GZA
GeoEnvironmental of
New York

*Engineers and
Scientists*

June 6, 2014
File No. 12.0076158.00

JANS Realty, LP
3611 Northern Boulevard
Long Island City, New York 11101

Subject: Groundwater Monitoring Well Installation
37-14 36th Street
Queens, New York
NYSDEC Site No. C241156

GZA of New York
104 W. 29th Street, 10th Fl.
New York, NY 10001
www.gza.com

Dear Charles Post,

Goldberg-Zoino Associates of New York P.C. d/b/a GZA GeoEnvironmental of New York is pleased to present this letter report, on behalf of JANS Realty, LP that provides the results of groundwater monitoring well installation and sampling conducted at the above-referenced property in Queens, New York (the Site). These activities were completed as discussed and agreed upon during our April 7, 2014 Site meeting. This letter is an addendum to the *Revised* Remedial Investigation Report / Remedial Action Work Plan (RIR/RAWP). The Site is located at Block 377, on Lot 23 on the New York City Department of Finance Tax maps. Please refer to **Figure 1** for a Site Location Map. This letter report and findings are subject to the limitations presented in **Attachment A**.

SCOPE OF WORK

On May 1, 2014 GZA installed three permanent groundwater wells at the northern most, and hydraulically upgradient, property boundary to detect potential impacted groundwater migrating from an off-Site source to under our Client's property. The wells are completed to an approximate depth of 28 feet below ground surface (bgs), and screened from approximately 23 to 28 feet bgs. The monitoring wells are designated from west to east as MW-4, MW-5, and MW-6. Please refer to the boring and well construction logs presented in **Attachment B**. These wells were developed and sampled for VOCs, described below, on May 15, 2014.

WELL DEVELOPMENT AND SAMPLING

Well development activities consisted of the use of weighted bailers to remove fines from the well bottom, then pumping and surging the well column to remove fines from the sand filter pack and screen. We purged approximately five well volumes of water from each well. During purging, water passed through a flow-through cell containing water quality instrumentation. **Attachment C** contains the well development logs.

Groundwater samples were collected using dedicated polyethylene bailers following development. We collected the samples in laboratory provided containers placed them on ice. Under chain-of-custody procedures, a laboratory courier transported them to a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation

Program (ELAP) certified laboratory. A trip blank was included in the sample shipment and all samples were analyzed for volatile organic compounds (VOCs) by the laboratory.

Following well development, the new groundwater monitoring wells were surveyed for northing, easting, and top of casing elevation. All wells associated with the Site were also gauged to calculate groundwater flow paths.

GROUNDWATER SAMPLING RESULTS

Each of the upgradient groundwater monitoring wells contained detectible concentrations of VOCs above the New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards (AWQS). Please refer to **Table 1** for a summary of VOC detections. In particular, the contaminate tetrachloroethene (PCE) was detected above the AWQS of 5 micrograms per liter (µg/l) in each well. The detected concentrations are 3,100 µg/l in MW-4, 810 µg/l in MW-5, and 110 µg/l in MW-6. These concentrations are greater than those detected downgradient and on-Site. **Attachment D** presents the laboratory analytical report. The attached **Figure 1** depicts the sampling locations and PCE data collected to date.

If you have any questions, please contact David Winslow or Brett Engard at 973-774-3300.

Regards,

Brett Engard
Project Manager

Brett Engard, for
Cloelle Danforth, Ph.D.
Engineer I

David Winslow, Ph.D, P.G
Vice President

Attachments:

Table 1 – Summary of VOC Detections
Figure 1 – Monitoring Well Location Map

Attachment A – Limitations
Attachment B – Boring Logs
Attachment C – Well Development Forms
Attachment D – Laboratory Analytical Report

TABLES

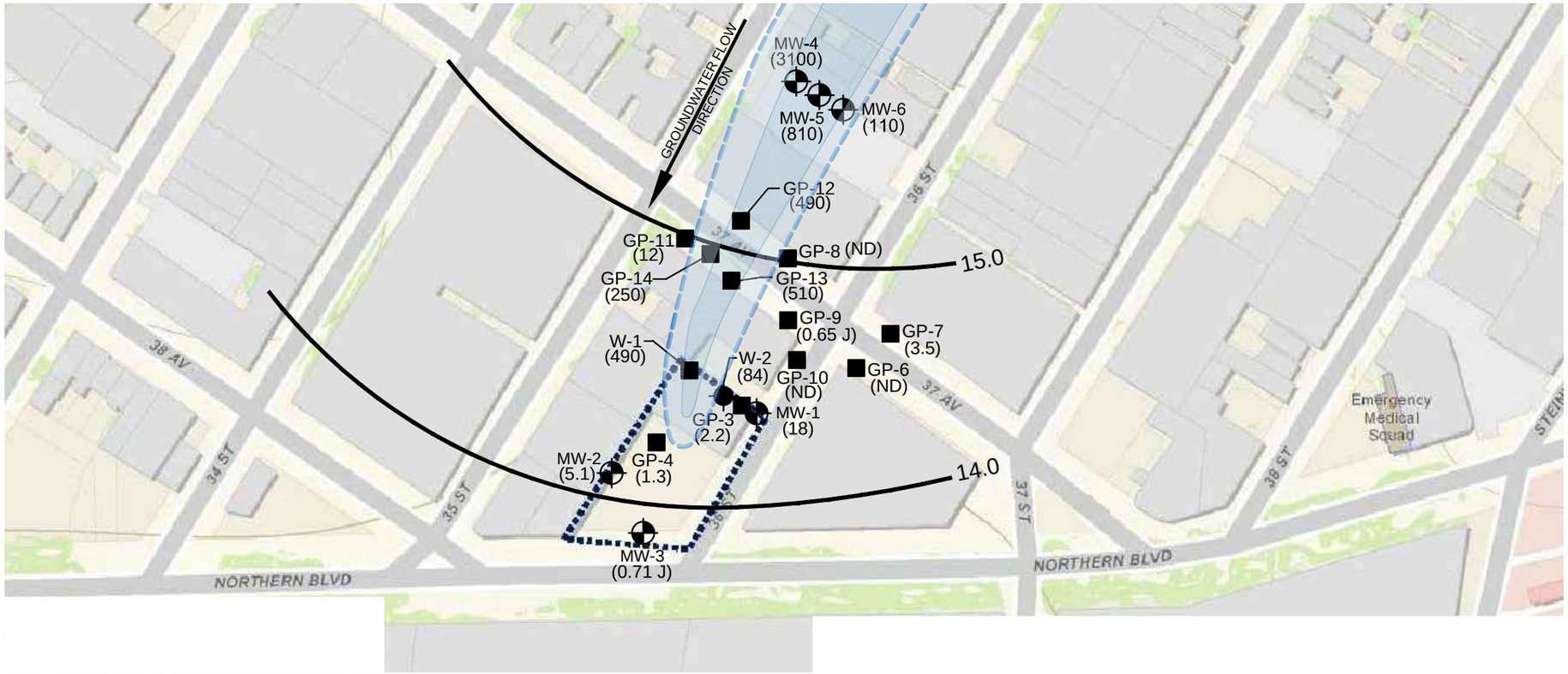
TABLE 1 - Summary of VOC Detections
NYSDEC Site No. C241156
37-14 36th Street
Long Island City, NY

Sample ID			**MW-4**		**MW-5**		**MW-6**		**TRIPBLANK**	
Lab Sample Number			F2352-01		F2352-02		F2352-03		F2352-04	
Sampling Date			5/15/2014		5/15/2014		5/15/2014		5/15/2014	
Matrix			Water		Water		Water		Water	
Units			ug/L		ug/L		ug/L		ug/L	
COMPOUND	**CAS #**	**NYSDEC AWQS**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	Qual
1,1-Dichloroethane	75-34-3	5	2.2		1	U	1	U	1	U
1,1-Dichloroethene	75-35-4	5	0.61	J	0.72	J	0.43	J	1	U
Chloroform	67-66-3	7	0.39	J	0.41	J	1	U	1	U
cis-1,2-Dichloroethene	156-59-2	5	**250**	D	**170**		**83.3**		1	U
Tetrachloroethene	127-18-4	5	**3,100**	D	**810**	D	**110**		1	U
trans-1,2-Dichloroethene	156-60-5	5	4.6		**130**		**100**		1	U
Trichloroethene	79-01-6	5	**120**		**170**		**53.9**		1	U
Vinyl Chloride	75-01-4	2	**8.6**		**3.4**		**7.6**		1	U

Notes:

D - The reported value is from a sec the calibration range.
J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the MDL. The concentration is an approximate value.
U - The compound was not detected at the indicated concentration.
NYSDEC AWQS - New York State Department on Environmental Conservation Aqueous Water Quality Standards
Qual - Laboratory Qualifier
250 Result exceeds the NYSDEC AWQS

FIGURES



N

0 75' 150' 300'

SCALE IN FEET

LEGEND:

- PROPERTY BOUNDARY
- 15.0 INFERRED GROUNDWATER ELEVATION CONTOUR (FEET)
- GP-12 SAMPLE ID
- (490) PCE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- TEMPORARY WELL POINT
- GROUNDWATER MONITORING WELL
- HYDROPUNCH SAMPLE
- PCE TETRACHLOROETHENE
- ND NON-DETECT

CONCENTRATION OF TETRACHLOROETHENE:

- 100 ug/L
- 500 ug/L

NOTES:

1. THE BASE MAP WAS DEVELOPED FROM ELECTRONIC FILES PROVIDED BY: UNITED STATES FISH AND WILDLIFE SERVICE, ENTITLED: NATIONAL WETLANDS INVENTORY MAPPER, DATED: 10/4/12.
2. THE LOCATION OF THE SELECTED SITE FEATURES AND EXPLORATIONS WERE APPROXIMATELY DETERMINED BY TAPE MEASUREMENTS AND LINE OF SIGHT FROM EXISTING TOPOGRAPHIC AND MAN-MADE FEATURES, THE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.
3. GROUNDWATER ELEVATION CONTOURS WERE INTERPOLATED FROM MEASUREMENTS MADE IN WIDELY SPACED EXPLORATIONS AND ACTUAL SUBSURFACE CONDITIONS MAY DIFFER FROM THOSE PRESENTED.
4. GROUNDWATER SAMPLES COLLECTED DURING REMEDIAL INVESTIGATION UNDER CONDITIONS DESCRIBED IN ATTACHED REPORT.

NO.	ISSUE/DESCRIPTION	BY	DATE

37-14 36TH STREET
QUEENS, NEW YORK

TCE SOLVENT PLUME MAP

PREPARED BY:
GZA GeoEnvironmental of New York
Engineers and Scientists
104 WEST 29TH STREET, 10TH FLOOR
NEW YORK, NEW YORK 10001

PREPARED FOR:
CROWN DESIGN AND CONSULTING

PROJ MGR: BE	REVIEWED BY: CD	CHECKED BY: DW	FIGURE
DESIGNED BY: BE	DRAWN BY: EM	SCALE: 1" = 150'	1
DATE: JUNE 2014	PROJECT NO. 12.0076158.00	REVISION NO.	SHEET NO.

APPENDIX A

LIMITATIONS

GEOHYDROLOGICAL LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater

however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

APPENDIX B

BORING LOGS

TEST BORING LOG

GZA GeoEnvironmental, Inc
Engineers and Scientists

36th Street QDP
37-1436th Street
Long Island City, NY

EXPLORATION NO.: MW-4
SHEET: 1 of 1
PROJECT NO: 12.0076158.05
REVIEWED BY:

Logged By: B. Engard
Drilling Co.: Soil Mechanics
Foreman: Glenn

Type of Rig: CME
Rig Model: 45C
Drilling Method: HSA

Boring Location: See Plan
Ground Surface Elev. (ft.):
Final Boring Depth (ft.): 29
Date Start - Finish: 4/30/2014 - 4/30/2014

H. Datum:
V. Datum:

Hammer Type:
Hammer Weight (lb.):
Hammer Fall (in.):
Auger or Casing O.D./I.D Dia (in.): 6

Sampler Type: Cuttings
Sampler O.D. (in.):
Sampler Length (in.):
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
5/1/14	08:55	13.22	

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		S-1	0-5					S-1 : Brown Sand, some Silt, dry to moist.				SAND	
5		S-2	5-10					S-2 : Brown Sand with Silt.			5	SAND AND SILT	
10		S-3	10-21					S-3 : Brown Sand with Silt, becoming wet.			10	SAND	
15													
20		S-4	20-29					S-4 : 21-22': Gravel 23-24": Gravel 26-27": Cobbles			21 22	GRAVEL WITH SAND	
											23	SAND	
25											25	SAND	
											26	COBBLES WITH SAND	
											29	SAND	
30								End of exploration at 29 feet.					

REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: MW-4

TEST BORING LOG

GZA GeoEnvironmental, Inc
Engineers and Scientists

36th Street QDP
37-1436th Street
Long Island City, NY

EXPLORATION NO.: MW-5
SHEET: 1 of 1
PROJECT NO: 12.0076158.05
REVIEWED BY:

Logged By: B. Engard
Drilling Co.: Soil Mechanics
Foreman: Glenn

Type of Rig: CME
Rig Model: 45C
Drilling Method: HSA

Boring Location: See Plan
Ground Surface Elev. (ft.):
Final Boring Depth (ft.): 29
Date Start - Finish: 4/30/2014 - 4/30/2014

H. Datum:
V. Datum:

Hammer Type:
Hammer Weight (lb.):
Hammer Fall (in.):
Auger or Casing O.D./I.D Dia (in.): 6

Sampler Type: Cuttings
Sampler O.D. (in.):
Sampler Length (in.):
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Stratum Description	Depth (ft.)	Elev. (ft.)
		S-1	0-7					S-1 : Fill, dark brown Sand with Gravel and brick fragments, dry.			FILL		
5													
		S-2	7-22					S-2 : Yellowish brown Sand, some Silt, medium grained.			SAND	7	
10													
15													
20													
25													
		S-3	27-29					S-3 : Gravel and cobbles.			COBBLES/GRAVEL/SAND	27	
30								End of exploration at 29 feet.				29	

REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: MW-5

TEST BORING LOG

GZA GeoEnvironmental, Inc
Engineers and Scientists

36th Street QDP
37-1436th Street
Long Island City, NY

EXPLORATION NO.: MW-6
SHEET: 1 of 1
PROJECT NO: 12.0076158.05
REVIEWED BY:

Logged By: B. Engard
Drilling Co.: Soil Mechanics
Foreman: Glenn

Type of Rig: CME
Rig Model: 45C
Drilling Method: HSA

Boring Location: See Plan
Ground Surface Elev. (ft.):
Final Boring Depth (ft.): 29
Date Start - Finish: 4/30/2014 - 4/30/2014

H. Datum:
V. Datum:

Hammer Type:
Hammer Weight (lb.):
Hammer Fall (in.):
Auger or Casing O.D./I.D Dia (in.): 6

Sampler Type: Cuttings
Sampler O.D. (in.):
Sampler Length (in.):
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		S-1	0-4					S-1 : Brown Sand with Gravel and brick fragments.				FILL	
											4		
5		S-2	4-29					S-2 : Brown to yellowish brown Sand with some Silt.					
10													
15												SAND	
20													
25											29		
30								End of exploration at 29 feet.					

REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

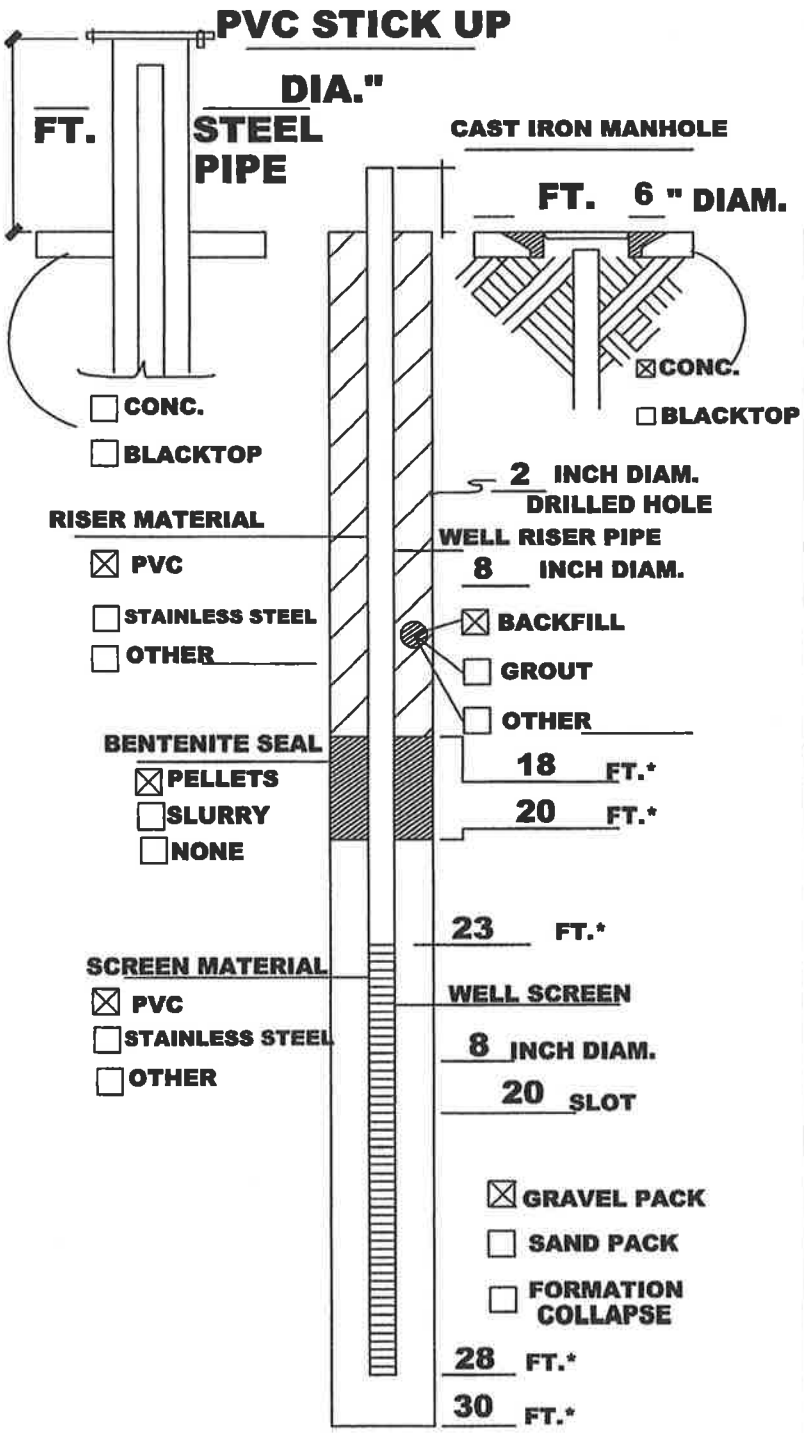
Exploration No.: MW-6

SOIL MECHANICS

STAND PIPE

OBSERVATION WELL LOG

JOB NO. 14-244
WELL NO. MW-4



PROJECT NAME: #35-01 37th AVENUE

LOCATION: LONG ISLAND CITY, NY

INSTALLATION DATE: 4/30/14

WELL HEAD ELEVATION _____

DEPTH TO WATER: _____

DEPTH TO WELL BOTTOM: 28'-0"

LENGTH OF WATER COLUMN: _____

CALCULATED VOL. OF WATER IN WELL: _____

DEVELOPMENT:

DEVELOPMENT DATE:

DEVELOPMENT RATE G P M:

PUMP DURATION (MINUTES)

METHOD:

☐ PUMP

☐ BAILER

☐ OTHER

DEPTH TO WATER _____

NOTES:

4-1/2" AUGERES

NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

*** DEPTH BELOW GROUND SURFACE**

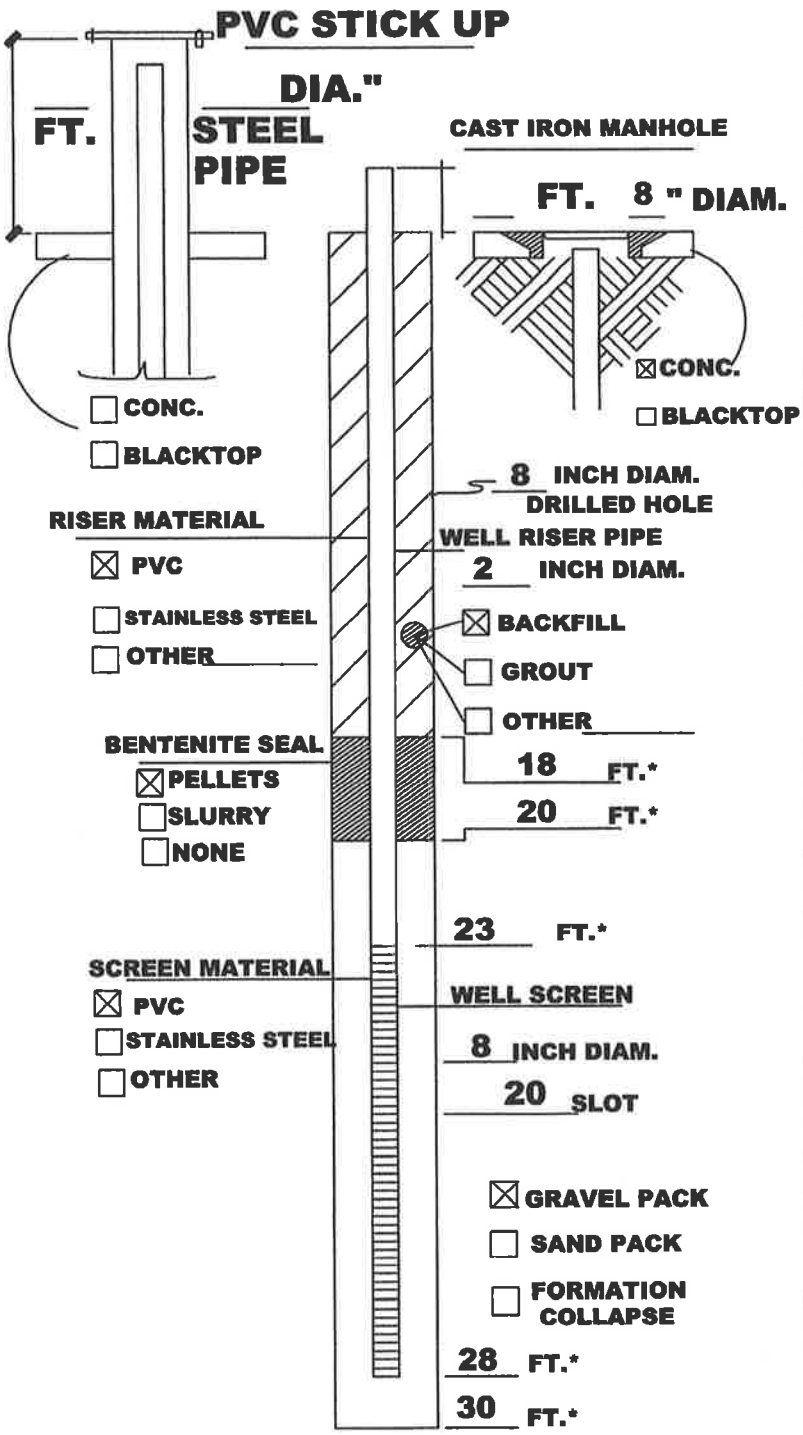
PREPARED BY: G. SIRICO

SOIL MECHANICS

STAND PIPE

OBSERVATION WELL LOG

JOB NO. 14-244
WELL NO. MW-5



NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

*** DEPTH BELOW GROUND SURFACE**

PROJECT NAME: #35-01 37th AVENUE

LOCATION: LONG ISLAND CITY, NY

INSTALLATION DATE: 4/30/14

WELL HEAD ELEVATION _____

DEPTH TO WATER: _____

DEPTH TO WELL BOTTOM: 28'-0"

LENGTH OF WATER COLUMN: _____

CALCULATED VOL. OF WATER IN WELL: _____

DEVELOPMENT:

DEVELOPMENT DATE:

DEVELOPMENT RATE G P M:

PUMP DURATION (MINUTES)

METHOD:

- ☐ PUMP
- ☐ BAILER
- ☐ OTHER

DEPTH TO WATER _____

NOTES:

4-1/2" AUGERES

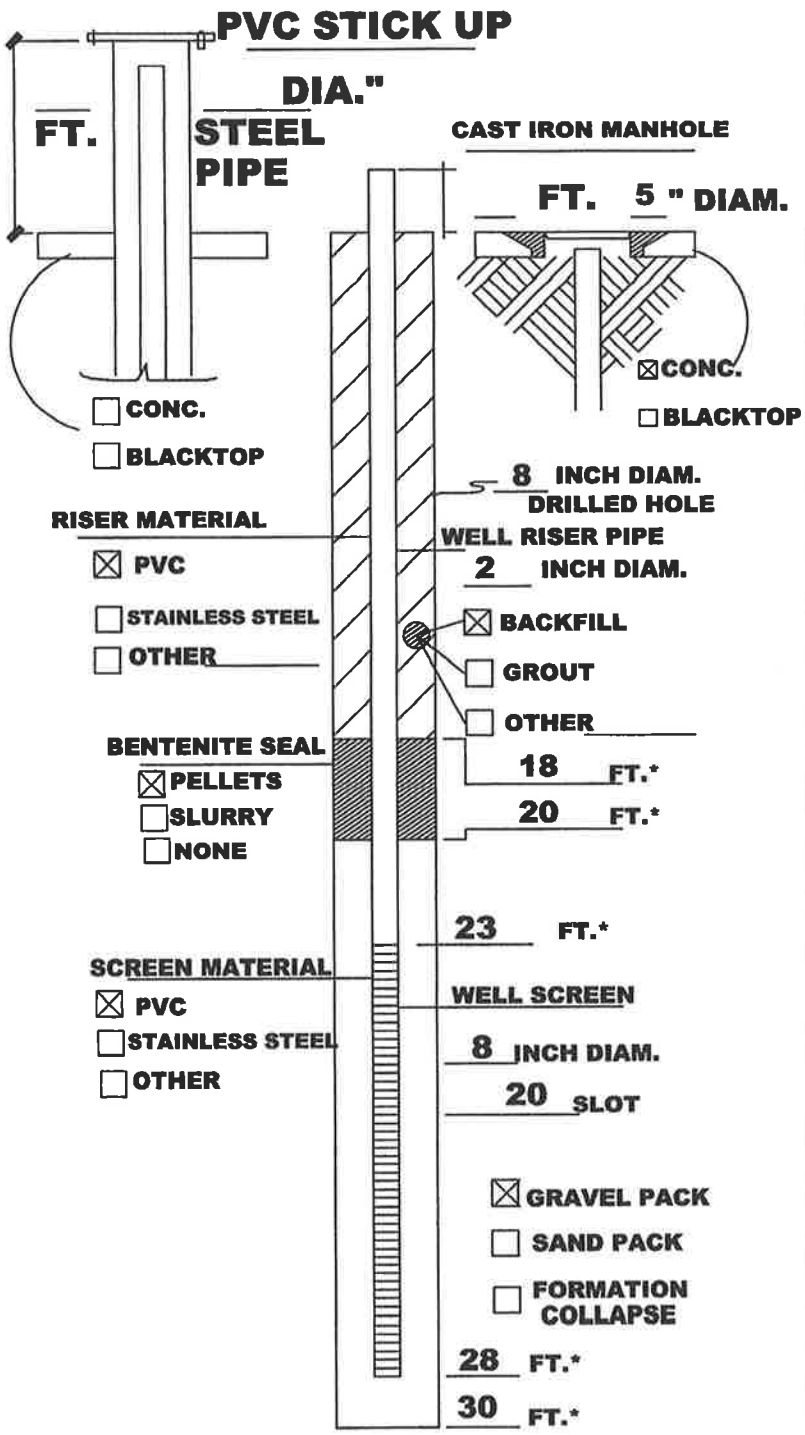
PREPARED BY: G. SIRICO

SOIL MECHANICS

STAND PIPE

OBSERVATION WELL LOG

JOB NO. 14-244
WELL NO. MW-6



NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

*** DEPTH BELOW GROUND SURFACE**

PROJECT NAME: #35-01 37th AVENUE

LOCATION: LONG ISLAND CITY, NY

INSTALLATION DATE: 4/30/14

WELL HEAD ELEVATION _____

DEPTH TO WATER: _____

DEPTH TO WELL BOTTOM: 28'-0"

LENGTH OF WATER COLUMN: _____

CALCULATED VOL. OF WATER IN WELL: _____

DEVELOPMENT:

DEVELOPMENT DATE:

DEVELOPMENT RATE G P M:

PUMP DURATION (MINUTES)

METHOD:

- ☐ PUMP
- ☐ BAILER
- ☐ OTHER

DEPTH TO WATER _____

NOTES:

4-1/2" AUGERES

PREPARED BY: G. SIRICO

APPENDIX C

WELL DEVELOPMENT FORMS

WELL ID: MW 4

actually 29.0

GZA GeoEnvironmental of New York
Well Purge Data Sheet

CLIENT:
SITE:
WEATHER:

PROJECT NO:
DATE:
SAMPLER(S):

COLUMN OF WATER IN WELL:
= Depth to Bottom (ft) - Static Water Level (ft)
= 29.05 - 12.89
Water Column (T) = 16.16 (ft)

GALLONS OF WATER PER WELL VOLUME:
Well Volume = Water Column (ft) x Multiplier
= 16.16 x 0.163
Well Volume (V) = 2.63 (gal)

Purge 7.9 - 13.15 gal

well diameter	Multiplier	
1	0.041	(gal / ft)
2	0.163	(gal / ft)
4	0.653	(gal / ft)

TOTAL VOLUME PURGED:
Design = _____ (gal)
Actual = _____ (gal)
PURGE RATE: _____ (gal / min)
PURGE METHOD: _____

SCREENED INTERVAL: _____

WATER QUALITY:

Time	Elapsed Time	Purged Volume (gal)	Depth to Water (ft)	pH (SU)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temp (°C)	ORP (mV)	Notes
~~1030~~	~~000~~	~~(1 gal)~~								
1005						61.4	2.55			
1030		0.75		7.41	1.78	1215		16.28	140	
1035		1.5		7.4	1.76	1214	2.13	16.2	48	
1040		2.75		7.4	0.93	1215	2.10	16.3	52	
1040		5.5		7.4	1.78	940	1.82	16.5	-38	
1043		6.5		7.5	1.74	302	3.31	16.5	-142	
1045		7		7.4	1.94	210	1.4	16.5	-200	
1050		8.5		7.4	1.3	90	4.16	16.6	-197	
1100		9	16.73	7.3	1.7	35	1.83	16.6	-216	

NOTES AND OBSERVATIONS:

* Bailed 1 gal - silty brown, sandy
where pump @ 1030

Sampled VOC @ 1100

WELL ID: MW 5

GZA GeoEnvironmental of New York
Well Purge Data Sheet

CLIENT:
SITE:
WEATHER:

PROJECT NO:
DATE:
SAMPLER(S):

COLUMN OF WATER IN WELL:
= Depth to Bottom (ft) - Static Water Level (ft)
= 27.8 - 13.17
Water Column (T) = 14.63 (ft)

GALLONS OF WATER PER WELL VOLUME:
Well Volume = Water Column (ft) x Multiplier
= _____ x _____
Well Volume (V) = 2.38 (gal)

Purge 7.15 to 12 gal

well diameter	Multiplier	
1	0.041	(gal / ft)
2	0.163	(gal / ft)
4	0.653	(gal / ft)

TOTAL VOLUME PURGED:
Design = _____ (gal)
Actual = _____ (gal)
PURGE RATE: _____ (gal / min)
PURGE METHOD: _____

SCREENED INTERVAL: _____

WATER QUALITY:

Time	Elapsed Time	Purged Volume (gal)	Depth to Water (ft)	pH (SU)	Specific Conductivity (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temp (^{0}C)	ORP (mV)	Notes
1235		2.5		7.4	1.7	1215	5.9	16.7	223	
1240		5		7.3	1.2	200	2.2	16.6	220	
1245		7		7.3	1.7	97	2.5	16.6	215	
1247		10	13.31							

NOTES AND OBSERVATIONS: * purged 2.5 by bailing → string Broke!
Sample for VOC 1250 DTB 28.02

WELL ID: MW6

GZA GeoEnvironmental of New York
Well Purge Data Sheet

CLIENT:
SITE:
WEATHER:

PROJECT NO:
DATE:
SAMPLER(S):

COLUMN OF WATER IN WELL:
= Depth to Bottom (ft) - Static Water Level (ft)
= 26.4 - 13.97
Water Column (T) = 12.63 (ft)

GALLONS OF WATER PER WELL VOLUME:
Well Volume = Water Column (ft) x Multiplier
= _____ x _____
Well Volume (V) = 2.05 (gal)

4.15 - 10.3

well diameter	Multiplier	
1	0.041	(gal / ft)
2	0.163	(gal / ft)
4	0.653	(gal / ft)

TOTAL VOLUME PURGED:
Design = _____ (gal)
Actual = _____ (gal)
PURGE RATE: _____ (gal / min)
PURGE METHOD: _____

SCREENED INTERVAL: _____

WATER QUALITY:

Time	Elapsed Time	Purged Volume (gal)	Depth to Water (ft)	pH (SU)	Specific Conductivity (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temp (^{0}C)	ORP (mV)	Notes
1200		2		7.4	1.33	1200	2.4	17.5	153	
1210		6		7.8	—	-				
1225		10	14.01	7.3	1.4	600	1.96	17.7	210	

NOTES AND OBSERVATIONS: bailed 2 gal to get out silt. started @ 1125
Sampled for VOCs @ 1215
DTB @ end = 17.4

APPENDIX D

LABORATORY ANALYTICAL REPORT

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA PACKAGE

VOLATILE ORGANICS

PROJECT NAME : 37-14 36TH STREET

GZA GEOENVIRONMENTAL

55 Lane Road

Suite 407

Fairfield, NJ - 07004

Phone No: 973-774-3300

ORDER ID : F2352

ATTENTION : Brett Engard

DoD ELAP

Table Of Contents for F2352

Table Of Contents for F2352

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Cover Page

Order ID : F2352

Project ID : 37-14 36th Street

Client : GZA Geoenvironmental

Lab Sample Number	Client Sample Number
F2352-01	MW4-5-15-14
F2352-02	MW5-5-15-14
F2352-03	MW6-5-15-14
F2352-04	TRIPBLANK

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed 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.

Signature : Mildred V Reyes

APPROVED

By Mildred V Reyes at 2:12 pm, May 30, 2014

Date: 5/24/2014

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

GZA Geoenvironmental
Project Name: 37-14 36th Street
Project # N/A
Chemtech Project # F2352
Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:
4 Water samples were received on 05/16/2014.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: VOCMS Group1. This data package contains results for VOCMS Group1.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.The analysis of VOCMS Group1 was based on method 8260-Low.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The MS {F2314-06MS} with File ID: VN015591.D recoveries met the requirements for all compounds except for cis-1,2-Dichloroethene[1400%] and Vinyl chloride[440%] .
The MSD {F2314-07MSD} with File ID: VN015592.D recoveries met the acceptable requirements except for cis-1,2-Dichloroethene[1000%] and Vinyl chloride[380%] .
The RPD recoveries met criteria .
The Blank Spike met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The %RSD is greater than 15% in the Initial Calibration (Method 82N052014W.M) for tert-Butylbenzene, this compound is passing on Linear regression.
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.
Samples MW4-5-15-14, MW5-5-15-14 were diluted due to high concentrations.

E. Additional Comments:

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount

for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature__ Mildred V Reyes

APPROVED
By Mildred V Reyes at 2:11 pm, May 30, 2014

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

QA Control # A3040960

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: F2352 MATRIX: Water

METHOD: 8260-Low

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements. The Initial Calibration met the requirements The %RSD is greater than 15% in the Initial Calibration (Method 82N052014W.M) for tert-Butylbenzene, this compound is passing on Linear regression.The Continuous Calibration met the requirements .			✓
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The MS {F2314-06MS} with File ID: VN015591.D recoveries met the requirements for all compounds except for cis-1,2-Dichloroethene[1400%] and Vinyl chloride[440%] . The MSD {F2314-07MSD} with File ID: VN015592.D recoveries met the acceptable requirements except for cis-1,2-Dichloroethene[1000%] and Vinyl chloride[380%] .		✓	
9.	Internal Standard Area/Retention Time Shift Meet Criteria Comments:			✓
10.	Analysis Holding Time Met If not met, list number of days exceeded for each sample:			✓

ADDITIONAL COMMENTS:

Samples MW4-5-15-14, MW5-5-15-14 were diluted due to high concentrations.

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

REVIEWED
By Nimisha at 1:55 pm, May 30, 2014

QA REVIEW Date

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: F2352

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

1st Level QA Review Signature: NIMISHA PANDYA **Date:** 05/30/2014

2nd Level QA Review Signature: Mildred V Reyes

APPROVED
By Mildred V Reyes at 2:11 pm, May 30, 2014

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

LAB CHRONICLE

OrderID:	F2352	**OrderDate:**	5/16/2014 5:45:38 PM
Client:	GZA Geoenvironmental	**Project:**	37-14 36th Street
Contact:	Brett Engard	**Location:**	VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
F2352-01	**MW4-5-15-14**	**Water**			**05/15/14**			**05/16/14**
			VOCMS Group1	8260-Low			05/22/14	
F2352-01DL	**MW4-5-15-14DL**	**Water**			**05/15/14**			**05/16/14**
			VOCMS Group1	8260-Low			05/22/14	
F2352-02	**MW5-5-15-14**	**Water**			**05/15/14**			**05/16/14**
			VOCMS Group1	8260-Low			05/22/14	
F2352-02DL	**MW5-5-15-14DL**	**Water**			**05/15/14**			**05/16/14**
			VOCMS Group1	8260-Low			05/22/14	
F2352-03	**MW6-5-15-14**	**Water**			**05/15/14**			**05/16/14**
			VOCMS Group1	8260-Low			05/22/14	
F2352-04	**TRIPBLANK**	**Water**			**05/15/14**			**05/16/14**
			VOCMS Group1	8260-Low			05/22/14	

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Hit Summary Sheet
SW-846

SDG No.: F2352

Client: GZA Geoenvironmental

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	**MW4-5-15-14**								
F2352-01	MW4-5-15-14	Water	Vinyl Chloride	8.60		0.2	0.2	1	ug/L
F2352-01	MW4-5-15-14	Water	1,1-Dichloroethene	0.61	J	0.2	0.2	1	ug/L
F2352-01	MW4-5-15-14	Water	trans-1,2-Dichloroethene	4.60		0.2	0.2	1	ug/L
F2352-01	MW4-5-15-14	Water	1,1-Dichloroethane	2.20		0.2	0.2	1	ug/L
F2352-01	MW4-5-15-14	Water	cis-1,2-Dichloroethene	280.00	E	0.2	0.2	1	ug/L
F2352-01	MW4-5-15-14	Water	Chloroform	0.39	J	0.2	0.2	1	ug/L
F2352-01	MW4-5-15-14	Water	Trichloroethene	120.00		0.2	0.2	1	ug/L
F2352-01	MW4-5-15-14	Water	Tetrachloroethene	3,200.00	E	0.2	0.2	1	ug/L
			Total Voc :	3616.4					
			Total Concentration:	3616.4					
Client ID:	**MW4-5-15-14DL**								
F2352-01DL	MW4-5-15-14DL	Water	cis-1,2-Dichloroethene	250.00	D	8	8	40	ug/L
F2352-01DL	MW4-5-15-14DL	Water	Trichloroethene	100.00	D	8	8	40	ug/L
F2352-01DL	MW4-5-15-14DL	Water	Tetrachloroethene	3,100.00	D	8	8	40	ug/L
			Total Voc :	3450					
			Total Concentration:	3450					
Client ID:	**MW5-5-15-14**								
F2352-02	MW5-5-15-14	Water	Vinyl Chloride	3.40		0.2	0.2	1	ug/L
F2352-02	MW5-5-15-14	Water	1,1-Dichloroethene	0.72	J	0.2	0.2	1	ug/L
F2352-02	MW5-5-15-14	Water	trans-1,2-Dichloroethene	130.00		0.2	0.2	1	ug/L
F2352-02	MW5-5-15-14	Water	cis-1,2-Dichloroethene	170.00		0.2	0.2	1	ug/L
F2352-02	MW5-5-15-14	Water	Chloroform	0.41	J	0.2	0.2	1	ug/L
F2352-02	MW5-5-15-14	Water	Trichloroethene	170.00		0.2	0.2	1	ug/L
F2352-02	MW5-5-15-14	Water	Tetrachloroethene	920.00	E	0.2	0.2	1	ug/L
			Total Voc :	1394.53					
			Total Concentration:	1394.53					
Client ID:	**MW5-5-15-14DL**								
F2352-02DL	MW5-5-15-14DL	Water	Vinyl Chloride	3.80	JD	2	2	10	ug/L
F2352-02DL	MW5-5-15-14DL	Water	trans-1,2-Dichloroethene	110.00	D	2	2	10	ug/L
F2352-02DL	MW5-5-15-14DL	Water	cis-1,2-Dichloroethene	150.00	D	2	2	10	ug/L
F2352-02DL	MW5-5-15-14DL	Water	Trichloroethene	140.00	D	2	2	10	ug/L
F2352-02DL	MW5-5-15-14DL	Water	Tetrachloroethene	810.00	D	2	2	10	ug/L
			Total Voc :	1213.8					
			Total Concentration:	1213.8					
Client ID:	**MW6-5-15-14**								
F2352-03	MW6-5-15-14	Water	Vinyl Chloride	7.60		0.2	0.2	1	ug/L
F2352-03	MW6-5-15-14	Water	1,1-Dichloroethene	0.43	J	0.2	0.2	1	ug/L
F2352-03	MW6-5-15-14	Water	trans-1,2-Dichloroethene	100.00		0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: F2352

Client: GZA Geoenvironmental

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
F2352-03	MW6-5-15-14	Water	cis-1,2-Dichloroethene	83.30		0.2	0.2	1	ug/L
F2352-03	MW6-5-15-14	Water	Trichloroethene	53.90		0.2	0.2	1	ug/L
F2352-03	MW6-5-15-14	Water	Tetrachloroethene	110.00		0.2	0.2	1	ug/L
			Total Voc :	355.23					
			Total Concentration:	355.23					

QC SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Surrogate Summary

SDG No.: F2352

Client: GZA Geoenvironmental

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits Low	Limits High
F2314-06MS	MLW-4-35-40MS	1,2-Dichloroethane-d4	50	51.61	103		70	120
		Dibromofluoromethane	50	53.35	107		85	115
		Toluene-d8	50	52.83	106		85	120
		4-Bromofluorobenzene	50	54.18	108		75	120
F2314-07MSD	MLW-4-35-40MSD	1,2-Dichloroethane-d4	50	46.69	93		70	120
		Dibromofluoromethane	50	46.79	94		85	115
		Toluene-d8	50	47.31	95		85	120
		4-Bromofluorobenzene	50	48.08	96		75	120
F2352-01	MW4-5-15-14	1,2-Dichloroethane-d4	50	46.86	94		61	141
		Dibromofluoromethane	50	47.74	95		69	133
		Toluene-d8	50	50.11	100		65	126
		4-Bromofluorobenzene	50	62.25	125		58	135
F2352-01DL	MW4-5-15-14DL	1,2-Dichloroethane-d4	50	45.12	90		61	141
		Dibromofluoromethane	50	46.17	92		69	133
		Toluene-d8	50	49.23	98		65	126
		4-Bromofluorobenzene	50	53.02	106		58	135
F2352-02	MW5-5-15-14	1,2-Dichloroethane-d4	50	46.23	92		61	141
		Dibromofluoromethane	50	47.11	94		69	133
		Toluene-d8	50	49.7	99		65	126
		4-Bromofluorobenzene	50	59.64	119		58	135
F2352-02DL	MW5-5-15-14DL	1,2-Dichloroethane-d4	50	45.61	91		61	141
		Dibromofluoromethane	50	46.32	93		69	133
		Toluene-d8	50	49.58	99		65	126
		4-Bromofluorobenzene	50	53.18	106		58	135
F2352-03	MW6-5-15-14	1,2-Dichloroethane-d4	50	46.25	93		61	141
		Dibromofluoromethane	50	45.98	92		69	133
		Toluene-d8	50	49.91	100		65	126
		4-Bromofluorobenzene	50	57.81	116		58	135
F2352-04	TRIPBLANK	1,2-Dichloroethane-d4	50	45.67	91		61	141
		Dibromofluoromethane	50	46.54	93		69	133
		Toluene-d8	50	49.87	100		65	126
		4-Bromofluorobenzene	50	57.73	115		58	135
VN0521WBL02	VN0521WBL02	1,2-Dichloroethane-d4	50	45.86	92		70	120
		Dibromofluoromethane	50	45.86	92		85	115
		Toluene-d8	50	49.61	99		85	120
		4-Bromofluorobenzene	50	57.17	114		75	120
VN0521WBS02	VN0521WBS02	1,2-Dichloroethane-d4	50	46.95	94		70	120
		Dibromofluoromethane	50	47.46	95		85	115
		Toluene-d8	50	47.69	95		85	120
		4-Bromofluorobenzene	50	48.16	96		75	120
VN0522WBL01	VN0522WBL01	1,2-Dichloroethane-d4	50	45.792	92		70	120
		Dibromofluoromethane	50	45.872	92		85	115
		Toluene-d8	50	49.467	99		85	120
		4-Bromofluorobenzene	50	53.924	108		75	120
VN0522WBS01	VN0522WBS01	1,2-Dichloroethane-d4	50	46.17	92		70	120
		Dibromofluoromethane	50	49.37	99		85	115
		Toluene-d8	50	49.03	98		85	120
		4-Bromofluorobenzene	50	47.6	95		75	120

CHEMTECH

Matrix Spike/Matrix Spike Duplicate Summary
SW-846

SDG No.: F2352

Client: GZA Geoenvironmental

Analytical Method: SW8260-Low

Lab Sample ID : F2314-06MS **Client Sample ID :** MLW-4-35-40MS **Datafile :** VN015591.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Vinyl chloride	50	560	780	ug/L	440	*			50	145	
1,1-Dichloroethene	50	1.6	53.8	ug/L	104				70	130	
Acetone	250	0	230	ug/L	92				40	140	
Methyl tert-butyl Ether	50	19.3	76.8	ug/L	115				65	125	
Methylene Chloride	50	0	51.1	ug/L	102				55	140	
trans-1,2-Dichloroethene	50	3.7	56	ug/L	105				60	140	
1,1-Dichloroethane	50	8.9	63.6	ug/L	109				70	135	
2-Butanone	250	0	260	ug/L	104				30	150	
Carbon Tetrachloride	50	0	48.2	ug/L	96				65	140	
cis-1,2-Dichloroethene	50	1900	2600	ug/L	1400	*			70	125	
Chloroform	50	0	51.3	ug/L	103				65	135	
1,1,1-Trichloroethane	50	0	50	ug/L	100				65	130	
Benzene	50	0	51	ug/L	102				80	120	
1,2-Dichloroethane	50	0	48.5	ug/L	97				70	130	
Trichloroethene	50	0.42	50.4	ug/L	100				70	125	
Toluene	50	0	50.5	ug/L	101				75	120	
Tetrachloroethene	50	1.4	48.4	ug/L	94				45	150	
Chlorobenzene	50	0	49.7	ug/L	99				80	120	
Ethyl Benzene	50	0	50.2	ug/L	100				75	125	
m/p-Xylenes	100	0	99.6	ug/L	100				75	130	
o-Xylene	50	0	50.9	ug/L	102				80	120	
N-propylbenzene	50	0	47.9	ug/L	96				70	130	
tert-Butylbenzene	50	0	52.2	ug/L	104				70	130	
1,2,4-Trimethylbenzene	50	0	48.2	ug/L	96				75	130	
Sec-butylbenzene	50	0	47.7	ug/L	95				70	125	
1,3-Dichlorobenzene	50	0	48.8	ug/L	98				75	125	
1,4-Dichlorobenzene	50	0	48.5	ug/L	97				75	125	
n-Butylbenzene	50	0	49.7	ug/L	99				70	135	
1,2-Dichlorobenzene	50	0	49.1	ug/L	98				70	120	
1,4-Dioxane	1000	0	1200	ug/L	120				50	150	

CHEMTECH

Matrix Spike/Matrix Spike Duplicate Summary
SW-846

SDG No.: F2352

Client: GZA Geoenvironmental

Analytical Method: SW8260-Low

Lab Sample ID : F2314-07MSD **Client Sample ID :** MLW-4-35-40MSD **Datafile :** VN015592.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Vinyl chloride	50	560	750	ug/L	380	*	4		50	145	20
1,1-Dichloroethene	50	1.6	51.3	ug/L	99		5		70	130	20
Acetone	250	0	230	ug/L	92		0		40	140	20
Methyl tert-butyl Ether	50	19.3	73	ug/L	107		5		65	125	20
Methylene Chloride	50	0	49	ug/L	98		4		55	140	20
trans-1,2-Dichloroethene	50	3.7	53.1	ug/L	99		5		60	140	20
1,1-Dichloroethane	50	8.9	60.6	ug/L	103		5		70	135	20
2-Butanone	250	0	250	ug/L	100		4		30	150	20
Carbon Tetrachloride	50	0	45.2	ug/L	90		6		65	140	20
cis-1,2-Dichloroethene	50	1900	2400	ug/L	1000	*	8		70	125	20
Chloroform	50	0	48.4	ug/L	97		6		65	135	20
1,1,1-Trichloroethane	50	0	47.2	ug/L	94		6		65	130	20
Benzene	50	0	48	ug/L	96		6		80	120	20
1,2-Dichloroethane	50	0	44.8	ug/L	90		8		70	130	20
Trichloroethene	50	0.42	47	ug/L	93		7		70	125	20
Toluene	50	0	47.6	ug/L	95		6		75	120	20
Tetrachloroethene	50	1.4	45.8	ug/L	89		6		45	150	20
Chlorobenzene	50	0	46.9	ug/L	94		6		80	120	20
Ethyl Benzene	50	0	47.7	ug/L	95		5		75	125	20
m/p-Xylenes	100	0	94.1	ug/L	94		6		75	130	20
o-Xylene	50	0	48.6	ug/L	97		5		80	120	20
N-propylbenzene	50	0	46	ug/L	92		4		70	130	20
tert-Butylbenzene	50	0	50.1	ug/L	100		4		70	130	20
1,2,4-Trimethylbenzene	50	0	46.6	ug/L	93		3		75	130	20
Sec-butylbenzene	50	0	45.6	ug/L	91		5		70	125	20
1,3-Dichlorobenzene	50	0	46.9	ug/L	94		4		75	125	20
1,4-Dichlorobenzene	50	0	46.9	ug/L	94		3		75	125	20
n-Butylbenzene	50	0	48.3	ug/L	97		3		70	135	20
1,2-Dichlorobenzene	50	0	47.5	ug/L	95		3		70	120	20
1,4-Dioxane	1000	0	1100	ug/L	110		9		50	150	20

CHEMTECH

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: F2352

Client: GZA Geoenvironmental

Analytical Method: SW8260-Low **Datafile :** VN015575.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0521WBS02	Vinyl chloride	20	20.8	ug/L	104			50	145	
	1,1-Dichloroethene	20	21.2	ug/L	106			70	130	
	Acetone	100	94.5	ug/L	95			40	140	
	Methyl tert-butyl Ether	20	20.9	ug/L	104			65	125	
	Methylene Chloride	20	21.1	ug/L	106			55	140	
	trans-1,2-Dichloroethene	20	21.4	ug/L	107			60	140	
	1,1-Dichloroethane	20	20.9	ug/L	104			70	135	
	2-Butanone	100	100	ug/L	100			30	150	
	Carbon Tetrachloride	20	19.6	ug/L	98			65	140	
	cis-1,2-Dichloroethene	20	21.4	ug/L	107			70	125	
	Chloroform	20	20.9	ug/L	104			65	135	
	1,1,1-Trichloroethane	20	20.7	ug/L	104			65	130	
	Benzene	20	20.2	ug/L	101			80	120	
	1,2-Dichloroethane	20	19.6	ug/L	98			70	130	
	Trichloroethene	20	19.9	ug/L	100			70	125	
	Toluene	20	20.5	ug/L	103			75	120	
	Tetrachloroethene	20	20.9	ug/L	104			45	150	
	Chlorobenzene	20	20.2	ug/L	101			80	120	
	Ethyl Benzene	20	20.5	ug/L	103			75	125	
	m/p-Xylenes	40	40.7	ug/L	102			75	130	
	o-Xylene	20	20.7	ug/L	104			80	120	
	N-propylbenzene	20	19.6	ug/L	98			70	130	
	tert-Butylbenzene	20	20.4	ug/L	102			70	130	
	1,2,4-Trimethylbenzene	20	19.3	ug/L	97			75	130	
	Sec-butylbenzene	20	19.7	ug/L	99			70	125	
	1,3-Dichlorobenzene	20	19.9	ug/L	100			75	125	
	1,4-Dichlorobenzene	20	20.1	ug/L	101			75	125	
	n-Butylbenzene	20	20.3	ug/L	102			70	135	
	1,2-Dichlorobenzene	20	20.1	ug/L	101			70	120	
	1,4-Dioxane	400	410	ug/L	103			50	150	

CHEMTECH

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: F2352

Client: GZA Geoenvironmental

Analytical Method: SW8260-Low **Datafile :** VN015597.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0522WBS01	Vinyl chloride	20	19.2	ug/L	96			50	145	
	1,1-Dichloroethene	20	18.9	ug/L	95			70	130	
	Acetone	100	140	ug/L	140			40	140	
	Methyl tert-butyl Ether	20	19.3	ug/L	97			65	125	
	Methylene Chloride	20	19.6	ug/L	98			55	140	
	trans-1,2-Dichloroethene	20	18.9	ug/L	95			60	140	
	1,1-Dichloroethane	20	19.6	ug/L	98			70	135	
	2-Butanone	100	110	ug/L	110			30	150	
	Carbon Tetrachloride	20	18.7	ug/L	94			65	140	
	cis-1,2-Dichloroethene	20	20.2	ug/L	101			70	125	
	Chloroform	20	19.2	ug/L	96			65	135	
	1,1,1-Trichloroethane	20	19	ug/L	95			65	130	
	Benzene	20	19.6	ug/L	98			80	120	
	1,2-Dichloroethane	20	19.4	ug/L	97			70	130	
	Trichloroethene	20	19.5	ug/L	98			70	125	
	Toluene	20	19.6	ug/L	98			75	120	
	Tetrachloroethene	20	19.8	ug/L	99			45	150	
	Chlorobenzene	20	19.2	ug/L	96			80	120	
	Ethyl Benzene	20	19.5	ug/L	98			75	125	
	m/p-Xylenes	40	38.2	ug/L	96			75	130	
	o-Xylene	20	19.6	ug/L	98			80	120	
	N-propylbenzene	20	19.5	ug/L	98			70	130	
	tert-Butylbenzene	20	21	ug/L	105			70	130	
	1,2,4-Trimethylbenzene	20	19.7	ug/L	99			75	130	
	Sec-butylbenzene	20	19.3	ug/L	97			70	125	
	1,3-Dichlorobenzene	20	19.1	ug/L	96			75	125	
	1,4-Dichlorobenzene	20	19.2	ug/L	96			75	125	
	n-Butylbenzene	20	19.4	ug/L	97			70	135	
	1,2-Dichlorobenzene	20	19.9	ug/L	100			70	120	
	1,4-Dioxane	400	410	ug/L	103			50	150	

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0521WBL02

Lab Name: CHEMTECH

Contract: GZAG02

Lab Code: CHEM

Case No.: F2352

SAS No.: F2352

SDG NO.: F2352

Lab File ID: VN015574.D

Lab Sample ID: VN0521WBL02

Date Analyzed: 05/22/2014

Time Analyzed: 01:44

GC Column: RXI-624

ID: 0.25 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0521WBS02	VN0521WBS02	VN015575.D	05/22/2014
TRIPBLANK	F2352-04	VN015579.D	05/22/2014
MW4-5-15-14	F2352-01	VN015580.D	05/22/2014
MW5-5-15-14	F2352-02	VN015581.D	05/22/2014
MW6-5-15-14	F2352-03	VN015582.D	05/22/2014
MLW-4-35-40MS	F2314-06MS	VN015591.D	05/22/2014
MLW-4-35-40MSD	F2314-07MSD	VN015592.D	05/22/2014

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0522WBL01

Lab Name: CHEMTECH

Contract: GZAG02

Lab Code: CHEM

Case No.: F2352

SAS No.: F2352

SDG NO.: F2352

Lab File ID: VN015596.D

Lab Sample ID: VN0522WBL01

Date Analyzed: 05/22/2014

Time Analyzed: 14:23

GC Column: RXI-624

ID: 0.25 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0522WBS01	VN0522WBS01	VN015597.D	05/22/2014
MW4-5-15-14DL	F2352-01DL	VN015598.D	05/22/2014
MW5-5-15-14DL	F2352-02DL	VN015602.D	05/22/2014

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG NO.: F2352

Lab File ID: VN015521.D BFB Injection Date: 05/20/2014

Instrument ID: MSVOA_N BFB Injection Time: 15:11

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.9
75	30.0 - 60.0% of mass 95	49.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 100.0% of mass 95	97.2
175	5.0 - 9.0% of mass 174	6.6 (6.8) 1
176	95.0 - 101.0% of mass 174	93.2 (95.9) 1
177	5.0 - 9.0% of mass 176	6.6 (7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VN015522.D	05/20/2014	17:24
VSTDICC005	VSTDICC005	VN015523.D	05/20/2014	17:54
VSTDICC020	VSTDICC020	VN015524.D	05/20/2014	18:24
VSTDICCC050	VSTDICCC050	VN015525.D	05/20/2014	18:54
VSTDICC100	VSTDICC100	VN015526.D	05/20/2014	19:24
VSTDICC200	VSTDICC200	VN015527.D	05/20/2014	19:55

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG NO.: F2352

Lab File ID: VN015572.D BFB Injection Date: 05/22/2014

Instrument ID: MSVOA_N BFB Injection Time: 00:14

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18
75	30.0 - 60.0% of mass 95	50.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 100.0% of mass 95	99.2
175	5.0 - 9.0% of mass 174	7.4 (7.4) 1
176	95.0 - 101.0% of mass 174	96.3 (97.1) 1
177	5.0 - 9.0% of mass 176	6.3 (6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN015573.D	05/22/2014	00:44
VN0521WBL02	VN0521WBL02	VN015574.D	05/22/2014	01:44
VN0521WBS02	VN0521WBS02	VN015575.D	05/22/2014	02:15
TRIPBLANK	F2352-04	VN015579.D	05/22/2014	04:46
MW4-5-15-14	F2352-01	VN015580.D	05/22/2014	05:16
MW5-5-15-14	F2352-02	VN015581.D	05/22/2014	05:47
MW6-5-15-14	F2352-03	VN015582.D	05/22/2014	06:17
MLW-4-35-40MS	F2314-06MS	VN015591.D	05/22/2014	10:50
MLW-4-35-40MSD	F2314-07MSD	VN015592.D	05/22/2014	11:20

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG NO.: F2352

Lab File ID: VN015594.D BFB Injection Date: 05/22/2014

Instrument ID: MSVOA_N BFB Injection Time: 12:32

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.1
75	30.0 - 60.0% of mass 95	50.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.4 (0.4) 1
174	50.0 - 100.0% of mass 95	98.3
175	5.0 - 9.0% of mass 174	7.9 (8) 1
176	95.0 - 101.0% of mass 174	94.9 (96.5) 1
177	5.0 - 9.0% of mass 176	6.1 (6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN015595.D	05/22/2014	13:03
VN0522WBL01	VN0522WBL01	VN015596.D	05/22/2014	14:23
VN0522WBS01	VN0522WBS01	VN015597.D	05/22/2014	14:54
MW4-5-15-14DL	F2352-01DL	VN015598.D	05/22/2014	15:24
MW5-5-15-14DL	F2352-02DL	VN015602.D	05/22/2014	17:25

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG NO.: F2352

Lab File ID: VN015573.D Date Analyzed: 05/22/2014

Instrument ID: MSVOA_N Time Analyzed: 00:44

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	185615	7.87	266327	8.79	233630	11.61
UPPER LIMIT	371230	8.37	532654	9.29	467260	12.11
LOWER LIMIT	92807.5	7.37	133164	8.29	116815	11.11
EPA SAMPLE NO.						
MLW-4-35-40MS	179348	7.87	258091	8.79	228735	11.61
MLW-4-35-40MSD	183304	7.87	268261	8.79	234362	11.61
MW4-5-15-14	226601	7.87	349039	8.79	365834	11.61
MW5-5-15-14	229823	7.87	352218	8.79	365897	11.61
MW6-5-15-14	234627	7.87	365455	8.79	376256	11.61
TRIPBLANK	243539	7.87	375855	8.79	388788	11.61
VN0521WBL02	236602	7.87	363398	8.79	371531	11.61
VN0521WBS02	184193	7.87	267805	8.79	234672	11.61

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG NO.: F2352

Lab File ID: VN015573.D Date Analyzed: 05/22/2014

Instrument ID: MSVOA_N Time Analyzed: 00:44

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	111003	13.56				
UPPER LIMIT	222006	14.06				
LOWER LIMIT	55501.5	13.06				
EPA SAMPLE NO.						
MLW-4-35-40MS	107814	13.56				
MLW-4-35-40MSD	109834	13.56				
MW4-5-15-14	183692	13.56				
MW5-5-15-14	174343	13.56				
MW6-5-15-14	174411	13.56				
TRIPBLANK	174688	13.56				
VN0521WBL02	162510	13.56				
VN0521WBS02	109601	13.56				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG NO.: F2352

Lab File ID: VN015595.D Date Analyzed: 05/22/2014

Instrument ID: MSVOA_N Time Analyzed: 13:03

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	171729	7.87	241067	8.79	211908	11.61
UPPER LIMIT	343458	8.37	482134	9.29	423816	12.11
LOWER LIMIT	85864.5	7.37	120534	8.29	105954	11.11
EPA SAMPLE NO.						
MW4-5-15-14DL	226674	7.87	349491	8.79	347384	11.61
MW5-5-15-14DL	227301	7.87	350845	8.79	346858	11.61
VN0522WBL01	233506	7.87	361177	8.79	361218	11.61
VN0522WBS01	197105	7.87	275670	8.79	239976	11.61

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG NO.: F2352

Lab File ID: VN015595.D Date Analyzed: 05/22/2014

Instrument ID: MSVOA_N Time Analyzed: 13:03

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	100102	13.56				
UPPER LIMIT	200204	14.06				
LOWER LIMIT	50051	13.06				
EPA SAMPLE NO.						
MW4-5-15-14DL	143209	13.56				
MW5-5-15-14DL	140795	13.56				
VN0522WBL01	143539	13.56				
VN0522WBS01	106078	13.56				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW4-5-15-14	SDG No.:	F2352
Lab Sample ID:	F2352-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015580.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	8.6		0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.61	J	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	4.6		0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	2.2		0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	280	E	0.2	0.2	1	ug/L
67-66-3	Chloroform	0.39	J	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	120		0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	3200	E	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	3	U	0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.9		61 - 141		94%	SPK: 50

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW4-5-15-14	SDG No.:	F2352
Lab Sample ID:	F2352-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015580.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	47.7		69 - 133		95%	SPK: 50
2037-26-5	Toluene-d8	50.1		65 - 126		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	62.3		58 - 135		125%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	226601	7.87				
540-36-3	1,4-Difluorobenzene	349039	8.79				
3114-55-4	Chlorobenzene-d5	365834	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	183692	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015580.D
Acq On : 22 May 2014 5:16
Operator : MD
Sample : F2352-01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 31 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

Quant Time: May 22 15:22:15 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	226601	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	349039	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	365834	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	183692	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	122135	46.86	ug/l	0.00
Spiked Amount 50.000			Recovery	=	93.72%	
36) Dibromofluoromethane	7.80	113	108523	47.74	ug/l	0.00
Spiked Amount 50.000			Recovery	=	95.48%	
51) Toluene-d8	10.29	98	419737	50.11	ug/l	0.00
Spiked Amount 50.000			Recovery	=	100.22%	
63) 4-Bromofluorobenzene	12.61	95	178630	62.25	ug/l	0.00
Spiked Amount 50.000			Recovery	=	124.50%	

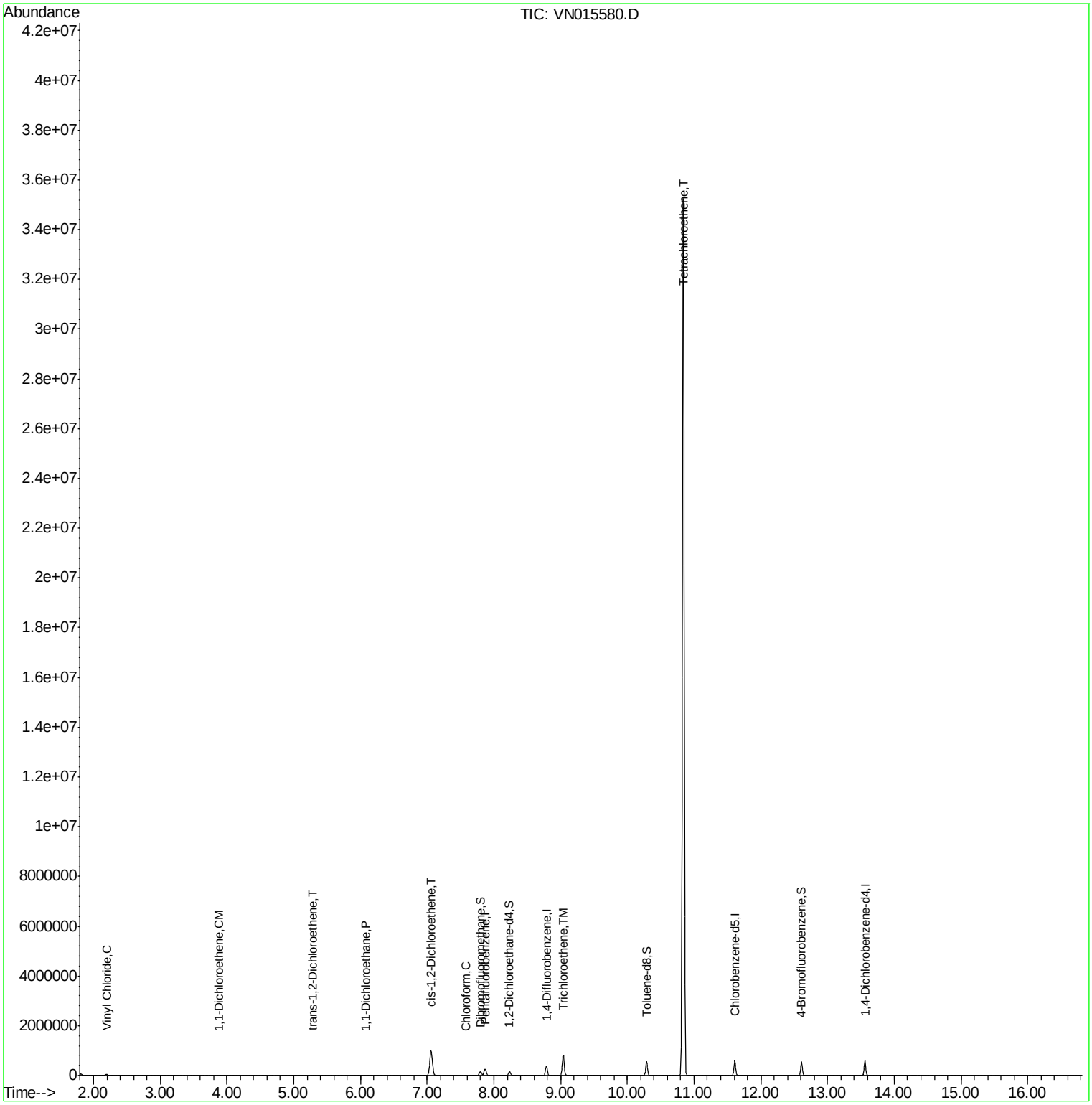
Target Compounds						Qvalue
5) Vinyl Chloride	2.20	62	18267	8.63	ug/l	96
13) 1,1-Dichloroethene	3.89	96	1131	0.61	ug/l #	80
22) trans-1,2-Dichloroethene	5.28	96	9068	4.64	ug/l	95
25) 1,1-Dichloroethane	6.09	63	8133	2.21	ug/l	97
28) cis-1,2-Dichloroethene	7.06	96	647884	282.30	ug/l	89
31) Chloroform	7.58	83	1477	0.39	ug/l	99
45) Trichloroethene	9.04	130	320368	123.22	ug/l	99
65) Tetrachloroethene	10.84	164	9093503	3150.77	ug/l	96

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

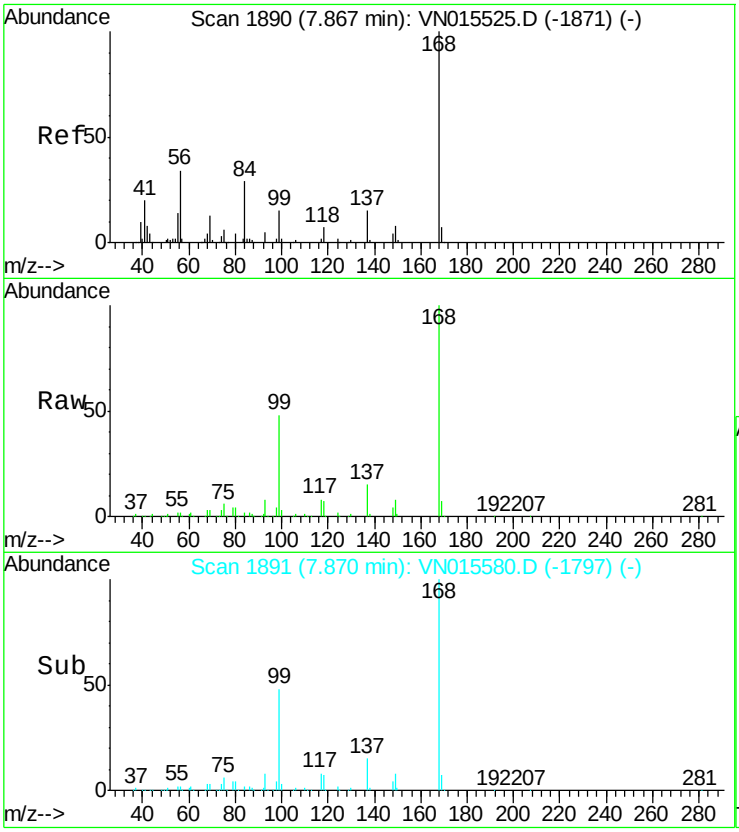
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015580.D
Acq On : 22 May 2014 5:16
Operator : MD
Sample : F2352-01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 31 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

Quant Time: May 22 15:22:15 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration



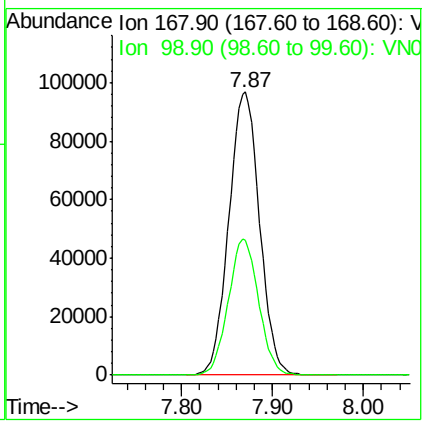
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

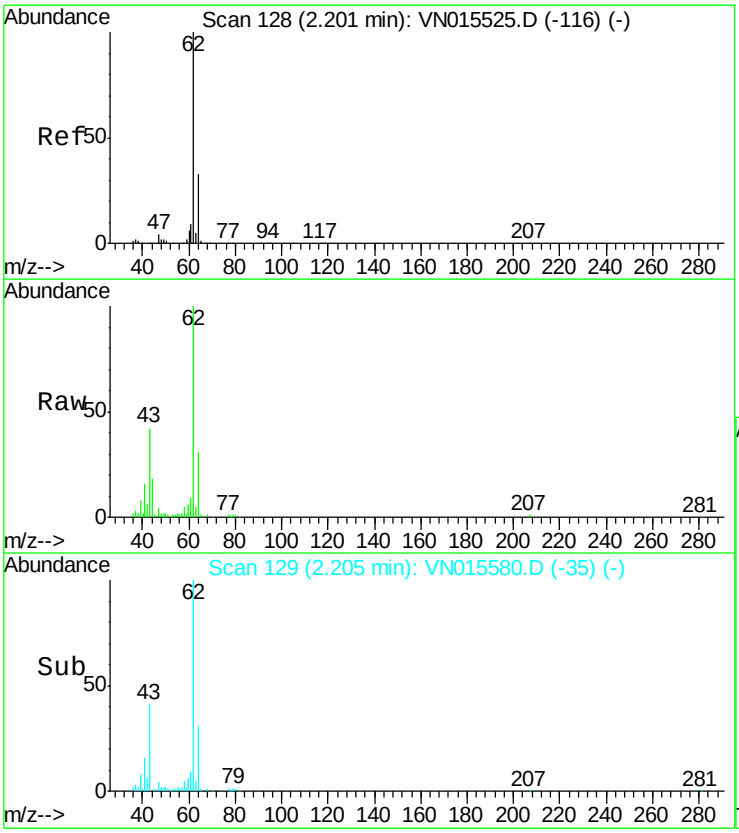


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1891
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion:168 Resp: 226601

Ion	Ratio	Lower	Upper
168	100		
99	47.6	39.0	58.4

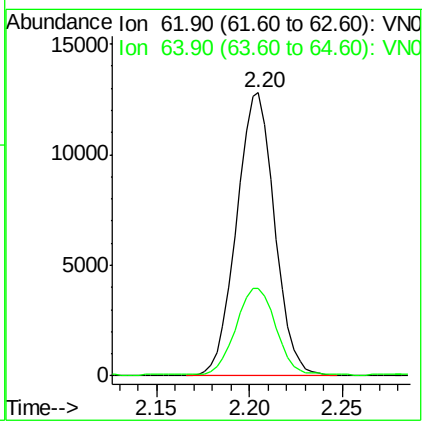




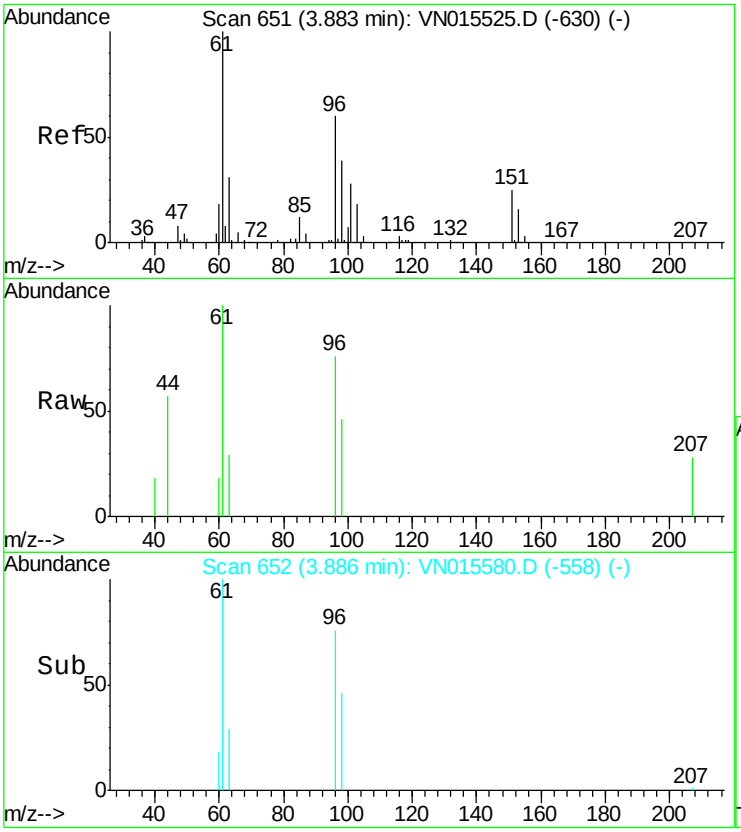
#5
Vinyl Chloride
Concen: 8.63 ug/l
RT: 2.20 min Scan# 129
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 62 Resp: 18267

Ion	Ratio	Lower	Upper
62	100		
64	30.6	26.2	39.4



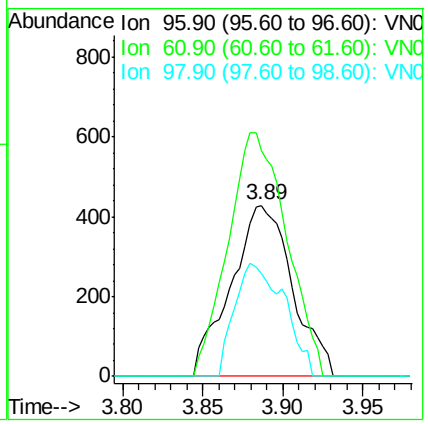
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

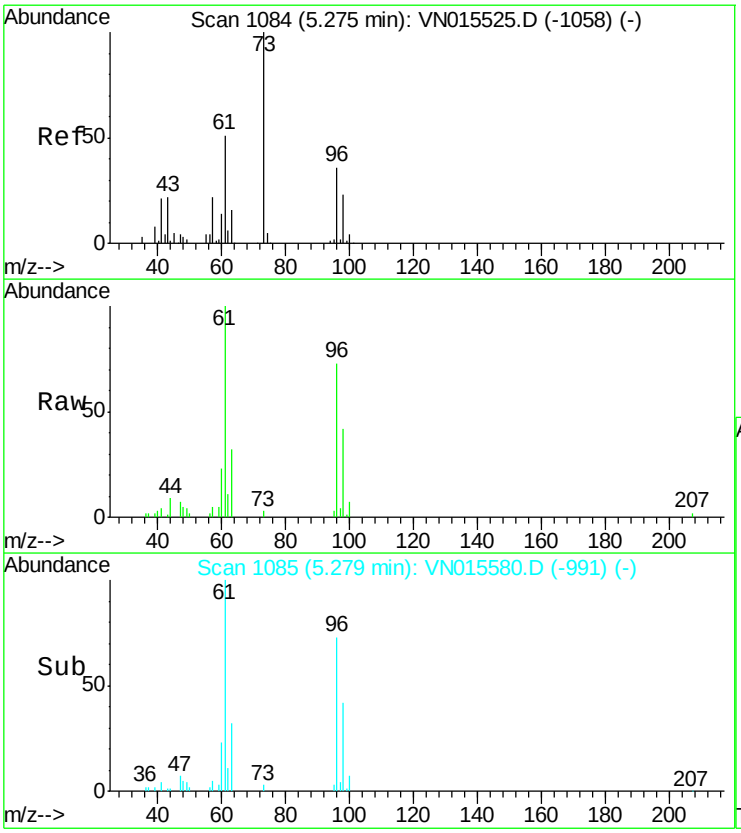


#13
1,1-Dichloroethene
Concen: 0.61 ug/l
RT: 3.89 min Scan# 652
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 96 Resp: 1131

Ion	Ratio	Lower	Upper
96	100		
61	131.5	132.3	198.5#
98	60.1	51.8	77.6

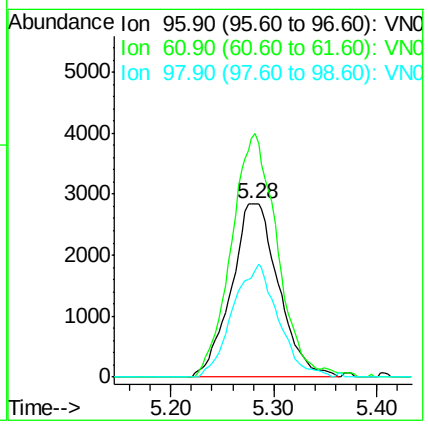




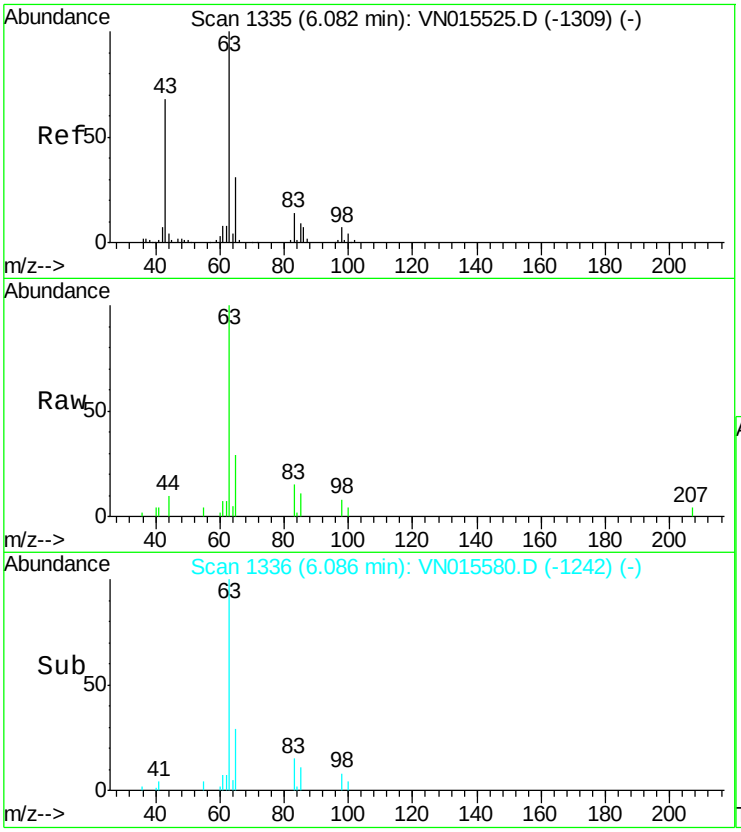
#22
trans-1,2-Dichloroethene
Concen: 4.64 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 96 Resp: 9068

Ion	Ratio	Lower	Upper
96	100		
61	137.2	113.3	169.9
98	57.3	50.4	75.6



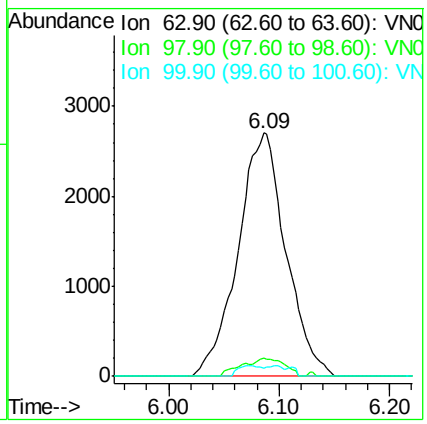
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

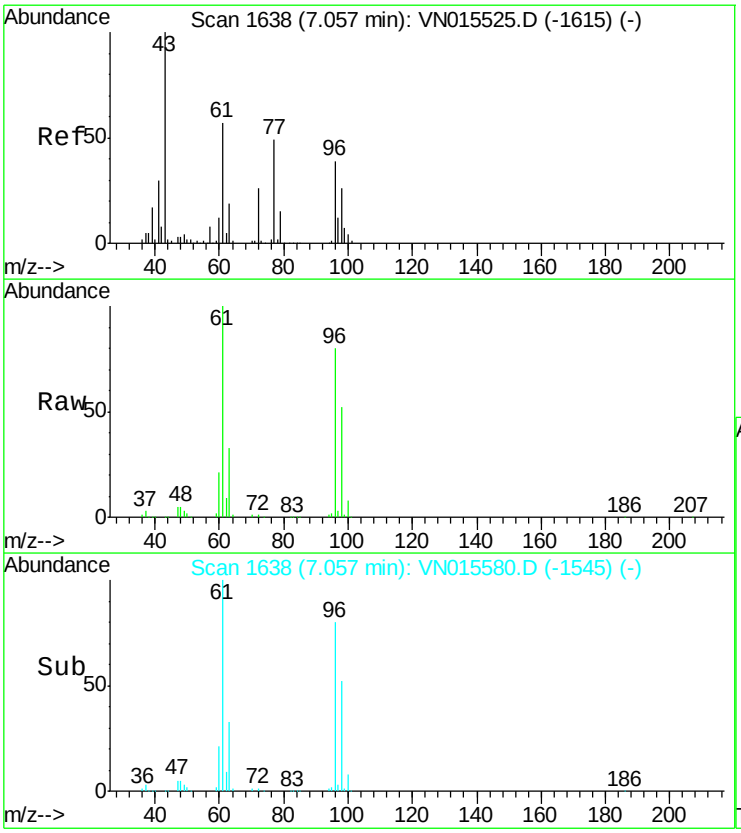


#25
1,1-Dichloroethane
Concen: 2.21 ug/l
RT: 6.09 min Scan# 1336
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 63 Resp: 8133

Ion	Ratio	Lower	Upper
63	100		
98	7.6	3.3	9.9
100	3.5	2.1	6.3

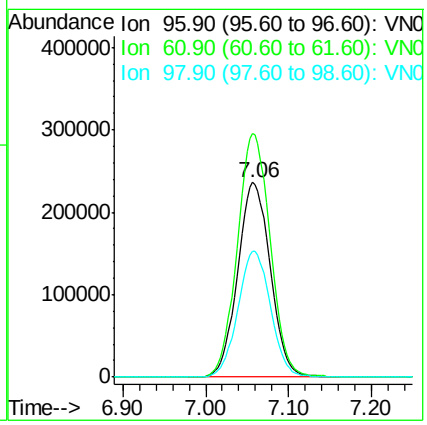




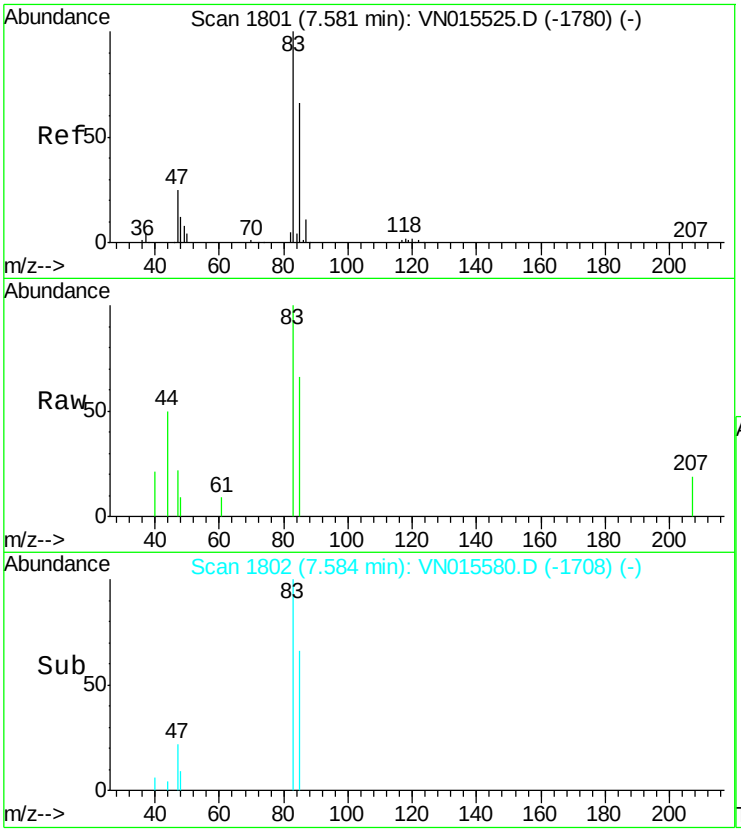
#28
cis-1,2-Dichloroethene
Concen: 282.30 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 96 Resp: 647884

Ion	Ratio	Lower	Upper
96	100		
61	126.1	0.0	292.0
98	64.7	0.0	129.4



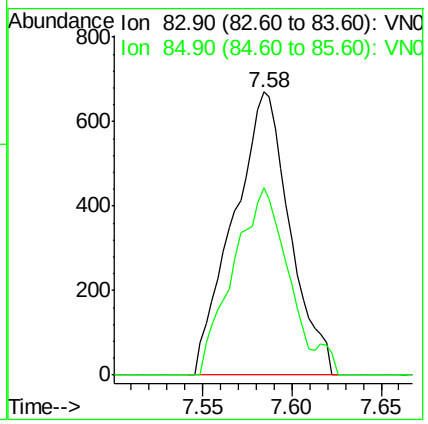
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

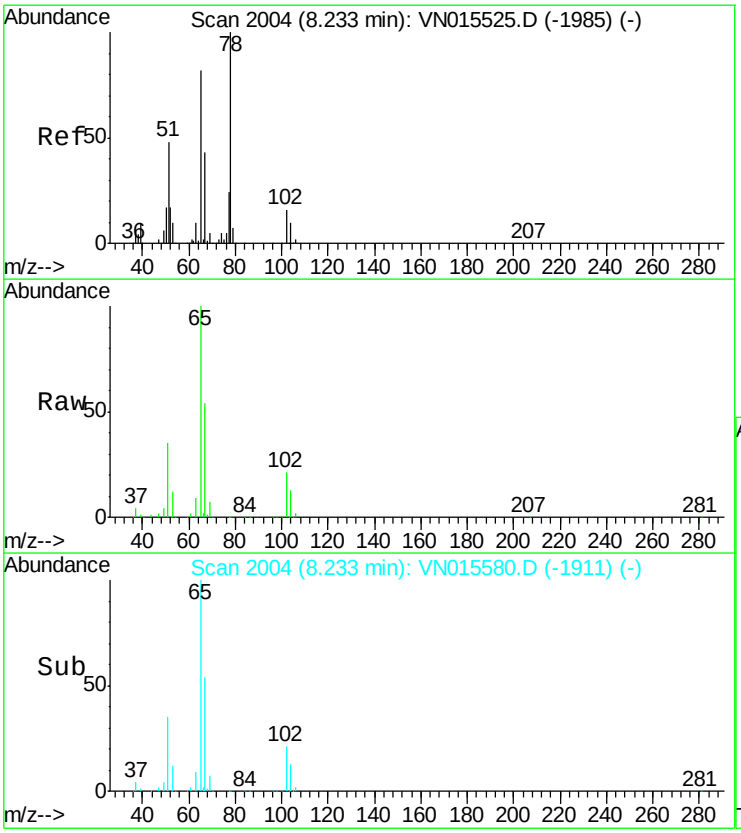


#31
Chloroform
Concen: 0.39 ug/l
RT: 7.58 min Scan# 1802
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 83 Resp: 1477

Ion	Ratio	Lower	Upper
83	100		
85	66.4	52.6	78.8

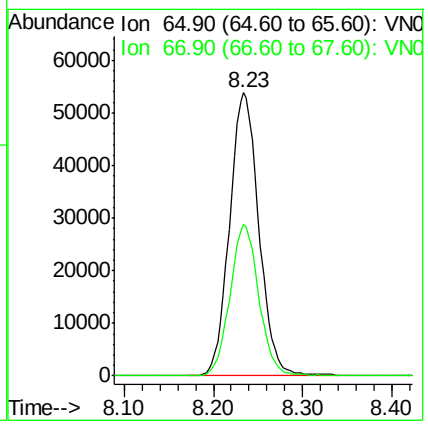




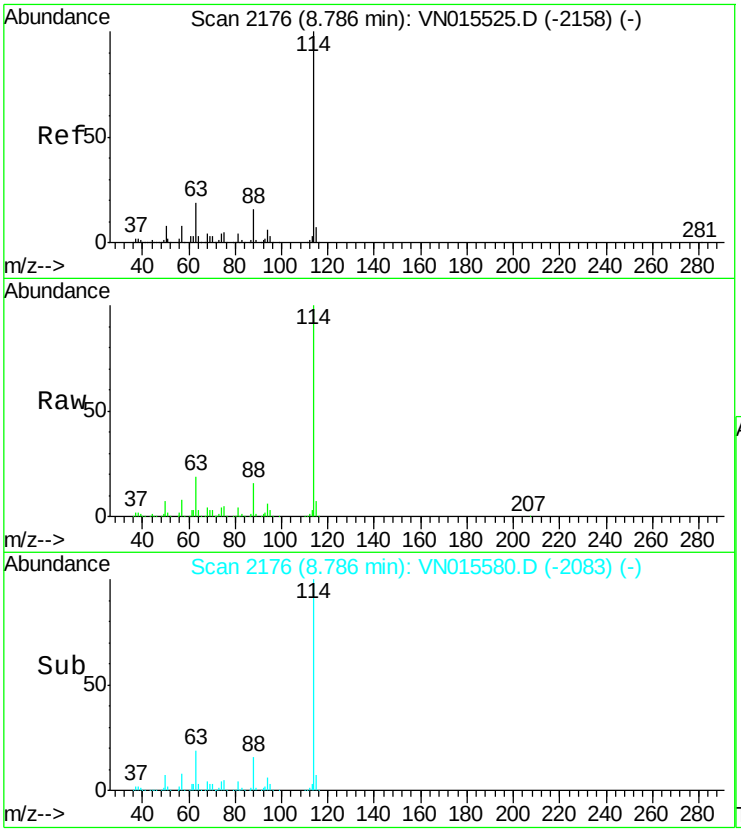
#34
1,2-Dichloroethane-d4
Concen: 46.86 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 65 Resp: 122135

Ion	Ratio	Lower	Upper
65	100		
67	52.7	0.0	103.6



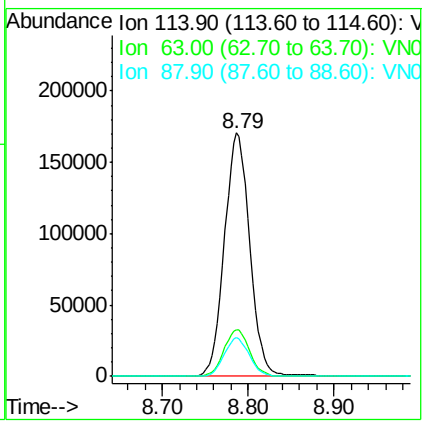
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

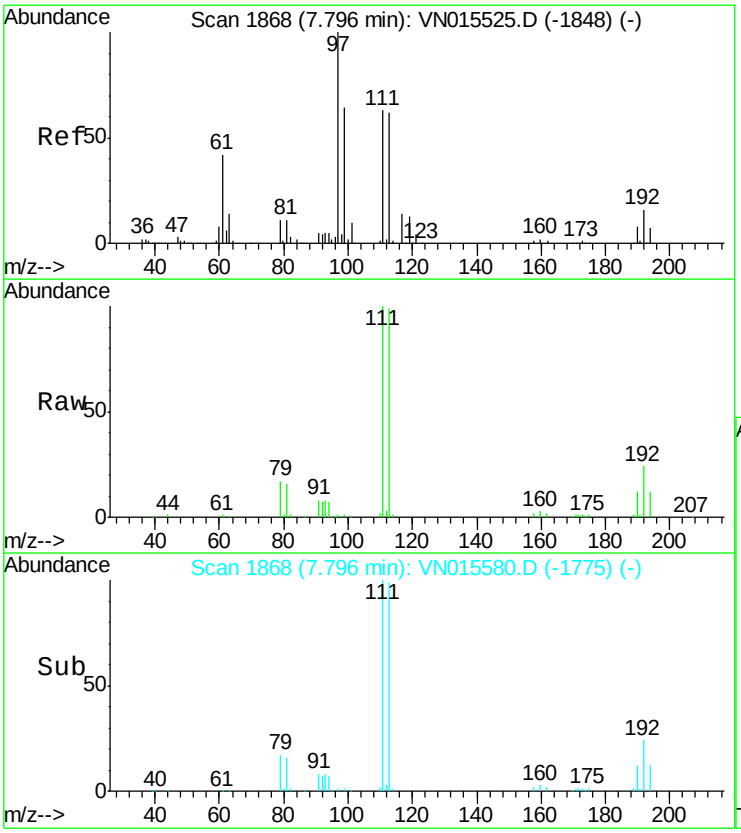


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion:114 Resp: 349039

Ion	Ratio	Lower	Upper
114	100		
63	19.4	0.0	38.6
88	15.7	0.0	32.2

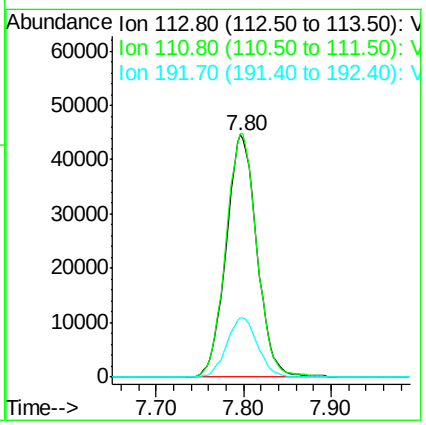




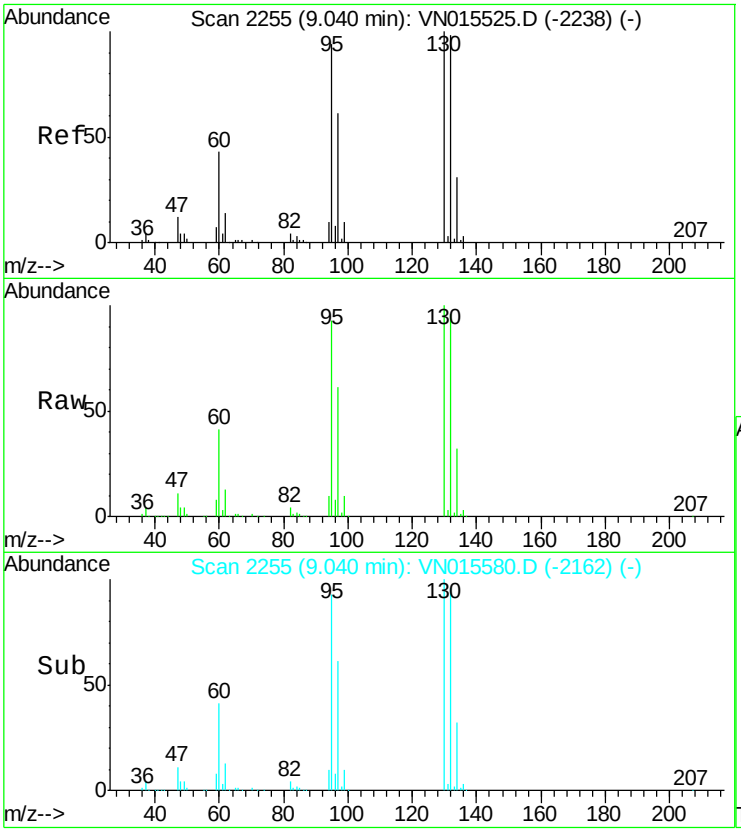
#36
Dibromofluoromethane
Concen: 47.74 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion:113 Resp: 108523

Ion	Ratio	Lower	Upper
113	100		
111	101.3	81.5	122.3
192	24.6	20.0	30.0



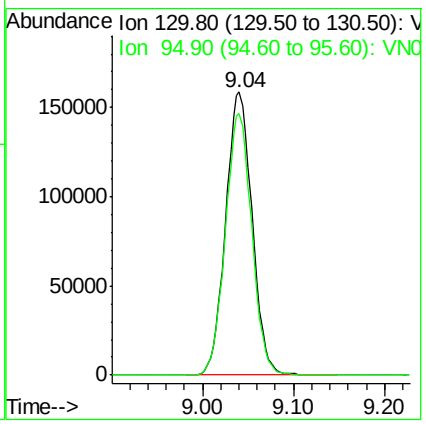
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

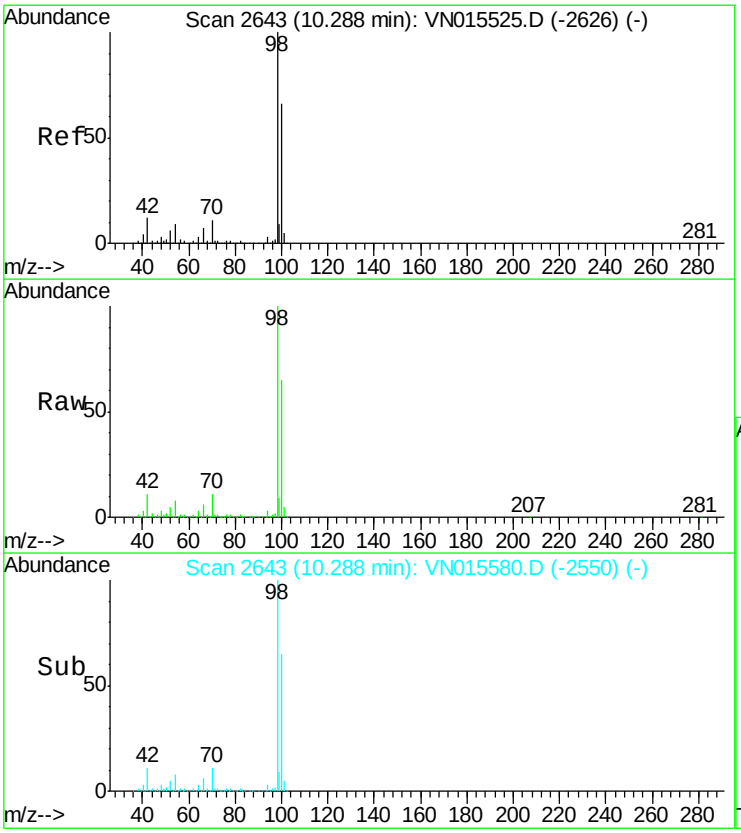


#45
Trichloroethene
Concen: 123.22 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion:130 Resp: 320368

Ion	Ratio	Lower	Upper
130	100		
95	92.6	0.0	187.0

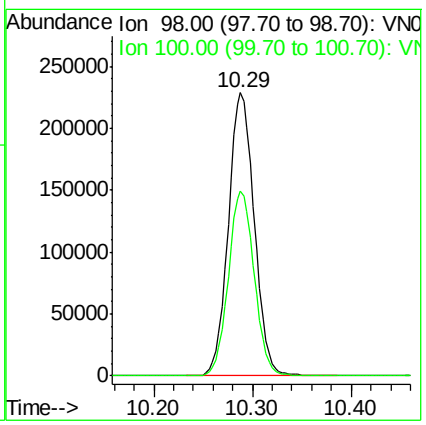




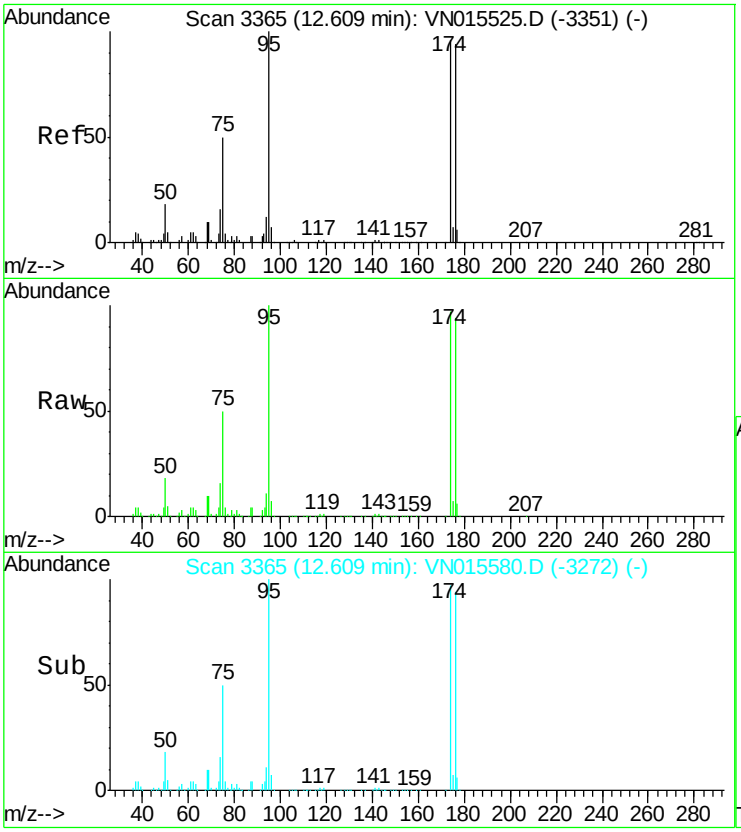
#51
Toluene-d8
Concen: 50.11 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 98 Resp: 419737

Ion	Ratio	Lower	Upper
98	100		
100	65.2	52.3	78.5



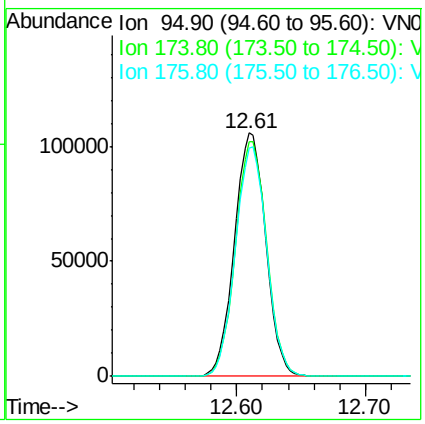
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

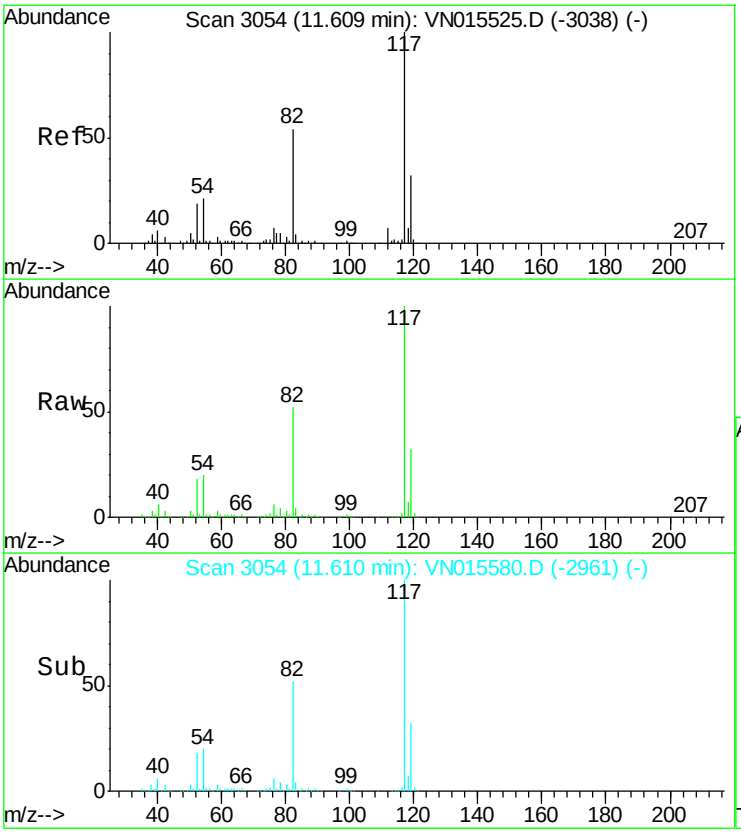


#63
4-Bromofluorobenzene
Concen: 62.25 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion: 95 Resp: 178630

Ion	Ratio	Lower	Upper
95	100		
174	96.7	0.0	191.8
176	94.3	0.0	186.8

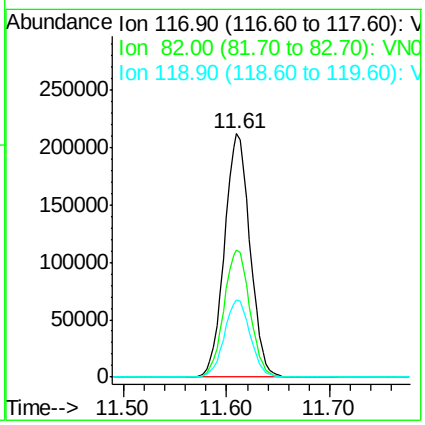




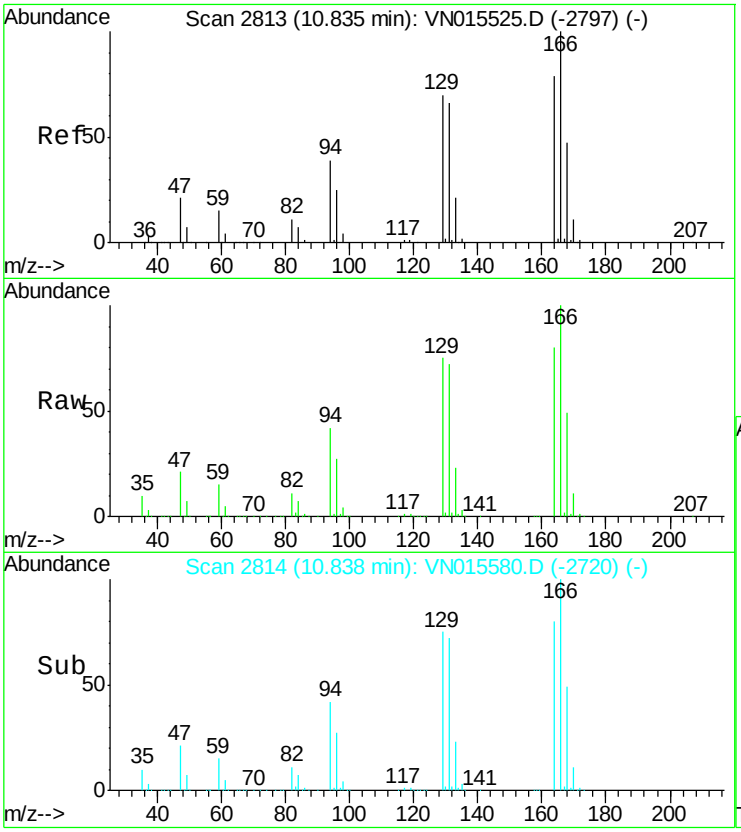
#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion:117 Resp: 365834

Ion	Ratio	Lower	Upper
117	100		
82	52.3	43.3	64.9
119	31.9	25.6	38.4



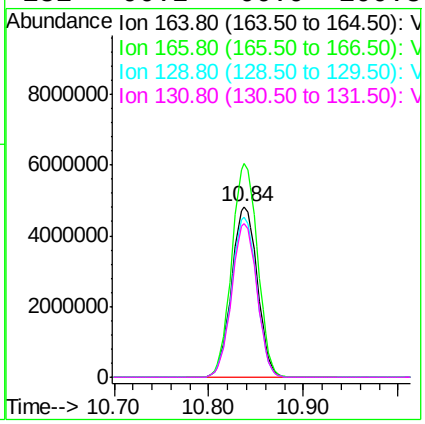
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14

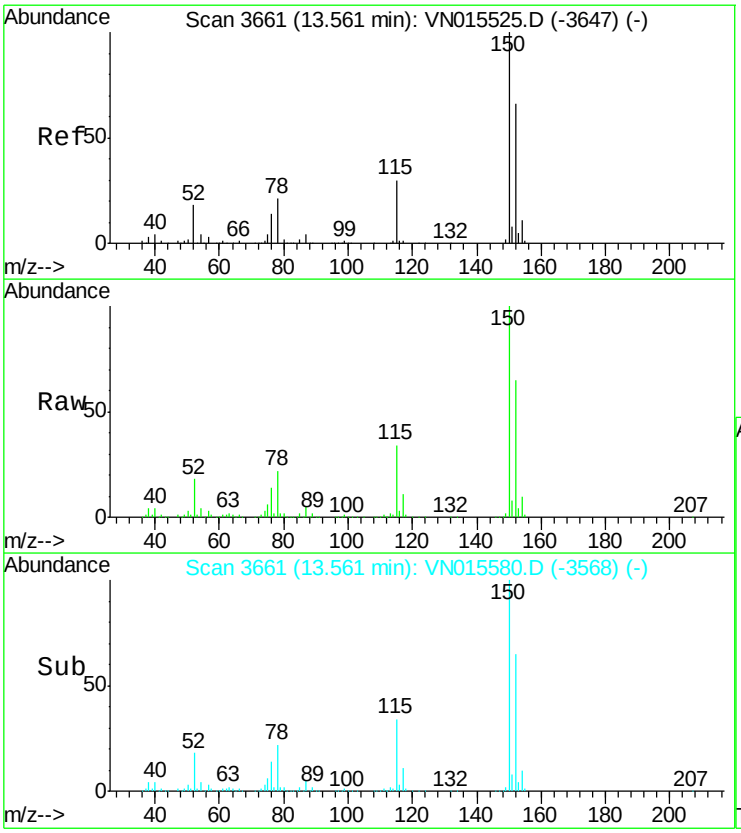


#65
Tetrachloroethene
Concen: 3150.77 ug/l
RT: 10.84 min Scan# 2814
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion:164 Resp: 9093503

Ion	Ratio	Lower	Upper
164	100		
166	125.1	101.7	152.5
129	93.6	70.7	106.1
131	90.2	66.9	100.3

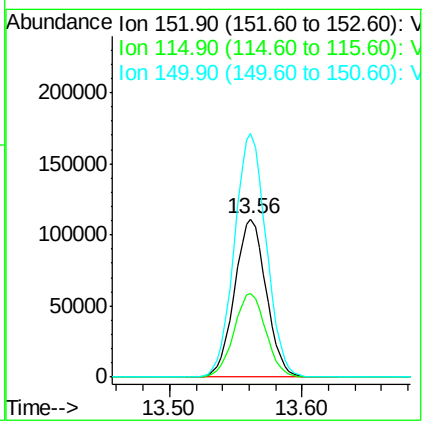




#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015580.D
Acq: 22 May 2014 5:16

Tgt Ion:152 Resp: 183692

Ion	Ratio	Lower	Upper
152	100		
115	53.6	27.2	81.6
150	155.5	0.0	343.6



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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW4-5-15-14DL	SDG No.:	F2352
Lab Sample ID:	F2352-01DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015598.D	40		05/22/14	VN052214

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	40	UD	8	8	40	ug/L
75-35-4	1,1-Dichloroethene	40	UD	8	8	40	ug/L
67-64-1	Acetone	200	UD	20	40	200	ug/L
1634-04-4	Methyl tert-butyl Ether	40	UD	14	20	40	ug/L
75-09-2	Methylene Chloride	40	UD	8	8	40	ug/L
156-60-5	trans-1,2-Dichloroethene	40	UD	8	8	40	ug/L
75-34-3	1,1-Dichloroethane	40	UD	8	8	40	ug/L
78-93-3	2-Butanone	200	UD	52.8	100	200	ug/L
56-23-5	Carbon Tetrachloride	40	UD	8	8	40	ug/L
156-59-2	cis-1,2-Dichloroethene	250	D	8	8	40	ug/L
67-66-3	Chloroform	40	UD	8	8	40	ug/L
71-55-6	1,1,1-Trichloroethane	40	UD	8	8	40	ug/L
71-43-2	Benzene	40	UD	8	8	40	ug/L
107-06-2	1,2-Dichloroethane	40	UD	8	8	40	ug/L
79-01-6	Trichloroethene	100	D	8	8	40	ug/L
108-88-3	Toluene	40	UD	8	8	40	ug/L
127-18-4	Tetrachloroethene	3100	D	8	8	40	ug/L
108-90-7	Chlorobenzene	40	UD	8	8	40	ug/L
100-41-4	Ethyl Benzene	40	UD	8	8	40	ug/L
1330-20-7	Total Xylenes	120	UD	24	24	120	ug/L
103-65-1	n-propylbenzene	40	UD	8	8	40	ug/L
98-06-6	tert-Butylbenzene	40	UD	8	8	40	ug/L
95-63-6	1,2,4-Trimethylbenzene	40	UD	8	8	40	ug/L
135-98-8	sec-Butylbenzene	40	UD	8	8	40	ug/L
541-73-1	1,3-Dichlorobenzene	40	UD	8	8	40	ug/L
106-46-7	1,4-Dichlorobenzene	40	UD	8	8	40	ug/L
104-51-8	n-Butylbenzene	40	UD	8	8	40	ug/L
95-50-1	1,2-Dichlorobenzene	40	UD	8	8	40	ug/L
123-91-1	1,4-Dioxane	4000	UD	4000	4000	4000	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.1		61 - 141		90%	SPK: 50

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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW4-5-15-14DL	SDG No.:	F2352
Lab Sample ID:	F2352-01DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015598.D	40		05/22/14	VN052214

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	46.2		69 - 133		92%	SPK: 50
2037-26-5	Toluene-d8	49.2		65 - 126		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	53		58 - 135		106%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	226674	7.87				
540-36-3	1,4-Difluorobenzene	349491	8.79				
3114-55-4	Chlorobenzene-d5	347384	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	143209	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015598.D
Acq On : 22 May 2014 15:24
Operator : MD
Sample : F2352-01DL 40X
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14DL

Quant Time: May 23 12:02:50 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	226674	50.00 ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	349491	50.00 ug/l	0.00
64) Chlorobenzene-d5	11.61	117	347384	50.00 ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	143209	50.00 ug/l	0.00
System Monitoring Compounds					
34) 1,2-Dichloroethane-d4	8.23	65	117646	45.12 ug/l	0.00
Spiked Amount 50.000			Recovery	= 90.24%	
36) Dibromofluoromethane	7.80	113	105087	46.17 ug/l	0.00
Spiked Amount 50.000			Recovery	= 92.34%	
51) Toluene-d8	10.29	98	412895	49.23 ug/l	0.00
Spiked Amount 50.000			Recovery	= 98.46%	
63) 4-Bromofluorobenzene	12.61	95	152327	53.02 ug/l	0.00
Spiked Amount 50.000			Recovery	= 106.04%	
Target Compounds					Qvalue
28) cis-1,2-Dichloroethene	7.06	96	14384	6.27 ug/l	90
45) Trichloroethene	9.04	130	6610	2.54 ug/l	98
65) Tetrachloroethene	10.83	164	213652	77.96 ug/l	98

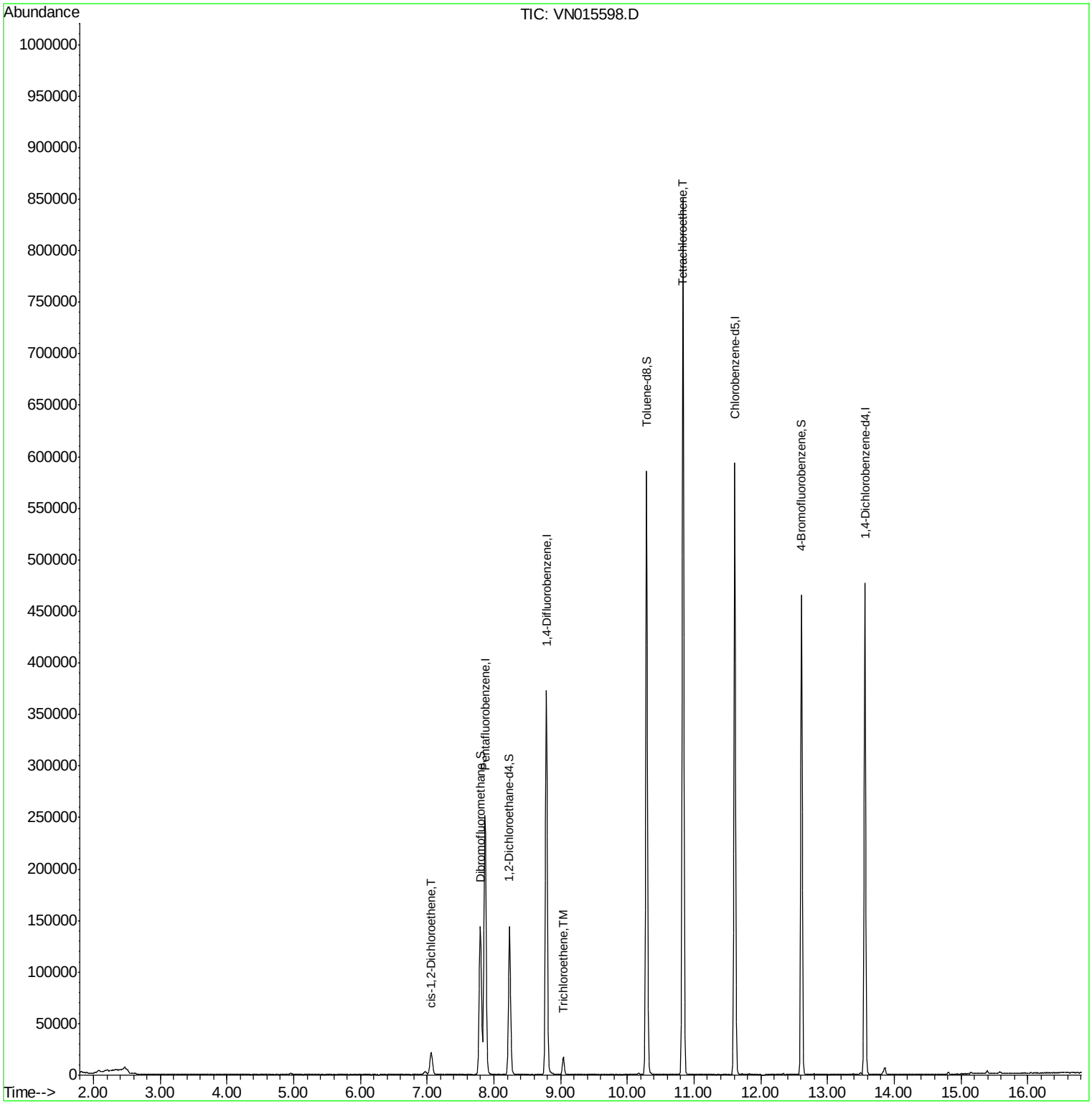
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VN015598.D**

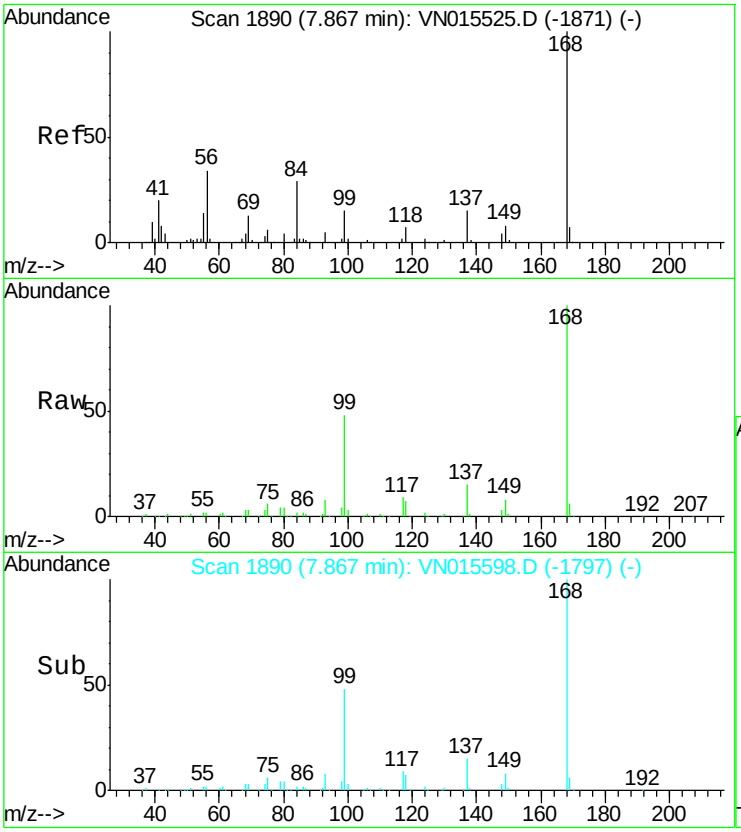
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015598.D
Acq On : 22 May 2014 15:24
Operator : MD
Sample : F2352-01DL 40X
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14DL

Quant Time: May 23 12:02:50 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration



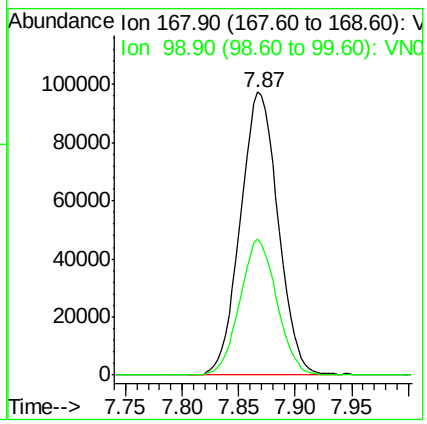
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14DL

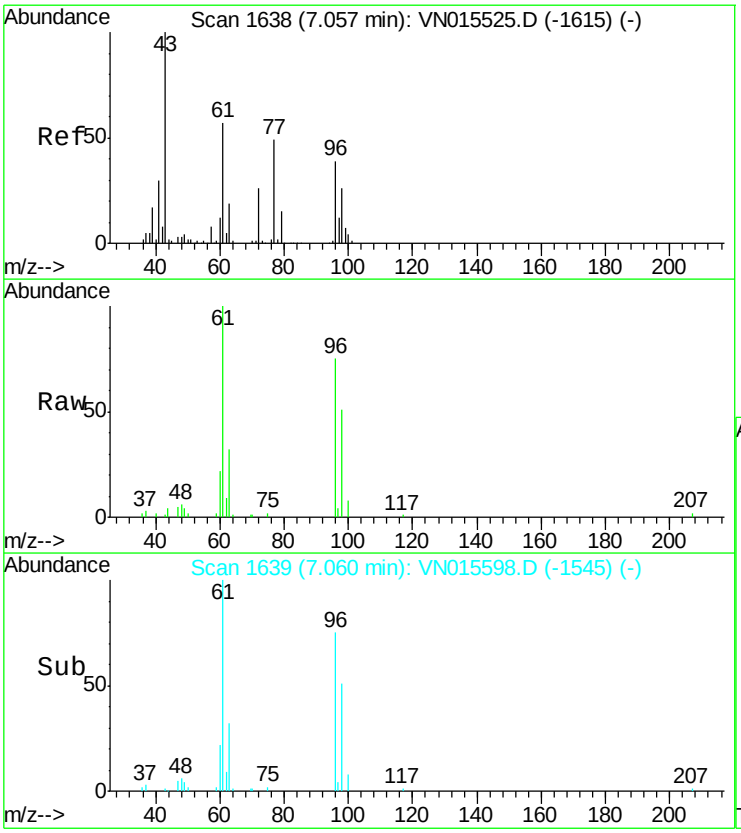


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion:168 Resp: 226674

Ion	Ratio	Lower	Upper
168	100		
99	47.9	39.0	58.4

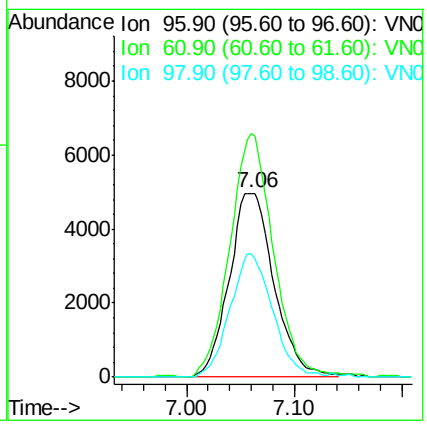




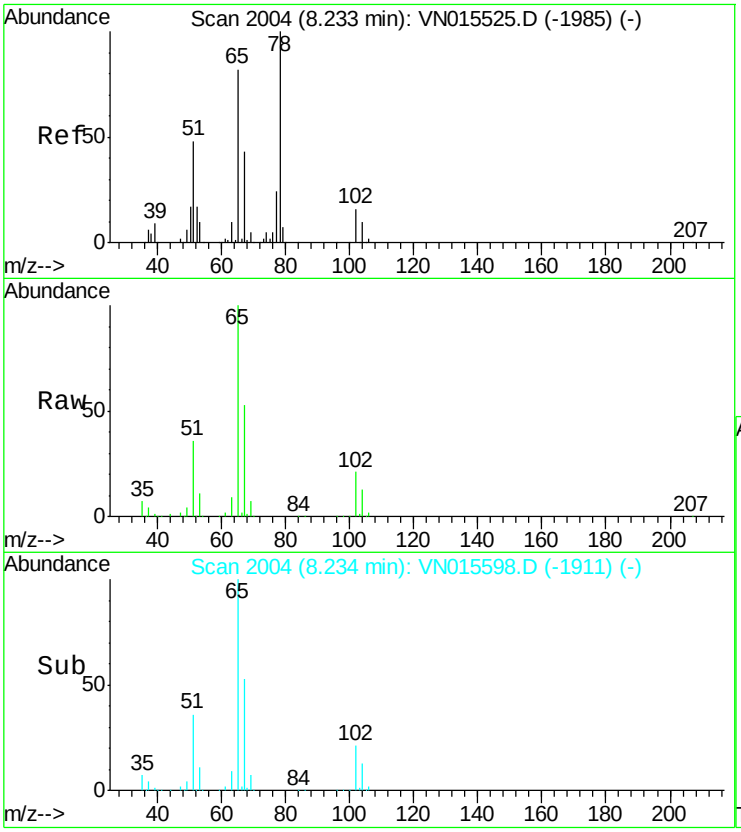
#28
cis-1,2-Dichloroethene
Concen: 6.27 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion: 96 Resp: 14384

Ion	Ratio	Lower	Upper
96	100		
61	128.3	0.0	292.0
98	63.4	0.0	129.4



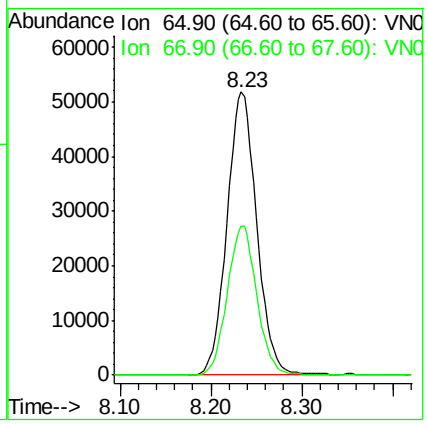
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14DL

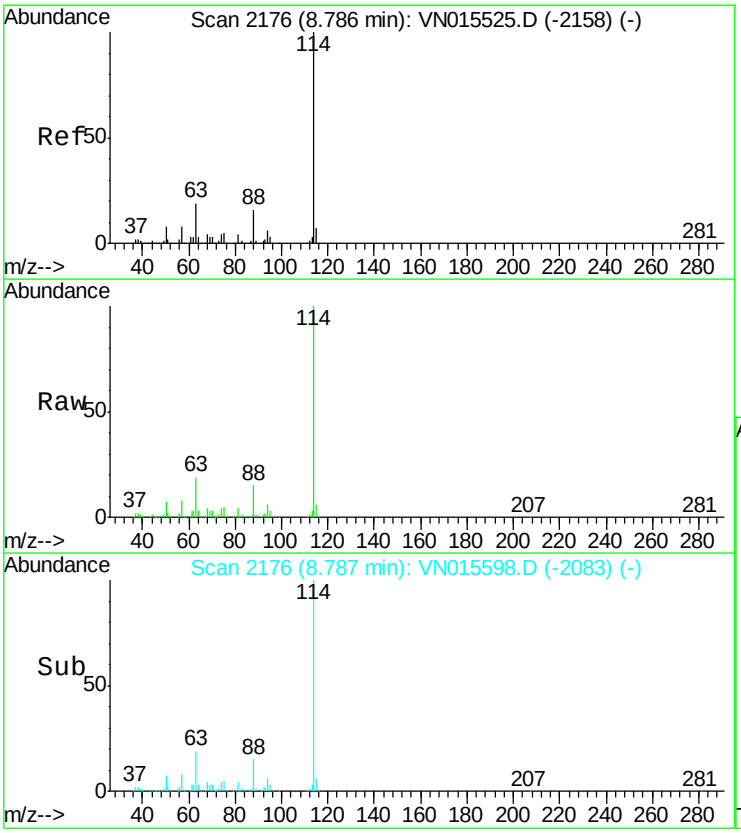


#34
1,2-Dichloroethane-d4
Concen: 45.12 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion: 65 Resp: 117646

Ion	Ratio	Lower	Upper
65	100		
67	52.4	0.0	103.6

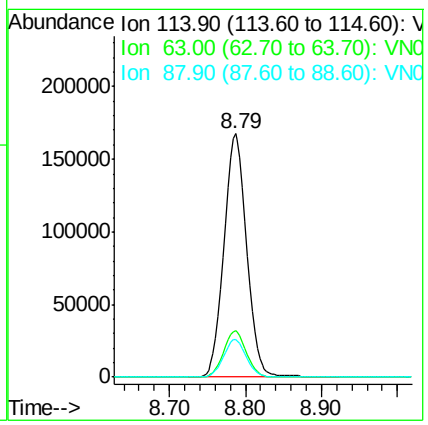




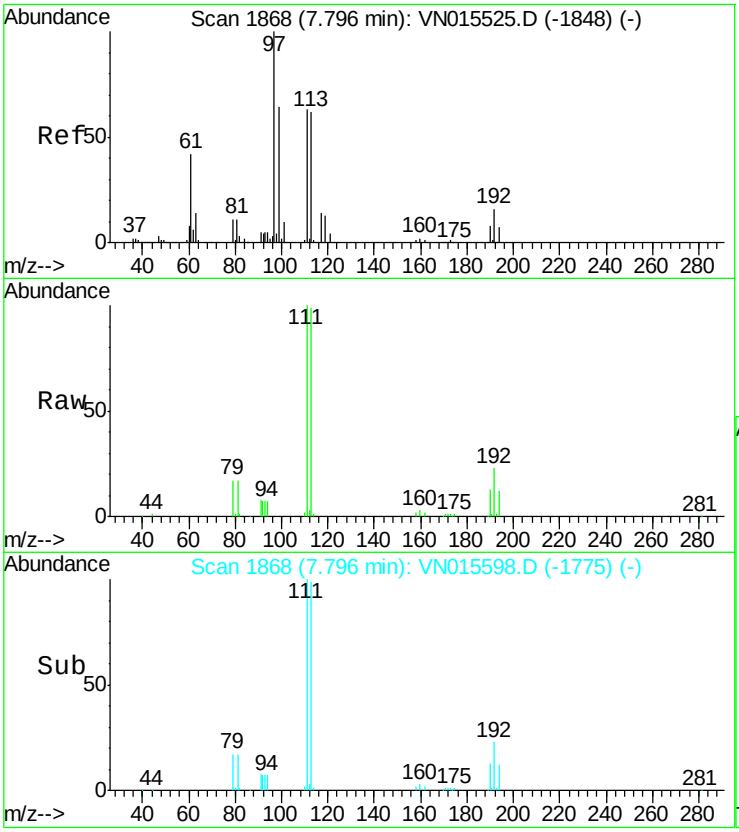
#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion:114 Resp: 349491

Ion	Ratio	Lower	Upper
114	100		
63	19.1	0.0	38.6
88	15.4	0.0	32.2



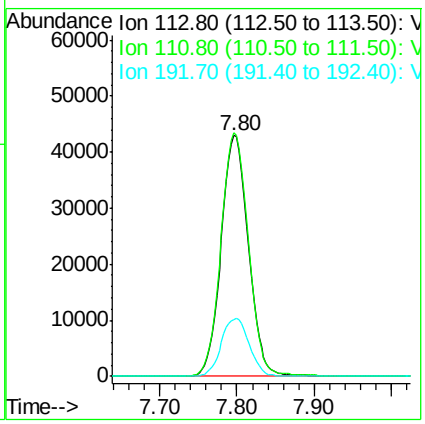
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14DL

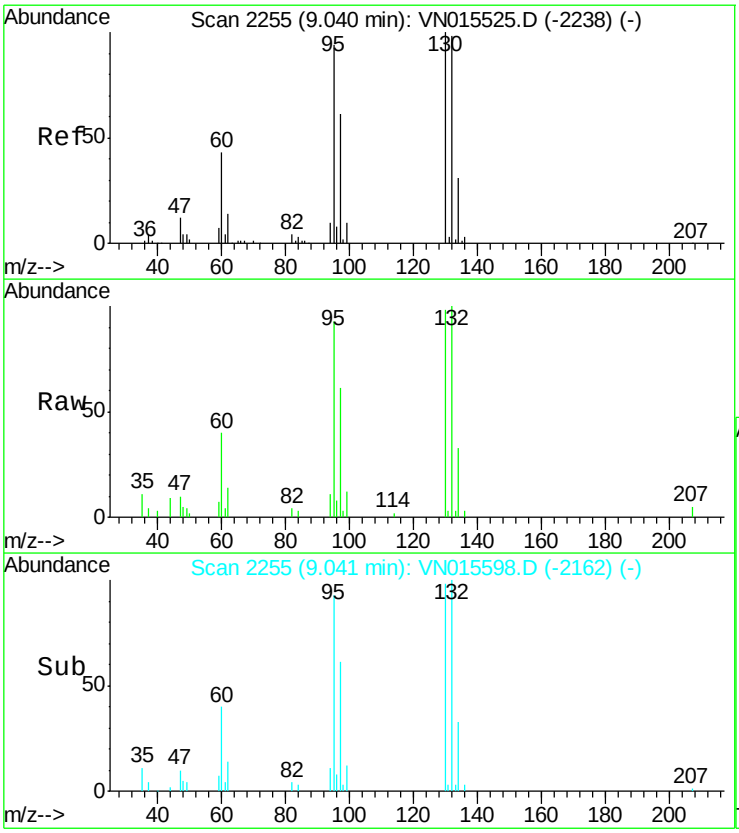


#36
Dibromofluoromethane
Concen: 46.17 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion:113 Resp: 105087

Ion	Ratio	Lower	Upper
113	100		
111	101.8	81.5	122.3
192	24.7	20.0	30.0

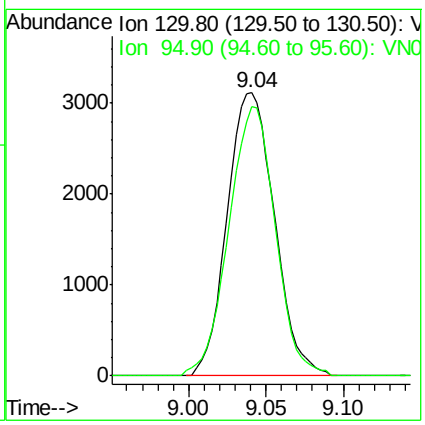




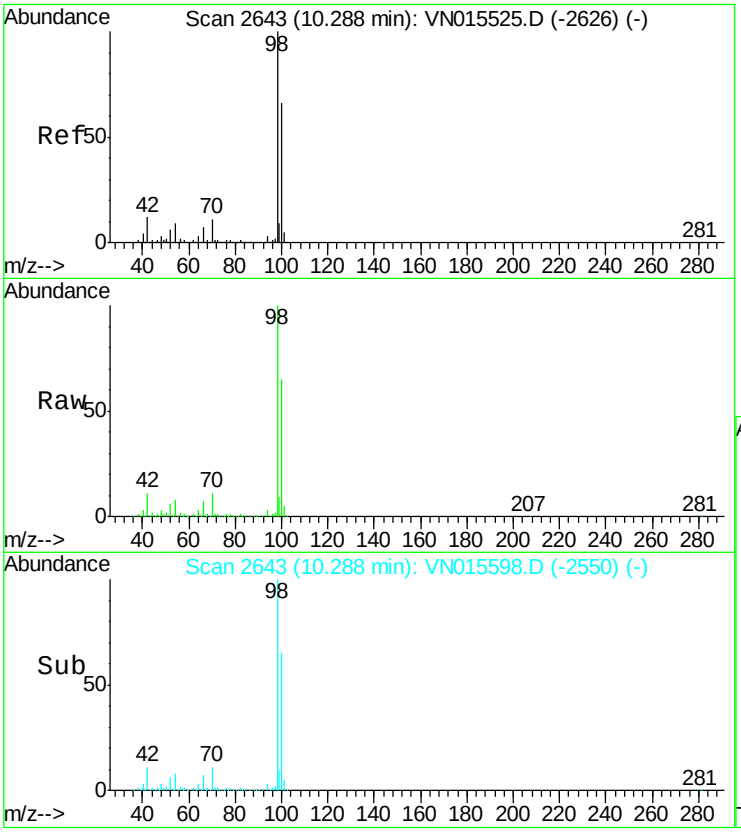
#45
Trichloroethene
Concen: 2.54 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion:130 Resp: 6610

Ion	Ratio	Lower	Upper
130	100		
95	95.2	0.0	187.0



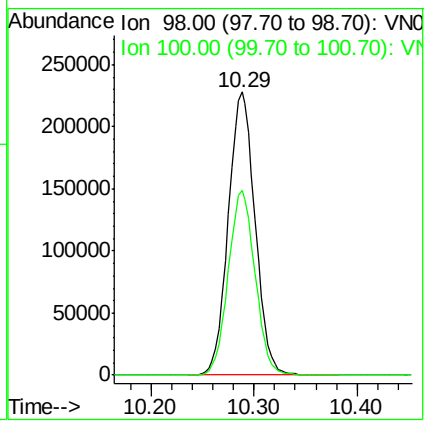
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14DL

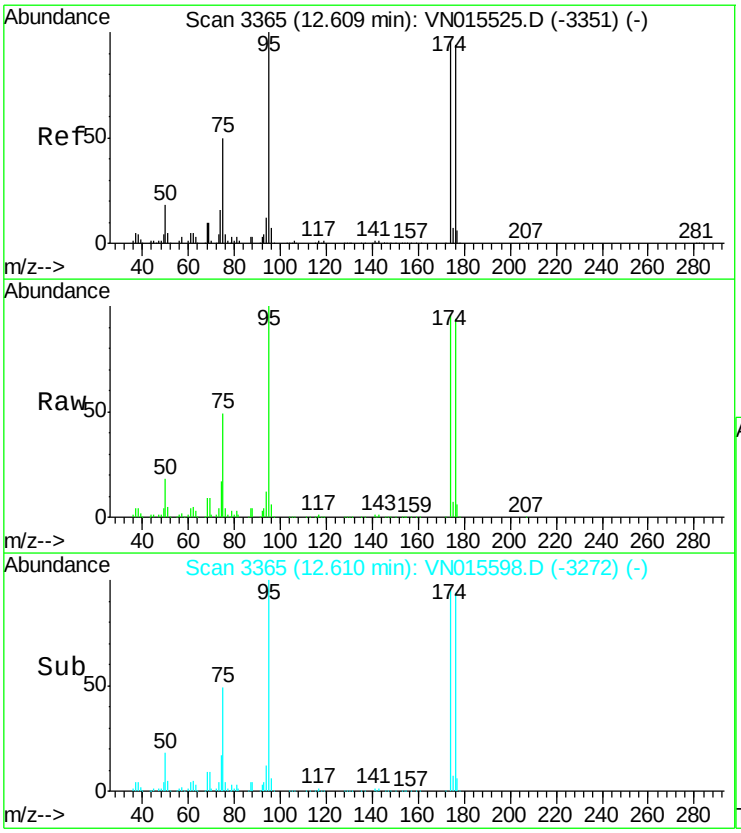


#51
Toluene-d8
Concen: 49.23 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion: 98 Resp: 412895

Ion	Ratio	Lower	Upper
98	100		
100	65.3	52.3	78.5

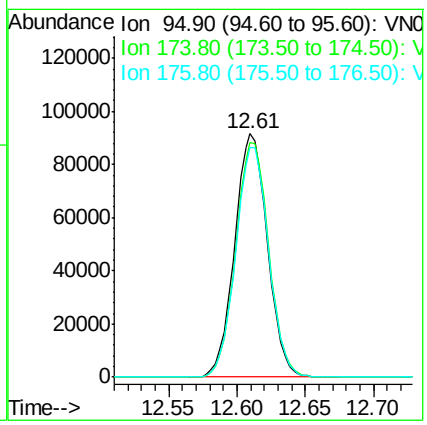




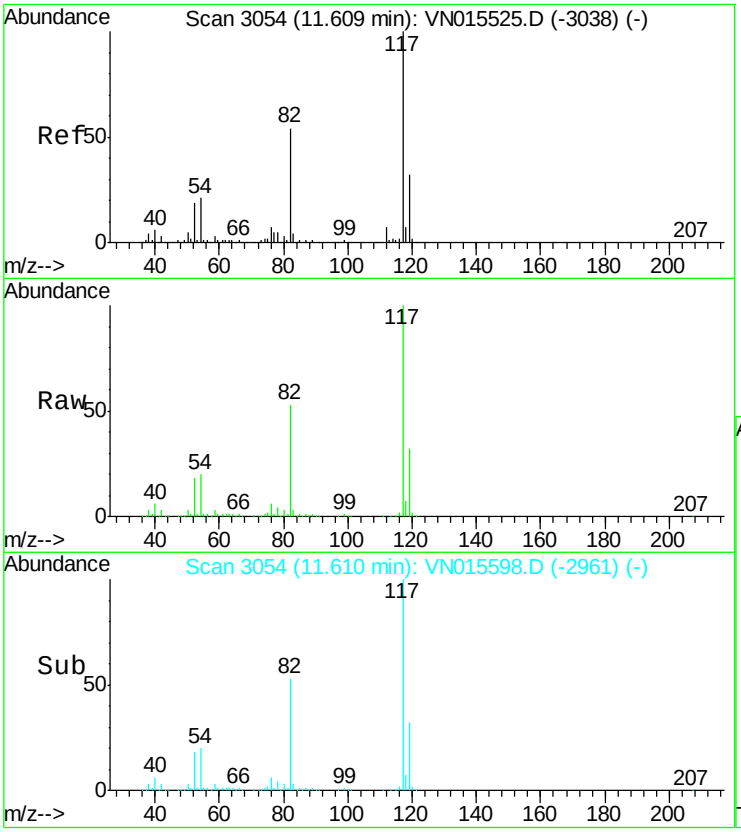
#63
4-Bromofluorobenzene
Concen: 53.02 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion: 95 Resp: 152327

Ion	Ratio	Lower	Upper
95	100		
174	97.5	0.0	191.8
176	95.2	0.0	186.8



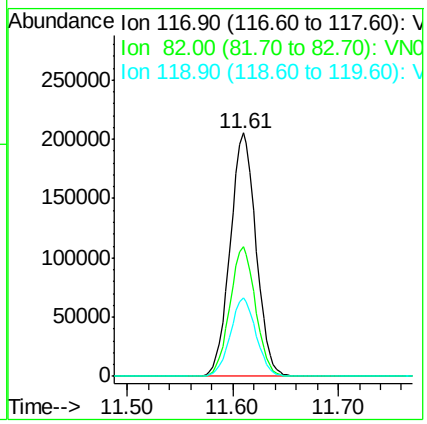
Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14DL

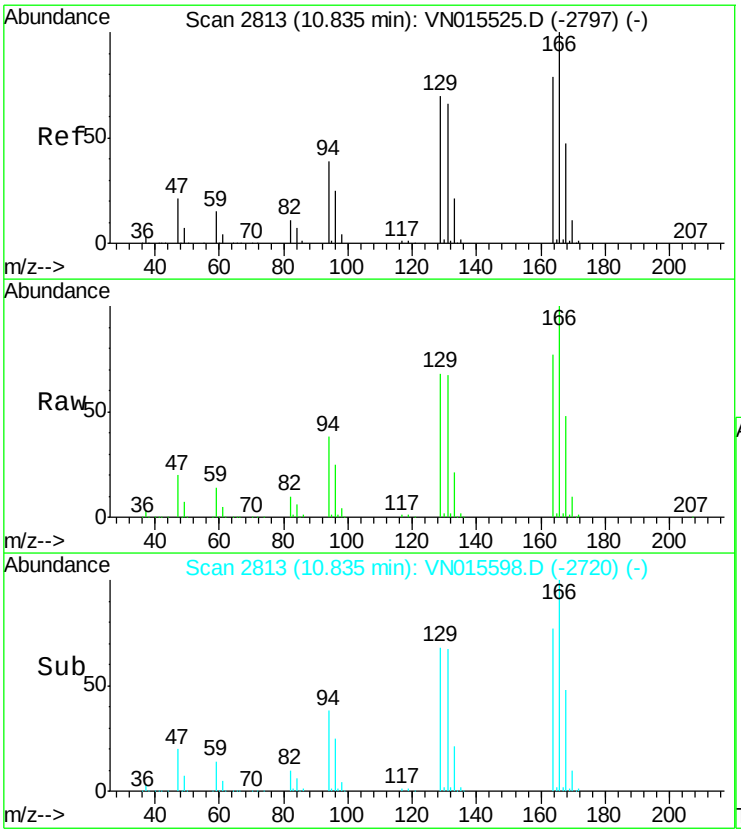


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion:117 Resp: 347384

Ion	Ratio	Lower	Upper
117	100		
82	53.1	43.3	64.9
119	32.0	25.6	38.4

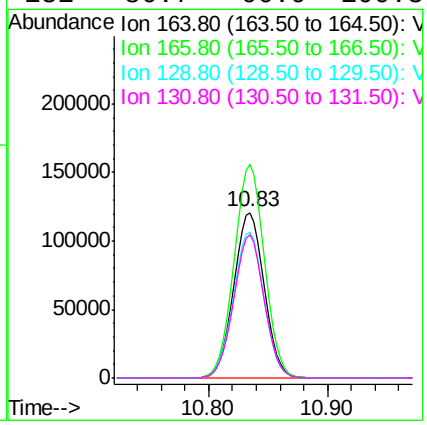


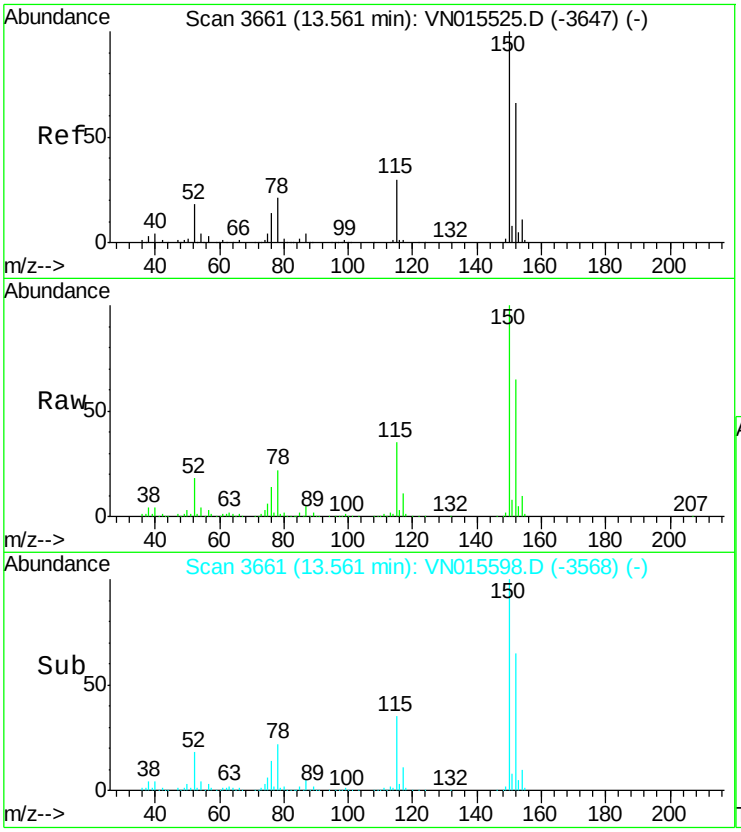


#65
Tetrachloroethene
Concen: 77.96 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion:164 Resp: 213652

Ion	Ratio	Lower	Upper
164	100		
166	129.2	101.7	152.5
129	88.2	70.7	106.1
131	86.7	66.9	100.3

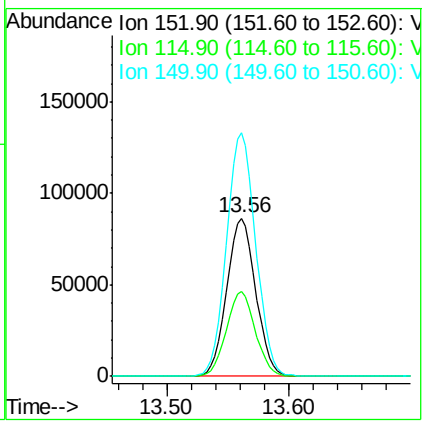




#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015598.D
Acq: 22 May 2014 15:24

Tgt Ion:152 Resp: 143209

Ion	Ratio	Lower	Upper
152	100		
115	53.5	27.2	81.6
150	155.5	0.0	343.6



Instrument :
MSVOA_N
ClientSampleId :
MW4-5-15-14DL

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW5-5-15-14	SDG No.:	F2352
Lab Sample ID:	F2352-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015581.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	3.4		0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.72	J	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	130		0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	170		0.2	0.2	1	ug/L
67-66-3	Chloroform	0.41	J	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	170		0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	920	E	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	3	U	0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.2		61 - 141		92%	SPK: 50

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW5-5-15-14	SDG No.:	F2352
Lab Sample ID:	F2352-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015581.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	47.1		69 - 133		94%	SPK: 50
2037-26-5	Toluene-d8	49.7		65 - 126		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	59.6		58 - 135		119%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	229823	7.87				
540-36-3	1,4-Difluorobenzene	352218	8.79				
3114-55-4	Chlorobenzene-d5	365897	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	174343	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015581.D
Acq On : 22 May 2014 5:47
Operator : MD
Sample : F2352-02
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 32 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

Quant Time: May 22 07:03:22 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	229823	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	352218	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	365897	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	174343	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	122222	46.23	ug/l	0.00
Spiked Amount 50.000			Recovery	=	92.46%	
36) Dibromofluoromethane	7.80	113	108060	47.11	ug/l	0.00
Spiked Amount 50.000			Recovery	=	94.22%	
51) Toluene-d8	10.29	98	420036	49.70	ug/l	0.00
Spiked Amount 50.000			Recovery	=	99.40%	
63) 4-Bromofluorobenzene	12.61	95	172699	59.64	ug/l	0.00
Spiked Amount 50.000			Recovery	=	119.28%	

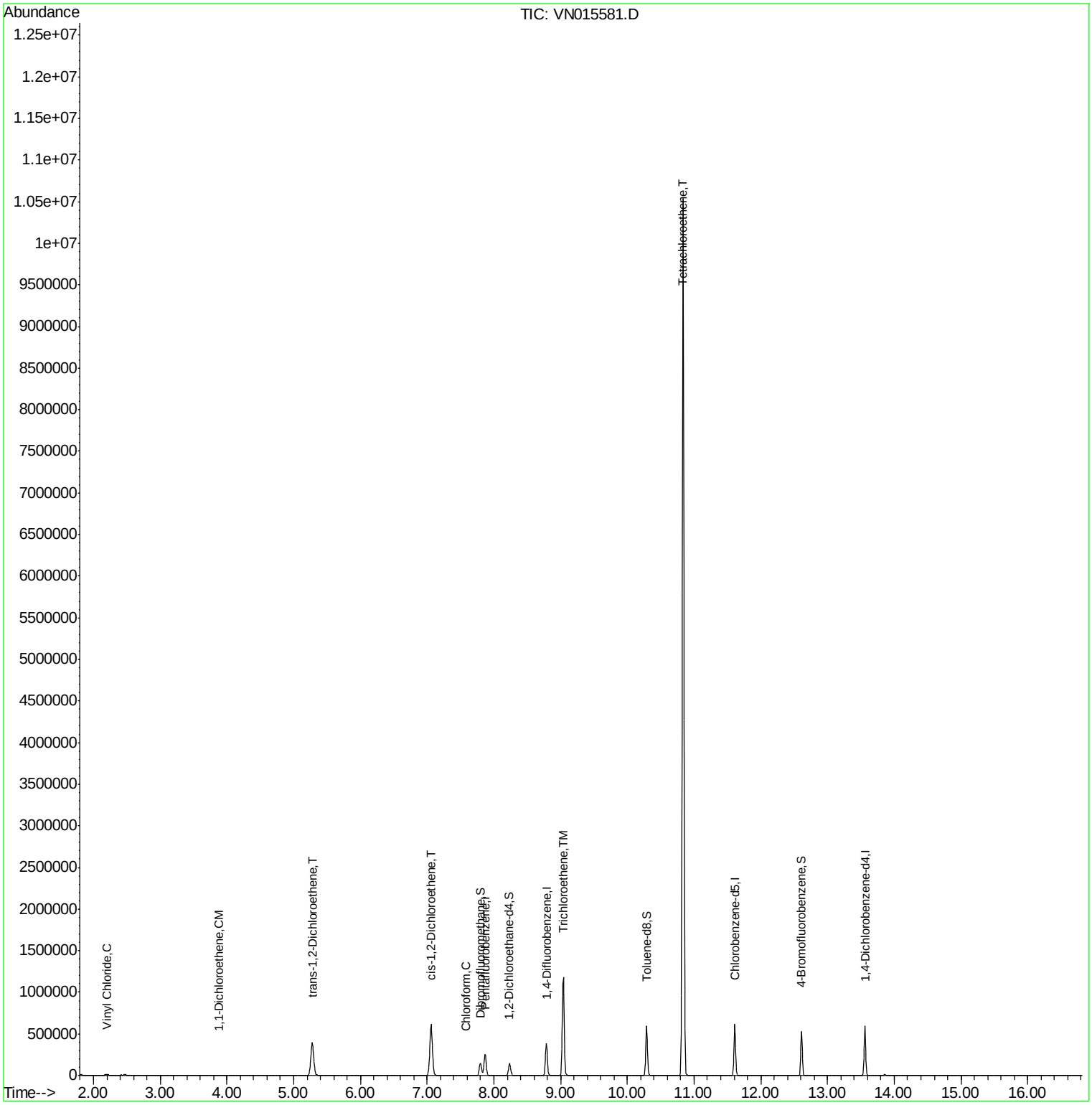
Target Compounds						Qvalue
5) Vinyl Chloride	2.20	62	7267	3.38	ug/l	97
13) 1,1-Dichloroethene	3.89	96	1357	0.72	ug/l #	77
22) trans-1,2-Dichloroethene	5.28	96	263434	132.88	ug/l	98
28) cis-1,2-Dichloroethene	7.06	96	392901	168.80	ug/l	89
31) Chloroform	7.58	83	1593	0.41	ug/l	90
45) Trichloroethene	9.04	130	446427	170.16	ug/l	100
65) Tetrachloroethene	10.83	164	2652917	919.04	ug/l	98

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

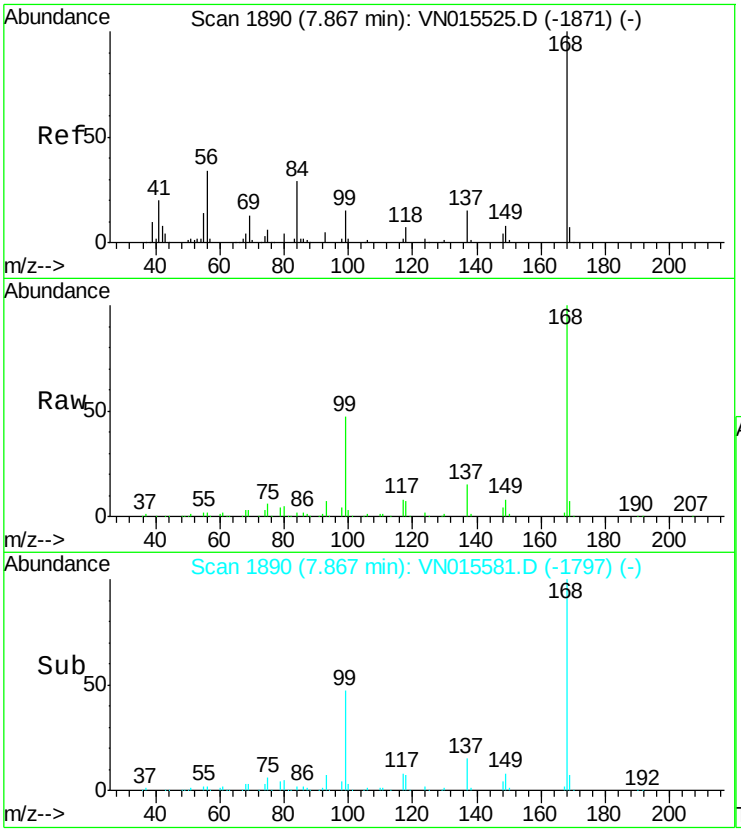
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015581.D
Acq On : 22 May 2014 5:47
Operator : MD
Sample : F2352-02
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 32 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

Quant Time: May 22 07:03:22 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration



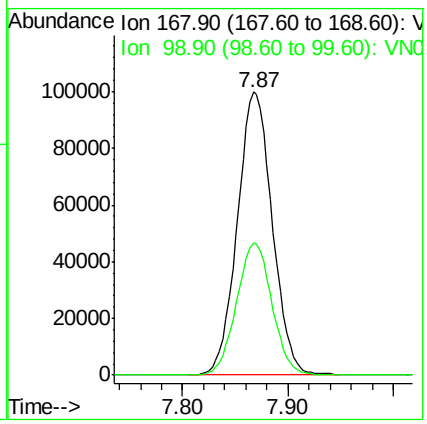
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

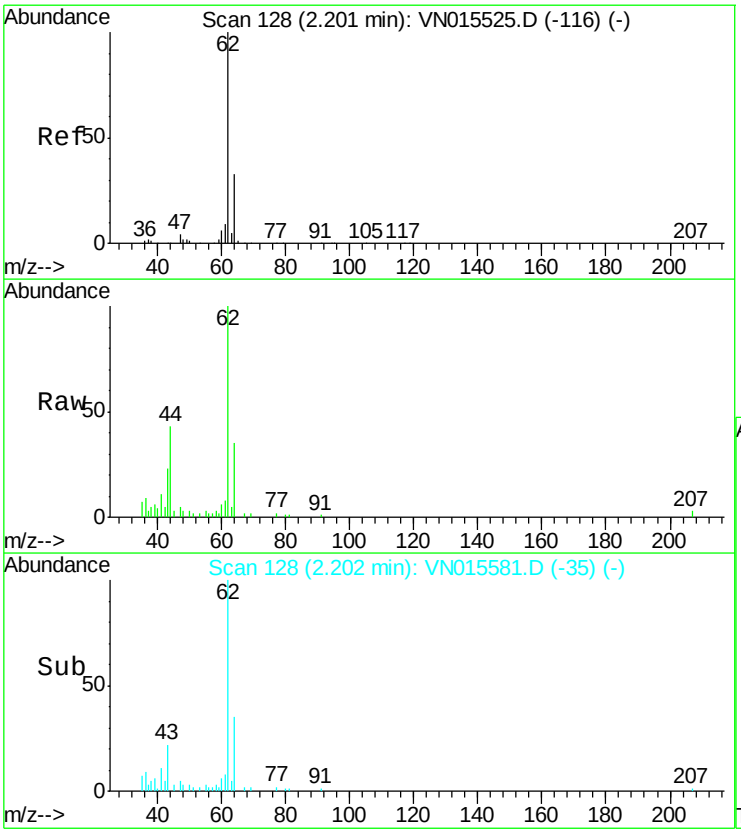


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion:168 Resp: 229823

Ion	Ratio	Lower	Upper
168	100		
99	46.5	39.0	58.4

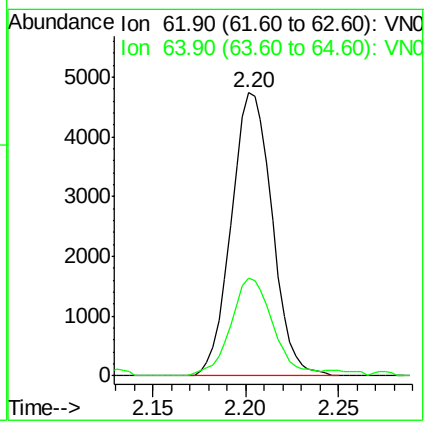




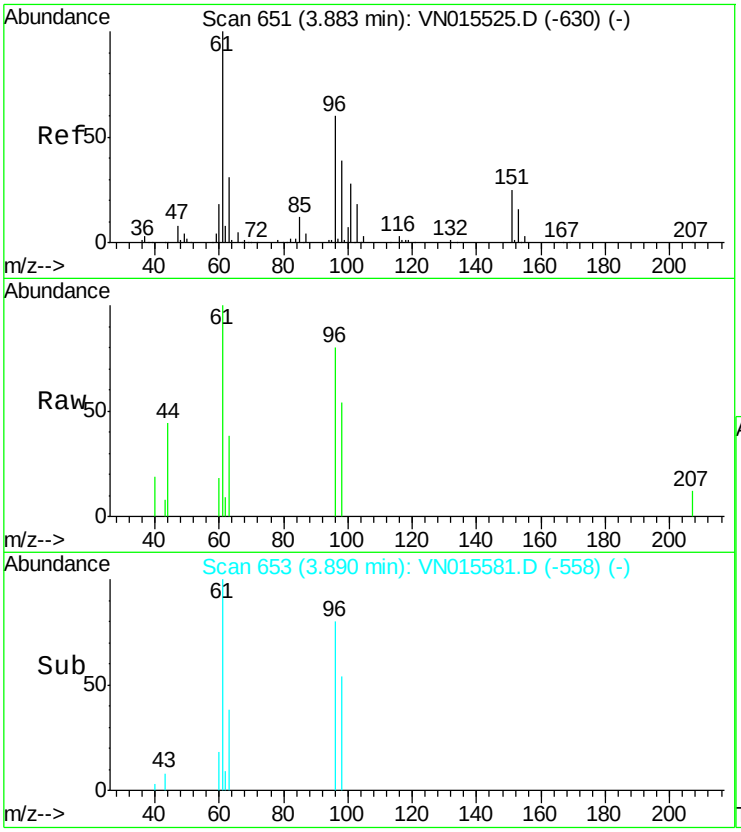
#5
Vinyl Chloride
Concen: 3.38 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion: 62 Resp: 7267

Ion	Ratio	Lower	Upper
62	100		
64	34.6	26.2	39.4



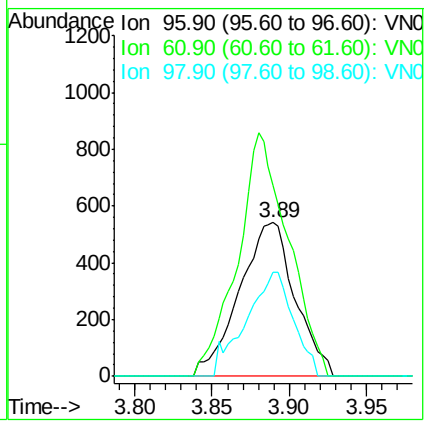
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

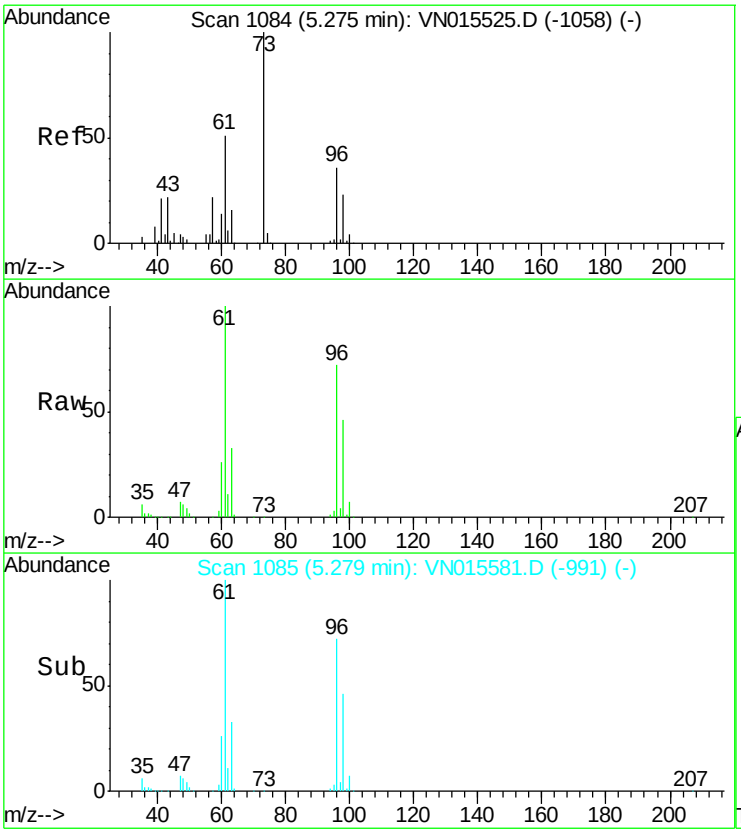


#13
1,1-Dichloroethene
Concen: 0.72 ug/l
RT: 3.89 min Scan# 653
Delta R.T. 0.01 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion: 96 Resp: 1357

Ion	Ratio	Lower	Upper
96	100		
61	124.4	132.3	198.5#
98	67.5	51.8	77.6

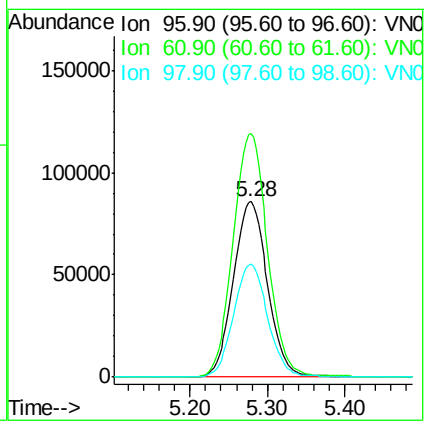




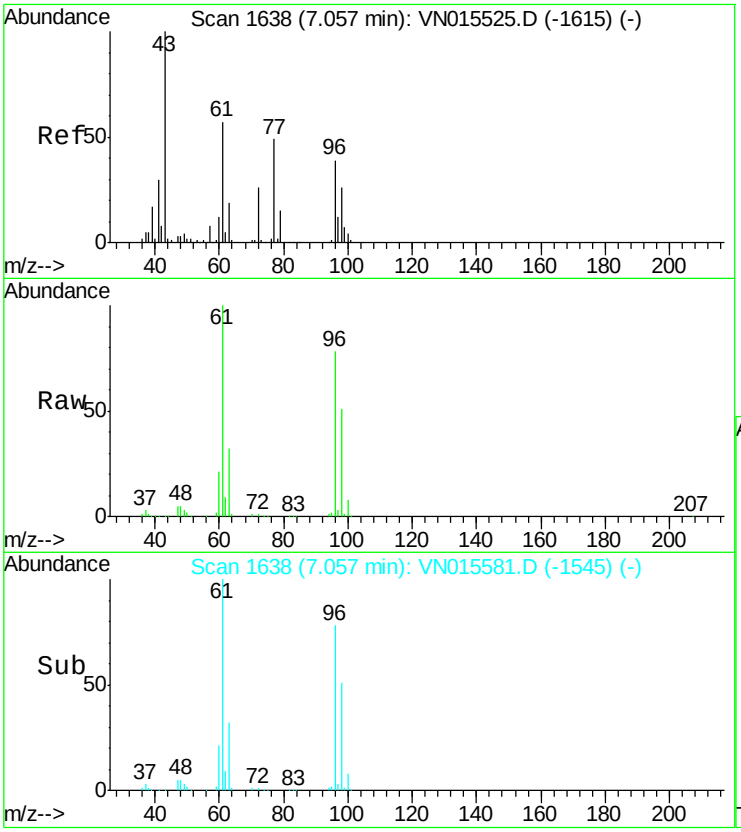
#22
trans-1,2-Dichloroethene
Concen: 132.88 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion: 96 Resp: 263434

Ion	Ratio	Lower	Upper
96	100		
61	138.8	113.3	169.9
98	64.3	50.4	75.6



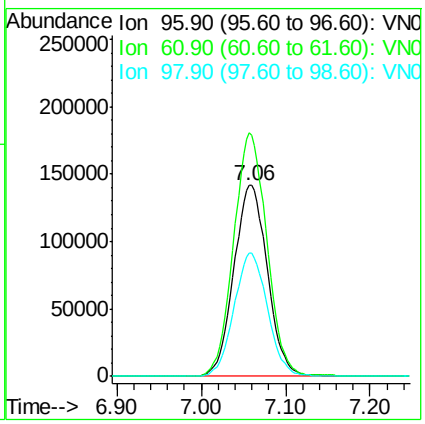
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

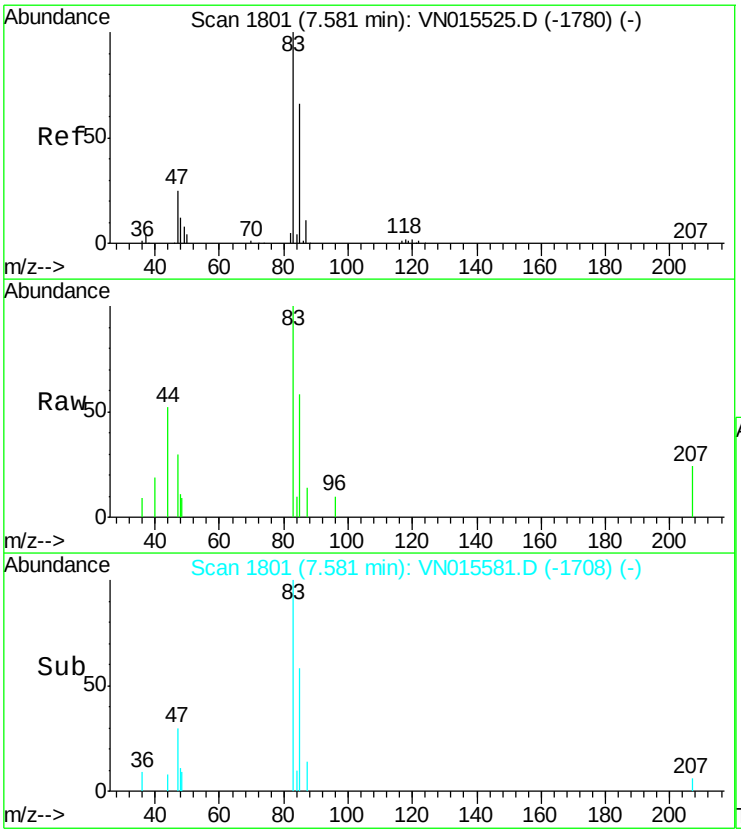


#28
cis-1,2-Dichloroethene
Concen: 168.80 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion: 96 Resp: 392901

Ion	Ratio	Lower	Upper
96	100		
61	126.5	0.0	292.0
98	64.4	0.0	129.4

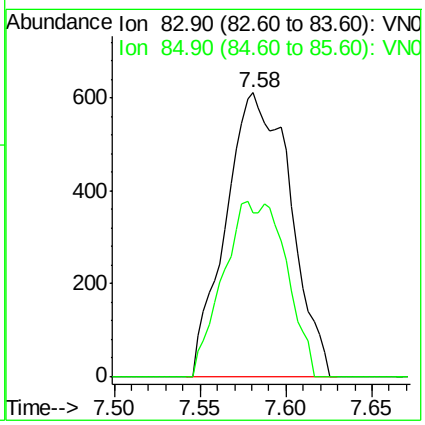




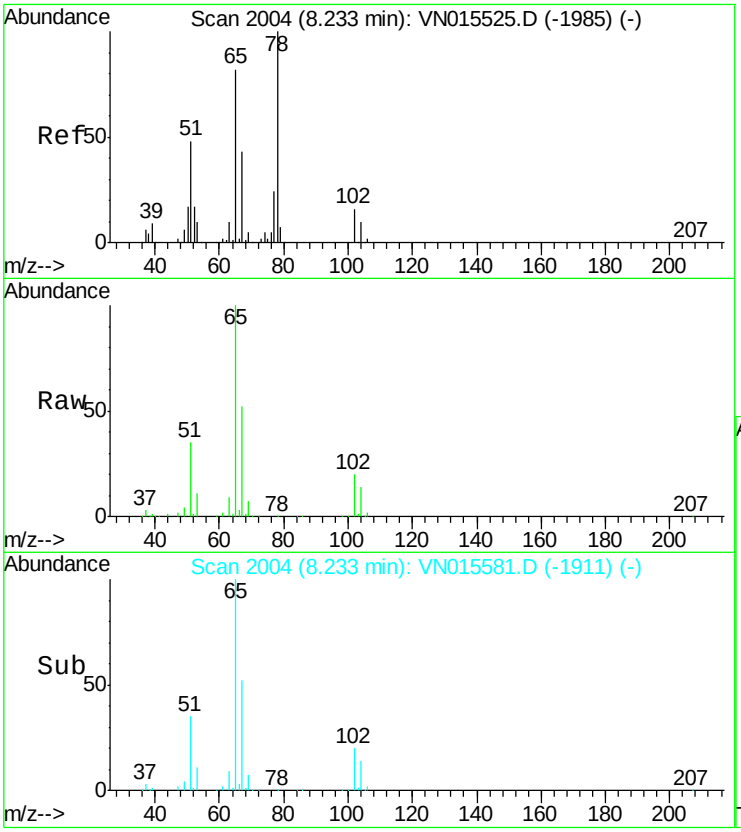
#31
Chloroform
Concen: 0.41 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion: 83 Resp: 1593

Ion	Ratio	Lower	Upper
83	100		
85	57.6	52.6	78.8



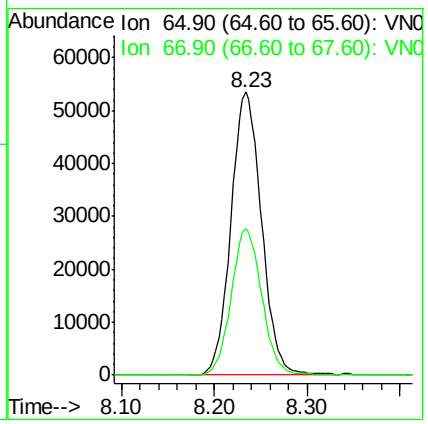
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

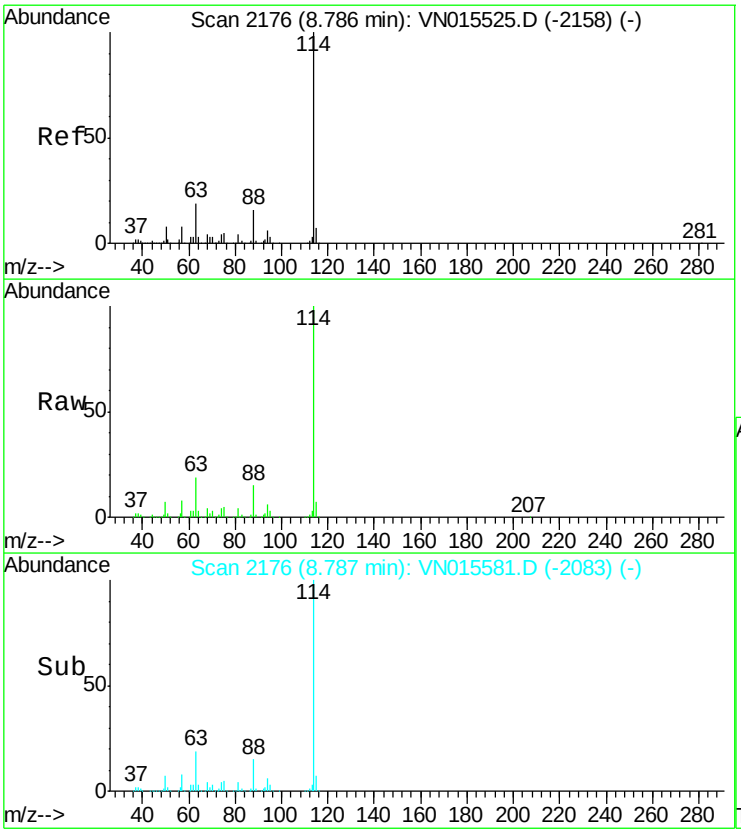


#34
1,2-Dichloroethane-d4
Concen: 46.23 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion: 65 Resp: 122222

Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	103.6

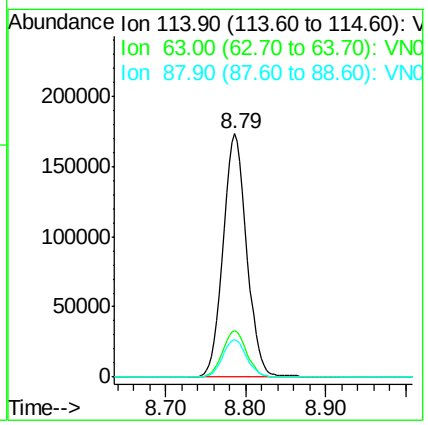




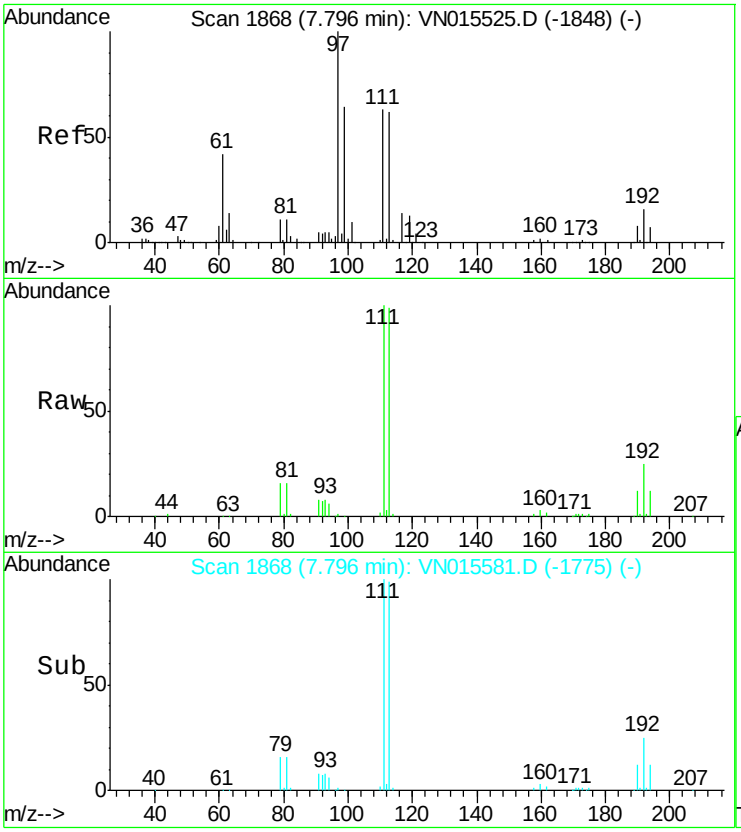
#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion:114 Resp: 352218

Ion	Ratio	Lower	Upper
114	100		
63	19.2	0.0	38.6
88	15.5	0.0	32.2



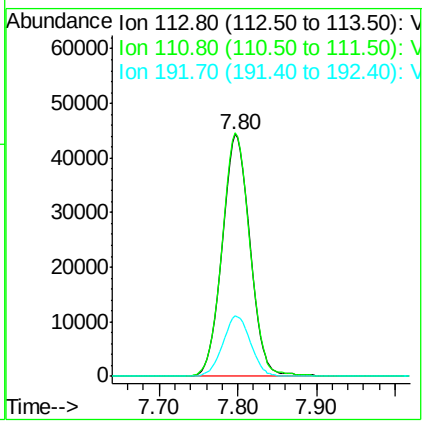
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

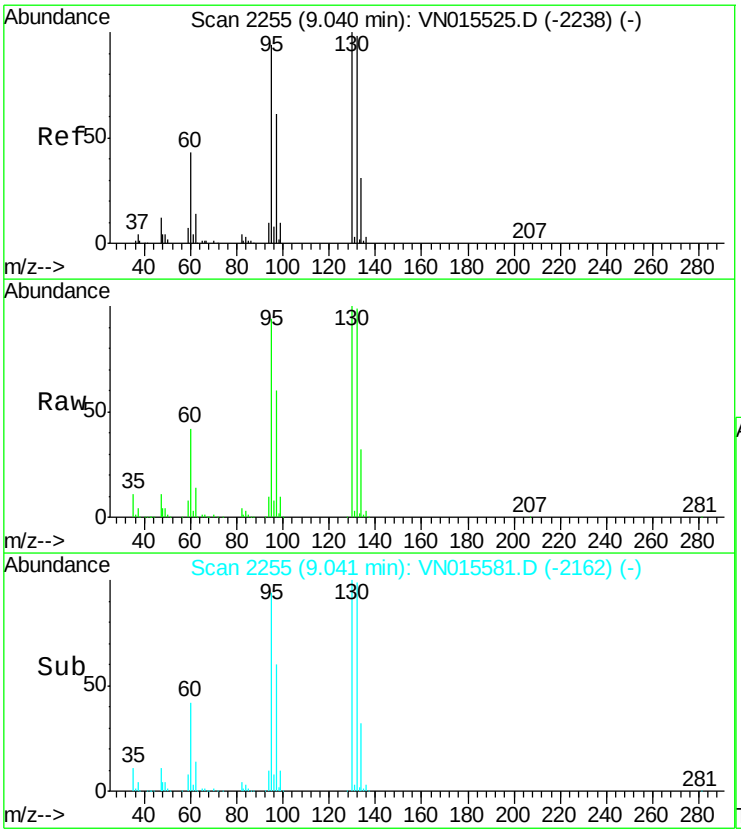


#36
Dibromofluoromethane
Concen: 47.11 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion:113 Resp: 108060

Ion	Ratio	Lower	Upper
113	100		
111	100.6	81.5	122.3
192	25.0	20.0	30.0

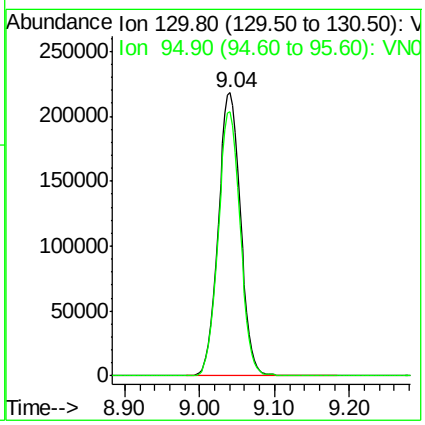




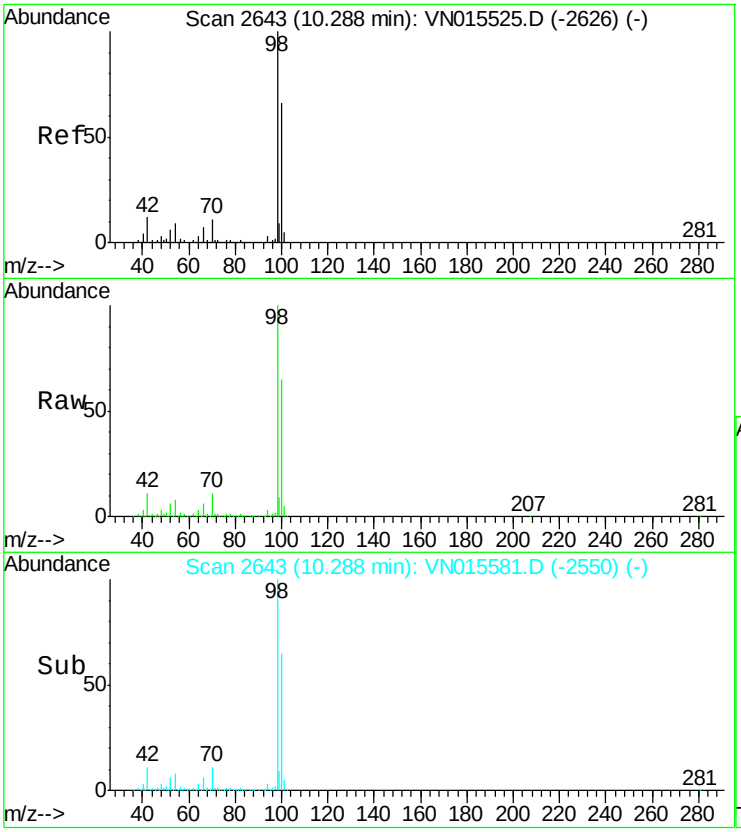
#45
Trichloroethene
Concen: 170.16 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion:130 Resp: 446427

Ion	Ratio	Lower	Upper
130	100		
95	93.5	0.0	187.0



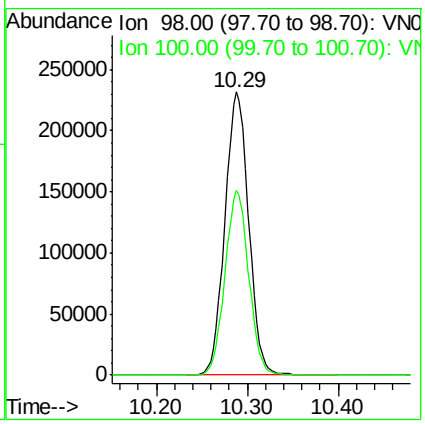
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

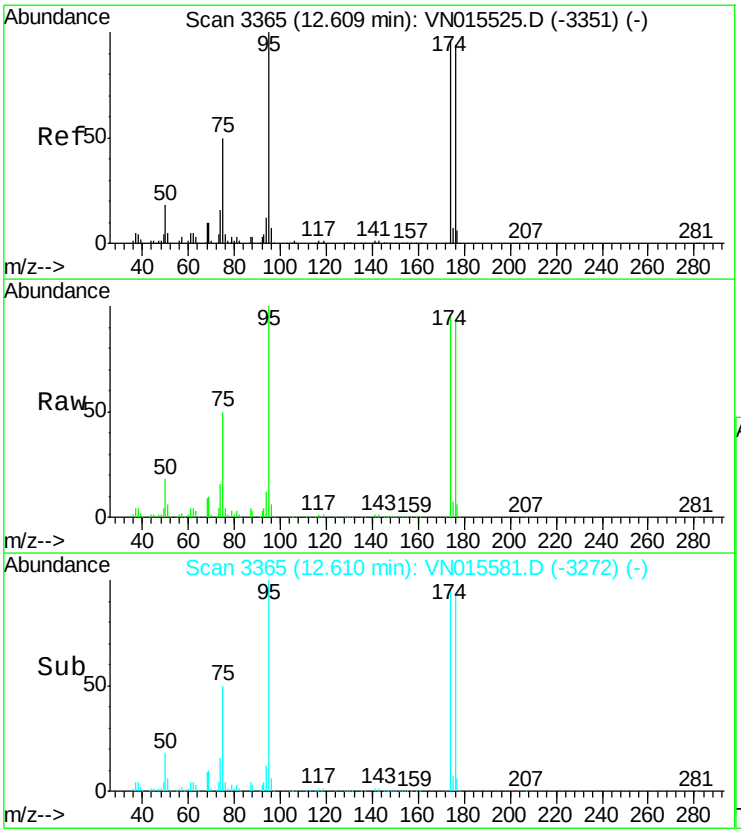


#51
Toluene-d8
Concen: 49.70 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion: 98 Resp: 420036

Ion	Ratio	Lower	Upper
98	100		
100	65.1	52.3	78.5

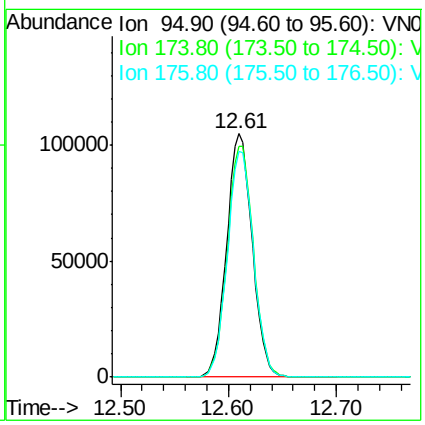




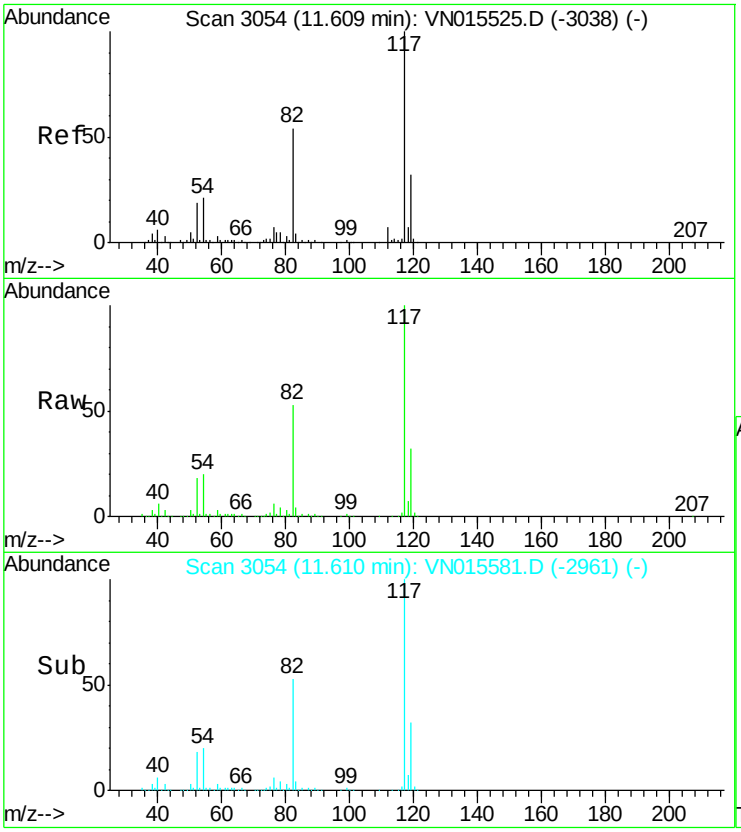
#63
4-Bromofluorobenzene
Concen: 59.64 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion: 95 Resp: 172699

Ion	Ratio	Lower	Upper
95	100		
174	96.6	0.0	191.8
176	94.3	0.0	186.8



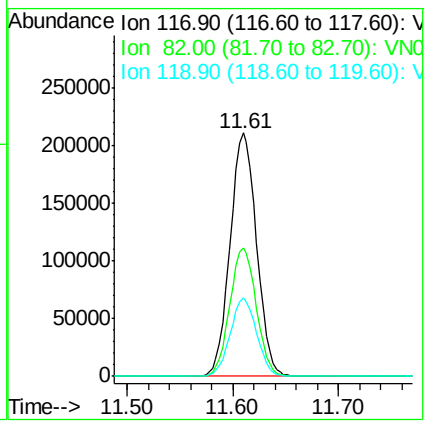
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

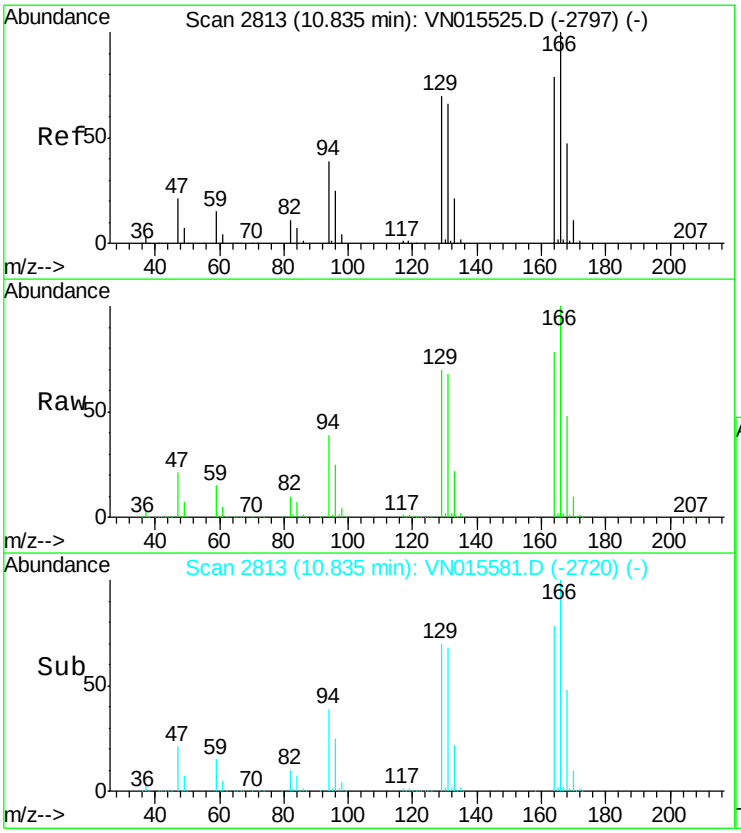


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion:117 Resp: 365897

Ion	Ratio	Lower	Upper
117	100		
82	53.0	43.3	64.9
119	32.1	25.6	38.4

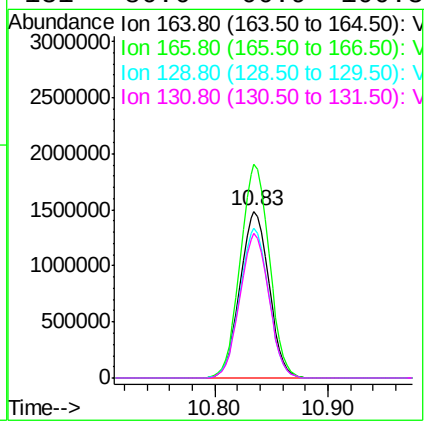


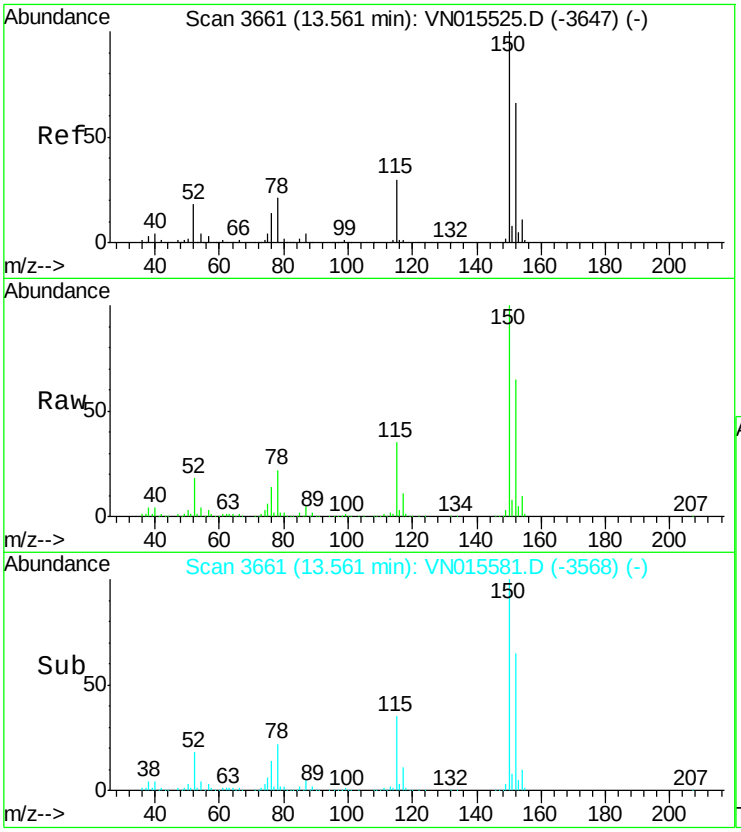


#65
Tetrachloroethene
Concen: 919.04 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion:164 Resp: 2652917

Ion	Ratio	Lower	Upper
164	100		
166	128.2	101.7	152.5
129	90.0	70.7	106.1
131	86.6	66.9	100.3

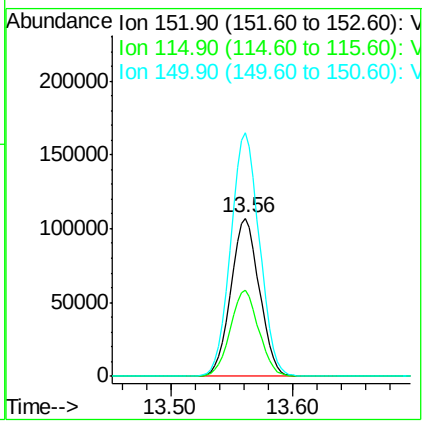




#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015581.D
Acq: 22 May 2014 5:47

Tgt Ion:152 Resp: 174343

Ion	Ratio	Lower	Upper
152	100		
115	54.3	27.2	81.6
150	154.9	0.0	343.6



Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW5-5-15-14DL	SDG No.:	F2352
Lab Sample ID:	F2352-02DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015602.D	10		05/22/14	VN052214

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	3.8	JD	2	2	10	ug/L
75-35-4	1,1-Dichloroethene	10	UD	2	2	10	ug/L
67-64-1	Acetone	50	UD	5	10	50	ug/L
1634-04-4	Methyl tert-butyl Ether	10	UD	3.5	5	10	ug/L
75-09-2	Methylene Chloride	10	UD	2	2	10	ug/L
156-60-5	trans-1,2-Dichloroethene	110	D	2	2	10	ug/L
75-34-3	1,1-Dichloroethane	10	UD	2	2	10	ug/L
78-93-3	2-Butanone	50	UD	13.2	25	50	ug/L
56-23-5	Carbon Tetrachloride	10	UD	2	2	10	ug/L
156-59-2	cis-1,2-Dichloroethene	150	D	2	2	10	ug/L
67-66-3	Chloroform	10	UD	2	2	10	ug/L
71-55-6	1,1,1-Trichloroethane	10	UD	2	2	10	ug/L
71-43-2	Benzene	10	UD	2	2	10	ug/L
107-06-2	1,2-Dichloroethane	10	UD	2	2	10	ug/L
79-01-6	Trichloroethene	140	D	2	2	10	ug/L
108-88-3	Toluene	10	UD	2	2	10	ug/L
127-18-4	Tetrachloroethene	810	D	2	2	10	ug/L
108-90-7	Chlorobenzene	10	UD	2	2	10	ug/L
100-41-4	Ethyl Benzene	10	UD	2	2	10	ug/L
1330-20-7	Total Xylenes	30	UD	6	6	30	ug/L
103-65-1	n-propylbenzene	10	UD	2	2	10	ug/L
98-06-6	tert-Butylbenzene	10	UD	2	2	10	ug/L
95-63-6	1,2,4-Trimethylbenzene	10	UD	2	2	10	ug/L
135-98-8	sec-Butylbenzene	10	UD	2	2	10	ug/L
541-73-1	1,3-Dichlorobenzene	10	UD	2	2	10	ug/L
106-46-7	1,4-Dichlorobenzene	10	UD	2	2	10	ug/L
104-51-8	n-Butylbenzene	10	UD	2	2	10	ug/L
95-50-1	1,2-Dichlorobenzene	10	UD	2	2	10	ug/L
123-91-1	1,4-Dioxane	1000	UD	1000	1000	1000	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.6		61 - 141		91%	SPK: 50

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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW5-5-15-14DL	SDG No.:	F2352
Lab Sample ID:	F2352-02DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015602.D	10		05/22/14	VN052214

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	46.3		69 - 133		93%	SPK: 50
2037-26-5	Toluene-d8	49.6		65 - 126		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.2		58 - 135		106%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	227301	7.87				
540-36-3	1,4-Difluorobenzene	350845	8.79				
3114-55-4	Chlorobenzene-d5	346858	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	140795	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015602.D
Acq On : 22 May 2014 17:25
Operator : MD
Sample : F2352-02DL 10X
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

Quant Time: May 23 01:29:08 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	227301	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	350845	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	346858	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	140795	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	119263	45.61	ug/l	0.00
Spiked Amount 50.000			Recovery	=	91.22%	
36) Dibromofluoromethane	7.80	113	105839	46.32	ug/l	0.00
Spiked Amount 50.000			Recovery	=	92.64%	
51) Toluene-d8	10.29	98	417423	49.58	ug/l	0.00
Spiked Amount 50.000			Recovery	=	99.16%	
63) 4-Bromofluorobenzene	12.61	95	153378	53.18	ug/l	0.00
Spiked Amount 50.000			Recovery	=	106.36%	
Target Compounds						Qvalue
5) Vinyl Chloride	2.20	62	814	0.38	ug/l	88
22) trans-1,2-Dichloroethene	5.28	96	22258	11.35	ug/l	100
28) cis-1,2-Dichloroethene	7.06	96	34501	14.99	ug/l	88
45) Trichloroethene	9.04	130	36916	14.13	ug/l	98
65) Tetrachloroethene	10.83	164	222970	81.48	ug/l	99

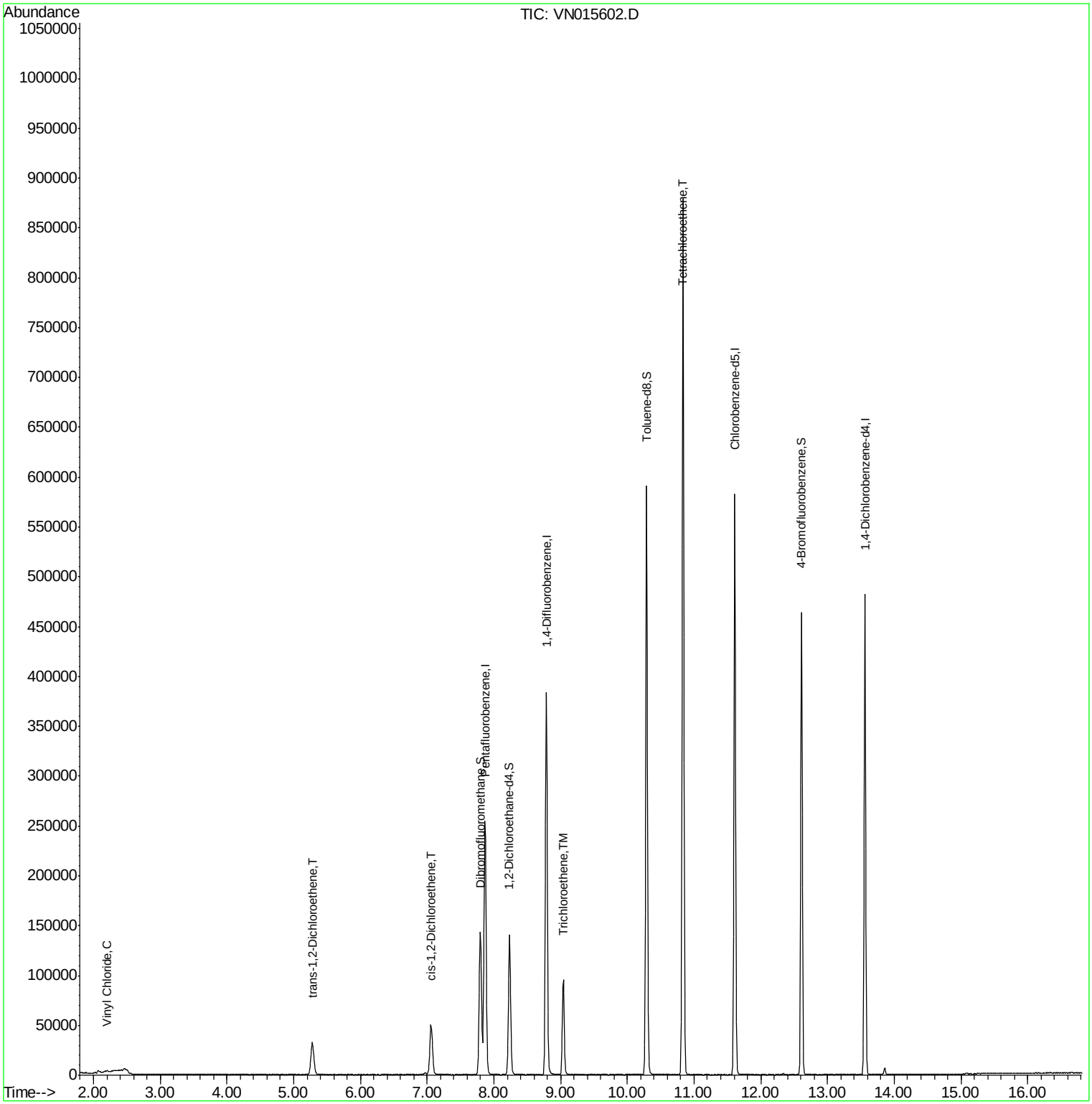
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VN015602.D**

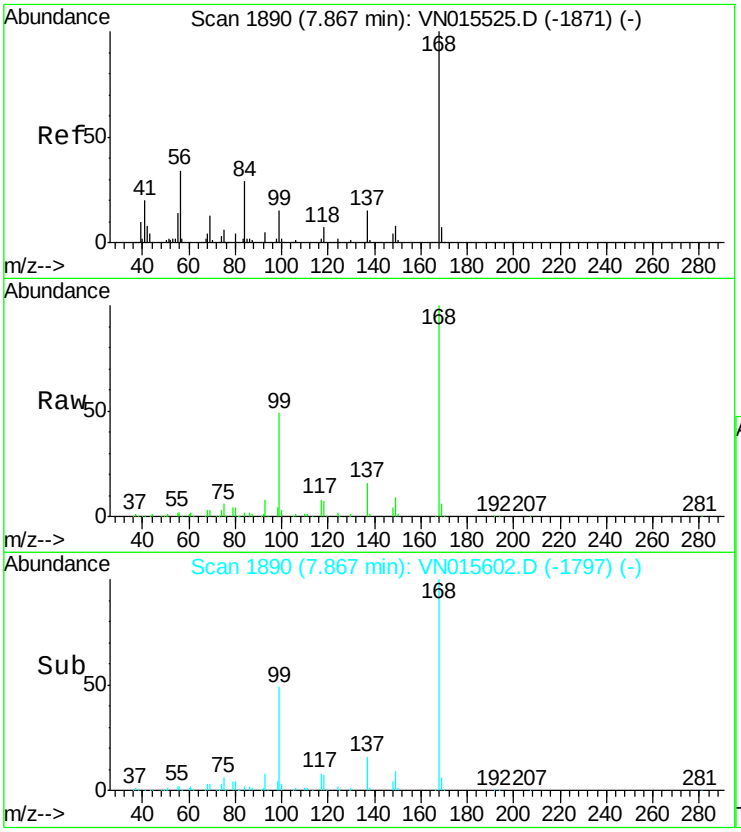
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015602.D
Acq On : 22 May 2014 17:25
Operator : MD
Sample : F2352-02DL 10X
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

Quant Time: May 23 01:29:08 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration



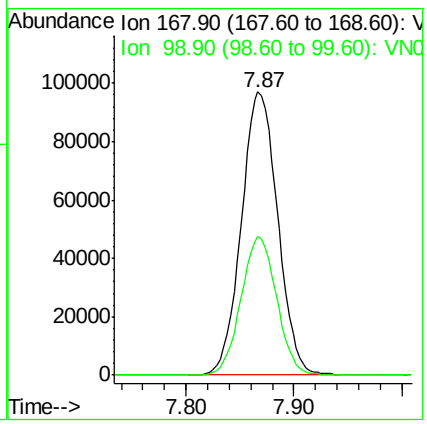
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

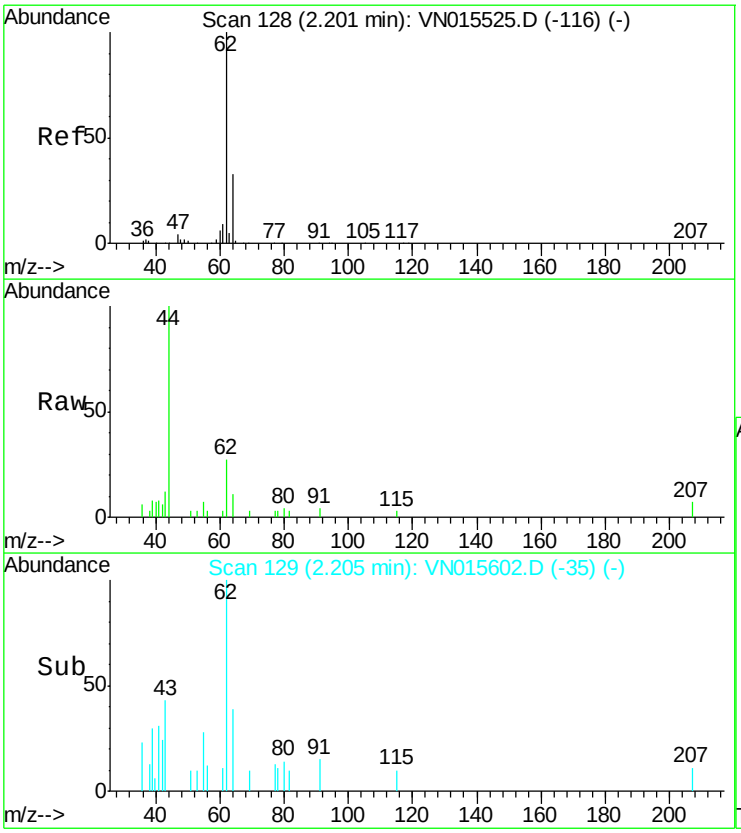


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion:168 Resp: 227301

Ion	Ratio	Lower	Upper
168	100		
99	48.8	39.0	58.4

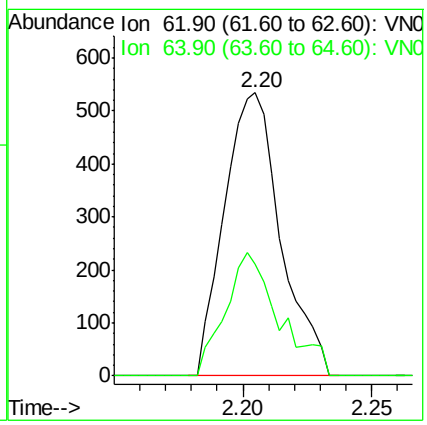




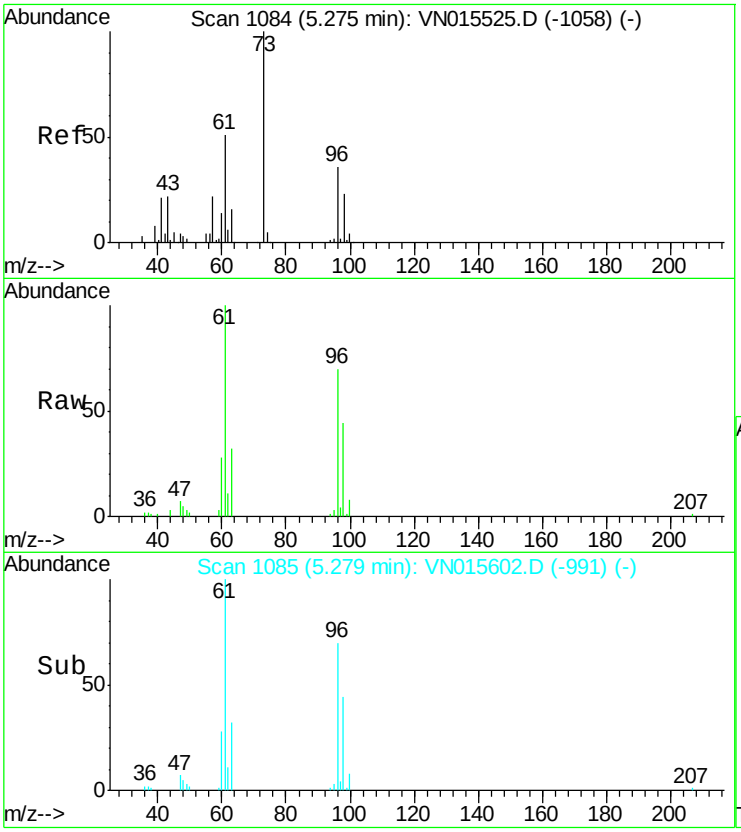
#5
Vinyl Chloride
Concen: 0.38 ug/l
RT: 2.20 min Scan# 129
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion: 62 Resp: 814

Ion	Ratio	Lower	Upper
62	100		
64	39.3	26.2	39.4



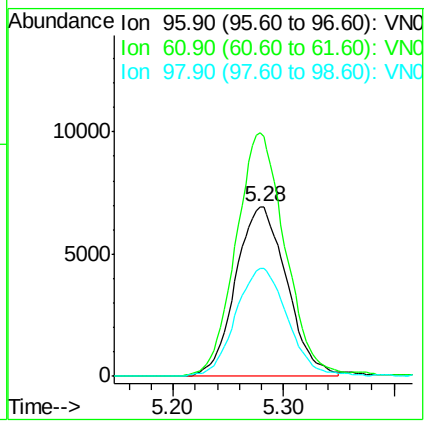
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

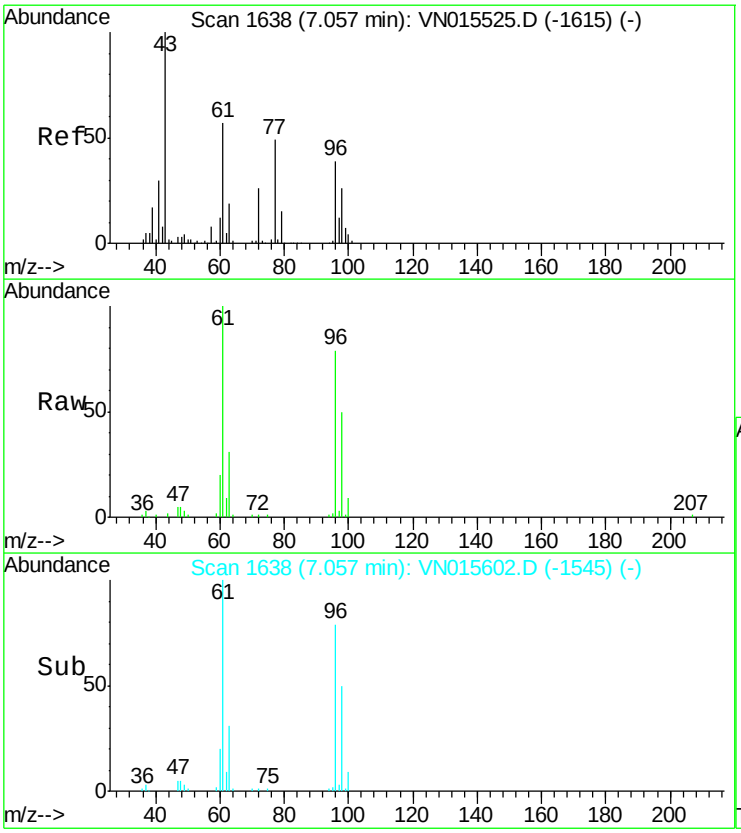


#22
trans-1,2-Dichloroethene
Concen: 11.35 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion: 96 Resp: 22258

Ion	Ratio	Lower	Upper
96	100		
61	142.0	113.3	169.9
98	62.5	50.4	75.6

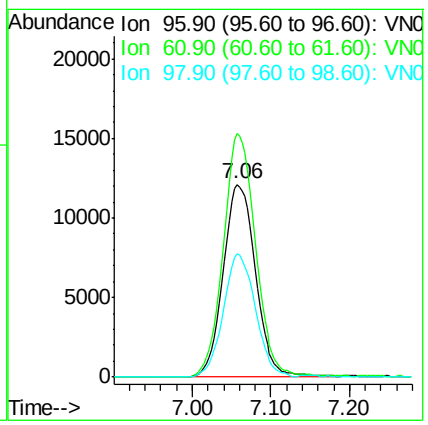




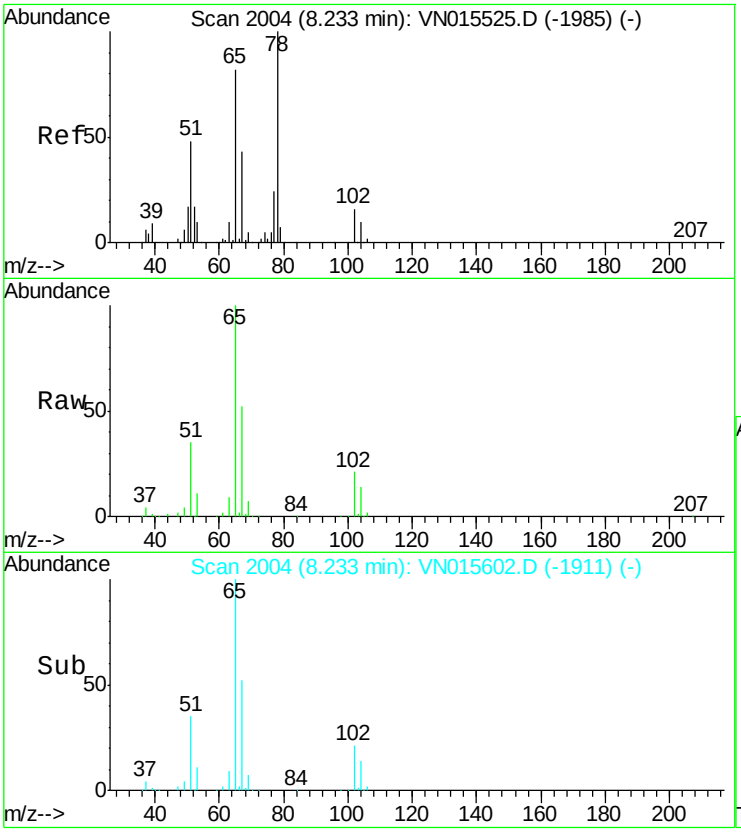
#28
cis-1,2-Dichloroethene
Concen: 14.99 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion: 96 Resp: 34501

Ion	Ratio	Lower	Upper
96	100		
61	125.7	0.0	292.0
98	63.3	0.0	129.4



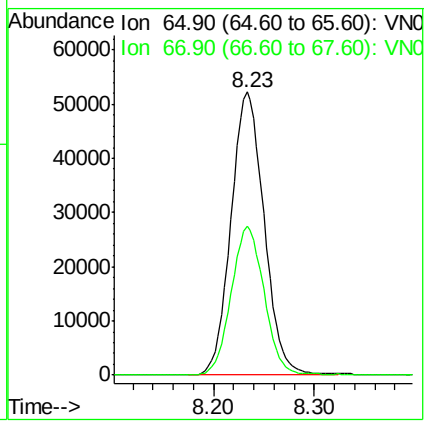
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

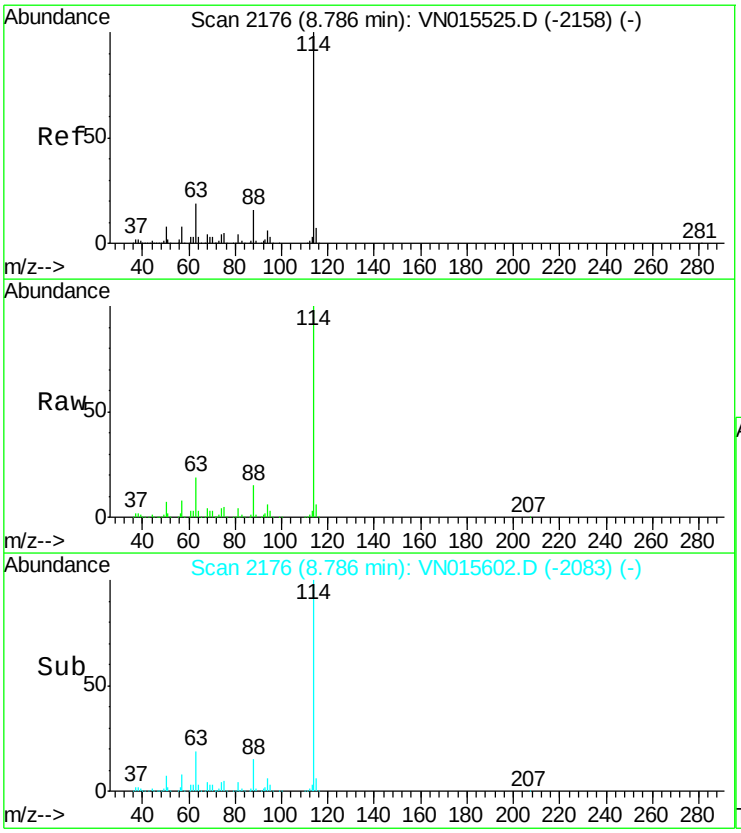


#34
1,2-Dichloroethane-d4
Concen: 45.61 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion: 65 Resp: 119263

Ion	Ratio	Lower	Upper
65	100		
67	52.2	0.0	103.6

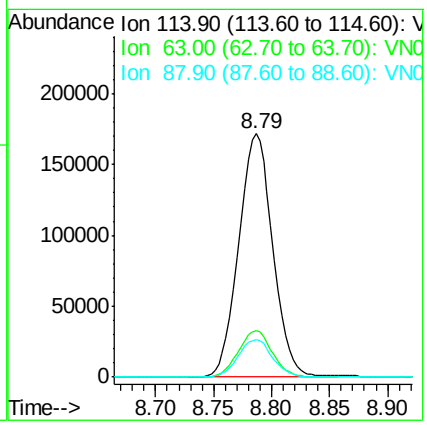




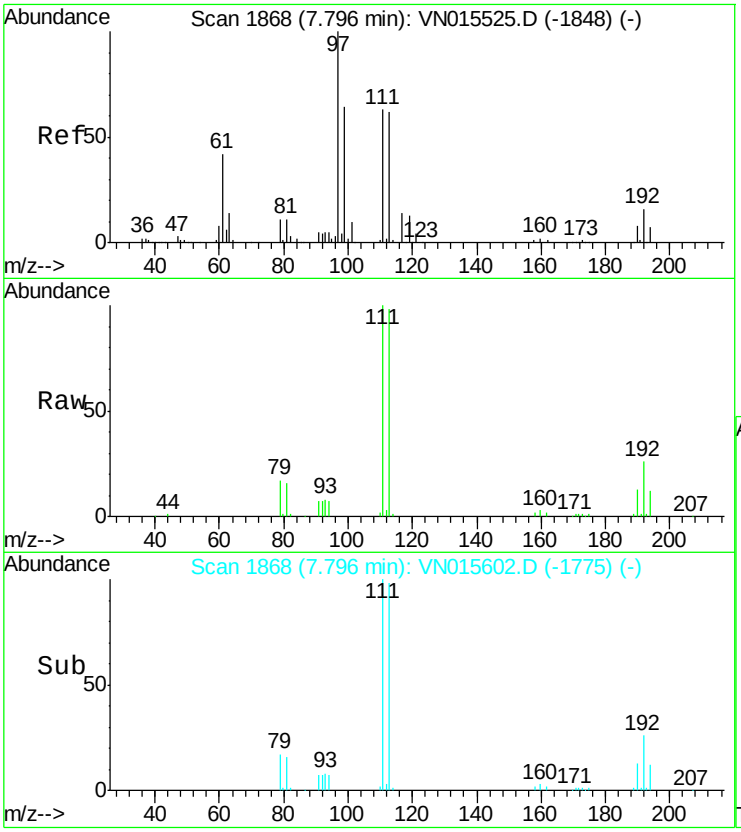
#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion:114 Resp: 350845

Ion	Ratio	Lower	Upper
114	100		
63	19.2	0.0	38.6
88	15.3	0.0	32.2



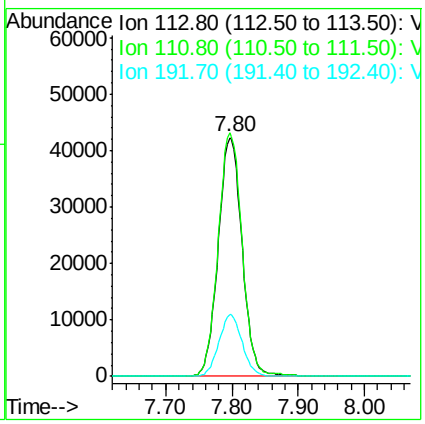
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

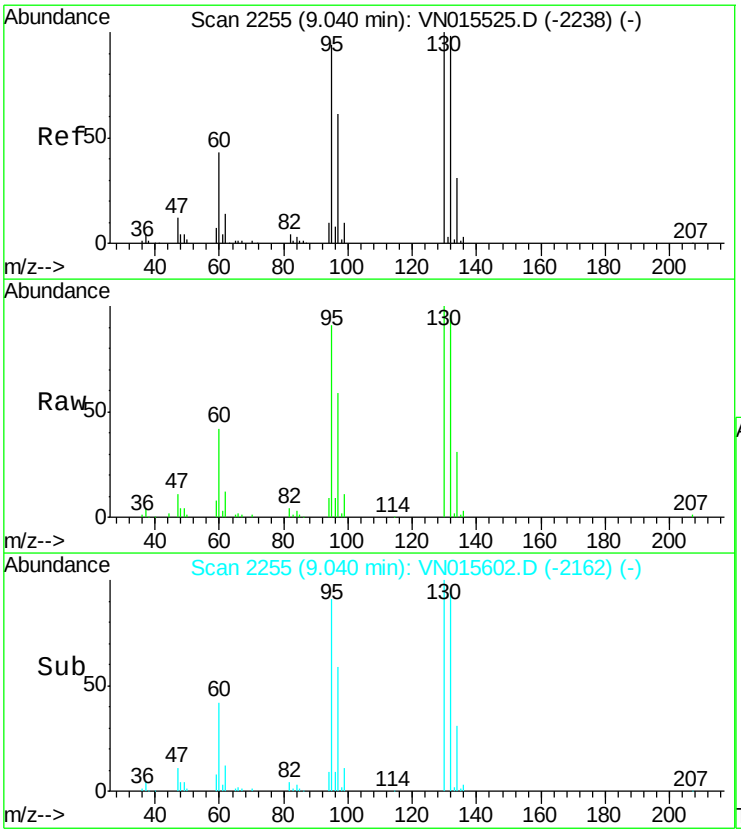


#36
Dibromofluoromethane
Concen: 46.32 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion:113 Resp: 105839

Ion	Ratio	Lower	Upper
113	100		
111	102.2	81.5	122.3
192	25.1	20.0	30.0

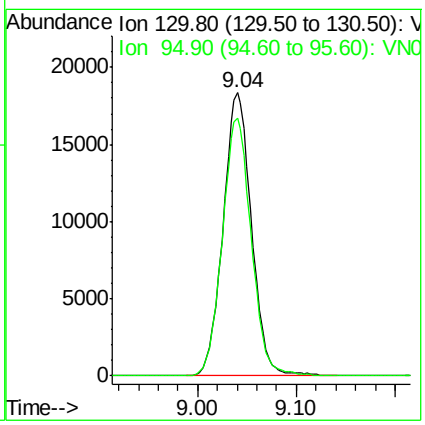




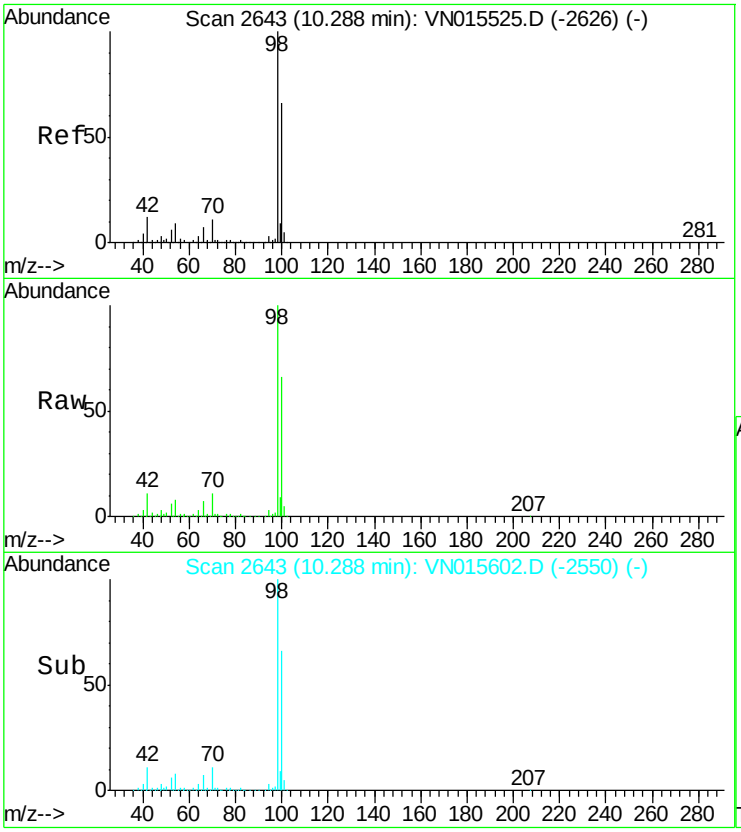
#45
Trichloroethene
Concen: 14.13 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion:130 Resp: 36916

Ion	Ratio	Lower	Upper
130	100		
95	91.2	0.0	187.0



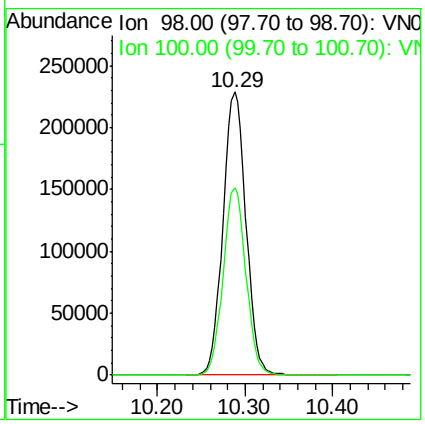
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

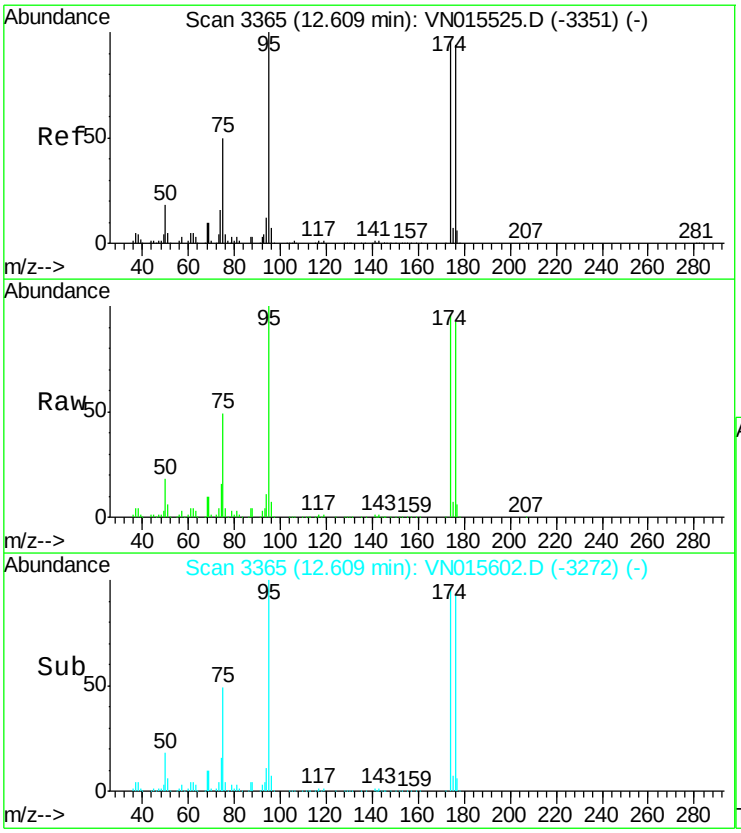


#51
Toluene-d8
Concen: 49.58 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion: 98 Resp: 417423

Ion	Ratio	Lower	Upper
98	100		
100	65.6	52.3	78.5

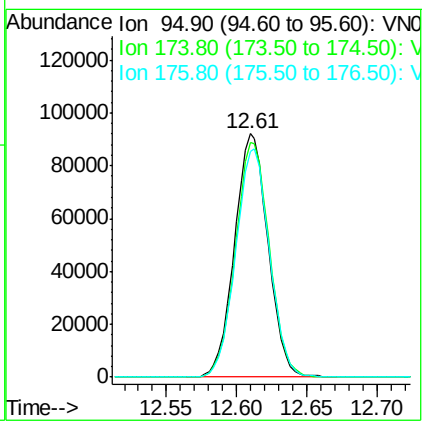




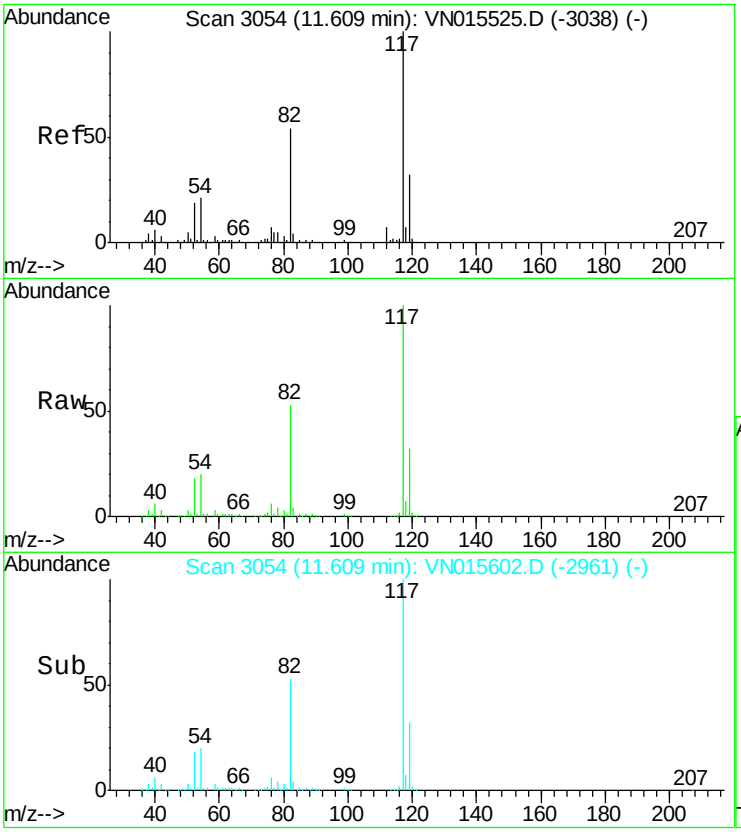
#63
4-Bromofluorobenzene
Concen: 53.18 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion: 95 Resp: 153378

Ion	Ratio	Lower	Upper
95	100		
174	97.8	0.0	191.8
176	94.6	0.0	186.8



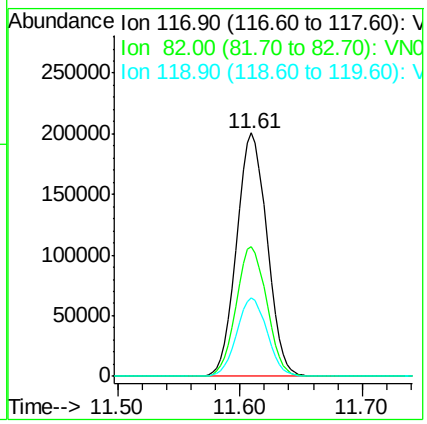
Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

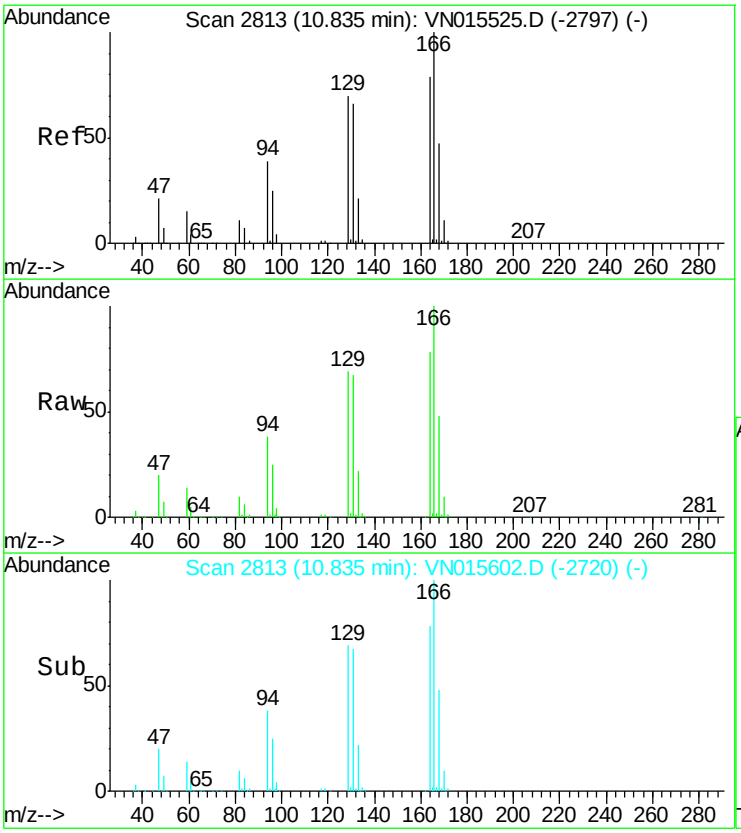


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion:117 Resp: 346858

Ion	Ratio	Lower	Upper
117	100		
82	53.4	43.3	64.9
119	32.1	25.6	38.4

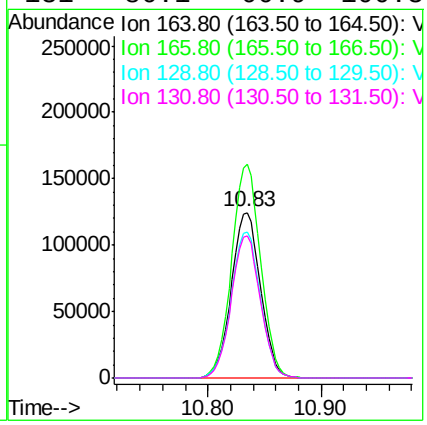


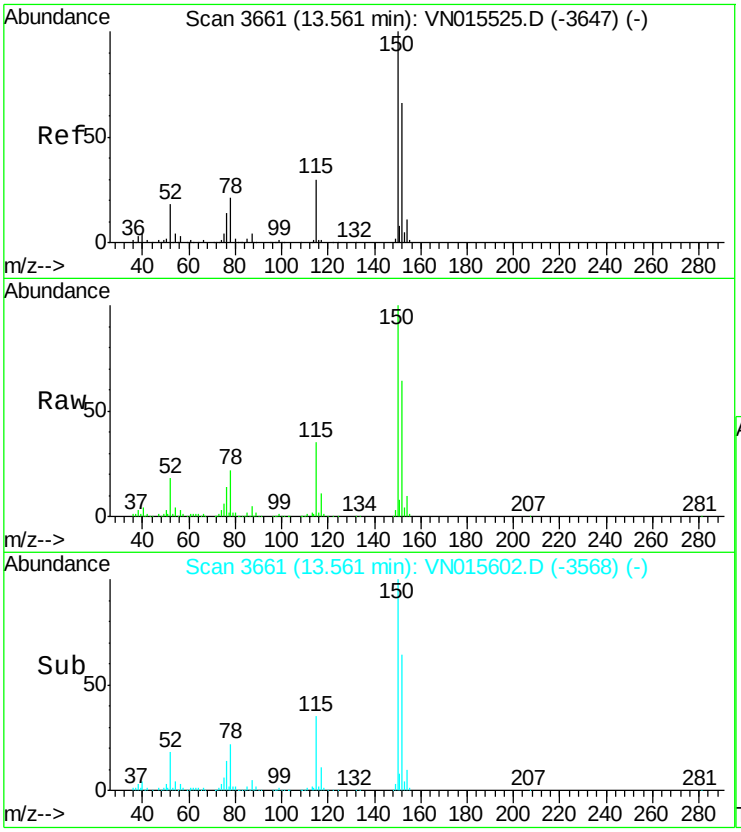


#65
Tetrachloroethene
Concen: 81.48 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion:164 Resp: 222970

Ion	Ratio	Lower	Upper
164	100		
166	128.8	101.7	152.5
129	88.3	70.7	106.1
131	86.1	66.9	100.3

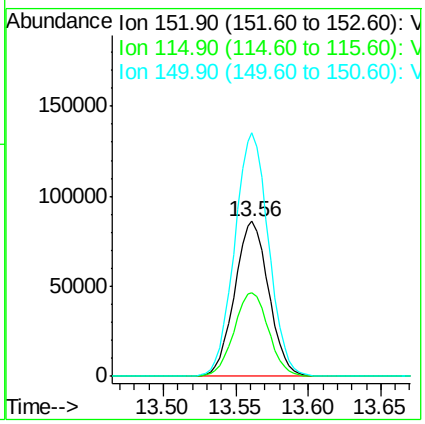




#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015602.D
Acq: 22 May 2014 17:25

Tgt Ion:152 Resp: 140795

Ion	Ratio	Lower	Upper
152	100		
115	54.9	27.2	81.6
150	157.0	0.0	343.6



Instrument :
MSVOA_N
ClientSampleId :
MW5-5-15-14DL

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW6-5-15-14	SDG No.:	F2352
Lab Sample ID:	F2352-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015582.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	7.6		0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.43	J	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	100		0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	83.3		0.2	0.2	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	53.9		0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	110		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	3	U	0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.3		61 - 141		93%	SPK: 50

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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	MW6-5-15-14	SDG No.:	F2352
Lab Sample ID:	F2352-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015582.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	46		69 - 133		92%	SPK: 50
2037-26-5	Toluene-d8	49.9		65 - 126		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.8		58 - 135		116%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	234627	7.87				
540-36-3	1,4-Difluorobenzene	365455	8.79				
3114-55-4	Chlorobenzene-d5	376256	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	174411	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015582.D
Acq On : 22 May 2014 6:17
Operator : MD
Sample : F2352-03
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 33 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

Quant Time: May 22 07:10:14 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

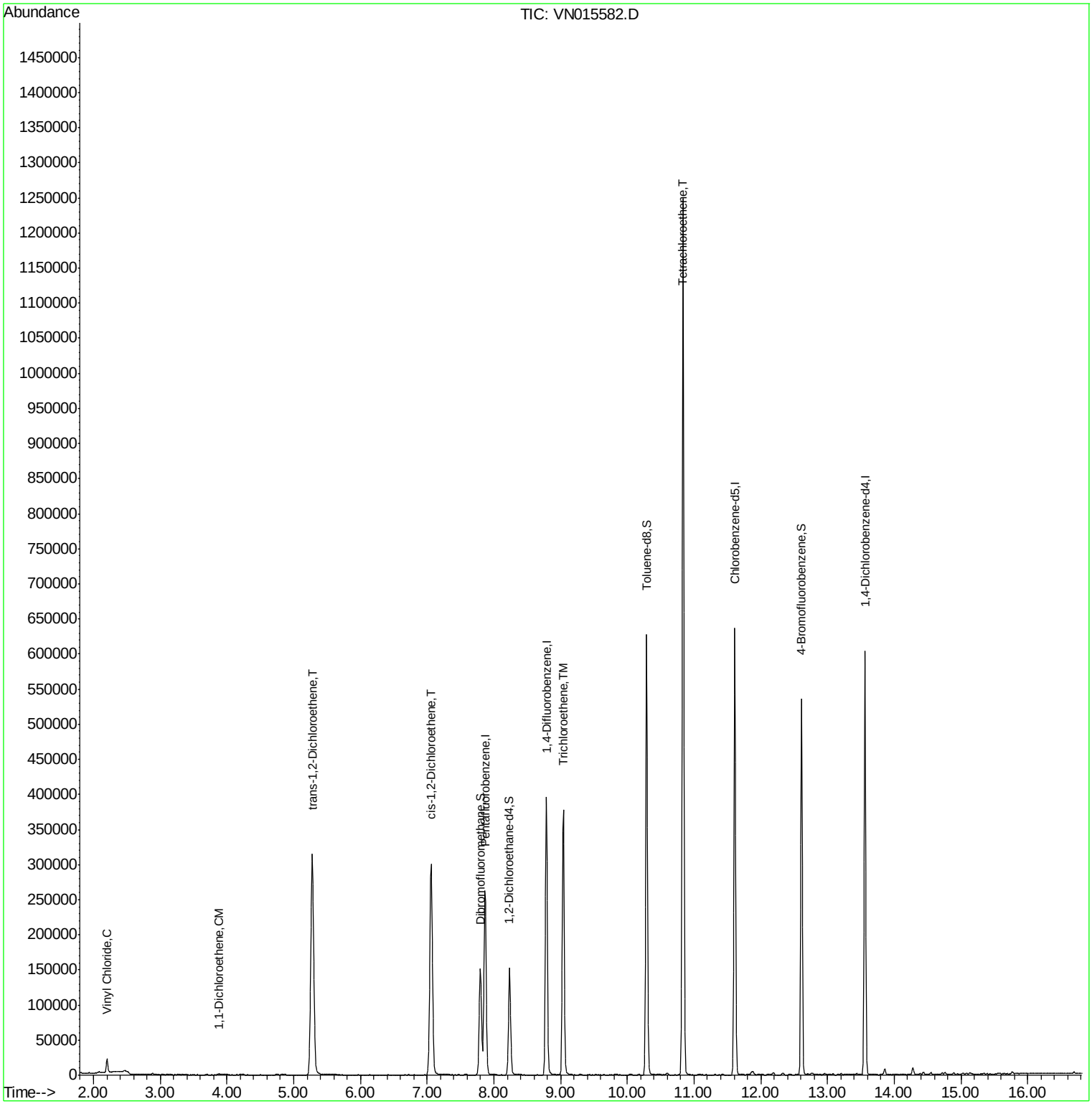
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	234627	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	365455	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	376256	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	174411	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	124829	46.25	ug/l	0.00
Spiked Amount 50.000			Recovery	=	92.50%	
36) Dibromofluoromethane	7.80	113	109447	45.98	ug/l	0.00
Spiked Amount 50.000			Recovery	=	91.96%	
51) Toluene-d8	10.29	98	437658	49.91	ug/l	0.00
Spiked Amount 50.000			Recovery	=	99.82%	
63) 4-Bromofluorobenzene	12.61	95	173669	57.81	ug/l	0.00
Spiked Amount 50.000			Recovery	=	115.62%	
Target Compounds						Qvalue
5) Vinyl Chloride	2.20	62	16563	7.55	ug/l	100
13) 1,1-Dichloroethene	3.88	96	822	0.43	ug/l	89
22) trans-1,2-Dichloroethene	5.28	96	211830	104.67	ug/l	96
28) cis-1,2-Dichloroethene	7.06	96	197910	83.29	ug/l	89
45) Trichloroethene	9.04	130	146601	53.85	ug/l	98
65) Tetrachloroethene	10.83	164	315159	106.17	ug/l	99

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

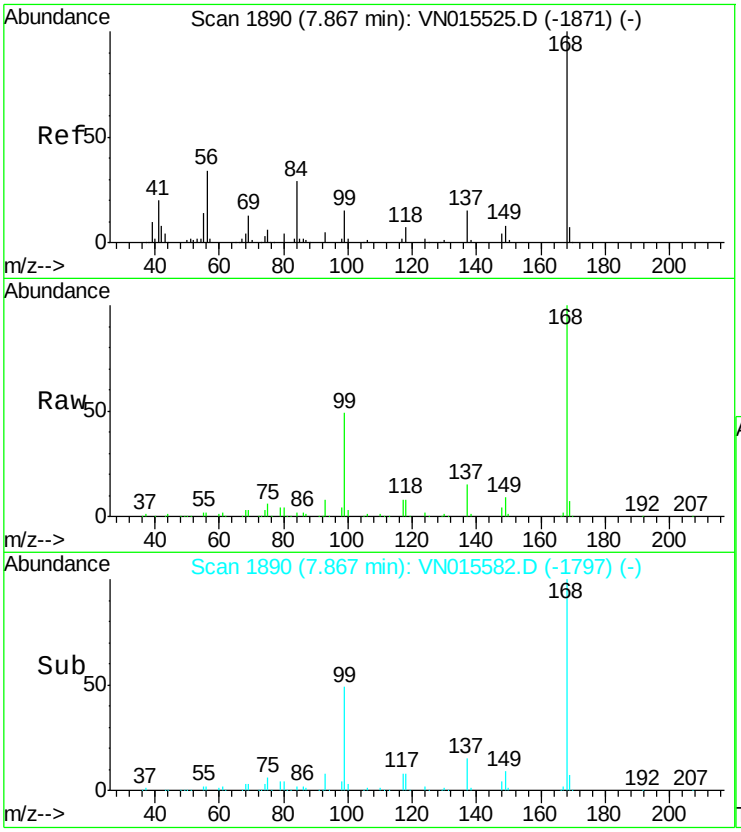
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015582.D
Acq On : 22 May 2014 6:17
Operator : MD
Sample : F2352-03
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 33 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

Quant Time: May 22 07:10:14 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration



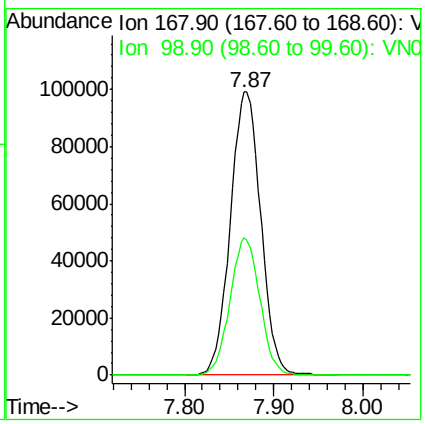
Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

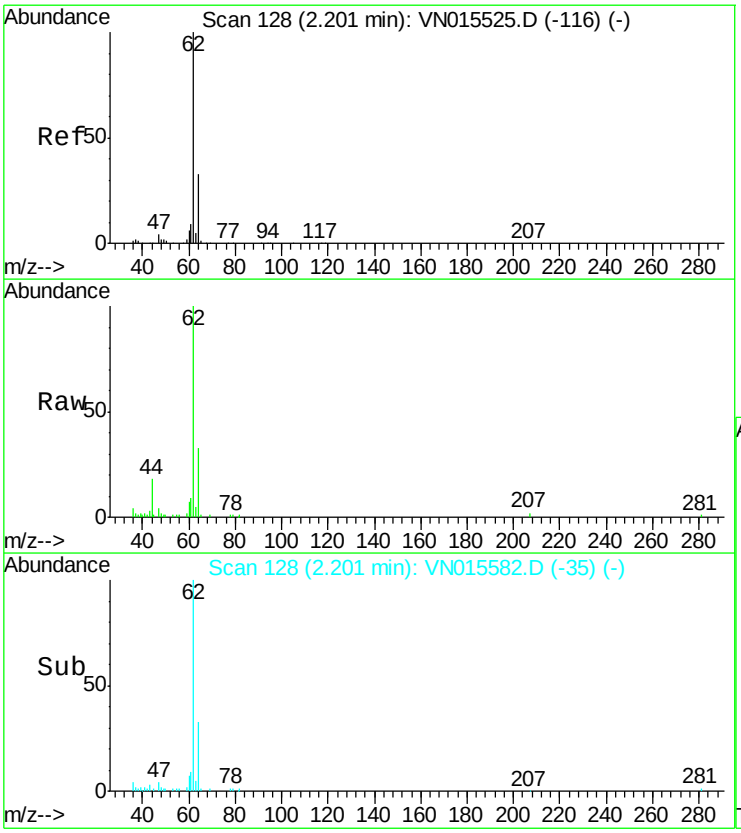


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion:168 Resp: 234627

Ion	Ratio	Lower	Upper
168	100		
99	48.6	39.0	58.4

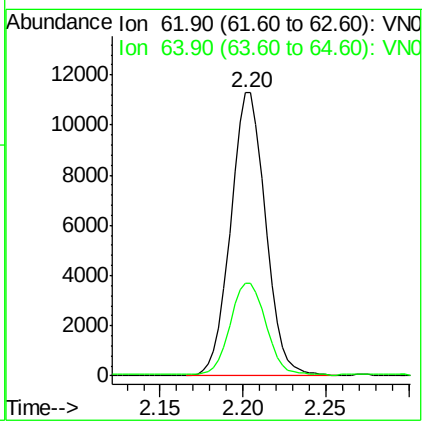




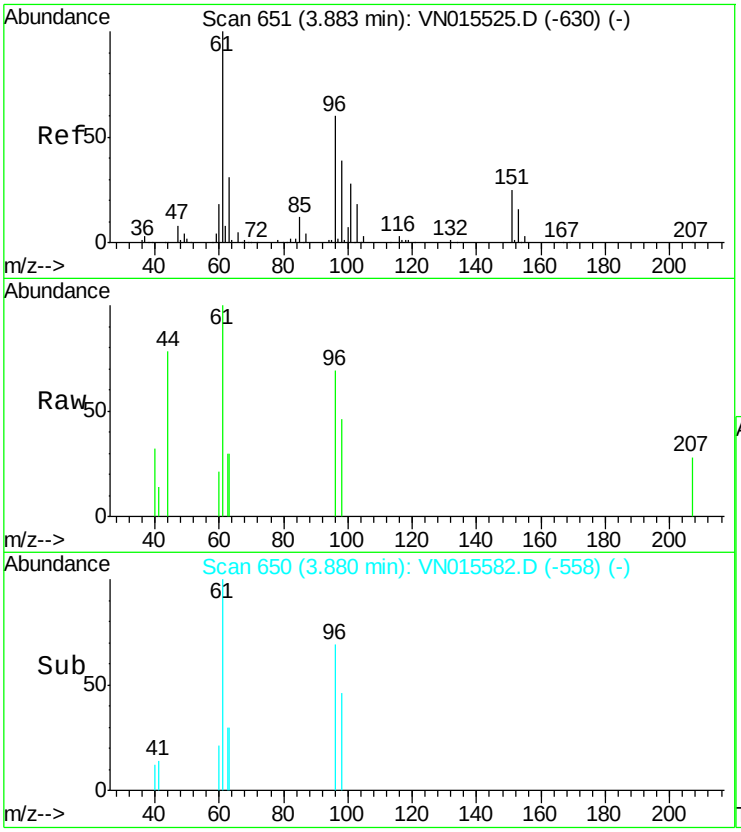
#5
Vinyl Chloride
Concen: 7.55 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion: 62 Resp: 16563

Ion	Ratio	Lower	Upper
62	100		
64	32.7	26.2	39.4



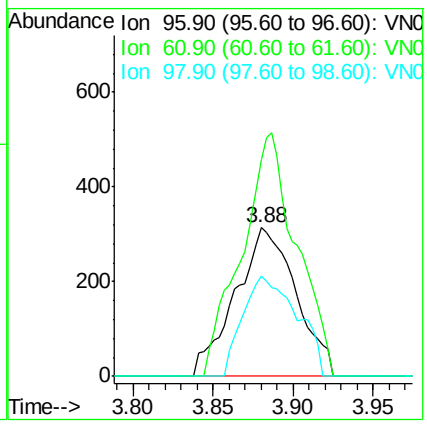
Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

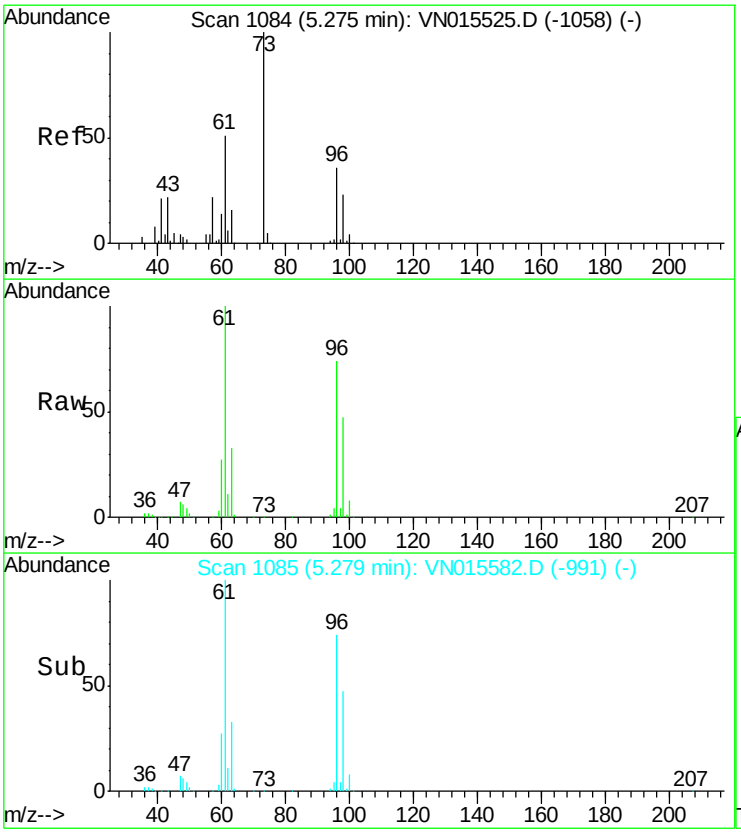


#13
1,1-Dichloroethene
Concen: 0.43 ug/l
RT: 3.88 min Scan# 650
Delta R.T. -0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion: 96 Resp: 822

Ion	Ratio	Lower	Upper
96	100		
61	145.9	132.3	198.5
98	67.5	51.8	77.6

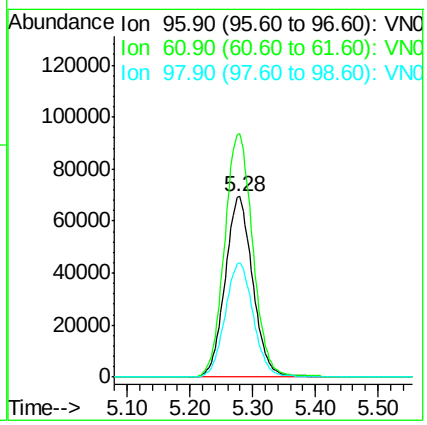




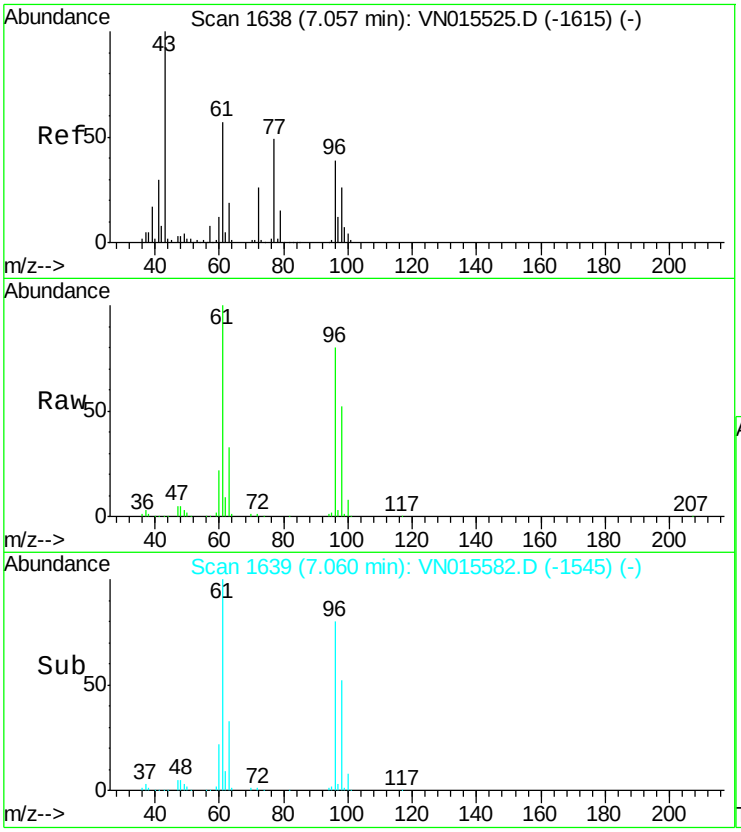
#22
trans-1,2-Dichloroethene
Concen: 104.67 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion: 96 Resp: 211830

Ion	Ratio	Lower	Upper
96	100		
61	134.9	113.3	169.9
98	63.1	50.4	75.6



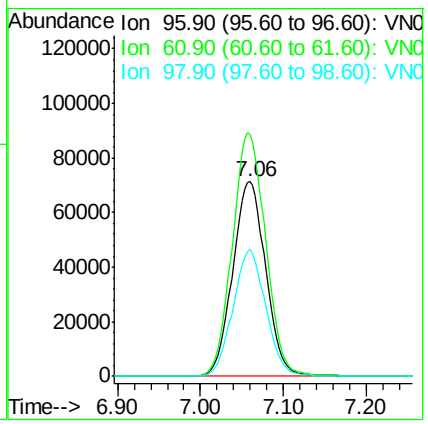
Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

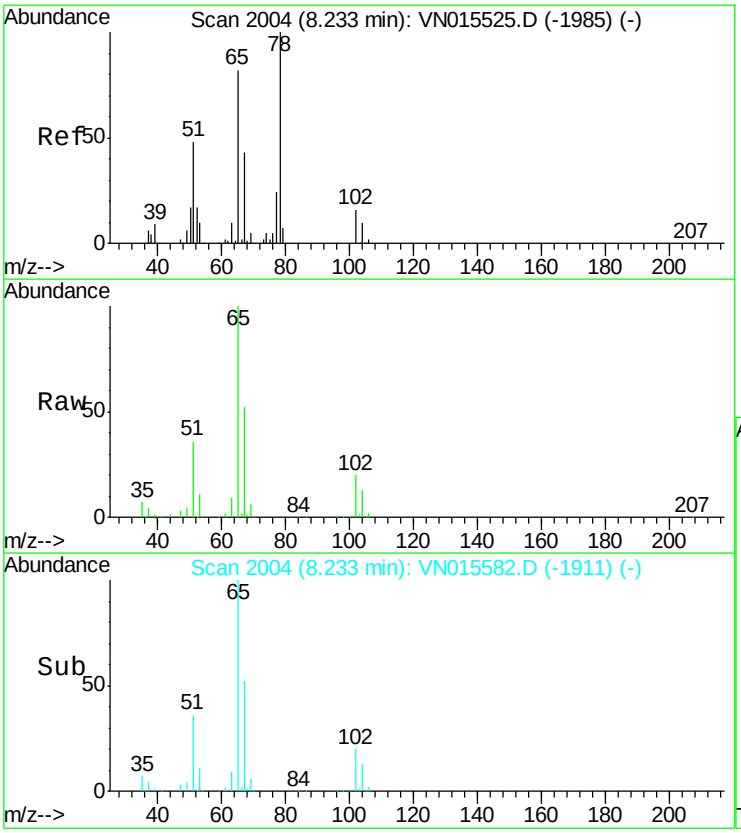


#28
cis-1,2-Dichloroethene
Concen: 83.29 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion: 96 Resp: 197910

Ion	Ratio	Lower	Upper
96	100		
61	126.4	0.0	292.0
98	64.5	0.0	129.4

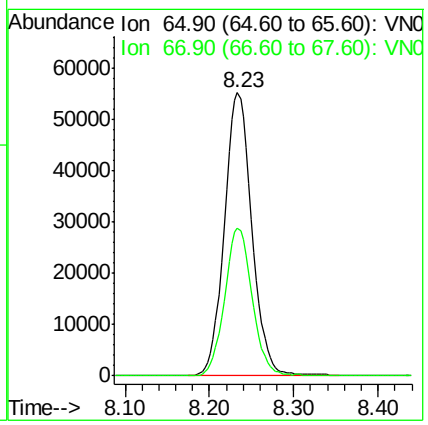




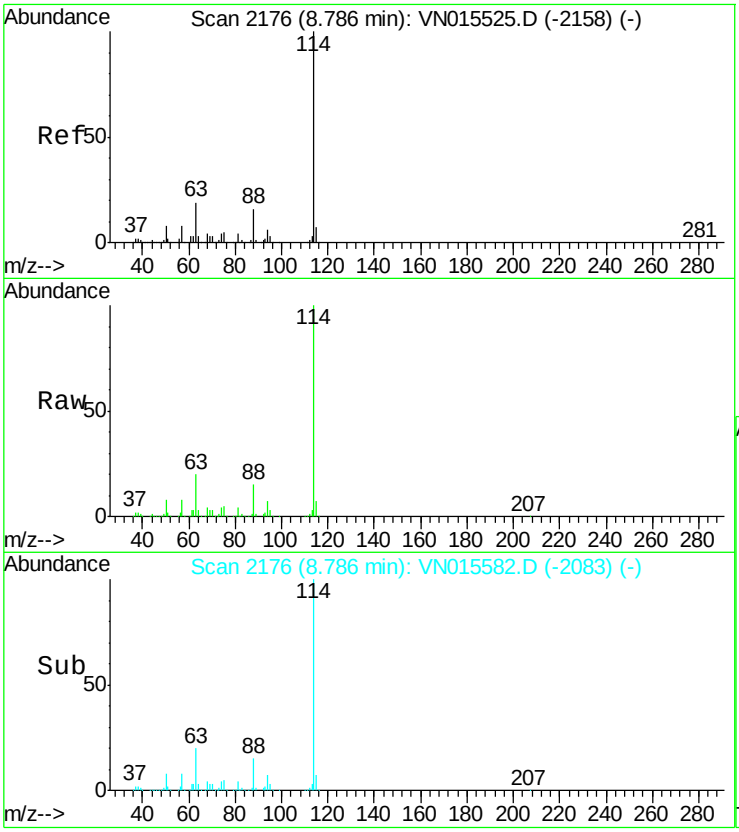
#34
1,2-Dichloroethane-d4
Concen: 46.25 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion: 65 Resp: 124829

Ion	Ratio	Lower	Upper
65	100		
67	52.0	0.0	103.6



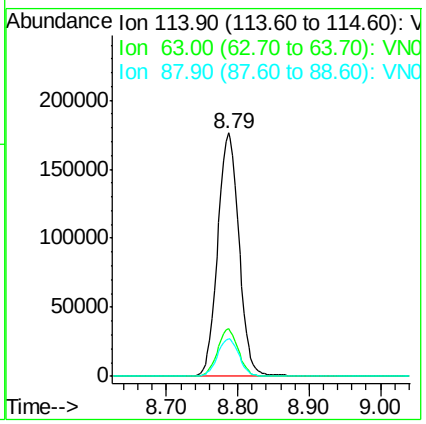
Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

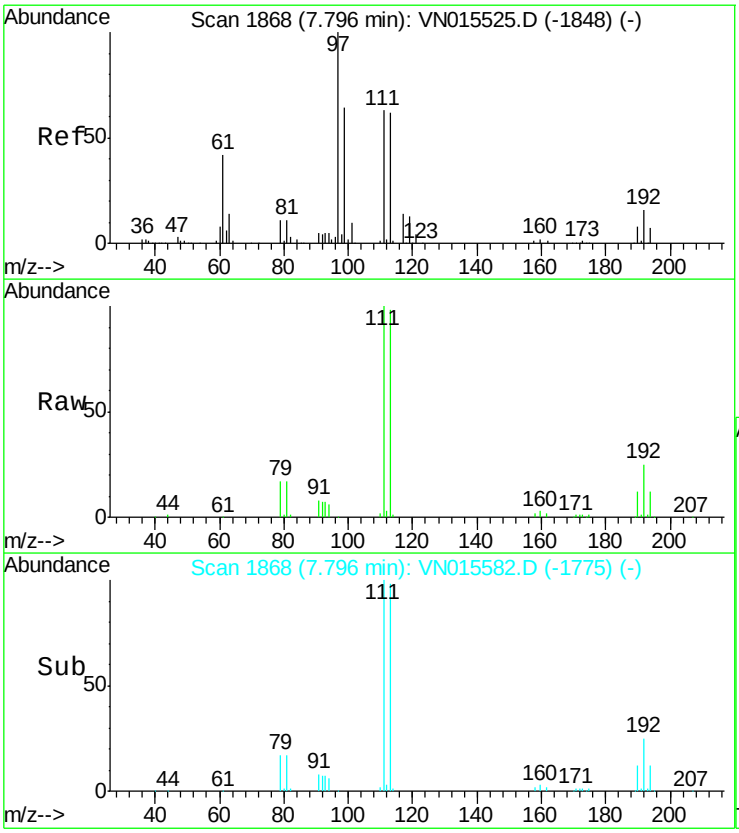


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion:114 Resp: 365455

Ion	Ratio	Lower	Upper
114	100		
63	19.6	0.0	38.6
88	15.5	0.0	32.2

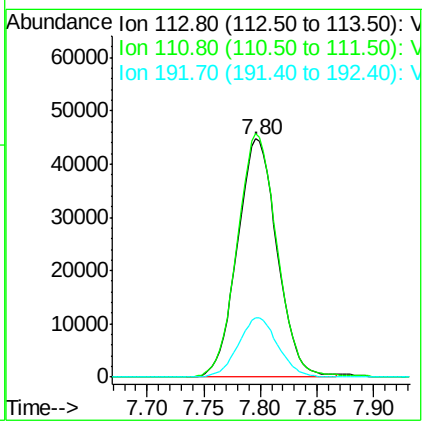




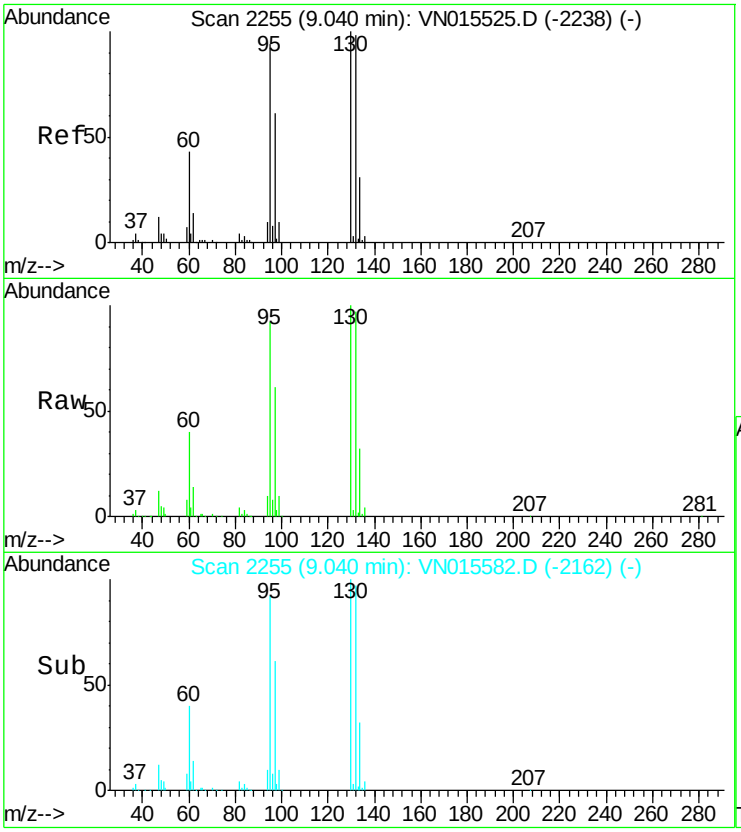
#36
Dibromofluoromethane
Concen: 45.98 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion:113 Resp: 109447

Ion	Ratio	Lower	Upper
113	100		
111	102.6	81.5	122.3
192	25.1	20.0	30.0



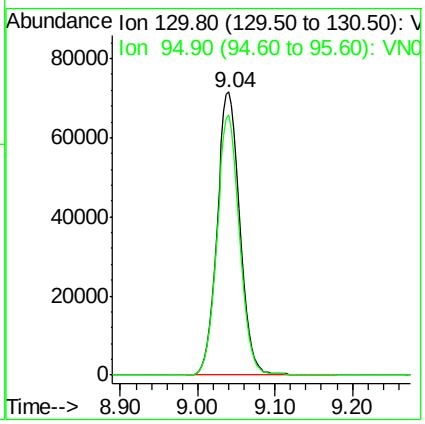
Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

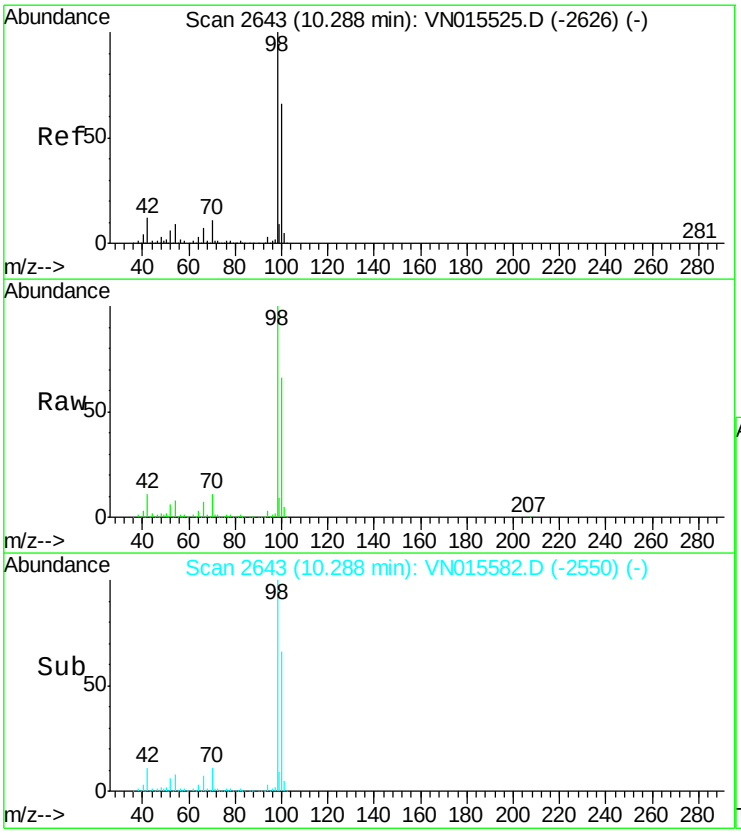


#45
Trichloroethene
Concen: 53.85 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion:130 Resp: 146601

Ion	Ratio	Lower	Upper
130	100		
95	91.8	0.0	187.0

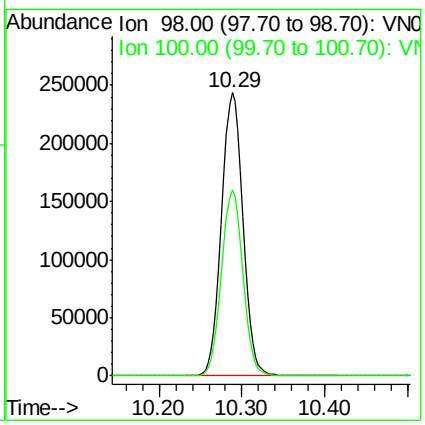




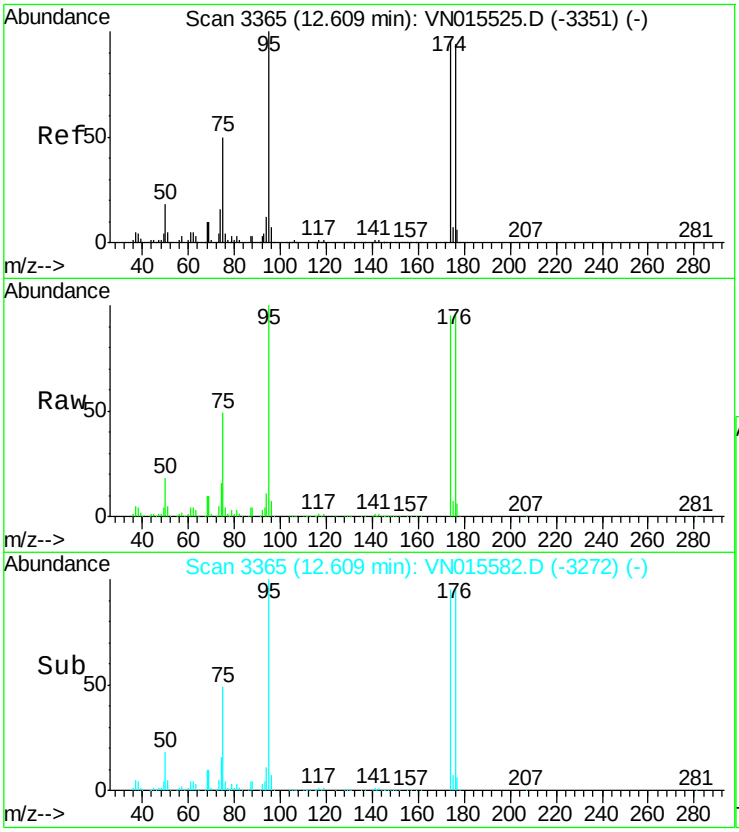
#51
Toluene-d8
Concen: 49.91 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion: 98 Resp: 437658

Ion	Ratio	Lower	Upper
98	100		
100	65.5	52.3	78.5



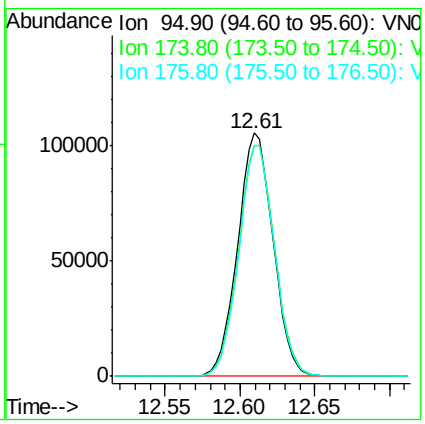
Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

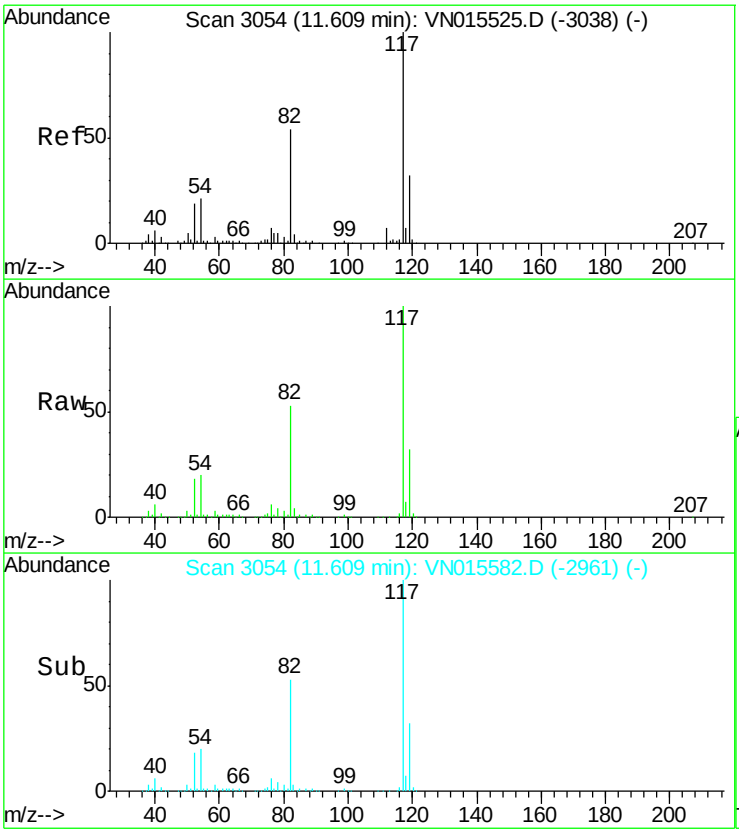


#63
4-Bromofluorobenzene
Concen: 57.81 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion: 95 Resp: 173669

Ion	Ratio	Lower	Upper
95	100		
174	97.6	0.0	191.8
176	95.5	0.0	186.8

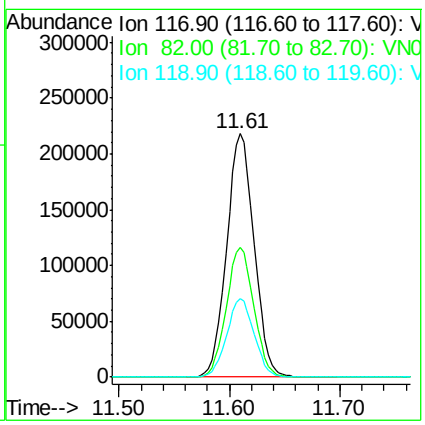




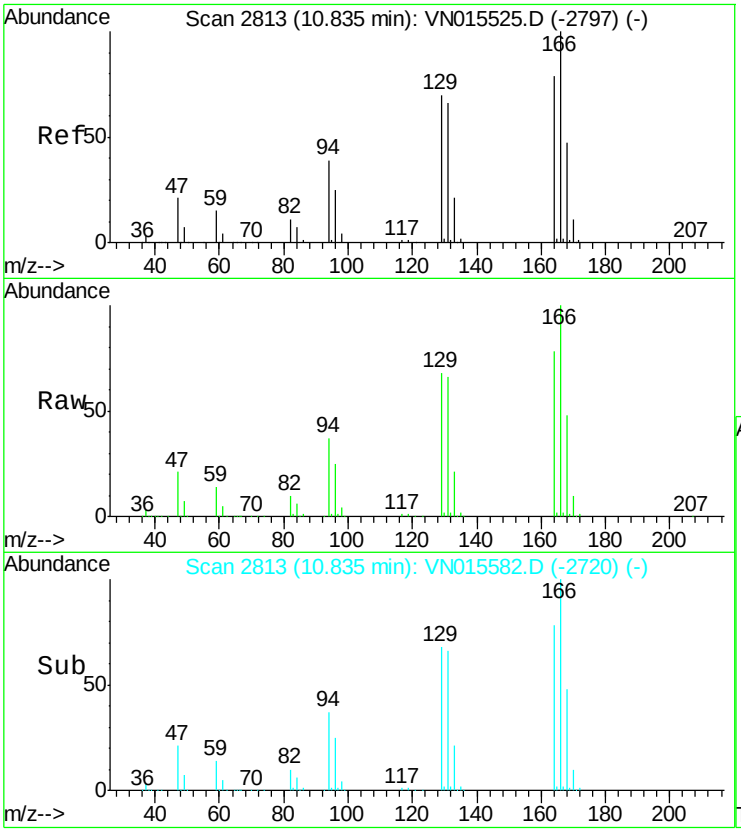
#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion:117 Resp: 376256

Ion	Ratio	Lower	Upper
117	100		
82	53.2	43.3	64.9
119	32.3	25.6	38.4



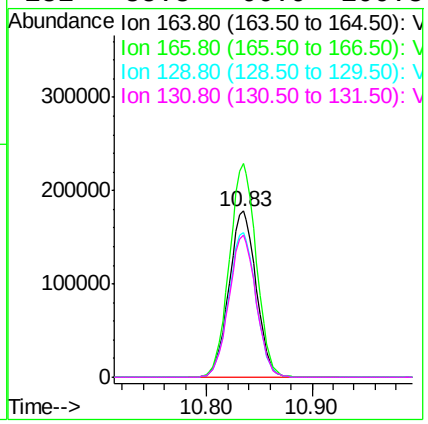
Instrument :
MSVOA_N
ClientSampleId :
MW6-5-15-14

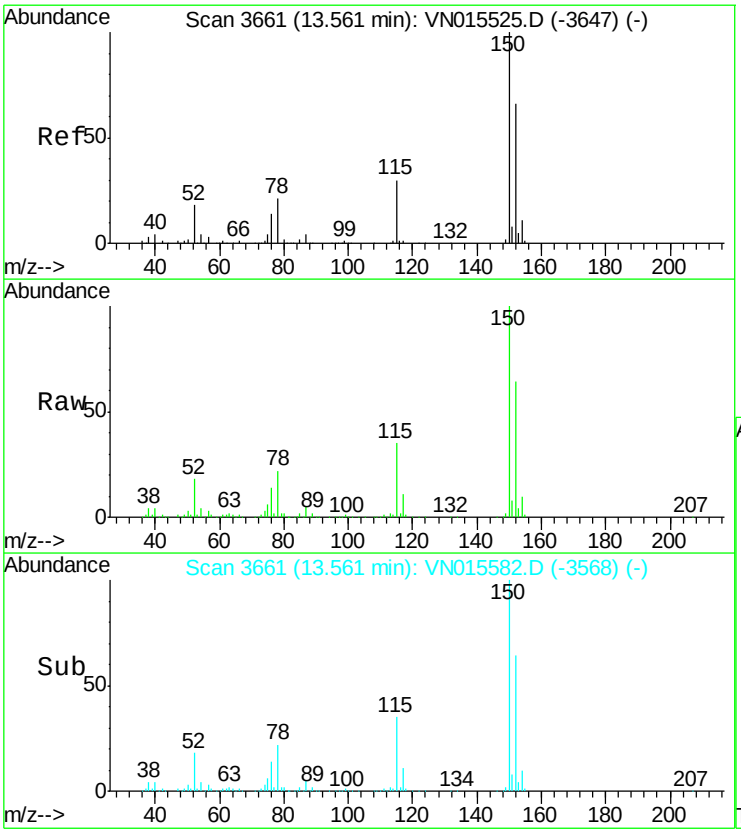


#65
Tetrachloroethene
Concen: 106.17 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion:164 Resp: 315159

Ion	Ratio	Lower	Upper
164	100		
166	128.7	101.7	152.5
129	87.4	70.7	106.1
131	85.3	66.9	100.3

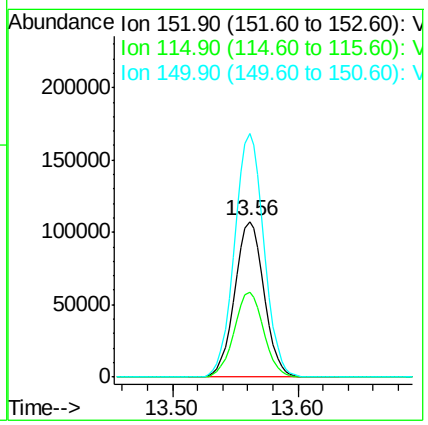




#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015582.D
Acq: 22 May 2014 6:17

Tgt Ion:152 Resp: 174411

Ion	Ratio	Lower	Upper
152	100		
115	54.6	27.2	81.6
150	157.3	0.0	343.6



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	TRIPBLANK	SDG No.:	F2352
Lab Sample ID:	F2352-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015579.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	3	U	0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.7		61 - 141		91%	SPK: 50

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/15/14
Project:	37-14 36th Street	Date Received:	05/16/14
Client Sample ID:	TRIPBLANK	SDG No.:	F2352
Lab Sample ID:	F2352-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015579.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	46.5		69 - 133		93%	SPK: 50
2037-26-5	Toluene-d8	49.9		65 - 126		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.7		58 - 135		115%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	243539	7.87				
540-36-3	1,4-Difluorobenzene	375855	8.79				
3114-55-4	Chlorobenzene-d5	388788	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	174688	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015579.D
Acq On : 22 May 2014 4:46
Operator : MD
Sample : F2352-04
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 30 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TRIPBLANK

Quant Time: May 22 06:11:13 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	243539	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	375855	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	388788	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	174688	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	127951	45.67	ug/l	0.00
Spiked Amount 50.000			Recovery = 91.34%			
36) Dibromofluoromethane	7.80	113	113930	46.54	ug/l	0.00
Spiked Amount 50.000			Recovery = 93.08%			
51) Toluene-d8	10.29	98	449808	49.87	ug/l	0.00
Spiked Amount 50.000			Recovery = 99.74%			
63) 4-Bromofluorobenzene	12.61	95	178367	57.73	ug/l	0.00
Spiked Amount 50.000			Recovery = 115.46%			

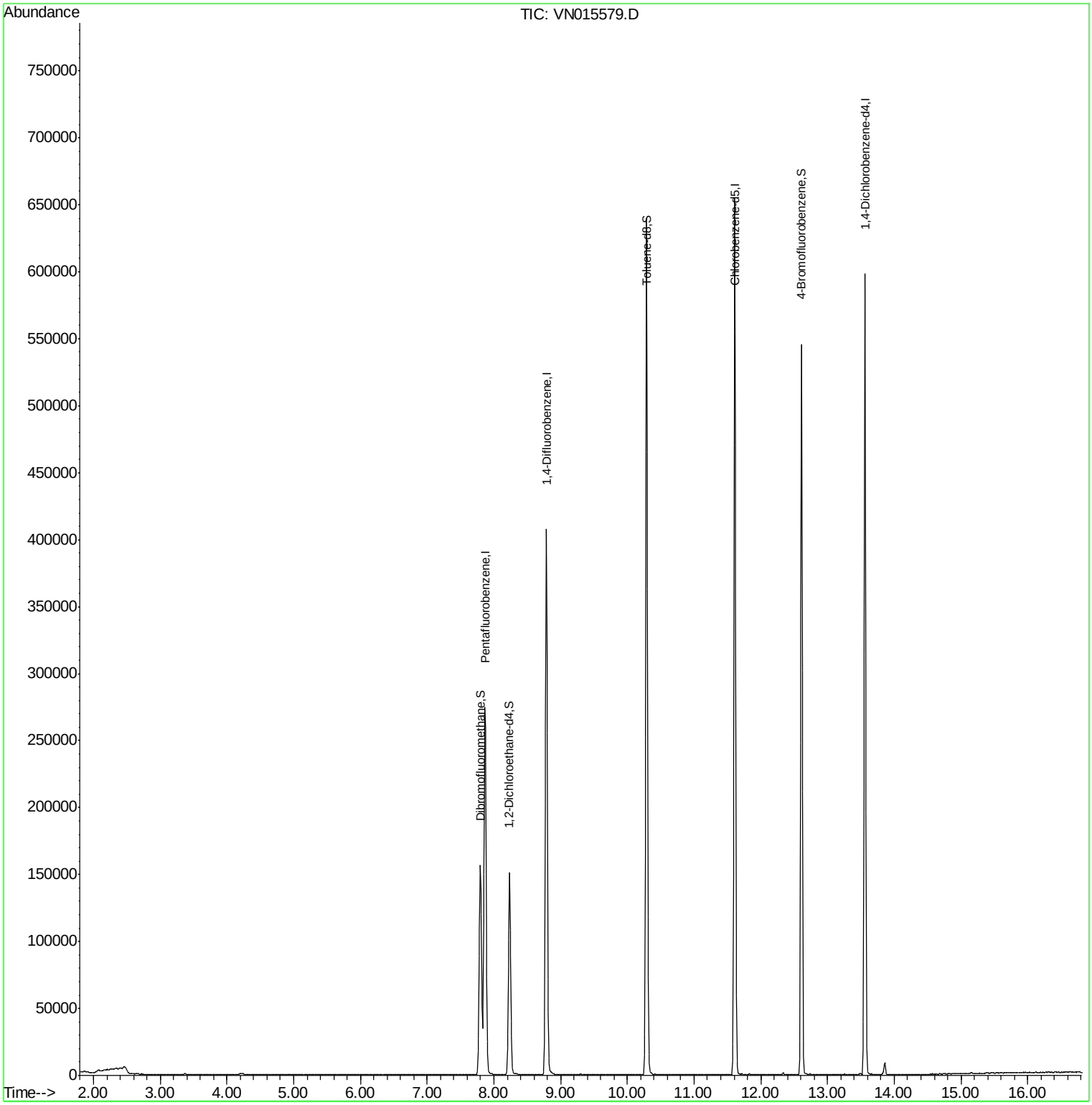
Target Compounds Qvalue

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

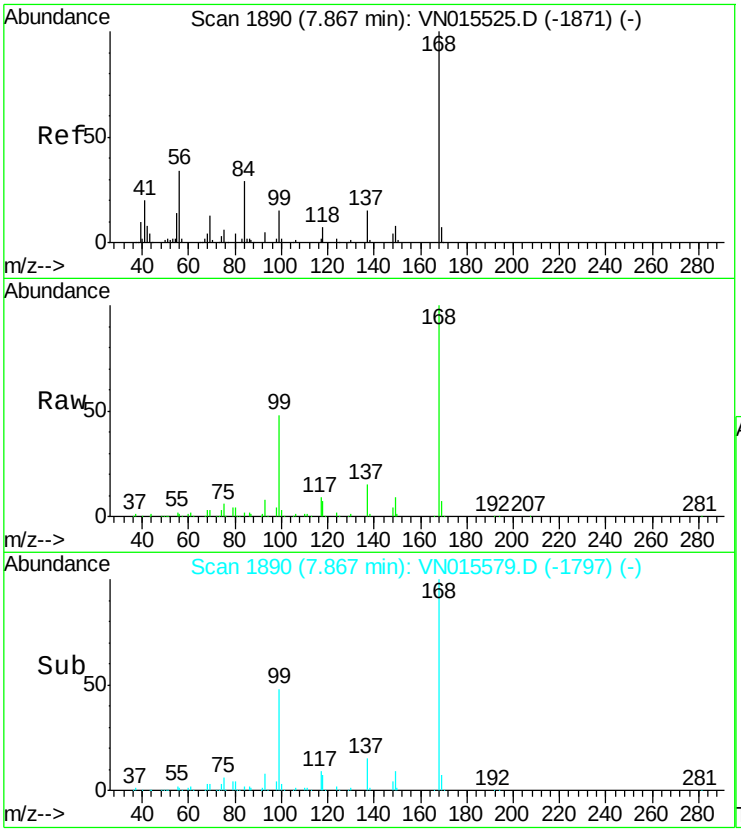
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015579.D
Acq On : 22 May 2014 4:46
Operator : MD
Sample : F2352-04
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 30 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TRIPBLANK

Quant Time: May 22 06:11:13 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration



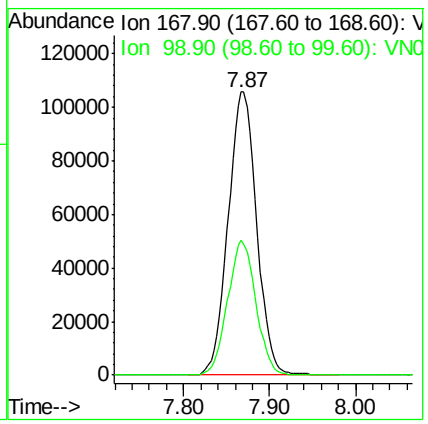
Instrument :
MSVOA_N
ClientSampleId :
TRIPBLANK

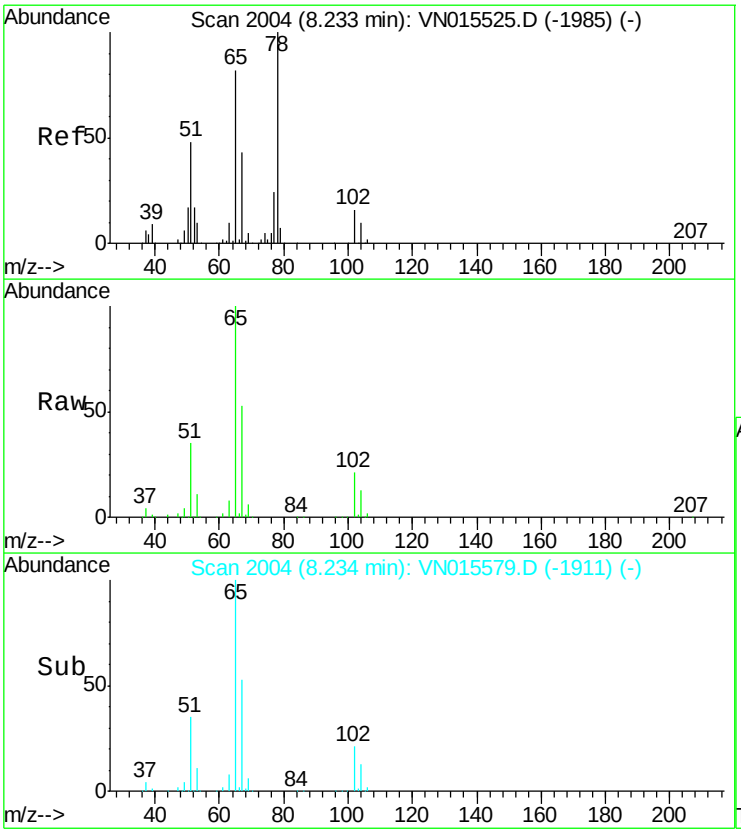


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015579.D
Acq: 22 May 2014 4:46

Tgt Ion:168 Resp: 243539

Ion	Ratio	Lower	Upper
168	100		
99	47.5	39.0	58.4

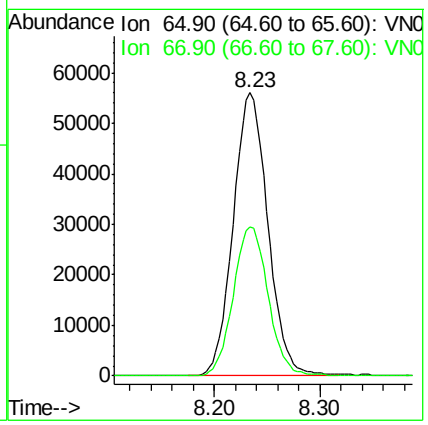




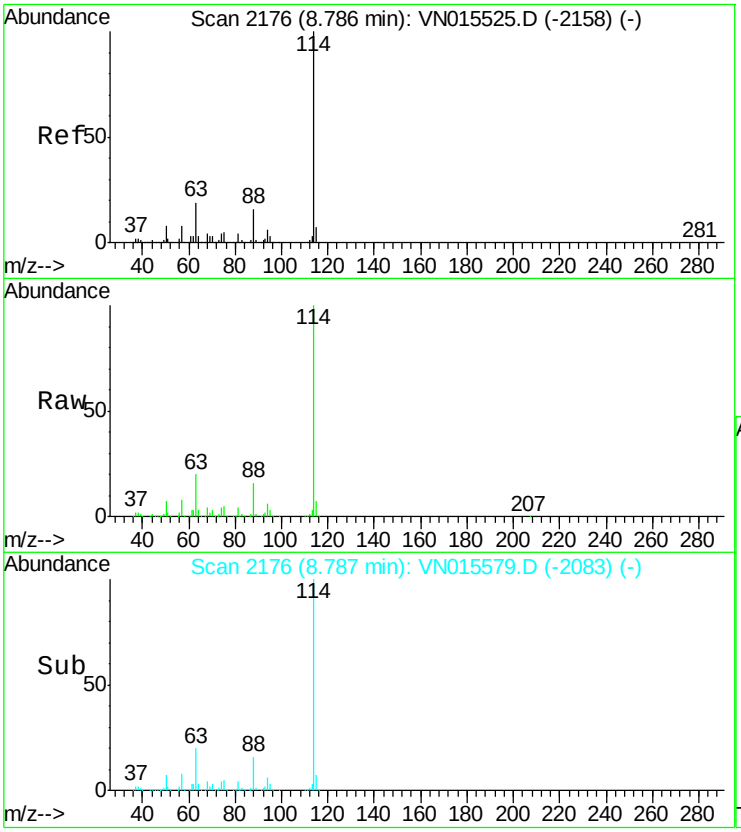
#34
1,2-Dichloroethane-d4
Concen: 45.67 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015579.D
Acq: 22 May 2014 4:46

Tgt Ion: 65 Resp: 127951

Ion	Ratio	Lower	Upper
65	100		
67	53.0	0.0	103.6



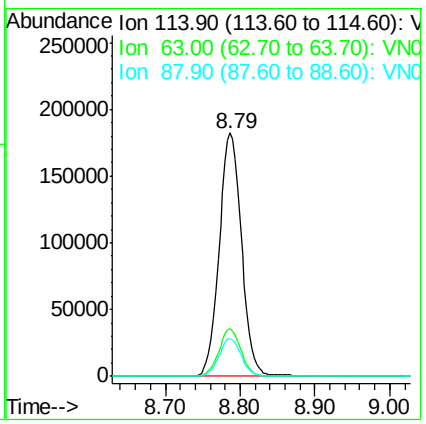
Instrument :
MSVOA_N
ClientSampleId :
TRIPBLANK

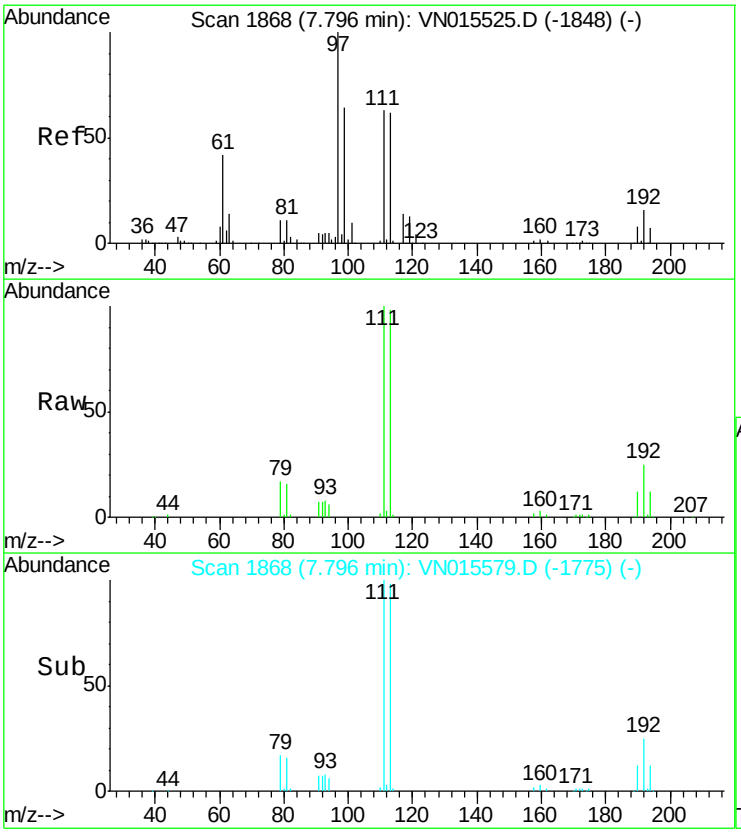


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015579.D
Acq: 22 May 2014 4:46

Tgt Ion:114 Resp: 375855

Ion	Ratio	Lower	Upper
114	100		
63	19.5	0.0	38.6
88	15.6	0.0	32.2

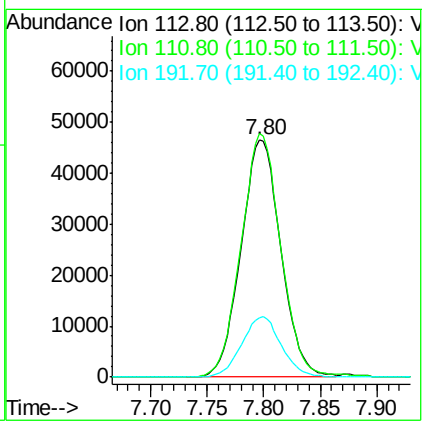




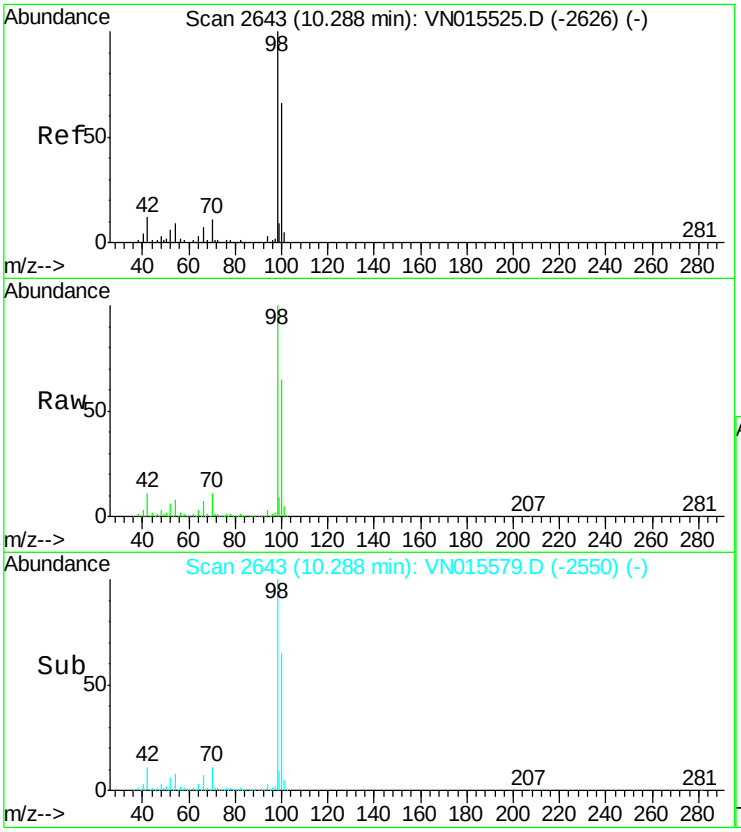
#36
Dibromofluoromethane
Concen: 46.54 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015579.D
Acq: 22 May 2014 4:46

Tgt Ion:113 Resp: 113930

Ion	Ratio	Lower	Upper
113	100		
111	102.5	81.5	122.3
192	25.3	20.0	30.0



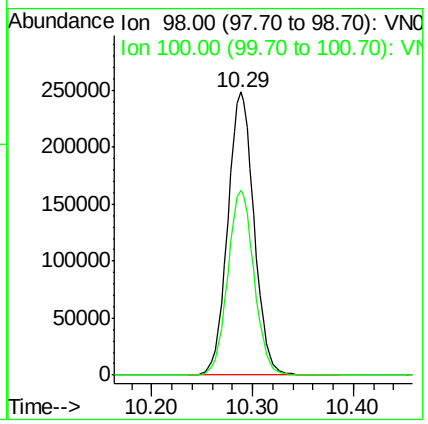
Instrument :
MSVOA_N
ClientSampleId :
TRIPBLANK

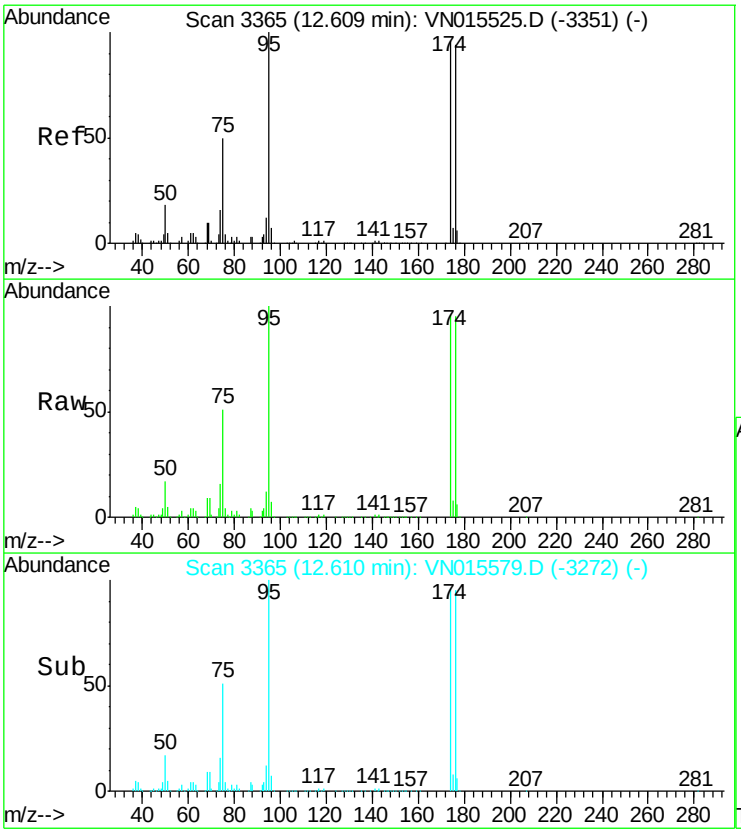


#51
Toluene-d8
Concen: 49.87 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015579.D
Acq: 22 May 2014 4:46

Tgt Ion: 98 Resp: 449808

Ion	Ratio	Lower	Upper
98	100		
100	65.3	52.3	78.5

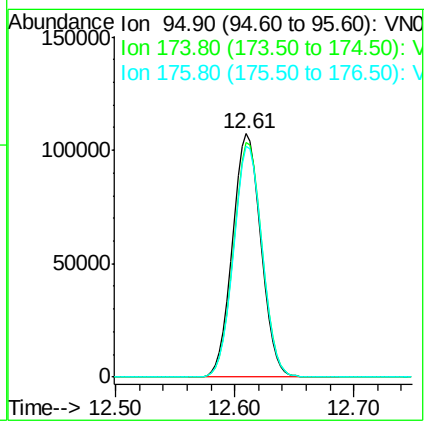




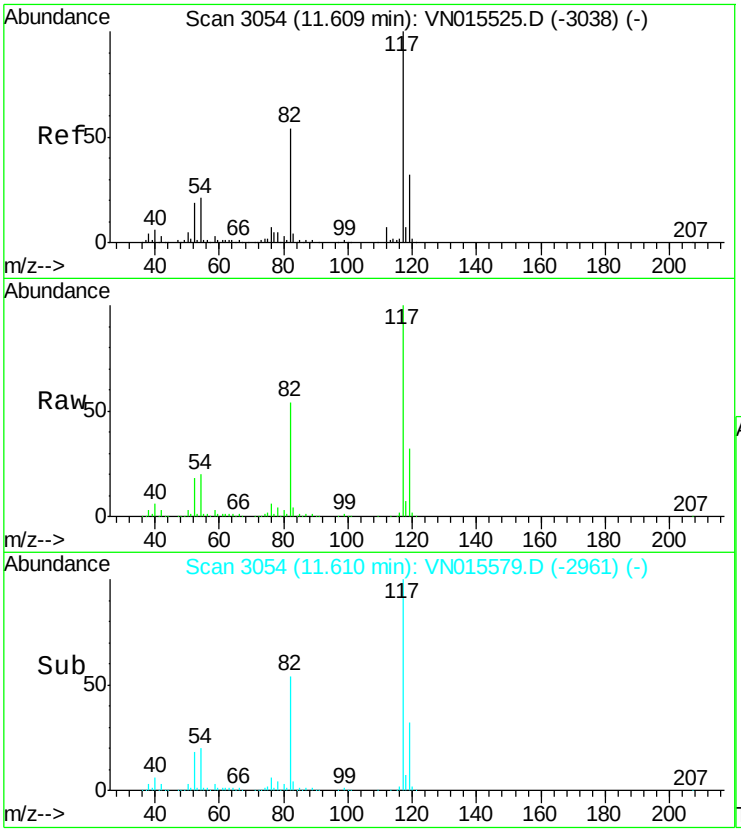
#63
4-Bromofluorobenzene
Concen: 57.73 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015579.D
Acq: 22 May 2014 4:46

Tgt Ion: 95 Resp: 178367

Ion	Ratio	Lower	Upper
95	100		
174	96.3	0.0	191.8
176	95.1	0.0	186.8



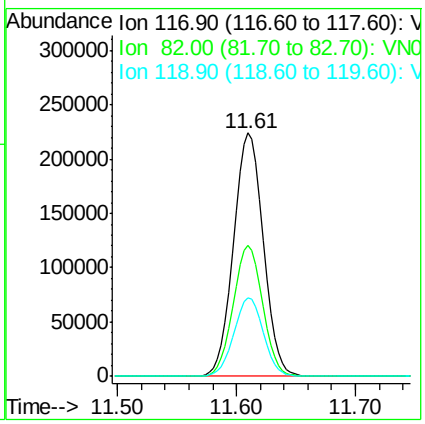
Instrument :
MSVOA_N
ClientSampleId :
TRIPBLANK

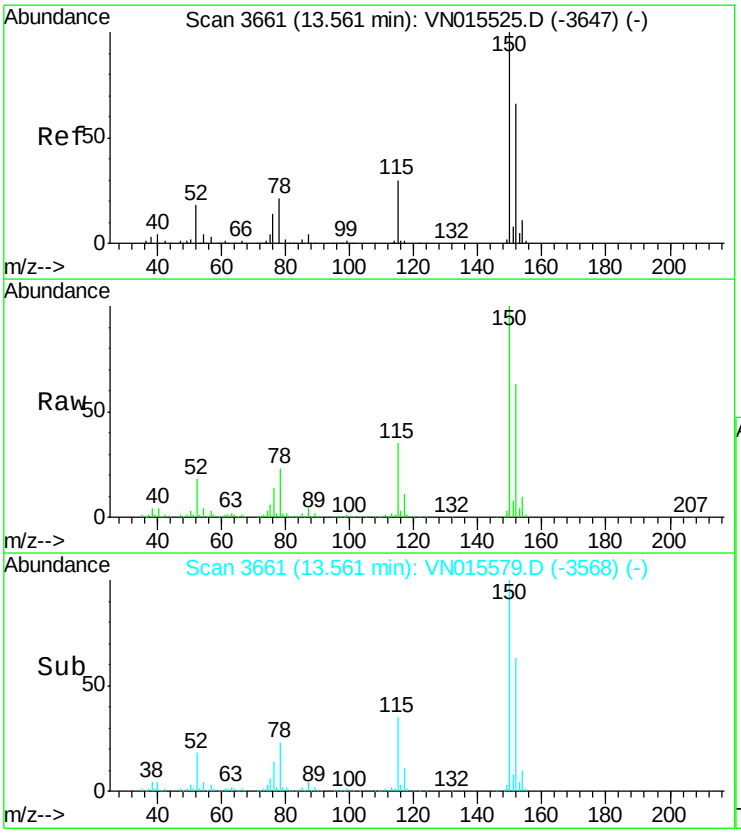


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015579.D
Acq: 22 May 2014 4:46

Tgt Ion:117 Resp: 388788

Ion	Ratio	Lower	Upper
117	100		
82	53.7	43.3	64.9
119	32.4	25.6	38.4

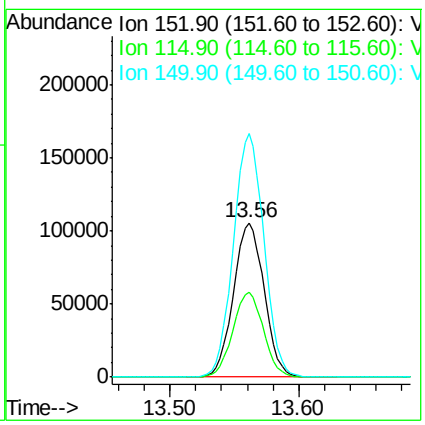




#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015579.D
Acq: 22 May 2014 4:46

Tgt Ion:152 Resp: 174688

Ion	Ratio	Lower	Upper
152	100		
115	54.7	27.2	81.6
150	157.0	0.0	343.6



CALIBRATION SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG No.: F2352

Instrument ID: MSVOA_N Calibration Date(s): 05/20/2014 05/20/2014

Heated Purge: (Y/N) N Calibration Time(s): 17:24 19:55

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF001 = VN015522.D RRF005 = VN015523.D RRF020 = VN015524.D
RRF050 = VN015525.D RRF100 = VN015526.D RRF200 = VN015527.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	% RSD
Vinyl Chloride	0.545	0.496	0.445	0.438	0.442	0.438	0.467	9.4
1,1-Dichloroethene	0.490	0.416	0.383	0.387	0.389	0.389	0.409	10.1
Acetone	0.200	0.177	0.183	0.182	0.173	0.168	0.180	6.1
Methyl tert-butyl Ether	1.663	1.437	1.390	1.404	1.376	1.370	1.440	7.8
Methylene Chloride	0.584	0.471	0.437	0.443	0.438	0.434	0.468	12.5
trans-1,2-Dichloroethene	0.491	0.439	0.413	0.412	0.418	0.415	0.431	7.1
1,1-Dichloroethane	0.913	0.814	0.779	0.796	0.781	0.786	0.812	6.3
2-Butanone	0.278	0.236	0.247	0.259	0.254	0.253	0.255	5.5
Carbon Tetrachloride	0.616	0.508	0.484	0.490	0.483	0.479	0.510	10.3
cis-1,2-Dichloroethene	0.561	0.521	0.485	0.495	0.487	0.489	0.506	5.9
Chloroform	0.977	0.831	0.808	0.808	0.802	0.802	0.838	8.2
1,1,1-Trichloroethane	0.901	0.788	0.750	0.762	0.757	0.750	0.785	7.5
Benzene	1.562	1.334	1.274	1.291	1.266	1.253	1.330	8.8
1,2-Dichloroethane	0.563	0.492	0.463	0.478	0.462	0.456	0.486	8.2
Trichloroethene	0.446	0.361	0.353	0.358	0.358	0.359	0.372	9.8
Toluene	0.948	0.853	0.813	0.825	0.812	0.807	0.843	6.4
Tetrachloroethene	0.469	0.393	0.376	0.384	0.374	0.370	0.394	9.5
Chlorobenzene	1.304	1.092	1.017	1.037	1.028	1.014	1.082	10.4
Ethyl Benzene	1.972	1.759	1.697	1.765	1.728	1.709	1.772	5.7
m/p-Xylenes	0.783	0.683	0.650	0.681	0.669	0.671	0.689	6.9
o-Xylene	0.715	0.688	0.651	0.686	0.670	0.660	0.678	3.4
n-propylbenzene	5.005	4.408	4.130	4.033	3.990	4.055	4.270	9.1
tert-Butylbenzene	4.092	3.387	2.961	2.789	2.707	2.689	3.104	17.7
1,2,4-Trimethylbenzene	4.165	3.610	3.334	3.228	3.088	3.001	3.404	12.6
sec-Butylbenzene	4.680	4.107	3.781	3.635	3.589	3.586	3.896	11.1
1,3-Dichlorobenzene	2.112	1.787	1.683	1.683	1.664	1.652	1.764	10
1,4-Dichlorobenzene	2.127	1.695	1.637	1.656	1.632	1.639	1.731	11.3
n-Butylbenzene	2.631	2.508	2.473	2.556	2.545	2.539	2.542	2.1
1,2-Dichlorobenzene	2.100	1.782	1.733	1.683	1.609	1.586	1.749	10.7
1,2-Dichloroethane-d4	0.718	0.535	0.603	0.533	0.539	0.523	0.575	13.2
Dibromofluoromethane	0.384	0.296	0.344	0.310	0.314	0.306	0.326	10
Toluene-d8	1.377	1.153	1.268	1.131	1.148	1.121	1.200	8.5
4-Bromofluorobenzene	0.459	0.370	0.422	0.402	0.414	0.400	0.411	7.1

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG No.: F2352

Instrument ID: MSVOA_N Calibration Date(s): 05/20/2014 05/20/2014

Heated Purge: (Y/N) N Calibration Time(s): 17:24 19:55

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF001 = VN015522.D RRF005 = VN015523.D RRF020 = VN015524.D
RRF050 = VN015525.D RRF100 = VN015526.D RRF200 = VN015527.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	% RSD
1,4-Dioxane	0.005	0.005	0.005	0.005	0.005	0.004	0.005	7.5

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Response Factor Report 7890

Method Path : W:\HPCHEM1\MSVOA N\METHODS\
Method File : 82N052014W.M
Title : SW846 8260
Last Update : Wed May 21 02:16:40 2014
Response Via : Initial Calibration

Calibration Files
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50 =VN015525.D 100 =VN015526.D 200 =VN015527.D

		Compound	1	5	20	50	100	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluorom	0.551	0.476	0.399	0.378	0.390	0.380	0.429	16.32
3)	T	Chlorodifluoromet	0.230	0.249	0.299	0.274	0.287	0.283	0.270	9.55
4)	P	Chloromethane	0.887	0.603	0.492	0.460	0.456	0.456	0.559	30.45
5)	C	Vinyl Chloride	0.545	0.496	0.445	0.438	0.442	0.438	0.467	9.40#
6)	T	Bromomethane	0.391	0.294	0.254	0.259	0.269	0.279	0.291	17.51
7)	T	Chloroethane	0.322	0.317	0.285	0.284	0.282	0.277	0.294	6.72
8)	T	Trichlorofluorome	0.953	0.778	0.716	0.703	0.712	0.690	0.759	13.16
9)	T	Diethyl Ether	0.319	0.284	0.267	0.275	0.270	0.269	0.281	6.98
10)	T	1,1,2-Trichlorotr	0.533	0.432	0.414	0.399	0.400	0.388	0.428	12.56
11)	T	Methyl Iodide	0.256	0.338	0.461	0.539	0.553	0.552	0.450	27.96
12)	T	Tert butyl alcoho	0.115	0.078	0.059	0.061	0.058	0.055	0.071	32.69
13)	CM	1,1-Dichloroethen	0.490	0.416	0.383	0.387	0.389	0.389	0.409	10.08#
14)	T	Acrolein	0.057	0.049	0.050	0.050	0.052	0.054	0.052	6.10
15)	T	Allyl chloride	0.883	0.738	0.661	0.686	0.676	0.649	0.716	12.22
16)	T	Acrylonitrile	0.162	0.177	0.178	0.197	0.194	0.197	0.184	7.61
17)	T	Acetone	0.200	0.177	0.183	0.182	0.173	0.168	0.180	6.08
18)	T	Carbon Disulfide	1.389	1.148	1.072	1.098	1.093	1.117	1.153	10.27
19)	T	Methyl Acetate	1.021	0.785	0.832	0.863	0.865	0.871	0.873	9.10
20)	T	Methyl tert-butyl	1.663	1.437	1.390	1.404	1.376	1.370	1.440	7.76
21)	T	Methylene Chlorid	0.584	0.471	0.437	0.443	0.438	0.434	0.468	12.47
22)	T	trans-1,2-Dichlor	0.491	0.439	0.413	0.412	0.418	0.415	0.431	7.15
23)	T	Diisopropyl ether	1.672	1.473	1.415	1.445	1.420	1.418	1.474	6.75
24)	T	Vinyl Acetate	0.598	0.716	0.720	0.770	0.793	0.797	0.732	10.14
25)	P	1,1-Dichloroethan	0.913	0.814	0.779	0.796	0.781	0.786	0.812	6.35
26)	T	2-Butanone	0.278	0.236	0.247	0.259	0.254	0.253	0.255	5.50
27)	T	2,2-Dichloropropa	0.839	0.745	0.707	0.687	0.666	0.655	0.717	9.48
28)	T	cis-1,2-Dichloroe	0.561	0.521	0.485	0.495	0.487	0.489	0.506	5.92
29)	T	Bromochloromethan	0.265	0.279	0.394	0.383	0.355	0.347	0.337	15.85
30)	T	Tetrahydrofuran	0.202	0.173	0.159	0.168	0.163	0.163	0.171	9.34
31)	C	Chloroform	0.977	0.831	0.808	0.808	0.802	0.802	0.838	8.25#
32)	T	Cyclohexane	1.668	0.928	0.764	0.721	0.718	0.699	0.916	41.21
33)	T	1,1,1-Trichloroet	0.901	0.788	0.750	0.762	0.757	0.750	0.785	7.48
34)	S	1,2-Dichloroethan	0.718	0.535	0.603	0.533	0.539	0.523	0.575	13.17
35)	I	1,4-Difluorobenzene	----------ISTD----------							
36)	S	Dibromofluorometh	0.384	0.296	0.344	0.310	0.314	0.306	0.326	9.99
37)	T	1,1-Dichloroprope	0.502	0.449	0.427	0.434	0.435	0.428	0.446	6.45
38)	T	Ethyl Acetate	0.408	0.413	0.373	0.400	0.384	0.383	0.393	4.00
39)	T	Carbon Tetrachlor	0.616	0.508	0.484	0.490	0.483	0.479	0.510	10.35
40)	T	Methylcyclohexane	0.696	0.580	0.550	0.533	0.539	0.525	0.570	11.26
41)	TM	Benzene	1.562	1.334	1.274	1.291	1.266	1.253	1.330	8.80
42)	T	Methacrylonitrile	0.254	0.221	0.222	0.233	0.232	0.232	0.233	5.08
43)	TM	1,2-Dichloroethan	0.563	0.492	0.463	0.478	0.462	0.456	0.486	8.22
44)	T	Isopropyl Acetate	0.851	0.682	0.661	0.698	0.678	0.677	0.708	10.06
45)	TM	Trichloroethene	0.446	0.361	0.353	0.358	0.358	0.359	0.372	9.75
46)	C	1,2-Dichloropropa	0.390	0.347	0.328	0.329	0.329	0.326	0.342	7.35#
47)	T	Dibromomethane	0.254	0.224	0.218	0.223	0.215	0.215	0.225	6.47
48)	T	Bromodichlorometh	0.515	0.446	0.441	0.457	0.454	0.454	0.461	5.90
49)	T	Methyl methacryla	0.326	0.333	0.332	0.354	0.353	0.350	0.341	3.63
50)	T	1,4-Dioxane	0.005	0.005	0.005	0.005	0.005	0.004	0.005	7.48
51)	S	Toluene-d8	1.377	1.153	1.268	1.131	1.148	1.121	1.200	8.49
52)	T	4-Methyl-2-Pentan	0.453	0.389	0.372	0.392	0.377	0.364	0.391	8.23

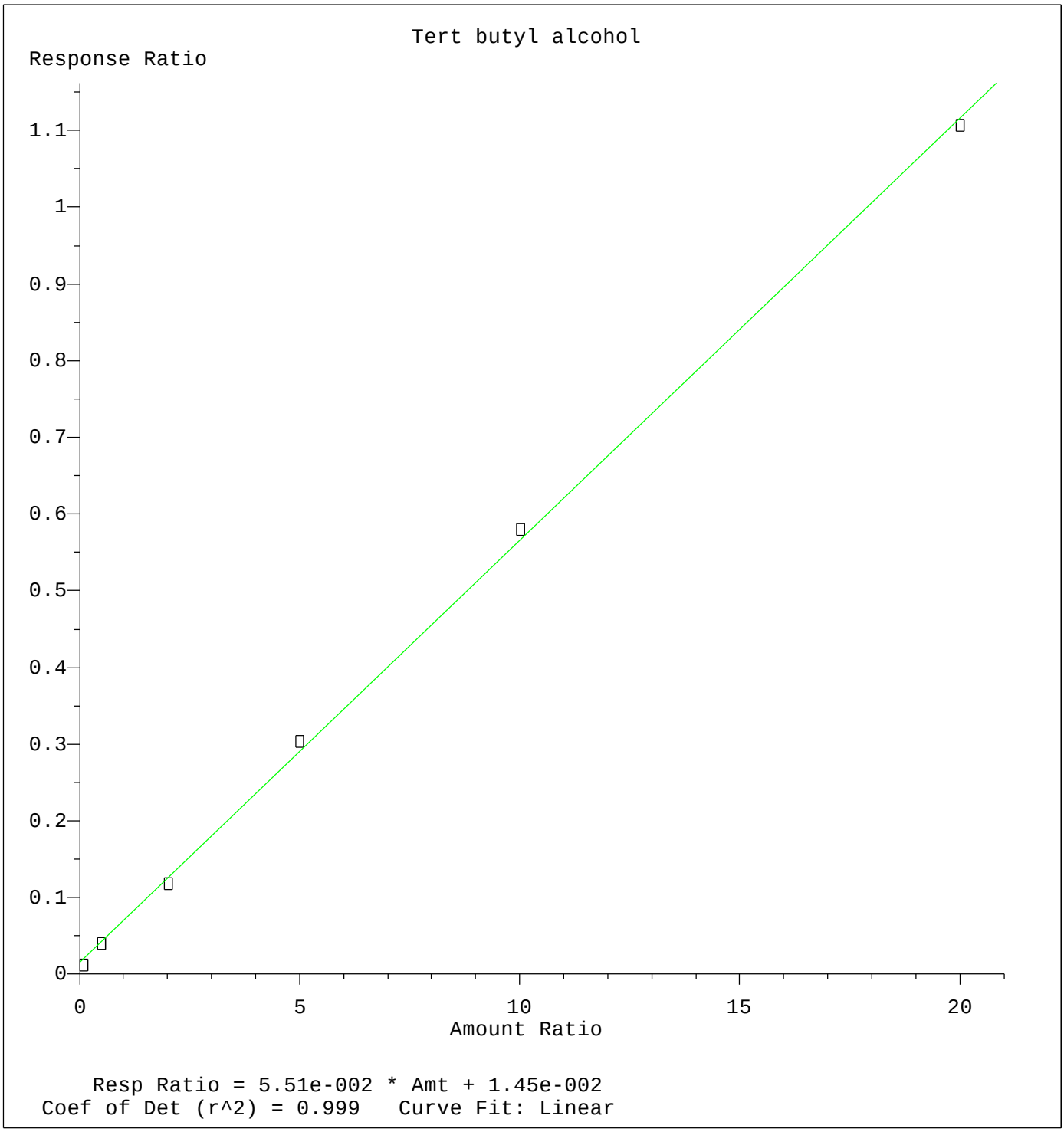
Response Factor Report 7890

Method Path : W:\HPCHEM1\MSVOA N\METHODS\
Method File : 82N052014W.M
Title : SW846 8260
Last Update : Wed May 21 02:16:40 2014
Response Via : Initial Calibration

Calibration Files
1 =VN015522.D 5 =VN015523.D 20 =VN015524.D
50 =VN015525.D 100 =VN015526.D 200 =VN015527.D

		Compound	1	5	20	50	100	200	Avg	%RSD
53)	CM	Toluene	0.948	0.853	0.813	0.825	0.812	0.807	0.843	6.40#
54)	T	t-1,3-Dichloropro	0.450	0.455	0.461	0.487	0.485	0.490	0.472	3.77
55)	T	cis-1,3-Dichlorop	0.581	0.495	0.504	0.521	0.522	0.527	0.525	5.71
56)	T	1,1,2-Trichloroet	0.369	0.322	0.313	0.324	0.315	0.310	0.326	6.78
57)	T	Ethyl methacrylat	0.500	0.467	0.468	0.492	0.485	0.480	0.482	2.71
58)	T	1,3-Dichloropropa	0.616	0.551	0.529	0.538	0.523	0.517	0.546	6.68
59)	T	2-Chloroethyl Vin	0.033	0.033	0.036	0.062	0.054	0.054	0.045	28.08
60)	T	2-Hexanone	0.266	0.251	0.249	0.268	0.255	0.245	0.256	3.68
61)	T	Dibromochlorometh	0.394	0.382	0.374	0.396	0.398	0.390	0.389	2.35
62)	T	1,2-Dibromoethane	0.360	0.333	0.321	0.341	0.335	0.330	0.337	3.87
63)	S	4-Bromofluorobenz	0.459	0.370	0.422	0.402	0.414	0.400	0.411	7.12
64)	I	Chlorobenzene-d5	----------ISTD----------							
65)	T	Tetrachloroethene	0.469	0.393	0.376	0.384	0.374	0.370	0.394	9.50
66)	PM	Chlorobenzene	1.304	1.092	1.017	1.037	1.028	1.014	1.082	10.41
67)	T	1,1,1,2-Tetrachlo	0.457	0.414	0.397	0.414	0.401	0.390	0.412	5.78
68)	C	Ethyl Benzene	1.972	1.759	1.697	1.765	1.728	1.709	1.772	5.74#
69)	T	m/p-Xylenes	0.783	0.683	0.650	0.681	0.669	0.671	0.689	6.86
70)	T	o-Xylene	0.715	0.688	0.651	0.686	0.670	0.660	0.678	3.40
71)	T	Styrene	1.095	0.991	1.013	1.104	1.100	1.092	1.066	4.72
72)	P	Bromoform	0.386	0.321	0.326	0.354	0.349	0.337	0.345	6.79
73)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
74)	T	Isopropylbenzene	5.514	4.348	4.004	3.776	3.669	3.679	4.165	17.03
75)	T	N-amyl acetate	1.552	1.343	1.223	1.268	1.220	1.254	1.310	9.65
76)	P	1,1,2,2-Tetrachlo	1.557	1.219	1.096	1.041	0.954	0.930	1.133	20.55
77)	T	1,2,3-Trichloropr	1.237	1.121	0.964	0.904	0.841	0.812	0.980	17.05
78)	T	Bromobenzene	1.362	1.136	1.038	1.021	0.978	0.971	1.084	13.67
79)	T	n-propylbenzene	5.005	4.408	4.130	4.033	3.990	4.055	4.270	9.12
80)	T	2-Chlorotoluene	3.638	2.849	2.610	2.480	2.407	2.411	2.733	17.33
81)	T	1,3,5-Trimethylbe	4.183	3.641	3.352	3.180	3.045	3.013	3.402	13.13
82)	T	trans-1,4-Dichlor	0.409	0.338	0.333	0.338	0.320	0.329	0.344	9.39
83)	T	4-Chlorotoluene	3.200	2.604	2.467	2.422	2.416	2.433	2.590	11.85
84)	T	tert-Butylbenzene	4.092	3.387	2.961	2.789	2.707	2.689	3.104	17.68
85)	T	1,2,4-Trimethylbe	4.165	3.610	3.334	3.228	3.088	3.001	3.404	12.60
86)	T	sec-Butylbenzene	4.680	4.107	3.781	3.635	3.589	3.586	3.896	11.08
87)	T	p-Isopropyltoluen	3.803	3.532	3.321	3.227	3.194	3.141	3.370	7.50
88)	T	1,3-Dichlorobenze	2.112	1.787	1.683	1.683	1.664	1.652	1.764	10.05
89)	T	1,4-Dichlorobenze	2.127	1.695	1.637	1.656	1.632	1.639	1.731	11.30
90)	T	n-Butylbenzene	2.631	2.508	2.473	2.556	2.545	2.539	2.542	2.08
91)	T	Hexachloroethane	0.766	0.656	0.626	0.617	0.599	0.584	0.641	10.30
92)	T	1,2-Dichlorobenze	2.100	1.782	1.733	1.683	1.609	1.586	1.749	10.71
93)	T	1,2-Dibromo-3-Chl	0.200	0.183	0.188	0.186	0.182	0.185	0.187	3.56
94)	T	1,2,4-Trichlorobe	0.616	0.630	0.823	0.946	0.965	1.038	0.836	21.44
95)	T	Hexachlorobutadie	0.740	0.693	0.642	0.620	0.576	0.572	0.641	10.33
96)	T	Naphthalene	1.854	1.366	1.806	2.233	2.389	2.618	2.044	22.28
97)	T	1,2,3-Trichlorobe	0.693	0.655	0.815	0.916	0.936	1.018	0.839	17.12

(#) = Out of Range



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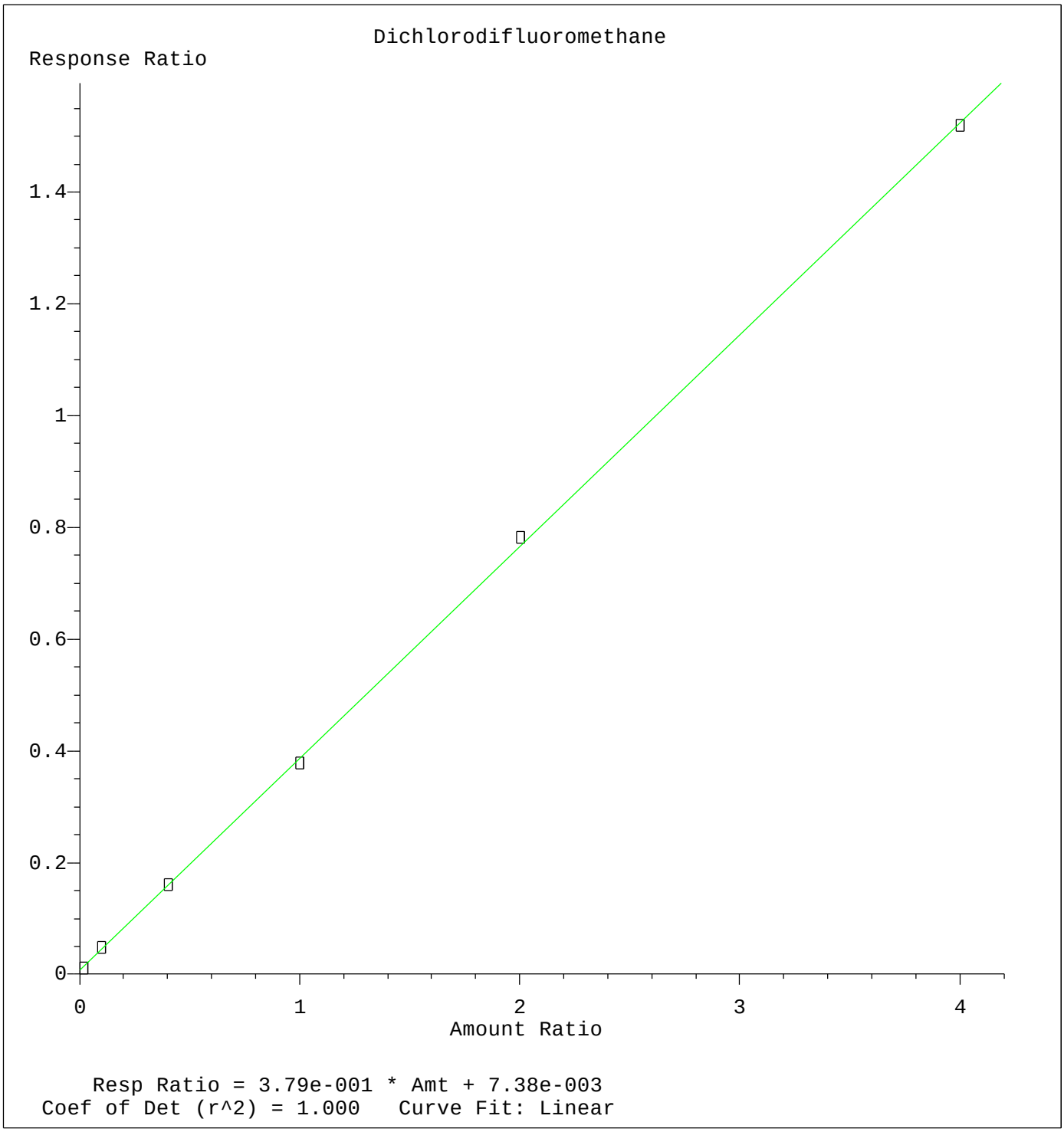
Calibration Table Last Updated: Wed May 21 02:15:19 2014



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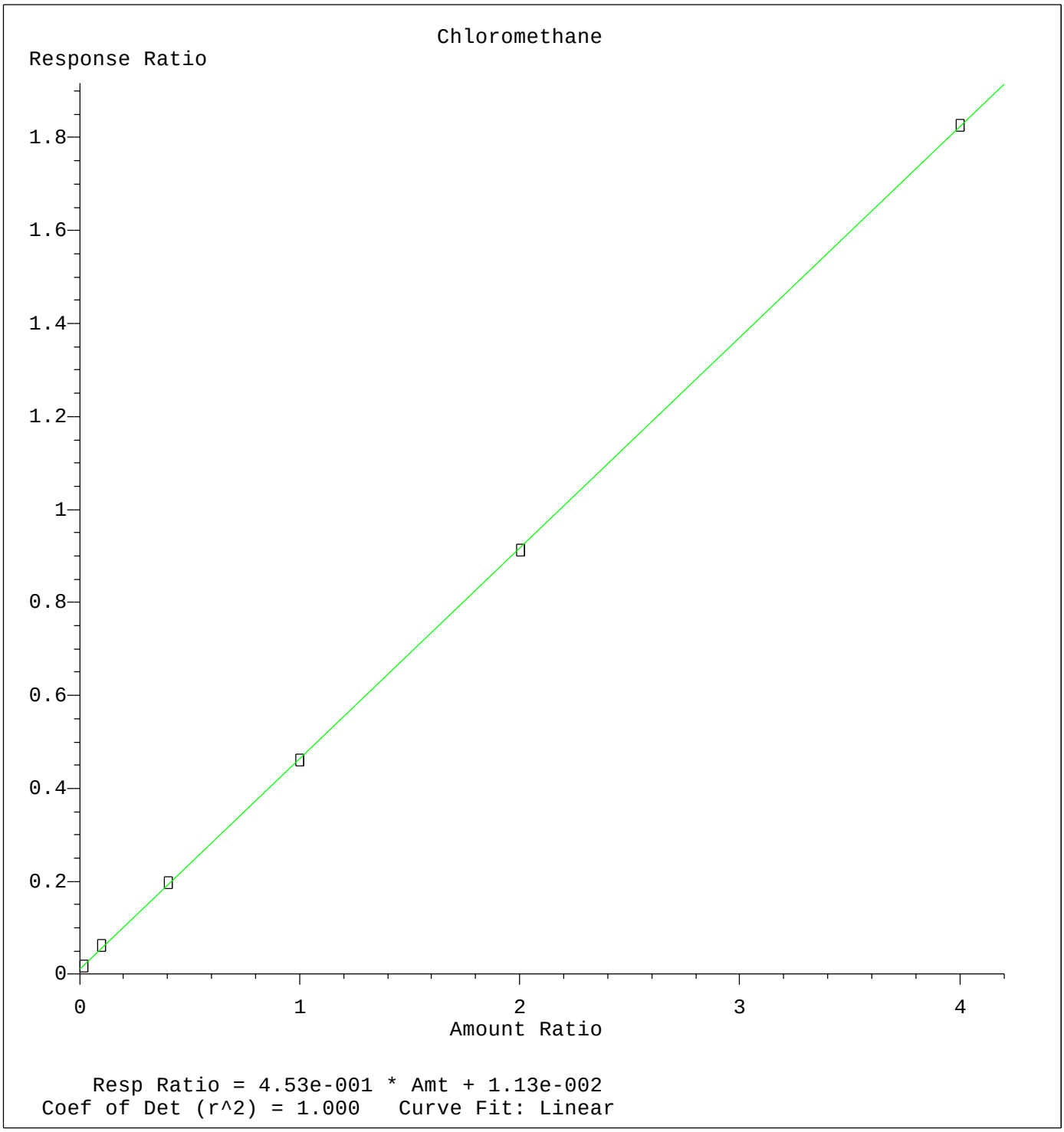
Calibration Table Last Updated: Wed May 21 01:37:50 2014



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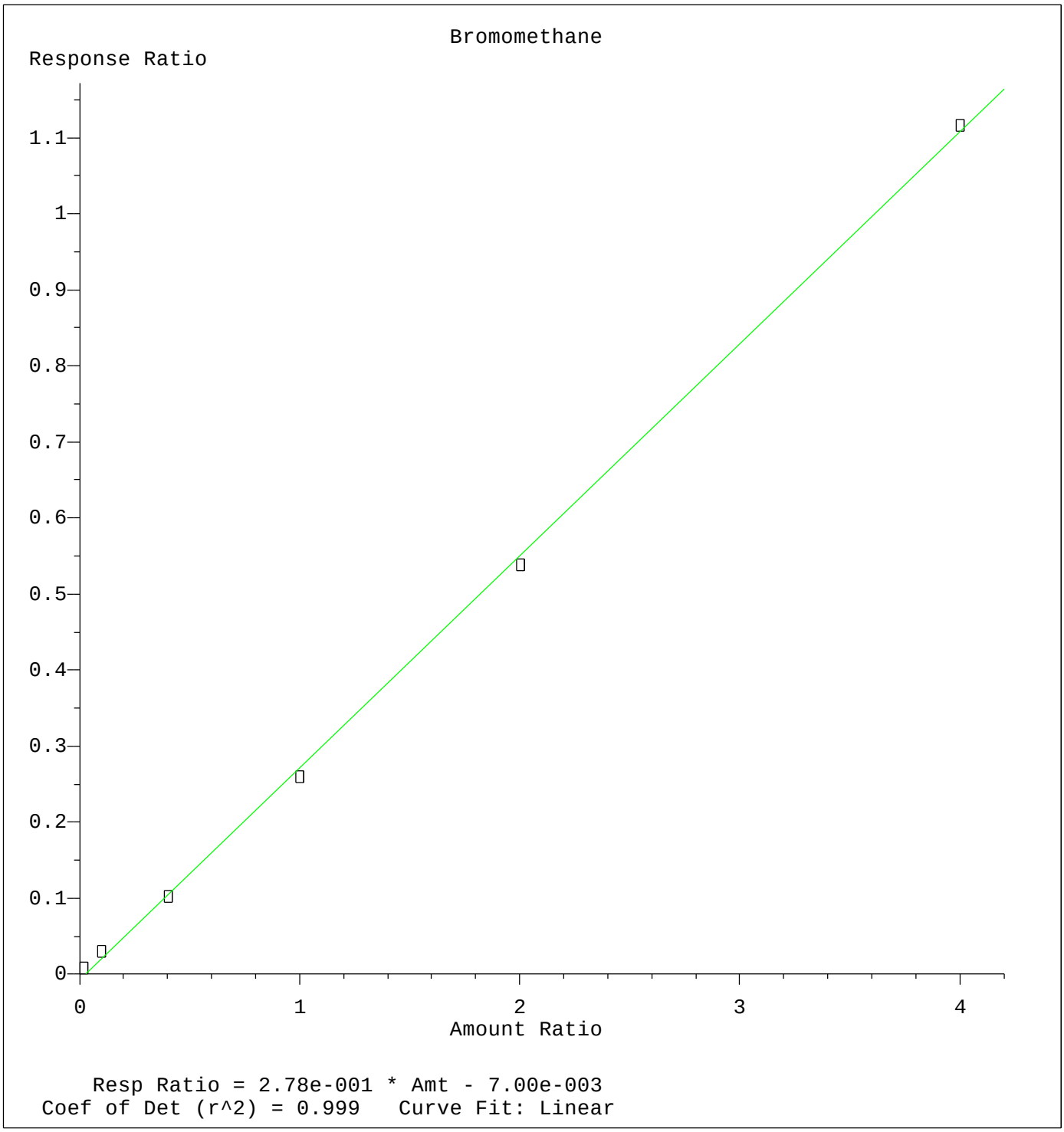

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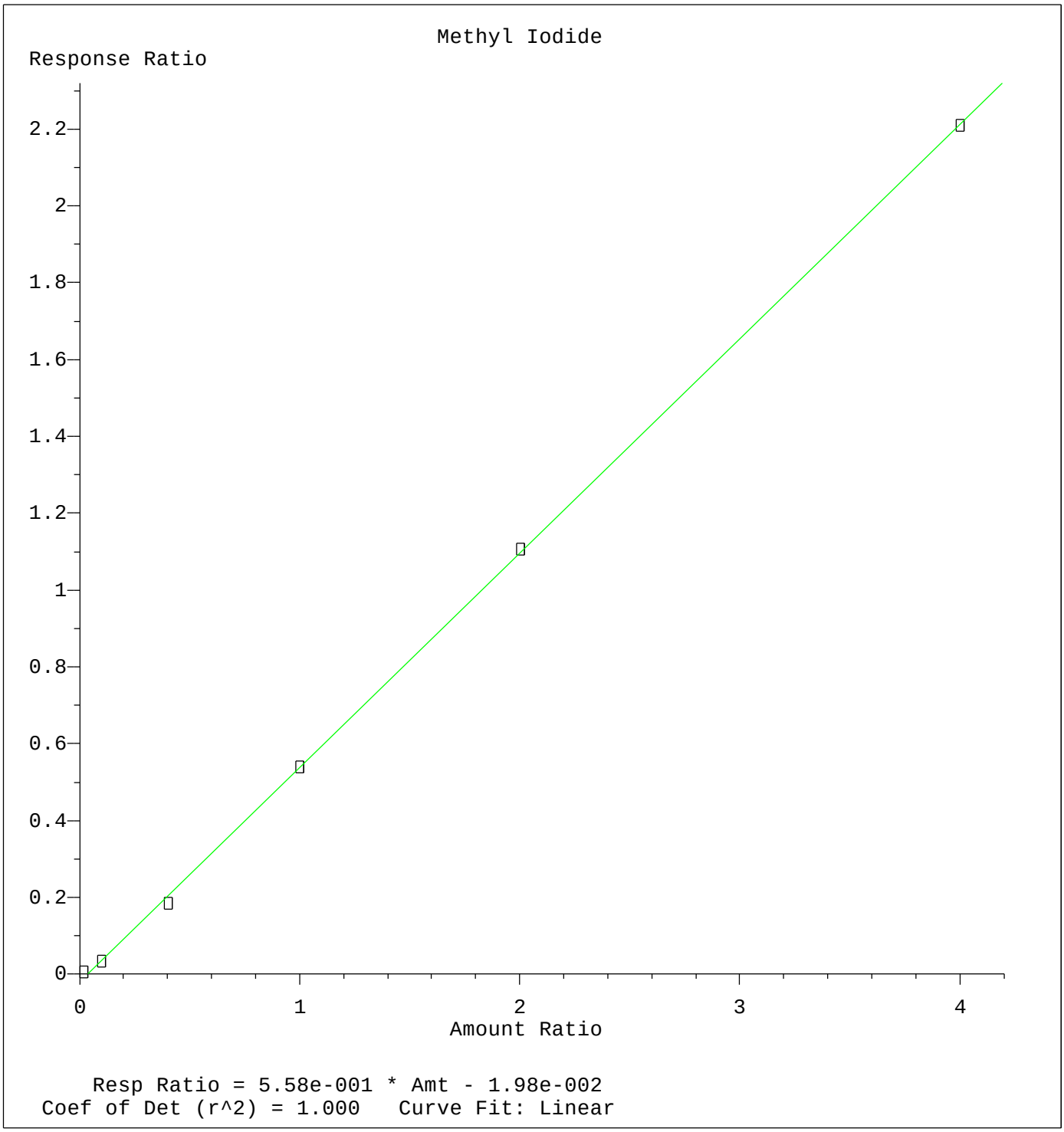

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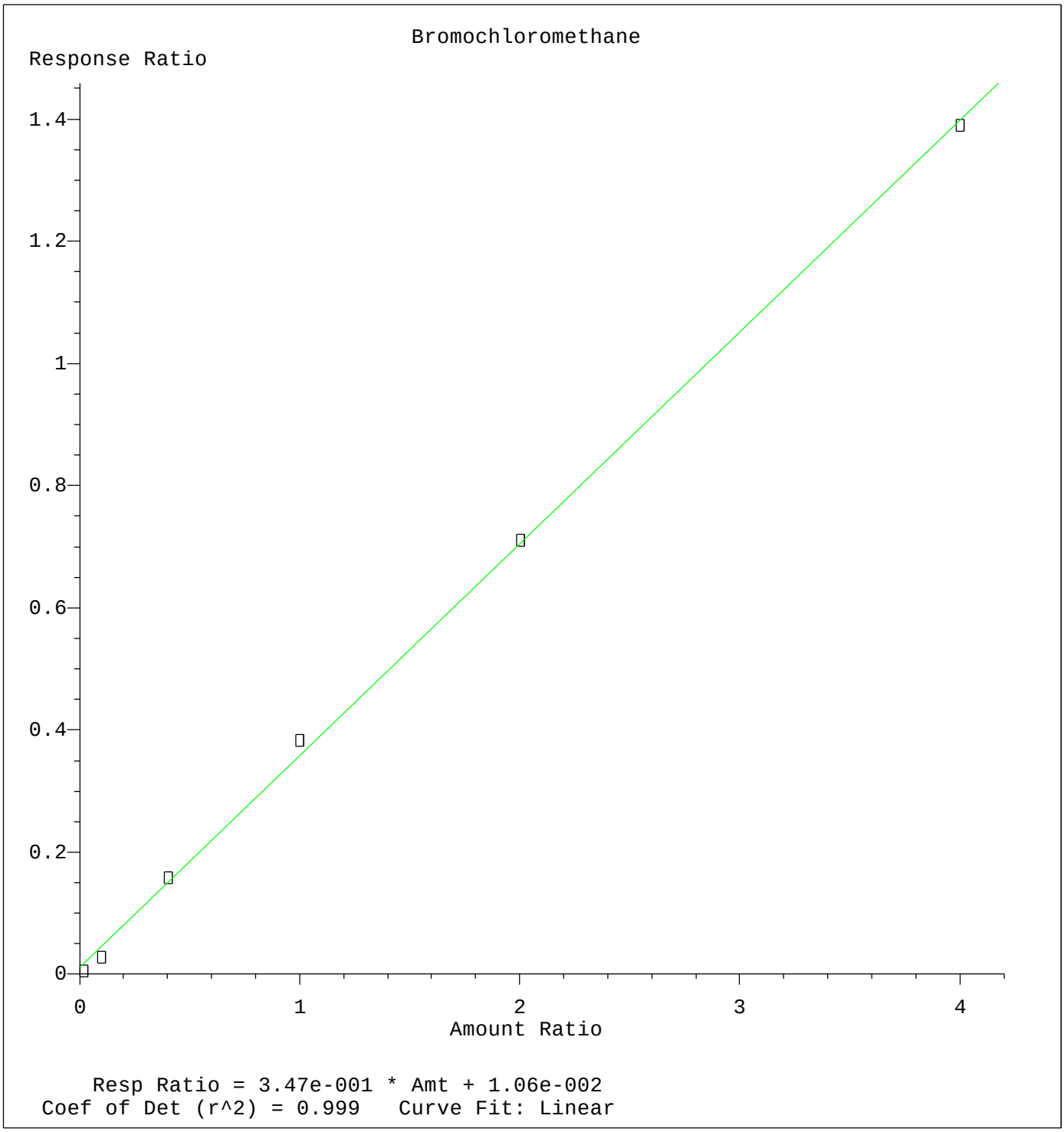
Calibration Table Last Updated: Wed May 21 01:42:15 2014



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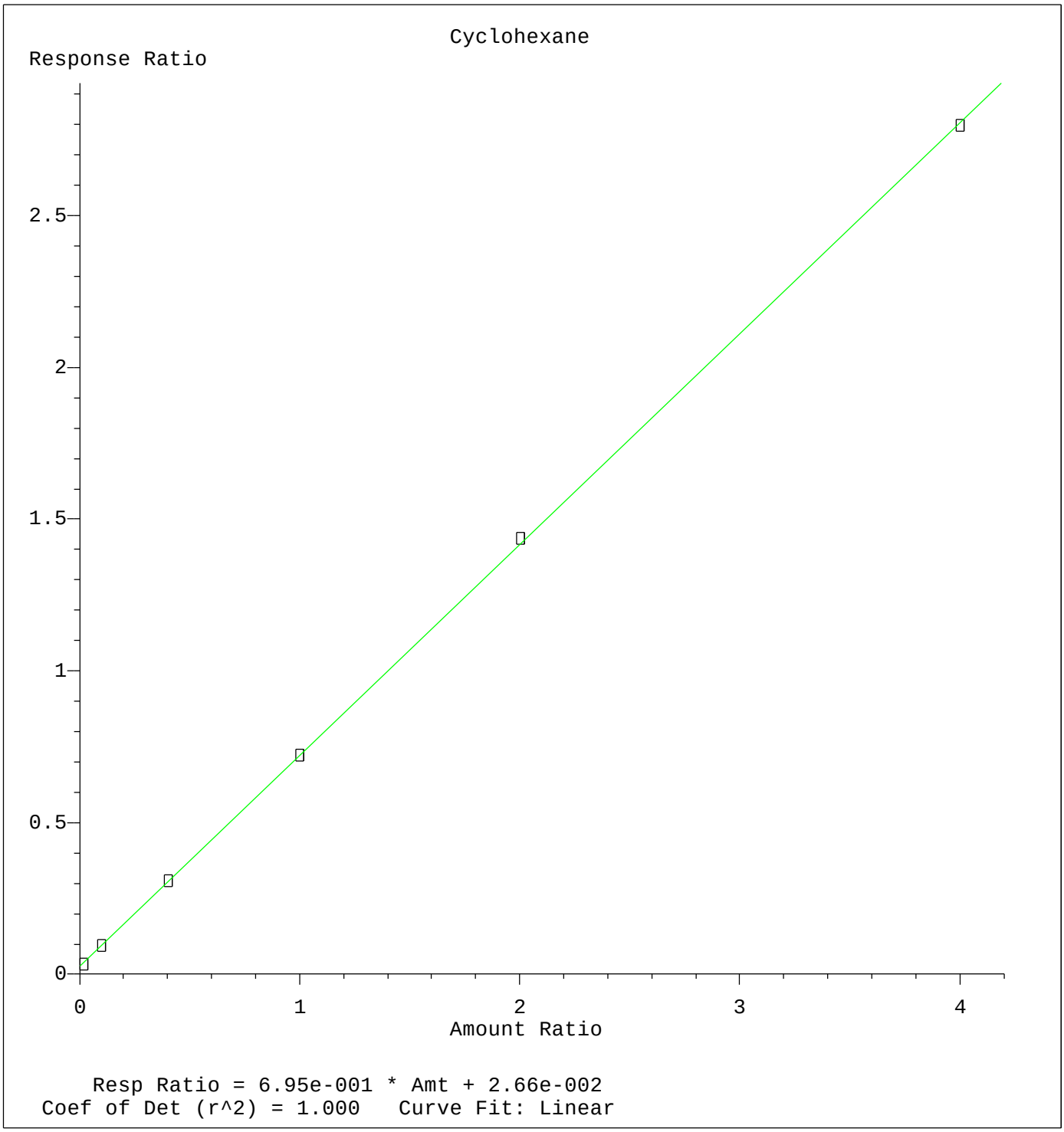

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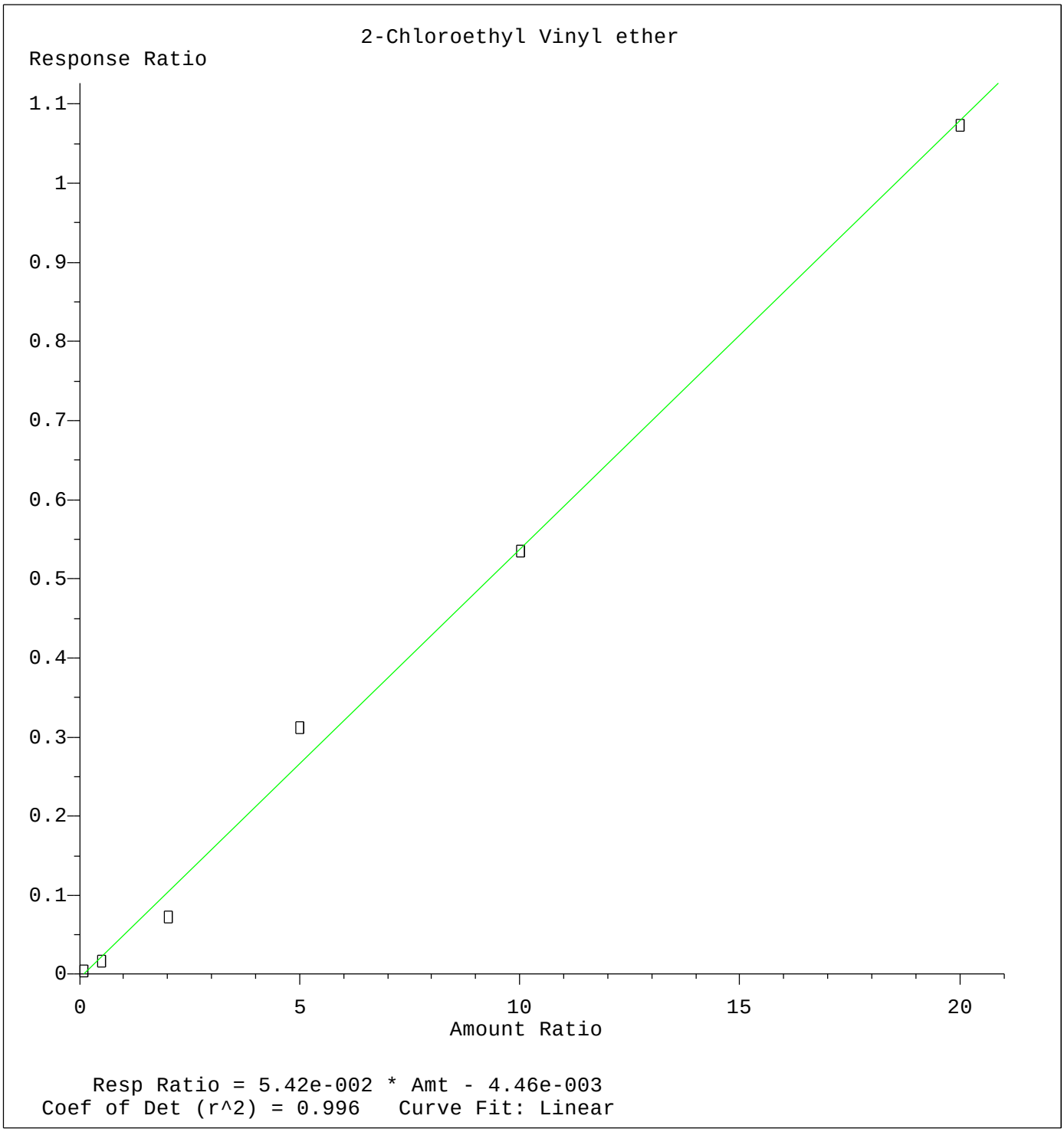

