclbenz	11.065	146	76727	5.18	ppb		96
111)	1,2-Dibromo-3-chloropr...	11.626	157	4670	4.34	ppb	#	79
112)	Trielution Dichlorotol...	11.730	125	181694	15.52	ppb		99
113)	1,3,5 Trichlorobenzene	11.778	180	51719	5.07	ppb		96
114)	Coelution Dichlorotoluene	11.998	125	128721	10.39	ppb		98
115)	1,2,4-Tcbenzene	12.162	180	46406	5.13	ppb		98
116)	Hexachlorobt	12.266	225	20395	5.16	ppb		96
117)	Naphthalen	12.303	128	82080	5.04	ppb		98
118)	1,2,3-Tclbenzene	12.437	180	37771	5.10	ppb		96
119)	2,4,5-Trichlorotolene	12.851	159	25032	5.12	ppb		96
120)	2,3,6-Trichlorotoluene	12.912	159	24018	5.37	ppb		89

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

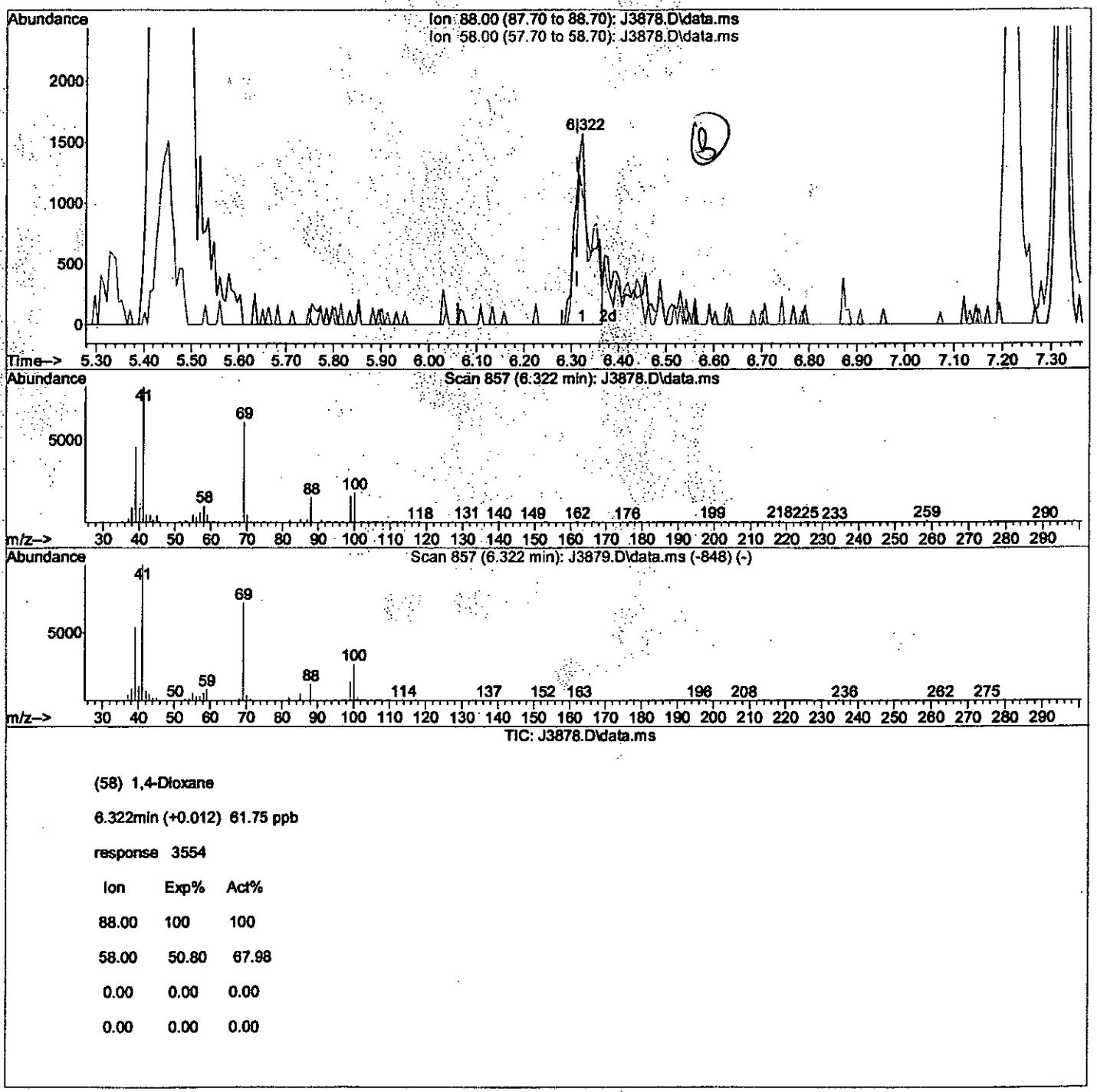
W031214.M Thu Mar 13 10:36:04 2014 Page: 3

00462

Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:50 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3878.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 61.75 ppb

response 3554

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.98
0.00	0.00	0.00
0.00	0.00	0.00

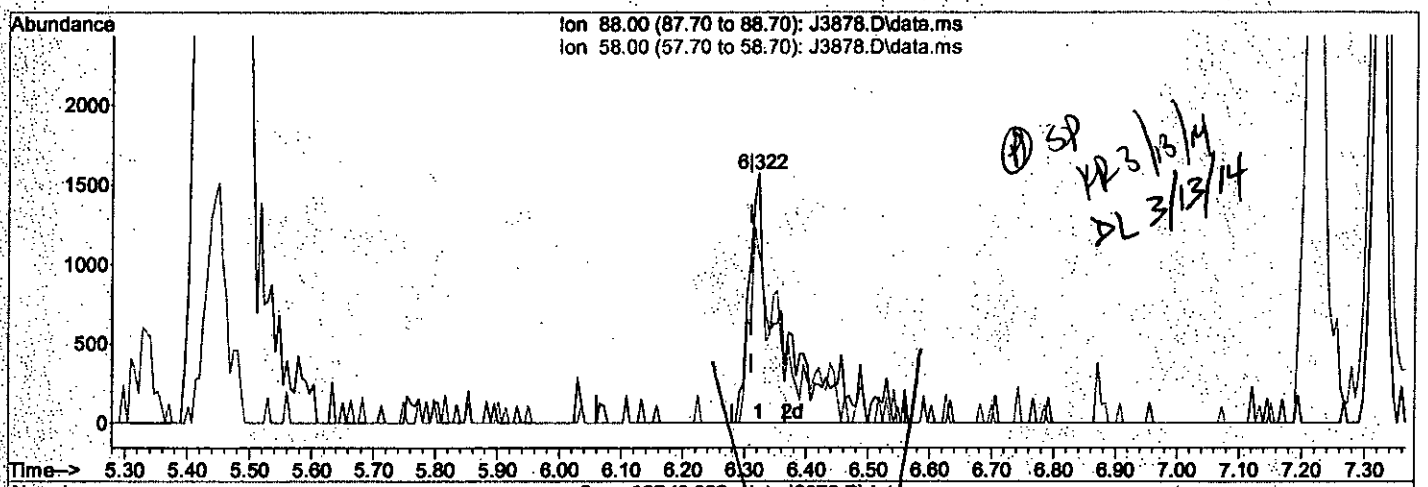
W031214.M Thu Mar 13 10:34:25 2014 Page: 1

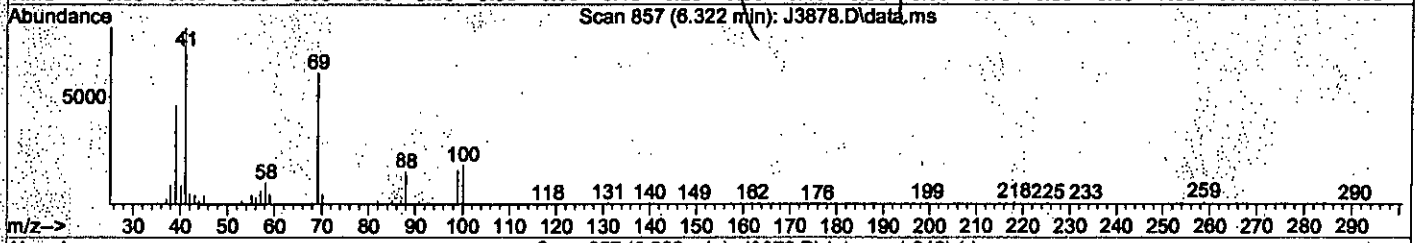
00463

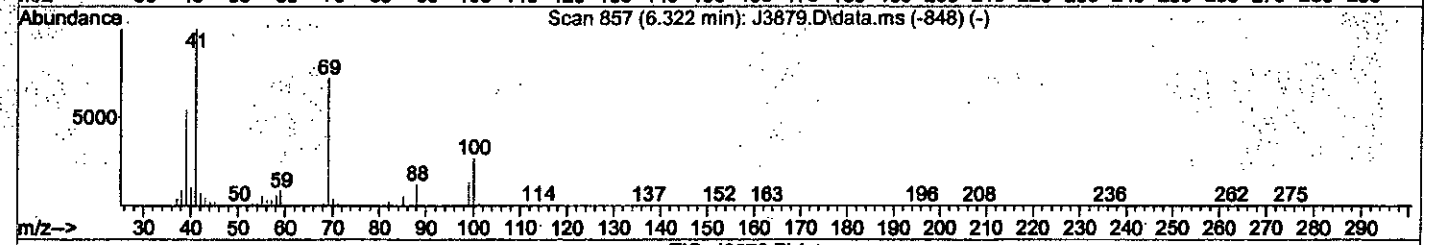
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:50 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3878.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 107.34 ppb m

response 6178

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.98
0.00	0.00	0.00
0.00	0.00	0.00

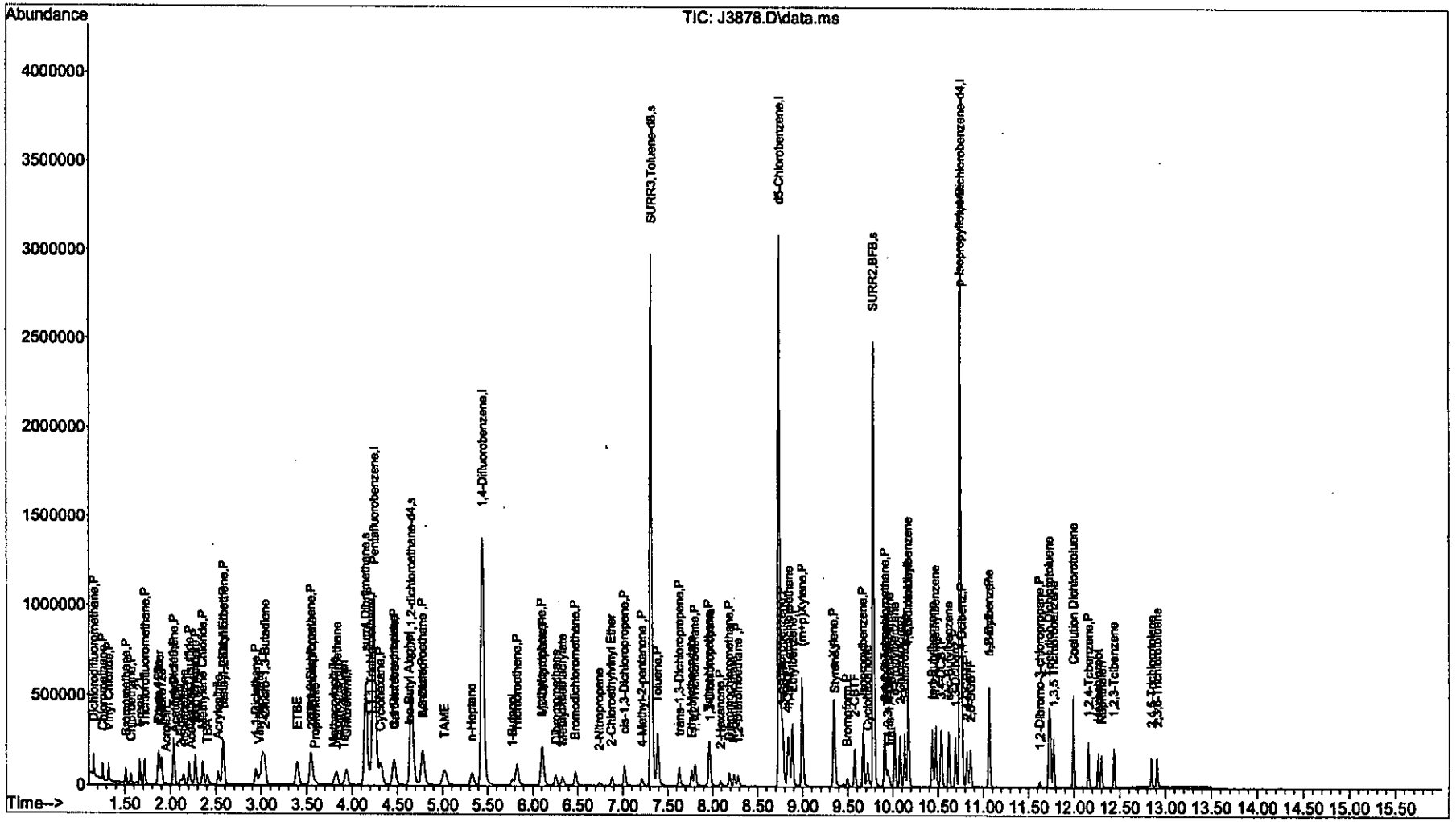
W031214.M Thu Mar 13 10:34:36 2014 Page: 1

00464

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



59400

W031214.M Thu Mar 13 10:36:07 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	922799	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1437195	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1313495	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	644479	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	420420	50.53	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.06%			
48) surr1,1,2-dichloroetha...	4.664	65	476208	50.24	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.48%			
65) SURR3,Toluene-d8	7.322	98	1753103	50.14	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.28%			
70) SURR2,BFB	9.785	95	651604	49.96	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.158	85	236007	21.53	ppb	100
3) Chloromethane	1.262	50	199071	20.91	ppb	100
4) Vinyl Chloride	1.323	62	184578	20.92	ppb	100
5) Bromomethane	1.512	94	101510	19.09	ppb	100
6) Chloroethane	1.567	64	108989	19.86	ppb	100
7) Freon 21	1.664	67	274791	20.65	ppb	100
8) Trichlorofluoromethane	1.719	101	283252	20.91	ppb	100
9) Diethyl Ether	1.878	59	136065	20.40	ppb	100
10) Freon 123a	1.865	67	204196	20.53	ppb	100
11) Freon 123	1.902	83	234424	20.64	ppb	100
12) Acrolein	1.951	56	18931	59.34	ppb	100
13) 1,1-Diclethene	2.036	96	137460	20.53	ppb	100
14) Freon 113	2.036	101	149593	20.41	ppb	100
15) Acetone	2.042	43	36823	20.11	ppb	100
16) 2-Propanol	2.115	45	122751	406.54	ppb	100
17) Iodomethane	2.146	142	198218	22.28	ppb	100
18) Carbon Disulfide	2.207	76	496357	21.31	ppb	100
19) Acetonitrile	2.225	40	33901	113.23	ppb	100
20) Allyl Chloride	2.274	76	97449	21.22	ppb	100
21) Methyl Acetate	2.274	43	82752	20.07	ppb	100
22) Methylene Chloride	2.359	84	176046	20.07	ppb	100
23) TBA	2.408	59	222324	434.45	ppb	100
24) Acrylonitrile	2.524	53	220459	107.48	ppb	100
25) Methyl-t-Butyl Ether	2.579	73	441594	20.75	ppb	100
26) trans-1,2-Dichloroethene	2.585	96	174413	20.79	ppb	100
28) 1,1-Diclethane	2.938	63	329721	21.11	ppb	100
29) Vinyl Acetate	2.981	86	26664	19.18	ppb	100
30) DIPE	3.012	45	654075	21.50	ppb	100
31) 2-Chloro-1,3-Butadiene	3.042	53	297059	22.09	ppb	100
32) ETBE	3.396	59	547952	21.53	ppb	100
33) 2,2-Dichloropropane	3.554	77	257201	20.76	ppb	100
34) cis-1,2-Dichloroethene	3.548	96	194189	20.74	ppb	100
35) 2-Butanone	3.548	43	52188	20.35	ppb	100
36) Propionitrile	3.597	54	81195	112.94	ppb	100
37) Bromochloromethane	3.828	130	103638	19.83	ppb	100

KR 3/13/14

W031214.M Thu Mar 13 10:46:01 2014 Page: 1

00466

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	50231	21.02	ppb	100
39) Tetrahydrofuran	3.908	42	37265	20.78	ppb	100
40) Chloroform	3.938	83	308523	20.16	ppb	100
41) 1,1,1-Trichloroethane	4.213	97	268217	20.43	ppb	100
42) TAME	5.023	73	454949	21.17	ppb	100
44) Cyclohexane	4.316	41	158361	20.37	ppb	100
46) Carbontetrachloride	4.469	121	68823	19.97	ppb	100
47) 1,1-Dichloropropene	4.462	75	223653	21.26	ppb	100
49) Benzene	4.779	78	747584	21.13	ppb	100
50) 1,2-Dichloroethane	4.786	62	222596	20.72	ppb	100
51) Iso-Butyl Alcohol	4.645	43	97955	411.63	ppb	100
52) n-Heptane	5.328	43	187647	21.23	ppb	100
53) 1-Butanol	5.773	56	140316	1044.44	ppb	100
54) Trichloroethene	5.828	130	172802	20.16	ppb	100
55) Methylcyclohexane	6.102	55	188533	20.46	ppb	100
56) 1,2-Diclpropane	6.115	63	190060	20.83	ppb	100
57) Dibromomethane	6.255	93	87964	20.44	ppb	100
58) 1,4-Dioxane	6.322	88	24827m	430.43	ppb	
59) Methyl Methacrylate	6.328	69	88674	20.83	ppb	100
60) Bromodichloromethane	6.474	83	224153	21.21	ppb	100
61) 2-Nitropropane	6.742	41	42750	37.61	ppb	100
62) 2-Chloroethylvinyl Ether	6.877	63	84368	20.79	ppb	100
63) cis-1,3-Dichloropropene	7.023	75	271354	21.64	ppb	100
64) 4-Methyl-2-pentanone	7.212	43	108953	19.96	ppb	100
66) Toluene	7.395	91	768079	21.05	ppb	100
67) trans-1,3-Dichloropropene	7.626	75	221059	21.87	ppb	100
68) Ethyl Methacrylate	7.767	69	182991	22.46	ppb	100
69) 1,1,2-Trichloroethane	7.803	97	135446	21.22	ppb	100
72) Tetrachloroethene	7.962	164	136336	20.09	ppb	100
73) 2-Hexanone	8.084	43	76704	20.62	ppb	100
74) 1,3-Dichloropropane	7.968	76	246006	20.80	ppb	100
75) Dibromochloromethane	8.187	129	145086	21.34	ppb	100
76) N-Butyl Acetate	8.236	43	189825	20.64	ppb	100
77) 1,2-Dibromoethane	8.285	107	128698	21.19	ppb	100
78) Chlorobenzene	8.767	112	471085	20.61	ppb	100
79) 3-CBTF	8.785	180	230152	20.35	ppb	100
80) 4-CBTF	8.840	180	214655	21.19	ppb	100
81) 1,1,1,2-Tetrachloroethane	8.852	131	167154	20.81	ppb	100
82) Ethylbenzene	8.888	106	251722	20.67	ppb	100
83) (m+p)Xylene	8.998	106	608659	42.53	ppb	100
84) o-Xylene	9.346	106	306257	20.97	ppb	100
85) Styrene	9.352	104	513247	21.98	ppb	100
87) Bromoform	9.492	173	79425	21.70	ppb	100
88) 2-CBTF	9.577	180	220924	20.58	ppb	100
89) Isopropylbenzene	9.669	105	718183	21.58	ppb	100
90) Cyclohexanone	9.718	55	223344	432.11	ppb	100
91) trans-1,4-Dichloro-2-B...	9.961	53	38370	22.12	ppb	100
92) 1,1,2,2-Tetrachloroethane	9.913	83	151723	20.56	ppb	100
93) Bromobenzene	9.907	156	192228	20.28	ppb	100
94) 1,2,3-Trichloropropane	9.943	110	45293	20.51	ppb	100
95) n-Propylbenzene	10.022	91	833670	21.42	ppb	100
96) 2-Chlorotoluene	10.083	91	514264	21.04	ppb	100

W031214.M Thu Mar 13 10:46:01 2014 Page: 2

00467

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97) 3-Chlorotoluene	10.132	91	541594	21.30 ppb	100
98) 4-Chlorotoluene	10.175	91	627344	21.77 ppb	100
99) 1,3,5-Trimethylbenzene	10.169	105	592216	21.82 ppb	100
100) tert-Butylbenzene	10.437	119	478689	20.95 ppb	100
101) 1,2,4-Trimethylbenzene	10.473	105	610669	21.87 ppb	100
102) 3,4-DCBTF	10.534	214	165151	20.80 ppb	100
103) sec-Butylbenzene	10.620	105	688491	21.65 ppb	100
104) p-Isopropyltoluene	10.742	119	592664	22.04 ppb	100
105) 1,3-Dclbenz	10.699	146	344896	21.37 ppb	100
106) 1,4-Dclbenz	10.766	146	352806	20.55 ppb	100
107) 2,4-DCBTF	10.821	214	146766	21.25 ppb	100
108) 2,5-DCBTF	10.864	214	163981	20.76 ppb	100
109) n-Butylbenzene	11.065	91	536348	22.12 ppb	100
110) 1,2-Dclbenz	11.065	146	326326	21.00 ppb	100
111) 1,2-Dibromo-3-chloropr...	11.626	157	23847	21.09 ppb	100
112) Trielution Dichlorotol...	11.729	125	790878	64.35 ppb	100
113) 1,3,5 Trichlorobenzene	11.778	180	225244	21.02 ppb	100
114) Coelution Dichlorotoluene	11.998	125	555902	42.72 ppb	100
115) 1,2,4-Tcbenzene	12.156	180	192297	20.24 ppb	100
116) Hexachlorobt	12.266	225	89220	21.51 ppb	100
117) Naphthalen	12.302	128	369318	21.59 ppb	100
118) 1,2,3-Tclbenzene	12.437	180	156926	20.17 ppb	100
119) 2,4,5-Trichlorotolene	12.851	159	107382	20.90 ppb	100
120) 2,3,6-Trichlorotoluene	12.912	159	96471	20.56 ppb	100

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

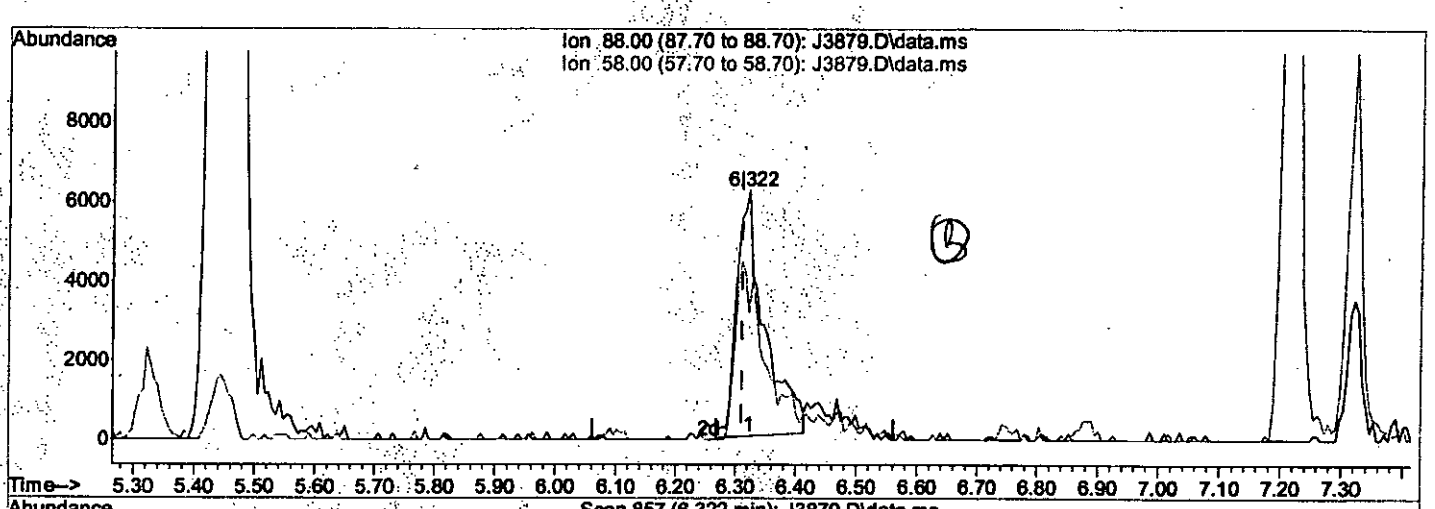
W031214.M Thu Mar 13 10:46:01 2014 Page: 3

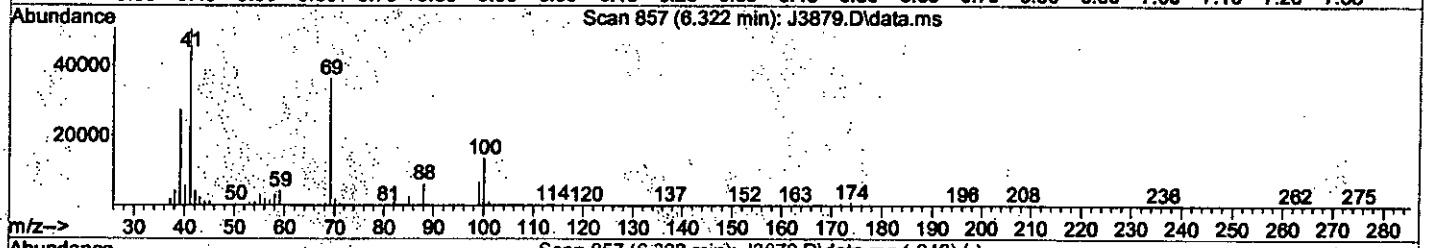
00468

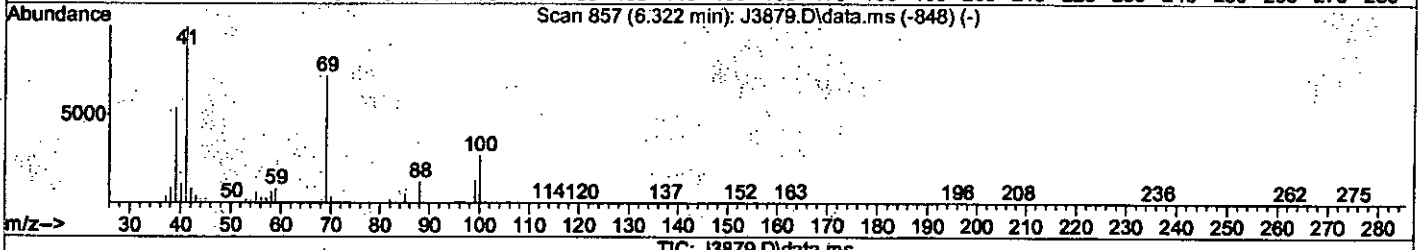
Quantitation Report (Qedit)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:55 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3879.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 345.93 ppb

response 19953

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	50.82
0.00	0.00	0.00
0.00	0.00	0.00

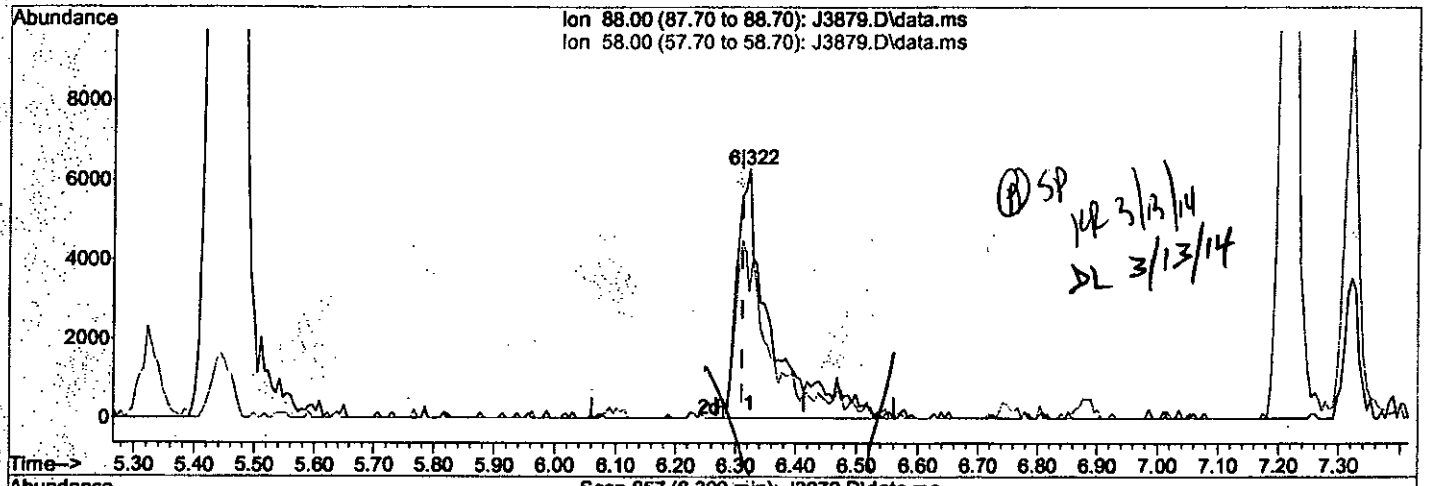
W031214.M Thu Mar 13 10:45:00 2014 Page: 1

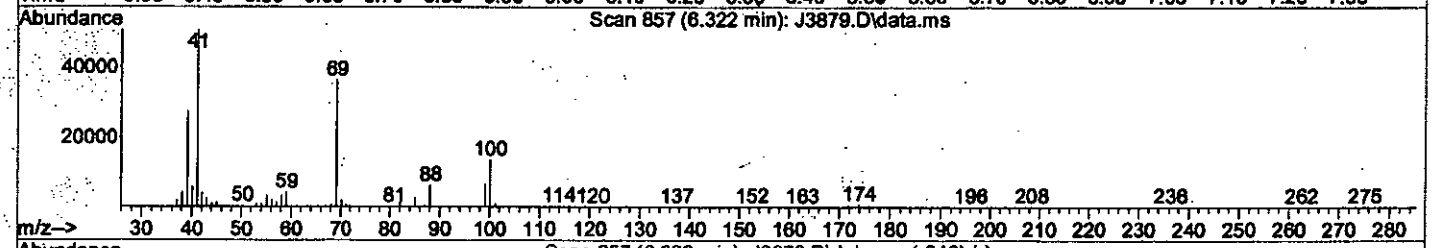
00469

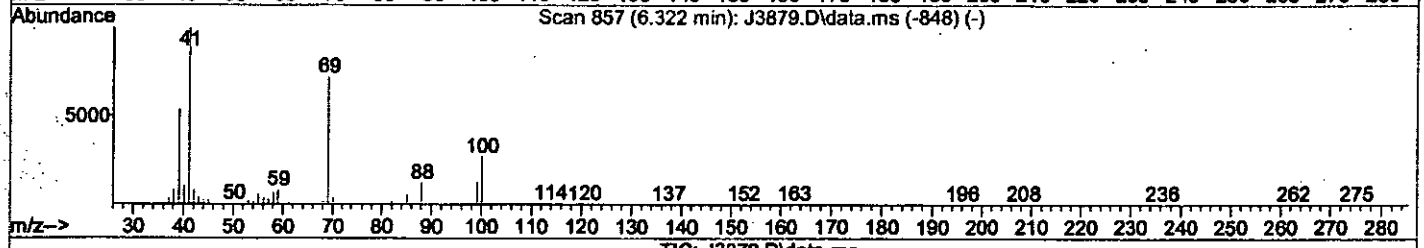
Quantitation Report (Qedit)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:55 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3879.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 430.43 ppb m

response 24827

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	50.82
0.00	0.00	0.00
0.00	0.00	0.00

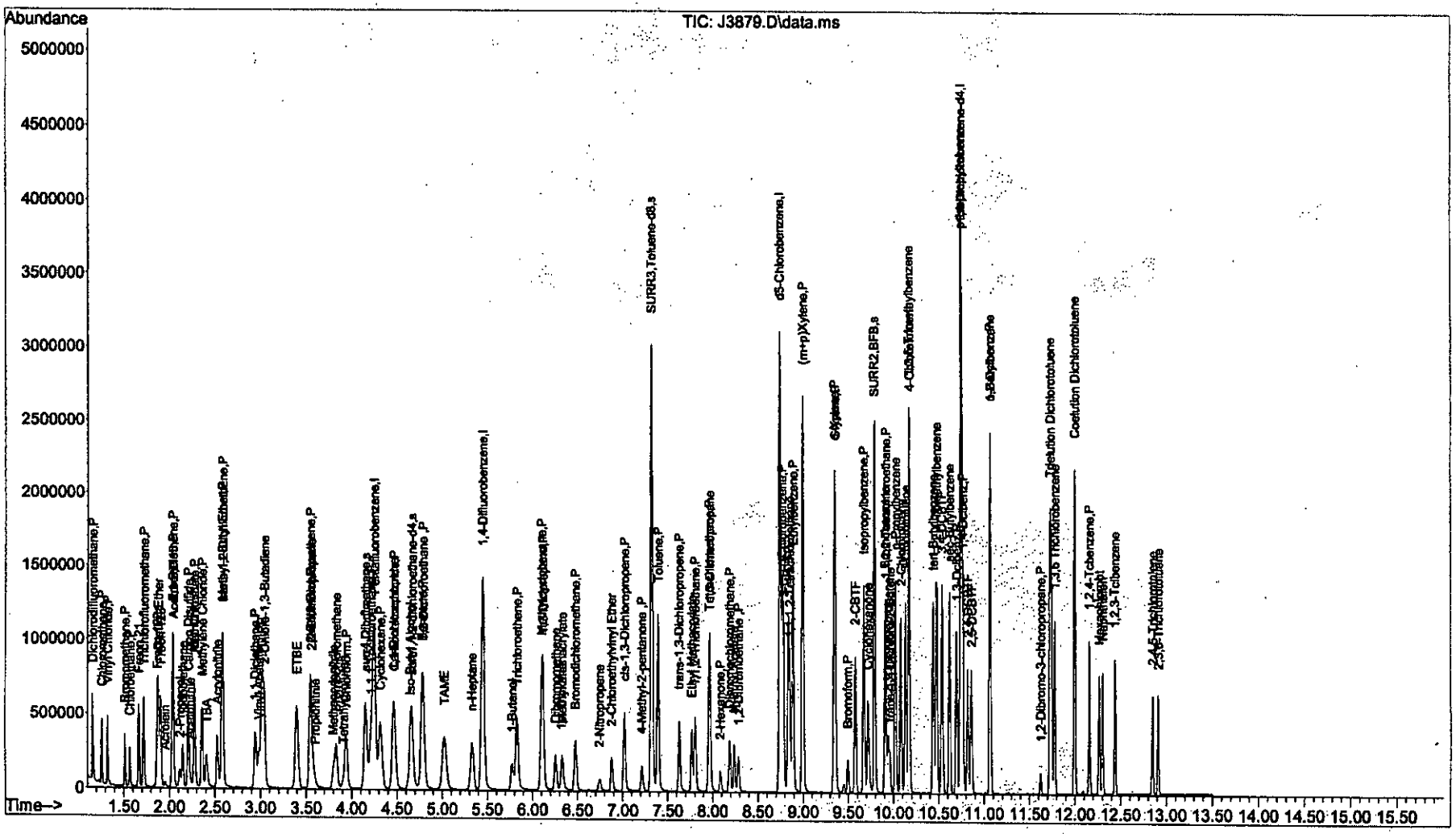
W031214.M Thu Mar 13 10:45:09 2014 Page: 1

00470

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:46:04 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	937657	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1455324	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1331361	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	670106	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	420448	49.90	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.80%				
48) surr1,1,2-dichloroetha...	4.658	65	477074	49.71	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.42%				
65) SURR3,Toluene-d8	7.322	98	1776183	50.17	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.34%				
70) SURR2,BFB	9.785	95	667990	50.57	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	564076	50.65	ppb		100
3) Chloromethane	1.262	50	474968	49.11	ppb		99
4) Vinyl Chloride	1.323	62	441606	49.26	ppb		99
5) Bromomethane	1.512	94	245467	45.43	ppb		99
6) Chloroethane	1.567	64	252379	45.25	ppb		98
7) Freon 21	1.664	67	644488	47.66	ppb		100
8) Trichlorofluoromethane	1.719	101	663901	48.23	ppb		100
9) Diethyl Ether	1.878	59	321286	47.40	ppb		97
10) Freon 123a	1.866	67	476539	47.15	ppb		97
11) Freon 123	1.902	83	541833	46.95	ppb		97
12) Acrolein	1.951	56	70930	218.82	ppb		93
13) 1,1-Diclethene	2.036	96	334465	49.15	ppb		97
14) Freon 113	2.036	101	357010	47.94	ppb		89
15) Acetone	2.042	43	88018	47.31	ppb		95
16) 2-Propanol	2.109	45	321452	1047.74	ppb		94
17) Iodomethane	2.146	142	528506	58.48	ppb		99
18) Carbon Disulfide	2.207	76	1233537	52.12	ppb		99
19) Acetonitrile	2.219	40	74229	244.00	ppb		95
20) Allyl Chloride	2.274	76	235013	50.37	ppb		98
21) Methyl Acetate	2.274	43	208249	49.71	ppb		98
22) Methylene Chloride	2.359	84	416569	46.73	ppb		97
23) TBA	2.402	59	549332	1056.46	ppb		100
24) Acrylonitrile	2.524	53	533681	256.05	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	1049984	48.54	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	412950	48.44	ppb		96
28) 1,1-Diclethane	2.939	63	773535	48.75	ppb		99
29) Vinyl Acetate	2.975	86	77152	54.60	ppb	#	88
30) DIPE	3.012	45	1550730	50.17	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	747718	54.71	ppb		95
32) ETBE	3.396	59	1323915	51.19	ppb		98
33) 2,2-Dichloropropane	3.554	77	628304	49.91	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	466155	49.00	ppb		98
35) 2-Butanone	3.542	43	132381	50.79	ppb		99
36) Propionitrile	3.591	54	202098	276.65	ppb		99
37) Bromochloromethane	3.829	130	248184	46.72	ppb		96

KR 3/13/14

W031214.M Thu Mar 13 10:48:05 2014 Page: 1

00472

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	126313	52.02	ppb	94
39) Tetrahydrofuran	3.902	42	90635	49.74	ppb	78
40) Chloroform	3.938	83	732190	47.09	ppb	98
41) 1,1,1-Trichloroethane	4.213	97	658125	49.34	ppb	90
42) TAME	5.023	73	1124934	51.52	ppb	99
44) Cyclohexane	4.316	41	365658	46.46	ppb	97
46) Carbontetrachloride	4.475	121	167213	47.92	ppb	94
47) 1,1-Dichloropropene	4.463	75	532677	50.00	ppb	97
49) Benzene	4.780	78	1762037	49.18	ppb	98
50) 1,2-Dichloroethane	4.786	62	526829	48.43	ppb	97
51) Iso-Butyl Alcohol	4.639	43	254891	1057.77	ppb	94
52) n-Heptane	5.328	43	424272	47.40	ppb	99
53) 1-Butanol	5.773	56	377086	2771.88	ppb	95
54) Trichloroethene	5.828	130	420559	48.46	ppb	98
55) Methylcyclohexane	6.103	55	430078	46.09	ppb	97
56) 1,2-Diclpropane	6.109	63	451018	48.80	ppb	99
57) Dibromomethane	6.255	93	217523	49.91	ppb	97
58) 1,4-Dioxane	6.316	88	57551m	985.34	ppb	
59) Methyl Methacrylate	6.328	69	226083	52.44	ppb	93
60) Bromodichloromethane	6.474	83	544940	50.92	ppb	97
61) 2-Nitropropane	6.743	41	120948	105.09	ppb	89
62) 2-Chloroethylvinyl Ether	6.877	63	216563	52.70	ppb	94
63) cis-1,3-Dichloropropene	7.023	75	673884	53.07	ppb	97
64) 4-Methyl-2-pentanone	7.212	43	291984	52.83	ppb	96
66) Toluene	7.389	91	1845581	49.96	ppb	98
67) trans-1,3-Dichloropropene	7.627	75	557858	54.50	ppb	97
68) Ethyl Methacrylate	7.767	69	467885	56.71	ppb	99
69) 1,1,2-Trichloroethane	7.810	97	323984	50.13	ppb	98
72) Tetrachloroethene	7.962	164	321606	46.76	ppb	100
73) 2-Hexanone	8.084	43	203476	53.96	ppb	99
74) 1,3-Dichloropropane	7.974	76	591305	49.33	ppb	97
75) Dibromochloromethane	8.187	129	370150	53.71	ppb	97
76) N-Butyl Acetate	8.236	43	500003	53.63	ppb	96
77) 1,2-Dibromoethane	8.285	107	316309	51.38	ppb	99
78) Chlorobenzene	8.767	112	1122450	48.45	ppb	99
79) 3-CBTF	8.785	180	564574	49.26	ppb	94
80) 4-CBTF	8.840	180	528416	51.46	ppb	99
81) 1,1,1,2-Tetrachloroethane	8.852	131	415996	51.10	ppb	96
82) Ethylbenzene	8.889	106	615664	49.88	ppb	98
83) (m+p)Xylene	8.998	106	1487671	102.56	ppb	95
84) o-Xylene	9.346	106	740250	50.01	ppb	97
85) Styrene	9.352	104	1267657	53.57	ppb	98
87) Bromoform	9.492	173	209385	55.02	ppb	98
88) 2-CBTF	9.577	180	557431	49.93	ppb	98
89) Isopropylbenzene	9.669	105	1741830	50.35	ppb	98
90) Cyclohexanone	9.718	55	530771	987.62	ppb	99
91) trans-1,4-Dichloro-2-B...	9.962	53	101239	56.13	ppb	89
92) 1,1,2,2-Tetrachloroethane	9.913	83	379084	49.40	ppb	99
93) Bromobenzene	9.907	156	470985	47.78	ppb	96
94) 1,2,3-Trichloropropane	9.943	110	111383	48.51	ppb	97
95) n-Propylbenzene	10.023	91	2010813	49.69	ppb	100
96) 2-Chlorotoluene	10.083	91	1249532	49.16	ppb	98

W031214.M Thu Mar 13 10:48:05 2014 Page: 2

00473

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.132	91	1329412	50.29	ppb	98
98) 4-Chlorotoluene	10.169	91	1484176	49.53	ppb	98
99) 1,3,5-Trimethylbenzene	10.169	105	1423846	50.45	ppb	99
100) tert-Butylbenzene	10.437	119	1162005	48.91	ppb	99
101) 1,2,4-Trimethylbenzene	10.480	105	1487149	51.22	ppb	100
102) 3,4-DCBTF	10.535	214	419830	50.85	ppb	98
103) sec-Butylbenzene	10.620	105	1626721	49.21	ppb	99
104) p-Isopropyltoluene	10.742	119	1412183	50.51	ppb	99
105) 1,3-Dclbenz	10.693	146	830616	49.50	ppb	98
106) 1,4-Dclbenz	10.766	146	848800	47.54	ppb	97
107) 2,4-DCBTF	10.821	214	371206	51.68	ppb	95
108) 2,5-DCBTF	10.858	214	418243	50.93	ppb	98
109) n-Butylbenzene	11.065	91	1279244	50.75	ppb	98
110) 1,2-Dclbenz	11.065	146	803257	49.72	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	63513	54.02	ppb	96
112) Trielution Dichlorotol...	11.729	125	2007597	157.11	ppb	99
113) 1,3,5 Trichlorobenzene	11.778	180	573684	51.48	ppb	98
114) Coelution Dichlorotoluene	11.998	125	1435061	106.06	ppb	98
115) 1,2,4-Tcbenzene	12.156	180	485670	49.15	ppb	96
116) Hexachlorobt	12.266	225	211082	48.95	ppb	98
117) Naphthalen	12.303	128	946078	53.18	ppb	98
118) 1,2,3-Tclbenzene	12.437	180	386312	47.75	ppb	98
119) 2,4,5-Trichlorotolene	12.851	159	270768	50.69	ppb	97
120) 2,3,6-Trichlorotoluene	12.912	159	254890	52.24	ppb	96

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

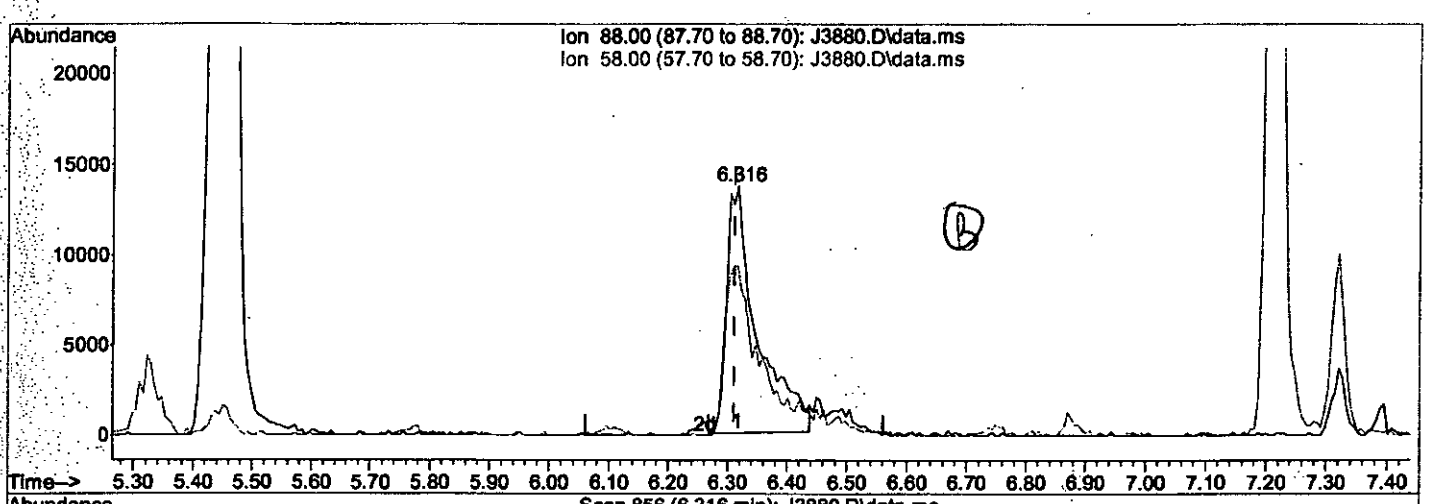
W031214.M Thu Mar 13 10:48:05 2014 Page: 3

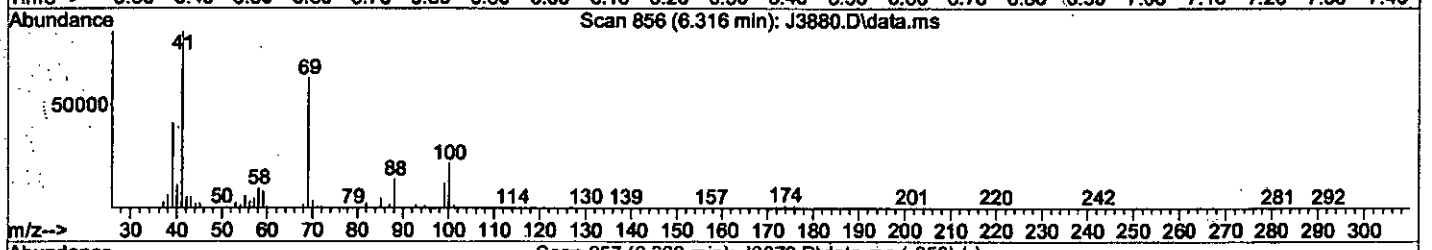
00474

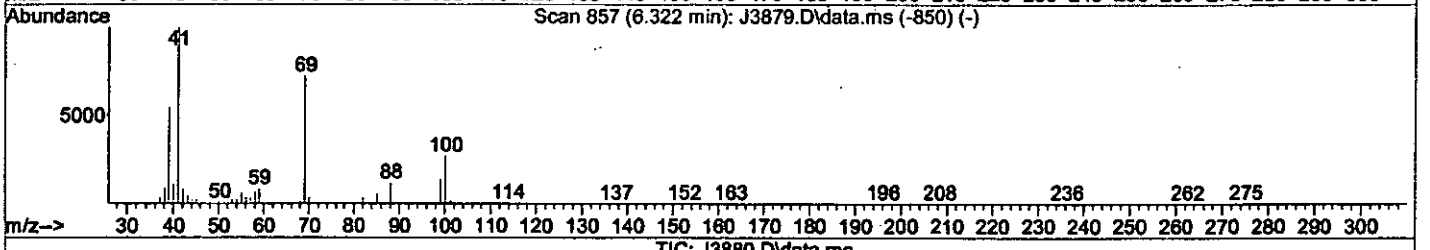
Quantitation Report (Qedit)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:59 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3880.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.008) 841.01 ppb

response 49121

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.82
0.00	0.00	0.00
0.00	0.00	0.00

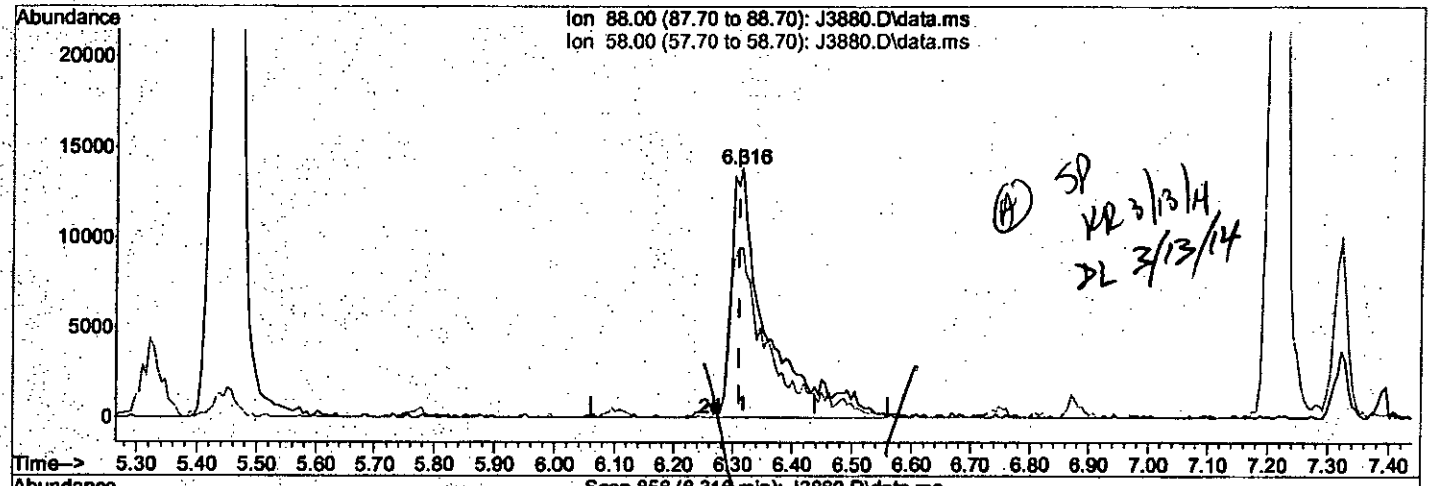
W031214.M Thu Mar 13 10:47:19 2014 Page: 1

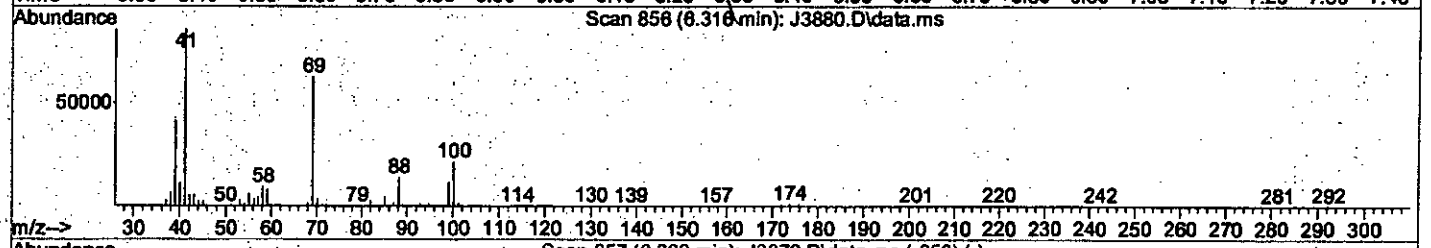
00475

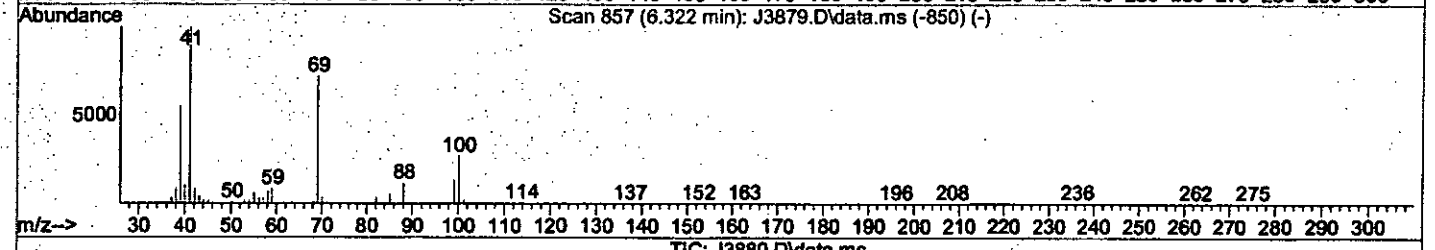
Quantitation Report (Qedit)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:59 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3880.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 985.34 ppb m

response 57551

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.82
0.00	0.00	0.00
0.00	0.00	0.00

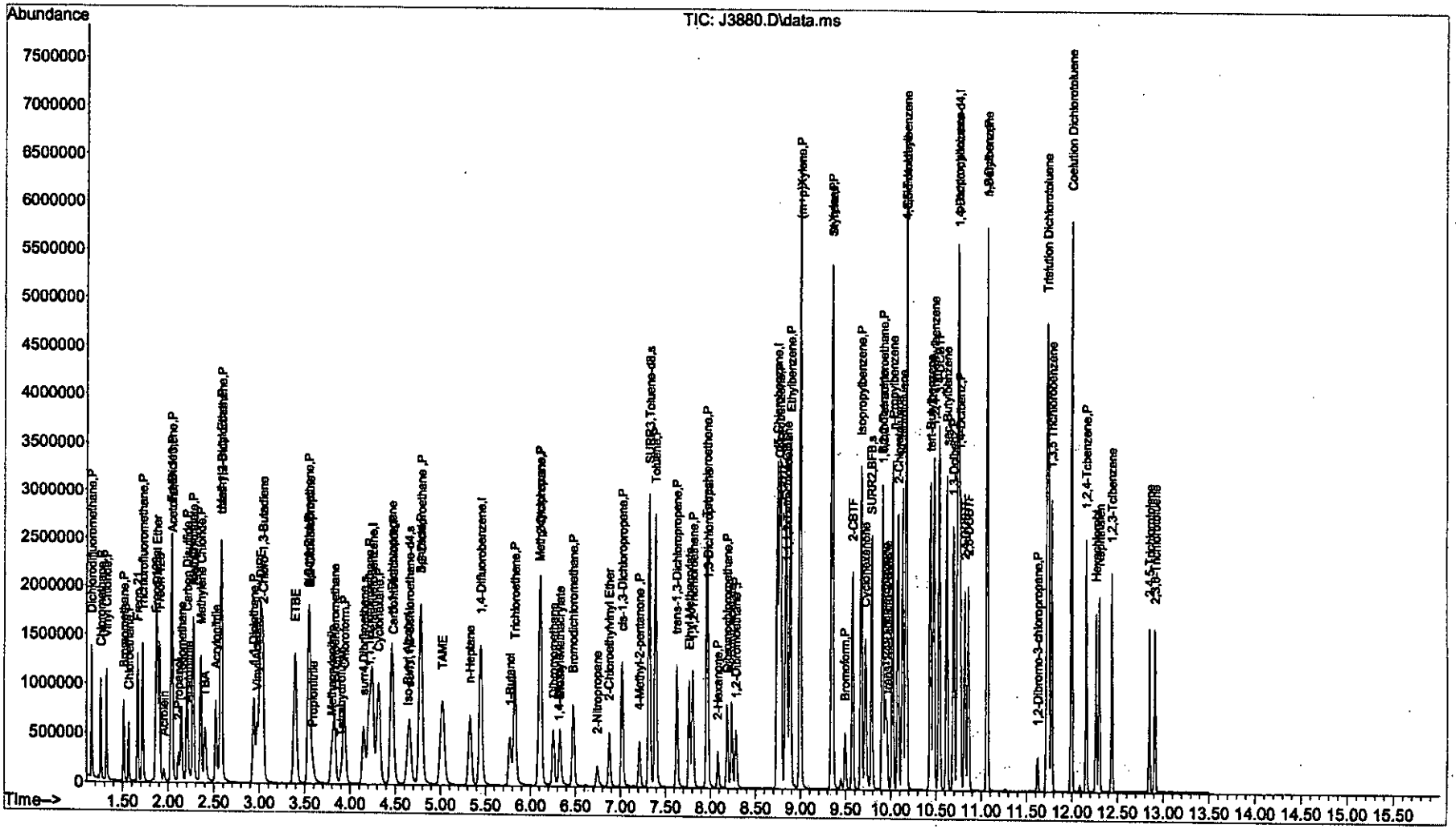
W031214.M Thu Mar 13 10:47:26 2014 Page: 1

00476

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:48:08 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	937973	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1484441	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1370021	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	701019	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	430044	50.04	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.08%				
48) surr1,1,2-dichloroetha...	4.658	65	480420	49.07	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 98.14%				
65) SURR3,Toluene-d8	7.322	98	1799950	49.84	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.68%				
70) SURR2,BFB	9.791	95	684103	50.78	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.56%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	1151799	103.38	ppb		98
3) Chloromethane	1.262	50	984445	101.75	ppb		98
4) Vinyl Chloride	1.323	62	910676	101.54	ppb		98
5) Bromomethane	1.512	94	519455	96.11	ppb		99
6) Chloroethane	1.567	64	513409	92.02	ppb		99
7) Freon 21	1.664	67	1302870	96.32	ppb		98
8) Trichlorofluoromethane	1.719	101	1346481	97.79	ppb		100
9) Diethyl Ether	1.878	59	651078	96.03	ppb		97
10) Freon 123a	1.872	67	966134	95.56	ppb		88
11) Freon 123	1.902	83	1112658	96.38	ppb		98
12) Acrolein	1.951	56	260329	802.83	ppb		93
13) 1,1-Diclethene	2.042	96	703538	103.36	ppb		91
14) Freon 113	2.036	101	752470	101.02	ppb		93
15) Acetone	2.042	43	187153	100.57	ppb		98
16) 2-Propanol	2.115	45	689079	2245.24	ppb		95
17) Iodomethane	2.146	142	1009536	111.66	ppb		98
18) Carbon Disulfide	2.207	76	2278103	96.23	ppb		99
19) Acetonitrile	2.219	40	167185	549.38	ppb		99
20) Allyl Chloride	2.274	76	470843	100.89	ppb		99
21) Methyl Acetate	2.274	43	413689	98.72	ppb		100
22) Methylene Chloride	2.359	84	856870	96.09	ppb		99
23) TBA	2.408	59	1129564	2171.61	ppb		99
24) Acrylonitrile	2.524	53	1072759	514.53	ppb		96
25) Methyl-t-Butyl Ether	2.579	73	2127883	98.35	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	868915	101.89	ppb		99
28) 1,1-Diclethane	2.945	63	1593999	100.42	ppb		99
29) Vinyl Acetate	2.981	86	147267	104.19	ppb	#	78
30) DIPE	3.018	45	3010668	97.38	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	1354355	99.07	ppb		98
32) ETBE	3.396	59	2608434	100.82	ppb		99
33) 2,2-Dichloropropane	3.554	77	1328467	105.49	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	962108	101.10	ppb		96
35) 2-Butanone	3.542	43	258220	99.04	ppb		96
36) Propionitrile	3.591	54	412919	565.06	ppb		94
37) Bromochloromethane	3.829	130	496052	93.36	ppb		95

KR 3/13/14

W031214.M Thu Mar 13 10:49:57 2014 Page: 1

00478

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	254231	104.67	ppb		98
39) Tetrahydrofuran	3.908	42	173277	95.07	ppb		76
40) Chloroform	3.938	83	1536180	98.76	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	1378473	103.32	ppb		86
42) TAME	5.023	73	2253915	103.19	ppb		99
44) Cyclohexane	4.316	41	749224	93.33	ppb		99
46) Carbontetrachloride	4.475	121	366099	102.86	ppb		97
47) 1,1-Dichloropropene	4.463	75	1116976	102.80	ppb		94
49) Benzene	4.780	78	3634712	99.46	ppb		98
50) 1,2-Dichloroethane	4.786	62	1063848	95.88	ppb		95
51) Iso-Butyl Alcohol	4.639	43	539363	2194.40	ppb		98
52) n-Heptane	5.328	43	888766	97.34	ppb		98
53) 1-Butanol	5.767	56	809280	5832.15	ppb		99
54) Trichloroethene	5.828	130	889519	100.49	ppb		98
55) Methylcyclohexane	6.103	55	905575	95.15	ppb		98
56) 1,2-Diclpropane	6.115	63	924592	98.08	ppb		94
57) Dibromomethane	6.255	93	443550	99.77	ppb		98
58) 1,4-Dioxane	6.310	88	125980m	2114.61	ppb		
59) Methyl Methacrylate	6.328	69	467460	106.30	ppb		94
60) Bromodichloromethane	6.480	83	1137327	104.18	ppb		97
61) 2-Nitropropane	6.749	41	259802	221.31	ppb		90
62) 2-Chloroethylvinyl Ether	6.877	63	425533	101.53	ppb		100
63) cis-1,3-Dichloropropene	7.023	75	1400196	108.11	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	583711	103.54	ppb		98
66) Toluene	7.395	91	3748008	99.46	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	1183119	113.32	ppb		98
68) Ethyl Methacrylate	7.767	69	978589	116.29	ppb		98
69) 1,1,2-Trichloroethane	7.809	97	656030	99.52	ppb		98
72) Tetrachloroethene	7.962	164	687266	97.11	ppb		98
73) 2-Hexanone	8.084	43	401480	103.46	ppb		98
74) 1,3-Dichloropropane	7.974	76	1209458	98.06	ppb		98
75) Dibromochloromethane	8.187	129	788086	111.12	ppb		98
76) N-Butyl Acetate	8.236	43	1000972	104.33	ppb		96
77) 1,2-Dibromoethane	8.285	107	655010	103.39	ppb		98
78) Chlorobenzene	8.767	112	2363650	99.14	ppb		99
79) 3-CBTF	8.785	180	1185107	100.49	ppb		96
80) 4-CBTF	8.840	180	1071141	101.37	ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	887066	105.88	ppb		97
82) Ethylbenzene	8.889	106	1313617	103.42	ppb	#	90
83) (m+p)Xylene	8.998	106	3142865	210.55	ppb	#	87
84) o-Xylene	9.346	106	1572694	103.24	ppb		92
85) Styrene	9.358	104	2671945	109.72	ppb		95
87) Bromoform	9.492	173	461418	115.90	ppb		98
88) 2-CBTF	9.577	180	1151393	98.59	ppb		99
89) Isopropylbenzene	9.675	105	3644119	100.68	ppb		95
90) Cyclohexanone	9.718	55	1104912	1965.28	ppb		99
91) trans-1,4-Dichloro-2-B...	9.961	53	209847	111.21	ppb		88
92) 1,1,2,2-Tetrachloroethane	9.913	83	772541	96.23	ppb		99
93) Bromobenzene	9.913	156	1019396	98.85	ppb	#	85
94) 1,2,3-Trichloropropane	9.943	110	229868	95.69	ppb		99
95) n-Propylbenzene	10.022	91	4188003	98.92	ppb		97
96) 2-Chlorotoluene	10.083	91	2652958	99.77	ppb		99

W031214.M Thu Mar 13 10:49:57 2014 Page: 2

00479

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	2690681	97.29	ppb	97
98)	4-Chlorotoluene	10.175	91	3159334	100.78	ppb	95
99)	1,3,5-Trimethylbenzene	10.175	105	3042400	103.05	ppb	95
100)	tert-Butylbenzene	10.437	119	2486489	100.05	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	3118106	102.65	ppb	97
102)	3,4-DCBTF	10.535	214	869988	100.73	ppb	97
103)	sec-Butylbenzene	10.620	105	3484191	100.74	ppb	97
104)	p-Isopropyltoluene	10.742	119	3038002	103.87	ppb	98
105)	1,3-Dclbenz	10.699	146	1804895	102.83	ppb	97
106)	1,4-Dclbenz	10.766	146	1826800	97.81	ppb	96
107)	2,4-DCBTF	10.821	214	767048	102.08	ppb	95
108)	2,5-DCBTF	10.864	214	873255	101.64	ppb	98
109)	n-Butylbenzene	11.065	91	2753475	104.42	ppb	98
110)	1,2-Dclbenz	11.065	146	1726213	102.13	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	139798	113.65	ppb	94
112)	Trielution Dichlorotol...	11.729	125	4037789	302.05	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	1149549	98.60	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	2873775	203.02	ppb	97
115)	1,2,4-Tcbenzene	12.162	180	1007657	97.49	ppb	95
116)	Hexachlorobt	12.266	225	434402	96.30	ppb	99
117)	Naphthalen	12.303	128	1968108	105.76	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	814869	96.28	ppb	99
119)	2,4,5-Trichlorotolene	12.851	159	541327	96.87	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	499889	97.93	ppb	97

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

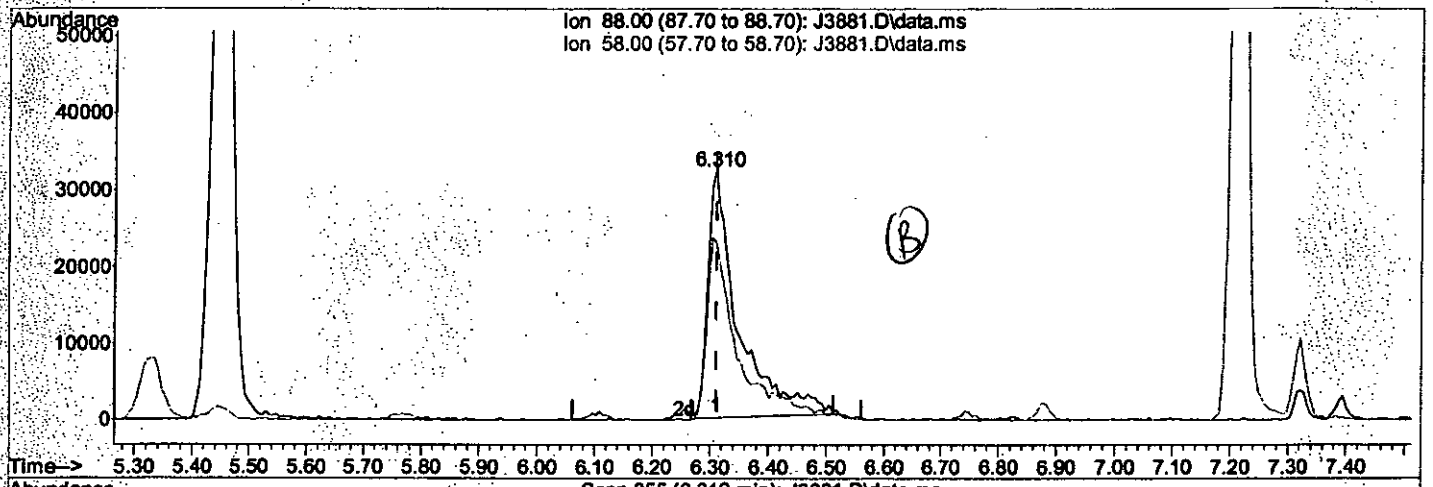
W031214.M Thu Mar 13 10:49:57 2014 Page: 3

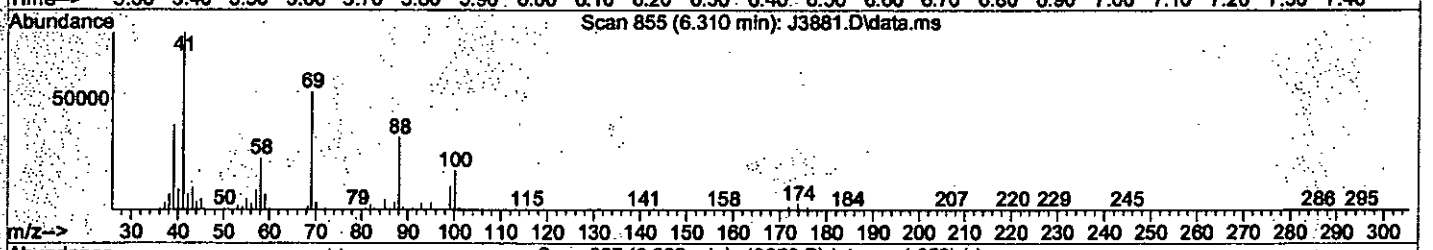
00480

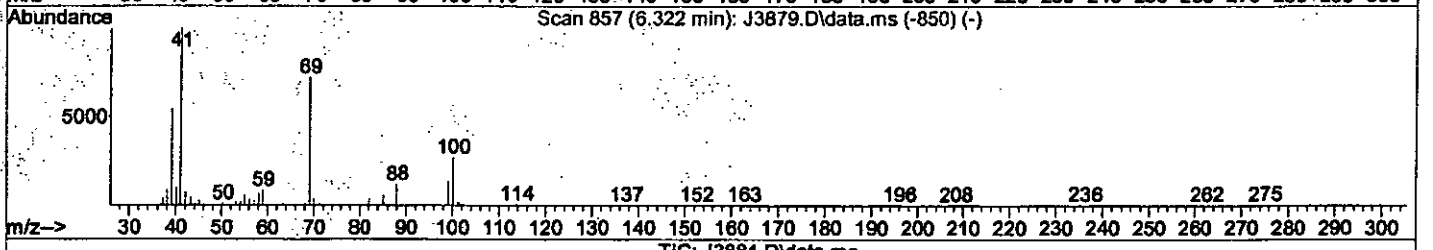
Quantitation Report (Qedit)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3881.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 1971.52 ppb

response 117455

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	71.24#
0.00	0.00	0.00
0.00	0.00	0.00

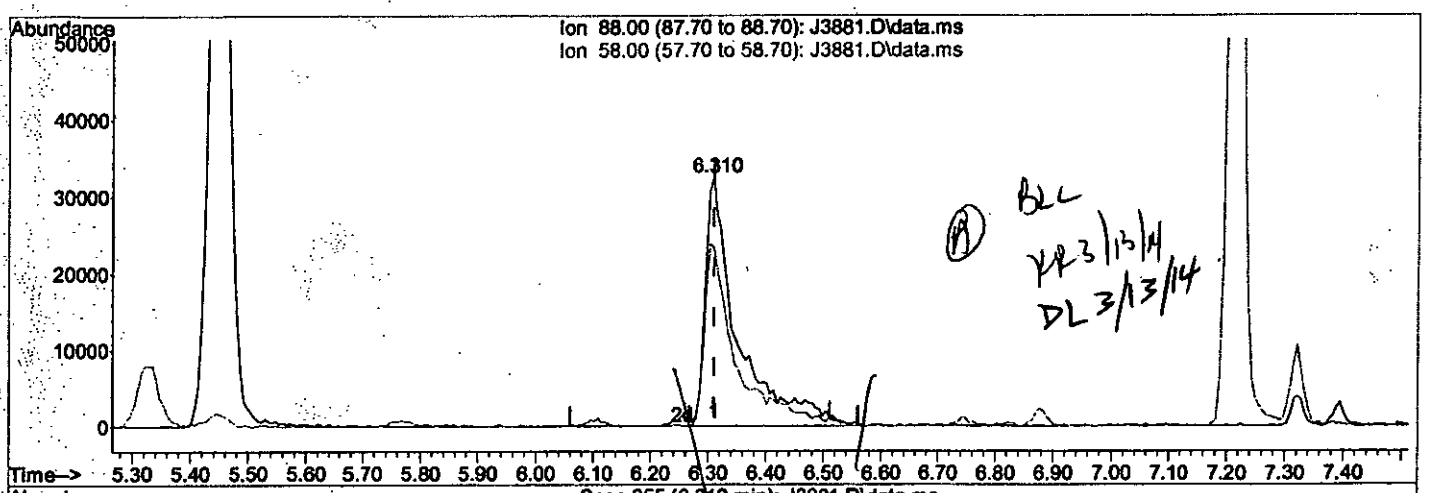
W031214.M Thu Mar 13 10:49:11 2014 Page: 1

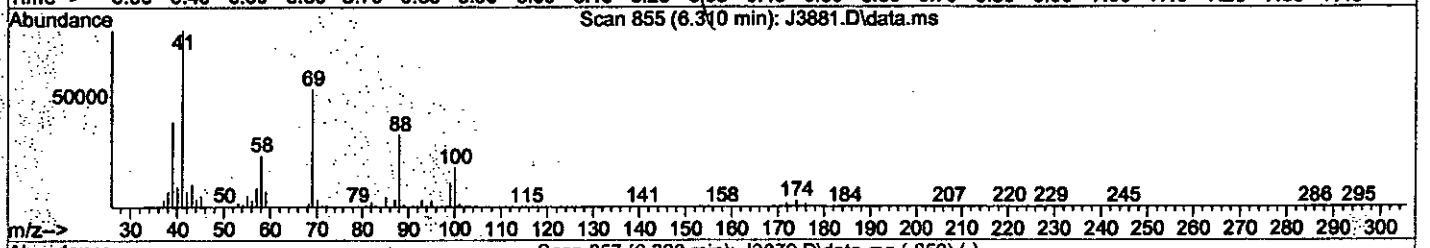
00481

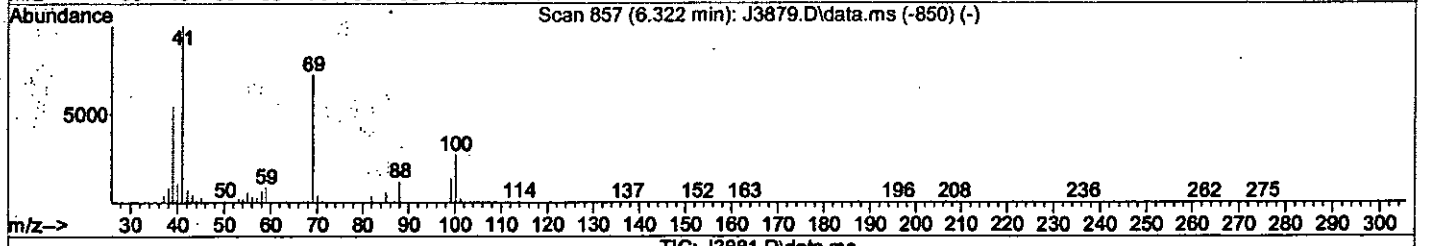
Quantitation Report (Qedit)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3881.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 2114.61 ppb m

response 125980

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	71.24#
0.00	0.00	0.00
0.00	0.00	0.00

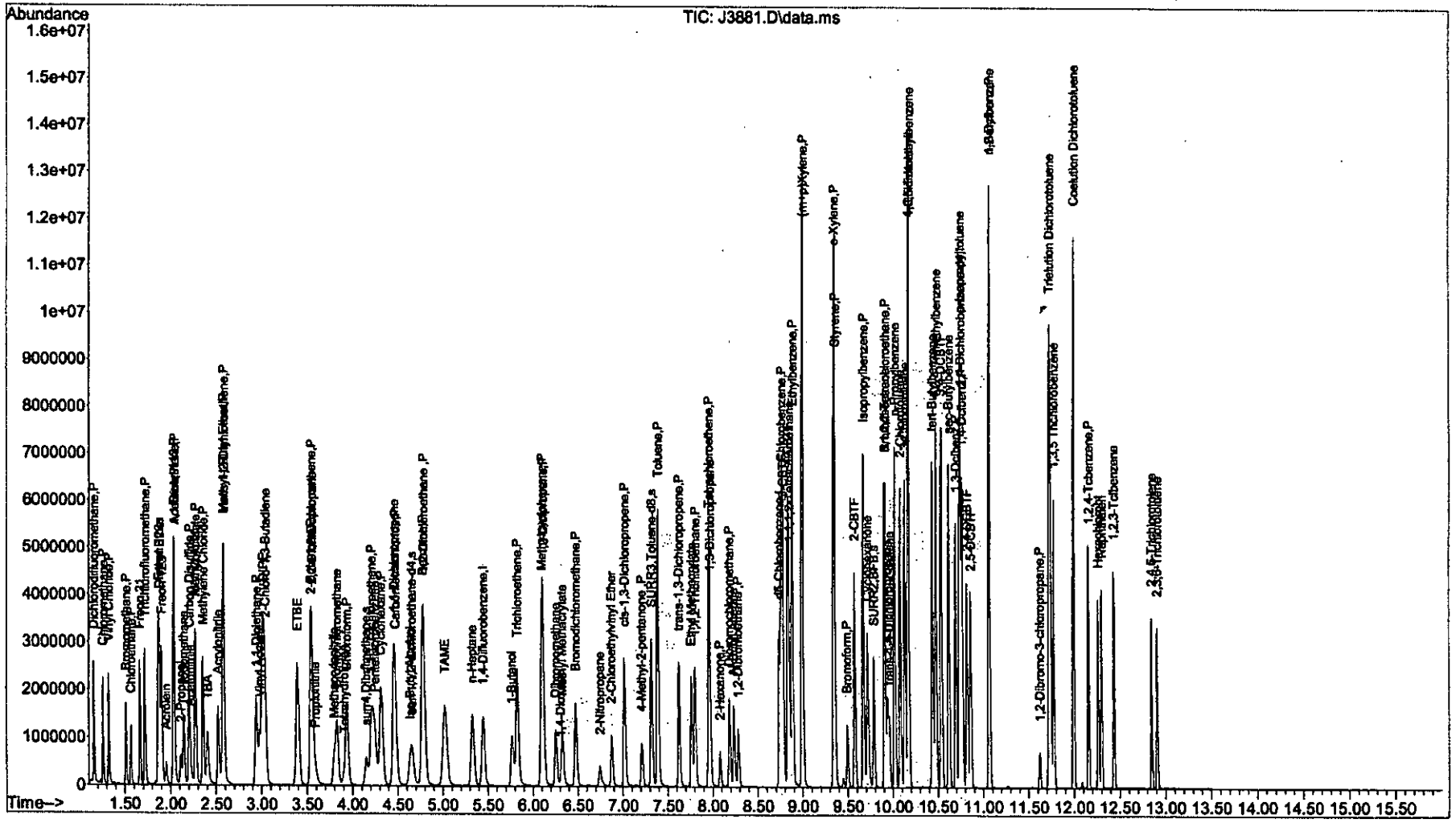
W031214.M Thu Mar 13 10:49:19 2014 Page: 1

00482

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:50:00 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	979999	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1518459	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1407424	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	759863	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	441101	50.18	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.36%				
48) surr1,1,2-dichloroetha...	4.664	65	488656	48.80	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 97.60%				
65) SURR3,Toluene-d8	7.322	98	1853938	50.19	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.38%				
70) SURR2,BFB	9.791	95	709699	51.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.00%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	2286283	196.42	ppb		96
3) Chloromethane	1.262	50	2037500	201.56	ppb		96
4) Vinyl Chloride	1.323	62	1831559	195.46	ppb		98
5) Bromomethane	1.512	94	1116290	197.68	ppb		99
6) Chloroethane	1.567	64	1042363	178.82	ppb		100
7) Freon 21	1.664	67	2705583	191.44	ppb		96
8) Trichlorofluoromethane	1.719	101	2751491	191.27	ppb		98
9) Diethyl Ether	1.878	59	1310397	184.99	ppb		96
10) Freon 123a	1.872	67	2017900m	191.04	ppb		
11) Freon 123	1.902	83	2383673	197.61	ppb		95
12) Acrolein	1.951	56	843142	2488.67	ppb		96
13) 1,1-Diclethene	2.036	96	1444716	203.15	ppb		95
14) Freon 113	2.036	101	1541423	198.05	ppb		90
15) Acetone	2.042	43	369068	189.81	ppb		99
16) 2-Propanol	2.116	45	1449061	4519.02	ppb		95
17) Iodomethane	2.146	142	2055775	217.63	ppb		96
18) Carbon Disulfide	2.207	76	4568264	184.69	ppb		98
19) Acetonitrile	2.219	40	322471	1014.22	ppb		94
20) Allyl Chloride	2.274	76	887879	182.08	ppb		95
21) Methyl Acetate	2.274	43	848257	193.74	ppb		99
22) Methylene Chloride	2.359	84	1742532	187.03	ppb		99
23) TBA	2.408	59	2336094	4298.58	ppb		95
24) Acrylonitrile	2.524	53	2160614	991.85	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	4301170	190.27	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	1768019	198.42	ppb		96
28) 1,1-Diclethane	2.939	63	3195225	192.67	ppb		100
29) Vinyl Acetate	2.975	86	322532	218.41	ppb	#	80
30) DIPE	3.018	45	5908636	182.91	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	2848864	199.45	ppb		97
32) ETBE	3.396	59	5248916	194.19	ppb		99
33) 2,2-Dichloropropane	3.554	77	2728713	207.38	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	1971351	198.26	ppb		97
35) 2-Butanone	3.548	43	536985	197.13	ppb		97
36) Propionitrile	3.591	54	833731	1091.99	ppb		98
37) Bromochloromethane	3.829	130	1006153	181.24	ppb		94

KR 3/13/14

W031214.M Thu Mar 13 10:52:01 2014 Page: 1

00484

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	524188	206.57	ppb		97
39) Tetrahydrofuran	3.902	42	364546	191.44	ppb		74
40) Chloroform	3.938	83	3126159	192.36	ppb		98
41) 1,1,1-Trichloroethane	4.213	97	2833193	203.25	ppb	#	84
42) TAME	5.023	73	4623300	202.60	ppb		99
44) Cyclohexane	4.316	41	1591117	193.76	ppb		99
46) Carbontetrachloride	4.469	121	768760	211.15	ppb		100
47) 1,1-Dichloropropene	4.463	75	2295867	206.56	ppb		94
49) Benzene	4.786	78	7257077	194.13	ppb		96
50) 1,2-Dichloroethane	4.792	62	2181265	192.18	ppb		97
51) Iso-Butyl Alcohol	4.639	43	1130810	4497.64	ppb		98
52) n-Heptane	5.328	43	1791526	191.82	ppb		97
53) 1-Butanol	5.773	56	1716496	12092.96	ppb		100
54) Trichloroethene	5.828	130	1855685	204.93	ppb		96
55) Methylcyclohexane	6.109	55	1898582	195.02	ppb		96
56) 1,2-Diclpropane	6.115	63	1885412	195.53	ppb		97
57) Dibromomethane	6.255	93	928427	204.16	ppb		97
58) 1,4-Dioxane	6.310	88	260761m	4278.89	ppb		
59) Methyl Methacrylate	6.328	69	977496	217.30	ppb		92
60) Bromodichloromethane	6.474	83	2367789	212.04	ppb		97
61) 2-Nitropropane	6.743	41	557263	464.07	ppb		83
62) 2-Chloroethylvinyl Ether	6.877	63	916396	213.74	ppb		100
63) cis-1,3-Dichloropropene	7.023	75	2885488	217.79	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	1217857	211.20	ppb		97
66) Toluene	7.395	91	7245118	187.96	ppb		93
67) trans-1,3-Dichloropropene	7.633	75	2452963	229.69	ppb		95
68) Ethyl Methacrylate	7.767	69	2019211	234.58	ppb		100
69) 1,1,2-Trichloroethane	7.810	97	1369904	203.16	ppb		97
72) Tetrachloroethene	7.962	164	1476158	203.04	ppb		98
73) 2-Hexanone	8.084	43	872249	218.80	ppb		99
74) 1,3-Dichloropropane	7.974	76	2487765	196.34	ppb		98
75) Dibromochloromethane	8.188	129	1673461	229.69	ppb		99
76) N-Butyl Acetate	8.236	43	2151476	218.28	ppb		97
77) 1,2-Dibromoethane	8.285	107	1357253	208.54	ppb		97
78) Chlorobenzene	8.773	112	4820919	196.84	ppb		95
79) 3-CBTF	8.785	180	2511010	207.26	ppb		95
80) 4-CBTF	8.840	180	2266329	208.77	ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	1919375	223.01	ppb		96
82) Ethylbenzene	8.889	106	2713368	207.95	ppb	#	70
83) (m+p)Xylene	8.998	106	6206404	404.74	ppb	#	67
84) o-Xylene	9.346	106	3243504	207.27	ppb	#	81
85) Styrene	9.358	104	5349928	213.85	ppb		99
87) Bromoform	9.498	173	1021268	236.66	ppb		99
88) 2-CBTF	9.577	180	2418474	191.05	ppb		98
89) Isopropylbenzene	9.675	105	6913118	176.21	ppb		86
90) Cyclohexanone	9.724	55	2390191	3922.16	ppb		97
91) trans-1,4-Dichloro-2-B...	9.962	53	457912	223.88	ppb		86
92) 1,1,2,2-Tetrachloroethane	9.913	83	1621835	186.37	ppb		98
93) Bromobenzene	9.913	156	2182175	195.22	ppb	#	82
94) 1,2,3-Trichloropropane	9.943	110	482217	185.19	ppb		97
95) n-Propylbenzene	10.023	91	7682061	167.40	ppb		87
96) 2-Chlorotoluene	10.083	91	5254597	182.32	ppb		93

W031214.M Thu Mar 13 10:52:01 2014 Page: 2

00485

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97) 3-Chlorotoluene	10.132	91	5400136	180.14	ppb		92
98) 4-Chlorotoluene	10.175	91	6004495	176.70	ppb		84
99) 1,3,5-Trimethylbenzene	10.175	105	5961721	186.29	ppb		86
100) tert-Butylbenzene	10.443	119	4946458	183.63	ppb		93
101) 1,2,4-Trimethylbenzene	10.480	105	6014450	182.67	ppb		88
102) 3,4-DCBTF	10.535	214	1853237	197.96	ppb		96
103) sec-Butylbenzene	10.620	105	6557013	174.91	ppb		91
104) p-Isopropyltoluene	10.742	119	5833378	184.01	ppb		90
105) 1,3-Dclbenz	10.699	146	3744521	196.81	ppb		96
106) 1,4-Dclbenz	10.772	146	3787265	187.07	ppb		95
107) 2,4-DCBTF	10.821	214	1588956	195.09	ppb		96
108) 2,5-DCBTF	10.864	214	1812827	194.66	ppb		98
109) n-Butylbenzene	11.071	91	5279444	184.71	ppb		91
110) 1,2-Dclbenz	11.065	146	3657071	199.61	ppb		98
111) 1,2-Dibromo-3-chloropr...	11.626	157	292980	219.74	ppb		96
112) Trielution Dichlorotol...	11.736	125	7827531	540.19	ppb	#	90
113) 1,3,5 Trichlorobenzene	11.778	180	2337530	184.97	ppb		99
114) Coelution Dichlorotoluene	11.998	125	5360706	349.39	ppb	#	87
115) 1,2,4-Tcbenzene	12.162	180	2051796	183.13	ppb		94
116) Hexachlorobt	12.266	225	888614	181.73	ppb		99
117) Naphthalen	12.303	128	3805658	188.67	ppb		98
118) 1,2,3-Tclbenzene	12.437	180	1643433	179.15	ppb		99
119) 2,4,5-Trichlorotolene	12.851	159	1040596	171.79	ppb		97
120) 2,3,6-Trichlorotoluene	12.912	159	963982	174.22	ppb		97

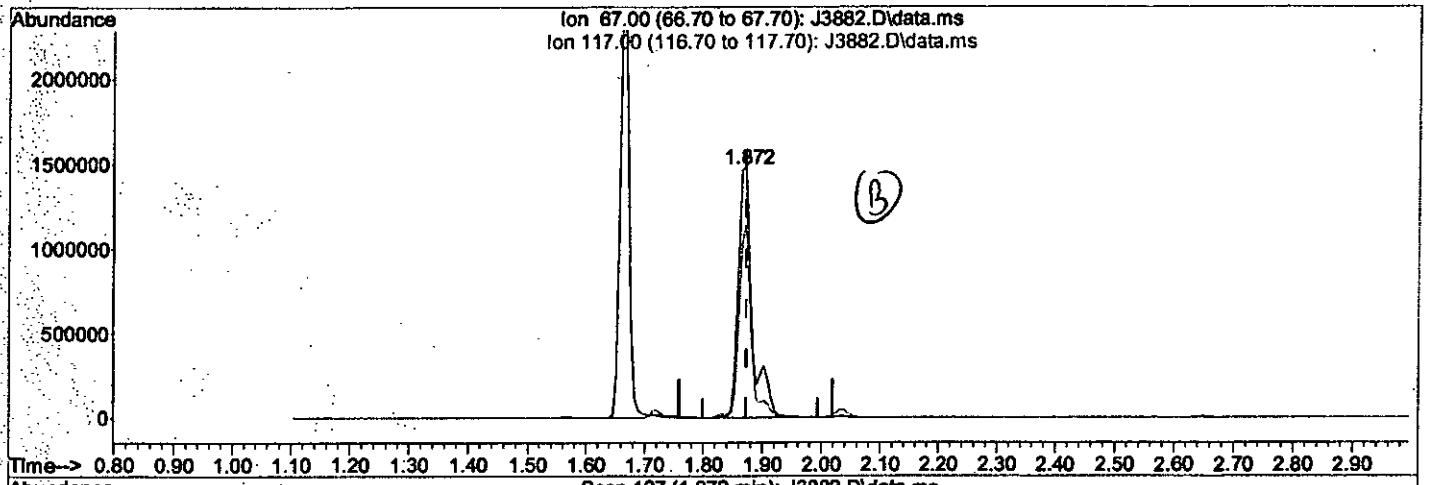
(#) = qualifier out of range (m) = manual integration (+) = signals summed

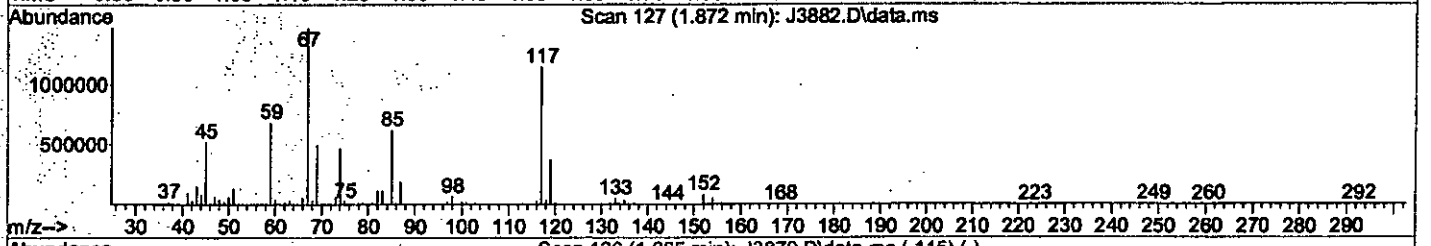
W031214.M Thu Mar 13 10:52:01 2014 Page: 3

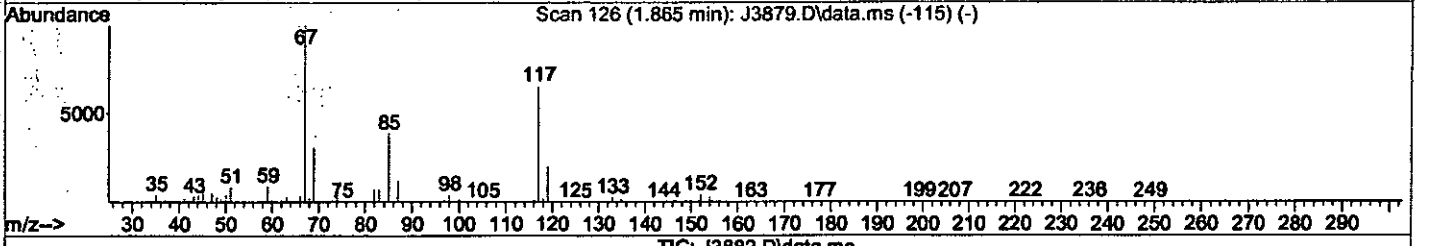
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3882.D\data.ms

(10) Freon 123a

1.872min (0.000) 225.75 ppb

response 2384527

Ion	Exp%	Act%
67.00	100	100
117.00	65.90	77.87
0.00	0.00	0.00
0.00	0.00	0.00

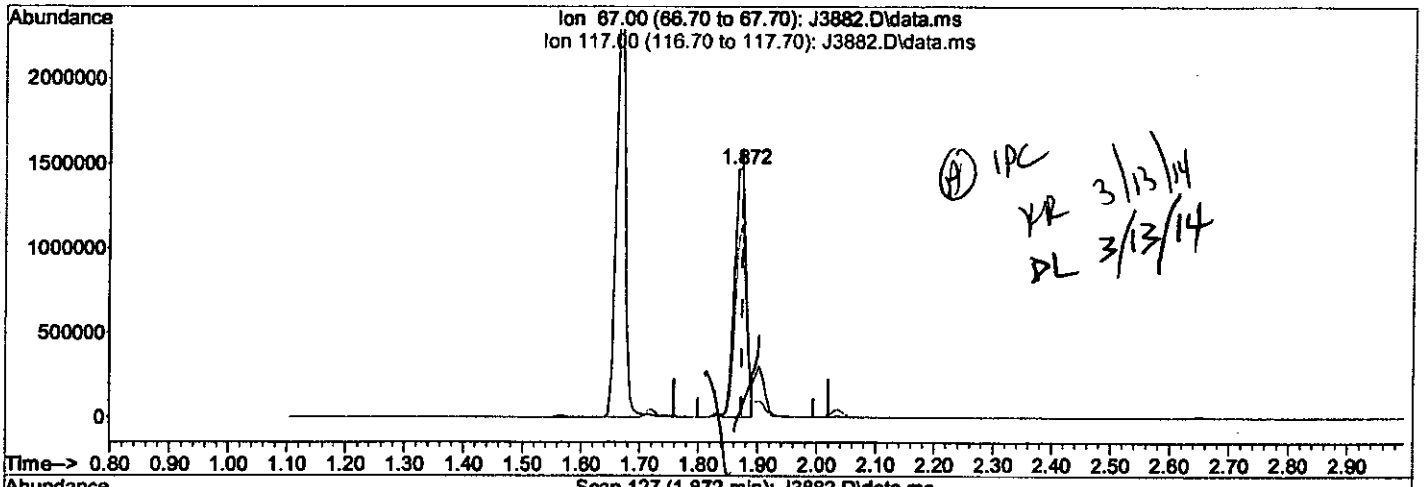
W031214.M Thu Mar 13 10:50:34 2014 Page: 1

00487

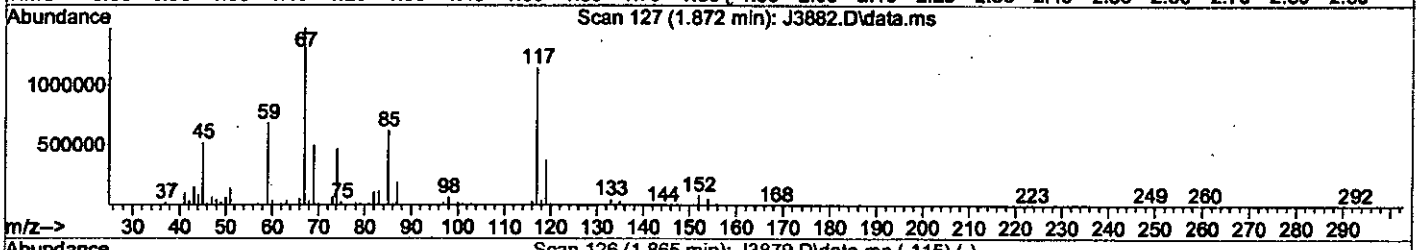
Quantitation Report (Qedit)

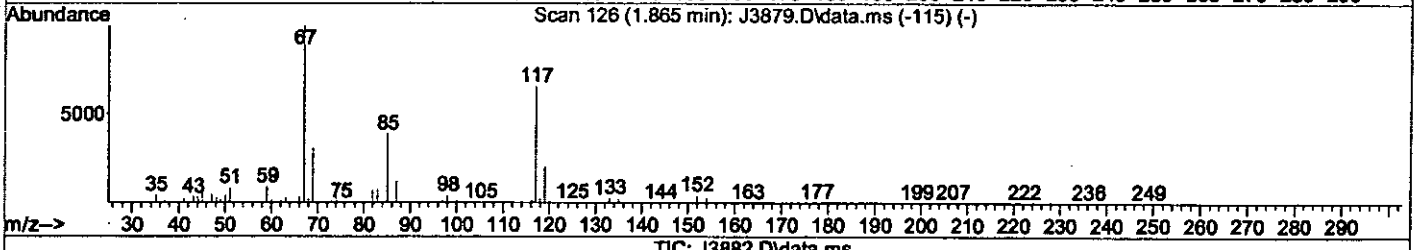
Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(A) IPC 3/13/14
KR 3/13/14
DL 3/13/14





TIC: J3882.D\data.ms

(10) Freon 123a

1.872min (0.000) 191.04 ppb m

response 2017900

Ion	Exp%	Act%
67.00	100	100
117.00	65.90	77.87
0.00	0.00	0.00
0.00	0.00	0.00

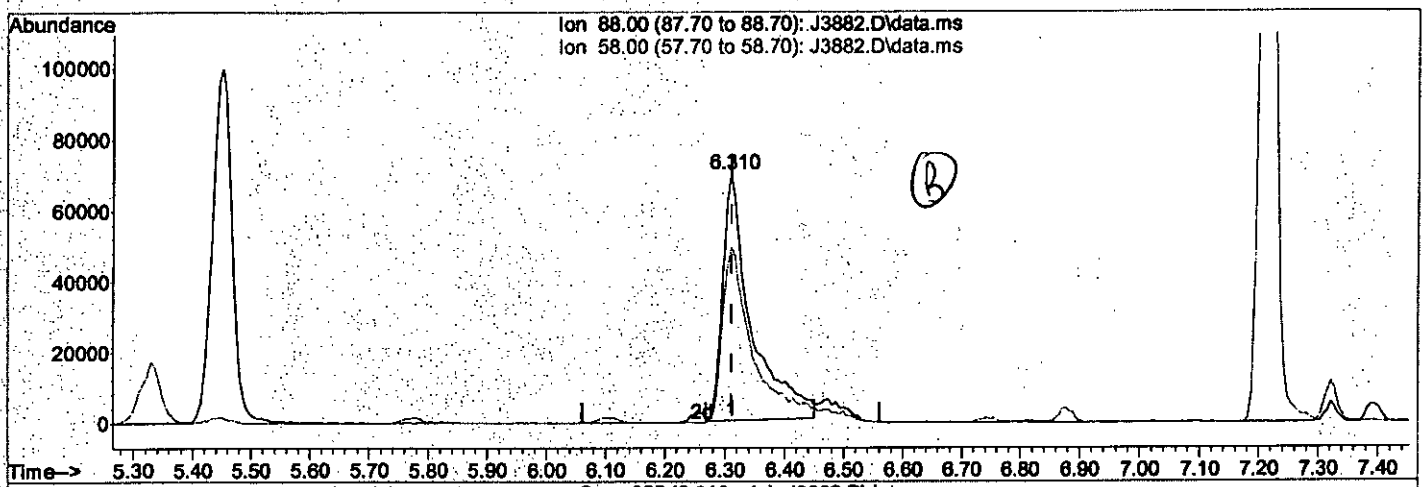
W031214.M Thu Mar 13 10:50:42 2014 Page: 1

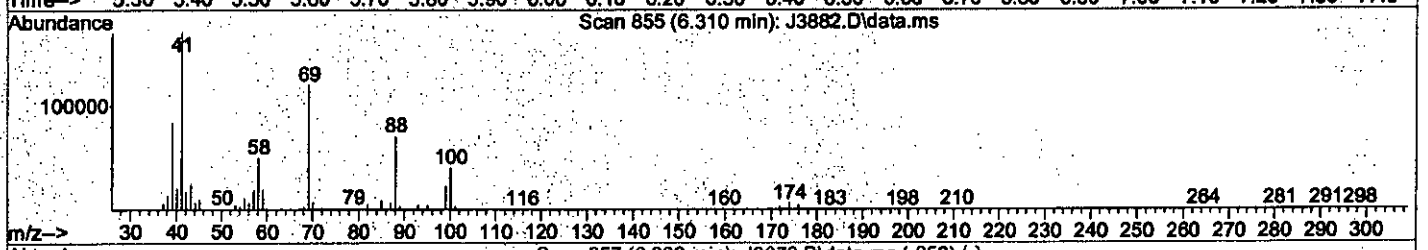
00488

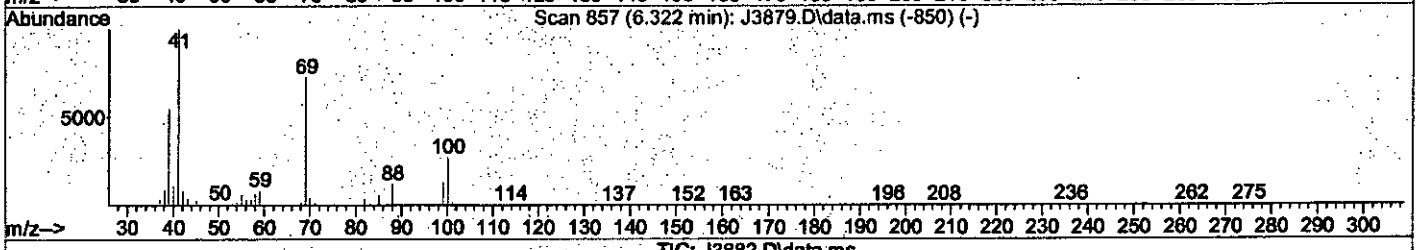
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3882.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 3786.68 ppb

response 230765

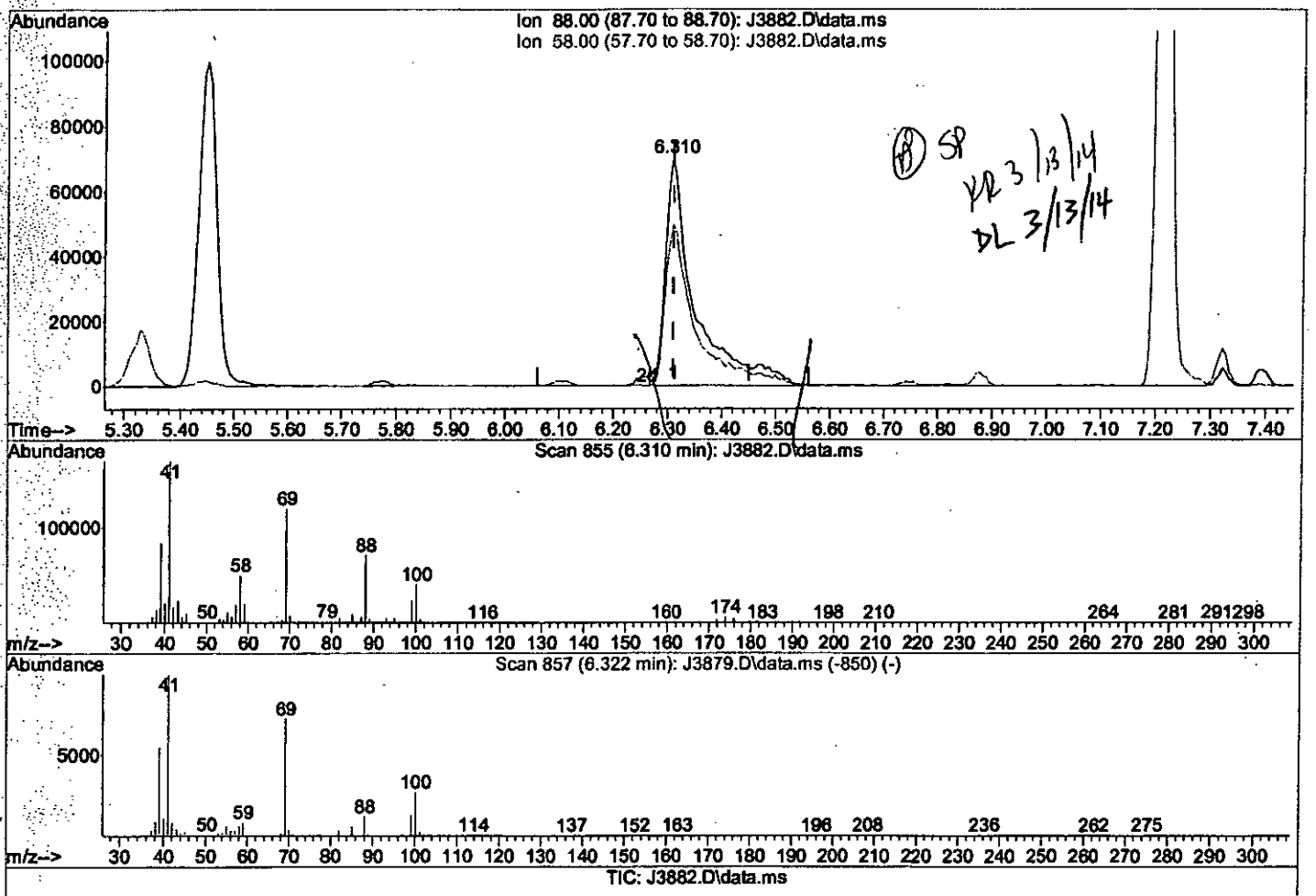
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	70.35
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:51:10 2014 Page: 1

Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3882.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 4278.89 ppb m

response 260761

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	70.35
0.00	0.00	0.00
0.00	0.00	0.00

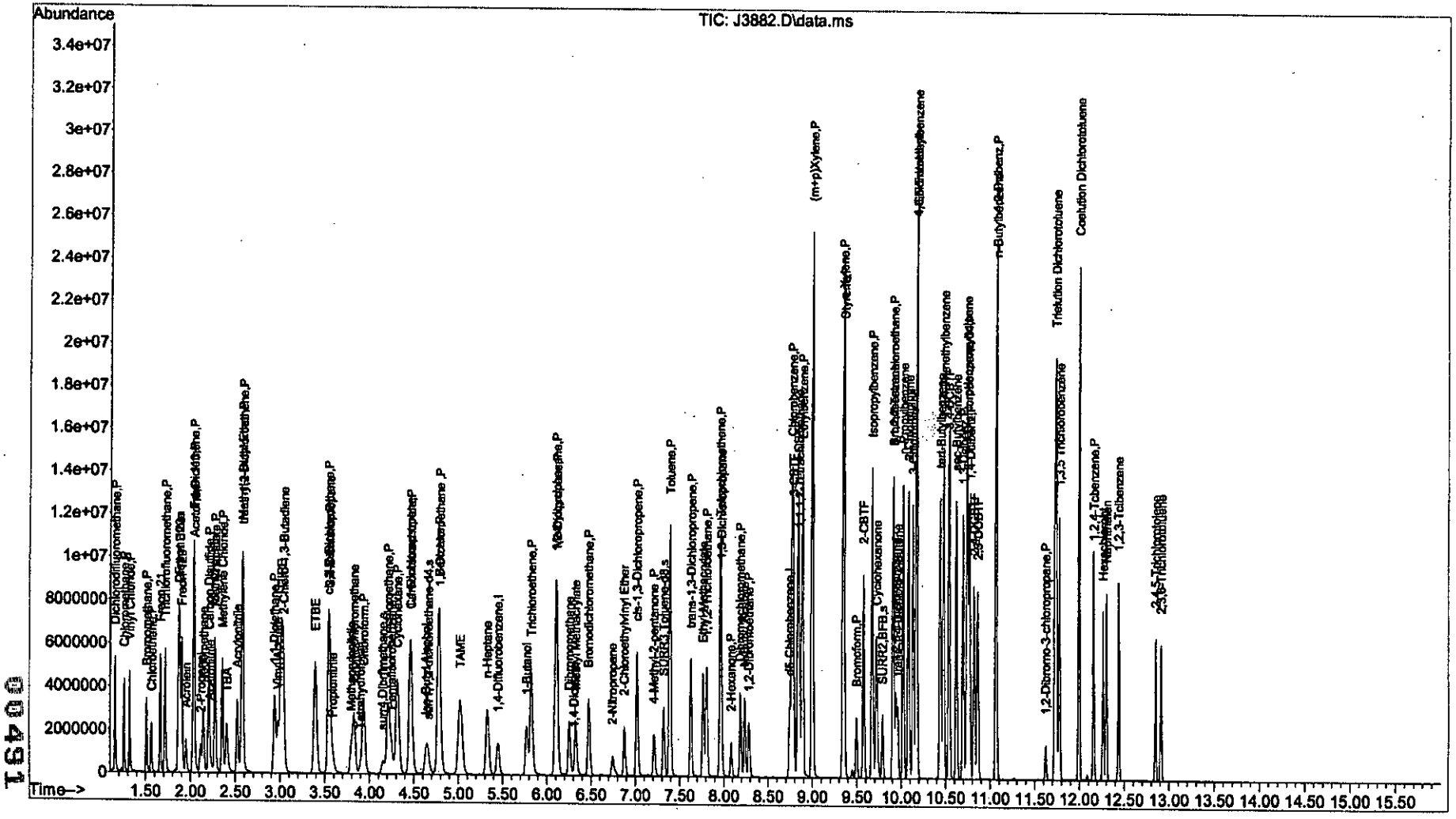
W031214.M Thu Mar 13 10:51:18 2014 Page: 1

00490

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:52:04 2014

Page: 4

Initial Calibration Verification Summary Report

KR 3/13/14

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
WOB1214 8260D waters **Column Name:** 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400023-09	T	Average RF	50	52.81	ppm	5.6	<=30
1,1,1-Trichloroethane (TCA)	RC1400023-09	T	Average RF	50	49.84	ppm	-0.3	<=30
1,1,2,2-Tetrachloroethane	RC1400023-09	T	Average RF	50	48.43	ppm	-3.1	<=30
1,1,2-Trichloroethane	RC1400023-09	T	Average RF	50	48.84	ppm	-2.3	<=30
1,1,2-Trichlorotrifluoroethane	RC1400023-09	T	Average RF	50	50.03	ppm	0.1	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400023-09	T	Average RF	50	48.94	ppm	-2.1	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400023-09	T	Average RF	50	57.52	ppm	15.0	<=30
1,1-Dichloropropene	RC1400023-09	T	Average RF	50	56.55	ppm	13.1	<=30
1,2,3-Trichlorobenzene	RC1400023-09	T	Average RF	50	50.70	ppm	1.4	<=30
1,2,3-Trichloropropane	RC1400023-09	T	Average RF	50	48.79	ppm	-2.4	<=30
1,2,4-Trichlorobenzene	RC1400023-09	T	Average RF	50	51.43	ppm	2.9	<=30
1,2,4-Trimethylbenzene	RC1400023-09	T	Average RF	50	52.17	ppm	4.3	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400023-09	T	Average RF	50	55.67	ppm	11.3	<=30
1,2-Dibromoethane	RC1400023-09	T	Average RF	50	52.14	ppm	4.3	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400023-09	T	Average RF	50	51.68	ppm	3.4	<=30
1,2-Dichlorobenzene	RC1400023-09	T	Average RF	50	50.95	ppm	1.9	<=30
1,2-Dichloroethane	RC1400023-09	T	Average RF	50	46.09	ppm	-7.8	<=30
1,2-Dichloropropane	RC1400023-09	T	Average RF	50	48.94	ppm	-2.1	<=30
1,3,5-Trichlorobenzene	RC1400023-09	T	Average RF	50	49.97	ppm	-0.1	<=30
1,3,5-Trimethylbenzene	RC1400023-09	T	Average RF	50	52.32	ppm	4.6	<=30
1,3-Dichlorobenzene	RC1400023-09	T	Average RF	50	51.41	ppm	2.8	<=30
1,3-Dichloropropane	RC1400023-09	T	Average RF	50	48.78	ppm	-2.4	<=30
1,4-Dichlorobenzene	RC1400023-09	T	Average RF	50	49.93	ppm	-0.1	<=30
1,4-Dioxane	RC1400023-09	T	Average RF	1000	938.8	ppm	-6.1	<=30
1-Butanol	RC1400023-09	T	Average RF	2500	2756	ppm	10.2	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400023-09	T	Average RF	50	51.02	ppm	2.0	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400023-09	T	Average RF	50	51.23	ppm	2.5	<=30
2,2-Dichloropropane	RC1400023-09	T	Average RF	50	53.03	ppm	6.1	<=30
2,3,6-Trichlorotoluene	RC1400023-09	T	Average RF	50	52.46	ppm	4.9	<=30
2,4,5-Trichlorotoluene	RC1400023-09	T	Average RF	50	53.89	ppm	7.8	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400023-09	T	Average RF	150	151.4	ppm	0.9	<=30
2,4-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.93	ppm	1.9	<=30
2,5-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.16	ppm	0.3	<=30
2-Butanone (MEK)	RC1400023-09	T	Average RF	50	45.55	ppm	-8.9	<=30
2-Chloro-1,3-butadiene	RC1400023-09	T	Average RF	50	49.33	ppm	-1.3	<=30
2-Chlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.08	ppm	0.2	<=30
2-Chloroethyl Vinyl Ether	RC1400023-09	T	Average RF	50	52.52	ppm	5.0	<=30
2-Chlorotoluene	RC1400023-09	T	Average RF	50	50.46	ppm	0.9	<=30
2-Hexanone	RC1400023-09	T	Average RF	50	49.41	ppm	-1.2	<=30
2-Methyl-1-propanol	RC1400023-09	T	Average RF	1000	1010	ppm	1.0	<=30
2-Methyl-2-propanol	RC1400023-09	T	Average RF	1000	978.2	ppm	-2.2	<=30
2-Nitropropane	RC1400023-09	T	Average RF	100	102.0	ppm	2.0	<=30
2-Propanol	RC1400023-09	T	Average RF	1000	1025	ppm	2.5	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400023-09	T	Average RF	100	103.6	ppm	3.6	<=30
3,4-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	49.78	ppm	-0.4	<=30
3-Chloro-1-propene	RC1400023-09	T	Average RF	50	50.79	ppm	1.6	<=30
3-Chlorobenzotrifluoride	RC1400023-09	T	Average RF	50	49.64	ppm	-0.7	<=30
3-Chlorotoluene	RC1400023-09	T	Average RF	50	48.80	ppm	-2.4	<=30
4-Chlorotoluene	RC1400023-09	T	Average RF	50	51.03	ppm	2.1	<=30
4-Isopropyltoluene	RC1400023-09	T	Average RF	50	53.38	ppm	6.8	<=30
4-Methyl-2-pentanone	RC1400023-09	T	Average RF	50	50.35	ppm	0.7	<=30

00492

Initial Calibration Verification Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400023-09	T	Average RF	50	39.48	ppm	-21.0	<=30
Acetonitrile	RC1400023-09	T	Average RF	250	225.5	ppm	-9.8	<=30
Acrolein	RC1400023-09	T	Quadratic	100	208.5	ppm	108.5	<=30
Acrylonitrile	RC1400023-09	T	Average RF	250	246.3	ppm	-1.5	<=30
Benzene	RC1400023-09	T	Average RF	50	49.93	ppm	-0.1	<=30
Bromobenzene	RC1400023-09	T	Average RF	50	49.66	ppm	-0.7	<=30
Bromochloromethane	RC1400023-09	T	Average RF	50	47.83	ppm	-4.3	<=30
Bromodichloromethane	RC1400023-09	T	Average RF	50	51.35	ppm	2.7	<=30
Bromoform	RC1400023-09	T	Average RF	50	54.02	ppm	8.0	<=30
Bromomethane	RC1400023-09	T	Average RF	50	47.24	ppm	-5.5	<=30
Carbon Disulfide	RC1400023-09	T	Average RF	50	47.03	ppm	-5.9	<=30
Carbon Tetrachloride	RC1400023-09	T	Average RF	50	50.06	ppm	0.1	<=30
Chlorobenzene	RC1400023-09	T	Average RF	50	50.84	ppm	1.7	<=30
Chloroethane	RC1400023-09	T	Average RF	50	45.68	ppm	-8.6	<=30
Chloroform	RC1400023-09	T	Average RF	50	48.21	ppm	-3.6	<=30
Chloromethane	RC1400023-09	T	Average RF	50	44.02	ppm	-12.0	<=30
Cyclohexane	RC1400023-09	T	Average RF	50	43.66	ppm	-12.7	<=30
Cyclohexanone	RC1400023-09	T	Average RF	1000	614.2	ppm	-38.6	<=30
Dibromochloromethane	RC1400023-09	T	Average RF	50	53.83	ppm	7.7	<=30
Dibromomethane	RC1400023-09	T	Average RF	50	49.61	ppm	-0.8	<=30
Dichlorodifluoromethane (CFC 12)	RC1400023-09	T	Average RF	50	38.90	ppm	-22.2	<=30
Dichlorofluoromethane (CFC 21)	RC1400023-09	T	Average RF	50	48.36	ppm	-3.3	<=30
Dichloromethane	RC1400023-09	T	Average RF	50	48.52	ppm	-3.0	<=30
Diethyl Ether	RC1400023-09	T	Average RF	50	49.25	ppm	-1.5	<=30
Diisopropyl Ether	RC1400023-09	T	Average RF	50	45.55	ppm	-8.9	<=30
Ethyl Methacrylate	RC1400023-09	T	Average RF	50	54.92	ppm	9.8	<=30
Ethyl tert-Butyl Ether	RC1400023-09	T	Average RF	50	47.03	ppm	-5.9	<=30
Ethylbenzene	RC1400023-09	T	Average RF	50	51.98	ppm	4.0	<=30
Hexachlorobutadiene	RC1400023-09	T	Average RF	50	52.06	ppm	4.1	<=30
Iodomethane	RC1400023-09	T	Average RF	50	55.23	ppm	10.5	<=30
Isopropylbenzene (Cumene)	RC1400023-09	T	Average RF	50	52.49	ppm	5.0	<=30
Methacrylonitrile	RC1400023-09	T	Average RF	50	49.67	ppm	-0.7	<=30
Methyl Acetate	RC1400023-09	T	Average RF	50	48.18	ppm	-3.6	<=30
Methyl Methacrylate	RC1400023-09	T	Average RF	50	50.68	ppm	1.4	<=30
Methyl tert-Butyl Ether	RC1400023-09	T	Average RF	50	49.16	ppm	-1.7	<=30
Methylcyclohexane	RC1400023-09	T	Average RF	50	44.63	ppm	-10.7	<=30
Naphthalene	RC1400023-09	T	Average RF	50	56.07	ppm	12.1	<=30
Propionitrile	RC1400023-09	T	Average RF	250	258.3	ppm	3.3	<=30
Styrene	RC1400023-09	T	Average RF	50	55.20	ppm	10.4	<=30
Tetrachloroethene (PCE)	RC1400023-09	T	Average RF	50	50.19	ppm	0.4	<=30
Tetrahydrofuran (THF)	RC1400023-09	T	Average RF	50	46.06	ppm	-7.9	<=30
Toluene	RC1400023-09	T	Average RF	50	50.32	ppm	0.6	<=30
Trichloroethene (TCE)	RC1400023-09	T	Average RF	50	51.42	ppm	2.8	<=30
Trichlorofluoromethane (CFC 11)	RC1400023-09	T	Average RF	50	45.53	ppm	-8.9	<=30
Vinyl Acetate	RC1400023-09	T	Average RF	50	47.09	ppm	-5.8	<=30
Vinyl Chloride	RC1400023-09	T	Average RF	50	46.08	ppm	-7.8	<=30
cis-1,2-Dichloroethene	RC1400023-09	T	Average RF	50	50.33	ppm	0.7	<=30
cis-1,3-Dichloropropene	RC1400023-09	T	Average RF	50	50.69	ppm	1.4	<=30
m,p-Xylenes	RC1400023-09	T	Average RF	100	107.8	ppm	7.8	<=30
n-Butyl Acetate	RC1400023-09	T	Average RF	50	52.20	ppm	4.4	<=30
n-Butylbenzene	RC1400023-09	T	Average RF	50	53.27	ppm	6.5	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400023-09	T	Average RF	50	47.14	ppm	-5.7	<=30
n-Propylbenzene	RC1400023-09	T	Average RF	50	51.09	ppm	2.2	<=30
o-Xylene	RC1400023-09	T	Average RF	50	52.18	ppm	4.4	<=30
sec-Butylbenzene	RC1400023-09	T	Average RF	50	51.80	ppm	3.6	<=30
tert-Amyl Methyl Ether	RC1400023-09	T	Average RF	50	49.25	ppm	-1.5	<=30
tert-Butylbenzene	RC1400023-09	T	Average RF	50	50.94	ppm	1.9	<=30
trans-1,2-Dichloroethene	RC1400023-09	T	Average RF	50	51.22	ppm	2.4	<=30
trans-1,3-Dichloropropene	RC1400023-09	T	Average RF	50	53.39	ppm	6.8	<=30
trans-1,4-Dichloro-2-butene	RC1400023-09	T	Average RF	50	50.06	ppm	0.1	<=30
1,2-Dichloroethane-d4	RC1400023-09	S	Average RF	50	47.74	ppm	-4.5	<=30
4-Bromofluorobenzene	RC1400023-09	S	Average RF	50	50.03	ppm	0.1	<=30
Dibromofluoromethane	RC1400023-09	S	Average RF	50	50.20	ppm	0.4	<=30
Toluene-d8	RC1400023-09	S	Average RF	50	49.47	ppm	-1.1	<=30

Exceptions

QAP CRA-OXY **Method** 8260C

Compound	Type	Criteria	Result
Acrolein	Percent Difference	<= 30	108.48
Cyclohexanone	Percent Difference	<= 30	-38.58

00494

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	929881	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1444154	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1310348	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	668032	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	419672	50.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.40%				
48) surr1,1,2-dichloroetha...	4.658	65	454641	47.74	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 95.48%				
65) SURR3,Toluene-d8	7.322	98	1737832	49.47	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.94%				
70) SURR2,BFB	9.785	95	655712	50.03	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	429607	38.90	ppb		99
3) Chloromethane	1.262	50	421317	44.02	ppb		97
4) Vinyl Chloride	1.323	62	409710	46.08	ppb		99
5) Bromomethane	1.512	94	253110	47.24	ppb		100
6) Chloroethane	1.567	64	242226	45.68	ppb		100
7) Freon 21	1.664	67	648556	48.36	ppb		99
8) Trichlorofluoromethane	1.719	101	621513	45.53	ppb		100
9) Diethyl Ether	1.878	59	331013	49.25	ppb		95
10) Freon 123a	1.866	67	517883	51.68	ppb		97
11) Freon 123	1.902	83	586378	51.23	ppb		97
12) Acrolein	1.951	56	55280	208.48	ppb		86
13) 1,1-Diclethene	2.036	96	388120	57.52	ppb		94
14) Freon 113	2.036	101	369435	50.03	ppb		94
15) Acetone	2.042	43	72835	39.48	ppb		96
16) 2-Propanol	2.109	45	306969	1025.29	ppb		98
17) Iodomethane	2.146	142	495062	55.23	ppb		95
18) Carbon Disulfide	2.207	76	1103871	47.03	ppb		99
19) Acetonitrile	2.225	40	68032	225.50	ppb		97
20) Allyl Chloride	2.274	76	234992	50.79	ppb		98
21) Methyl Acetate	2.274	43	200165	48.18	ppb		99
22) Methylene Chloride	2.353	84	428950	48.52	ppb		97
23) TBA	2.402	59	504436	978.23	ppb		98
24) Acrylonitrile	2.524	53	509123	246.31	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	1054535	49.16	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	433069	51.22	ppb		97
28) 1,1-Diclethane	2.938	63	770101	48.94	ppb		99
29) Vinyl Acetate	2.975	86	65986	47.09	ppb	#	71
30) DIPE	3.012	45	1396139	45.55	ppb		98
31) 2-Chloro-1,3-Butadiene	3.036	53	668588	49.33	ppb		95
32) ETBE	3.396	59	1206134	47.03	ppb		98
33) 2,2-Dichloropropane	3.554	77	662135	53.03	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	474863	50.33	ppb		97
35) 2-Butanone	3.548	43	117744	45.55	ppb		98
36) Propionitrile	3.591	54	192749	258.26	ppb		100
37) Bromochloromethane	3.829	130	251979	47.83	ppb		89