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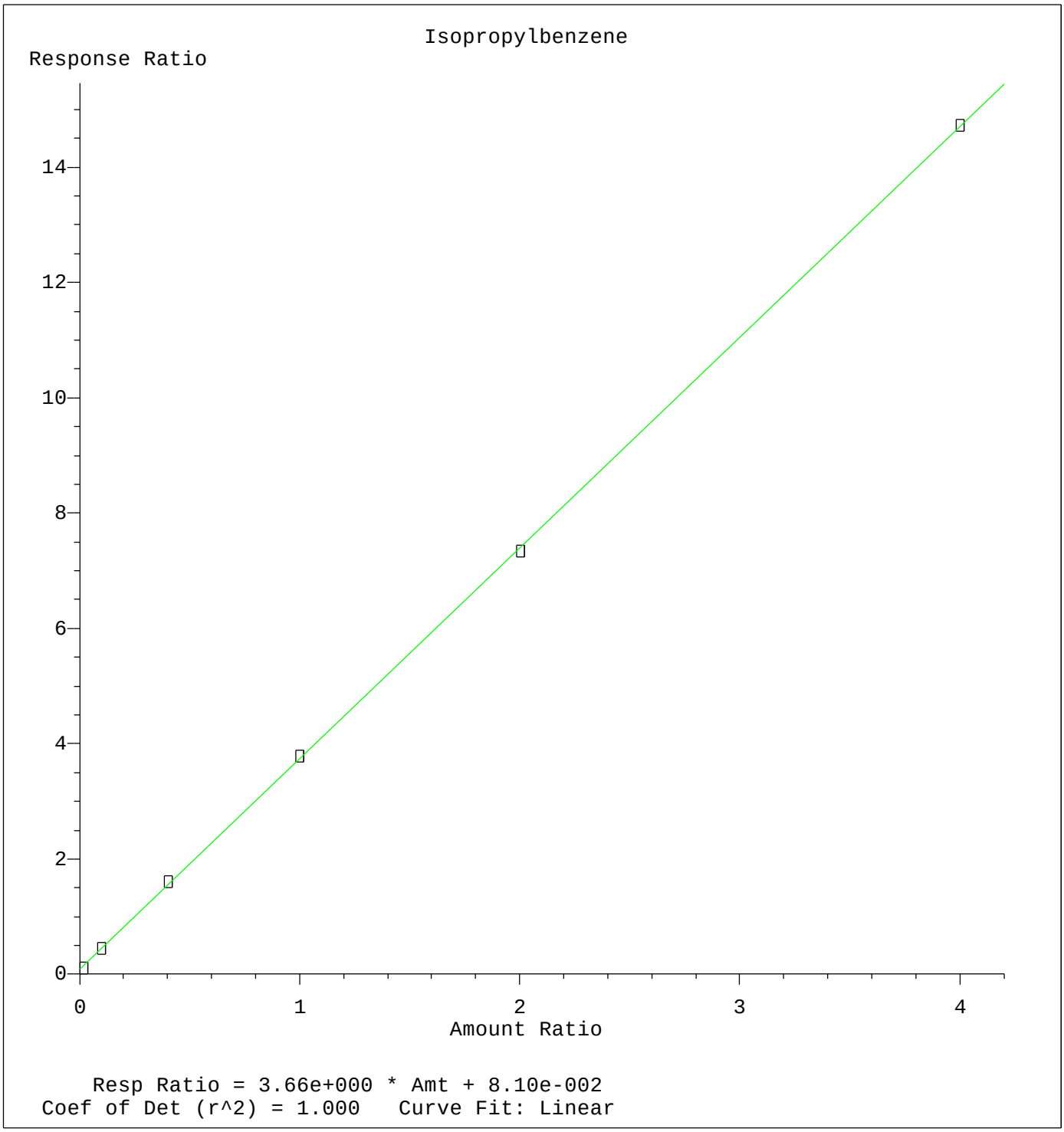
Calibration Table Last Updated: Wed May 21 01:43:14 2014



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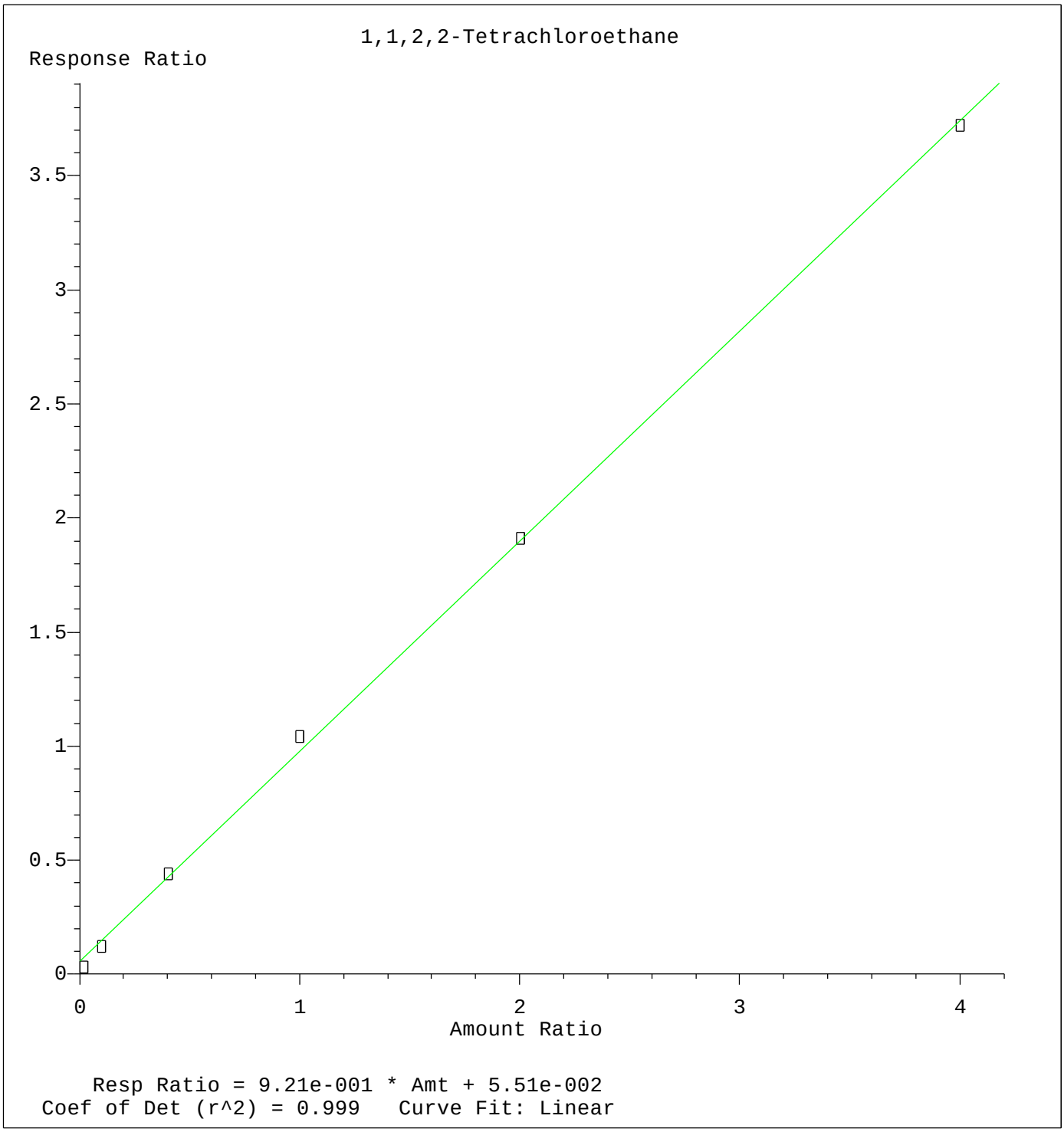

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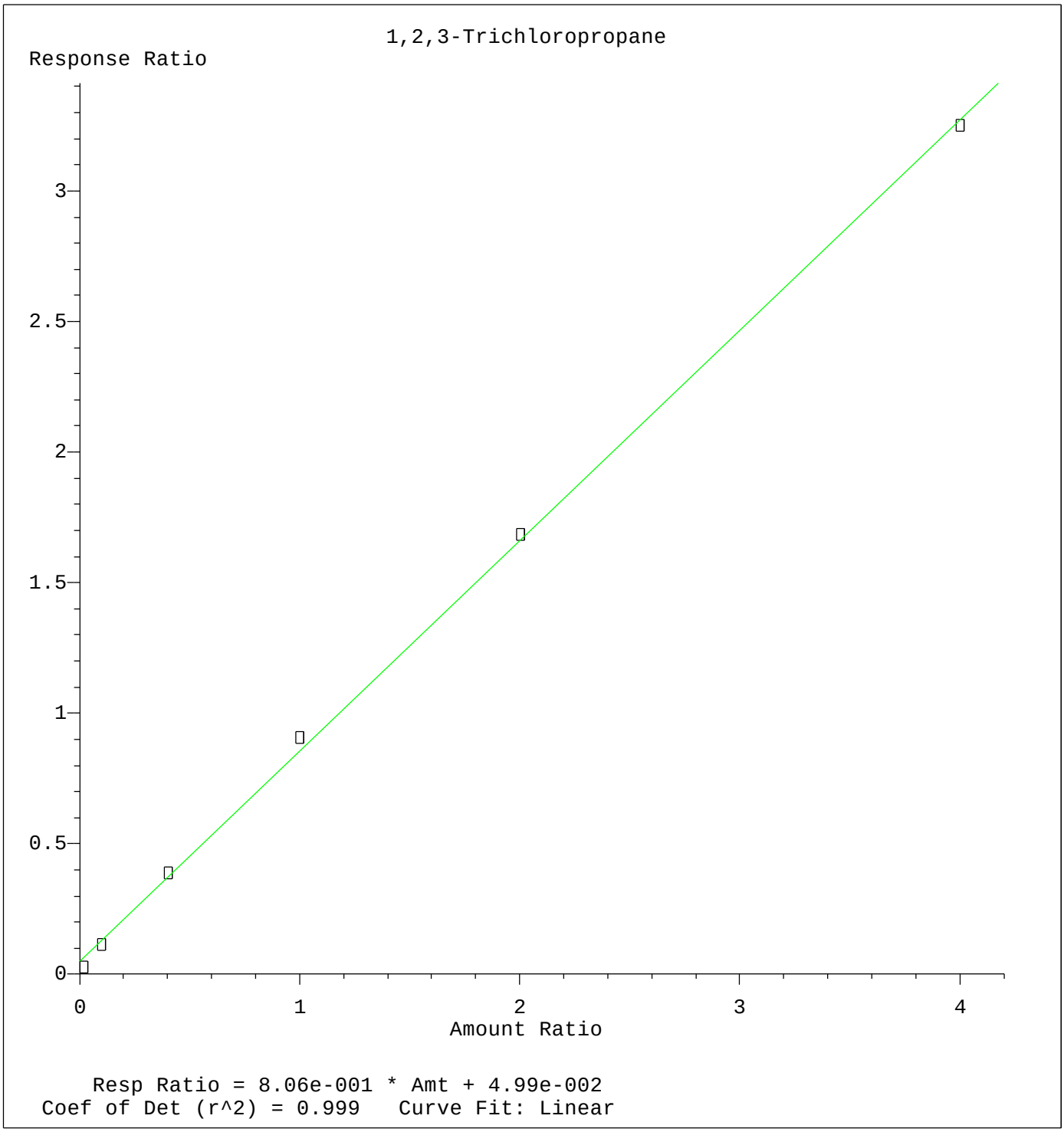
Calibration Table Last Updated: Wed May 21 01:44:17 2014



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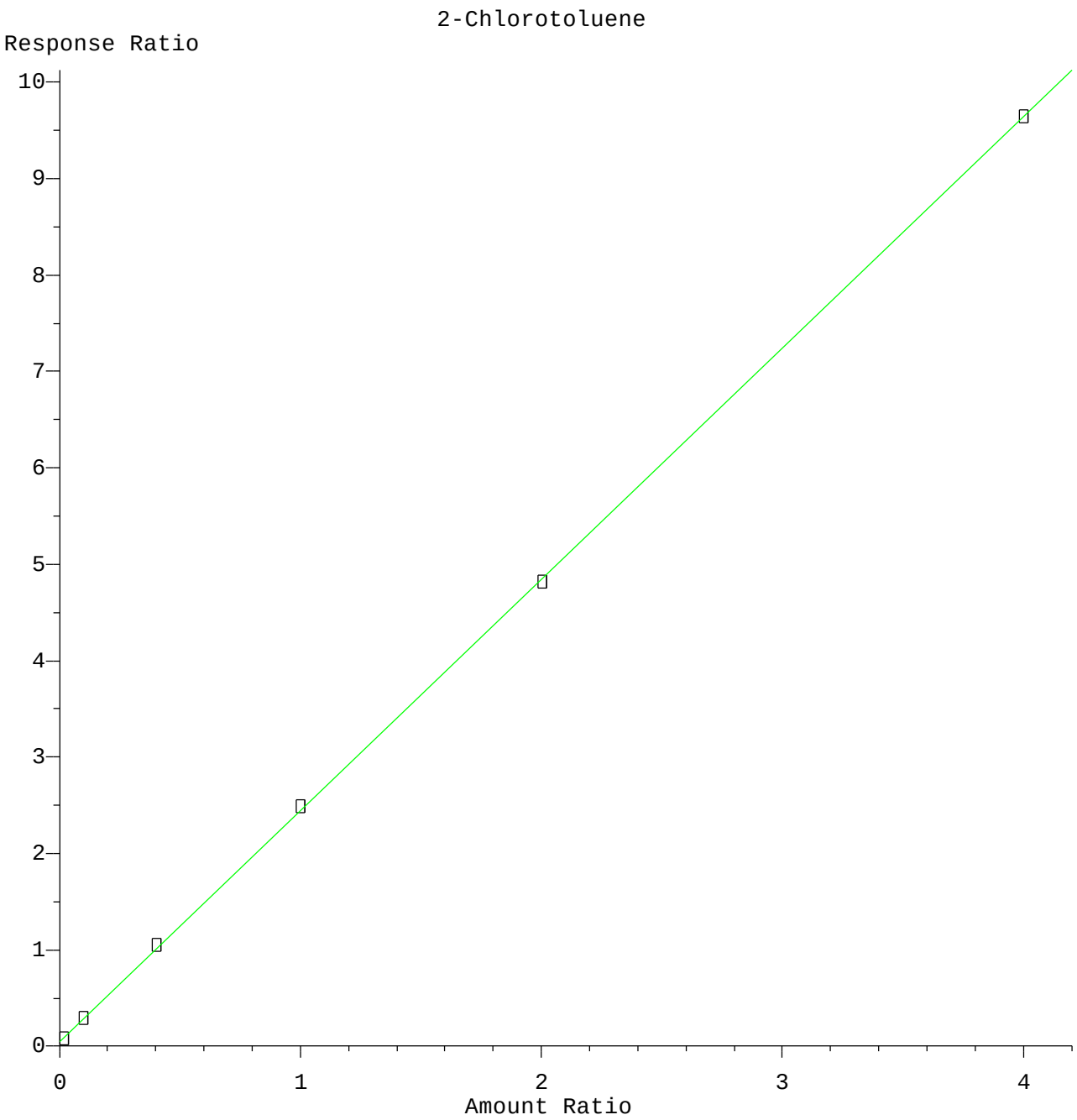
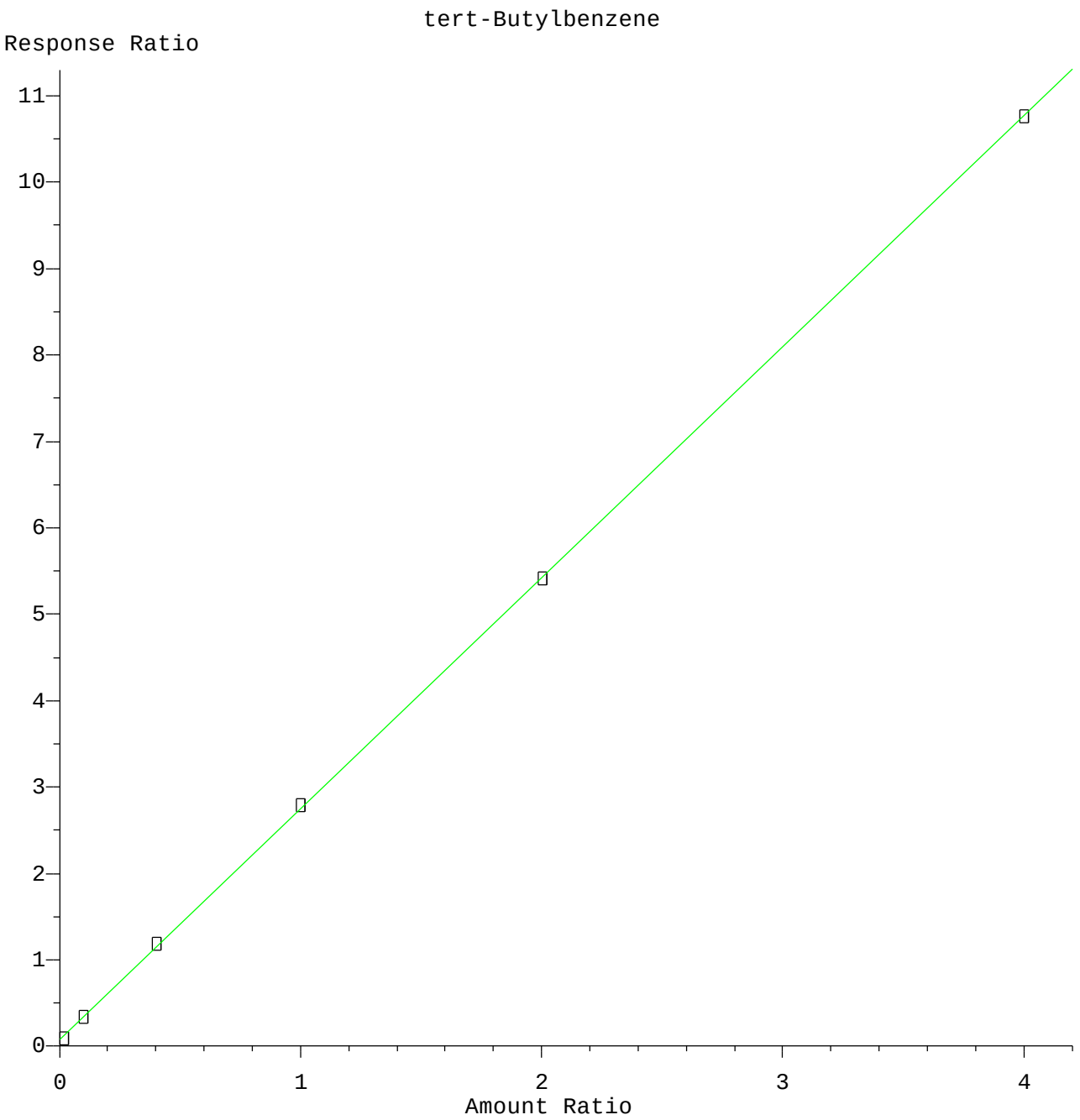
Calibration Table Last Updated: Wed May 21 01:44:33 2014



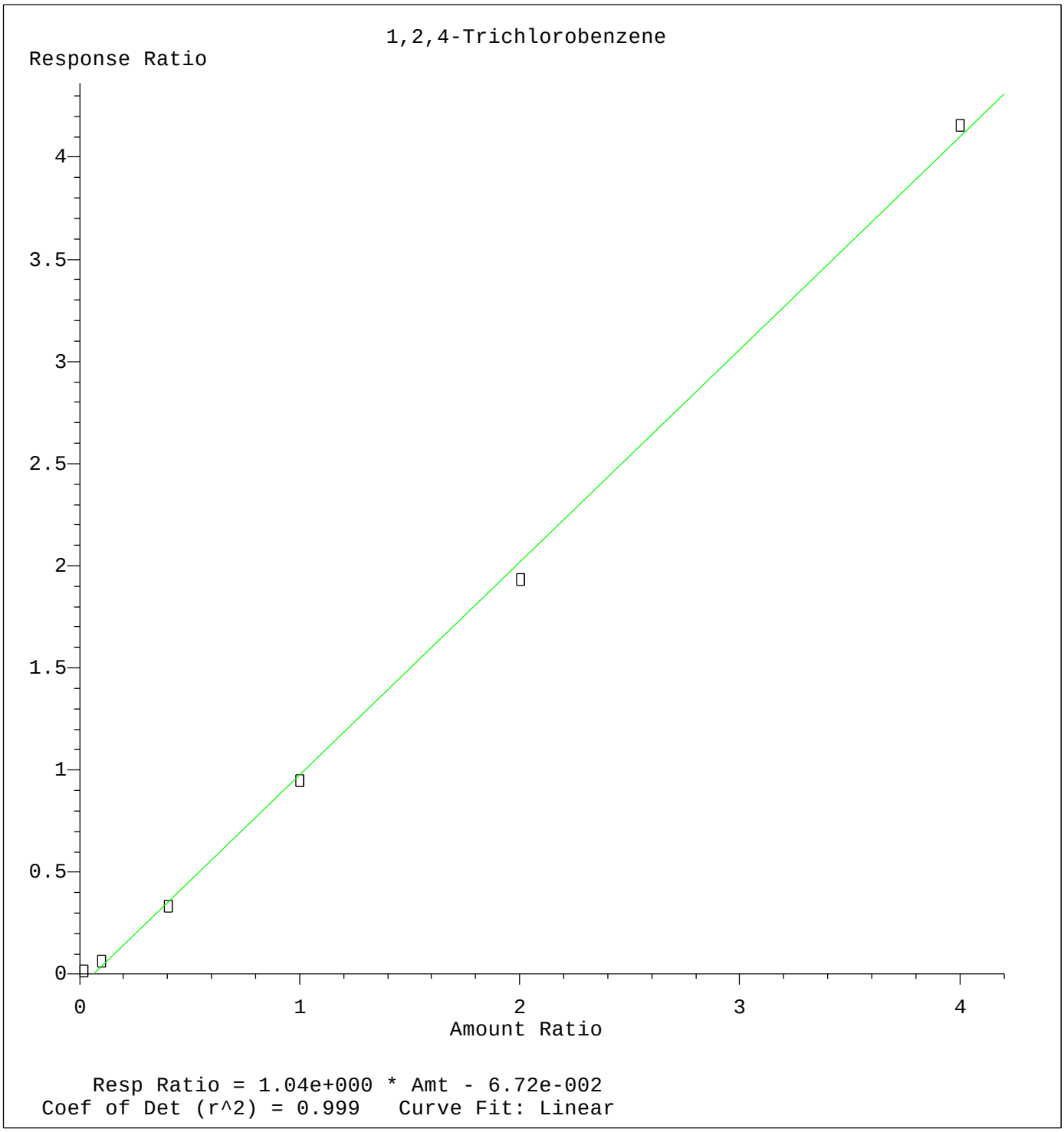
Resp Ratio = 2.40e+000 * Amt + 5.32e-002
Coef of Det (r^2) = 1.000 Curve Fit: Linear

Method Name: W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Calibration Table Last Updated: Wed May 21 01:44:53 2014



Resp Ratio = 2.67e+000 * Amt + 7.92e-002
Coef of Det (r^2) = 1.000 Curve Fit: Linear

Method Name: W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Calibration Table Last Updated: Wed May 21 01:45:09 2014



Method Name: W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
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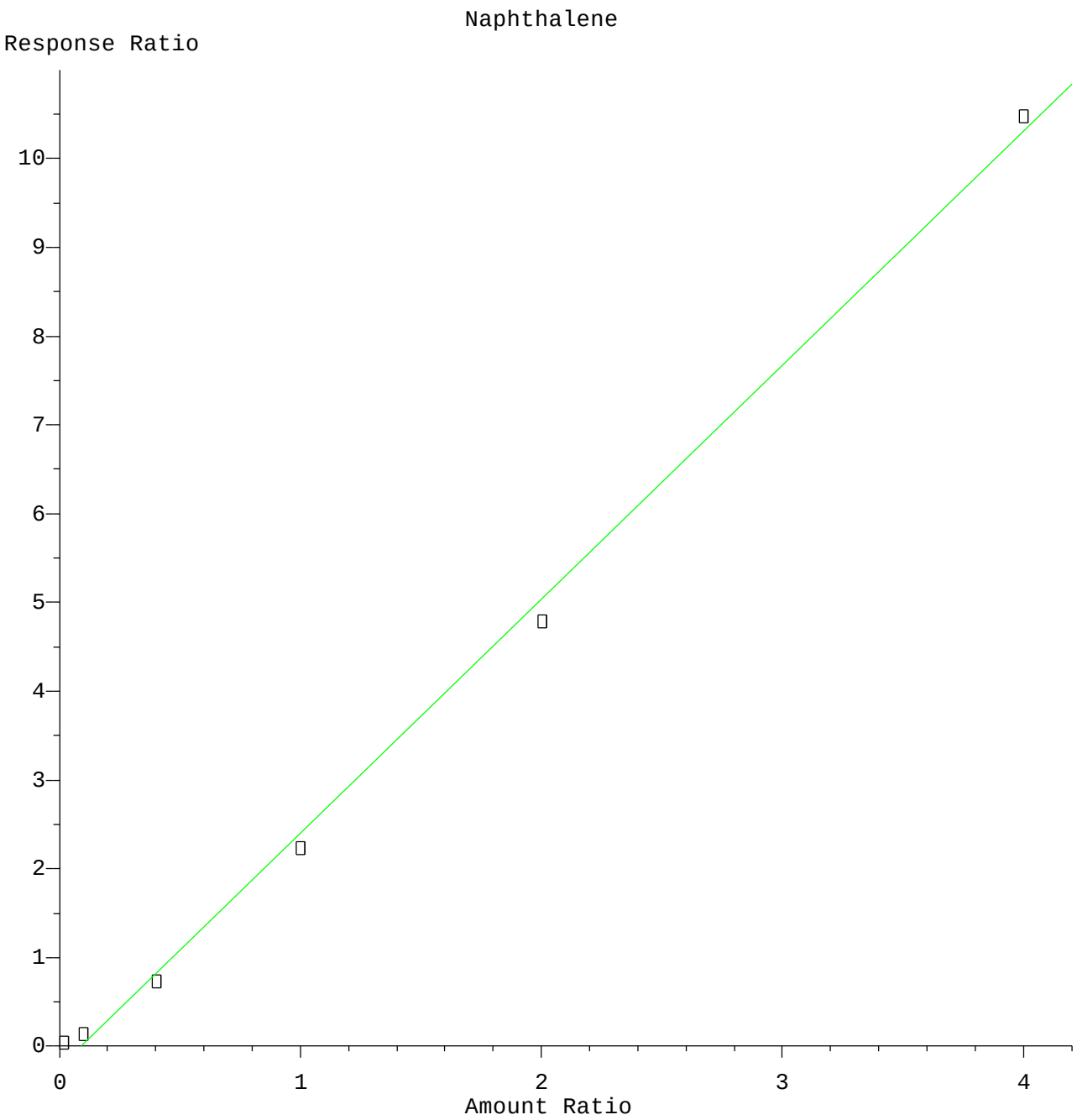
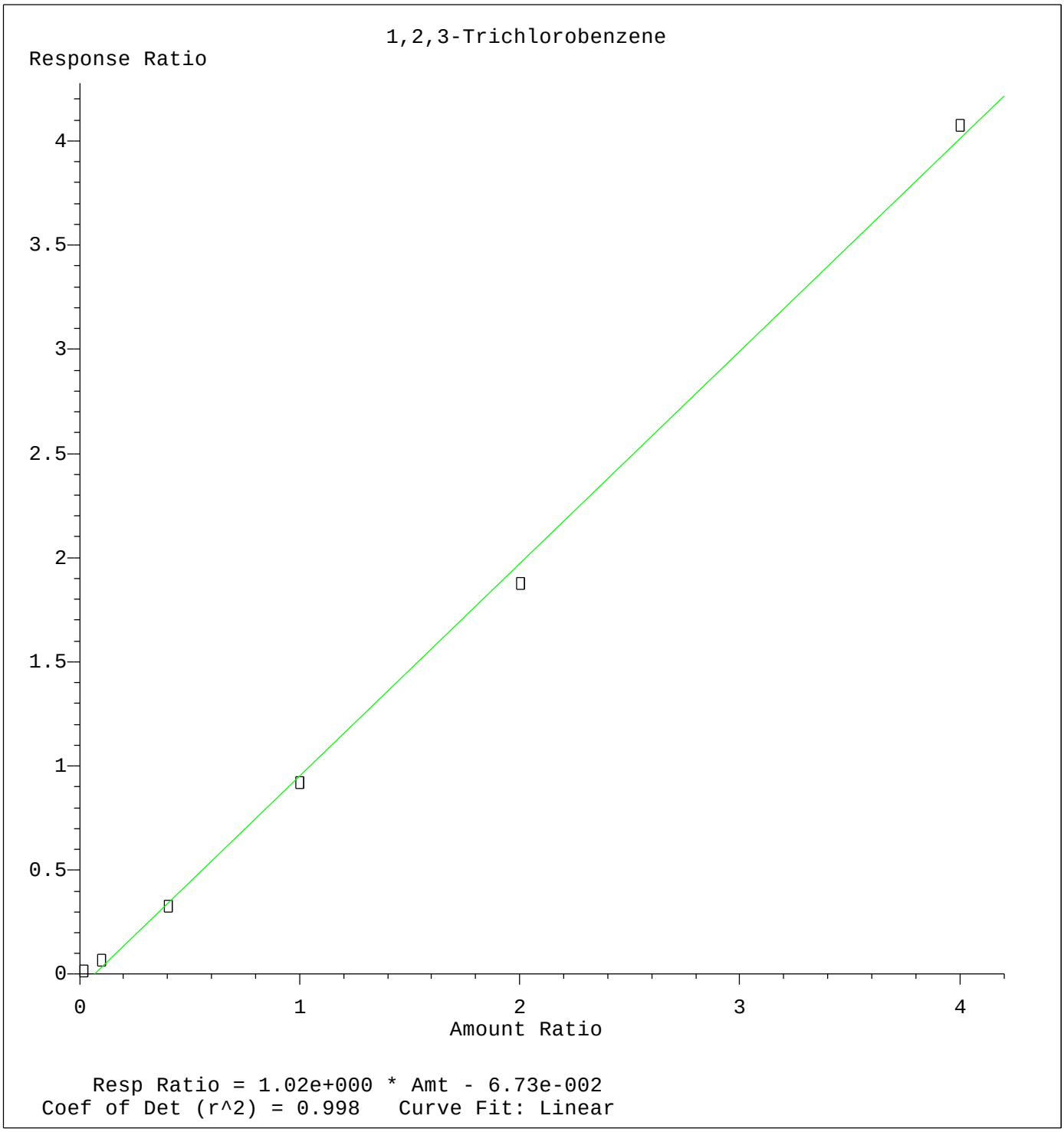


Resp Ratio = 2.63e+000 * Amt - 2.39e-001
Coef of Det (r^2) = 0.998 Curve Fit: Linear

Method Name: W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Calibration Table Last Updated: Wed May 21 01:47:03 2014



Method Name: W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Calibration Table Last Updated: Wed May 21 01:47:13 2014

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015522.D
Acq On : 20 May 2014 17:24
Operator : MD
Sample : VSTDICC001
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM

Quant Time: May 21 02:20:19 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	186967	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	260086	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	213420	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	78757	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	2686	1.13	ug/l	0.00
Spiked Amount 50.000			Recovery	=	2.26%	
36) Dibromofluoromethane	7.80	113	1995	1.18	ug/l	0.00
Spiked Amount 50.000			Recovery	=	2.36%	
51) Toluene-d8	10.29	98	7165	1.12	ug/l	0.00
Spiked Amount 50.000			Recovery	=	2.24%	
63) 4-Bromofluorobenzene	12.61	95	2387	1.13	ug/l	0.00
Spiked Amount 50.000			Recovery	=	2.26%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	2059	0.96	ug/l	99
3) Chlorodifluoromethane	1.87	51	860	0.50	ug/l #	58
4) Chloromethane	2.06	50	3317	1.27	ug/l	96
5) Vinyl Chloride	2.20	62	2037	0.92	ug/l #	88
6) Bromomethane	2.62	94	1462	1.14	ug/l	91
7) Chloroethane	2.77	64	1203	0.87	ug/l	94
8) Trichlorofluoromethane	3.12	101	3562	1.15	ug/l	86
9) Diethyl Ether	3.54	74	1191	1.02	ug/l	95
10) 1,1,2-Trichlorotrifluoroet	3.91	101	1993	1.18	ug/l #	87
11) Methyl Iodide	4.11	142	958	0.55	ug/l #	71
12) Tert butyl alcohol	4.95	59	2159m	10.47	ug/l	
13) 1,1-Dichloroethene	3.88	96	1831	1.09	ug/l	89
14) Acrolein	3.74	56	1074m	5.29	ug/l	
15) Allyl chloride	4.51	41	3301m	1.14	ug/l	
16) Acrylonitrile	5.22	53	3036m	3.74	ug/l	
17) Acetone	3.97	43	3734	4.48	ug/l	98
18) Carbon Disulfide	4.24	76	5193	1.10	ug/l	100
19) Methyl Acetate	4.53	43	3819m	1.74	ug/l	
20) Methyl tert-butyl Ether	5.28	73	6217	1.08	ug/l	96
21) Methylene Chloride	4.75	84	2183	1.10	ug/l	95
22) trans-1,2-Dichloroethene	5.28	96	1835m	1.04	ug/l	
23) Diisopropyl ether	6.19	45	6252	0.95	ug/l #	84
24) Vinyl Acetate	6.13	43	11186m	2.41	ug/l	
25) 1,1-Dichloroethane	6.08	63	3415	0.96	ug/l #	91
26) 2-Butanone	7.07	43	5204	4.74	ug/l	96
27) 2,2-Dichloropropane	7.06	77	3137	1.16	ug/l	91
28) cis-1,2-Dichloroethene	7.06	96	2099	1.01	ug/l	87
29) Bromochloromethane	7.42	49	992	0.57	ug/l #	92
30) Tetrahydrofuran	7.45	42	3786	5.33	ug/l #	89
31) Chloroform	7.58	83	3655	1.04	ug/l	97
32) Cyclohexane	7.88	56	6236	1.56	ug/l #	49
33) 1,1,1-Trichloroethane	7.79	97	3369	1.10	ug/l	93
37) 1,1-Dichloropropene	8.01	75	2613	1.06	ug/l	98
38) Ethyl Acetate	7.16	43	2120m	1.14	ug/l	

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015522.D
Acq On : 20 May 2014 17:24
Operator : MD
Sample : VSTDICC001
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 02:20:19 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
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5/21/2014 11:01:16 AM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) Carbon Tetrachloride	8.00	117	3202	1.29 ug/l #	94
40) Methylcyclohexane	9.29	83	3618	1.24 ug/l	97
41) Benzene	8.26	78	8124	1.13 ug/l	94
42) Methacrylonitrile	7.38	41	1322	1.01 ug/l #	74
43) 1,2-Dichloroethane	8.33	62	2926	1.11 ug/l	100
44) Isopropyl Acetate	8.36	43	4428	1.45 ug/l #	87
45) Trichloroethene	9.04	130	2322	1.21 ug/l	86
46) 1,2-Dichloropropane	9.32	63	2031	1.04 ug/l	99
47) Dibromomethane	9.41	93	1319	1.09 ug/l	95
48) Bromodichloromethane	9.59	83	2680	1.11 ug/l	92
49) Methyl methacrylate	9.39	41	1697	0.90 ug/l #	80
50) 1,4-Dioxane	9.41	88	496	20.03 ug/l #	70
52) 4-Methyl-2-Pentanone	10.16	43	11792	5.68 ug/l	98
53) Toluene	10.36	92	4930	1.12 ug/l	98
54) t-1,3-Dichloropropene	10.57	75	2343	0.97 ug/l	95
55) cis-1,3-Dichloropropene	10.03	75	3022	1.09 ug/l	97
56) 1,1,2-Trichloroethane	10.75	97	1922	1.11 ug/l	95
57) Ethyl methacrylate	10.61	69	2600	1.09 ug/l	95
58) 1,3-Dichloropropane	10.90	76	3205	1.08 ug/l	98
59) 2-Chloroethyl Vinyl ether	9.88	63	868	0.97 ug/l #	45
60) 2-Hexanone	10.93	43	6916	4.96 ug/l	96
61) Dibromochloromethane	11.10	129	2051	1.06 ug/l	94
62) 1,2-Dibromoethane	11.21	107	1871	1.08 ug/l	97
65) Tetrachloroethene	10.83	164	2002	1.17 ug/l	92
66) Chlorobenzene	11.64	112	5568	1.21 ug/l	94
67) 1,1,1,2-Tetrachloroethane	11.71	131	1951	1.17 ug/l	90
68) Ethyl Benzene	11.71	91	8416	1.13 ug/l	99
69) m/p-Xylenes	11.82	106	6685	2.38 ug/l	100
70) o-Xylene	12.15	106	3052	1.06 ug/l	83
71) Styrene	12.17	104	4673	1.09 ug/l	98
72) Bromoform	12.33	173	1647	1.29 ug/l #	96
74) Isopropylbenzene	12.46	105	8686	1.38 ug/l	100
75) N-amyl acetate	12.27	43	2444	1.37 ug/l #	94
76) 1,1,2,2-Tetrachloroethane	12.70	83	2453	1.35 ug/l	99
77) 1,2,3-Trichloropropane	12.75	75	1949m	1.17 ug/l	
78) Bromobenzene	12.74	156	2145	1.31 ug/l	97
79) n-propylbenzene	12.80	91	7883	1.17 ug/l	99
80) 2-Chlorotoluene	12.89	91	5730	1.34 ug/l	95
81) 1,3,5-Trimethylbenzene	12.94	105	6589	1.31 ug/l	98
82) trans-1,4-Dichloro-2-buten	12.51	75	644	1.40 ug/l	98
83) 4-Chlorotoluene	12.98	91	5041	1.27 ug/l	96
84) tert-Butylbenzene	13.20	119	6446	1.42 ug/l	100
85) 1,2,4-Trimethylbenzene	13.25	105	6561	1.31 ug/l	99
86) sec-Butylbenzene	13.38	105	7372	1.22 ug/l	100
87) p-Isopropyltoluene	13.50	119	5990	1.22 ug/l	97
88) 1,3-Dichlorobenzene	13.50	146	3326	1.24 ug/l	96
89) 1,4-Dichlorobenzene	13.58	146	3351m	1.25 ug/l	
90) n-Butylbenzene	13.83	91	4144	1.04 ug/l	100
91) Hexachloroethane	14.11	117	1207	1.22 ug/l	96
92) 1,2-Dichlorobenzene	13.87	146	3308	1.21 ug/l	96

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015522.D
Acq On : 20 May 2014 17:24
Operator : MD
Sample : VSTDICC001
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM

Quant Time: May 21 02:20:19 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
93) 1,2-Dibromo-3-Chloropropan	14.49	75	315	1.04 ug/l	95
94) 1,2,4-Trichlorobenzene	15.15	180	970	0.72 ug/l	98
95) Hexachlorobutadiene	15.26	225	1166	1.23 ug/l	95
96) Naphthalene	15.39	128	2921	0.93 ug/l	95
97) 1,2,3-Trichlorobenzene	15.59	180	1091	0.79 ug/l	98

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

Quantitation Report (QT Reviewed)

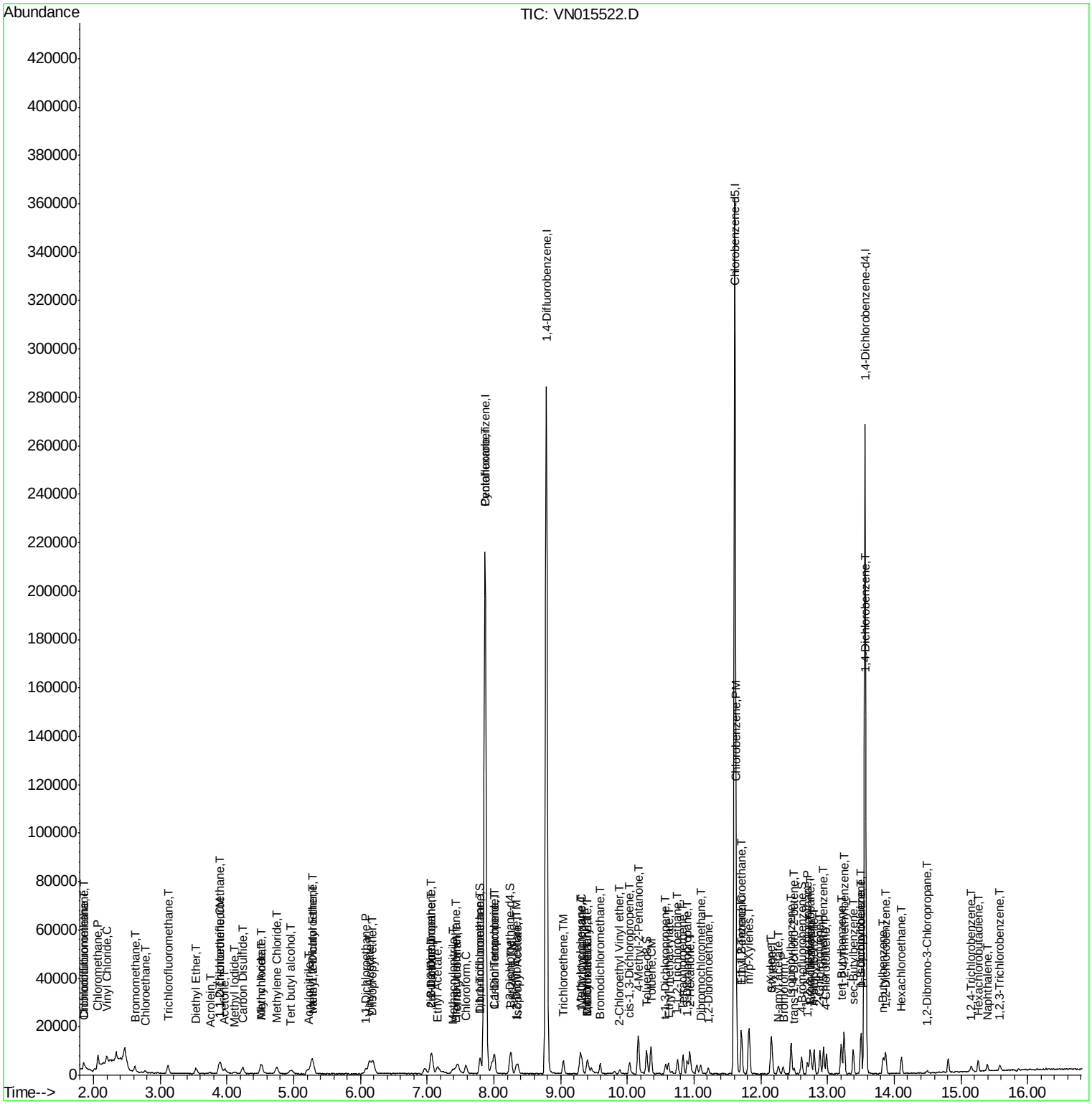
ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015522.D
Acq On : 20 May 2014 17:24
Operator : MD
Sample : VSTDICC001
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 02:20:19 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

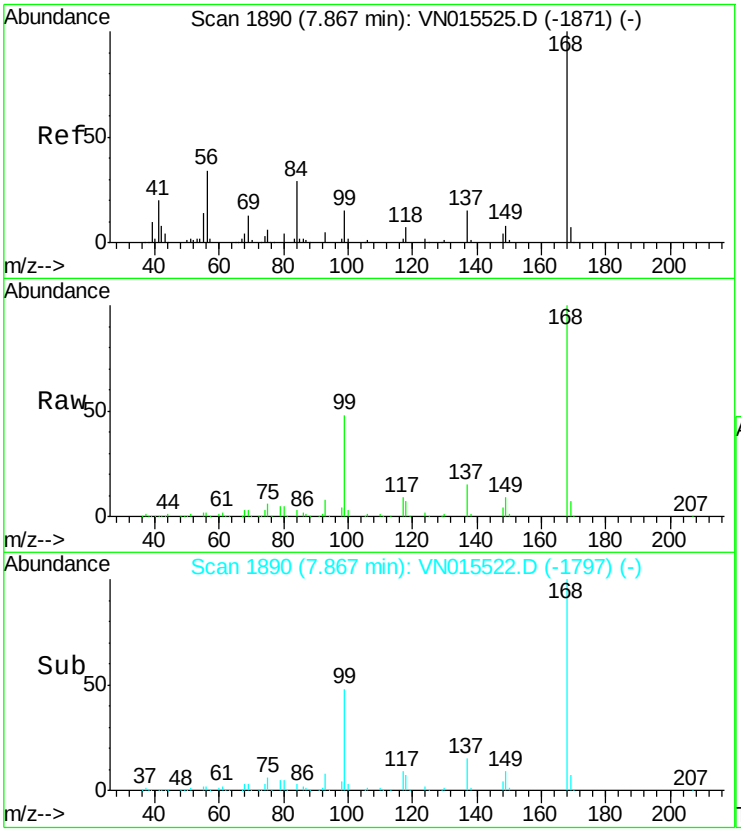
Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

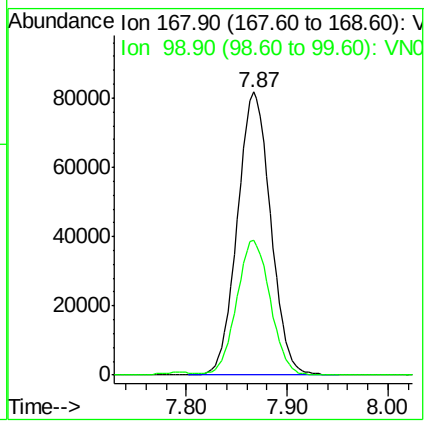
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM

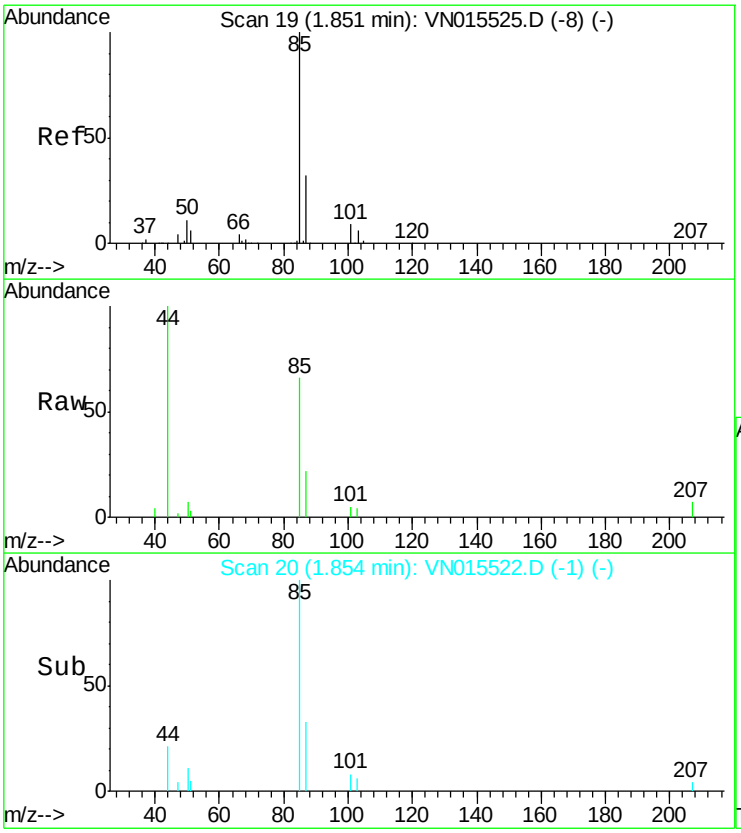


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:168 Resp: 186967

Ion	Ratio	Lower	Upper
168	100		
99	47.6	39.0	58.4

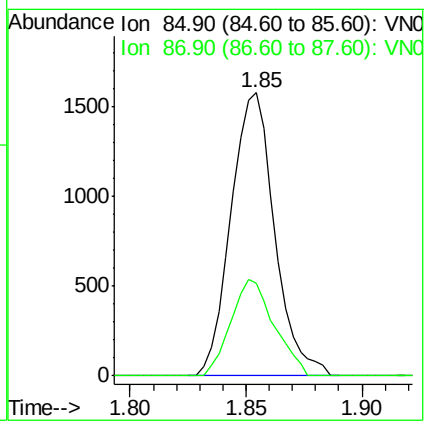




#2
Dichlorodifluoromethane
Concen: 0.96 ug/l
RT: 1.85 min Scan# 20
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 85 Resp: 2059

Ion	Ratio	Lower	Upper
85	100		
87	32.9	16.1	48.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
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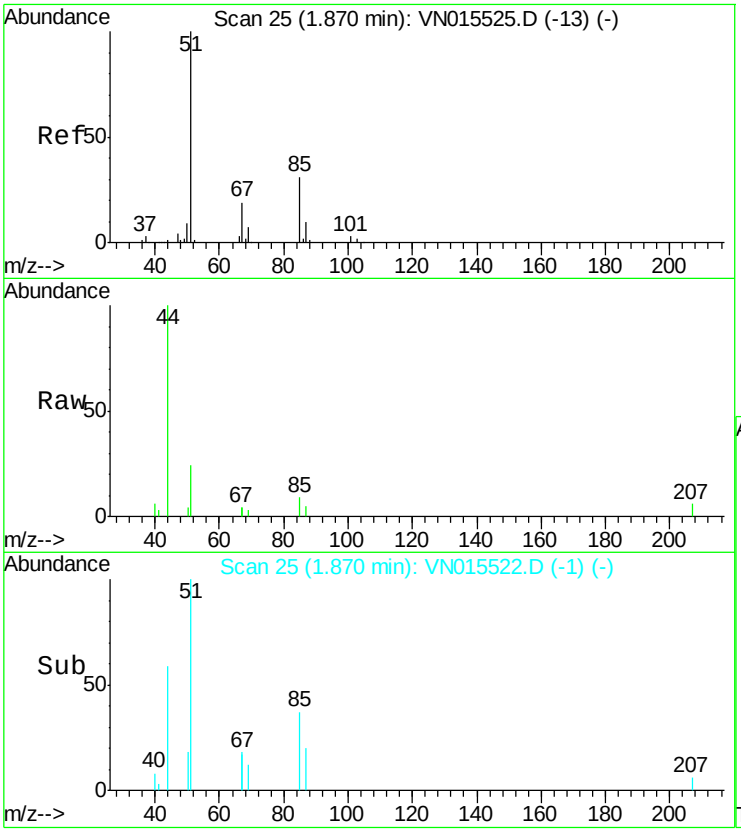
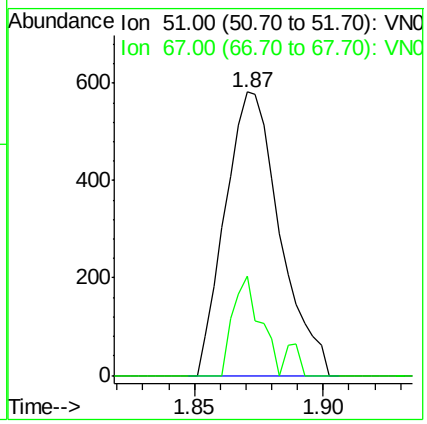
5/21/2014 11:01:16 AM

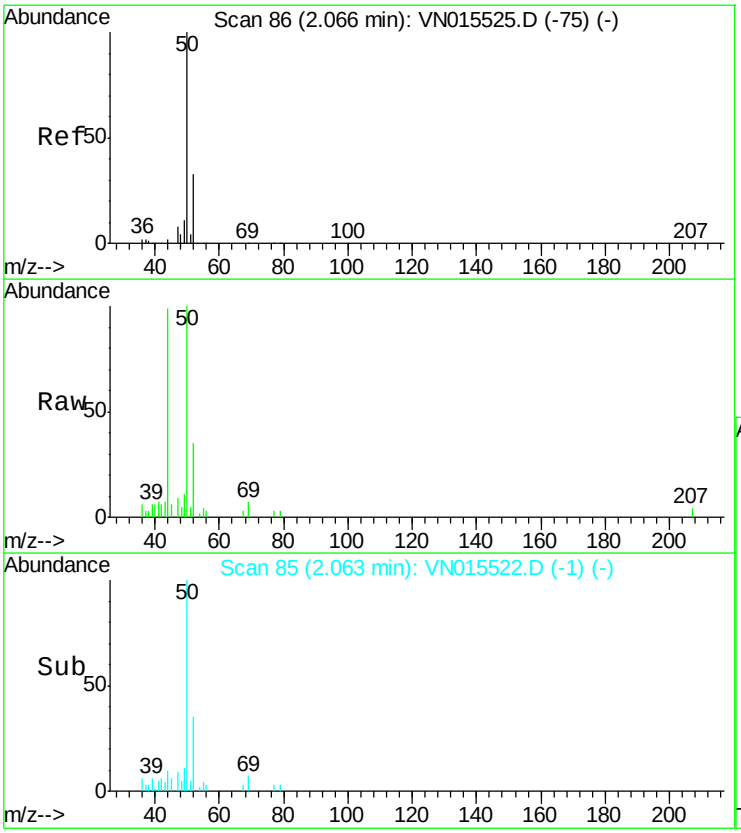


#3
Chlorodifluoromethane
Concen: 0.50 ug/l
RT: 1.87 min Scan# 25
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 51 Resp: 860

Ion	Ratio	Lower	Upper
51	100		
67	0.0	15.1	22.7#

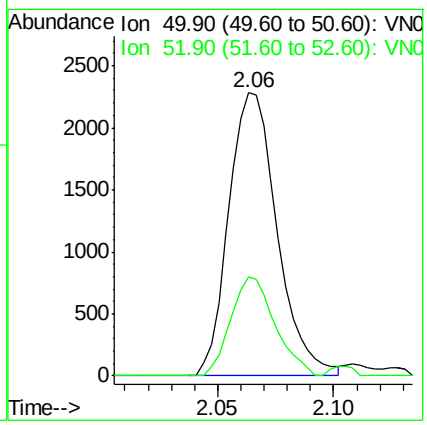




#4
Chloromethane
Concen: 1.27 ug/l
RT: 2.06 min Scan# 85
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 50 Resp: 3317

Ion	Ratio	Lower	Upper
50	100		
52	35.0	26.2	39.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
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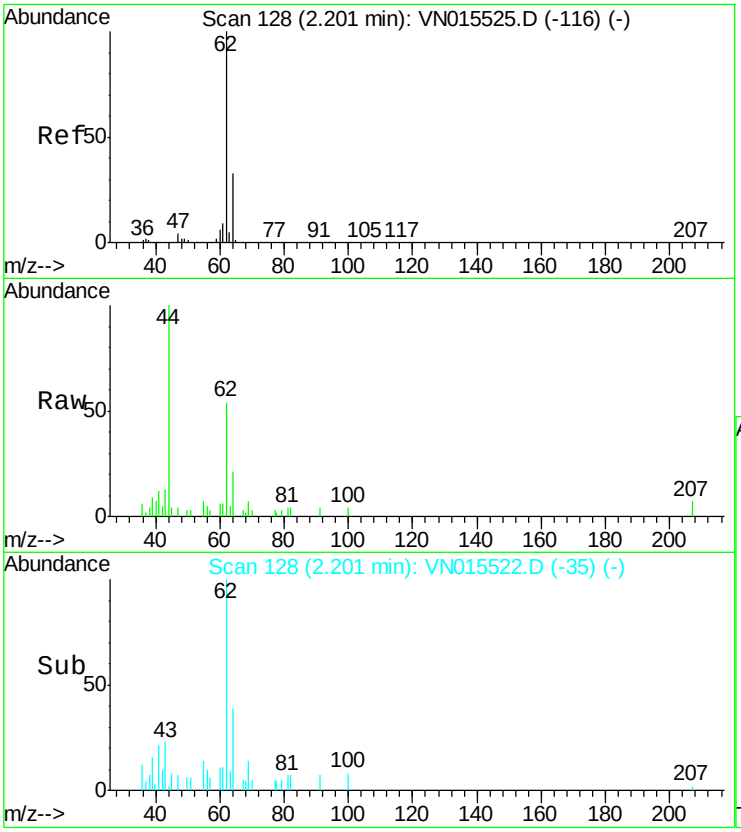
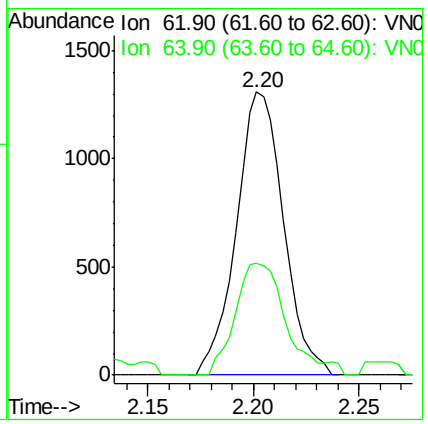
5/21/2014 11:01:16 AM

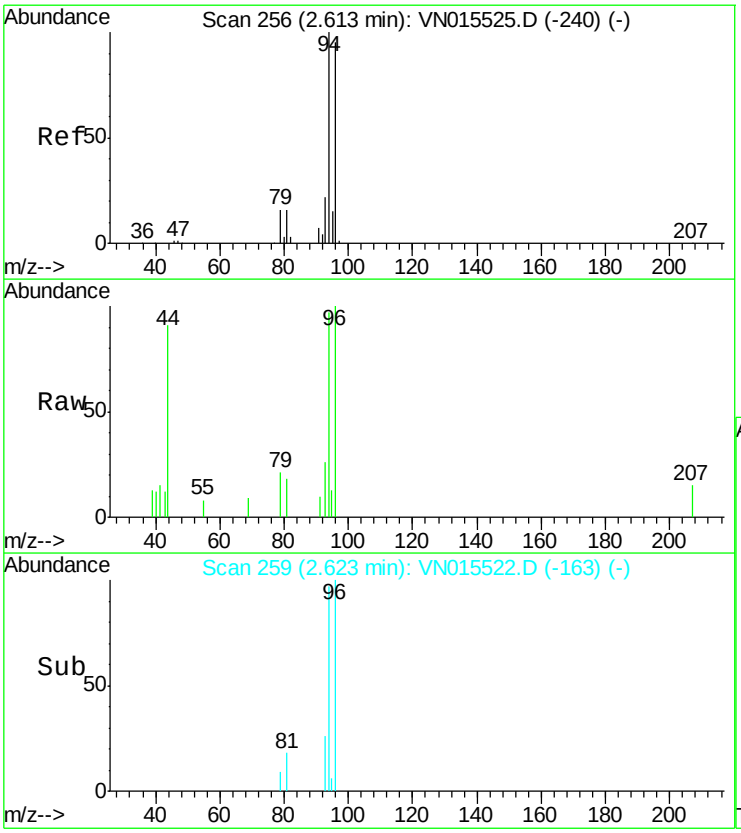


#5
Vinyl Chloride
Concen: 0.92 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 62 Resp: 2037

Ion	Ratio	Lower	Upper
62	100		
64	39.4	26.2	39.4#

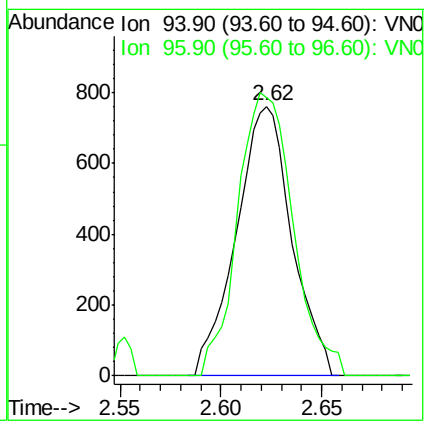




#6
Bromomethane
Concen: 1.14 ug/l
RT: 2.62 min Scan# 259
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

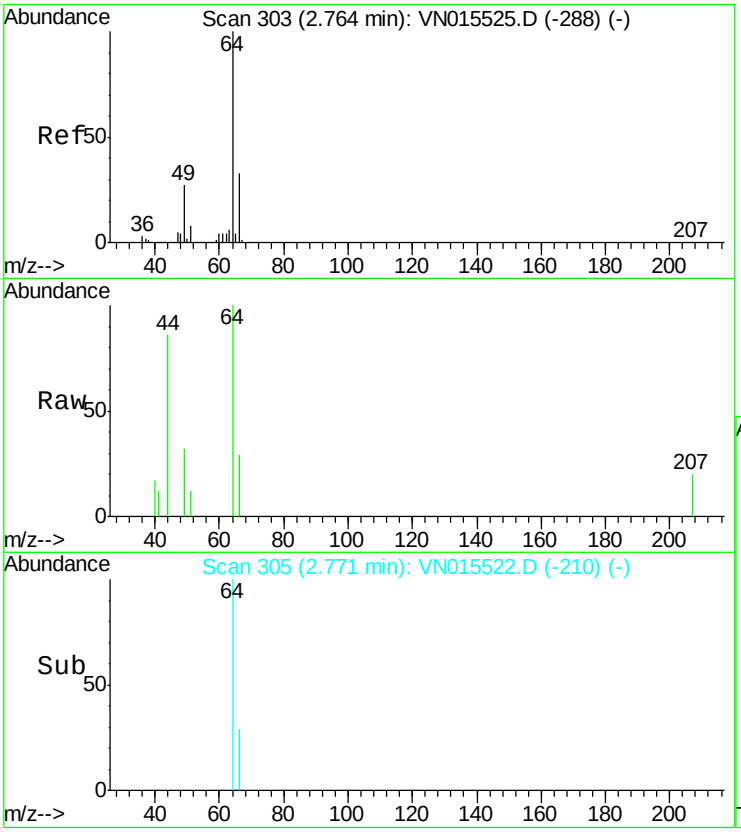
Tgt Ion: 94 Resp: 1462

Ion	Ratio	Lower	Upper
94	100		
96	103.4	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

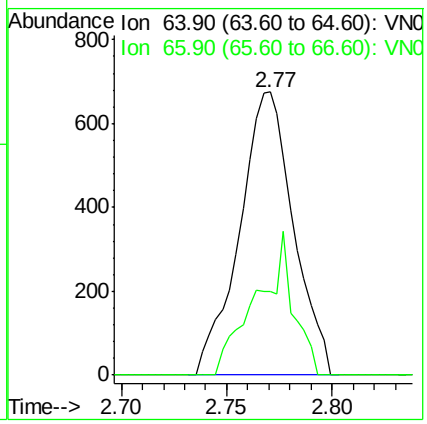
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM

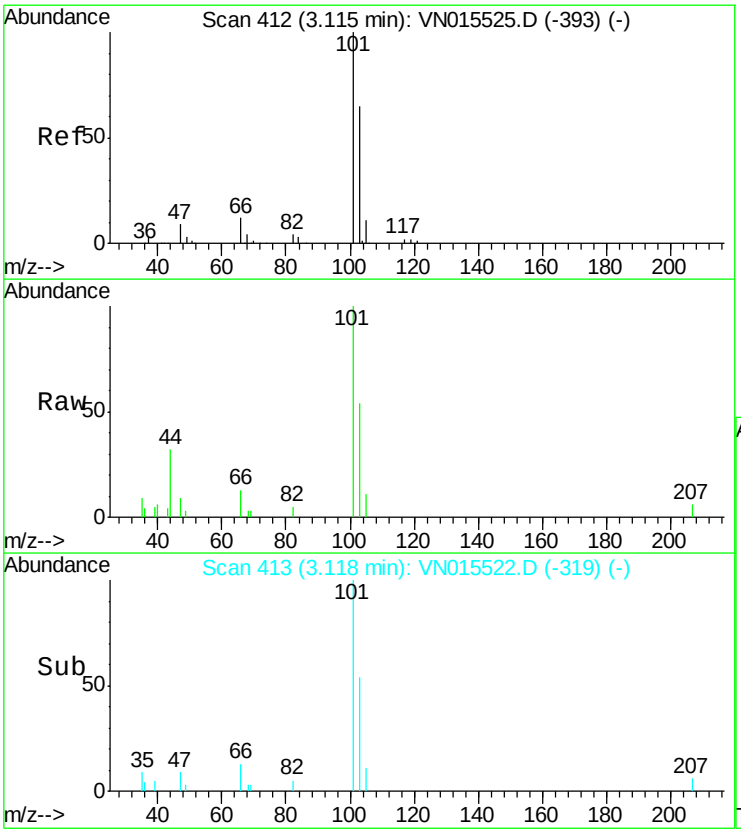


#7
Chloroethane
Concen: 0.87 ug/l
RT: 2.77 min Scan# 305
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 64 Resp: 1203

Ion	Ratio	Lower	Upper
64	100		
66	29.5	26.3	39.5

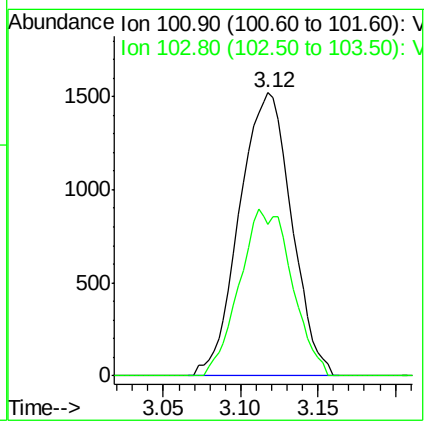


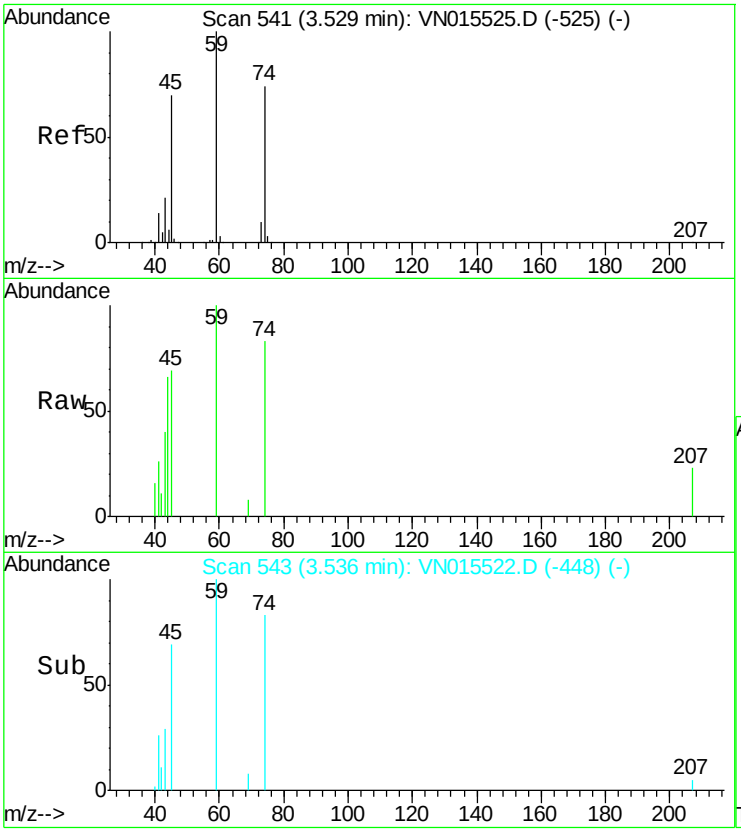


#8
Trichlorofluoromethane
Concen: 1.15 ug/l
RT: 3.12 min Scan# 413
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:101 Resp: 3562

Ion	Ratio	Lower	Upper
101	100		
103	53.8	52.1	78.1





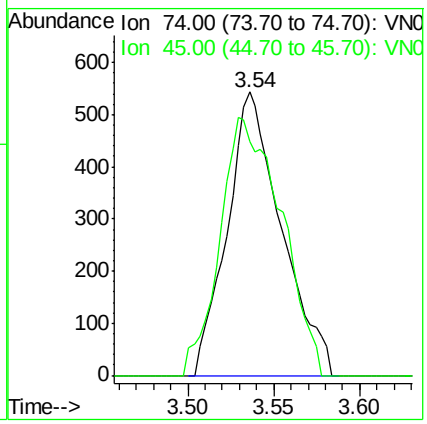
#9
Diethyl Ether
Concen: 1.02 ug/l
RT: 3.54 min Scan# 543
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

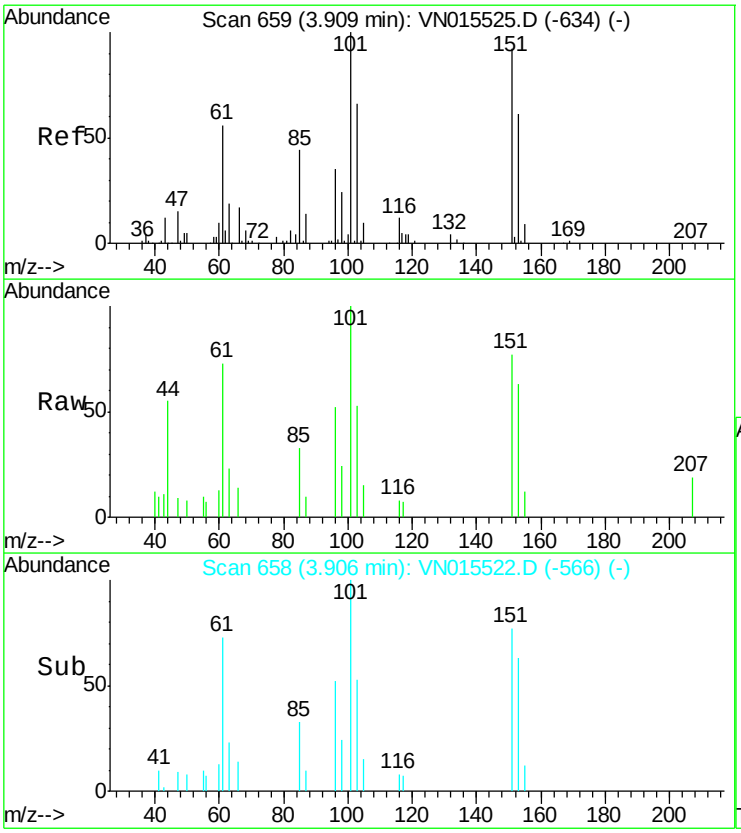
Tgt Ion: 74 Resp: 1191

Ion	Ratio	Lower	Upper
74	100		
45	102.7	48.9	146.8

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM

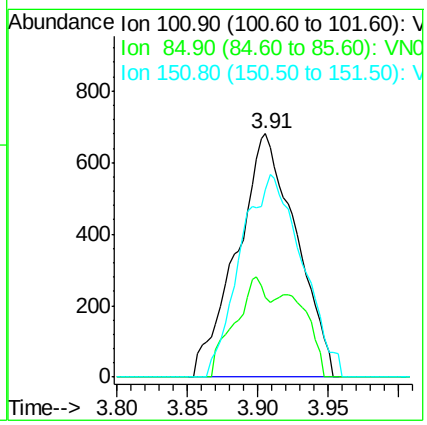




#10
1,1,2-Trichlorotrifluoroethane
Concen: 1.18 ug/l
RT: 3.91 min Scan# 658
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:101 Resp: 1993

Ion	Ratio	Lower	Upper
101	100		
85	23.1	34.5	51.7#
151	86.4	72.9	109.3



Instrument :
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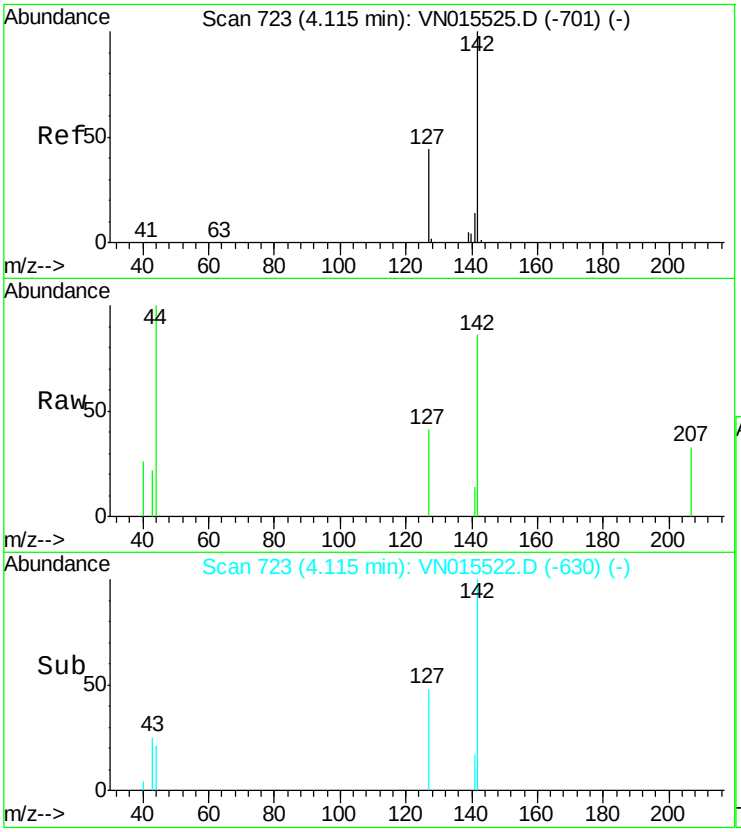
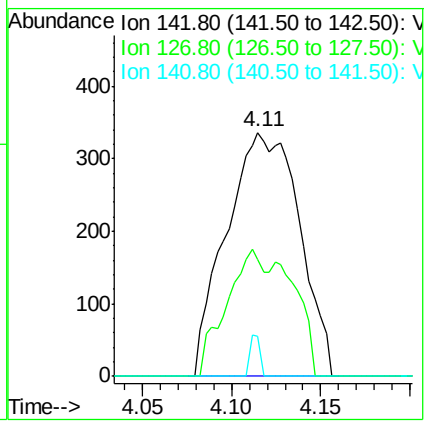
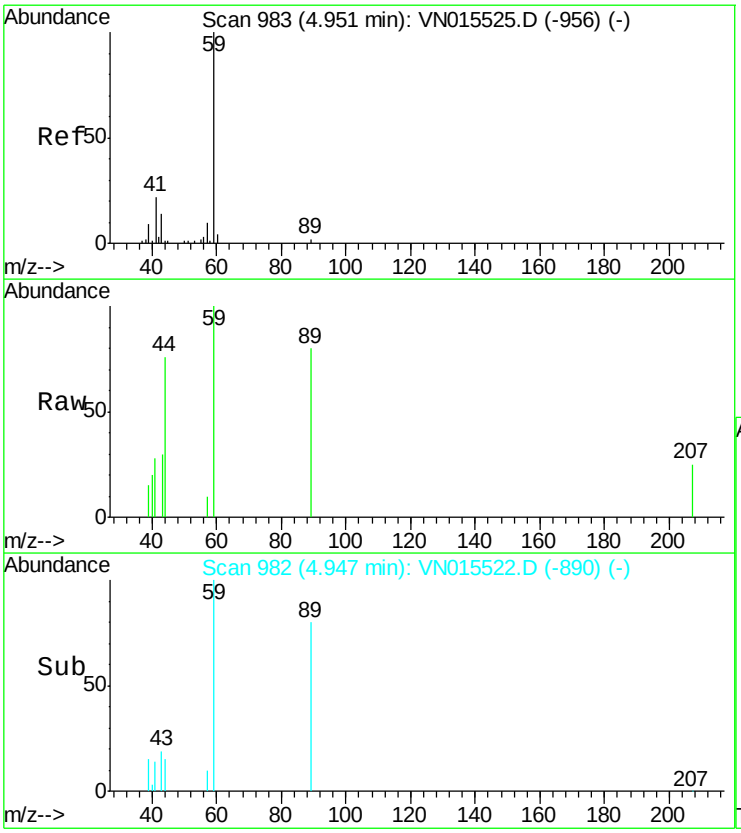


#11
Methyl Iodide
Concen: 0.55 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:142 Resp: 958

Ion	Ratio	Lower	Upper
142	100		
127	26.1	34.7	52.1#
141	0.0	11.4	17.0#

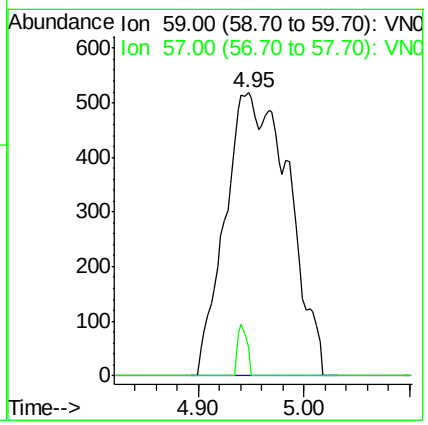


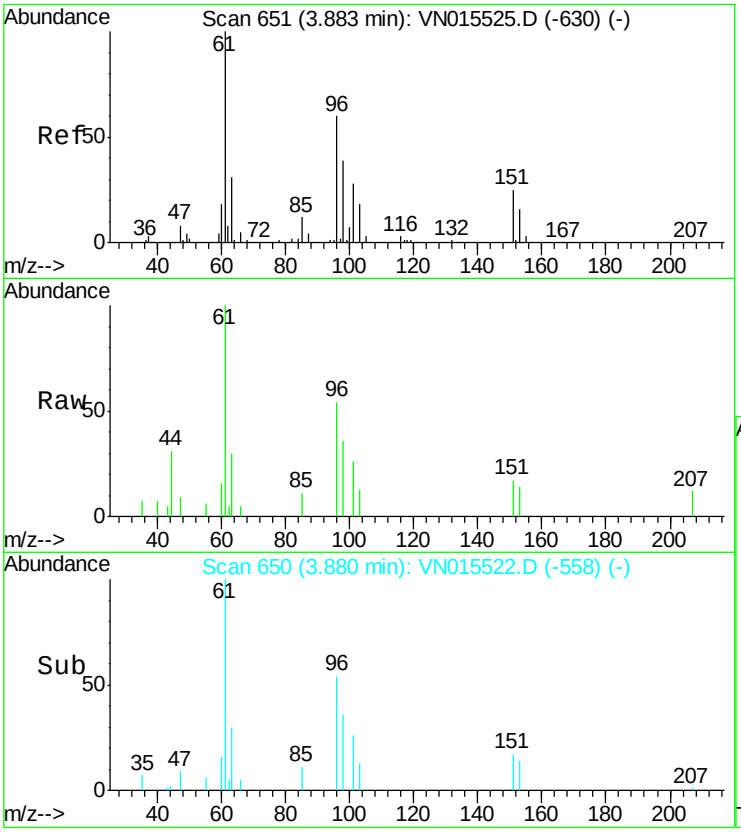


#12
Tert butyl alcohol
Concen: 10.47 ug/l m
RT: 4.95 min Scan# 982
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 59 Resp: 2159

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.4	12.6#





#13
1,1-Dichloroethene
Concen: 1.09 ug/l
RT: 3.88 min Scan# 650
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 96 Resp: 1831

Ion	Ratio	Lower	Upper
96	100		
61	184.7	132.3	198.5
98	67.4	51.8	77.6

Instrument :
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LabSampleId :
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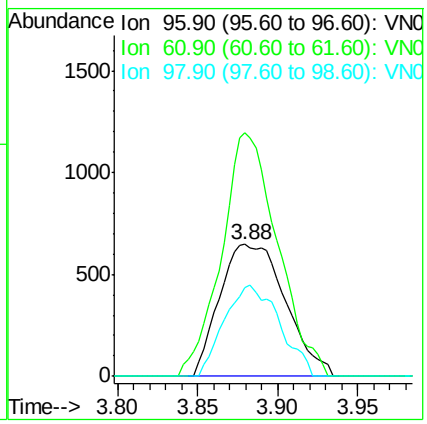
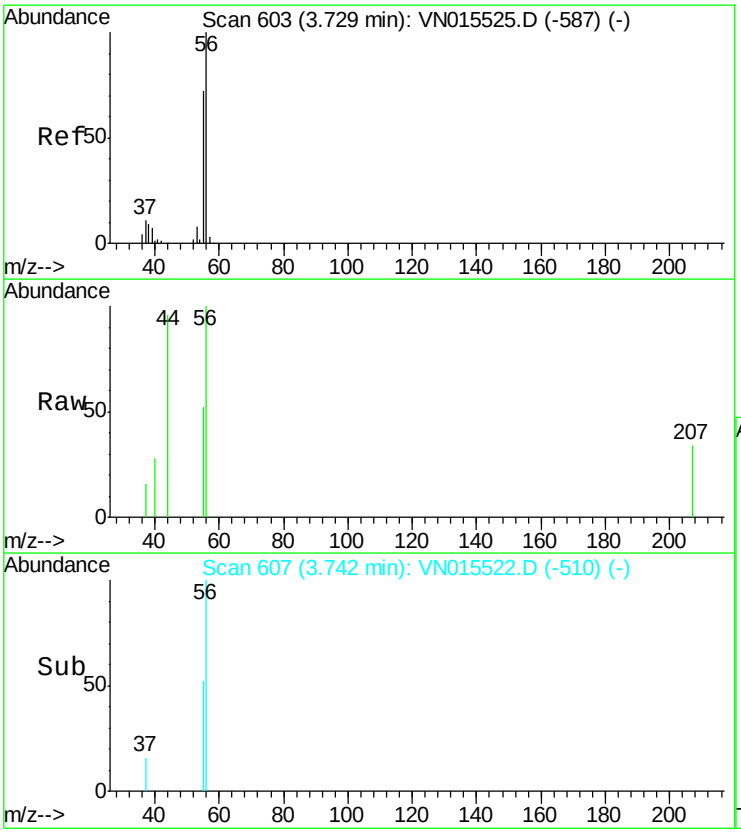
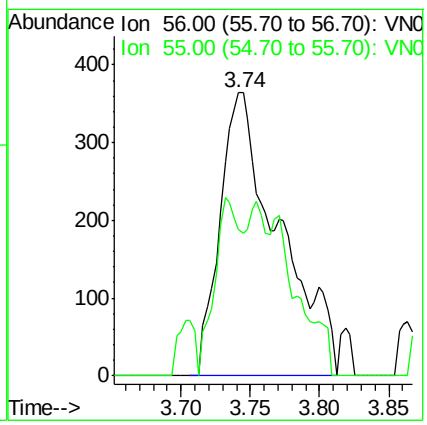




#14
Acrolein
Concen: 5.29 ug/l m
RT: 3.74 min Scan# 607
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 56 Resp: 1074

Ion	Ratio	Lower	Upper
56	100		
55	28.1	57.9	86.9#



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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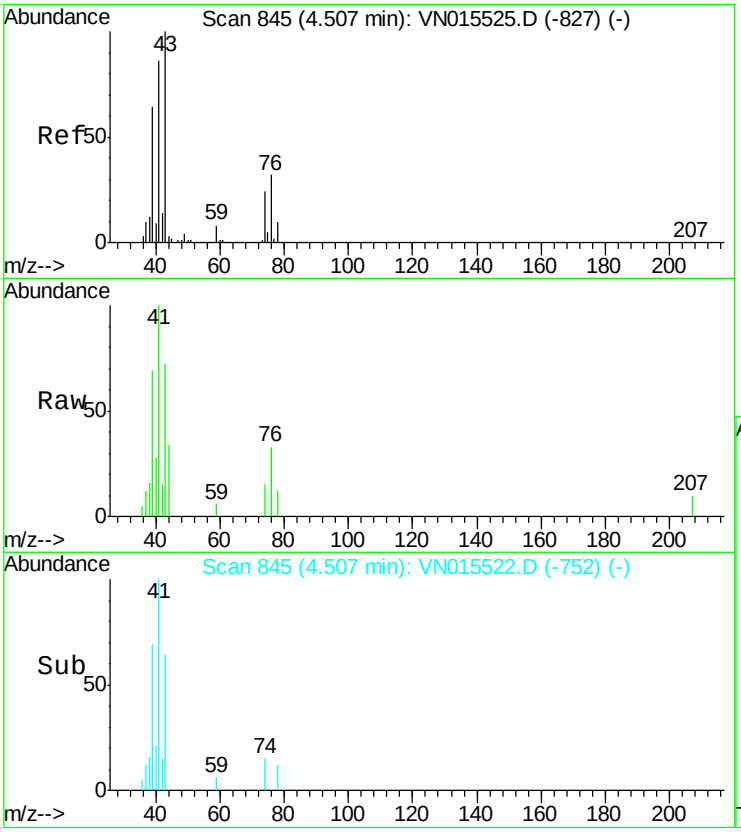
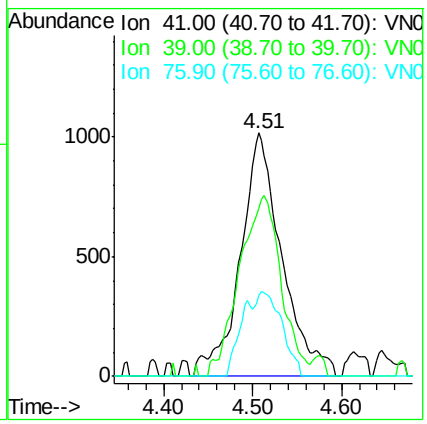
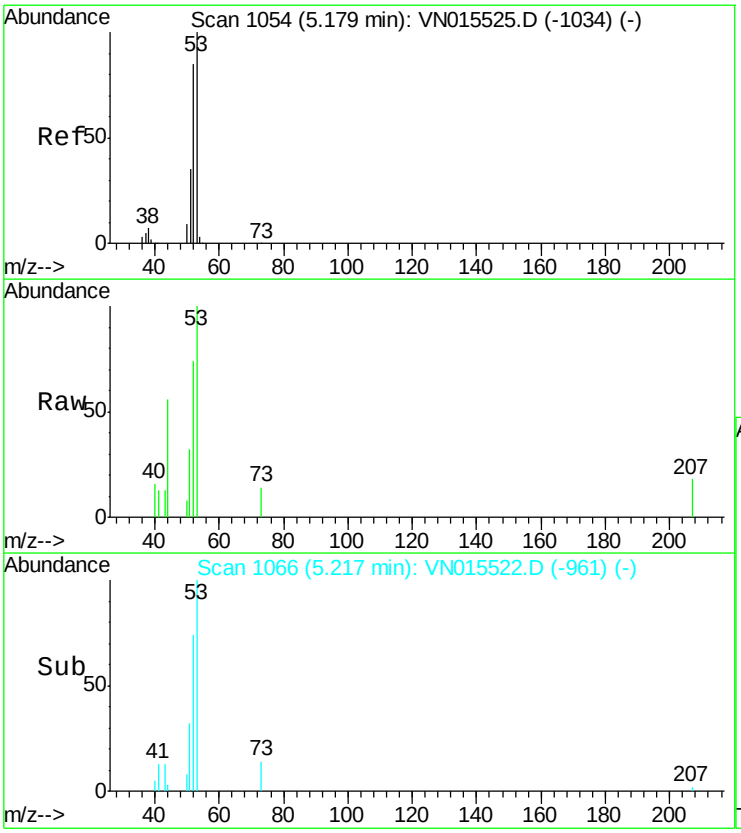


#15
Allyl chloride
Concen: 1.14 ug/l m
RT: 4.51 min Scan# 845
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 41 Resp: 3301

Ion	Ratio	Lower	Upper
41	100		
39	74.5	57.4	86.2
76	11.3	28.5	42.7#

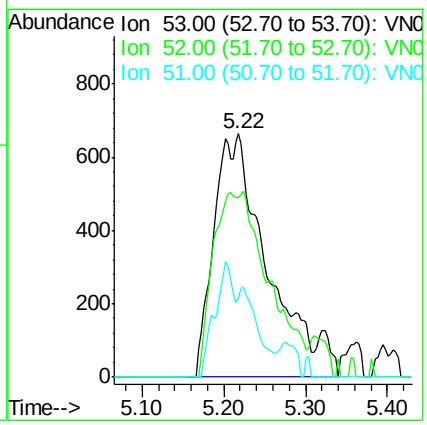


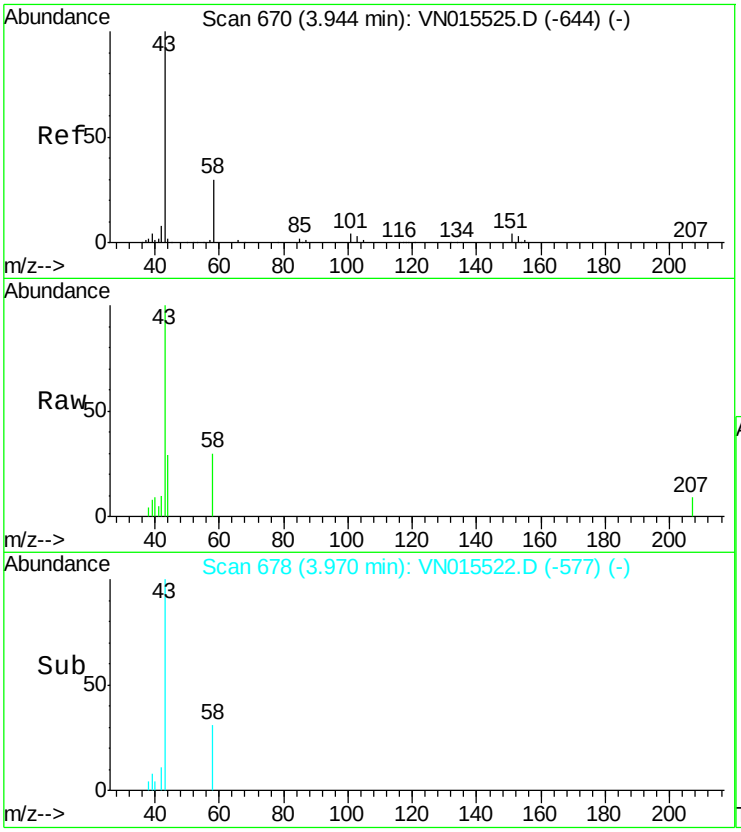


#16
Acrylonitrile
Concen: 3.74 ug/l m
RT: 5.22 min Scan# 1066
Delta R.T. 0.04 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 53 Resp: 3036

Ion	Ratio	Lower	Upper
53	100		
52	32.2	65.7	98.5#
51	16.3	29.1	43.7#





#17
Acetone
Concen: 4.48 ug/l
RT: 3.97 min Scan# 678
Delta R.T. 0.03 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 3734

Ion	Ratio	Lower	Upper
43	100		
58	31.5	24.2	36.2

Instrument :
MSVOA_N
LabSampleId :
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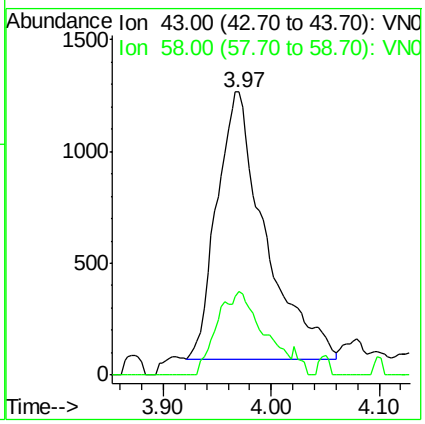
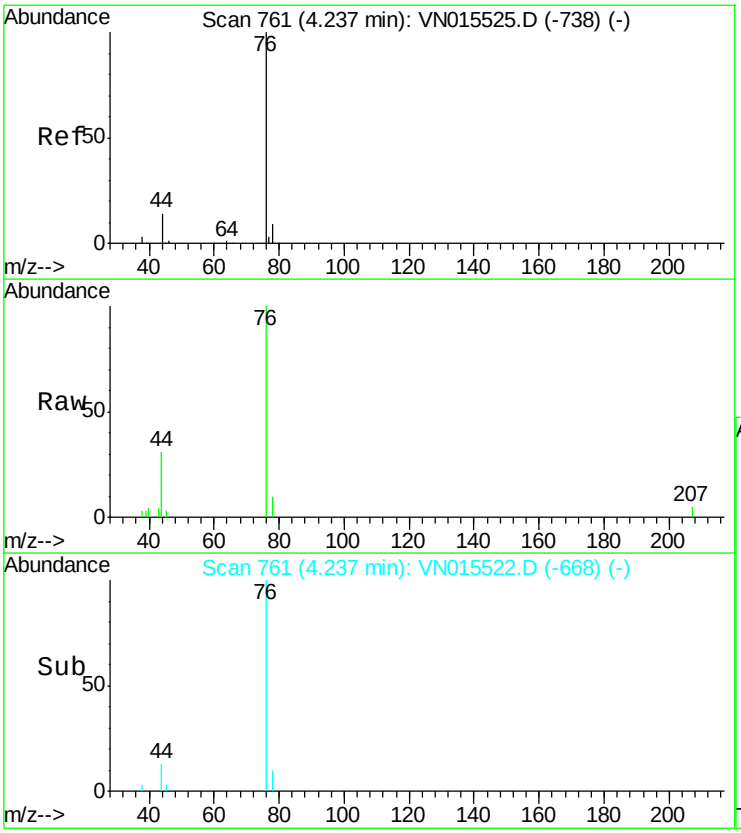
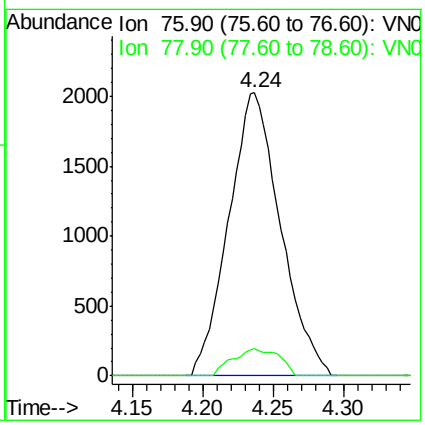




#18
Carbon Disulfide
Concen: 1.10 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 76 Resp: 5193

Ion	Ratio	Lower	Upper
76	100		
78	9.5	7.5	11.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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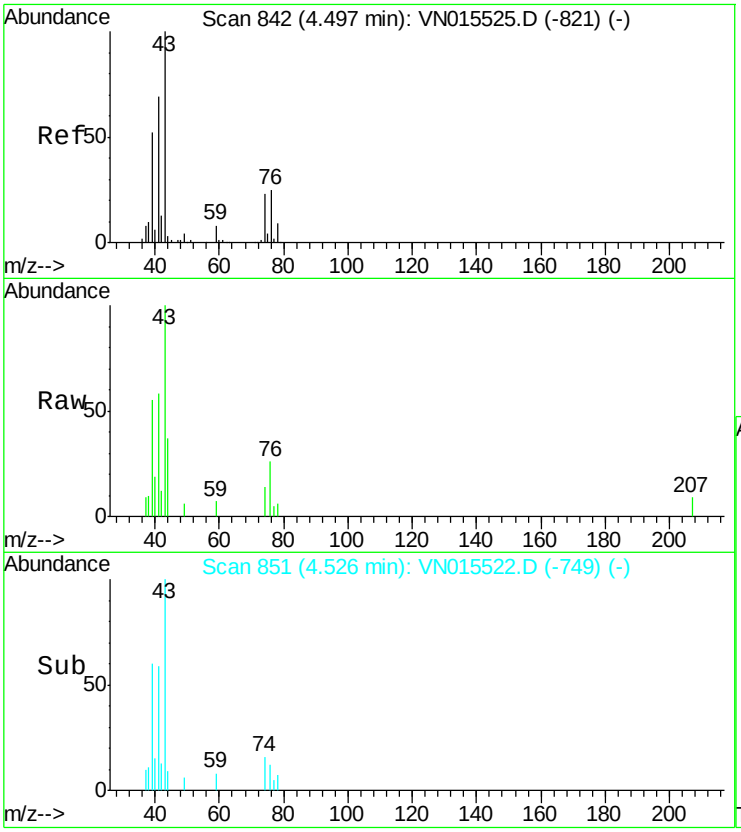
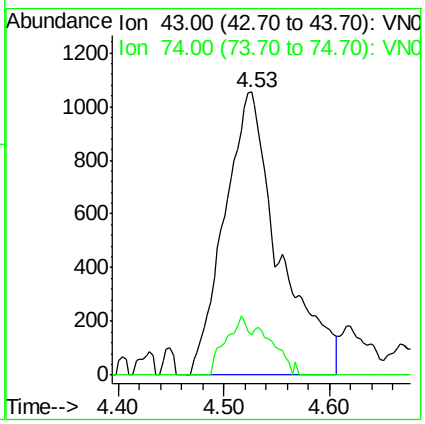
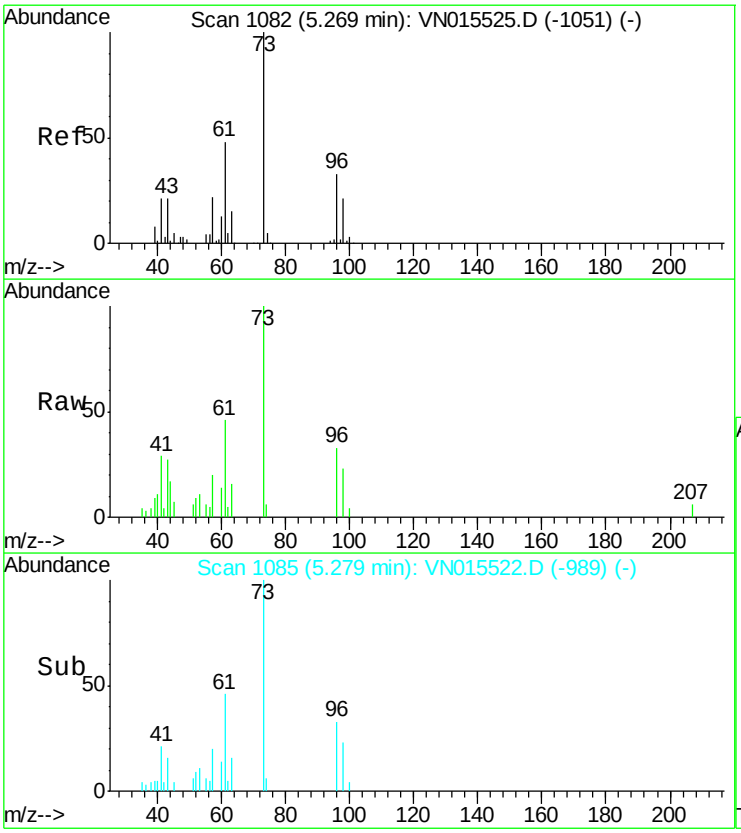


#19
Methyl Acetate
Concen: 1.74 ug/l m
RT: 4.53 min Scan# 851
Delta R.T. 0.03 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 3819

Ion	Ratio	Lower	Upper
43	100		
74	9.0	18.5	27.7#

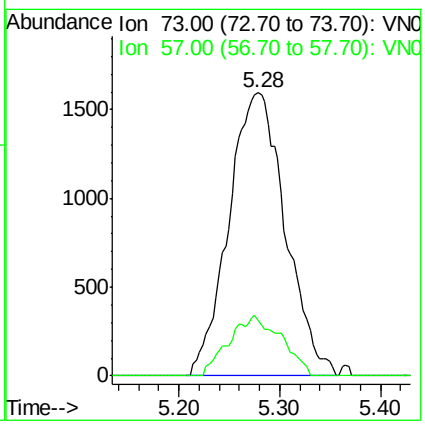




#20
Methyl tert-butyl Ether
Concen: 1.08 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 73 Resp: 6217

Ion	Ratio	Lower	Upper
73	100		
57	19.7	17.3	25.9



Instrument :
MSVOA_N
LabSampleId :
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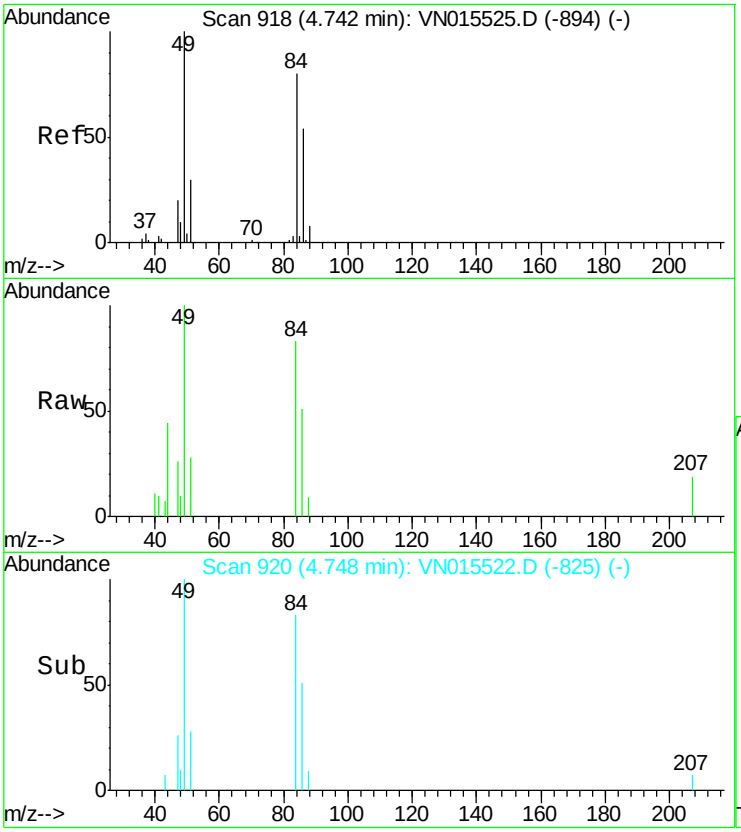
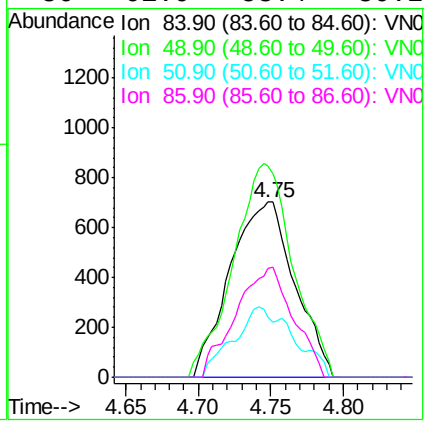
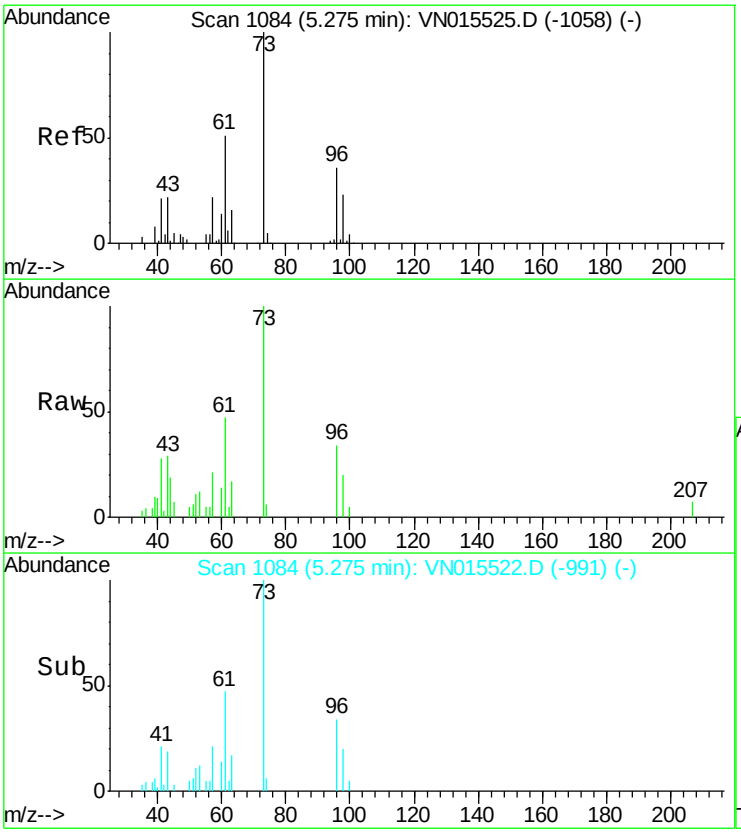


#21
Methylene Chloride
Concen: 1.10 ug/l
RT: 4.75 min Scan# 920
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 84 Resp: 2183

Ion	Ratio	Lower	Upper
84	100		
49	120.5	99.8	149.6
51	34.0	30.2	45.2
86	61.9	53.4	80.2

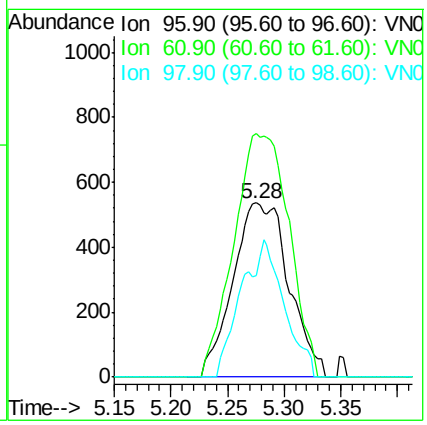




#22
trans-1,2-Dichloroethene
Concen: 1.04 ug/l m
RT: 5.28 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 96 Resp: 1835

Ion	Ratio	Lower	Upper
96	100		
61	139.9	113.3	169.9
98	58.2	50.4	75.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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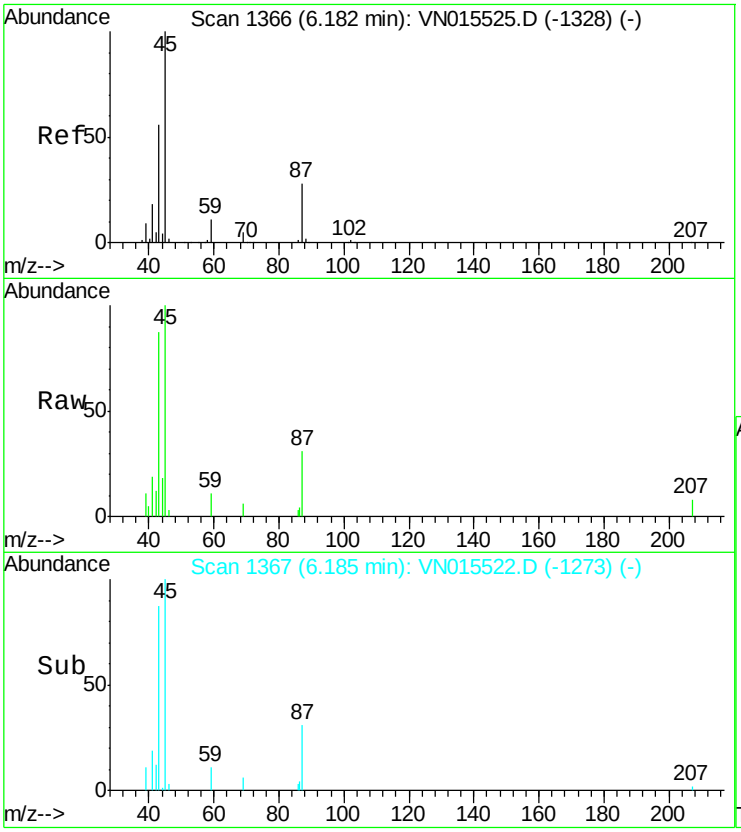
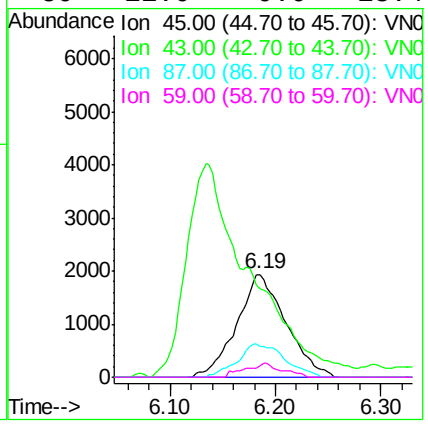
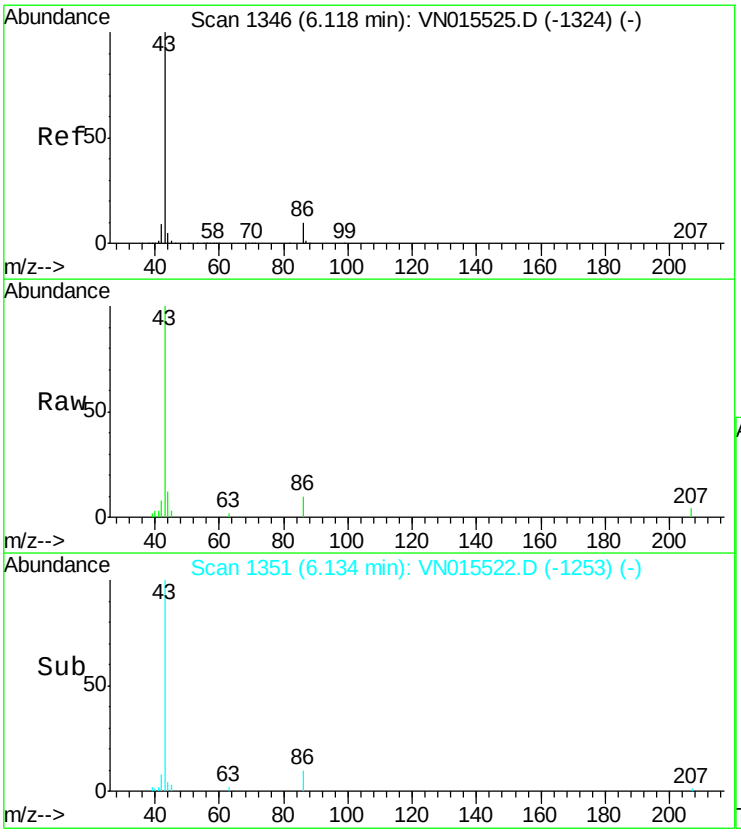


#23
Diisopropyl ether
Concen: 0.95 ug/l
RT: 6.19 min Scan# 1367
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 45 Resp: 6252

Ion	Ratio	Lower	Upper
45	100		
43	73.5	44.6	67.0#
87	30.5	22.3	33.5
59	11.0	9.0	13.4

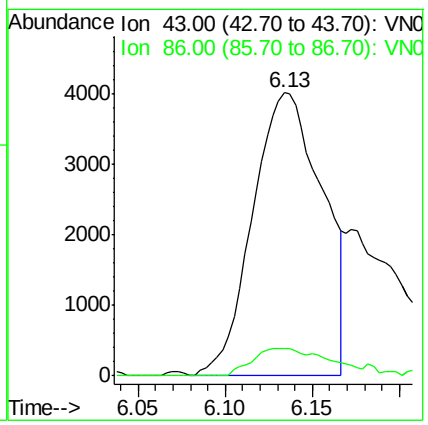




#24
Vinyl Acetate
Concen: 2.41 ug/l m
RT: 6.13 min Scan# 1351
Delta R.T. 0.02 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 11186

Ion	Ratio	Lower	Upper
43	100		
86	9.7	7.9	11.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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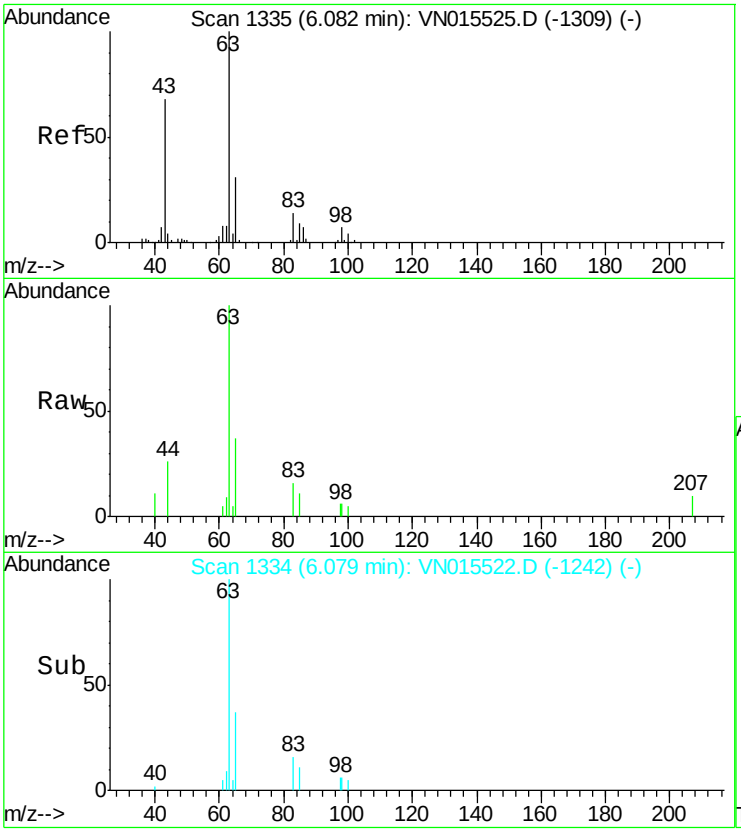
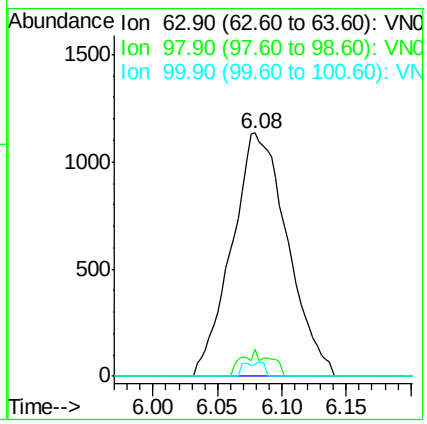
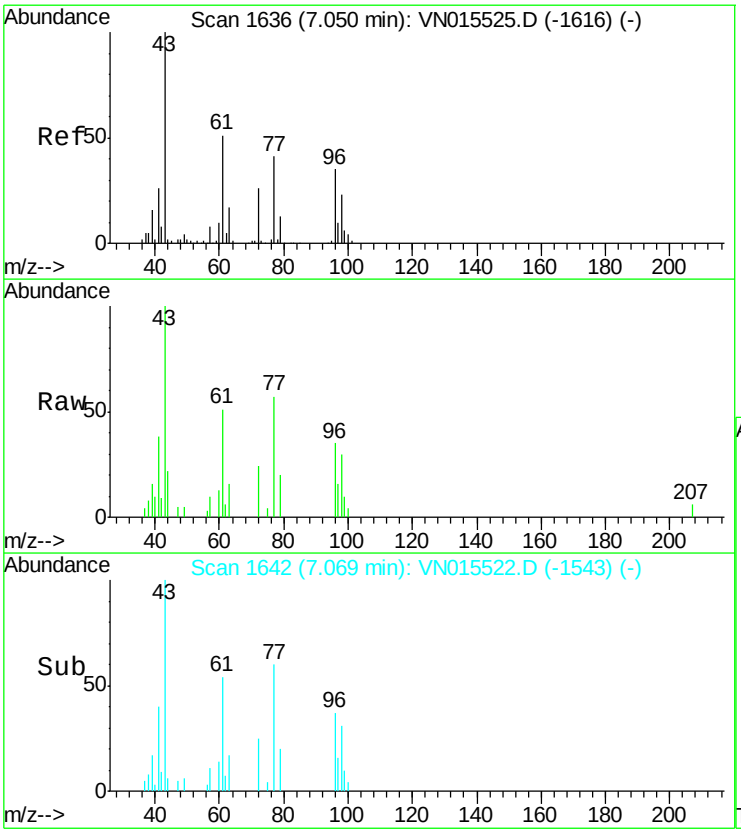


#25
1,1-Dichloroethane
Concen: 0.96 ug/l
RT: 6.08 min Scan# 1334
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 63 Resp: 3415

Ion	Ratio	Lower	Upper
63	100		
98	11.2	3.3	9.9#
100	4.8	2.1	6.3

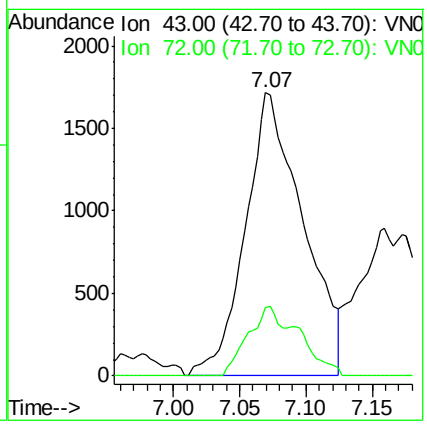




#26
2-Butanone
Concen: 4.74 ug/l
RT: 7.07 min Scan# 1642
Delta R.T. 0.02 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 5204

Ion	Ratio	Lower	Upper
43	100		
72	24.1	20.7	31.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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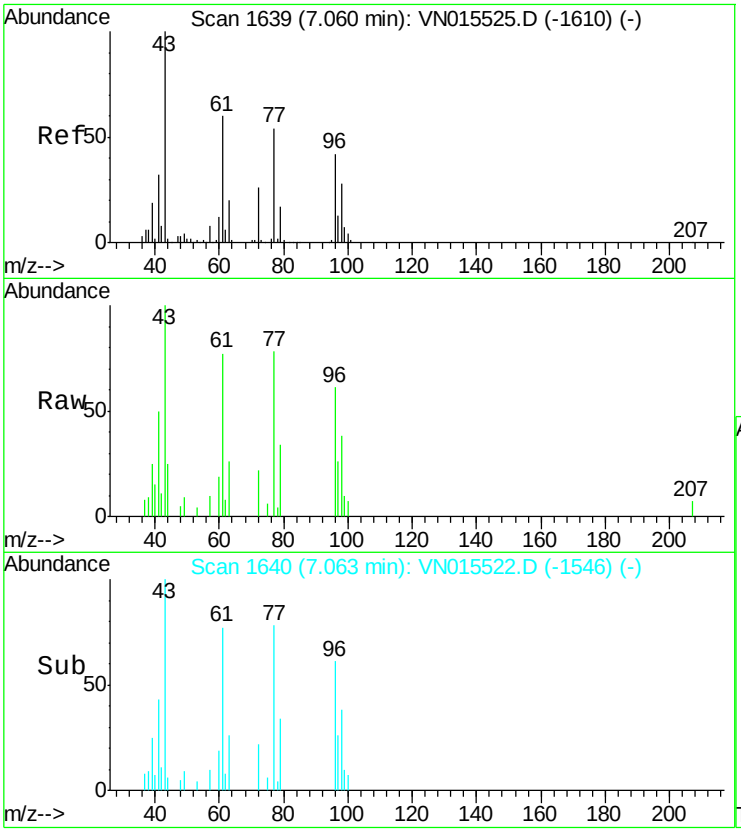
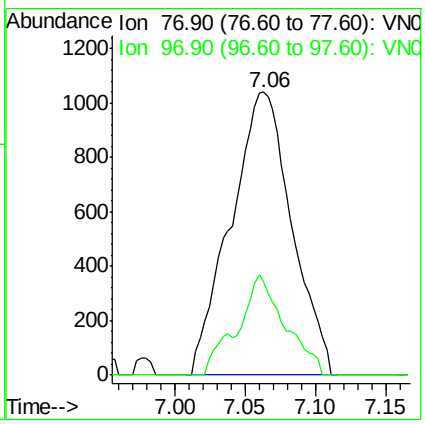
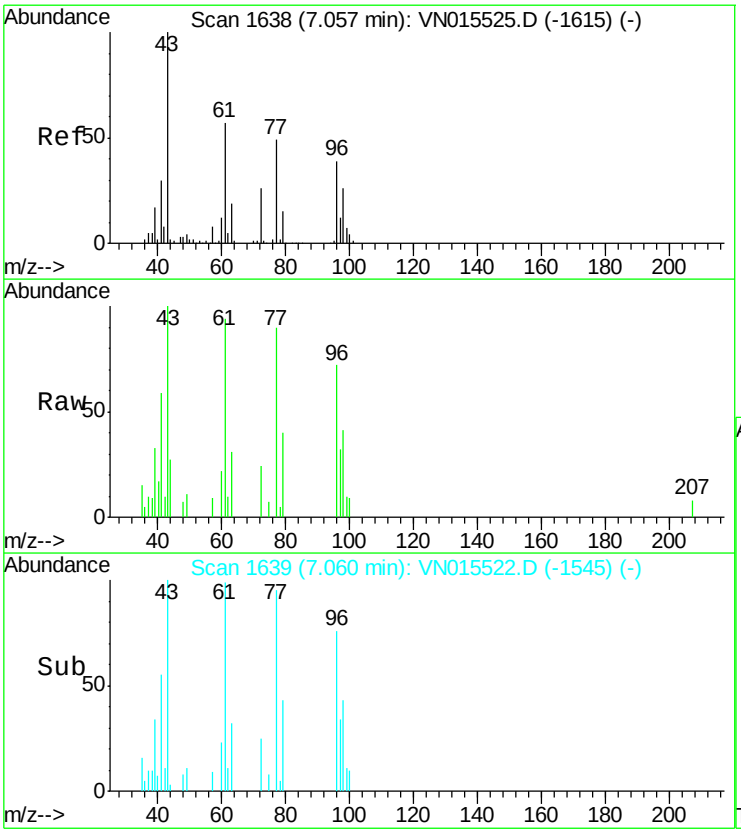


#27
2,2-Dichloropropane
Concen: 1.16 ug/l
RT: 7.06 min Scan# 1640
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 77 Resp: 3137

Ion	Ratio	Lower	Upper
77	100		
97	27.6	11.6	34.7

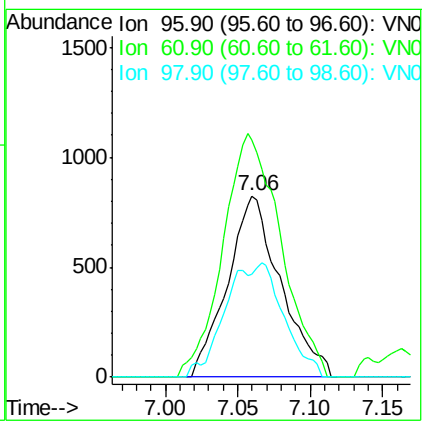




#28
cis-1,2-Dichloroethene
Concen: 1.01 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 96 Resp: 2099

Ion	Ratio	Lower	Upper
96	100		
61	146.0	0.0	292.0
98	30.3	0.0	129.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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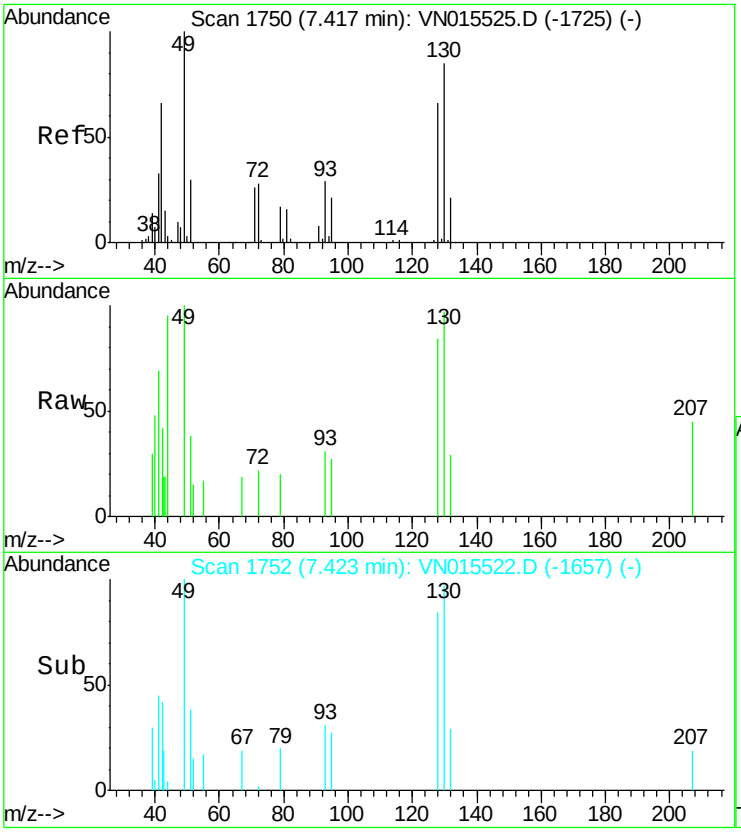
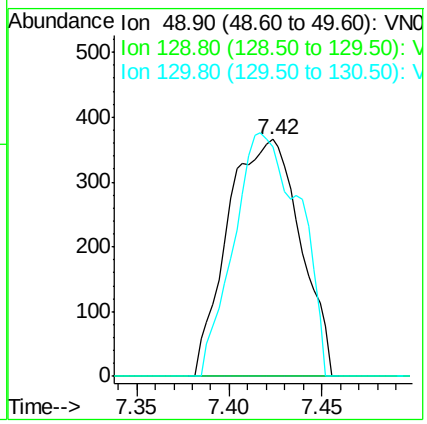
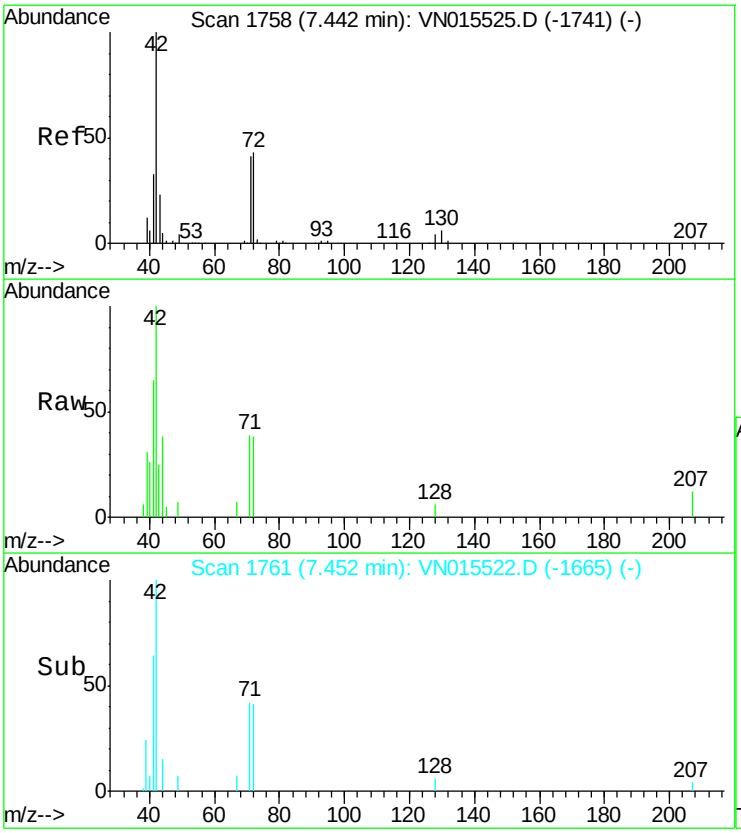


#29
Bromochloromethane
Concen: 0.57 ug/l
RT: 7.42 min Scan# 1752
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 49 Resp: 992

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.2
130	93.4	68.6	102.8

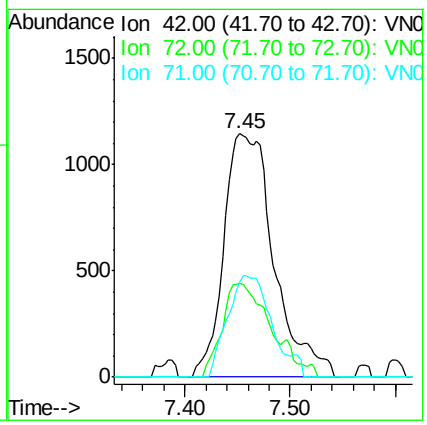




#30
Tetrahydrofuran
Concen: 5.33 ug/l
RT: 7.45 min Scan# 1761
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 42 Resp: 3786

Ion	Ratio	Lower	Upper
42	100		
72	33.2	34.2	51.2#
71	36.8	32.5	48.7



Instrument :
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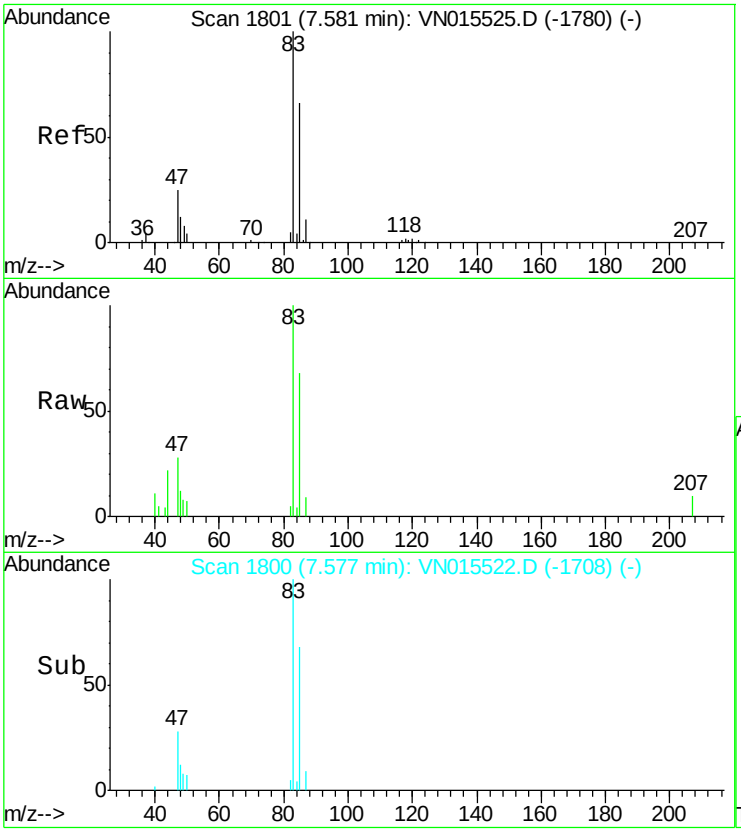
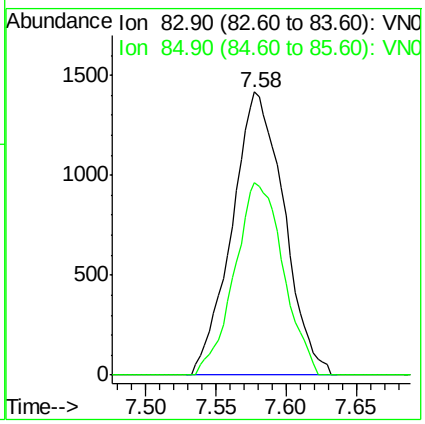
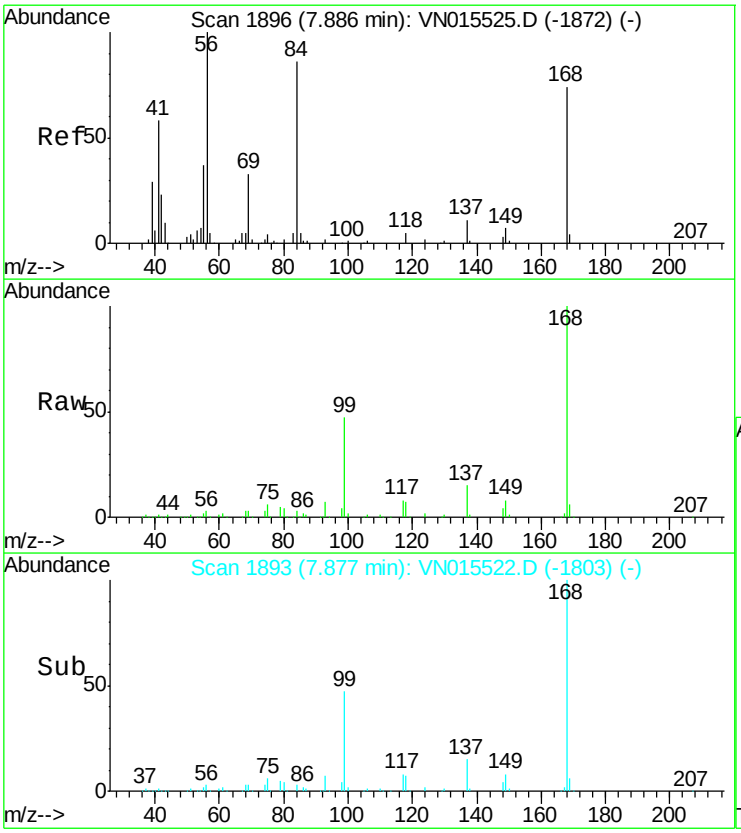


#31
Chloroform
Concen: 1.04 ug/l
RT: 7.58 min Scan# 1800
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 83 Resp: 3655

Ion	Ratio	Lower	Upper
83	100		
85	67.8	52.6	78.8

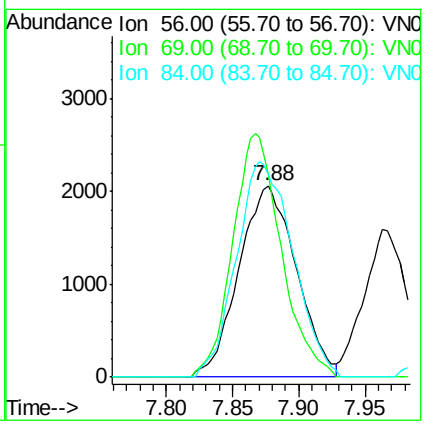




#32
Cyclohexane
Concen: 1.56 ug/l
RT: 7.88 min Scan# 1893
Delta R.T. -0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 56 Resp: 6236

Ion	Ratio	Lower	Upper
56	100		
69	105.6	26.6	39.8#
84	105.7	69.0	103.4#



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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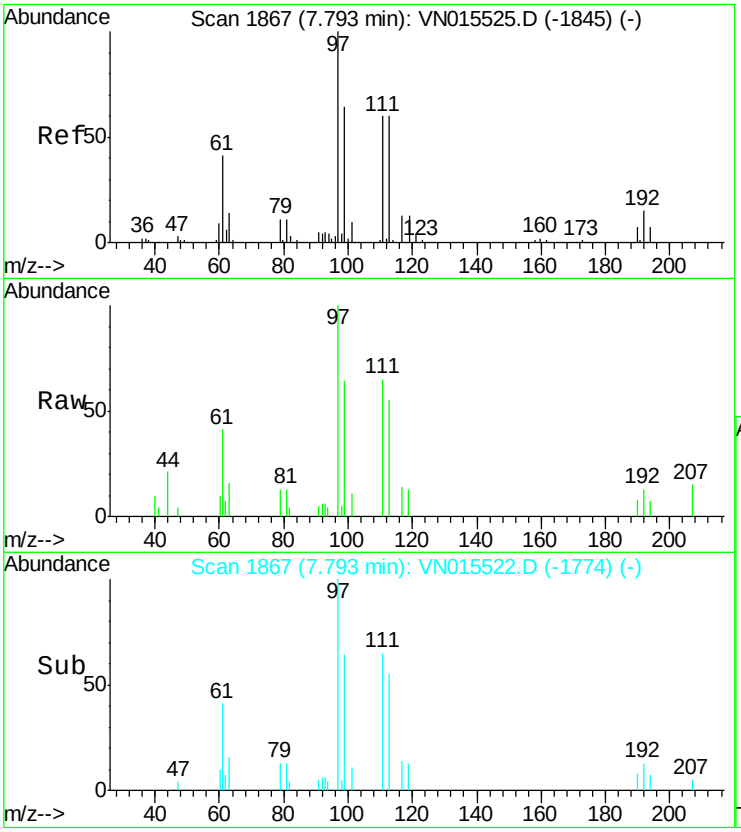
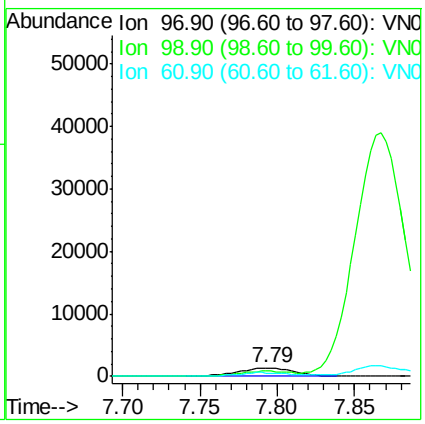
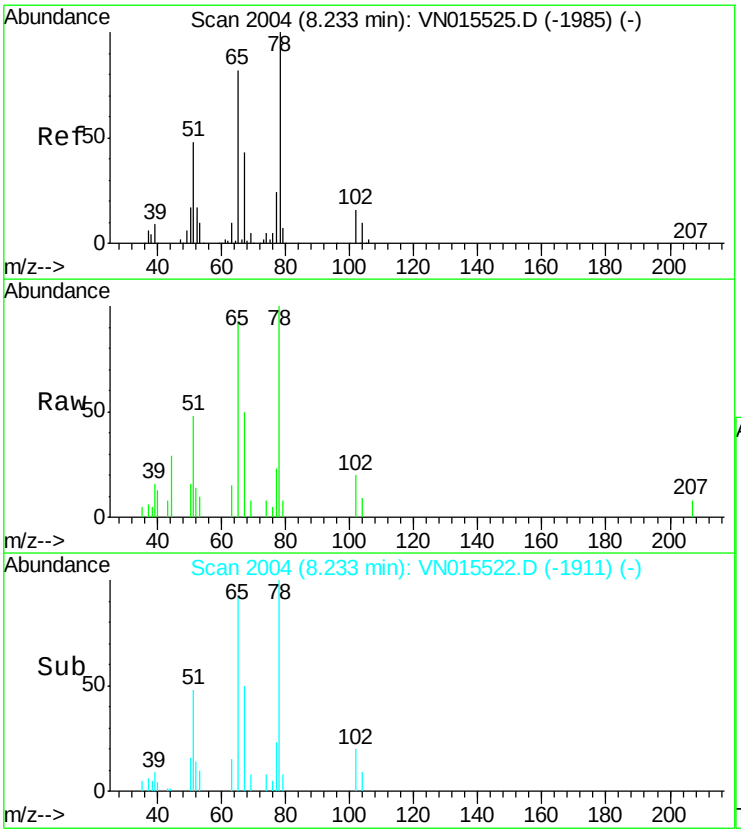


#33
1,1,1-Trichloroethane
Concen: 1.10 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 97 Resp: 3369

Ion	Ratio	Lower	Upper
97	100		
99	56.2	51.2	76.8
61	40.9	33.9	50.9

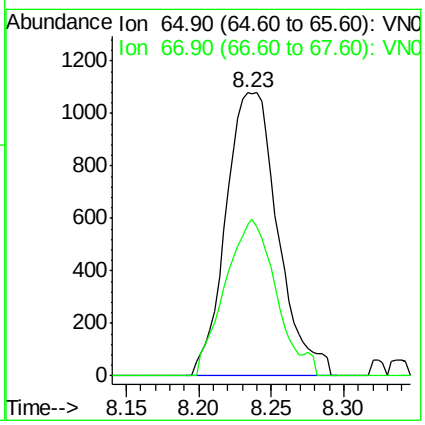




#34
1,2-Dichloroethane-d4
Concen: 1.13 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 65 Resp: 2686

Ion	Ratio	Lower	Upper
65	100		
67	54.4	0.0	103.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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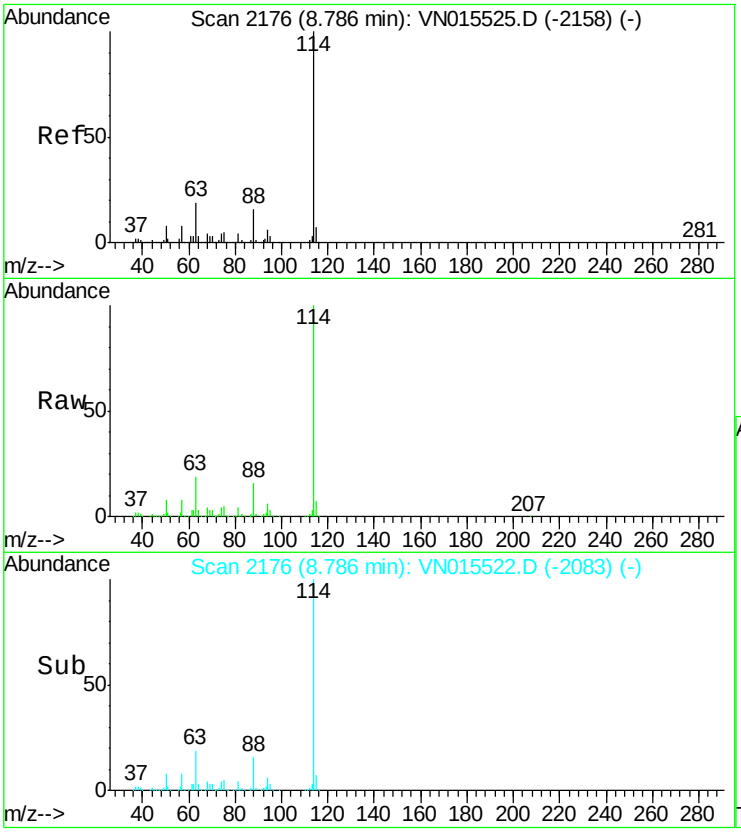
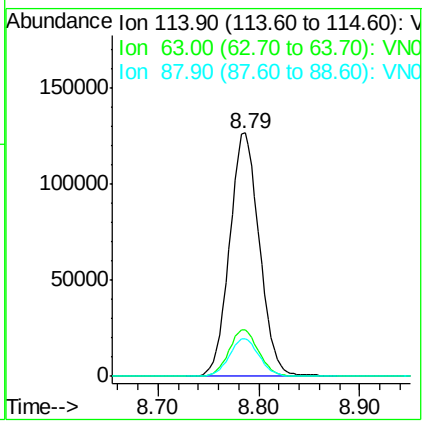
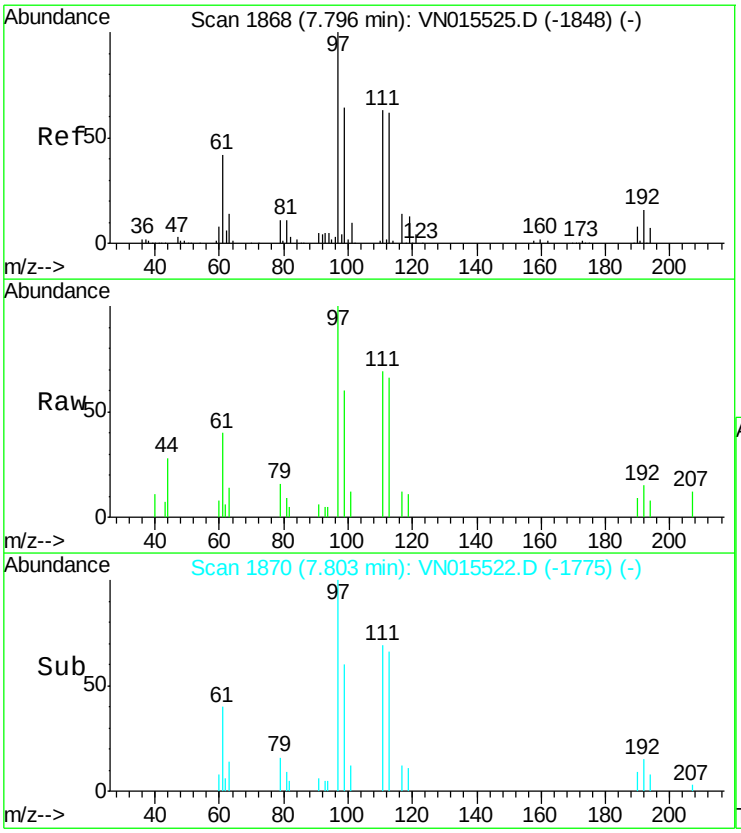


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:114 Resp: 260086

Ion	Ratio	Lower	Upper
114	100		
63	19.0	0.0	38.6
88	15.6	0.0	32.2

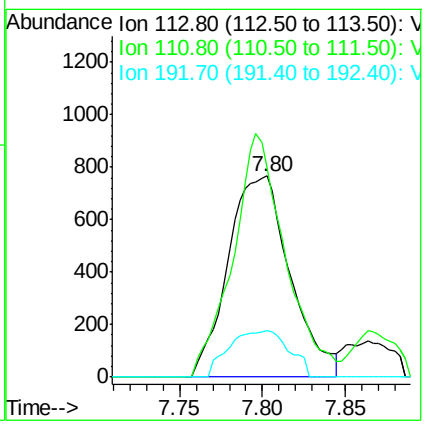


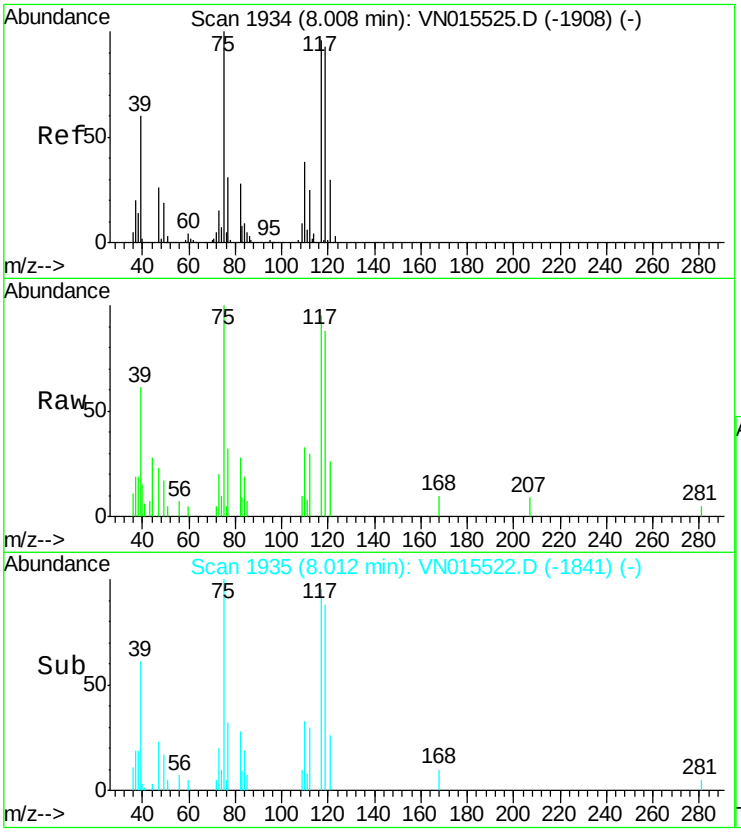


#36
Dibromofluoromethane
Concen: 1.18 ug/l
RT: 7.80 min Scan# 1870
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:113 Resp: 1995

Ion	Ratio	Lower	Upper
113	100		
111	102.4	81.5	122.3
192	22.2	20.0	30.0





#37
1,1-Dichloropropene
Concen: 1.06 ug/l
RT: 8.01 min Scan# 1935
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 75 Resp: 2613

Ion	Ratio	Lower	Upper
75	100		
110	35.7	18.6	55.6
77	31.4	24.4	36.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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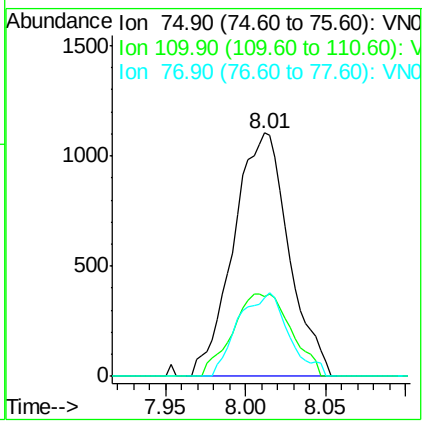
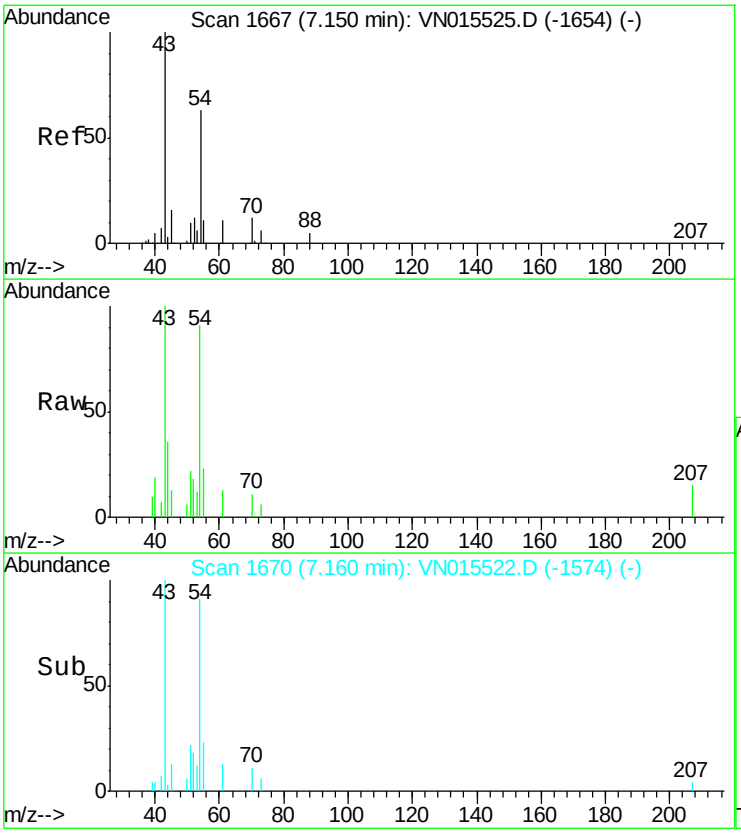
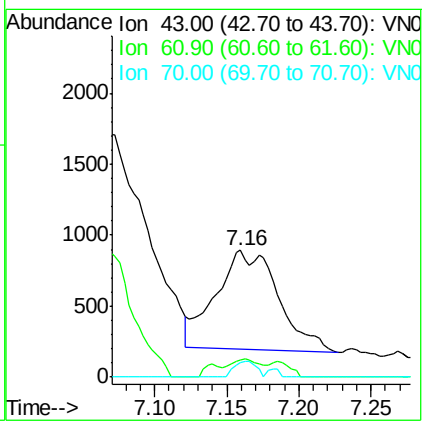




#38
Ethyl Acetate
Concen: 1.14 ug/l m
RT: 7.16 min Scan# 1670
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 2120

Ion	Ratio	Lower	Upper
43	100		
61	0.0	10.8	16.2#
70	0.0	8.5	12.7#



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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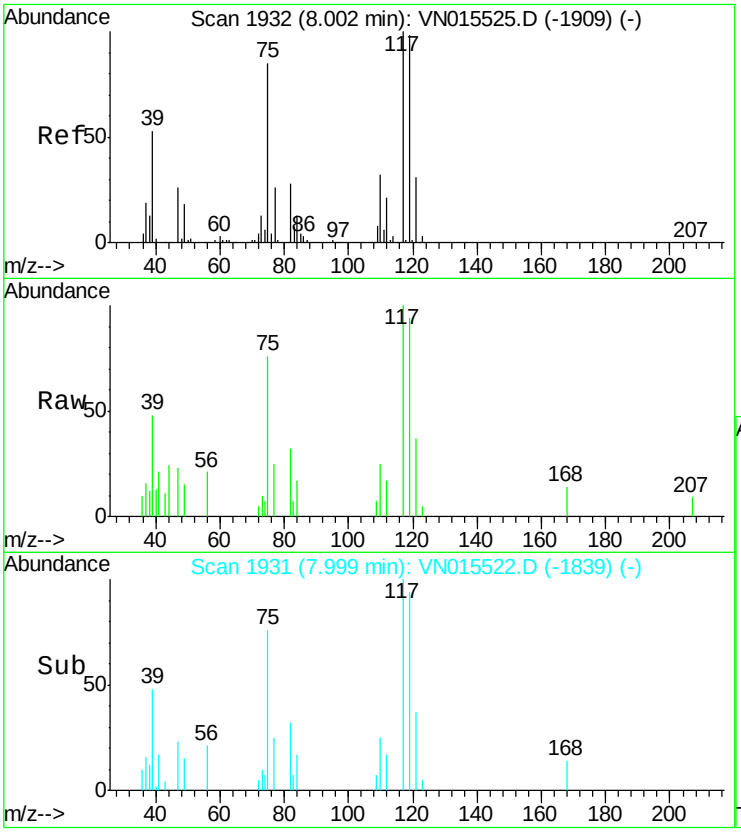
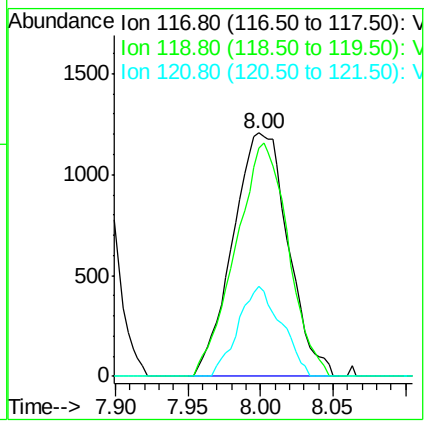
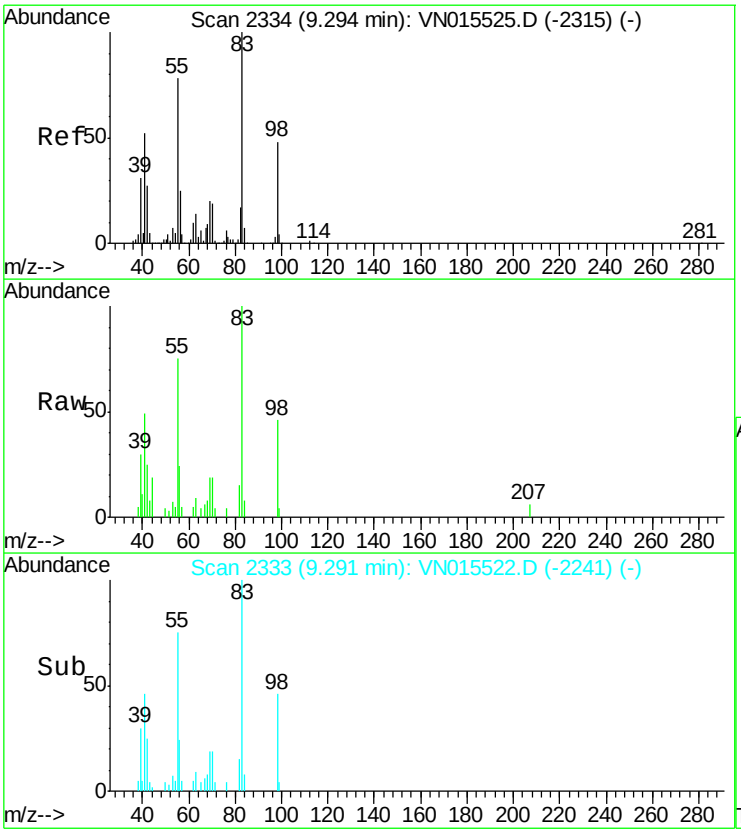


#39
Carbon Tetrachloride
Concen: 1.29 ug/l
RT: 8.00 min Scan# 1931
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:117 Resp: 3202

Ion	Ratio	Lower	Upper
117	100		
119	93.6	78.0	117.0
121	36.8	24.5	36.7#

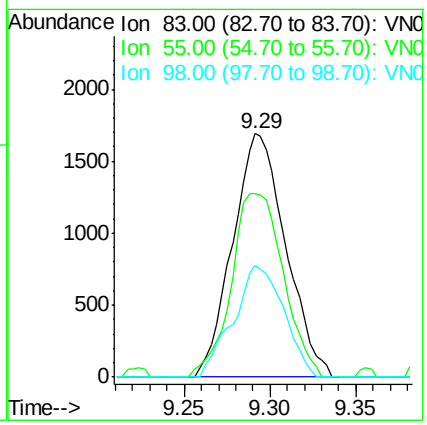




#40
Methylcyclohexane
Concen: 1.24 ug/l
RT: 9.29 min Scan# 2333
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 83 Resp: 3618

Ion	Ratio	Lower	Upper
83	100		
55	75.1	62.5	93.7
98	46.2	38.2	57.2



Instrument :
MSVOA_N
LabSampleId :
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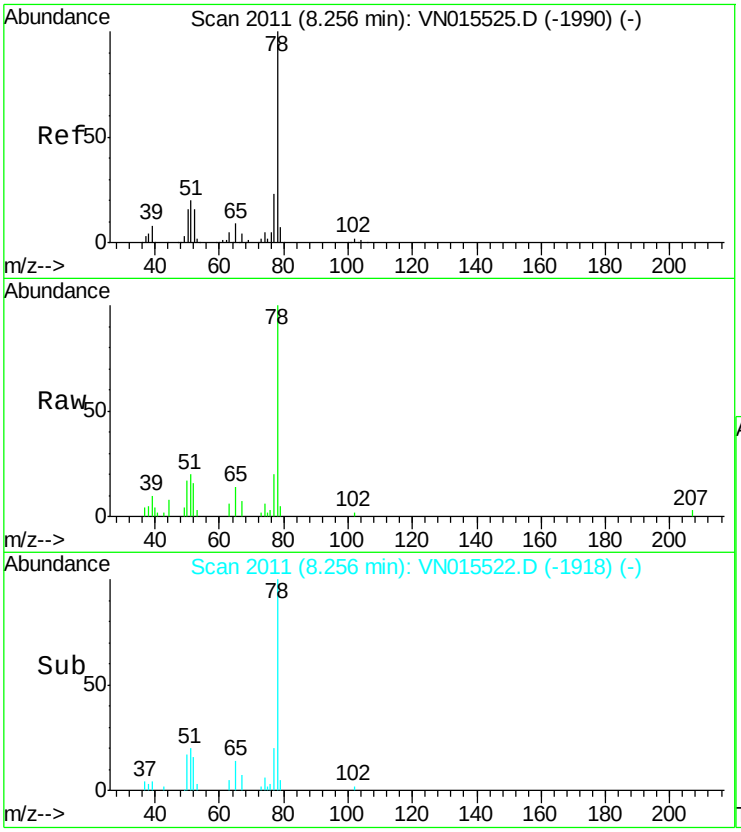
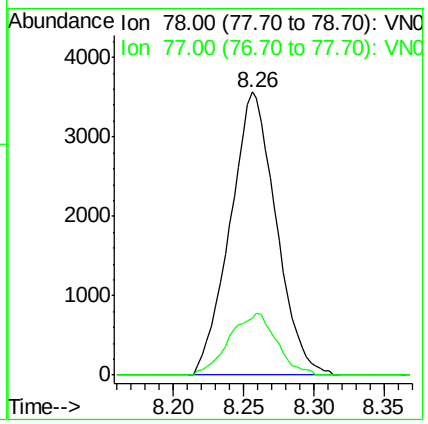
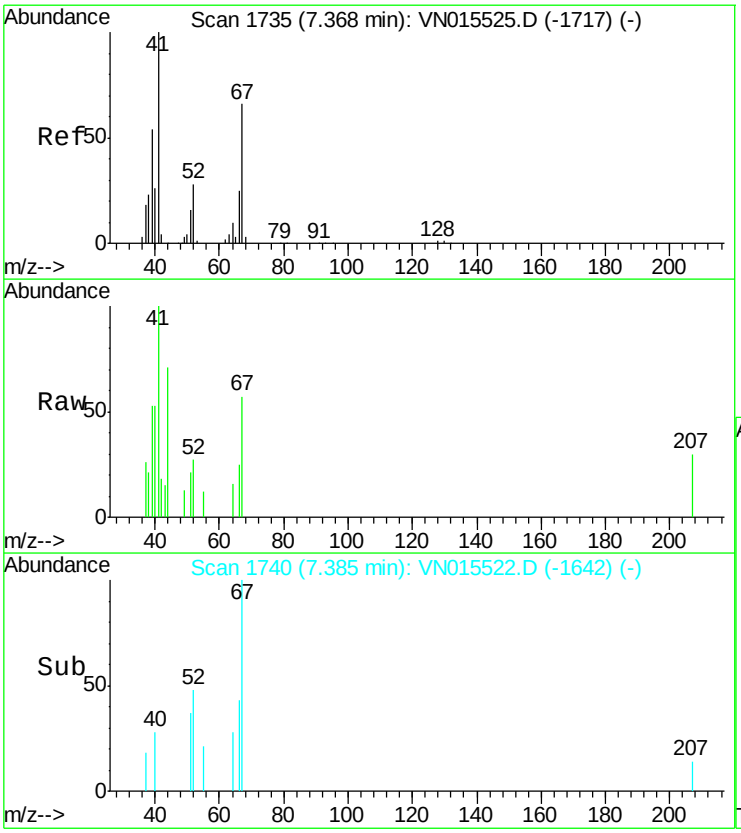


#41
Benzene
Concen: 1.13 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 78 Resp: 8124

Ion	Ratio	Lower	Upper
78	100		
77	20.3	18.5	27.7

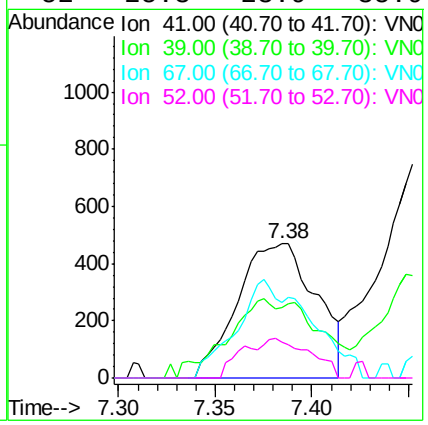




#42
Methacrylonitrile
Concen: 1.01 ug/l
RT: 7.38 min Scan# 1740
Delta R.T. 0.02 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 41 Resp: 1322

Ion	Ratio	Lower	Upper
41	100		
39	37.2	45.0	67.4#
67	40.7	54.9	82.3#
52	25.3	23.9	35.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
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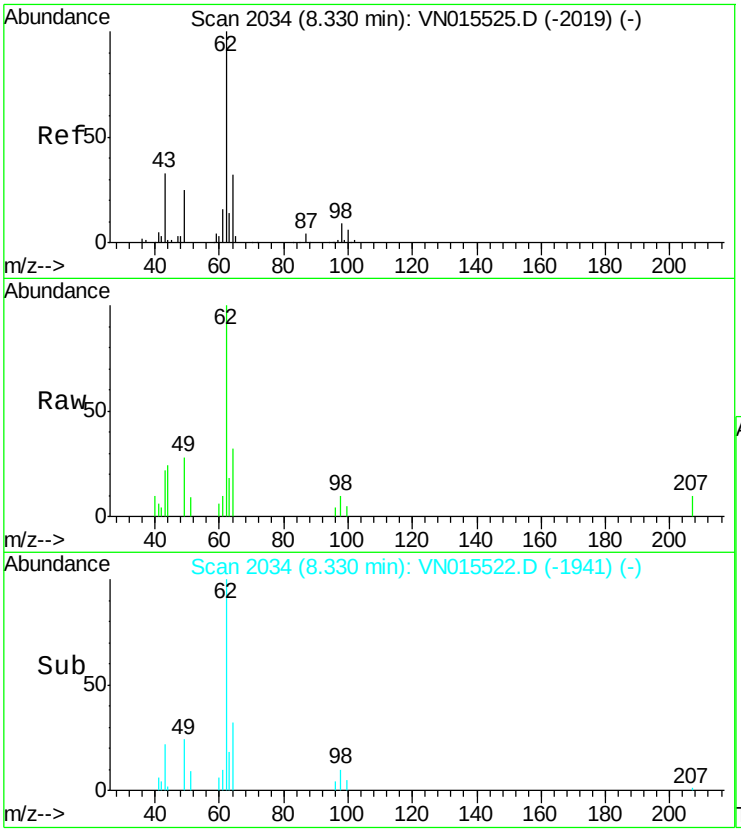
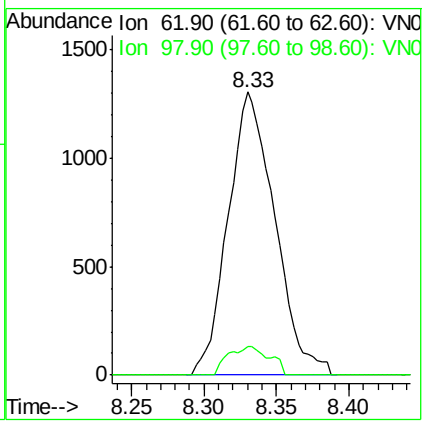
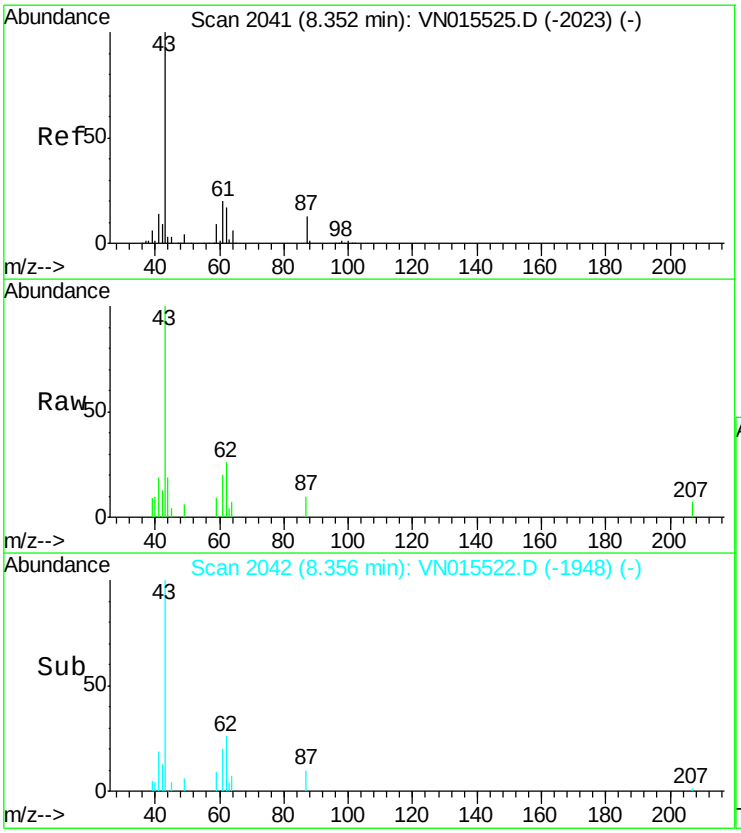


#43
1,2-Dichloroethane
Concen: 1.11 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 62 Resp: 2926

Ion	Ratio	Lower	Upper
62	100		
98	8.9	0.0	18.2

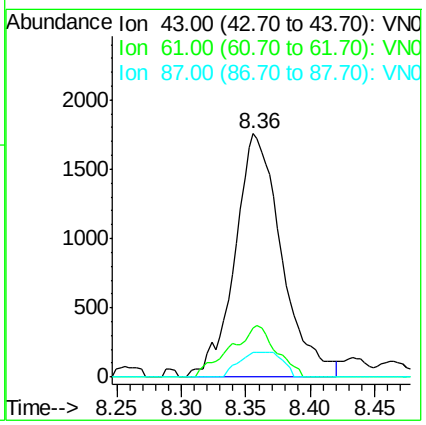




#44
Isopropyl Acetate
Concen: 1.45 ug/l
RT: 8.36 min Scan# 2042
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 4428

Ion	Ratio	Lower	Upper
43	100		
61	20.8	20.4	30.6
87	5.2	10.4	15.6#



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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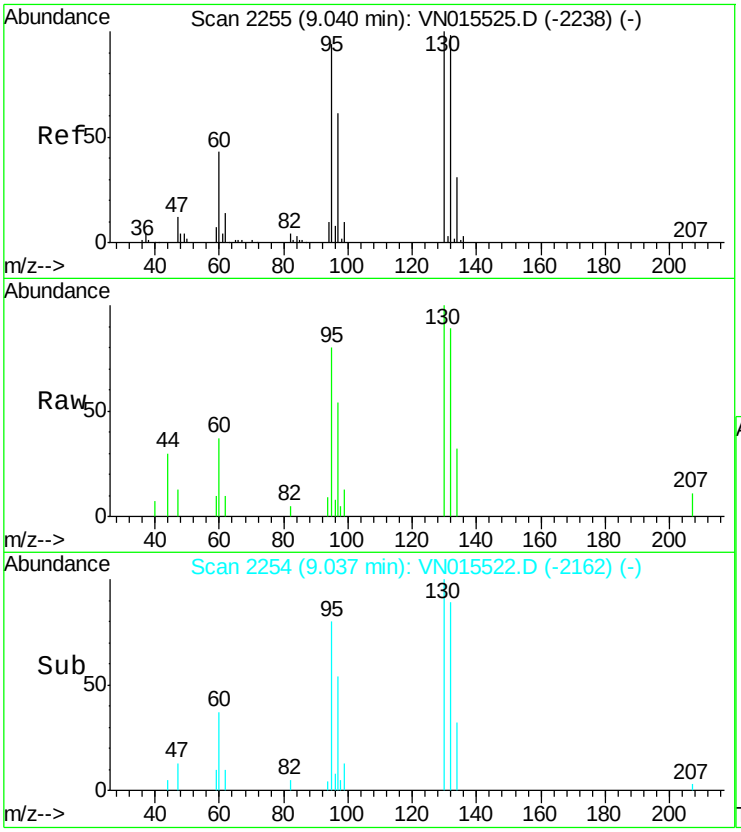
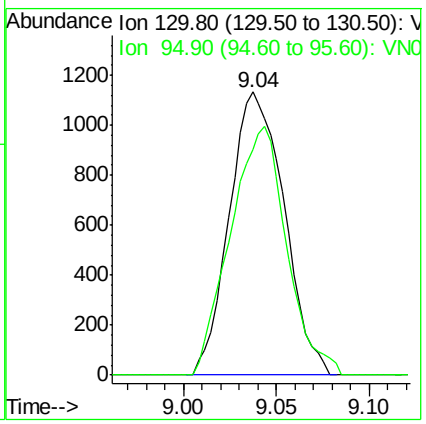
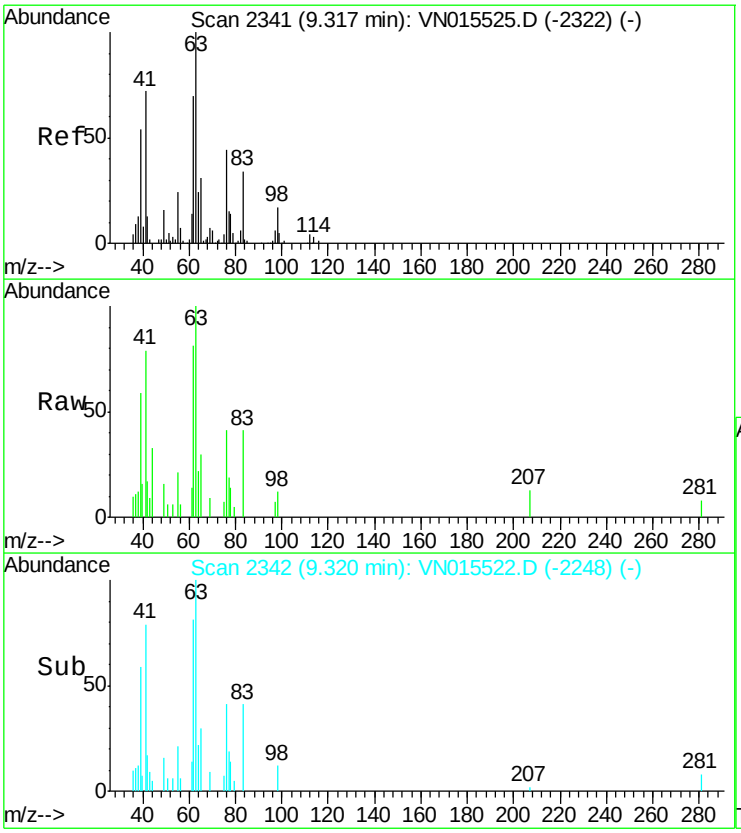


#45
Trichloroethene
Concen: 1.21 ug/l
RT: 9.04 min Scan# 2254
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:130 Resp: 2322

Ion	Ratio	Lower	Upper
130	100		
95	79.7	0.0	187.0

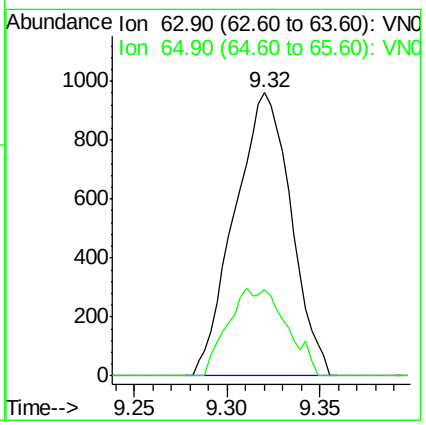




#46
1,2-Dichloropropane
Concen: 1.04 ug/l
RT: 9.32 min Scan# 2342
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 63 Resp: 2031

Ion	Ratio	Lower	Upper
63	100		
65	30.4	25.0	37.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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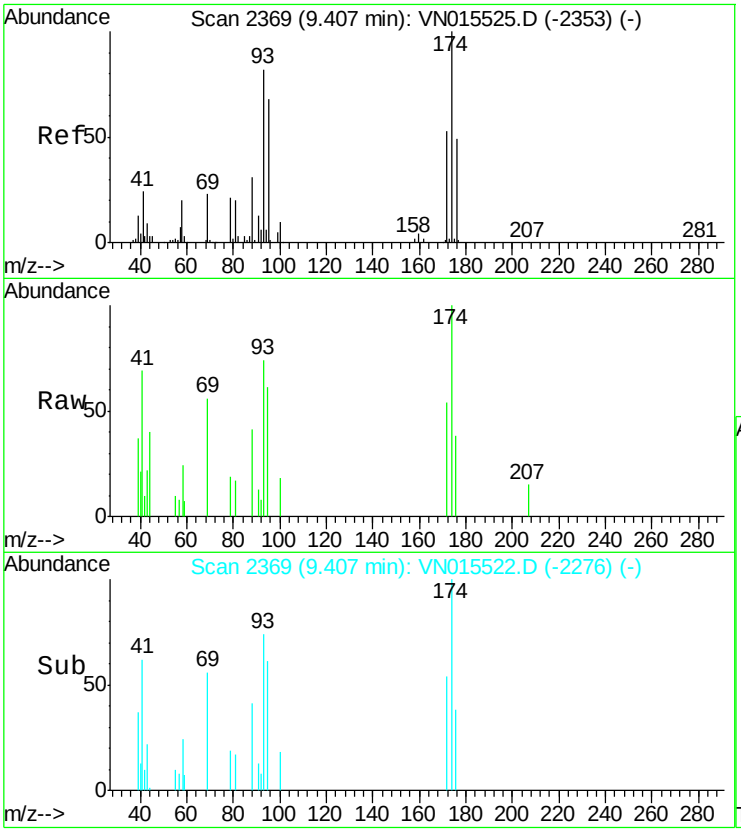
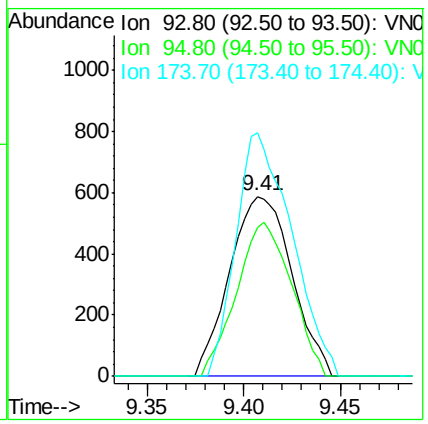
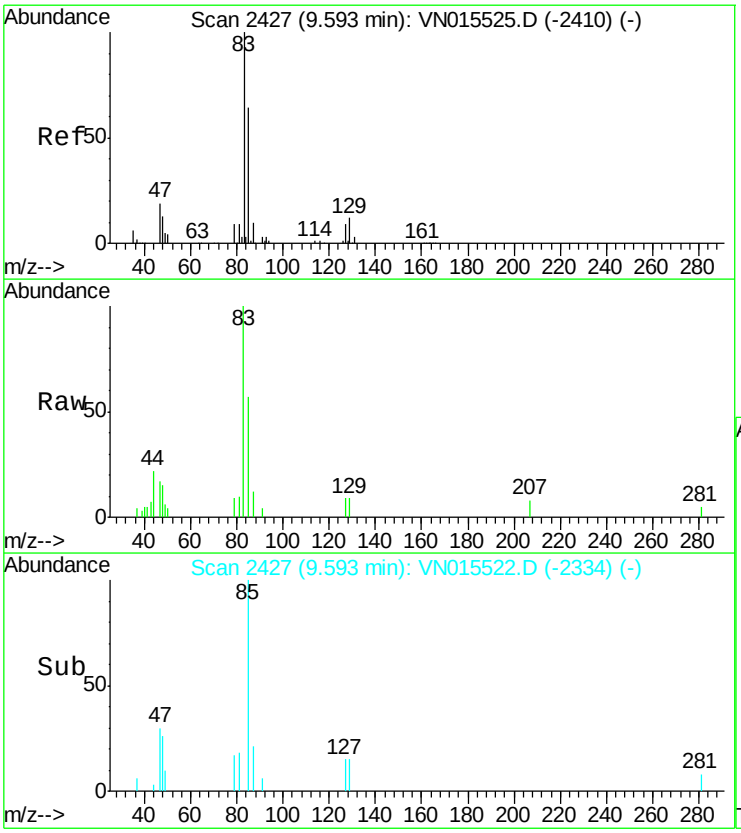


#47
Dibromomethane
Concen: 1.09 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 93 Resp: 1319

Ion	Ratio	Lower	Upper
93	100		
95	75.5	66.9	100.3
174	121.5	98.6	148.0

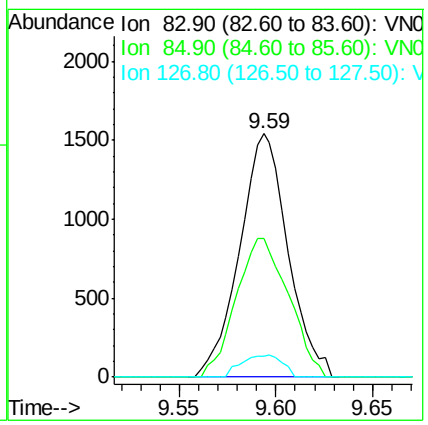




#48
Bromodichloromethane
Concen: 1.11 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 83 Resp: 2680

Ion	Ratio	Lower	Upper
83	100		
85	56.9	51.1	76.7
127	8.7	7.6	11.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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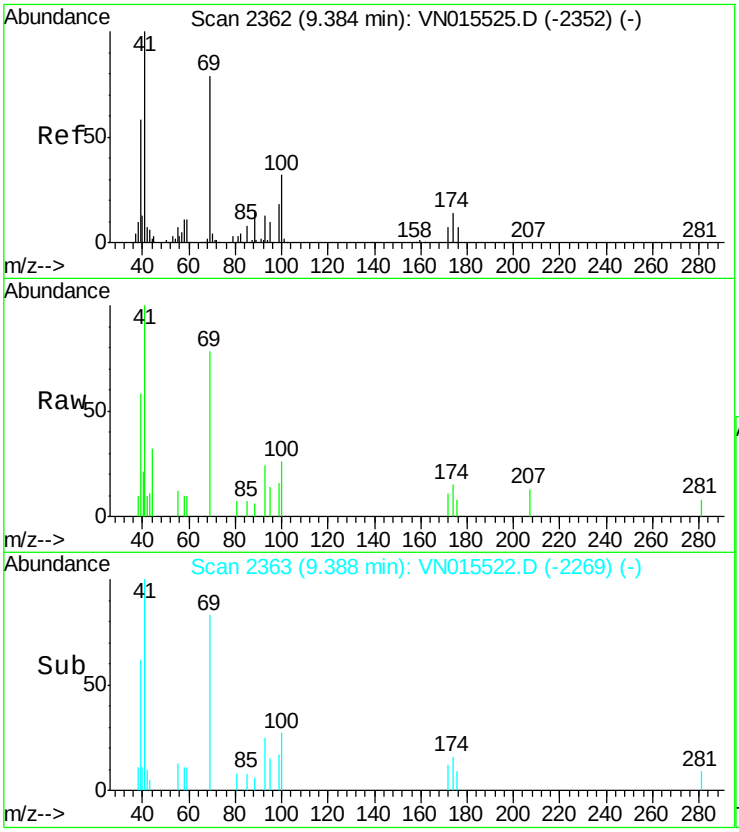
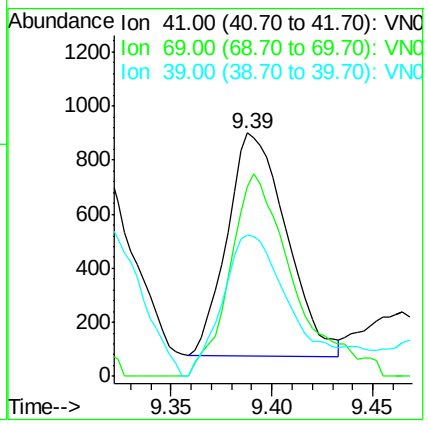
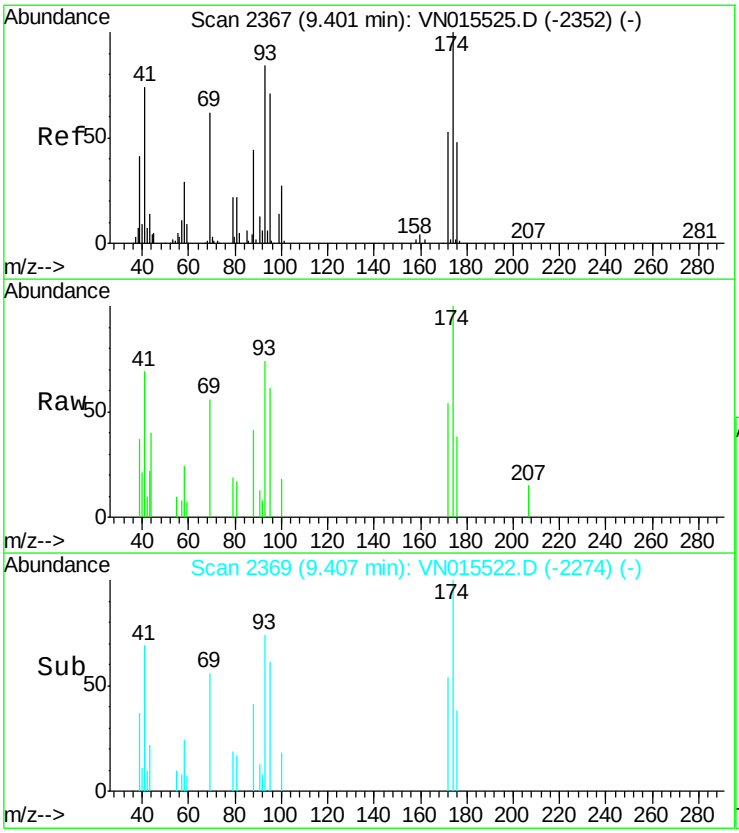


#49
Methyl methacrylate
Concen: 0.90 ug/l
RT: 9.39 min Scan# 2363
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 41 Resp: 1697

Ion	Ratio	Lower	Upper
41	100		
69	97.4	62.8	94.2#
39	71.4	46.4	69.6#

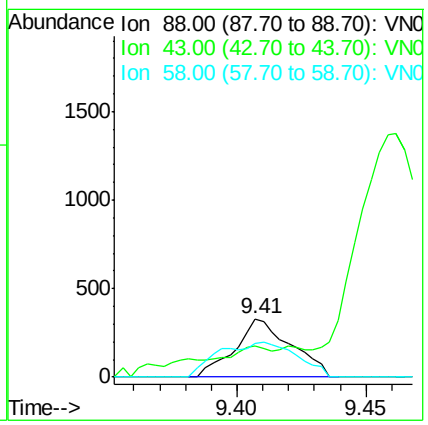




#50
1,4-Dioxane
Concen: 20.03 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 88 Resp: 496

Ion	Ratio	Lower	Upper
88	100		
43	0.0	26.4	39.6#
58	84.3	56.6	84.8



Instrument :
MSVOA_N
LabSampleId :
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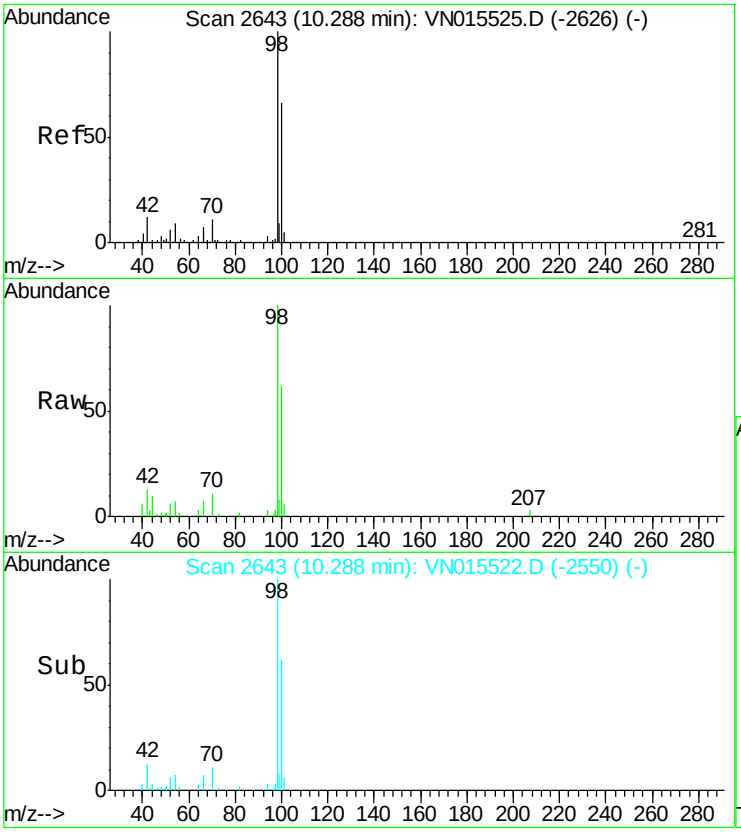
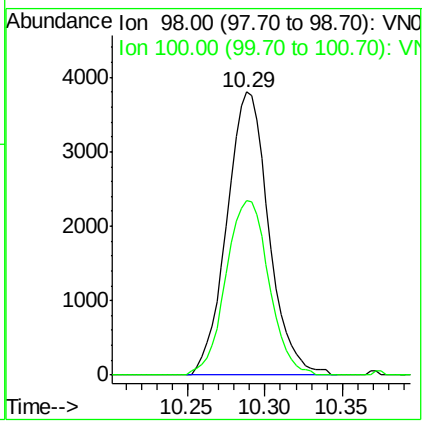
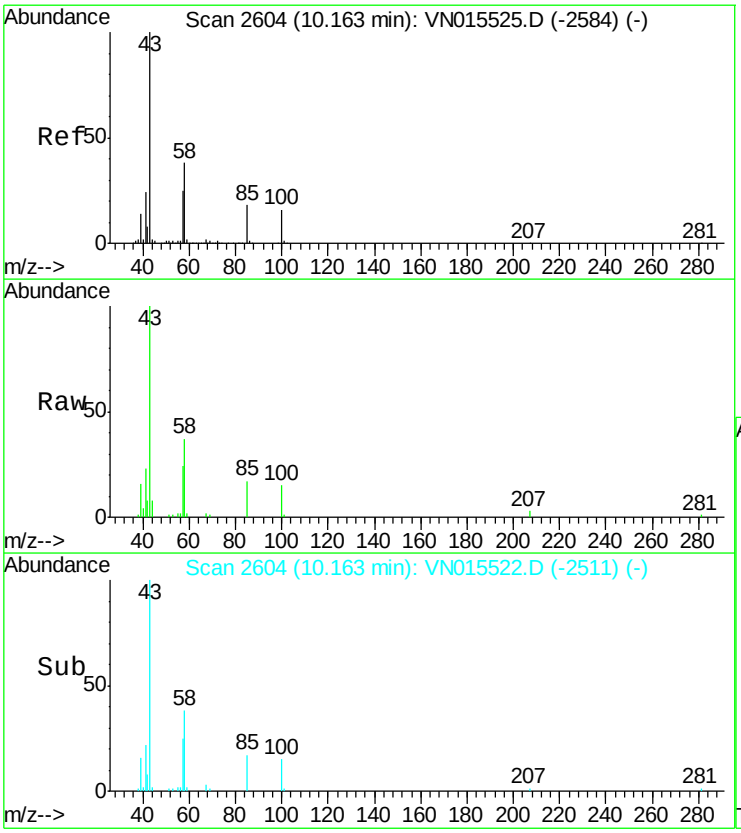


#51
Toluene-d8
Concen: 1.12 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 98 Resp: 7165

Ion	Ratio	Lower	Upper
98	100		
100	63.1	52.3	78.5

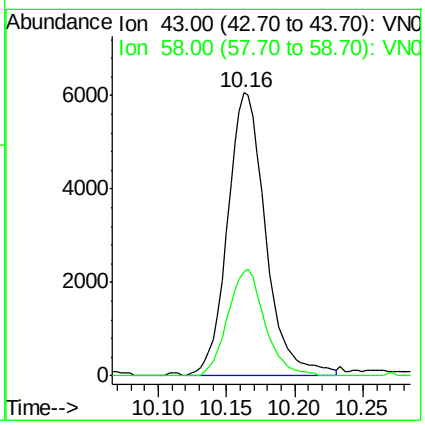




#52
4-Methyl-2-Pentanone
Concen: 5.68 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 11792

Ion	Ratio	Lower	Upper
43	100		
58	36.5	30.2	45.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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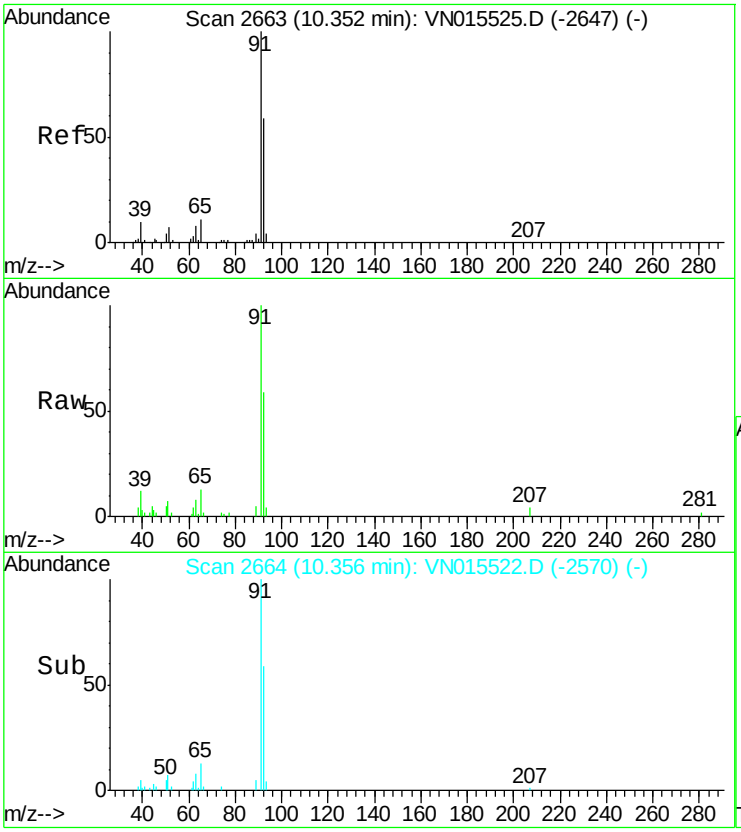
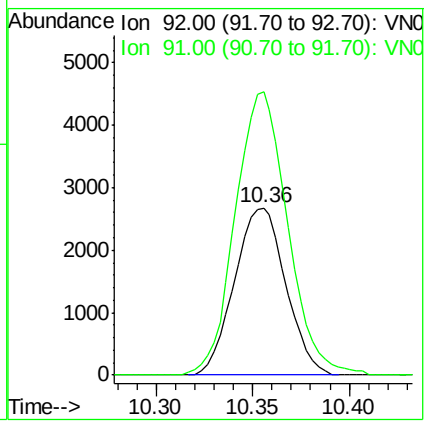
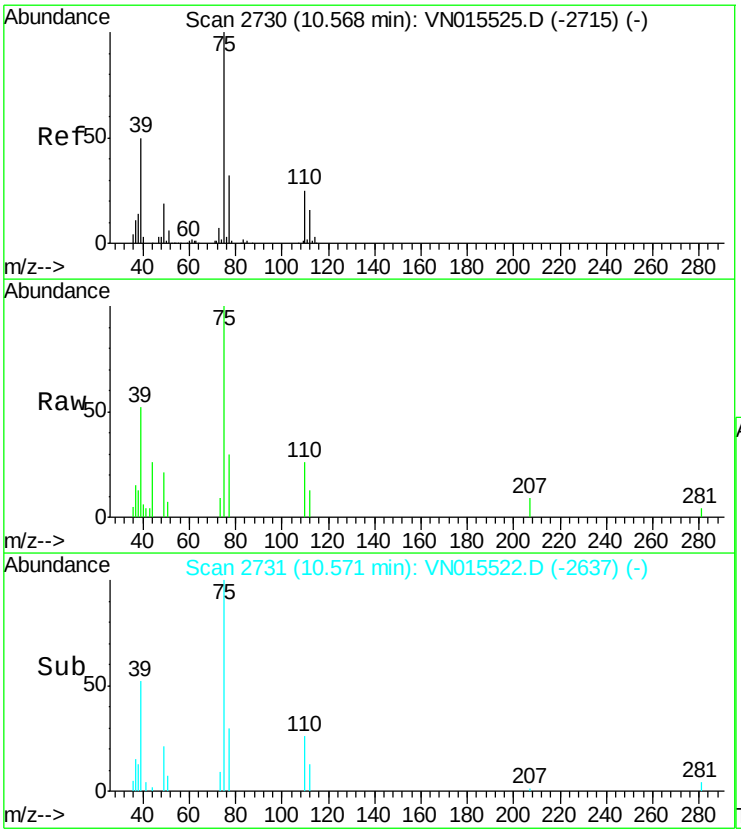


#53
Toluene
Concen: 1.12 ug/l
RT: 10.36 min Scan# 2664
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 92 Resp: 4930

Ion	Ratio	Lower	Upper
92	100		
91	173.7	136.2	204.4

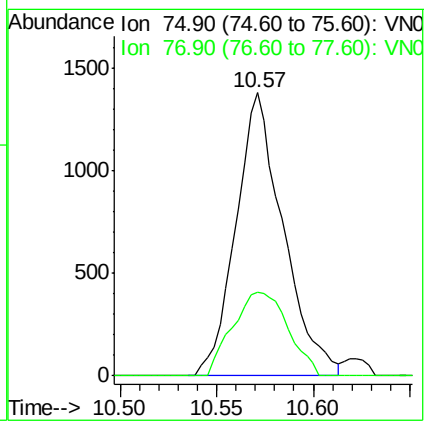


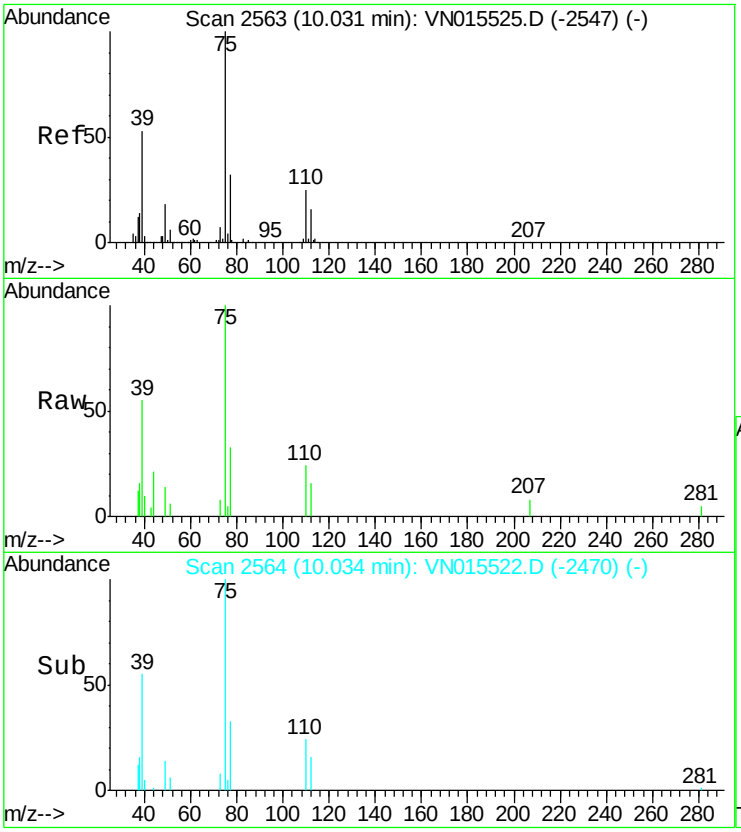


#54
t-1,3-Dichloropropene
Concen: 0.97 ug/l
RT: 10.57 min Scan# 2731
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 75 Resp: 2343

Ion	Ratio	Lower	Upper
75	100		
77	29.8	26.0	39.0





#55
cis-1,3-Dichloropropene
Concen: 1.09 ug/l
RT: 10.03 min Scan# 2564
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 75 Resp: 3022

Ion	Ratio	Lower	Upper
75	100		
77	33.5	25.4	38.2
39	55.2	42.2	63.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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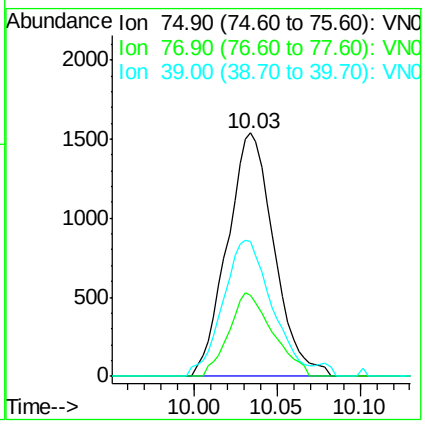
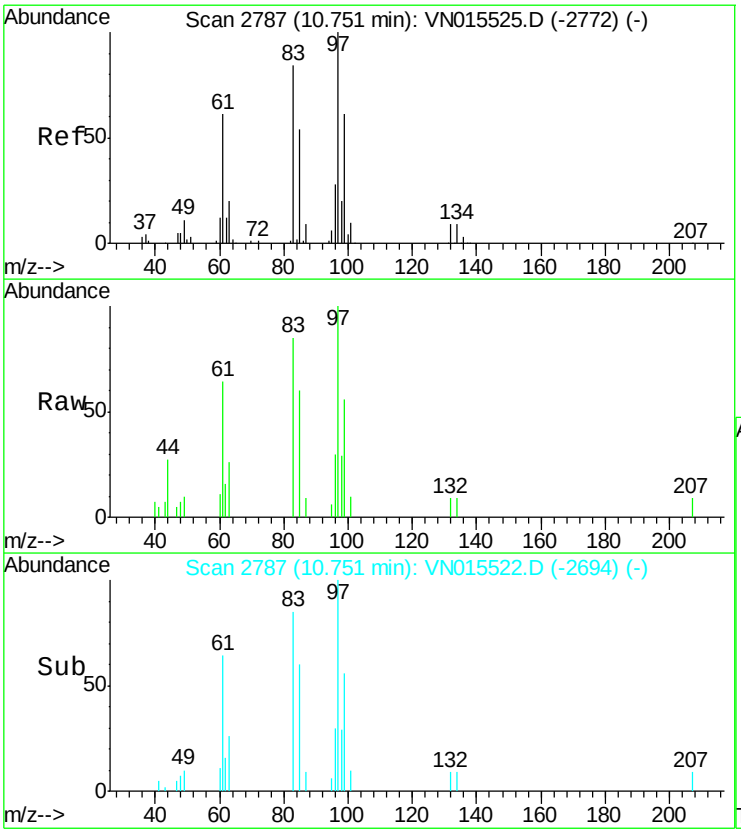
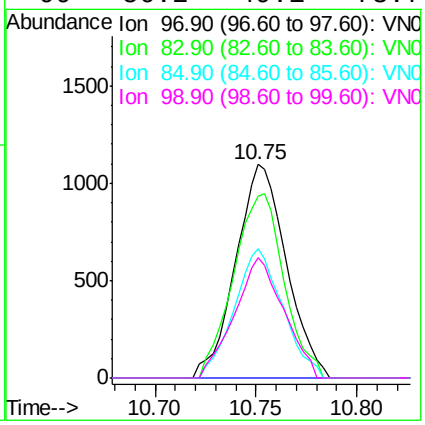


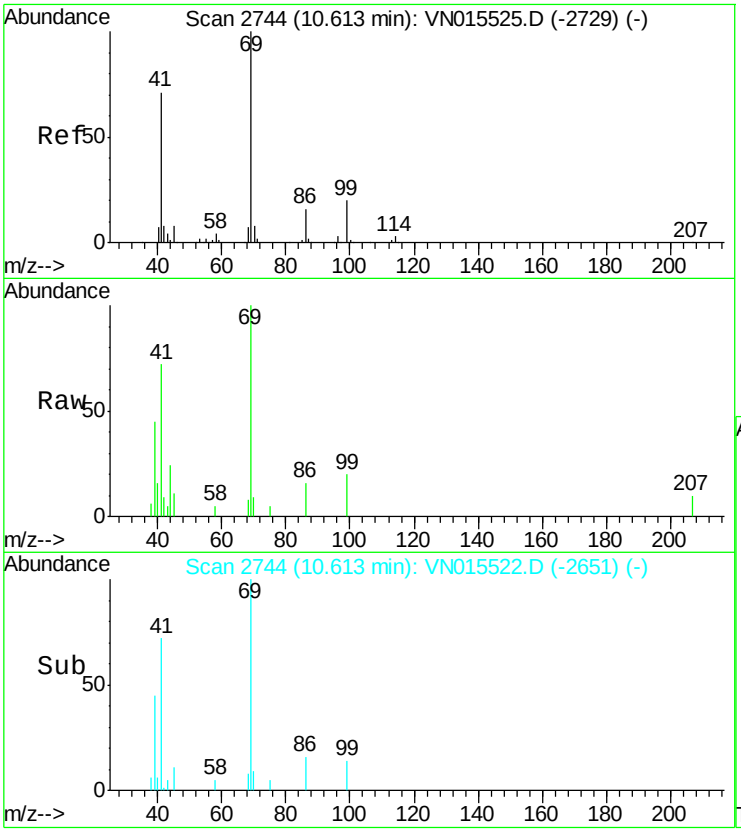


#56
1,1,2-Trichloroethane
Concen: 1.11 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 97 Resp: 1922

Ion	Ratio	Lower	Upper
97	100		
83	84.9	67.0	100.4
85	60.4	42.9	64.3
99	56.2	49.1	73.7





#57
Ethyl methacrylate
Concen: 1.09 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 69 Resp: 2600

Ion	Ratio	Lower	Upper
69	100		
41	76.3	56.9	85.3
39	37.7	32.0	48.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
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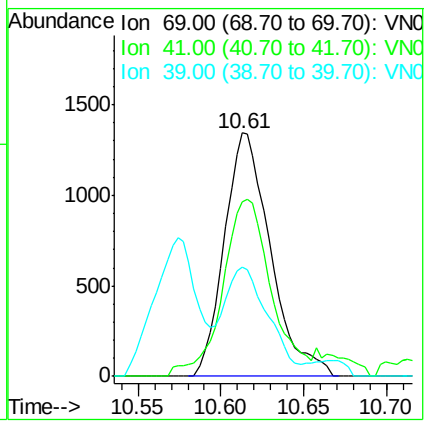
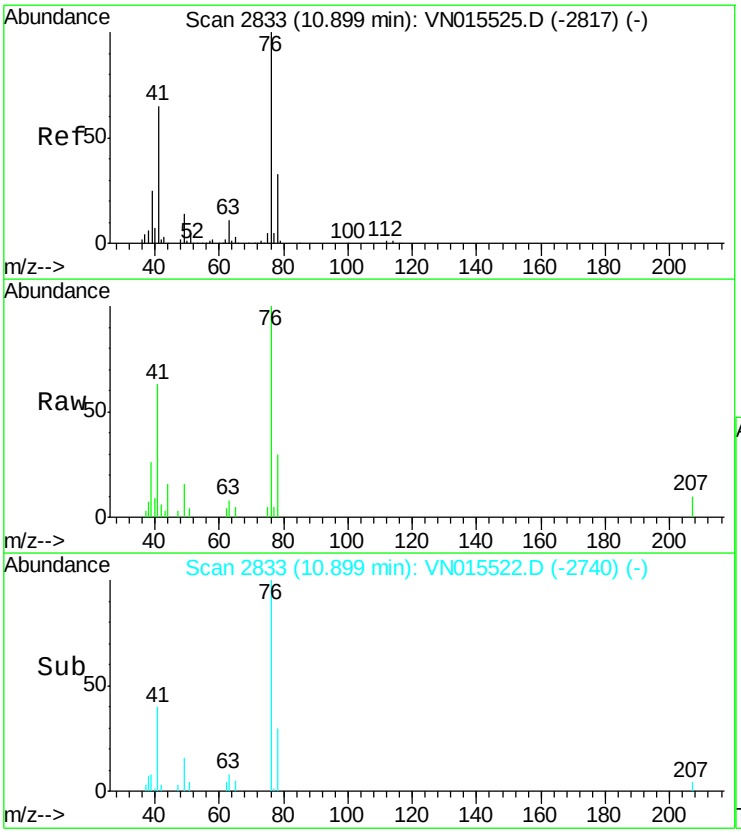
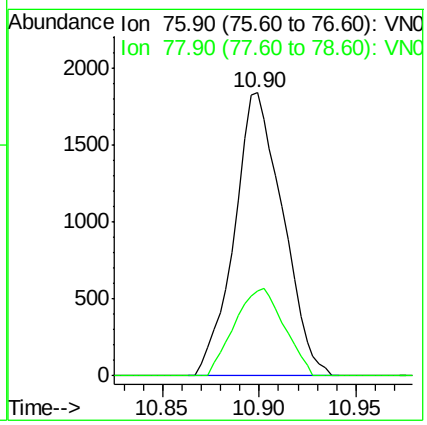


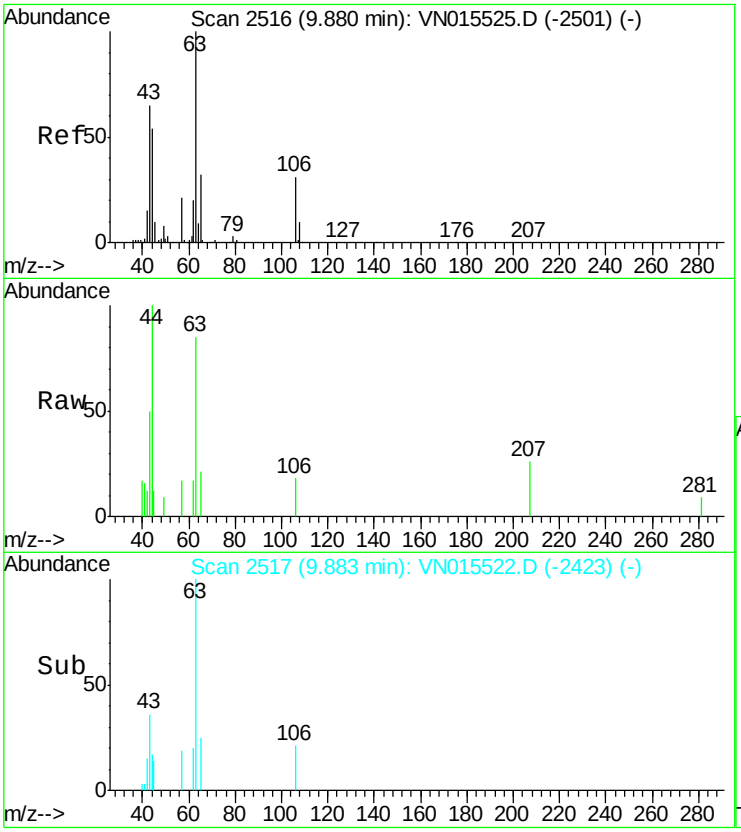


#58
1,3-Dichloropropane
Concen: 1.08 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 76 Resp: 3205

Ion	Ratio	Lower	Upper
76	100		
78	31.5	26.3	39.5





#59
2-Chloroethyl Vinyl ether
Concen: 0.97 ug/l
RT: 9.88 min Scan# 2517
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 63 Resp: 868

Ion	Ratio	Lower	Upper
63	100		
106	0.0	23.7	35.5#

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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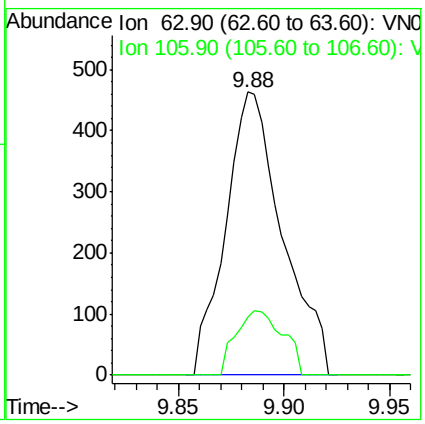
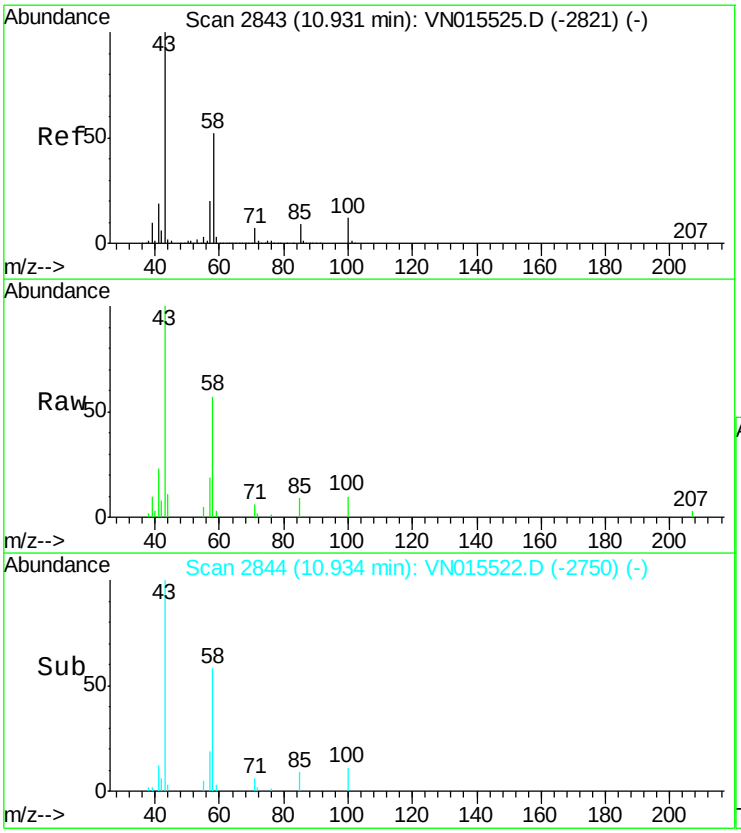
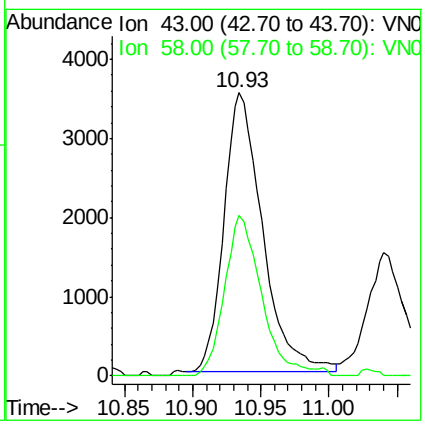


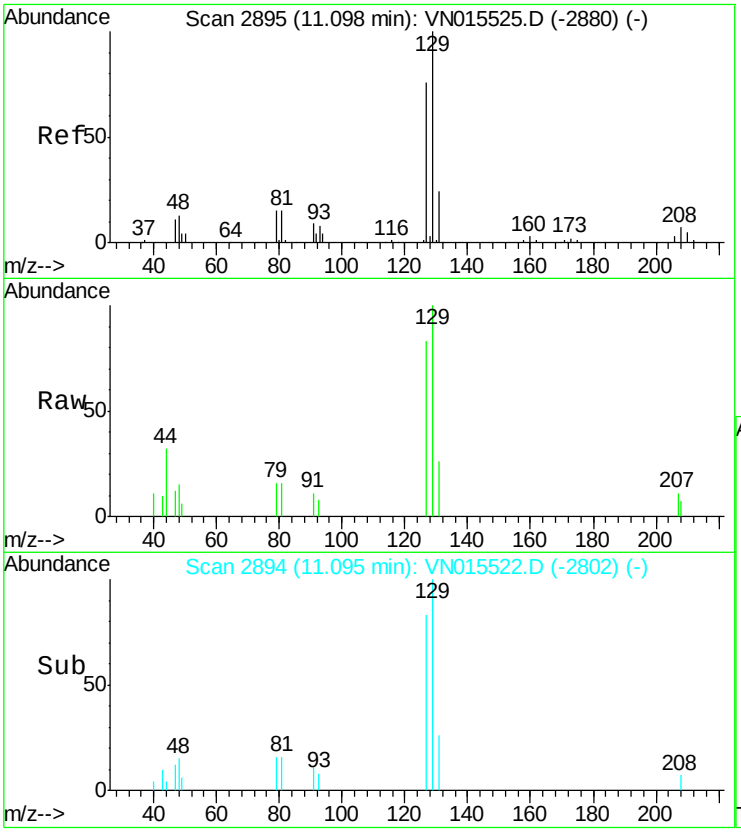


#60
2-Hexanone
Concen: 4.96 ug/l
RT: 10.93 min Scan# 2844
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 6916

Ion	Ratio	Lower	Upper
43	100		
58	54.9	26.0	78.0





#61
Dibromochloromethane
Concen: 1.06 ug/l
RT: 11.10 min Scan# 2894
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:129 Resp: 2051

Ion	Ratio	Lower	Upper
129	100		
127	82.6	38.6	116.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
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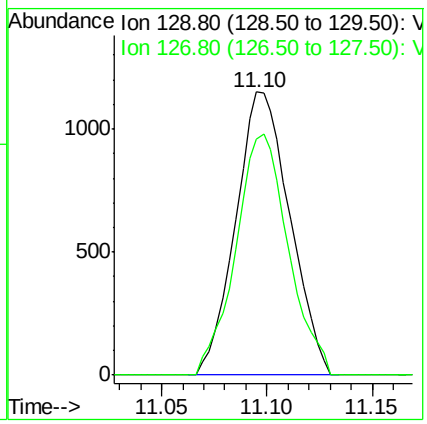
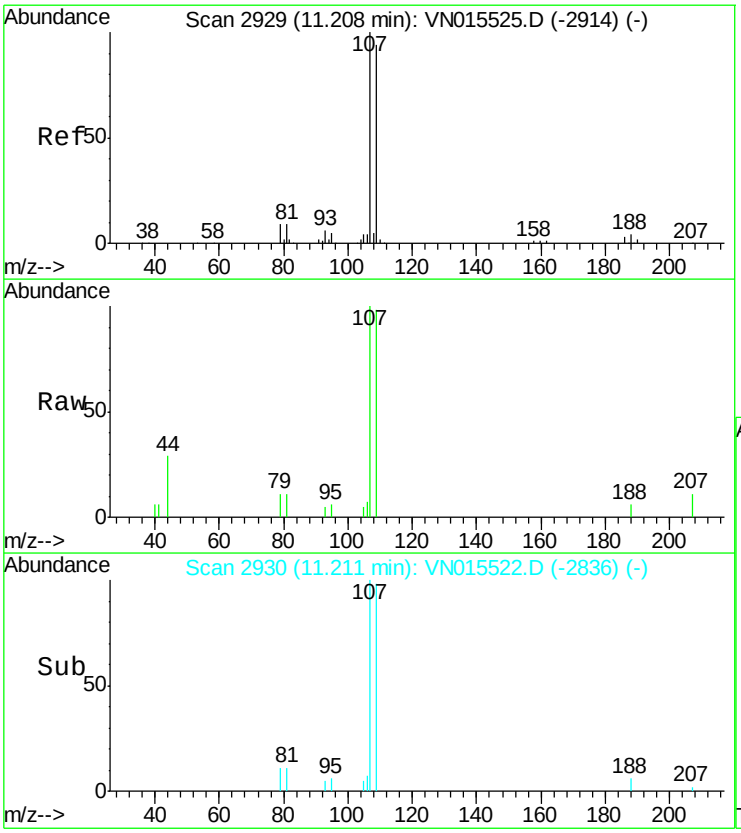
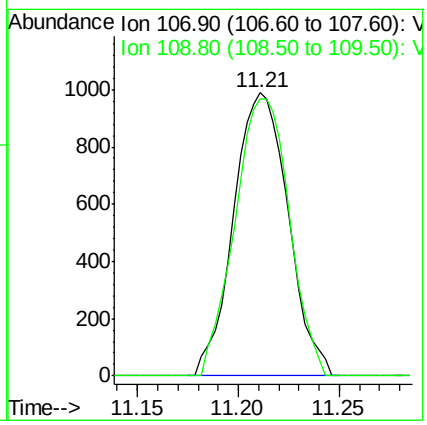




#62
1,2-Dibromoethane
Concen: 1.08 ug/l
RT: 11.21 min Scan# 2930
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:107 Resp: 1871

Ion	Ratio	Lower	Upper
107	100		
109	97.9	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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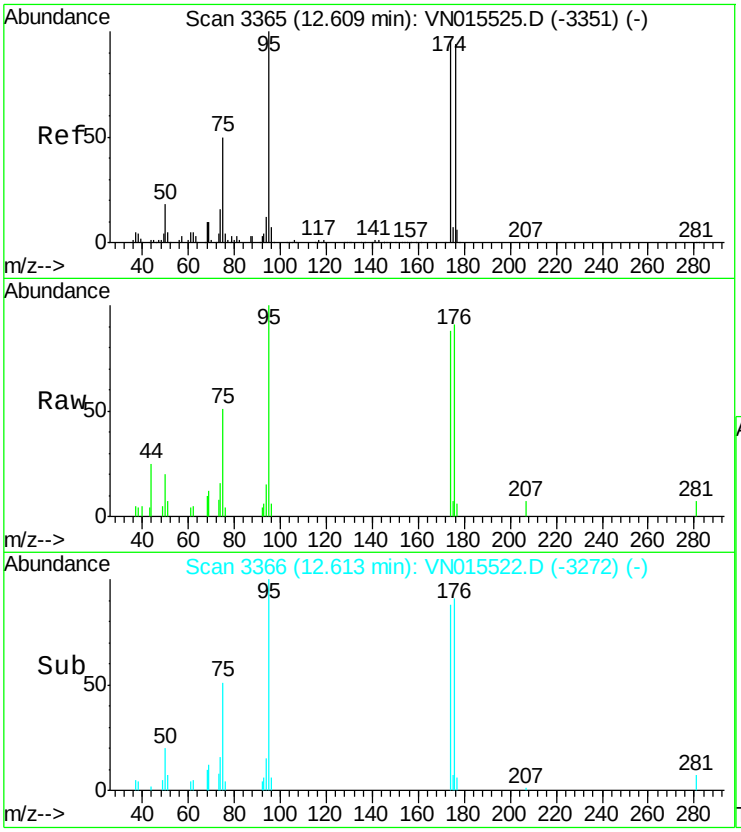
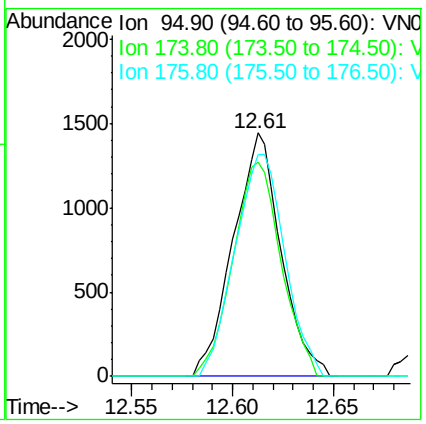
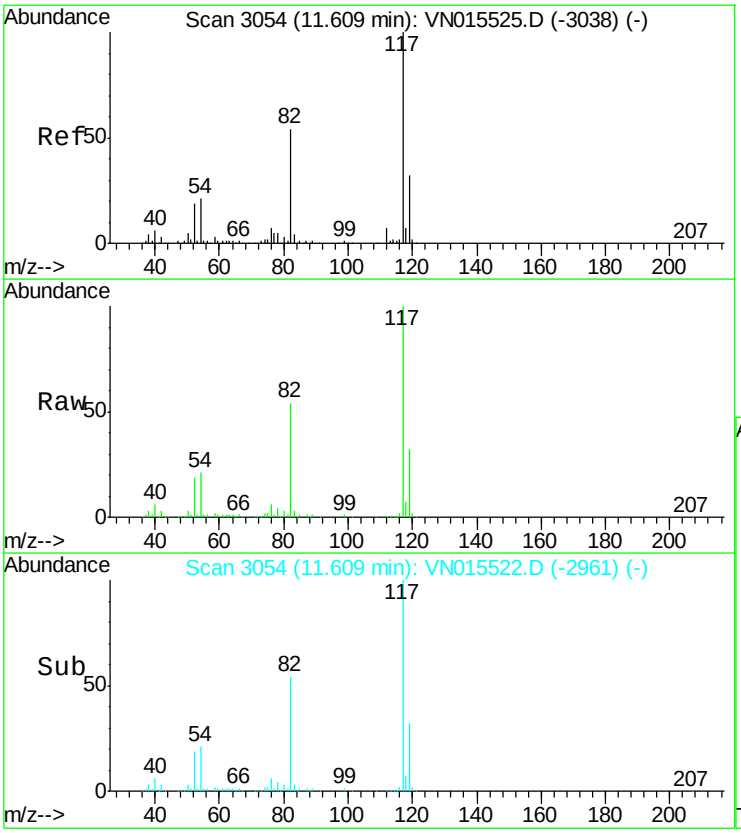


#63
4-Bromofluorobenzene
Concen: 1.13 ug/l
RT: 12.61 min Scan# 3366
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 95 Resp: 2387

Ion	Ratio	Lower	Upper
95	100		
174	88.9	0.0	191.8
176	95.5	0.0	186.8

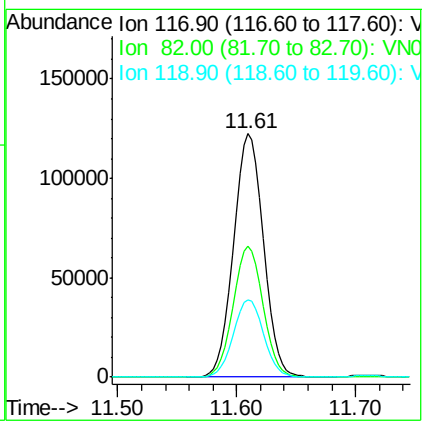


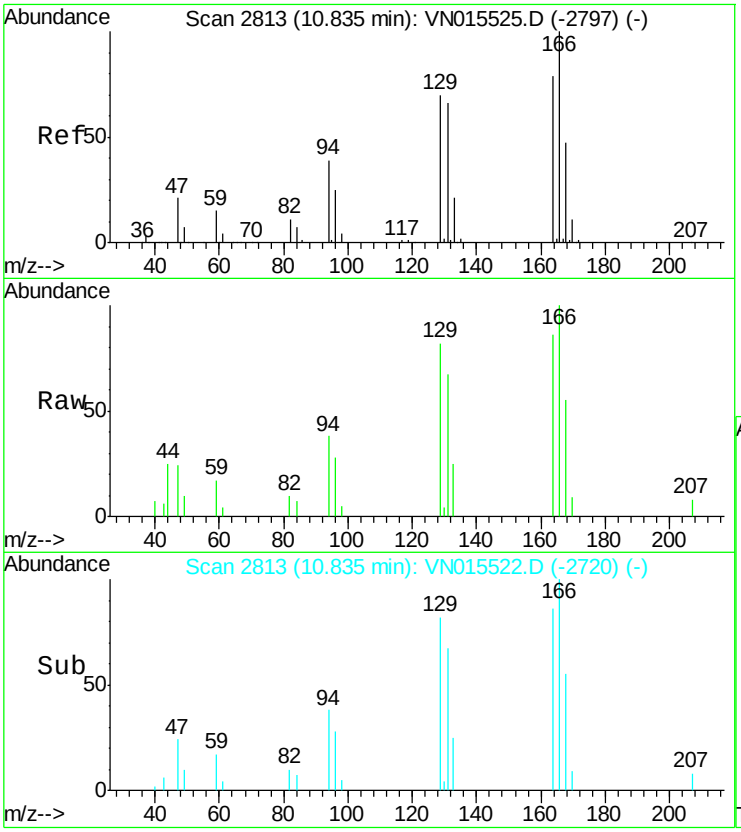


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:117 Resp: 213420

Ion	Ratio	Lower	Upper
117	100		
82	53.7	43.3	64.9
119	31.9	25.6	38.4

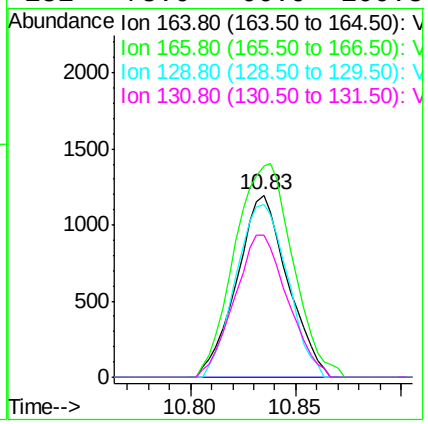




#65
Tetrachloroethene
Concen: 1.17 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:164 Resp: 2002

Ion	Ratio	Lower	Upper
164	100		
166	115.9	101.7	152.5
129	95.3	70.7	106.1
131	78.0	66.9	100.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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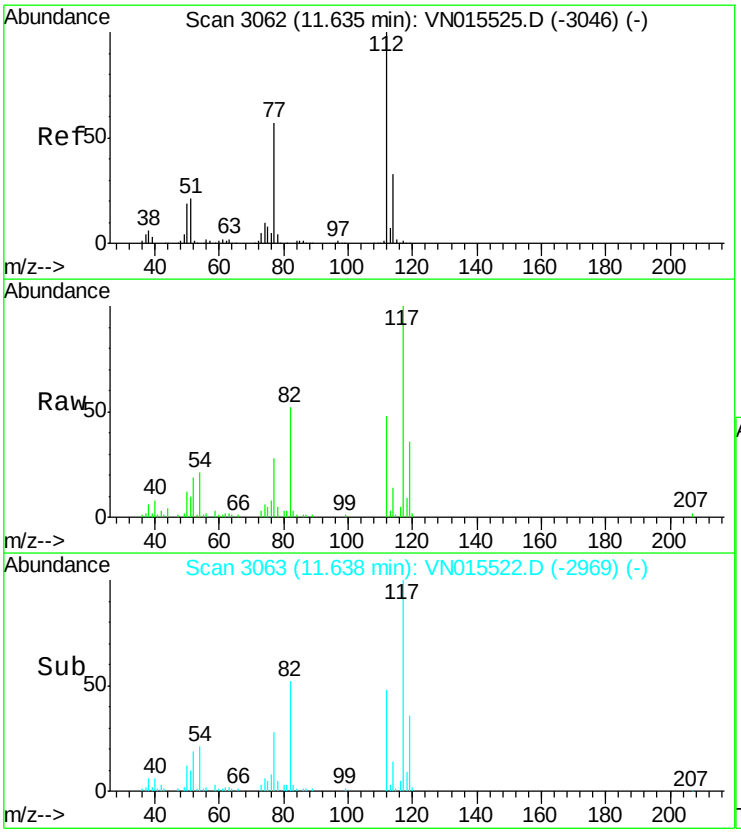
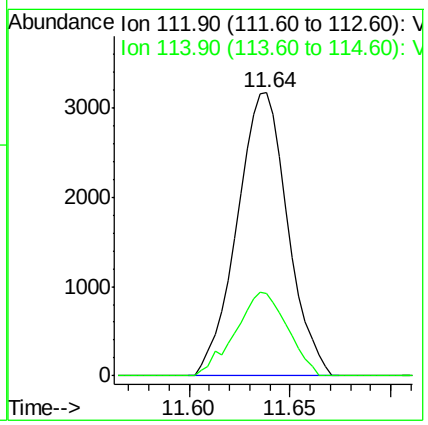
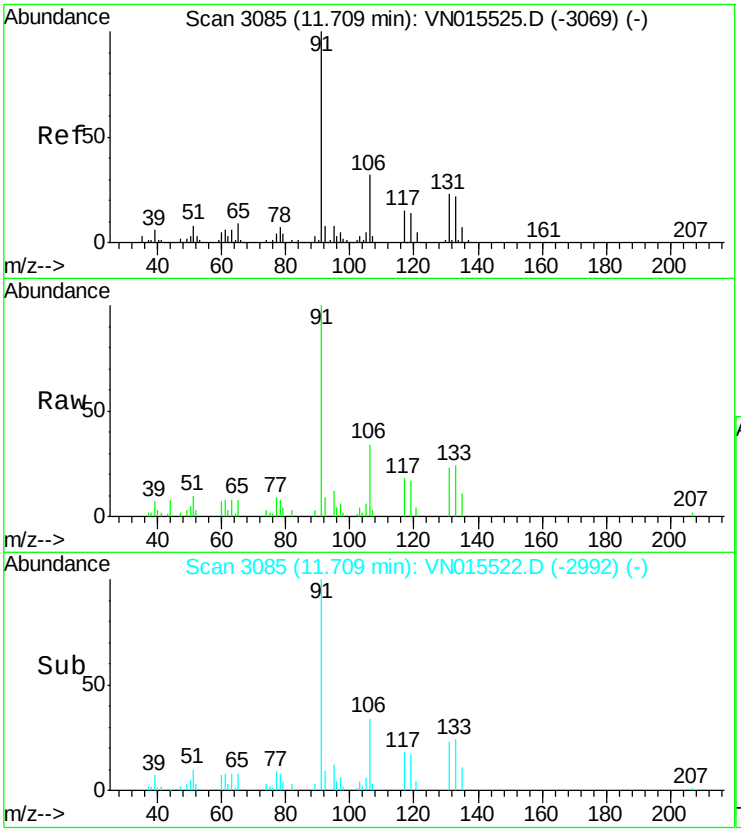


#66
Chlorobenzene
Concen: 1.21 ug/l
RT: 11.64 min Scan# 3063
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:112 Resp: 5568

Ion	Ratio	Lower	Upper
112	100		
114	29.1	26.2	39.2





#67
1,1,1,2-Tetrachloroethane
Concen: 1.17 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:131 Resp: 1951

Ion	Ratio	Lower	Upper
131	100		
133	99.3	47.7	143.1
119	78.0	31.5	94.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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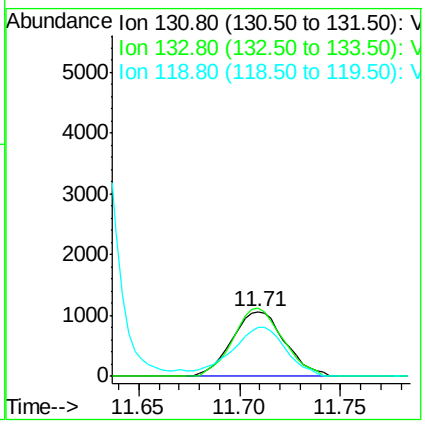
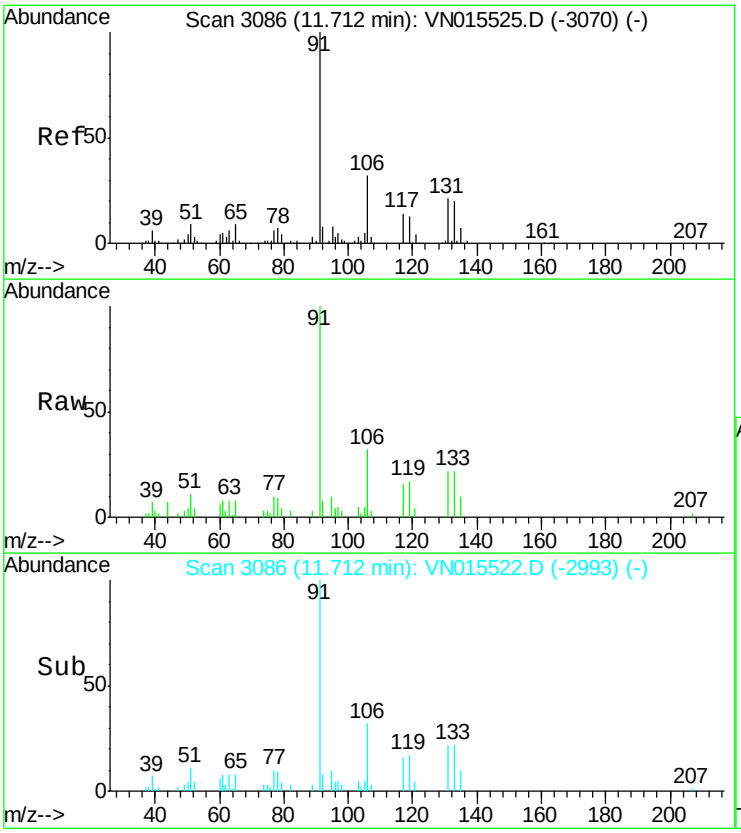
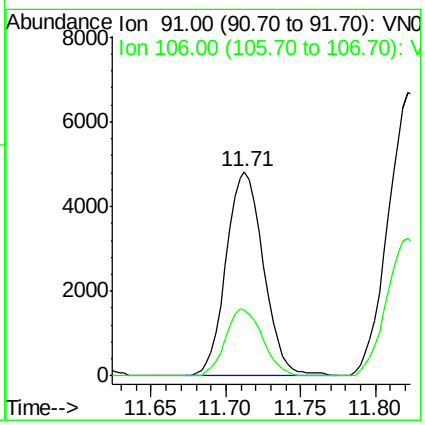


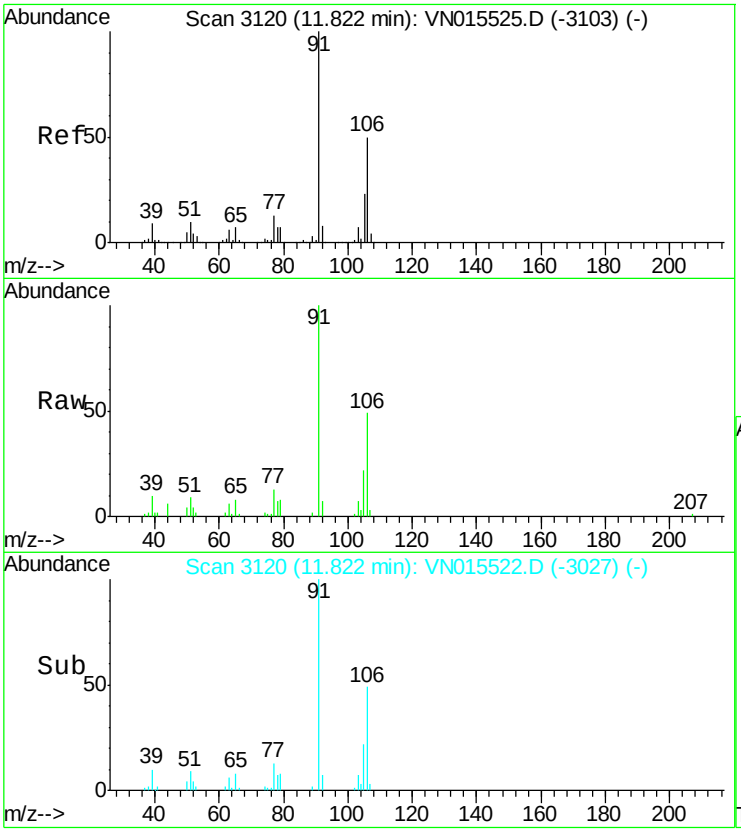


#68
Ethyl Benzene
Concen: 1.13 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 91 Resp: 8416

Ion	Ratio	Lower	Upper
91	100		
106	32.4	25.5	38.3





#69
m/p-Xylenes
Concen: 2.38 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:106 Resp: 6685

Ion	Ratio	Lower	Upper
106	100		
91	201.3	160.5	240.7

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
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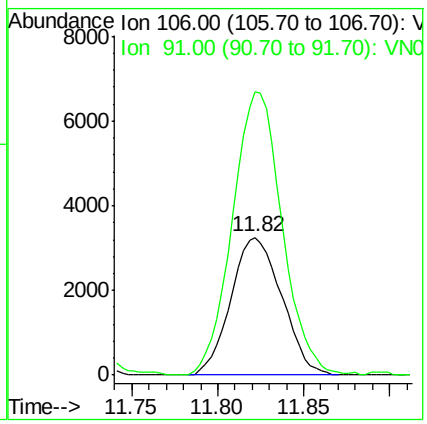
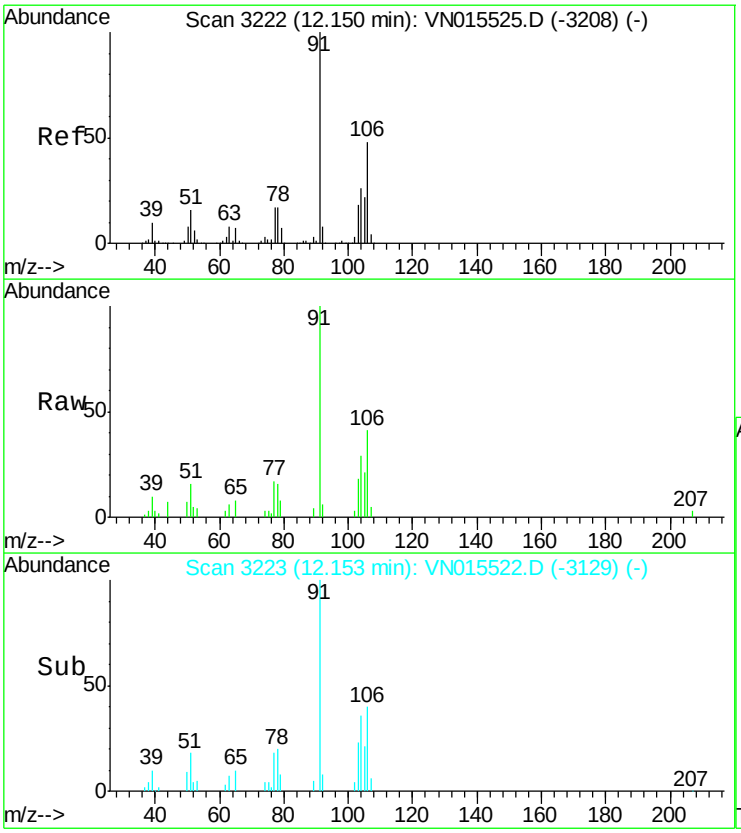
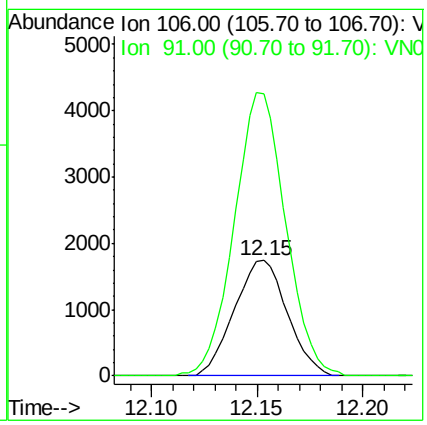


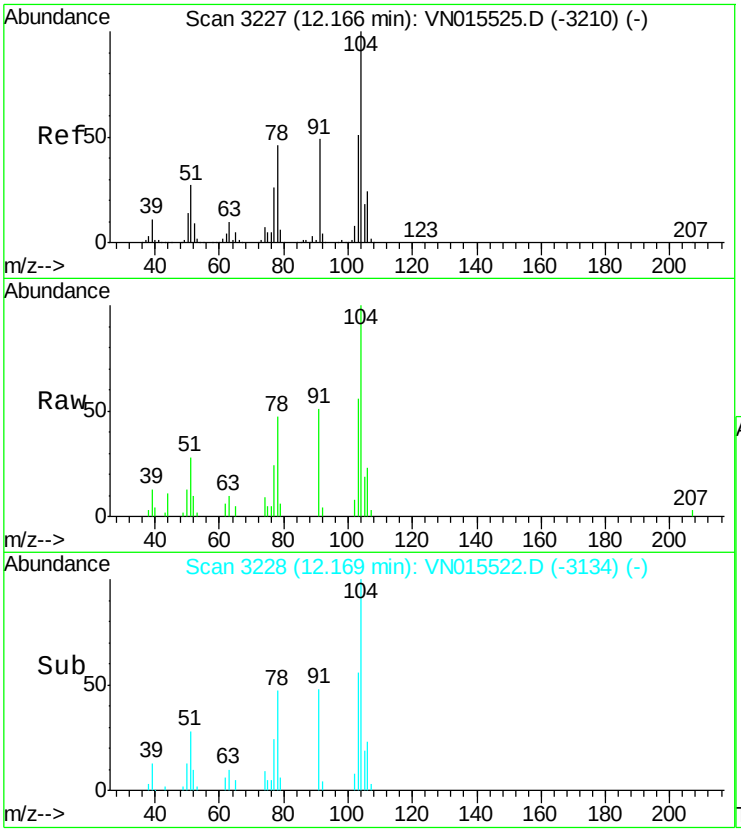


#70
o-Xylene
Concen: 1.06 ug/l
RT: 12.15 min Scan# 3223
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:106 Resp: 3052

Ion	Ratio	Lower	Upper
106	100		
91	236.1	104.9	314.7

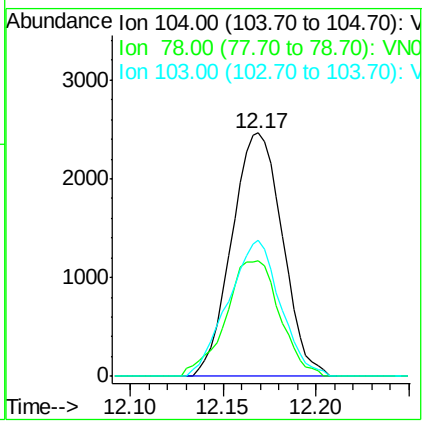




#71
Styrene
Concen: 1.09 ug/l
RT: 12.17 min Scan# 3228
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:104 Resp: 4673

Ion	Ratio	Lower	Upper
104	100		
78	50.5	40.1	60.1
103	57.5	44.0	66.0



Instrument :
MSVOA_N
LabSampleId :
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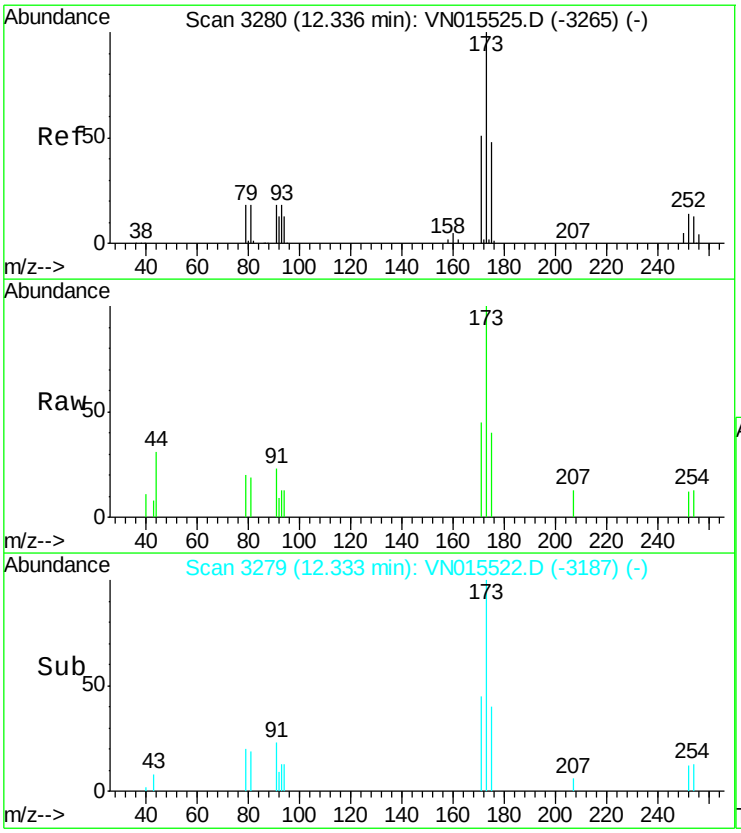
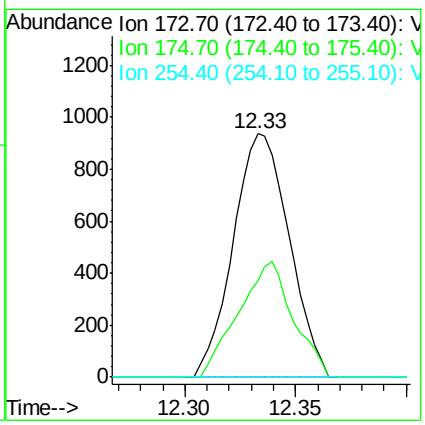
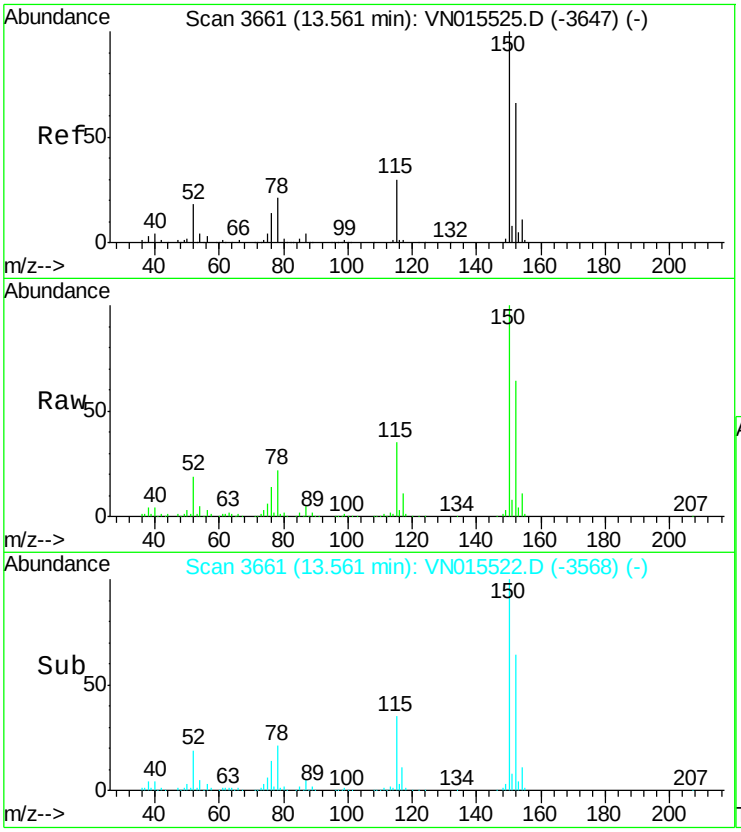


#72
Bromoform
Concen: 1.29 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:173 Resp: 1647

Ion	Ratio	Lower	Upper
173	100		
175	46.2	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:152 Resp: 78757

Ion	Ratio	Lower	Upper
152	100		
115	53.8	27.2	81.6
150	156.3	0.0	343.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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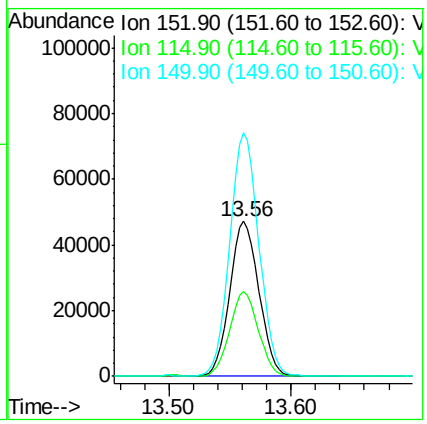
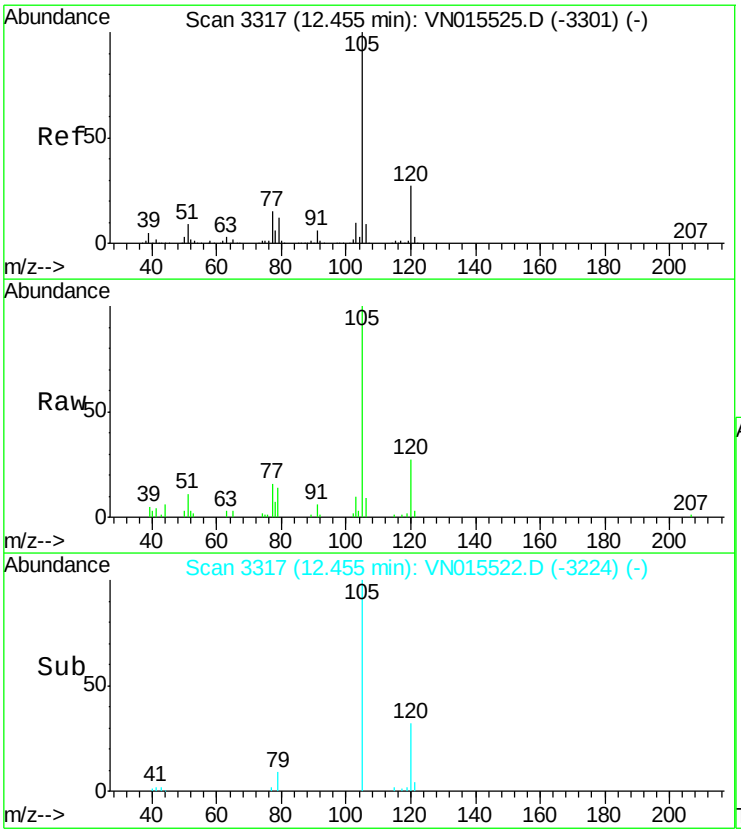
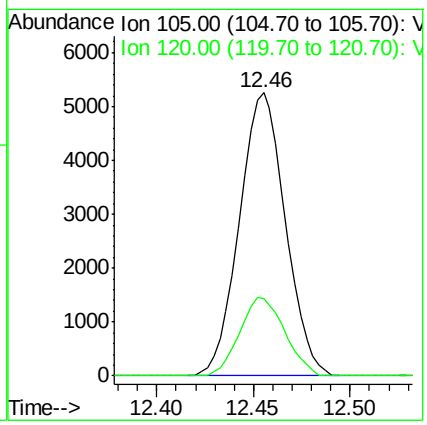


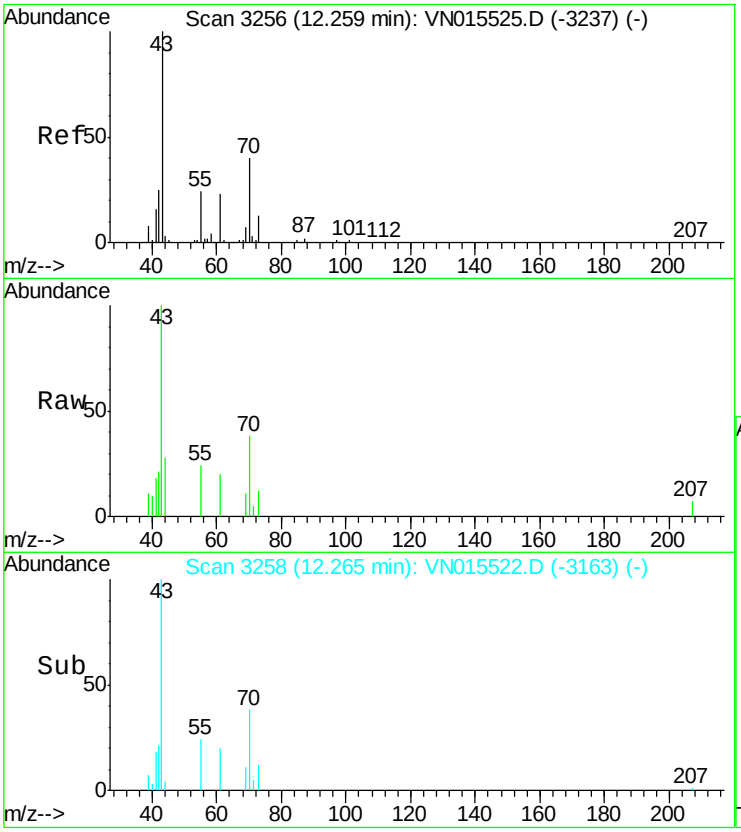


#74
Isopropylbenzene
Concen: 1.38 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:105 Resp: 8686

Ion	Ratio	Lower	Upper
105	100		
120	27.1	13.7	41.0

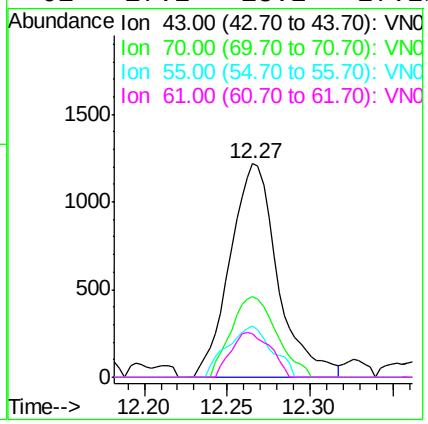




#75
N-amyl acetate
Concen: 1.37 ug/l
RT: 12.27 min Scan# 3258
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 43 Resp: 2444

Ion	Ratio	Lower	Upper
43	100		
70	36.0	32.0	48.0
55	22.4	18.5	27.7
61	17.2	18.2	27.2#



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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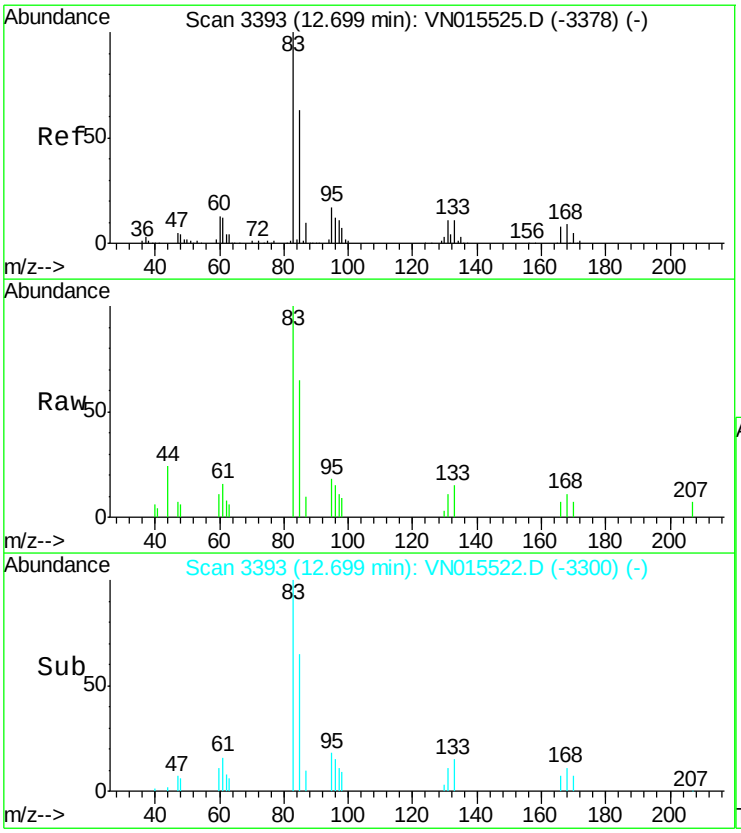
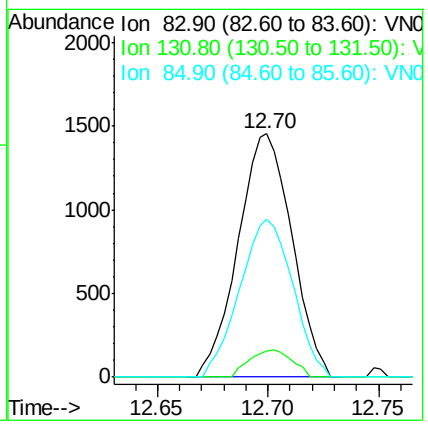
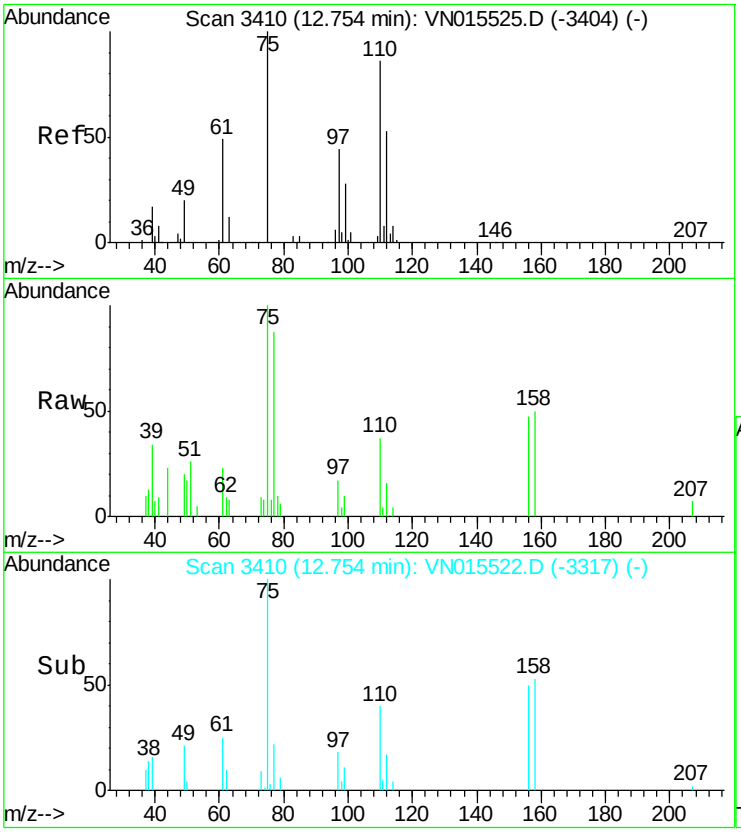


#76
1,1,2,2-Tetrachloroethane
Concen: 1.35 ug/l
RT: 12.70 min Scan# 3393
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 83 Resp: 2453

Ion	Ratio	Lower	Upper
83	100		
131	8.8	5.9	17.6
85	64.0	31.9	95.7





#77
1,2,3-Trichloropropane
Concen: 1.17 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 75 Resp: 1949

Ion	Ratio	Lower	Upper
75	100		
77	194.4	90.4	271.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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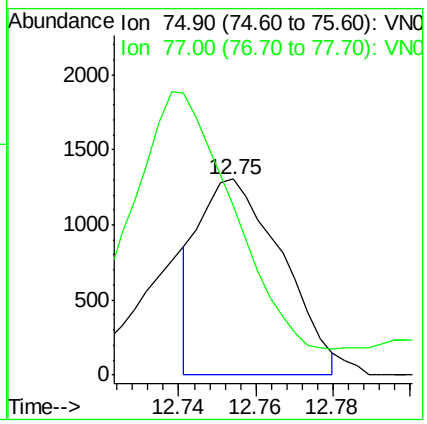
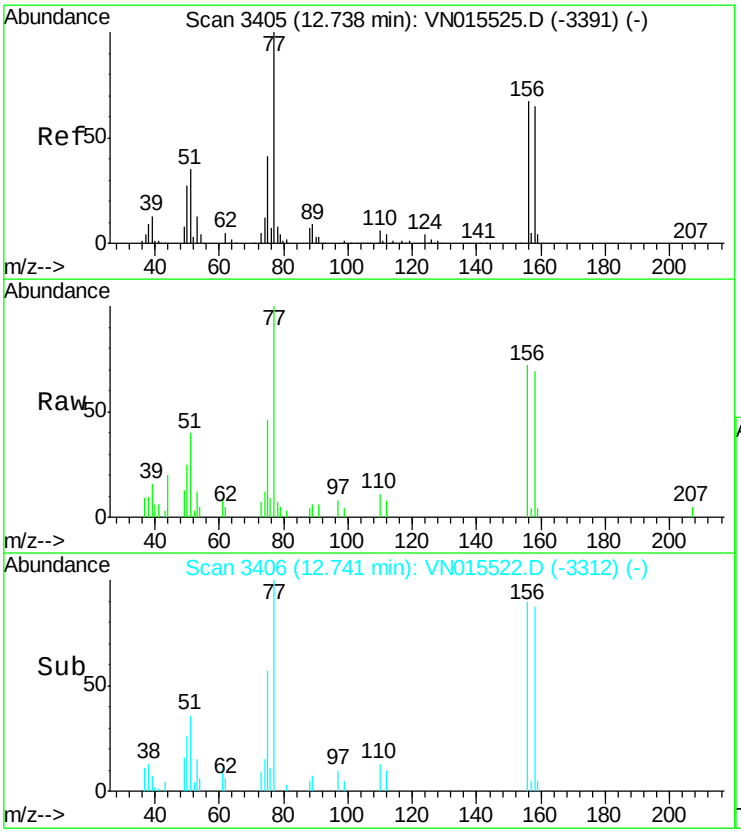
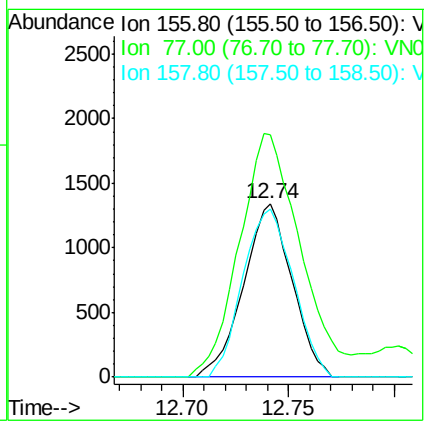


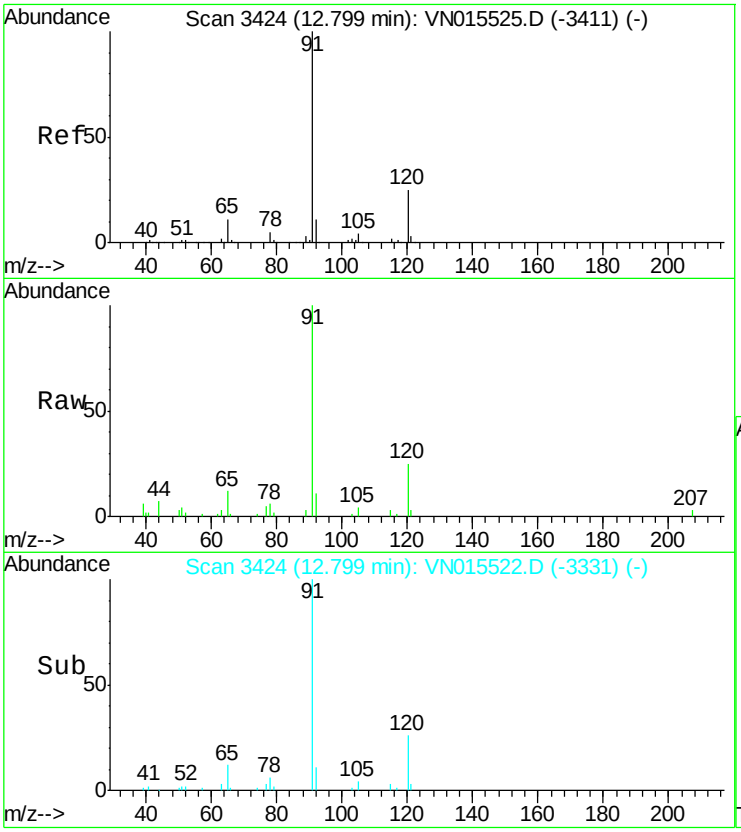


#78
Bromobenzene
Concen: 1.31 ug/l
RT: 12.74 min Scan# 3406
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:156 Resp: 2145

Ion	Ratio	Lower	Upper
156	100		
77	176.6	86.0	258.0
158	100.7	48.7	146.1





#79
n-propylbenzene
Concen: 1.17 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 91 Resp: 7883

Ion	Ratio	Lower	Upper
91	100		
120	24.8	12.2	36.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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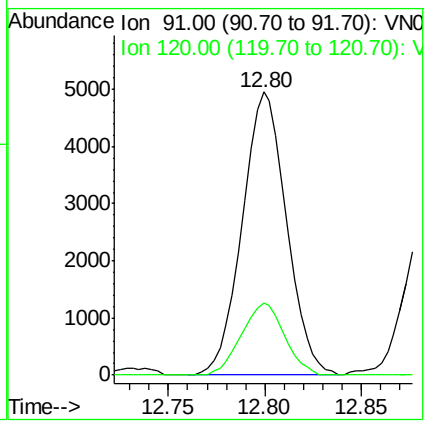
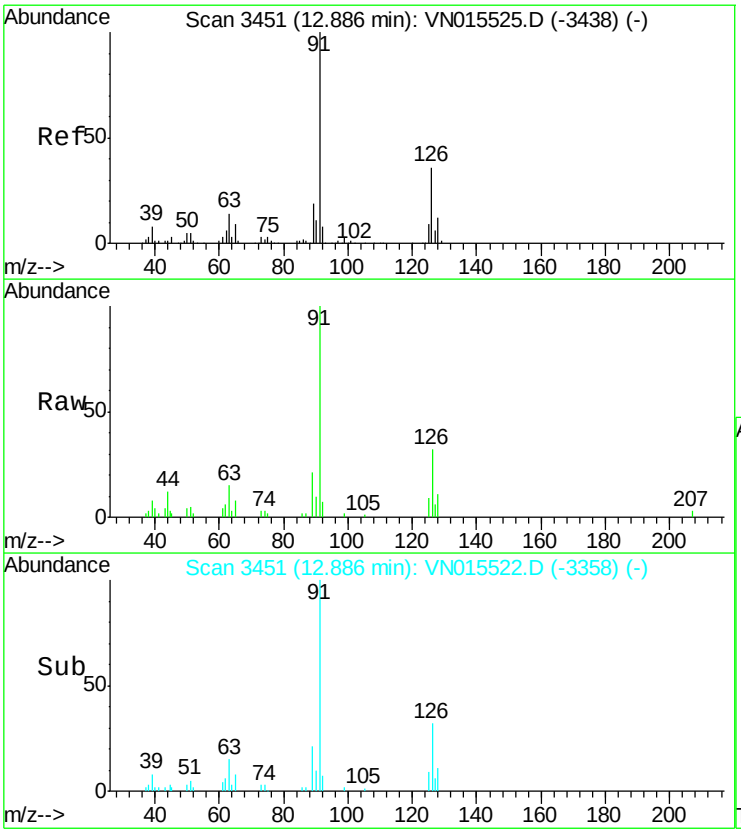
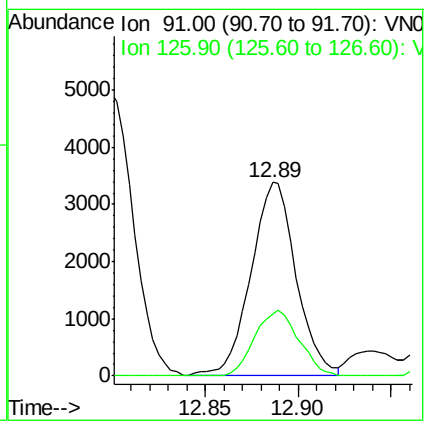




#80
2-Chlorotoluene
Concen: 1.34 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 91 Resp: 5730

Ion	Ratio	Lower	Upper
91	100		
126	32.8	17.9	53.8



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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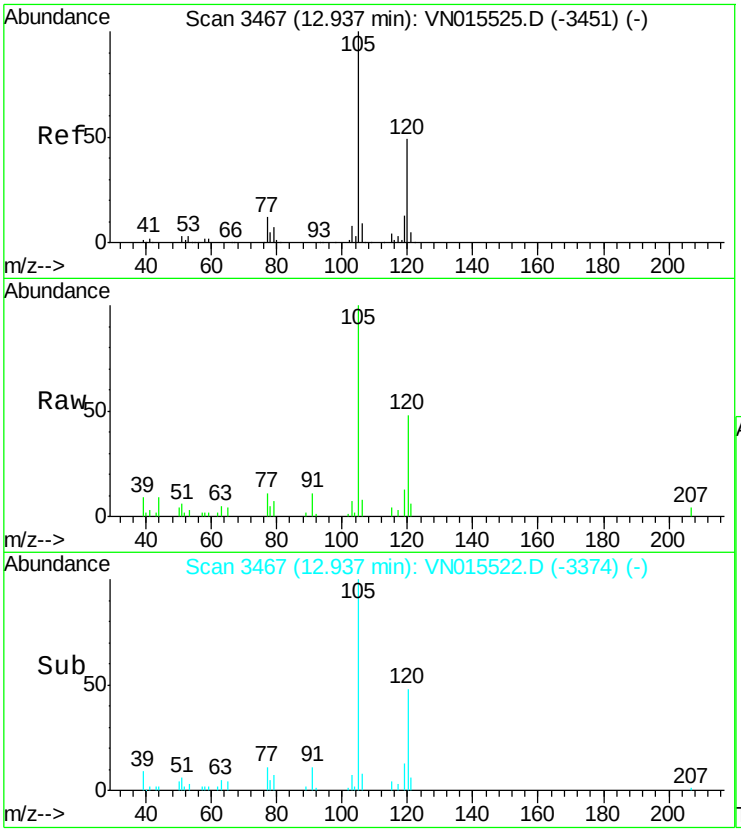
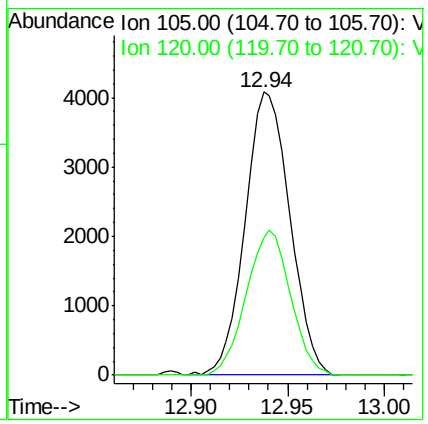
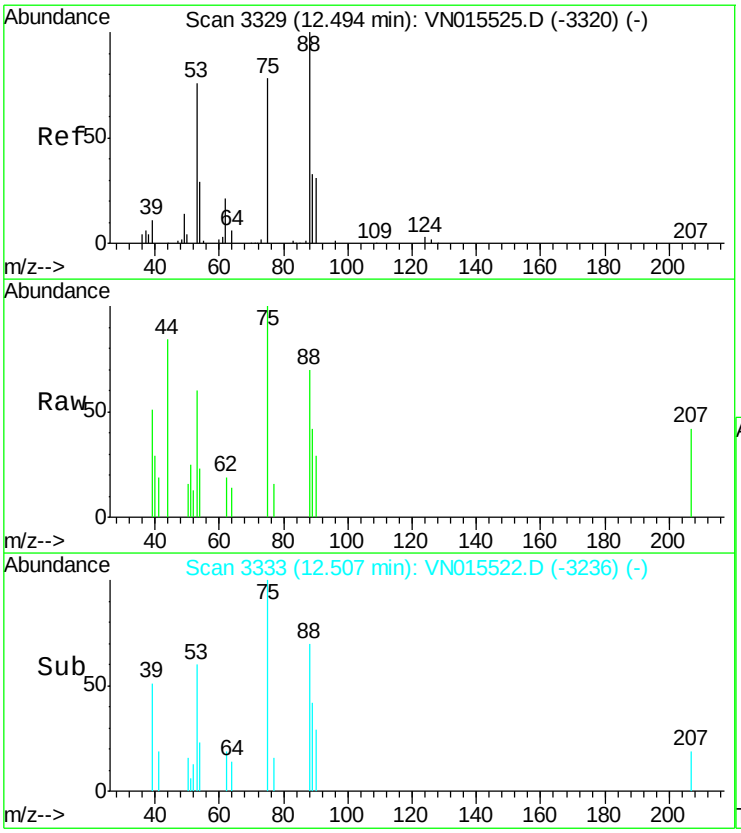


#81
1,3,5-Trimethylbenzene
Concen: 1.31 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:105 Resp: 6589

Ion	Ratio	Lower	Upper
105	100		
120	50.4	24.6	73.8

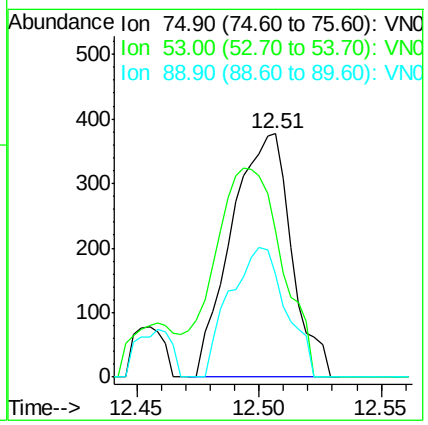


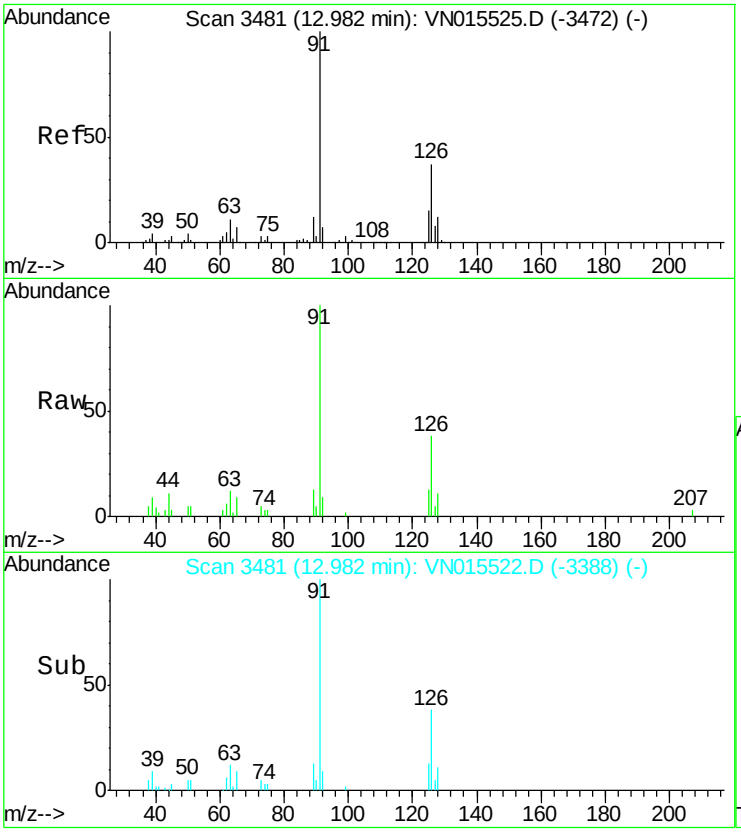


#82
trans-1,4-Dichloro-2-butene
Concen: 1.40 ug/l
RT: 12.51 min Scan# 3333
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 75 Resp: 644

Ion	Ratio	Lower	Upper
75	100		
53	96.6	77.5	116.3
89	49.8	37.7	56.5





#83
4-Chlorotoluene
Concen: 1.27 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 91 Resp: 5041

Ion	Ratio	Lower	Upper
91	100		
126	37.5	17.5	52.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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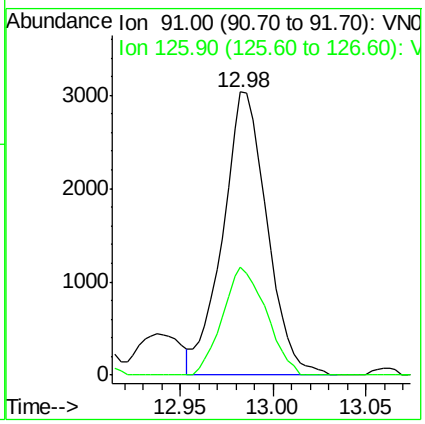
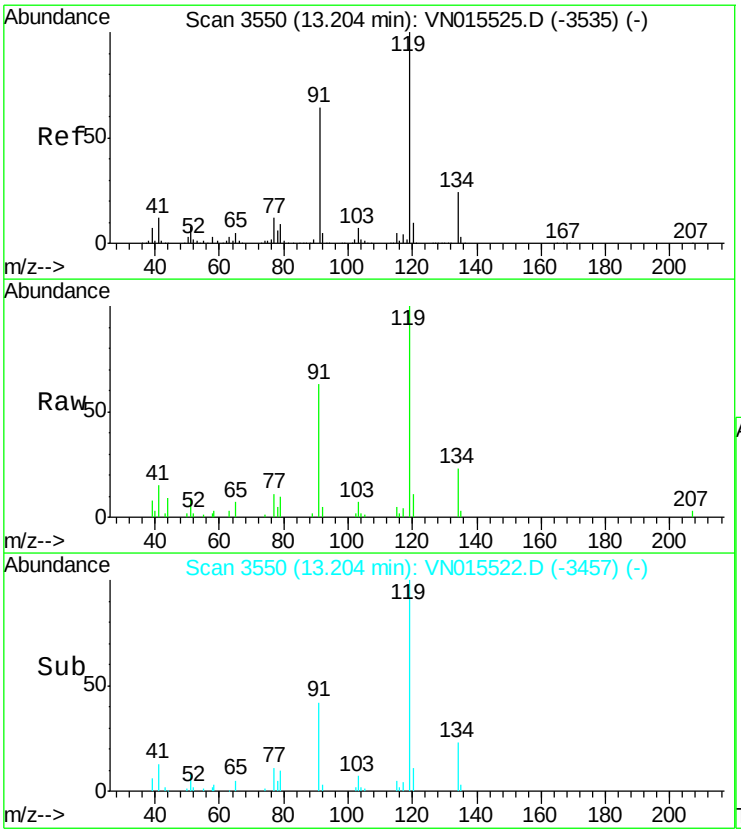
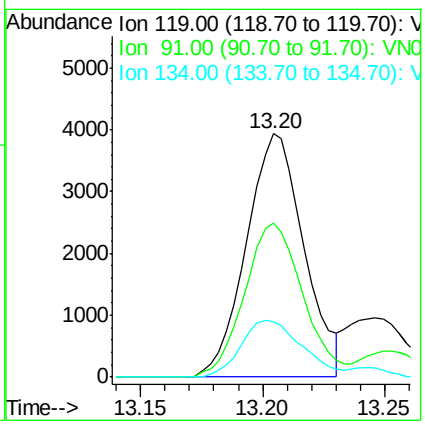




#84
tert-Butylbenzene
Concen: 1.42 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:119 Resp: 6446

Ion	Ratio	Lower	Upper
119	100		
91	63.7	31.9	95.9
134	24.6	12.1	36.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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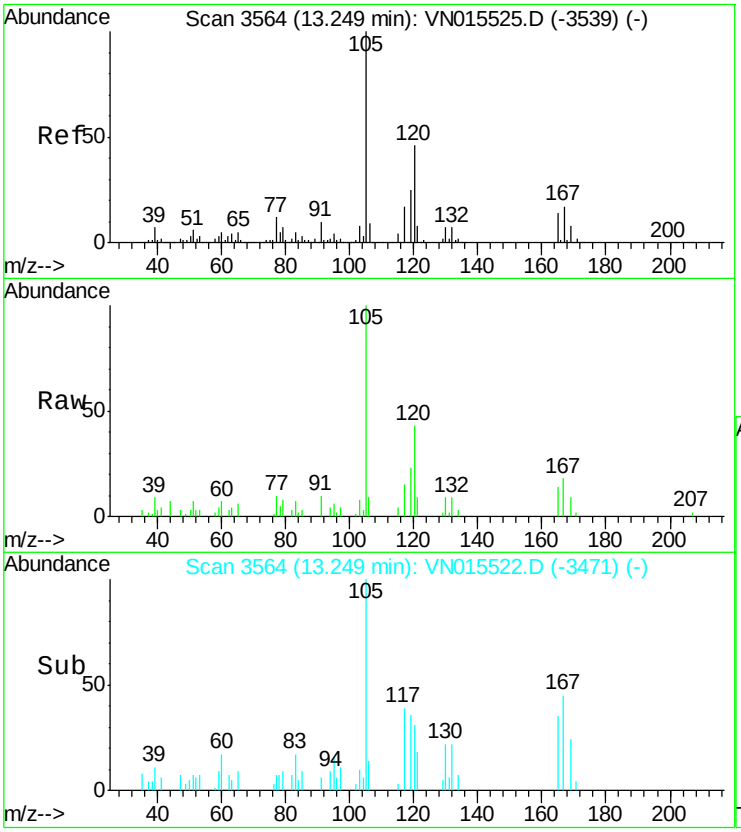
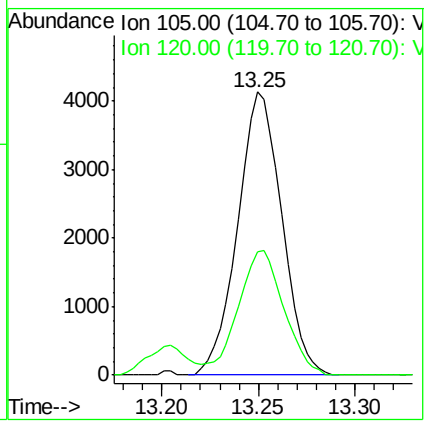
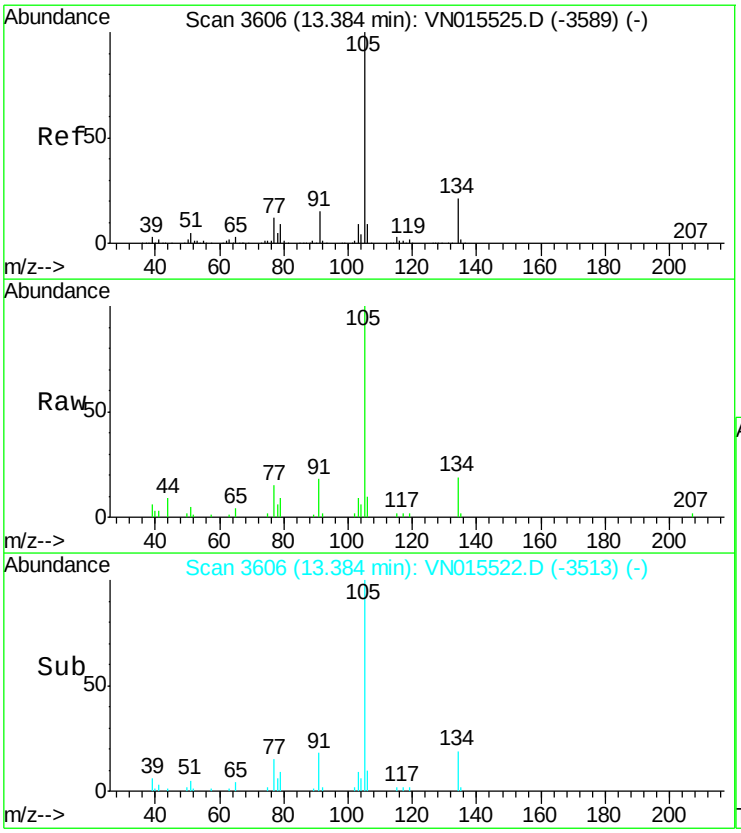


#85
1,2,4-Trimethylbenzene
Concen: 1.31 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:105 Resp: 6561

Ion	Ratio	Lower	Upper
105	100		
120	45.7	23.1	69.3

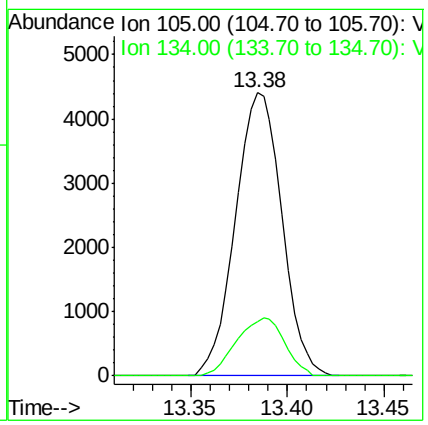


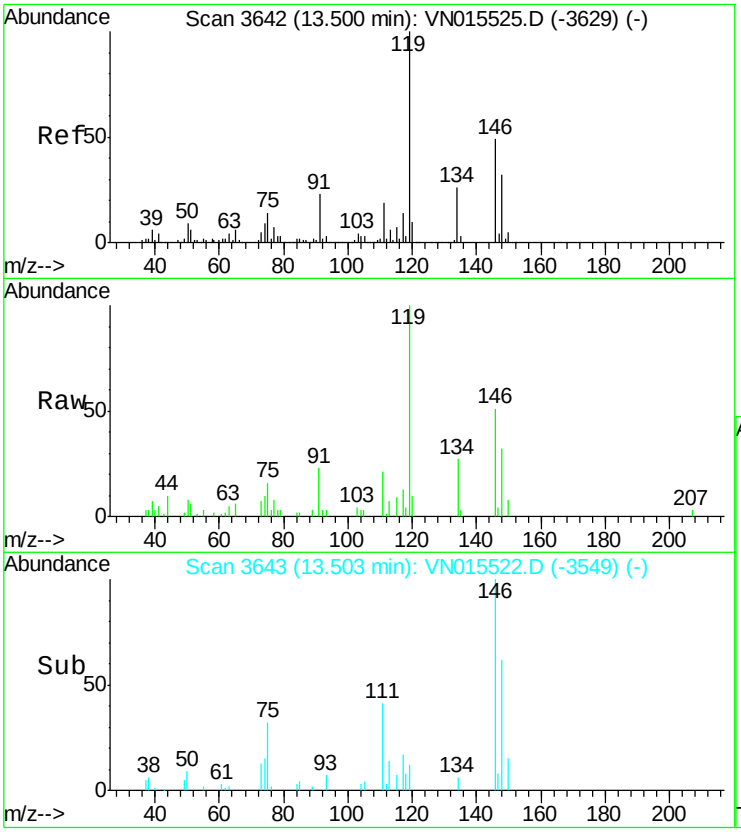


#86
sec-Butylbenzene
Concen: 1.22 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:105 Resp: 7372

Ion	Ratio	Lower	Upper
105	100		
134	21.1	10.6	31.8





#87
p-Isopropyltoluene
Concen: 1.22 ug/l
RT: 13.50 min Scan# 3643
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:119 Resp: 5990

Ion	Ratio	Lower	Upper
119	100		
134	28.7	13.3	39.9
91	22.7	11.7	35.1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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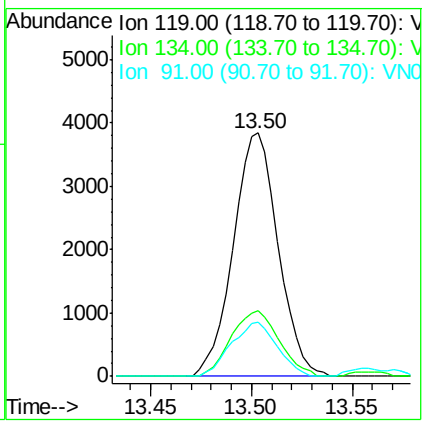
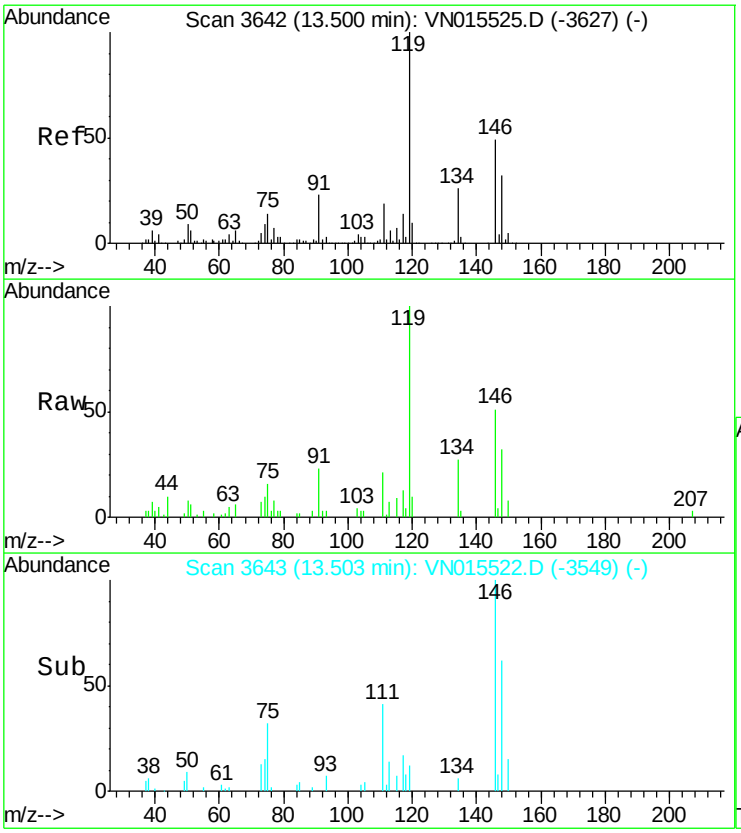
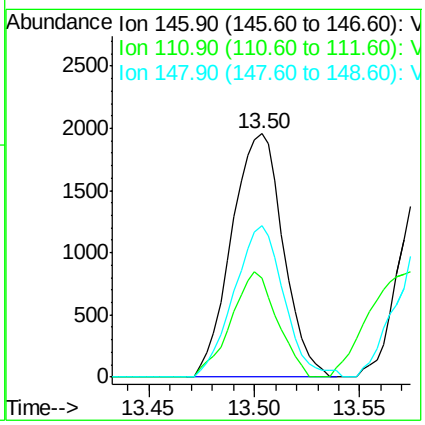


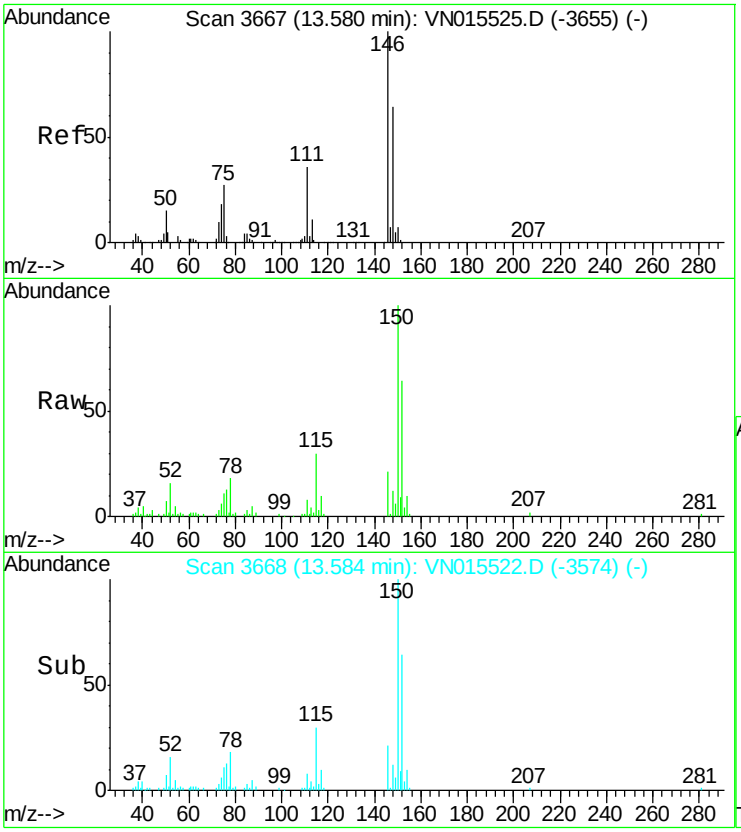


#88
1,3-Dichlorobenzene
Concen: 1.24 ug/l
RT: 13.50 min Scan# 3643
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:146 Resp: 3326

Ion	Ratio	Lower	Upper
146	100		
111	38.4	19.1	57.1
148	60.3	32.4	97.0





#89
1,4-Dichlorobenzene
Concen: 1.25 ug/l m
RT: 13.58 min Scan# 3668
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:146 Resp: 3351

Ion	Ratio	Lower	Upper
146	100		
111	38.1	18.4	55.4
148	59.8	32.3	96.9

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

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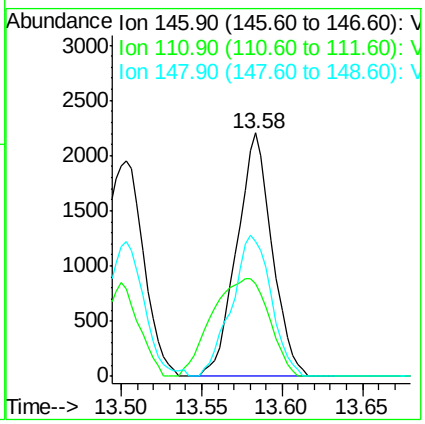
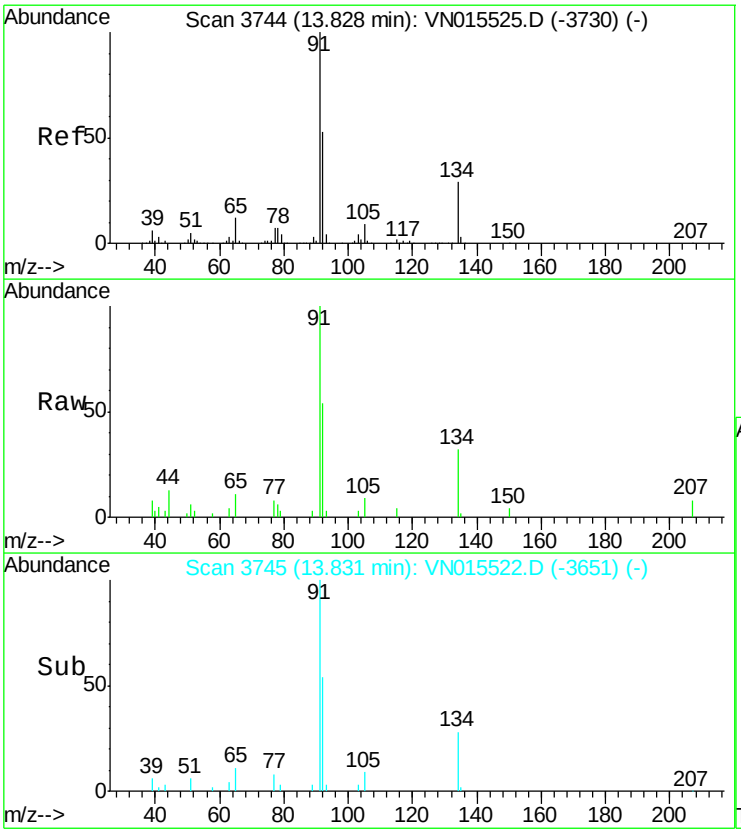
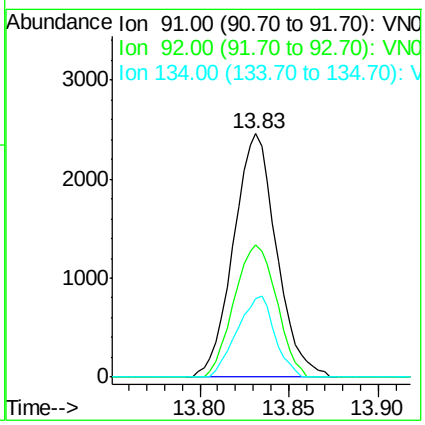


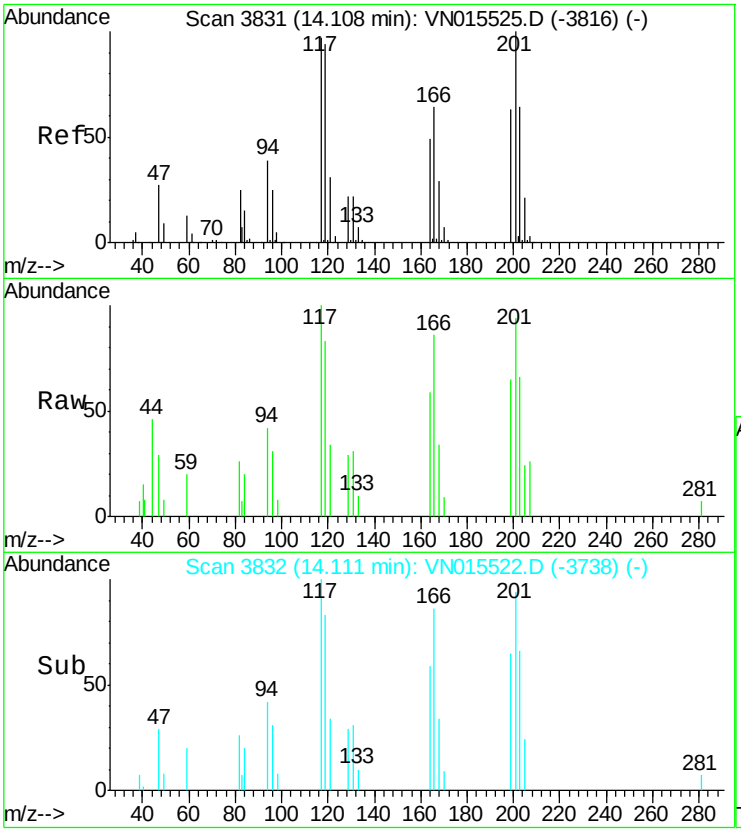


#90
n-Butylbenzene
Concen: 1.04 ug/l
RT: 13.83 min Scan# 3745
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion: 91 Resp: 4144

Ion	Ratio	Lower	Upper
91	100		
92	53.5	26.6	79.8
134	29.1	14.4	43.4





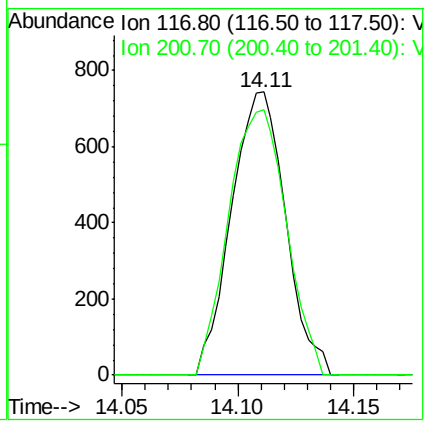
#91
Hexachloroethane
Concen: 1.22 ug/l
RT: 14.11 min Scan# 3832
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

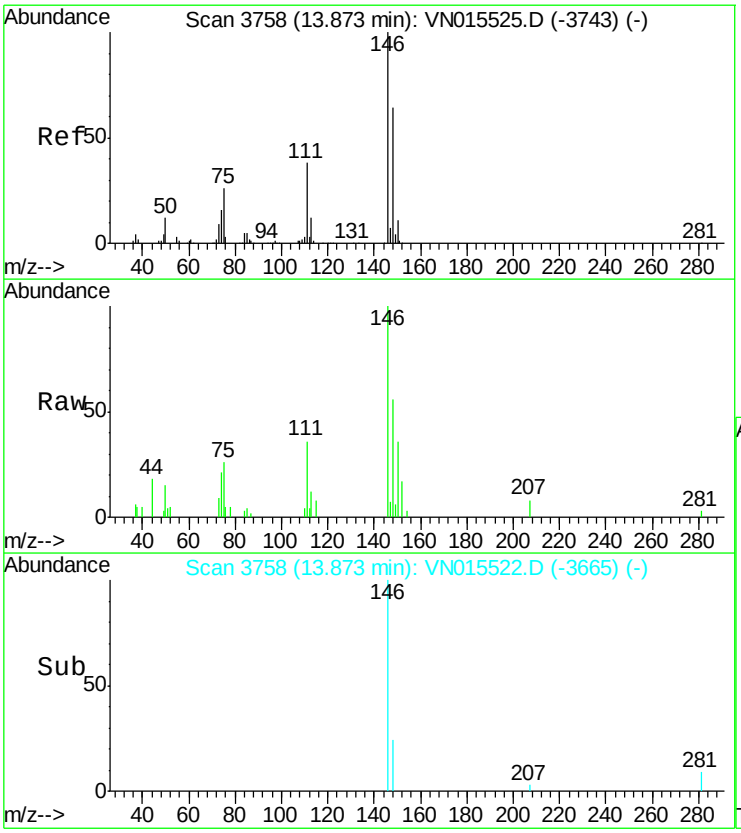
Tgt Ion:117 Resp: 1207

Ion	Ratio	Lower	Upper
117	100		
201	99.8	51.7	155.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM

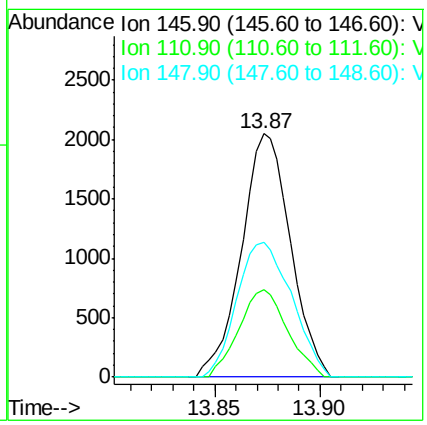


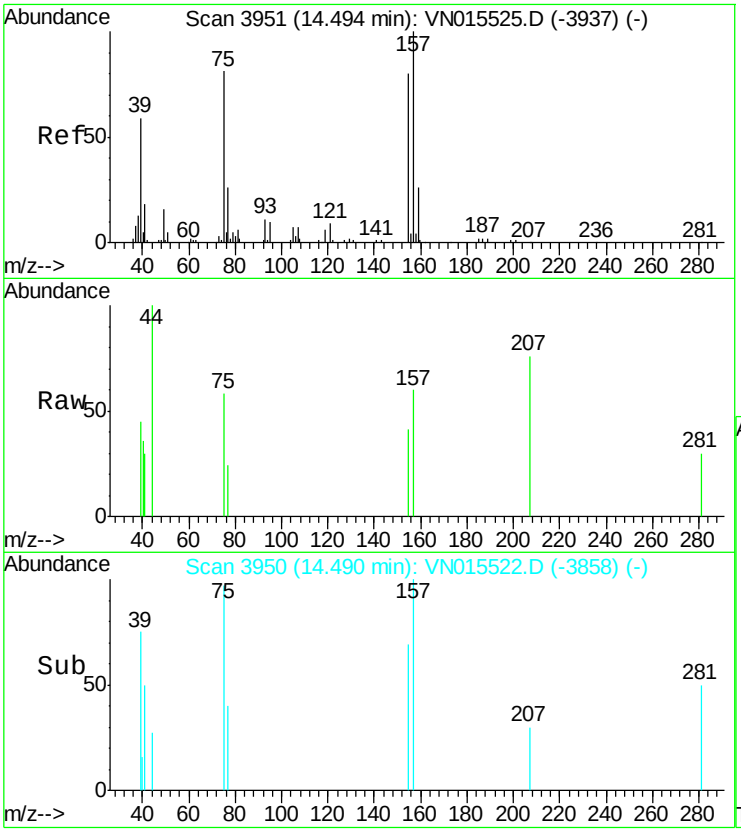


#92
1,2-Dichlorobenzene
Concen: 1.21 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:146 Resp: 3308

Ion	Ratio	Lower	Upper
146	100		
111	35.4	19.4	58.2
148	61.8	32.4	97.0





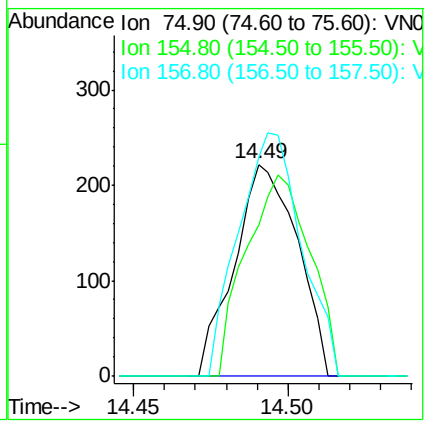
#93
1,2-Dibromo-3-Chloropropane
Concen: 1.04 ug/l
RT: 14.49 min Scan# 3950
Delta R.T. -0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

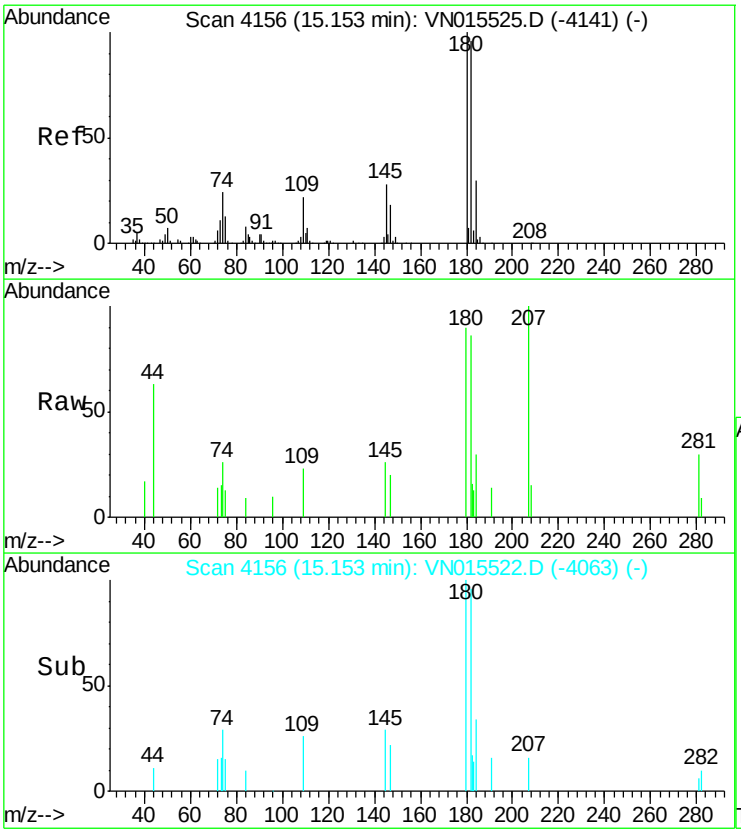
Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM

Tgt Ion: 75 Resp: 315

Ion	Ratio	Lower	Upper
75	100		
155	95.9	49.4	148.2
157	114.9	61.3	183.8

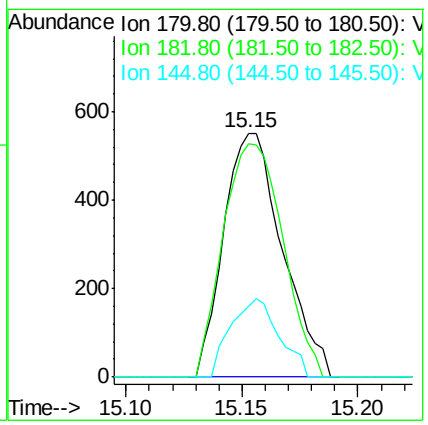


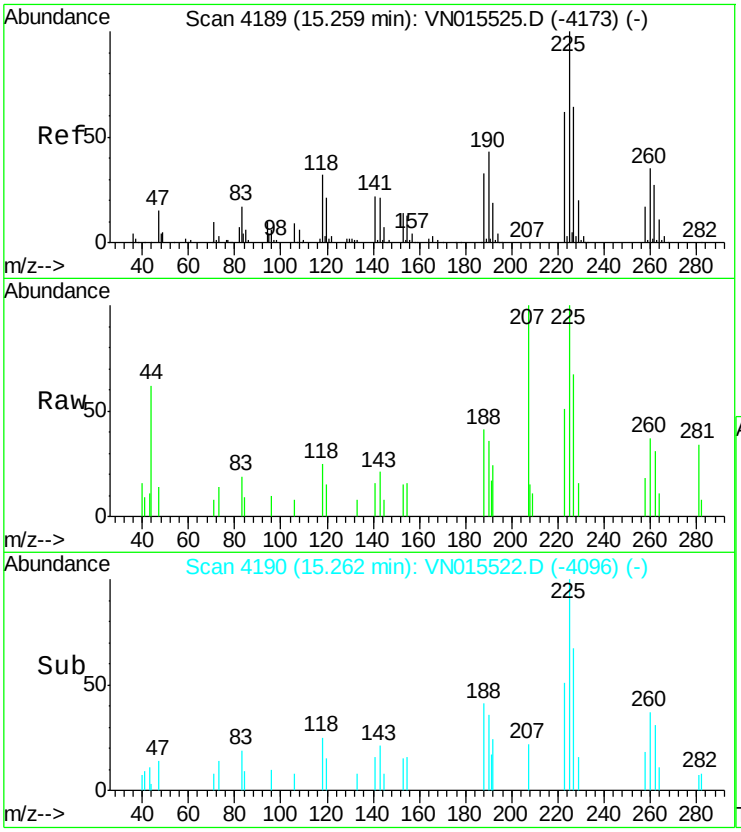


#94
1,2,4-Trichlorobenzene
Concen: 0.72 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:180 Resp: 970

Ion	Ratio	Lower	Upper
180	100		
182	97.6	48.0	144.0
145	26.5	14.0	42.0





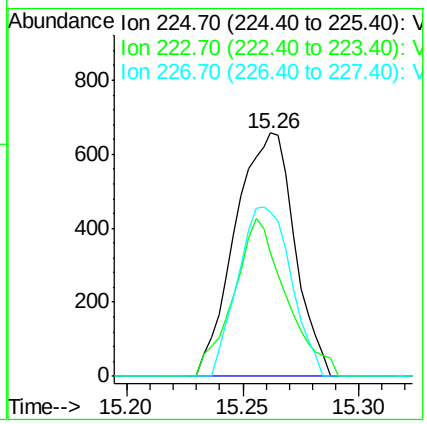
#95
Hexachlorobutadiene
Concen: 1.23 ug/l
RT: 15.26 min Scan# 4190
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

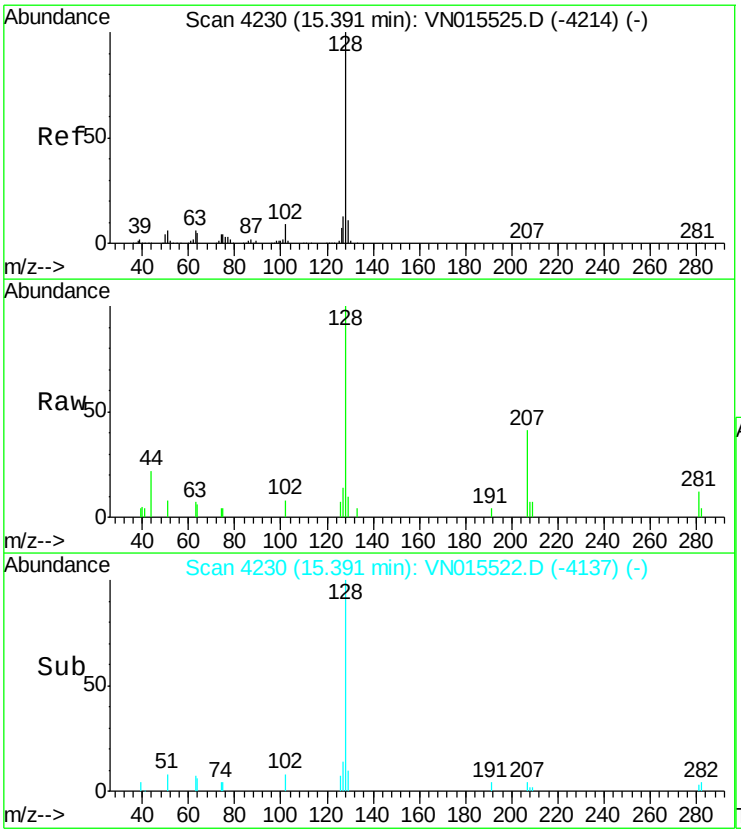
Tgt Ion:225 Resp: 1166

Ion	Ratio	Lower	Upper
225	100		
223	57.5	31.6	95.0
227	62.5	32.1	96.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM

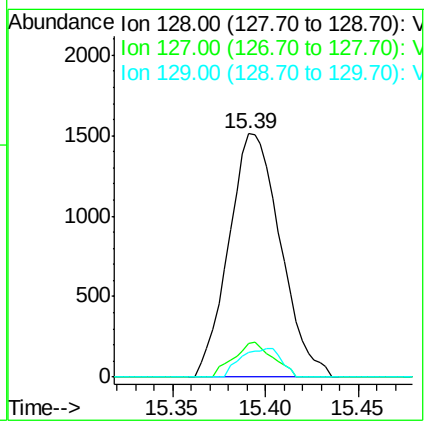


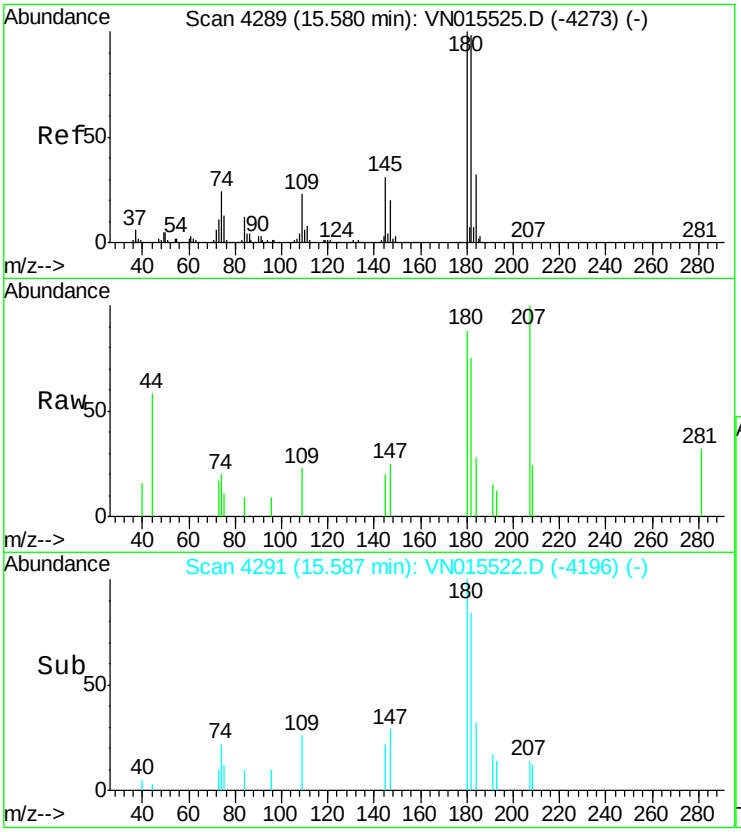


#96
Naphthalene
Concen: 0.93 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:128 Resp: 2921

Ion	Ratio	Lower	Upper
128	100		
127	11.0	10.3	15.5
129	9.2	8.7	13.1





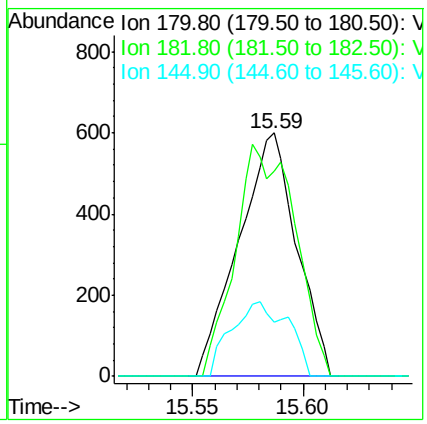
#97
1,2,3-Trichlorobenzene
Concen: 0.79 ug/l
RT: 15.59 min Scan# 4291
Delta R.T. 0.01 min
Lab File: VN015522.D
Acq: 20 May 2014 17:24

Tgt Ion:180 Resp: 1091

Ion	Ratio	Lower	Upper
180	100		
182	98.5	47.8	143.4
145	29.9	14.9	44.7

Instrument :
MSVOA_N
LabSampleId :
VSTDICC001

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:16 AM



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015523.D
Acq On : 20 May 2014 17:54
Operator : MD
Sample : VSTDICC005
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

Manual Integrations
APPROVED
MMDadoda
5/21/2014 11:01:31 AM

Quant Time: May 21 01:40:18 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	191138	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	264459	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	228179	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	93547	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.24	65	10220	4.21	ug/l	0.00
Spiked Amount 50.000			Recovery	=	8.42%	
36) Dibromofluoromethane	7.80	113	7827	4.54	ug/l	0.00
Spiked Amount 50.000			Recovery	=	9.08%	
51) Toluene-d8	10.29	98	30494	4.71	ug/l	0.00
Spiked Amount 50.000			Recovery	=	9.42%	
63) 4-Bromofluorobenzene	12.61	95	9794	4.55	ug/l	0.00
Spiked Amount 50.000			Recovery	=	9.10%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	9105	4.16	ug/l	96
3) Chlorodifluoromethane	1.87	51	4764	2.70	ug/l	98
4) Chloromethane	2.07	50	11534	4.31	ug/l	100
5) Vinyl Chloride	2.20	62	9476	4.19	ug/l	97
6) Bromomethane	2.61	94	5616	4.29	ug/l	96
7) Chloroethane	2.76	64	6068	4.27	ug/l	99
8) Trichlorofluoromethane	3.11	101	14869	4.69	ug/l	98
9) Diethyl Ether	3.54	74	5430	4.53	ug/l	98
10) 1,1,2-Trichlorotrifluoroet	3.91	101	8266	4.77	ug/l	97
11) Methyl Iodide	4.11	142	6461	3.64	ug/l	98
12) Tert butyl alcohol	4.95	59	7470	35.42	ug/l #	72
13) 1,1-Dichloroethene	3.88	96	7951	4.65	ug/l	98
14) Acrolein	3.74	56	4726	22.77	ug/l	95
15) Allyl chloride	4.51	41	14108m	4.75	ug/l	
16) Acrylonitrile	5.20	53	16913	20.38	ug/l	96
17) Acetone	3.95	43	16887	19.83	ug/l	97
18) Carbon Disulfide	4.23	76	21934	4.53	ug/l	99
19) Methyl Acetate	4.51	43	15006	6.69	ug/l	98
20) Methyl tert-butyl Ether	5.27	73	27464	4.68	ug/l	100
21) Methylene Chloride	4.74	84	9008	4.45	ug/l	90
22) trans-1,2-Dichloroethene	5.28	96	8397	4.64	ug/l	92
23) Diisopropyl ether	6.18	45	28153	4.19	ug/l #	87
24) Vinyl Acetate	6.12	43	68396m	14.41	ug/l	
25) 1,1-Dichloroethane	6.08	63	15568	4.30	ug/l #	97
26) 2-Butanone	7.06	43	22582	20.10	ug/l	98
27) 2,2-Dichloropropane	7.05	77	14240	5.17	ug/l	100
28) cis-1,2-Dichloroethene	7.05	96	9958	4.68	ug/l	97
29) Bromochloromethane	7.42	49	5331	2.98	ug/l #	98
30) Tetrahydrofuran	7.45	42	16500	22.73	ug/l	98
31) Chloroform	7.58	83	15876	4.43	ug/l	95
32) Cyclohexane	7.88	56	17741	4.34	ug/l #	84
33) 1,1,1-Trichloroethane	7.79	97	15058	4.82	ug/l	98
37) 1,1-Dichloropropene	8.01	75	11882	4.73	ug/l	98
38) Ethyl Acetate	7.16	43	10924	5.77	ug/l #	88

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015523.D
Acq On : 20 May 2014 17:54
Operator : MD
Sample : VSTDICC005
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

Quant Time: May 21 01:40:18 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) Carbon Tetrachloride	8.00	117	13432	5.31 ug/l	92
40) Methylcyclohexane	9.29	83	15327	5.15 ug/l	99
41) Benzene	8.26	78	35275	4.82 ug/l	99
42) Methacrylonitrile	7.37	41	5854	4.41 ug/l	95
43) 1,2-Dichloroethane	8.33	62	13022	4.86 ug/l	100
44) Isopropyl Acetate	8.36	43	18025	5.79 ug/l	98
45) Trichloroethene	9.04	130	9551	4.90 ug/l	97
46) 1,2-Dichloropropane	9.32	63	9178	4.62 ug/l	100
47) Dibromomethane	9.41	93	5914	4.82 ug/l	100
48) Bromodichloromethane	9.59	83	11790	4.81 ug/l	98
49) Methyl methacrylate	9.39	41	8794m	4.59 ug/l	
50) 1,4-Dioxane	9.40	88	2727	108.29 ug/l	91
52) 4-Methyl-2-Pentanone	10.16	43	51412	24.35 ug/l	99
53) Toluene	10.35	92	22555	5.05 ug/l	99
54) t-1,3-Dichloropropene	10.57	75	12037	4.89 ug/l	100
55) cis-1,3-Dichloropropene	10.03	75	13099	4.65 ug/l	98
56) 1,1,2-Trichloroethane	10.75	97	8522	4.84 ug/l	95
57) Ethyl methacrylate	10.61	69	12338	5.07 ug/l	97
58) 1,3-Dichloropropane	10.90	76	14583	4.83 ug/l	99
59) 2-Chloroethyl Vinyl ether	9.88	63	4346	4.80 ug/l	98
60) 2-Hexanone	10.93	43	33236	23.45 ug/l	99
61) Dibromochloromethane	11.10	129	10103	5.15 ug/l	95
62) 1,2-Dibromoethane	11.21	107	8817	4.99 ug/l	99
65) Tetrachloroethene	10.83	164	8975	4.91 ug/l	98
66) Chlorobenzene	11.64	112	24927	5.08 ug/l	99
67) 1,1,1,2-Tetrachloroethane	11.71	131	9442	5.30 ug/l	97
68) Ethyl Benzene	11.71	91	40148	5.05 ug/l	99
69) m/p-Xylenes	11.82	106	31179	10.36 ug/l	98
70) o-Xylene	12.15	106	15706	5.10 ug/l	99
71) Styrene	12.17	104	22606	4.91 ug/l	97
72) Bromoform	12.33	173	7334	5.37 ug/l #	96
74) Isopropylbenzene	12.45	105	40670	5.42 ug/l	99
75) N-amyl acetate	12.26	43	12565	5.94 ug/l	100
76) 1,1,2,2-Tetrachloroethane	12.70	83	11408	5.28 ug/l	98
77) 1,2,3-Trichloropropane	12.75	75	10487m	5.31 ug/l	
78) Bromobenzene	12.74	156	10625	5.44 ug/l	99
79) n-propylbenzene	12.80	91	41233	5.16 ug/l	100
80) 2-Chlorotoluene	12.89	91	26648	5.25 ug/l	99
81) 1,3,5-Trimethylbenzene	12.94	105	34056	5.71 ug/l	100
82) trans-1,4-Dichloro-2-buten	12.50	75	3162	5.79 ug/l	96
83) 4-Chlorotoluene	12.98	91	24355	5.16 ug/l	99
84) tert-Butylbenzene	13.20	119	31686	5.88 ug/l	100
85) 1,2,4-Trimethylbenzene	13.25	105	33767	5.68 ug/l	99
86) sec-Butylbenzene	13.38	105	38416	5.36 ug/l	100
87) p-Isopropyltoluene	13.50	119	33037	5.66 ug/l	99
88) 1,3-Dichlorobenzene	13.50	146	16718	5.26 ug/l	99
89) 1,4-Dichlorobenzene	13.58	146	15855	4.99 ug/l	96
90) n-Butylbenzene	13.83	91	23463	4.96 ug/l	99
91) Hexachloroethane	14.11	117	6135	5.20 ug/l	95
92) 1,2-Dichlorobenzene	13.87	146	16666	5.15 ug/l	98

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015523.D
Acq On : 20 May 2014 17:54
Operator : MD
Sample : VSTDICC005
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

Quant Time: May 21 01:40:18 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2-Dibromo-3-Chloropropan	14.49	75	1710	4.75	ug/l	93
94) 1,2,4-Trichlorobenzene	15.15	180	5891	3.67	ug/l	98
95) Hexachlorobutadiene	15.26	225	6482	5.74	ug/l	98
96) Naphthalene	15.39	128	12774	3.41	ug/l	99
97) 1,2,3-Trichlorobenzene	15.58	180	6128	3.73	ug/l	99

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

Quantitation Report (QT Reviewed)

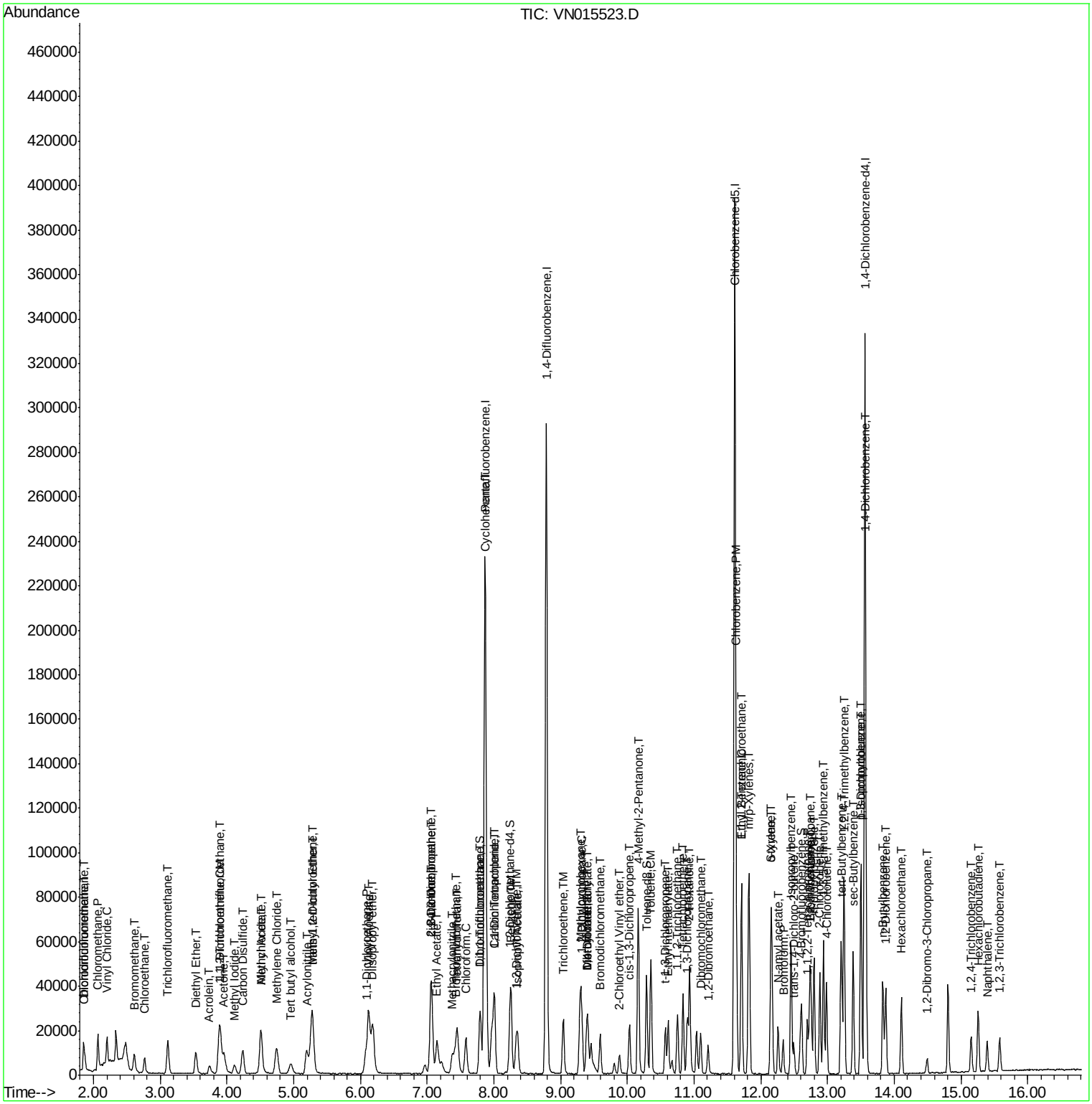
ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015523.D
Acq On : 20 May 2014 17:54
Operator : MD
Sample : VSTDICC005
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 01:40:18 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

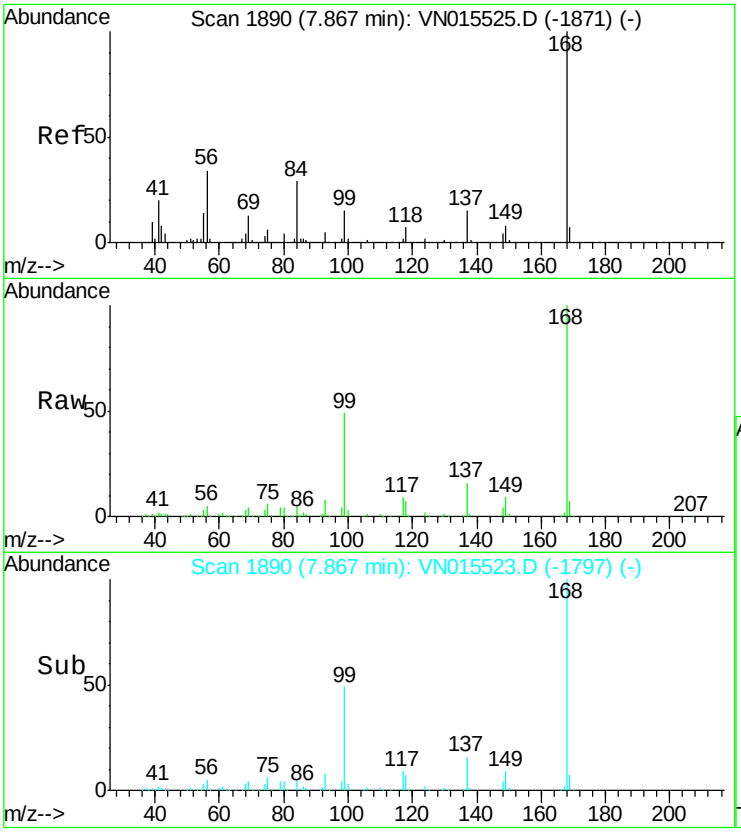
Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

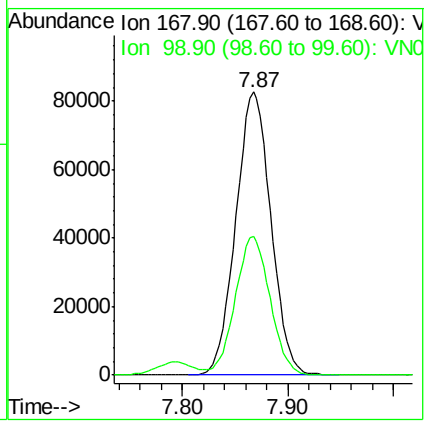
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

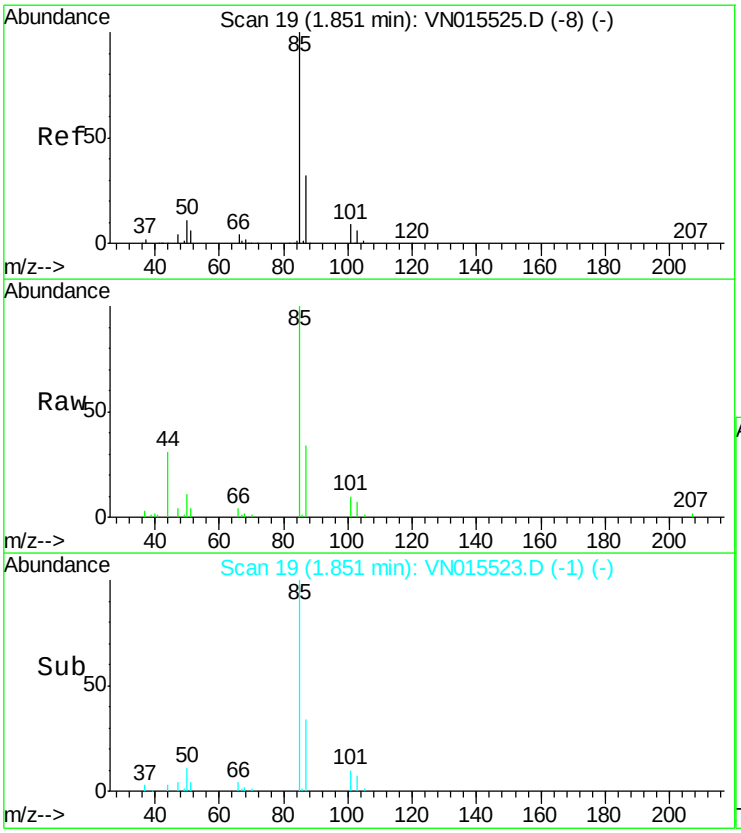


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:168 Resp: 191138

Ion	Ratio	Lower	Upper
168	100		
99	48.9	39.0	58.4

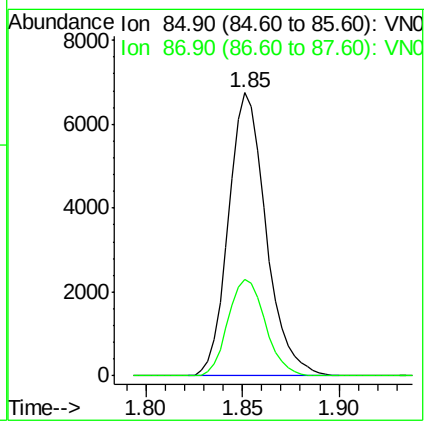




#2
Dichlorodifluoromethane
Concen: 4.16 ug/l
RT: 1.85 min Scan# 19
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

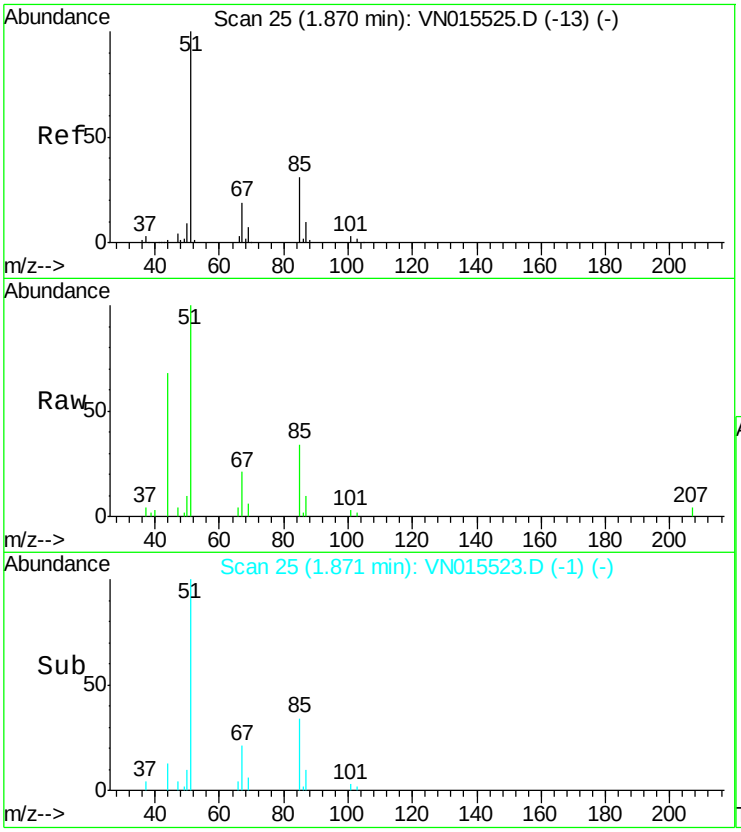
Tgt Ion: 85 Resp: 9105

Ion	Ratio	Lower	Upper
85	100		
87	34.2	16.1	48.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

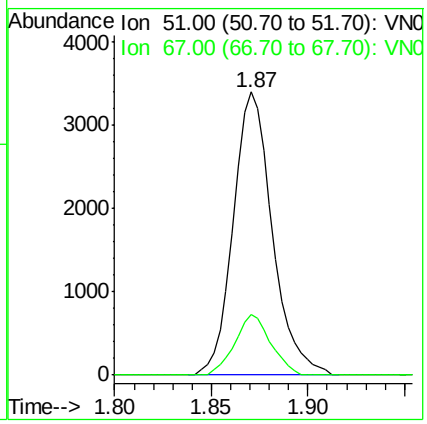
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

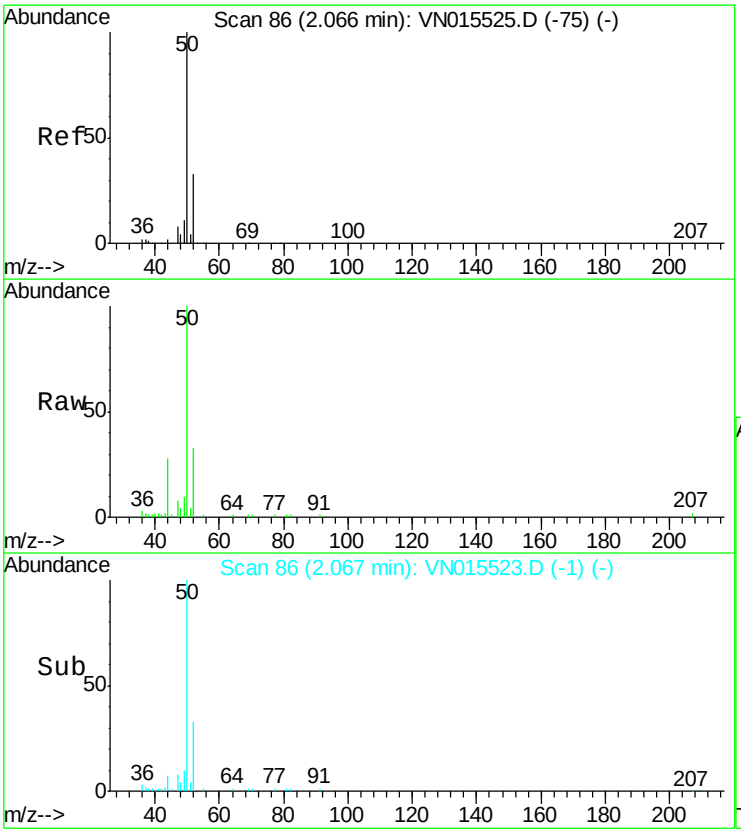


#3
Chlorodifluoromethane
Concen: 2.70 ug/l
RT: 1.87 min Scan# 25
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 51 Resp: 4764

Ion	Ratio	Lower	Upper
51	100		
67	19.7	15.1	22.7

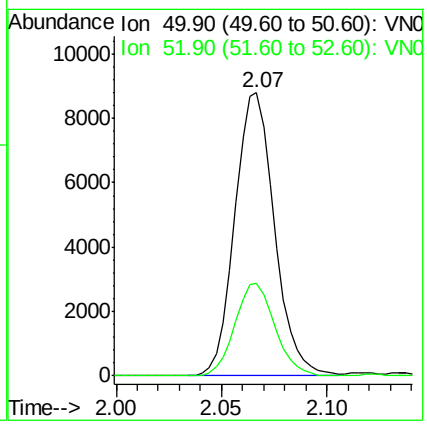




#4
Chloromethane
Concen: 4.31 ug/l
RT: 2.07 min Scan# 86
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 50 Resp: 11534

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.2	39.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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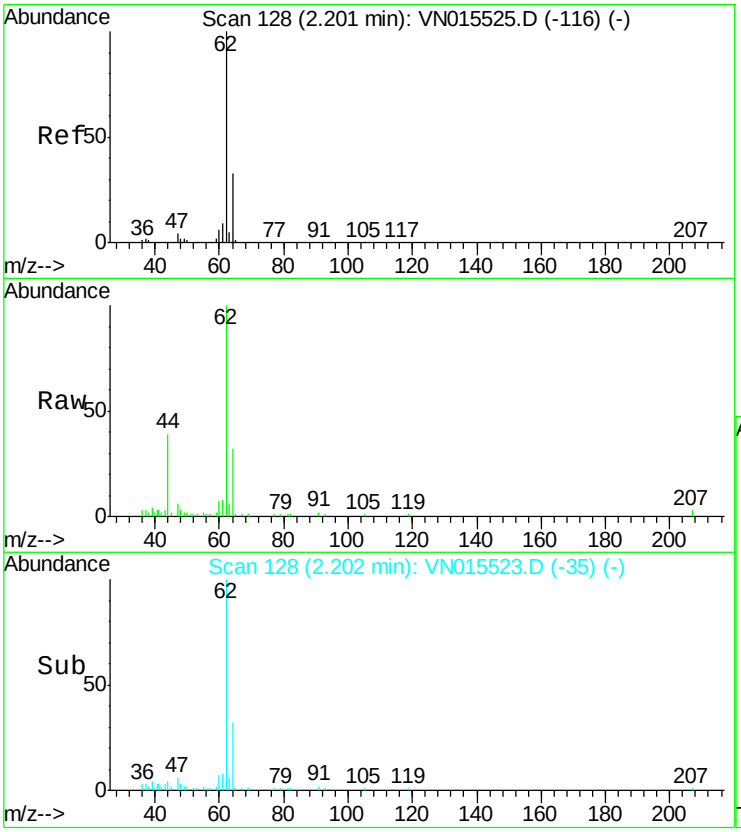
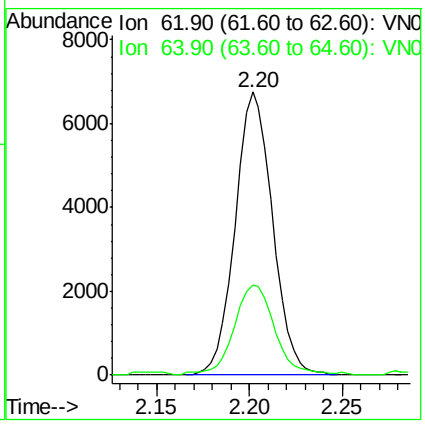
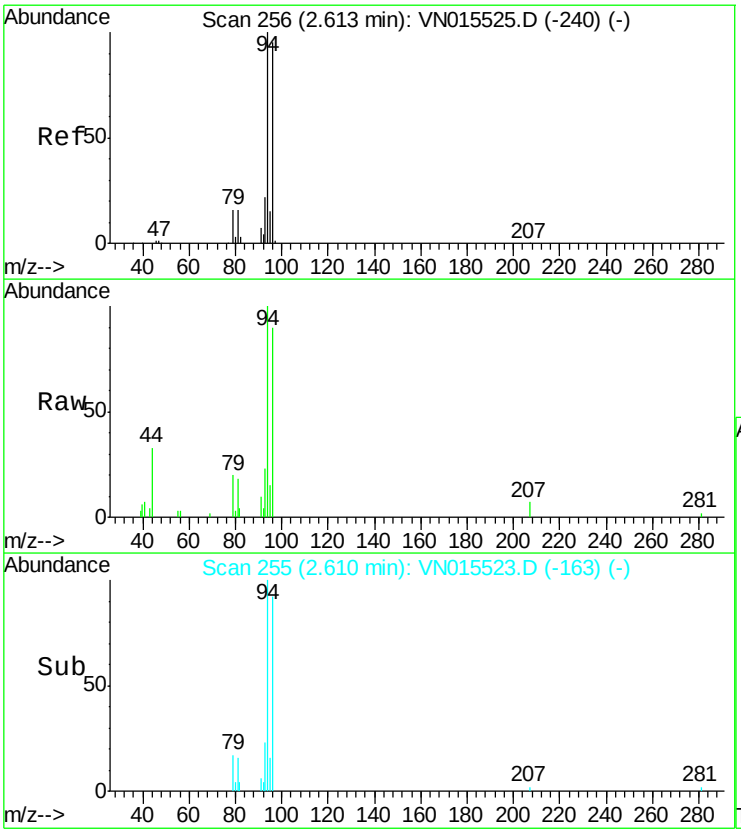


#5
Vinyl Chloride
Concen: 4.19 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 62 Resp: 9476

Ion	Ratio	Lower	Upper
62	100		
64	31.1	26.2	39.4

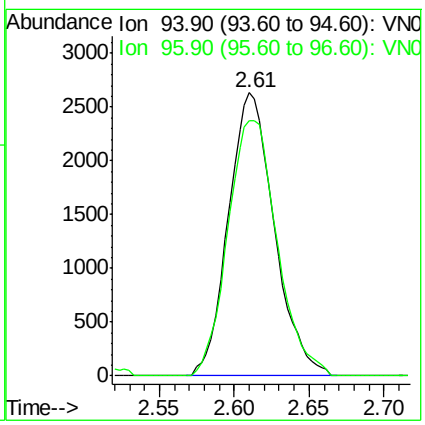




#6
Bromomethane
Concen: 4.29 ug/l
RT: 2.61 min Scan# 255
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 94 Resp: 5616

Ion	Ratio	Lower	Upper
94	100		
96	90.4	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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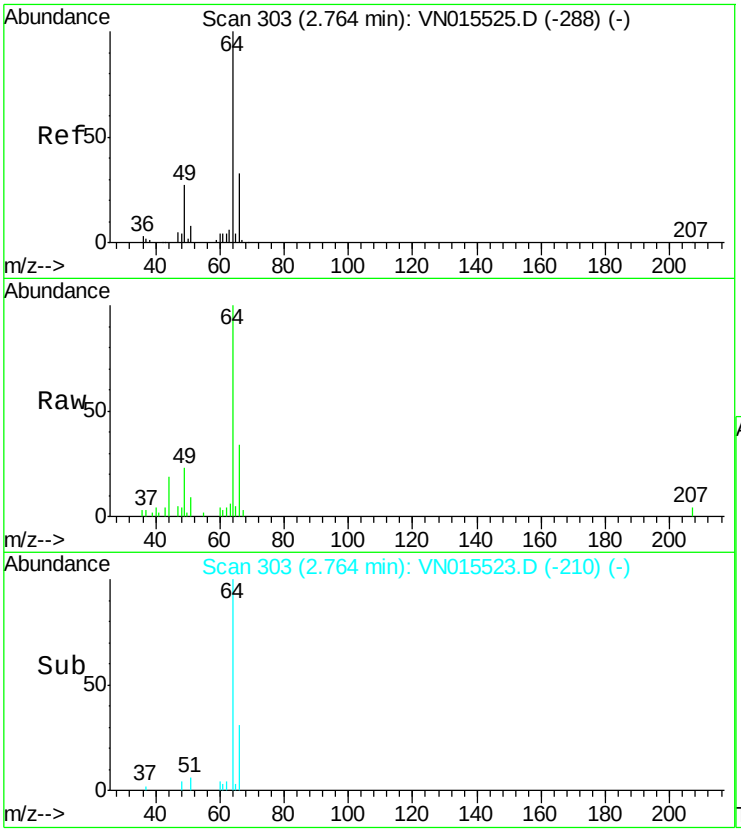
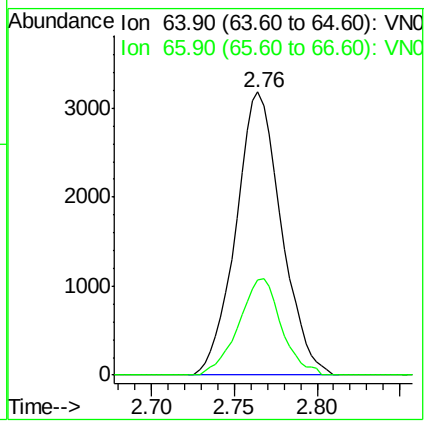
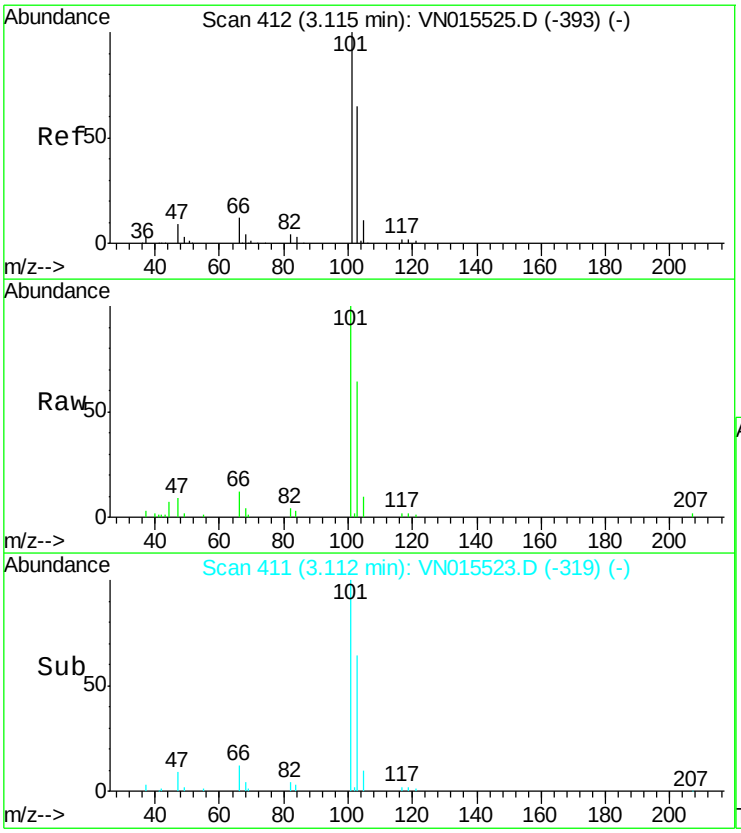


#7
Chloroethane
Concen: 4.27 ug/l
RT: 2.76 min Scan# 303
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 64 Resp: 6068

Ion	Ratio	Lower	Upper
64	100		
66	33.6	26.3	39.5

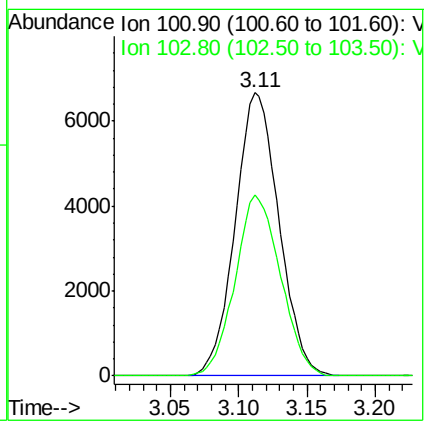




#8
Trichlorofluoromethane
Concen: 4.69 ug/l
RT: 3.11 min Scan# 411
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:101 Resp: 14869

Ion	Ratio	Lower	Upper
101	100		
103	63.7	52.1	78.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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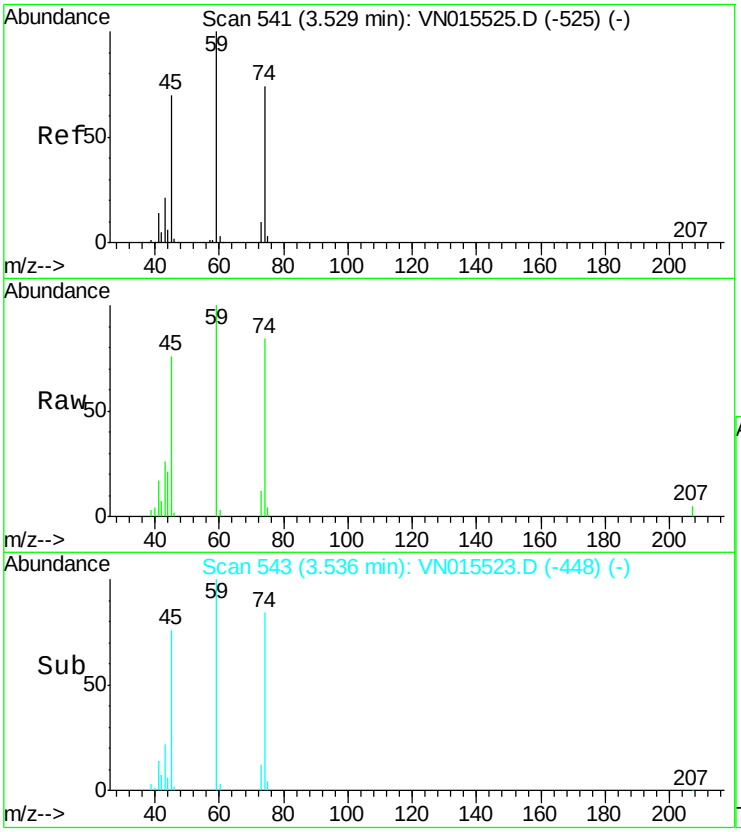
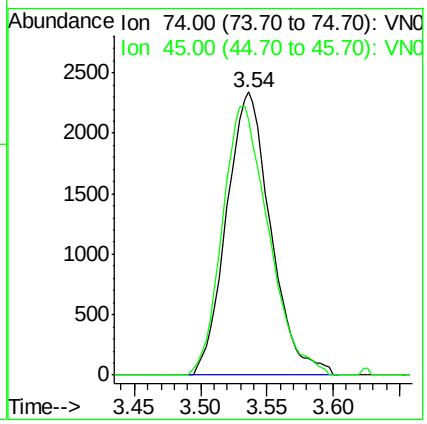
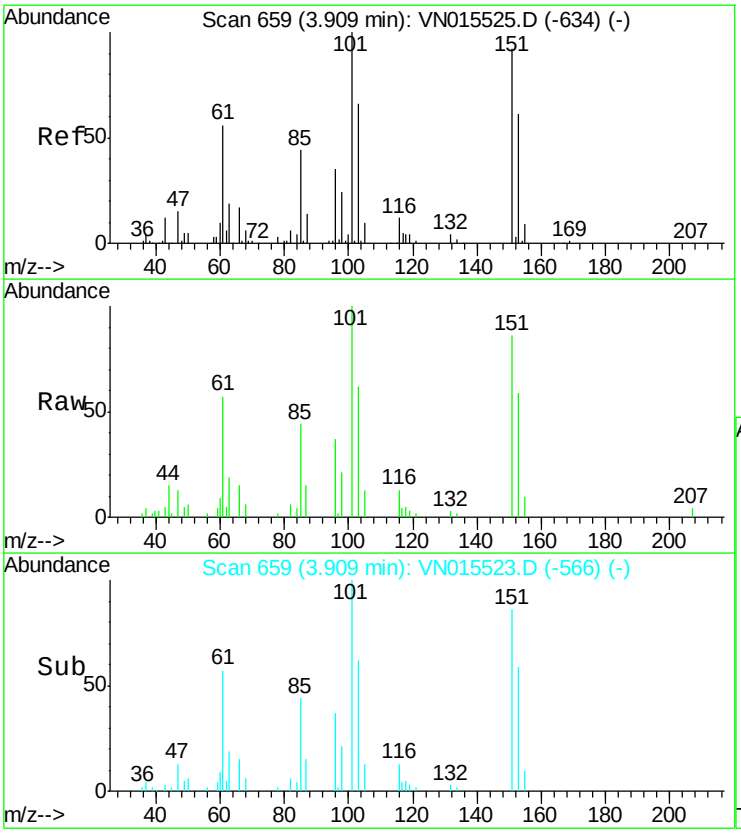


#9
Diethyl Ether
Concen: 4.53 ug/l
RT: 3.54 min Scan# 543
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 74 Resp: 5430

Ion	Ratio	Lower	Upper
74	100		
45	99.4	48.9	146.8

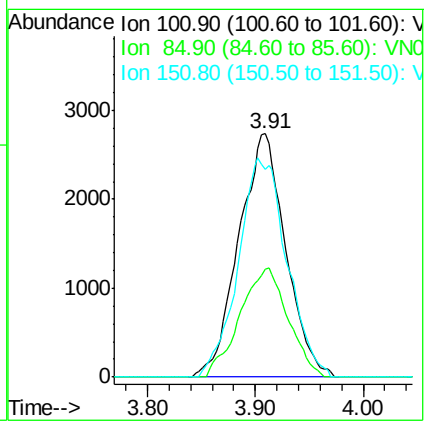




#10
1,1,2-Trichlorotrifluoroethane
Concen: 4.77 ug/l
RT: 3.91 min Scan# 659
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:101 Resp: 8266

Ion	Ratio	Lower	Upper
101	100		
85	46.0	34.5	51.7
151	93.1	72.9	109.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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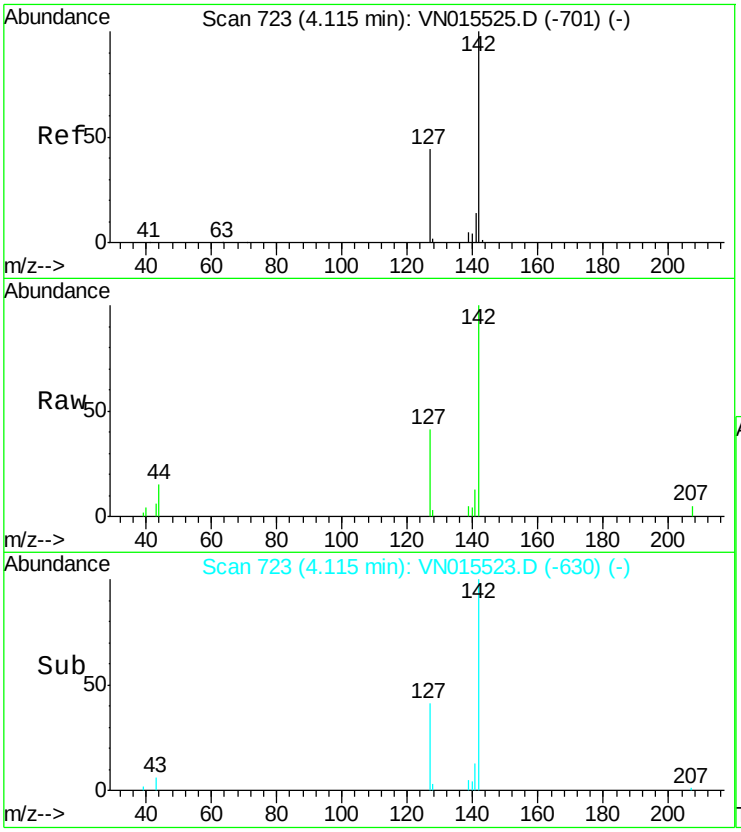
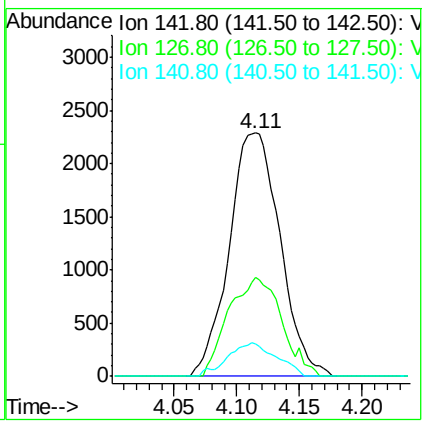
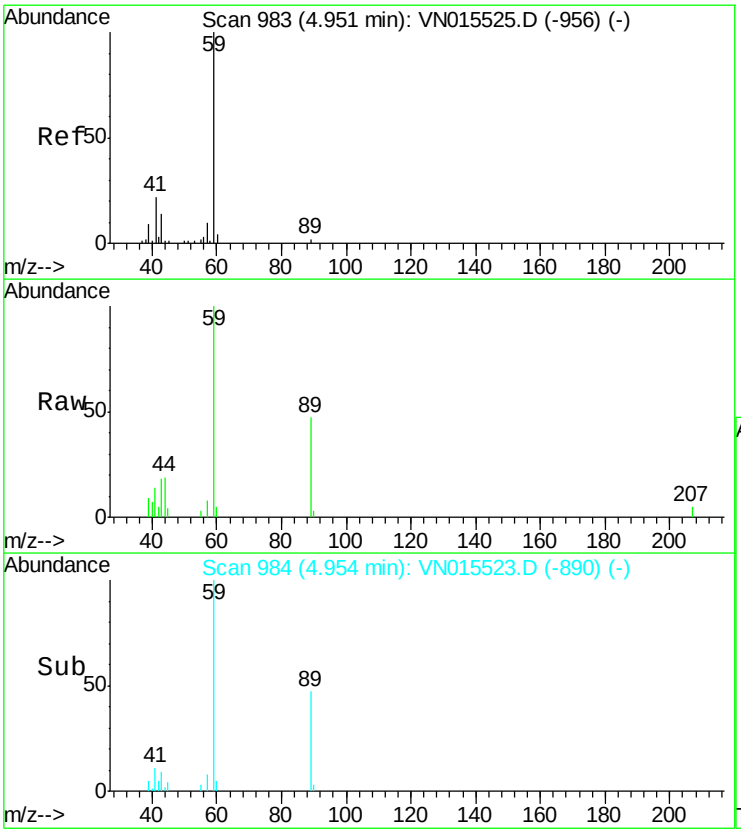


#11
Methyl Iodide
Concen: 3.64 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:142 Resp: 6461

Ion	Ratio	Lower	Upper
142	100		
127	42.2	34.7	52.1
141	13.2	11.4	17.0

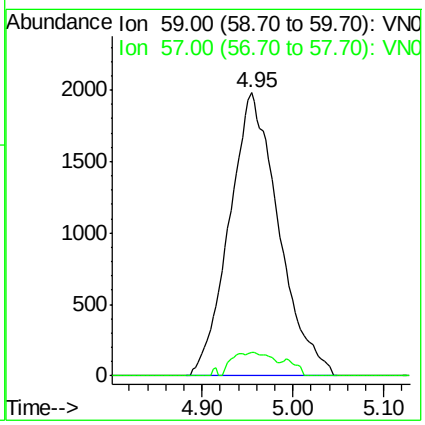




#12
Tert butyl alcohol
Concen: 35.42 ug/l
RT: 4.95 min Scan# 984
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 59 Resp: 7470

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.4	12.6#



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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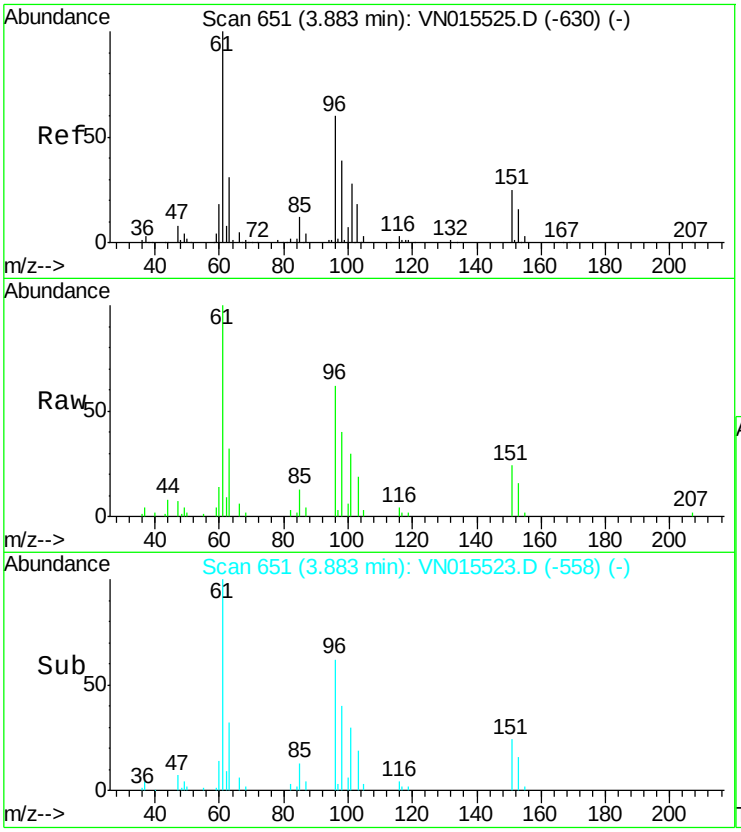
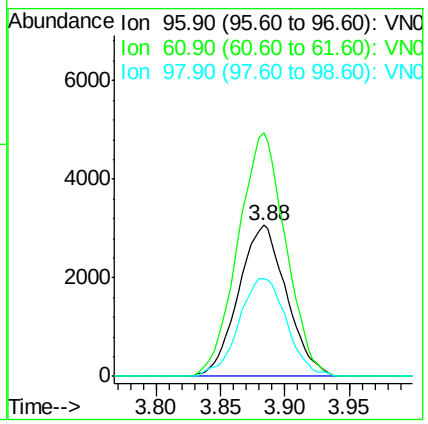
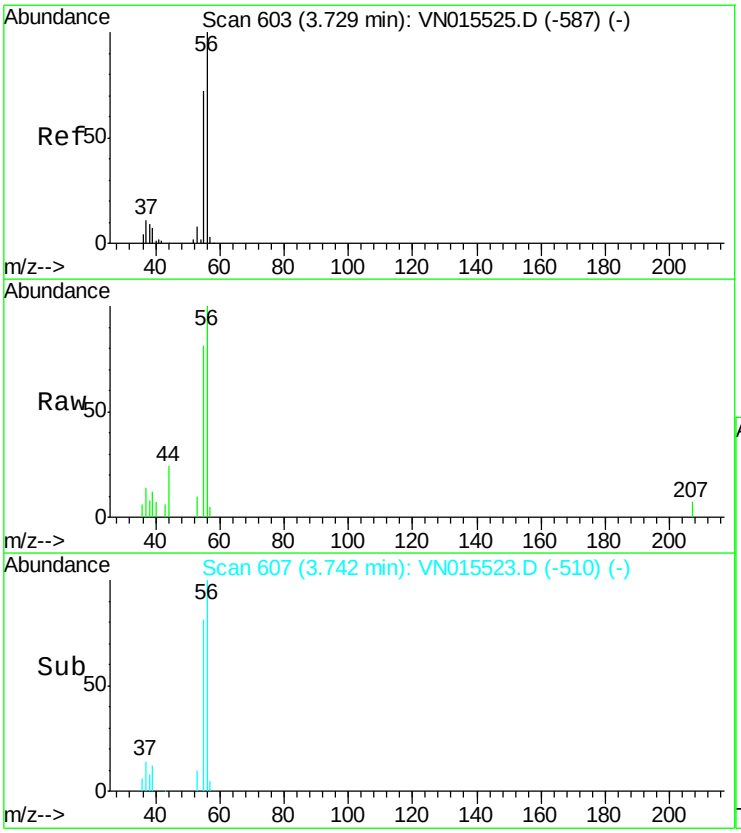