KP 3/13/14

W031214.M Thu Mar 13 12:15:31 2014 Page: 1

00495

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	119599	49.67	ppb	98
39) Tetrahydrofuran	3.902	42	83220	46.06	ppb	78
40) Chloroform	3.938	83	743487	48.21	ppb	95
41) 1,1,1-Trichloroethane	4.213	97	659281	49.84	ppb	90
42) TAME	5.017	73	1066399	49.25	ppb	100
44) Cyclohexane	4.316	41	341159	43.66	ppb	98
46) Carbontetrachloride	4.469	121	173353	50.06	ppb	97
47) 1,1-Dichloropropene	4.463	75	603211	56.55	ppb	93
49) Benzene	4.780	78	1775123	49.93	ppb	100
50) 1,2-Dichloroethane	4.786	62	497561	46.09	ppb	96
51) Iso-Butyl Alcohol	4.639	43	246703	1009.81	ppb	98
52) n-Heptane	5.328	43	418693	47.14	ppb	98
53) 1-Butanol	5.767	56	369742	2755.71	ppb	98
54) Trichloroethene	5.828	130	442862	51.42	ppb	96
55) Methylcyclohexane	6.103	55	413194	44.63	ppb	96
56) 1,2-Diclpropane	6.115	63	444936	48.94	ppb	96
57) Dibromomethane	6.255	93	214572	49.61	ppb	97
58) 1,4-Dioxane	6.310	88	55901m	938.84	ppb	
59) Methyl Methacrylate	6.328	69	216807	50.68	ppb	99
60) Bromodichloromethane	6.474	83	545381	51.35	ppb	98
61) 2-Nitropropane	6.743	41	116523	102.03	ppb	89
62) 2-Chloroethylvinyl Ether	6.877	63	214137	52.52	ppb	100
63) cis-1,3-Dichloropropene	7.023	75	638673	50.69	ppb	98
64) 4-Methyl-2-pentanone	7.212	43	276149	50.35	ppb	96
66) Toluene	7.395	91	1844775	50.32	ppb	98
67) trans-1,3-Dichloropropene	7.627	75	542305	53.39	ppb	96
68) Ethyl Methacrylate	7.767	69	453829	54.92	ppb	98
69) 1,1,2-Trichloroethane	7.809	97	313249	48.84	ppb	98
72) Tetrachloroethene	7.962	164	339703	50.19	ppb	100
73) 2-Hexanone	8.084	43	183408	49.41	ppb	96
74) 1,3-Dichloropropane	7.968	76	575463	48.78	ppb	100
75) Dibromochloromethane	8.187	129	365103	53.83	ppb	96
76) N-Butyl Acetate	8.236	43	479039	52.20	ppb	97
77) 1,2-Dibromoethane	8.285	107	315951	52.14	ppb	97
78) Chlorobenzene	8.767	112	1159324	50.84	ppb	96
79) 3-CBTF	8.785	180	559968	49.64	ppb	98
80) 4-CBTF	8.840	180	515676	51.02	ppb	100
81) 1,1,1,2-Tetrachloroethane	8.846	131	423150	52.81	ppb	97
82) Ethylbenzene	8.889	106	631469	51.98	ppb	96
83) (m+p)Xylene	8.998	106	1538701	107.78	ppb	93
84) o-Xylene	9.346	106	760185	52.18	ppb	94
85) Styrene	9.352	104	1285835	55.20	ppb	97
87) Bromoform	9.492	173	204953	54.02	ppb	97
88) 2-CBTF	9.577	180	557312	50.08	ppb	96
89) Isopropylbenzene	9.669	105	1810564	52.49	ppb	98
90) Cyclohexanone	9.718	55	329122	614.21	ppb	98
91) trans-1,4-Dichloro-2-B...	9.961	53	90008	50.06	ppb	80
92) 1,1,2,2-Tetrachloroethane	9.913	83	370514	48.43	ppb	99
93) Bromobenzene	9.907	156	488033	49.66	ppb	97
94) 1,2,3-Trichloropropane	9.943	110	111696	48.79	ppb	97
95) n-Propylbenzene	10.022	91	2061187	51.09	ppb	99
96) 2-Chlorotoluene	10.077	91	1278494	50.46	ppb	97

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

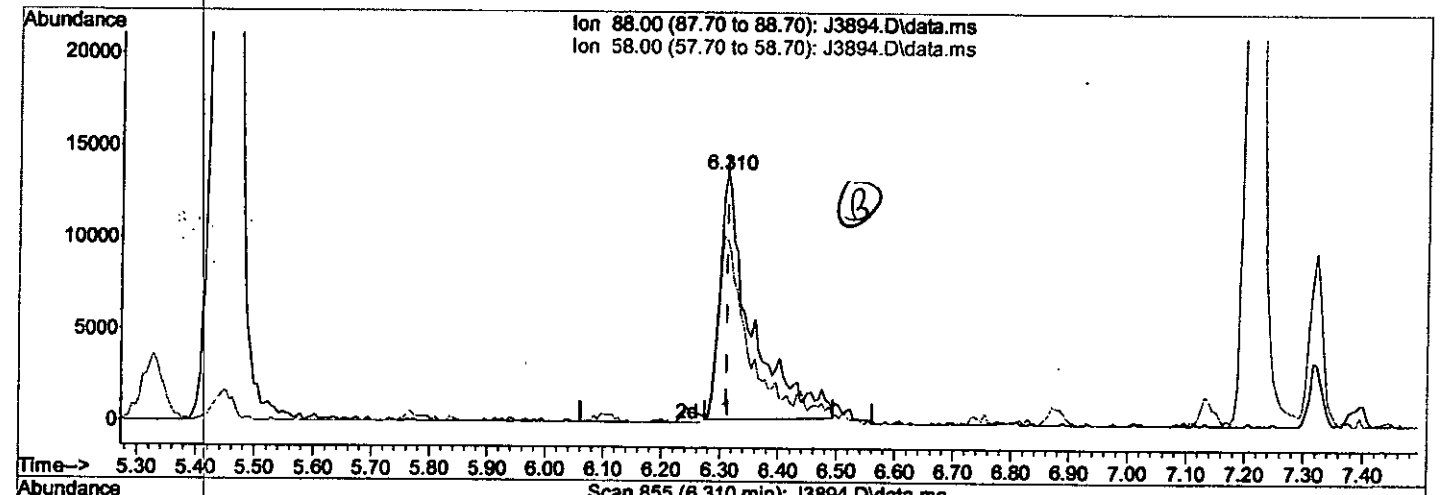
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1285999	48.80	ppb	98
98)	4-Chlorotoluene	10.169	91	1524341	51.03	ppb	99
99)	1,3,5-Trimethylbenzene	10.169	105	1471871	52.32	ppb	98
100)	tert-Butylbenzene	10.437	119	1206430	50.94	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	1510183	52.17	ppb	98
102)	3,4-DCBTF	10.535	214	409731	49.78	ppb	96
103)	sec-Butylbenzene	10.620	105	1707185	51.80	ppb	98
104)	p-Isopropyltoluene	10.742	119	1487810	53.38	ppb	98
105)	1,3-Dclbenz	10.693	146	859962	51.41	ppb	98
106)	1,4-Dclbenz	10.766	146	888598	49.93	ppb	98
107)	2,4-DCBTF	10.821	214	364683	50.93	ppb	96
108)	2,5-DCBTF	10.864	214	410704	50.16	ppb	97
109)	n-Butylbenzene	11.065	91	1338607	53.27	ppb	99
110)	1,2-Dclbenz	11.065	146	820587	50.95	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	65258	55.67	ppb	96
112)	Trielution Dichlorotol...	11.729	125	1928109	151.35	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	555108	49.97	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1397381	103.59	ppb	98
115)	1,2,4-Tcbenzene	12.156	180	506622	51.43	ppb	99
116)	Hexachlorobt	12.266	225	223796	52.06	ppb	97
117)	Naphthalen	12.303	128	994268	56.07	ppb	97
118)	1,2,3-Tclbenzene	12.437	180	408897	50.70	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	286396	53.89	ppb	99
120)	2,3,6-Trichlorotoluene	12.912	159	255170	52.46	ppb	98

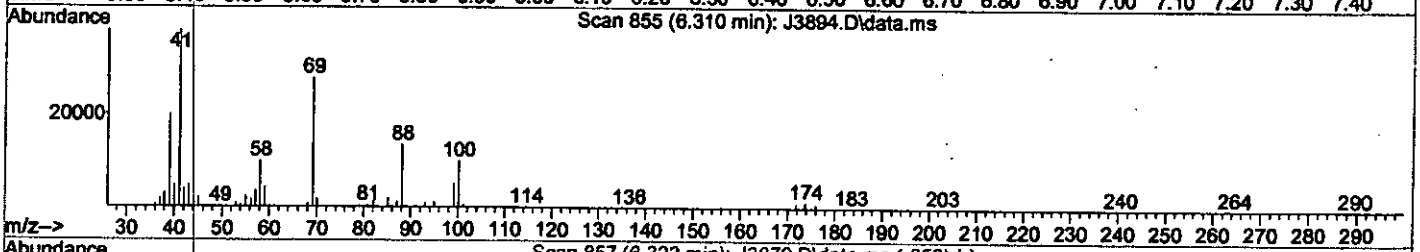
(#) = qualifier out of range (m) = manual integration (+) = signals summed

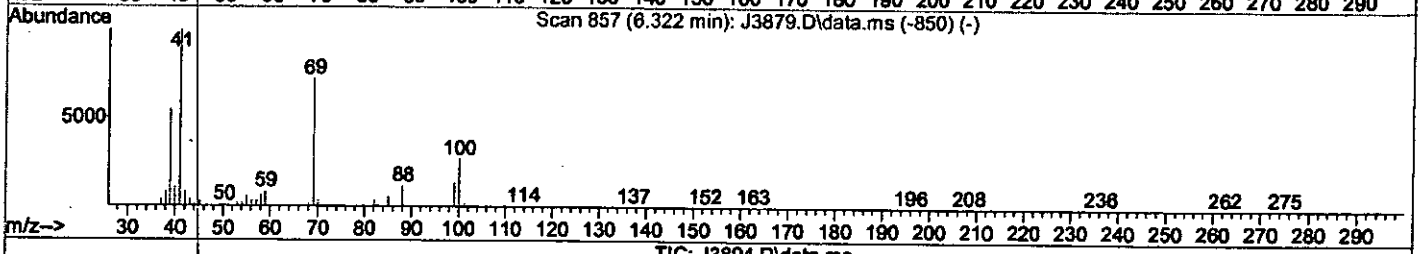
Quantitation Report (Qedit)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:12:46 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J3894.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 853.79 ppb

response 50837

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	73.63#
0.00	0.00	0.00
0.00	0.00	0.00

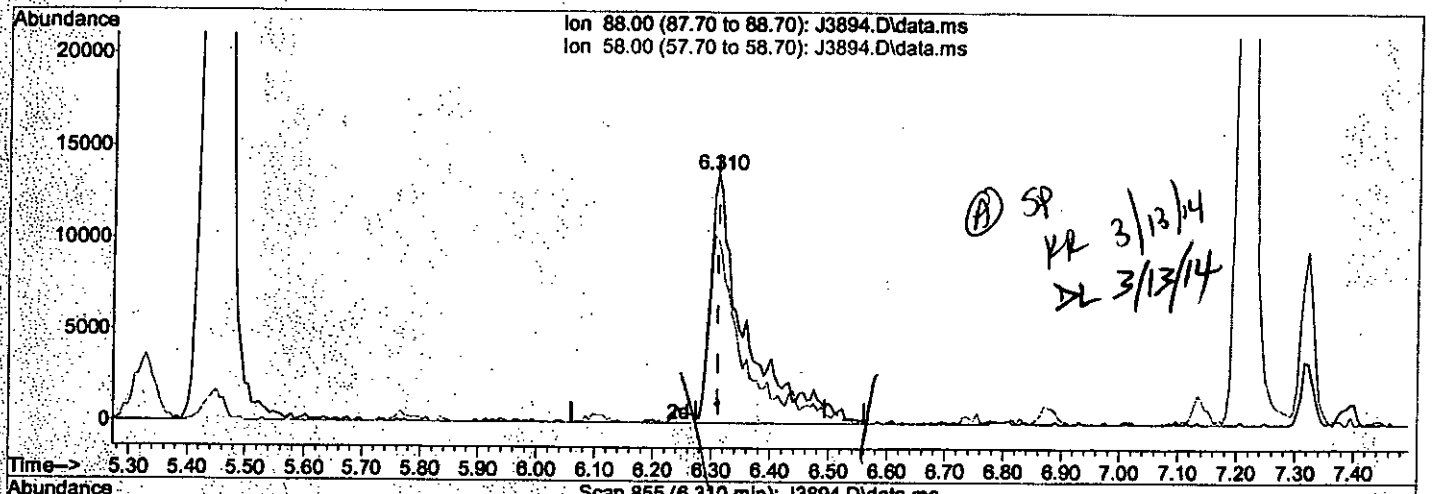
W031214.M Thu Mar 13 12:14:44 2014 Page: 1

00498

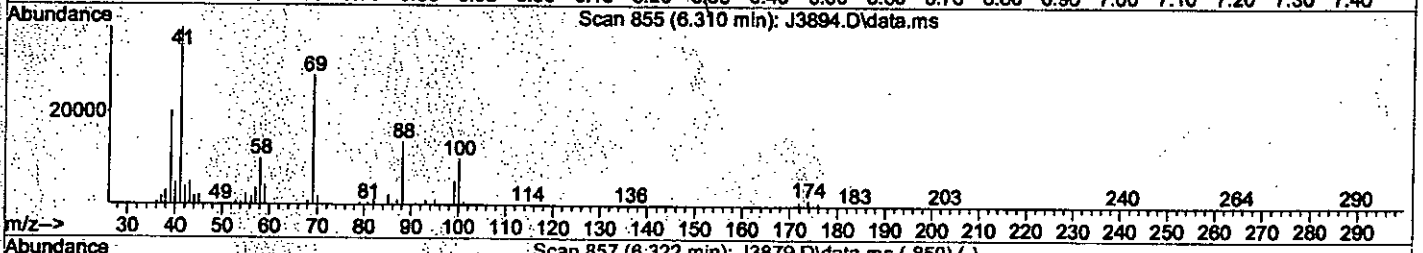
Quantitation Report (Qedit)

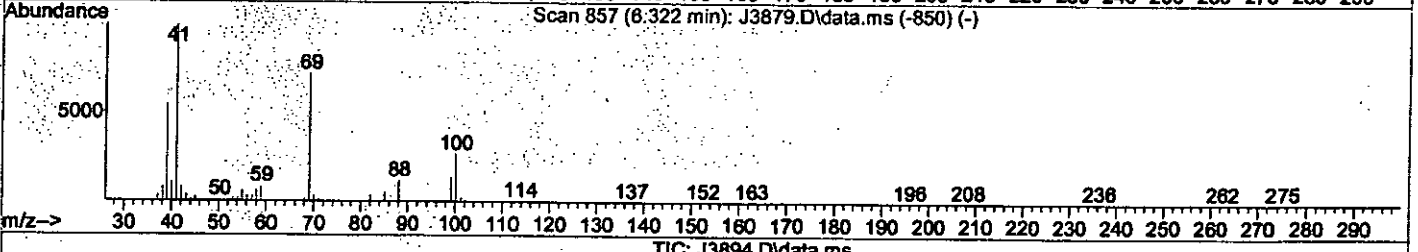
Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:12:46 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



(A) SP KR 3/13/14 DL 3/13/14





TIC: J3894.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 938.84 ppb m

response 55901

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	73.63#
0.00	0.00	0.00
0.00	0.00	0.00

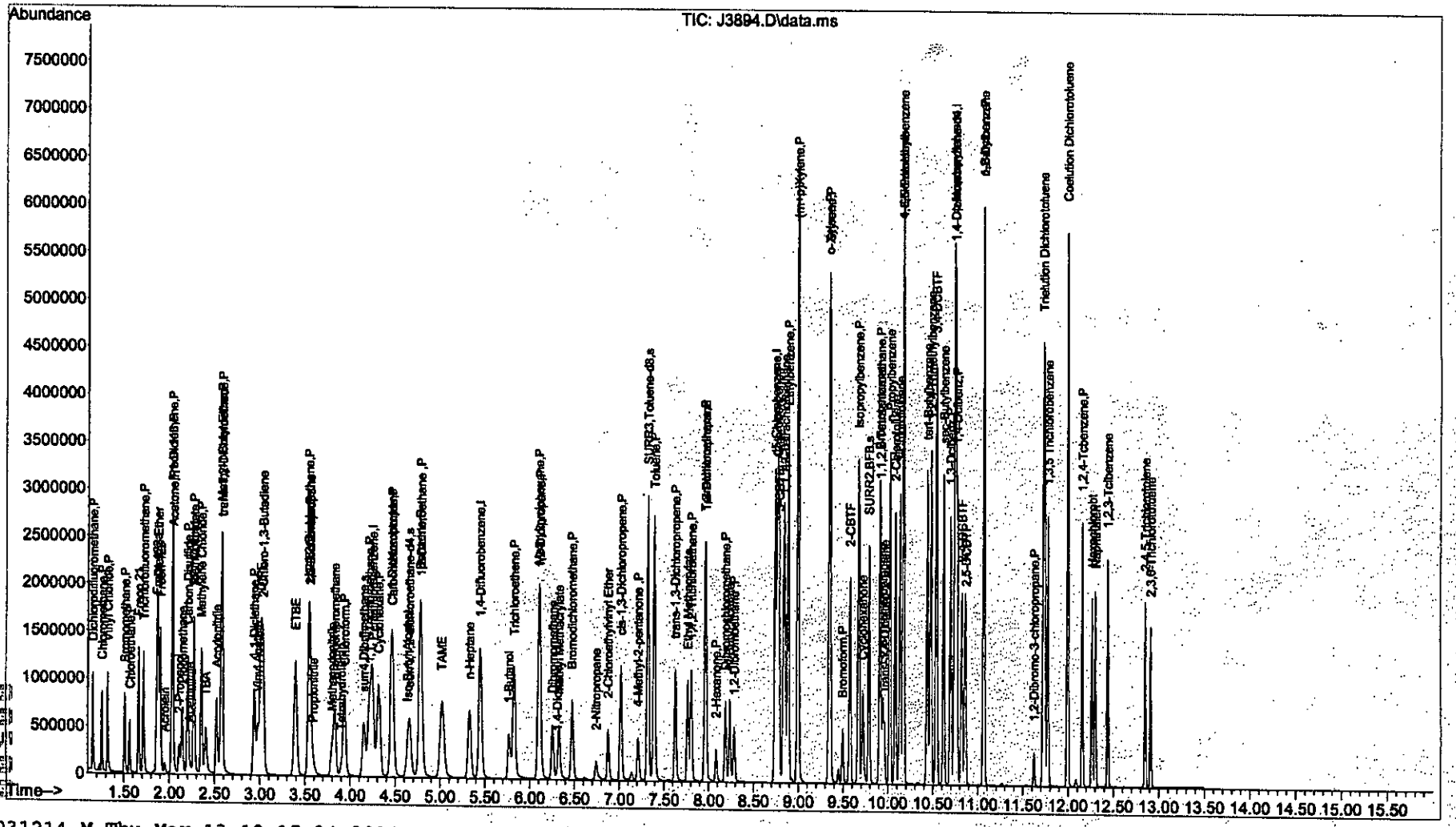
W031214.M Thu Mar 13 12:14:52 2014 Page: 1

00499

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 12:15:34 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/ 8/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\040714\J4547.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 387044
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	49.8	0.3058	0.3044	-0.4	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	49.4	0.7112	0.7023	-1.2	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	44.3	0.5726	0.5077	-11.3	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	53.1	0.2220	0.2357	6.2	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	46.4	0.8461	0.7859	-7.1	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	46.0	0.3628	0.3336	-8.1	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	49.4	0.3693	0.3649	-1.2	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	50.3	0.6036	0.6075	0.6	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	48.5	0.1713	0.1662	-3.0	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	47.4	0.7372	0.6988	-5.2	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	47.2	2.167	2.046	-5.6	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	59.9	0.08773	0.1052	19.9	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	53.5	0.2312	0.2473	7.0	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	48.7	1.206	1.173	-2.7	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	51.3	0.3737	0.3832	2.5	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	47.2	0.3148	0.2973	-5.5	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	47.3	2.106	1.991	-5.4	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	48.1	1.252	1.205	-3.8	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	49.2	0.4501	0.4430	-1.6	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	46.8	1.332	1.246	-6.5	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	41.7	0.6713	0.5597	-16.6	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	52.2	0.1390	0.1451	4.4	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	46.5	1.896	1.763	-7.0	NA	± 20 %	Average RF
2-Hexanone	50.0	55.4	0.1416	0.1570	10.9	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	46.5	2.236	2.077	-7.1	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	47.6	2.086	1.987	-4.8	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	56.2	0.1899	0.2134	12.4	NA	± 20 %	Average RF
Acetone	50.0	47.8	0.09920	0.09474	-4.5	NA	± 20 %	Average RF
Benzene	50.0	48.3	1.231	1.188	-3.5	NA	± 20 %	Average RF
Bromobenzene	50.0	46.9	0.7355	0.6896	-6.2	NA	± 20 %	Average RF
Bromochloromethane	50.0	48.2	0.2832	0.2730	-3.6	NA	± 20 %	Average RF
Bromodichloromethane	50.0	52.4	0.3677	0.3856	4.9	NA	± 20 %	Average RF
Bromoform	50.0	57.5	0.2840	0.3265	15.0	NA	± 20 %	Average RF
Bromomethane	50.0	48.0	0.2881	0.2764	-4.1	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	49.8	0.1199	0.1194	-0.4	NA	± 20 %	Average RF
Chlorobenzene	50.0	48.2	0.8701	0.8388	-3.6	NA	± 20 %	Average RF
Chloroethane	50.0	51.0	0.2851	0.2908	2.0	NA	± 20 %	Average RF
Chloroform	50.0	47.5	0.8292	0.7872	-5.1	NA	± 20 %	Average RF
Chloromethane	50.0	45.9	0.5146	0.4723	-8.2	NA	± 20 %	Average RF
Dibromochloromethane	50.0	55.8	0.2588	0.2889	11.6	NA	± 20 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/ 8/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\040714\J4547.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 387044
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	48.0	0.5939	0.5705	-3.9	NA	± 20 %	Average RF
Methylene Chloride	50.0	44.7	0.4753	0.4254	-10.5	NA	± 20 %	Average RF
Ethylbenzene	50.0	49.2	0.4636	0.4561	-1.6	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	42.9	0.3218	0.2761	-14.2	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	47.2	2.581	2.438	-5.6	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	51.4	1.153	1.185	2.8	NA	± 20 %	Average RF
Naphthalene	50.0	53.2	1.327	1.412	6.4	NA	± 20 %	Average RF
Styrene	50.0	53.1	0.8888	0.9439	6.2	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	48.0	0.2583	0.2479	-4.0	NA	± 20 %	Average RF
Toluene	50.0	49.6	1.269	1.259	-0.8	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	54.8	0.2982	0.3265	9.5	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	49.0	0.7340	0.7189	-2.1	NA	± 20 %	Average RF
Vinyl Chloride	50.0	51.7	0.4781	0.4942	3.4	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	47.1	0.5073	0.4781	-5.8	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	51.4	0.4363	0.4480	2.7	NA	± 20 %	Average RF
m,p-Xylenes	100	101	0.5448	0.5490	0.8	NA	± 20 %	Average RF
n-Butylbenzene	50.0	46.1	1.881	1.734	-7.8	NA	± 20 %	Average RF
n-Propylbenzene	50.0	46.4	3.020	2.803	-7.2	NA	± 20 %	Average RF
o-Xylene	50.0	48.8	0.5559	0.5430	-2.3	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	46.4	2.467	2.289	-7.2	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	46.2	1.773	1.636	-7.7	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	47.6	0.4546	0.4329	-4.8	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	55.3	0.3517	0.3891	10.7	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	52.1	0.4538	0.4725	4.1	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.9	0.2895	0.2946	1.8	NA	± 20 %	Average RF
Toluene-d8	50.0	49.3	1.216	1.199	-1.4	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 10:45:18 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	88	0.00
2	P	Dichlorodifluoromethane	0.5939	0.5705	3.9	83	0.00
3	P	Chloromethane	0.5146	0.4723	8.2	82	0.00
4	P	Vinyl Chloride	0.4781	0.4942	-3.4	92	0.00
5	P	Bromomethane	0.2881	0.2764	4.1	93	0.00
6	P	Chloroethane	0.2851	0.2908	-2.0	95	0.00
7		Freon 21	0.7211	0.8405	-16.6	108	0.00
8	P	Trichlorofluoromethane	0.7340	0.7189	2.1	89	0.00
9		Diethyl Ether	0.3614	0.3385	6.3	87	0.00
10		Freon 123a	0.5388	0.5382	0.1	93	0.00
11		Freon 123	0.6154	0.6319	-2.7	96	0.00
12		Acrolein	0.0172	0.0265	-54.1#	154	0.00
13	P	1,1-Diclethene	0.3628	0.3336	8.0	82	0.00
14	P	Freon 113	0.3971	0.3753	5.5	87	0.00
15	P	Acetone	0.0992	0.0947	4.5	89	0.00
16		2-Propanol	0.0161	0.0213	-32.3#	110	0.01
17		Iodomethane	0.4820	0.2961	38.6#	46#	0.00
18	P	Carbon Disulfide	1.2620	1.2073	4.3	81	0.00
19		Acetonitrile	0.0162	0.0163	-0.6	91	0.01
20		Allyl Chloride	0.2488	0.1942	21.9#	68	0.00
21	P	Methyl Acetate	0.2234	0.2428	-8.7	96	0.00
22	P	Methylene Chloride	0.4753	0.4254	10.5	84	0.00
23		TBA	0.0277	0.0344	-24.2#	103	0.00
24		Acrylonitrile	0.1111	0.1142	-2.8	88	0.00
25	P	Methyl-t-Butyl Ether	1.1534	1.1854	-2.8	93	0.00
26	P	trans-1,2-Dichloroethene	0.4546	0.4329	4.8	87	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.8461	0.7859	7.1	84	0.00
29		Vinyl Acetate	0.0753	0.0425	43.6#	45#	0.00
~~30~~		~~DIPE~~	~~1.6481~~	~~0.0012~~	~~99.9#~~	~~0#~~	~~0.03~~
31		2-Chloro-1,3-Butadiene	0.7288	0.6886	5.5	76	0.00
~~32~~		~~ETBE~~	~~1.3791~~	~~0.0003~~	~~100.0#~~	~~0#~~	~~0.00~~
33		2,2-Dichloropropane	0.6713	0.5597	16.6	74	0.00
34	P	cis-1,2-Dichloroethene	0.5073	0.4781	5.8	85	0.00
35	P	2-Butanone	0.1390	0.1451	-4.4	90	0.00
36		Propionitrile	0.0401	0.0454	-13.2	93	0.00
37		Bromochloromethane	0.2832	0.2730	3.6	91	0.00
38		Methacrylonitrile	0.1295	0.1331	-2.8	87	0.00
39		Tetrahydrofuran	0.0972	0.0971	0.1	88	0.00
40	P	Chloroform	0.8292	0.7872	5.1	89	0.00
41	P	1,1,1-Trichloroethane	0.7112	0.7023	1.3	88	0.00
~~42~~		~~TAME~~	~~1.1643~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~5.02#~~
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	86	0.00
44	P	Cyclohexane	0.2705	0.2804	-3.7	95	0.00
45	s	surr4,Dibrflmethane	0.2895	0.2946	-1.8	87	0.00
46	P	Carbontetrachloride	0.1199	0.1194	0.4	89	0.00
47		1,1-Dichloropropene	0.3693	0.3649	1.2	85	0.00

00503

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 10:45:18 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
48	s	surr1,1,2-dichloroethane-d4	0.3297	0.3362	-2.0	88	0.00
49	P	Benzene	1.2310	1.1882	3.5	84	0.00
50	P	1,2-Dichloroethane	0.3737	0.3832	-2.5	91	0.00
51		Iso-Butyl Alcohol	0.0085	0.0095	-11.8	93	0.01
52		n-Heptane	0.3075	0.2574	16.3	76	0.00
~~53~~		~~1-Butanol~~	~~0.0046~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~5.77#~~
54	P	Trichloroethene	0.2982	0.3265	-9.5	97	0.00
55	P	Methylcyclohexane	0.3206	0.3276	-2.2	95	0.00
56	P	1,2-Diclpropane	0.3148	0.2973	5.6	82	0.00
57		Dibromomethane	0.1497	0.1583	-5.7	91	0.00
58		1,4-Dioxane	0.0021	0.0022	-4.8	93	0.01
59		Methyl Methacrylate	0.1481	0.1647	-11.2	91	0.00
60	P	Bromodichloromethane	0.3677	0.3856	-4.9	88	0.00
61		2-Nitropropane	0.0395	0.0465	-17.7	96	0.00
62		2-Chloroethylvinyl Ether	0.1412	0.1168	17.3	67	0.00
63	P	cis-1,3-Dichloropropene	0.4363	0.4480	-2.7	83	0.00
64	P	4-Methyl-2-pentanone	0.1899	0.2134	-12.4	91	0.00
65	s	SURR3,Toluene-d8	1.2163	1.1987	1.4	84	0.00
66	P	Toluene	1.2692	1.2590	0.8	85	0.00
67	P	trans-1,3-Dichloropropene	0.3517	0.3891	-10.6	87	0.00
68		Ethyl Methacrylate	0.2861	0.3411	-19.2	91	0.00
69	P	1,1,2-Trichloroethane	0.2220	0.2357	-6.2	91	0.00
70	s	SURR2,BFB	0.4538	0.4725	-4.1	88	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	88	0.00
72	P	Tetrachloroethene	0.2583	0.2479	4.0	90	0.00
73	P	2-Hexanone	0.1416	0.1570	-10.9	90	0.00
74		1,3-Dichloropropane	0.4501	0.4430	1.6	88	0.00
75	P	Dibromochloromethane	0.2588	0.2889	-11.6	91	0.00
76		N-Butyl Acetate	0.3502	0.3914	-11.8	91	0.00
77	P	1,2-Dibromoethane	0.2312	0.2473	-7.0	91	0.00
78	P	Chlorobenzene	0.8701	0.8388	3.6	87	0.00
~~79~~		~~3-CBTF~~	~~0.4304~~	~~0.0003~~	~~99.9#~~	~~0#~~	~~0.00~~
~~80~~		~~4-CBTF~~	~~0.3856~~	~~0.0004~~	~~99.9#~~	~~0#~~	~~0.01~~
81		1,1,1,2-Tetrachloroethane	0.3058	0.3044	0.5	85	0.00
82	P	Ethylbenzene	0.4636	0.4561	1.6	87	0.00
83	P	(m+p)Xylene	0.5448	0.5490	-0.8	86	0.00
84	P	o-Xylene	0.5559	0.5430	2.3	86	0.00
85	P	Styrene	0.8888	0.9439	-6.2	87	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	93	0.00
87	P	Bromoform	0.2840	0.3265	-15.0	97	0.00
~~88~~		~~2-CBTF~~	~~0.8330~~	~~0.0005~~	~~99.9#~~	~~0#~~	~~0.00~~
89	P	Isopropylbenzene	2.5815	2.4378	5.6	87	0.00
90		Cyclohexanone	0.0401	0.0342	14.7	80	0.00
91		trans-1,4-Dichloro-2-Butene	0.1346	0.1187	11.8	73	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5726	0.5077	11.3	83	0.00
93		Bromobenzene	0.7355	0.6896	6.2	91	0.00

00504

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 10:45:18 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
94		1,2,3-Trichloropropane	0.1713	0.1662	3.0	93	0.00
95		n-Propylbenzene	3.0196	2.8029	7.2	87	0.00
96		2-Chlorotoluene	1.8965	1.7633	7.0	88	0.00
~~97~~		~~3-Chlorotoluene~~	~~1.9725~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~10.13#~~
98		4-Chlorotoluene	2.2360	2.0773	7.1	87	0.00
99		1,3,5-Trimethylbenzene	2.1057	1.9913	5.4	87	0.00
100		tert-Butylbenzene	1.7725	1.6364	7.7	88	0.00
101		1,2,4-Trimethylbenzene	2.1665	2.0460	5.6	85	0.00
~~102~~		~~3,4-DCBTF~~	~~0.6160~~	~~0.0005~~	~~99.9#~~	~~0#~~	~~0.00~~
103		sec-Butylbenzene	2.4668	2.2891	7.2	87	0.00
104		p-Isopropyltoluene	2.0860	1.9868	4.8	87	0.00
105	P	1,3-Dclbenz	1.2519	1.2047	3.8	90	0.00
106	P	1,4-Dclbenz	1.3322	1.2459	6.5	91	0.00
~~107~~		~~2,4-DCBTF~~	~~0.5359~~	~~0.0008~~	~~99.9#~~	~~0#~~	~~0.00~~
~~108~~		~~2,5-DCBTF~~	~~0.6128~~	~~0.0008~~	~~99.9#~~	~~0#~~	~~0.00~~
109		n-Butylbenzene	1.8808	1.7338	7.8	84	0.00
110	P	1,2-Dclbenz	1.2055	1.1731	2.7	91	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0877	0.1052	-20.0	103	0.00
~~112~~		~~Trielution Dichlorotoluene~~	~~0.9535~~	~~0.0019~~	~~99.8#~~	~~0#~~	~~0.00~~
~~113~~		~~1,3,5-Trichlorobenzene~~	~~0.8315~~	~~0.0008~~	~~99.9#~~	~~0#~~	~~0.00~~
~~114~~		~~Coelution Dichlorotoluene~~	~~1.0096~~	~~0.0018~~	~~99.8#~~	~~0#~~	~~0.00~~
115	P	1,2,4-Tcbenzene	0.7372	0.6988	5.2	89	0.00
116		Hexachlorobt	0.3218	0.2761	14.2	81	0.00
117		Naphthalen	1.3273	1.4117	-6.4	93	0.00
118		1,2,3-Tclbenzene	0.6036	0.6075	-0.6	98	0.00
~~119~~		~~2,4,5-Trichlorotolene~~	~~0.3978~~	~~0.0076~~	~~98.1#~~	~~2#~~	~~0.00~~
~~120~~		~~2,3,6-Trichlorotoluene~~	~~0.3641~~	~~0.0073~~	~~98.0#~~	~~3#~~	~~0.00~~

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

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12 PO 1403295-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 01:28:10 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	825372	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1244693	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1168204	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	621359	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	366671	50.89	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.78%				
48) surr1,1,2-dichloroetha...	4.664	65	418427	50.97	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 101.94%				
65) SURR3,Toluene-d8	7.322	98	1492065	49.28	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.56%				
70) SURR2,BFB	9.791	95	588145	52.06	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.12%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	470893	48.03	ppb		98
3) Chloromethane	1.262	50	389803	45.88	ppb		98
4) Vinyl Chloride	1.323	62	407871	51.68	ppb		100
5) Bromomethane	1.512	94	228132	47.97	ppb		100
6) Chloroethane	1.567	64	240009	50.99	ppb		100
7) Freon 21	1.664	67	693684	58.28	ppb		98
8) Trichlorofluoromethane	1.719	101	593346	48.97	ppb		98
9) Diethyl Ether	1.884	59	279389	46.83	ppb		92
10) Freon 123a	1.872	67	444198	49.94	ppb		84
11) Freon 123	1.902	83	521528	51.34	ppb		99
12) Acrolein	1.951	56	109196	342.72	ppb		100
13) 1,1-Diclethene	2.042	96	275349	45.97	ppb		92
14) Freon 113	2.036	101	309781	47.26	ppb		96
15) Acetone	2.048	43	78194	47.75	ppb		95
16) 2-Propanol	2.128	45	352331	1325.81	ppb		99
17) Iodomethane	2.146	142	244389	30.72	ppb		94
18) Carbon Disulfide	2.207	76	996439	47.83	ppb		99
19) Acetonitrile	2.231	40	67400	251.70	ppb		99
20) Allyl Chloride	2.280	76	160292	39.03	ppb		93
21) Methyl Acetate	2.274	43	200380	54.34	ppb		98
22) Methylene Chloride	2.359	84	351083	44.74	ppb		97
23) TBA	2.414	59	567597	1240.08	ppb		94
24) Acrylonitrile	2.524	53	471217	256.84	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	978406	51.39	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	357336	47.62	ppb		99
28) 1,1-Diclethane	2.945	63	648680	46.44	ppb		99
29) Vinyl Acetate	2.981	86	35077	28.20	ppb	#	78
31) 2-Chloro-1,3-Butadiene	3.042	53	568331	47.24	ppb		93
33) 2,2-Dichloropropane	3.560	77	461938	41.68	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	394604	47.12	ppb		99
35) 2-Butanone	3.548	43	119758	52.20	ppb		94
36) Propionitrile	3.597	54	187368	282.84	ppb		96
37) Bromochloromethane	3.829	130	225290	48.18	ppb		92
38) Methacrylonitrile	3.798	67	109870	51.41	ppb		96
39) Tetrahydrofuran	3.908	42	80169	49.99	ppb		74

KR 4/8/14

00506

W031214.M Tue Apr 08 01:28:12 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 01:28:10 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) Chloroform	3.938	83	649726	47.47	ppb		100
41) 1,1,1-Trichloroethane	4.213	97	579678	49.38	ppb		87
44) Cyclohexane	4.316	41	349052	51.83	ppb		98
46) Carbontetrachloride	4.469	121	148657	49.81	ppb		99
47) 1,1-Dichloropropene	4.463	75	454218	49.41	ppb		96
49) Benzene	4.786	78	1478958	48.26	ppb		98
50) 1,2-Dichloroethane	4.792	62	476959	51.26	ppb		95
51) Iso-Butyl Alcohol	4.652	43	236857	1124.87	ppb		98
52) n-Heptane	5.334	43	320386	41.85	ppb		93
54) Trichloroethene	5.828	130	406367	54.75	ppb		97
55) Methylcyclohexane	6.109	55	407782	51.10	ppb		96
56) 1,2-Diclpropane	6.115	63	370102	47.23	ppb		94
57) Dibromomethane	6.255	93	196978	52.84	ppb		98
58) 1,4-Dioxane	6.322	88 ~~53705~~ ~~49327~~		~~961.19~~	ppb	1046.50	81
59) Methyl Methacrylate	6.328	69	204978	55.59	ppb		97
60) Bromodichloromethane	6.480	83	479995	52.44	ppb		96
61) 2-Nitropropane	6.749	41	115728	117.57	ppb		82
62) 2-Chloroethylvinyl Ether	6.877	63	145335	41.35	ppb		99
63) cis-1,3-Dichloropropene	7.023	75	557628	51.35	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	265574	56.18	ppb		98
66) Toluene	7.395	91	1567089	49.60	ppb		99
67) trans-1,3-Dichloropropene	7.633	75	484358	55.33	ppb		97
68) Ethyl Methacrylate	7.767	69	424546	59.61	ppb		97
69) 1,1,2-Trichloroethane	7.809	97	293424	53.09	ppb		98
72) Tetrachloroethene	7.962	164	289646	48.00	ppb		97
73) 2-Hexanone	8.084	43	183447	55.44	ppb		97
74) 1,3-Dichloropropane	7.974	76	517563	49.21	ppb		99
75) Dibromochloromethane	8.194	129	337530	55.81	ppb		97
76) N-Butyl Acetate	8.242	43	457219	55.89	ppb		98
77) 1,2-Dibromoethane	8.285	107	288925	53.48	ppb		98
78) Chlorobenzene	8.773	112	979870	48.20	ppb		94
81) 1,1,1,2-Tetrachloroethane	8.852	131	355651	49.79	ppb		98
82) Ethylbenzene	8.888	106	532763	49.19	ppb		97
83) (m+p)Xylene	8.998	106	1282767	100.78	ppb		96
84) o-Xylene	9.346	106	634377	48.84	ppb		98
85) Styrene	9.358	104	1102717	53.10	ppb		93
87) Bromoform	9.498	173	202886	57.49	ppb		98
89) Isopropylbenzene	9.675	105	1514763	47.22	ppb		98
90) Cyclohexanone	9.718	55	424438	851.58	ppb		98
91) trans-1,4-Dichloro-2-B...	9.961	53	73770	44.11	ppb		90
92) 1,1,2,2-Tetrachloroethane	9.913	83	315449	44.33	ppb		98
93) Bromobenzene	9.913	156	428474	46.88	ppb	#	85
94) 1,2,3-Trichloropropane	9.943	110	103257	48.49	ppb		95
95) n-Propylbenzene	10.022	91	1741584	46.41	ppb		99
96) 2-Chlorotoluene	10.083	91	1095631	46.49	ppb		98
~~97) 3-Chlorotoluene~~	~~10.175~~	~~91~~	~~1298733~~	~~52.98~~	~~ppb~~		~~98~~
98) 4-Chlorotoluene	10.175	91	1290719	46.45	ppb		95
99) 1,3,5-Trimethylbenzene	10.175	105	1237292	47.28	ppb		97
100) tert-Butylbenzene	10.437	119	1016774	46.16	ppb		97
101) 1,2,4-Trimethylbenzene	10.480	105	1271310	47.22	ppb		96
103) sec-Butylbenzene	10.620	105	1422357	46.40	ppb		98
104) p-Isopropyltoluene	10.742	119	1234541	47.62	ppb		98

00507

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 01:28:10 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

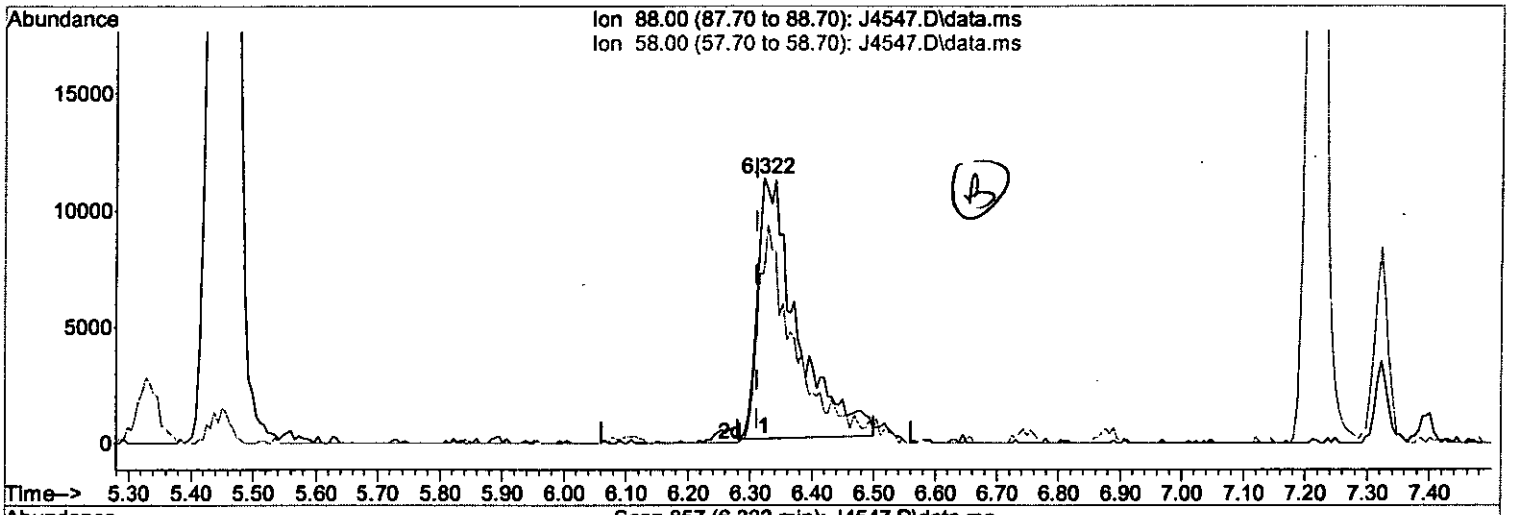
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	10.699	146	748545	48.11	ppb	96
106) 1,4-Dclbenz	10.772	146	774131	46.76	ppb	96
109) n-Butylbenzene	11.065	91	1077322	46.09	ppb	97
110) 1,2-Dclbenz	11.065	146	728892	48.65	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	65344	59.93	ppb	95
112) Trielution Dichlorotol...	11.735	125	3453	0.29	ppb	95
115) 1,2,4-Tcbenzene	12.162	180	434216	47.39	ppb	93
116) Hexachlorobt	12.266	225	171546	42.90	ppb	97
117) Naphthalen	12.302	128	877170	53.18	ppb	99
118) 1,2,3-Tclbenzene	12.437	180	377482	50.32	ppb	97
119) 2,4,5-Trichlorotolene	12.851	159	4722	0.96	ppb	92
120) 2,3,6-Trichlorotoluene	12.912	159	4547	1.00	ppb	97

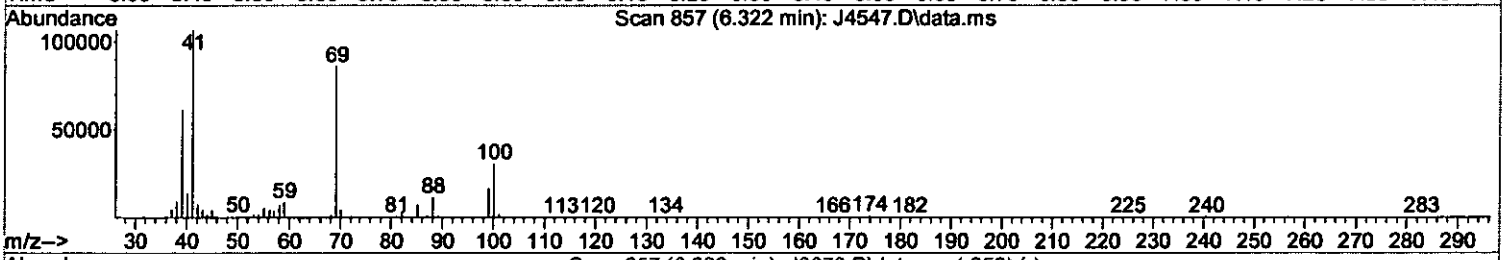
(#) = qualifier out of range (m) = manual integration (+) = signals summed

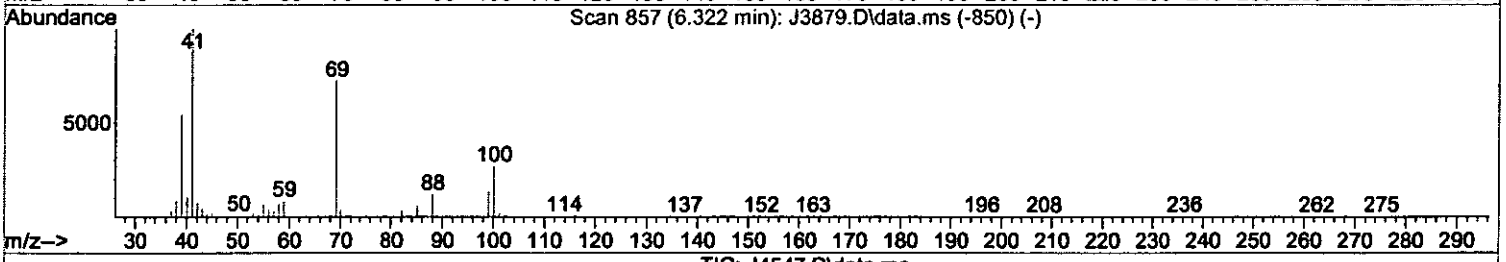
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 01:28:10 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4547.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 961.19 ppb

response 49327

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	63.86
0.00	0.00	0.00
0.00	0.00	0.00

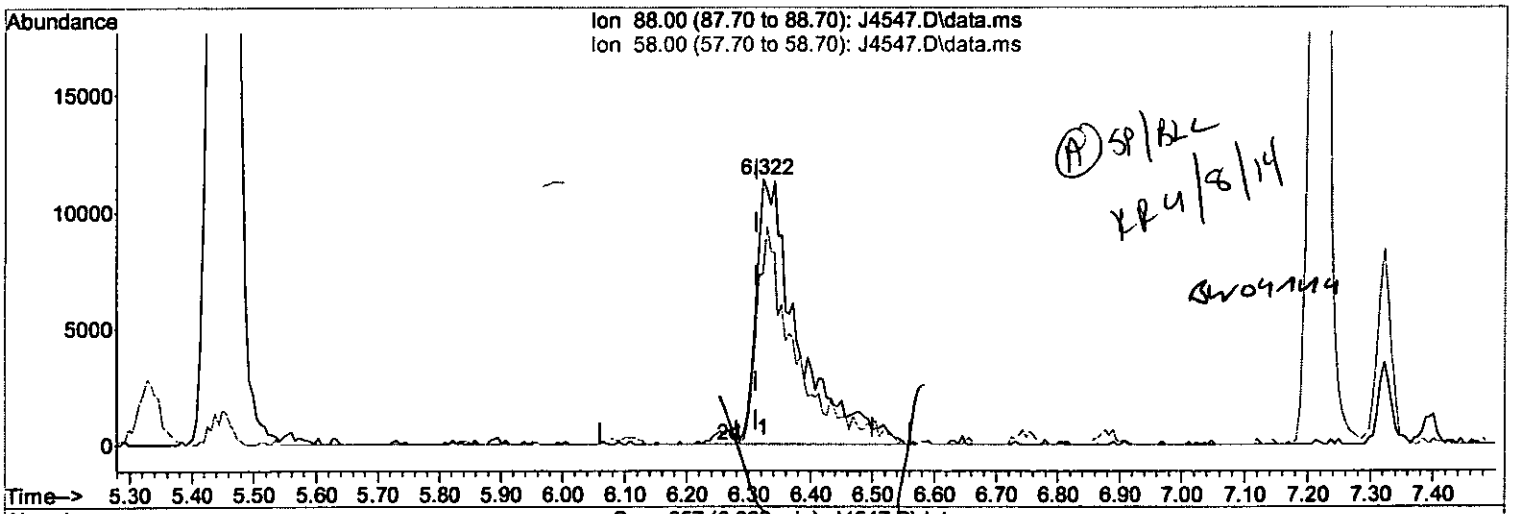
00509

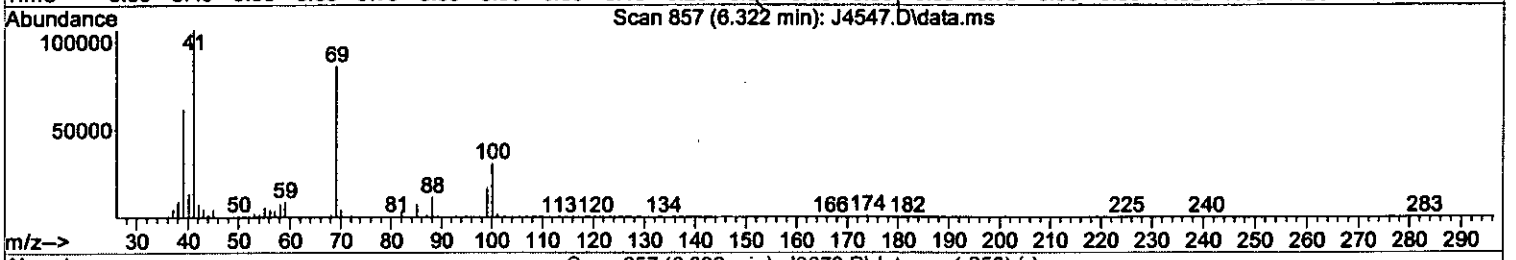
W031214.M Tue Apr 08 10:44:10 2014 Page: 1

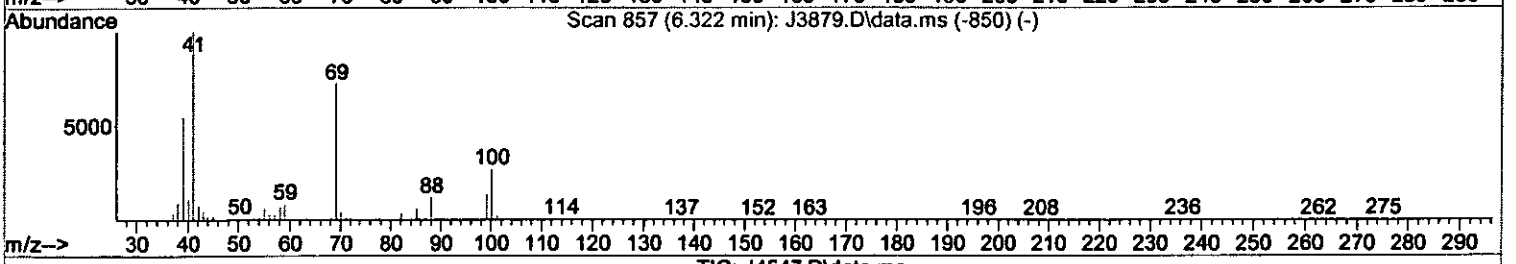
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 01:28:10 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4547.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 1046.50 ppb m

response 53705

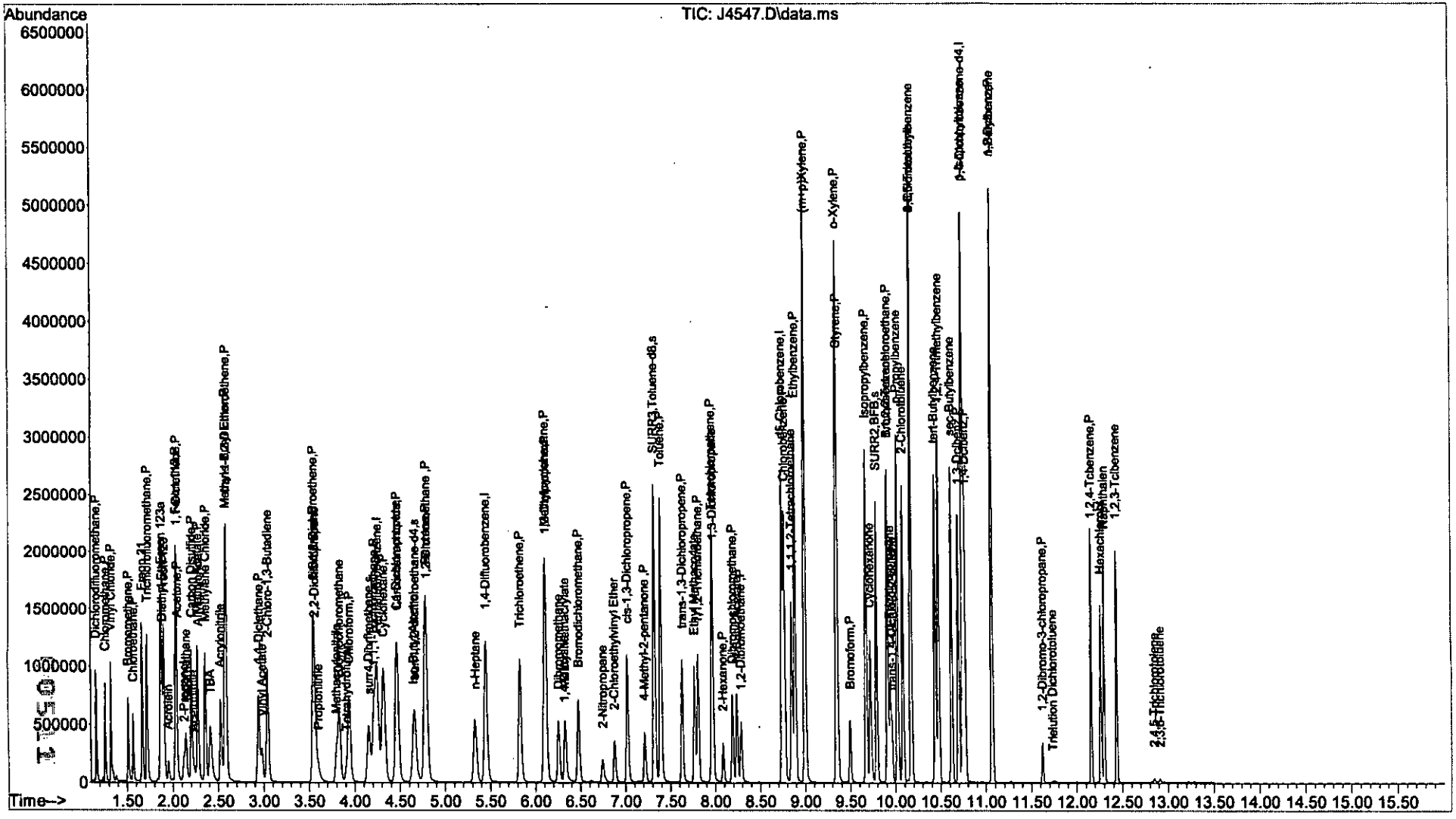
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	63.86
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Apr 08 10:44:18 2014 00510 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4547.D
Misc :
Acq On : 8 Apr 2014 1:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 01:28:10 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Apr 08 01:28:14 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/ 8/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 387236
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	52.7	0.3058	0.3224	5.5	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	50.5	0.7112	0.7176	0.9	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	46.8	0.5726	0.5355	-6.5	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	49.4	0.2220	0.2192	-1.3	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	47.5	0.8461	0.8033	-5.1	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	47.5	0.3628	0.3449	-4.9	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	50.6	0.3693	0.3734	1.1	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	51.3	0.6036	0.6196	2.6	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	48.4	0.1713	0.1659	-3.2	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	51.9	0.7372	0.7656	3.8	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	52.9	2.167	2.290	5.7	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	55.7	0.08773	0.09767	11.3	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	51.6	0.2312	0.2387	3.3	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	52.4	1.206	1.263	4.8	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	50.2	0.3737	0.3748	0.3	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	47.7	0.3148	0.3001	-4.7	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	52.7	2.106	2.221	5.5	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	52.8	1.252	1.321	5.5	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	48.4	0.4501	0.4355	-3.2	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	50.2	1.332	1.338	0.4	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	53.4	0.6713	0.7172	6.8	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	50.0	0.1390	0.1389	-0.1	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	50.7	1.896	1.924	1.5	NA	± 20 %	Average RF
2-Hexanone	50.0	53.9	0.1416	0.1527	7.8	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	51.1	2.236	2.285	2.2	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	54.2	2.086	2.259	8.3	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	50.8	0.1899	0.1929	1.6	NA	± 20 %	Average RF
Acetone	50.0	51.9	0.09920	0.1029	3.8	NA	± 20 %	Average RF
Benzene	50.0	48.9	1.231	1.203	-2.3	NA	± 20 %	Average RF
Bromobenzene	50.0	50.3	0.7355	0.7393	0.5	NA	± 20 %	Average RF
Bromochloromethane	50.0	47.1	0.2832	0.2666	-5.9	NA	± 20 %	Average RF
Bromodichloromethane	50.0	52.9	0.3677	0.3890	5.8	NA	± 20 %	Average RF
Bromoform	50.0	57.3	0.2840	0.3253	14.6	NA	± 20 %	Average RF
Bromomethane	50.0	42.7	0.2881	0.2458	-14.7	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	51.6	0.1199	0.1238	3.2	NA	± 20 %	Average RF
Chlorobenzene	50.0	50.6	0.8701	0.8804	1.2	NA	± 20 %	Average RF
Chloroethane	50.0	51.4	0.2851	0.2930	2.7	NA	± 20 %	Average RF
Chloroform	50.0	48.1	0.8292	0.7972	-3.8	NA	± 20 %	Average RF
Chloromethane	50.0	45.5	0.5146	0.4683	-9.0	NA	± 20 %	Average RF
Dibromochloromethane	50.0	54.3	0.2588	0.2812	8.7	NA	± 20 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/ 8/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 387236
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	49.2	0.5939	0.5840	-1.7	NA	± 20 %	Average RF
Methylene Chloride	50.0	45.1	0.4753	0.4286	-9.8	NA	± 20 %	Average RF
Ethylbenzene	50.0	51.8	0.4636	0.4803	3.6	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	55.1	0.3218	0.3543	10.1	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	52.2	2.581	2.697	4.5	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	47.5	1.153	1.095	-5.0	NA	± 20 %	Average RF
Naphthalene	50.0	52.0	1.327	1.381	4.0	NA	± 20 %	Average RF
Styrene	50.0	54.6	0.8888	0.9704	9.2	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	51.3	0.2583	0.2649	2.6	NA	± 20 %	Average RF
Toluene	50.0	51.0	1.269	1.295	2.1	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	51.2	0.2982	0.3053	2.4	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	50.9	0.7340	0.7472	1.8	NA	± 20 %	Average RF
Vinyl Chloride	50.0	54.8	0.4781	0.5238	9.6	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	48.9	0.5073	0.4958	-2.3	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	53.0	0.4363	0.4623	6.0	NA	± 20 %	Average RF
m,p-Xylenes	100	107	0.5448	0.5806	6.6	NA	± 20 %	Average RF
n-Butylbenzene	50.0	54.1	1.881	2.034	8.1	NA	± 20 %	Average RF
n-Propylbenzene	50.0	51.5	3.020	3.111	3.0	NA	± 20 %	Average RF
o-Xylene	50.0	51.9	0.5559	0.5776	3.9	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	52.5	2.467	2.591	5.0	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	51.4	1.773	1.821	2.7	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	47.7	0.4546	0.4340	-4.5	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	55.2	0.3517	0.3880	10.3	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	49.9	0.4538	0.4532	-0.1	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.7	0.2895	0.2937	1.5	NA	± 20 %	Average RF
Toluene-d8	50.0	49.1	1.216	1.195	-1.8	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:53:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

KR 4/8/14

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	90	0.00
2	P	Dichlorodifluoromethane	0.5939	0.5840	1.7	87	0.00
3	P	Chloromethane	0.5146	0.4683	9.0	83	0.00
4	P	Vinyl Chloride	0.4781	0.5238	-9.6	100	0.00
5	P	Bromomethane	0.2881	0.2458	14.7	84	0.00
6	P	Chloroethane	0.2851	0.2930	-2.8	97	0.00
7		Freon 21	0.7211	0.8262	-14.6	108	0.00
8	P	Trichlorofluoromethane	0.7340	0.7472	-1.8	95	0.00
9		Diethyl Ether	0.3614	0.3254	10.0	85	0.00
10		Freon 123a	0.5388	0.5258	2.4	93	0.00
11		Freon 123	0.6154	0.6067	1.4	94	0.00
12		Acrolein	0.0172	0.0347	-60.9 ~~-101.7#~~	205#	0.00
13	P	1,1-Diclethene	0.3628	0.3449	4.9	87	0.00
14	P	Freon 113	0.3971	0.3930	1.0	92	0.00
15	P	Acetone	0.0992	0.1029	-3.7	98	0.00
16		2-Propanol	0.0161	0.0188	-16.8	98	0.02
17		Iodomethane	0.4820	0.3882	19.5	62	0.00
18	P	Carbon Disulfide	1.2620	1.2024	4.7	82	0.00
19		Acetonitrile	0.0162	0.0151	6.8	85	0.01
20		Allyl Chloride	0.2488	0.2370	4.7	85	0.00
21	P	Methyl Acetate	0.2234	0.2156	3.5	87	0.00
22	P	Methylene Chloride	0.4753	0.4286	9.8	86	0.00
23		TBA	0.0277	0.0302	-9.0	92	0.01
24		Acrylonitrile	0.1111	0.1062	4.4	84	0.00
25	P	Methyl-t-Butyl Ether	1.1534	1.0952	5.0	88	0.00
26	P	trans-1,2-Dichloroethene	0.4546	0.4340	4.5	88	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.8461	0.8033	5.1	87	0.00
29		Vinyl Acetate	0.0753	0.0783	-4.0	85	0.00
30		DIPE	1.6481	1.4874	9.8	81	0.00
31		2-Chloro-1,3-Butadiene	0.7288	0.7098	2.6	80	0.00
32		ETBE	1.3791	1.3226	4.1	84	0.00
33		2,2-Dichloropropane	0.6713	0.7172	-6.8	96	0.00
34	P	cis-1,2-Dichloroethene	0.5073	0.4958	2.3	89	0.00
35	P	2-Butanone	0.1390	0.1389	0.1	88	0.00
36		Propionitrile	0.0401	0.0402	-0.2	83	0.00
37		Bromochloromethane	0.2832	0.2666	5.9	90	0.00
38		Methacrylonitrile	0.1295	0.1230	5.0	82	0.00
39		Tetrahydrofuran	0.0972	0.0863	11.2	80	0.00
40	P	Chloroform	0.8292	0.7972	3.9	91	0.00
41	P	1,1,1-Trichloroethane	0.7112	0.7176	-0.9	92	0.00
42		TAME	1.1643	1.1331	2.7	85	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	87	0.00
44	P	Cyclohexane	0.2705	0.2767	-2.3	96	0.00
45	s	surr4,Dibrflmethane	0.2895	0.2937	-1.5	89	0.00
46	P	Carbontetrachloride	0.1199	0.1238	-3.3	94	0.00
47		1,1-Dichloropropene	0.3693	0.3734	-1.1	89	0.00