#13
1,1-Dichloroethene
Concen: 4.65 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 96 Resp: 7951

Ion	Ratio	Lower	Upper
96	100		
61	161.4	132.3	198.5
98	64.9	51.8	77.6

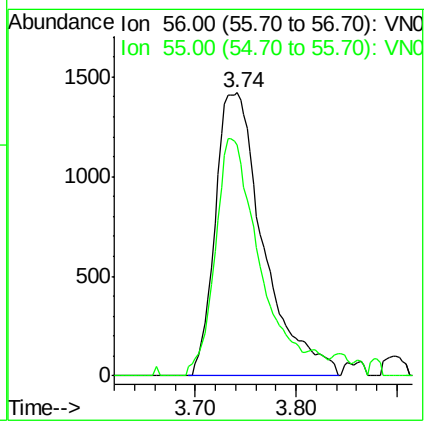




#14
Acrolein
Concen: 22.77 ug/l
RT: 3.74 min Scan# 607
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 56 Resp: 4726

Ion	Ratio	Lower	Upper
56	100		
55	76.3	57.9	86.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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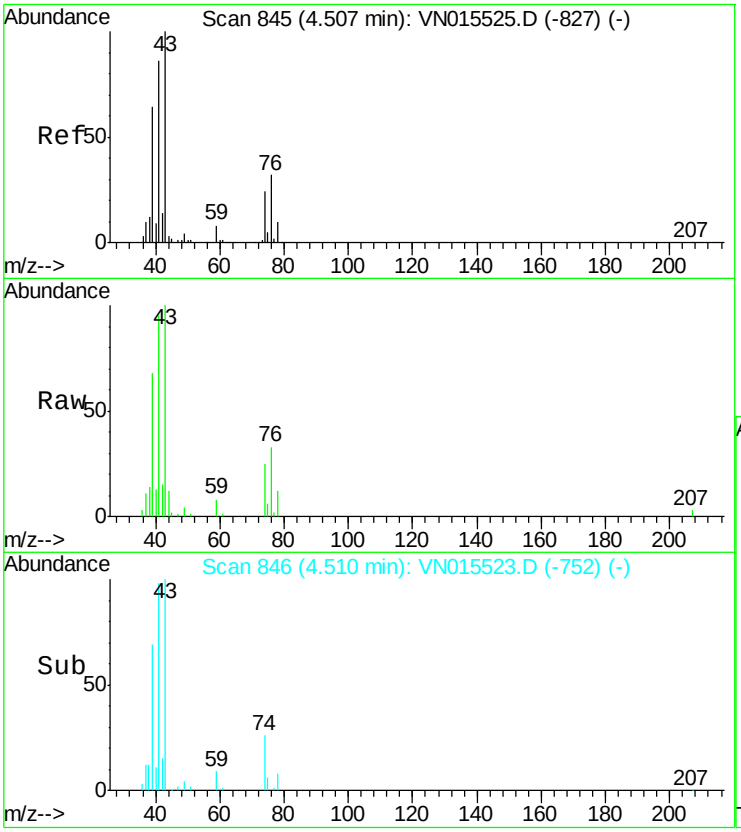
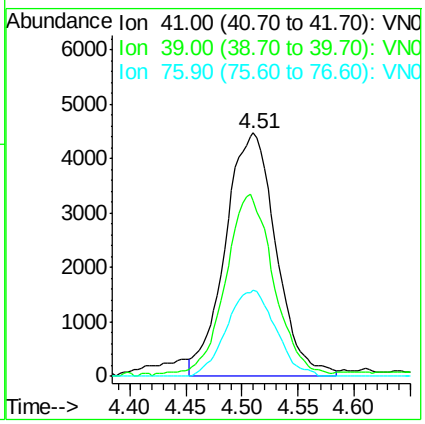
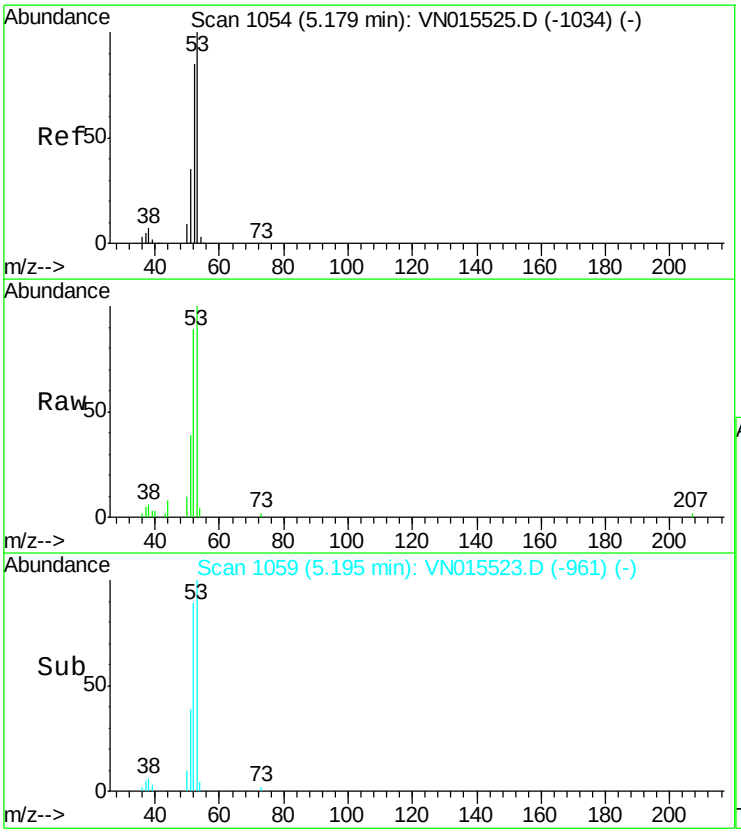


#15
Allyl chloride
Concen: 4.75 ug/l m
RT: 4.51 min Scan# 846
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 41 Resp: 14108

Ion	Ratio	Lower	Upper
41	100		
39	71.7	57.4	86.2
76	33.9	28.5	42.7

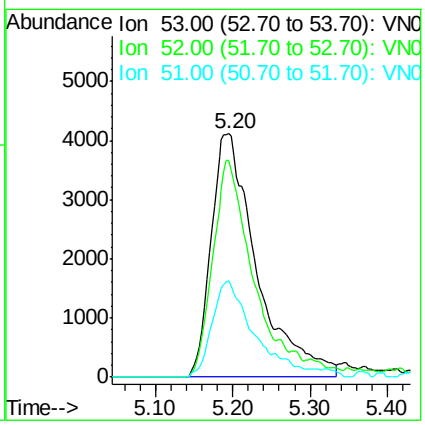




#16
Acrylonitrile
Concen: 20.38 ug/l
RT: 5.20 min Scan# 1059
Delta R.T. 0.02 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 53 Resp: 16913

Ion	Ratio	Lower	Upper
53	100		
52	77.7	65.7	98.5
51	36.2	29.1	43.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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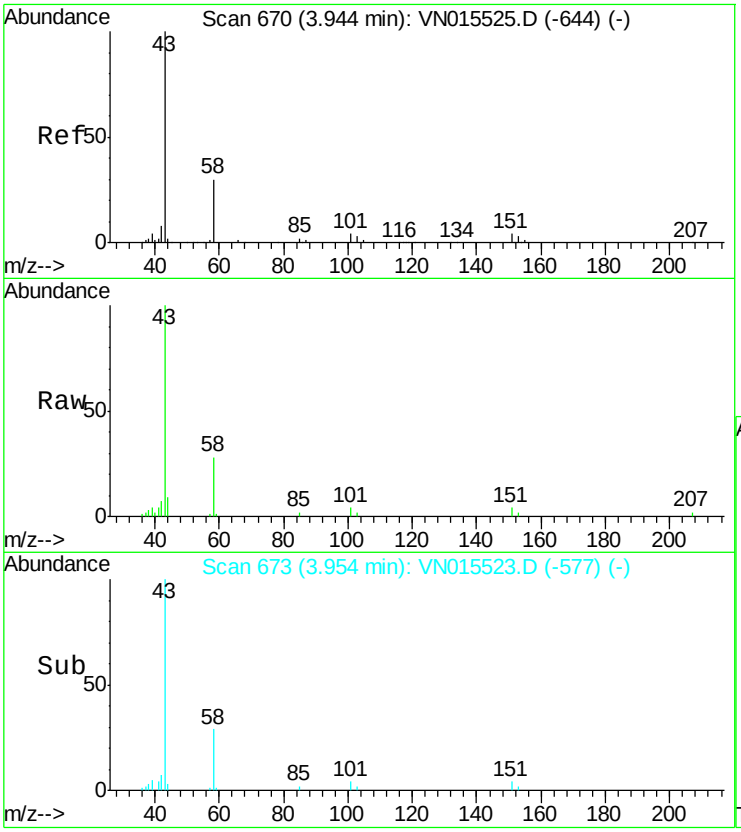
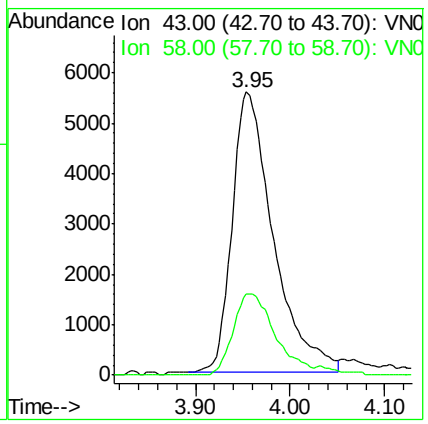
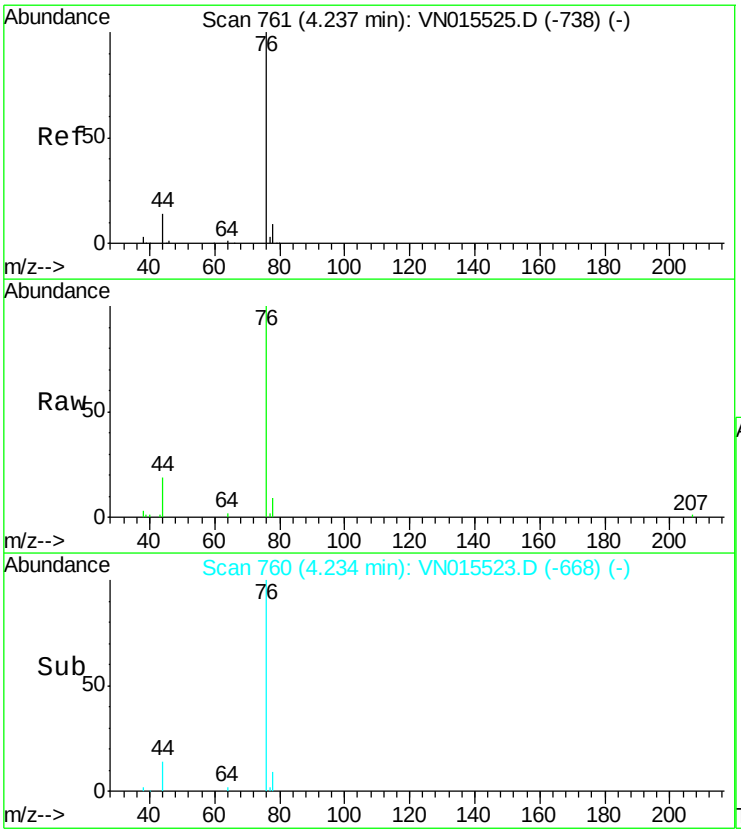


#17
Acetone
Concen: 19.83 ug/l
RT: 3.95 min Scan# 673
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 16887

Ion	Ratio	Lower	Upper
43	100		
58	28.7	24.2	36.2

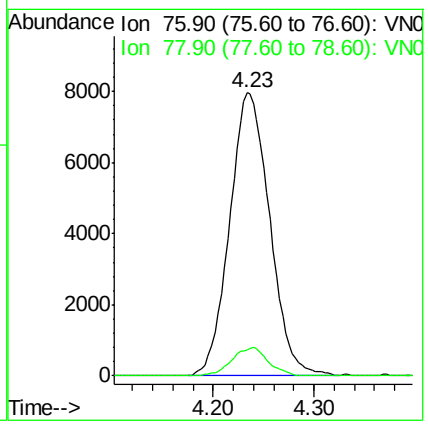




#18
Carbon Disulfide
Concen: 4.53 ug/l
RT: 4.23 min Scan# 760
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 76 Resp: 21934

Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.5	11.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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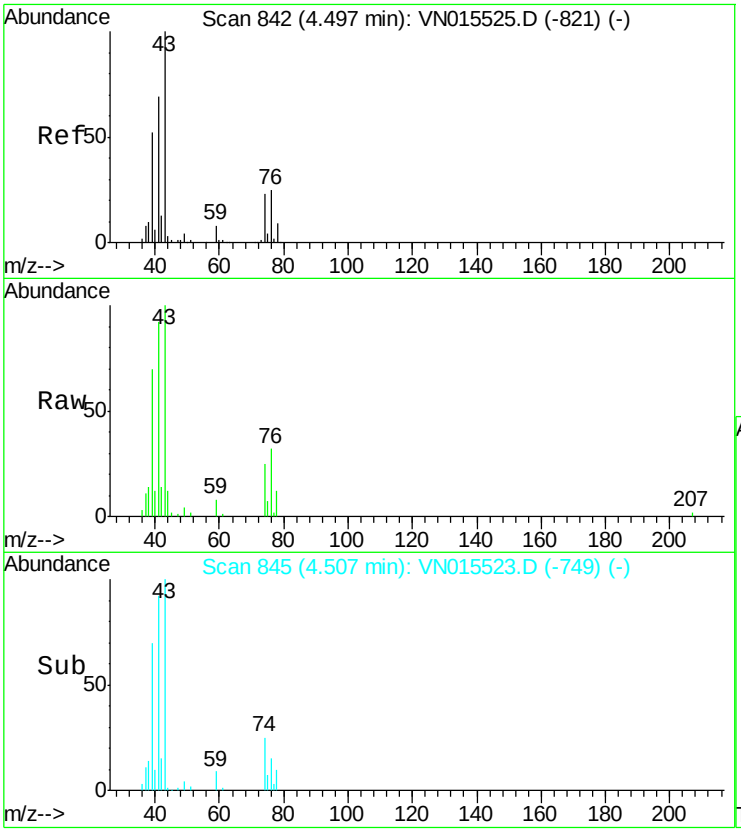
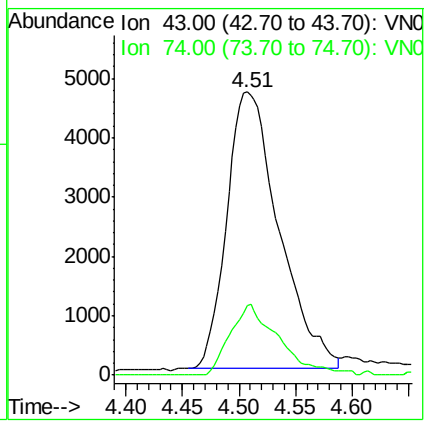
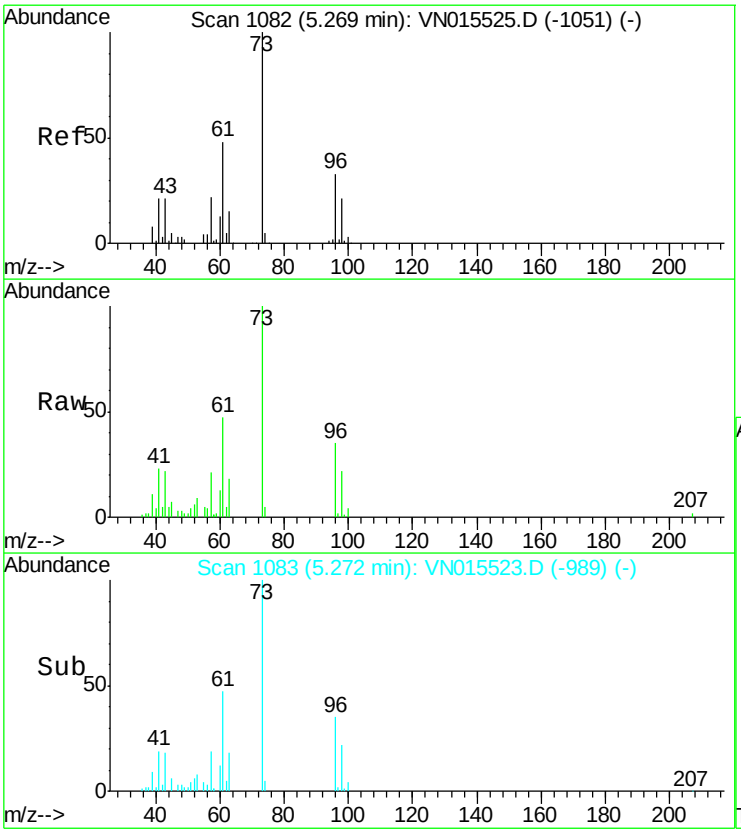


#19
Methyl Acetate
Concen: 6.69 ug/l
RT: 4.51 min Scan# 845
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 15006

Ion	Ratio	Lower	Upper
43	100		
74	23.9	18.5	27.7

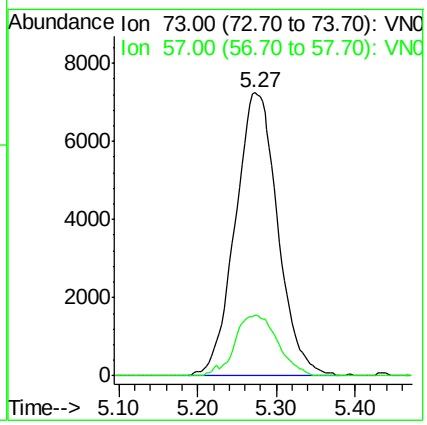




#20
Methyl tert-butyl Ether
Concen: 4.68 ug/l
RT: 5.27 min Scan# 1083
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 73 Resp: 27464

Ion	Ratio	Lower	Upper
73	100		
57	21.4	17.3	25.9



Instrument :
MSVOA_N
LabSampleId :
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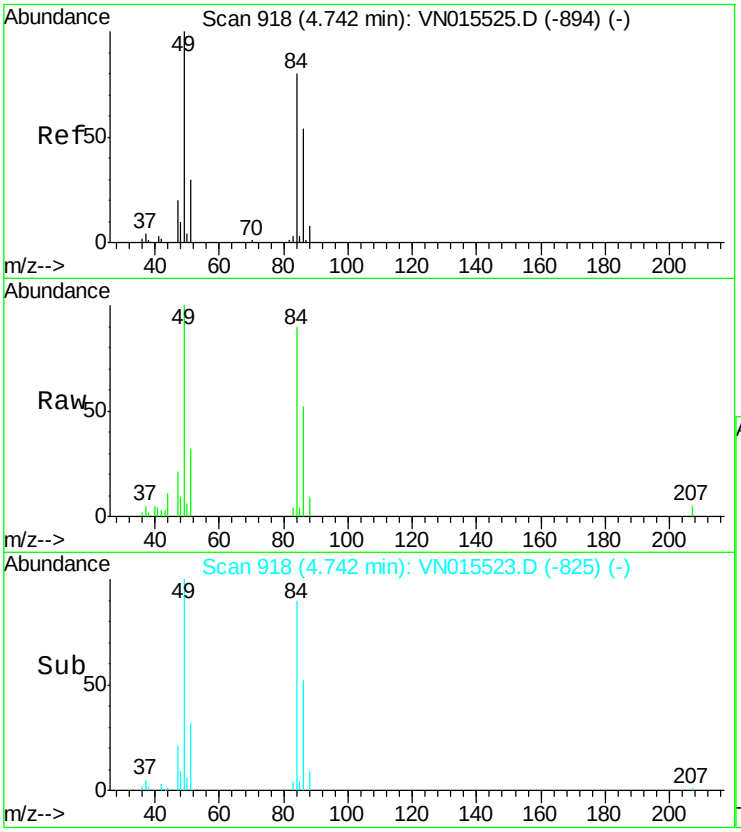
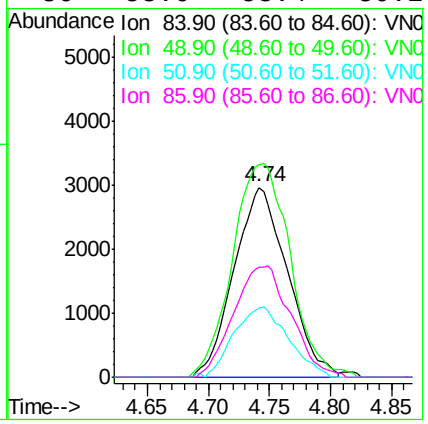
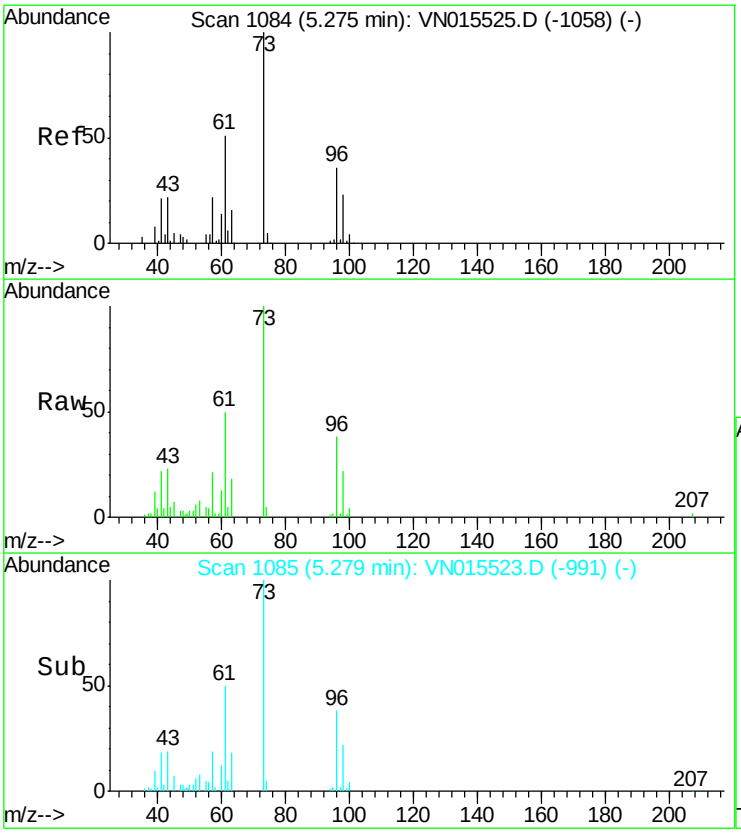


#21
Methylene Chloride
Concen: 4.45 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 84 Resp: 9008

Ion	Ratio	Lower	Upper
84	100		
49	111.6	99.8	149.6
51	36.2	30.2	45.2
86	58.0	53.4	80.2

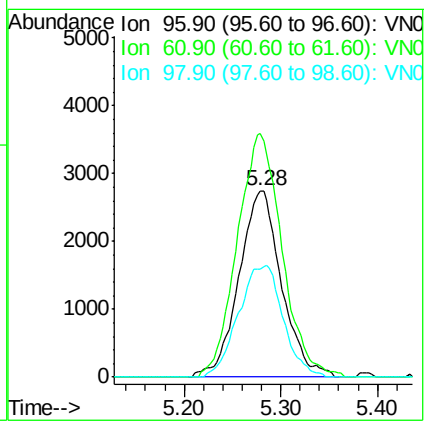




#22
trans-1,2-Dichloroethene
Concen: 4.64 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 96 Resp: 8397

Ion	Ratio	Lower	Upper
96	100		
61	130.9	113.3	169.9
98	58.3	50.4	75.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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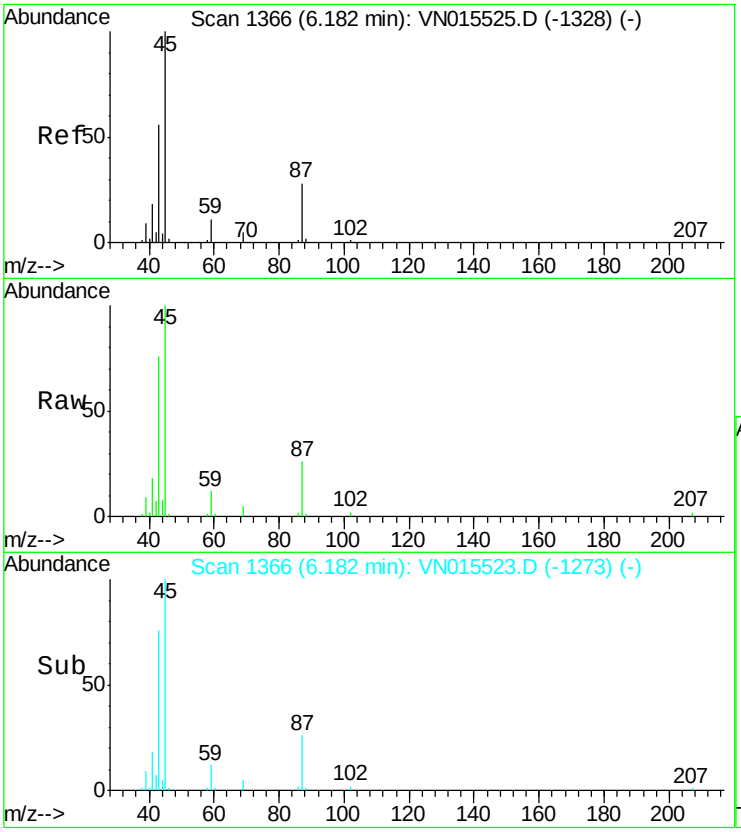
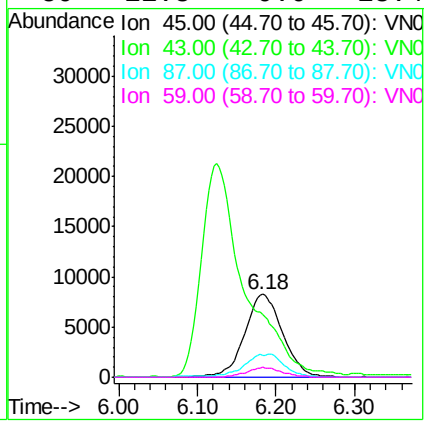
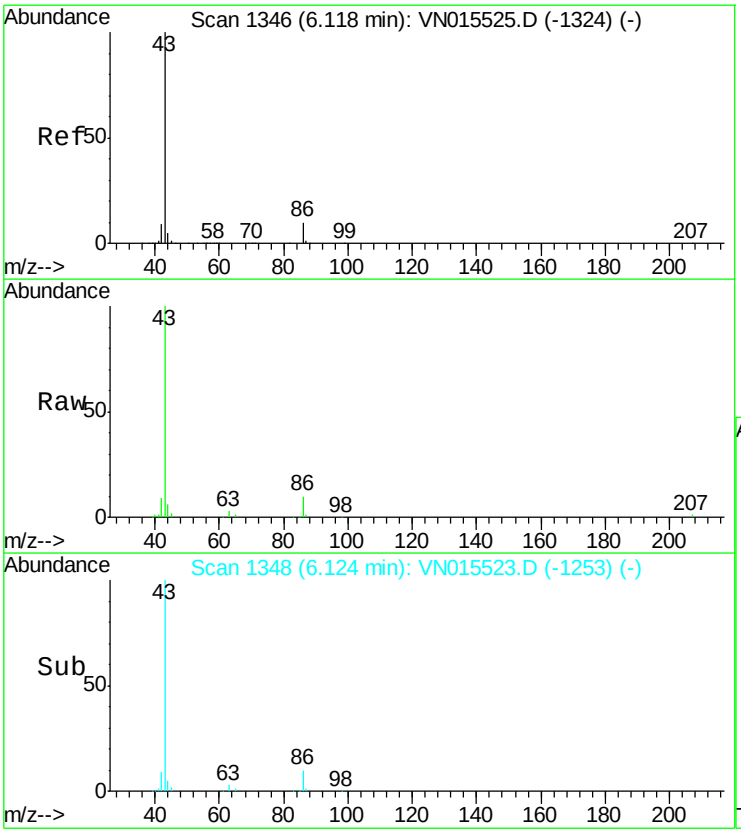


#23
Diisopropyl ether
Concen: 4.19 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 45 Resp: 28153

Ion	Ratio	Lower	Upper
45	100		
43	71.0	44.6	67.0#
87	26.5	22.3	33.5
59	11.8	9.0	13.4

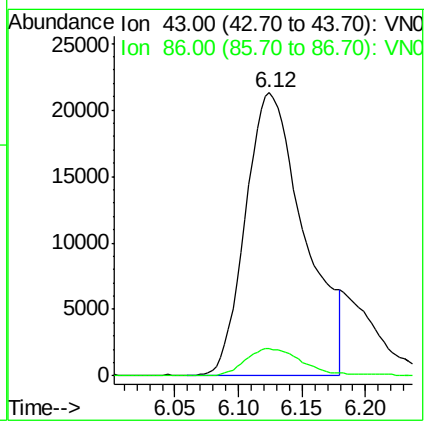




#24
Vinyl Acetate
Concen: 14.41 ug/l m
RT: 6.12 min Scan# 1348
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 68396

Ion	Ratio	Lower	Upper
43	100		
86	9.7	7.9	11.9



Instrument :
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LabSampleId :
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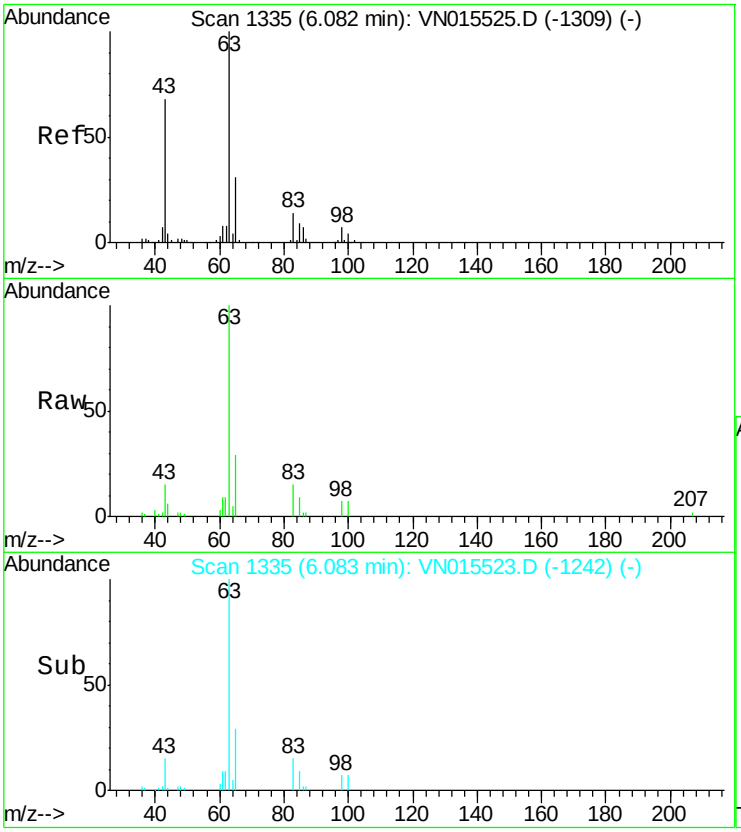
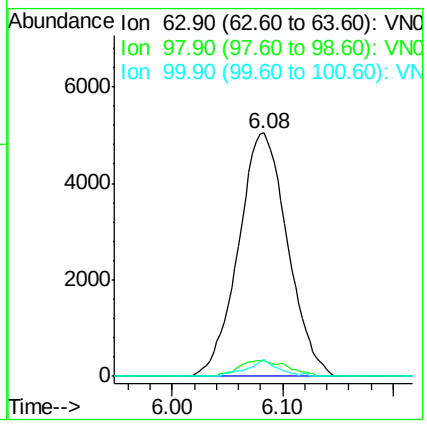
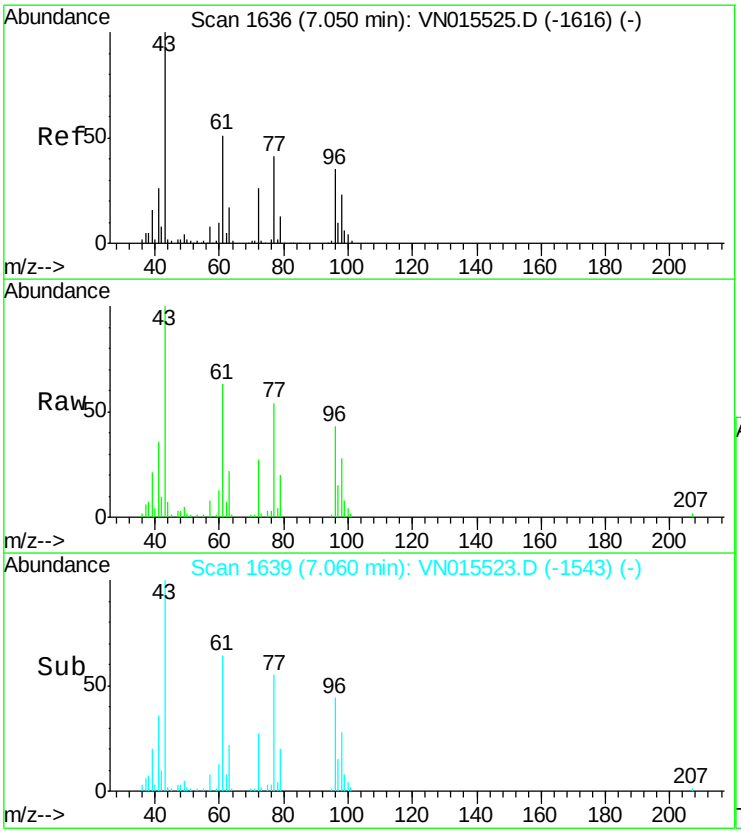


#25
1,1-Dichloroethane
Concen: 4.30 ug/l
RT: 6.08 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 63 Resp: 15568

Ion	Ratio	Lower	Upper
63	100		
98	6.6	3.3	9.9
100	6.9	2.1	6.3#

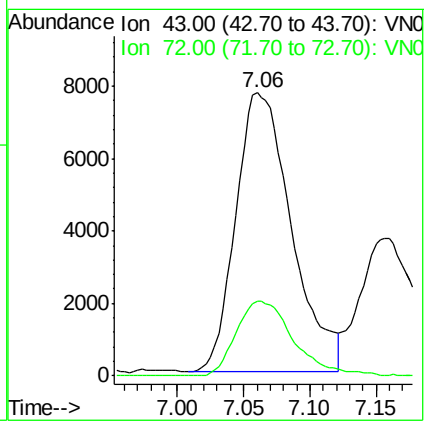




#26
2-Butanone
Concen: 20.10 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 22582

Ion	Ratio	Lower	Upper
43	100		
72	27.0	20.7	31.1



Instrument :
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LabSampleId :
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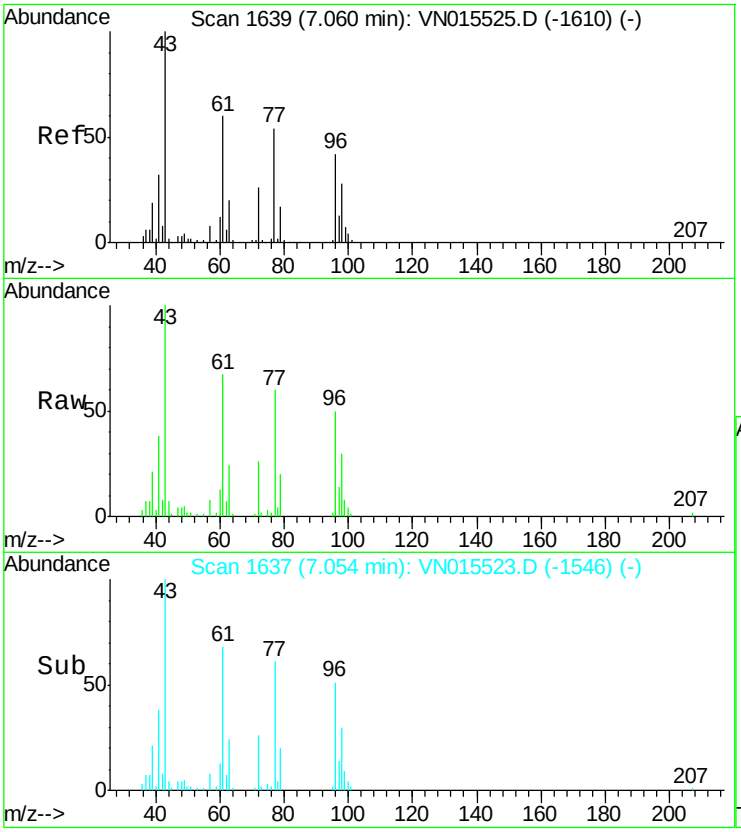
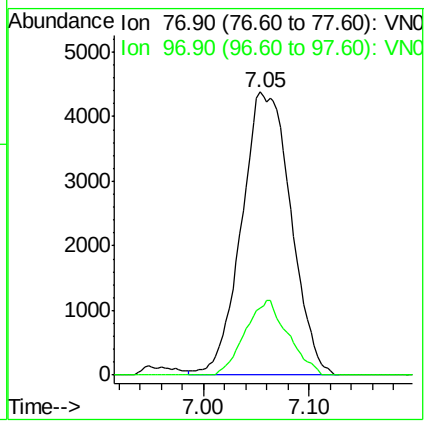
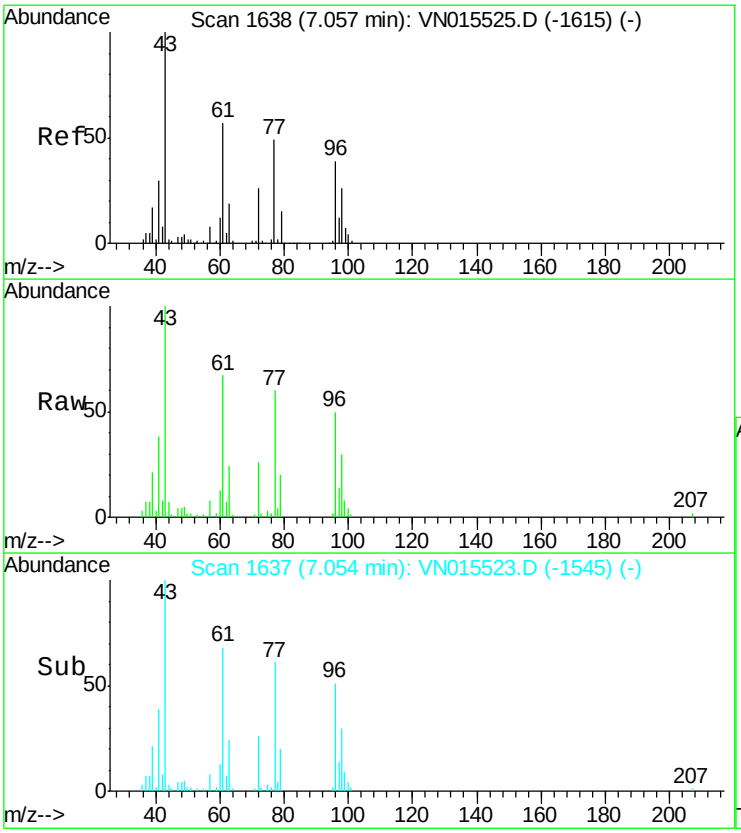


#27
2,2-Dichloropropane
Concen: 5.17 ug/l
RT: 7.05 min Scan# 1637
Delta R.T. -0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 77 Resp: 14240

Ion	Ratio	Lower	Upper
77	100		
97	23.0	11.6	34.7

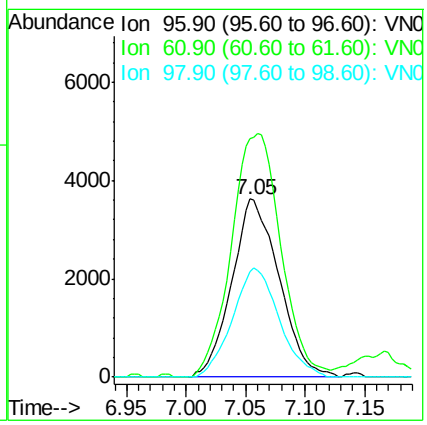




#28
cis-1,2-Dichloroethene
Concen: 4.68 ug/l
RT: 7.05 min Scan# 1637
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 96 Resp: 9958

Ion	Ratio	Lower	Upper
96	100		
61	143.2	0.0	292.0
98	60.6	0.0	129.4



Instrument :
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LabSampleId :
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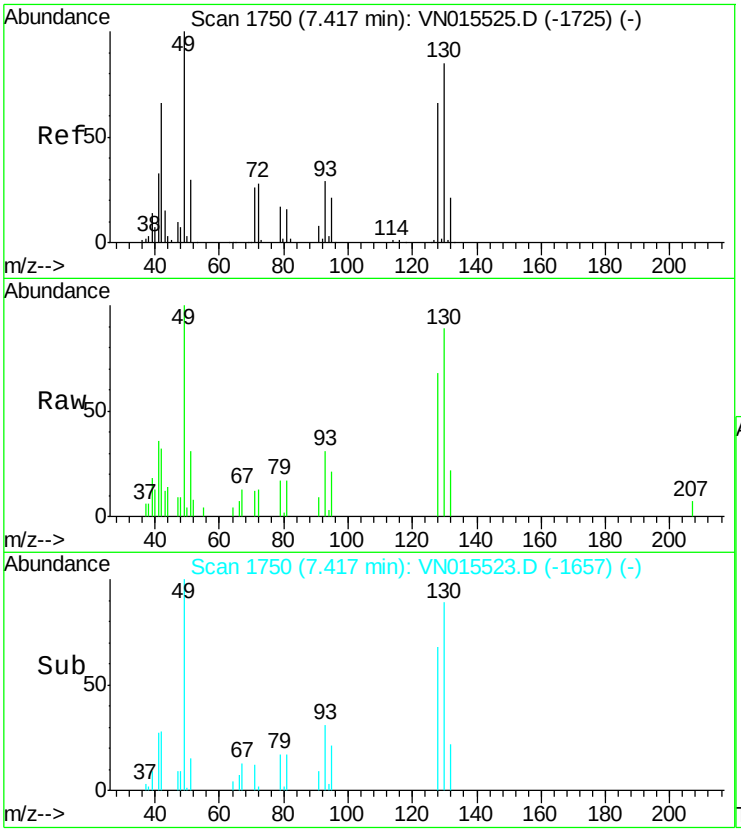
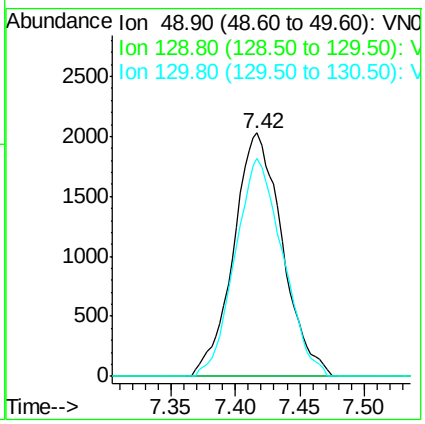
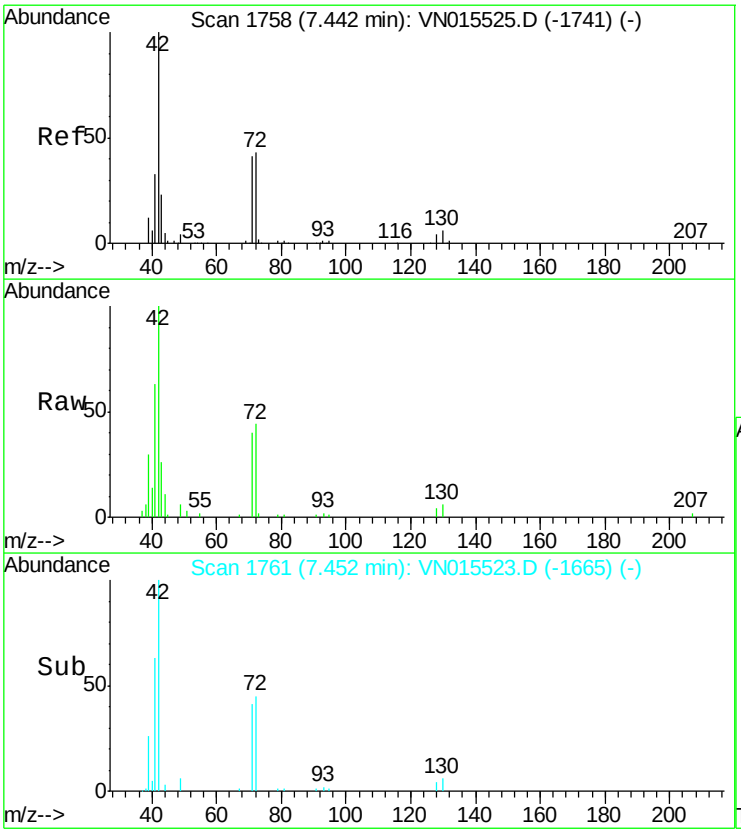


#29
Bromochloromethane
Concen: 2.98 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 49 Resp: 5331

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.2
130	87.6	68.6	102.8

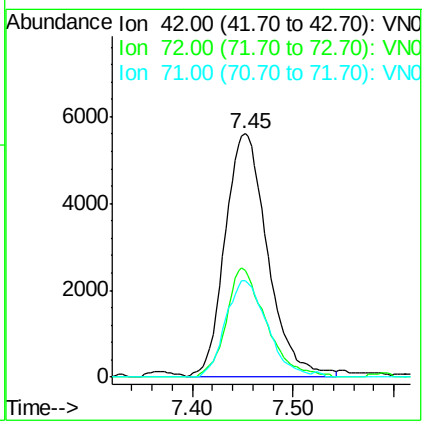




#30
Tetrahydrofuran
Concen: 22.73 ug/l
RT: 7.45 min Scan# 1761
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 42 Resp: 16500

Ion	Ratio	Lower	Upper
42	100		
72	41.8	34.2	51.2
71	38.4	32.5	48.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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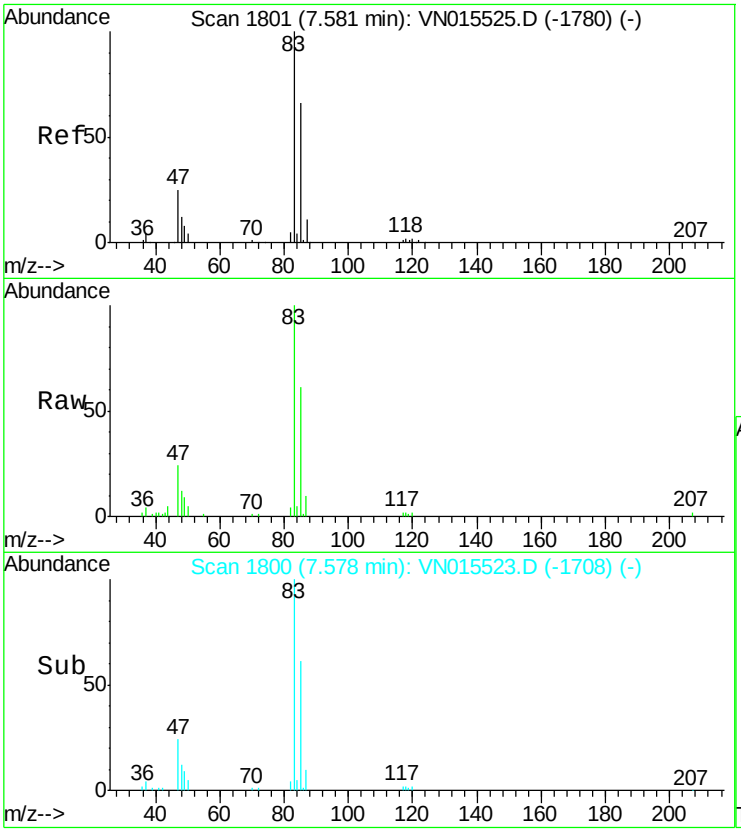
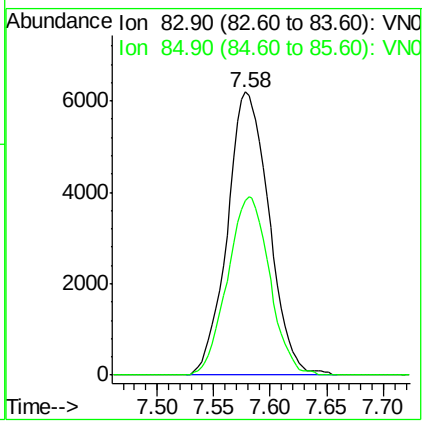
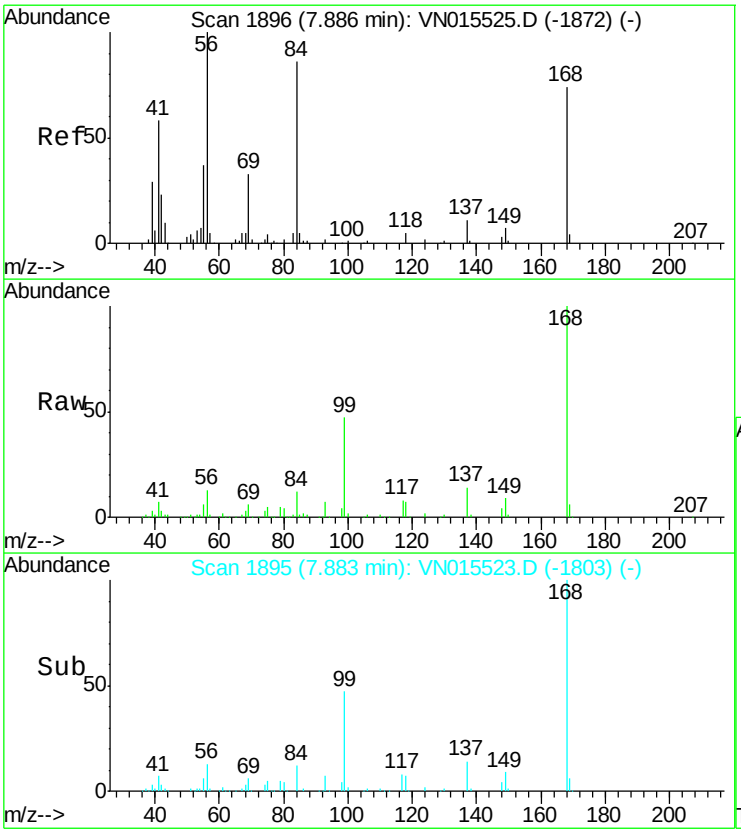


#31
Chloroform
Concen: 4.43 ug/l
RT: 7.58 min Scan# 1800
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 83 Resp: 15876

Ion	Ratio	Lower	Upper
83	100		
85	61.5	52.6	78.8

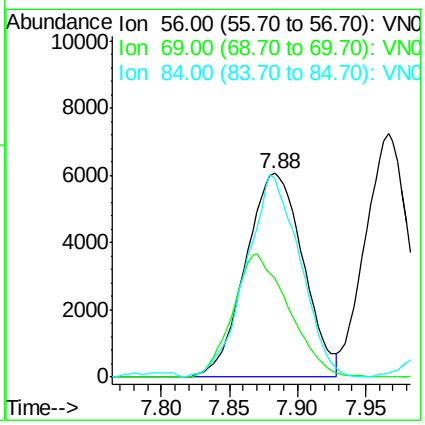


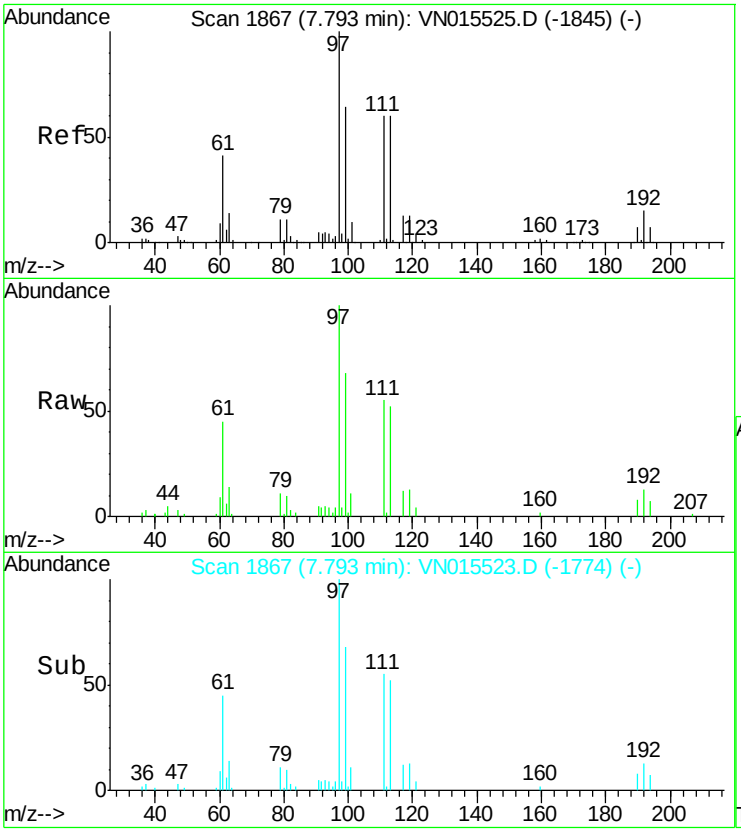


#32
Cyclohexane
Concen: 4.34 ug/l
RT: 7.88 min Scan# 1895
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 56 Resp: 17741

Ion	Ratio	Lower	Upper
56	100		
69	48.5	26.6	39.8#
84	97.5	69.0	103.4





#33
1,1,1-Trichloroethane
Concen: 4.82 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 97 Resp: 15058

Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.2	76.8
61	44.5	33.9	50.9

Instrument :
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LabSampleId :
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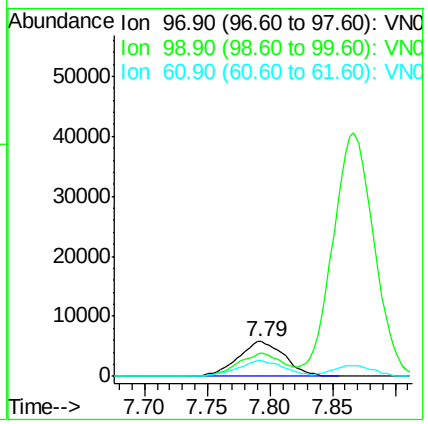
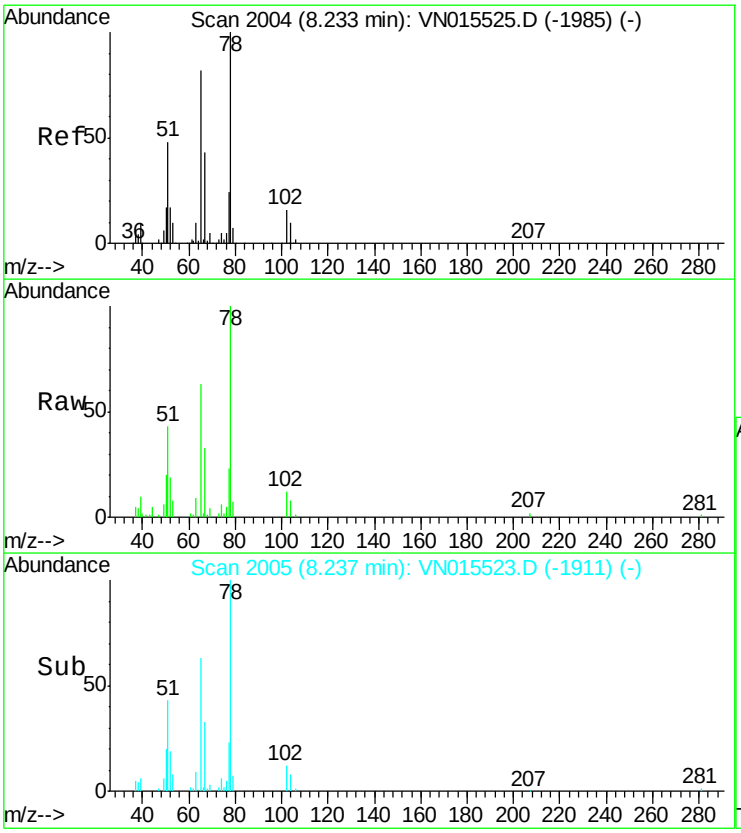
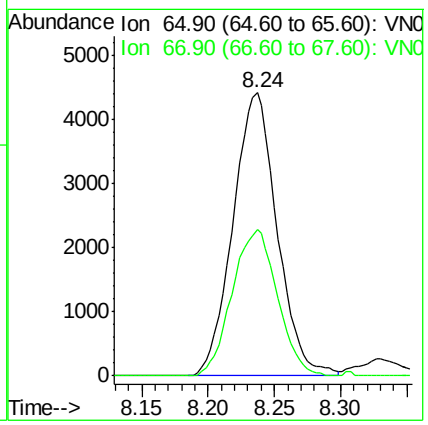




#34
1,2-Dichloroethane-d4
Concen: 4.21 ug/l
RT: 8.24 min Scan# 2005
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 65 Resp: 10220

Ion	Ratio	Lower	Upper
65	100		
67	52.8	0.0	103.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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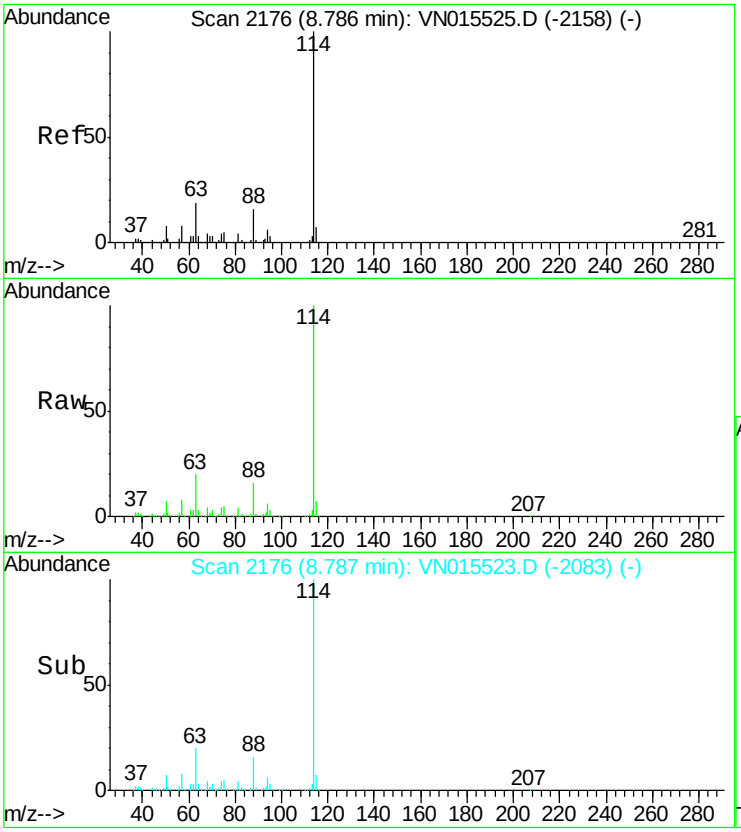
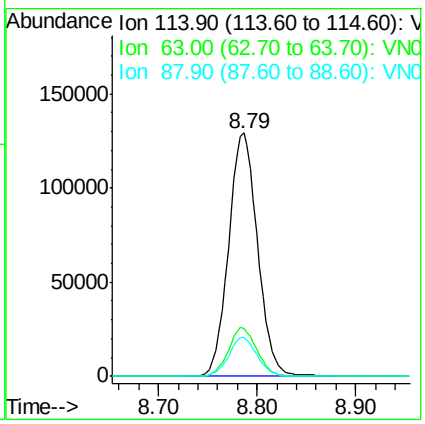
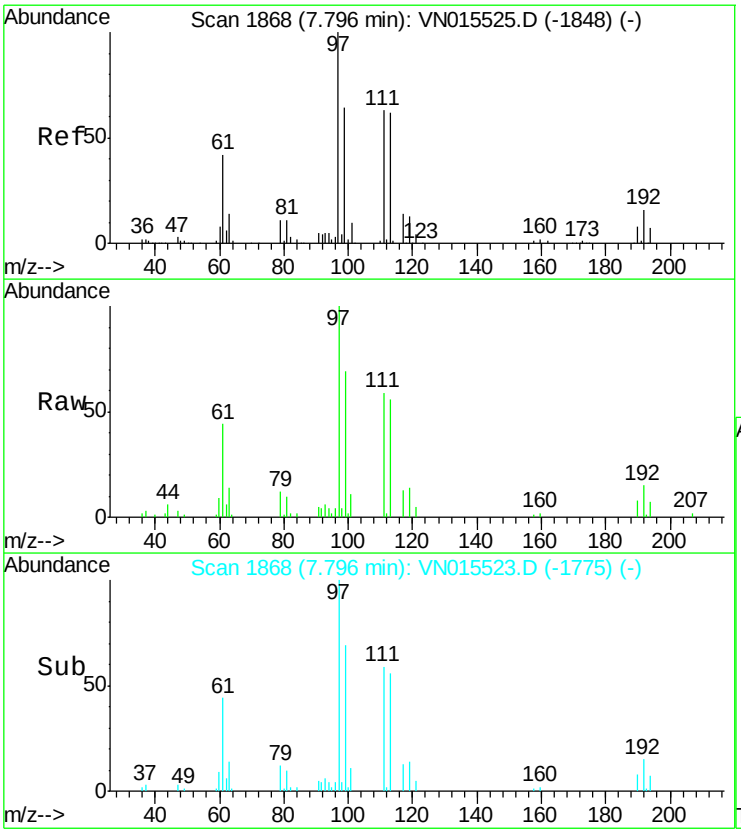


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:114 Resp: 264459

Ion	Ratio	Lower	Upper
114	100		
63	19.7	0.0	38.6
88	15.9	0.0	32.2

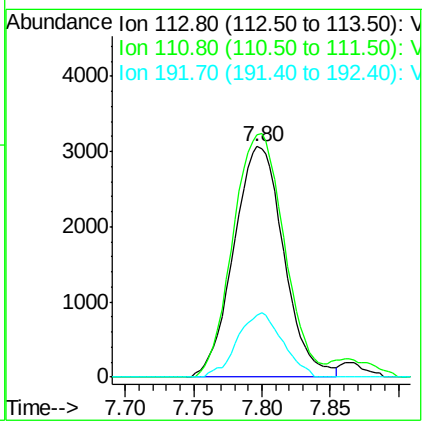




#36
Dibromofluoromethane
Concen: 4.54 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:113 Resp: 7827

Ion	Ratio	Lower	Upper
113	100		
111	107.8	81.5	122.3
192	25.1	20.0	30.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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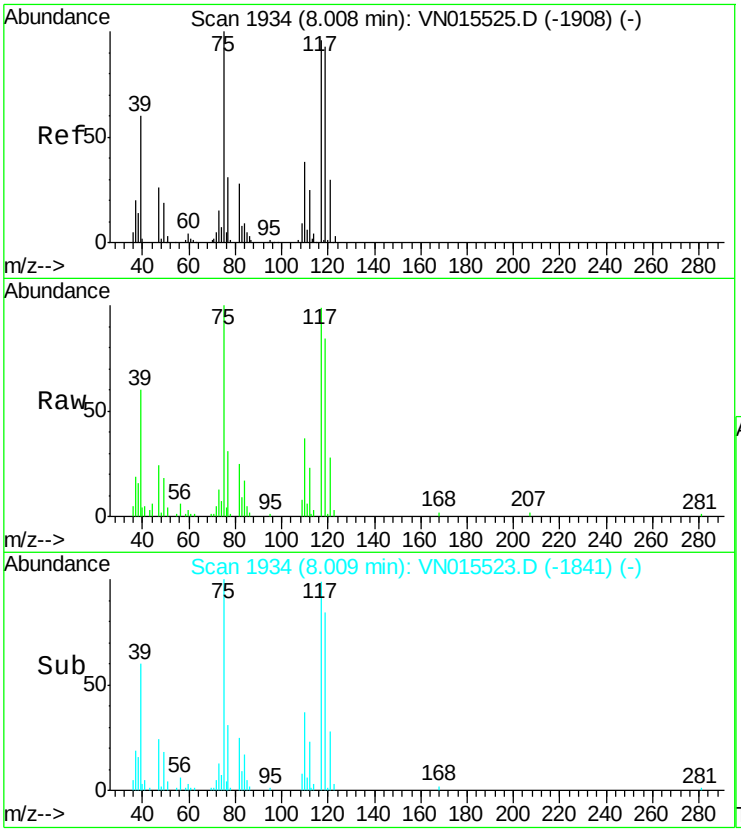
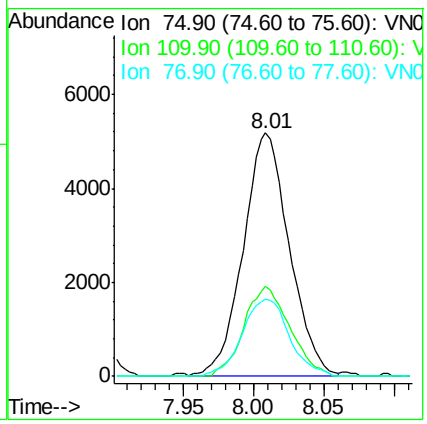
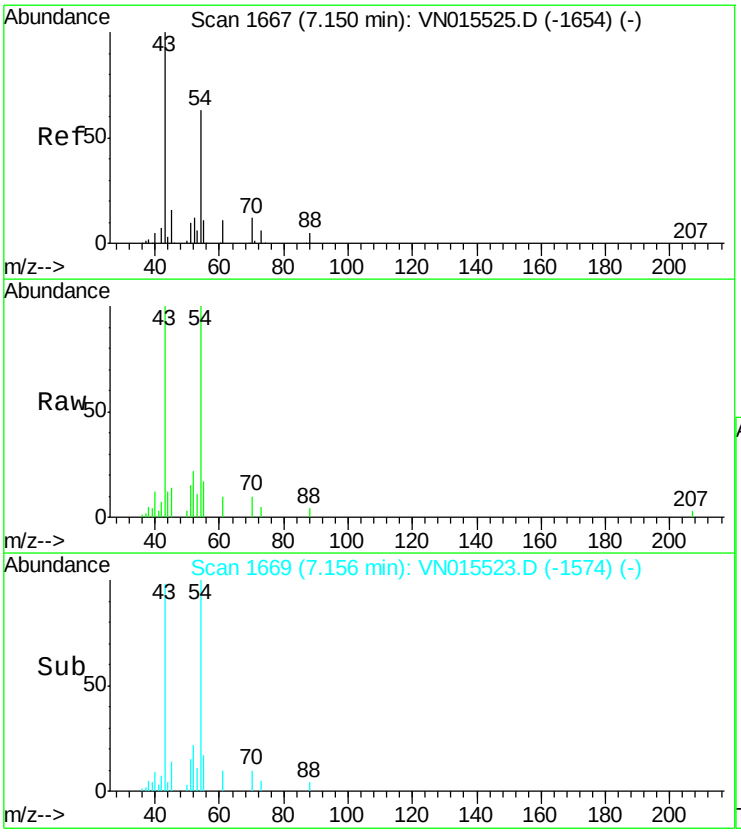


#37
1,1-Dichloropropene
Concen: 4.73 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 75 Resp: 11882

Ion	Ratio	Lower	Upper
75	100		
110	36.5	18.6	55.6
77	32.3	24.4	36.6

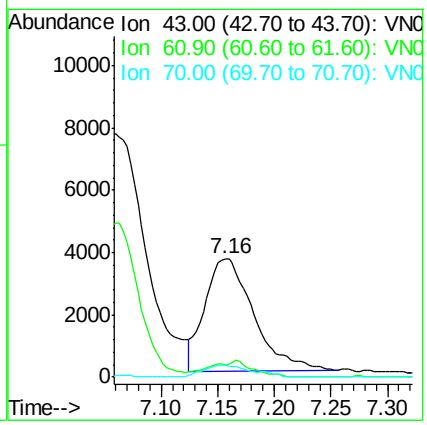


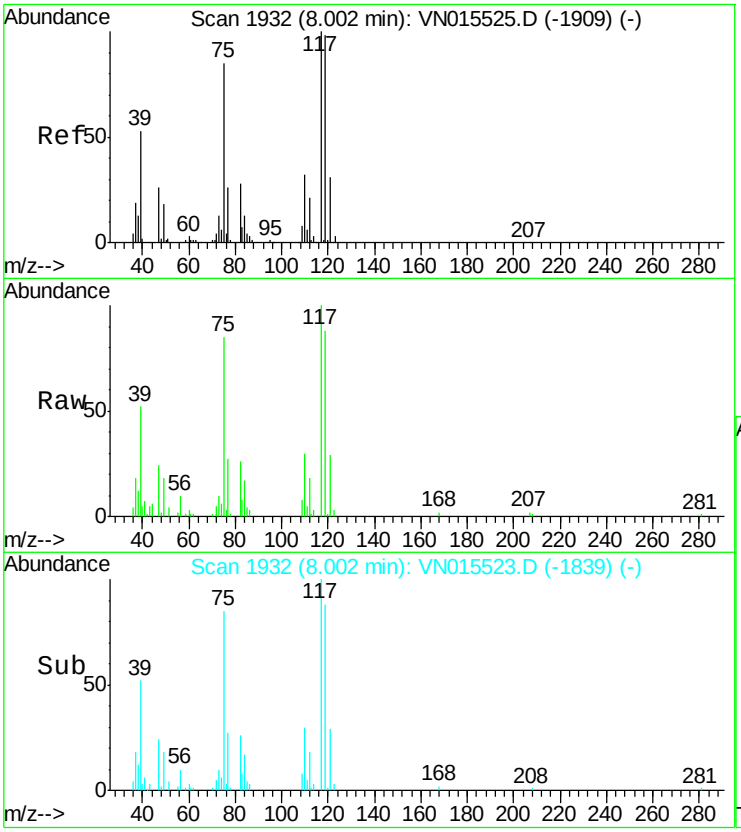


#38
Ethyl Acetate
Concen: 5.77 ug/l
RT: 7.16 min Scan# 1669
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 10924

Ion	Ratio	Lower	Upper
43	100		
61	5.8	10.8	16.2#
70	9.2	8.5	12.7

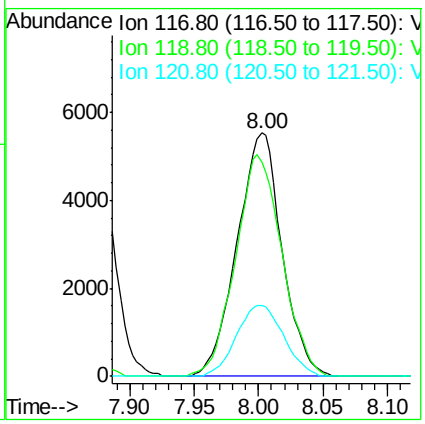




#39
Carbon Tetrachloride
Concen: 5.31 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:117 Resp: 13432

Ion	Ratio	Lower	Upper
117	100		
119	88.1	78.0	117.0
121	29.2	24.5	36.7



Instrument :
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LabSampleId :
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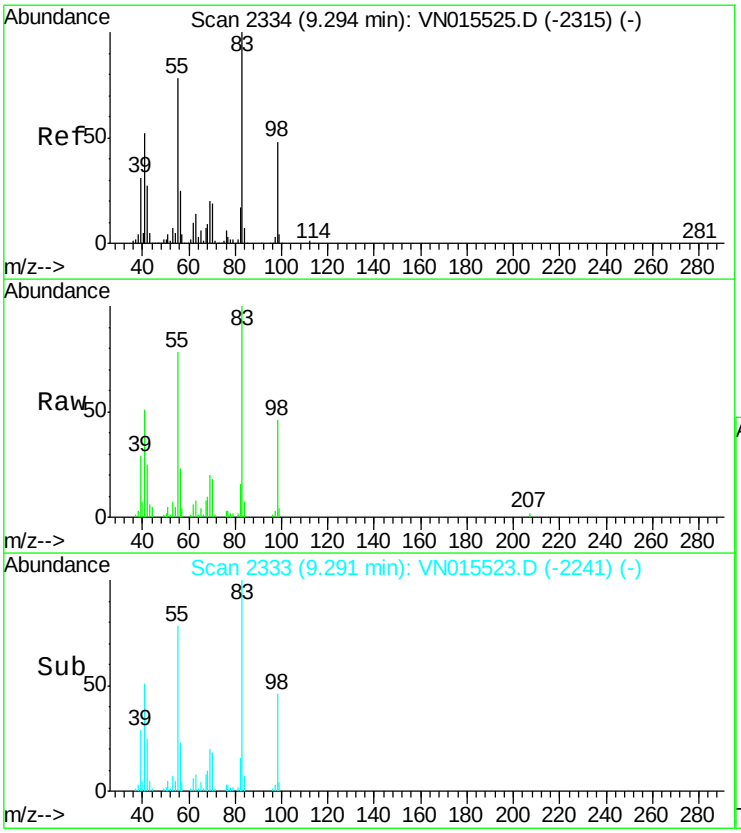
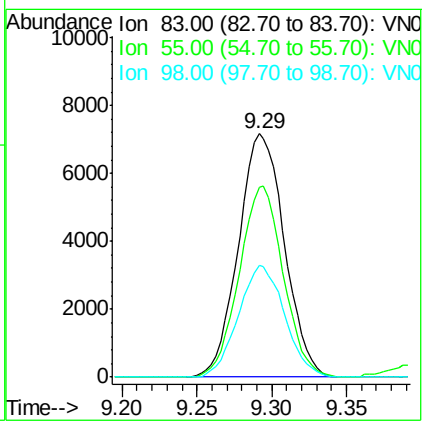
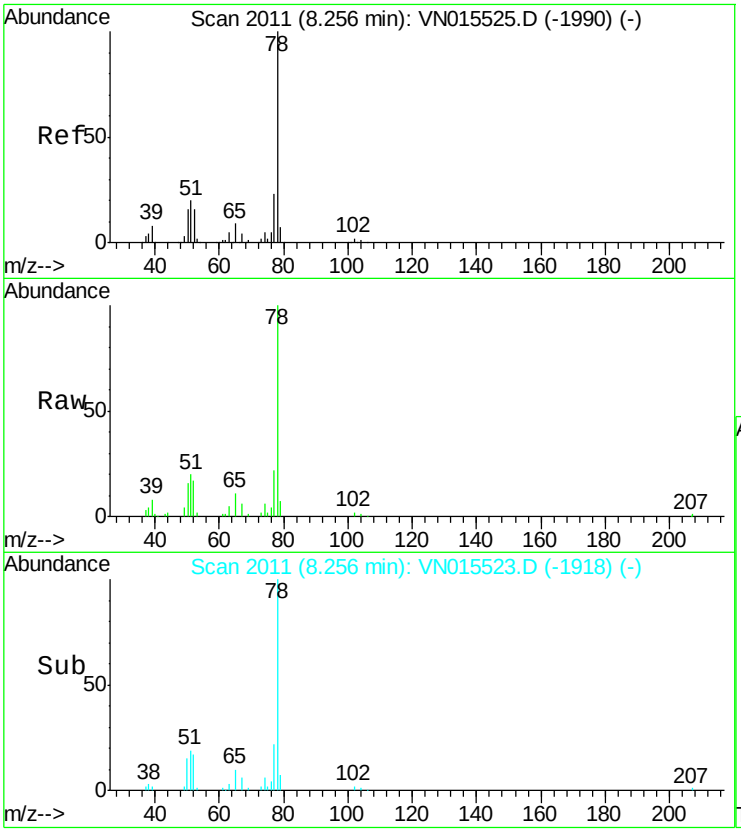


#40
Methylcyclohexane
Concen: 5.15 ug/l
RT: 9.29 min Scan# 2333
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 83 Resp: 15327

Ion	Ratio	Lower	Upper
83	100		
55	77.8	62.5	93.7
98	46.1	38.2	57.2





#41
Benzene
Concen: 4.82 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 78 Resp: 35275

Ion	Ratio	Lower	Upper
78	100		
77	22.4	18.5	27.7

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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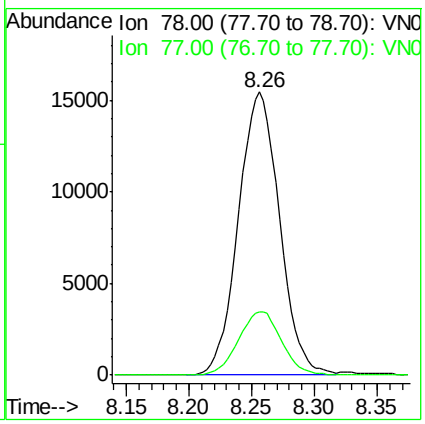
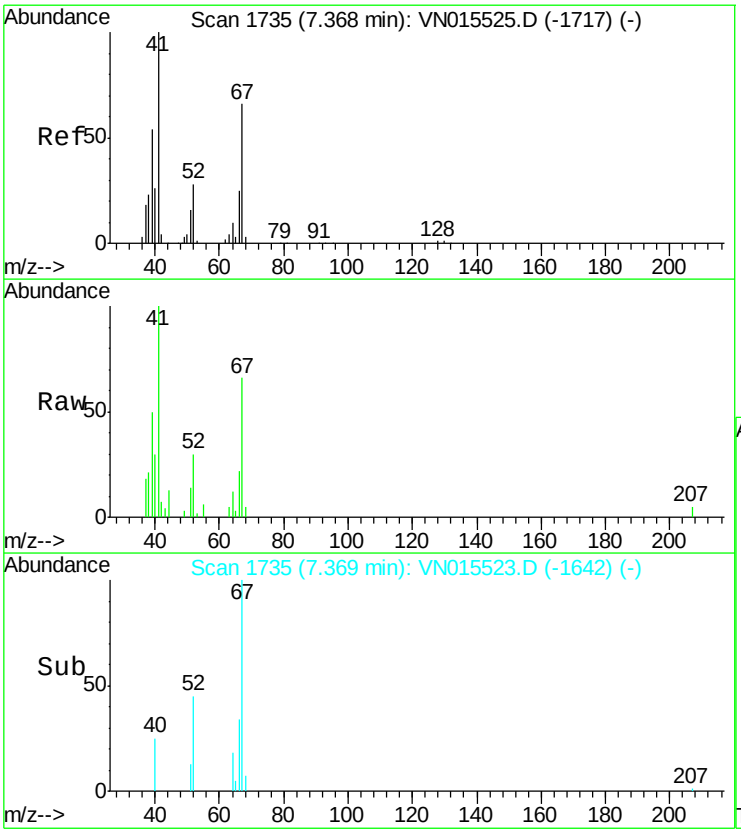
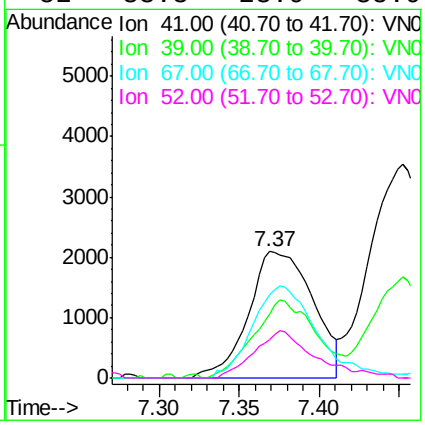


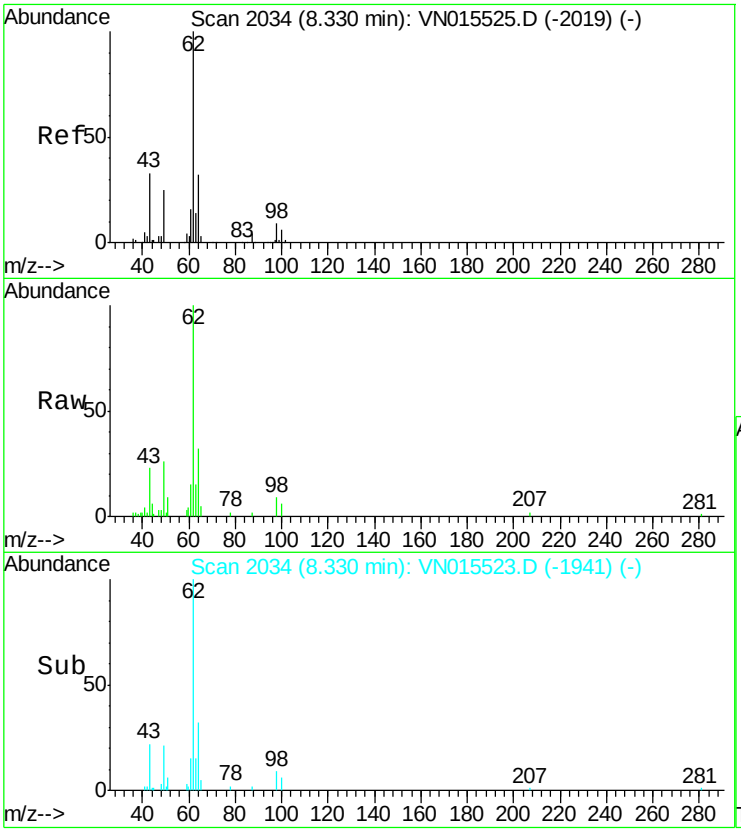


#42
Methacrylonitrile
Concen: 4.41 ug/l
RT: 7.37 min Scan# 1735
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 41 Resp: 5854

Ion	Ratio	Lower	Upper
41	100		
39	60.2	45.0	67.4
67	72.8	54.9	82.3
52	33.3	23.9	35.9





#43
1,2-Dichloroethane
Concen: 4.86 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 62 Resp: 13022

Ion	Ratio	Lower	Upper
62	100		
98	9.3	0.0	18.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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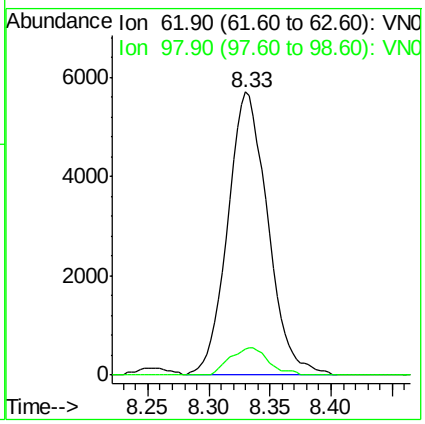
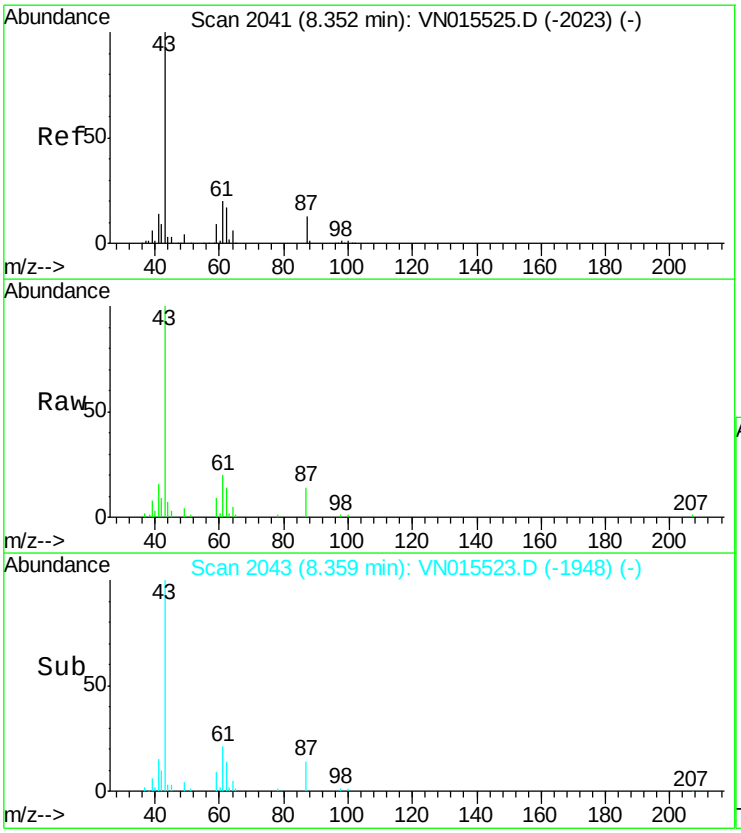
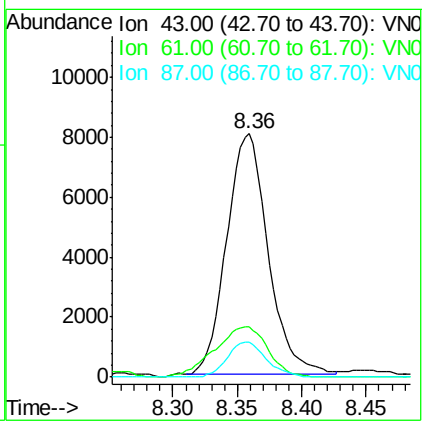




#44
Isopropyl Acetate
Concen: 5.79 ug/l
RT: 8.36 min Scan# 2043
Delta R.T. 0.01 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 18025

Ion	Ratio	Lower	Upper
43	100		
61	26.7	20.4	30.6
87	13.7	10.4	15.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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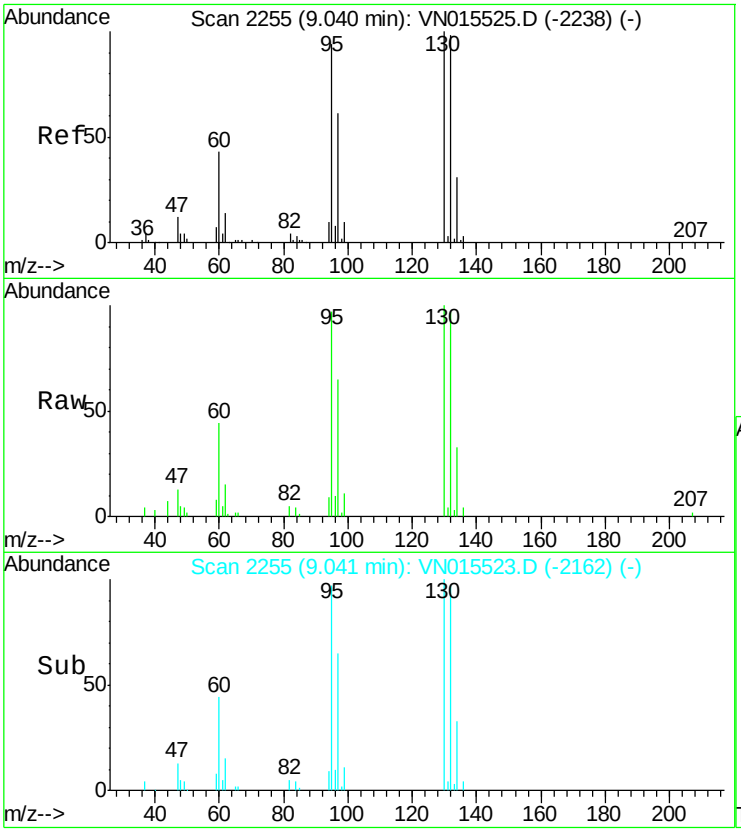
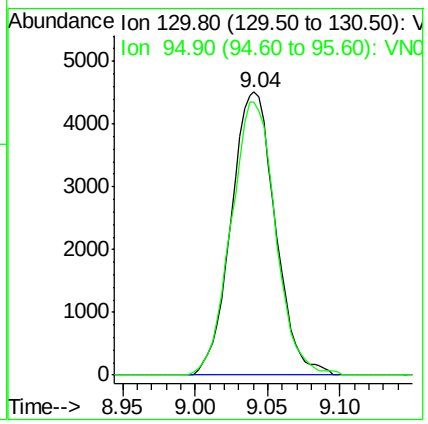
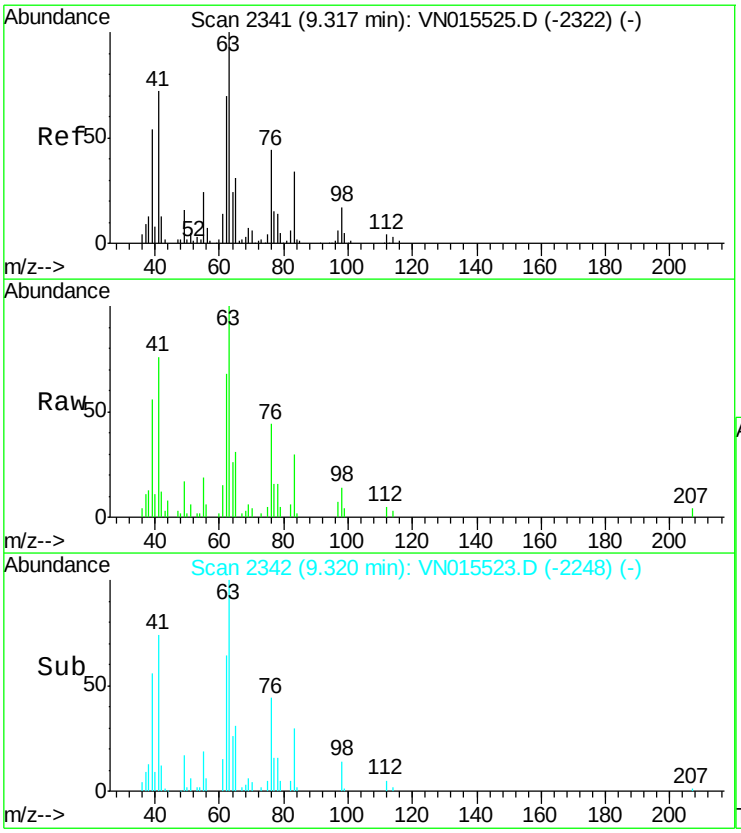


#45
Trichloroethene
Concen: 4.90 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:130 Resp: 9551

Ion	Ratio	Lower	Upper
130	100		
95	96.5	0.0	187.0

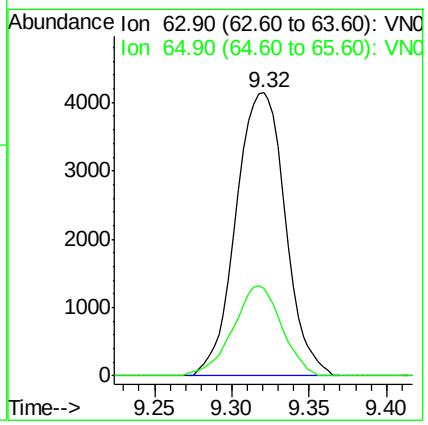




#46
1,2-Dichloropropane
Concen: 4.62 ug/l
RT: 9.32 min Scan# 2342
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 63 Resp: 9178

Ion	Ratio	Lower	Upper
63	100		
65	31.1	25.0	37.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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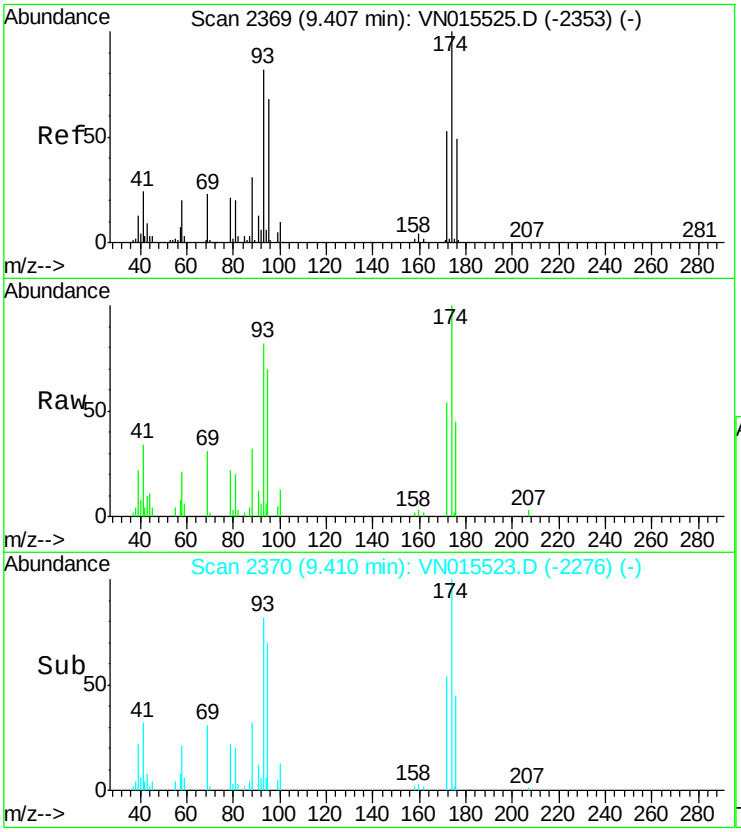
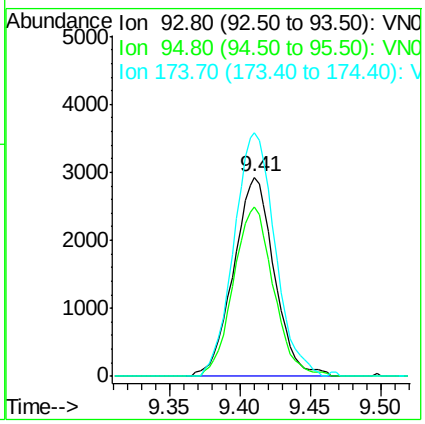
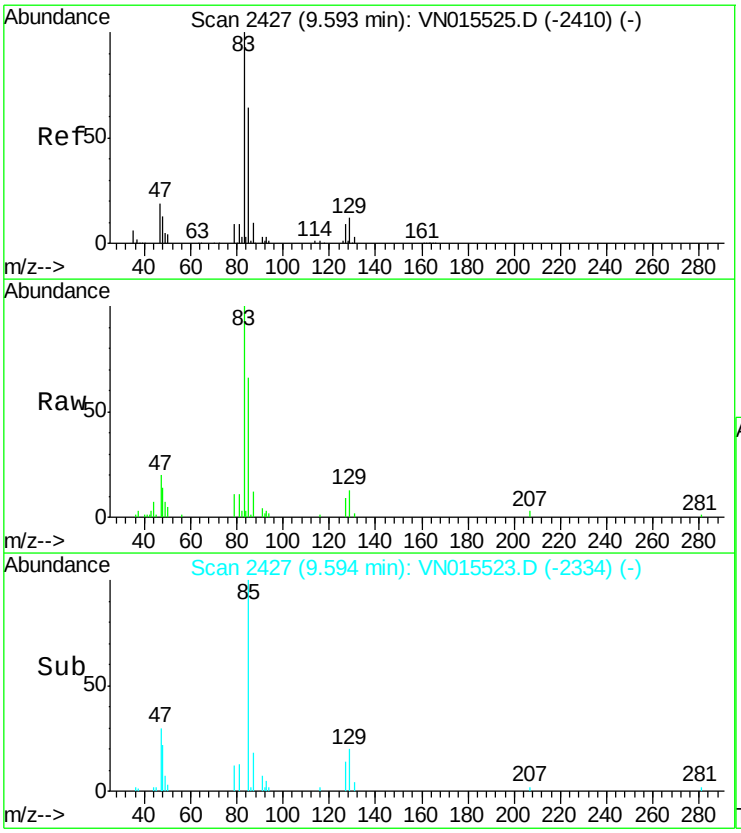


#47
Dibromomethane
Concen: 4.82 ug/l
RT: 9.41 min Scan# 2370
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 93 Resp: 5914

Ion	Ratio	Lower	Upper
93	100		
95	83.6	66.9	100.3
174	123.5	98.6	148.0

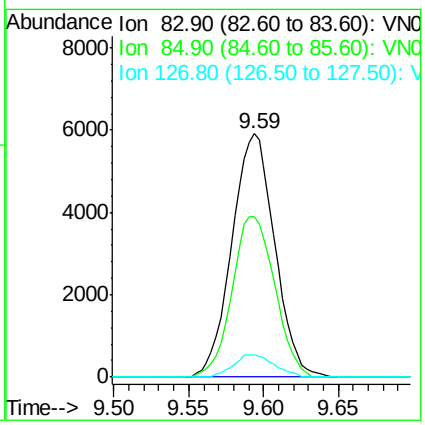




#48
Bromodichloromethane
Concen: 4.81 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 83 Resp: 11790

Ion	Ratio	Lower	Upper
83	100		
85	65.8	51.1	76.7
127	9.1	7.6	11.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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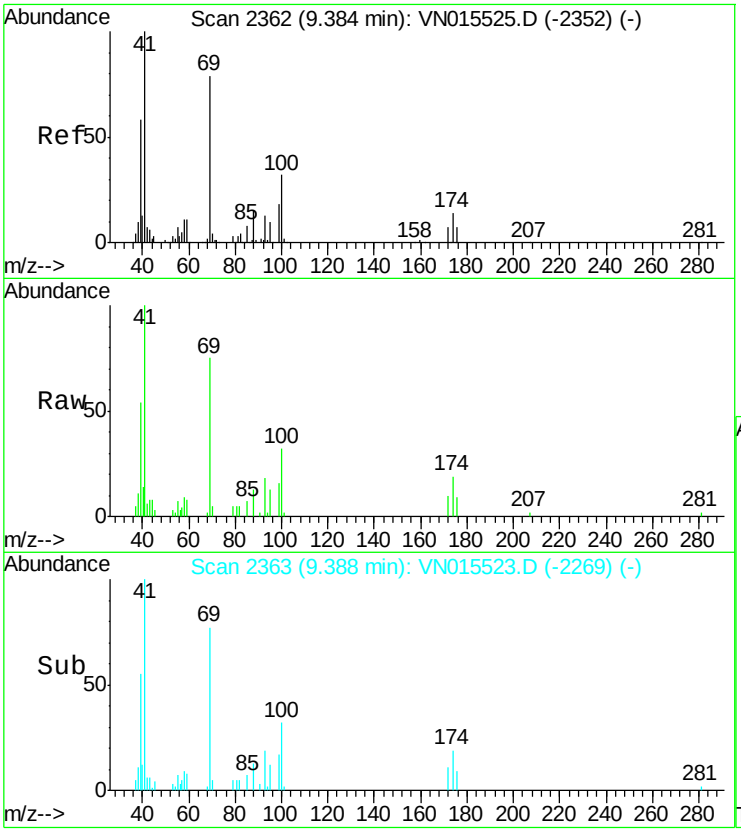
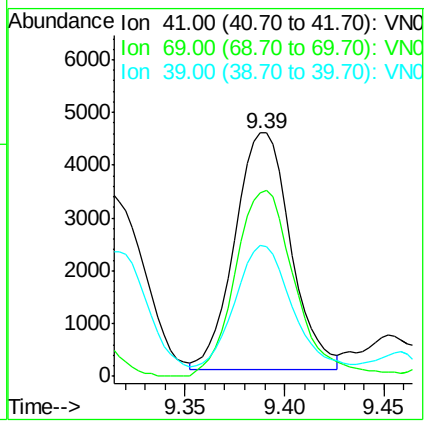
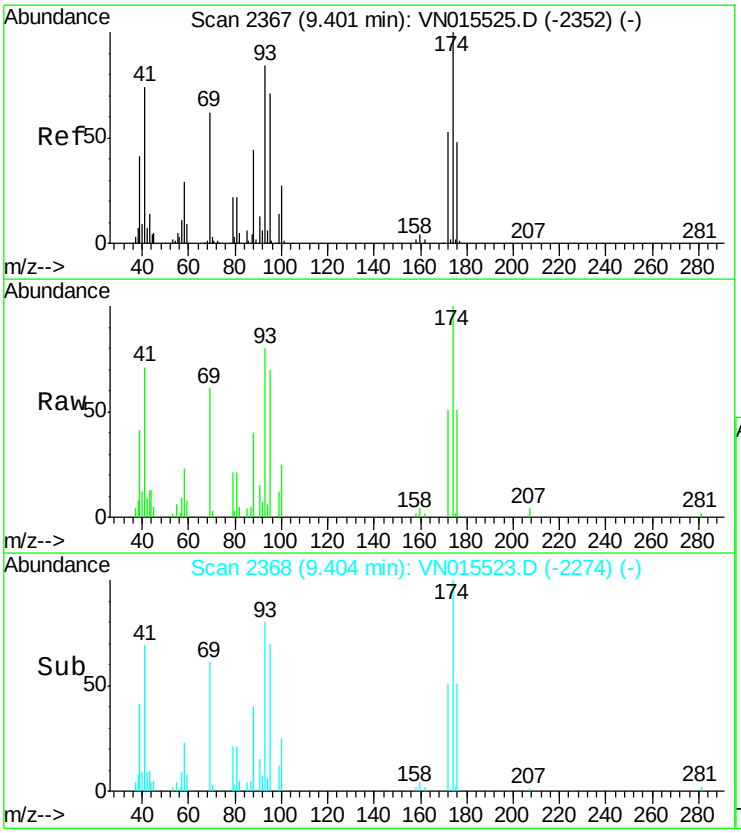


#49
Methyl methacrylate
Concen: 4.59 ug/l m
RT: 9.39 min Scan# 2363
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 41 Resp: 8794

Ion	Ratio	Lower	Upper
41	100		
69	83.7	62.8	94.2
39	60.2	46.4	69.6

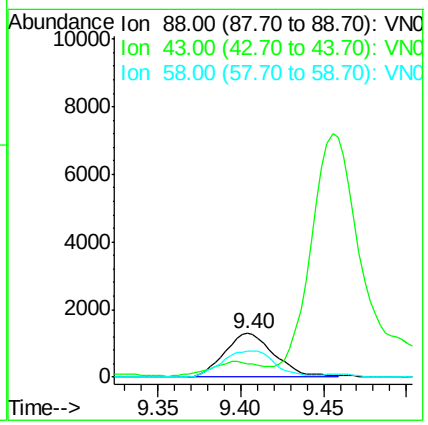




#50
1,4-Dioxane
Concen: 108.29 ug/l
RT: 9.40 min Scan# 2368
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 88 Resp: 2727

Ion	Ratio	Lower	Upper
88	100		
43	36.7	26.4	39.6
58	62.6	56.6	84.8



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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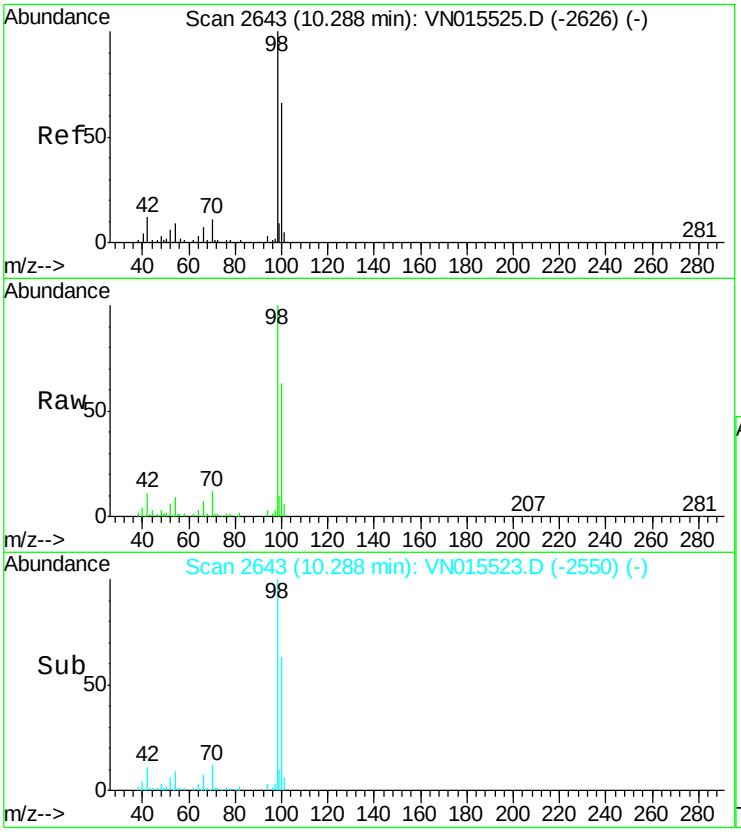
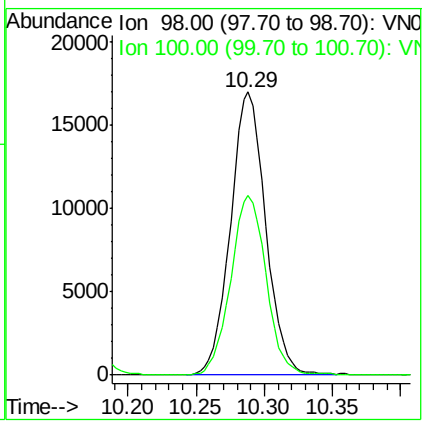
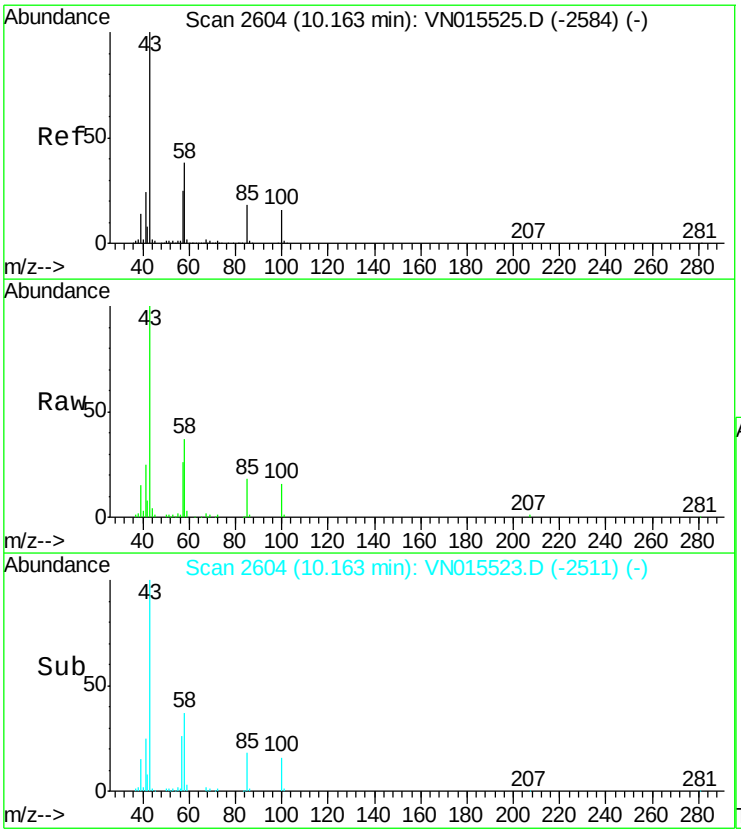


#51
Toluene-d8
Concen: 4.71 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 98 Resp: 30494

Ion	Ratio	Lower	Upper
98	100		
100	63.8	52.3	78.5

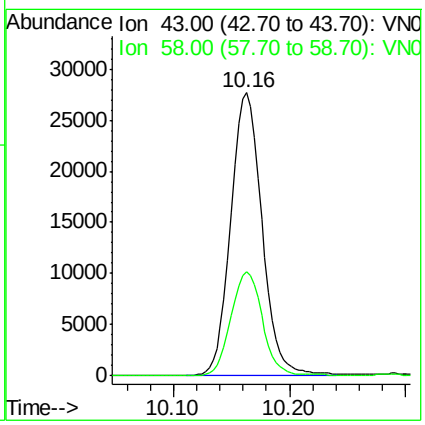


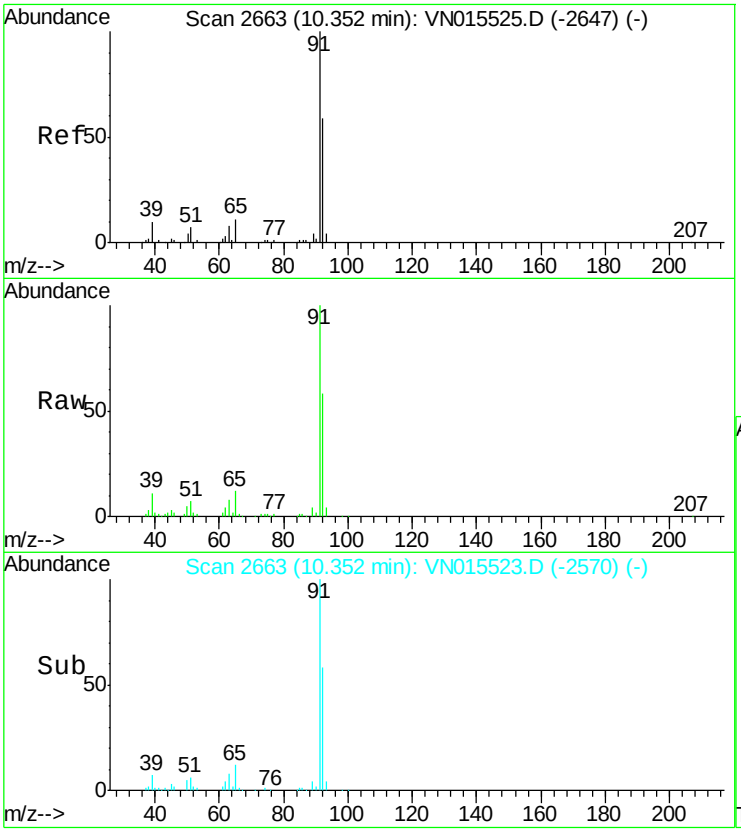


#52
4-Methyl-2-Pentanone
Concen: 24.35 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 51412

Ion	Ratio	Lower	Upper
43	100		
58	37.3	30.2	45.2





#53
Toluene
Concen: 5.05 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 92 Resp: 22555

Ion	Ratio	Lower	Upper
92	100		
91	171.8	136.2	204.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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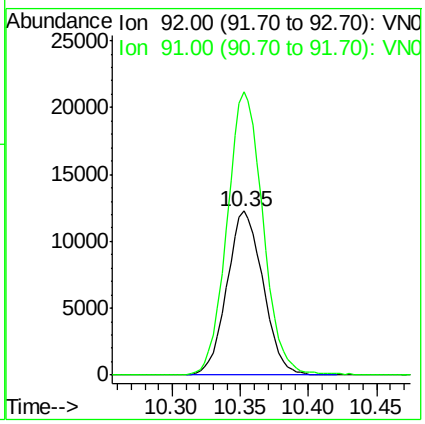
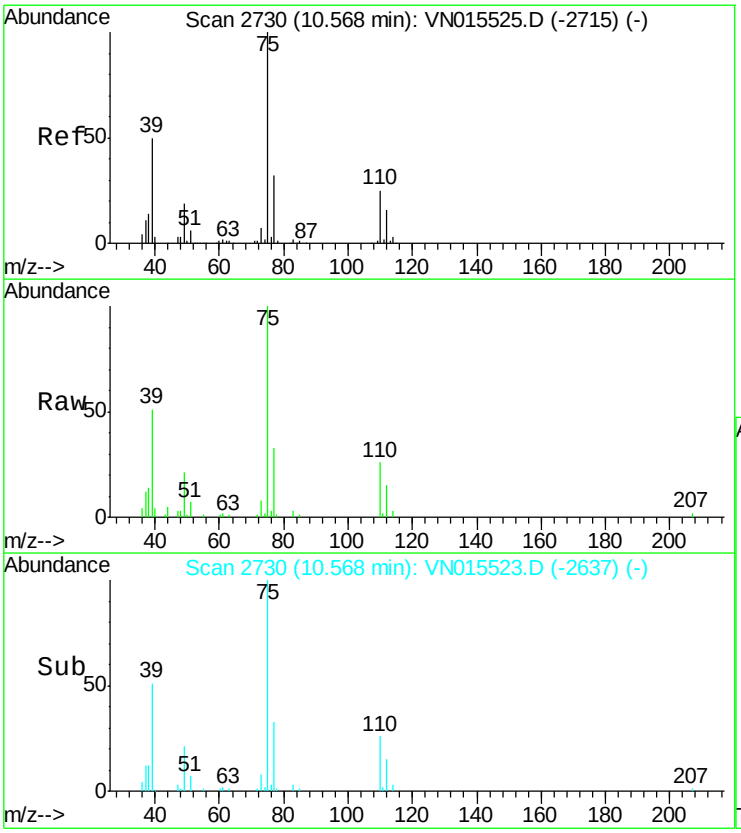
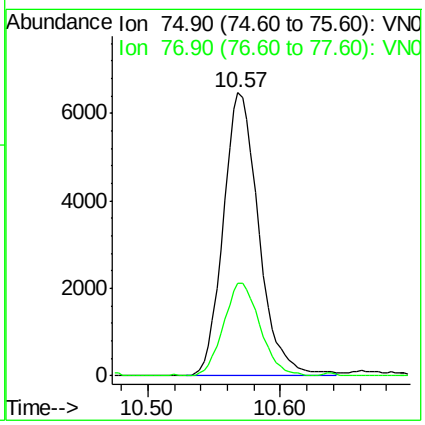


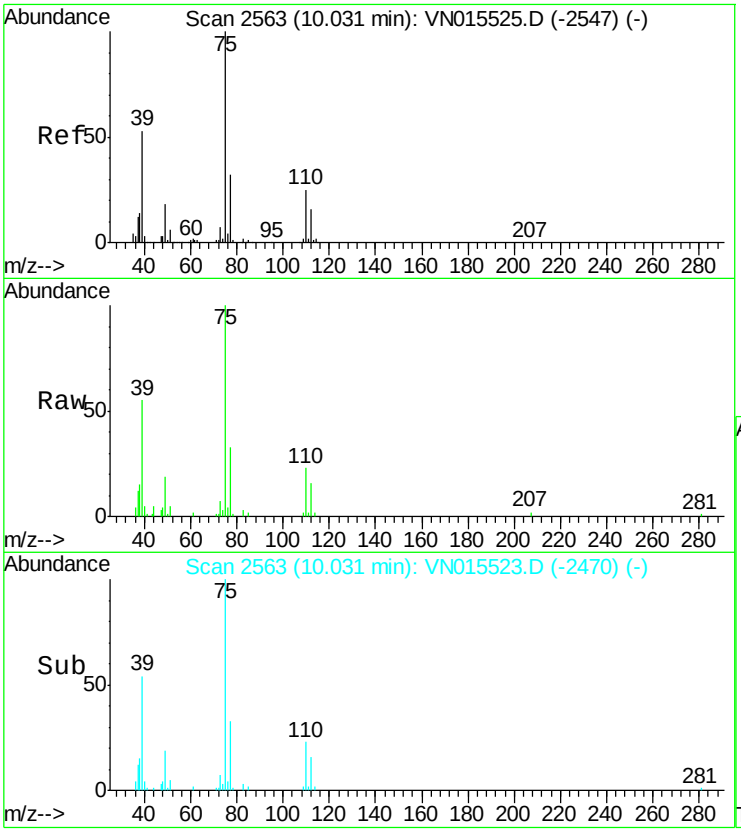


#54
t-1,3-Dichloropropene
Concen: 4.89 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 75 Resp: 12037

Ion	Ratio	Lower	Upper
75	100		
77	32.7	26.0	39.0





#55
cis-1,3-Dichloropropene
Concen: 4.65 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 75 Resp: 13099

Ion	Ratio	Lower	Upper
75	100		
77	32.9	25.4	38.2
39	54.6	42.2	63.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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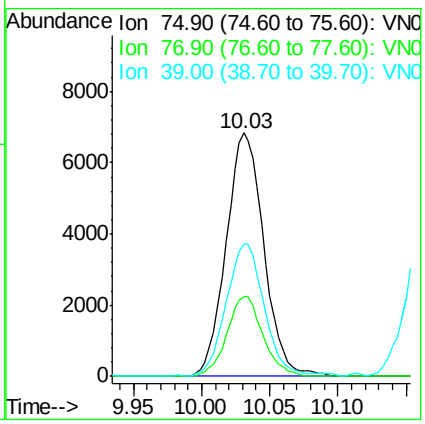
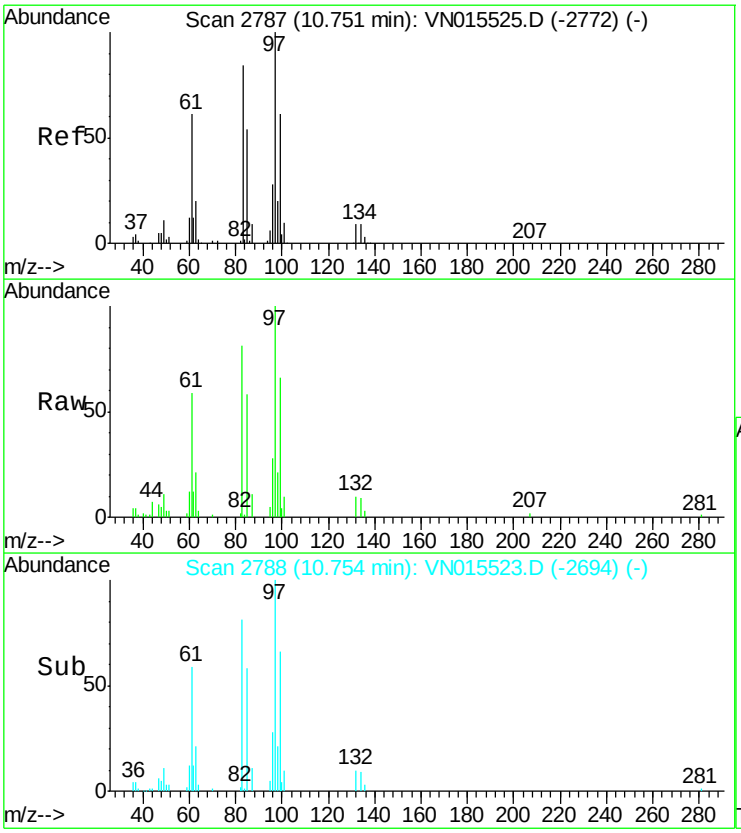
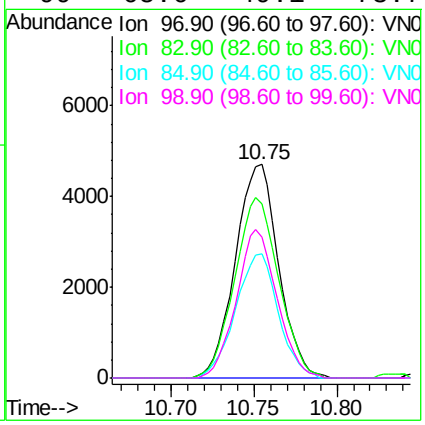


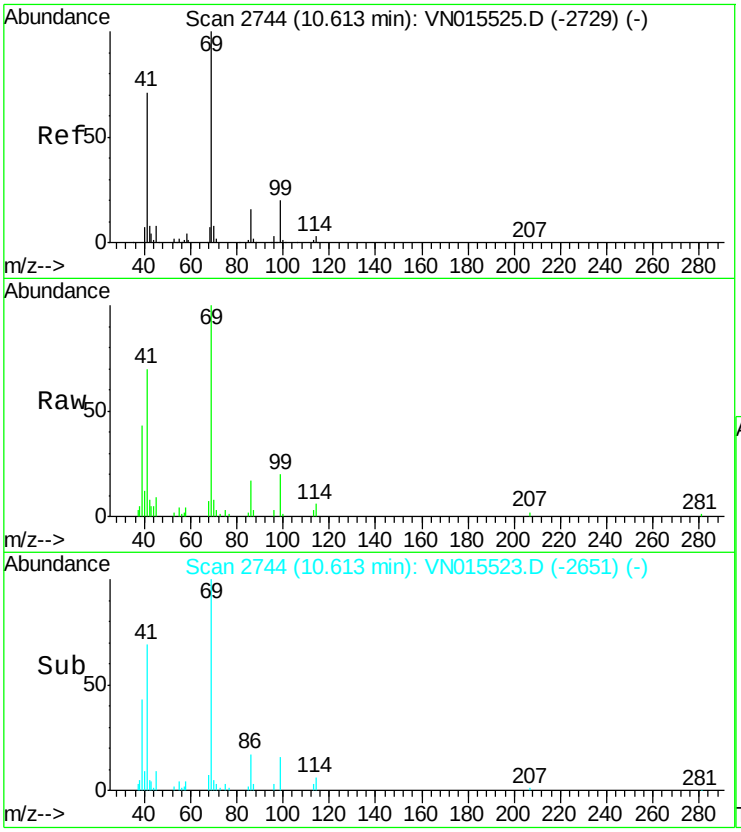


#56
1,1,2-Trichloroethane
Concen: 4.84 ug/l
RT: 10.75 min Scan# 2788
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 97 Resp: 8522

Ion	Ratio	Lower	Upper
97	100		
83	81.2	67.0	100.4
85	58.0	42.9	64.3
99	65.6	49.1	73.7





#57
Ethyl methacrylate
Concen: 5.07 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 69 Resp: 12338

Ion	Ratio	Lower	Upper
69	100		
41	69.4	56.9	85.3
39	37.4	32.0	48.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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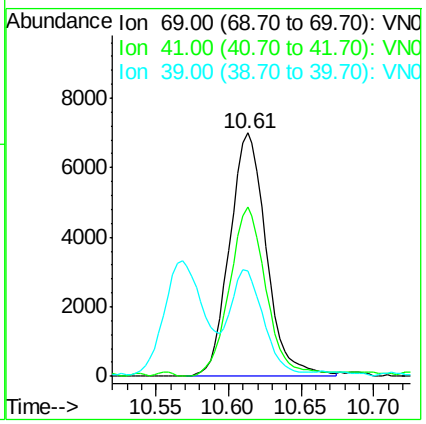
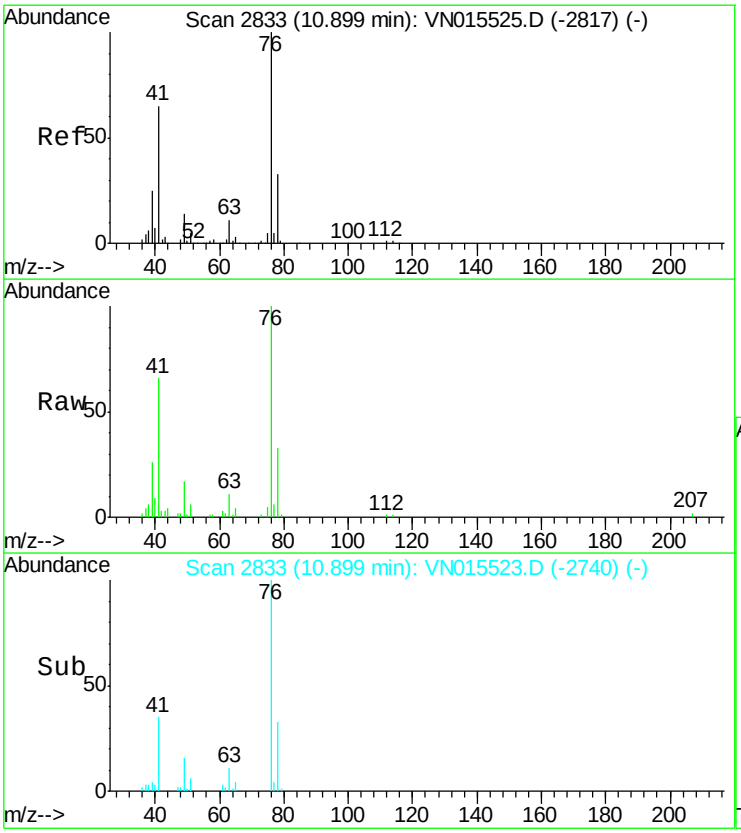
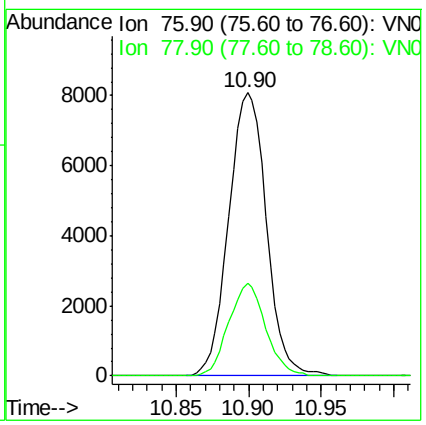


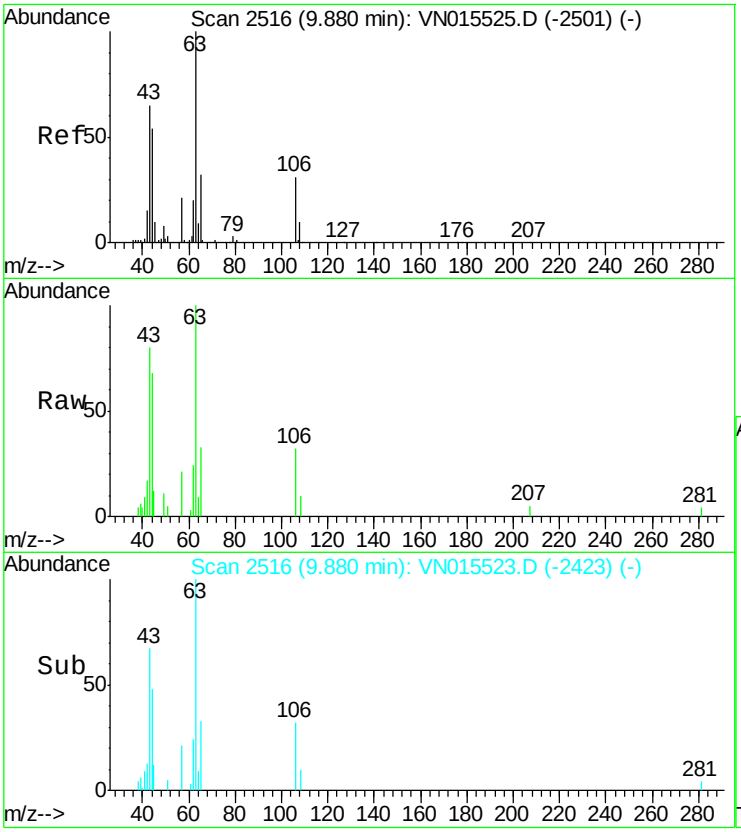


#58
1,3-Dichloropropane
Concen: 4.83 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 76 Resp: 14583

Ion	Ratio	Lower	Upper
76	100		
78	32.1	26.3	39.5





#59
2-Chloroethyl Vinyl ether
Concen: 4.80 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 63 Resp: 4346

Ion	Ratio	Lower	Upper
63	100		
106	28.7	23.7	35.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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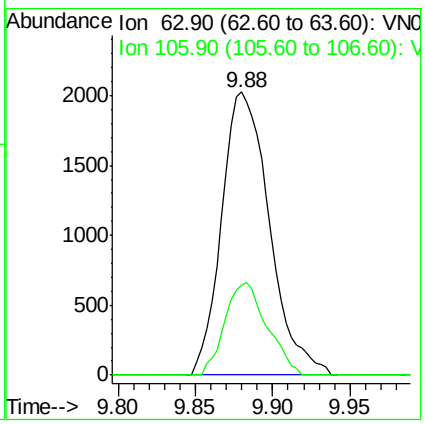
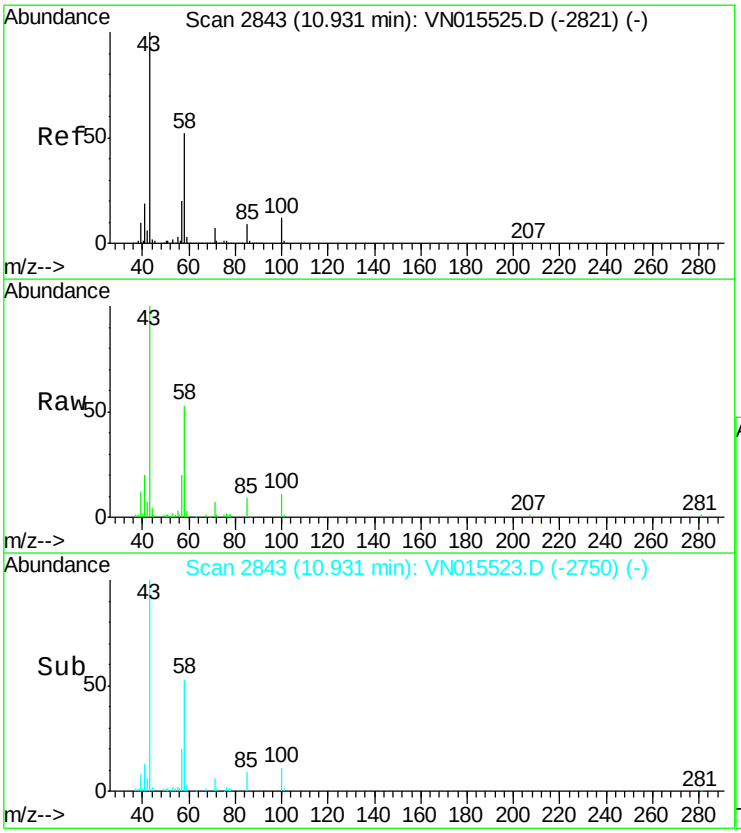
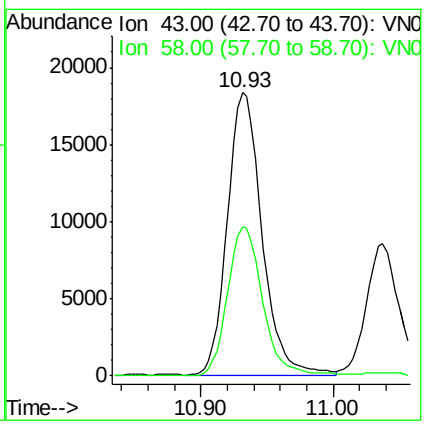


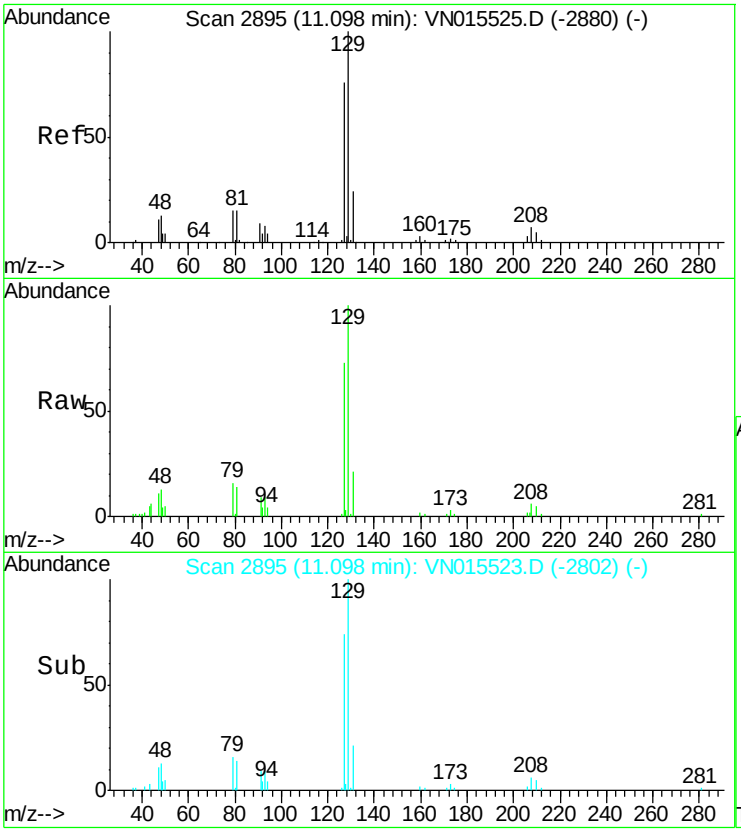


#60
2-Hexanone
Concen: 23.45 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 33236

Ion	Ratio	Lower	Upper
43	100		
58	53.1	26.0	78.0





#61
Dibromochloromethane
Concen: 5.15 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:129 Resp: 10103

Ion	Ratio	Lower	Upper
129	100		
127	72.7	38.6	116.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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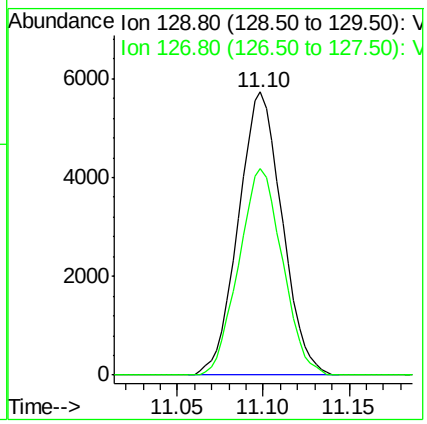
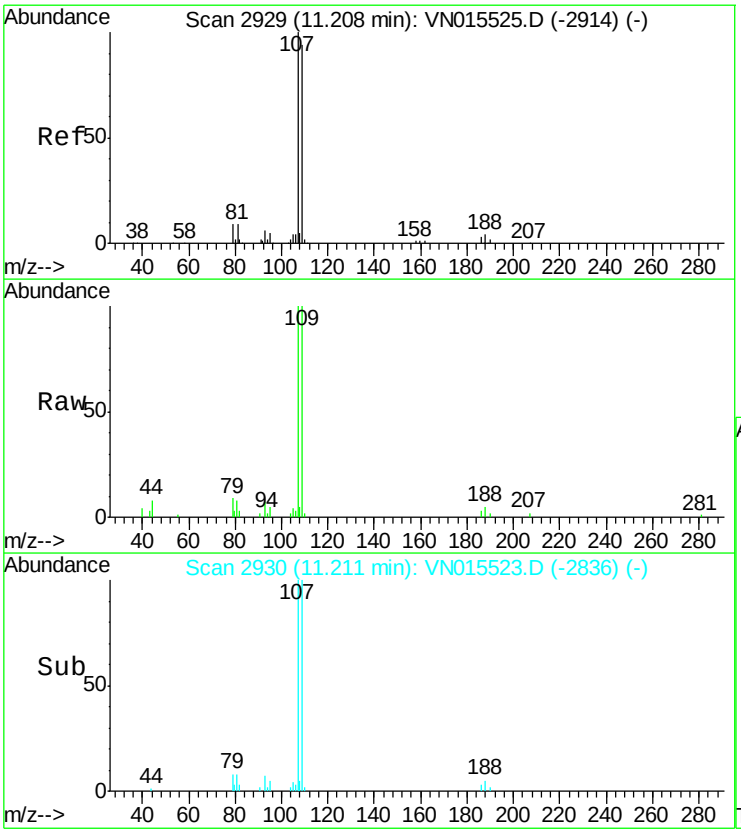
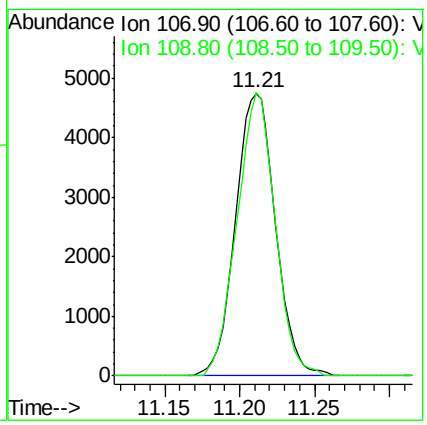




#62
1,2-Dibromoethane
Concen: 4.99 ug/l
RT: 11.21 min Scan# 2930
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:107 Resp: 8817

Ion	Ratio	Lower	Upper
107	100		
109	95.6	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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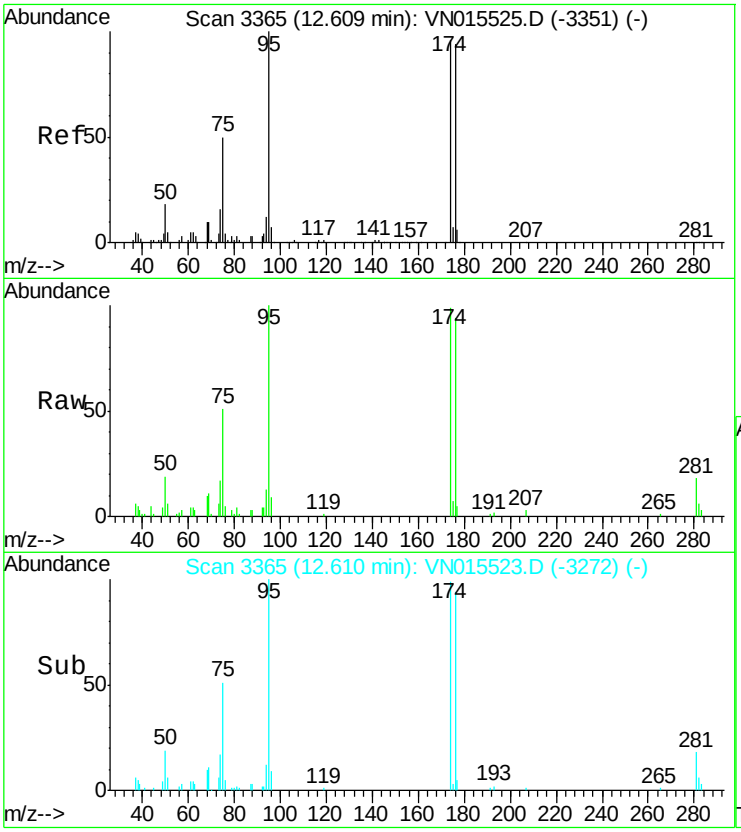
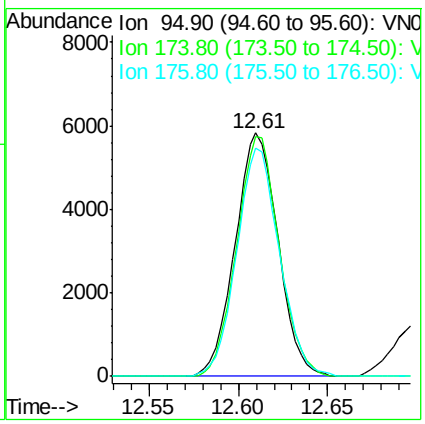
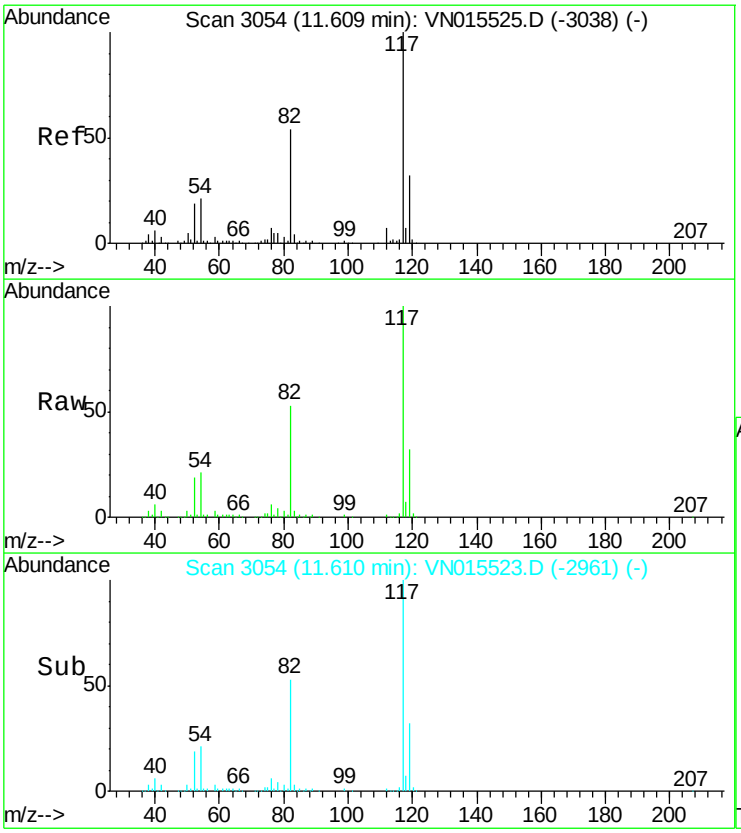


#63
4-Bromofluorobenzene
Concen: 4.55 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 95 Resp: 9794

Ion	Ratio	Lower	Upper
95	100		
174	97.6	0.0	191.8
176	93.6	0.0	186.8

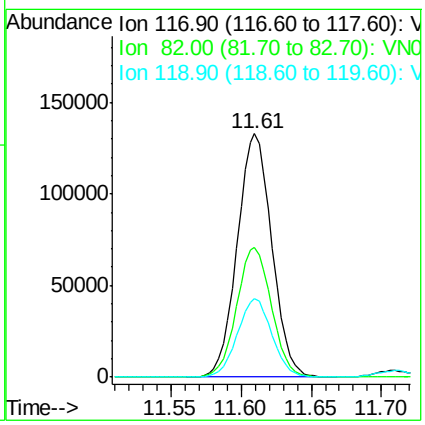




#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:117 Resp: 228179

Ion	Ratio	Lower	Upper
117	100		
82	53.2	43.3	64.9
119	32.5	25.6	38.4



Instrument :
MSVOA_N
LabSampleId :
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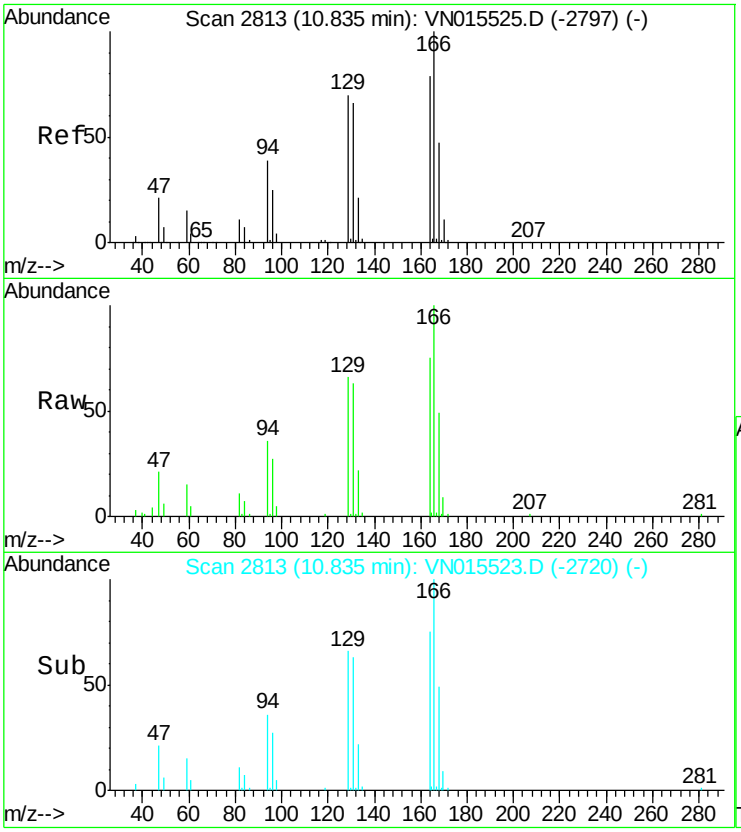
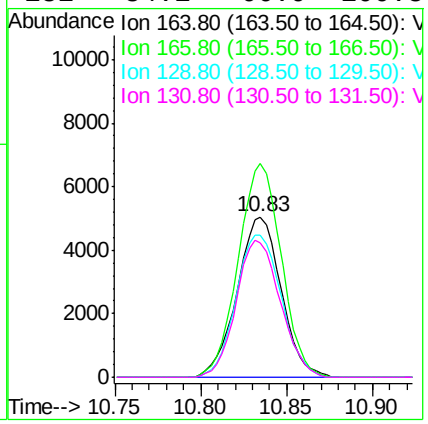
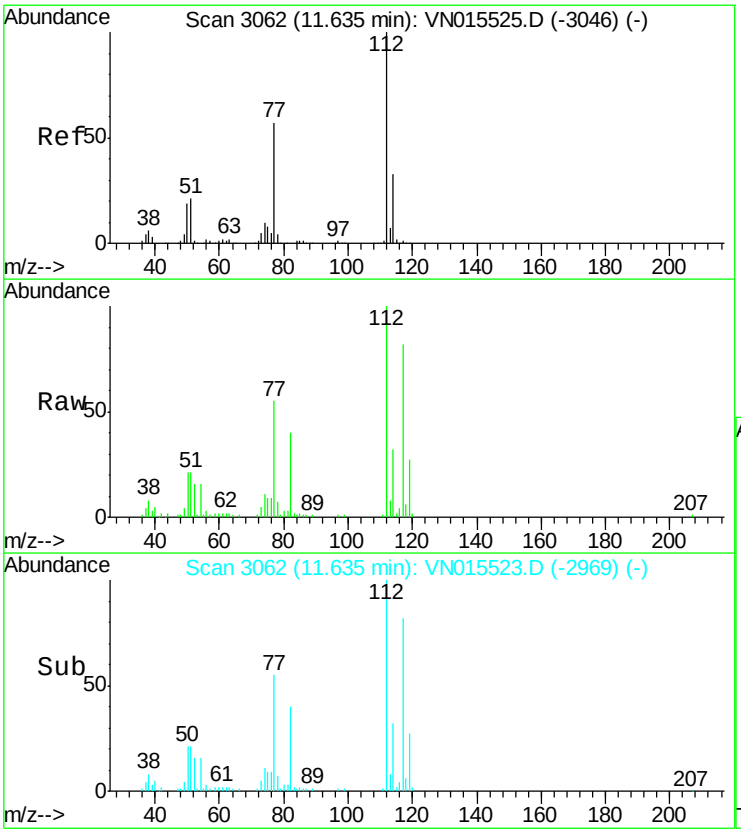


#65
Tetrachloroethene
Concen: 4.91 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:164 Resp: 8975

Ion	Ratio	Lower	Upper
164	100		
166	133.2	101.7	152.5
129	88.5	70.7	106.1
131	84.1	66.9	100.3

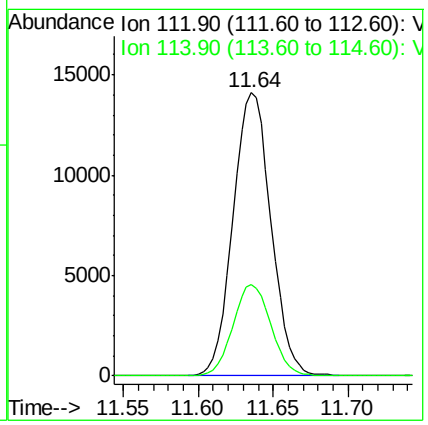


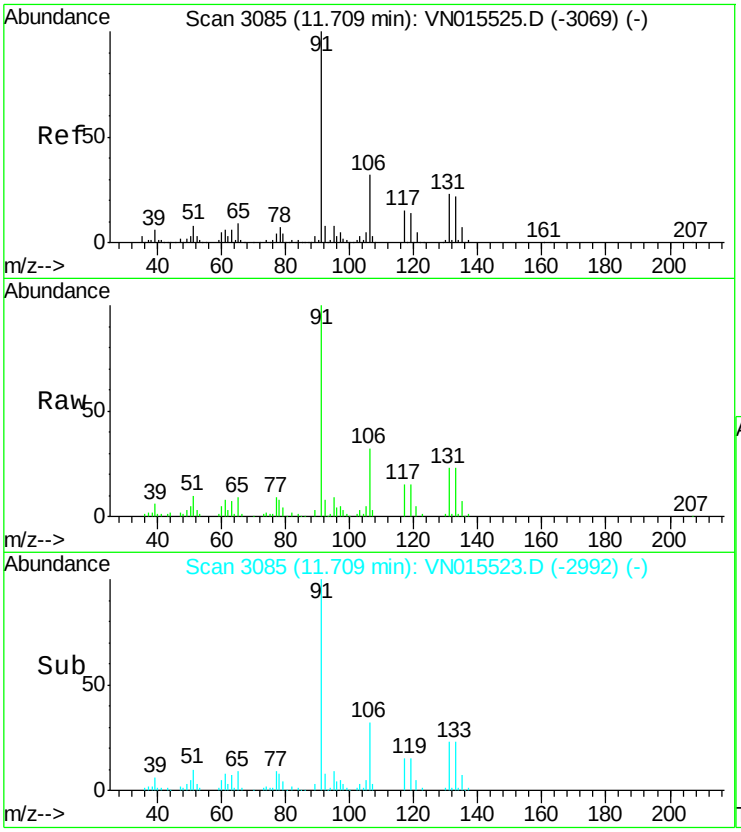


#66
Chlorobenzene
Concen: 5.08 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:112 Resp: 24927

Ion	Ratio	Lower	Upper
112	100		
114	32.1	26.2	39.2





#67
1,1,1,2-Tetrachloroethane
Concen: 5.30 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:131 Resp: 9442

Ion	Ratio	Lower	Upper
131	100		
133	96.8	47.7	143.1
119	67.9	31.5	94.5

Instrument :
MSVOA_N
LabSampleId :
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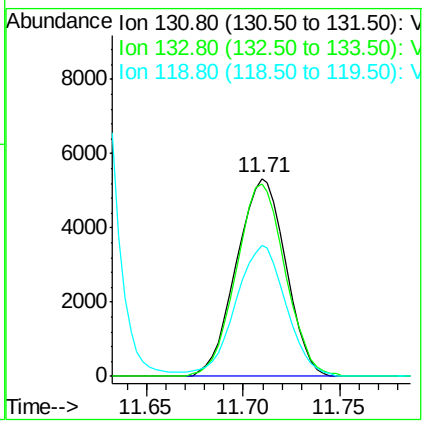
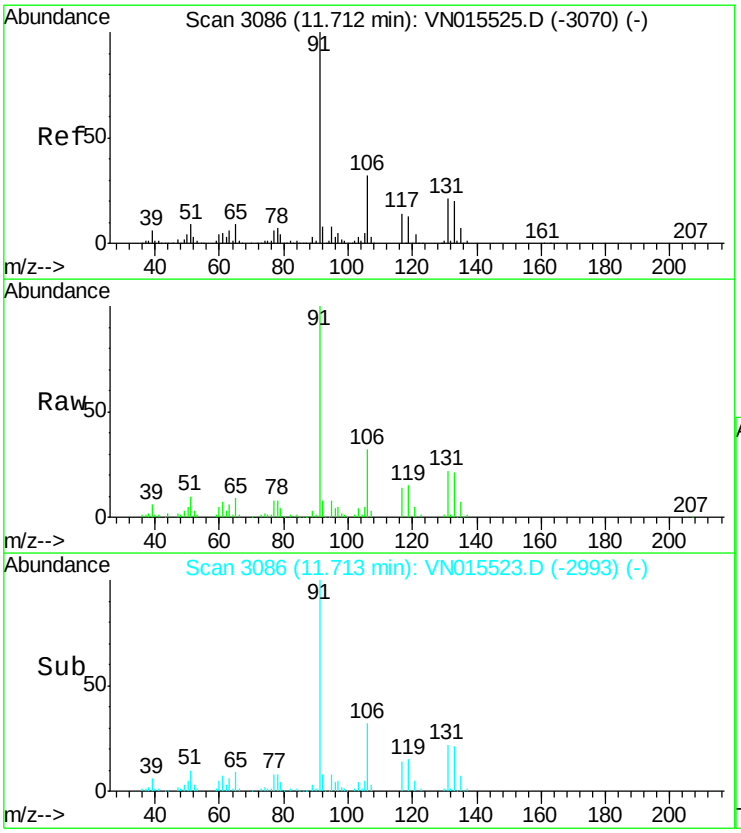
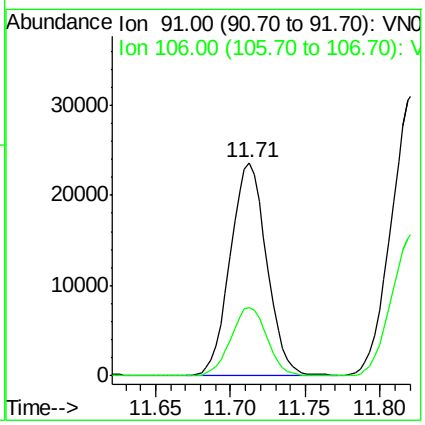


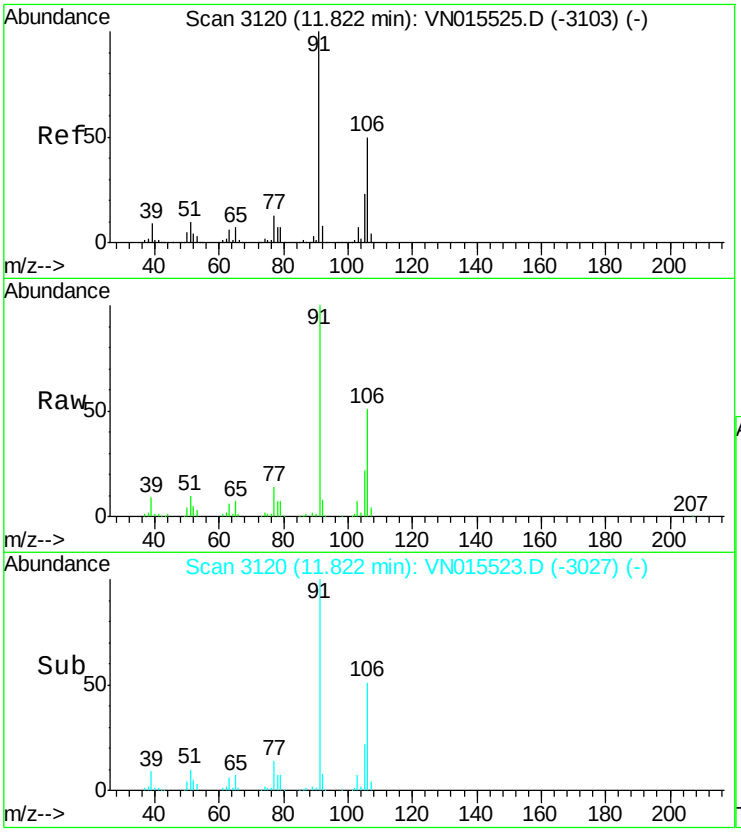


#68
Ethyl Benzene
Concen: 5.05 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 91 Resp: 40148

Ion	Ratio	Lower	Upper
91	100		
106	32.2	25.5	38.3





#69
m/p-Xylenes
Concen: 10.36 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:106 Resp: 31179

Ion	Ratio	Lower	Upper
106	100		
91	197.5	160.5	240.7

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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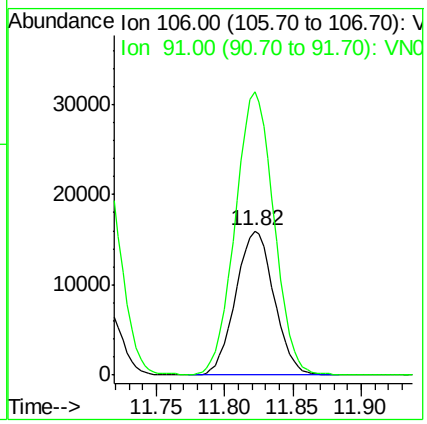
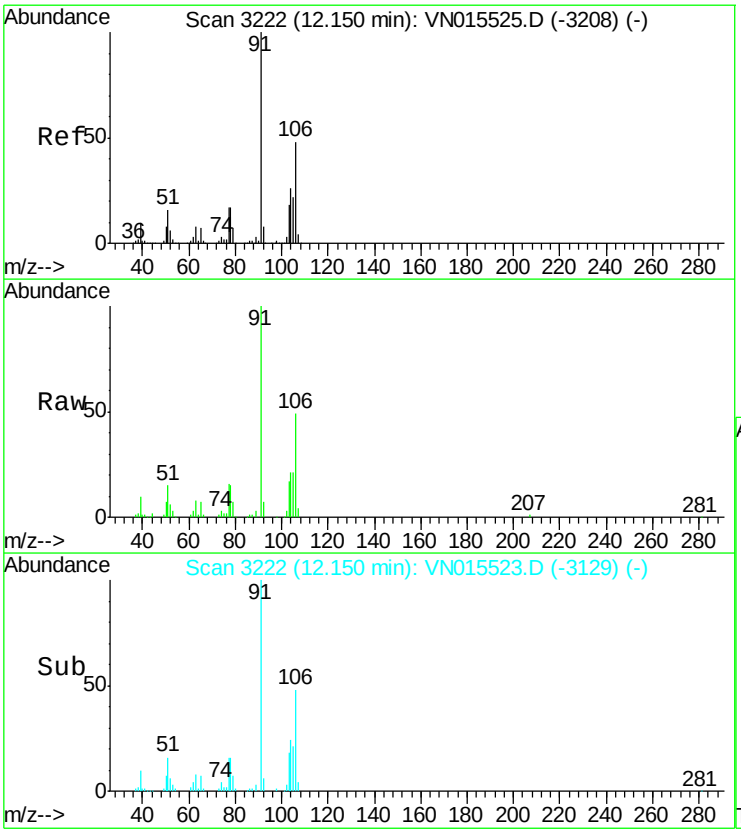
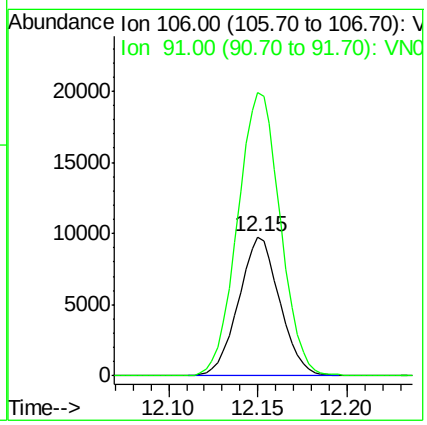


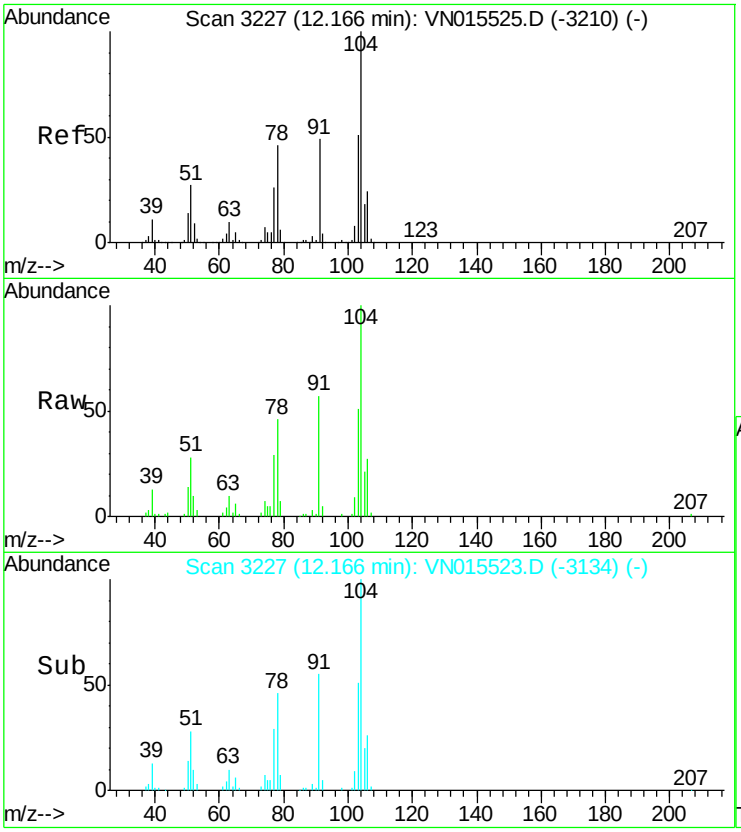


#70
o-Xylene
Concen: 5.10 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:106 Resp: 15706

Ion	Ratio	Lower	Upper
106	100		
91	212.0	104.9	314.7





#71
Styrene
Concen: 4.91 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:104 Resp: 22606

Ion	Ratio	Lower	Upper
104	100		
78	51.9	40.1	60.1
103	56.9	44.0	66.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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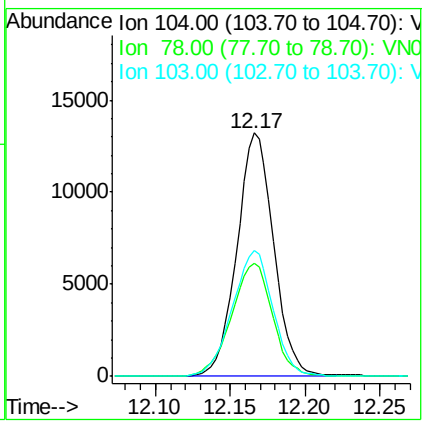
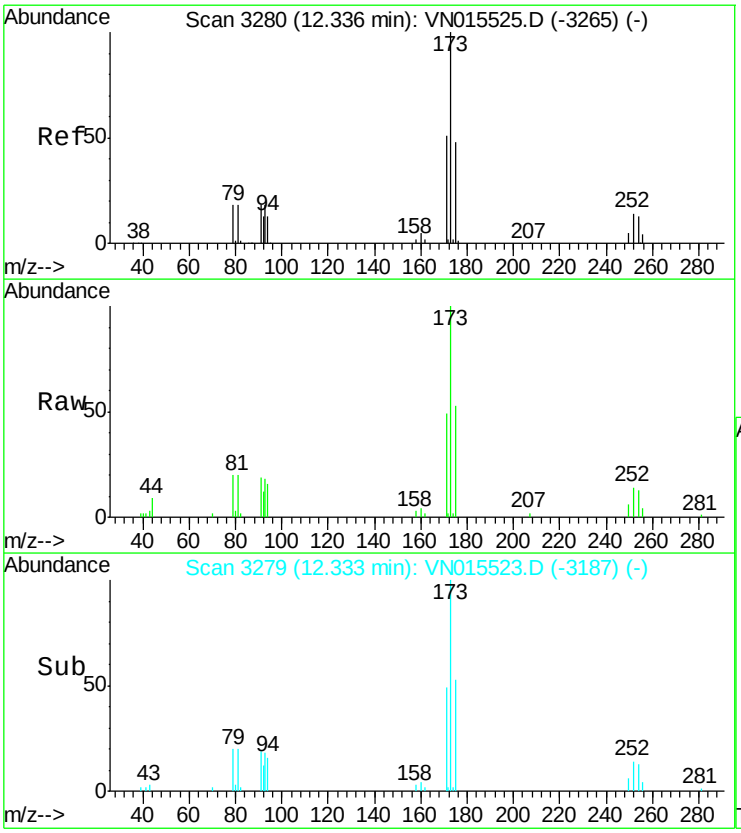
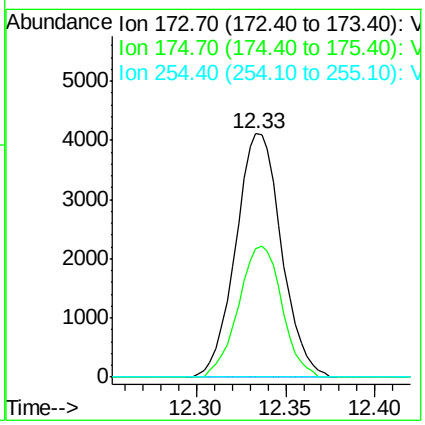


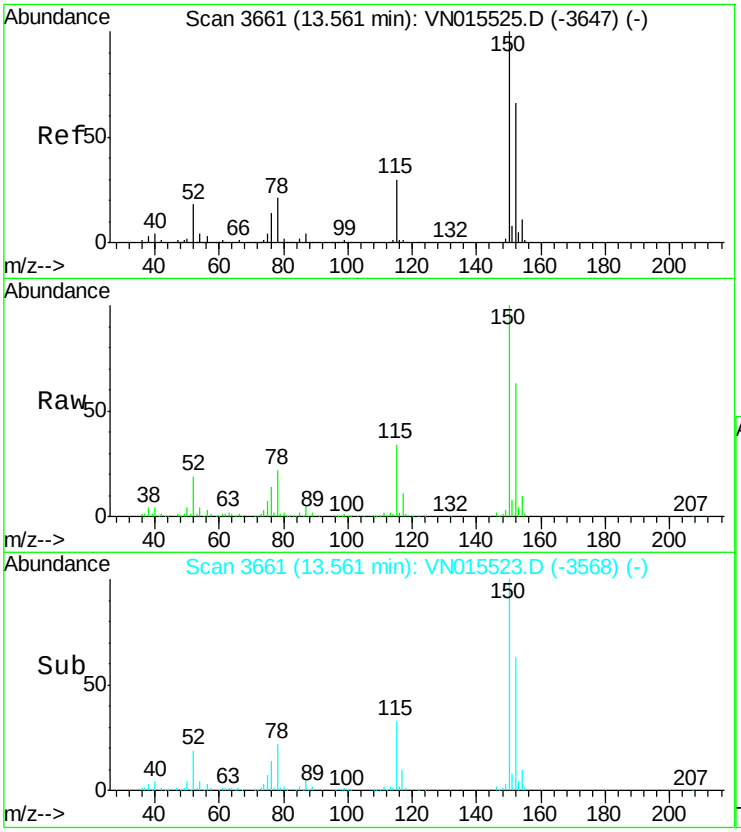


#72
Bromoform
Concen: 5.37 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:173 Resp: 7334

Ion	Ratio	Lower	Upper
173	100		
175	51.1	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:152 Resp: 93547

Ion	Ratio	Lower	Upper
152	100		
115	53.6	27.2	81.6
150	157.4	0.0	343.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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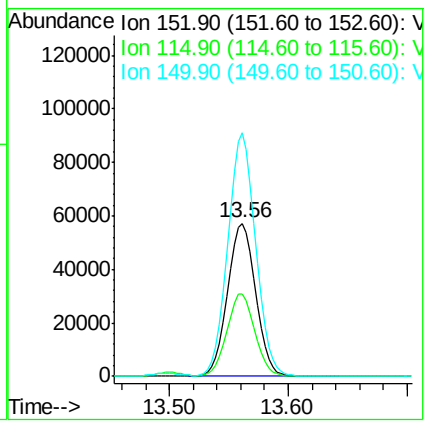
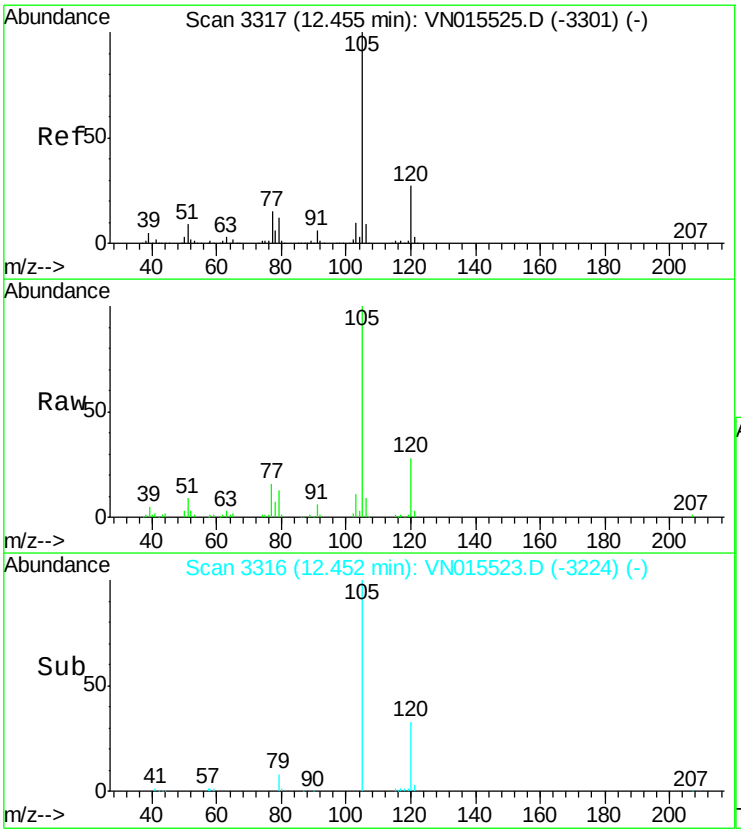
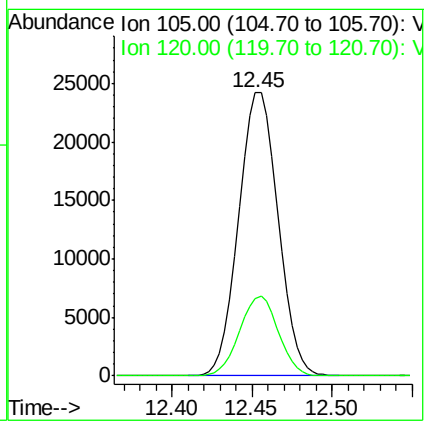




#74
Isopropylbenzene
Concen: 5.42 ug/l
RT: 12.45 min Scan# 3316
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:105 Resp: 40670

Ion	Ratio	Lower	Upper
105	100		
120	27.6	13.7	41.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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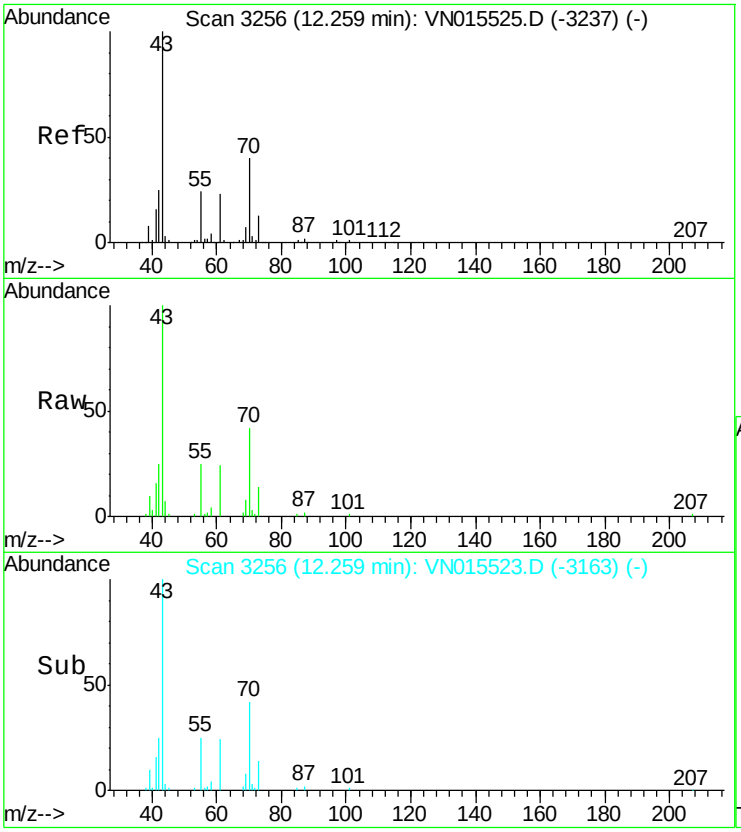
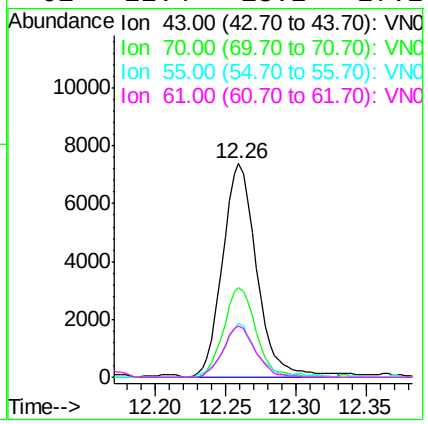
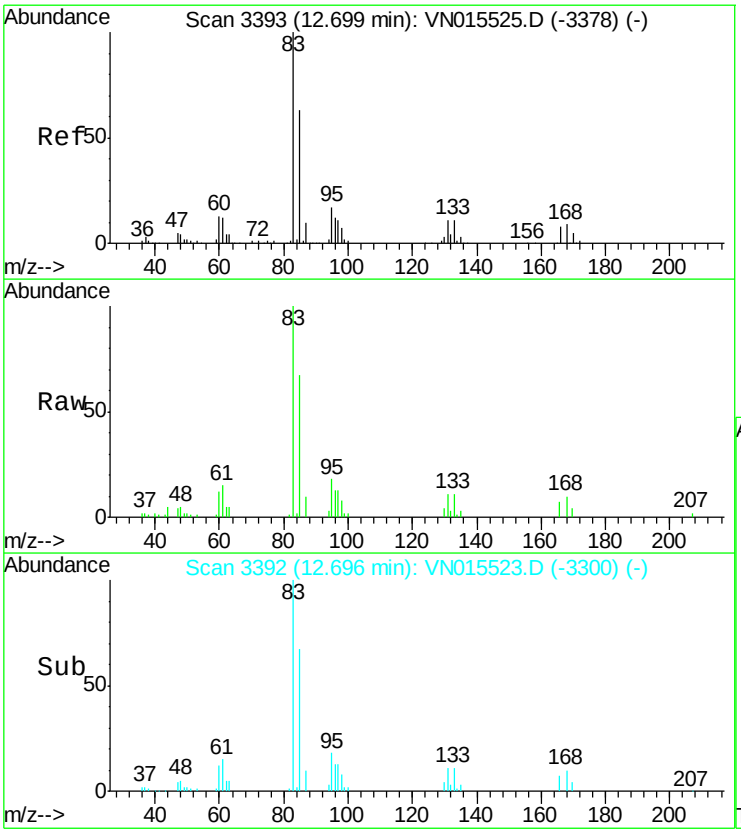


#75
N-amyl acetate
Concen: 5.94 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 43 Resp: 12565

Ion	Ratio	Lower	Upper
43	100		
70	39.9	32.0	48.0
55	23.5	18.5	27.7
61	22.4	18.2	27.2

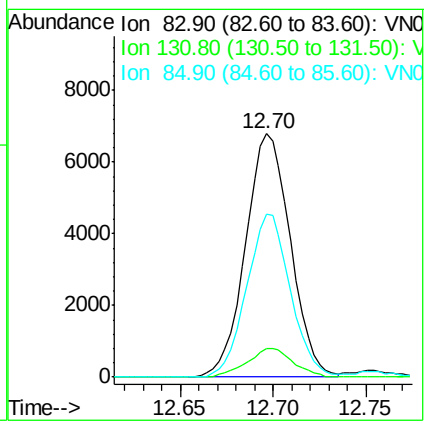


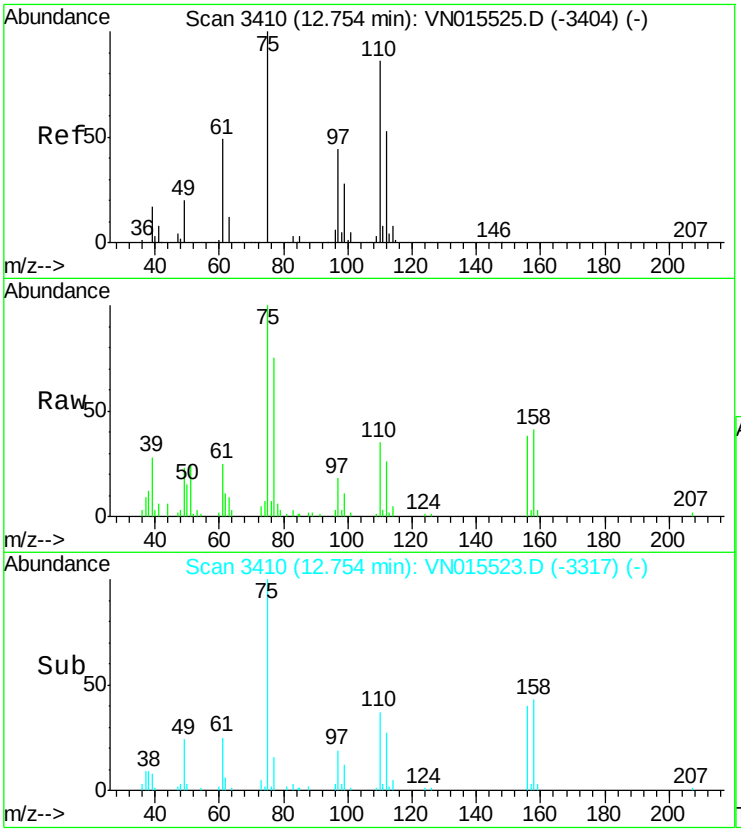


#76
1,1,2,2-Tetrachloroethane
Concen: 5.28 ug/l
RT: 12.70 min Scan# 3392
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 83 Resp: 11408

Ion	Ratio	Lower	Upper
83	100		
131	12.0	5.9	17.6
85	65.1	31.9	95.7





#77
1,2,3-Trichloropropane
Concen: 5.31 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 75 Resp: 10487

Ion	Ratio	Lower	Upper
75	100		
77	173.7	90.4	271.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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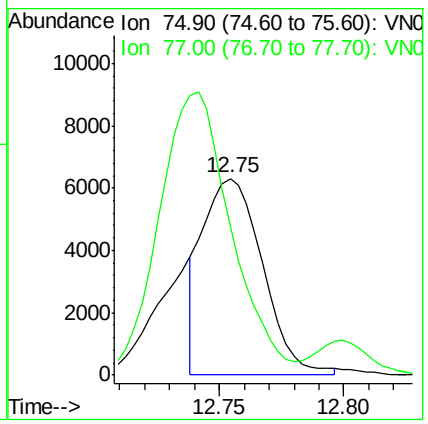
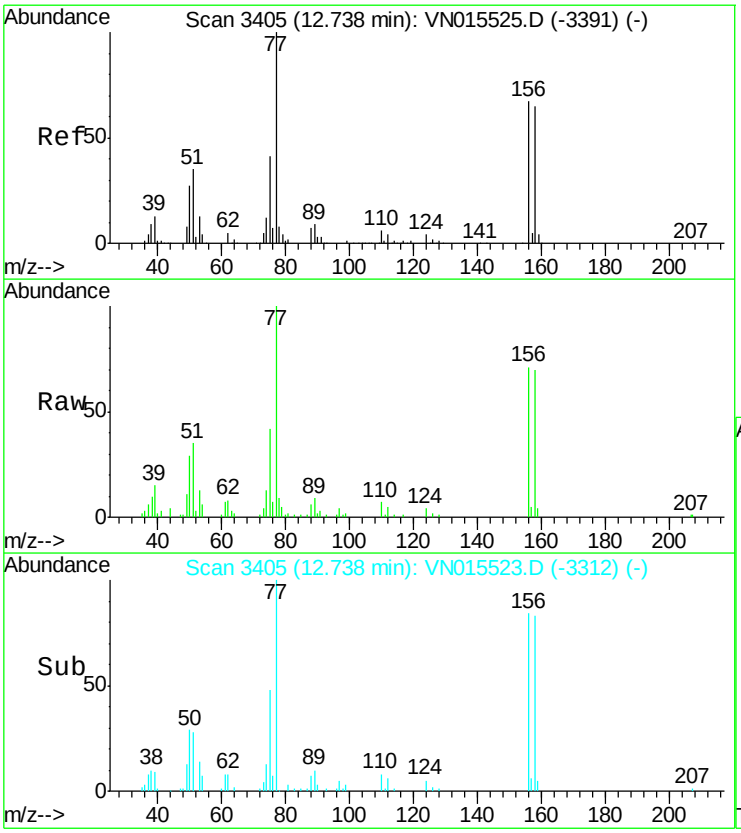
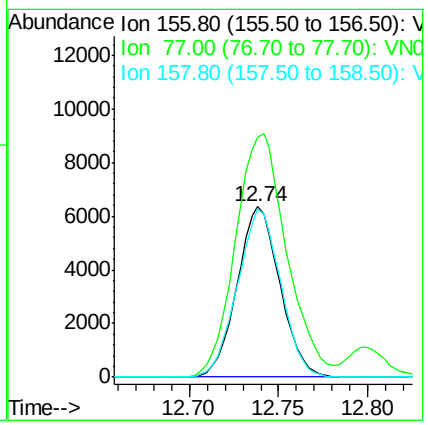




#78
Bromobenzene
Concen: 5.44 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:156 Resp: 10625

Ion	Ratio	Lower	Upper
156	100		
77	171.4	86.0	258.0
158	99.9	48.7	146.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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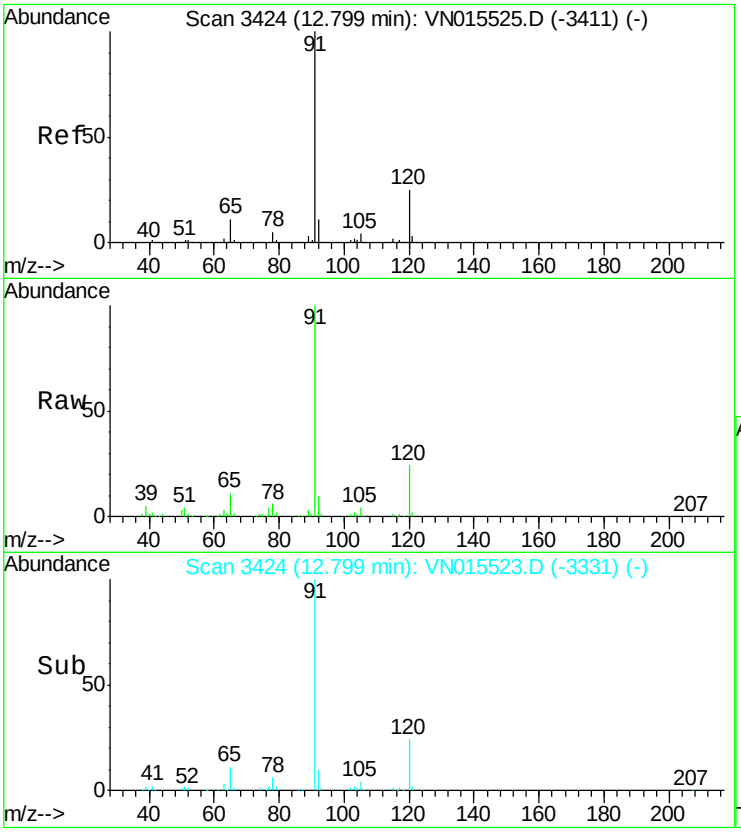
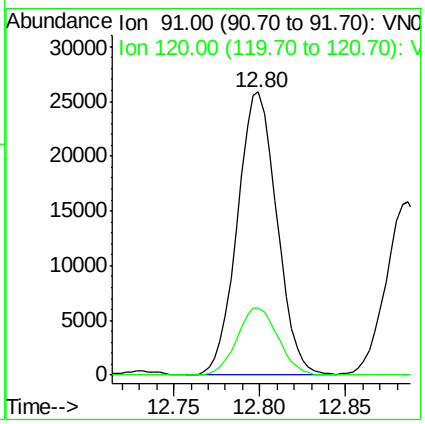
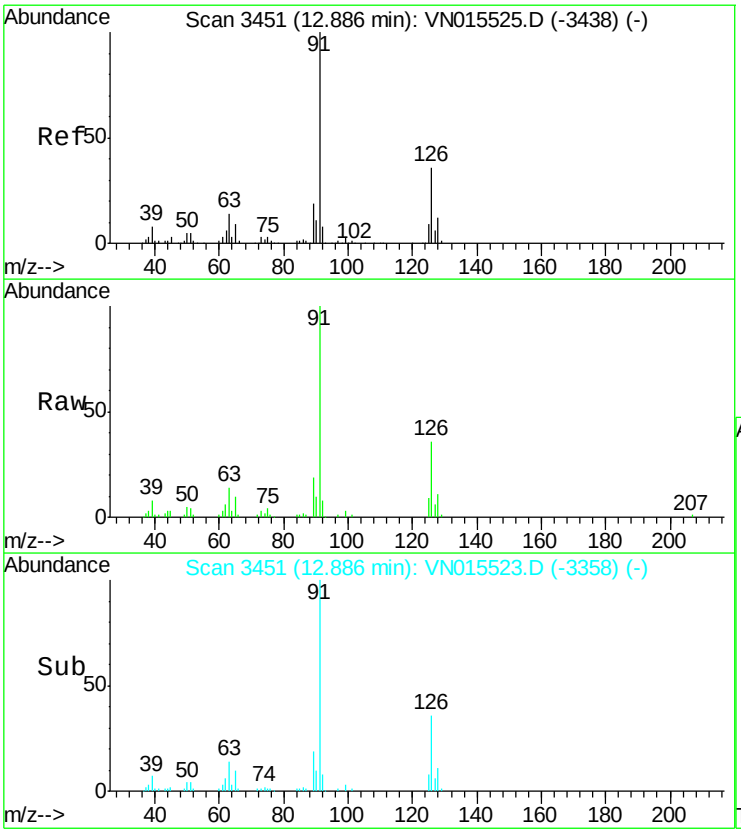


#79
n-propylbenzene
Concen: 5.16 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 91 Resp: 41233

Ion	Ratio	Lower	Upper
91	100		
120	24.5	12.2	36.4

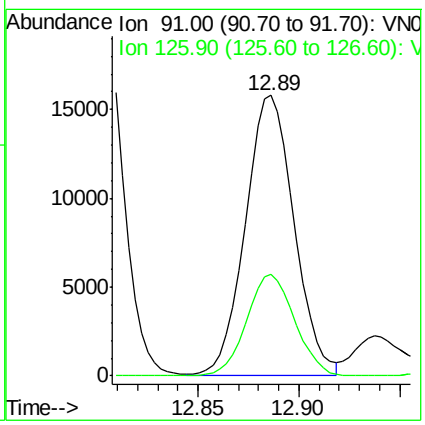




#80
2-Chlorotoluene
Concen: 5.25 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 91 Resp: 26648

Ion	Ratio	Lower	Upper
91	100		
126	35.6	17.9	53.8



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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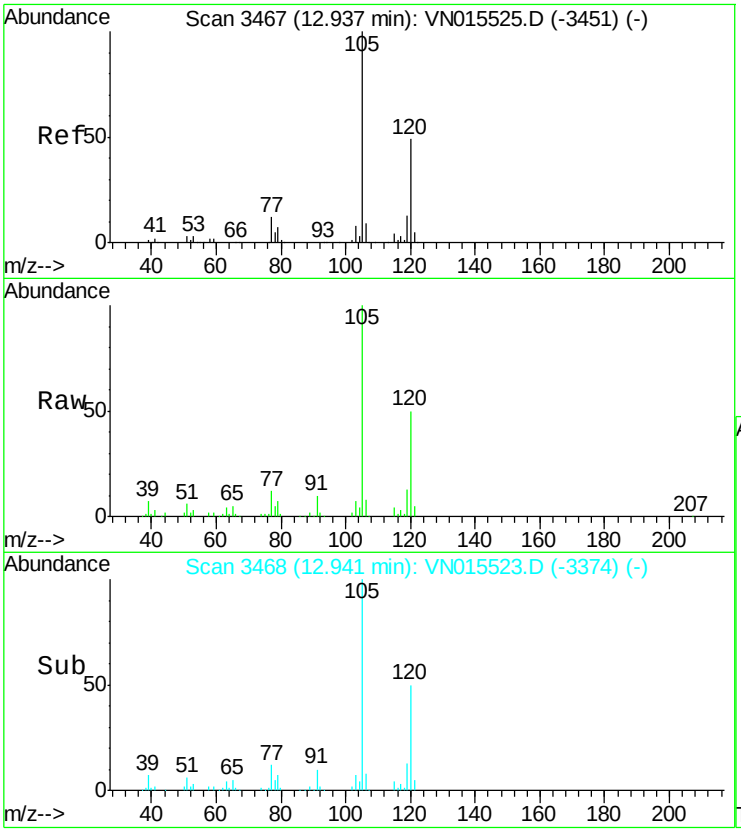
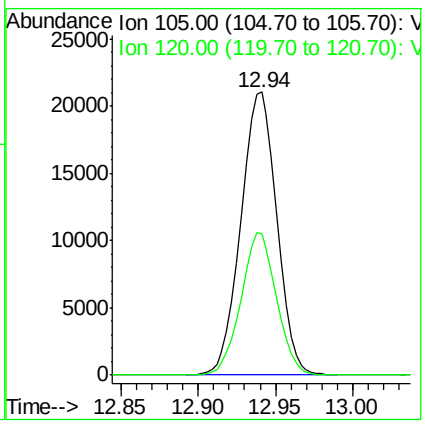
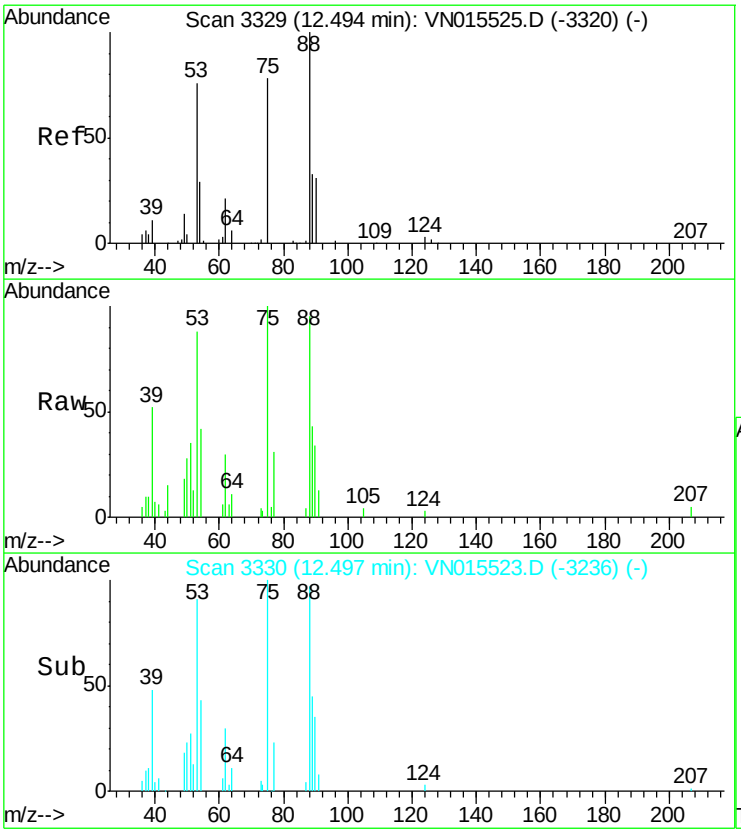


#81
1,3,5-Trimethylbenzene
Concen: 5.71 ug/l
RT: 12.94 min Scan# 3468
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:105 Resp: 34056

Ion	Ratio	Lower	Upper
105	100		
120	49.5	24.6	73.8

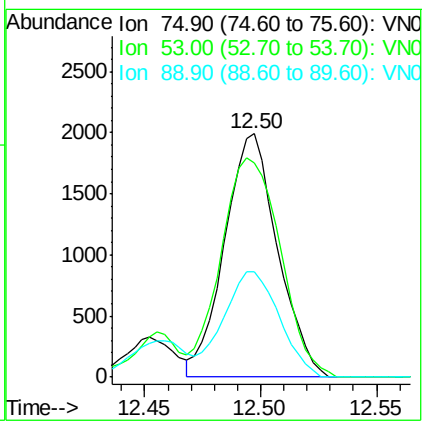




#82
trans-1,4-Dichloro-2-butene
Concen: 5.79 ug/l
RT: 12.50 min Scan# 3330
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 75 Resp: 3162

Ion	Ratio	Lower	Upper
75	100		
53	101.5	77.5	116.3
89	45.8	37.7	56.5



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

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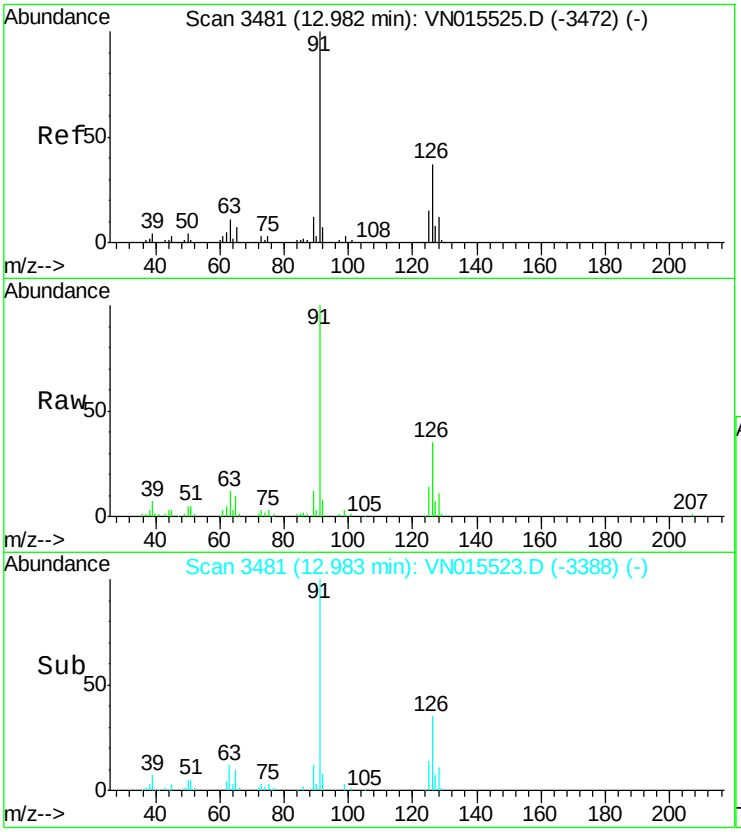
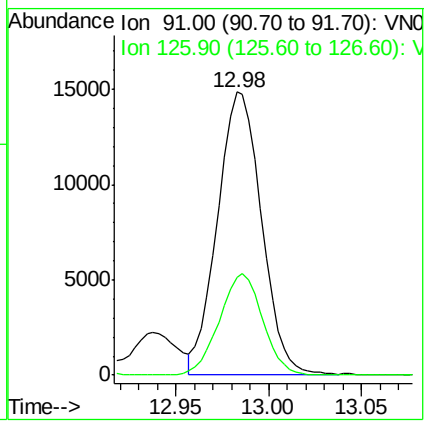
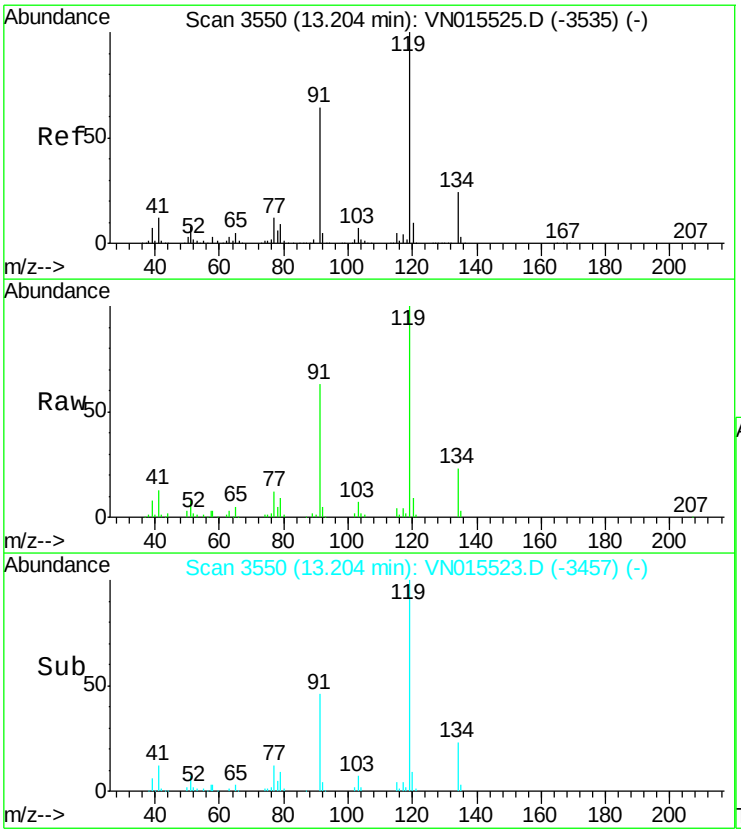


#83
4-Chlorotoluene
Concen: 5.16 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 91 Resp: 24355

Ion	Ratio	Lower	Upper
91	100		
126	35.5	17.5	52.6

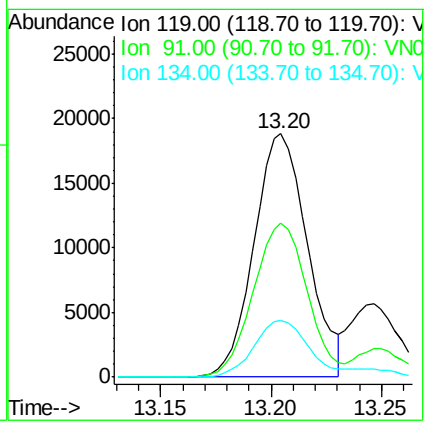


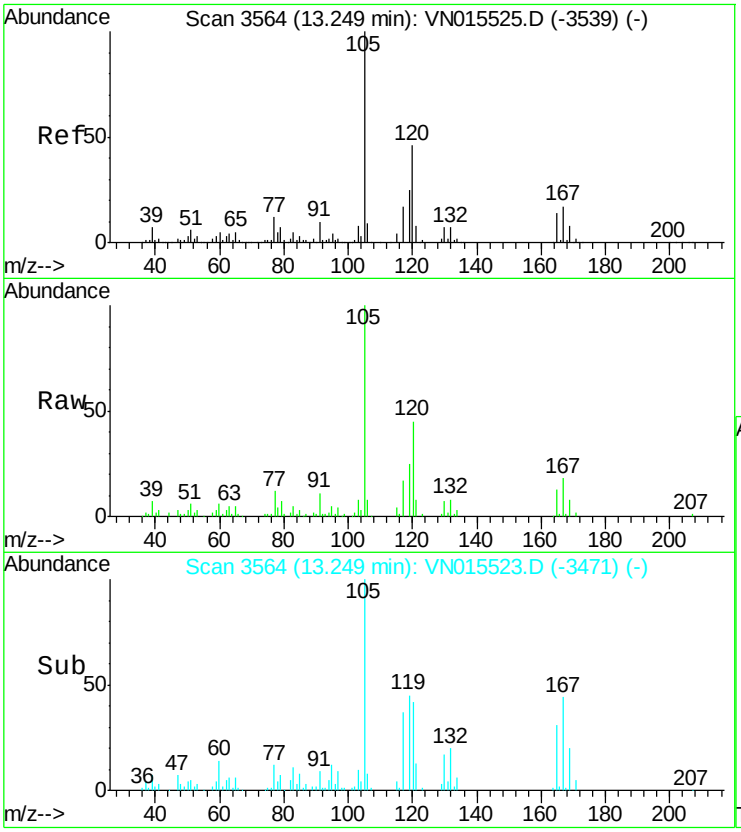


#84
tert-Butylbenzene
Concen: 5.88 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:119 Resp: 31686

Ion	Ratio	Lower	Upper
119	100		
91	64.0	31.9	95.9
134	23.5	12.1	36.3





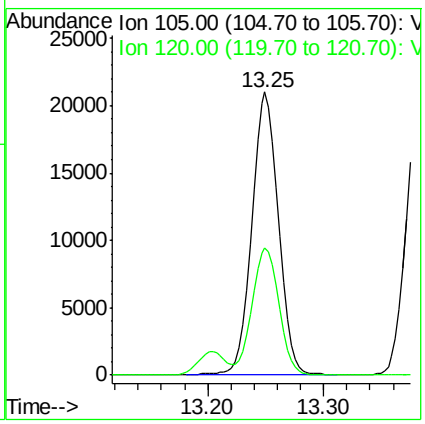
#85
1,2,4-Trimethylbenzene
Concen: 5.68 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

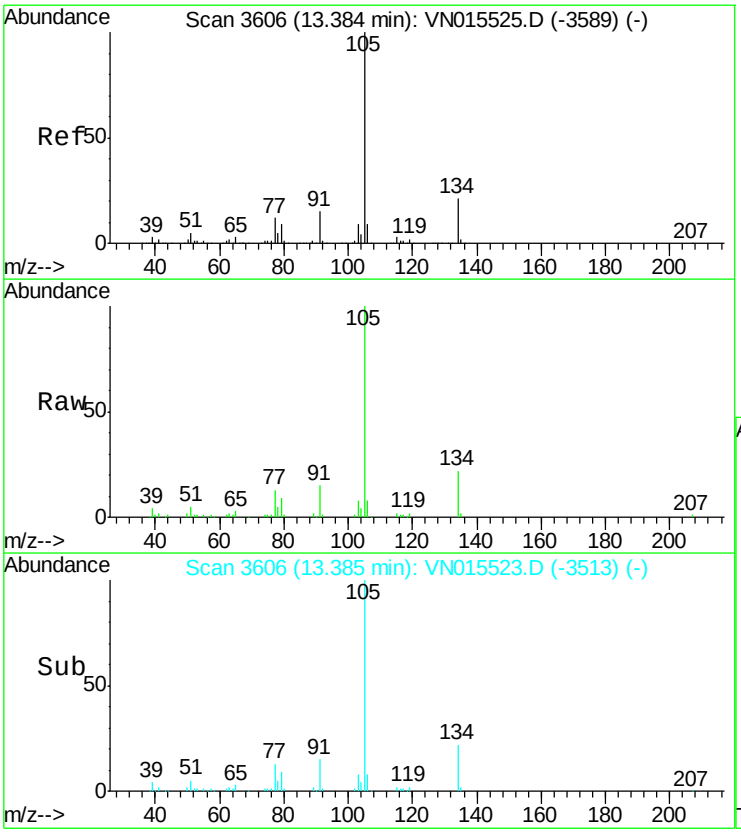
Tgt Ion:105 Resp: 33767

Ion	Ratio	Lower	Upper
105	100		
120	45.4	23.1	69.3

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

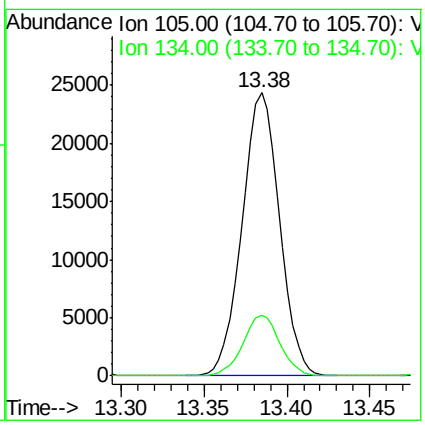


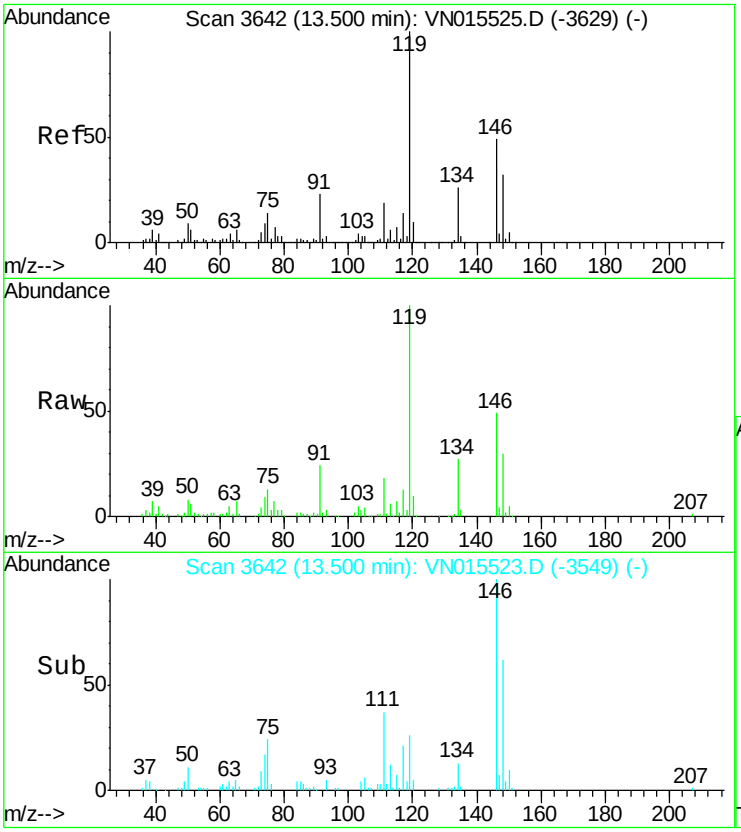


#86
sec-Butylbenzene
Concen: 5.36 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:105 Resp: 38416

Ion	Ratio	Lower	Upper
105	100		
134	21.1	10.6	31.8





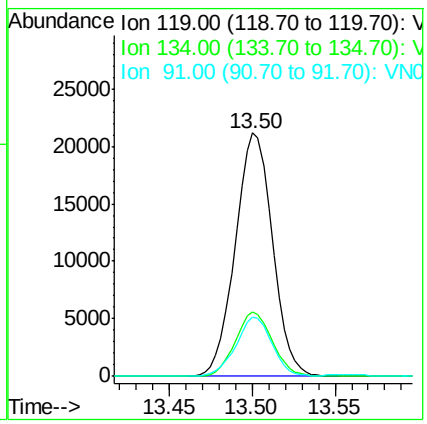
#87
p-Isopropyltoluene
Concen: 5.66 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

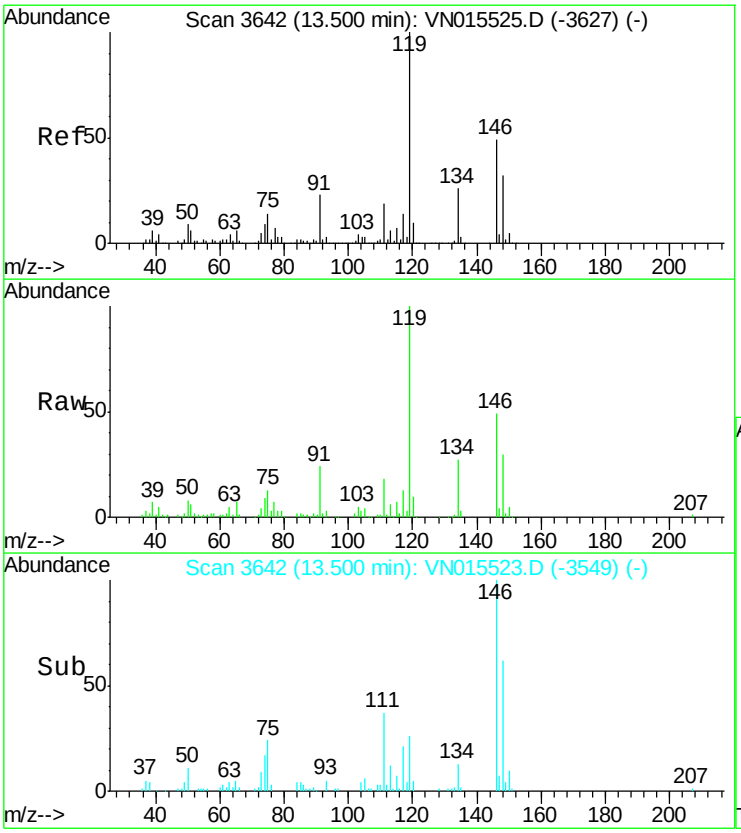
Tgt Ion:119 Resp: 33037

Ion	Ratio	Lower	Upper
119	100		
134	26.3	13.3	39.9
91	23.7	11.7	35.1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

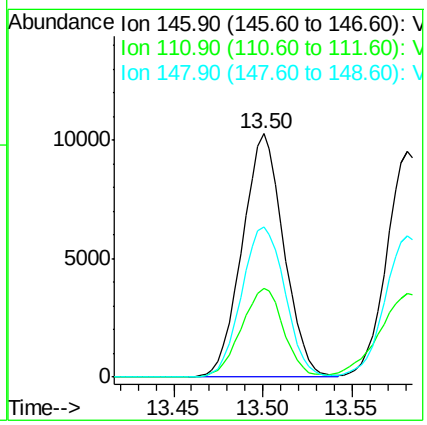




#88
1,3-Dichlorobenzene
Concen: 5.26 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

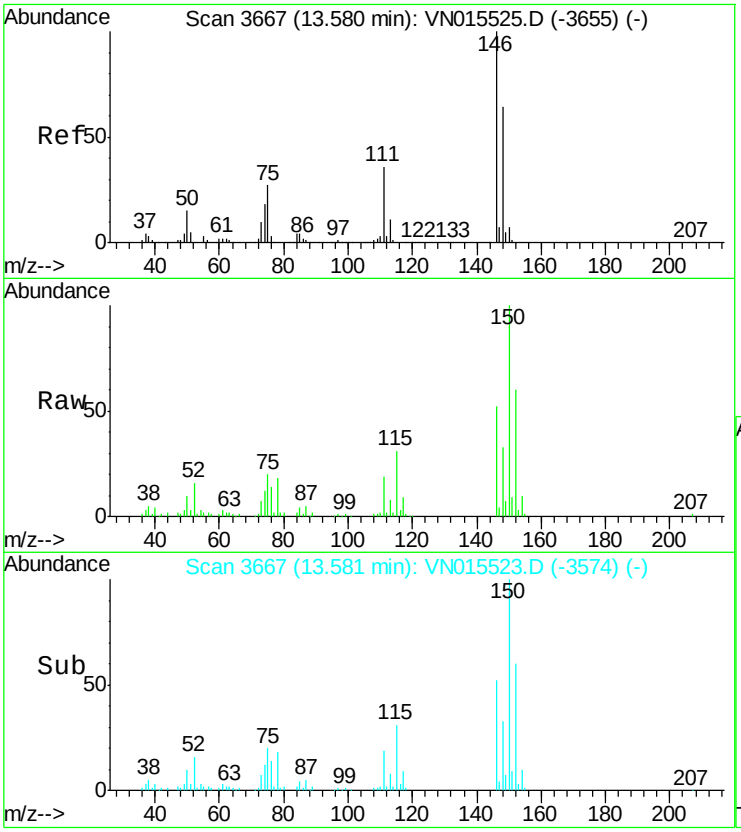
Tgt Ion:146 Resp: 16718

Ion	Ratio	Lower	Upper
146	100		
111	37.3	19.1	57.1
148	64.5	32.4	97.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

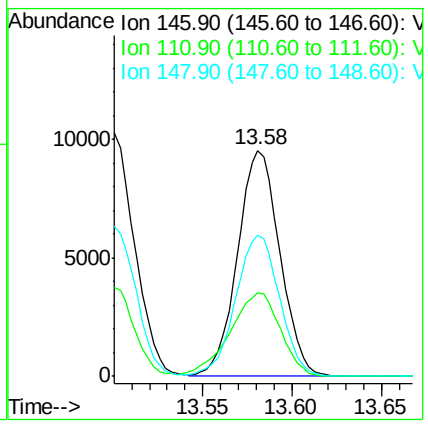
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

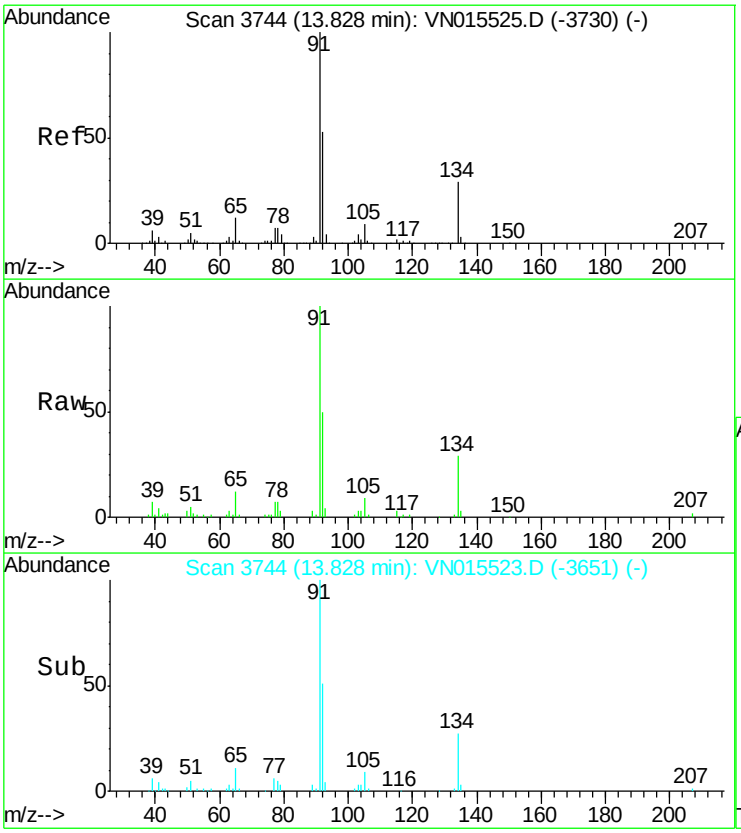


#89
1,4-Dichlorobenzene
Concen: 4.99 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:146 Resp: 15855

Ion	Ratio	Lower	Upper
146	100		
111	44.0	18.4	55.4
148	64.7	32.3	96.9

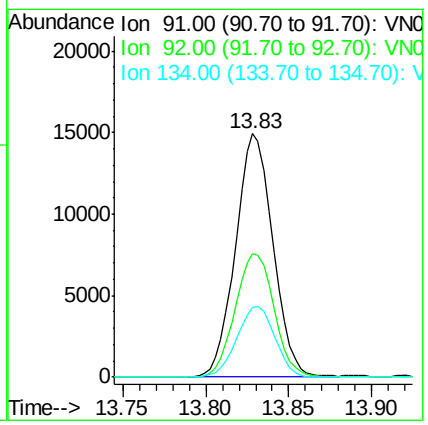


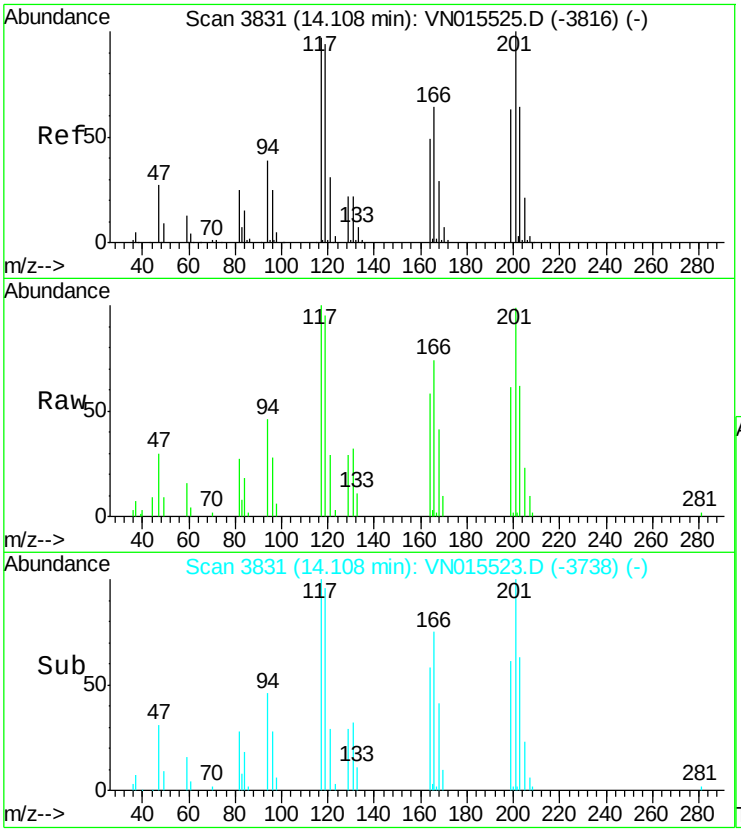


#90
n-Butylbenzene
Concen: 4.96 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion: 91 Resp: 23463

Ion	Ratio	Lower	Upper
91	100		
92	52.2	26.6	79.8
134	29.3	14.4	43.4





#91
Hexachloroethane
Concen: 5.20 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:117 Resp: 6135

Ion	Ratio	Lower	Upper
117	100		
201	98.1	51.7	155.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

Manual Integrations APPROVED
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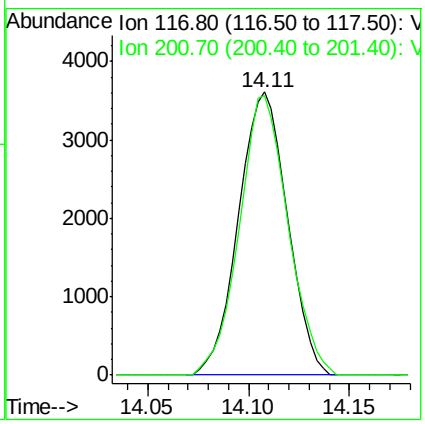
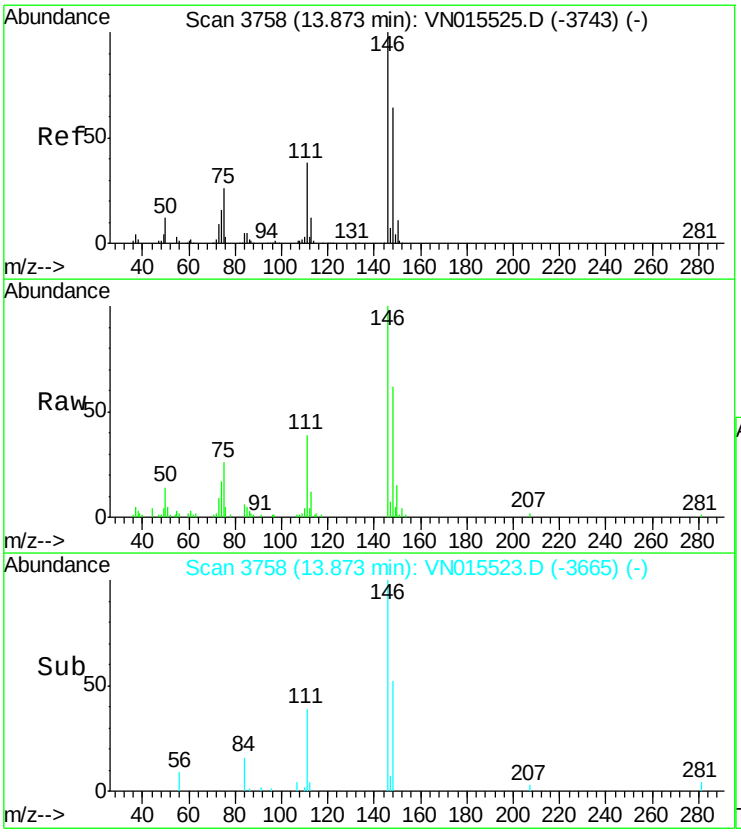
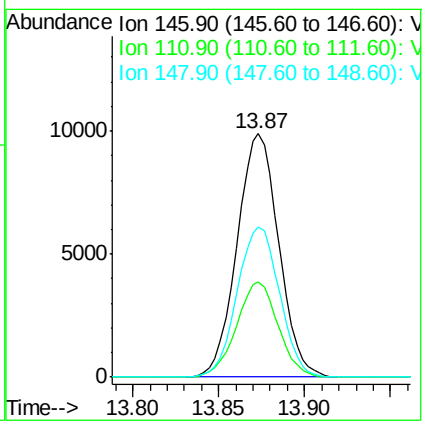


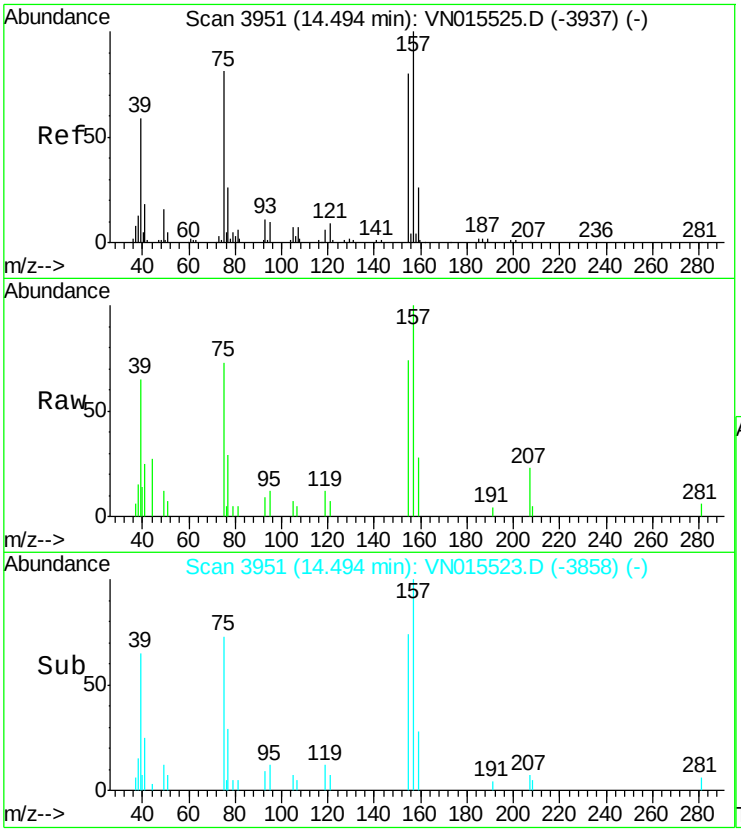


#92
1,2-Dichlorobenzene
Concen: 5.15 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:146 Resp: 16666

Ion	Ratio	Lower	Upper
146	100		
111	38.8	19.4	58.2
148	62.7	32.4	97.0





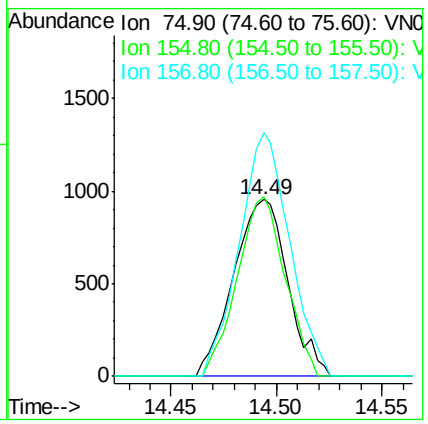
#93
1,2-Dibromo-3-Chloropropane
Concen: 4.75 ug/l
RT: 14.49 min Scan# 3951
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

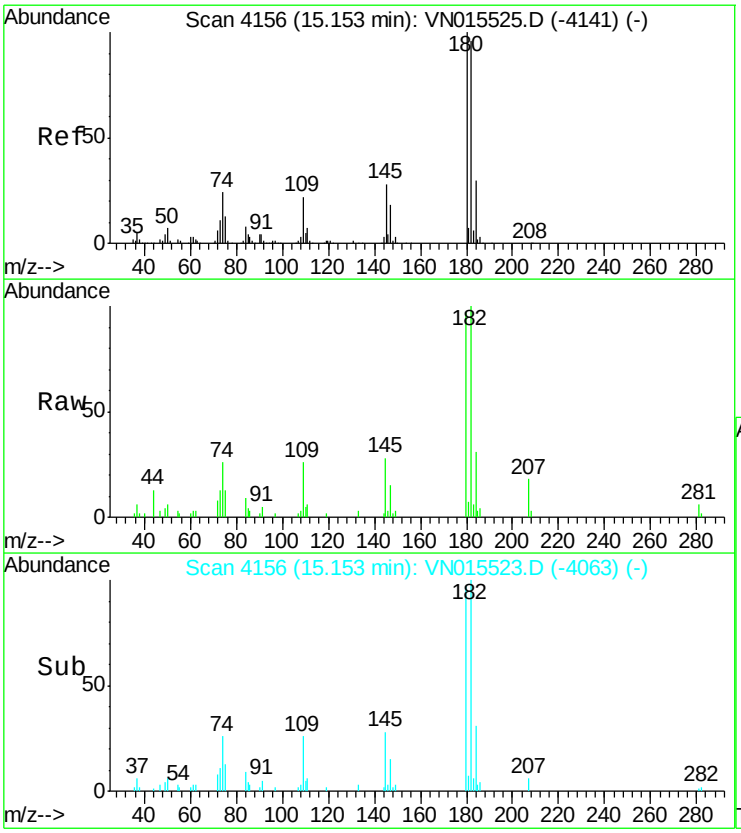
Instrument : MSVOA_N
LabSampleId : VSTDICC005

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

Tgt Ion: 75 Resp: 1710

Ion	Ratio	Lower	Upper
75	100		
155	89.6	49.4	148.2
157	128.0	61.3	183.8

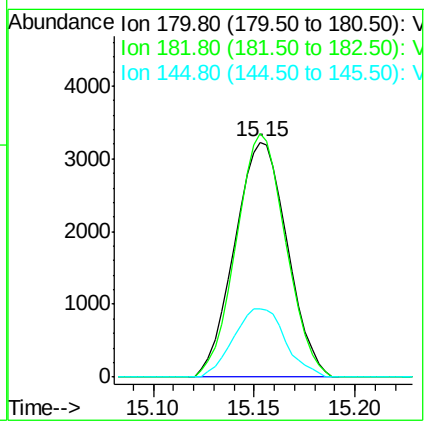




#94
1,2,4-Trichlorobenzene
Concen: 3.67 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

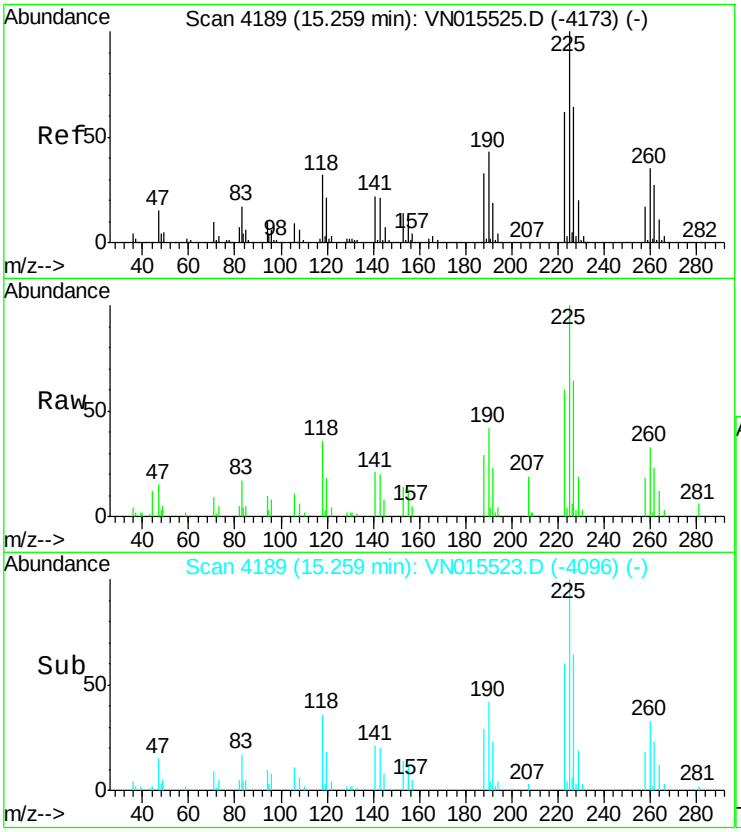
Tgt Ion:180 Resp: 5891

Ion	Ratio	Lower	Upper
180	100		
182	97.6	48.0	144.0
145	28.6	14.0	42.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

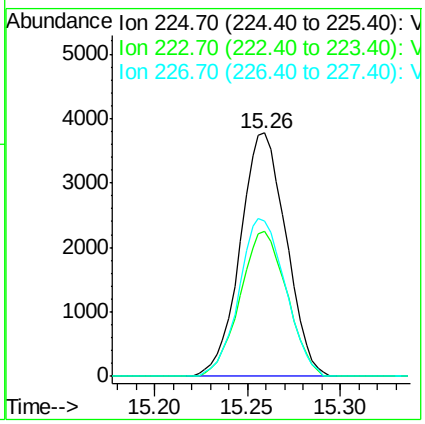
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:31 AM

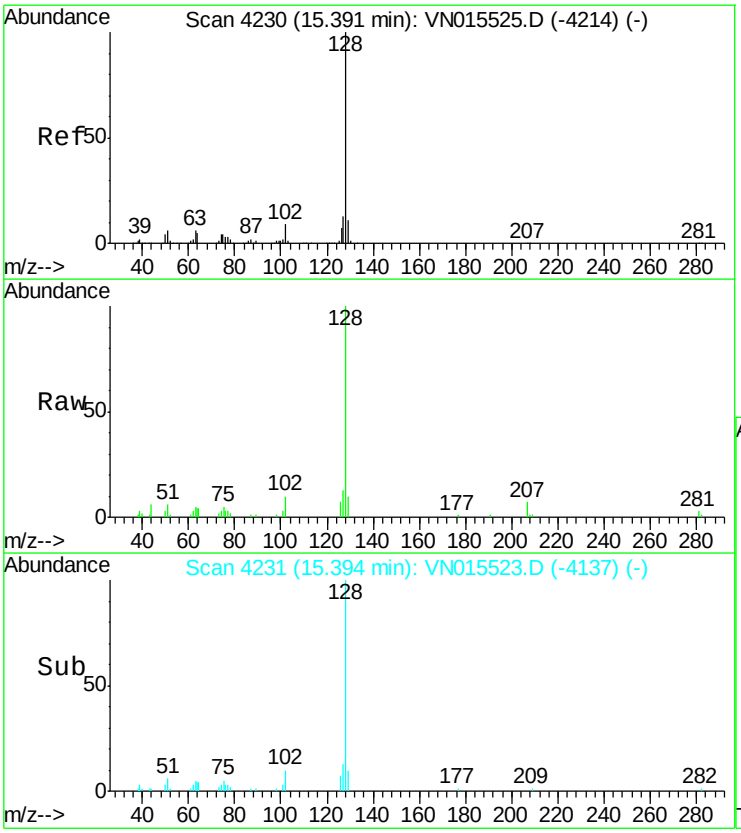


#95
Hexachlorobutadiene
Concen: 5.74 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:225 Resp: 6482

Ion	Ratio	Lower	Upper
225	100		
223	60.7	31.6	95.0
227	65.4	32.1	96.5

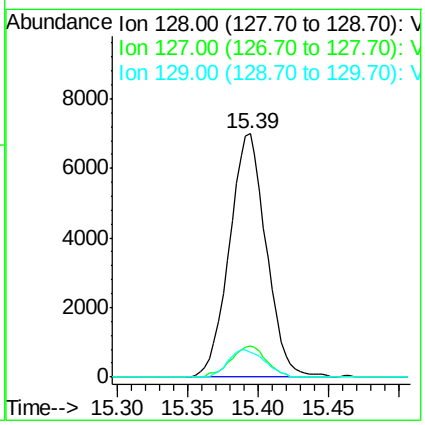


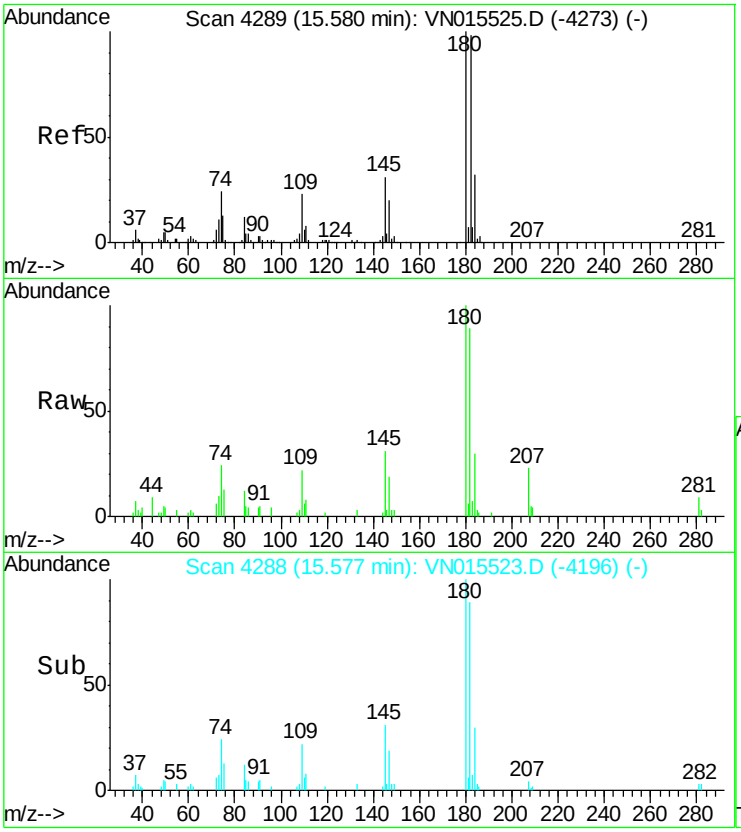


#96
Naphthalene
Concen: 3.41 ug/l
RT: 15.39 min Scan# 4231
Delta R.T. 0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:128 Resp: 12774

Ion	Ratio	Lower	Upper
128	100		
127	12.2	10.3	15.5
129	11.3	8.7	13.1

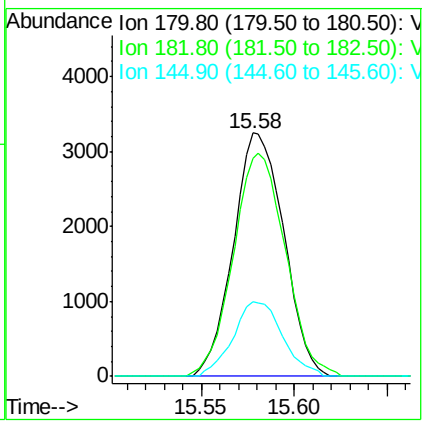




#97
1,2,3-Trichlorobenzene
Concen: 3.73 ug/l
RT: 15.58 min Scan# 4288
Delta R.T. -0.00 min
Lab File: VN015523.D
Acq: 20 May 2014 17:54

Tgt Ion:180 Resp: 6128

Ion	Ratio	Lower	Upper
180	100		
182	94.7	47.8	143.4
145	30.1	14.9	44.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC005

Manual Integrations APPROVED
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5/21/2014 11:01:31 AM

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015524.D
Acq On : 20 May 2014 18:24
Operator : MD
Sample : VSTDICC020
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:45 AM

Quant Time: May 21 01:33:31 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	192907	50.00 ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	270396	50.00 ug/l	0.00
64) Chlorobenzene-d5	11.61	117	234843	50.00 ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	101939	50.00 ug/l	0.00
System Monitoring Compounds					
34) 1,2-Dichloroethane-d4	8.23	65	46509	19.00 ug/l	0.00
Spiked Amount 50.000				Recovery = 38.00%	
36) Dibromofluoromethane	7.80	113	37164	21.08 ug/l	0.00
Spiked Amount 50.000				Recovery = 42.16%	
51) Toluene-d8	10.29	98	137128	20.69 ug/l	0.00
Spiked Amount 50.000				Recovery = 41.38%	
63) 4-Bromofluorobenzene	12.61	95	45604	20.72 ug/l	0.00
Spiked Amount 50.000				Recovery = 41.44%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.85	85	30761	13.94 ug/l	98
3) Chlorodifluoromethane	1.87	51	23060	12.97 ug/l	100
4) Chloromethane	2.06	50	37965	14.06 ug/l	100
5) Vinyl Chloride	2.20	62	34354	15.04 ug/l	97
6) Bromomethane	2.62	94	19617	14.85 ug/l	97
7) Chloroethane	2.77	64	22022	15.35 ug/l	98
8) Trichlorofluoromethane	3.11	101	55245	17.28 ug/l	97
9) Diethyl Ether	3.53	74	20629	17.06 ug/l	98
10) 1,1,2-Trichlorotrifluoroet	3.91	101	31971	18.27 ug/l	99
11) Methyl Iodide	4.12	142	35581	19.87 ug/l	98
12) Tert butyl alcohol	4.95	59	22720	106.75 ug/l	100
13) 1,1-Dichloroethene	3.88	96	29580	17.14 ug/l	96
14) Acrolein	3.73	56	19125	91.29 ug/l	99
15) Allyl chloride	4.51	41	51025	17.02 ug/l	98
16) Acrylonitrile	5.18	53	68805	82.16 ug/l	99
17) Acetone	3.95	43	70643	82.18 ug/l	99
18) Carbon Disulfide	4.24	76	82702	16.93 ug/l	99
19) Methyl Acetate	4.50	43	64221	28.36 ug/l	100
20) Methyl tert-butyl Ether	5.27	73	107276	18.11 ug/l	99
21) Methylene Chloride	4.74	84	33756	16.51 ug/l	97
22) trans-1,2-Dichloroethene	5.28	96	31879	17.45 ug/l	100
23) Diisopropyl ether	6.18	45	109215	16.10 ug/l	96
24) Vinyl Acetate	6.12	43	277790m	57.98 ug/l	
25) 1,1-Dichloroethane	6.08	63	60118	16.46 ug/l	99
26) 2-Butanone	7.05	43	95398	84.13 ug/l	99
27) 2,2-Dichloropropane	7.06	77	54540	19.62 ug/l	99
28) cis-1,2-Dichloroethene	7.06	96	37429	17.41 ug/l	99
29) Bromochloromethane	7.42	49	30411	16.83 ug/l	95
30) Tetrahydrofuran	7.45	42	61488	83.93 ug/l	98
31) Chloroform	7.58	83	62324	17.25 ug/l	99
32) Cyclohexane	7.89	56	58929	14.27 ug/l	97
33) 1,1,1-Trichloroethane	7.79	97	57898	18.35 ug/l	100
37) 1,1-Dichloropropene	8.01	75	46226	17.99 ug/l	99
38) Ethyl Acetate	7.15	43	40361	20.86 ug/l	100

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015524.D
Acq On : 20 May 2014 18:24
Operator : MD
Sample : VSTDICC020
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:45 AM

Quant Time: May 21 01:33:31 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) Carbon Tetrachloride	8.00	117	52359	20.23 ug/l	99
40) Methylcyclohexane	9.29	83	59454	19.55 ug/l	98
41) Benzene	8.26	78	137761	18.42 ug/l	99
42) Methacrylonitrile	7.37	41	24047	17.74 ug/l	97
43) 1,2-Dichloroethane	8.33	62	50106	18.30 ug/l	99
44) Isopropyl Acetate	8.36	43	71524	22.48 ug/l	99
45) Trichloroethene	9.04	130	38193	19.16 ug/l	99
46) 1,2-Dichloropropane	9.32	63	35453	17.46 ug/l	100
47) Dibromomethane	9.41	93	23602	18.80 ug/l	99
48) Bromodichloromethane	9.59	83	47671	19.04 ug/l	99
49) Methyl methacrylate	9.38	41	35861	18.30 ug/l	99
50) 1,4-Dioxane	9.40	88	10008	388.70 ug/l	96
52) 4-Methyl-2-Pentanone	10.16	43	201324	93.26 ug/l	100
53) Toluene	10.35	92	87936	19.24 ug/l	99
54) t-1,3-Dichloropropene	10.57	75	49915	19.82 ug/l	100
55) cis-1,3-Dichloropropene	10.03	75	54489	18.93 ug/l	99
56) 1,1,2-Trichloroethane	10.75	97	33828	18.78 ug/l	99
57) Ethyl methacrylate	10.61	69	50637	20.34 ug/l	99
58) 1,3-Dichloropropane	10.90	76	57173	18.53 ug/l	99
59) 2-Chloroethyl Vinyl ether	9.88	63	19501	21.05 ug/l	100
60) 2-Hexanone	10.93	43	134515	92.83 ug/l	100
61) Dibromochloromethane	11.10	129	40479	20.19 ug/l	100
62) 1,2-Dibromoethane	11.21	107	34694	19.20 ug/l	99
65) Tetrachloroethene	10.83	164	35306	18.78 ug/l	99
66) Chlorobenzene	11.64	112	95550	18.94 ug/l	99
67) 1,1,1,2-Tetrachloroethane	11.71	131	37312	20.36 ug/l	99
68) Ethyl Benzene	11.71	91	159371	19.49 ug/l	98
69) m/p-Xylenes	11.82	106	122163	39.46 ug/l	100
70) o-Xylene	12.15	106	61148	19.28 ug/l	96
71) Styrene	12.17	104	95113	20.08 ug/l	99
72) Bromoform	12.34	173	30590	21.78 ug/l #	100
74) Isopropylbenzene	12.46	105	163255	19.97 ug/l	99
75) N-amyl acetate	12.26	43	49863	21.65 ug/l	99
76) 1,1,2,2-Tetrachloroethane	12.70	83	44699	19.00 ug/l	98
77) 1,2,3-Trichloropropane	12.75	75	39302m	18.26 ug/l	
78) Bromobenzene	12.74	156	42333	19.90 ug/l	98
79) n-propylbenzene	12.80	91	168407	19.32 ug/l	99
80) 2-Chlorotoluene	12.89	91	106438	19.26 ug/l	99
81) 1,3,5-Trimethylbenzene	12.94	105	136686	21.02 ug/l	98
82) trans-1,4-Dichloro-2-buten	12.49	75	13590	22.82 ug/l	96
83) 4-Chlorotoluene	12.98	91	100589	19.57 ug/l	100
84) tert-Butylbenzene	13.20	119	120745	20.56 ug/l	99
85) 1,2,4-Trimethylbenzene	13.25	105	135954	20.97 ug/l	100
86) sec-Butylbenzene	13.38	105	154165	19.73 ug/l	100
87) p-Isopropyltoluene	13.50	119	135421	21.29 ug/l	99
88) 1,3-Dichlorobenzene	13.50	146	68619	19.80 ug/l	100
89) 1,4-Dichlorobenzene	13.58	146	66737	19.28 ug/l	98
90) n-Butylbenzene	13.83	91	100842	19.56 ug/l	99
91) Hexachloroethane	14.11	117	25536	19.86 ug/l	98
92) 1,2-Dichlorobenzene	13.87	146	70663	20.04 ug/l	99

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015524.D
Acq On : 20 May 2014 18:24
Operator : MD
Sample : VSTDICC020
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:45 AM

Quant Time: May 21 01:33:31 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
93) 1,2-Dibromo-3-Chloropropan	14.49	75	7676	19.55 ug/l	98
94) 1,2,4-Trichlorobenzene	15.15	180	33569	19.18 ug/l	99
95) Hexachlorobutadiene	15.26	225	26164	21.26 ug/l	98
96) Naphthalene	15.39	128	73627	18.01 ug/l	99
97) 1,2,3-Trichlorobenzene	15.58	180	33251	18.57 ug/l	99

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

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015524.D
Acq On : 20 May 2014 18:24
Operator : MD
Sample : VSTDICC020
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 21 01:33:31 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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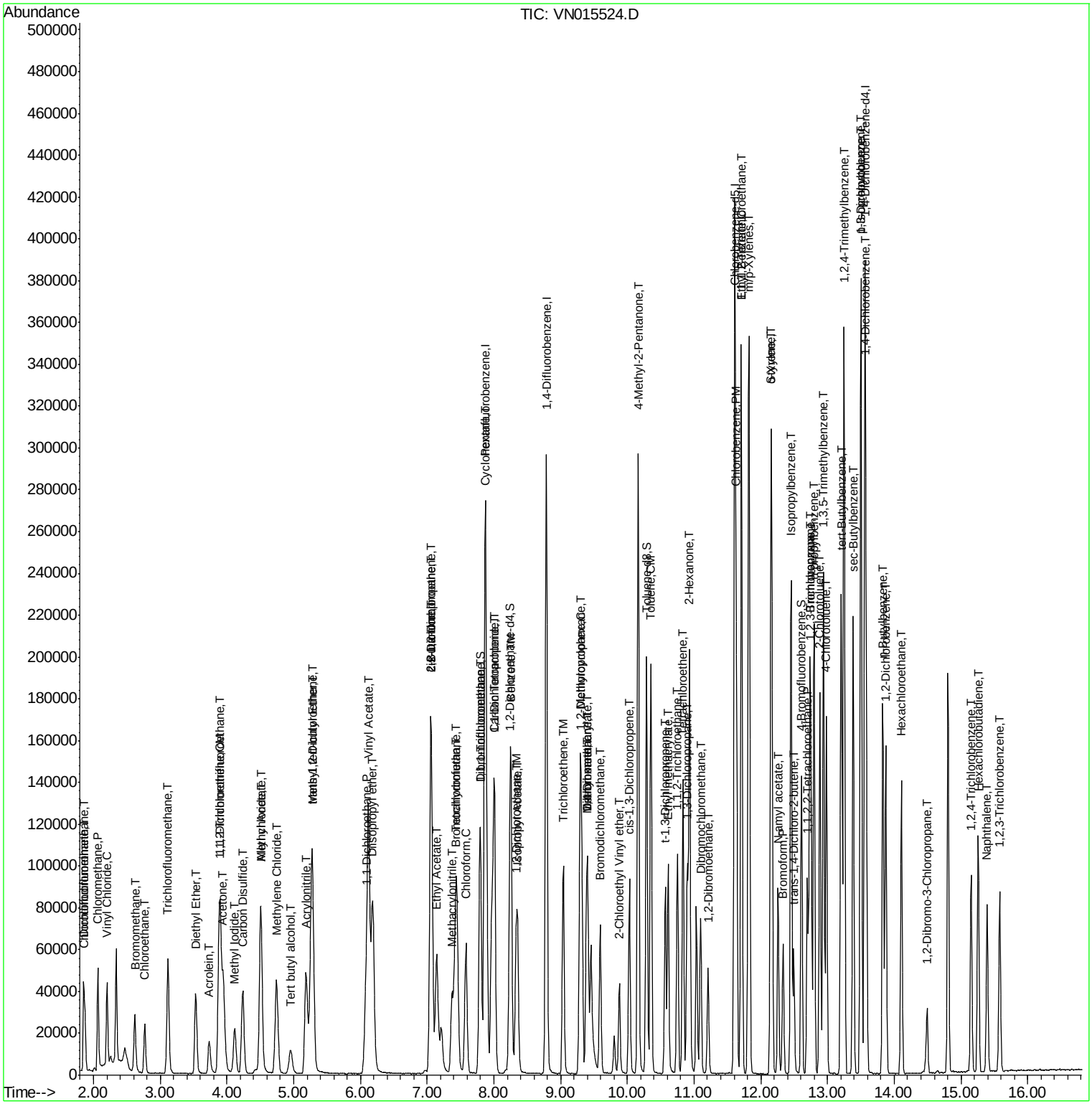
5/21/2014 11:01:45 AM



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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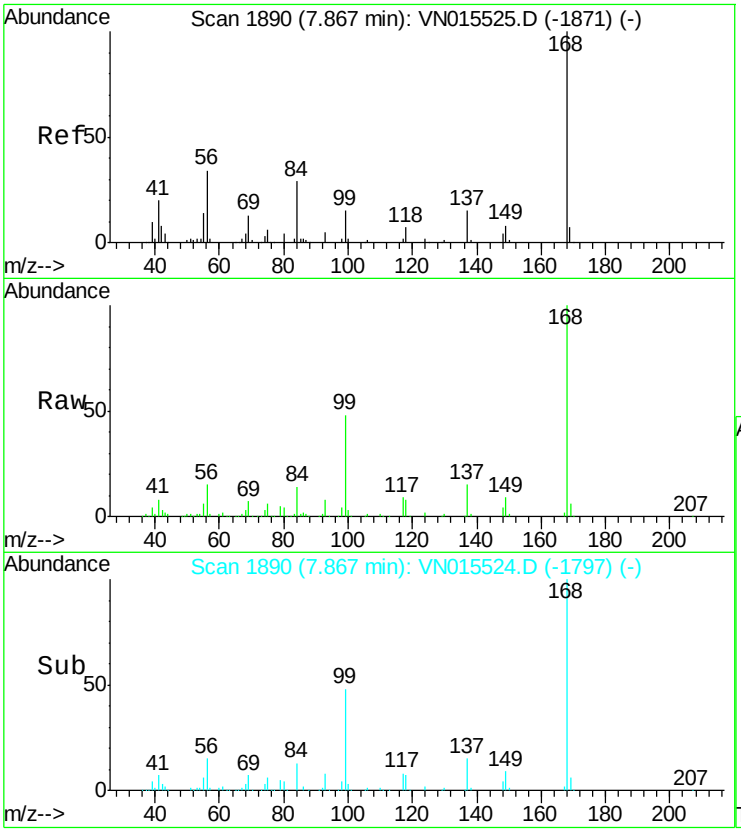
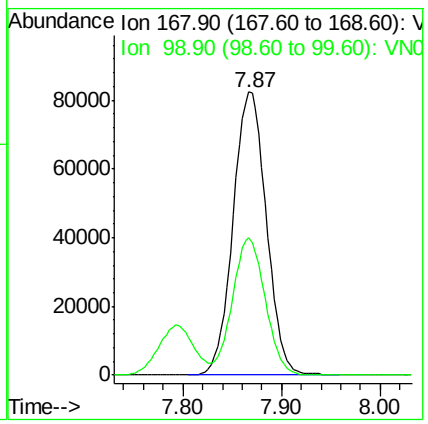
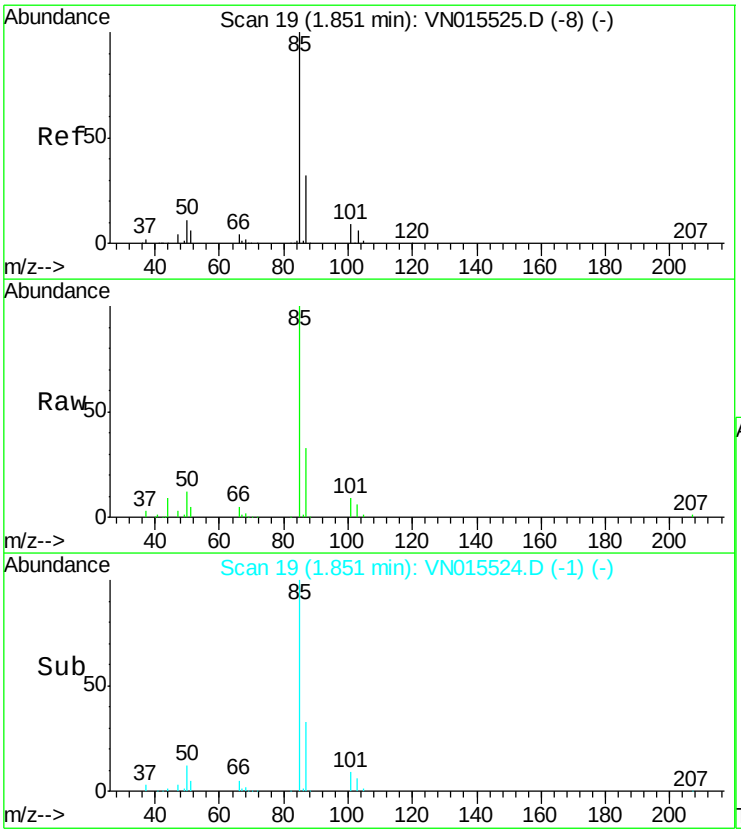


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:168 Resp: 192907

Ion	Ratio	Lower	Upper
168	100		
99	48.3	39.0	58.4

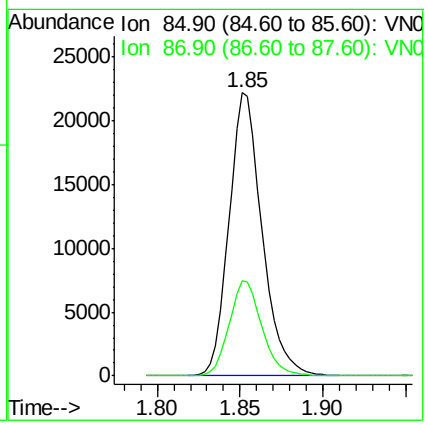




#2
Dichlorodifluoromethane
Concen: 13.94 ug/l
RT: 1.85 min Scan# 19
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 85 Resp: 30761

Ion	Ratio	Lower	Upper
85	100		
87	33.4	16.1	48.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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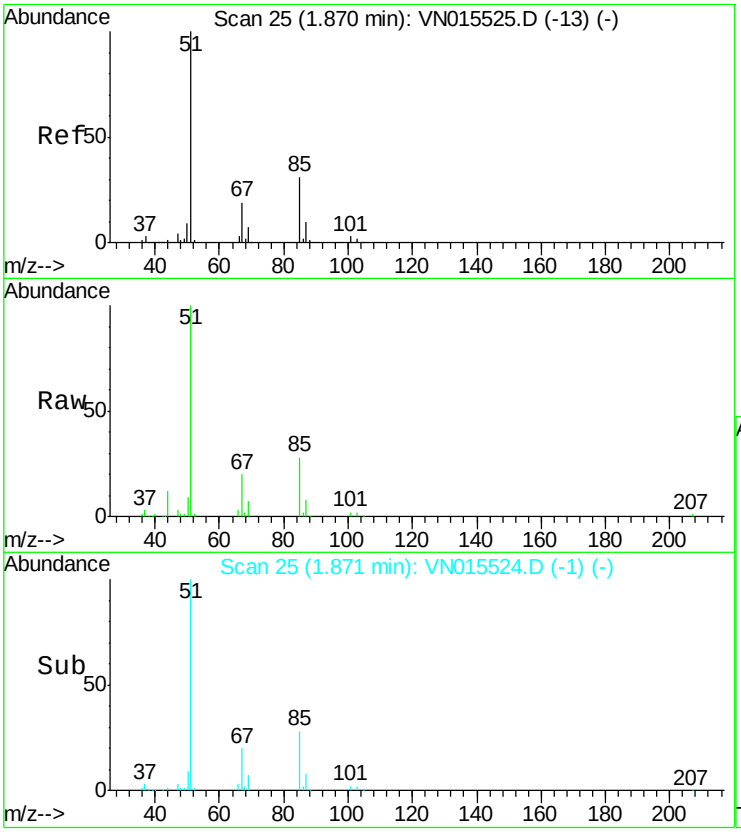
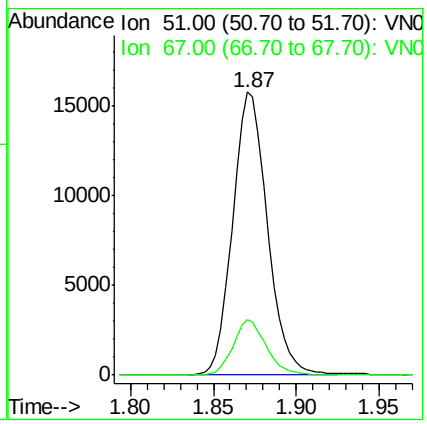
5/21/2014 11:01:45 AM

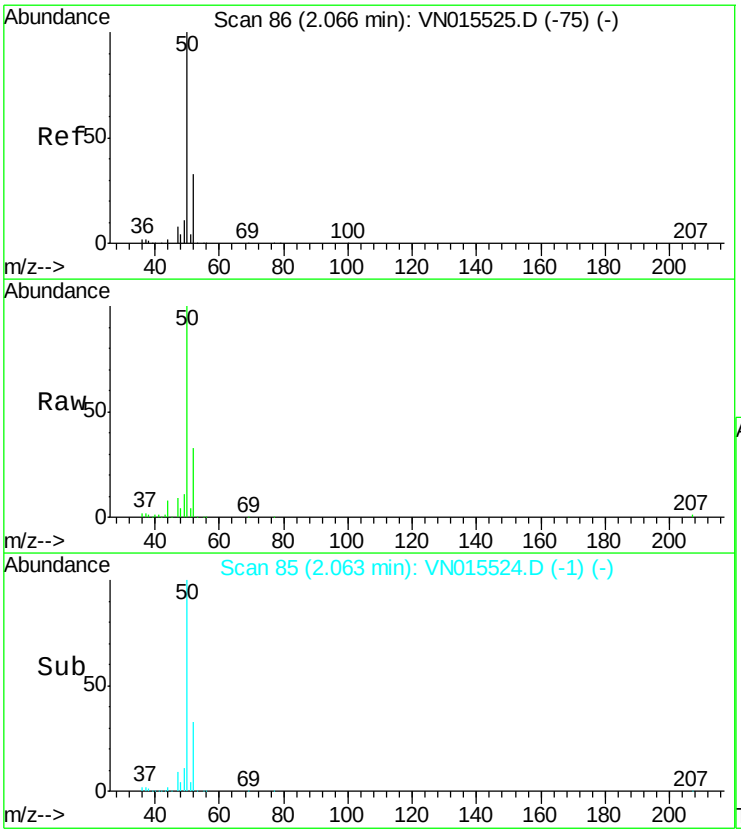


#3
Chlorodifluoromethane
Concen: 12.97 ug/l
RT: 1.87 min Scan# 25
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 51 Resp: 23060

Ion	Ratio	Lower	Upper
51	100		
67	18.8	15.1	22.7

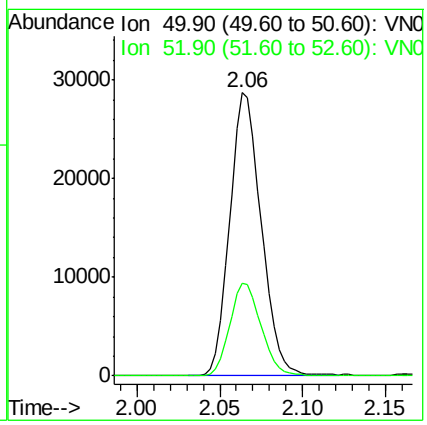




#4
Chloromethane
Concen: 14.06 ug/l
RT: 2.06 min Scan# 85
Delta R.T. -0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 50 Resp: 37965

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.2	39.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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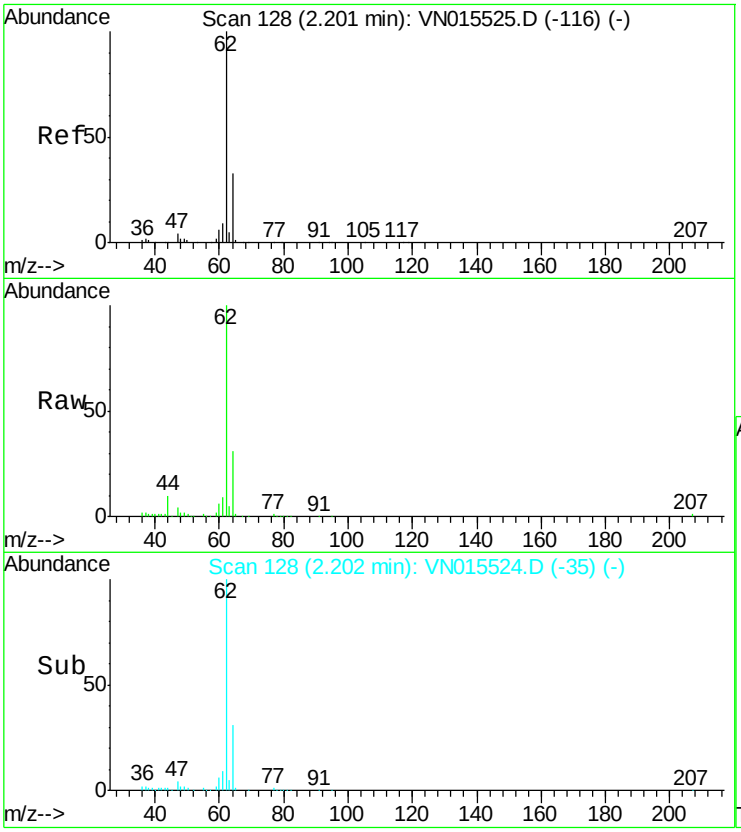
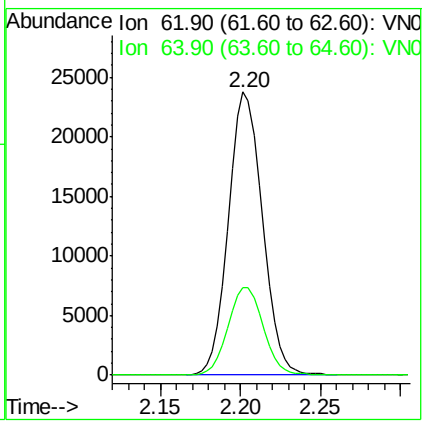
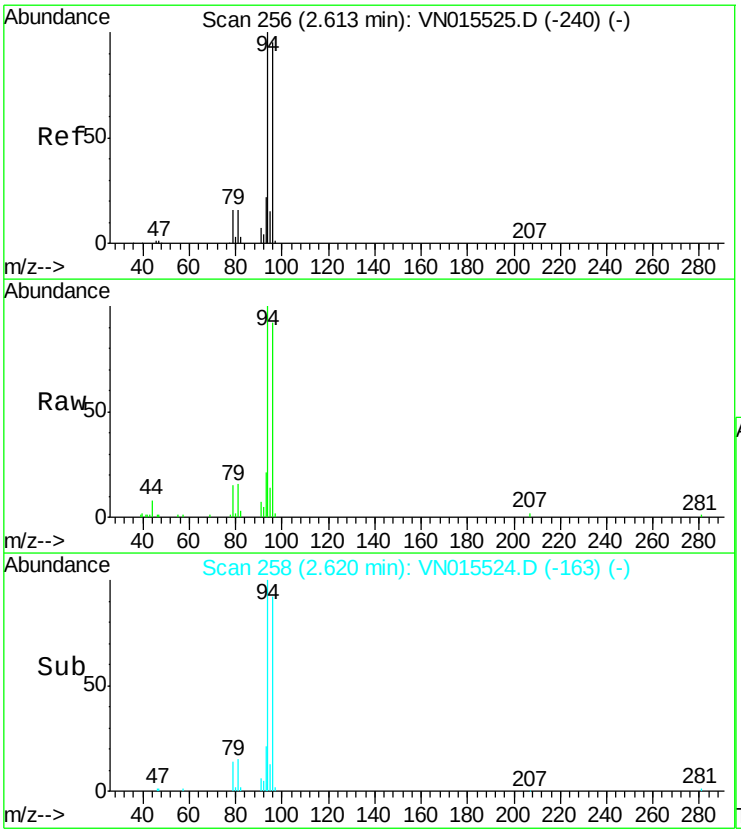


#5
Vinyl Chloride
Concen: 15.04 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 62 Resp: 34354

Ion	Ratio	Lower	Upper
62	100		
64	31.0	26.2	39.4

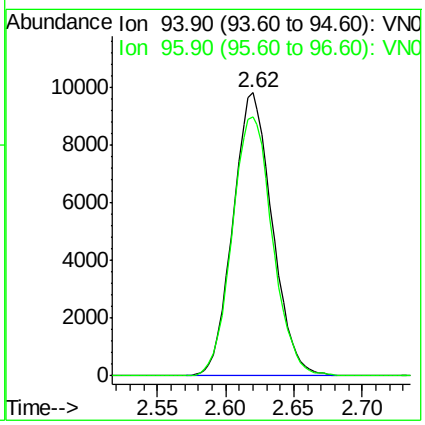




#6
Bromomethane
Concen: 14.85 ug/l
RT: 2.62 min Scan# 258
Delta R.T. 0.01 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 94 Resp: 19617

Ion	Ratio	Lower	Upper
94	100		
96	91.6	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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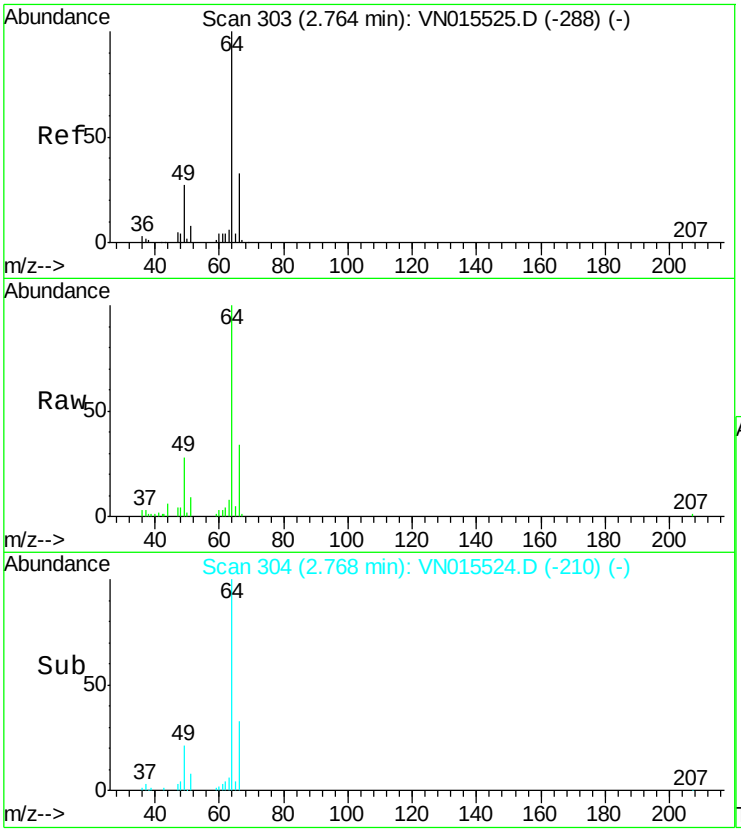
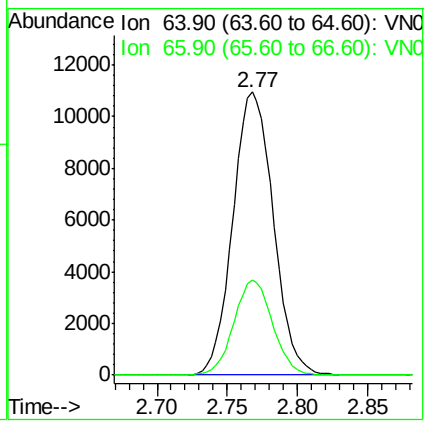
5/21/2014 11:01:45 AM

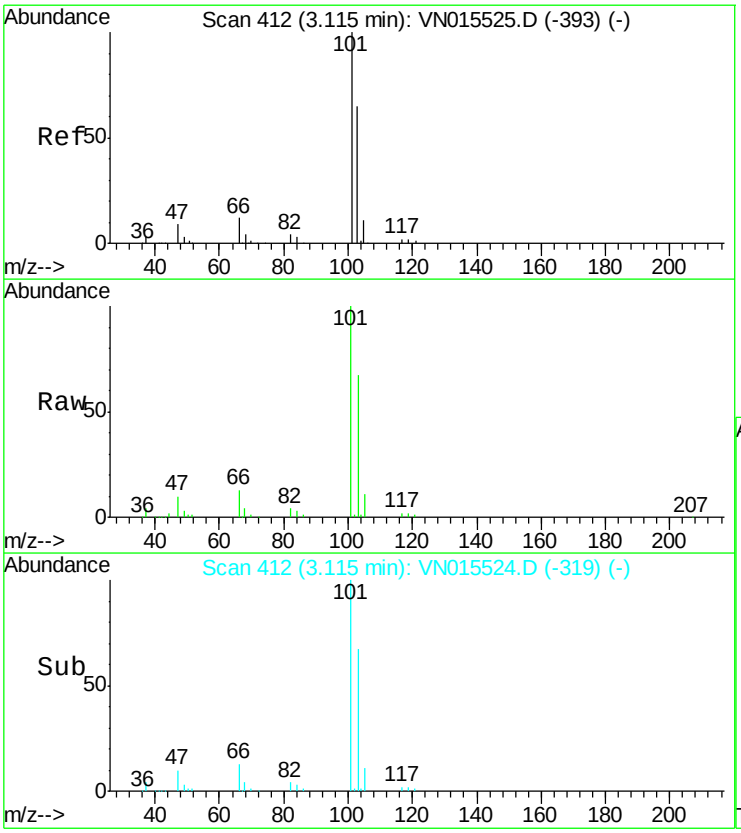


#7
Chloroethane
Concen: 15.35 ug/l
RT: 2.77 min Scan# 304
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 64 Resp: 22022

Ion	Ratio	Lower	Upper
64	100		
66	33.8	26.3	39.5

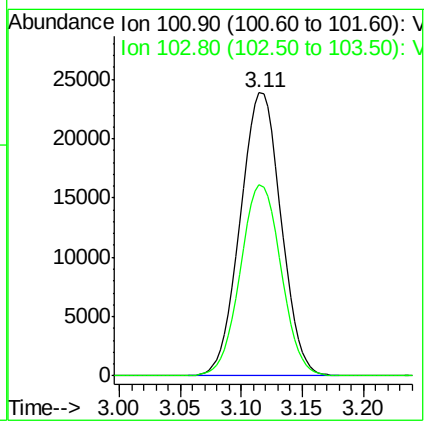




#8
Trichlorofluoromethane
Concen: 17.28 ug/l
RT: 3.11 min Scan# 412
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:101 Resp: 55245

Ion	Ratio	Lower	Upper
101	100		
103	67.4	52.1	78.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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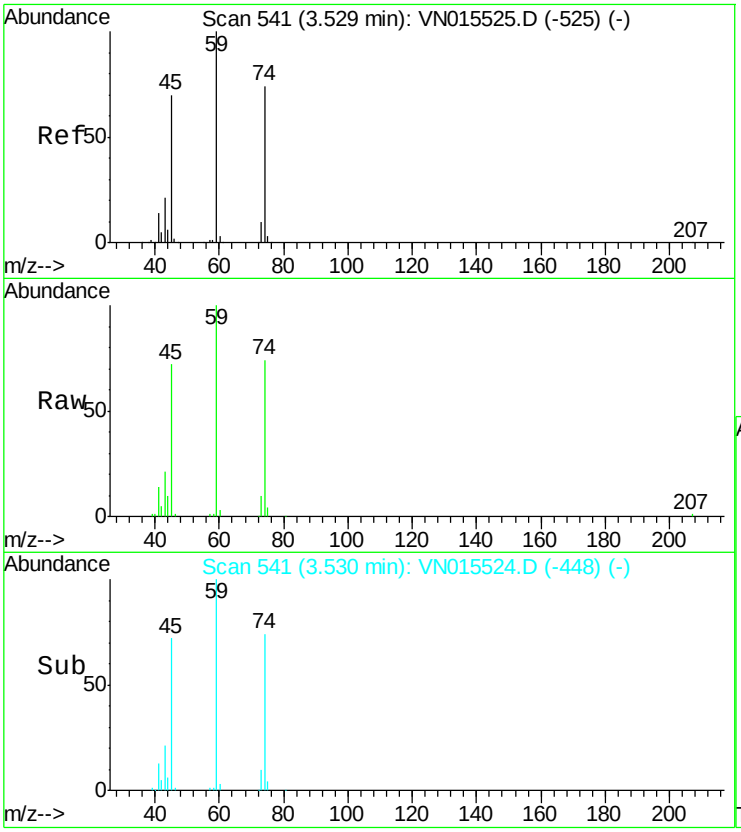
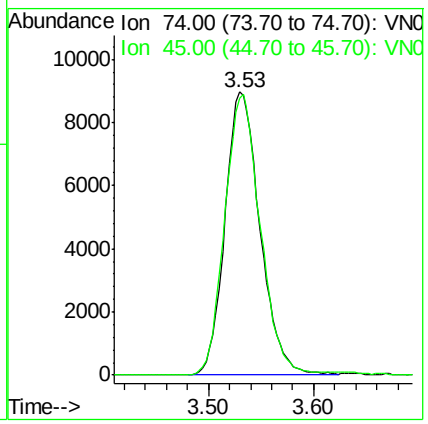
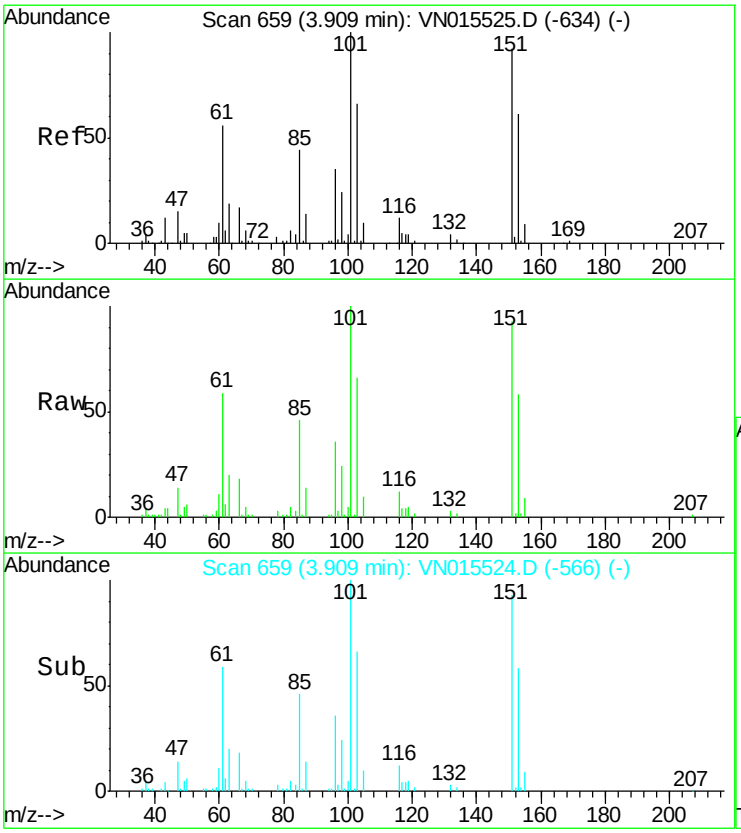


#9
Diethyl Ether
Concen: 17.06 ug/l
RT: 3.53 min Scan# 541
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 74 Resp: 20629

Ion	Ratio	Lower	Upper
74	100		
45	100.3	48.9	146.8

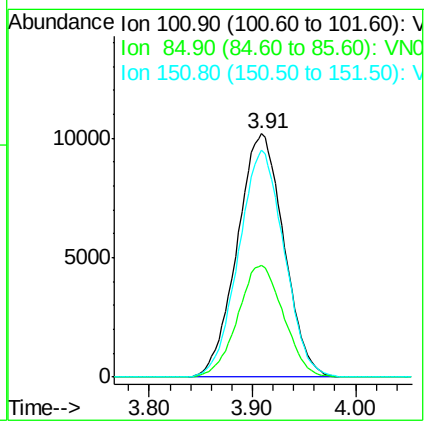




#10
1,1,2-Trichlorotrifluoroethane
Concen: 18.27 ug/l
RT: 3.91 min Scan# 659
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:101 Resp: 31971

Ion	Ratio	Lower	Upper
101	100		
85	44.8	34.5	51.7
151	91.1	72.9	109.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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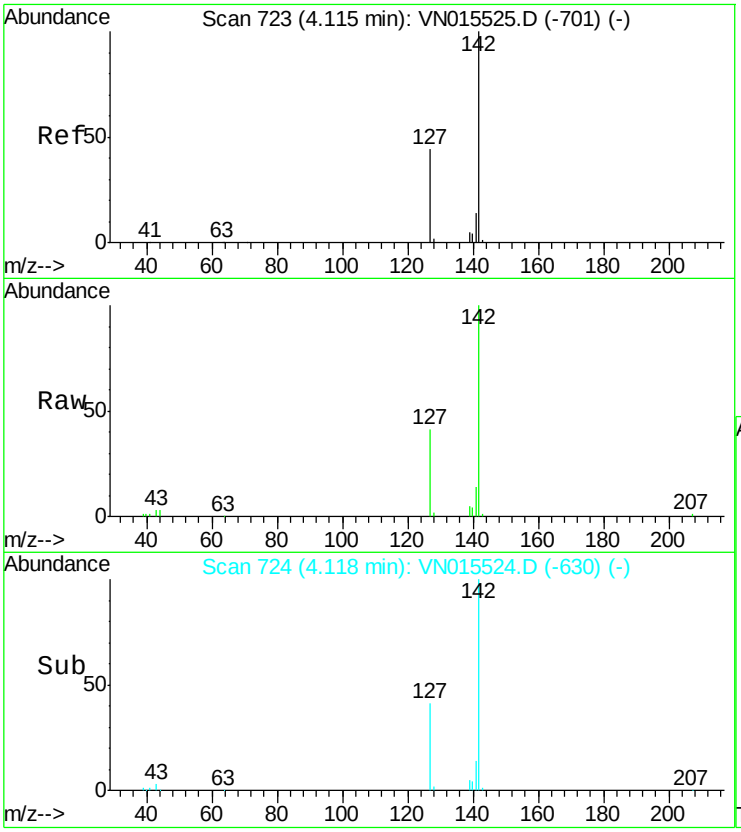
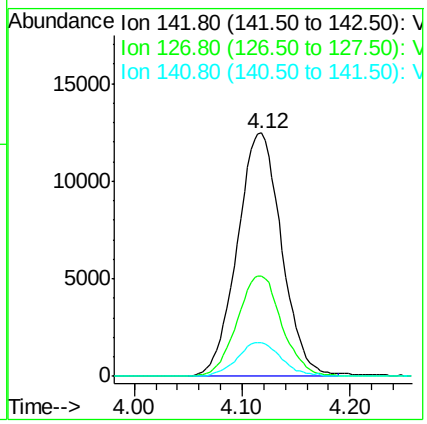
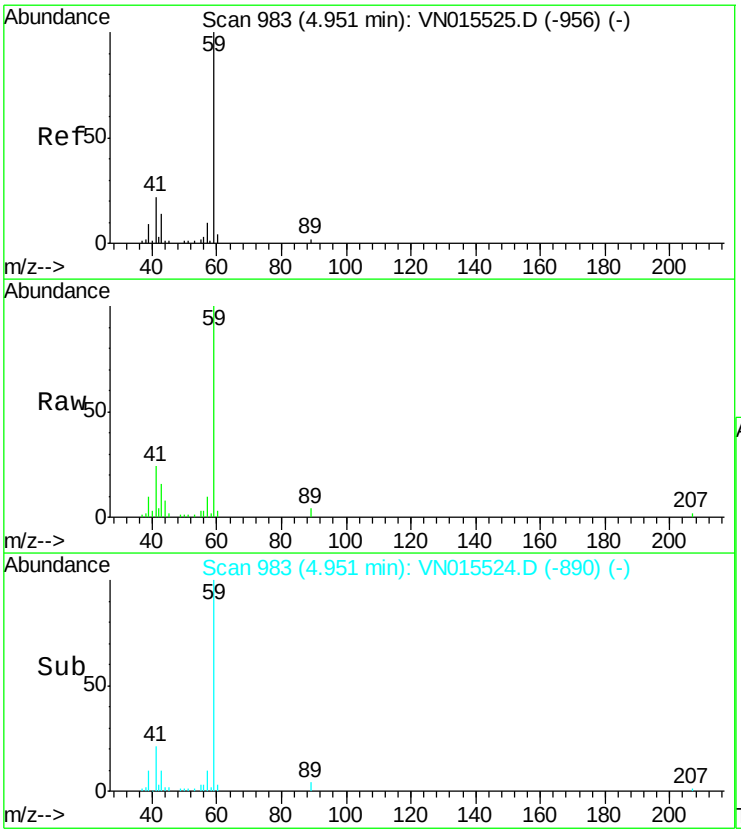


#11
Methyl Iodide
Concen: 19.87 ug/l
RT: 4.12 min Scan# 724
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:142 Resp: 35581

Ion	Ratio	Lower	Upper
142	100		
127	41.7	34.7	52.1
141	13.9	11.4	17.0

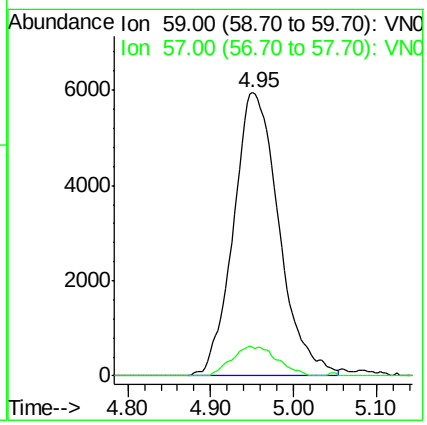




#12
Tert butyl alcohol
Concen: 106.75 ug/l
RT: 4.95 min Scan# 983
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 59 Resp: 22720

Ion	Ratio	Lower	Upper
59	100		
57	10.3	8.4	12.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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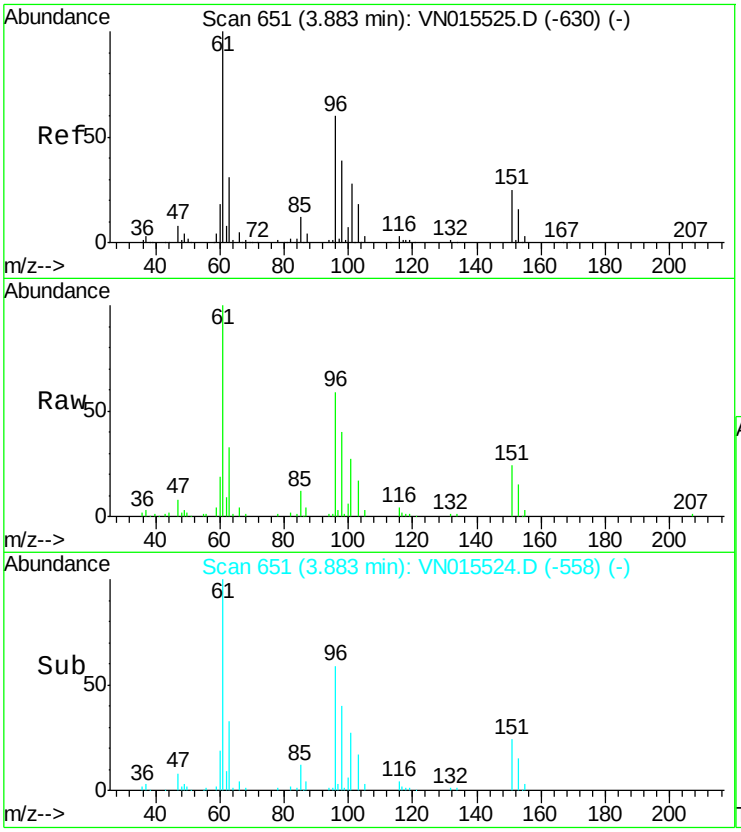
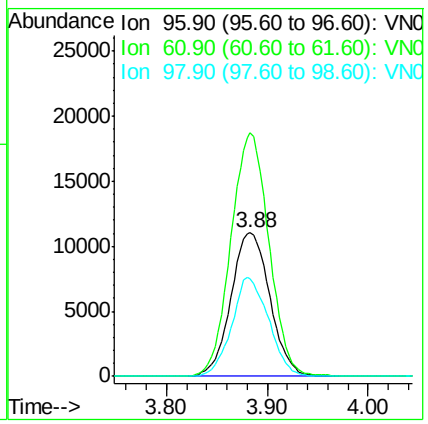
5/21/2014 11:01:45 AM

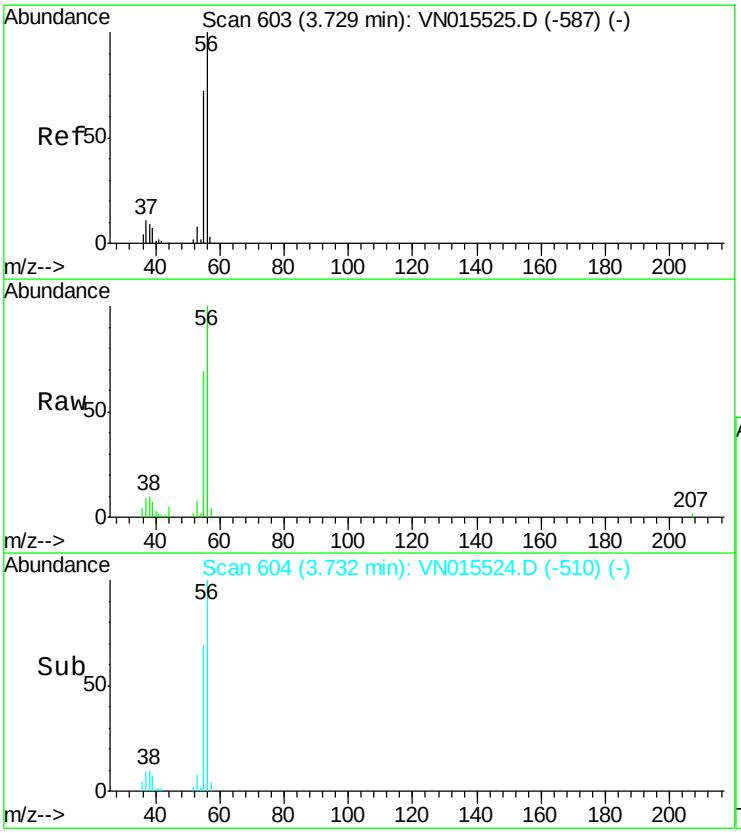


#13
1,1-Dichloroethene
Concen: 17.14 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 96 Resp: 29580

Ion	Ratio	Lower	Upper
96	100		
61	170.1	132.3	198.5
98	68.0	51.8	77.6

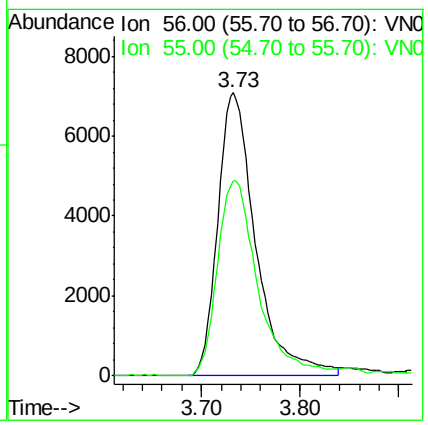




#14
Acrolein
Concen: 91.29 ug/l
RT: 3.73 min Scan# 604
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 56 Resp: 19125

Ion	Ratio	Lower	Upper
56	100		
55	73.2	57.9	86.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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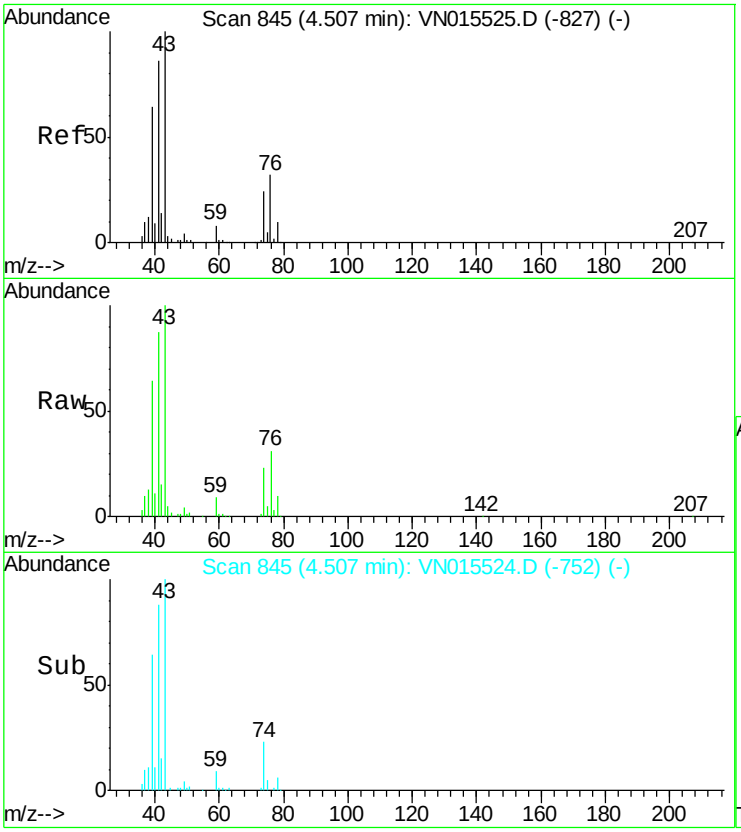
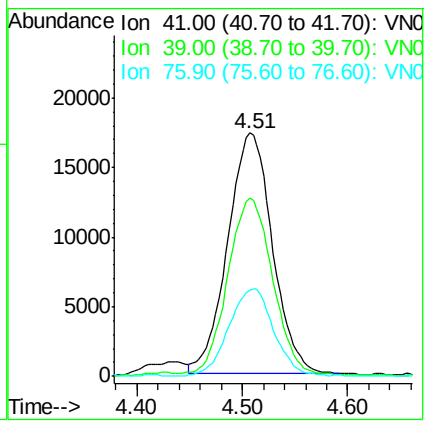
5/21/2014 11:01:45 AM

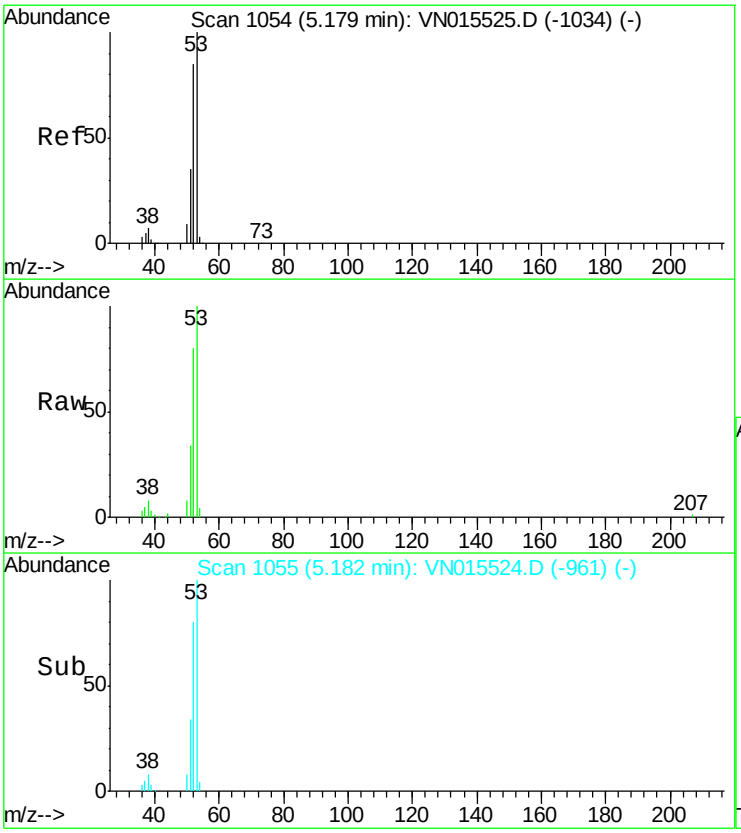


#15
Allyl chloride
Concen: 17.02 ug/l
RT: 4.51 min Scan# 845
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 41 Resp: 51025

Ion	Ratio	Lower	Upper
41	100		
39	73.6	57.4	86.2
76	36.6	28.5	42.7

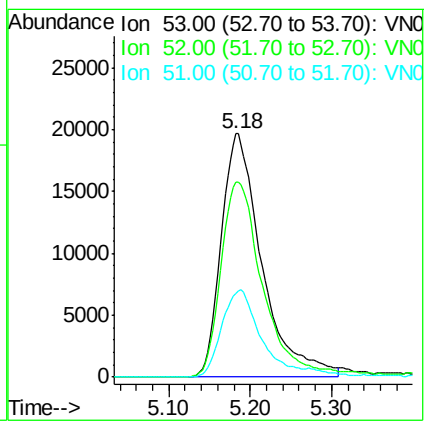


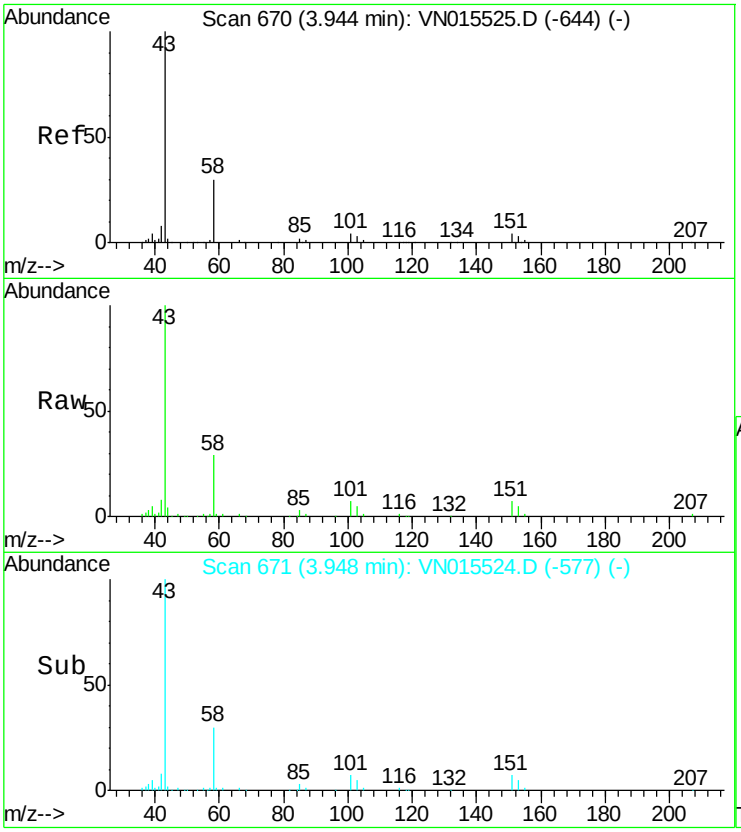


#16
Acrylonitrile
Concen: 82.16 ug/l
RT: 5.18 min Scan# 1055
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 53 Resp: 68805

Ion	Ratio	Lower	Upper
53	100		
52	81.9	65.7	98.5
51	34.2	29.1	43.7





#17
Acetone
Concen: 82.18 ug/l
RT: 3.95 min Scan# 671
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 70643

Ion	Ratio	Lower	Upper
43	100		
58	29.5	24.2	36.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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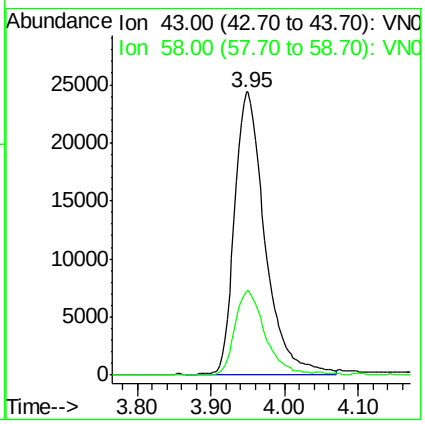
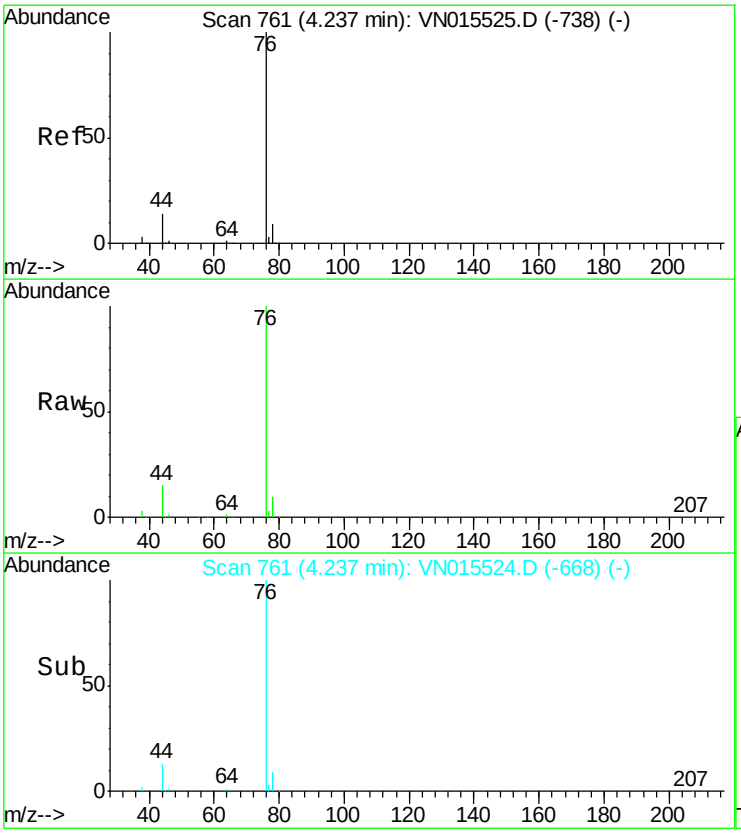
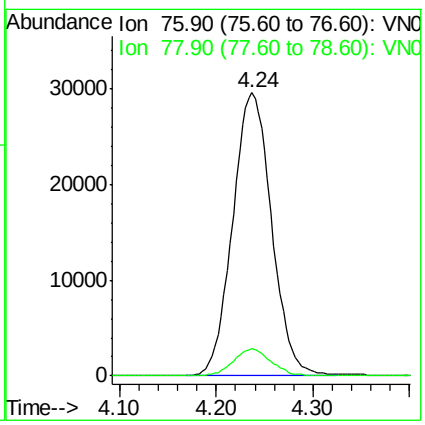




#18
Carbon Disulfide
Concen: 16.93 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 76 Resp: 82702

Ion	Ratio	Lower	Upper
76	100		
78	9.6	7.5	11.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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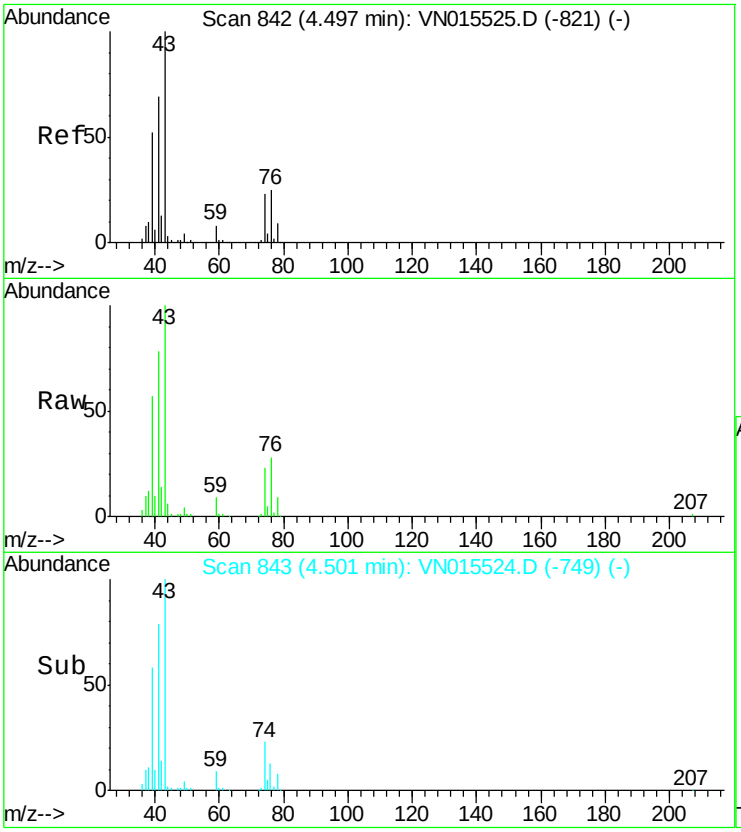
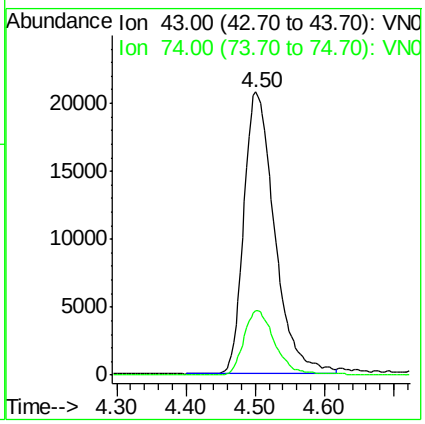
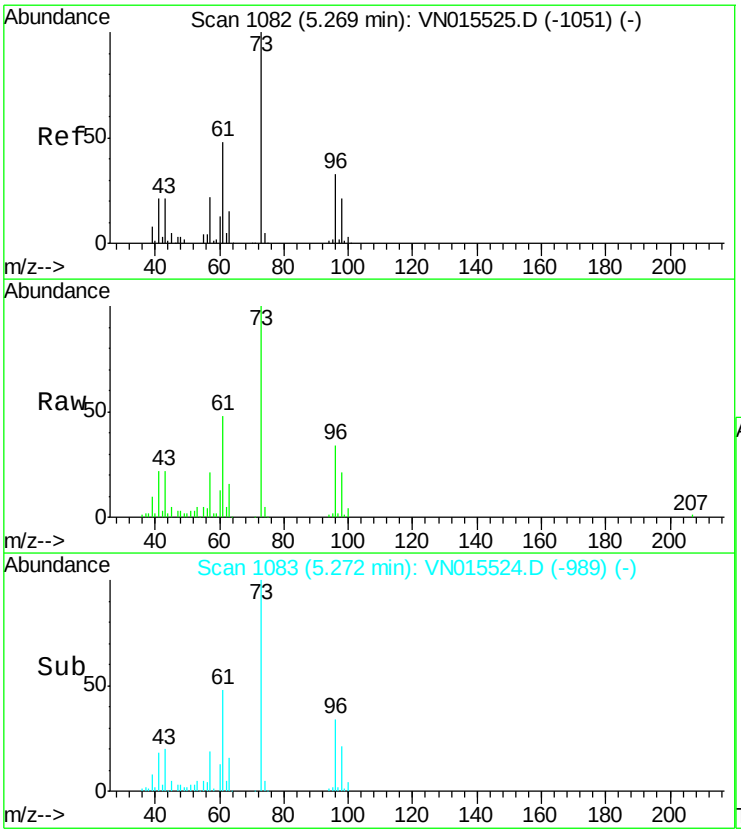


#19
Methyl Acetate
Concen: 28.36 ug/l
RT: 4.50 min Scan# 843
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 64221

Ion	Ratio	Lower	Upper
43	100		
74	23.3	18.5	27.7

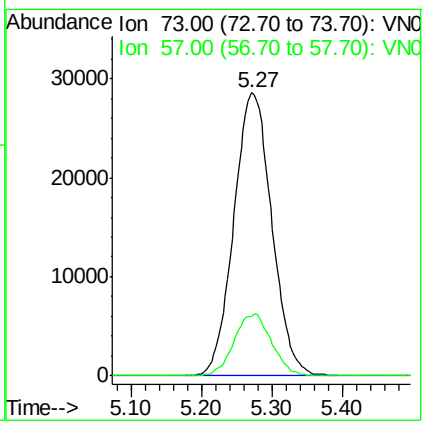




#20
Methyl tert-butyl Ether
Concen: 18.11 ug/l
RT: 5.27 min Scan# 1083
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 73 Resp: 107276

Ion	Ratio	Lower	Upper
73	100		
57	21.2	17.3	25.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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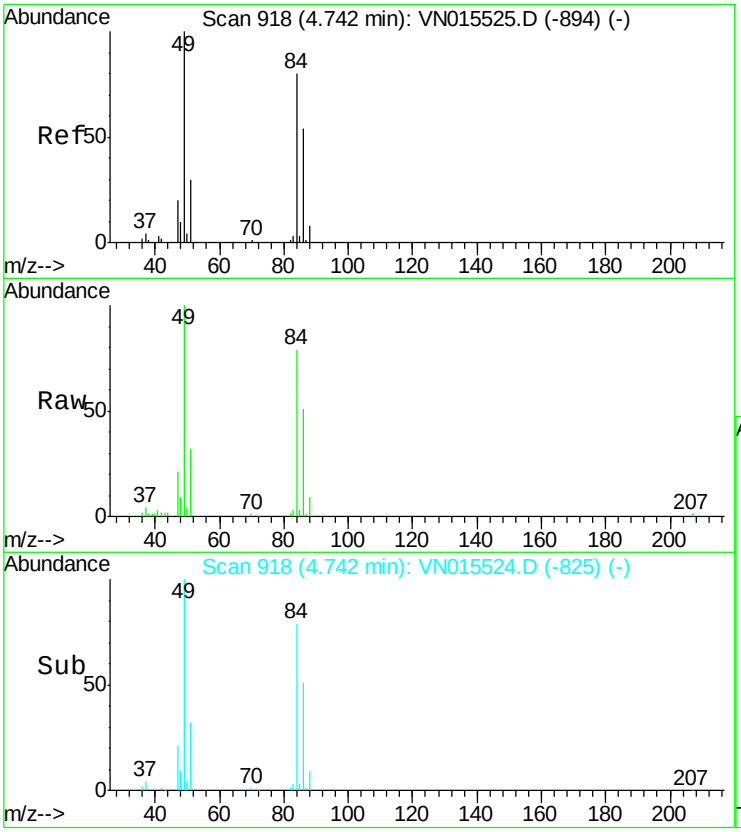
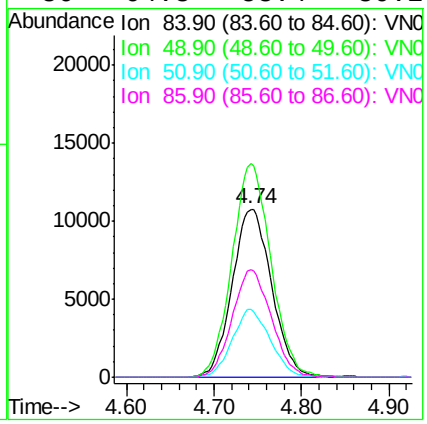
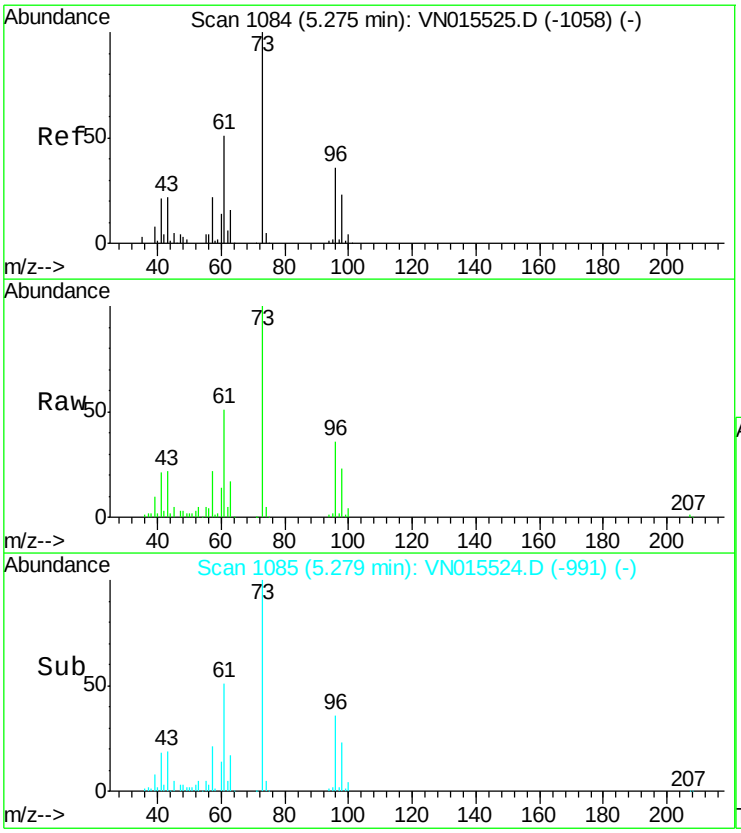


#21
Methylene Chloride
Concen: 16.51 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 84 Resp: 33756

Ion	Ratio	Lower	Upper
84	100		
49	127.0	99.8	149.6
51	40.2	30.2	45.2
86	64.3	53.4	80.2

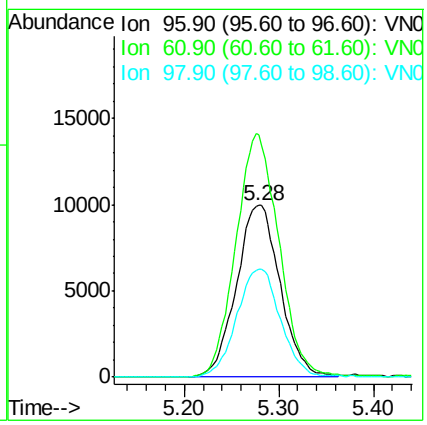




#22
trans-1,2-Dichloroethene
Concen: 17.45 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 96 Resp: 31879

Ion	Ratio	Lower	Upper
96	100		
61	141.1	113.3	169.9
98	62.8	50.4	75.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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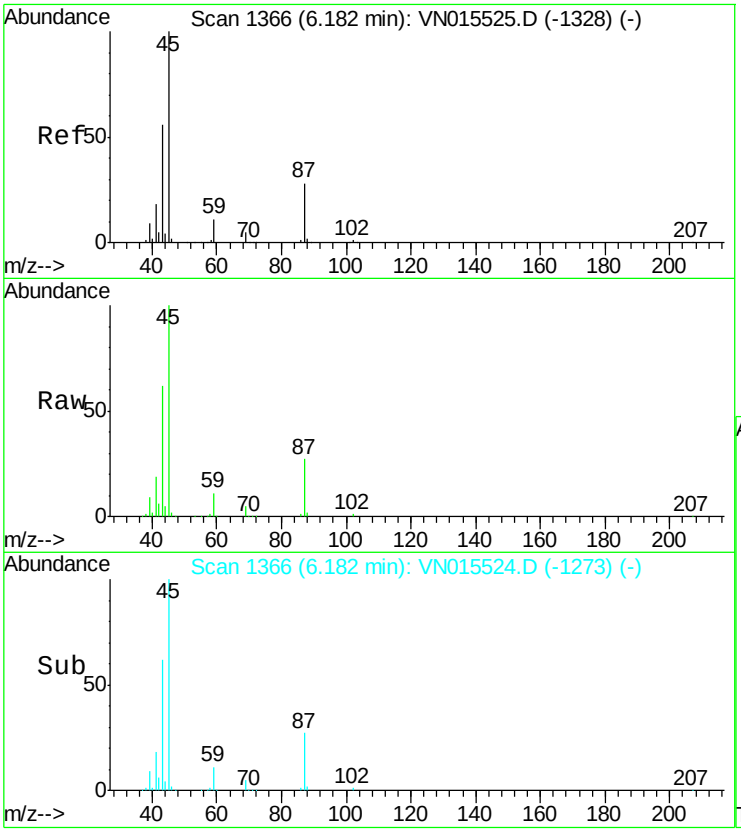
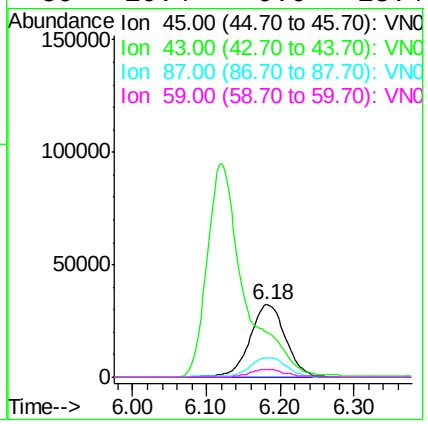
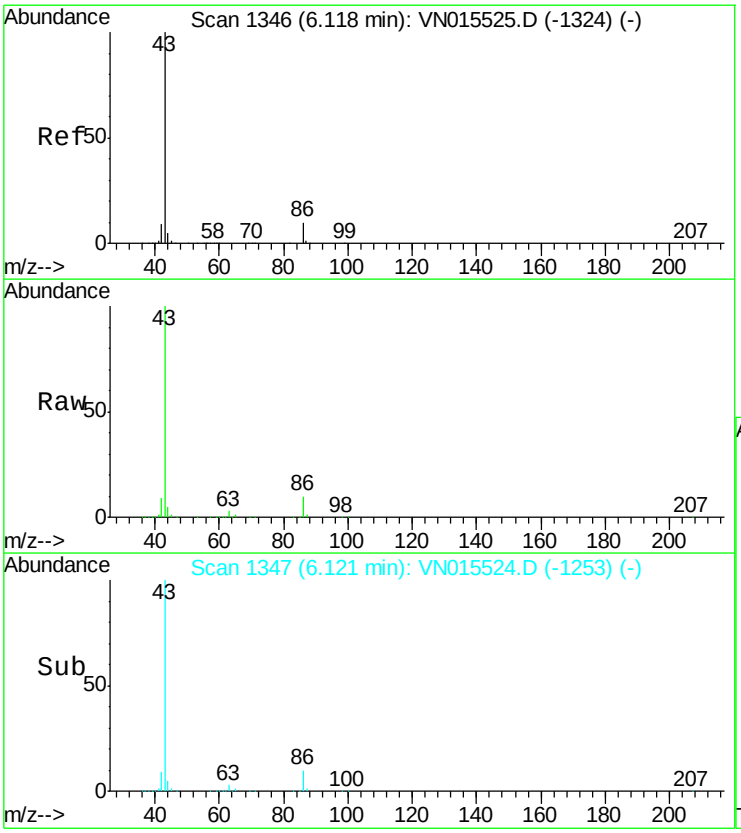


#23
Diisopropyl ether
Concen: 16.10 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 45 Resp: 109215

Ion	Ratio	Lower	Upper
45	100		
43	59.3	44.6	67.0
87	26.9	22.3	33.5
59	10.4	9.0	13.4

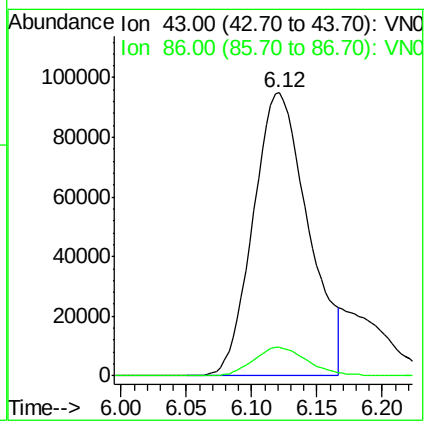




#24
Vinyl Acetate
Concen: 57.98 ug/l m
RT: 6.12 min Scan# 1347
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 277790

Ion	Ratio	Lower	Upper
43	100		
86	10.0	7.9	11.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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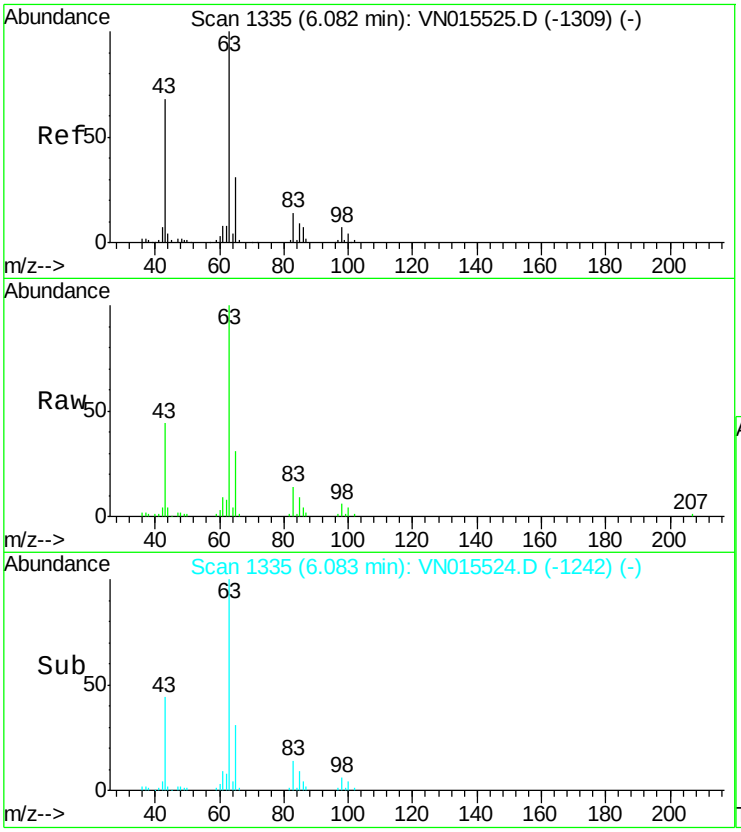
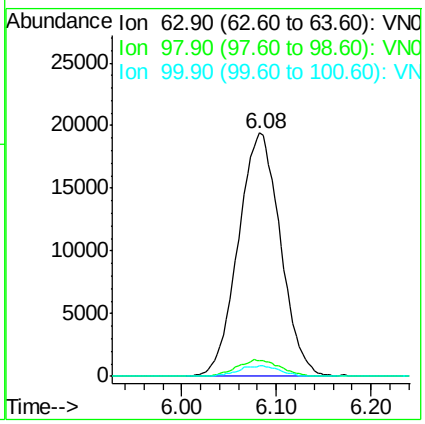
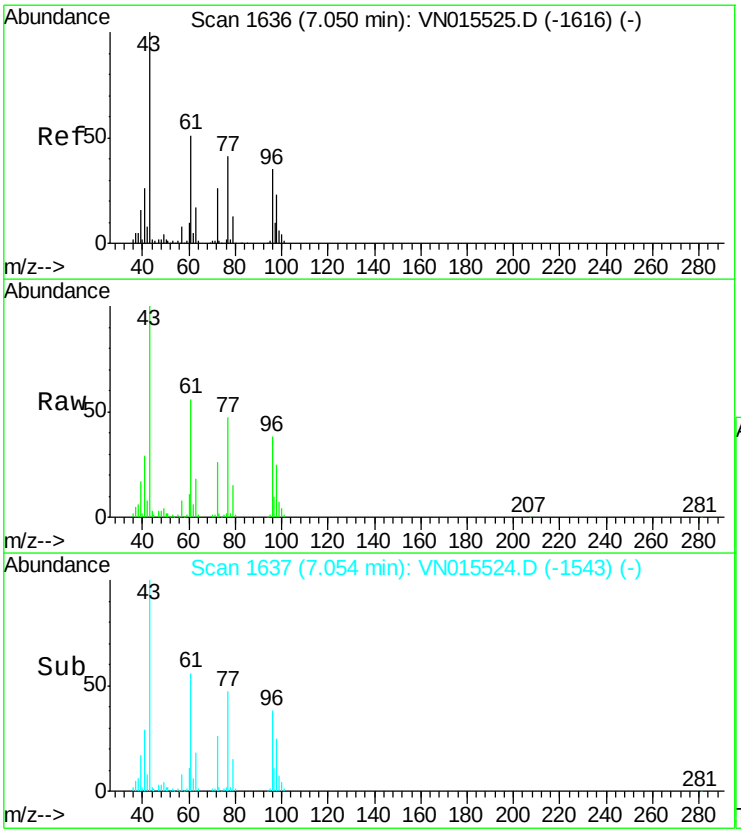


#25
1,1-Dichloroethane
Concen: 16.46 ug/l
RT: 6.08 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 63 Resp: 60118

Ion	Ratio	Lower	Upper
63	100		
98	6.3	3.3	9.9
100	4.3	2.1	6.3

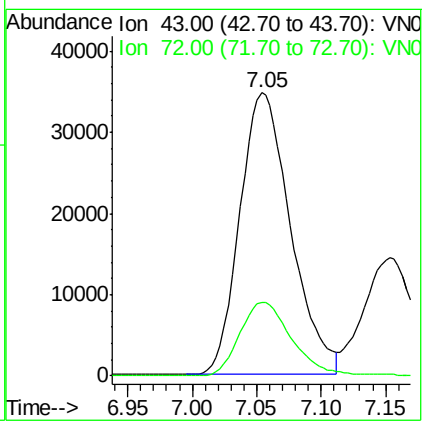




#26
2-Butanone
Concen: 84.13 ug/l
RT: 7.05 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 95398

Ion	Ratio	Lower	Upper
43	100		
72	26.2	20.7	31.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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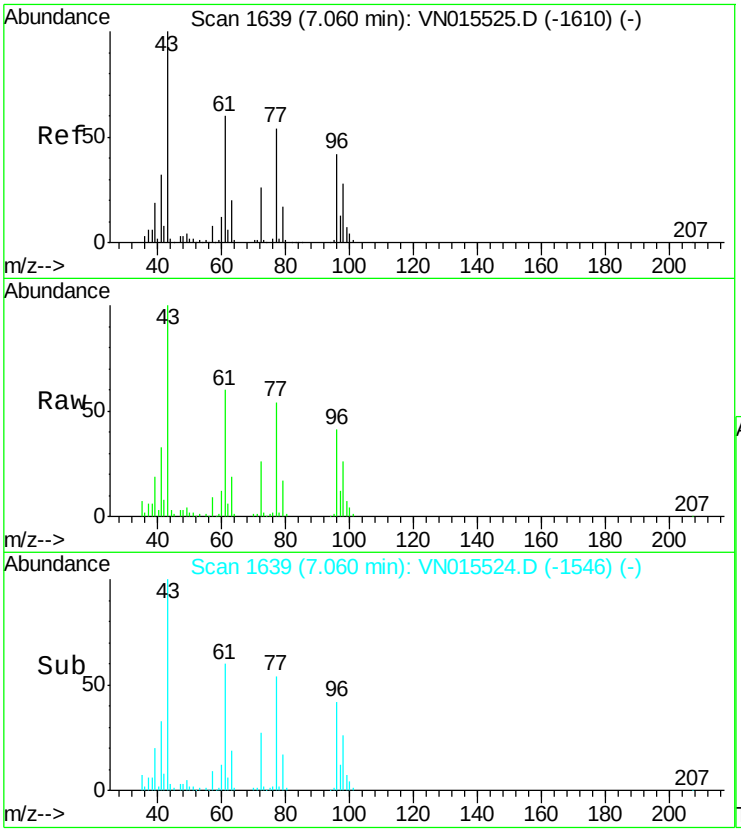
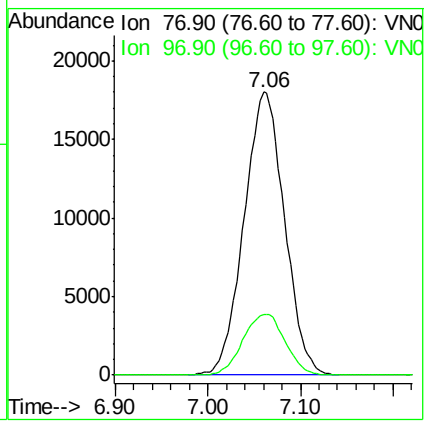
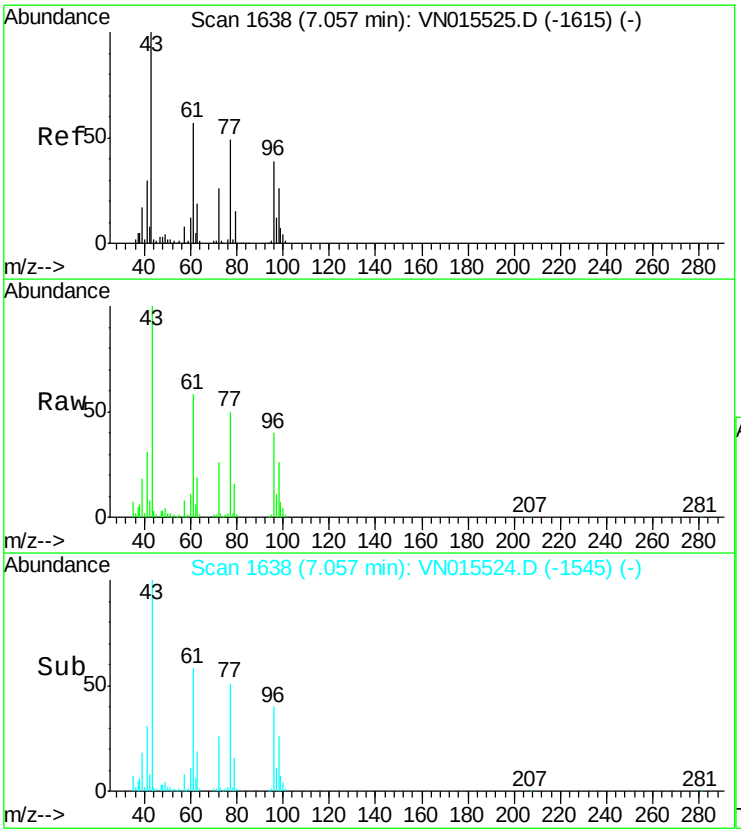


#27
2,2-Dichloropropane
Concen: 19.62 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 77 Resp: 54540

Ion	Ratio	Lower	Upper
77	100		
97	22.4	11.6	34.7

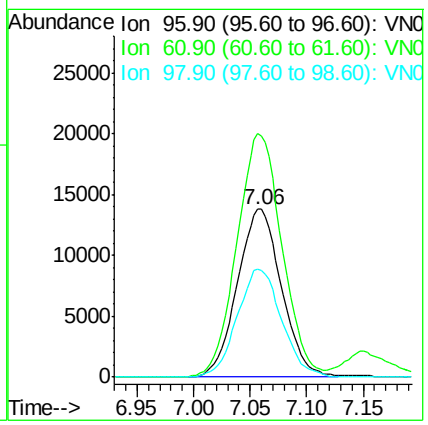




#28
cis-1,2-Dichloroethene
Concen: 17.41 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 96 Resp: 37429

Ion	Ratio	Lower	Upper
96	100		
61	148.0	0.0	292.0
98	64.7	0.0	129.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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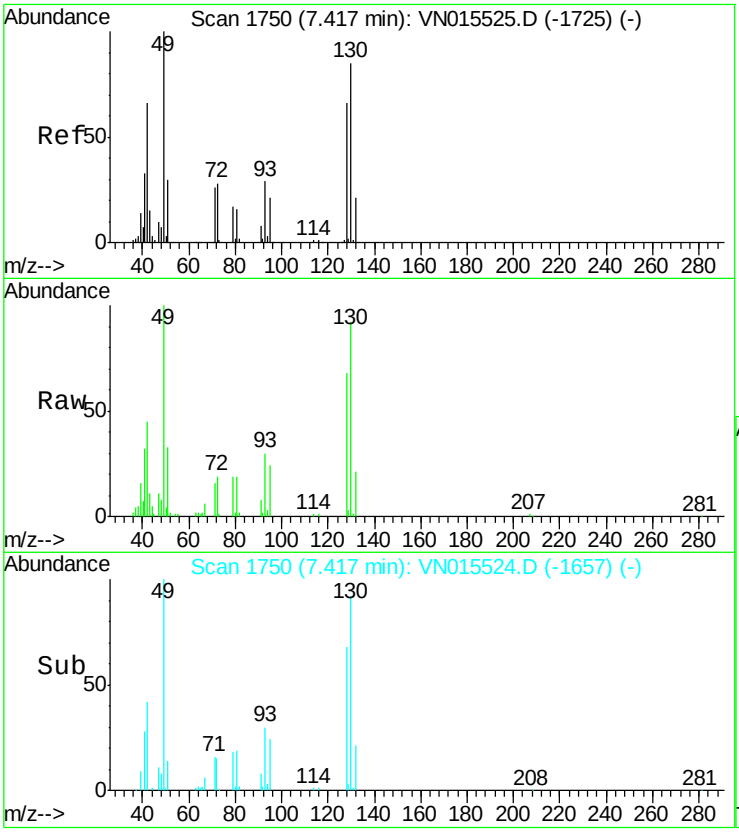
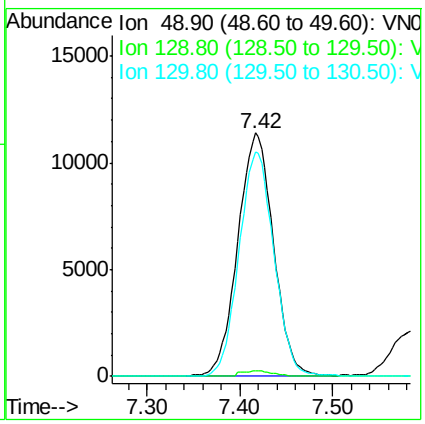
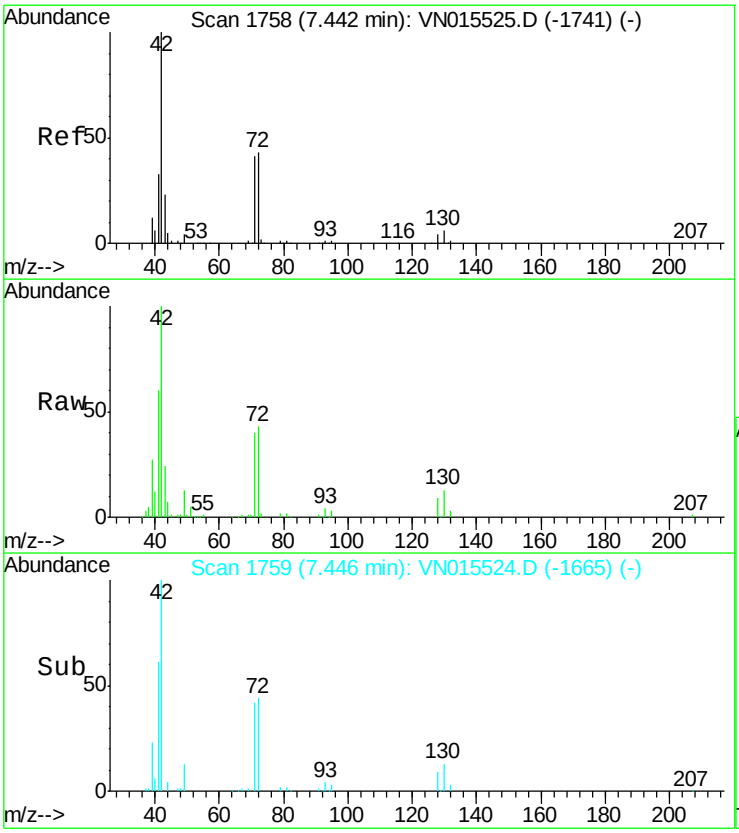


#29
Bromochloromethane
Concen: 16.83 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 49 Resp: 30411

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.2
130	90.3	68.6	102.8

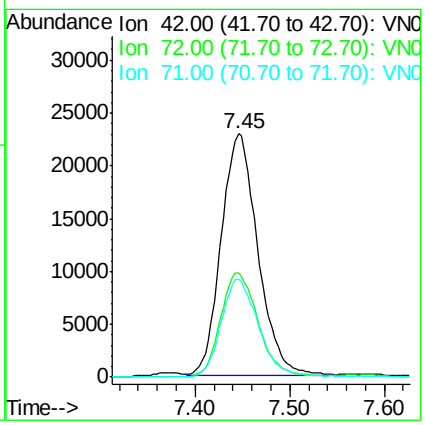




#30
Tetrahydrofuran
Concen: 83.93 ug/l
RT: 7.45 min Scan# 1759
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 42 Resp: 61488

Ion	Ratio	Lower	Upper
42	100		
72	44.6	34.2	51.2
71	41.2	32.5	48.7



Instrument :
MSVOA_N
LabSampleId :
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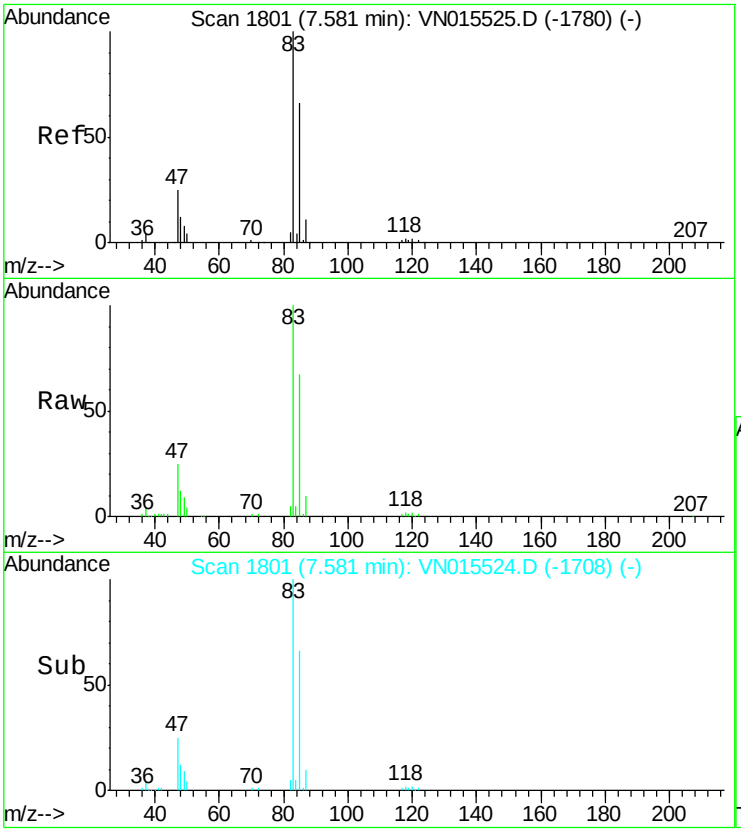
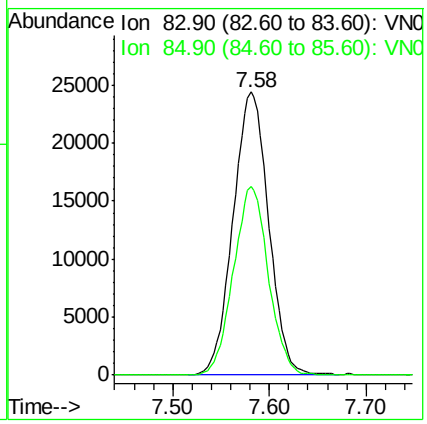
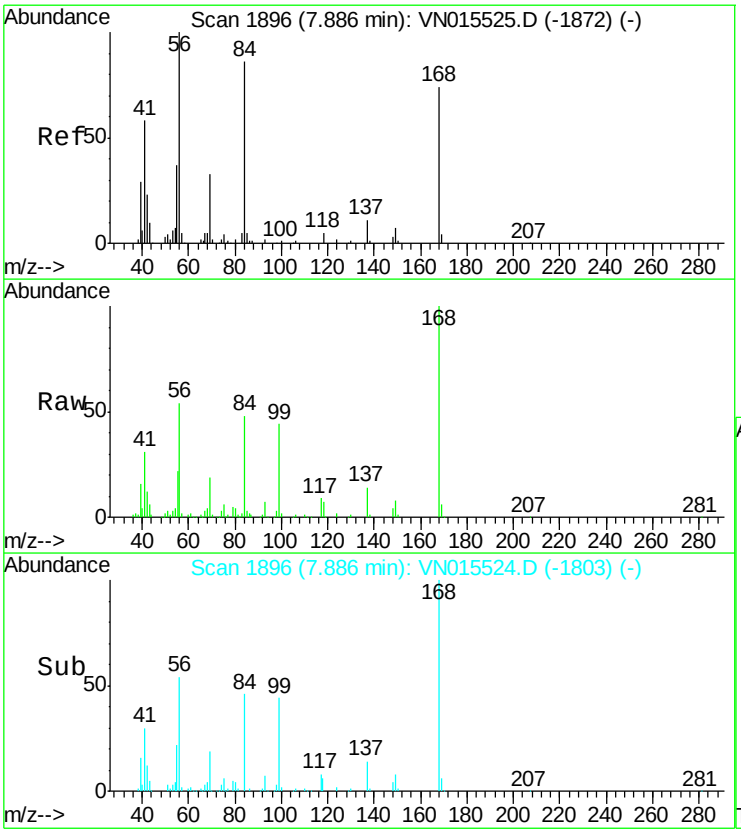


#31
Chloroform
Concen: 17.25 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 83 Resp: 62324

Ion	Ratio	Lower	Upper
83	100		
85	66.8	52.6	78.8

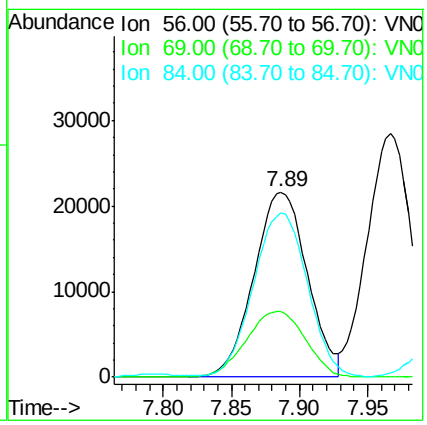


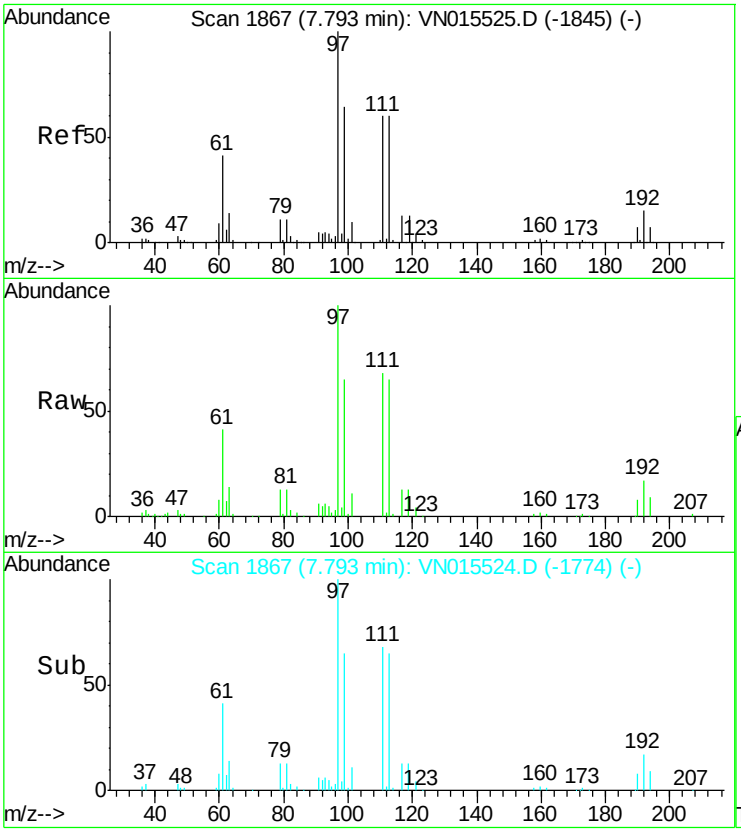


#32
Cyclohexane
Concen: 14.27 ug/l
RT: 7.89 min Scan# 1896
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 56 Resp: 58929

Ion	Ratio	Lower	Upper
56	100		
69	35.6	26.6	39.8
84	88.1	69.0	103.4





#33
1,1,1-Trichloroethane
Concen: 18.35 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 97 Resp: 57898

Ion	Ratio	Lower	Upper
97	100		
99	64.0	51.2	76.8
61	42.3	33.9	50.9

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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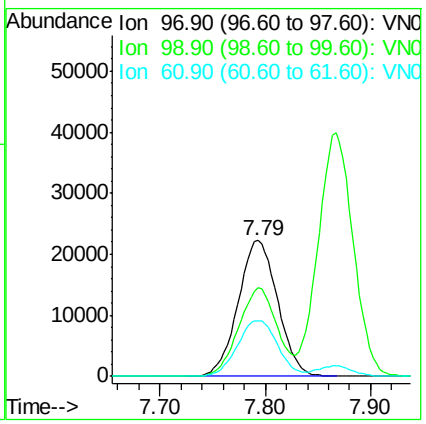
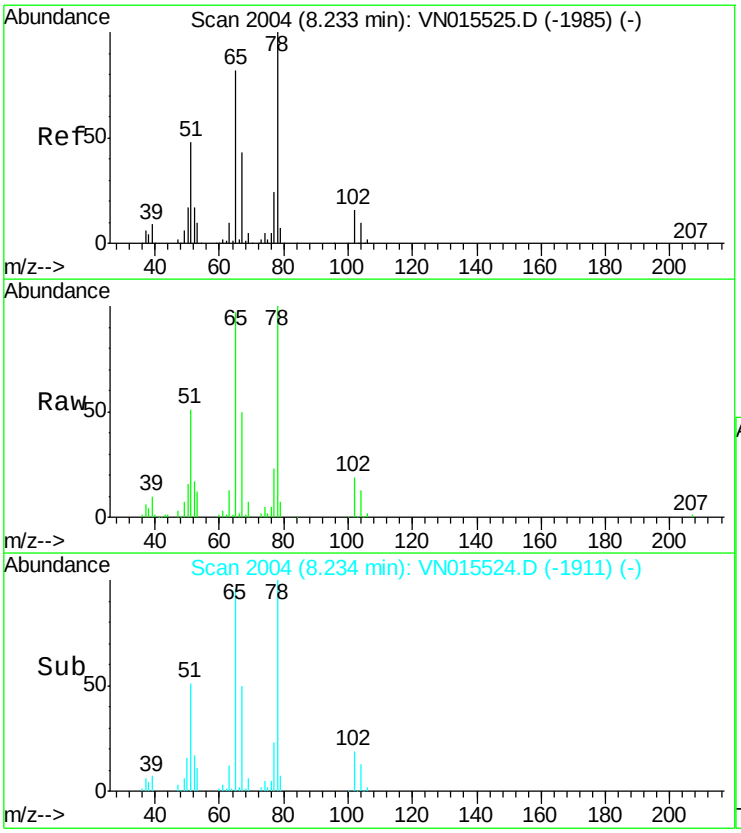
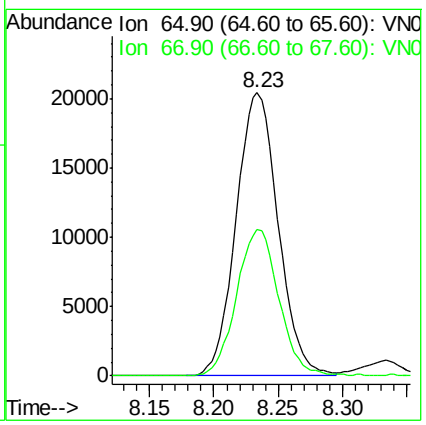




#34
1,2-Dichloroethane-d4
Concen: 19.00 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 65 Resp: 46509

Ion	Ratio	Lower	Upper
65	100		
67	51.9	0.0	103.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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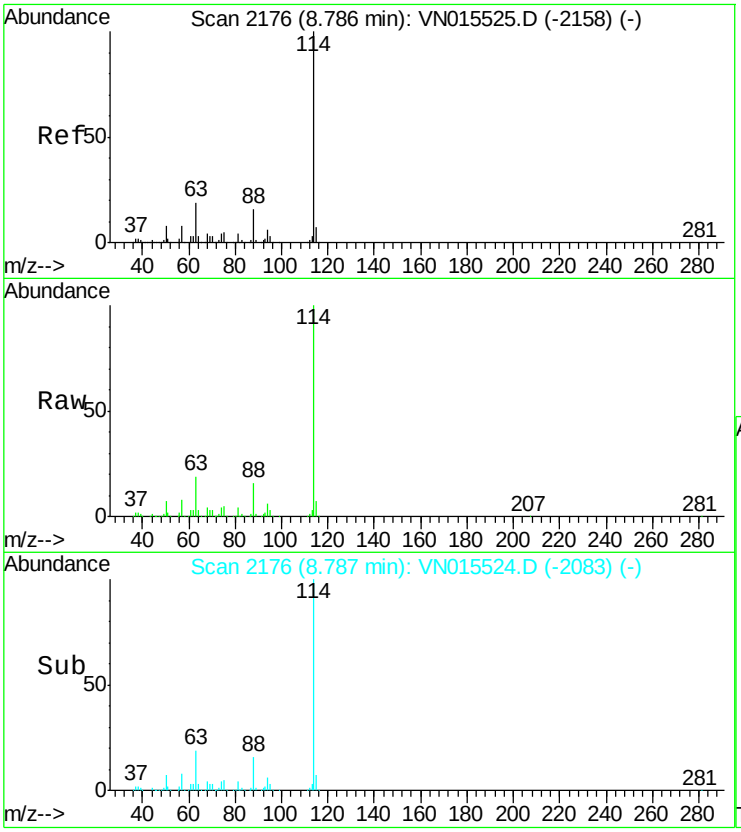
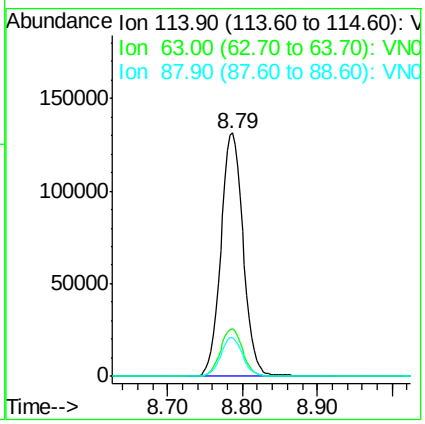
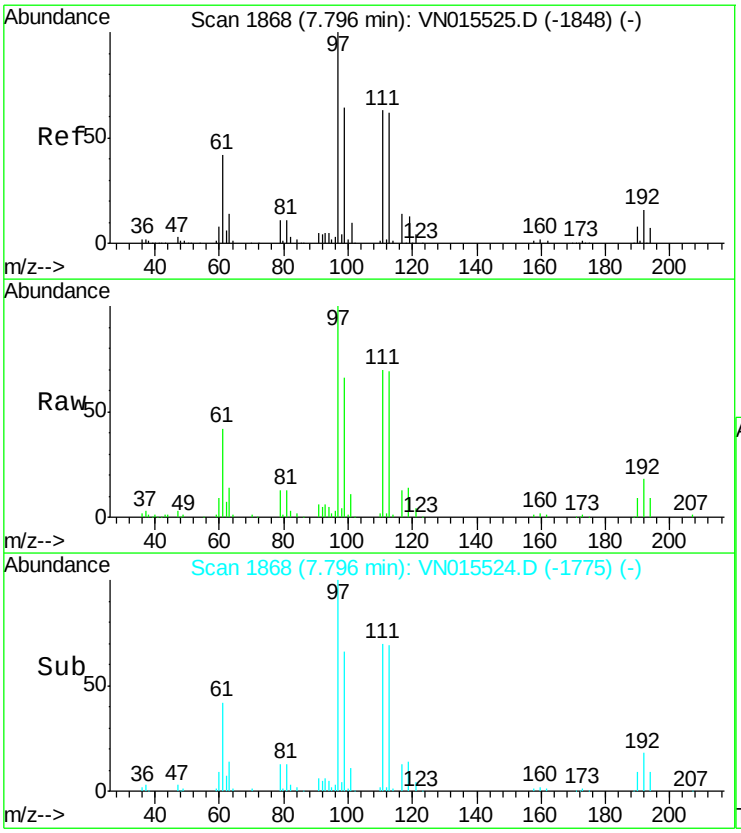


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:114 Resp: 270396

Ion	Ratio	Lower	Upper
114	100		
63	19.4	0.0	38.6
88	15.8	0.0	32.2

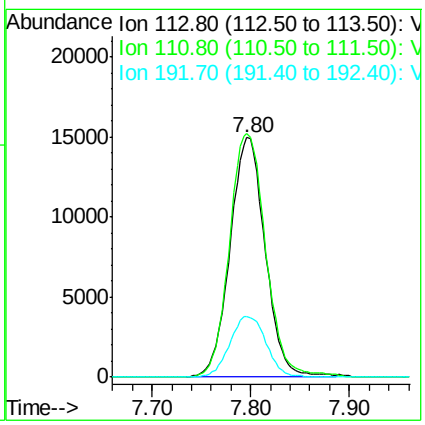




#36
Dibromofluoromethane
Concen: 21.08 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:113 Resp: 37164

Ion	Ratio	Lower	Upper
113	100		
111	104.9	81.5	122.3
192	26.0	20.0	30.0



Instrument :
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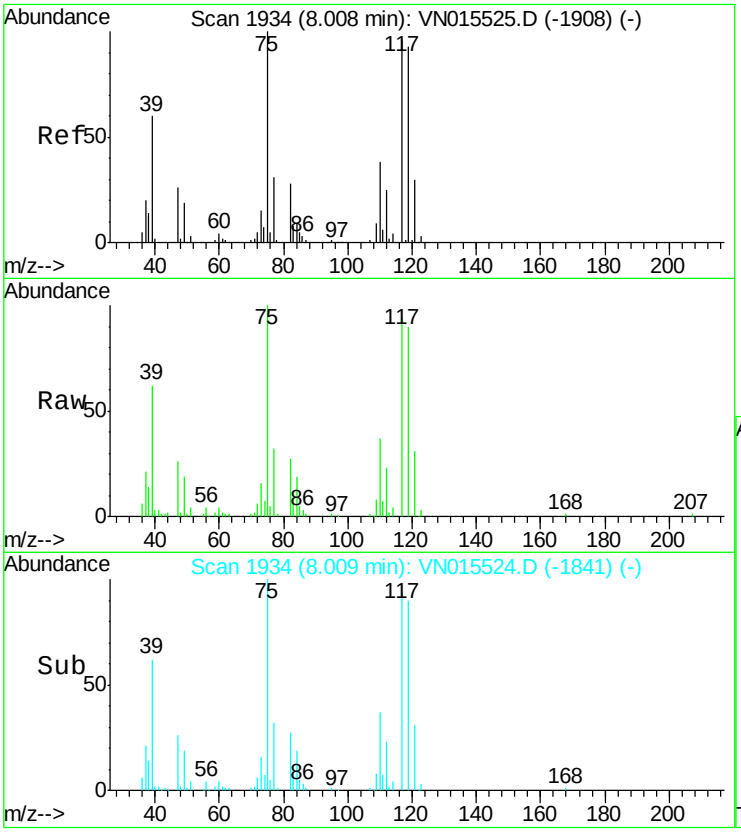
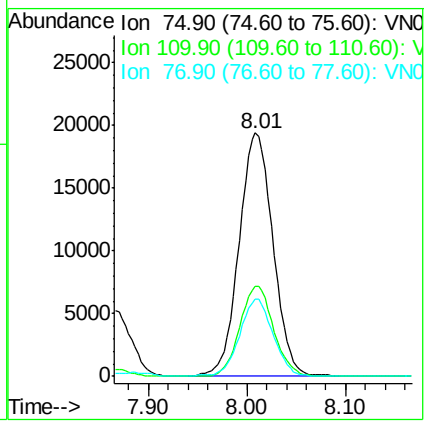
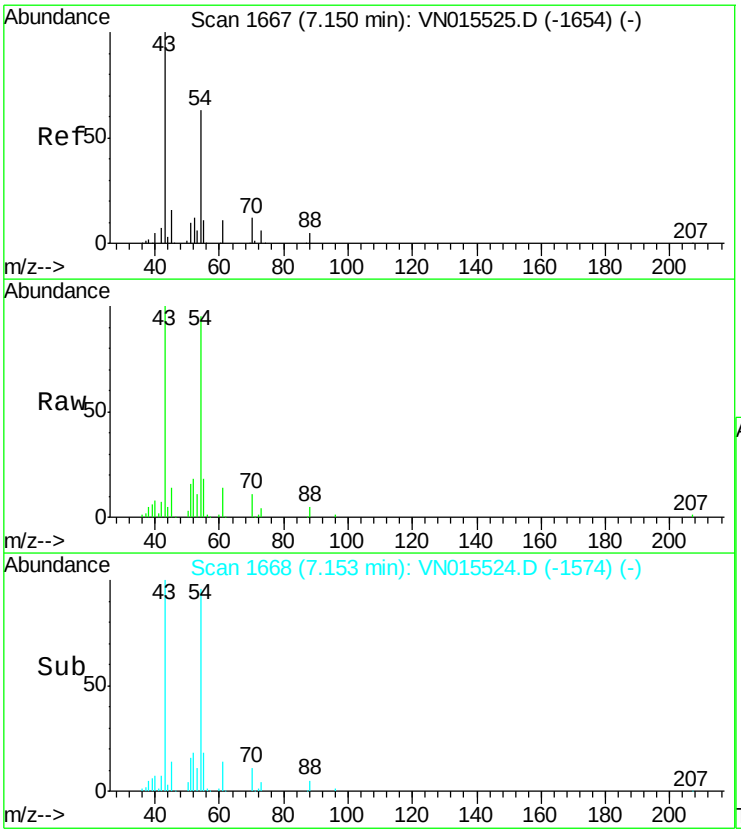


#37
1,1-Dichloropropene
Concen: 17.99 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 75 Resp: 46226

Ion	Ratio	Lower	Upper
75	100		
110	36.7	18.6	55.6
77	31.5	24.4	36.6

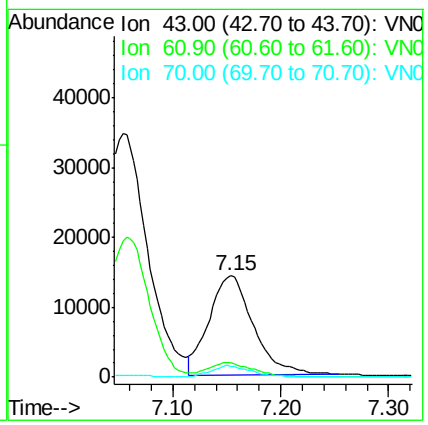




#38
Ethyl Acetate
Concen: 20.86 ug/l
RT: 7.15 min Scan# 1668
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 40361

Ion	Ratio	Lower	Upper
43	100		
61	13.6	10.8	16.2
70	10.7	8.5	12.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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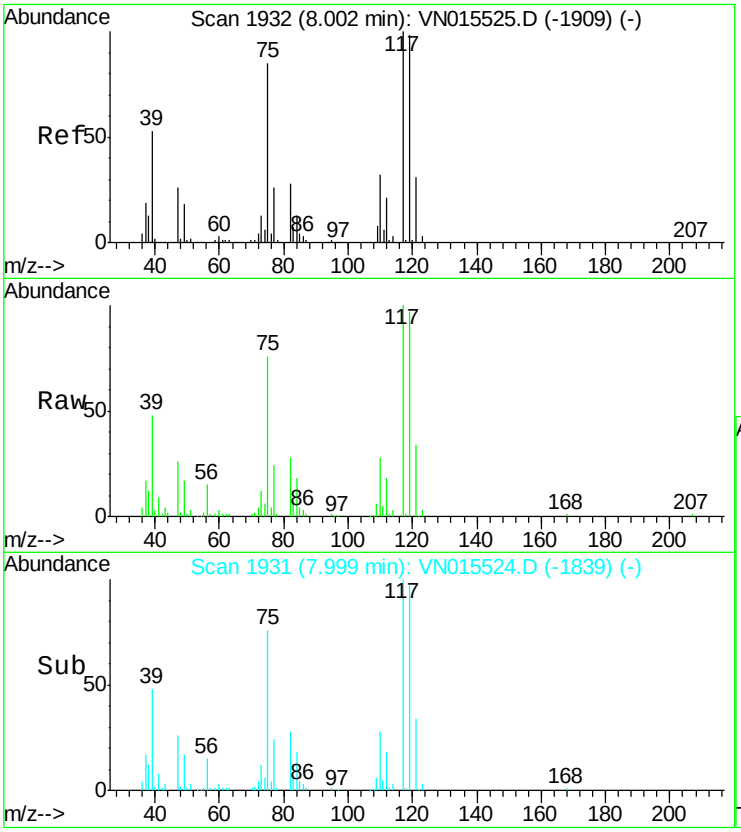
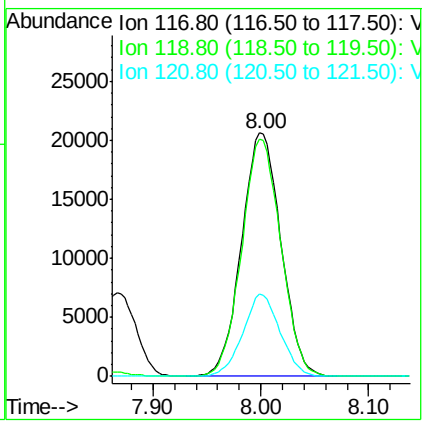
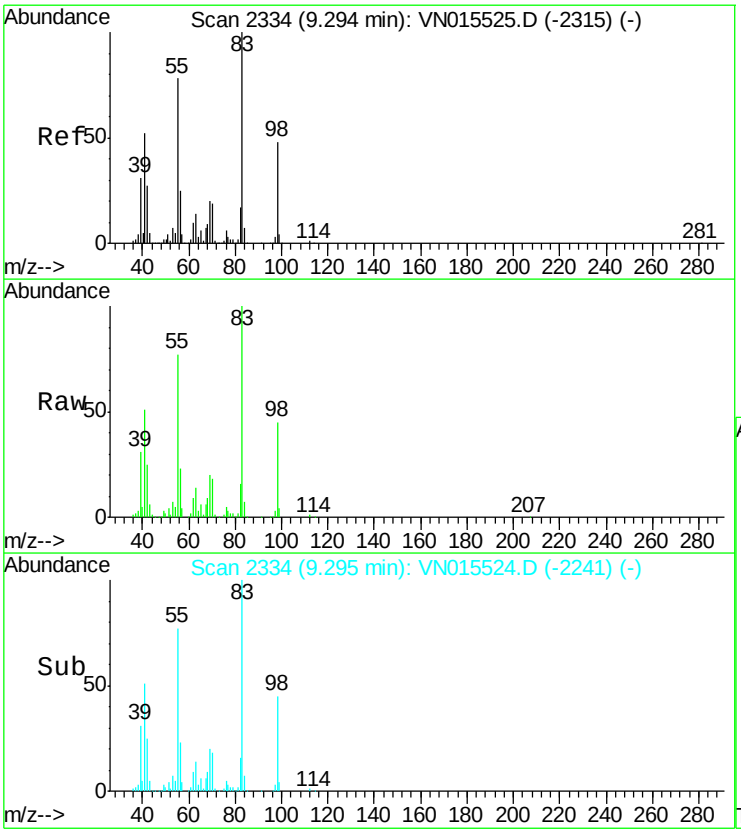


#39
Carbon Tetrachloride
Concen: 20.23 ug/l
RT: 8.00 min Scan# 1931
Delta R.T. -0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:117 Resp: 52359

Ion	Ratio	Lower	Upper
117	100		
119	97.5	78.0	117.0
121	33.8	24.5	36.7

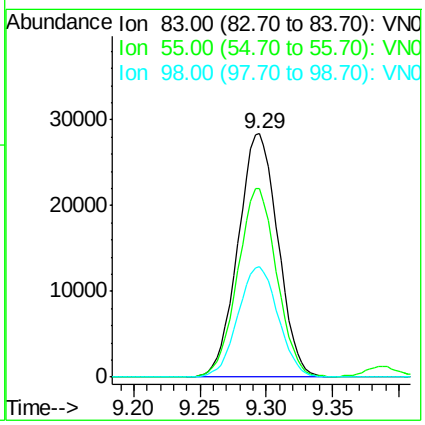




#40
Methylcyclohexane
Concen: 19.55 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 83 Resp: 59454

Ion	Ratio	Lower	Upper
83	100		
55	77.3	62.5	93.7
98	45.3	38.2	57.2



Instrument :
MSVOA_N
LabSampleId :
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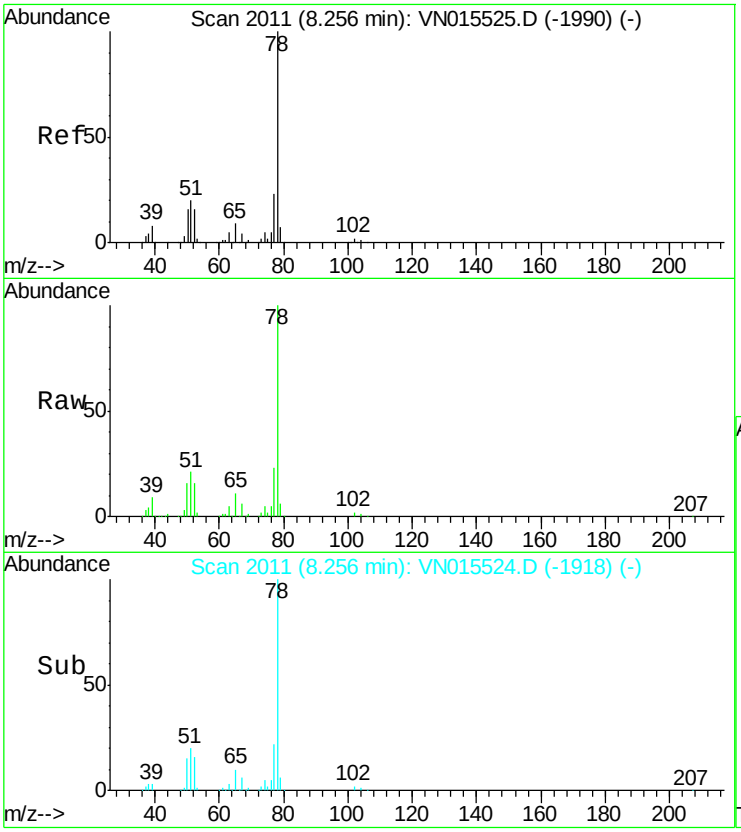
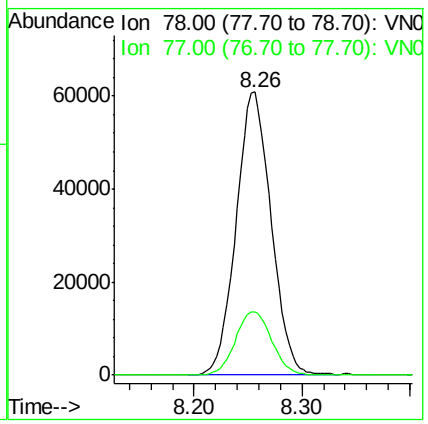
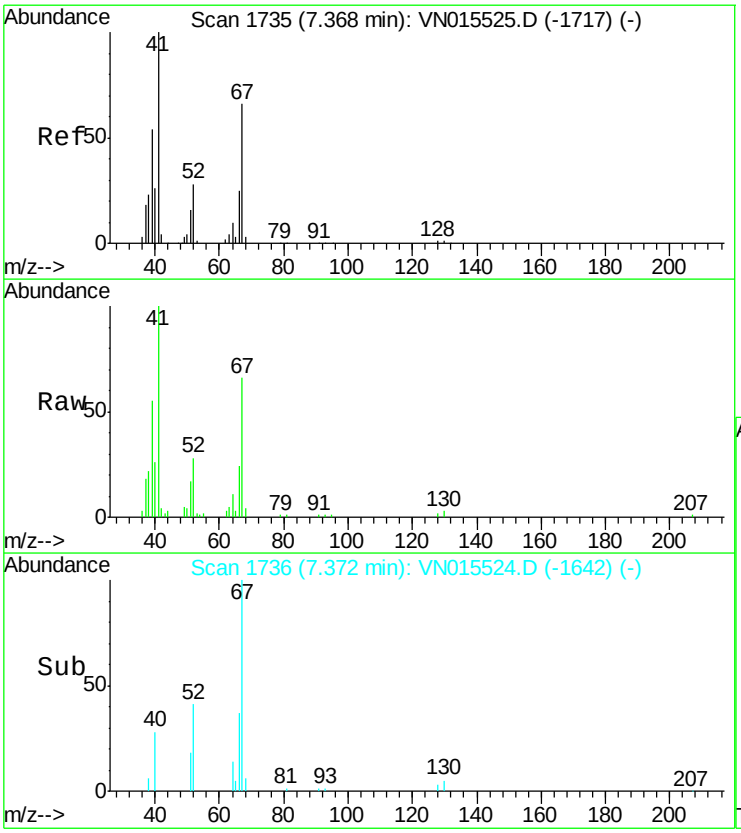