W031214.M Tue Apr 08 12:55:14 2014 00514 Page: 1

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:53:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
48	s	surr1,1,2-dichloroethane-d4	0.3297	0.3347	-1.5	89	0.00
49	P	Benzene	1.2310	1.2031	2.3	87	0.00
50	P	1,2-Dichloroethane	0.3737	0.3748	-0.3	90	0.00
51		Iso-Butyl Alcohol	0.0085	0.0088	-3.5	88	0.01
52		n-Heptane	0.3075	0.3098	-0.7	93	0.00
53		1-Butanol	0.0046	0.0053	-15.2	89	0.02
54	P	Trichloroethene	0.2982	0.3053	-2.4	92	0.00
55	P	Methylcyclohexane	0.3206	0.3331	-3.9	98	0.00
56	P	1,2-Diclpropane	0.3148	0.3001	4.7	84	0.00
57		Dibromomethane	0.1497	0.1513	-1.1	88	0.00
58		1,4-Dioxane	0.0021	0.0020	4.8	89	0.04
59		Methyl Methacrylate	0.1481	0.1479	0.1	83	0.00
60	P	Bromodichloromethane	0.3677	0.3890	-5.8	90	0.00
61		2-Nitropropane	0.0395	0.0446	-12.9	93	0.00
62		2-Chloroethylvinyl Ether	0.1412	0.1286	8.9	75	0.00
63	P	cis-1,3-Dichloropropene	0.4363	0.4623	-6.0	87	0.00
64	P	4-Methyl-2-pentanone	0.1899	0.1929	-1.6	84	0.00
65	s	SURR3,Toluene-d8	1.2163	1.1949	1.8	85	0.00
66	P	Toluene	1.2692	1.2953	-2.1	89	0.00
67	P	trans-1,3-Dichloropropene	0.3517	0.3880	-10.3	88	0.00
68		Ethyl Methacrylate	0.2861	0.3112	-8.8	84	0.00
69	P	1,1,2-Trichloroethane	0.2220	0.2192	1.3	86	0.00
70	s	SURR2,BFB	0.4538	0.4532	0.1	86	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	88	0.00
72	P	Tetrachloroethene	0.2583	0.2649	-2.6	96	0.00
73	P	2-Hexanone	0.1416	0.1527	-7.8	88	0.00
74		1,3-Dichloropropane	0.4501	0.4355	3.2	86	0.00
75	P	Dibromochloromethane	0.2588	0.2812	-8.7	89	0.00
76		N-Butyl Acetate	0.3502	0.3530	-0.8	83	0.00
77	P	1,2-Dibromoethane	0.2312	0.2387	-3.2	88	0.00
78	P	Chlorobenzene	0.8701	0.8804	-1.2	92	0.00
79		3-CBTF	0.4304	0.4774	-10.9	99	0.00
80		4-CBTF	0.3856	0.4393	-13.9	97	0.00
81		1,1,1,2-Tetrachloroethane	0.3058	0.3224	-5.4	91	0.00
82	P	Ethylbenzene	0.4636	0.4803	-3.6	91	0.00
83	P	(m+p)Xylene	0.5448	0.5806	-6.6	91	0.00
84	P	o-Xylene	0.5559	0.5776	-3.9	91	0.00
85	P	Styrene	0.8888	0.9704	-9.2	90	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	89	0.00
87	P	Bromoform	0.2840	0.3253	-14.5	93	0.00
88		2-CBTF	0.8330	0.9033	-8.4	97	0.00
89	P	Isopropylbenzene	2.5815	2.6973	-4.5	93	0.00
90		Cyclohexanone	0.0401	0.0571	PT -42.4#	129	0.00
91		trans-1,4-Dichloro-2-Butene	0.1346	0.1379	-2.5	81	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5726	0.5355	6.5	84	0.00
93		Bromobenzene	0.7355	0.7393	-0.5	94	0.00

00515

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:53:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
94		1,2,3-Trichloropropane	0.1713	0.1659	3.2	89	0.00
95		n-Propylbenzene	3.0196	3.1107	-3.0	93	0.00
96		2-Chlorotoluene	1.8965	1.9242	-1.5	92	0.00
97		3-Chlorotoluene	1.9725	2.0292	-2.9	91	0.00
98		4-Chlorotoluene	2.2360	2.2850	-2.2	92	0.00
99		1,3,5-Trimethylbenzene	2.1057	2.2211	-5.5	93	0.00
100		tert-Butylbenzene	1.7725	1.8208	-2.7	94	0.00
101		1,2,4-Trimethylbenzene	2.1665	2.2901	-5.7	92	0.00
102		3,4-DCBTF	0.6160	0.6596	-7.1	94	0.00
103		sec-Butylbenzene	2.4668	2.5907	-5.0	95	0.00
104		p-Isopropyltoluene	2.0860	2.2594	-8.3	96	0.00
105	P	1,3-Dclbenz	1.2519	1.3211	-5.5	95	0.00
106	P	1,4-Dclbenz	1.3322	1.3376	-0.4	94	0.00
107		2,4-DCBTF	0.5359	0.5966	-11.3	96	0.00
108		2,5-DCBTF	0.6128	0.6765	-10.4	97	0.00
109		n-Butylbenzene	1.8808	2.0338	-8.1	95	0.00
110	P	1,2-Dclbenz	1.2055	1.2631	-4.8	94	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0877	0.0977	-11.4	92	0.00
112		Trielution Dichlorotoluene	0.9535	1.0258	-7.6	92	0.00
113		1,3,5 Trichlorobenzene	0.8315	0.9033	-8.6	94	0.00
114		Coelution Dichlorotoluene	1.0096	1.0960	-8.6	91	0.00
115	P	1,2,4-Tcbenzene	0.7372	0.7656	-3.9	94	0.00
116		Hexachlorobt	0.3218	0.3543	-10.1	100	0.00
117		Naphthalen	1.3273	1.3809	-4.0	87	0.00
118		1,2,3-Tclbenzene	0.6036	0.6196	-2.7	96	0.00
119		2,4,5-Trichlorotolene	0.3978	0.4056	-2.0	90	0.00
120		2,3,6-Trichlorotoluene	0.3641	0.3664	-0.6	86	0.00

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

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1403327-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:51:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	839906	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1267860	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1169242	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	598089	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	372336	50.73	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.46%				
48) surr1,1,2-dichloroetha...	4.658	65	424387	50.76	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 101.52%				
65) SURR3,Toluene-d8	7.322	98	1515021	49.12	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.24%				
70) SURR2,BFB	9.791	95	574595	49.94	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	490486	49.17	ppb		98
3) Chloromethane	1.256	50	393351	45.50	ppb		99
4) Vinyl Chloride	1.323	62	439949	54.78	ppb		98
5) Bromomethane	1.512	94	206486	42.67	ppb		100
6) Chloroethane	1.567	64	246053	51.37	ppb		99
7) Freon 21	1.664	67	693959	57.29	ppb		99
8) Trichlorofluoromethane	1.719	101	627579	50.90	ppb		98
9) Diethyl Ether	1.878	59	273278	45.01	ppb		96
10) Freon 123a	1.865	67	441622	48.79	ppb		95
11) Freon 123	1.902	83	509601	49.29	ppb		96
12) Acrolein	1.951	56	145631	402.35	ppb		96
13) 1,1-Diclethene	2.036	96	289723	47.53	ppb		96
14) Freon 113	2.036	101	330044	49.48	ppb		91
15) Acetone	2.048	43	86455	51.88	ppb		95
16) 2-Propanol	2.134	45	315742	1167.56	ppb		100
17) Iodomethane	2.146	142	326086	40.28	ppb		95
18) Carbon Disulfide	2.207	76	1009864	47.64	ppb		98
19) Acetonitrile	2.231	40	63233	232.05	ppb		94
20) Allyl Chloride	2.274	76	199034	47.63	ppb		99
21) Methyl Acetate	2.274	43	181052	48.25	ppb		99
22) Methylene Chloride	2.359	84	359998	45.08	ppb		98
23) TBA	2.420	59	507917	1090.49	ppb		100
24) Acrylonitrile	2.524	53	446173	238.98	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	919901	47.48	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	364552	47.74	ppb		97
28) 1,1-Diclethane	2.938	63	674719	47.47	ppb		99
29) Vinyl Acetate	2.981	86	65736	51.94	ppb	#	81
30) DIPE	3.012	45	1249290	45.13	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	596142	48.70	ppb		89
32) ETBE	3.396	59	1110823	47.95	ppb		99
33) 2,2-Dichloropropane	3.554	77	602392	53.42	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	416432	48.87	ppb		97
35) 2-Butanone	3.548	43	116632	49.96	ppb		96
36) Propionitrile	3.597	54	168659	250.19	ppb		95
37) Bromochloromethane	3.829	130	223953	47.07	ppb		90

KR 4/8/14

W031214.M Tue Apr 08 12:51:36 2014 00517 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:51:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	103347	47.52	ppb		95
39) Tetrahydrofuran	3.908	42	72498	44.42	ppb		75
40) Chloroform	3.938	83	669607	48.08	ppb		97
41) 1,1,1-Trichloroethane	4.213	97	602686	50.45	ppb		88
42) TAME	5.023	73	951688	48.66	ppb		97
44) Cyclohexane	4.316	41	350778	51.14	ppb		96
46) Carbontetrachloride	4.469	121	156932	51.62	ppb		97
47) 1,1-Dichloropropene	4.463	75	473477	50.56	ppb		92
49) Benzene	4.780	78	1525416	48.87	ppb		99
50) 1,2-Dichloroethane	4.786	62	475232	50.15	ppb		96
51) Iso-Butyl Alcohol	4.652	43	223845	1043.65	ppb		97
52) n-Heptane	5.328	43	392796	50.37	ppb		96
53) 1-Butanol	5.792	56	335990	2852.36	ppb		99
54) Trichloroethene	5.828	130	387082	51.20	ppb		97
55) Methylcyclohexane	6.102	55	422338	51.96	ppb		98
56) 1,2-Diclpropane	6.115	63	380473	47.67	ppb		95
57) Dibromomethane	6.255	93	191837	50.52	ppb		95
58) 1,4-Dioxane	6.346	88	5146748154	~~921.19~~	ppb	984.56	95
59) Methyl Methacrylate	6.328	69	187534	49.93	ppb		96
60) Bromodichloromethane	6.474	83	493138	52.89	ppb		98
61) 2-Nitropropane	6.749	41	113034	112.74	ppb		97
62) 2-Chloroethylvinyl Ether	6.877	63	163035	45.54	ppb		96
63) cis-1,3-Dichloropropene	7.023	75	586145	52.99	ppb		97
64) 4-Methyl-2-pentanone	7.212	43	244574	50.80	ppb		95
66) Toluene	7.395	91	1642263	51.03	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	491920	55.17	ppb		98
68) Ethyl Methacrylate	7.767	69	394506	54.38	ppb		99
69) 1,1,2-Trichloroethane	7.809	97	277929	49.36	ppb		97
72) Tetrachloroethene	7.962	164	309730	51.28	ppb		98
73) 2-Hexanone	8.084	43	178565	53.92	ppb		97
74) 1,3-Dichloropropane	7.974	76	509239	48.38	ppb		99
75) Dibromochloromethane	8.187	129	328844	54.33	ppb		99
76) N-Butyl Acetate	8.236	43	412745	50.40	ppb		98
77) 1,2-Dibromoethane	8.285	107	279144	51.63	ppb		98
78) Chlorobenzene	8.767	112	1029431	50.59	ppb		97
79) 3-CBTF	8.785	180	558178	55.46	ppb		96
80) 4-CBTF	8.840	180	513630	56.95	ppb		99
81) 1,1,1,2-Tetrachloroethane	8.852	131	377019	52.73	ppb		96
82) Ethylbenzene	8.888	106	561564	51.80	ppb		97
83) (m+p)Xylene	8.998	106	1357835	106.59	ppb		93
84) o-Xylene	9.346	106	675308	51.94	ppb		95
85) Styrene	9.352	104	1134662	54.59	ppb		98
87) Bromoform	9.498	173	194566	57.28	ppb		98
88) 2-CBTF	9.577	180	540226	54.22	ppb		95
89) Isopropylbenzene	9.675	105	1613226	52.24	ppb		96
90) Cyclohexanone	9.718	55	682927	1423.52	ppb		98
91) trans-1,4-Dichloro-2-B...	9.961	53	82449	51.21	ppb		91
92) 1,1,2,2-Tetrachloroethane	9.913	83	320305	46.76	ppb		98
93) Bromobenzene	9.913	156	442179	50.26	ppb	#	82
94) 1,2,3-Trichloropropane	9.943	110	99234	48.42	ppb		95
95) n-Propylbenzene	10.022	91	1860454	51.51	ppb		98
96) 2-Chlorotoluene	10.083	91	1150863	50.73	ppb		99

00518

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:51:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

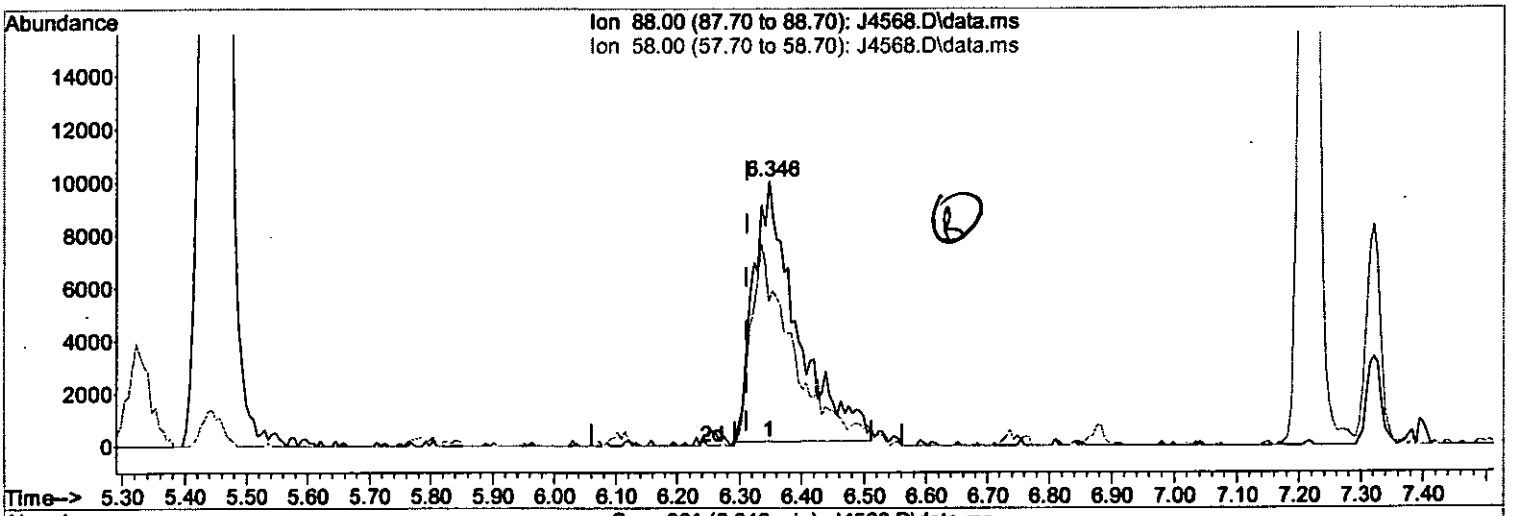
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1213670	51.44	ppb	96
98)	4-Chlorotoluene	10.175	91	1366643	51.10	ppb	95
99)	1,3,5-Trimethylbenzene	10.169	105	1328410	52.74	ppb	98
100)	tert-Butylbenzene	10.437	119	1089005	51.36	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	1369691	52.85	ppb	98
102)	3,4-DCBTF	10.535	214	394489	53.54	ppb	97
103)	sec-Butylbenzene	10.620	105	1549446	52.51	ppb	99
104)	p-Isopropyltoluene	10.742	119	1351328	54.16	ppb	98
105)	1,3-Dclbenz	10.699	146	790131	52.76	ppb	96
106)	1,4-Dclbenz	10.766	146	800028	50.21	ppb	98
107)	2,4-DCBTF	10.821	214	356829	55.66	ppb	95
108)	2,5-DCBTF	10.864	214	404618	55.20	ppb	97
109)	n-Butylbenzene	11.065	91	1216377	54.07	ppb	98
110)	1,2-Dclbenz	11.065	146	755438	52.39	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	58416	55.66	ppb	96
112)	Trielution Dichlorotol...	11.729	125	1840610	161.38	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	540274	54.32	ppb	99
114)	Coelution Dichlorotoluene	11.998	125	1311039	108.56	ppb	99
115)	1,2,4-Tcbenzene	12.156	180	457897	51.92	ppb	99
116)	Hexachlorobt	12.266	225	211878	55.05	ppb	98
117)	Naphthalen	12.302	128	825874	52.02	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	370582	51.32	ppb	99
119)	2,4,5-Trichlorotolene	12.851	159	242570	50.98	ppb	99
120)	2,3,6-Trichlorotoluene	12.912	159	219163	50.32	ppb	96

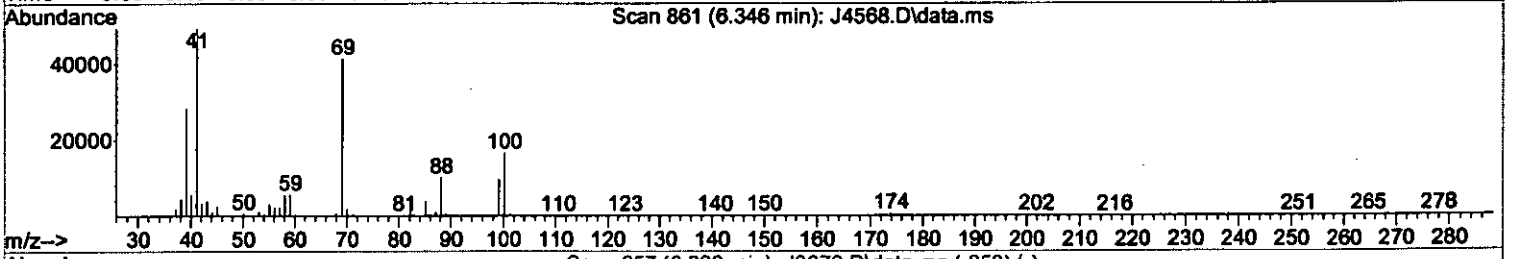
(#) = qualifier out of range (m) = manual integration (+) = signals summed

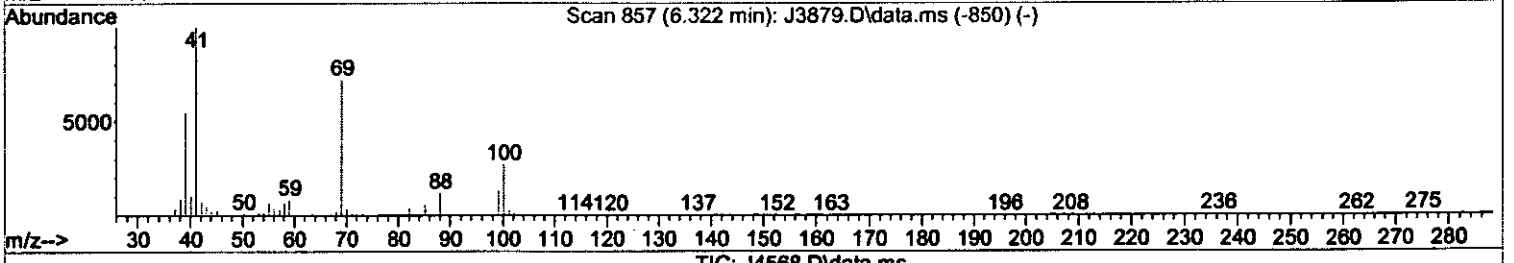
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:51:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4568.D\data.ms

(58) 1,4-Dioxane

6.346min (+0.036) 921.19 ppb

response 48154

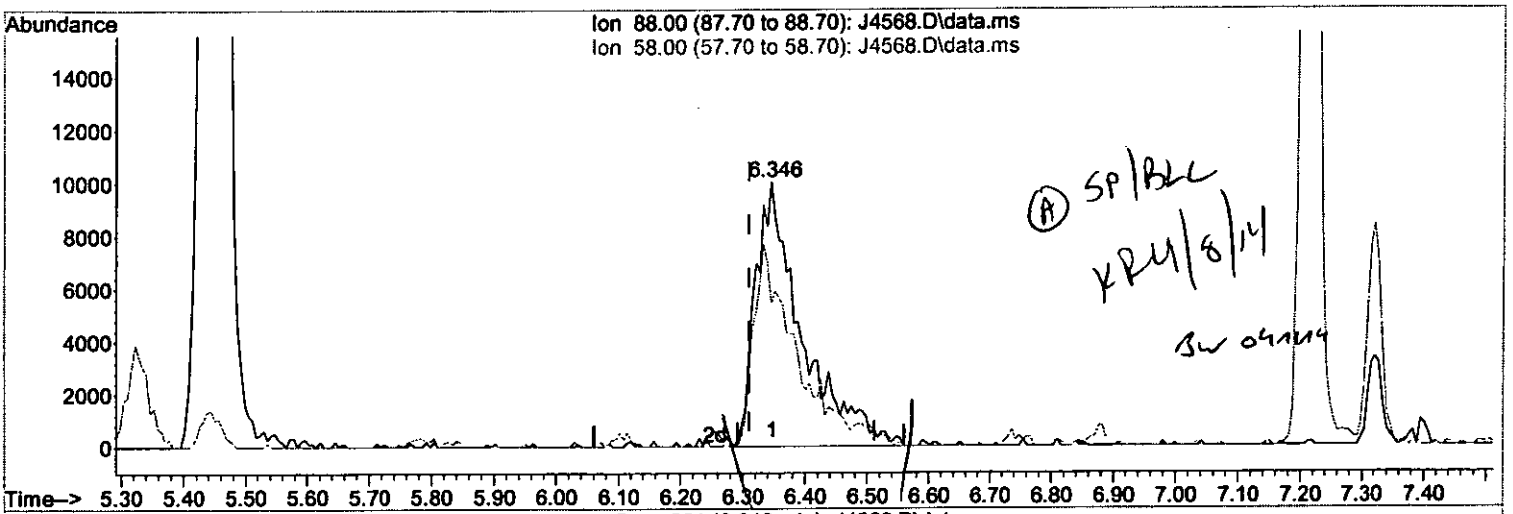
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	54.33
0.00	0.00	0.00
0.00	0.00	0.00

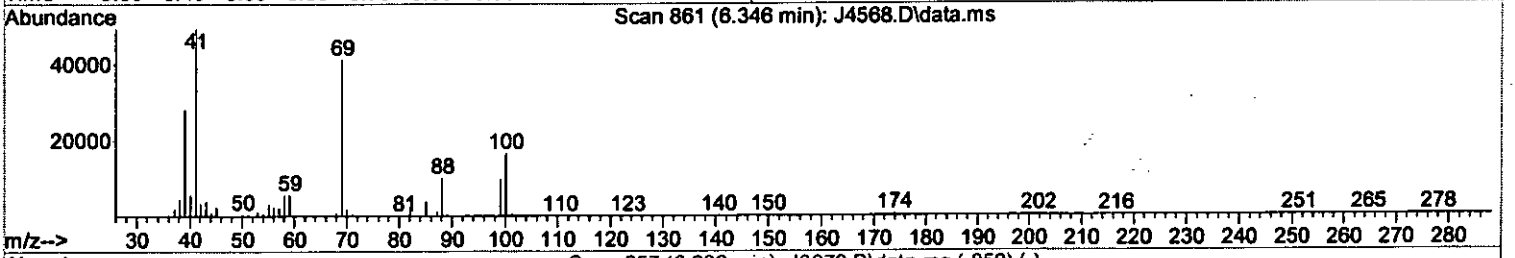
W031214.M Tue Apr 08 12:53:29 2014 00520 Page: 1

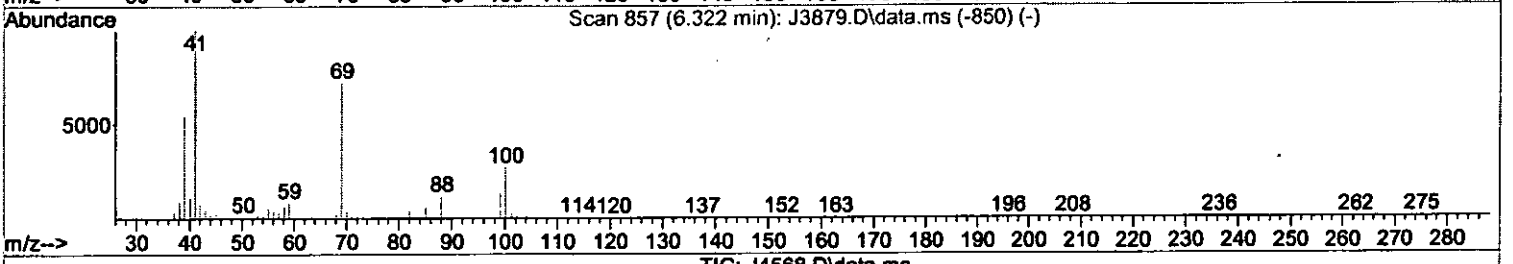
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:51:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4568.D\data.ms

(58) 1,4-Dioxane

6.346min (+0.036) 984.56 ppb m

response 51467

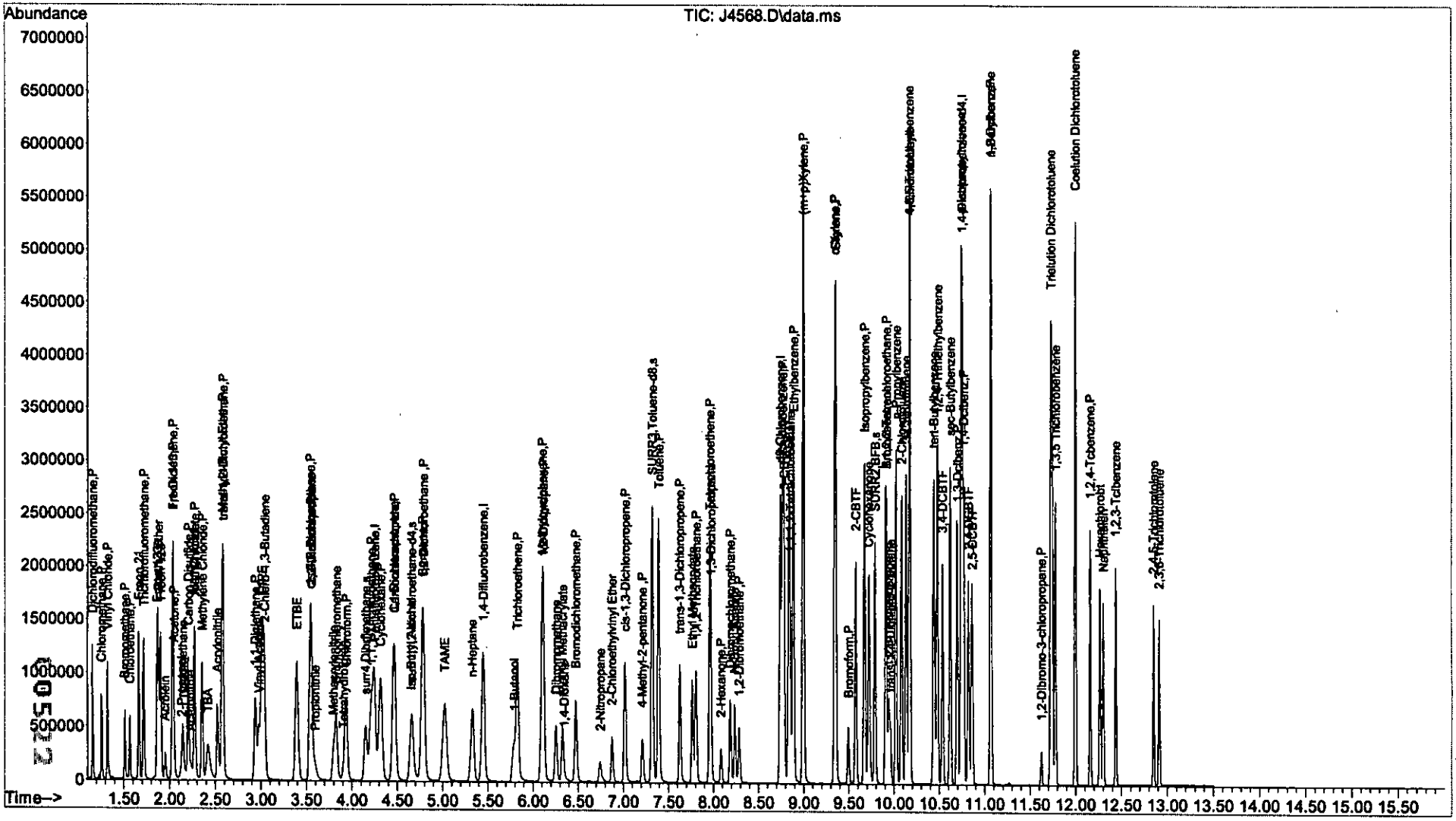
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	54.33
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Apr 08 12:53:37 2014 00521 Page: 1

Quantication Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4568.D
Misc :
Acq On : 8 Apr 2014 12:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 12:51:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Apr 08 12:51:39 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/10/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\041014\J4649.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 387653
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	53.2	0.3058	0.3252	6.4	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	48.6	0.7112	0.6910	-2.8	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	47.2	0.5726	0.5408	-5.6	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	50.3	0.2220	0.2235	0.7	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	44.6	0.8461	0.7554	-10.7	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	45.8	0.3628	0.3325	-8.4	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	50.0	0.3693	0.3690	-0.1	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	53.2	0.6036	0.6421	6.4	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	49.0	0.1713	0.1681	-1.9	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	52.7	0.7372	0.7763	5.3	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	50.0	2.167	2.166	0.0	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	56.5	0.08773	0.09921	13.1	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	52.6	0.2312	0.2432	5.2	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	51.0	1.206	1.230	2.1	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	49.6	0.3737	0.3708	-0.8	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	46.6	0.3148	0.2934	-6.8	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	50.8	2.106	2.138	1.5	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	51.6	1.252	1.291	3.1	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	48.4	0.4501	0.4353	-3.3	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	48.9	1.332	1.302	-2.3	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	49.9	0.6713	0.6703	-0.2	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	49.8	0.1390	0.1385	-0.4	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	48.1	1.896	1.825	-3.7	NA	± 20 %	Average RF
2-Hexanone	50.0	54.7	0.1416	0.1548	9.3	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	49.1	2.236	2.193	-1.9	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	52.0	2.086	2.169	4.0	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	52.5	0.1899	0.1995	5.1	NA	± 20 %	Average RF
Acetone	50.0	51.8	0.09920	0.1028	3.6	NA	± 20 %	Average RF
Benzene	50.0	47.6	1.231	1.172	-4.8	NA	± 20 %	Average RF
Bromobenzene	50.0	49.7	0.7355	0.7306	-0.7	NA	± 20 %	Average RF
Bromochloromethane	50.0	46.5	0.2832	0.2634	-7.0	NA	± 20 %	Average RF
Bromodichloromethane	50.0	51.8	0.3677	0.3806	3.5	NA	± 20 %	Average RF
Bromoform	50.0	54.9	0.2840	0.3120	9.9	NA	± 20 %	Average RF
Bromomethane	50.0	42.1	0.2881	0.2428	-15.7	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	50.0	0.1199	0.1199	0.0	NA	± 20 %	Average RF
Chlorobenzene	50.0	49.3	0.8701	0.8584	-1.3	NA	± 20 %	Average RF
Chloroethane	50.0	49.1	0.2851	0.2802	-1.7	NA	± 20 %	Average RF
Chloroform	50.0	45.9	0.8292	0.7613	-8.2	NA	± 20 %	Average RF
Chloromethane	50.0	42.3	0.5146	0.4350	-15.5	NA	± 20 %	Average RF
Dibromochloromethane	50.0	55.2	0.2588	0.2855	10.3	NA	± 20 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM-1Q 2014/748810-03000

Service Request: R1402225
Date Analyzed: 4/10/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\041014\J4649.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 387653
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	47.1	0.5939	0.5590	-5.9	NA	± 20 %	Average RF
Methylene Chloride	50.0	43.7	0.4753	0.4155	-12.6	NA	± 20 %	Average RF
Ethylbenzene	50.0	50.4	0.4636	0.4674	0.8	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	53.7	0.3218	0.3455	7.4	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	50.3	2.581	2.598	0.6	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	47.5	1.153	1.096	-5.0	NA	± 20 %	Average RF
Naphthalene	50.0	54.2	1.327	1.439	8.4	NA	± 20 %	Average RF
Styrene	50.0	53.9	0.8888	0.9581	7.8	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	51.9	0.2583	0.2682	3.8	NA	± 20 %	Average RF
Toluene	50.0	49.4	1.269	1.254	-1.2	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	51.8	0.2982	0.3089	3.6	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	49.7	0.7340	0.7295	-0.6	NA	± 20 %	Average RF
Vinyl Chloride	50.0	50.7	0.4781	0.4843	1.3	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	46.3	0.5073	0.4694	-7.5	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	52.3	0.4363	0.4561	4.6	NA	± 20 %	Average RF
m,p-Xylenes	100	104	0.5448	0.5657	3.8	NA	± 20 %	Average RF
n-Butylbenzene	50.0	51.0	1.881	1.919	2.0	NA	± 20 %	Average RF
n-Propylbenzene	50.0	49.1	3.020	2.963	-1.9	NA	± 20 %	Average RF
o-Xylene	50.0	50.6	0.5559	0.5629	1.3	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	49.8	2.467	2.457	-0.4	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	49.5	1.773	1.755	-1.0	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	46.1	0.4546	0.4194	-7.7	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	56.0	0.3517	0.3939	12.0	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	50.1	0.4538	0.4546	0.2	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.9	0.2895	0.2948	1.8	NA	± 20 %	Average RF
Toluene-d8	50.0	49.2	1.216	1.198	-1.5	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:58:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

KR 4/10/14

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	89	0.00
2	P	Dichlorodifluoromethane	0.5939	0.5590	5.9	83	0.00
3	P	Chloromethane	0.5146	0.4350	15.5	76	0.00
4	P	Vinyl Chloride	0.4781	0.4843	-1.3	92	0.00
5	P	Bromomethane	0.2881	0.2428	15.7	83	0.00
6	P	Chloroethane	0.2851	0.2802	1.7	93	0.00
7		Freon 21	0.7211	0.7956	-10.3	103	0.00
8	P	Trichlorofluoromethane	0.7340	0.7295	0.6	92	0.00
9		Diethyl Ether	0.3614	0.3176	12.1	83	0.00
10		Freon 123a	0.5388	0.5070	5.9	89	0.00
11		Freon 123	0.6154	0.5836	5.2	90	0.00
12		Acrolein	0.0172	0.0458	~~-89.2 -166.3#~~	269#	0.00
13	P	1,1-Diclethene	0.3628	0.3325	8.4	83	0.00
14	P	Freon 113	0.3971	0.3831	3.5	90	0.00
15	P	Acetone	0.0992	0.1028	-3.6	98	0.00
16		2-Propanol	0.0161	0.0181	-12.4	94	0.02
17		Iodomethane	0.4820	0.3939	18.3	62	0.00
18	P	Carbon Disulfide	1.2620	1.1113	11.9	75	0.00
19		Acetonitrile	0.0162	0.0143	11.7	81	0.01
20		Allyl Chloride	0.2488	0.2267	8.9	81	0.00
21	P	Methyl Acetate	0.2234	0.2134	4.5	86	0.00
22	P	Methylene Chloride	0.4753	0.4155	12.6	83	0.00
23		TBA	0.0277	0.0314	-13.4	95	0.01
24		Acrylonitrile	0.1111	0.1041	6.3	81	0.00
25	P	Methyl-t-Butyl Ether	1.1534	1.0959	5.0	87	0.00
26	P	trans-1,2-Dichloroethene	0.4546	0.4194	7.7	85	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.8461	0.7554	10.7	82	0.00
29		Vinyl Acetate	0.0753	0.0702	6.8	76	0.00
30		DIPE	1.6481	1.4668	11.0	79	0.00
31		2-Chloro-1,3-Butadiene	0.7288	0.6479	11.1	72	0.00
32		ETBE	1.3791	1.3310	3.5	84	0.00
33		2,2-Dichloropropane	0.6713	0.6703	0.1	89	0.00
34	P	cis-1,2-Dichloroethene	0.5073	0.4694	7.5	84	0.00
35	P	2-Butanone	0.1390	0.1385	0.4	87	0.00
36		Propionitrile	0.0401	0.0395	1.5	82	0.00
37		Bromochloromethane	0.2832	0.2634	7.0	89	0.00
38		Methacrylonitrile	0.1295	0.1200	7.3	79	0.00
39		Tetrahydrofuran	0.0972	0.0907	6.7	83	0.00
40	P	Chloroform	0.8292	0.7613	8.2	87	0.00
41	P	1,1,1-Trichloroethane	0.7112	0.6910	2.8	88	0.00
42		TAME	1.1643	1.1404	2.1	85	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	85	0.00
44	P	Cyclohexane	0.2705	0.2680	0.9	90	0.00
45	s	surr4,Dibrflmethane	0.2895	0.2948	-1.8	86	0.00
46	P	Carbontetrachloride	0.1199	0.1199	0.0	88	0.00
47		1,1-Dichloropropene	0.3693	0.3690	0.1	85	0.00

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:58:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
48	s	surr1,1,2-dichloroethane-d4	0.3297	0.3353	-1.7	87	0.00
49	P	Benzene	1.2310	1.1723	4.8	82	0.00
50	P	1,2-Dichloroethane	0.3737	0.3708	0.8	87	0.00
51		Iso-Butyl Alcohol	0.0085	0.0090	-5.9	87	0.02
52		n-Heptane	0.3075	0.2958	3.8	86	0.00
53		1-Butanol	0.0046	0.0056	-21.7#	92	0.01
54	P	Trichloroethene	0.2982	0.3089	-3.6	90	0.00
55	P	Methylcyclohexane	0.3206	0.3258	-1.6	93	0.00
56	P	1,2-Diclpropane	0.3148	0.2934	6.8	80	0.00
57		Dibromomethane	0.1497	0.1526	-1.9	86	0.00
58		1,4-Dioxane	0.0021	0.0020	4.8	87	0.02
59		Methyl Methacrylate	0.1481	0.1567	-5.8	85	0.00
60	P	Bromodichloromethane	0.3677	0.3806	-3.5	86	0.00
61		2-Nitropropane	0.0395	0.0443	-12.2	90	0.00
62		2-Chloroethylvinyl Ether	0.1412	0.1303	7.7	74	0.00
63	P	cis-1,3-Dichloropropene	0.4363	0.4561	-4.5	83	0.00
64	P	4-Methyl-2-pentanone	0.1899	0.1995	-5.1	84	0.00
65	s	SURR3,Toluene-d8	1.2163	1.1977	1.5	83	0.00
66	P	Toluene	1.2692	1.2542	1.2	84	0.00
67	P	trans-1,3-Dichloropropene	0.3517	0.3939	-12.0	87	0.00
68		Ethyl Methacrylate	0.2861	0.3228	-12.8	85	0.00
69	P	1,1,2-Trichloroethane	0.2220	0.2235	-0.7	85	0.00
70	s	SURR2,BFB	0.4538	0.4546	-0.2	84	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	85	0.00
72	P	Tetrachloroethene	0.2583	0.2682	-3.8	95	0.00
73	P	2-Hexanone	0.1416	0.1548	-9.3	87	0.00
74		1,3-Dichloropropane	0.4501	0.4353	3.3	84	0.00
75	P	Dibromochloromethane	0.2588	0.2855	-10.3	88	0.00
76		N-Butyl Acetate	0.3502	0.3717	-6.1	85	0.00
77	P	1,2-Dibromoethane	0.2312	0.2432	-5.2	88	0.00
78	P	Chlorobenzene	0.8701	0.8584	1.3	87	0.00
79		3-CBTF	0.4304	0.4748	-10.3	96	0.00
80		4-CBTF	0.3856	0.4311	-11.8	93	0.00
81		1,1,1,2-Tetrachloroethane	0.3058	0.3252	-6.3	89	0.00
82	P	Ethylbenzene	0.4636	0.4674	-0.8	86	0.00
83	P	(m+p)Xylene	0.5448	0.5657	-3.8	87	0.00
84	P	o-Xylene	0.5559	0.5629	-1.3	87	0.00
85	P	Styrene	0.8888	0.9581	-7.8	86	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	88	0.00
87	P	Bromoform	0.2840	0.3120	-9.9	88	0.00
88		2-CBTF	0.8330	0.8911	-7.0	95	0.00
89	P	Isopropylbenzene	2.5815	2.5977	-0.6	88	0.00
90		Cyclohexanone	0.0401	0.0494	-23.2#	110	0.00
91		trans-1,4-Dichloro-2-Butene	0.1346	0.1469	-9.1	86	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5726	0.5408	5.6	85	0.00
93		Bromobenzene	0.7355	0.7306	0.7	92	0.00

W031214.M Thu Apr 10 11:59:39 2014 00526 Page: 2

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:58:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial 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)
94		1,2,3-Trichloropropane	0.1713	0.1681	1.9	89	0.00
95		n-Propylbenzene	3.0196	2.9627	1.9	87	0.00
96		2-Chlorotoluene	1.8965	1.8254	3.7	87	0.00
97		3-Chlorotoluene	1.9725	1.9406	1.6	87	0.00
98		4-Chlorotoluene	2.2360	2.1933	1.9	88	0.00
99		1,3,5-Trimethylbenzene	2.1057	2.1380	-1.5	89	0.00
100		tert-Butylbenzene	1.7725	1.7554	1.0	90	0.00
101		1,2,4-Trimethylbenzene	2.1665	2.1663	0.0	86	0.00
102		3,4-DCBTF	0.6160	0.6498	-5.5	92	0.00
103		sec-Butylbenzene	2.4668	2.4565	0.4	90	0.00
104		p-Isopropyltoluene	2.0860	2.1688	-4.0	91	0.00
105	P	1,3-Dclbenz	1.2519	1.2908	-3.1	92	0.00
106	P	1,4-Dclbenz	1.3322	1.3020	2.3	91	0.00
107		2,4-DCBTF	0.5359	0.5894	-10.0	94	0.00
108		2,5-DCBTF	0.6128	0.6559	-7.0	93	0.00
109		n-Butylbenzene	1.8808	1.9192	-2.0	89	0.00
110	P	1,2-Dclbenz	1.2055	1.2303	-2.1	91	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0877	0.0992	-13.1	93	0.00
112		Trielution Dichlorotoluene	0.9535	0.9936	-4.2	88	0.00
113		1,3,5 Trichlorobenzene	0.8315	0.9017	-8.4	93	0.00
114		Coelution Dichlorotoluene	1.0096	1.0845	-7.4	90	0.00
115	P	1,2,4-Tcbenzene	0.7372	0.7763	-5.3	95	0.00
116		Hexachlorobt	0.3218	0.3455	-7.4	97	0.00
117		Naphthalen	1.3273	1.4390	-8.4	90	0.00
118		1,2,3-Tclbenzene	0.6036	0.6421	-6.4	99	0.00
119		2,4,5-Trichlorotolene	0.3978	0.4198	-5.5	92	0.00
120		2,3,6-Trichlorotoluene	0.3641	0.3811	-4.7	89	0.00

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

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12 RQ1403454-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:48:24 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	834712	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1231191	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1138266	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	592812	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	362894	50.91	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.82%				
48) surr1,1,2-dichloroetha...	4.658	65	412817	50.84	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 101.68%				
65) SURR3,Toluene-d8	7.322	98	1474612	49.24	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.48%				
70) SURR2,BFB	9.791	95	559728	50.09	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	466601	47.06	ppb		99
3) Chloromethane	1.256	50	363100	42.26	ppb		99
4) Vinyl Chloride	1.323	62	404244	50.65	ppb		99
5) Bromomethane	1.512	94	202704	42.14	ppb		99
6) Chloroethane	1.567	64	233915	49.14	ppb		99
7) Freon 21	1.664	67	664086	55.17	ppb		98
8) Trichlorofluoromethane	1.719	101	608936	49.70	ppb		99
9) Diethyl Ether	1.878	59	265121	43.94	ppb		96
10) Freon 123a	1.865	67	423197	47.05	ppb		90
11) Freon 123	1.902	83	487113	47.41	ppb		96
12) Acrolein	1.951	56	191120	472.94	ppb		93
13) 1,1-Diclethene	2.036	96	277519	45.82	ppb		95
14) Freon 113	2.036	101	319740	48.23	ppb		84
15) Acetone	2.048	43	85823	51.82	ppb		98
16) 2-Propanol	2.140	45	301391	1121.43	ppb		99
17) Iodomethane	2.146	142	328784	40.86	ppb		95
18) Carbon Disulfide	2.207	76	927622	44.03	ppb		99
19) Acetonitrile	2.231	40	59780	220.74	ppb		94
20) Allyl Chloride	2.274	76	189219	45.56	ppb		96
21) Methyl Acetate	2.274	43	178157	47.77	ppb		98
22) Methylene Chloride	2.353	84	346831	43.71	ppb		98
23) TBA	2.420	59	524164	1132.38	ppb		96
24) Acrylonitrile	2.524	53	434441	234.15	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	914737	47.51	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	350088	46.13	ppb		97
28) 1,1-Diclethane	2.938	63	630535	44.64	ppb		99
29) Vinyl Acetate	2.975	86	58588	46.58	ppb	#	82
30) DIPE	3.012	45	1224339	44.50	ppb		98
31) 2-Chloro-1,3-Butadiene	3.036	53	540799	44.45	ppb		91
32) ETBE	3.396	59	1110969	48.26	ppb		98
33) 2,2-Dichloropropane	3.554	77	559503	49.92	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	391818	46.26	ppb		96
35) 2-Butanone	3.548	43	115571	49.81	ppb		97
36) Propionitrile	3.597	54	165038	246.34	ppb		99
37) Bromochloromethane	3.828	130	219839	46.49	ppb	#	86

KR 4/10/14

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:48:24 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	100141	46.33	ppb		100
39) Tetrahydrofuran	3.908	42	75676	46.66	ppb		73
40) Chloroform	3.938	83	635462	45.91	ppb		98
41) 1,1,1-Trichloroethane	4.213	97	576816	48.58	ppb		88
42) TAME	5.023	73	951880	48.97	ppb		98
44) Cyclohexane	4.316	41	329922	49.53	ppb		98
46) Carbontetrachloride	4.469	121	147592	50.00	ppb		100
47) 1,1-Dichloropropene	4.463	75	454263	49.96	ppb		93
49) Benzene	4.779	78	1443377	47.62	ppb		98
50) 1,2-Dichloroethane	4.786	62	456484	49.60	ppb		96
51) Iso-Butyl Alcohol	4.658	43	221597	1063.94	ppb		96
52) n-Heptane	5.328	43	364185	48.09	ppb		98
53) 1-Butanol	5.785	56	346122	3025.89	ppb		97
54) Trichloroethene	5.828	130	380372	51.81	ppb		94
55) Methylcyclohexane	6.109	55	401111	50.81	ppb		99
56) 1,2-Diclpropane	6.115	63	361235	46.60	ppb		99
57) Dibromomethane	6.255	93	187924	50.97	ppb		94
58) 1,4-Dioxane	6.334	88	~~44731~~	~~881.19~~	ppb	0481.44	77
59) Methyl Methacrylate	6.328	69	192951	52.90	ppb		90
60) Bromodichloromethane	6.480	83	468651	51.76	ppb		95
61) 2-Nitropropane	6.743	41	109108	112.06	ppb		84
62) 2-Chloroethylvinyl Ether	6.877	63	160395	46.14	ppb		98
63) cis-1,3-Dichloropropene	7.023	75	561607	52.28	ppb		96
64) 4-Methyl-2-pentanone	7.212	43	245644	52.54	ppb		99
66) Toluene	7.395	91	1544099	49.41	ppb		98
67) trans-1,3-Dichloropropene	7.627	75	484911	56.00	ppb		99
68) Ethyl Methacrylate	7.767	69	397377	56.41	ppb		98
69) 1,1,2-Trichloroethane	7.809	97	275152	50.33	ppb		97
72) Tetrachloroethene	7.962	164	305279	51.92	ppb		99
73) 2-Hexanone	8.084	43	176195	54.65	ppb		98
74) 1,3-Dichloropropane	7.974	76	495433	48.35	ppb		95
75) Dibromochloromethane	8.187	129	324946	55.15	ppb		99
76) N-Butyl Acetate	8.236	43	423052	53.07	ppb		97
77) 1,2-Dibromoethane	8.285	107	276787	52.58	ppb		99
78) Chlorobenzene	8.767	112	977121	49.33	ppb		97
79) 3-CBTF	8.785	180	540399	55.15	ppb		97
80) 4-CBTF	8.840	180	490683	55.89	ppb		99
81) 1,1,1,2-Tetrachloroethane	8.852	131	370151	53.18	ppb		97
82) Ethylbenzene	8.888	106	532064	50.42	ppb		97
83) (m+p)Xylene	8.998	106	1287824	103.84	ppb		97
84) o-Xylene	9.346	106	640749	50.63	ppb		95
85) Styrene	9.352	104	1090574	53.90	ppb		98
87) Bromoform	9.492	173	184954	54.94	ppb		99
88) 2-CBTF	9.577	180	528243	53.49	ppb		95
89) Isopropylbenzene	9.675	105	1539955	50.31	ppb		98
90) Cyclohexanone	9.718	55	585346	1230.98	ppb		100
91) trans-1,4-Dichloro-2-B...	9.961	53	87073	54.57	ppb		94
92) 1,1,2,2-Tetrachloroethane	9.913	83	320574	47.22	ppb		97
93) Bromobenzene	9.913	156	433126	49.67	ppb	#	79
94) 1,2,3-Trichloropropane	9.943	110	99631	49.04	ppb	#	88
95) n-Propylbenzene	10.022	91	1756331	49.06	ppb		99
96) 2-Chlorotoluene	10.083	91	1082120	48.13	ppb		96

00529

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:48:24 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

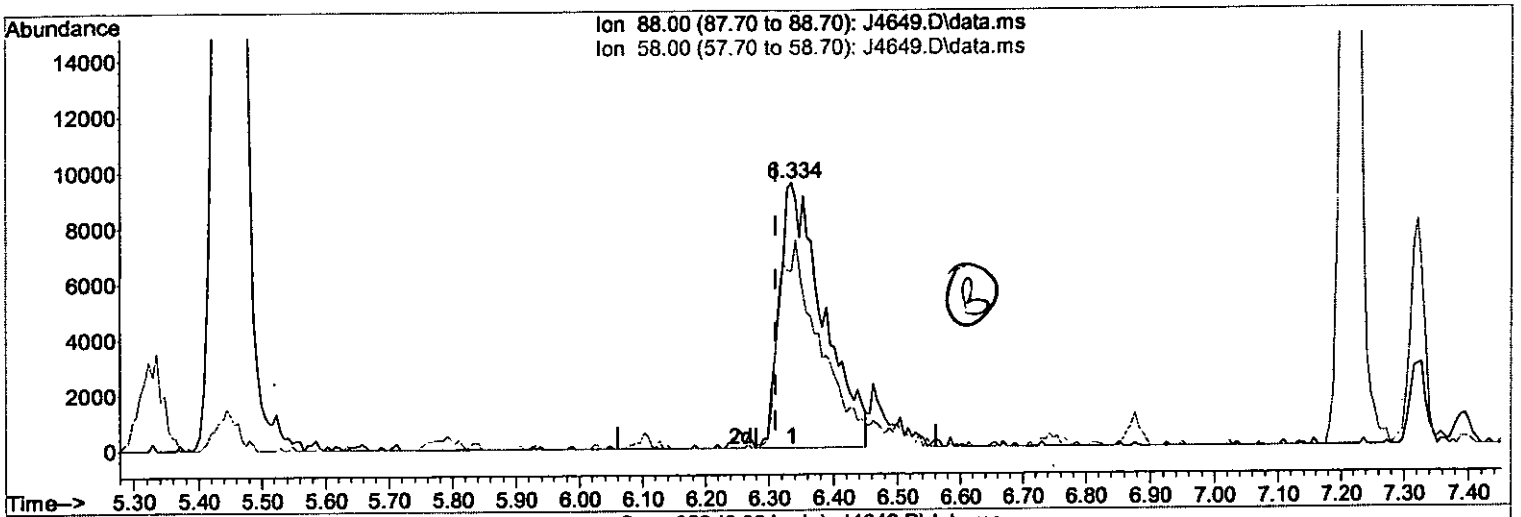
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1150401	49.19	ppb	96
98)	4-Chlorotoluene	10.175	91	1300235	49.05	ppb	96
99)	1,3,5-Trimethylbenzene	10.169	105	1267453	50.77	ppb	99
100)	tert-Butylbenzene	10.437	119	1040606	49.52	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	1284199	49.99	ppb	97
102)	3,4-DCBTF	10.534	214	385229	52.75	ppb	98
103)	sec-Butylbenzene	10.620	105	1456246	49.79	ppb	97
104)	p-Isopropyltoluene	10.742	119	1285680	51.98	ppb	98
105)	1,3-Dclbenz	10.699	146	765219	51.55	ppb	95
106)	1,4-Dclbenz	10.766	146	771848	48.87	ppb	98
107)	2,4-DCBTF	10.821	214	349417	54.99	ppb	95
108)	2,5-DCBTF	10.858	214	388818	53.52	ppb	99
109)	n-Butylbenzene	11.065	91	1137716	51.02	ppb	99
110)	1,2-Dclbenz	11.065	146	729365	51.03	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	58813	56.54	ppb	98
112)	Trielution Dichlorotol...	11.729	125	1767102	156.32	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	534533	54.22	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1285780	107.42	ppb	97
115)	1,2,4-Tcbenzene	12.156	180	460229	52.65	ppb	99
116)	Hexachlorobt	12.266	225	204825	53.69	ppb	98
117)	Naphthalen	12.302	128	853080	54.21	ppb	100
118)	1,2,3-Tclbenzene	12.437	180	380640	53.18	ppb	99
119)	2,4,5-Trichlorotolene	12.851	159	248868	52.77	ppb	97
120)	2,3,6-Trichlorotoluene	12.912	159	225922	52.34	ppb	96

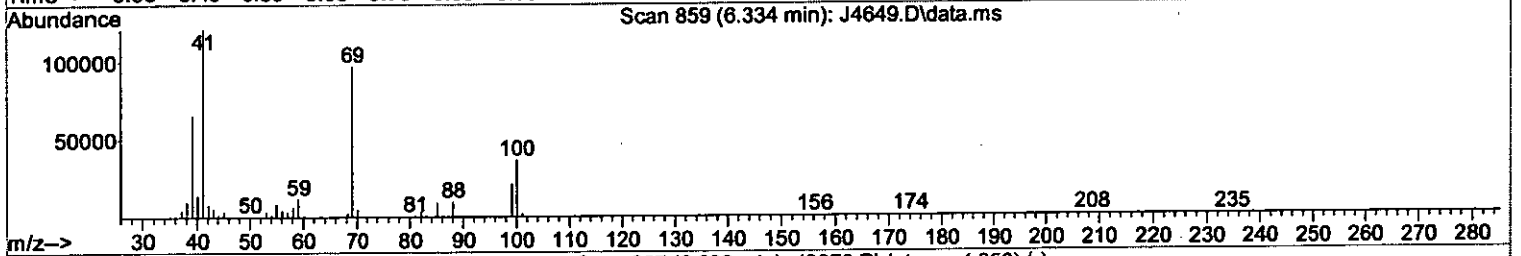
(#) = qualifier out of range (m) = manual integration (+) = signals summed

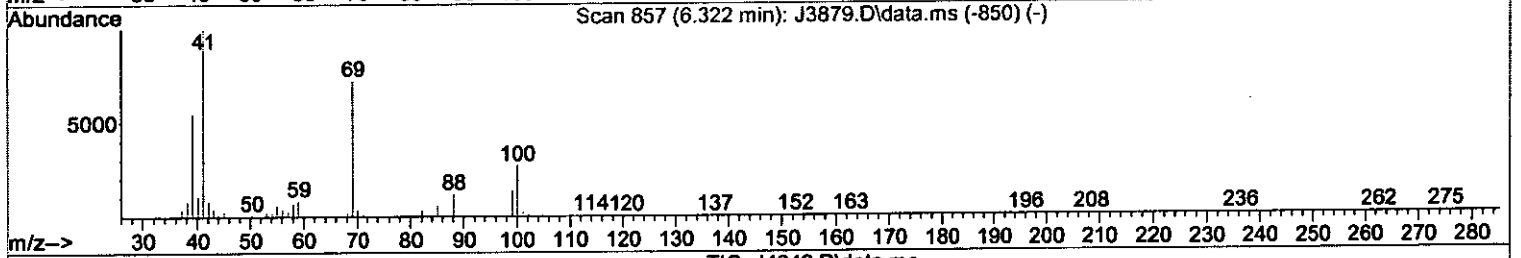
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:48:24 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4649.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.024) 881.19 ppb

response 44731

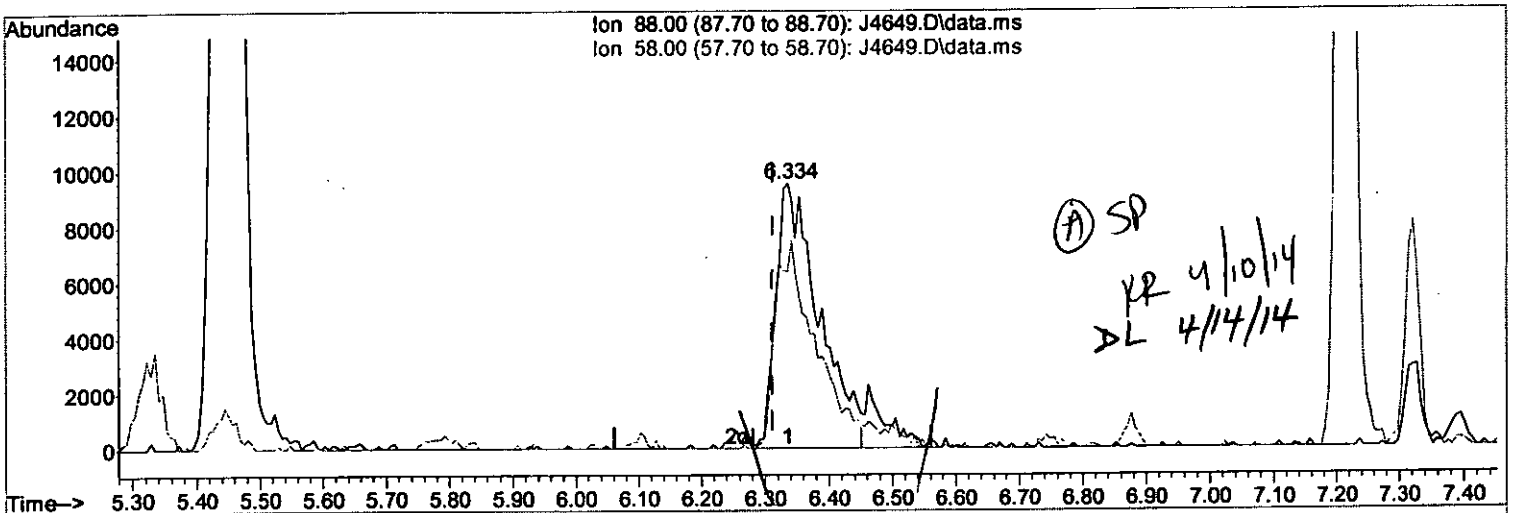
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	66.57
0.00	0.00	0.00
0.00	0.00	0.00

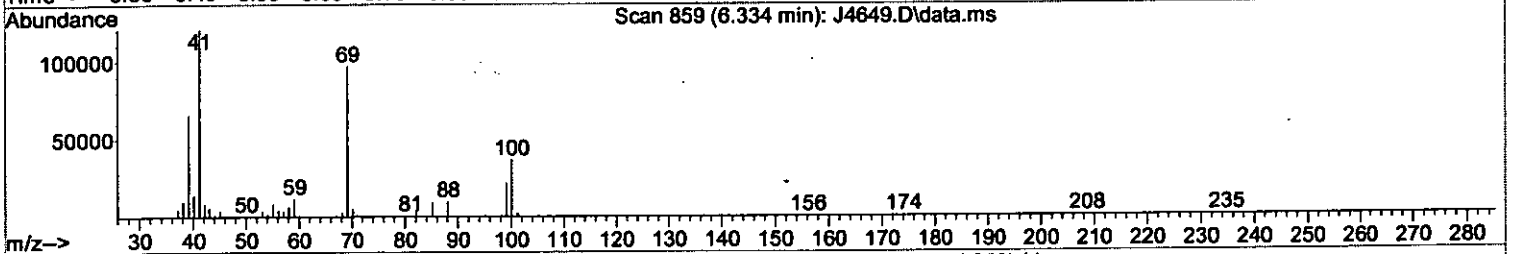
W031214.M Thu Apr 10 11:58:26 2014 00531 Page: 1

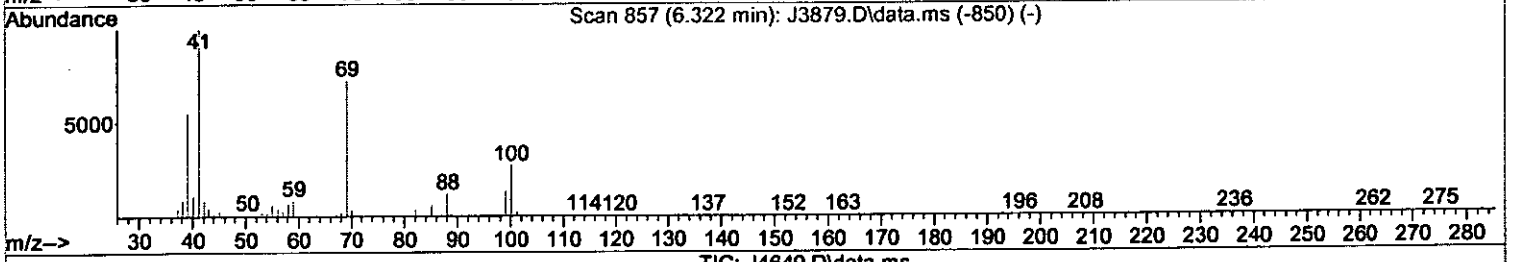
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:48:24 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4649.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.024) 984.44 ppb m

response 49972

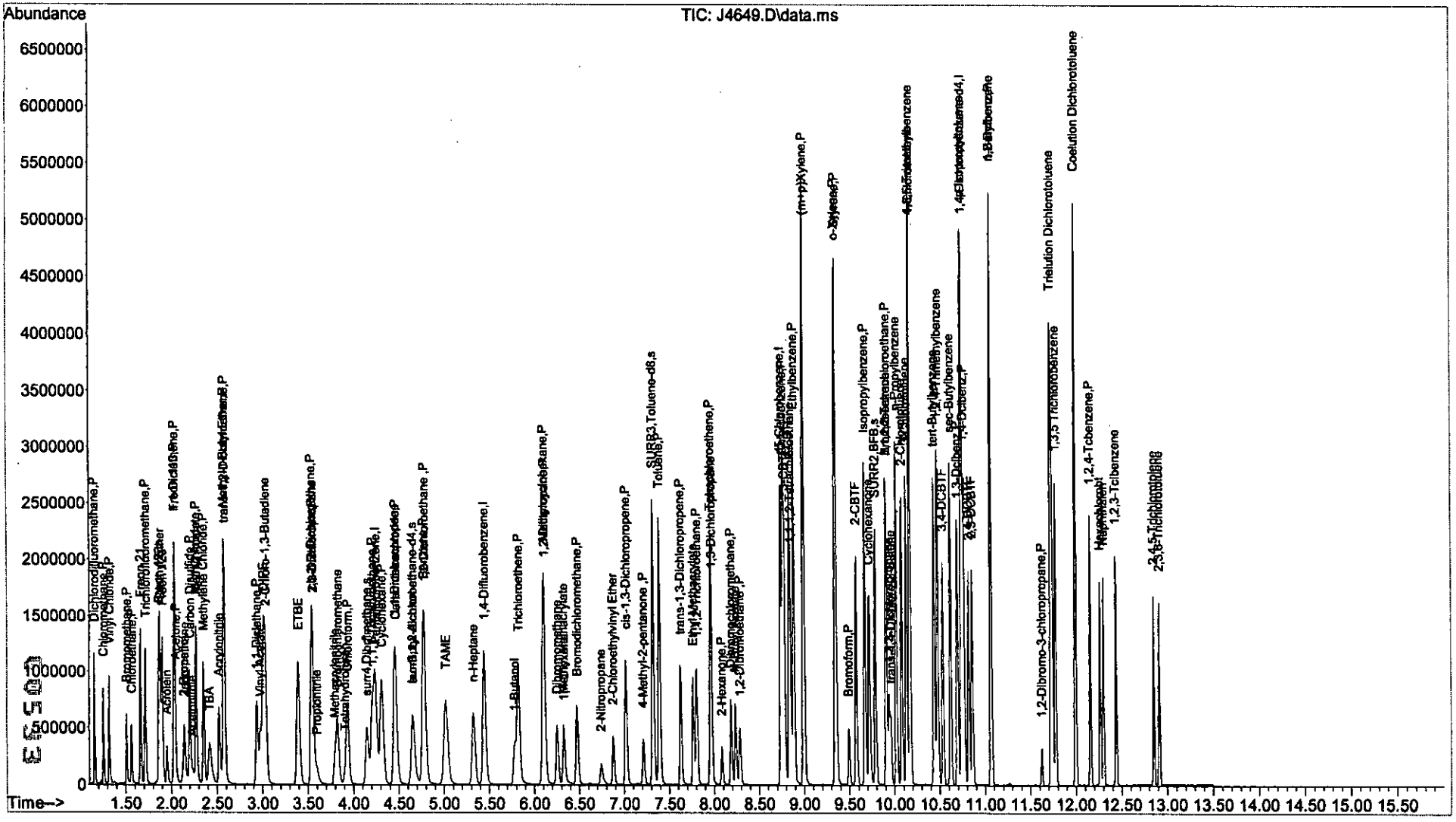
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	66.57
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Apr 10 11:58:34 2014 00532 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4649.D
Misc :
Acq On : 10 Apr 2014 11:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 11:48:24 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Thu Apr 10 11:48:30 2014 Page: 4

ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

00534

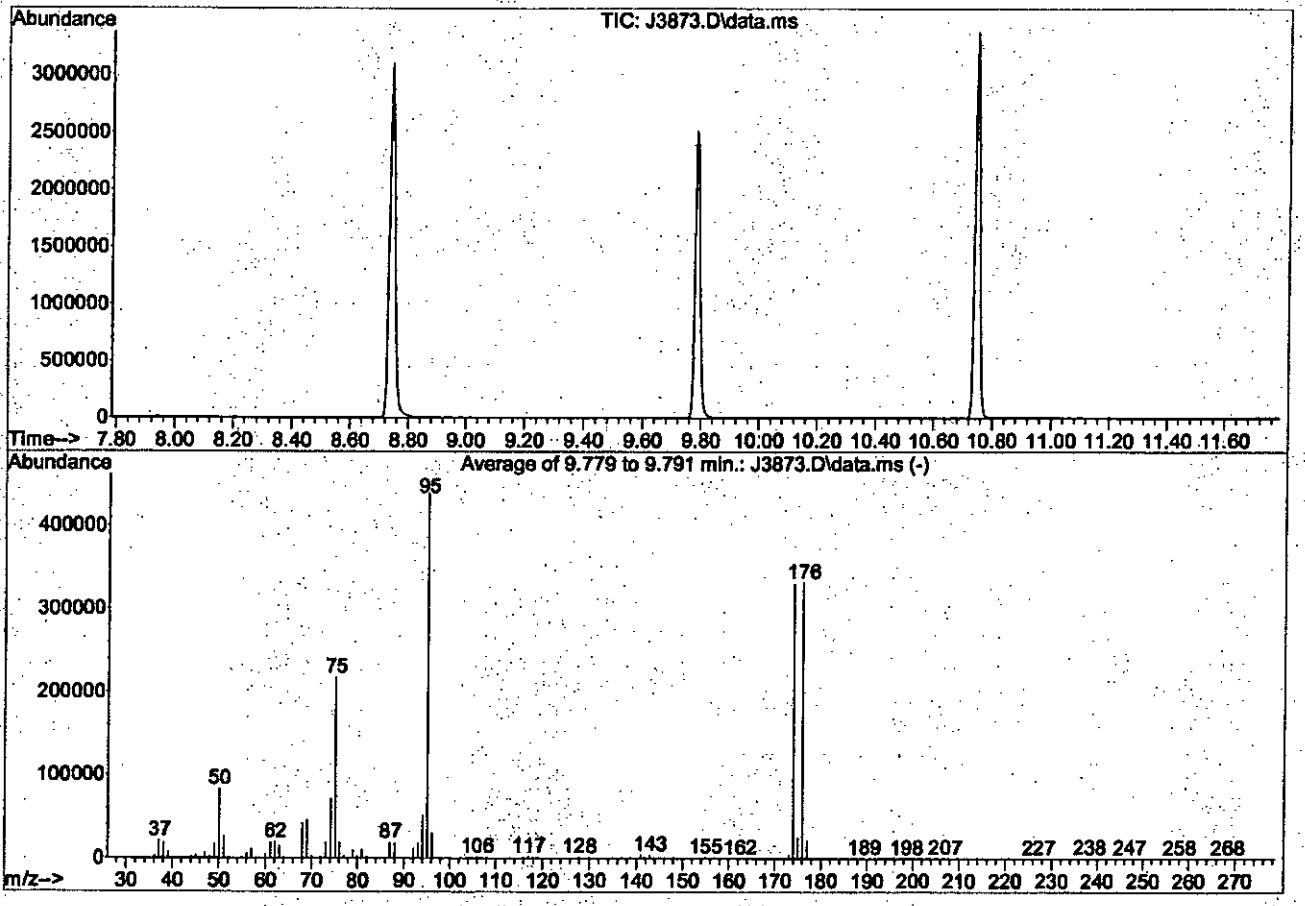
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\031214\
Data File : J3873.D
Acq On : 12 Mar 2014 9:41 am
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP60.P

KR 3/12/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Jan 16 12:02:56 2014



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	83285	PASS
75	95	30	60	49.5	217600	PASS
95	95	100	100	100.0	439232	PASS
96	95	5	9	6.8	30035	PASS
173	174	0.00	2	1.2	3907	PASS
174	95	50	120	75.2	330475	PASS
175	174	5	9	7.6	25003	PASS
176	174	95	101	100.4	331712	PASS
177	176	5	9	6.5	21696	PASS

W031214.M Wed Mar 12 10:00:02 2014 Page: 1

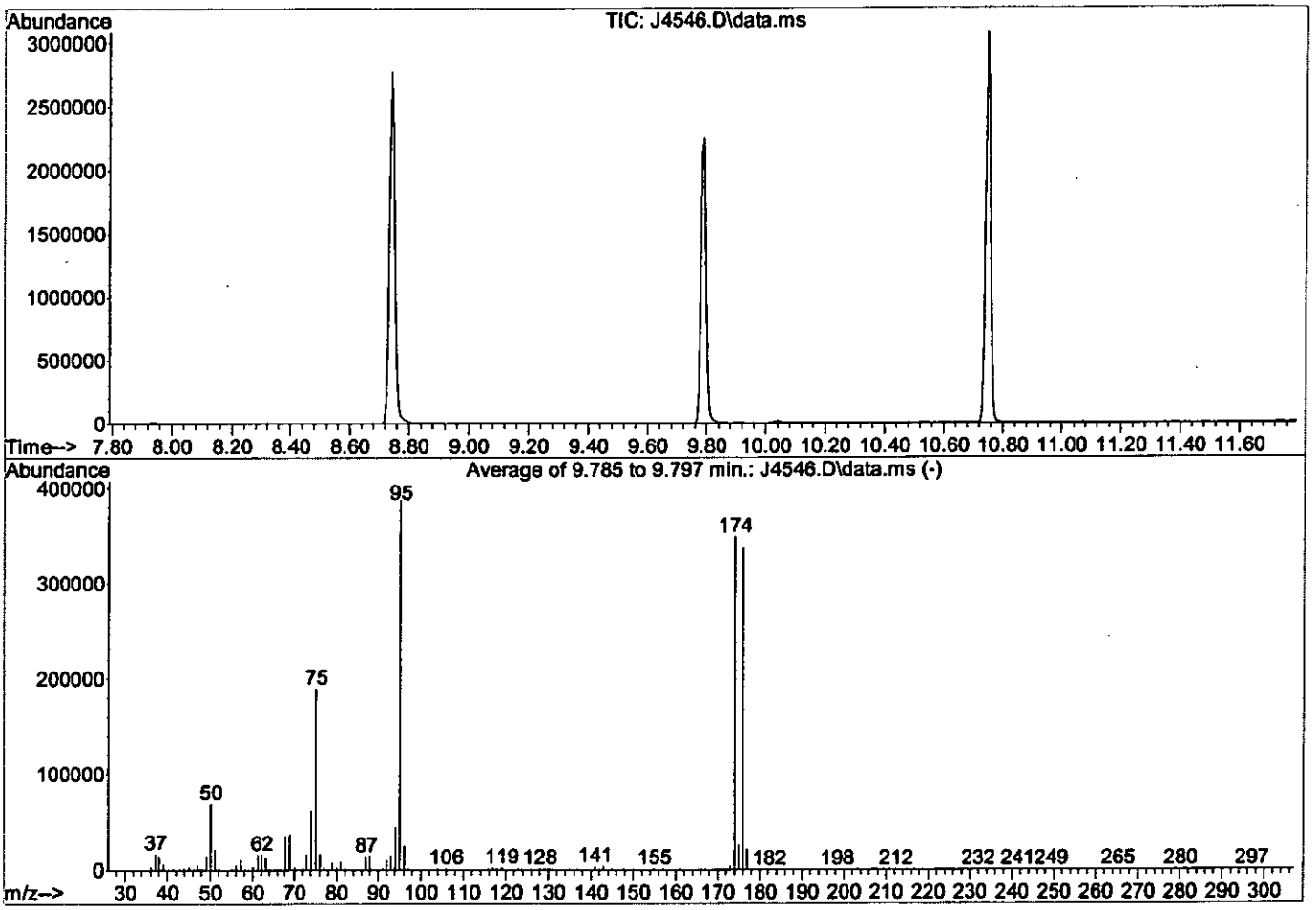
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4546.D
Acq On : 8 Apr 2014 12:40 am
Operator : K.Ruest
Sample : TUNE RQ1408255-01
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014

RPY 4/8/14



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	69123	PASS
75	95	30	60	48.9	189629	PASS
95	95	100	100	100.0	387755	PASS
96	95	5	9	6.4	24975	PASS
173	174	0.00	2	1.0	3574	PASS
174	95	50	120	89.9	348587	PASS
175	174	5	9	7.3	25477	PASS
176	174	95	101	96.9	337749	PASS
177	176	5	9	6.3	21195	PASS

W031214.M Tue Apr 08 09:47:10 2014

00536
Page: 1

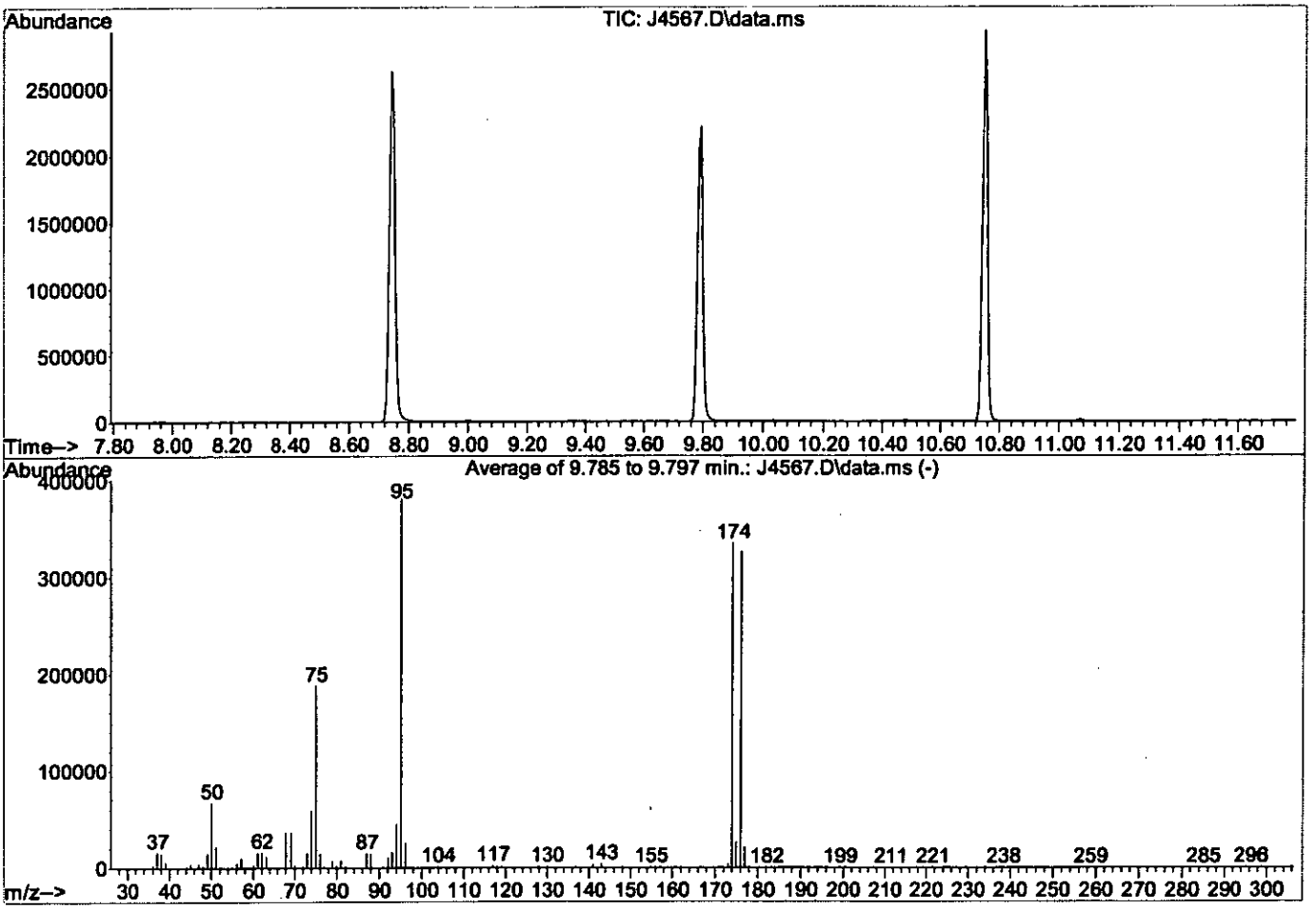
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4567.D
Acq On : 8 Apr 2014 12:00 pm
Operator : K.Ruest
Sample : TUNE RQ1403327-01
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014

KR 4/8/14



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	67157	PASS
75	95	30	60	49.3	188045	PASS
95	95	100	100	100.0	381593	PASS
96	95	5	9	6.6	25206	PASS
173	174	0.00	2	1.1	3697	PASS
174	95	50	120	87.7	334741	PASS
175	174	5	9	7.8	26040	PASS
176	174	95	101	97.4	325931	PASS
177	176	5	9	6.4	20699	PASS

W031214.M Tue Apr 08 12:27:49 2014

00537
Page: 1

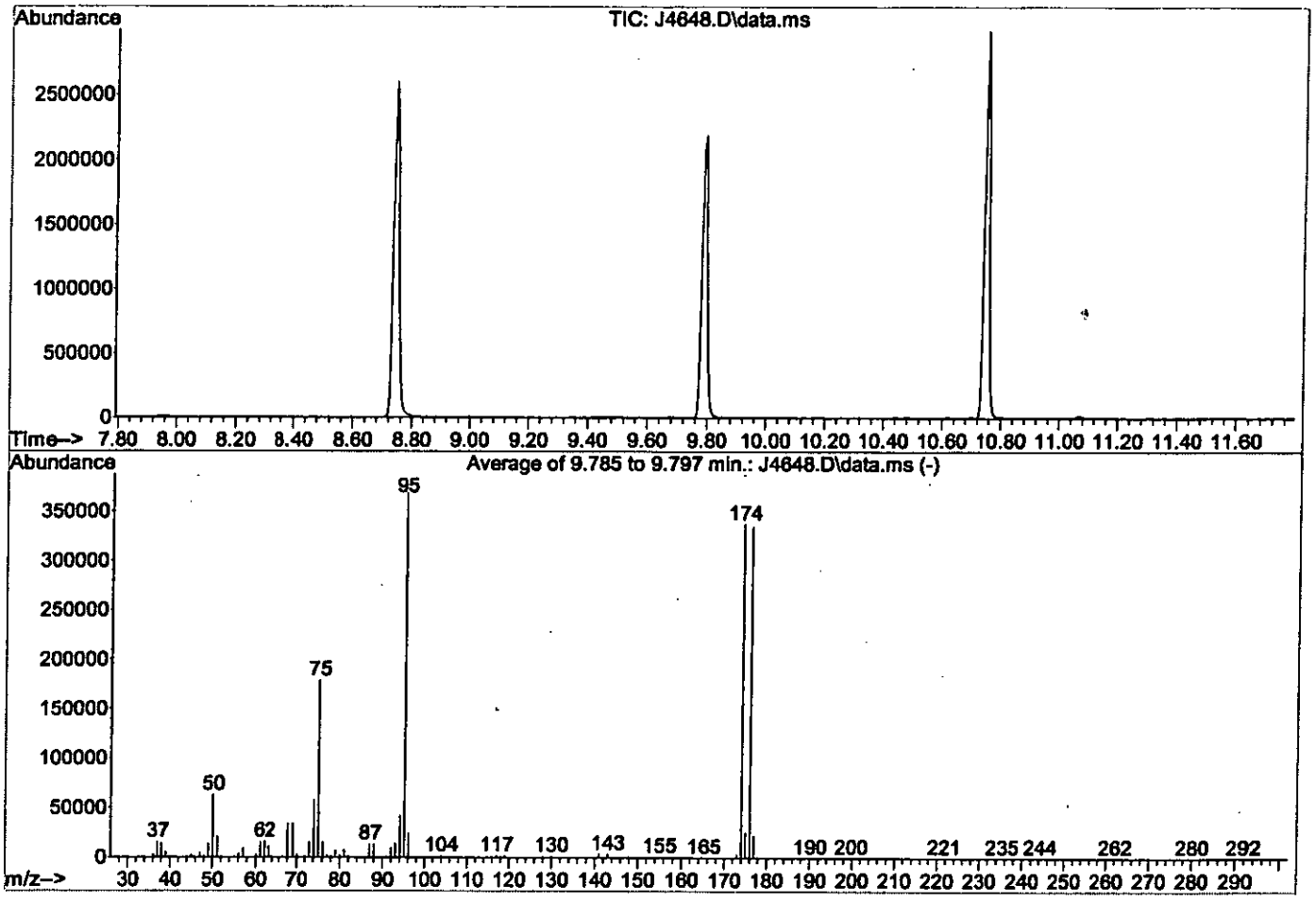
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4648.D
Acq On : 10 Apr 2014 10:54 am
Operator : K.Ruest
Sample : TUNE RQ1403451-01
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP60.P

KR 4/10/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Mar 13 11:21:13 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	63216	PASS
75	95	30	60	48.6	179173	PASS
95	95	100	100	100.0	368981	PASS
96	95	5	9	6.7	24655	PASS
173	174	0.00	2	1.0	3414	PASS
174	95	50	120	91.5	337557	PASS
175	174	5	9	7.6	25504	PASS
176	174	95	101	99.1	334677	PASS
177	176	5	9	6.6	22061	PASS

00538

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 03:22
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403255-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4551.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.42**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 03:22
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403255-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4551.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	4/8/14 03:22	
Dibromofluoromethane	99	85-115	4/8/14 03:22	
Toluene-d8	98	85-120	4/8/14 03:22	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 0322

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403255-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4551.D
Misc :
Acq On : 8 Apr 2014 3:22 am
Operator : K.Ruest
InstName : MSVOA-12 PO 1403275-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 03:37:26 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	823826	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1239658	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1162152	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	584989	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.158	113	356216	49.64	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.28%			
48) surr1,1,2-dichloroetha...	4.664	65	424105	51.88	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.76%			
65) SURR3,Toluene-d8	7.322	98	1484001	49.21	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.42%			
70) SURR2,BFB	9.791	95	571027	50.75	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.50%			
5) Bromomethane	1.524		1977	0.42 m		
Target Compounds						Qvalue
~~15) Acetone~~	~~2.048~~	~~43~~	~~377~~	~~0.23~~	~~ppb~~	~~86~~
18) Carbon Disulfide	2.207	76	4185	0.20	ppb	98 MD
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~4127~~	~~1.01~~	~~ppb #~~	~~1~~
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1296~~	~~2.76~~	~~ppb #~~	~~14~~
115) 1,2,4-Tcbenzene	12.162	180	1735	0.20	ppb	93 <
116) Hexachlorobt	12.266	225	1653	0.44	ppb	84 <
118) 1,2,3-Tclbenzene	12.437	180	1463	0.21	ppb	93 <

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

KP 4/8/14

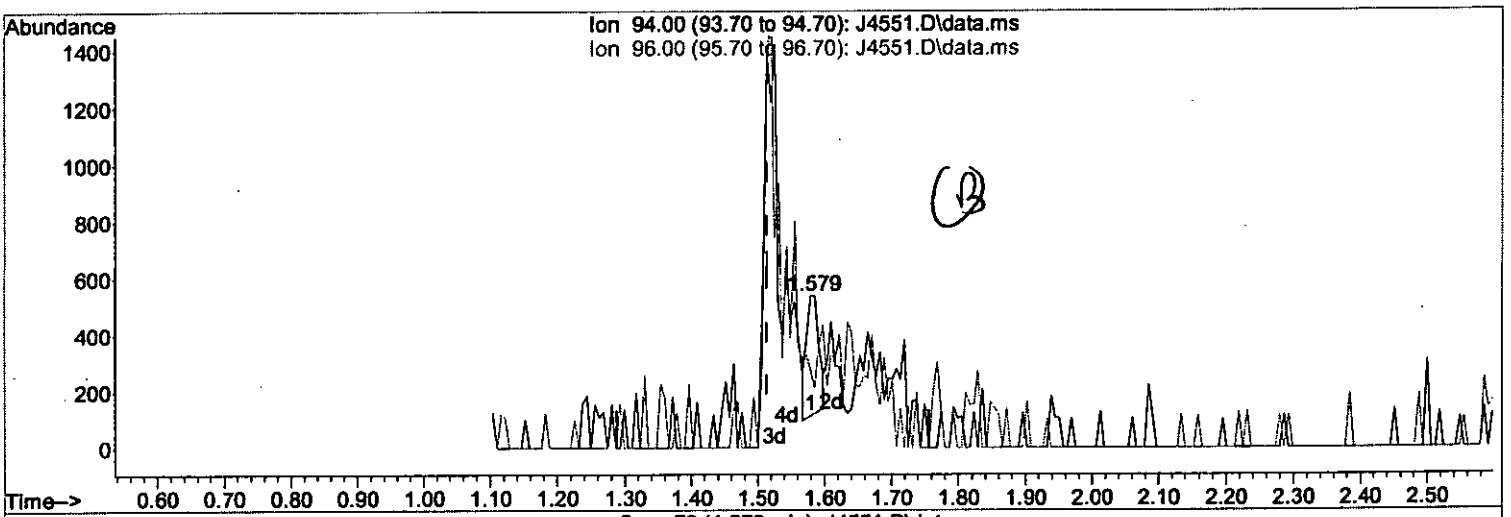
00542

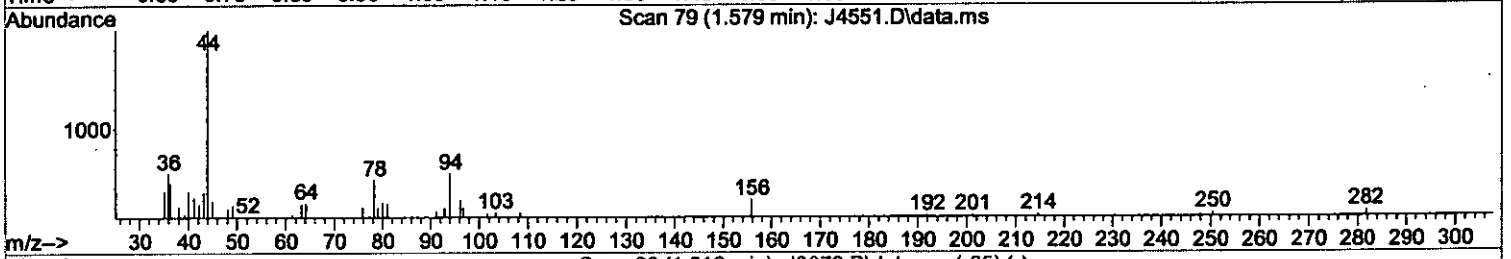
W031214.M Tue Apr 08 03:37:28 2014 Page: 1

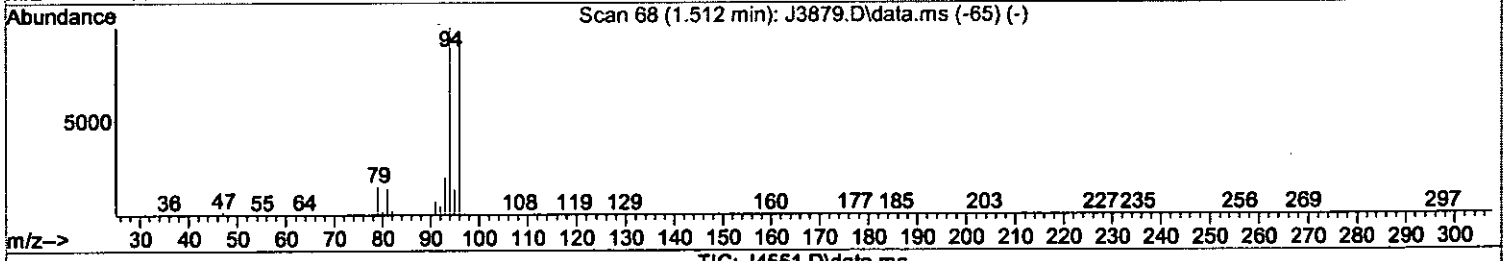
Quantitation Report (Qedit)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4551.D
Misc :
Acq On : 8 Apr 2014 3:22 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 03:37:26 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4551.D\data.ms

(5) Bromomethane (P)

1.579min (+0.067) 0.12 ppb

response 548

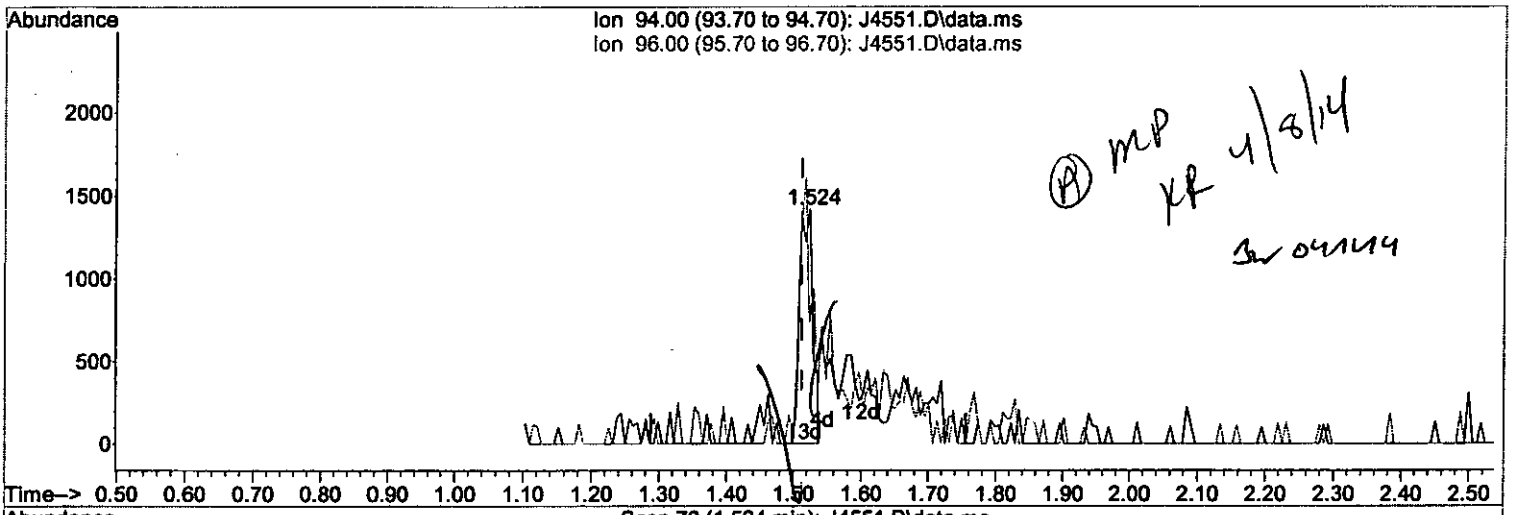
Ion	Exp%	Act%
94.00	100	100
96.00	93.80	86.09
0.00	0.00	0.00
0.00	0.00	0.00

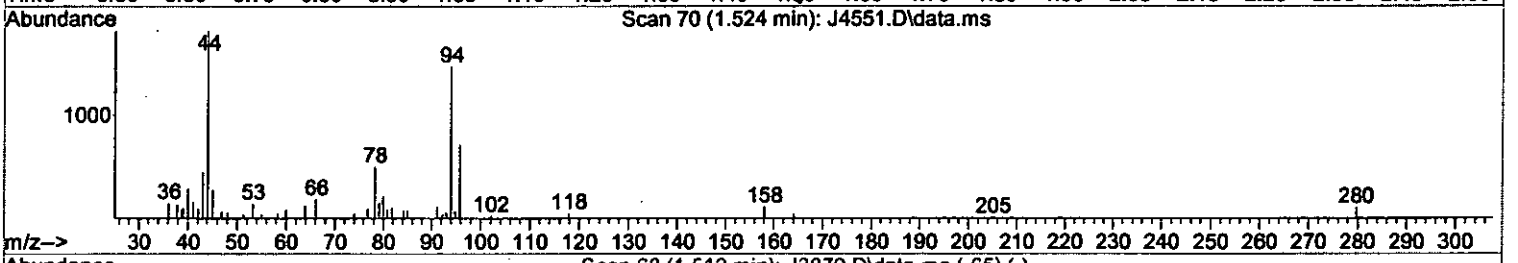
W031214.M Tue Apr 08 11:27:41 2014 00543 Page: 1

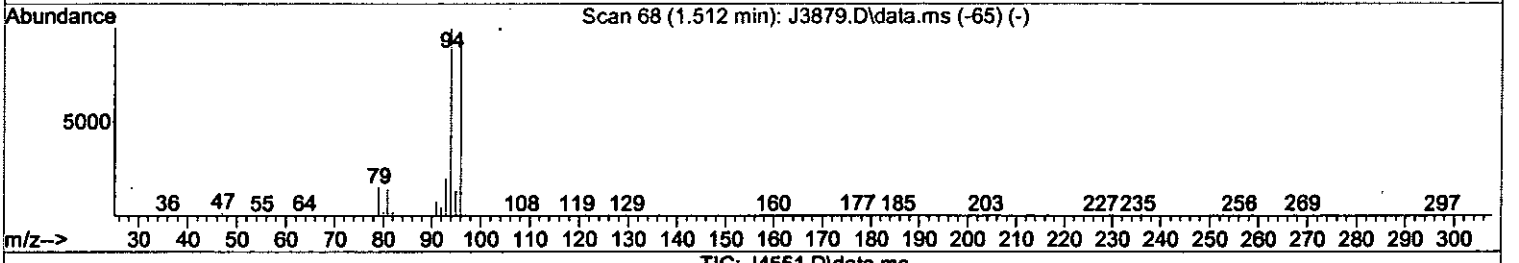
Quantitation Report (Qedit)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4551.D
Misc :
Acq On : 8 Apr 2014 3:22 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 03:37:26 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4551.D\data.ms

(5) Bromomethane (P)

1.524min (+0.012) 0.42 ppb m

response 1977

Ion	Exp%	Act%
94.00	100	100
96.00	93.80	52.08#
0.00	0.00	0.00
0.00	0.00	0.00

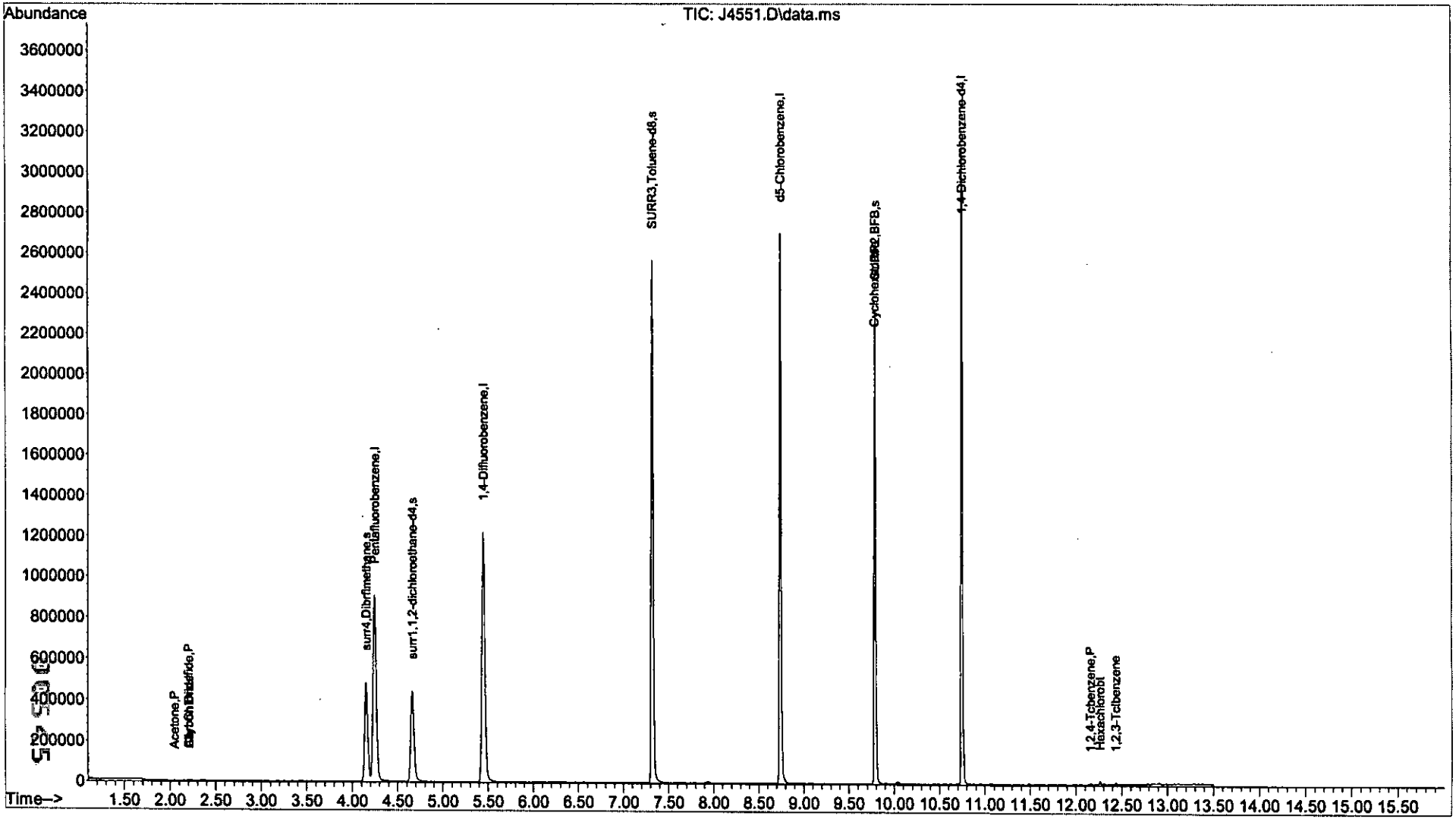
00544

W031214.M Tue Apr 08 11:27:55 2014 Page: 1

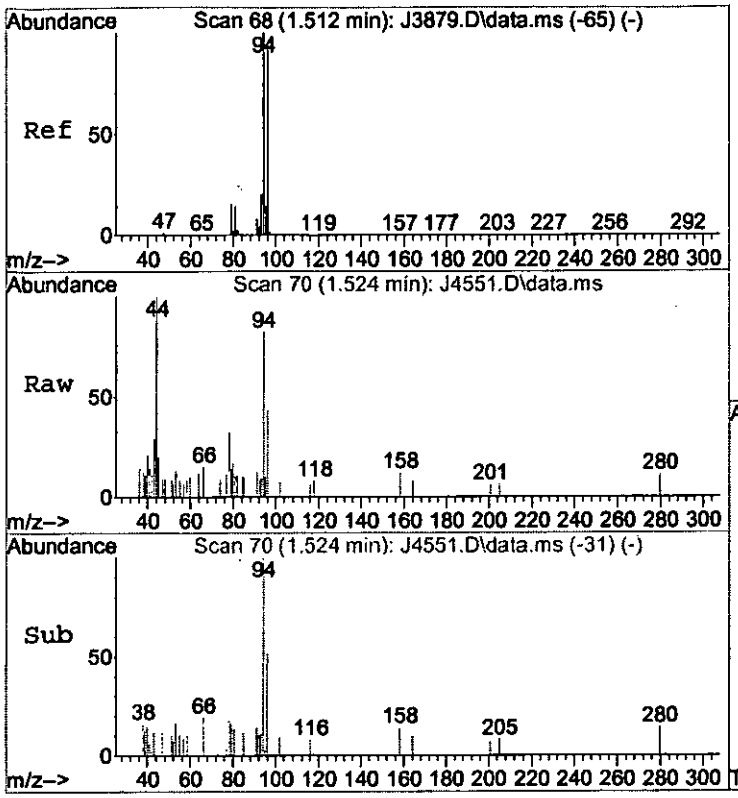
Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4551.D
Misc :
Acq On : 8 Apr 2014 3:22 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 03:37:26 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



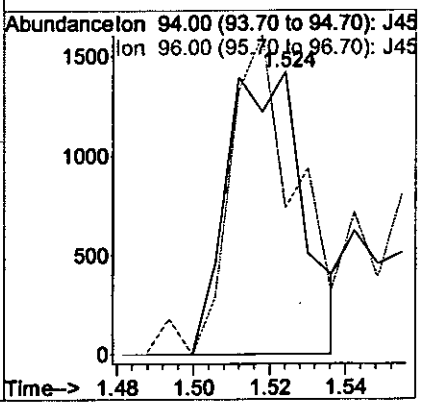
W031214.M Tue Apr 08 03:37:29 2014 Page: 2



#5
Bromomethane
Concen: 0.42 ppb m
RT: 1.524 min Scan# 70
Delta R.T. 0.012 min
Lab File: J4551.D
Acq: 8 Apr 2014 3:22 am

Tgt Ion: 94 Resp: 1977

Ion	Ratio	Lower	Upper
94	100		
96	52.1	73.8	113.8#



J4551.D W031214.M Tue Apr 08 11:34:42 2014

00546
Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4551.D
Acq On : 8 Apr 2014 3:22 am
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4551.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.158	491	502	509	rBV	485663	1166642	30.04%	5.520%
2	4.249	509	517	534	rVB	906769	2274812	58.57%	10.762%
3	4.664	575	585	598	rBV2	443181	1146364	29.52%	5.424%
4	5.450	704	714	732	rBV	1221047	2833461	72.95%	13.405%
5	7.322	1014	1021	1041	rBV	2567870	3883914	100.00%	18.375%
6	8.742	1248	1254	1270	rBV	2702708	3500741	90.13%	16.562%
7	9.791	1420	1426	1434	rBV	2318392	2799028	72.07%	13.243%
8	10.748	1578	1583	1591	rBV	3111096	3531694	90.93%	16.709%

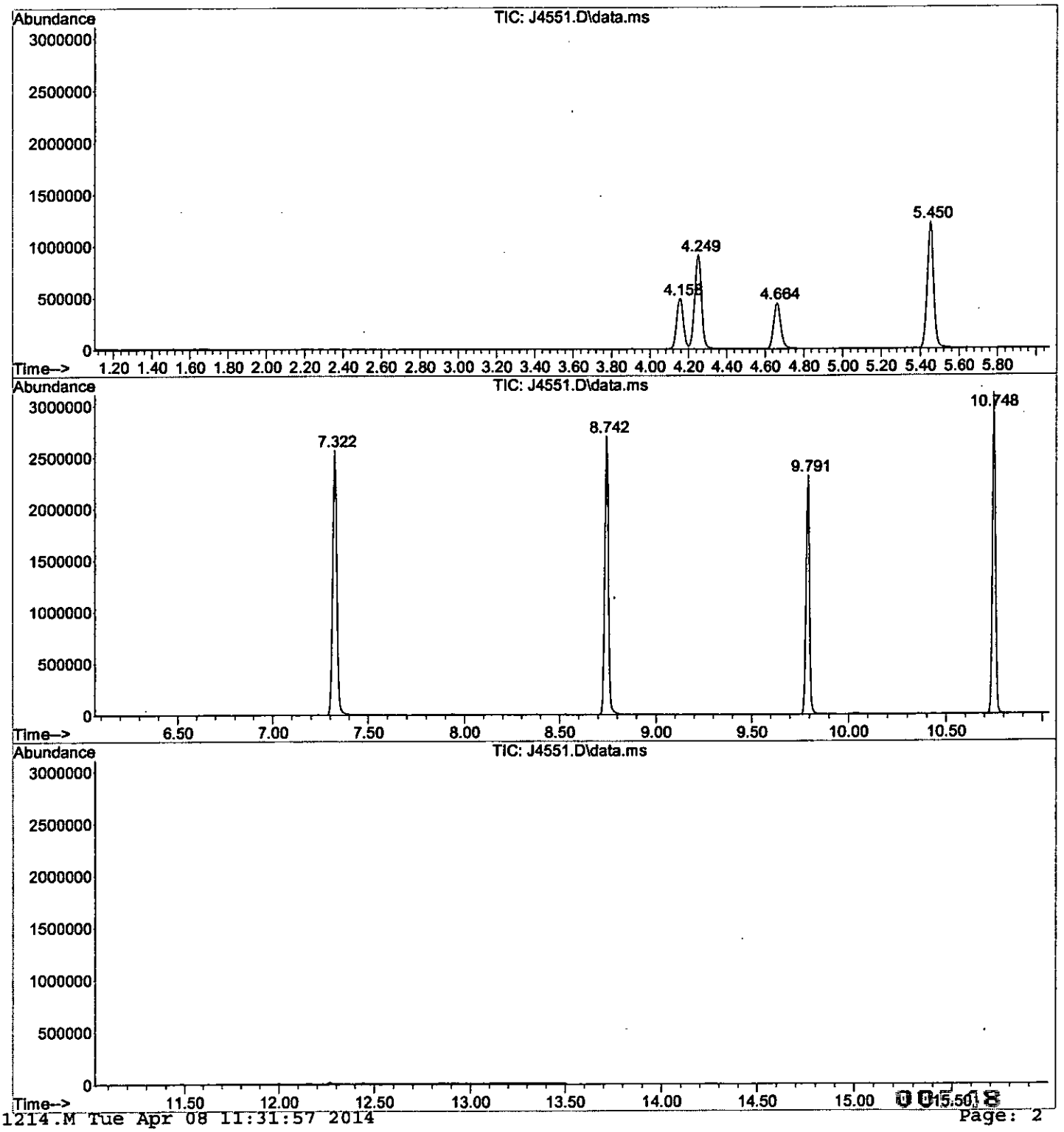
Sum of corrected areas: 21136656

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040714\
Data File : J4551.D
Acq On : 8 Apr 2014 3:22 am
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Apr 08 11:31:57 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040714\\
Data File : J4551.D
Acq On : 8 Apr 2014 3:22 amm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 32 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 14:13
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403327-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4571.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.32**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.51**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 14:13
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403327-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4571.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.94**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.44**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/8/14 14:13	
Dibromofluoromethane	101	85-115	4/8/14 14:13	
Toluene-d8	98	85-120	4/8/14 14:13	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 1413

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403327-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4571.D
Misc :
Acq On : 8 Apr 2014 2:13 pm
Operator : K.Ruest
InstName : MSVOA-12 FQ1403327-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 14:28:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	844068	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1263995	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1150225	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	575343	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	370921	50.69	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.38%				
48) surr1,1,2-dichloroetha...	4.664	65	429032	51.47	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.94%				
65) SURR3,Toluene-d8	7.322	98	1511514	49.16	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.32%				
70) SURR2,BFB	9.791 ~~9.858~~		955622601 ~~842~~	49.01 ~~0.07~~	ppb		0.07
Spiked Amount 50.000	Range 85 - 122		Recovery =		~~0.14~~%	#	98.02 ?
Target Compounds							Qvalue
5) Bromomethane	1.518	94	2502	0.51	ppb	#	71 J
~~15) Acetone~~	~~2.073~~	~~43~~	~~427~~	~~0.25~~	~~ppb~~	~~#~~	~~1~~
17) Iodomethane	2.152	142	2236	0.27	ppb		77 M/SP/QCL
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~2589~~	~~0.62~~	~~ppb~~	~~#~~	~~1~~
~~39) Tetrahydrofuran~~	~~3.920~~	~~42~~	~~368~~	~~0.22~~	~~ppb~~	~~#~~	~~45~~
90) Cyclohexanone	9.724	55	548	1.19	ppb		96 QCL-NT
112) Trielution Dichlorotol...	11.736	125	5747	0.52	ppb		100 NTD
114) Coelution Dichlorotoluene	11.998	125	4722	0.41	ppb		92 ↓
115) 1,2,4-Tcbenzene	12.162	180	2738	0.32	ppb		96 J
116) Hexachlorobt	12.266	225	3463	0.94	ppb		94 J
117) Naphthalen	12.302	128	6692	0.44	ppb		91 J
118) 1,2,3-Tclbenzene	12.437	180	2920	0.42	ppb		94 <
119) 2,4,5-Trichlorotolene	12.851	159	7901	1.73	ppb		94 NTD
120) 2,3,6-Trichlorotoluene	12.912	159	7000	1.67	ppb	#	87 ↓

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

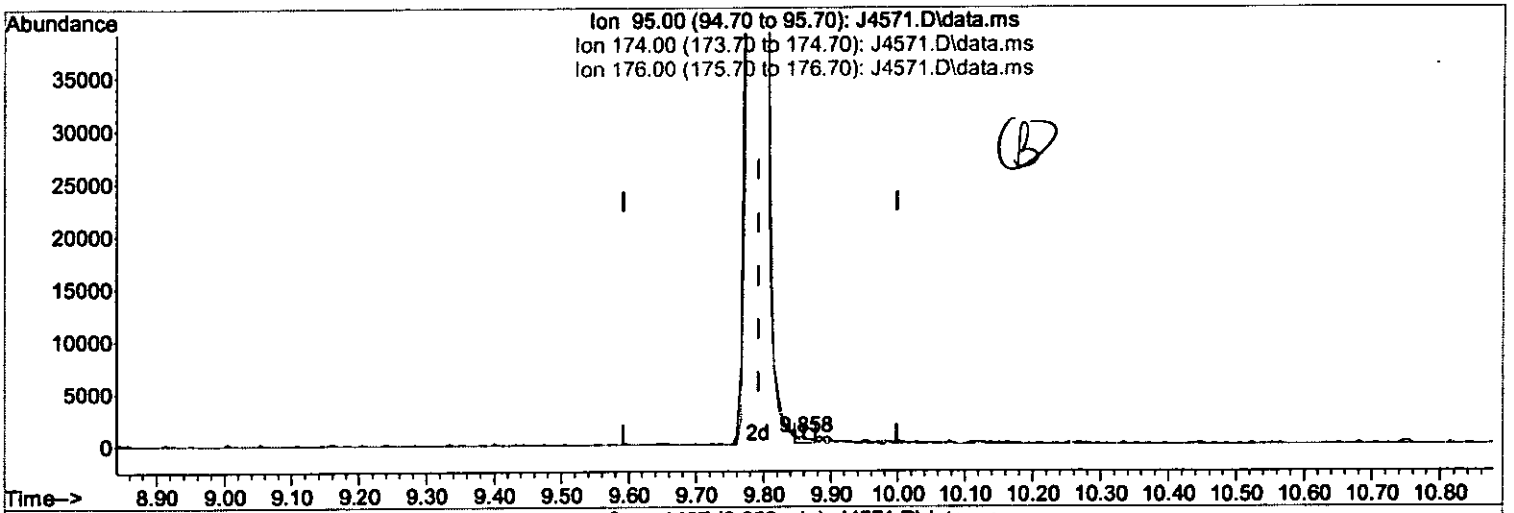
KP
4/6/14

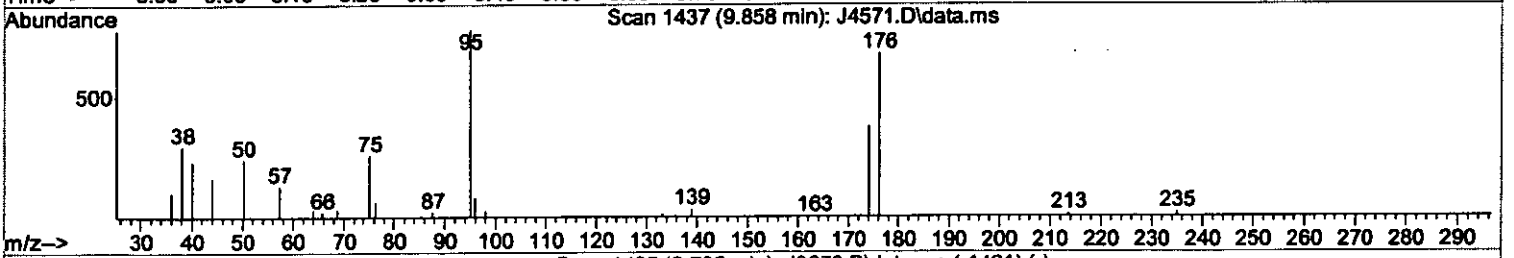
W031214.M Tue Apr 08 14:28:36 2014 00553 Page: 1

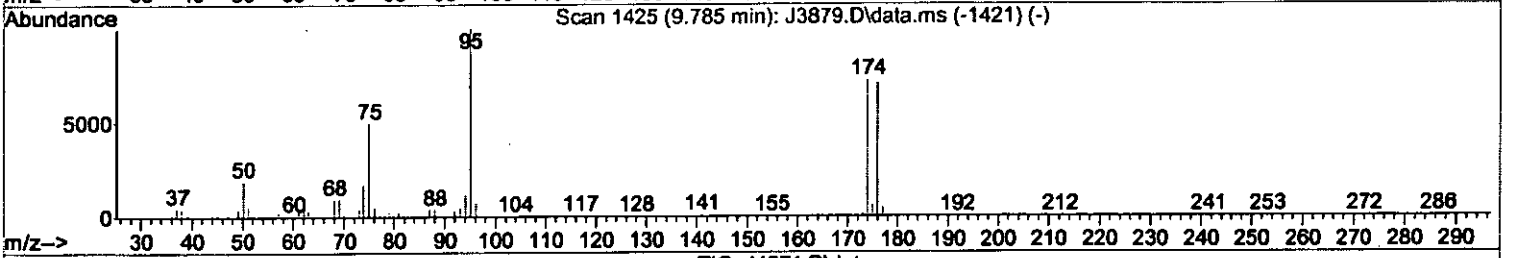
Quantitation Report (Qedit)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4571.D
Misc :
Acq On : 8 Apr 2014 2:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 14:28:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4571.D\data.ms

(70) SURR2,BFB (s)

9.858min (+0.067) 0.07 ppb

response 842

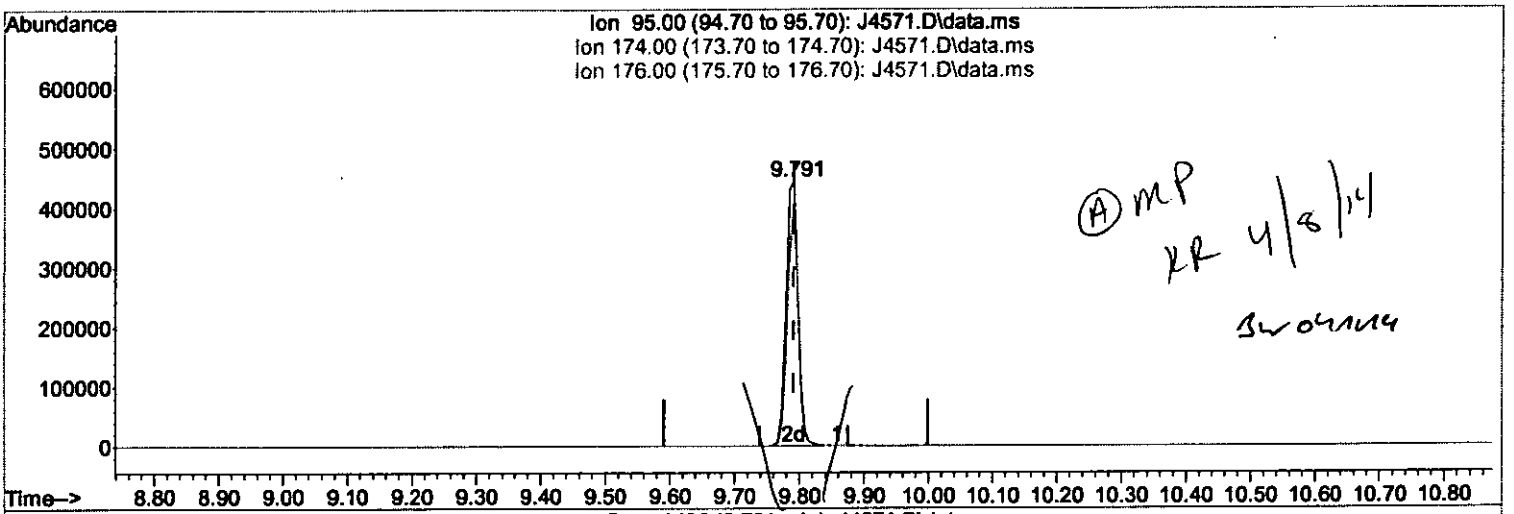
Ion	Exp%	Act%
95.00	100	100
174.00	72.40	55.35
176.00	70.70	88.60
0.00	0.00	0.00

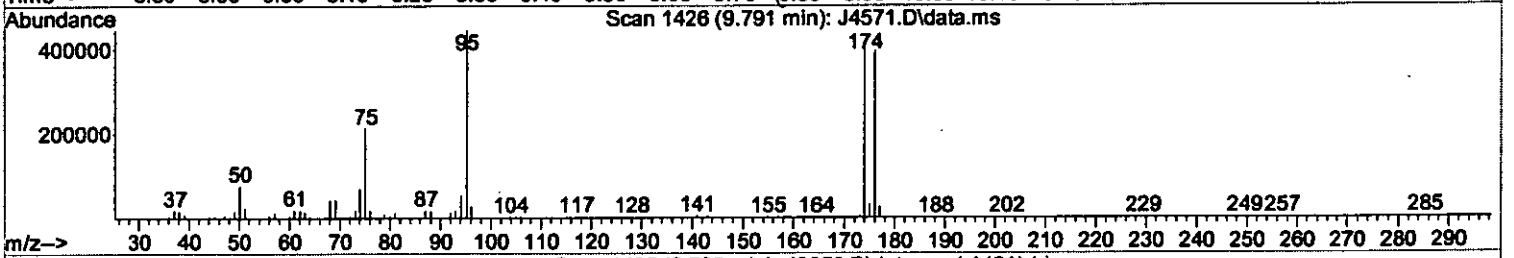
W031214.M Tue Apr 08 14:46:41 2014 00554 Page: 1

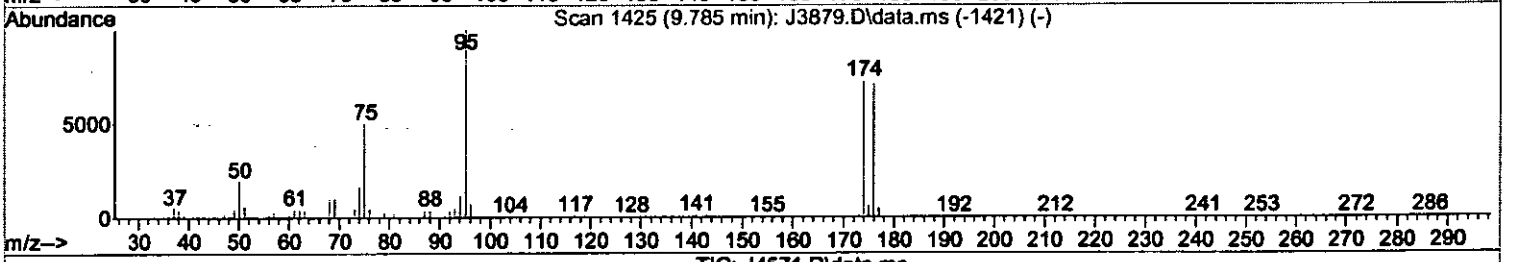
Quantitation Report (Qedit)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4571.D
Misc :
Acq On : 8 Apr 2014 2:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 14:28:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4571.D\data.ms

(70) SURR2,BFB (s)

9.791min (-0.000) 49.01 ppb m

response 562261

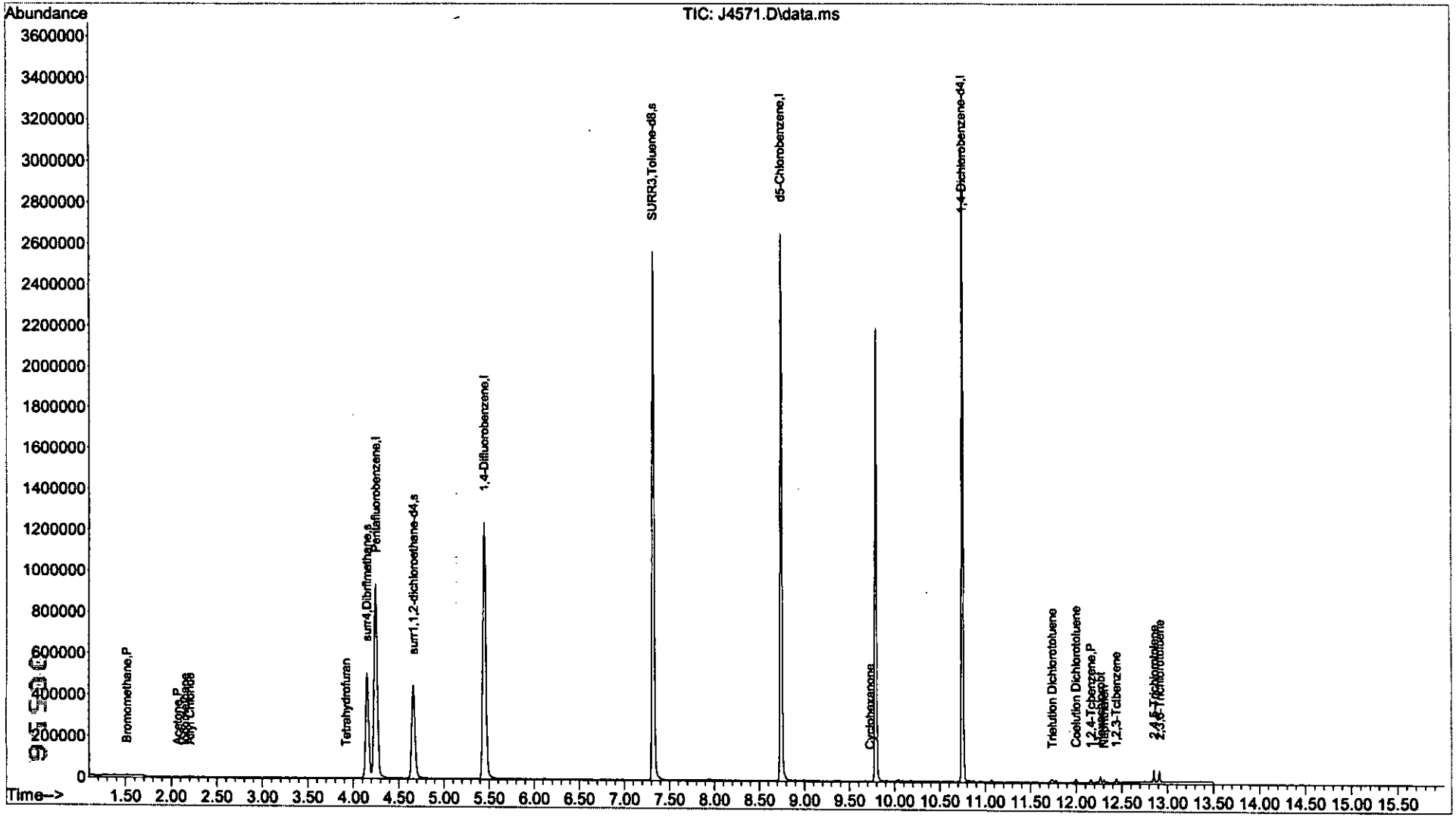
Ion	Exp%	Act%
95.00	100	100
174.00	72.40	92.70#
176.00	70.70	89.19
0.00	0.00	0.00

W031214.M Tue Apr 08 14:46:51 2014 00555 Page: 1

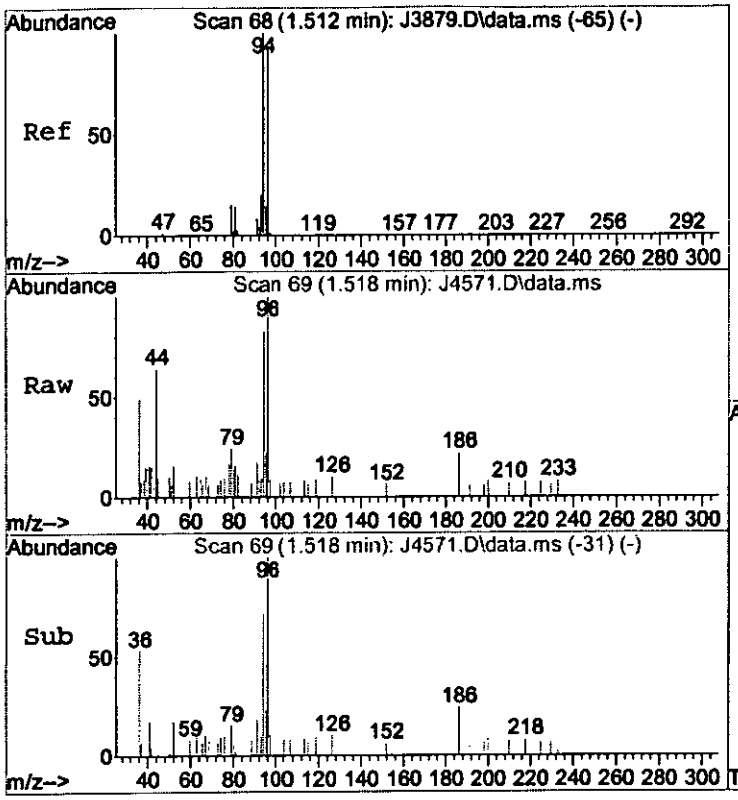
Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4571.D
Misc :
Acq On : 8 Apr 2014 2:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 14:28:33 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



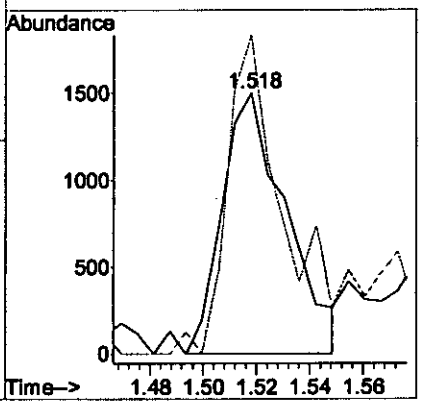
W031214.M Tue Apr 08 14:28:38 2014 Page: 2

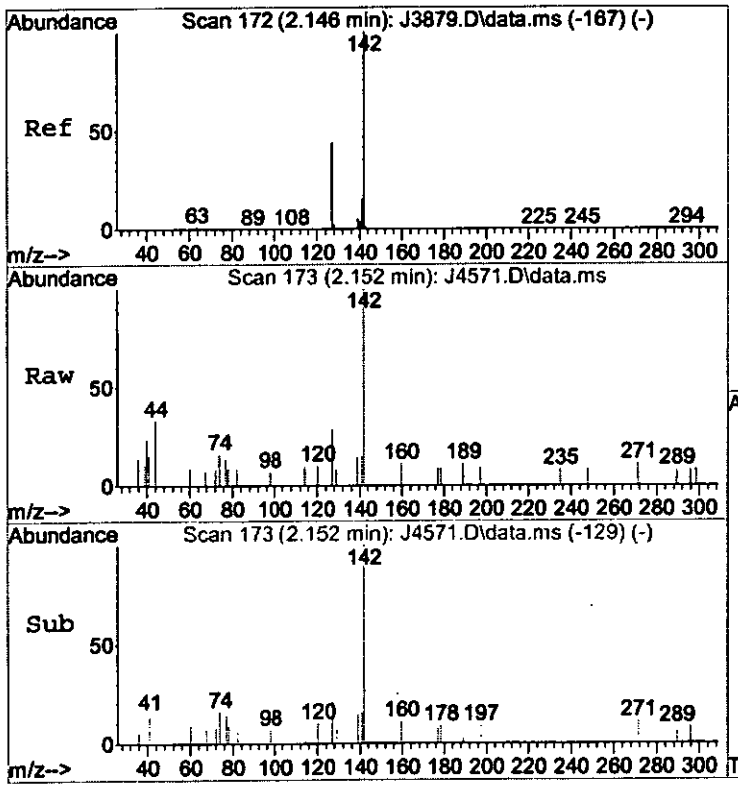


#5
Bromomethane
Concen: 0.51 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4571.D
Acq: 8 Apr 2014 2:13 pm

Tgt Ion: 94 Resp: 2502

Ion	Ratio	Lower	Upper
94	100		
96	122.0	73.8	113.8#

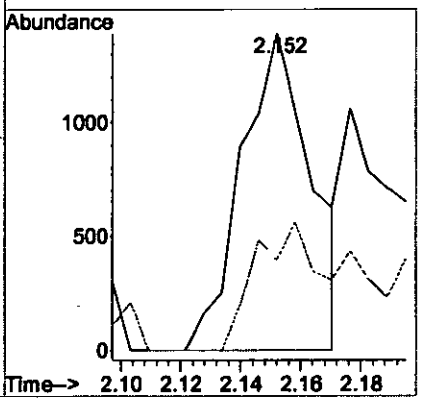




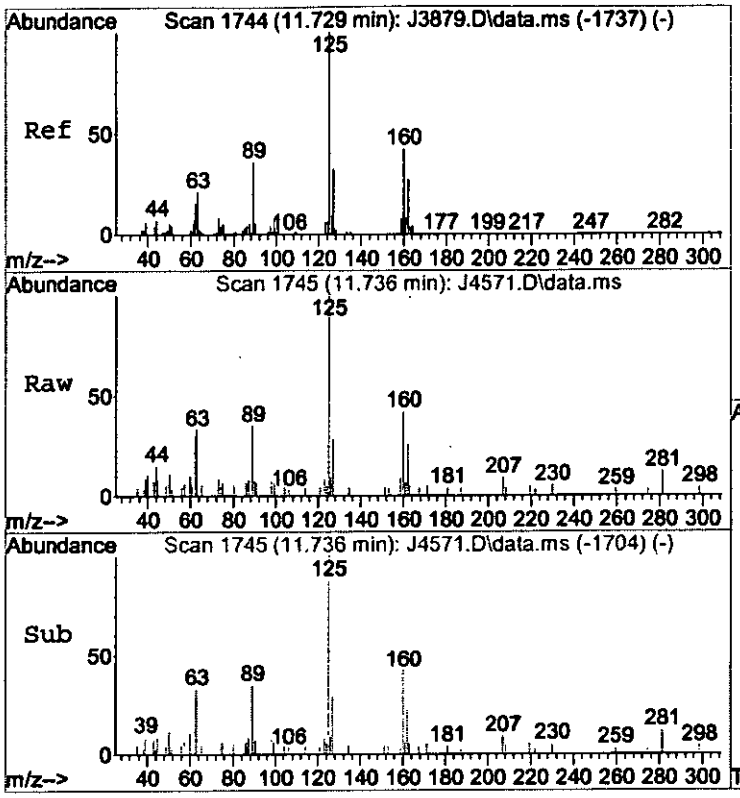
#17
Iodomethane
Concen: 0.27 ppb
RT: 2.152 min Scan# 173
Delta R.T. 0.006 min
Lab File: J4571.D
Acq: 8 Apr 2014 2:13 pm

Tgt Ion:142 Resp: 2236

Ion	Ratio	Lower	Upper
142	100		
127	28.4	23.5	63.5



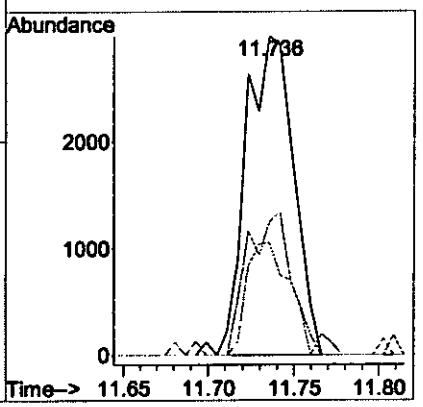
J4571.D W031214.M Tue Apr 08 14:48:19 2014 00557 Page 3

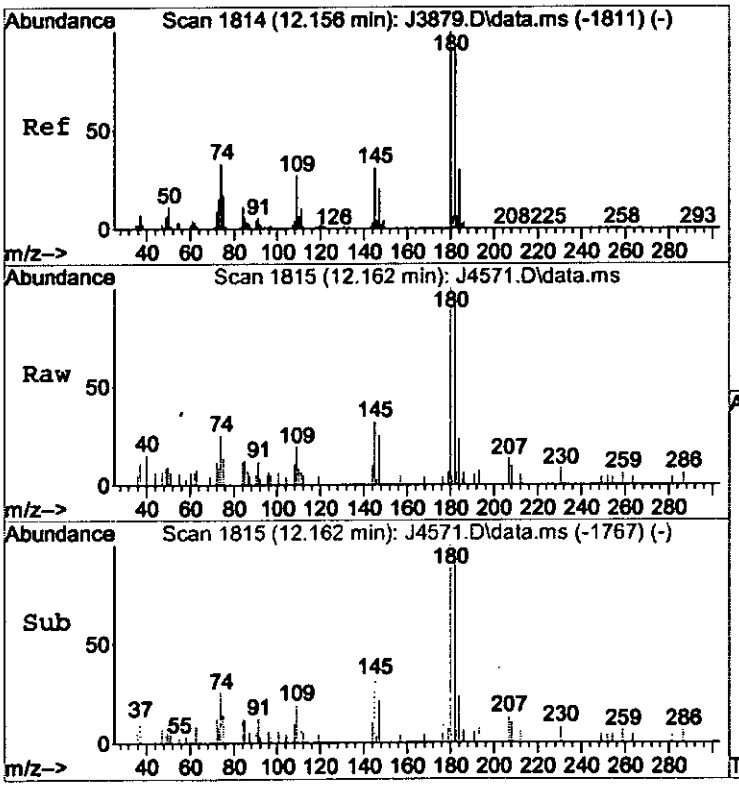


#112
Trielution Dichlorotoluene
Concen: 0.52 ppb
RT: 11.736 min Scan# 1745
Delta R.T. -0.000 min
Lab File: J4571.D
Acq: 8 Apr 2014 2:13 pm

Tgt Ion:125 Resp: 5747

Ion	Ratio	Lower	Upper
125	100		
160	42.0	33.6	50.4
89	35.5	28.8	43.2

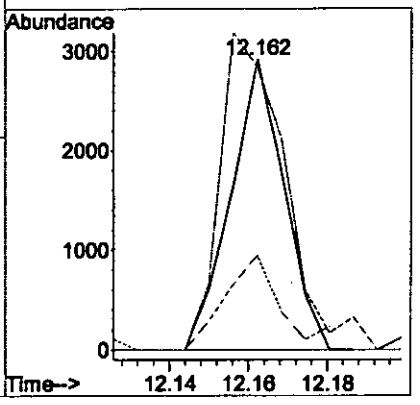


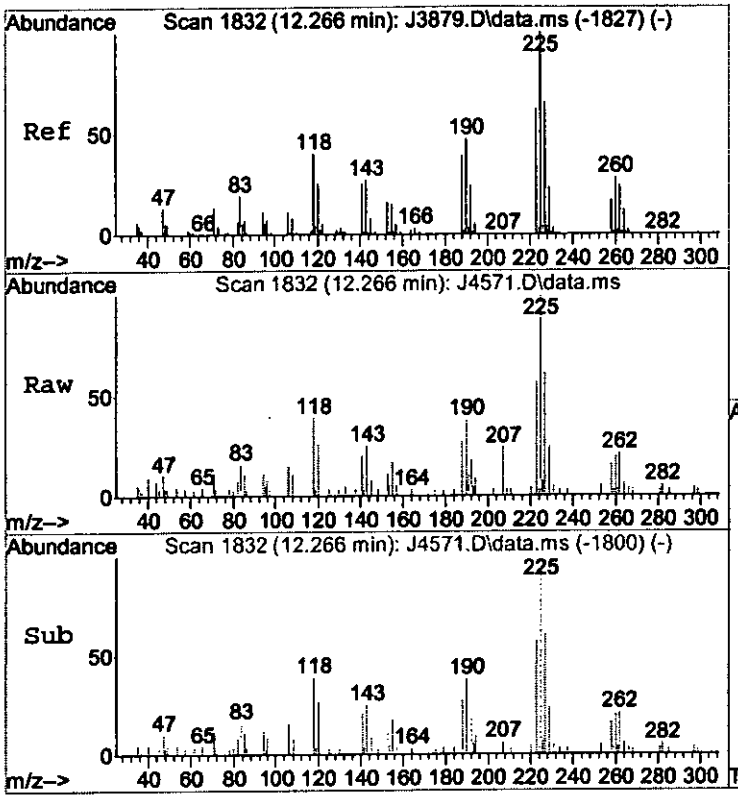


#115
1,2,4-Tcbenzene
Concen: 0.32 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: J4571.D
Acq: 8 Apr 2014 2:13 pm

Tgt Ion:180 Resp: 2738

Ion	Ratio	Lower	Upper
180	100		
182	97.2	72.2	112.2
145	32.5	11.4	51.4

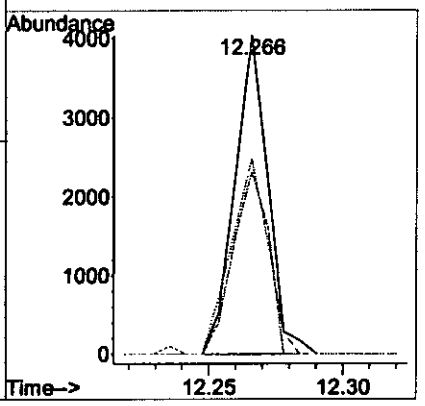


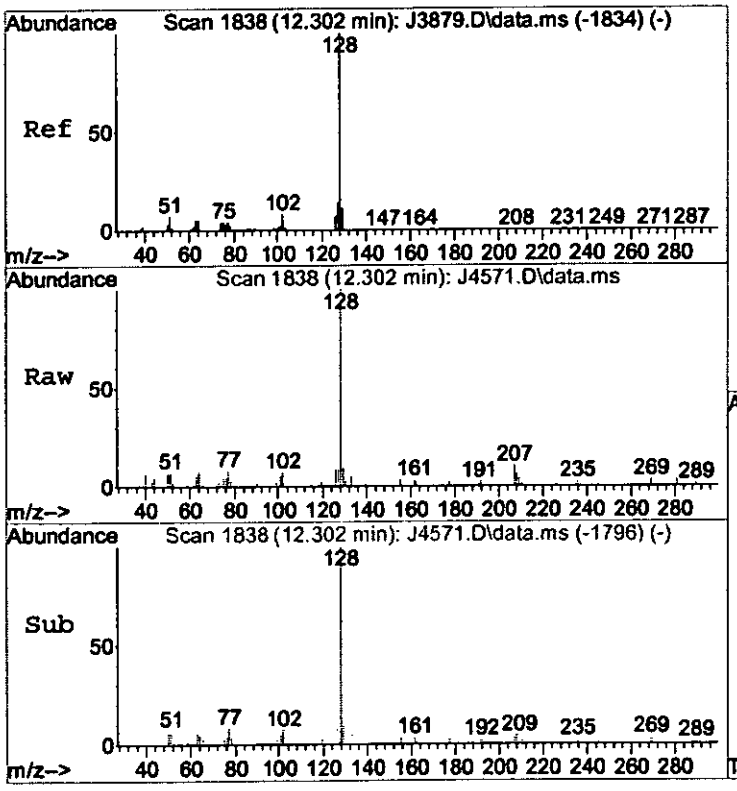


#116
Hexachlorobt
Concen: 0.94 ppb
RT: 12.266 min Scan# 1832
Delta R.T. -0.000 min
Lab File: J4571.D
Acq: 8 Apr 2014 2:13 pm

Tgt Ion:225 Resp: 3463

Ion	Ratio	Lower	Upper
225	100		
223	57.3	42.4	82.4
227	61.3	44.9	84.9

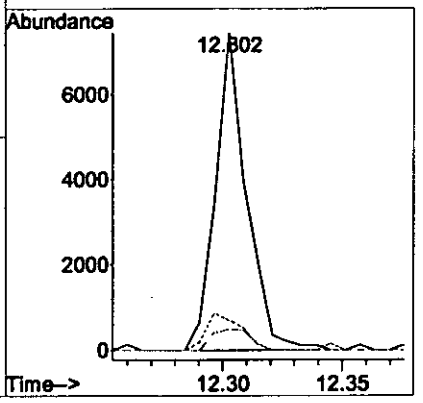




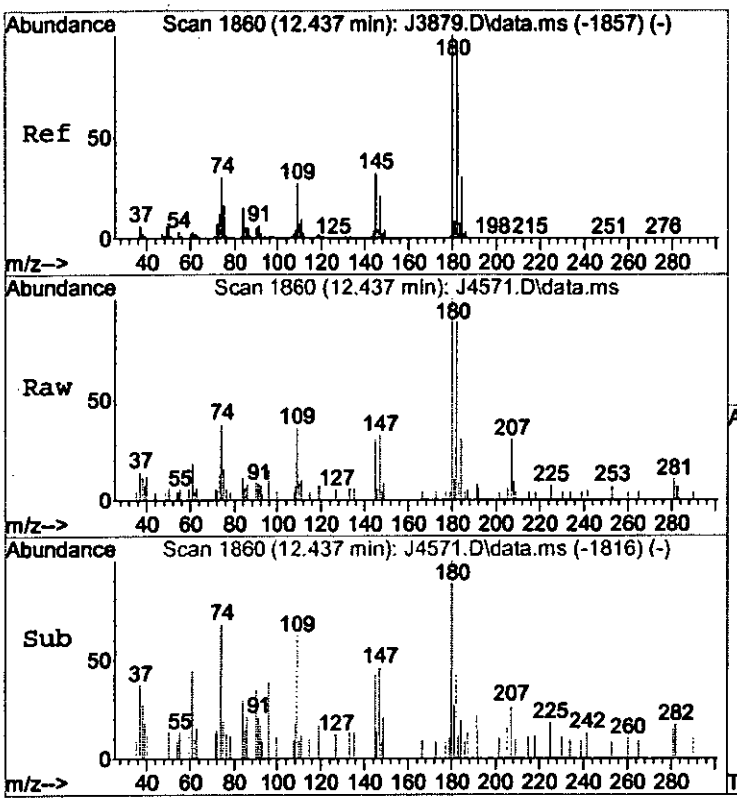
#117
Naphthalen
Concen: 0.44 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: J4571.D
Acq: 8 Apr 2014 2:13 pm

Tgt Ion:128 Resp: 6692

Ion	Ratio	Lower	Upper
128	100		
127	9.5	0.0	33.8
102	6.6	0.0	28.5



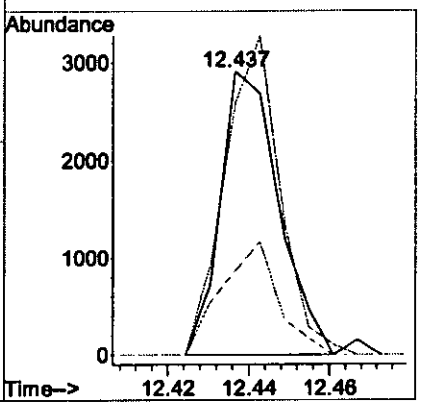
J4571.D W031214.M Tue Apr 08 14:48:22 2014 00559 Page 5



#118
1,2,3-Tclbenzene
Concen: 0.42 ppb
RT: 12.437 min Scan# 1860
Delta R.T. -0.000 min
Lab File: J4571.D
Acq: 8 Apr 2014 2:13 pm

Tgt Ion:180 Resp: 2920

Ion	Ratio	Lower	Upper
180	100		
182	88.7	75.2	115.2
145	34.7	11.9	51.9



J4571.D W031214.M Tue Apr 08 14:48:22 2014 00560 Page 6

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4571.D
Acq On : 8 Apr 2014 2:13 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4571.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	489	501	509	rBV	508468	1197357	30.33%	5.645%
2	4.249	509	517	531	rVB	932431	2316561	58.67%	10.922%
3	4.664	575	585	603	rBV	447203	1170337	29.64%	5.518%
4	5.450	703	714	734	rBV	1238718	2873930	72.79%	13.549%
5	7.322	1014	1021	1042	rBV	2556927	3948337	100.00%	18.615%
6	8.742	1249	1254	1267	rBV	2643109	3432557	86.94%	16.183%
7	9.791	1420	1426	1436	rBV	2188937	2733236	69.22%	12.886%
8	10.748	1578	1583	1593	rBV	3049634	3433411	86.96%	16.187%
9	12.851	1924	1928	1931	rBV	59500	52967	1.34%	0.250%
10	12.912	1934	1938	1944	rVB	53936	52112	1.32%	0.246%

Sum of corrected areas: 21210805

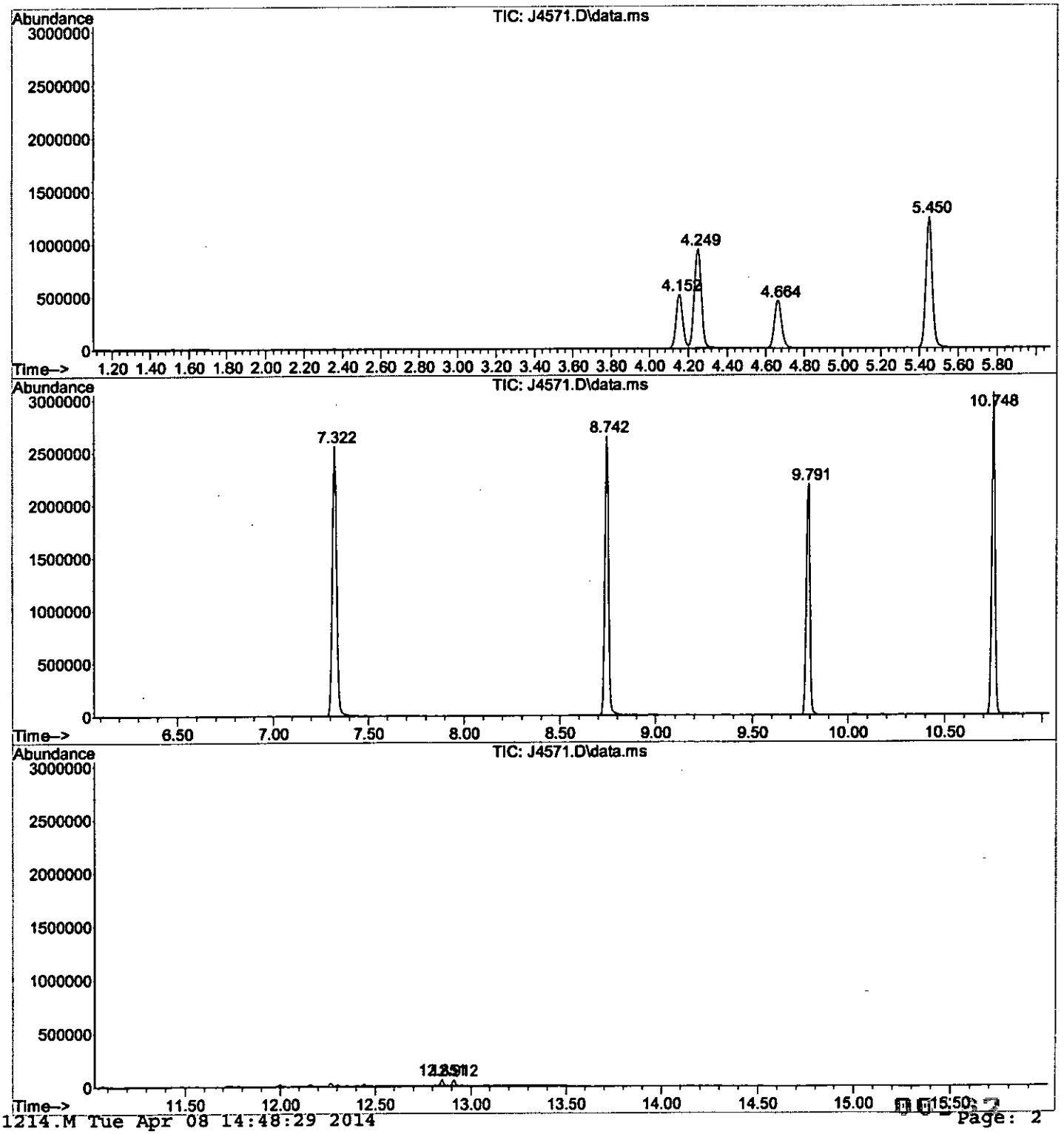
W031214.M Tue Apr 08 14:48:27 2014 00561 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\040814\
Data File : J4571.D
Acq On : 8 Apr 2014 2:13 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Tue Apr 08 14:48:29 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\040814\\
Data File : J4571.D
Acq On : 8 Apr 2014 2:13 pmm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 2 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/10/14 13:12
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403454-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\U4652.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.34**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.44**	J	5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/10/14 13:12
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403454-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4652.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.93**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.37**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/10/14 13:12	
Dibromofluoromethane	102	85-115	4/10/14 13:12	
Toluene-d8	98	85-120	4/10/14 13:12	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/10/14 1312

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1403454-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4652.D
Misc :
Acq On : 10 Apr 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12 RG1403451-01

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 13:27:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	836187	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1224934	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1133069	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	566359	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	362110	51.06	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.12%				
48) surr1,1,2-dichloroetha...	4.664	65	410683	50.84	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 101.68%				
65) SURR3,Toluene-d8	7.322	98	1461959	49.06	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.12%				
70) SURR2,BFB 9.791	~~9.852~~	95	9/2167748	~~0.07~~	ppb	48.77	0.06
~~Spiked Amount 50.000~~	~~Range 85 - 122~~		~~Recovery = 0.14%~~			# 97.54%	
Target Compounds							Qvalue
5) Bromomethane	1.518	94	2106	0.44	ppb		82 J
~~15) Acetone~~	~~2.049~~	~~43~~	~~871~~	~~0.52~~	~~ppb~~	~~#~~	~~52~~
16) 2-Propanol	2.152	45	330	1.23	ppb	#	55
20) Allyl Chloride	2.207	76	1825	0.44	ppb	#	1
52) n-Heptane	5.334	43	~~1514~~	0.20	ppb	#	63 MD
53) 1-Butanol	5.828	~~56~~	229	2.01	ppb	#	23
58) 1,4-Dioxane	~~6.407~~	88	277	5.48	ppb		99
90) Cyclohexanone	9.730	55	1188	2.62	ppb		87 MD
112) ~~Trielution~~ Dichlorotol...	11.736	125	5190	0.48	ppb	#	88 MD
113) 1,3,5 Trichlorobenzene	11.778	180	2142	0.23	ppb		87 J
~~114) Coelution Dichlorotoluene~~	~~11.998~~	~~125~~	~~4424~~	~~0.39~~	~~ppb~~		~~96~~
115) 1,2,4-Tcbenzene	12.162	180	2821	0.34	ppb	#	72 J
116) Hexachlorobt	12.266	225	3391	0.93	ppb		89 J
117) Naphthalen	12.303	128	5565	0.37	ppb		90 J
118) 1,2,3-Tclbenzene	12.443	180	3661	0.54	ppb		88 <
119) 2,4,5-Trichlorotolene	12.851	159	7858	1.74	ppb		93 MD
120) 2,3,6-Trichlorotoluene WP	12.851	159	7858	1.91	ppb		95 J

KR 4/10/14

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

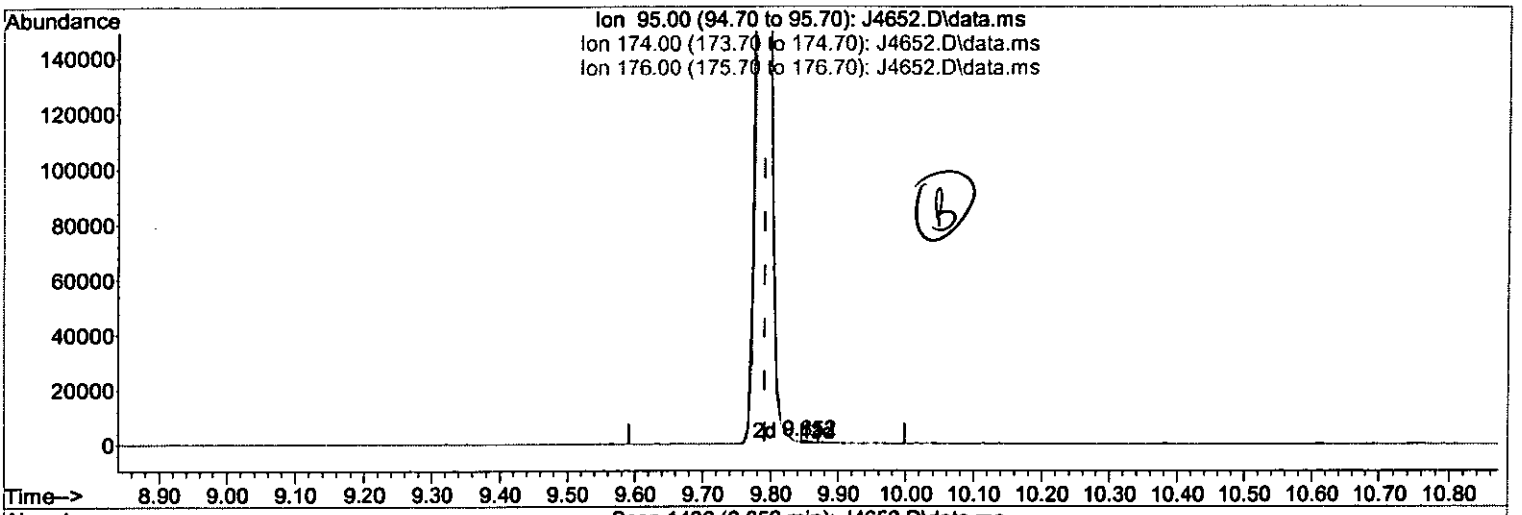
W031214.M Thu Apr 10 13:27:11 2014

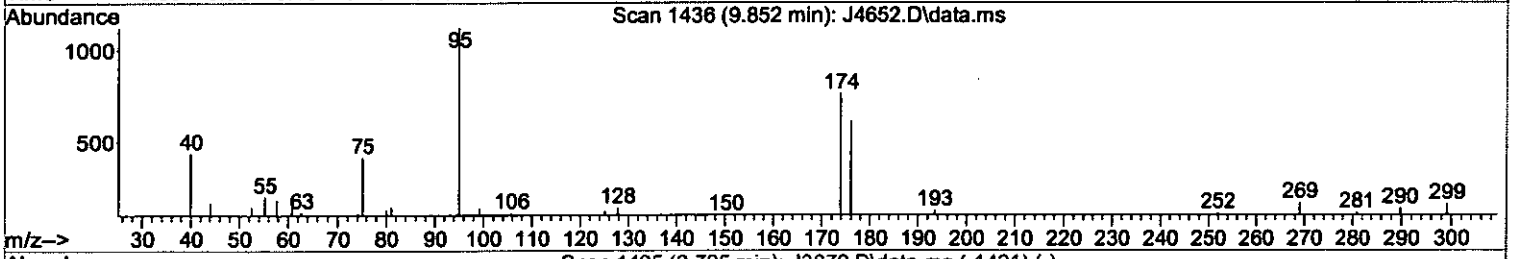
00567
Page: 1

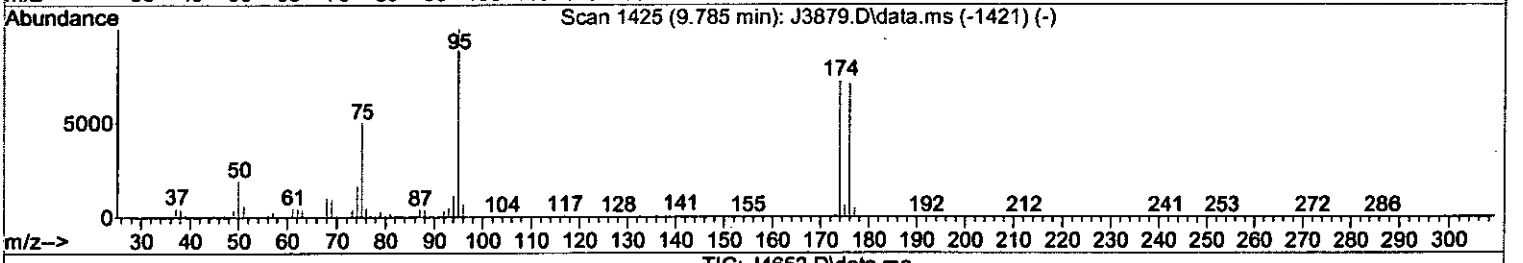
Quantitation Report (Qedit)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4652.D
Misc :
Acq On : 10 Apr 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 13:27:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4652.D\data.ms

(70) SURR2,BFB (s)

9.852min (+0.061) 0.07 ppb

response 748

Ion	Exp%	Act%
95.00	100	100
174.00	72.40	67.70
176.00	70.70	54.27
0.00	0.00	0.00

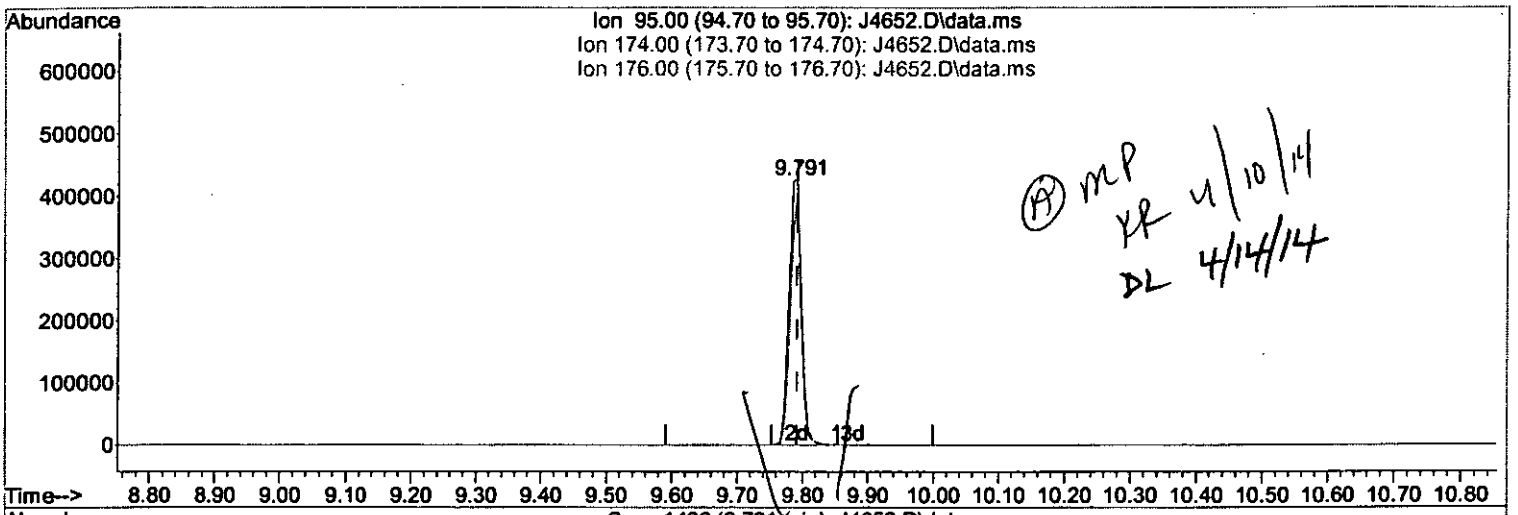
00568

W031214.M Thu Apr 10 13:28:51 2014 Page: 1

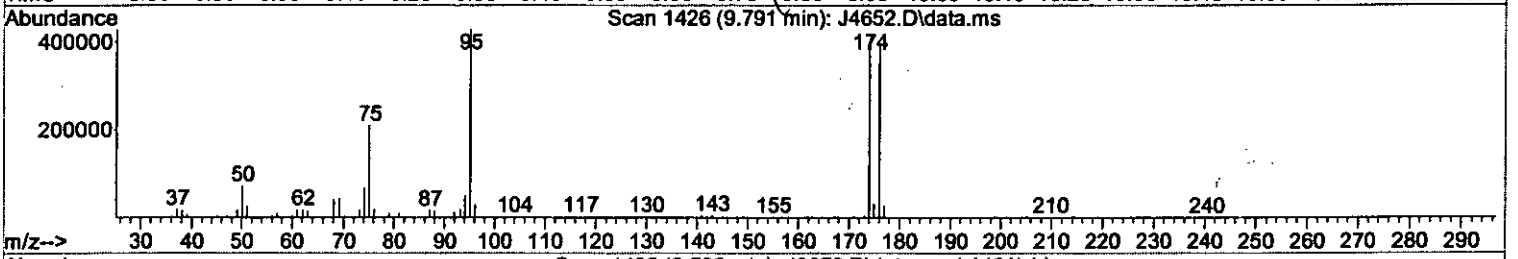
Quantitation Report (Qedit)

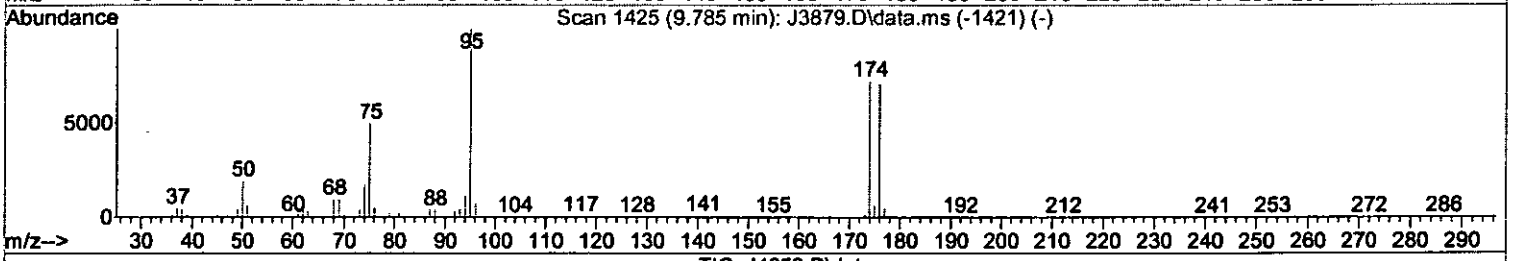
Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4652.D
Misc :
Acq On : 10 Apr 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 13:28:54 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



(A) MP 4/10/14
RF 4/10/14
DL 4/14/14





TIC: J4652.D\data.ms

(70) SURR2,BFB (s)

9.791min (+0.000) 48.77 ppb m

response 542167

Ion	Exp%	Act%
95.00	100	100
174.00	72.40	95.26#
176.00	70.70	92.67#
0.00	0.00	0.00

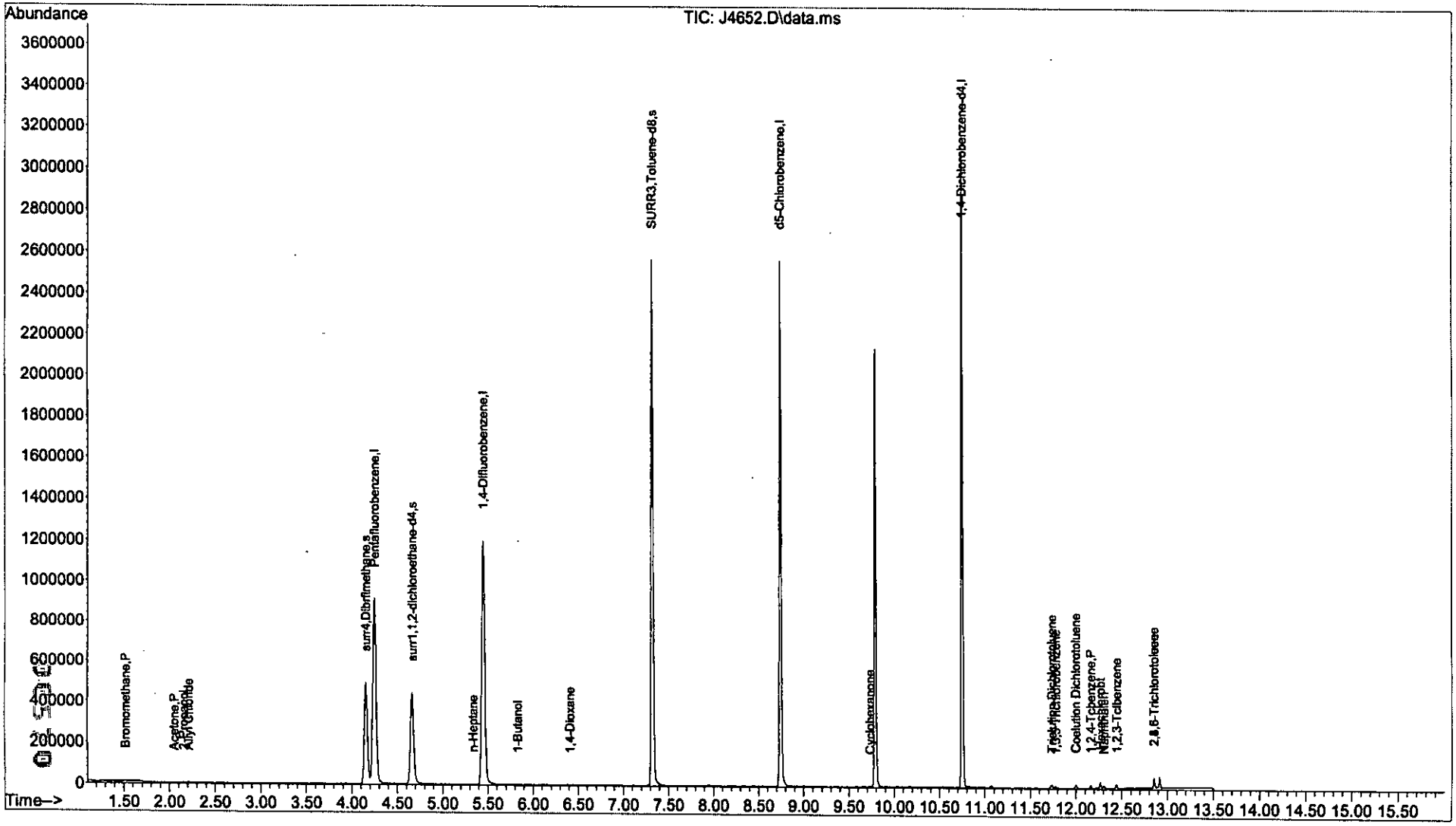
00563

W031214.M Thu Apr 10 14:34:11 2014 Page: 1

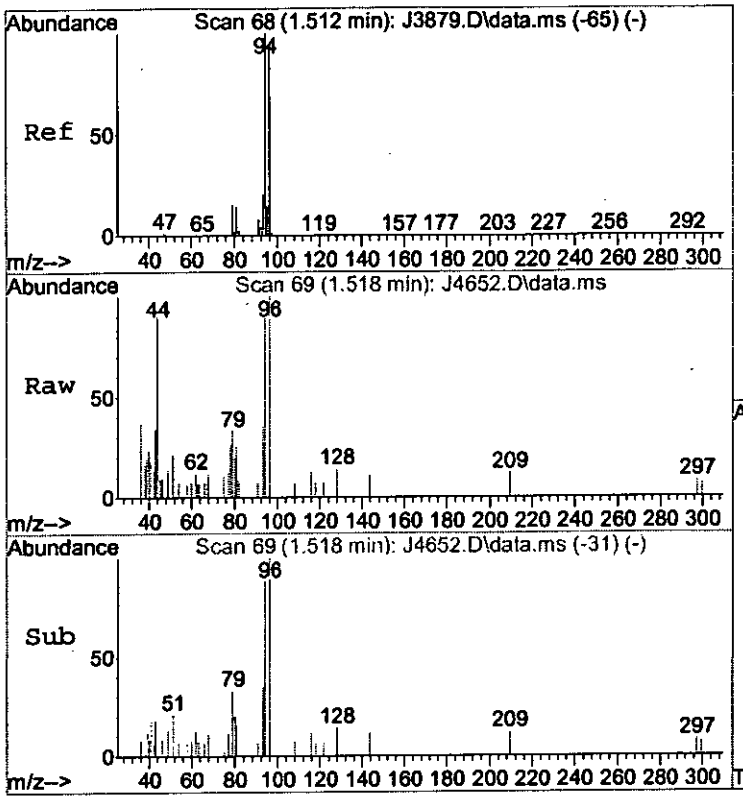
Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4652.D
Misc :
Acq On : 10 Apr 2014 1:12 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 13:27:09 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



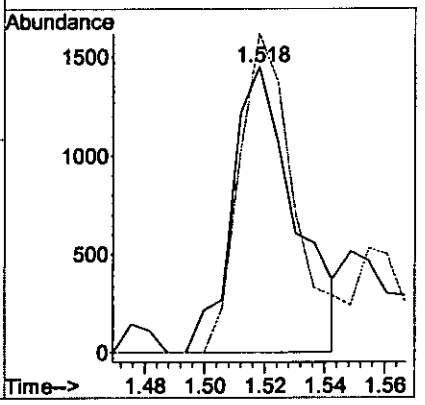
W031214.M Thu Apr 10 13:27:14 2014 Page: 2

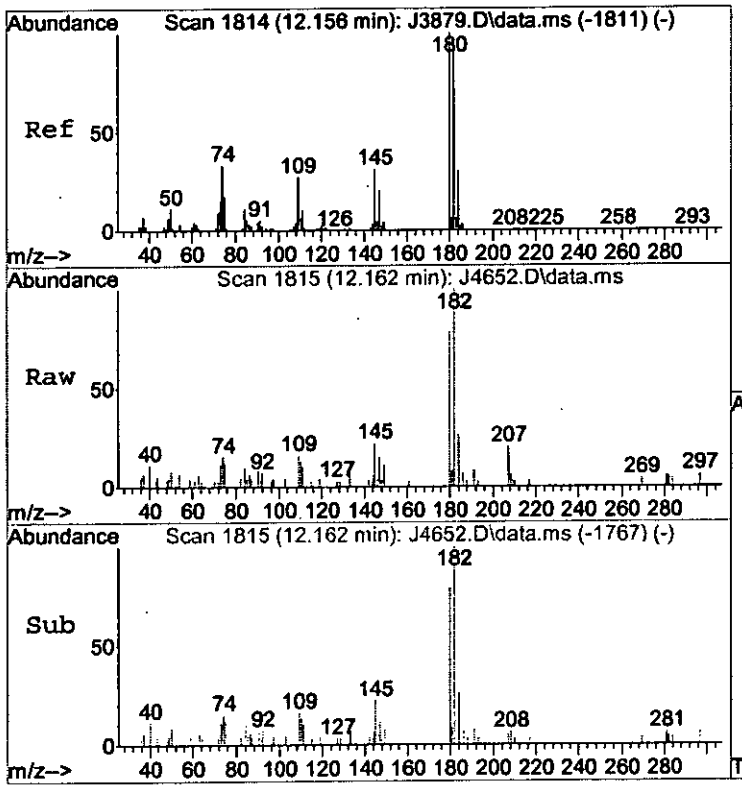


#5
Bromomethane
Concen: 0.44 ppb
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: J4652.D
Acq: 10 Apr 2014 1:12 pm

Tgt Ion: 94 Resp: 2106

Ion	Ratio	Lower	Upper
94	100		
96	111.5	73.8	113.8

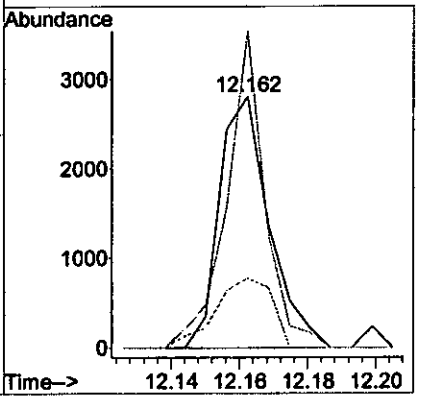


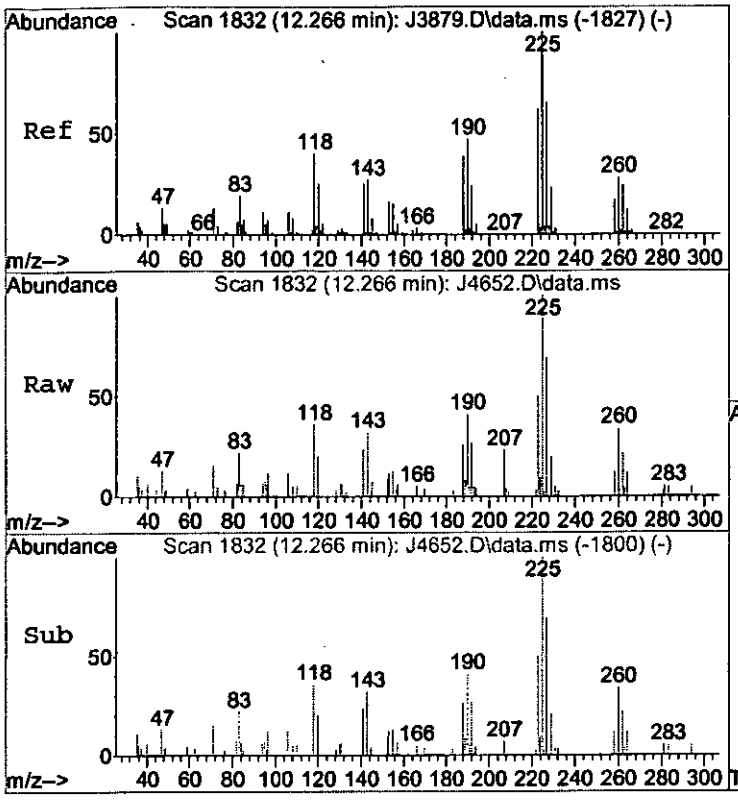


#115
1,2,4-Tcbenzene
Concen: 0.34 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: J4652.D
Acq: 10 Apr 2014 1:12 pm

Tgt Ion:180 Resp: 2821

Ion	Ratio	Lower	Upper
180	100		
182	126.2	72.2	112.2#
145	27.7	11.4	51.4

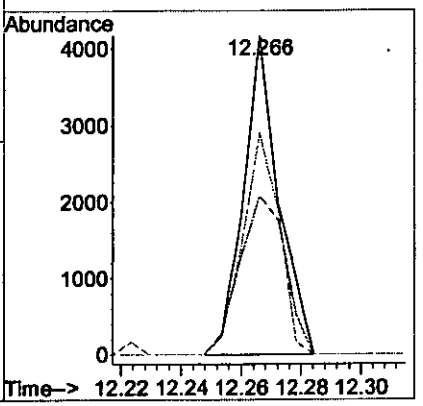


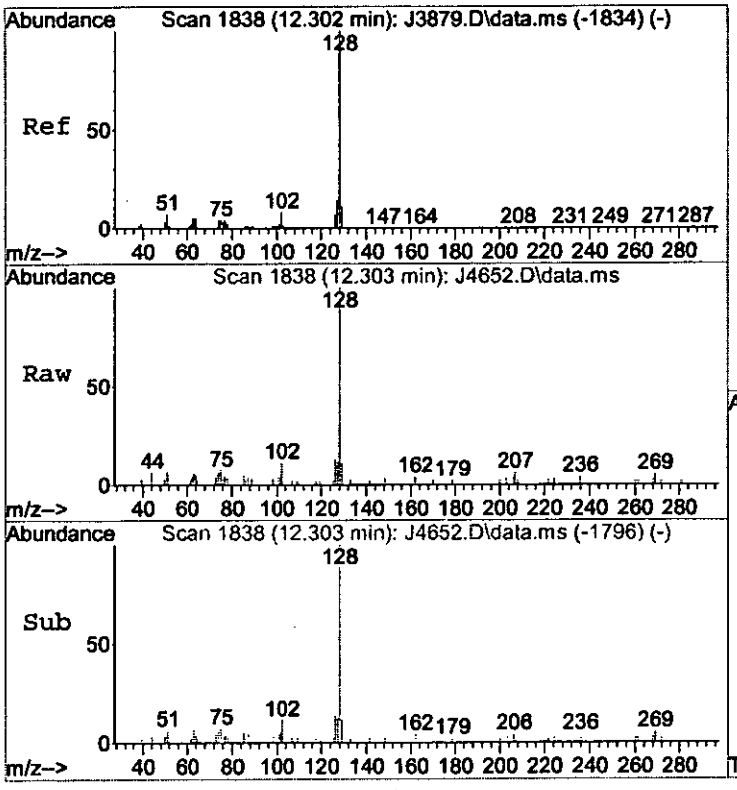


#116
Hexachlorobt
Concen: 0.93 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: J4652.D
Acq: 10 Apr 2014 1:12 pm

Tgt Ion:225 Resp: 3391

Ion	Ratio	Lower	Upper
225	100		
223	49.9	42.4	82.4
227	69.5	44.9	84.9

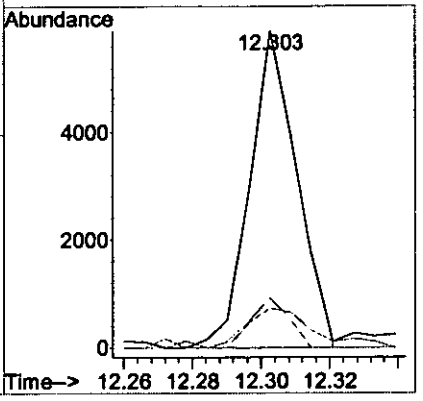




#117
Naphthalen
Concen: 0.37 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J4652.D
Acq: 10 Apr 2014 1:12 pm

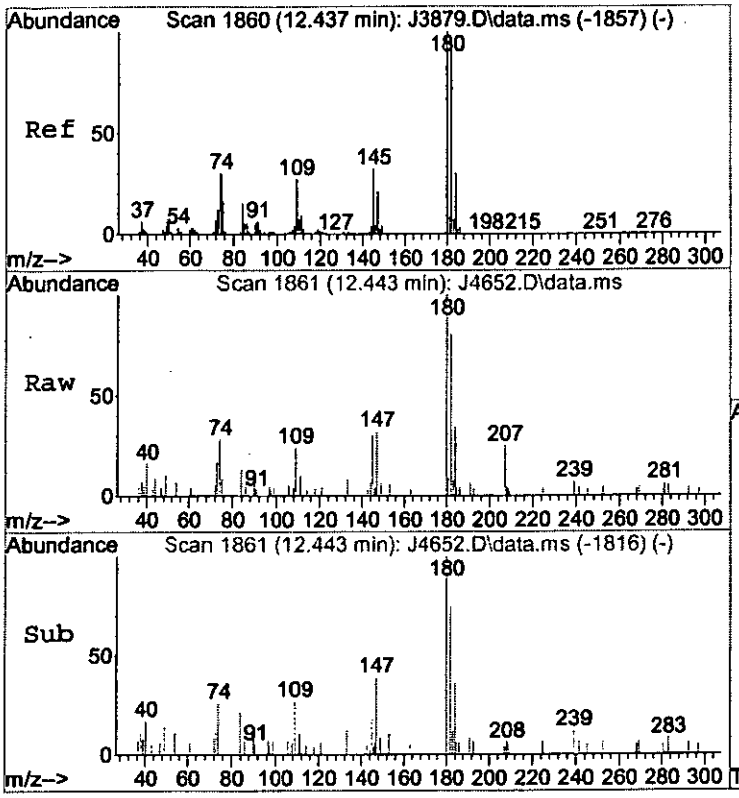
Tgt Ion:128 Resp: 5565

Ion	Ratio	Lower	Upper
128	100		
127	12.4	0.0	33.8
102	15.7	0.0	28.5



00572

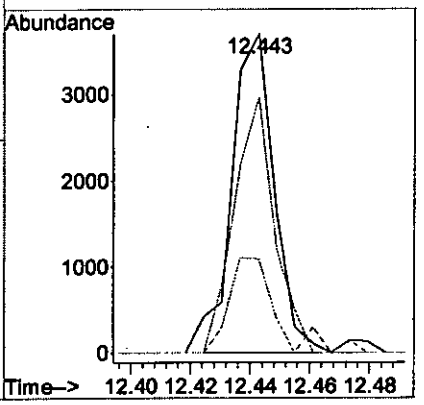
J4652.D W031214.M Thu Apr 10 16:10:00 2014 Page 4



#118
1,2,3-Tclbenzene
Concen: 0.54 ppb
RT: 12.443 min Scan# 1861
Delta R.T. 0.006 min
Lab File: J4652.D
Acq: 10 Apr 2014 1:12 pm

Tgt Ion:180 Resp: 3661

Ion	Ratio	Lower	Upper
180	100		
182	80.3	75.2	115.2
145	32.4	11.9	51.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4652.D
Acq On : 10 Apr 2014 1:12 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J4652.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	490	501	509	rBV	495230	1169010	30.77%	5.638%
2	4.249	509	517	533	rVB	909671	2281656	60.05%	11.005%
3	4.664	574	585	605	rBV	444751	1135229	29.88%	5.475%
4	5.450	704	714	729	rBV	1194018	2787996	73.38%	13.447%
5	7.322	1014	1021	1032	rBV	2558730	3799617	100.00%	18.326%
6	8.742	1249	1254	1267	rBV	2555207	3357804	88.37%	16.195%
7	9.791	1421	1426	1439	rVB	2131853	2688700	70.76%	12.968%
8	10.748	1578	1583	1593	rBV	3076000	3412674	89.82%	16.460%
9	12.851	1925	1928	1932	rBV	49411	51321	1.35%	0.248%
10	12.912	1935	1938	1942	rVB	52694	49464	1.30%	0.239%

Sum of corrected areas: 20733471

00574

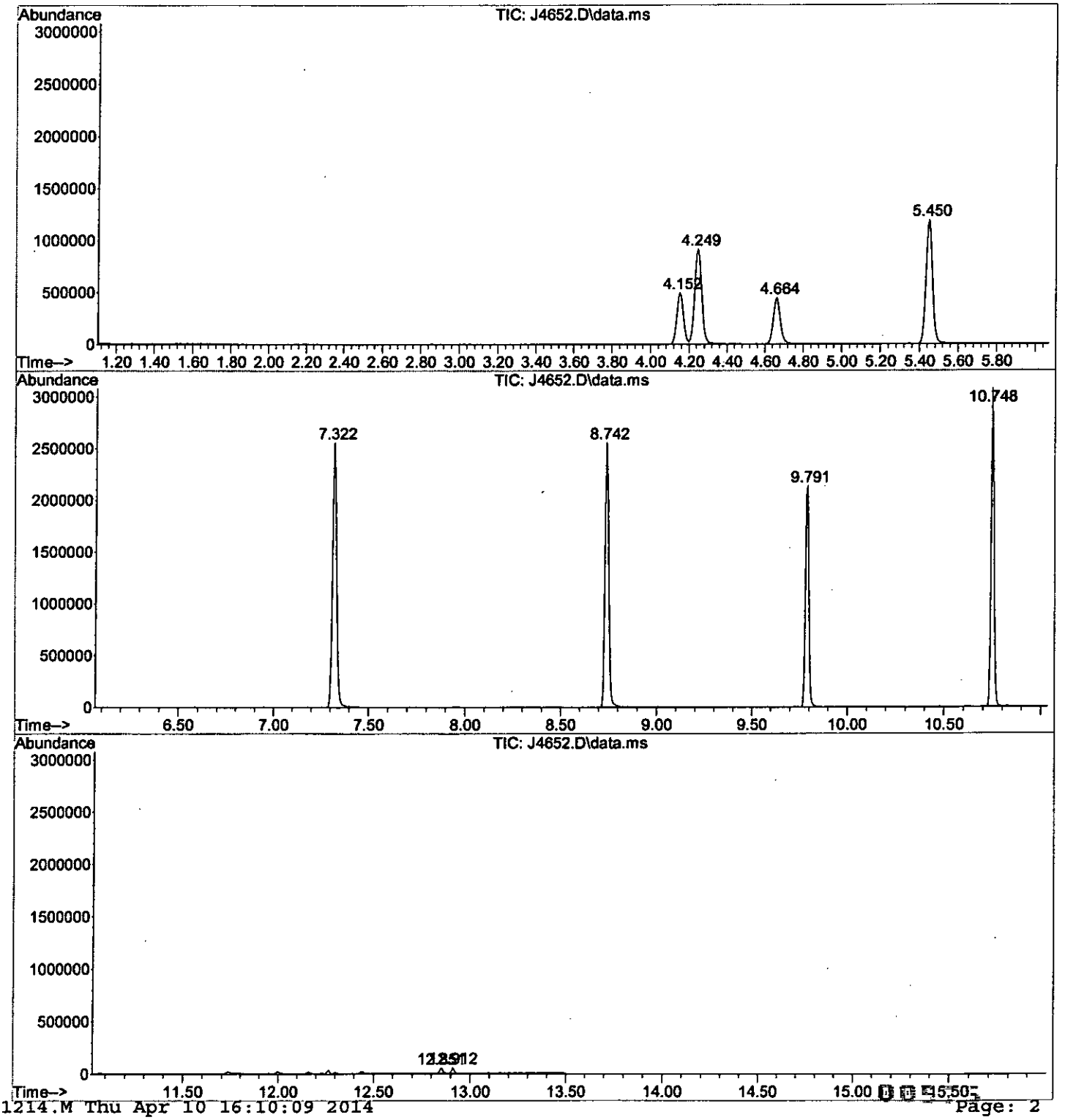
W031214.M Thu Apr 10 16:10:07 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\041014\
Data File : J4652.D
Acq On : 10 Apr 2014 1:12 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\041014\\
Data File : J4652.D
Acq On : 10 Apr 2014 1:12 pmm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 2 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

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

No Library Search Compounds Detected
****

00576

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 01:45
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1403255-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4548.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**19.3**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**19.6**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**17.3**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**20.4**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**19.0**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**21.4**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**22.4**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**23.1**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**20.2**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**21.7**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**19.4**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**24.1**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**21.0**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**19.6**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**20.6**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**19.3**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**19.5**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**19.5**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**19.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**19.2**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**16.6**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**22.5**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**19.1**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**22.4**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**19.5**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**20.0**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**22.1**		5.0	1.0	0.67	
67-64-1	Acetone	**21.9**		5.0	5.0	1.3	
71-43-2	Benzene	**19.7**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**19.4**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**19.4**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**20.9**		5.0	1.0	0.32	
75-25-2	Bromoform	**21.4**		5.0	1.0	0.42	
74-83-9	Bromomethane	**19.4**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**19.8**		5.0	1.0	0.45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 01:45
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1403255-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387044
Data File Name:	I:\ACQUDATA\msvoa12\Data\040714\J4548.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**19.3**		5.0	1.0	0.29	
75-00-3	Chloroethane	**20.4**		5.0	1.0	0.24	
67-66-3	Chloroform	**19.3**		5.0	1.0	0.25	
74-87-3	Chloromethane	**17.7**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**20.8**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**16.7**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**18.8**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**19.2**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**20.4**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**19.8**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**20.8**		5.0	1.0	0.29	
91-20-3	Naphthalene	**24.2**		5.0	1.0	0.20	
100-42-5	Styrene	**20.0**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**19.1**		5.0	1.0	0.30	
108-88-3	Toluene	**19.8**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**22.4**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**19.6**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**20.3**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**18.9**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**19.0**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**40.2**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**19.4**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**19.2**		5.0	1.0	0.20	
95-47-6	o-Xylene	**19.3**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**19.4**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**19.1**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**19.6**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**21.1**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75-120	4/8/14 01:45	
Dibromofluoromethane	102	85-115	4/8/14 01:45	
Toluene-d8	99	85-120	4/8/14 01:45	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4548.D
Misc : :
Acq On : 8 Apr 2014 1:45 am
Operator : K.Ruest
InstName : MSVOA-12 RQ 1403235-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 02:00:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	833618	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1254047	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1195842	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	606439	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	368960	50.82	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.64%				
48) surr1,1,2-dichloroetha...	4.658	65	417278	50.46	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.92%				
65) SURR3,Toluene-d8	7.322	98	1516421	49.71	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.42%				
70) SURR2,BFB	9.791	95	587889	51.65	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	165367	16.70	ppb		96
3) Chloromethane	1.262	50	151472	17.65	ppb		97
4) Vinyl Chloride	1.323	62	161764	20.29	ppb		99
5) Bromomethane	1.512	94	93180	19.40	ppb		99
6) Chloroethane	1.567	64	96725	20.35	ppb		99
7) Freon 21	1.664	67	270719	22.52	ppb		97
8) Trichlorofluoromethane	1.719	101	239443	19.57	ppb		98
9) Diethyl Ether	1.878	59	119267	19.79	ppb		97
10) Freon 123a	1.865	67	185149	20.61	ppb		93
11) Freon 123	1.902	83	214335	20.89	ppb		99
12) Acrolein	1.951	56	18307	105.34	ppb		95
13) 1,1-Diclethene	2.042	96	129584	21.42	ppb		92
14) Freon 113	2.036	101	130369	19.69	ppb		92
15) Acetone	2.048	43	36230	21.91	ppb		90
16) 2-Propanol	2.128	45	145305	541.37	ppb		92
17) Iodomethane	2.146	142	96331	11.99	ppb		94
18) Carbon Disulfide	2.207	76	408929	19.44	ppb		98
19) Acetonitrile	2.231	40	27732	102.54	ppb		94
20) Allyl Chloride	2.274	76	77844	18.77	ppb		98
21) Methyl Acetate	2.274	43	74576	20.02	ppb		99
22) Methylene Chloride	2.359	84	148937	18.79	ppb		98
23) TBA	2.414	59	229490	496.43	ppb		98
24) Acrylonitrile	2.524	53	189604	102.32	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	399987	20.80	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	148209	19.55	ppb		97
28) 1,1-Diclethane	2.945	63	268405	19.03	ppb		98
29) Vinyl Acetate	2.981	86	11159	8.88	ppb	#	71
31) 2-Chloro-1,3-Butadiene	3.042	53	255054	20.99	ppb		93
33) 2,2-Dichloropropane	3.560	77	186260	16.64	ppb		96
34) cis-1,2-Dichloroethene	3.548	96	160223	18.94	ppb		99
35) 2-Butanone	3.554	43	52146	22.50	ppb		95
36) Propionitrile	3.597	54	75093	112.23	ppb		98
37) Bromochloromethane	3.829	130	91501	19.38	ppb		88
38) Methacrylonitrile	3.804	67	45204	20.94	ppb		85
39) Tetrahydrofuran	3.914	42	33550	20.71	ppb		80