#41
Benzene
Concen: 18.42 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 78 Resp: 137761

Ion	Ratio	Lower	Upper
78	100		
77	22.5	18.5	27.7

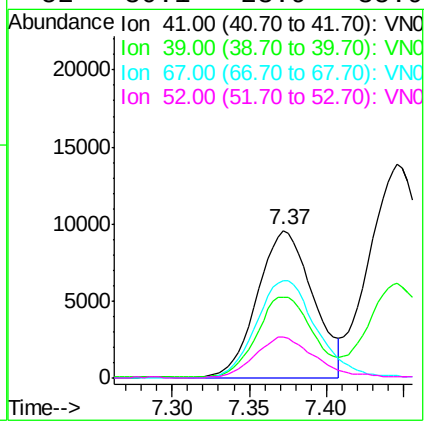




#42
Methacrylonitrile
Concen: 17.74 ug/l
RT: 7.37 min Scan# 1736
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 41 Resp: 24047

Ion	Ratio	Lower	Upper
41	100		
39	54.5	45.0	67.4
67	71.6	54.9	82.3
52	30.1	23.9	35.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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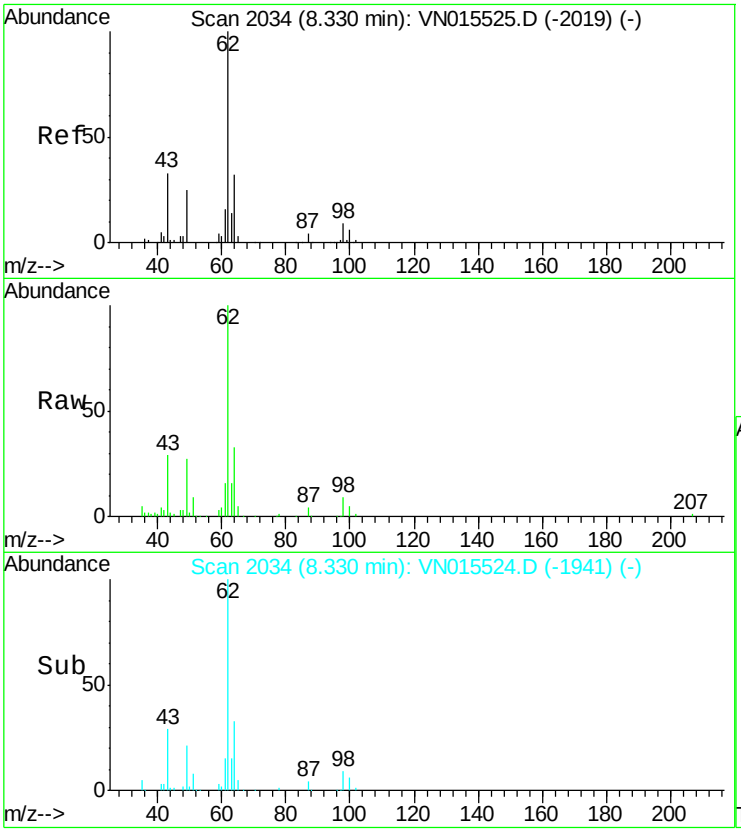
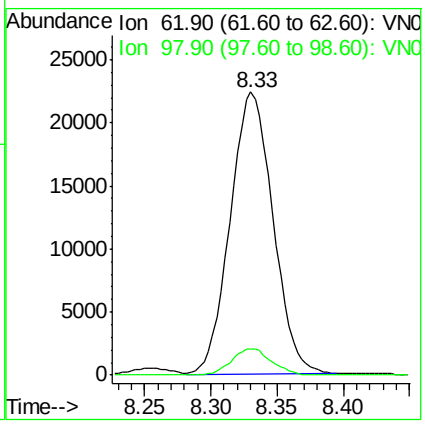
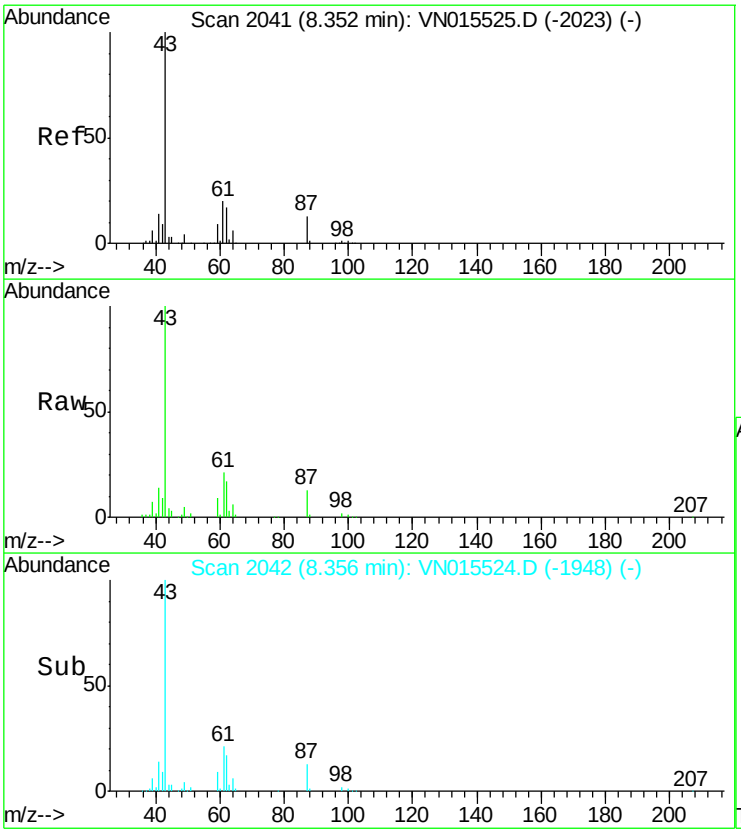


#43
1,2-Dichloroethane
Concen: 18.30 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 62 Resp: 50106

Ion	Ratio	Lower	Upper
62	100		
98	8.9	0.0	18.2

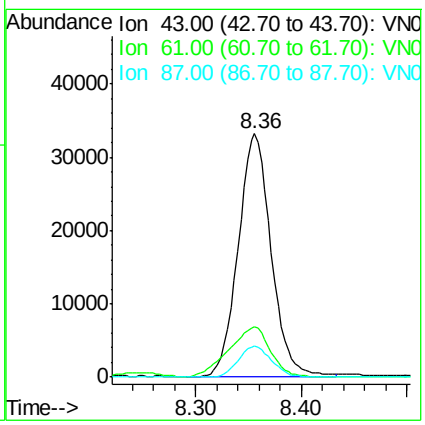




#44
Isopropyl Acetate
Concen: 22.48 ug/l
RT: 8.36 min Scan# 2042
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 71524

Ion	Ratio	Lower	Upper
43	100		
61	26.5	20.4	30.6
87	13.0	10.4	15.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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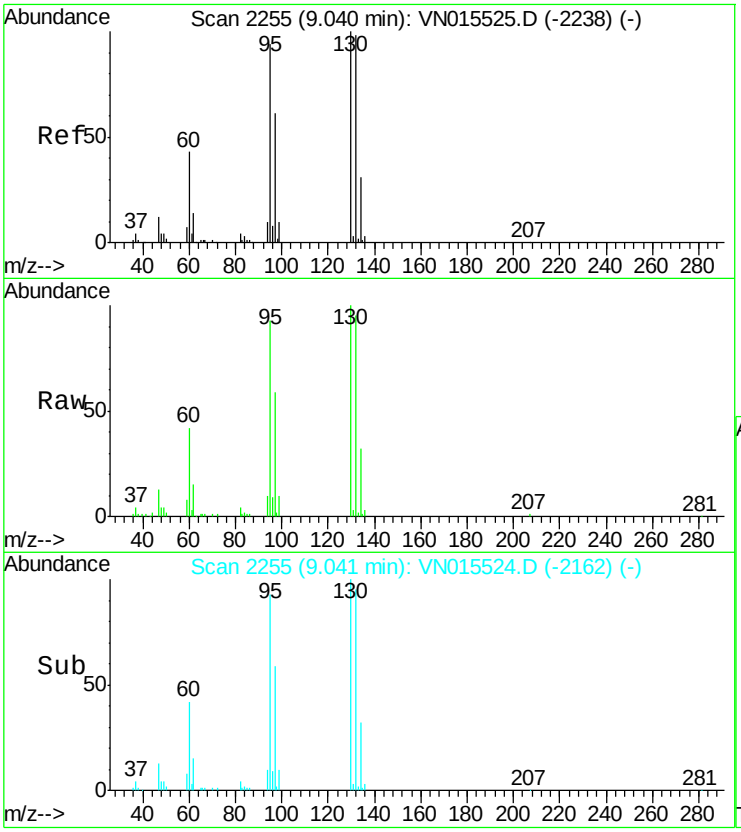
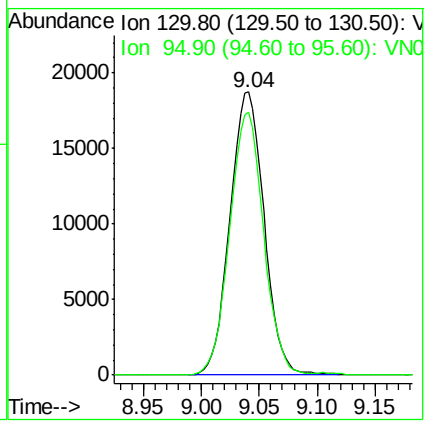
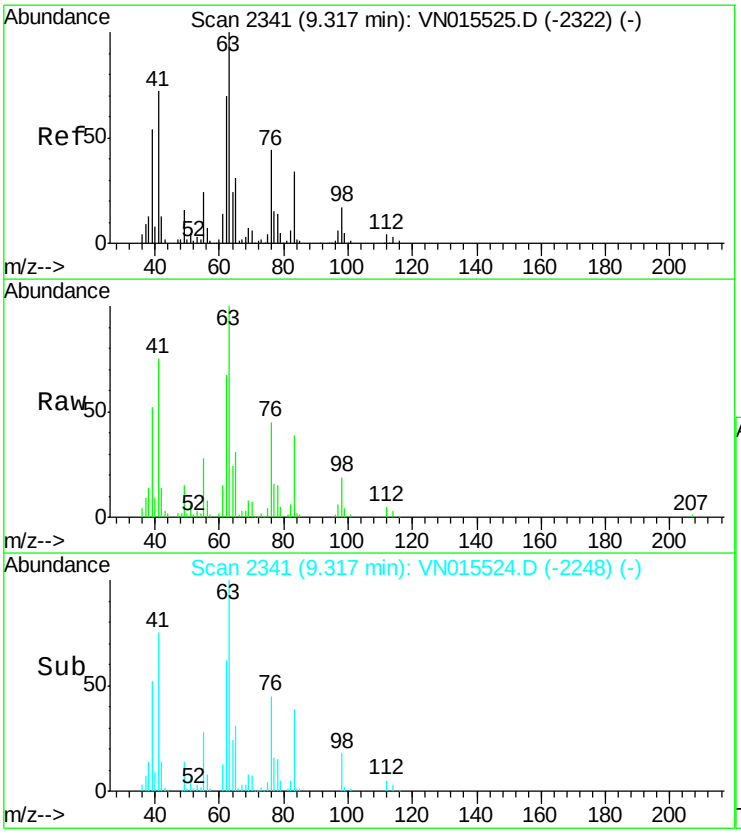


#45
Trichloroethene
Concen: 19.16 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:130 Resp: 38193

Ion	Ratio	Lower	Upper
130	100		
95	92.9	0.0	187.0

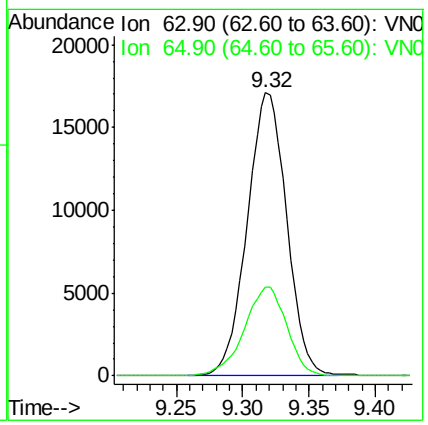


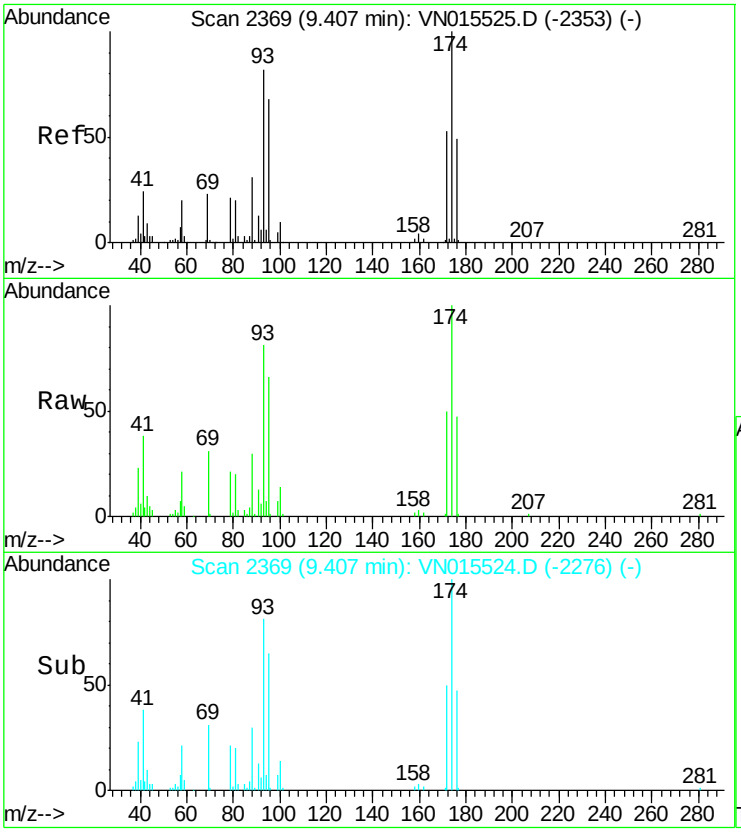


#46
1,2-Dichloropropane
Concen: 17.46 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 63 Resp: 35453

Ion	Ratio	Lower	Upper
63	100		
65	31.2	25.0	37.4





#47
Dibromomethane
Concen: 18.80 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 93 Resp: 23602

Ion	Ratio	Lower	Upper
93	100		
95	82.9	66.9	100.3
174	123.9	98.6	148.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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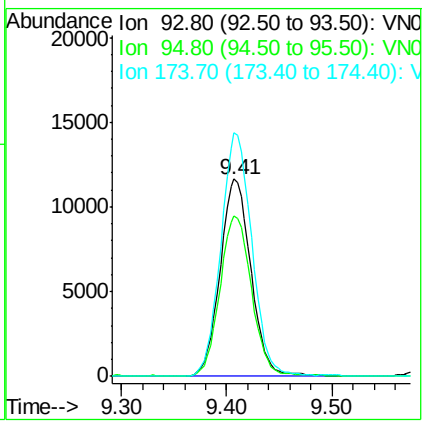
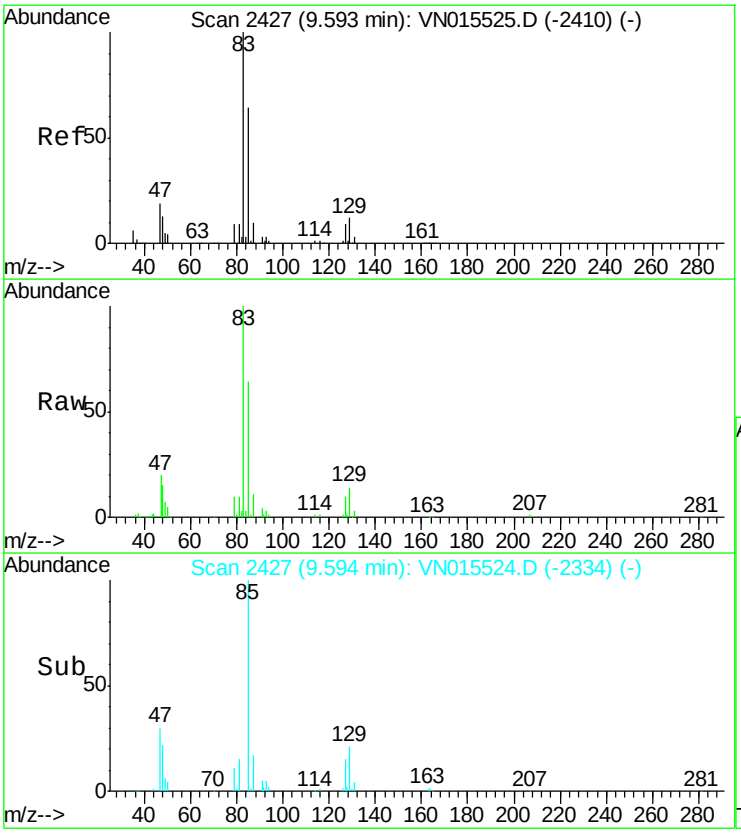
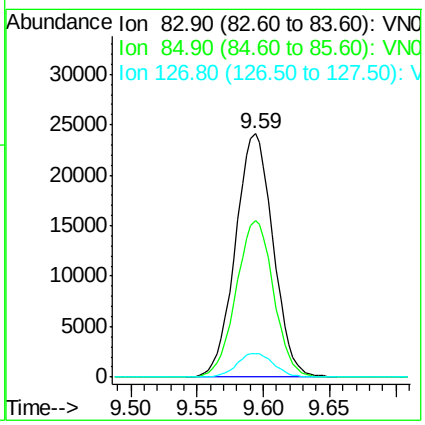




#48
Bromodichloromethane
Concen: 19.04 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 83 Resp: 47671

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.1	76.7
127	9.9	7.6	11.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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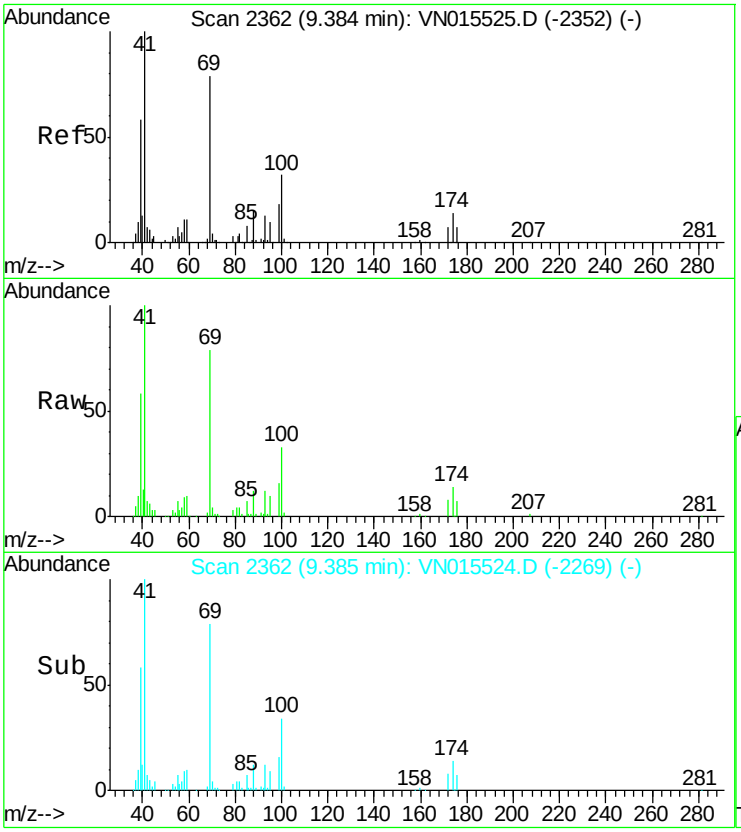
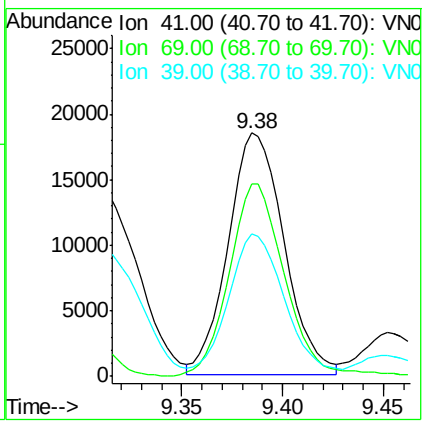
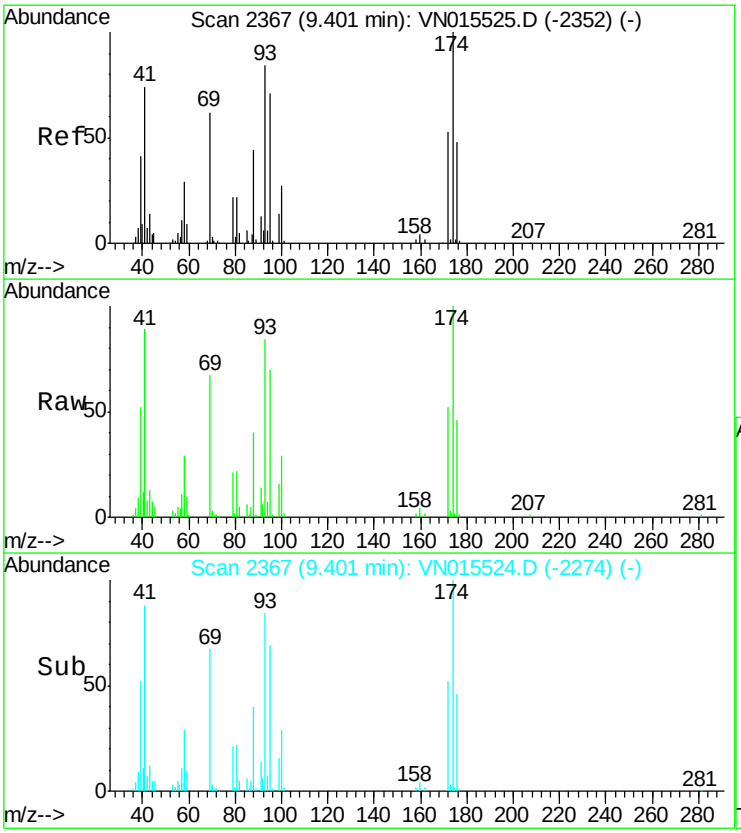


#49
Methyl methacrylate
Concen: 18.30 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 41 Resp: 35861

Ion	Ratio	Lower	Upper
41	100		
69	79.0	62.8	94.2
39	58.9	46.4	69.6

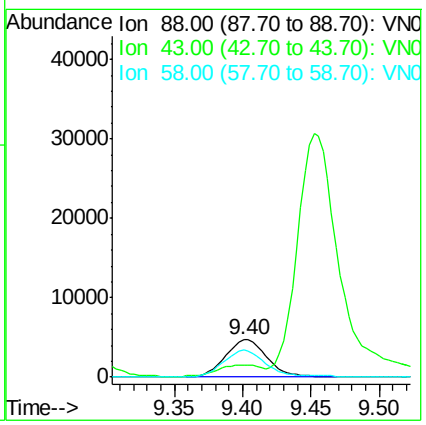




#50
1,4-Dioxane
Concen: 388.70 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 88 Resp: 10008

Ion	Ratio	Lower	Upper
88	100		
43	31.8	26.4	39.6
58	74.7	56.6	84.8



Instrument :
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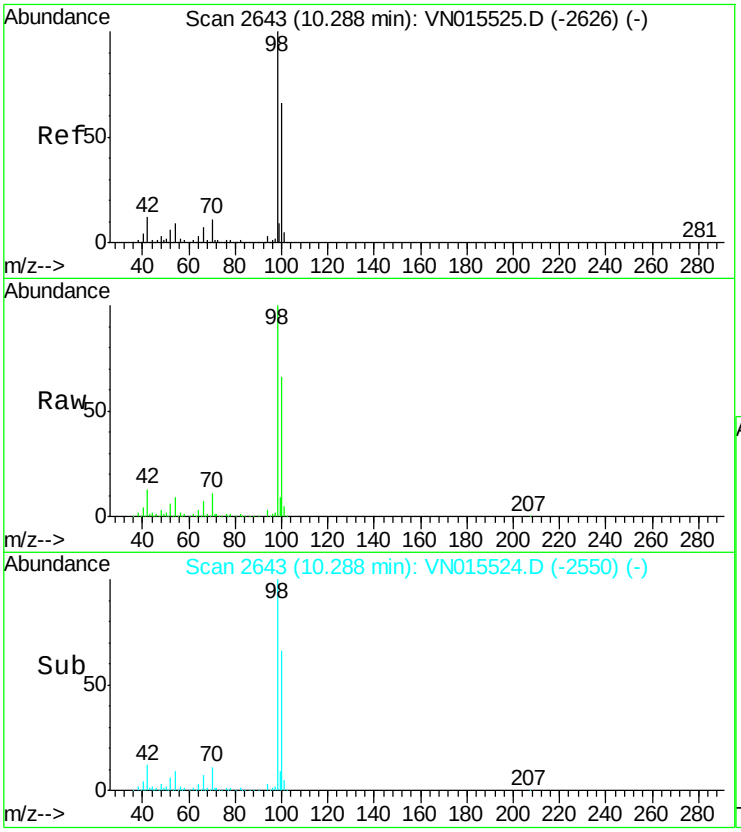
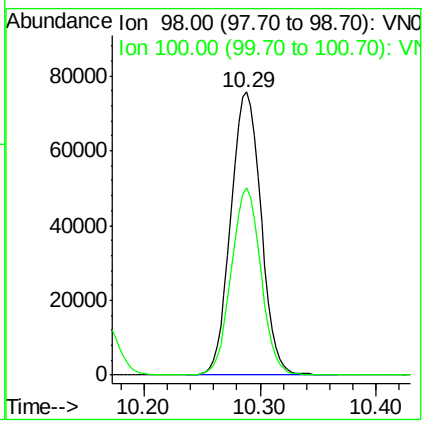
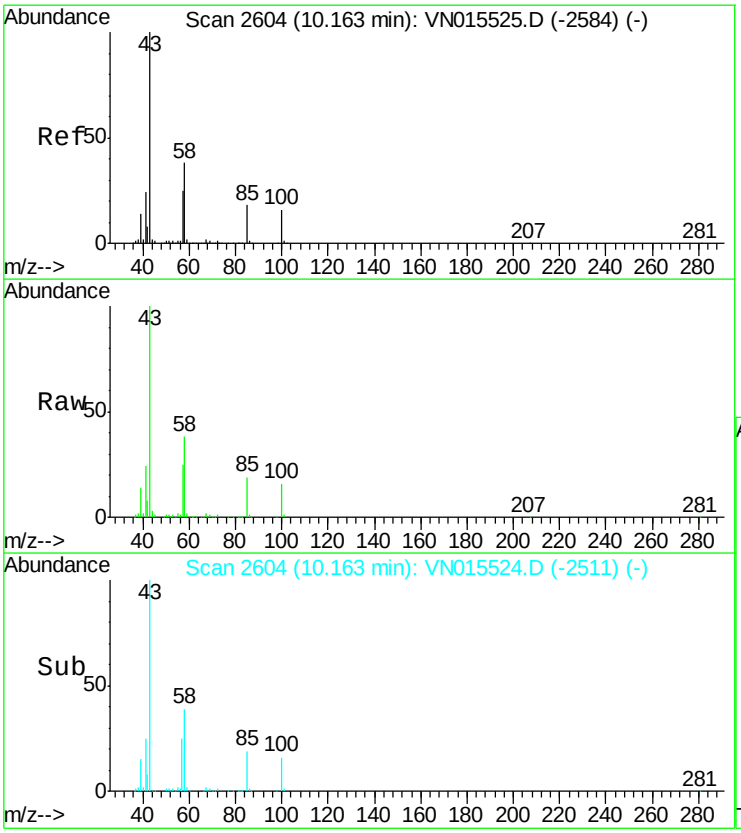


#51
Toluene-d8
Concen: 20.69 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 98 Resp: 137128

Ion	Ratio	Lower	Upper
98	100		
100	64.8	52.3	78.5

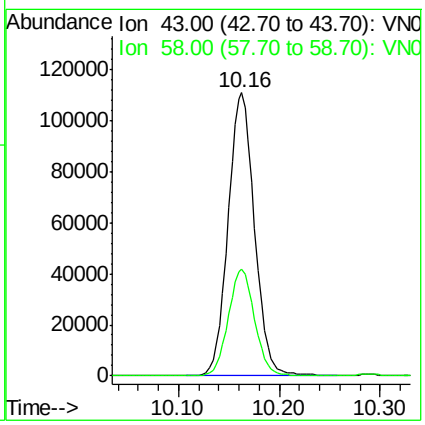




#52
4-Methyl-2-Pentanone
Concen: 93.26 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 201324

Ion	Ratio	Lower	Upper
43	100		
58	37.5	30.2	45.2



Instrument :
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LabSampleId :
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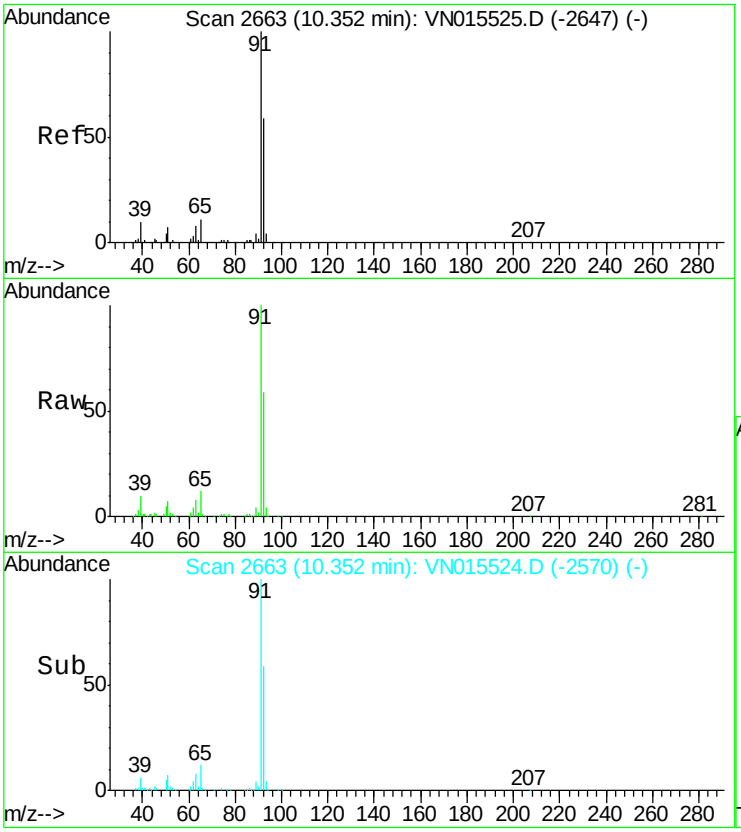
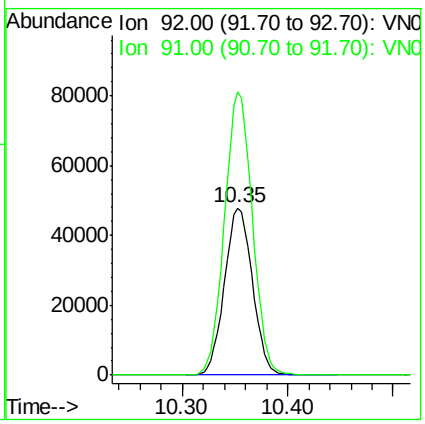
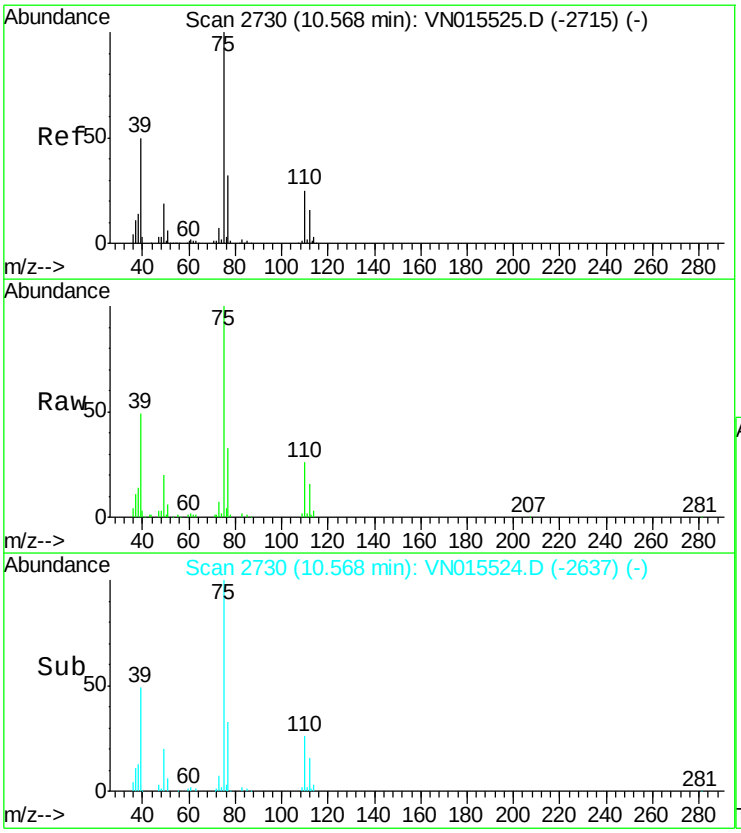


#53
Toluene
Concen: 19.24 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 92 Resp: 87936

Ion	Ratio	Lower	Upper
92	100		
91	168.3	136.2	204.4

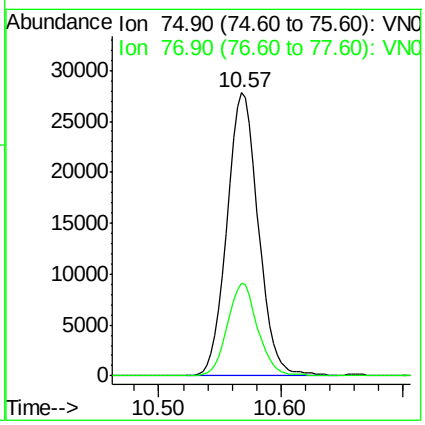


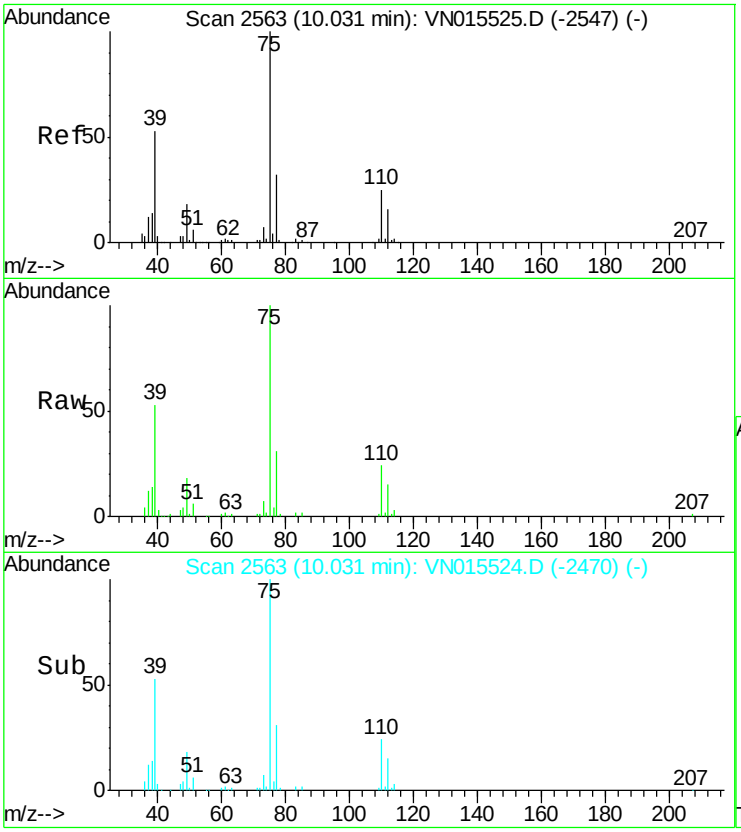


#54
t-1,3-Dichloropropene
Concen: 19.82 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 75 Resp: 49915

Ion	Ratio	Lower	Upper
75	100		
77	32.6	26.0	39.0





#55
cis-1,3-Dichloropropene
Concen: 18.93 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 75 Resp: 54489

Ion	Ratio	Lower	Upper
75	100		
77	30.6	25.4	38.2
39	52.3	42.2	63.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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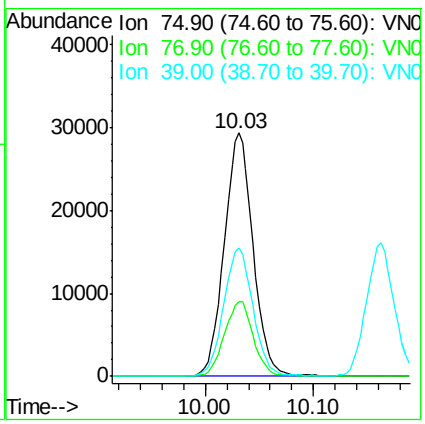
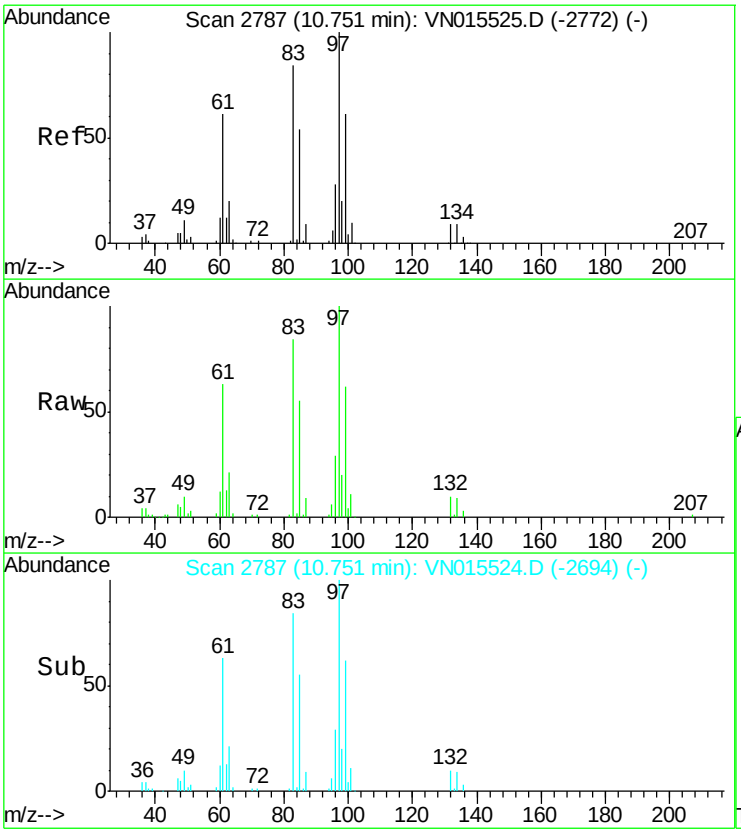
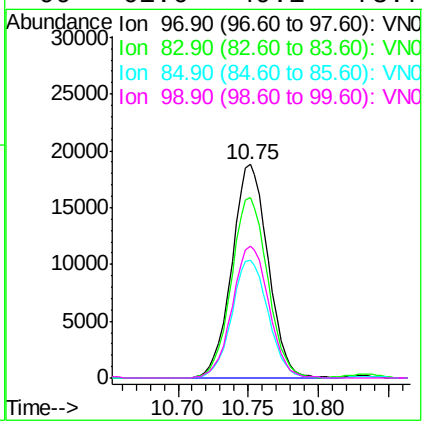


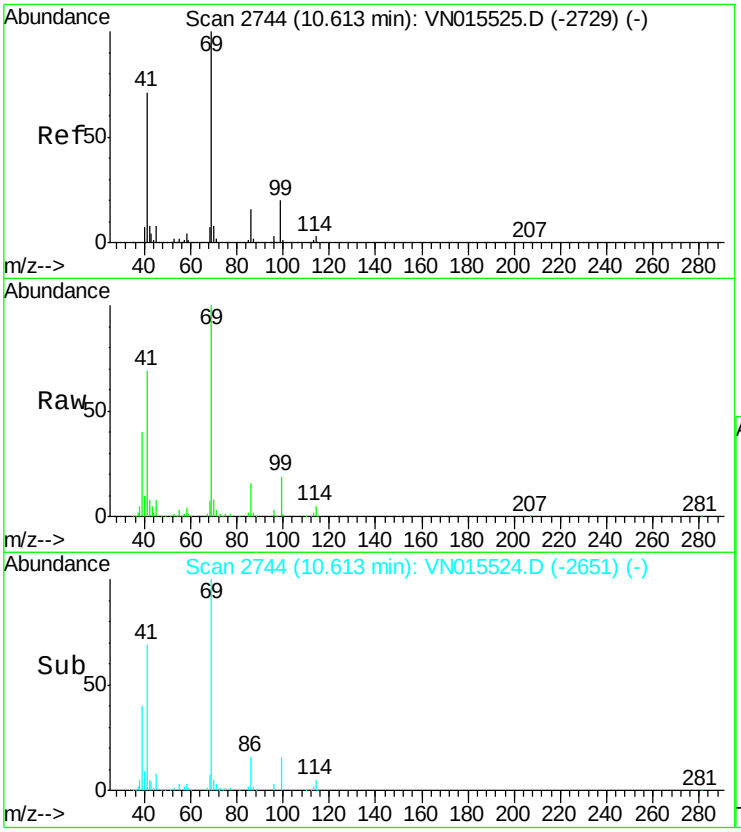


#56
1,1,2-Trichloroethane
Concen: 18.78 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 97 Resp: 33828

Ion	Ratio	Lower	Upper
97	100		
83	84.4	67.0	100.4
85	55.0	42.9	64.3
99	61.6	49.1	73.7





#57
Ethyl methacrylate
Concen: 20.34 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 69 Resp: 50637

Ion	Ratio	Lower	Upper
69	100		
41	70.5	56.9	85.3
39	39.0	32.0	48.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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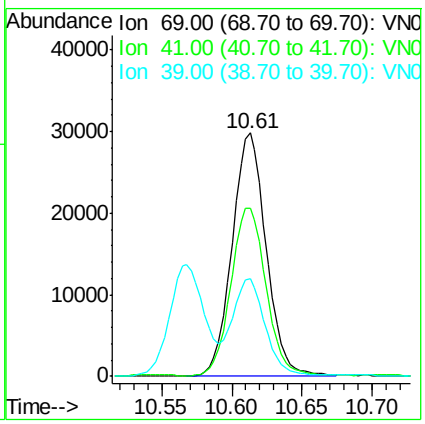
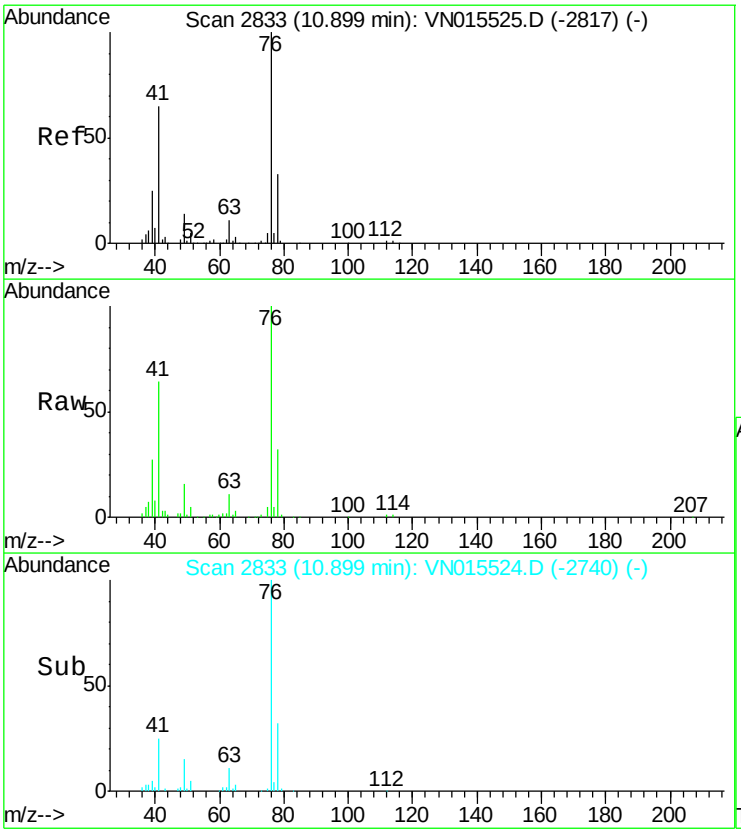
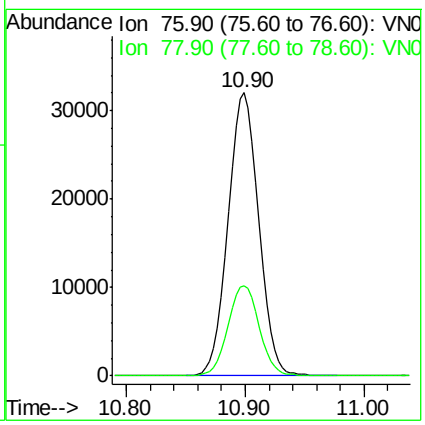


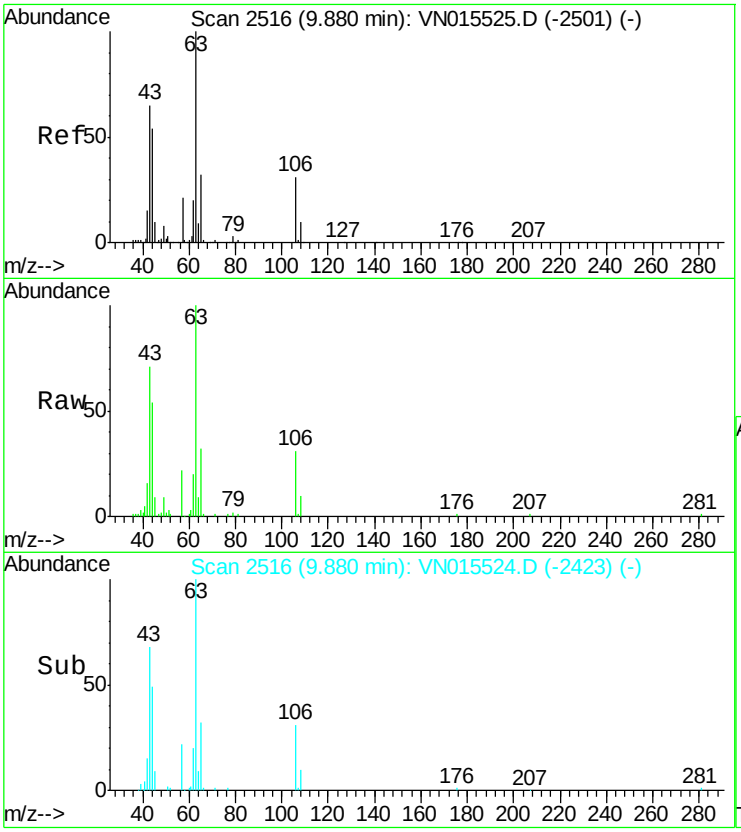


#58
1,3-Dichloropropane
Concen: 18.53 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 76 Resp: 57173

Ion	Ratio	Lower	Upper
76	100		
78	32.5	26.3	39.5





#59
2-Chloroethyl Vinyl ether
Concen: 21.05 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 63 Resp: 19501

Ion	Ratio	Lower	Upper
63	100		
106	29.7	23.7	35.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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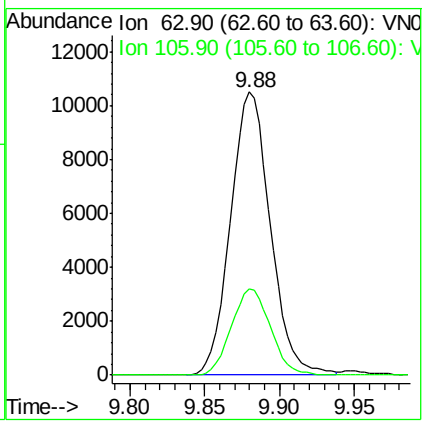
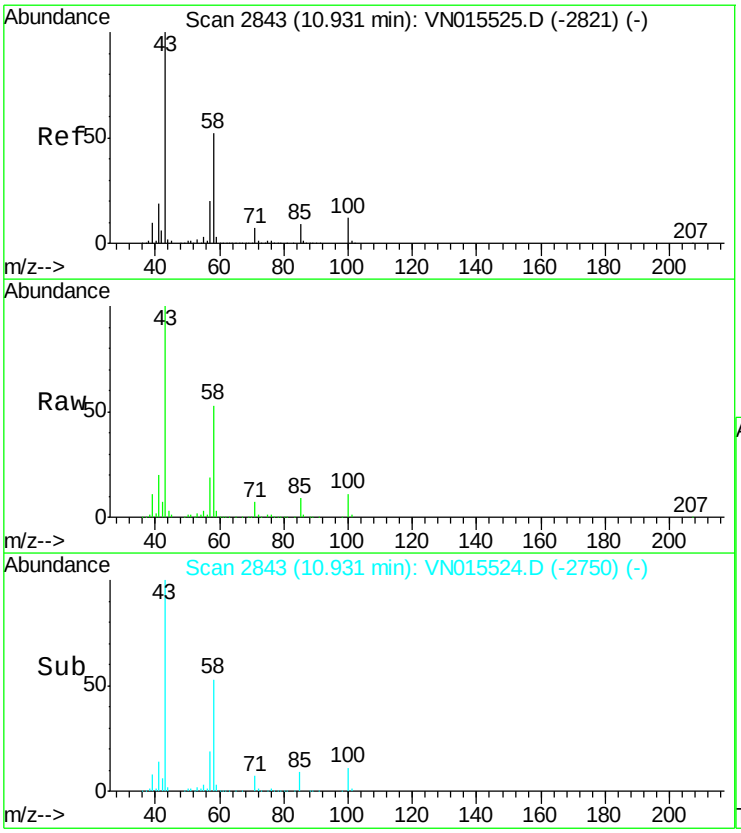
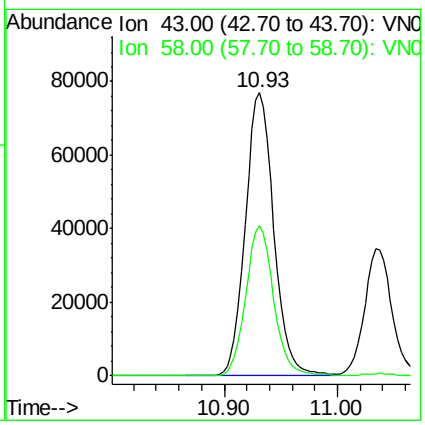




#60
2-Hexanone
Concen: 92.83 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 134515

Ion	Ratio	Lower	Upper
43	100		
58	52.0	26.0	78.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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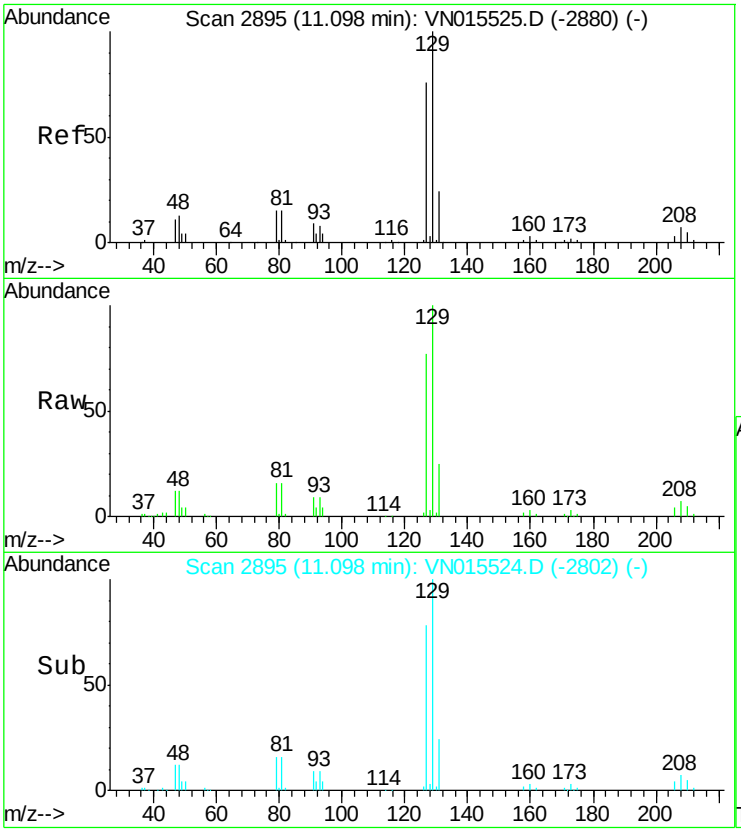
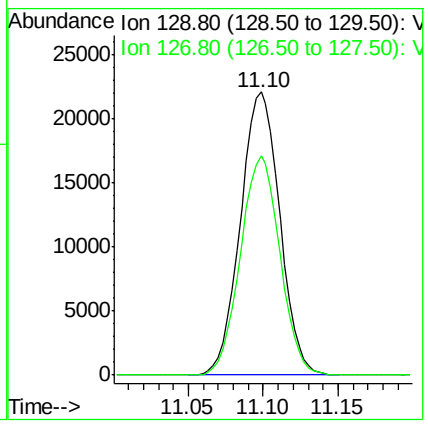
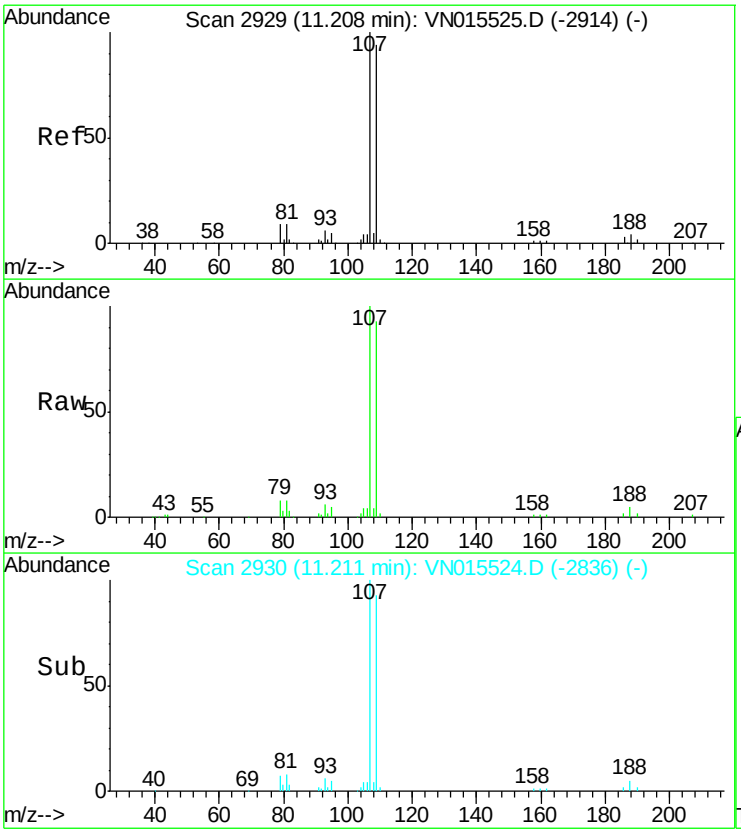


#61
Dibromochloromethane
Concen: 20.19 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:129 Resp: 40479

Ion	Ratio	Lower	Upper
129	100		
127	77.6	38.6	116.0

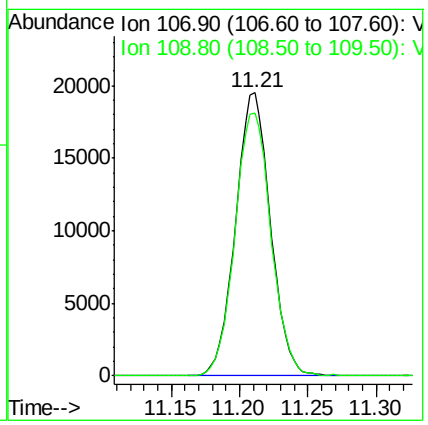


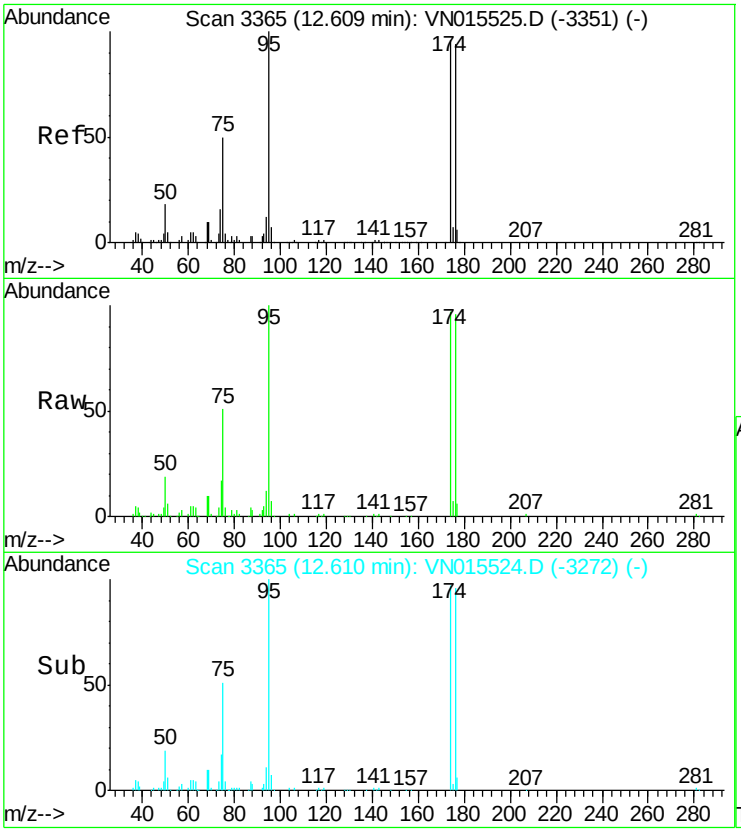


#62
1,2-Dibromoethane
Concen: 19.20 ug/l
RT: 11.21 min Scan# 2930
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:107 Resp: 34694

Ion	Ratio	Lower	Upper
107	100		
109	96.1	75.8	113.6





#63
4-Bromofluorobenzene
Concen: 20.72 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 95 Resp: 45604

Ion	Ratio	Lower	Upper
95	100		
174	97.5	0.0	191.8
176	96.1	0.0	186.8

Instrument :
MSVOA_N
LabSampleId :
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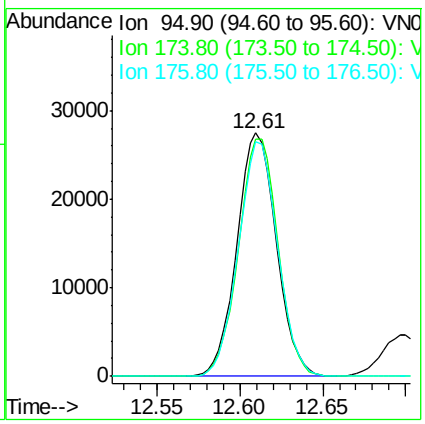
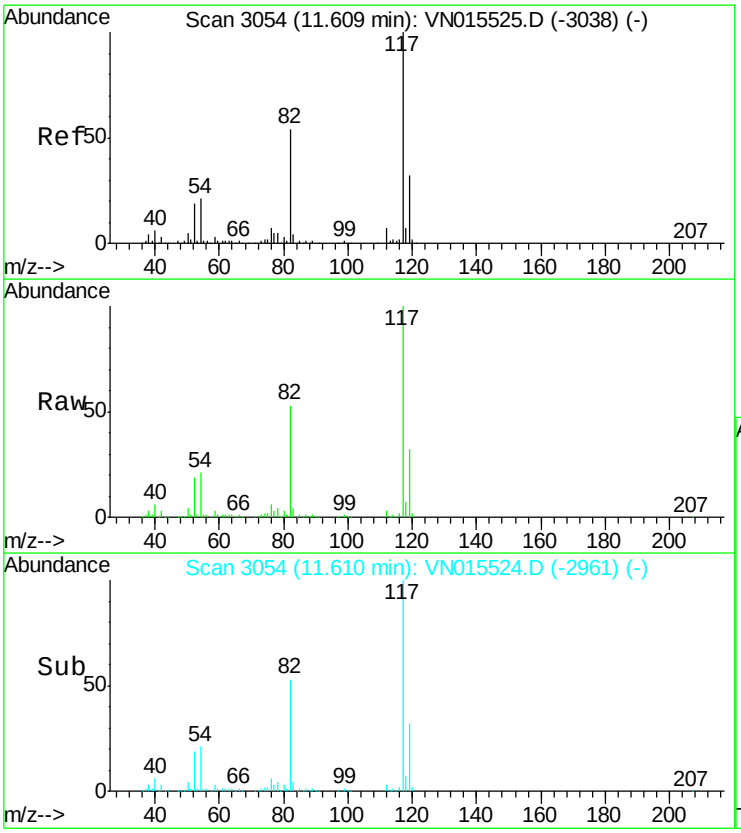
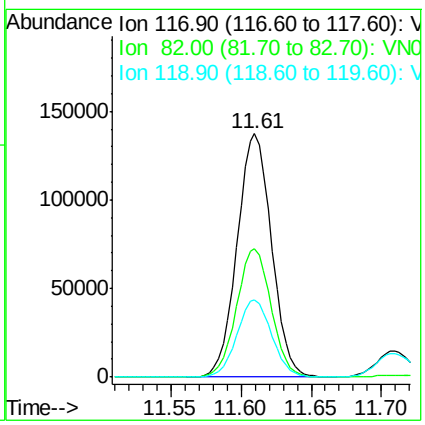


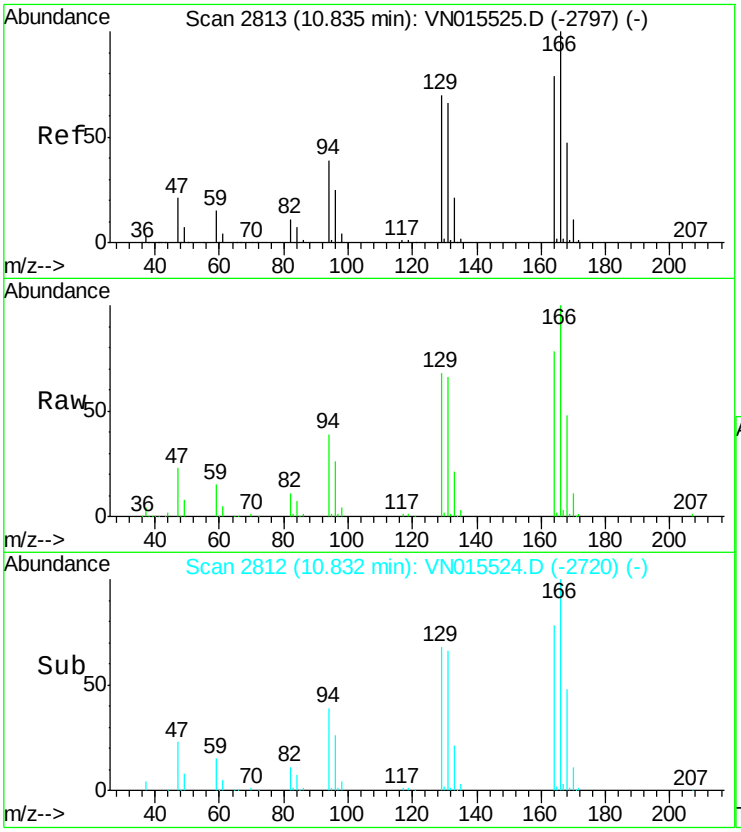


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:117 Resp: 234843

Ion	Ratio	Lower	Upper
117	100		
82	53.0	43.3	64.9
119	32.0	25.6	38.4

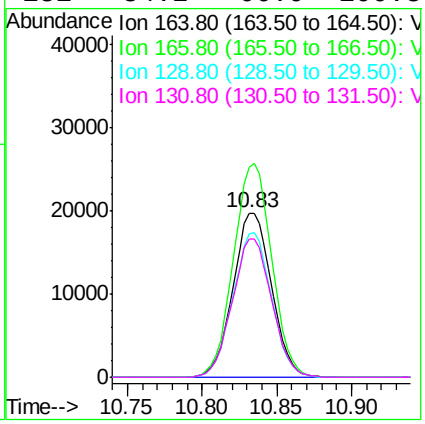




#65
Tetrachloroethene
Concen: 18.78 ug/l
RT: 10.83 min Scan# 2812
Delta R.T. -0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:164 Resp: 35306

Ion	Ratio	Lower	Upper
164	100		
166	127.7	101.7	152.5
129	87.2	70.7	106.1
131	84.2	66.9	100.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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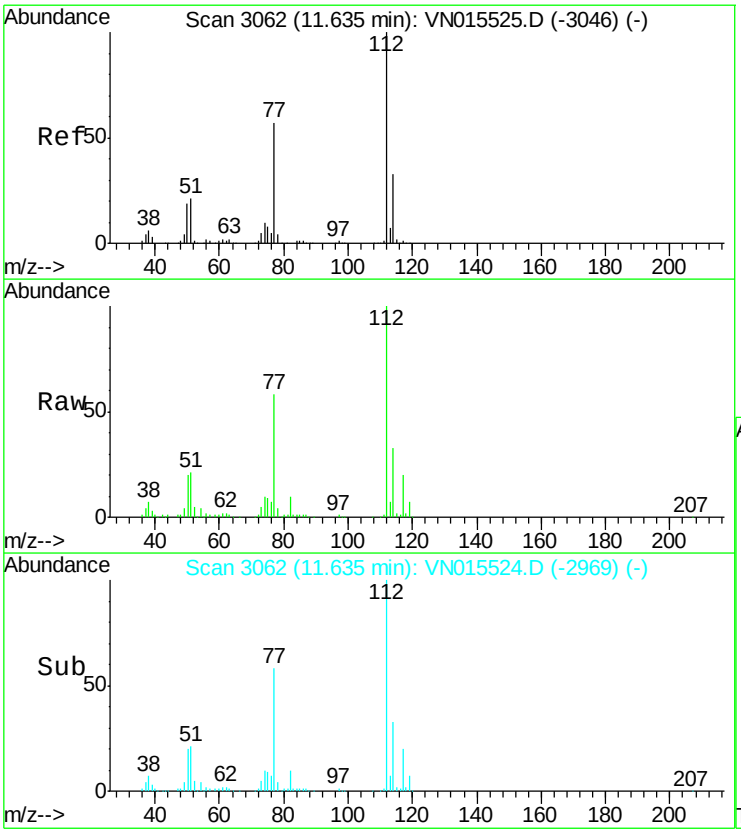
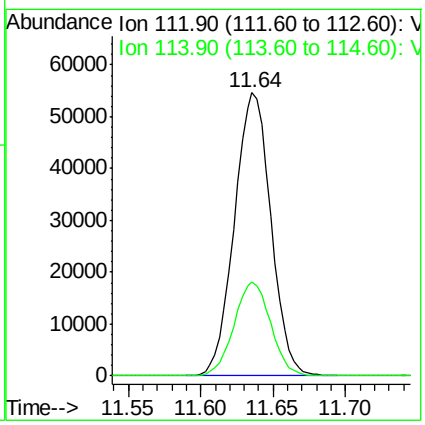
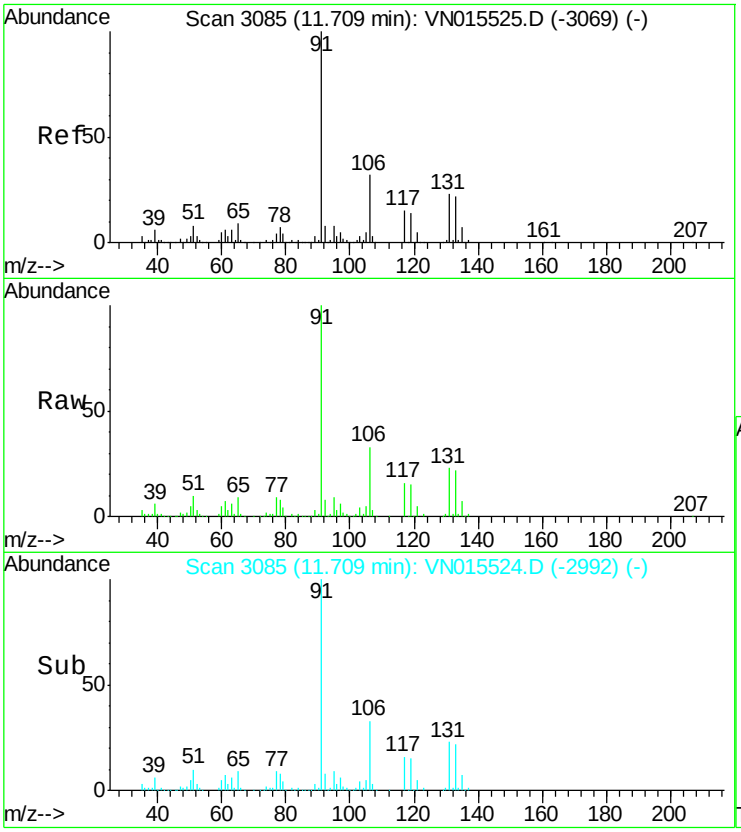


#66
Chlorobenzene
Concen: 18.94 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:112 Resp: 95550

Ion	Ratio	Lower	Upper
112	100		
114	33.3	26.2	39.2





#67
1,1,1,2-Tetrachloroethane
Concen: 20.36 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:131 Resp: 37312

Ion	Ratio	Lower	Upper
131	100		
133	96.2	47.7	143.1
119	64.3	31.5	94.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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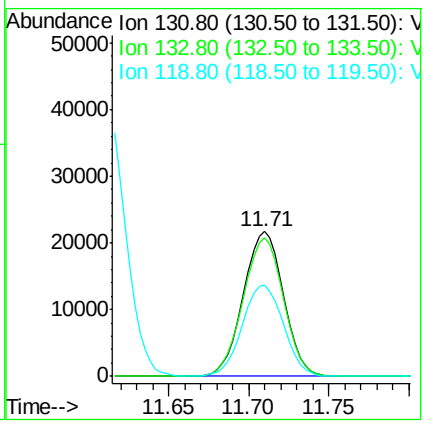
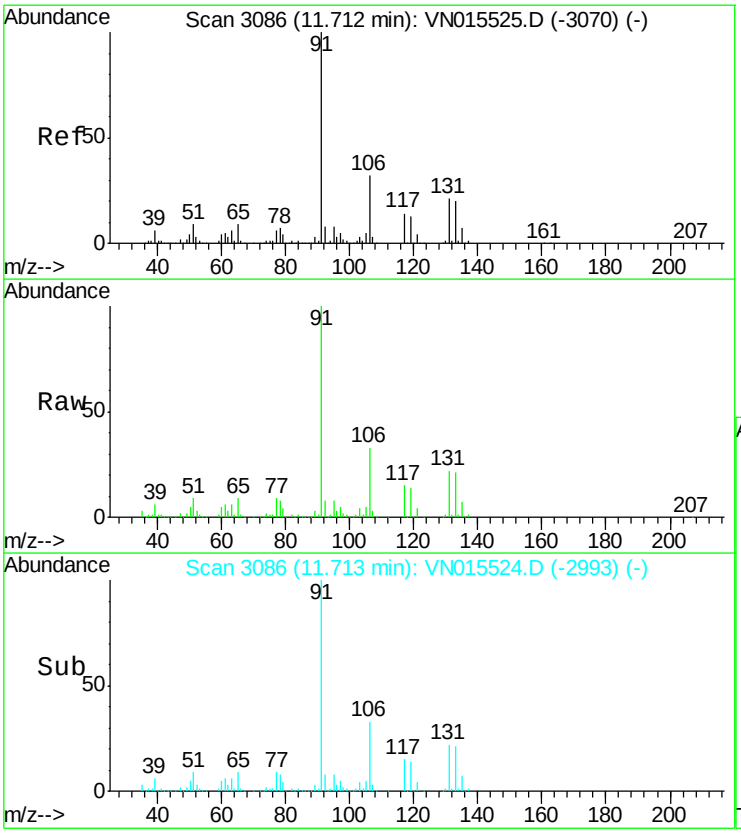
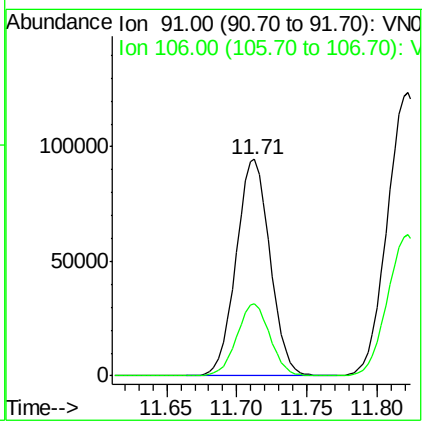




#68
Ethyl Benzene
Concen: 19.49 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 91 Resp: 159371

Ion	Ratio	Lower	Upper
91	100		
106	33.2	25.5	38.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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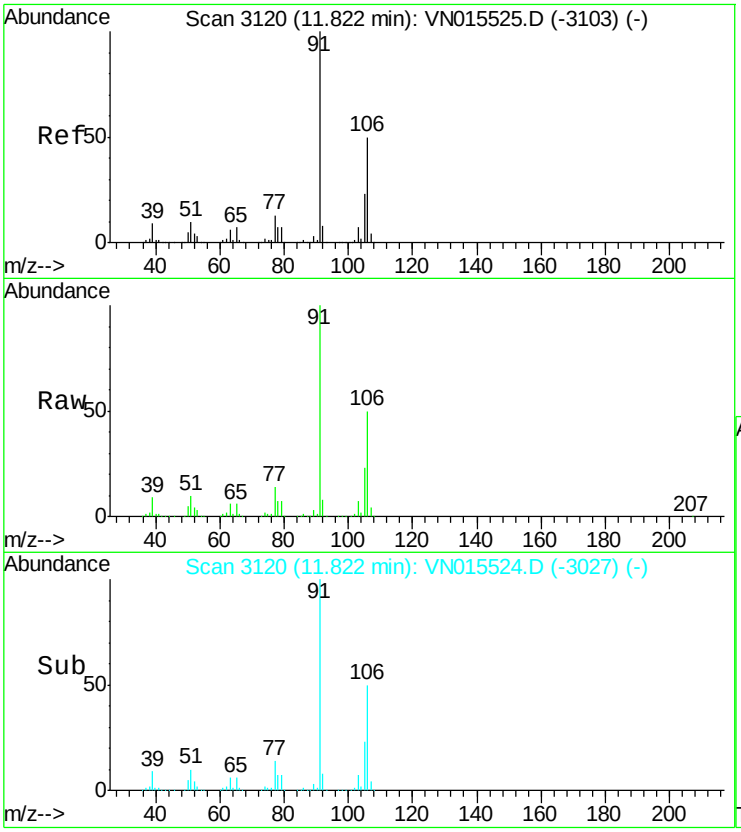
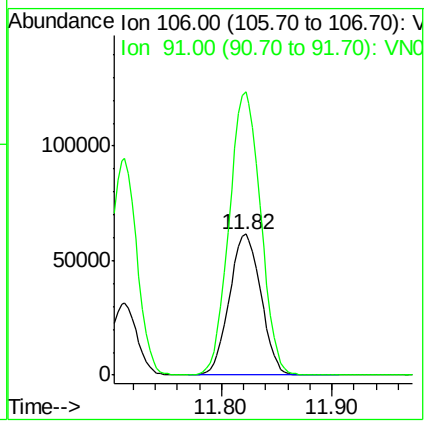
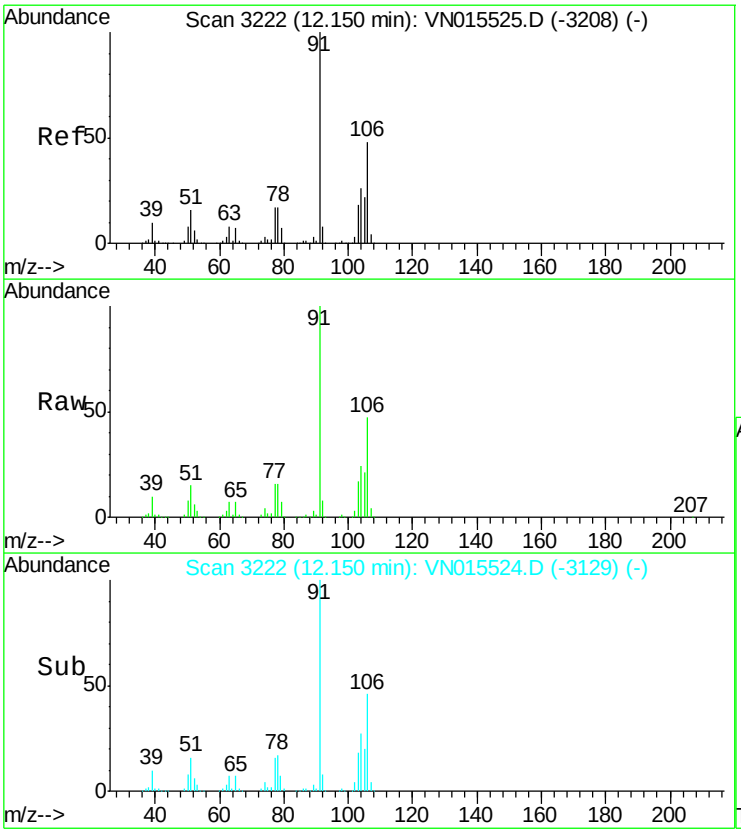


#69
m/p-Xylenes
Concen: 39.46 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:106 Resp: 122163

Ion	Ratio	Lower	Upper
106	100		
91	200.0	160.5	240.7

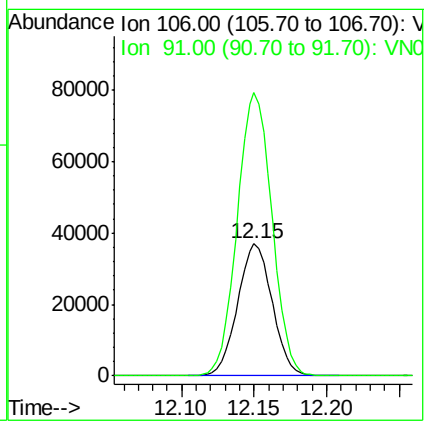


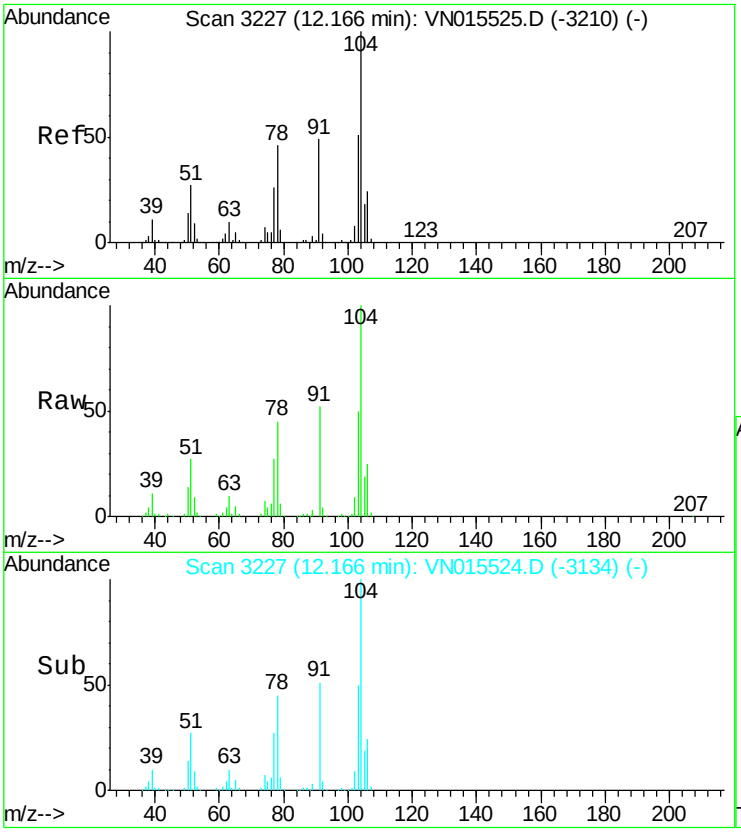


#70
o-Xylene
Concen: 19.28 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:106 Resp: 61148

Ion	Ratio	Lower	Upper
106	100		
91	215.7	104.9	314.7





#71
Styrene
Concen: 20.08 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:104 Resp: 95113

Ion	Ratio	Lower	Upper
104	100		
78	51.2	40.1	60.1
103	55.2	44.0	66.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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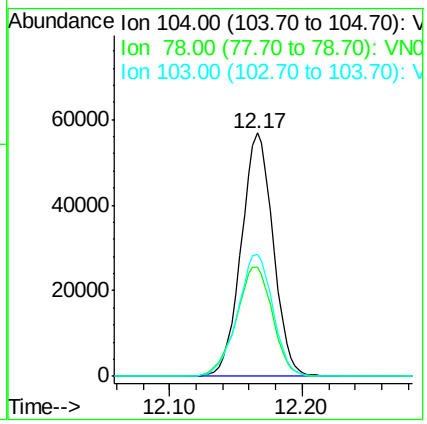
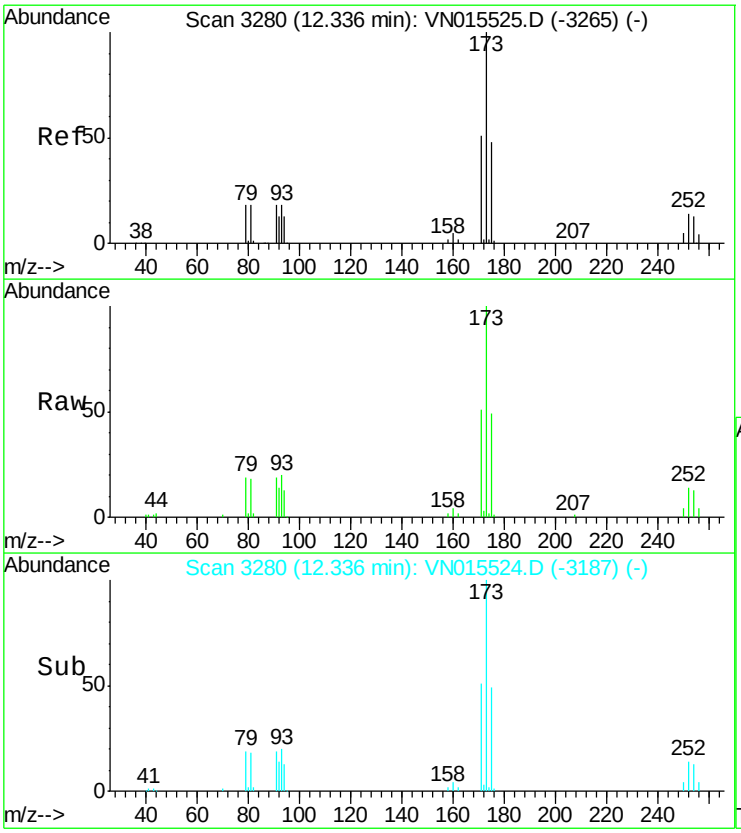
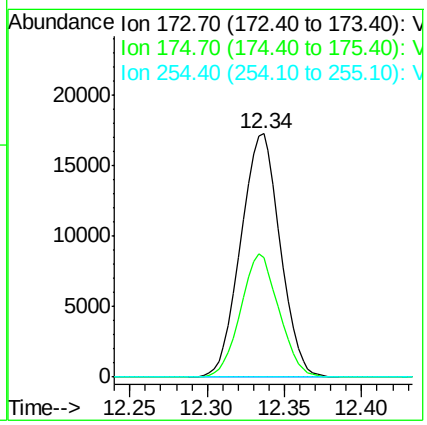


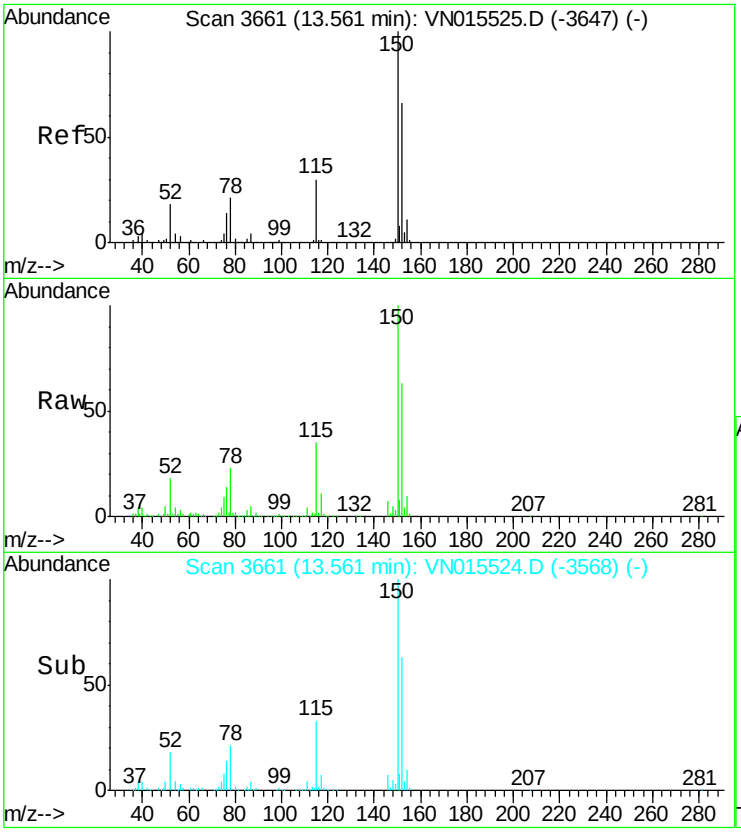


#72
Bromoform
Concen: 21.78 ug/l
RT: 12.34 min Scan# 3280
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:173 Resp: 30590

Ion	Ratio	Lower	Upper
173	100		
175	48.9	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:152 Resp: 101939

Ion	Ratio	Lower	Upper
152	100		
115	55.1	27.2	81.6
150	165.1	0.0	343.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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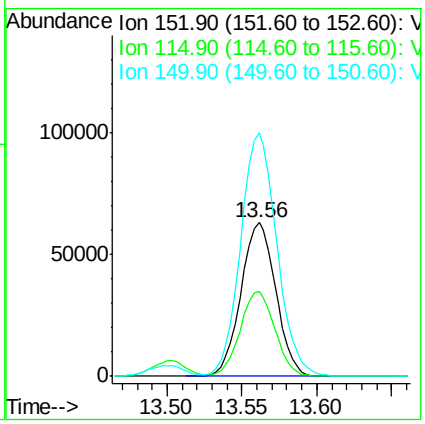
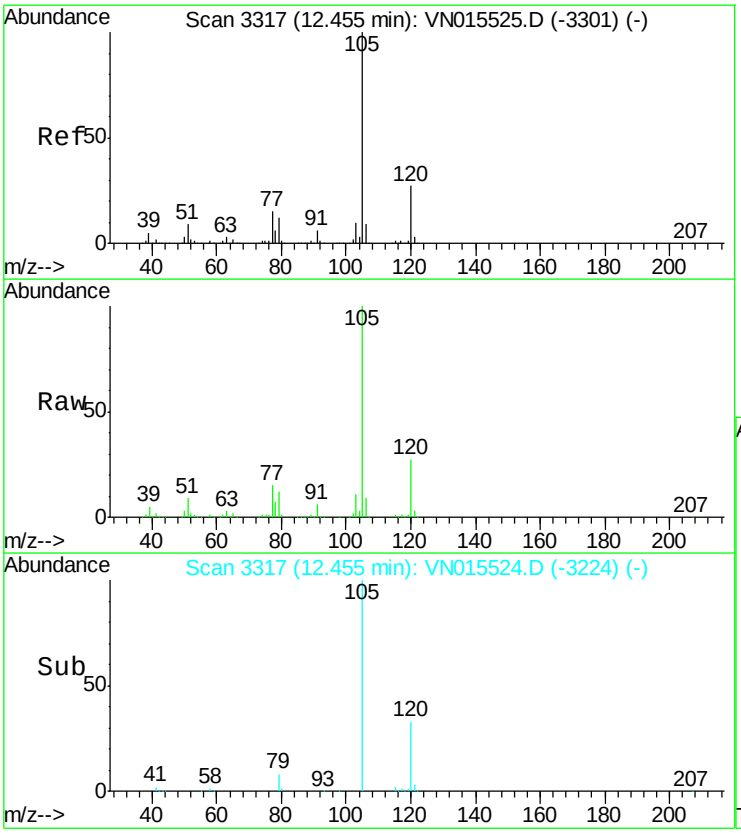
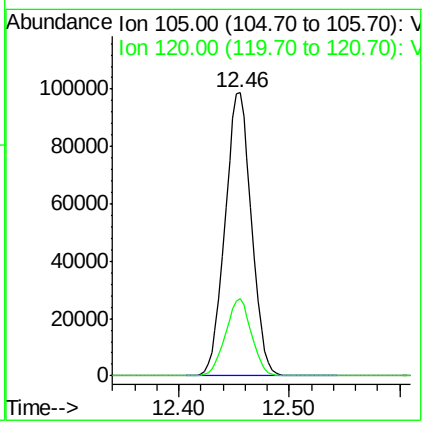




#74
Isopropylbenzene
Concen: 19.97 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:105 Resp: 163255

Ion	Ratio	Lower	Upper
105	100		
120	26.9	13.7	41.0



Instrument :
MSVOA_N
LabSampleId :
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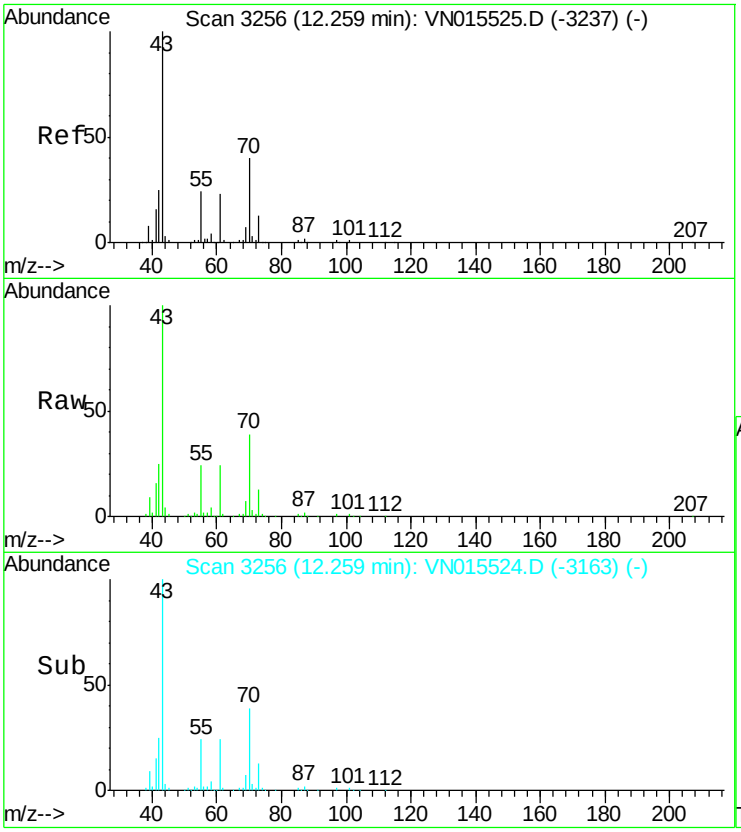
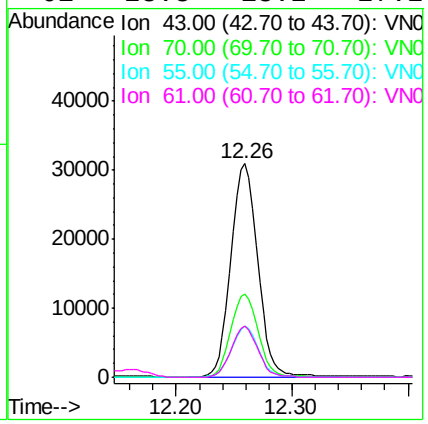
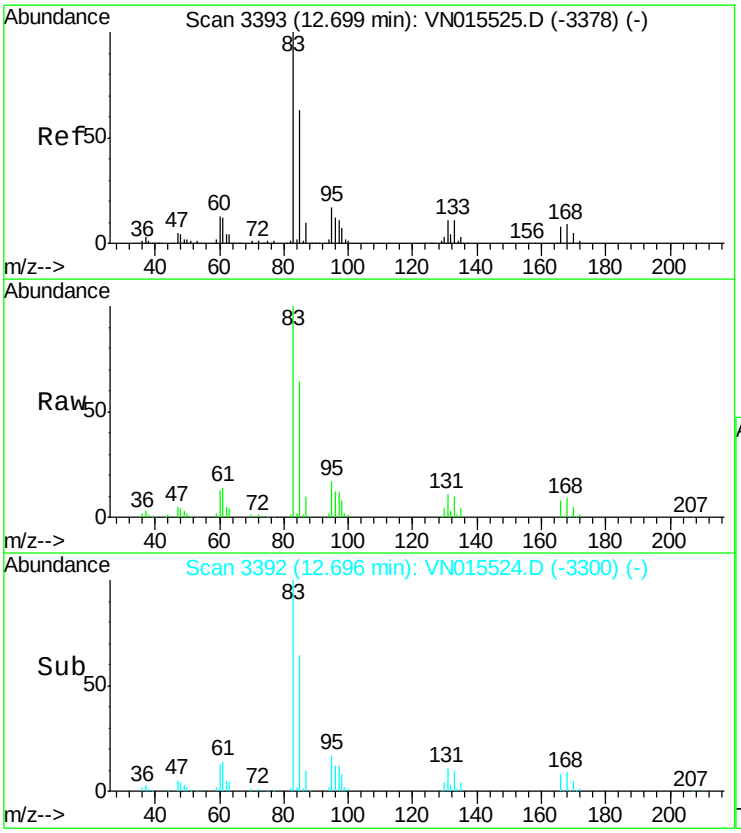


#75
N-amyl acetate
Concen: 21.65 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 43 Resp: 49863

Ion	Ratio	Lower	Upper
43	100		
70	39.3	32.0	48.0
55	23.9	18.5	27.7
61	23.3	18.2	27.2

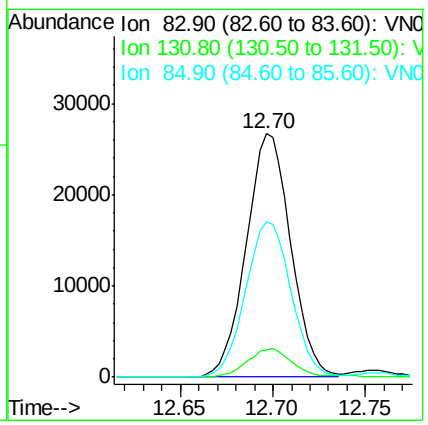


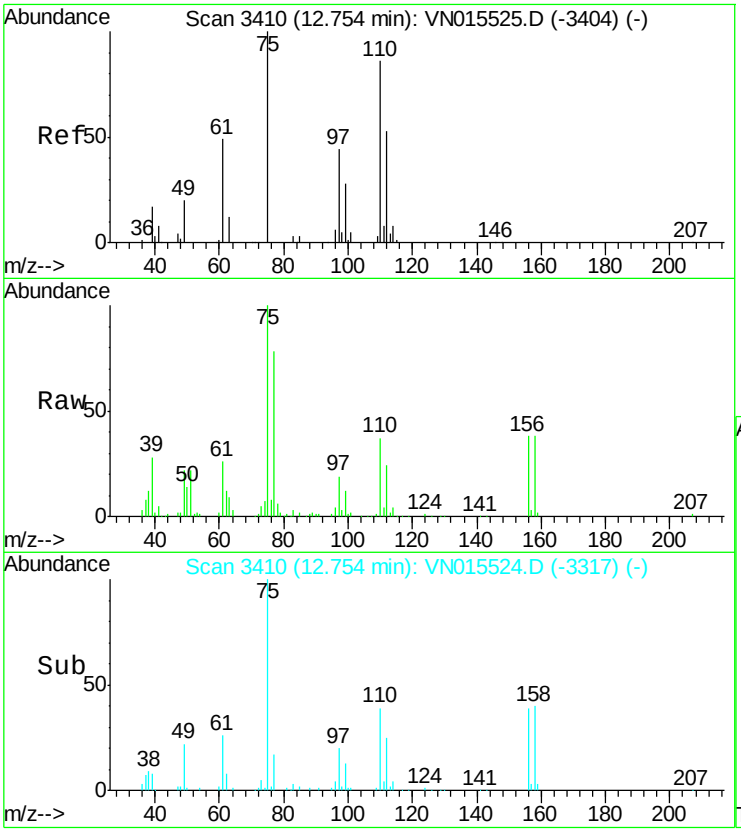


#76
1,1,2,2-Tetrachloroethane
Concen: 19.00 ug/l
RT: 12.70 min Scan# 3392
Delta R.T. -0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 83 Resp: 44699

Ion	Ratio	Lower	Upper
83	100		
131	11.5	5.9	17.6
85	65.2	31.9	95.7





#77
1,2,3-Trichloropropane
Concen: 18.26 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 75 Resp: 39302

Ion	Ratio	Lower	Upper
75	100		
77	189.5	90.4	271.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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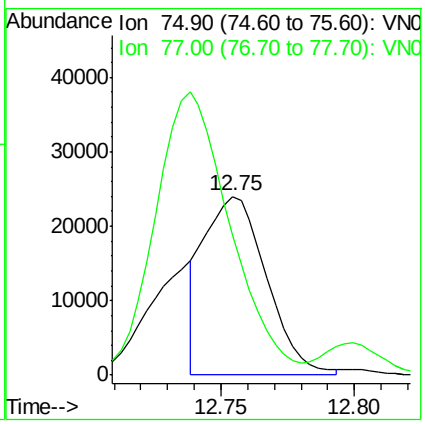
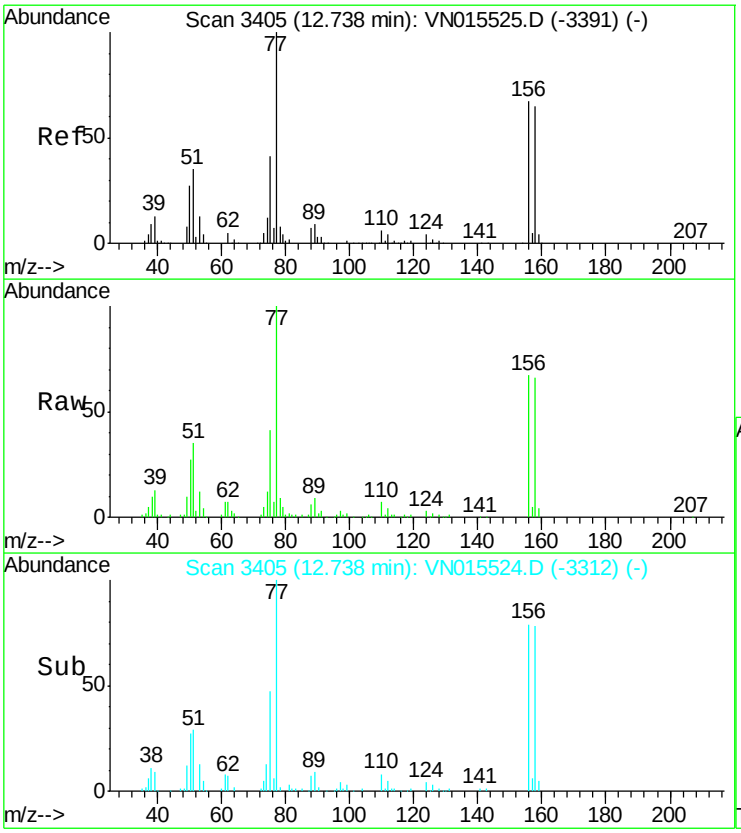
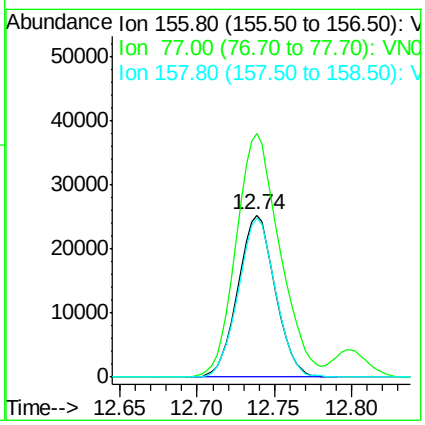




#78
Bromobenzene
Concen: 19.90 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:156 Resp: 42333

Ion	Ratio	Lower	Upper
156	100		
77	176.0	86.0	258.0
158	97.9	48.7	146.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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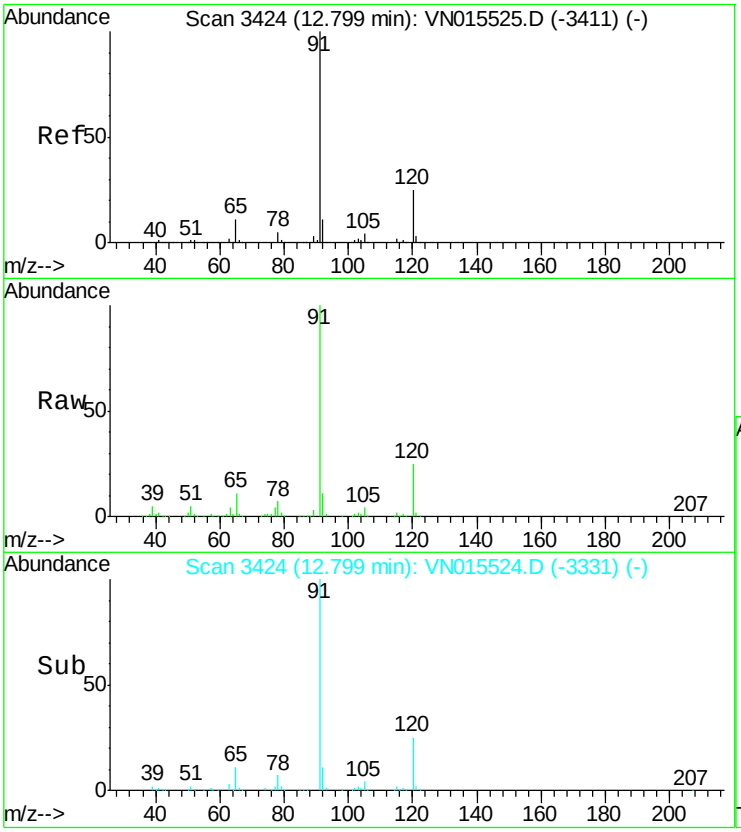
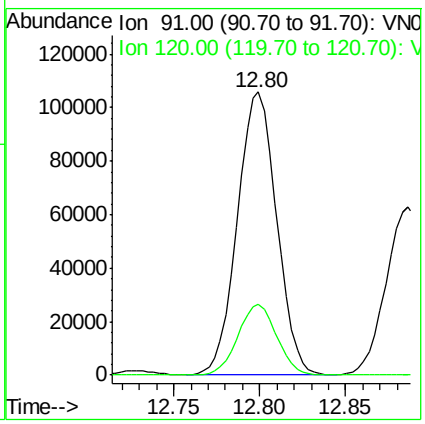
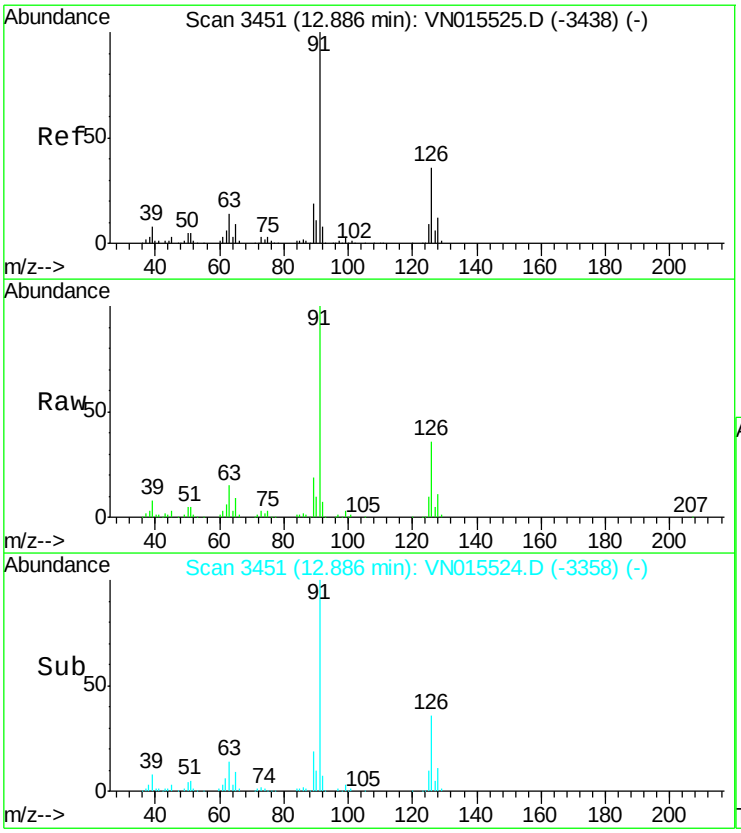


#79
n-propylbenzene
Concen: 19.32 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 91 Resp: 168407

Ion	Ratio	Lower	Upper
91	100		
120	24.6	12.2	36.4

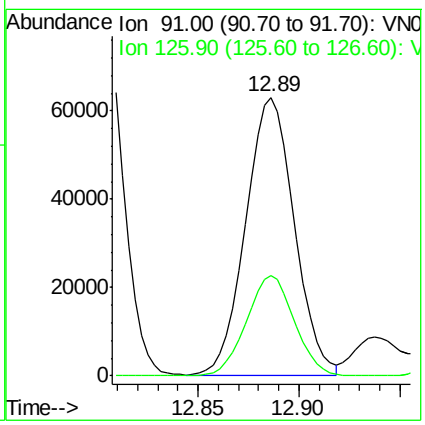




#80
2-Chlorotoluene
Concen: 19.26 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 91 Resp: 106438

Ion	Ratio	Lower	Upper
91	100		
126	35.4	17.9	53.8



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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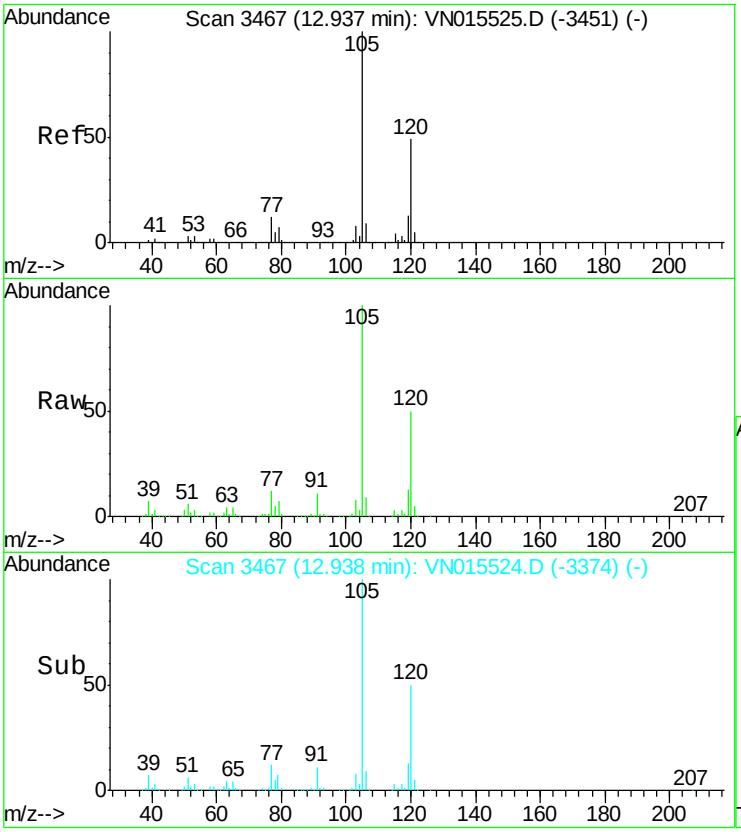
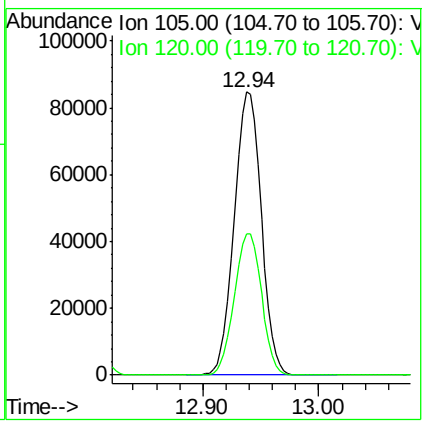
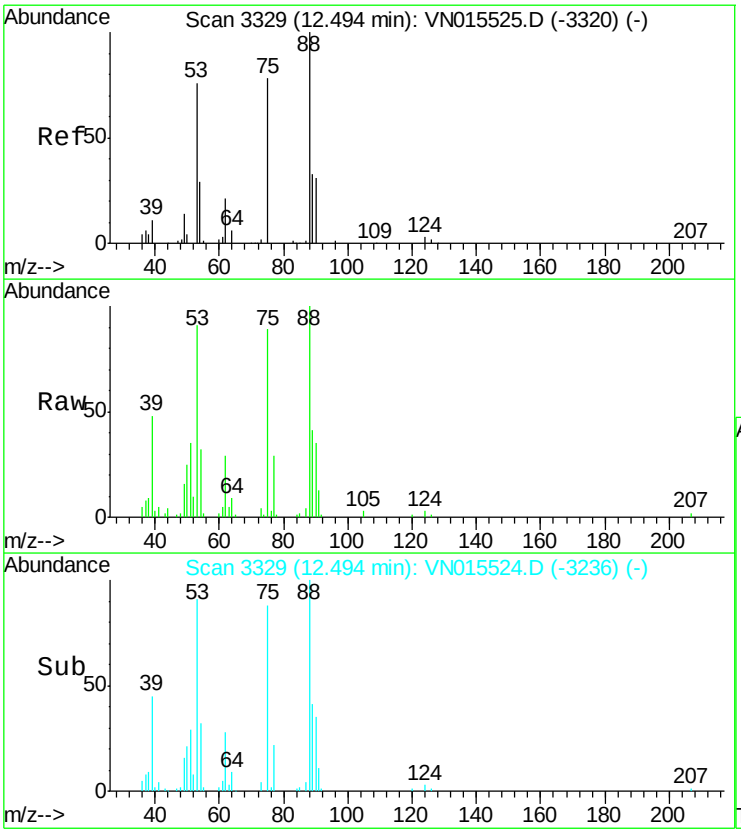


#81
1,3,5-Trimethylbenzene
Concen: 21.02 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:105 Resp: 136686

Ion	Ratio	Lower	Upper
105	100		
120	50.3	24.6	73.8

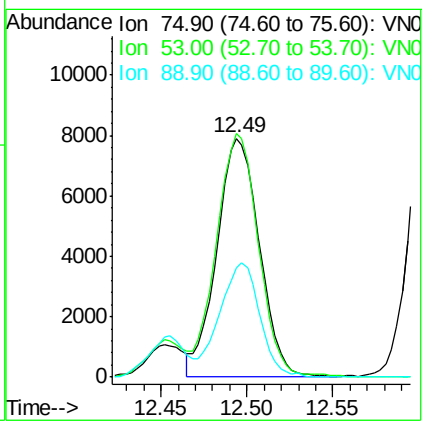


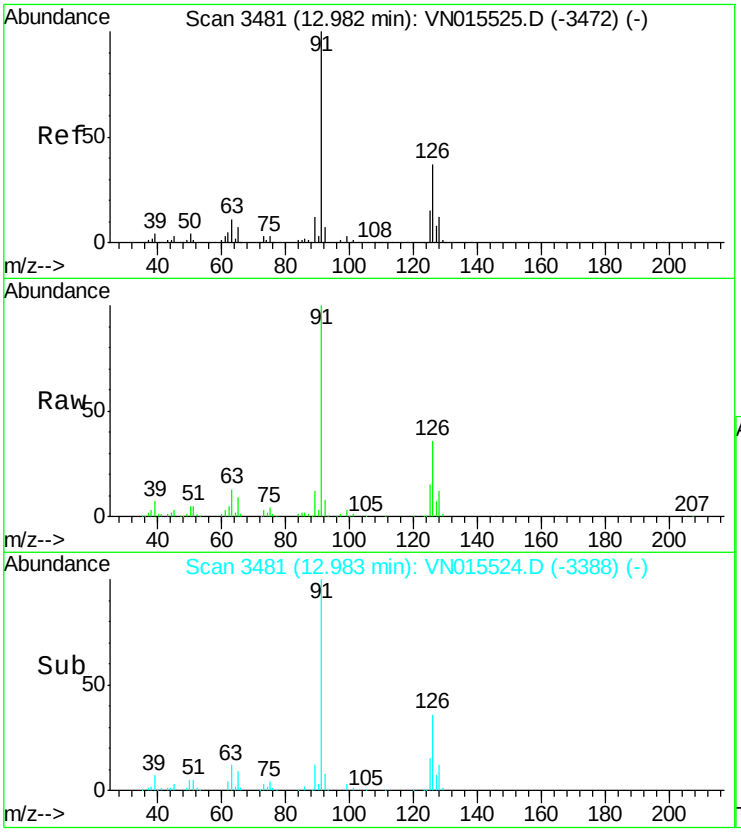


#82
trans-1,4-Dichloro-2-butene
Concen: 22.82 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 75 Resp: 13590

Ion	Ratio	Lower	Upper
75	100		
53	101.9	77.5	116.3
89	45.8	37.7	56.5





#83
4-Chlorotoluene
Concen: 19.57 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 91 Resp: 100589

Ion	Ratio	Lower	Upper
91	100		
126	35.1	17.5	52.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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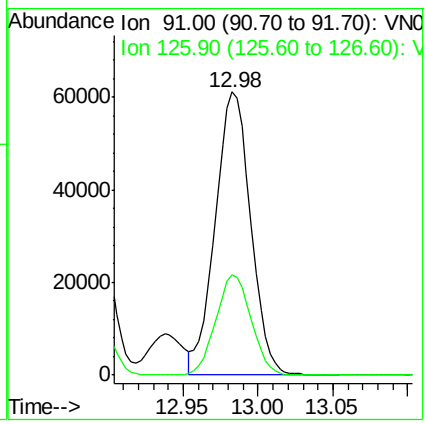
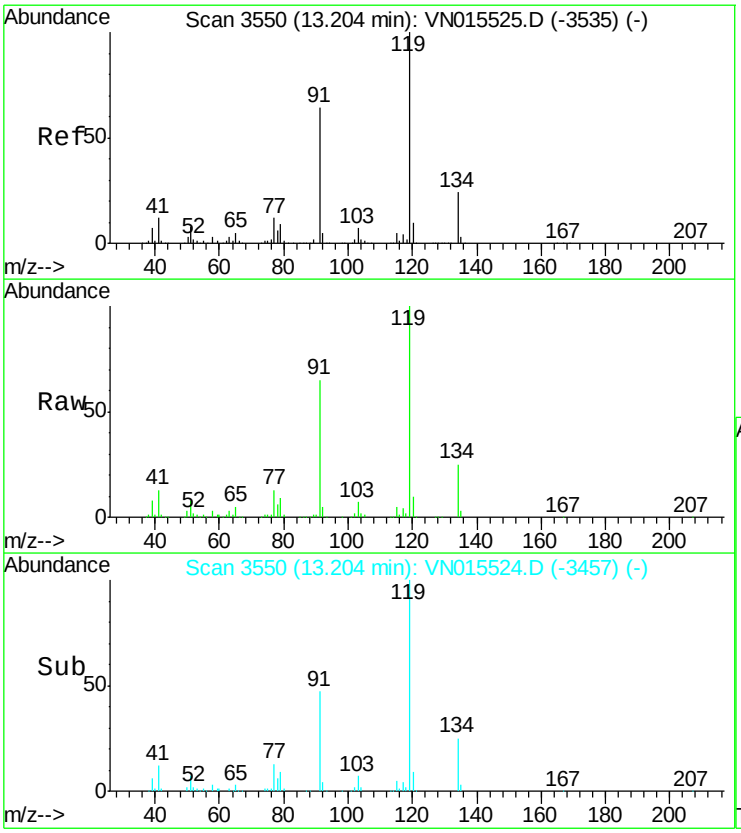
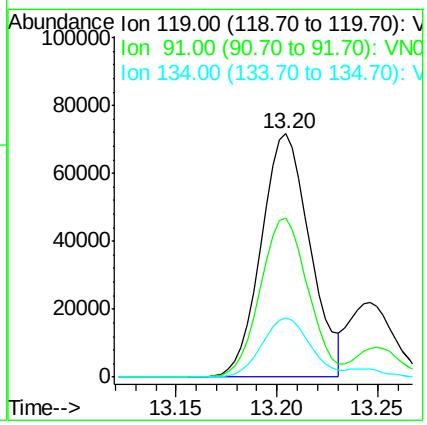


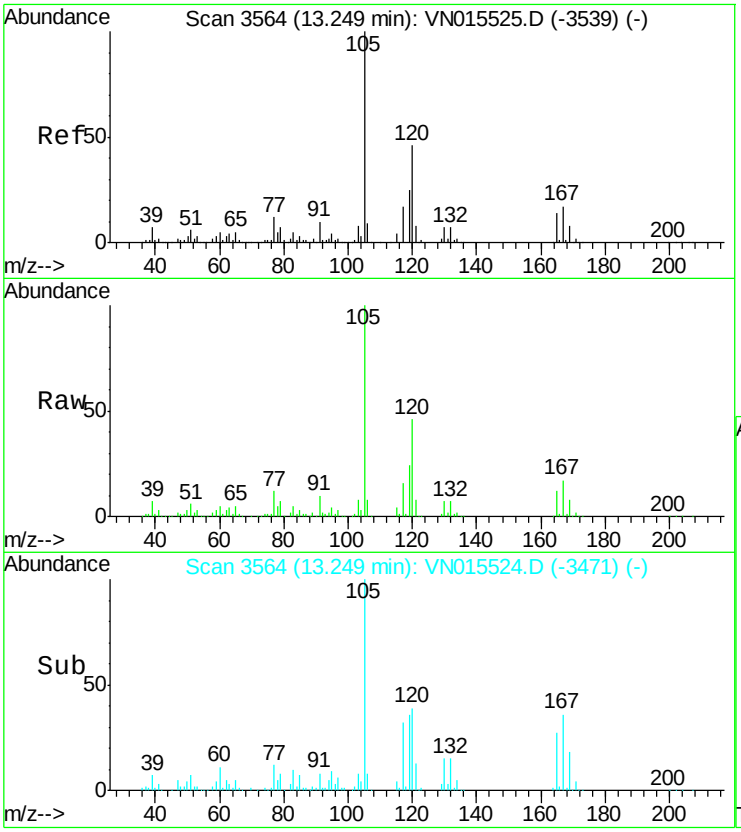


#84
tert-Butylbenzene
Concen: 20.56 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:119 Resp: 120745

Ion	Ratio	Lower	Upper
119	100		
91	64.5	31.9	95.9
134	24.2	12.1	36.3





#85
1,2,4-Trimethylbenzene
Concen: 20.97 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:105 Resp: 135954

Ion	Ratio	Lower	Upper
105	100		
120	46.2	23.1	69.3

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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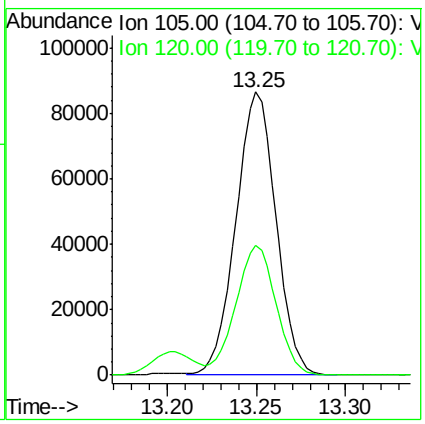
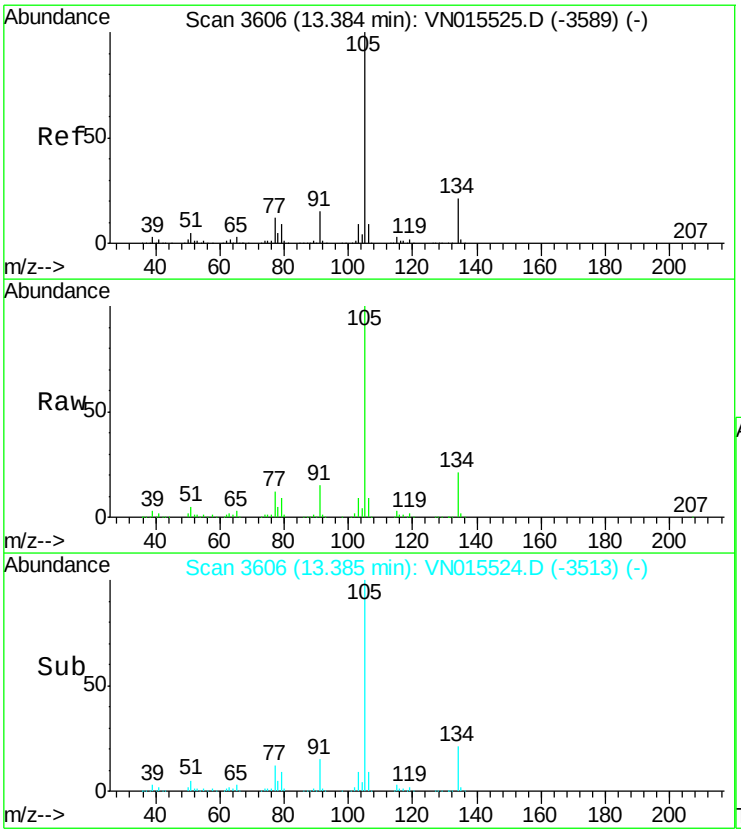
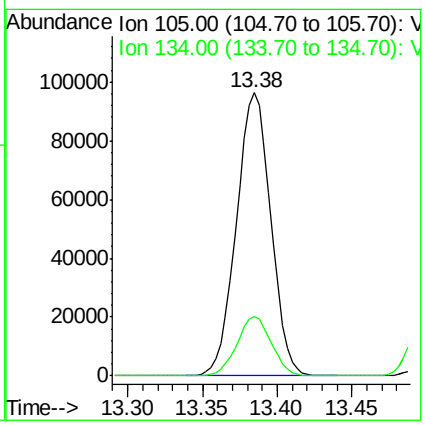


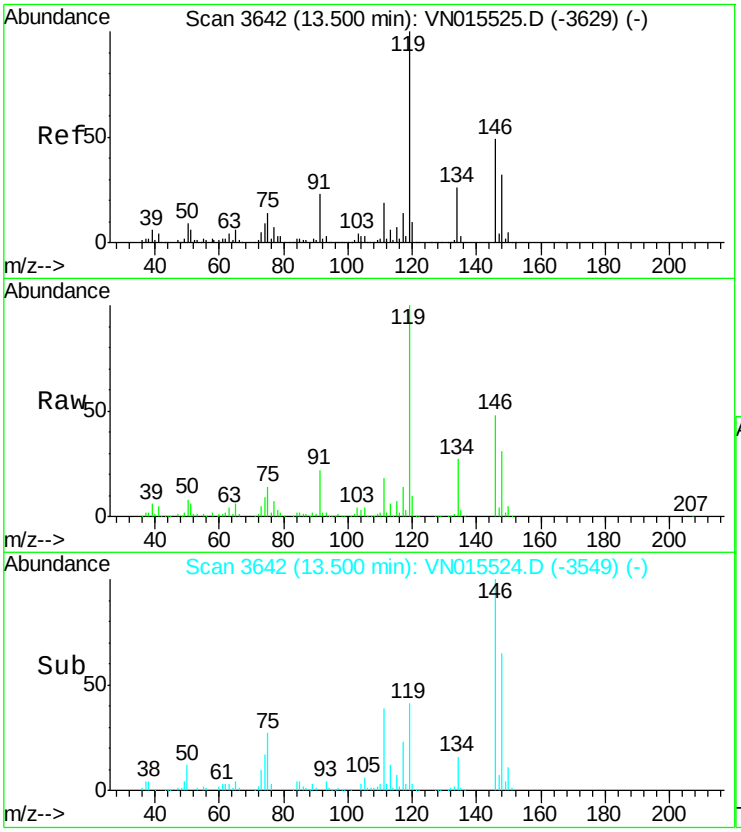


#86
sec-Butylbenzene
Concen: 19.73 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:105 Resp: 154165

Ion	Ratio	Lower	Upper
105	100		
134	21.0	10.6	31.8





#87
p-Isopropyltoluene
Concen: 21.29 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:119 Resp: 135421

Ion	Ratio	Lower	Upper
119	100		
134	27.1	13.3	39.9
91	22.7	11.7	35.1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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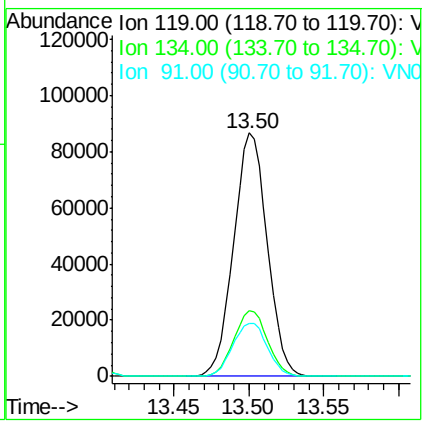
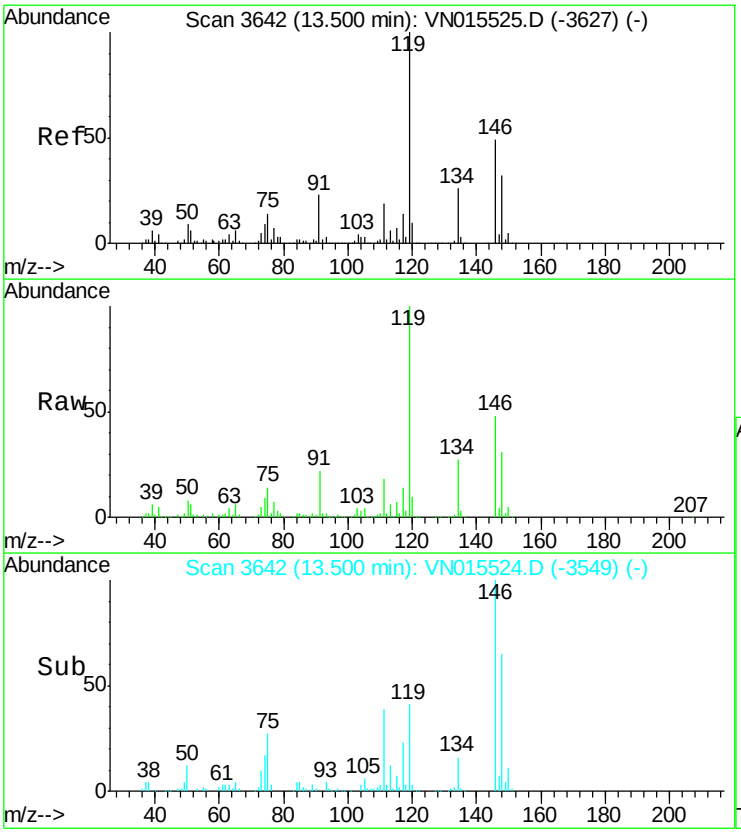
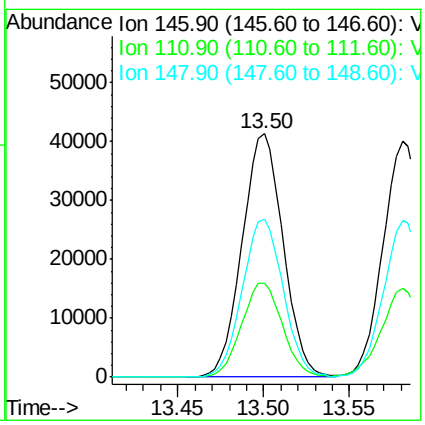


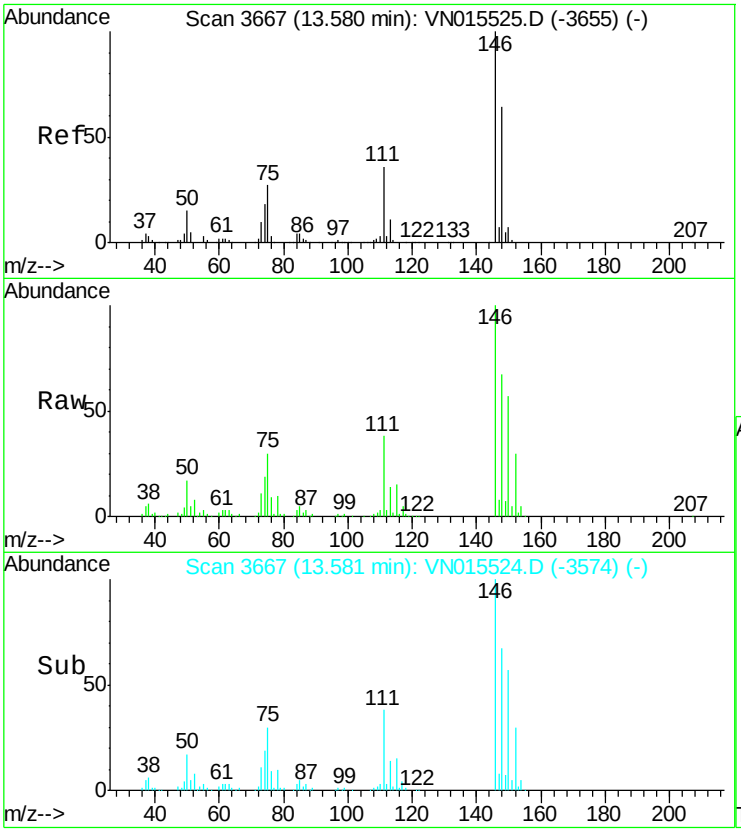


#88
1,3-Dichlorobenzene
Concen: 19.80 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:146 Resp: 68619

Ion	Ratio	Lower	Upper
146	100		
111	38.6	19.1	57.1
148	64.7	32.4	97.0





#89
1,4-Dichlorobenzene
Concen: 19.28 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:146 Resp: 66737

Ion	Ratio	Lower	Upper
146	100		
111	38.6	18.4	55.4
148	65.4	32.3	96.9

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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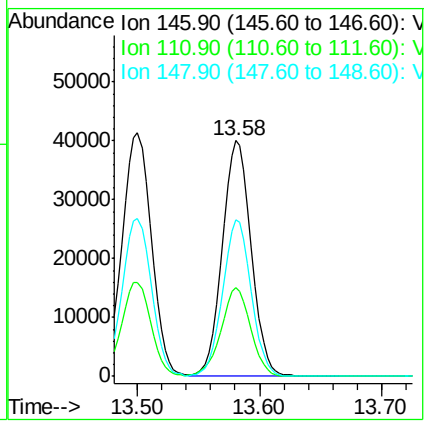
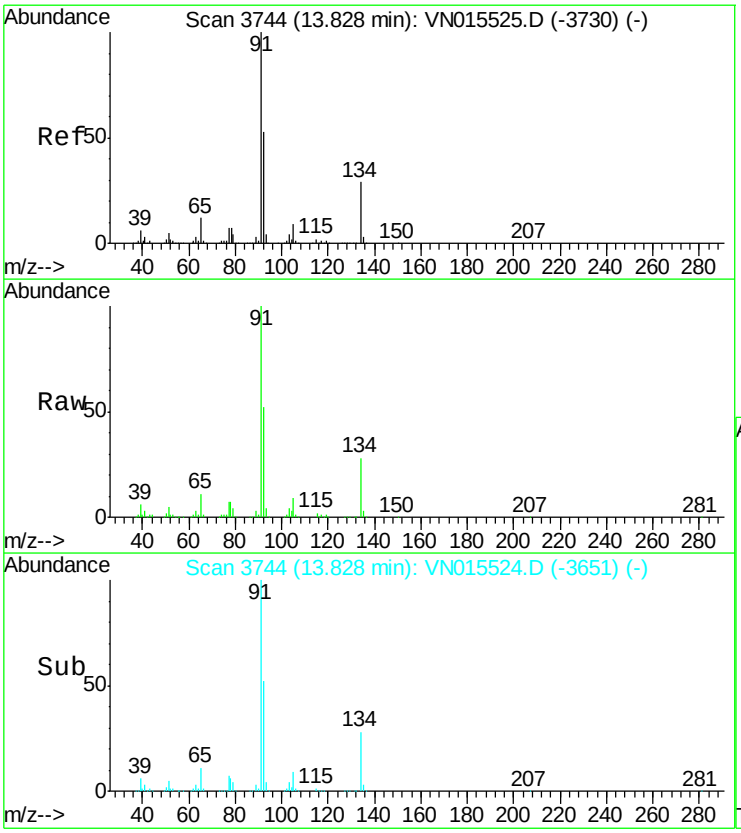
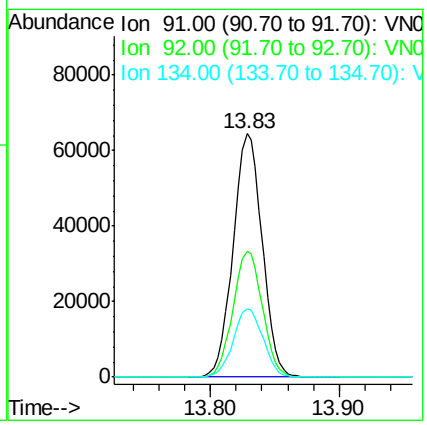


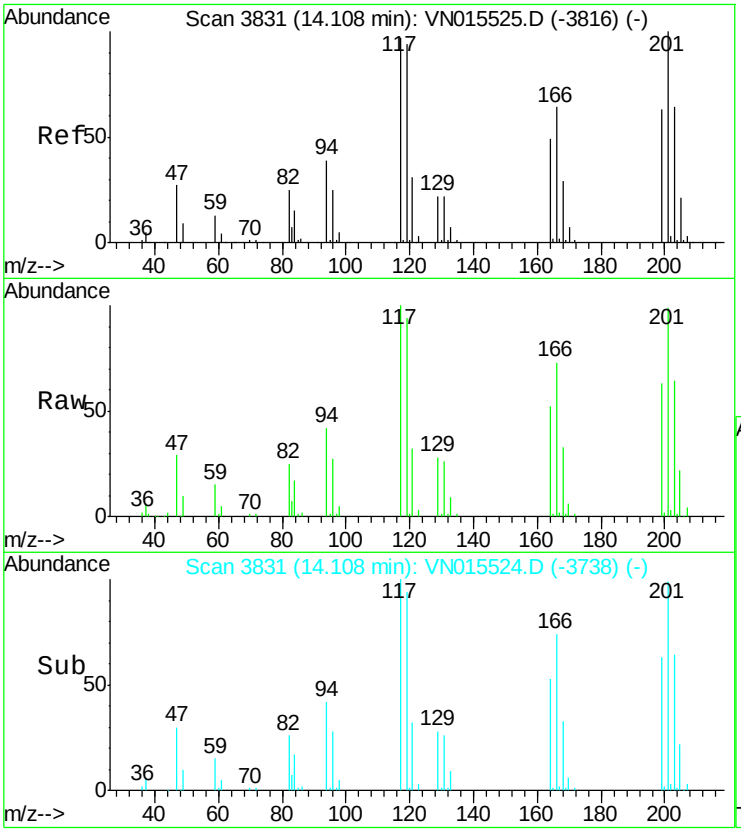


#90
n-Butylbenzene
Concen: 19.56 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion: 91 Resp: 100842

Ion	Ratio	Lower	Upper
91	100		
92	52.3	26.6	79.8
134	28.9	14.4	43.4





#91
Hexachloroethane
Concen: 19.86 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:117 Resp: 25536

Ion	Ratio	Lower	Upper
117	100		
201	101.6	51.7	155.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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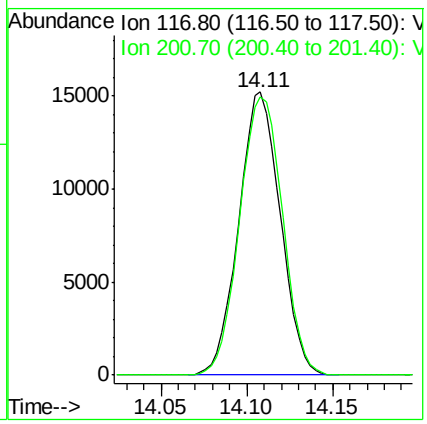
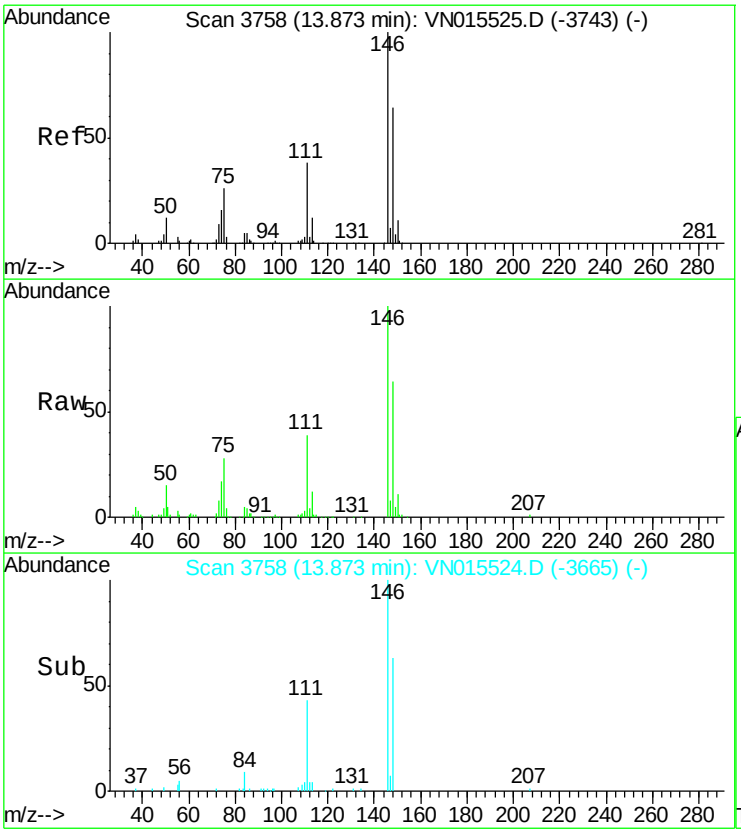
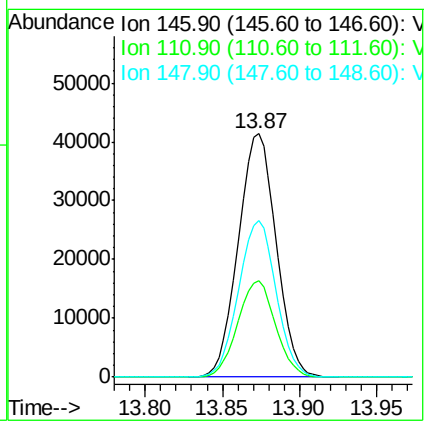


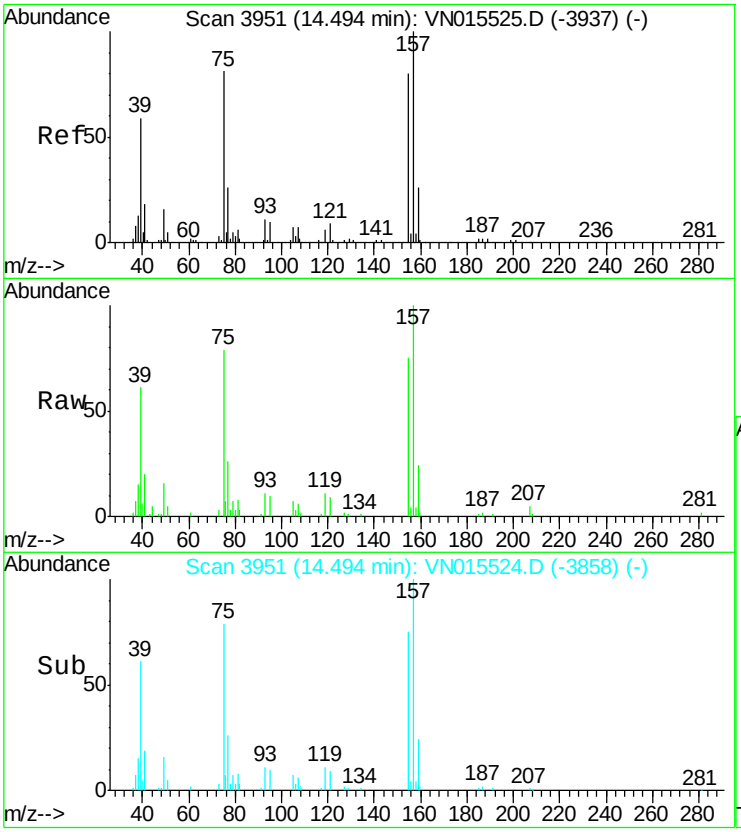


#92
1,2-Dichlorobenzene
Concen: 20.04 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:146 Resp: 70663

Ion	Ratio	Lower	Upper
146	100		
111	39.3	19.4	58.2
148	63.8	32.4	97.0





#93
1,2-Dibromo-3-Chloropropane
Concen: 19.55 ug/l
RT: 14.49 min Scan# 3951
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

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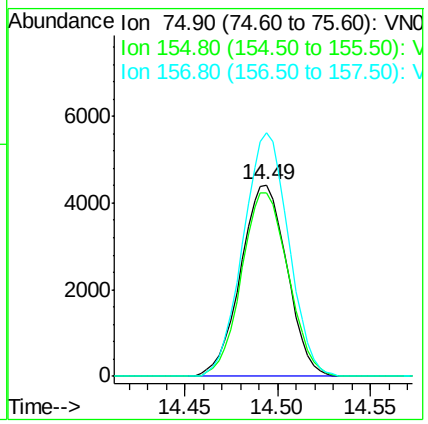
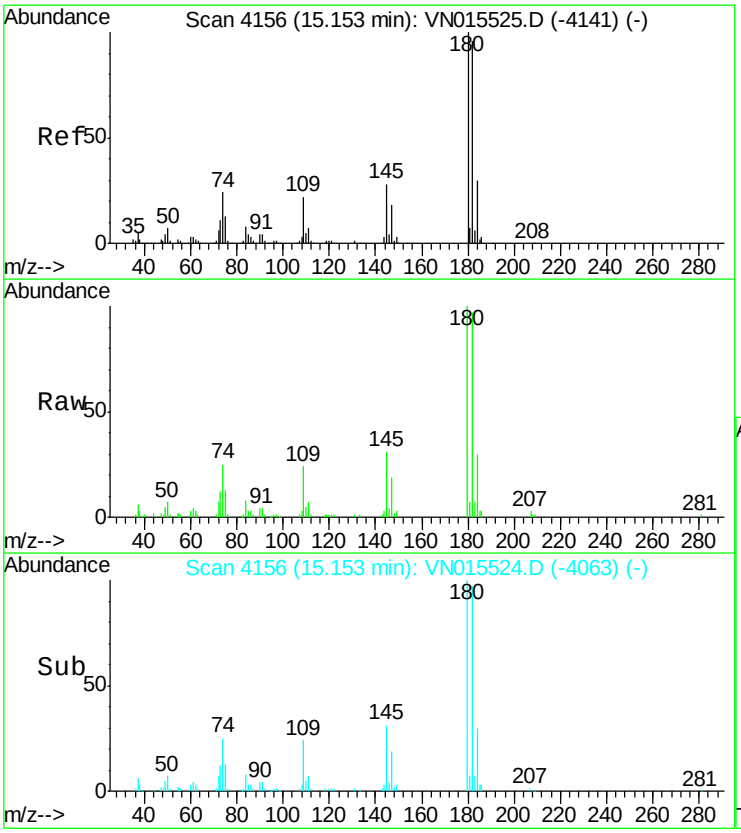
Tgt Ion: 75 Resp: 7676

Ion	Ratio	Lower	Upper
75	100		
155	96.5	49.4	148.2
157	124.9	61.3	183.8

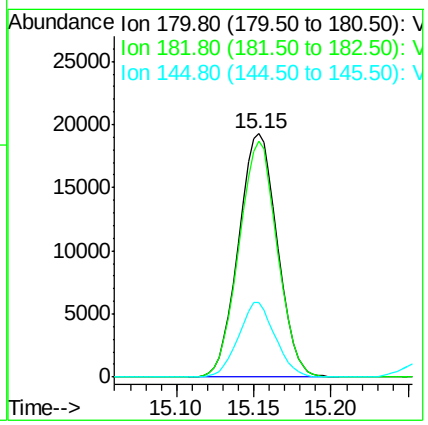


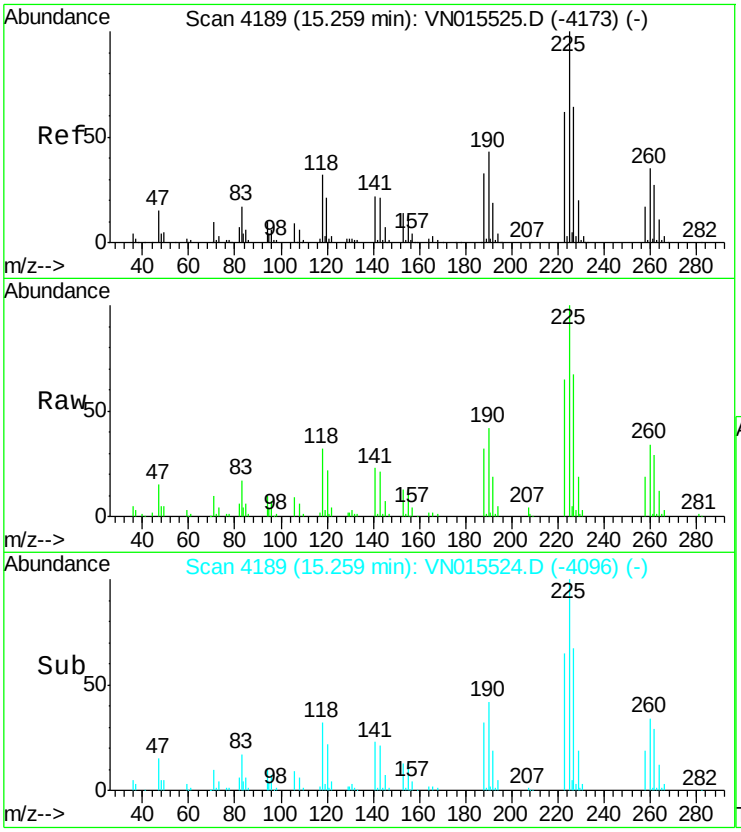


#94
1,2,4-Trichlorobenzene
Concen: 19.18 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:180 Resp: 33569

Ion	Ratio	Lower	Upper
180	100		
182	95.8	48.0	144.0
145	29.3	14.0	42.0





#95
Hexachlorobutadiene
Concen: 21.26 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:225 Resp: 26164

Ion	Ratio	Lower	Upper
225	100		
223	62.0	31.6	95.0
227	65.9	32.1	96.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
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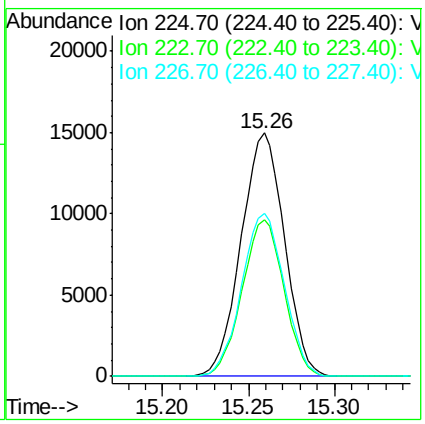
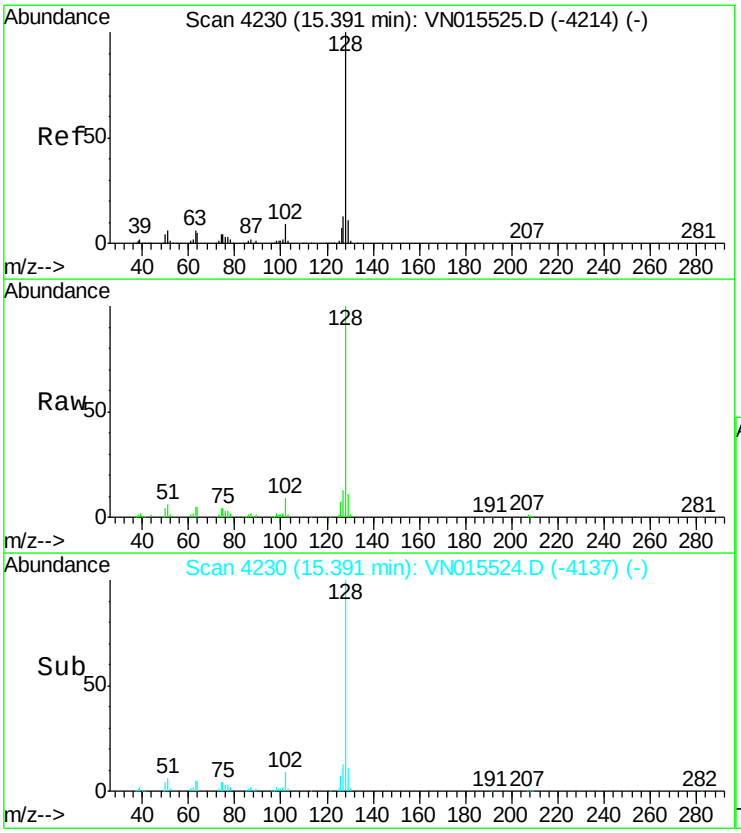
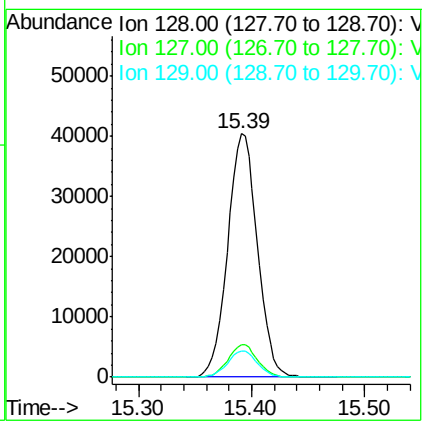


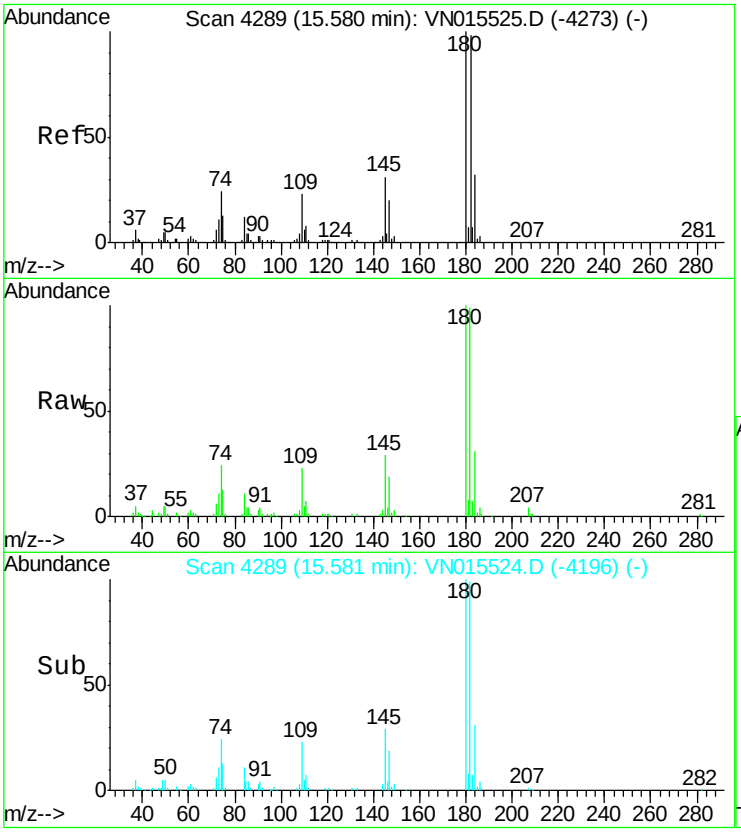


#96
Naphthalene
Concen: 18.01 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:128 Resp: 73627

Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.3	15.5
129	10.7	8.7	13.1

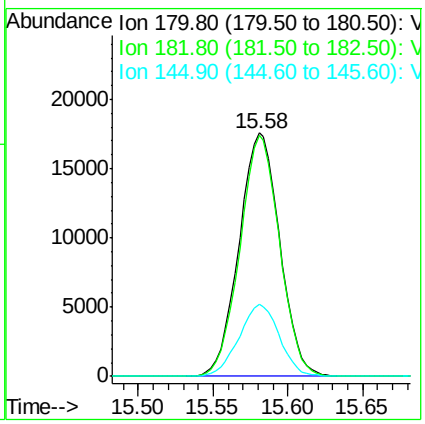




#97
1,2,3-Trichlorobenzene
Concen: 18.57 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015524.D
Acq: 20 May 2014 18:24

Tgt Ion:180 Resp: 33251

Ion	Ratio	Lower	Upper
180	100		
182	96.0	47.8	143.4
145	29.3	14.9	44.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC020

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:45 AM

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015525.D
Acq On : 20 May 2014 18:54
Operator : MD
Sample : VSTDICCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

Quant Time: May 21 01:35:19 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	198886	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	278373	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	243469	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	116575	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	106024	42.02	ug/l	0.00
Spiked Amount 50.000			Recovery	=	84.04%	
36) Dibromofluoromethane	7.80	113	86303	47.56	ug/l	0.00
Spiked Amount 50.000			Recovery	=	95.12%	
51) Toluene-d8	10.29	98	314972	46.17	ug/l	0.00
Spiked Amount 50.000			Recovery	=	92.34%	
63) 4-Bromofluorobenzene	12.61	95	111916	49.39	ug/l	0.00
Spiked Amount 50.000			Recovery	=	98.78%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	75198	33.04	ug/l	100
3) Chlorodifluoromethane	1.87	51	54519	29.74	ug/l	100
4) Chloromethane	2.07	50	91561	32.89	ug/l	100
5) Vinyl Chloride	2.20	62	87057	36.97	ug/l	100
6) Bromomethane	2.61	94	51573	37.88	ug/l	100
7) Chloroethane	2.76	64	56385	38.12	ug/l	100
8) Trichlorofluoromethane	3.11	101	139809	42.41	ug/l	100
9) Diethyl Ether	3.53	74	54622	43.81	ug/l	100
10) 1,1,2-Trichlorotrifluoroet	3.91	101	79411	44.01	ug/l	100
11) Methyl Iodide	4.11	142	107217	58.06	ug/l	100
12) Tert butyl alcohol	4.95	59	60335	274.97	ug/l	100
13) 1,1-Dichloroethene	3.88	96	76958	43.24	ug/l	100
14) Acrolein	3.73	56	49318	228.34	ug/l	100
15) Allyl chloride	4.51	41	136391	44.13	ug/l	100
16) Acrylonitrile	5.18	53	195911	226.91	ug/l	100
17) Acetone	3.94	43	181182	204.43	ug/l	100
18) Carbon Disulfide	4.24	76	218358	43.36	ug/l	100
19) Methyl Acetate	4.50	43	171671	73.53	ug/l	100
20) Methyl tert-butyl Ether	5.27	73	279144	45.71	ug/l	100
21) Methylene Chloride	4.74	84	88088	41.79	ug/l	100
22) trans-1,2-Dichloroethene	5.28	96	81862	43.47	ug/l	100
23) Diisopropyl ether	6.18	45	287409	41.10	ug/l	100
24) Vinyl Acetate	6.12	43	765689m	155.02	ug/l	
25) 1,1-Dichloroethane	6.08	63	158253	42.02	ug/l	100
26) 2-Butanone	7.05	43	257929	220.63	ug/l	100
27) 2,2-Dichloropropane	7.06	77	136693	47.69	ug/l	100
28) cis-1,2-Dichloroethene	7.06	96	98447	44.43	ug/l	100
29) Bromochloromethane	7.42	49	76093	40.84	ug/l	100
30) Tetrahydrofuran	7.44	42	167182	221.35	ug/l	100
31) Chloroform	7.58	83	160683	43.13	ug/l	100
32) Cyclohexane	7.89	56	143316	33.67	ug/l	100
33) 1,1,1-Trichloroethane	7.79	97	151625	46.62	ug/l	100
37) 1,1-Dichloropropene	8.01	75	120745	45.64	ug/l	100
38) Ethyl Acetate	7.15	43	111412	55.94	ug/l	100

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015525.D
Acq On : 20 May 2014 18:54
Operator : MD
Sample : VSTDICCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

Quant Time: May 21 01:35:19 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) Carbon Tetrachloride	8.00	117	136298	51.15	ug/l		100
40) Methylcyclohexane	9.29	83	148416	47.41	ug/l		100
41) Benzene	8.26	78	359349	46.66	ug/l		100
42) Methacrylonitrile	7.37	41	64975	46.55	ug/l		100
43) 1,2-Dichloroethane	8.33	62	133195	47.25	ug/l		100
44) Isopropyl Acetate	8.35	43	194390	59.35	ug/l		100
45) Trichloroethene	9.04	130	99582	48.53	ug/l		100
46) 1,2-Dichloropropane	9.32	63	91712	43.88	ug/l		100
47) Dibromomethane	9.41	93	61941	47.91	ug/l		100
48) Bromodichloromethane	9.59	83	127260	49.37	ug/l		100
49) Methyl methacrylate	9.38	41	98451	48.79	ug/l		100
50) 1,4-Dioxane	9.40	88	28588	1078.52	ug/l		100
52) 4-Methyl-2-Pentanone	10.16	43	546037	245.70	ug/l		100
53) Toluene	10.35	92	229631	48.81	ug/l		100
54) t-1,3-Dichloropropene	10.57	75	135472	52.25	ug/l		100
55) cis-1,3-Dichloropropene	10.03	75	144970	48.93	ug/l		100
56) 1,1,2-Trichloroethane	10.75	97	90235	48.66	ug/l		100
57) Ethyl methacrylate	10.61	69	136888	53.42	ug/l		100
58) 1,3-Dichloropropane	10.90	76	149873	47.19	ug/l		100
59) 2-Chloroethyl Vinyl ether	9.88	63	86724	90.92	ug/l		100
60) 2-Hexanone	10.93	43	372829	249.92	ug/l		100
61) Dibromochloromethane	11.10	129	110121	53.36	ug/l		100
62) 1,2-Dibromoethane	11.21	107	94830	50.96	ug/l		100
65) Tetrachloroethene	10.83	164	93586	48.02	ug/l		100
66) Chlorobenzene	11.64	112	252473	48.27	ug/l		100
67) 1,1,1,2-Tetrachloroethane	11.71	131	100858	53.09	ug/l		100
68) Ethyl Benzene	11.71	91	429638	50.68	ug/l		100
69) m/p-Xylenes	11.82	106	331553	103.29	ug/l		100
70) o-Xylene	12.15	106	167125	50.82	ug/l		100
71) Styrene	12.17	104	268773	54.73	ug/l		100
72) Bromoform	12.34	173	86162	59.17	ug/l	#	100
74) Isopropylbenzene	12.46	105	440149	47.09	ug/l		100
75) N-amyl acetate	12.26	43	147825	56.12	ug/l		100
76) 1,1,2,2-Tetrachloroethane	12.70	83	121324	45.10	ug/l		100
77) 1,2,3-Trichloropropane	12.75	75	105430m	42.84	ug/l		
78) Bromobenzene	12.74	156	119032	48.93	ug/l		100
79) n-propylbenzene	12.80	91	470148	47.17	ug/l		100
80) 2-Chlorotoluene	12.89	91	289140	45.74	ug/l		100
81) 1,3,5-Trimethylbenzene	12.94	105	370698	49.85	ug/l		100
82) trans-1,4-Dichloro-2-buten	12.49	75	39369	57.81	ug/l		100
83) 4-Chlorotoluene	12.98	91	282364	48.04	ug/l		100
84) tert-Butylbenzene	13.20	119	325185	48.41	ug/l		100
85) 1,2,4-Trimethylbenzene	13.25	105	376300	50.76	ug/l		100
86) sec-Butylbenzene	13.38	105	423703	47.42	ug/l		100
87) p-Isopropyltoluene	13.50	119	376238	51.71	ug/l		100
88) 1,3-Dichlorobenzene	13.50	146	196247	49.51	ug/l		100
89) 1,4-Dichlorobenzene	13.58	146	193097	48.79	ug/l		100
90) n-Butylbenzene	13.83	91	297964	50.54	ug/l		100
91) Hexachloroethane	14.11	117	71872	48.89	ug/l		100
92) 1,2-Dichlorobenzene	13.87	146	196189	48.64	ug/l		100

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015525.D
Acq On : 20 May 2014 18:54
Operator : MD
Sample : VSTDICCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

Quant Time: May 21 01:35:19 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2-Dibromo-3-Chloropropan	14.49	75	21635	48.19	ug/l	100
94) 1,2,4-Trichlorobenzene	15.15	180	110242	55.08	ug/l	100
95) Hexachlorobutadiene	15.26	225	72293	51.36	ug/l	100
96) Naphthalene	15.39	128	260285	55.69	ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	106788	52.16	ug/l	100

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

Quantitation Report (QT Reviewed)

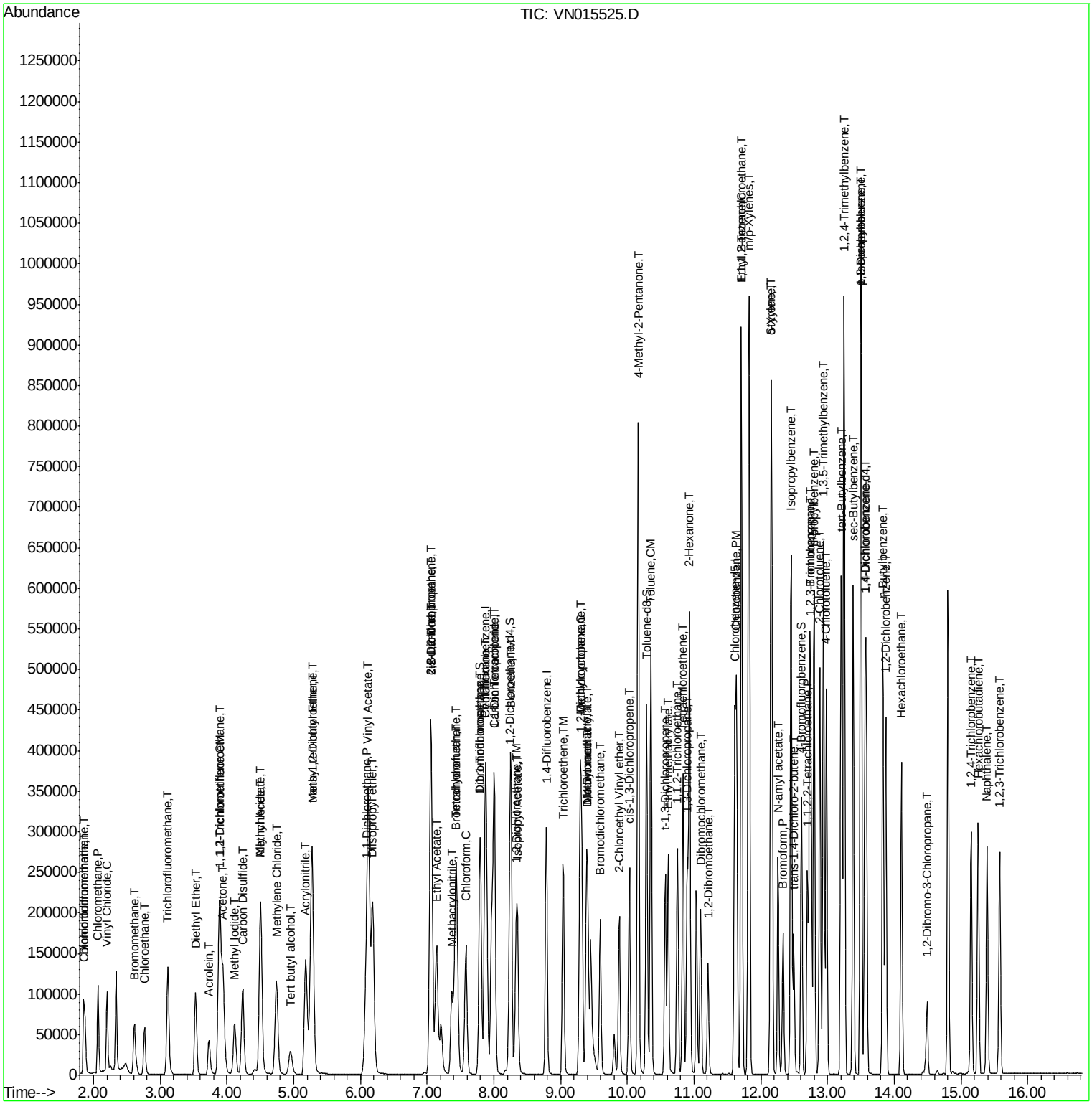
ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015525.D
Acq On : 20 May 2014 18:54
Operator : MD
Sample : VSTDICCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 21 01:35:19 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

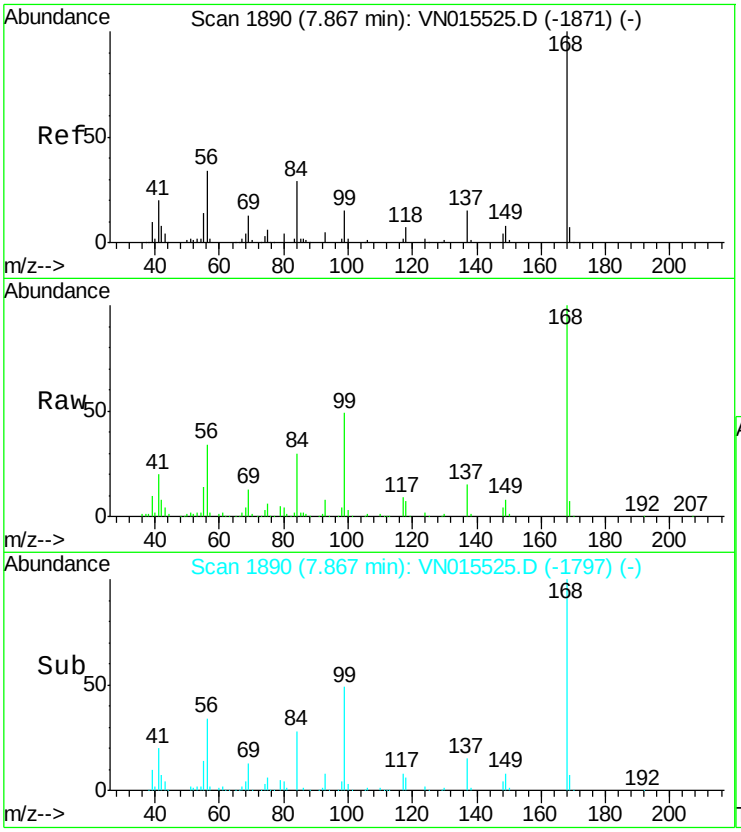
Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

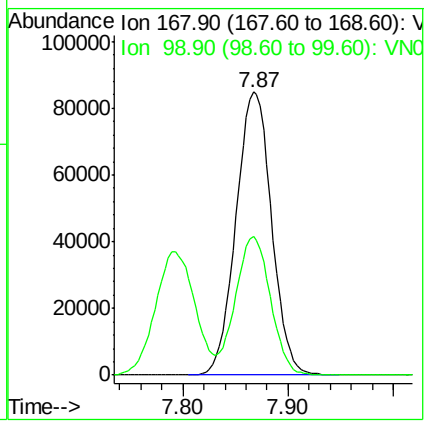
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

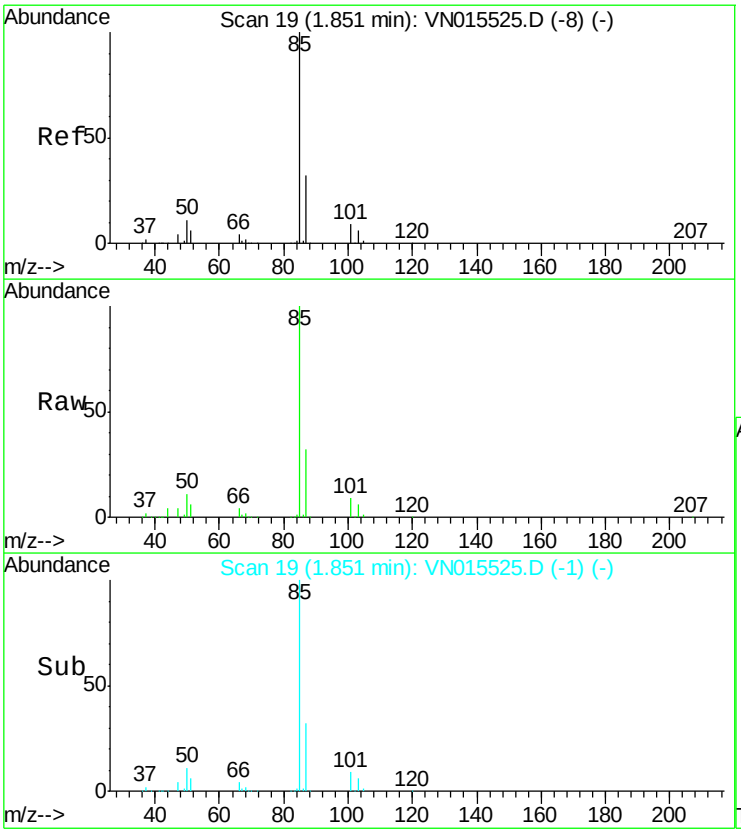


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:168 Resp: 198886

Ion	Ratio	Lower	Upper
168	100		
99	48.7	39.0	58.4

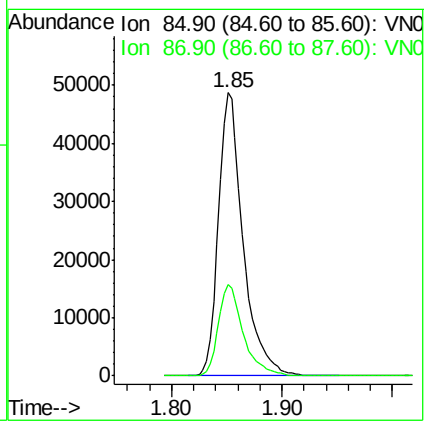




#2
Dichlorodifluoromethane
Concen: 33.04 ug/l
RT: 1.85 min Scan# 19
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

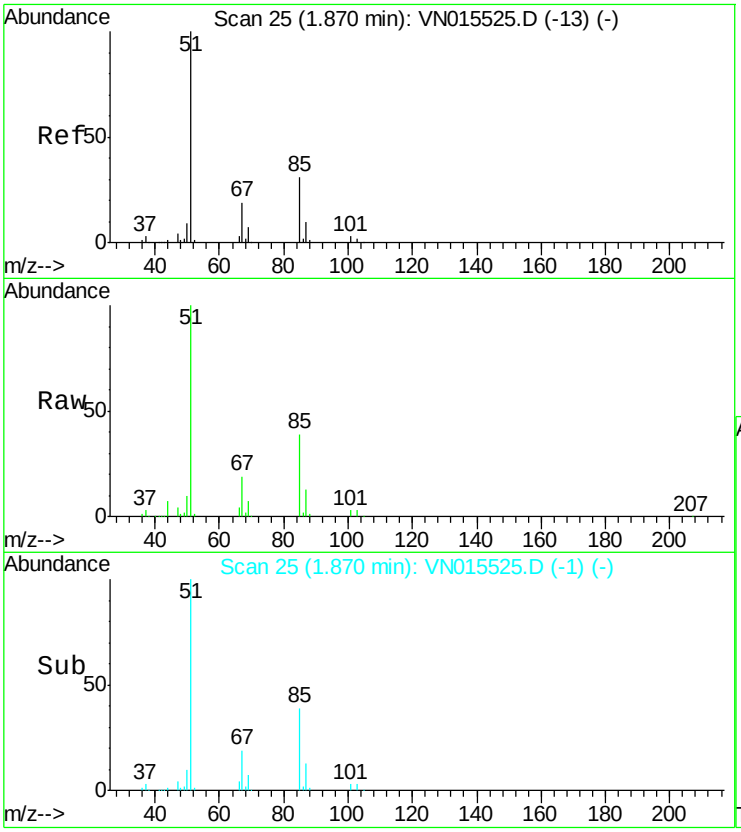
Tgt Ion: 85 Resp: 75198

Ion	Ratio	Lower	Upper
85	100		
87	32.1	16.1	48.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

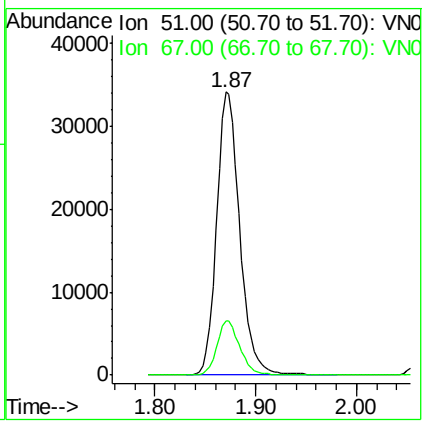
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

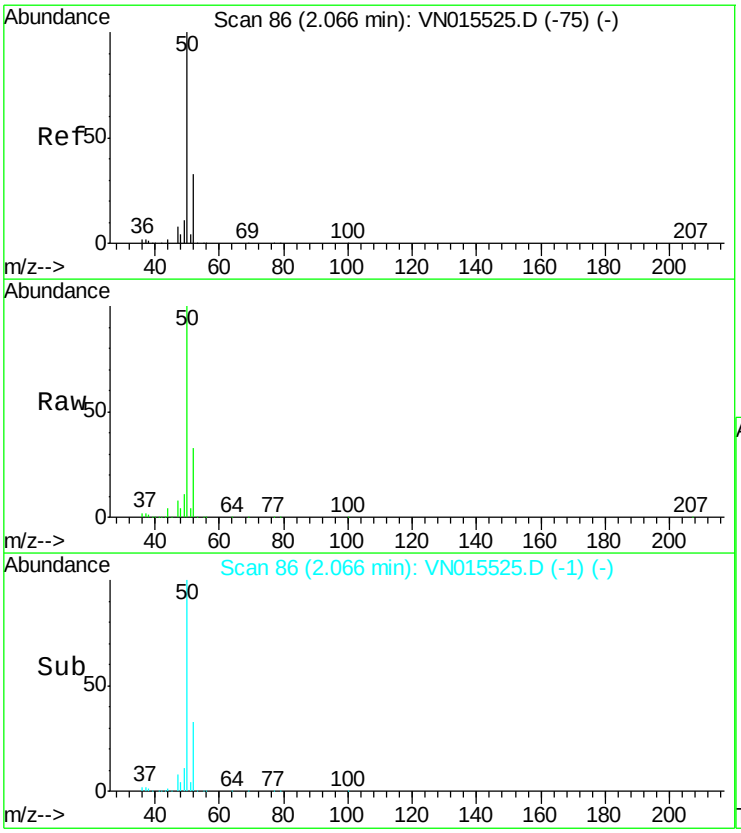


#3
Chlorodifluoromethane
Concen: 29.74 ug/l
RT: 1.87 min Scan# 25
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 51 Resp: 54519

Ion	Ratio	Lower	Upper
51	100		
67	18.9	15.1	22.7

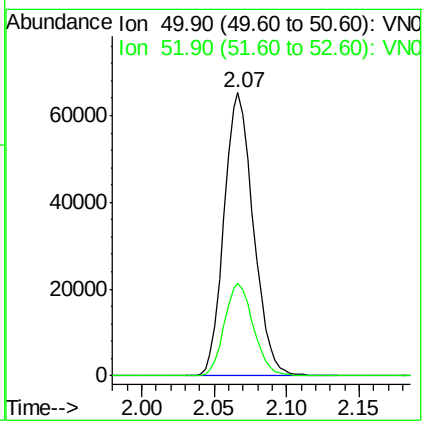




#4
Chloromethane
Concen: 32.89 ug/l
RT: 2.07 min Scan# 86
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

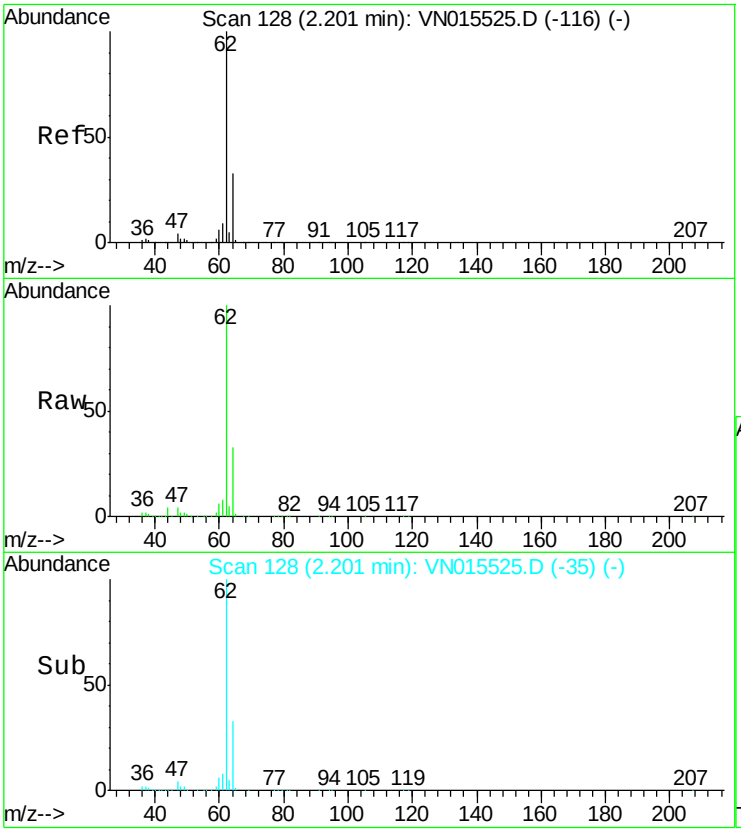
Tgt Ion: 50 Resp: 91561

Ion	Ratio	Lower	Upper
50	100		
52	32.7	26.2	39.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

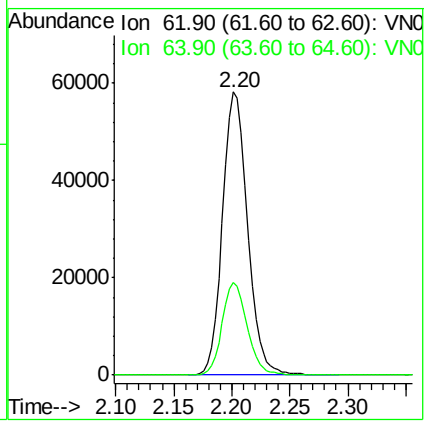
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

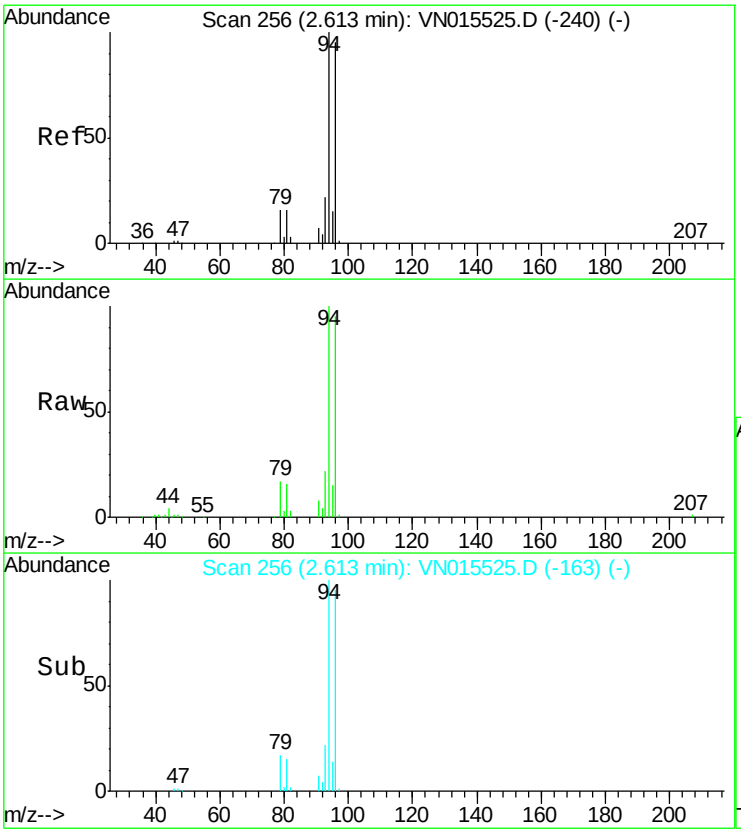


#5
Vinyl Chloride
Concen: 36.97 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 62 Resp: 87057

Ion	Ratio	Lower	Upper
62	100		
64	32.8	26.2	39.4

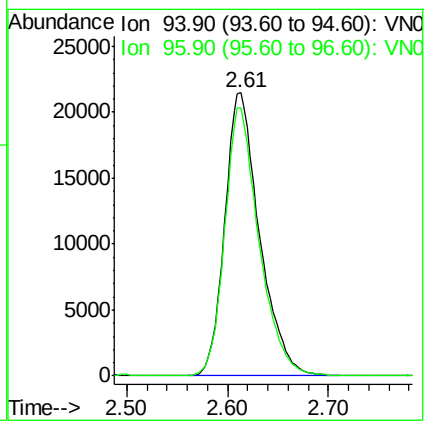




#6
Bromomethane
Concen: 37.88 ug/l
RT: 2.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

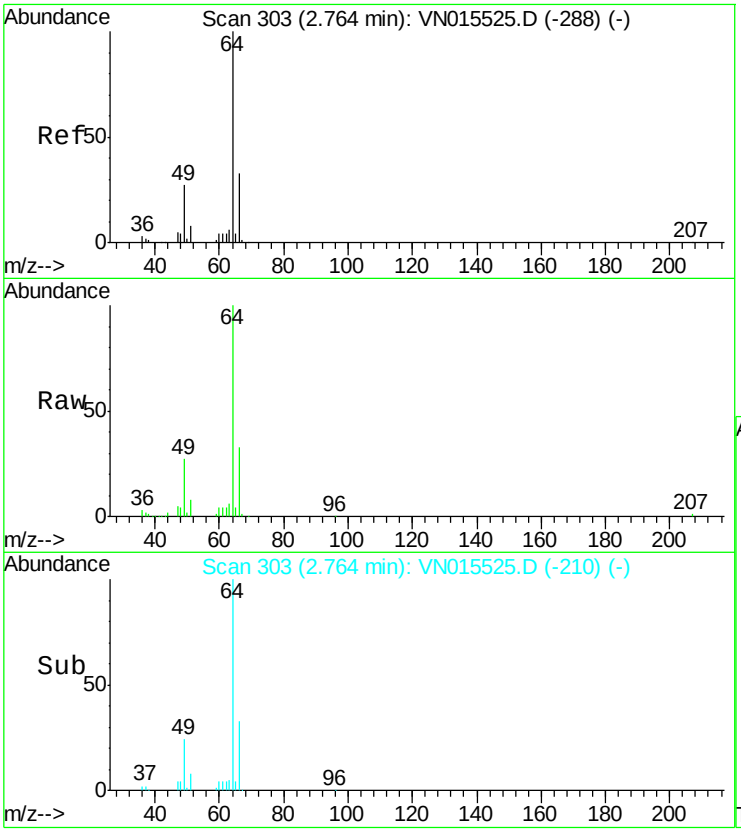
Tgt Ion: 94 Resp: 51573

Ion	Ratio	Lower	Upper
94	100		
96	94.7	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

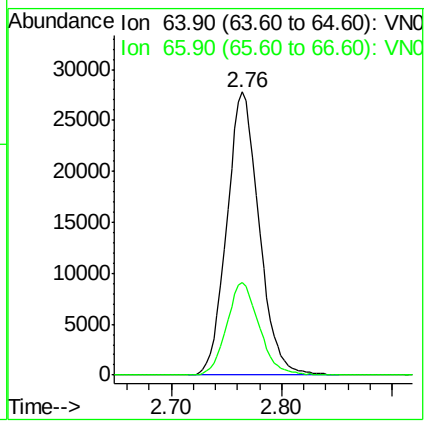
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

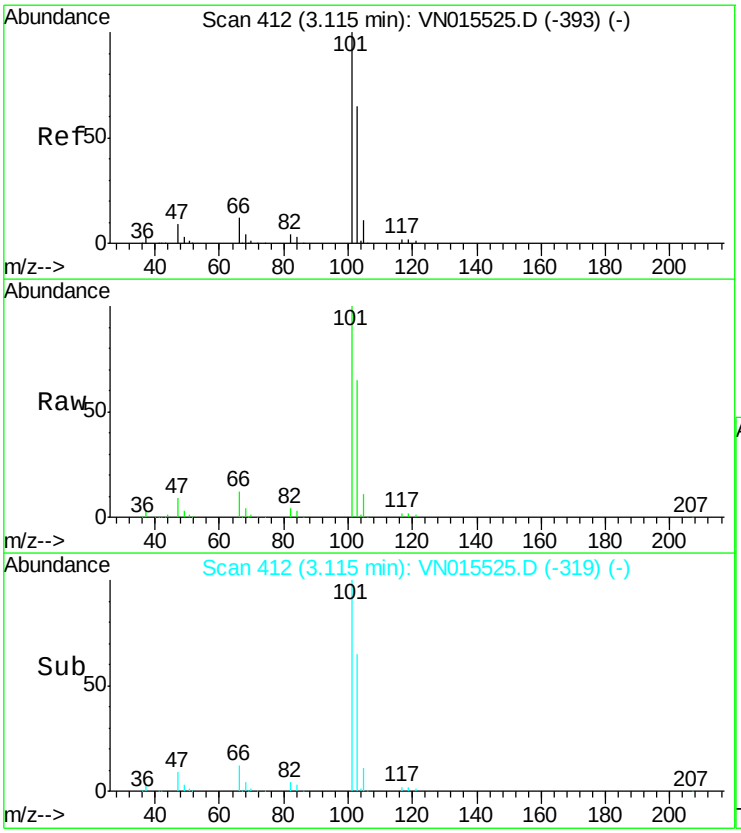


#7
Chloroethane
Concen: 38.12 ug/l
RT: 2.76 min Scan# 303
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 64 Resp: 56385

Ion	Ratio	Lower	Upper
64	100		
66	32.9	26.3	39.5

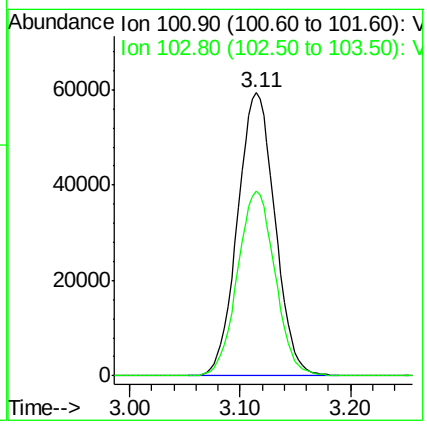




#8
Trichlorofluoromethane
Concen: 42.41 ug/l
RT: 3.11 min Scan# 412
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

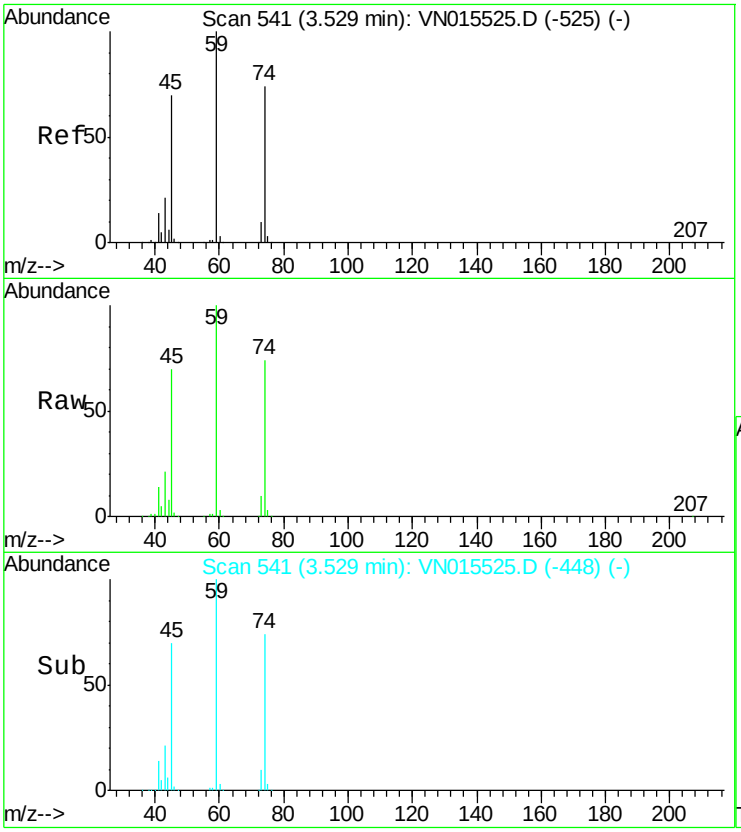
Tgt Ion:101 Resp: 139809

Ion	Ratio	Lower	Upper
101	100		
103	65.1	52.1	78.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

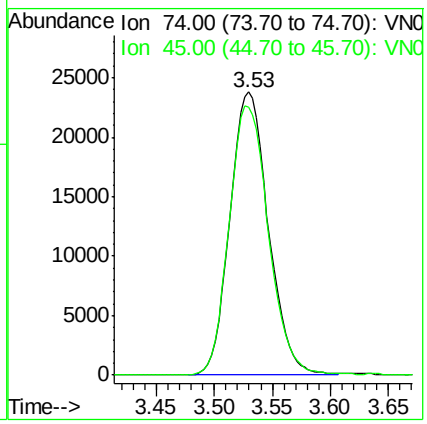
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

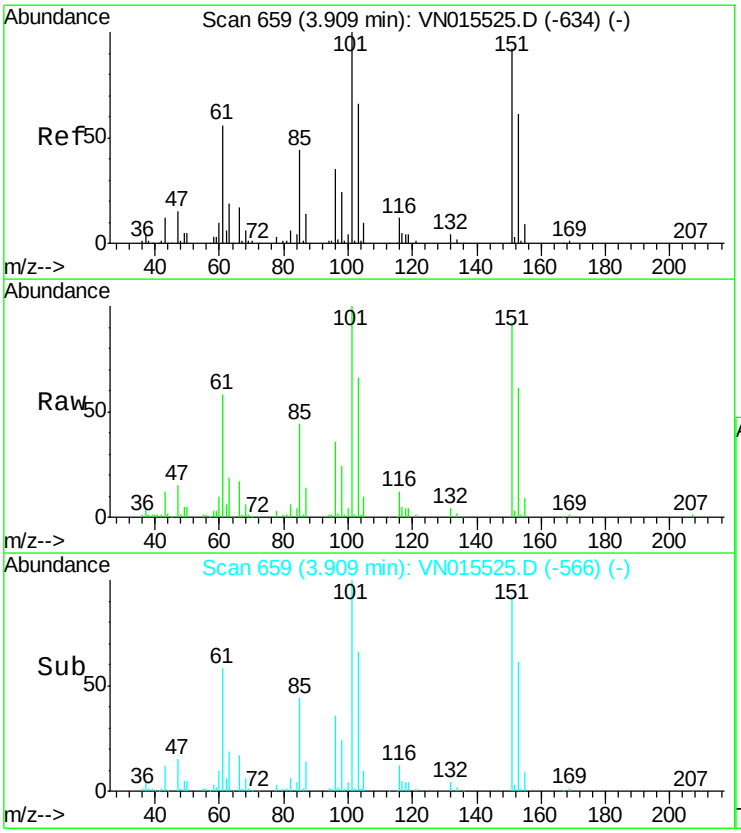


#9
Diethyl Ether
Concen: 43.81 ug/l
RT: 3.53 min Scan# 541
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 74 Resp: 54622

Ion	Ratio	Lower	Upper
74	100		
45	97.9	48.9	146.8

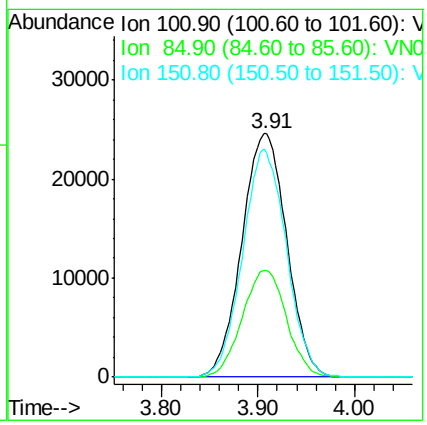




#10
1,1,2-Trichlorotrifluoroethane
Concen: 44.01 ug/l
RT: 3.91 min Scan# 659
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:101 Resp: 79411

Ion	Ratio	Lower	Upper
101	100		
85	43.1	34.5	51.7
151	91.1	72.9	109.3



Instrument :
MSVOA_N
LabSampleId :
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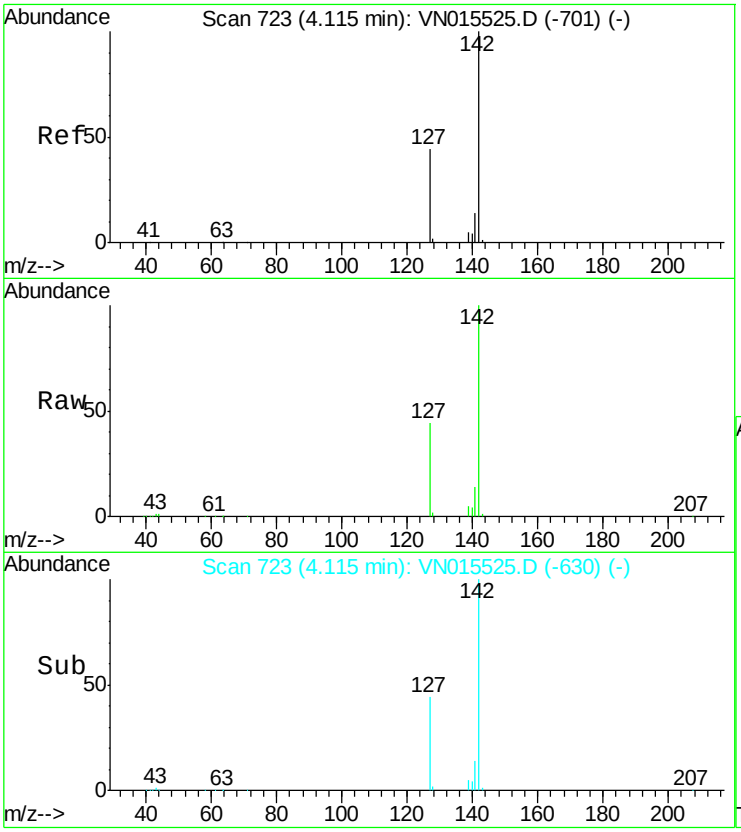
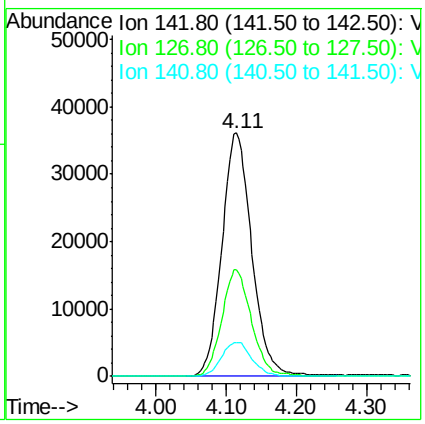
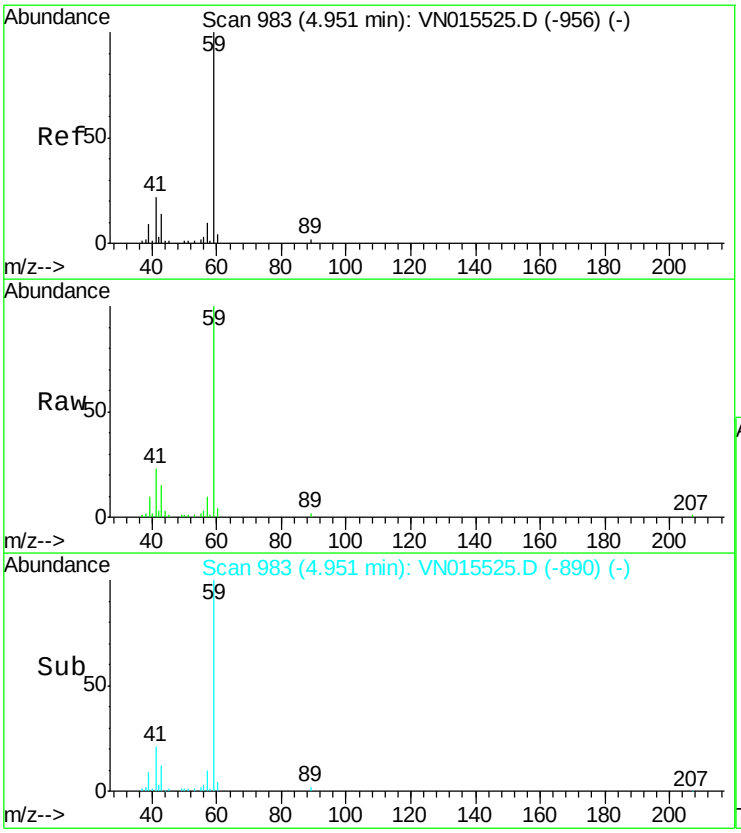


#11
Methyl Iodide
Concen: 58.06 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:142 Resp: 107217

Ion	Ratio	Lower	Upper
142	100		
127	43.4	34.7	52.1
141	14.2	11.4	17.0

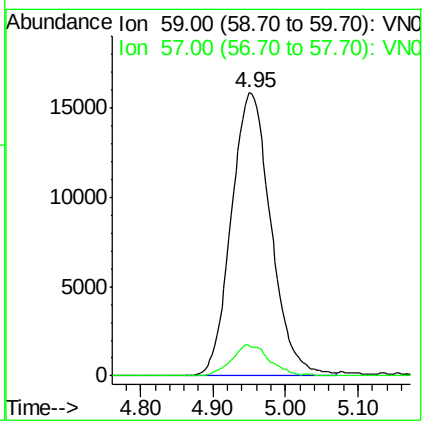




#12
Tert butyl alcohol
Concen: 274.97 ug/l
RT: 4.95 min Scan# 983
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 59 Resp: 60335

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.4	12.6



Instrument :
MSVOA_N
LabSampleId :
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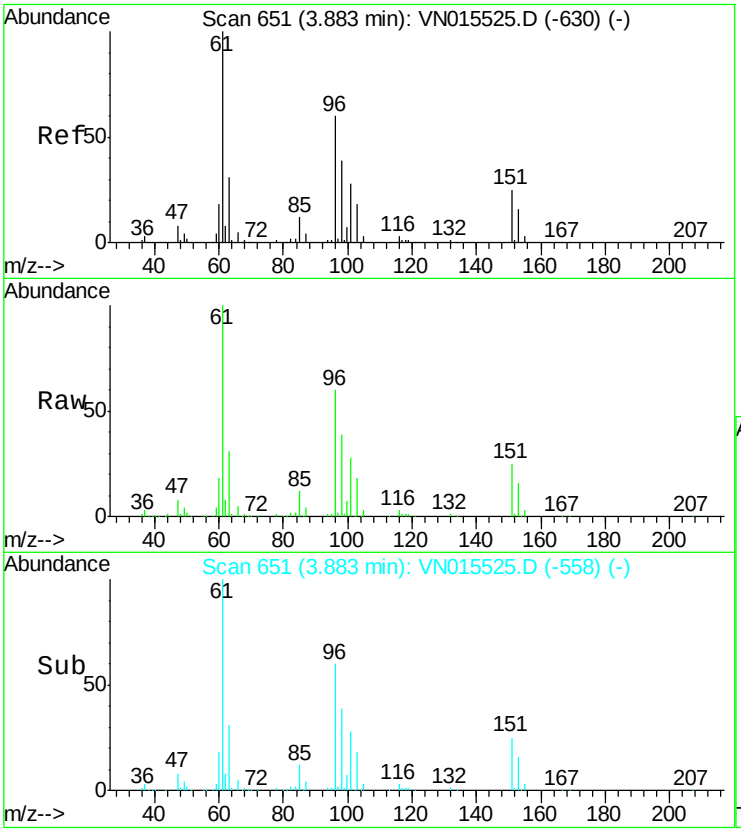
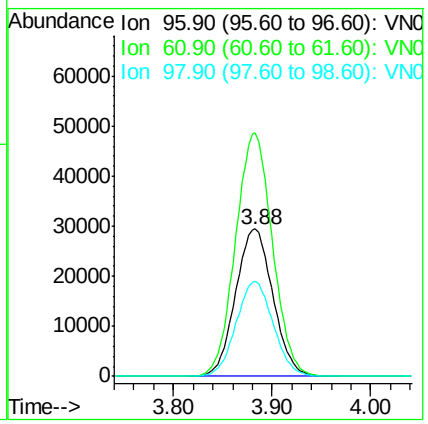
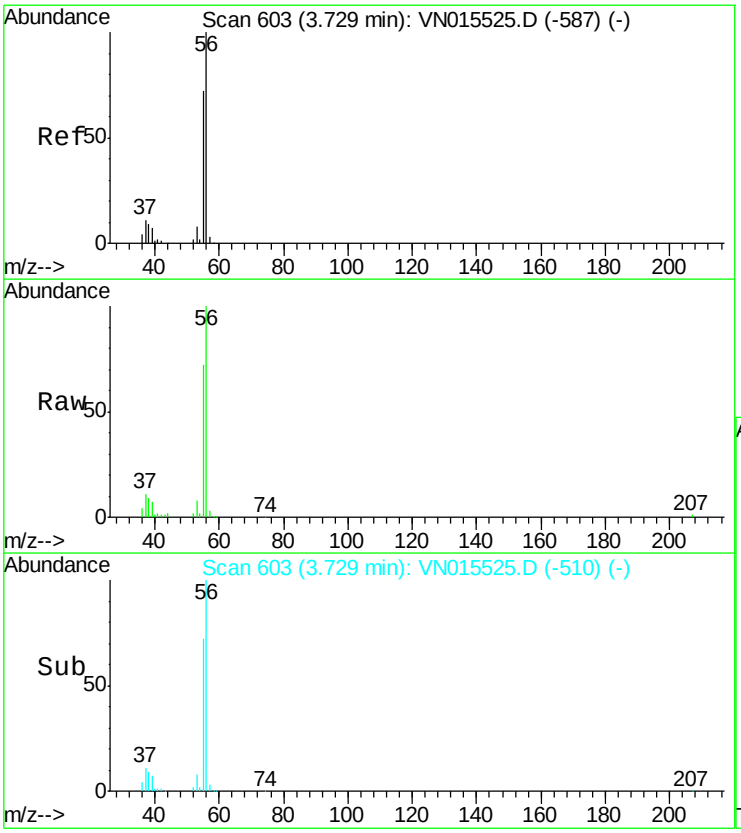


#13
1,1-Dichloroethene
Concen: 43.24 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 96 Resp: 76958

Ion	Ratio	Lower	Upper
96	100		
61	165.4	132.3	198.5
98	64.7	51.8	77.6

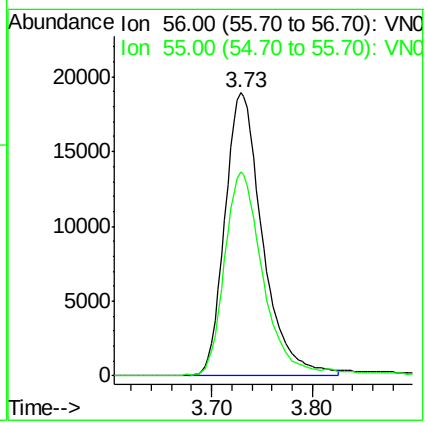




#14
Acrolein
Concen: 228.34 ug/l
RT: 3.73 min Scan# 603
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 56 Resp: 49318

Ion	Ratio	Lower	Upper
56	100		
55	72.4	57.9	86.9



Instrument :
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LabSampleId :
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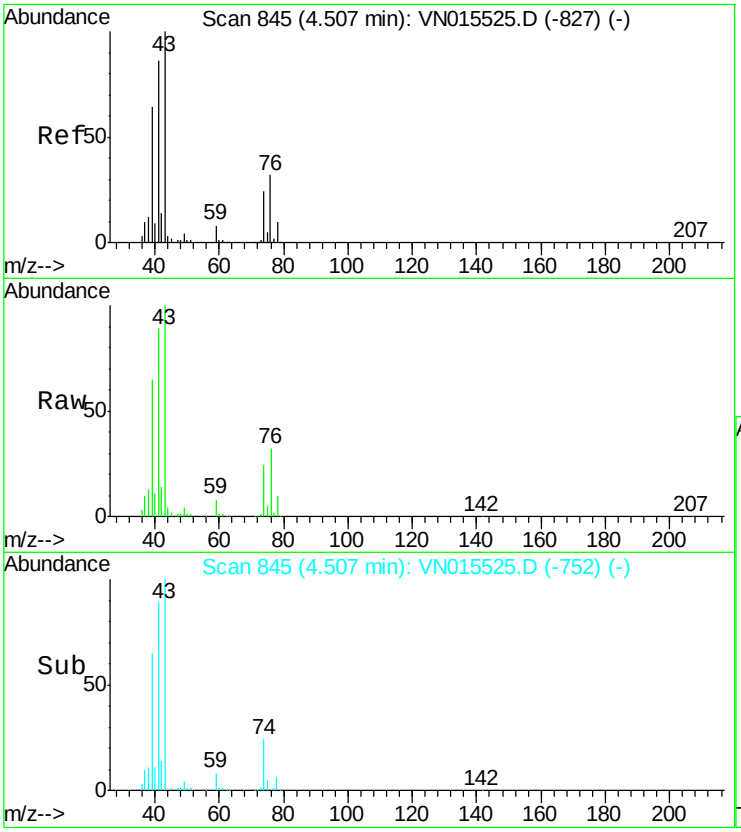
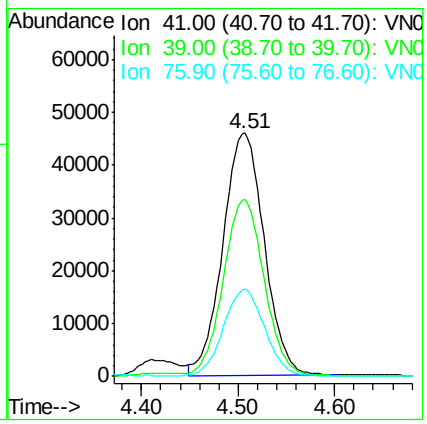
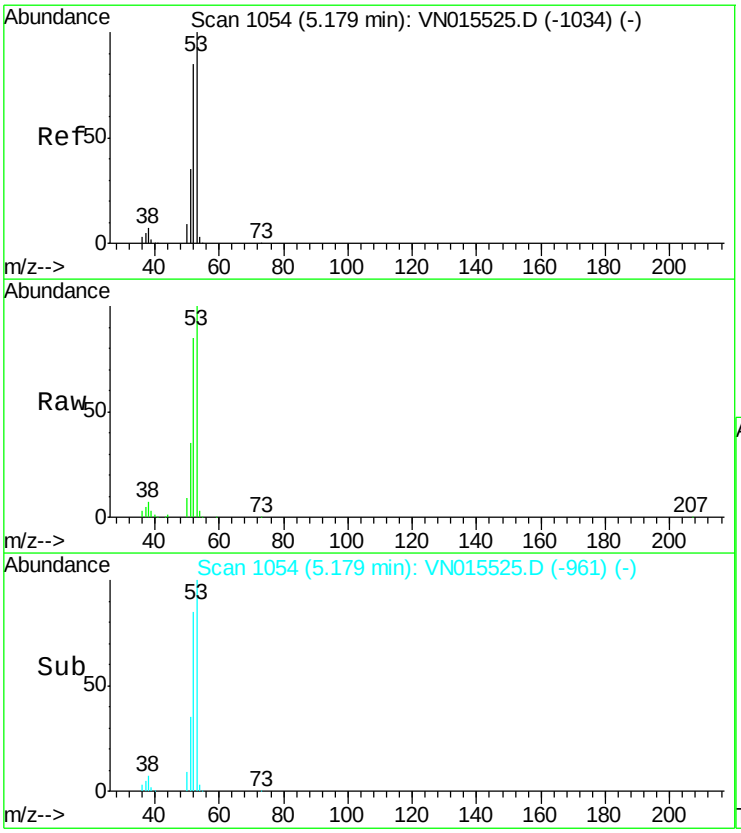


#15
Allyl chloride
Concen: 44.13 ug/l
RT: 4.51 min Scan# 845
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 41 Resp: 136391

Ion	Ratio	Lower	Upper
41	100		
39	71.8	57.4	86.2
76	35.6	28.5	42.7

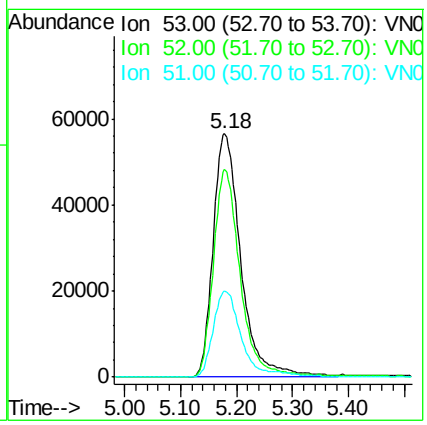


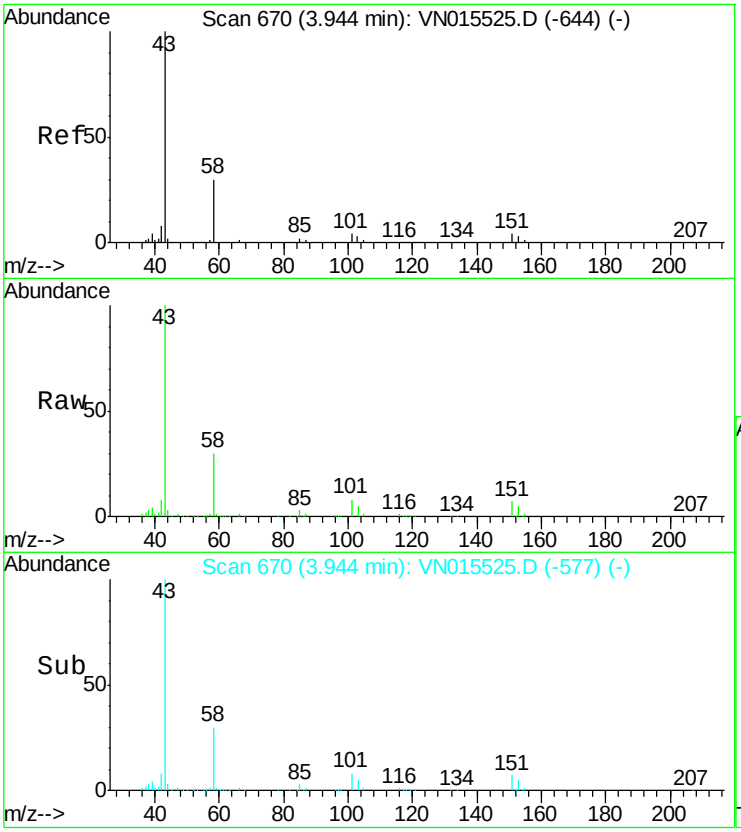


#16
Acrylonitrile
Concen: 226.91 ug/l
RT: 5.18 min Scan# 1054
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 53 Resp: 195911

Ion	Ratio	Lower	Upper
53	100		
52	82.1	65.7	98.5
51	36.4	29.1	43.7





#17
Acetone
Concen: 204.43 ug/l
RT: 3.94 min Scan# 670
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 181182

Ion	Ratio	Lower	Upper
43	100		
58	30.2	24.2	36.2

Instrument :
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LabSampleId :
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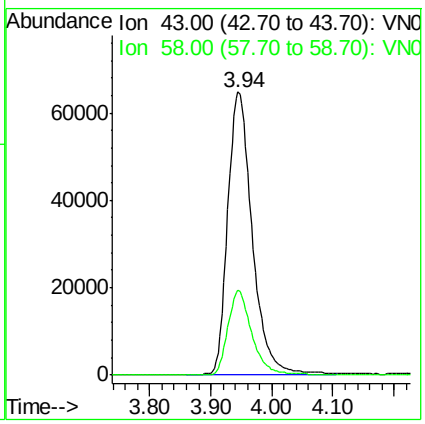
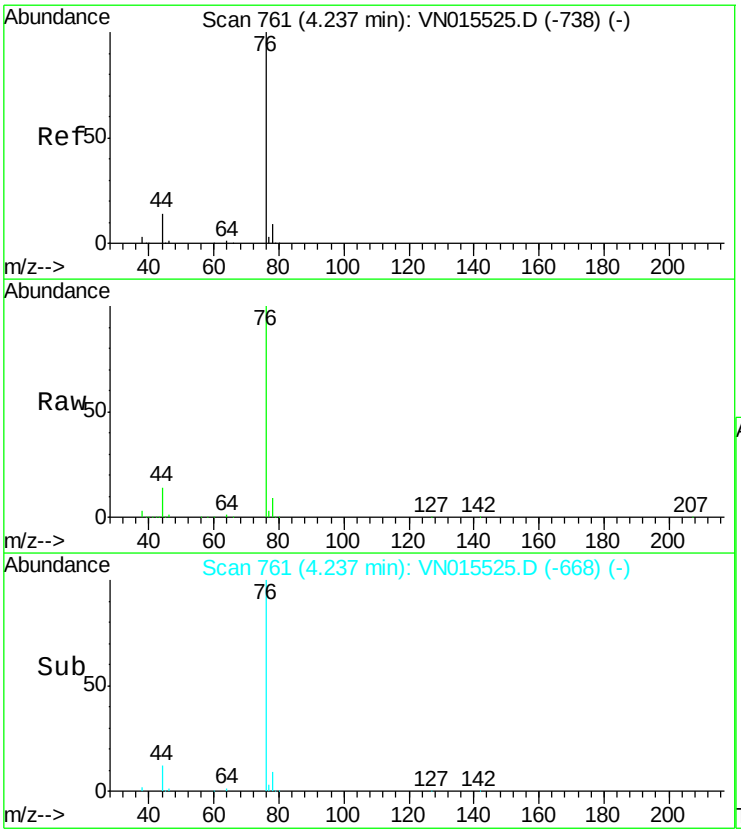
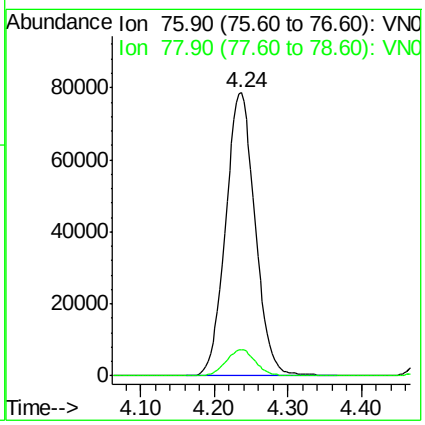




#18
Carbon Disulfide
Concen: 43.36 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 76 Resp: 218358

Ion	Ratio	Lower	Upper
76	100		
78	9.4	7.5	11.3



Instrument :
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LabSampleId :
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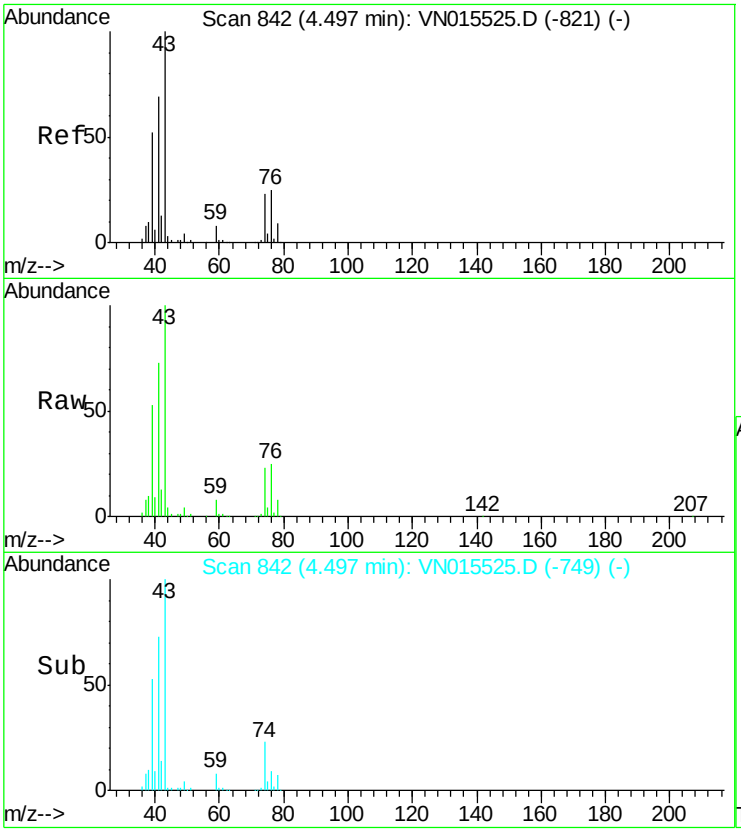
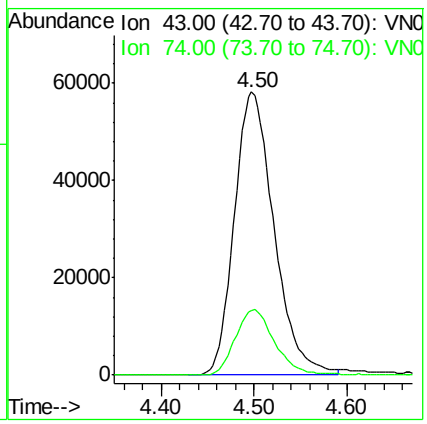
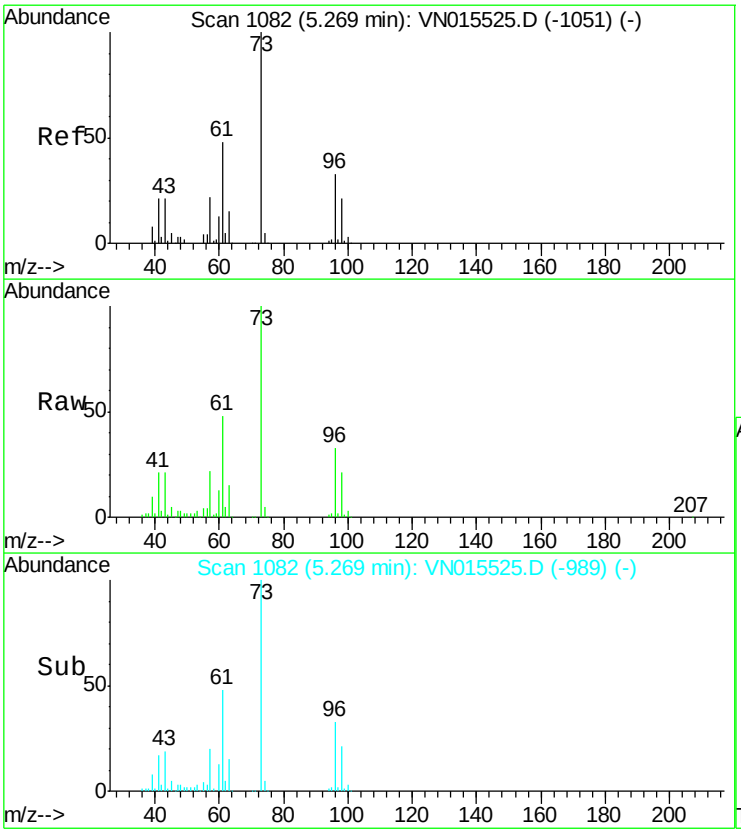


#19
Methyl Acetate
Concen: 73.53 ug/l
RT: 4.50 min Scan# 842
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 171671

Ion	Ratio	Lower	Upper
43	100		
74	23.1	18.5	27.7

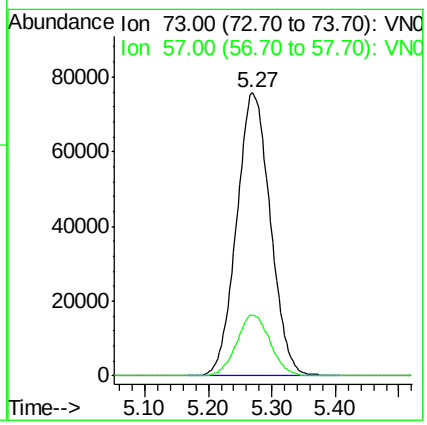




#20
Methyl tert-butyl Ether
Concen: 45.71 ug/l
RT: 5.27 min Scan# 1082
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 73 Resp: 279144

Ion	Ratio	Lower	Upper
73	100		
57	21.6	17.3	25.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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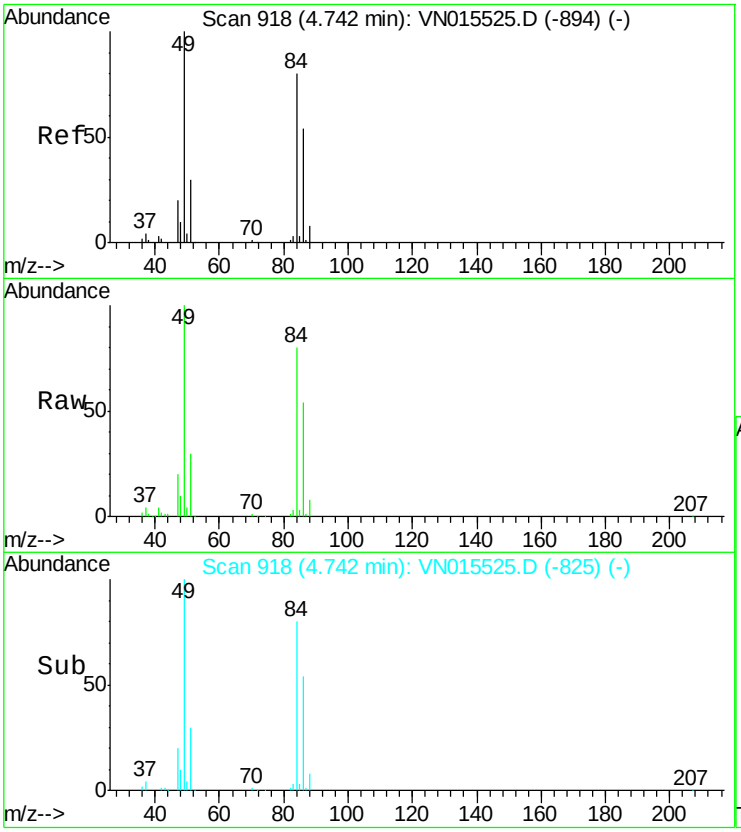
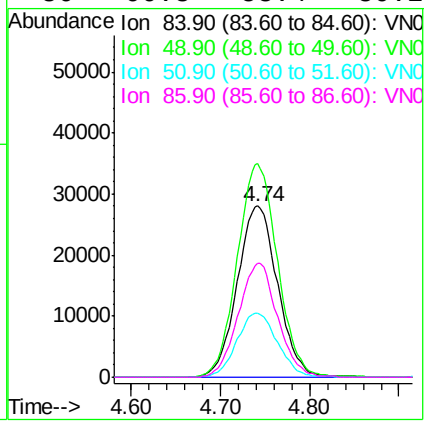
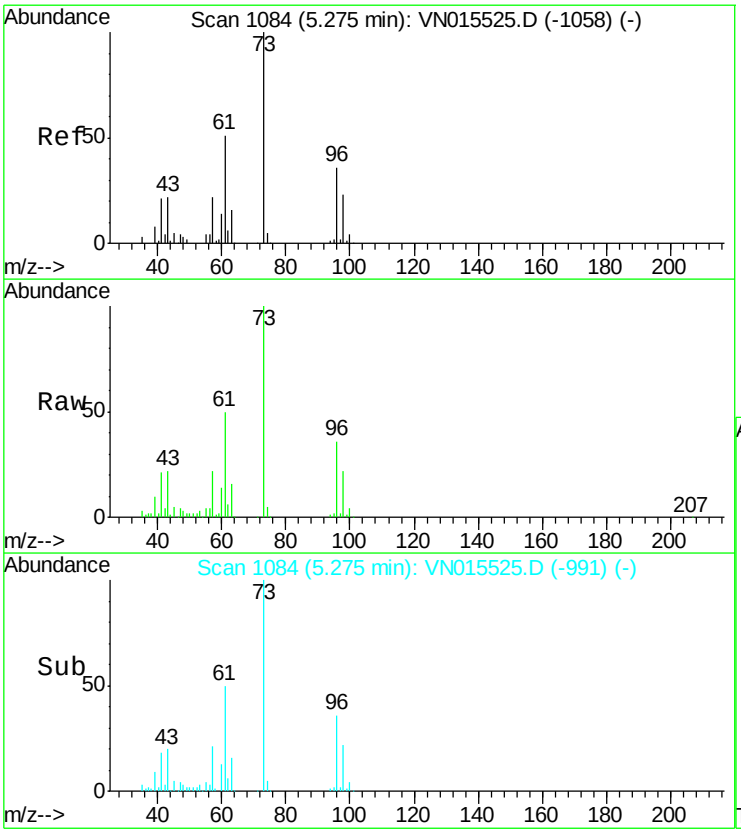


#21
Methylene Chloride
Concen: 41.79 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 84 Resp: 88088

Ion	Ratio	Lower	Upper
84	100		
49	124.7	99.8	149.6
51	37.7	30.2	45.2
86	66.8	53.4	80.2

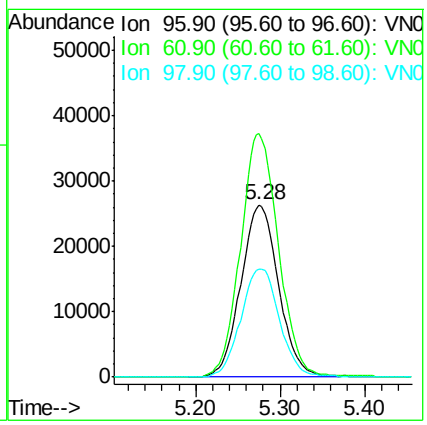




#22
trans-1,2-Dichloroethene
Concen: 43.47 ug/l
RT: 5.28 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 96 Resp: 81862

Ion	Ratio	Lower	Upper
96	100		
61	141.6	113.3	169.9
98	63.0	50.4	75.6



Instrument :
MSVOA_N
LabSampleId :
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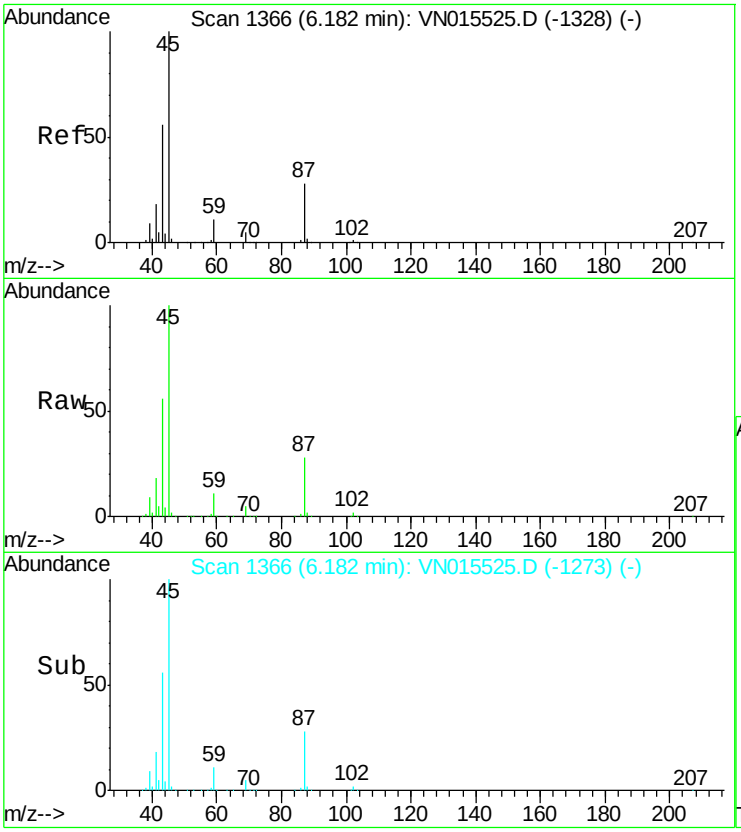
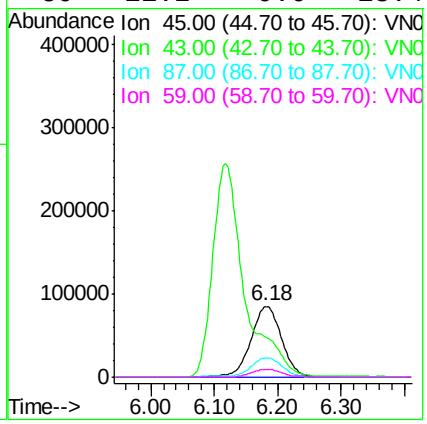
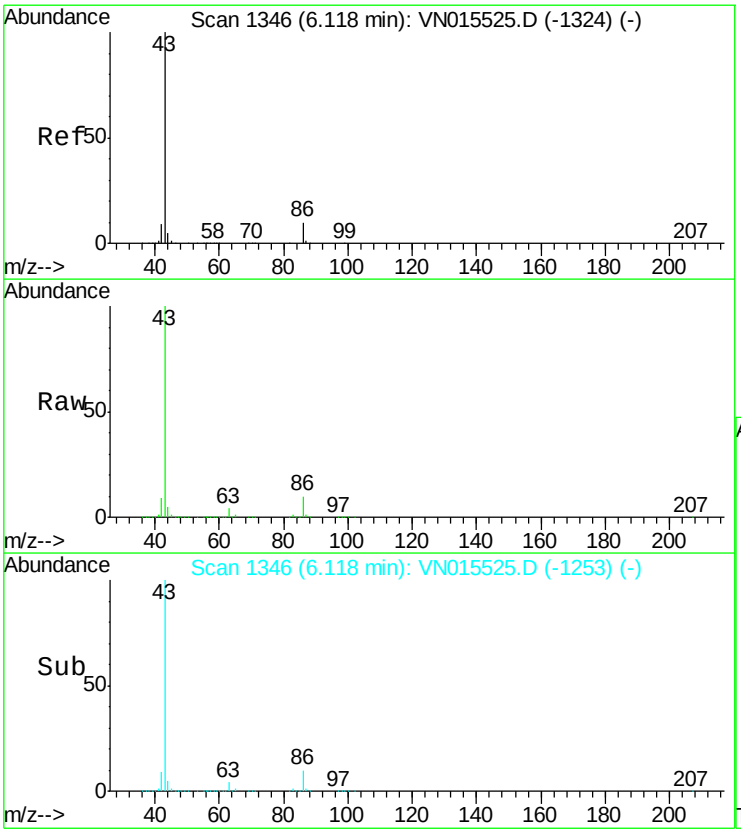


#23
Diisopropyl ether
Concen: 41.10 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 45 Resp: 287409

Ion	Ratio	Lower	Upper
45	100		
43	55.8	44.6	67.0
87	27.9	22.3	33.5
59	11.2	9.0	13.4

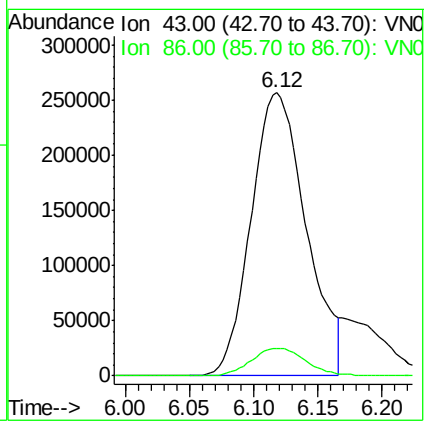




#24
Vinyl Acetate
Concen: 155.02 ug/l m
RT: 6.12 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 765689

Ion	Ratio	Lower	Upper
43	100		
86	9.9	7.9	11.9



Instrument :
MSVOA_N
LabSampleId :
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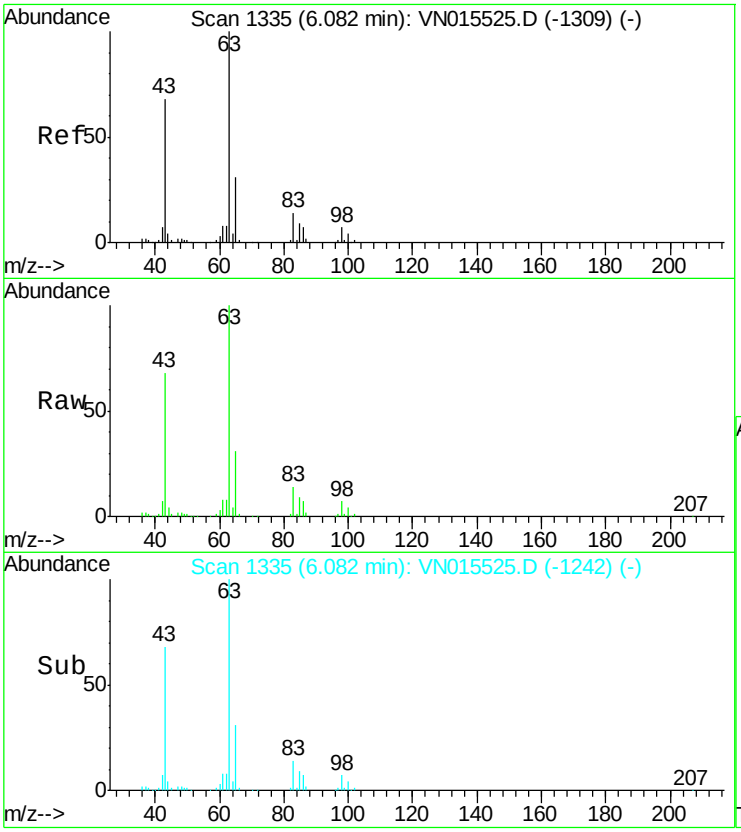
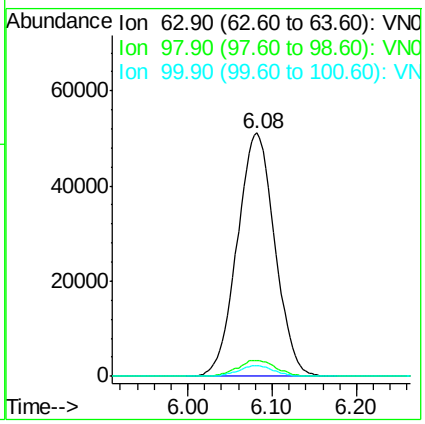
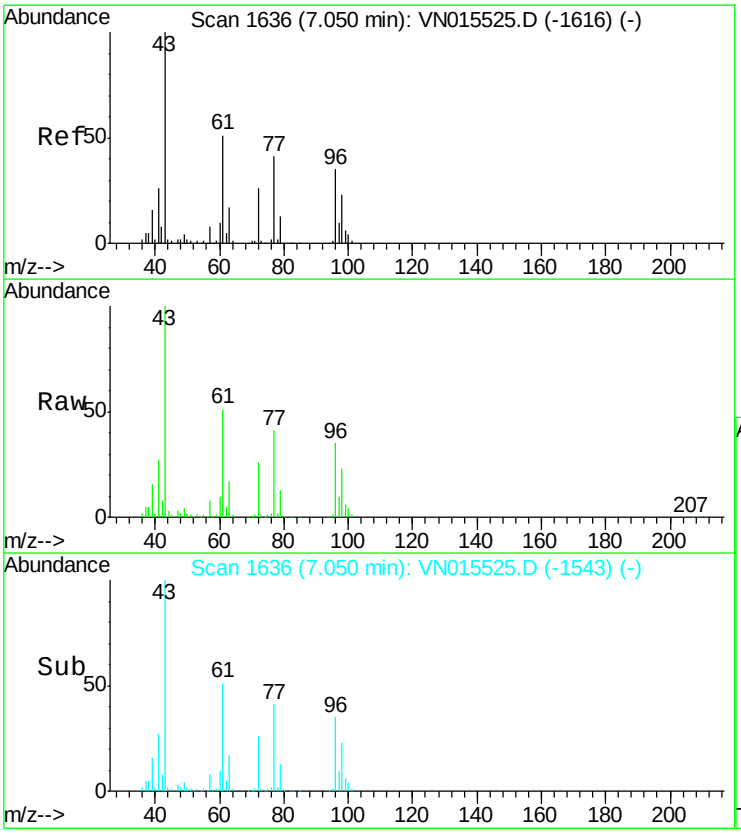


#25
1,1-Dichloroethane
Concen: 42.02 ug/l
RT: 6.08 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 63 Resp: 158253

Ion	Ratio	Lower	Upper
63	100		
98	6.6	3.3	9.9
100	4.2	2.1	6.3

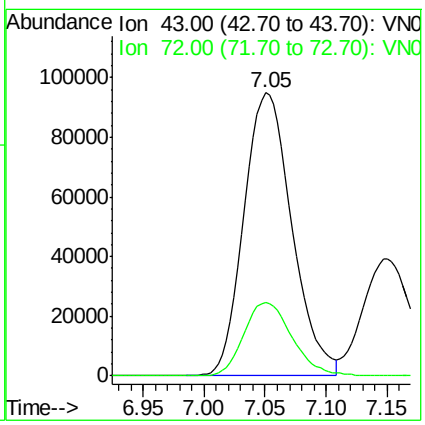




#26
2-Butanone
Concen: 220.63 ug/l
RT: 7.05 min Scan# 1636
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 257929

Ion	Ratio	Lower	Upper
43	100		
72	25.9	20.7	31.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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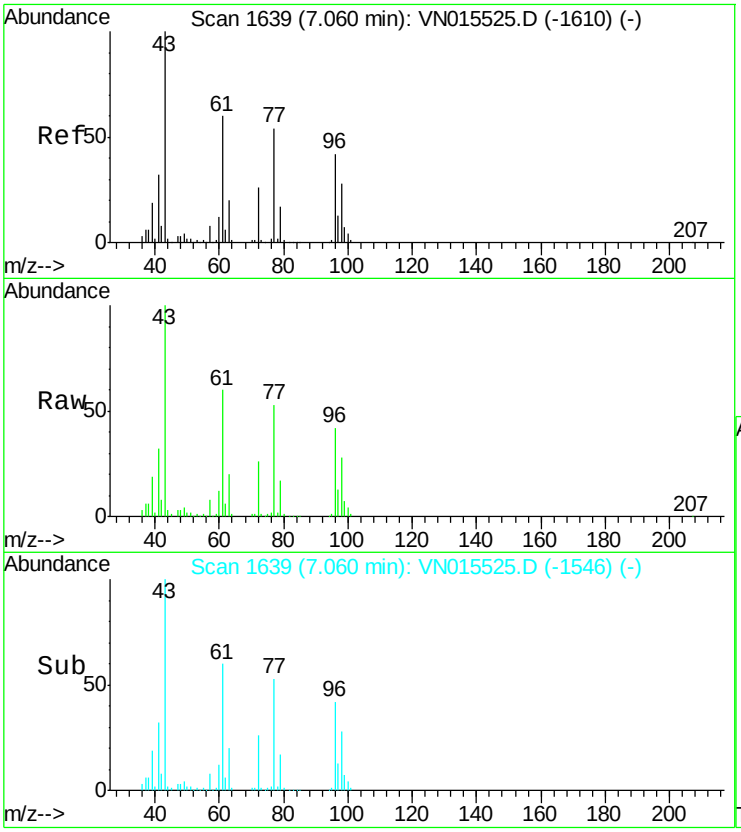
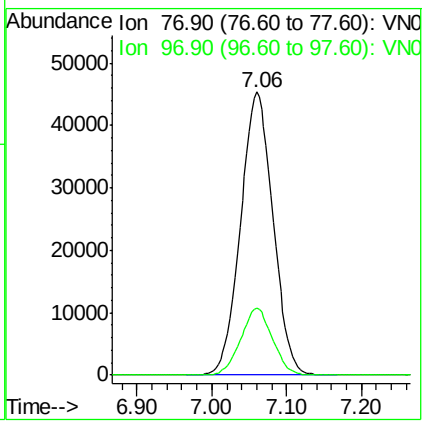
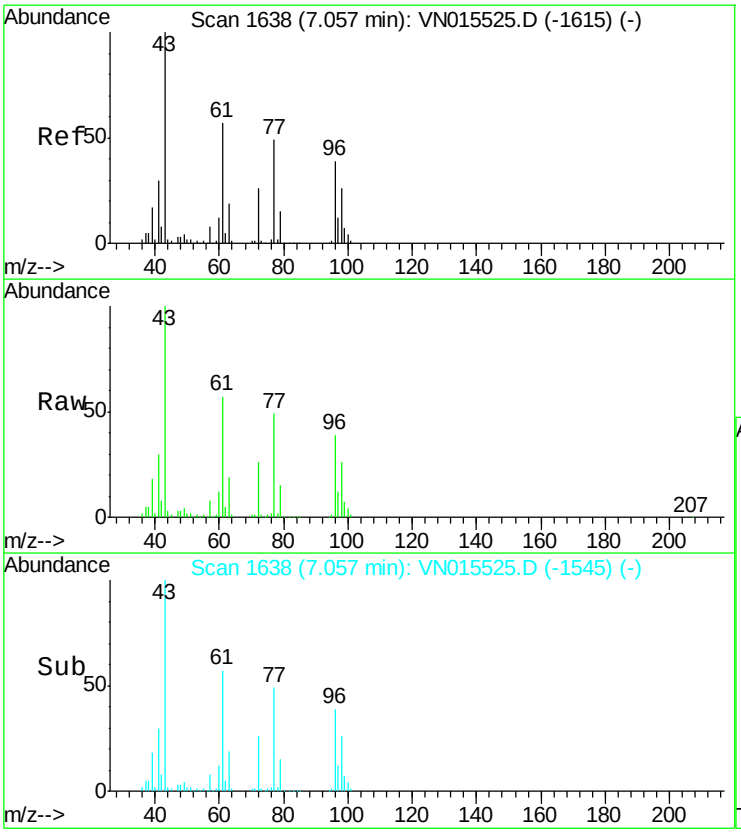


#27
2,2-Dichloropropane
Concen: 47.69 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 77 Resp: 136693

Ion	Ratio	Lower	Upper
77	100		
97	23.1	11.6	34.7

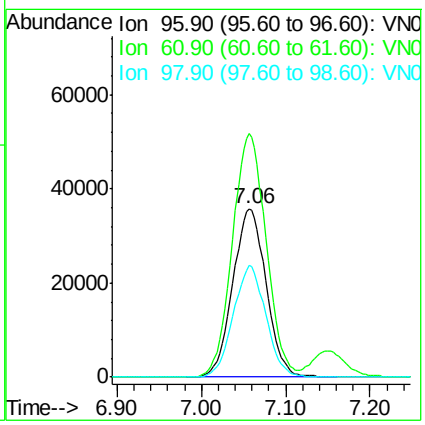




#28
cis-1,2-Dichloroethene
Concen: 44.43 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 96 Resp: 98447

Ion	Ratio	Lower	Upper
96	100		
61	146.0	0.0	292.0
98	64.7	0.0	129.4



Instrument :
MSVOA_N
LabSampleId :
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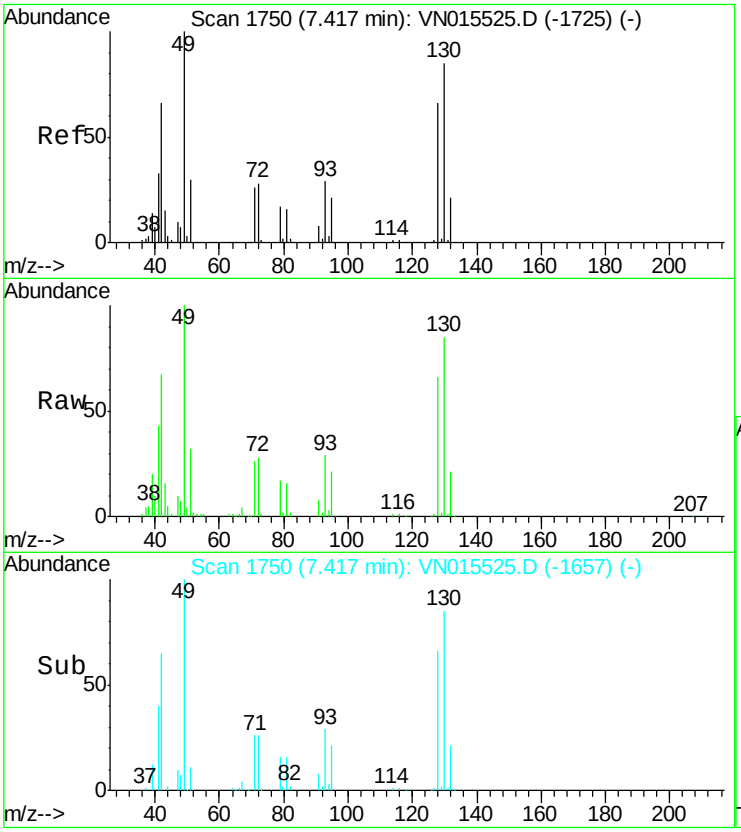
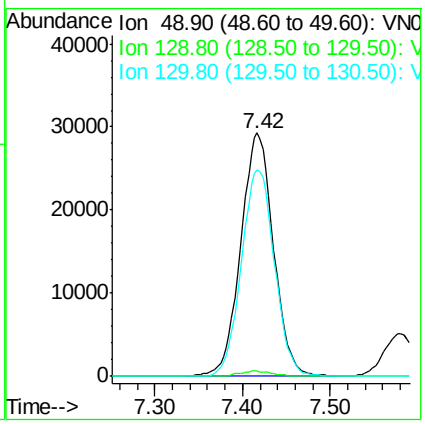
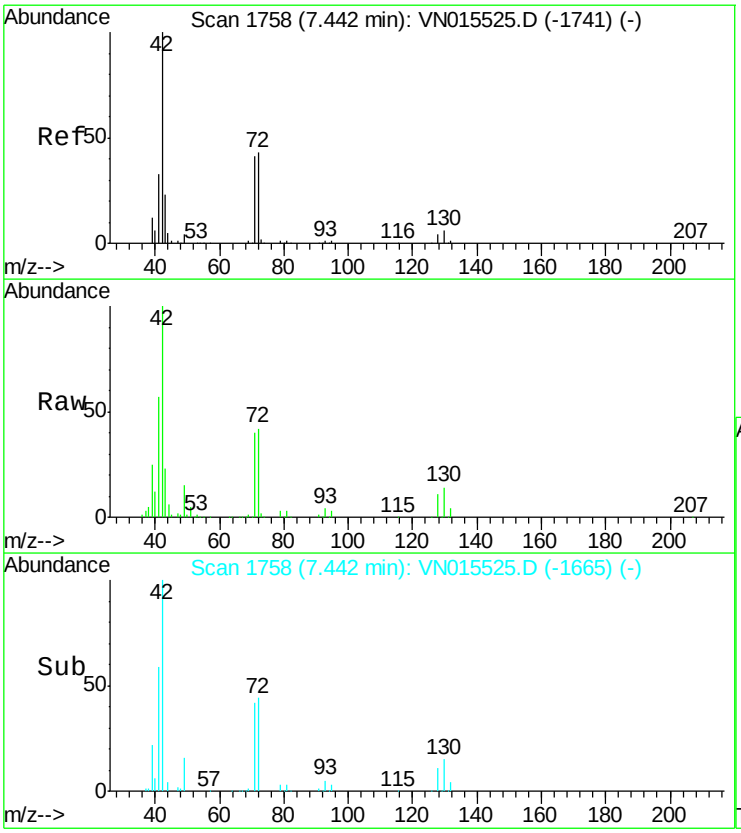


#29
Bromochloromethane
Concen: 40.84 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 49 Resp: 76093

Ion	Ratio	Lower	Upper
49	100		
129	2.1	0.0	4.2
130	85.7	68.6	102.8

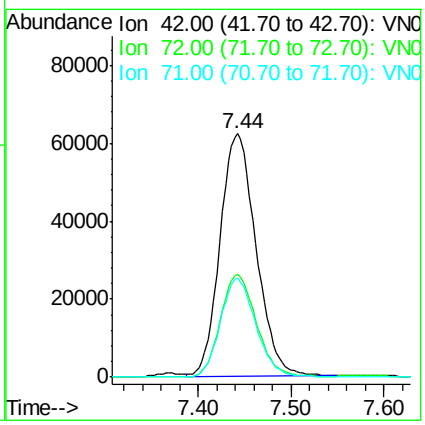




#30
Tetrahydrofuran
Concen: 221.35 ug/l
RT: 7.44 min Scan# 1758
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 42 Resp: 167182

Ion	Ratio	Lower	Upper
42	100		
72	42.7	34.2	51.2
71	40.6	32.5	48.7



Instrument :
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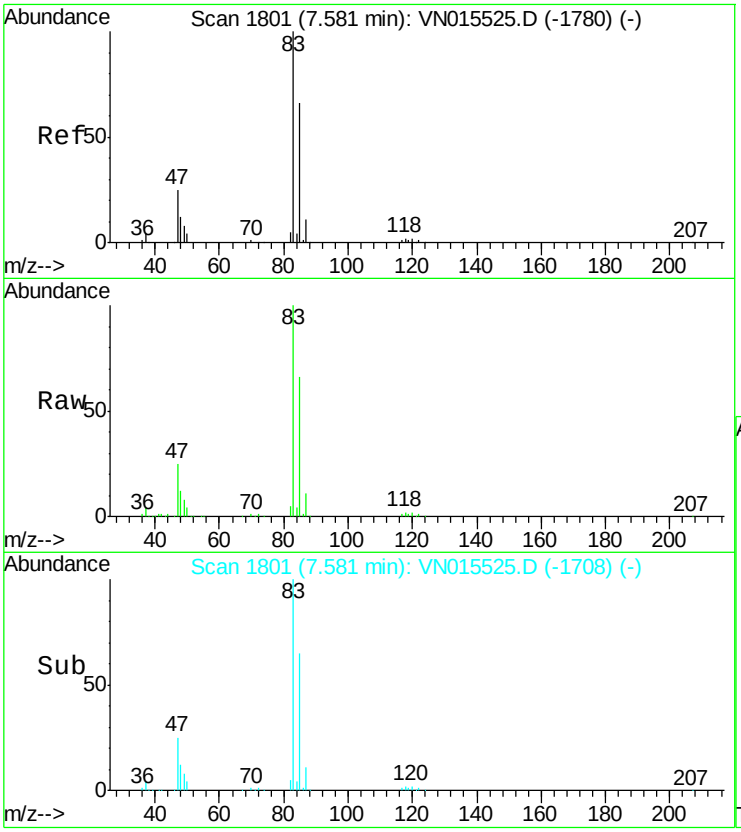
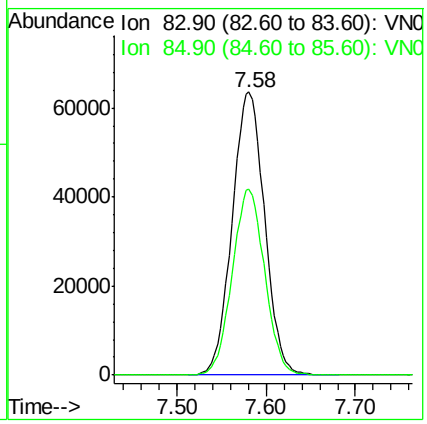
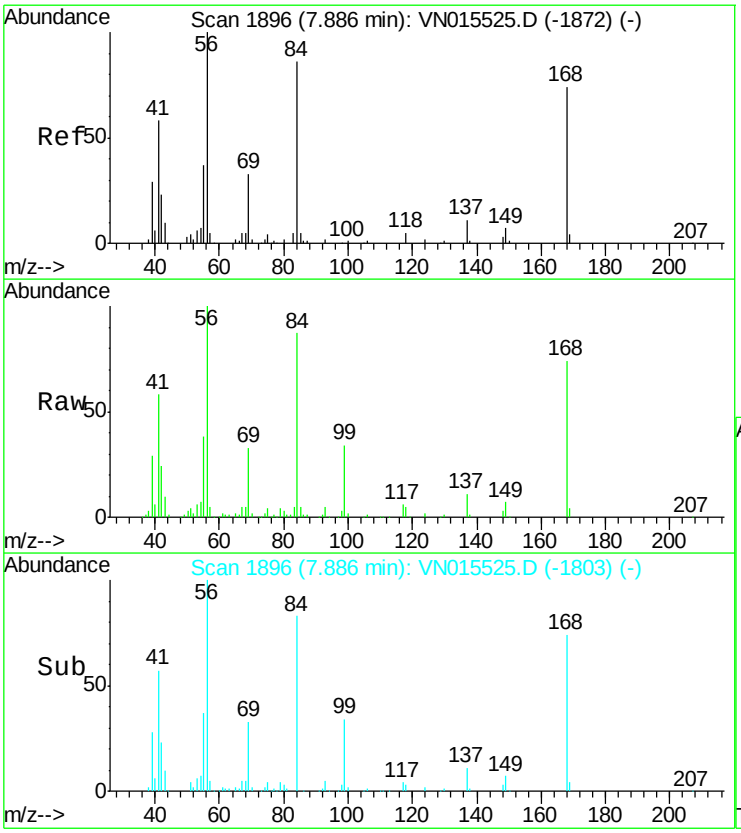


#31
Chloroform
Concen: 43.13 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 83 Resp: 160683

Ion	Ratio	Lower	Upper
83	100		
85	65.7	52.6	78.8

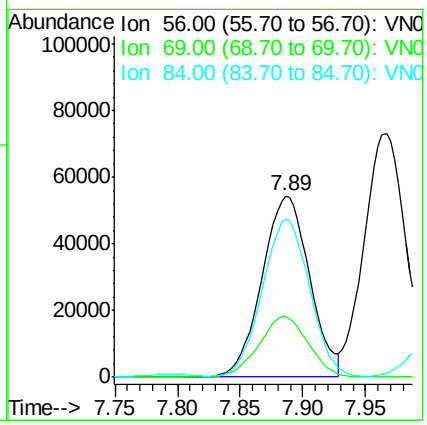




#32
Cyclohexane
Concen: 33.67 ug/l
RT: 7.89 min Scan# 1896
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 56 Resp: 143316

Ion	Ratio	Lower	Upper
56	100		
69	33.2	26.6	39.8
84	86.2	69.0	103.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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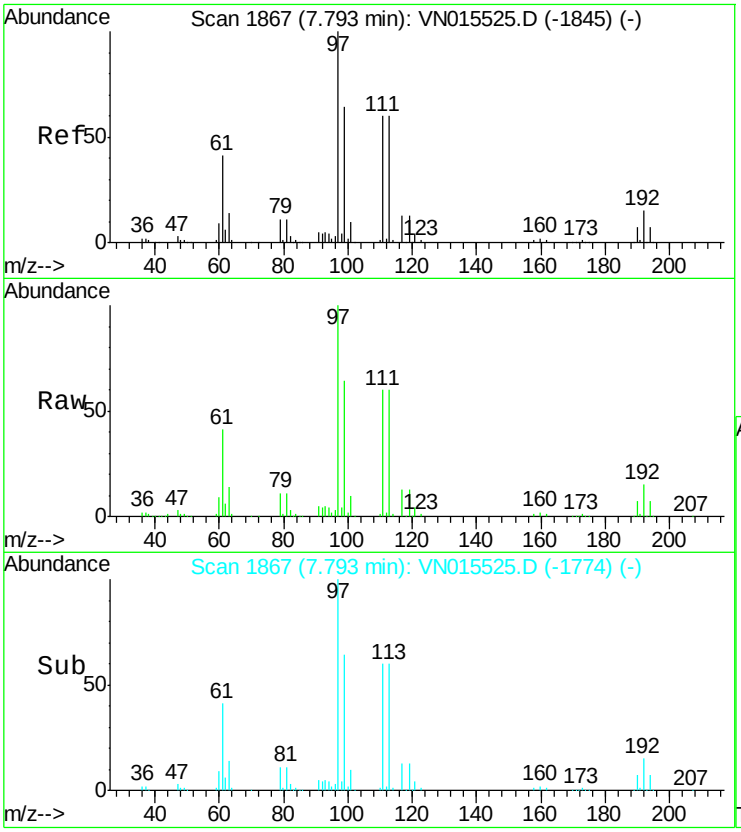
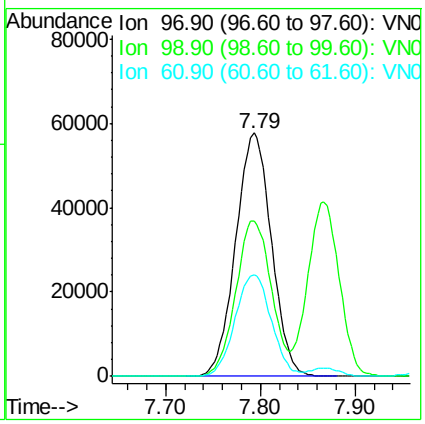
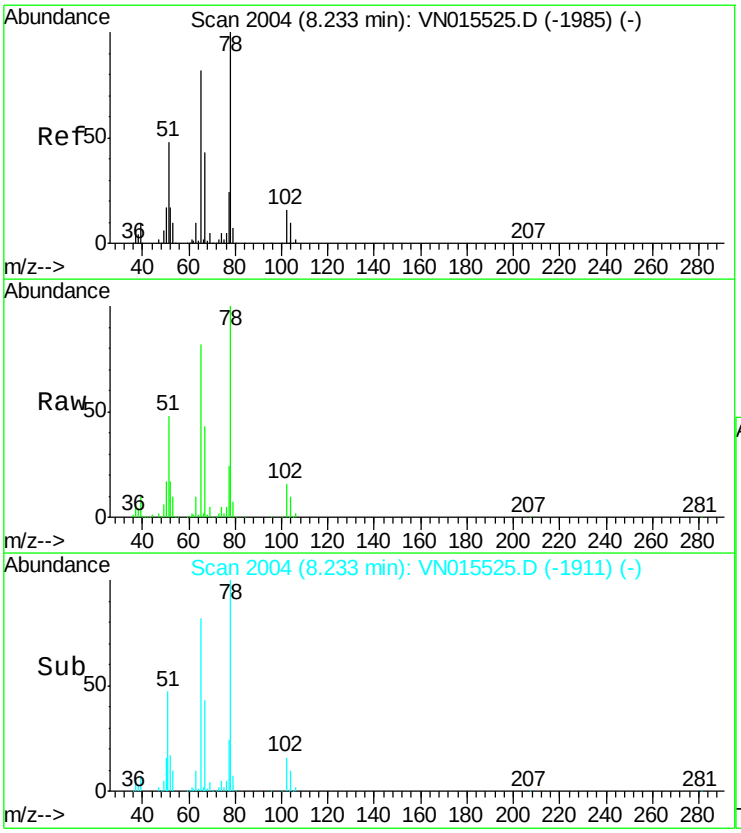


#33
1,1,1-Trichloroethane
Concen: 46.62 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 97 Resp: 151625

Ion	Ratio	Lower	Upper
97	100		
99	64.0	51.2	76.8
61	42.4	33.9	50.9

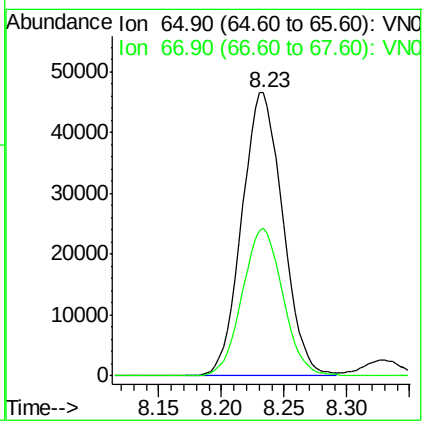




#34
1,2-Dichloroethane-d4
Concen: 42.02 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 65 Resp: 106024

Ion	Ratio	Lower	Upper
65	100		
67	51.8	0.0	103.6



Instrument :
MSVOA_N
LabSampleId :
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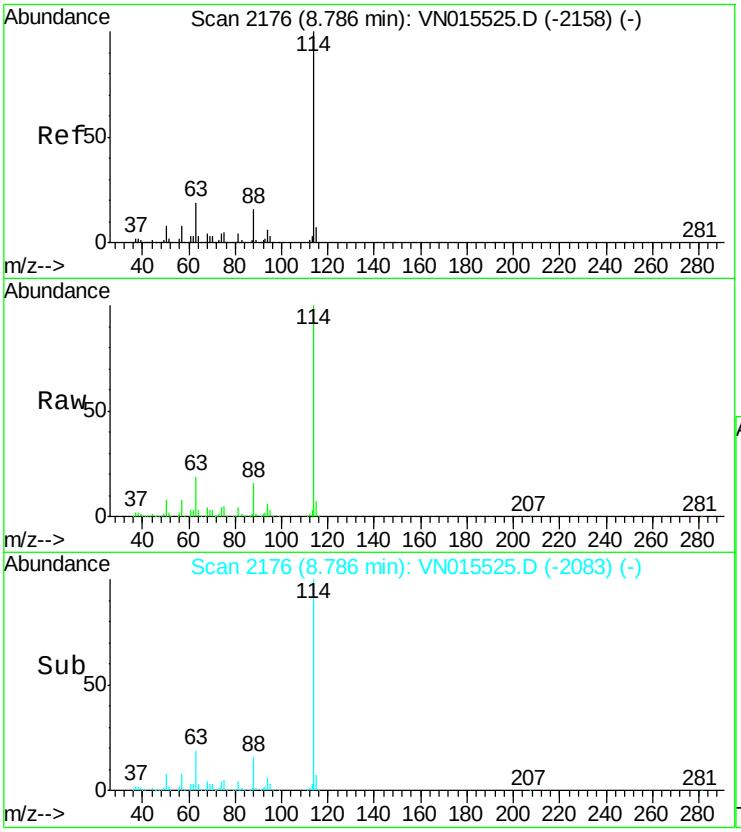
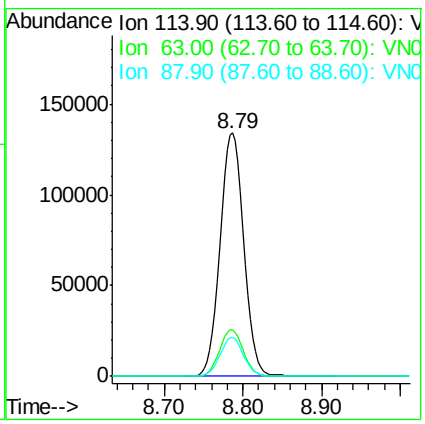
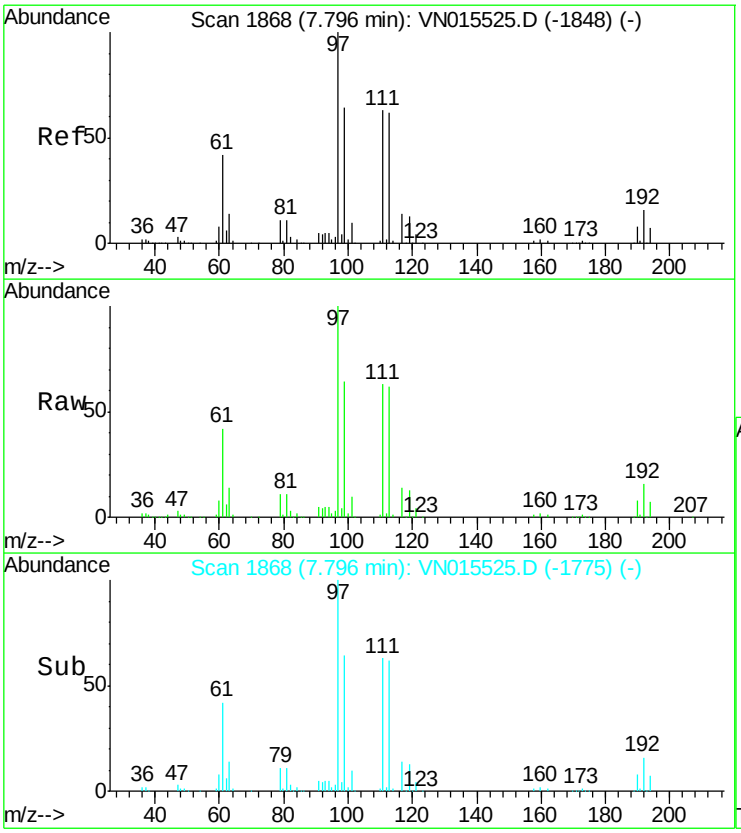


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:114 Resp: 278373

Ion	Ratio	Lower	Upper
114	100		
63	19.3	0.0	38.6
88	16.1	0.0	32.2

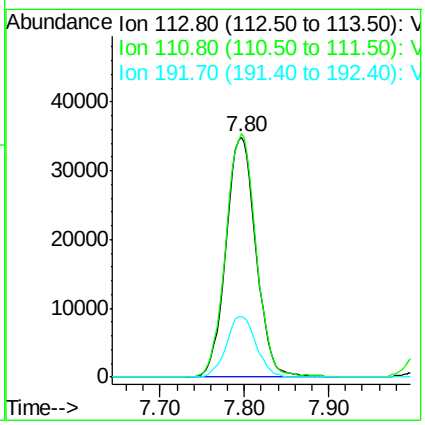




#36
Dibromofluoromethane
Concen: 47.56 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:113 Resp: 86303

Ion	Ratio	Lower	Upper
113	100		
111	101.9	81.5	122.3
192	25.0	20.0	30.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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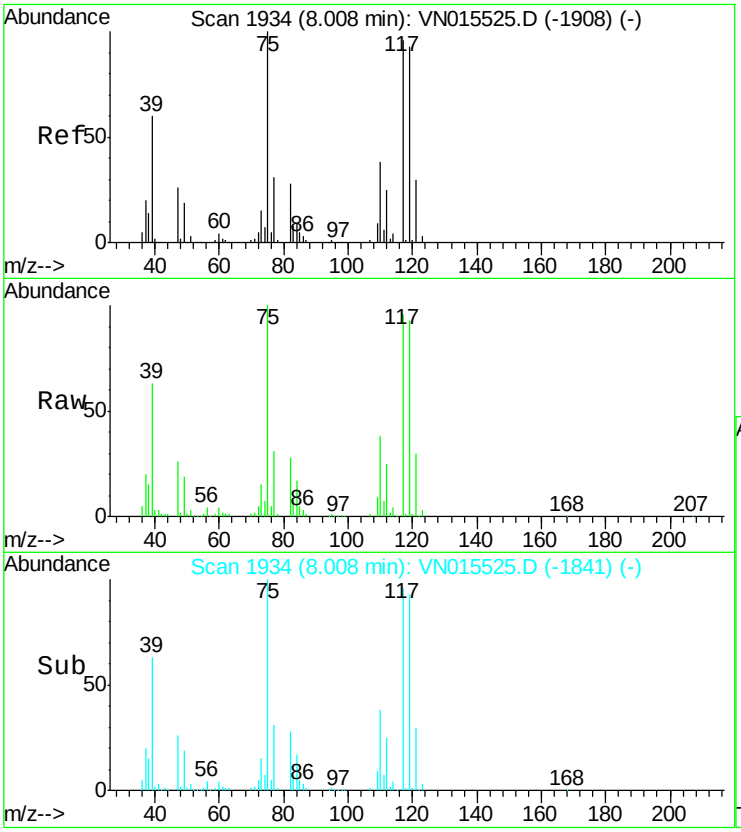
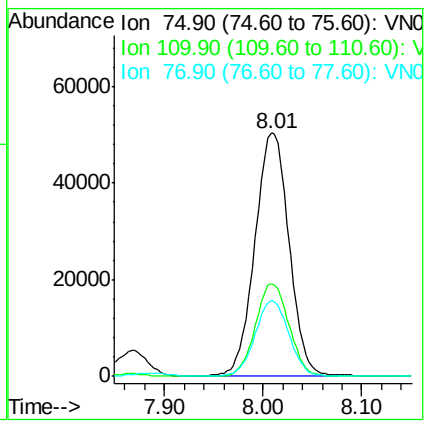
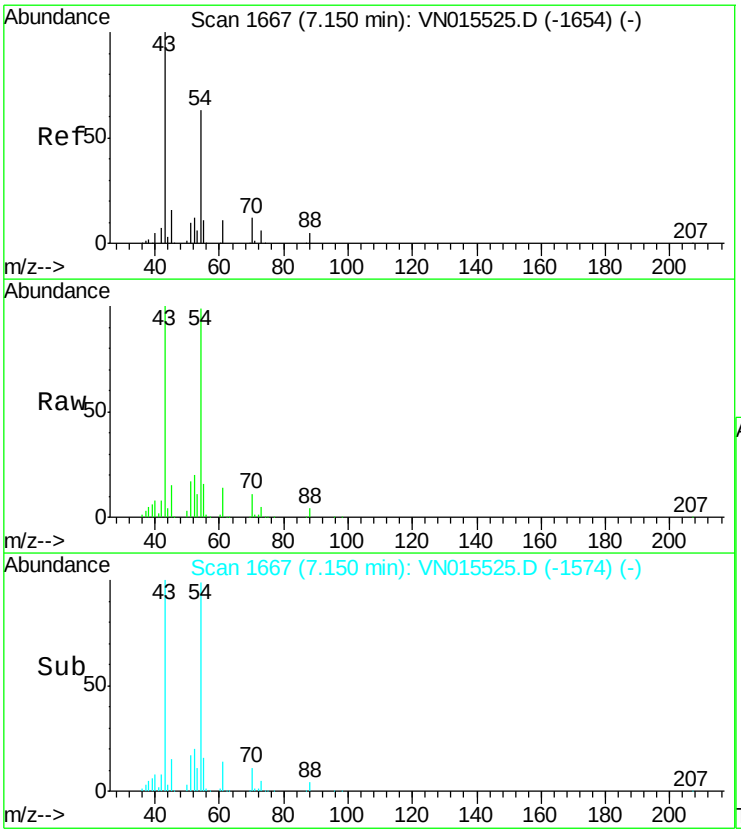


#37
1,1-Dichloropropene
Concen: 45.64 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 75 Resp: 120745

Ion	Ratio	Lower	Upper
75	100		
110	37.1	18.6	55.6
77	30.5	24.4	36.6

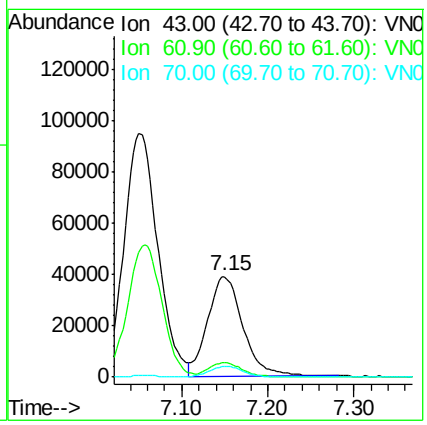




#38
Ethyl Acetate
Concen: 55.94 ug/l
RT: 7.15 min Scan# 1667
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 111412

Ion	Ratio	Lower	Upper
43	100		
61	13.5	10.8	16.2
70	10.6	8.5	12.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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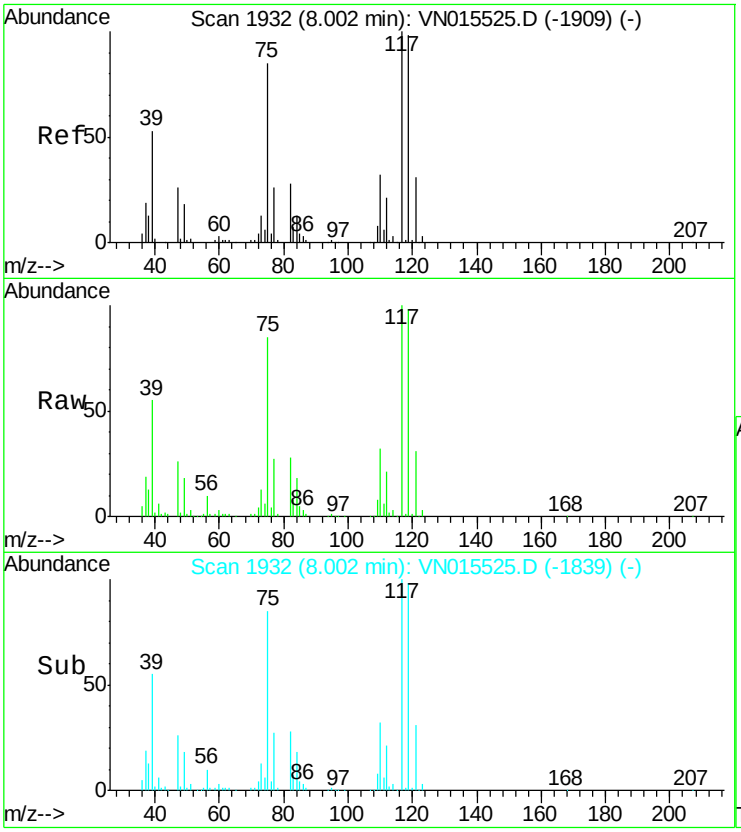
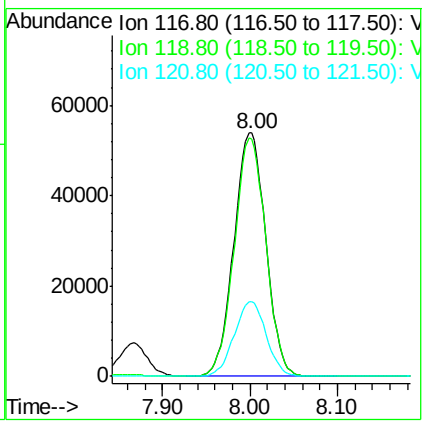
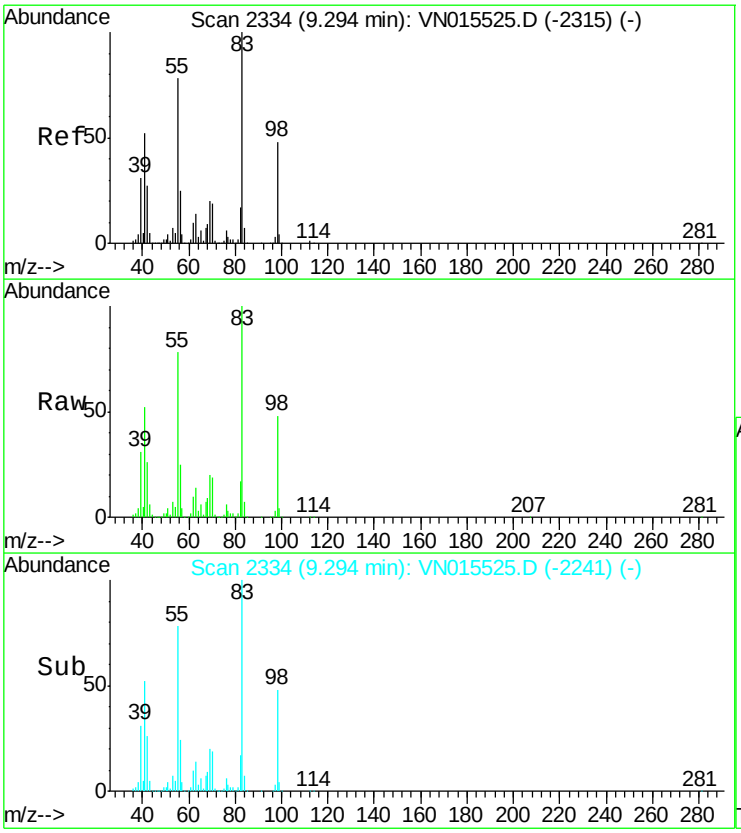


#39
Carbon Tetrachloride
Concen: 51.15 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:117 Resp: 136298

Ion	Ratio	Lower	Upper
117	100		
119	97.5	78.0	117.0
121	30.6	24.5	36.7

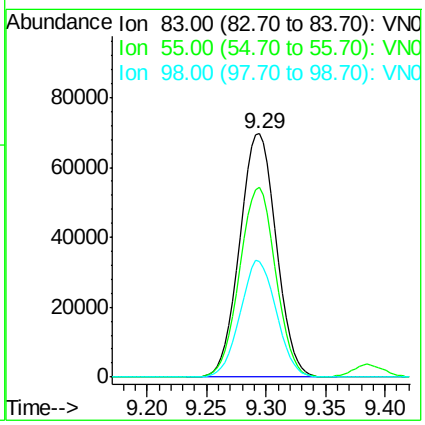




#40
Methylcyclohexane
Concen: 47.41 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 83 Resp: 148416

Ion	Ratio	Lower	Upper
83	100		
55	78.1	62.5	93.7
98	47.7	38.2	57.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

Manual Integrations APPROVED
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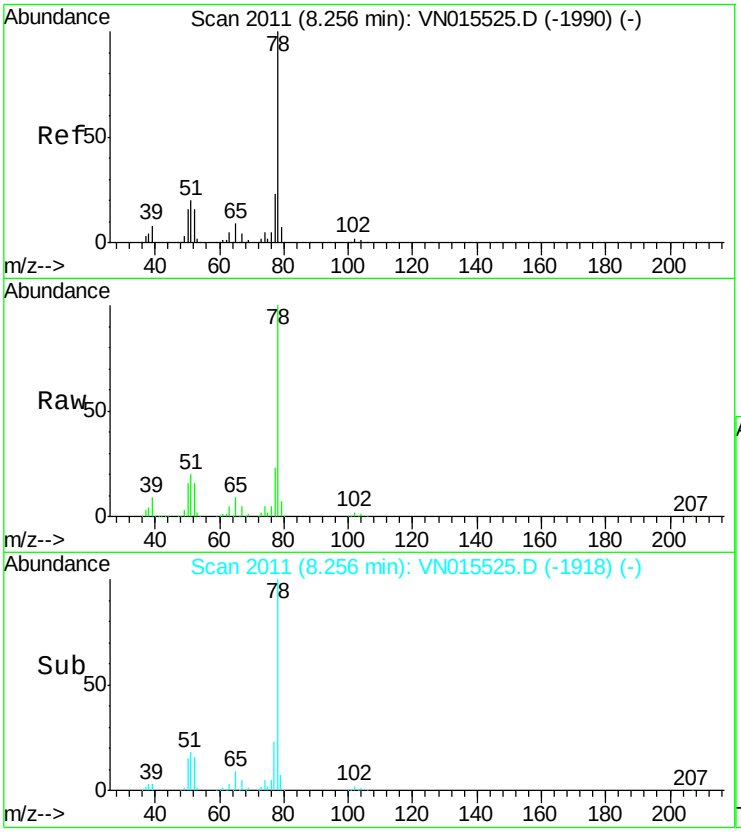
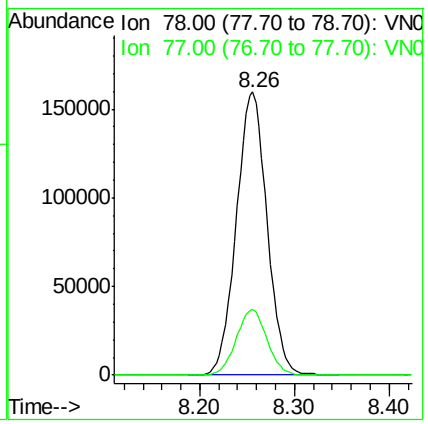
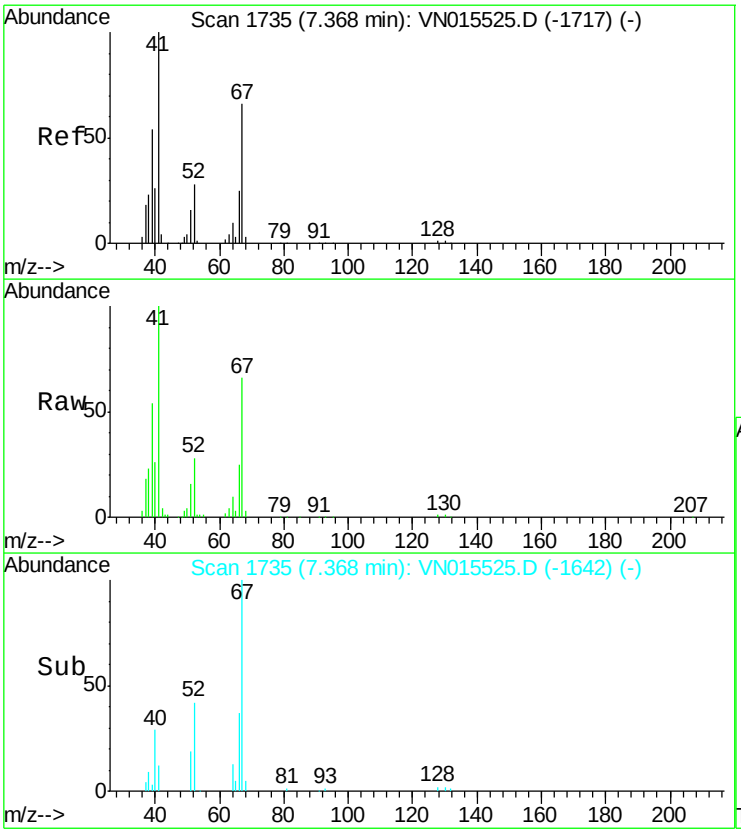


#41
Benzene
Concen: 46.66 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 78 Resp: 359349

Ion	Ratio	Lower	Upper
78	100		
77	23.1	18.5	27.7

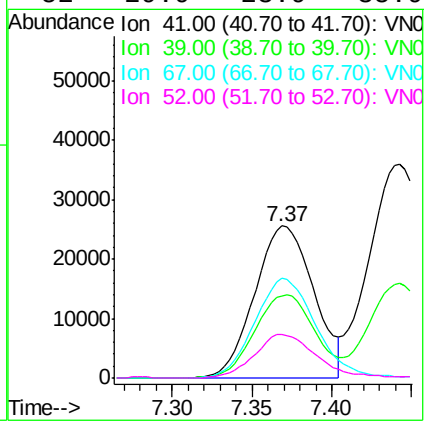




#42
Methacrylonitrile
Concen: 46.55 ug/l
RT: 7.37 min Scan# 1735
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 41 Resp: 64975

Ion	Ratio	Lower	Upper
41	100		
39	56.2	45.0	67.4
67	68.6	54.9	82.3
52	29.9	23.9	35.9



Instrument :
MSVOA_N
LabSampleId :
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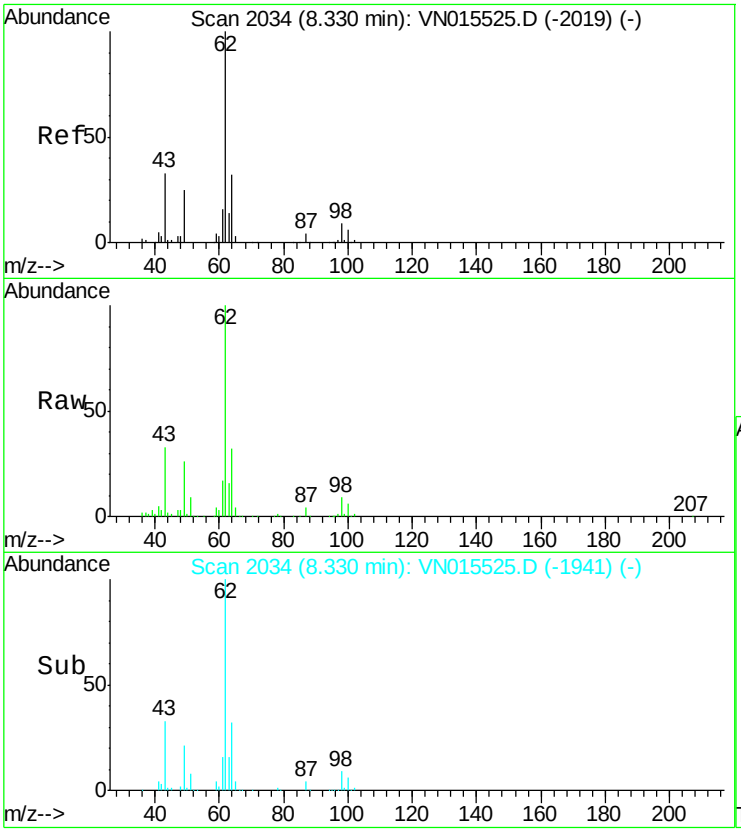
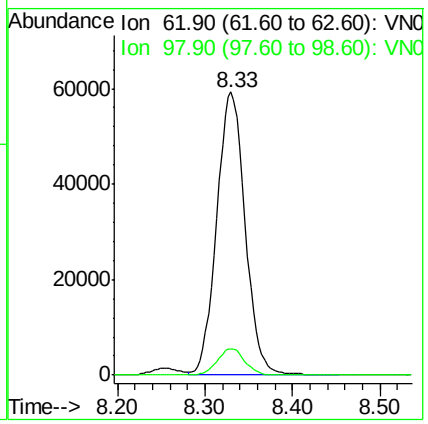
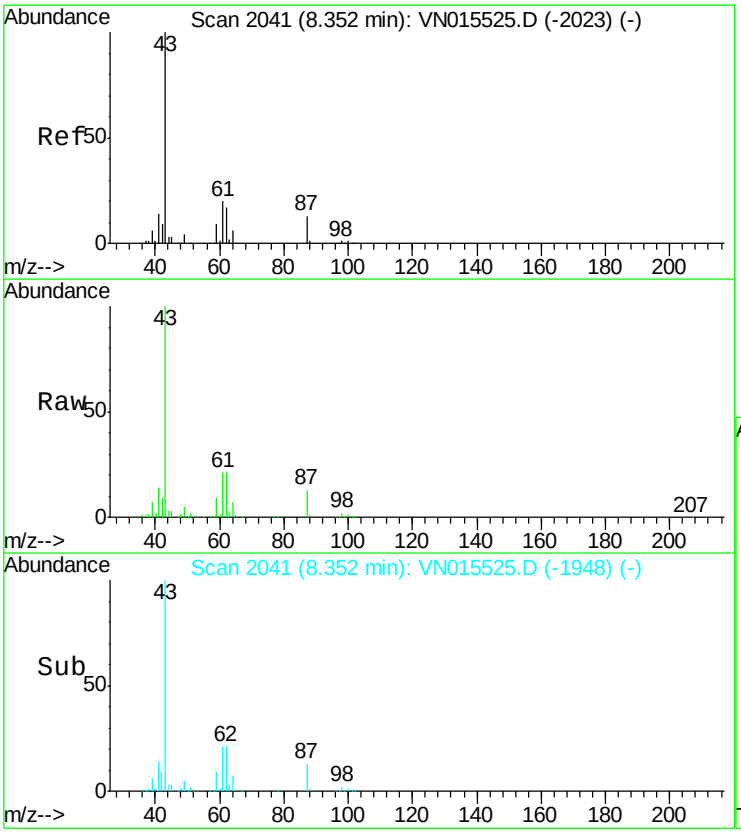


#43
1,2-Dichloroethane
Concen: 47.25 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 62 Resp: 133195

Ion	Ratio	Lower	Upper
62	100		
98	9.1	0.0	18.2

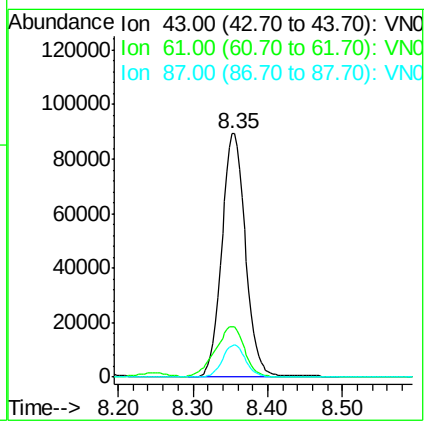


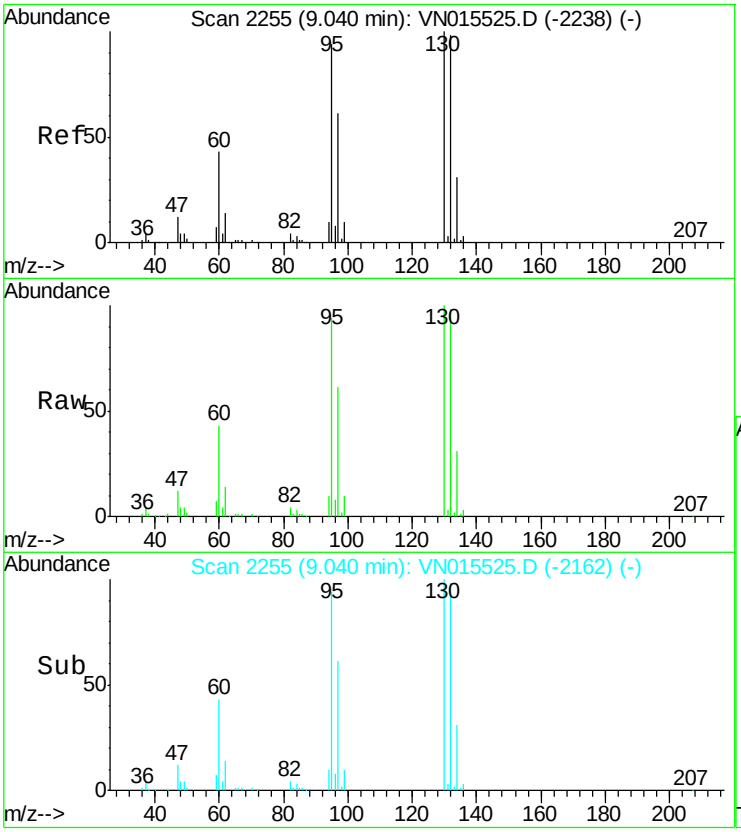


#44
Isopropyl Acetate
Concen: 59.35 ug/l
RT: 8.35 min Scan# 2041
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 194390

Ion	Ratio	Lower	Upper
43	100		
61	25.5	20.4	30.6
87	13.0	10.4	15.6





#45
Trichloroethene
Concen: 48.53 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:130 Resp: 99582

Ion	Ratio	Lower	Upper
130	100		
95	93.5	0.0	187.0

Instrument :
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LabSampleId :
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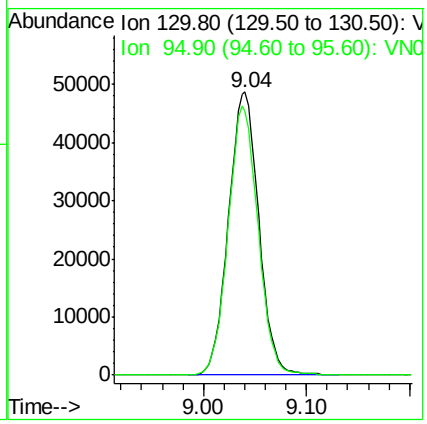
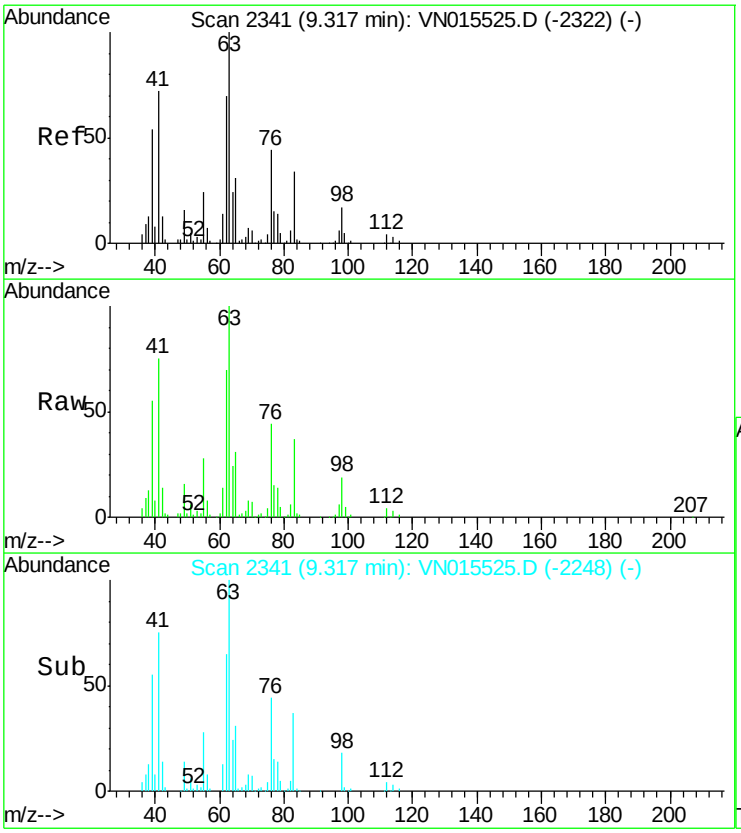
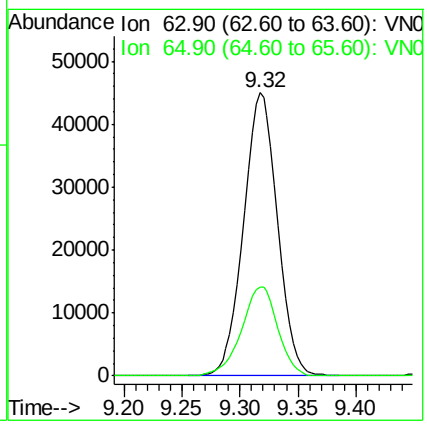




#46
1,2-Dichloropropane
Concen: 43.88 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 63 Resp: 91712

Ion	Ratio	Lower	Upper
63	100		
65	31.2	25.0	37.4



Instrument :
MSVOA_N
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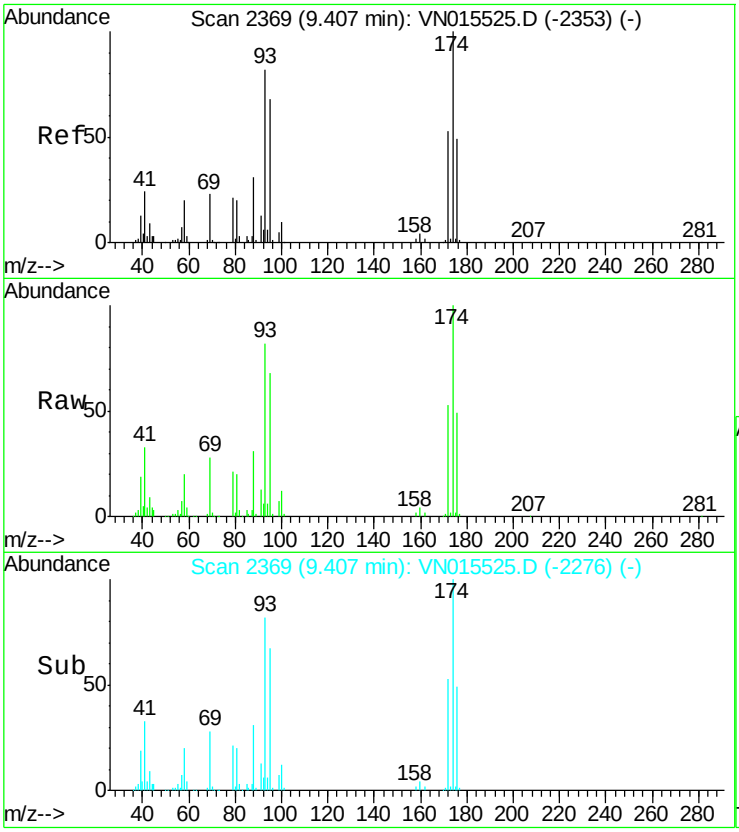
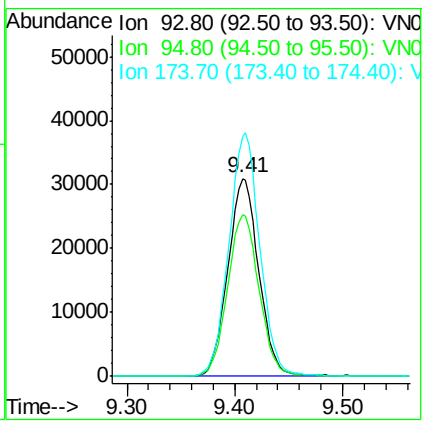
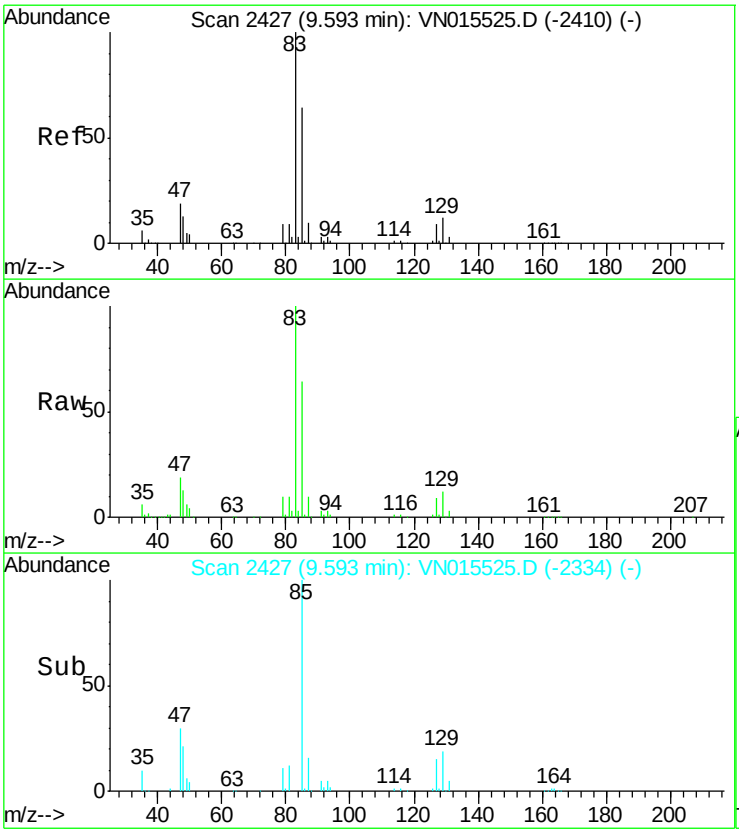


#47
Dibromomethane
Concen: 47.91 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 93 Resp: 61941

Ion	Ratio	Lower	Upper
93	100		
95	83.6	66.9	100.3
174	123.3	98.6	148.0

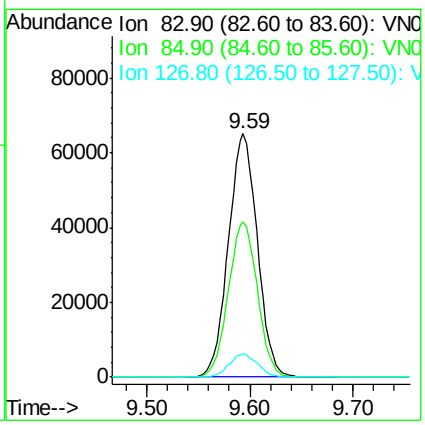




#48
Bromodichloromethane
Concen: 49.37 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 83 Resp: 127260

Ion	Ratio	Lower	Upper
83	100		
85	63.9	51.1	76.7
127	9.5	7.6	11.4



Instrument :
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LabSampleId :
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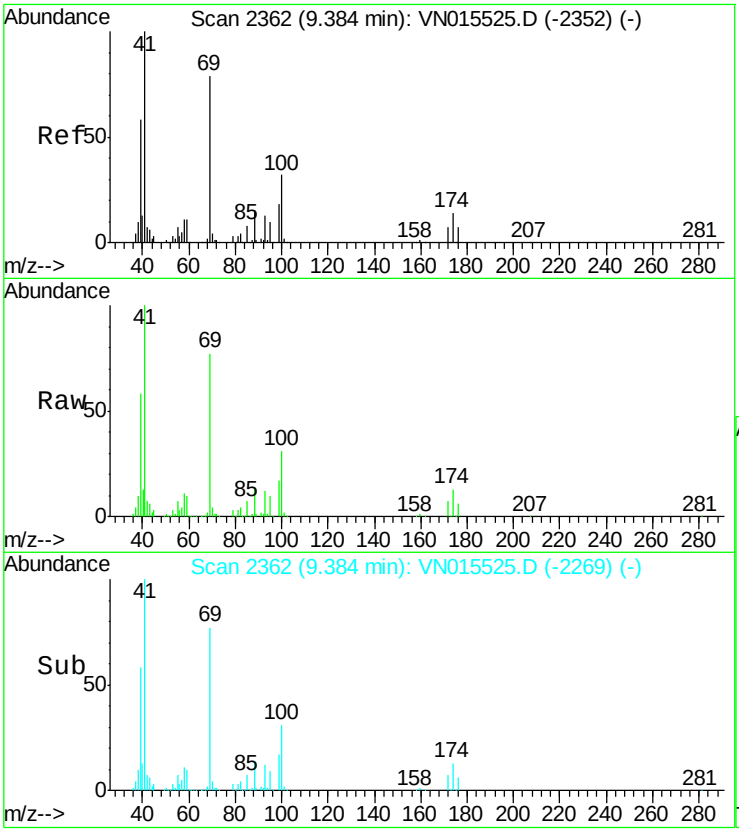
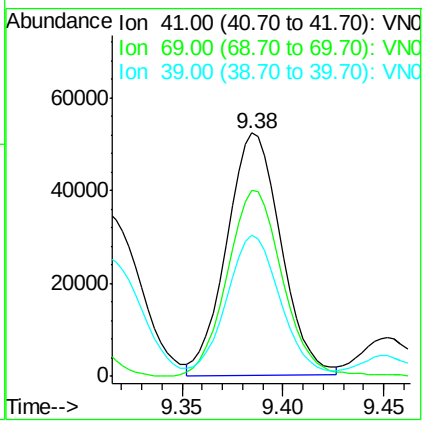
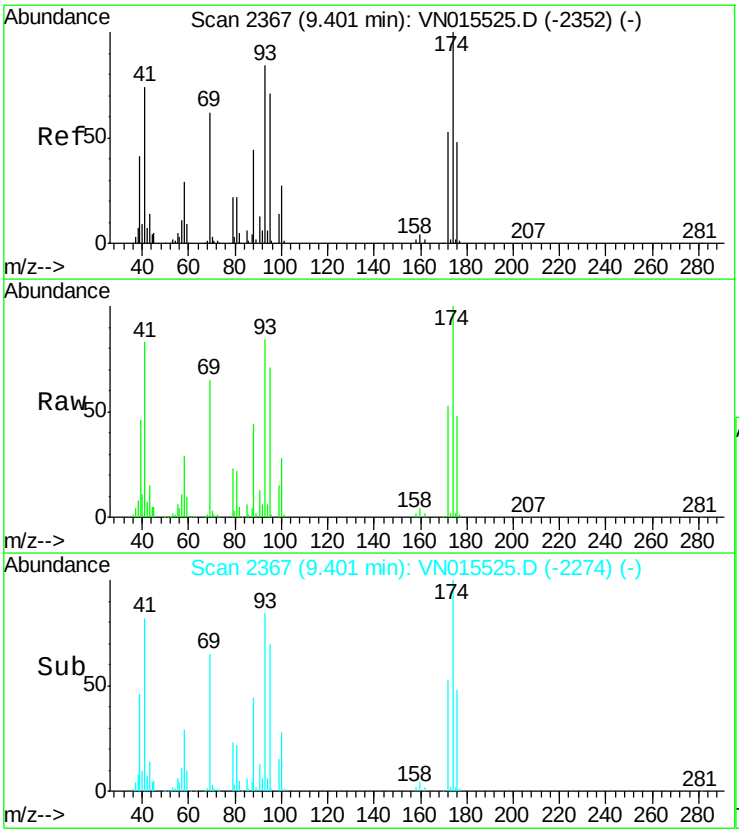


#49
Methyl methacrylate
Concen: 48.79 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 41 Resp: 98451

Ion	Ratio	Lower	Upper
41	100		
69	78.5	62.8	94.2
39	58.0	46.4	69.6

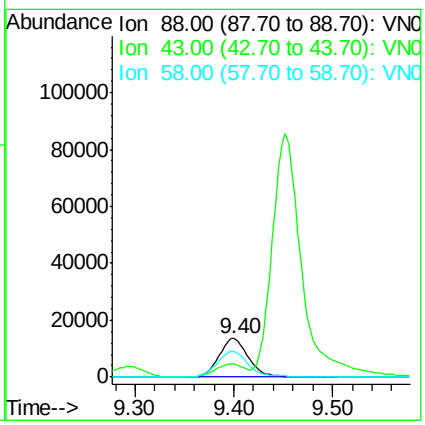


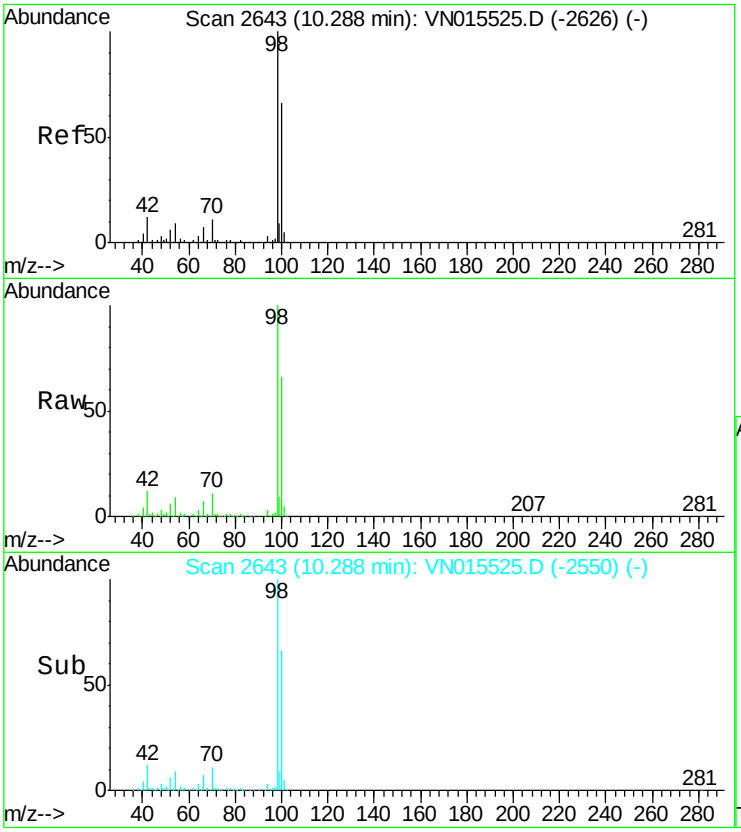


#50
1,4-Dioxane
Concen: 1078.52 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 88 Resp: 28588

Ion	Ratio	Lower	Upper
88	100		
43	33.0	26.4	39.6
58	70.7	56.6	84.8





#51
Toluene-d8
Concen: 46.17 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 98 Resp: 314972

Ion	Ratio	Lower	Upper
98	100		
100	65.4	52.3	78.5

Instrument :
MSVOA_N
LabSampleId :
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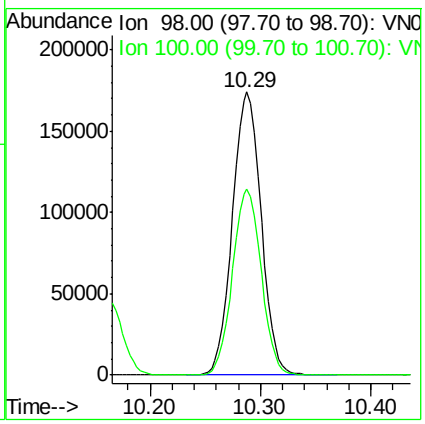
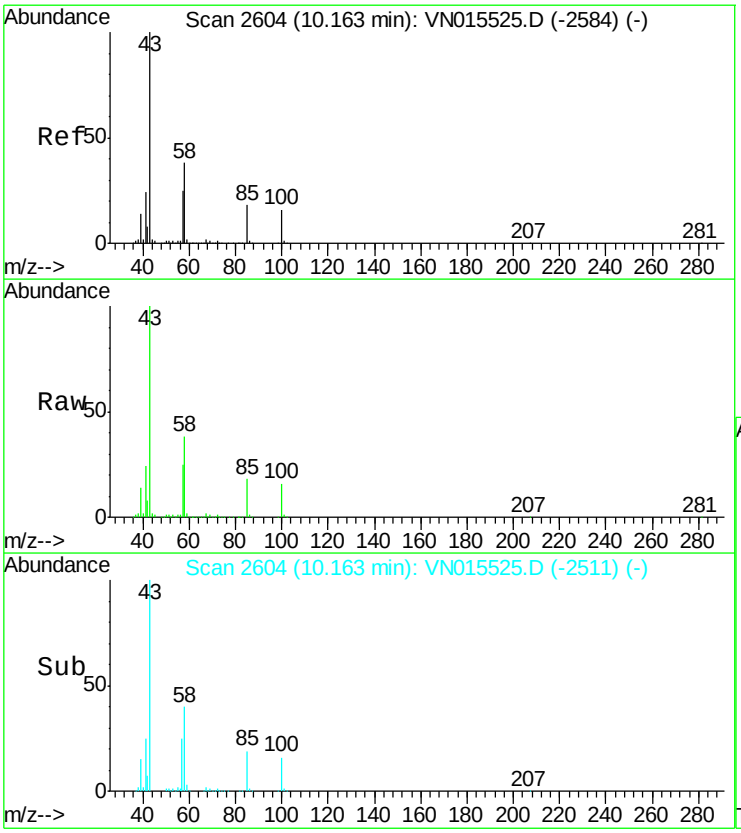
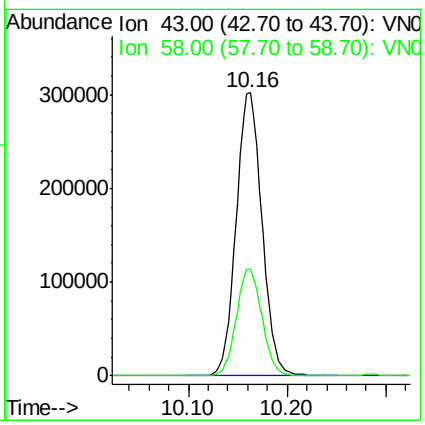




#52
4-Methyl-2-Pentanone
Concen: 245.70 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 546037

Ion	Ratio	Lower	Upper
43	100		
58	37.7	30.2	45.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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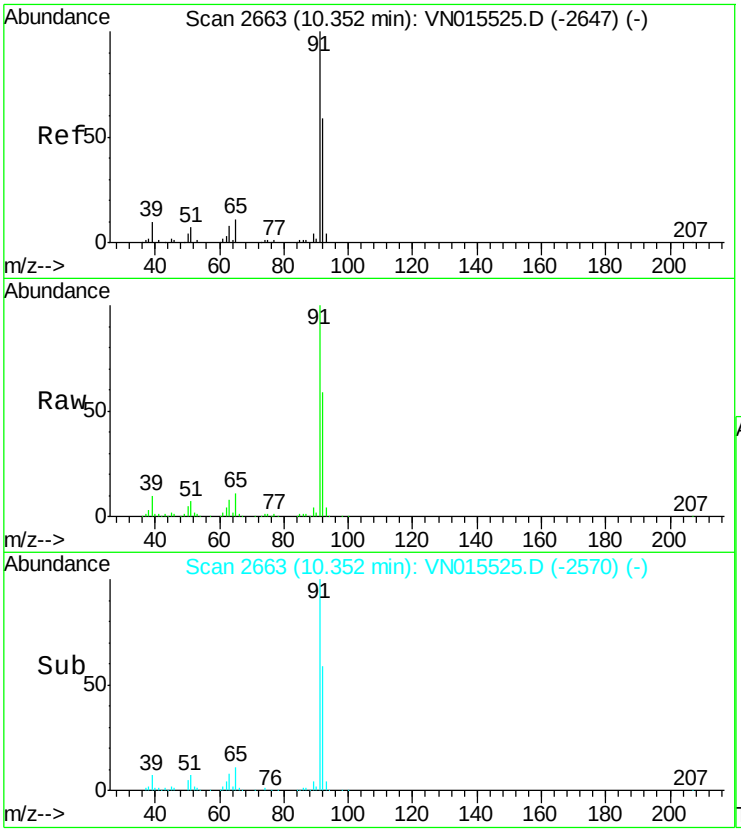
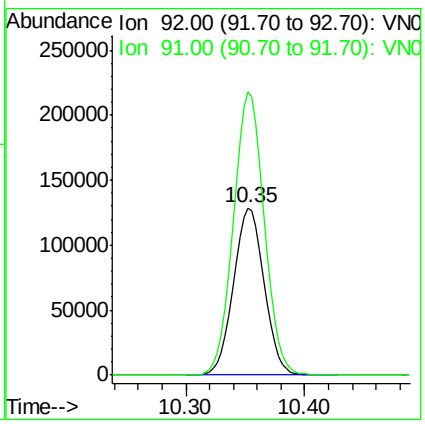
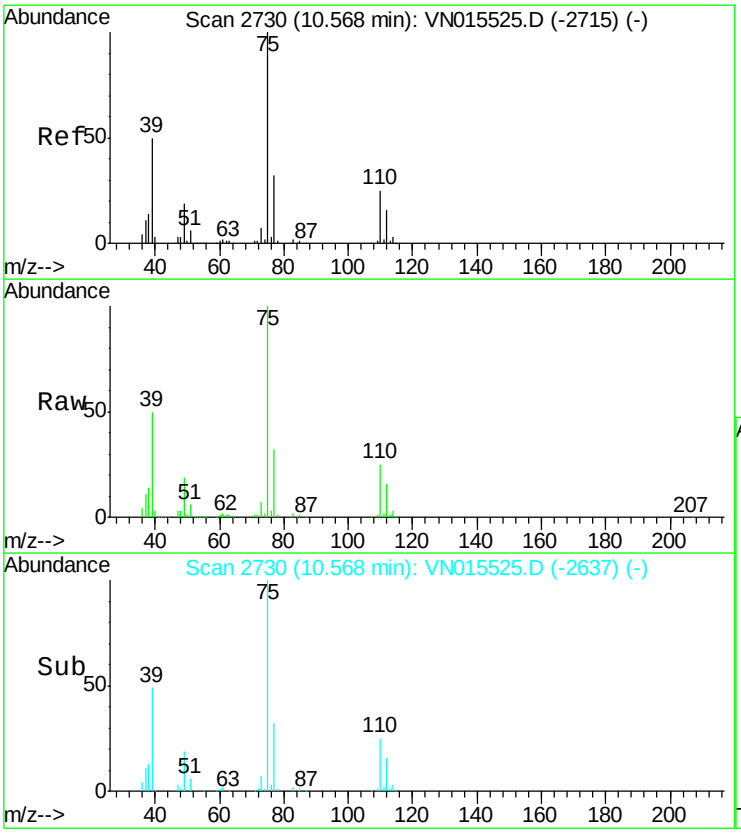


#53
Toluene
Concen: 48.81 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 92 Resp: 229631

Ion	Ratio	Lower	Upper
92	100		
91	170.3	136.2	204.4

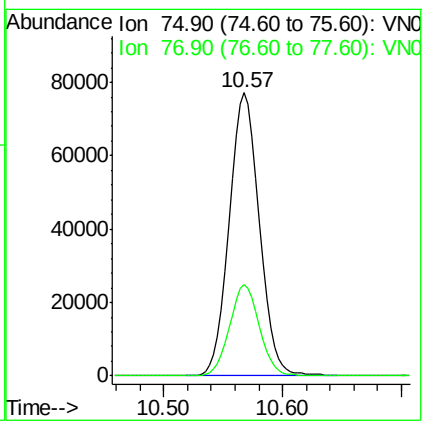


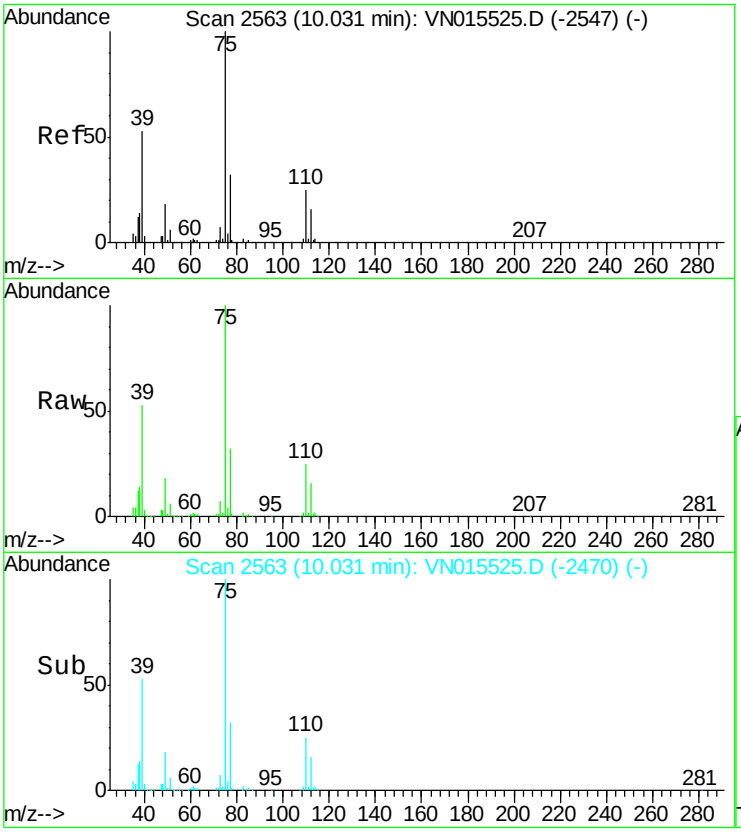


#54
t-1,3-Dichloropropene
Concen: 52.25 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 75 Resp: 135472

Ion	Ratio	Lower	Upper
75	100		
77	32.5	26.0	39.0





#55
cis-1,3-Dichloropropene
Concen: 48.93 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 75 Resp: 144970

Ion	Ratio	Lower	Upper
75	100		
77	31.8	25.4	38.2
39	52.8	42.2	63.4

Instrument :
MSVOA_N
LabSampleId :
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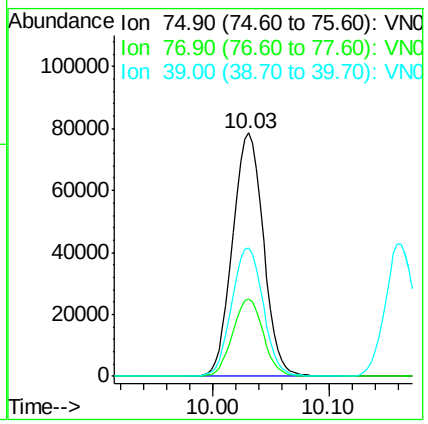
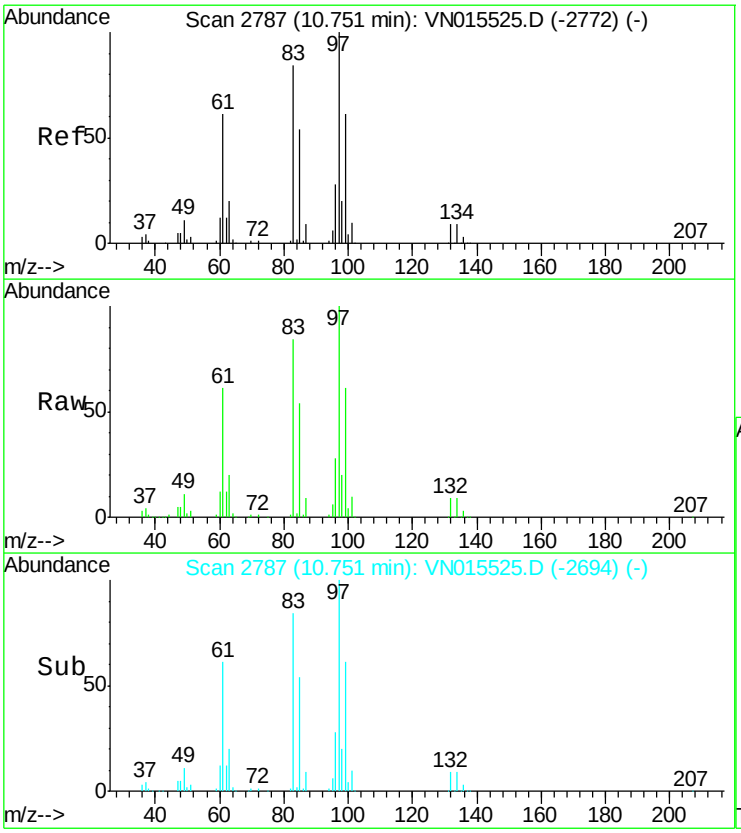
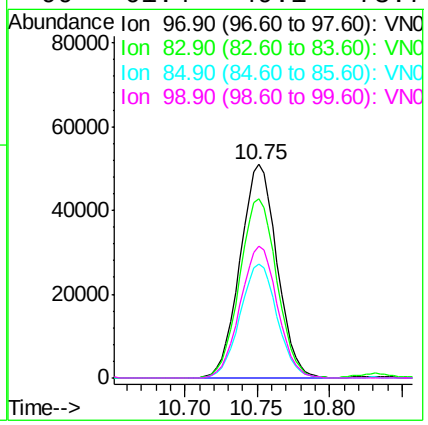


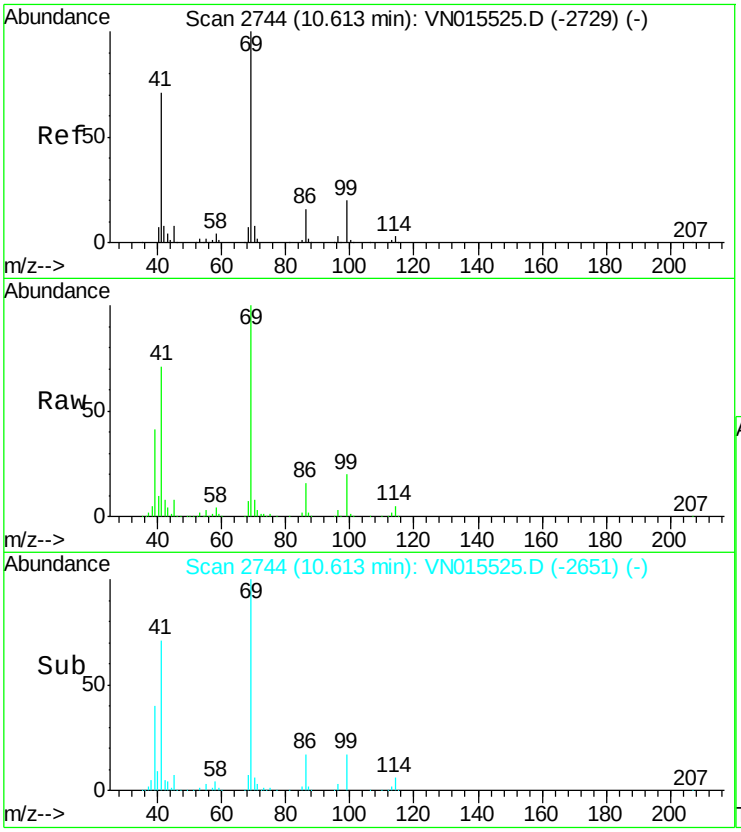


#56
1,1,2-Trichloroethane
Concen: 48.66 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 97 Resp: 90235

Ion	Ratio	Lower	Upper
97	100		
83	83.7	67.0	100.4
85	53.6	42.9	64.3
99	61.4	49.1	73.7





#57
Ethyl methacrylate
Concen: 53.42 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 69 Resp: 136888

Ion	Ratio	Lower	Upper
69	100		
41	71.1	56.9	85.3
39	40.0	32.0	48.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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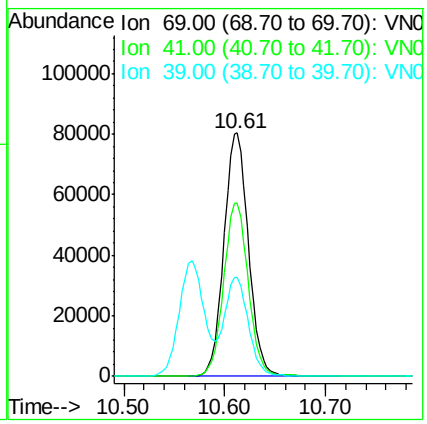
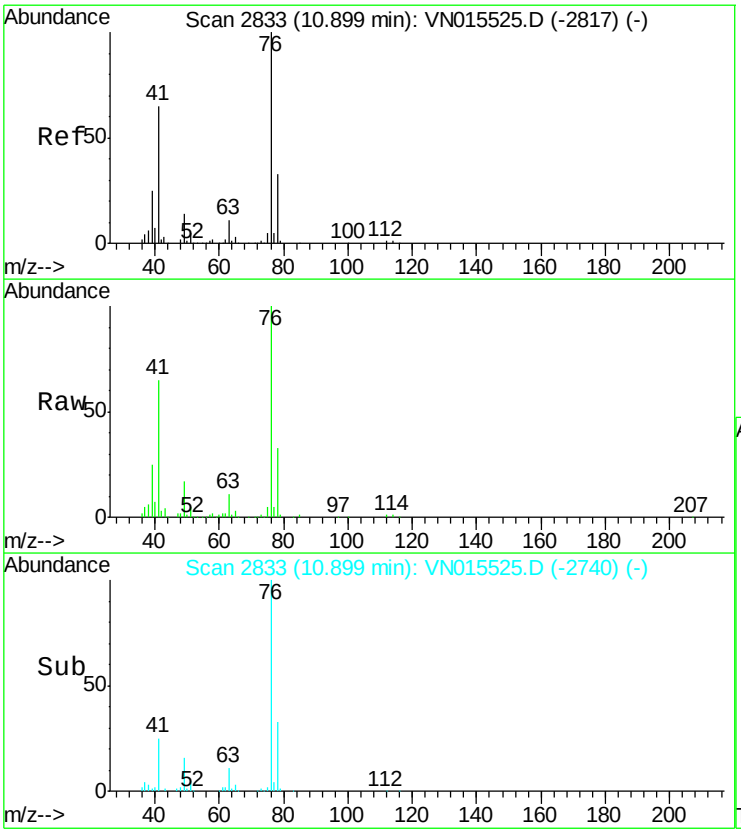
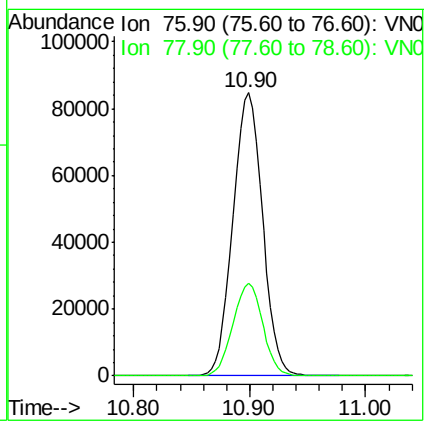


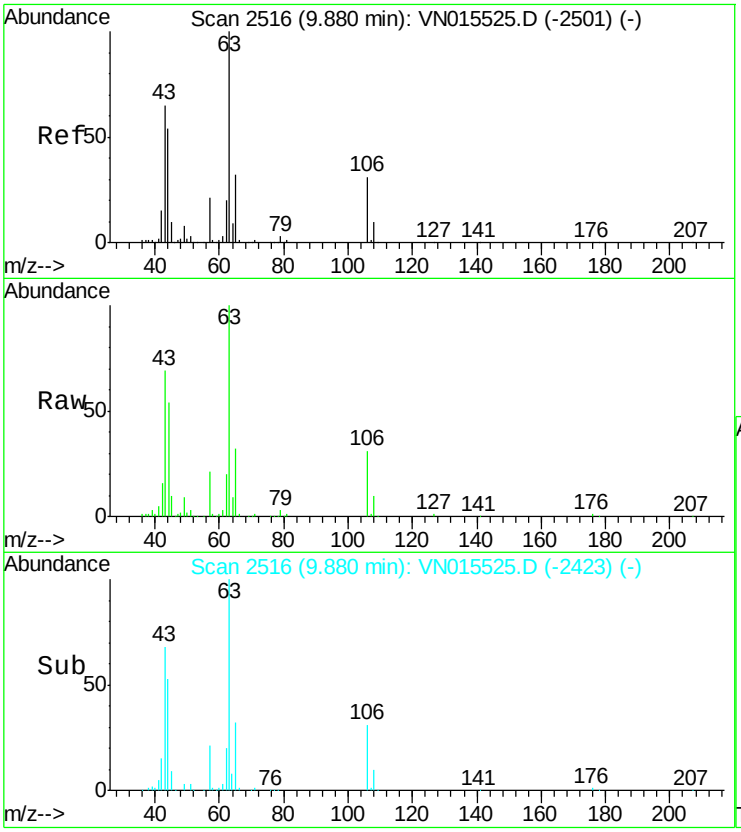


#58
1,3-Dichloropropane
Concen: 47.19 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 76 Resp: 149873

Ion	Ratio	Lower	Upper
76	100		
78	32.9	26.3	39.5





#59
2-Chloroethyl Vinyl ether
Concen: 90.92 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 63 Resp: 86724

Ion	Ratio	Lower	Upper
63	100		
106	29.6	23.7	35.5

Instrument :
MSVOA_N
LabSampleId :
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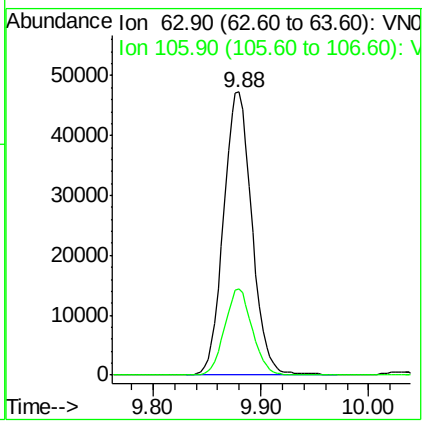
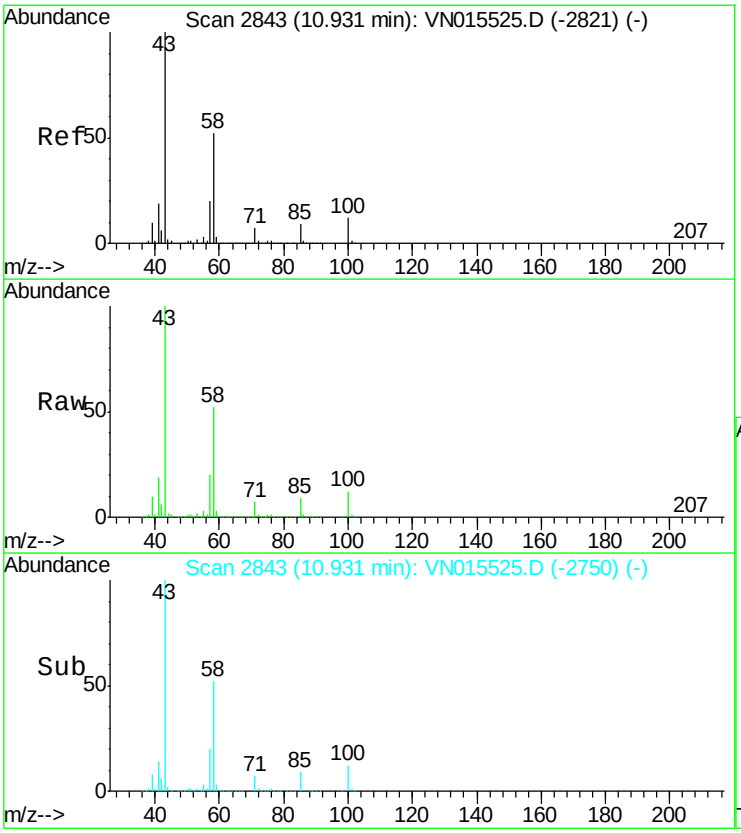
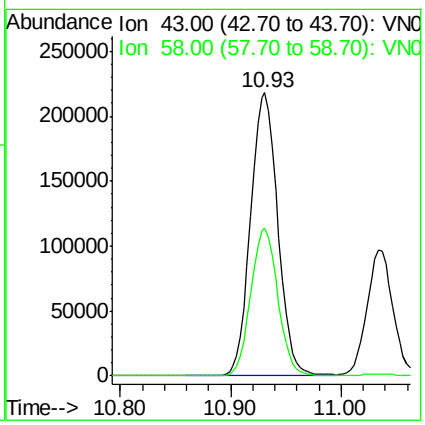




#60
2-Hexanone
Concen: 249.92 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 372829

Ion	Ratio	Lower	Upper
43	100		
58	52.0	26.0	78.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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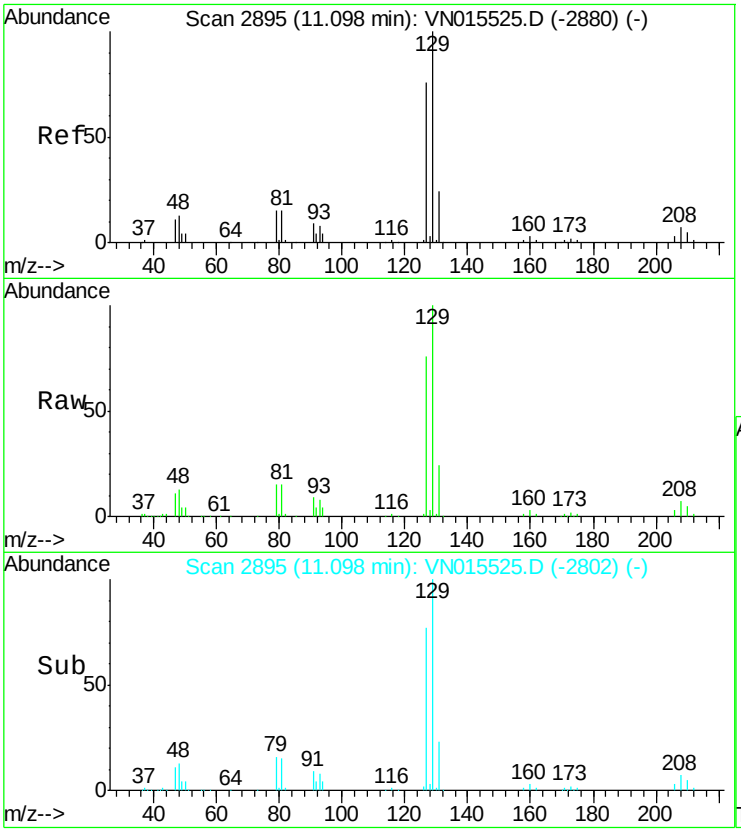
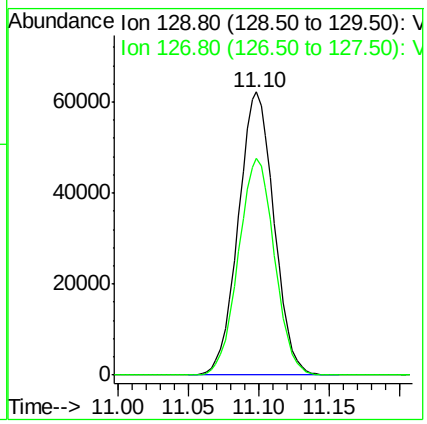
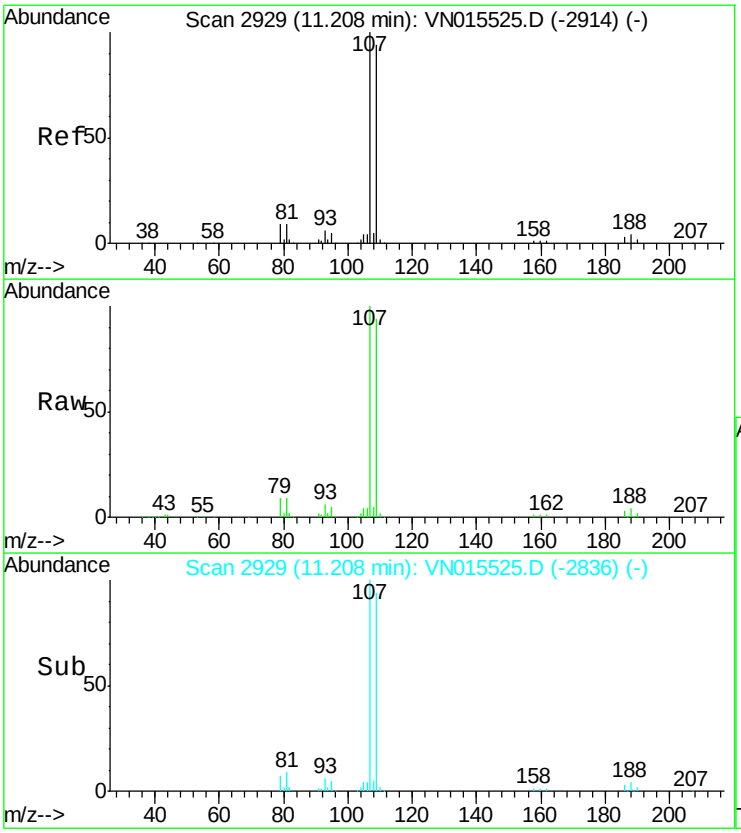


#61
Dibromochloromethane
Concen: 53.36 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:129 Resp: 110121

Ion	Ratio	Lower	Upper
129	100		
127	77.3	38.6	116.0

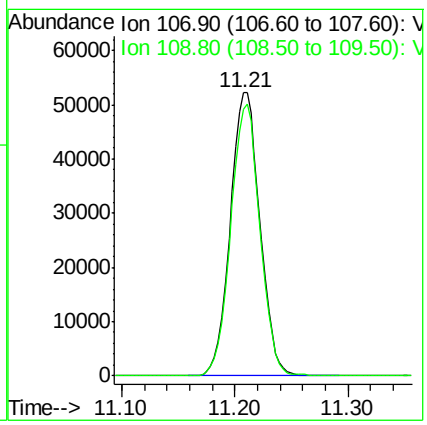




#62
1,2-Dibromoethane
Concen: 50.96 ug/l
RT: 11.21 min Scan# 2929
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:107 Resp: 94830

Ion	Ratio	Lower	Upper
107	100		
109	94.7	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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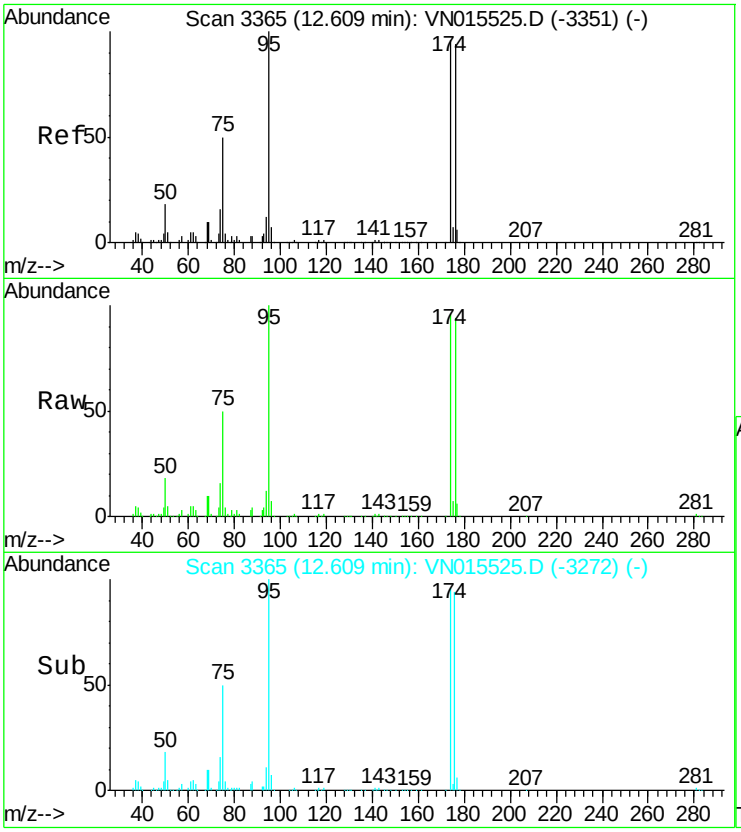
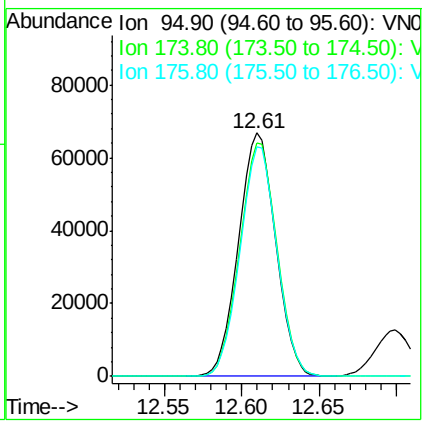
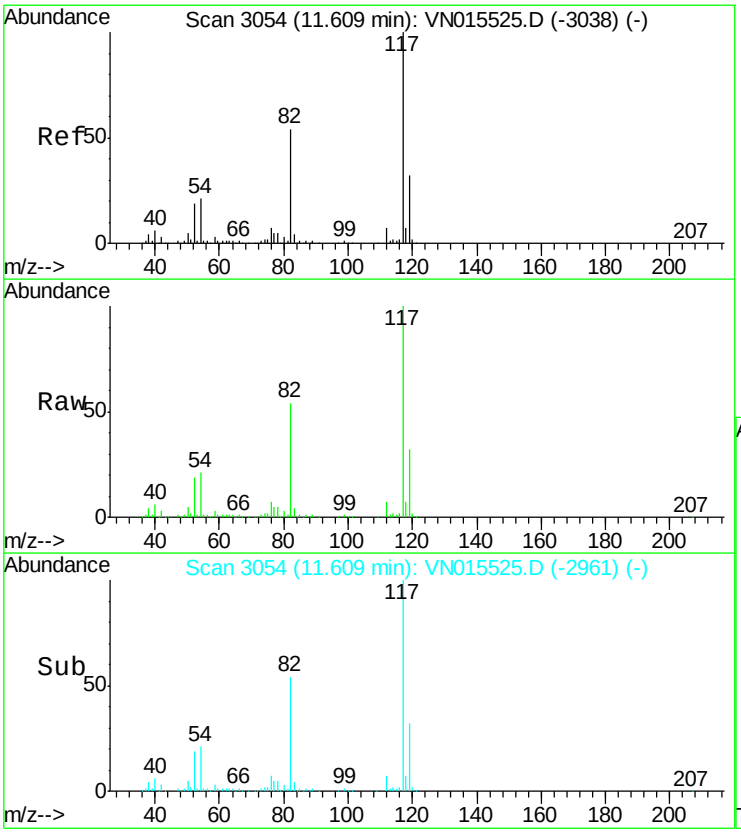


#63
4-Bromofluorobenzene
Concen: 49.39 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 95 Resp: 111916

Ion	Ratio	Lower	Upper
95	100		
174	95.9	0.0	191.8
176	93.4	0.0	186.8

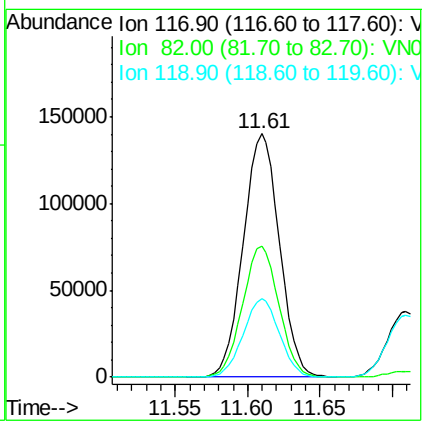


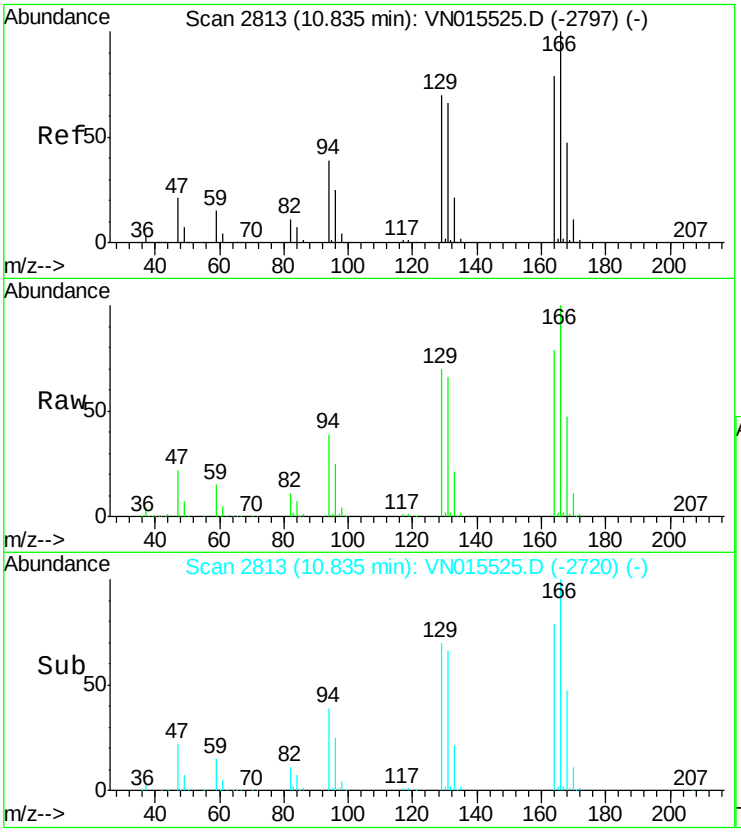


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:117 Resp: 243469

Ion	Ratio	Lower	Upper
117	100		
82	54.1	43.3	64.9
119	32.0	25.6	38.4

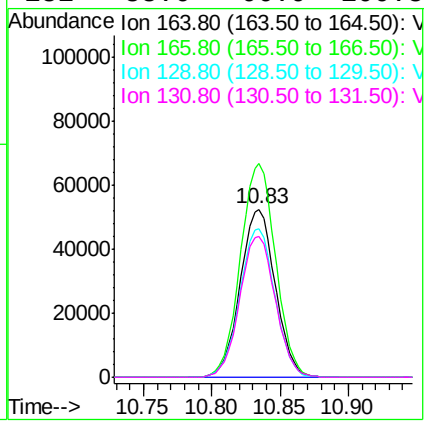




#65
Tetrachloroethene
Concen: 48.02 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:164 Resp: 93586

Ion	Ratio	Lower	Upper
164	100		
166	127.1	101.7	152.5
129	88.4	70.7	106.1
131	83.6	66.9	100.3



Instrument :
MSVOA_N
LabSampleId :
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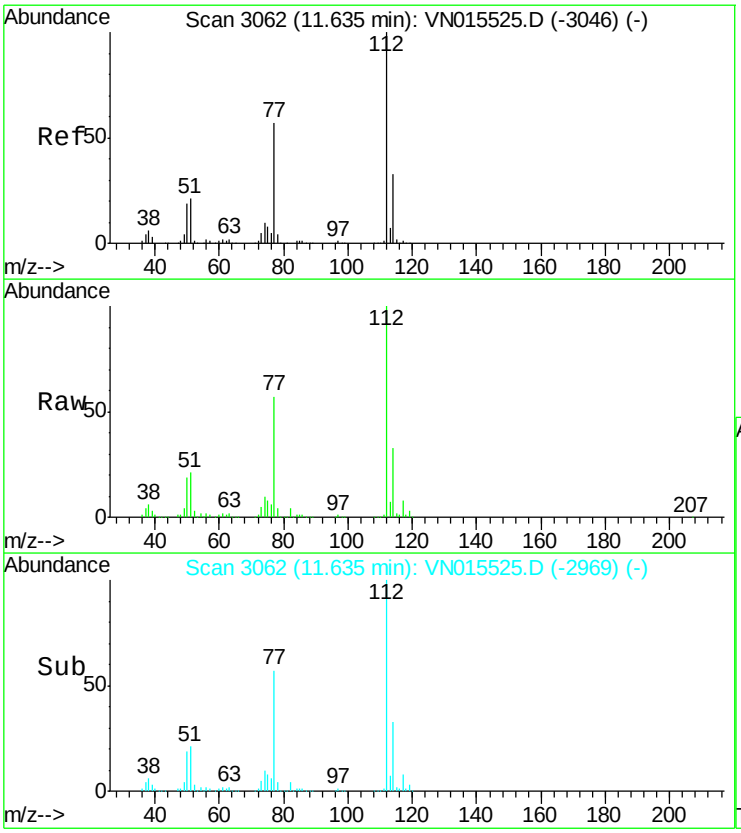
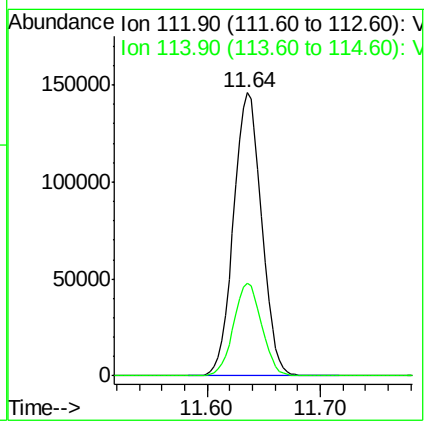


#66
Chlorobenzene
Concen: 48.27 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:112 Resp: 252473

Ion	Ratio	Lower	Upper
112	100		
114	32.7	26.2	39.2



Instrument :
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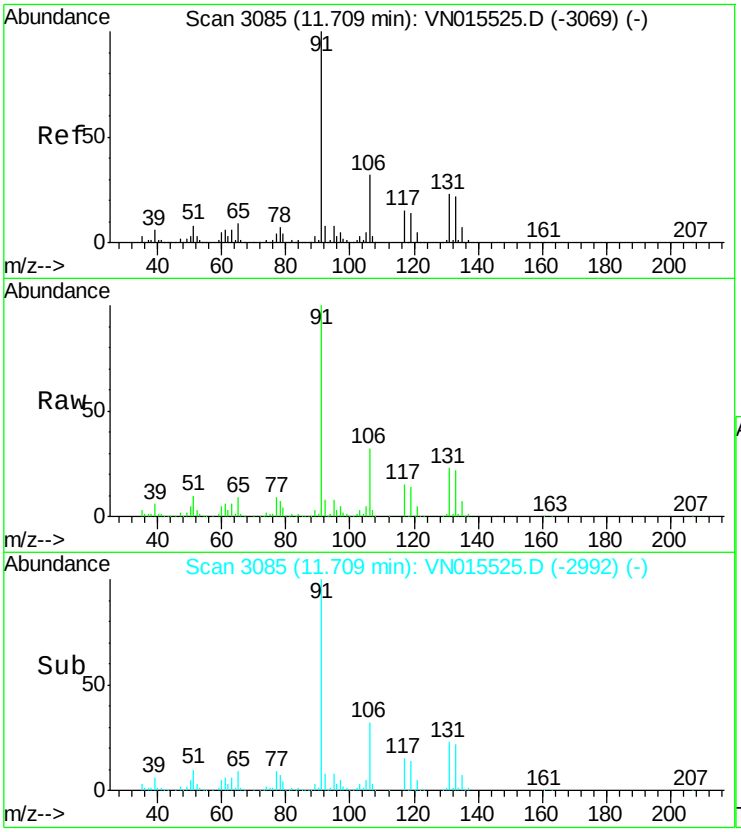
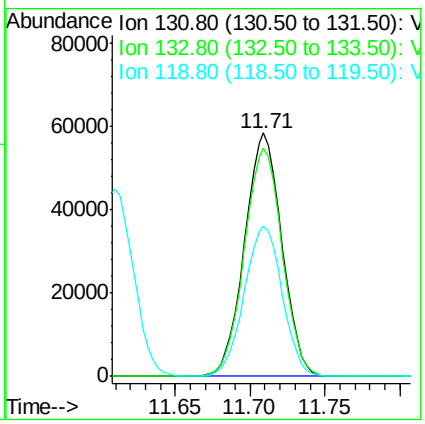
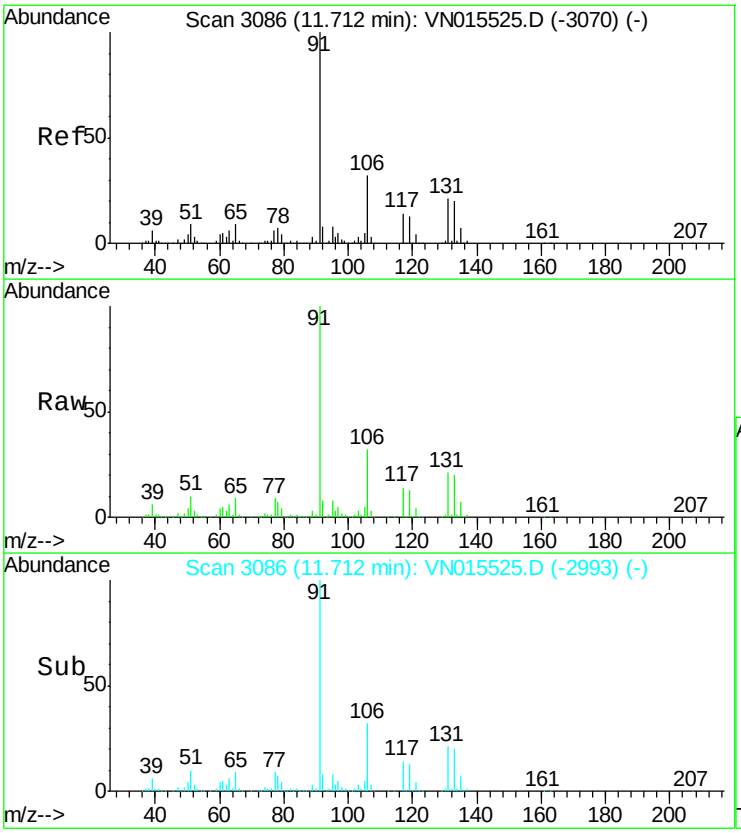


#67
1,1,1,2-Tetrachloroethane
Concen: 53.09 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:131 Resp: 100858

Ion	Ratio	Lower	Upper
131	100		
133	95.4	47.7	143.1
119	63.0	31.5	94.5

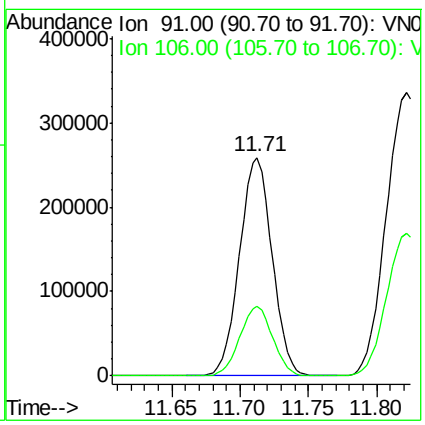


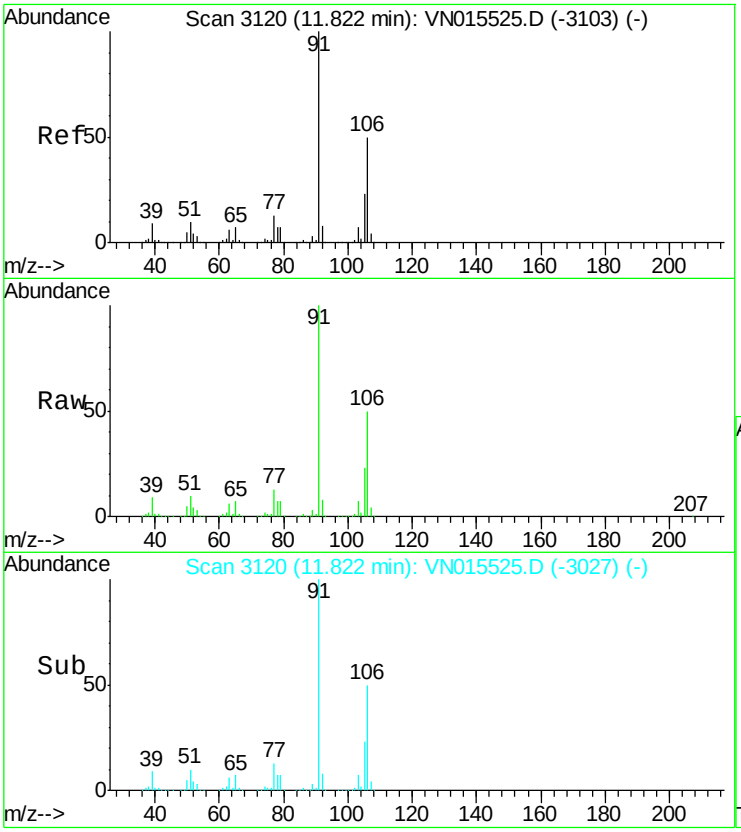


#68
Ethyl Benzene
Concen: 50.68 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 91 Resp: 429638

Ion	Ratio	Lower	Upper
91	100		
106	31.9	25.5	38.3





#69
m/p-Xylenes
Concen: 103.29 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:106 Resp: 331553

Ion	Ratio	Lower	Upper
106	100		
91	200.6	160.5	240.7

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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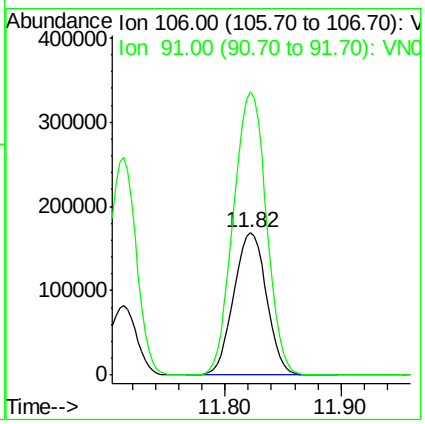
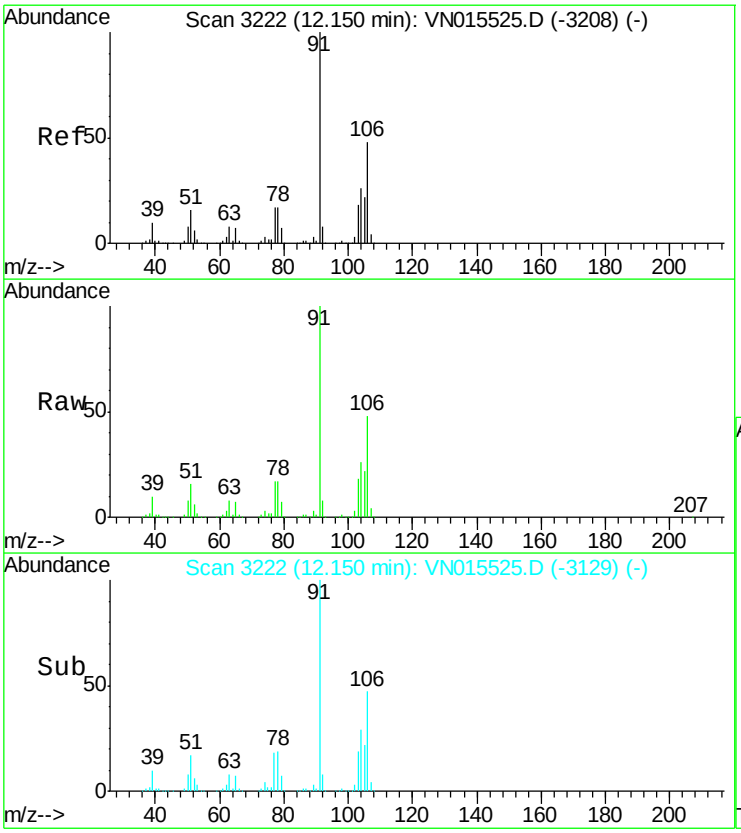
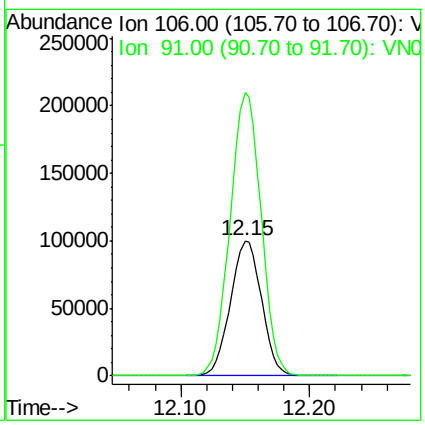


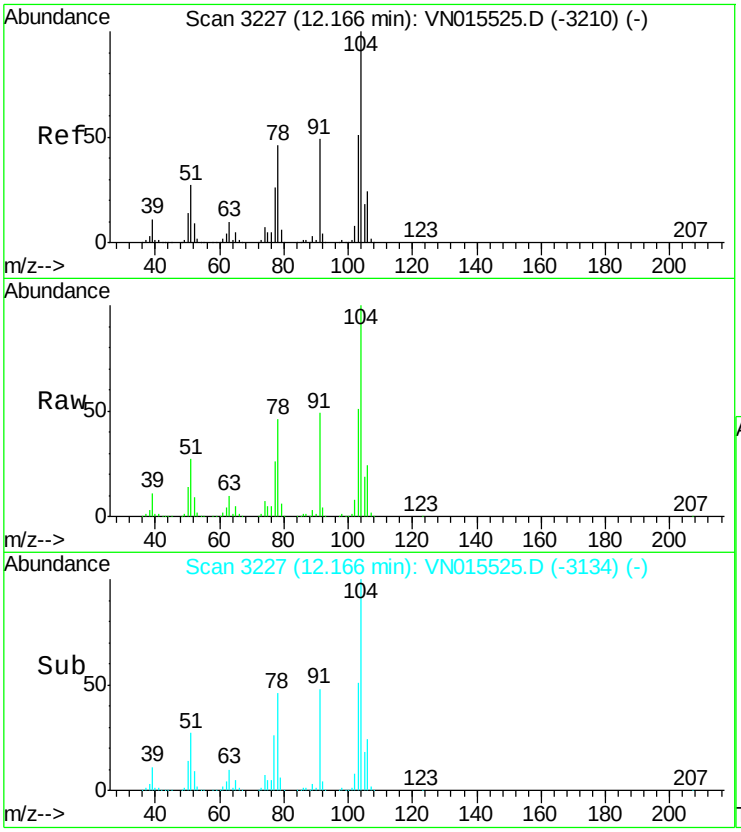


#70
o-Xylene
Concen: 50.82 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:106 Resp: 167125