KR 4/8/14

W031214.M Tue Apr 08 02:00:33 2014 00579 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4548.D
Misc :
Acq On : 8 Apr 2014 1:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 02:00:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
40)	Chloroform	3.938	83	266998	19.31	ppb		98	
41)	1,1,1-Trichloroethane	4.213	97	232243	19.59	ppb		98	
44)	Cyclohexane	4.316	41	126773	18.68	ppb		92	
46)	Carbontetrachloride	4.469	121	59655	19.84	ppb		94	
47)	1,1-Dichloropropene	4.463	75	207404	22.39	ppb		98	
49)	Benzene	4.780	78	607813	19.69	ppb		99	
50)	1,2-Dichloroethane	4.786	62	192743	20.56	ppb		97	
51)	Iso-Butyl Alcohol	4.652	43	100194	472.29	ppb		98	
52)	n-Heptane	5.328	43	131755	17.08	ppb		95	
~~53)~~	~~1-Butanol~~	~~5.792~~	~~56~~	~~472~~	~~4.05~~	~~ppb~~		~~73~~	
54)	Trichloroethene	5.828	130	167726	22.43	ppb		94	
55)	Methylcyclohexane	6.102	55	144977	18.03	ppb		96	
56)	1,2-Diclpropane	6.115	63	152161	19.27	ppb		95	
57)	Dibromomethane	6.255	93	78448	20.89	ppb		94	
58)	1,4-Dioxane	6.328	88	~~26450~~	~~511.56~~	ppb	#	66	528.83
59)	Methyl Methacrylate	6.334	69	76860	20.69	ppb		87	
60)	Bromodichloromethane	6.480	83	193131	20.94	ppb		96	
61)	2-Nitropropane	6.743	41	42694	43.05	ppb		89	
62)	2-Chloroethylvinyl Ether	6.883	63	60724	17.15	ppb		98	
63)	cis-1,3-Dichloropropene	7.023	75	208190	19.03	ppb		97	
64)	4-Methyl-2-pentanone	7.218	43	105353	22.12	ppb		99	
66)	Toluene	7.395	91	630607	19.81	ppb		99	
67)	trans-1,3-Dichloropropene	7.633	75	185861	21.07	ppb		97	
68)	Ethyl Methacrylate	7.767	69	159409	22.22	ppb		95	
69)	1,1,2-Trichloroethane	7.809	97	113471	20.38	ppb		97	
72)	Tetrachloroethene	7.962	164	118088	19.12	ppb		98	
73)	2-Hexanone	8.084	43	75793	22.38	ppb		97	
74)	1,3-Dichloropropane	7.974	76	208901	19.40	ppb		97	
75)	Dibromochloromethane	8.194	129	128910	20.82	ppb		96	
76)	N-Butyl Acetate	8.242	43	178515	21.32	ppb		99	
77)	1,2-Dibromoethane	8.285	107	115949	20.97	ppb		98	
78)	Chlorobenzene	8.773	112	401922	19.31	ppb		93	
81)	1,1,1,2-Tetrachloroethane	8.852	131	141081	19.29	ppb		95	
82)	Ethylbenzene	8.889	106	212341	19.15	ppb		99	
83)	(m+p)Xylene	8.998	106	524189	40.23	ppb		97	
84)	o-Xylene	9.346	106	256604	19.30	ppb		99	
85)	Styrene	9.358	104	424158	19.95	ppb		93	
87)	Bromoform	9.498	173	73634	21.38	ppb		99	
89)	Isopropylbenzene	9.675	105	620418	19.82	ppb		96	
90)	Cyclohexanone	9.718	55	195168	401.21	ppb		98	
91)	trans-1,4-Dichloro-2-B...	9.961	53	26154	16.02	ppb		98	
92)	1,1,2,2-Tetrachloroethane	9.913	83	120233	17.31	ppb		95	
93)	Bromobenzene	9.913	156	172748	19.36	ppb	#	86	
94)	1,2,3-Trichloropropane	9.943	110	42065	20.24	ppb		97	
95)	n-Propylbenzene	10.022	91	701780	19.16	ppb		98	
96)	2-Chlorotoluene	10.083	91	439406	19.10	ppb		99	
~~97)~~	~~3-Chlorotoluene~~	~~10.175~~	~~91~~	~~530516~~	~~22.17~~	~~ppb~~		~~95~~	
98)	4-Chlorotoluene	10.175	91	527999	19.47	ppb		98	
99)	1,3,5-Trimethylbenzene	10.169	105	498123	19.50	ppb		99	
100)	tert-Butylbenzene	10.437	119	409508	19.05	ppb		99	
101)	1,2,4-Trimethylbenzene	10.480	105	508771	19.36	ppb		97	
103)	sec-Butylbenzene	10.620	105	579530	19.37	ppb		98	

00580

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4548.D
Misc :
Acq On : 8 Apr 2014 1:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 02:00:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

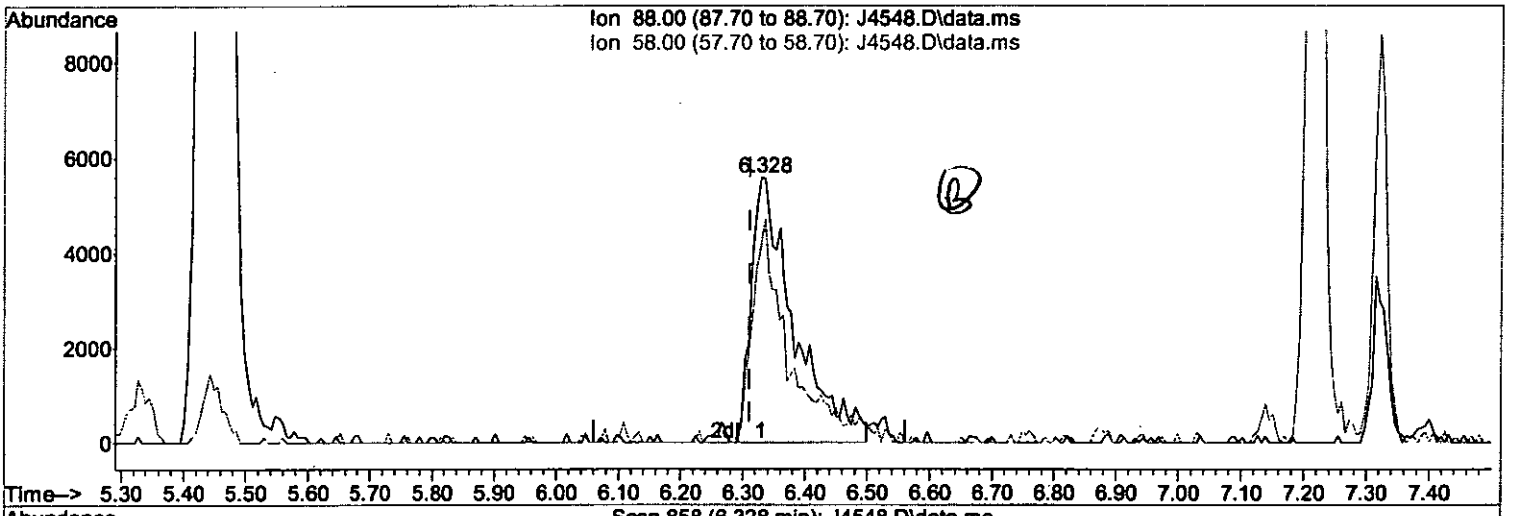
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
104) p-Isopropyltoluene	10.742	119	506683	20.03	ppb		98
105) 1,3-Dclbenz	10.699	146	296060	19.50	ppb		97
106) 1,4-Dclbenz	10.766	146	310099	19.19	ppb		96
109) n-Butylbenzene	11.065	91	442526	19.40	ppb		97
110) 1,2-Dclbenz	11.065	146	286174	19.57	ppb		97
111) 1,2-Dibromo-3-chloropr...	11.626	157	25614	24.07	ppb		95
112) Trielution Dichlorotol...	11.729	125	2459	0.21	ppb		97
115) 1,2,4-Tcbenzene	12.156	180	194346	21.73	ppb		96
116) Hexachlorobt	12.266	225	79652	20.41	ppb		96
117) Naphthalen	12.303	128	390011	24.23	ppb		98
118) 1,2,3-Tclbenzene	12.437	180	169254	23.12	ppb		98
119) 2,4,5-Trichlorotolene	12.851	159	2926	0.61	ppb	#	92
120) 2,3,6-Trichlorotoluene	12.912	159	2627	0.59	ppb	#	76

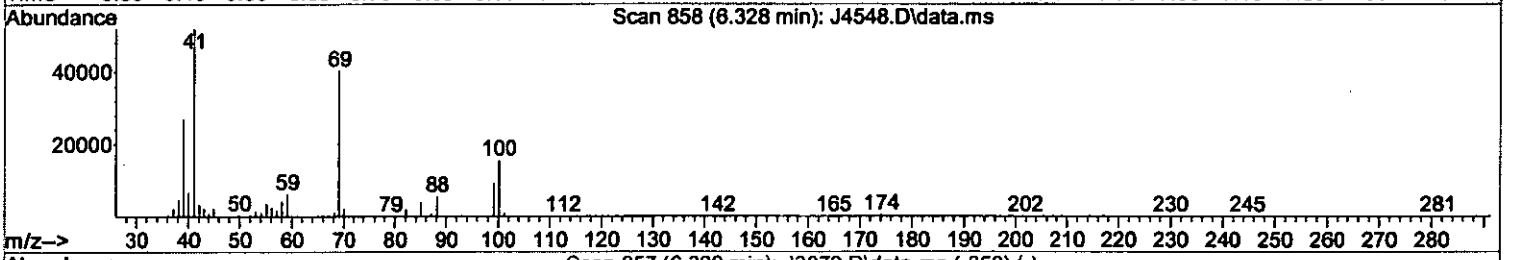
(#) = qualifier out of range (m) = manual integration (+) = signals summed

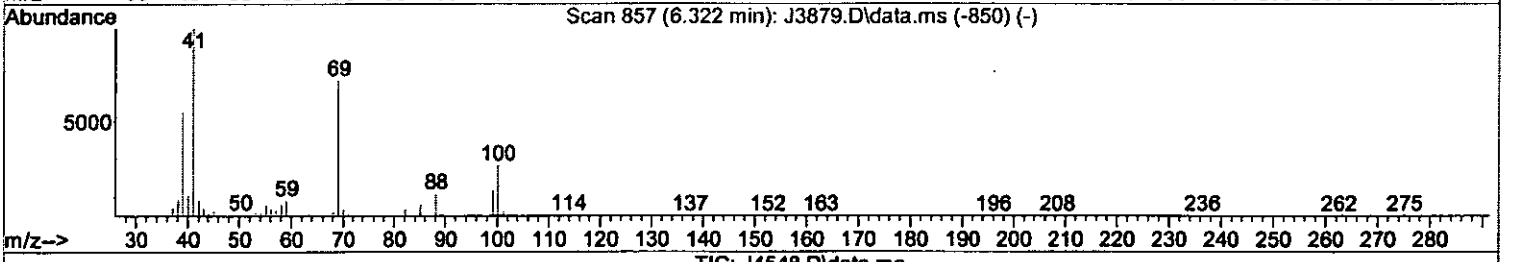
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4548.D
Misc :
Acq On : 8 Apr 2014 1:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 02:00:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4548.D\data.ms

(58) 1,4-Dioxane

6.328min (+0.018) 511.56 ppb

response 26450

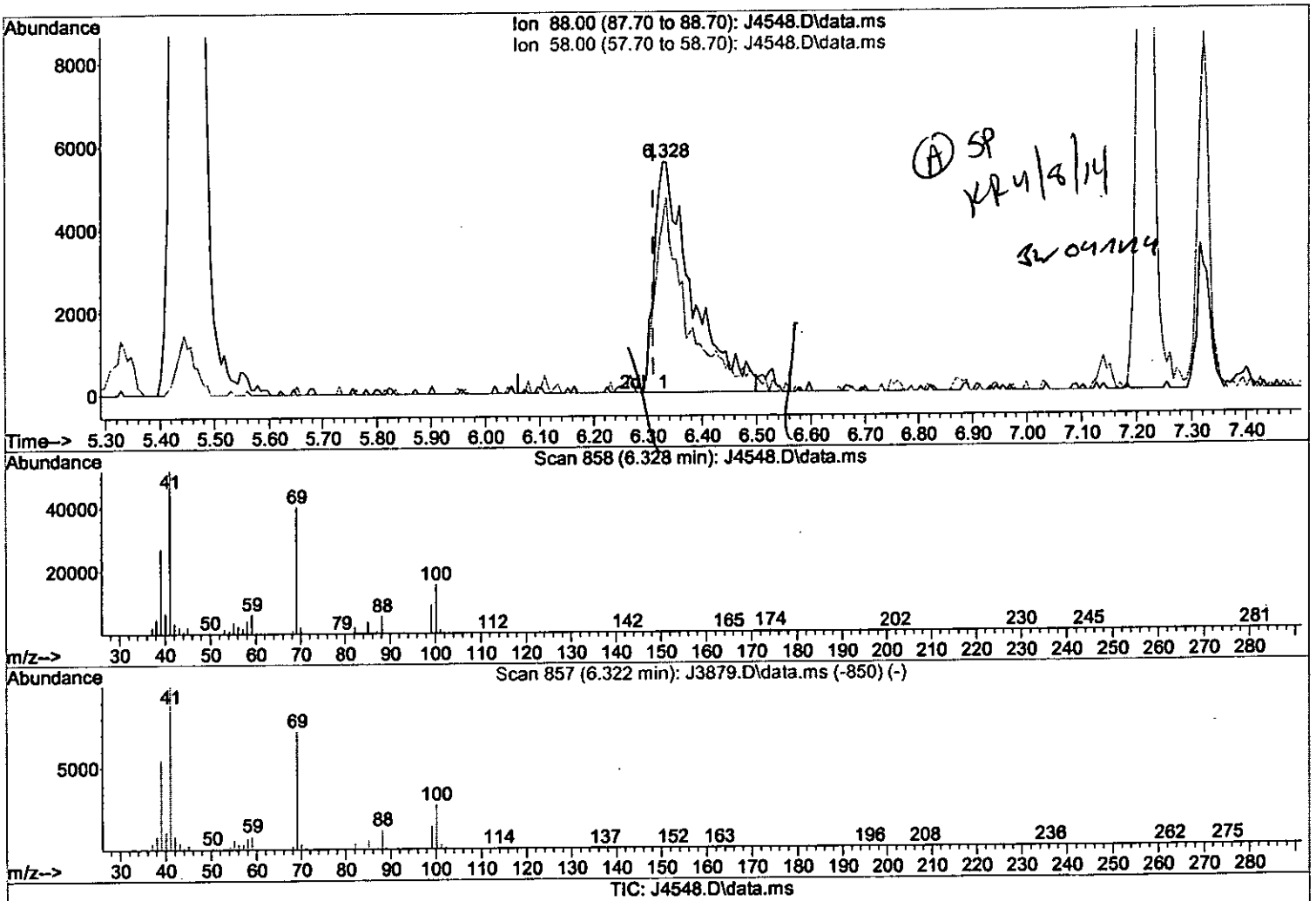
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	74.71#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Apr 08 10:48:26 2014 00582 Page: 1

Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\040714\J4548.D
Misc :
Acq On : 8 Apr 2014 1:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 02:00:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



(58) 1,4-Dioxane

6.328min (+0.018) 528.83 ppb m

response 27343

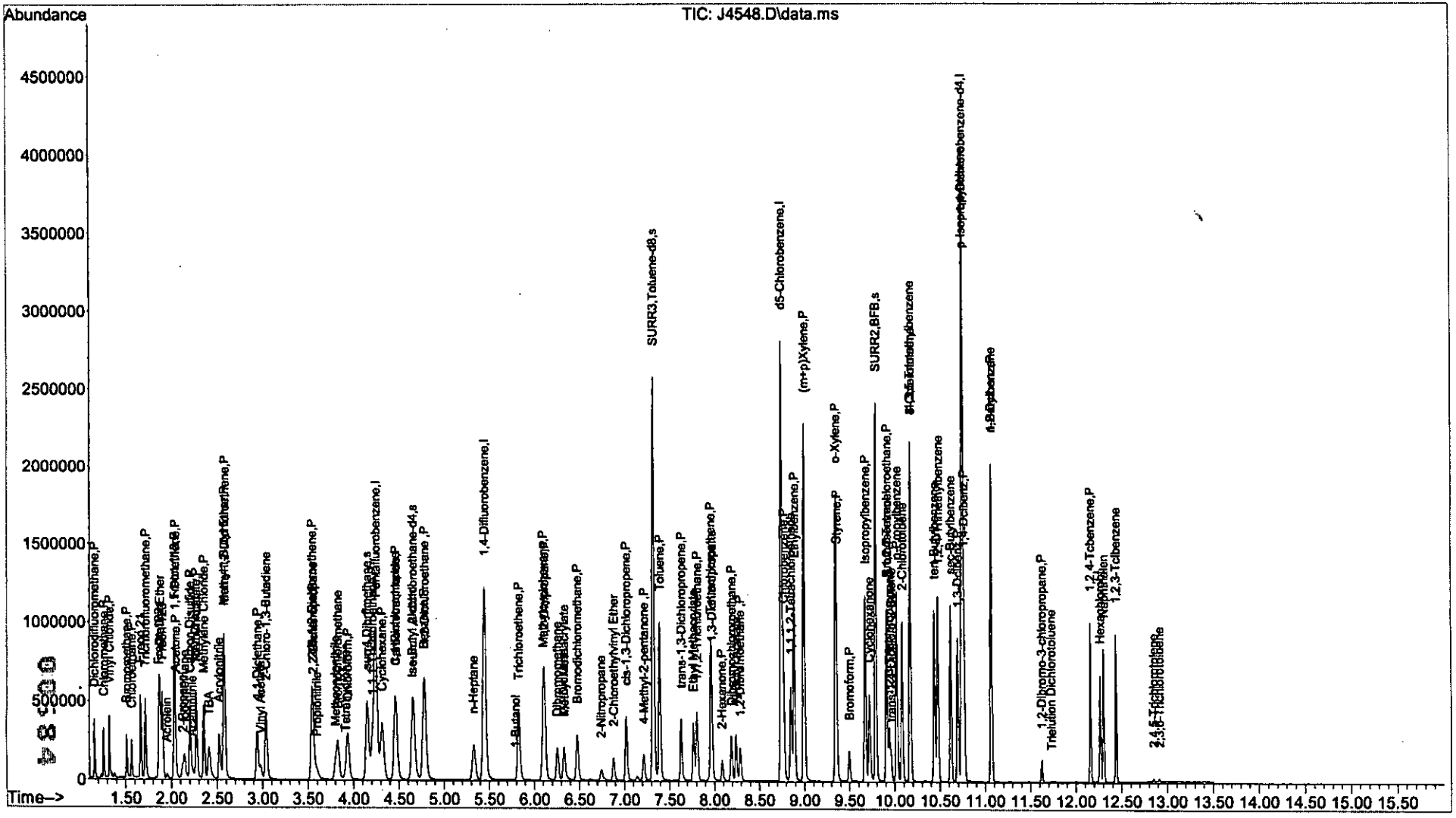
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	74.71#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Apr 08 10:48:32 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\040714\J4548.D
Misc :
Acq On : 8 Apr 2014 1:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 02:00:32 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Apr 08 02:00:36 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 13:08
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1403327-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4569.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**20.6**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**19.4**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**19.4**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**19.5**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**18.3**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**21.3**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**22.3**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**24.0**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**19.6**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**22.5**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**20.6**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**22.0**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**20.5**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**20.5**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**20.2**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**19.1**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**20.7**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**20.9**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**19.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**20.0**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**20.2**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**22.1**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**19.9**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**24.1**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**20.6**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**21.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**21.5**		5.0	1.0	0.67	
67-64-1	Acetone	**24.6**		5.0	5.0	1.3	
71-43-2	Benzene	**19.3**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**19.9**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**18.7**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**20.5**		5.0	1.0	0.32	
75-25-2	Bromoform	**20.5**		5.0	1.0	0.42	
74-83-9	Bromomethane	**17.8**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**19.6**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/14 13:08
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1403327-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4569.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**19.8**		5.0	1.0	0.29	
75-00-3	Chloroethane	**19.1**		5.0	1.0	0.24	
67-66-3	Chloroform	**18.8**		5.0	1.0	0.25	
74-87-3	Chloromethane	**17.1**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**21.5**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**16.9**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**18.3**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**19.7**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**22.7**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**20.8**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**19.9**		5.0	1.0	0.29	
91-20-3	Naphthalene	**24.4**		5.0	1.0	0.20	
100-42-5	Styrene	**21.0**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**20.3**		5.0	1.0	0.30	
108-88-3	Toluene	**19.9**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**20.5**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**18.8**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**20.0**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**18.9**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**19.4**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**42.1**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**21.1**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**20.2**		5.0	1.0	0.20	
95-47-6	o-Xylene	**20.4**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**20.7**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**20.2**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**19.2**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**20.6**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	4/8/14 13:08	
Dibromofluoromethane	102	85-115	4/8/14 13:08	
Toluene-d8	100	85-120	4/8/14 13:08	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4569.D
Misc :
Acq On : 8 Apr 2014 1:08 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1403327-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 13:23:52 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	852681	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1270359	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1158790	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	595020	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	375535	51.06	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.12%				
48) surr1,1,2-dichloroetha...	4.664	65	431414	51.49	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.98%				
65) SURR3,Toluene-d8	7.322	98	1537650	49.76	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.52%				
70) SURR2,BFB	9.791	95	575096	49.88	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.76%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	170649	16.85	ppb		99
3) Chloromethane	1.256	50	149604	17.05	ppb		99
4) Vinyl Chloride	1.323	62	162737	19.96	ppb		99
5) Bromomethane	1.512	94	87419	17.79	ppb		97
6) Chloroethane	1.567	64	93057	19.14	ppb		99
7) Freon 21	1.664	67	272651	22.17	ppb		99
8) Trichlorofluoromethane	1.719	101	235511	18.82	ppb		98
9) Diethyl Ether	1.878	59	115814	18.79	ppb		94
10) Freon 123a	1.866	67	186193	20.26	ppb		91
11) Freon 123	1.902	83	215713	20.55	ppb		97
12) Acrolein	1.957	56	24641	128.24	ppb		95
13) 1,1-Diclethene	2.036	96	131618	21.27	ppb		98
14) Freon 113	2.036	101	133911	19.78	ppb		89
15) Acetone	2.055	43	41575	24.57	ppb		97
16) 2-Propanol	2.140	45	139303	507.40	ppb		94
17) Iodomethane	2.146	142	128690	15.66	ppb		91
18) Carbon Disulfide	2.207	76	467149	21.71	ppb		100
19) Acetonitrile	2.237	40	22837	82.55	ppb		94
20) Allyl Chloride	2.274	76	79879	18.83	ppb		95
21) Methyl Acetate	2.274	43	70508	18.51	ppb		99
22) Methylene Chloride	2.359	84	148404	18.31	ppb		97
23) TBA	2.426	59	220649	466.63	ppb		99
24) Acrylonitrile	2.524	53	184305	97.24	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	391105	19.88	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	148865	19.20	ppb		95
28) 1,1-Diclethane	2.938	63	263632	18.27	ppb		99
29) Vinyl Acetate	2.981	86	26799	20.86	ppb	#	76
30) DIPE	3.012	45	497736	17.71	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	272226	21.90	ppb		94
32) ETBE	3.396	59	444626	18.91	ppb		99
33) 2,2-Dichloropropane	3.554	77	230744	20.15	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	163207	18.86	ppb		99
35) 2-Butanone	3.554	43	52470	22.14	ppb		92
36) Propionitrile	3.603	54	70879	103.57	ppb		100
37) Bromochloromethane	3.829	130	90275	18.69	ppb		92

PR 4/8/14

W031214.M Tue Apr 08 13:23:56 2014 00587 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4569.D
Misc :
Acq On : 8 Apr 2014 1:08 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 13:23:52 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	42359	19.18	ppb		88
39) Tetrahydrofuran	3.908	42	30329	18.30	ppb		82
40) Chloroform	3.938	83	265267	18.76	ppb		97
41) 1,1,1-Trichloroethane	4.213	97	234734	19.35	ppb		97
42) TAME	5.023	73	390650	19.67	ppb		99
44) Cyclohexane	4.316	41	128624	18.71	ppb		92
46) Carbontetrachloride	4.469	121	59575	19.56	ppb		97
47) 1,1-Dichloropropene	4.463	75	209002	22.28	ppb		94
49) Benzene	4.780	78	602677	19.27	ppb		98
50) 1,2-Dichloroethane	4.792	62	192214	20.24	ppb		97
51) Iso-Butyl Alcohol	4.658	43	95751	445.55	ppb		88
52) n-Heptane	5.328	43	149163	19.09	ppb		98
53) 1-Butanol	5.798	56	149699	1268.36	ppb		96
54) Trichloroethene	5.828	130	155366	20.51	ppb		94
55) Methylcyclohexane	6.109	55	153342	18.83	ppb		99
56) 1,2-Diclpropane	6.109	63	152935	19.12	ppb		96
57) Dibromomethane	6.255	93	74157	19.49	ppb		96
58) 1,4-Dioxane	6.346	88	13160 20907	~~399.16~~	ppb	#	52 453.63
59) Methyl Methacrylate	6.328	69	76084	20.22	ppb		95
60) Bromodichloromethane	6.474	83	191791	20.53	ppb		98
61) 2-Nitropropane	6.743	41	42216	42.02	ppb		96
62) 2-Chloroethylvinyl Ether	6.883	63	70972	19.79	ppb		95
63) cis-1,3-Dichloropropene	7.023	75	214818	19.38	ppb		99
64) 4-Methyl-2-pentanone	7.218	43	103693	21.49	ppb		97
66) Toluene	7.395	91	641555	19.89	ppb		99
67) trans-1,3-Dichloropropene	7.633	75	183700	20.56	ppb		97
68) Ethyl Methacrylate	7.767	69	156841	21.58	ppb		97
69) 1,1,2-Trichloroethane	7.809	97	109721	19.45	ppb		98
72) Tetrachloroethene	7.962	164	121293	20.26	ppb		95
73) 2-Hexanone	8.084	43	79084	24.09	ppb		100
74) 1,3-Dichloropropane	7.974	76	202247	19.39	ppb		96
75) Dibromochloromethane	8.187	129	129062	21.52	ppb		94
76) N-Butyl Acetate	8.236	43	174412	21.49	ppb		98
77) 1,2-Dibromoethane	8.285	107	109810	20.49	ppb		97
78) Chlorobenzene	8.773	112	399505	19.81	ppb		97
79) 3-CBTF	8.785	180	223238	22.38	ppb		93
80) 4-CBTF	8.840	180	204815	22.92	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.852	131	146095	20.62	ppb		94
82) Ethylbenzene	8.889	106	211693	19.70	ppb		95
83) (m+p)Xylene	8.998	106	532032	42.14	ppb		96
84) o-Xylene	9.346	106	262316	20.36	ppb		99
85) Styrene	9.352	104	433213	21.03	ppb		99
87) Bromoform	9.498	173	69275	20.50	ppb		96
88) 2-CBTF	9.577	180	219513	22.14	ppb		97
89) Isopropylbenzene	9.675	105	637912	20.76	ppb		98
90) Cyclohexanone	9.724	55	271643	569.14	ppb		98
91) trans-1,4-Dichloro-2-B...	9.962	53	29193	18.23	ppb		96
92) 1,1,2,2-Tetrachloroethane	9.913	83	132246	19.41	ppb		96
93) Bromobenzene	9.913	156	174136	19.89	ppb	#	84
94) 1,2,3-Trichloropropane	9.943	110	40019	19.63	ppb		91
95) n-Propylbenzene	10.022	91	724733	20.17	ppb		100
96) 2-Chlorotoluene	10.083	91	449536	19.92	ppb		99

00588

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4569.D
Misc :
Acq On : 8 Apr 2014 1:08 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 13:23:52 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

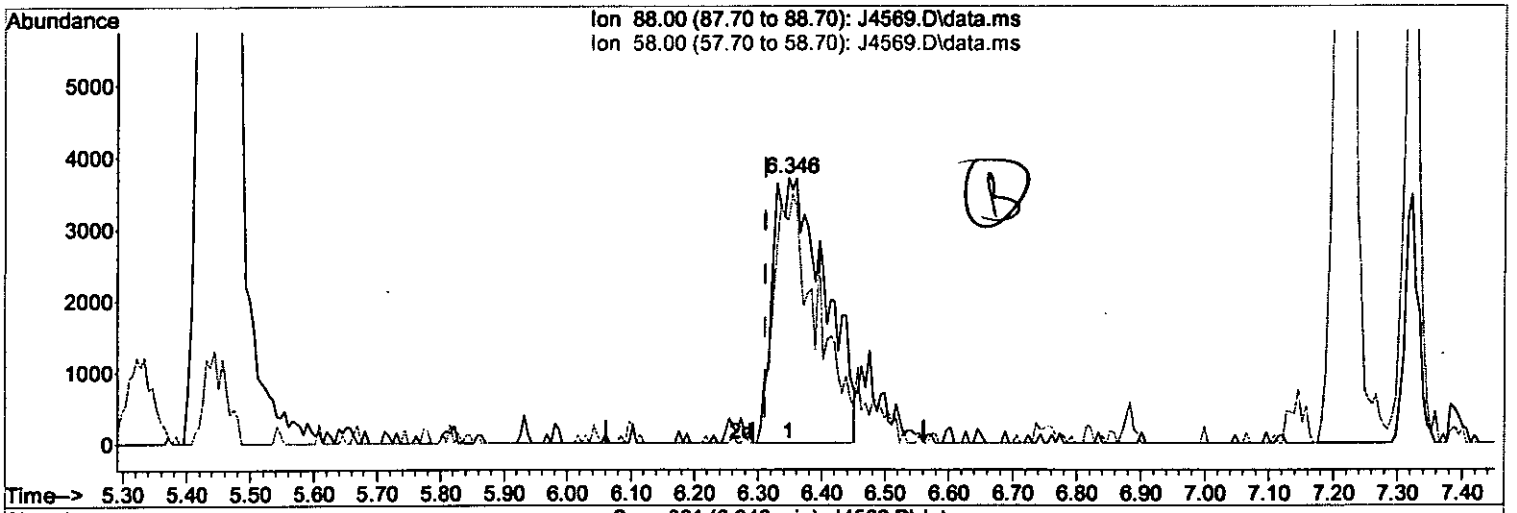
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	489814	20.87	ppb	97
98)	4-Chlorotoluene	10.175	91	547486	20.58	ppb	96
99)	1,3,5-Trimethylbenzene	10.169	105	518407	20.69	ppb	100
100)	tert-Butylbenzene	10.437	119	425677	20.18	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	532283	20.64	ppb	98
102)	3,4-DCBTF	10.535	214	162410	22.15	ppb	96
103)	sec-Butylbenzene	10.620	105	608504	20.73	ppb	98
104)	p-Isopropyltoluene	10.742	119	535573	21.57	ppb	97
105)	1,3-Dclbenz	10.699	146	310870	20.87	ppb	97
106)	1,4-Dclbenz	10.766	146	316954	19.99	ppb	98
107)	2,4-DCBTF	10.821	214	146446	22.96	ppb	96
108)	2,5-DCBTF	10.858	214	162962	22.35	ppb	95
109)	n-Butylbenzene	11.065	91	473134	21.14	ppb	99
110)	1,2-Dclbenz	11.065	146	294324	20.52	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	22995	22.02	ppb	97
112)	Trielution Dichlorotol...	11.729	125	777596	68.53	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	234529	23.70	ppb	95
114)	Coelution Dichlorotoluene	11.998	125	564058	46.95	ppb	99
115)	1,2,4-Tcbenzene	12.156	180	197570	22.52	ppb	99
116)	Hexachlorobt	12.266	225	86997	22.72	ppb	98
117)	Naphthalen	12.303	128	385172	24.39	ppb	98
118)	1,2,3-Tclbenzene	12.443	180	172578	24.02	ppb	95
119)	2,4,5-Trichlorotolene	12.851	159	127171	26.87	ppb	97
120)	2,3,6-Trichlorotoluene	12.912	159	113026	26.09	ppb	96

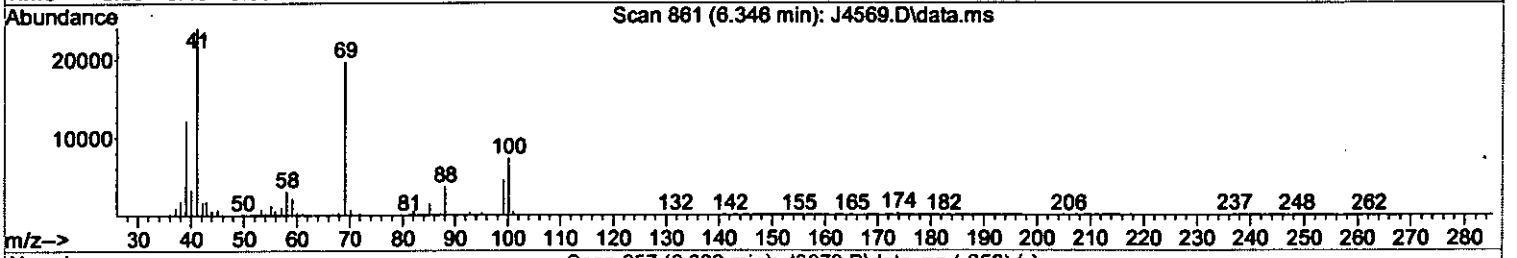
(#) = qualifier out of range (m) = manual integration (+) = signals summed

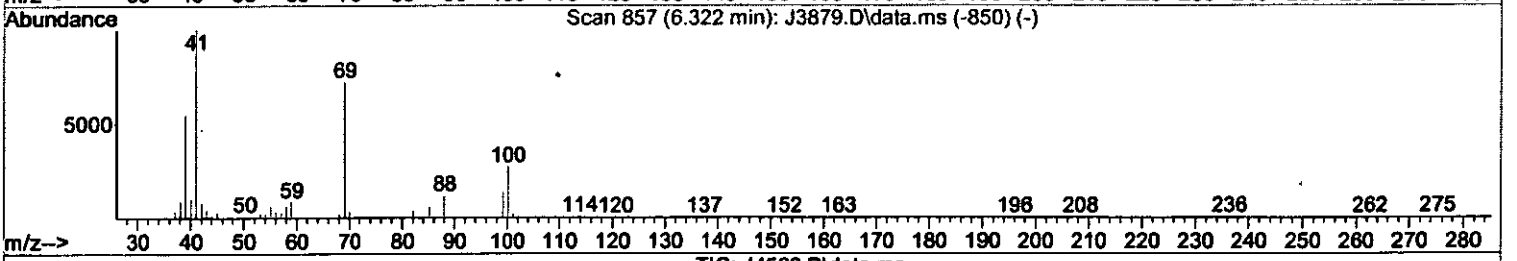
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4569.D
Misc :
Acq On : 8 Apr 2014 1:08 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 13:23:52 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4569.D\data.ms

(58) 1,4-Dioxane

6.346min (+0.037) 399.16 ppb

response 20907

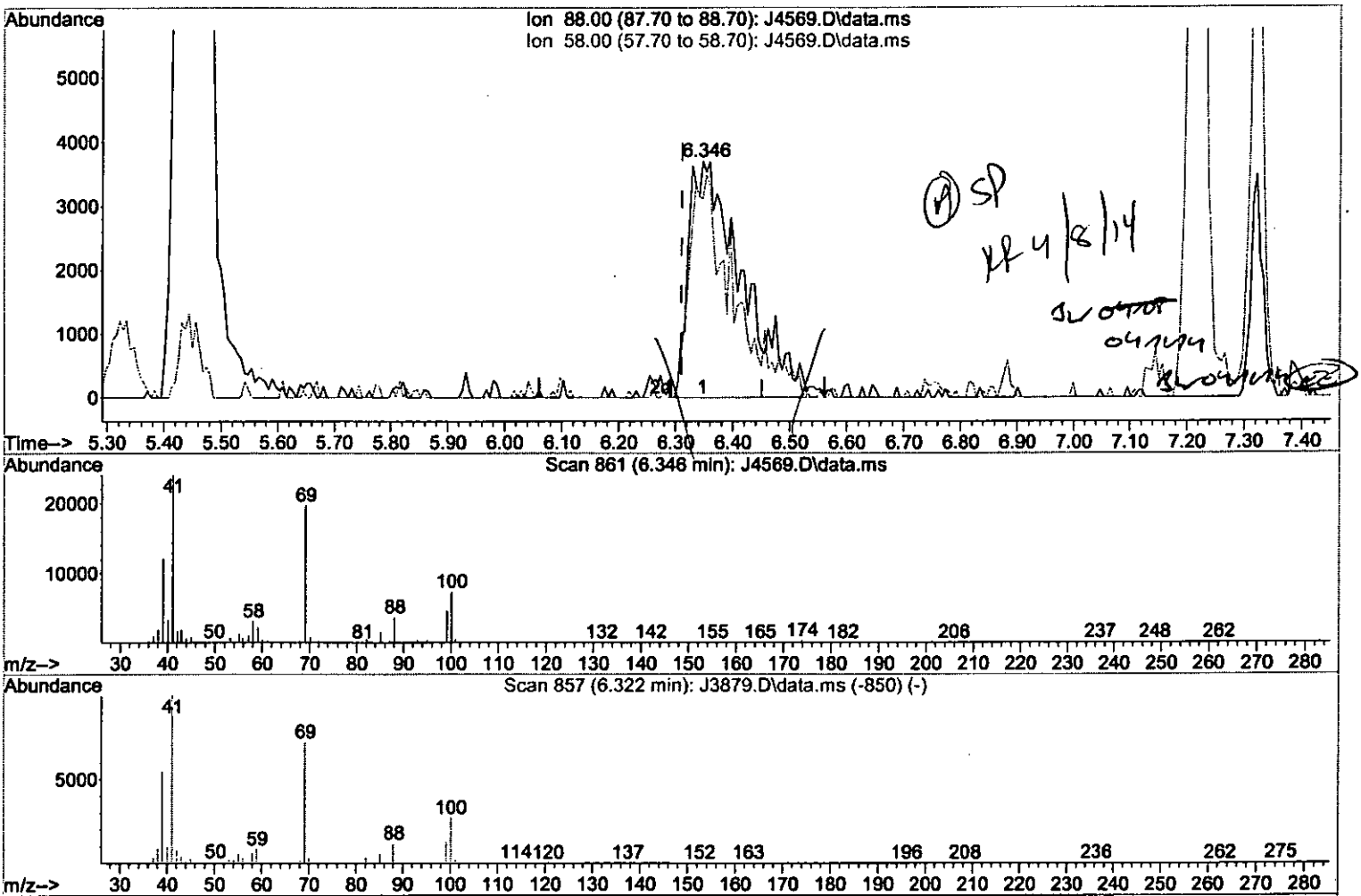
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	83.96#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Apr 08 14:10:41 2014 00590 Page: 1

Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4569.D
Misc :
Acq On : 8 Apr 2014 1:08 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 13:23:52 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4569.D\data.ms

(58) 1,4-Dioxane

6.346min (+0.037) 453.63 ppb m

response 23760

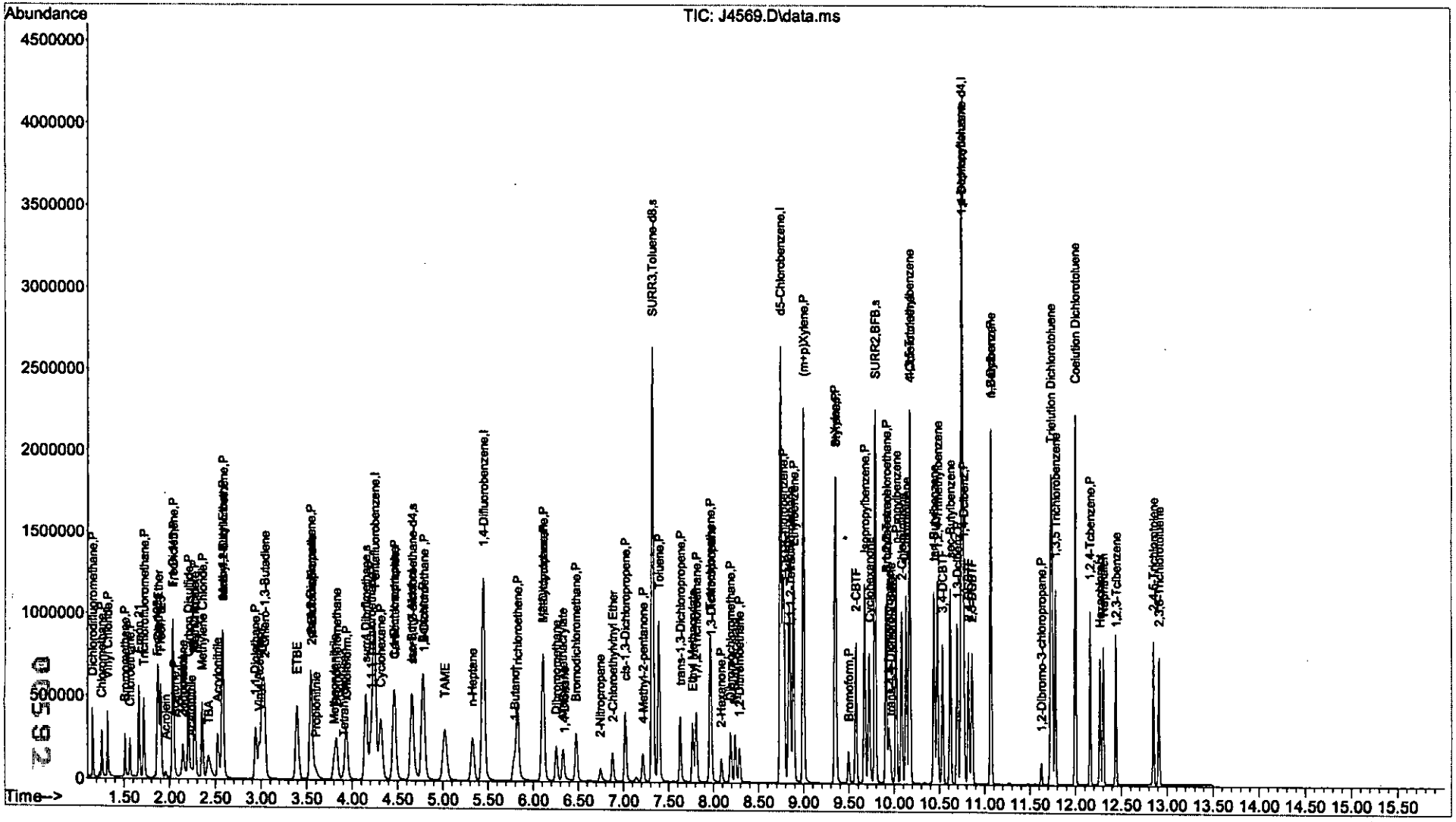
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	83.96#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue Apr 08 14:10:49 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4569.D
Misc :
Acq On : 8 Apr 2014 1:08 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 13:23:52 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Apr 08 13:23:58 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/10/14 12:05
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1403454-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\U4650.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**20.8**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**19.4**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**19.8**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**19.6**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**18.4**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**21.2**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**22.6**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**23.9**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**20.6**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**23.1**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**20.7**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**22.7**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**20.5**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**21.0**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**20.3**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**18.9**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**20.9**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**21.1**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**19.3**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**20.6**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**20.1**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**22.4**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**19.7**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**23.6**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**20.4**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**21.7**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**20.7**		5.0	1.0	0.67	
67-64-1	Acetone	**24.5**		5.0	5.0	1.3	
71-43-2	Benzene	**19.3**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**20.2**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**19.1**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**20.3**		5.0	1.0	0.32	
75-25-2	Bromoform	**21.2**		5.0	1.0	0.42	
74-83-9	Bromomethane	**17.3**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**20.3**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/10/14 12:05
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1403454-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387653
Data File Name:	I:\ACQUDATA\msvoa12\Data\041014\J4650.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**20.1**		5.0	1.0	0.29	
75-00-3	Chloroethane	**19.2**		5.0	1.0	0.24	
67-66-3	Chloroform	**18.6**		5.0	1.0	0.25	
74-87-3	Chloromethane	**16.9**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**21.5**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**16.1**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**18.0**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**20.3**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**22.4**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**20.0**		5.0	1.0	0.29	
91-20-3	Naphthalene	**24.6**		5.0	1.0	0.20	
100-42-5	Styrene	**20.7**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**20.6**		5.0	1.0	0.30	
108-88-3	Toluene	**20.2**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**20.6**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**19.3**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**19.2**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**18.7**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**20.2**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**41.8**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**20.9**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**20.4**		5.0	1.0	0.20	
95-47-6	o-Xylene	**20.0**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**20.8**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**20.5**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**19.2**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**21.0**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	4/10/14 12:05	
Dibromofluoromethane	103	85-115	4/10/14 12:05	
Toluene-d8	99	85-120	4/10/14 12:05	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4650.D
Misc :
Acq On : 10 Apr 2014 12:05 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1403454-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 12:20:49 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	835777	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1232617	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1142149	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	579627	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	367346	51.48	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.96%				
48) surr1,1,2-dichloroetha...	4.664	65	416890	51.28	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.56%				
65) SURR3,Toluene-d8	7.322	98	1480054	49.36	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.72%				
70) SURR2,BFB	9.791	95	550798	49.24	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	160037	16.12	ppb		97
3) Chloromethane	1.262	50	145330	16.89	ppb		99
4) Vinyl Chloride	1.323	62	153341	19.19	ppb		99
5) Bromomethane	1.512	94	83328	17.30	ppb		97
6) Chloroethane	1.567	64	91579	19.21	ppb		98
7) Freon 21	1.664	67	262058	21.74	ppb		99
8) Trichlorofluoromethane	1.719	101	236842	19.31	ppb		100
9) Diethyl Ether	1.878	59	111697	18.49	ppb		97
10) Freon 123a	1.872	67	177062	19.66	ppb		87
11) Freon 123	1.902	83	201290	19.57	ppb		98
12) Acrolein	1.957	56	29230	146.44	ppb		100
13) 1,1-Diclethene	2.042	96	128387	21.17	ppb		92
14) Freon 113	2.036	101	129300	19.48	ppb		91
15) Acetone	2.054	43	40558	24.46	ppb		97
16) 2-Propanol	2.146	45	145748	541.62	ppb		99
17) Iodomethane	2.146	142	140687	17.46	ppb		94
18) Carbon Disulfide	2.207	76	439722	20.84	ppb		99
19) Acetonitrile	2.237	40	18625	68.69	ppb		94
20) Allyl Chloride	2.280	76	77757	18.70	ppb	#	83
21) Methyl Acetate	2.274	43	71432	19.13	ppb		97
22) Methylene Chloride	2.359	84	143013	18.00	ppb		98
23) TBA	2.426	59	227958	491.84	ppb		99
24) Acrylonitrile	2.524	53	172719	92.97	ppb		95
25) Methyl-t-Butyl Ether	2.579	73	386306	20.04	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	145887	19.20	ppb		98
28) 1,1-Diclethane	2.938	63	259476	18.35	ppb		100
29) Vinyl Acetate	2.981	86	24706	19.62	ppb	#	63
30) DIPE	3.018	45	477148	17.32	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	258576	21.23	ppb		96
32) ETBE	3.396	59	434931	18.87	ppb		99
33) 2,2-Dichloropropane	3.554	77	225922	20.13	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	158335	18.67	ppb		95
35) 2-Butanone	3.554	43	51947	22.36	ppb		95
36) Propionitrile	3.603	54	68196	101.66	ppb		97
37) Bromochloromethane	3.828	130	90291	19.07	ppb		90

JLR 4/10/14

W031214.M Thu Apr 10 12:20:48 2014 00595 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4650.D
Misc :
Acq On : 10 Apr 2014 12:05 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 12:20:49 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	43099	19.91	ppb		93
39) Tetrahydrofuran	3:914	42	29761	18.33	ppb		72
40) Chloroform	3.938	83	258138	18.62	ppb		98
41) 1,1,1-Trichloroethane	4.213	97	230702	19.41	ppb		97
42) TAME	5.023	73	387972	19.94	ppb		100
44) Cyclohexane	4.316	41	119024	17.85	ppb		93
46) Carbontetrachloride	4.469	121	59943	20.28	ppb		98
47) 1,1-Dichloropropene	4.462	75	206098	22.64	ppb		95
49) Benzene	4.779	78	584612	19.26	ppb		99
50) 1,2-Dichloroethane	4.786	62	187083	20.30	ppb		96
51) Iso-Butyl Alcohol	4.658	43	91737	439.94	ppb		99
52) n-Heptane	5.328	43	141391	18.65	ppb		95
53) 1-Butanol	5.791	56	161042	1406.24	ppb		98
54) Trichloroethene	5.828	130	151220	20.57	ppb		94
55) Methylcyclohexane	6.102	55	147151	18.62	ppb		95
56) 1,2-Diclpropane	6.109	63	146943	18.94	ppb		98
57) Dibromomethane	6.255	93	75952	20.58	ppb		88
58) 1,4-Dioxane	6.365	88	3,296 29916	~~588.66~~	ppb	615.81	97
59) Methyl Methacrylate	6.334	69	73741	20.19	ppb		92
60) Bromodichloromethane	6.474	83	183766	20.27	ppb		96
61) 2-Nitropropane	6.749	41	39372	40.39	ppb		88
62) 2-Chloroethylvinyl Ether	6.883	63	68683	19.73	ppb		100
63) cis-1,3-Dichloropropene	7.023	75	217253	20.20	ppb		97
64) 4-Methyl-2-pentanone	7.212	43	96749	20.67	ppb		97
66) Toluene	7.395	91	631280	20.18	ppb		100
67) trans-1,3-Dichloropropene	7.633	75	181999	20.99	ppb		94
68) Ethyl Methacrylate	7.767	69	152142	21.57	ppb		97
69) 1,1,2-Trichloroethane	7.809	97	107332	19.61	ppb		99
72) Tetrachloroethene	7.962	164	121443	20.58	ppb		95
73) 2-Hexanone	8.084	43	76325	23.59	ppb		93
74) 1,3-Dichloropropane	7.974	76	198759	19.33	ppb		99
75) Dibromochloromethane	8.187	129	126988	21.48	ppb		96
76) N-Butyl Acetate	8.236	43	165507	20.69	ppb		96
77) 1,2-Dibromoethane	8.285	107	108414	20.53	ppb		99
78) Chlorobenzene	8.773	112	398906	20.07	ppb		93
79) 3-CBTF	8.785	180	227146	23.10	ppb		97
80) 4-CBTF	8.840	180	207181	23.52	ppb		99
81) 1,1,1,2-Tetrachloroethane	8.852	131	145469	20.83	ppb		98
82) Ethylbenzene	8.888	106	215167	20.32	ppb		96
83) (m+p)Xylene	8.998	106	520688	41.84	ppb		99
84) o-Xylene	9.346	106	254128	20.01	ppb		97
85) Styrene	9.358	104	420704	20.72	ppb		93
87) Bromoform	9.492	173	69748	21.19	ppb		98
88) 2-CBTF	9.577	180	214695	22.23	ppb		95
89) Isopropylbenzene	9.675	105	628170	20.99	ppb		97
90) Cyclohexanone	9.724	55	243556	523.85	ppb		97
91) trans-1,4-Dichloro-2-B...	9.961	53	31664	20.29	ppb		90
92) 1,1,2,2-Tetrachloroethane	9.913	83	131648	19.83	ppb		97
93) Bromobenzene	9.913	156	172187	20.19	ppb	#	86
94) 1,2,3-Trichloropropane	9.943	110	40914	20.60	ppb		96
95) n-Propylbenzene	10.022	91	715570	20.44	ppb		99
96) 2-Chlorotoluene	10.083	91	434003	19.74	ppb		100

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4650.D
Misc :
Acq On : 10 Apr 2014 12:05 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 12:20:49 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

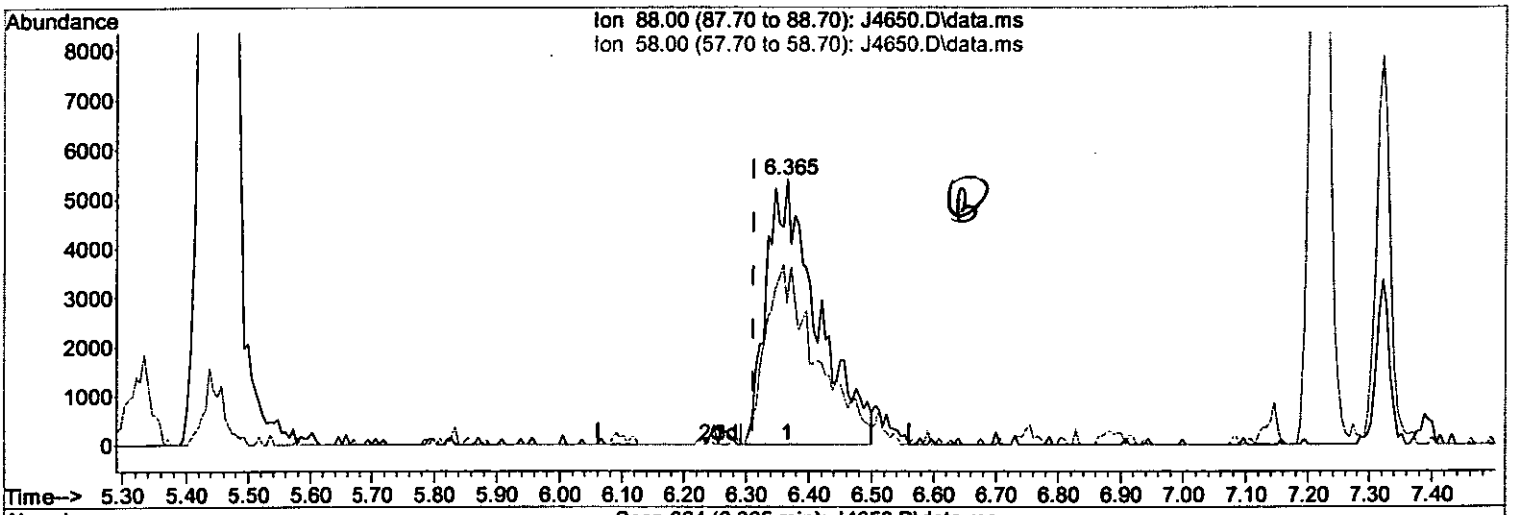
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	481230	21.05	ppb	98
98)	4-Chlorotoluene	10.169	91	527398	20.35	ppb	97
99)	1,3,5-Trimethylbenzene	10.169	105	509489	20.87	ppb	99
100)	tert-Butylbenzene	10.437	119	421012	20.49	ppb	96
101)	1,2,4-Trimethylbenzene	10.480	105	519605	20.69	ppb	98
102)	3,4-DCBTF	10.534	214	160008	22.41	ppb	97
103)	sec-Butylbenzene	10.620	105	593600	20.76	ppb	99
104)	p-Isopropyltoluene	10.742	119	524231	21.68	ppb	98
105)	1,3-Dclbenz	10.699	146	305558	21.05	ppb	97
106)	1,4-Dclbenz	10.766	146	318692	20.64	ppb	97
107)	2,4-DCBTF	10.821	214	144189	23.21	ppb	94
108)	2,5-DCBTF	10.864	214	162659	22.90	ppb	99
109)	n-Butylbenzene	11.065	91	456115	20.92	ppb	98
110)	1,2-Dclbenz	11.065	146	293733	21.02	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	23079	22.69	ppb	97
112)	Trielution Dichlorotol...	11.729	125	759956	68.75	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	223742	23.21	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	553771	47.32	ppb	98
115)	1,2,4-Tcbenzene	12.162	180	197569	23.12	ppb	95
116)	Hexachlorobt	12.266	225	83656	22.43	ppb	96
117)	Naphthalen	12.302	128	378828	24.62	ppb	98
118)	1,2,3-Tclbenzene	12.443	180	166986	23.86	ppb	97
119)	2,4,5-Trichlorotolene	12.851	159	125401	27.20	ppb	99
120)	2,3,6-Trichlorotoluene	12.912	159	107106	25.38	ppb	98

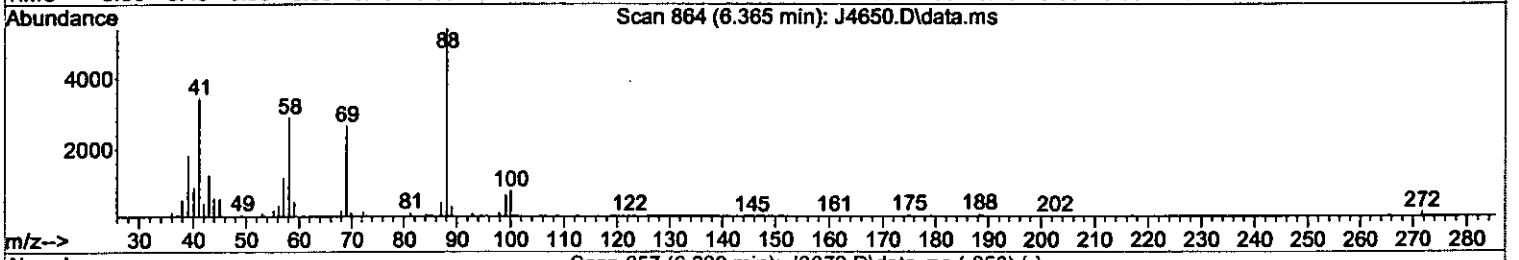
(#) = qualifier out of range (m) = manual integration (+) = signals summed

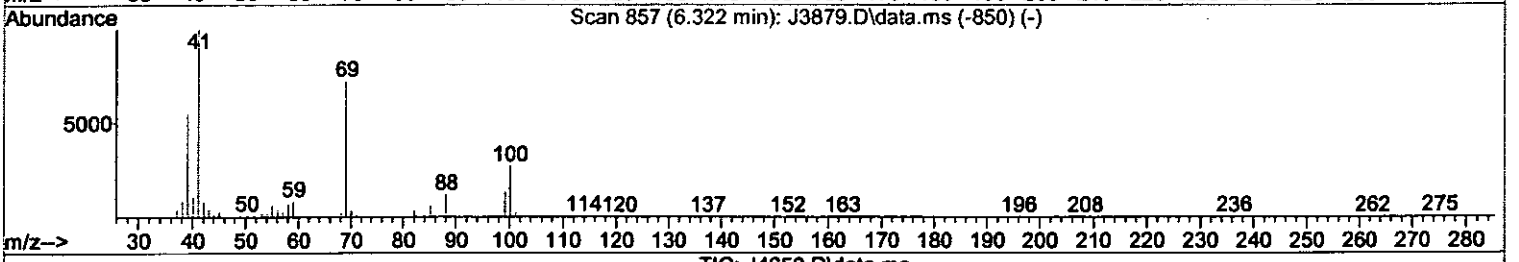
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4650.D
Misc :
Acq On : 10 Apr 2014 12:05 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 12:20:49 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4650.D\data.ms

(58) 1,4-Dioxane

6.365min (+0.055) 588.66 ppb

response 29916

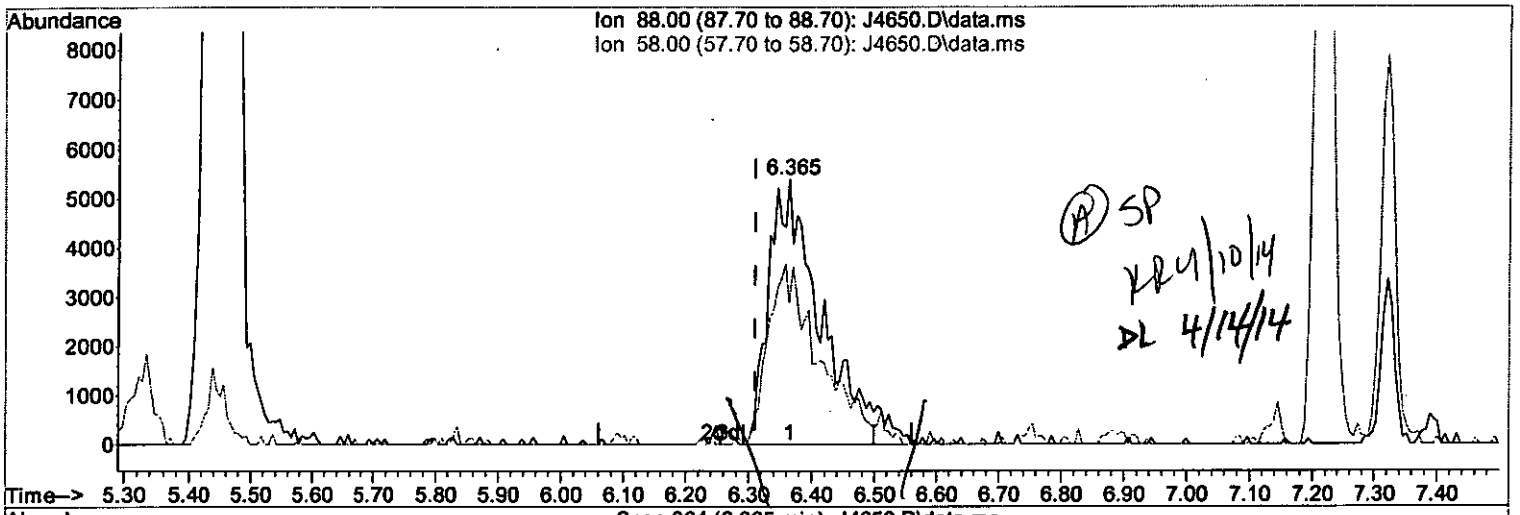
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	53.21
0.00	0.00	0.00
0.00	0.00	0.00