Ion	Ratio	Lower	Upper
106	100		
91	209.8	104.9	314.7

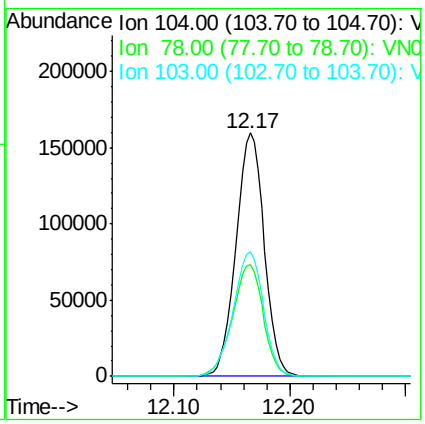




#71
Styrene
Concen: 54.73 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:104 Resp: 268773

Ion	Ratio	Lower	Upper
104	100		
78	50.1	40.1	60.1
103	55.0	44.0	66.0



Instrument :
MSVOA_N
LabSampleId :
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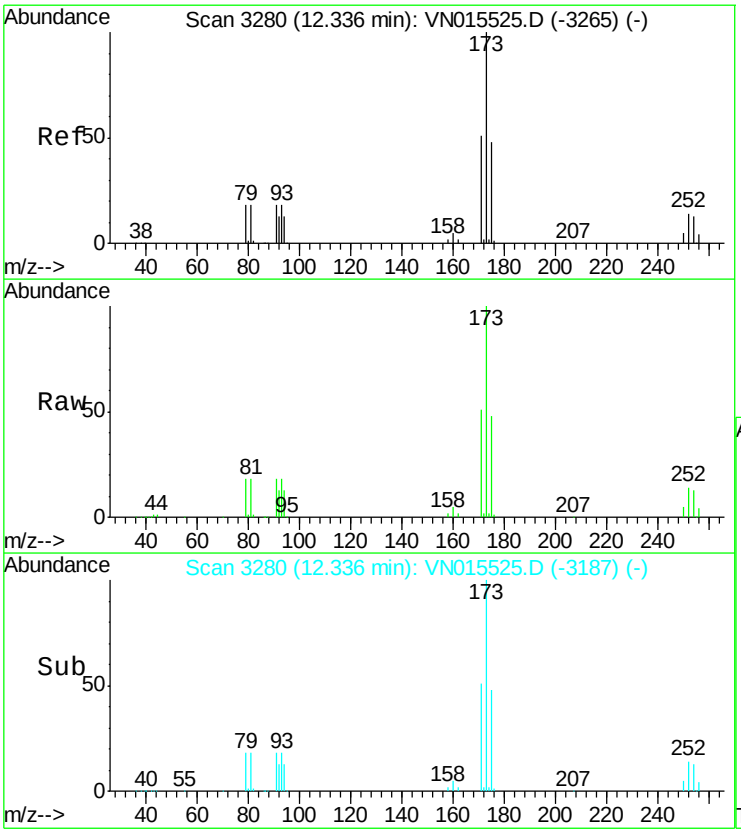
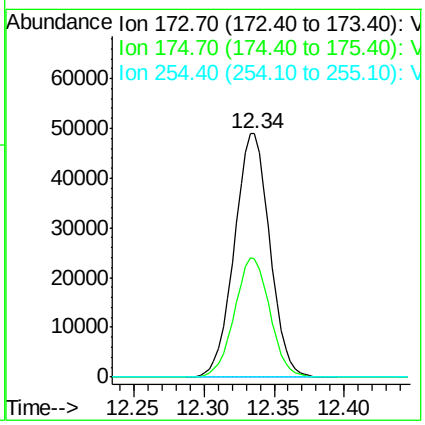
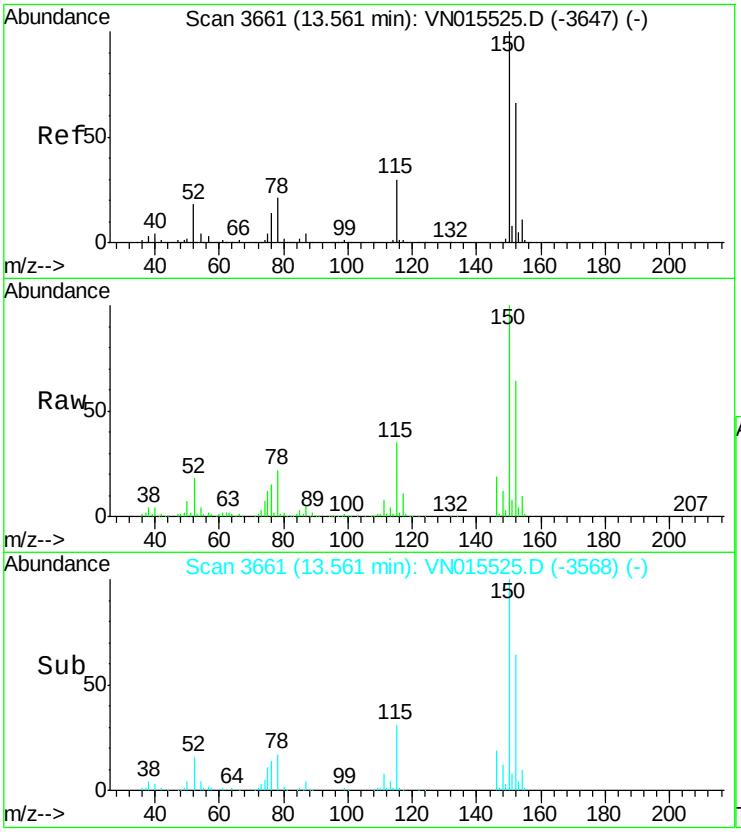


#72
Bromoform
Concen: 59.17 ug/l
RT: 12.34 min Scan# 3280
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:173 Resp: 86162

Ion	Ratio	Lower	Upper
173	100		
175	48.6	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:152 Resp: 116575

Ion	Ratio	Lower	Upper
152	100		
115	54.4	27.2	81.6
150	171.8	0.0	343.6

Instrument :
MSVOA_N
LabSampleId :
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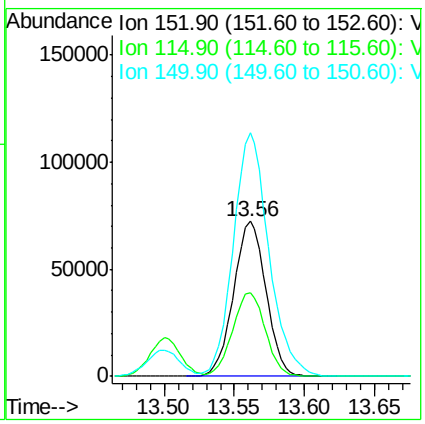
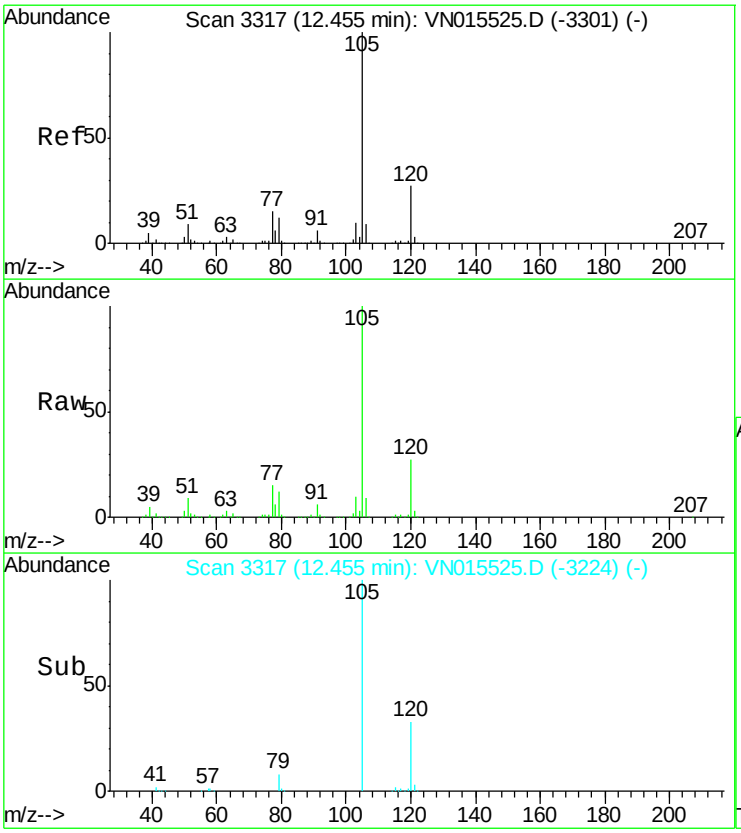
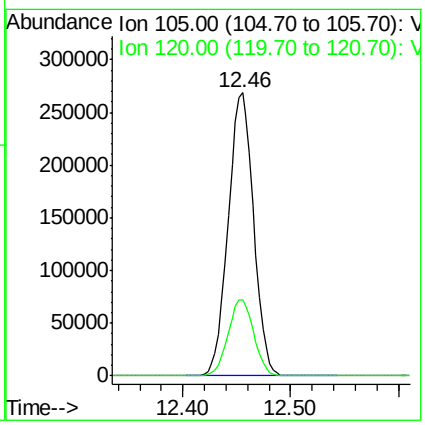




#74
Isopropylbenzene
Concen: 47.09 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:105 Resp: 440149

Ion	Ratio	Lower	Upper
105	100		
120	27.3	13.7	41.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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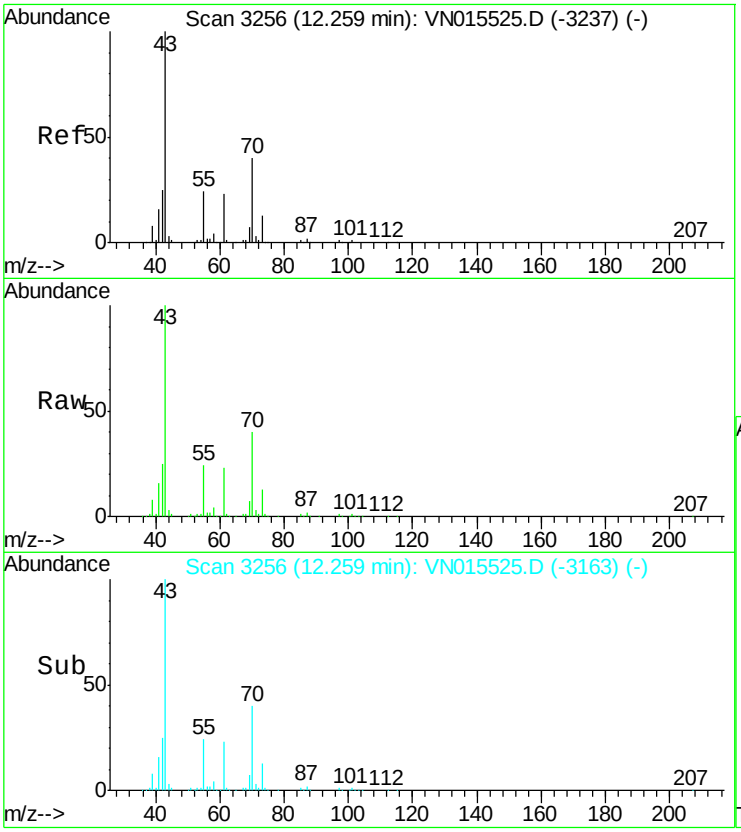
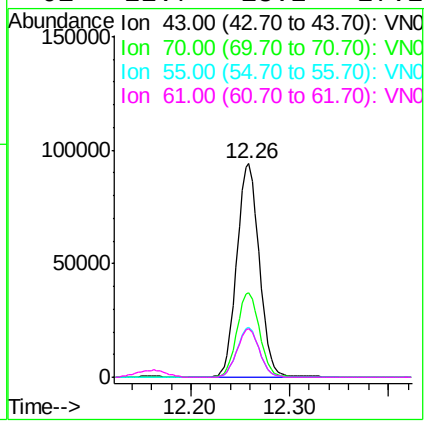
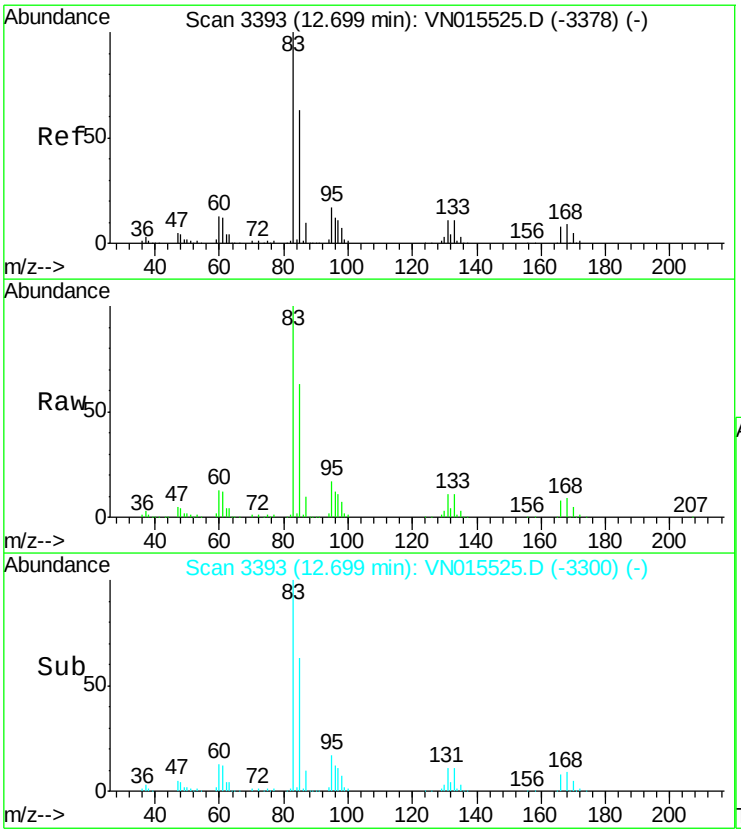


#75
N-amyl acetate
Concen: 56.12 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 43 Resp: 147825

Ion	Ratio	Lower	Upper
43	100		
70	40.0	32.0	48.0
55	23.1	18.5	27.7
61	22.7	18.2	27.2

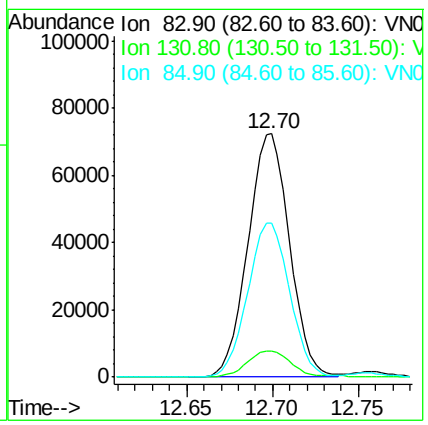


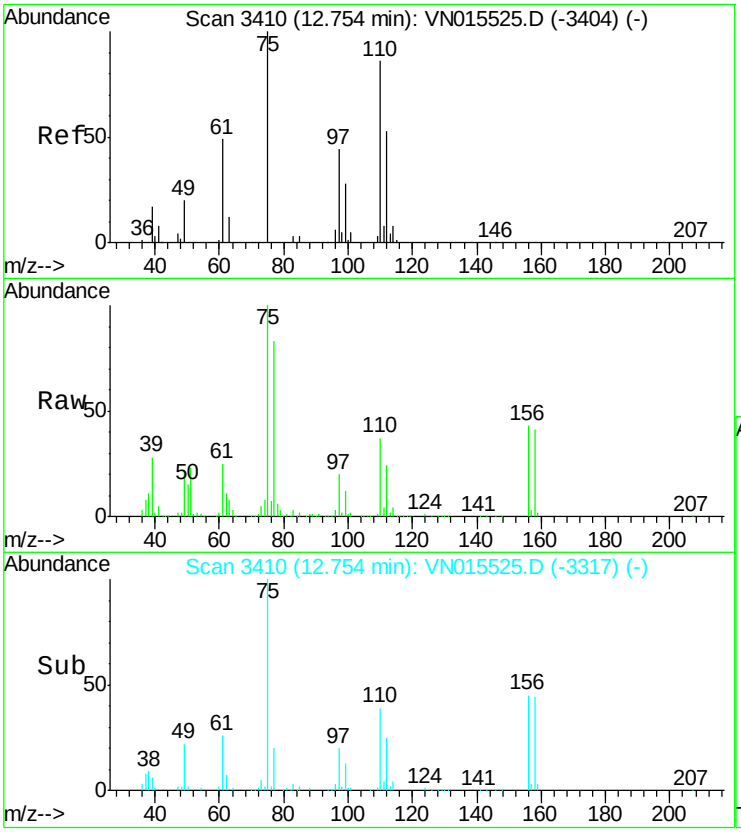


#76
1,1,2,2-Tetrachloroethane
Concen: 45.10 ug/l
RT: 12.70 min Scan# 3393
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 83 Resp: 121324

Ion	Ratio	Lower	Upper
83	100		
131	11.7	5.9	17.6
85	63.8	31.9	95.7





#77
1,2,3-Trichloropropane
Concen: 42.84 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 75 Resp: 105430

Ion	Ratio	Lower	Upper
75	100		
77	194.2	90.4	271.2

Instrument :
MSVOA_N
LabSampleId :
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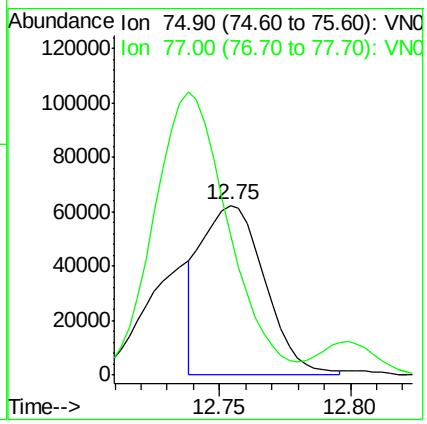
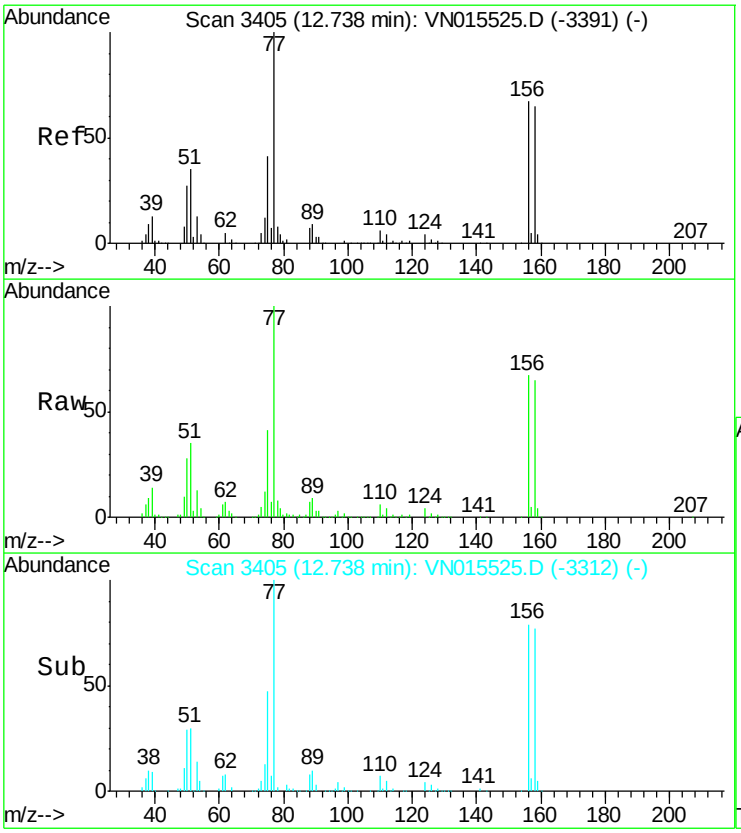
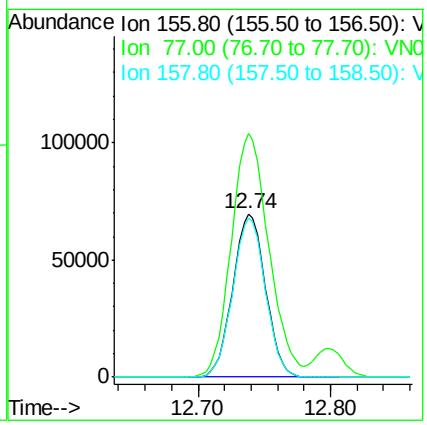




#78
Bromobenzene
Concen: 48.93 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:156 Resp: 119032

Ion	Ratio	Lower	Upper
156	100		
77	172.0	86.0	258.0
158	97.4	48.7	146.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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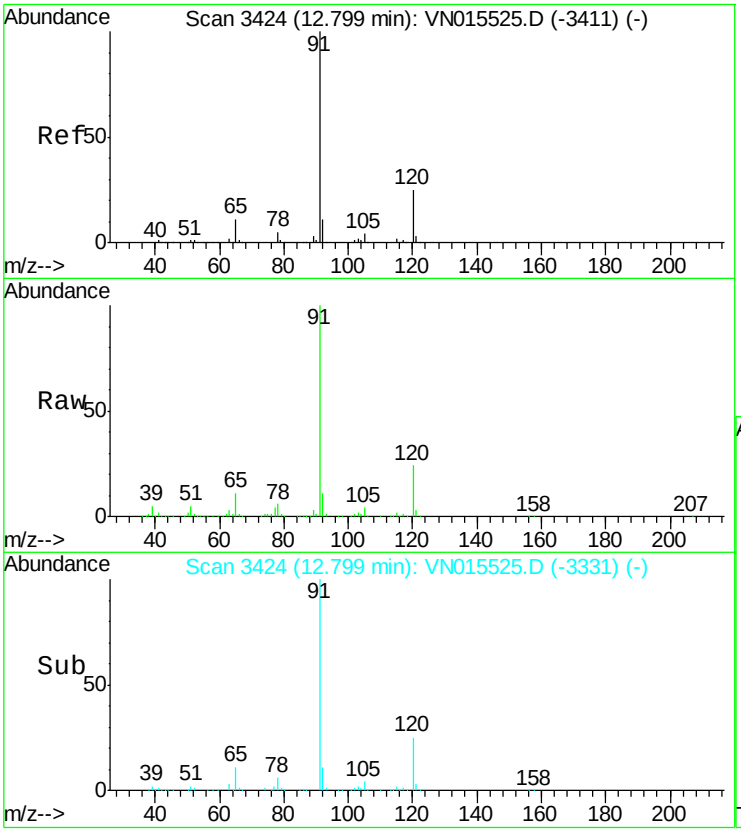
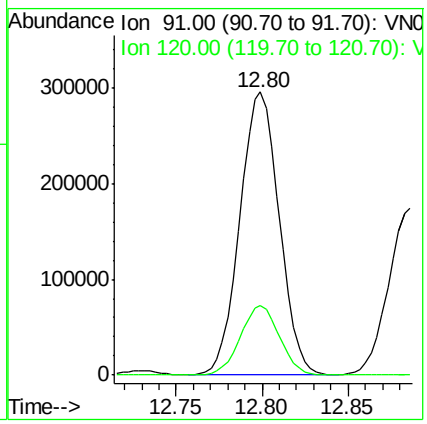
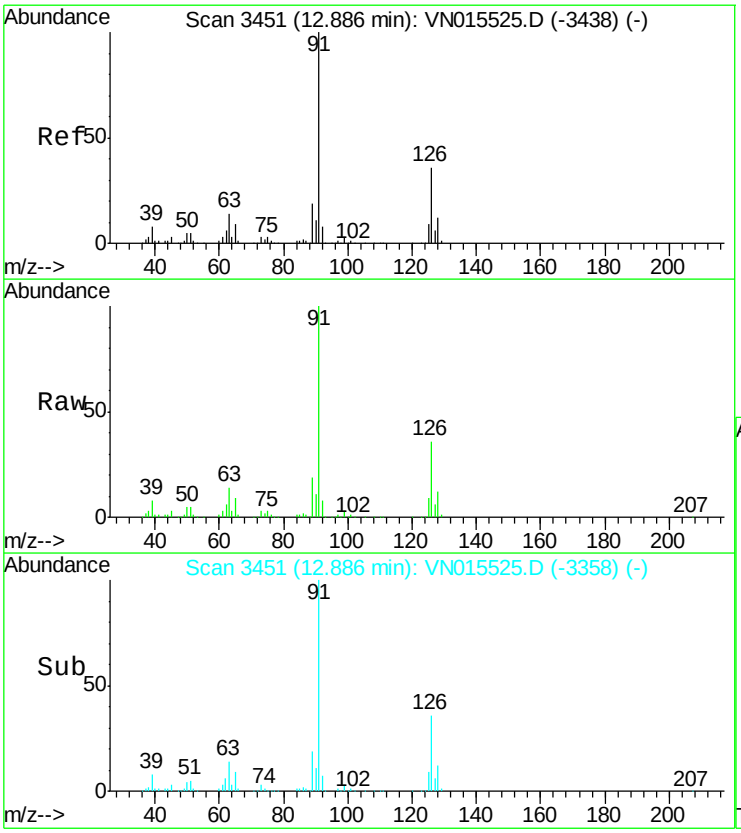


#79
n-propylbenzene
Concen: 47.17 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 91 Resp: 470148

Ion	Ratio	Lower	Upper
91	100		
120	24.3	12.2	36.4

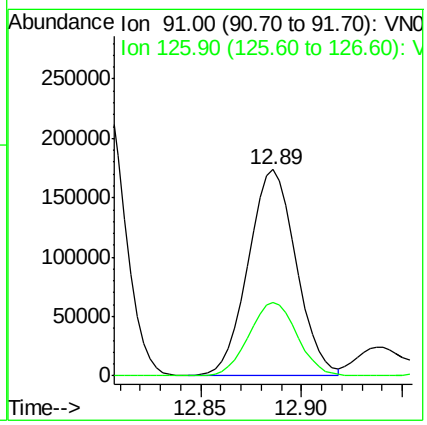


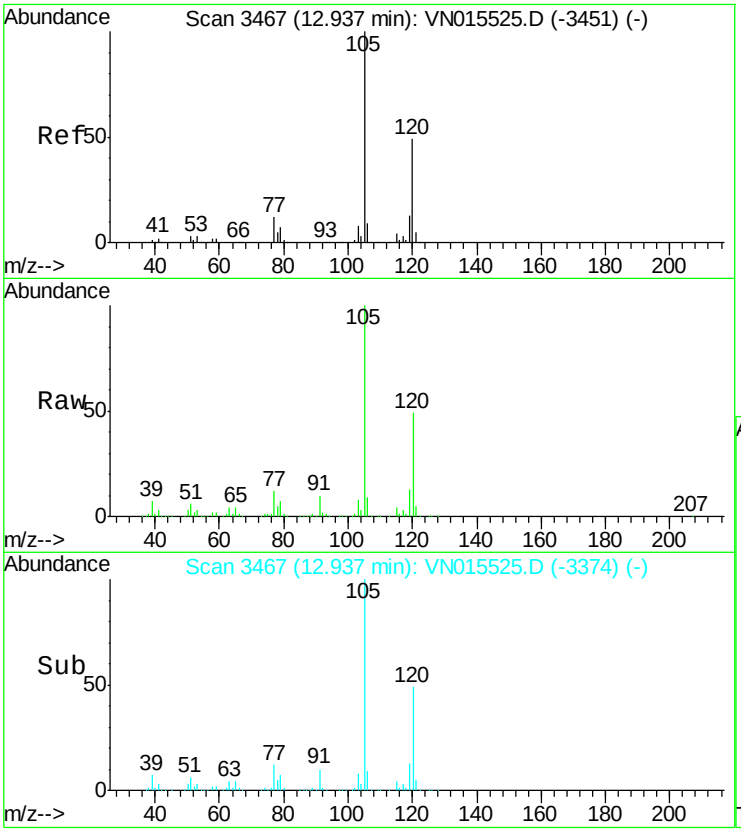


#80
2-Chlorotoluene
Concen: 45.74 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 91 Resp: 289140

Ion	Ratio	Lower	Upper
91	100		
126	35.9	17.9	53.8





#81
1,3,5-Trimethylbenzene
Concen: 49.85 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:105 Resp: 370698

Ion	Ratio	Lower	Upper
105	100		
120	49.2	24.6	73.8

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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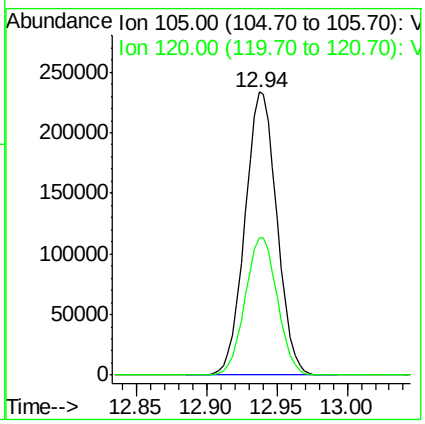
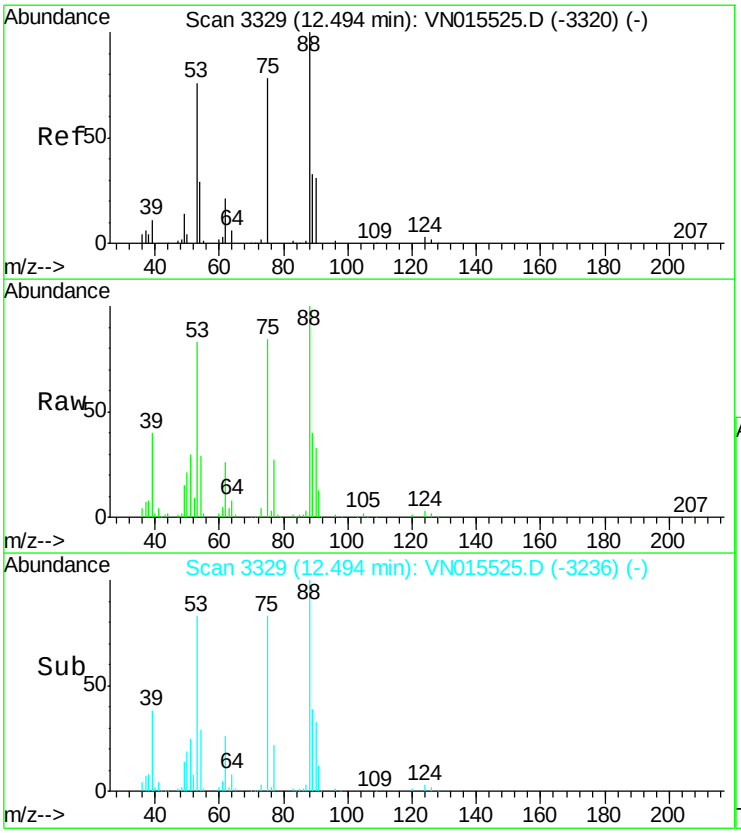
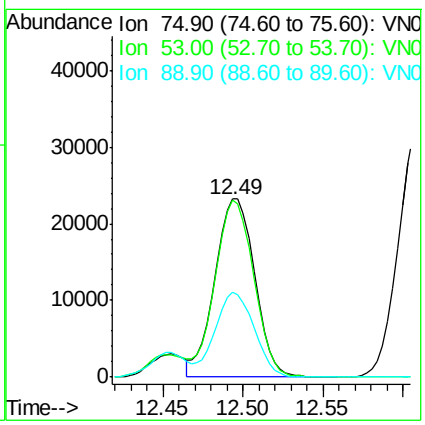


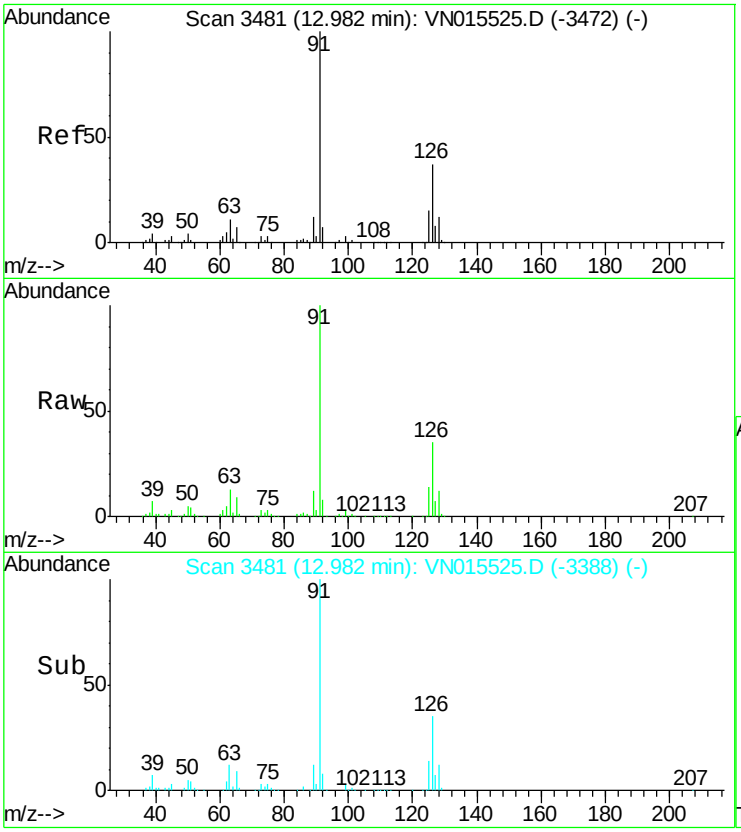


#82
trans-1,4-Dichloro-2-butene
Concen: 57.81 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 75 Resp: 39369

Ion	Ratio	Lower	Upper
75	100		
53	96.9	77.5	116.3
89	47.1	37.7	56.5





#83
4-Chlorotoluene
Concen: 48.04 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 91 Resp: 282364

Ion	Ratio	Lower	Upper
91	100		
126	35.1	17.5	52.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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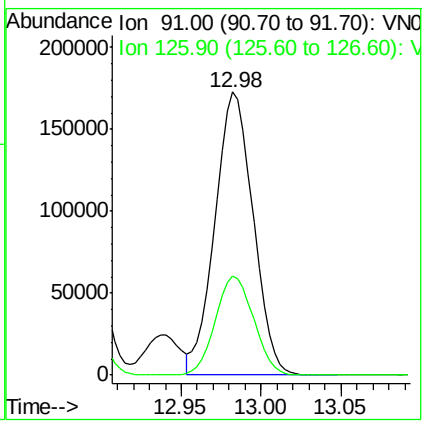
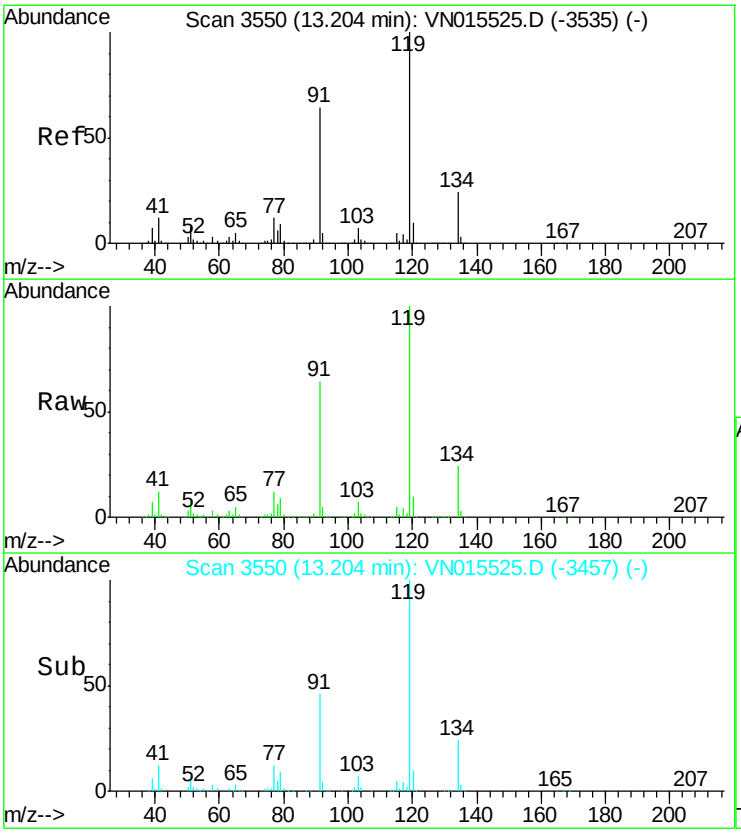
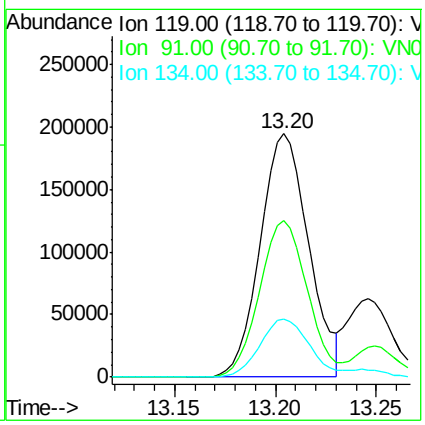




#84
tert-Butylbenzene
Concen: 48.41 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:119 Resp: 325185

Ion	Ratio	Lower	Upper
119	100		
91	63.9	31.9	95.9
134	24.2	12.1	36.3



Instrument :
MSVOA_N
LabSampleId :
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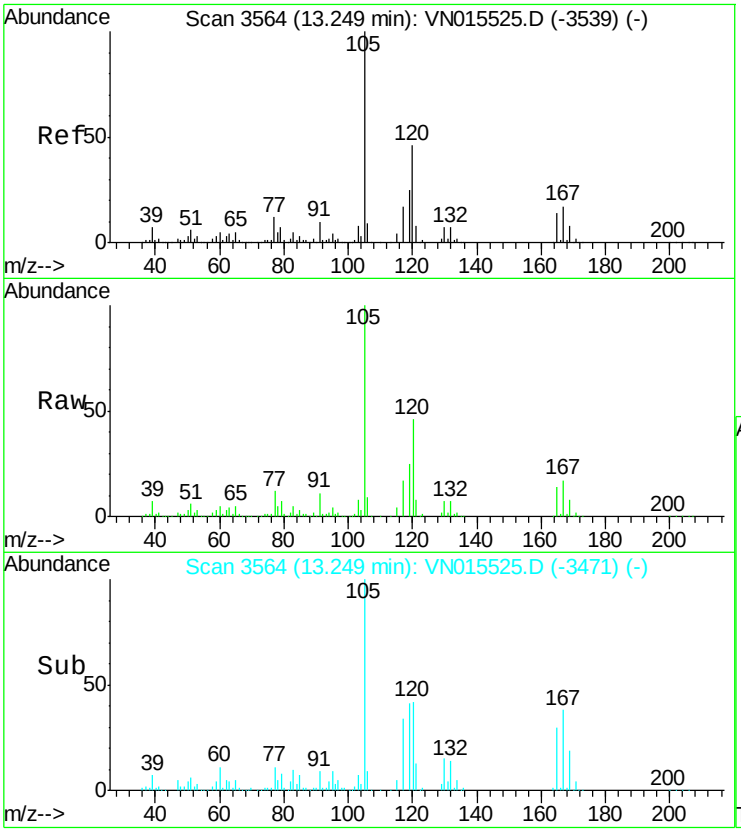
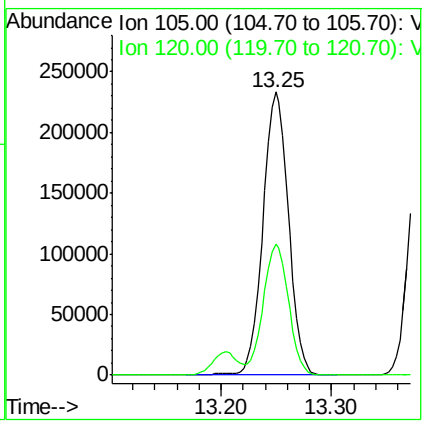
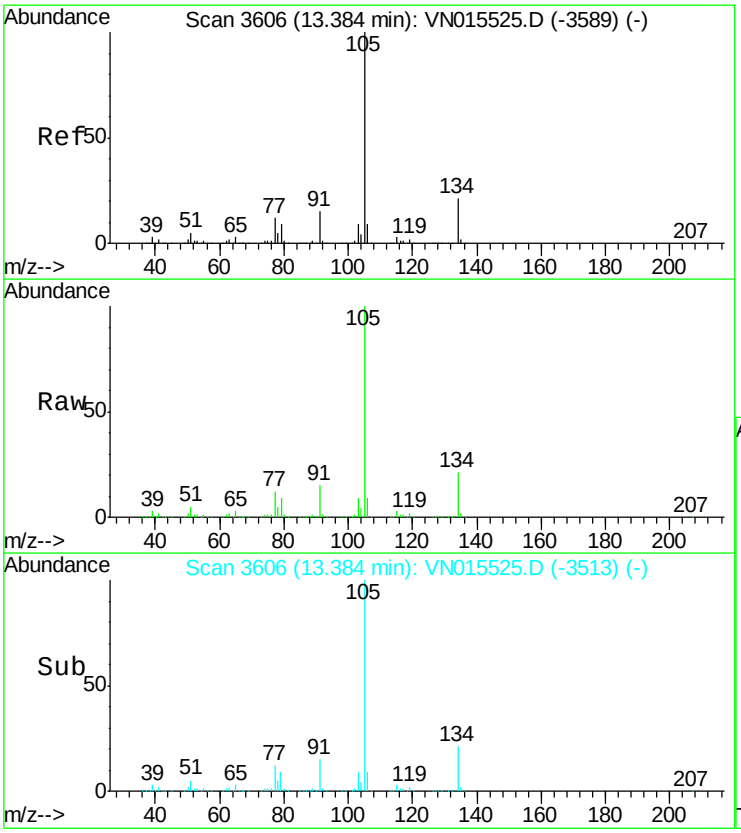


#85
1,2,4-Trimethylbenzene
Concen: 50.76 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:105 Resp: 376300

Ion	Ratio	Lower	Upper
105	100		
120	46.2	23.1	69.3

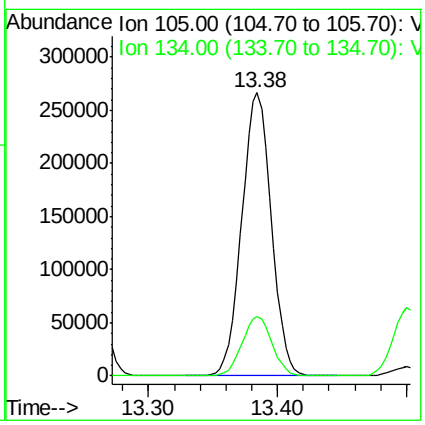


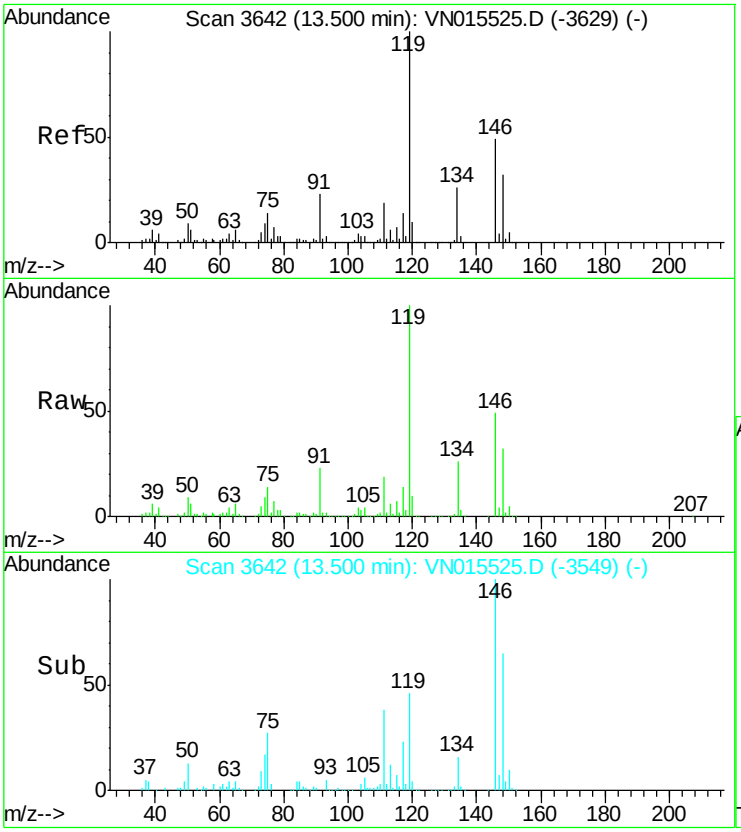


#86
sec-Butylbenzene
Concen: 47.42 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:105 Resp: 423703

Ion	Ratio	Lower	Upper
105	100		
134	21.2	10.6	31.8





#87
p-Isopropyltoluene
Concen: 51.71 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:119 Resp: 376238

Ion	Ratio	Lower	Upper
119	100		
134	26.6	13.3	39.9
91	23.4	11.7	35.1

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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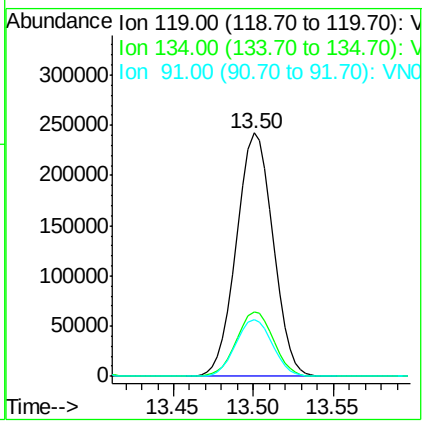
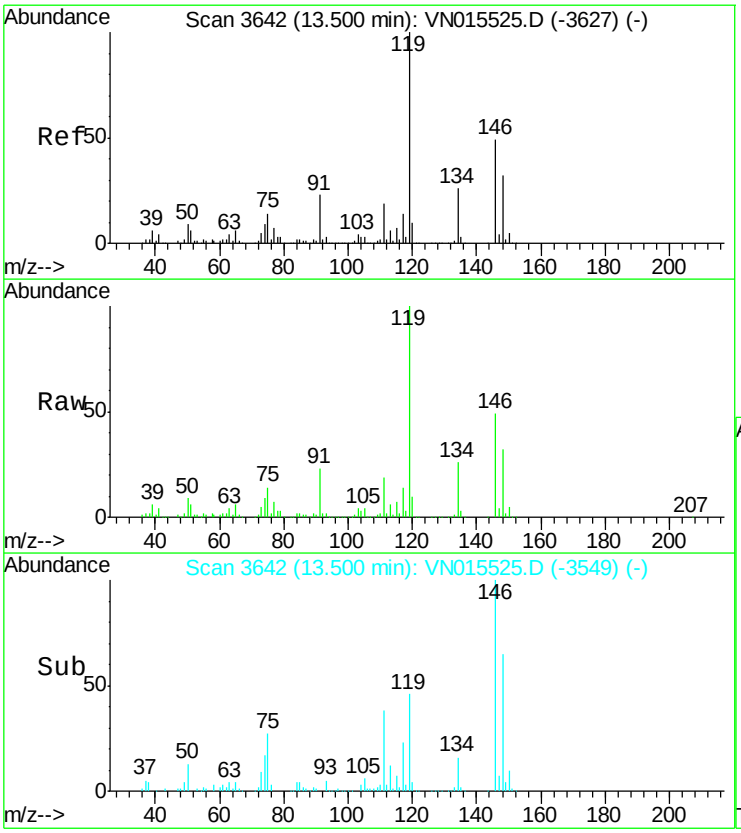
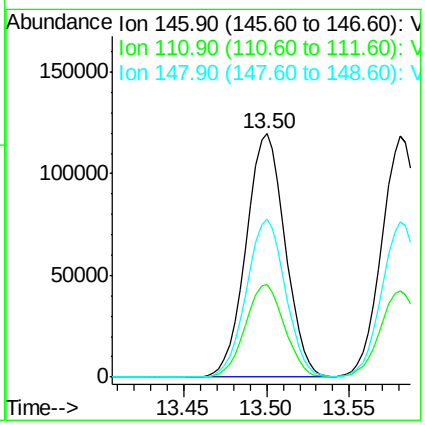


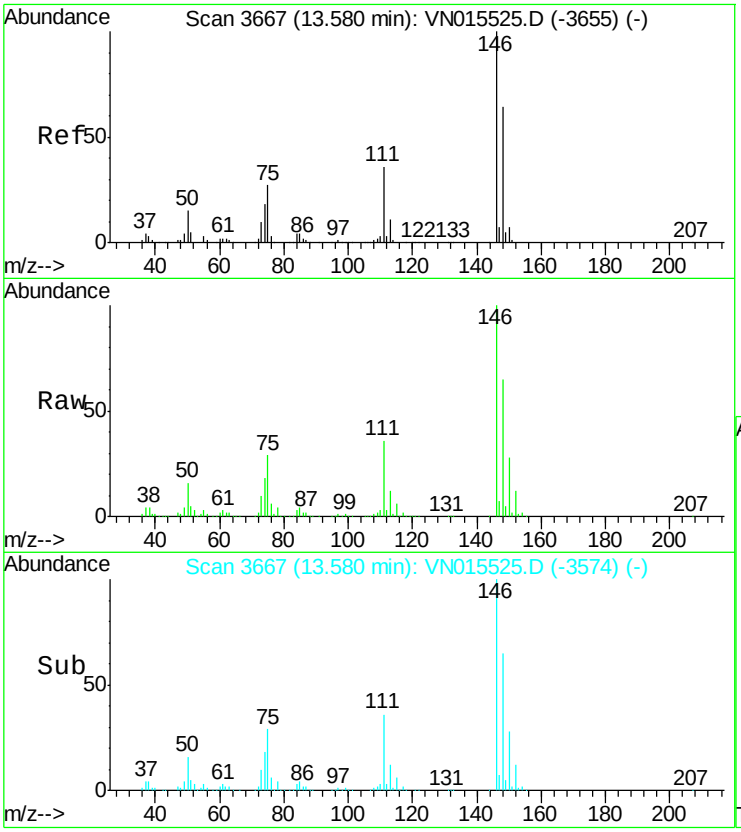


#88
1,3-Dichlorobenzene
Concen: 49.51 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:146 Resp: 196247

Ion	Ratio	Lower	Upper
146	100		
111	38.1	19.1	57.1
148	64.7	32.4	97.0





#89
1,4-Dichlorobenzene
Concen: 48.79 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:146 Resp: 193097

Ion	Ratio	Lower	Upper
146	100		
111	36.9	18.4	55.4
148	64.6	32.3	96.9

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

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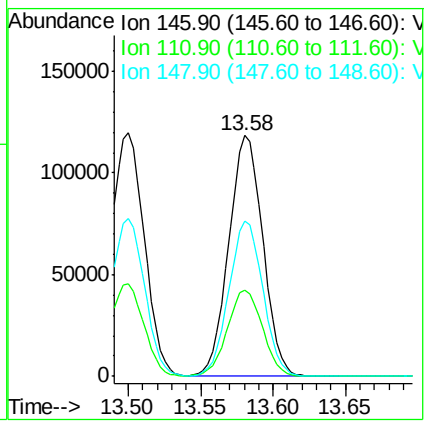
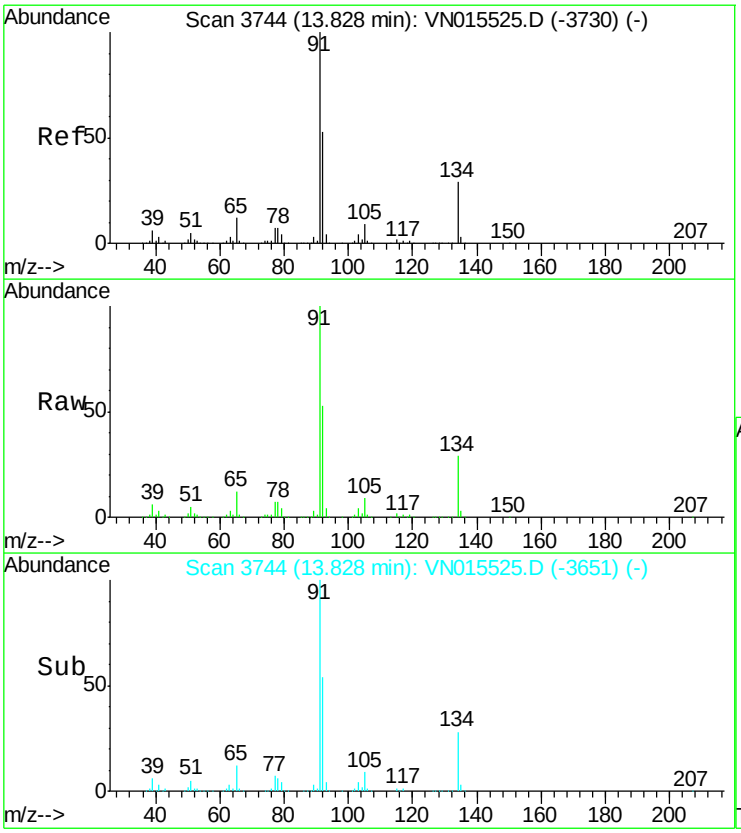
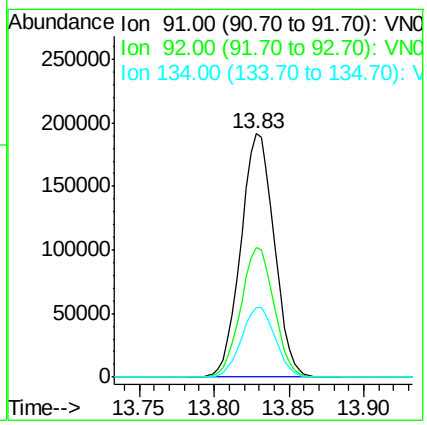


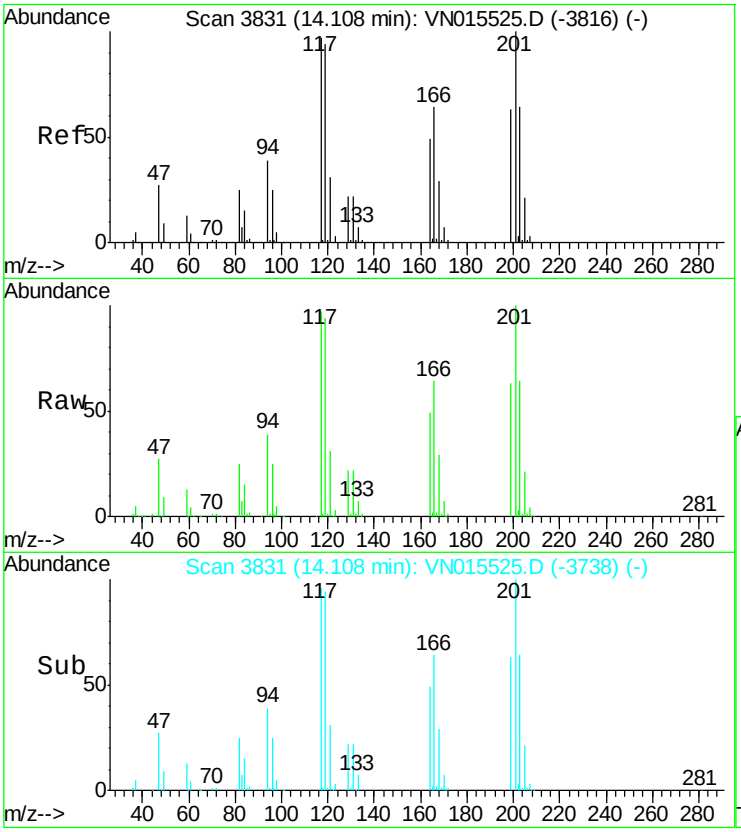


#90
n-Butylbenzene
Concen: 50.54 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion: 91 Resp: 297964

Ion	Ratio	Lower	Upper
91	100		
92	53.2	26.6	79.8
134	28.9	14.4	43.4





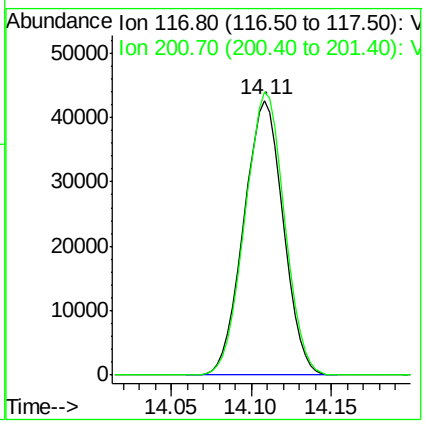
#91
Hexachloroethane
Concen: 48.89 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

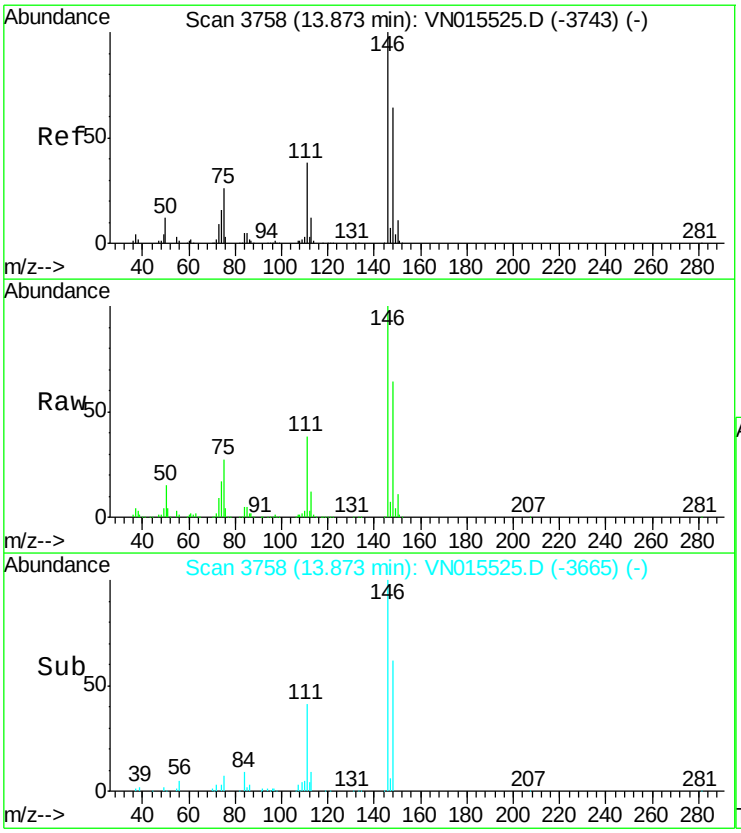
Tgt Ion:117 Resp: 71872

Ion	Ratio	Lower	Upper
117	100		
201	103.5	51.7	155.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

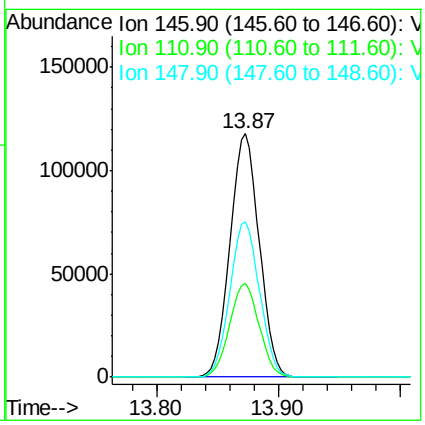


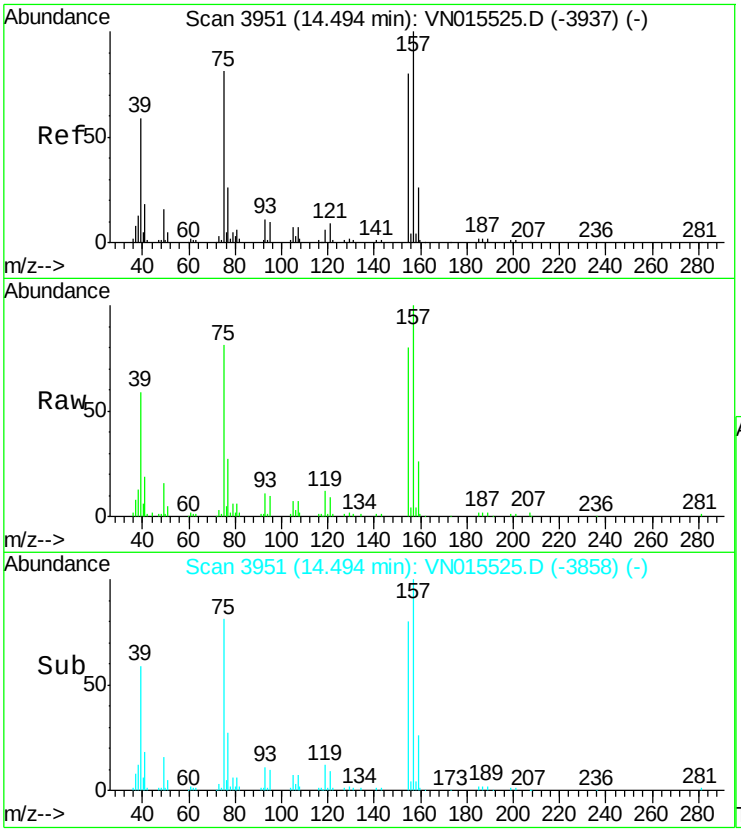


#92
1,2-Dichlorobenzene
Concen: 48.64 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:146 Resp: 196189

Ion	Ratio	Lower	Upper
146	100		
111	38.8	19.4	58.2
148	64.7	32.4	97.0





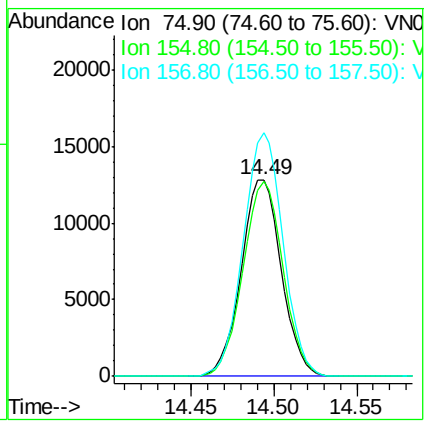
#93
1,2-Dibromo-3-Chloropropane
Concen: 48.19 ug/l
RT: 14.49 min Scan# 3951
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

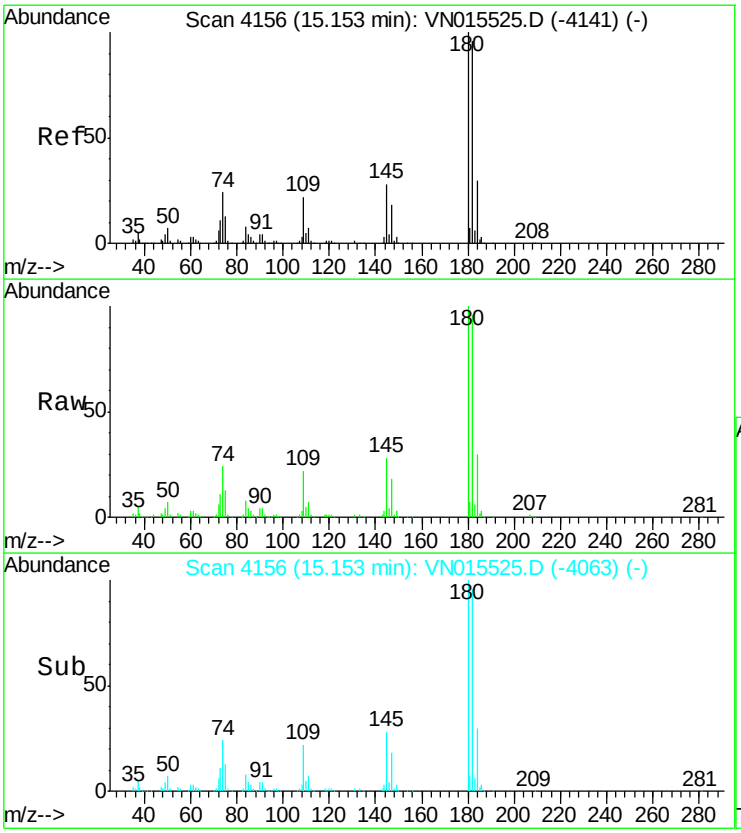
Instrument : MSVOA_N
LabSampleId : VSTDICCC050

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

Tgt Ion: 75 Resp: 21635

Ion	Ratio	Lower	Upper
75	100		
155	98.8	49.4	148.2
157	122.5	61.3	183.8

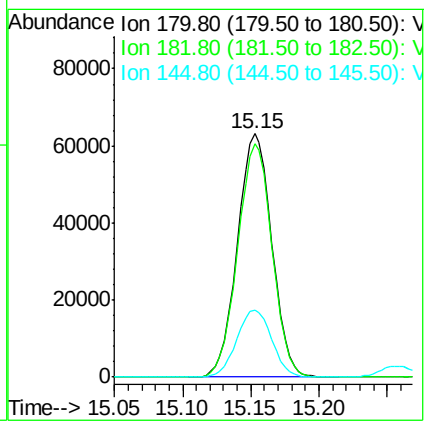


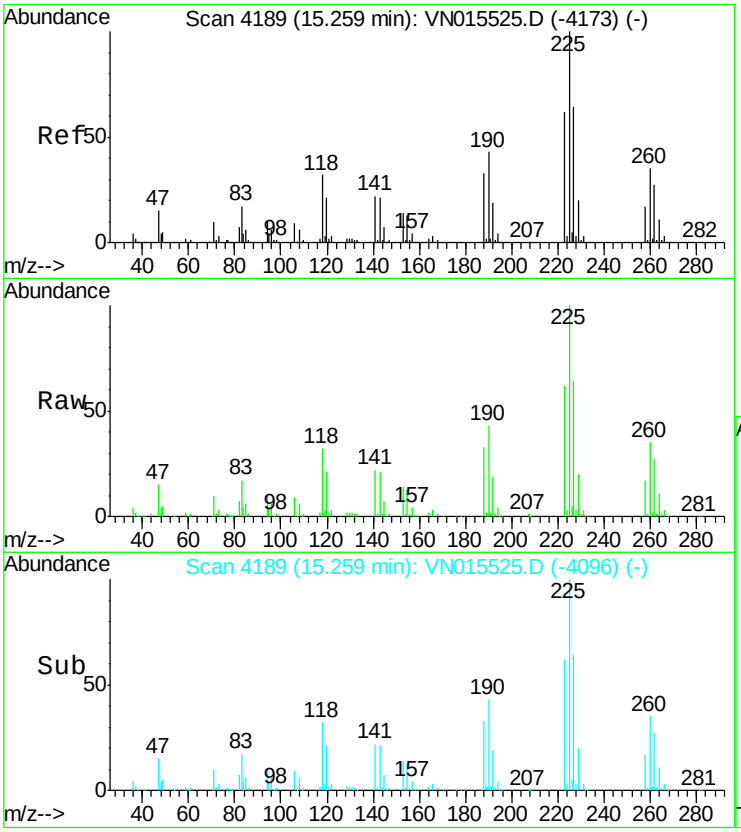


#94
1,2,4-Trichlorobenzene
Concen: 55.08 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:180 Resp: 110242

Ion	Ratio	Lower	Upper
180	100		
182	96.0	48.0	144.0
145	28.0	14.0	42.0

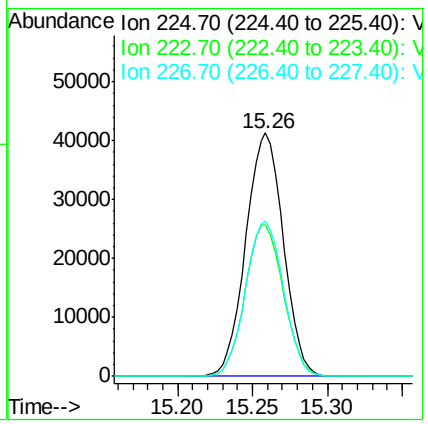




#95
Hexachlorobutadiene
Concen: 51.36 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

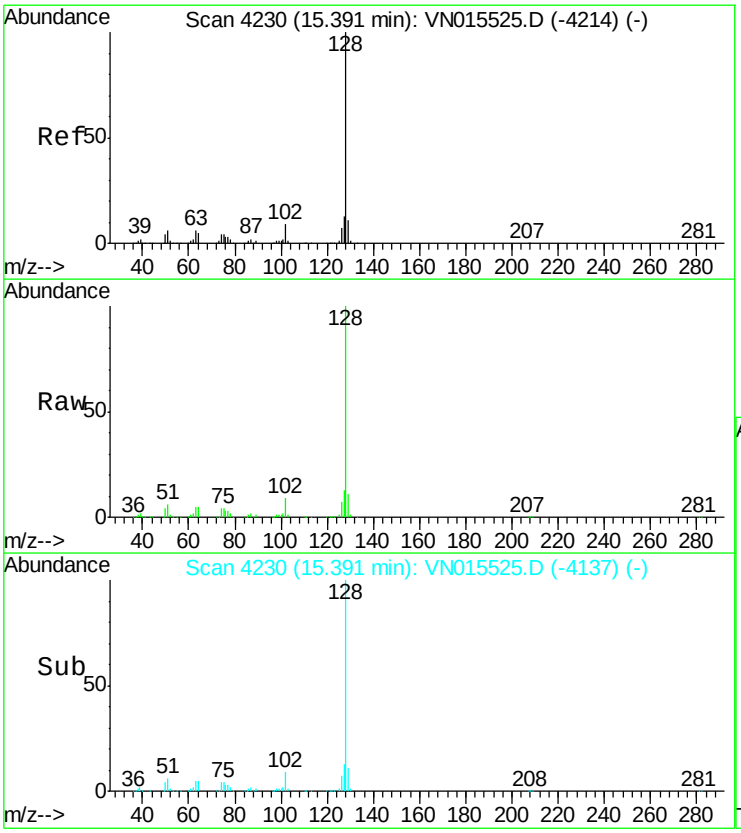
Tgt Ion:225 Resp: 72293

Ion	Ratio	Lower	Upper
225	100		
223	63.3	31.6	95.0
227	64.3	32.1	96.5



Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

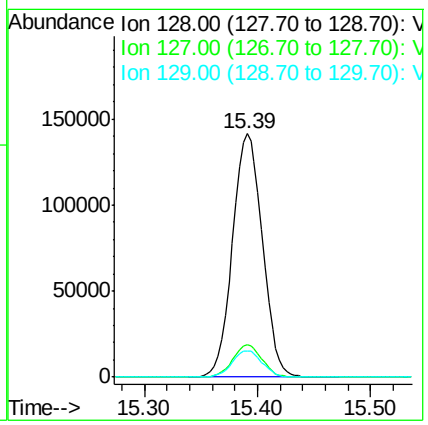
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:01:58 AM

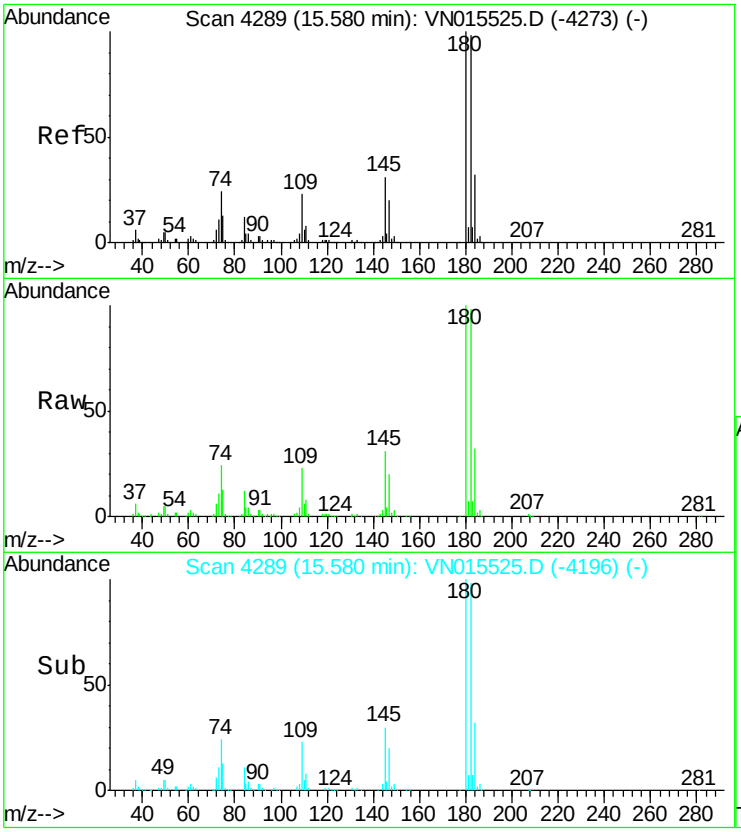


#96
Naphthalene
Concen: 55.69 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:128 Resp: 260285

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.3	15.5
129	10.9	8.7	13.1





#97
1,2,3-Trichlorobenzene
Concen: 52.16 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015525.D
Acq: 20 May 2014 18:54

Tgt Ion:180 Resp: 106788

Ion	Ratio	Lower	Upper
180	100		
182	95.6	47.8	143.4
145	29.8	14.9	44.7

Instrument :
MSVOA_N
LabSampleId :
VSTDICCC050

Manual Integrations APPROVED
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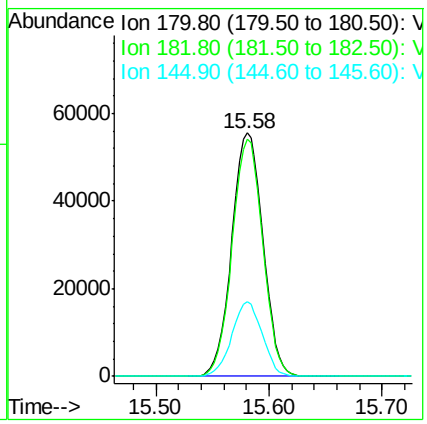
5/21/2014 11:01:58 AM



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : \\74.0.250.170\voasrv\HPCHEM1\MSVOA N\Data\VN052014\
Data File : VN015526.D
Acq On : 20 May 2014 19:24
Operator : MD
Sample : VSTDICC100
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 21 01:37:06 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	188175	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	264160	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	234158	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	113785	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	202824	84.95	ug/l	0.00
Spiked Amount 50.000			Recovery	=	169.90%	
36) Dibromofluoromethane	7.80	113	166110	96.46	ug/l	0.00
Spiked Amount 50.000			Recovery	=	192.92%	
51) Toluene-d8	10.29	98	606509	93.69	ug/l	0.00
Spiked Amount 50.000			Recovery	=	187.38%	
63) 4-Bromofluorobenzene	12.61	95	218616	101.68	ug/l	0.00
Spiked Amount 50.000			Recovery	=	203.36%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	146900	68.22	ug/l	100
3) Chlorodifluoromethane	1.87	51	107942	62.23	ug/l	99
4) Chloromethane	2.07	50	171630	65.17	ug/l	99
5) Vinyl Chloride	2.20	62	166300	74.65	ug/l	98
6) Bromomethane	2.60	94	101241	78.59	ug/l	99
7) Chloroethane	2.76	64	105959	75.71	ug/l	100
8) Trichlorofluoromethane	3.11	101	267820	85.87	ug/l	100
9) Diethyl Ether	3.53	74	101594	86.12	ug/l	100
10) 1,1,2-Trichlorotrifluoroet	3.91	101	150422	88.12	ug/l	99
11) Methyl Iodide	4.11	142	207984	119.05	ug/l	99
12) Tert butyl alcohol	4.95	59	109062	525.34	ug/l	99
13) 1,1-Dichloroethene	3.88	96	146392	86.93	ug/l	97
14) Acrolein	3.73	56	97831	478.74	ug/l	98
15) Allyl chloride	4.50	41	254403	87.00	ug/l	100
16) Acrylonitrile	5.18	53	365471	447.40	ug/l	99
17) Acetone	3.94	43	324837	387.37	ug/l	99
18) Carbon Disulfide	4.23	76	411372	86.34	ug/l	100
19) Methyl Acetate	4.50	43	325512	147.36	ug/l	100
20) Methyl tert-butyl Ether	5.27	73	517713	89.61	ug/l	100
21) Methylene Chloride	4.74	84	164919	82.69	ug/l	97
22) trans-1,2-Dichloroethene	5.28	96	157201	88.22	ug/l	98
23) Diisopropyl ether	6.18	45	534552	80.79	ug/l	100
24) Vinyl Acetate	6.12	43	1491381m	319.12	ug/l	
25) 1,1-Dichloroethane	6.08	63	293918	82.48	ug/l	100
26) 2-Butanone	7.05	43	477359	431.57	ug/l	99
27) 2,2-Dichloropropane	7.06	77	250746	92.46	ug/l	100
28) cis-1,2-Dichloroethene	7.06	96	183203	87.38	ug/l	100
29) Bromochloromethane	7.42	49	133562	75.76	ug/l	98
30) Tetrahydrofuran	7.44	42	305819	427.95	ug/l	100
31) Chloroform	7.58	83	301981	85.67	ug/l	100
32) Cyclohexane	7.89	56	270269	67.11	ug/l	99
33) 1,1,1-Trichloroethane	7.79	97	284730	92.52	ug/l	100
37) 1,1-Dichloropropene	8.01	75	229810	91.53	ug/l	100
38) Ethyl Acetate	7.15	43	202976	107.41	ug/l	100

ICAL Form

Data Path : \\74.0.250.170\voasrv\HPCHEM1\MSVOA N\Data\VN052014\
Data File : VN015526.D
Acq On : 20 May 2014 19:24
Operator : MD
Sample : VSTDICC100
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations
APPROVED
MMDadoda
5/21/2014 11:02:18 AM

Quant Time: May 21 01:37:06 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) Carbon Tetrachloride	8.00	117	255434	101.03 ug/l	99
40) Methylcyclohexane	9.29	83	284621	95.81 ug/l	100
41) Benzene	8.26	78	668660	91.50 ug/l	99
42) Methacrylonitrile	7.37	41	122687	92.63 ug/l	99
43) 1,2-Dichloroethane	8.33	62	243919	91.19 ug/l	100
44) Isopropyl Acetate	8.35	43	358199	115.25 ug/l	99
45) Trichloroethene	9.04	130	188994	97.07 ug/l	99
46) 1,2-Dichloropropane	9.32	63	173568	87.52 ug/l	100
47) Dibromomethane	9.41	93	113798	92.76 ug/l	98
48) Bromodichloromethane	9.59	83	239689	97.98 ug/l	99
49) Methyl methacrylate	9.38	41	186470	97.39 ug/l	99
50) 1,4-Dioxane	9.40	88	49416	1964.59 ug/l	97
52) 4-Methyl-2-Pentanone	10.16	43	997082	472.79 ug/l	100
53) Toluene	10.35	92	429118	96.12 ug/l	99
54) t-1,3-Dichloropropene	10.57	75	256259	104.16 ug/l	99
55) cis-1,3-Dichloropropene	10.03	75	275687	98.06 ug/l	99
56) 1,1,2-Trichloroethane	10.75	97	166607	94.67 ug/l	99
57) Ethyl methacrylate	10.61	69	256130	105.33 ug/l	99
58) 1,3-Dichloropropane	10.90	76	276447	91.72 ug/l	99
59) 2-Chloroethyl Vinyl ether	9.88	63	141335	156.15 ug/l	99
60) 2-Hexanone	10.93	43	672374	474.97 ug/l	99
61) Dibromochloromethane	11.10	129	210269	107.37 ug/l	99
62) 1,2-Dibromoethane	11.21	107	177045	100.27 ug/l	99
65) Tetrachloroethene	10.83	164	175036	93.39 ug/l	99
66) Chlorobenzene	11.64	112	481452	95.70 ug/l	99
67) 1,1,1,2-Tetrachloroethane	11.71	131	187911	102.85 ug/l	100
68) Ethyl Benzene	11.71	91	809416	99.27 ug/l	100
69) m/p-Xylenes	11.82	106	626514	202.95 ug/l	99
70) o-Xylene	12.15	106	313622	99.16 ug/l	99
71) Styrene	12.17	104	515225	109.09 ug/l	100
72) Bromoform	12.33	173	163289	116.59 ug/l #	100
74) Isopropylbenzene	12.45	105	835026	91.52 ug/l	100
75) N-amyl acetate	12.26	43	277676	108.00 ug/l	100
76) 1,1,2,2-Tetrachloroethane	12.70	83	217032	82.66 ug/l	98
77) 1,2,3-Trichloropropane	12.75	75	191351m	79.66 ug/l	
78) Bromobenzene	12.74	156	222593	93.73 ug/l	99
79) n-propylbenzene	12.80	91	908057	93.35 ug/l	100
80) 2-Chlorotoluene	12.89	91	547769	88.78 ug/l	99
81) 1,3,5-Trimethylbenzene	12.94	105	692869	95.46 ug/l	99
82) trans-1,4-Dichloro-2-buten	12.49	75	72711	109.38 ug/l	99
83) 4-Chlorotoluene	12.98	91	549842	95.84 ug/l	100
84) tert-Butylbenzene	13.20	119	616017	93.96 ug/l	100
85) 1,2,4-Trimethylbenzene	13.25	105	702771	97.12 ug/l	100
86) sec-Butylbenzene	13.38	105	816636	93.64 ug/l	100
87) p-Isopropyltoluene	13.50	119	726775	102.34 ug/l	99
88) 1,3-Dichlorobenzene	13.50	146	378784	97.91 ug/l	100
89) 1,4-Dichlorobenzene	13.58	146	371396	96.13 ug/l	100
90) n-Butylbenzene	13.83	91	579141	100.63 ug/l	99
91) Hexachloroethane	14.11	117	136263	94.96 ug/l	98
92) 1,2-Dichlorobenzene	13.87	146	366124	93.00 ug/l	99

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : \\74.0.250.170\voasrv\HPCHEM1\MSVOA N\Data\VN052014\
Data File : VN015526.D
Acq On : 20 May 2014 19:24
Operator : MD
Sample : VSTDICC100
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

Quant Time: May 21 01:37:06 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2-Dibromo-3-Chloropropan	14.49	75	41367	94.40	ug/l	98
94) 1,2,4-Trichlorobenzene	15.15	180	219553	112.39	ug/l	100
95) Hexachlorobutadiene	15.26	225	131189	95.50	ug/l	99
96) Naphthalene	15.39	128	543636	119.17	ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	212970	106.58	ug/l	100

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

Quantitation Report (QT Reviewed)

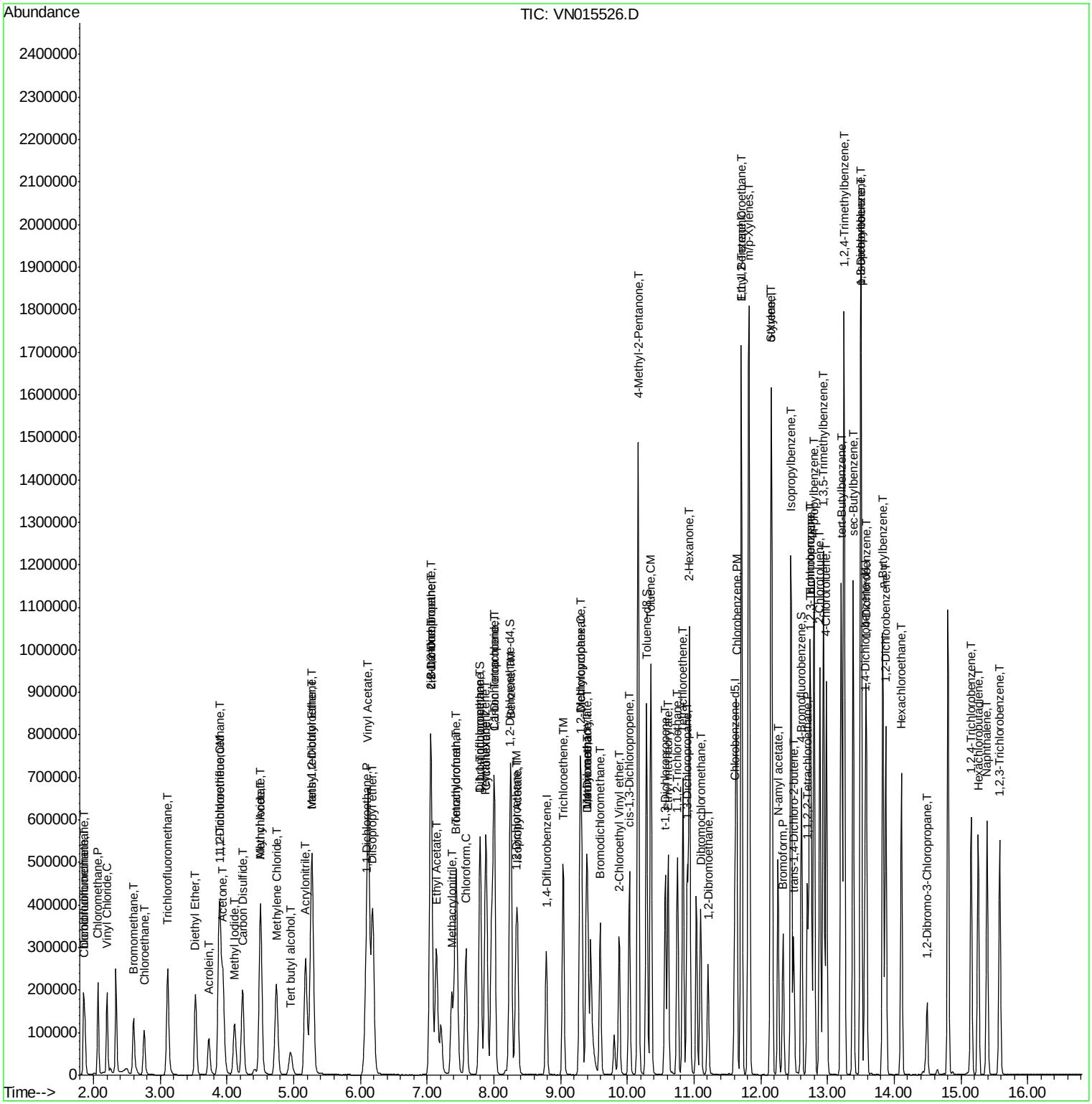
ICAL Form

Data Path : \\74.0.250.170\voasrv\HPCHEM1\MSVOA N\Data\VN052014\
Data File : VN015526.D
Acq On : 20 May 2014 19:24
Operator : MD
Sample : VSTDICC100
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 21 01:37:06 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

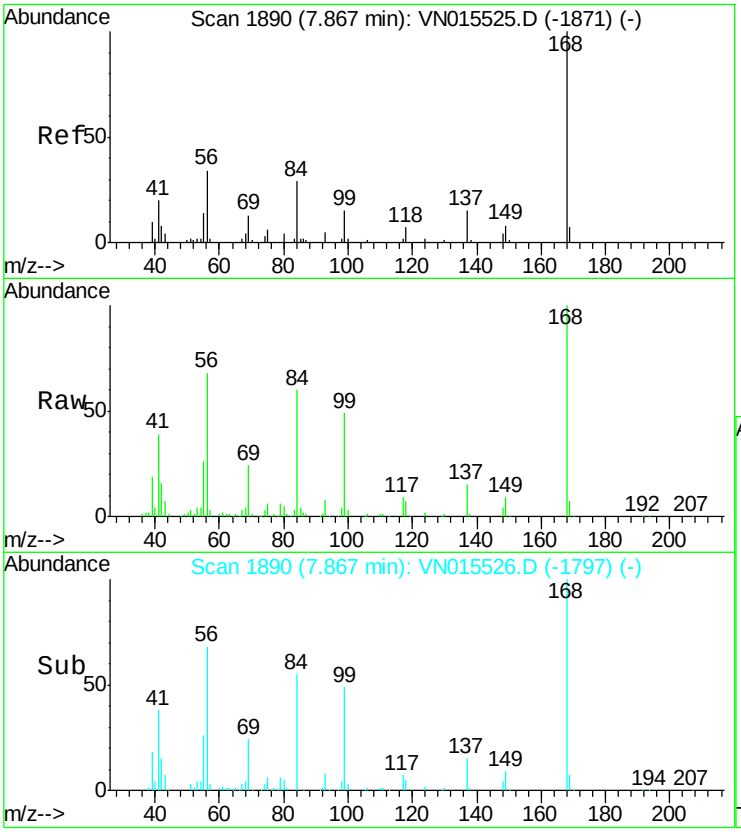
Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

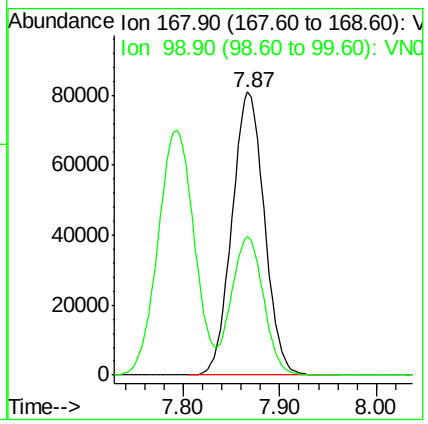
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

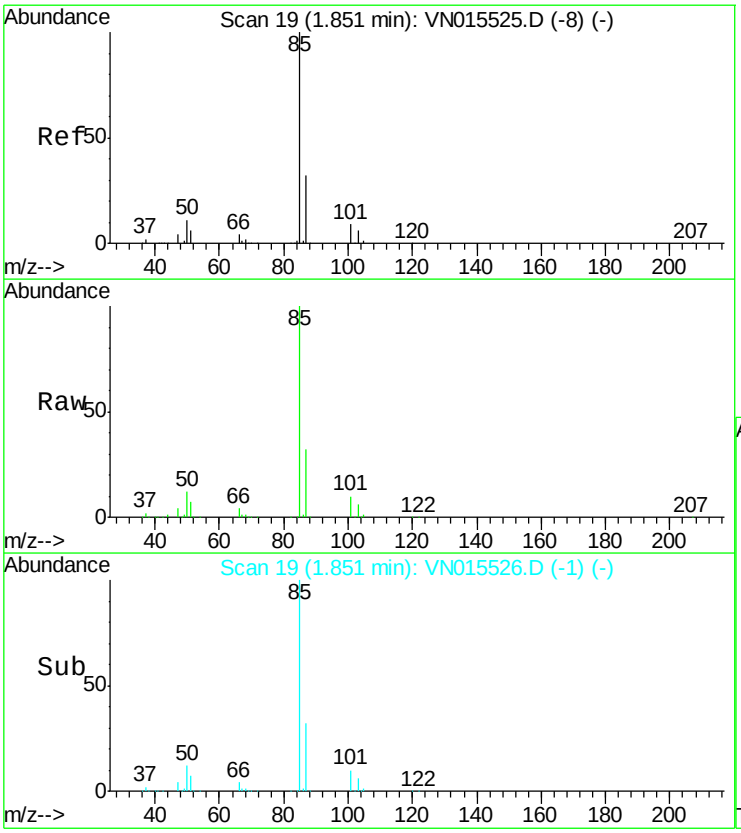


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:168 Resp: 188175

Ion	Ratio	Lower	Upper
168	100		
99	48.9	39.0	58.4

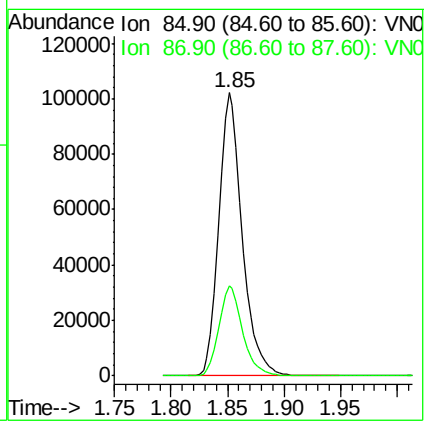




#2
Dichlorodifluoromethane
Concen: 68.22 ug/l
RT: 1.85 min Scan# 19
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 85 Resp: 146900

Ion	Ratio	Lower	Upper
85	100		
87	32.0	16.1	48.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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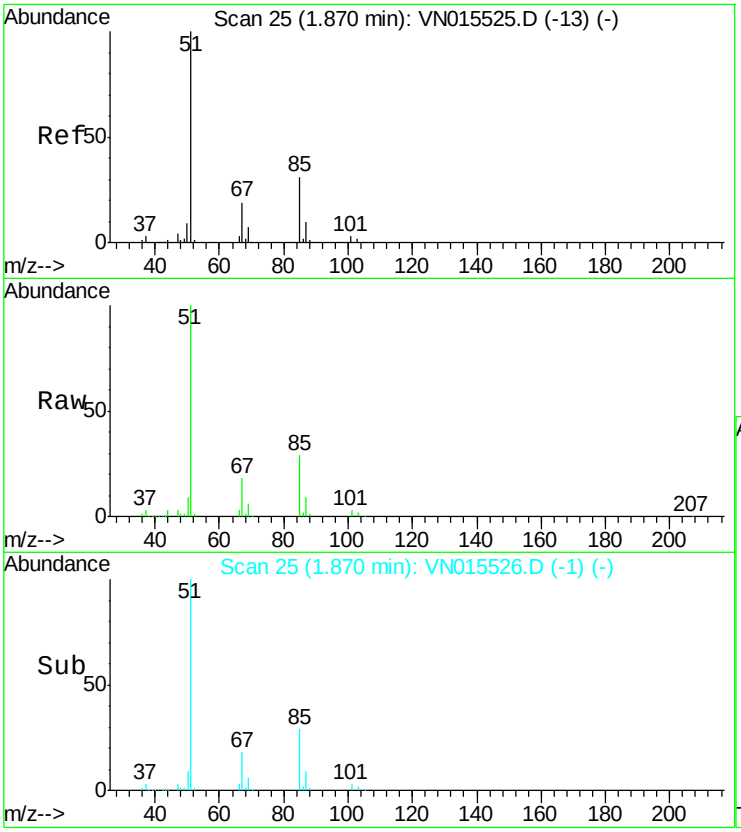
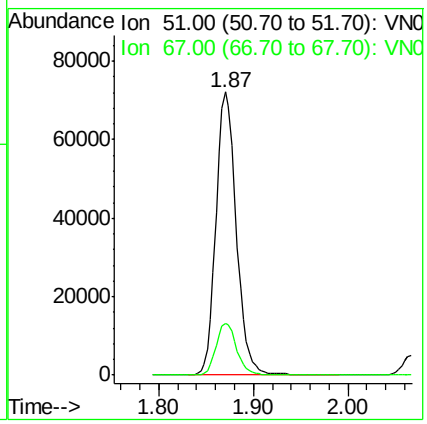
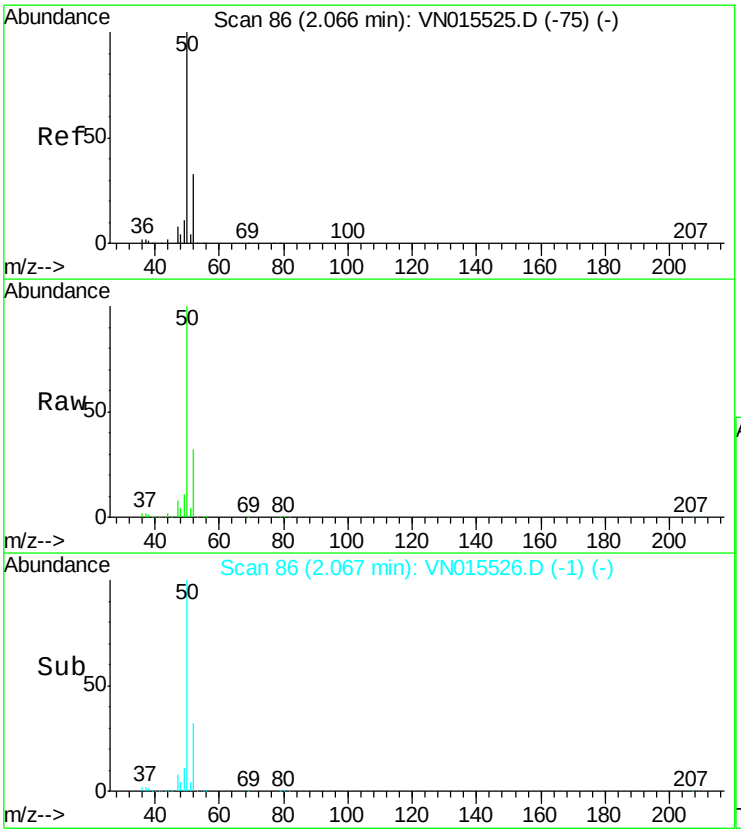


#3
Chlorodifluoromethane
Concen: 62.23 ug/l
RT: 1.87 min Scan# 25
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 51 Resp: 107942

Ion	Ratio	Lower	Upper
51	100		
67	18.6	15.1	22.7

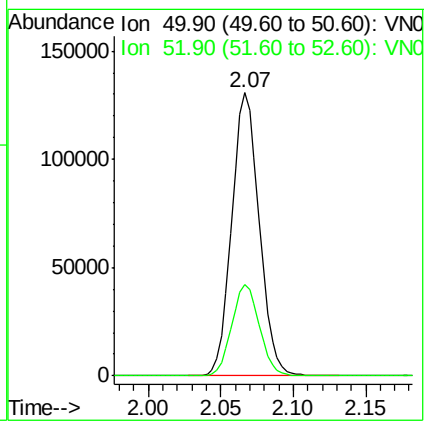




#4
Chloromethane
Concen: 65.17 ug/l
RT: 2.07 min Scan# 86
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 50 Resp: 171630

Ion	Ratio	Lower	Upper
50	100		
52	32.4	26.2	39.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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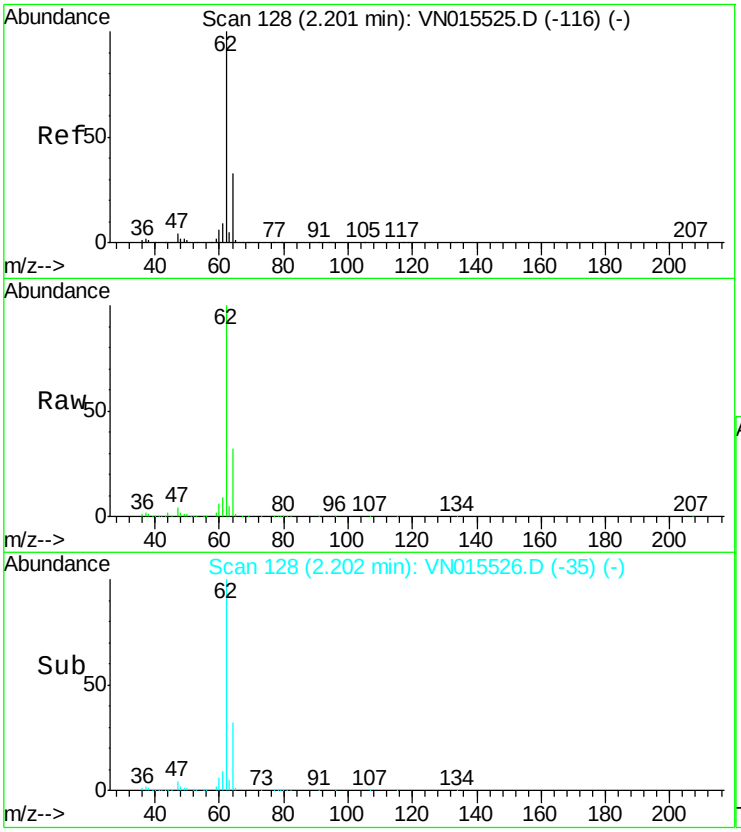
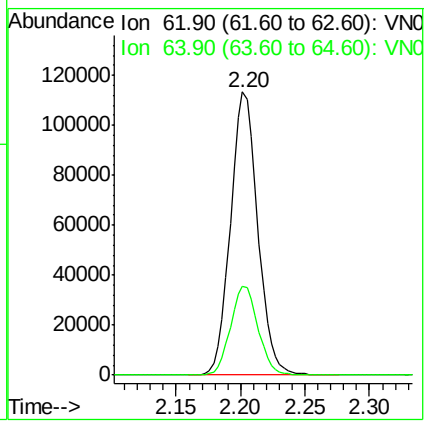
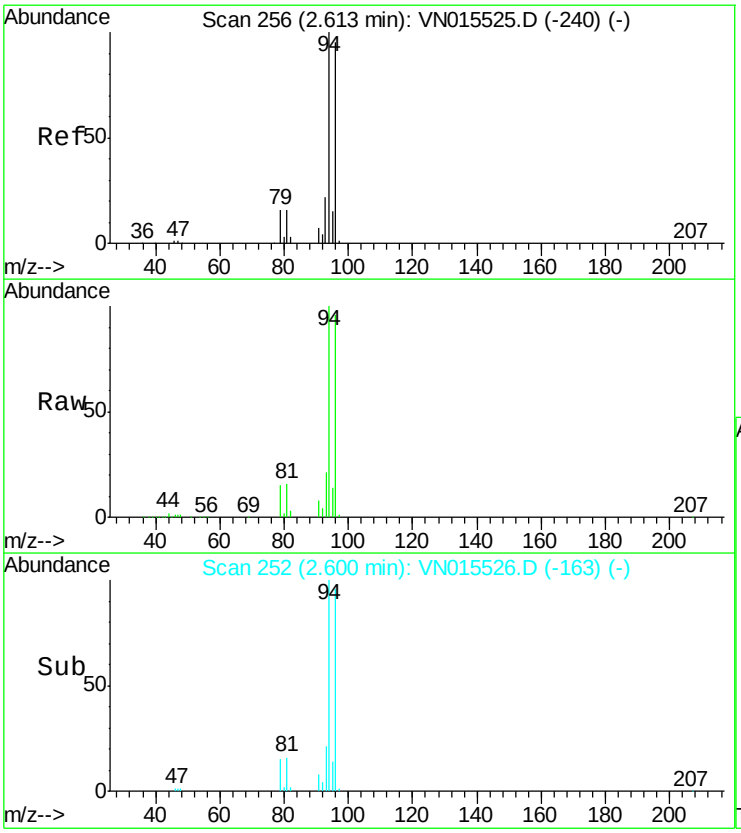


#5
Vinyl Chloride
Concen: 74.65 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 62 Resp: 166300

Ion	Ratio	Lower	Upper
62	100		
64	31.6	26.2	39.4

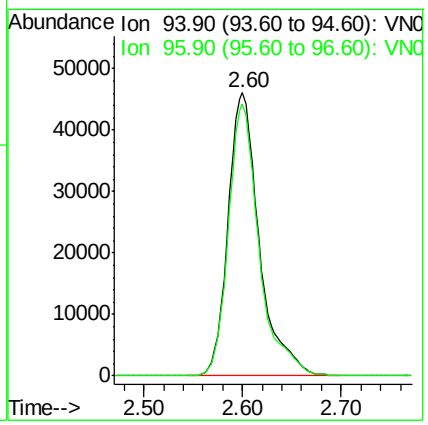




#6
Bromomethane
Concen: 78.59 ug/l
RT: 2.60 min Scan# 252
Delta R.T. -0.01 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 94 Resp: 101241

Ion	Ratio	Lower	Upper
94	100		
96	96.0	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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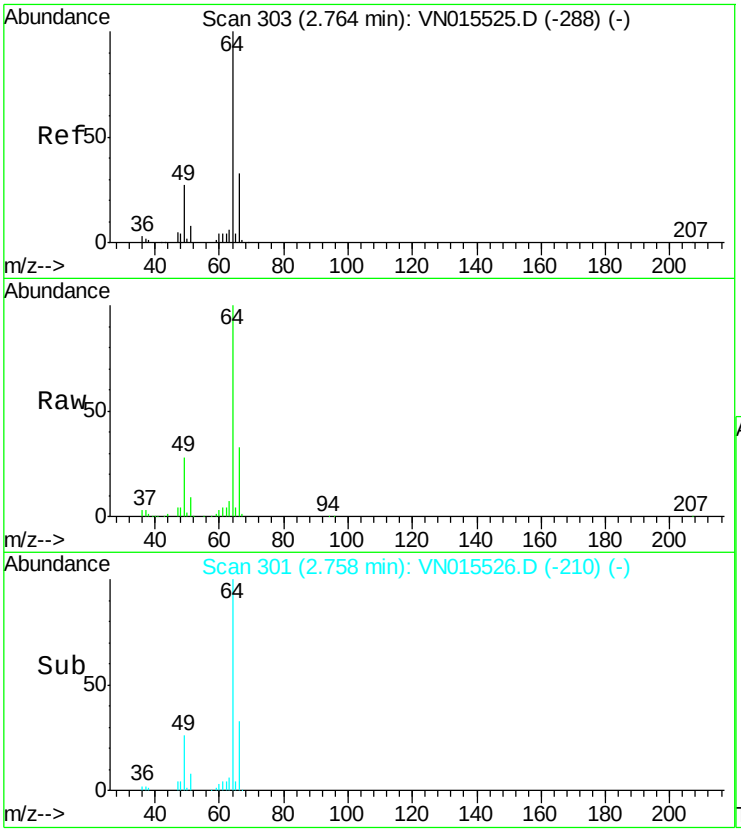
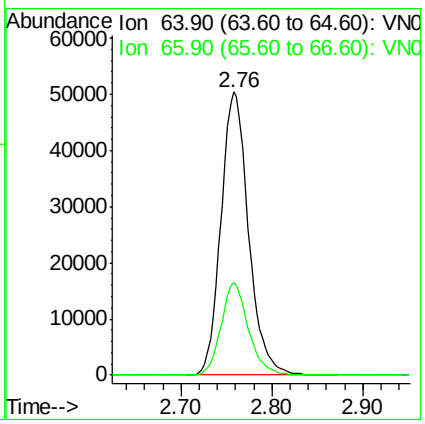
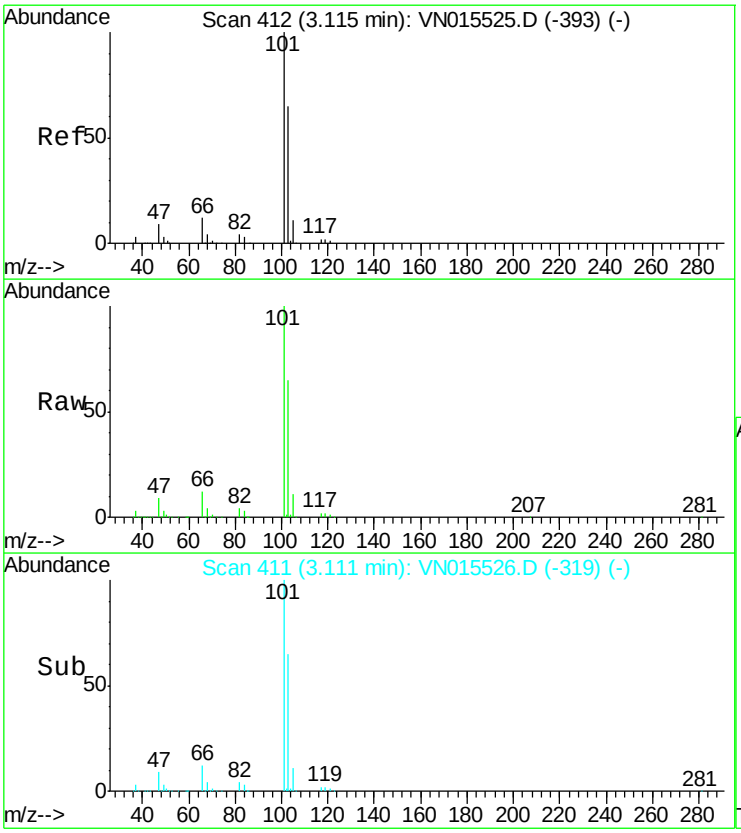


#7
Chloroethane
Concen: 75.71 ug/l
RT: 2.76 min Scan# 301
Delta R.T. -0.01 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 64 Resp: 105959

Ion	Ratio	Lower	Upper
64	100		
66	32.8	26.3	39.5

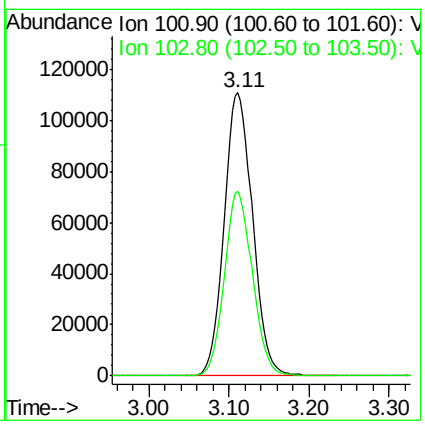


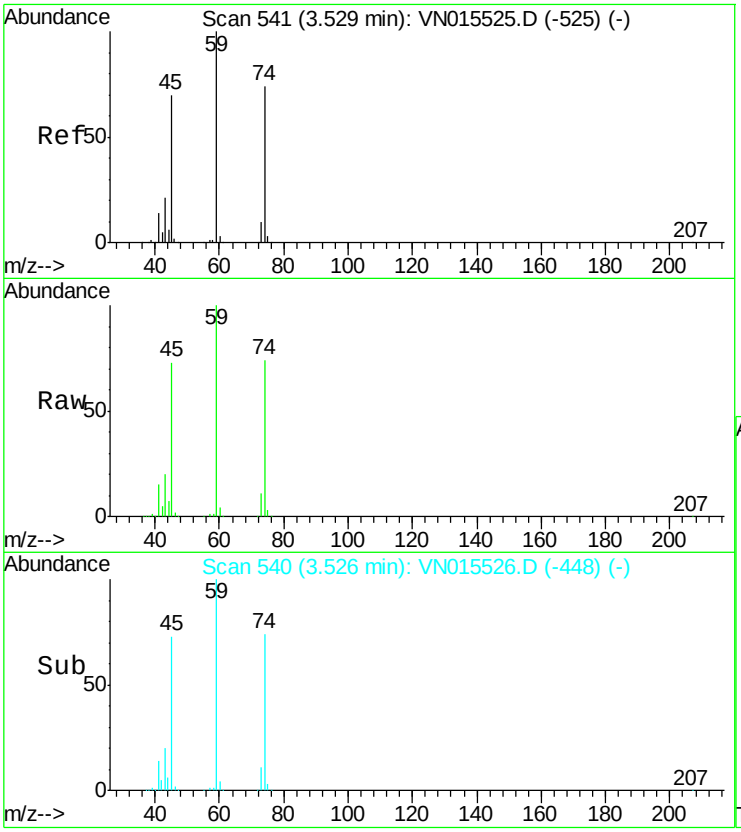


#8
Trichlorofluoromethane
Concen: 85.87 ug/l
RT: 3.11 min Scan# 411
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:101 Resp: 267820

Ion	Ratio	Lower	Upper
101	100		
103	65.1	52.1	78.1





#9
Diethyl Ether
Concen: 86.12 ug/l
RT: 3.53 min Scan# 540
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 74 Resp: 101594

Ion	Ratio	Lower	Upper
74	100		
45	98.1	48.9	146.8

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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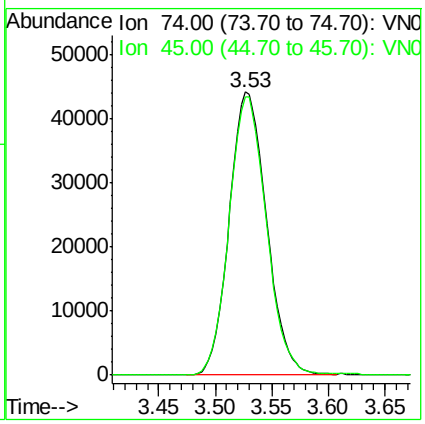
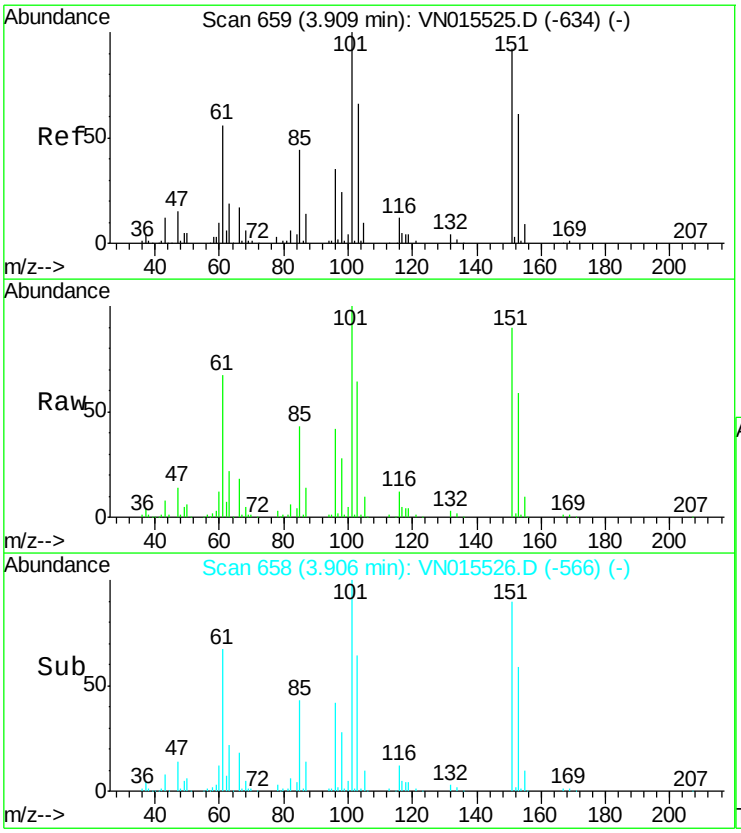
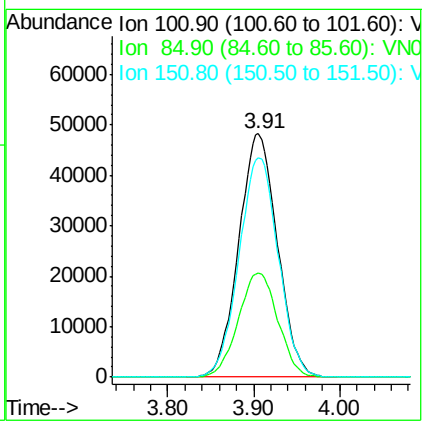




#10
1,1,2-Trichlorotrifluoroethane
Concen: 88.12 ug/l
RT: 3.91 min Scan# 658
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:101 Resp: 150422

Ion	Ratio	Lower	Upper
101	100		
85	43.8	34.5	51.7
151	92.0	72.9	109.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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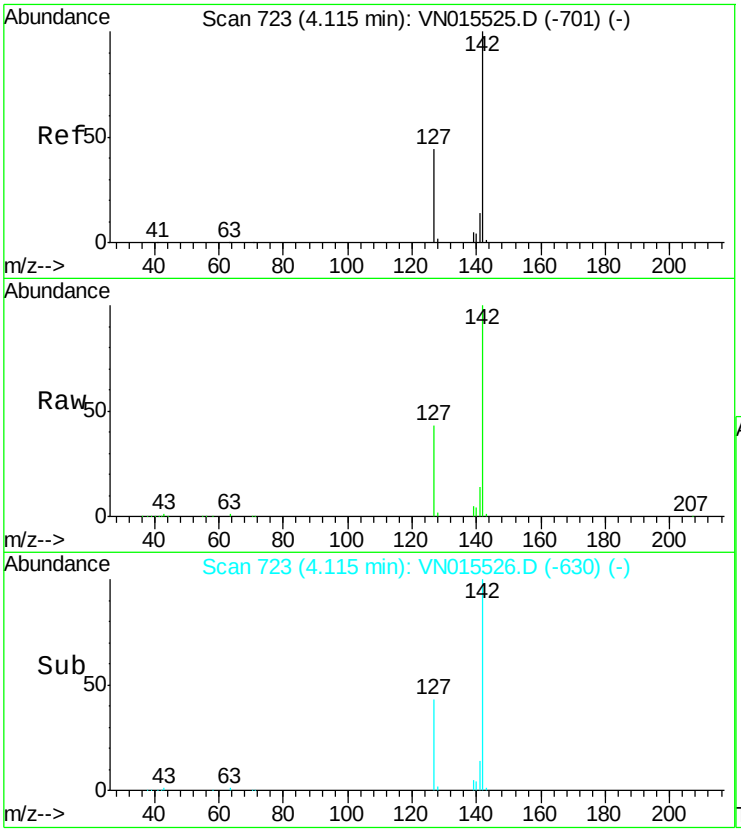
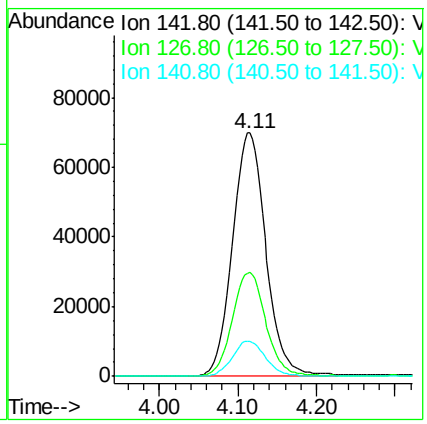
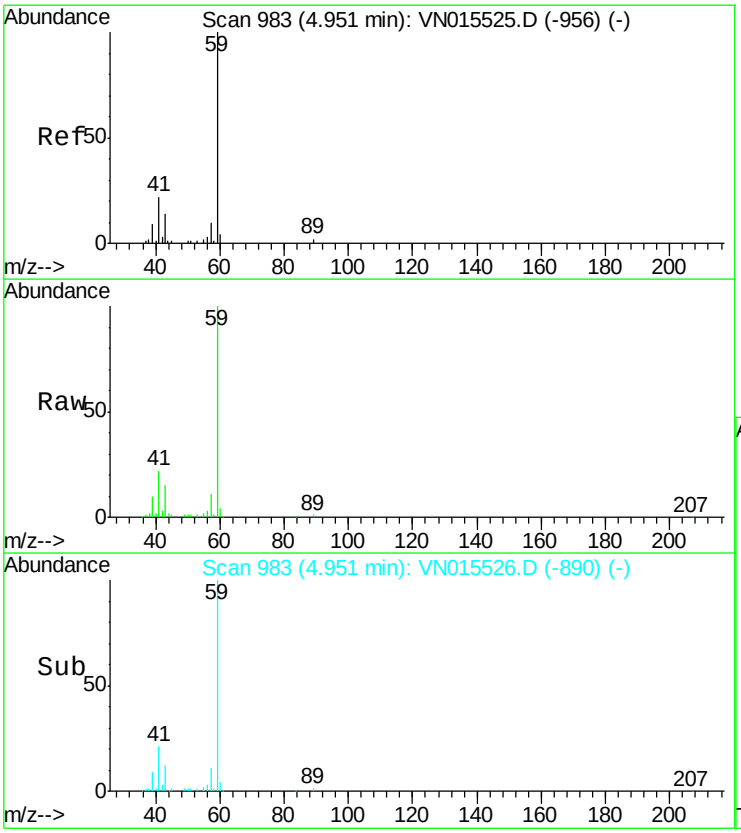


#11
Methyl Iodide
Concen: 119.05 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:142 Resp: 207984

Ion	Ratio	Lower	Upper
142	100		
127	42.7	34.7	52.1
141	14.5	11.4	17.0

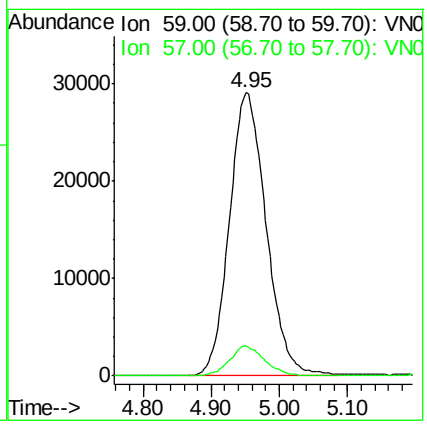




#12
Tert butyl alcohol
Concen: 525.34 ug/l
RT: 4.95 min Scan# 983
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 59 Resp: 109062

Ion	Ratio	Lower	Upper
59	100		
57	10.2	8.4	12.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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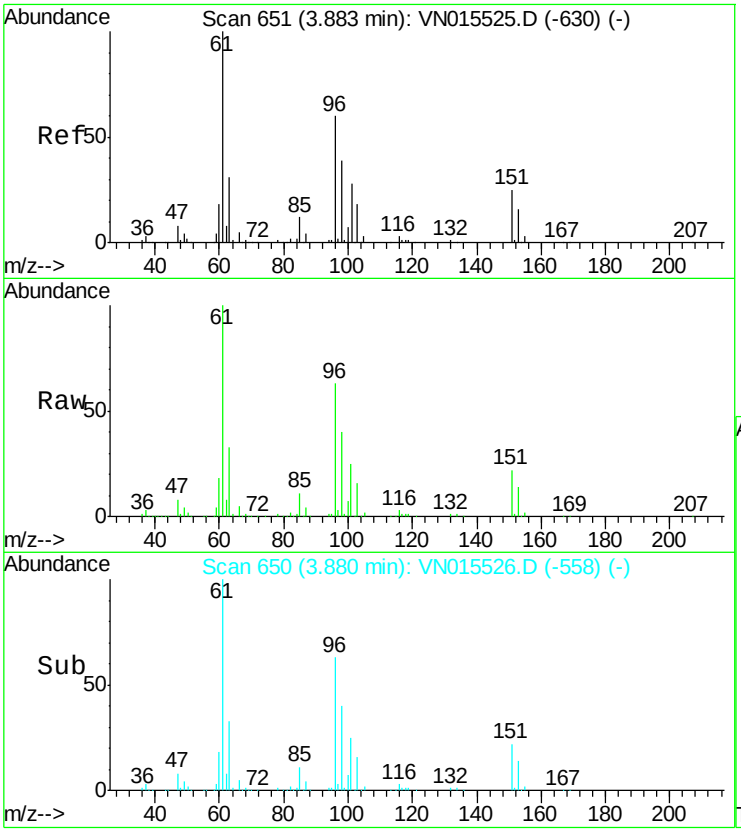
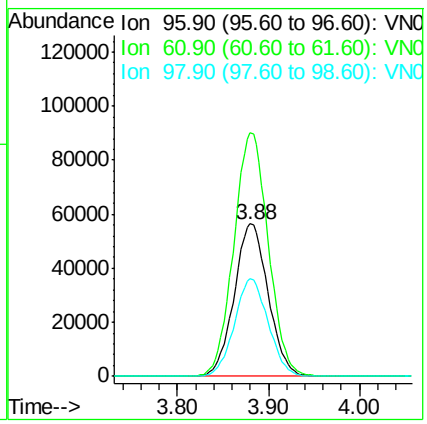
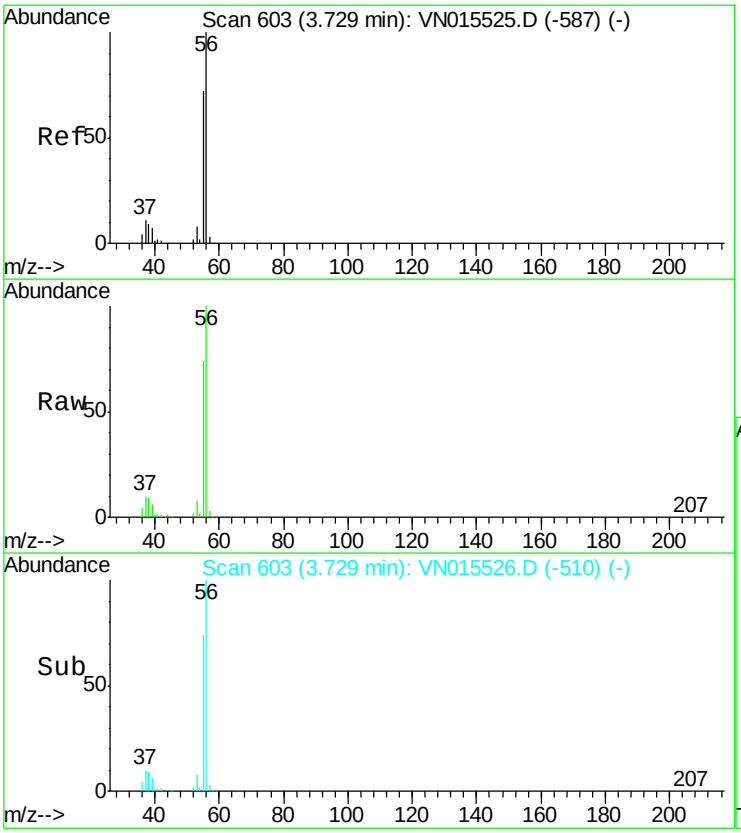


#13
1,1-Dichloroethene
Concen: 86.93 ug/l
RT: 3.88 min Scan# 650
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 96 Resp: 146392

Ion	Ratio	Lower	Upper
96	100		
61	159.7	132.3	198.5
98	64.1	51.8	77.6

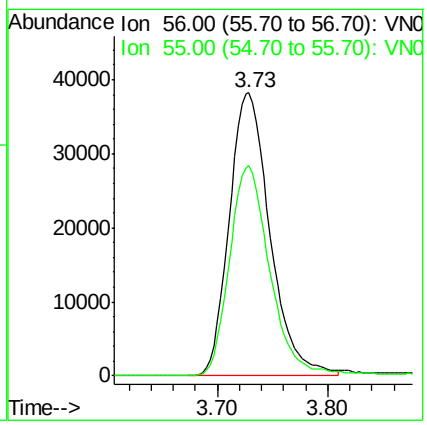




#14
Acrolein
Concen: 478.74 ug/l
RT: 3.73 min Scan# 603
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 56 Resp: 97831

Ion	Ratio	Lower	Upper
56	100		
55	74.2	57.9	86.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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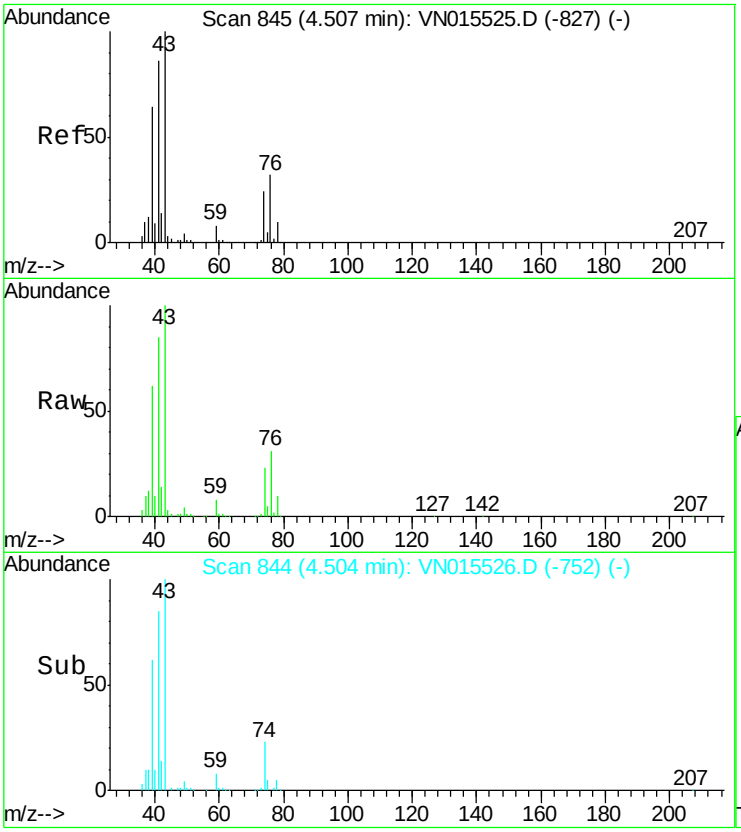
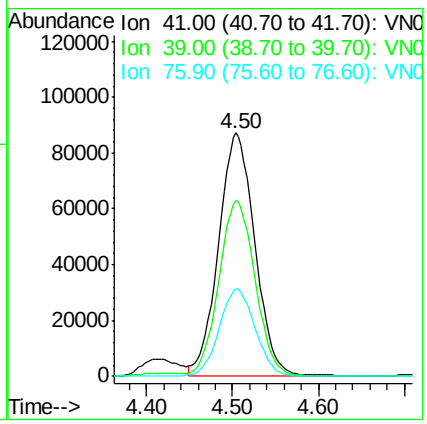
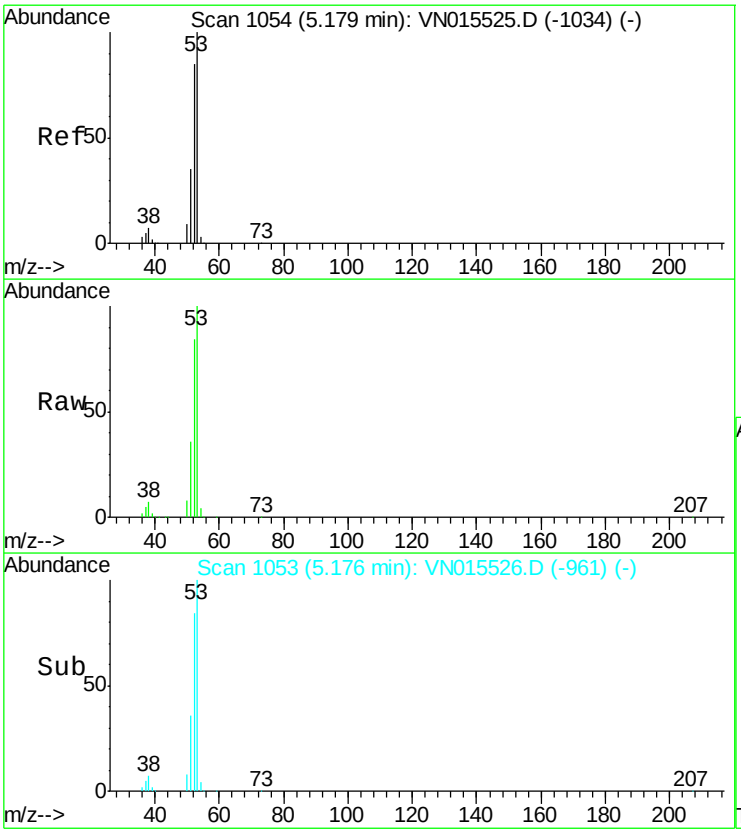


#15
Allyl chloride
Concen: 87.00 ug/l
RT: 4.50 min Scan# 844
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 41 Resp: 254403

Ion	Ratio	Lower	Upper
41	100		
39	72.1	57.4	86.2
76	35.4	28.5	42.7

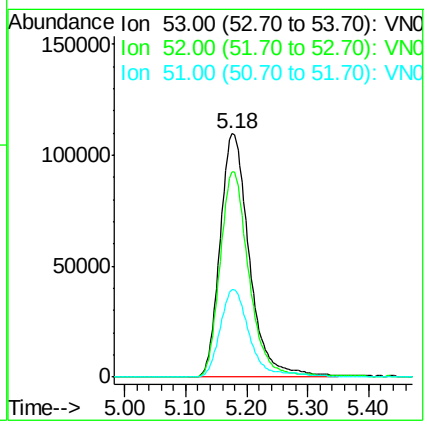




#16
Acrylonitrile
Concen: 447.40 ug/l
RT: 5.18 min Scan# 1053
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 53 Resp: 365471

Ion	Ratio	Lower	Upper
53	100		
52	83.3	65.7	98.5
51	36.8	29.1	43.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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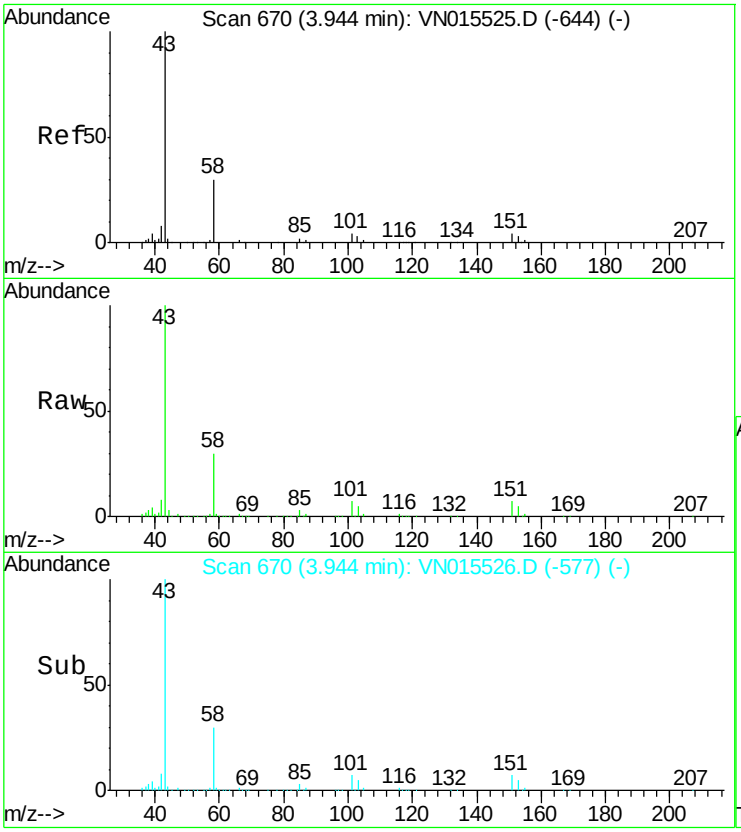
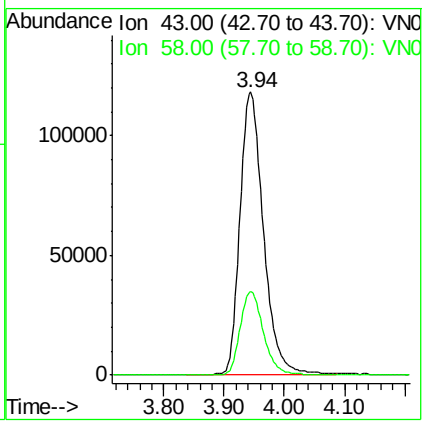
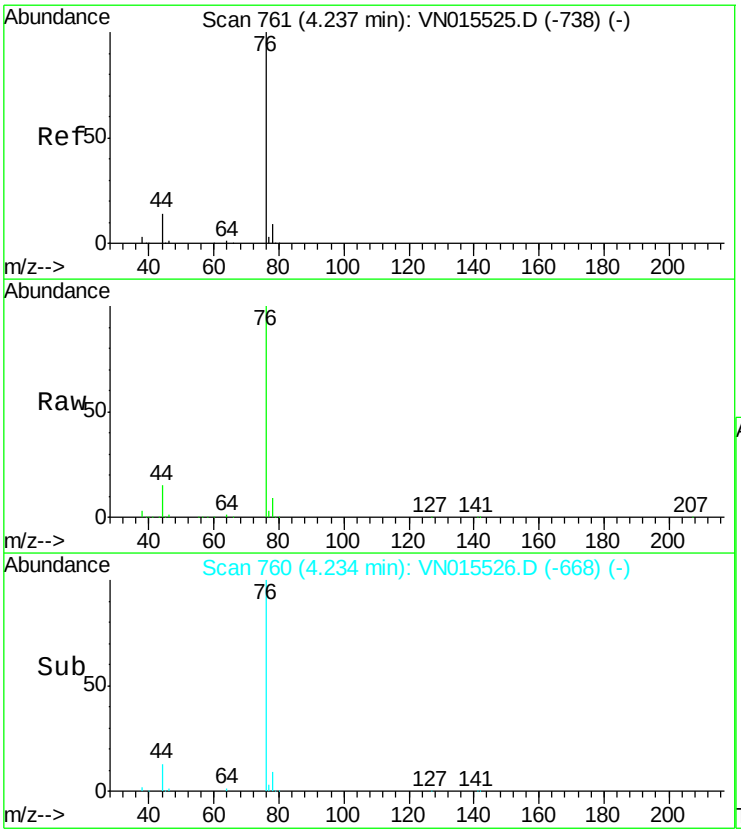


#17
Acetone
Concen: 387.37 ug/l
RT: 3.94 min Scan# 670
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 324837

Ion	Ratio	Lower	Upper
43	100		
58	29.6	24.2	36.2

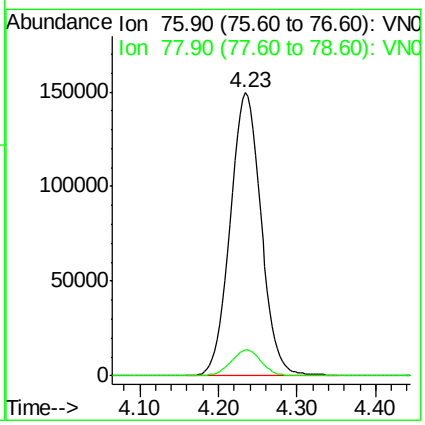




#18
Carbon Disulfide
Concen: 86.34 ug/l
RT: 4.23 min Scan# 760
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 76 Resp: 411372

Ion	Ratio	Lower	Upper
76	100		
78	9.3	7.5	11.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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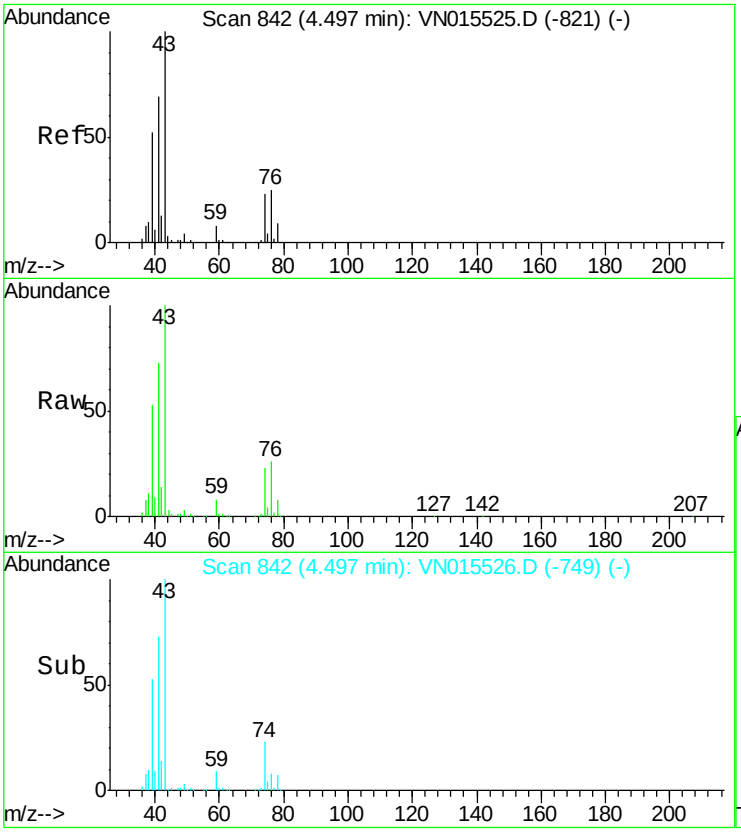
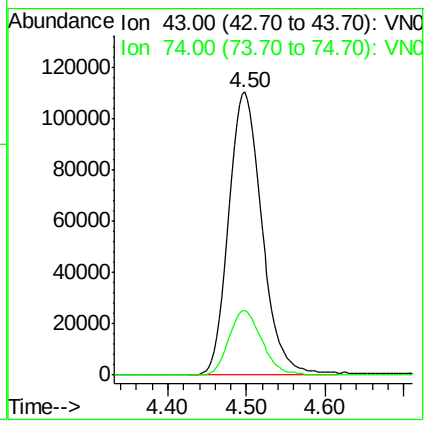
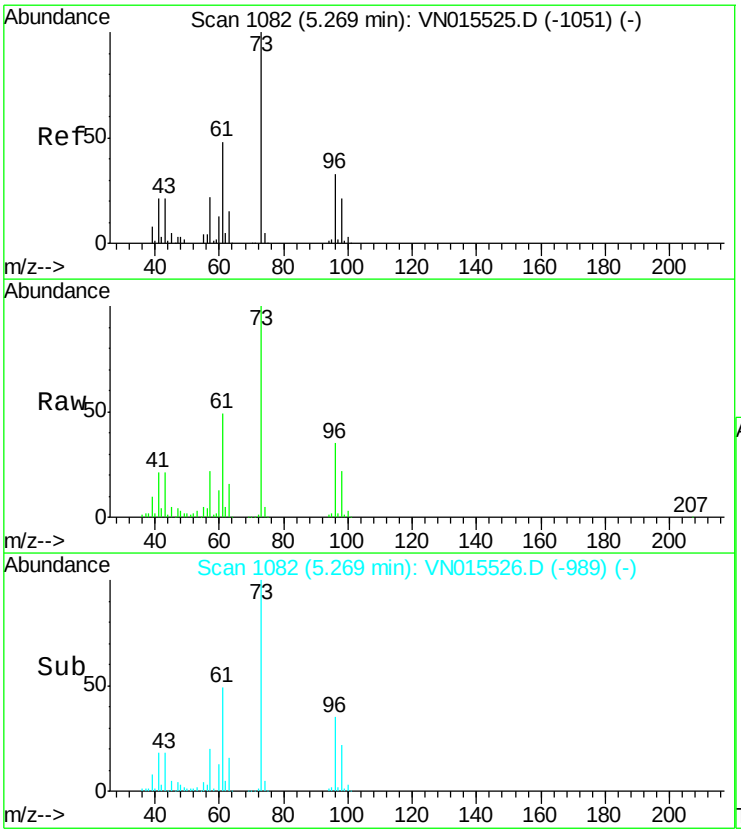


#19
Methyl Acetate
Concen: 147.36 ug/l
RT: 4.50 min Scan# 842
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 325512

Ion	Ratio	Lower	Upper
43	100		
74	22.9	18.5	27.7

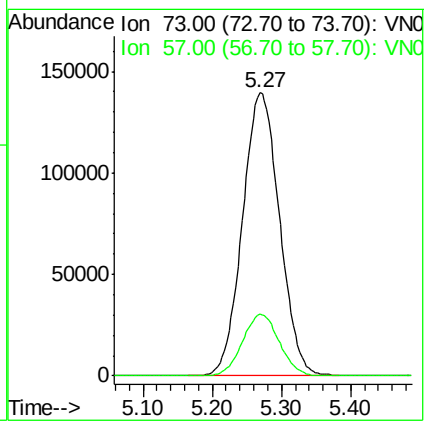




#20
Methyl tert-butyl Ether
Concen: 89.61 ug/l
RT: 5.27 min Scan# 1082
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 73 Resp: 517713

Ion	Ratio	Lower	Upper
73	100		
57	21.7	17.3	25.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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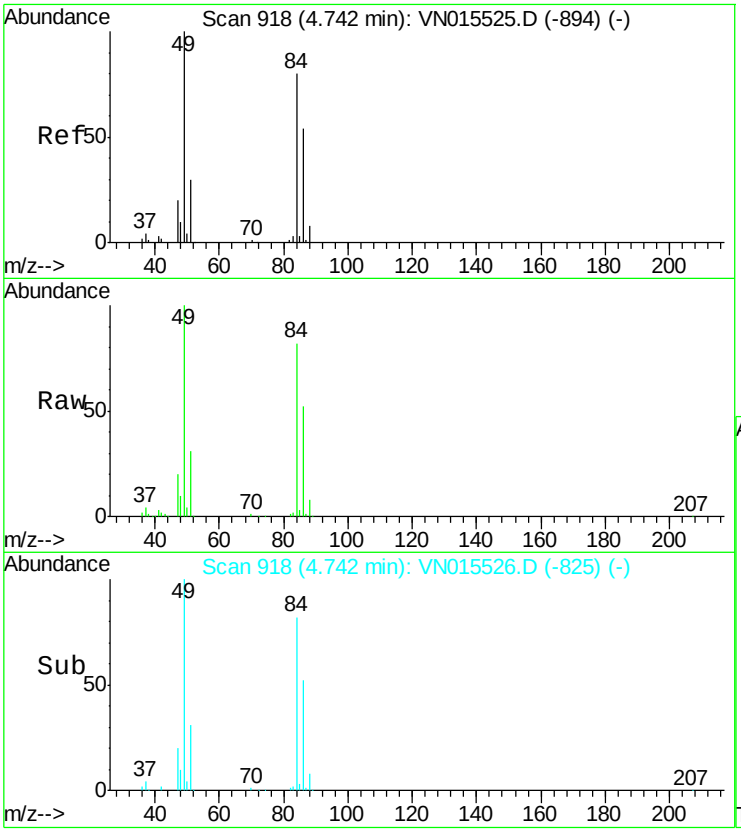
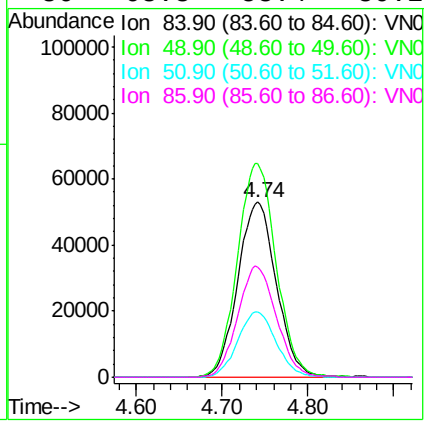
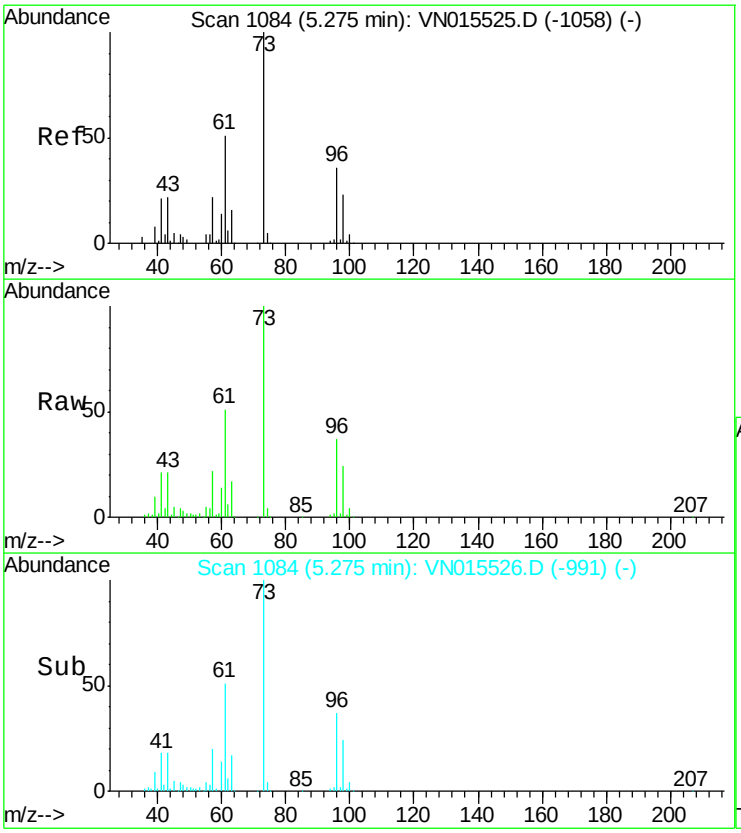


#21
Methylene Chloride
Concen: 82.69 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 84 Resp: 164919

Ion	Ratio	Lower	Upper
84	100		
49	122.0	99.8	149.6
51	37.5	30.2	45.2
86	63.3	53.4	80.2

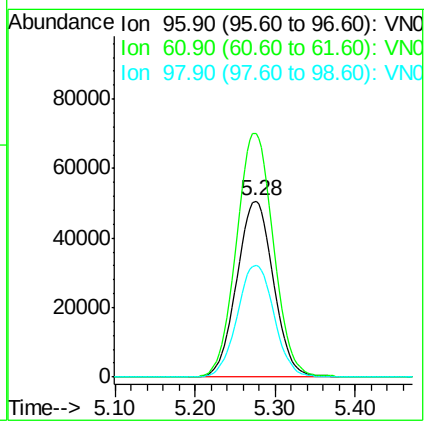




#22
trans-1,2-Dichloroethene
Concen: 88.22 ug/l
RT: 5.28 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 96 Resp: 157201

Ion	Ratio	Lower	Upper
96	100		
61	138.2	113.3	169.9
98	63.6	50.4	75.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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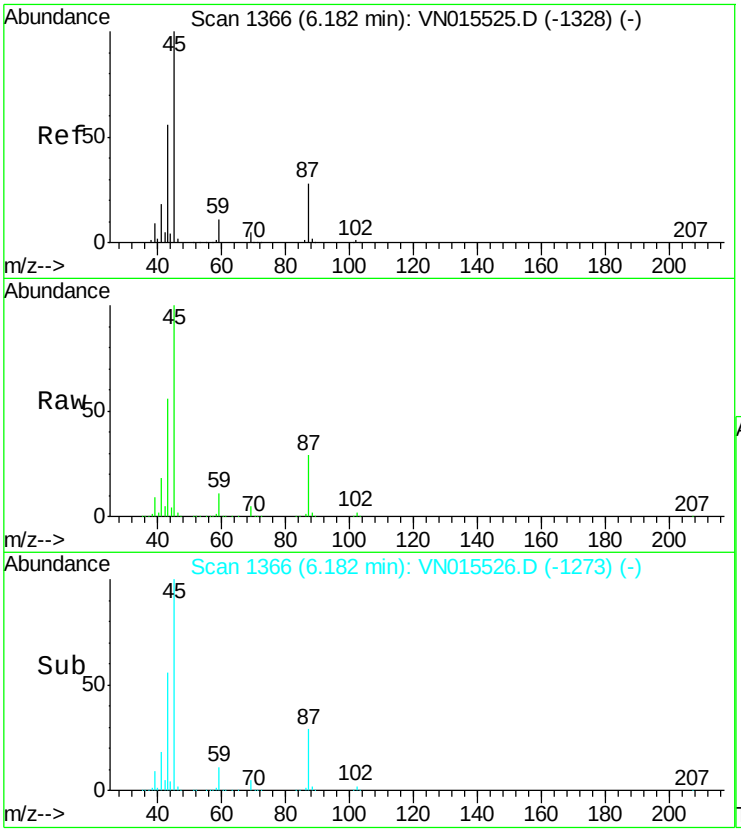
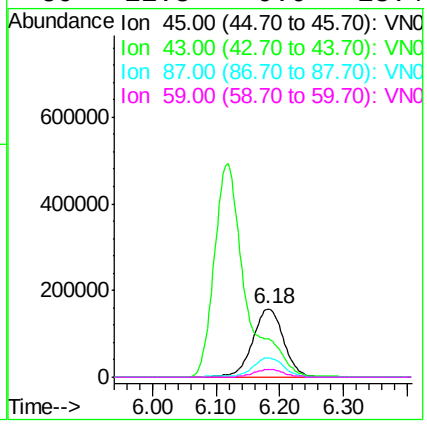
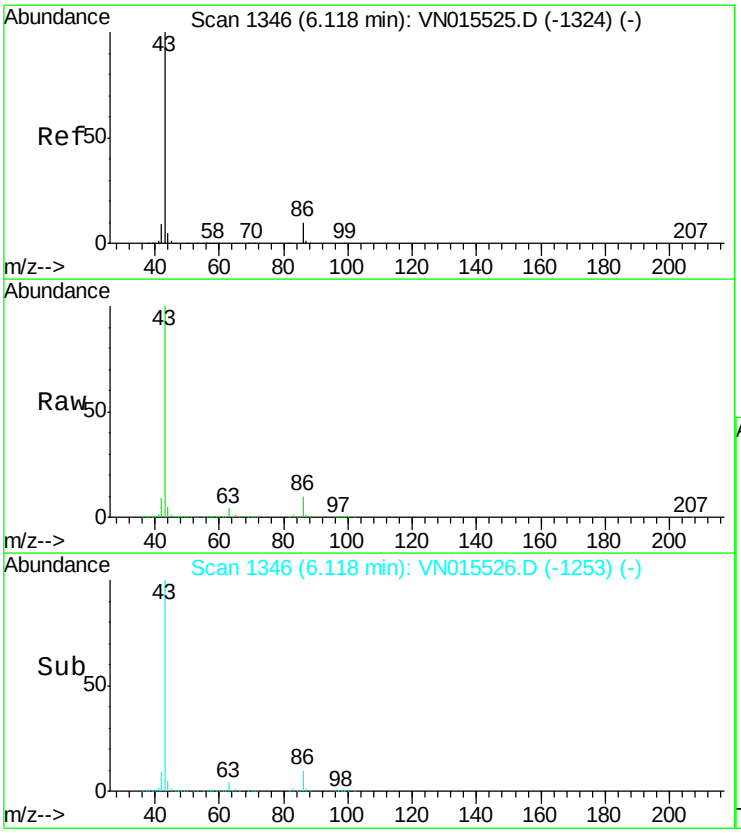


#23
Diisopropyl ether
Concen: 80.79 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 45 Resp: 534552

Ion	Ratio	Lower	Upper
45	100		
43	55.7	44.6	67.0
87	28.6	22.3	33.5
59	11.3	9.0	13.4

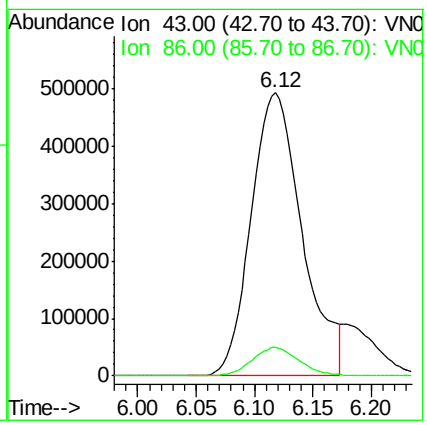




#24
Vinyl Acetate
Concen: 319.12 ug/l m
RT: 6.12 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 1491381

Ion	Ratio	Lower	Upper
43	100		
86	10.1	7.9	11.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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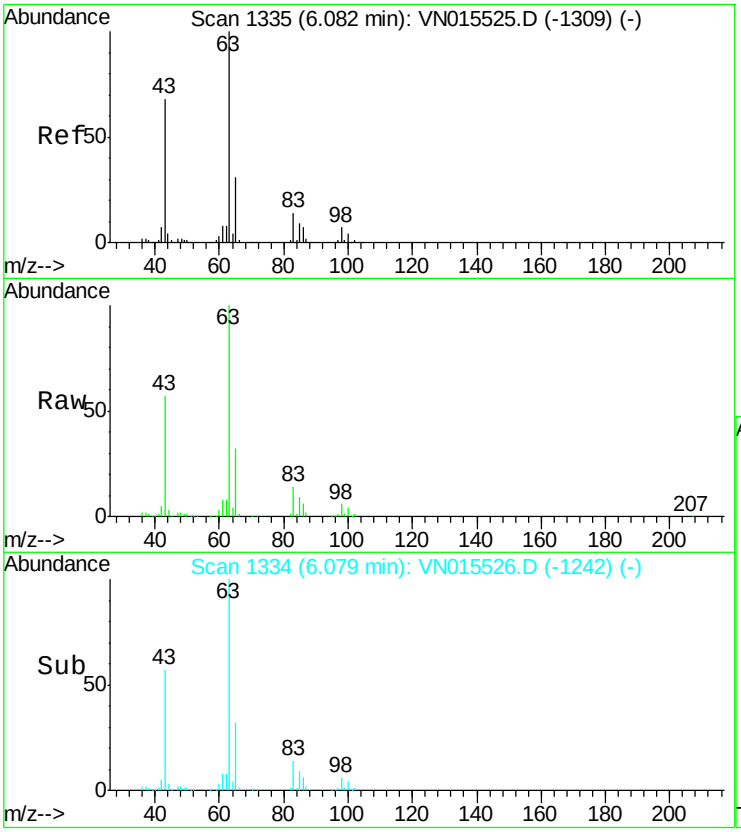
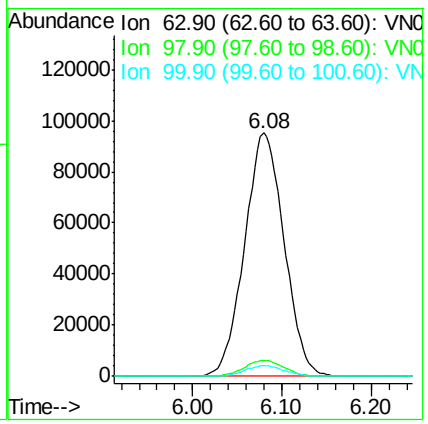
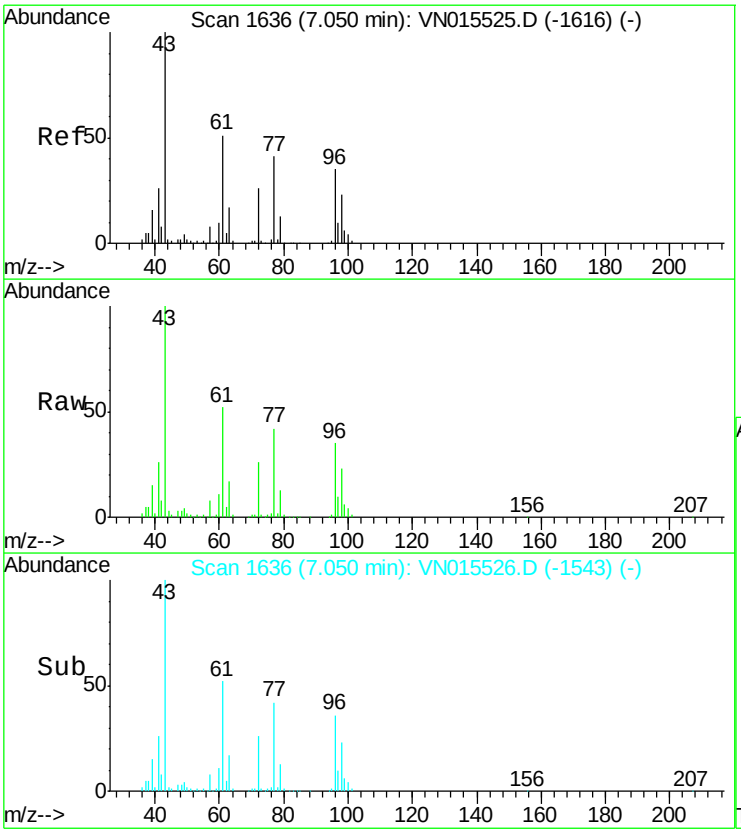


#25
1,1-Dichloroethane
Concen: 82.48 ug/l
RT: 6.08 min Scan# 1334
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 63 Resp: 293918

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	4.4	2.1	6.3

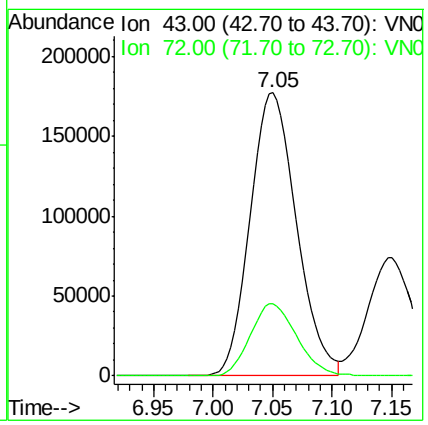




#26
2-Butanone
Concen: 431.57 ug/l
RT: 7.05 min Scan# 1636
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 477359

Ion	Ratio	Lower	Upper
43	100		
72	25.6	20.7	31.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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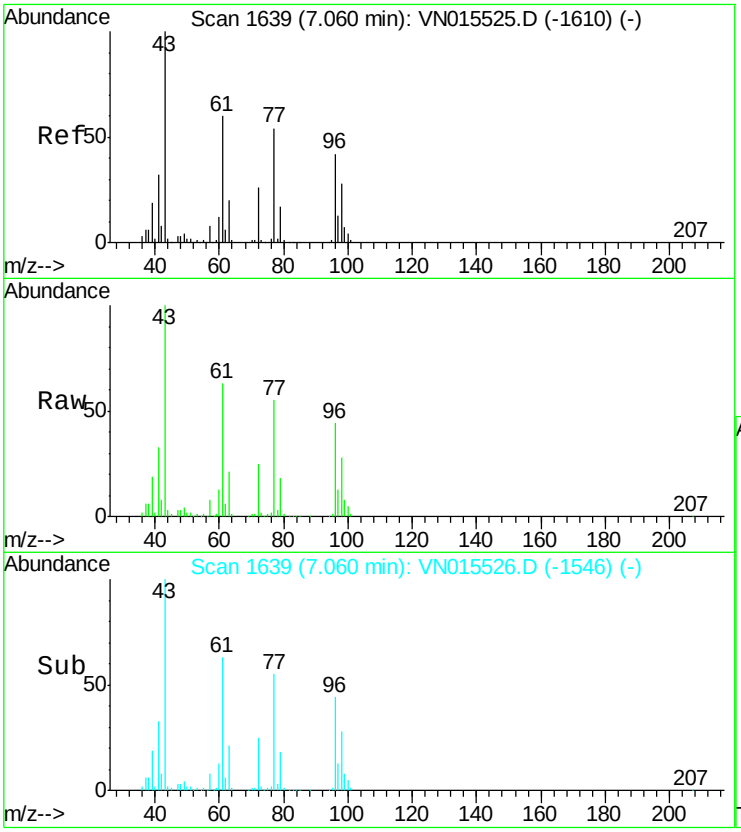
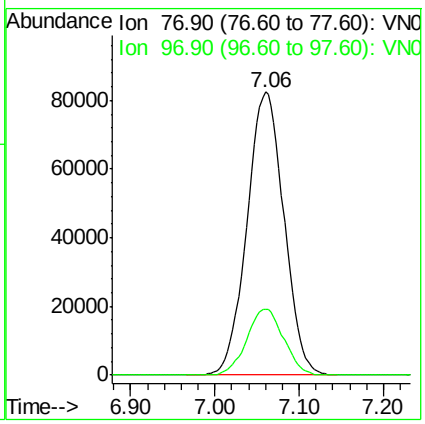
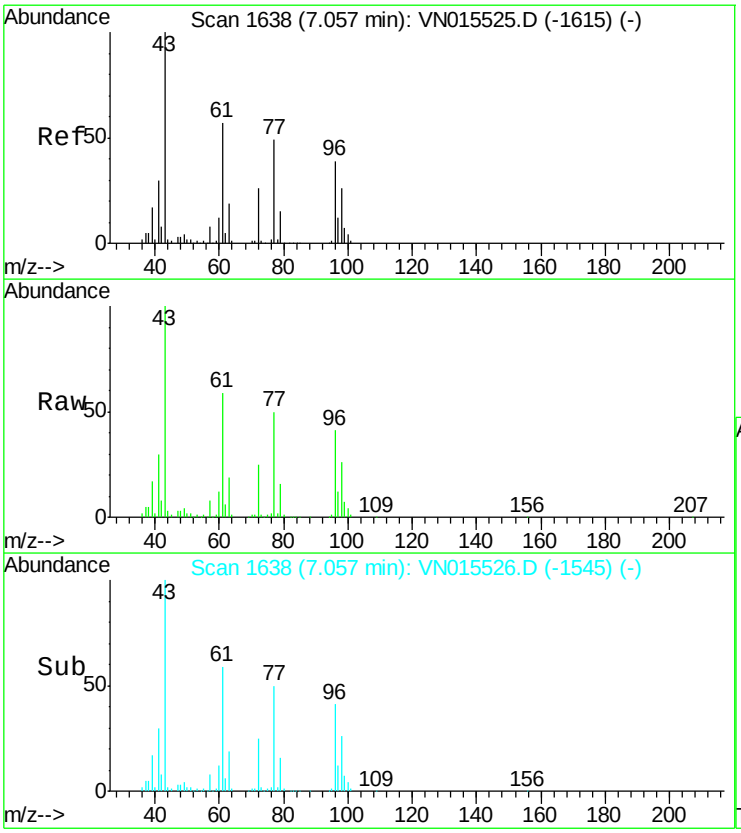


#27
2,2-Dichloropropane
Concen: 92.46 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 77 Resp: 250746

Ion	Ratio	Lower	Upper
77	100		
97	23.3	11.6	34.7

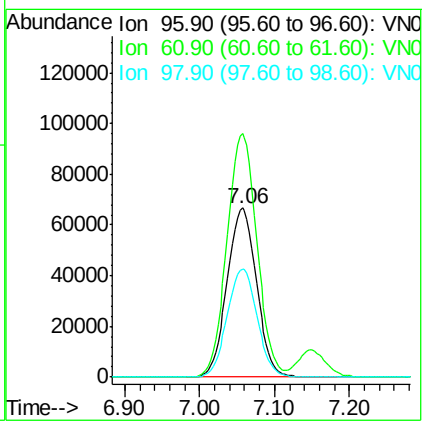




#28
cis-1,2-Dichloroethene
Concen: 87.38 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 96 Resp: 183203

Ion	Ratio	Lower	Upper
96	100		
61	146.1	0.0	292.0
98	65.0	0.0	129.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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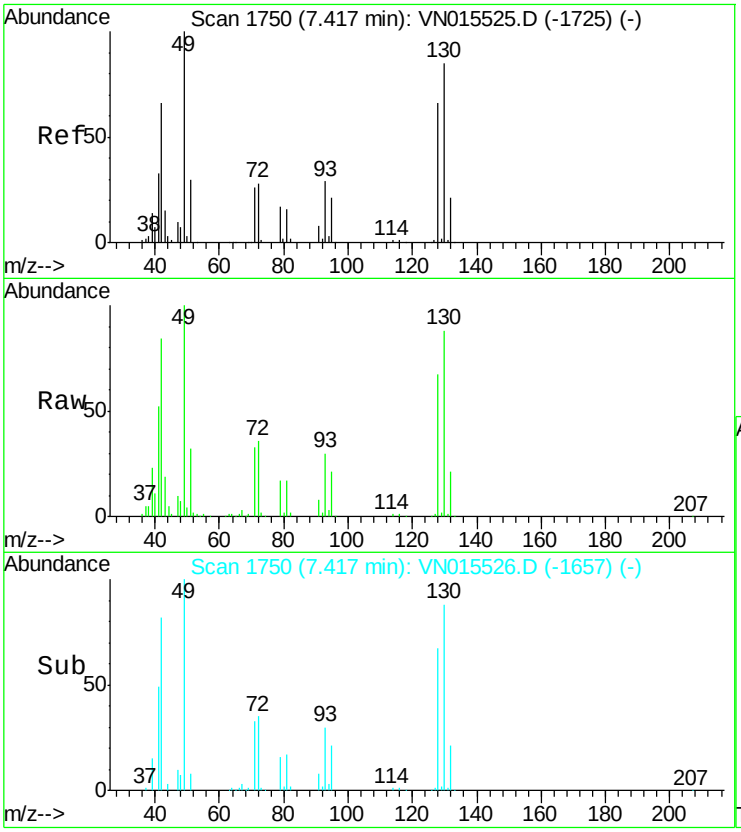
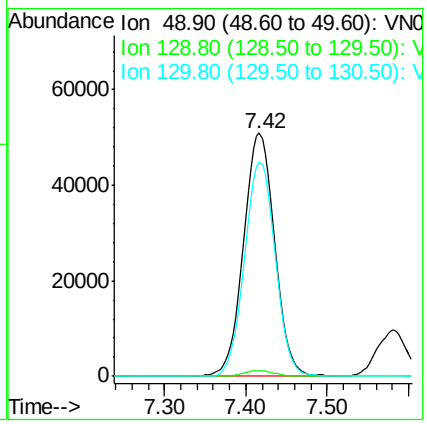
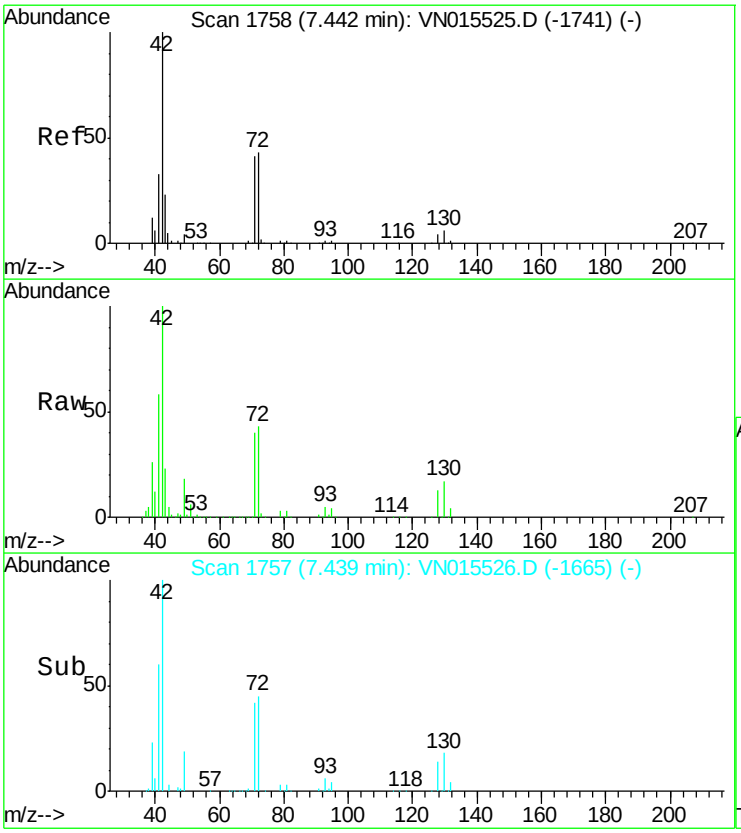


#29
Bromochloromethane
Concen: 75.76 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 49 Resp: 133562

Ion	Ratio	Lower	Upper
49	100		
129	2.2	0.0	4.2
130	87.4	68.6	102.8

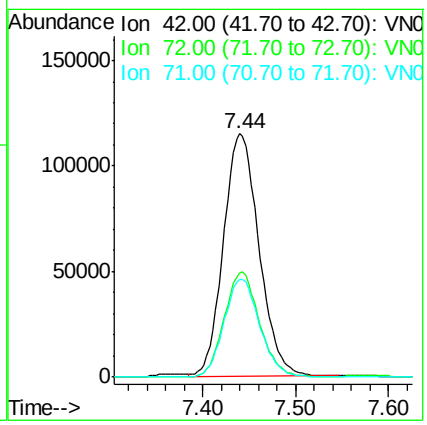




#30
Tetrahydrofuran
Concen: 427.95 ug/l
RT: 7.44 min Scan# 1757
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 42 Resp: 305819

Ion	Ratio	Lower	Upper
42	100		
72	43.2	34.2	51.2
71	40.7	32.5	48.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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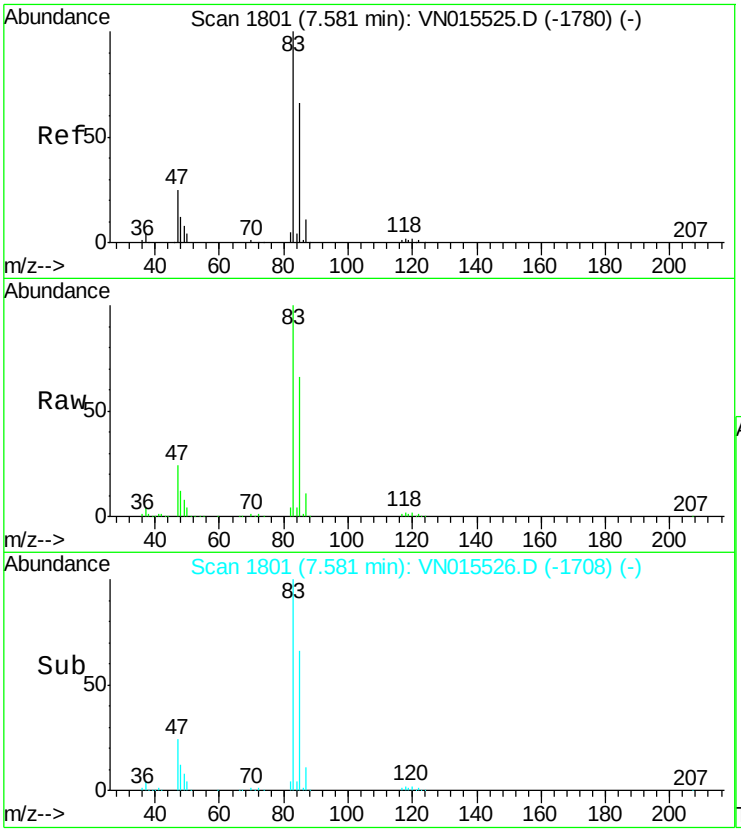
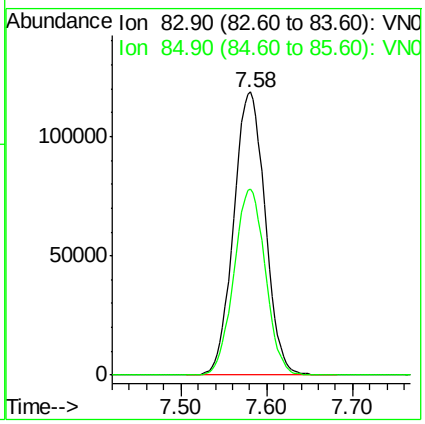
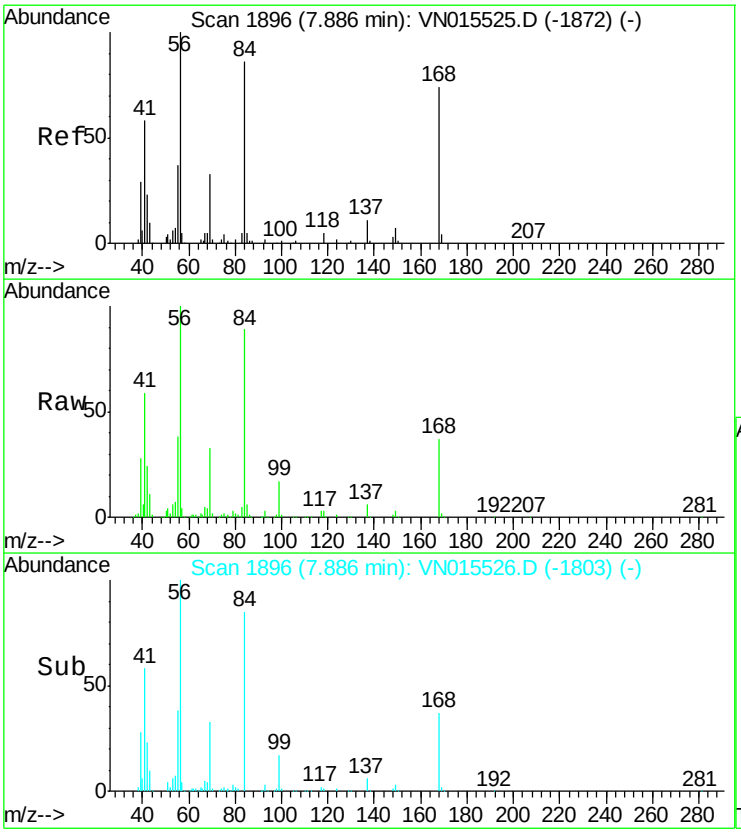


#31
Chloroform
Concen: 85.67 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 83 Resp: 301981

Ion	Ratio	Lower	Upper
83	100		
85	65.8	52.6	78.8

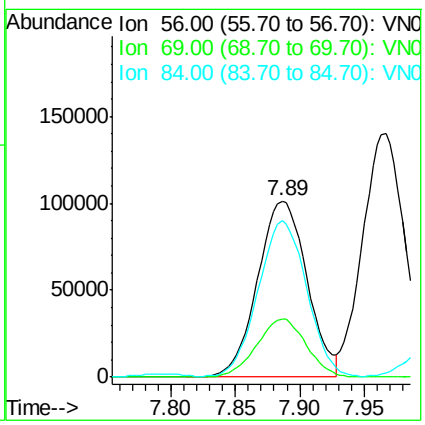




#32
Cyclohexane
Concen: 67.11 ug/l
RT: 7.89 min Scan# 1896
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 56 Resp: 270269

Ion	Ratio	Lower	Upper
56	100		
69	33.2	26.6	39.8
84	87.8	69.0	103.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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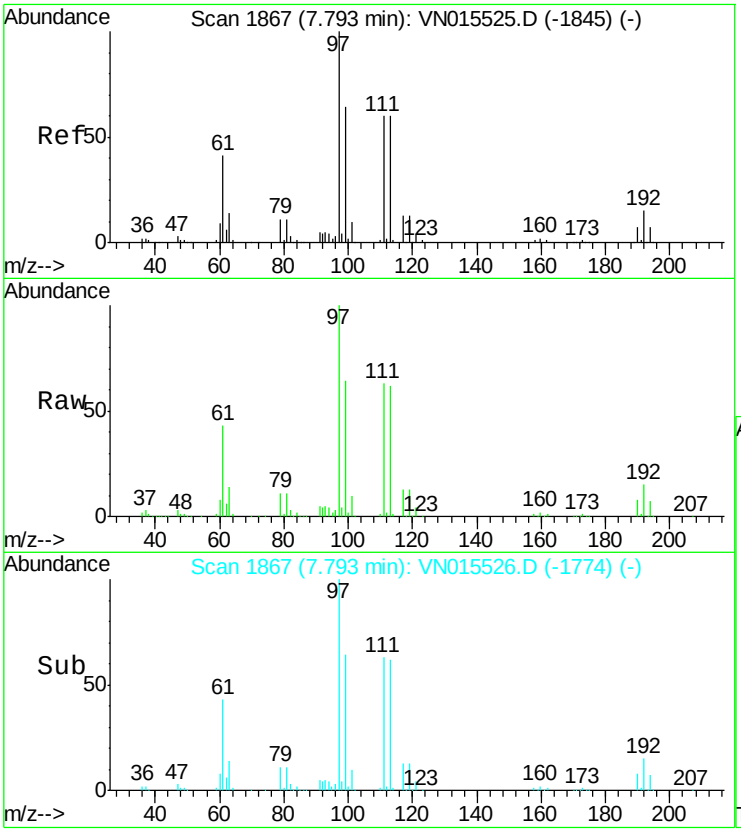
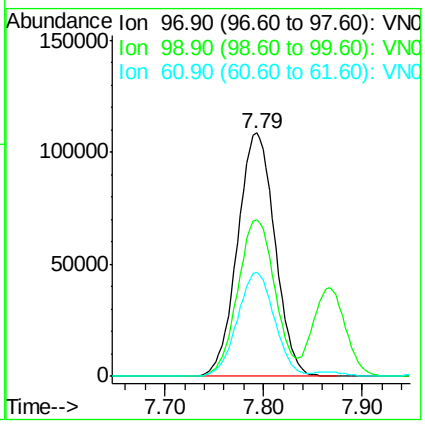
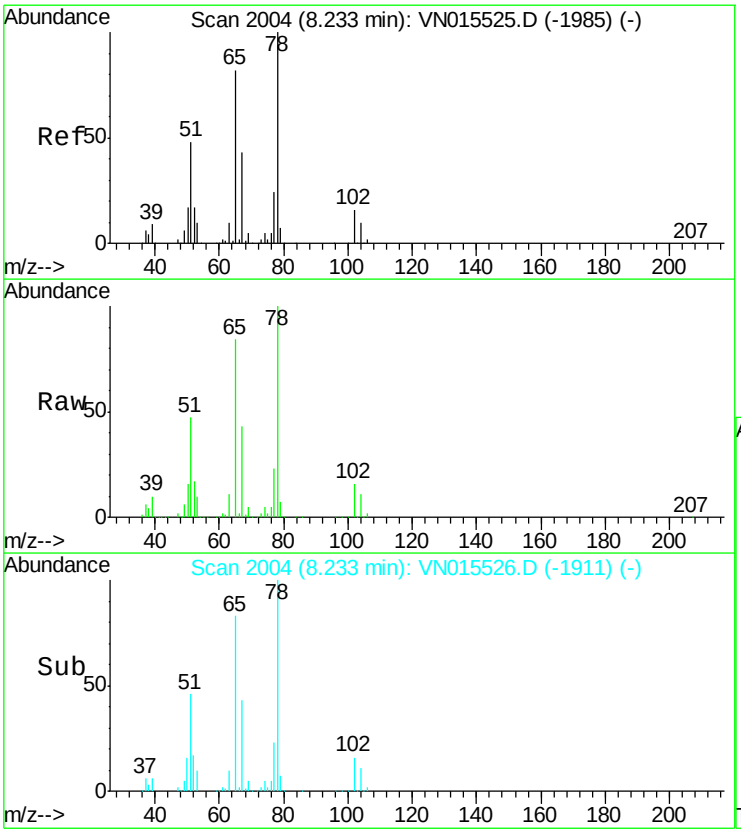


#33
1,1,1-Trichloroethane
Concen: 92.52 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 97 Resp: 284730

Ion	Ratio	Lower	Upper
97	100		
99	64.4	51.2	76.8
61	42.4	33.9	50.9

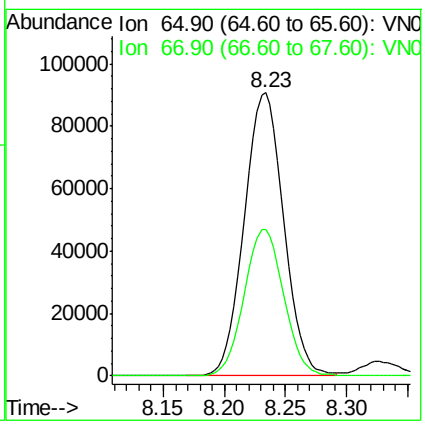


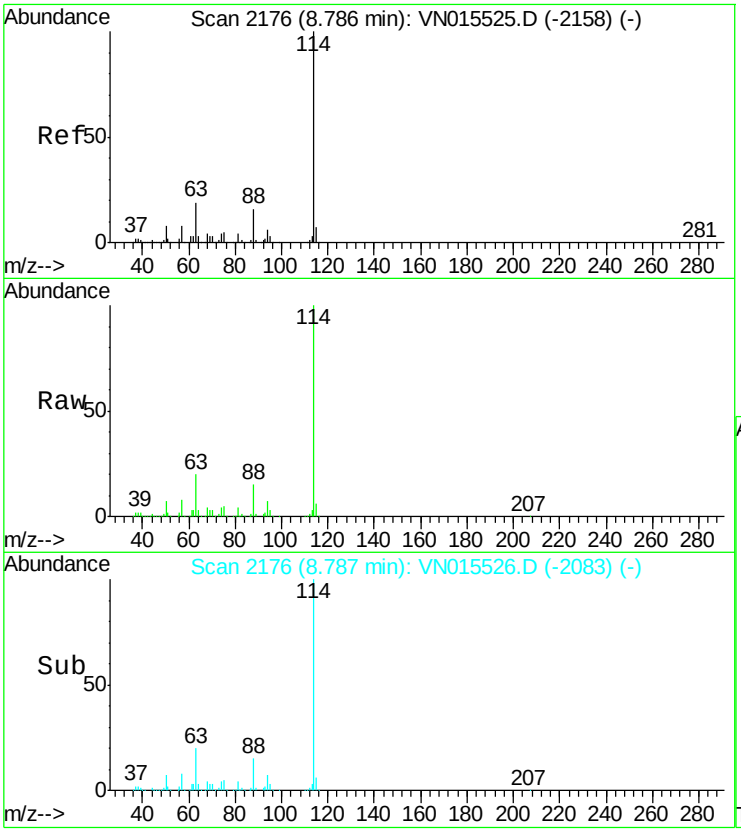


#34
1,2-Dichloroethane-d4
Concen: 84.95 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 65 Resp: 202824

Ion	Ratio	Lower	Upper
65	100		
67	51.9	0.0	103.6

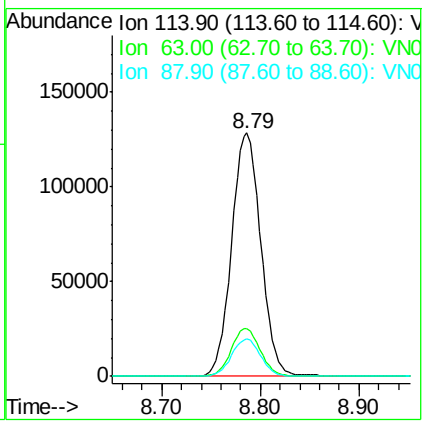




#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:114 Resp: 264160

Ion	Ratio	Lower	Upper
114	100		
63	19.6	0.0	38.6
88	15.4	0.0	32.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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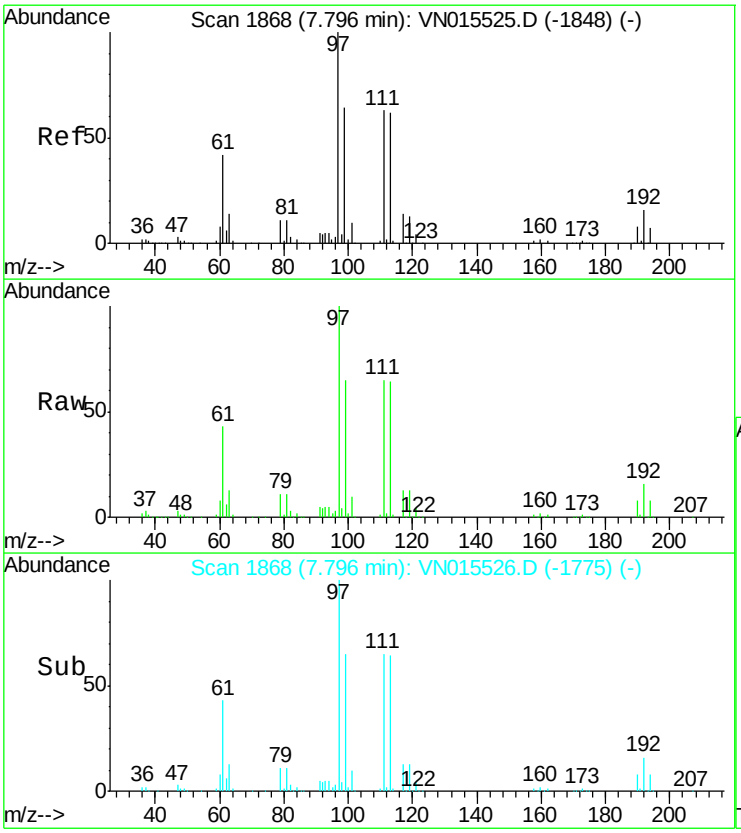
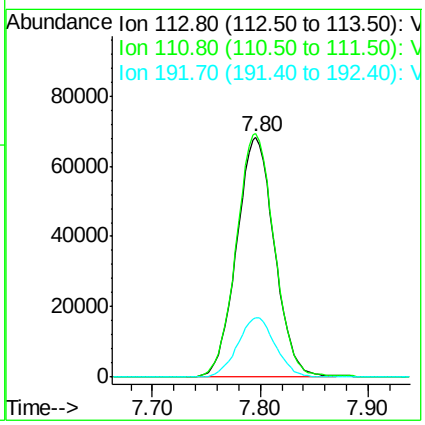


#36
Dibromofluoromethane
Concen: 96.46 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:113 Resp: 166110

Ion	Ratio	Lower	Upper
113	100		
111	102.4	81.5	122.3
192	24.9	20.0	30.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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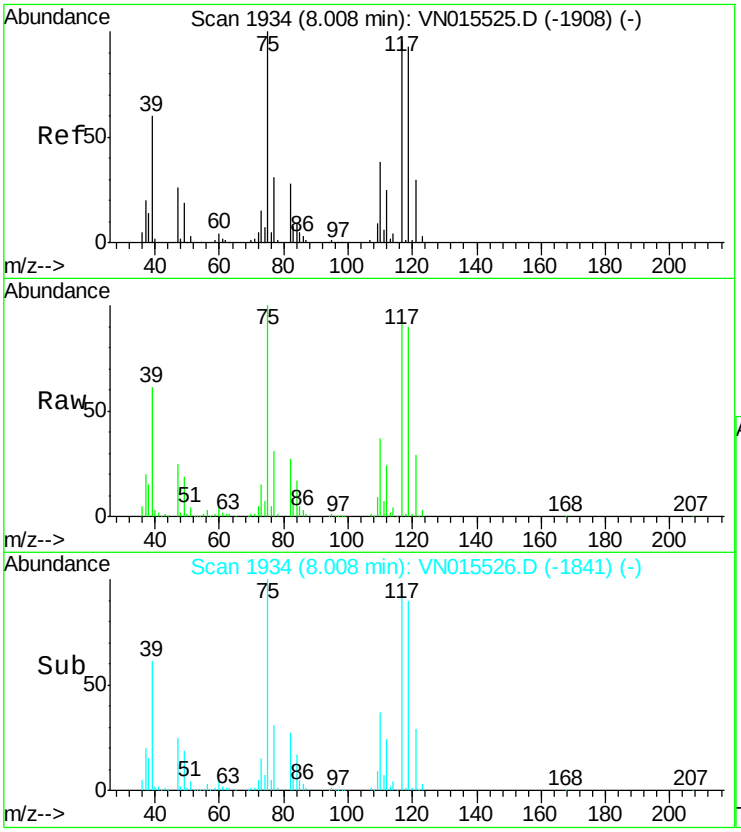
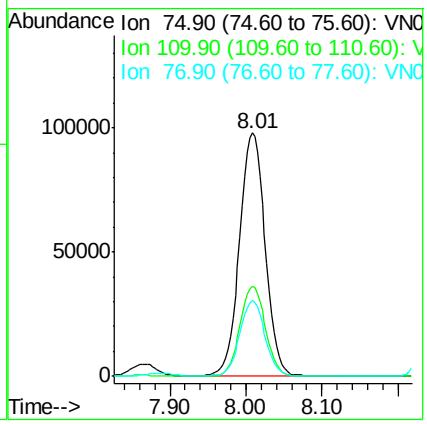
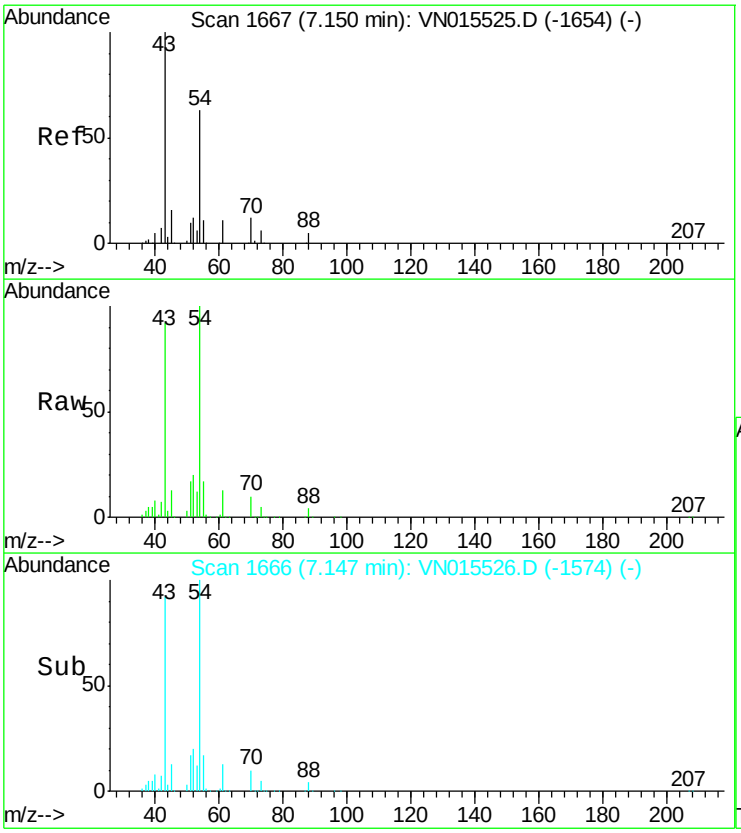


#37
1,1-Dichloropropene
Concen: 91.53 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 75 Resp: 229810

Ion	Ratio	Lower	Upper
75	100		
110	36.7	18.6	55.6
77	30.5	24.4	36.6

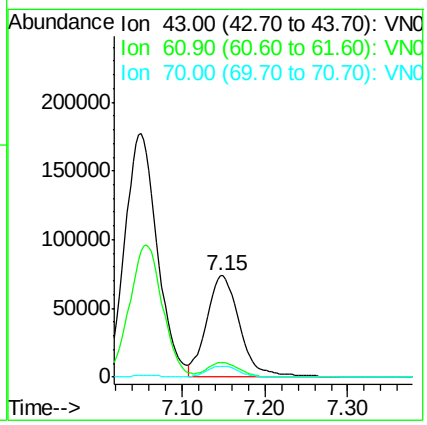




#38
Ethyl Acetate
Concen: 107.41 ug/l
RT: 7.15 min Scan# 1666
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 202976

Ion	Ratio	Lower	Upper
43	100		
61	13.4	10.8	16.2
70	10.4	8.5	12.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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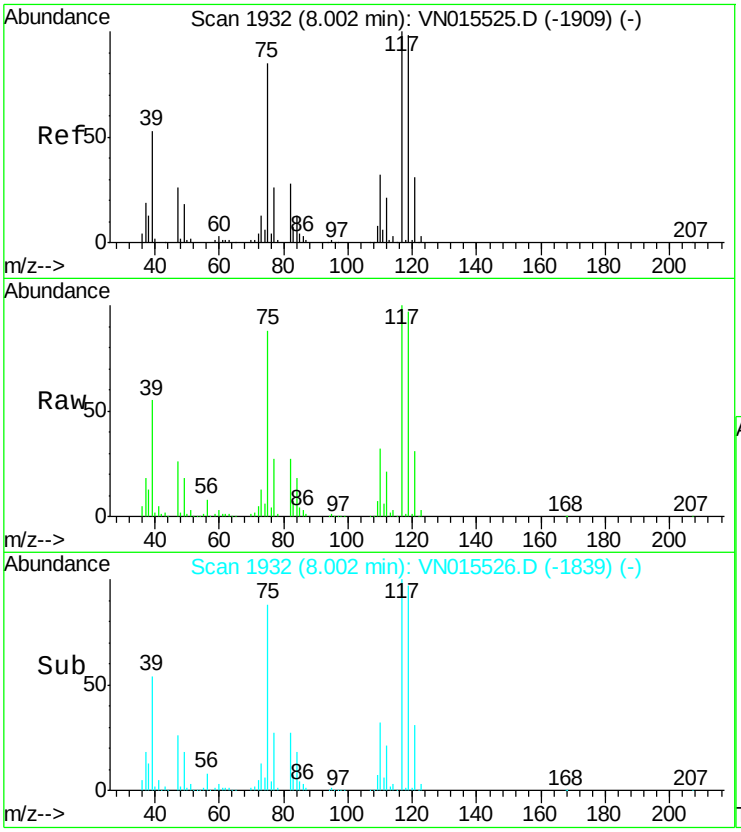
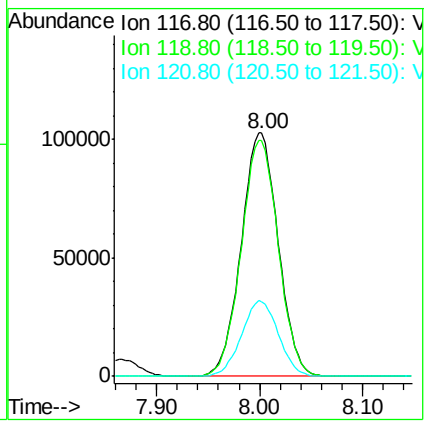
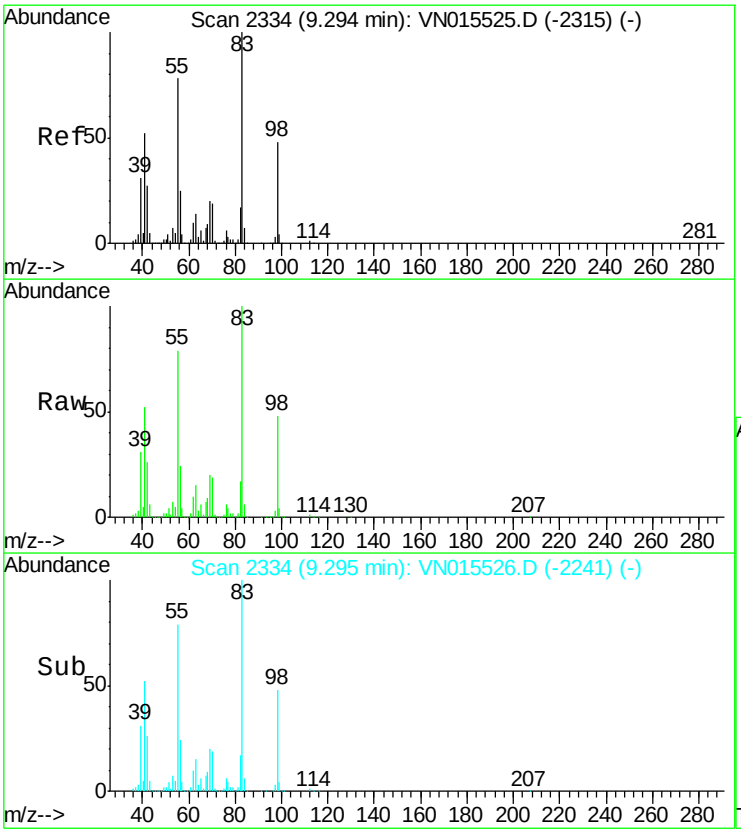


#39
Carbon Tetrachloride
Concen: 101.03 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:117 Resp: 255434

Ion	Ratio	Lower	Upper
117	100		
119	96.7	78.0	117.0
121	30.9	24.5	36.7

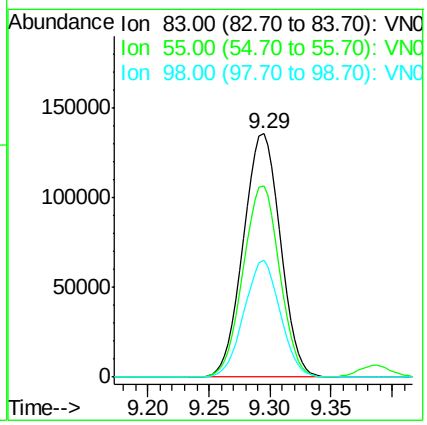




#40
Methylcyclohexane
Concen: 95.81 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 83 Resp: 284621

Ion	Ratio	Lower	Upper
83	100		
55	78.6	62.5	93.7
98	47.8	38.2	57.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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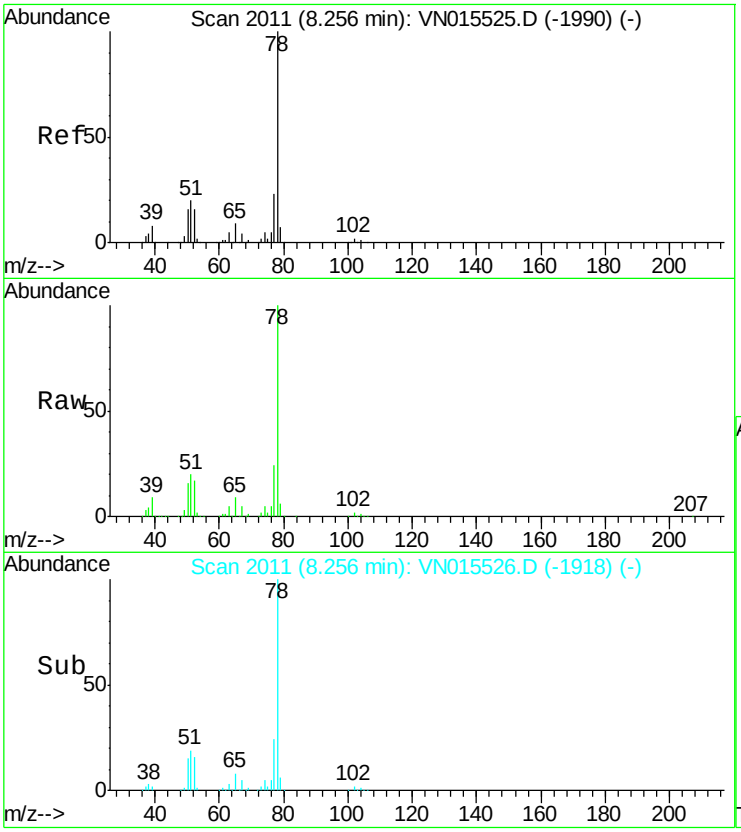
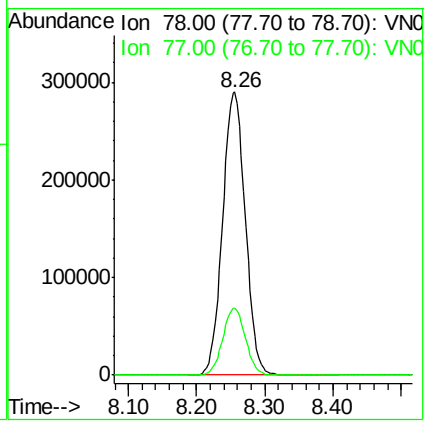
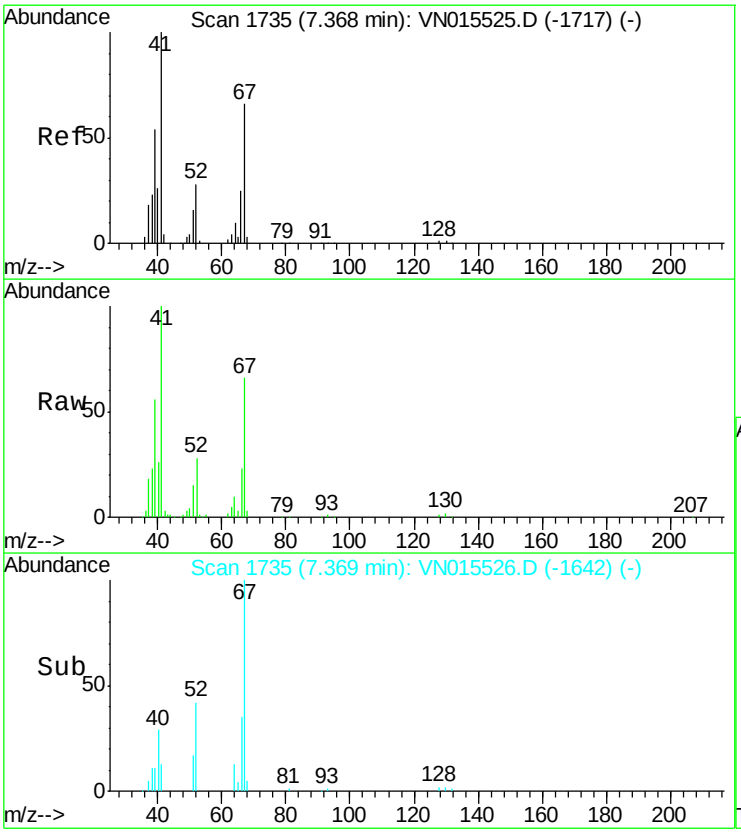


#41
Benzene
Concen: 91.50 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 78 Resp: 668660

Ion	Ratio	Lower	Upper
78	100		
77	23.8	18.5	27.7

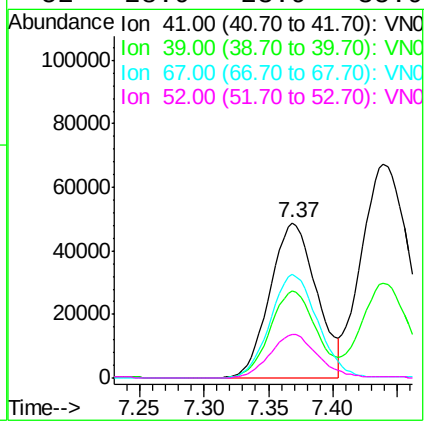


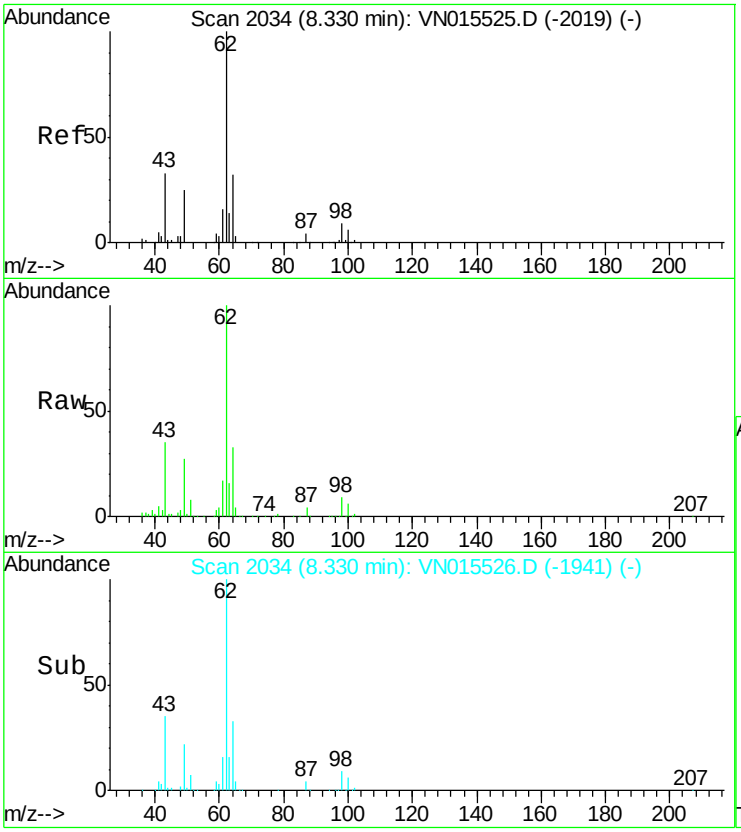


#42
Methacrylonitrile
Concen: 92.63 ug/l
RT: 7.37 min Scan# 1735
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 41 Resp: 122687

Ion	Ratio	Lower	Upper
41	100		
39	55.4	45.0	67.4
67	68.3	54.9	82.3
52	28.9	23.9	35.9

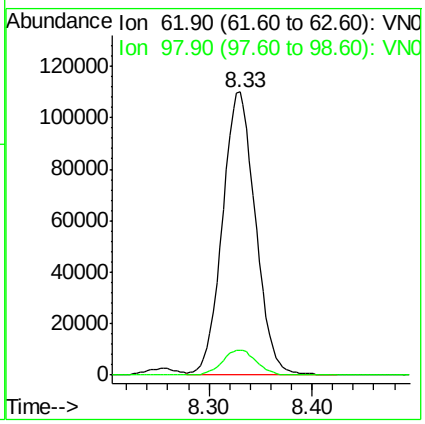




#43
1,2-Dichloroethane
Concen: 91.19 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 62 Resp: 243919

Ion	Ratio	Lower	Upper
62	100		
98	9.1	0.0	18.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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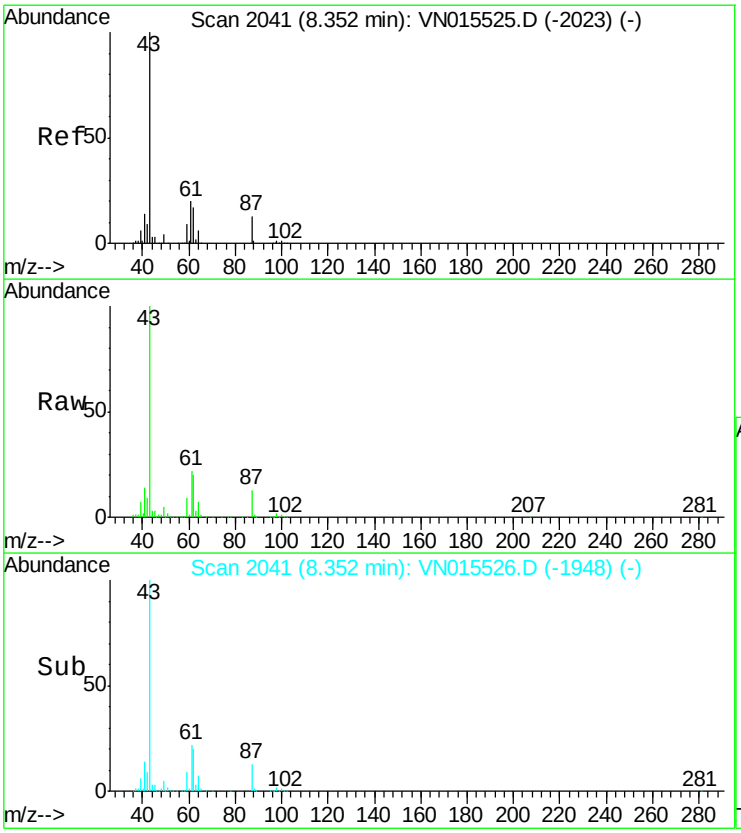
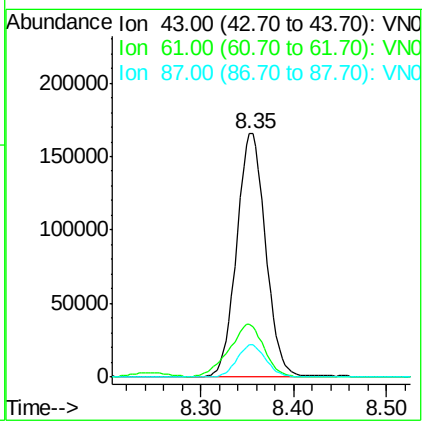


#44
Isopropyl Acetate
Concen: 115.25 ug/l
RT: 8.35 min Scan# 2041
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 358199

Ion	Ratio	Lower	Upper
43	100		
61	26.0	20.4	30.6
87	13.2	10.4	15.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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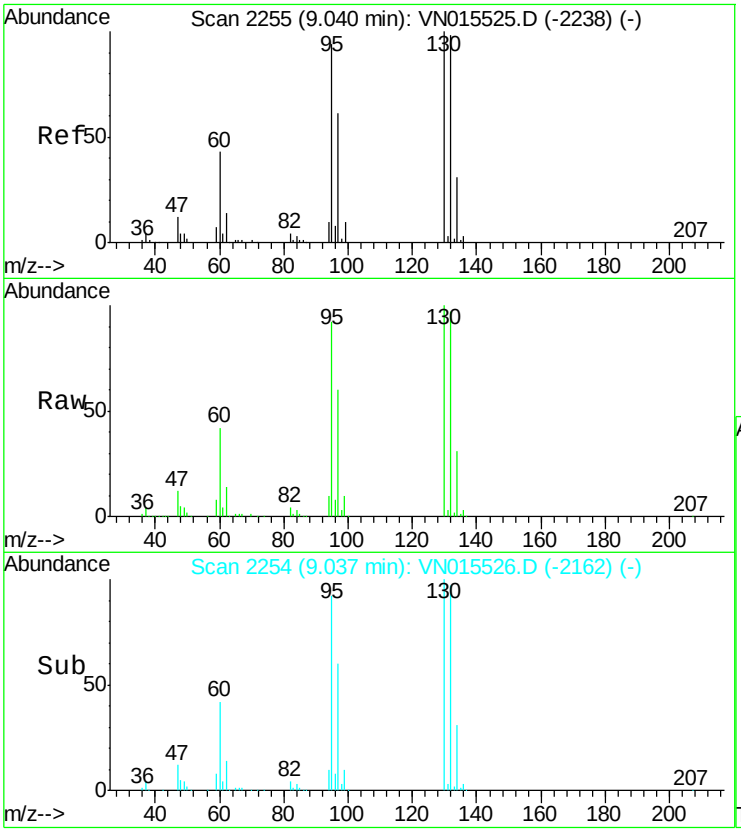
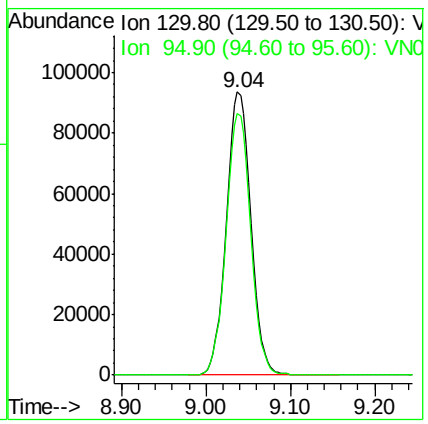
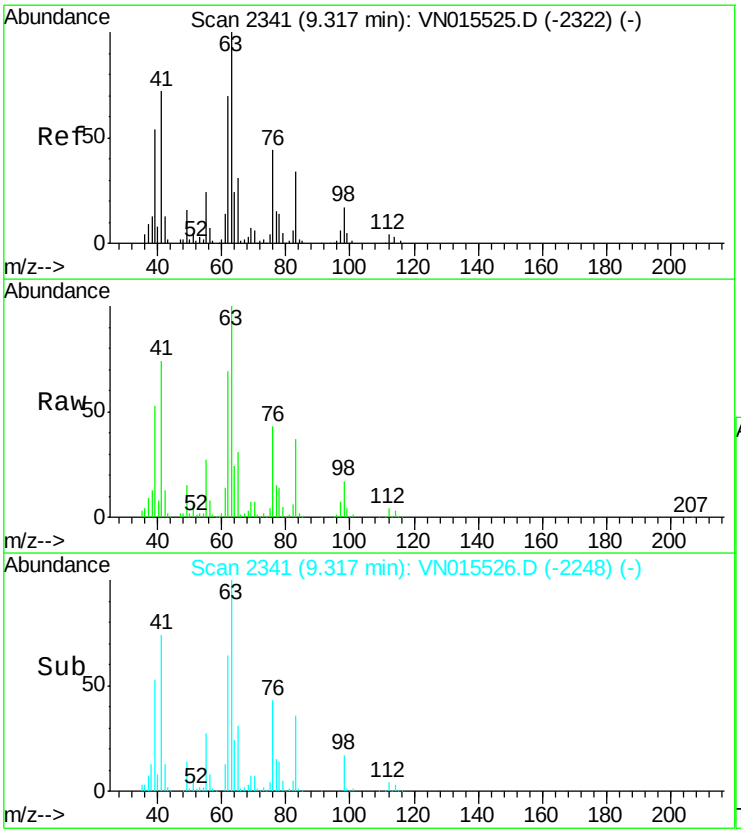


#45
Trichloroethene
Concen: 97.07 ug/l
RT: 9.04 min Scan# 2254
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:130 Resp: 188994

Ion	Ratio	Lower	Upper
130	100		
95	92.3	0.0	187.0

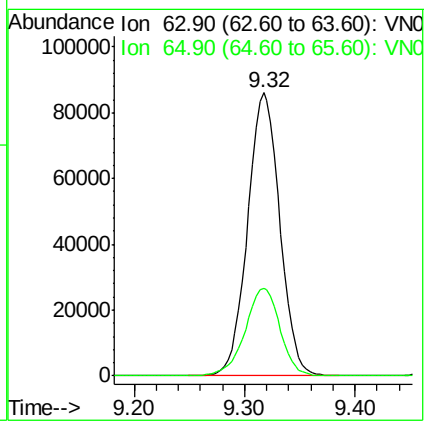


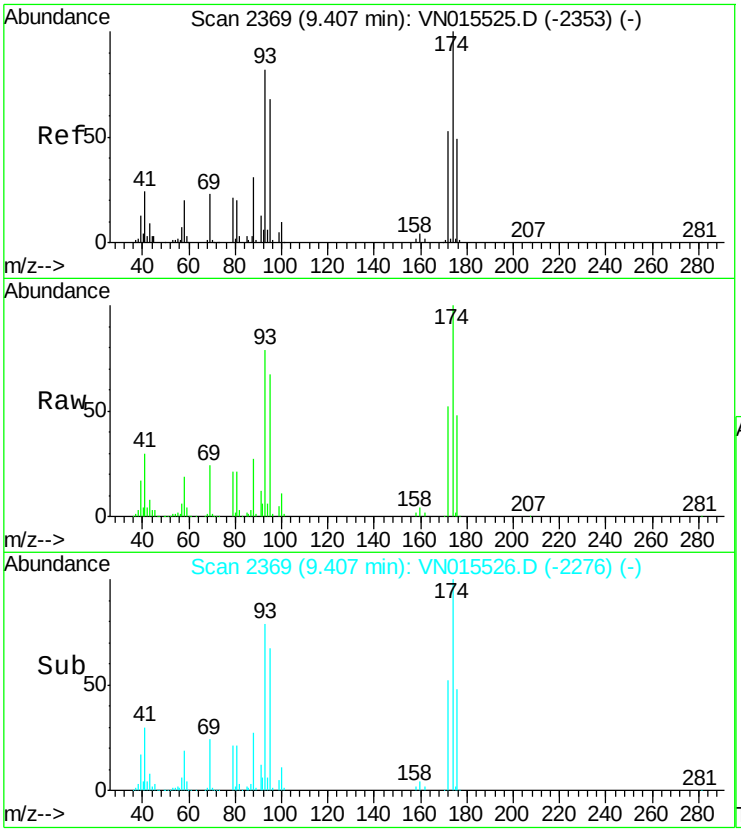


#46
1,2-Dichloropropane
Concen: 87.52 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 63 Resp: 173568

Ion	Ratio	Lower	Upper
63	100		
65	31.0	25.0	37.4





#47
Dibromomethane
Concen: 92.76 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 93 Resp: 113798

Ion	Ratio	Lower	Upper
93	100		
95	84.2	66.9	100.3
174	126.3	98.6	148.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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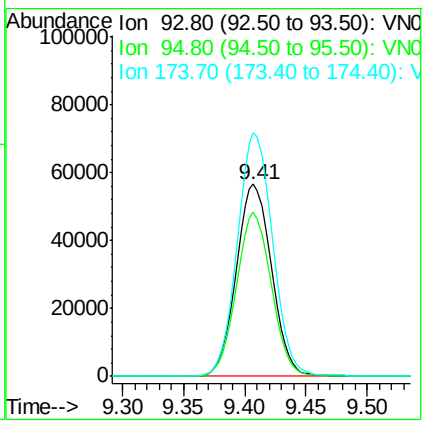
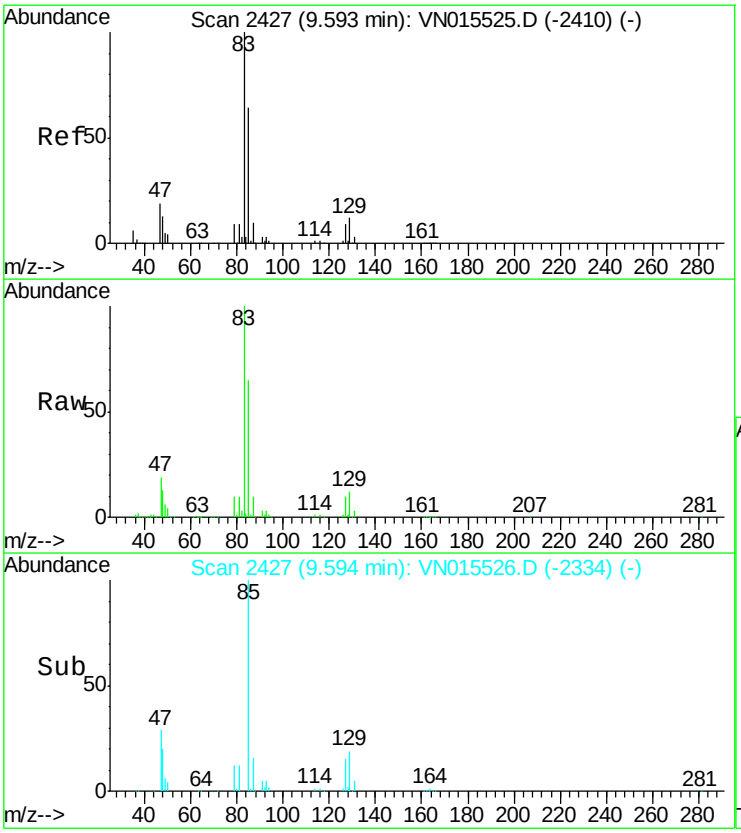
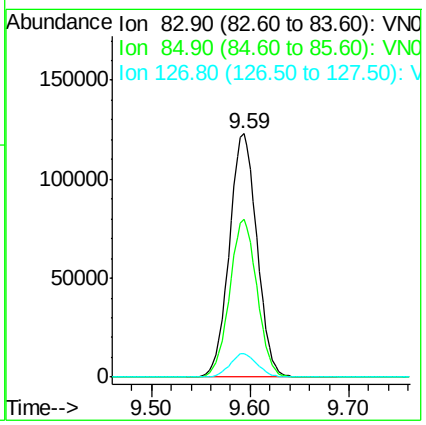




#48
Bromodichloromethane
Concen: 97.98 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 83 Resp: 239689

Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.1	76.7
127	9.7	7.6	11.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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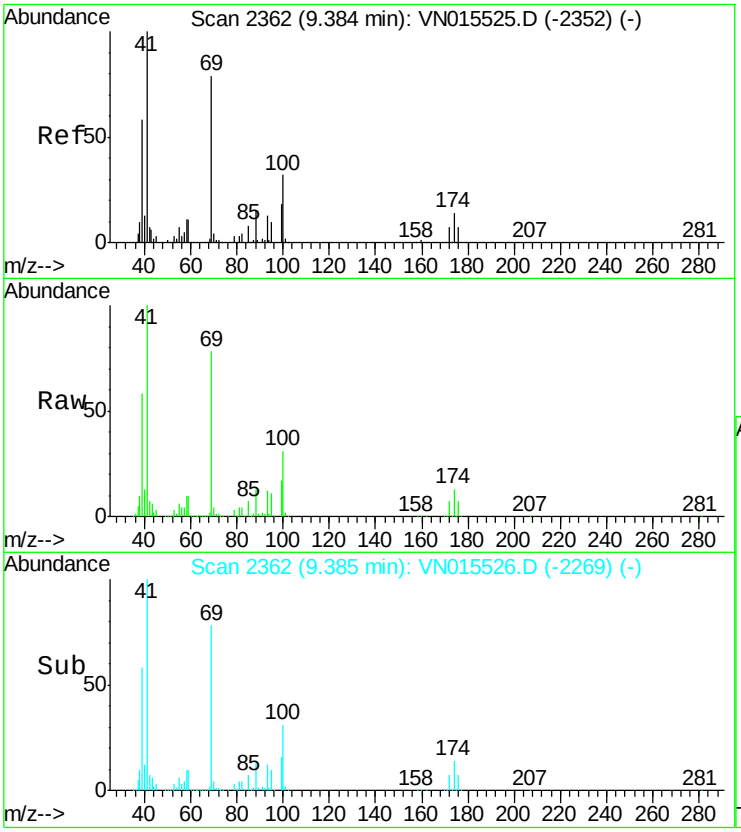
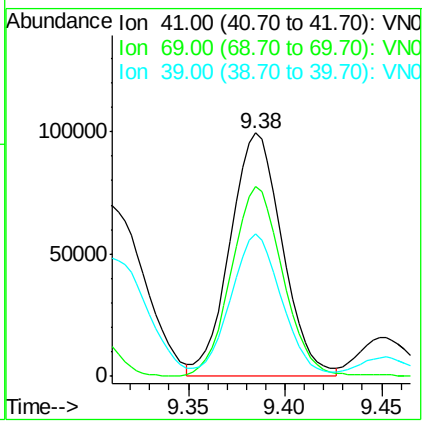
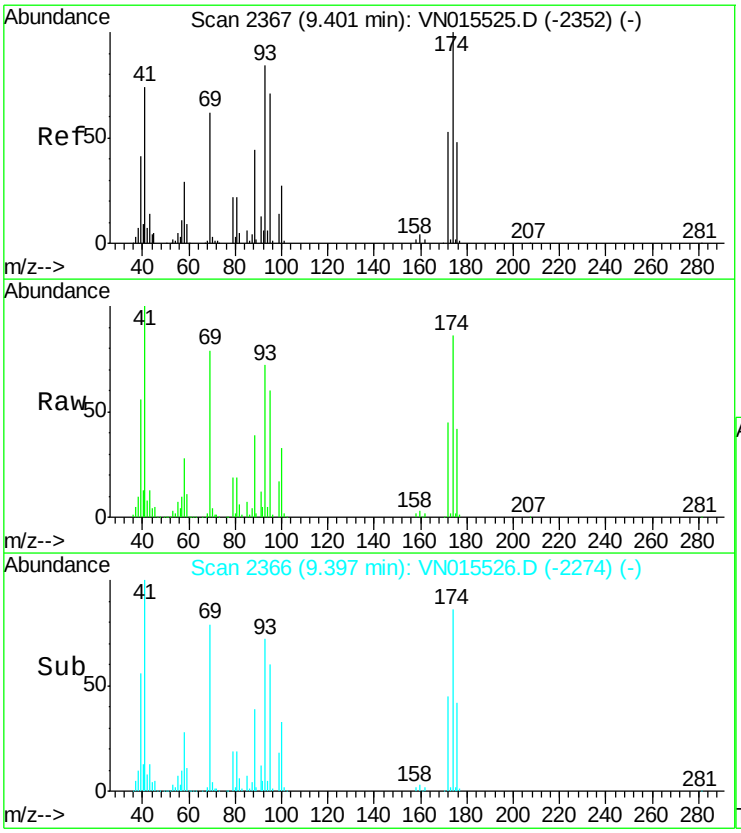


#49
Methyl methacrylate
Concen: 97.39 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 41 Resp: 186470

Ion	Ratio	Lower	Upper
41	100		
69	77.3	62.8	94.2
39	57.1	46.4	69.6

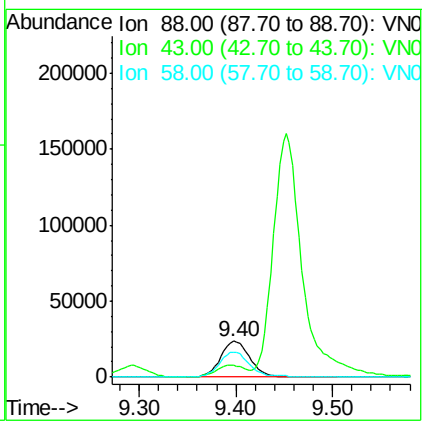




#50
1,4-Dioxane
Concen: 1964.59 ug/l
RT: 9.40 min Scan# 2366
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 88 Resp: 49416

Ion	Ratio	Lower	Upper
88	100		
43	31.7	26.4	39.6
58	73.1	56.6	84.8



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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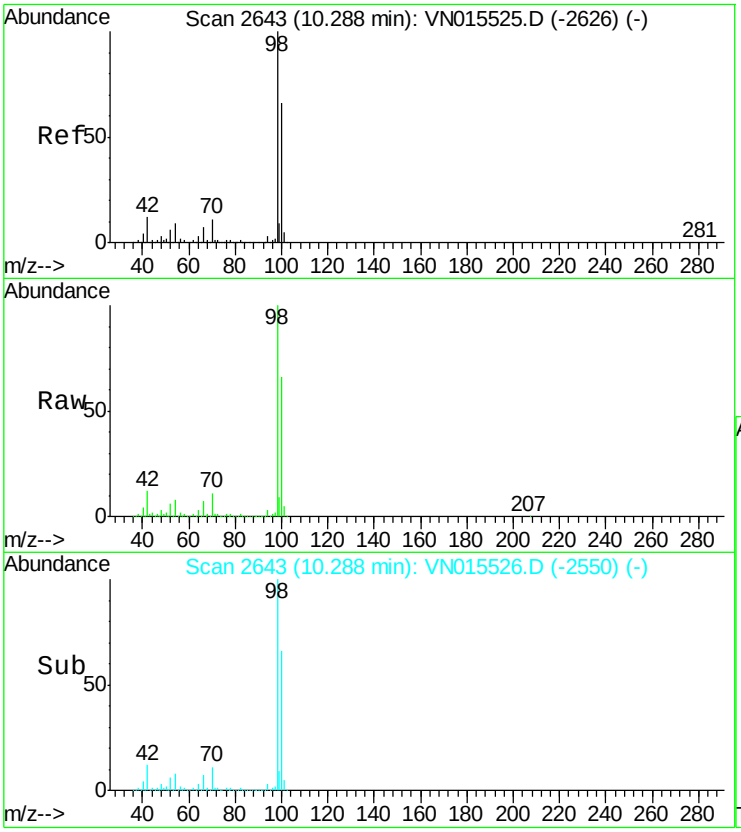
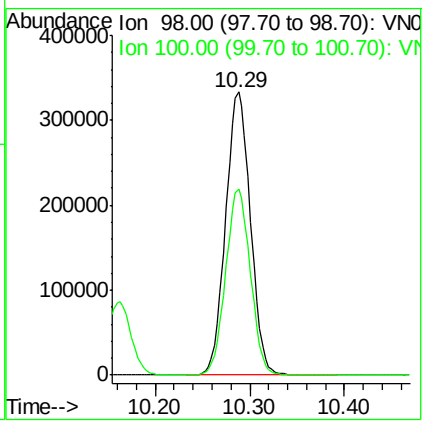
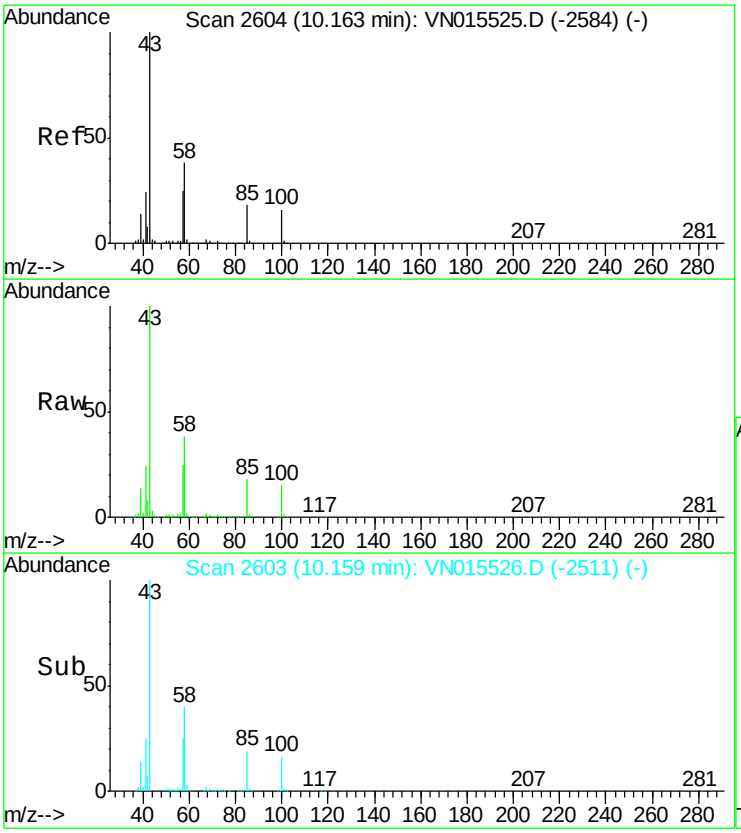


#51
Toluene-d8
Concen: 93.69 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 98 Resp: 606509

Ion	Ratio	Lower	Upper
98	100		
100	65.5	52.3	78.5

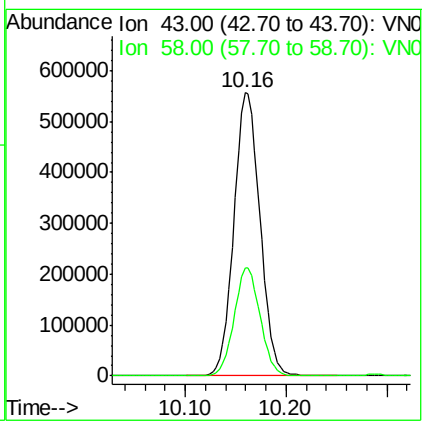


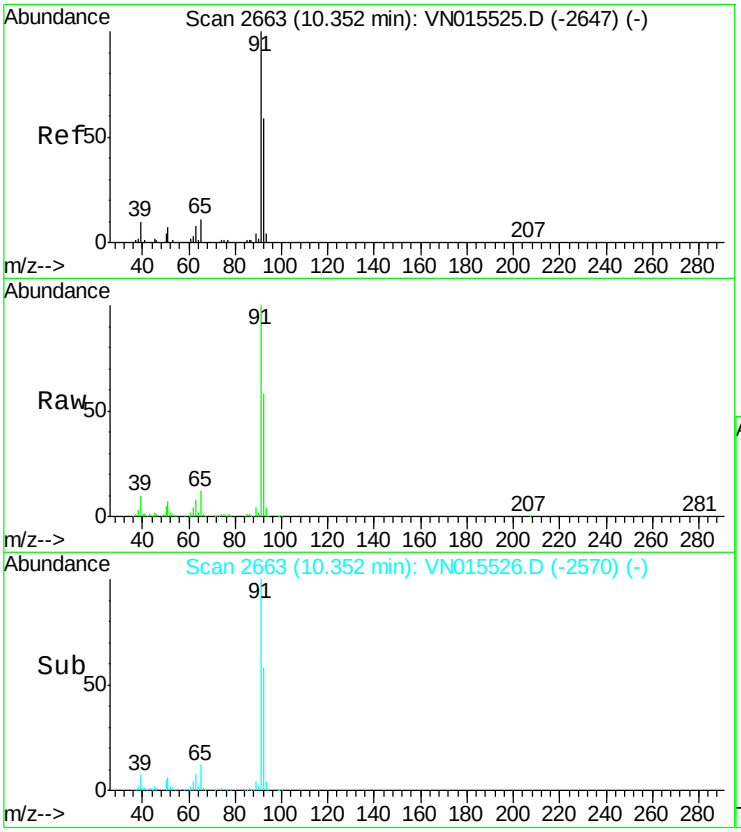


#52
4-Methyl-2-Pentanone
Concen: 472.79 ug/l
RT: 10.16 min Scan# 2603
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 997082

Ion	Ratio	Lower	Upper
43	100		
58	38.0	30.2	45.2





#53
Toluene
Concen: 96.12 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 92 Resp: 429118

Ion	Ratio	Lower	Upper
92	100		
91	171.0	136.2	204.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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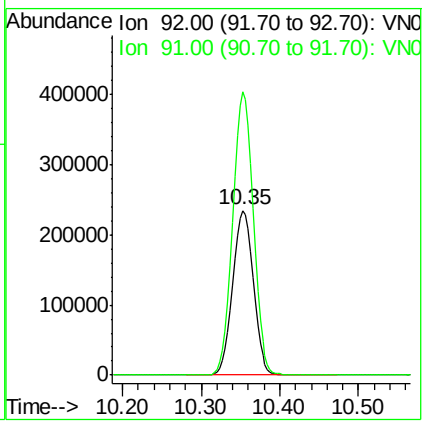
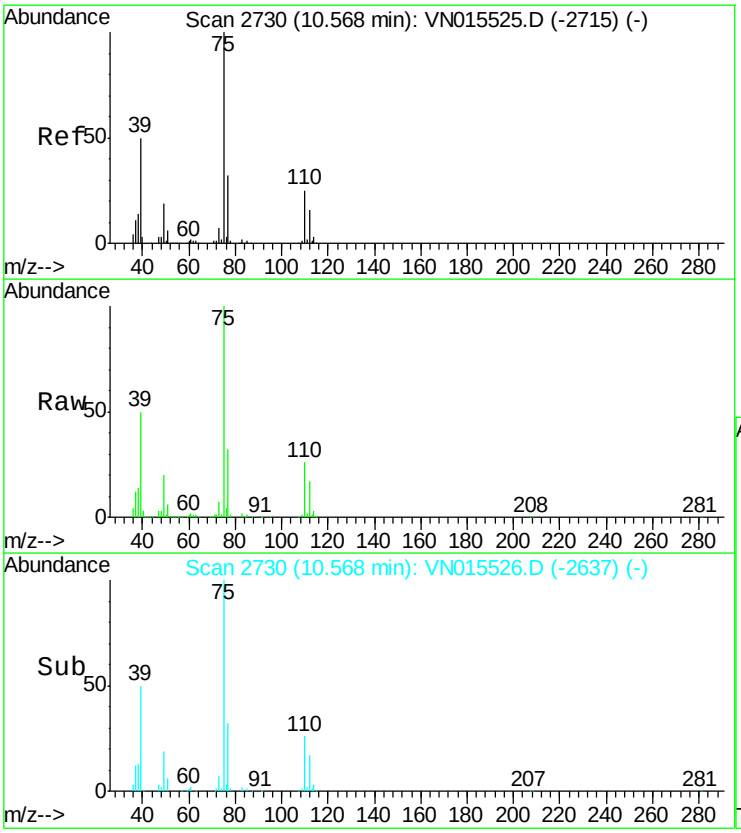
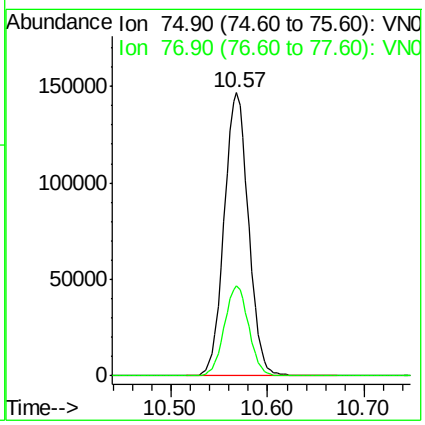


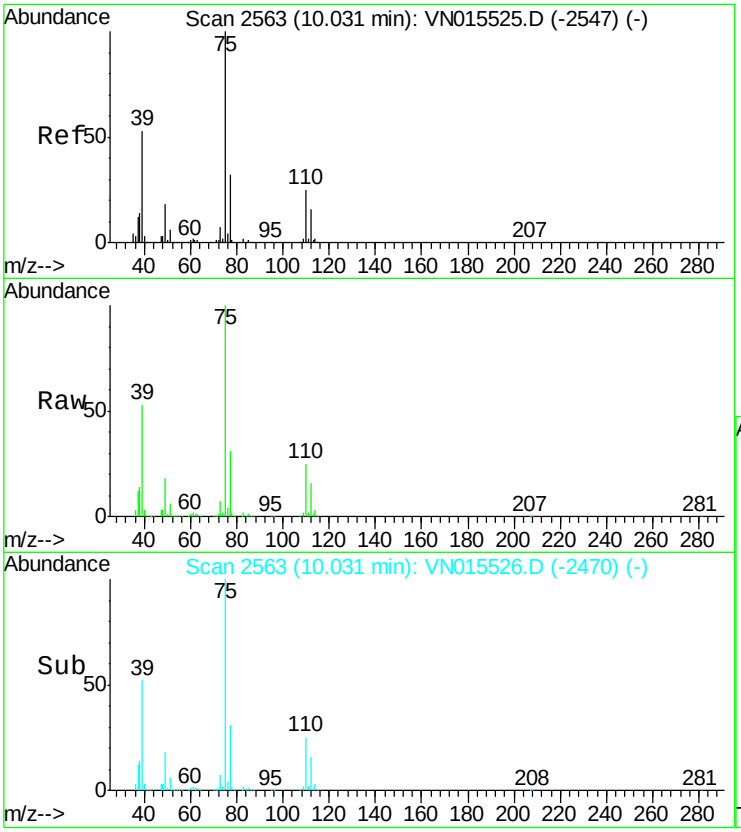


#54
t-1,3-Dichloropropene
Concen: 104.16 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 75 Resp: 256259

Ion	Ratio	Lower	Upper
75	100		
77	31.8	26.0	39.0





#55
cis-1,3-Dichloropropene
Concen: 98.06 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 75 Resp: 275687

Ion	Ratio	Lower	Upper
75	100		
77	30.7	25.4	38.2
39	52.5	42.2	63.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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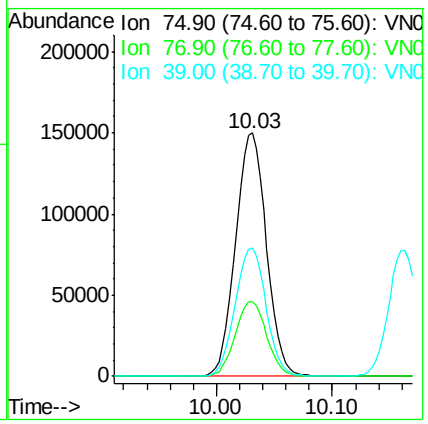
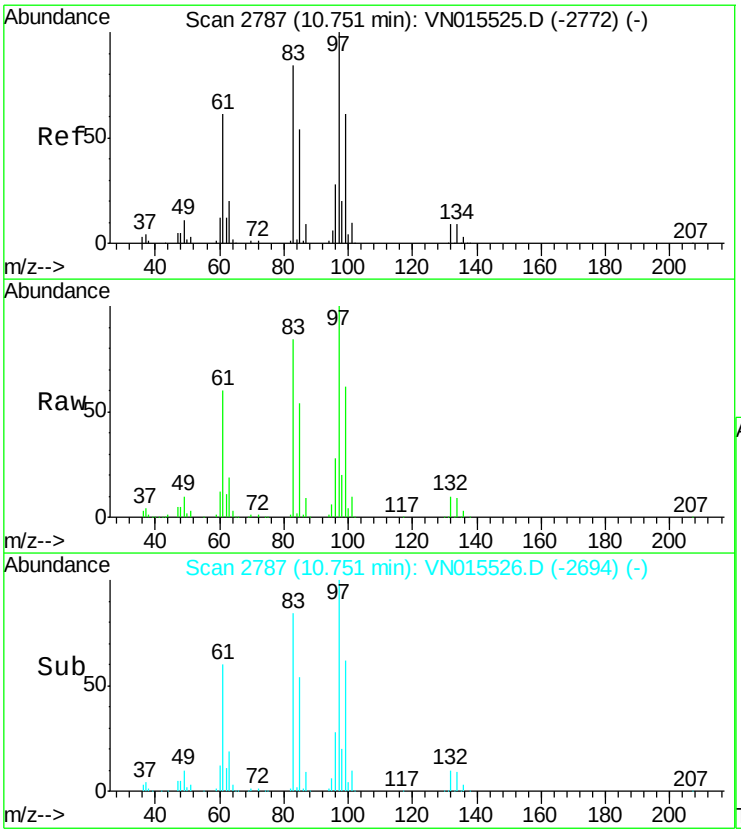
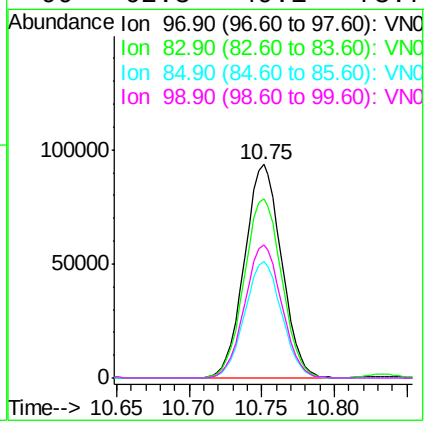


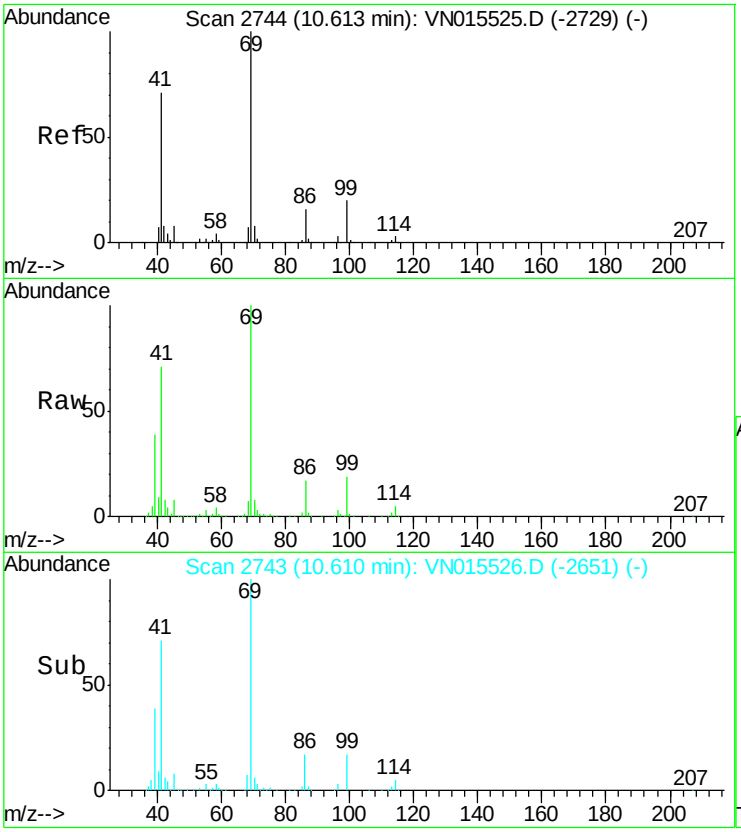


#56
1,1,2-Trichloroethane
Concen: 94.67 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 97 Resp: 166607

Ion	Ratio	Lower	Upper
97	100		
83	83.7	67.0	100.4
85	54.4	42.9	64.3
99	62.3	49.1	73.7





#57
Ethyl methacrylate
Concen: 105.33 ug/l
RT: 10.61 min Scan# 2743
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 69 Resp: 256130

Ion	Ratio	Lower	Upper
69	100		
41	70.5	56.9	85.3
39	39.3	32.0	48.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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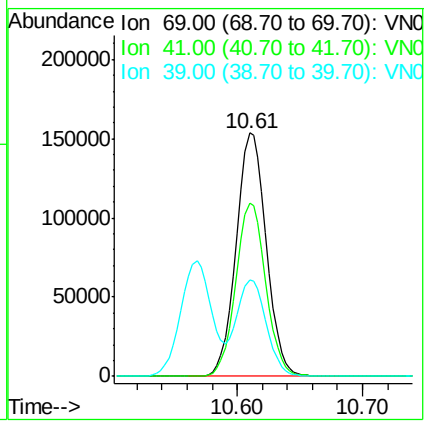
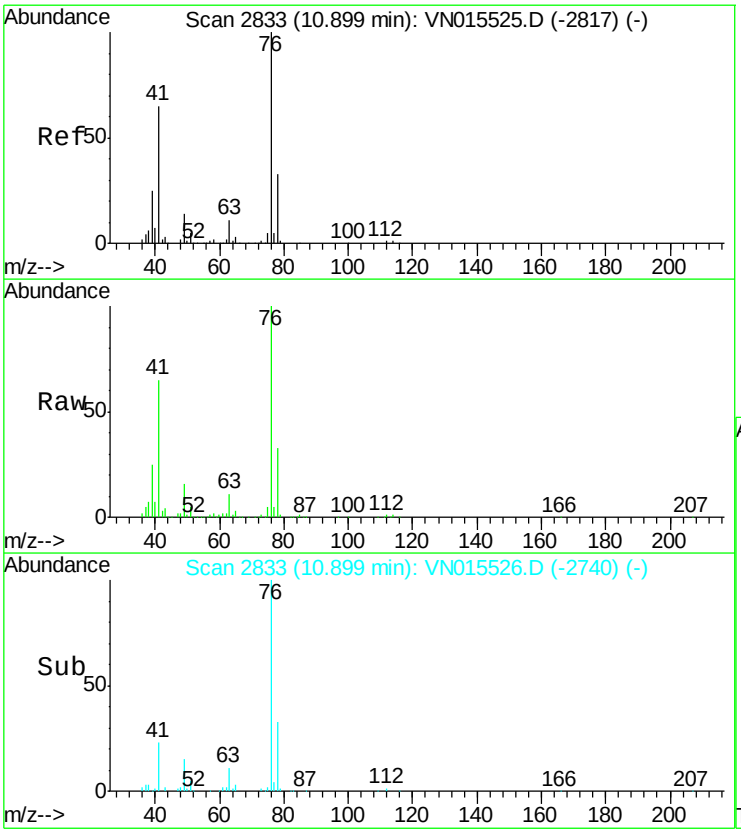
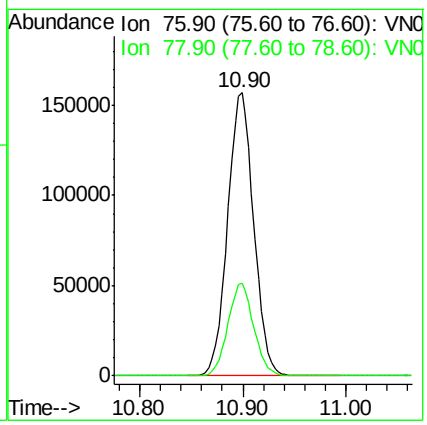


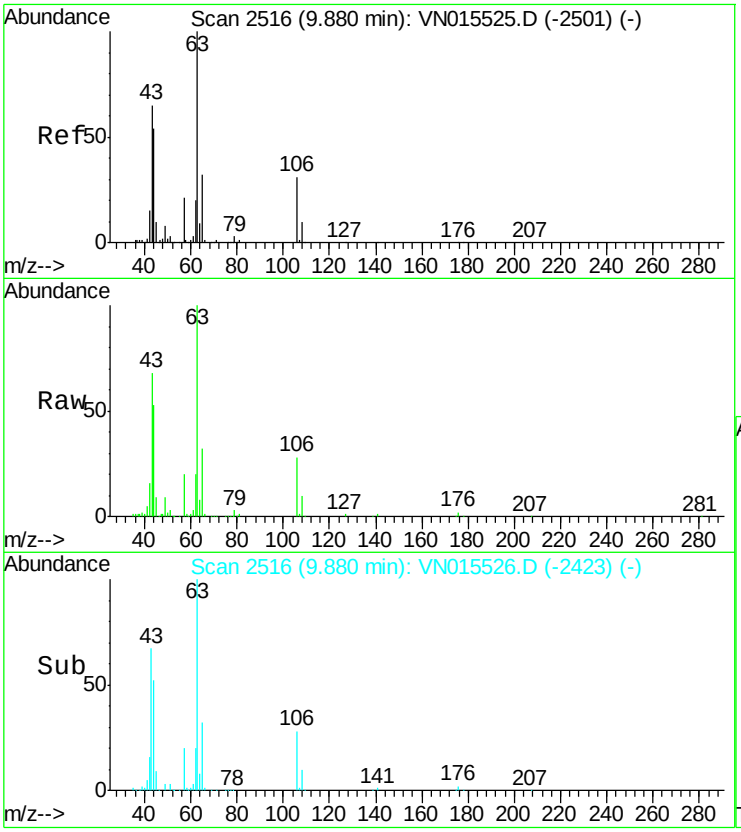


#58
1,3-Dichloropropane
Concen: 91.72 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 76 Resp: 276447

Ion	Ratio	Lower	Upper
76	100		
78	32.4	26.3	39.5





#59
2-Chloroethyl Vinyl ether
Concen: 156.15 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 63 Resp: 141335

Ion	Ratio	Lower	Upper
63	100		
106	28.8	23.7	35.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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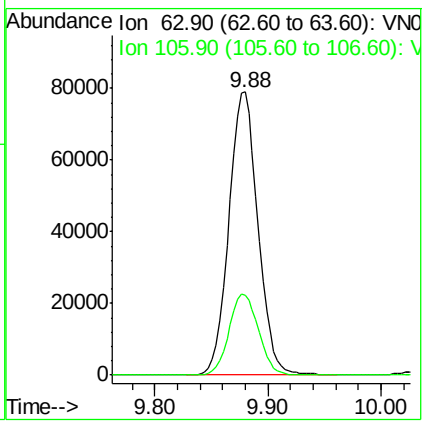
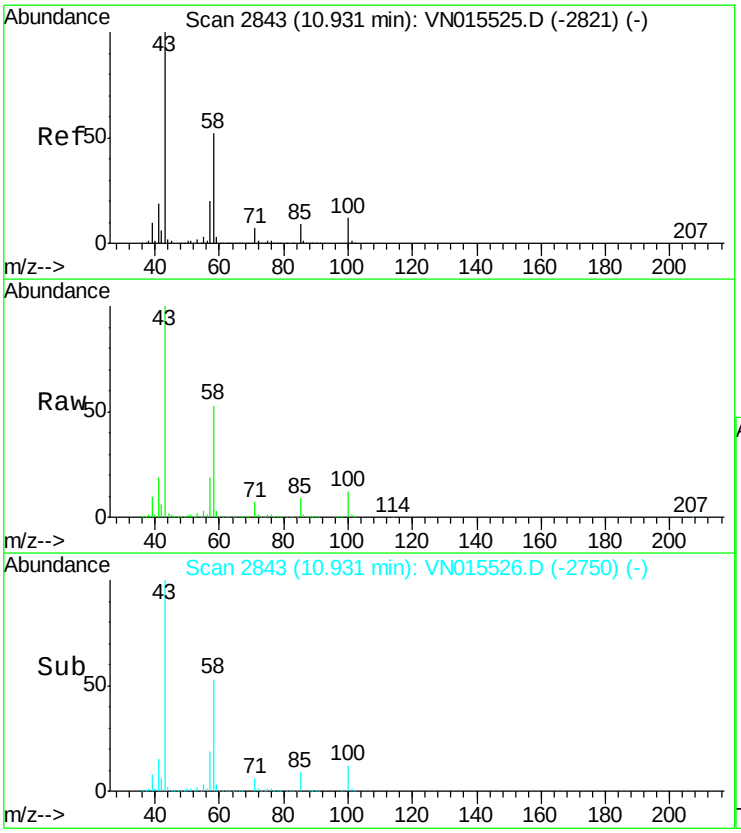
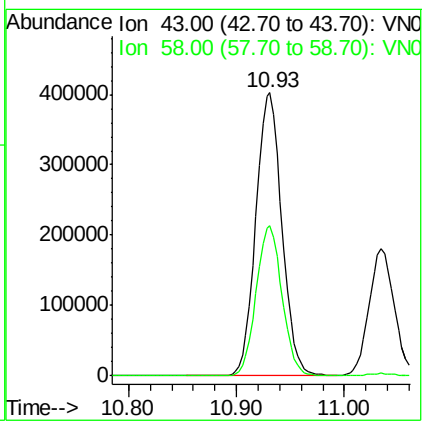




#60
2-Hexanone
Concen: 474.97 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 672374

Ion	Ratio	Lower	Upper
43	100		
58	52.8	26.0	78.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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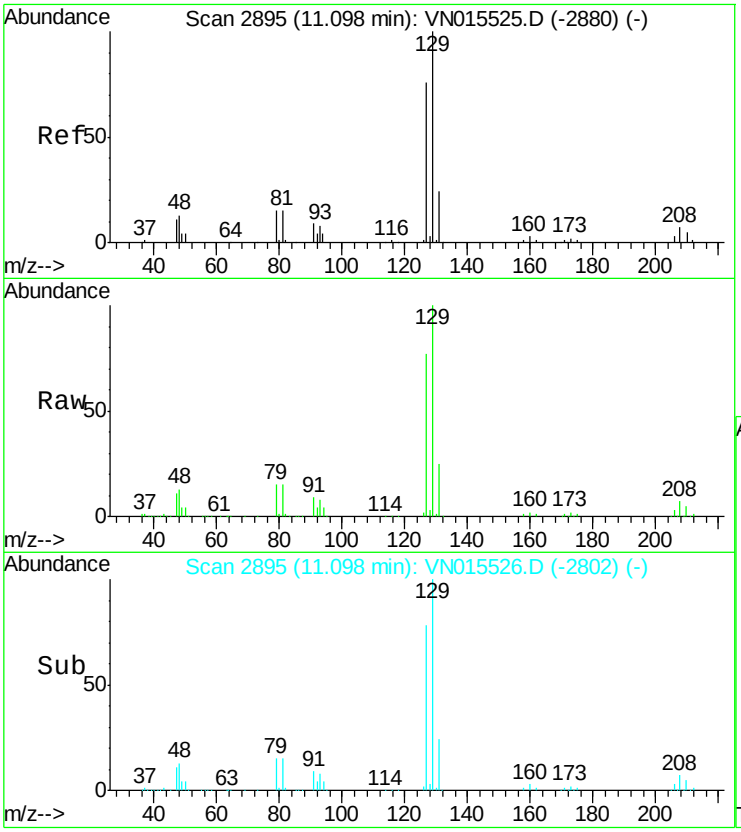
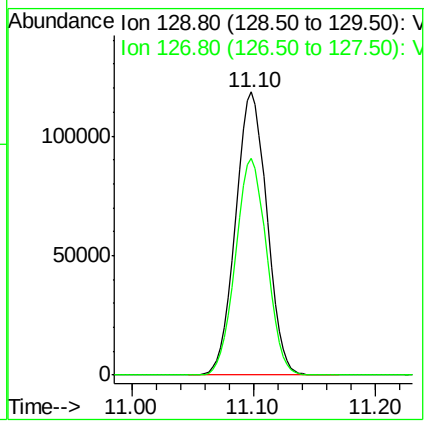
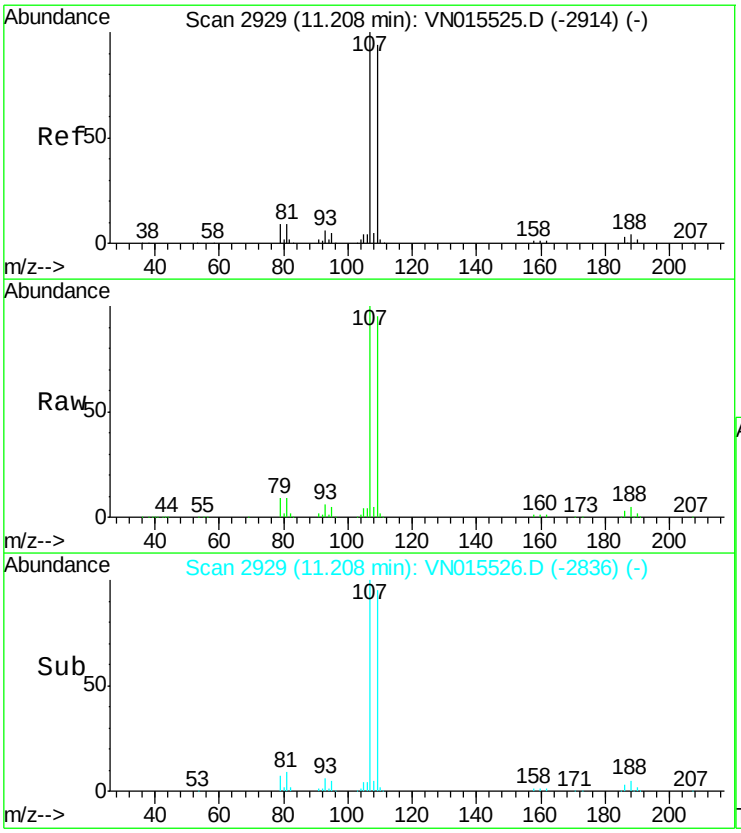


#61
Dibromochloromethane
Concen: 107.37 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:129 Resp: 210269

Ion	Ratio	Lower	Upper
129	100		
127	76.3	38.6	116.0

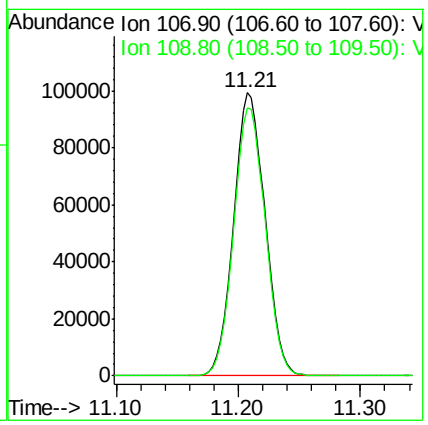


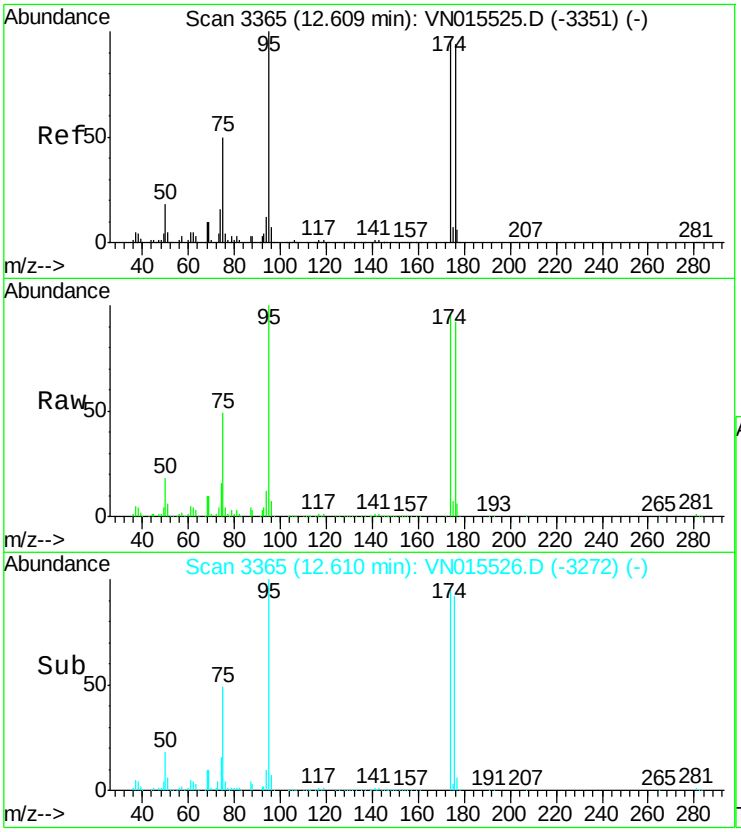


#62
1,2-Dibromoethane
Concen: 100.27 ug/l
RT: 11.21 min Scan# 2929
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:107 Resp: 177045

Ion	Ratio	Lower	Upper
107	100		
109	95.2	75.8	113.6

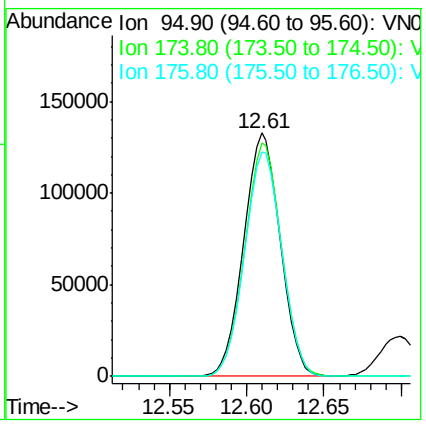




#63
4-Bromofluorobenzene
Concen: 101.68 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 95 Resp: 218616

Ion	Ratio	Lower	Upper
95	100		
174	96.3	0.0	191.8
176	93.9	0.0	186.8



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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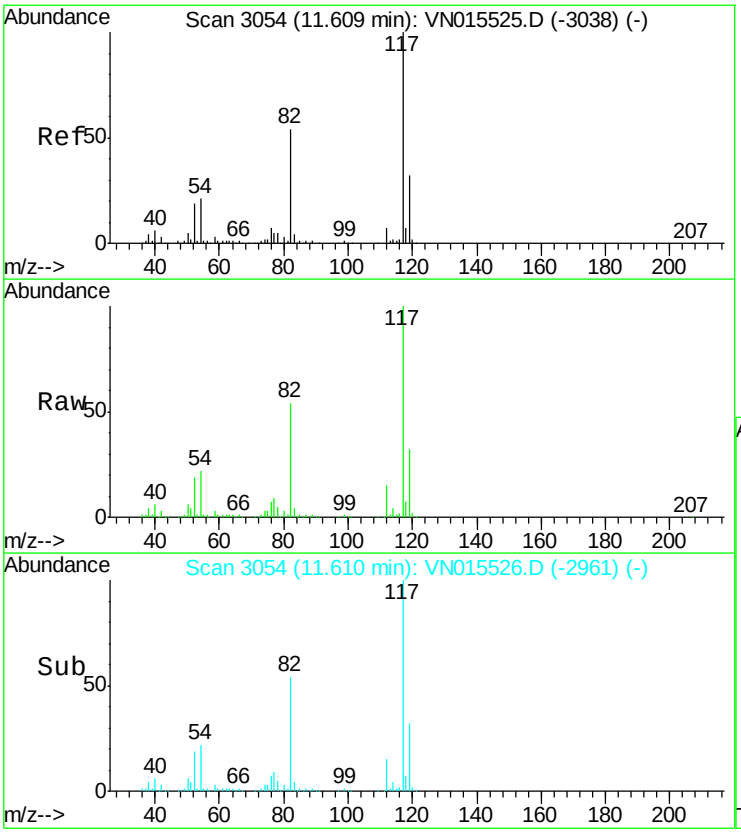
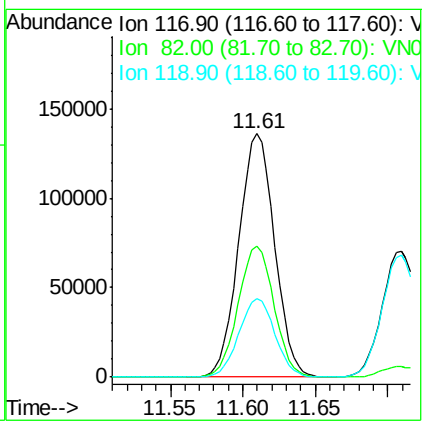
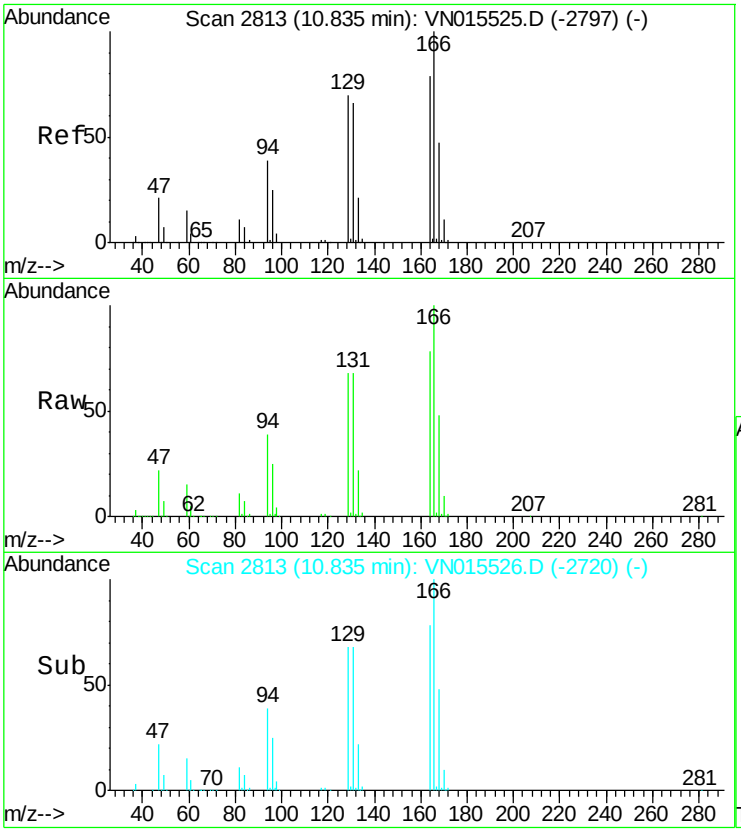


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:117 Resp: 234158

Ion	Ratio	Lower	Upper
117	100		
82	53.6	43.3	64.9
119	32.1	25.6	38.4

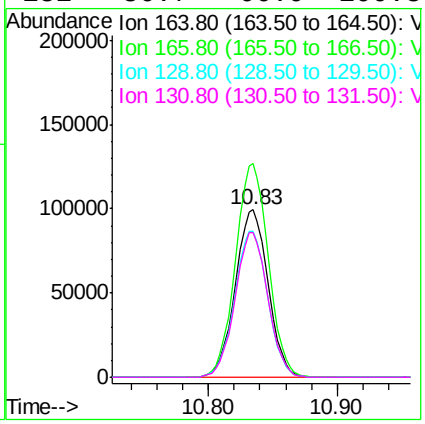




#65
Tetrachloroethene
Concen: 93.39 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:164 Resp: 175036

Ion	Ratio	Lower	Upper
164	100		
166	127.6	101.7	152.5
129	87.4	70.7	106.1
131	86.7	66.9	100.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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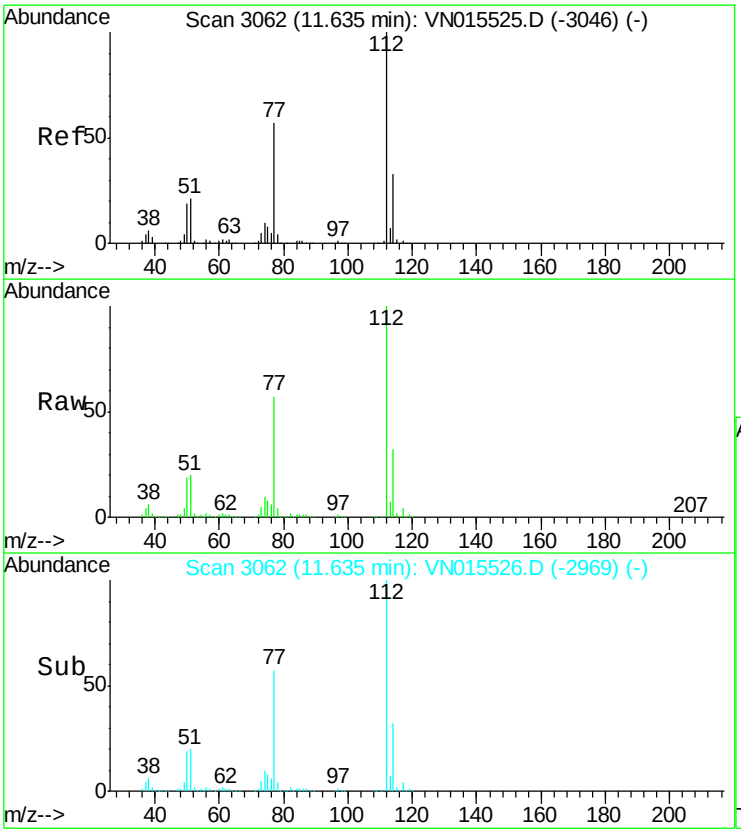
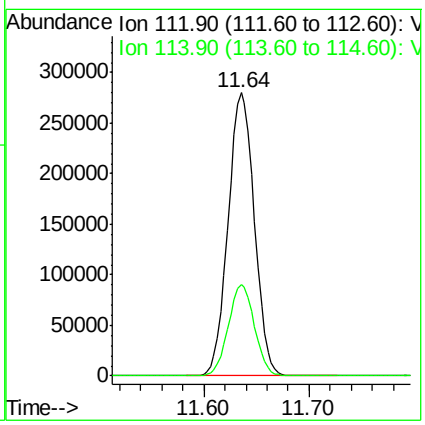
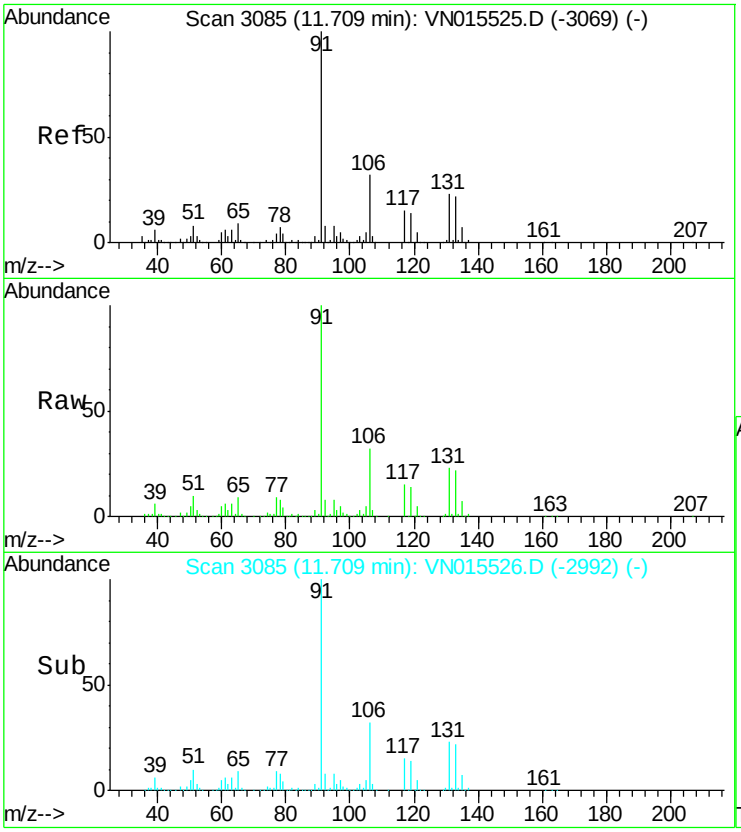


#66
Chlorobenzene
Concen: 95.70 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:112 Resp: 481452

Ion	Ratio	Lower	Upper
112	100		
114	32.3	26.2	39.2





#67
1,1,1,2-Tetrachloroethane
Concen: 102.85 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:131 Resp: 187911

Ion	Ratio	Lower	Upper
131	100		
133	95.9	47.7	143.1
119	63.1	31.5	94.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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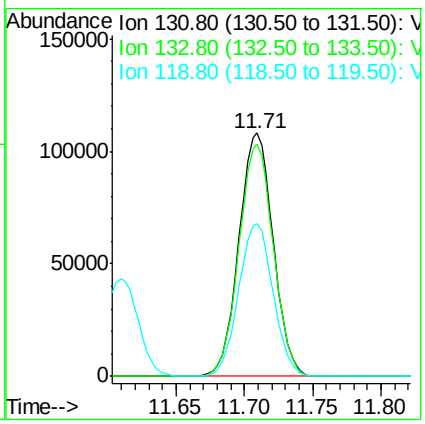
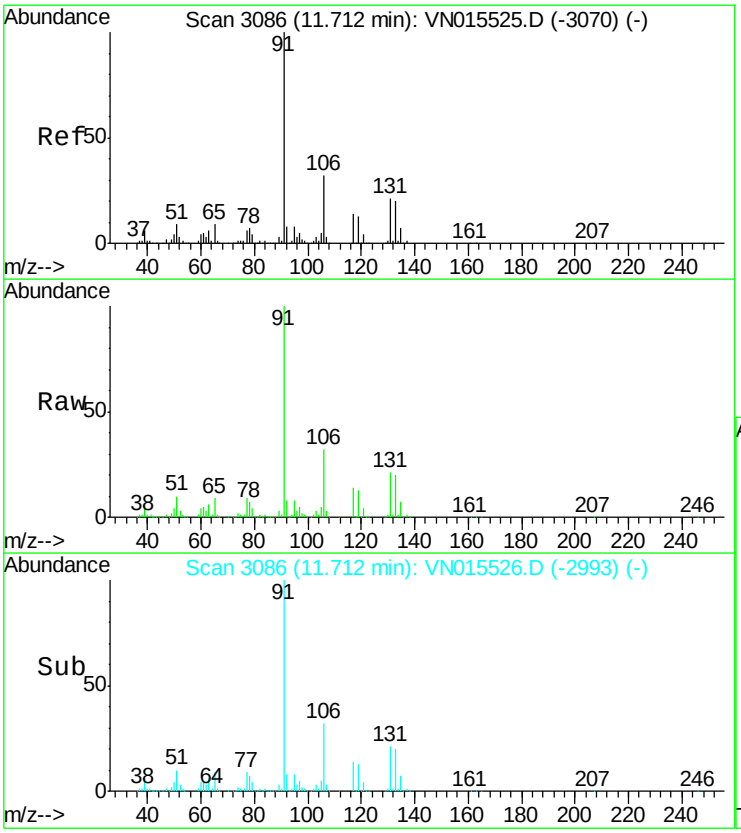
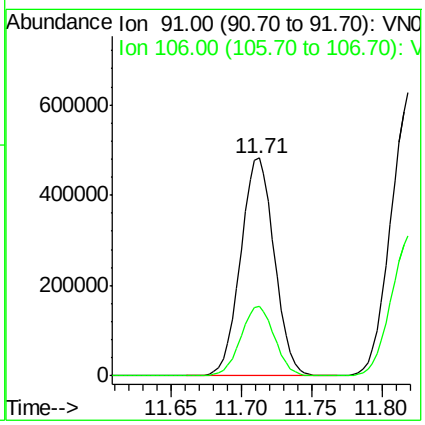


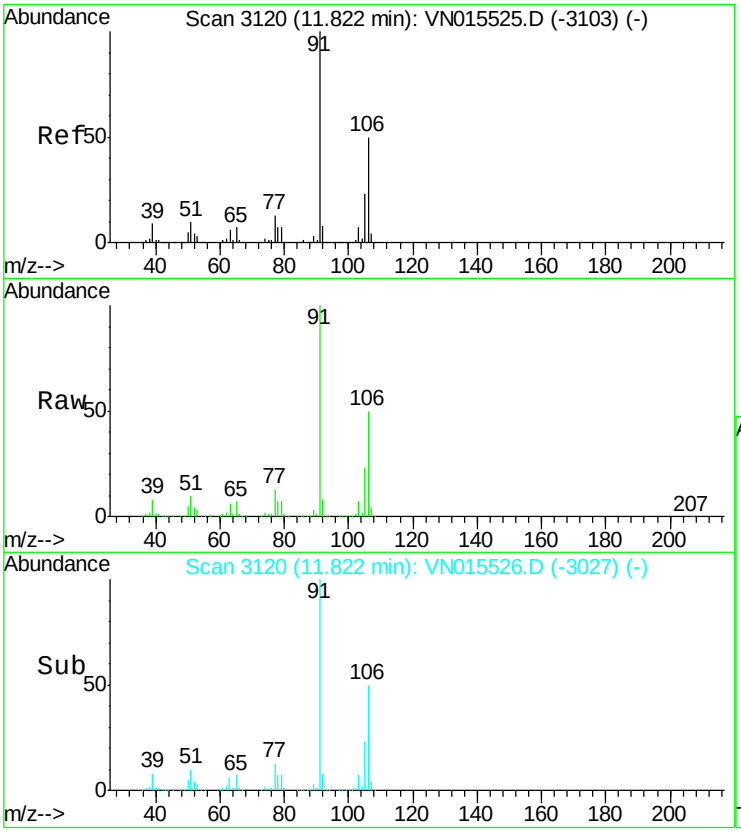


#68
Ethyl Benzene
Concen: 99.27 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 91 Resp: 809416

Ion	Ratio	Lower	Upper
91	100		
106	31.8	25.5	38.3





#69
m/p-Xylenes
Concen: 202.95 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:106 Resp: 626514

Ion	Ratio	Lower	Upper
106	100		
91	201.4	160.5	240.7

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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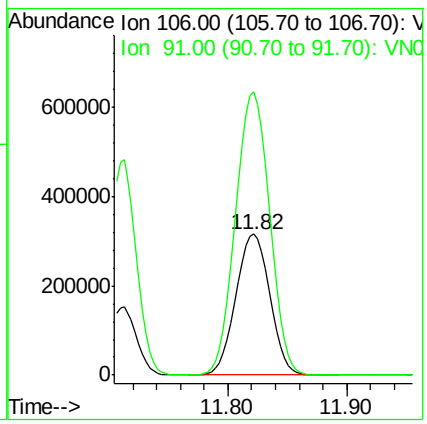
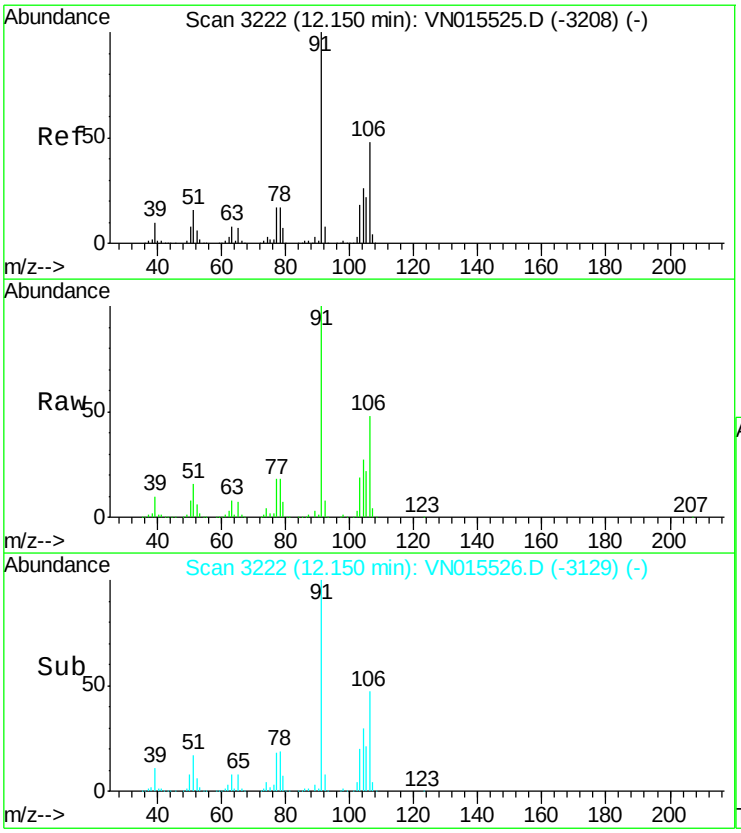
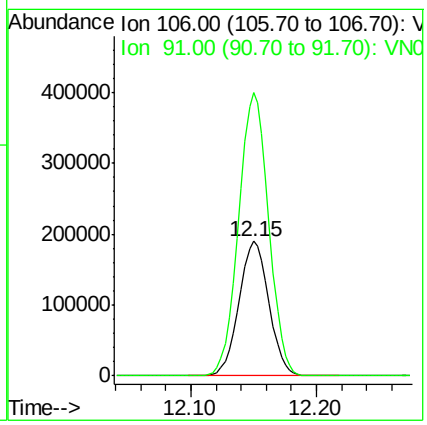


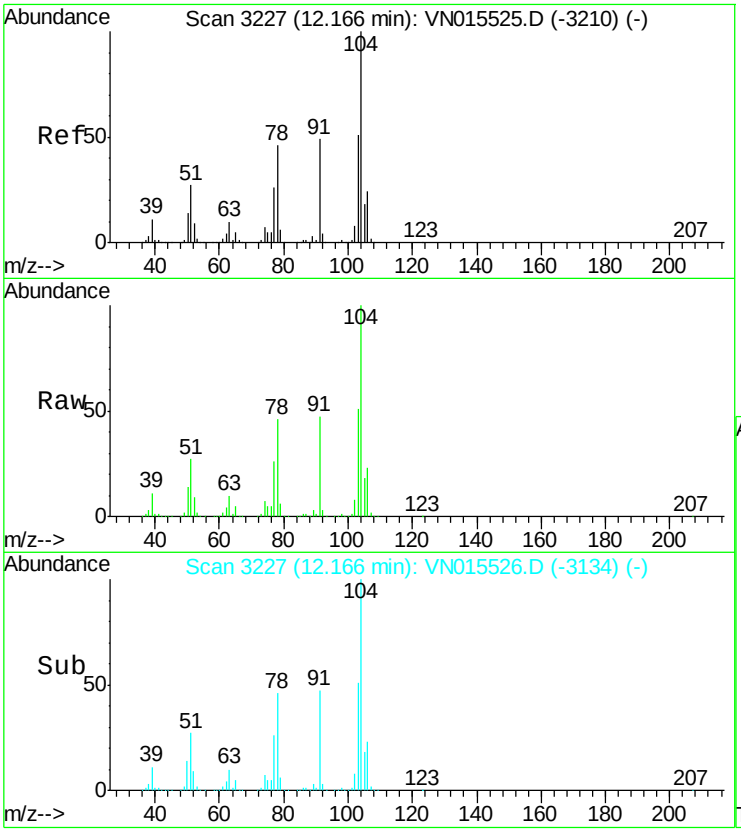


#70
o-Xylene
Concen: 99.16 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:106 Resp: 313622

Ion	Ratio	Lower	Upper
106	100		
91	211.5	104.9	314.7





#71
Styrene
Concen: 109.09 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:104 Resp: 515225

Ion	Ratio	Lower	Upper
104	100		
78	50.4	40.1	60.1
103	55.1	44.0	66.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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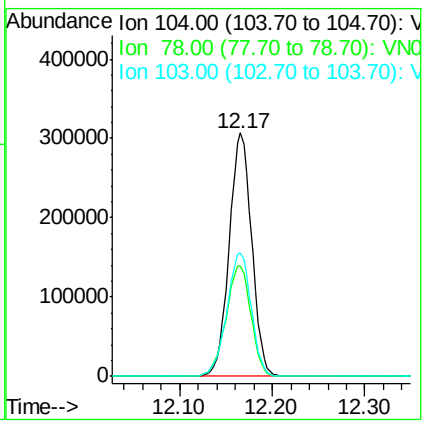
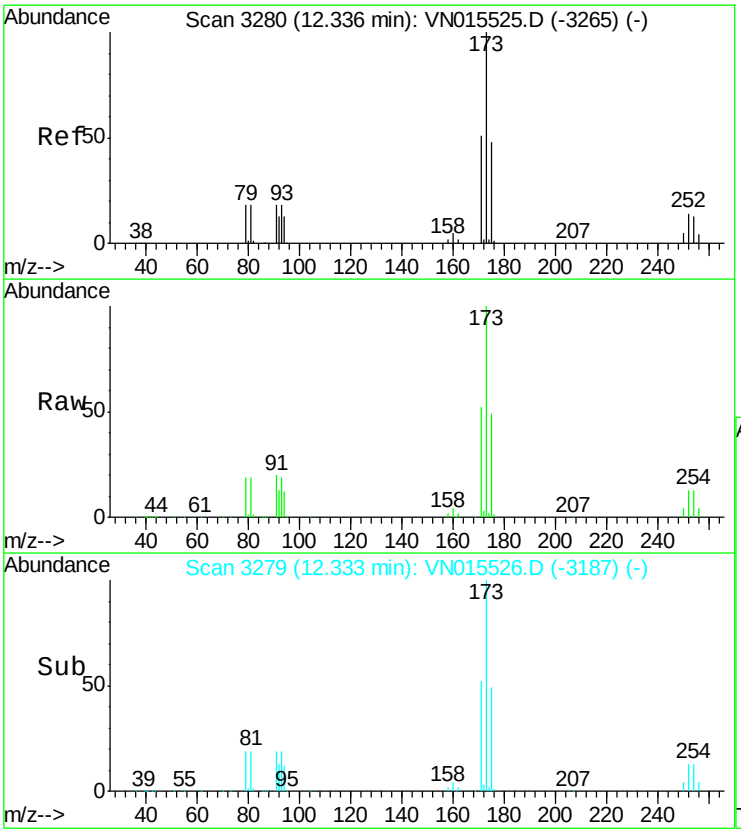
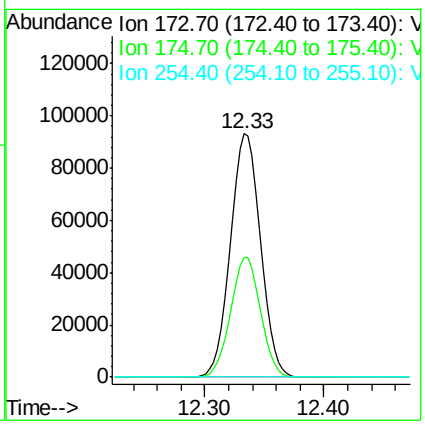


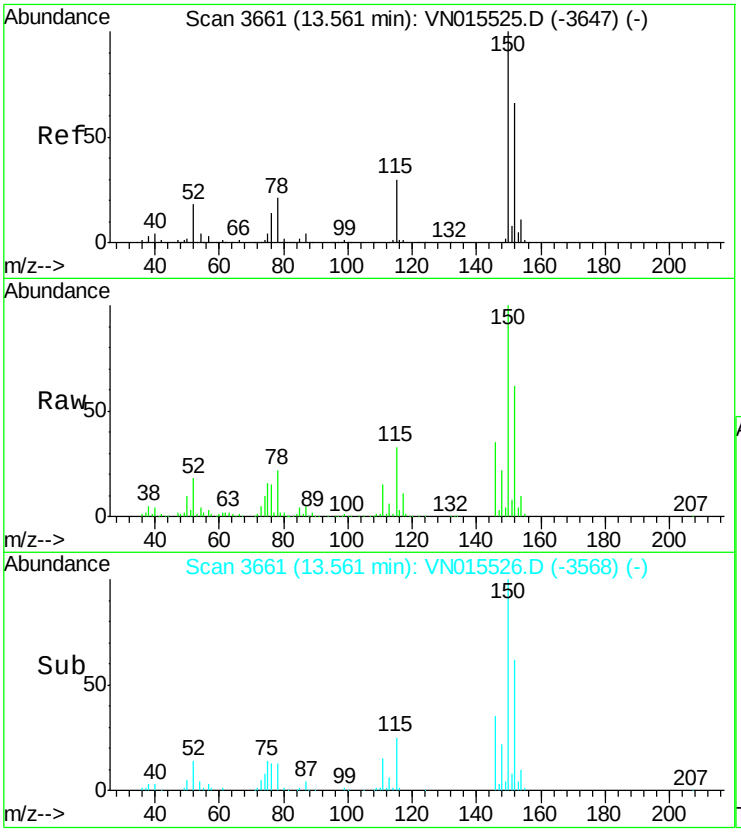


#72
Bromoform
Concen: 116.59 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:173 Resp: 163289

Ion	Ratio	Lower	Upper
173	100		
175	48.6	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:152 Resp: 113785

Ion	Ratio	Lower	Upper
152	100		
115	54.6	27.2	81.6
150	189.9	0.0	343.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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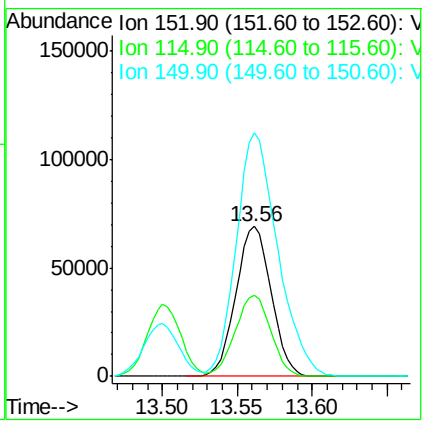
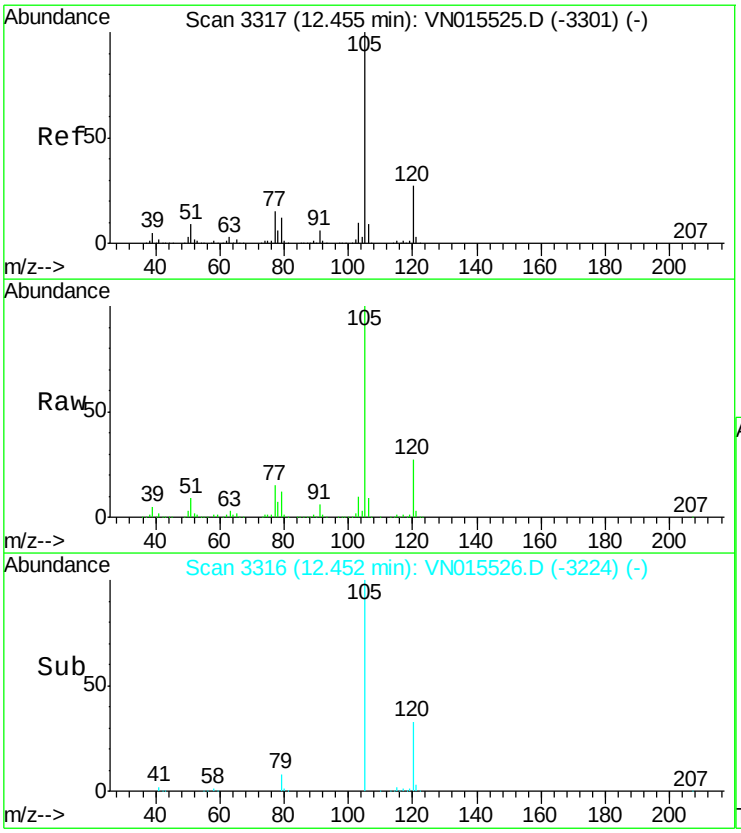
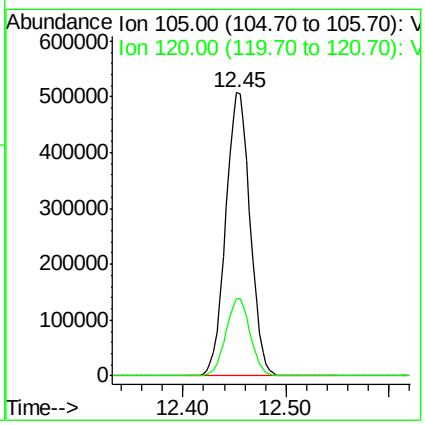




#74
Isopropylbenzene
Concen: 91.52 ug/l
RT: 12.45 min Scan# 3316
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:105 Resp: 835026

Ion	Ratio	Lower	Upper
105	100		
120	27.2	13.7	41.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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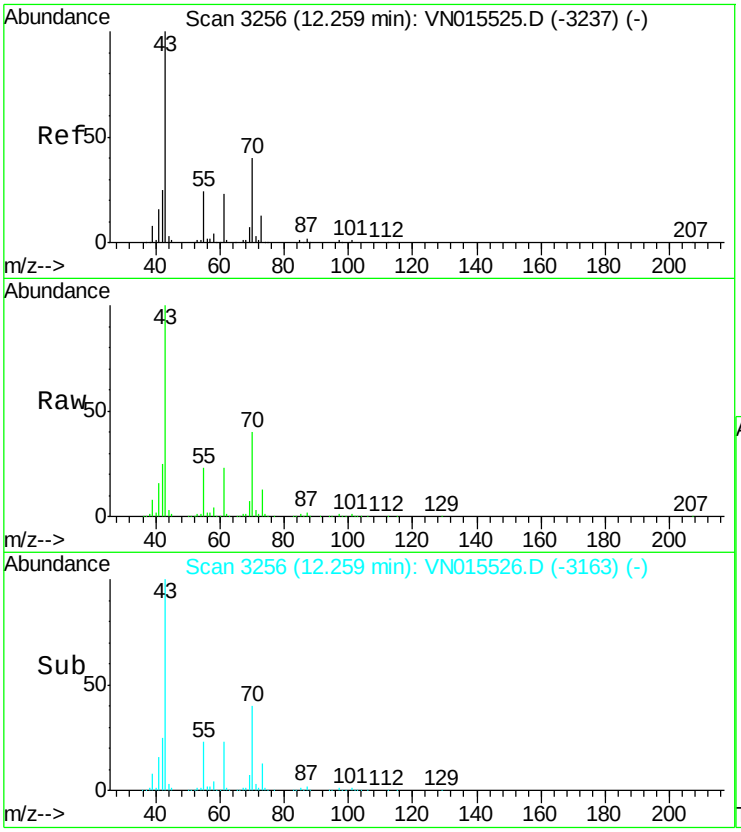
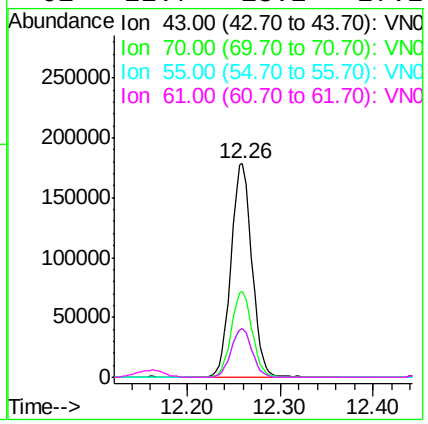
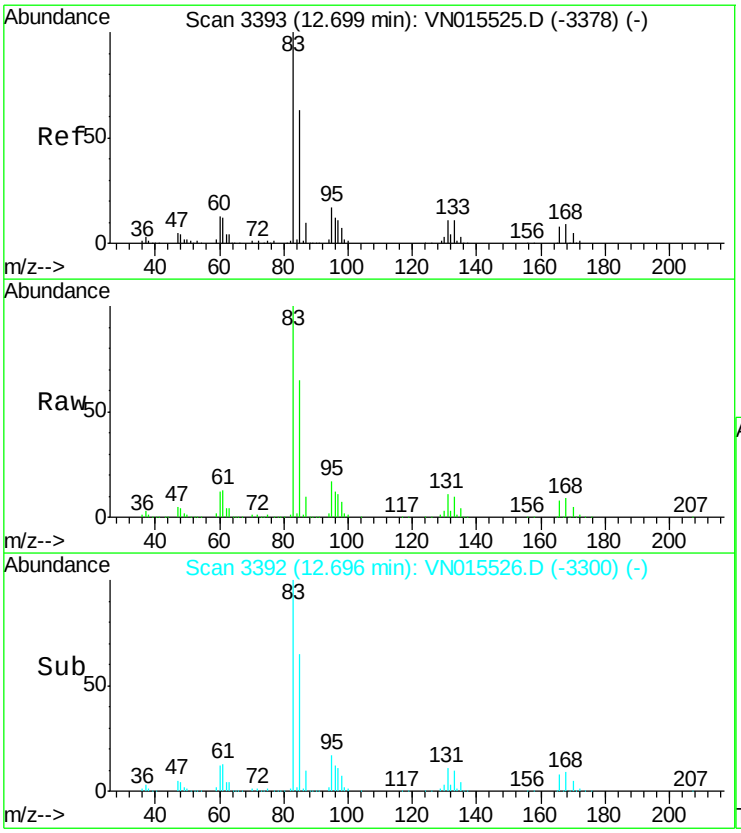


#75
N-amyl acetate
Concen: 108.00 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 43 Resp: 277676

Ion	Ratio	Lower	Upper
43	100		
70	40.3	32.0	48.0
55	23.0	18.5	27.7
61	22.7	18.2	27.2

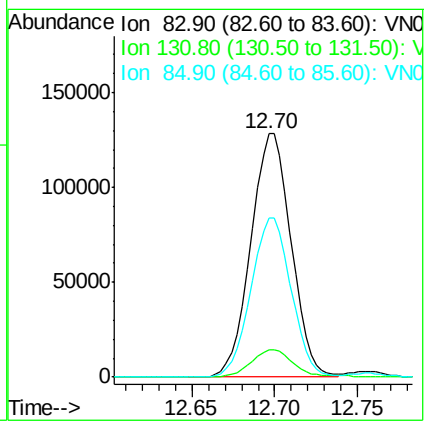


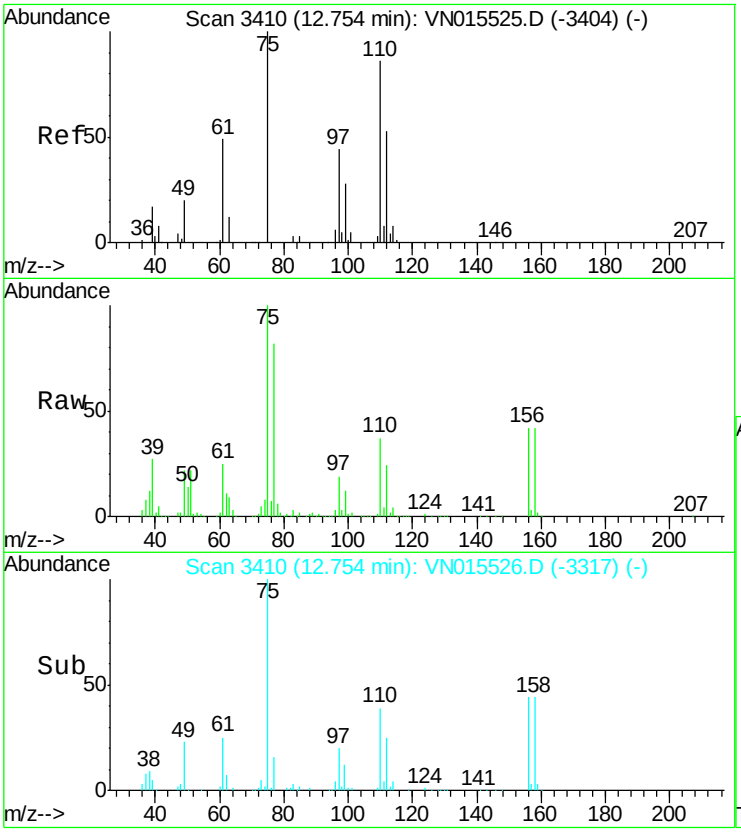


#76
1,1,2,2-Tetrachloroethane
Concen: 82.66 ug/l
RT: 12.70 min Scan# 3392
Delta R.T. -0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 83 Resp: 217032

Ion	Ratio	Lower	Upper
83	100		
131	11.9	5.9	17.6
85	65.3	31.9	95.7





#77
1,2,3-Trichloropropane
Concen: 79.66 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 75 Resp: 191351

Ion	Ratio	Lower	Upper
75	100		
77	200.9	90.4	271.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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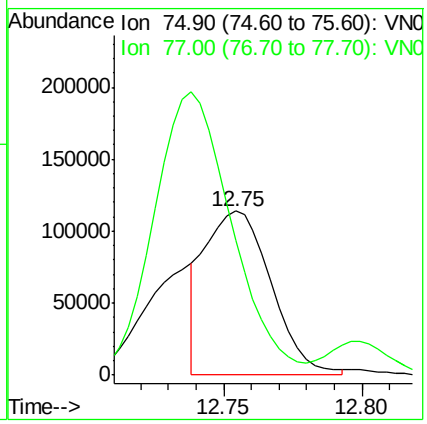
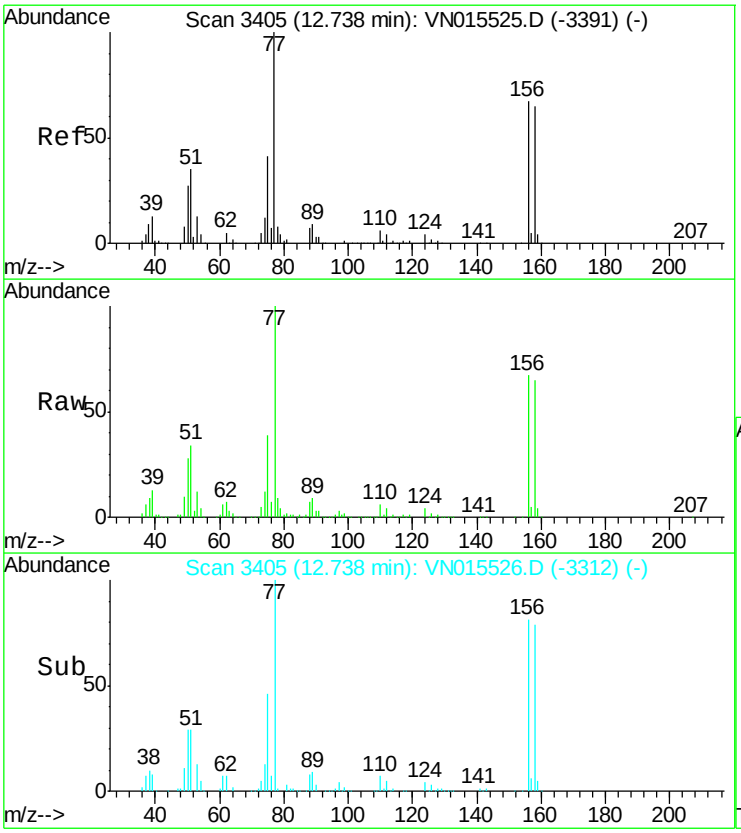
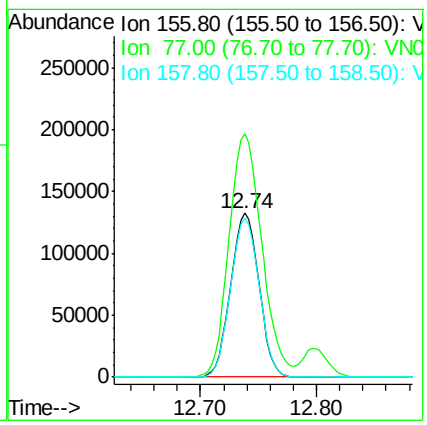


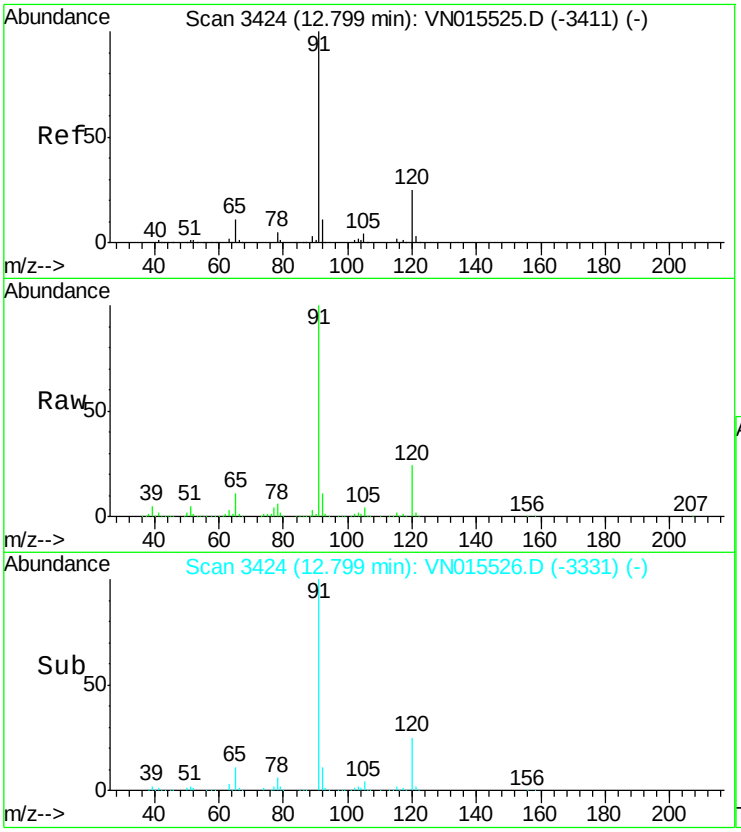


#78
Bromobenzene
Concen: 93.73 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:156 Resp: 222593

Ion	Ratio	Lower	Upper
156	100		
77	172.7	86.0	258.0
158	98.0	48.7	146.1





#79
n-propylbenzene
Concen: 93.35 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 91 Resp: 908057

Ion	Ratio	Lower	Upper
91	100		
120	24.4	12.2	36.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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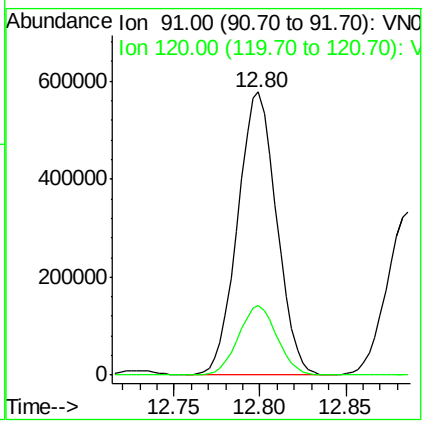
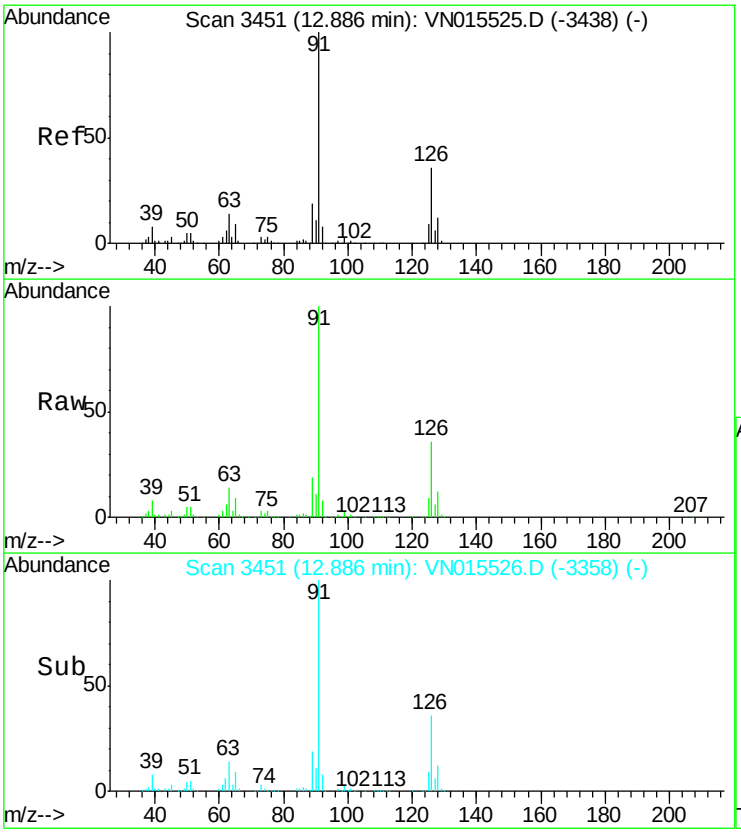
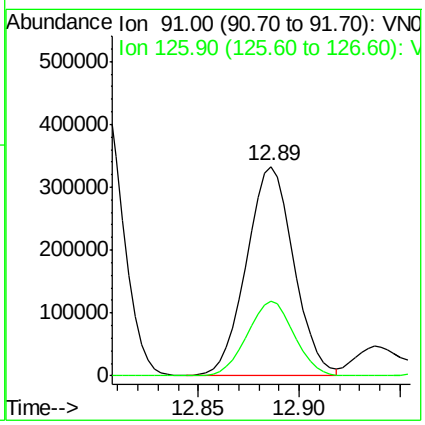


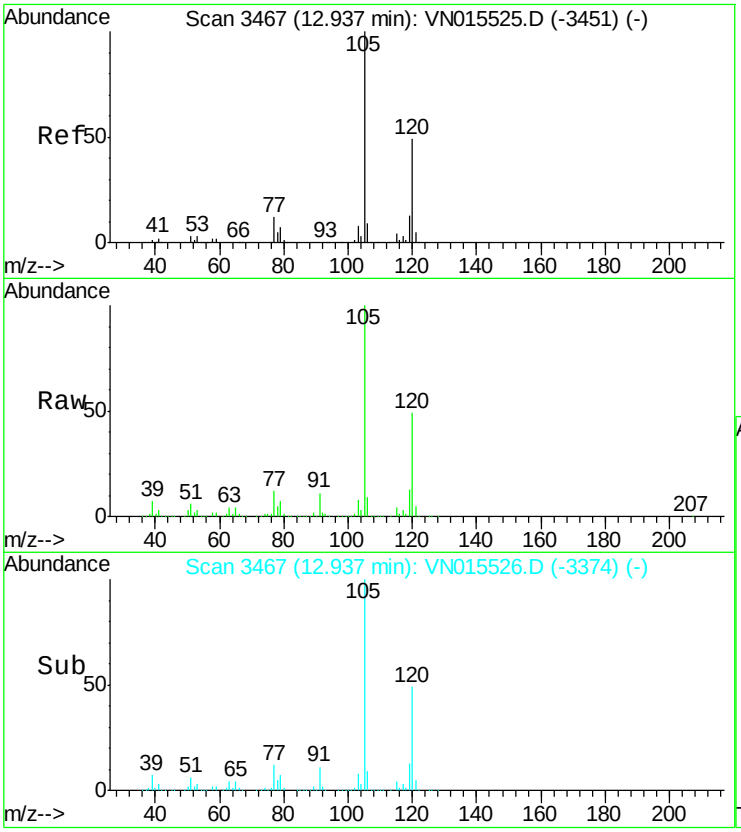


#80
2-Chlorotoluene
Concen: 88.78 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 91 Resp: 547769

Ion	Ratio	Lower	Upper
91	100		
126	35.4	17.9	53.8





#81
1,3,5-Trimethylbenzene
Concen: 95.46 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:105 Resp: 692869

Ion	Ratio	Lower	Upper
105	100		
120	49.8	24.6	73.8

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

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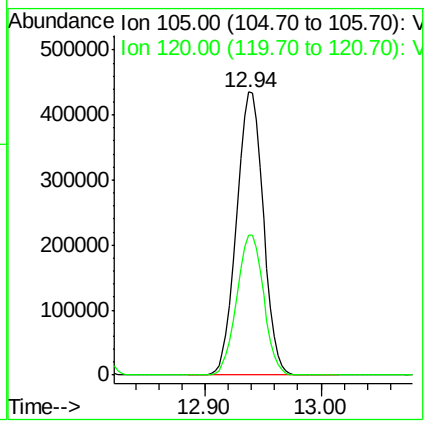
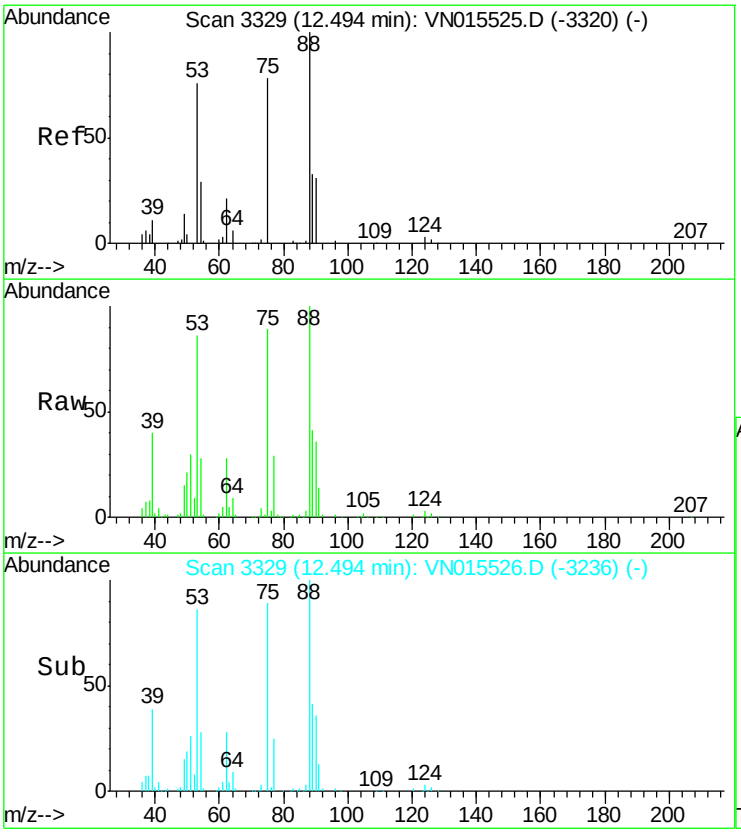
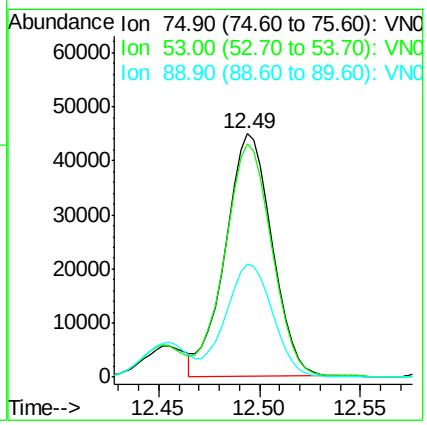


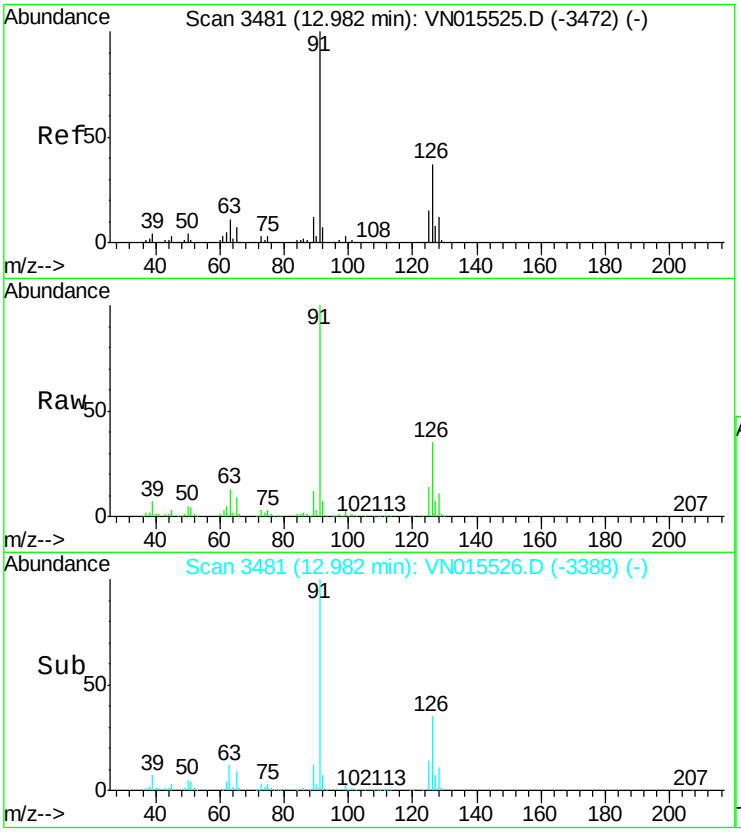


#82
trans-1,4-Dichloro-2-butene
Concen: 109.38 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 75 Resp: 72711

Ion	Ratio	Lower	Upper
75	100		
53	97.6	77.5	116.3
89	47.4	37.7	56.5





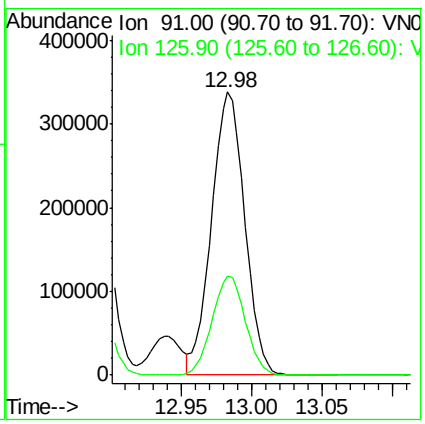
#83
4-Chlorotoluene
Concen: 95.84 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

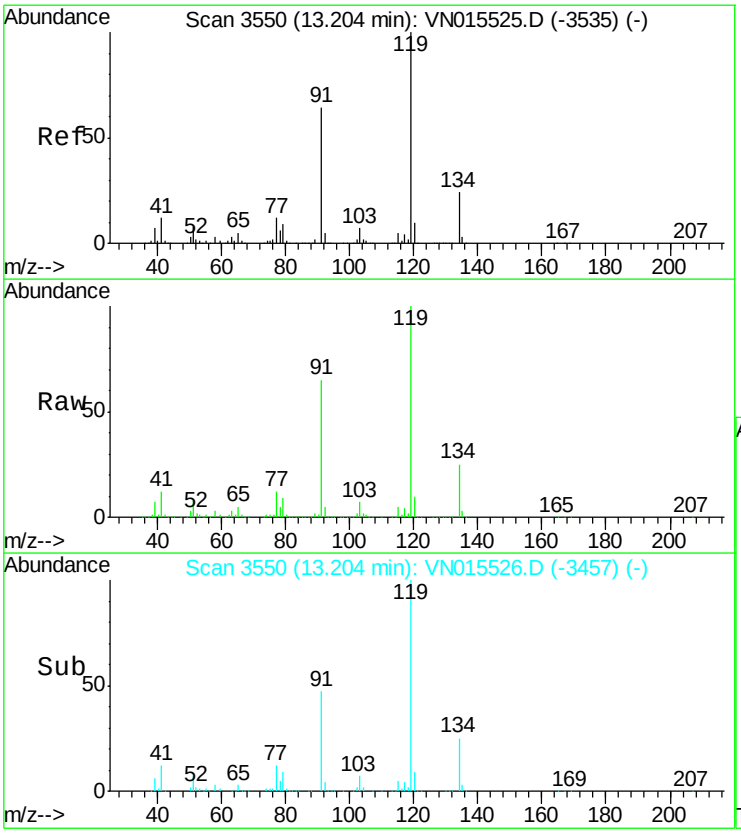
Tgt Ion: 91 Resp: 549842

Ion	Ratio	Lower	Upper
91	100		
126	35.1	17.5	52.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

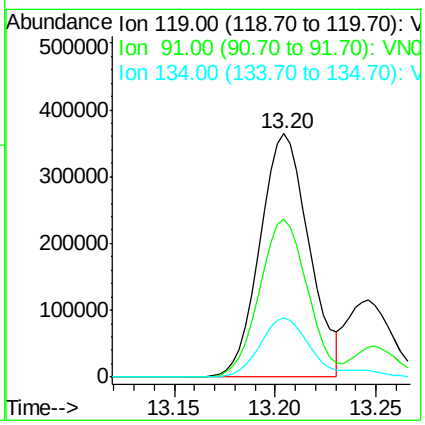


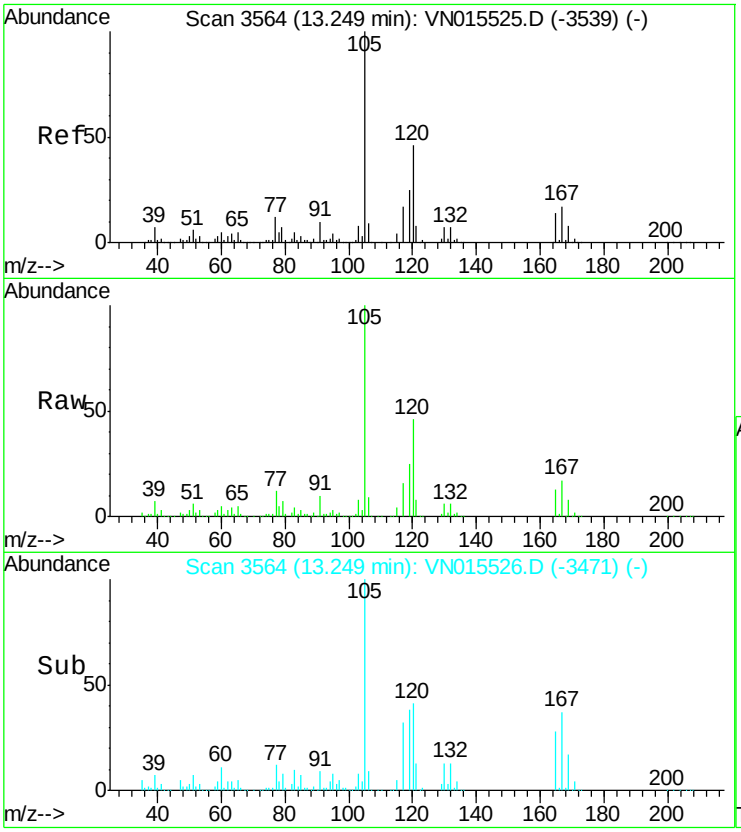


#84
tert-Butylbenzene
Concen: 93.96 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:119 Resp: 616017

Ion	Ratio	Lower	Upper
119	100		
91	63.8	31.9	95.9
134	24.2	12.1	36.3





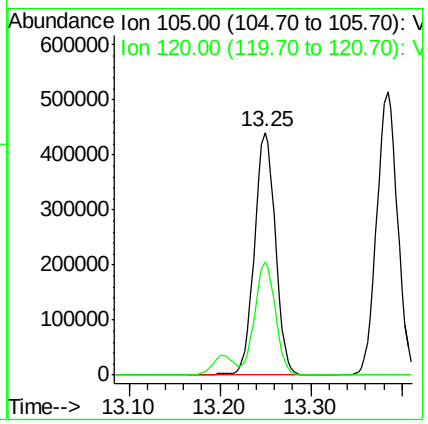
#85
1,2,4-Trimethylbenzene
Concen: 97.12 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

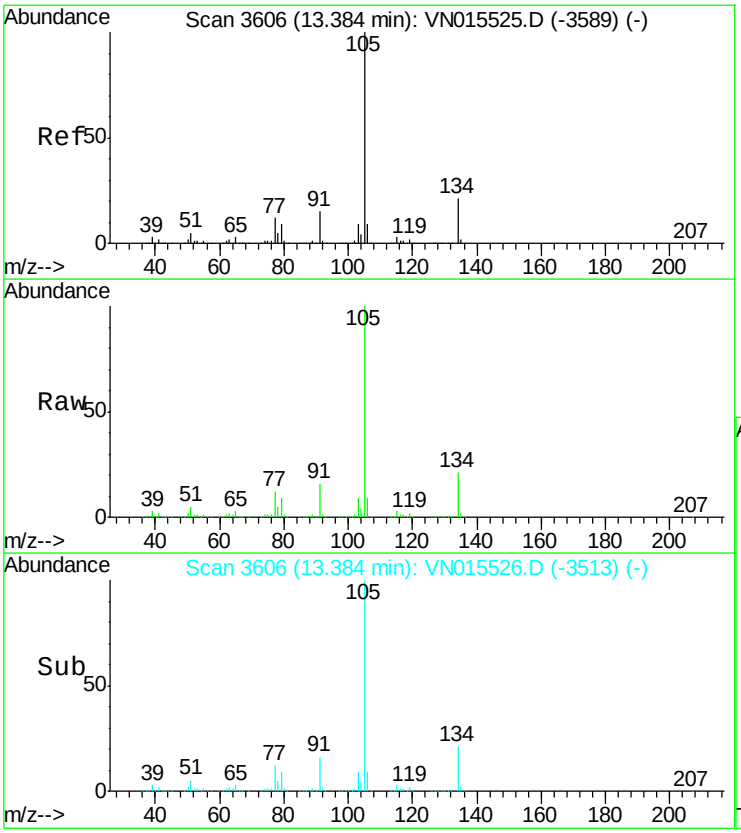
Tgt Ion:105 Resp: 702771

Ion	Ratio	Lower	Upper
105	100		
120	46.4	23.1	69.3

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

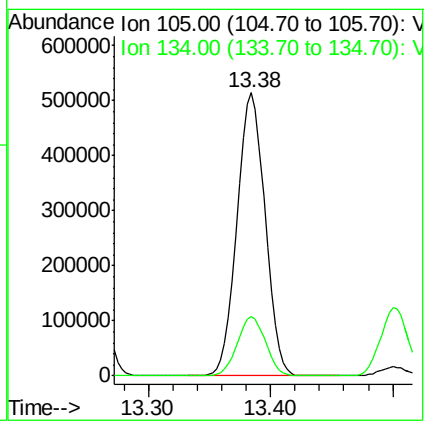


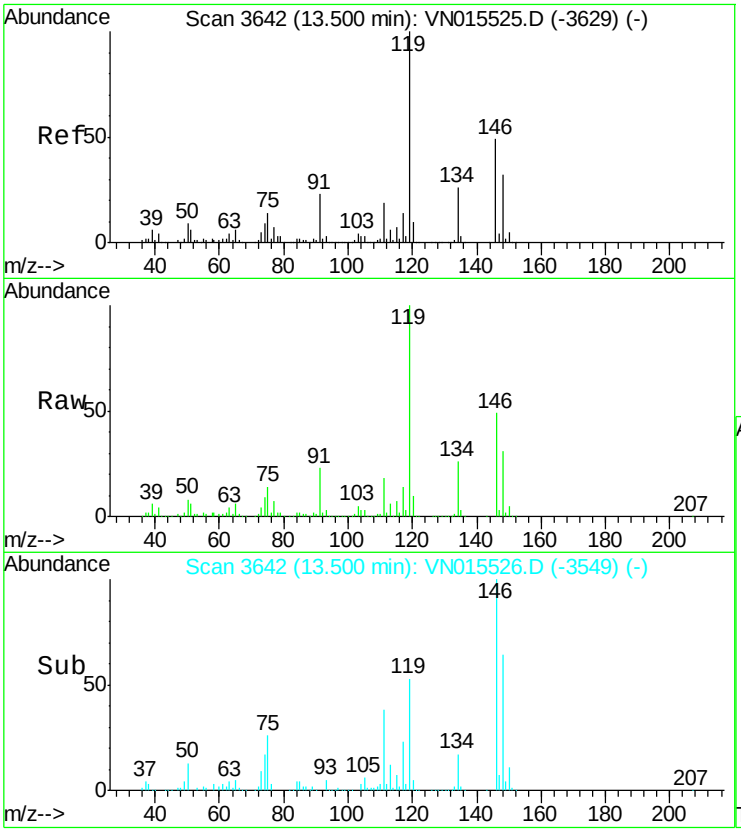


#86
sec-Butylbenzene
Concen: 93.64 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:105 Resp: 816636

Ion	Ratio	Lower	Upper
105	100		
134	21.1	10.6	31.8





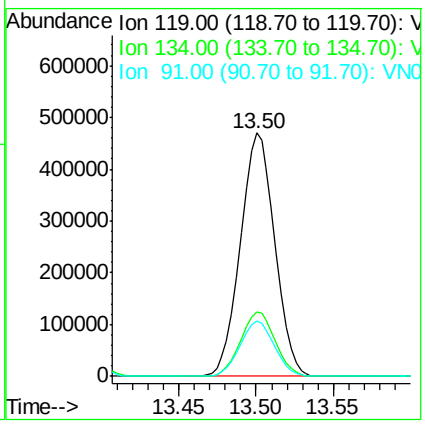
#87
p-Isopropyltoluene
Concen: 102.34 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

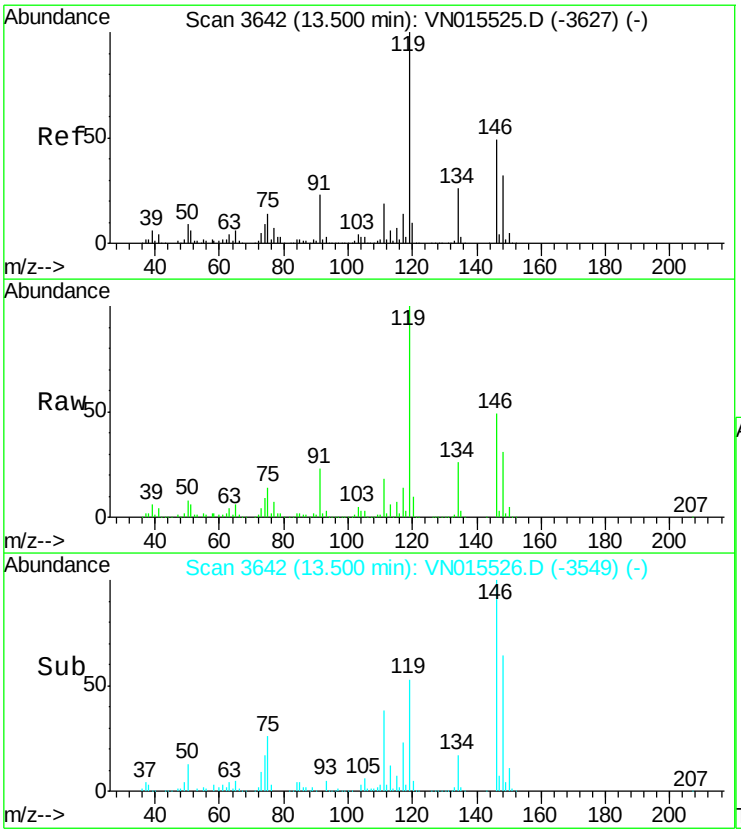
Tgt Ion:119 Resp: 726775

Ion	Ratio	Lower	Upper
119	100		
134	26.6	13.3	39.9
91	22.8	11.7	35.1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

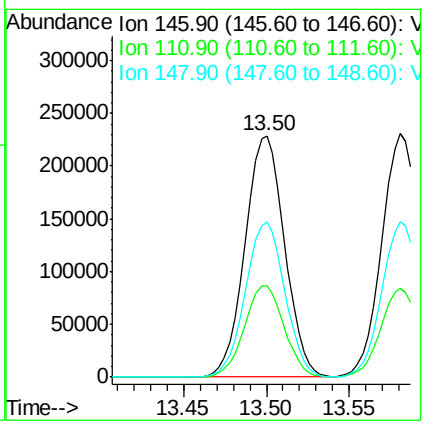


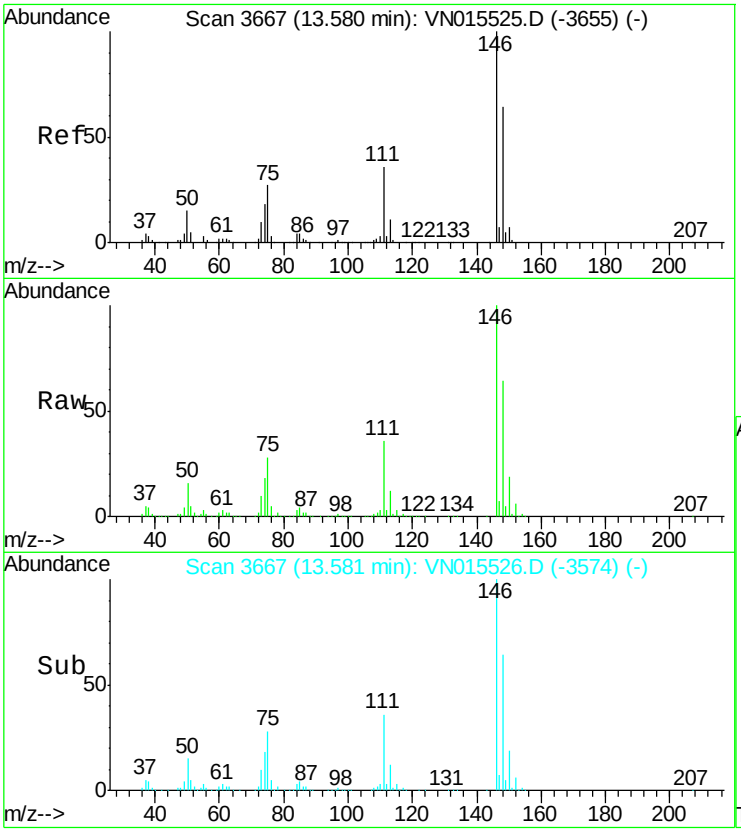


#88
1,3-Dichlorobenzene
Concen: 97.91 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:146 Resp: 378784

Ion	Ratio	Lower	Upper
146	100		
111	38.0	19.1	57.1
148	64.2	32.4	97.0





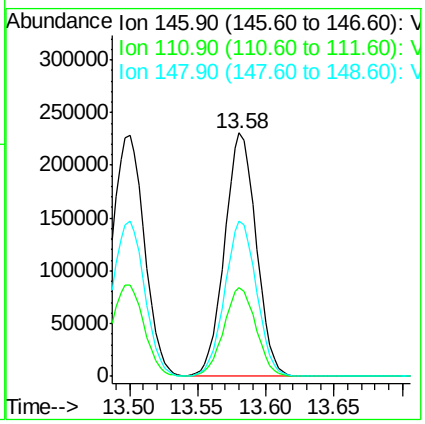
#89
1,4-Dichlorobenzene
Concen: 96.13 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

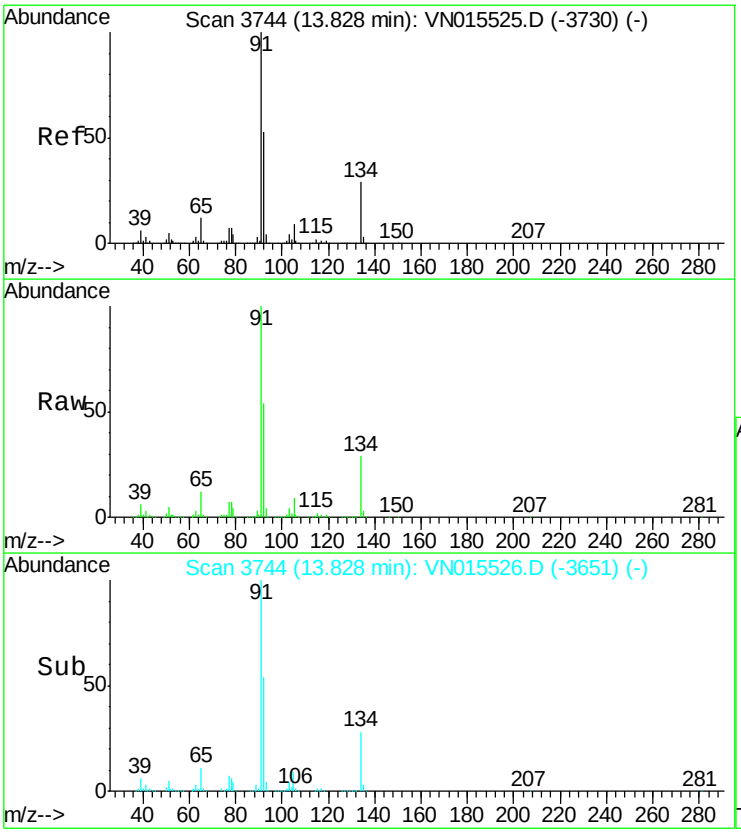
Tgt Ion:146 Resp: 371396

Ion	Ratio	Lower	Upper
146	100		
111	37.0	18.4	55.4
148	64.1	32.3	96.9

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

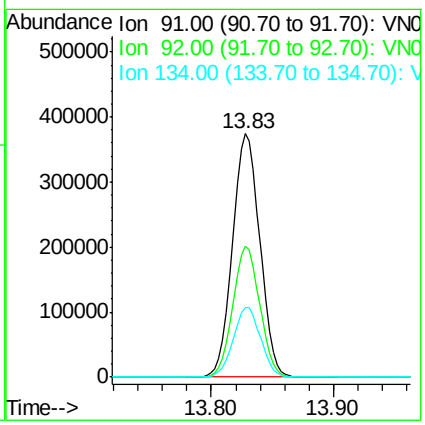


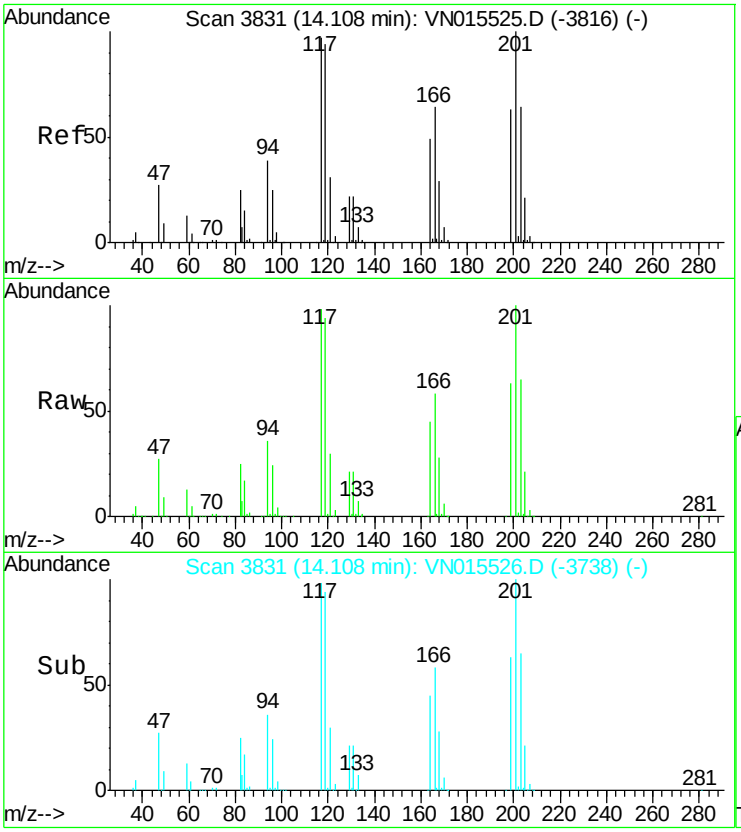


#90
n-Butylbenzene
Concen: 100.63 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion: 91 Resp: 579141

Ion	Ratio	Lower	Upper
91	100		
92	52.9	26.6	79.8
134	28.6	14.4	43.4





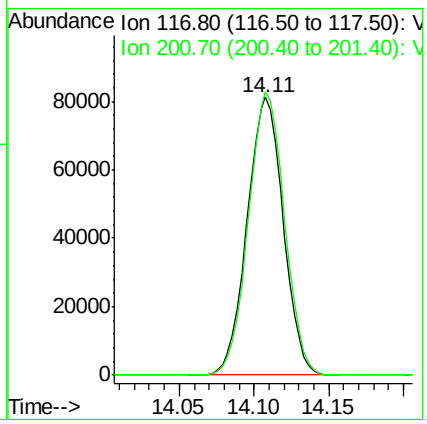
#91
Hexachloroethane
Concen: 94.96 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

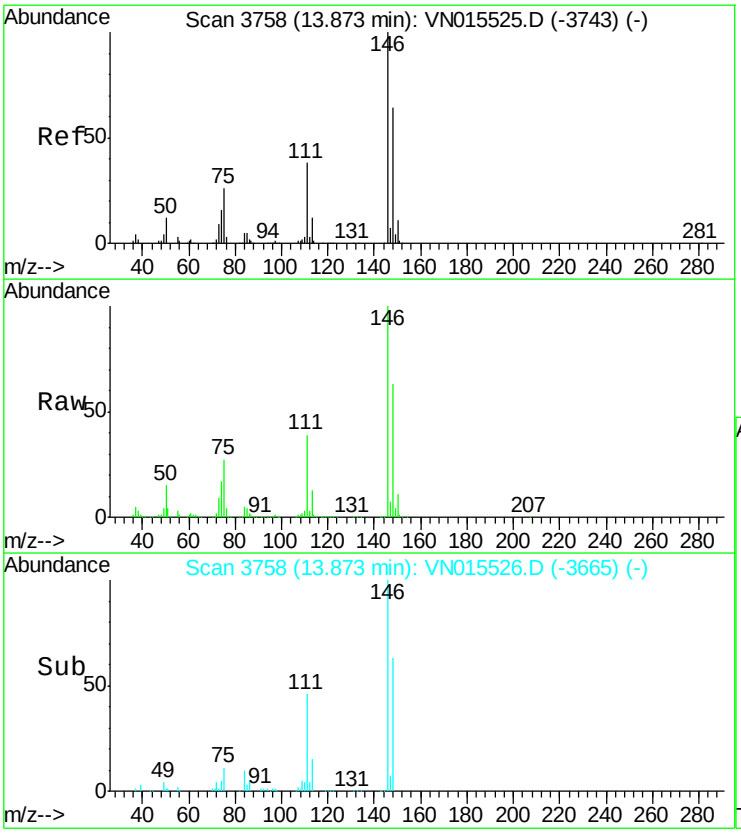
Tgt Ion:117 Resp: 136263

Ion	Ratio	Lower	Upper
117	100		
201	101.9	51.7	155.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

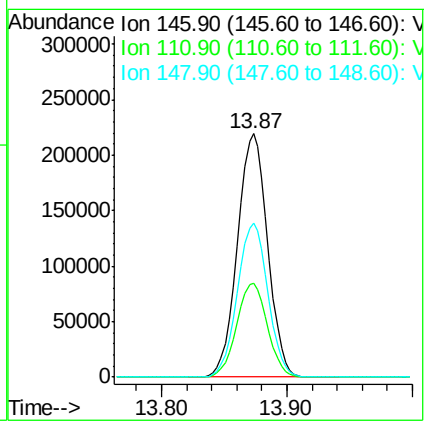


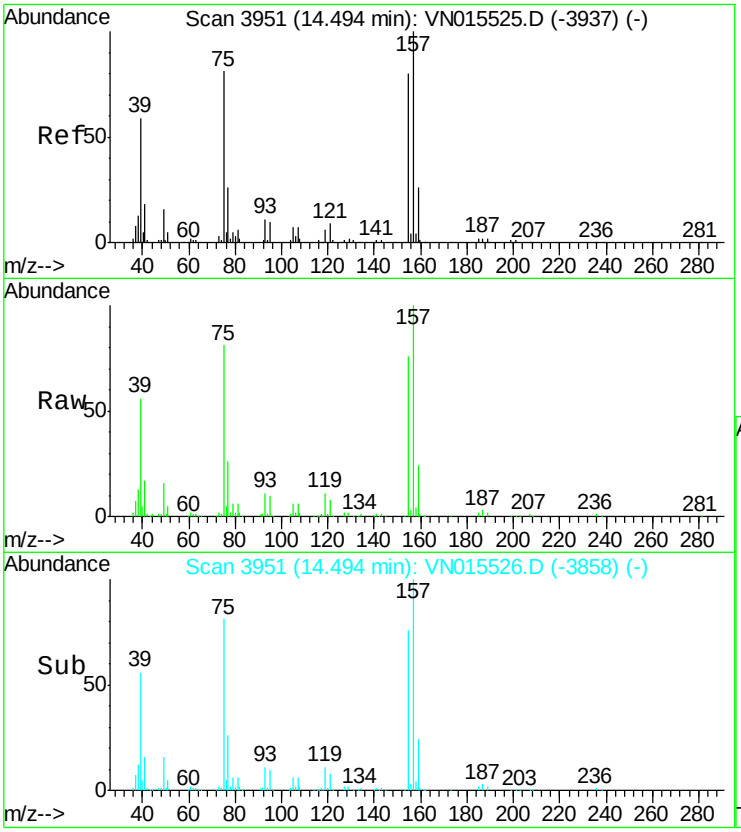


#92
1,2-Dichlorobenzene
Concen: 93.00 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:146 Resp: 366124

Ion	Ratio	Lower	Upper
146	100		
111	39.2	19.4	58.2
148	64.0	32.4	97.0





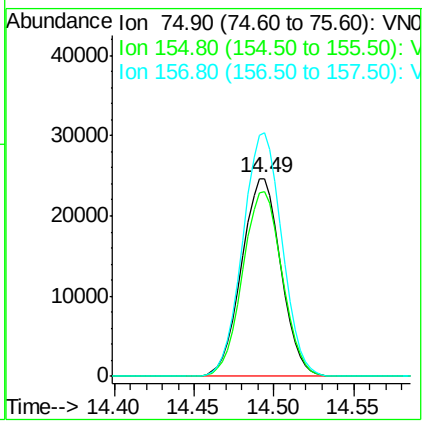
#93
1,2-Dibromo-3-Chloropropane
Concen: 94.40 ug/l
RT: 14.49 min Scan# 3951
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

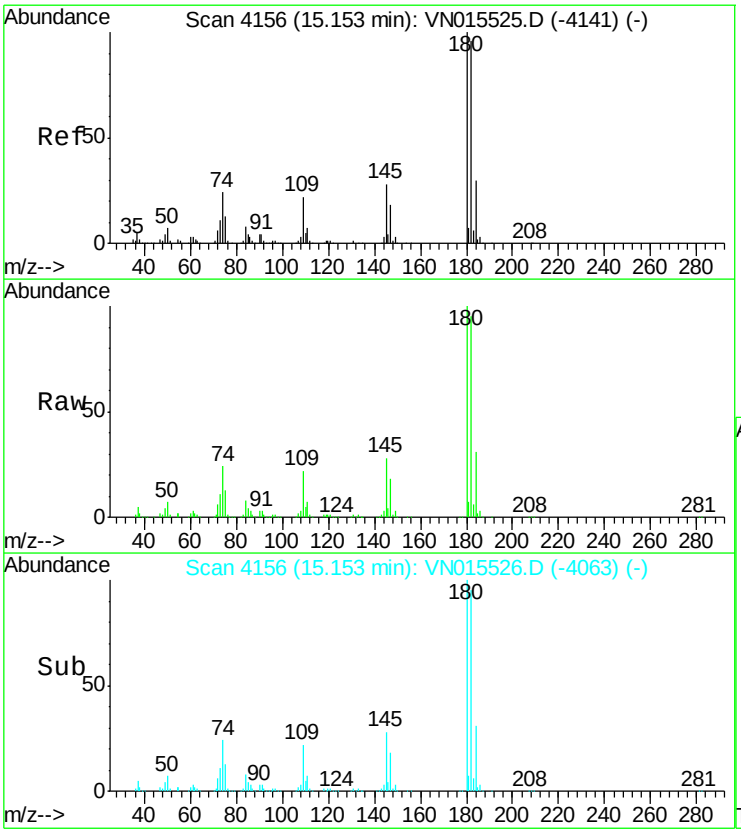
Tgt Ion: 75 Resp: 41367

Ion	Ratio	Lower	Upper
75	100		
155	93.8	49.4	148.2
157	122.9	61.3	183.8

Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

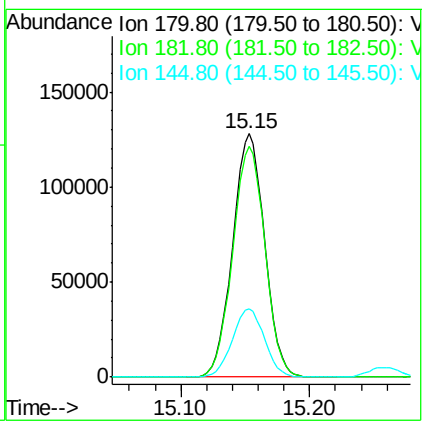


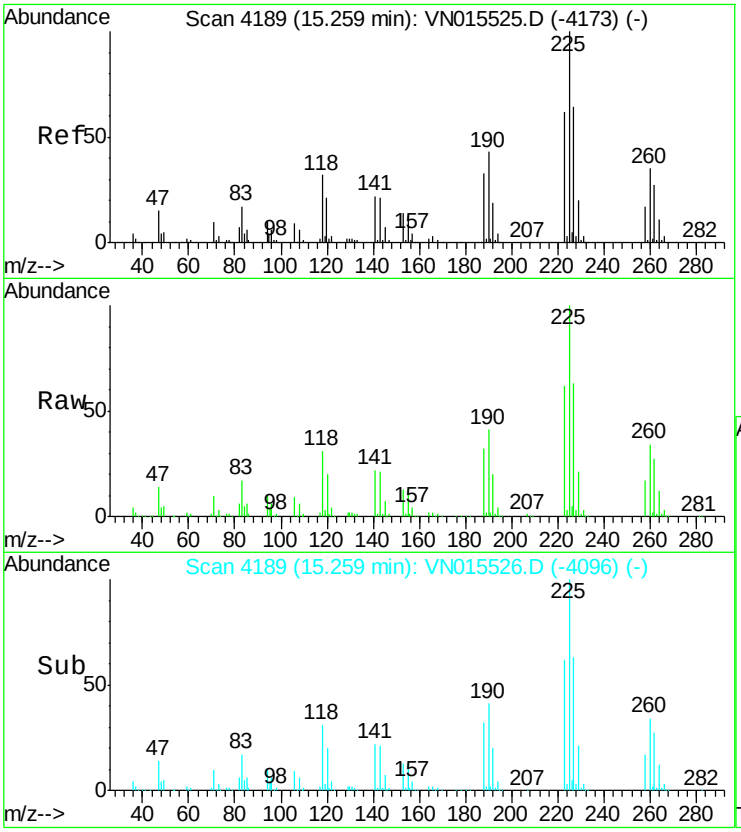


#94
1,2,4-Trichlorobenzene
Concen: 112.39 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:180 Resp: 219553

Ion	Ratio	Lower	Upper
180	100		
182	96.0	48.0	144.0
145	28.4	14.0	42.0

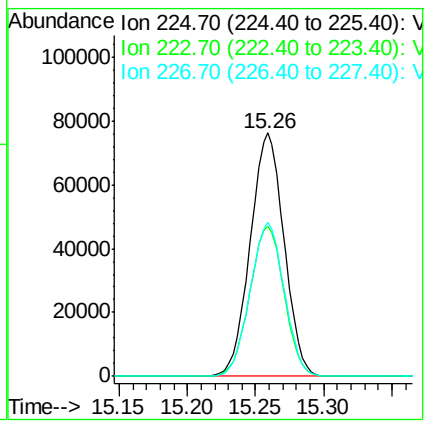




#95
Hexachlorobutadiene
Concen: 95.50 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:225 Resp: 131189

Ion	Ratio	Lower	Upper
225	100		
223	62.6	31.6	95.0
227	63.6	32.1	96.5



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
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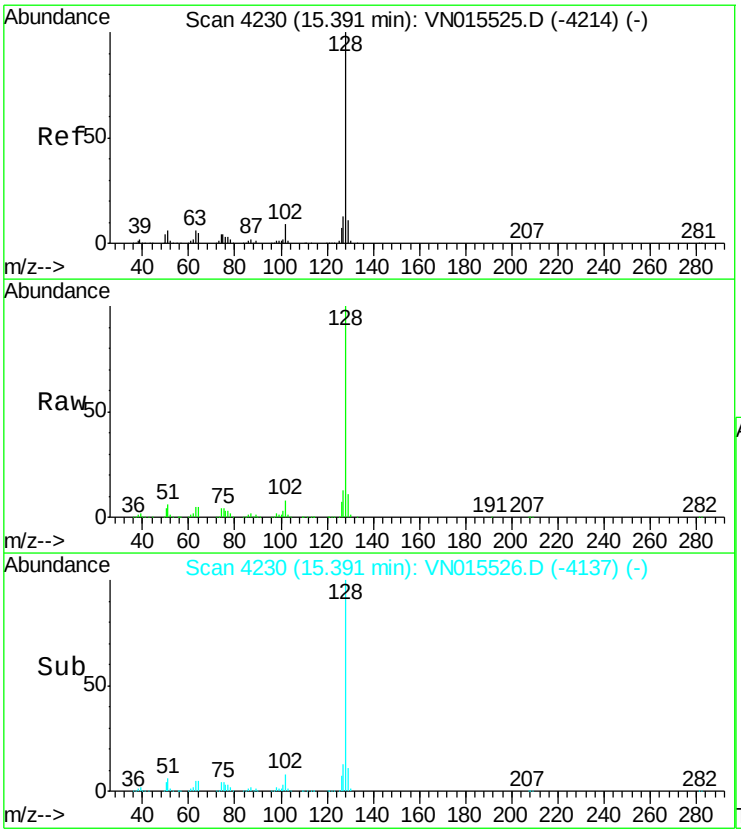
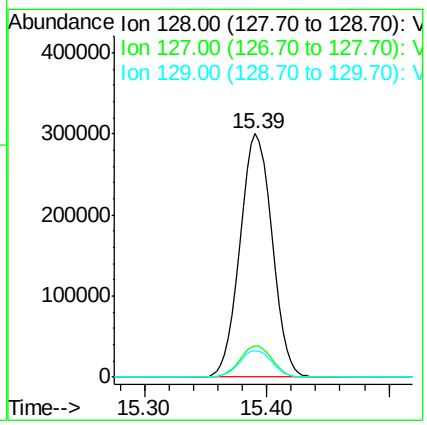
5/21/2014 11:02:18 AM

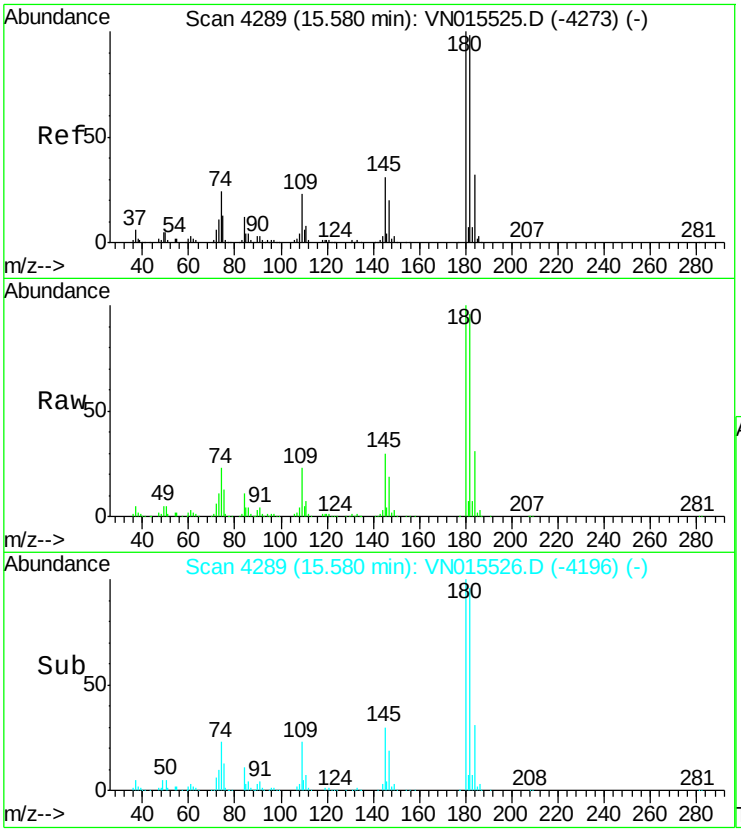


#96
Naphthalene
Concen: 119.17 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:128 Resp: 543636

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.3	15.5
129	10.9	8.7	13.1

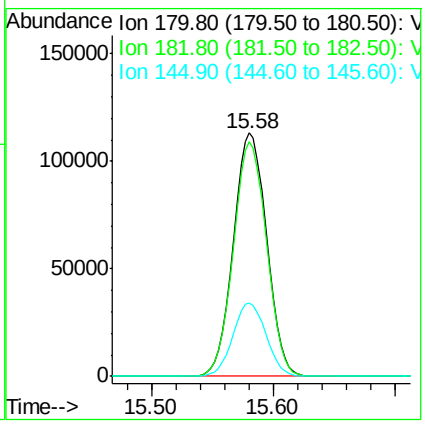




#97
1,2,3-Trichlorobenzene
Concen: 106.58 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015526.D
Acq: 20 May 2014 19:24

Tgt Ion:180 Resp: 212970

Ion	Ratio	Lower	Upper
180	100		
182	96.0	47.8	143.4
145	30.1	14.9	44.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC100

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:18 AM

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015527.D
Acq On : 20 May 2014 19:55
Operator : MD
Sample : VSTDICC200
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:31 AM

Quant Time: May 21 01:38:57 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	188786	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	267445	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	237607	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	112641	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	395027	164.92	ug/l	0.00
Spiked Amount 50.000			Recovery	=	329.84%	
36) Dibromofluoromethane	7.80	113	327763	187.99	ug/l	0.00
Spiked Amount 50.000			Recovery	=	375.98%	
51) Toluene-d8	10.29	98	1199281	182.97	ug/l	0.00
Spiked Amount 50.000			Recovery	=	365.94%	
63) 4-Bromofluorobenzene	12.61	95	427412	196.34	ug/l	0.00
Spiked Amount 50.000			Recovery	=	392.68%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	286624	132.68	ug/l	100
3) Chlorodifluoromethane	1.87	51	213658	122.78	ug/l	100
4) Chloromethane	2.07	50	344526	130.39	ug/l	100
5) Vinyl Chloride	2.20	62	331121	148.15	ug/l	98
6) Bromomethane	2.58	94	210667	162.99	ug/l	98
7) Chloroethane	2.75	64	208956	148.82	ug/l	99
8) Trichlorofluoromethane	3.10	101	521181	166.57	ug/l	99
9) Diethyl Ether	3.53	74	202826	171.38	ug/l	99
10) 1,1,2-Trichlorotrifluoroet	3.90	101	293136	171.17	ug/l	99
11) Methyl Iodide	4.11	142	416925	237.87	ug/l	99
12) Tert butyl alcohol	4.95	59	208746	1002.25	ug/l	100
13) 1,1-Dichloroethene	3.88	96	293921	173.98	ug/l	98
14) Acrolein	3.72	56	202101	985.79	ug/l	99
15) Allyl chloride	4.50	41	490388	167.15	ug/l	100
16) Acrylonitrile	5.18	53	742558	906.07	ug/l	99
17) Acetone	3.94	43	635848	755.80	ug/l	99
18) Carbon Disulfide	4.23	76	843751	176.51	ug/l	99
19) Methyl Acetate	4.49	43	657568	296.73	ug/l	99
20) Methyl tert-butyl Ether	5.27	73	1034661	178.51	ug/l	100
21) Methylene Chloride	4.74	84	327670	163.77	ug/l	99
22) trans-1,2-Dichloroethene	5.27	96	313614	175.44	ug/l	99
23) Diisopropyl ether	6.18	45	1070982	161.34	ug/l	97
24) Vinyl Acetate	6.12	43	3007865	641.53	ug/l	100
25) 1,1-Dichloroethane	6.08	63	593335	165.97	ug/l	100
26) 2-Butanone	7.05	43	953617	859.35	ug/l	100
27) 2,2-Dichloropropane	7.06	77	494510	181.76	ug/l	99
28) cis-1,2-Dichloroethene	7.06	96	369411	175.62	ug/l	100
29) Bromochloromethane	7.42	49	262185	148.23	ug/l	98
30) Tetrahydrofuran	7.44	42	614172	856.67	ug/l	100
31) Chloroform	7.58	83	605745	171.28	ug/l	98
32) Cyclohexane	7.89	56	527877	130.66	ug/l	99
33) 1,1,1-Trichloroethane	7.79	97	566286	183.41	ug/l	99
37) 1,1-Dichloropropene	8.01	75	457467	179.97	ug/l	99
38) Ethyl Acetate	7.15	43	409472	214.01	ug/l	100

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015527.D
Acq On : 20 May 2014 19:55
Operator : MD
Sample : VSTDICC200
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:31 AM

Quant Time: May 21 01:38:57 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) Carbon Tetrachloride	8.00	117	512102	200.05 ug/l	99
40) Methylcyclohexane	9.29	83	561591	186.73 ug/l	99
41) Benzene	8.26	78	1340243	181.14 ug/l	100
42) Methacrylonitrile	7.37	41	248237	185.12 ug/l	99
43) 1,2-Dichloroethane	8.33	62	487585	180.04 ug/l	100
44) Isopropyl Acetate	8.35	43	724463	230.23 ug/l	99
45) Trichloroethene	9.04	130	383549	194.57 ug/l	98
46) 1,2-Dichloropropane	9.32	63	349259	173.94 ug/l	100
47) Dibromomethane	9.41	93	230227	185.36 ug/l	99
48) Bromodichloromethane	9.59	83	485713	196.11 ug/l	100
49) Methyl methacrylate	9.38	41	374798	193.35 ug/l	99
50) 1,4-Dioxane	9.40	88	89902	3530.26 ug/l	98
52) 4-Methyl-2-Pentanone	10.16	43	1945006	910.95 ug/l	99
53) Toluene	10.35	92	863366	191.01 ug/l	99
54) t-1,3-Dichloropropene	10.57	75	524474	210.57 ug/l	99
55) cis-1,3-Dichloropropene	10.03	75	563383	197.93 ug/l	99
56) 1,1,2-Trichloroethane	10.75	97	332092	186.39 ug/l	99
57) Ethyl methacrylate	10.61	69	513482	208.57 ug/l	98
58) 1,3-Dichloropropane	10.90	76	553435	181.37 ug/l	99
59) 2-Chloroethyl Vinyl ether	9.88	63	287037	313.22 ug/l	100
60) 2-Hexanone	10.93	43	1308835	913.22 ug/l	99
61) Dibromochloromethane	11.10	129	416859	210.25 ug/l	100
62) 1,2-Dibromoethane	11.21	107	353474	197.73 ug/l	100
65) Tetrachloroethene	10.83	164	352034	185.11 ug/l	99
66) Chlorobenzene	11.64	112	963389	188.72 ug/l	99
67) 1,1,1,2-Tetrachloroethane	11.71	131	371128	200.18 ug/l	99
68) Ethyl Benzene	11.71	91	1623974	196.27 ug/l	100
69) m/p-Xylenes	11.82	106	1274843	406.96 ug/l	99
70) o-Xylene	12.15	106	627428	195.51 ug/l	99
71) Styrene	12.17	104	1037838	216.55 ug/l	100
72) Bromoform	12.33	173	320512	225.52 ug/l #	99
74) Isopropylbenzene	12.46	105	1657498	183.51 ug/l	100
75) N-amyl acetate	12.26	43	565174	222.06 ug/l	99
76) 1,1,2,2-Tetrachloroethane	12.70	83	418813	161.13 ug/l	99
77) 1,2,3-Trichloropropane	12.75	75	365963m	153.91 ug/l	
78) Bromobenzene	12.74	156	437676	186.18 ug/l	100
79) n-propylbenzene	12.80	91	1827202	189.75 ug/l	100
80) 2-Chlorotoluene	12.89	91	1086411	177.86 ug/l	99
81) 1,3,5-Trimethylbenzene	12.94	105	1357633	188.95 ug/l	99
82) trans-1,4-Dichloro-2-buten	12.49	75	148130	225.10 ug/l	97
83) 4-Chlorotoluene	12.98	91	1096117	192.99 ug/l	100
84) tert-Butylbenzene	13.20	119	1211598	186.67 ug/l	100
85) 1,2,4-Trimethylbenzene	13.25	105	1352013	188.73 ug/l	99
86) sec-Butylbenzene	13.38	105	1615677	187.14 ug/l	100
87) p-Isopropyltoluene	13.50	119	1415194	201.31 ug/l	100
88) 1,3-Dichlorobenzene	13.50	146	744223	194.33 ug/l	100
89) 1,4-Dichlorobenzene	13.58	146	738333	193.05 ug/l	100
90) n-Butylbenzene	13.83	91	1143764	200.76 ug/l	99
91) Hexachloroethane	14.11	117	262998	185.15 ug/l	100
92) 1,2-Dichlorobenzene	13.87	146	714379	183.30 ug/l	99