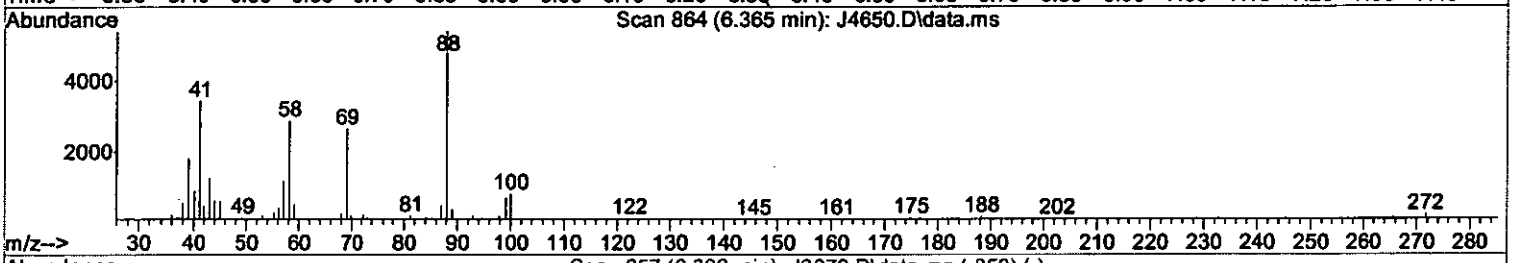
00598

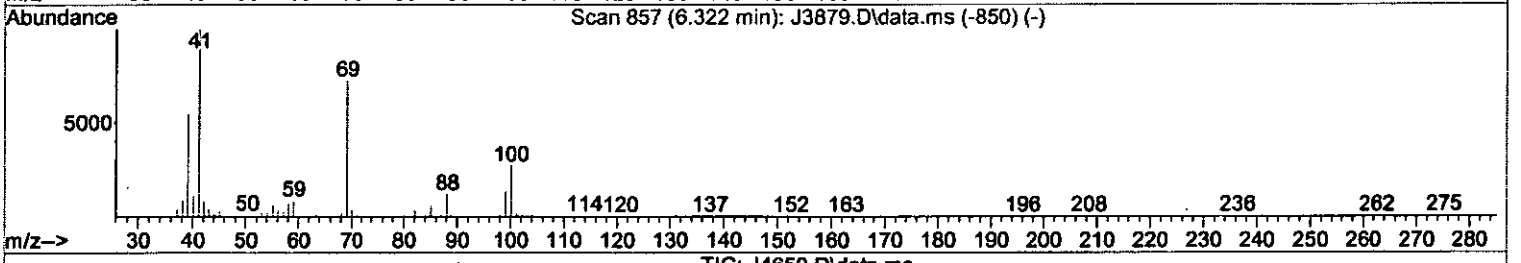
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\041014\J4650.D
Misc :
Acq On : 10 Apr 2014 12:05 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 12:20:49 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4650.D\data.ms

(58) 1,4-Dioxane

6.365min (+0.055) 615.81 ppb m

response 31296

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	53.21
0.00	0.00	0.00
0.00	0.00	0.00

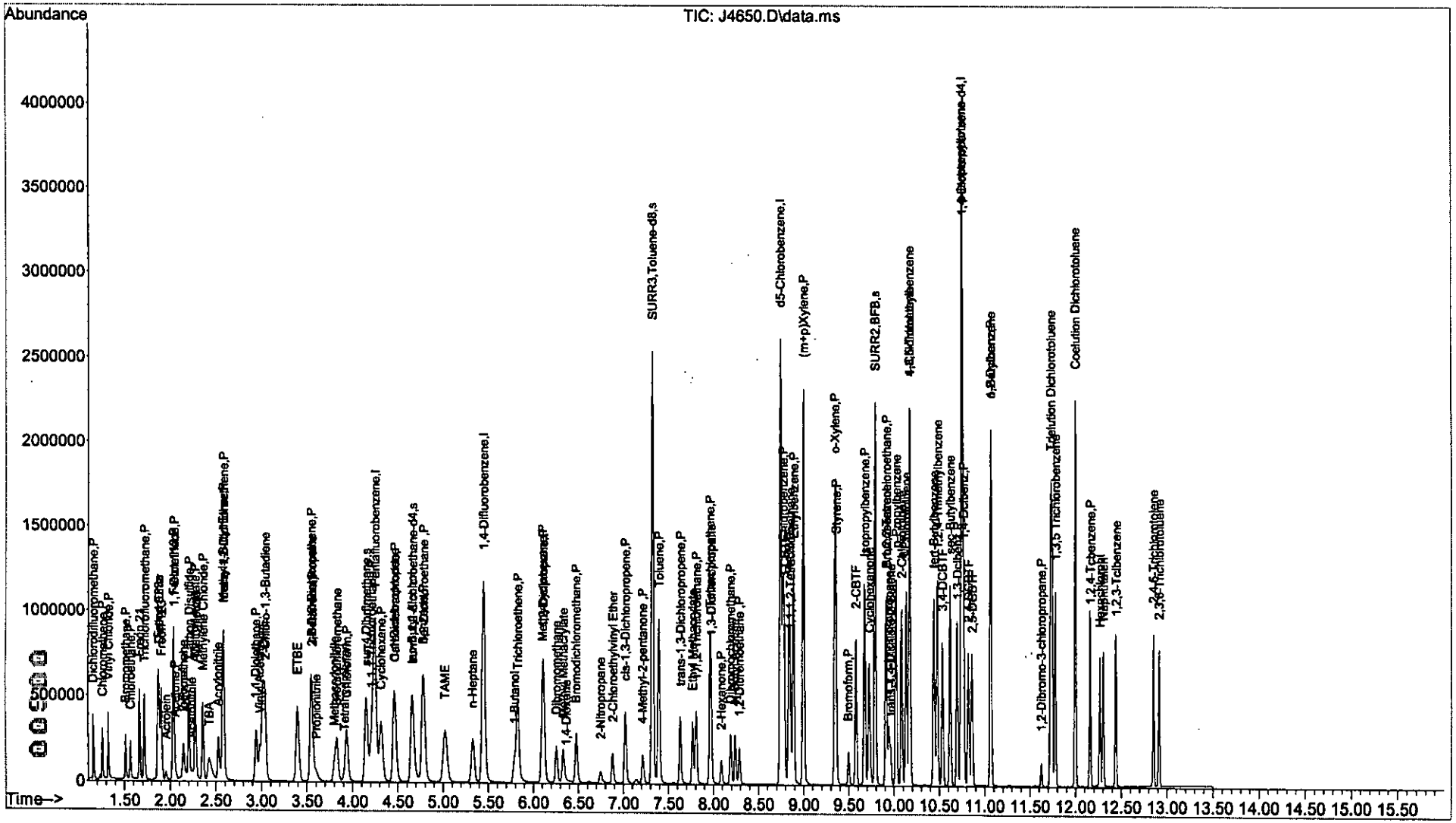
00599

W031214.M Thu Apr 10 12:29:52 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\041014\J4650.D
Misc :
Acq On : 10 Apr 2014 12:05 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 10 12:20:49 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Thu Apr 10 12:20:52 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1110
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 22:50
Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	RQ1403327-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4587.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**53.3**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**49.9**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**53.1**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**52.5**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**47.5**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**55.3**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**57.7**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**54.3**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**54.3**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**52.3**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**50.5**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**64.8**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**55.8**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**52.0**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**52.5**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**48.4**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**50.6**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**51.8**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**51.5**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**50.2**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**47.7**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**50.6**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**49.6**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**56.6**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**51.1**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**52.0**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**59.2**		5.0	1.0	0.67	
67-64-1	Acetone	**49.1**		5.0	5.0	1.3	
71-43-2	Benzene	**50.2**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**51.5**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**48.6**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**51.5**		5.0	1.0	0.32	
75-25-2	Bromoform	**49.9**		5.0	1.0	0.42	
74-83-9	Bromomethane	**33.7**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**50.2**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1110
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 22:50
Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	RQ1403327-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4587.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**51.3**		5.0	1.0	0.29	
75-00-3	Chloroethane	**50.4**		5.0	1.0	0.24	
67-66-3	Chloroform	**48.7**		5.0	1.0	0.25	
74-87-3	Chloromethane	**43.0**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**51.2**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**41.9**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**47.1**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**51.7**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**47.2**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**51.7**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**53.0**		5.0	1.0	0.29	
91-20-3	Naphthalene	**60.8**		5.0	1.0	0.20	
100-42-5	Styrene	**52.3**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**52.6**		5.0	1.0	0.30	
108-88-3	Toluene	**50.8**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**52.7**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**48.7**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**51.8**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**48.4**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**49.3**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**107**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**49.9**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**50.2**		5.0	1.0	0.20	
95-47-6	o-Xylene	**51.6**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**50.1**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**49.4**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**48.9**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**53.7**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	4/8/14 22:50	
Dibromofluoromethane	103	85-115	4/8/14 22:50	
Toluene-d8	99	85-120	4/8/14 22:50	

Quantitation Report (Not Reviewed)

Sample : R1402225-007MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4587.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 10:50 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1403327-05

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:05:29 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	840375	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1253922	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1161971	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	595578	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	373857	51.50	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.00%				
48) surr1,1,2-dichloroetha...	4.664	65	438366	53.01	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 106.02%				
65) SURR3,Toluene-d8	7.322	98	1513066	49.60	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.20%				
70) SURR2,BFB	9.791	95	567975	49.91	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.82%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	417820	41.86	ppb		95
3) Chloromethane	1.262	50	371471	42.95	ppb		98
4) Vinyl Chloride	1.323	62	415829	51.75	ppb		99
5) Bromomethane	1.512	94	163094	33.68	ppb		96
6) Chloroethane	1.567	64	241460	50.38	ppb		100
7) Freon 21	1.664	67	695971	57.43	ppb		100
8) Trichlorofluoromethane	1.719	101	600258	48.66	ppb		98
9) Diethyl Ether	1.878	59	299059	49.23	ppb		97
10) Freon 123a	1.872	67	470994	52.01	ppb		83
11) Freon 123	1.902	83	549119	53.09	ppb		99
12) Acrolein	1.957	56	62550	240.66	ppb		98
13) 1,1-Diclethene	2.036	96	337328	55.31	ppb		97
14) Freon 113	2.036	101	329933	49.44	ppb		92
15) Acetone	2.048	43	81857	49.09	ppb		98
16) 2-Propanol	2.128	45	352275	1301.93	ppb		95
17) Iodomethane	2.146	142	266507	32.90	ppb		90
18) Carbon Disulfide	2.207	76	686323	32.36	ppb		99
19) Acetonitrile	2.231	40	67447	247.37	ppb		89
20) Allyl Chloride	2.274	76	161834	38.70	ppb		94
21) Methyl Acetate	2.274	43	177373	47.24	ppb		99
22) Methylene Chloride	2.359	84	376488	47.12	ppb		99
23) TBA	2.420	59	600980	1289.58	ppb		94
24) Acrylonitrile	2.524	53	491208	262.96	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	1027044	52.98	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	373679	48.91	ppb		96
28) 1,1-Diclethane	2.945	63	675417	47.49	ppb		99
29) Vinyl Acetate	2.981	86	64028	50.56	ppb	#	74
30) DIPE	3.018	45	1200576	43.34	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	647869	52.89	ppb		93
32) ETBE	3.402	59	1095966	47.28	ppb		98
33) 2,2-Dichloropropane	3.560	77	538530	47.73	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	412544	48.38	ppb		99
35) 2-Butanone	3.548	43	118094	50.56	ppb		98
36) Propionitrile	3.597	54	189236	280.56	ppb		94
37) Bromochloromethane	3.829	130	231441	48.62	ppb		95

KR 4/9/14

Quantitation Report (Not Reviewed)

Sample : R1402225-007MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4587.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 10:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:05:29 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	115089	52.89	ppb		91
39) Tetrahydrofuran	3.908	42	83016	50.84	ppb		78
40) Chloroform	3.938	83	677975	48.65	ppb		100
41) 1,1,1-Trichloroethane	4.213	97	596010	49.86	ppb		89
42) TAME	5.023	73	973851	49.77	ppb		98
44) Cyclohexane	4.316	41	318030	46.88	ppb		91
46) Carbontetrachloride	4.469	121	150907	50.19	ppb		98
47) 1,1-Dichloropropene	4.463	75	534305	57.69	ppb		96
49) Benzene	4.786	78	1549331	50.19	ppb		98
50) 1,2-Dichloroethane	4.786	62	492089	52.50	ppb		96
51) Iso-Butyl Alcohol	4.652	43	253417	1194.66	ppb		89
52) n-Heptane	5.334	43	320328	41.53	ppb		98
53) 1-Butanol	5.785	56	399896	3432.62	ppb		100
54) Trichloroethene	5.828	130	394387	52.74	ppb		97
55) Methylcyclohexane	6.109	55	373043	46.40	ppb		93
56) 1,2-Diclpropane	6.115	63	381937	48.38	ppb		98
57) Dibromomethane	6.255	93	200032	53.27	ppb		94
58) 1,4-Dioxane	6.334	88 ~~5743916~~		~~849.45~~	ppb		84
59) Methyl Methacrylate	6.334	69	210714	56.73	ppb		89
60) Bromodichloromethane	6.480	83	475071	51.52	ppb		98
61) 2-Nitropropane	6.749	41	121669	122.70	ppb		89
63) cis-1,3-Dichloropropene	7.023	75	538943	49.26	ppb		100
64) 4-Methyl-2-pentanone	7.212	43	281679	59.15	ppb		98
66) Toluene	7.395	91	1616017	50.77	ppb		99
67) trans-1,3-Dichloropropene	7.633	75	473220	53.66	ppb		95
68) Ethyl Methacrylate	7.767	69	433708	60.45	ppb		99
69) 1,1,2-Trichloroethane	7.809	97	292469	52.52	ppb		96
72) Tetrachloroethene	7.962	164	315827	52.62	ppb		97
73) 2-Hexanone	8.084	43	186353	56.62	ppb		100
74) 1,3-Dichloropropane	7.974	76	538749	51.50	ppb		97
75) Dibromochloromethane	8.194	129	308094	51.22	ppb		99
76) N-Butyl Acetate	8.236	43	444104	54.57	ppb		98
77) 1,2-Dibromoethane	8.285	107	299713	55.78	ppb		99
78) Chlorobenzene	8.773	112	1036220	51.25	ppb		94
79) 3-CBTF	8.785	180	534489	53.44	ppb		98
80) 4-CBTF	8.840	180	479910	53.55	ppb		99
81) 1,1,1,2-Tetrachloroethane	8.852	131	378375	53.25	ppb		94
82) Ethylbenzene	8.889	106	557274	51.73	ppb		97
83) (m+p)Xylene	8.998	106	1350232	106.65	ppb		96
84) o-Xylene	9.346	106	666023	51.55	ppb		96
85) Styrene	9.358	104	1080181	52.30	ppb		93
87) Bromoform	9.498	173	168802	49.91	ppb		97
88) 2-CBTF	9.577	180	513260	51.73	ppb		98
89) Isopropylbenzene	9.675	105	1590094	51.71	ppb		96
90) Cyclohexanone	9.724	55	180750	378.35	ppb		99
91) trans-1,4-Dichloro-2-B...	9.962	53	66085	41.22	ppb		94
92) 1,1,2,2-Tetrachloroethane	9.913	83	362146	53.10	ppb		100
93) Bromobenzene	9.913	156	451522	51.54	ppb	#	83
94) 1,2,3-Trichloropropane	9.943	110	110837	54.31	ppb		96
95) n-Propylbenzene	10.022	91	1804269	50.16	ppb		98
96) 2-Chlorotoluene	10.083	91	1121273	49.64	ppb		99
97) 3-Chlorotoluene	10.132	91	1166058	49.63	ppb		99

W031214.M Tue Apr 08 23:05:36 2014 Page: 2

Quantitation Report (Not Reviewed)

Sample : R1402225-007MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4587.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 10:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:05:29 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

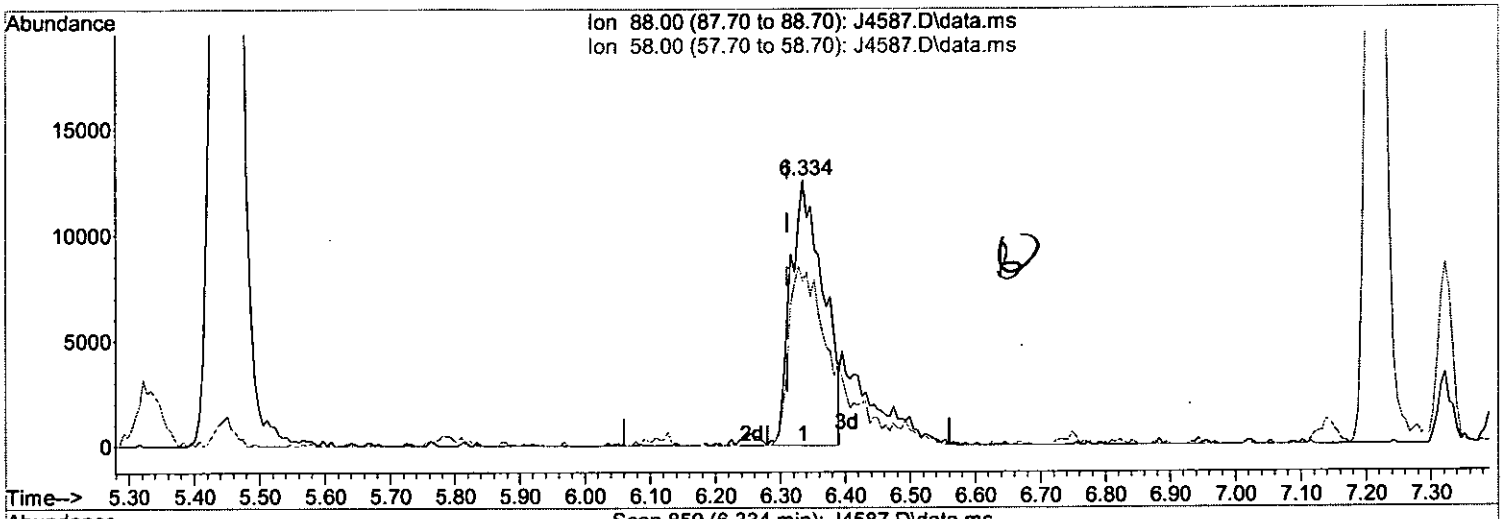
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	4-Chlorotoluene	10.175	91	1359593	51.05	ppb	95
99)	1,3,5-Trimethylbenzene	10.169	105	1268626	50.58	ppb	98
100)	tert-Butylbenzene	10.437	119	1043518	49.42	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	1304161	50.54	ppb	98
102)	3,4-DCBTF	10.535	214	355914	48.51	ppb	97
103)	sec-Butylbenzene	10.620	105	1473265	50.14	ppb	99
104)	p-Isopropyltoluene	10.742	119	1291864	51.99	ppb	98
105)	1,3-Dclbenz	10.699	146	771880	51.76	ppb	97
106)	1,4-Dclbenz	10.766	146	796992	50.23	ppb	98
107)	2,4-DCBTF	10.821	214	325437	50.98	ppb	97
108)	2,5-DCBTF	10.864	214	371164	50.85	ppb	97
109)	n-Butylbenzene	11.065	91	1117429	49.88	ppb	98
110)	1,2-Dclbenz	11.065	146	746164	51.96	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	67717	64.80	ppb	95
112)	Trielution Dichlorotol...	11.729	125	1742622	153.43	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	510906	51.58	ppb	99
114)	Coelution Dichlorotoluene	11.998	125	1270796	105.67	ppb	98
115)	1,2,4-Tcbenzene	12.162	180	459222	52.29	ppb	93
116)	Hexachlorobt	12.266	225	180800	47.17	ppb	98
117)	Naphthalen	12.303	128	961940	60.84	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	390333	54.29	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	240877	50.84	ppb	96
120)	2,3,6-Trichlorotoluene	12.912	159	207697	47.89	ppb	96

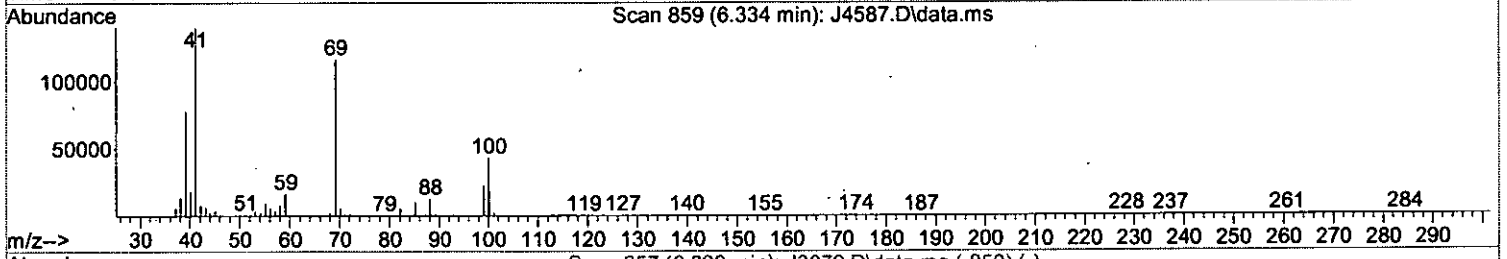
(#) = qualifier out of range (m) = manual integration (+) = signals summed

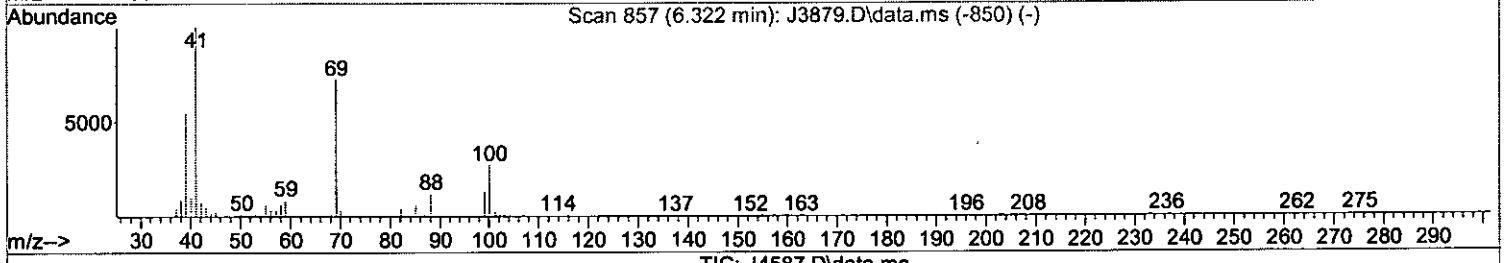
Quantitation Report (Qedit)

Sample : R1402225-007MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4587.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 10:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:05:29 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4587.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.024) 849.45 ppb

response 43916

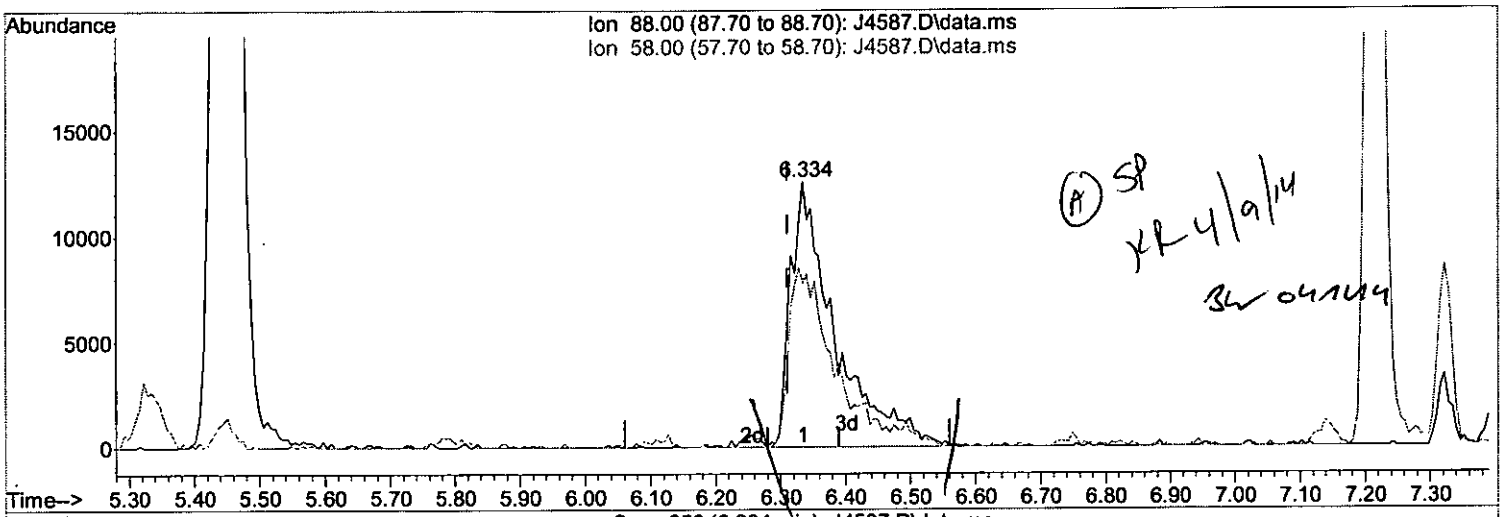
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	61.89
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Wed Apr 09 10:47:19 2014 00606 Page: 1

Quantitation Report (Qedit)

Sample : R1402225-007MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4587.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 10:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:05:29 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



TIC: J4587.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.024) 1151.41 ppb m

response 59527

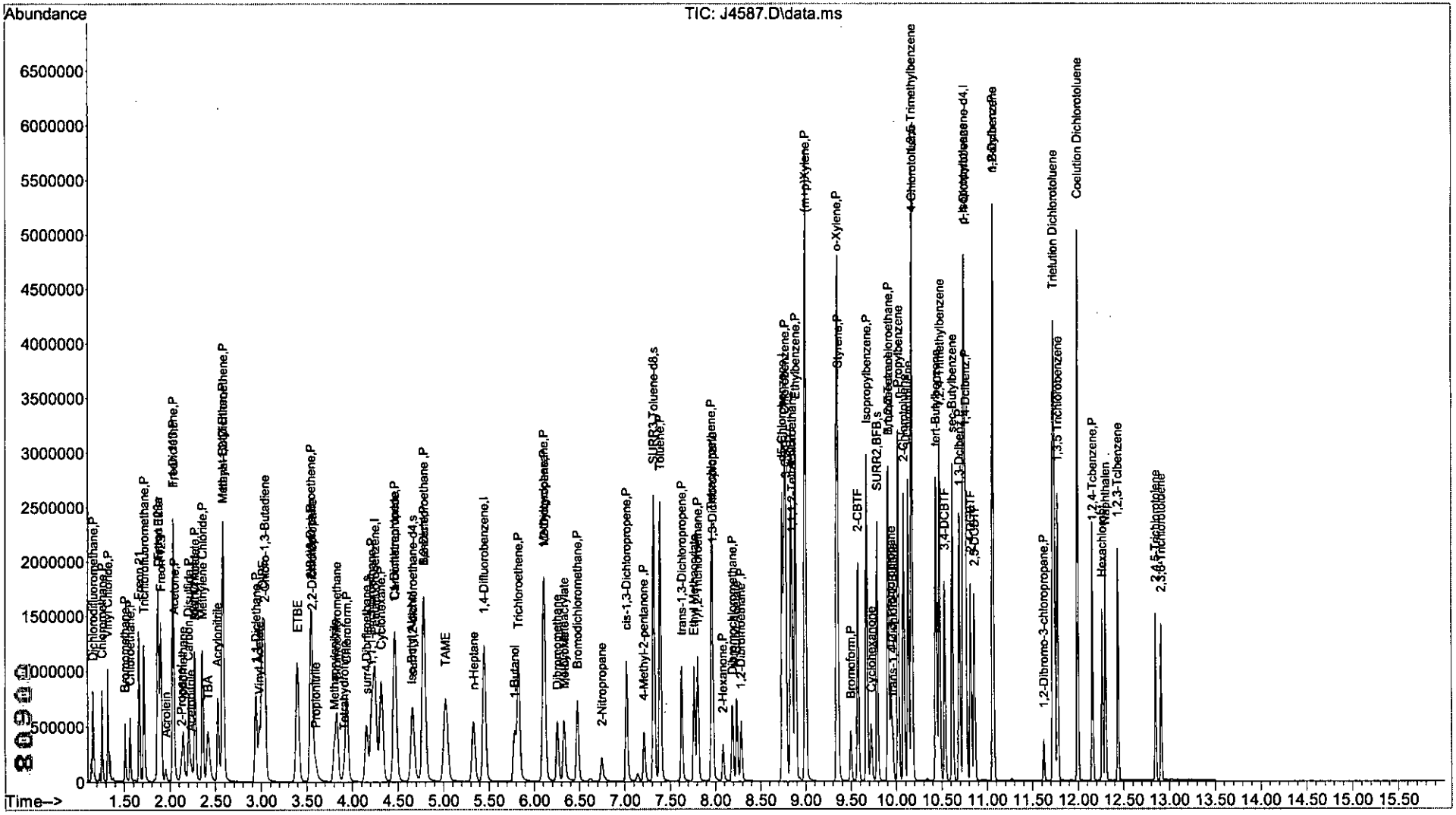
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	61.89
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Wed Apr 09 10:47:26 2014 00607 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1402225-007MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4587.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 10:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:05:29 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Apr 08 23:05:39 2014 Page: 4

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1110
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 23:22
Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	RQ1403327-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4588.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**52.6**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**48.8**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**50.6**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**51.6**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**46.6**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**54.3**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**57.1**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**54.1**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**51.9**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**52.8**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**49.6**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**61.9**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**54.2**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**51.2**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**51.2**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**47.7**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**49.6**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**51.4**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**50.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**49.5**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**45.7**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**53.1**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**48.4**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**56.9**		5.0	5.0	1.7	
106-43-4	4-Chlorotoluene	**49.7**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**51.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**58.0**		5.0	1.0	0.67	
67-64-1	Acetone	**47.5**		5.0	5.0	1.3	
71-43-2	Benzene	**49.1**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**50.6**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**46.5**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**50.2**		5.0	1.0	0.32	
75-25-2	Bromoform	**46.8**		5.0	1.0	0.42	
74-83-9	Bromomethane	**41.5**		5.0	1.0	0.29	
56-23-5	Carbon Tetrachloride	**48.9**		5.0	1.0	0.45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1402225
Project:	FTMM-1Q 2014/748810-03000	**Date Collected:**	3/31/14 1110
Sample Matrix:	Water	**Date Received:**	4/ 1/14
		Date Analyzed:	4/8/14 23:22
Sample Name:	FTMM-53-GW-699MW06-10.20	**Units:**	µg/L
Lab Code:	RQ1403327-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	387236
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\040814\J4588.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-90-7	Chlorobenzene	**50.5**		5.0	1.0	0.29	
75-00-3	Chloroethane	**48.5**		5.0	1.0	0.24	
67-66-3	Chloroform	**47.3**		5.0	1.0	0.25	
74-87-3	Chloromethane	**41.7**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**50.8**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**41.2**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**46.1**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**51.4**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**48.1**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**50.1**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**51.6**		5.0	1.0	0.29	
91-20-3	Naphthalene	**60.5**		5.0	1.0	0.20	
100-42-5	Styrene	**52.1**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**51.3**		5.0	1.0	0.30	
108-88-3	Toluene	**50.2**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**53.1**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**47.7**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**50.7**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**47.8**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**48.6**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**105**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**49.8**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**49.0**		5.0	1.0	0.20	
95-47-6	o-Xylene	**50.4**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**49.5**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**48.9**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**48.1**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**53.1**		5.0	1.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	4/8/14 23:22	
Dibromofluoromethane	102	85-115	4/8/14 23:22	
Toluene-d8	99	85-120	4/8/14 23:22	

Quantitation Report (Not Reviewed)

Sample : R1402225-007DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4588.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 11:22 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ 1403327-06

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:38:02 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	858092	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1274176	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1175630	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	616636	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	377866	51.23	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.46%				
48) surr1,1,2-dichloroetha...	4.664	65	434757	51.74	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.48%				
65) SURR3,Toluene-d8	7.322	98	1536007	49.55	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.10%				
70) SURR2,BFB	9.791	95	581078	50.25	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	419887	41.20	ppb		99
3) Chloromethane	1.262	50	368031	41.67	ppb		97
4) Vinyl Chloride	1.323	62	415981	50.70	ppb		99
5) Bromomethane	1.512	94	205082	41.48	ppb		98
6) Chloroethane	1.567	64	237406	48.51	ppb		98
7) Freon 21	1.664	67	704000	56.89	ppb		98
8) Trichlorofluoromethane	1.719	101	600509	47.67	ppb		100
9) Diethyl Ether	1.878	59	303568	48.94	ppb		96
10) Freon 123a	1.872	67	478185	51.71	ppb		83
11) Freon 123	1.902	83	551092	52.18	ppb		95
12) Acrolein	1.957	56	66872	247.72	ppb		89
13) 1,1-Diclethene	2.042	96	337827	54.25	ppb		90
14) Freon 113	2.036	101	328214	48.16	ppb		92
15) Acetone	2.048	43	80794	47.46	ppb		99
16) 2-Propanol	2.134	45	369631	1337.87	ppb		98
17) Iodomethane	2.146	142	371919	44.97	ppb		93
18) Carbon Disulfide	2.207	76	693974	32.04	ppb		99
19) Acetonitrile	2.231	40	65839	236.49	ppb	#	86
20) Allyl Chloride	2.274	76	162899	38.15	ppb	#	89
21) Methyl Acetate	2.274	43	181021	47.22	ppb		99
22) Methylene Chloride	2.359	84	376337	46.13	ppb		97
23) TBA	2.420	59	610335	1282.61	ppb		97
24) Acrylonitrile	2.524	53	487802	255.74	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	1021036	51.58	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	375552	48.14	ppb		97
28) 1,1-Diclethane	2.944	63	676008	46.55	ppb		98
29) Vinyl Acetate	2.981	86	64150	49.61	ppb	#	83
30) DIPE	3.018	45	1219232	43.11	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	666119	53.26	ppb		91
32) ETBE	3.396	59	1118644	47.26	ppb		98
33) 2,2-Dichloropropane	3.560	77	526954	45.74	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	416106	47.79	ppb		100
35) 2-Butanone	3.548	43	126581	53.07	ppb		98
36) Propionitrile	3.597	54	187279	271.92	ppb		99
37) Bromochloromethane	3.828	130	225995	46.49	ppb		91

RR 4/9/14

Quantitation Report (Not Reviewed)

Sample : R1402225-007DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4588.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 11:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:38:02 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
38) Methacrylonitrile	3.804	67	115779	52.11	ppb		90	
39) Tetrahydrofuran	3.908	42	84204	50.50	ppb		83	
40) Chloroform	3.938	83	673034	47.30	ppb		99	
41) 1,1,1-Trichloroethane	4.213	97	595862	48.82	ppb		89	
42) TAME	5.029	73	996990	49.90	ppb		99	
44) Cyclohexane	4.316	41	327477	47.50	ppb		95	
46) Carbontetrachloride	4.475	121	149384	48.90	ppb		94	
47) 1,1-Dichloropropene	4.462	75	537694	57.14	ppb		93	
49) Benzene	4.779	78	1540508	49.11	ppb		99	
50) 1,2-Dichloroethane	4.786	62	487699	51.21	ppb		94	
51) Iso-Butyl Alcohol	4.651	43	260600	1208.99	ppb		98	
52) n-Heptane	5.328	43	322075	41.10	ppb		97	
53) 1-Butanol	5.785	56	420456	3551.73	ppb		99	
54) Trichloroethene	5.828	130	403601	53.12	ppb		96	
55) Methylcyclohexane	6.109	55	390646	47.82	ppb		94	
56) 1,2-Diclpropane	6.115	63	382600	47.70	ppb		94	
57) Dibromomethane	6.255	93	199398	52.25	ppb		96	
58) 1,4-Dioxane	6.334	88	~~54659~~	~~1040.44~~	ppb	#	61	1230.57
59) Methyl Methacrylate	6.334	69	209980	55.63	ppb		90	
60) Bromodichloromethane	6.480	83	469901	50.15	ppb		97	
61) 2-Nitropropane	6.749	41	121127	120.21	ppb		81	
63) cis-1,3-Dichloropropene	7.023	75	540704	48.64	ppb		99	
64) 4-Methyl-2-pentanone	7.212	43	280420	57.95	ppb		98	
66) Toluene	7.395	91	1624813	50.23	ppb		99	
67) trans-1,3-Dichloropropene	7.633	75	475769	53.09	ppb		96	
68) Ethyl Methacrylate	7.767	69	431797	59.23	ppb		99	
69) 1,1,2-Trichloroethane	7.809	97	292176	51.64	ppb		97	
72) Tetrachloroethene	7.962	164	311395	51.28	ppb		97	
73) 2-Hexanone	8.084	43	189616	56.94	ppb		100	
74) 1,3-Dichloropropane	7.974	76	533029	50.36	ppb		99	
75) Dibromochloromethane	8.187	129	308959	50.77	ppb		95	
76) N-Butyl Acetate	8.242	43	444934	54.04	ppb		96	
77) 1,2-Dibromoethane	8.285	107	294508	54.17	ppb		99	
78) Chlorobenzene	8.773	112	1032362	50.46	ppb		95	
79) 3-CBTF	8.785	180	542177	53.57	ppb		94	
80) 4-CBTF	8.840	180	492662	54.33	ppb		98	
81) 1,1,1,2-Tetrachloroethane	8.852	131	378206	52.61	ppb		96	
82) Ethylbenzene	8.888	106	560183	51.40	ppb		100	
83) (m+p)Xylene	8.998	106	1350100	105.40	ppb		97	
84) o-Xylene	9.346	106	658897	50.41	ppb		99	
85) Styrene	9.358	104	1088110	52.07	ppb		95	
87) Bromoform	9.498	173	163857	46.79	ppb		98	
88) 2-CBTF	9.577	180	529780	51.57	ppb		96	
89) Isopropylbenzene	9.675	105	1593798	50.06	ppb		97	
90) Cyclohexanone	9.718	55	184182	372.37	ppb		100	
91) trans-1,4-Dichloro-2-B...	9.961	53	66975	40.35	ppb		93	
92) 1,1,2,2-Tetrachloroethane	9.913	83	357480	50.62	ppb		97	
93) Bromobenzene	9.913	156	458962	50.60	ppb	#	82	
94) 1,2,3-Trichloropropane	9.943	110	109688	51.91	ppb		98	
95) n-Propylbenzene	10.022	91	1826368	49.04	ppb		99	
96) 2-Chlorotoluene	10.083	91	1132443	48.42	ppb		99	
97) 3-Chlorotoluene	10.132	91	1194667	49.11	ppb		98	

Quantitation Report (Not Reviewed)

Sample : R1402225-007DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4588.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 11:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:38:02 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

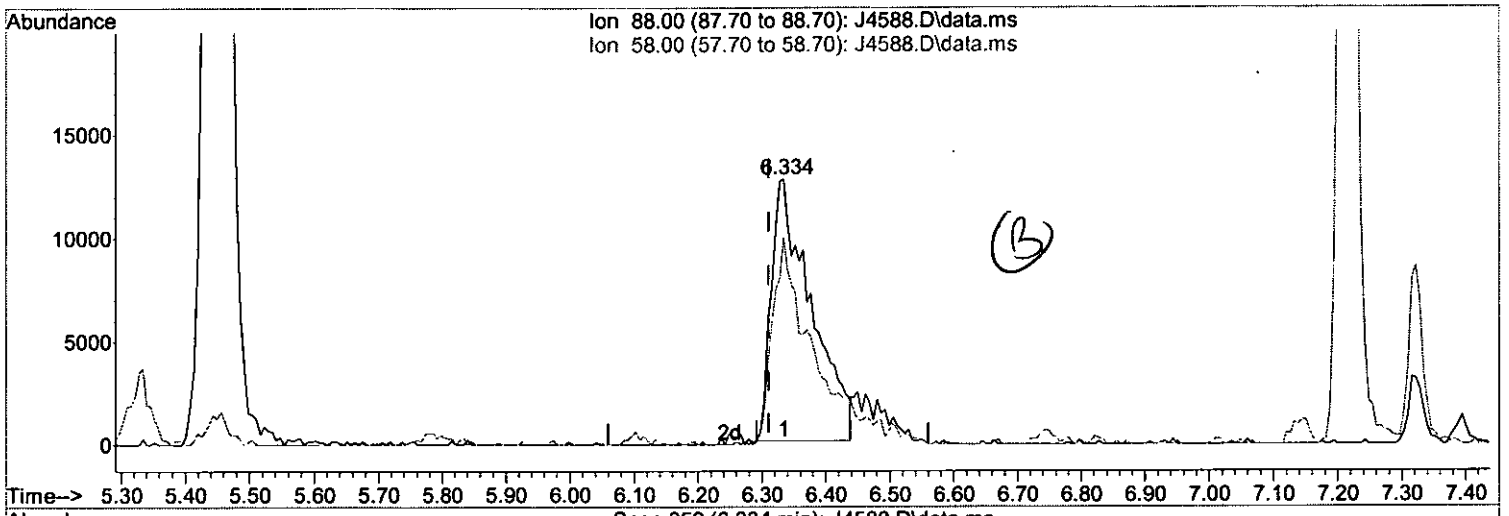
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	4-Chlorotoluene	10.175	91	1370256	49.69	ppb	96
99)	1,3,5-Trimethylbenzene	10.175	105	1287508	49.58	ppb	97
100)	tert-Butylbenzene	10.443	119	1068003	48.86	ppb	96
101)	1,2,4-Trimethylbenzene	10.480	105	1325930	49.62	ppb	98
102)	3,4-DCBTF	10.534	214	373871	49.21	ppb	95
103)	sec-Butylbenzene	10.620	105	1506321	49.51	ppb	99
104)	p-Isopropyltoluene	10.742	119	1326370	51.56	ppb	97
105)	1,3-Dclbenz	10.699	146	793250	51.38	ppb	97
106)	1,4-Dclbenz	10.772	146	813143	49.49	ppb	96
107)	2,4-DCBTF	10.821	214	335900	50.82	ppb	95
108)	2,5-DCBTF	10.864	214	387988	51.34	ppb	98
109)	n-Butylbenzene	11.065	91	1154302	49.76	ppb	98
110)	1,2-Dclbenz	11.065	146	760735	51.17	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	66998	61.92	ppb	95
112)	Trielution Dichlorotol...	11.729	125	1846720	157.05	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	537565	52.42	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	1338807	107.52	ppb	99
115)	1,2,4-Tcbenzene	12.162	180	480252	52.82	ppb	94
116)	Hexachlorobt	12.266	225	190825	48.09	ppb	100
117)	Naphthalen	12.302	128	990468	60.51	ppb	98
118)	1,2,3-Tclbenzene	12.443	180	402816	54.11	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	280537	57.19	ppb	97
120)	2,3,6-Trichlorotoluene	12.912	159	234882	52.31	ppb	96

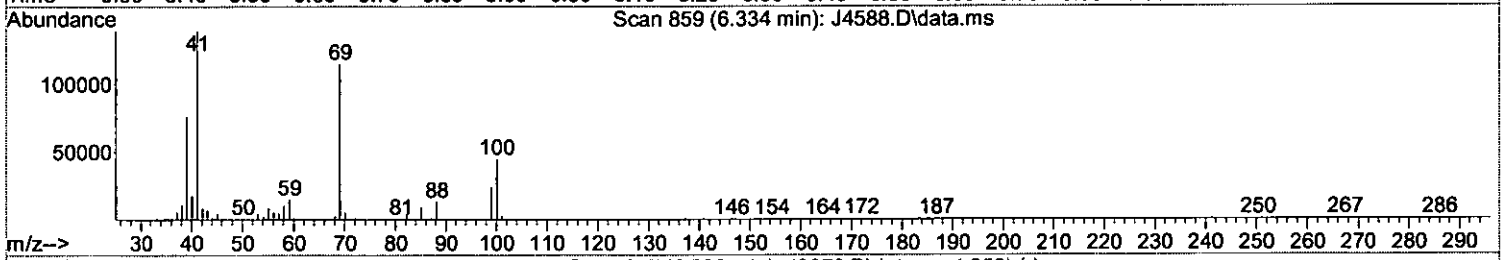
(#) = qualifier out of range (m) = manual integration (+) = signals summed

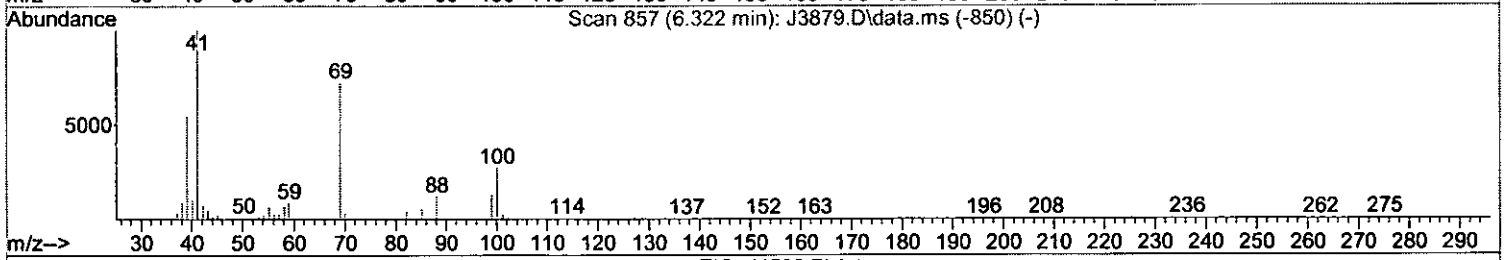
Quantitation Report (Qedit)

Sample : R1402225-007DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4588.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 11:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:38:02 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4588.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.024) 1040.44 ppb

response 54659

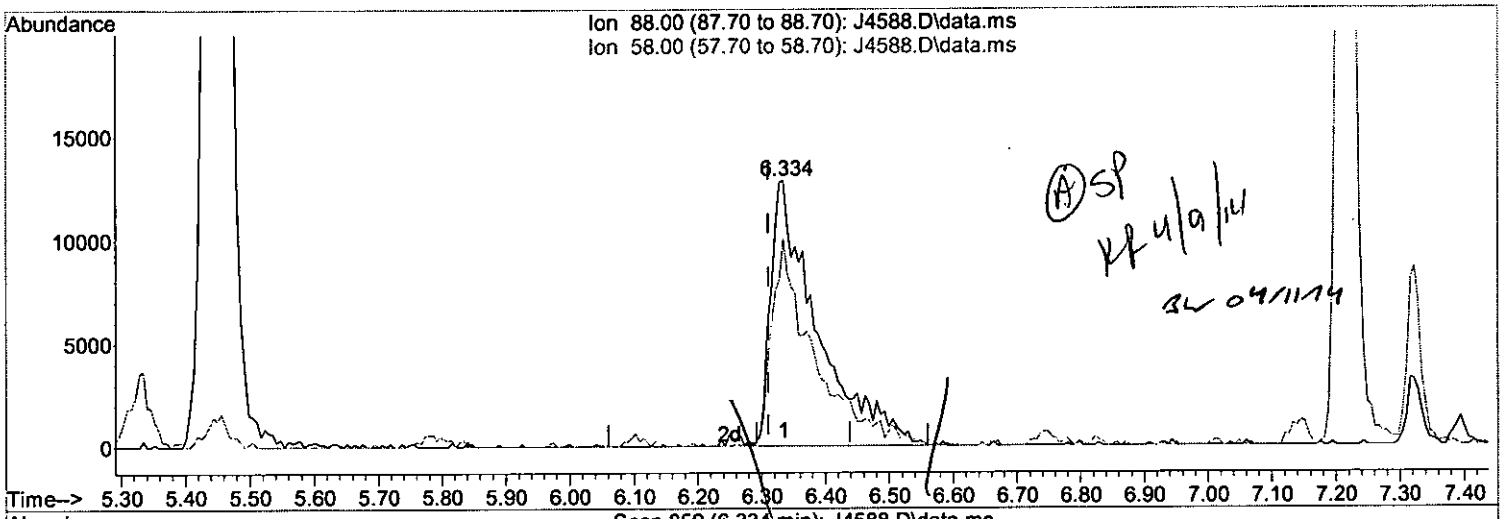
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	78.03#
0.00	0.00	0.00
0.00	0.00	0.00

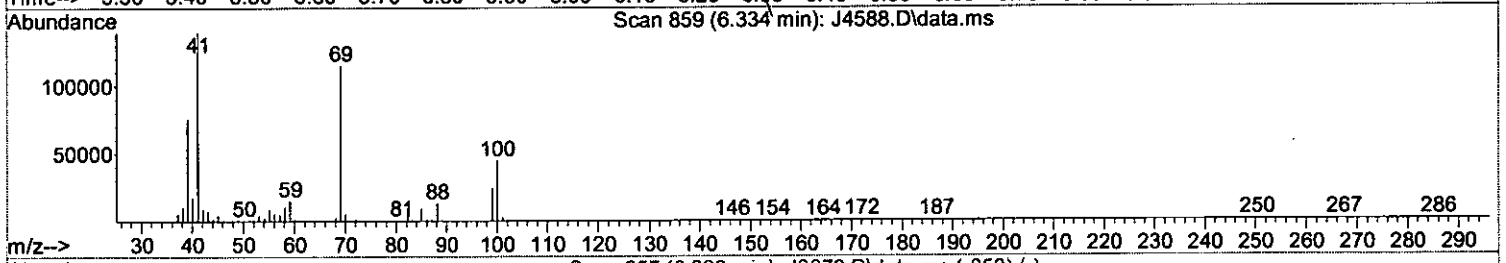
W031214.M Wed Apr 09 10:49:06 2014 Page: 1

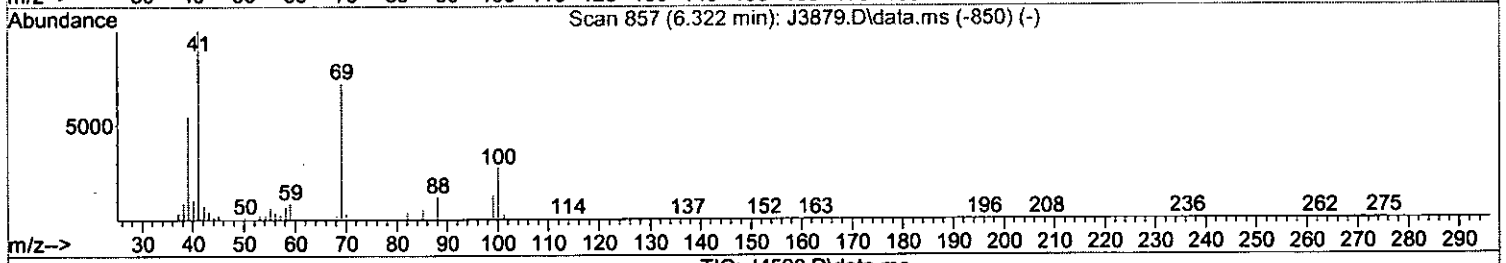
Quantitation Report (Qedit)

Sample : R1402225-007DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\040814\J4588.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 11:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:38:02 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J4588.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.024) 1230.57 ppb m

response 64647

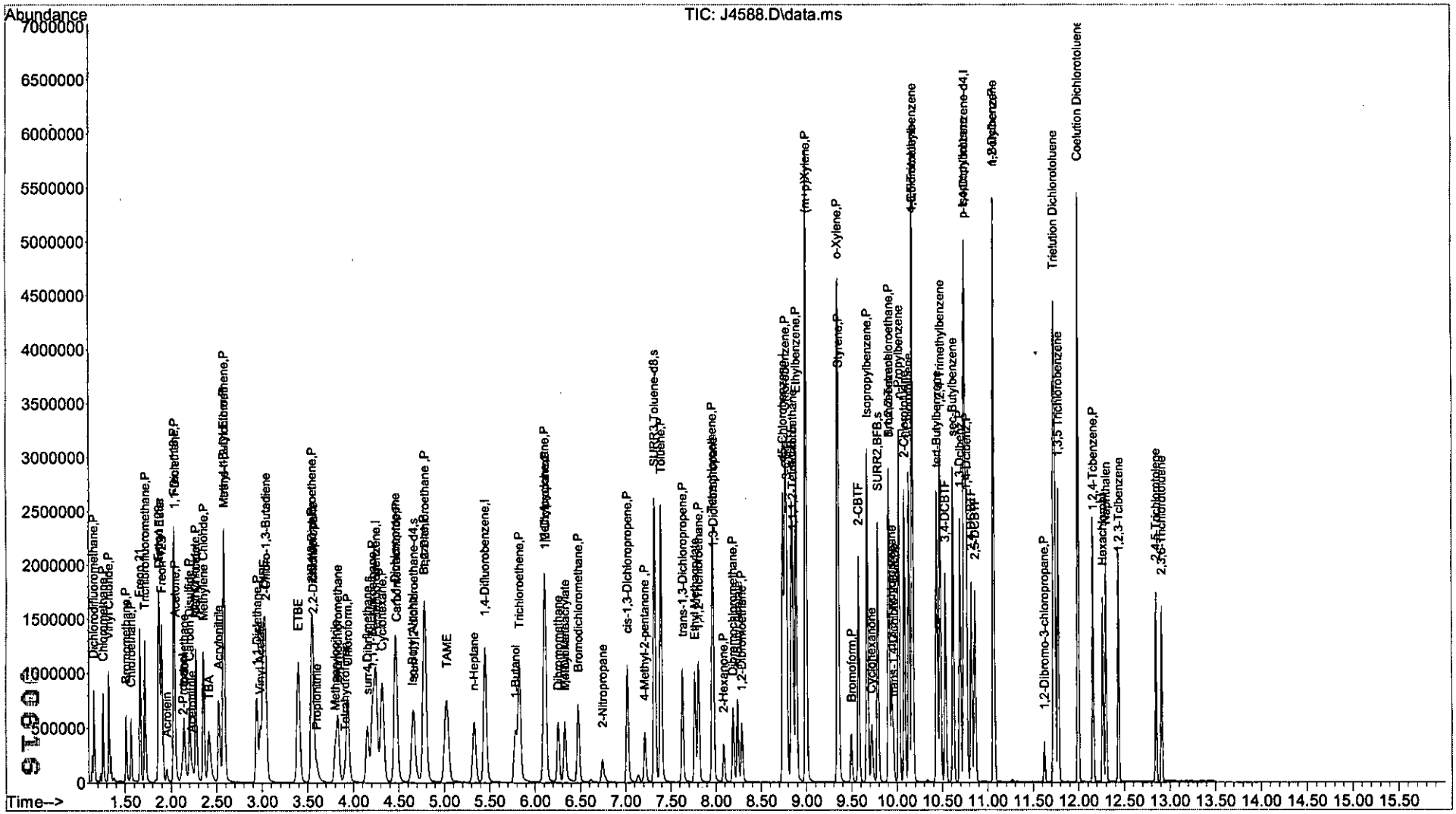
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	78.03#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Wed Apr 09 10:49:13 2014 00615 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1402225-007DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\040814\J4588.D
Misc : PARSONS 9913 T4
Acq On : 8 Apr 2014 11:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Apr 08 23:38:02 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Tue Apr 08 23:38:13 2014 Page: 4

Analysis: 8260 Waters | Analyst: K. Priest | Tune Method: W031214
Date: 3/12/14 | Data Path: j:\acqudata\msvoa\21 03.2.14 | Run Method: ↓
Instr. 12 | LIMS Run# : —ICAL—

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								53672		
(2)	1 TUNE								53673	YT	(auto) 9:41
2	1 BLK	5ppm	50ppm FV						53674	YB	
1	0.5	5ml	— 50mls						53675	Y	8260 Water ICAL
2	1.0	10ml	—						53676	Y	
3	2.0	20ml	—						53677	Y	
4	5.0	50ml	—						53678	Y	
5	20	—	2ml						53679	Y	
6	50	—	5ml						53680	Y	
7	100	—	10ml						53681	Y	
8	200	—	20ml						53682	Y	
9	BLK								53683	—	
10	↓								53684	—	
11									53685	—	
12									53686	—	
13	1.0 ppb LOD		K1401347-017						53687		
14	5.0 ppb LOQ								53688		
15	10 ppb LOQ								53689		

EOD
KP 3/12/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

50D Primary OCC : 67739
Primary HBO : 68188
Primary Fit : 67761 10ml → 1.0ml MeOH
Primary H&L : 68234 = 5ppm std
TG 68233

Secondary :
Secondary :
Secondary :
Secondary :

Combined IS/Surr 50D : 68182
Surrogate :
Internal Std :

Runlog-MSVOAr1 12/5/12
Page 148

Analysis: 8260 waters Analyst: K. Quest Tune Method: W031214
Date: 4/7/14 - Run#2 Data Path: j:\acqudata\msvoa2\040714 Run Method: ↓
Instr. 12 LIMS Run#: 367044

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
27	TUNE		LQ1403295-01						~~J4535~~	Y	J4546 (auto) 00:40
28	CCV		02						~~J4546~~	VC	J4547
29	LCS		03						~~J4547~~	VQ	J4548
30	VBLK		—						~~J4548~~	N	J4549 rpt c/o
31	↓		—						~~J4549~~	N	J4550 ↓
32	↓		04						~~J4550~~	YB	J4551
33	L1402225-001	1.0		[redacted]	9913	4	1	LZ	J4552	N	rpt 3 @ 5u ↓
34	002	1.0					1	LZ	J4553	Y	
35	003	1.0					1	LZ	J4554	Y	
36	004	1.0					1	LZ	J4555	Y	
37	005	1.0					1	LZ	J4556	Y	
38	006	1.0					1	LZ	J4557	Y	
39	009	1.0					1	LZ	J4558	Y	
40	010	1.0					1	LZ	J4559	N	rpt 10
41	011	1.0					1	LZ	J4560	N	rpt c/o
42	013	1.0					1	LZ	J4561	N	rpt c/o
43	012	2.0	25/50mls				1	LZ	J4562	N	rpt 1.0
44	006	5.0	10/50mls				1	LZ	J4563	N	rpt 2.0
45	MS 006	5.0	↓				1	LZ	J4564	N	overdilute - RunQC
46	↓ MSD 006	5.0	↓				1	LZ	J4565	N	↓
47	BLK								J4566	—	(4/8/14) new IS/Su - hot DI -

EOD
KPQ 4/8/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

EOD Primary HSL : 69146
Primary TCL : 68947 5ml → 50mls
Primary FRT : 68904 = CCV
Primary :
Primary :

EOD Secondary FRT : 68705 - 5ml
EOD Secondary HSL : 68796 2ml
Secondary TCL : 68899
Secondary :
Secondary :

50mls = LCS
-10ml / 40ml
40ml vial = MS/D

Combined IS/Surr 500 : 68925
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13
Page 30

Analysis: 8260 Waters Analyst: YQuest Tune Method: W031214
Date: 4/6/14 Data Path: j:\acqudata\msvoa_2\040814 Run Method: ↓
Instr. 12 LIMS Run#: 357236

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
2	TUNE(BFB in 5ml)		RQ1403327-01						J4567	YT	(auto) 12:00
1	CCV		02						J4568	YC	
2	LCS		03						J4569	YQ	
1	VBLK		—						J4570	N	rpt c/o
2	↓		↓ 04						J4571	YB	Bromom + 124TCB + hex + nap = J
3	RQ1402225-007	1.0		[redacted]	9913	4	1	12	J4572	Y	
4	001	1.0					2	12	J4573	Y	
5	011	1.0					2	12	J4574	Y	
6	013	1.0					2	12	J4575	Y	
7	2243-009	1.0	Frontier 1/06/13/JT2				1	12	J4576	Y	
8	014	1.0					1	12	J4577	Y	
9	018	1.0					1	12	J4578	Y	
10	019	1.0					1	12	J4579	Y	
11	012	1.0					2	12	J4580	Y	
12	016	10	5/50mls				1	12	J4581	N	rpt 2.5
13	017	20	2.5/50mls				1	12	J4582	N	rpt 10
14	006	2.0	25/50mls				2	12	J4583	Y	
15	020	2.0	↓				1	12	J4584	N	rpt 1.0
16	010	10	5/50mls				2	12	J4585	Y	DL
17	015	5.0	10/50mls				1	12	J4586	N	rpt 2.5
18	MS 007	1.0	RQ1403327-05				2	12	J4587	YQ	
19	↓ MSD 007	1.0	06	↓	↓	↓	3	12	J4588	YQ	23:22 ✓
20	HIGHLOADS								J4589		
21	BLK								J4590		

EOD
KR 4/8/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

SOD Primary CCC : 609070
Primary HBO : 609188
Primary Frt : 609104 5ml → 50mls = CCV
Primary HSL : 609146
Primary TG : 609147

200 Secondary Frt : 608705 -5ml
SOD Secondary CCC : 609071
Secondary HBO : 609196 2ml
Secondary HSL : 609244
Secondary TG : 609199

50mls = LCS

-10.6ml
4.2ml
12ml vial = MSD

Combined IS/Surr SOD : 609202
Surrogate :
Internal Std :

Runlog-MSVOA_2 9/20/13
Page 31

609619

Analysis: 8260 Waters | Analyst: KQuest | Tune Method: W031214
Date: 4/10/14 | Data Path: j:\acqudata\msvoa12\041014 | Run Method: ↓
Instr. 12 | LIMS Run#: 387653

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	DFTPP (carbon 15/24)		RQ1403451-01						J41476	YT	(auto) 10:54
2	CCV		02						J41479	YC	
3	LCS		03						J41650	YB	
1	VBLK								J41651	(N)	rpt 1.0
2	↓		↓ 04						J41652	YB	
3	R1402225-020	1.0		[redacted]	99/3	4	2	12	J41653	Y	
1	017	10	5/50mls				2	12	J41654	Y	
2	015	2.5	20/50mls				2	12	J41655	Y	
3	016	2.5	↓			↓	2	12	J41656	Y	
4	R1402291-017	1.0		[redacted]	6613	4	1	12	J41657	Y	(N) POS PCE c/o
5	015	5.0	10/50mls				1	12	J41658	(N)	rpt 1.0
6	016	1.0					1	12	J41659	Y	
7	018	1.0					1	12	J41660	Y	
8	019	1.0					1	12	J41661	Y	
9	020	1.0					1	12	J41662	Y	
10	021	1.0					1	12	J41663	Y	
11	022	1.0					1	12	J41664	Y	
12	023	1.0					1	12	J41665	Y	
13	024	1.0					1	12	J41666	(Y)	rpt 3rd run ↓ confirms
14	015	1.0					2	12	J41667	Y	
15	017	1.0					2	12	J41668	(Y)	rpt 3rd run ↓ confirms
16	MS 017	1.0	RQ1403451-05				3	12	J41669	YQ	
17	↓ MSD 017	1.0	↓ 06	↓	↓	↓	4	12	J41670	(N)	rpt - out of clock 22:35
18	HIGH LEASES							-	J41671	-	
19	BLK							-	J41672	-	
											EOD KR 4/10/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

SOD Primary HBO : 691337
Primary OCC : 691070
Primary HSL : 691146 5mL + 50mls
Primary T6 : 688947 = CCV
Primary Frt : 688904

SOD Secondary Frt : 688705 - 5mL
SOD Secondary OCC : 691071
Secondary HBO : 688296 2mL
Secondary HSL : 691244
Secondary T6 : 688999
50mls = LCS

- 10.2mL
Combined IS/Surr SOD: 691202
Surrogate :
Internal Std :
10.2mL
10.2mL vial = ms/msd

Runlog-MSVOAr2 9/20/13
Page 35