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015527.D
Acq On : 20 May 2014 19:55
Operator : MD
Sample : VSTDICC200
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:31 AM

Quant Time: May 21 01:38:57 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
93) 1,2-Dibromo-3-Chloropropan	14.49	75	83279	191.97 ug/l	98
94) 1,2,4-Trichlorobenzene	15.15	180	467775	241.89 ug/l	99
95) Hexachlorobutadiene	15.26	225	257790	189.56 ug/l	99
96) Naphthalene	15.39	128	1179633	261.20 ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	458649	231.86 ug/l	100

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

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015527.D
Acq On : 20 May 2014 19:55
Operator : MD
Sample : VSTDICC200
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 01:38:57 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 01:08:46 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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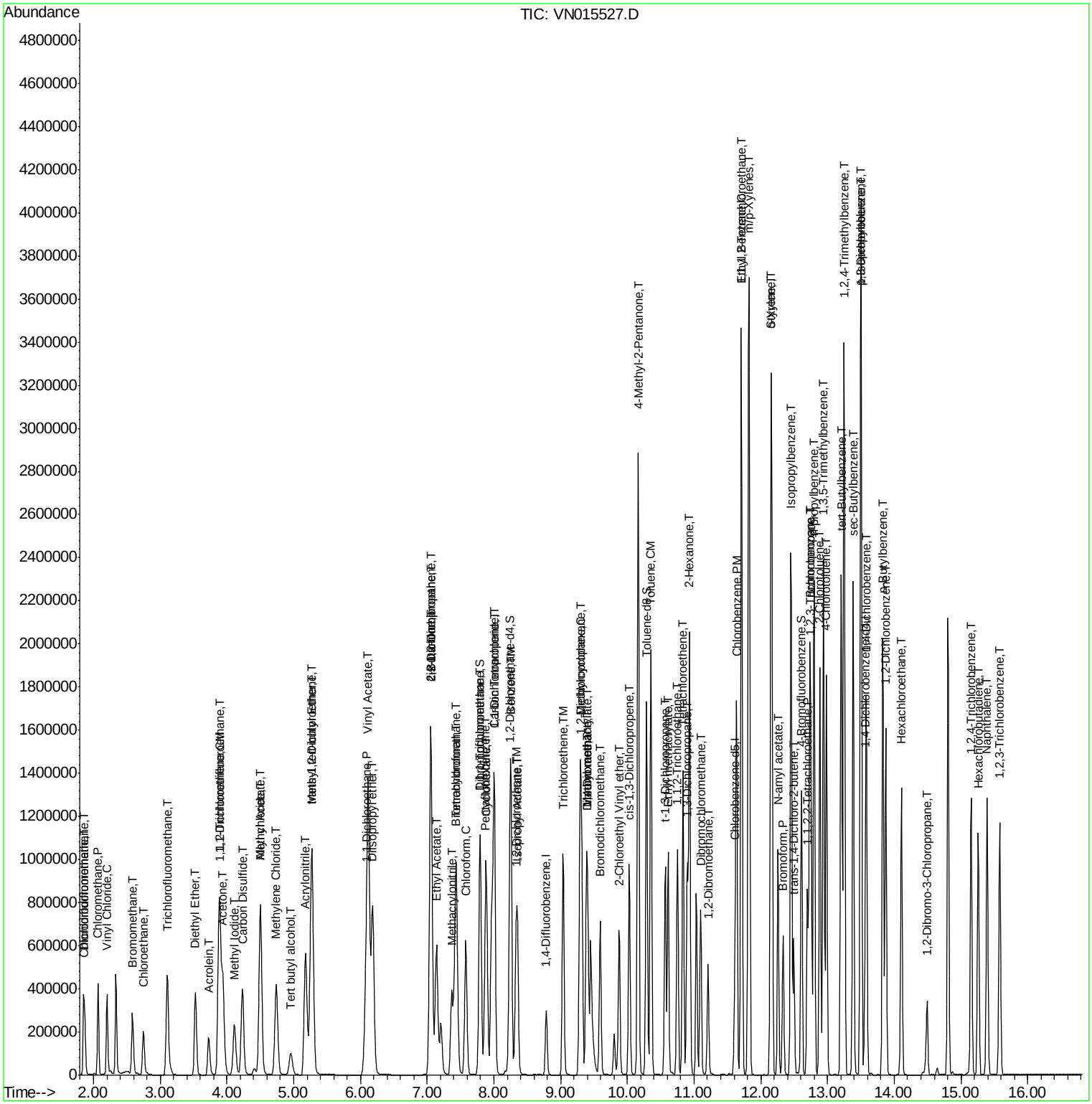

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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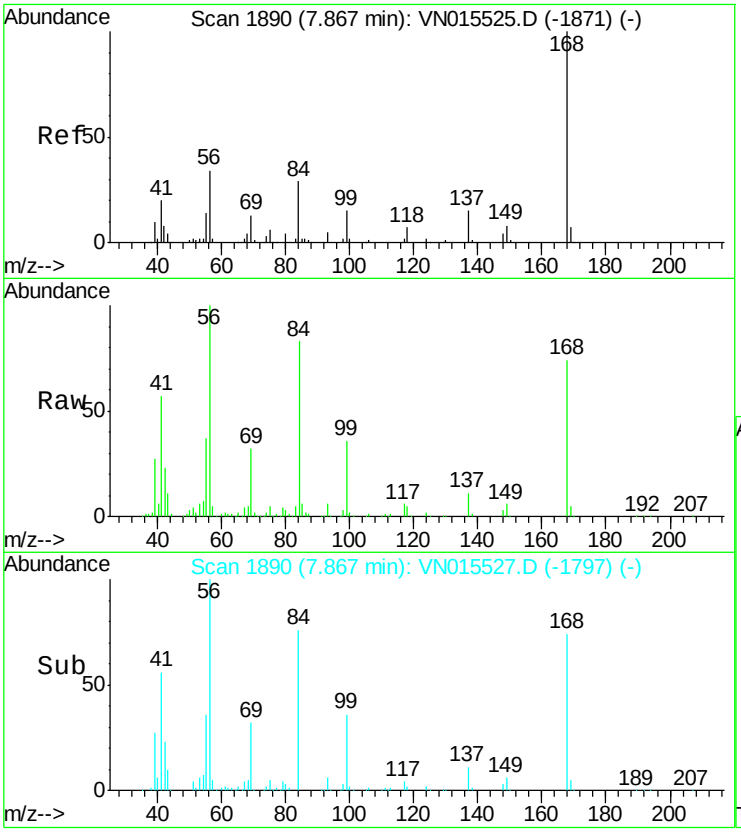
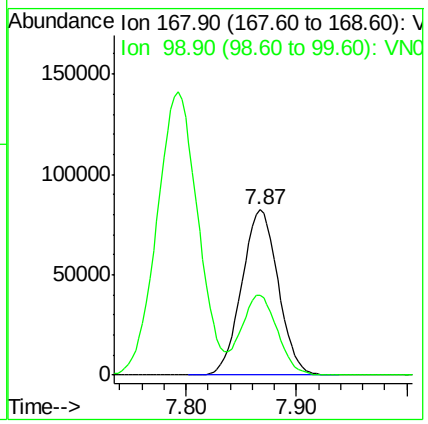
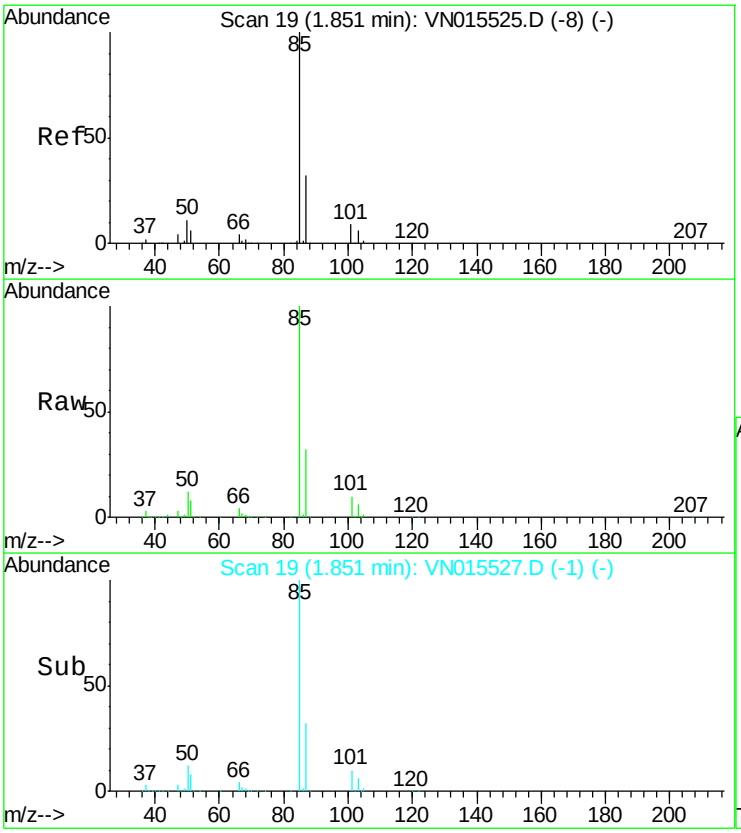


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:168 Resp: 188786

Ion	Ratio	Lower	Upper
168	100		
99	48.2	39.0	58.4

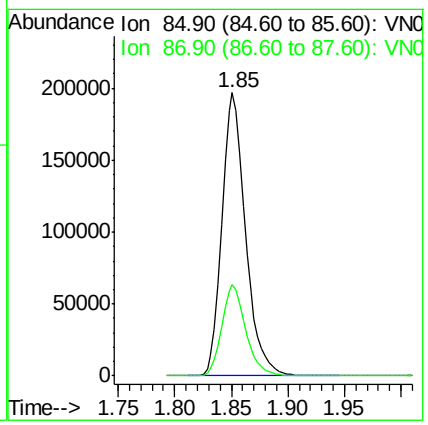




#2
Dichlorodifluoromethane
Concen: 132.68 ug/l
RT: 1.85 min Scan# 19
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 85 Resp: 286624

Ion	Ratio	Lower	Upper
85	100		
87	32.3	16.1	48.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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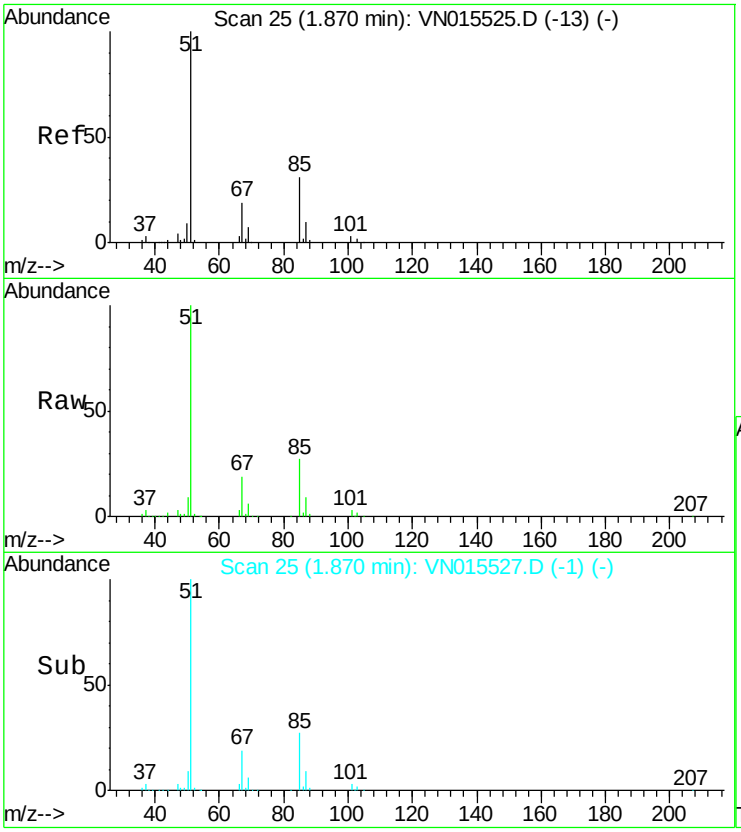
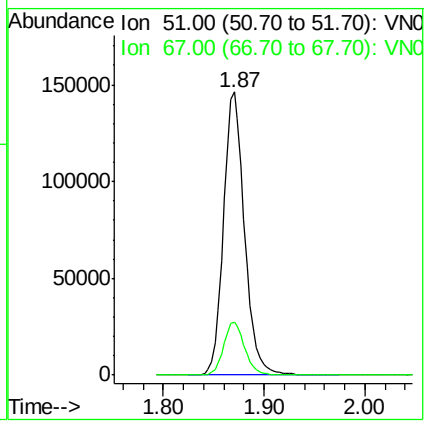
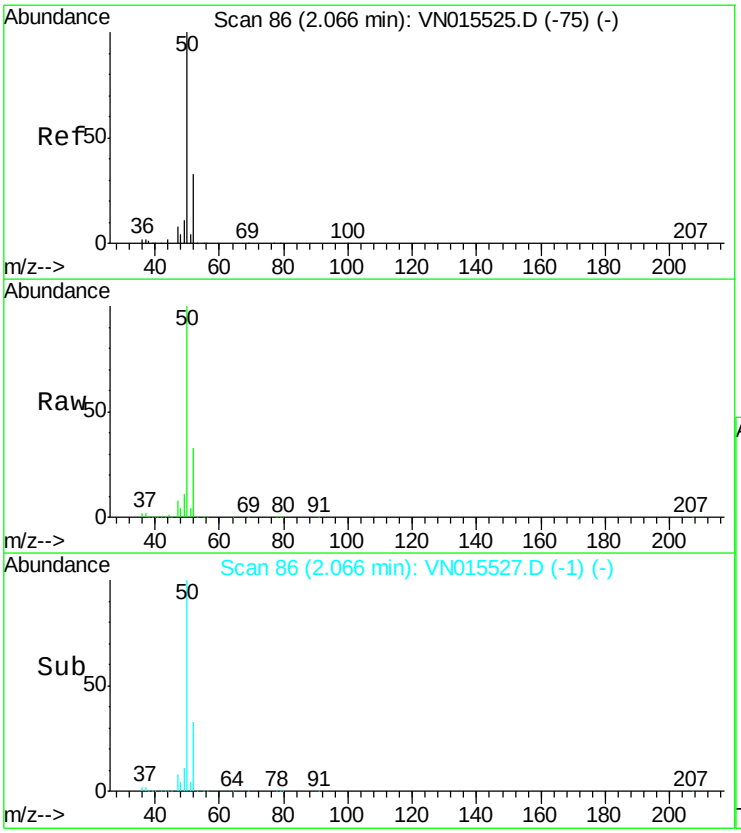


#3
Chlorodifluoromethane
Concen: 122.78 ug/l
RT: 1.87 min Scan# 25
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 51 Resp: 213658

Ion	Ratio	Lower	Upper
51	100		
67	18.8	15.1	22.7

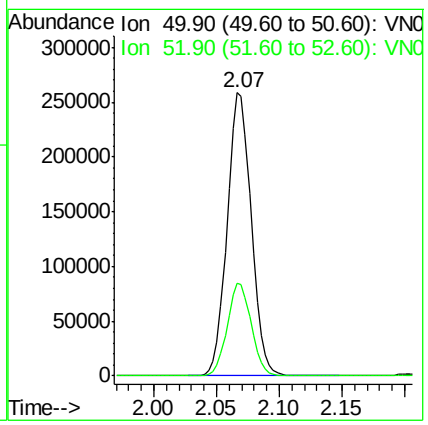




#4
Chloromethane
Concen: 130.39 ug/l
RT: 2.07 min Scan# 86
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 50 Resp: 344526

Ion	Ratio	Lower	Upper
50	100		
52	32.7	26.2	39.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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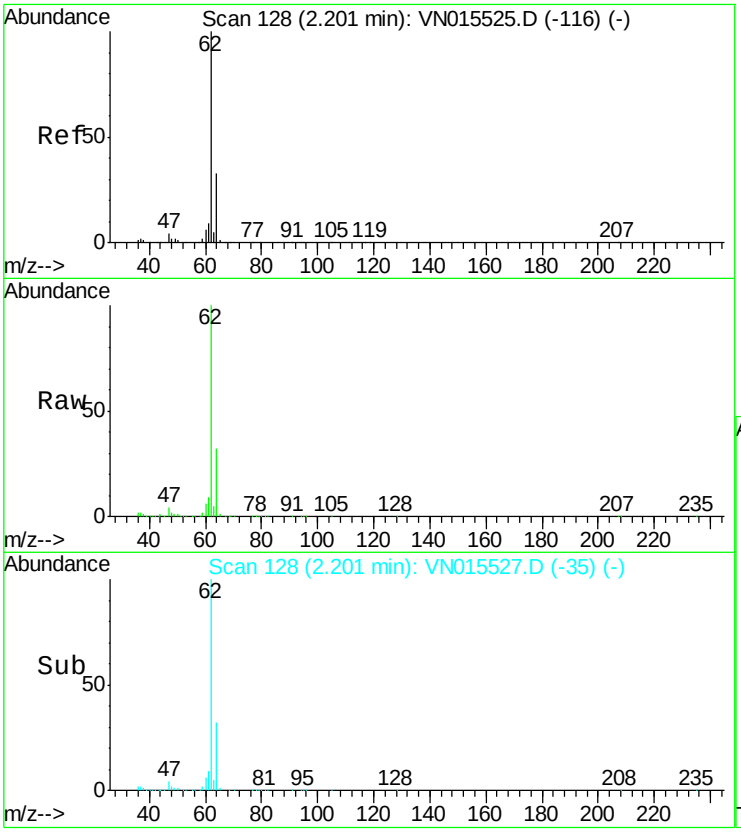
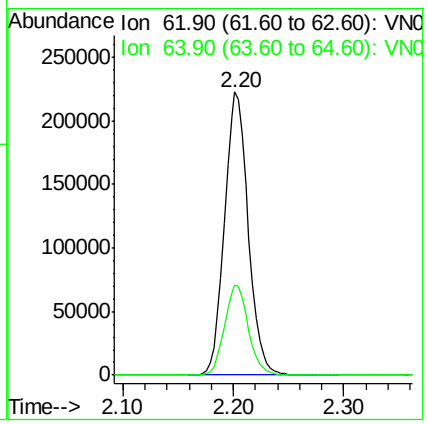
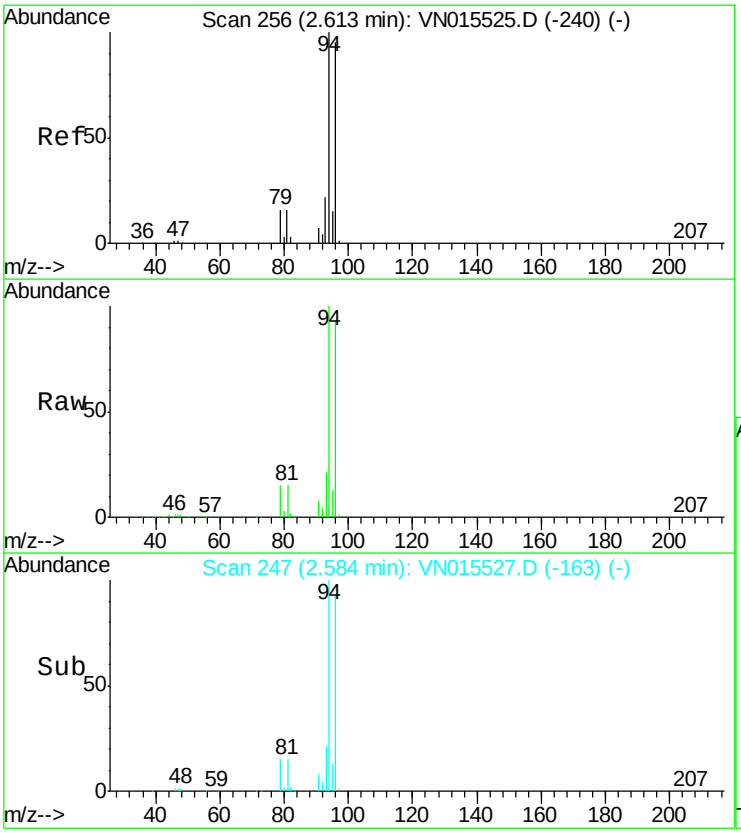


#5
Vinyl Chloride
Concen: 148.15 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 62 Resp: 331121

Ion	Ratio	Lower	Upper
62	100		
64	31.9	26.2	39.4

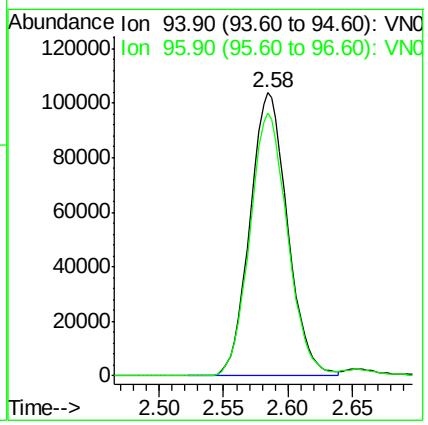




#6
Bromomethane
Concen: 162.99 ug/l
RT: 2.58 min Scan# 247
Delta R.T. -0.03 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 94 Resp: 210667

Ion	Ratio	Lower	Upper
94	100		
96	92.7	75.8	113.6



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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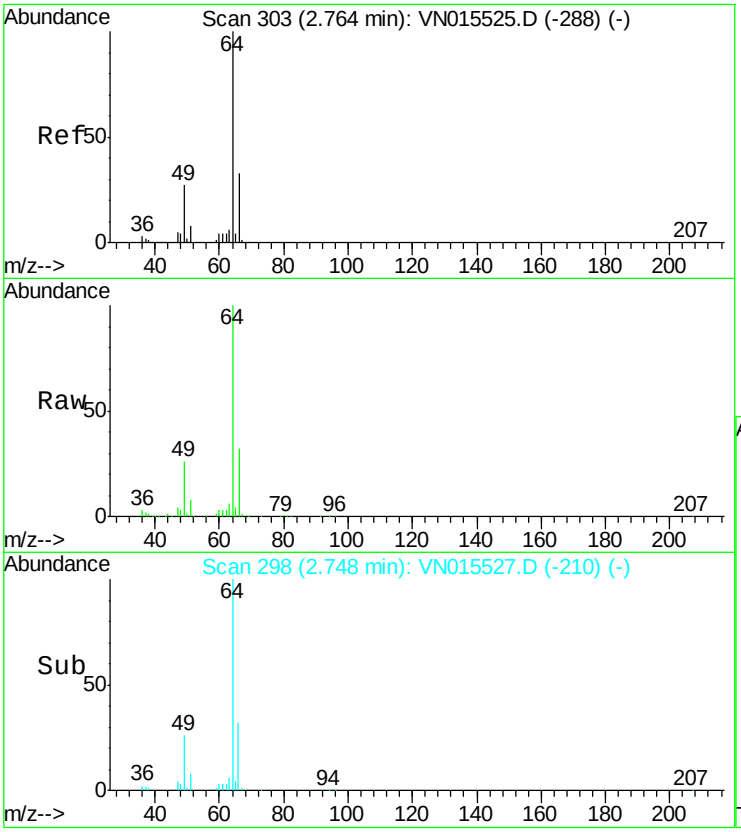
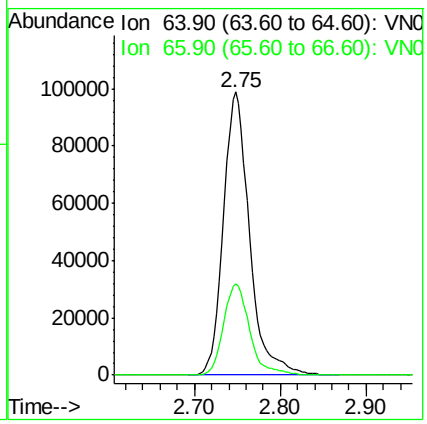
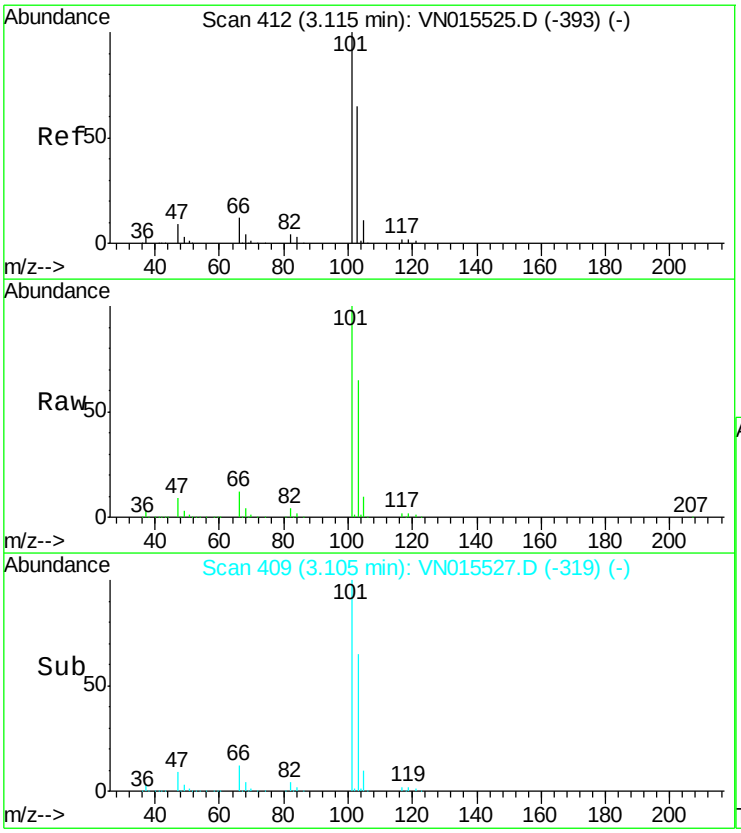


#7
Chloroethane
Concen: 148.82 ug/l
RT: 2.75 min Scan# 298
Delta R.T. -0.02 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 64 Resp: 208956

Ion	Ratio	Lower	Upper
64	100		
66	32.1	26.3	39.5

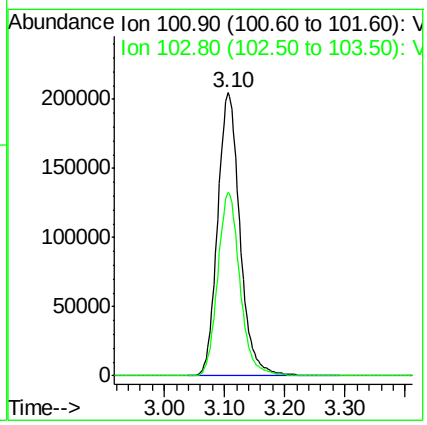




#8
Trichlorofluoromethane
Concen: 166.57 ug/l
RT: 3.10 min Scan# 409
Delta R.T. -0.01 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:101 Resp: 521181

Ion	Ratio	Lower	Upper
101	100		
103	64.6	52.1	78.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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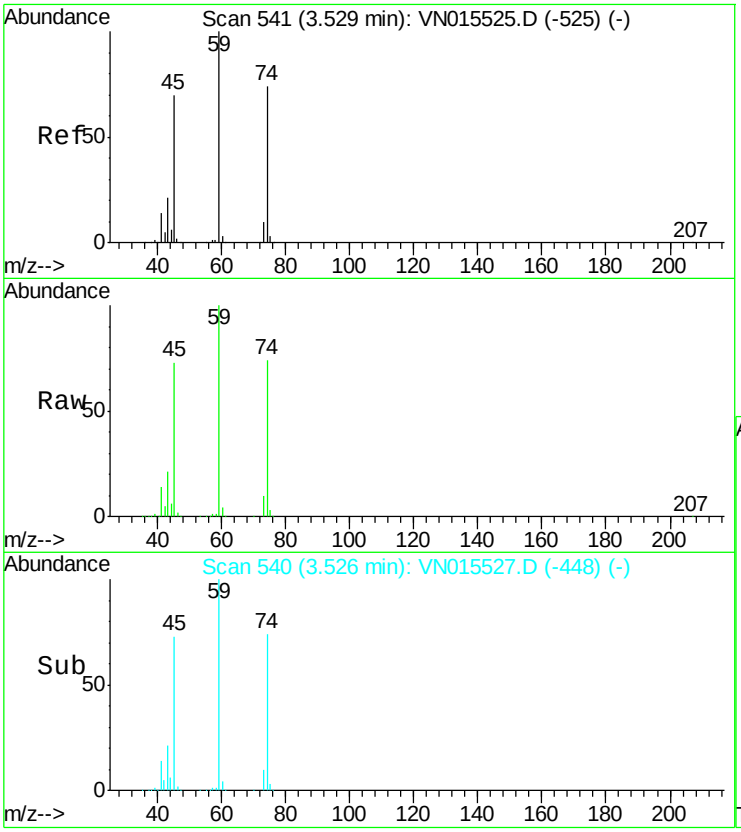
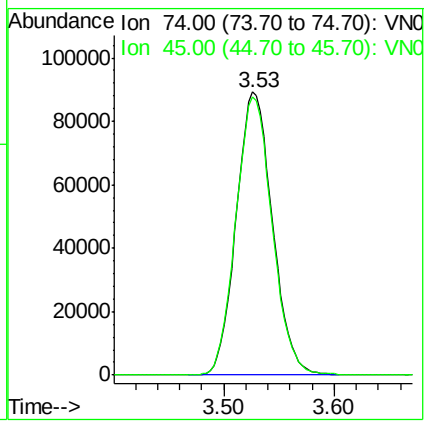
5/21/2014 11:02:31 AM

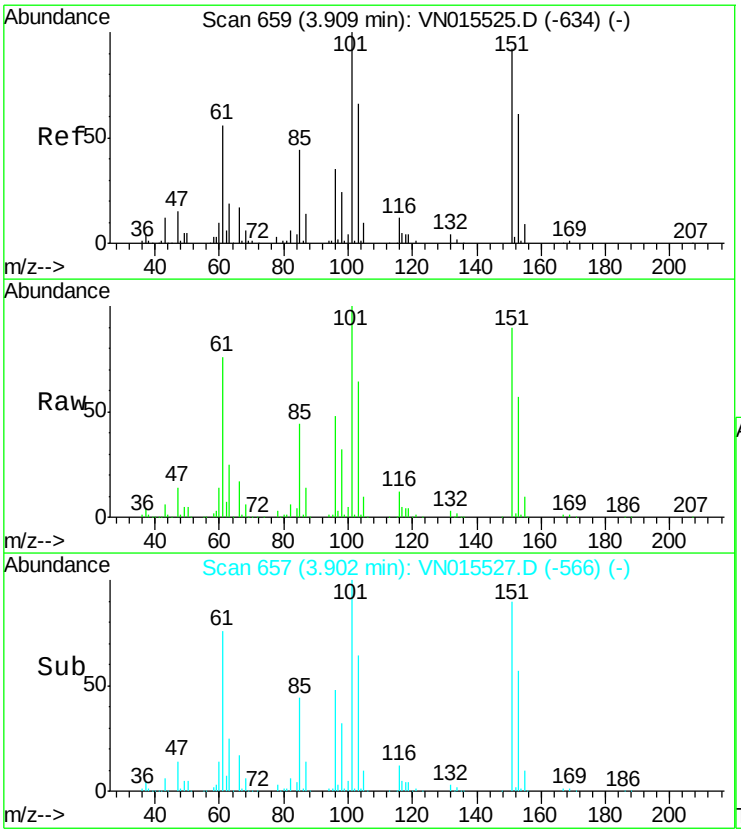


#9
Diethyl Ether
Concen: 171.38 ug/l
RT: 3.53 min Scan# 540
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 74 Resp: 202826

Ion	Ratio	Lower	Upper
74	100		
45	98.8	48.9	146.8

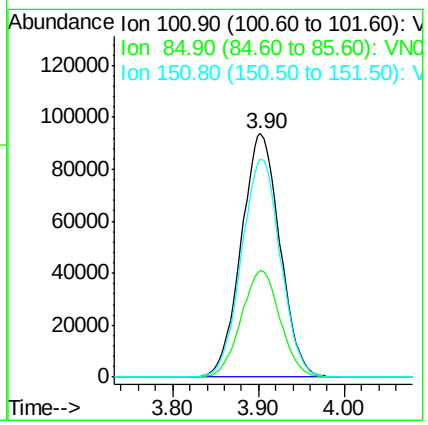




#10
1,1,2-Trichlorotrifluoroethane
Concen: 171.17 ug/l
RT: 3.90 min Scan# 657
Delta R.T. -0.01 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:101 Resp: 293136

Ion	Ratio	Lower	Upper
101	100		
85	44.0	34.5	51.7
151	90.6	72.9	109.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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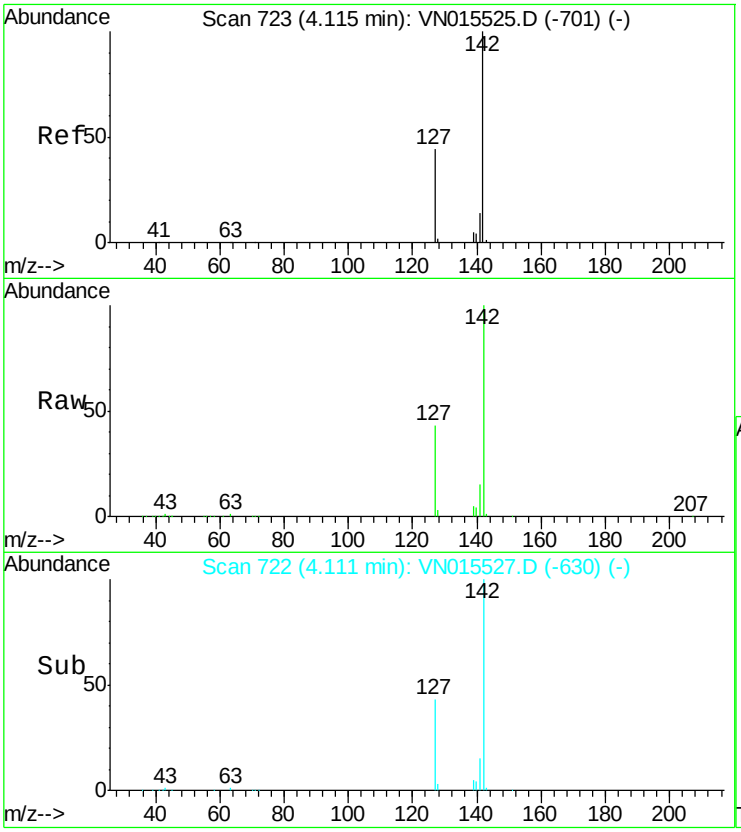
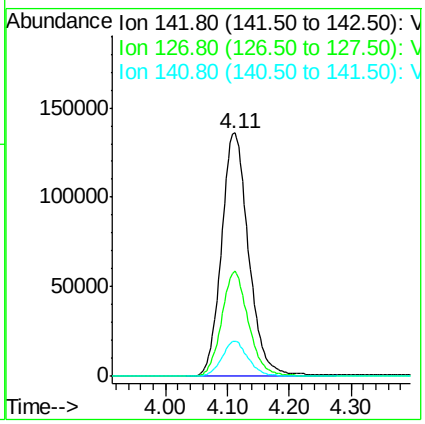
5/21/2014 11:02:31 AM

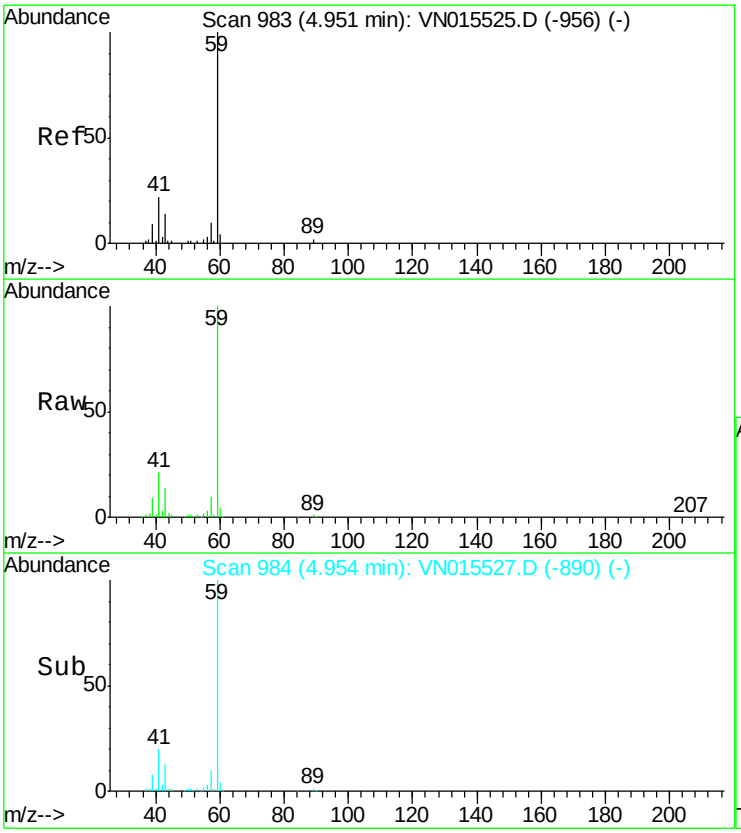


#11
Methyl Iodide
Concen: 237.87 ug/l
RT: 4.11 min Scan# 722
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:142 Resp: 416925

Ion	Ratio	Lower	Upper
142	100		
127	42.3	34.7	52.1
141	14.1	11.4	17.0

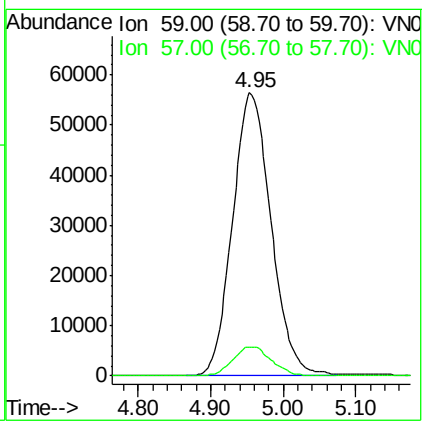


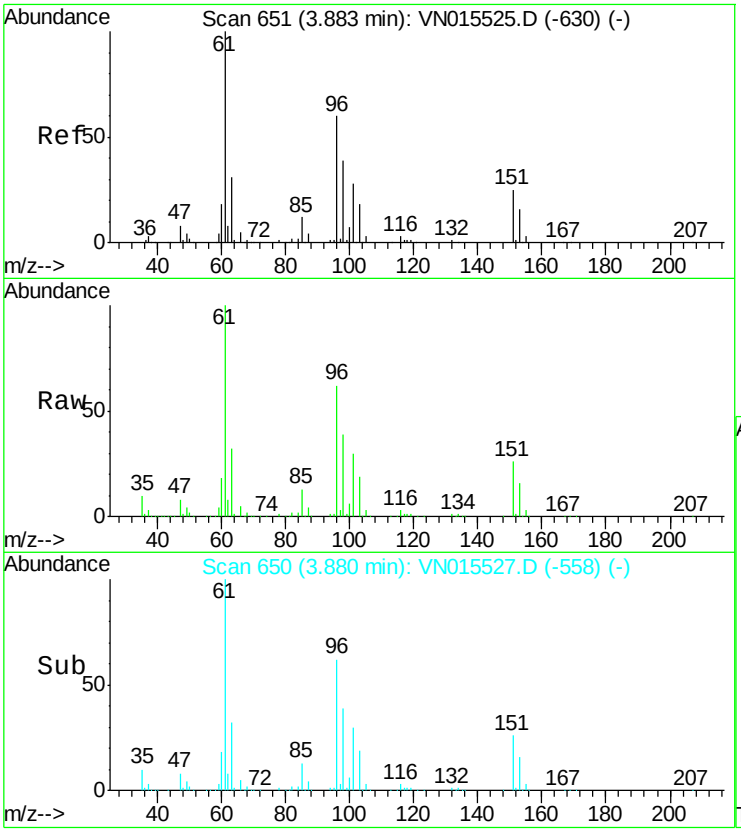


#12
Tert butyl alcohol
Concen: 1002.25 ug/l
RT: 4.95 min Scan# 984
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 59 Resp: 208746

Ion	Ratio	Lower	Upper
59	100		
57	10.4	8.4	12.6





#13
1,1-Dichloroethene
Concen: 173.98 ug/l
RT: 3.88 min Scan# 650
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 96 Resp: 293921

Ion	Ratio	Lower	Upper
96	100		
61	162.2	132.3	198.5
98	63.9	51.8	77.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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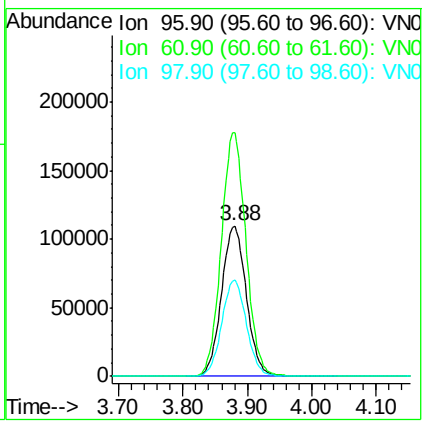
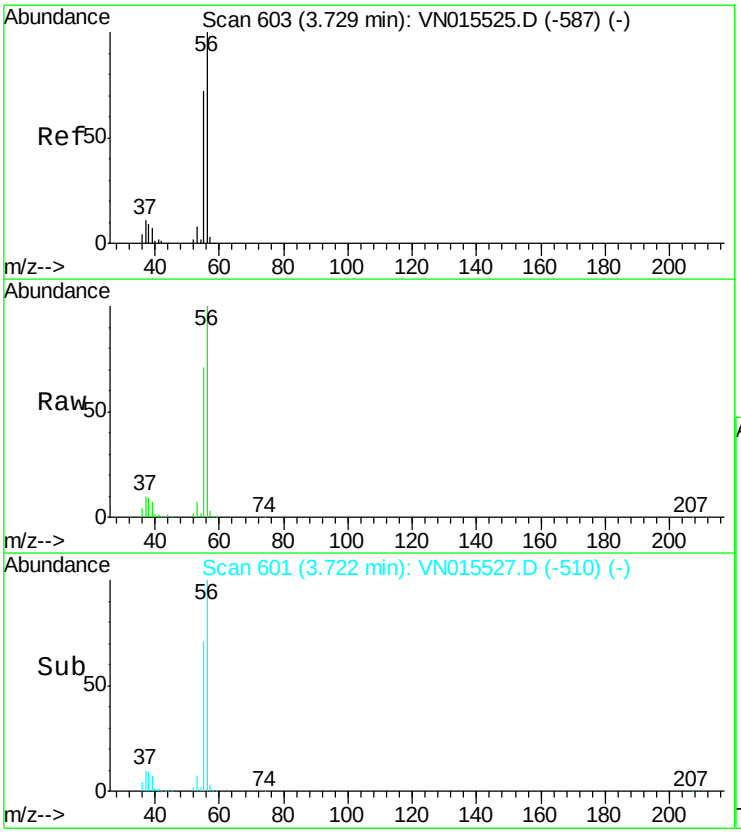
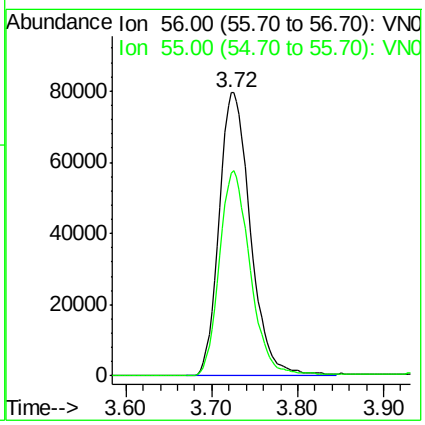




#14
Acrolein
Concen: 985.79 ug/l
RT: 3.72 min Scan# 601
Delta R.T. -0.01 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 56 Resp: 202101

Ion	Ratio	Lower	Upper
56	100		
55	71.3	57.9	86.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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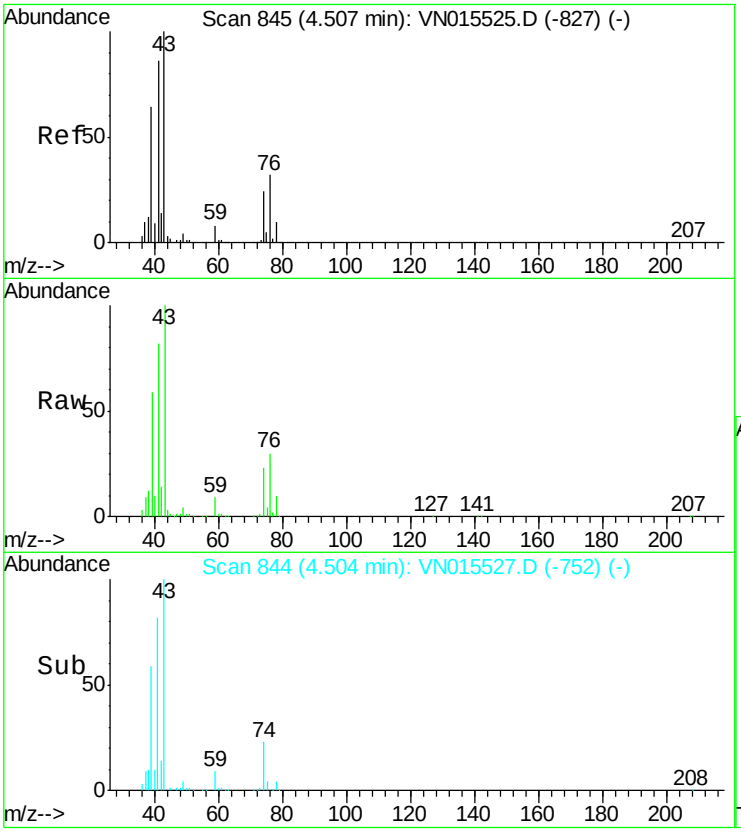
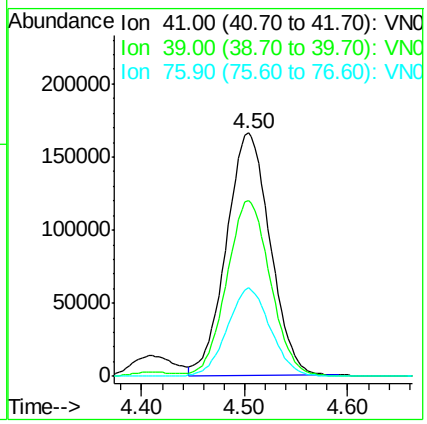
5/21/2014 11:02:31 AM

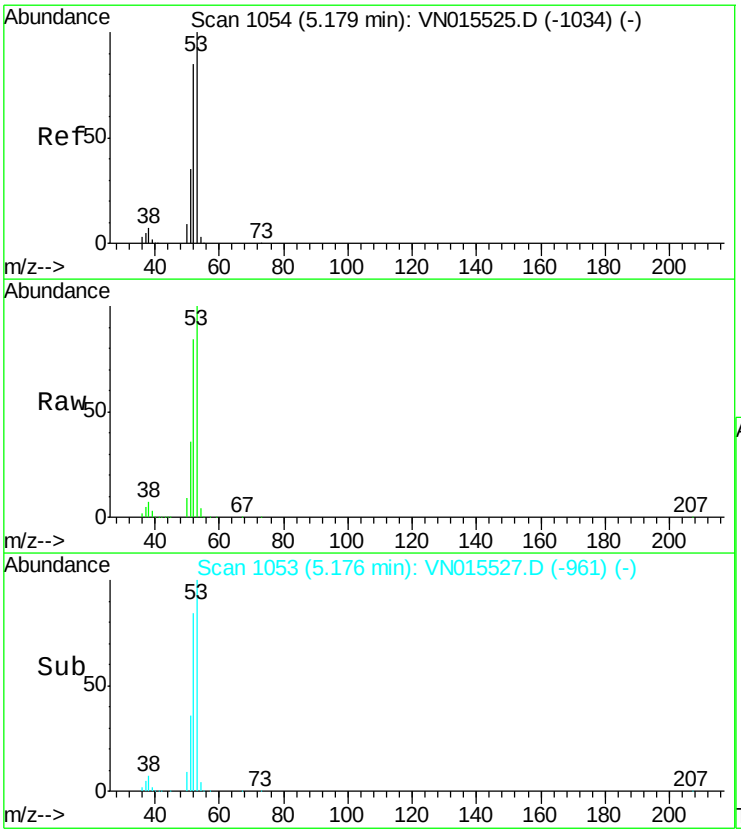


#15
Allyl chloride
Concen: 167.15 ug/l
RT: 4.50 min Scan# 844
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 41 Resp: 490388

Ion	Ratio	Lower	Upper
41	100		
39	71.9	57.4	86.2
76	35.6	28.5	42.7

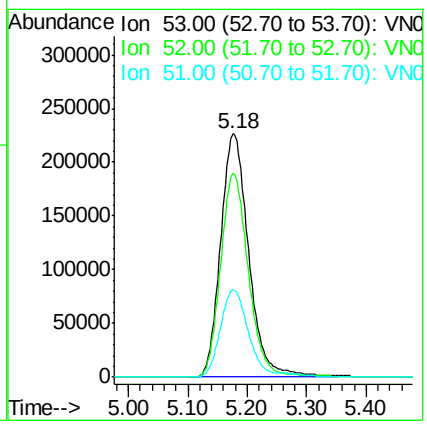




#16
Acrylonitrile
Concen: 906.07 ug/l
RT: 5.18 min Scan# 1053
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 53 Resp: 742558

Ion	Ratio	Lower	Upper
53	100		
52	82.7	65.7	98.5
51	36.9	29.1	43.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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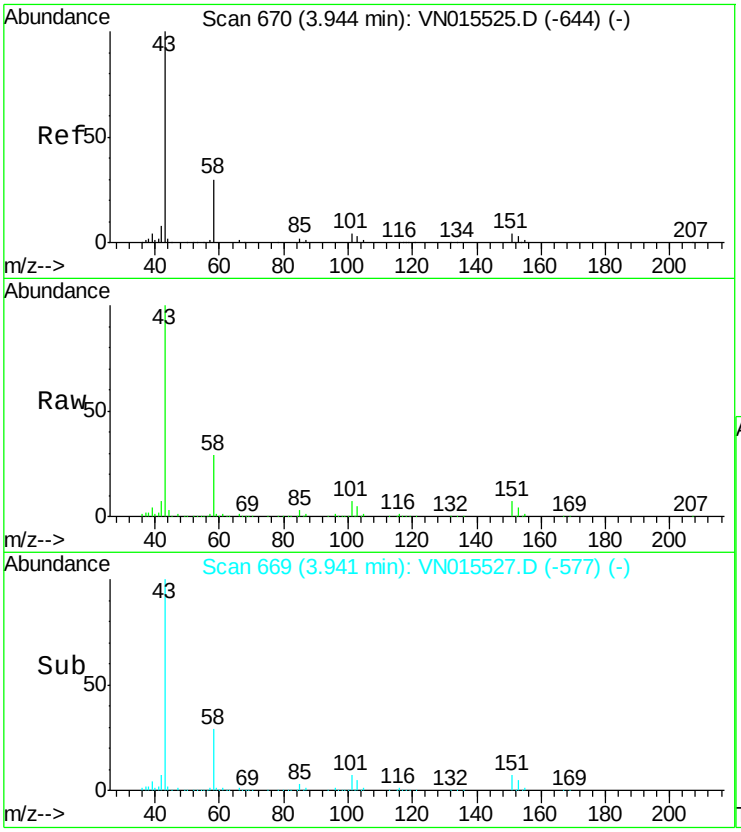
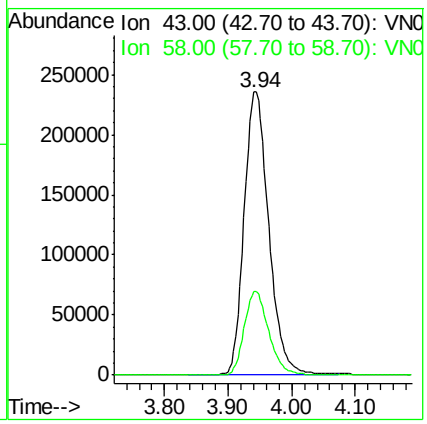
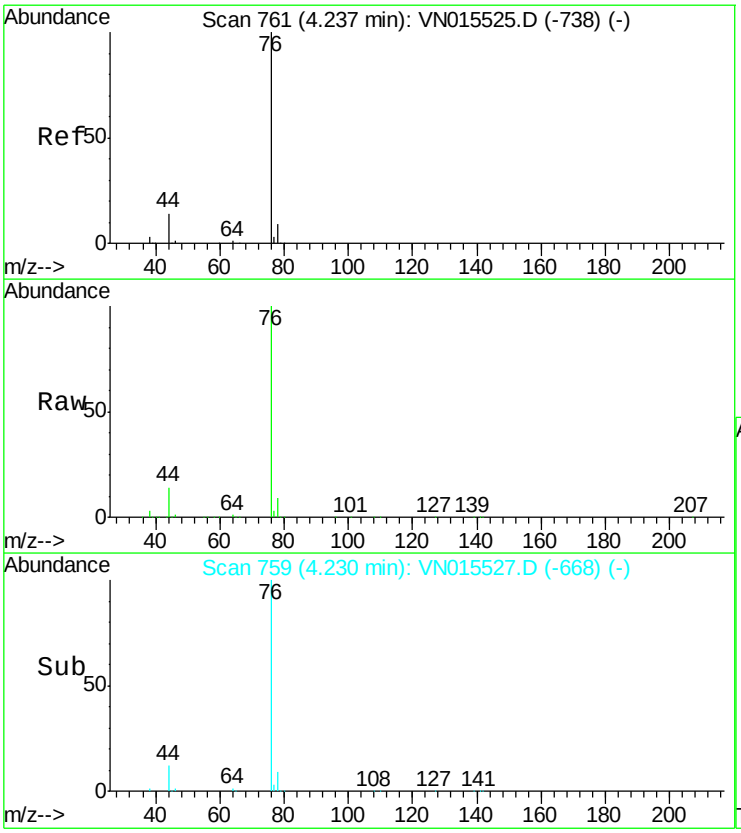


#17
Acetone
Concen: 755.80 ug/l
RT: 3.94 min Scan# 669
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 635848

Ion	Ratio	Lower	Upper
43	100		
58	29.4	24.2	36.2

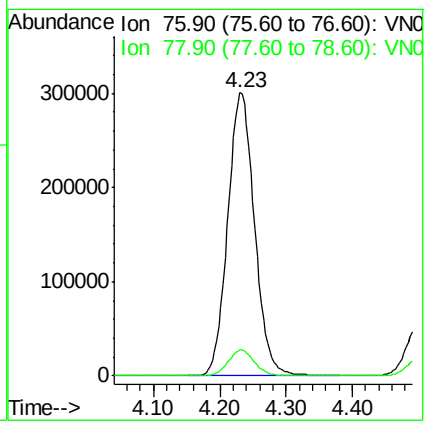




#18
Carbon Disulfide
Concen: 176.51 ug/l
RT: 4.23 min Scan# 759
Delta R.T. -0.01 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 76 Resp: 843751

Ion	Ratio	Lower	Upper
76	100		
78	9.0	7.5	11.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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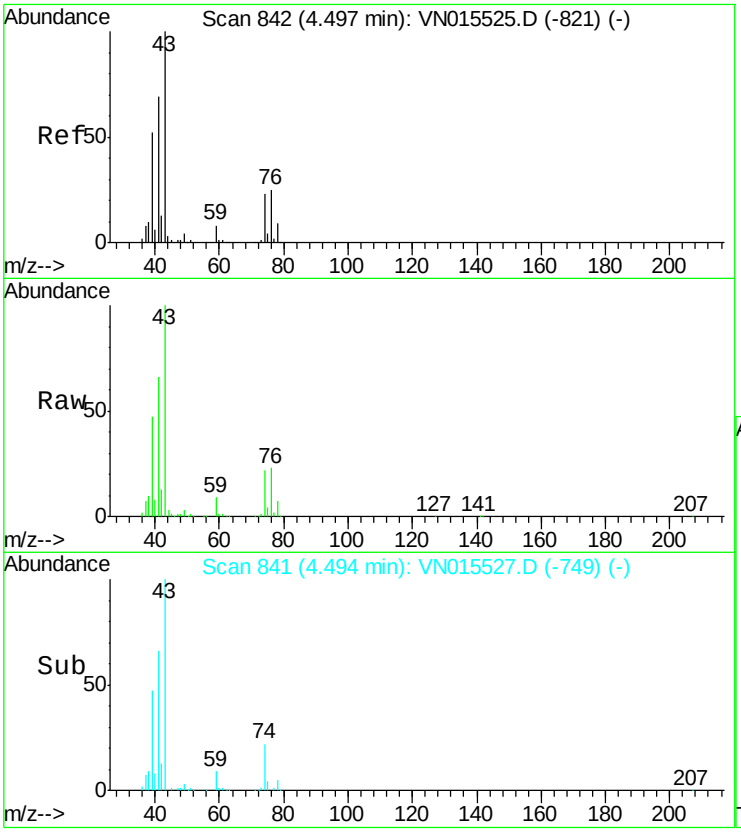
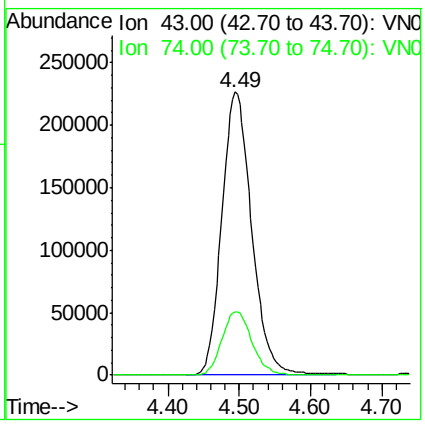
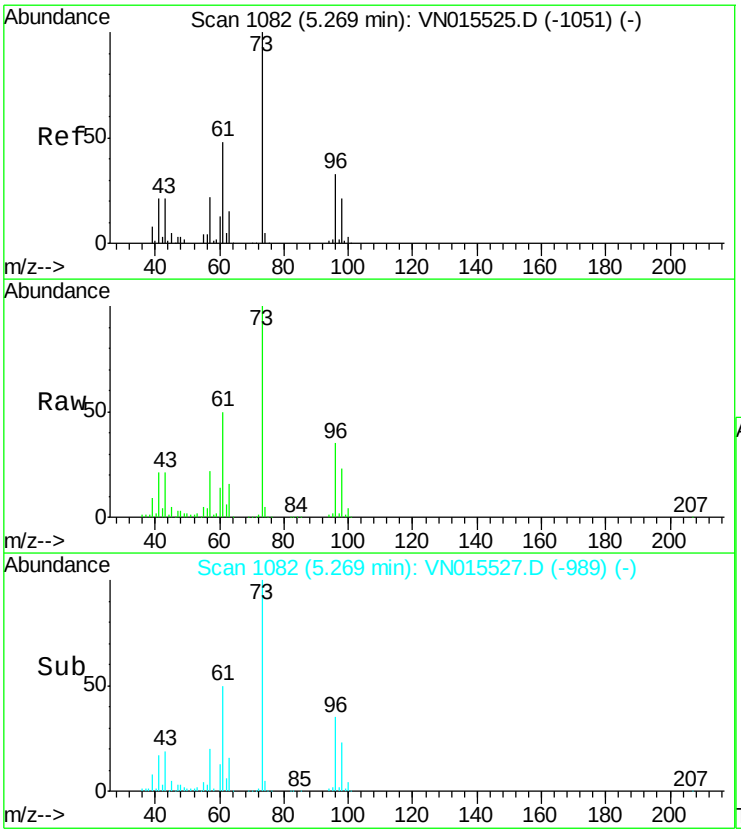


#19
Methyl Acetate
Concen: 296.73 ug/l
RT: 4.49 min Scan# 841
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 657568

Ion	Ratio	Lower	Upper
43	100		
74	22.7	18.5	27.7

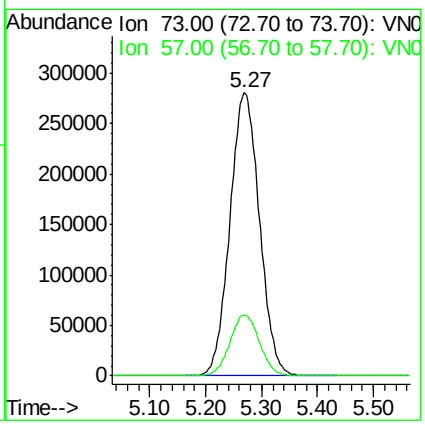




#20
Methyl tert-butyl Ether
Concen: 178.51 ug/l
RT: 5.27 min Scan# 1082
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 73 Resp: 1034661

Ion	Ratio	Lower	Upper
73	100		
57	21.6	17.3	25.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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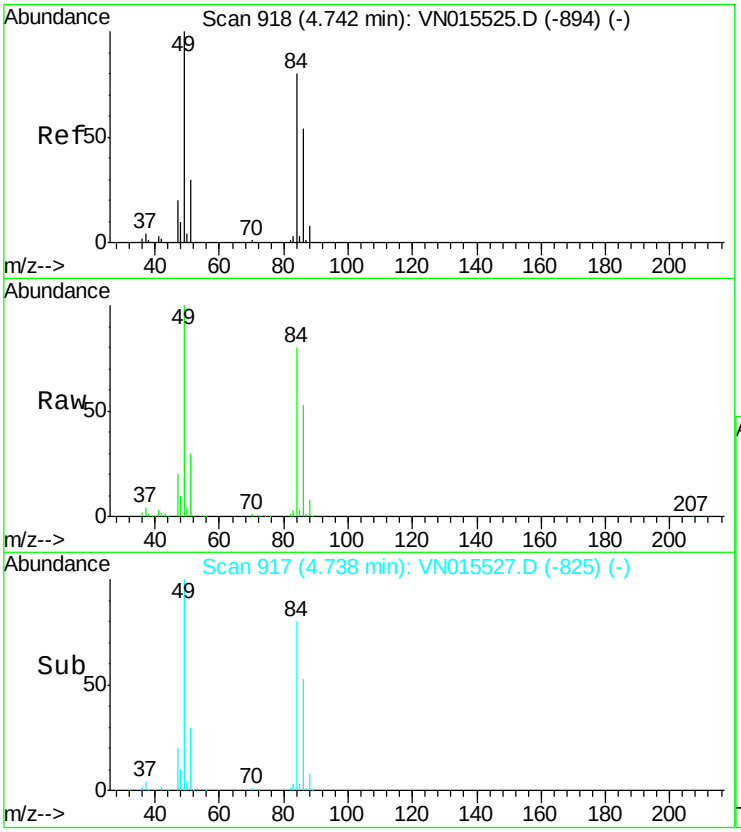
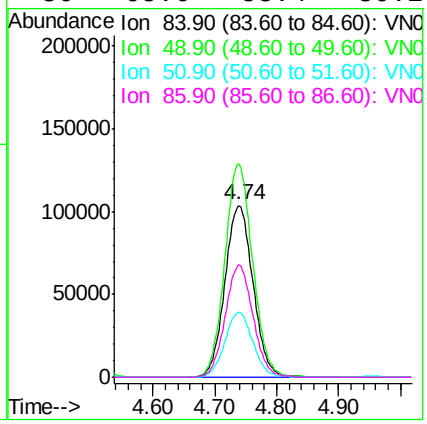
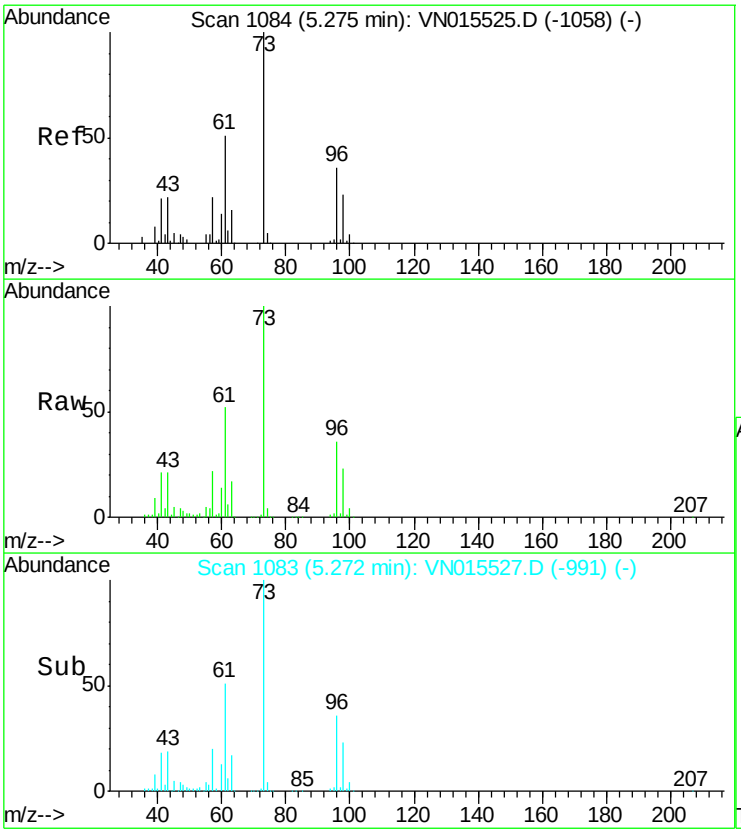


#21
Methylene Chloride
Concen: 163.77 ug/l
RT: 4.74 min Scan# 917
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 84 Resp: 327670

Ion	Ratio	Lower	Upper
84	100		
49	124.4	99.8	149.6
51	37.8	30.2	45.2
86	65.6	53.4	80.2

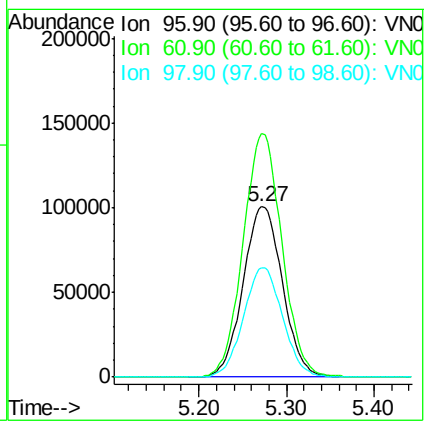


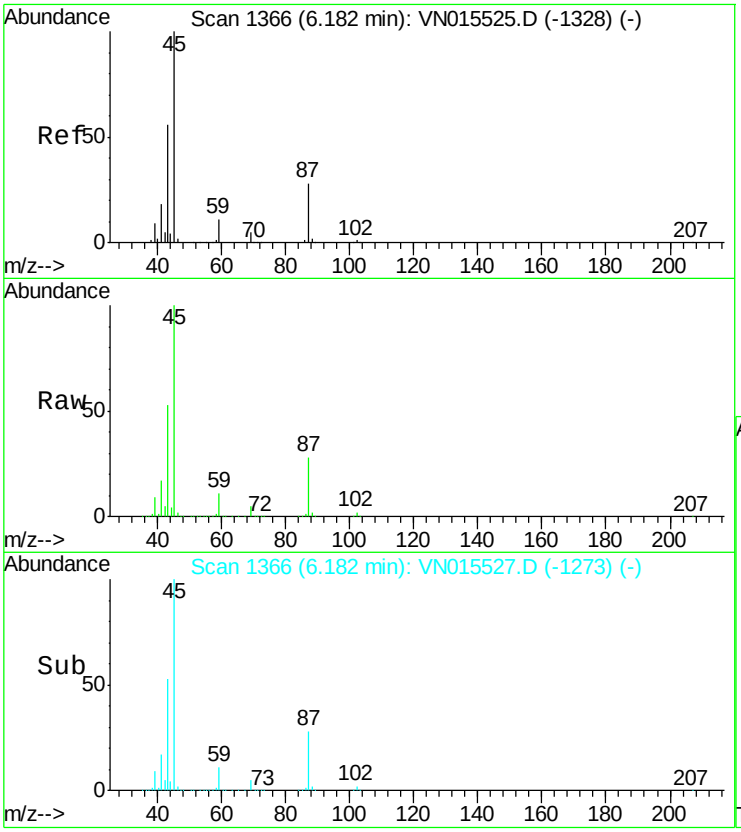


#22
trans-1,2-Dichloroethene
Concen: 175.44 ug/l
RT: 5.27 min Scan# 1083
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 96 Resp: 313614

Ion	Ratio	Lower	Upper
96	100		
61	142.9	113.3	169.9
98	64.0	50.4	75.6

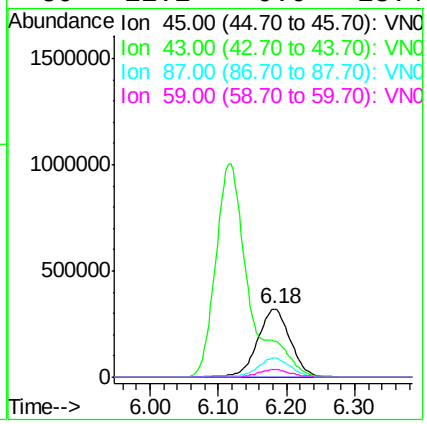




#23
Diisopropyl ether
Concen: 161.34 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 45 Resp: 1070982

Ion	Ratio	Lower	Upper
45	100		
43	52.5	44.6	67.0
87	27.9	22.3	33.5
59	11.1	9.0	13.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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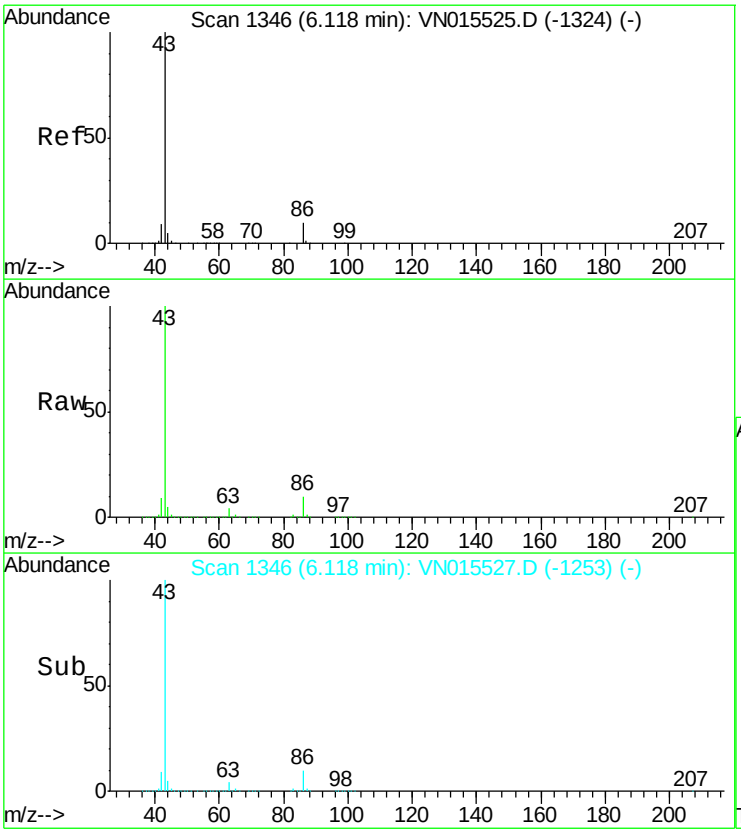
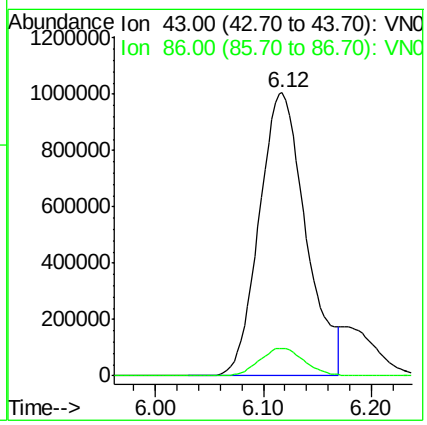


#24
Vinyl Acetate
Concen: 641.53 ug/l
RT: 6.12 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 3007865

Ion	Ratio	Lower	Upper
43	100		
86	9.9	7.9	11.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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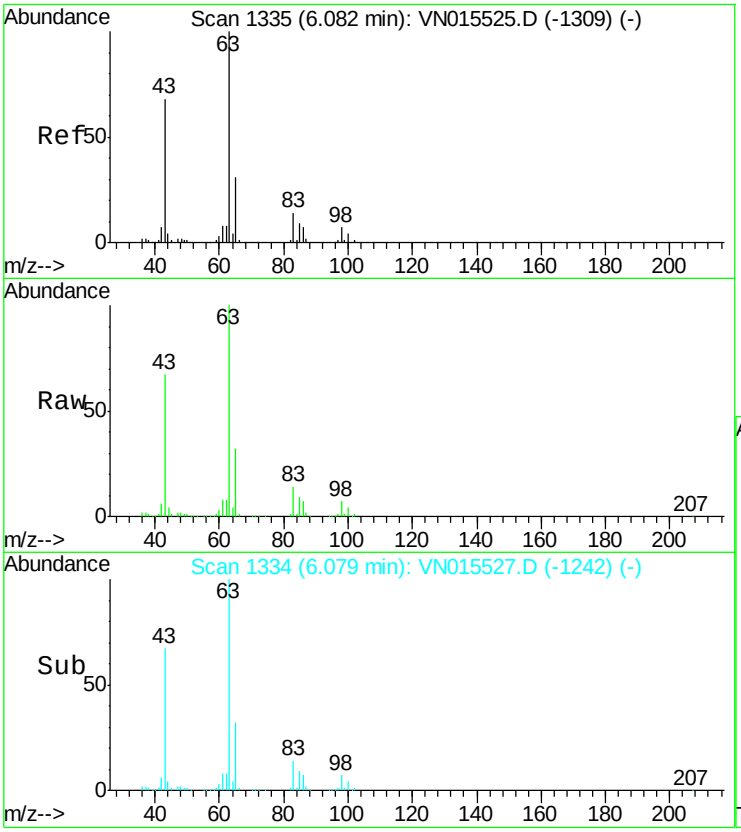
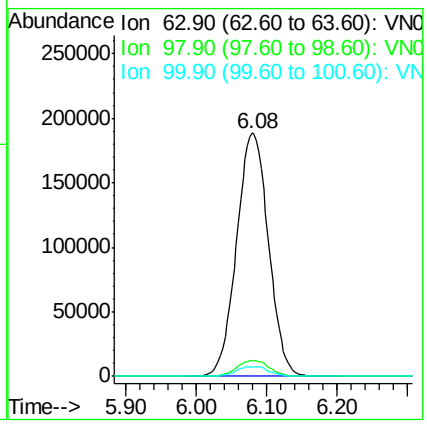
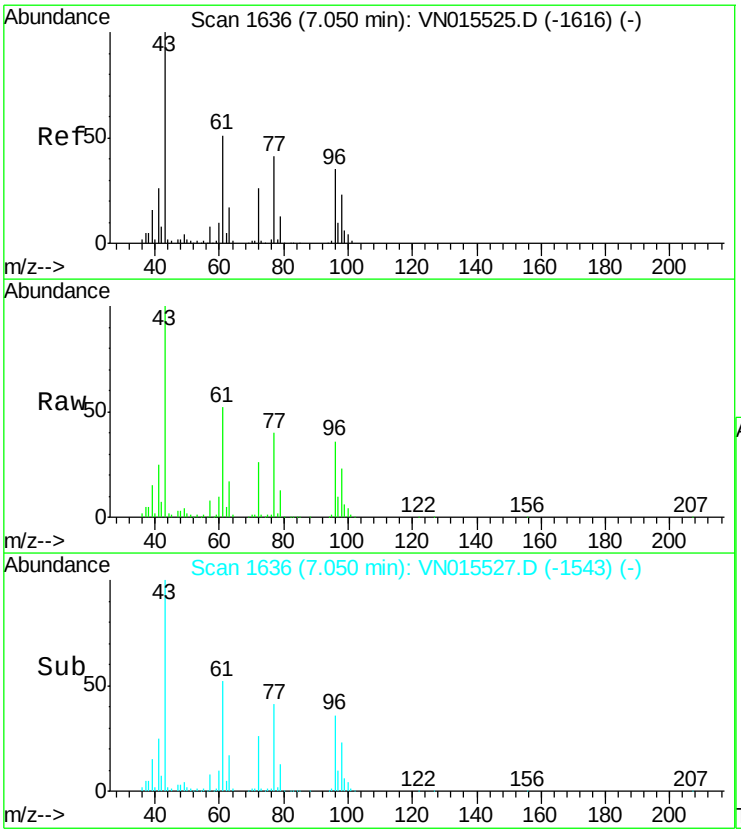


#25
1,1-Dichloroethane
Concen: 165.97 ug/l
RT: 6.08 min Scan# 1334
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 63 Resp: 593335

Ion	Ratio	Lower	Upper
63	100		
98	6.6	3.3	9.9
100	4.0	2.1	6.3

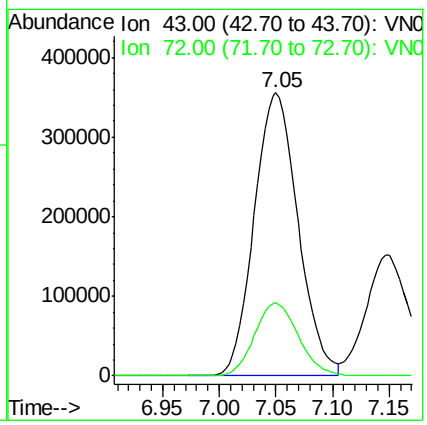




#26
2-Butanone
Concen: 859.35 ug/l
RT: 7.05 min Scan# 1636
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 953617

Ion	Ratio	Lower	Upper
43	100		
72	25.8	20.7	31.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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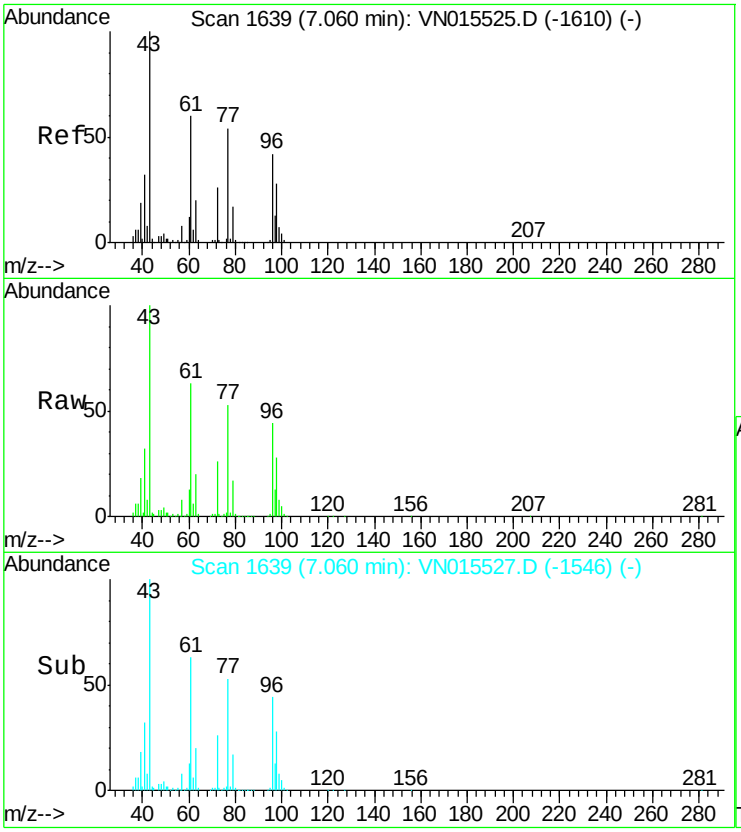
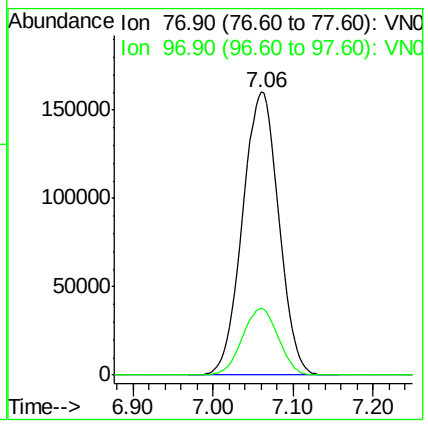
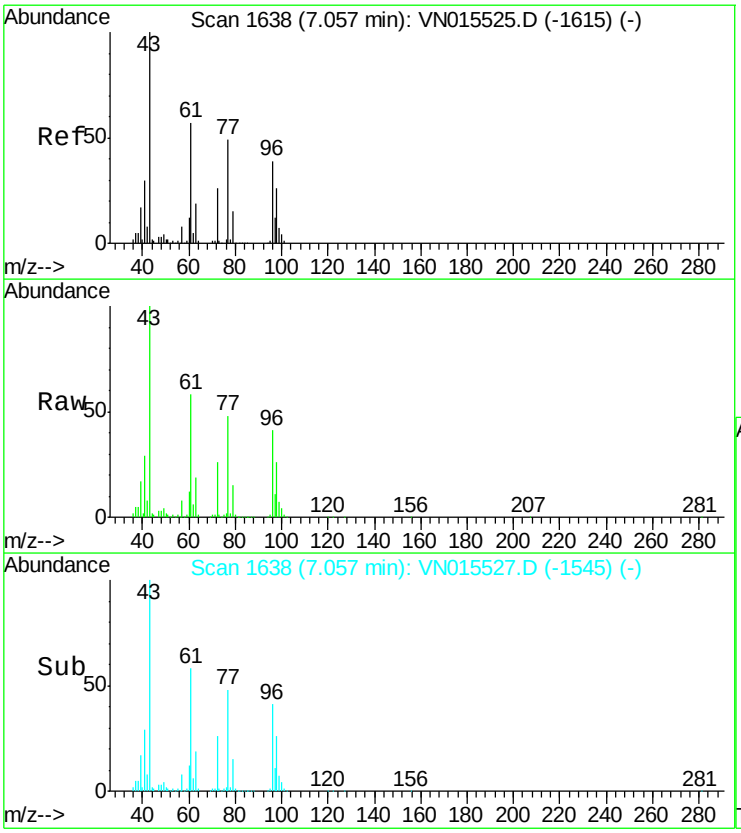


#27
2,2-Dichloropropane
Concen: 181.76 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 77 Resp: 494510

Ion	Ratio	Lower	Upper
77	100		
97	23.4	11.6	34.7

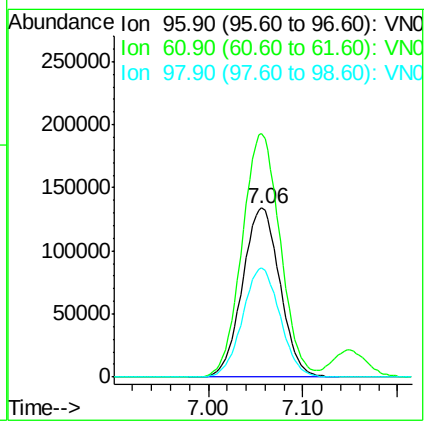




#28
cis-1,2-Dichloroethene
Concen: 175.62 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 96 Resp: 369411

Ion	Ratio	Lower	Upper
96	100		
61	146.0	0.0	292.0
98	64.4	0.0	129.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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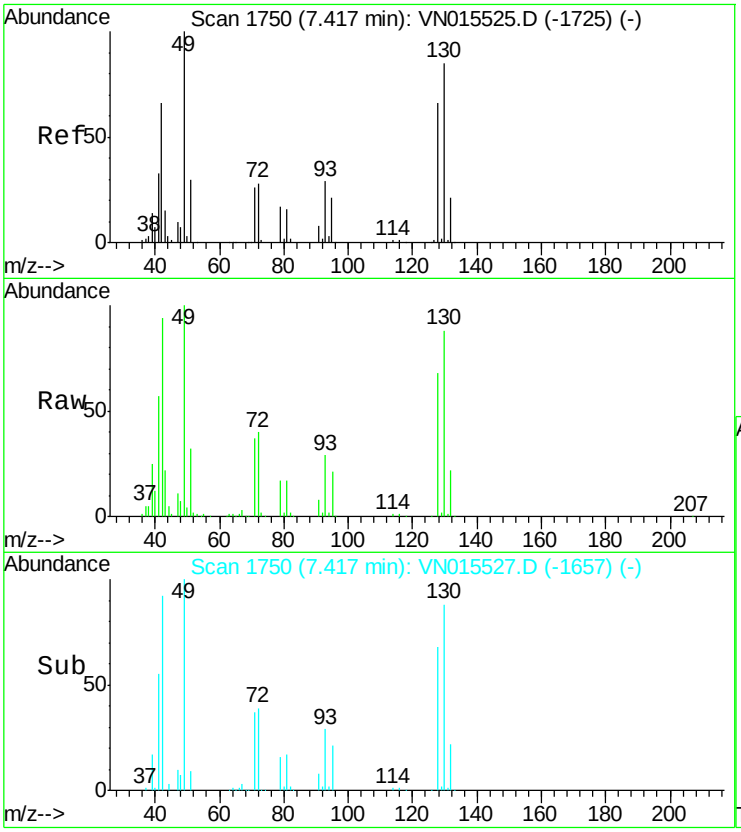
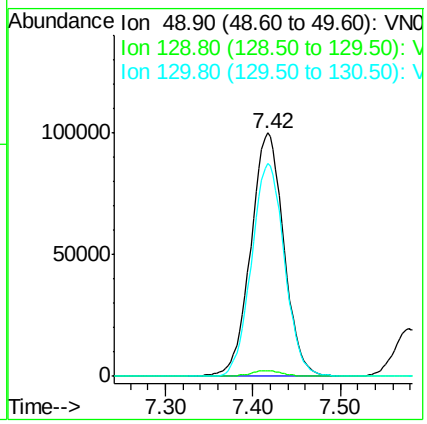
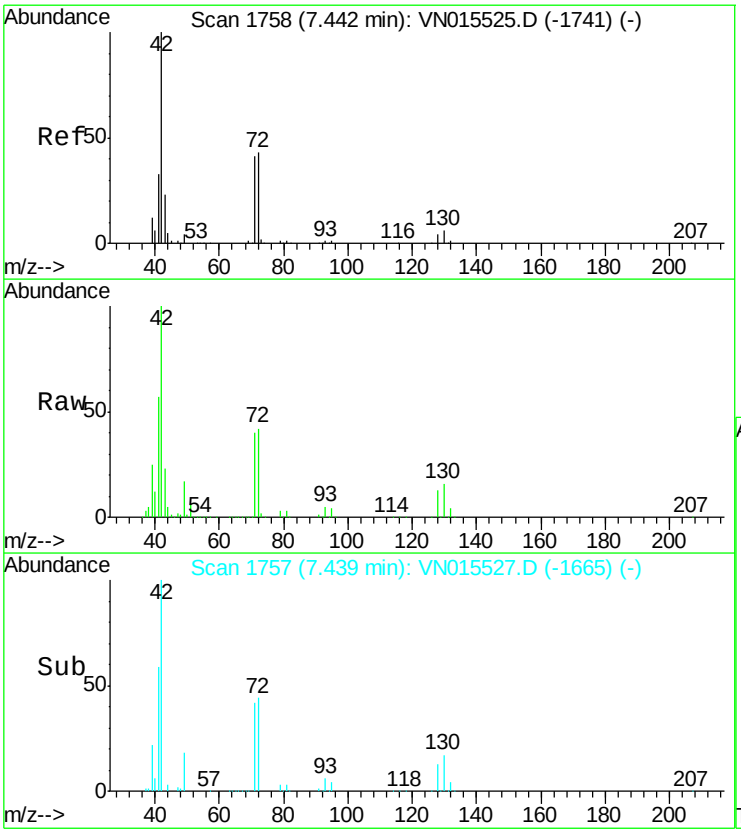


#29
Bromochloromethane
Concen: 148.23 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 49 Resp: 262185

Ion	Ratio	Lower	Upper
49	100		
129	2.3	0.0	4.2
130	87.4	68.6	102.8

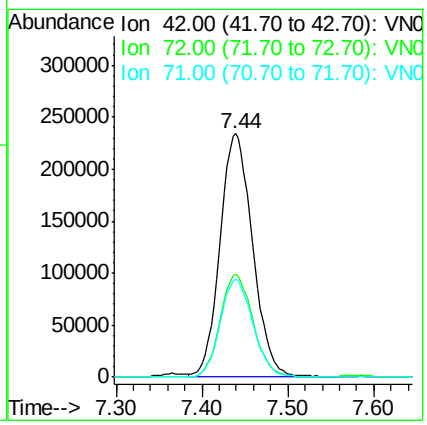




#30
Tetrahydrofuran
Concen: 856.67 ug/l
RT: 7.44 min Scan# 1757
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 42 Resp: 614172

Ion	Ratio	Lower	Upper
42	100		
72	42.7	34.2	51.2
71	40.7	32.5	48.7



Instrument :
MSVOA_N
LabSampleId :
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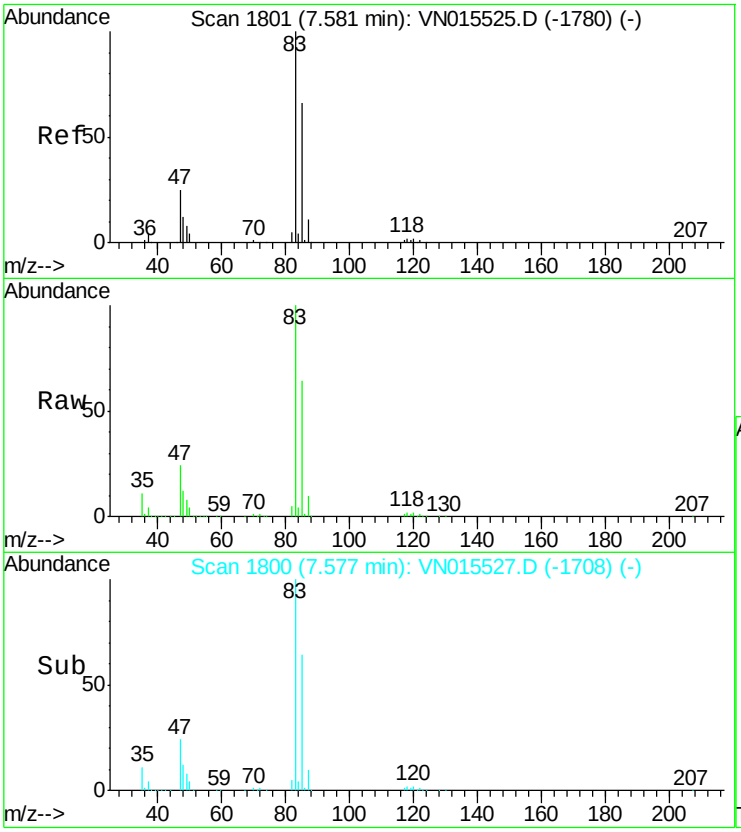
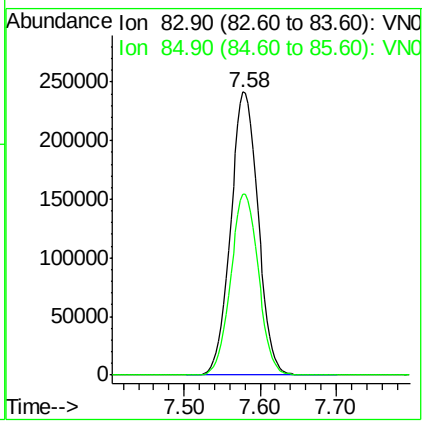
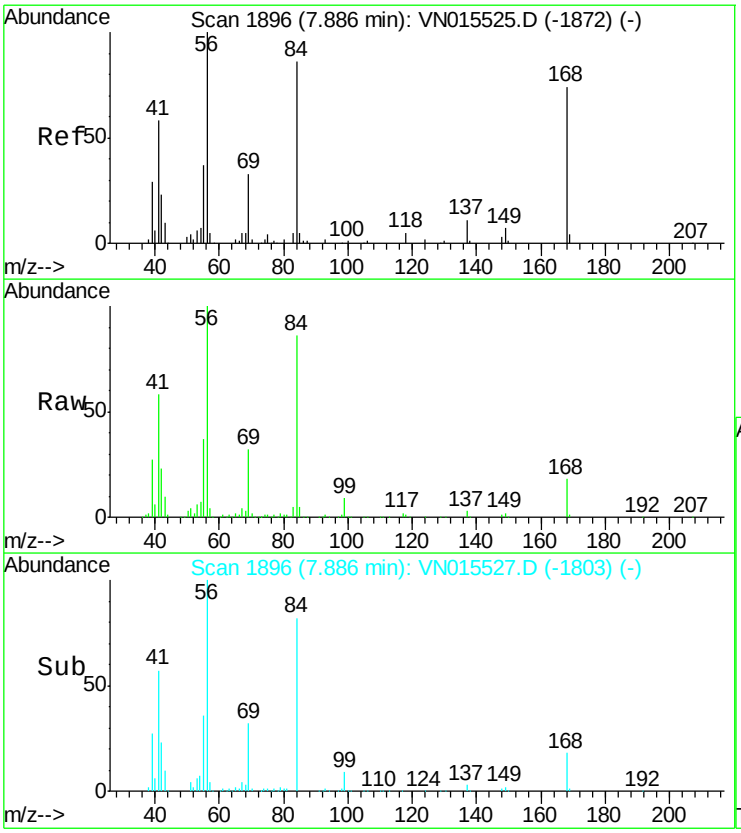


#31
Chloroform
Concen: 171.28 ug/l
RT: 7.58 min Scan# 1800
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 83 Resp: 605745

Ion	Ratio	Lower	Upper
83	100		
85	64.1	52.6	78.8

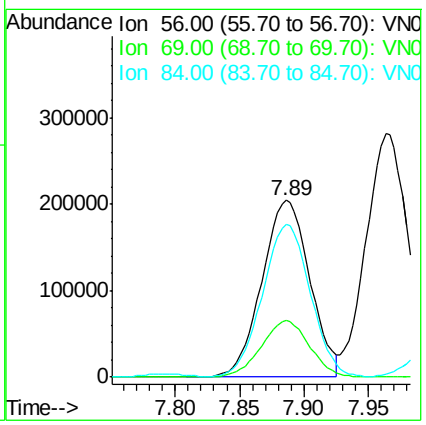


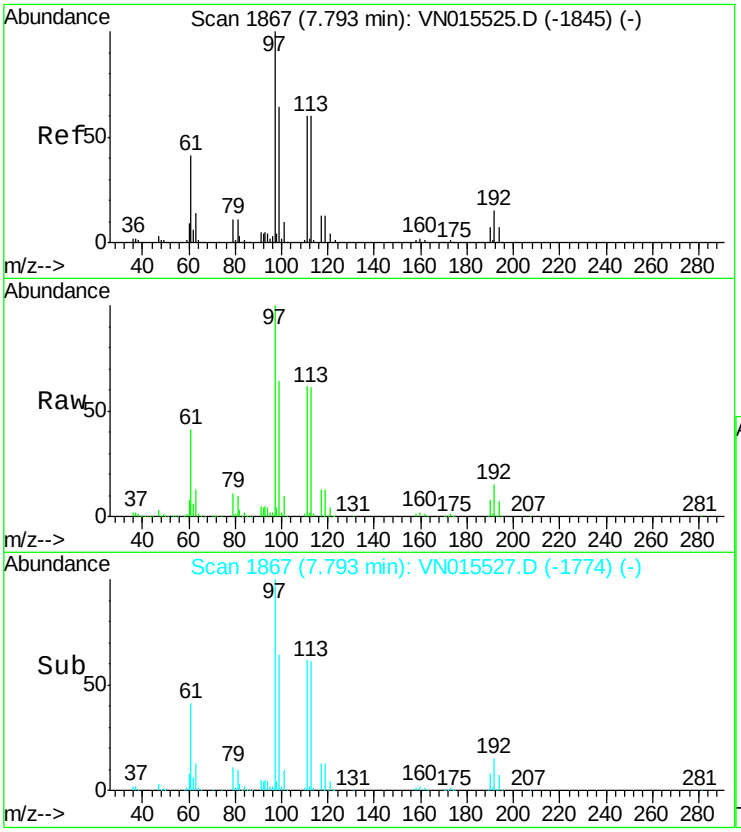


#32
Cyclohexane
Concen: 130.66 ug/l
RT: 7.89 min Scan# 1896
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 56 Resp: 527877

Ion	Ratio	Lower	Upper
56	100		
69	32.0	26.6	39.8
84	85.3	69.0	103.4





#33
1,1,1-Trichloroethane
Concen: 183.41 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 97 Resp: 566286

Ion	Ratio	Lower	Upper
97	100		
99	64.5	51.2	76.8
61	41.8	33.9	50.9

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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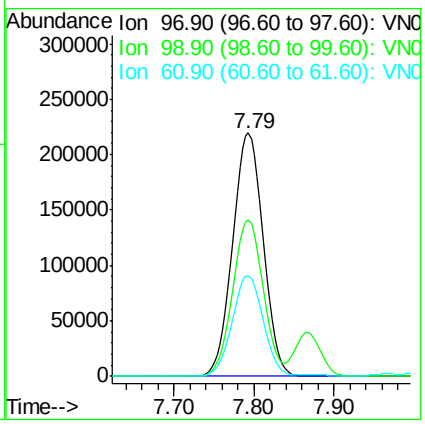
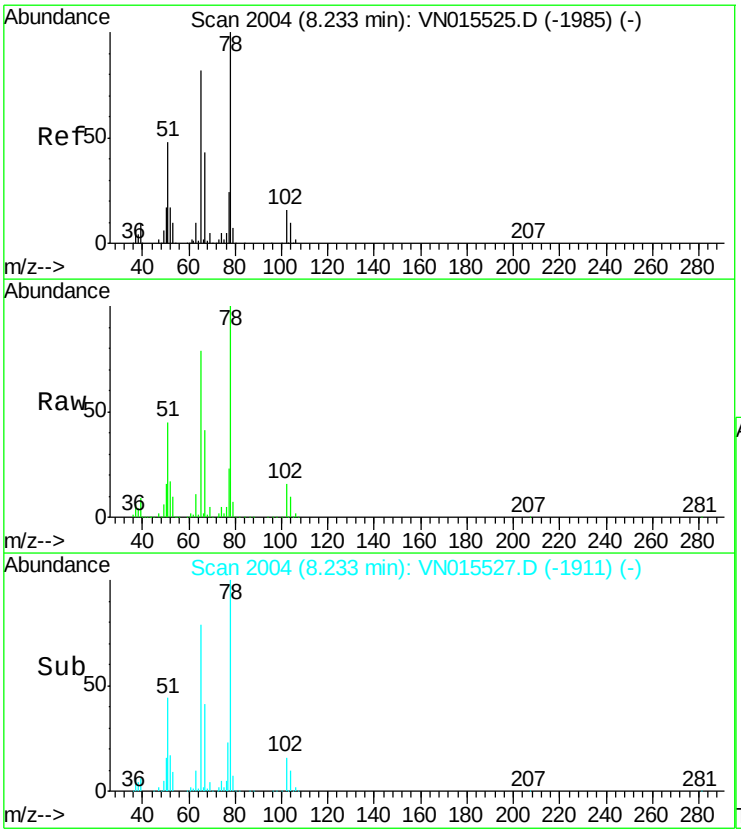
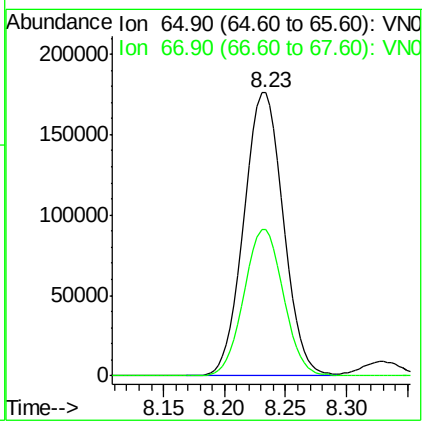


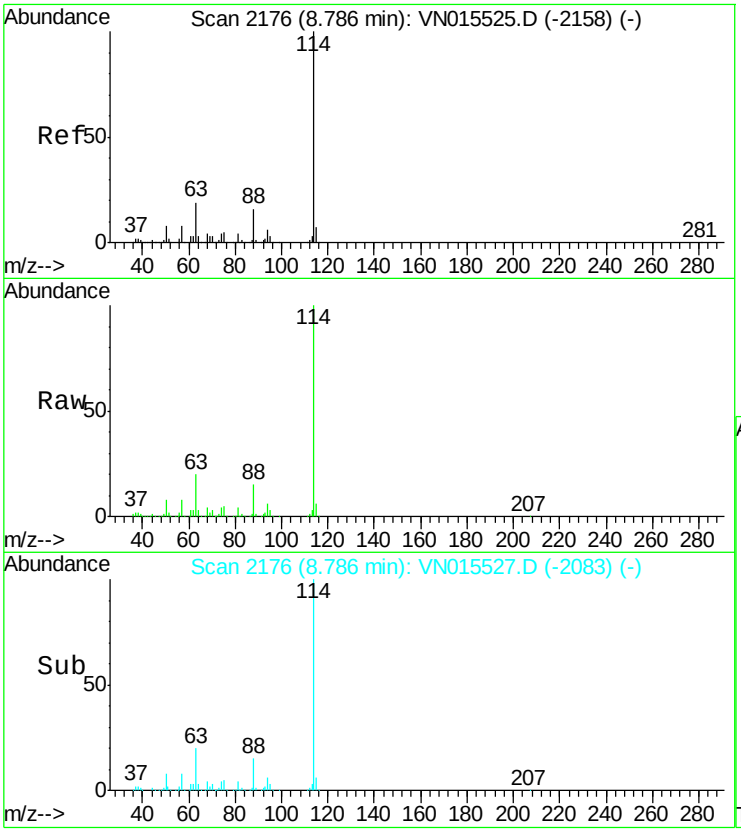


#34
1,2-Dichloroethane-d4
Concen: 164.92 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 65 Resp: 395027

Ion	Ratio	Lower	Upper
65	100		
67	51.9	0.0	103.6

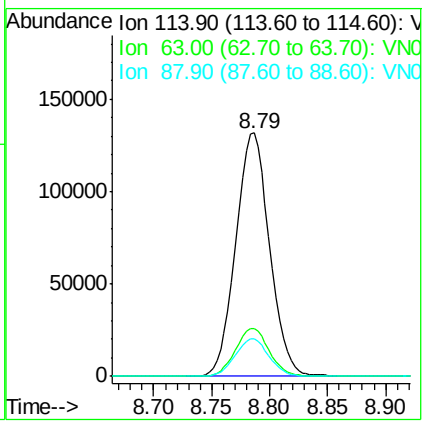




#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:114 Resp: 267445

Ion	Ratio	Lower	Upper
114	100		
63	19.6	0.0	38.6
88	15.5	0.0	32.2



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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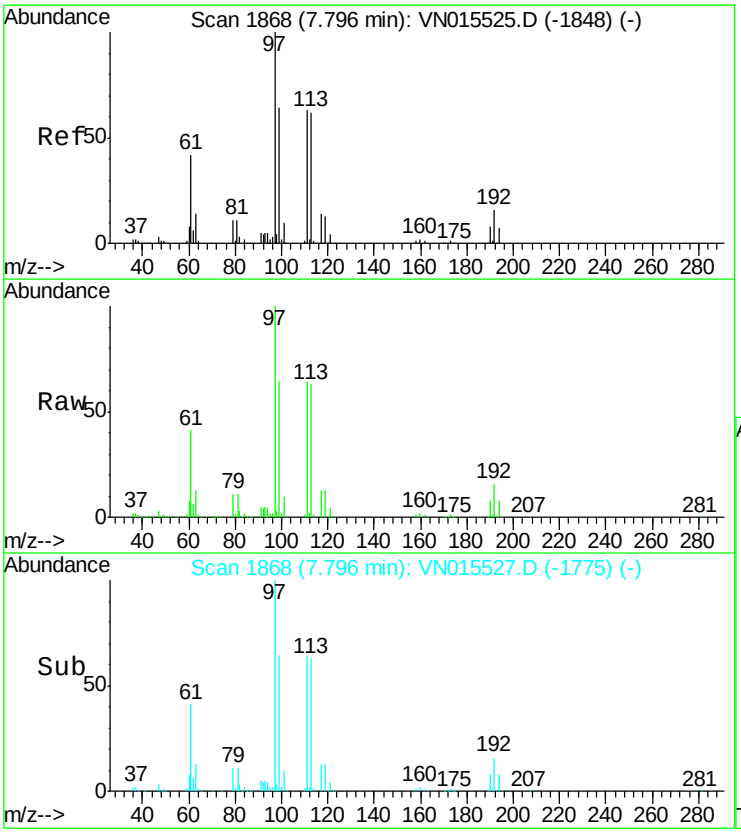
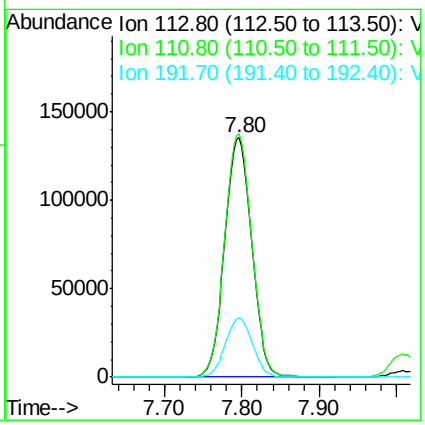


#36
Dibromofluoromethane
Concen: 187.99 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:113 Resp: 327763

Ion	Ratio	Lower	Upper
113	100		
111	102.2	81.5	122.3
192	24.7	20.0	30.0



Instrument :
MSVOA_N
LabSampleId :
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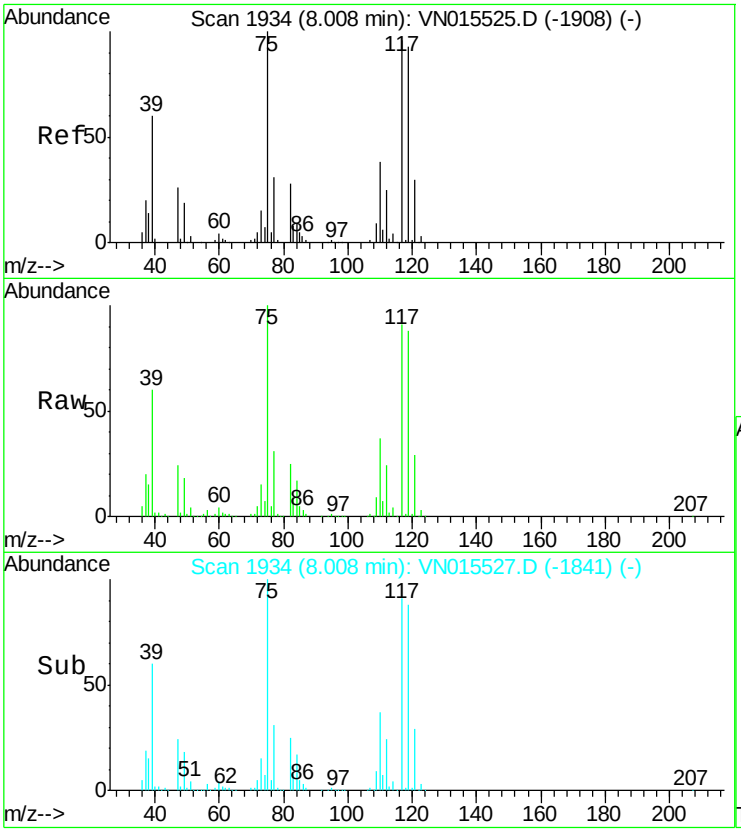
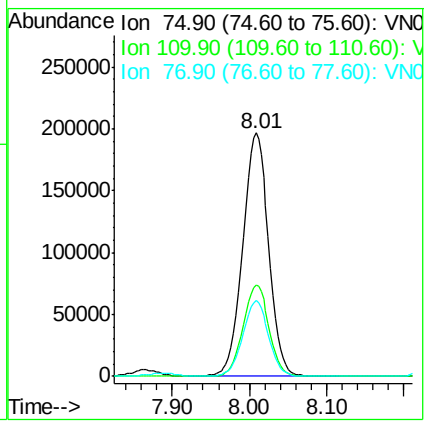
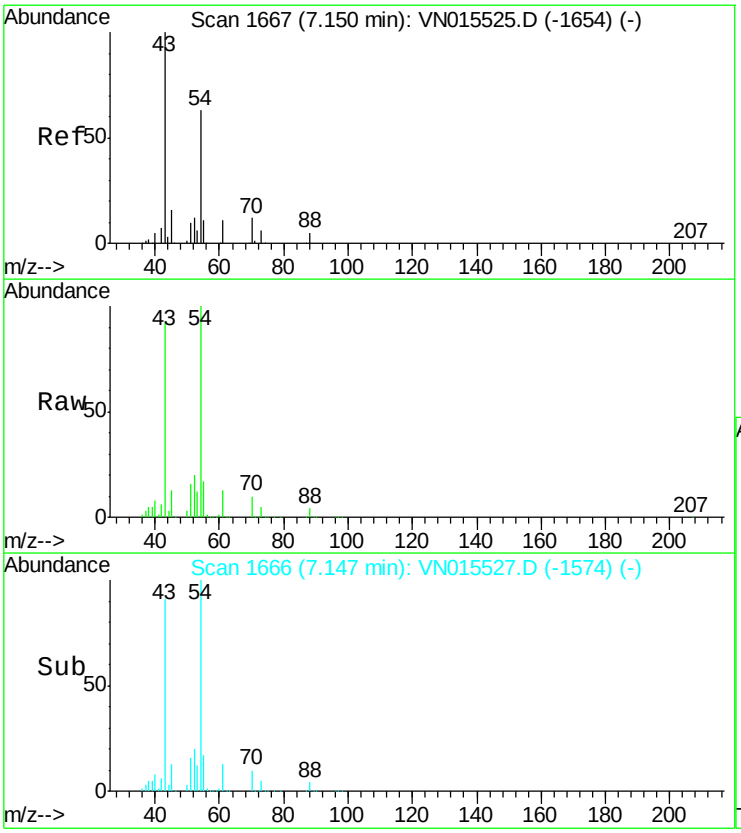


#37
1,1-Dichloropropene
Concen: 179.97 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 75 Resp: 457467

Ion	Ratio	Lower	Upper
75	100		
110	37.4	18.6	55.6
77	30.8	24.4	36.6

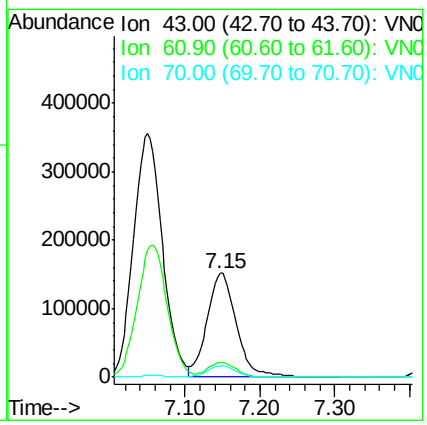




#38
Ethyl Acetate
Concen: 214.01 ug/l
RT: 7.15 min Scan# 1666
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 409472

Ion	Ratio	Lower	Upper
43	100		
61	13.7	10.8	16.2
70	10.6	8.5	12.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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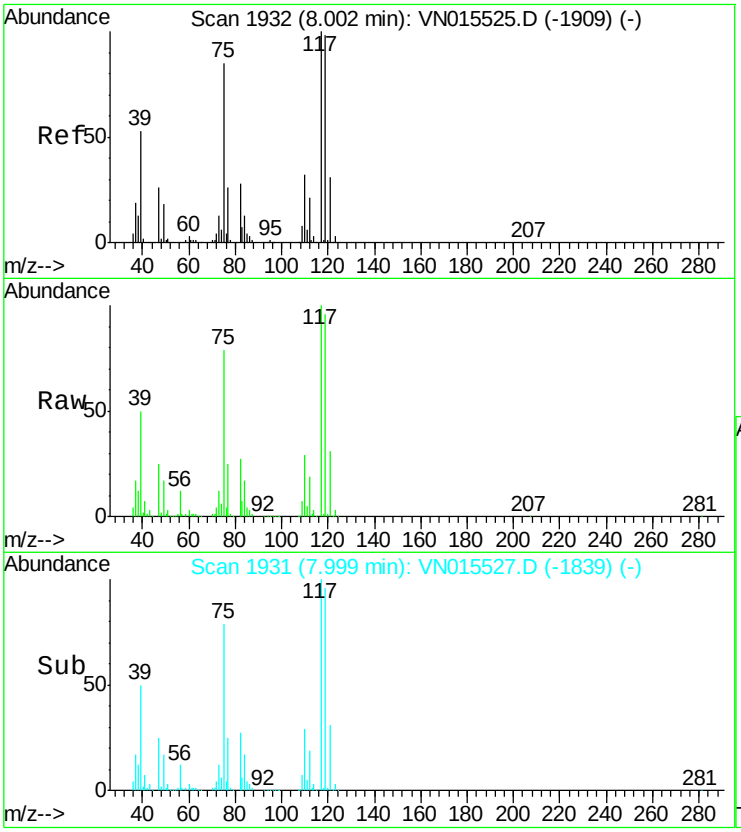
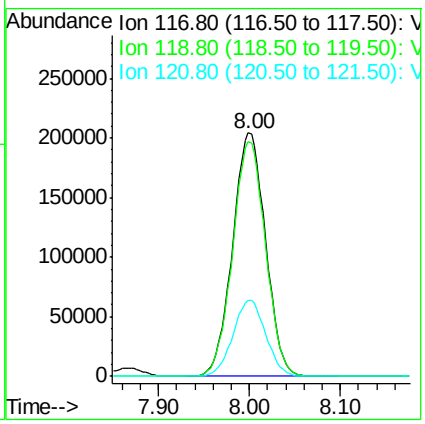
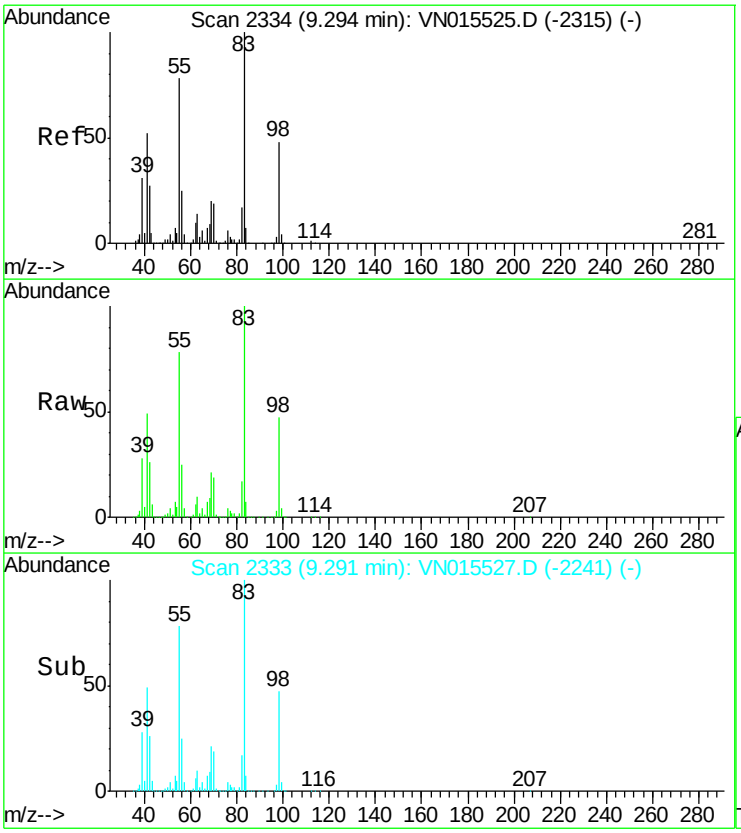


#39
Carbon Tetrachloride
Concen: 200.05 ug/l
RT: 8.00 min Scan# 1931
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:117 Resp: 512102

Ion	Ratio	Lower	Upper
117	100		
119	96.5	78.0	117.0
121	31.2	24.5	36.7

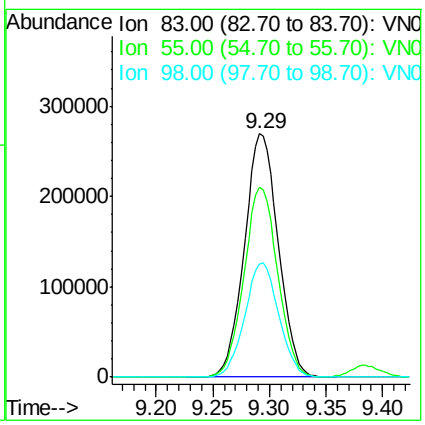


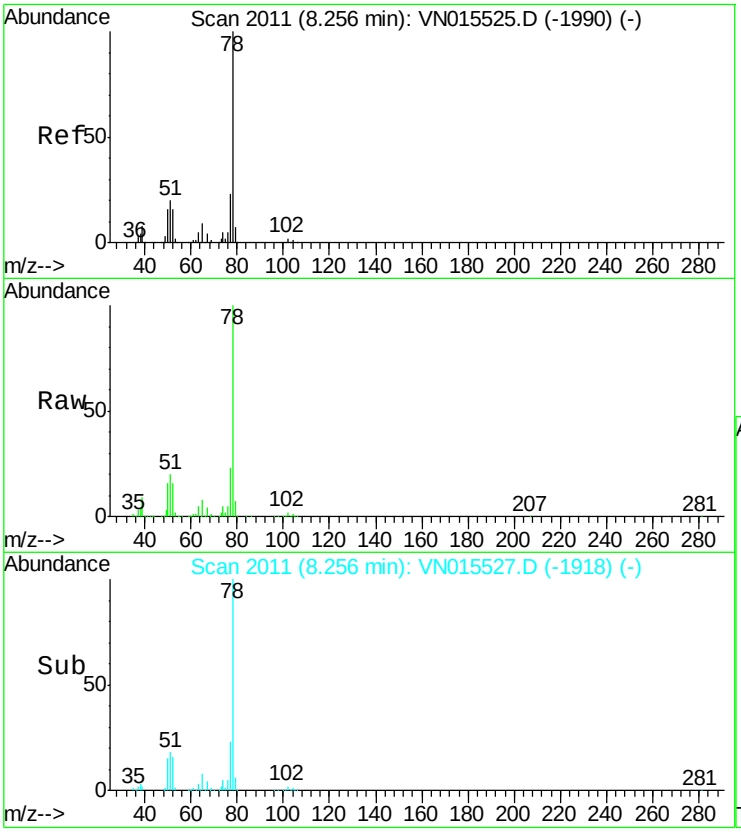


#40
Methylcyclohexane
Concen: 186.73 ug/l
RT: 9.29 min Scan# 2333
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 83 Resp: 561591

Ion	Ratio	Lower	Upper
83	100		
55	78.0	62.5	93.7
98	46.7	38.2	57.2





#41
Benzene
Concen: 181.14 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 78 Resp: 1340243

Ion	Ratio	Lower	Upper
78	100		
77	23.3	18.5	27.7

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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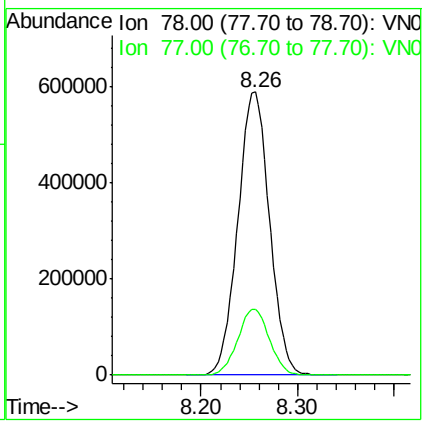
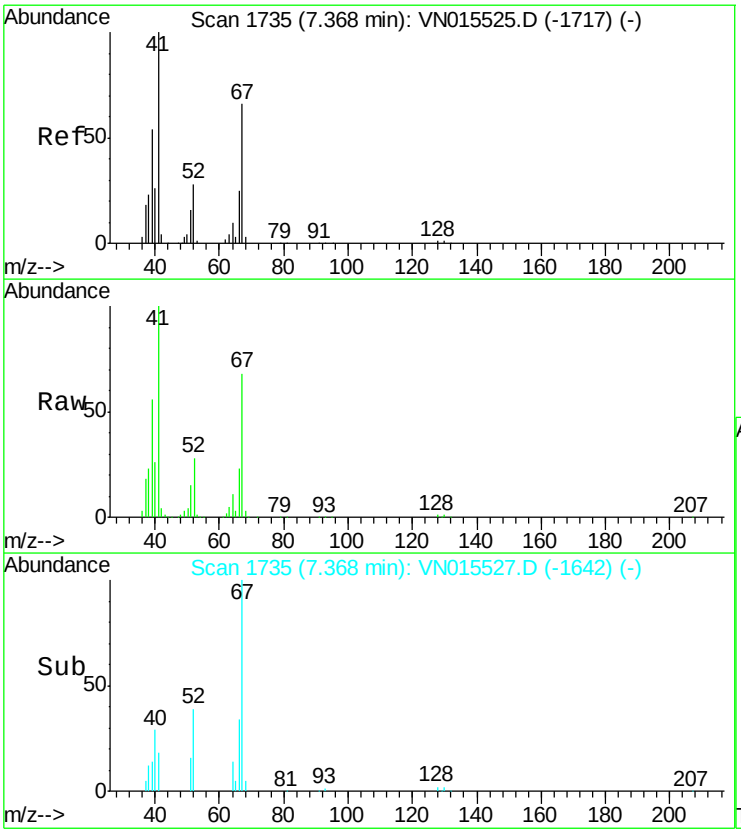
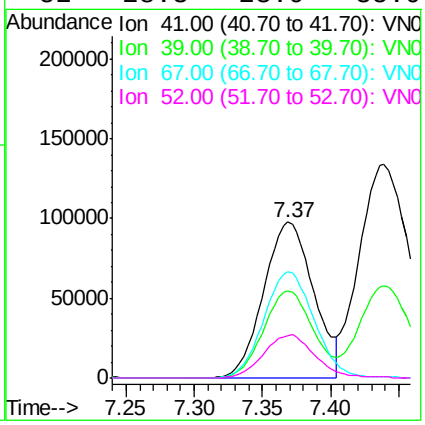




#42
Methacrylonitrile
Concen: 185.12 ug/l
RT: 7.37 min Scan# 1735
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 41 Resp: 248237

Ion	Ratio	Lower	Upper
41	100		
39	55.6	45.0	67.4
67	68.8	54.9	82.3
52	28.3	23.9	35.9



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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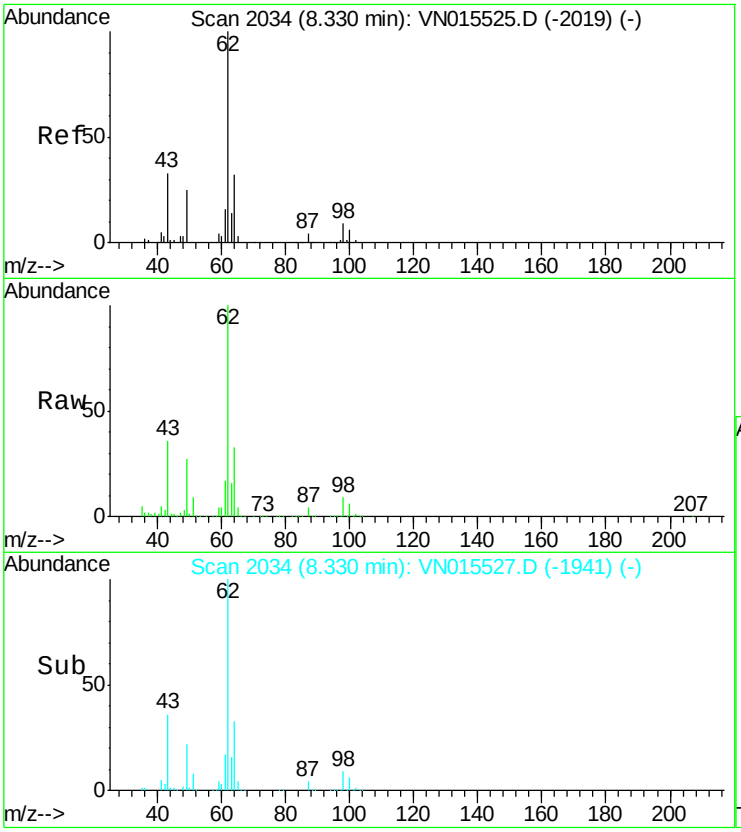
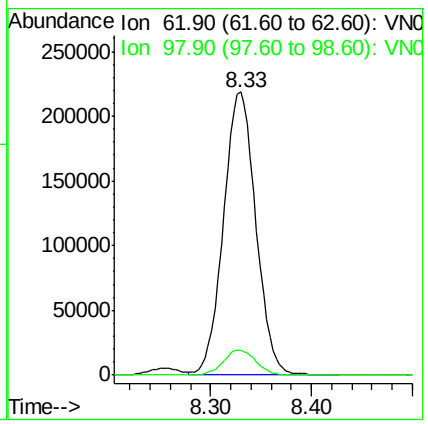
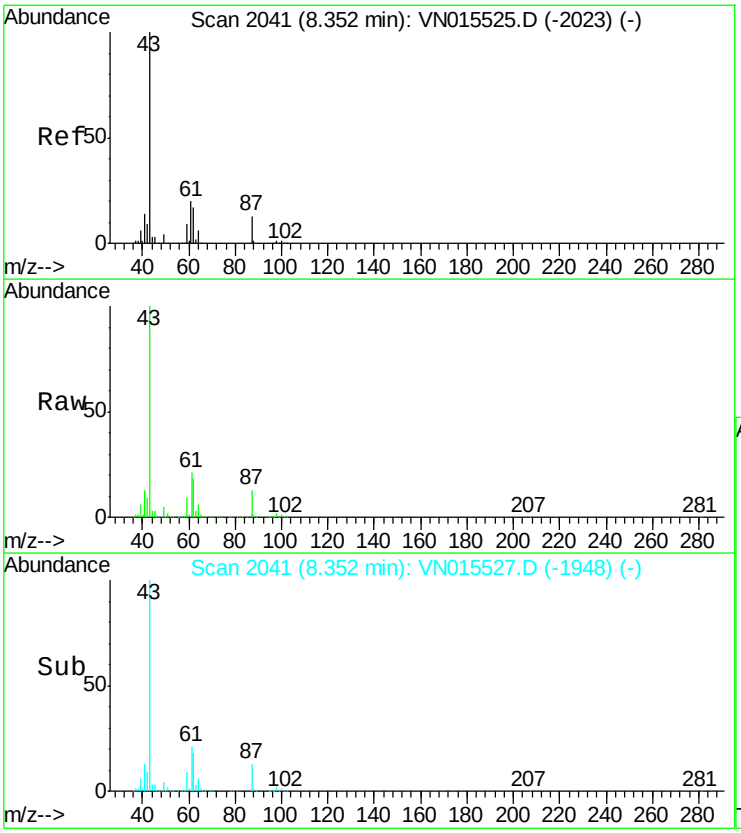


#43
1,2-Dichloroethane
Concen: 180.04 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 62 Resp: 487585

Ion	Ratio	Lower	Upper
62	100		
98	9.0	0.0	18.2

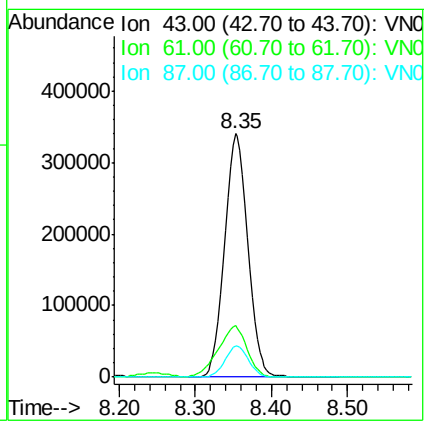




#44
Isopropyl Acetate
Concen: 230.23 ug/l
RT: 8.35 min Scan# 2041
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 724463

Ion	Ratio	Lower	Upper
43	100		
61	26.1	20.4	30.6
87	13.0	10.4	15.6



Instrument :
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LabSampleId :
VSTDICC200

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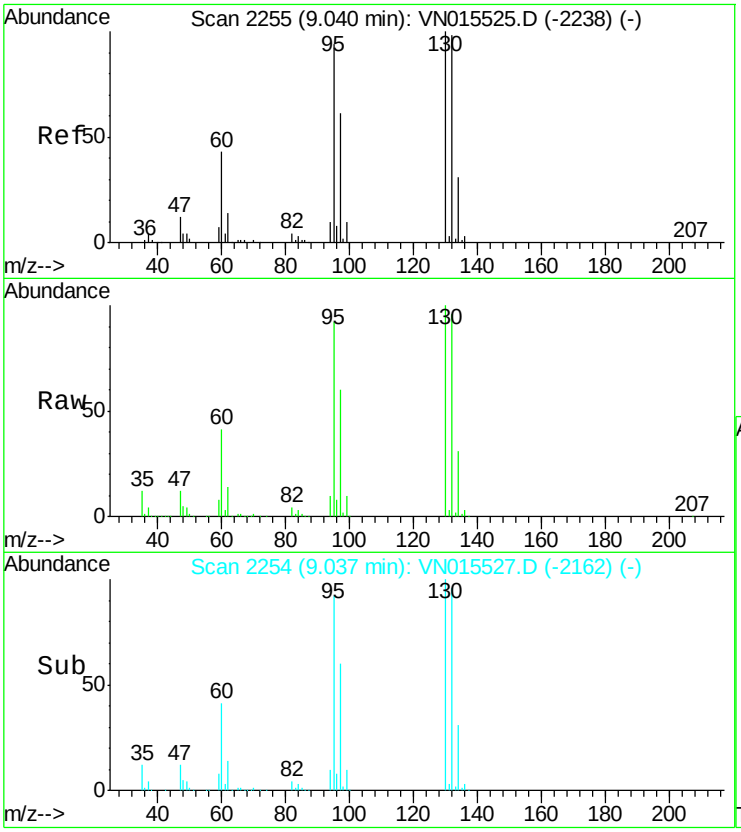
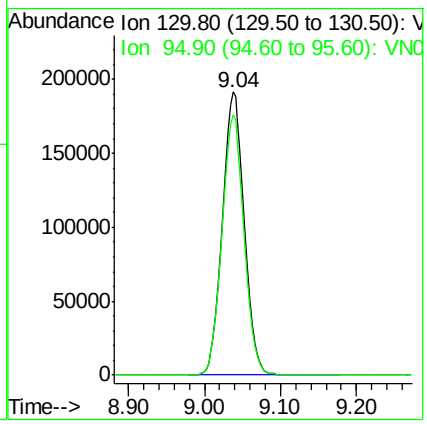
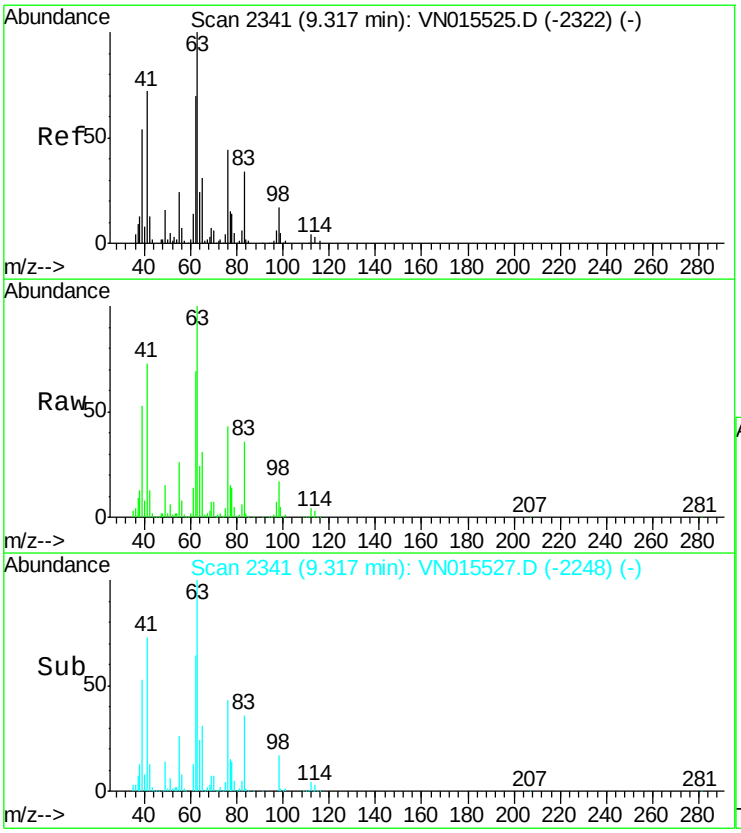


#45
Trichloroethene
Concen: 194.57 ug/l
RT: 9.04 min Scan# 2254
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:130 Resp: 383549

Ion	Ratio	Lower	Upper
130	100		
95	92.0	0.0	187.0

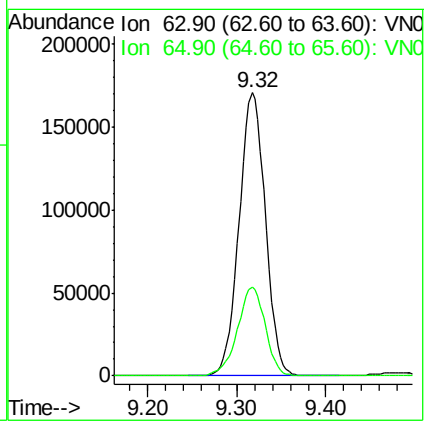


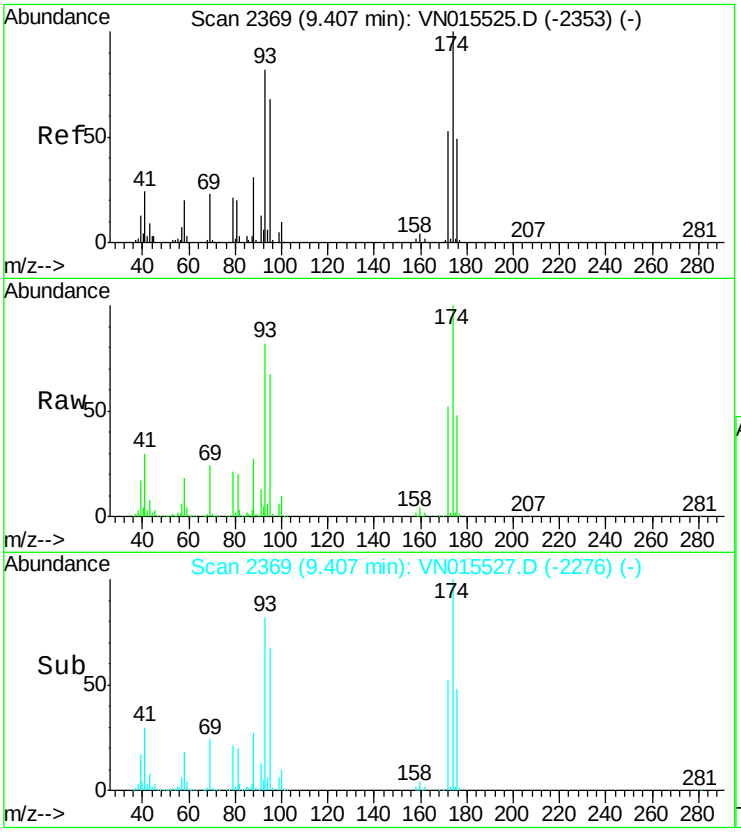


#46
1,2-Dichloropropane
Concen: 173.94 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 63 Resp: 349259

Ion	Ratio	Lower	Upper
63	100		
65	31.5	25.0	37.4

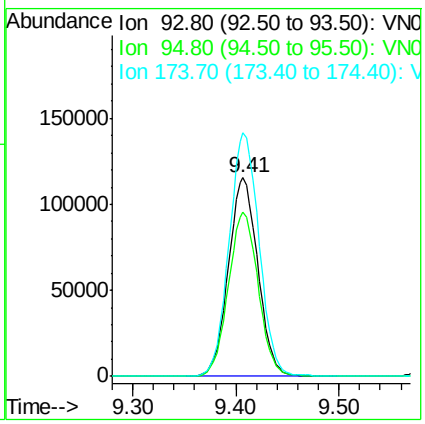




#47
Dibromomethane
Concen: 185.36 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 93 Resp: 230227

Ion	Ratio	Lower	Upper
93	100		
95	83.5	66.9	100.3
174	124.8	98.6	148.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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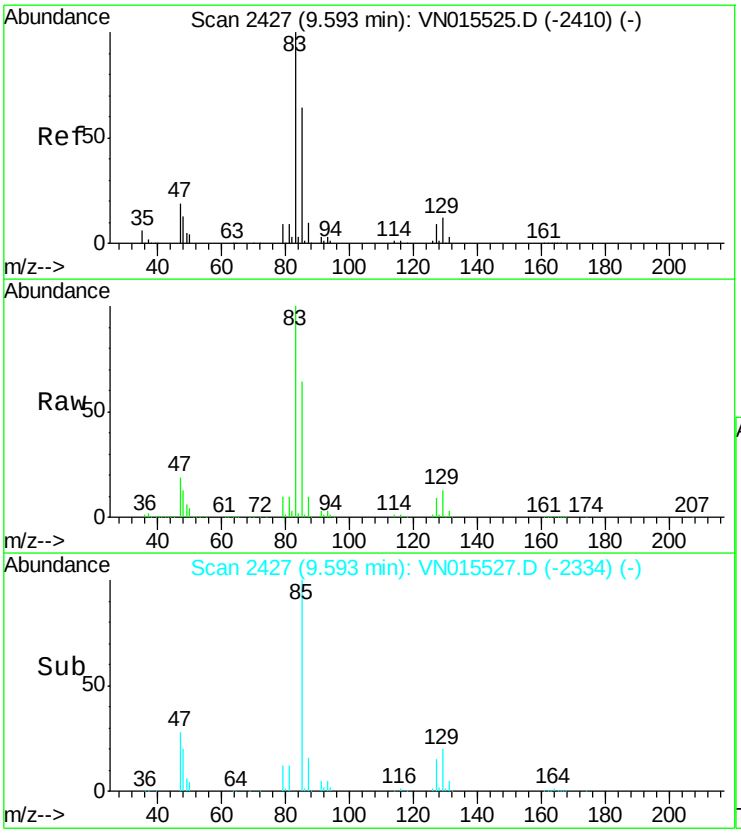
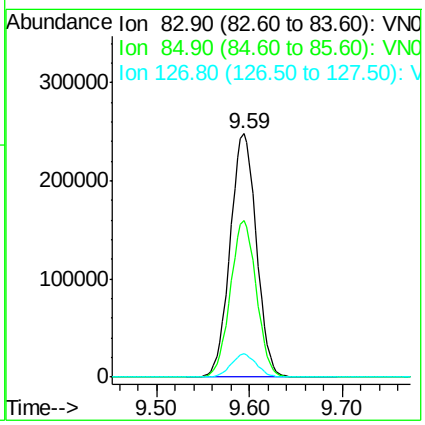


#48
Bromodichloromethane
Concen: 196.11 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 83 Resp: 485713

Ion	Ratio	Lower	Upper
83	100		
85	64.2	51.1	76.7
127	9.4	7.6	11.4



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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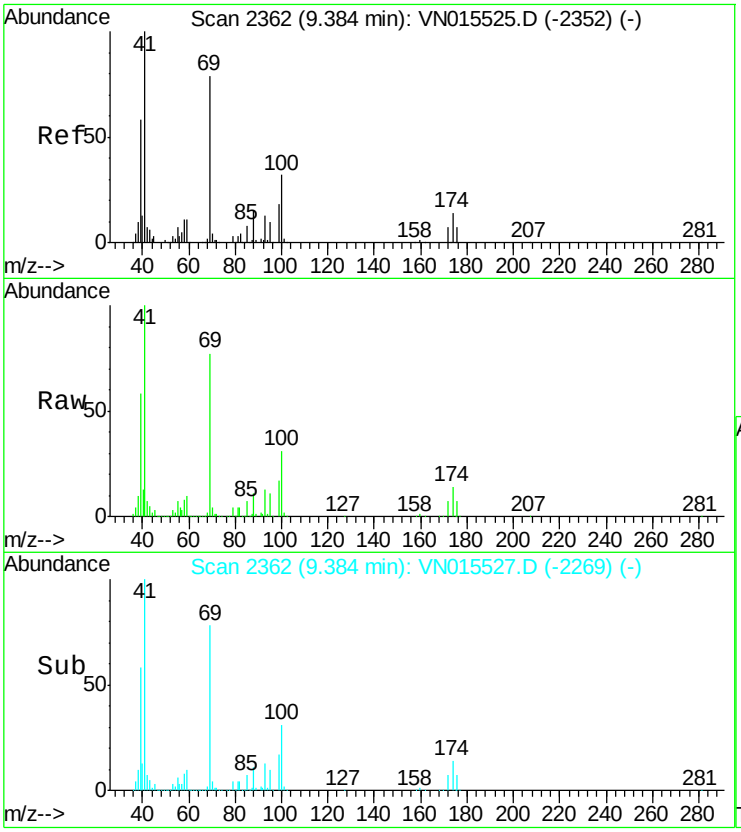
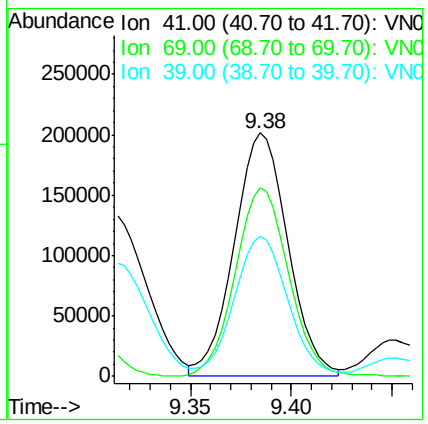
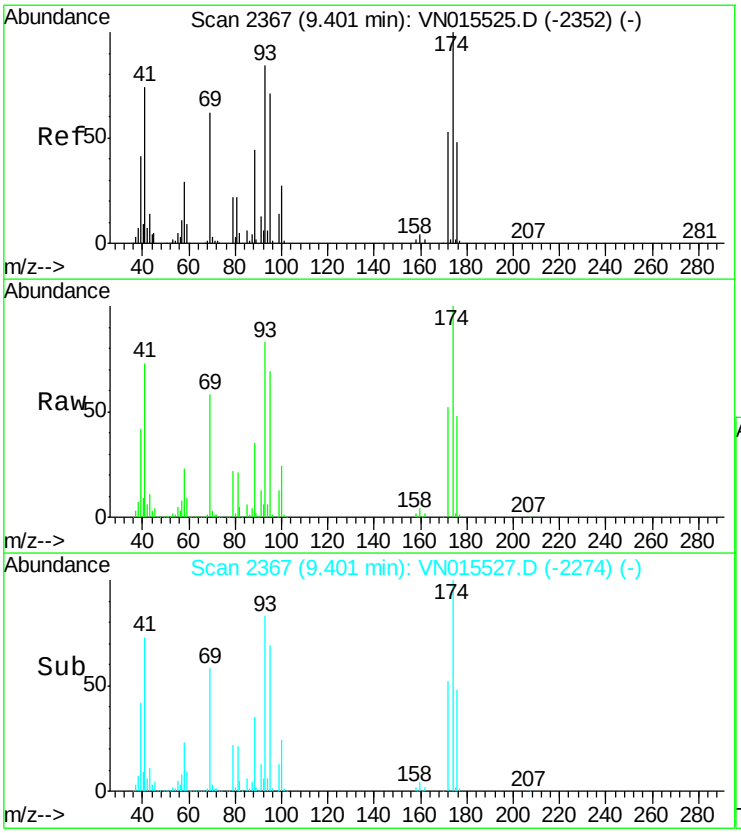


#49
Methyl methacrylate
Concen: 193.35 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 41 Resp: 374798

Ion	Ratio	Lower	Upper
41	100		
69	77.7	62.8	94.2
39	57.6	46.4	69.6

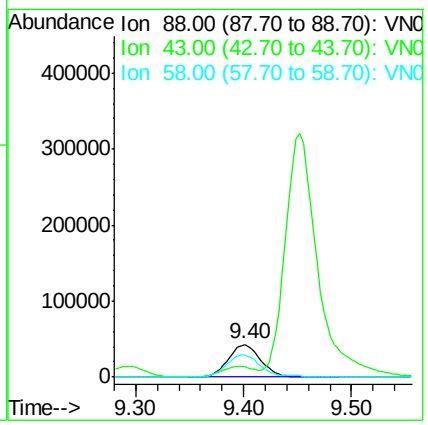




#50
1,4-Dioxane
Concen: 3530.26 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 88 Resp: 89902

Ion	Ratio	Lower	Upper
88	100		
43	32.1	26.4	39.6
58	72.8	56.6	84.8



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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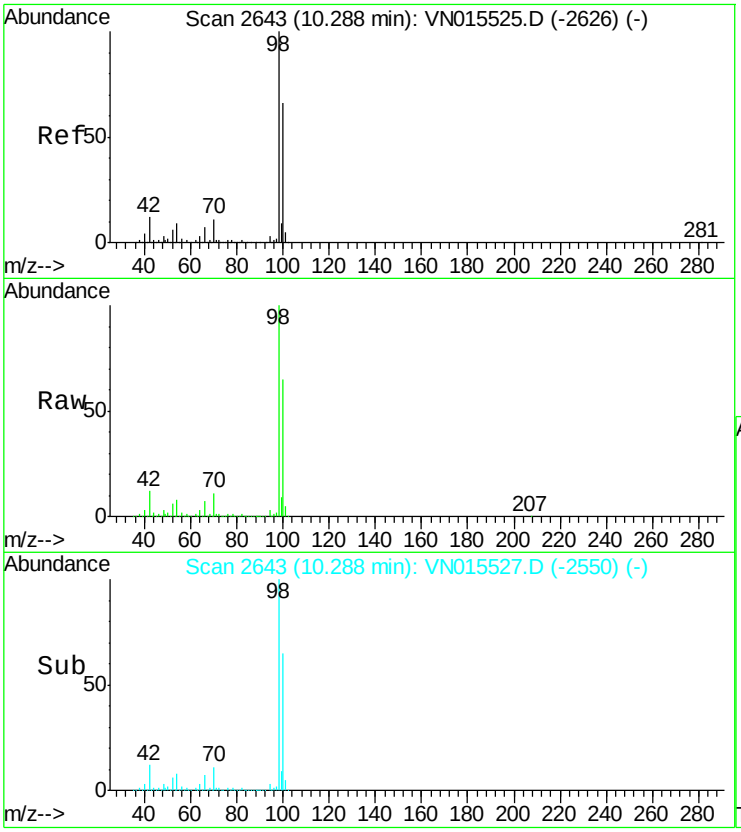
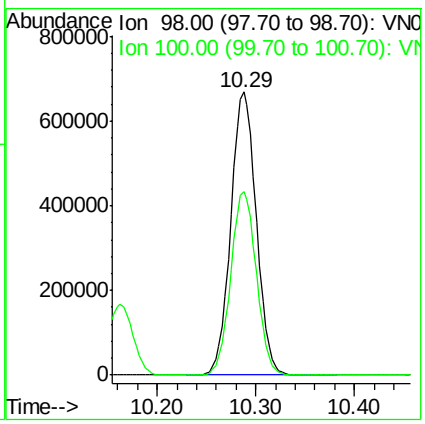
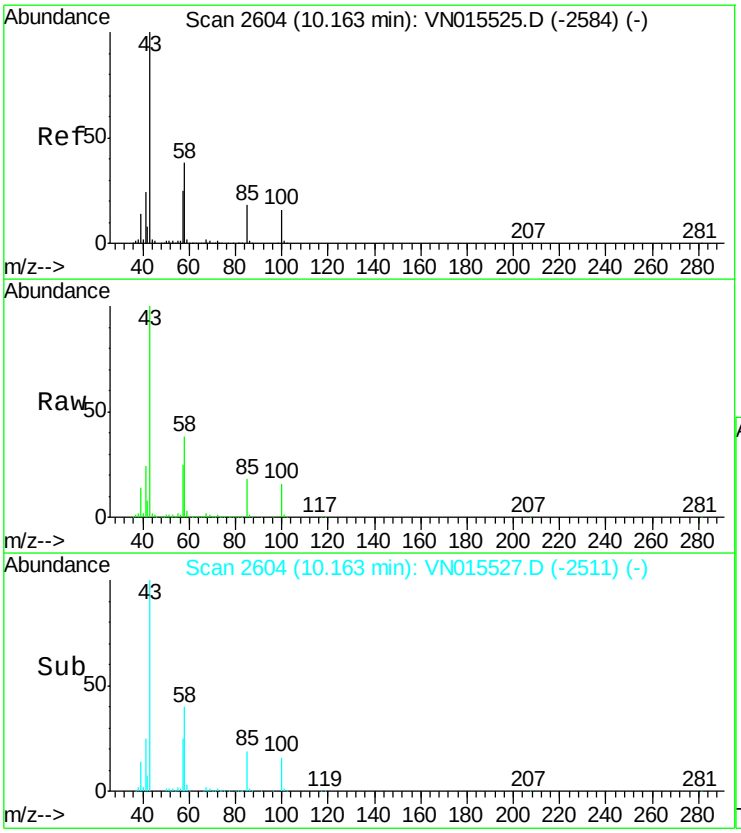


#51
Toluene-d8
Concen: 182.97 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 98 Resp: 1199281

Ion	Ratio	Lower	Upper
98	100		
100	65.3	52.3	78.5

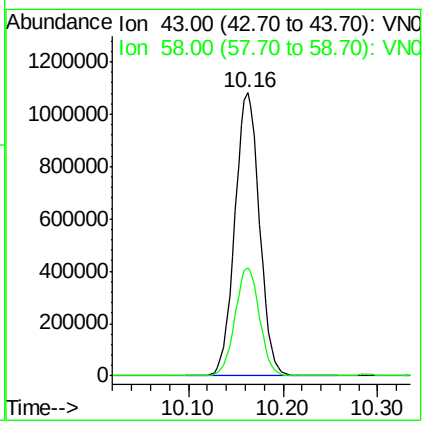


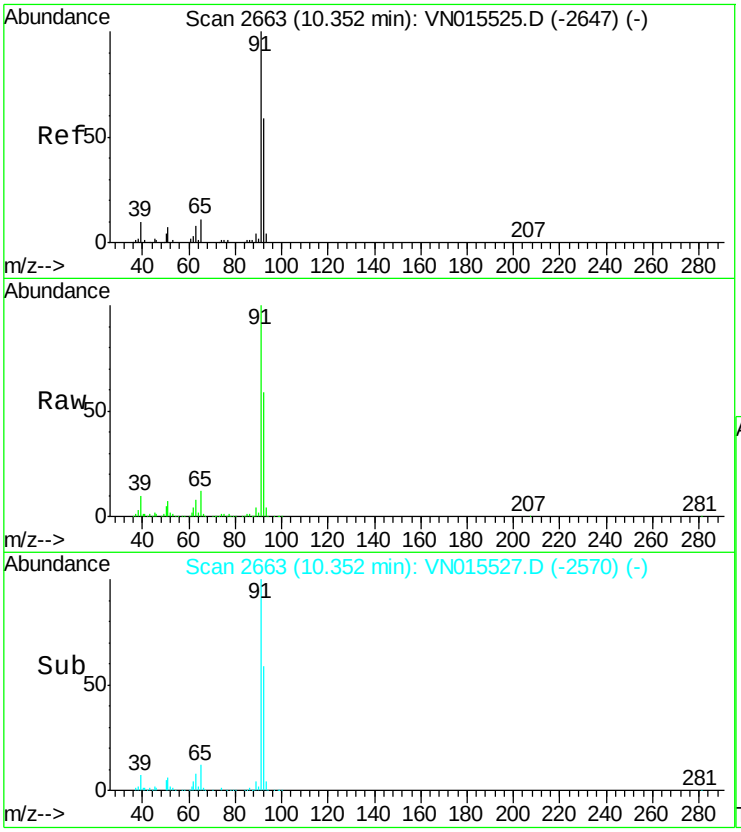


#52
4-Methyl-2-Pentanone
Concen: 910.95 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 1945006

Ion	Ratio	Lower	Upper
43	100		
58	38.0	30.2	45.2





#53
Toluene
Concen: 191.01 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 92 Resp: 863366

Ion	Ratio	Lower	Upper
92	100		
91	171.5	136.2	204.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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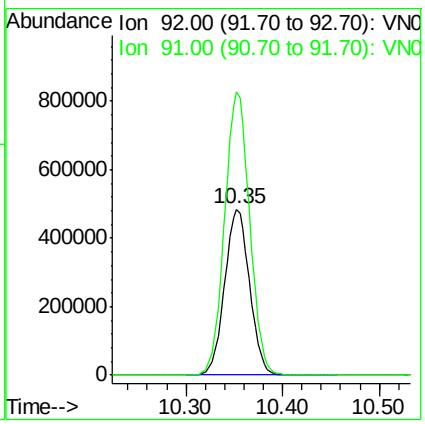
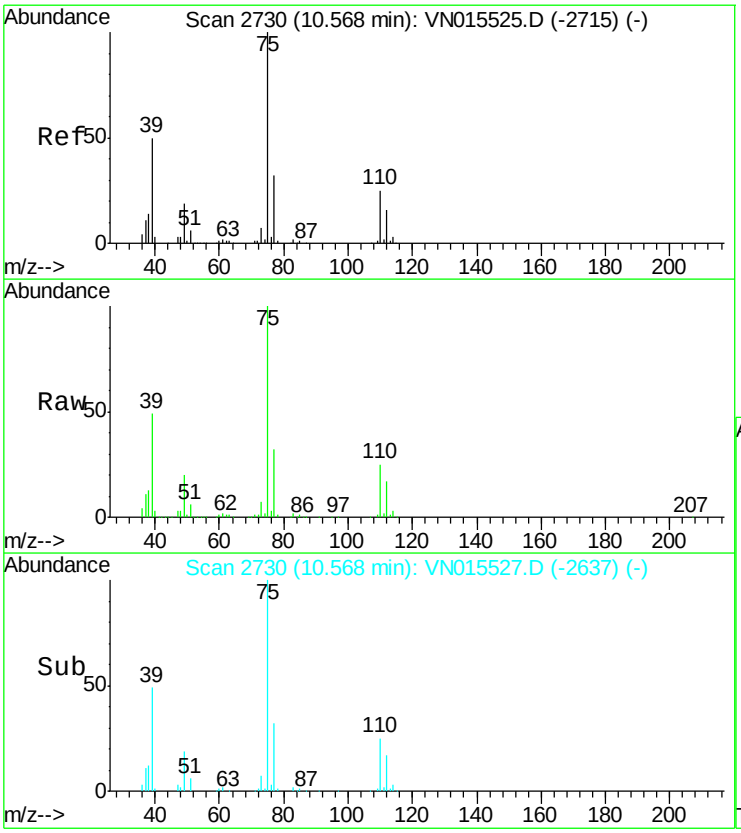
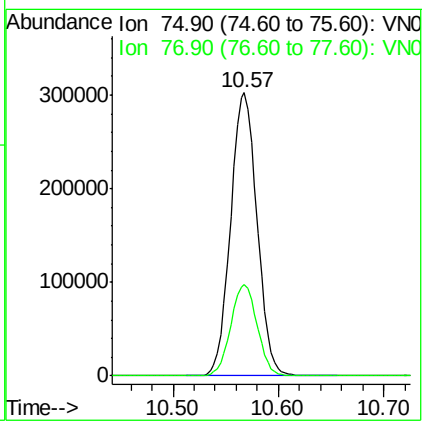


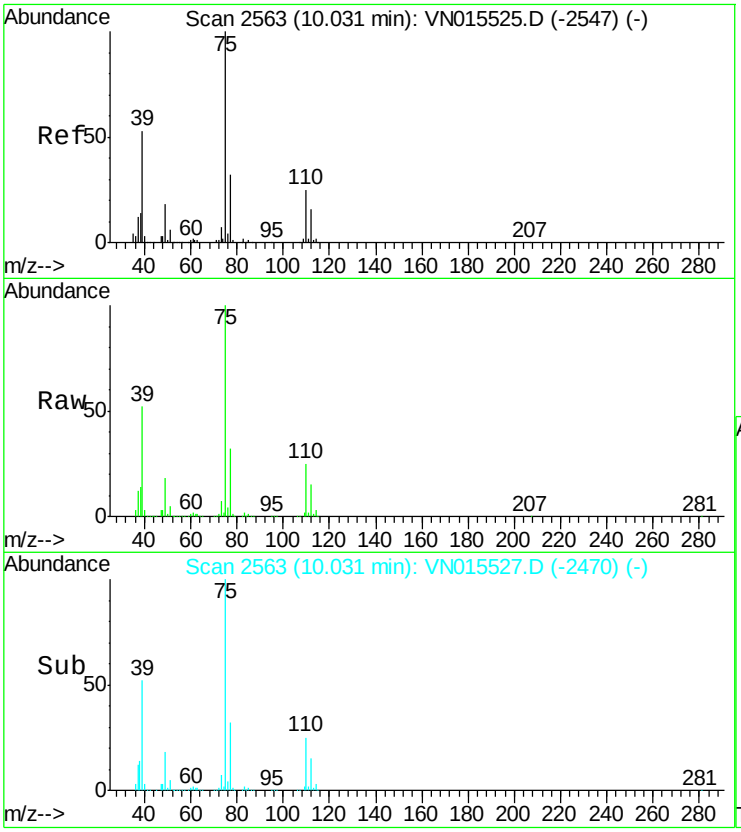


#54
t-1,3-Dichloropropene
Concen: 210.57 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 75 Resp: 524474

Ion	Ratio	Lower	Upper
75	100		
77	32.2	26.0	39.0





#55
cis-1,3-Dichloropropene
Concen: 197.93 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 75 Resp: 563383

Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.4	38.2
39	52.2	42.2	63.4

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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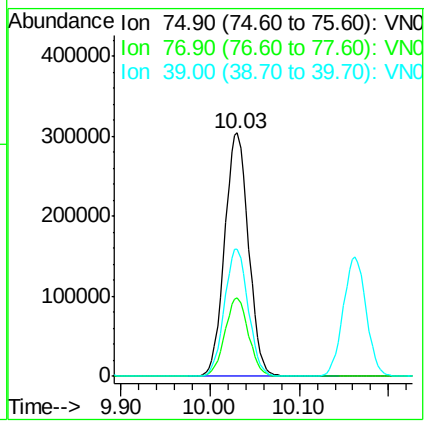
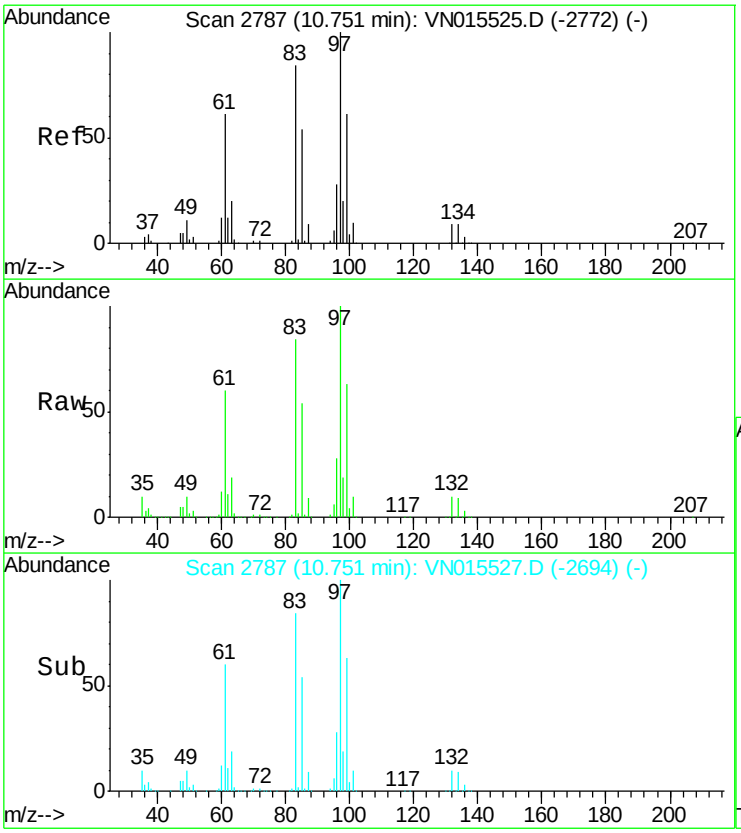
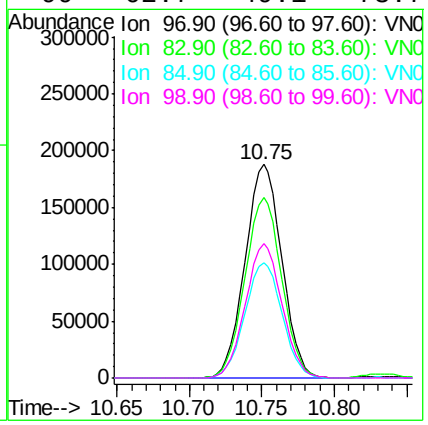


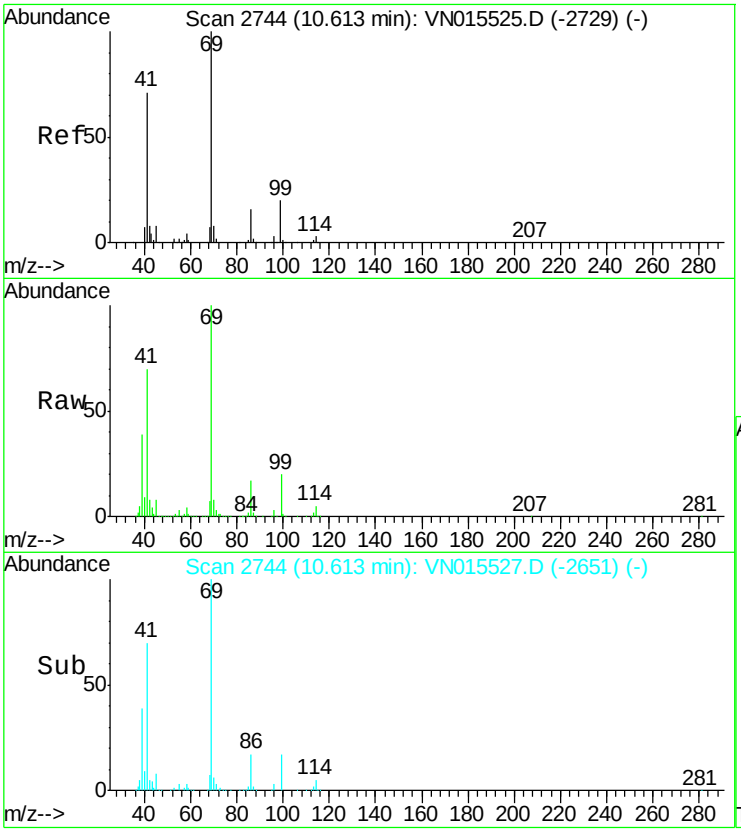


#56
1,1,2-Trichloroethane
Concen: 186.39 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 97 Resp: 332092

Ion	Ratio	Lower	Upper
97	100		
83	84.5	67.0	100.4
85	54.0	42.9	64.3
99	62.7	49.1	73.7





#57
Ethyl methacrylate
Concen: 208.57 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 69 Resp: 513482

Ion	Ratio	Lower	Upper
69	100		
41	70.3	56.9	85.3
39	38.2	32.0	48.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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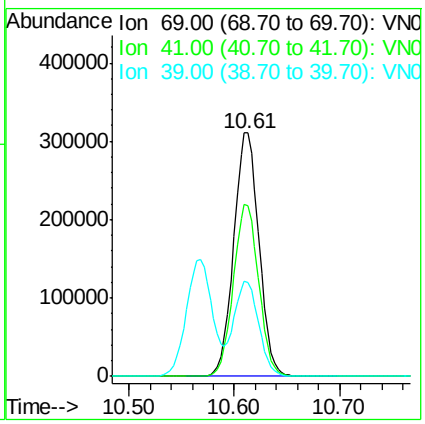
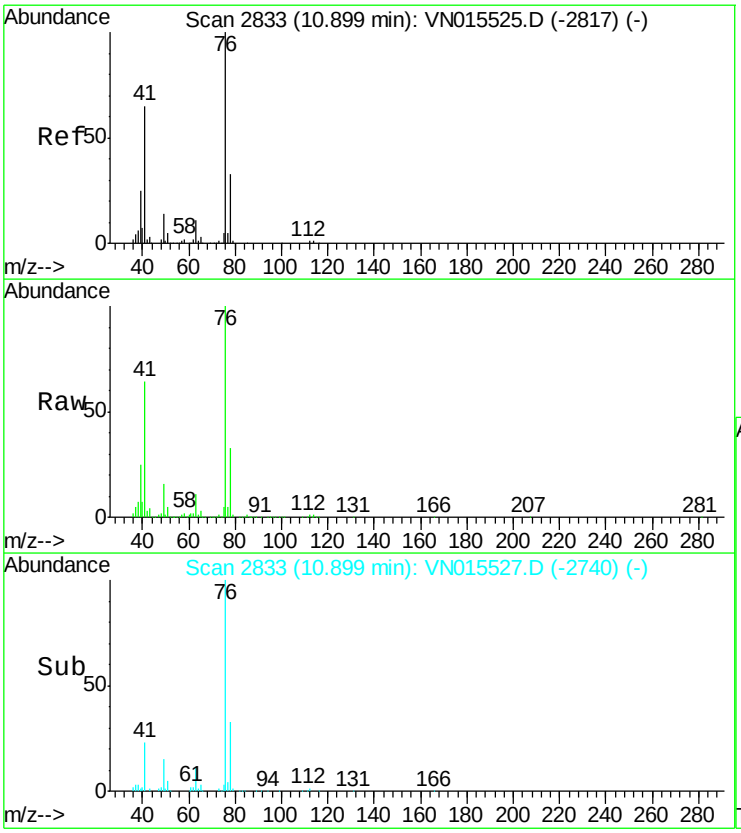
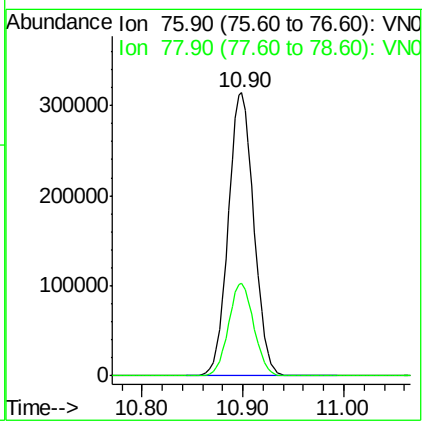


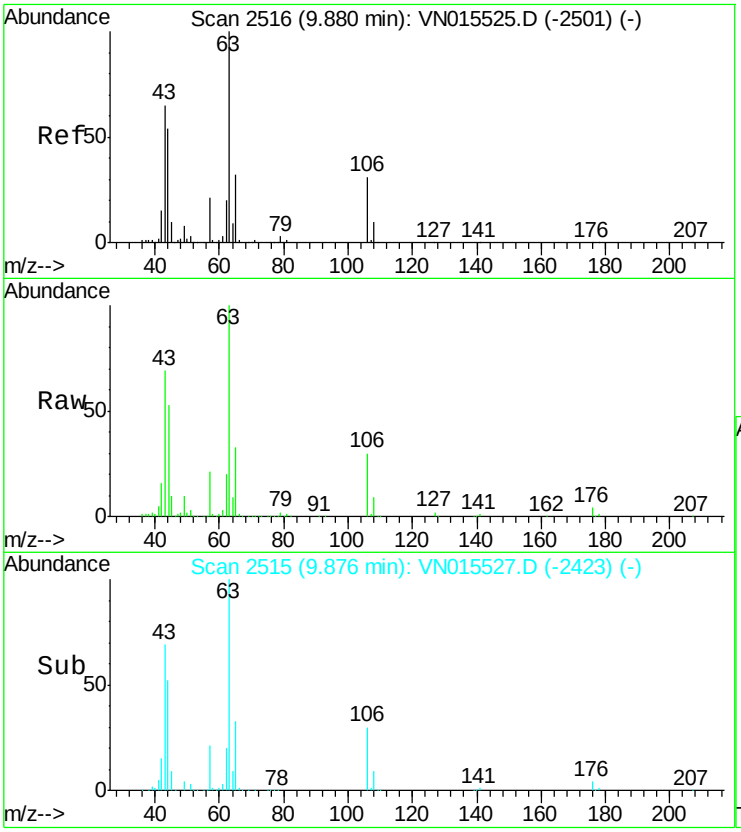


#58
1,3-Dichloropropane
Concen: 181.37 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 76 Resp: 553435

Ion	Ratio	Lower	Upper
76	100		
78	32.4	26.3	39.5

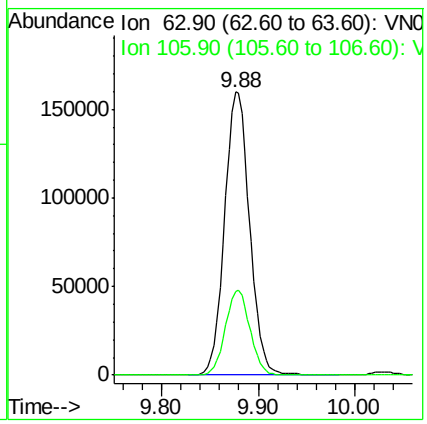




#59
2-Chloroethyl Vinyl ether
Concen: 313.22 ug/l
RT: 9.88 min Scan# 2515
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 63 Resp: 287037

Ion	Ratio	Lower	Upper
63	100		
106	29.6	23.7	35.5



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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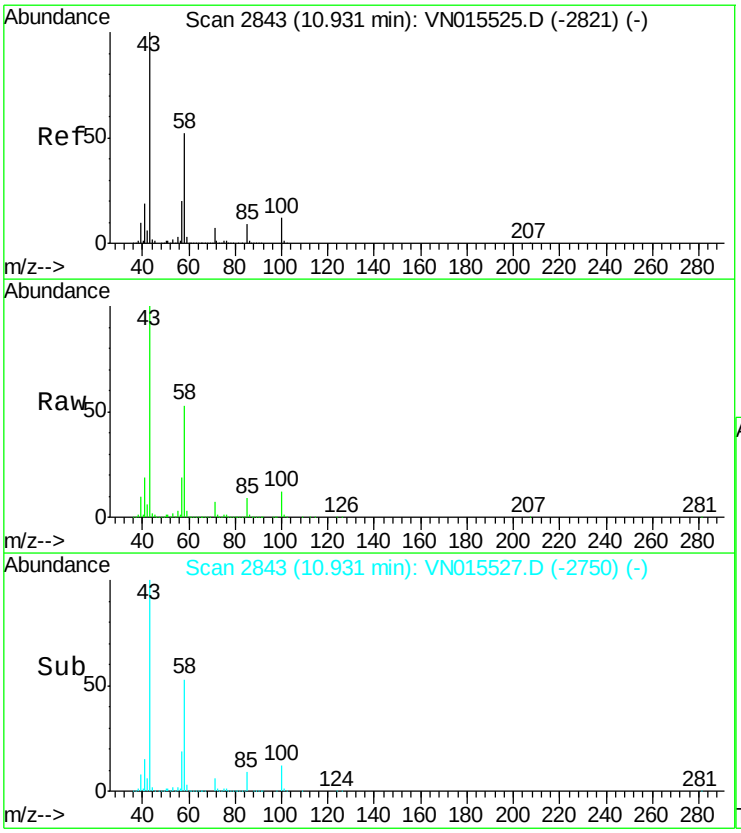
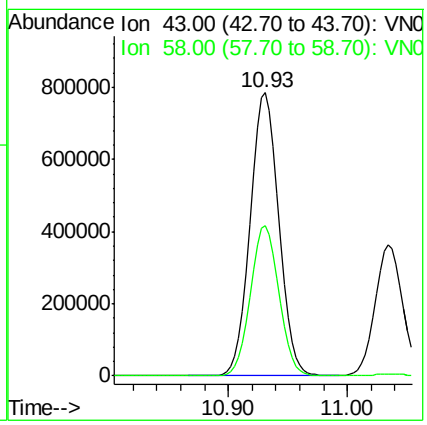


#60
2-Hexanone
Concen: 913.22 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 1308835

Ion	Ratio	Lower	Upper
43	100		
58	52.7	26.0	78.0



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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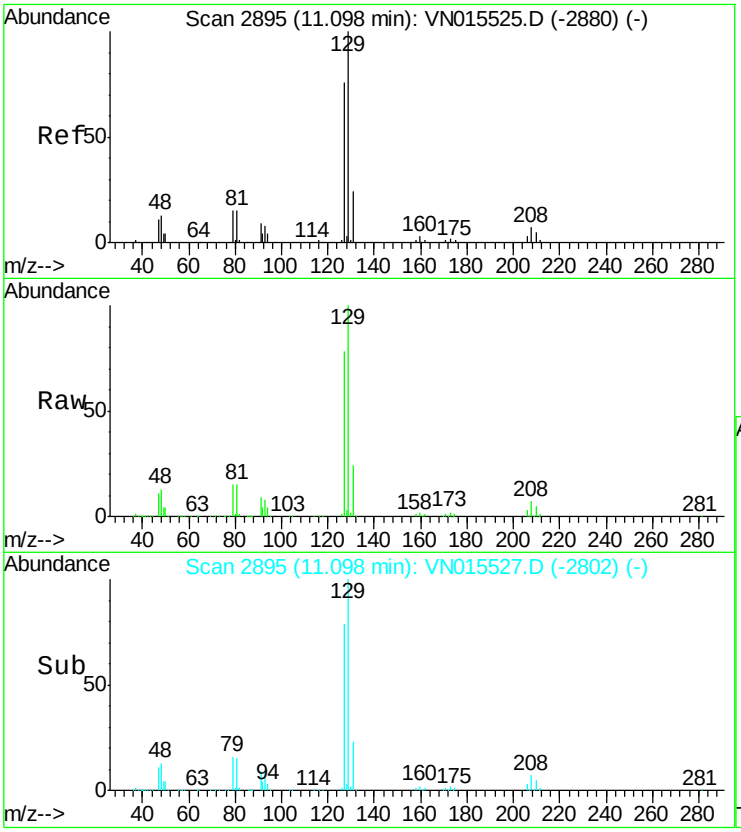
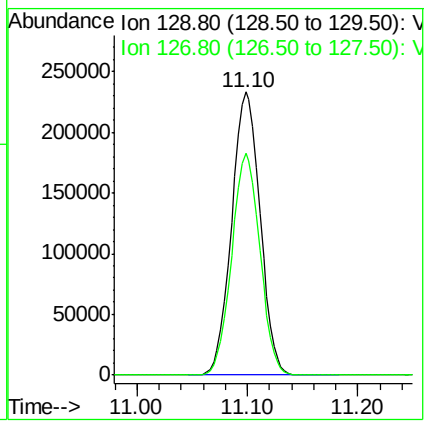
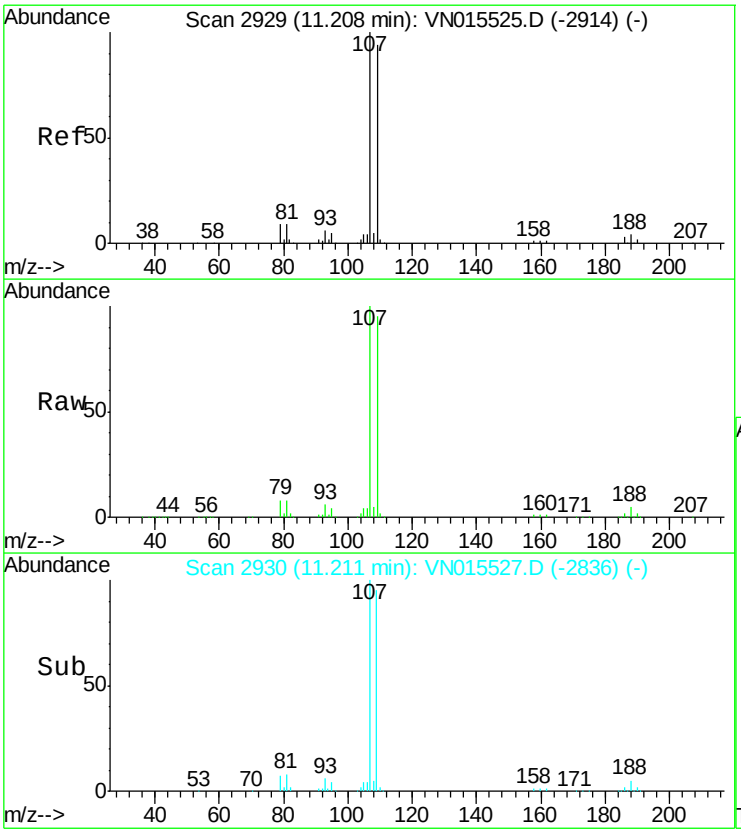


#61
Dibromochloromethane
Concen: 210.25 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:129 Resp: 416859

Ion	Ratio	Lower	Upper
129	100		
127	77.6	38.6	116.0

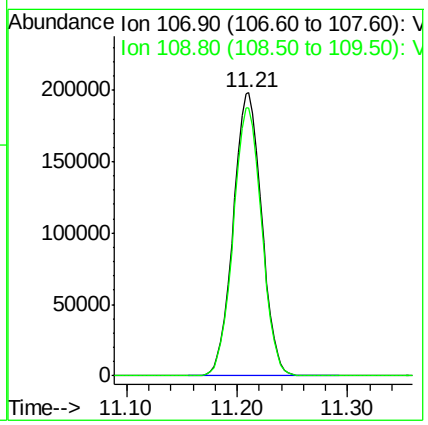


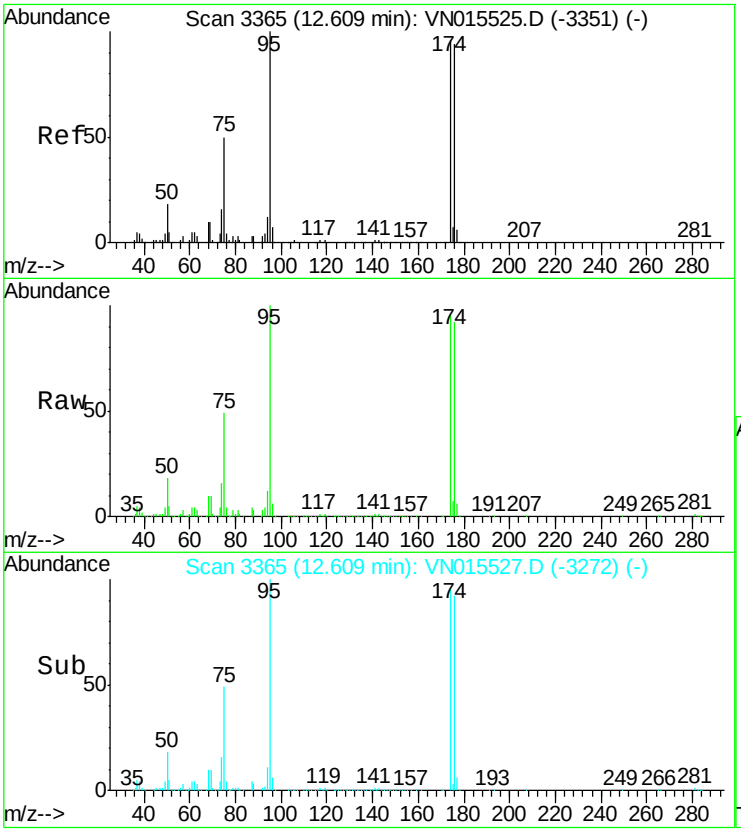


#62
1,2-Dibromoethane
Concen: 197.73 ug/l
RT: 11.21 min Scan# 2930
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:107 Resp: 353474

Ion	Ratio	Lower	Upper
107	100		
109	94.9	75.8	113.6





#63
4-Bromofluorobenzene
Concen: 196.34 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 95 Resp: 427412

Ion	Ratio	Lower	Upper
95	100		
174	96.0	0.0	191.8
176	93.4	0.0	186.8

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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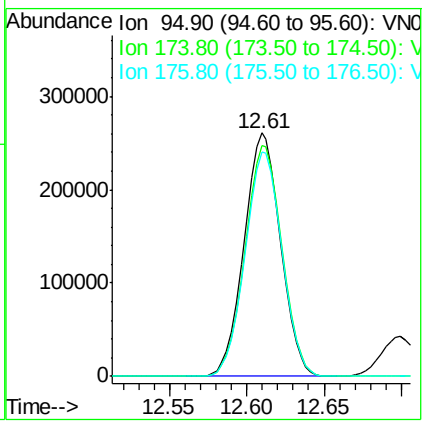
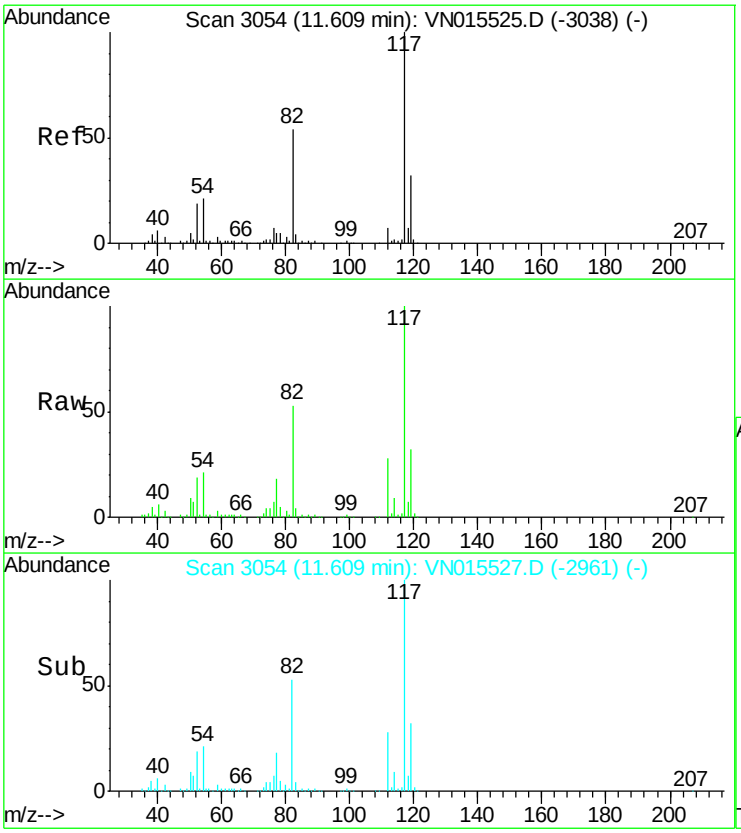
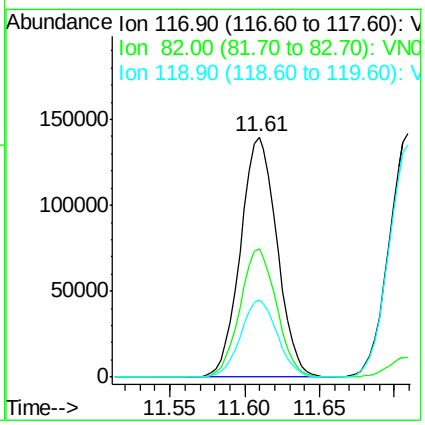


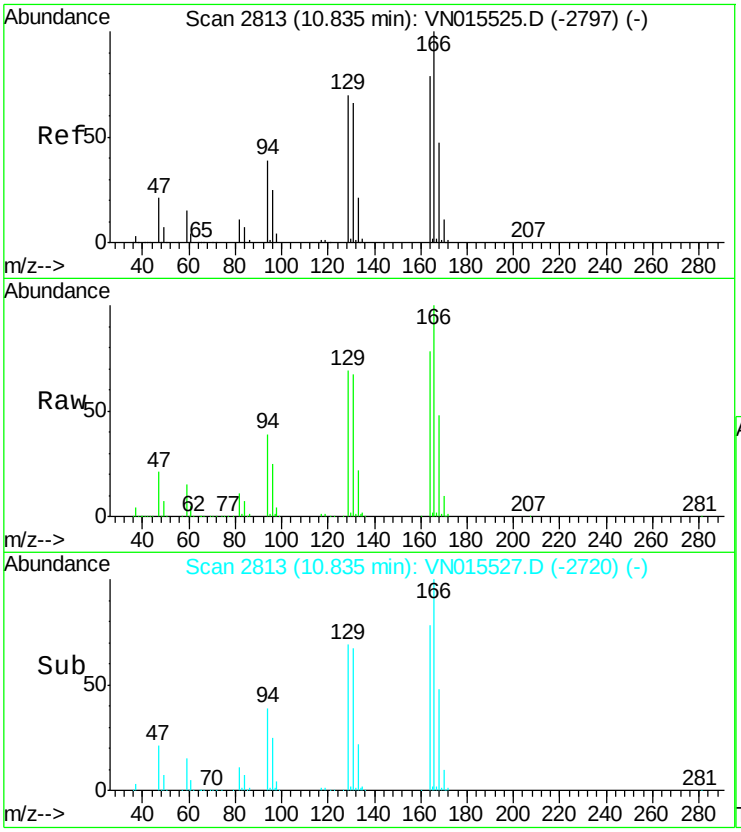


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:117 Resp: 237607

Ion	Ratio	Lower	Upper
117	100		
82	53.2	43.3	64.9
119	32.1	25.6	38.4

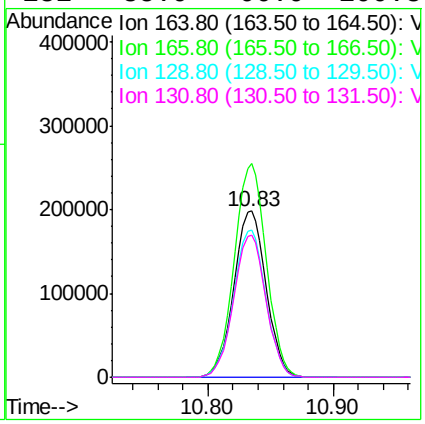




#65
Tetrachloroethene
Concen: 185.11 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:164 Resp: 352034

Ion	Ratio	Lower	Upper
164	100		
166	128.6	101.7	152.5
129	88.7	70.7	106.1
131	85.9	66.9	100.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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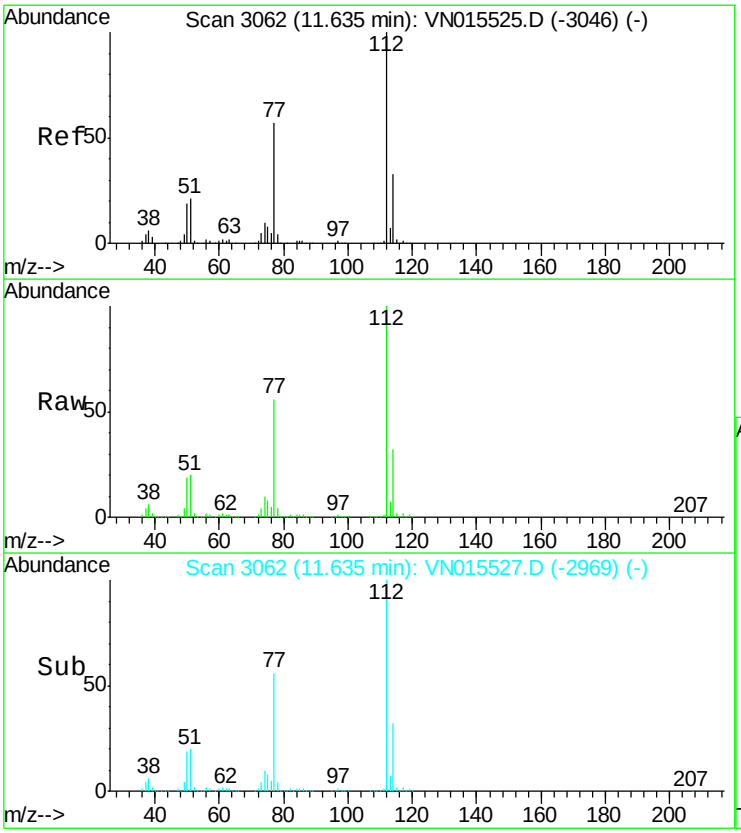
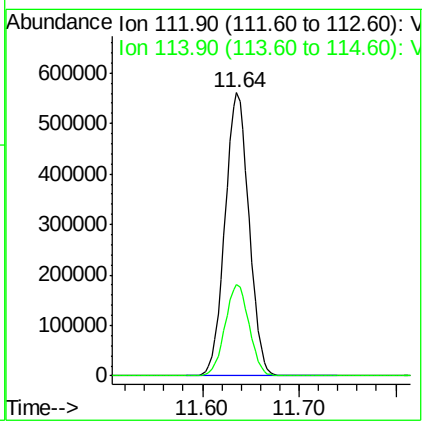
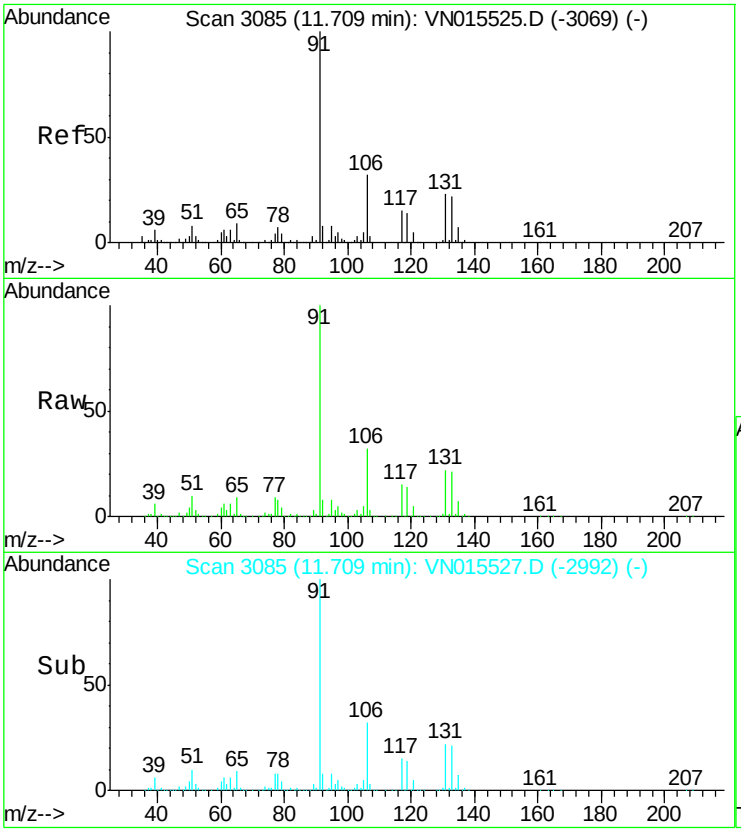


#66
Chlorobenzene
Concen: 188.72 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:112 Resp: 963389

Ion	Ratio	Lower	Upper
112	100		
114	32.2	26.2	39.2





#67
1,1,1,2-Tetrachloroethane
Concen: 200.18 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:131 Resp: 371128

Ion	Ratio	Lower	Upper
131	100		
133	96.1	47.7	143.1
119	63.4	31.5	94.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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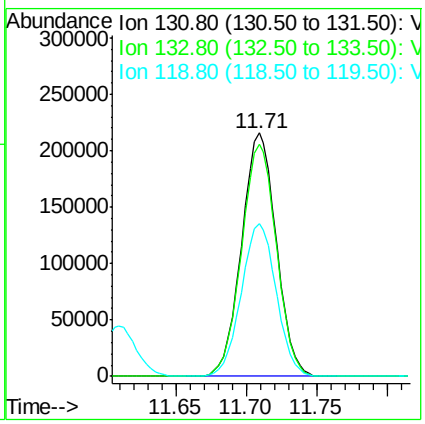
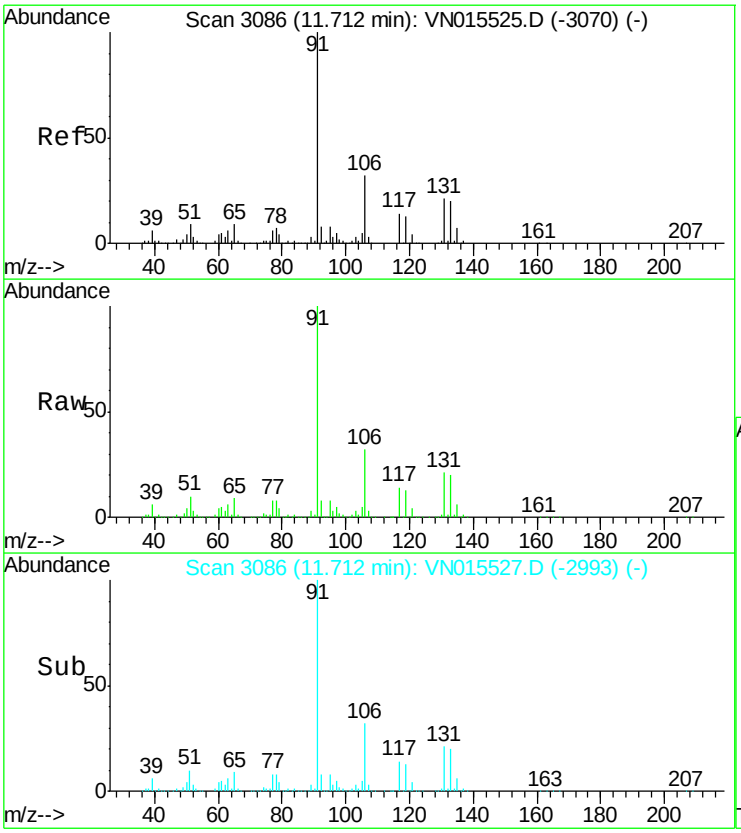
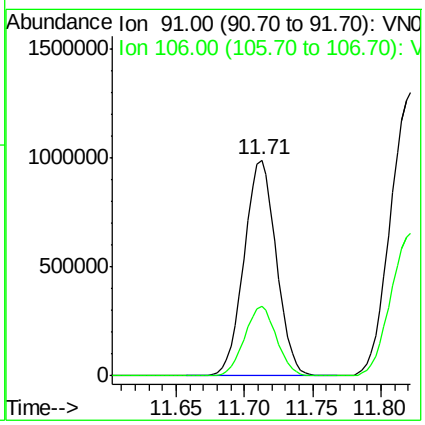




#68
Ethyl Benzene
Concen: 196.27 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 91 Resp: 1623974

Ion	Ratio	Lower	Upper
91	100		
106	32.1	25.5	38.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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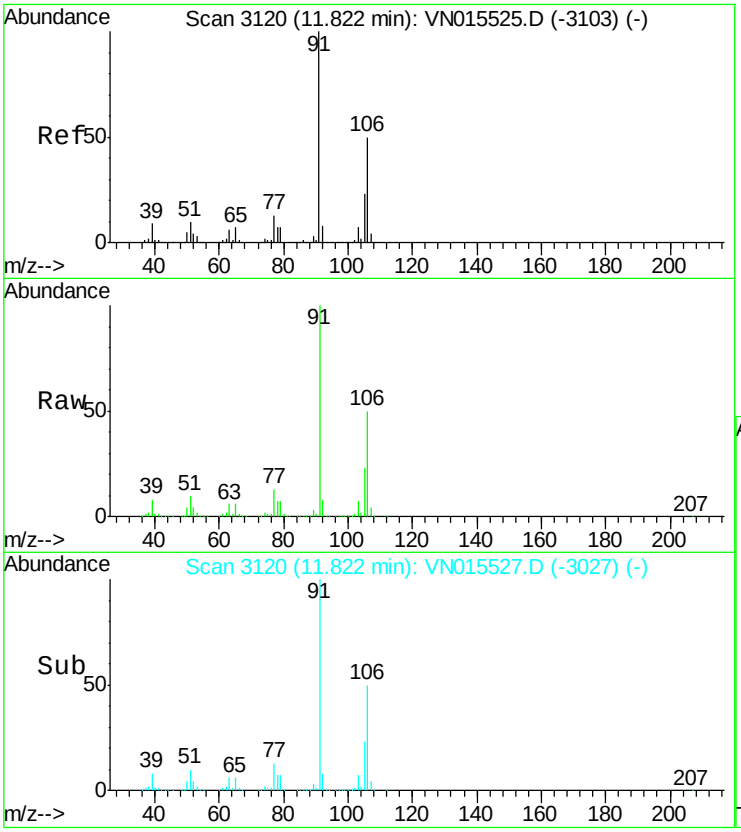
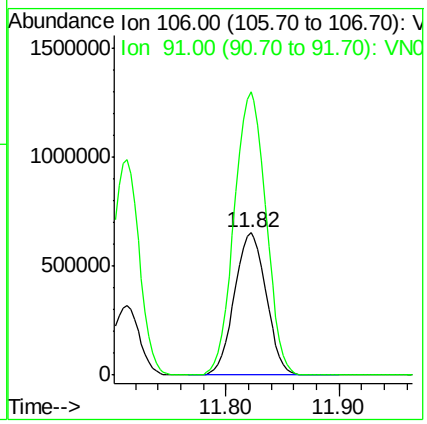
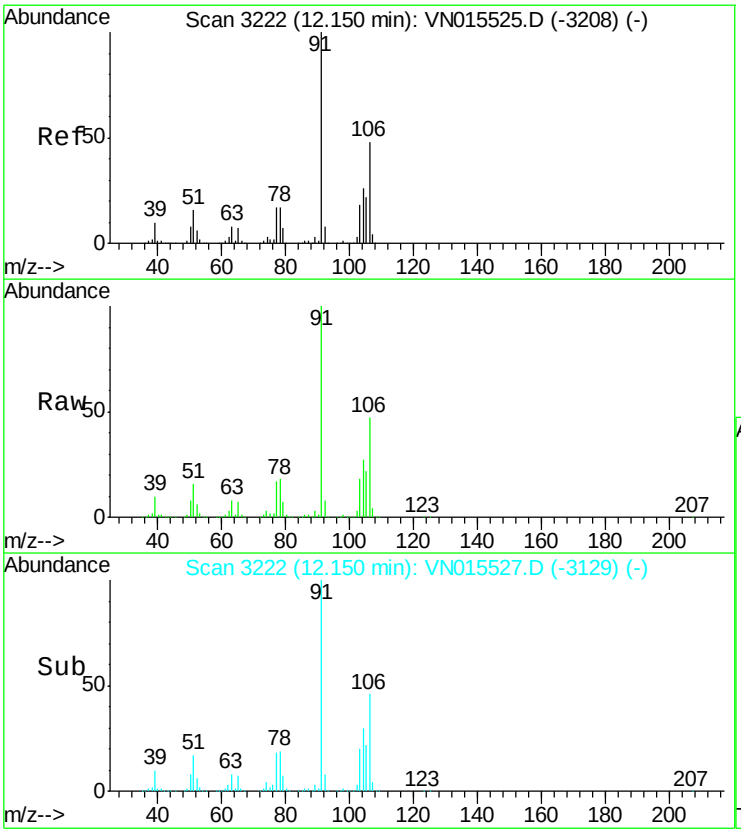


#69
m/p-Xylenes
Concen: 406.96 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:106 Resp: 1274843

Ion	Ratio	Lower	Upper
106	100		
91	199.7	160.5	240.7

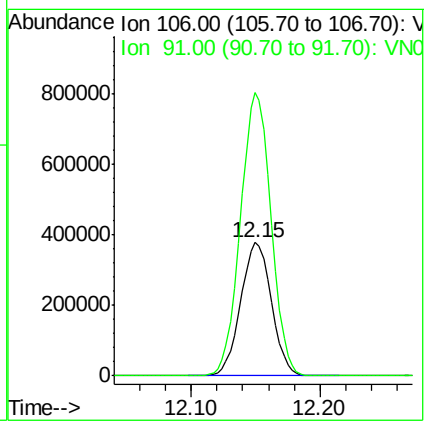


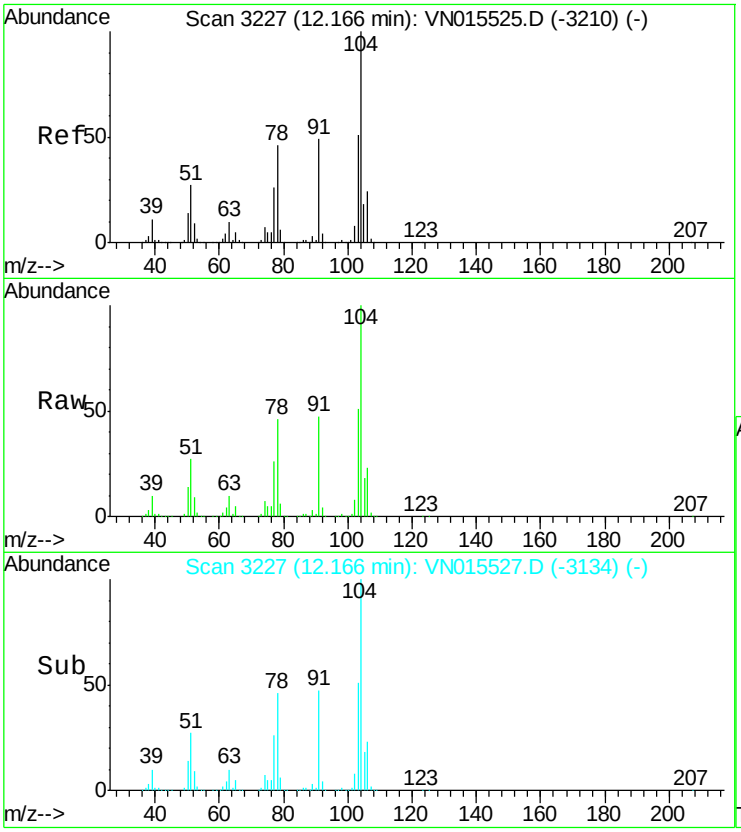


#70
o-Xylene
Concen: 195.51 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:106 Resp: 627428

Ion	Ratio	Lower	Upper
106	100		
91	211.0	104.9	314.7





#71
Styrene
Concen: 216.55 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:104 Resp: 1037838

Ion	Ratio	Lower	Upper
104	100		
78	50.5	40.1	60.1
103	54.8	44.0	66.0

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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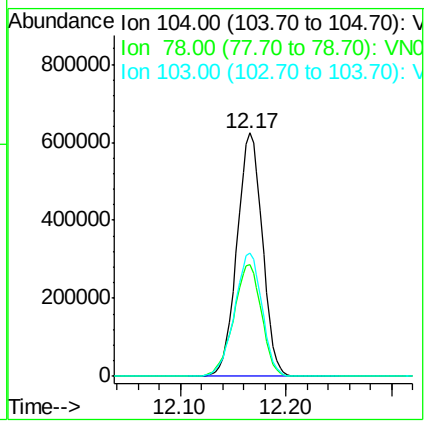
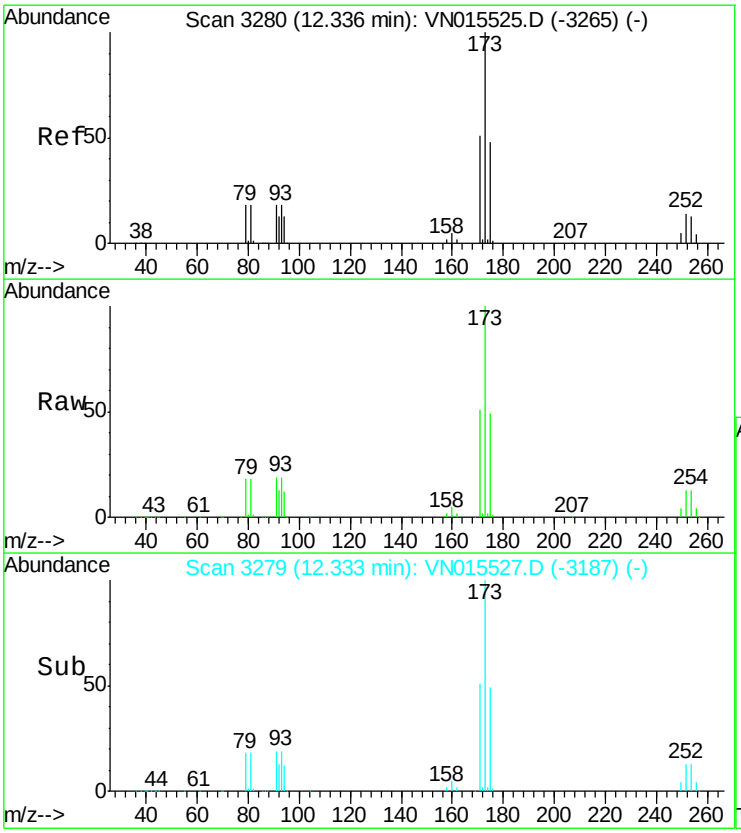
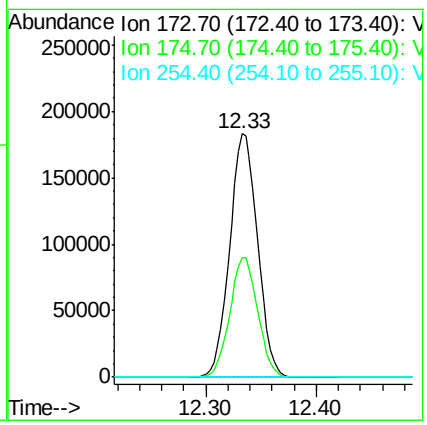


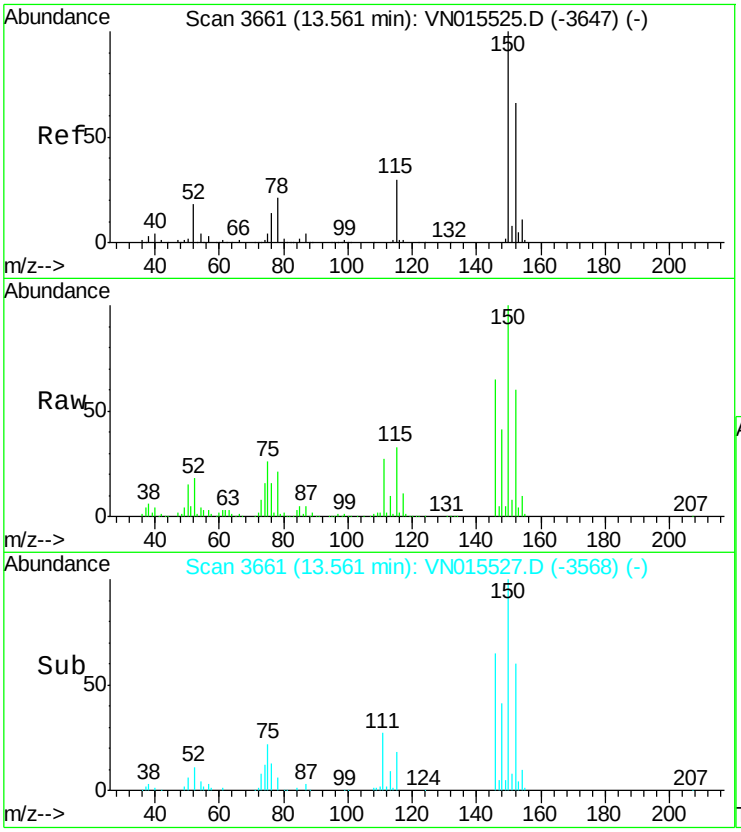


#72
Bromoform
Concen: 225.52 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:173 Resp: 320512

Ion	Ratio	Lower	Upper
173	100		
175	49.0	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:152 Resp: 112641

Ion	Ratio	Lower	Upper
152	100		
115	54.9	27.2	81.6
150	225.4	0.0	343.6

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
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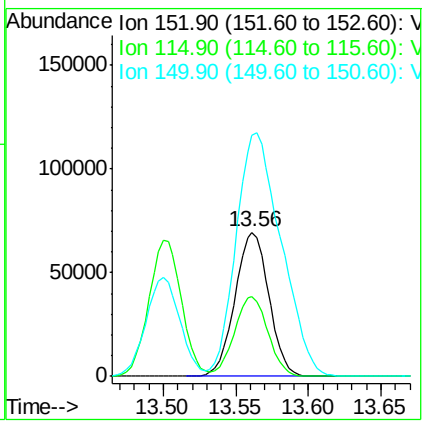
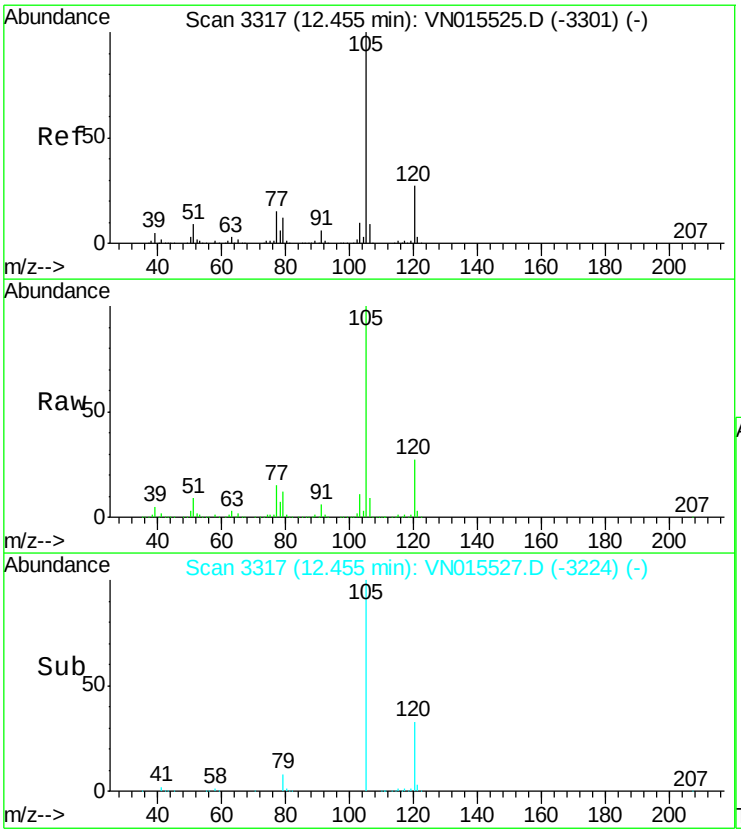
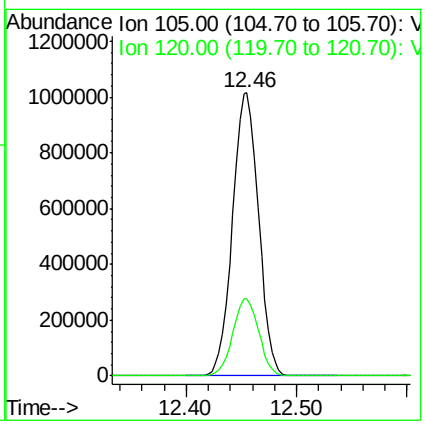


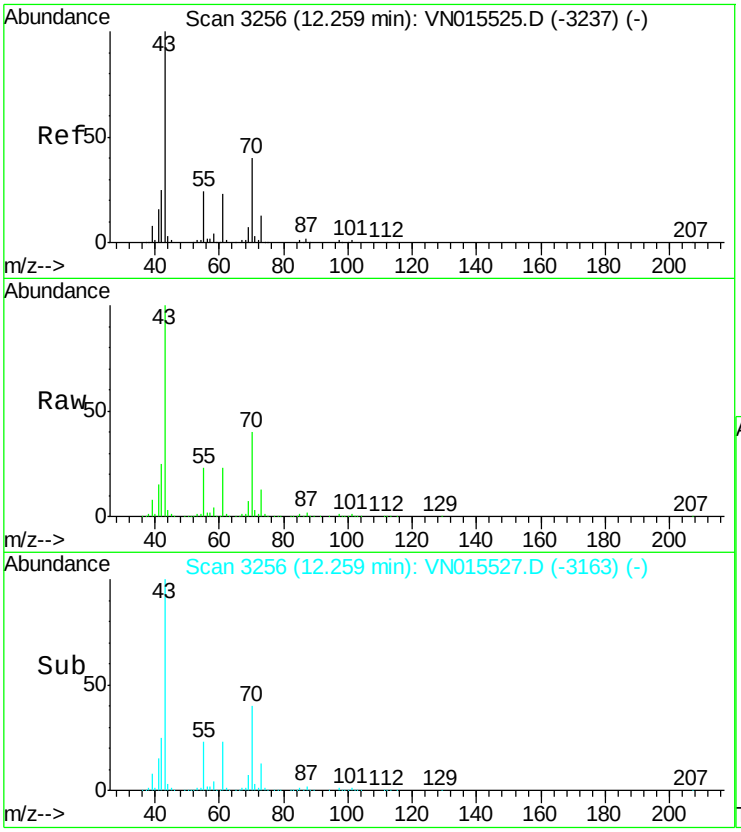


#74
Isopropylbenzene
Concen: 183.51 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:105 Resp: 1657498

Ion	Ratio	Lower	Upper
105	100		
120	27.3	13.7	41.0

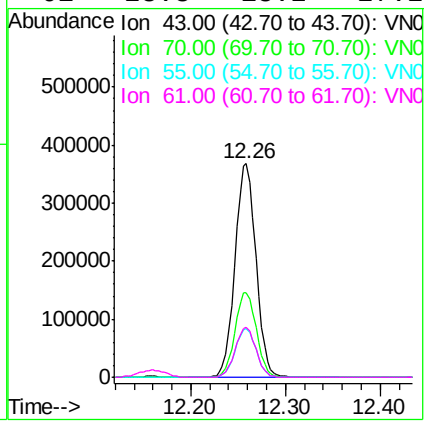




#75
N-amyl acetate
Concen: 222.06 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 43 Resp: 565174

Ion	Ratio	Lower	Upper
43	100		
70	40.2	32.0	48.0
55	23.0	18.5	27.7
61	23.3	18.2	27.2



Instrument :
MSVOA_N
LabSampleId :
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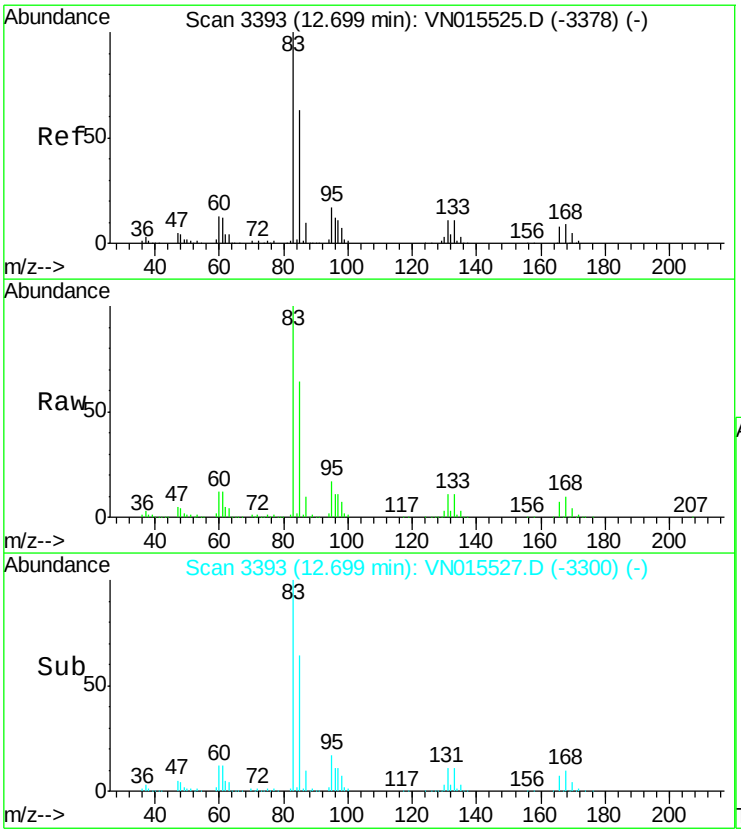
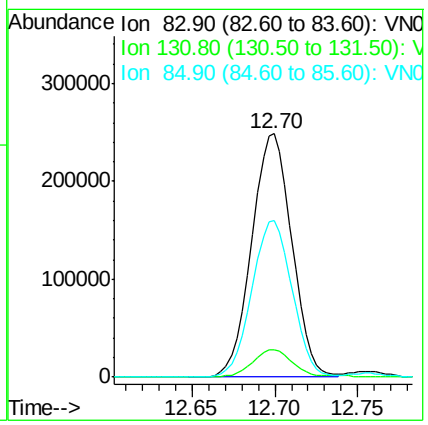


#76
1,1,2,2-Tetrachloroethane
Concen: 161.13 ug/l
RT: 12.70 min Scan# 3393
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 83 Resp: 418813

Ion	Ratio	Lower	Upper
83	100		
131	11.6	5.9	17.6
85	64.3	31.9	95.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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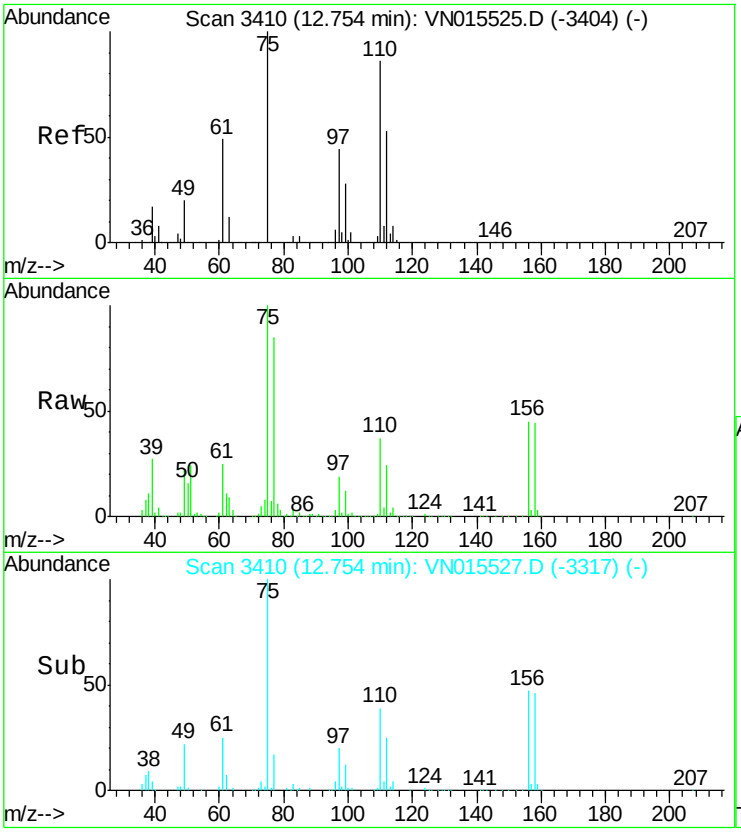
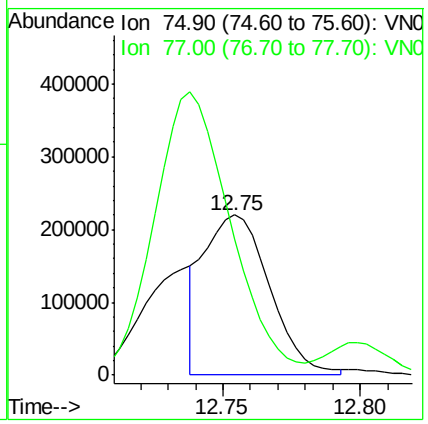
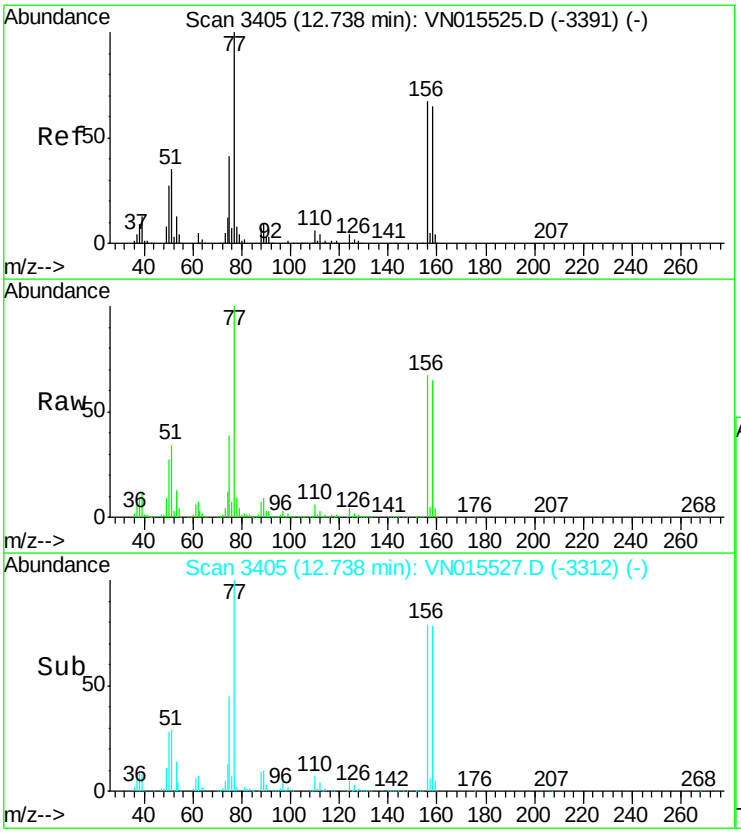


#77
1,2,3-Trichloropropane
Concen: 153.91 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 75 Resp: 365963

Ion	Ratio	Lower	Upper
75	100		
77	206.2	90.4	271.2

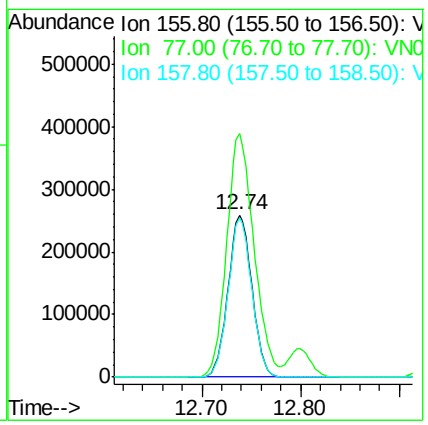




#78
Bromobenzene
Concen: 186.18 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:156 Resp: 437676

Ion	Ratio	Lower	Upper
156	100		
77	172.4	86.0	258.0
158	97.6	48.7	146.1



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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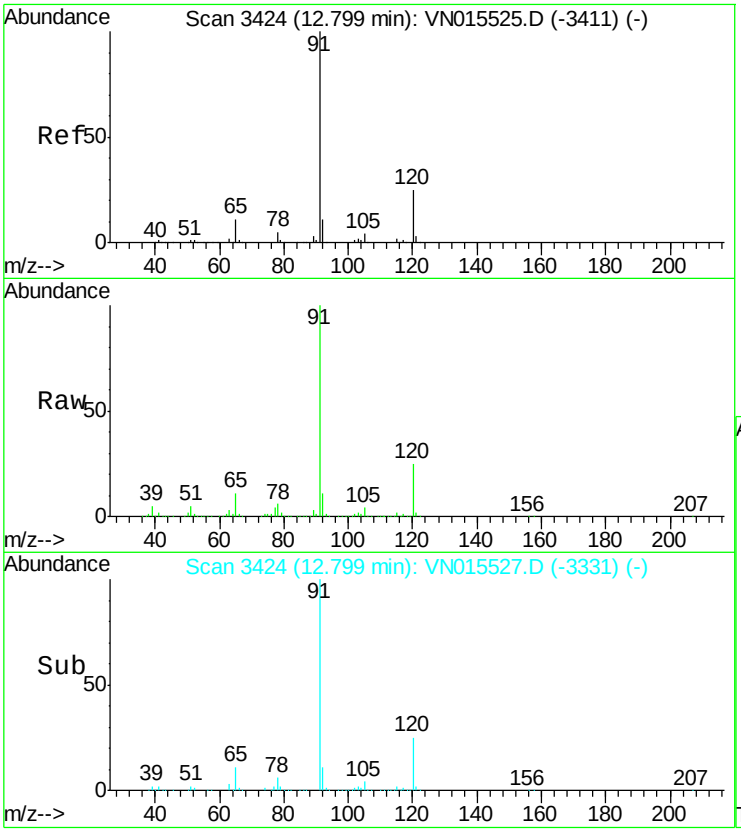
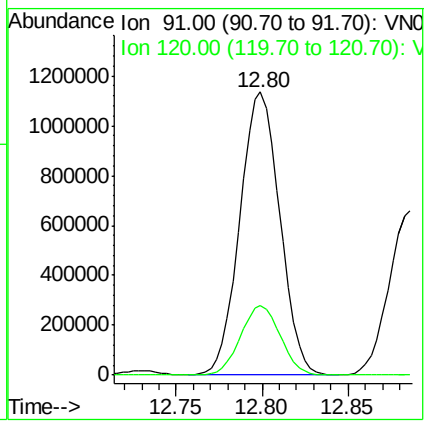
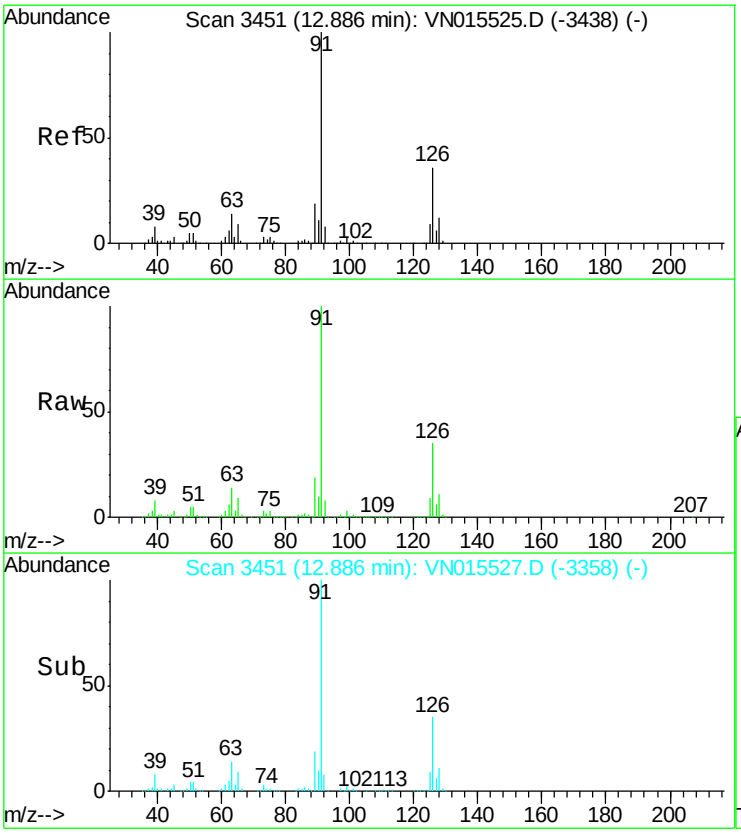


#79
n-propylbenzene
Concen: 189.75 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 91 Resp: 1827202

Ion	Ratio	Lower	Upper
91	100		
120	24.5	12.2	36.4

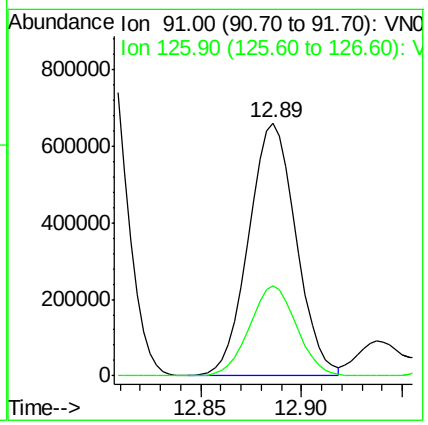


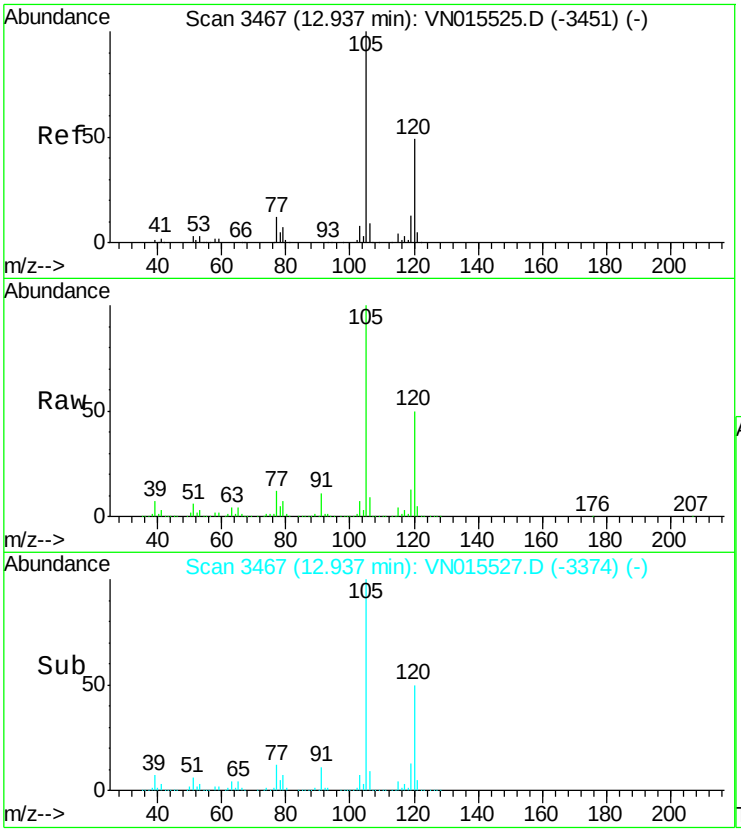


#80
2-Chlorotoluene
Concen: 177.86 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 91 Resp: 1086411

Ion	Ratio	Lower	Upper
91	100		
126	35.2	17.9	53.8





#81
1,3,5-Trimethylbenzene
Concen: 188.95 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:105 Resp: 1357633

Ion	Ratio	Lower	Upper
105	100		
120	49.7	24.6	73.8

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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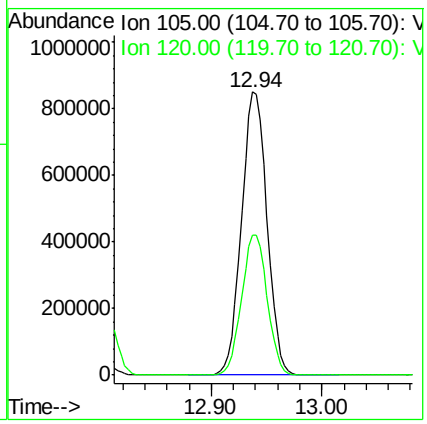
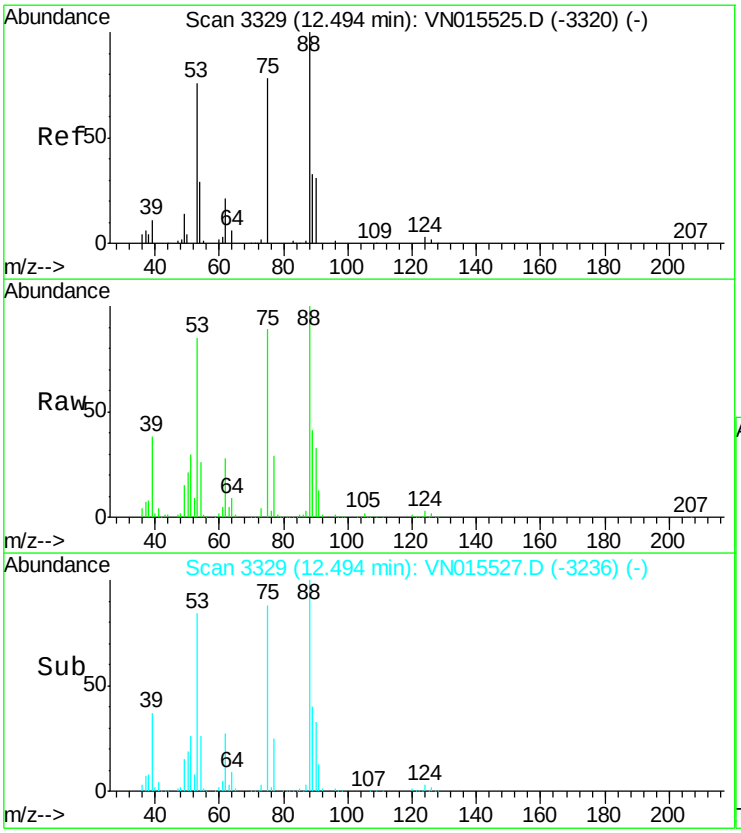
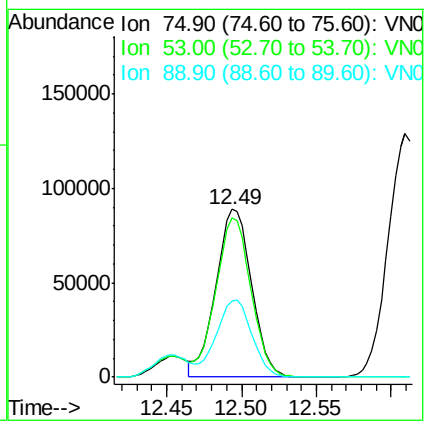




#82
trans-1,4-Dichloro-2-butene
Concen: 225.10 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 75 Resp: 148130

Ion	Ratio	Lower	Upper
75	100		
53	94.0	77.5	116.3
89	46.0	37.7	56.5



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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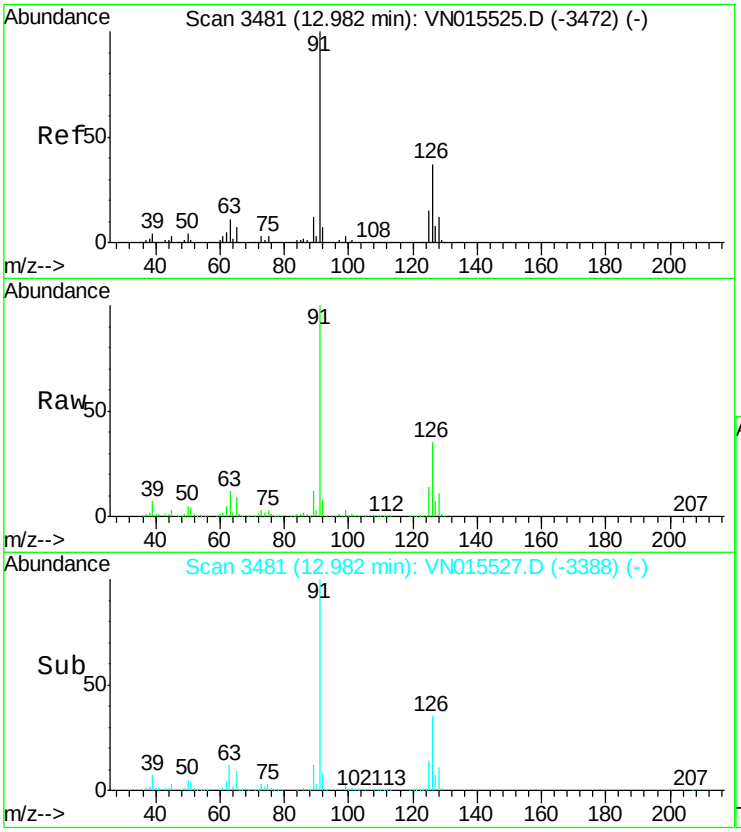
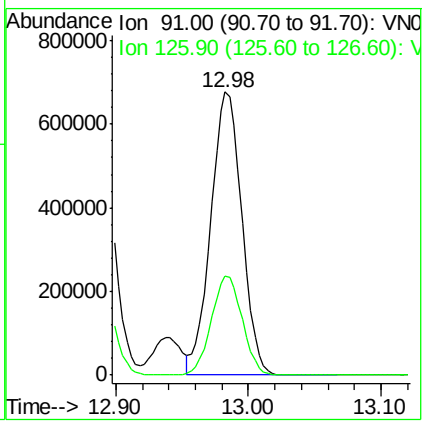
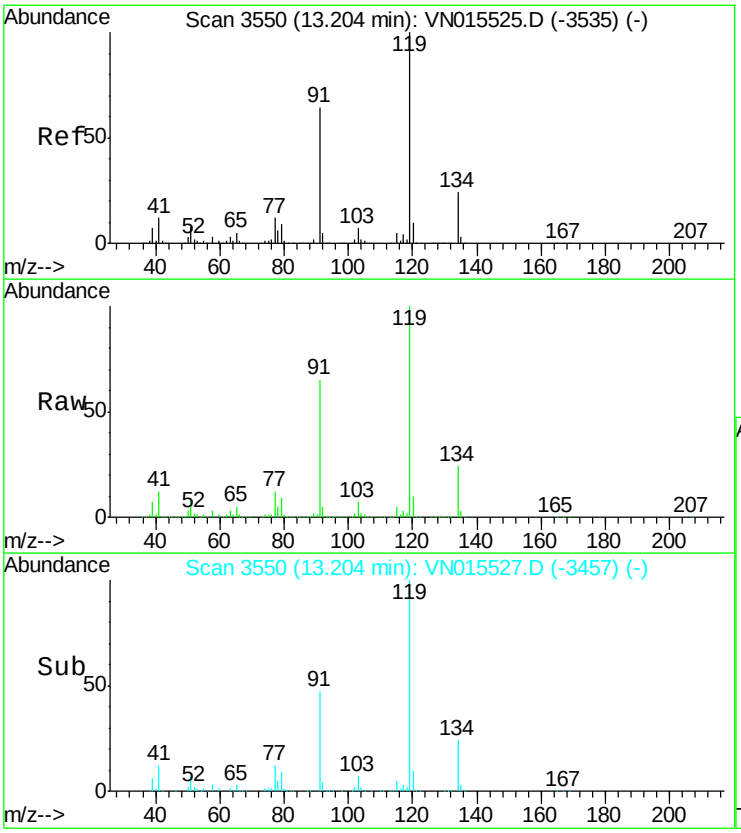


#83
4-Chlorotoluene
Concen: 192.99 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 91 Resp: 1096117

Ion	Ratio	Lower	Upper
91	100		
126	34.9	17.5	52.6

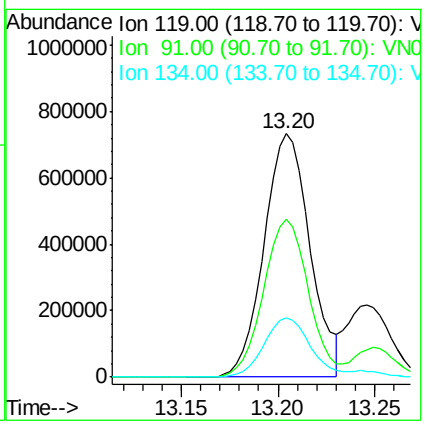




#84
tert-Butylbenzene
Concen: 186.67 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:119 Resp: 1211598

Ion	Ratio	Lower	Upper
119	100		
91	63.7	31.9	95.9
134	24.6	12.1	36.3



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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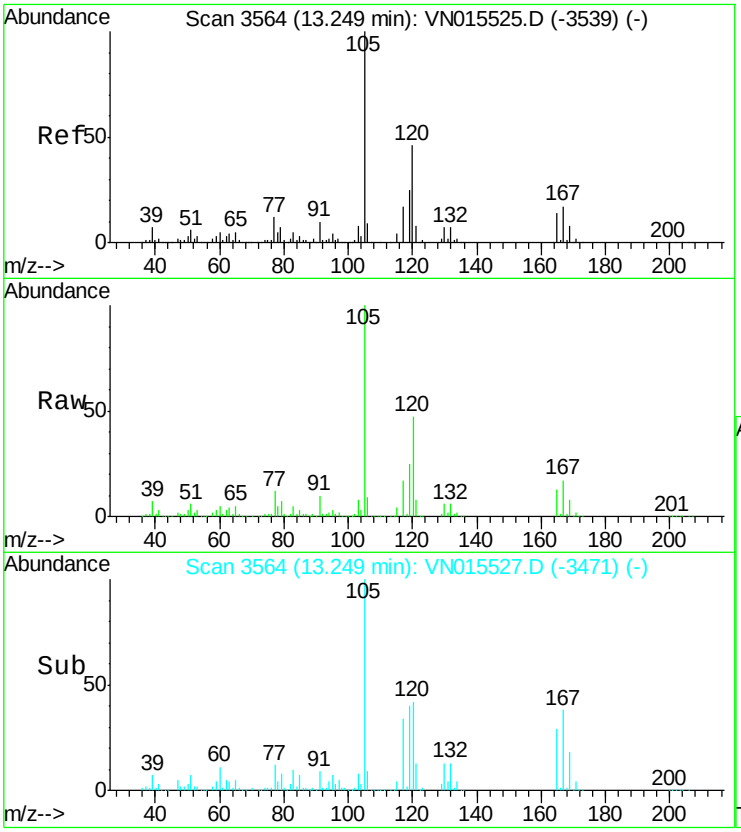
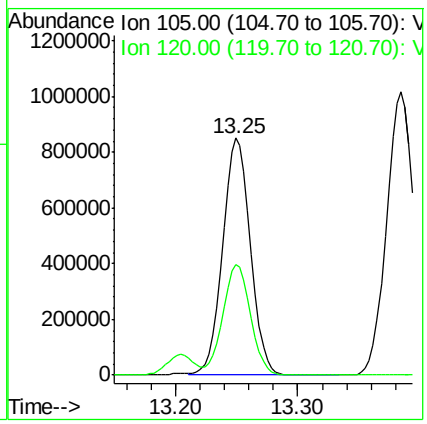
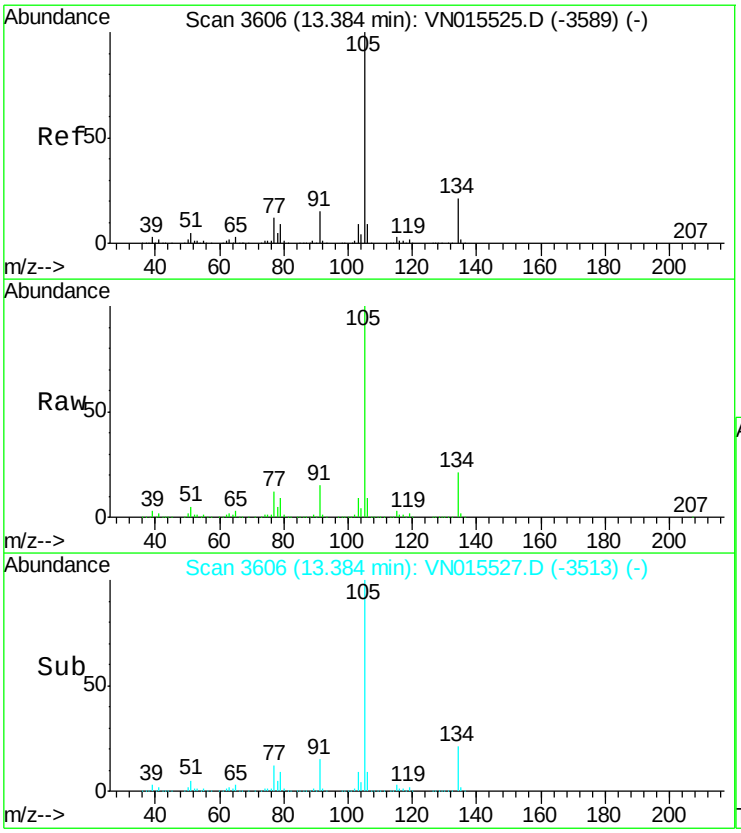


#85
1,2,4-Trimethylbenzene
Concen: 188.73 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:105 Resp: 1352013

Ion	Ratio	Lower	Upper
105	100		
120	46.7	23.1	69.3

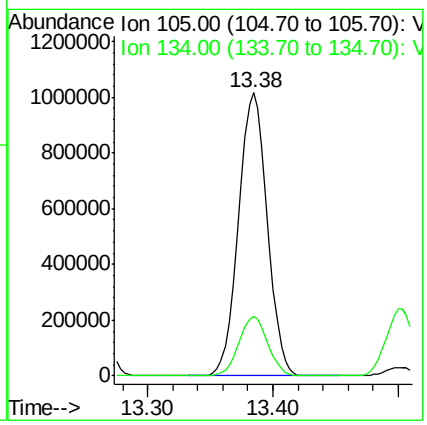


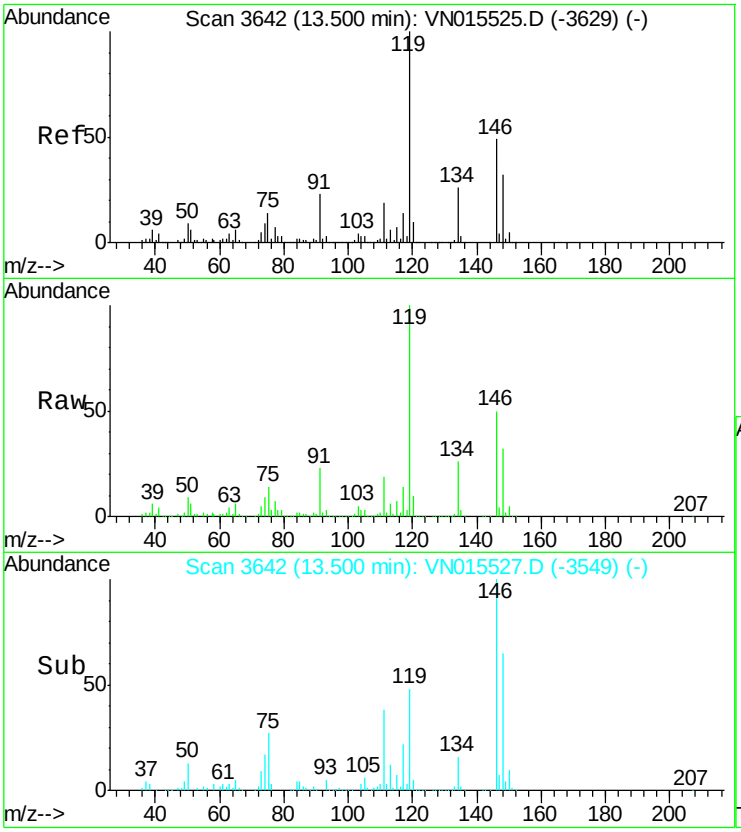


#86
sec-Butylbenzene
Concen: 187.14 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:105 Resp: 1615677

Ion	Ratio	Lower	Upper
105	100		
134	21.0	10.6	31.8





#87
p-Isopropyltoluene
Concen: 201.31 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:119 Resp: 1415194

Ion	Ratio	Lower	Upper
119	100		
134	26.6	13.3	39.9
91	22.9	11.7	35.1

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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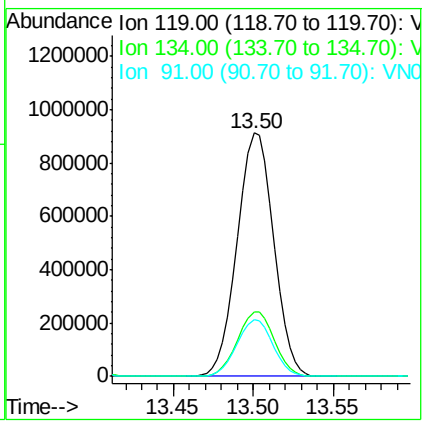
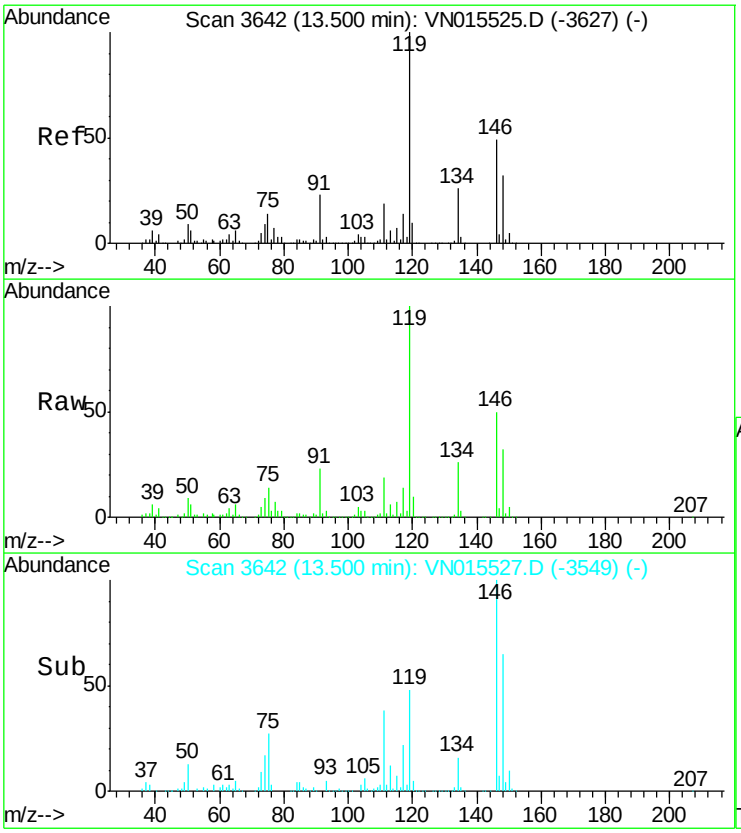
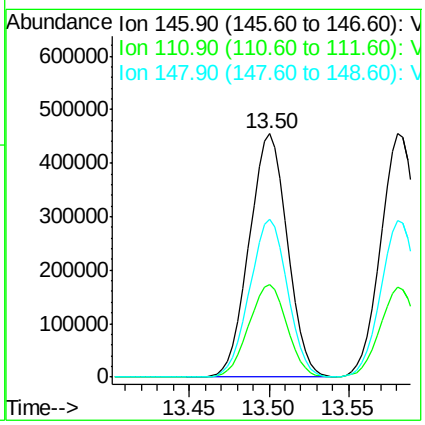


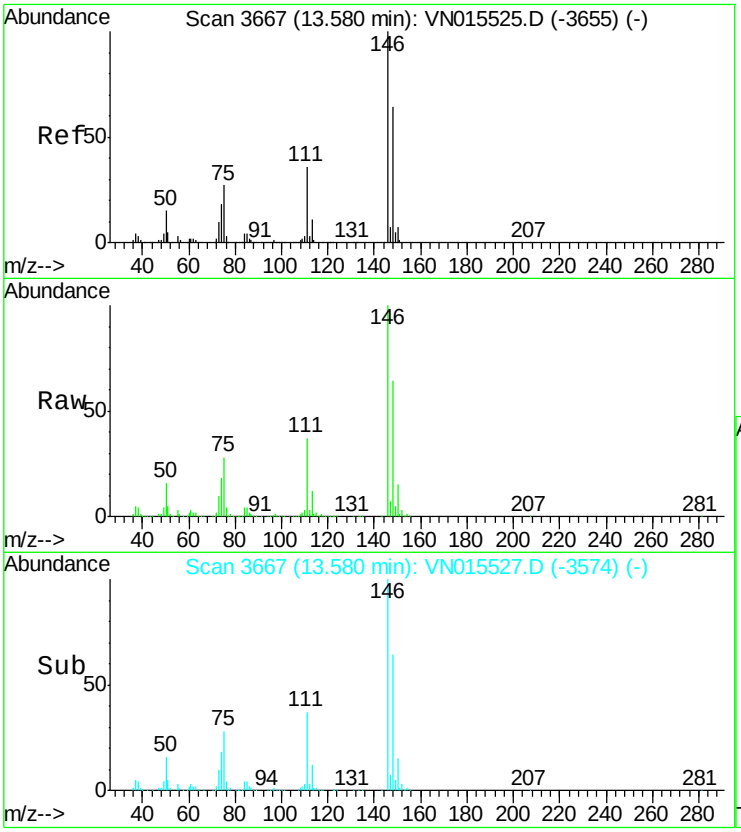


#88
1,3-Dichlorobenzene
Concen: 194.33 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:146 Resp: 744223

Ion	Ratio	Lower	Upper
146	100		
111	38.0	19.1	57.1
148	64.6	32.4	97.0





#89
1,4-Dichlorobenzene
Concen: 193.05 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:146 Resp: 738333

Ion	Ratio	Lower	Upper
146	100		
111	36.8	18.4	55.4
148	64.3	32.3	96.9

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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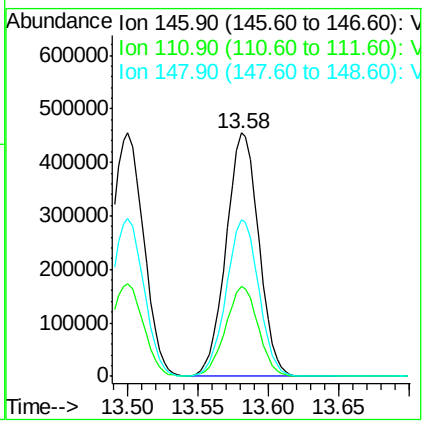
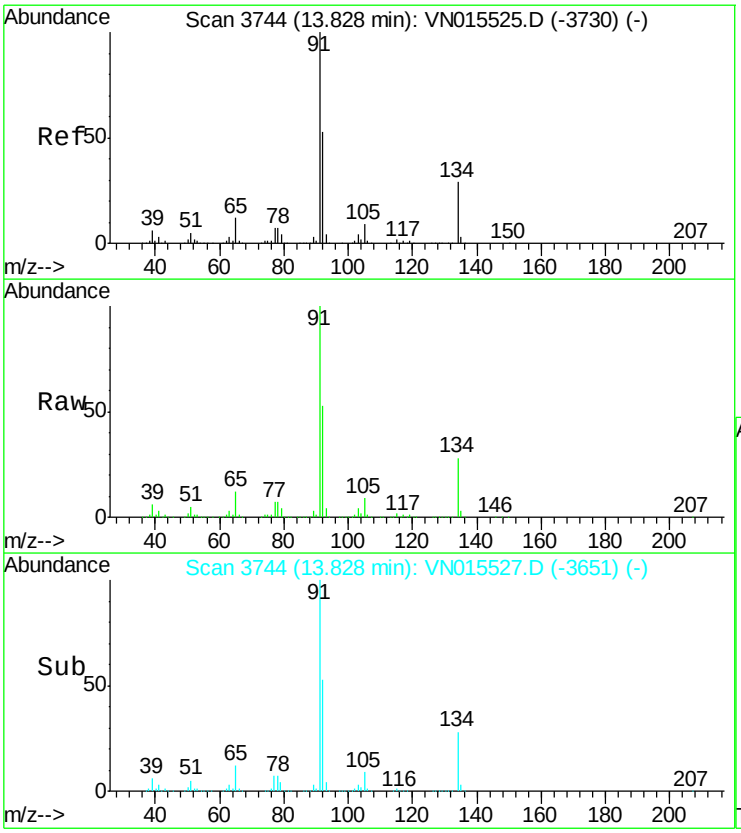
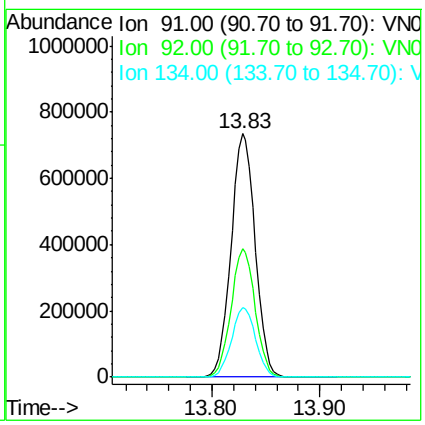


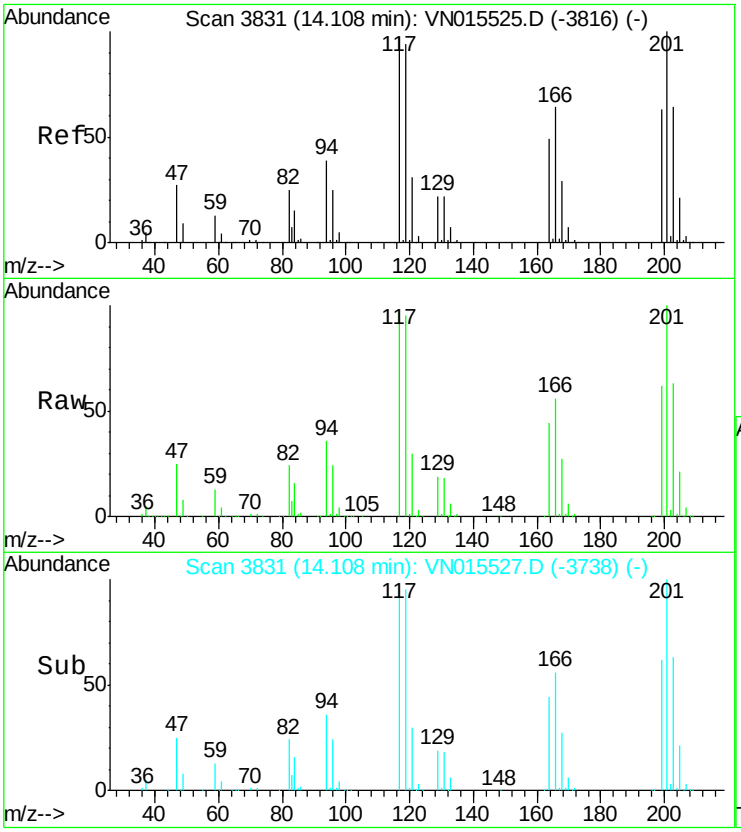


#90
n-Butylbenzene
Concen: 200.76 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 91 Resp: 1143764

Ion	Ratio	Lower	Upper
91	100		
92	52.7	26.6	79.8
134	28.5	14.4	43.4





#91
Hexachloroethane
Concen: 185.15 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:117 Resp: 262998

Ion	Ratio	Lower	Upper
117	100		
201	103.0	51.7	155.2

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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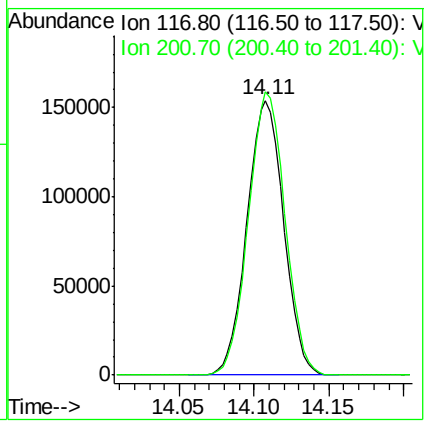
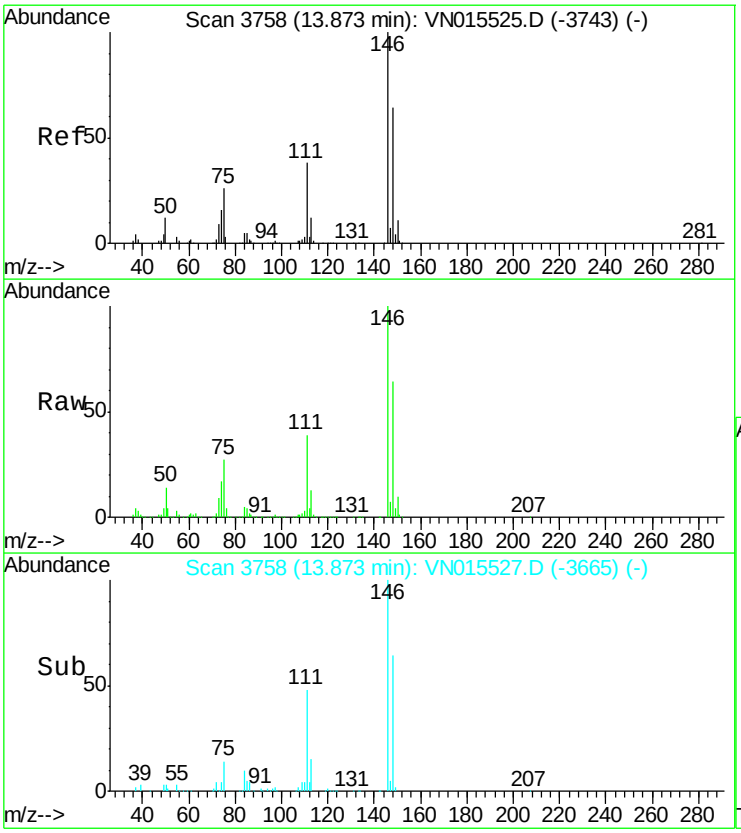
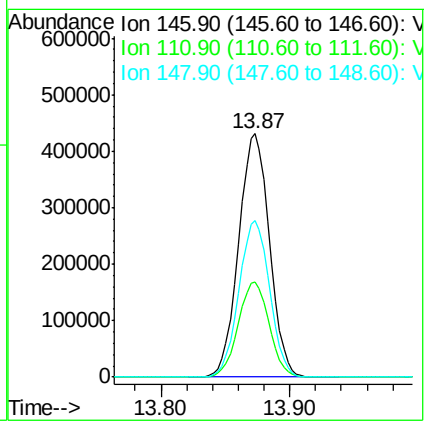


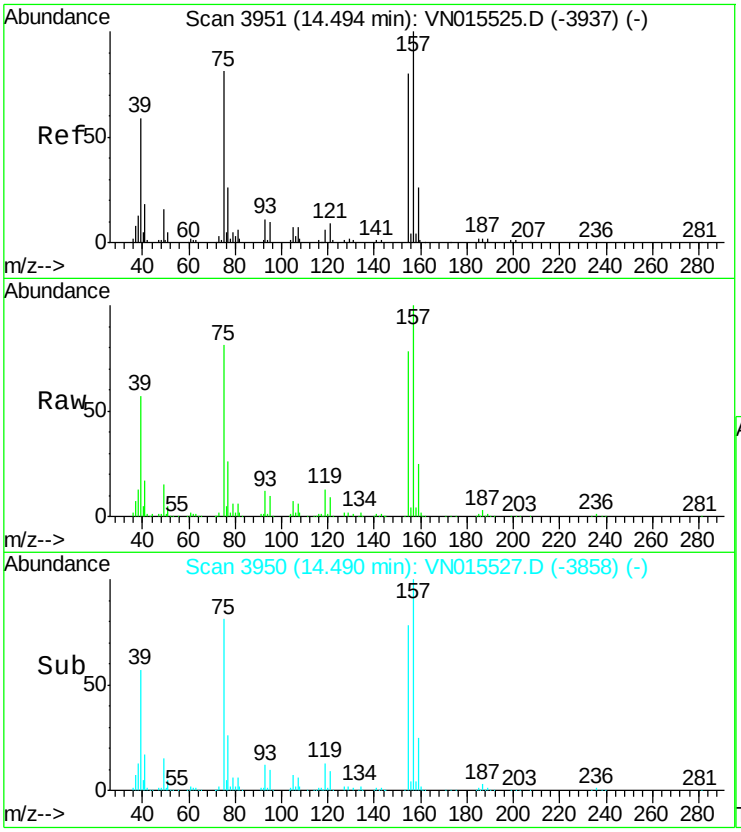


#92
1,2-Dichlorobenzene
Concen: 183.30 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:146 Resp: 714379

Ion	Ratio	Lower	Upper
146	100		
111	39.1	19.4	58.2
148	64.3	32.4	97.0





#93
1,2-Dibromo-3-Chloropropane
Concen: 191.97 ug/l
RT: 14.49 min Scan# 3950
Delta R.T. -0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion: 75 Resp: 83279

Ion	Ratio	Lower	Upper
75	100		
155	97.6	49.4	148.2
157	125.8	61.3	183.8

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

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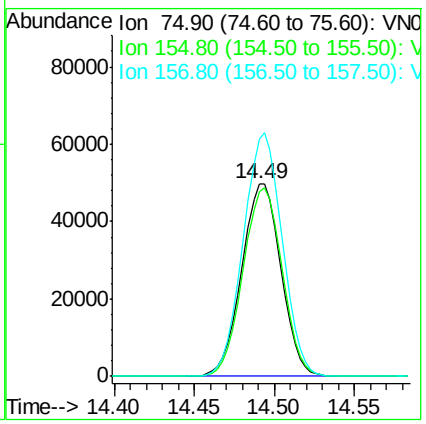
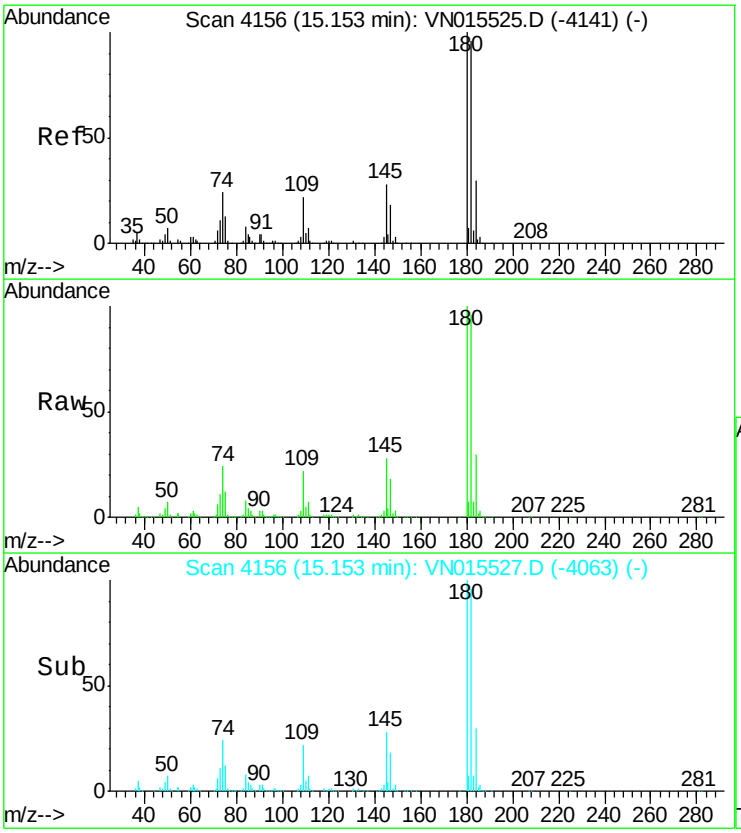
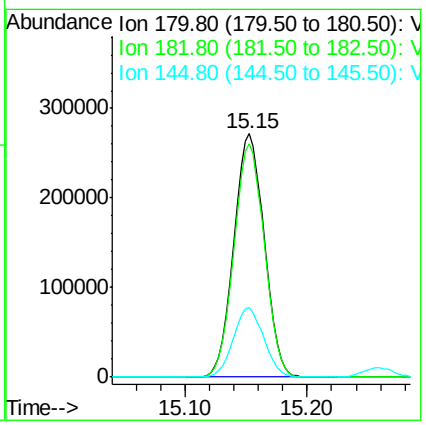


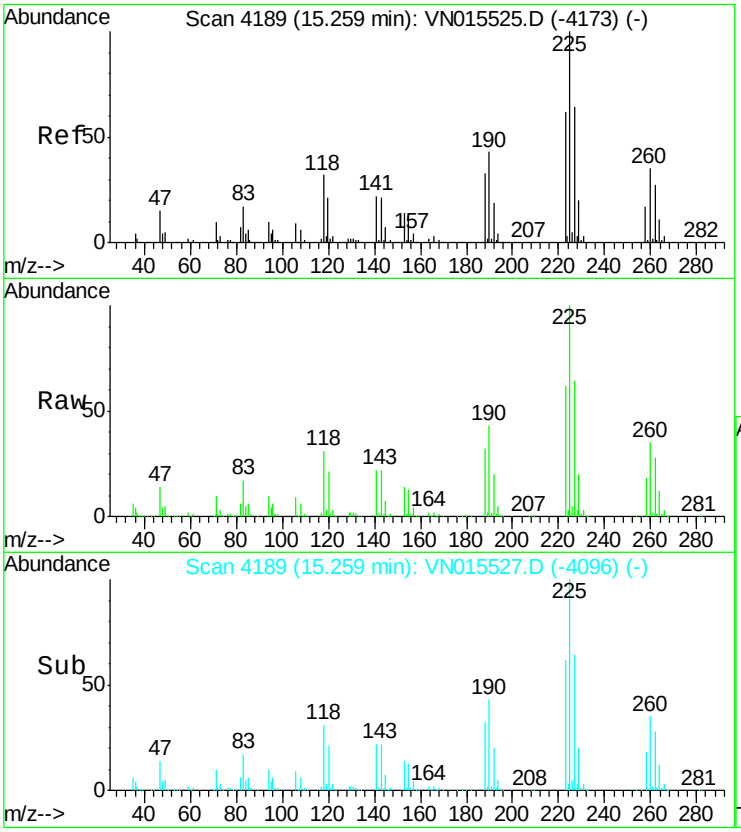


#94
1,2,4-Trichlorobenzene
Concen: 241.89 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:180 Resp: 467775

Ion	Ratio	Lower	Upper
180	100		
182	95.5	48.0	144.0
145	28.5	14.0	42.0





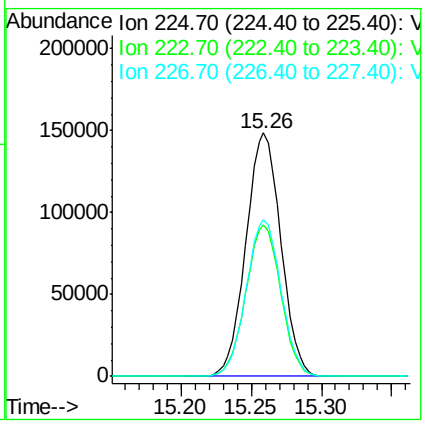
#95
Hexachlorobutadiene
Concen: 189.56 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

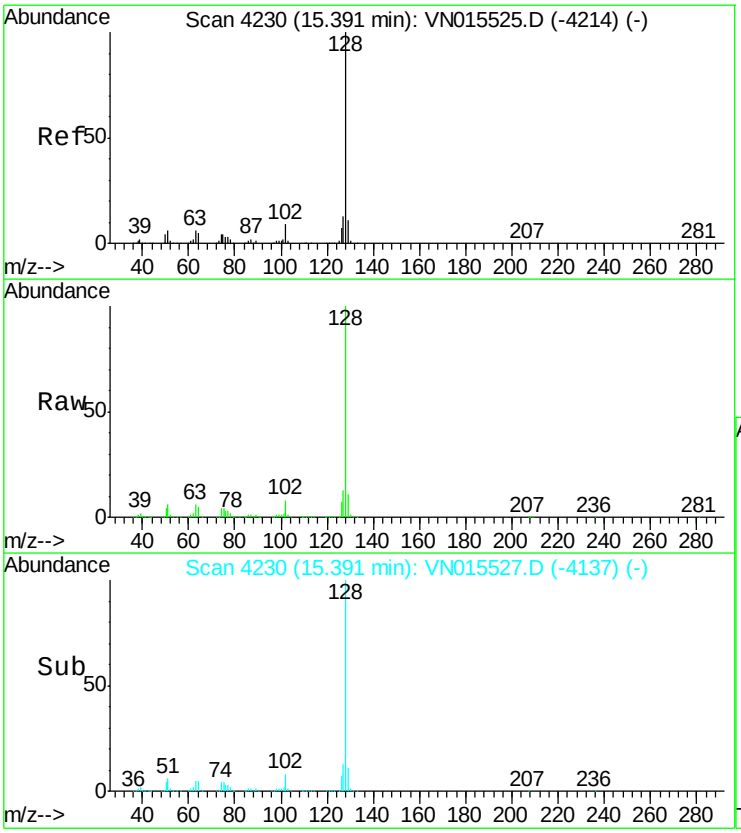
Tgt Ion:225 Resp: 257790

Ion	Ratio	Lower	Upper
225	100		
223	62.2	31.6	95.0
227	64.0	32.1	96.5

Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:31 AM

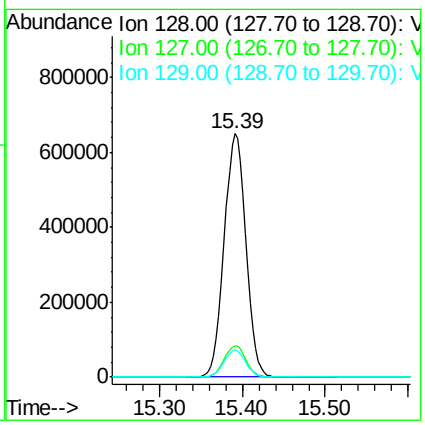


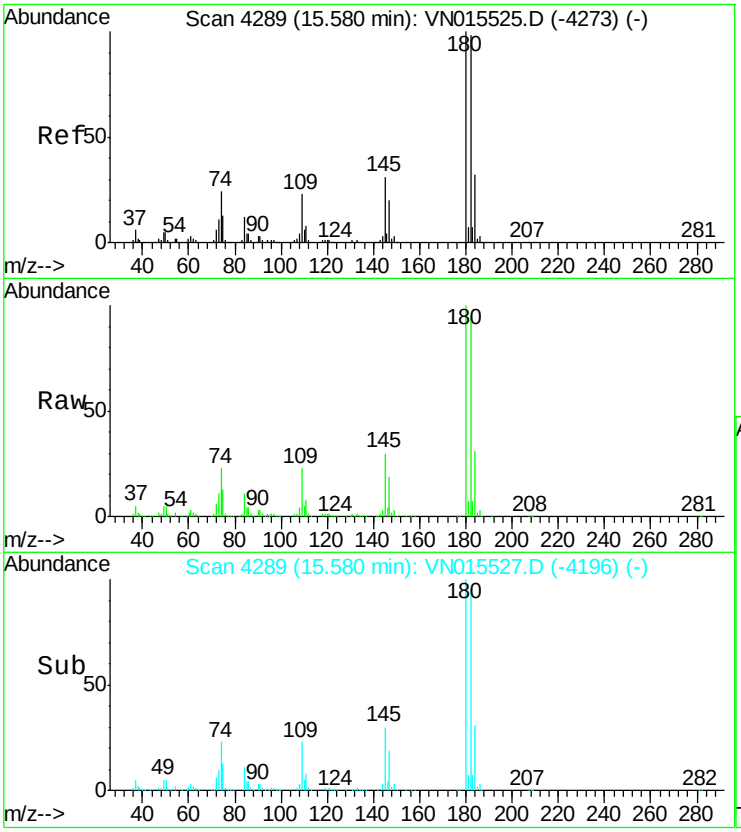


#96
Naphthalene
Concen: 261.20 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:128 Resp: 1179633

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.3	15.5
129	11.0	8.7	13.1

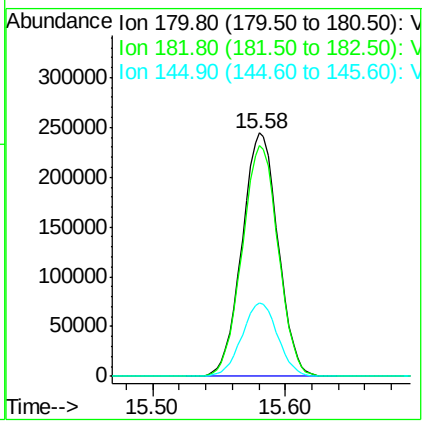




#97
1,2,3-Trichlorobenzene
Concen: 231.86 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015527.D
Acq: 20 May 2014 19:55

Tgt Ion:180 Resp: 458649

Ion	Ratio	Lower	Upper
180	100		
182	95.3	47.8	143.4
145	30.1	14.9	44.7



Instrument :
MSVOA_N
LabSampleId :
VSTDICC200

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:31 AM

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	182647	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	258485	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	223211	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	105479	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	106714	50.79	ug/l	0.00
Spiked Amount 50.000			Recovery	=	101.58%	
36) Dibromofluoromethane	7.80	113	88635	52.65	ug/l	0.00
Spiked Amount 50.000			Recovery	=	105.30%	
51) Toluene-d8	10.29	98	321698	51.86	ug/l	0.00
Spiked Amount 50.000			Recovery	=	103.72%	
63) 4-Bromofluorobenzene	12.61	95	114204	53.74	ug/l	0.00
Spiked Amount 50.000			Recovery	=	107.48%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	79215	56.23	ug/l	98
3) Chlorodifluoromethane	1.87	51	55237	55.94	ug/l	100
4) Chloromethane	2.07	50	91766	54.24	ug/l	100
5) Vinyl Chloride	2.20	62	89390	52.37	ug/l	98
6) Bromomethane	2.61	94	57784	58.06	ug/l	96
7) Chloroethane	2.76	64	56776	52.80	ug/l	99
8) Trichlorofluoromethane	3.11	101	143755	51.88	ug/l	100
9) Diethyl Ether	3.53	74	54868	53.54	ug/l	99
10) 1,1,2-Trichlorotrifluoroet	3.91	101	82508	52.79	ug/l	99
11) Methyl Iodide	4.12	142	92038	46.94	ug/l	99
12) Tert butyl alcohol	4.95	59	59755	283.95	ug/l	99
13) 1,1-Dichloroethene	3.88	96	77696	52.00	ug/l	97
14) Acrolein	3.73	56	50569	266.58	ug/l	97
15) Allyl chloride	4.50	41	134539	51.47	ug/l	100
16) Acrylonitrile	5.18	53	192420	285.87	ug/l	100
17) Acetone	3.94	43	162499	246.51	ug/l	97
18) Carbon Disulfide	4.24	76	218617	51.92	ug/l	100
19) Methyl Acetate	4.50	43	172662	54.15	ug/l	99
20) Methyl tert-butyl Ether	5.27	73	278957	53.04	ug/l	99
21) Methylene Chloride	4.74	84	88108	51.55	ug/l	99
22) trans-1,2-Dichloroethene	5.28	96	82740	52.52	ug/l	99
23) Diisopropyl ether	6.18	45	286843	53.27	ug/l	99
24) Vinyl Acetate	6.12	43	754475m	282.08	ug/l	
25) 1,1-Dichloroethane	6.08	63	157232	53.04	ug/l	99
26) 2-Butanone	7.05	43	249500	268.28	ug/l	99
27) 2,2-Dichloropropane	7.06	77	126425	48.30	ug/l	100
28) cis-1,2-Dichloroethene	7.06	96	97871	52.91	ug/l	98
29) Bromochloromethane	7.42	49	70101	53.80	ug/l	97
30) Tetrahydrofuran	7.44	42	163101	260.64	ug/l	99
31) Chloroform	7.58	83	161236	52.67	ug/l	99
32) Cyclohexane	7.89	56	150043	57.20	ug/l	98
33) 1,1,1-Trichloroethane	7.79	97	152336	53.15	ug/l	99
37) 1,1-Dichloropropene	8.01	75	121282	52.61	ug/l	99
38) Ethyl Acetate	7.15	43	109858	54.00	ug/l	99

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) Carbon Tetrachloride	8.00	117	137275	52.08	ug/l		99
40) Methylcyclohexane	9.29	83	152520	51.73	ug/l		99
41) Benzene	8.26	78	356816	51.90	ug/l		100
42) Methacrylonitrile	7.37	41	63433	52.76	ug/l		98
43) 1,2-Dichloroethane	8.33	62	131367	52.32	ug/l		99
44) Isopropyl Acetate	8.35	43	191002	52.19	ug/l		100
45) Trichloroethene	9.04	130	98700	51.26	ug/l		97
46) 1,2-Dichloropropane	9.32	63	92338	52.28	ug/l		99
47) Dibromomethane	9.41	93	60686	52.23	ug/l		99
48) Bromodichloromethane	9.59	83	126185	52.93	ug/l		99
49) Methyl methacrylate	9.38	41	97613	55.34	ug/l		99
50) 1,4-Dioxane	9.40	88	27827	1130.68	ug/l		99
52) 4-Methyl-2-Pentanone	10.16	43	532708	263.33	ug/l		100
53) Toluene	10.35	92	228042	52.33	ug/l		99
54) t-1,3-Dichloropropene	10.57	75	130884	53.69	ug/l		98
55) cis-1,3-Dichloropropene	10.03	75	144678	53.32	ug/l		100
56) 1,1,2-Trichloroethane	10.75	97	89319	53.04	ug/l		99
57) Ethyl methacrylate	10.61	69	136037	54.61	ug/l		98
58) 1,3-Dichloropropane	10.90	76	147712	52.34	ug/l		99
59) 2-Chloroethyl Vinyl ether	9.88	63	68674	249.14	ug/l		99
60) 2-Hexanone	10.93	43	358655	271.52	ug/l		99
61) Dibromochloromethane	11.10	129	109302	54.36	ug/l		99
62) 1,2-Dibromoethane	11.21	107	94525	54.31	ug/l		100
65) Tetrachloroethene	10.83	164	92947	52.78	ug/l		99
66) Chlorobenzene	11.64	112	254460	52.67	ug/l		99
67) 1,1,1,2-Tetrachloroethane	11.71	131	99174	53.88	ug/l		100
68) Ethyl Benzene	11.71	91	425416	53.79	ug/l		100
69) m/p-Xylenes	11.82	106	326648	106.12	ug/l		99
70) o-Xylene	12.15	106	162927	53.80	ug/l		97
71) Styrene	12.17	104	265183	55.74	ug/l		100
72) Bromoform	12.33	173	84186	54.59	ug/l	#	99
74) Isopropylbenzene	12.45	105	433226	55.07	ug/l		100
75) N-amyl acetate	12.26	43	141636	51.25	ug/l		99
76) 1,1,2,2-Tetrachloroethane	12.70	83	117983	57.72	ug/l		100
77) 1,2,3-Trichloropropane	12.75	75	103286m	57.68	ug/l		
78) Bromobenzene	12.74	156	115644	50.55	ug/l		99
79) n-propylbenzene	12.80	91	462804	51.38	ug/l		99
80) 2-Chlorotoluene	12.89	91	286191	55.50	ug/l		99
81) 1,3,5-Trimethylbenzene	12.94	105	365377	50.91	ug/l		100
82) trans-1,4-Dichloro-2-buten	12.49	75	37618	51.78	ug/l		98
83) 4-Chlorotoluene	12.98	91	277343	50.75	ug/l		100
84) tert-Butylbenzene	13.20	119	323303	55.88	ug/l		99
85) 1,2,4-Trimethylbenzene	13.25	105	371421	51.72	ug/l		100
86) sec-Butylbenzene	13.38	105	419644	51.06	ug/l		100
87) p-Isopropyltoluene	13.50	119	371142	52.21	ug/l		100
88) 1,3-Dichlorobenzene	13.50	146	192654	51.78	ug/l		100
89) 1,4-Dichlorobenzene	13.58	146	187821	51.43	ug/l		100
90) n-Butylbenzene	13.83	91	290755	54.22	ug/l		99
91) Hexachloroethane	14.11	117	70026	51.77	ug/l		98
92) 1,2-Dichlorobenzene	13.87	146	191109	51.81	ug/l		99

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2-Dibromo-3-Chloropropan	14.49	75	21121	53.48	ug/l	97
94) 1,2,4-Trichlorobenzene	15.15	180	105307	51.13	ug/l	100
95) Hexachlorobutadiene	15.26	225	71219	52.70	ug/l	99
96) Naphthalene	15.39	128	241189	47.93	ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	101164	50.32	ug/l	99

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

Quantitation Report (QT Reviewed)

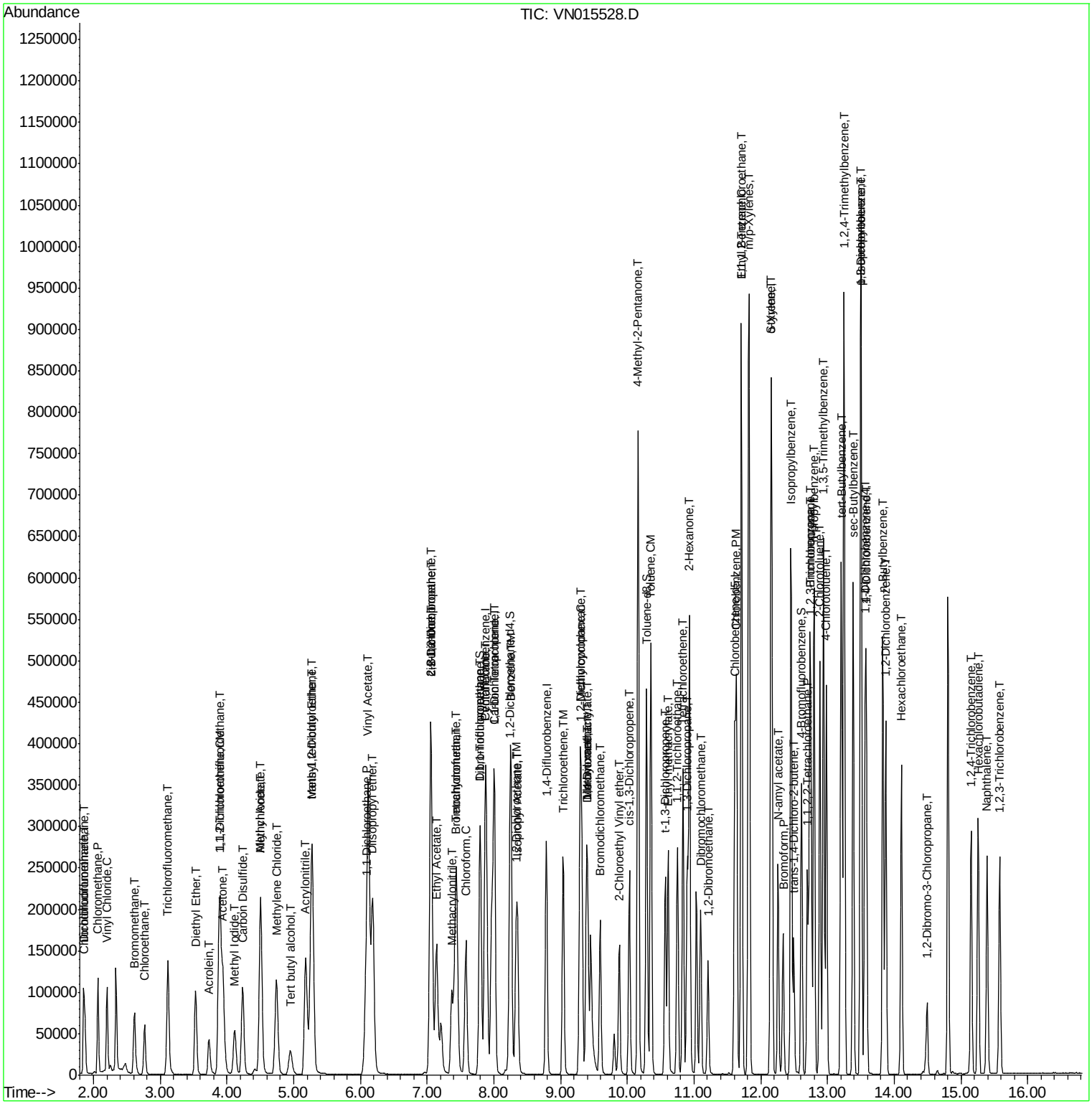
ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

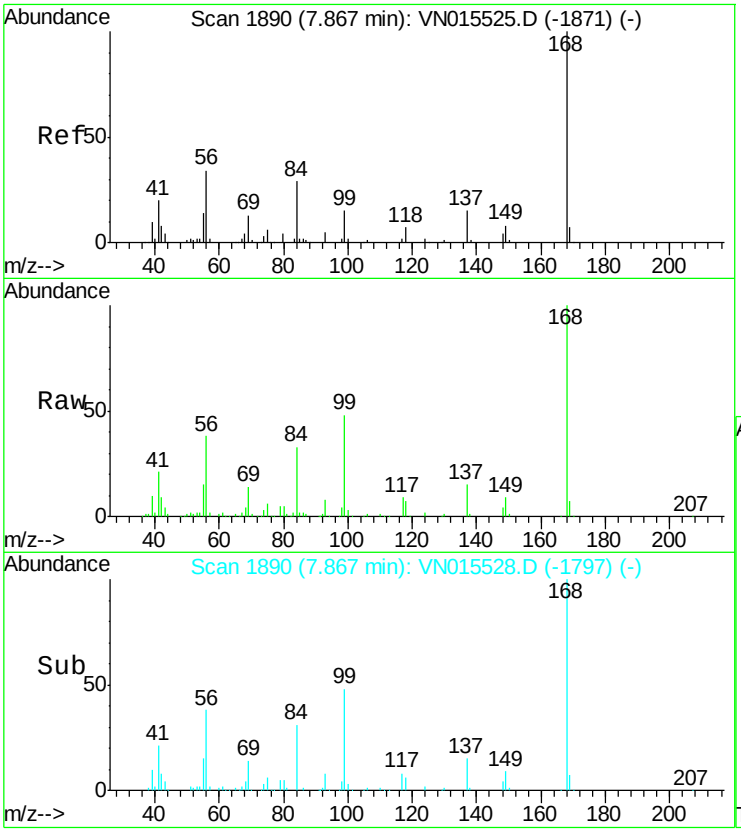
Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

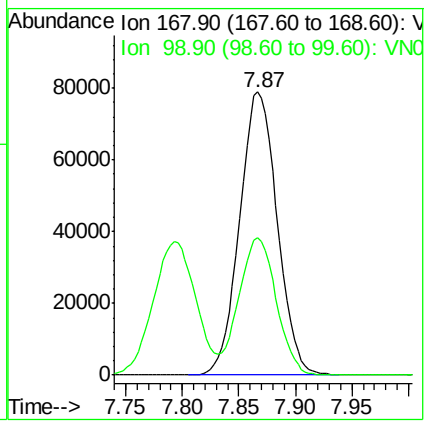
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

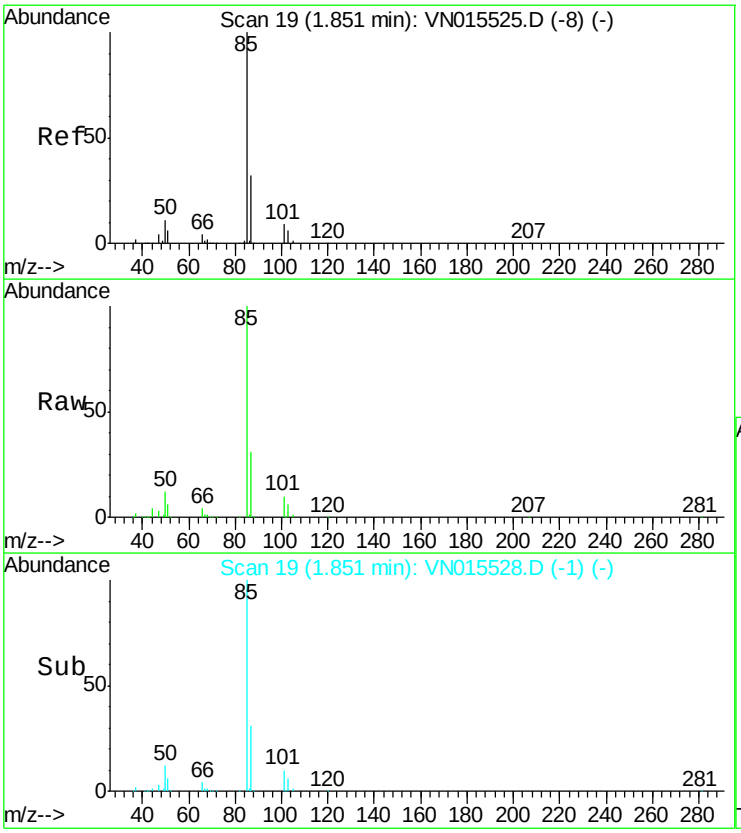


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:168 Resp: 182647

Ion	Ratio	Lower	Upper
168	100		
99	48.2	39.0	58.4

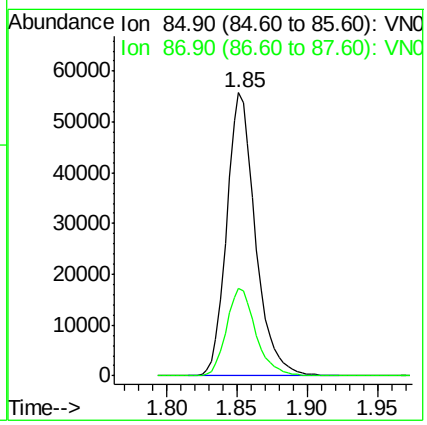




#2
Dichlorodifluoromethane
Concen: 56.23 ug/l
RT: 1.85 min Scan# 19
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

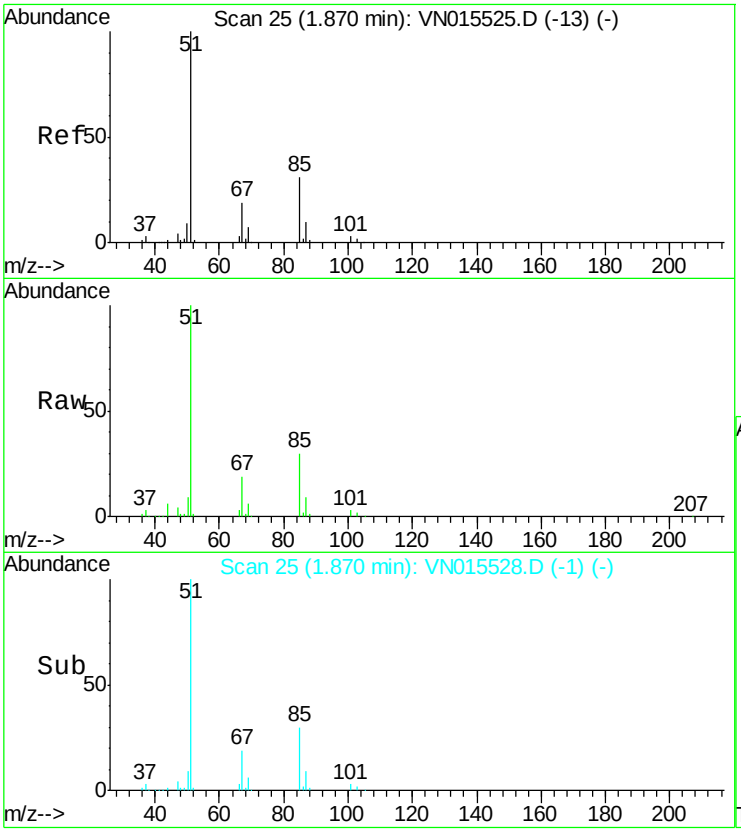
Tgt Ion: 85 Resp: 79215

Ion	Ratio	Lower	Upper
85	100		
87	31.0	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

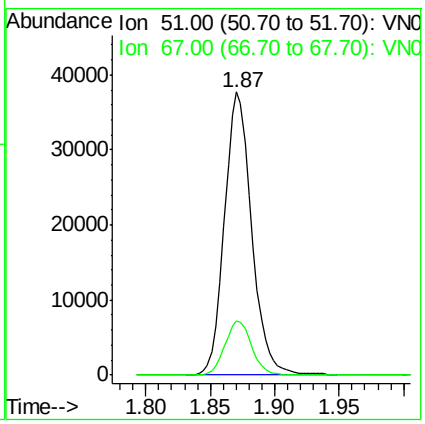
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

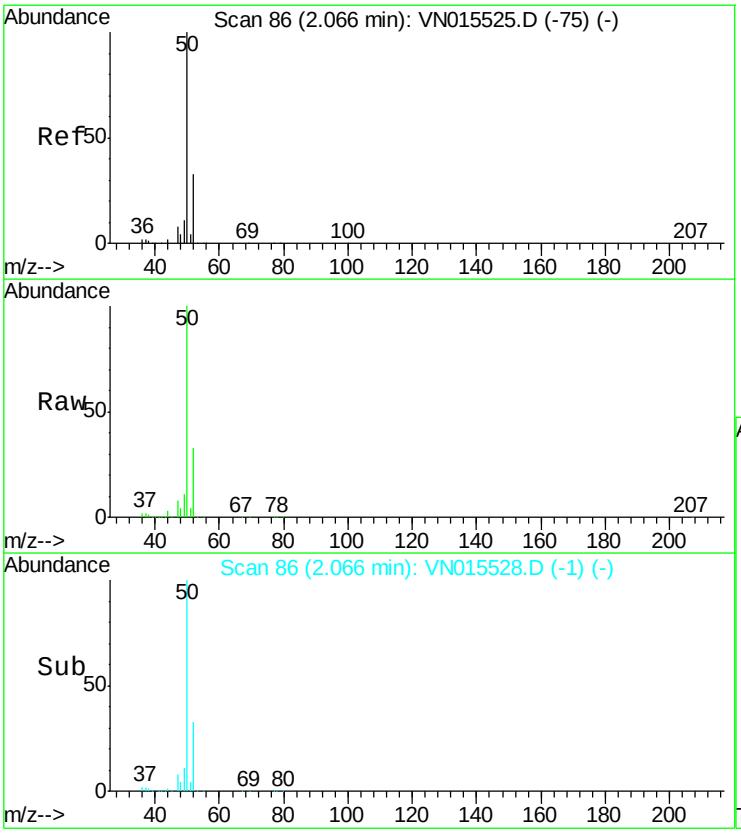


#3
Chlorodifluoromethane
Concen: 55.94 ug/l
RT: 1.87 min Scan# 25
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 51 Resp: 55237

Ion	Ratio	Lower	Upper
51	100		
67	18.9	15.1	22.7

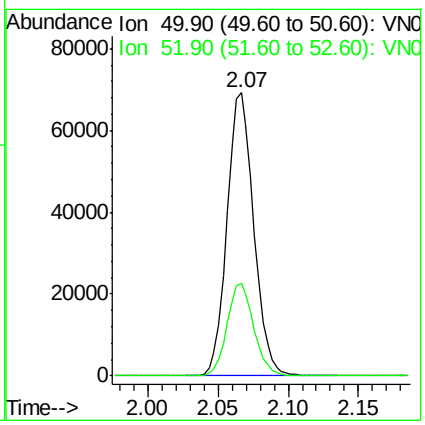




#4
Chloromethane
Concen: 54.24 ug/l
RT: 2.07 min Scan# 86
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 50 Resp: 91766

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.2	39.2



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
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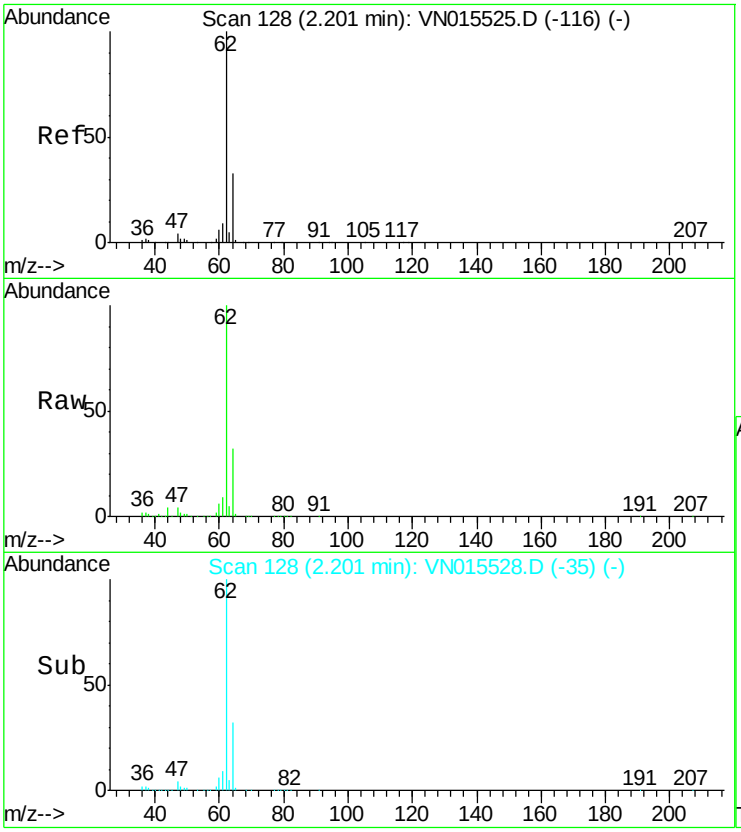
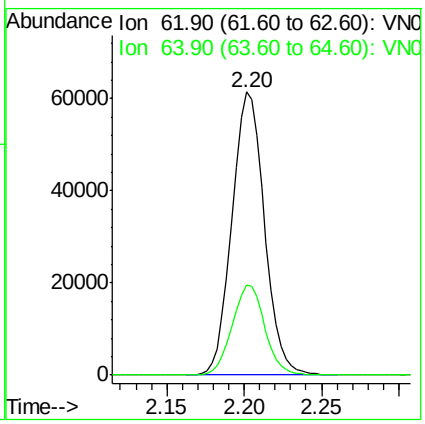
5/21/2014 11:02:44 AM

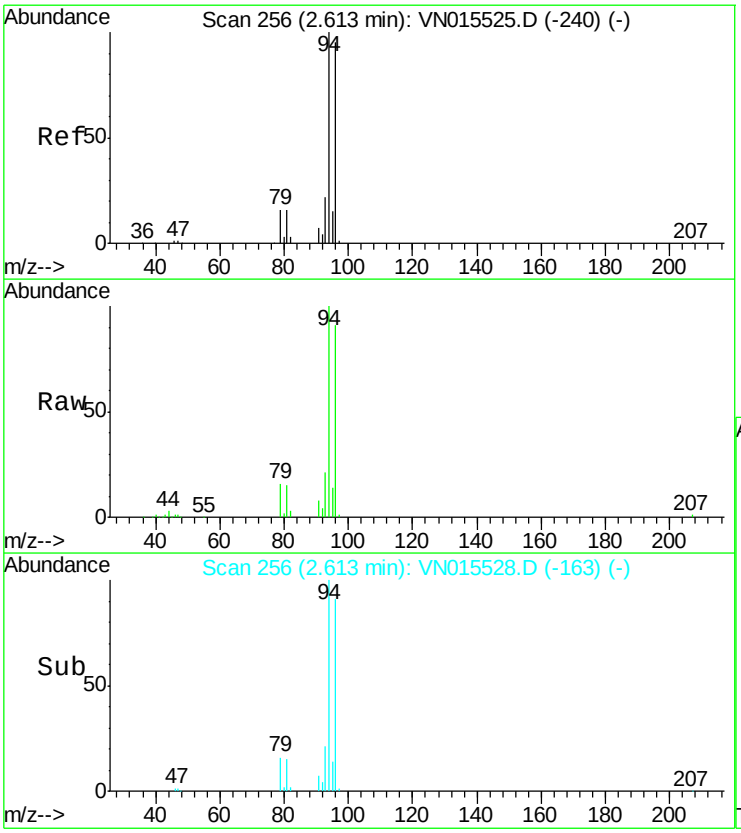


#5
Vinyl Chloride
Concen: 52.37 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 62 Resp: 89390

Ion	Ratio	Lower	Upper
62	100		
64	31.7	26.2	39.4

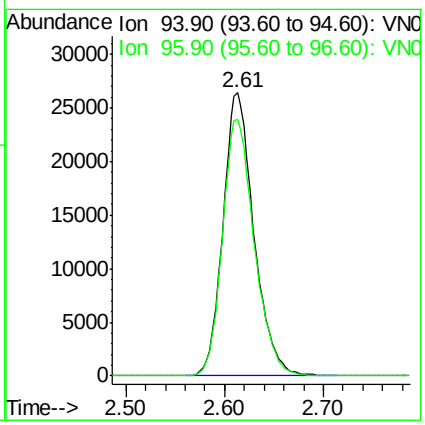




#6
Bromomethane
Concen: 58.06 ug/l
RT: 2.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

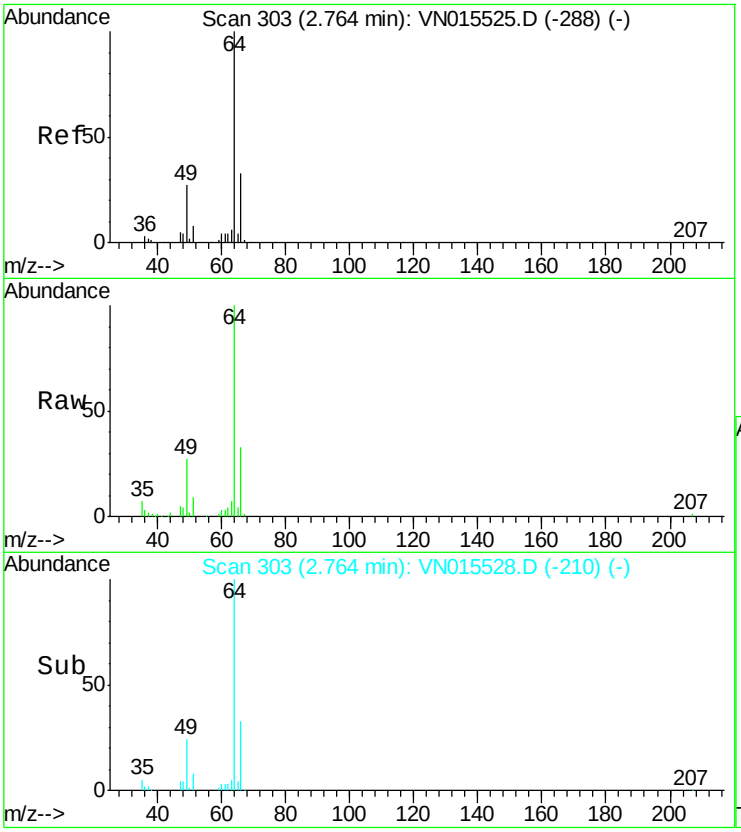
Tgt Ion: 94 Resp: 57784

Ion	Ratio	Lower	Upper
94	100		
96	90.8	75.8	113.6



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

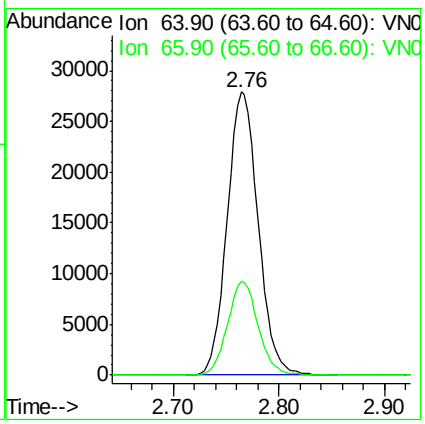
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

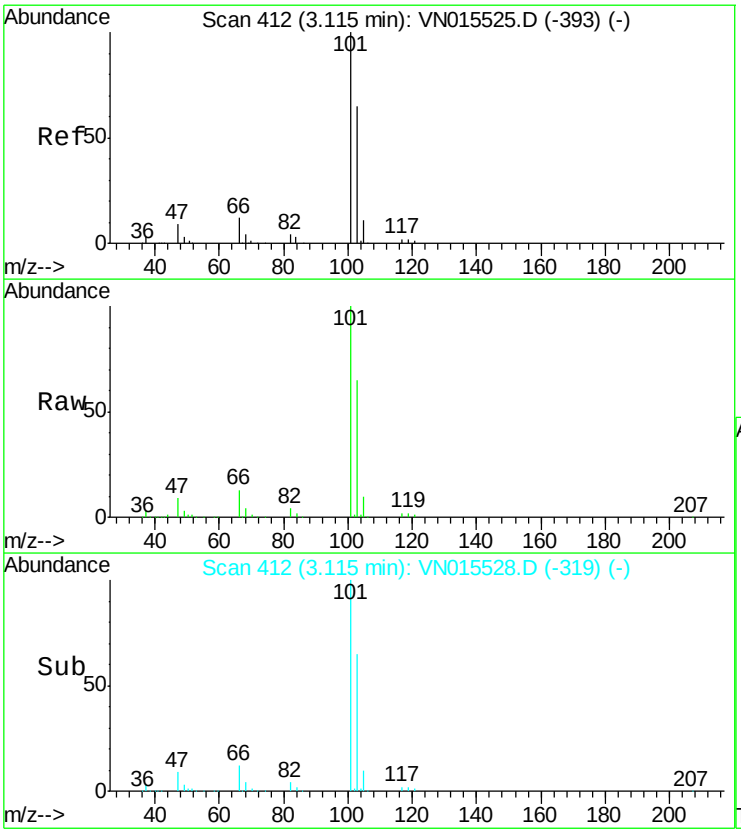


#7
Chloroethane
Concen: 52.80 ug/l
RT: 2.76 min Scan# 303
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 64 Resp: 56776

Ion	Ratio	Lower	Upper
64	100		
66	33.2	26.3	39.5

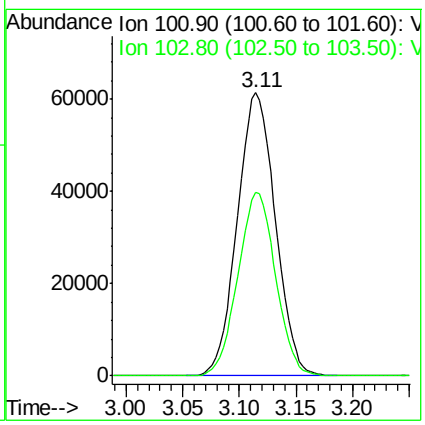


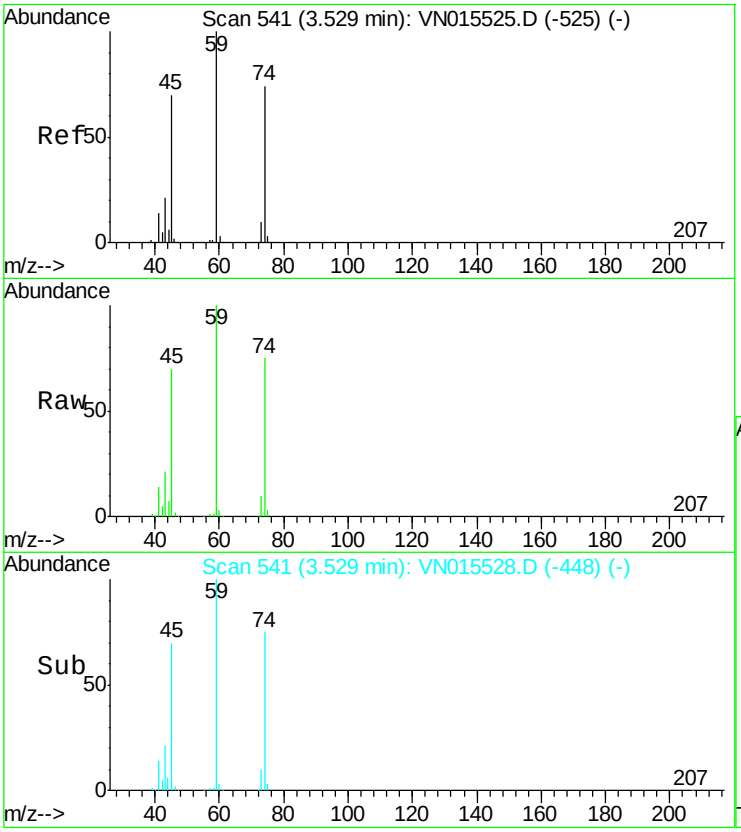


#8
Trichlorofluoromethane
Concen: 51.88 ug/l
RT: 3.11 min Scan# 412
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:101 Resp: 143755

Ion	Ratio	Lower	Upper
101	100		
103	64.8	52.1	78.1





#9
Diethyl Ether
Concen: 53.54 ug/l
RT: 3.53 min Scan# 541
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 74 Resp: 54868

Ion	Ratio	Lower	Upper
74	100		
45	96.8	48.9	146.8

Instrument :
MSVOA_N
ClientSampleId :
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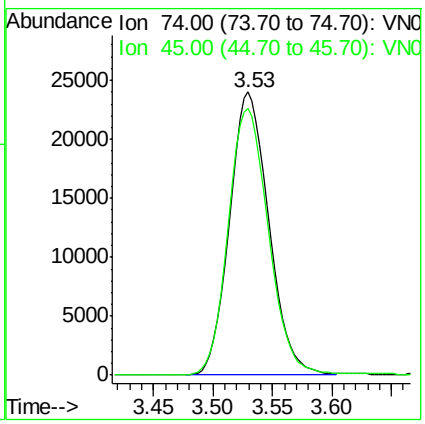
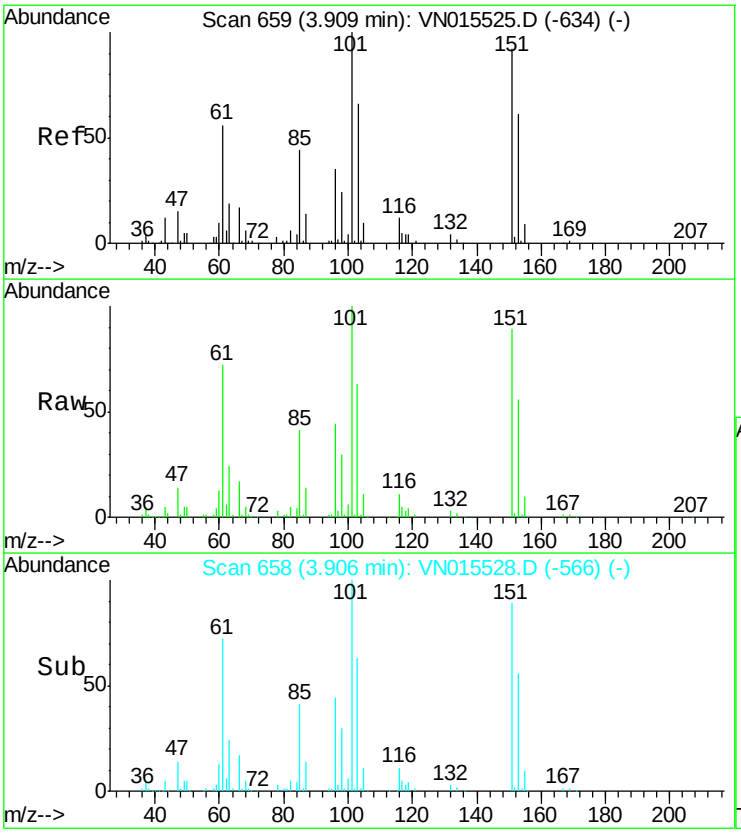
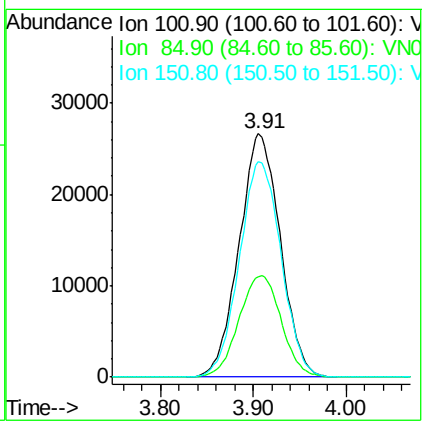




#10
1,1,2-Trichlorotrifluoroethane
Concen: 52.79 ug/l
RT: 3.91 min Scan# 658
Delta R.T. -0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:101 Resp: 82508

Ion	Ratio	Lower	Upper
101	100		
85	42.8	34.5	51.7
151	89.9	72.9	109.3



Instrument :
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ClientSampleId :
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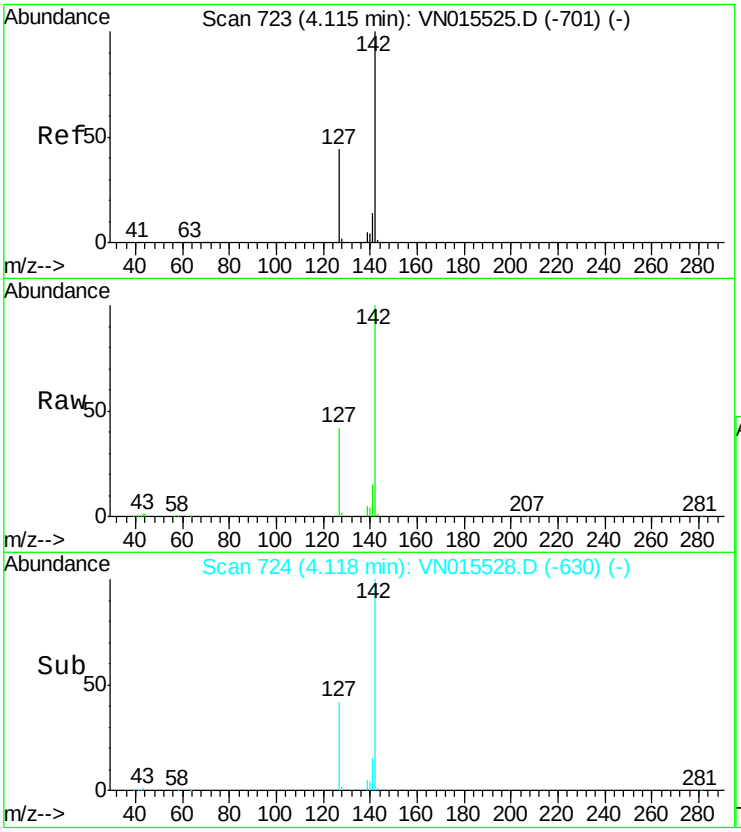
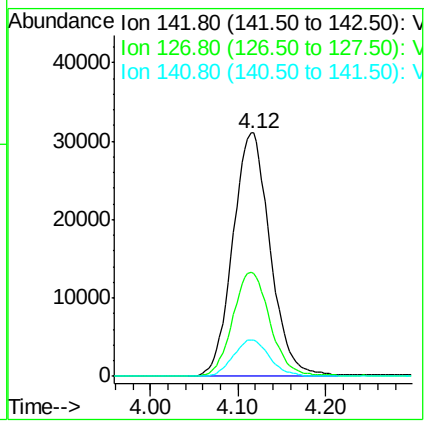
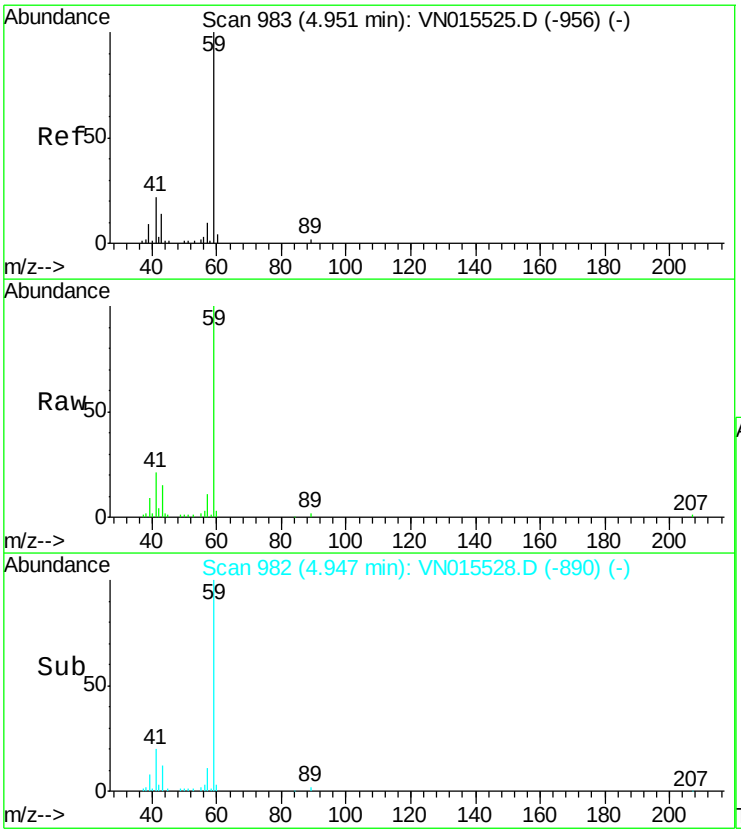


#11
Methyl Iodide
Concen: 46.94 ug/l
RT: 4.12 min Scan# 724
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:142 Resp: 92038

Ion	Ratio	Lower	Upper
142	100		
127	42.9	34.7	52.1
141	14.6	11.4	17.0

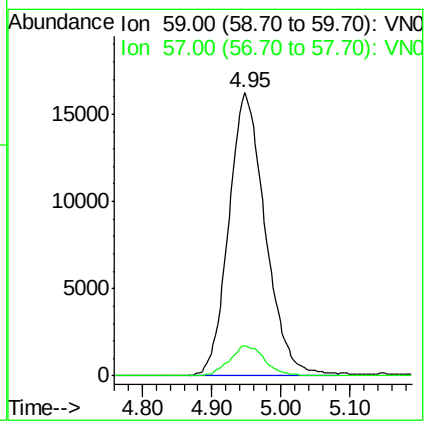




#12
Tert butyl alcohol
Concen: 283.95 ug/l
RT: 4.95 min Scan# 982
Delta R.T. -0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 59 Resp: 59755

Ion	Ratio	Lower	Upper
59	100		
57	10.2	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

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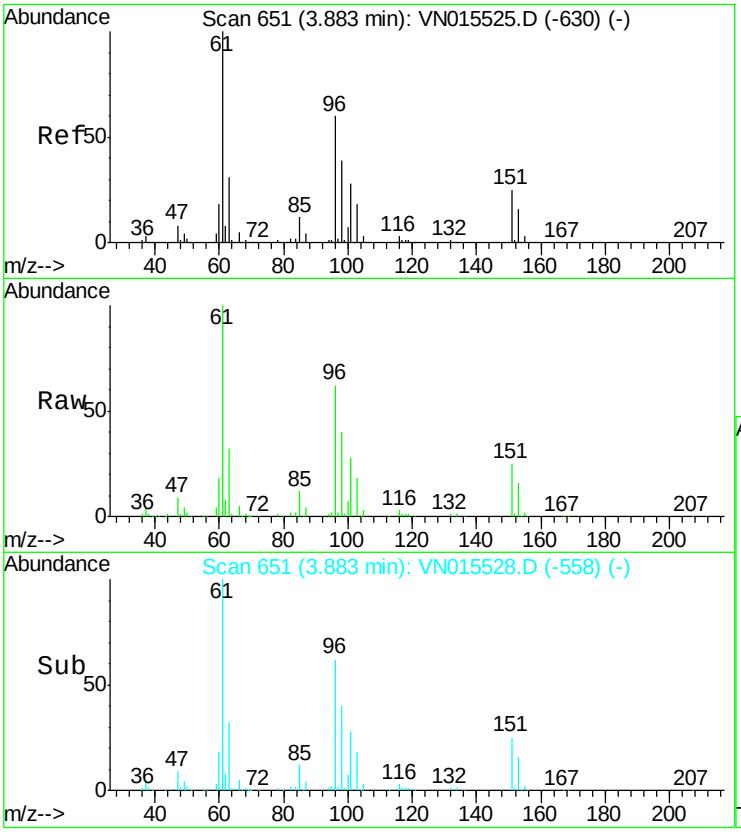
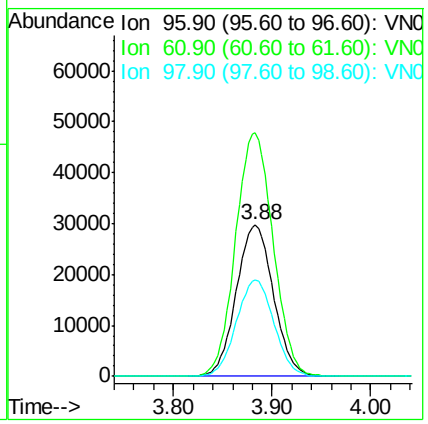
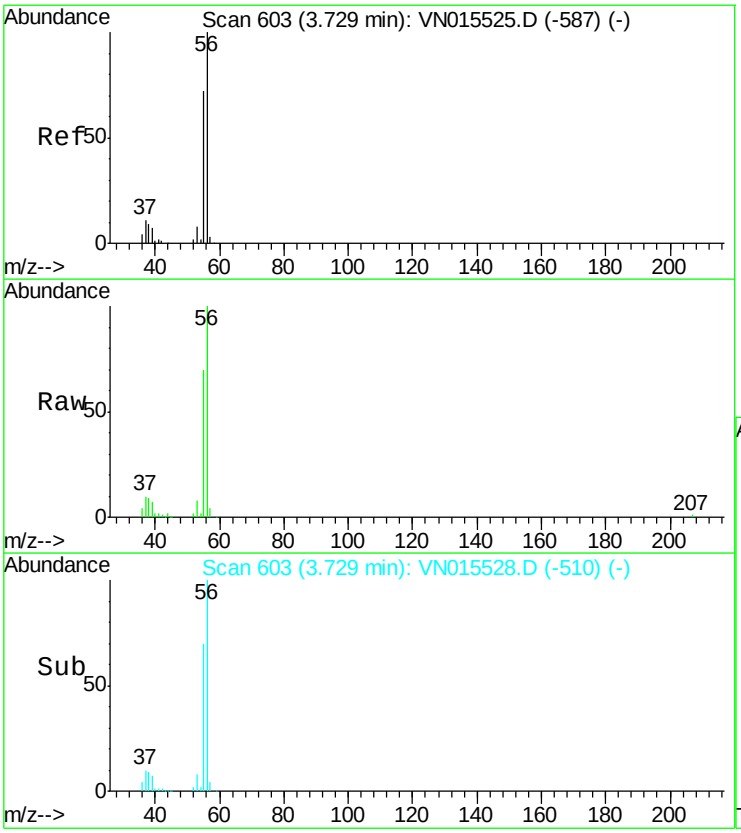


#13
1,1-Dichloroethene
Concen: 52.00 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 96 Resp: 77696

Ion	Ratio	Lower	Upper
96	100		
61	160.5	132.3	198.5
98	63.5	51.8	77.6

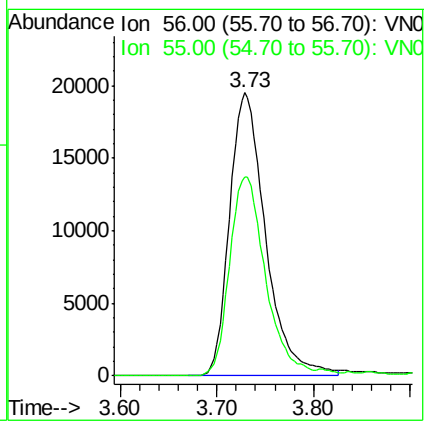




#14
Acrolein
Concen: 266.58 ug/l
RT: 3.73 min Scan# 603
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 56 Resp: 50569

Ion	Ratio	Lower	Upper
56	100		
55	70.0	57.9	86.9



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

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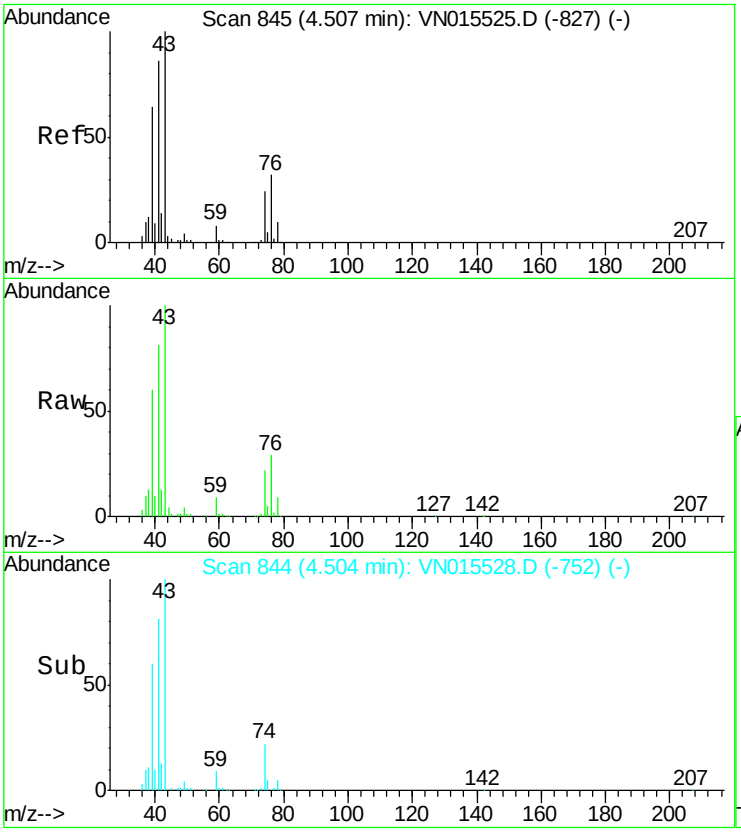
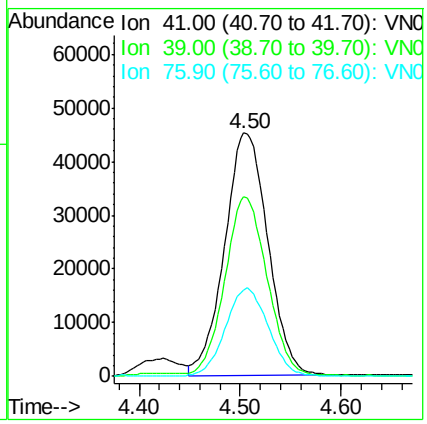
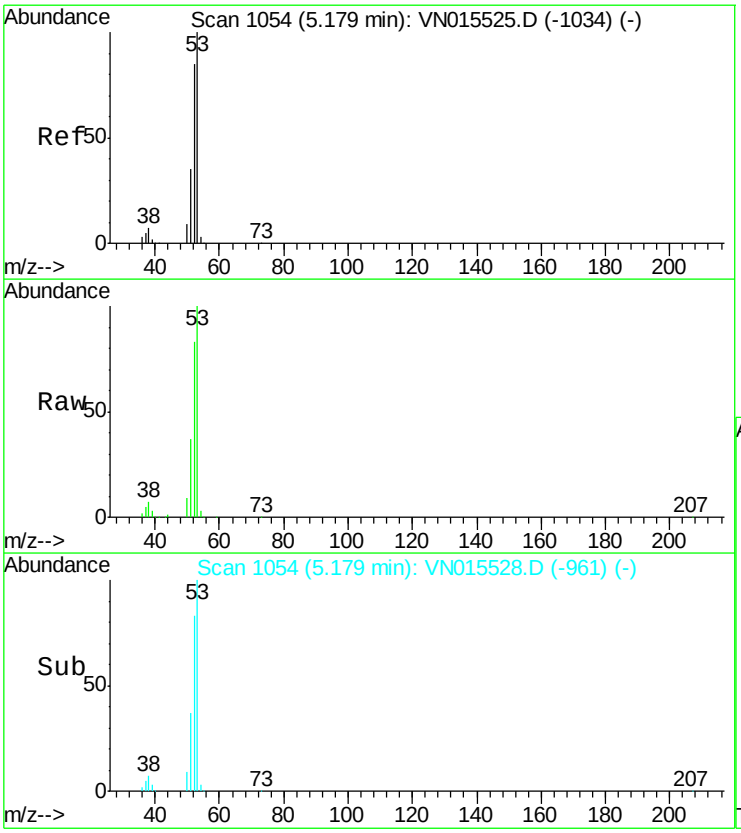


#15
Allyl chloride
Concen: 51.47 ug/l
RT: 4.50 min Scan# 844
Delta R.T. -0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 41 Resp: 134539

Ion	Ratio	Lower	Upper
41	100		
39	71.8	57.4	86.2
76	35.8	28.5	42.7

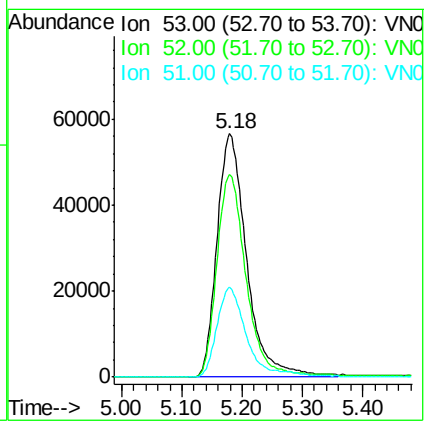




#16
Acrylonitrile
Concen: 285.87 ug/l
RT: 5.18 min Scan# 1054
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 53 Resp: 192420

Ion	Ratio	Lower	Upper
53	100		
52	82.2	65.7	98.5
51	36.9	29.1	43.7



Instrument :
MSVOA_N
ClientSampleId :
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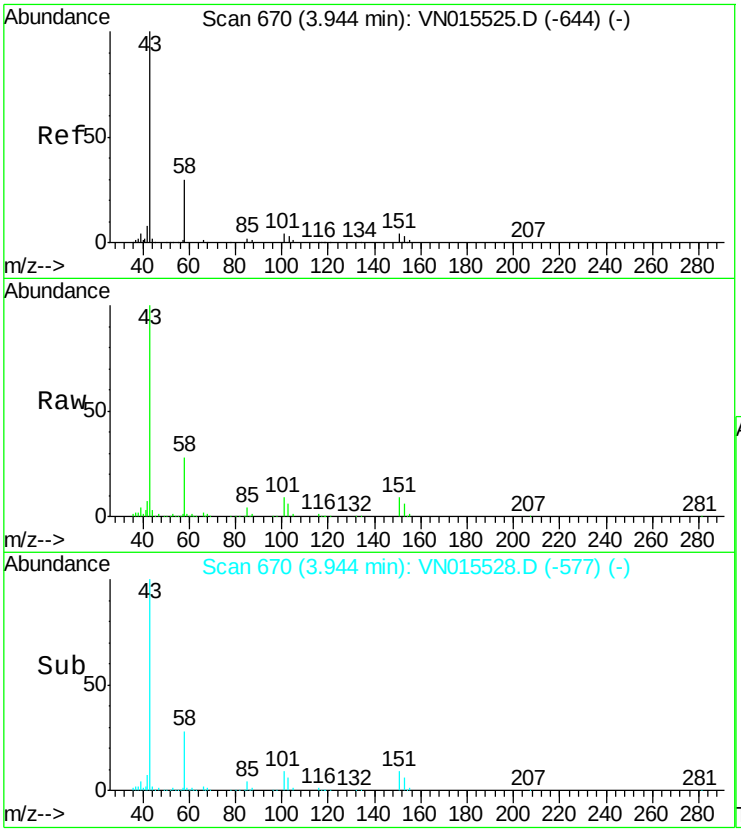
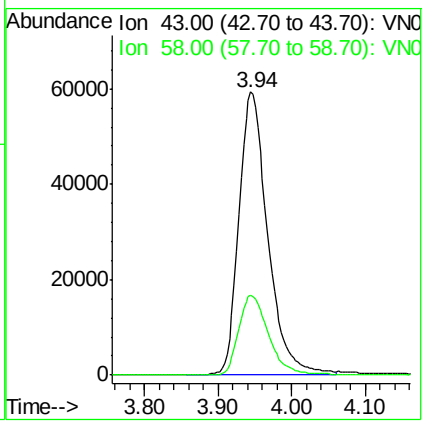
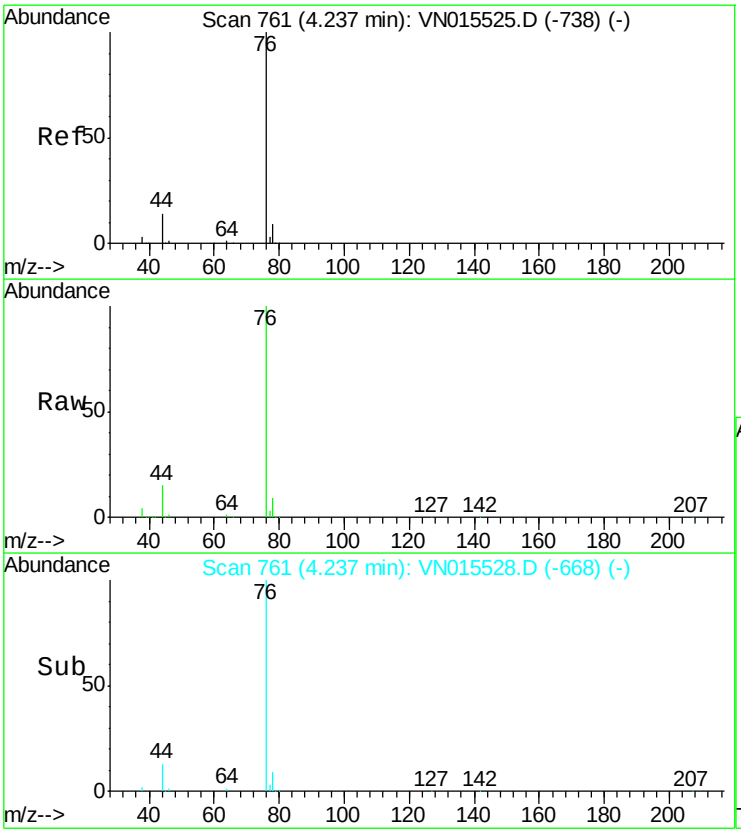


#17
Acetone
Concen: 246.51 ug/l
RT: 3.94 min Scan# 670
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 162499

Ion	Ratio	Lower	Upper
43	100		
58	28.4	24.2	36.2

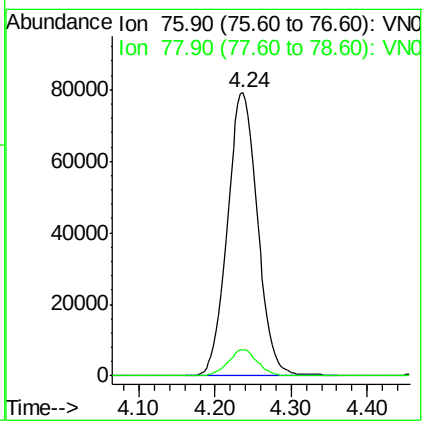




#18
Carbon Disulfide
Concen: 51.92 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 76 Resp: 218617

Ion	Ratio	Lower	Upper
76	100		
78	9.3	7.5	11.3



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

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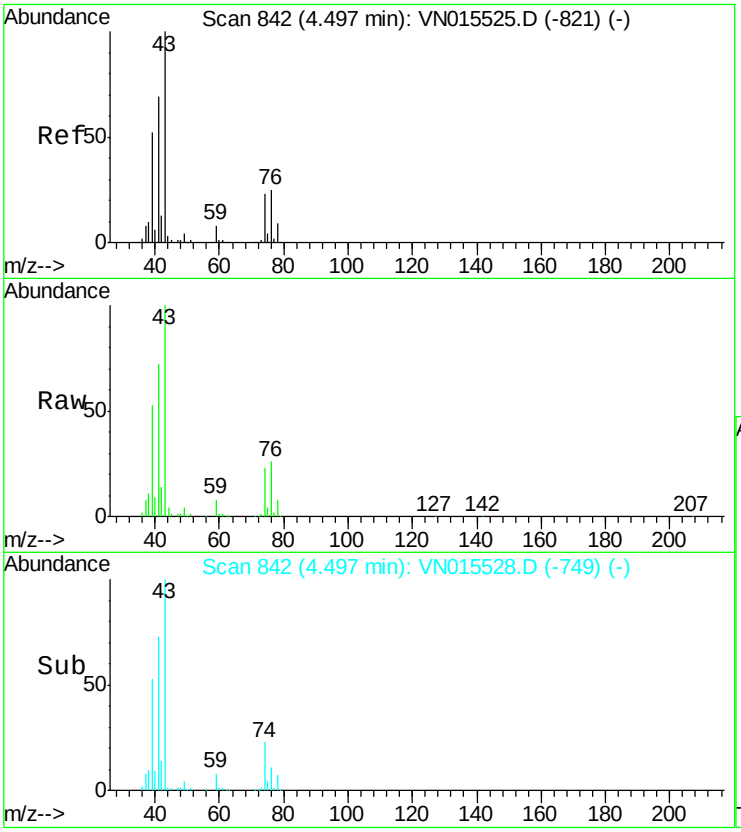
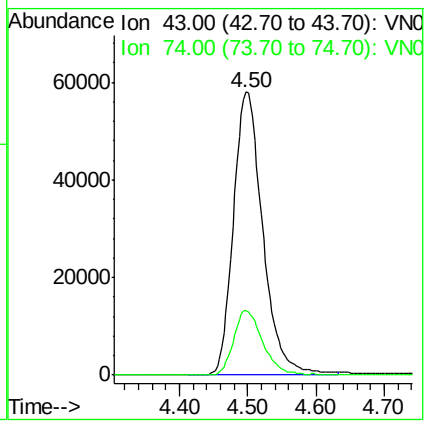
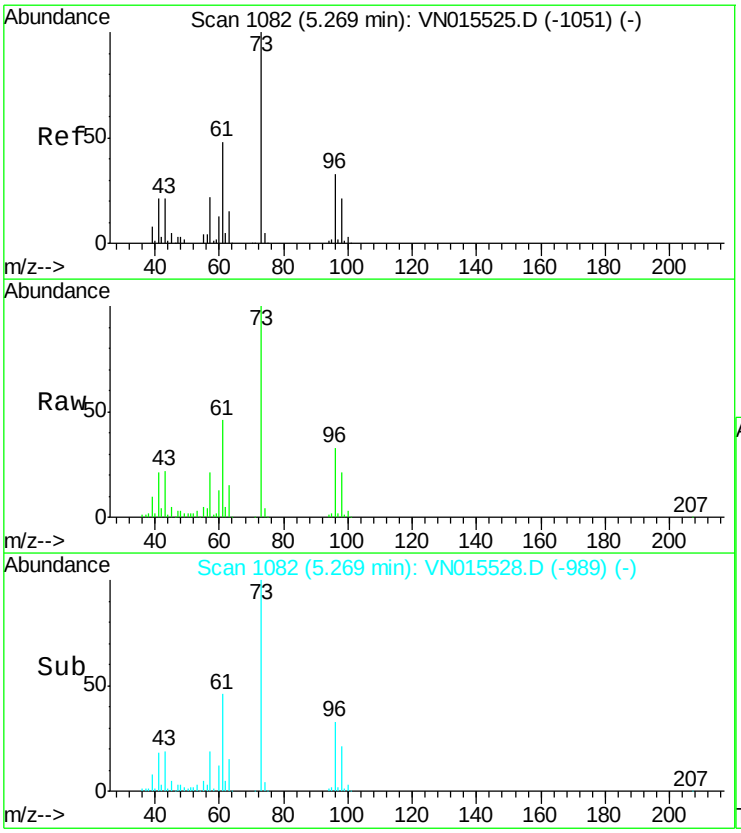


#19
Methyl Acetate
Concen: 54.15 ug/l
RT: 4.50 min Scan# 842
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 172662

Ion	Ratio	Lower	Upper
43	100		
74	22.6	18.5	27.7

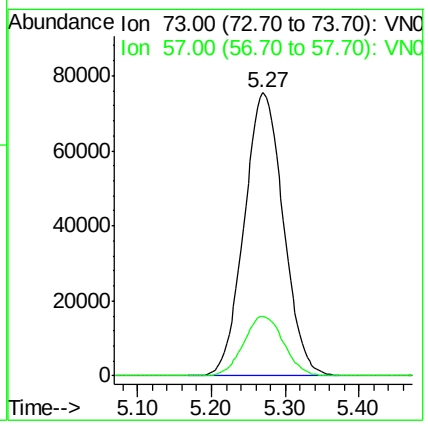




#20
Methyl tert-butyl Ether
Concen: 53.04 ug/l
RT: 5.27 min Scan# 1082
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 73 Resp: 278957

Ion	Ratio	Lower	Upper
73	100		
57	21.2	17.3	25.9



Instrument :
MSVOA_N
ClientSampleId :
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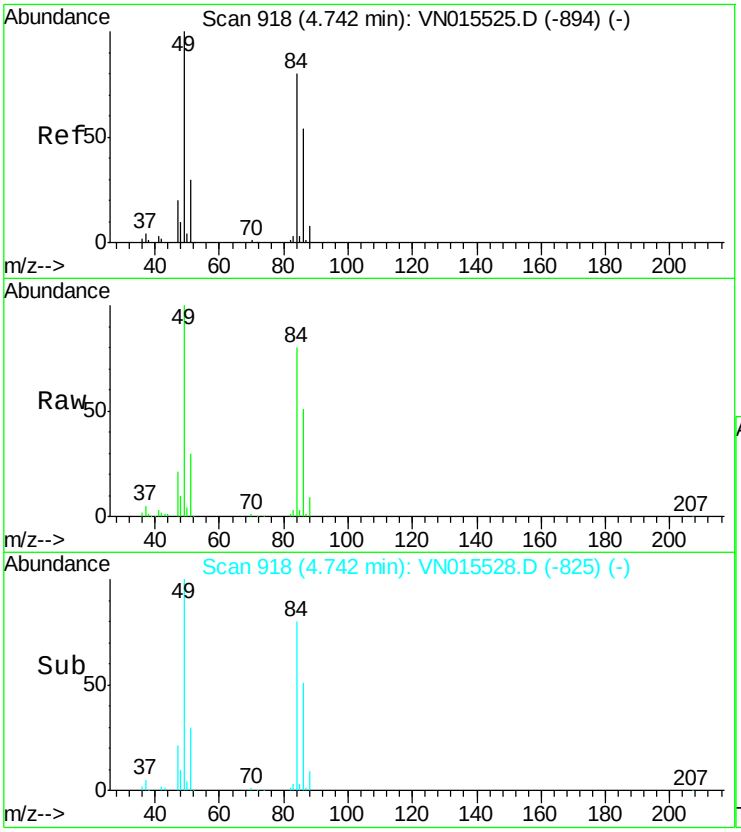
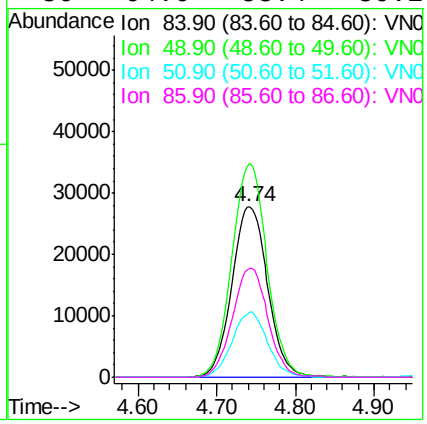
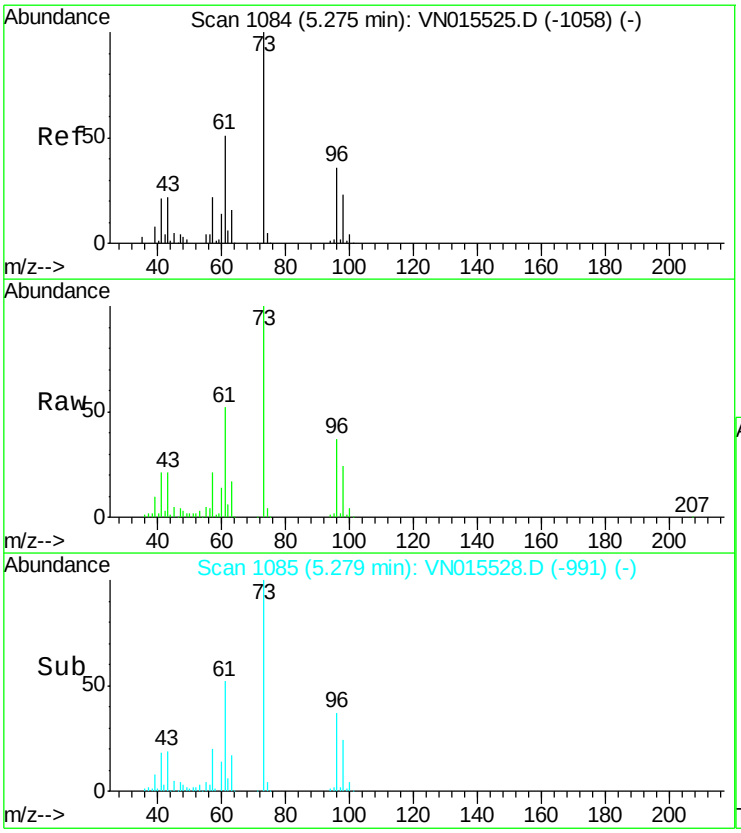


#21
Methylene Chloride
Concen: 51.55 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 84 Resp: 88108

Ion	Ratio	Lower	Upper
84	100		
49	125.2	99.8	149.6
51	38.0	30.2	45.2
86	64.0	53.4	80.2

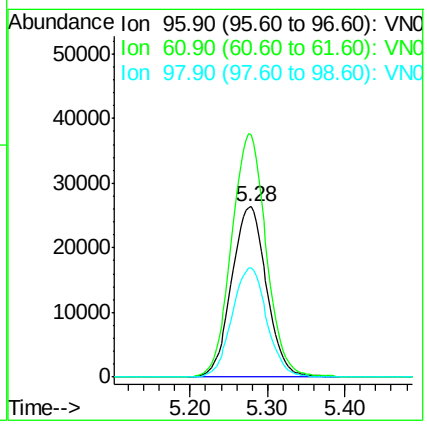




#22
trans-1,2-Dichloroethene
Concen: 52.52 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 96 Resp: 82740

Ion	Ratio	Lower	Upper
96	100		
61	142.7	113.3	169.9
98	64.4	50.4	75.6



Instrument :
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ClientSampleId :
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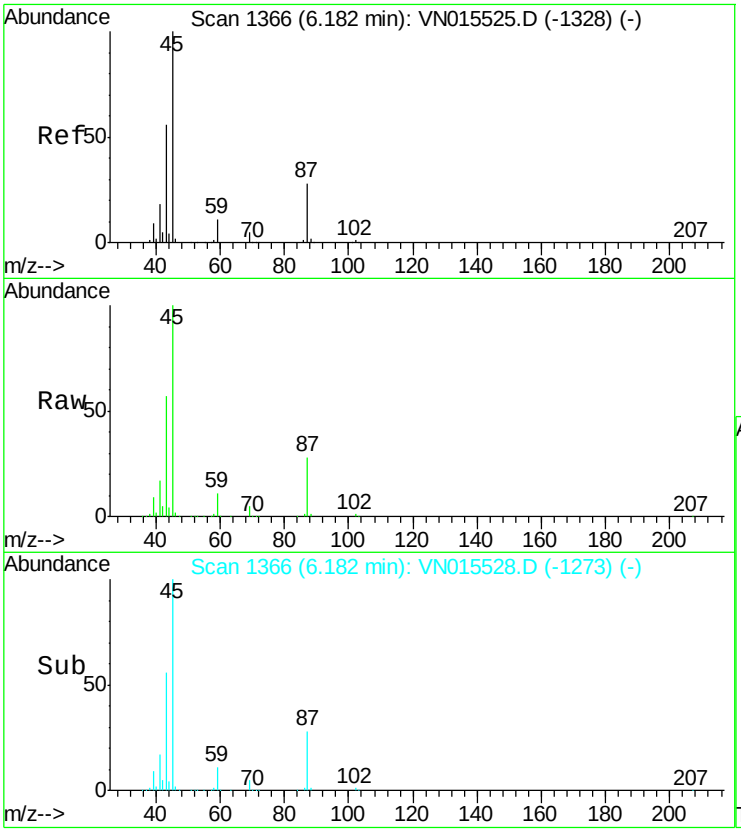
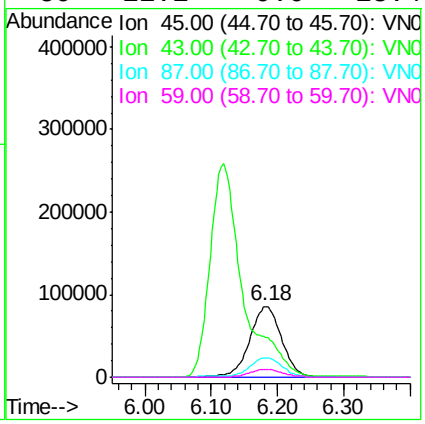
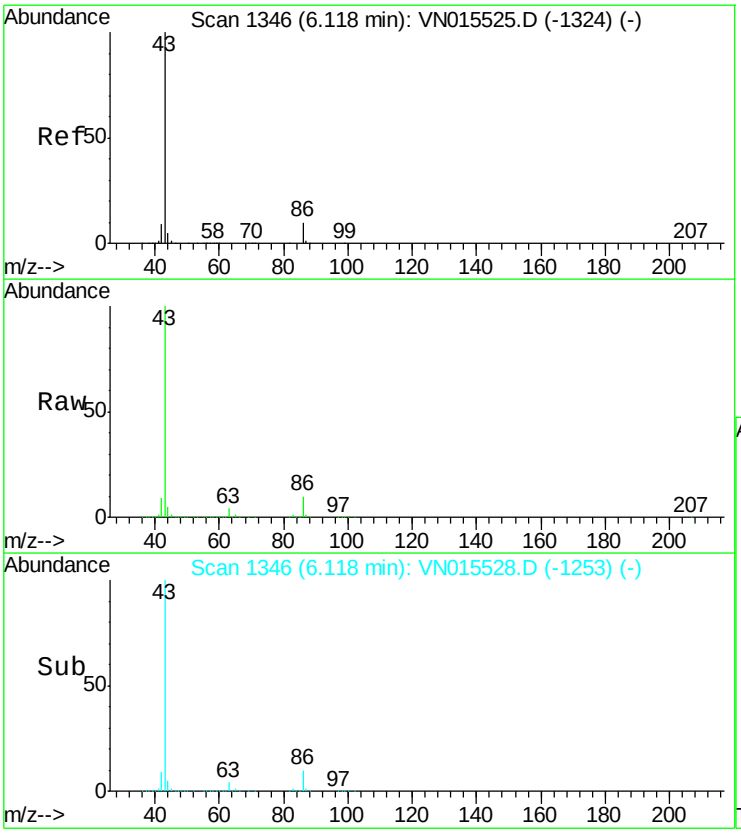


#23
Diisopropyl ether
Concen: 53.27 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 45 Resp: 286843

Ion	Ratio	Lower	Upper
45	100		
43	55.2	44.6	67.0
87	27.6	22.3	33.5
59	11.1	9.0	13.4

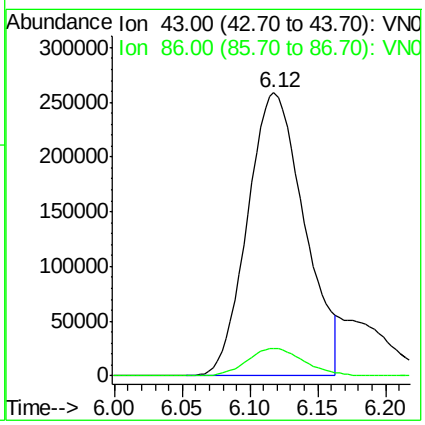




#24
Vinyl Acetate
Concen: 282.08 ug/l m
RT: 6.12 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 754475

Ion	Ratio	Lower	Upper
43	100		
86	9.9	7.9	11.9



Instrument :
MSVOA_N
ClientSampleId :
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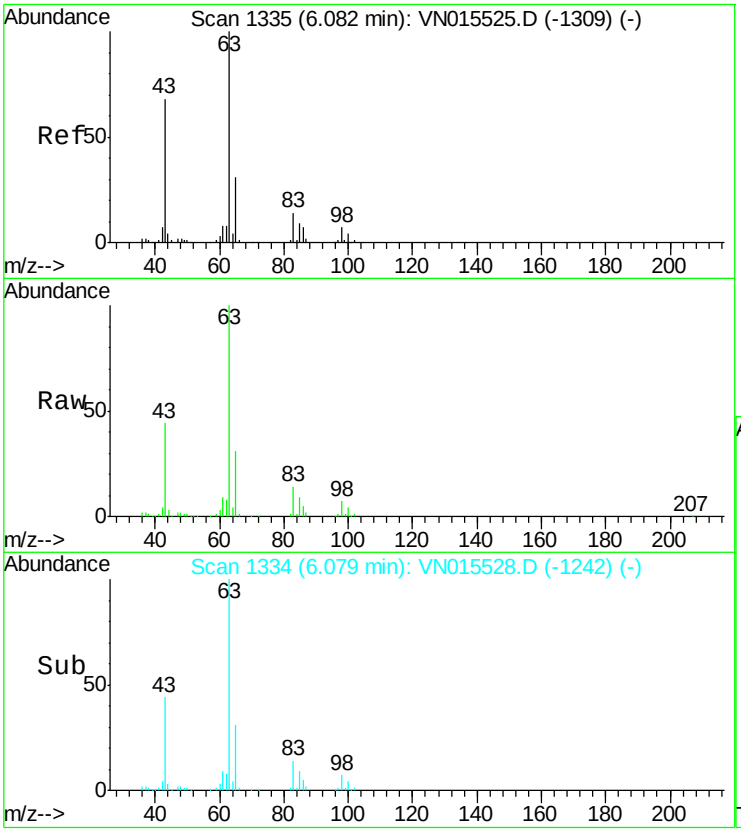
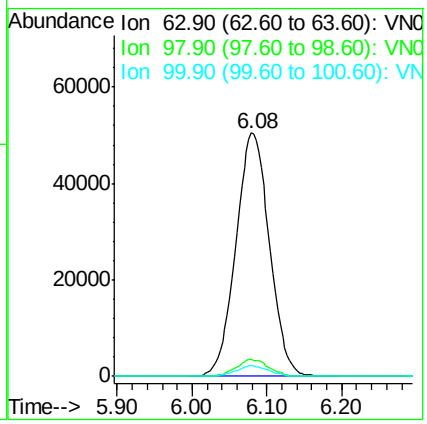
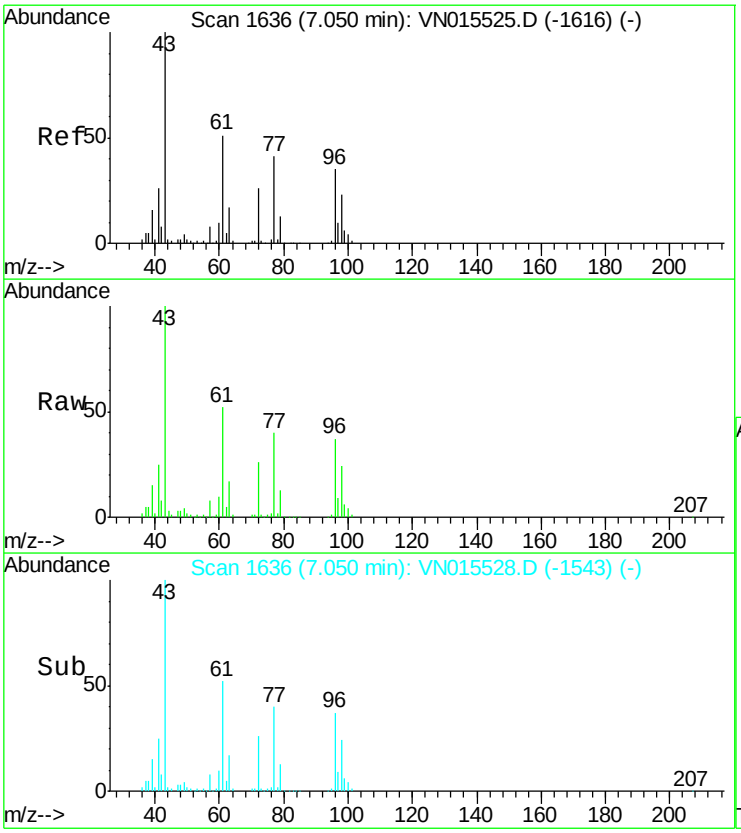


#25
1,1-Dichloroethane
Concen: 53.04 ug/l
RT: 6.08 min Scan# 1334
Delta R.T. -0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 63 Resp: 157232

Ion	Ratio	Lower	Upper
63	100		
98	6.9	3.3	9.9
100	4.4	2.1	6.3

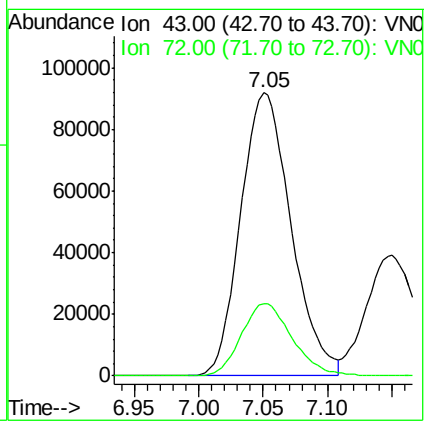




#26
2-Butanone
Concen: 268.28 ug/l
RT: 7.05 min Scan# 1636
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 249500

Ion	Ratio	Lower	Upper
43	100		
72	25.6	20.7	31.1



Instrument :
MSVOA_N
ClientSampleId :
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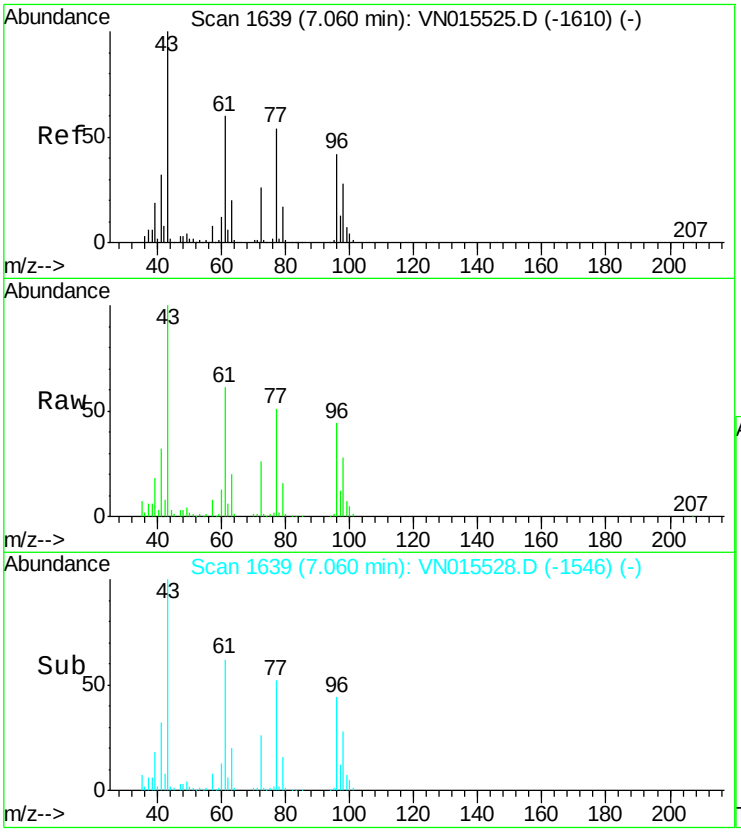
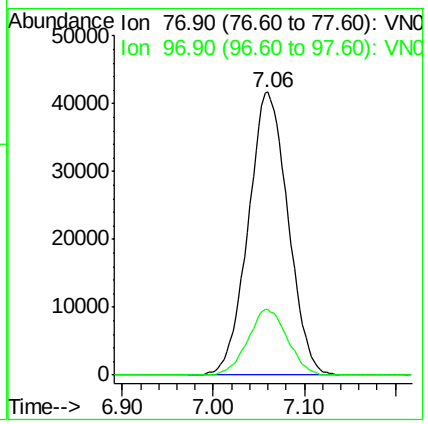
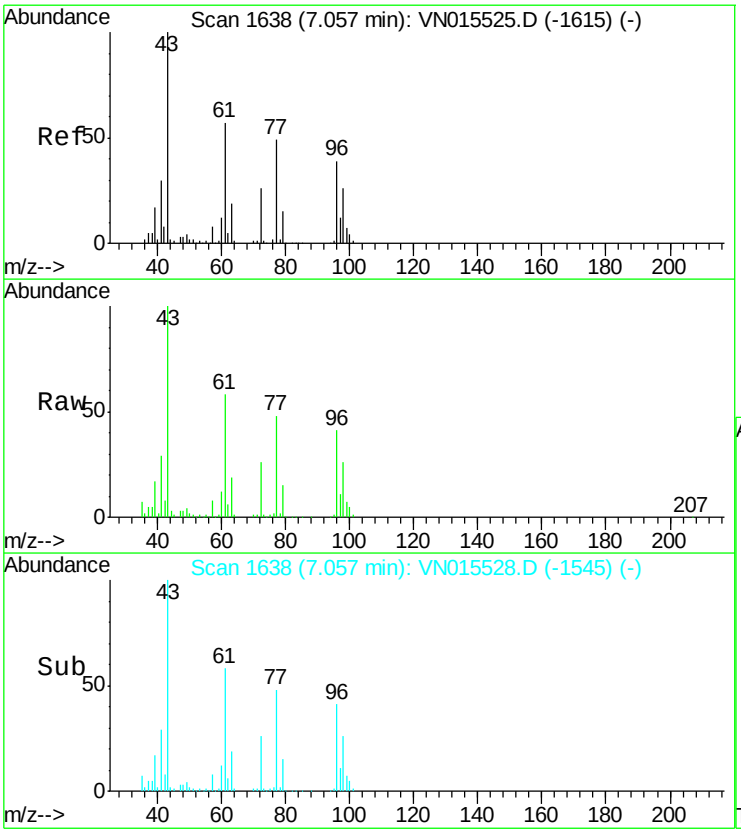


#27
2,2-Dichloropropane
Concen: 48.30 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 77 Resp: 126425

Ion	Ratio	Lower	Upper
77	100		
97	23.1	11.6	34.7

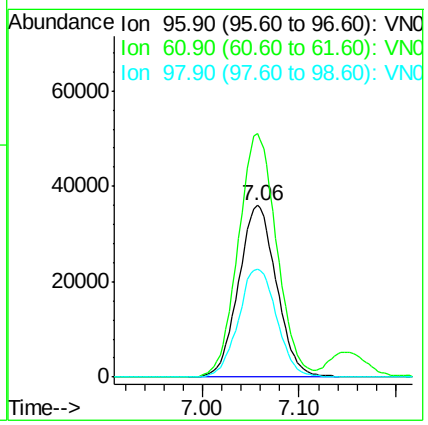




#28
cis-1,2-Dichloroethene
Concen: 52.91 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 96 Resp: 97871

Ion	Ratio	Lower	Upper
96	100		
61	143.7	0.0	292.0
98	64.1	0.0	129.4



Instrument :
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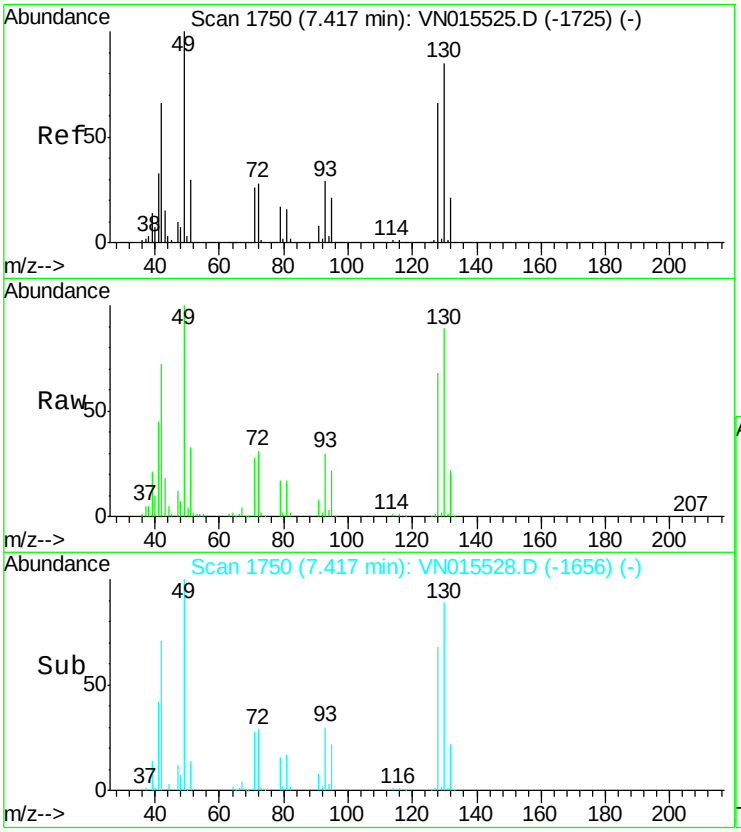
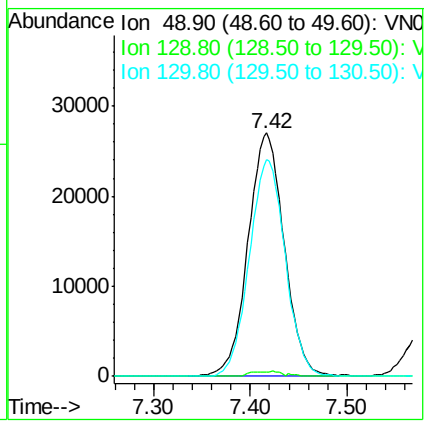
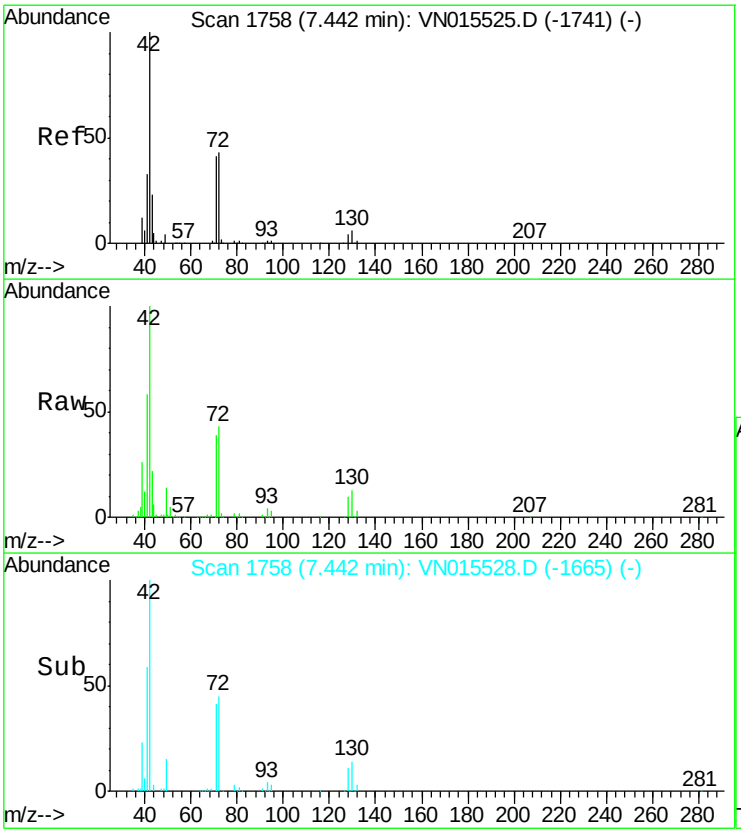


#29
Bromochloromethane
Concen: 53.80 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 49 Resp: 70101

Ion	Ratio	Lower	Upper
49	100		
129	1.6	0.0	4.2
130	88.5	68.6	102.8

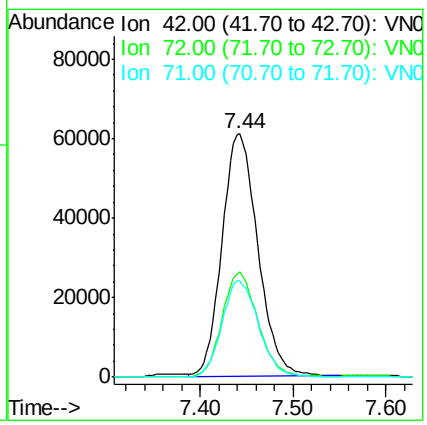




#30
Tetrahydrofuran
Concen: 260.64 ug/l
RT: 7.44 min Scan# 1758
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 42 Resp: 163101

Ion	Ratio	Lower	Upper
42	100		
72	43.4	34.2	51.2
71	40.8	32.5	48.7



Instrument :
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ClientSampleId :
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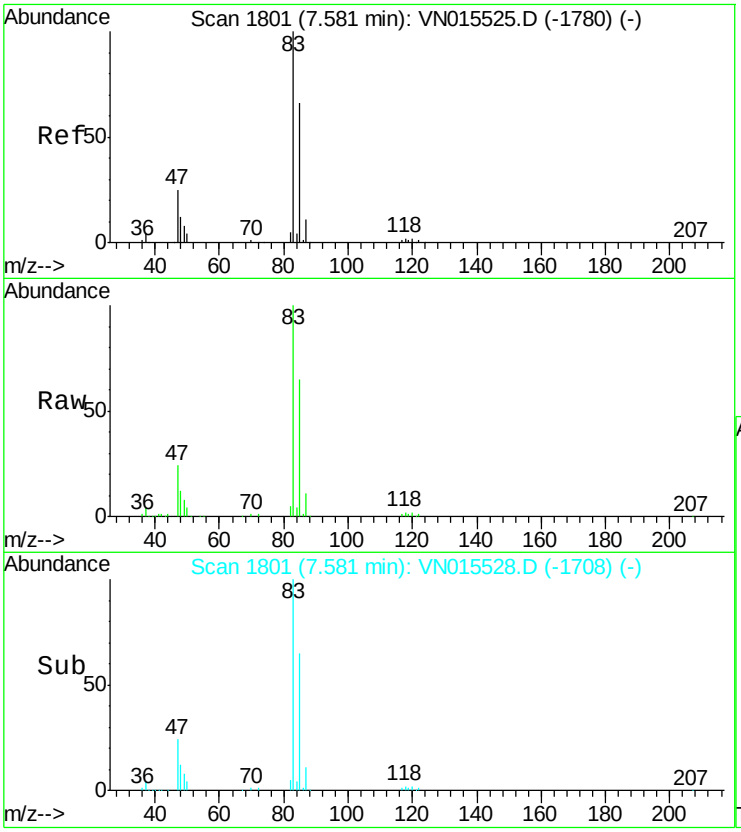
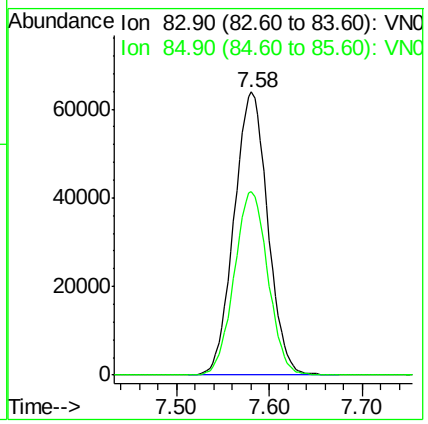
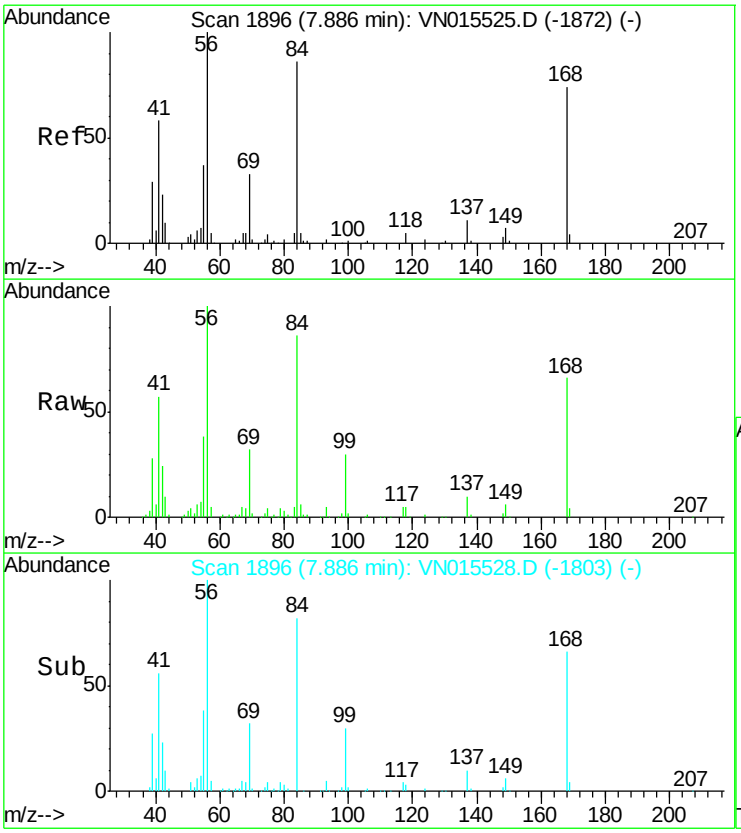


#31
Chloroform
Concen: 52.67 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 83 Resp: 161236

Ion	Ratio	Lower	Upper
83	100		
85	64.9	52.6	78.8

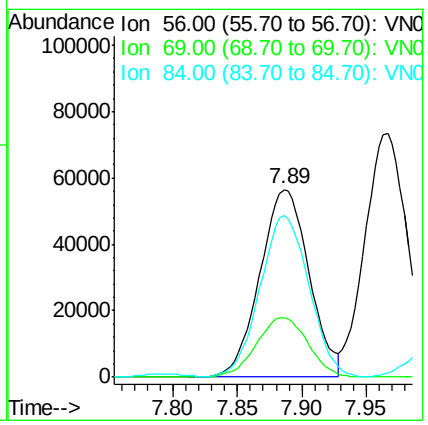




#32
Cyclohexane
Concen: 57.20 ug/l
RT: 7.89 min Scan# 1896
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 56 Resp: 150043

Ion	Ratio	Lower	Upper
56	100		
69	31.6	26.6	39.8
84	85.1	69.0	103.4



Instrument :
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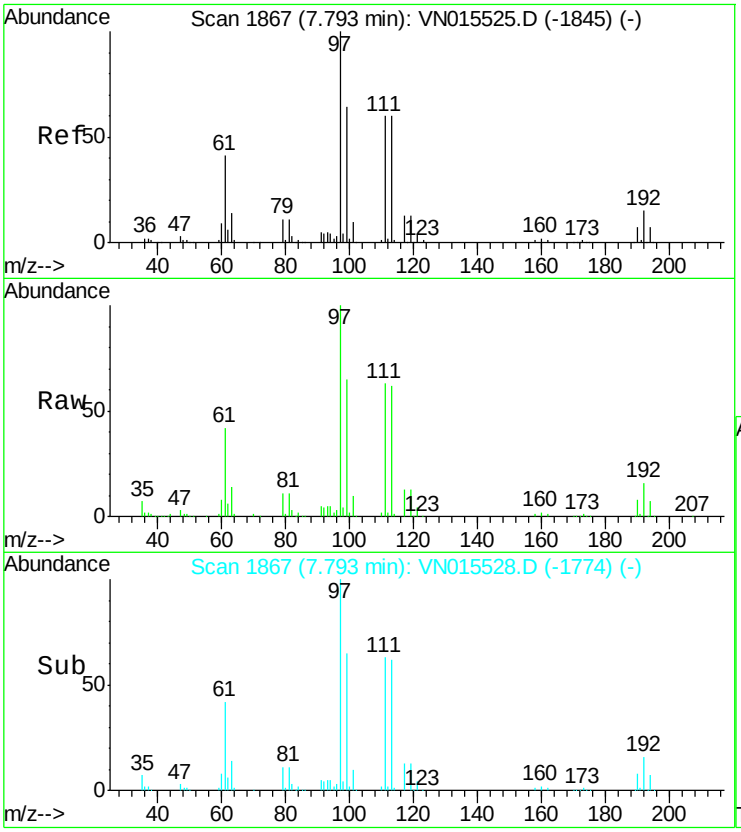
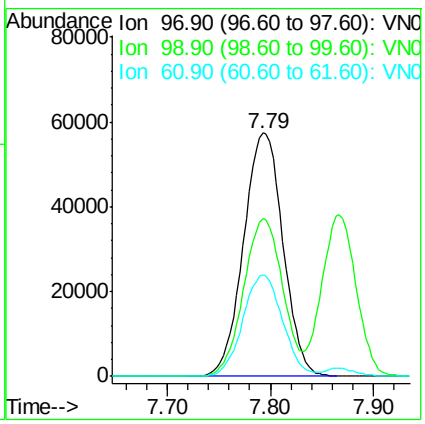
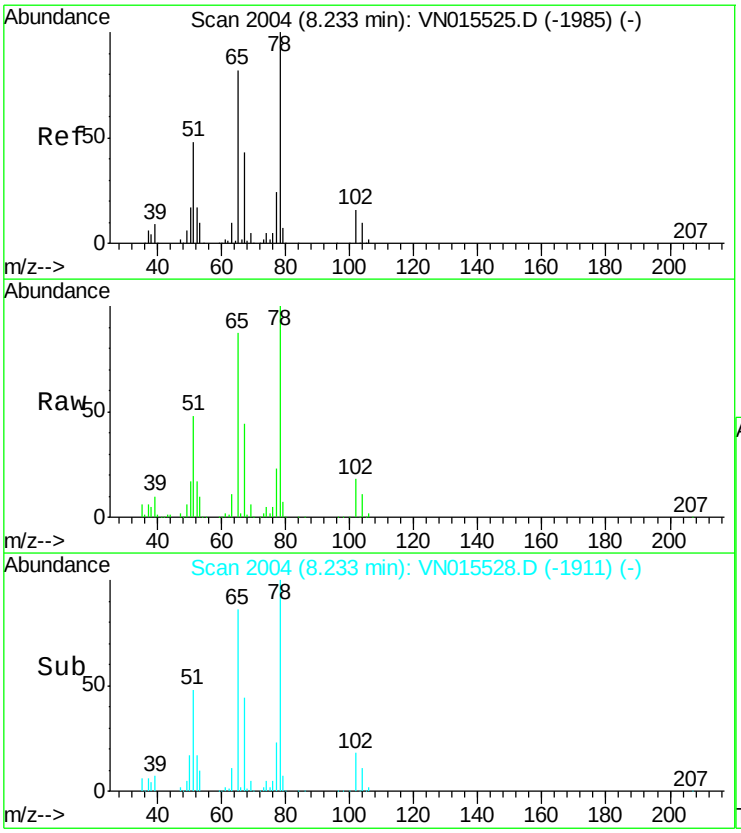


#33
1,1,1-Trichloroethane
Concen: 53.15 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 97 Resp: 152336

Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.2	76.8
61	41.9	33.9	50.9

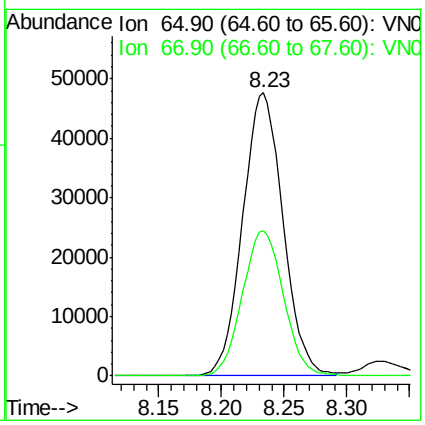




#34
1,2-Dichloroethane-d4
Concen: 50.79 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 65 Resp: 106714

Ion	Ratio	Lower	Upper
65	100		
67	52.3	0.0	103.6



Instrument :
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ClientSampleId :
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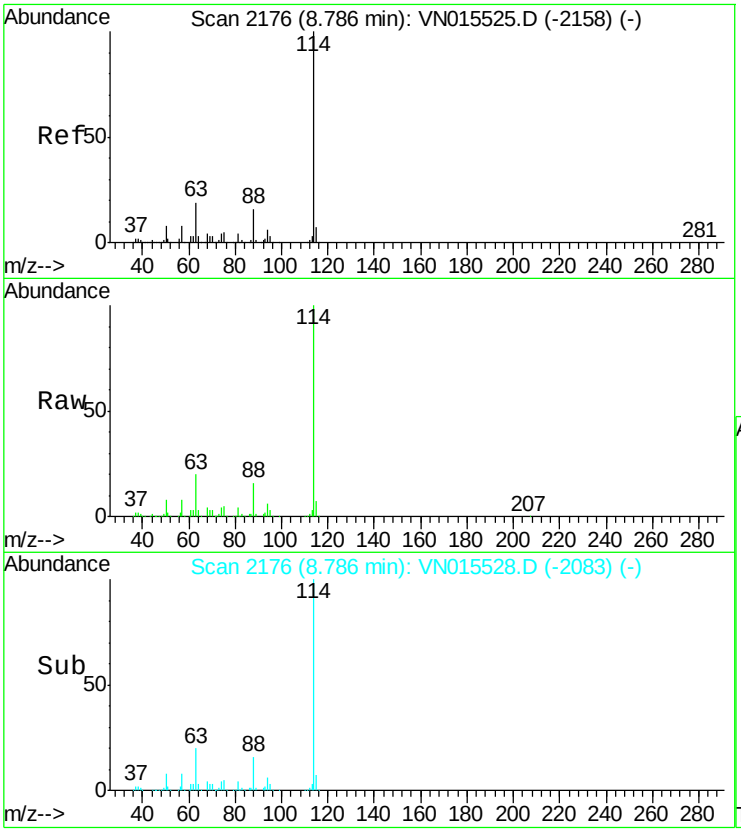
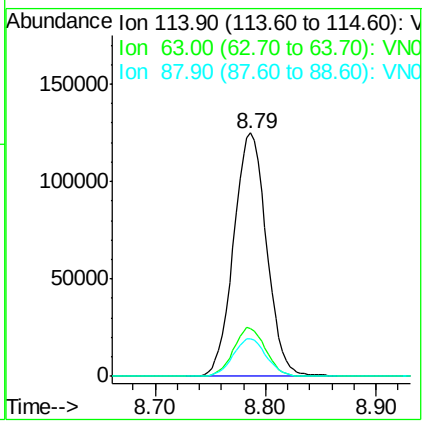
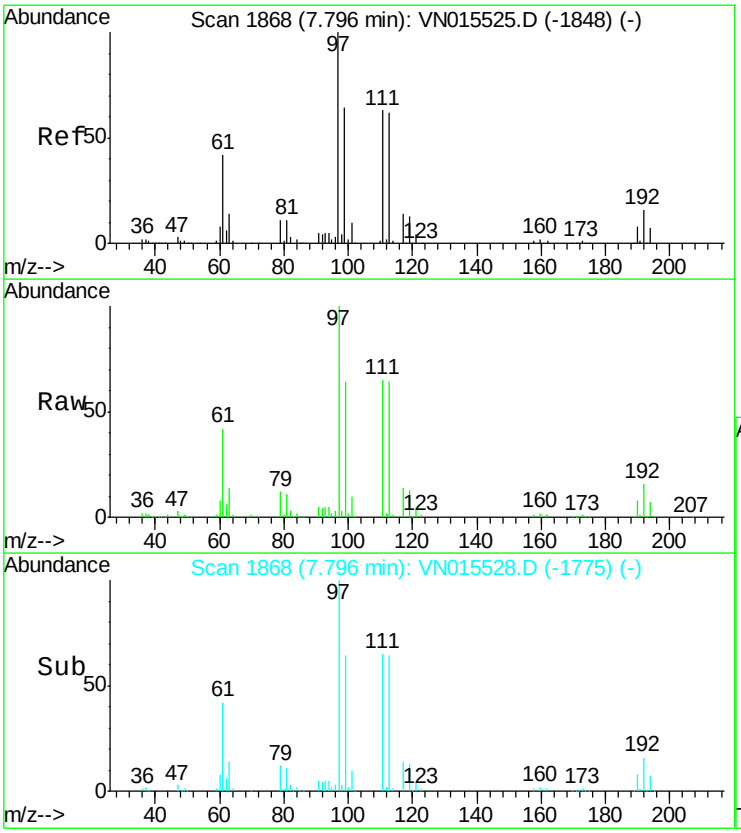


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:114 Resp: 258485

Ion	Ratio	Lower	Upper
114	100		
63	19.8	0.0	38.6
88	15.7	0.0	32.2

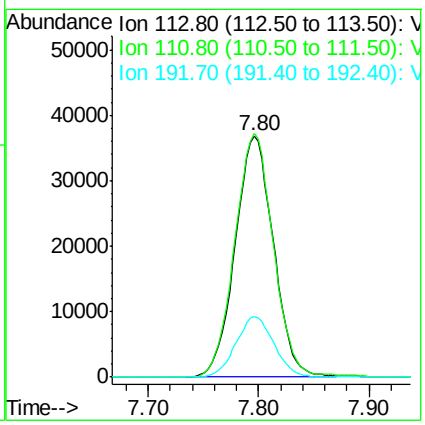




#36
Dibromofluoromethane
Concen: 52.65 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:113 Resp: 88635

Ion	Ratio	Lower	Upper
113	100		
111	102.1	81.5	122.3
192	24.9	20.0	30.0



Instrument :
MSVOA_N
ClientSampleId :
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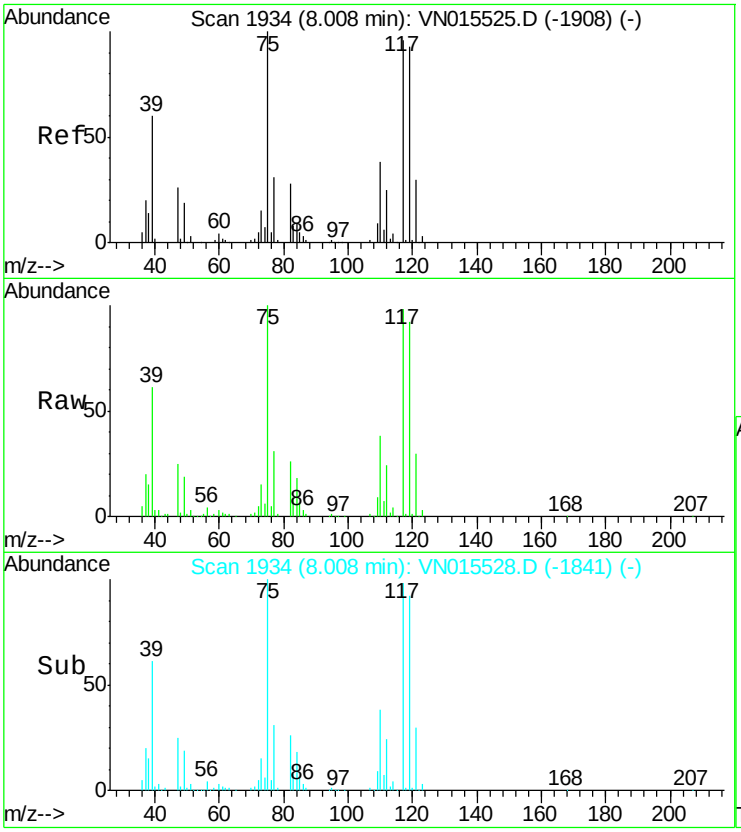
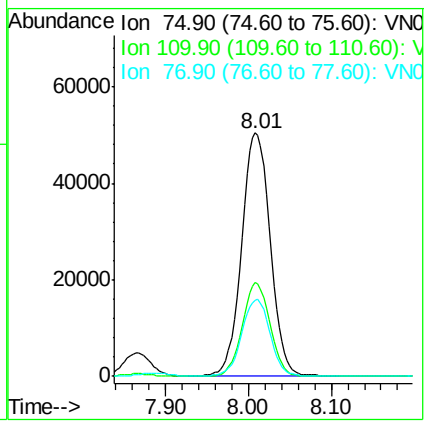
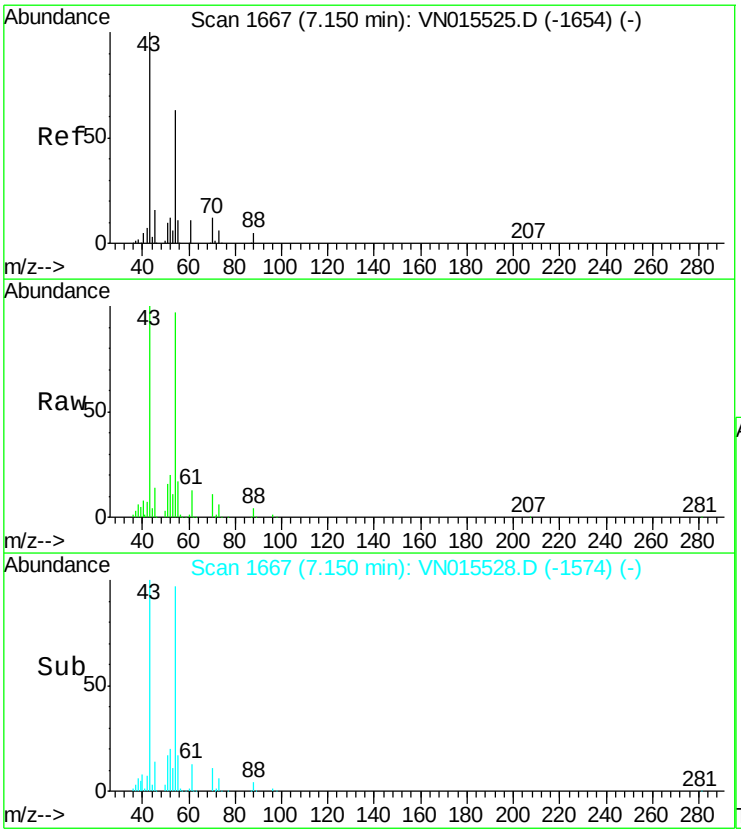


#37
1,1-Dichloropropene
Concen: 52.61 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 75 Resp: 121282

Ion	Ratio	Lower	Upper
75	100		
110	37.3	18.6	55.6
77	31.3	24.4	36.6

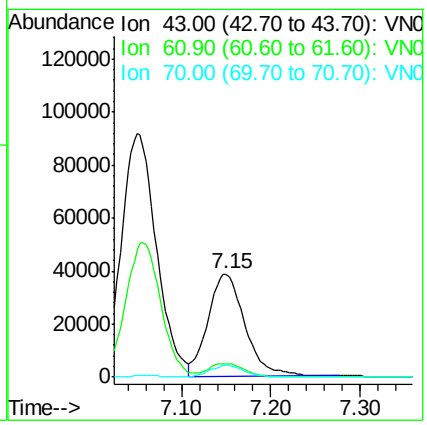




#38
Ethyl Acetate
Concen: 54.00 ug/l
RT: 7.15 min Scan# 1667
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 109858

Ion	Ratio	Lower	Upper
43	100		
61	13.6	10.8	16.2
70	11.0	8.5	12.7



Instrument :
MSVOA_N
ClientSampleId :
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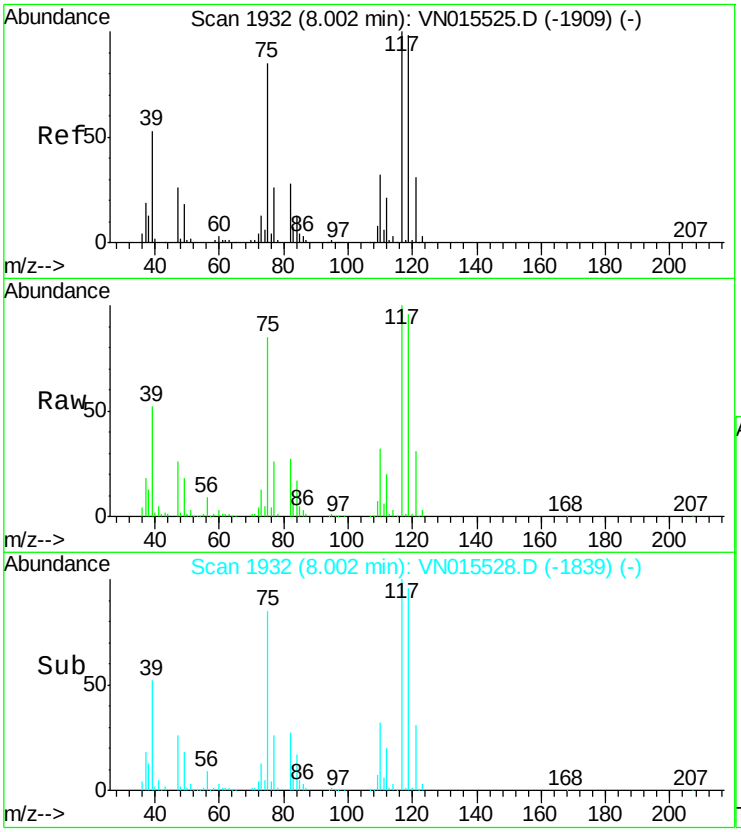
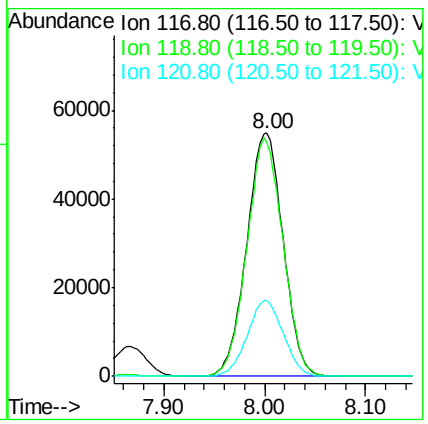
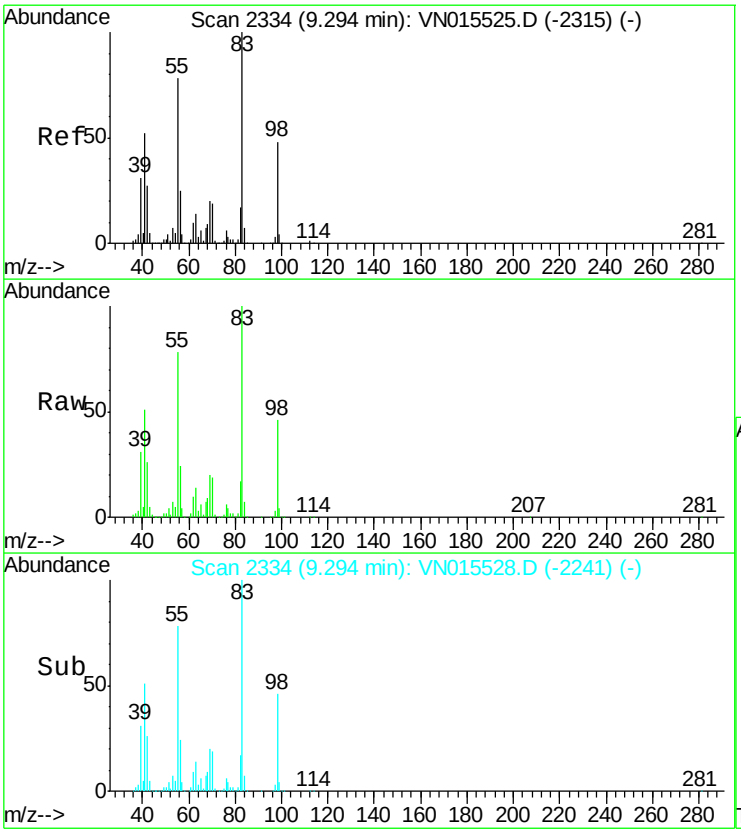


#39
Carbon Tetrachloride
Concen: 52.08 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:117 Resp: 137275

Ion	Ratio	Lower	Upper
117	100		
119	96.4	78.0	117.0
121	31.1	24.5	36.7

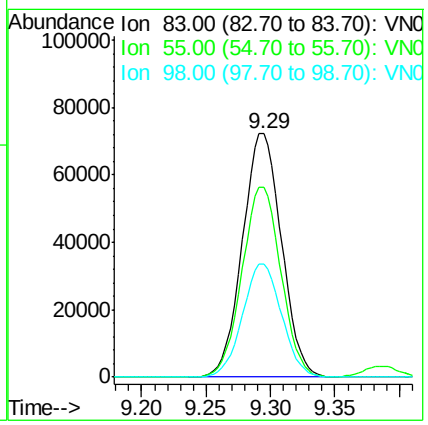




#40
Methylcyclohexane
Concen: 51.73 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 83 Resp: 152520

Ion	Ratio	Lower	Upper
83	100		
55	78.2	62.5	93.7
98	46.4	38.2	57.2



Instrument :
MSVOA_N
ClientSampleId :
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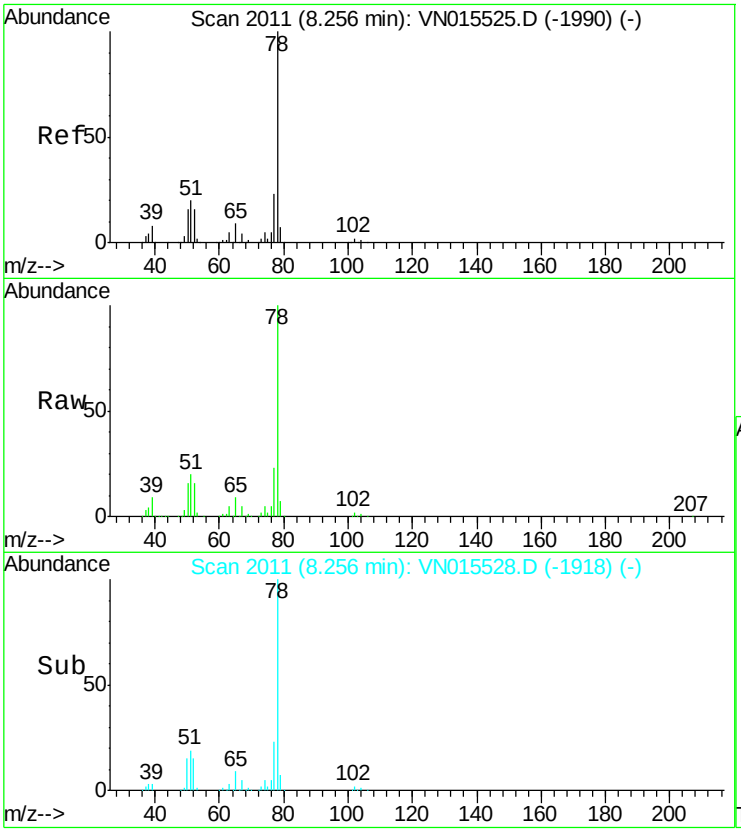
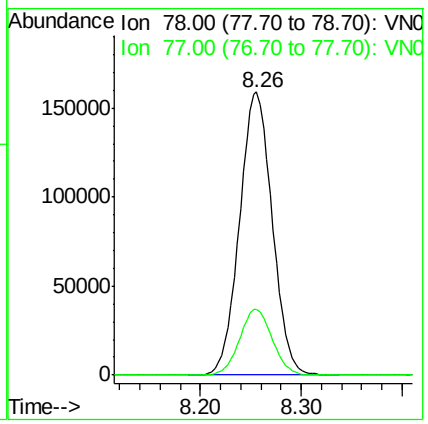
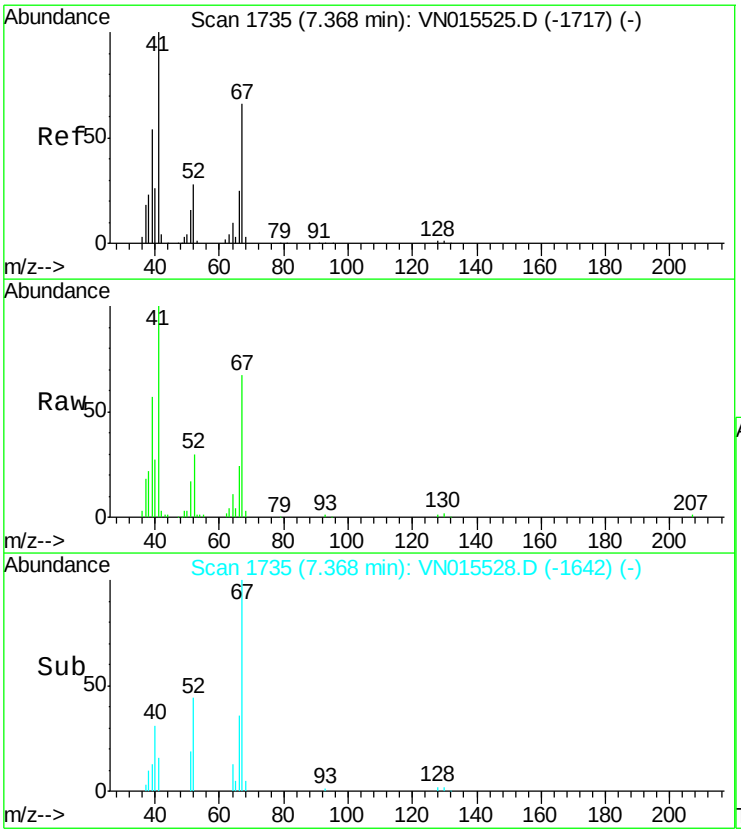


#41
Benzene
Concen: 51.90 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 78 Resp: 356816

Ion	Ratio	Lower	Upper
78	100		
77	23.3	18.5	27.7

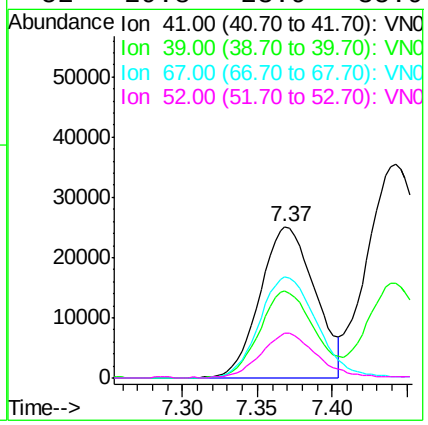




#42
Methacrylonitrile
Concen: 52.76 ug/l
RT: 7.37 min Scan# 1735
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 41 Resp: 63433

Ion	Ratio	Lower	Upper
41	100		
39	58.0	45.0	67.4
67	71.0	54.9	82.3
52	29.8	23.9	35.9



Instrument :
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ClientSampleId :
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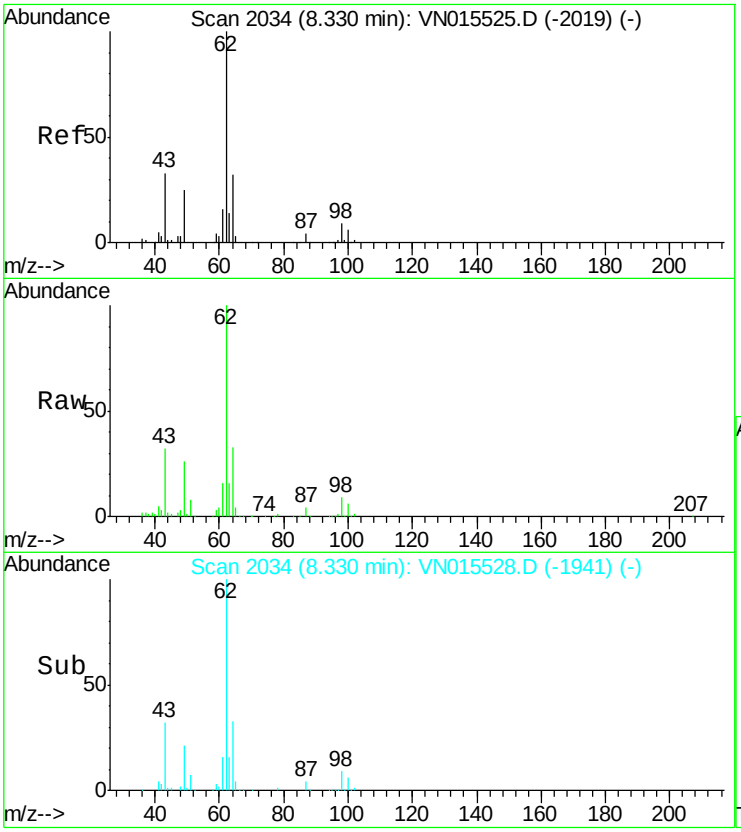
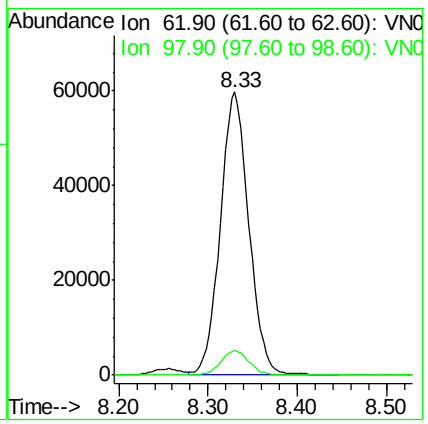
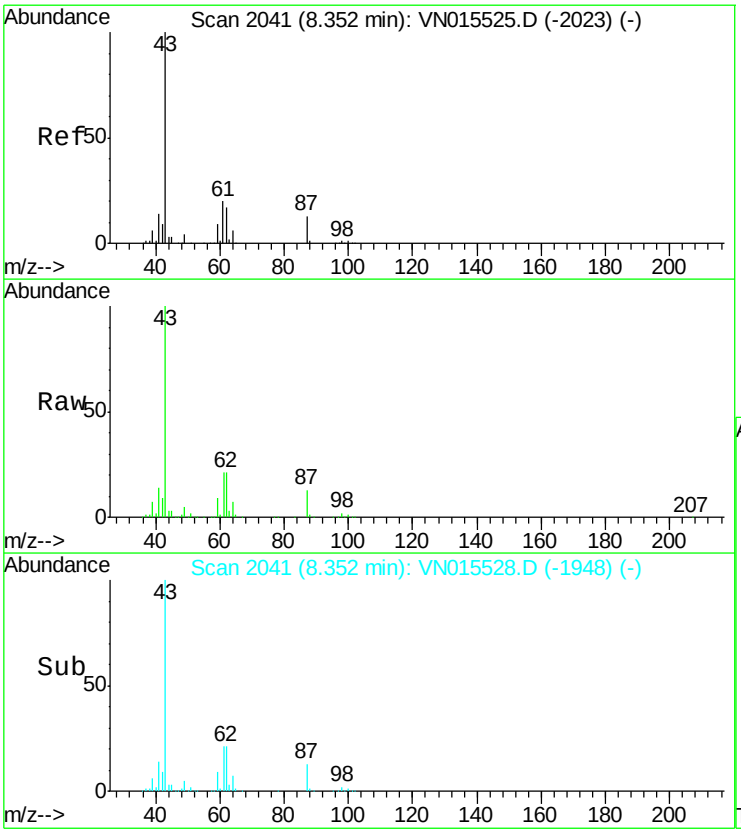


#43
1,2-Dichloroethane
Concen: 52.32 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 62 Resp: 131367

Ion	Ratio	Lower	Upper
62	100		
98	8.7	0.0	18.2

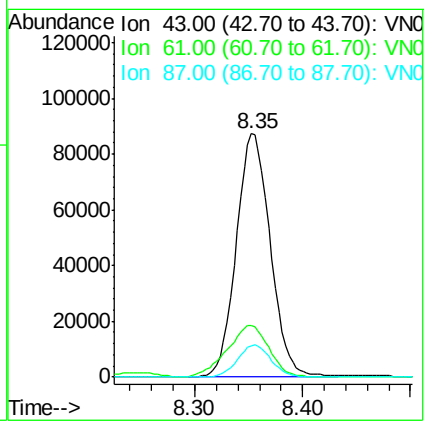




#44
Isopropyl Acetate
Concen: 52.19 ug/l
RT: 8.35 min Scan# 2041
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 191002

Ion	Ratio	Lower	Upper
43	100		
61	25.7	20.4	30.6
87	12.9	10.4	15.6



Instrument :
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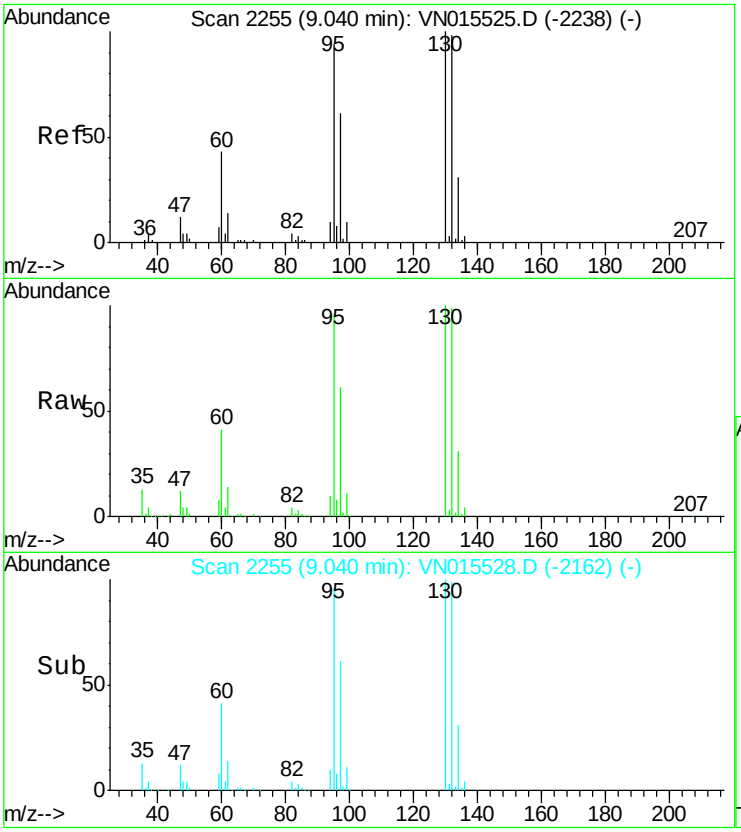
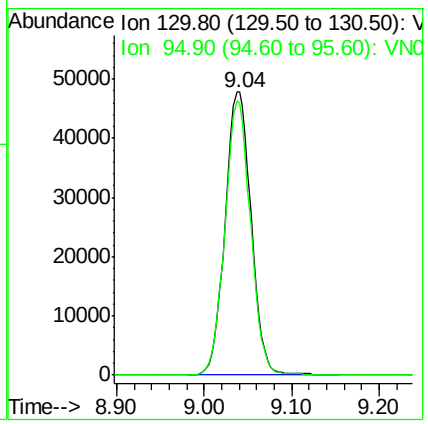
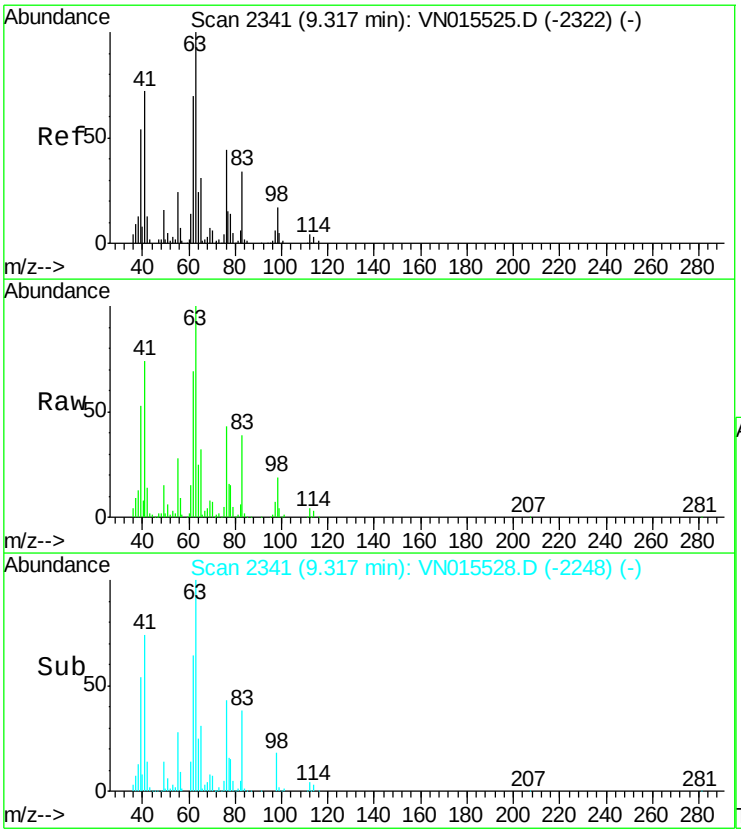


#45
Trichloroethene
Concen: 51.26 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:130 Resp: 98700

Ion	Ratio	Lower	Upper
130	100		
95	96.3	0.0	187.0

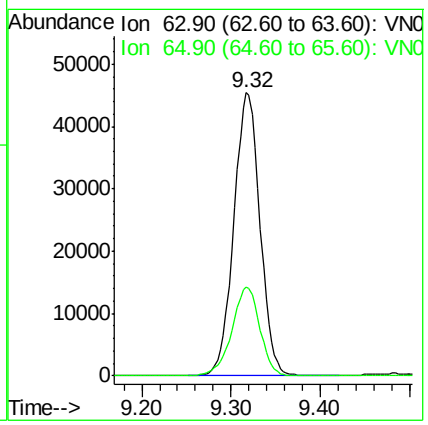




#46
1,2-Dichloropropane
Concen: 52.28 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 63 Resp: 92338

Ion	Ratio	Lower	Upper
63	100		
65	31.6	25.0	37.4



Instrument :
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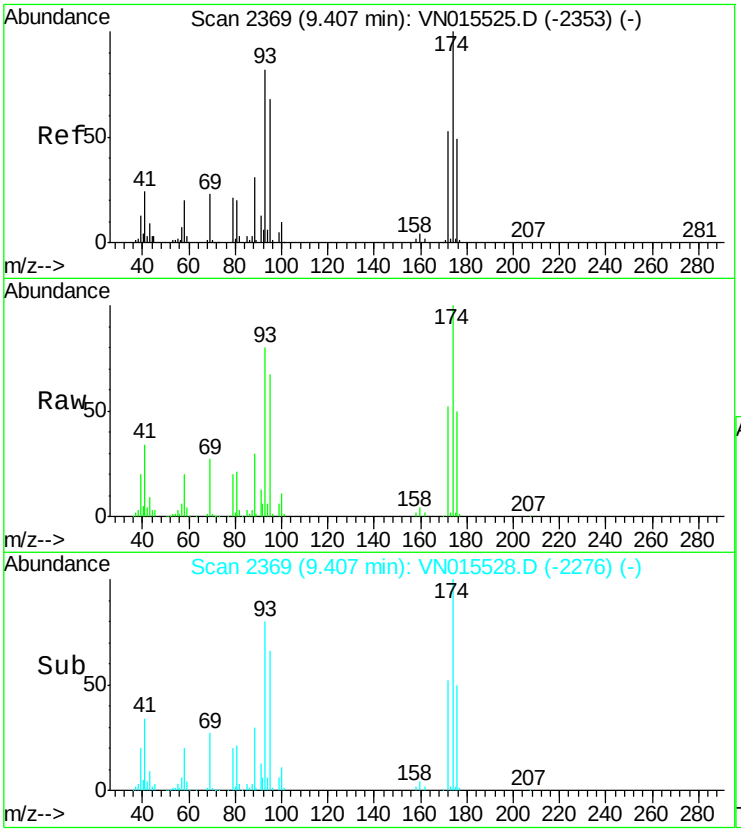
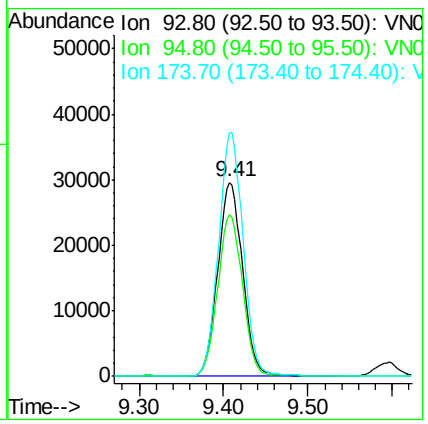
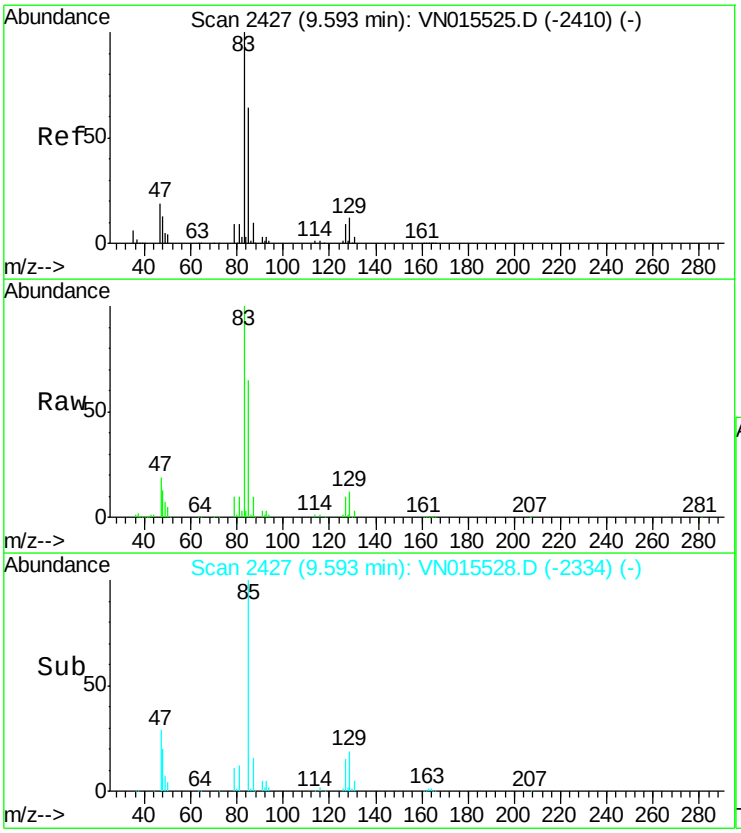


#47
Dibromomethane
Concen: 52.23 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 93 Resp: 60686

Ion	Ratio	Lower	Upper
93	100		
95	83.1	66.9	100.3
174	124.2	98.6	148.0

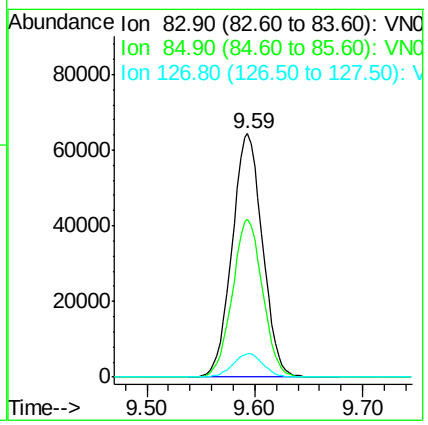




#48
Bromodichloromethane
Concen: 52.93 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 83 Resp: 126185

Ion	Ratio	Lower	Upper
83	100		
85	64.6	51.1	76.7
127	9.7	7.6	11.4



Instrument :
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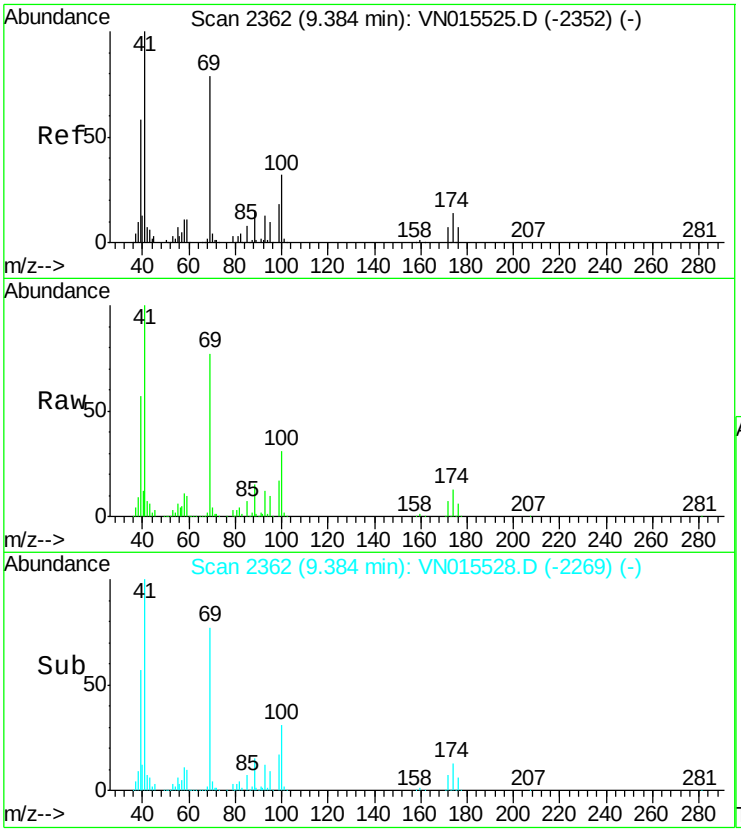
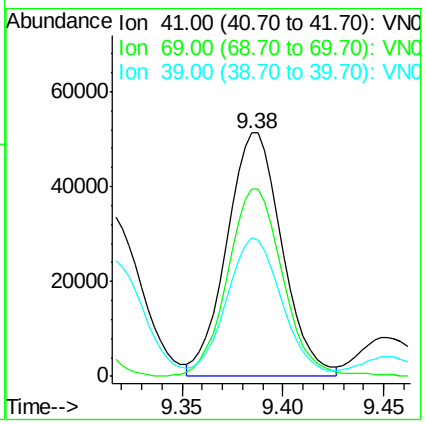
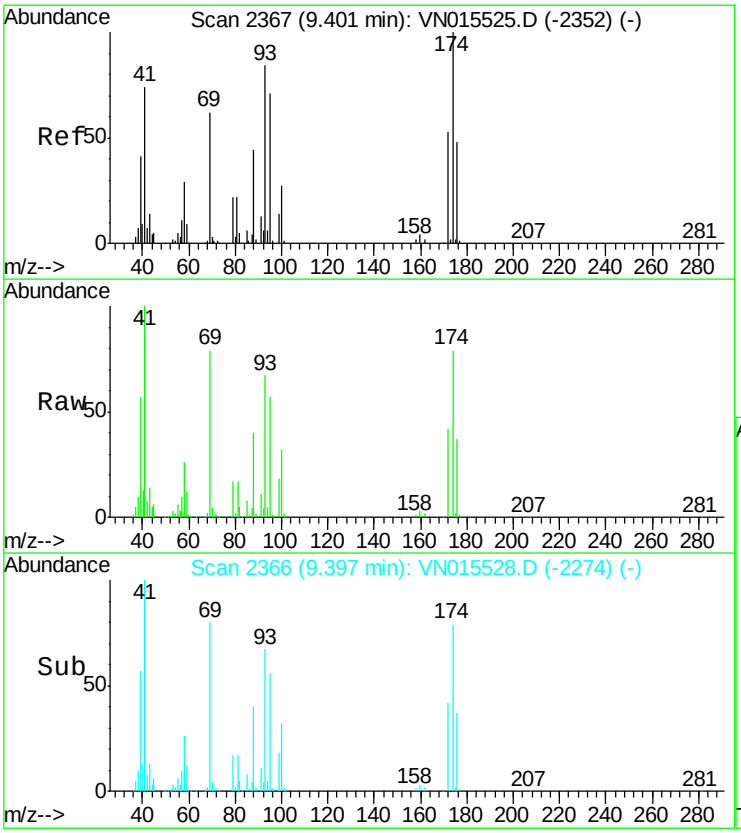


#49
Methyl methacrylate
Concen: 55.34 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 41 Resp: 97613

Ion	Ratio	Lower	Upper
41	100		
69	77.7	62.8	94.2
39	56.8	46.4	69.6

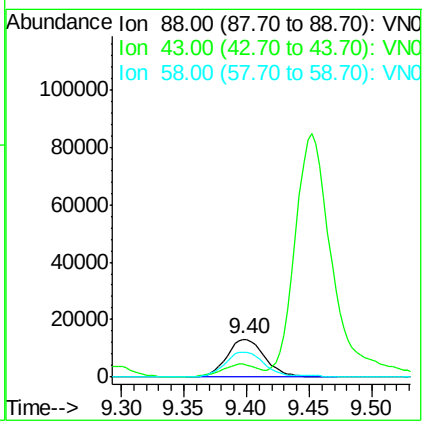


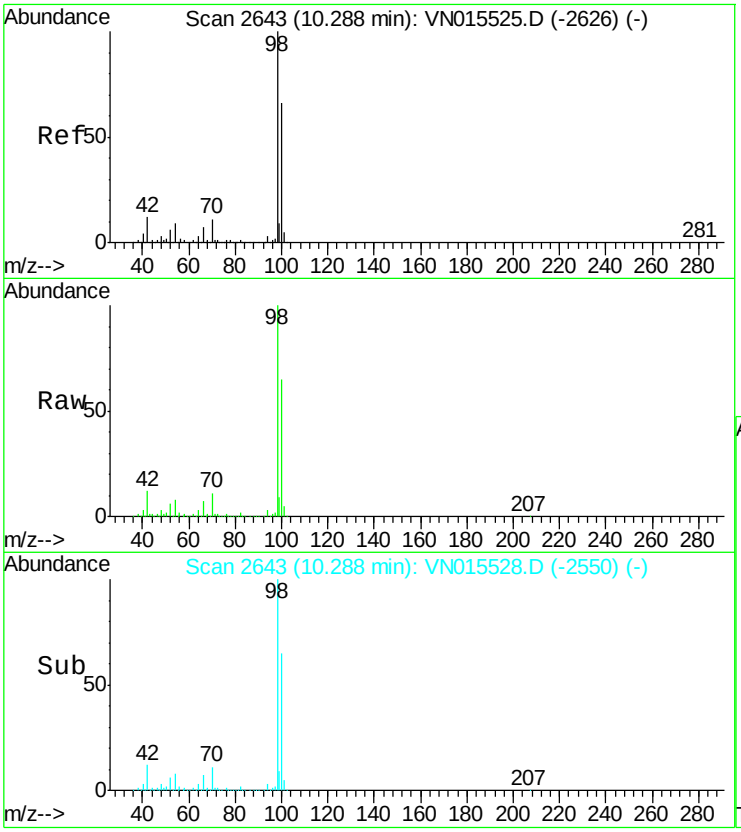


#50
1,4-Dioxane
Concen: 1130.68 ug/l
RT: 9.40 min Scan# 2366
Delta R.T. -0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 88 Resp: 27827

Ion	Ratio	Lower	Upper
88	100		
43	32.9	26.4	39.6
58	71.8	56.6	84.8





#51
Toluene-d8
Concen: 51.86 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 98 Resp: 321698

Ion	Ratio	Lower	Upper
98	100		
100	65.7	52.3	78.5

Instrument :
MSVOA_N
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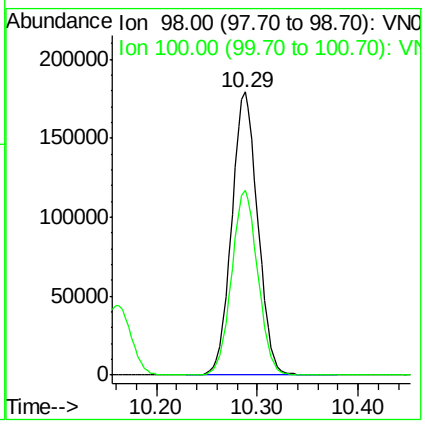
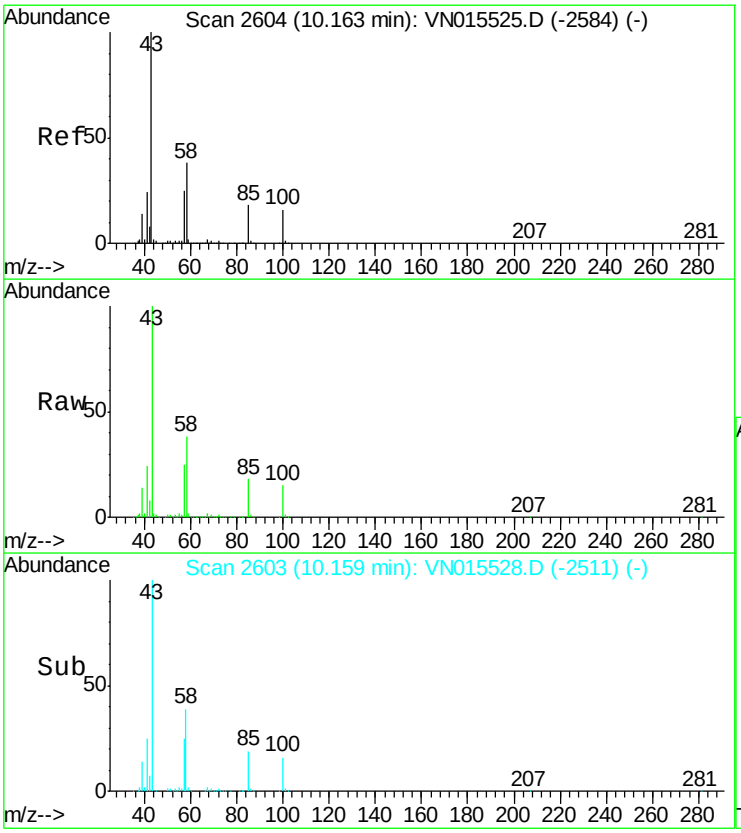
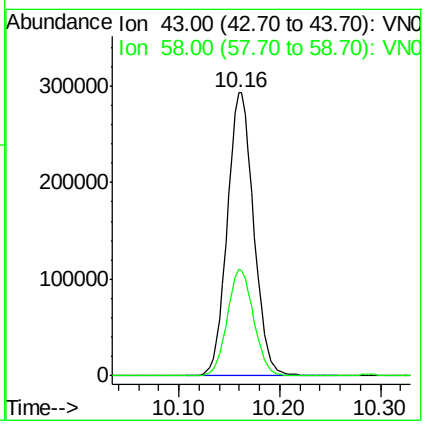


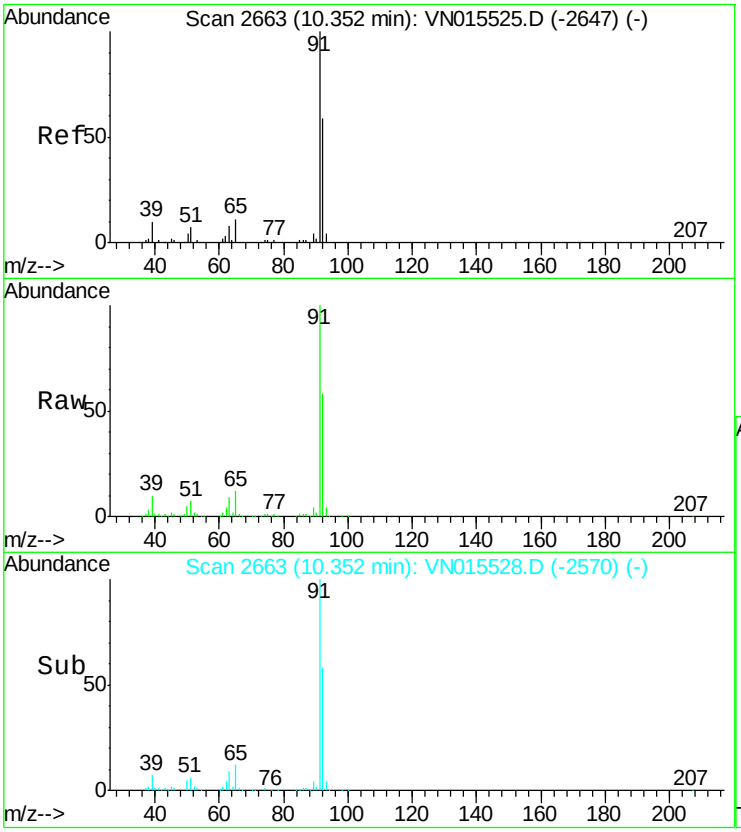


#52
4-Methyl-2-Pentanone
Concen: 263.33 ug/l
RT: 10.16 min Scan# 2603
Delta R.T. -0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 532708

Ion	Ratio	Lower	Upper
43	100		
58	37.8	30.2	45.2





#53
Toluene
Concen: 52.33 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 92 Resp: 228042

Ion	Ratio	Lower	Upper
92	100		
91	171.1	136.2	204.4

Instrument :
MSVOA_N
ClientSampleId :
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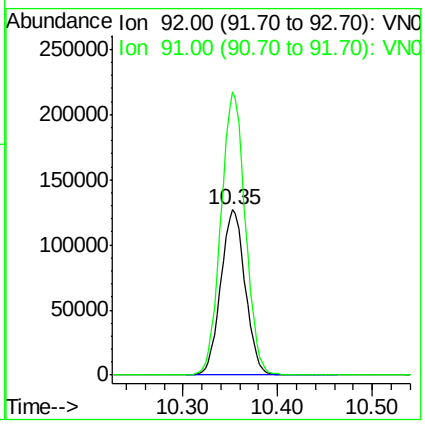
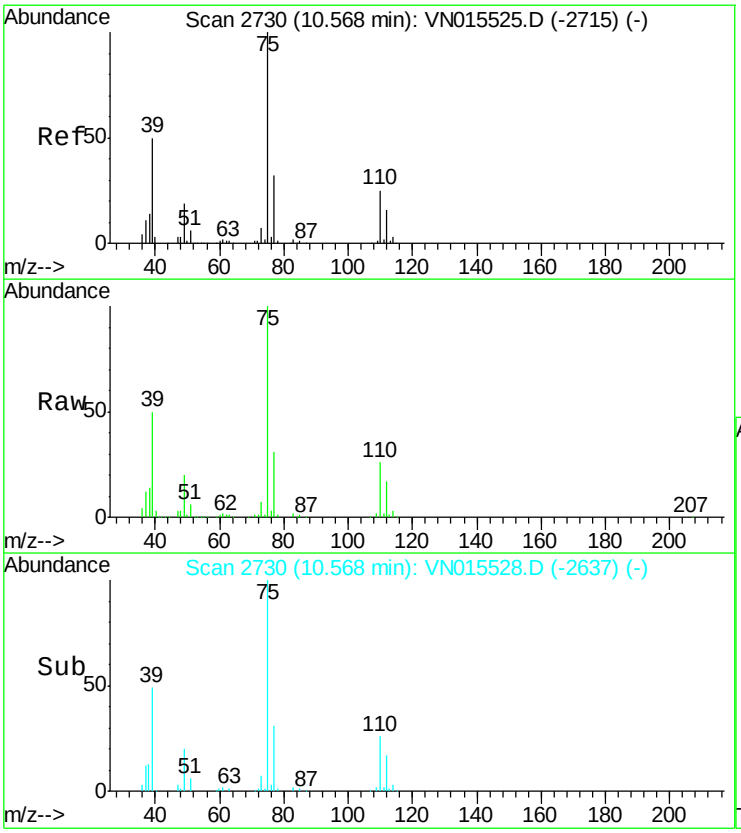
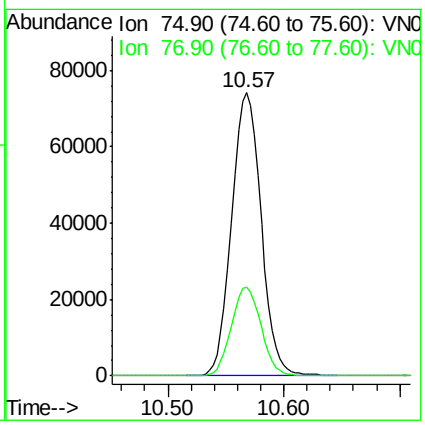


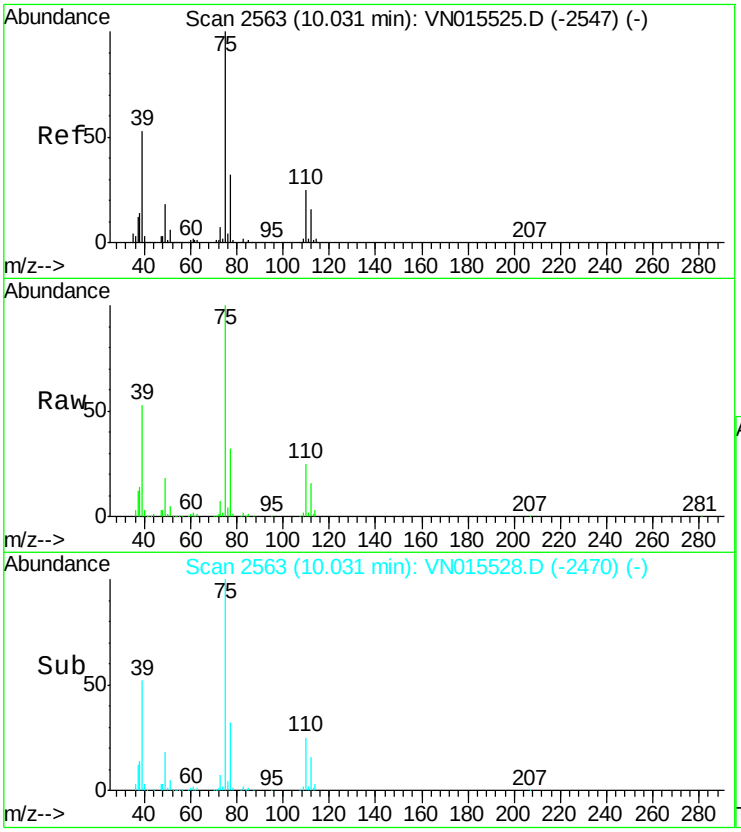


#54
t-1,3-Dichloropropene
Concen: 53.69 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 75 Resp: 130884

Ion	Ratio	Lower	Upper
75	100		
77	31.3	26.0	39.0





#55
cis-1,3-Dichloropropene
Concen: 53.32 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 75 Resp: 144678

Ion	Ratio	Lower	Upper
75	100		
77	31.9	25.4	38.2
39	52.5	42.2	63.4

Instrument :
MSVOA_N
ClientSampleId :
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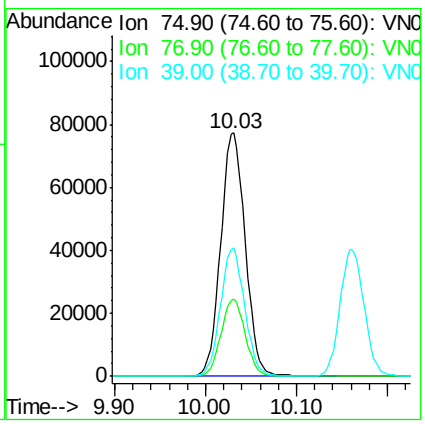
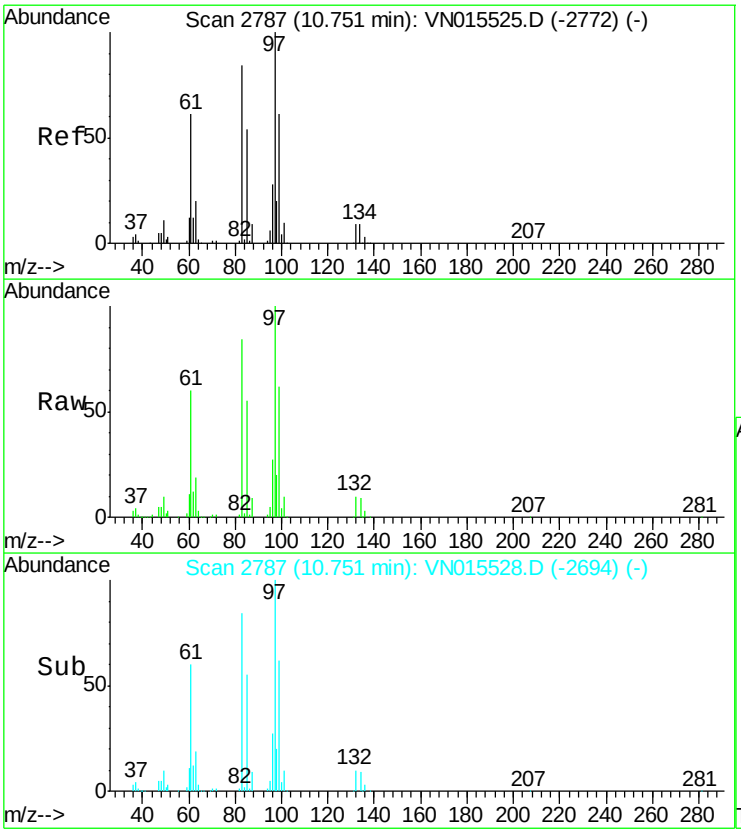
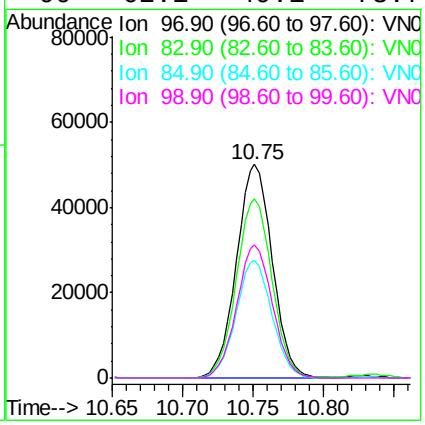


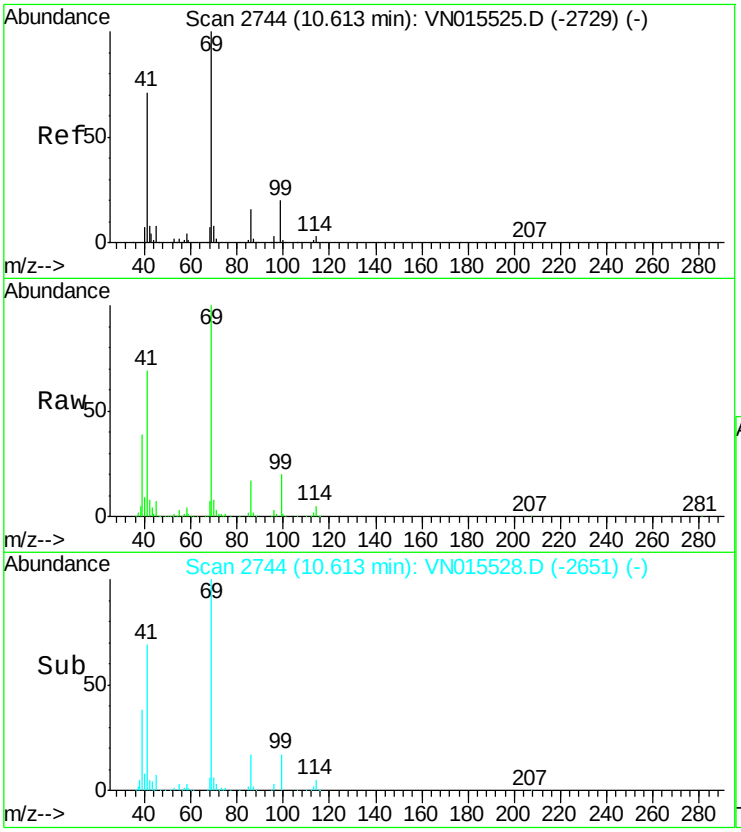


#56
1,1,2-Trichloroethane
Concen: 53.04 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 97 Resp: 89319

Ion	Ratio	Lower	Upper
97	100		
83	84.0	67.0	100.4
85	55.1	42.9	64.3
99	62.1	49.1	73.7





#57
Ethyl methacrylate
Concen: 54.61 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 69 Resp: 136037

Ion	Ratio	Lower	Upper
69	100		
41	69.7	56.9	85.3
39	38.6	32.0	48.0

Instrument :
MSVOA_N
ClientSampleId :
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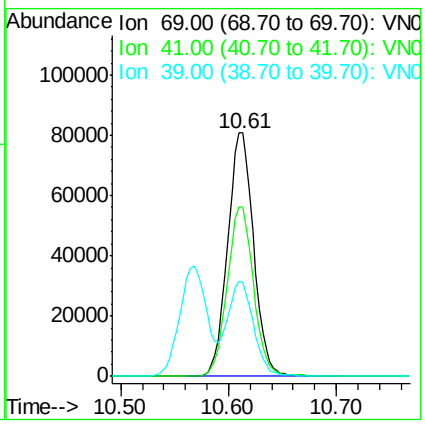
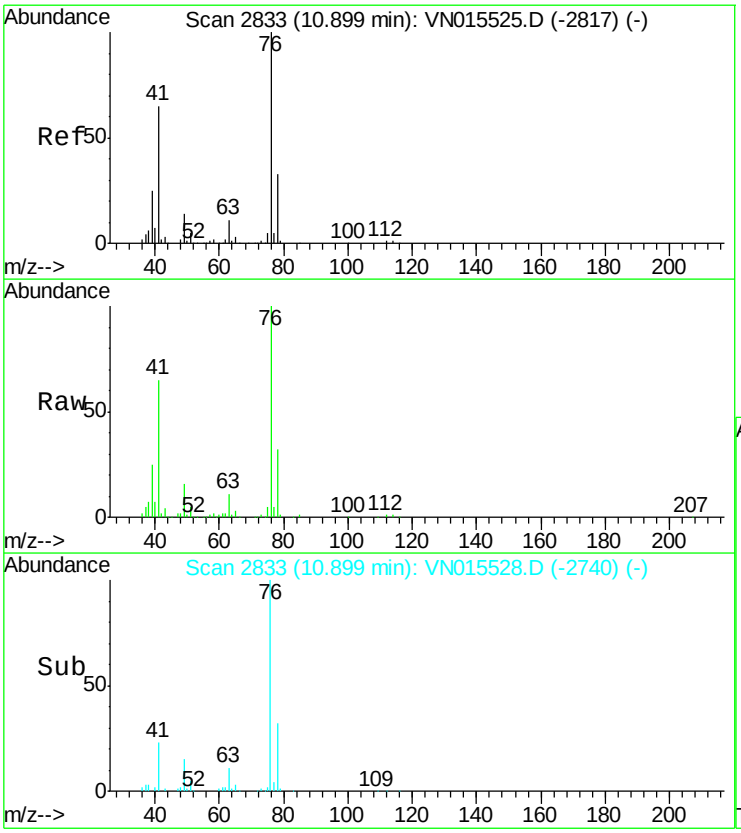
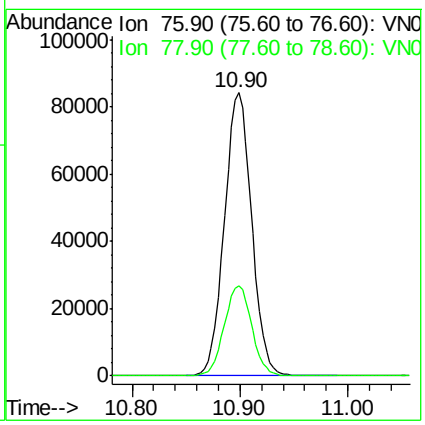


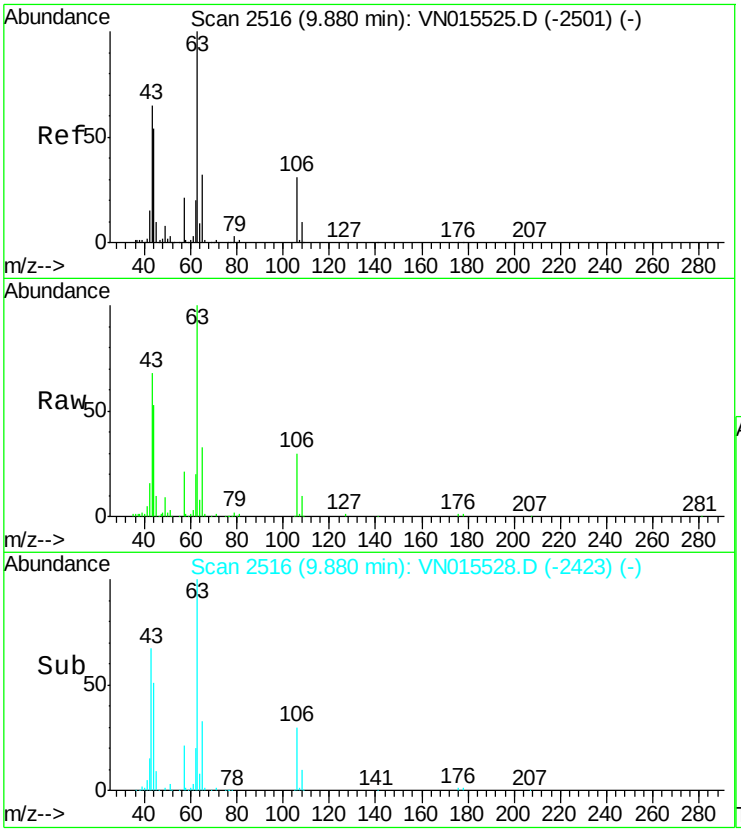


#58
1,3-Dichloropropane
Concen: 52.34 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 76 Resp: 147712

Ion	Ratio	Lower	Upper
76	100		
78	32.2	26.3	39.5





#59
2-Chloroethyl Vinyl ether
Concen: 249.14 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 63 Resp: 68674

Ion	Ratio	Lower	Upper
63	100		
106	30.2	23.7	35.5

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
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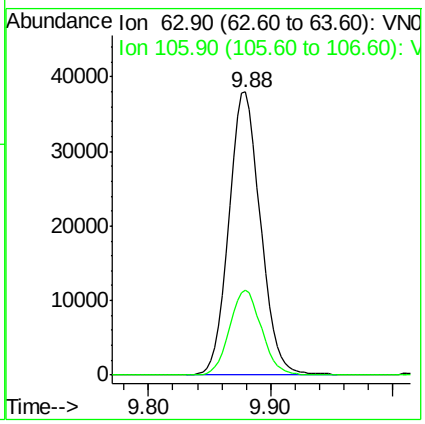
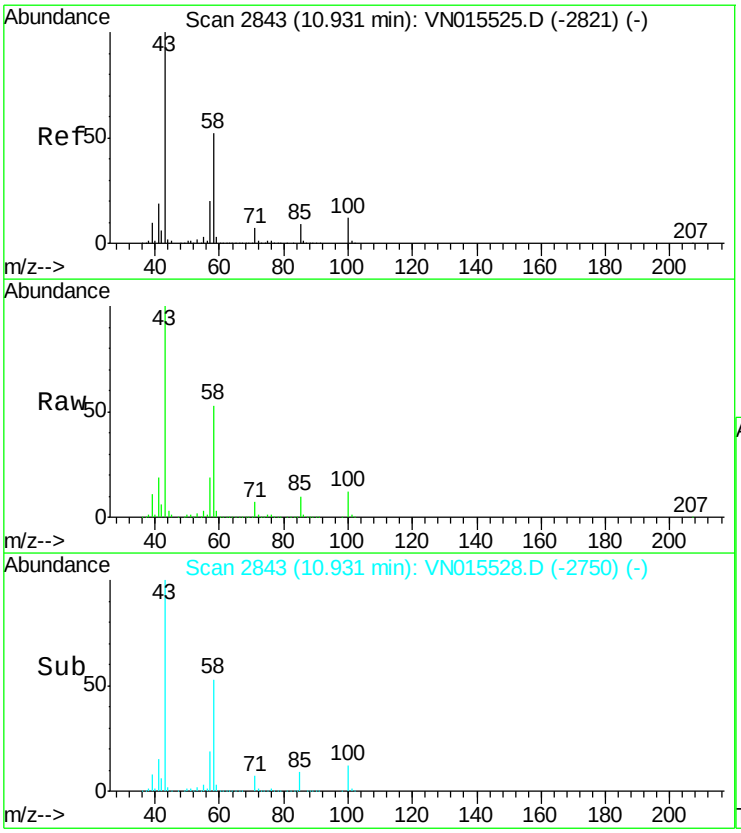
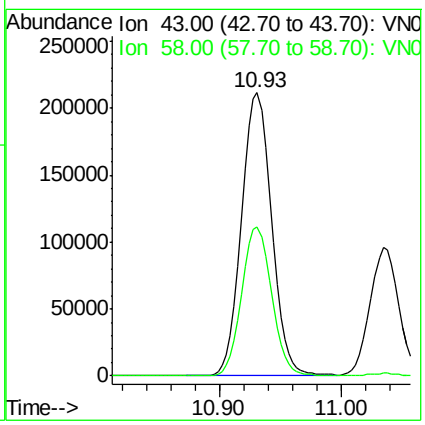


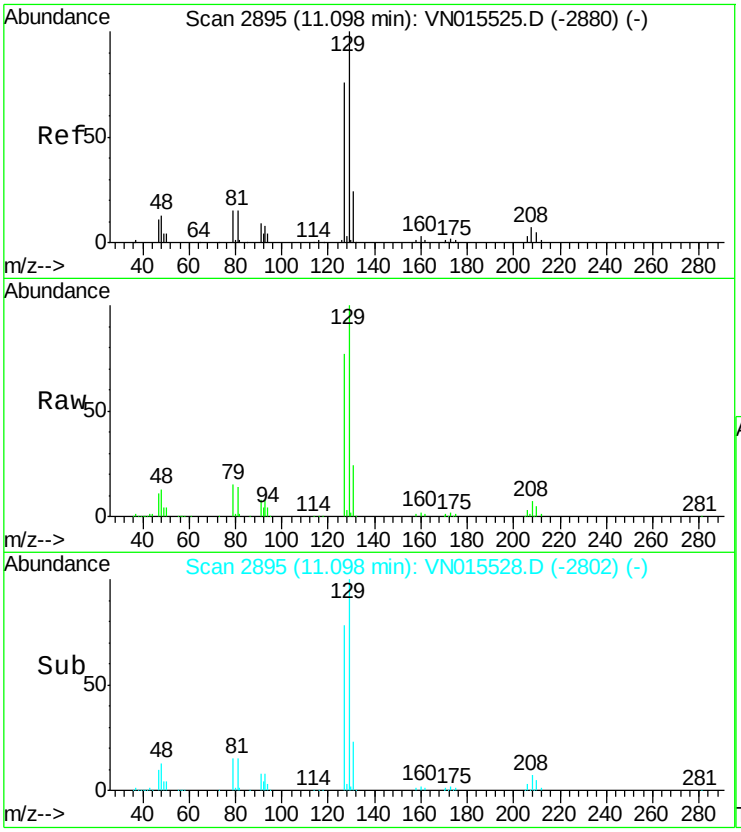


#60
2-Hexanone
Concen: 271.52 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 358655

Ion	Ratio	Lower	Upper
43	100		
58	52.5	26.0	78.0





#61
Dibromochloromethane
Concen: 54.36 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:129 Resp: 109302

Ion	Ratio	Lower	Upper
129	100		
127	76.8	38.6	116.0

Instrument :
MSVOA_N
ClientSampleId :
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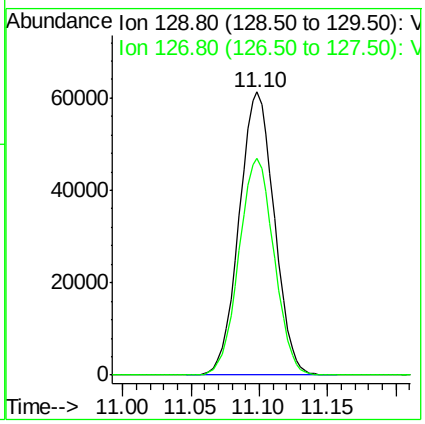
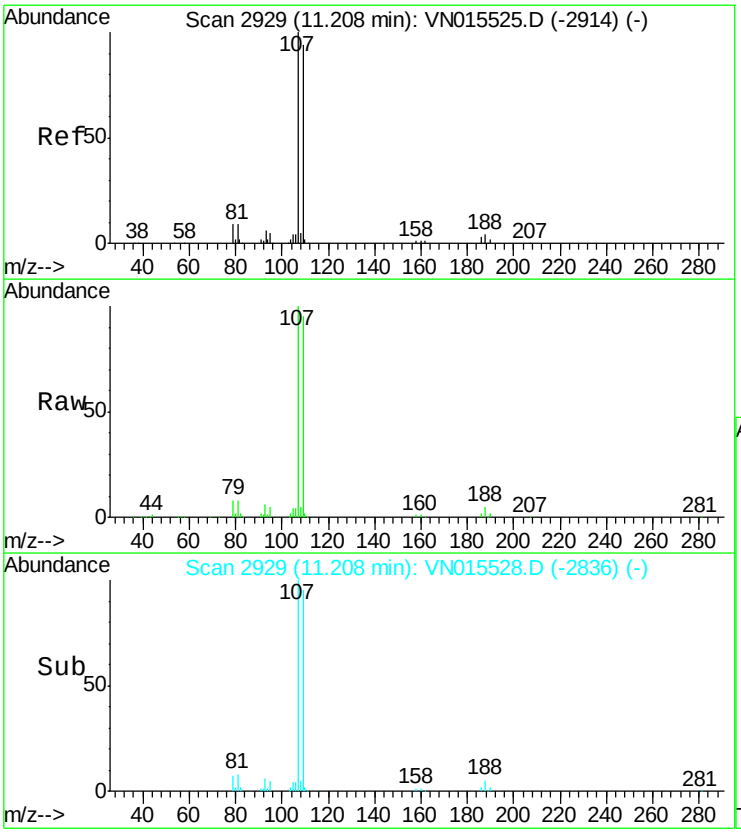
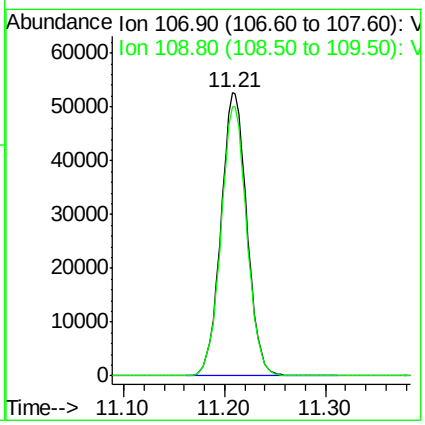




#62
1,2-Dibromoethane
Concen: 54.31 ug/l
RT: 11.21 min Scan# 2929
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:107 Resp: 94525

Ion	Ratio	Lower	Upper
107	100		
109	94.7	75.8	113.6



Instrument :
MSVOA_N
ClientSampleId :
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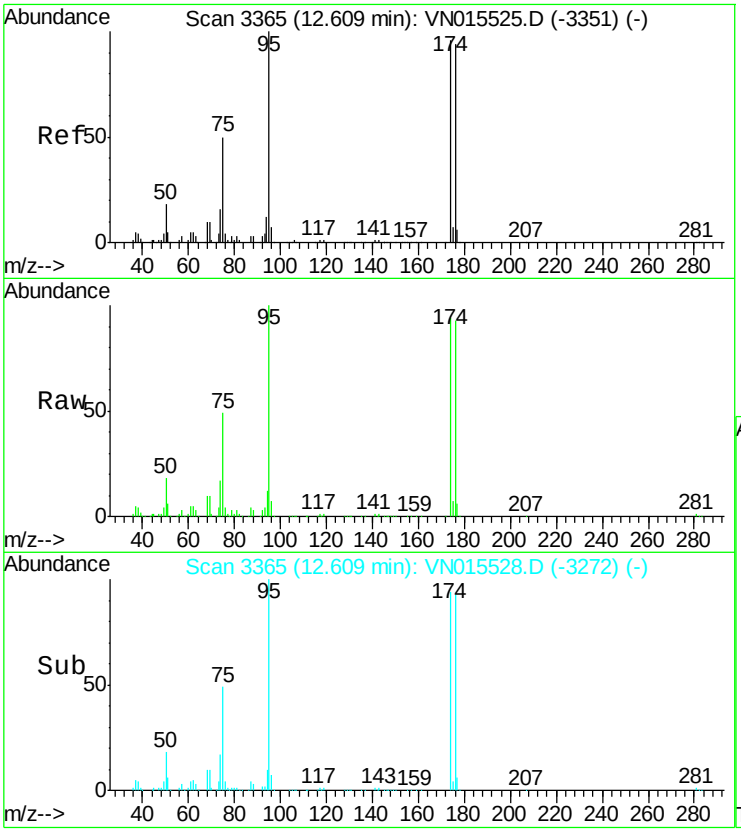
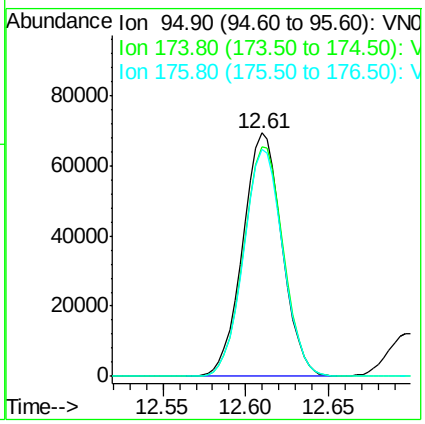
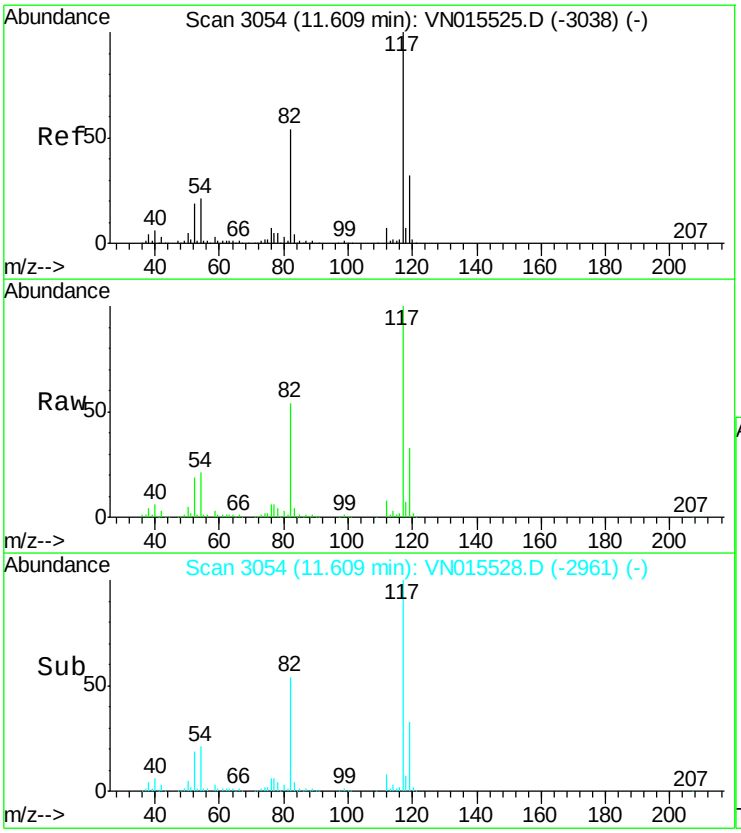


#63
4-Bromofluorobenzene
Concen: 53.74 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 95 Resp: 114204

Ion	Ratio	Lower	Upper
95	100		
174	95.5	0.0	191.8
176	93.4	0.0	186.8

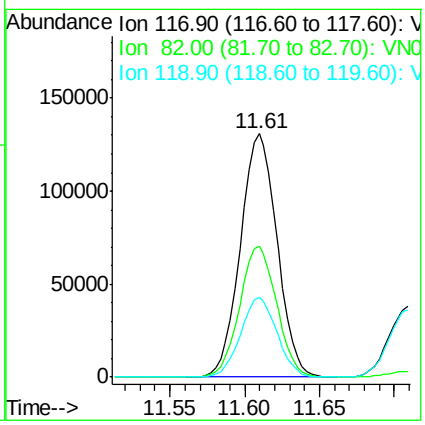


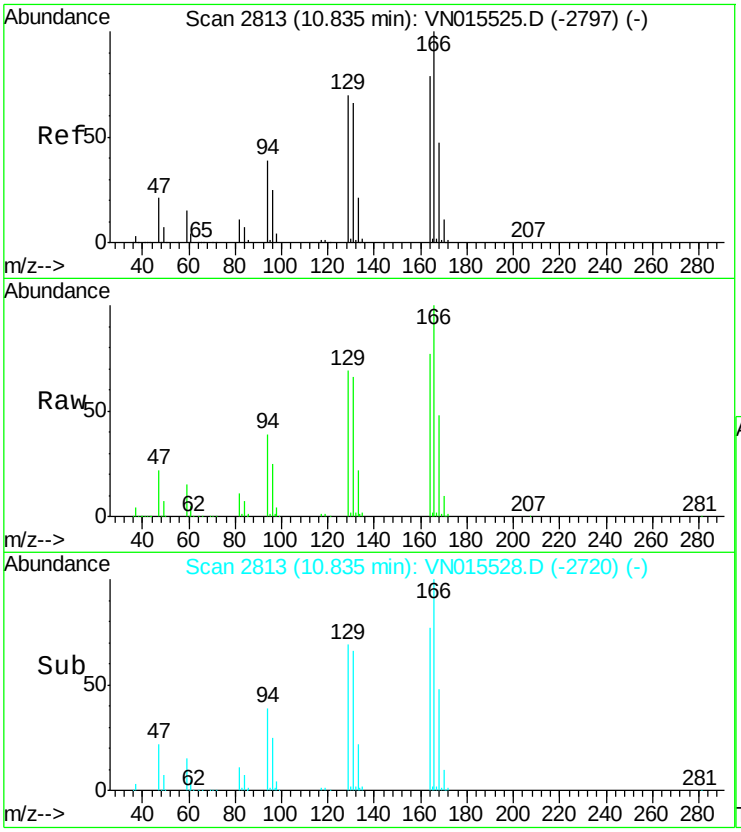


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:117 Resp: 223211

Ion	Ratio	Lower	Upper
117	100		
82	53.7	43.3	64.9
119	32.7	25.6	38.4

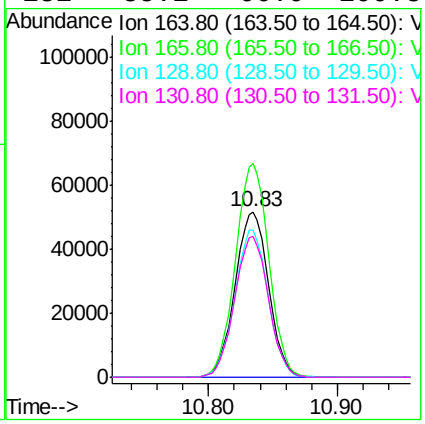




#65
Tetrachloroethene
Concen: 52.78 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:164 Resp: 92947

Ion	Ratio	Lower	Upper
164	100		
166	129.3	101.7	152.5
129	88.9	70.7	106.1
131	85.1	66.9	100.3



Instrument :
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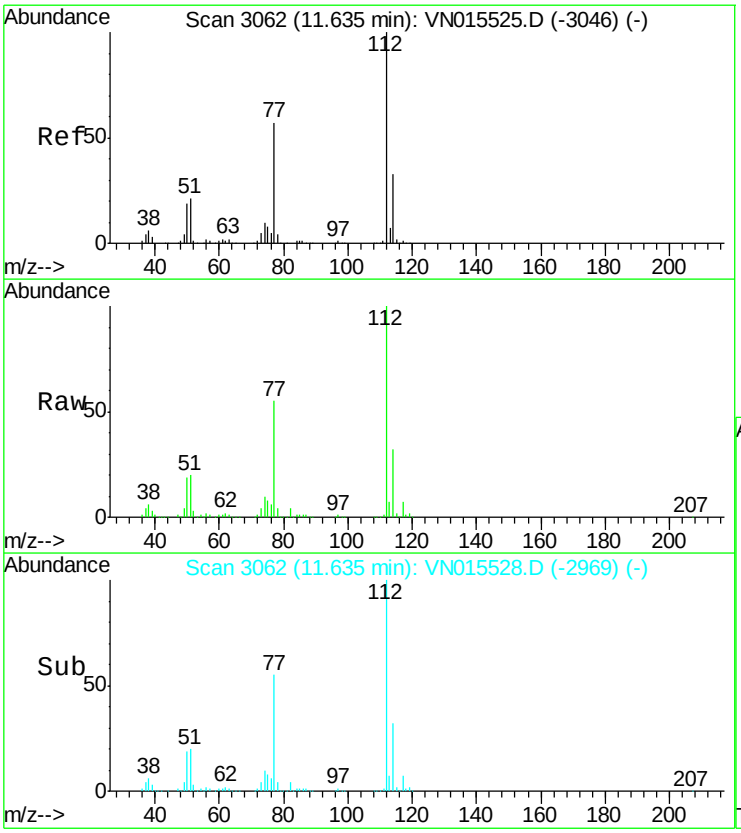
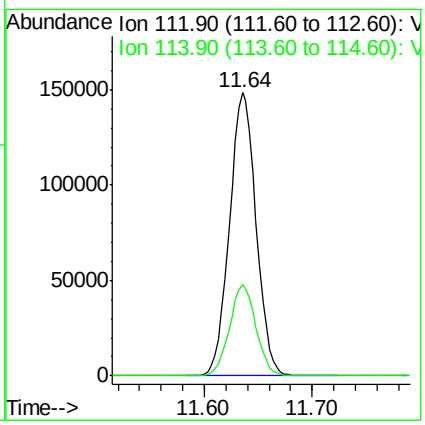


#66
Chlorobenzene
Concen: 52.67 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:112 Resp: 254460

Ion	Ratio	Lower	Upper
112	100		
114	32.3	26.2	39.2



Instrument :
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ClientSampleId :
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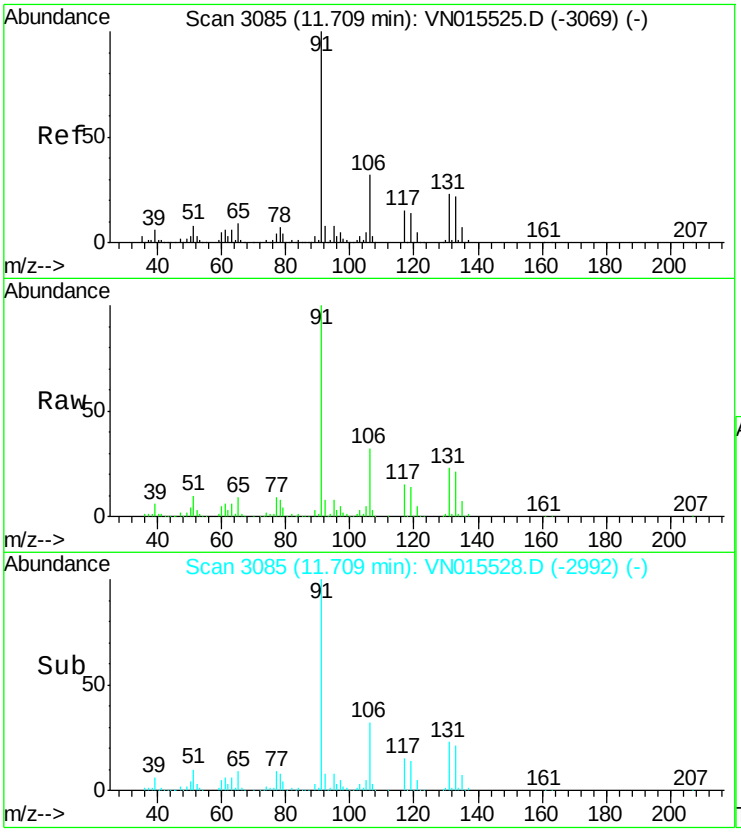
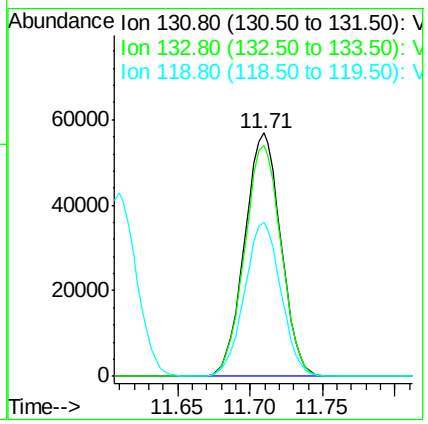
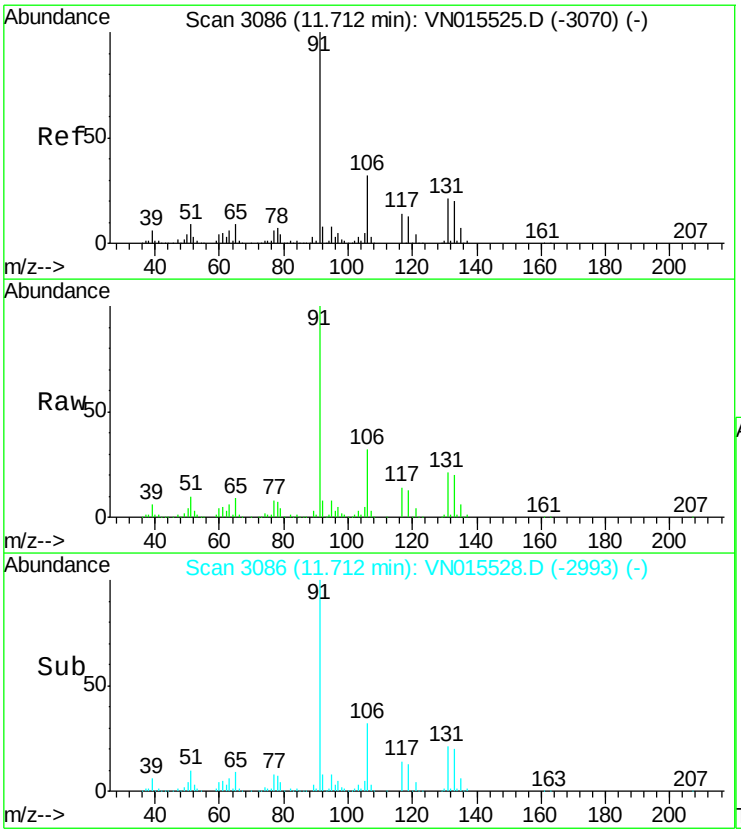


#67
1,1,1,2-Tetrachloroethane
Concen: 53.88 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:131 Resp: 99174

Ion	Ratio	Lower	Upper
131	100		
133	95.5	47.7	143.1
119	63.4	31.5	94.5

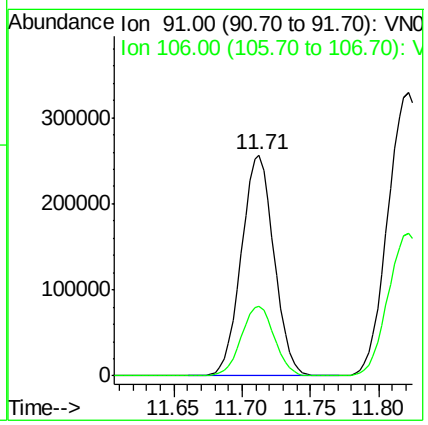


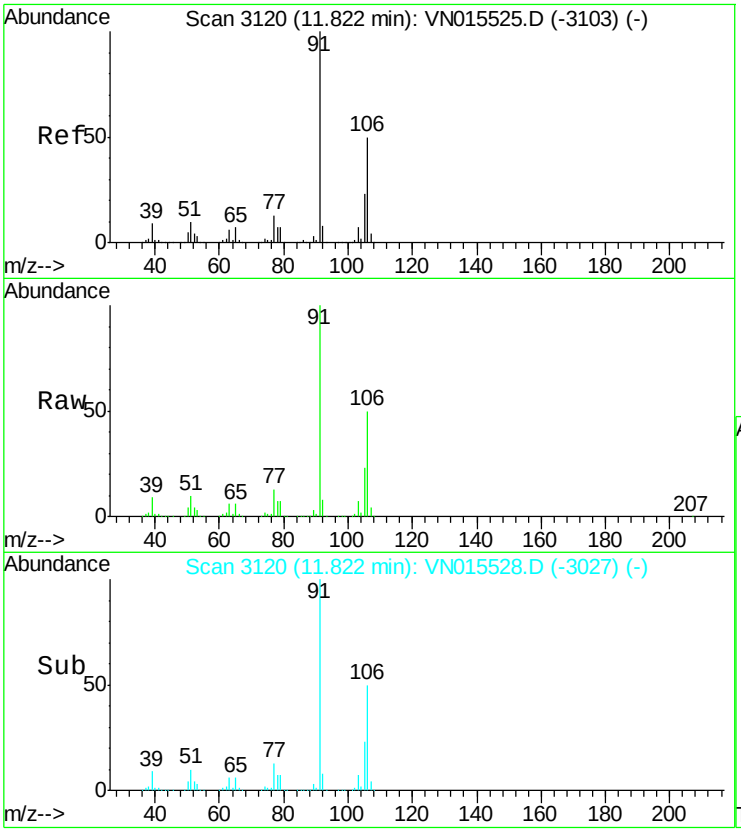


#68
Ethyl Benzene
Concen: 53.79 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 91 Resp: 425416

Ion	Ratio	Lower	Upper
91	100		
106	31.7	25.5	38.3





#69
m/p-Xylenes
Concen: 106.12 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:106 Resp: 326648

Ion	Ratio	Lower	Upper
106	100		
91	199.4	160.5	240.7

Instrument :
MSVOA_N
ClientSampleId :
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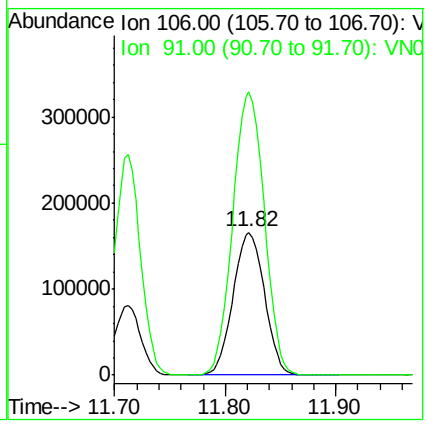
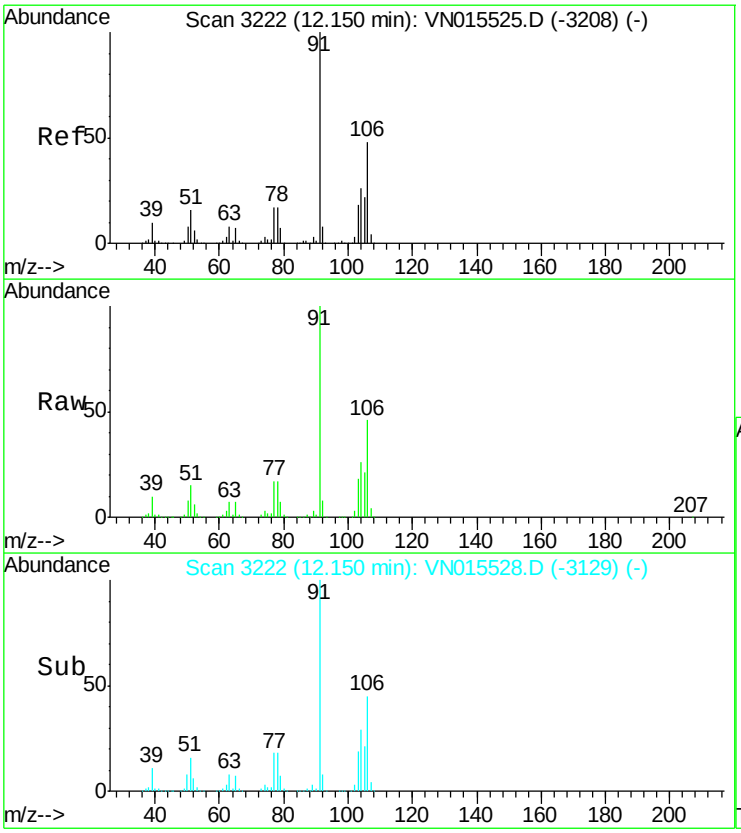
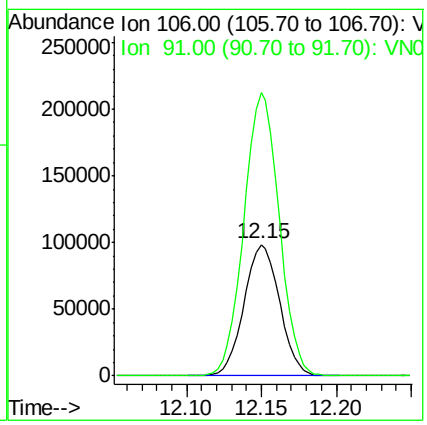


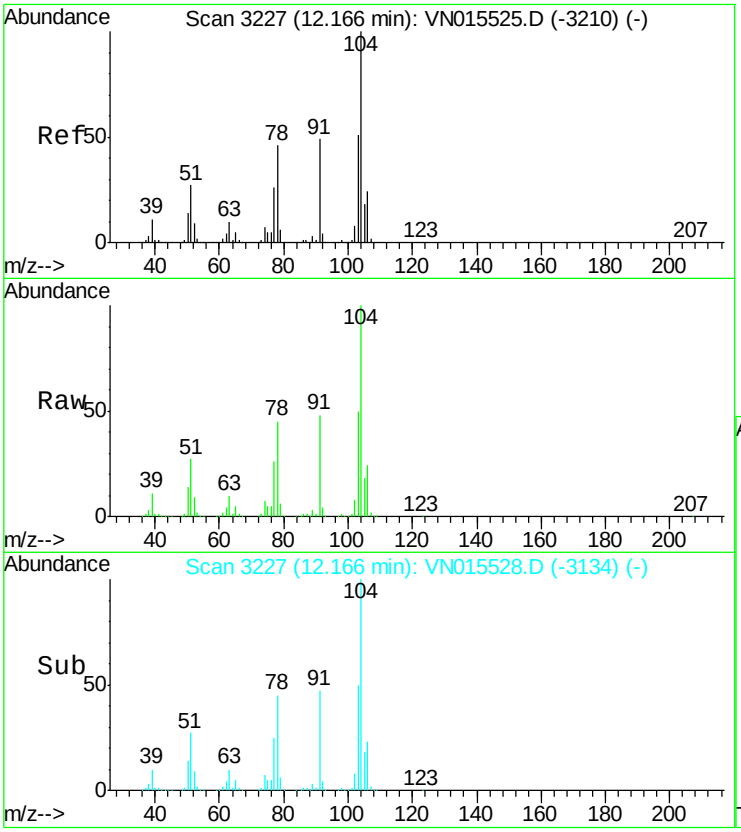


#70
o-Xylene
Concen: 53.80 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:106 Resp: 162927

Ion	Ratio	Lower	Upper
106	100		
91	213.8	104.9	314.7





#71
Styrene
Concen: 55.74 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:104 Resp: 265183

Ion	Ratio	Lower	Upper
104	100		
78	50.3	40.1	60.1
103	55.0	44.0	66.0

Instrument :
MSVOA_N
ClientSampleId :
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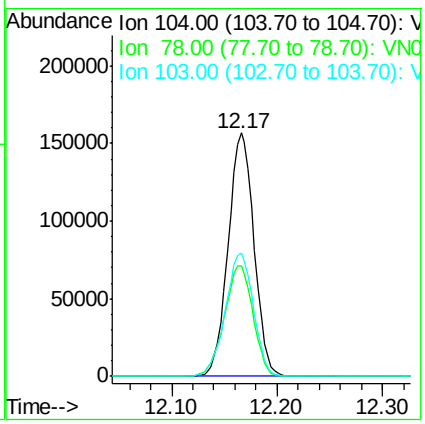
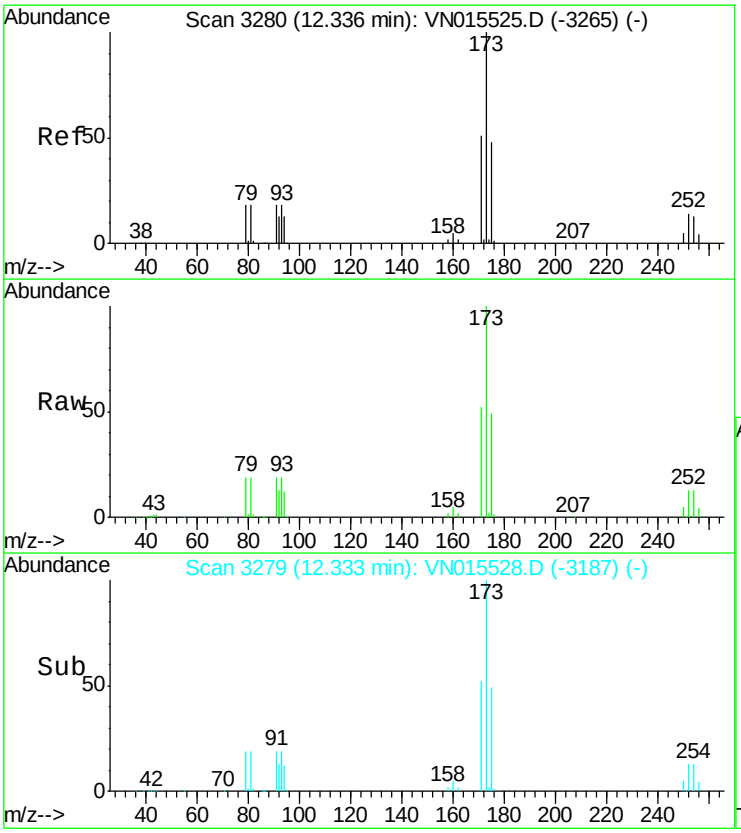
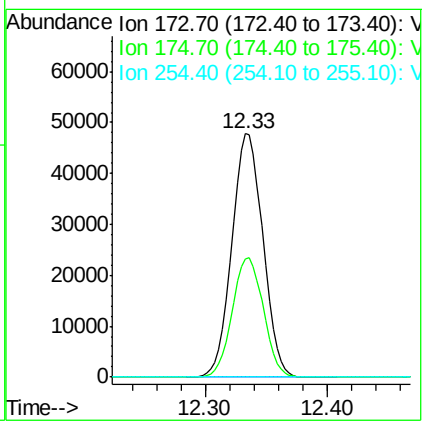


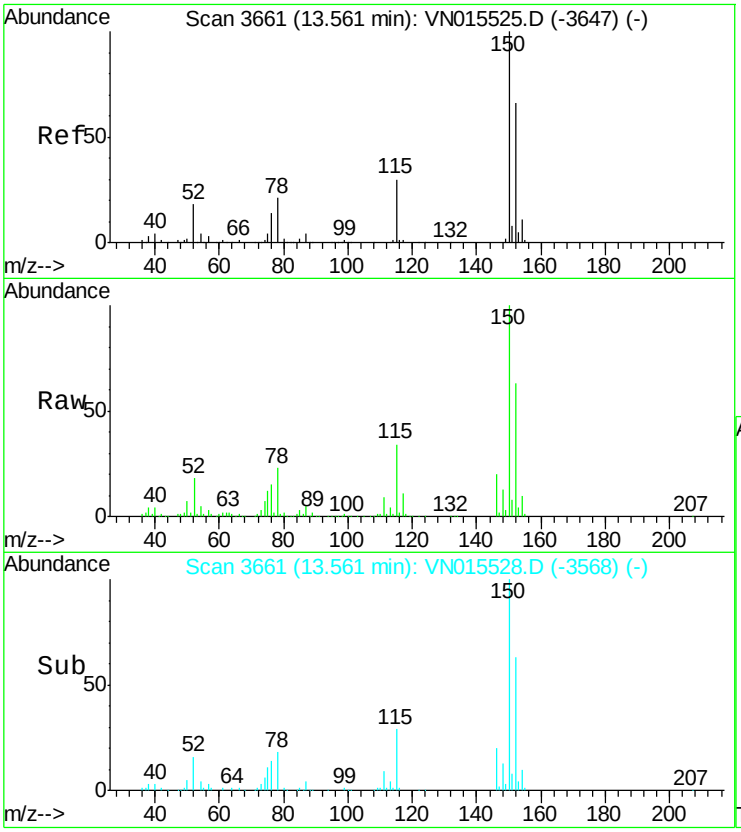


#72
Bromoform
Concen: 54.59 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:173 Resp: 84186

Ion	Ratio	Lower	Upper
173	100		
175	48.9	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:152 Resp: 105479

Ion	Ratio	Lower	Upper
152	100		
115	54.4	27.2	81.6
150	173.2	0.0	343.6

Instrument :
MSVOA_N
ClientSampleId :
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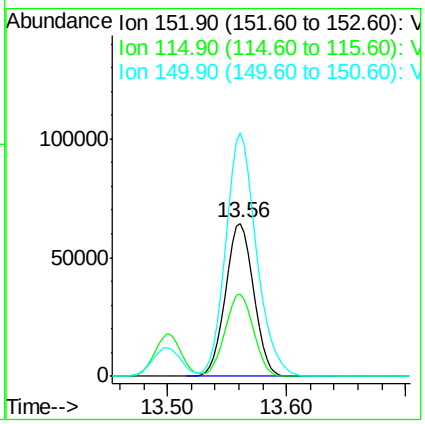
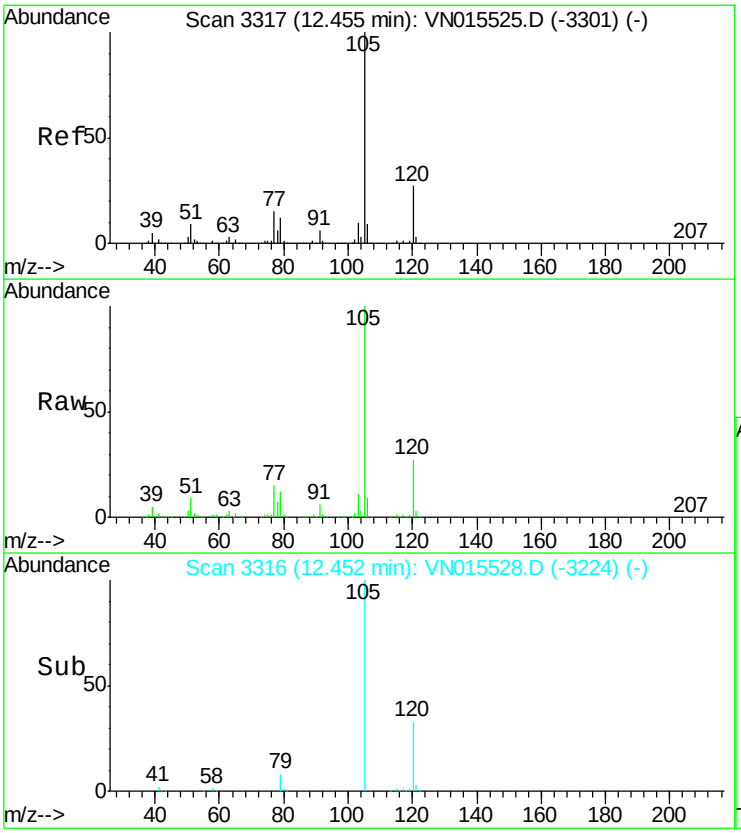
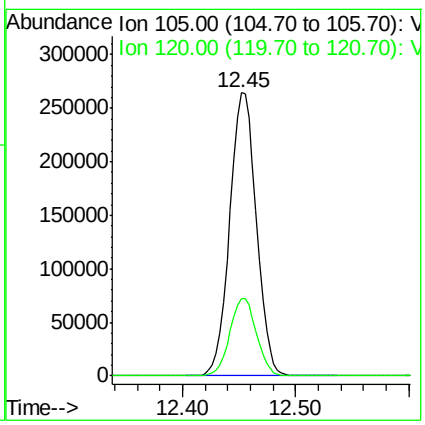




#74
Isopropylbenzene
Concen: 55.07 ug/l
RT: 12.45 min Scan# 3316
Delta R.T. -0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:105 Resp: 433226

Ion	Ratio	Lower	Upper
105	100		
120	27.3	13.7	41.0



Instrument :
MSVOA_N
ClientSampleId :
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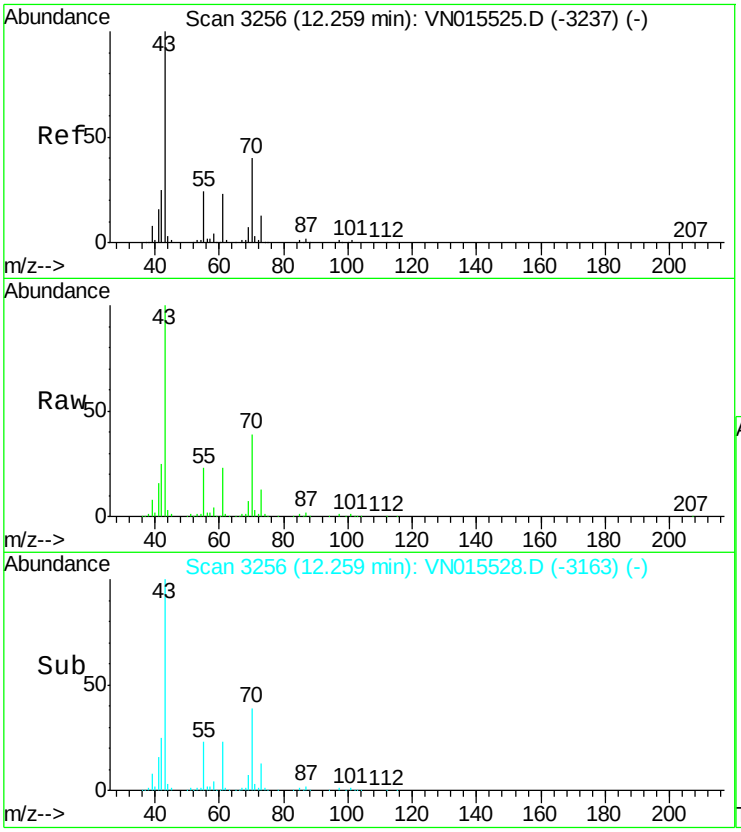
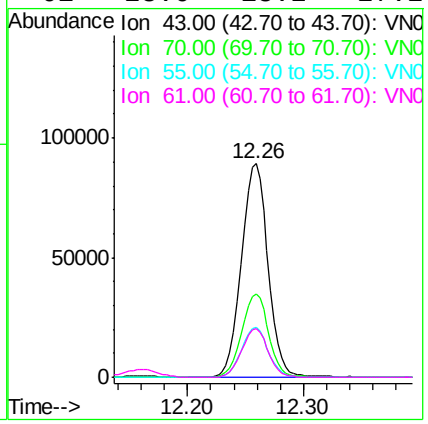
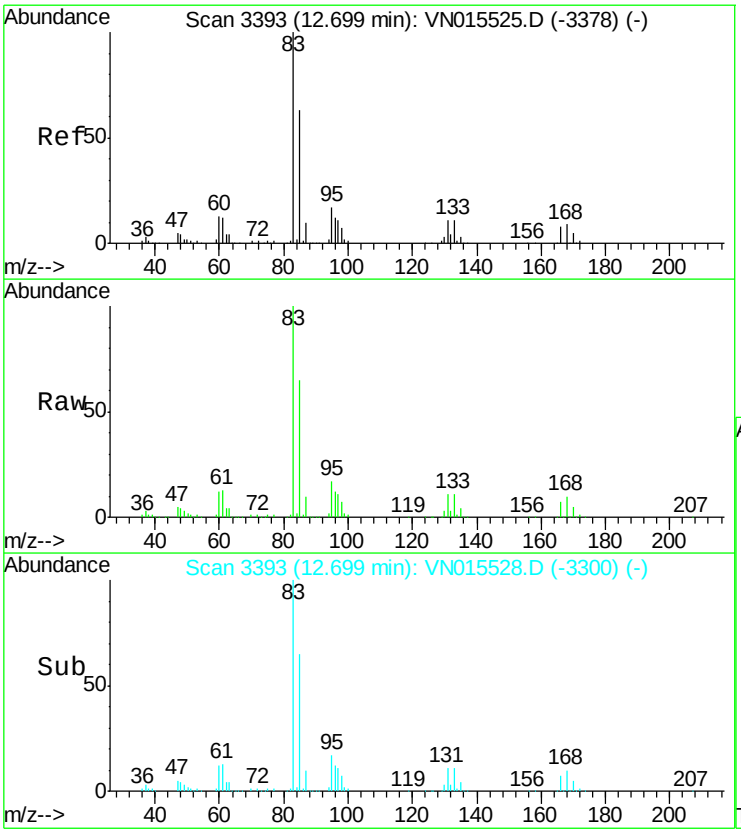


#75
N-amyl acetate
Concen: 51.25 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 43 Resp: 141636

Ion	Ratio	Lower	Upper
43	100		
70	39.4	32.0	48.0
55	23.2	18.5	27.7
61	23.0	18.2	27.2

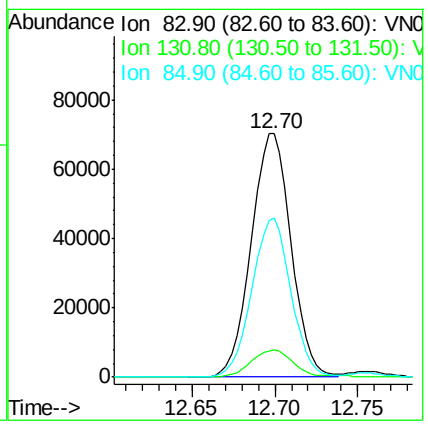




#76
1,1,2,2-Tetrachloroethane
Concen: 57.72 ug/l
RT: 12.70 min Scan# 3393
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 83 Resp: 117983

Ion	Ratio	Lower	Upper
83	100		
131	11.9	5.9	17.6
85	63.8	31.9	95.7



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

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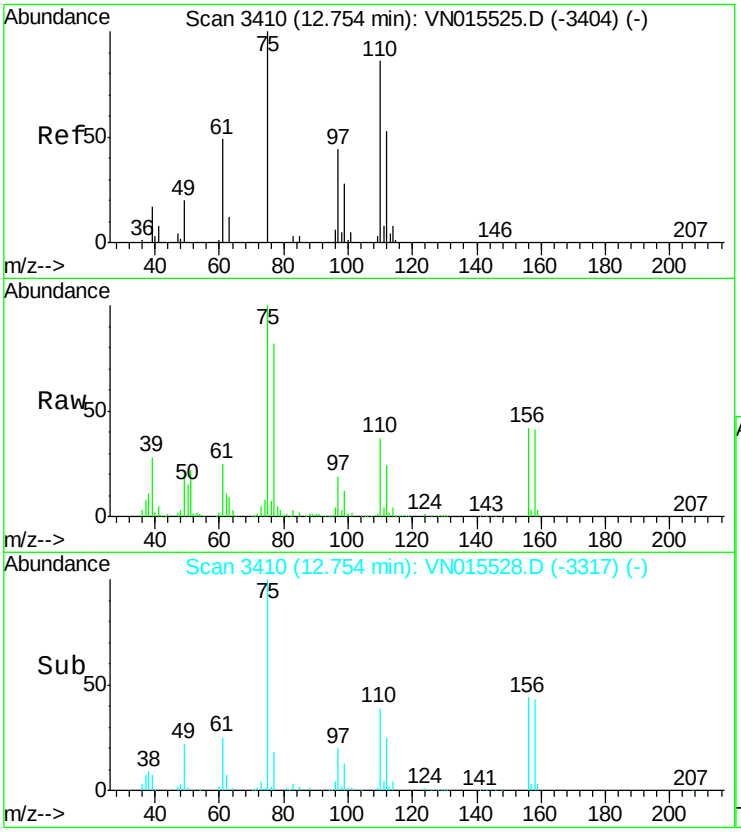
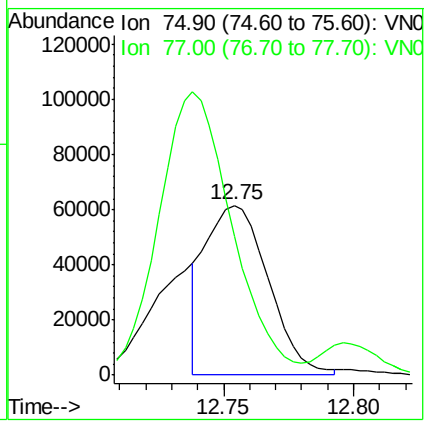
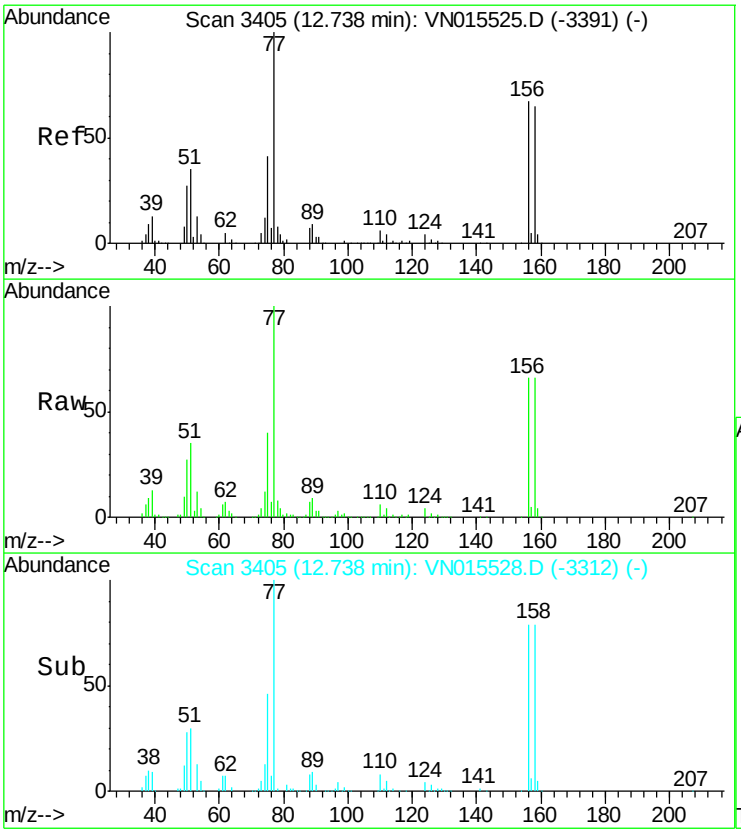


#77
1,2,3-Trichloropropane
Concen: 57.68 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 75 Resp: 103286

Ion	Ratio	Lower	Upper
75	100		
77	195.3	90.4	271.2

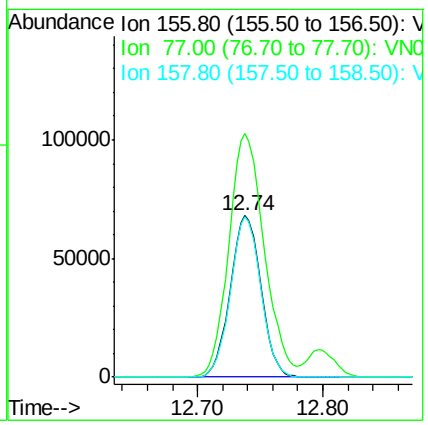


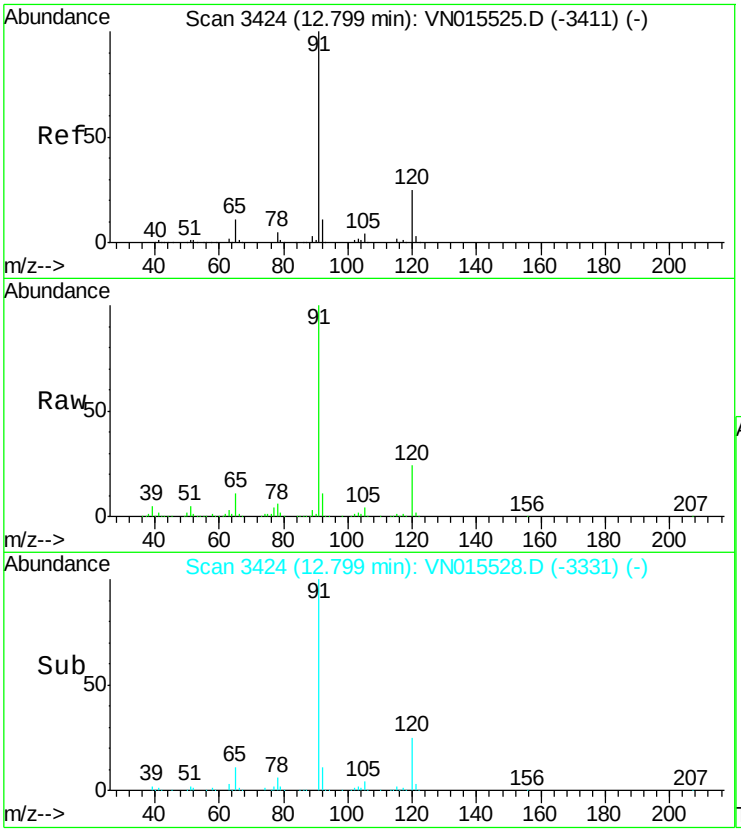


#78
Bromobenzene
Concen: 50.55 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:156 Resp: 115644

Ion	Ratio	Lower	Upper
156	100		
77	174.4	86.0	258.0
158	98.1	48.7	146.1





#79
n-propylbenzene
Concen: 51.38 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 91 Resp: 462804

Ion	Ratio	Lower	Upper
91	100		
120	24.6	12.2	36.4

Instrument :
MSVOA_N
ClientSampleId :
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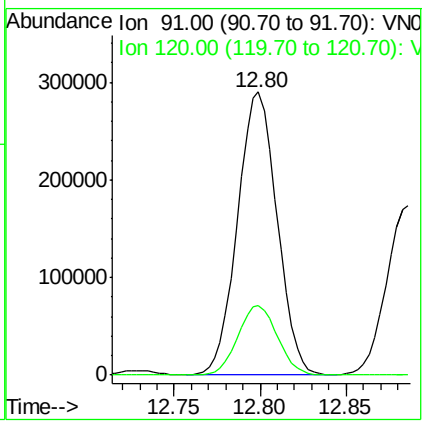
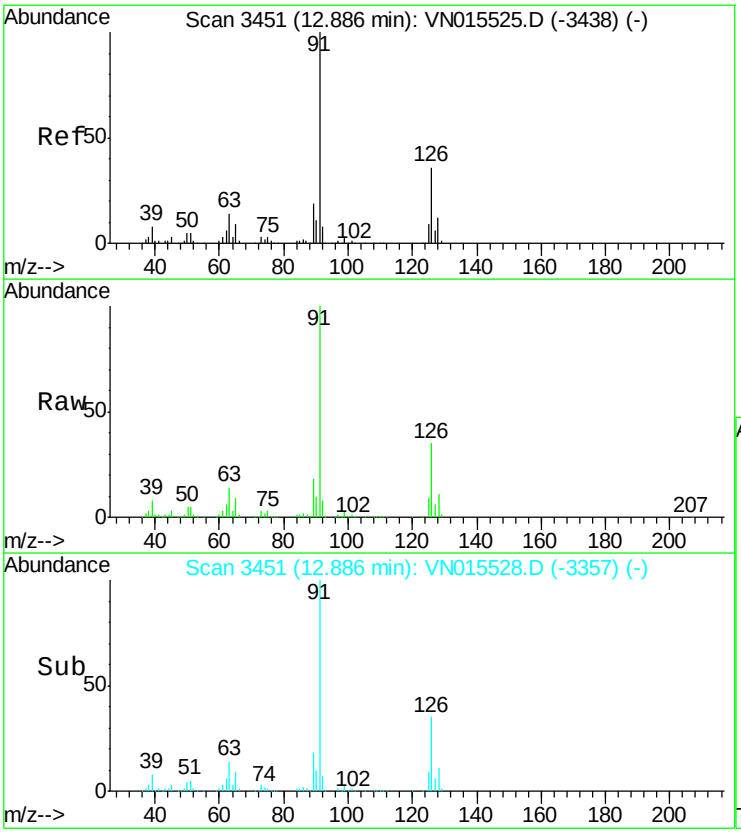
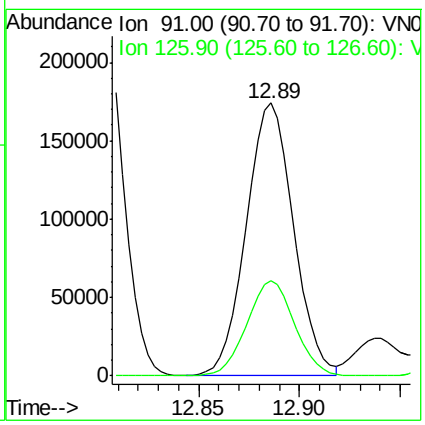


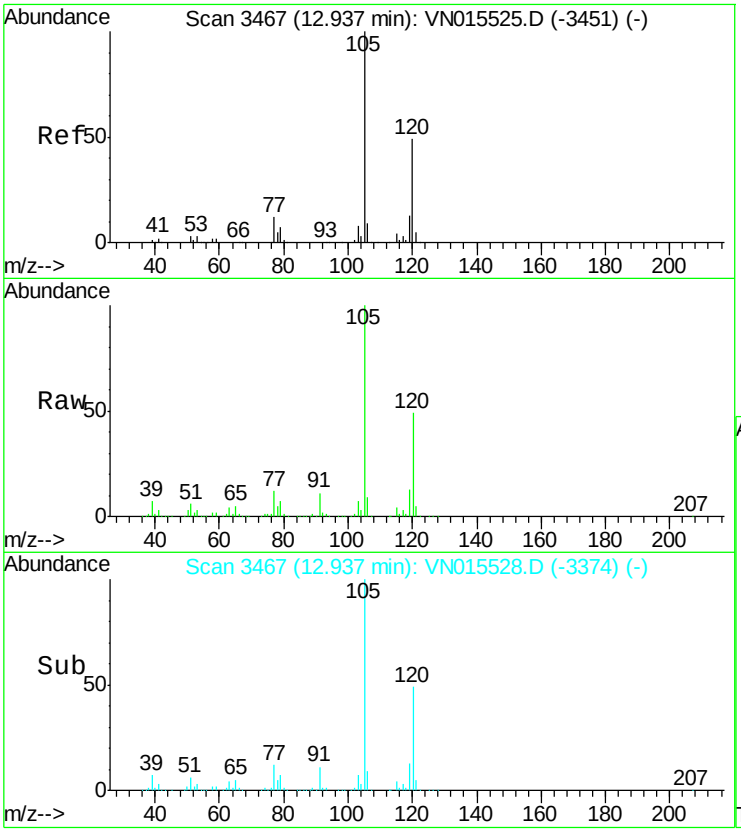


#80
2-Chlorotoluene
Concen: 55.50 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 91 Resp: 286191

Ion	Ratio	Lower	Upper
91	100		
126	35.1	17.9	53.8





#81
1,3,5-Trimethylbenzene
Concen: 50.91 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:105 Resp: 365377

Ion	Ratio	Lower	Upper
105	100		
120	49.4	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

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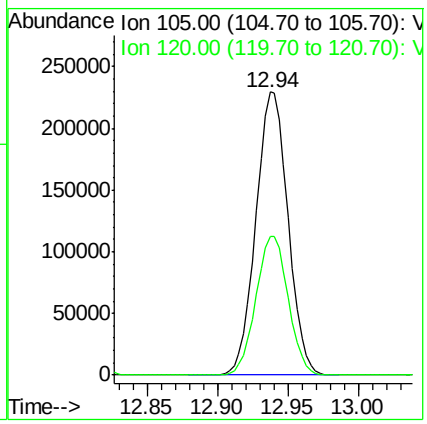
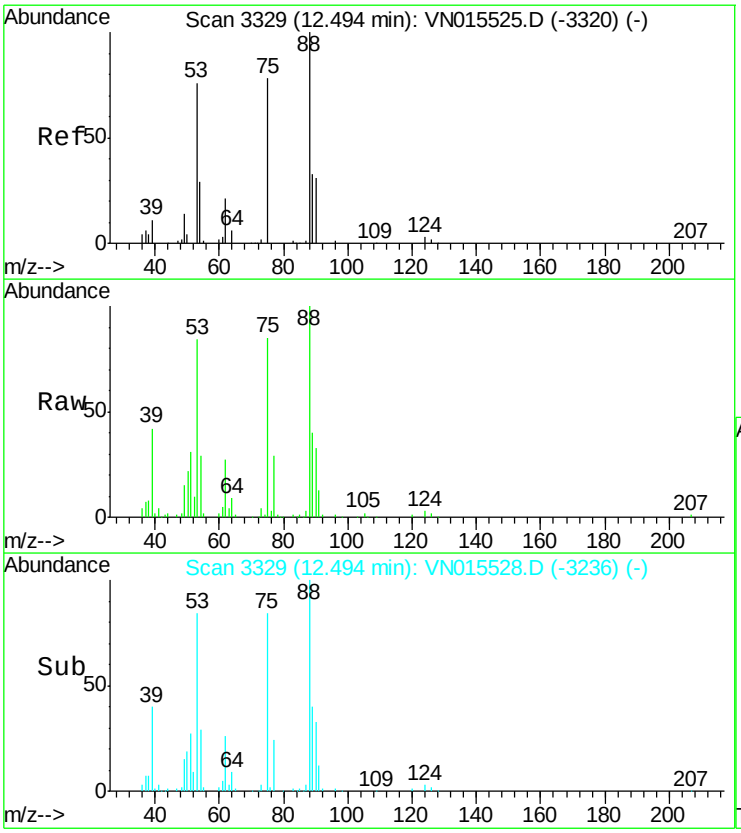
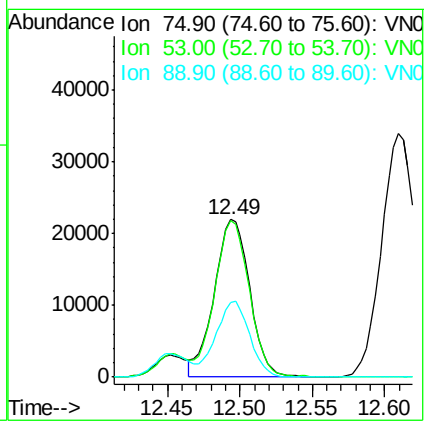


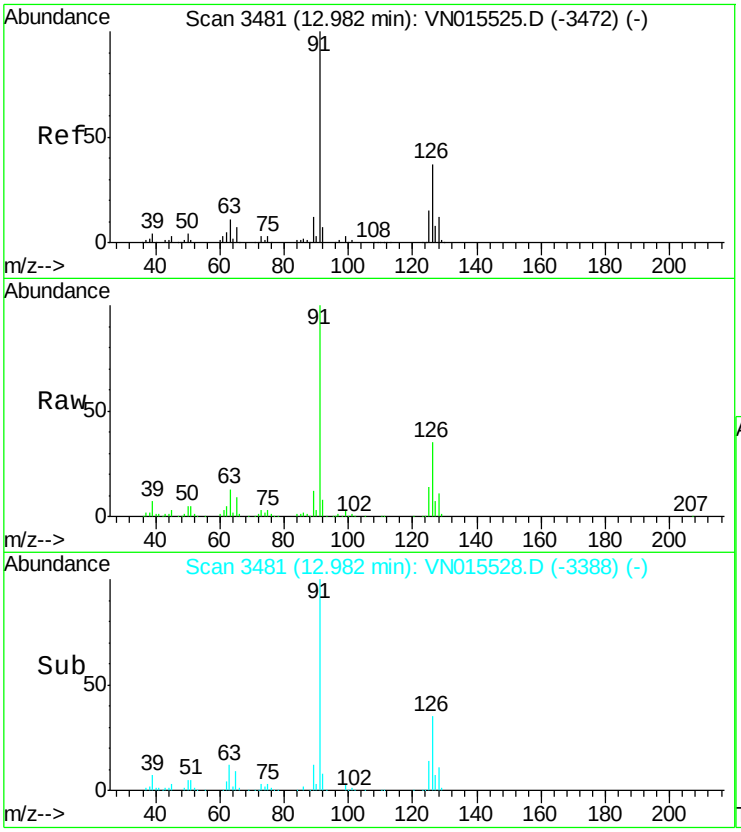


#82
trans-1,4-Dichloro-2-butene
Concen: 51.78 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 75 Resp: 37618

Ion	Ratio	Lower	Upper
75	100		
53	94.7	77.5	116.3
89	46.0	37.7	56.5





#83
4-Chlorotoluene
Concen: 50.75 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 91 Resp: 277343

Ion	Ratio	Lower	Upper
91	100		
126	35.2	17.5	52.6

Instrument :
MSVOA_N
ClientSampleId :
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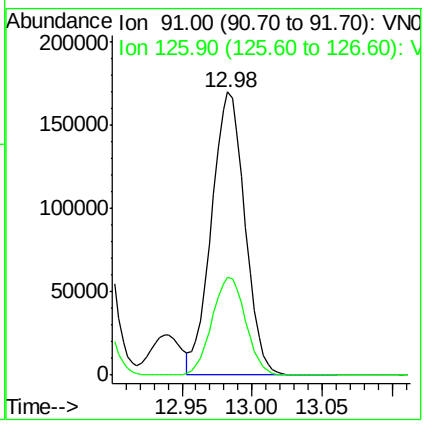
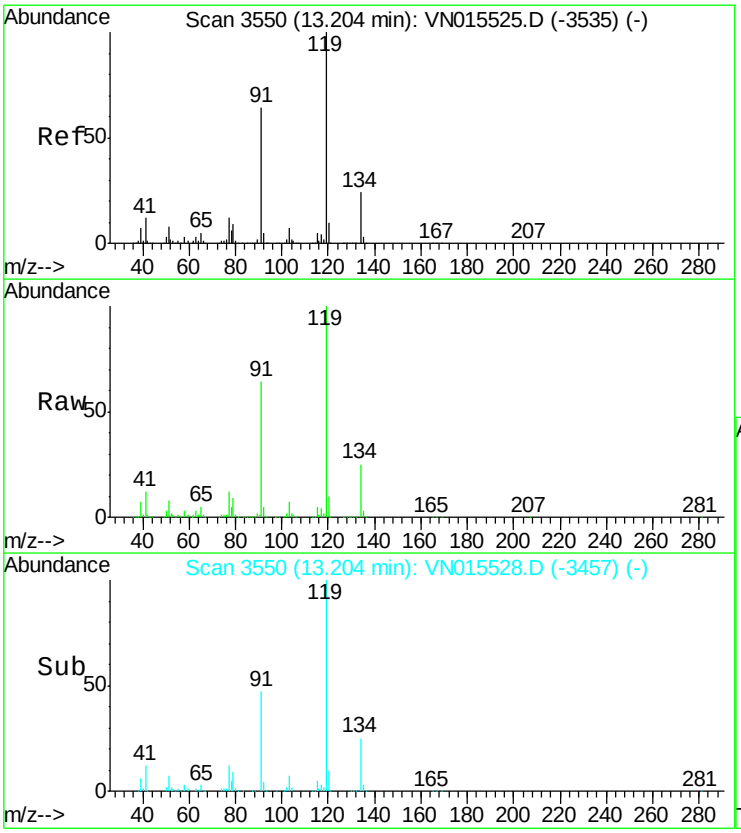
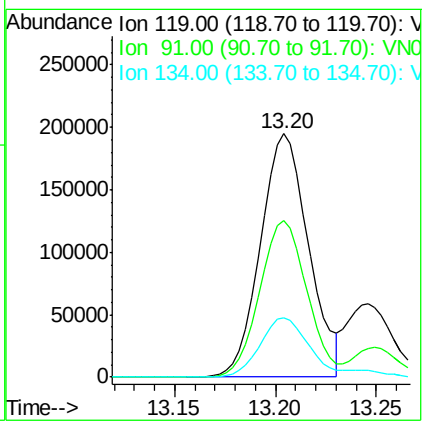


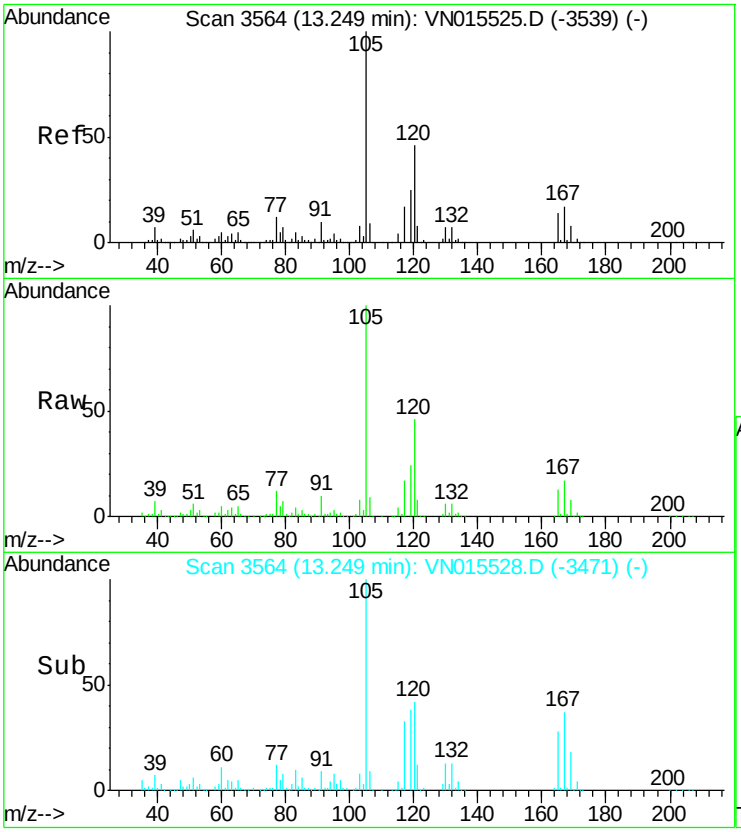


#84
tert-Butylbenzene
Concen: 55.88 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:119 Resp: 323303

Ion	Ratio	Lower	Upper
119	100		
91	63.5	31.9	95.9
134	24.8	12.1	36.3





#85
1,2,4-Trimethylbenzene
Concen: 51.72 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:105 Resp: 371421

Ion	Ratio	Lower	Upper
105	100		
120	46.2	23.1	69.3

Instrument :
MSVOA_N
ClientSampleId :
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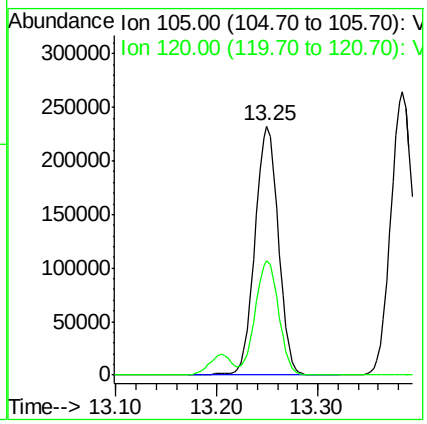
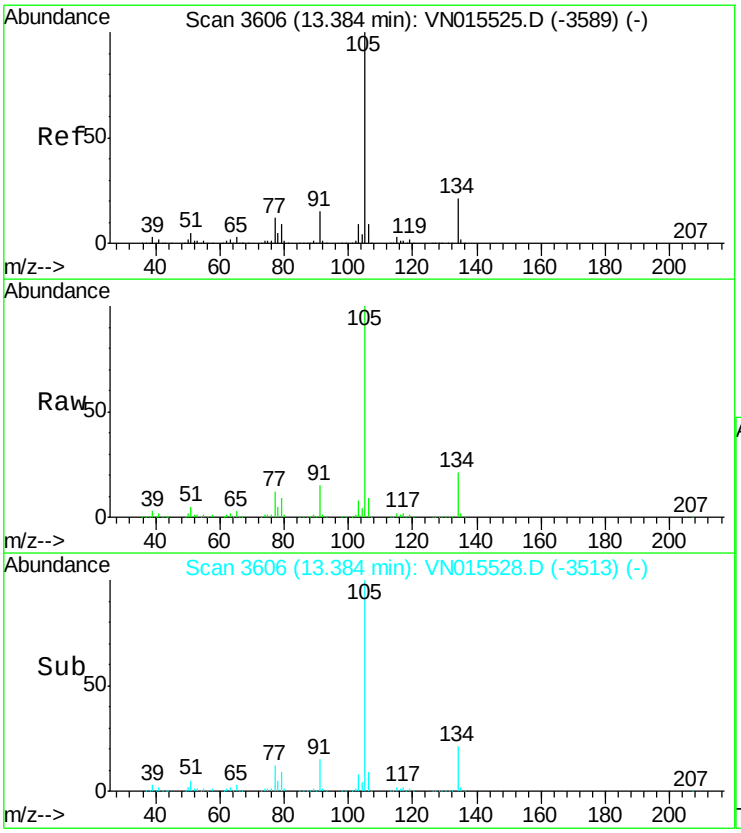
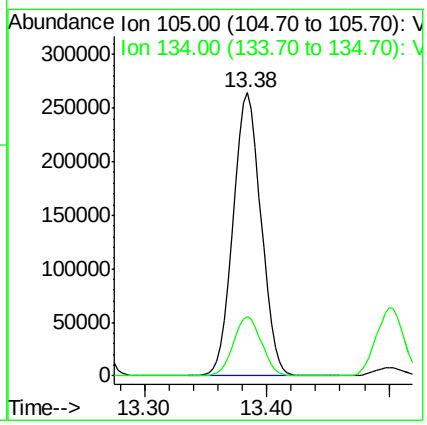


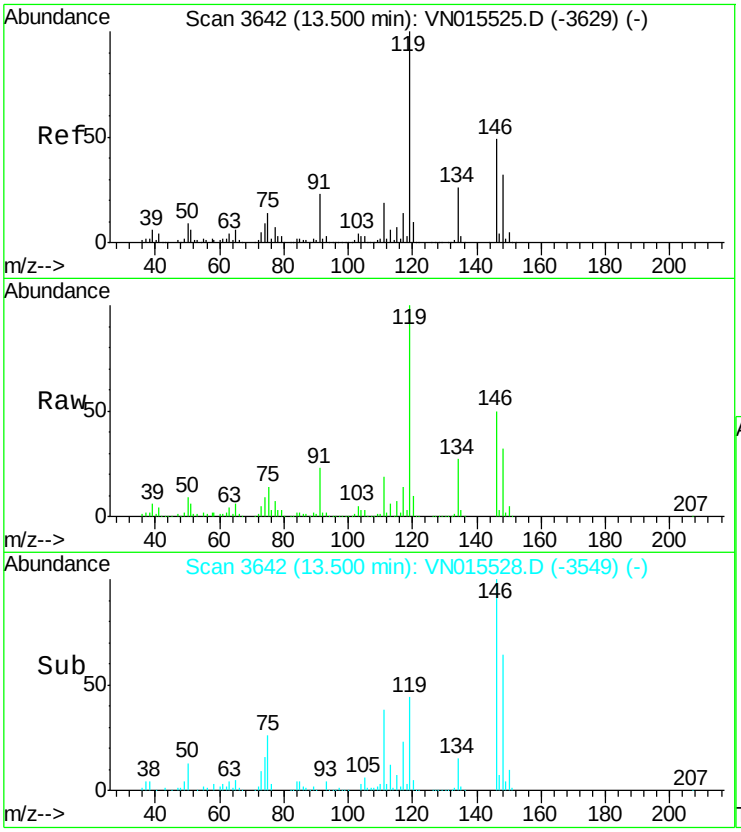


#86
sec-Butylbenzene
Concen: 51.06 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:105 Resp: 419644

Ion	Ratio	Lower	Upper
105	100		
134	21.1	10.6	31.8





#87
p-Isopropyltoluene
Concen: 52.21 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:119 Resp: 371142

Ion	Ratio	Lower	Upper
119	100		
134	26.7	13.3	39.9
91	23.2	11.7	35.1

Instrument :
MSVOA_N
ClientSampleId :
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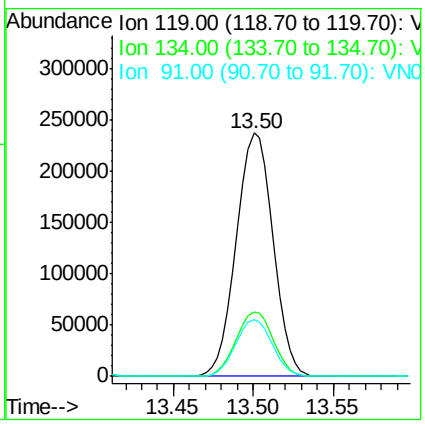
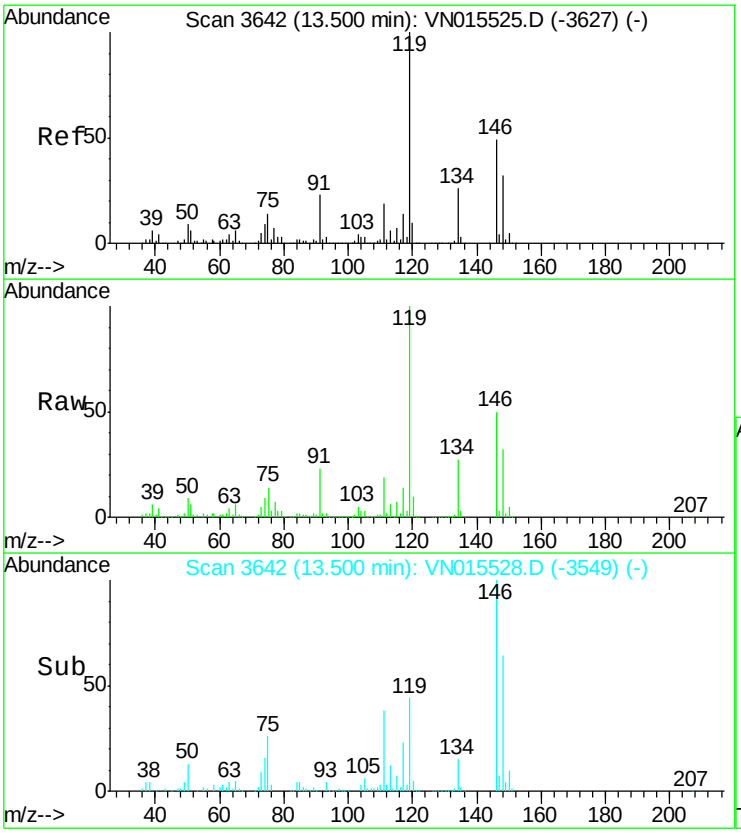
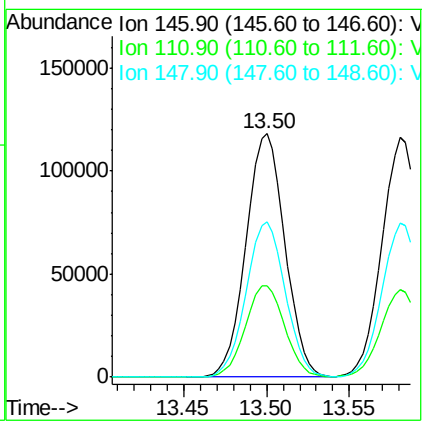


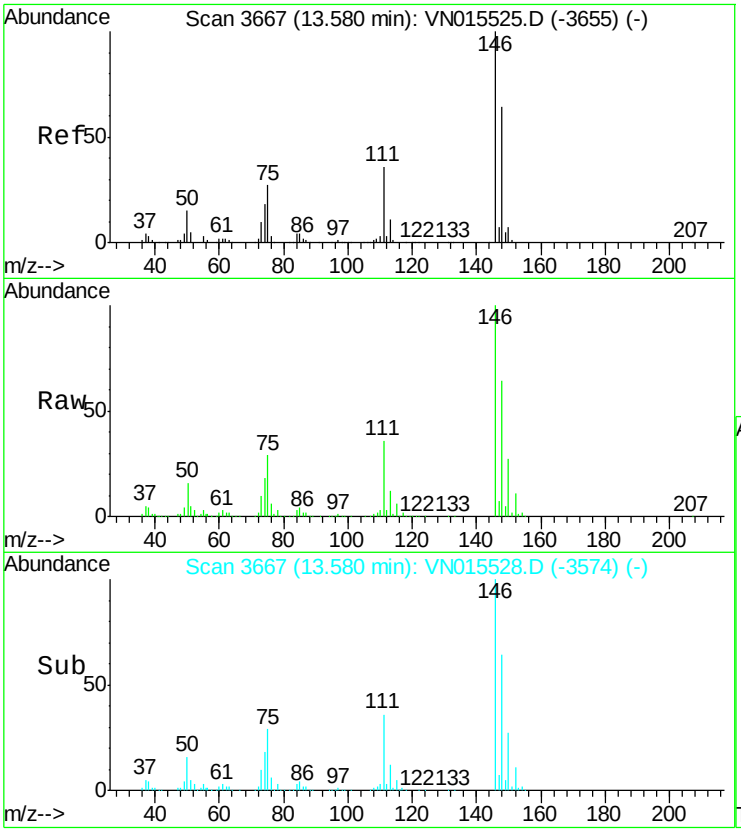


#88
1,3-Dichlorobenzene
Concen: 51.78 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:146 Resp: 192654

Ion	Ratio	Lower	Upper
146	100		
111	38.0	19.1	57.1
148	64.2	32.4	97.0





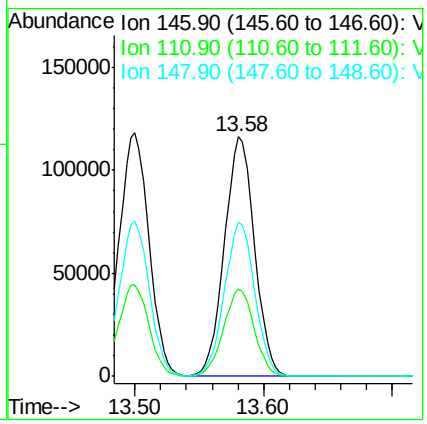
#89
1,4-Dichlorobenzene
Concen: 51.43 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

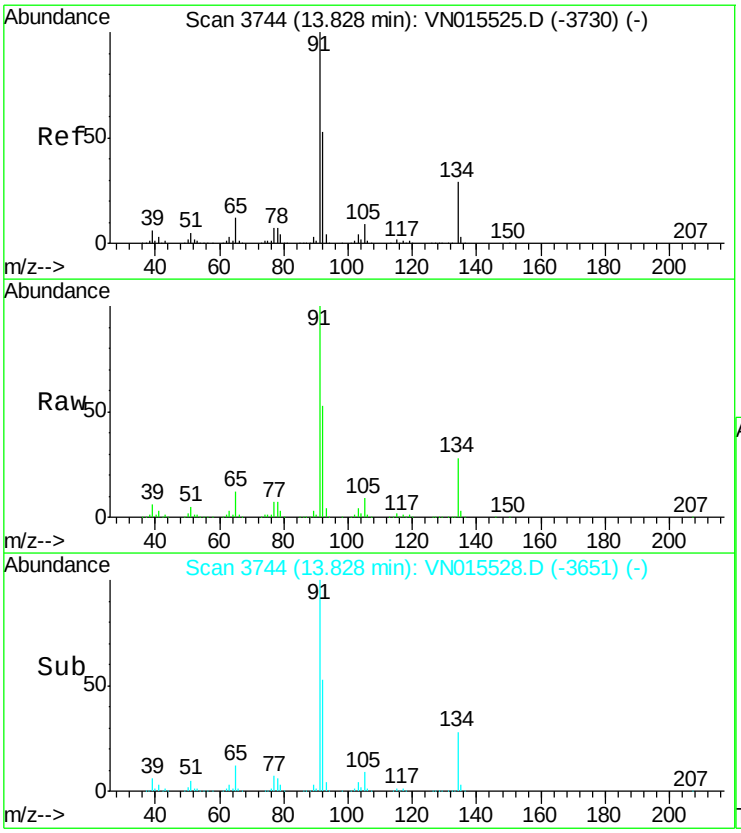
Tgt Ion:146 Resp: 187821

Ion	Ratio	Lower	Upper
146	100		
111	37.1	18.4	55.4
148	65.0	32.3	96.9

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

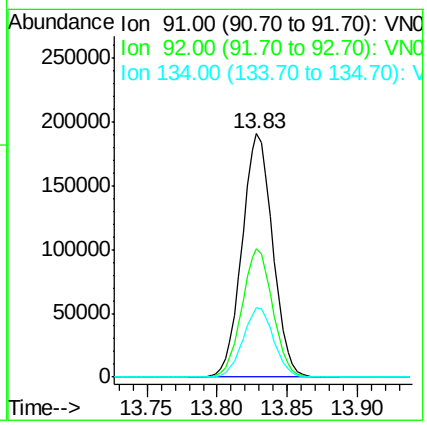


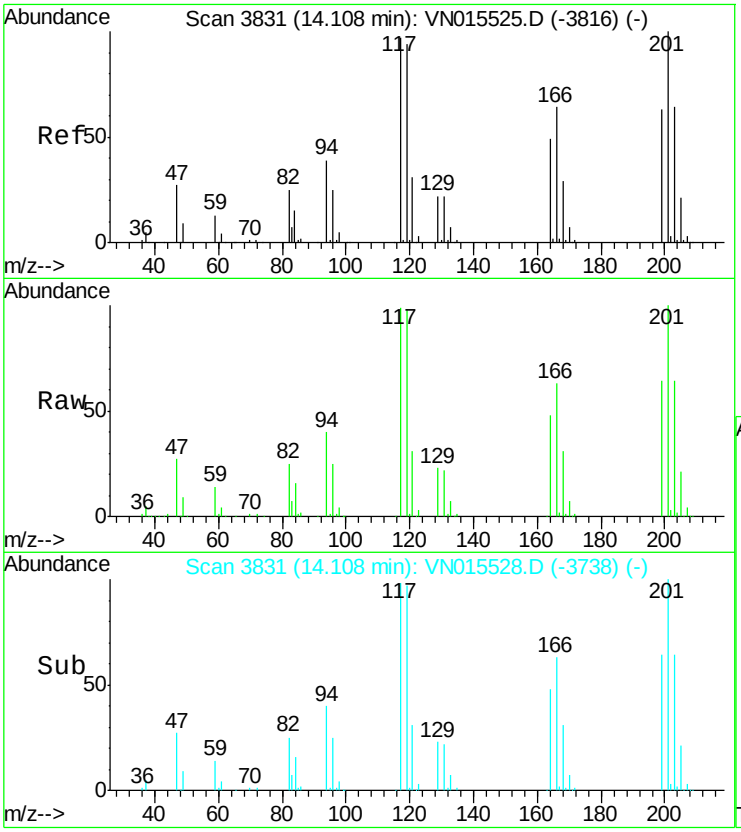


#90
n-Butylbenzene
Concen: 54.22 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion: 91 Resp: 290755

Ion	Ratio	Lower	Upper
91	100		
92	52.8	26.6	79.8
134	28.5	14.4	43.4





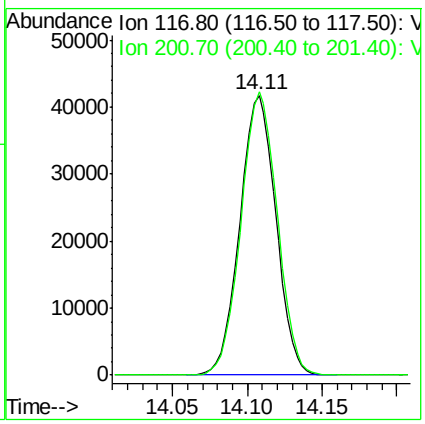
#91
Hexachloroethane
Concen: 51.77 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

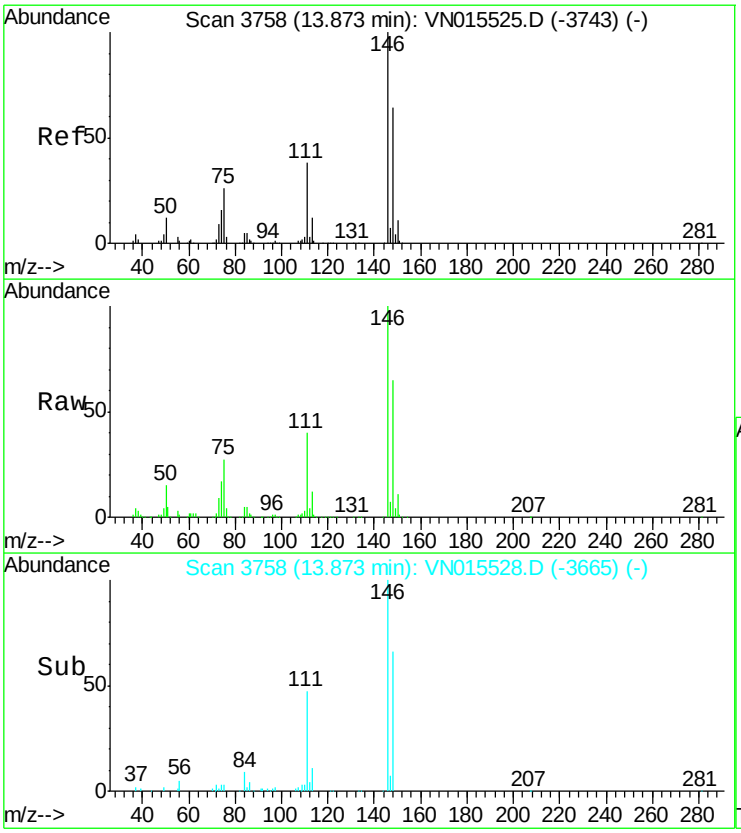
Tgt Ion:117 Resp: 70026

Ion	Ratio	Lower	Upper
117	100		
201	101.7	51.7	155.2

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

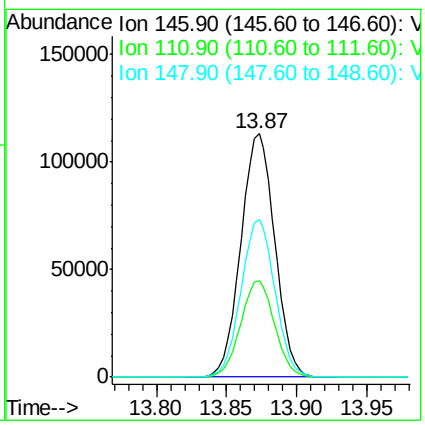


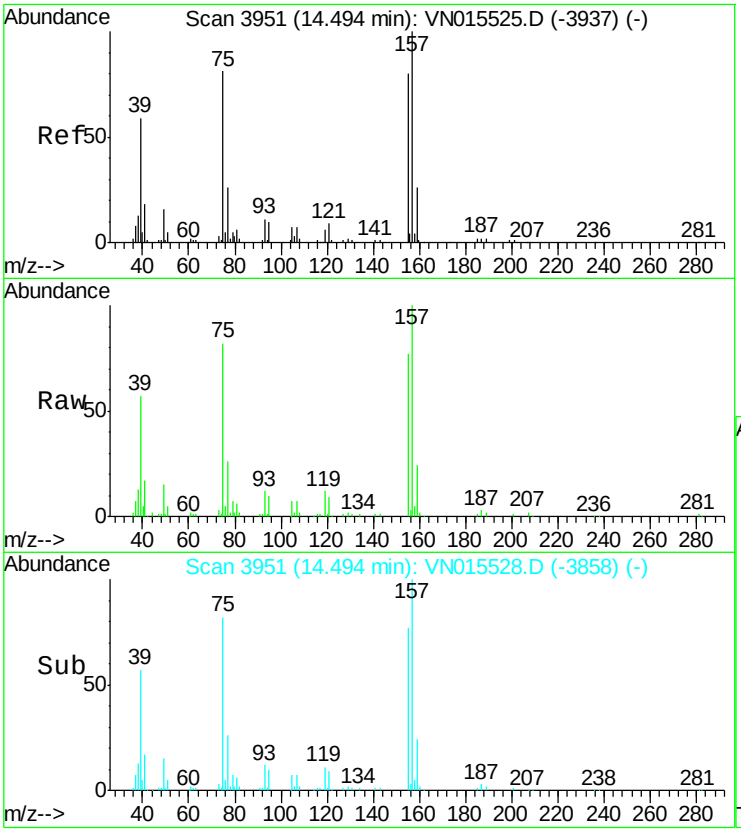


#92
1,2-Dichlorobenzene
Concen: 51.81 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:146 Resp: 191109

Ion	Ratio	Lower	Upper
146	100		
111	39.6	19.4	58.2
148	64.4	32.4	97.0





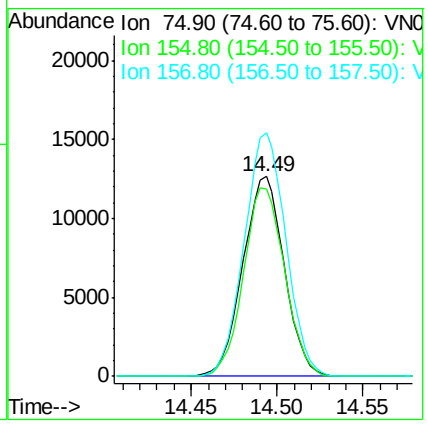
#93
1,2-Dibromo-3-Chloropropane
Concen: 53.48 ug/l
RT: 14.49 min Scan# 3951
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

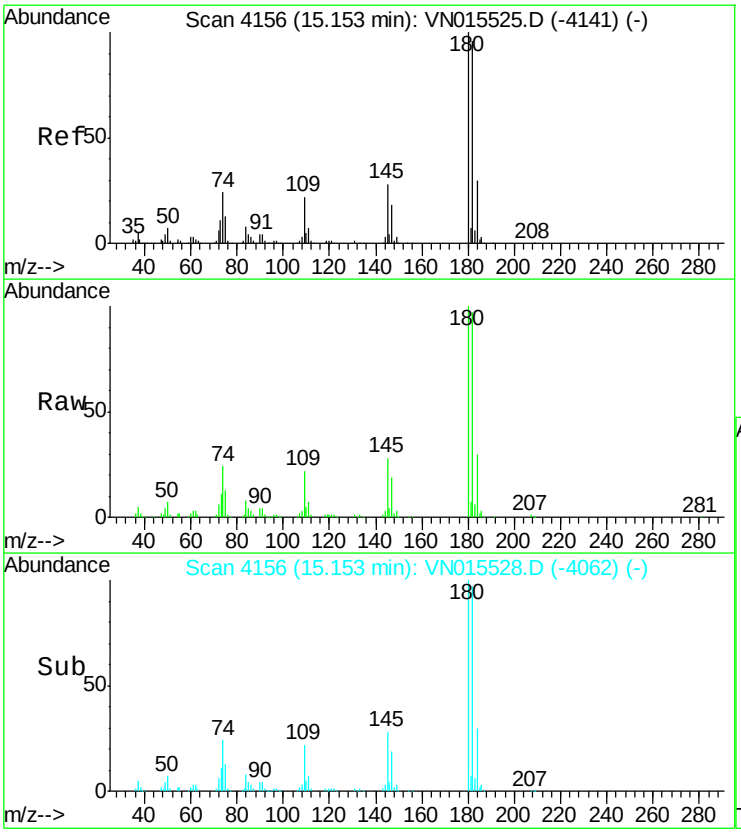
Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

Tgt Ion: 75 Resp: 21121

Ion	Ratio	Lower	Upper
75	100		
155	93.7	49.4	148.2
157	122.9	61.3	183.8

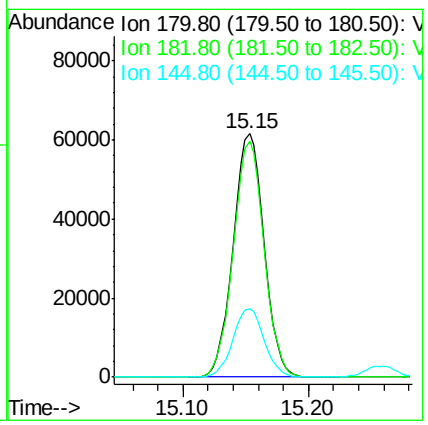




#94
1,2,4-Trichlorobenzene
Concen: 51.13 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

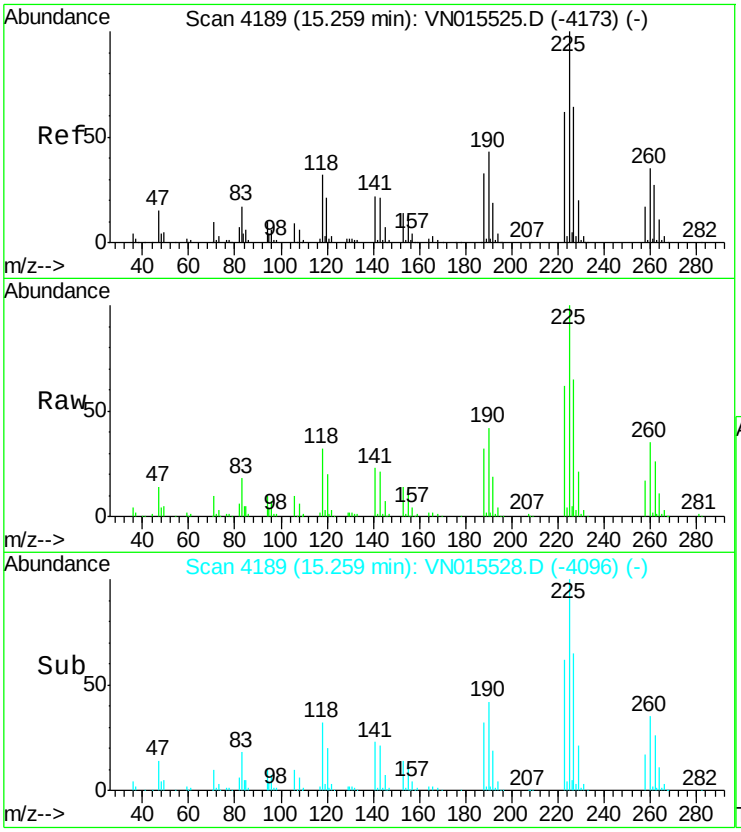
Tgt Ion:180 Resp: 105307

Ion	Ratio	Lower	Upper
180	100		
182	96.4	48.0	144.0
145	28.4	14.0	42.0



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

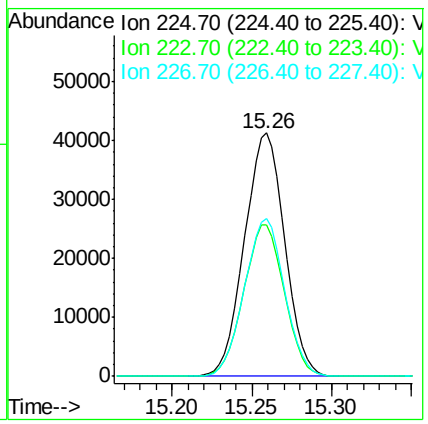
Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

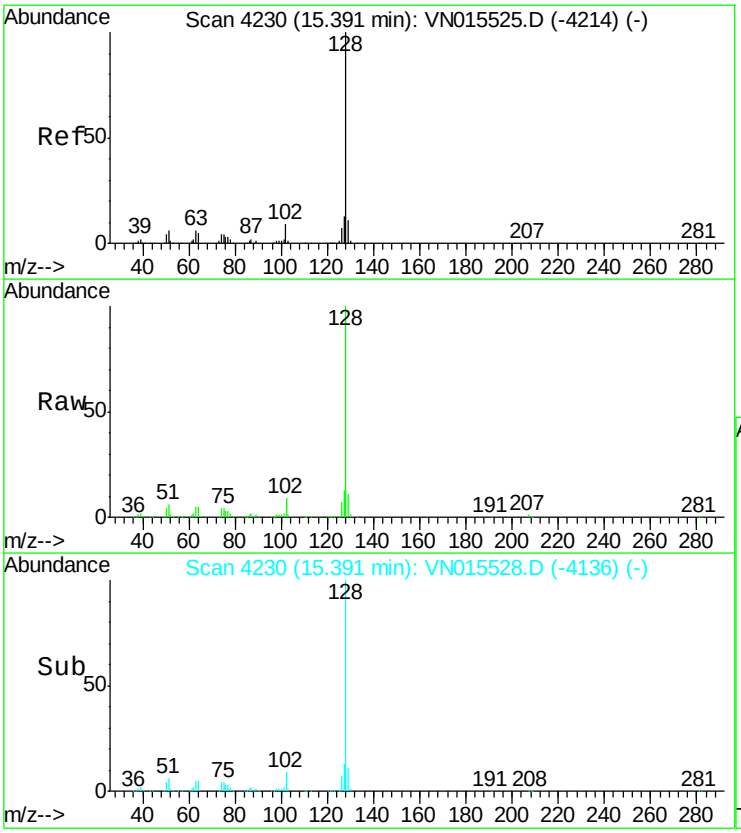


#95
Hexachlorobutadiene
Concen: 52.70 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:225 Resp: 71219

Ion	Ratio	Lower	Upper
225	100		
223	62.7	31.6	95.0
227	64.6	32.1	96.5

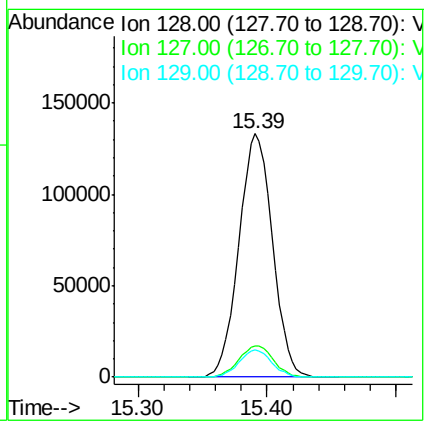


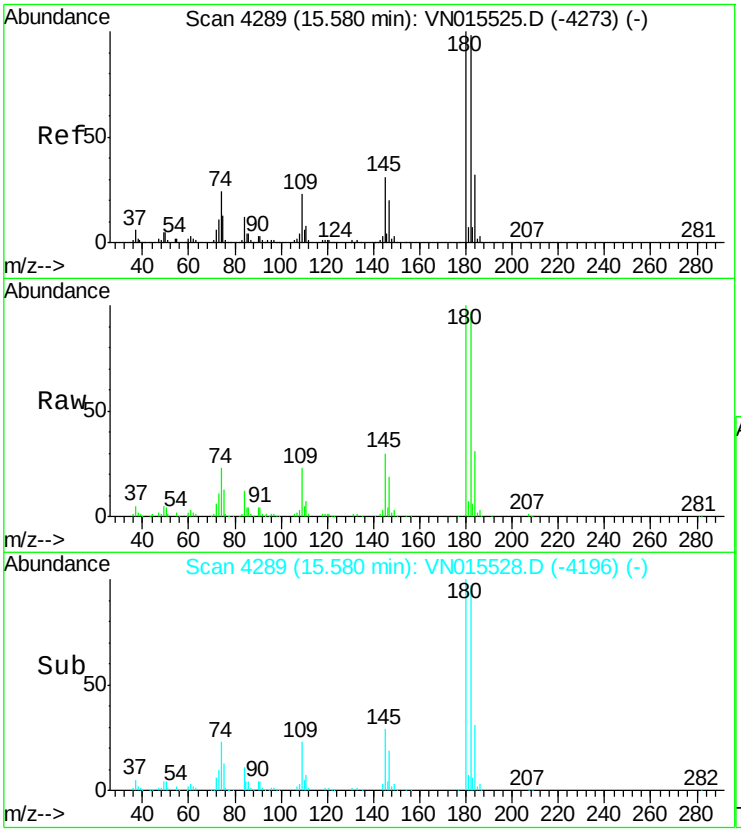


#96
Naphthalene
Concen: 47.93 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:128 Resp: 241189

Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.3	15.5
129	10.9	8.7	13.1

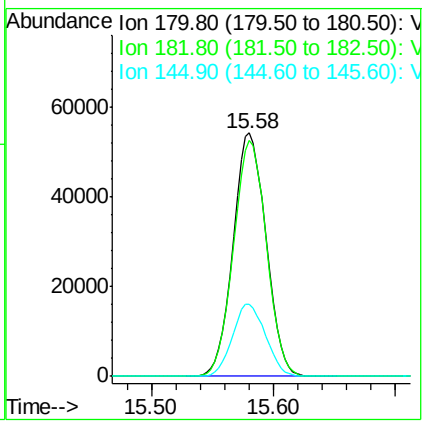




#97
1,2,3-Trichlorobenzene
Concen: 50.32 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015528.D
Acq: 20 May 2014 21:25

Tgt Ion:180 Resp: 101164

Ion	Ratio	Lower	Upper
180	100		
182	96.9	47.8	143.4
145	29.9	14.9	44.7



Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Manual Integrations APPROVED
MMDadoda
5/21/2014 11:02:44 AM

Evaluate Continuing Calibration Report

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	92	0.00
2	T	Dichlorodifluoromethane	0.429	0.434	-1.2	105	0.00
3	T	Chlorodifluoromethane	0.270	0.302	-11.9	101	0.00
4	P	Chloromethane	0.559	0.502	10.2	100	0.00
5	C	Vinyl Chloride	0.467	0.489	-4.7#	103	0.00
6	T	Bromomethane	0.291	0.316	-8.6	112	0.00
7	T	Chloroethane	0.294	0.311	-5.8	101	0.00
8	T	Trichlorofluoromethane	0.759	0.787	-3.7	103	0.00
9	T	Diethyl Ether	0.281	0.300	-6.8	100	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.428	0.452	-5.6	104	0.00
11	T	Methyl Iodide	0.450	0.504	-12.0	86	0.00
12	T	Tert butyl alcohol	0.071	0.065	8.5	99	0.00
13	CM	1,1-Dichloroethene	0.409	0.425	-3.9#	101	0.00
14	T	Acrolein	0.052	0.055	-5.8	103	0.00
15	T	Allyl chloride	0.716	0.737	-2.9	99	0.00
16	T	Acrylonitrile	0.184	0.211	-14.7	98	0.00
17	T	Acetone	0.180	0.178	1.1	90	0.00
18	T	Carbon Disulfide	1.153	1.197	-3.8	100	0.00
19	T	Methyl Acetate	0.873	0.945	-8.2	101	0.00
20	T	Methyl tert-butyl Ether	1.440	1.527	-6.0	100	0.00
21	T	Methylene Chloride	0.468	0.482	-3.0	100	0.00
22	T	trans-1,2-Dichloroethene	0.431	0.453	-5.1	101	0.00
23	T	Diisopropyl ether	1.474	1.570	-6.5	100	0.00
24	T	Vinyl Acetate	0.732	0.826	-12.8	99	0.00
25	P	1,1-Dichloroethane	0.812	0.861	-6.0	99	0.00
26	T	2-Butanone	0.255	0.273	-7.1	97	0.00
27	T	2,2-Dichloropropane	0.717	0.692	3.5	92	0.00
28	T	cis-1,2-Dichloroethene	0.506	0.536	-5.9	99	0.00
29	T	Bromochloromethane	0.337	0.384	-13.9	92	0.00
30	T	Tetrahydrofuran	0.171	0.179	-4.7	98	0.00
31	C	Chloroform	0.838	0.883	-5.4#	100	0.00
32	T	Cyclohexane	0.916	0.821	10.4	105	0.00
33	T	1,1,1-Trichloroethane	0.785	0.834	-6.2	100	0.00
34	S	1,2-Dichloroethane-d4	0.575	0.584	-1.6	101	0.00
35	I	1,4-Difluorobenzene	1.000	1.000	0.0	93	0.00
36	S	Dibromofluoromethane	0.326	0.343	-5.2	103	0.00
37	T	1,1-Dichloropropene	0.446	0.469	-5.2	100	0.00
38	T	Ethyl Acetate	0.393	0.425	-8.1	99	0.00
39	T	Carbon Tetrachloride	0.510	0.531	-4.1	101	0.00
40	T	Methylcyclohexane	0.570	0.590	-3.5	103	0.00
41	TM	Benzene	1.330	1.380	-3.8	99	0.00
42	T	Methacrylonitrile	0.233	0.245	-5.2	98	0.00
43	TM	1,2-Dichloroethane	0.486	0.508	-4.5	99	0.00
44	T	Isopropyl Acetate	0.708	0.739	-4.4	98	0.00
45	TM	Trichloroethene	0.372	0.382	-2.7	99	0.00

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	C	1,2-Dichloropropane	0.342	0.357	-4.4#	101	0.00
47	T	Dibromomethane	0.225	0.235	-4.4	98	0.00
48	T	Bromodichloromethane	0.461	0.488	-5.9	99	0.00
49	T	Methyl methacrylate	0.341	0.378	-10.9	99	0.00
50	T	1,4-Dioxane	0.005	0.005	0.0	97	0.00
51	S	Toluene-d8	1.200	1.245	-3.8	102	0.00
52	T	4-Methyl-2-Pentanone	0.391	0.412	-5.4	98	0.00
53	CM	Toluene	0.843	0.882	-4.6#	99	0.00
54	T	t-1,3-Dichloropropene	0.472	0.506	-7.2	97	0.00
55	T	cis-1,3-Dichloropropene	0.525	0.560	-6.7	100	0.00
56	T	1,1,2-Trichloroethane	0.326	0.346	-6.1	99	0.00
57	T	Ethyl methacrylate	0.482	0.526	-9.1	99	0.00
58	T	1,3-Dichloropropane	0.546	0.571	-4.6	99	0.00
59	T	2-Chloroethyl Vinyl ether	0.045	0.053	-17.8	79	0.00
60	T	2-Hexanone	0.256	0.278	-8.6	96	0.00
61	T	Dibromochloromethane	0.389	0.423	-8.7	99	0.00
62	T	1,2-Dibromoethane	0.337	0.366	-8.6	100	0.00
63	S	4-Bromofluorobenzene	0.411	0.442	-7.5	102	0.00
64	I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
65	T	Tetrachloroethene	0.394	0.416	-5.6	99	0.00
66	PM	Chlorobenzene	1.082	1.140	-5.4	101	0.00
67	T	1,1,1,2-Tetrachloroethane	0.412	0.444	-7.8	98	0.00
68	C	Ethyl Benzene	1.772	1.906	-7.6#	99	0.00
69	T	m/p-Xylenes	0.689	0.732	-6.2	99	0.00
70	T	o-Xylene	0.678	0.730	-7.7	97	0.00
71	T	Styrene	1.066	1.188	-11.4	99	0.00
72	P	Bromoform	0.345	0.377	-9.3	98	0.00
73	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	0.00
74	T	Isopropylbenzene	4.165	4.107	1.4	98	0.00
75	T	N-amyl acetate	1.310	1.343	-2.5	96	0.00
76	P	1,1,2,2-Tetrachloroethane	1.133	1.119	1.2	97	0.00
77	T	1,2,3-Trichloropropane	0.980	0.979	0.1	98	0.00
78	T	Bromobenzene	1.084	1.096	-1.1	97	0.00
79	T	n-propylbenzene	4.270	4.388	-2.8	98	0.00
80	T	2-Chlorotoluene	2.733	2.713	0.7	99	0.00
81	T	1,3,5-Trimethylbenzene	3.402	3.464	-1.8	99	0.00
82	T	trans-1,4-Dichloro-2-butene	0.344	0.357	-3.8	96	0.00
83	T	4-Chlorotoluene	2.590	2.629	-1.5	98	0.00
84	T	tert-Butylbenzene	3.104	3.065	1.3	99	0.00
85	T	1,2,4-Trimethylbenzene	3.404	3.521	-3.4	99	0.00
86	T	sec-Butylbenzene	3.896	3.978	-2.1	99	0.00
87	T	p-Isopropyltoluene	3.370	3.519	-4.4	99	0.00
88	T	1,3-Dichlorobenzene	1.764	1.826	-3.5	98	0.00
89	T	1,4-Dichlorobenzene	1.731	1.781	-2.9	97	0.00

Evaluate Continuing Calibration Report

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	n-Butylbenzene	2.542	2.757	-8.5	98	0.00
91 T	Hexachloroethane	0.641	0.664	-3.6	97	0.00
92 T	1,2-Dichlorobenzene	1.749	1.812	-3.6	97	0.00
93 T	1,2-Dibromo-3-Chloropropane	0.187	0.200	-7.0	98	0.00
94 T	1,2,4-Trichlorobenzene	0.836	0.998	-19.4	96	0.00
95 T	Hexachlorobutadiene	0.641	0.675	-5.3	99	0.00
96 T	Naphthalene	2.044	2.287	-11.9	93	0.00
97 T	1,2,3-Trichlorobenzene	0.839	0.959	-14.3	95	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

ICAL Form

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	92	0.00
2	T	Dichlorodifluoromethane	50.000	56.229	-12.5	105	0.00
3	T	Chlorodifluoromethane	50.000	55.937	-11.9	101	0.00
4	P	Chloromethane	50.000	54.241	-8.5	100	0.00
5	C	Vinyl Chloride	50.000	52.366	-4.7#	103	0.00
6	T	Bromomethane	50.000	58.061	-16.1	112	0.00
7	T	Chloroethane	50.000	52.796	-5.6	101	0.00
8	T	Trichlorofluoromethane	50.000	51.881	-3.8	103	0.00
9	T	Diethyl Ether	50.000	53.544	-7.1	100	0.00
10	T	1,1,2-Trichlorotrifluoroeth	50.000	52.795	-5.6	104	0.00
11	T	Methyl Iodide	50.000	46.940	6.1	86	0.00
12	T	Tert butyl alcohol	250.000	283.952	-13.6	99	0.00
13	CM	1,1-Dichloroethene	50.000	52.001	-4.0#	101	0.00
14	T	Acrolein	250.000	266.582	-6.6	103	0.00
15	T	Allyl chloride	50.000	51.471	-2.9	99	0.00
16	T	Acrylonitrile	250.000	285.869	-14.3	98	0.00
17	T	Acetone	250.000	246.510	1.4	90	0.00
18	T	Carbon Disulfide	50.000	51.917	-3.8	100	0.00
19	T	Methyl Acetate	50.000	54.148	-8.3	101	0.00
20	T	Methyl tert-butyl Ether	50.000	53.037	-6.1	100	0.00
21	T	Methylene Chloride	50.000	51.546	-3.1	100	0.00
22	T	trans-1,2-Dichloroethene	50.000	52.516	-5.0	101	0.00
23	T	Diisopropyl ether	50.000	53.273	-6.5	100	0.00
24	T	Vinyl Acetate	250.000	282.085	-12.8	99	0.00
25	P	1,1-Dichloroethane	50.000	53.038	-6.1	99	0.00
26	T	2-Butanone	250.000	268.284	-7.3	97	0.00
27	T	2,2-Dichloropropane	50.000	48.301	3.4	92	0.00
28	T	cis-1,2-Dichloroethene	50.000	52.908	-5.8	99	0.00
29	T	Bromochloromethane	50.000	53.798	-7.6	92	0.00
30	T	Tetrahydrofuran	250.000	260.645	-4.3	98	0.00
31	C	Chloroform	50.000	52.669	-5.3#	100	0.00
32	T	Cyclohexane	50.000	57.201	-14.4	105	0.00
33	T	1,1,1-Trichloroethane	50.000	53.147	-6.3	100	0.00
34	S	1,2-Dichloroethane-d4	50.000	50.793	-1.6	101	0.00
35	I	1,4-Difluorobenzene	50.000	50.000	0.0	93	0.00
36	S	Dibromofluoromethane	50.000	52.648	-5.3	103	0.00
37	T	1,1-Dichloropropene	50.000	52.613	-5.2	100	0.00
38	T	Ethyl Acetate	50.000	54.004	-8.0	99	0.00
39	T	Carbon Tetrachloride	50.000	52.077	-4.2	101	0.00
40	T	Methylcyclohexane	50.000	51.734	-3.5	103	0.00
41	TM	Benzene	50.000	51.904	-3.8	99	0.00
42	T	Methacrylonitrile	50.000	52.756	-5.5	98	0.00
43	TM	1,2-Dichloroethane	50.000	52.320	-4.6	99	0.00
44	T	Isopropyl Acetate	50.000	52.189	-4.4	98	0.00
45	TM	Trichloroethene	50.000	51.262	-2.5	99	0.00

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
46	C	1,2-Dichloropropane	50.000	52.284	-4.6#	101	0.00
47	T	Dibromomethane	50.000	52.229	-4.5	98	0.00
48	T	Bromodichloromethane	50.000	52.935	-5.9	99	0.00
49	T	Methyl methacrylate	50.000	55.337	-10.7	99	0.00
50	T	1,4-Dioxane	1000.000	1130.685	-13.1	97	0.00
51	S	Toluene-d8	50.000	51.864	-3.7	102	0.00
52	T	4-Methyl-2-Pentanone	250.000	263.331	-5.3	98	0.00
53	CM	Toluene	50.000	52.328	-4.7#	99	0.00
54	T	t-1,3-Dichloropropene	50.000	53.695	-7.4	97	0.00
55	T	cis-1,3-Dichloropropene	50.000	53.318	-6.6	100	0.00
56	T	1,1,2-Trichloroethane	50.000	53.041	-6.1	99	0.00
57	T	Ethyl methacrylate	50.000	54.611	-9.2	99	0.00
58	T	1,3-Dichloropropane	50.000	52.344	-4.7	99	0.00
59	T	2-Chloroethyl Vinyl ether	250.000	249.136	0.3	79	0.00
60	T	2-Hexanone	250.000	271.516	-8.6	96	0.00
61	T	Dibromochloromethane	50.000	54.356	-8.7	99	0.00
62	T	1,2-Dibromoethane	50.000	54.309	-8.6	100	0.00
63	S	4-Bromofluorobenzene	50.000	53.744	-7.5	102	0.00
64	I	Chlorobenzene-d5	50.000	50.000	0.0	92	0.00
65	T	Tetrachloroethene	50.000	52.782	-5.6	99	0.00
66	PM	Chlorobenzene	50.000	52.674	-5.3	101	0.00
67	T	1,1,1,2-Tetrachloroethane	50.000	53.876	-7.8	98	0.00
68	C	Ethyl Benzene	50.000	53.791	-7.6#	99	0.00
69	T	m/p-Xylenes	100.000	106.121	-6.1	99	0.00
70	T	o-Xylene	50.000	53.795	-7.6	97	0.00
71	T	Styrene	50.000	55.741	-11.5	99	0.00
72	P	Bromoform	50.000	54.589	-9.2	98	0.00
73	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	90	0.00
74	T	Isopropylbenzene	50.000	55.070	-10.1	98	0.00
75	T	N-amyl acetate	50.000	51.250	-2.5	96	0.00
76	P	1,1,2,2-Tetrachloroethane	50.000	57.722	-15.4	97	0.00
77	T	1,2,3-Trichloropropane	50.000	57.679	-15.4	98	0.00
78	T	Bromobenzene	50.000	50.552	-1.1	97	0.00
79	T	n-propylbenzene	50.000	51.375	-2.8	98	0.00
80	T	2-Chlorotoluene	50.000	55.498	-11.0	99	0.00
81	T	1,3,5-Trimethylbenzene	50.000	50.907	-1.8	99	0.00
82	T	trans-1,4-Dichloro-2-butene	50.000	51.783	-3.6	96	0.00
83	T	4-Chlorotoluene	50.000	50.754	-1.5	98	0.00
84	T	tert-Butylbenzene	50.000	55.885	-11.8	99	0.00
85	T	1,2,4-Trimethylbenzene	50.000	51.718	-3.4	99	0.00
86	T	sec-Butylbenzene	50.000	51.057	-2.1	99	0.00
87	T	p-Isopropyltoluene	50.000	52.212	-4.4	99	0.00
88	T	1,3-Dichlorobenzene	50.000	51.784	-3.6	98	0.00
89	T	1,4-Dichlorobenzene	50.000	51.434	-2.9	97	0.00

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052014\
Data File : VN015528.D
Acq On : 20 May 2014 21:25
Operator : MD
Sample : VSTDICV050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN052014

Quant Time: May 21 02:26:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
90 T	n-Butylbenzene	50.000	54.221	-8.4	98	0.00
91 T	Hexachloroethane	50.000	51.767	-3.5	97	0.00
92 T	1,2-Dichlorobenzene	50.000	51.806	-3.6	97	0.00
93 T	1,2-Dibromo-3-Chloropropane	50.000	53.481	-7.0	98	0.00
94 T	1,2,4-Trichlorobenzene	50.000	51.131	-2.3	96	0.00
95 T	Hexachlorobutadiene	50.000	52.700	-5.4	99	0.00
96 T	Naphthalene	50.000	47.930	4.1	93	0.00
97 T	1,2,3-Trichlorobenzene	50.000	50.324	-0.6	95	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG No.: F2352

Instrument ID: MSVOA_N Calibration Date/Time: 05/22/2014 00:44

Lab File ID: VN015573.D Init. Calib. Date(s): 05/20/2014 05/20/2014

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:24 19:55

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.467	0.475		1.71	20
1,1-Dichloroethene	0.409	0.417		1.96	20
Acetone	0.180	0.169		-6.11	20
Methyl tert-butyl Ether	1.440	1.475		2.43	20
Methylene Chloride	0.468	0.479		2.35	20
trans-1,2-Dichloroethene	0.431	0.450		4.41	20
1,1-Dichloroethane	0.812	0.831	0.1	2.34	20
2-Butanone	0.255	0.265		3.92	20
Carbon Tetrachloride	0.510	0.503		-1.37	20
cis-1,2-Dichloroethene	0.506	0.524		3.56	20
Chloroform	0.838	0.866		3.34	20
1,1,1-Trichloroethane	0.785	0.792		0.89	20
Benzene	1.330	1.339		0.68	20
1,2-Dichloroethane	0.486	0.482		-0.82	20
Trichloroethene	0.372	0.378		1.61	20
Toluene	0.843	0.865		2.61	20
Tetrachloroethene	0.394	0.404		2.54	20
Chlorobenzene	1.082	1.086	0.3	0.37	20
Ethyl Benzene	1.772	1.838		3.72	20
m/p-Xylenes	0.689	0.709		2.9	20
o-Xylene	0.678	0.708		4.43	20
n-propylbenzene	4.270	4.233		-0.87	20
tert-Butylbenzene	3.104	2.915		-6.09	20
1,2,4-Trimethylbenzene	3.404	3.353		-1.5	20
sec-Butylbenzene	3.896	3.816		-2.05	20
1,3-Dichlorobenzene	1.764	1.788		1.36	20
1,4-Dichlorobenzene	1.731	1.757		1.5	20
n-Butylbenzene	2.542	2.666		4.88	20
1,2-Dichlorobenzene	1.749	1.772		1.32	20
1,2-Dichloroethane-d4	0.575	0.546		-5.04	20
Dibromofluoromethane	0.326	0.316		-3.07	20
Toluene-d8	1.200	1.164		-3	20
4-Bromofluorobenzene	0.411	0.418		1.7	20
1,4-Dioxane	0.005	0.005	0.05	0	50

All other compounds must meet a minimum RRF of 0.010.

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:15:56 PM

Quant Time: May 22 01:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	185615	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	266327	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	233630	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	111003	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	101393	47.49	ug/l	0.00
Spiked Amount 50.000			Recovery	=	94.98%	
36) Dibromofluoromethane	7.80	113	84117	48.49	ug/l	0.00
Spiked Amount 50.000			Recovery	=	96.98%	
51) Toluene-d8	10.29	98	309936	48.50	ug/l	0.00
Spiked Amount 50.000			Recovery	=	97.00%	
63) 4-Bromofluorobenzene	12.61	95	111435	50.90	ug/l	0.00
Spiked Amount 50.000			Recovery	=	101.80%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	77359	54.00	ug/l	99
4) Chloromethane	2.06	50	99156	57.75	ug/l	99
5) Vinyl Chloride	2.20	62	88108	50.79	ug/l	99
6) Bromomethane	2.62	94	48870	48.53	ug/l	97
7) Chloroethane	2.77	64	58008	53.08	ug/l	97
8) Trichlorofluoromethane	3.12	101	141969	50.42	ug/l	100
9) Diethyl Ether	3.53	74	54899	52.72	ug/l	99
10) 1,1,2-Trichlorotrifluoroet	3.91	101	80661	50.79	ug/l	99
11) Methyl Iodide	4.11	142	71437	36.27	ug/l	98
12) Tert butyl alcohol	4.95	59	57336	267.36	ug/l	100
13) 1,1-Dichloroethene	3.88	96	77458	51.01	ug/l	97
14) Acrolein	3.73	56	49104	254.72	ug/l	97
15) Allyl chloride	4.51	41	129133	48.61	ug/l	99
16) Acrylonitrile	5.18	53	194053	283.69	ug/l	100
17) Acetone	3.95	43	156895	234.20	ug/l	100
18) Carbon Disulfide	4.24	76	215374	50.33	ug/l	99
19) Methyl Acetate	4.50	43	172649	53.28	ug/l	100
20) Methyl tert-butyl Ether	5.27	73	273777	51.22	ug/l	99
21) Methylene Chloride	4.74	84	88888	51.17	ug/l	96
22) trans-1,2-Dichloroethene	5.28	96	83460	52.13	ug/l	98
23) Diisopropyl ether	6.18	45	284308	51.96	ug/l	99
24) Vinyl Acetate	6.12	43	768391m	282.69	ug/l	
25) 1,1-Dichloroethane	6.08	63	154301	51.22	ug/l	99
26) 2-Butanone	7.05	43	245690	259.96	ug/l	99
27) 2,2-Dichloropropane	7.06	77	109249	41.07	ug/l	99
28) cis-1,2-Dichloroethene	7.06	96	97317	51.77	ug/l	97
29) Bromochloromethane	7.42	49	74288	56.16	ug/l	97
30) Tetrahydrofuran	7.44	42	164768	259.10	ug/l	99
31) Chloroform	7.58	83	160705	51.66	ug/l	100
32) Cyclohexane	7.89	56	147812	55.39	ug/l	98
33) 1,1,1-Trichloroethane	7.79	97	146970	50.46	ug/l	99
37) 1,1-Dichloropropene	8.01	75	120870	50.89	ug/l	99
38) Ethyl Acetate	7.15	43	107114	51.10	ug/l	98
39) Carbon Tetrachloride	8.00	117	134060	49.36	ug/l	98

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:15:56 PM

Quant Time: May 22 01:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) Methylcyclohexane	9.29	83	152482	50.20	ug/l		97
41) Benzene	8.26	78	356727	50.36	ug/l		99
42) Methacrylonitrile	7.37	41	63024	50.87	ug/l		98
43) 1,2-Dichloroethane	8.33	62	128358	49.62	ug/l		99
44) Isopropyl Acetate	8.36	43	187408	49.70	ug/l		99
45) Trichloroethene	9.04	130	100758	50.79	ug/l		98
46) 1,2-Dichloropropane	9.32	63	92285	50.72	ug/l		100
47) Dibromomethane	9.41	93	60577	50.60	ug/l		99
48) Bromodichloromethane	9.59	83	124938	50.87	ug/l		98
49) Methyl methacrylate	9.38	41	96008	52.82	ug/l		99
50) 1,4-Dioxane	9.40	88	26849	1058.82	ug/l		99
52) 4-Methyl-2-Pentanone	10.16	43	529240	253.91	ug/l		99
53) Toluene	10.35	92	230384	51.31	ug/l		99
54) t-1,3-Dichloropropene	10.57	75	126971	50.56	ug/l		99
55) cis-1,3-Dichloropropene	10.03	75	138446	49.52	ug/l		99
56) 1,1,2-Trichloroethane	10.75	97	88678	51.11	ug/l		97
57) Ethyl methacrylate	10.61	69	134252	52.31	ug/l		97
58) 1,3-Dichloropropane	10.90	76	148311	51.01	ug/l		98
59) 2-Chloroethyl Vinyl ether	9.88	63	36744	131.35	ug/l		99
60) 2-Hexanone	10.93	43	355088	260.90	ug/l		99
61) Dibromochloromethane	11.10	129	108356	52.30	ug/l		99
62) 1,2-Dibromoethane	11.21	107	95020	52.99	ug/l		99
65) Tetrachloroethene	10.83	164	94287	51.16	ug/l		99
66) Chlorobenzene	11.64	112	253668	50.17	ug/l		99
67) 1,1,1,2-Tetrachloroethane	11.71	131	98334	51.04	ug/l		99
68) Ethyl Benzene	11.71	91	429405	51.87	ug/l		99
69) m/p-Xylenes	11.82	106	331391	102.86	ug/l		99
70) o-Xylene	12.15	106	165437	52.19	ug/l		100
71) Styrene	12.17	104	266940	53.61	ug/l		100
72) Bromoform	12.33	173	82613	51.18	ug/l	#	100
74) Isopropylbenzene	12.46	105	439439	53.04	ug/l		100
75) N-amyl acetate	12.26	43	137570	47.30	ug/l		99
76) 1,1,2,2-Tetrachloroethane	12.70	83	120315	55.84	ug/l		99
77) 1,2,3-Trichloropropane	12.75	75	110200m	58.52	ug/l		
78) Bromobenzene	12.74	156	117183	48.68	ug/l		100
79) n-propylbenzene	12.80	91	469825	49.56	ug/l		100
80) 2-Chlorotoluene	12.89	91	287284	52.89	ug/l		99
81) 1,3,5-Trimethylbenzene	12.94	105	366189	48.48	ug/l		99
82) trans-1,4-Dichloro-2-buten	12.49	75	34798	45.52	ug/l		96
83) 4-Chlorotoluene	12.98	91	282768	49.17	ug/l		99
84) tert-Butylbenzene	13.20	119	323606	53.08	ug/l		99
85) 1,2,4-Trimethylbenzene	13.25	105	372151	49.24	ug/l		100
86) sec-Butylbenzene	13.38	105	423534	48.97	ug/l		100
87) p-Isopropyltoluene	13.50	119	375664	50.22	ug/l		99
88) 1,3-Dichlorobenzene	13.50	146	198466	50.69	ug/l		99
89) 1,4-Dichlorobenzene	13.58	146	194987	50.74	ug/l		99
90) n-Butylbenzene	13.83	91	295948	52.44	ug/l		100
91) Hexachloroethane	14.11	117	69212	48.62	ug/l		98
92) 1,2-Dichlorobenzene	13.87	146	196698	50.67	ug/l		99
93) 1,2-Dibromo-3-Chloropropan	14.49	75	21463	51.64	ug/l		98

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 22 01:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
94) 1,2,4-Trichlorobenzene	15.15	180	112106	51.69 ug/l	99
95) Hexachlorobutadiene	15.26	225	71441	50.23 ug/l	99
96) Naphthalene	15.39	128	256502	48.39 ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	108736	51.33 ug/l	99

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

Quantitation Report (QT Reviewed)

Sample Results: **VN015573.D**

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 22 01:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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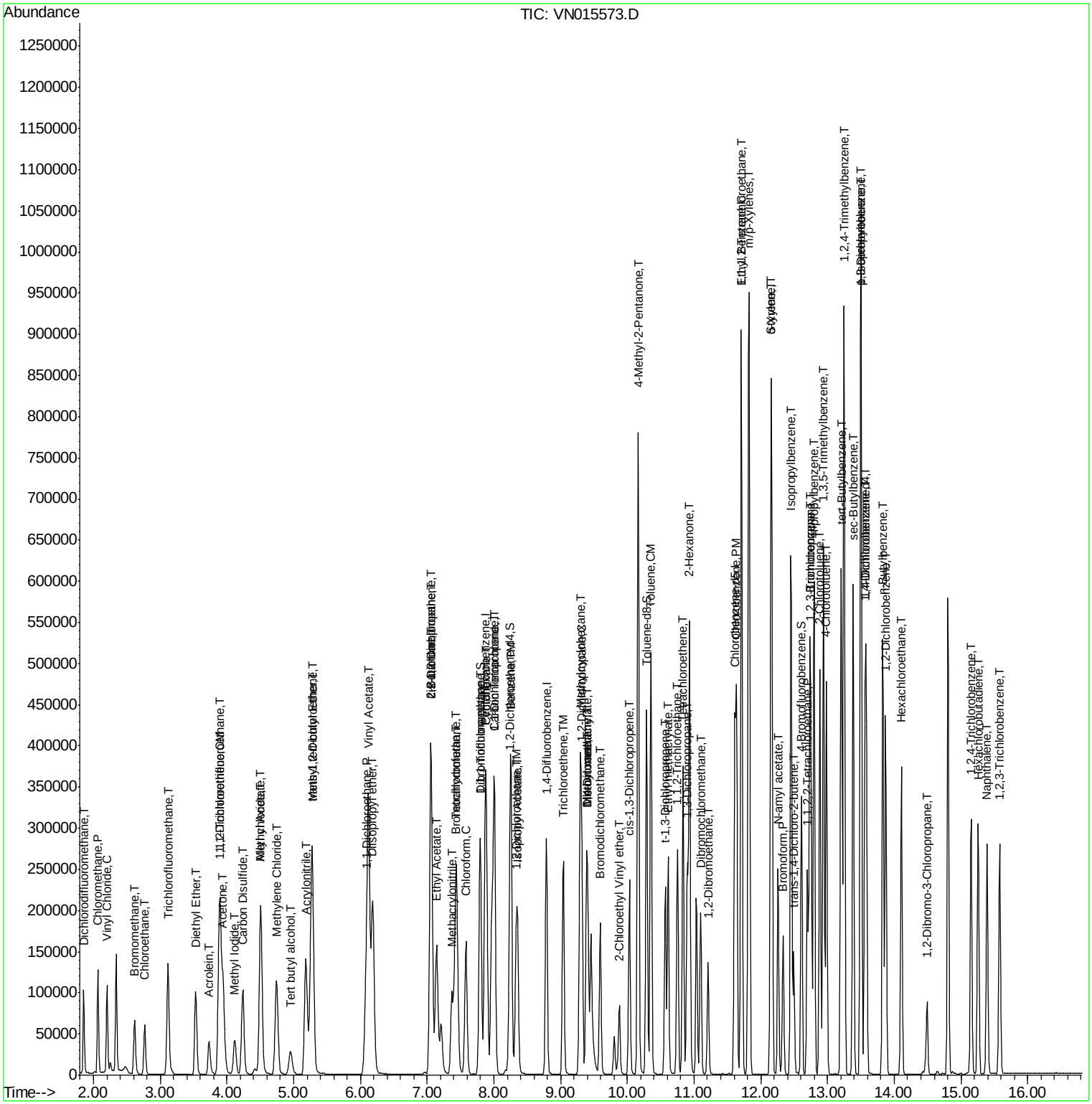

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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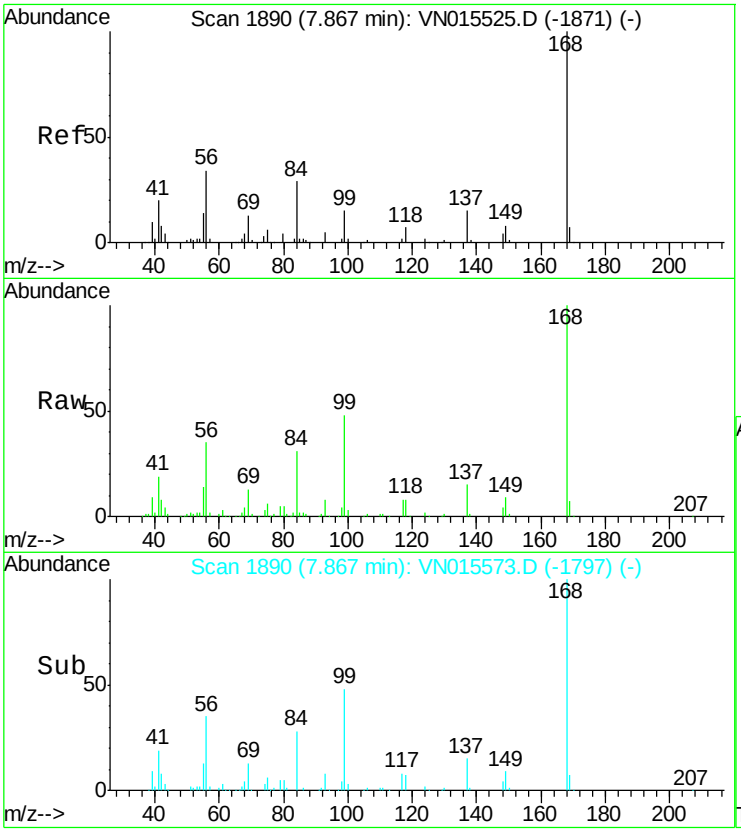
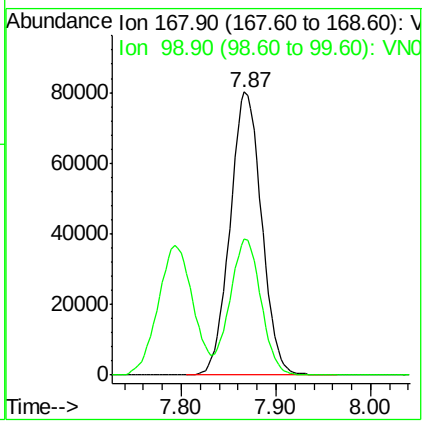
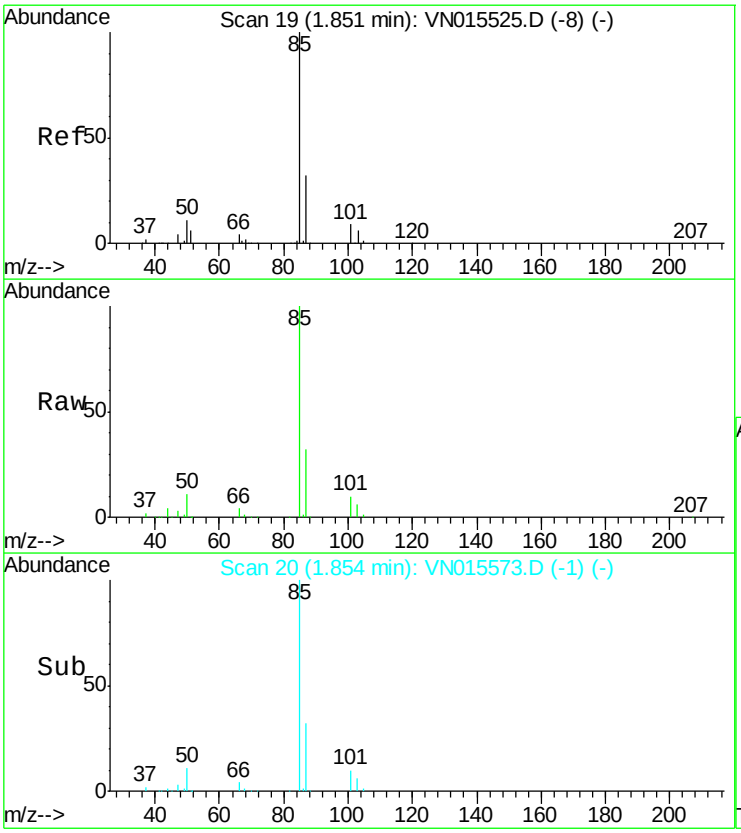


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:168 Resp: 185615

Ion	Ratio	Lower	Upper
168	100		
99	48.0	39.0	58.4

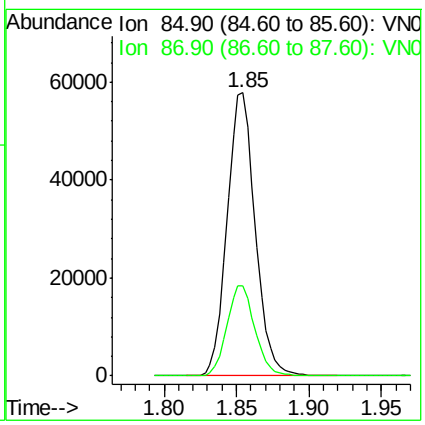




#2
Dichlorodifluoromethane
Concen: 54.00 ug/l
RT: 1.85 min Scan# 20
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 85 Resp: 77359

Ion	Ratio	Lower	Upper
85	100		
87	31.6	16.1	48.2



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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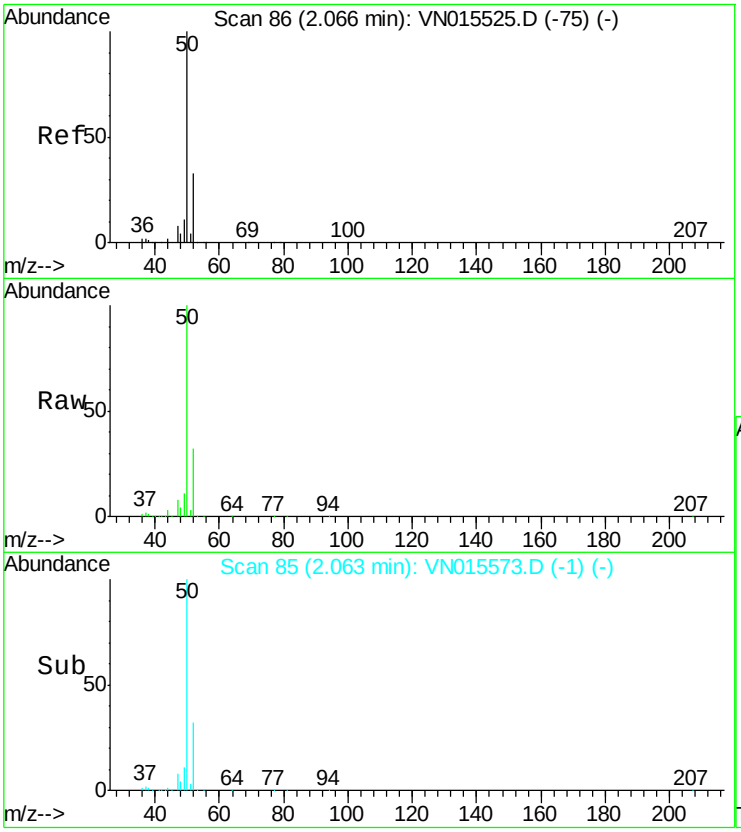
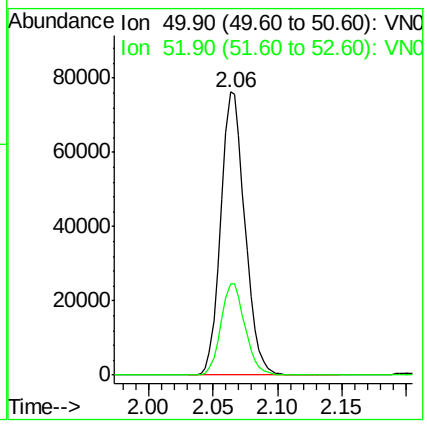
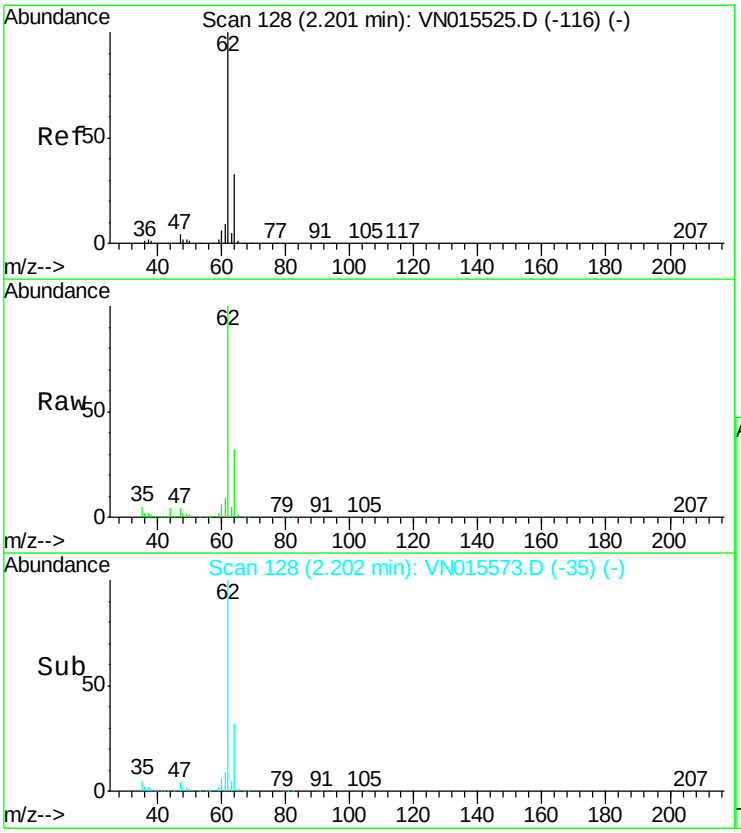


#4
Chloromethane
Concen: 57.75 ug/l
RT: 2.06 min Scan# 85
Delta R.T. -0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 50 Resp: 99156

Ion	Ratio	Lower	Upper
50	100		
52	32.3	26.2	39.2

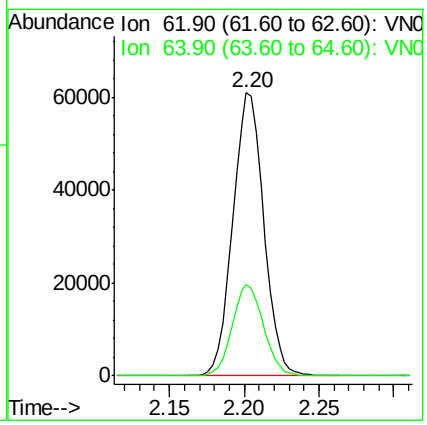




#5
Vinyl Chloride
Concen: 50.79 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 62 Resp: 88108

Ion	Ratio	Lower	Upper
62	100		
64	32.4	26.2	39.4



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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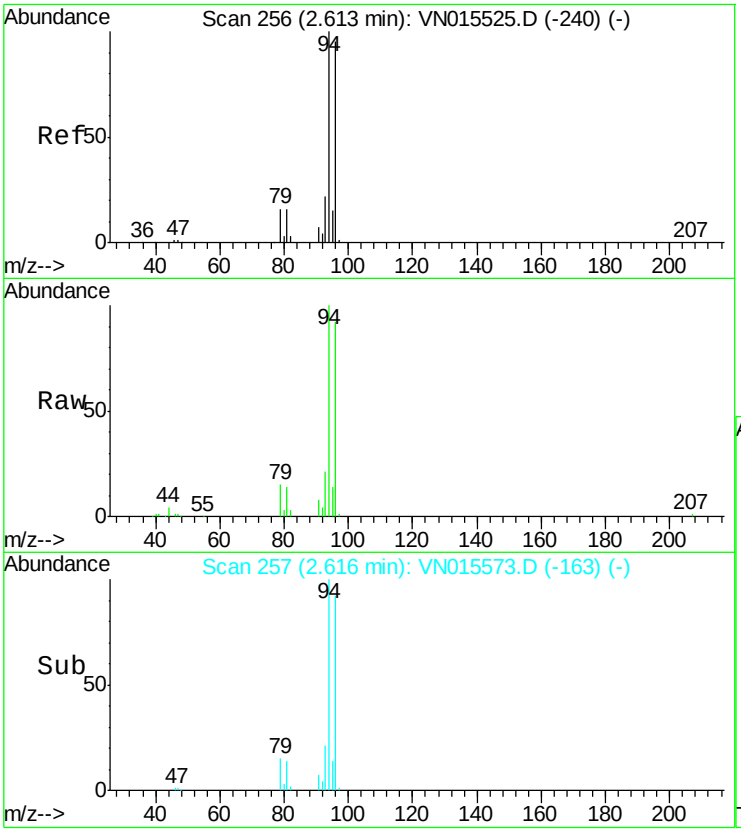
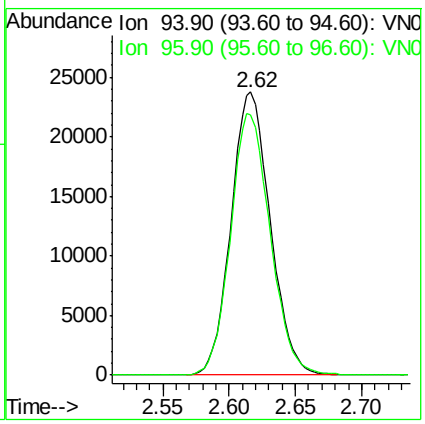
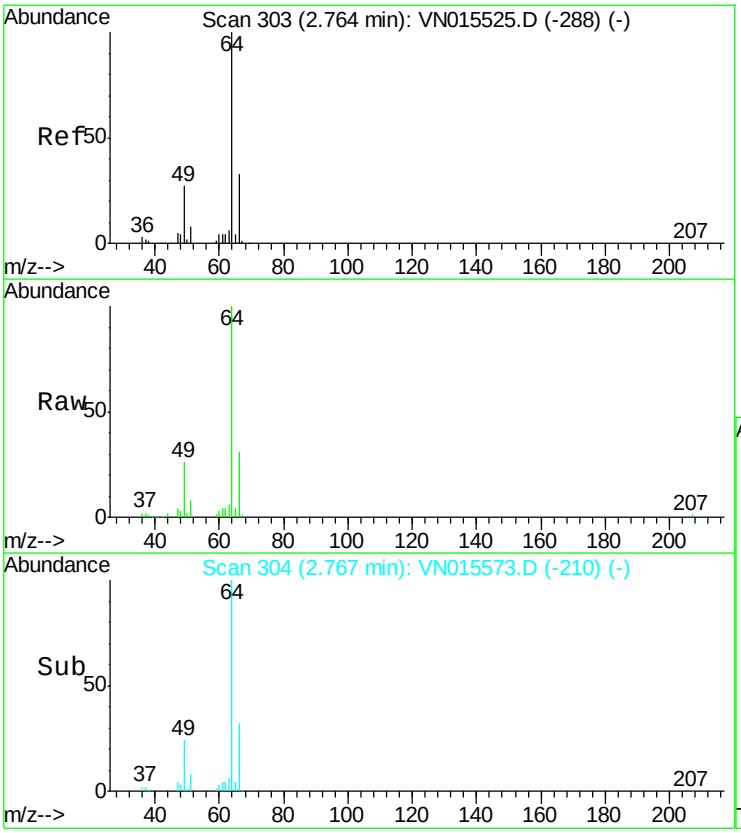


#6
Bromomethane
Concen: 48.53 ug/l
RT: 2.62 min Scan# 257
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 94 Resp: 48870

Ion	Ratio	Lower	Upper
94	100		
96	92.1	75.8	113.6

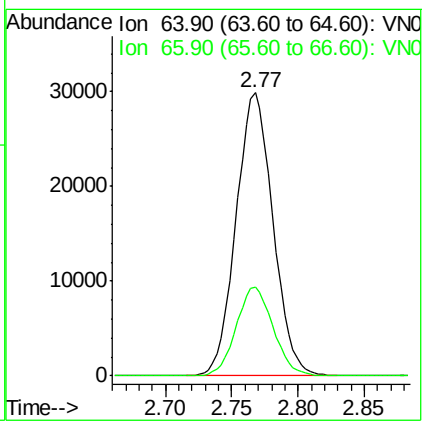




#7
Chloroethane
Concen: 53.08 ug/l
RT: 2.77 min Scan# 304
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 64 Resp: 58008

Ion	Ratio	Lower	Upper
64	100		
66	31.5	26.3	39.5



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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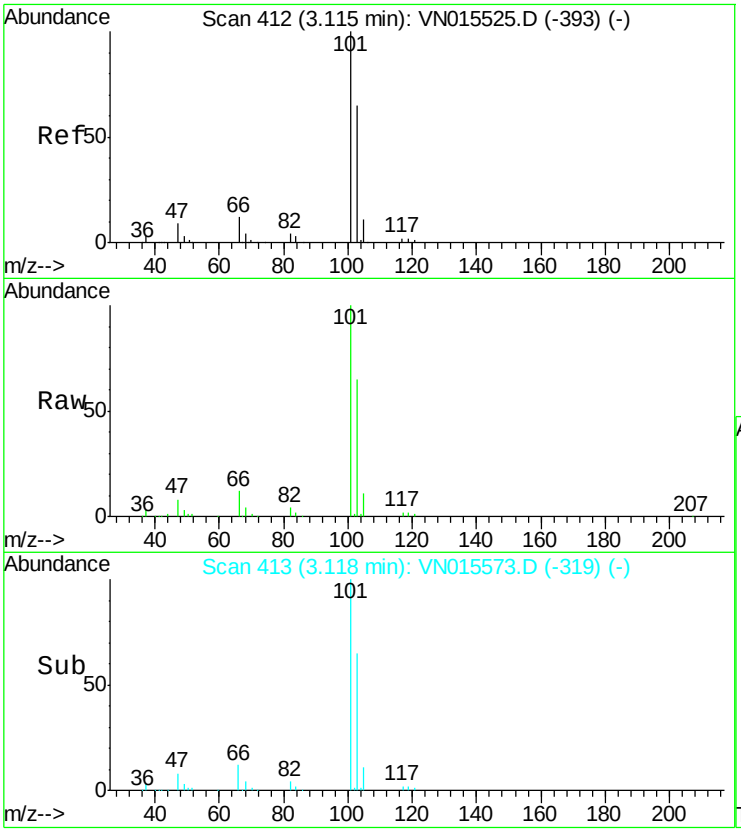
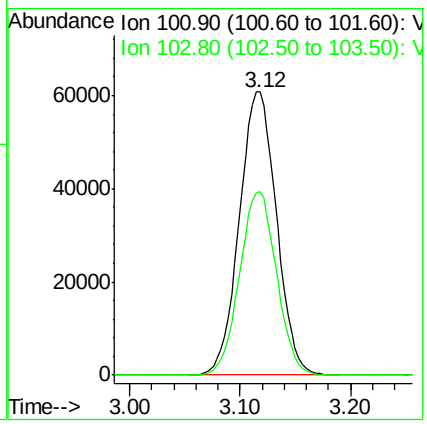
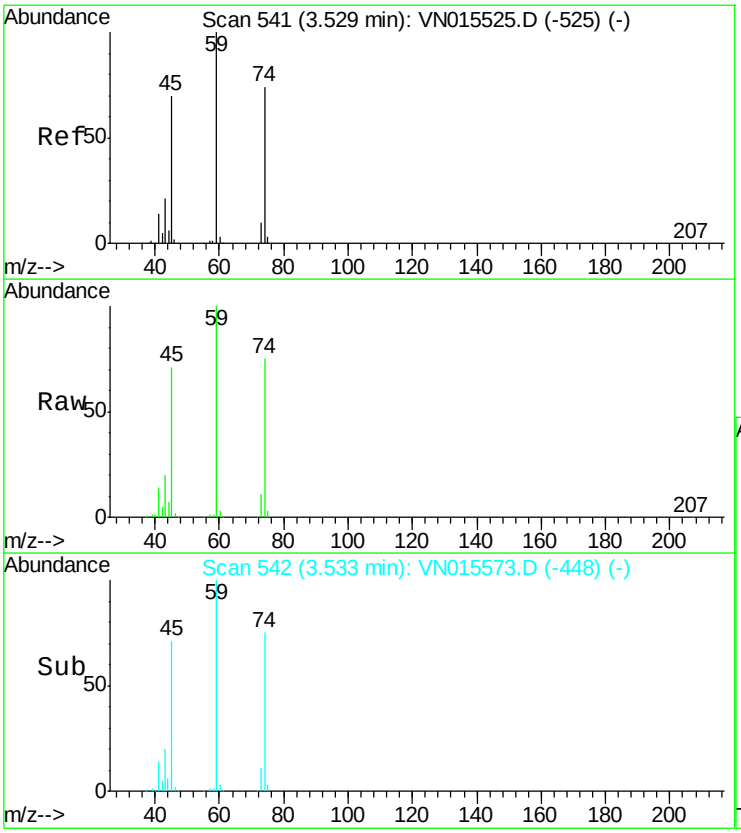


#8
Trichlorofluoromethane
Concen: 50.42 ug/l
RT: 3.12 min Scan# 413
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:101 Resp: 141969

Ion	Ratio	Lower	Upper
101	100		
103	64.7	52.1	78.1

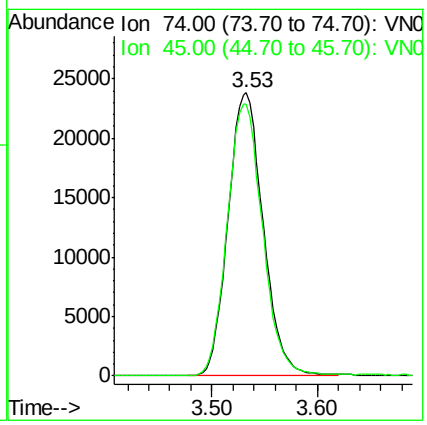


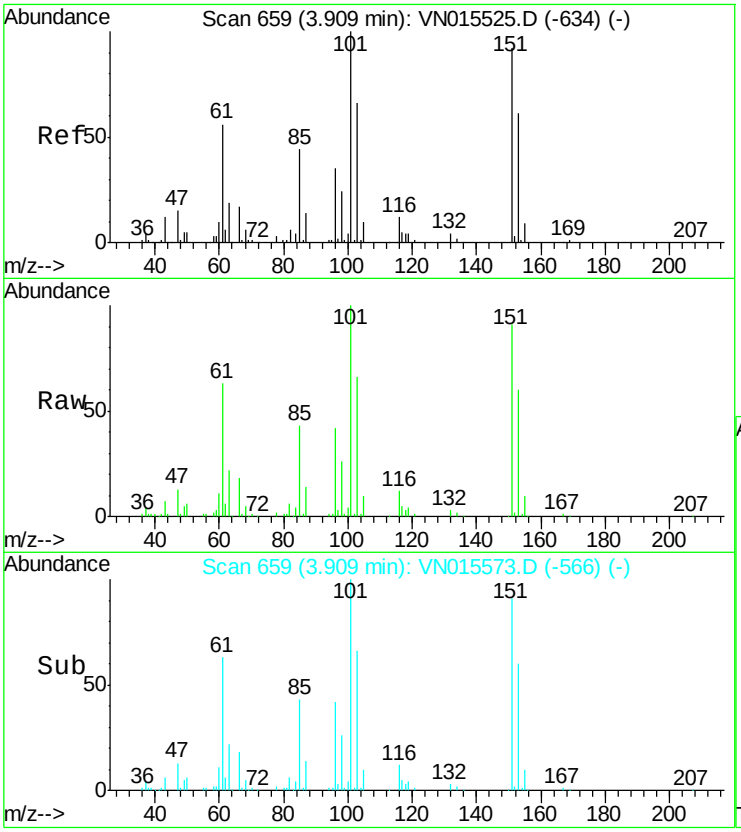


#9
Diethyl Ether
Concen: 52.72 ug/l
RT: 3.53 min Scan# 542
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 74 Resp: 54899

Ion	Ratio	Lower	Upper
74	100		
45	97.2	48.9	146.8





#10
1,1,2-Trichlorotrifluoroethane
Concen: 50.79 ug/l
RT: 3.91 min Scan# 659
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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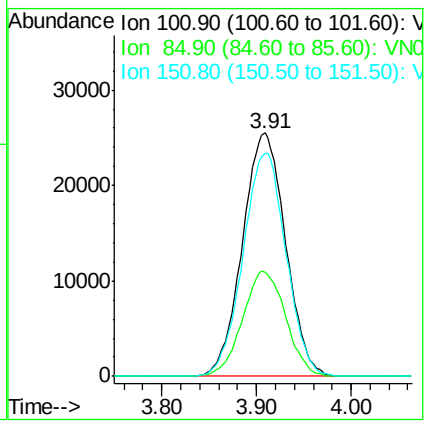
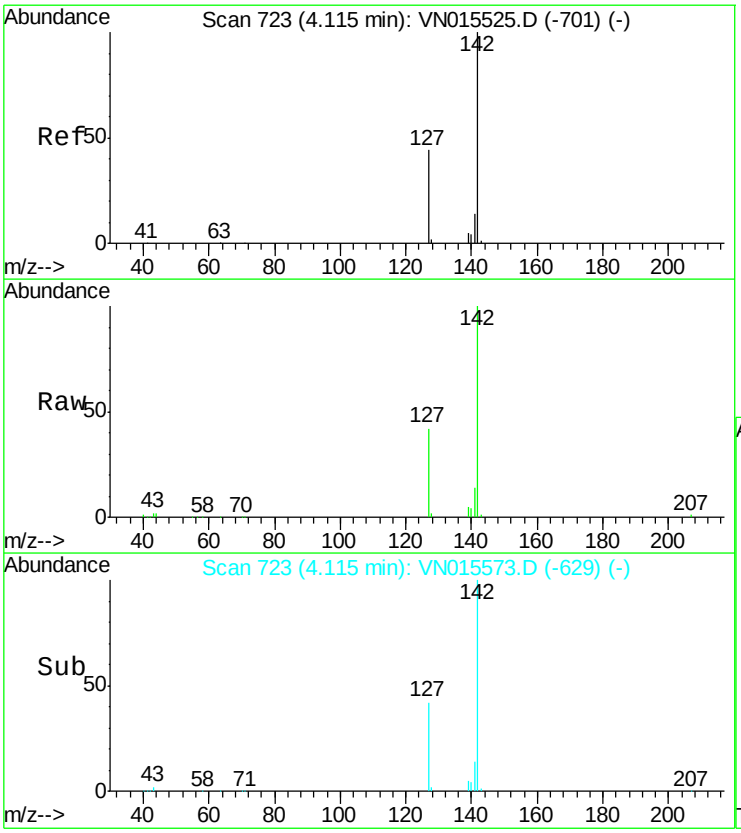
Tgt Ion:101 Resp: 80661

Ion	Ratio	Lower	Upper
101	100		
85	43.3	34.5	51.7
151	91.7	72.9	109.3

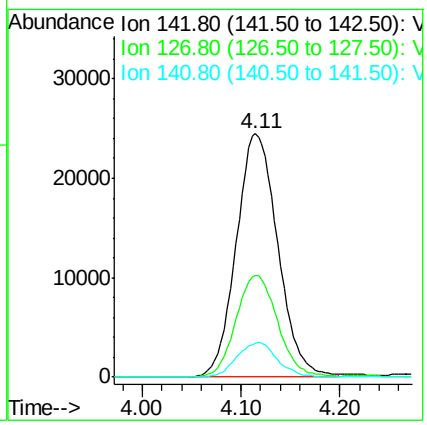




#11
Methyl Iodide
Concen: 36.27 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:142 Resp: 71437

Ion	Ratio	Lower	Upper
142	100		
127	42.0	34.7	52.1
141	13.9	11.4	17.0



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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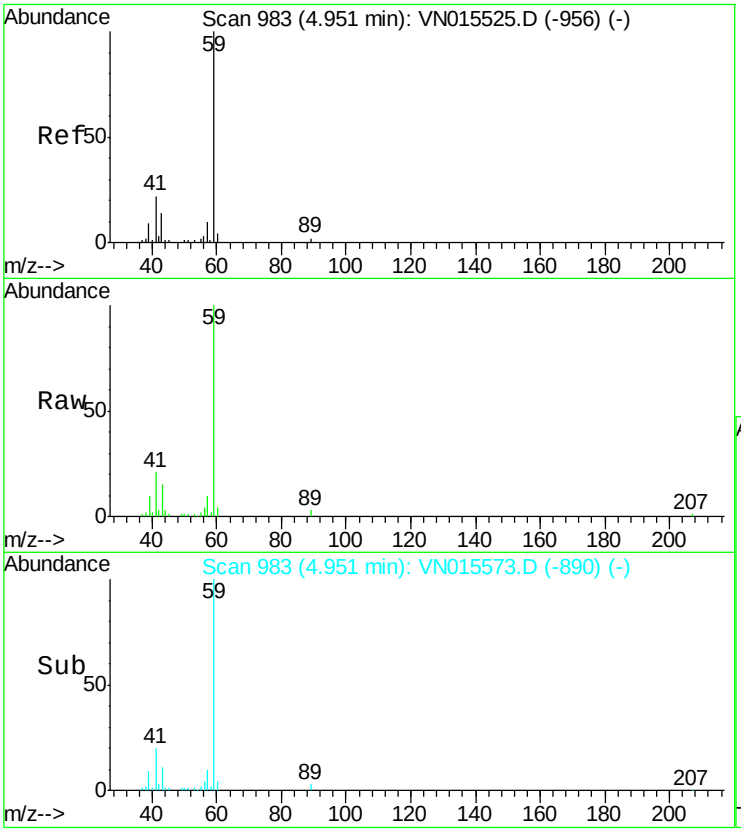
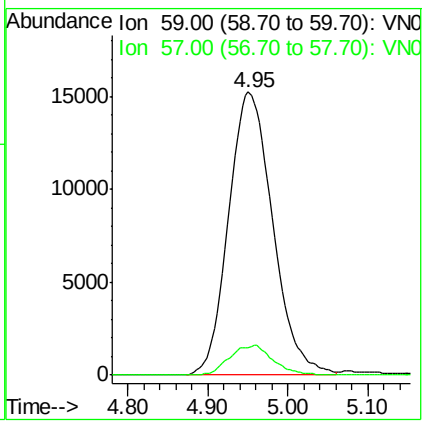
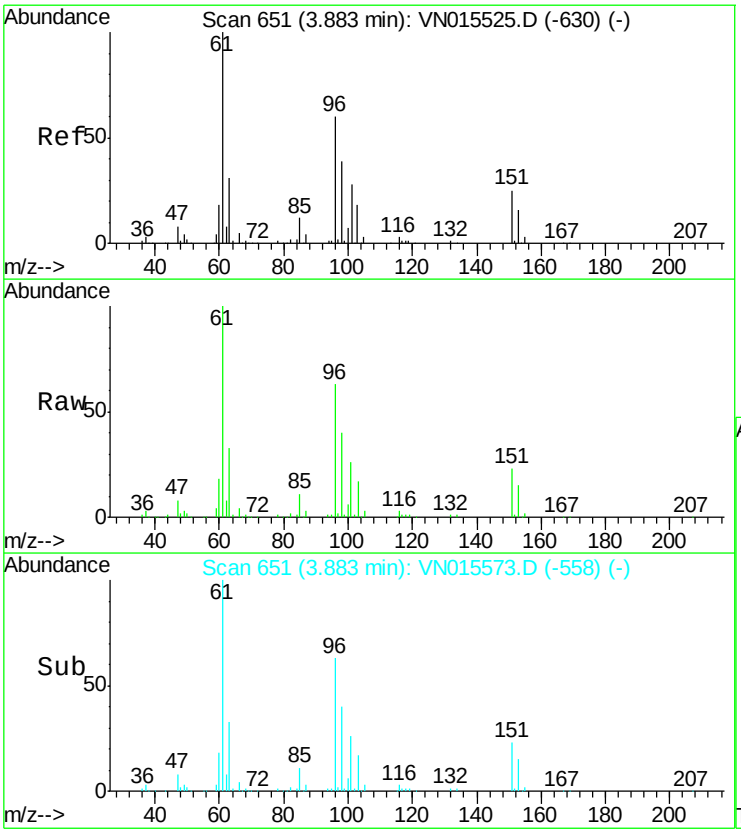


#12
Tert butyl alcohol
Concen: 267.36 ug/l
RT: 4.95 min Scan# 983
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 59 Resp: 57336

Ion	Ratio	Lower	Upper
59	100		
57	10.4	8.4	12.6

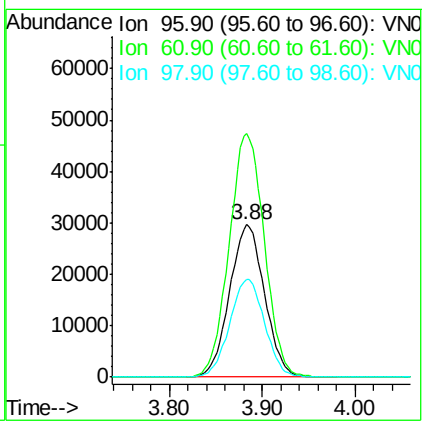




#13
1,1-Dichloroethene
Concen: 51.01 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 96 Resp: 77458

Ion	Ratio	Lower	Upper
96	100		
61	160.0	132.3	198.5
98	64.6	51.8	77.6



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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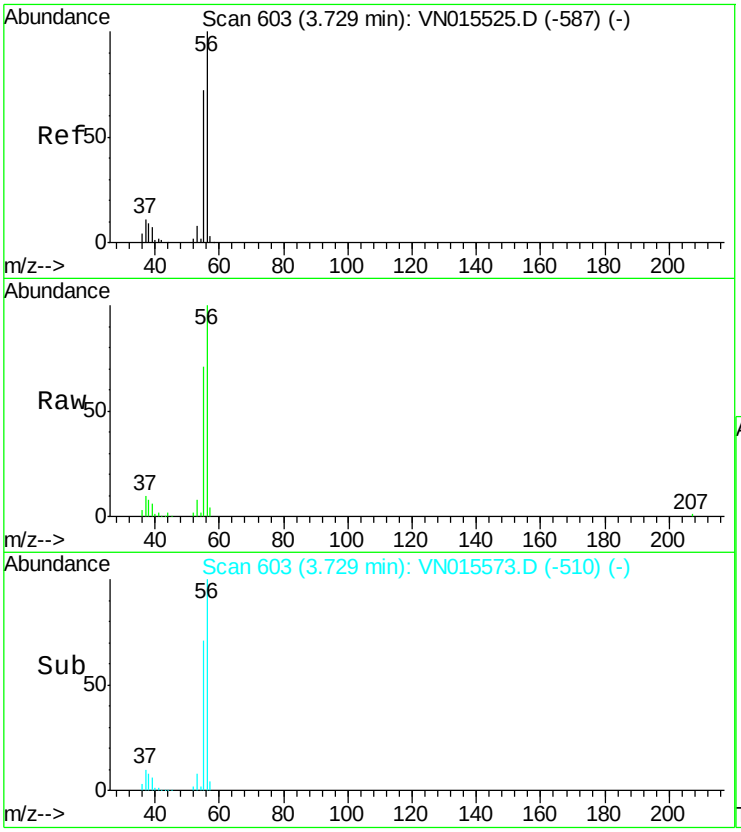
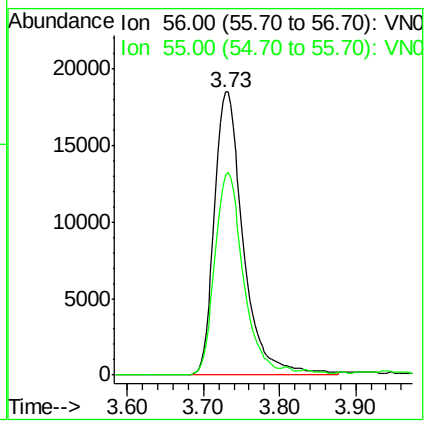
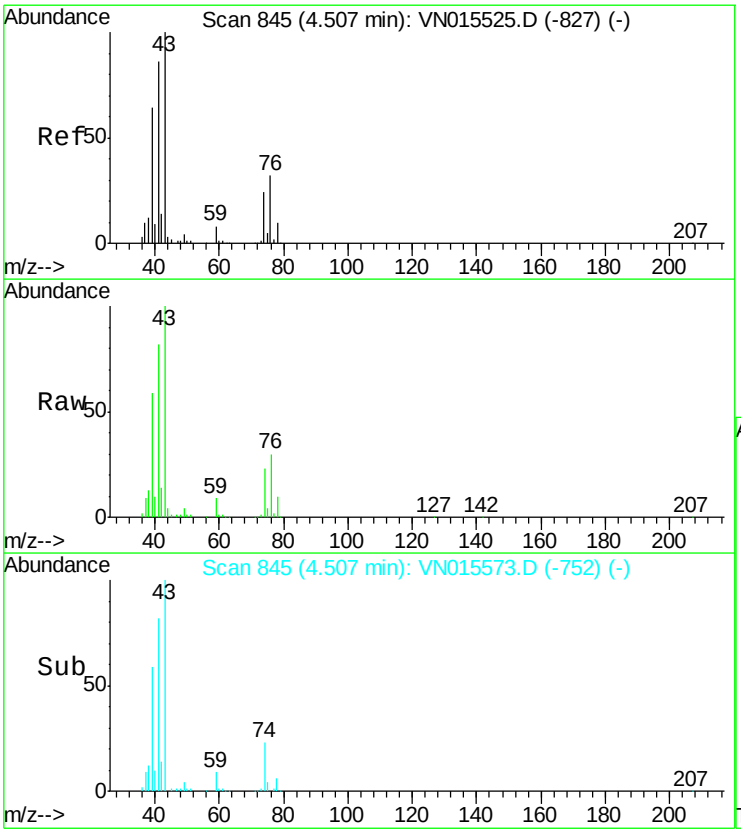


#14
Acrolein
Concen: 254.72 ug/l
RT: 3.73 min Scan# 603
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 56 Resp: 49104

Ion	Ratio	Lower	Upper
56	100		
55	69.8	57.9	86.9

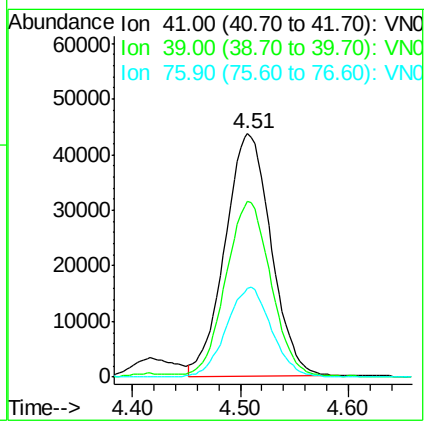




#15
Allyl chloride
Concen: 48.61 ug/l
RT: 4.51 min Scan# 845
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 41 Resp: 129133

Ion	Ratio	Lower	Upper
41	100		
39	70.5	57.4	86.2
76	35.7	28.5	42.7



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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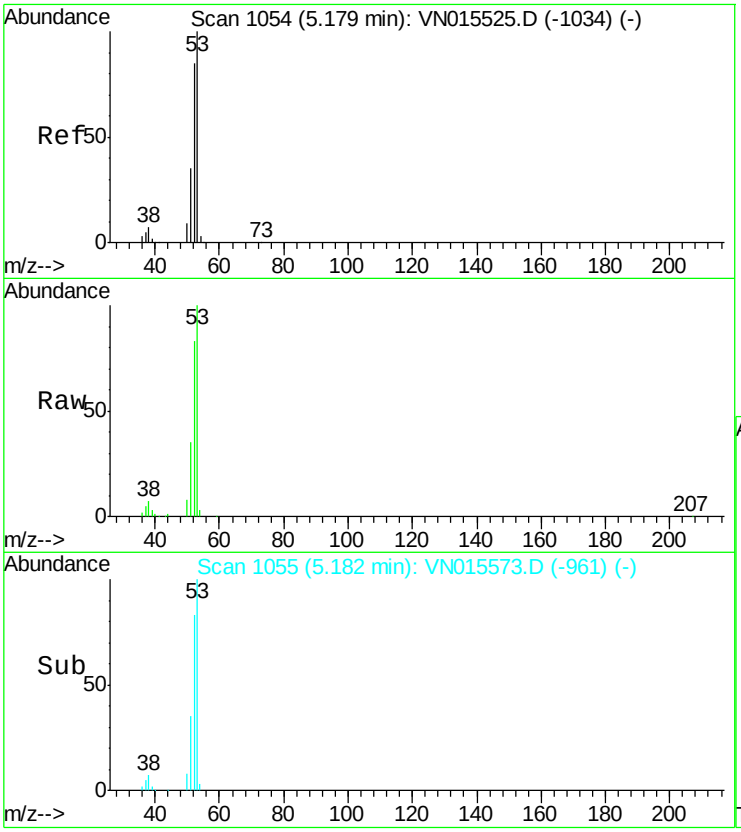
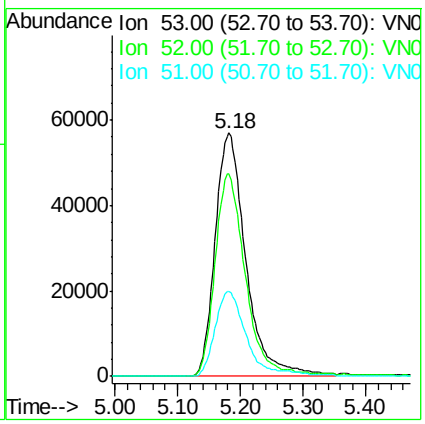
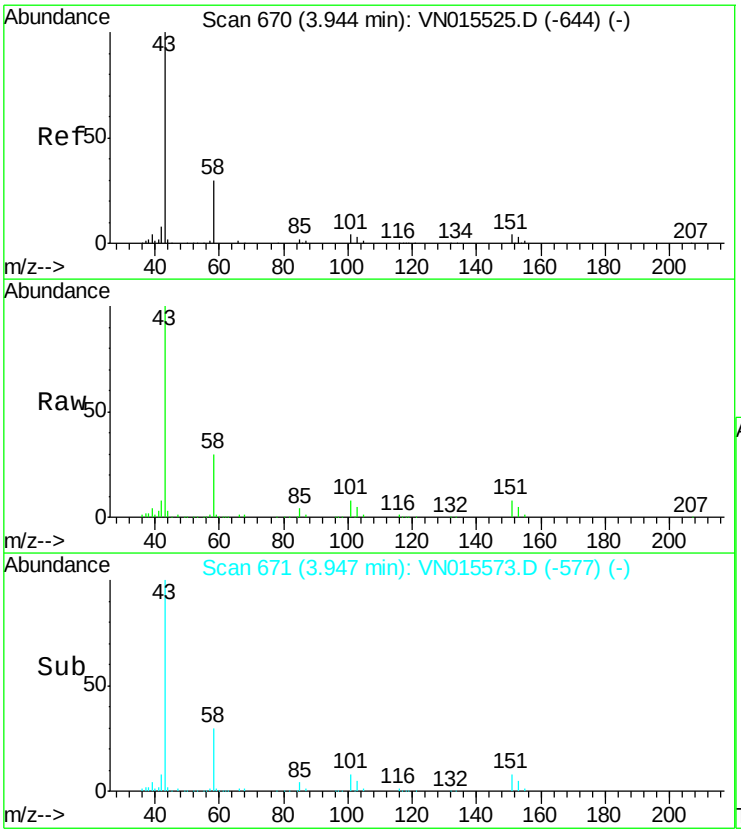


#16
Acrylonitrile
Concen: 283.69 ug/l
RT: 5.18 min Scan# 1055
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 53 Resp: 194053

Ion	Ratio	Lower	Upper
53	100		
52	81.9	65.7	98.5
51	35.9	29.1	43.7

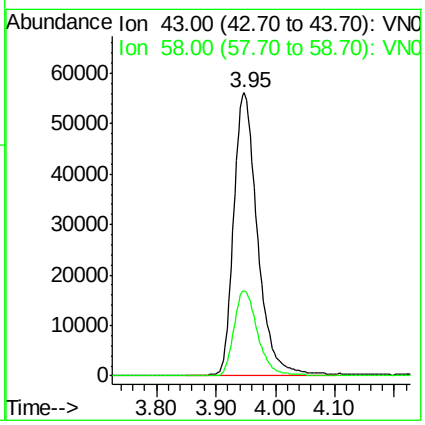




#17
Acetone
Concen: 234.20 ug/l
RT: 3.95 min Scan# 671
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 156895

Ion	Ratio	Lower	Upper
43	100		
58	30.2	24.2	36.2



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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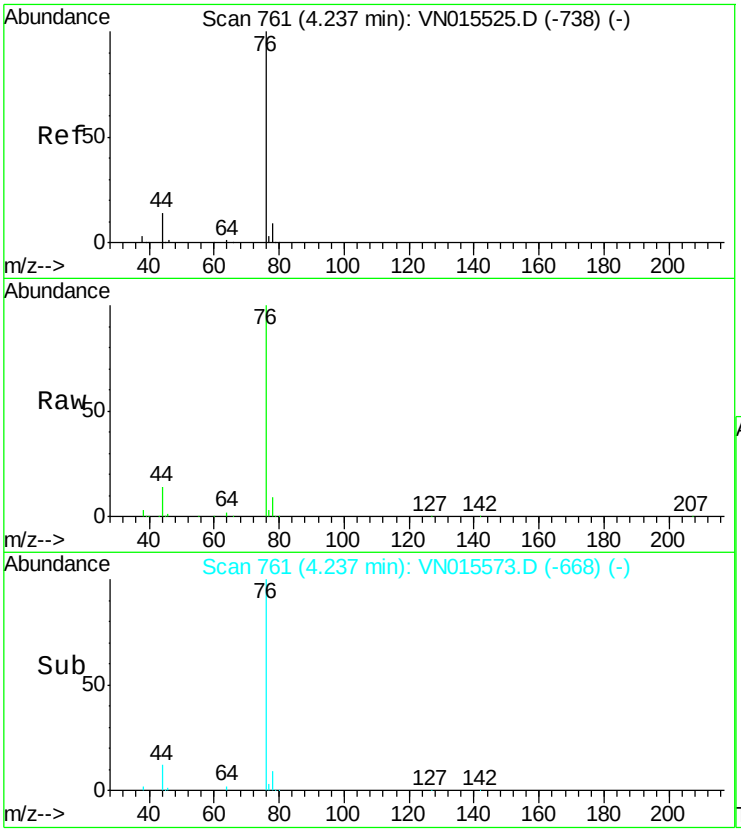
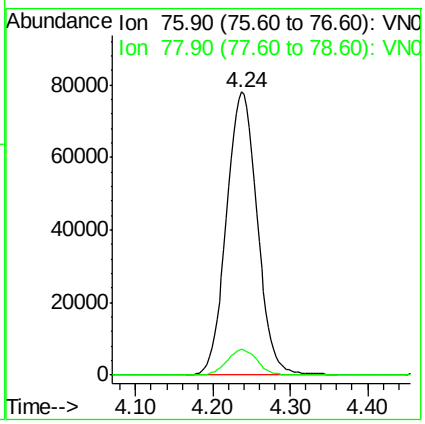
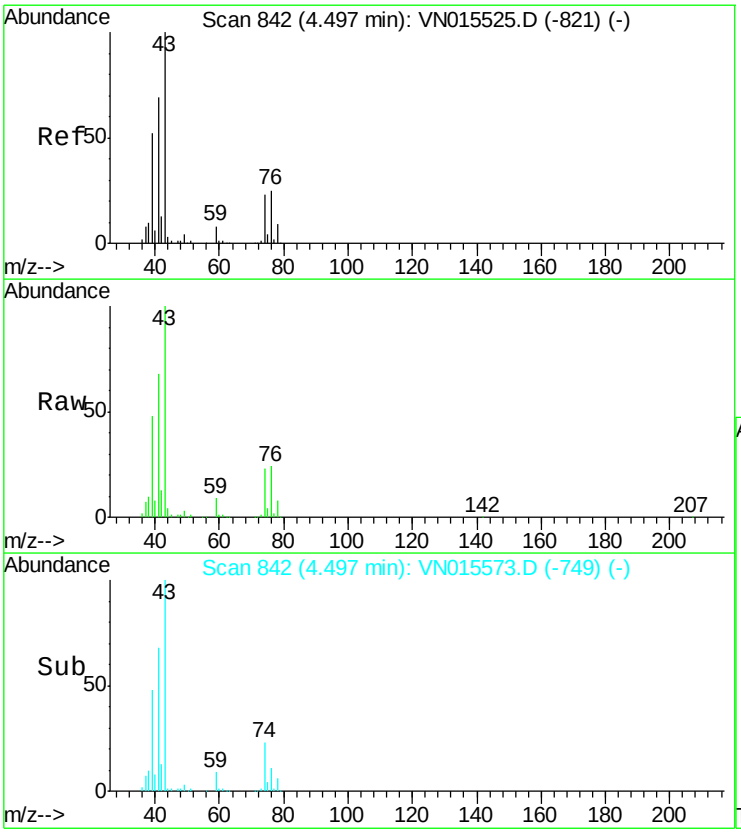


#18
Carbon Disulfide
Concen: 50.33 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 76 Resp: 215374

Ion	Ratio	Lower	Upper
76	100		
78	9.0	7.5	11.3

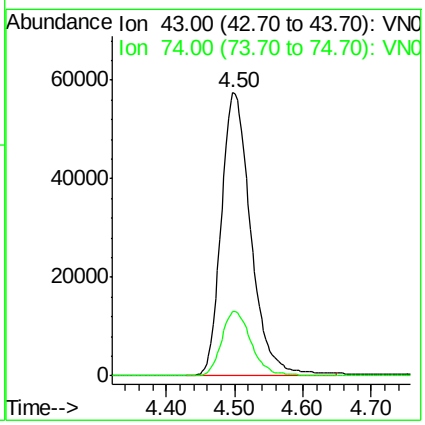




#19
Methyl Acetate
Concen: 53.28 ug/l
RT: 4.50 min Scan# 842
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 172649

Ion	Ratio	Lower	Upper
43	100		
74	22.9	18.5	27.7



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
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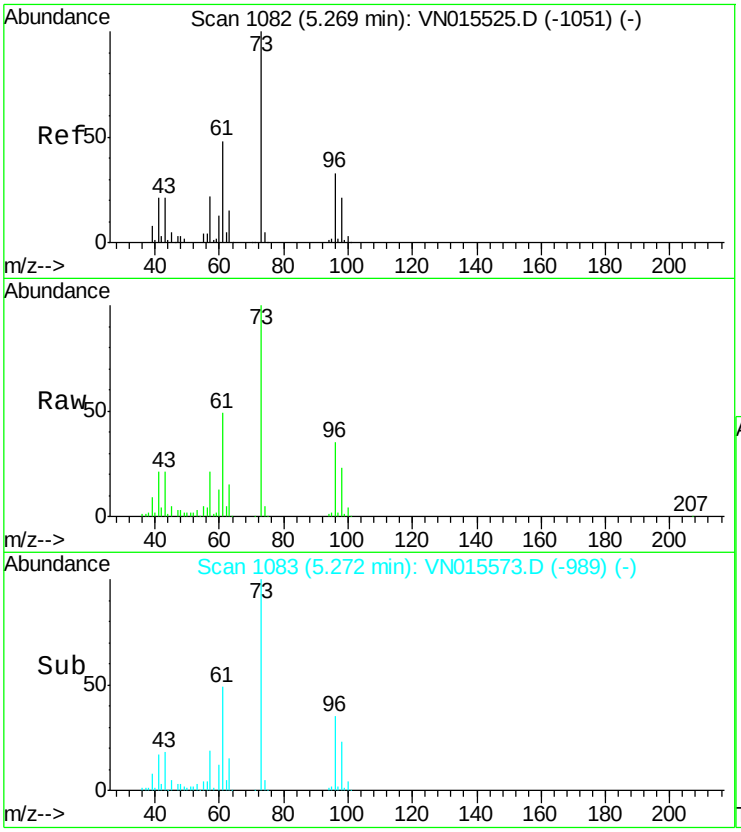
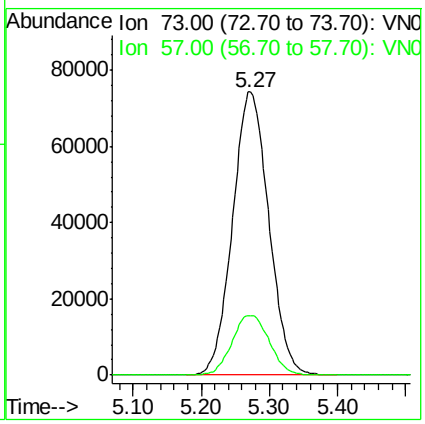
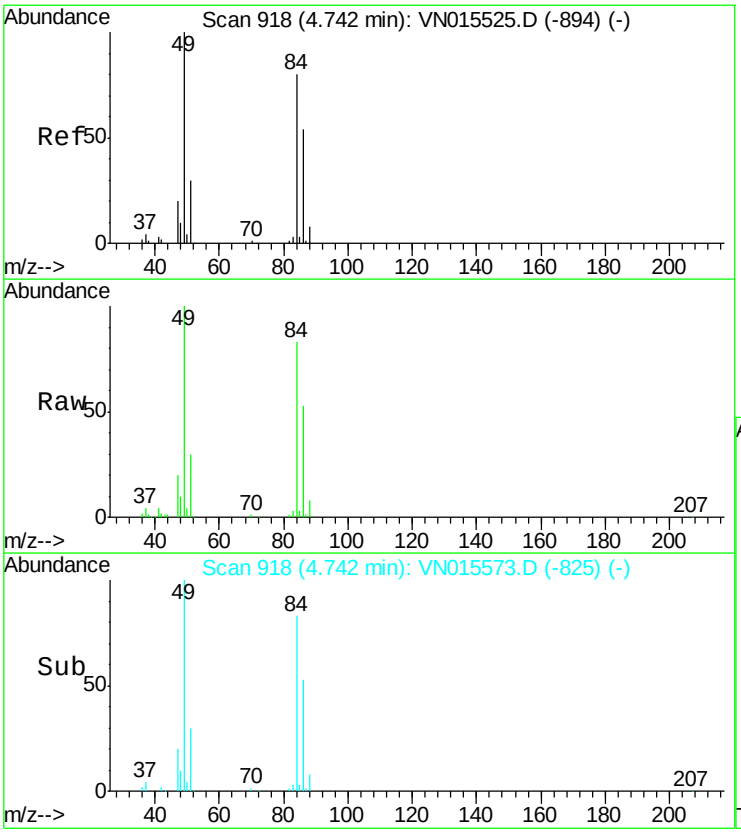


#20
Methyl tert-butyl Ether
Concen: 51.22 ug/l
RT: 5.27 min Scan# 1083
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 73 Resp: 273777

Ion	Ratio	Lower	Upper
73	100		
57	21.0	17.3	25.9

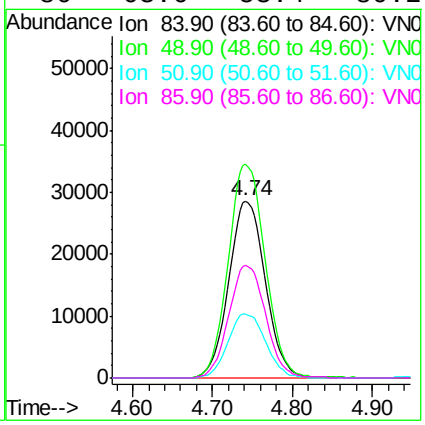




#21
Methylene Chloride
Concen: 51.17 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 84 Resp: 88888

Ion	Ratio	Lower	Upper
84	100		
49	120.7	99.8	149.6
51	35.9	30.2	45.2
86	63.6	53.4	80.2



Instrument :
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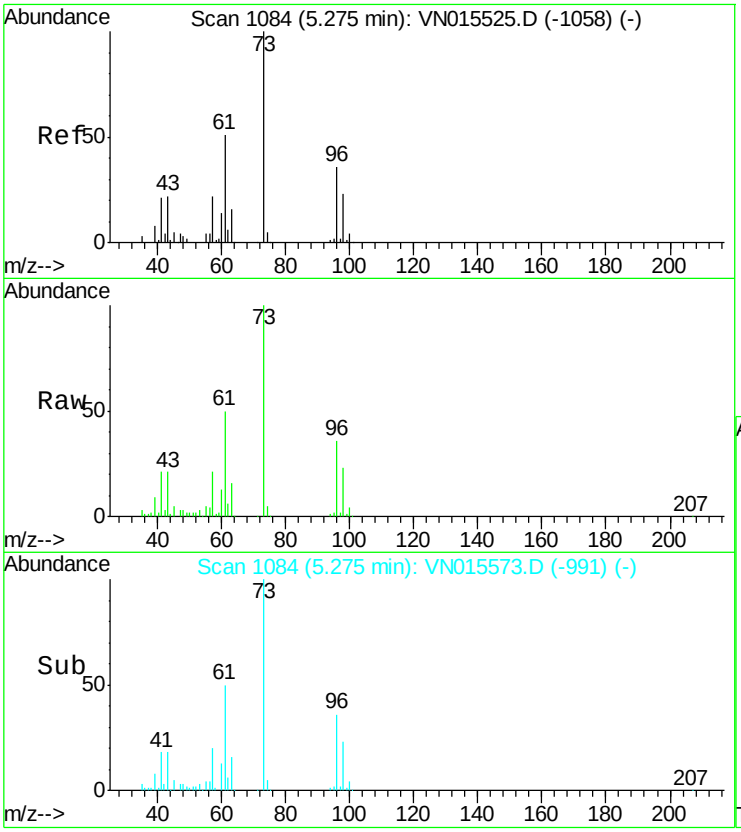
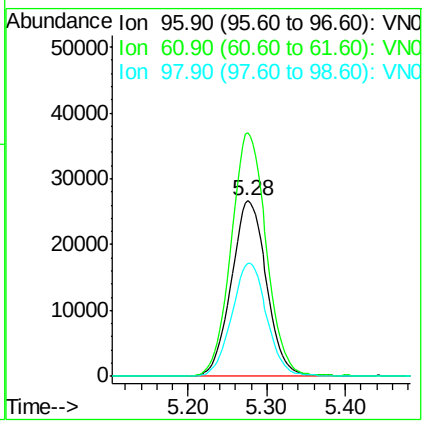
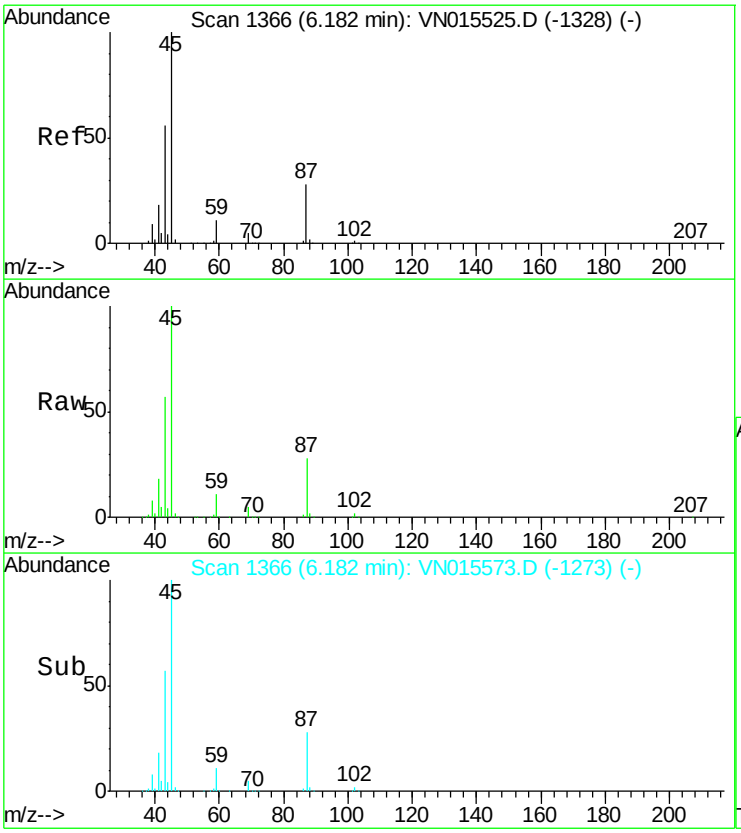


#22
trans-1,2-Dichloroethene
Concen: 52.13 ug/l
RT: 5.28 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 96 Resp: 83460

Ion	Ratio	Lower	Upper
96	100		
61	138.9	113.3	169.9
98	64.5	50.4	75.6

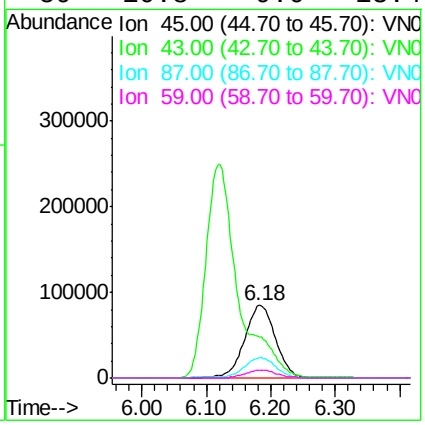




#23
Diisopropyl ether
Concen: 51.96 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 45 Resp: 284308

Ion	Ratio	Lower	Upper
45	100		
43	56.2	44.6	67.0
87	27.6	22.3	33.5
59	10.8	9.0	13.4



Instrument :
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LabSampleId :
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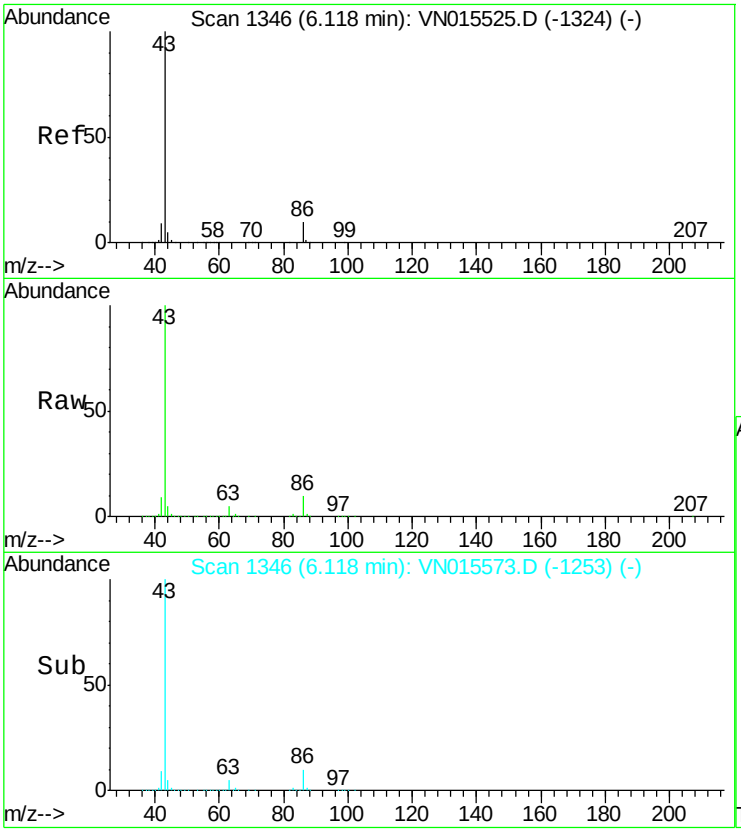
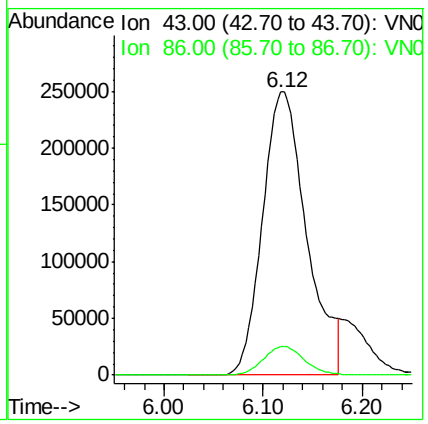
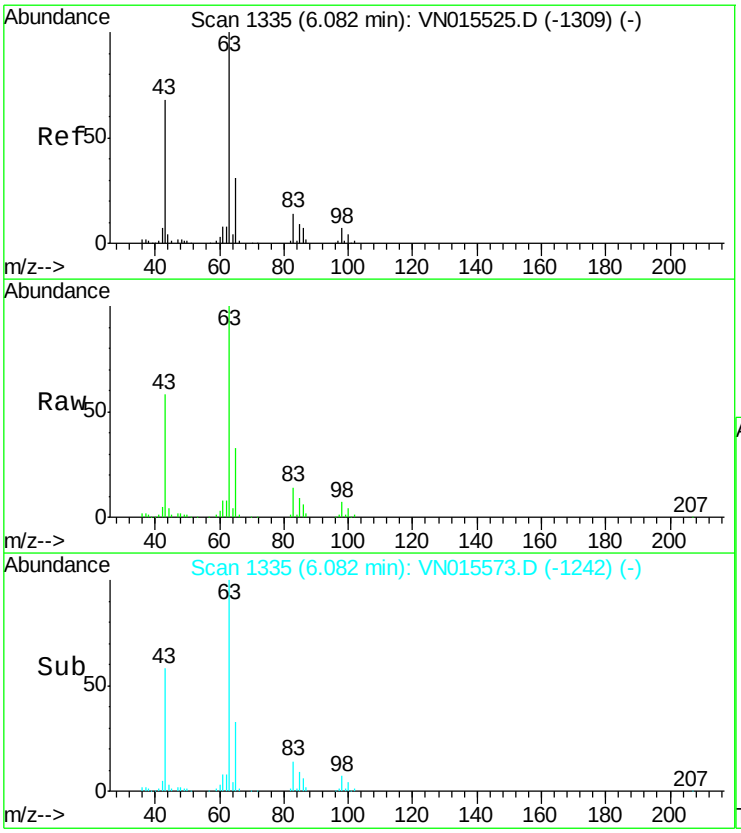


#24
Vinyl Acetate
Concen: 282.69 ug/l m
RT: 6.12 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 768391

Ion	Ratio	Lower	Upper
43	100		
86	10.2	7.9	11.9

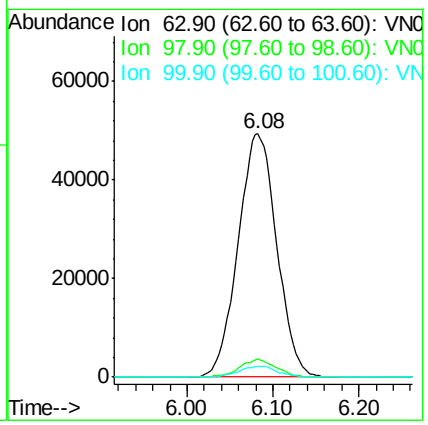


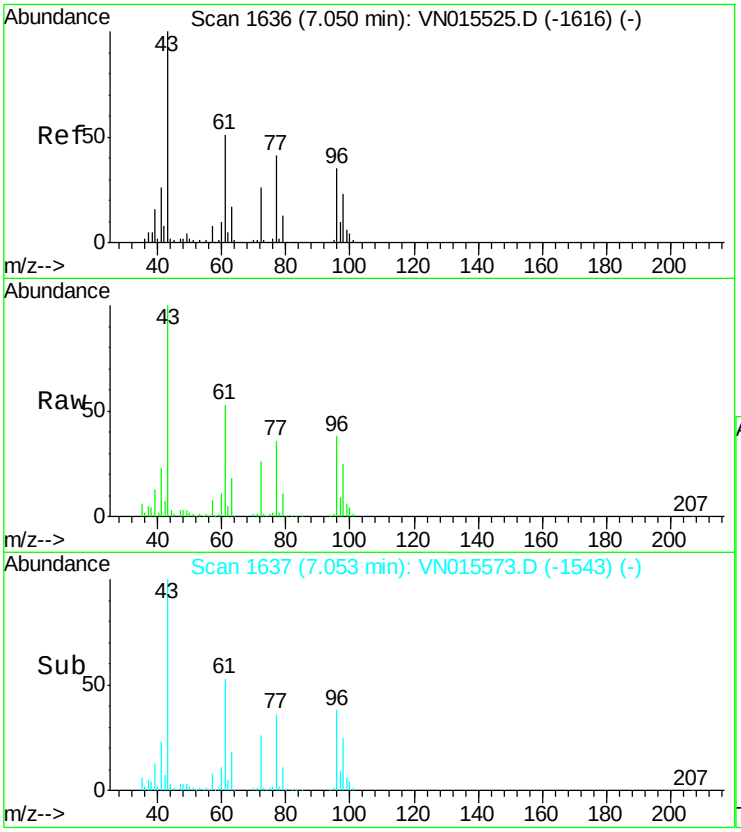


#25
1,1-Dichloroethane
Concen: 51.22 ug/l
RT: 6.08 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 63 Resp: 154301

Ion	Ratio	Lower	Upper
63	100		
98	7.3	3.3	9.9
100	4.3	2.1	6.3





#26
2-Butanone
Concen: 259.96 ug/l
RT: 7.05 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 245690

Ion	Ratio	Lower	Upper
43	100		
72	25.6	20.7	31.1

Instrument :
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LabSampleId :
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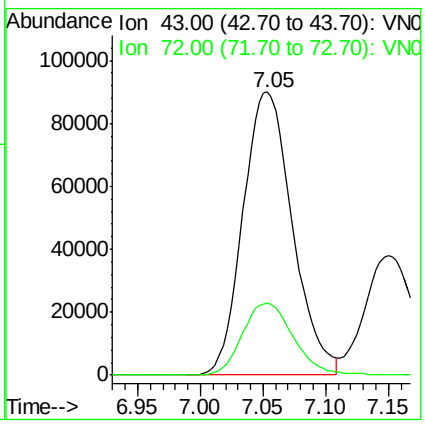
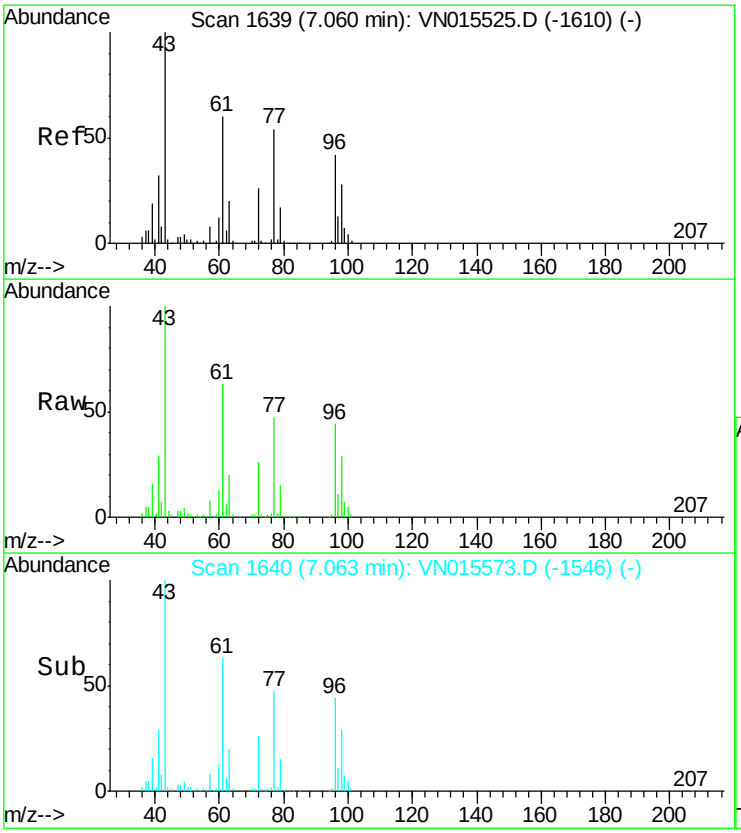
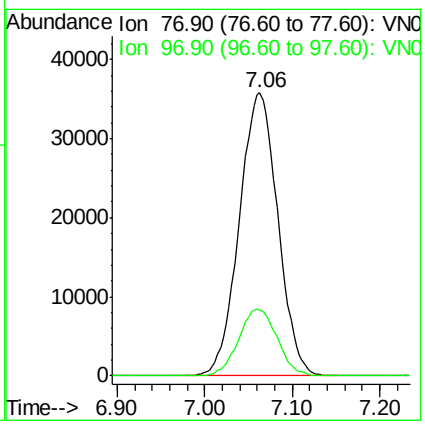




#27
2,2-Dichloropropane
Concen: 41.07 ug/l
RT: 7.06 min Scan# 1640
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 77 Resp: 109249

Ion	Ratio	Lower	Upper
77	100		
97	23.6	11.6	34.7



Instrument :
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LabSampleId :
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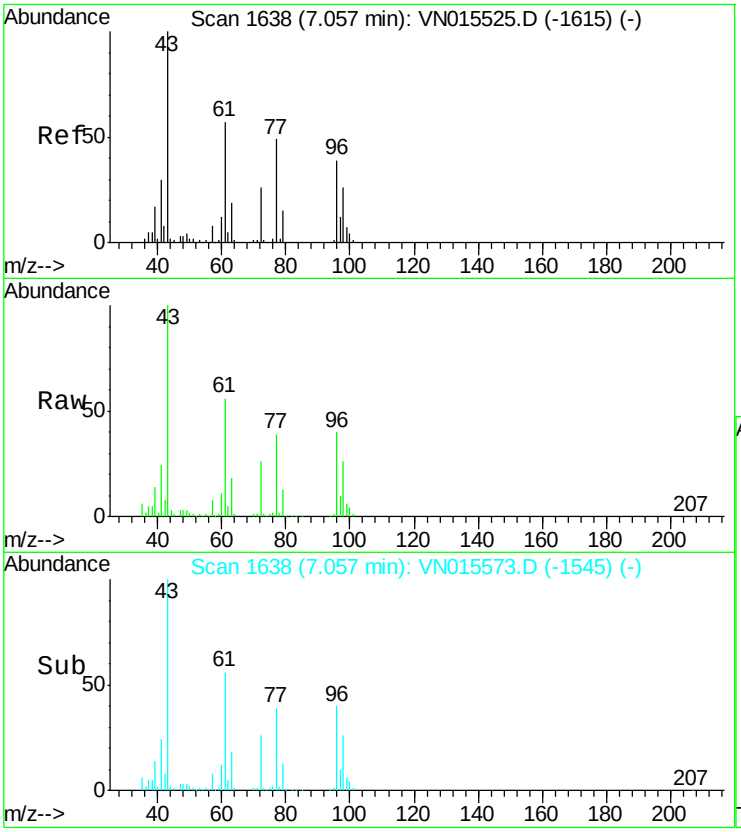
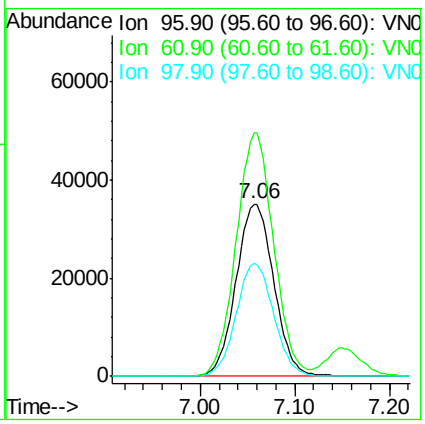
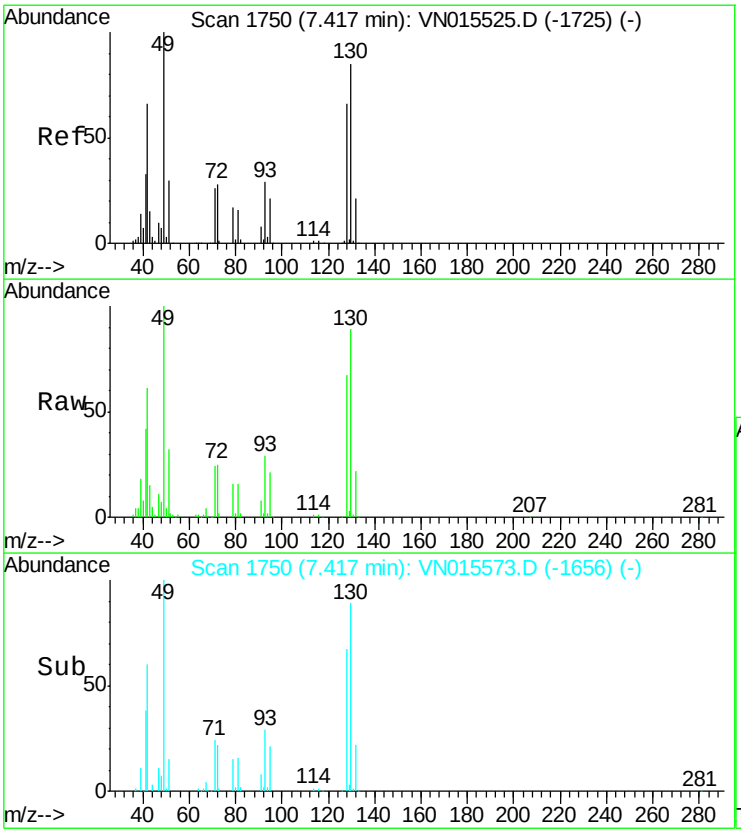


#28
cis-1,2-Dichloroethene
Concen: 51.77 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 96 Resp: 97317

Ion	Ratio	Lower	Upper
96	100		
61	140.5	0.0	292.0
98	65.0	0.0	129.4

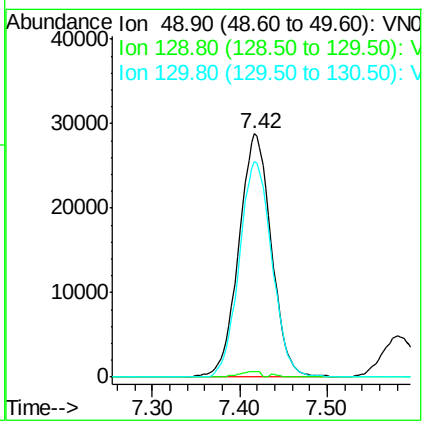




#29
Bromochloromethane
Concen: 56.16 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 49 Resp: 74288

Ion	Ratio	Lower	Upper
49	100		
129	1.5	0.0	4.2
130	88.9	68.6	102.8



Instrument :
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LabSampleId :
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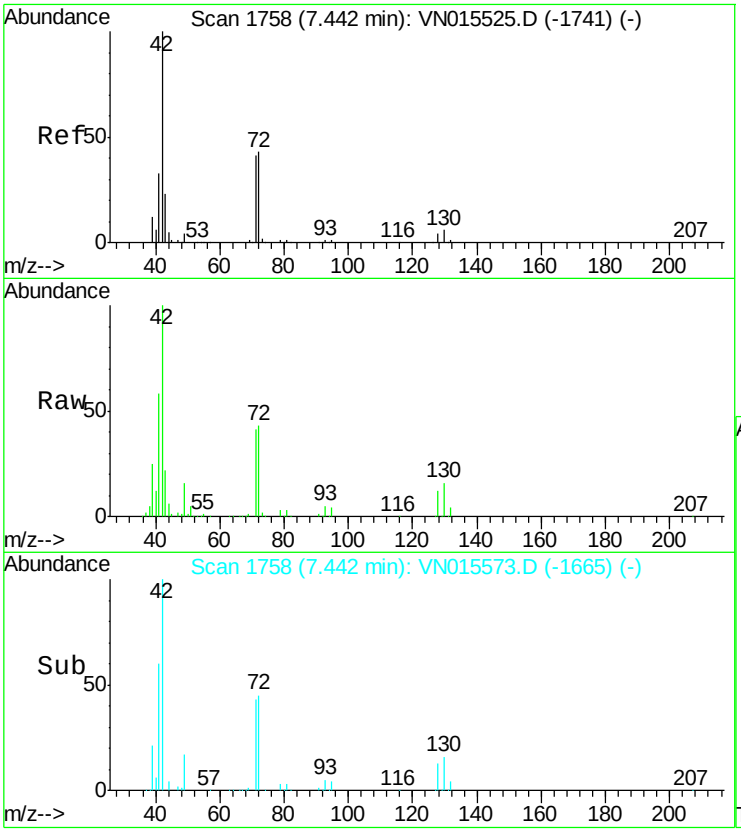
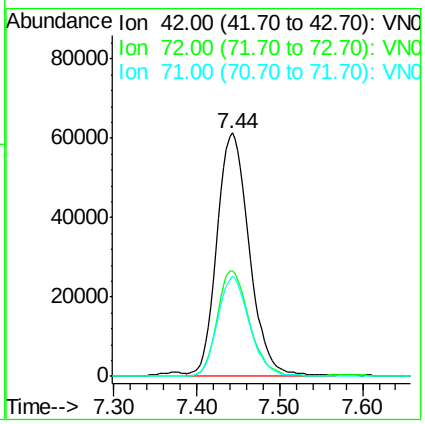
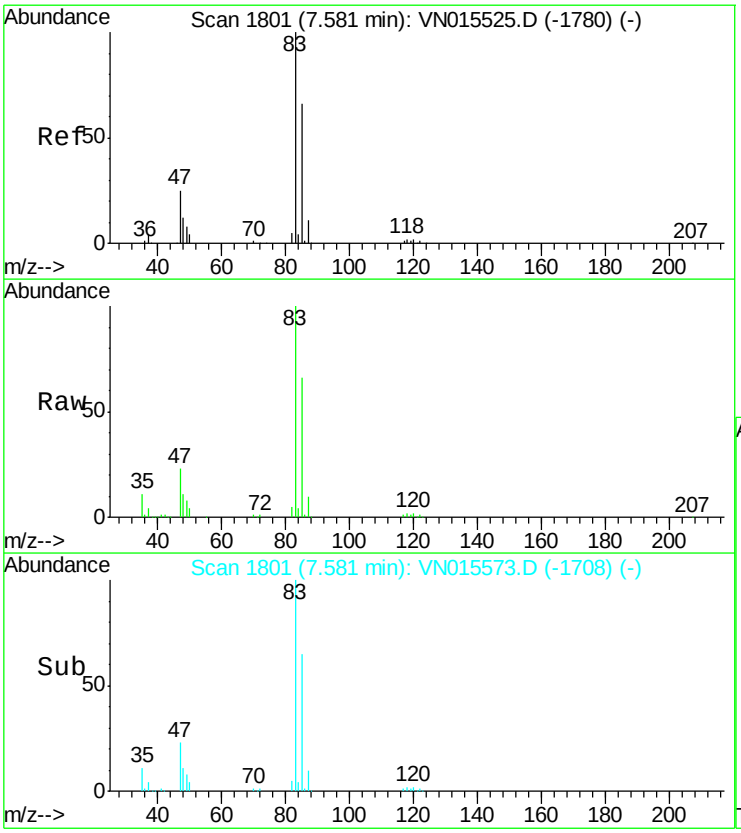


#30
Tetrahydrofuran
Concen: 259.10 ug/l
RT: 7.44 min Scan# 1758
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 42 Resp: 164768

Ion	Ratio	Lower	Upper
42	100		
72	43.4	34.2	51.2
71	40.8	32.5	48.7

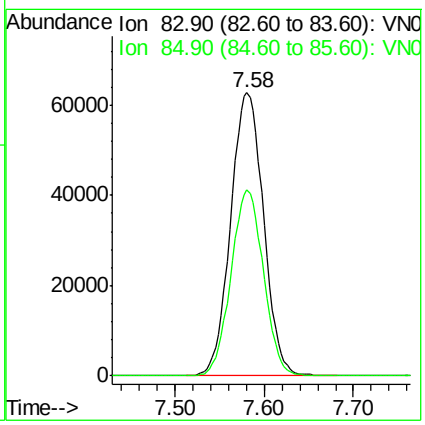




#31
Chloroform
Concen: 51.66 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 83 Resp: 160705

Ion	Ratio	Lower	Upper
83	100		
85	65.6	52.6	78.8



Instrument :
MSVOA_N
LabSampleId :
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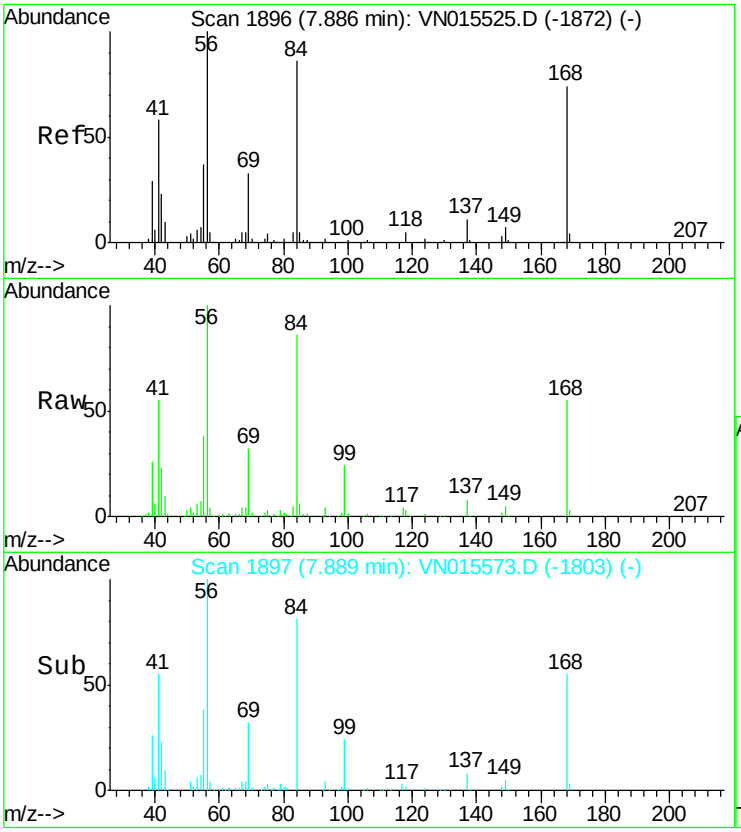
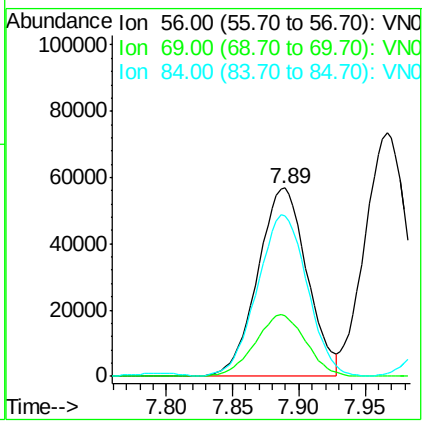
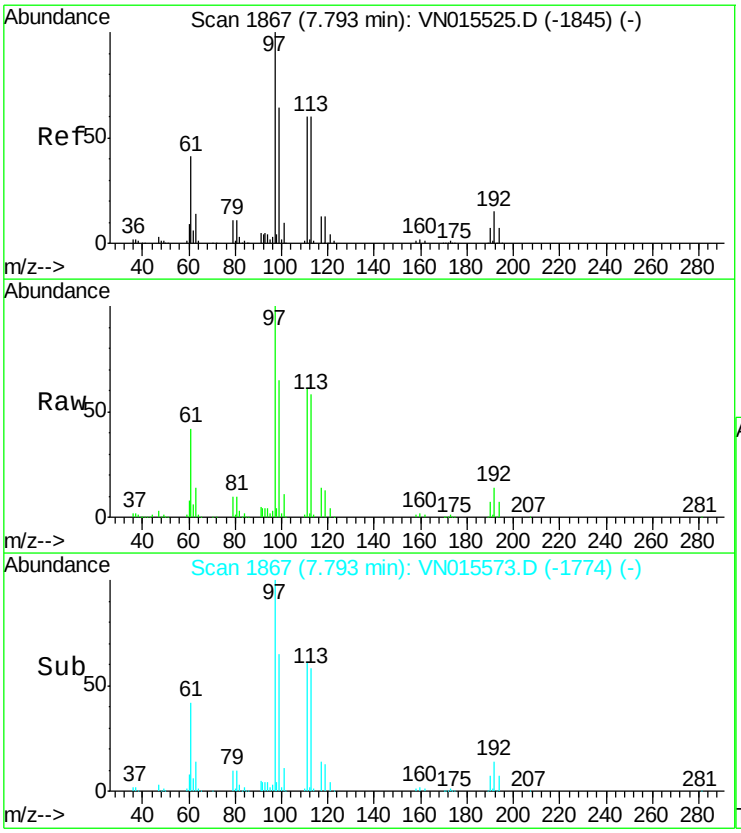


#32
Cyclohexane
Concen: 55.39 ug/l
RT: 7.89 min Scan# 1897
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 56 Resp: 147812

Ion	Ratio	Lower	Upper
56	100		
69	32.1	26.6	39.8
84	84.9	69.0	103.4

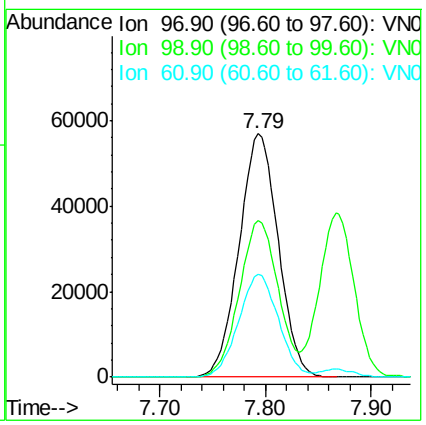




#33
1,1,1-Trichloroethane
Concen: 50.46 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 97 Resp: 146970

Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.2	76.8
61	43.0	33.9	50.9



Instrument :
MSVOA_N
LabSampleId :
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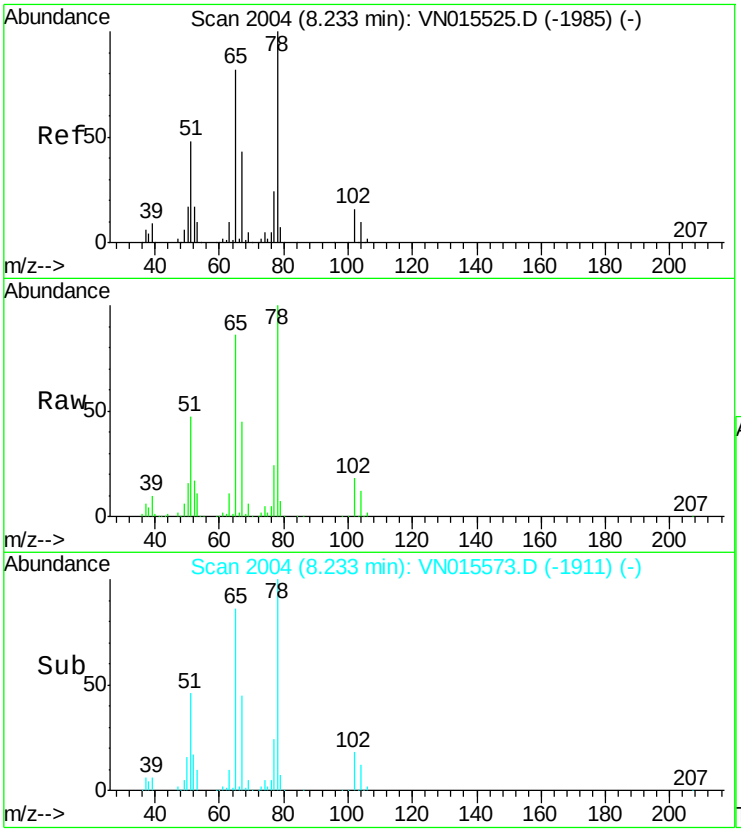
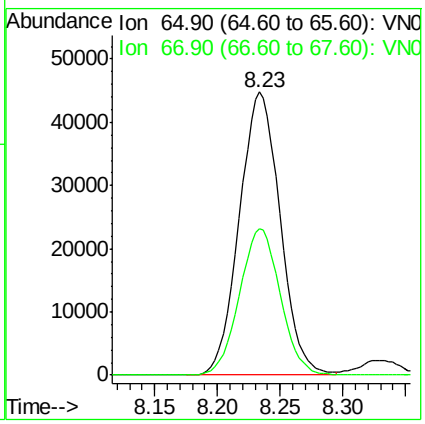
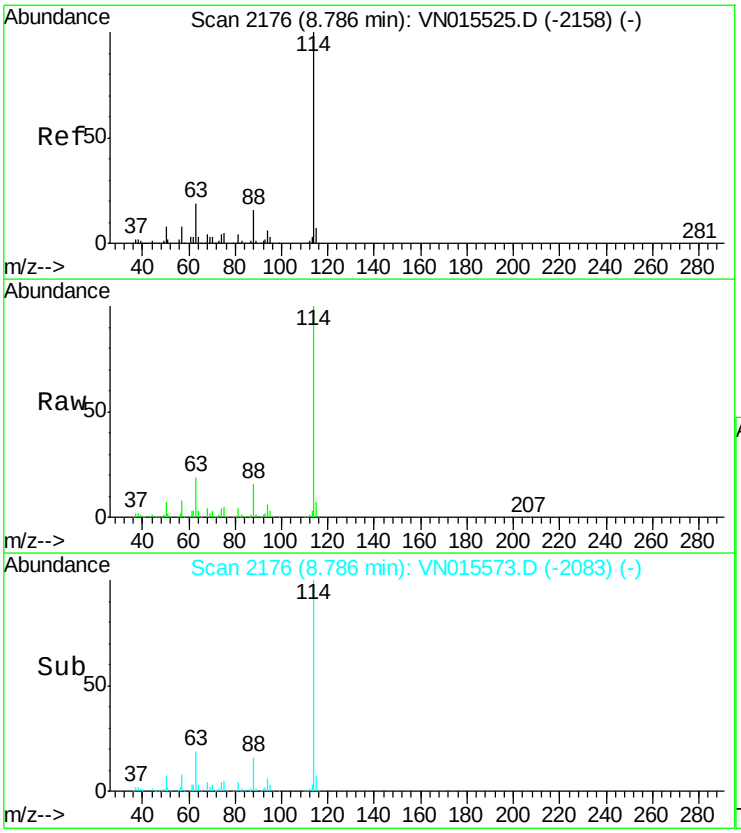


#34
1,2-Dichloroethane-d4
Concen: 47.49 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 65 Resp: 101393

Ion	Ratio	Lower	Upper
65	100		
67	52.0	0.0	103.6

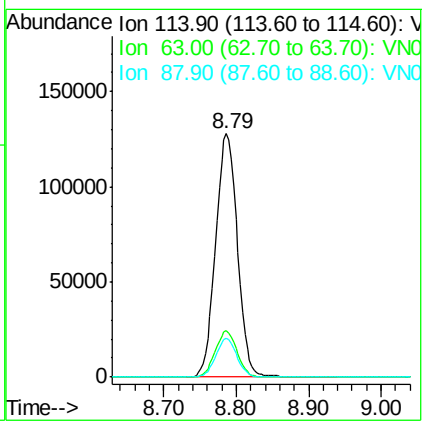




#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:114 Resp: 266327

Ion	Ratio	Lower	Upper
114	100		
63	18.9	0.0	38.6
88	15.8	0.0	32.2



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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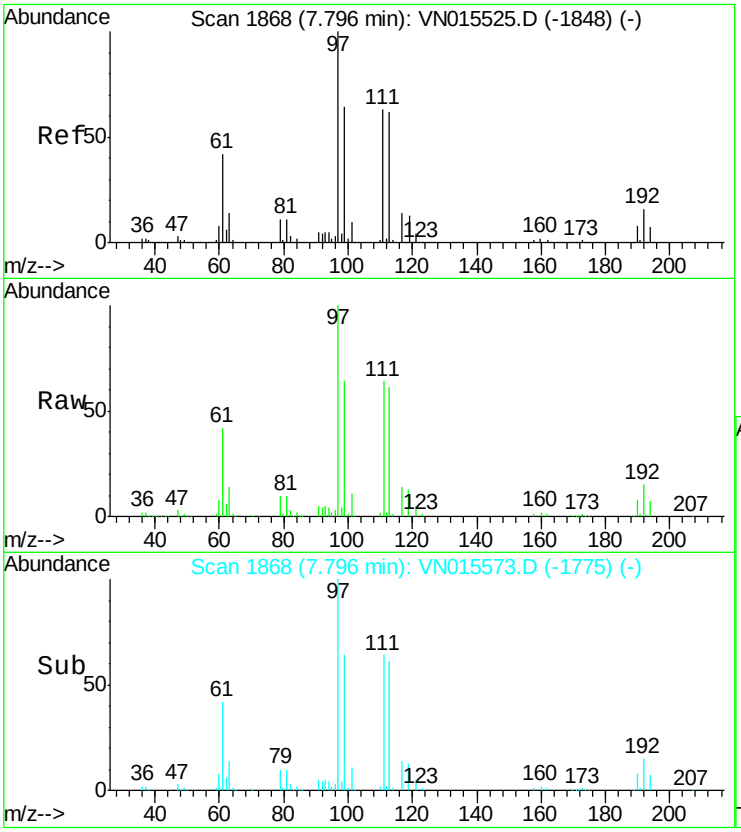
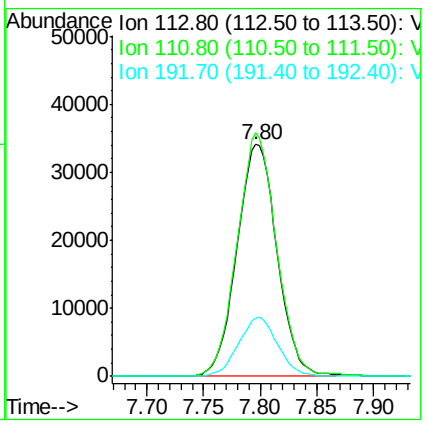
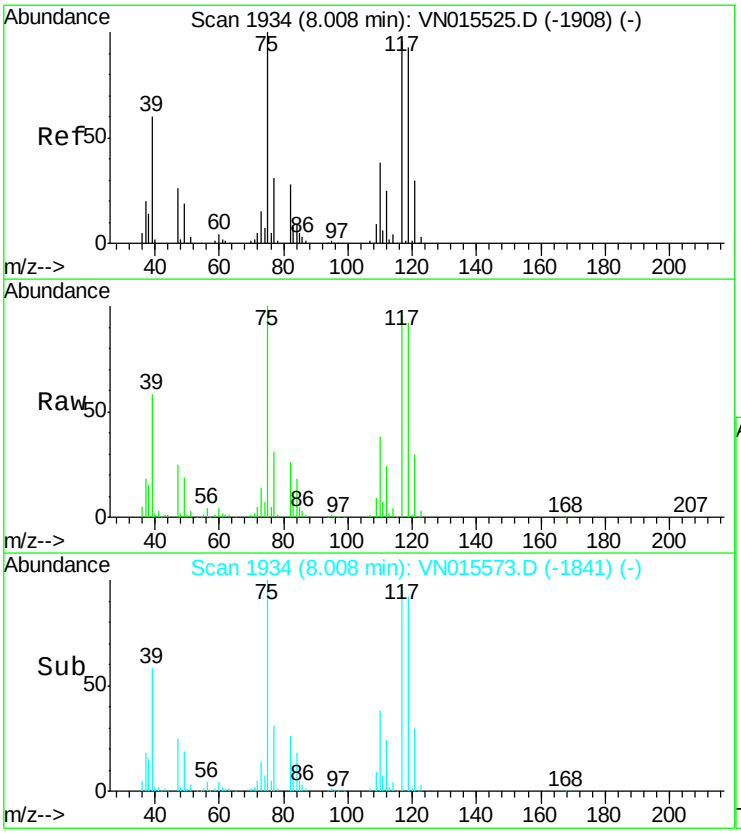


#36
Dibromofluoromethane
Concen: 48.49 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:113 Resp: 84117

Ion	Ratio	Lower	Upper
113	100		
111	102.5	81.5	122.3
192	24.6	20.0	30.0

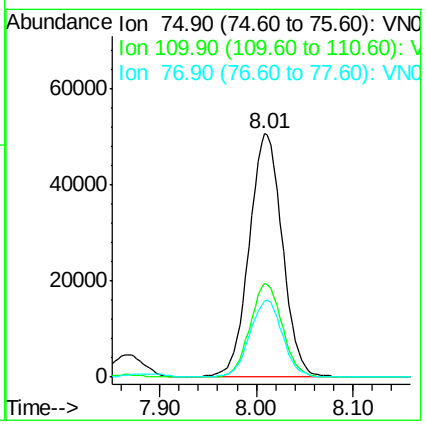




#37
1,1-Dichloropropene
Concen: 50.89 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 75 Resp: 120870

Ion	Ratio	Lower	Upper
75	100		
110	37.3	18.6	55.6
77	31.3	24.4	36.6



Instrument :
MSVOA_N
LabSampleId :
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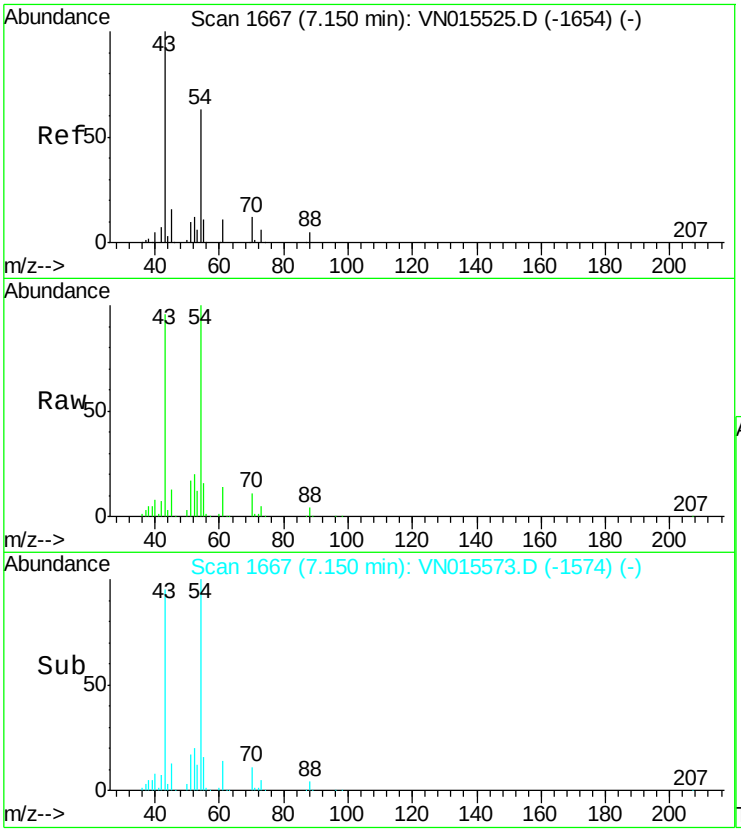
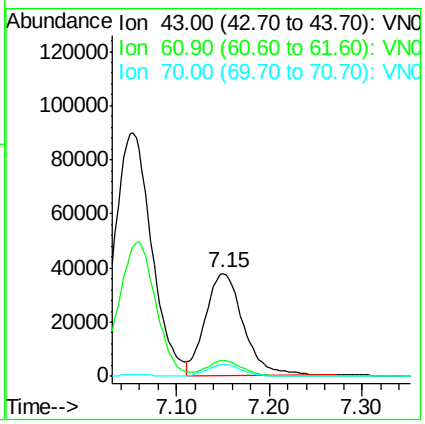
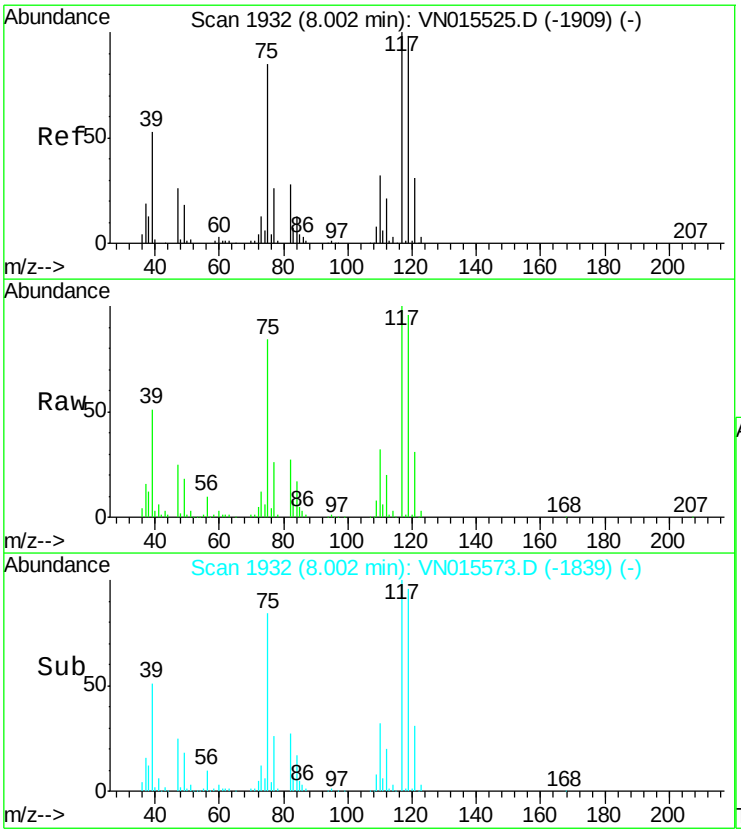


#38
Ethyl Acetate
Concen: 51.10 ug/l
RT: 7.15 min Scan# 1667
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 107114

Ion	Ratio	Lower	Upper
43	100		
61	14.2	10.8	16.2
70	11.1	8.5	12.7

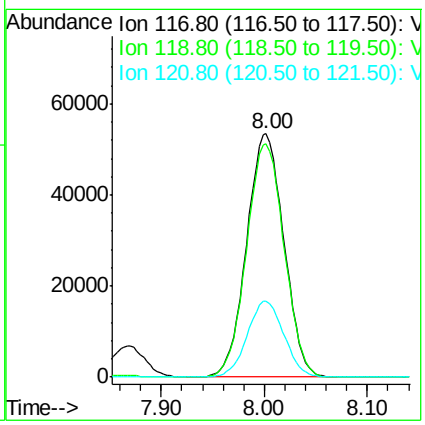


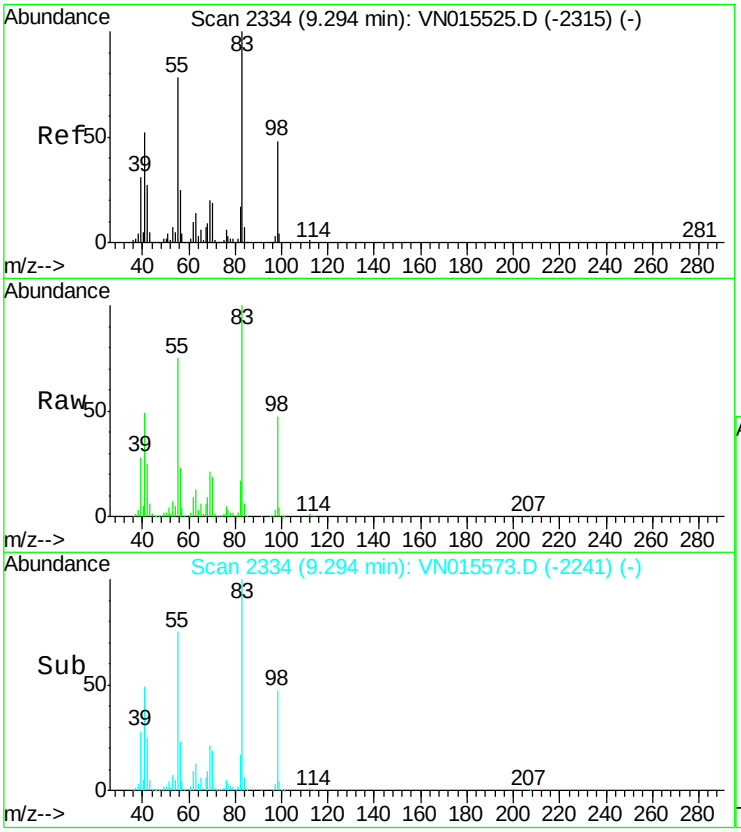


#39
Carbon Tetrachloride
Concen: 49.36 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:117 Resp: 134060

Ion	Ratio	Lower	Upper
117	100		
119	95.6	78.0	117.0
121	31.3	24.5	36.7

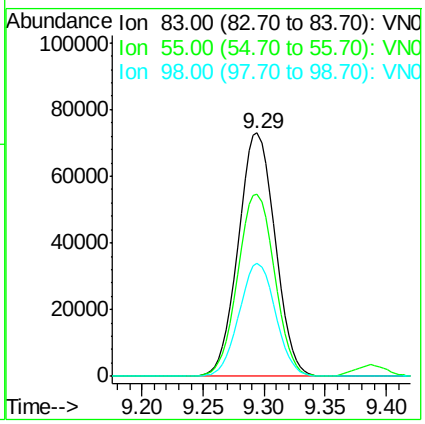




#40
Methylcyclohexane
Concen: 50.20 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 83 Resp: 152482

Ion	Ratio	Lower	Upper
83	100		
55	74.9	62.5	93.7
98	46.5	38.2	57.2



Instrument :
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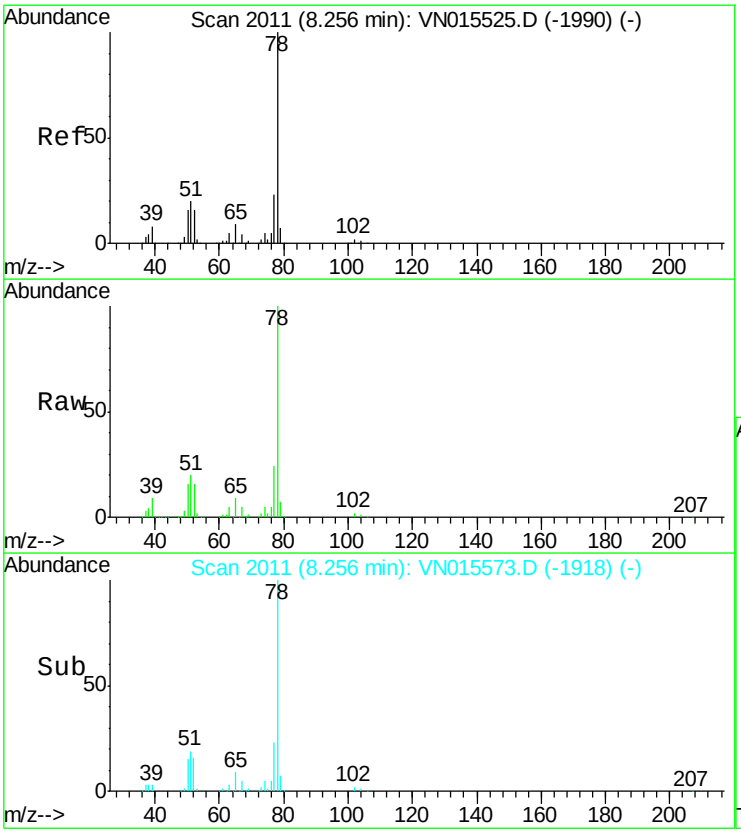
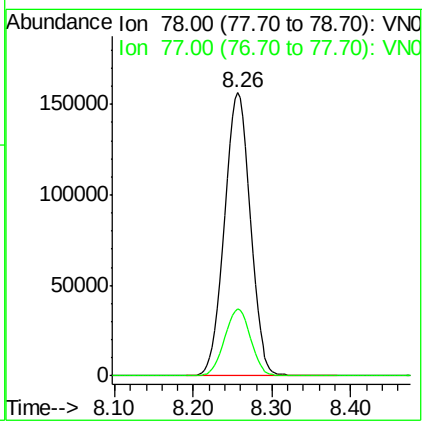


#41
Benzene
Concen: 50.36 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 78 Resp: 356727

Ion	Ratio	Lower	Upper
78	100		
77	23.6	18.5	27.7



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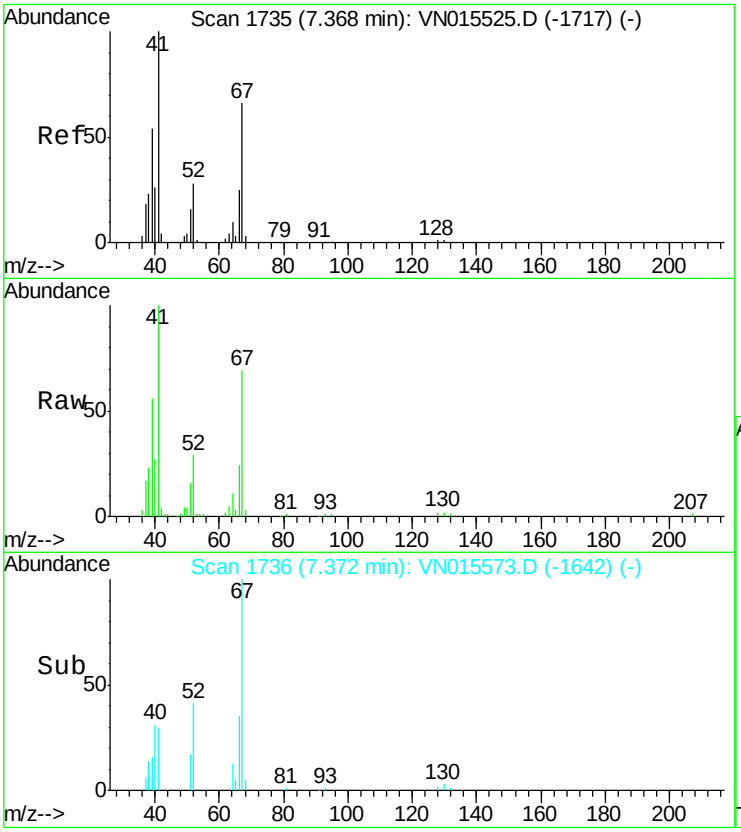
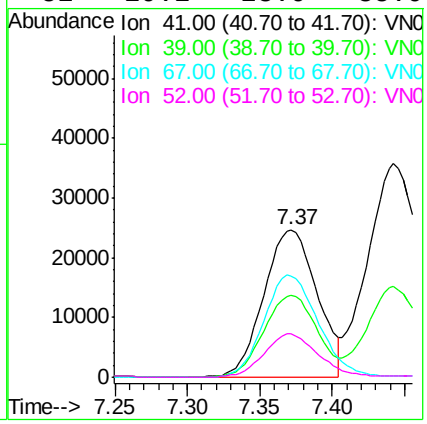
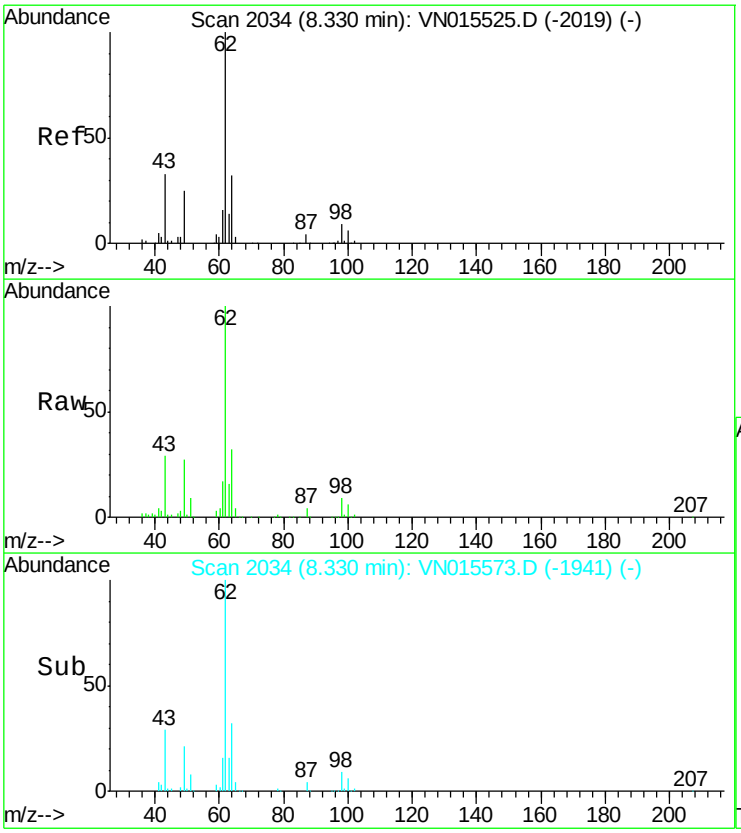


#42
Methacrylonitrile
Concen: 50.87 ug/l
RT: 7.37 min Scan# 1736
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 41 Resp: 63024

Ion	Ratio	Lower	Upper
41	100		
39	56.8	45.0	67.4
67	70.6	54.9	82.3
52	29.2	23.9	35.9

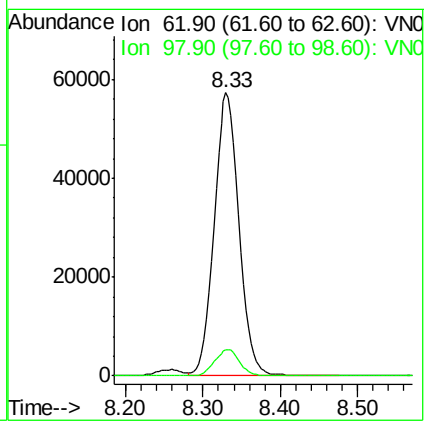




#43
1,2-Dichloroethane
Concen: 49.62 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 62 Resp: 128358

Ion	Ratio	Lower	Upper
62	100		
98	9.3	0.0	18.2



Instrument :
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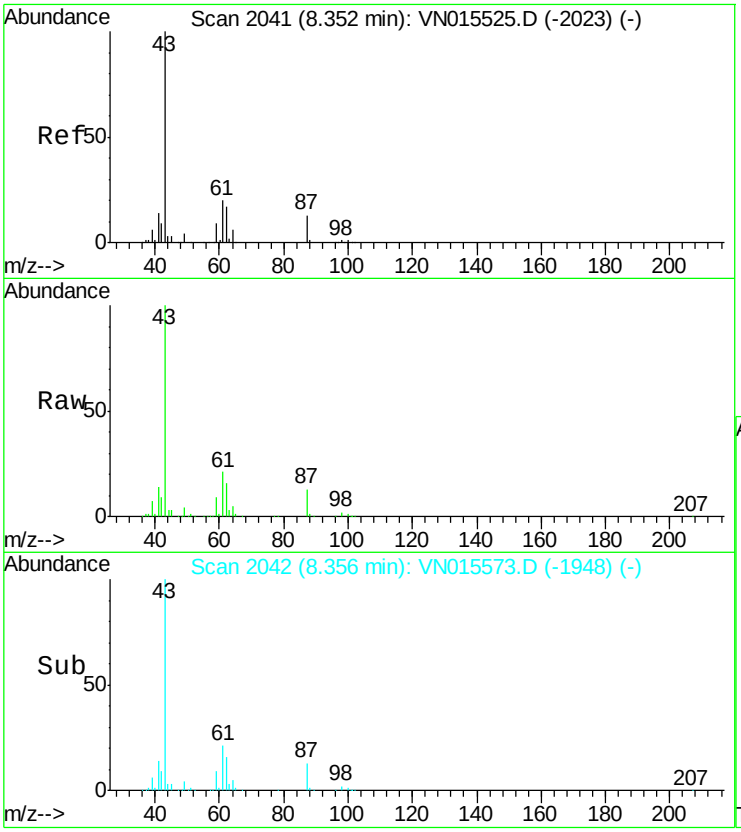
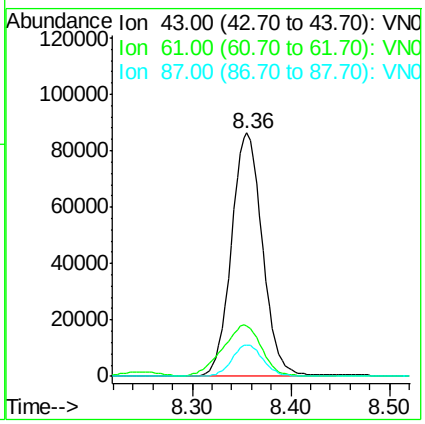
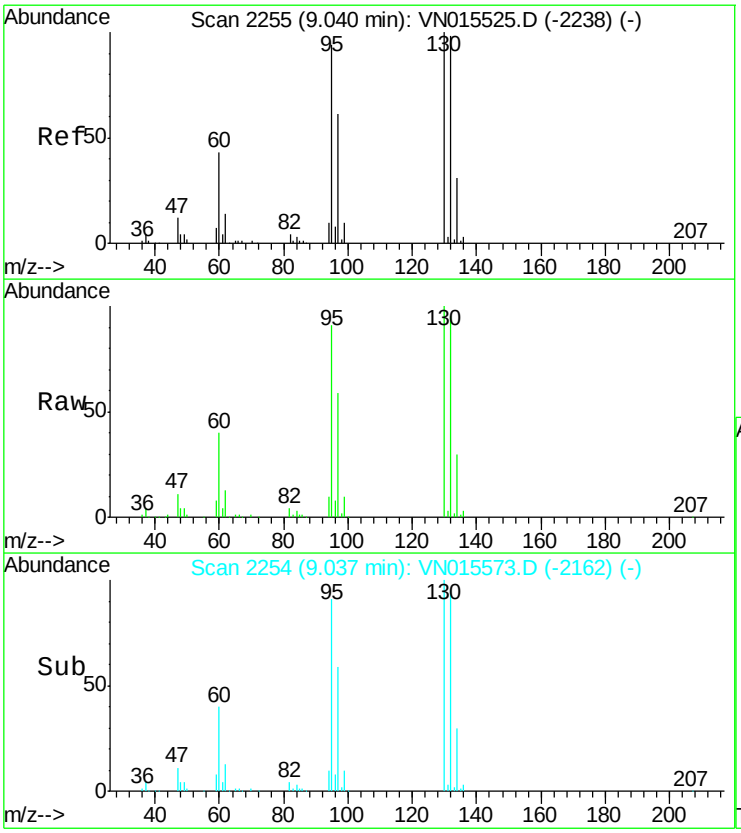


#44
Isopropyl Acetate
Concen: 49.70 ug/l
RT: 8.36 min Scan# 2042
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 187408

Ion	Ratio	Lower	Upper
43	100		
61	26.6	20.4	30.6
87	13.1	10.4	15.6

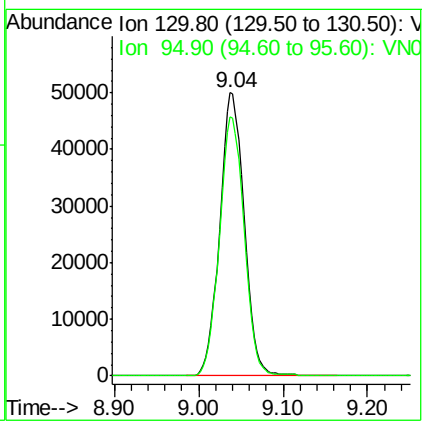




#45
Trichloroethene
Concen: 50.79 ug/l
RT: 9.04 min Scan# 2254
Delta R.T. -0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:130 Resp: 100758

Ion	Ratio	Lower	Upper
130	100		
95	91.5	0.0	187.0



Instrument :
MSVOA_N
LabSampleId :
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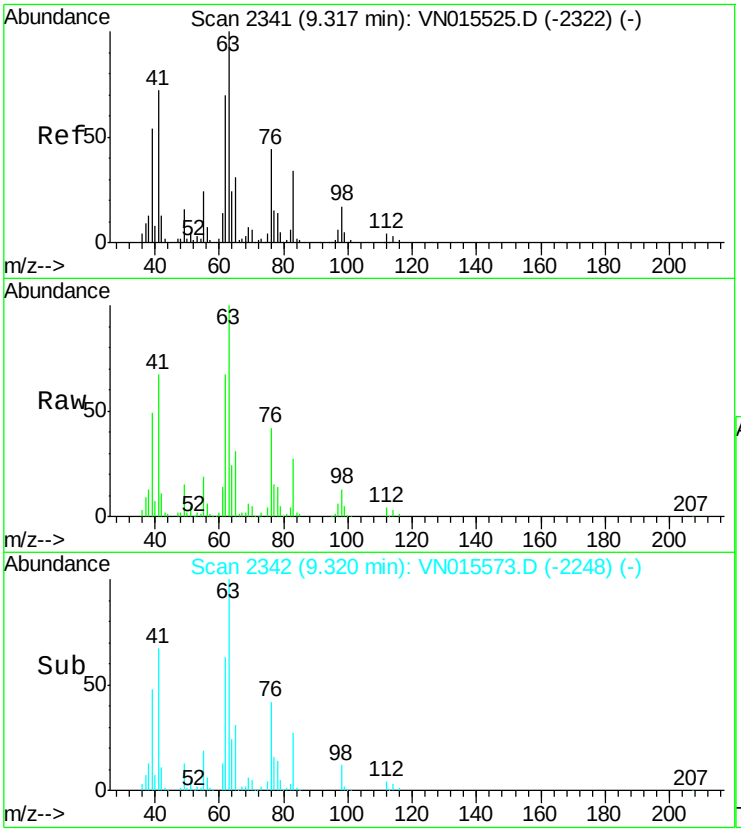
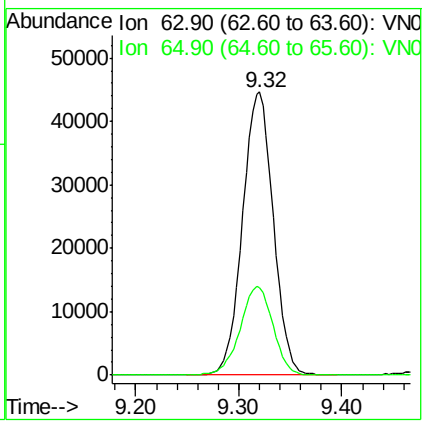
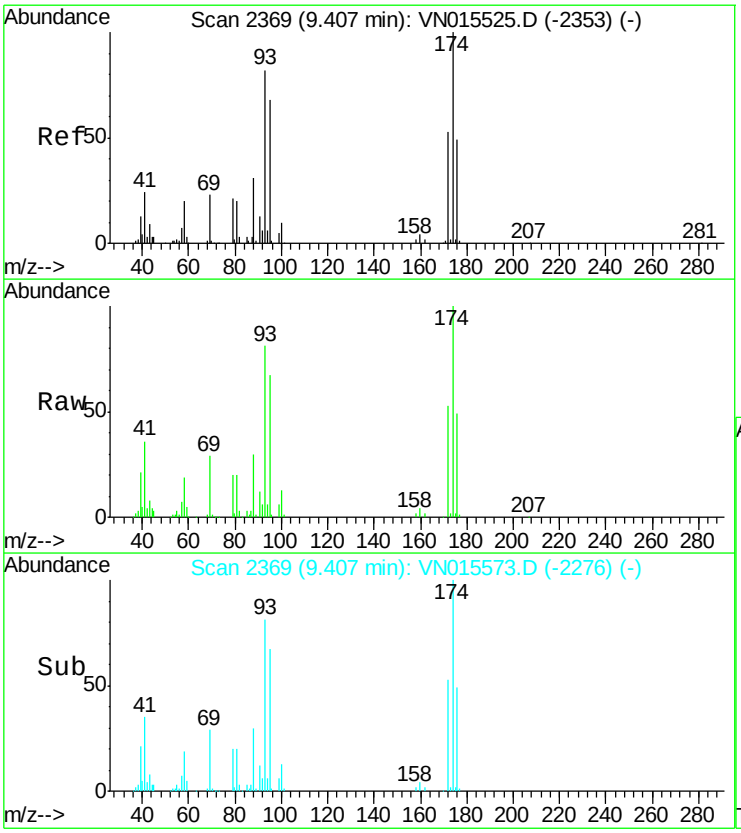


#46
1,2-Dichloropropane
Concen: 50.72 ug/l
RT: 9.32 min Scan# 2342
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 63 Resp: 92285

Ion	Ratio	Lower	Upper
63	100		
65	31.1	25.0	37.4

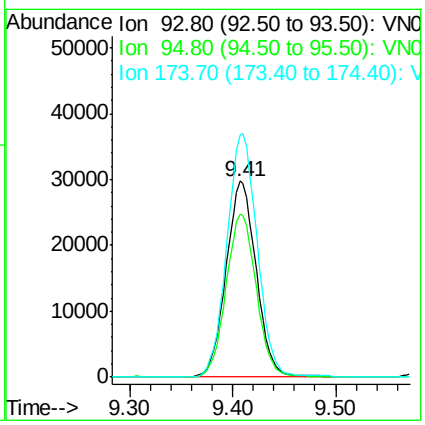




#47
Dibromomethane
Concen: 50.60 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 93 Resp: 60577

Ion	Ratio	Lower	Upper
93	100		
95	83.3	66.9	100.3
174	125.0	98.6	148.0



Instrument :
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LabSampleId :
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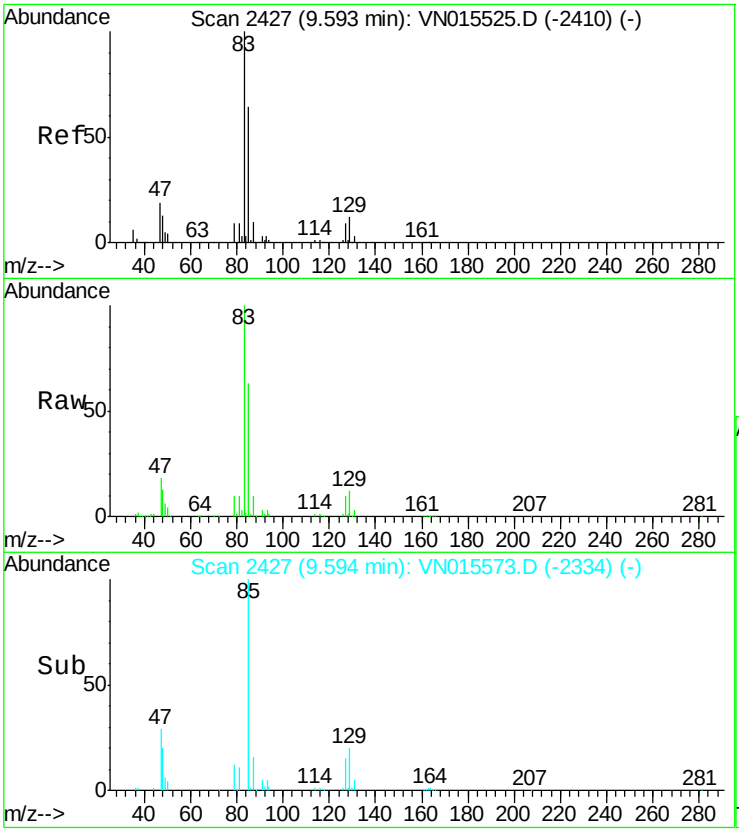
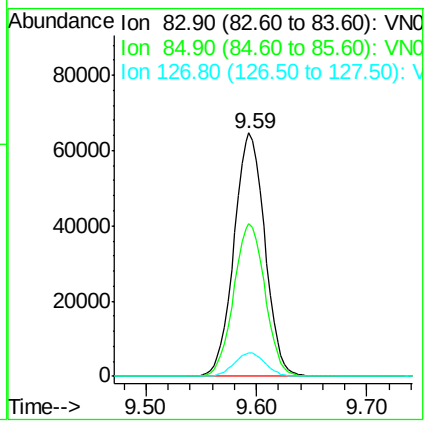
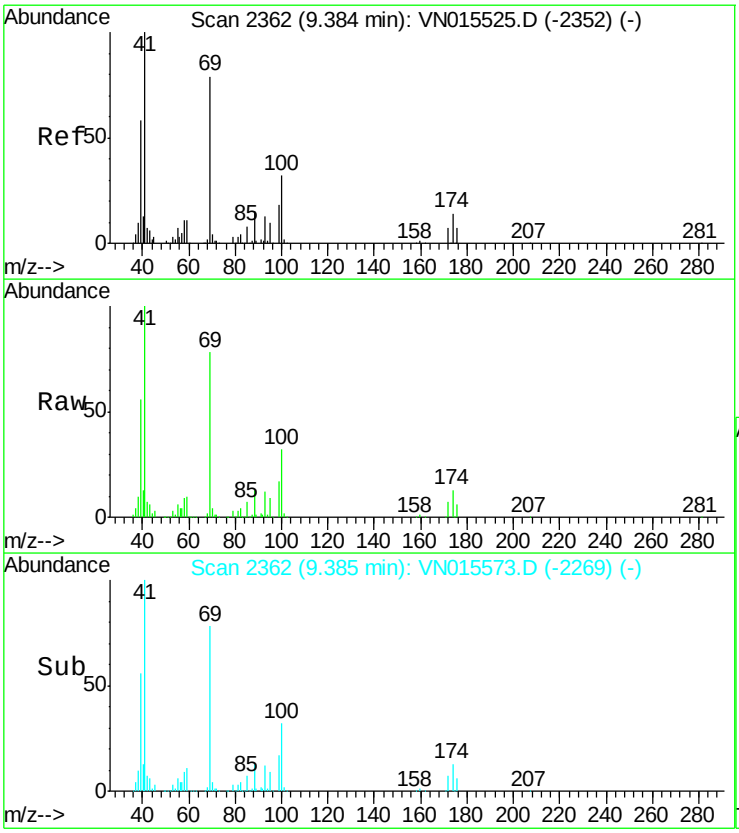


#48
Bromodichloromethane
Concen: 50.87 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 83 Resp: 124938

Ion	Ratio	Lower	Upper
83	100		
85	62.5	51.1	76.7
127	9.6	7.6	11.4

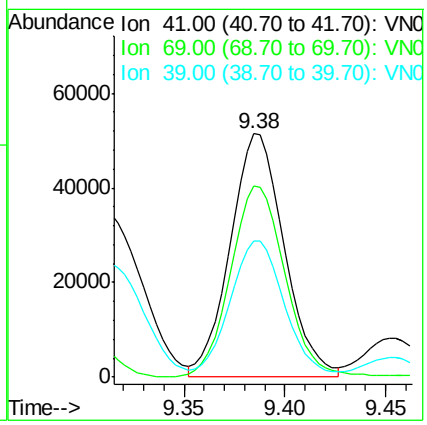


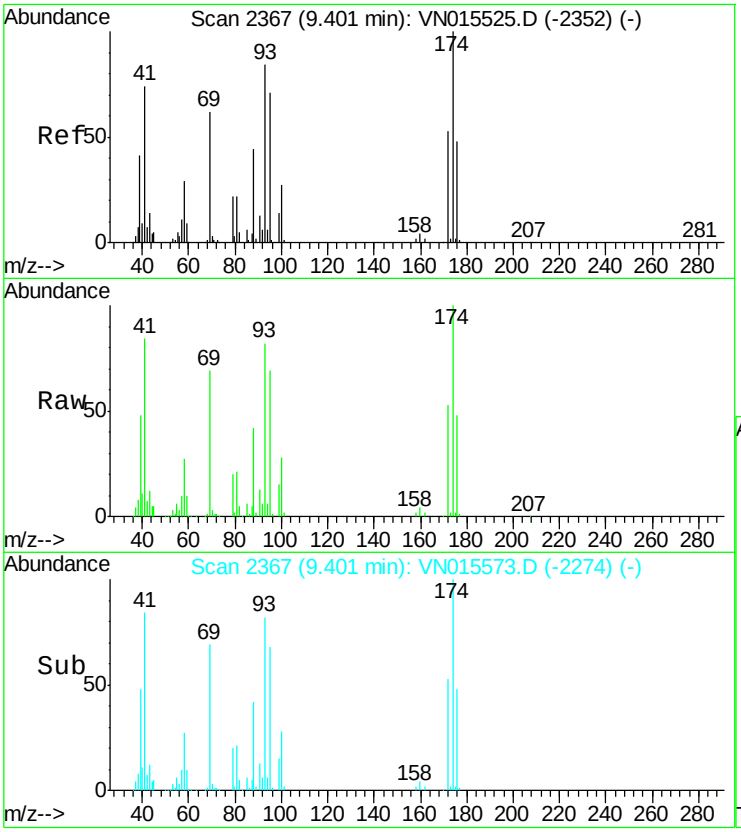


#49
Methyl methacrylate
Concen: 52.82 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 41 Resp: 96008

Ion	Ratio	Lower	Upper
41	100		
69	79.2	62.8	94.2
39	56.7	46.4	69.6





#50
1,4-Dioxane
Concen: 1058.82 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 88 Resp: 26849

Ion	Ratio	Lower	Upper
88	100		
43	31.4	26.4	39.6
58	70.4	56.6	84.8

Instrument :
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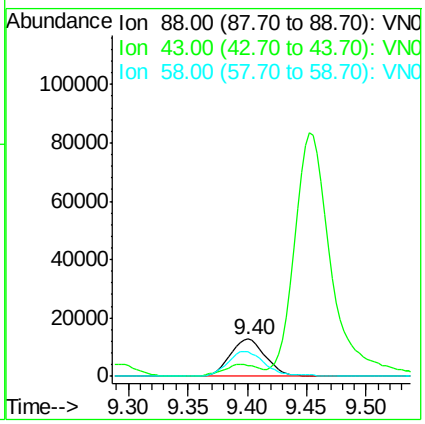
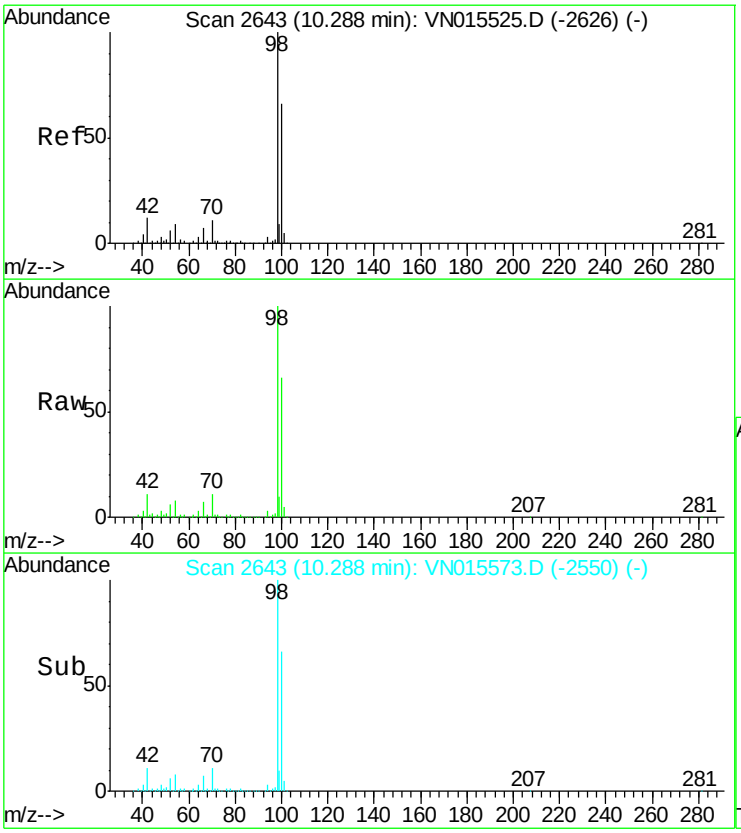
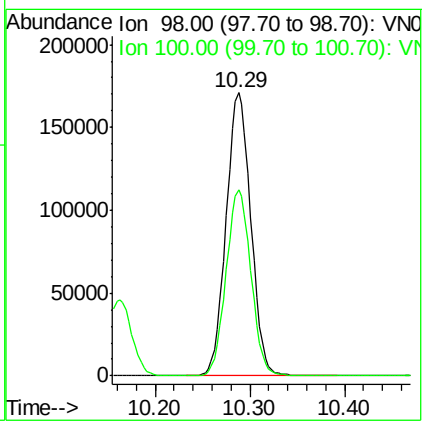


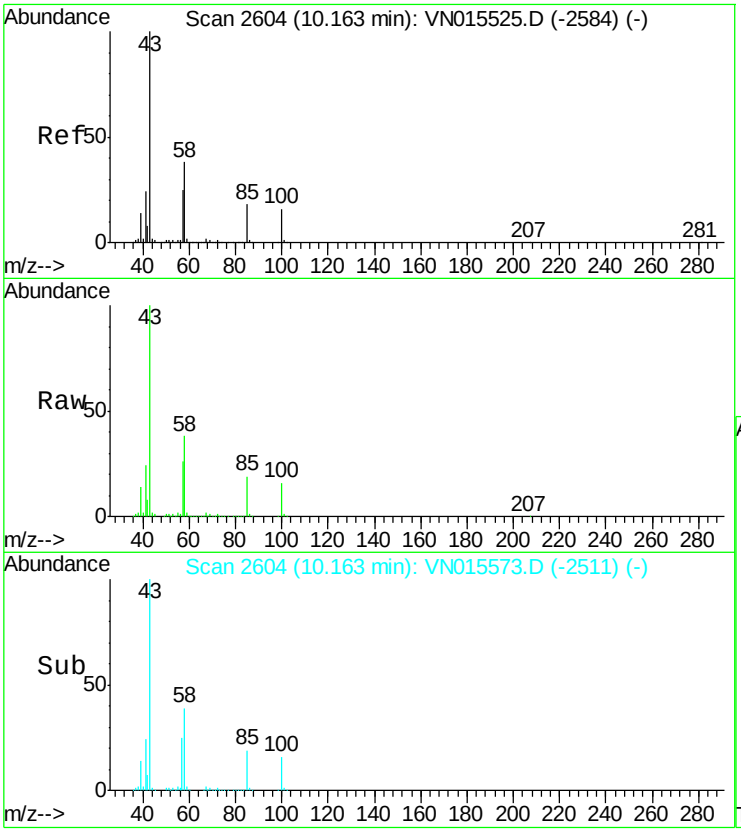


#51
Toluene-d8
Concen: 48.50 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 98 Resp: 309936

Ion	Ratio	Lower	Upper
98	100		
100	65.9	52.3	78.5





#52
4-Methyl-2-Pentanone
Concen: 253.91 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 529240

Ion	Ratio	Lower	Upper
43	100		
58	38.5	30.2	45.2

Instrument :
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LabSampleId :
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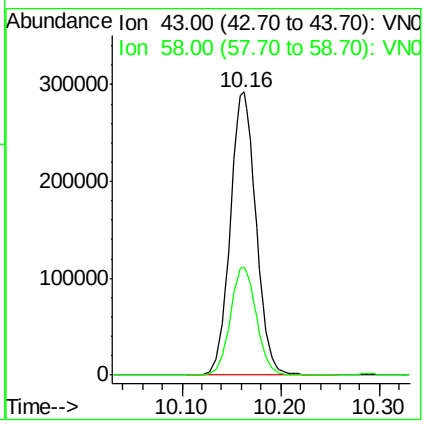
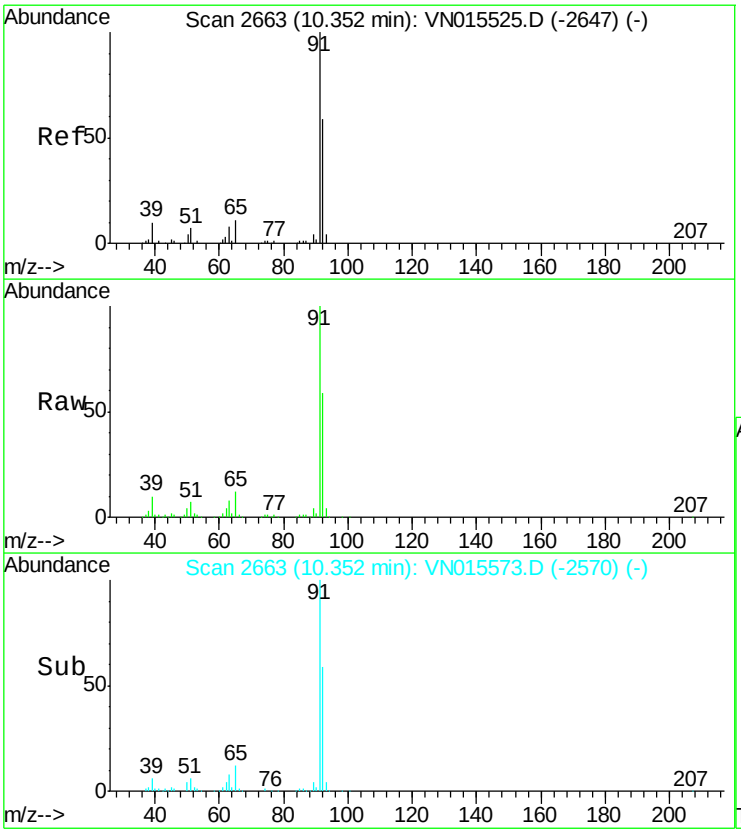
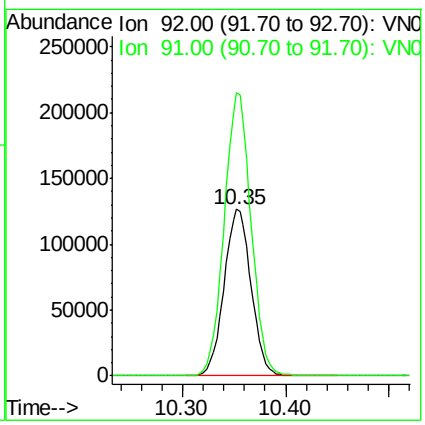




#53
Toluene
Concen: 51.31 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 92 Resp: 230384

Ion	Ratio	Lower	Upper
92	100		
91	169.6	136.2	204.4



Instrument :
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LabSampleId :
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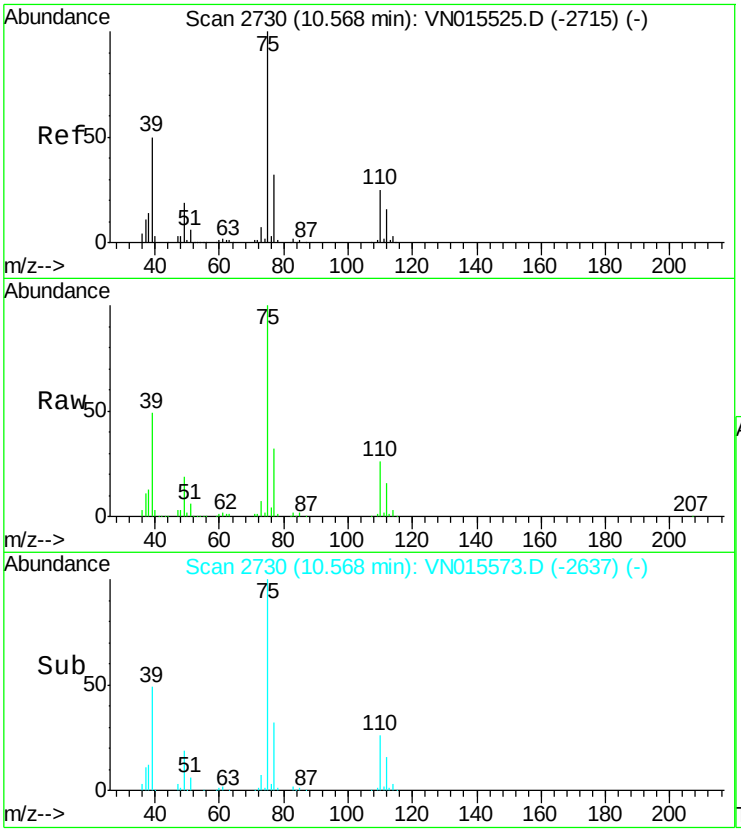
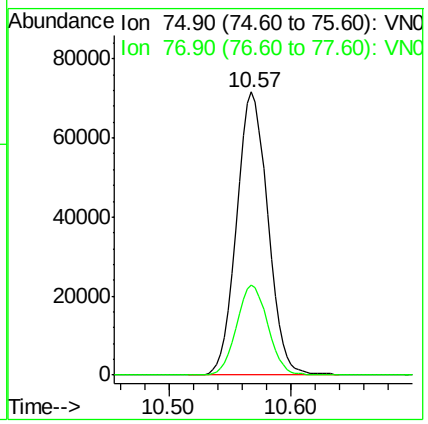
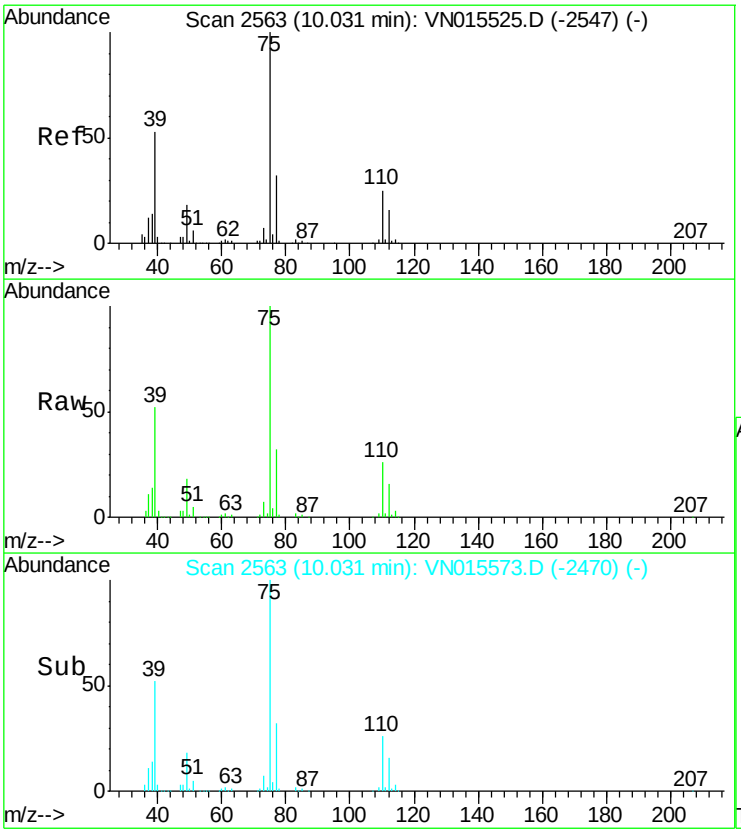


#54
t-1,3-Dichloropropene
Concen: 50.56 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 75 Resp: 126971

Ion	Ratio	Lower	Upper
75	100		
77	31.8	26.0	39.0

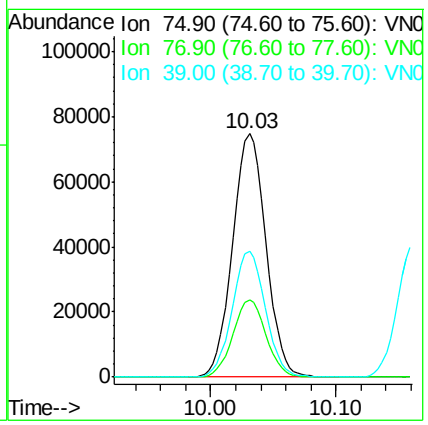


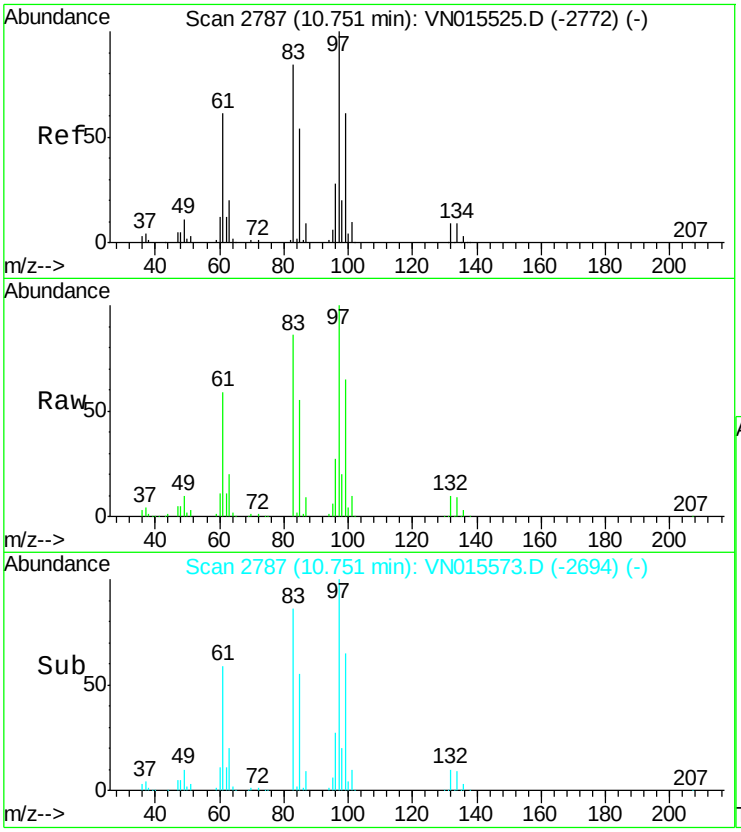


#55
cis-1,3-Dichloropropene
Concen: 49.52 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 75 Resp: 138446

Ion	Ratio	Lower	Upper
75	100		
77	31.7	25.4	38.2
39	51.7	42.2	63.4





#56
1,1,2-Trichloroethane
Concen: 51.11 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

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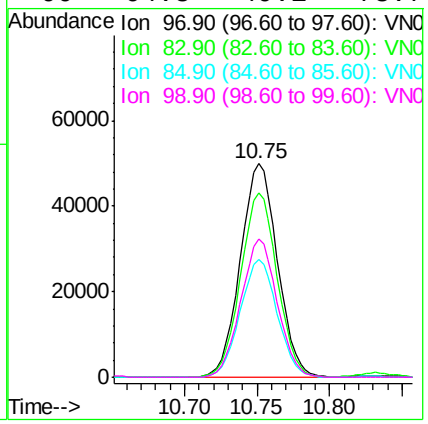
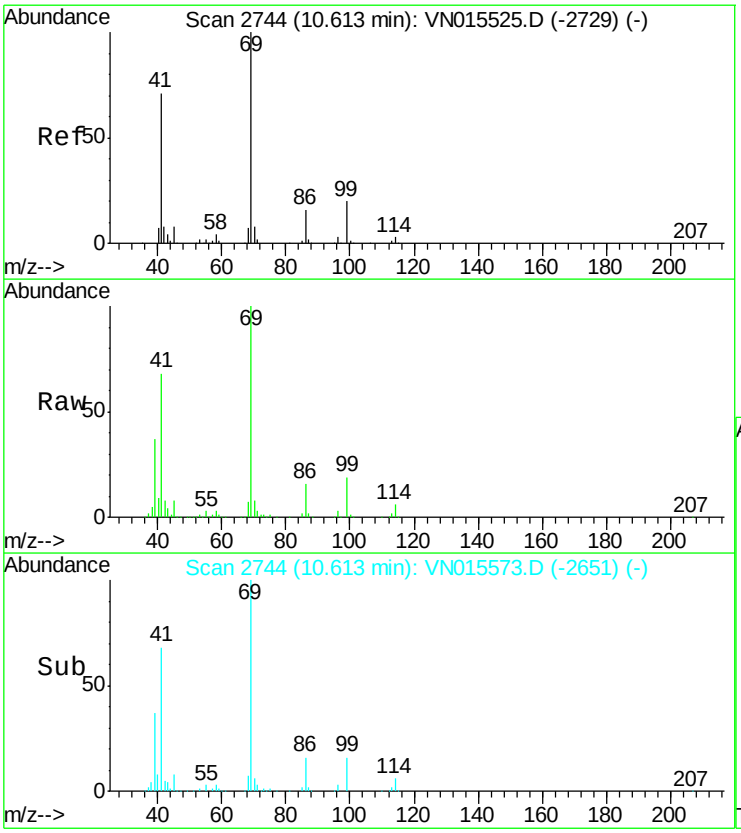
Tgt Ion: 97 Resp: 88678

Ion	Ratio	Lower	Upper
97	100		
83	86.3	67.0	100.4
85	54.9	42.9	64.3
99	64.8	49.1	73.7

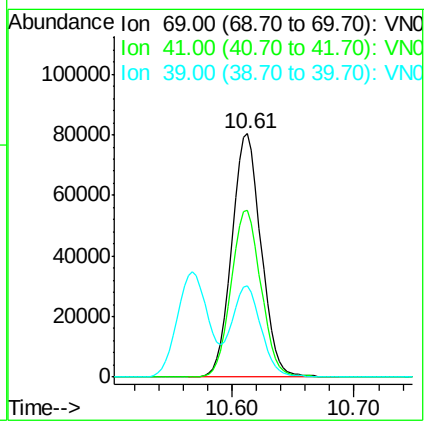


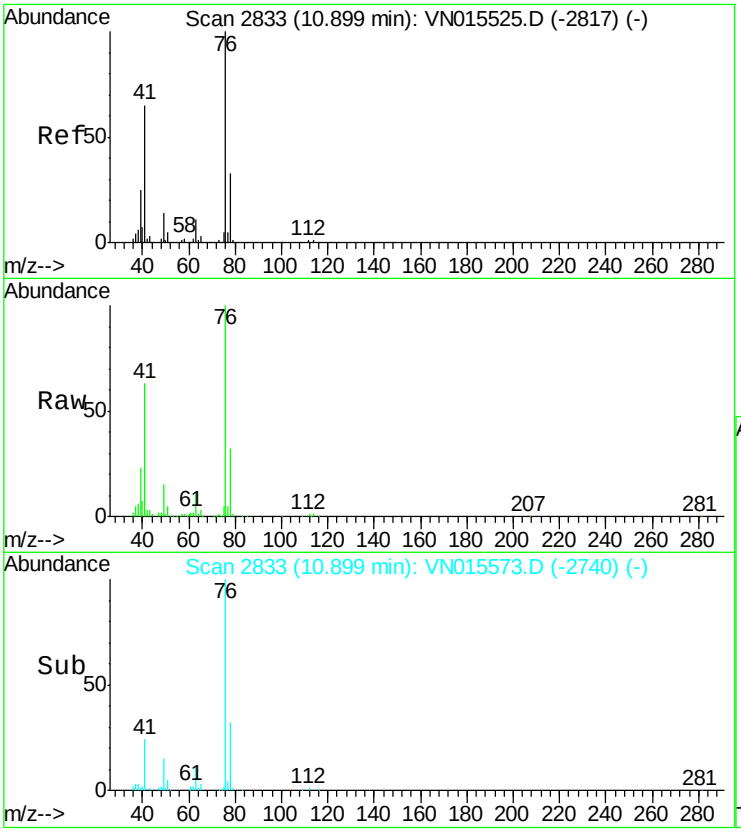


#57
Ethyl methacrylate
Concen: 52.31 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 69 Resp: 134252

Ion	Ratio	Lower	Upper
69	100		
41	69.7	56.9	85.3
39	37.5	32.0	48.0





#58
1,3-Dichloropropane
Concen: 51.01 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 76 Resp: 148311

Ion	Ratio	Lower	Upper
76	100		
78	32.0	26.3	39.5

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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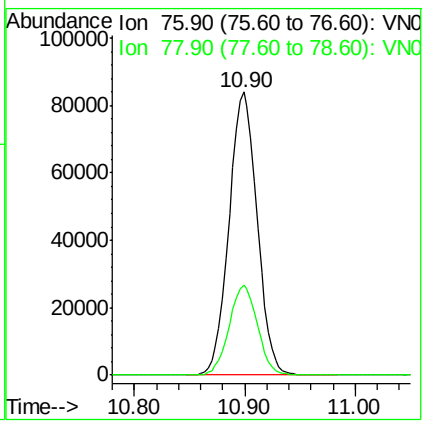
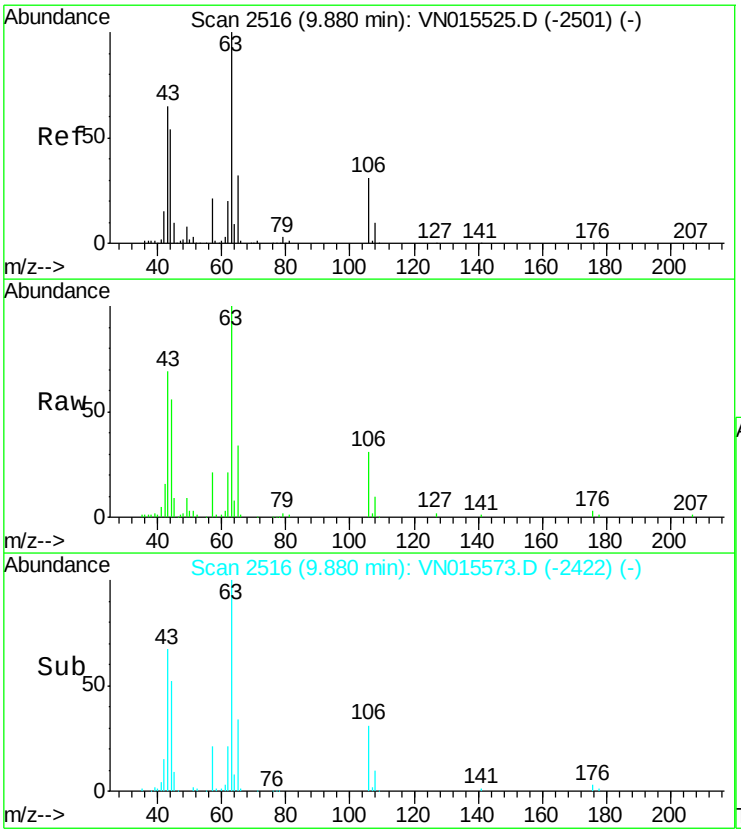
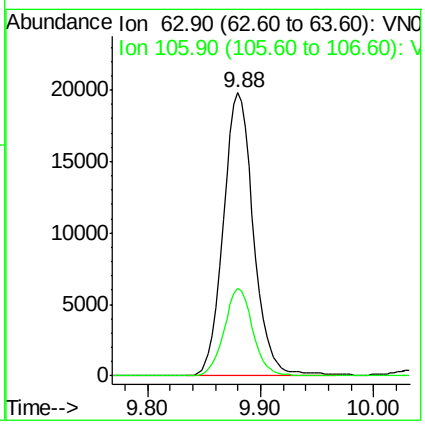


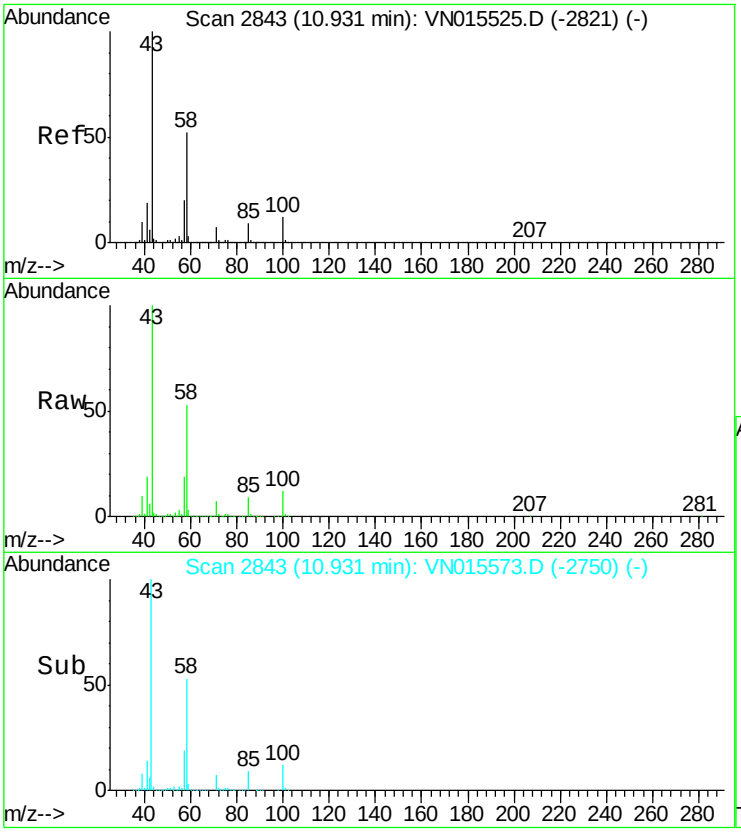


#59
2-Chloroethyl Vinyl ether
Concen: 131.35 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 63 Resp: 36744

Ion	Ratio	Lower	Upper
63	100		
106	29.1	23.7	35.5





#60
2-Hexanone
Concen: 260.90 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 355088

Ion	Ratio	Lower	Upper
43	100		
58	52.9	26.0	78.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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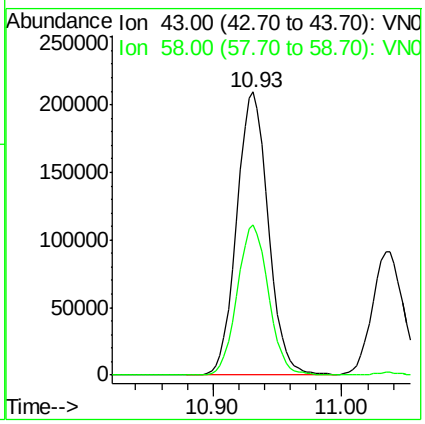
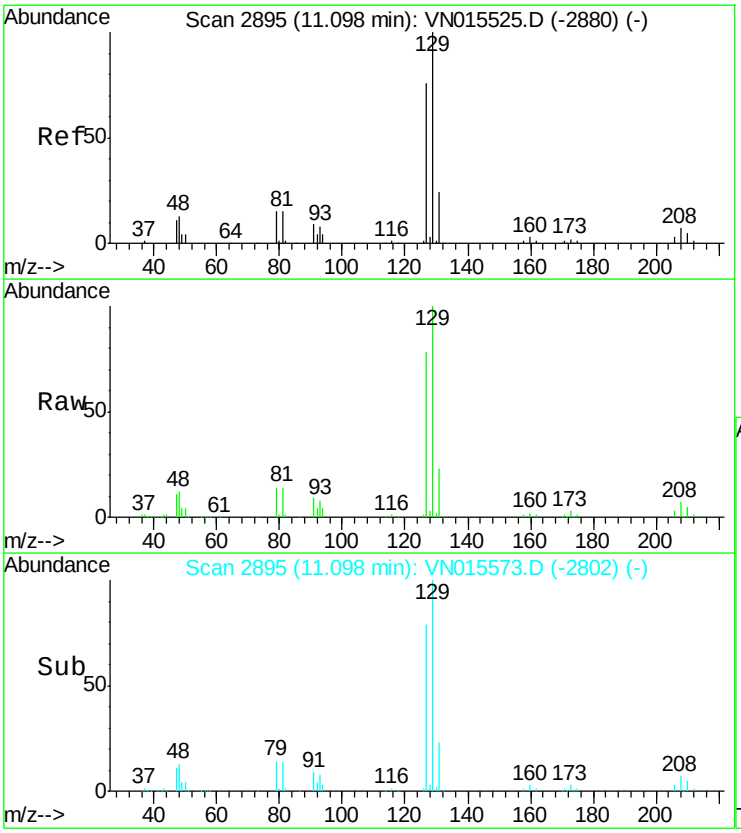
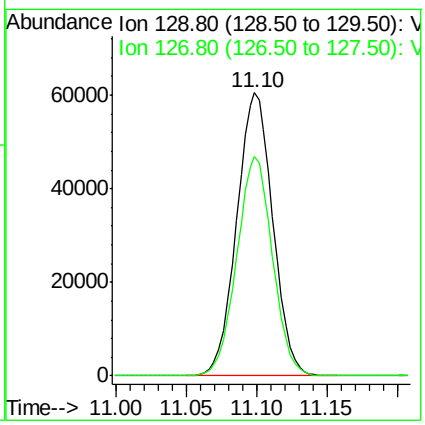


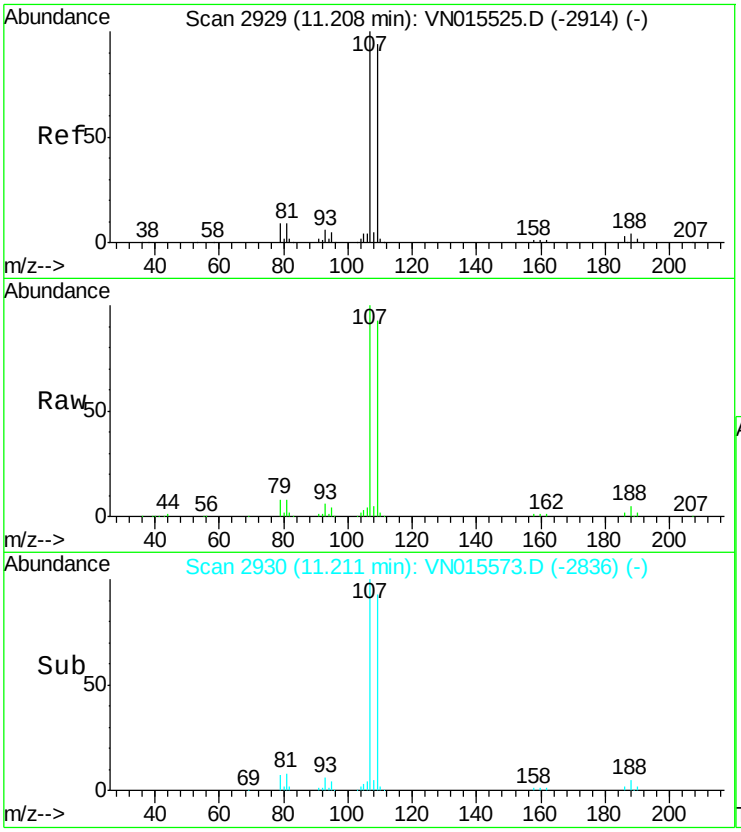


#61
Dibromochloromethane
Concen: 52.30 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:129 Resp: 108356

Ion	Ratio	Lower	Upper
129	100		
127	76.5	38.6	116.0





#62
1,2-Dibromoethane
Concen: 52.99 ug/l
RT: 11.21 min Scan# 2930
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:107 Resp: 95020

Ion	Ratio	Lower	Upper
107	100		
109	93.5	75.8	113.6

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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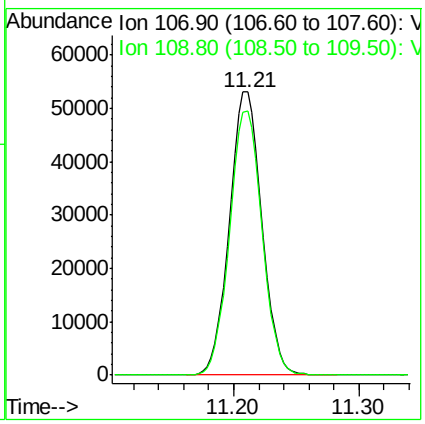
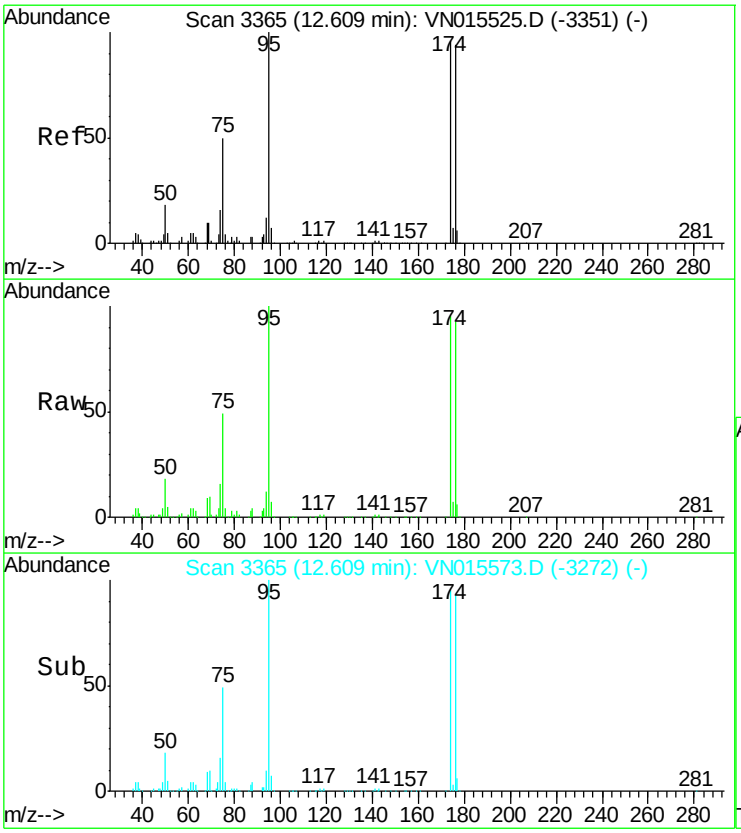
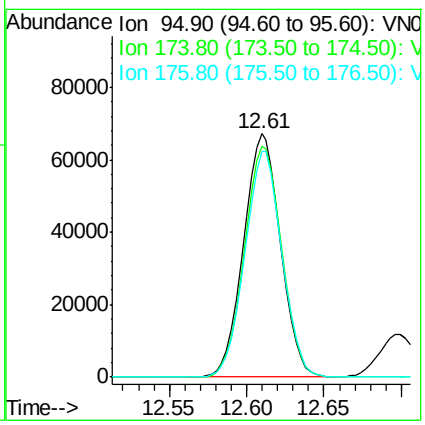




#63
4-Bromofluorobenzene
Concen: 50.90 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 95 Resp: 111435

Ion	Ratio	Lower	Upper
95	100		
174	96.1	0.0	191.8
176	92.9	0.0	186.8



Instrument :
MSVOA_N
LabSampleId :
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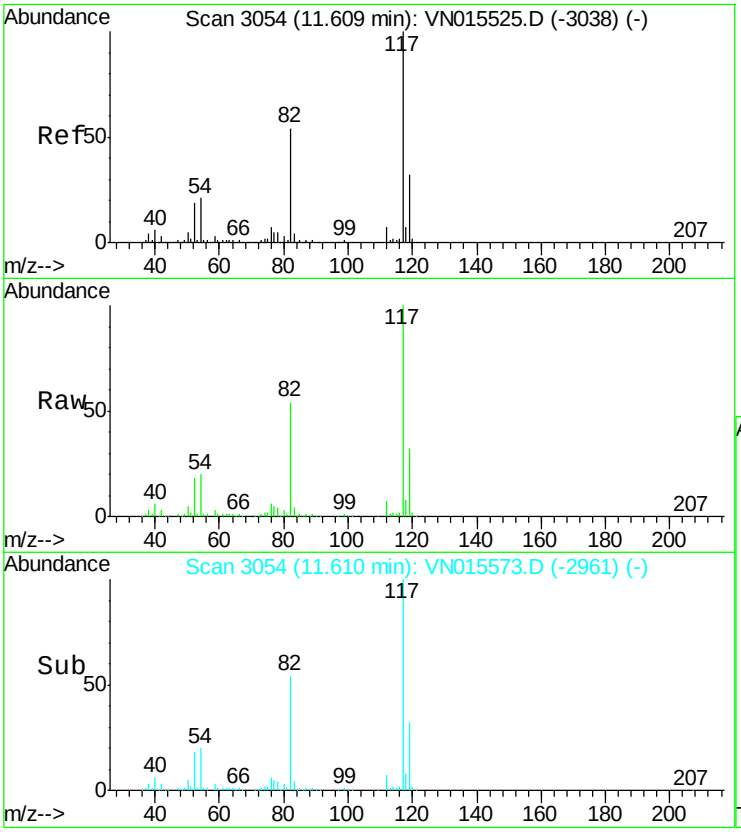
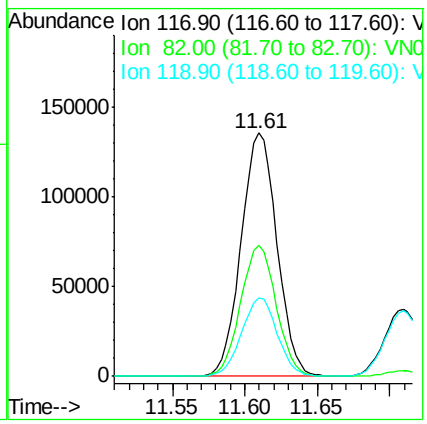
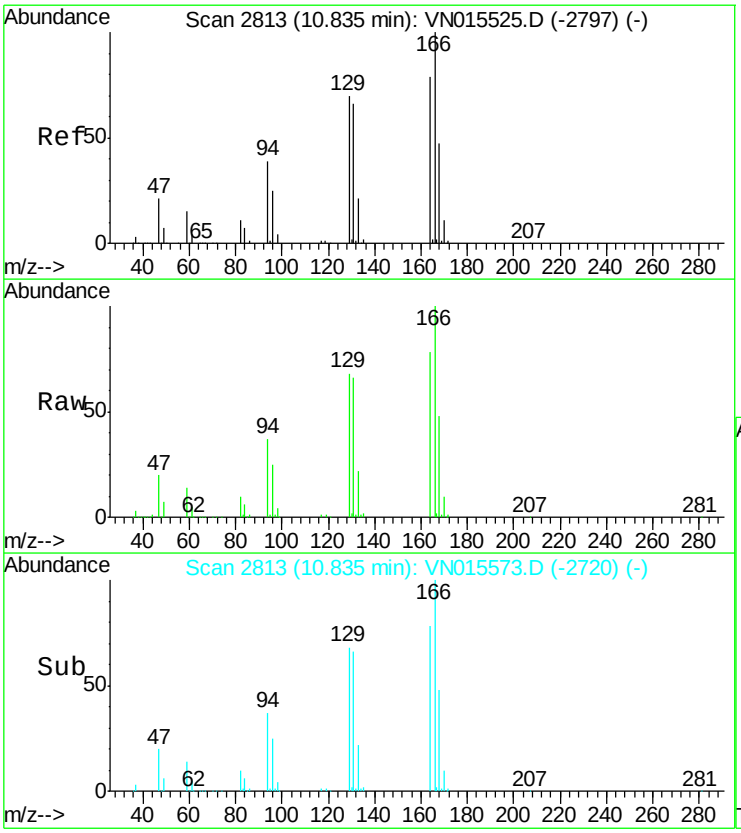


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:117 Resp: 233630

Ion	Ratio	Lower	Upper
117	100		
82	53.6	43.3	64.9
119	32.1	25.6	38.4

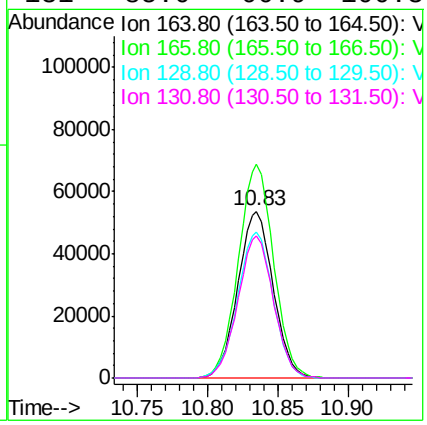




#65
Tetrachloroethene
Concen: 51.16 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:164 Resp: 94287

Ion	Ratio	Lower	Upper
164	100		
166	128.0	101.7	152.5
129	87.3	70.7	106.1
131	85.0	66.9	100.3



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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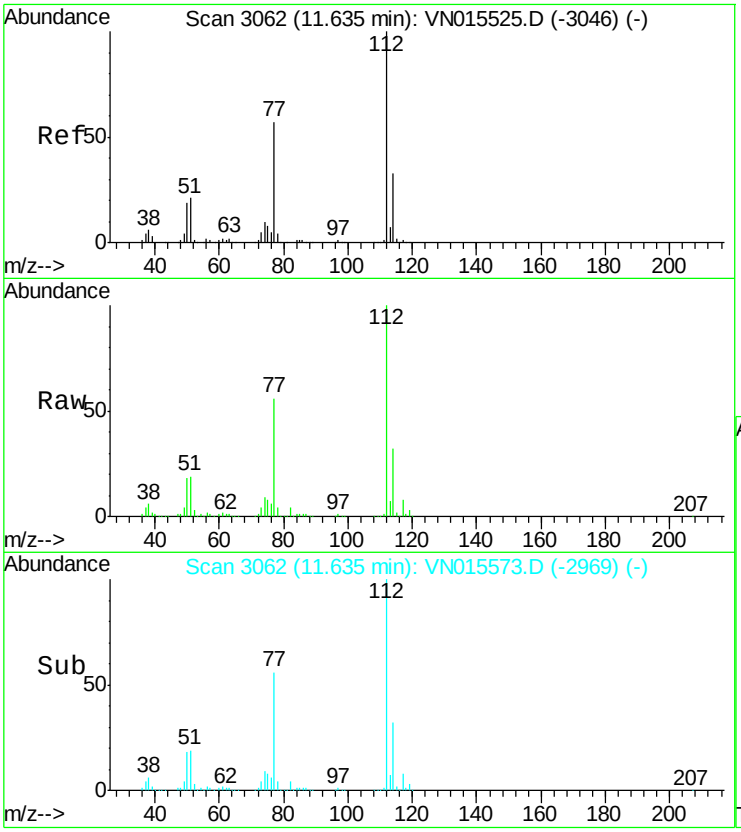
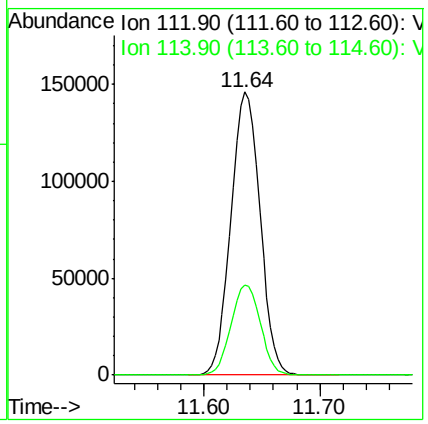
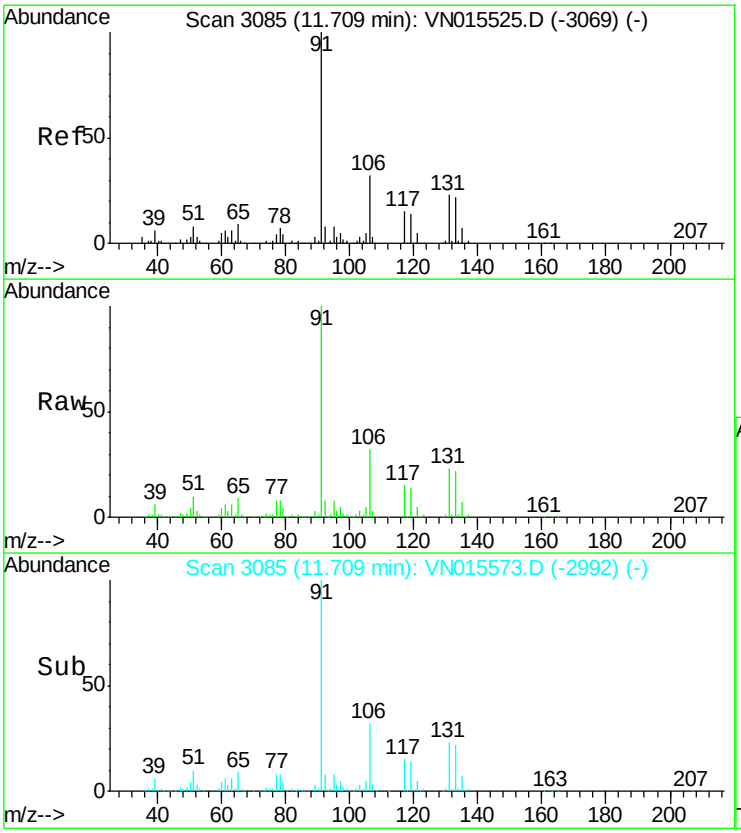


#66
Chlorobenzene
Concen: 50.17 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:112 Resp: 253668

Ion	Ratio	Lower	Upper
112	100		
114	32.1	26.2	39.2

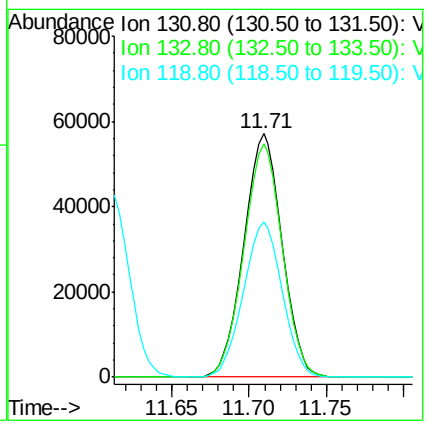


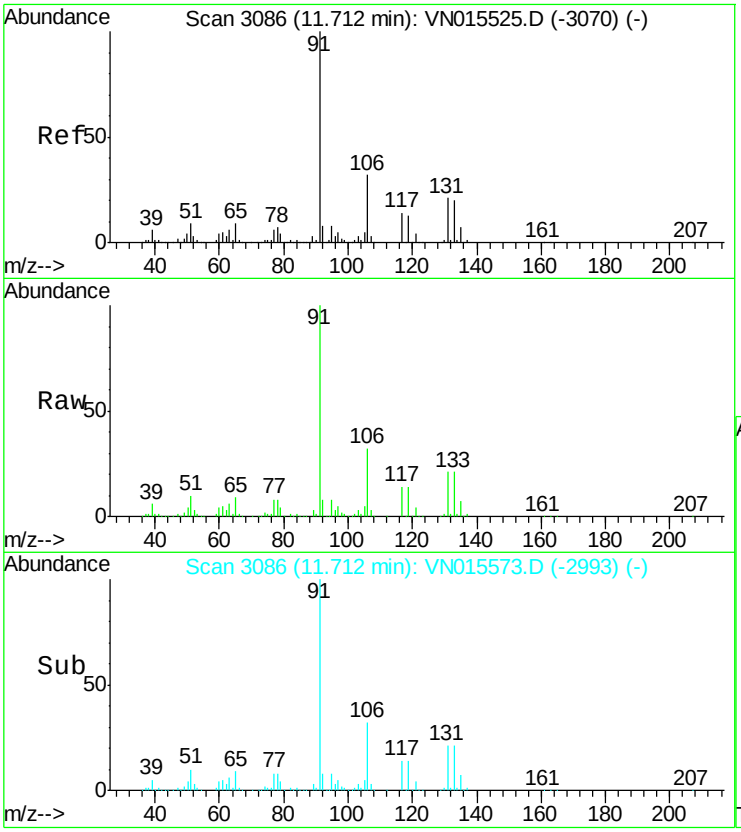


#67
1,1,1,2-Tetrachloroethane
Concen: 51.04 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:131 Resp: 98334

Ion	Ratio	Lower	Upper
131	100		
133	96.3	47.7	143.1
119	64.5	31.5	94.5

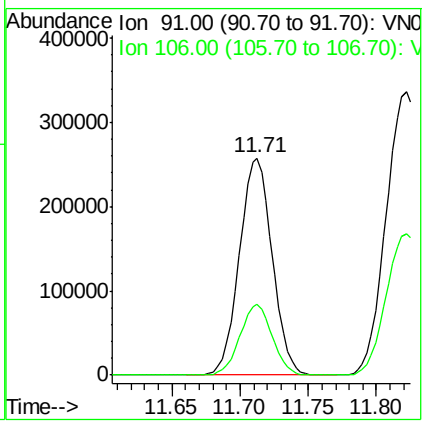




#68
Ethyl Benzene
Concen: 51.87 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 91 Resp: 429405

Ion	Ratio	Lower	Upper
91	100		
106	32.5	25.5	38.3



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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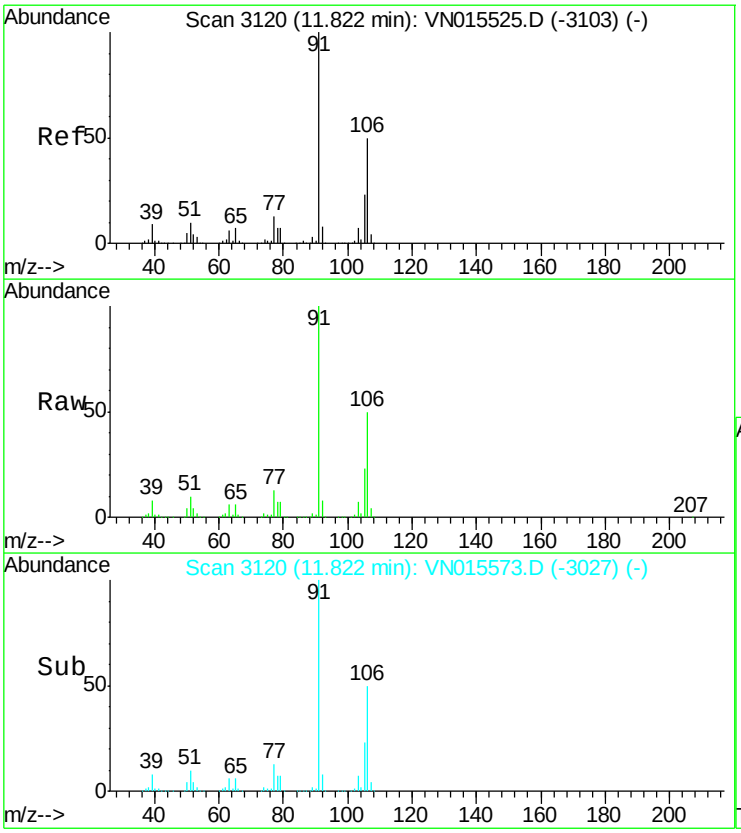
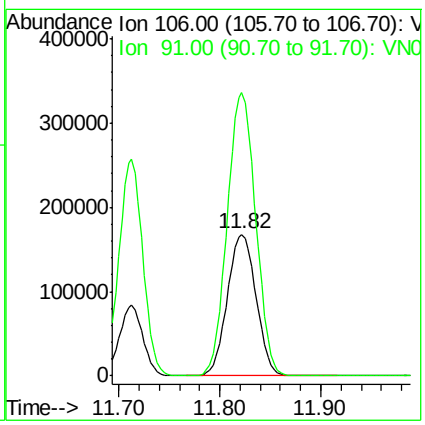
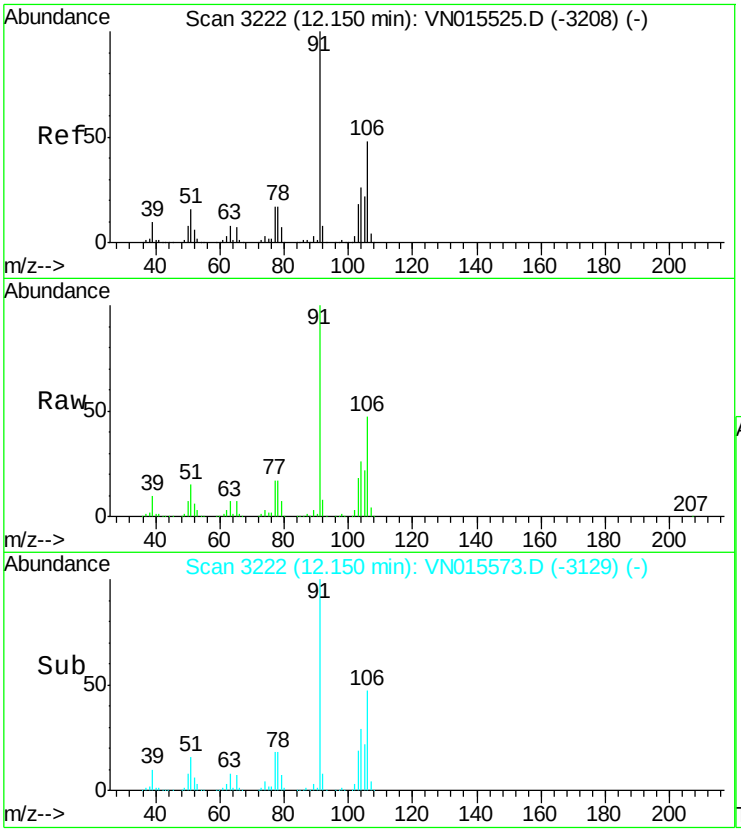


#69
m/p-Xylenes
Concen: 102.86 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:106 Resp: 331391

Ion	Ratio	Lower	Upper
106	100		
91	198.5	160.5	240.7





#70
o-Xylene
Concen: 52.19 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:106 Resp: 165437

Ion	Ratio	Lower	Upper
106	100		
91	209.4	104.9	314.7

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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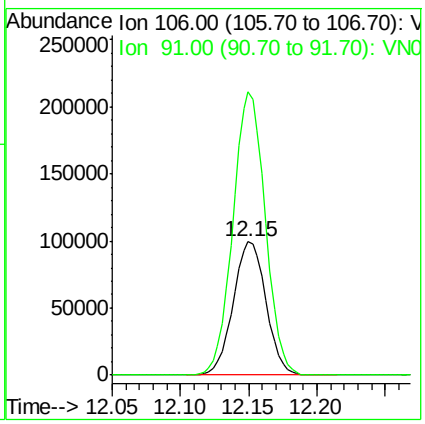
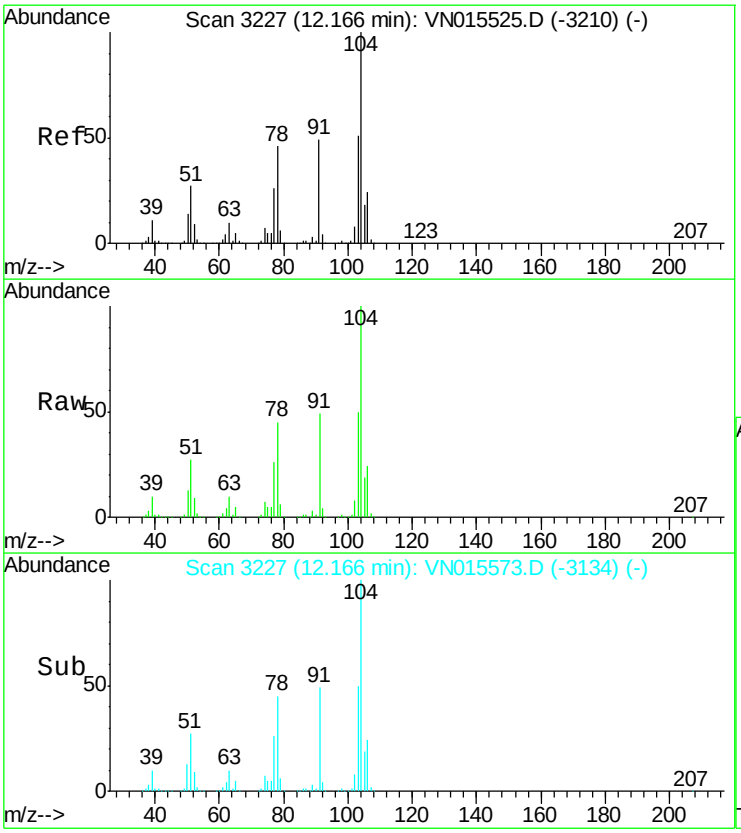
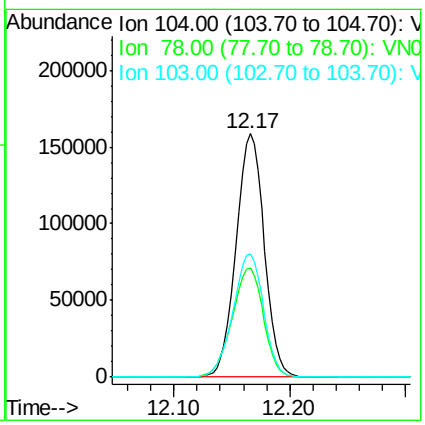


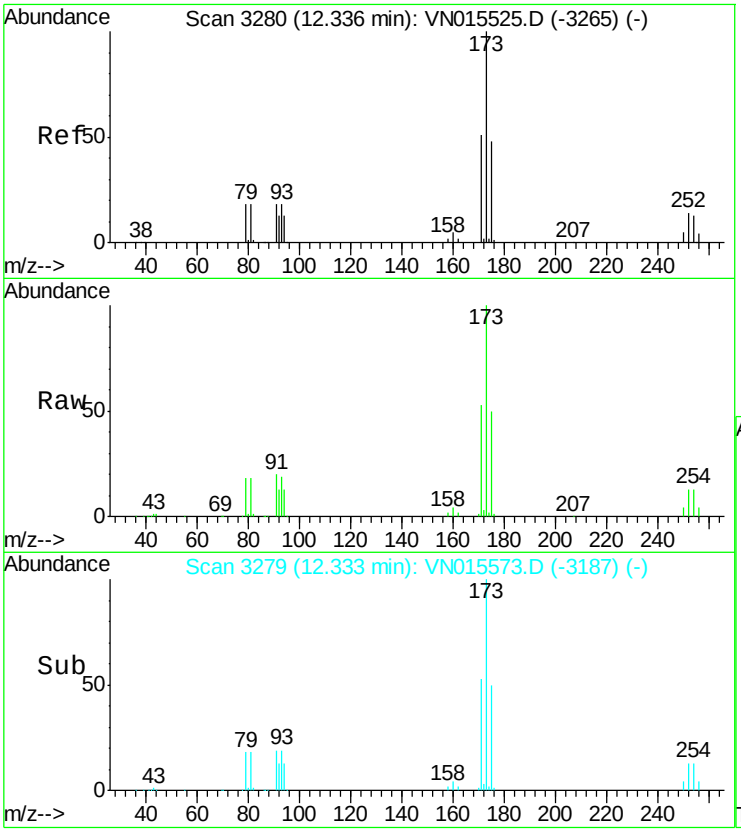


#71
Styrene
Concen: 53.61 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:104 Resp: 266940

Ion	Ratio	Lower	Upper
104	100		
78	49.7	40.1	60.1
103	54.9	44.0	66.0





#72
Bromoform
Concen: 51.18 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:173 Resp: 82613

Ion	Ratio	Lower	Upper
173	100		
175	48.6	24.3	72.9
254	0.0	0.0	0.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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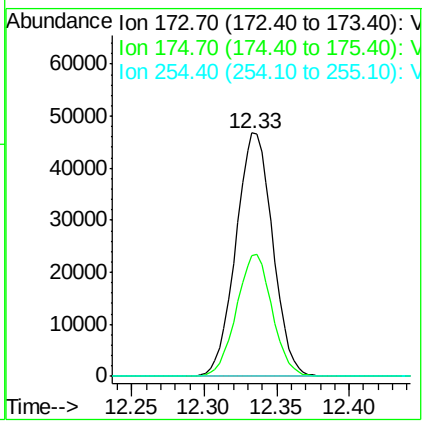
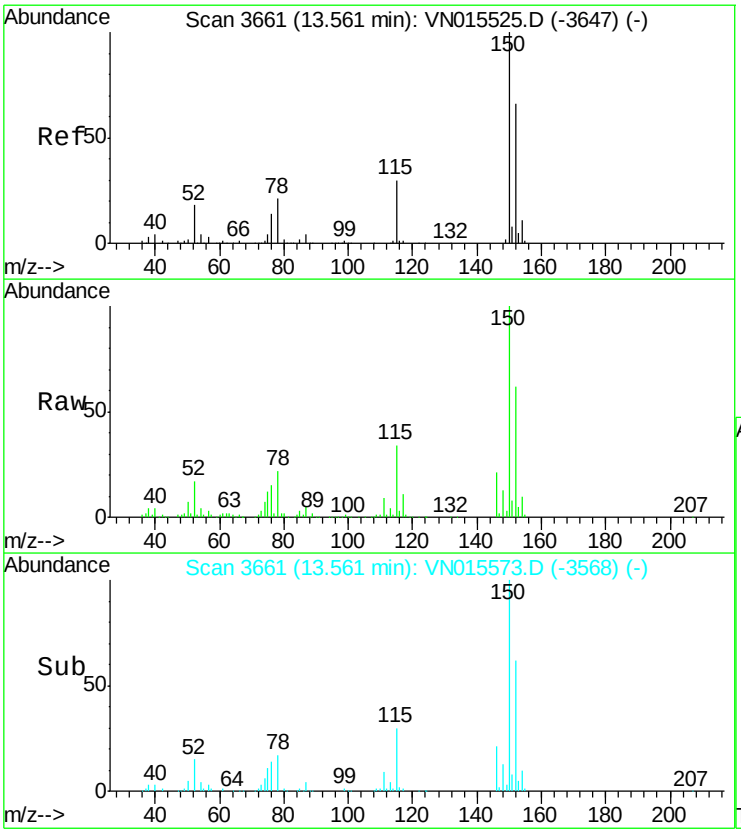
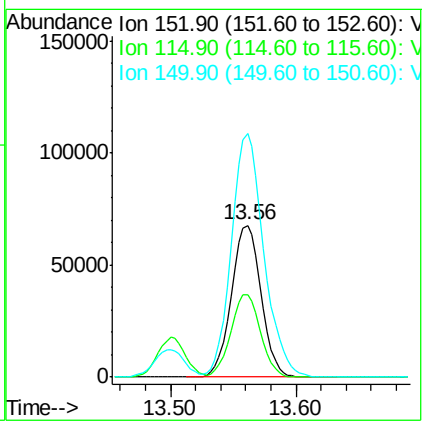


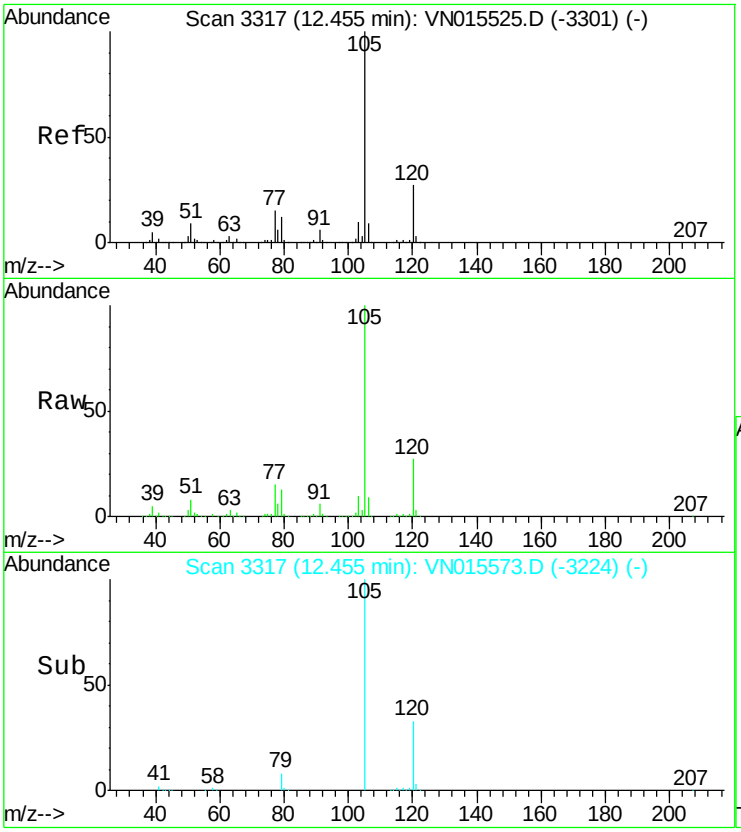


#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:152 Resp: 111003

Ion	Ratio	Lower	Upper
152	100		
115	54.4	27.2	81.6
150	175.2	0.0	343.6





#74
Isopropylbenzene
Concen: 53.04 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:105 Resp: 439439

Ion	Ratio	Lower	Upper
105	100		
120	27.2	13.7	41.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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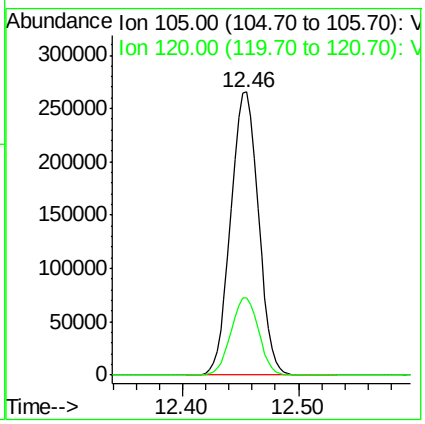
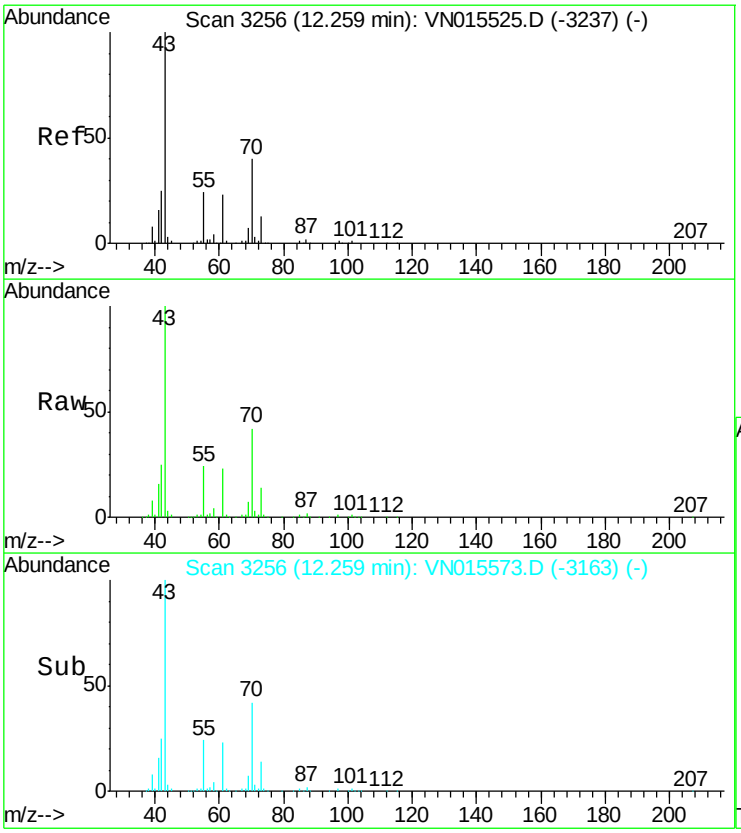
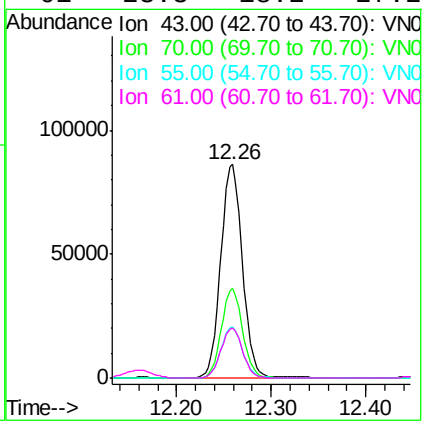




#75
N-amyl acetate
Concen: 47.30 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 43 Resp: 137570

Ion	Ratio	Lower	Upper
43	100		
70	40.9	32.0	48.0
55	23.9	18.5	27.7
61	23.3	18.2	27.2



Instrument :
MSVOA_N
LabSampleId :
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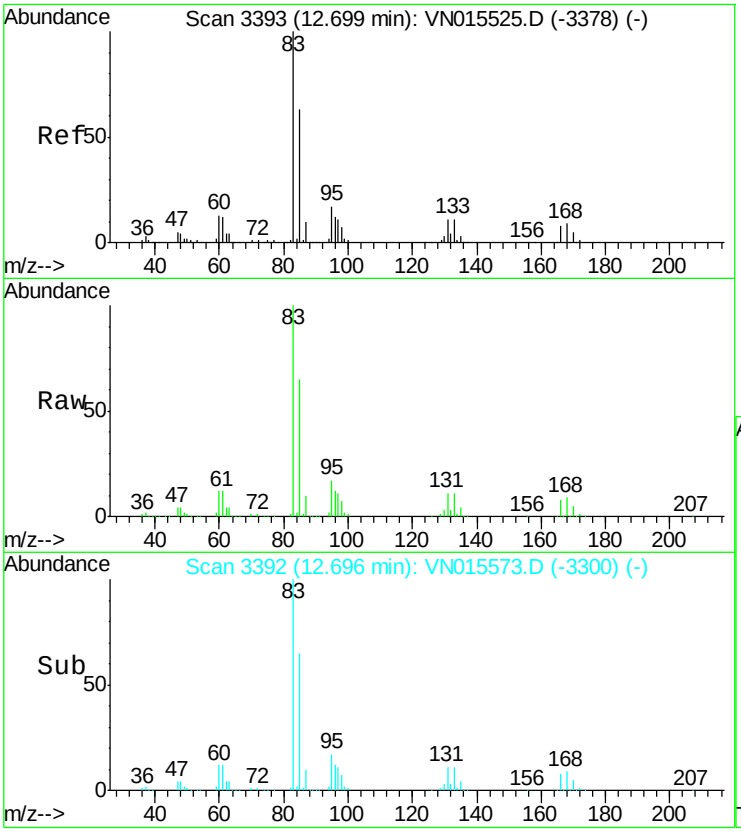
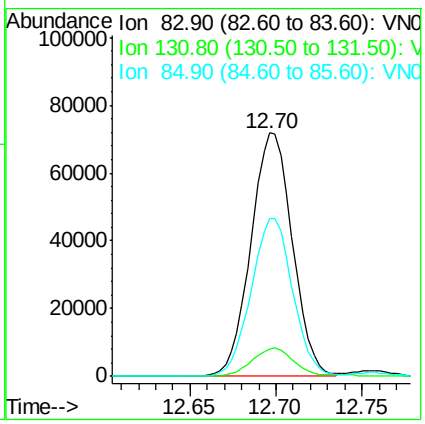
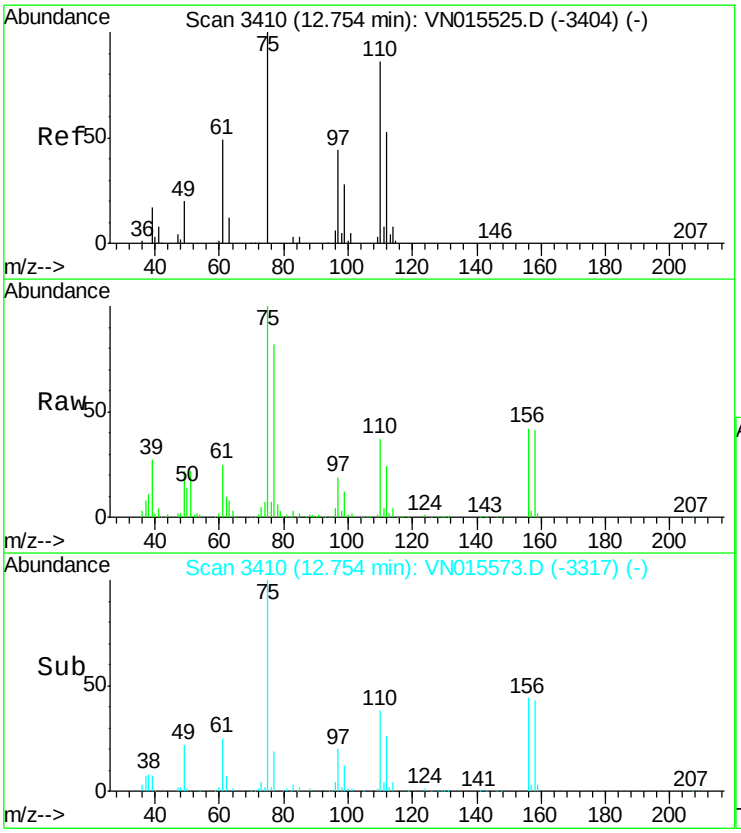


#76
1,1,2,2-Tetrachloroethane
Concen: 55.84 ug/l
RT: 12.70 min Scan# 3392
Delta R.T. -0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 83 Resp: 120315

Ion	Ratio	Lower	Upper
83	100		
131	12.2	5.9	17.6
85	64.9	31.9	95.7

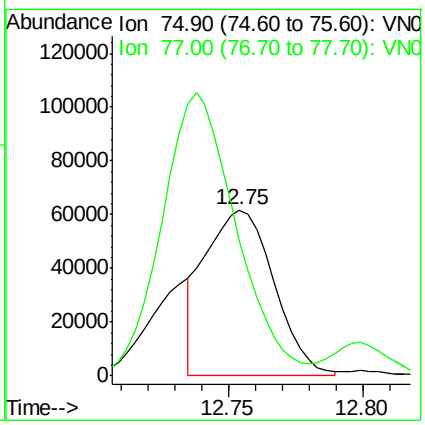


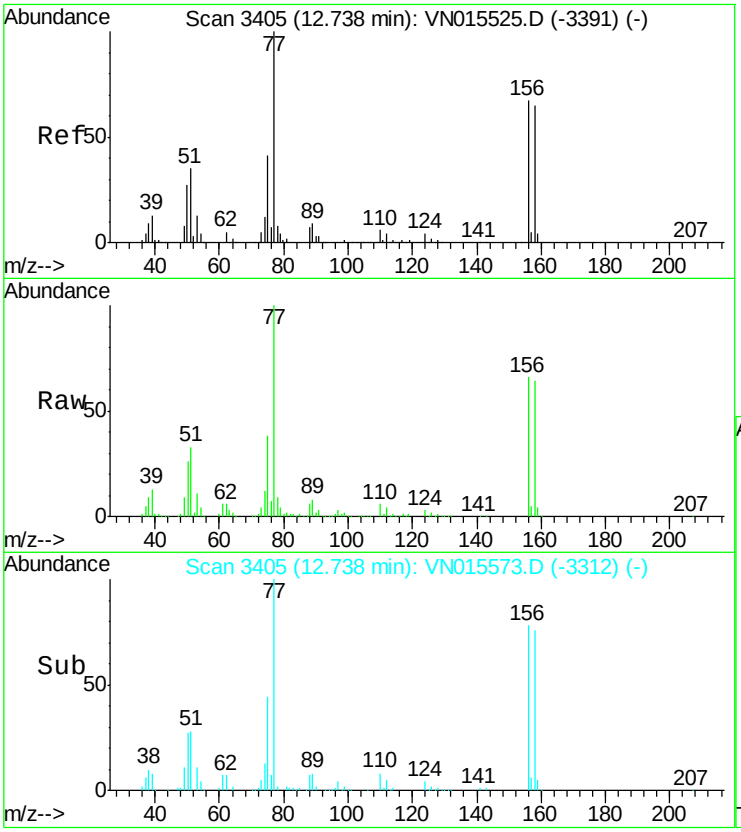


#77
1,2,3-Trichloropropane
Concen: 58.52 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 75 Resp: 110200

Ion	Ratio	Lower	Upper
75	100		
77	183.4	90.4	271.2





#78
Bromobenzene
Concen: 48.68 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:156 Resp: 117183

Ion	Ratio	Lower	Upper
156	100		
77	172.5	86.0	258.0
158	97.2	48.7	146.1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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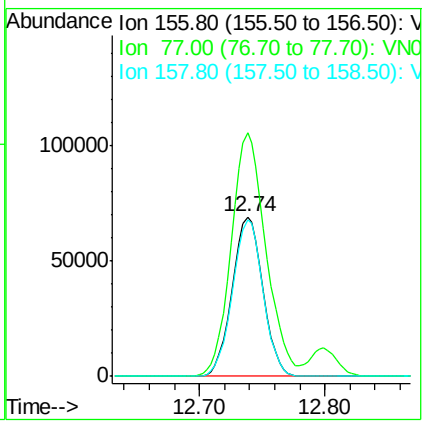
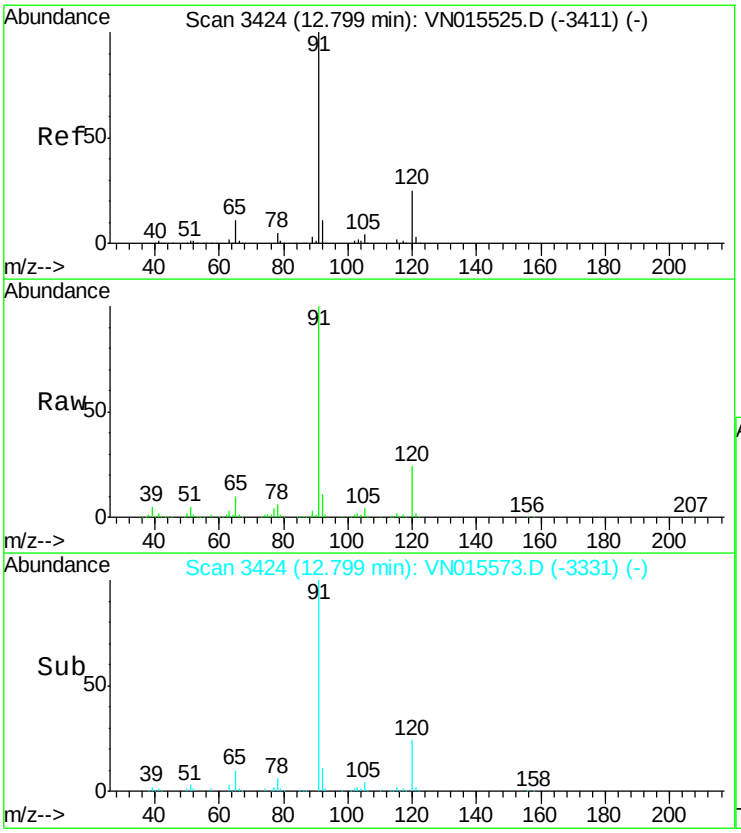
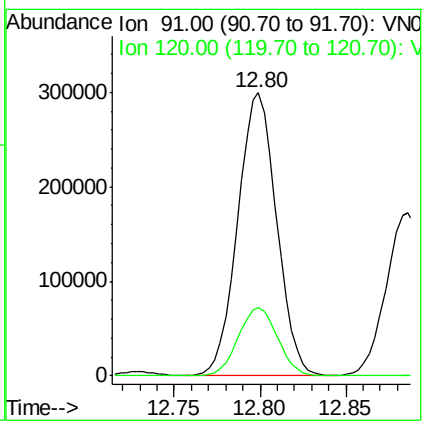


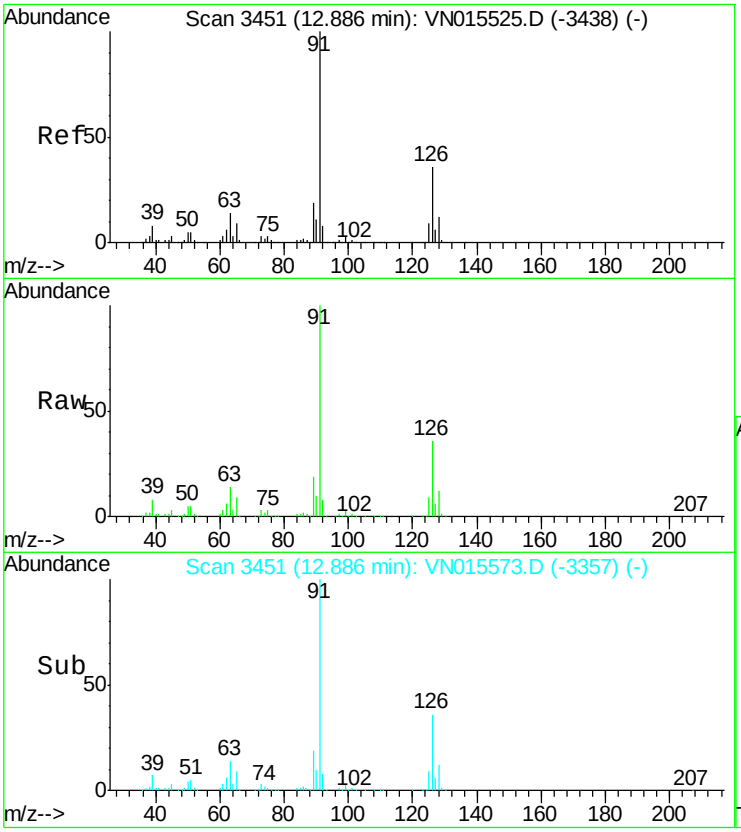


#79
n-propylbenzene
Concen: 49.56 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 91 Resp: 469825

Ion	Ratio	Lower	Upper
91	100		
120	24.5	12.2	36.4





#80
2-Chlorotoluene
Concen: 52.89 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 91 Resp: 287284

Ion	Ratio	Lower	Upper
91	100		
126	35.6	17.9	53.8

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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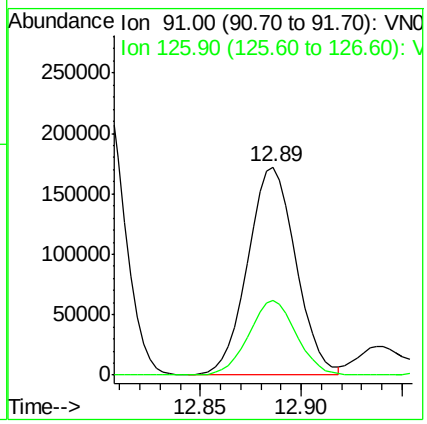
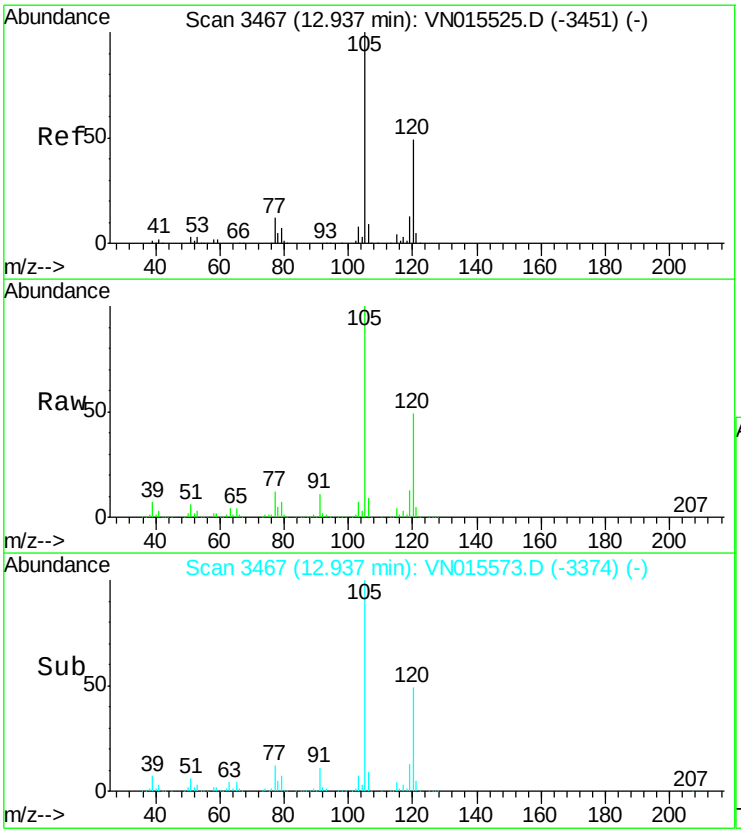
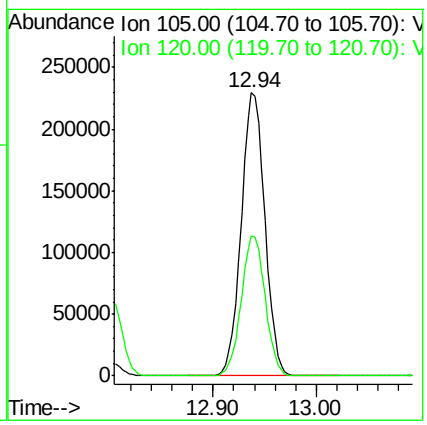


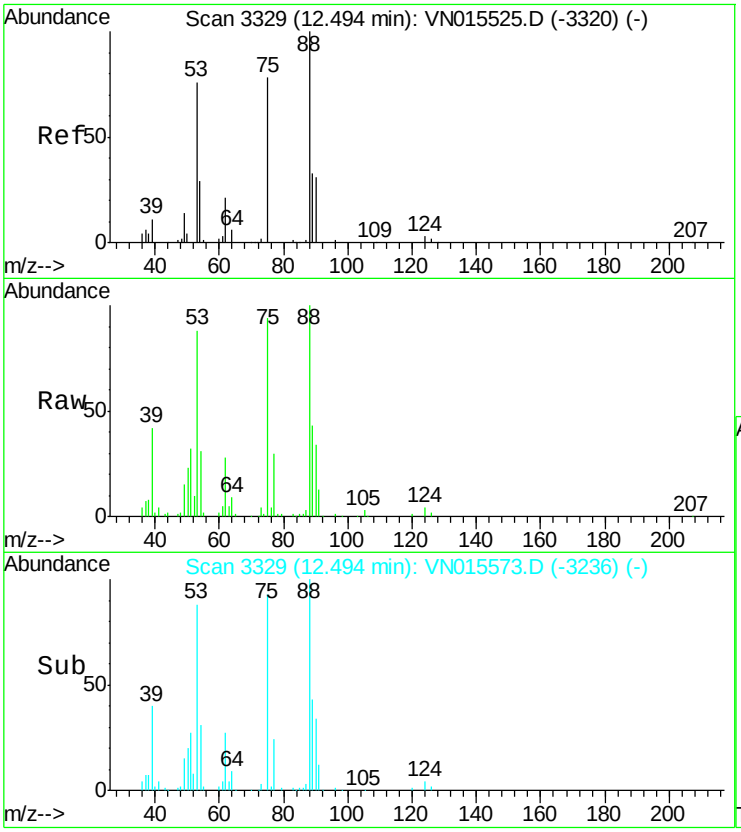


#81
1,3,5-Trimethylbenzene
Concen: 48.48 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:105 Resp: 366189

Ion	Ratio	Lower	Upper
105	100		
120	49.8	24.6	73.8





#82
trans-1,4-Dichloro-2-butene
Concen: 45.52 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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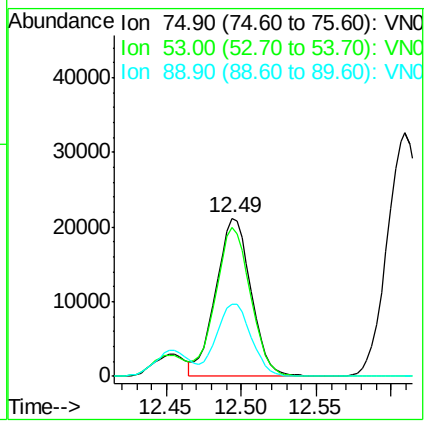
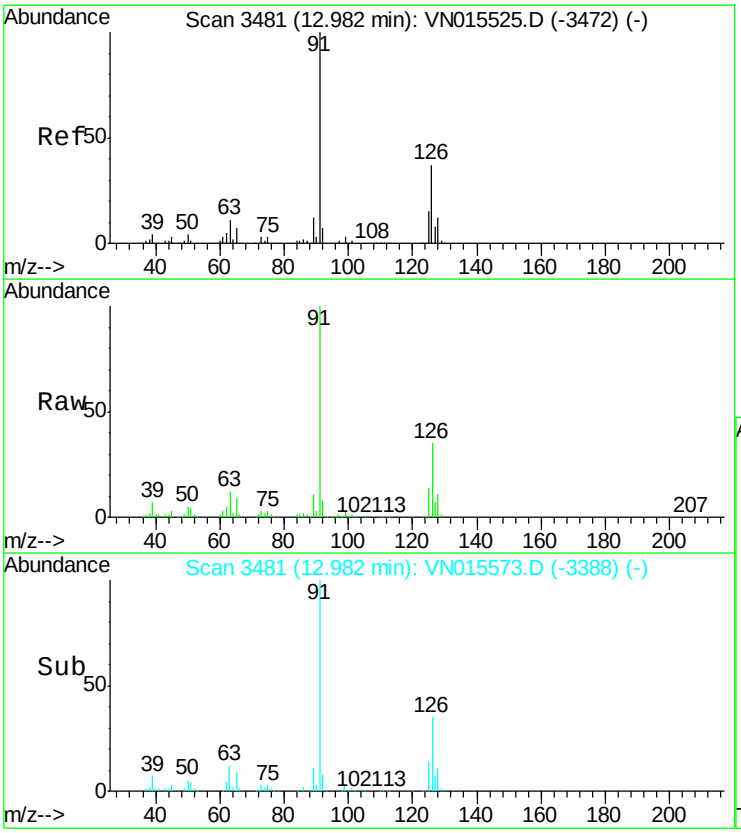
Tgt Ion: 75 Resp: 34798

Ion	Ratio	Lower	Upper
75	100		
53	92.8	77.5	116.3
89	45.1	37.7	56.5

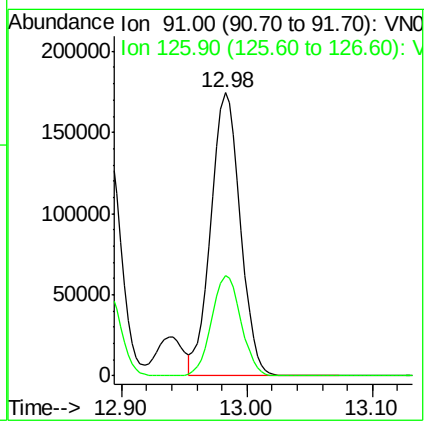


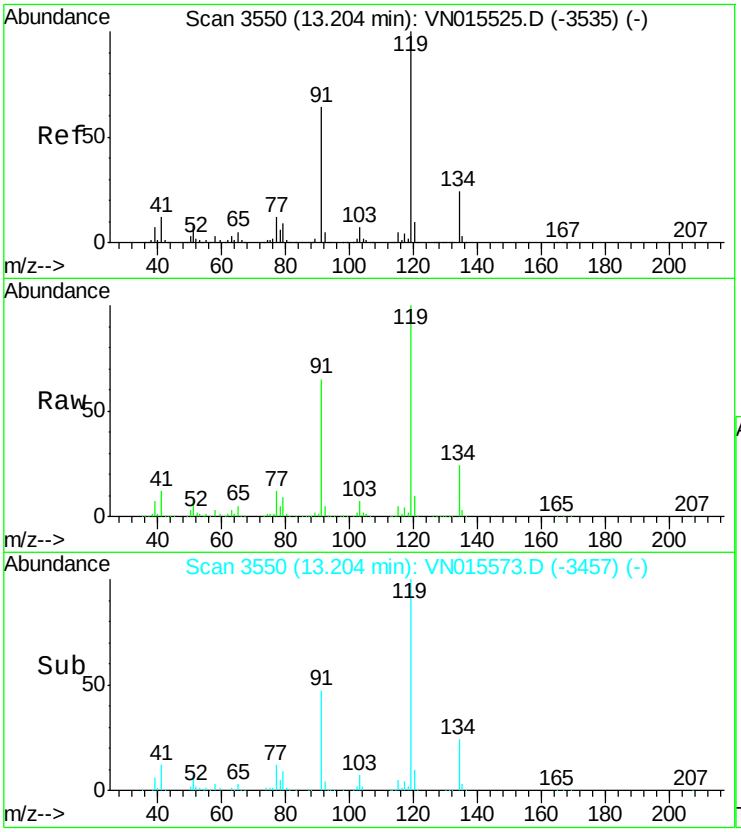


#83
4-Chlorotoluene
Concen: 49.17 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 91 Resp: 282768

Ion	Ratio	Lower	Upper
91	100		
126	35.5	17.5	52.6





#84
tert-Butylbenzene
Concen: 53.08 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:119 Resp: 323606

Ion	Ratio	Lower	Upper
119	100		
91	63.3	31.9	95.9
134	24.3	12.1	36.3

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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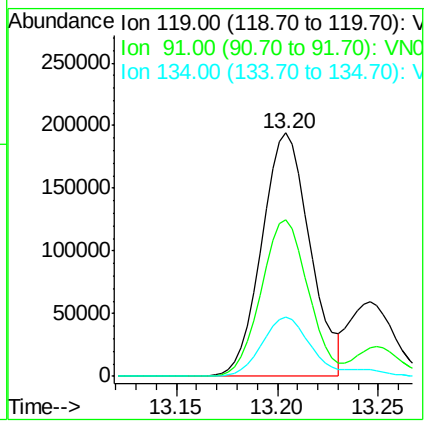
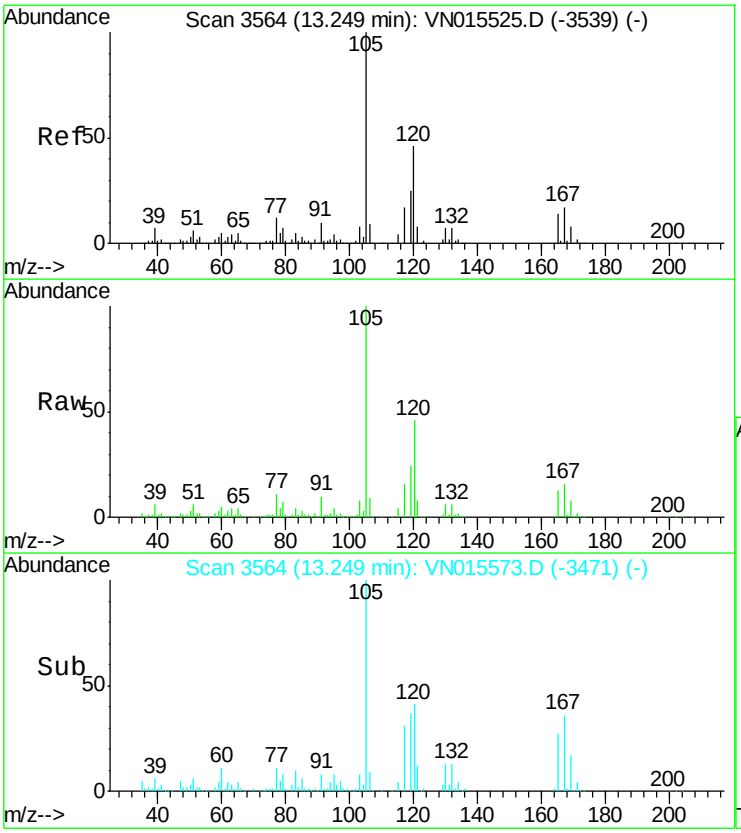
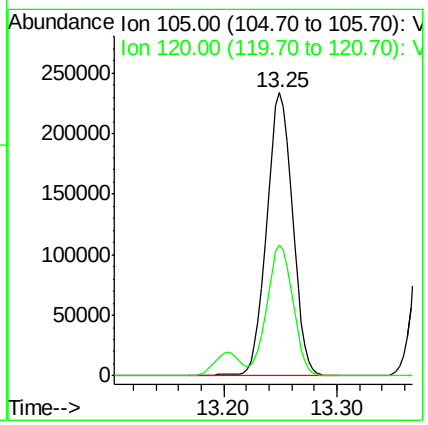




#85
1,2,4-Trimethylbenzene
Concen: 49.24 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:105 Resp: 372151

Ion	Ratio	Lower	Upper
105	100		
120	46.5	23.1	69.3



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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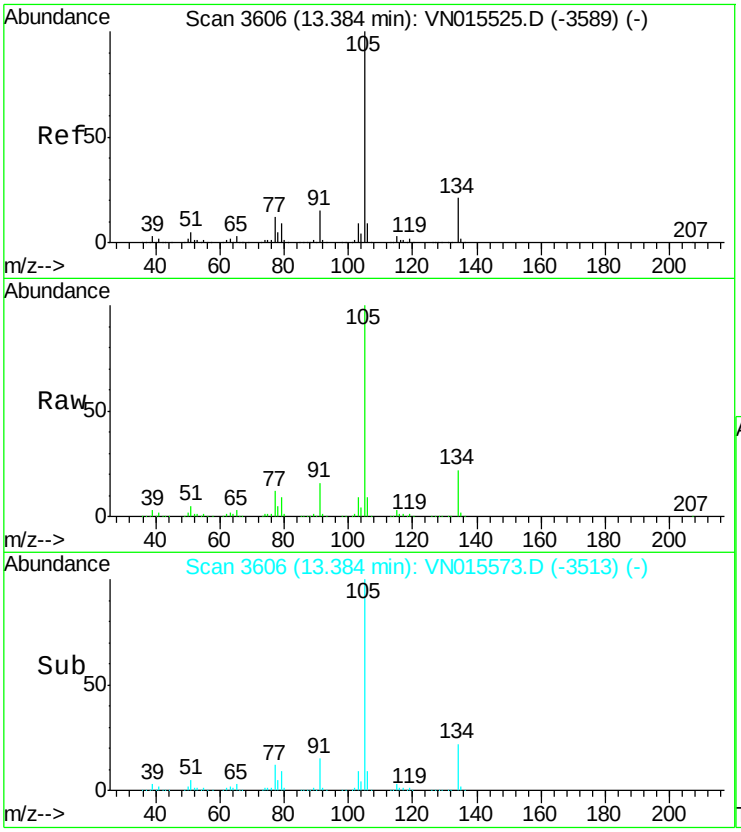
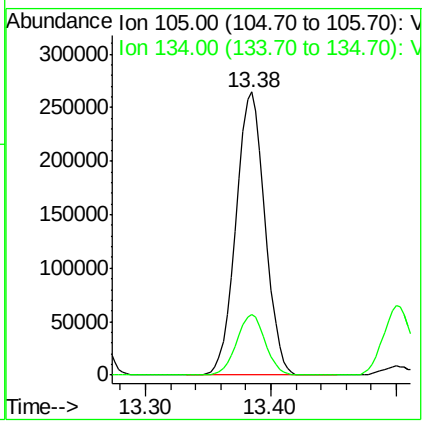
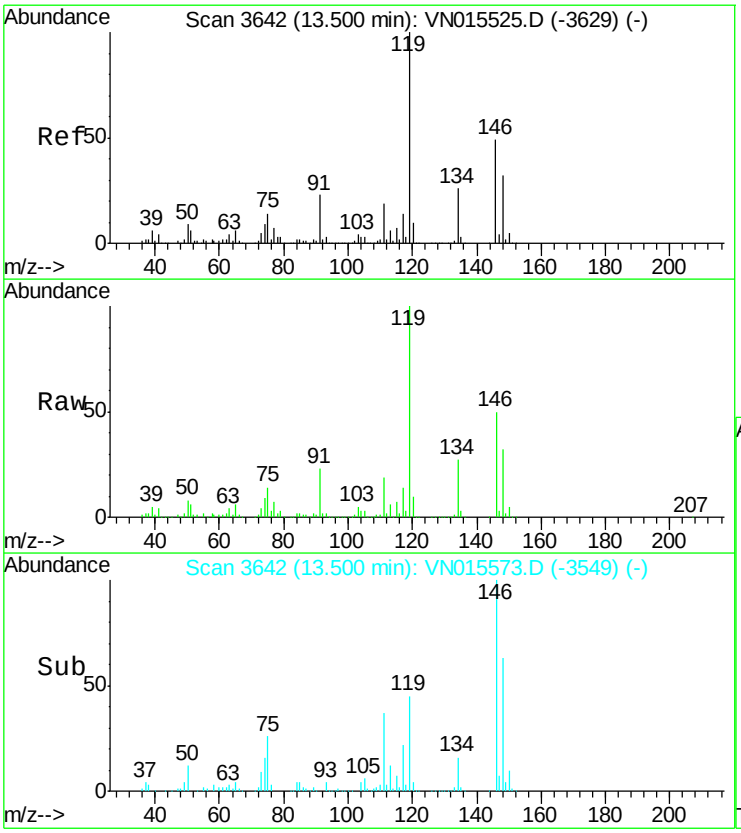


#86
sec-Butylbenzene
Concen: 48.97 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:105 Resp: 423534

Ion	Ratio	Lower	Upper
105	100		
134	21.2	10.6	31.8

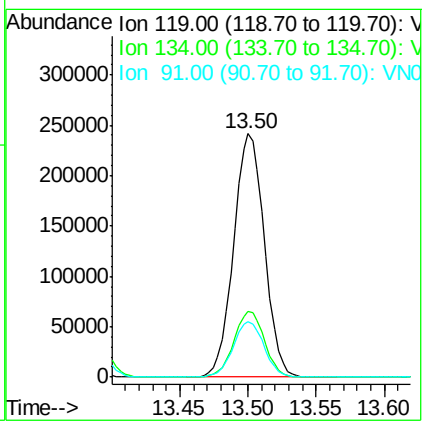


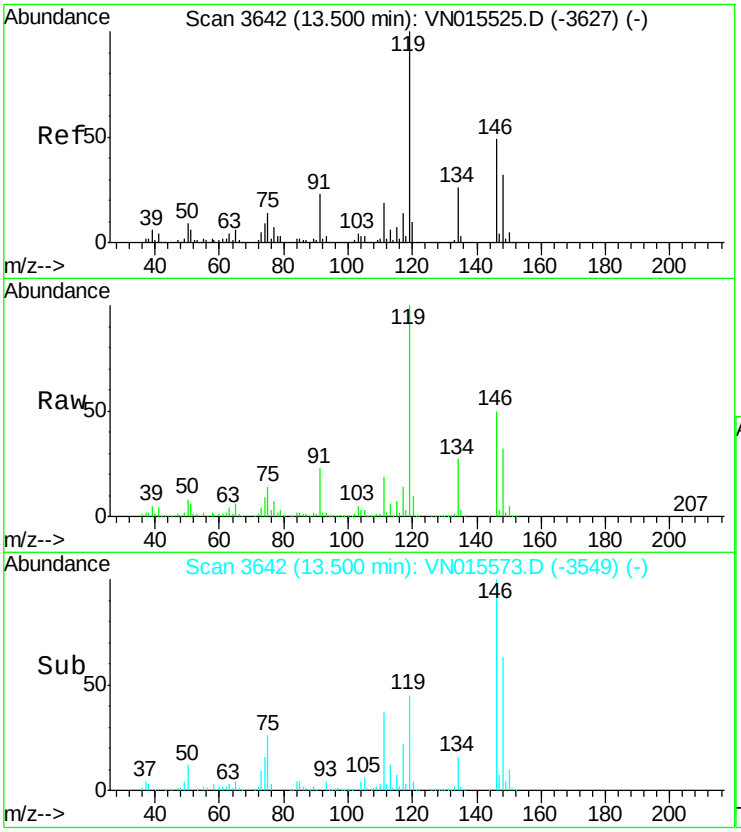


#87
p-Isopropyltoluene
Concen: 50.22 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:119 Resp: 375664

Ion	Ratio	Lower	Upper
119	100		
134	27.0	13.3	39.9
91	22.9	11.7	35.1





#88
1,3-Dichlorobenzene
Concen: 50.69 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:146 Resp: 198466

Ion	Ratio	Lower	Upper
146	100		
111	37.9	19.1	57.1
148	63.8	32.4	97.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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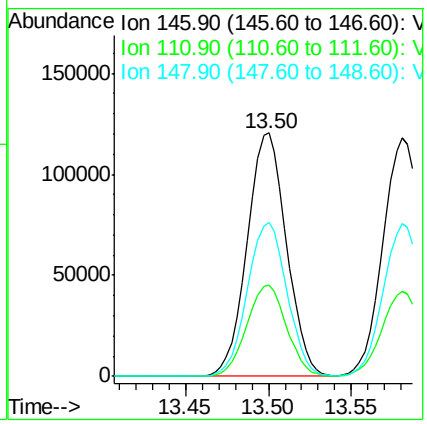
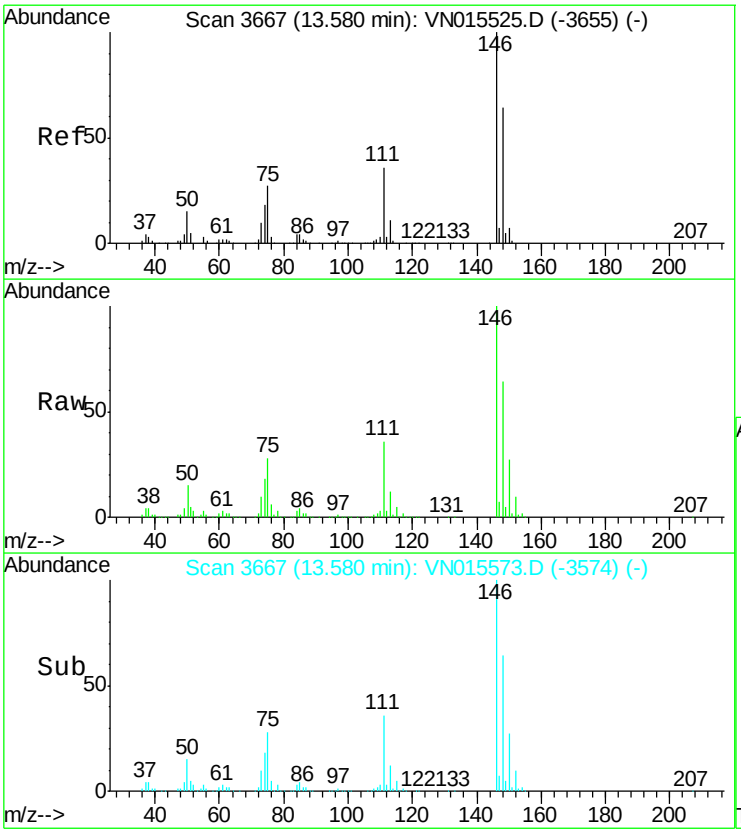
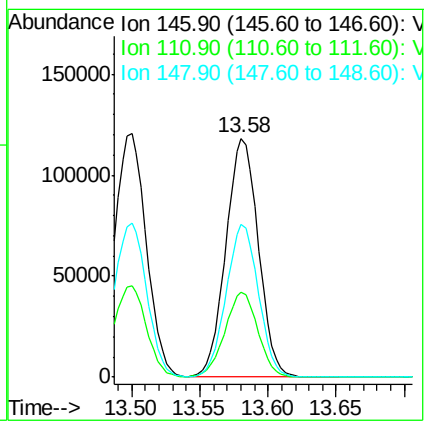


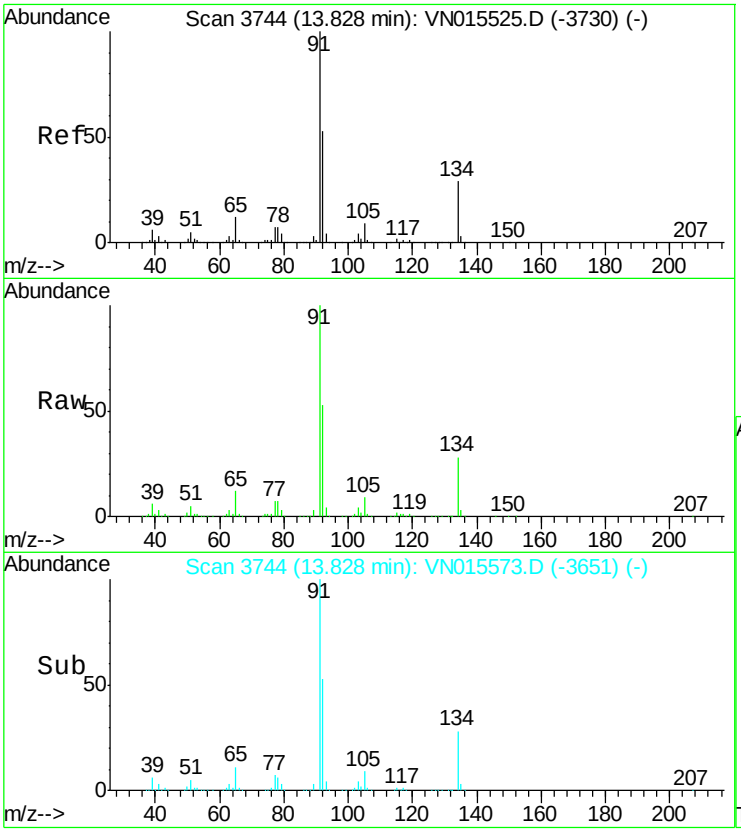


#89
1,4-Dichlorobenzene
Concen: 50.74 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:146 Resp: 194987

Ion	Ratio	Lower	Upper
146	100		
111	36.0	18.4	55.4
148	63.9	32.3	96.9





#90
n-Butylbenzene
Concen: 52.44 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 91 Resp: 295948

Ion	Ratio	Lower	Upper
91	100		
92	52.9	26.6	79.8
134	28.9	14.4	43.4

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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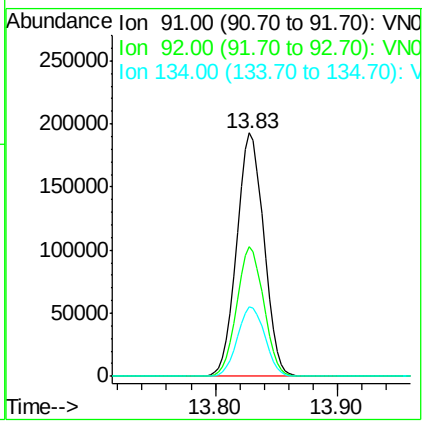
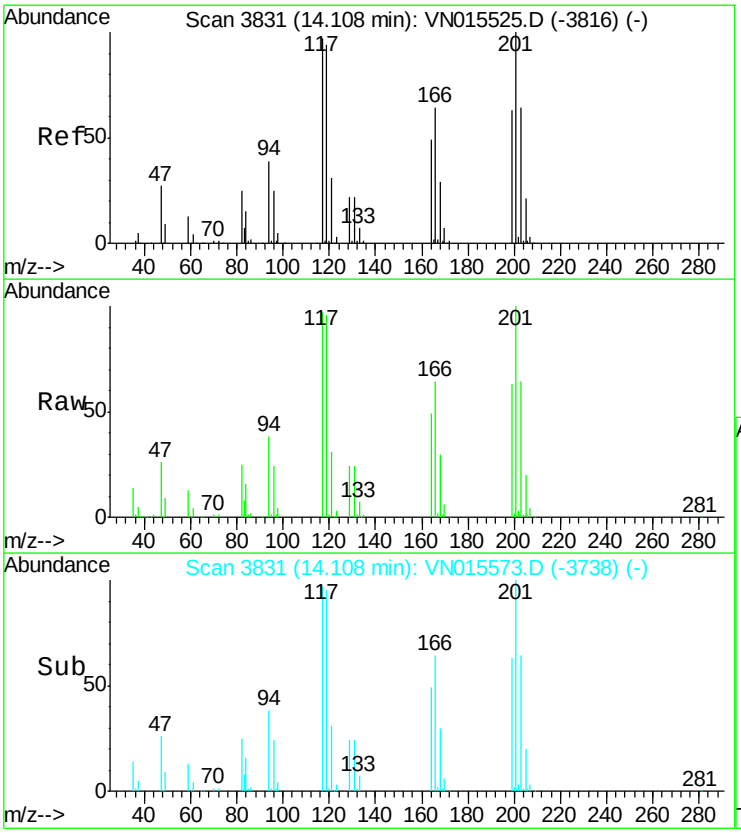
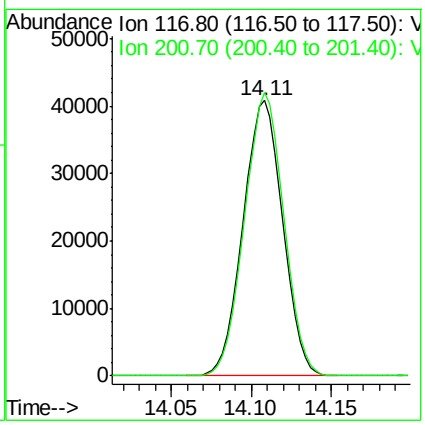


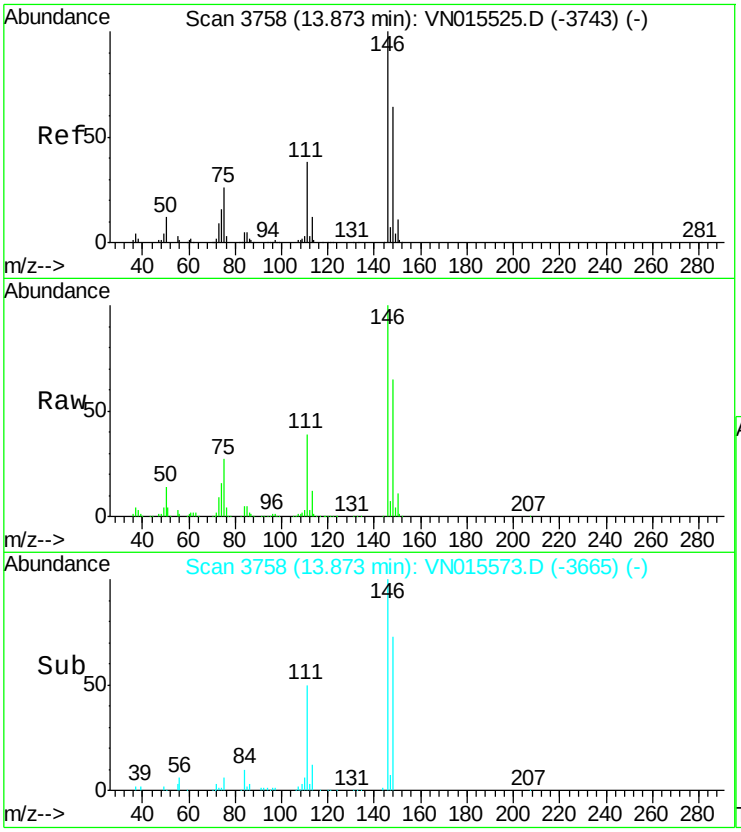


#91
Hexachloroethane
Concen: 48.62 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:117 Resp: 69212

Ion	Ratio	Lower	Upper
117	100		
201	101.8	51.7	155.2





#92
1,2-Dichlorobenzene
Concen: 50.67 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:146 Resp: 196698

Ion	Ratio	Lower	Upper
146	100		
111	39.0	19.4	58.2
148	64.1	32.4	97.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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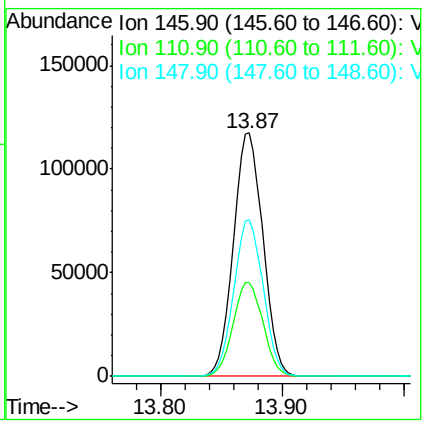
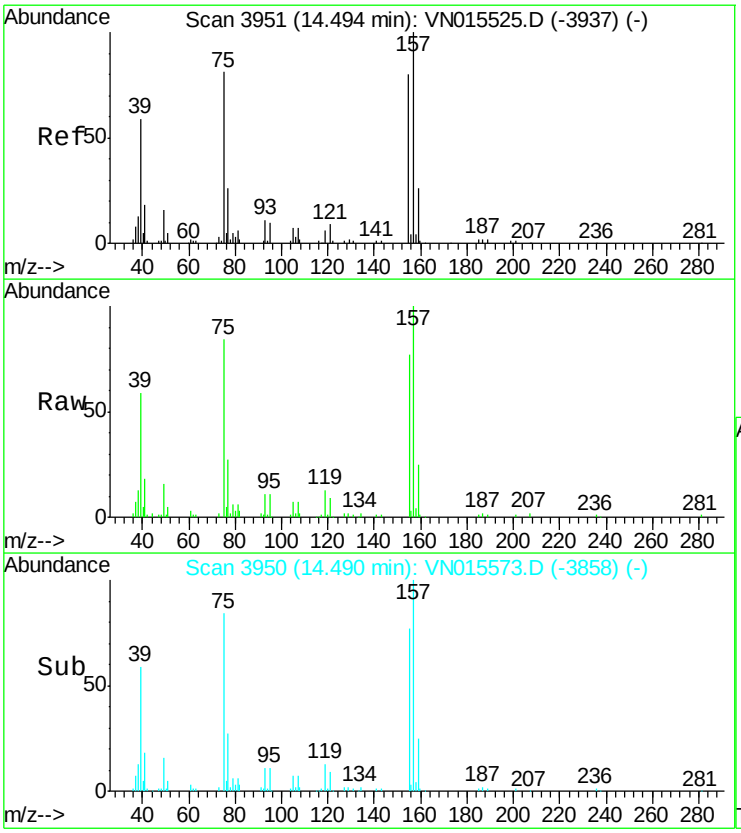
5/22/2014 4:15:56 PM

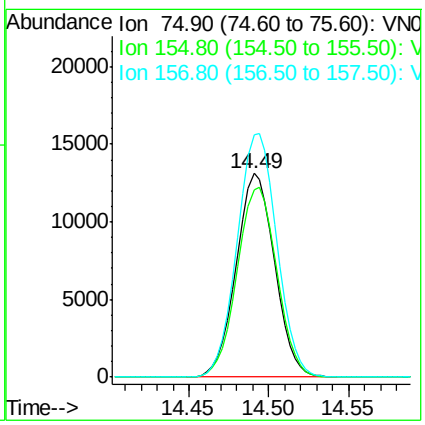


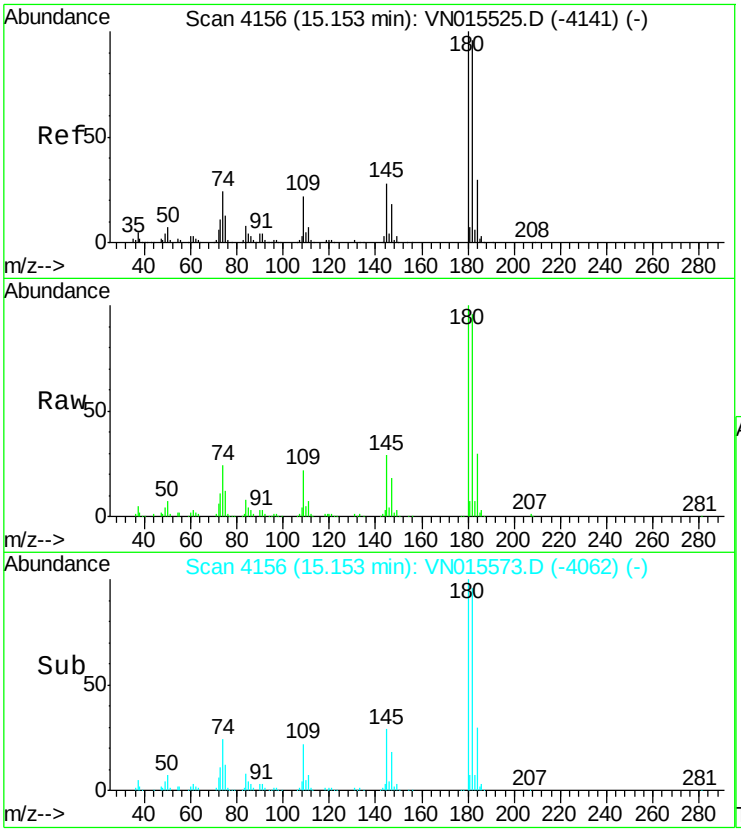


#93
1,2-Dibromo-3-Chloropropane
Concen: 51.64 ug/l
RT: 14.49 min Scan# 3950
Delta R.T. -0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion: 75 Resp: 21463

Ion	Ratio	Lower	Upper
75	100		
155	96.0	49.4	148.2
157	123.5	61.3	183.8





#94
1,2,4-Trichlorobenzene
Concen: 51.69 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:180 Resp: 112106

Ion	Ratio	Lower	Upper
180	100		
182	95.7	48.0	144.0
145	29.1	14.0	42.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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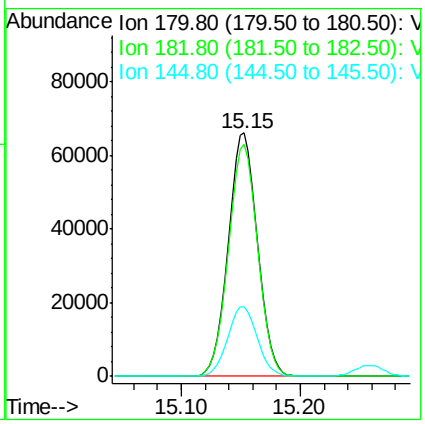
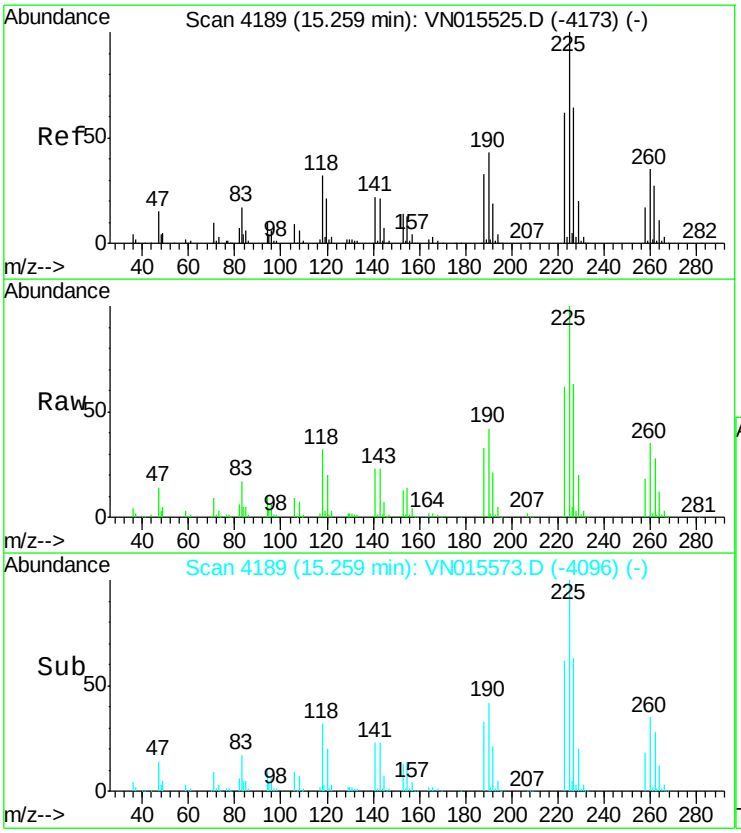
5/22/2014 4:15:56 PM

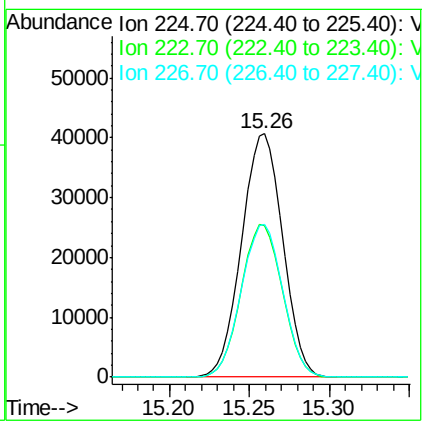


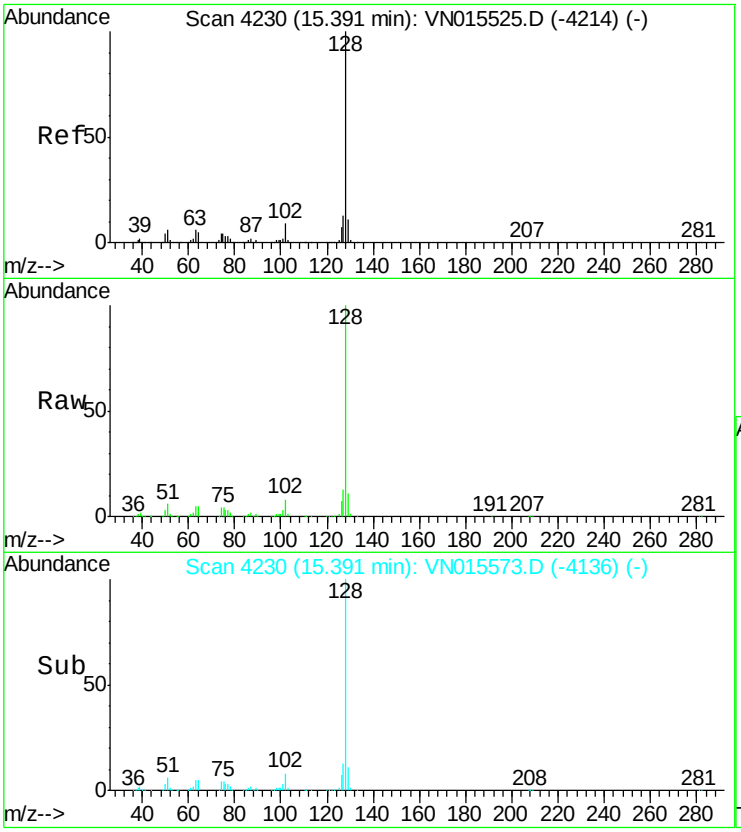


#95
Hexachlorobutadiene
Concen: 50.23 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:225 Resp: 71441

Ion	Ratio	Lower	Upper
225	100		
223	63.0	31.6	95.0
227	63.5	32.1	96.5





#96
Naphthalene
Concen: 48.39 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:128 Resp: 256502

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.3	15.5
129	10.8	8.7	13.1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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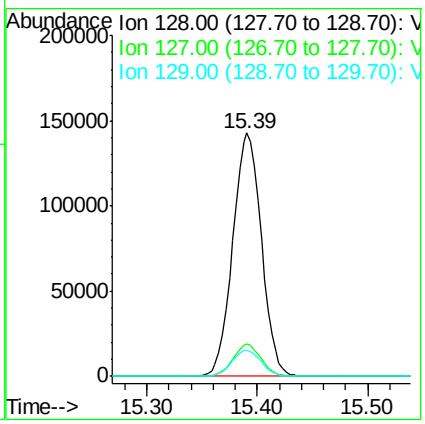
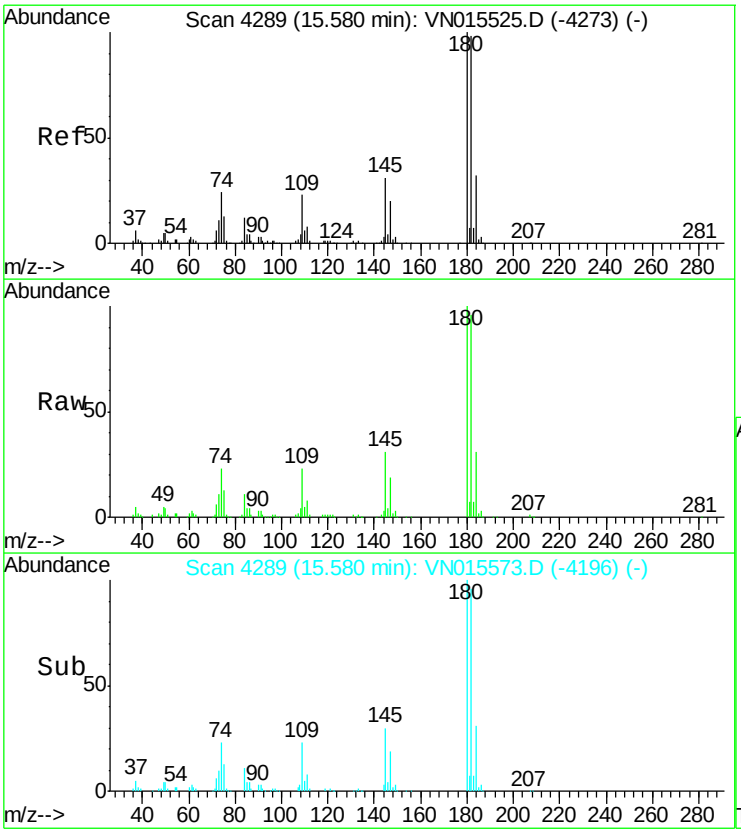
5/22/2014 4:15:56 PM

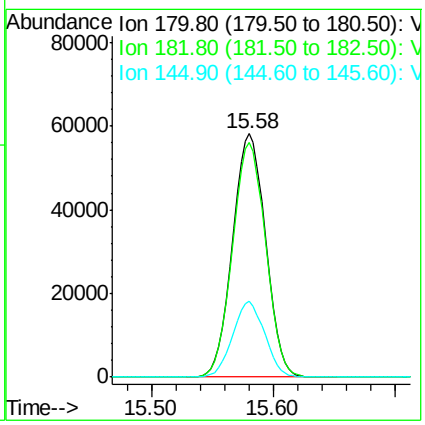




#97
1,2,3-Trichlorobenzene
Concen: 51.33 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015573.D
Acq: 22 May 2014 00:44

Tgt Ion:180 Resp: 108736

Ion	Ratio	Lower	Upper
180	100		
182	96.6	47.8	143.4
145	30.2	14.9	44.7



Evaluate Continuing Calibration Report

Data Path : W:\HPCHEM1\MSVOA N\Data\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: May 22 00:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	93	0.00
2	T	Dichlorodifluoromethane	0.429	0.417	2.8	103	0.00
3	T	Chlorodifluoromethane	0.270	0.000	100.0#	0#	-1.87#
4	P	Chloromethane	0.559	0.534	4.5	108	0.00
5	C	Vinyl Chloride	0.467	0.475	-1.7#	101	0.00
6	T	Bromomethane	0.291	0.263	9.6	95	0.00
7	T	Chloroethane	0.294	0.313	-6.5	103	0.00
8	T	Trichlorofluoromethane	0.759	0.765	-0.8	102	0.00
9	T	Diethyl Ether	0.281	0.296	-5.3	101	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.428	0.435	-1.6	102	0.00
11	T	Methyl Iodide	0.450	0.385	14.4	67	0.00
12	T	Tert butyl alcohol	0.071	0.062	12.7	95	0.00
13	CM	1,1-Dichloroethene	0.409	0.417	-2.0#	101	0.00
14	T	Acrolein	0.052	0.053	-1.9	100	0.00
15	T	Allyl chloride	0.716	0.696	2.8	95	0.00
16	T	Acrylonitrile	0.184	0.209	-13.6	99	0.00
17	T	Acetone	0.180	0.169	6.1	87	0.00
18	T	Carbon Disulfide	1.153	1.160	-0.6	99	0.00
19	T	Methyl Acetate	0.873	0.930	-6.5	101	0.00
20	T	Methyl tert-butyl Ether	1.440	1.475	-2.4	98	0.00
21	T	Methylene Chloride	0.468	0.479	-2.4	101	0.00
22	T	trans-1,2-Dichloroethene	0.431	0.450	-4.4	102	0.00
23	T	Diisopropyl ether	1.474	1.532	-3.9	99	0.00
24	T	Vinyl Acetate	0.732	0.828	-13.1	100	0.00
25	P	1,1-Dichloroethane	0.812	0.831	-2.3	98	0.00
26	T	2-Butanone	0.255	0.265	-3.9	95	0.00
27	T	2,2-Dichloropropane	0.717	0.589	17.9	80	0.00
28	T	cis-1,2-Dichloroethene	0.506	0.524	-3.6	99	0.00
29	T	Bromochloromethane	0.337	0.400	-18.7	98	0.00
30	T	Tetrahydrofuran	0.171	0.178	-4.1	99	0.00
31	C	Chloroform	0.838	0.866	-3.3#	100	0.00
32	T	Cyclohexane	0.916	0.796	13.1	103	0.00
33	T	1,1,1-Trichloroethane	0.785	0.792	-0.9	97	0.00
34	S	1,2-Dichloroethane-d4	0.575	0.546	5.0	96	0.00
35	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	0.00
36	S	Dibromofluoromethane	0.326	0.316	3.1	97	0.00
37	T	1,1-Dichloropropene	0.446	0.454	-1.8	100	0.00
38	T	Ethyl Acetate	0.393	0.402	-2.3	96	0.00
39	T	Carbon Tetrachloride	0.510	0.503	1.4	98	0.00
40	T	Methylcyclohexane	0.570	0.573	-0.5	103	0.00
41	TM	Benzene	1.330	1.339	-0.7	99	0.00
42	T	Methacrylonitrile	0.233	0.237	-1.7	97	0.00
43	TM	1,2-Dichloroethane	0.486	0.482	0.8	96	0.00
44	T	Isopropyl Acetate	0.708	0.704	0.6	96	0.00
45	TM	Trichloroethene	0.372	0.378	-1.6	101	0.00

Evaluate Continuing Calibration Report

Data Path : W:\HPCHEM1\MSVOA N\Data\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: May 22 00:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	C	1,2-Dichloropropane	0.342	0.347	-1.5#	101	0.00
47	T	Dibromomethane	0.225	0.227	-0.9	98	0.00
48	T	Bromodichloromethane	0.461	0.469	-1.7	98	0.00
49	T	Methyl methacrylate	0.341	0.360	-5.6	98	0.00
50	T	1,4-Dioxane	0.005	0.005	0.0	94	0.00
51	S	Toluene-d8	1.200	1.164	3.0	98	0.00
52	T	4-Methyl-2-Pentanone	0.391	0.397	-1.5	97	0.00
53	CM	Toluene	0.843	0.865	-2.6#	100	0.00
54	T	t-1,3-Dichloropropene	0.472	0.477	-1.1	94	0.00
55	T	cis-1,3-Dichloropropene	0.525	0.520	1.0	95	0.00
56	T	1,1,2-Trichloroethane	0.326	0.333	-2.1	98	0.00
57	T	Ethyl methacrylate	0.482	0.504	-4.6	98	0.00
58	T	1,3-Dichloropropane	0.546	0.557	-2.0	99	0.00
59	T	2-Chloroethyl Vinyl ether	0.045	0.028	37.8#	42#	0.00
60	T	2-Hexanone	0.256	0.267	-4.3	95	0.00
61	T	Dibromochloromethane	0.389	0.407	-4.6	98	0.00
62	T	1,2-Dibromoethane	0.337	0.357	-5.9	100	0.00
63	S	4-Bromofluorobenzene	0.411	0.418	-1.7	100	0.00
64	I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00
65	T	Tetrachloroethene	0.394	0.404	-2.5	101	0.00
66	PM	Chlorobenzene	1.082	1.086	-0.4	100	0.00
67	T	1,1,1,2-Tetrachloroethane	0.412	0.421	-2.2	97	0.00
68	C	Ethyl Benzene	1.772	1.838	-3.7#	100	0.00
69	T	m/p-Xylenes	0.689	0.709	-2.9	100	0.00
70	T	o-Xylene	0.678	0.708	-4.4	99	0.00
71	T	Styrene	1.066	1.143	-7.2	99	0.00
72	P	Bromoform	0.345	0.354	-2.6	96	0.00
73	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00
74	T	Isopropylbenzene	4.165	3.959	4.9	100	0.00
75	T	N-amyl acetate	1.310	1.239	5.4	93	0.00
76	P	1,1,2,2-Tetrachloroethane	1.133	1.084	4.3	99	0.00
77	T	1,2,3-Trichloropropane	0.980	0.993	-1.3	105	0.00
78	T	Bromobenzene	1.084	1.056	2.6	98	0.00
79	T	n-propylbenzene	4.270	4.233	0.9	100	0.00
80	T	2-Chlorotoluene	2.733	2.588	5.3	99	0.00
81	T	1,3,5-Trimethylbenzene	3.402	3.299	3.0	99	0.00
82	T	trans-1,4-Dichloro-2-butene	0.344	0.313	9.0	88	0.00
83	T	4-Chlorotoluene	2.590	2.547	1.7	100	0.00
84	T	tert-Butylbenzene	3.104	2.915	6.1	100	0.00
85	T	1,2,4-Trimethylbenzene	3.404	3.353	1.5	99	0.00
86	T	sec-Butylbenzene	3.896	3.816	2.1	100	0.00
87	T	p-Isopropyltoluene	3.370	3.384	-0.4	100	0.00
88	T	1,3-Dichlorobenzene	1.764	1.788	-1.4	101	0.00
89	T	1,4-Dichlorobenzene	1.731	1.757	-1.5	101	0.00

Evaluate Continuing Calibration Report

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Data Path : W:\HPCHEM1\MSVOA_N\Data\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 22 00:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	n-Butylbenzene	2.542	2.666	-4.9	99	0.00
91 T	Hexachloroethane	0.641	0.624	2.7	96	0.00
92 T	1,2-Dichlorobenzene	1.749	1.772	-1.3	100	0.00
93 T	1,2-Dibromo-3-Chloropropane	0.187	0.193	-3.2	99	0.00
94 T	1,2,4-Trichlorobenzene	0.836	1.010	-20.8#	102	0.00
95 T	Hexachlorobutadiene	0.641	0.644	-0.5	99	0.00
96 T	Naphthalene	2.044	2.311	-13.1	99	0.00
97 T	1,2,3-Trichlorobenzene	0.839	0.980	-16.8	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data Path : W:\HPCHEM1\MSVOA N\Data\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: May 22 00:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	93	0.00
2	T	Dichlorodifluoromethane	50.000	53.995	-8.0	103	0.00
3	T	Chlorodifluoromethane	50.000	0.000	100.0#	0	-1.87#
4	P	Chloromethane	50.000	57.751	-15.5	108	0.00
5	C	Vinyl Chloride	50.000	50.789	-1.6#	101	0.00
6	T	Bromomethane	50.000	48.530	2.9	95	0.00
7	T	Chloroethane	50.000	53.079	-6.2	103	0.00
8	T	Trichlorofluoromethane	50.000	50.417	-0.8	102	0.00
9	T	Diethyl Ether	50.000	52.718	-5.4	101	0.00
10	T	1,1,2-Trichlorotrifluoroeth	50.000	50.788	-1.6	102	0.00
11	T	Methyl Iodide	50.000	36.270	27.5#	67	0.00
12	T	Tert butyl alcohol	250.000	267.365	-6.9	95	0.00
13	CM	1,1-Dichloroethene	50.000	51.012	-2.0#	101	0.00
14	T	Acrolein	250.000	254.720	-1.9	100	0.00
15	T	Allyl chloride	50.000	48.613	2.8	95	0.00
16	T	Acrylonitrile	250.000	283.685	-13.5	99	0.00
17	T	Acetone	250.000	234.203	6.3	87	0.00
18	T	Carbon Disulfide	50.000	50.329	-0.7	99	0.00
19	T	Methyl Acetate	50.000	53.278	-6.6	101	0.00
20	T	Methyl tert-butyl Ether	50.000	51.220	-2.4	98	0.00
21	T	Methylene Chloride	50.000	51.171	-2.3	101	0.00
22	T	trans-1,2-Dichloroethene	50.000	52.126	-4.3	102	0.00
23	T	Diisopropyl ether	50.000	51.958	-3.9	99	0.00
24	T	Vinyl Acetate	250.000	282.694	-13.1	100	0.00
25	P	1,1-Dichloroethane	50.000	51.217	-2.4	98	0.00
26	T	2-Butanone	250.000	259.963	-4.0	95	0.00
27	T	2,2-Dichloropropane	50.000	41.072	17.9	80	0.00
28	T	cis-1,2-Dichloroethene	50.000	51.768	-3.5	99	0.00
29	T	Bromochloromethane	50.000	56.165	-12.3	98	0.00
30	T	Tetrahydrofuran	250.000	259.098	-3.6	99	0.00
31	C	Chloroform	50.000	51.656	-3.3#	100	0.00
32	T	Cyclohexane	50.000	55.391	-10.8	103	0.00
33	T	1,1,1-Trichloroethane	50.000	50.455	-0.9	97	0.00
34	S	1,2-Dichloroethane-d4	50.000	47.488	5.0	96	0.00
35	I	1,4-Difluorobenzene	50.000	50.000	0.0	96	0.00
36	S	Dibromofluoromethane	50.000	48.493	3.0	97	0.00
37	T	1,1-Dichloropropene	50.000	50.891	-1.8	100	0.00
38	T	Ethyl Acetate	50.000	51.105	-2.2	96	0.00
39	T	Carbon Tetrachloride	50.000	49.360	1.3	98	0.00
40	T	Methylcyclohexane	50.000	50.199	-0.4	103	0.00
41	TM	Benzene	50.000	50.363	-0.7	99	0.00
42	T	Methacrylonitrile	50.000	50.872	-1.7	97	0.00
43	TM	1,2-Dichloroethane	50.000	49.616	0.8	96	0.00
44	T	Isopropyl Acetate	50.000	49.699	0.6	96	0.00
45	TM	Trichloroethene	50.000	50.790	-1.6	101	0.00

Data Path : W:\HPCHEM1\MSVOA N\Data\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: May 22 00:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
46	C	1,2-Dichloropropane	50.000	50.715	-1.4#	101	0.00
47	T	Dibromomethane	50.000	50.600	-1.2	98	0.00
48	T	Bromodichloromethane	50.000	50.868	-1.7	98	0.00
49	T	Methyl methacrylate	50.000	52.824	-5.6	98	0.00
50	T	1,4-Dioxane	1000.000	1058.823	-5.9	94	0.00
51	S	Toluene-d8	50.000	48.497	3.0	98	0.00
52	T	4-Methyl-2-Pentanone	250.000	253.914	-1.6	97	0.00
53	CM	Toluene	50.000	51.309	-2.6#	100	0.00
54	T	t-1,3-Dichloropropene	50.000	50.556	-1.1	94	0.00
55	T	cis-1,3-Dichloropropene	50.000	49.519	1.0	95	0.00
56	T	1,1,2-Trichloroethane	50.000	51.109	-2.2	98	0.00
57	T	Ethyl methacrylate	50.000	52.308	-4.6	98	0.00
58	T	1,3-Dichloropropane	50.000	51.009	-2.0	99	0.00
59	T	2-Chloroethyl Vinyl ether	250.000	131.351	47.5#	42	0.00
60	T	2-Hexanone	250.000	260.901	-4.4	95	0.00
61	T	Dibromochloromethane	50.000	52.299	-4.6	98	0.00
62	T	1,2-Dibromoethane	50.000	52.986	-6.0	100	0.00
63	S	4-Bromofluorobenzene	50.000	50.897	-1.8	100	0.00
64	I	Chlorobenzene-d5	50.000	50.000	0.0	96	0.00
65	T	Tetrachloroethene	50.000	51.156	-2.3	101	0.00
66	PM	Chlorobenzene	50.000	50.168	-0.3	100	0.00
67	T	1,1,1,2-Tetrachloroethane	50.000	51.037	-2.1	97	0.00
68	C	Ethyl Benzene	50.000	51.874	-3.7#	100	0.00
69	T	m/p-Xylenes	100.000	102.860	-2.9	100	0.00
70	T	o-Xylene	50.000	52.188	-4.4	99	0.00
71	T	Styrene	50.000	53.608	-7.2	99	0.00
72	P	Bromoform	50.000	51.180	-2.4	96	0.00
73	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	95	0.00
74	T	Isopropylbenzene	50.000	53.040	-6.1	100	0.00
75	T	N-amyl acetate	50.000	47.301	5.4	93	0.00
76	P	1,1,2,2-Tetrachloroethane	50.000	55.841	-11.7	99	0.00
77	T	1,2,3-Trichloropropane	50.000	58.520	-17.0	105	0.00
78	T	Bromobenzene	50.000	48.676	2.6	98	0.00
79	T	n-propylbenzene	50.000	49.559	0.9	100	0.00
80	T	2-Chlorotoluene	50.000	52.887	-5.8	99	0.00
81	T	1,3,5-Trimethylbenzene	50.000	48.481	3.0	99	0.00
82	T	trans-1,4-Dichloro-2-butene	50.000	45.518	9.0	88	0.00
83	T	4-Chlorotoluene	50.000	49.172	1.7	100	0.00
84	T	tert-Butylbenzene	50.000	53.081	-6.2	100	0.00
85	T	1,2,4-Trimethylbenzene	50.000	49.240	1.5	99	0.00
86	T	sec-Butylbenzene	50.000	48.966	2.1	100	0.00
87	T	p-Isopropyltoluene	50.000	50.218	-0.4	100	0.00
88	T	1,3-Dichlorobenzene	50.000	50.692	-1.4	101	0.00
89	T	1,4-Dichlorobenzene	50.000	50.739	-1.5	101	0.00

Evaluate Continuing Calibration Report

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Data Path : W:\HPCHEM1\MSVOA N\Data\VN052114\
Data File : VN015573.D
Acq On : 22 May 2014 00:44
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 22 00:43:30 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
90 T	n-Butylbenzene	50.000	52.443	-4.9	99	0.00
91 T	Hexachloroethane	50.000	48.619	2.8	96	0.00
92 T	1,2-Dichlorobenzene	50.000	50.667	-1.3	100	0.00
93 T	1,2-Dibromo-3-Chloropropane	50.000	51.643	-3.3	99	0.00
94 T	1,2,4-Trichlorobenzene	50.000	51.686	-3.4	102	0.00
95 T	Hexachlorobutadiene	50.000	50.234	-0.5	99	0.00
96 T	Naphthalene	50.000	48.389	3.2	99	0.00
97 T	1,2,3-Trichlorobenzene	50.000	51.328	-2.7	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GZAG02

Lab Code: CHEM Case No.: F2352 SAS No.: F2352 SDG No.: F2352

Instrument ID: MSVOA_N Calibration Date/Time: 05/22/2014 13:03

Lab File ID: VN015595.D Init. Calib. Date(s): 05/20/2014 05/20/2014

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:24 19:55

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.467	0.453		-3	20
1,1-Dichloroethene	0.409	0.397		-2.93	20
Acetone	0.180	0.201		11.67	20
Methyl tert-butyl Ether	1.440	1.581		9.79	20
Methylene Chloride	0.468	0.504		7.69	20
trans-1,2-Dichloroethene	0.431	0.447		3.71	20
1,1-Dichloroethane	0.812	0.851	0.1	4.8	20
2-Butanone	0.255	0.294		15.29	20
Carbon Tetrachloride	0.510	0.494		-3.14	20
cis-1,2-Dichloroethene	0.506	0.550		8.7	20
Chloroform	0.838	0.887		5.85	20
1,1,1-Trichloroethane	0.785	0.768		-2.17	20
Benzene	1.330	1.395		4.89	20
1,2-Dichloroethane	0.486	0.517		6.38	20
Trichloroethene	0.372	0.385		3.49	20
Toluene	0.843	0.884		4.86	20
Tetrachloroethene	0.394	0.404		2.54	20
Chlorobenzene	1.082	1.131	0.3	4.53	20
Ethyl Benzene	1.772	1.870		5.53	20
m/p-Xylenes	0.689	0.723		4.93	20
o-Xylene	0.678	0.733		8.11	20
n-propylbenzene	4.270	4.304		0.8	20
tert-Butylbenzene	3.104	2.967		-4.41	20
1,2,4-Trimethylbenzene	3.404	3.493		2.62	20
sec-Butylbenzene	3.896	3.872		-0.62	20
1,3-Dichlorobenzene	1.764	1.837		4.14	20
1,4-Dichlorobenzene	1.731	1.796		3.76	20
n-Butylbenzene	2.542	2.754		8.34	20
1,2-Dichlorobenzene	1.749	1.832		4.75	20
1,2-Dichloroethane-d4	0.575	0.594		3.3	20
Dibromofluoromethane	0.326	0.354		8.59	20
Toluene-d8	1.200	1.249		4.08	20
4-Bromofluorobenzene	0.411	0.438		6.57	20
1,4-Dioxane	0.005	0.006	0.05	20	50

All other compounds must meet a minimum RRF of 0.010.

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	171729	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	241067	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	211908	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	100102	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	102025	51.65	ug/l	0.00
Spiked Amount 50.000			Recovery	=	103.30%	
36) Dibromofluoromethane	7.80	113	85351	54.36	ug/l	0.00
Spiked Amount 50.000			Recovery	=	108.72%	
51) Toluene-d8	10.29	98	301051	52.04	ug/l	0.00
Spiked Amount 50.000			Recovery	=	104.08%	
63) 4-Bromofluorobenzene	12.61	95	105499	53.24	ug/l	0.00
Spiked Amount 50.000			Recovery	=	106.48%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	66465	50.07	ug/l	100
4) Chloromethane	2.06	50	93545	58.91	ug/l	99
5) Vinyl Chloride	2.20	62	77807	48.48	ug/l	100
6) Bromomethane	2.61	94	43238	46.46	ug/l	97
7) Chloroethane	2.76	64	52170	51.60	ug/l	99
8) Trichlorofluoromethane	3.11	101	122116	46.87	ug/l	99
9) Diethyl Ether	3.53	74	54041	56.09	ug/l	99
10) 1,1,2-Trichlorotrifluoroet	3.91	101	74131	50.45	ug/l	99
11) Methyl Iodide	4.11	142	77681	42.32	ug/l	97
12) Tert butyl alcohol	4.95	59	58141	294.31	ug/l	98
13) 1,1-Dichloroethene	3.88	96	68154	48.51	ug/l	98
14) Acrolein	3.73	56	73291	410.93	ug/l	99
15) Allyl chloride	4.51	41	124217	50.54	ug/l	98
16) Acrylonitrile	5.18	53	193965	306.48	ug/l	99
17) Acetone	3.94	43	172736	278.70	ug/l	99
18) Carbon Disulfide	4.24	76	188334	47.57	ug/l	99
19) Methyl Acetate	4.50	43	170311	56.81	ug/l	100
20) Methyl tert-butyl Ether	5.27	73	271537	54.91	ug/l	100
21) Methylene Chloride	4.74	84	86550	53.85	ug/l	94
22) trans-1,2-Dichloroethene	5.28	96	76721	51.79	ug/l	98
23) Diisopropyl ether	6.18	45	277285	54.77	ug/l	98
24) Vinyl Acetate	6.12	43	771581m	306.82	ug/l	
25) 1,1-Dichloroethane	6.08	63	146208	52.45	ug/l	99
26) 2-Butanone	7.05	43	252779	289.09	ug/l	100
27) 2,2-Dichloropropane	7.06	77	119738	48.65	ug/l	99
28) cis-1,2-Dichloroethene	7.06	96	94484	54.32	ug/l	97
29) Bromochloromethane	7.42	49	71982	58.89	ug/l	96
30) Tetrahydrofuran	7.44	42	162463	276.13	ug/l	99
31) Chloroform	7.58	83	152325	52.92	ug/l	100
32) Cyclohexane	7.89	56	129436	52.32	ug/l	98
33) 1,1,1-Trichloroethane	7.79	97	131821	48.91	ug/l	99
37) 1,1-Dichloropropene	8.01	75	107724	50.11	ug/l	98
38) Ethyl Acetate	7.15	43	107642	56.74	ug/l	100
39) Carbon Tetrachloride	8.00	117	119027	48.42	ug/l	99

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Methylcyclohexane	9.29	83	138458	50.36 ug/l	98
41) Benzene	8.26	78	336379	52.47 ug/l	98
42) Methacrylonitrile	7.37	41	64903	57.88 ug/l	98
43) 1,2-Dichloroethane	8.33	62	124575	53.20 ug/l	99
44) Isopropyl Acetate	8.36	43	184718	54.12 ug/l	98
45) Trichloroethene	9.04	130	92767	51.66 ug/l	97
46) 1,2-Dichloropropane	9.32	63	89976	54.63 ug/l	99
47) Dibromomethane	9.41	93	58695	54.17 ug/l	97
48) Bromodichloromethane	9.59	83	119470	53.74 ug/l	99
49) Methyl methacrylate	9.38	41	93547	56.86 ug/l	98
50) 1,4-Dioxane	9.40	88	28160	1226.89 ug/l	97
52) 4-Methyl-2-Pentanone	10.16	43	525578	278.58 ug/l	98
53) Toluene	10.35	92	213144	52.44 ug/l	99
54) t-1,3-Dichloropropene	10.57	75	127237	55.97 ug/l	100
55) cis-1,3-Dichloropropene	10.03	75	138355	54.67 ug/l	98
56) 1,1,2-Trichloroethane	10.75	97	89003	56.67 ug/l	99
57) Ethyl methacrylate	10.61	69	133401	57.42 ug/l	95
58) 1,3-Dichloropropane	10.90	76	144814	55.03 ug/l	99
59) 2-Chloroethyl Vinyl ether	9.88	63	55383	215.99 ug/l	99
60) 2-Hexanone	10.93	43	352537	286.17 ug/l	98
61) Dibromochloromethane	11.10	129	105025	56.00 ug/l	99
62) 1,2-Dibromoethane	11.21	107	91655	56.47 ug/l	100
65) Tetrachloroethene	10.83	164	85628	51.22 ug/l	98
66) Chlorobenzene	11.64	112	239594	52.24 ug/l	99
67) 1,1,1,2-Tetrachloroethane	11.71	131	92691	53.04 ug/l	99
68) Ethyl Benzene	11.71	91	396361	52.79 ug/l	100
69) m/p-Xylenes	11.82	106	306403	104.85 ug/l	99
70) o-Xylene	12.15	106	155265	54.00 ug/l	99
71) Styrene	12.17	104	249917	55.33 ug/l	100
72) Bromoform	12.33	173	81383	55.59 ug/l #	99
74) Isopropylbenzene	12.46	105	401798	53.79 ug/l	100
75) N-amyl acetate	12.26	43	136924	52.21 ug/l	99
76) 1,1,2,2-Tetrachloroethane	12.70	83	117808	60.89 ug/l	99
77) 1,2,3-Trichloropropane	12.75	75	100961m	59.50 ug/l	
78) Bromobenzene	12.74	156	109624	50.49 ug/l	98
79) n-propylbenzene	12.80	91	430876	50.40 ug/l	100
80) 2-Chlorotoluene	12.89	91	266965	54.53 ug/l	100
81) 1,3,5-Trimethylbenzene	12.94	105	341233	50.10 ug/l	99
82) trans-1,4-Dichloro-2-buten	12.49	75	35795	51.92 ug/l	98
83) 4-Chlorotoluene	12.98	91	262599	50.64 ug/l	100
84) tert-Butylbenzene	13.20	119	296970	54.04 ug/l	99
85) 1,2,4-Trimethylbenzene	13.25	105	349680	51.31 ug/l	100
86) sec-Butylbenzene	13.38	105	387630	49.70 ug/l	100
87) p-Isopropyltoluene	13.50	119	350183	51.91 ug/l	99
88) 1,3-Dichlorobenzene	13.50	146	183845	52.07 ug/l	99
89) 1,4-Dichlorobenzene	13.58	146	179762	51.87 ug/l	100
90) n-Butylbenzene	13.83	91	275663	54.17 ug/l	100
91) Hexachloroethane	14.11	117	62252	48.49 ug/l	98
92) 1,2-Dichlorobenzene	13.87	146	183417	52.39 ug/l	100
93) 1,2-Dibromo-3-Chloropropan	14.49	75	20484	54.65 ug/l	98

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
94) 1,2,4-Trichlorobenzene	15.15	180	101604	51.93 ug/l	100
95) Hexachlorobutadiene	15.26	225	68901	53.72 ug/l	99
96) Naphthalene	15.39	128	232989	48.71 ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	97715	51.16 ug/l	100

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

Quantitation Report (QT Reviewed)

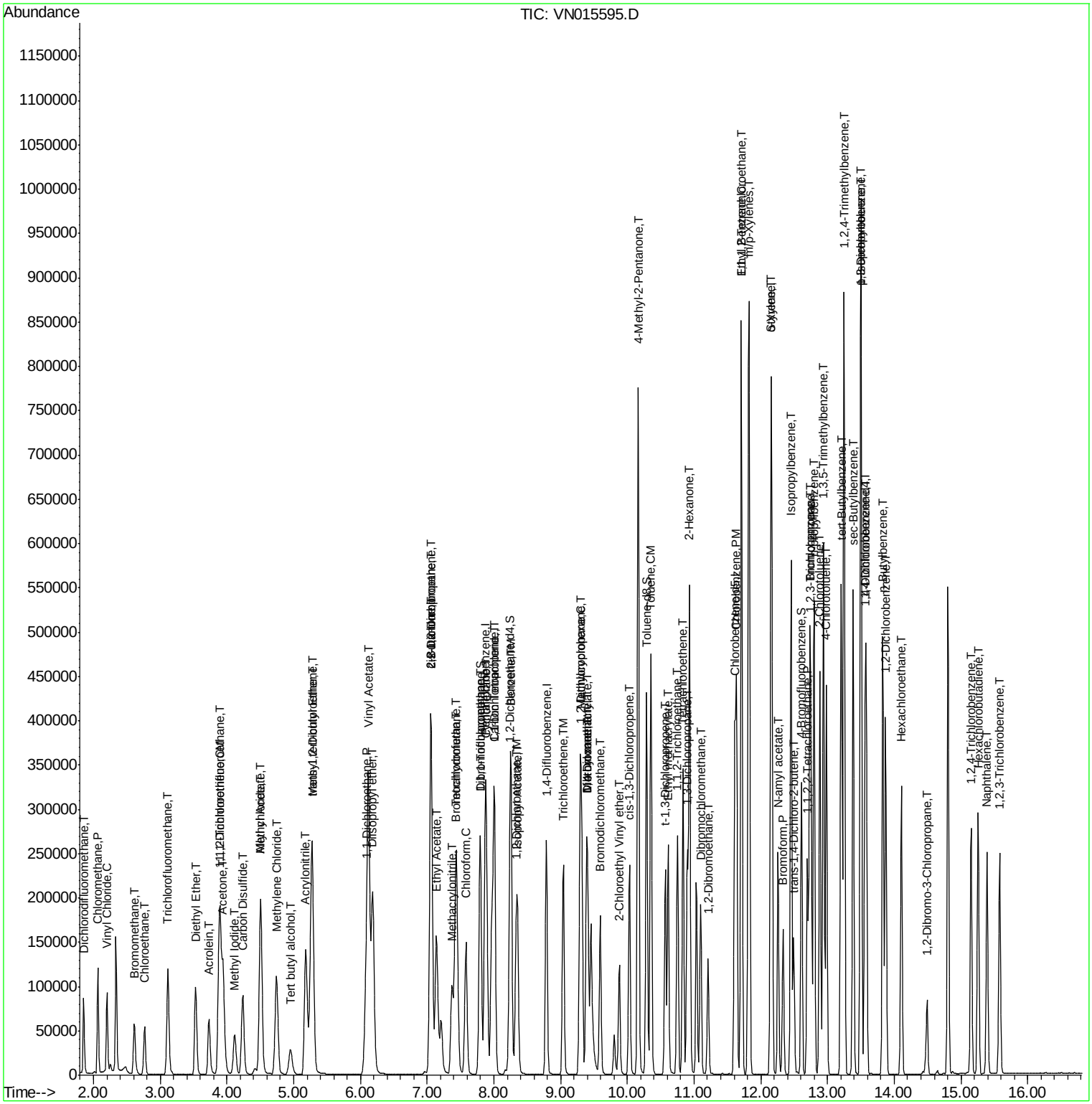
Sample Results: **VN015595.D**

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

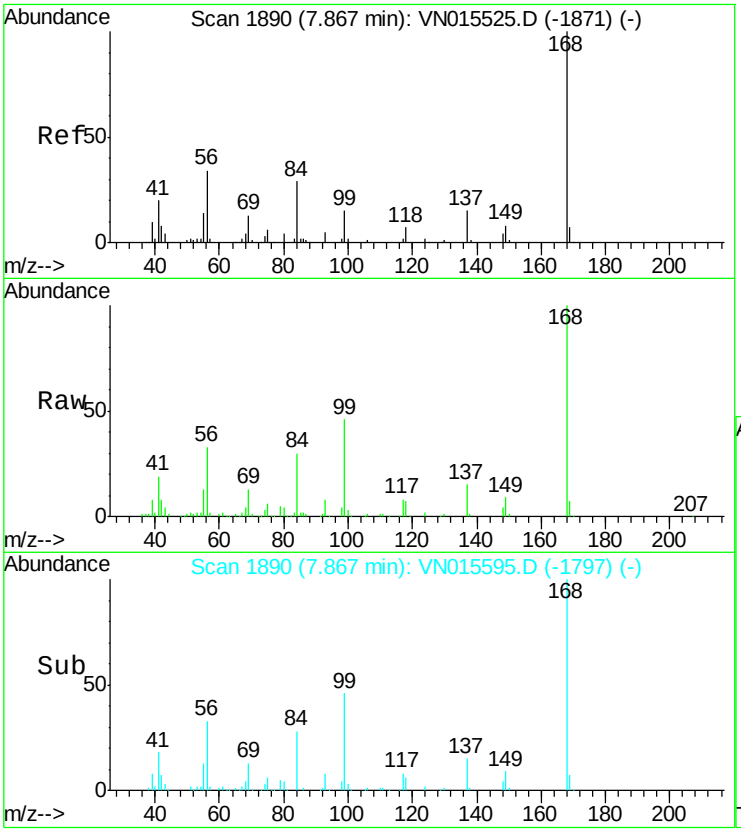
Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

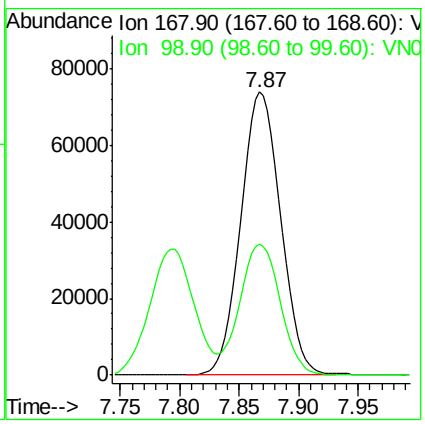
Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

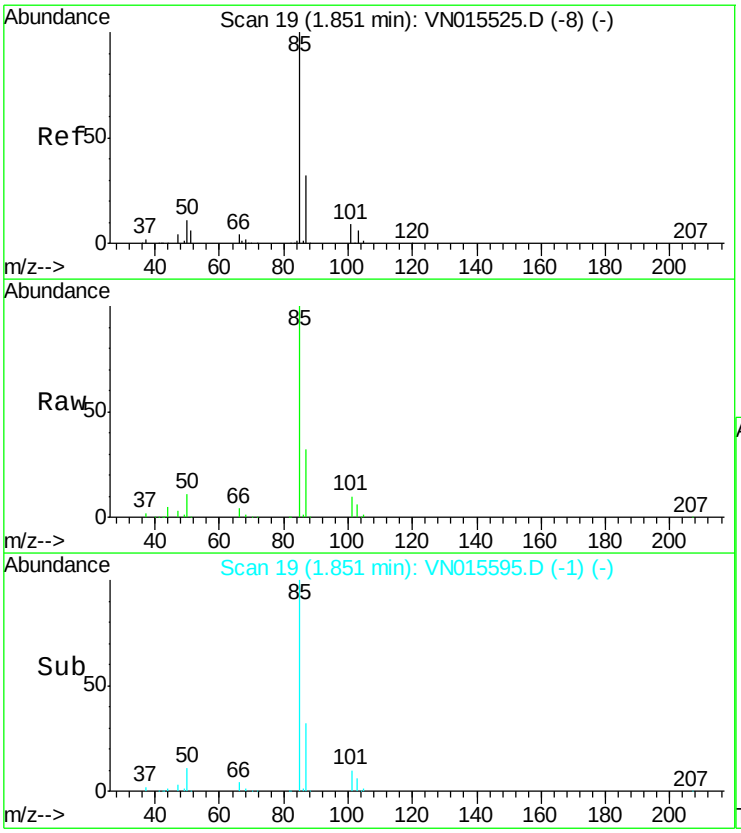


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:168 Resp: 171729

Ion	Ratio	Lower	Upper
168	100		
99	46.0	39.0	58.4

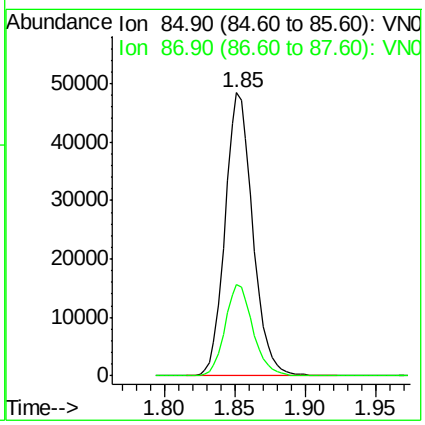




#2
Dichlorodifluoromethane
Concen: 50.07 ug/l
RT: 1.85 min Scan# 19
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

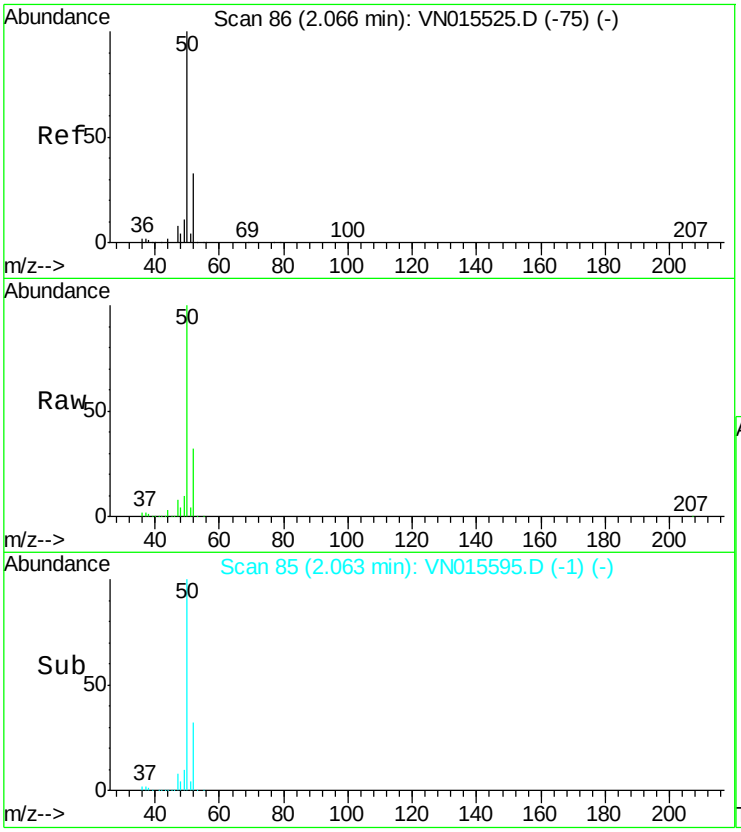
Tgt Ion: 85 Resp: 66465

Ion	Ratio	Lower	Upper
85	100		
87	32.3	16.1	48.2



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

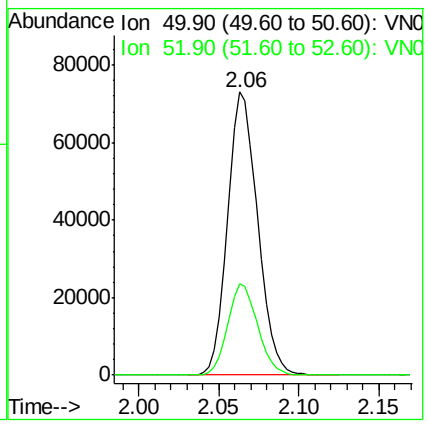
Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

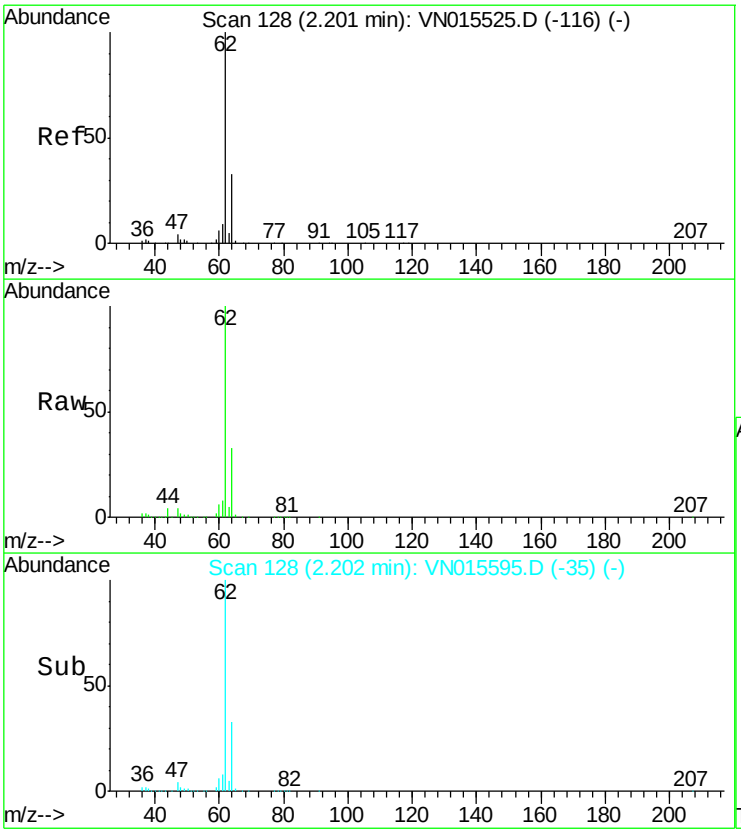


#4
Chloromethane
Concen: 58.91 ug/l
RT: 2.06 min Scan# 85
Delta R.T. -0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 50 Resp: 93545

Ion	Ratio	Lower	Upper
50	100		
52	32.1	26.2	39.2

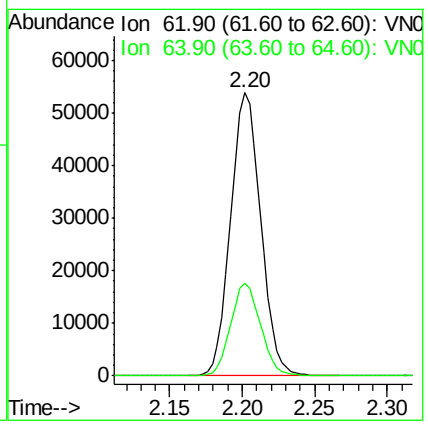




#5
Vinyl Chloride
Concen: 48.48 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

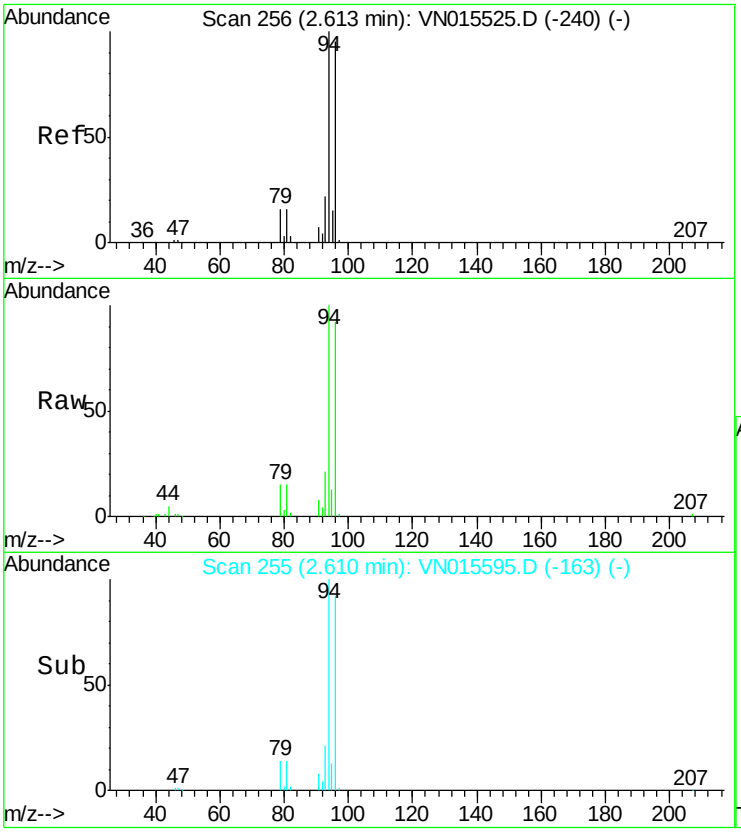
Tgt Ion: 62 Resp: 77807

Ion	Ratio	Lower	Upper
62	100		
64	33.0	26.2	39.4



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

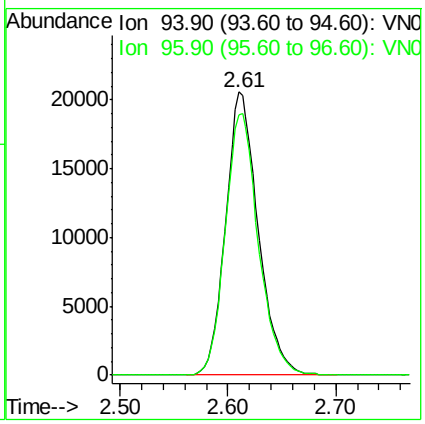
Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

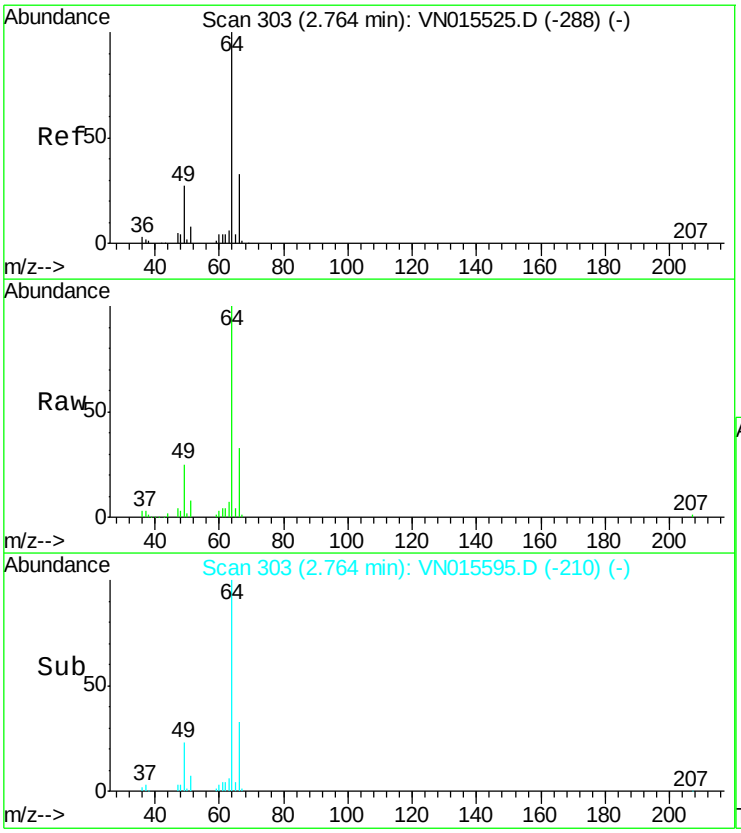


#6
Bromomethane
Concen: 46.46 ug/l
RT: 2.61 min Scan# 255
Delta R.T. -0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 94 Resp: 43238

Ion	Ratio	Lower	Upper
94	100		
96	92.1	75.8	113.6

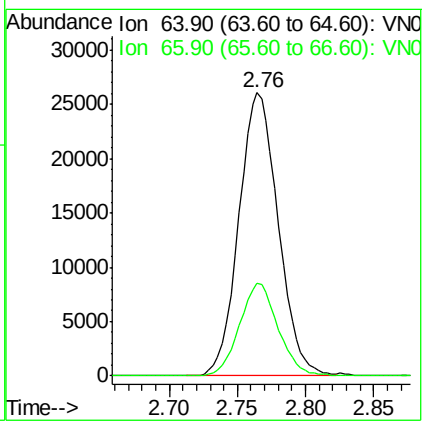




#7
Chloroethane
Concen: 51.60 ug/l
RT: 2.76 min Scan# 303
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

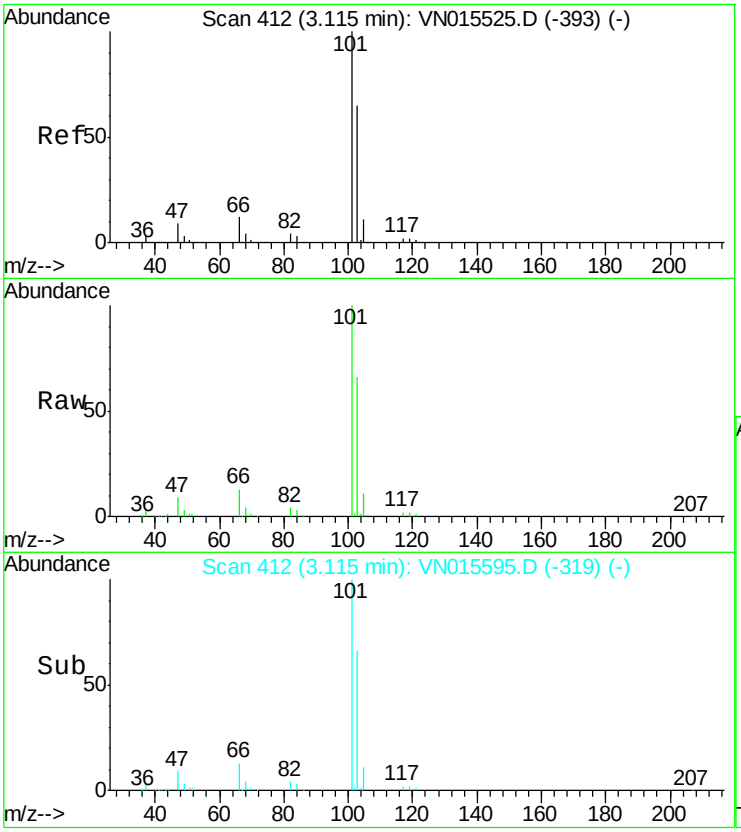
Tgt Ion: 64 Resp: 52170

Ion	Ratio	Lower	Upper
64	100		
66	32.5	26.3	39.5



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

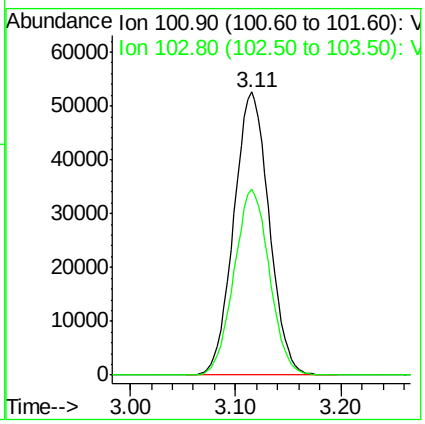
Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

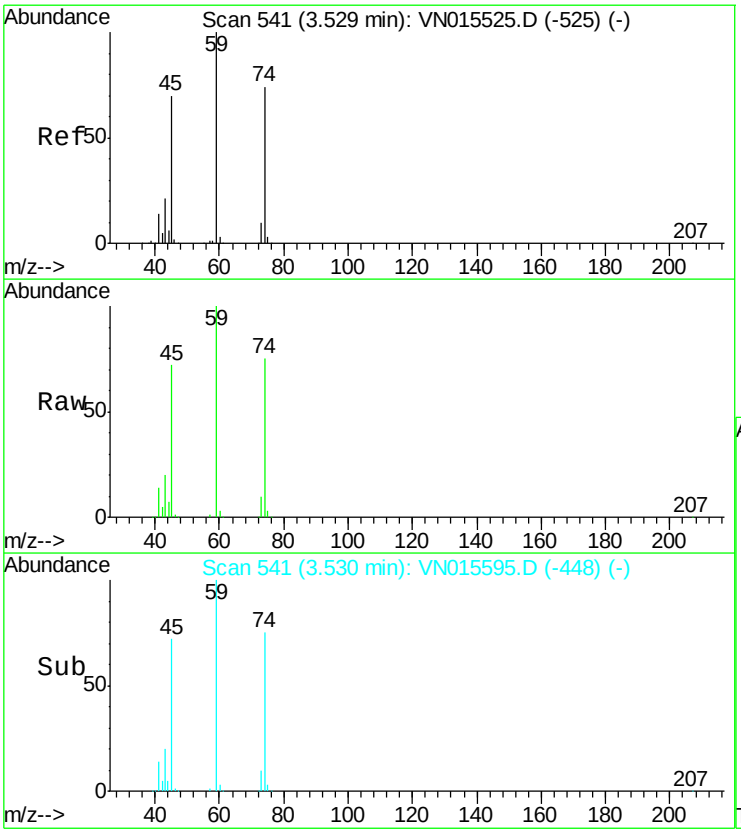


#8
Trichlorofluoromethane
Concen: 46.87 ug/l
RT: 3.11 min Scan# 412
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:101 Resp: 122116

Ion	Ratio	Lower	Upper
101	100		
103	65.7	52.1	78.1

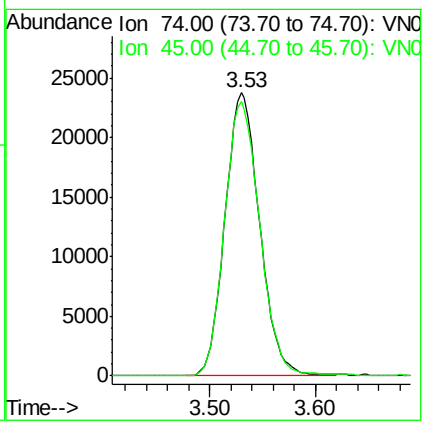


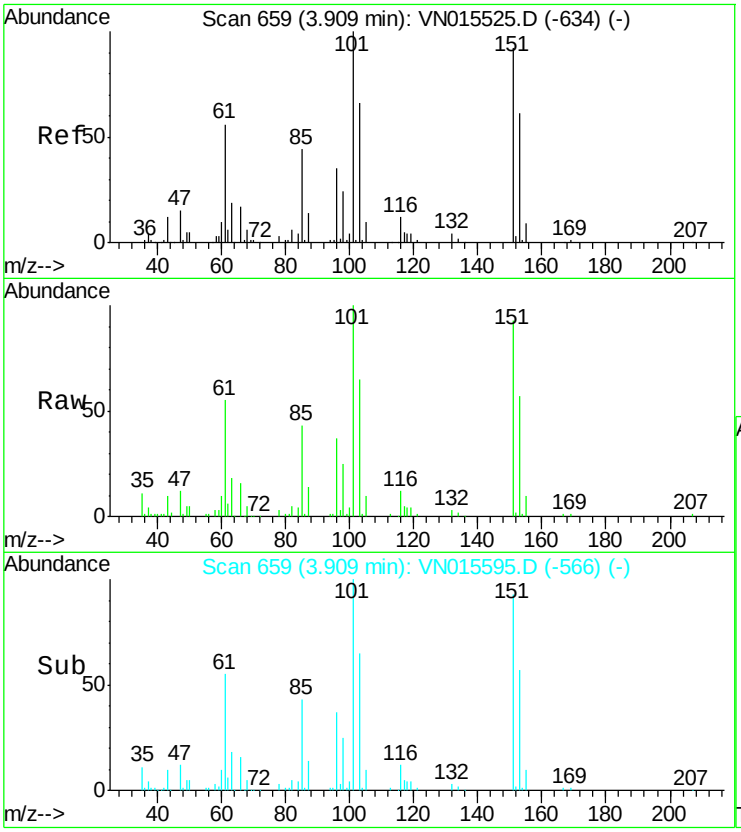


#9
Diethyl Ether
Concen: 56.09 ug/l
RT: 3.53 min Scan# 541
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 74 Resp: 54041

Ion	Ratio	Lower	Upper
74	100		
45	98.4	48.9	146.8





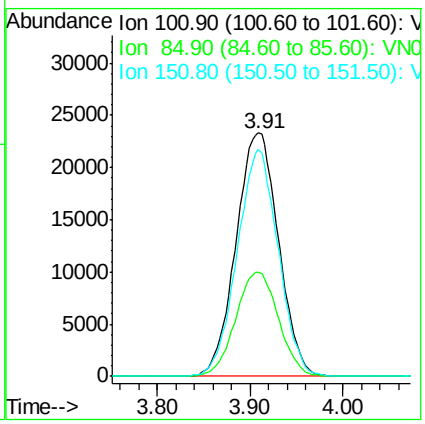
#10
1,1,2-Trichlorotrifluoroethane
Concen: 50.45 ug/l
RT: 3.91 min Scan# 659
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

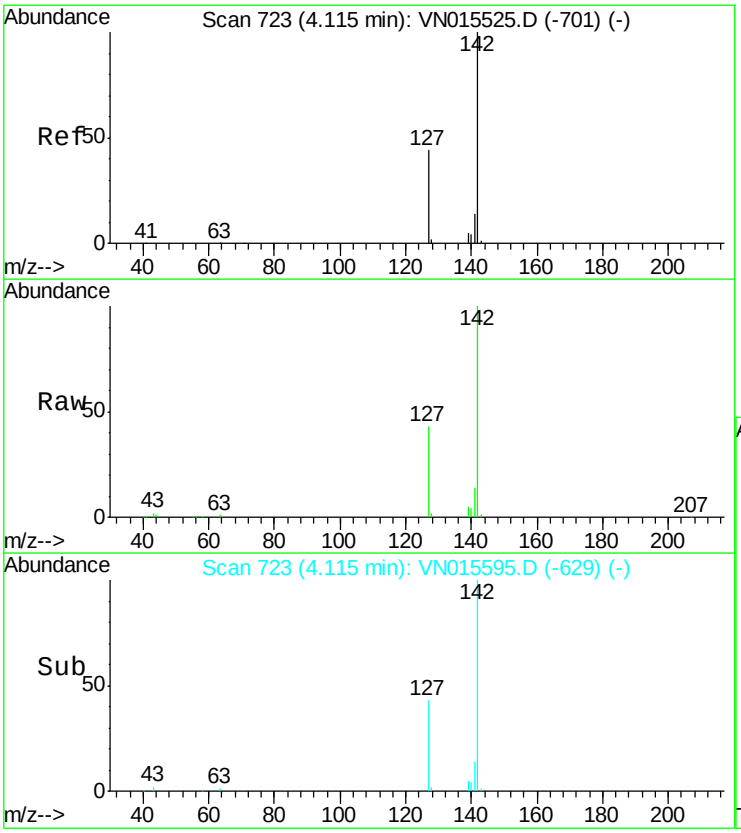
Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

Tgt Ion:101 Resp: 74131

Ion	Ratio	Lower	Upper
101	100		
85	43.0	34.5	51.7
151	89.9	72.9	109.3

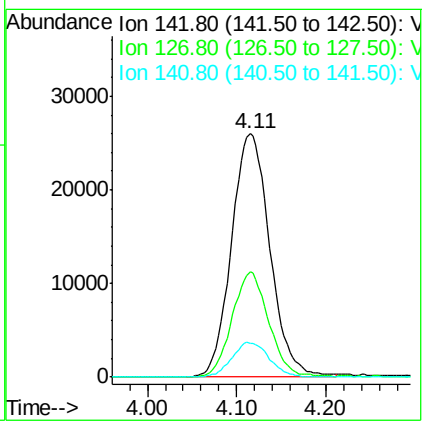




#11
Methyl Iodide
Concen: 42.32 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

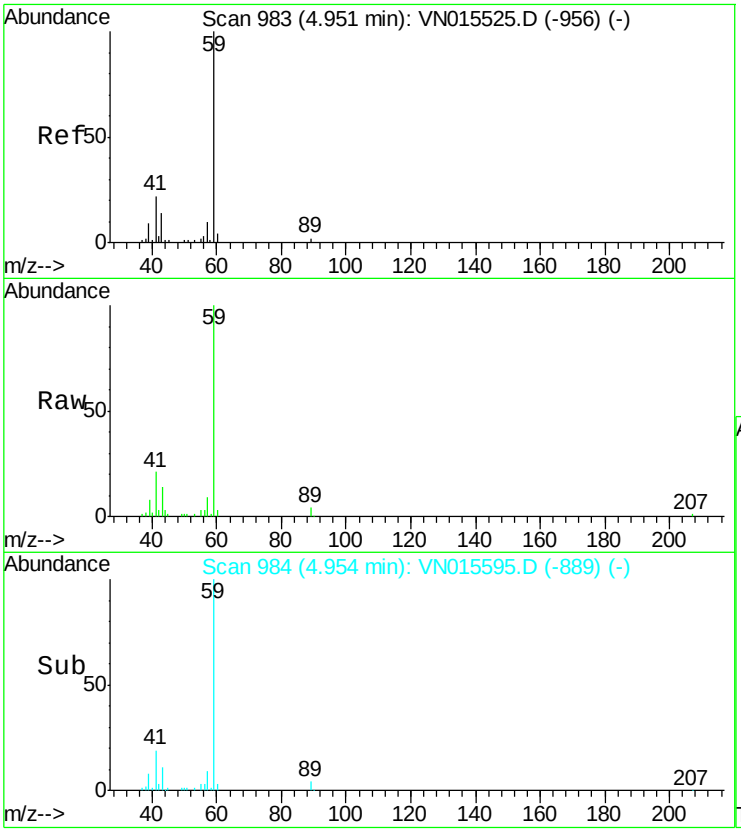
Tgt Ion:142 Resp: 77681

Ion	Ratio	Lower	Upper
142	100		
127	41.3	34.7	52.1
141	13.9	11.4	17.0



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

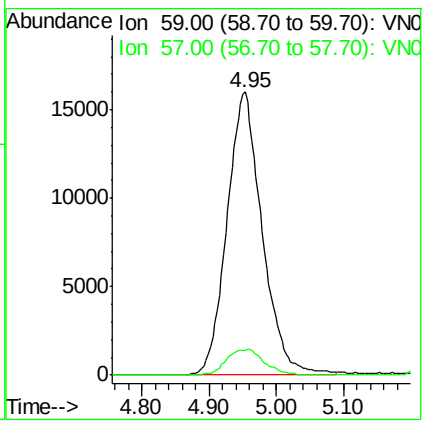
Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

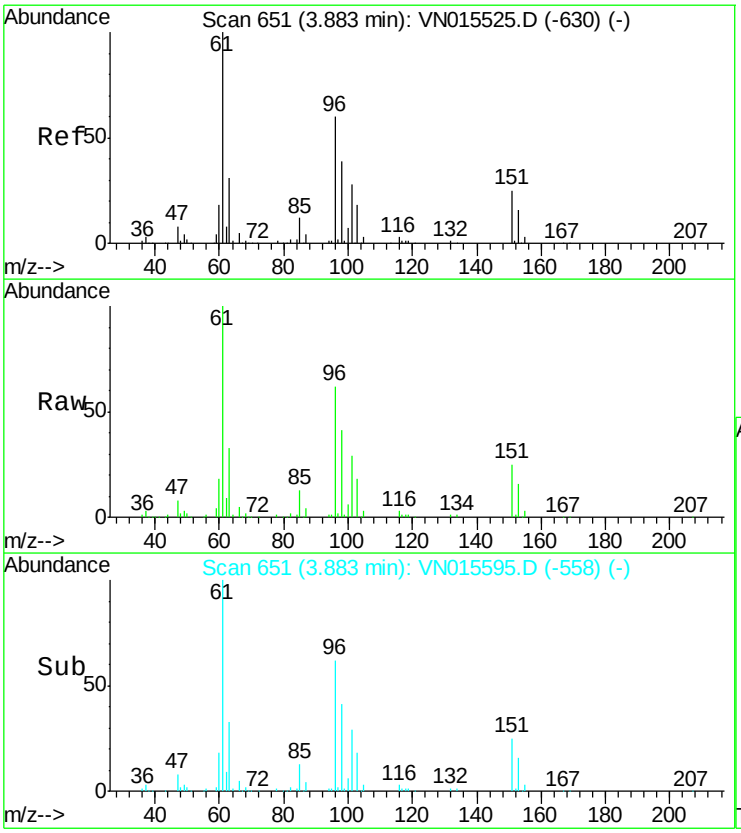


#12
Tert butyl alcohol
Concen: 294.31 ug/l
RT: 4.95 min Scan# 984
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 59 Resp: 58141

Ion	Ratio	Lower	Upper
59	100		
57	9.8	8.4	12.6

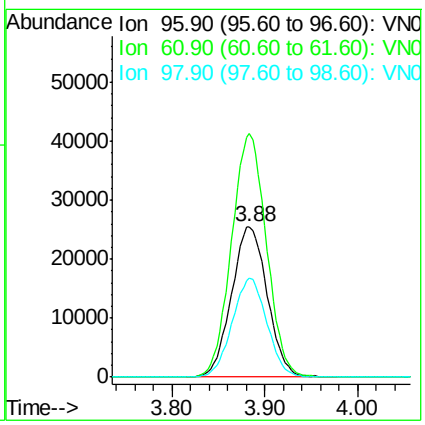




#13
1,1-Dichloroethene
Concen: 48.51 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 96 Resp: 68154

Ion	Ratio	Lower	Upper
96	100		
61	162.0	132.3	198.5
98	65.9	51.8	77.6



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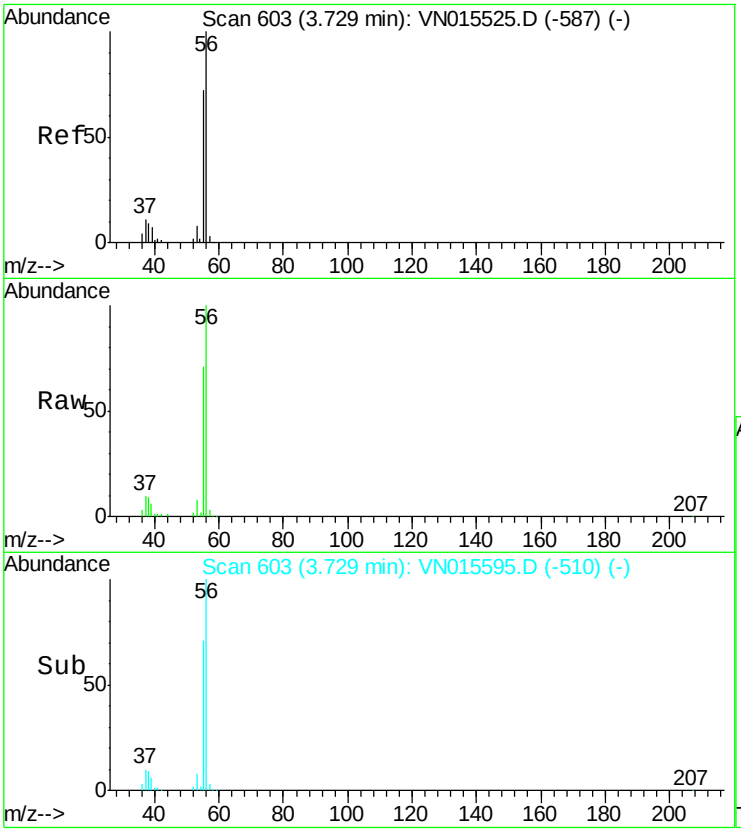
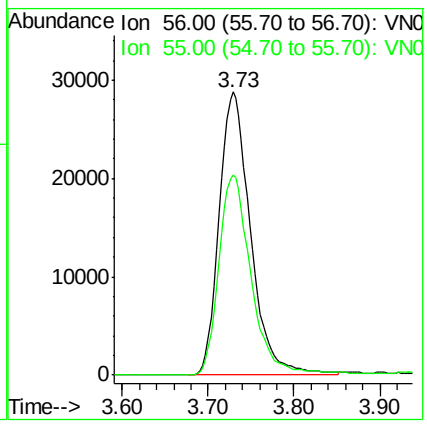
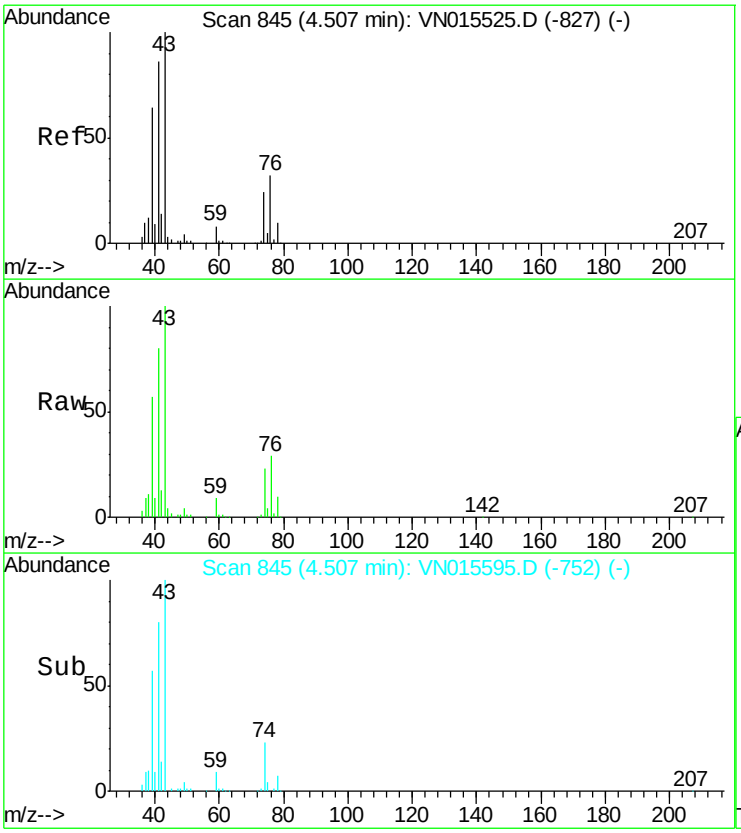


#14
Acrolein
Concen: 410.93 ug/l
RT: 3.73 min Scan# 603
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 56 Resp: 73291

Ion	Ratio	Lower	Upper
56	100		
55	71.6	57.9	86.9

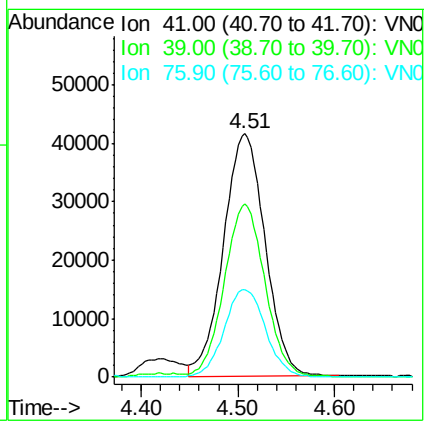


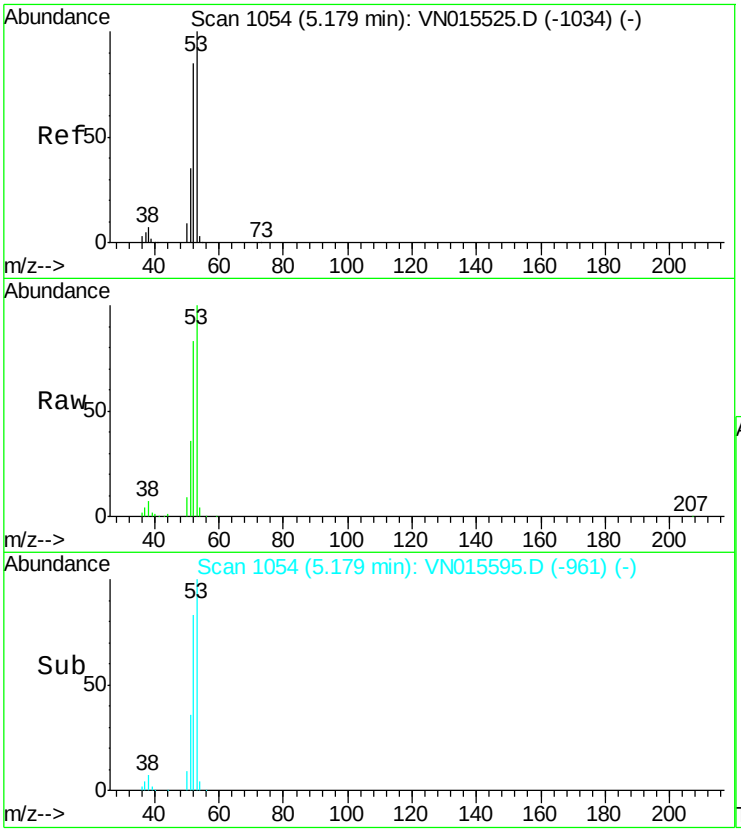


#15
Allyl chloride
Concen: 50.54 ug/l
RT: 4.51 min Scan# 845
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 41 Resp: 124217

Ion	Ratio	Lower	Upper
41	100		
39	69.4	57.4	86.2
76	35.6	28.5	42.7

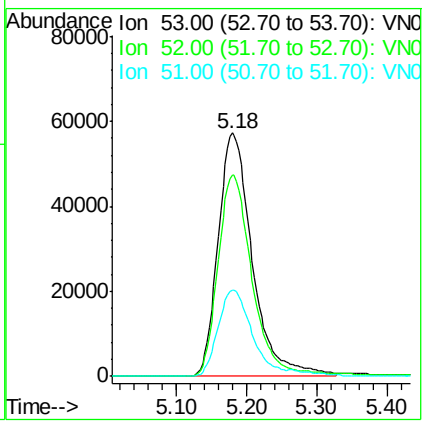




#16
Acrylonitrile
Concen: 306.48 ug/l
RT: 5.18 min Scan# 1054
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 53 Resp: 193965

Ion	Ratio	Lower	Upper
53	100		
52	82.0	65.7	98.5
51	34.8	29.1	43.7



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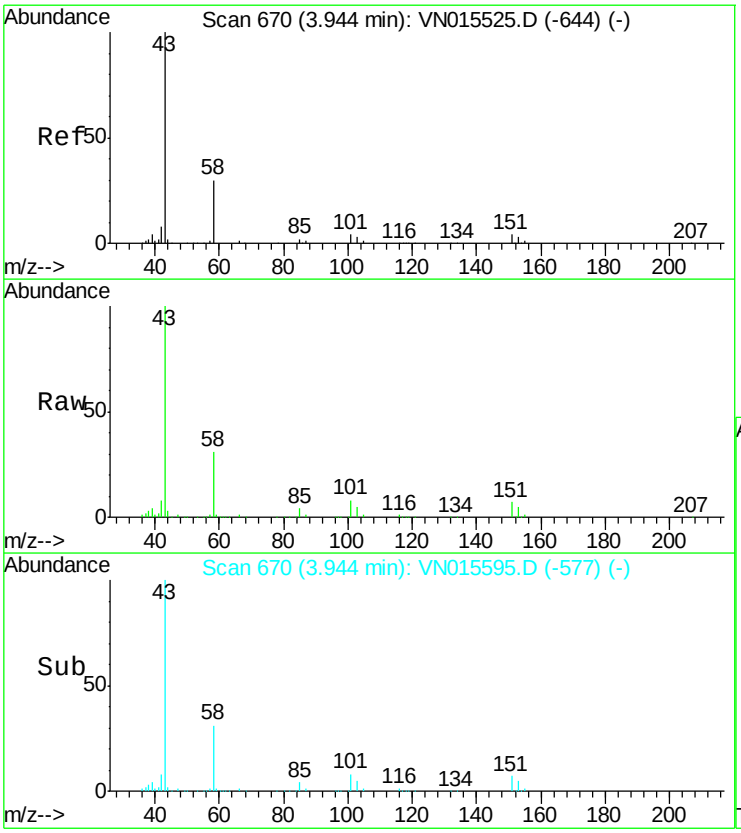
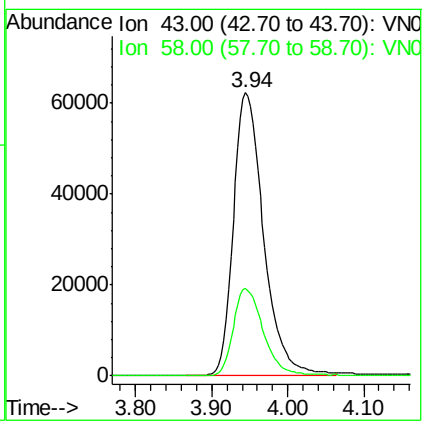


#17
Acetone
Concen: 278.70 ug/l
RT: 3.94 min Scan# 670
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 172736

Ion	Ratio	Lower	Upper
43	100		
58	31.0	24.2	36.2



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LabSampleId :
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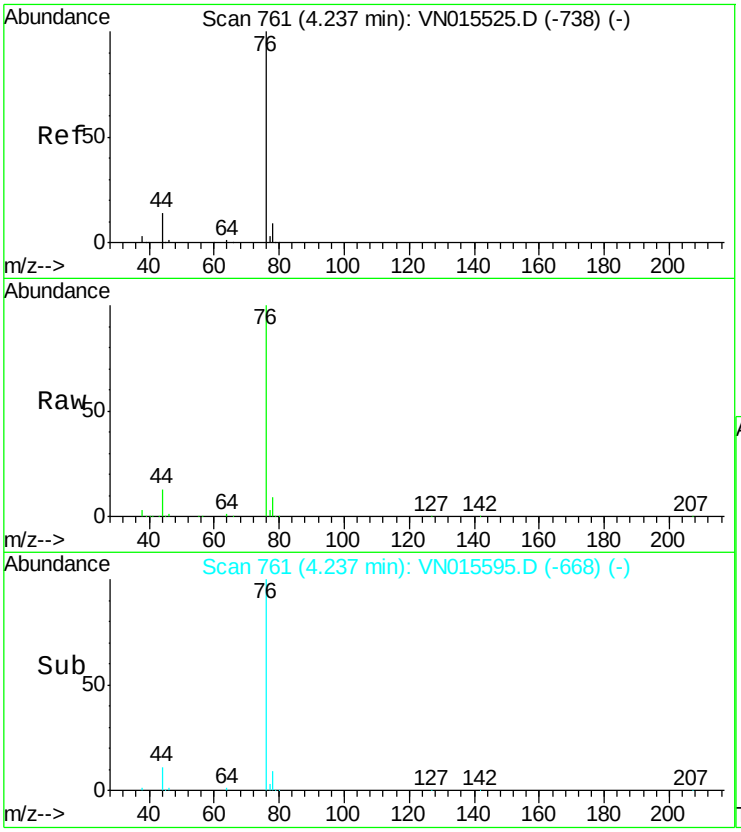
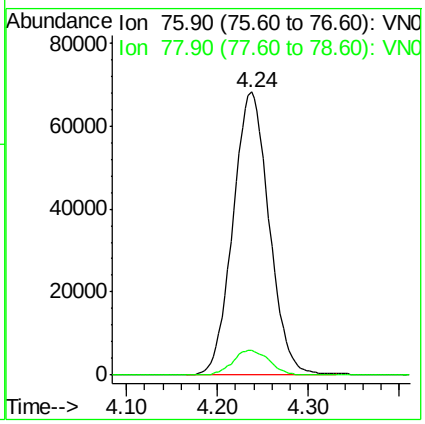
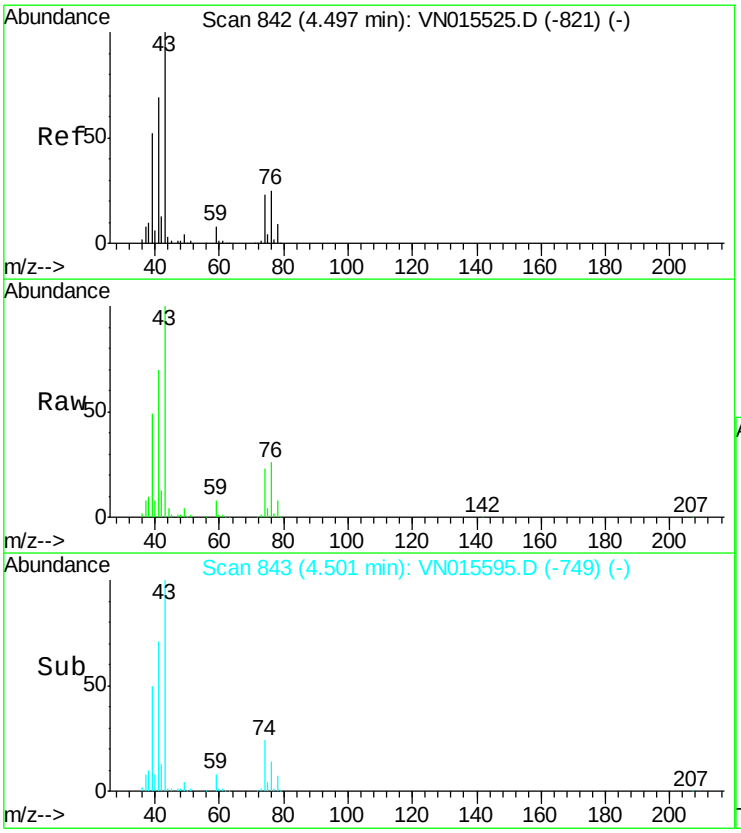


#18
Carbon Disulfide
Concen: 47.57 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 76 Resp: 188334

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.5	11.3

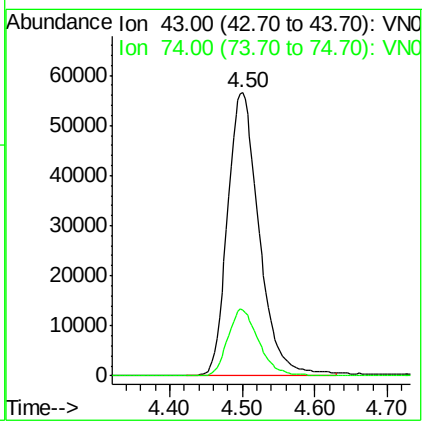




#19
Methyl Acetate
Concen: 56.81 ug/l
RT: 4.50 min Scan# 843
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 170311

Ion	Ratio	Lower	Upper
43	100		
74	23.2	18.5	27.7



Instrument :
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LabSampleId :
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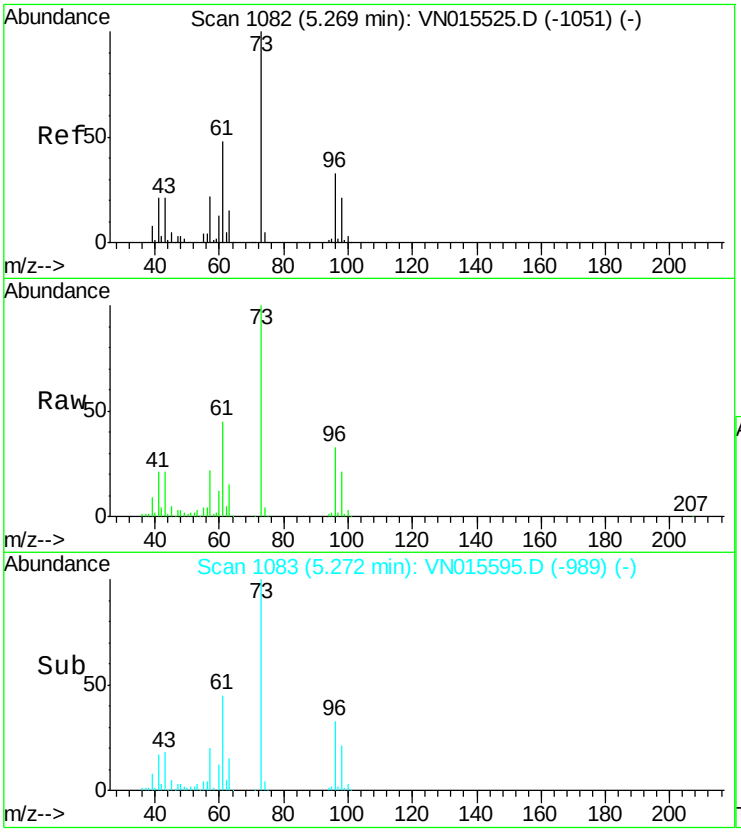
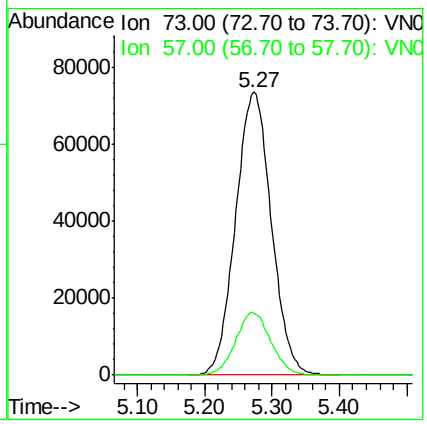
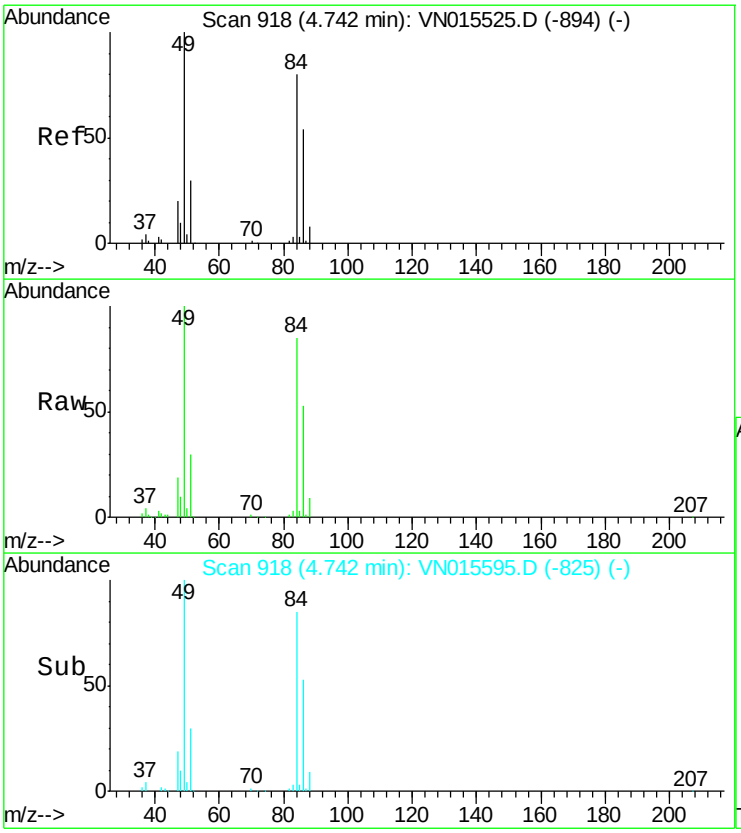


#20
Methyl tert-butyl Ether
Concen: 54.91 ug/l
RT: 5.27 min Scan# 1083
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 73 Resp: 271537

Ion	Ratio	Lower	Upper
73	100		
57	21.8	17.3	25.9

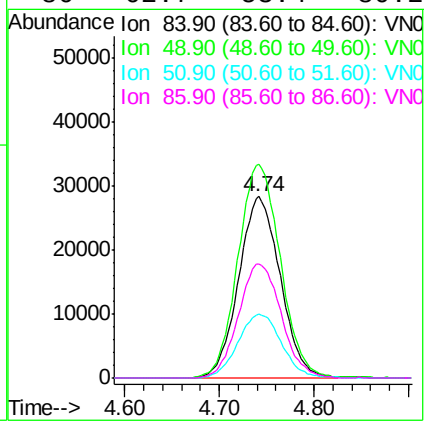




#21
Methylene Chloride
Concen: 53.85 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 84 Resp: 86550

Ion	Ratio	Lower	Upper
84	100		
49	117.6	99.8	149.6
51	35.2	30.2	45.2
86	62.7	53.4	80.2



Instrument :
MSVOA_N
LabSampleId :
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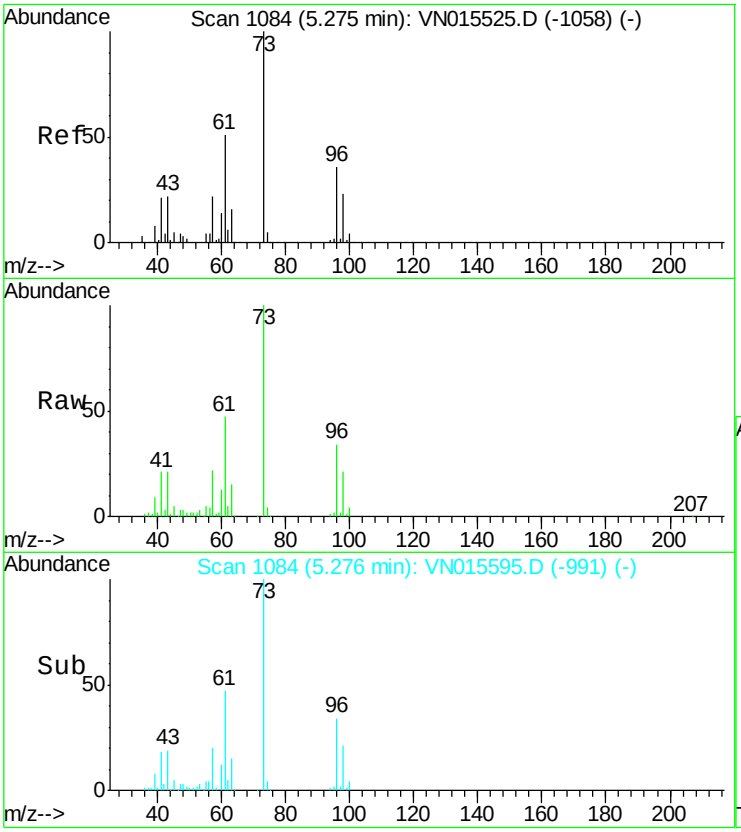
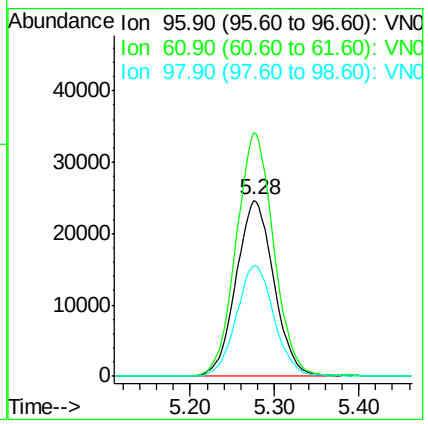
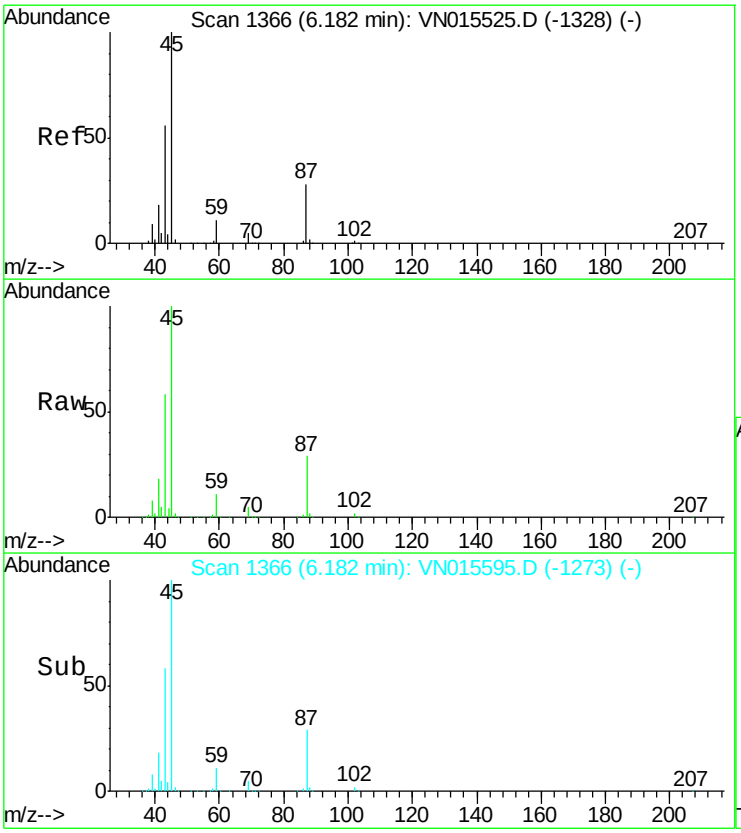


#22
trans-1,2-Dichloroethene
Concen: 51.79 ug/l
RT: 5.28 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 96 Resp: 76721

Ion	Ratio	Lower	Upper
96	100		
61	138.3	113.3	169.9
98	62.7	50.4	75.6

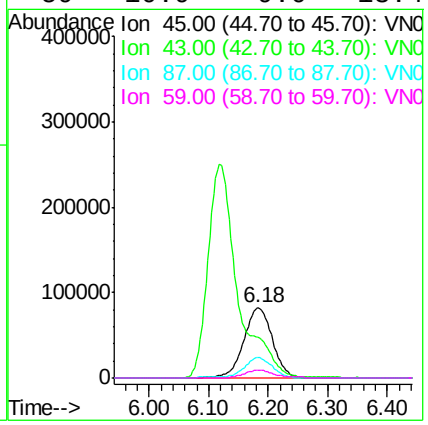




#23
Diisopropyl ether
Concen: 54.77 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 45 Resp: 277285

Ion	Ratio	Lower	Upper
45	100		
43	57.2	44.6	67.0
87	29.0	22.3	33.5
59	10.9	9.0	13.4



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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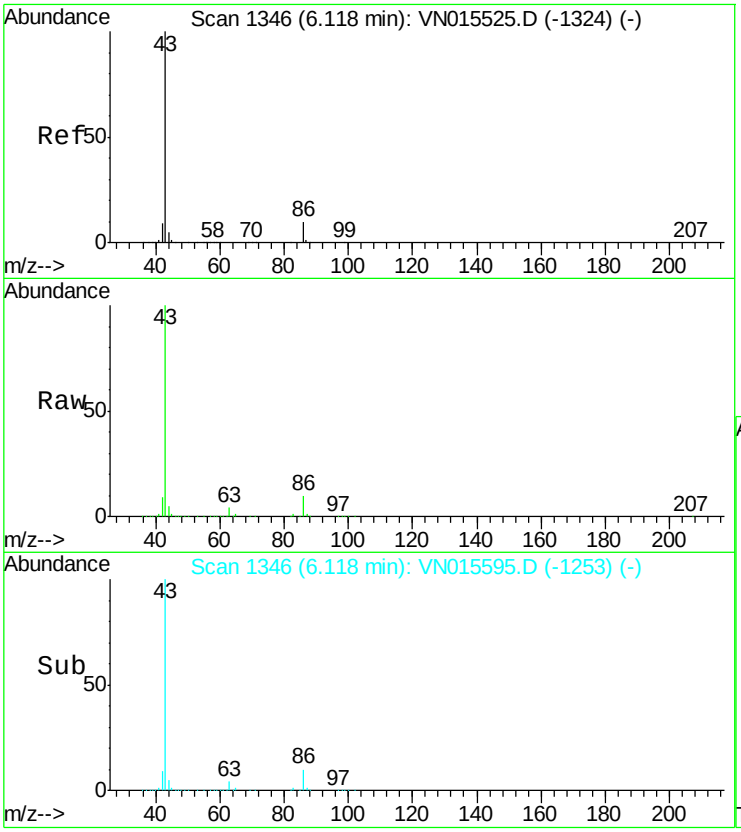
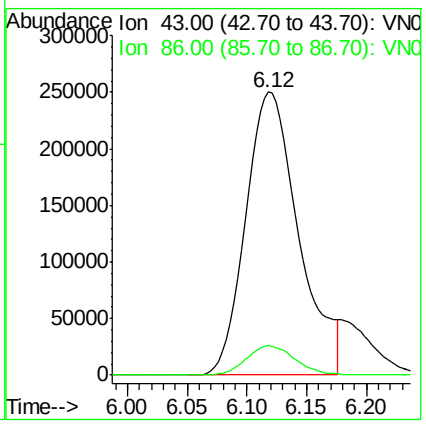
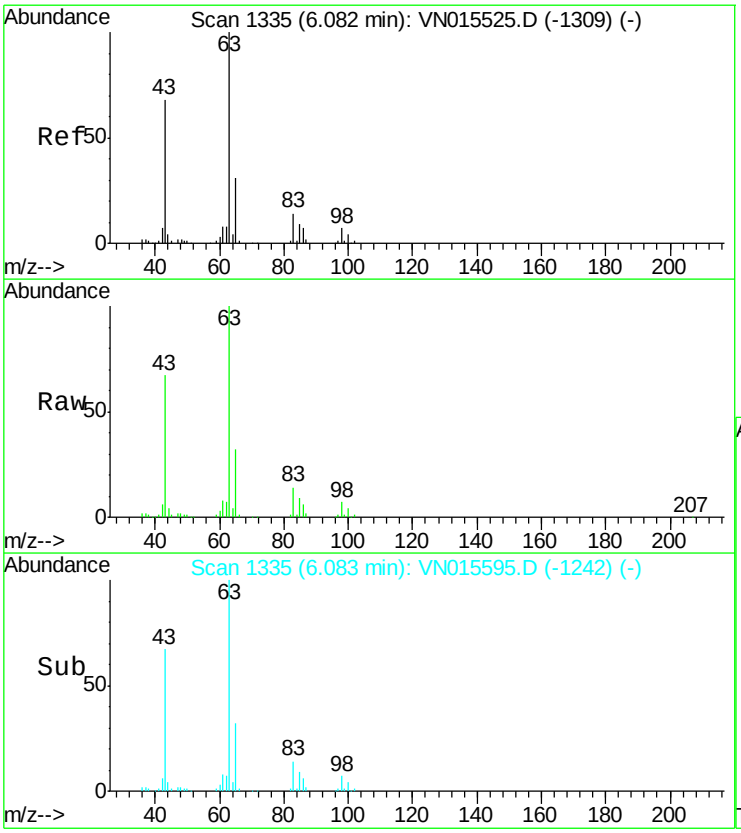


#24
Vinyl Acetate
Concen: 306.82 ug/l m
RT: 6.12 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 771581

Ion	Ratio	Lower	Upper
43	100		
86	10.4	7.9	11.9

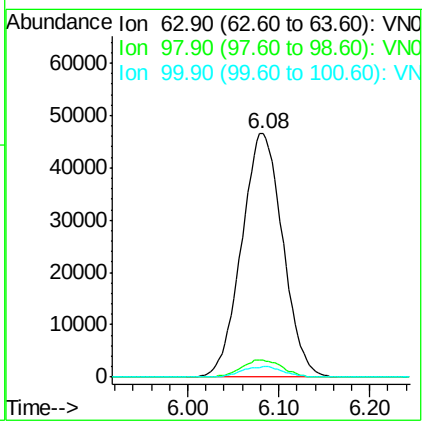


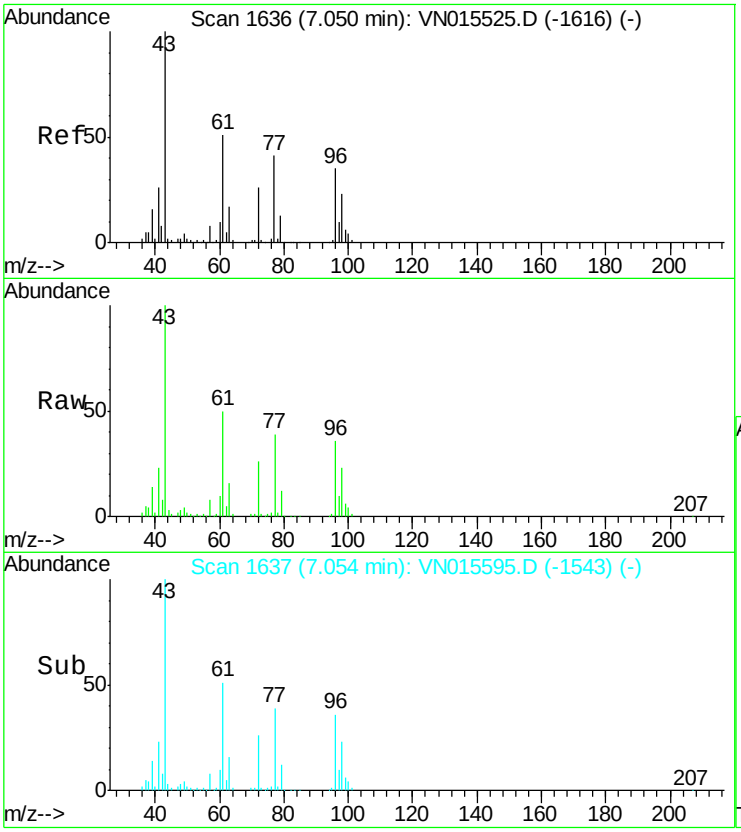


#25
1,1-Dichloroethane
Concen: 52.45 ug/l
RT: 6.08 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 63 Resp: 146208

Ion	Ratio	Lower	Upper
63	100		
98	7.0	3.3	9.9
100	4.2	2.1	6.3





#26
2-Butanone
Concen: 289.09 ug/l
RT: 7.05 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 252779

Ion	Ratio	Lower	Upper
43	100		
72	25.8	20.7	31.1

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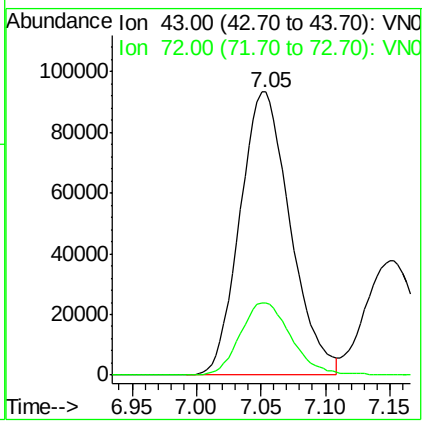
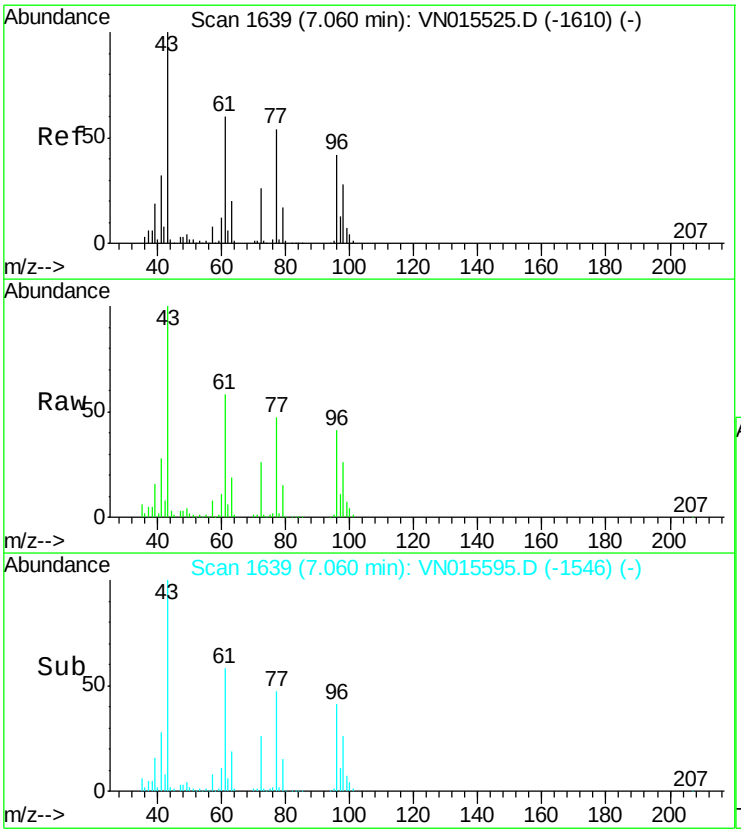
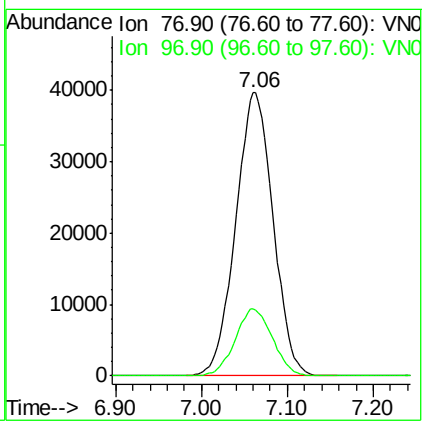




#27
2,2-Dichloropropane
Concen: 48.65 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 77 Resp: 119738

Ion	Ratio	Lower	Upper
77	100		
97	23.6	11.6	34.7



Instrument :
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LabSampleId :
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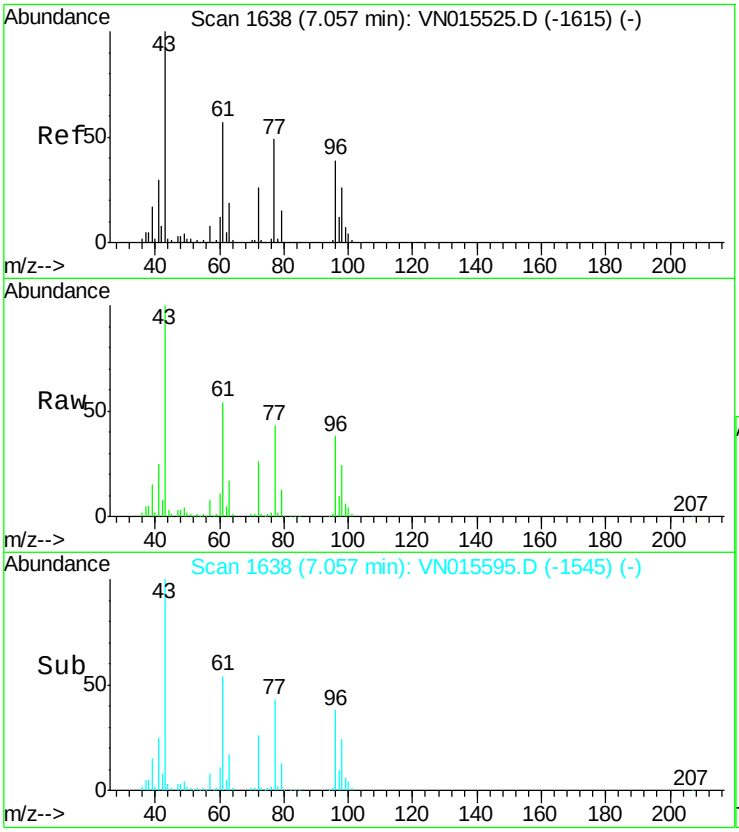
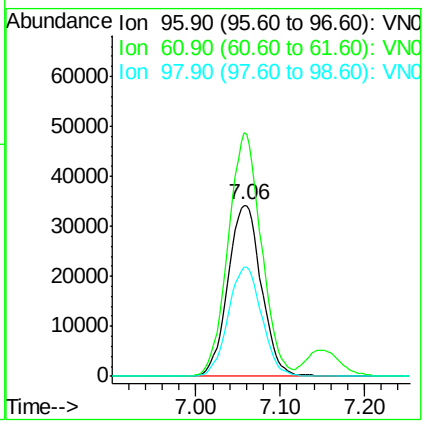
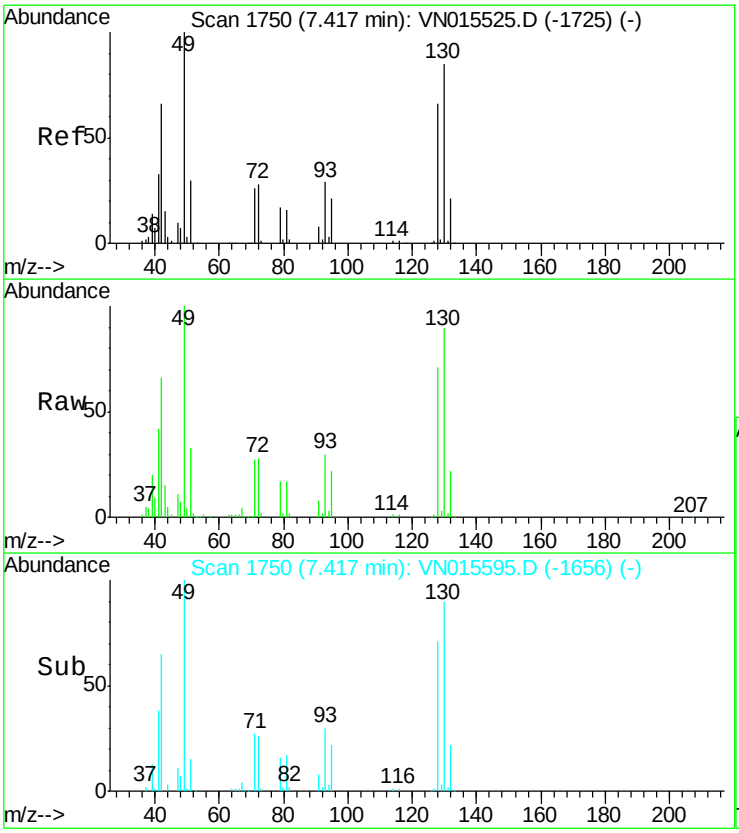


#28
cis-1,2-Dichloroethene
Concen: 54.32 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 96 Resp: 94484

Ion	Ratio	Lower	Upper
96	100		
61	141.0	0.0	292.0
98	64.1	0.0	129.4

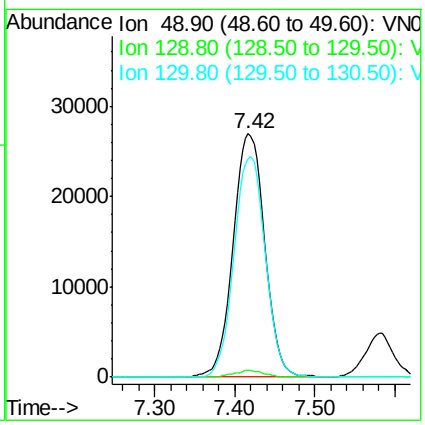




#29
Bromochloromethane
Concen: 58.89 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 49 Resp: 71982

Ion	Ratio	Lower	Upper
49	100		
129	2.5	0.0	4.2
130	89.7	68.6	102.8



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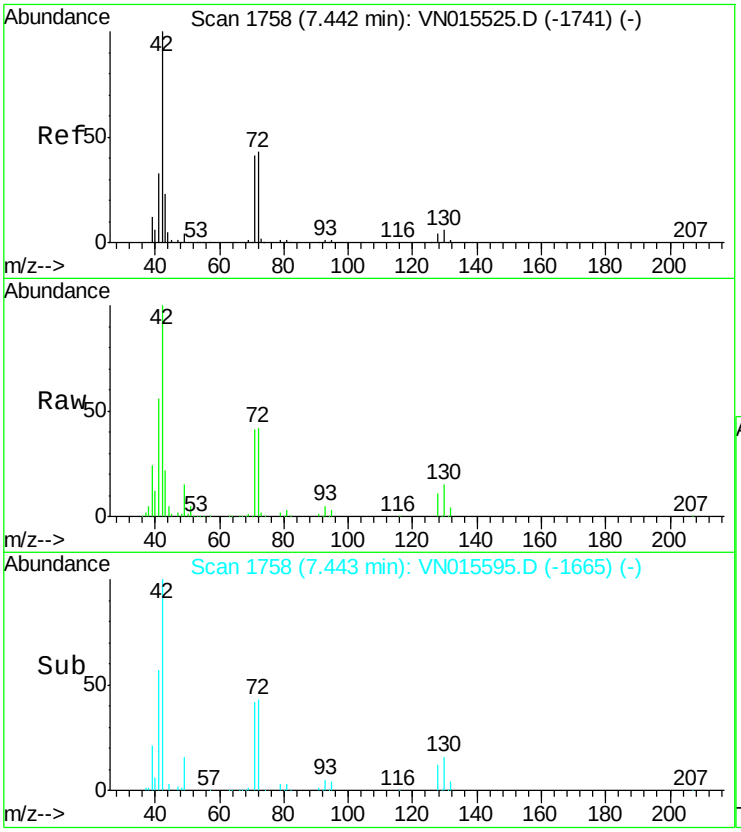
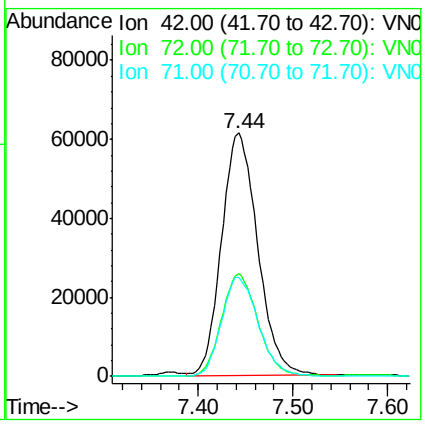
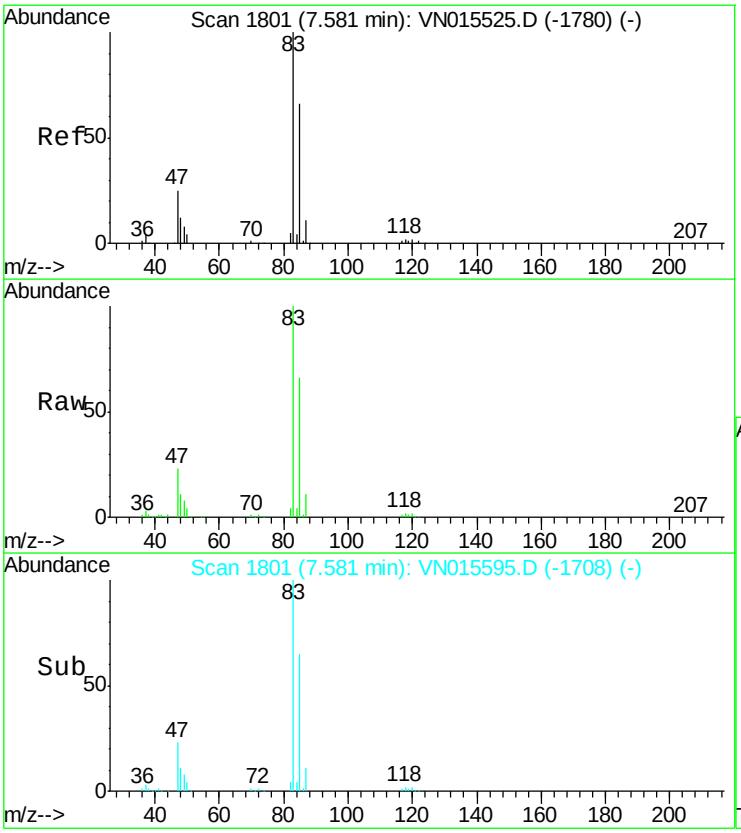


#30
Tetrahydrofuran
Concen: 276.13 ug/l
RT: 7.44 min Scan# 1758
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 42 Resp: 162463

Ion	Ratio	Lower	Upper
42	100		
72	43.0	34.2	51.2
71	41.8	32.5	48.7

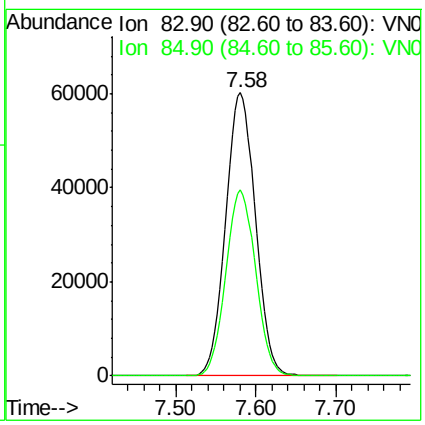




#31
Chloroform
Concen: 52.92 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 83 Resp: 152325

Ion	Ratio	Lower	Upper
83	100		
85	65.6	52.6	78.8



Instrument :
MSVOA_N
LabSampleId :
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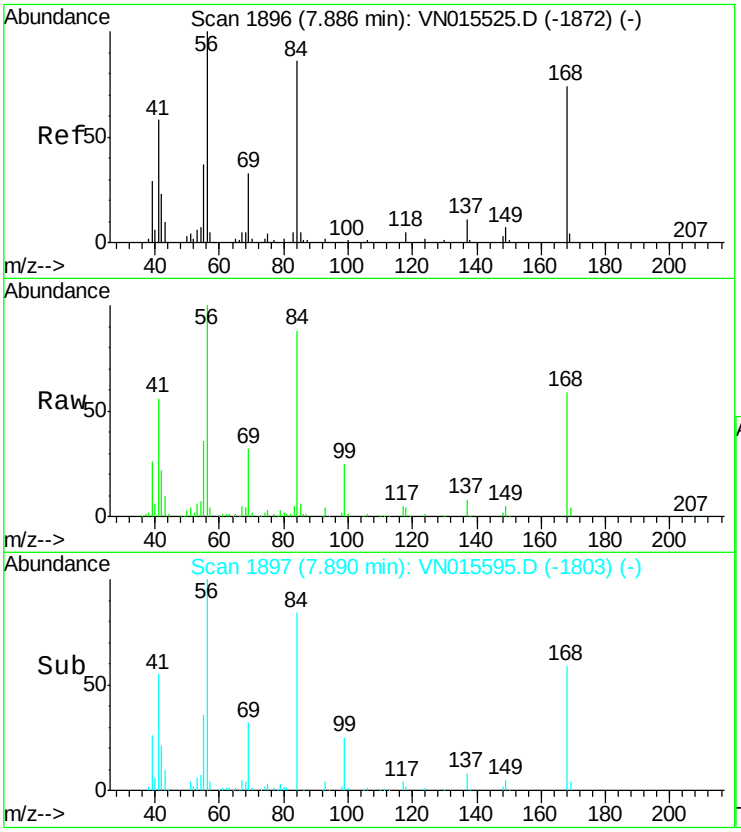
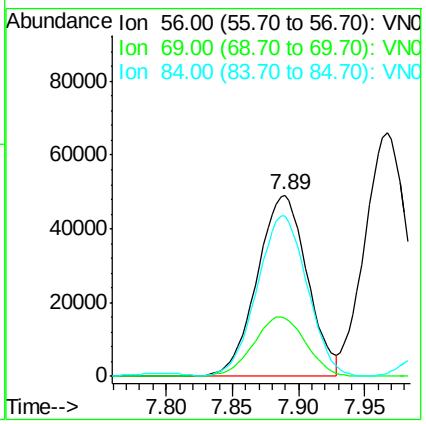
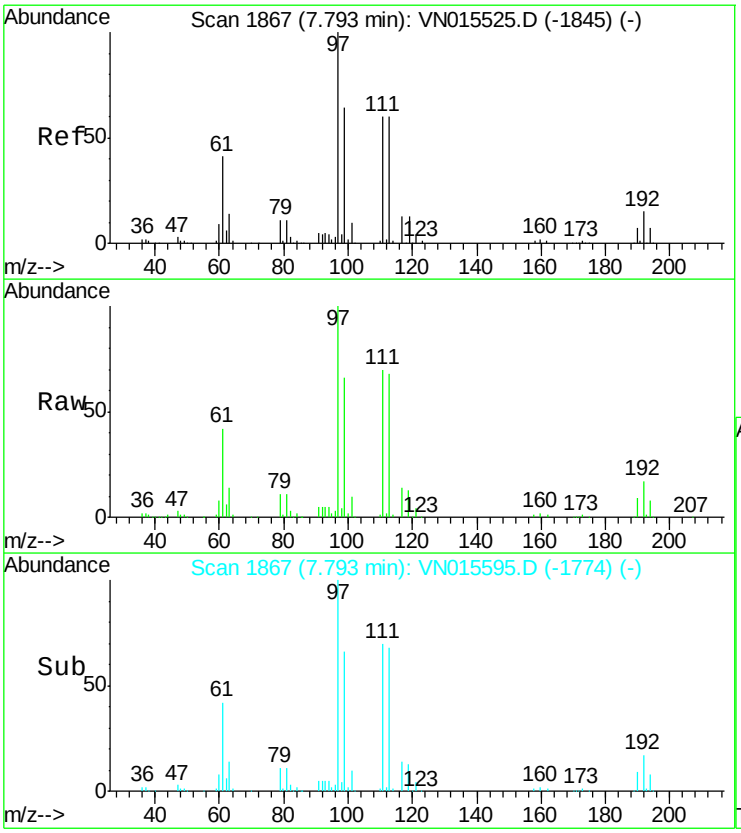


#32
Cyclohexane
Concen: 52.32 ug/l
RT: 7.89 min Scan# 1897
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 56 Resp: 129436

Ion	Ratio	Lower	Upper
56	100		
69	32.0	26.6	39.8
84	87.5	69.0	103.4

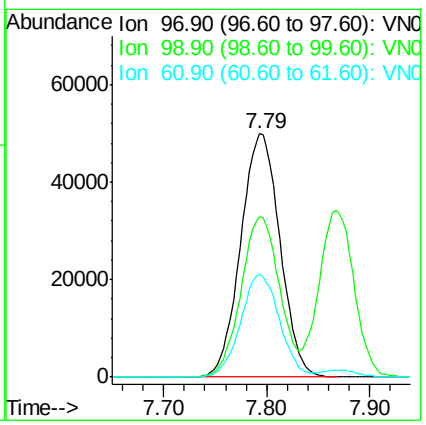




#33
1,1,1-Trichloroethane
Concen: 48.91 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 97 Resp: 131821

Ion	Ratio	Lower	Upper
97	100		
99	65.0	51.2	76.8
61	42.1	33.9	50.9



Instrument :
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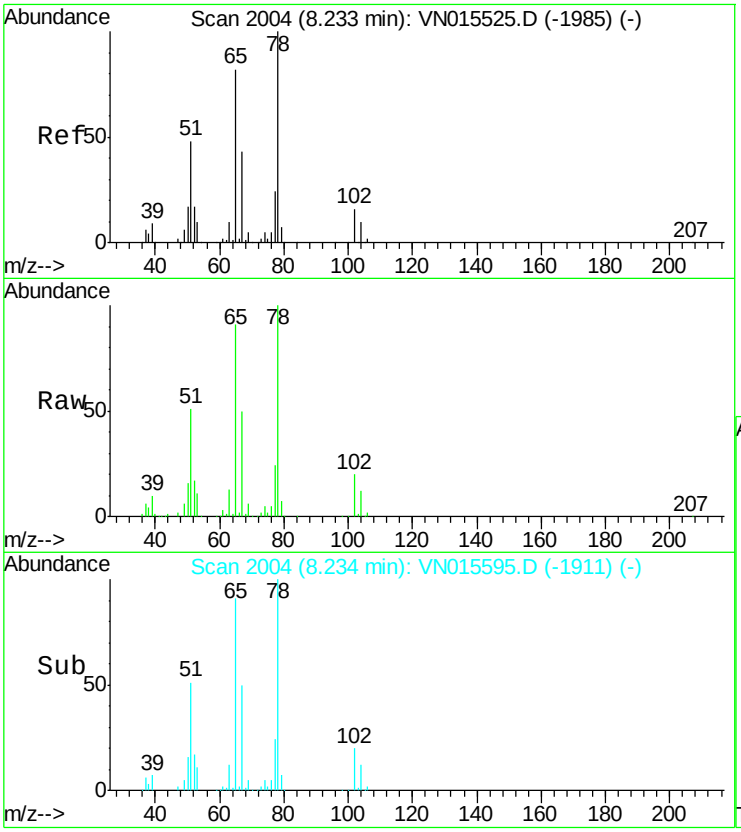
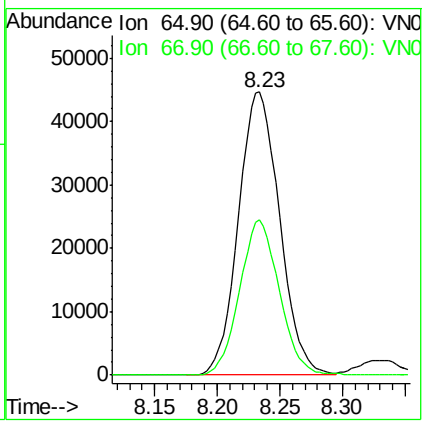
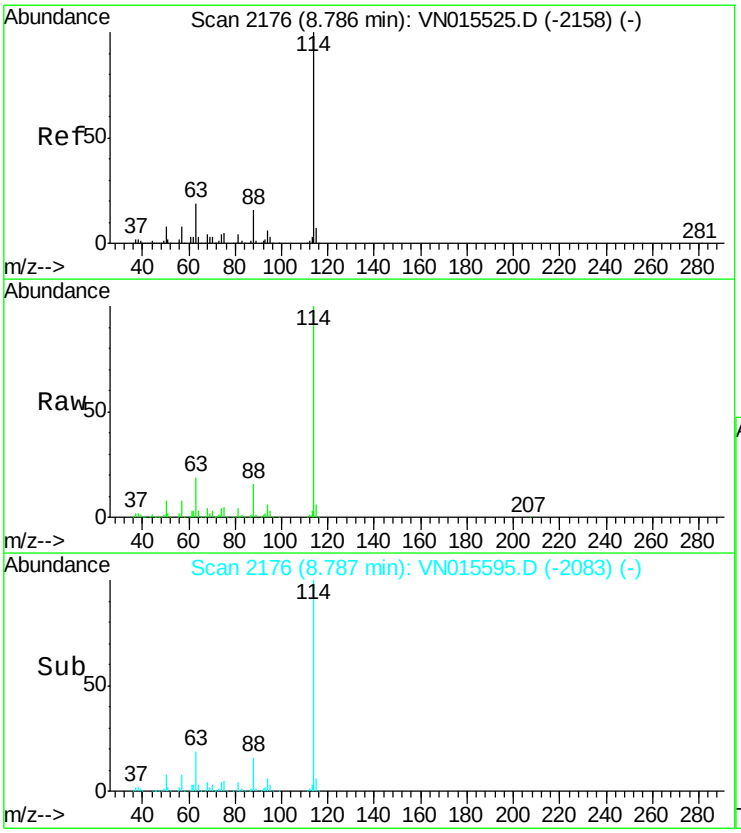


#34
1,2-Dichloroethane-d4
Concen: 51.65 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 65 Resp: 102025

Ion	Ratio	Lower	Upper
65	100		
67	52.9	0.0	103.6

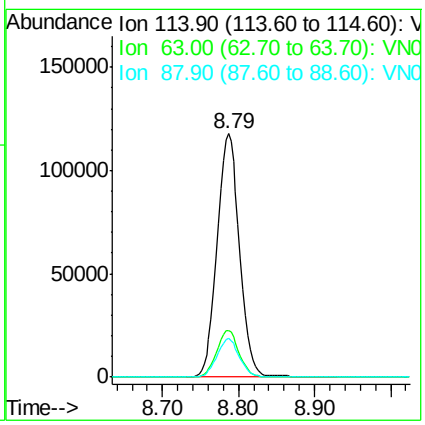




#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:114 Resp: 241067

Ion	Ratio	Lower	Upper
114	100		
63	19.3	0.0	38.6
88	15.8	0.0	32.2



Instrument :
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LabSampleId :
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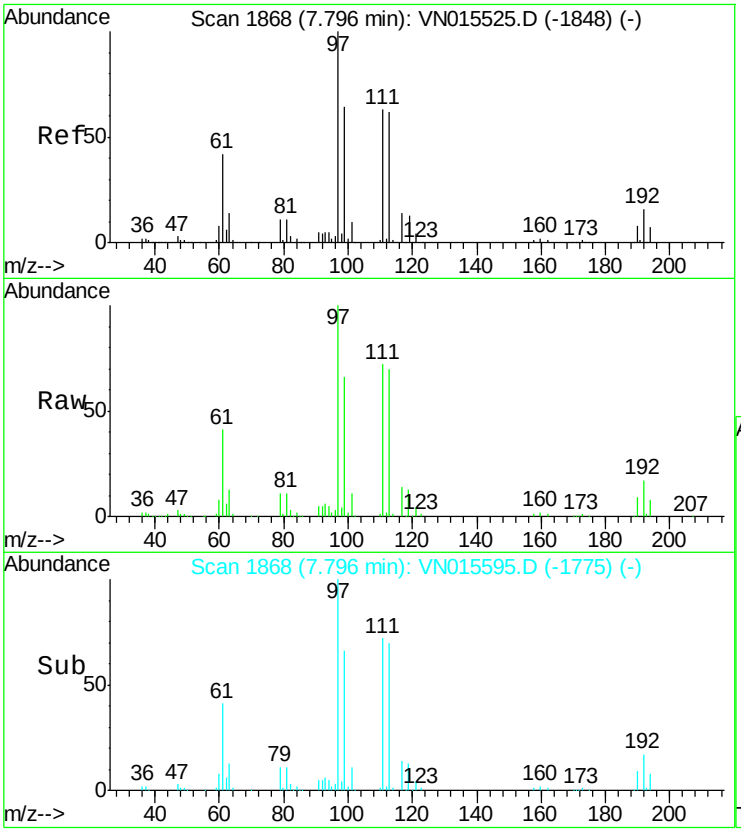
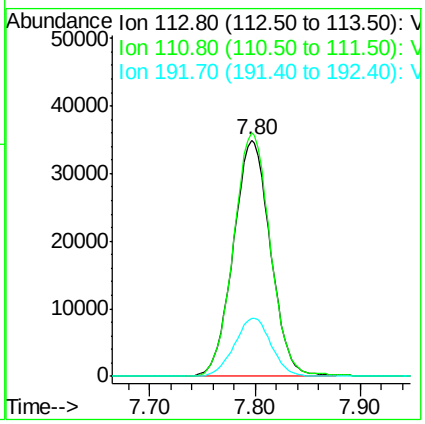
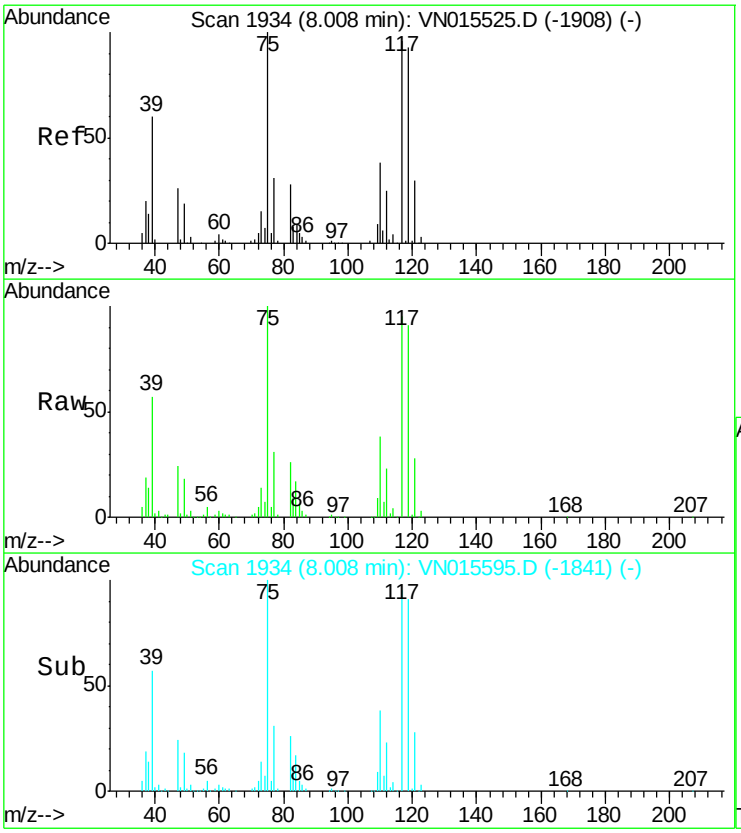


#36
Dibromofluoromethane
Concen: 54.36 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:113 Resp: 85351

Ion	Ratio	Lower	Upper
113	100		
111	102.6	81.5	122.3
192	24.4	20.0	30.0

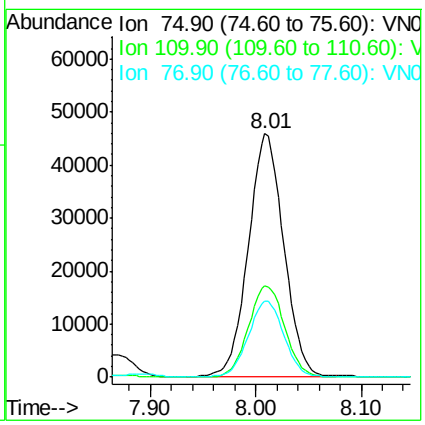




#37
1,1-Dichloropropene
Concen: 50.11 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 75 Resp: 107724

Ion	Ratio	Lower	Upper
75	100		
110	38.2	18.6	55.6
77	31.7	24.4	36.6



Instrument :
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LabSampleId :
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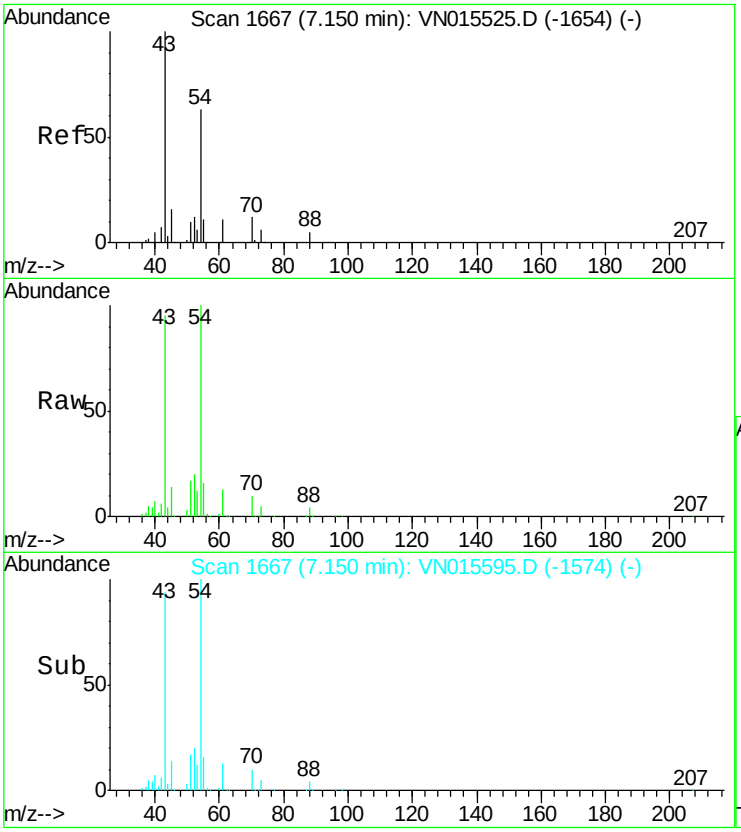
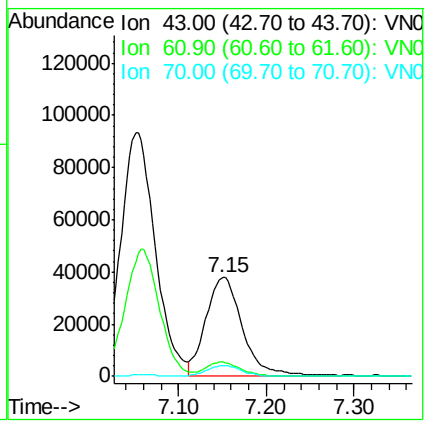
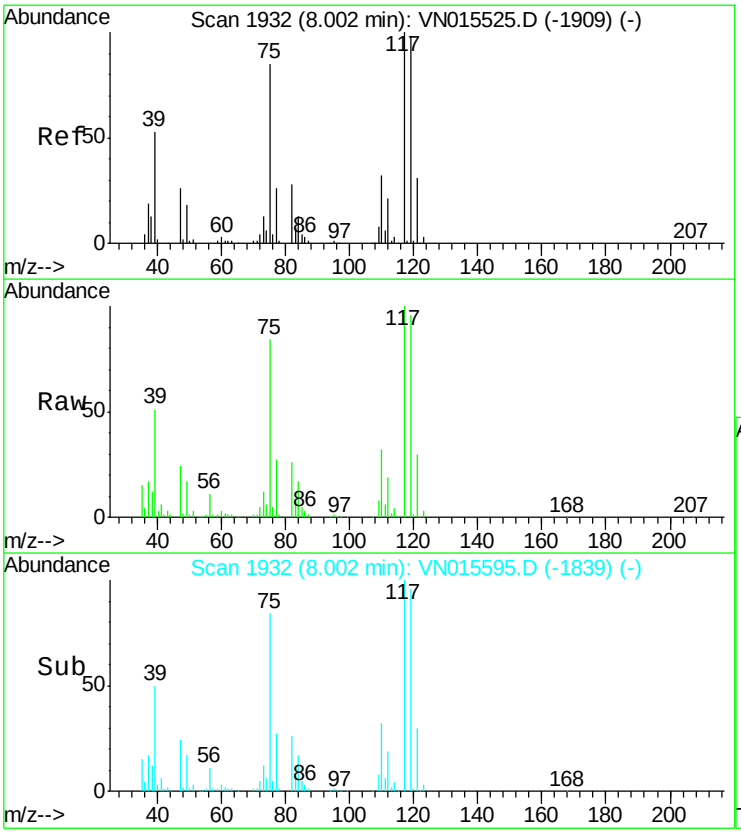


#38
Ethyl Acetate
Concen: 56.74 ug/l
RT: 7.15 min Scan# 1667
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 107642

Ion	Ratio	Lower	Upper
43	100		
61	13.7	10.8	16.2
70	10.7	8.5	12.7

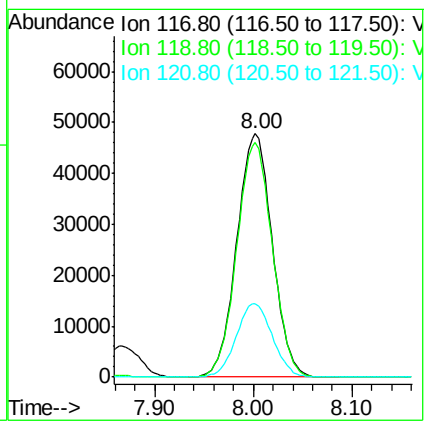




#39
Carbon Tetrachloride
Concen: 48.42 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:117 Resp: 119027

Ion	Ratio	Lower	Upper
117	100		
119	96.4	78.0	117.0
121	29.9	24.5	36.7



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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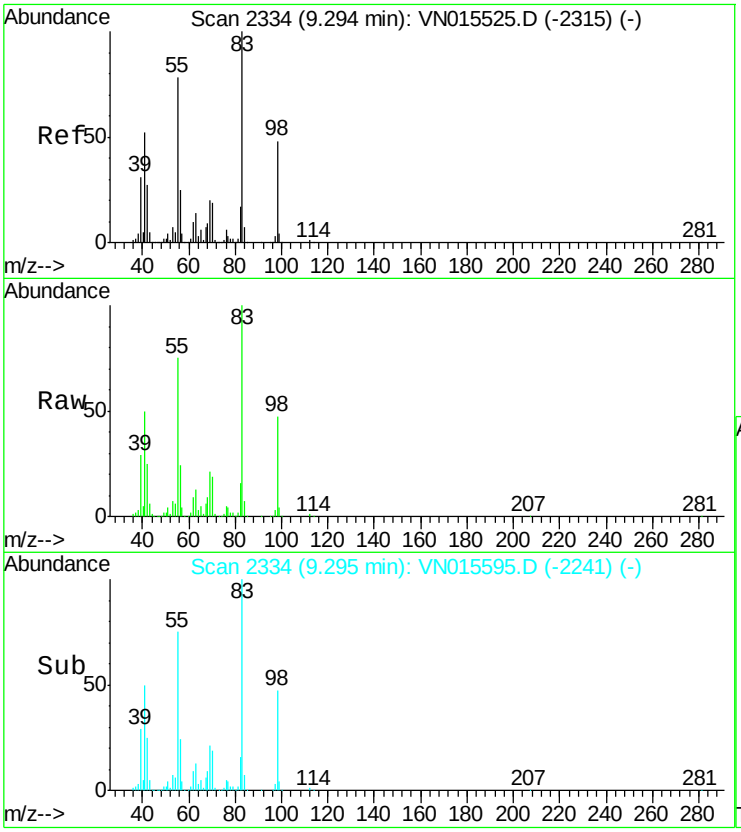
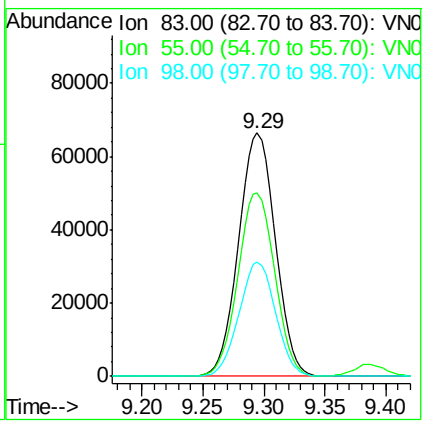
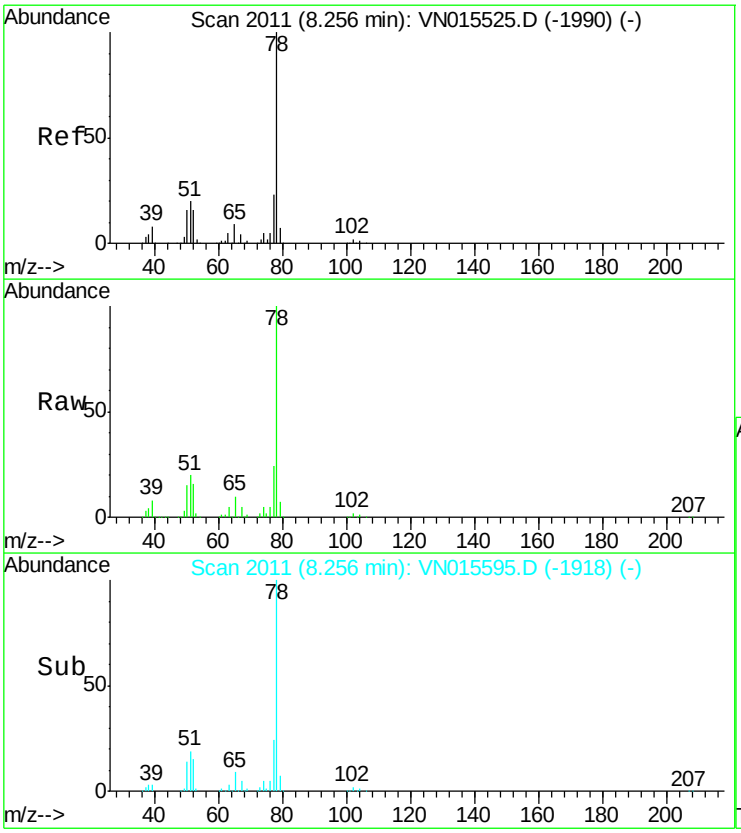


#40
Methylcyclohexane
Concen: 50.36 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 83 Resp: 138458

Ion	Ratio	Lower	Upper
83	100		
55	75.4	62.5	93.7
98	46.9	38.2	57.2

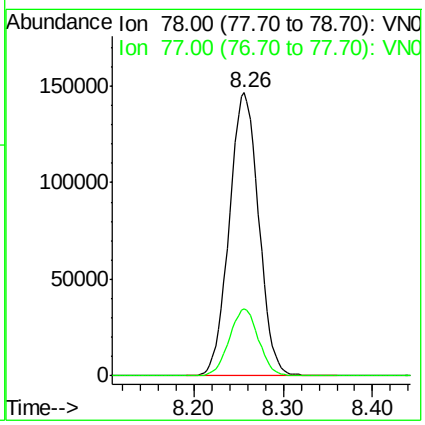




#41
Benzene
Concen: 52.47 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 78 Resp: 336379

Ion	Ratio	Lower	Upper
78	100		
77	23.8	18.5	27.7



Instrument :
MSVOA_N
LabSampleId :
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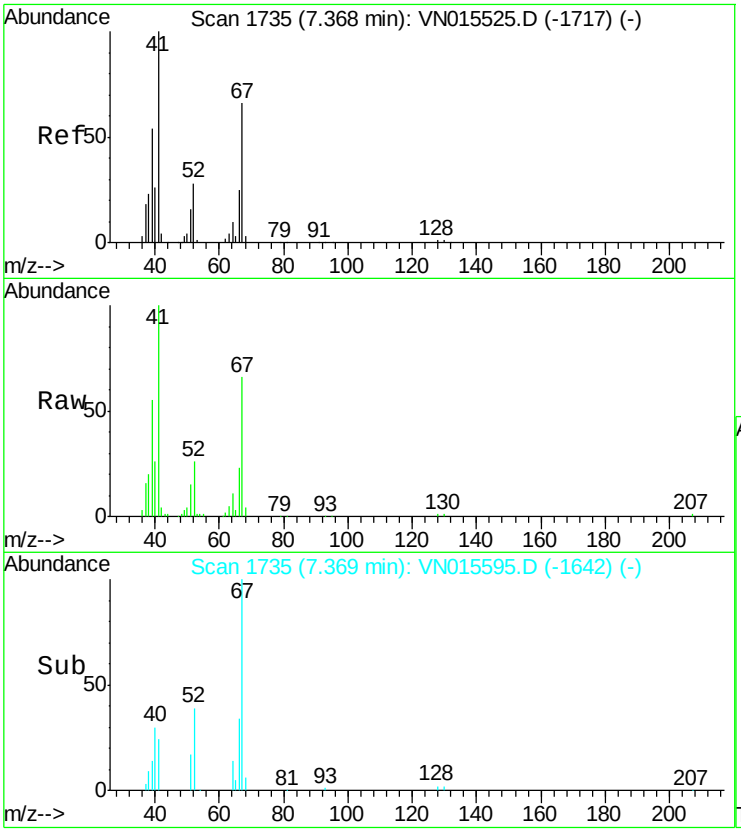
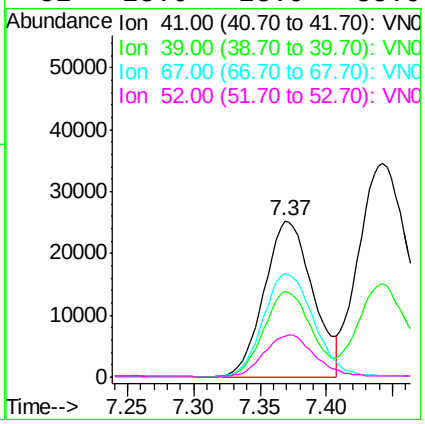
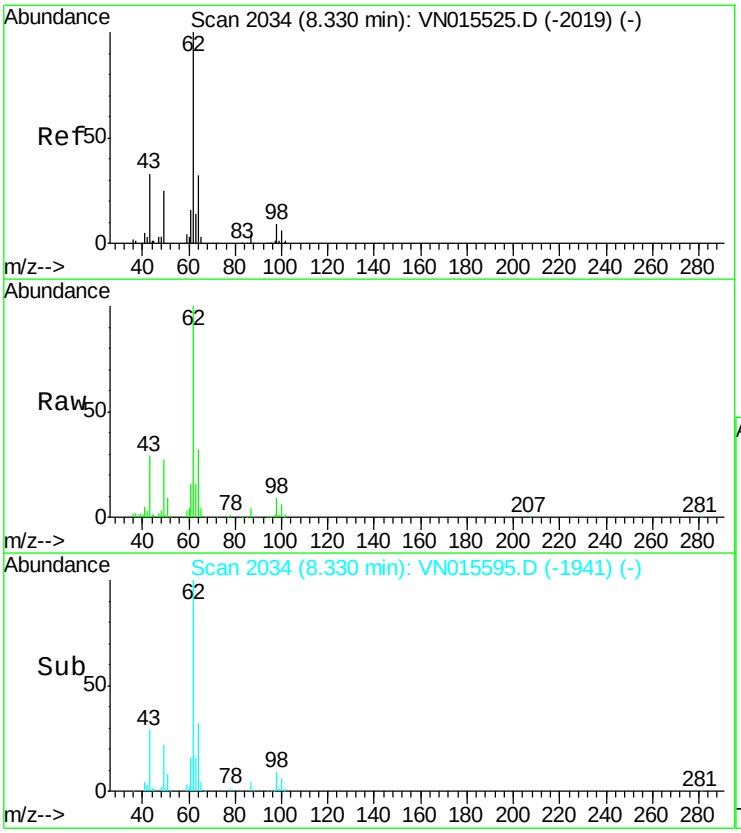


#42
Methacrylonitrile
Concen: 57.88 ug/l
RT: 7.37 min Scan# 1735
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 41 Resp: 64903

Ion	Ratio	Lower	Upper
41	100		
39	54.4	45.0	67.4
67	69.5	54.9	82.3
52	28.0	23.9	35.9

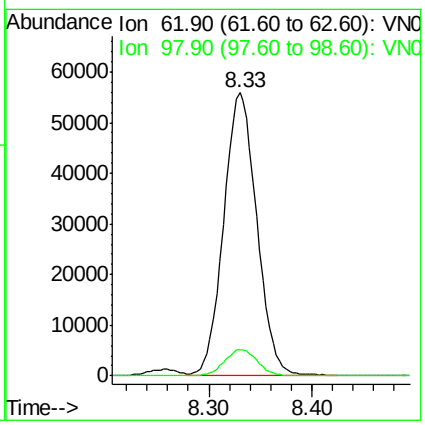




#43
1,2-Dichloroethane
Concen: 53.20 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 62 Resp: 124575

Ion	Ratio	Lower	Upper
62	100		
98	9.4	0.0	18.2



Instrument :
MSVOA_N
LabSampleId :
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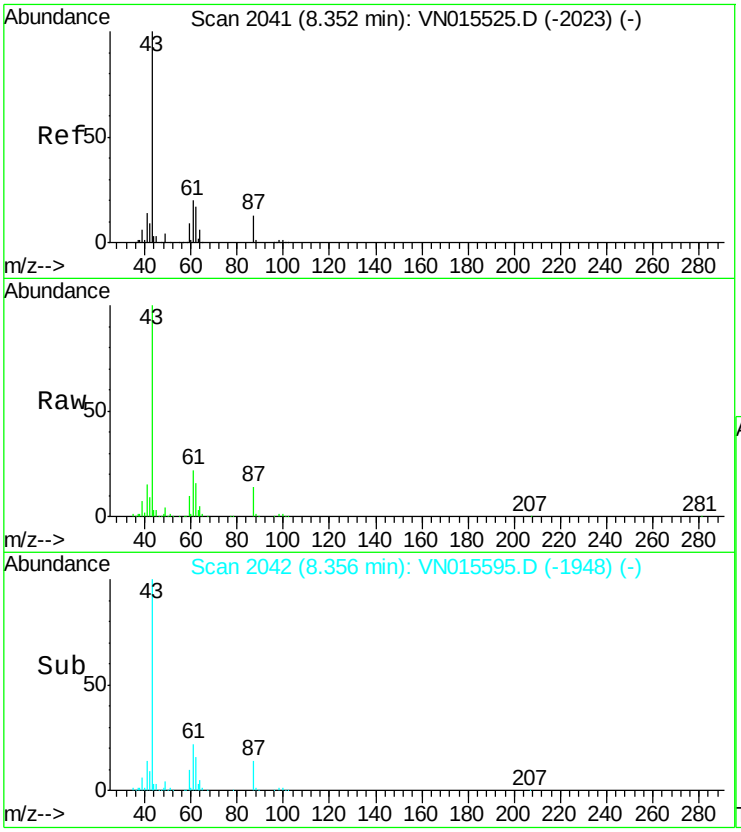
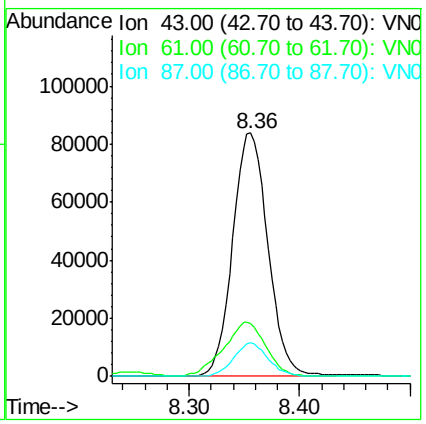
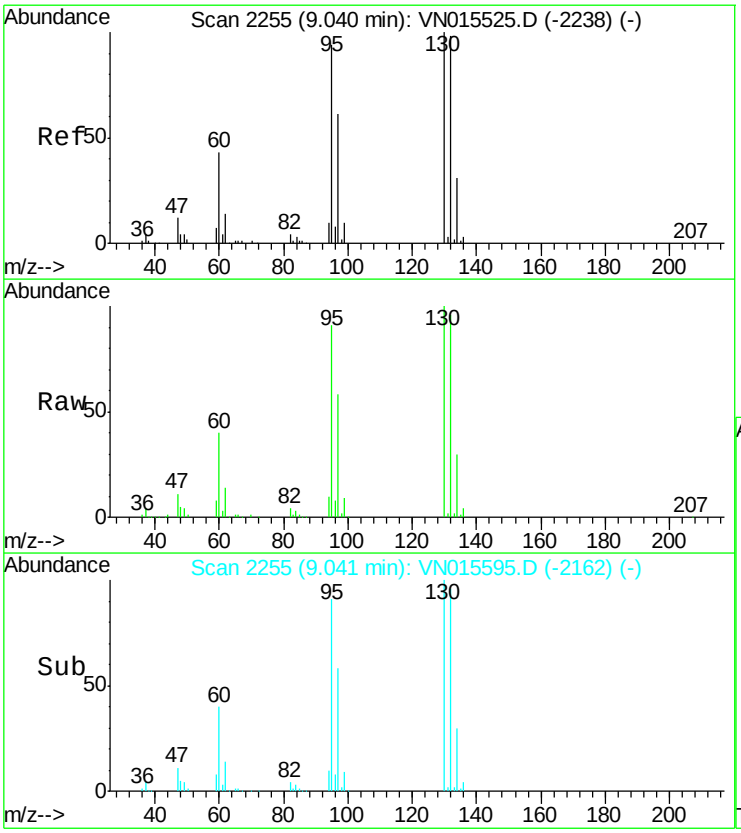


#44
Isopropyl Acetate
Concen: 54.12 ug/l
RT: 8.36 min Scan# 2042
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 184718

Ion	Ratio	Lower	Upper
43	100		
61	26.6	20.4	30.6
87	13.5	10.4	15.6

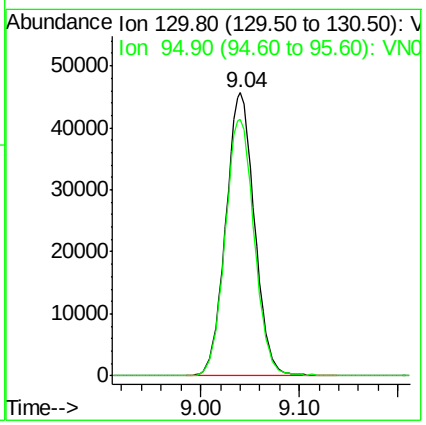




#45
Trichloroethene
Concen: 51.66 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:130 Resp: 92767

Ion	Ratio	Lower	Upper
130	100		
95	90.8	0.0	187.0



Instrument :
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LabSampleId :
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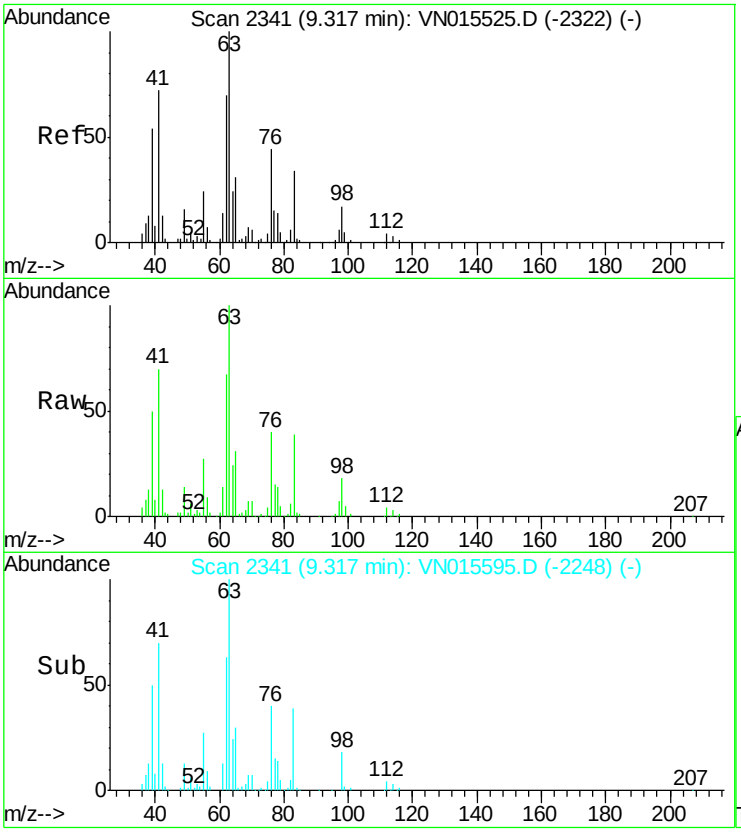
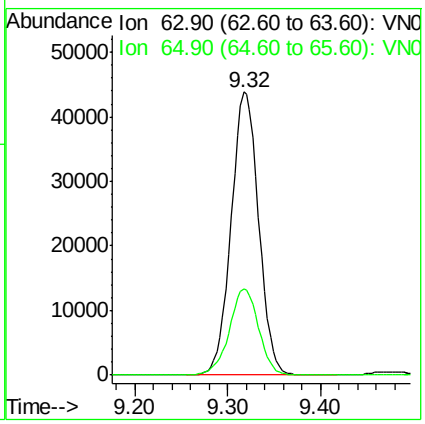
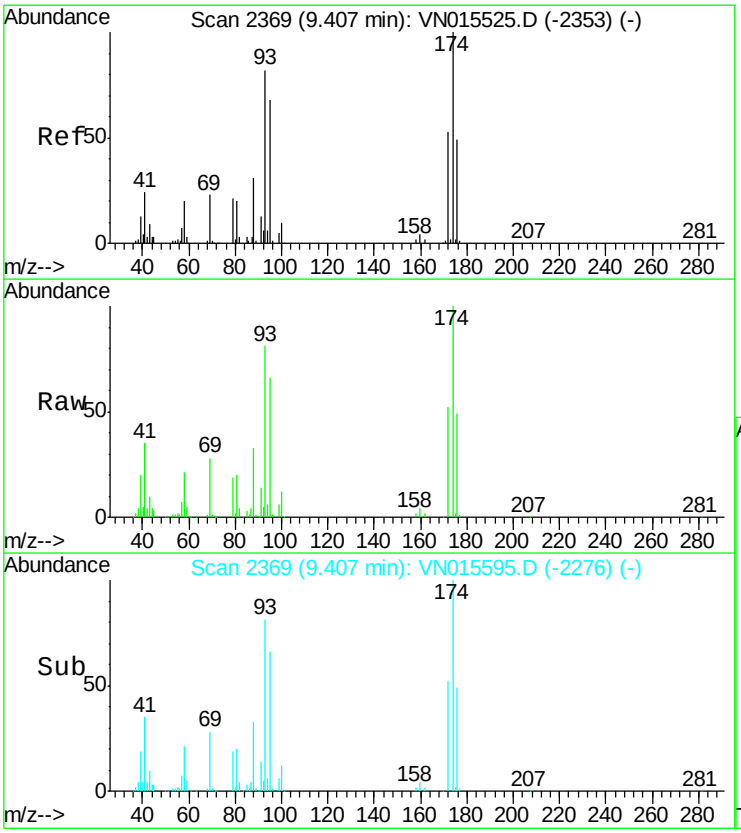


#46
1,2-Dichloropropane
Concen: 54.63 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 63 Resp: 89976

Ion	Ratio	Lower	Upper
63	100		
65	30.5	25.0	37.4

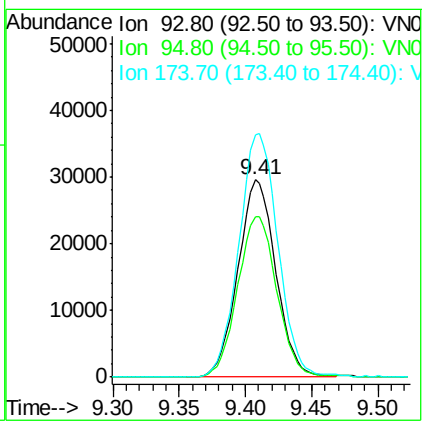




#47
Dibromomethane
Concen: 54.17 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 93 Resp: 58695

Ion	Ratio	Lower	Upper
93	100		
95	84.6	66.9	100.3
174	127.7	98.6	148.0



Instrument :
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LabSampleId :
VSTDCCC050

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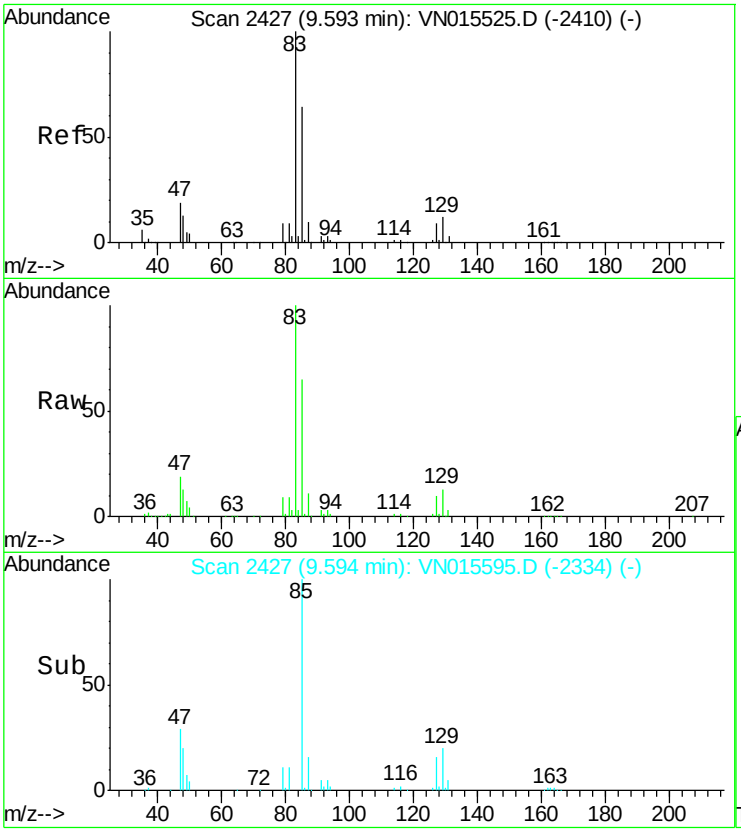
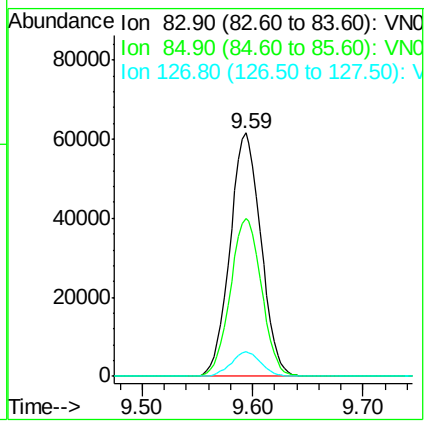
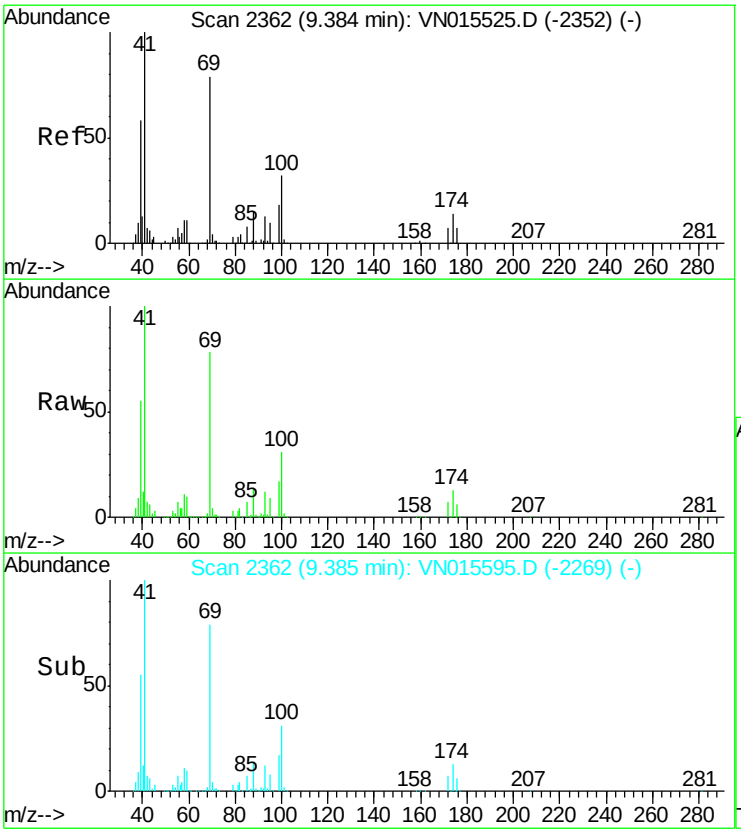


#48
Bromodichloromethane
Concen: 53.74 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 83 Resp: 119470

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.1	76.7
127	10.0	7.6	11.4

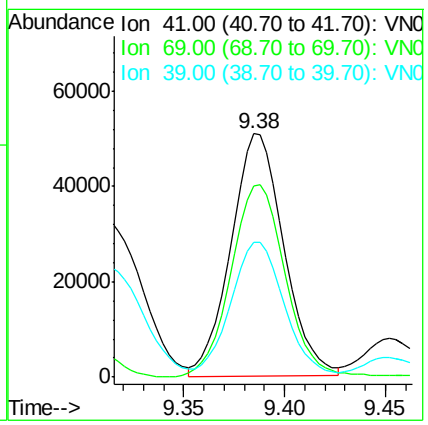


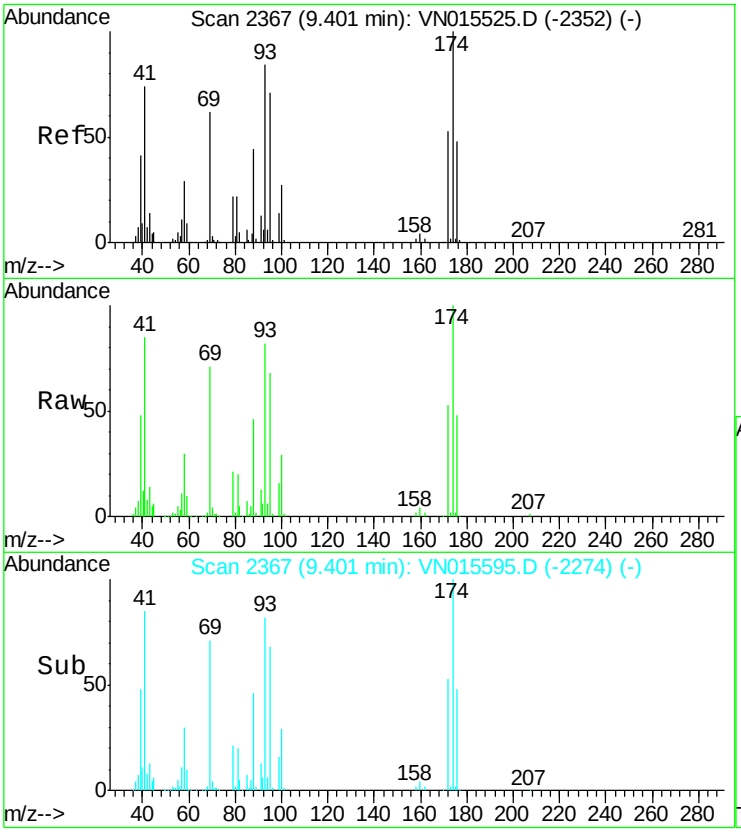


#49
Methyl methacrylate
Concen: 56.86 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 41 Resp: 93547

Ion	Ratio	Lower	Upper
41	100		
69	81.1	62.8	94.2
39	56.9	46.4	69.6





#50
1,4-Dioxane
Concen: 1226.89 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 88 Resp: 28160

Ion	Ratio	Lower	Upper
88	100		
43	31.5	26.4	39.6
58	67.9	56.6	84.8

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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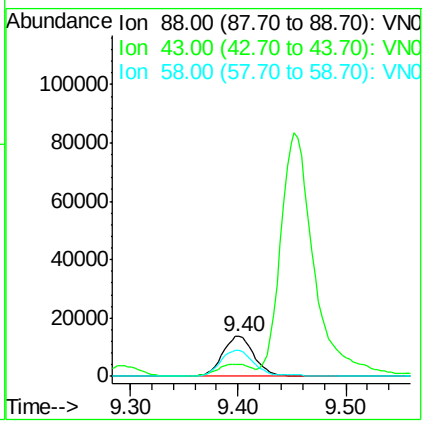
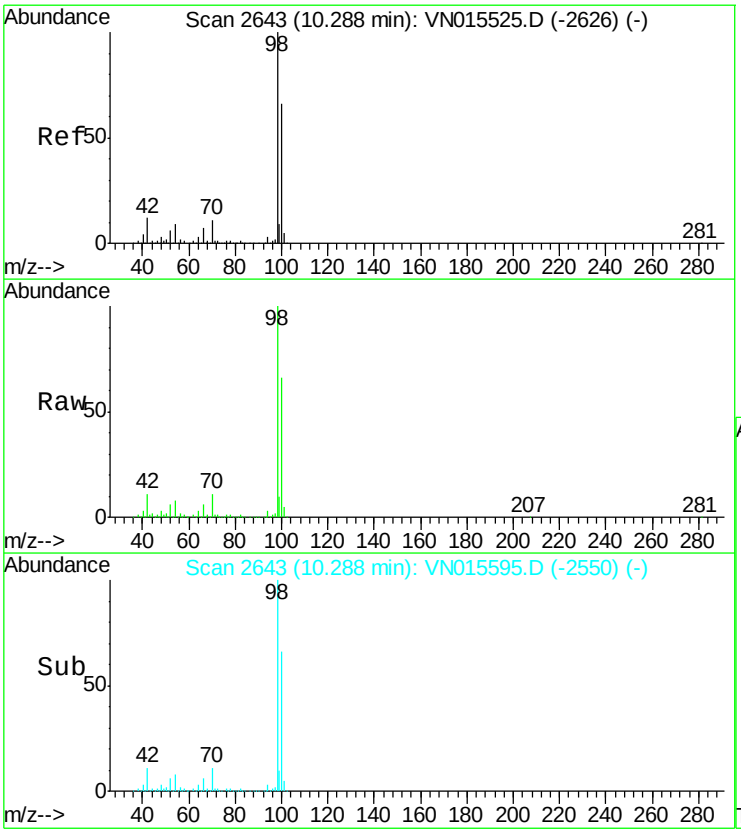
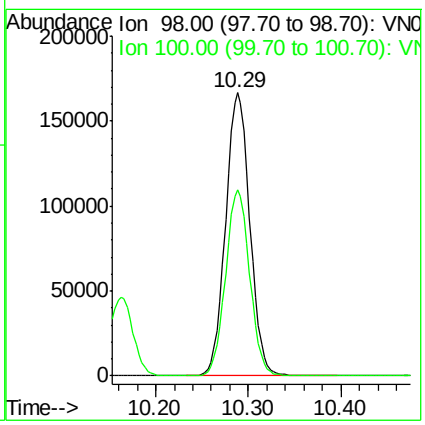




#51
Toluene-d8
Concen: 52.04 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 98 Resp: 301051

Ion	Ratio	Lower	Upper
98	100		
100	65.6	52.3	78.5



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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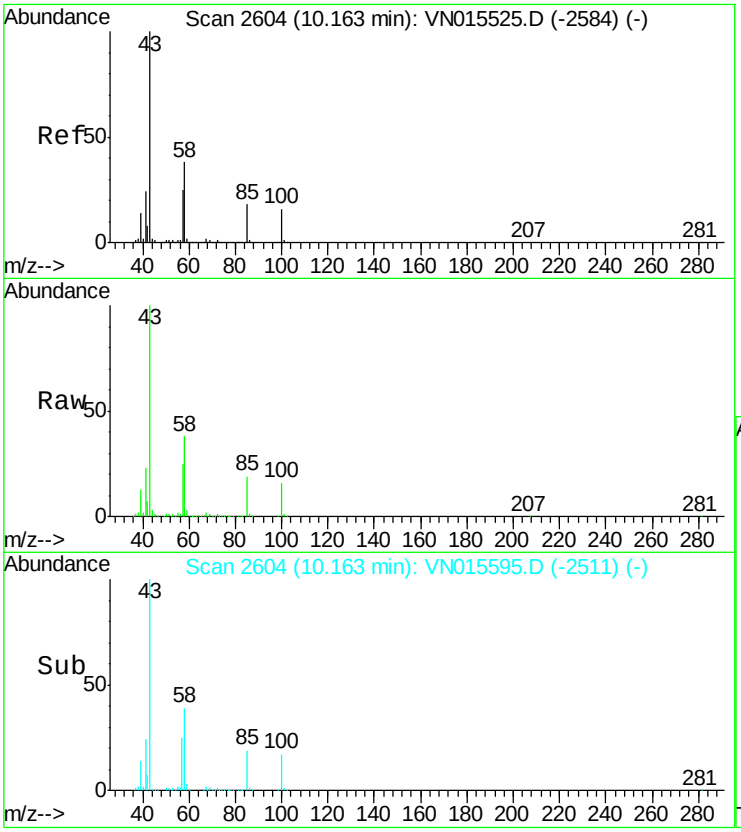
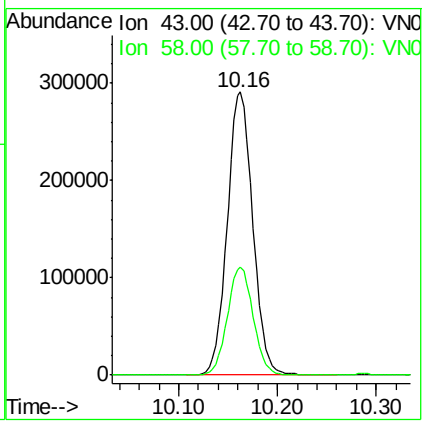
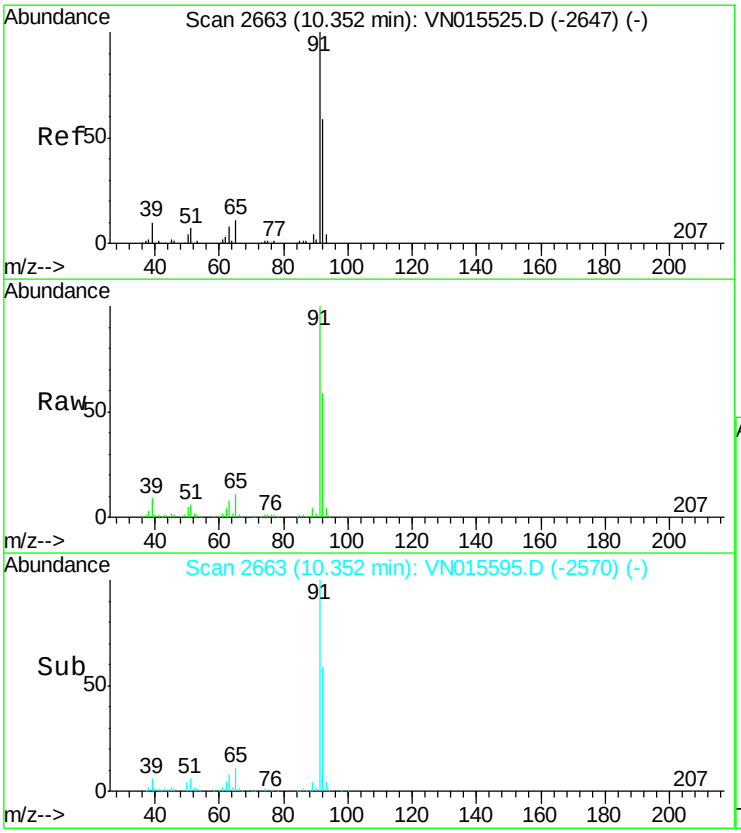


#52
4-Methyl-2-Pentanone
Concen: 278.58 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 525578

Ion	Ratio	Lower	Upper
43	100		
58	38.7	30.2	45.2

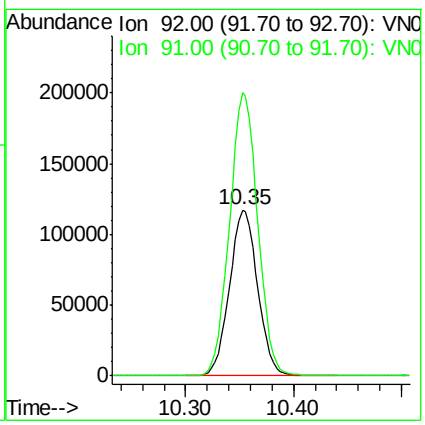




#53
Toluene
Concen: 52.44 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 92 Resp: 213144

Ion	Ratio	Lower	Upper
92	100		
91	171.1	136.2	204.4



Instrument :
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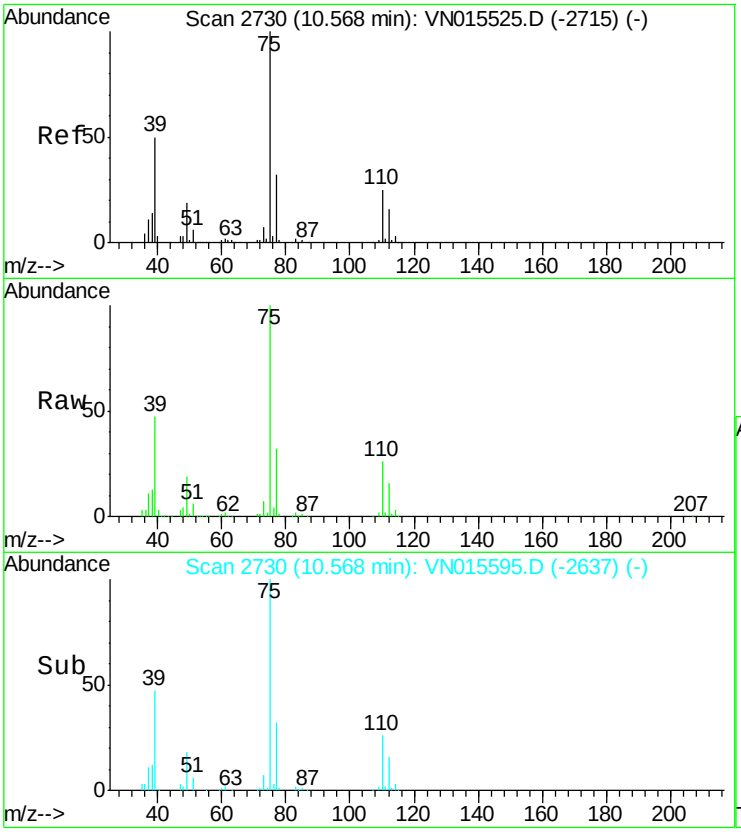
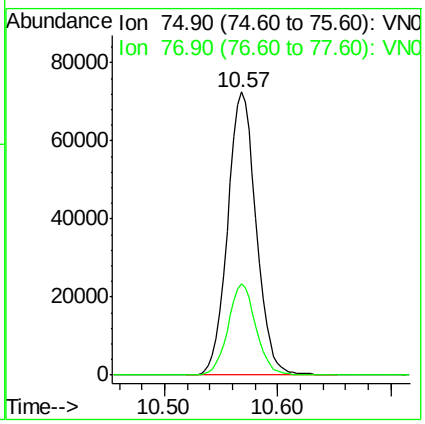
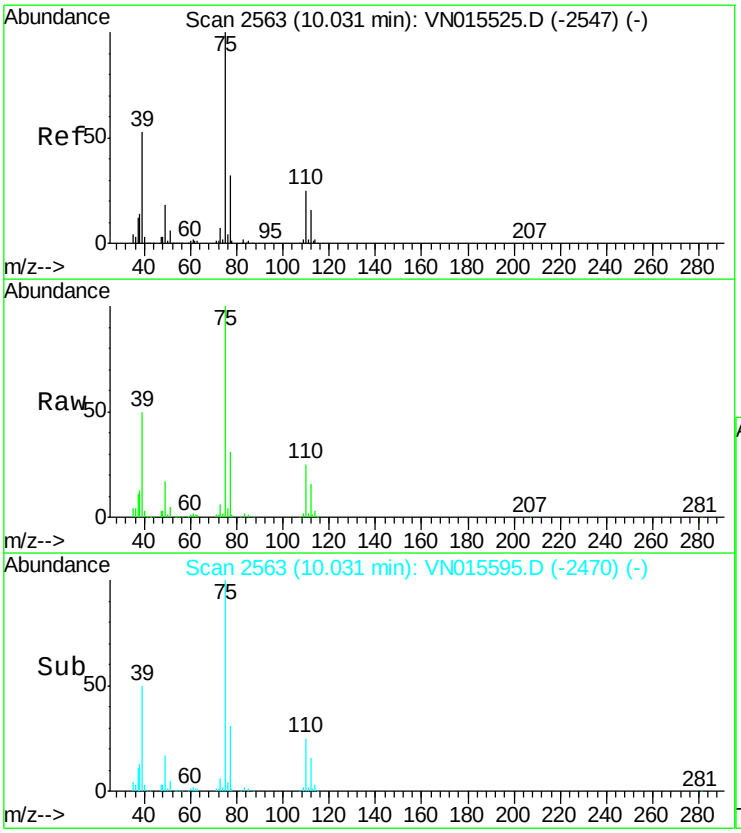


#54
t-1,3-Dichloropropene
Concen: 55.97 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 75 Resp: 127237

Ion	Ratio	Lower	Upper
75	100		
77	32.3	26.0	39.0

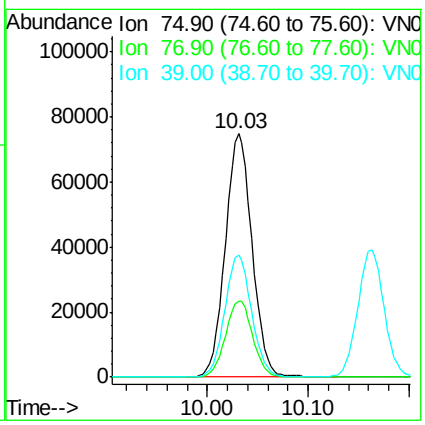


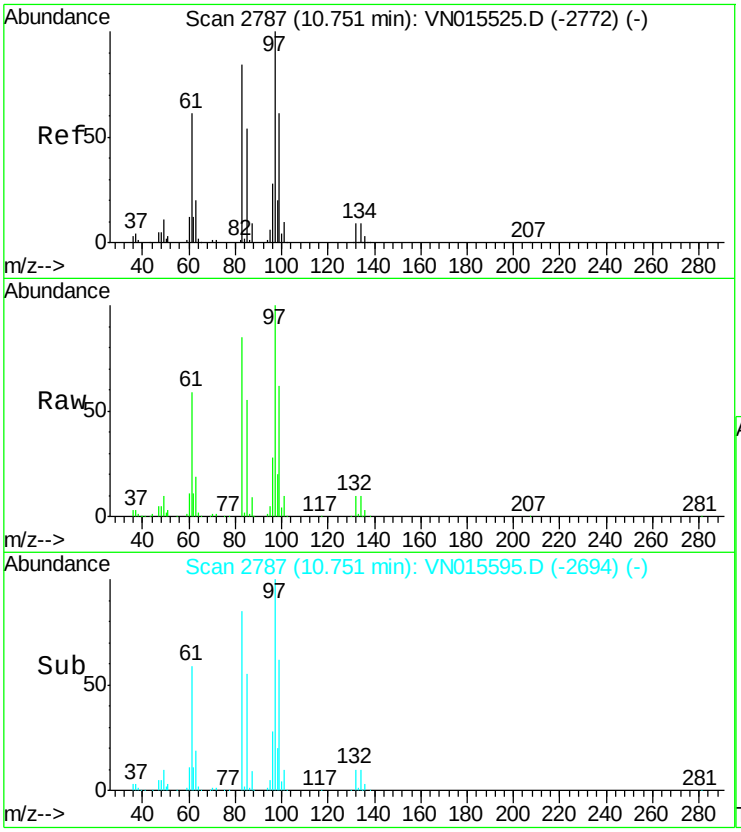


#55
cis-1,3-Dichloropropene
Concen: 54.67 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 75 Resp: 138355

Ion	Ratio	Lower	Upper
75	100		
77	31.4	25.4	38.2
39	50.4	42.2	63.4





#56
1,1,2-Trichloroethane
Concen: 56.67 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Instrument :
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LabSampleId :
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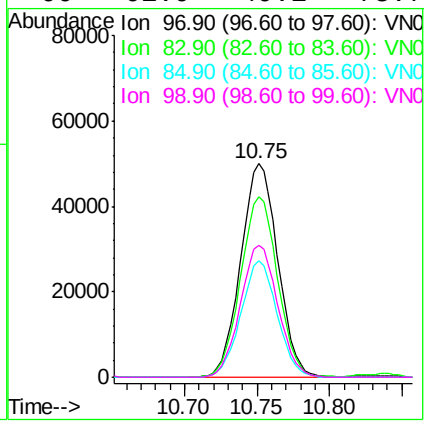
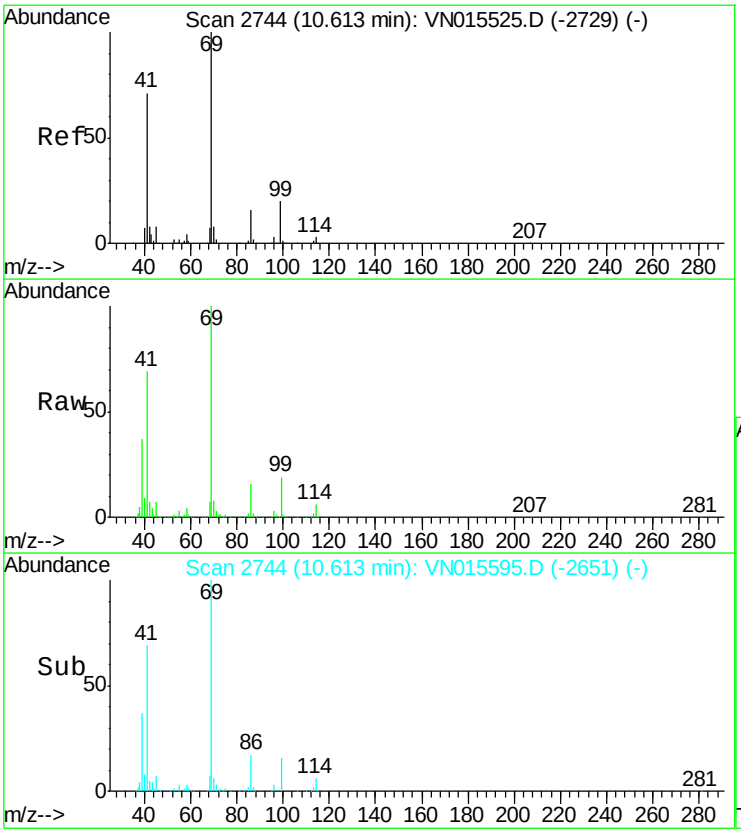
Tgt Ion: 97 Resp: 89003

Ion	Ratio	Lower	Upper
97	100		
83	84.7	67.0	100.4
85	54.7	42.9	64.3
99	61.9	49.1	73.7

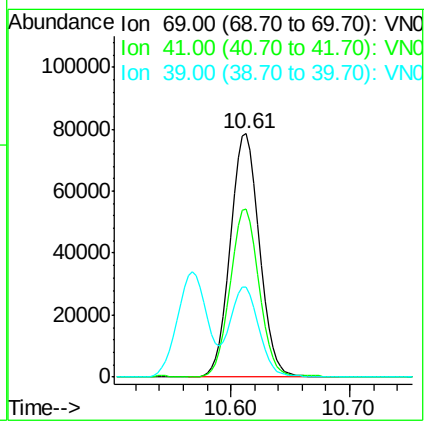


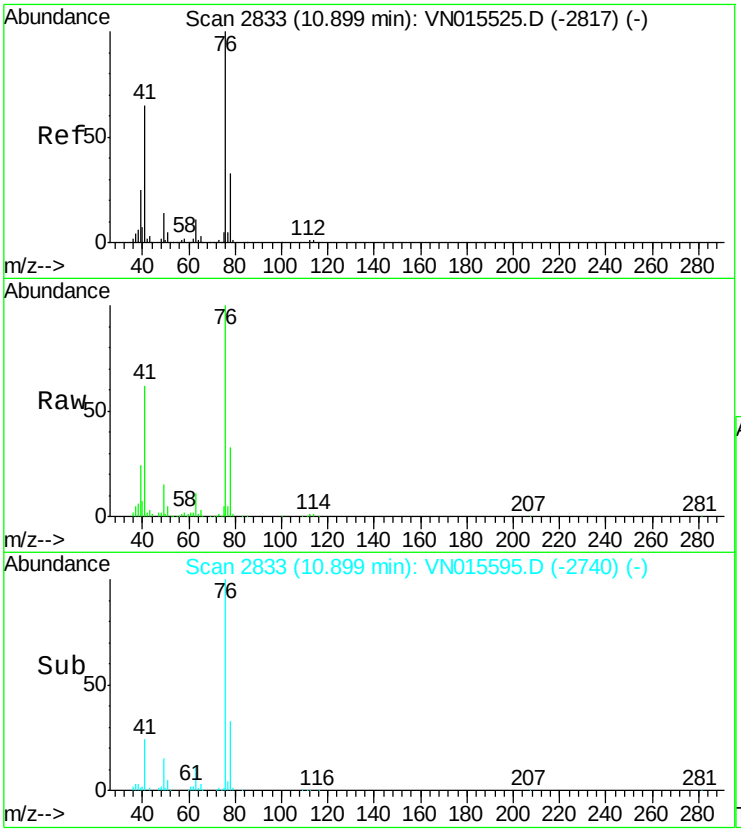


#57
Ethyl methacrylate
Concen: 57.42 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 69 Resp: 133401

Ion	Ratio	Lower	Upper
69	100		
41	67.9	56.9	85.3
39	36.4	32.0	48.0





#58
1,3-Dichloropropane
Concen: 55.03 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 76 Resp: 144814

Ion	Ratio	Lower	Upper
76	100		
78	32.6	26.3	39.5

Instrument :
MSVOA_N
LabSampleId :
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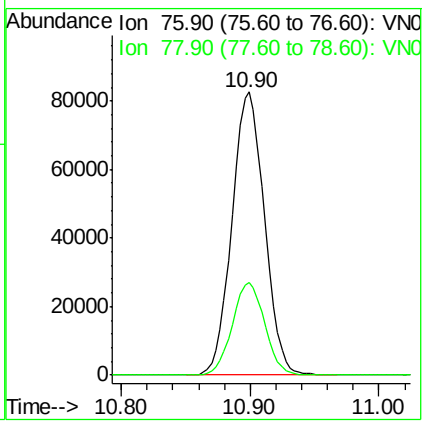
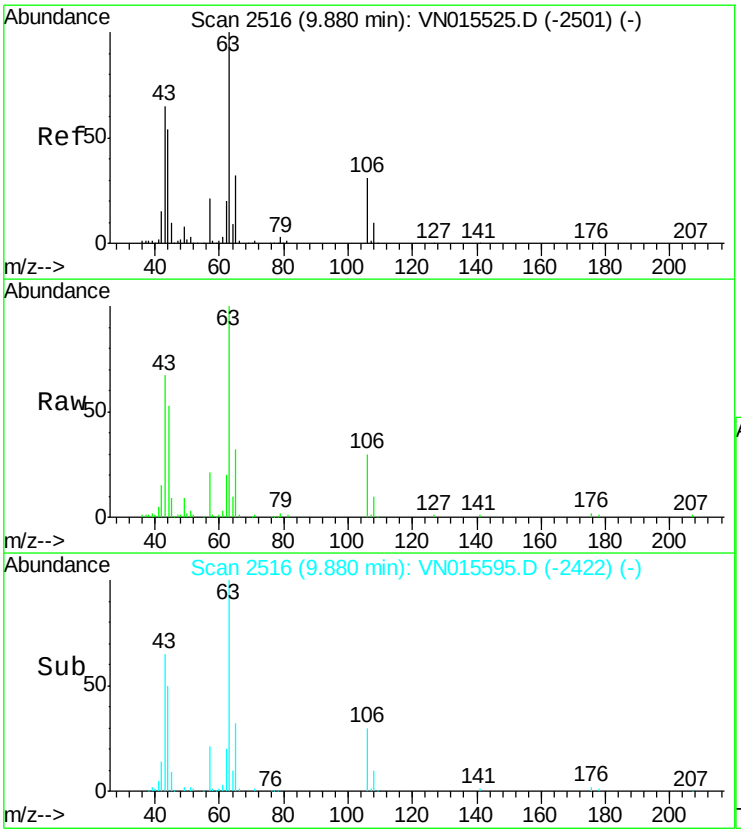
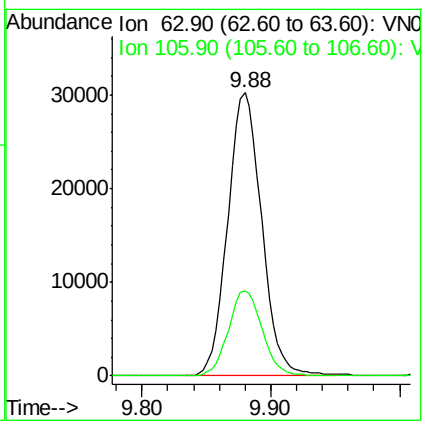


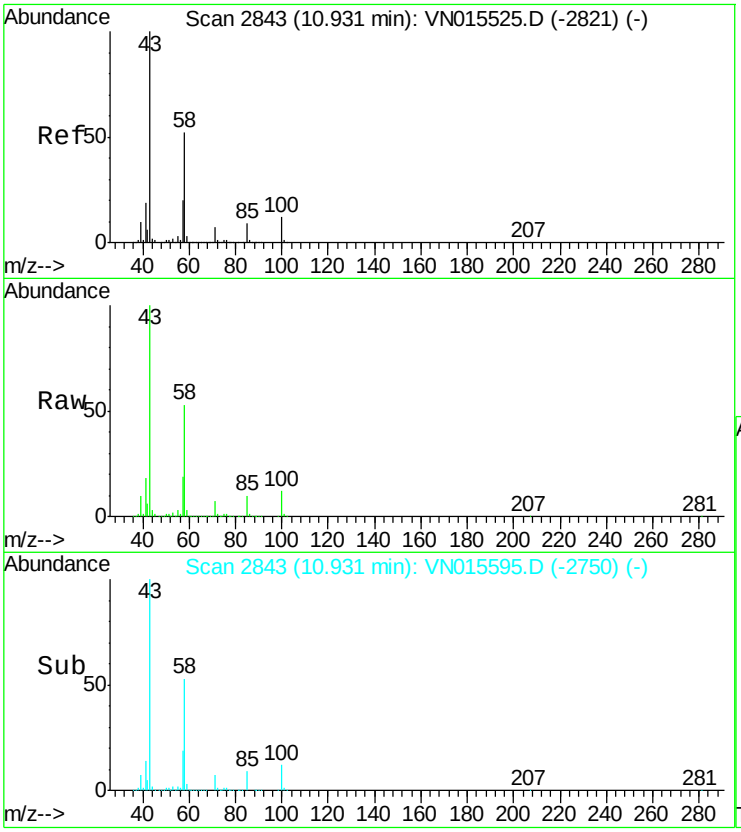


#59
2-Chloroethyl Vinyl ether
Concen: 215.99 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 63 Resp: 55383

Ion	Ratio	Lower	Upper
63	100		
106	29.9	23.7	35.5





#60
2-Hexanone
Concen: 286.17 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 352537

Ion	Ratio	Lower	Upper
43	100		
58	53.6	26.0	78.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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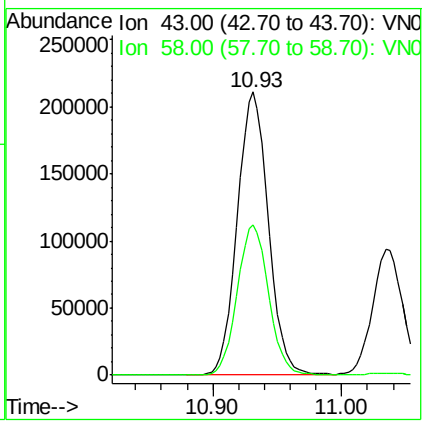
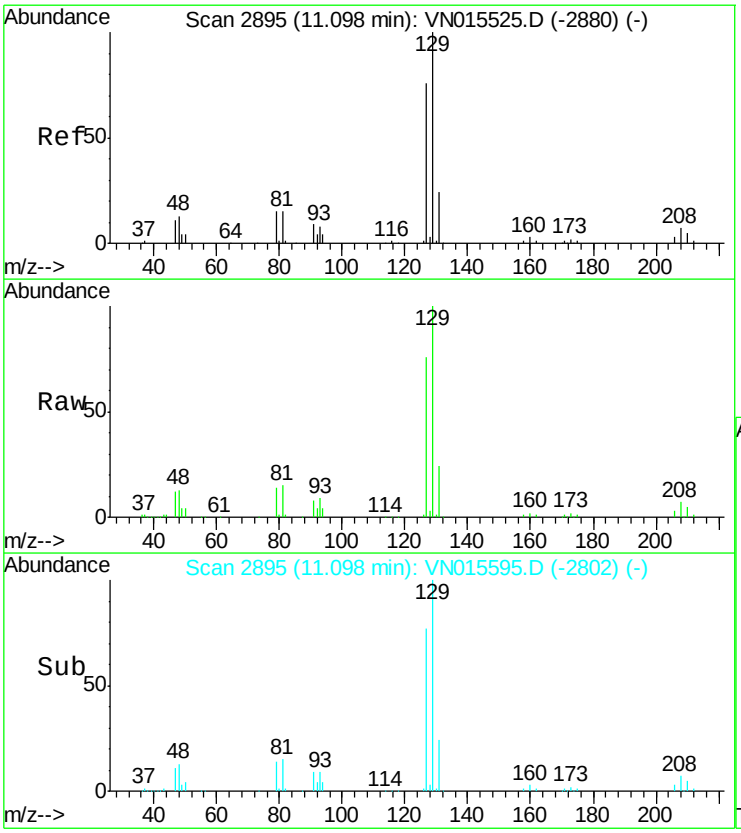
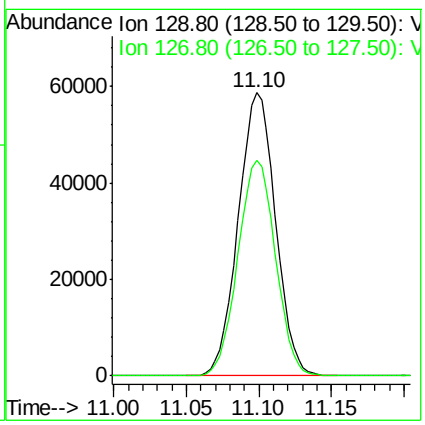


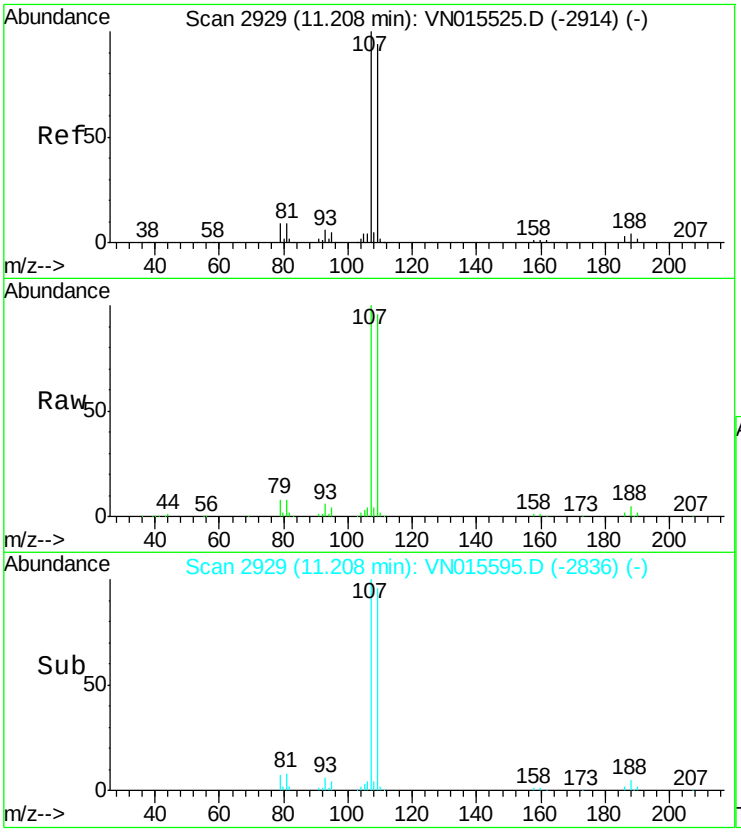


#61
Dibromochloromethane
Concen: 56.00 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:129 Resp: 105025

Ion	Ratio	Lower	Upper
129	100		
127	76.7	38.6	116.0





#62
1,2-Dibromoethane
Concen: 56.47 ug/l
RT: 11.21 min Scan# 2929
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:107 Resp: 91655

Ion	Ratio	Lower	Upper
107	100		
109	94.7	75.8	113.6

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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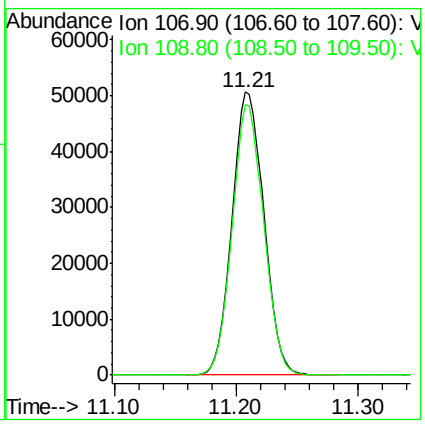
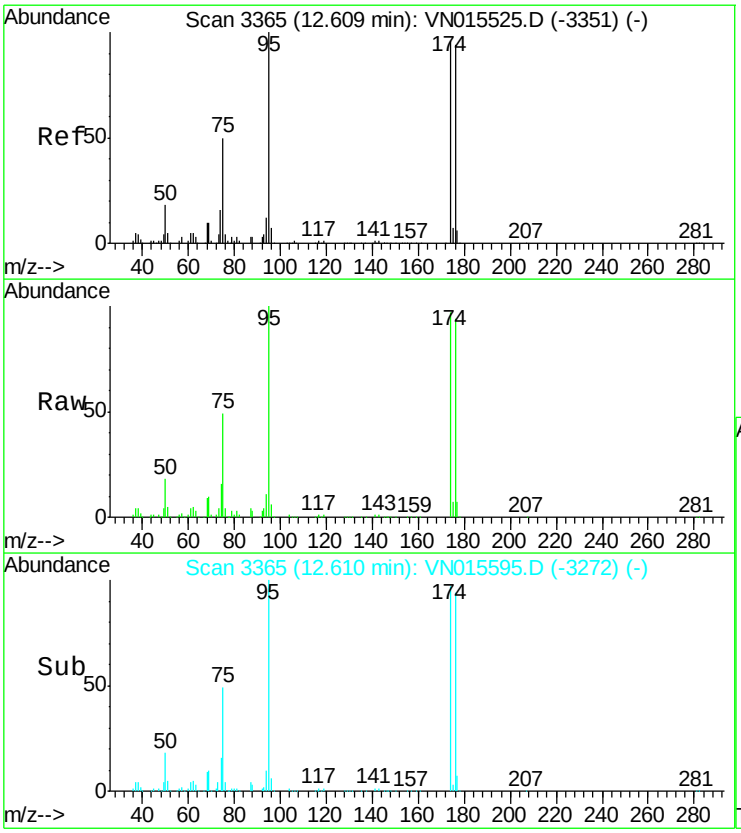
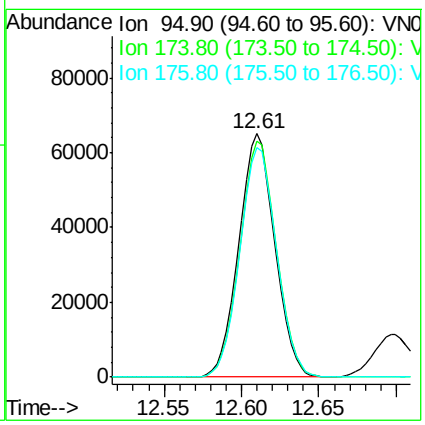


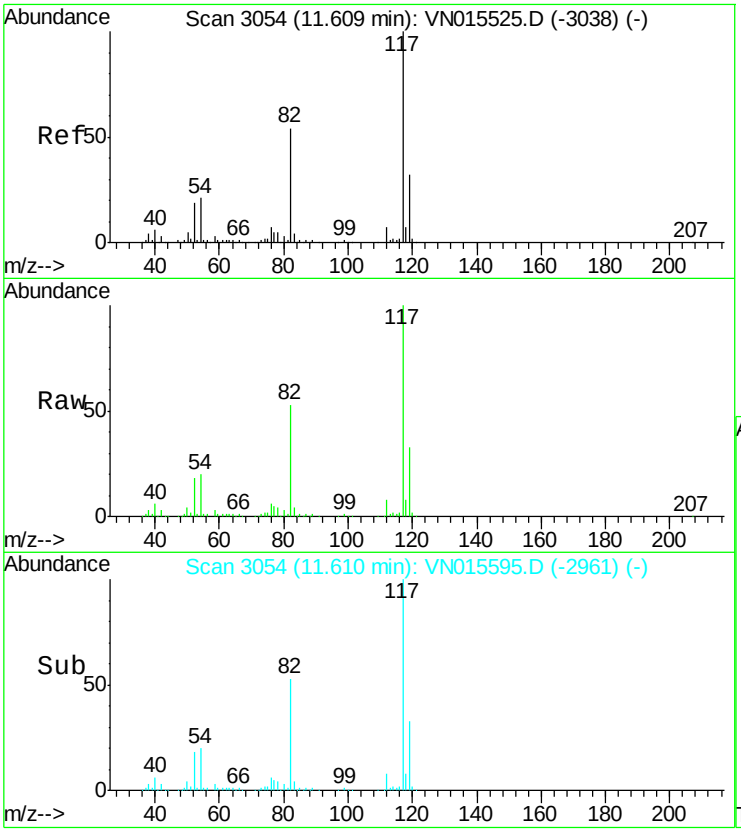


#63
4-Bromofluorobenzene
Concen: 53.24 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 95 Resp: 105499

Ion	Ratio	Lower	Upper
95	100		
174	97.9	0.0	191.8
176	96.0	0.0	186.8





#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:117 Resp: 211908

Ion	Ratio	Lower	Upper
117	100		
82	53.0	43.3	64.9
119	32.6	25.6	38.4

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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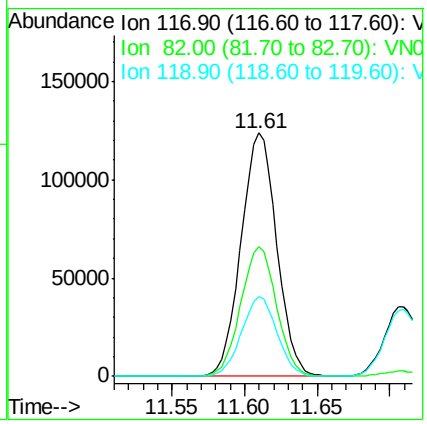
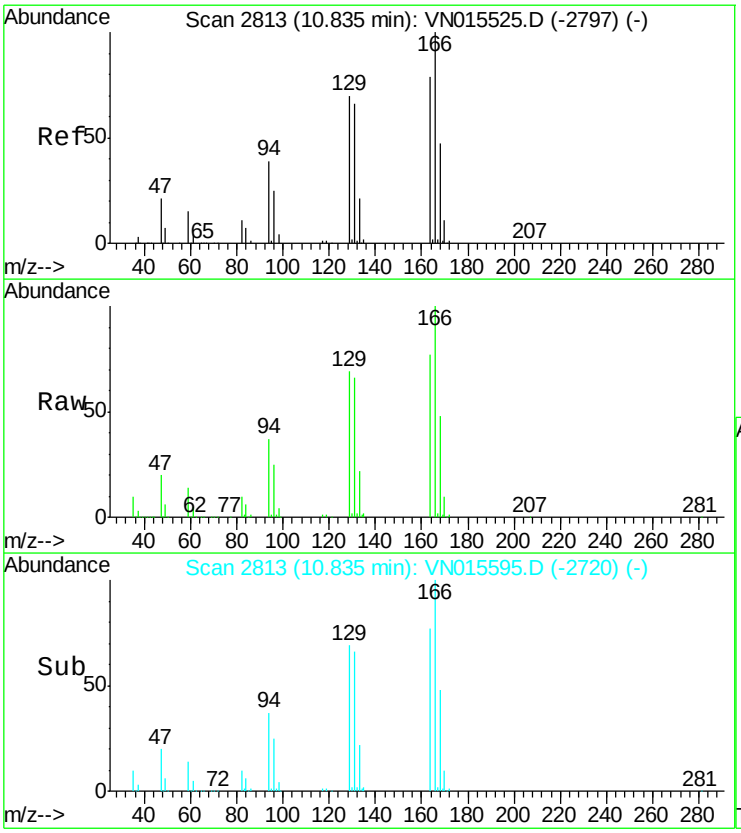
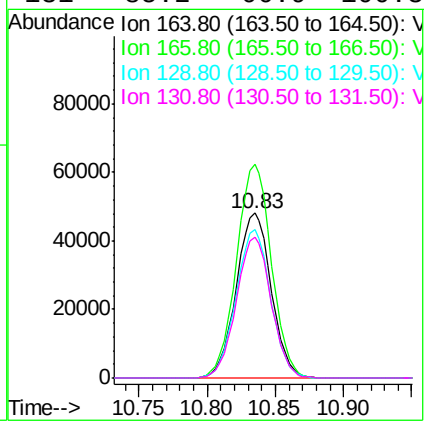


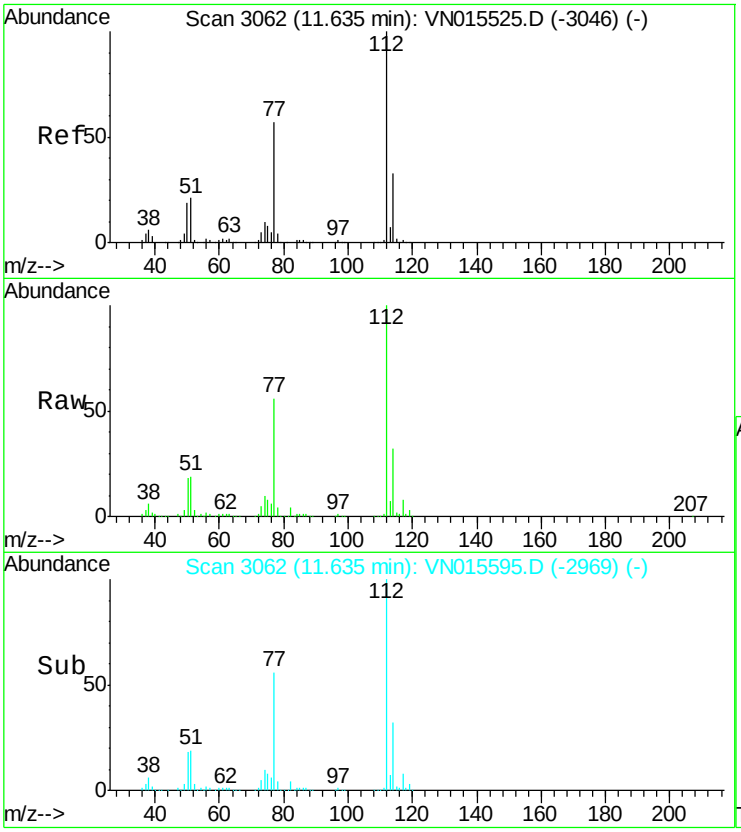


#65
Tetrachloroethene
Concen: 51.22 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:164 Resp: 85628

Ion	Ratio	Lower	Upper
164	100		
166	129.5	101.7	152.5
129	89.8	70.7	106.1
131	85.2	66.9	100.3





#66
Chlorobenzene
Concen: 52.24 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:112 Resp: 239594

Ion	Ratio	Lower	Upper
112	100		
114	32.1	26.2	39.2

Instrument :
MSVOA_N
LabSampleId :
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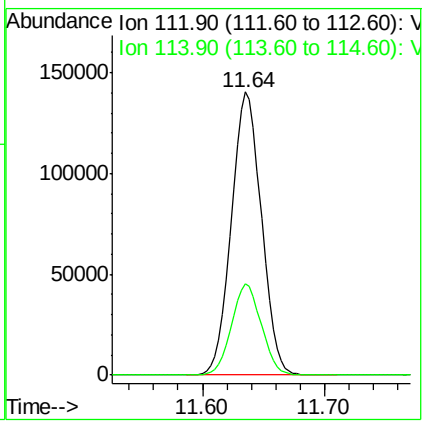
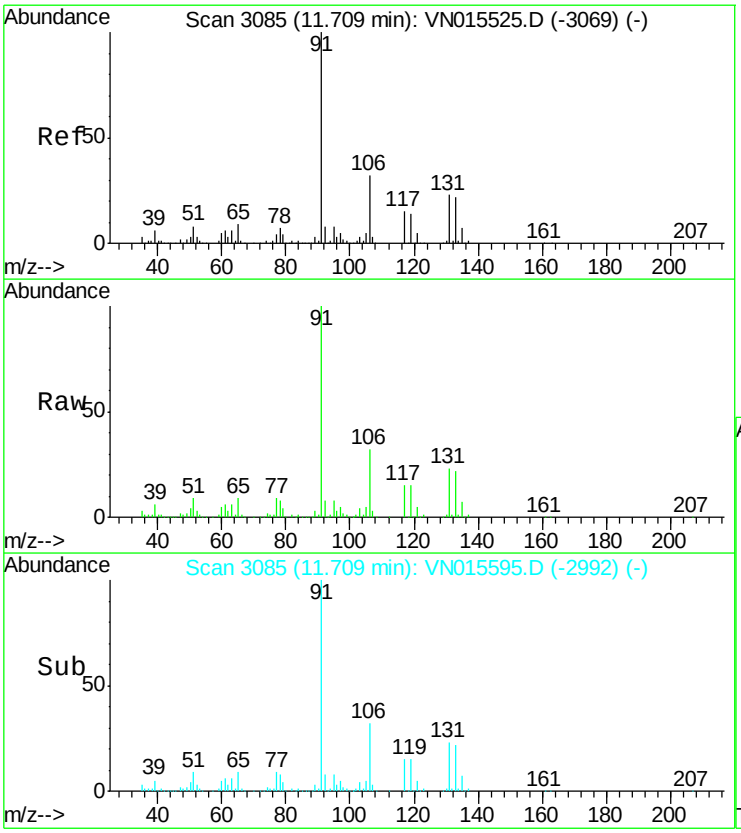
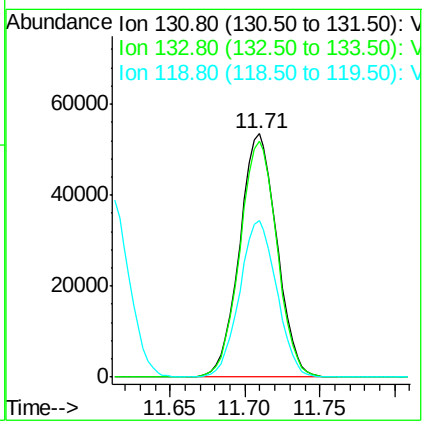




#67
1,1,1,2-Tetrachloroethane
Concen: 53.04 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:131 Resp: 92691

Ion	Ratio	Lower	Upper
131	100		
133	96.3	47.7	143.1
119	64.2	31.5	94.5



Instrument :
MSVOA_N
LabSampleId :
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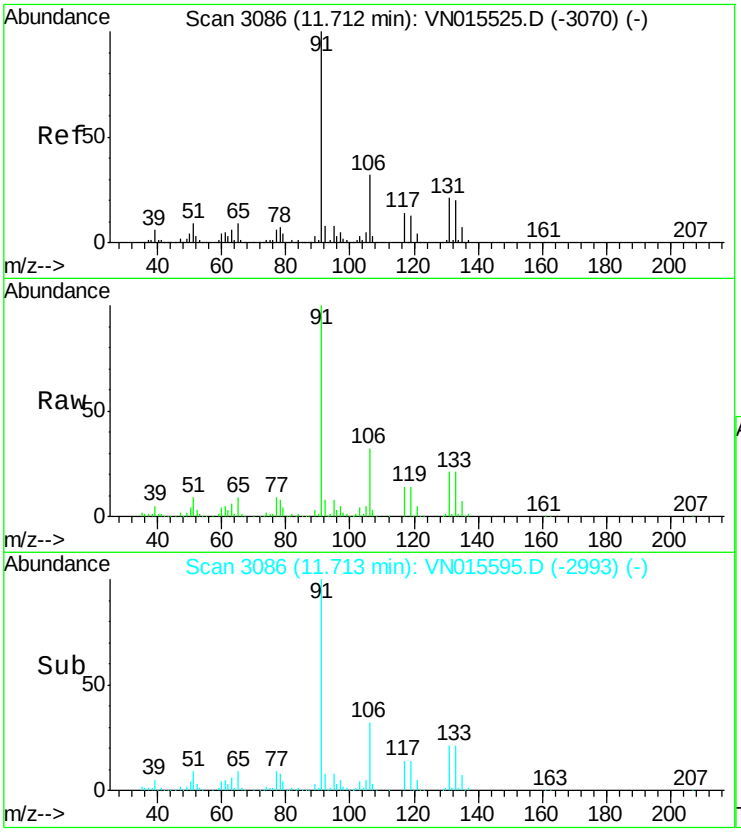
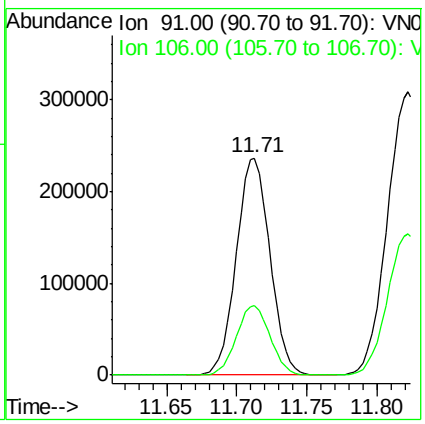
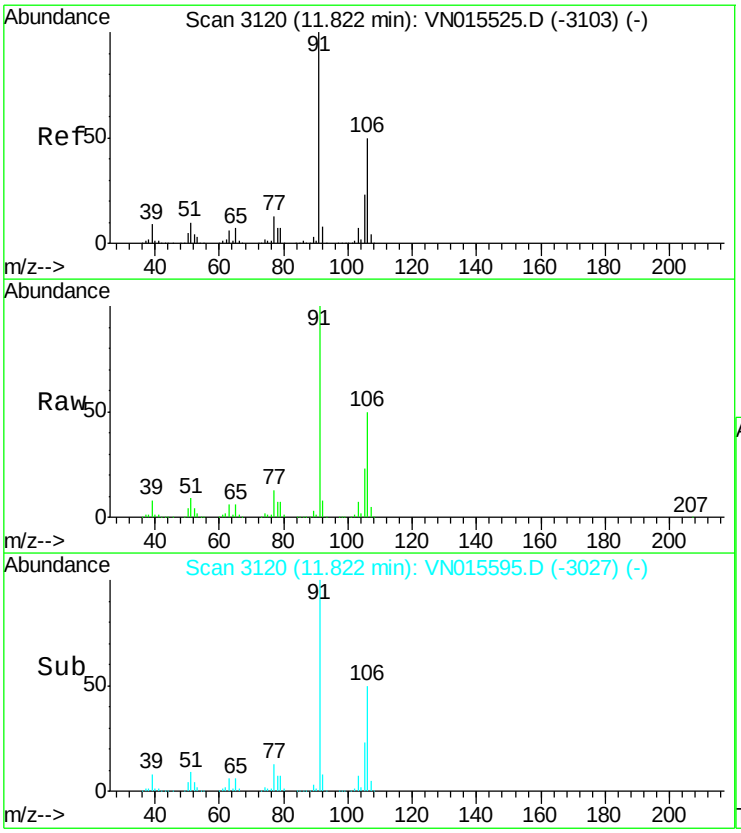


#68
Ethyl Benzene
Concen: 52.79 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 91 Resp: 396361

Ion	Ratio	Lower	Upper
91	100		
106	32.1	25.5	38.3

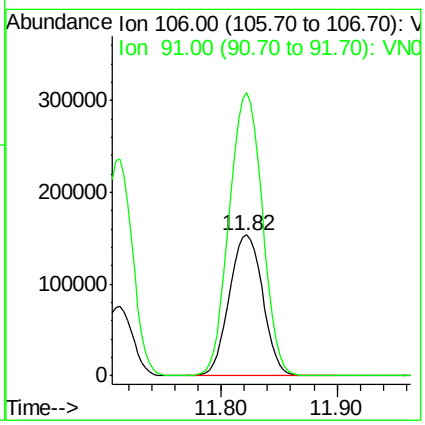




#69
m/p-Xylenes
Concen: 104.85 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:106 Resp: 306403

Ion	Ratio	Lower	Upper
106	100		
91	199.2	160.5	240.7



Instrument :
MSVOA_N
LabSampleId :
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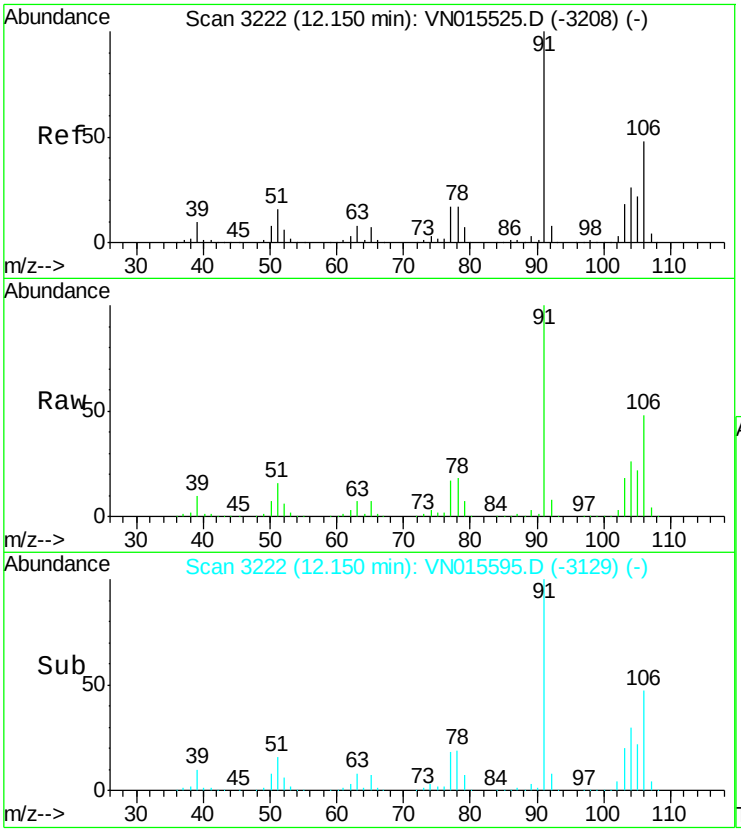
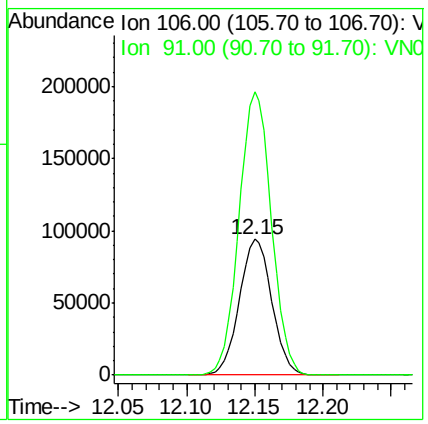
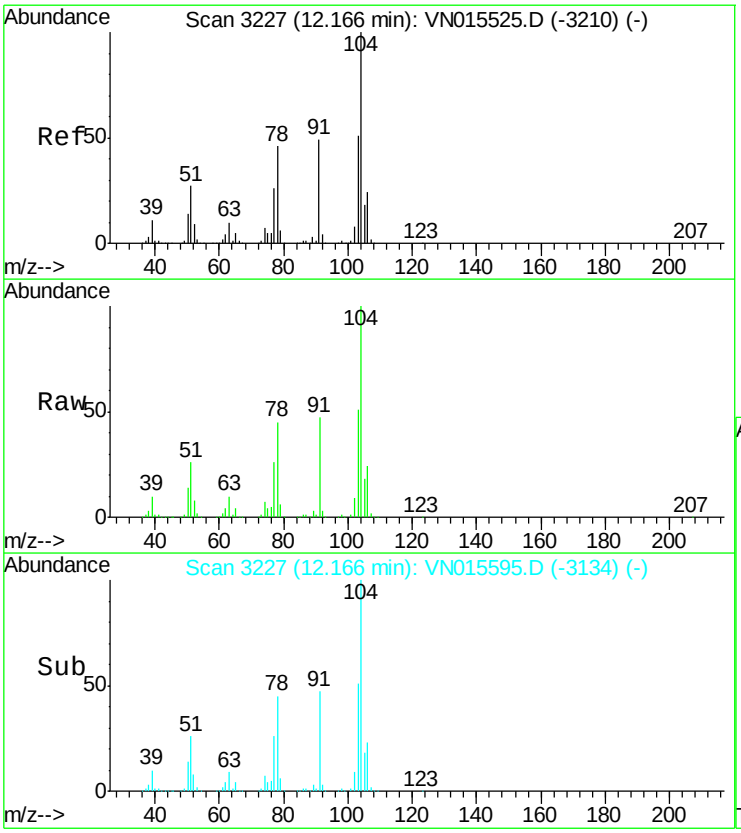


#70
o-Xylene
Concen: 54.00 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:106 Resp: 155265

Ion	Ratio	Lower	Upper
106	100		
91	207.9	104.9	314.7

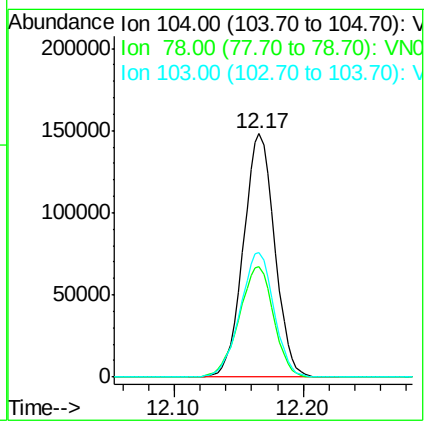


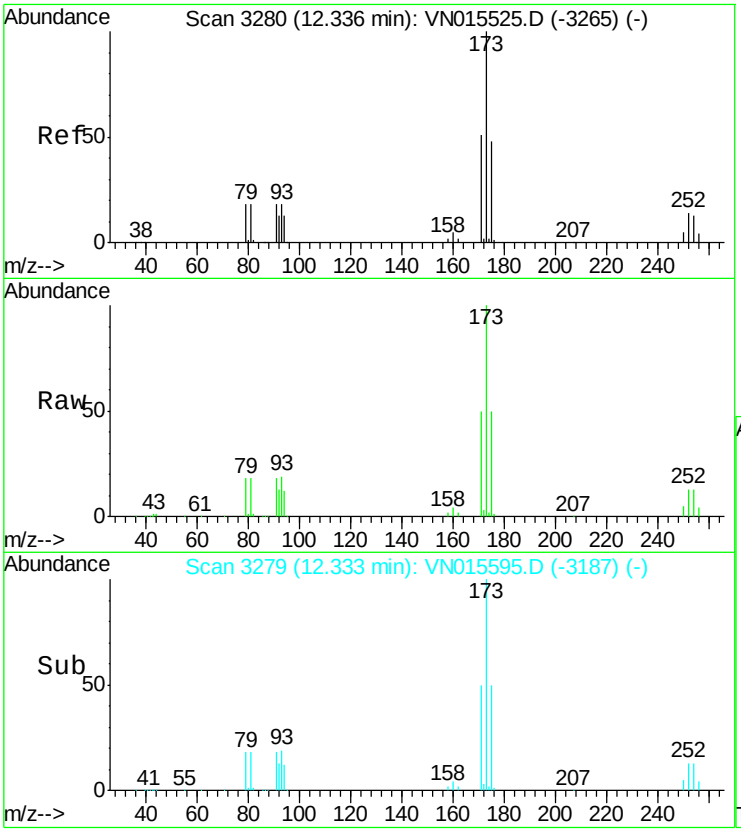


#71
Styrene
Concen: 55.33 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:104 Resp: 249917

Ion	Ratio	Lower	Upper
104	100		
78	50.0	40.1	60.1
103	55.3	44.0	66.0





#72
Bromoform
Concen: 55.59 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:173 Resp: 81383

Ion	Ratio	Lower	Upper
173	100		
175	49.1	24.3	72.9
254	0.0	0.0	0.0

Instrument :
MSVOA_N
LabSampleId :
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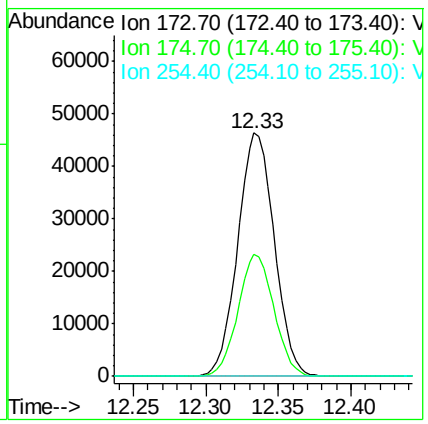
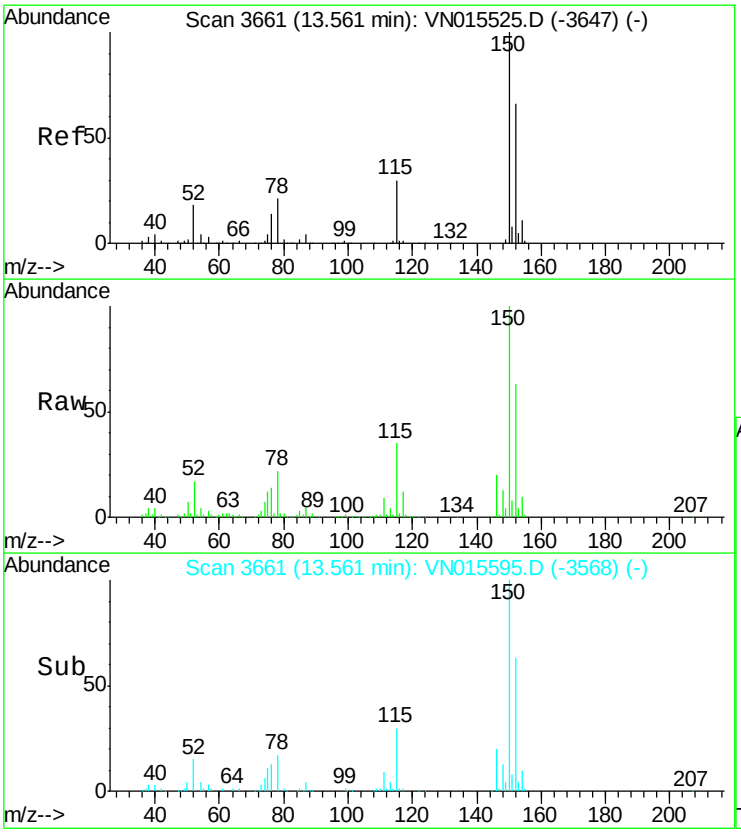
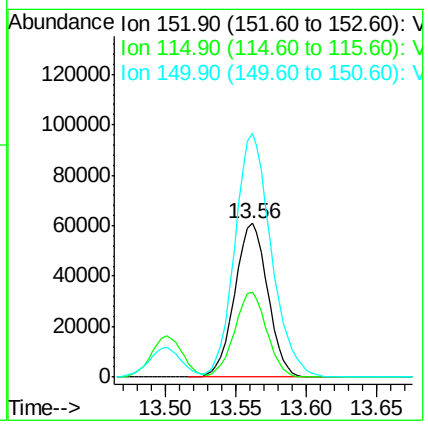


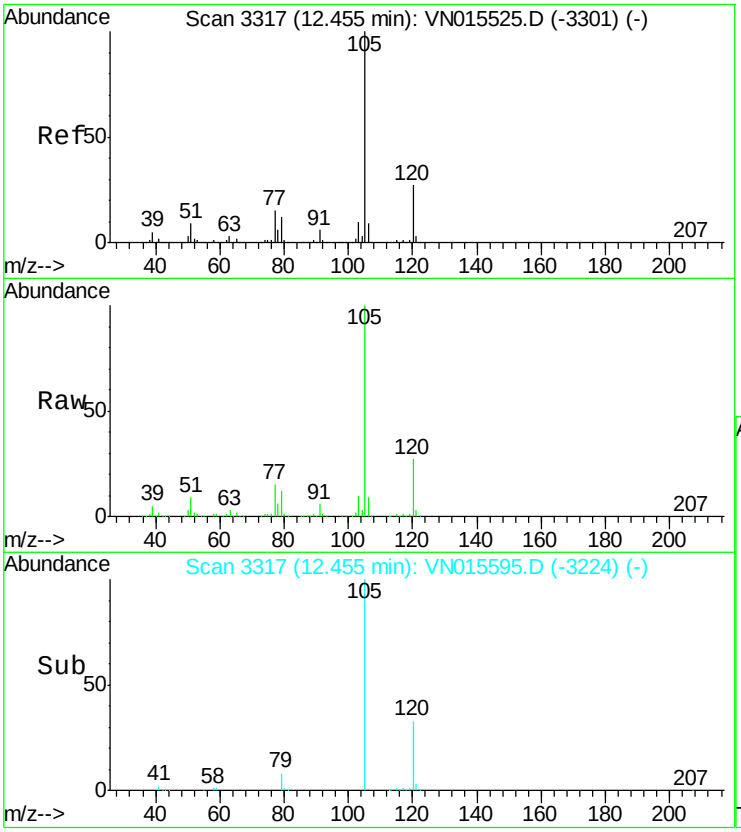


#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:152 Resp: 100102

Ion	Ratio	Lower	Upper
152	100		
115	53.9	27.2	81.6
150	174.4	0.0	343.6





#74
Isopropylbenzene
Concen: 53.79 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:105 Resp: 401798

Ion	Ratio	Lower	Upper
105	100		
120	27.2	13.7	41.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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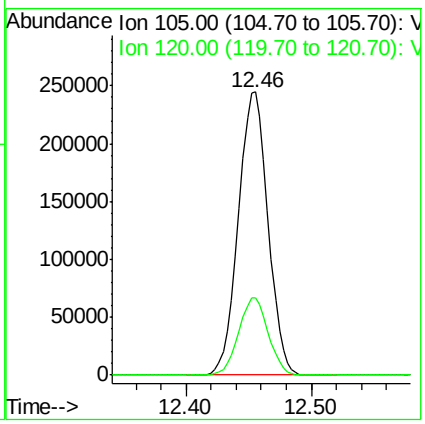
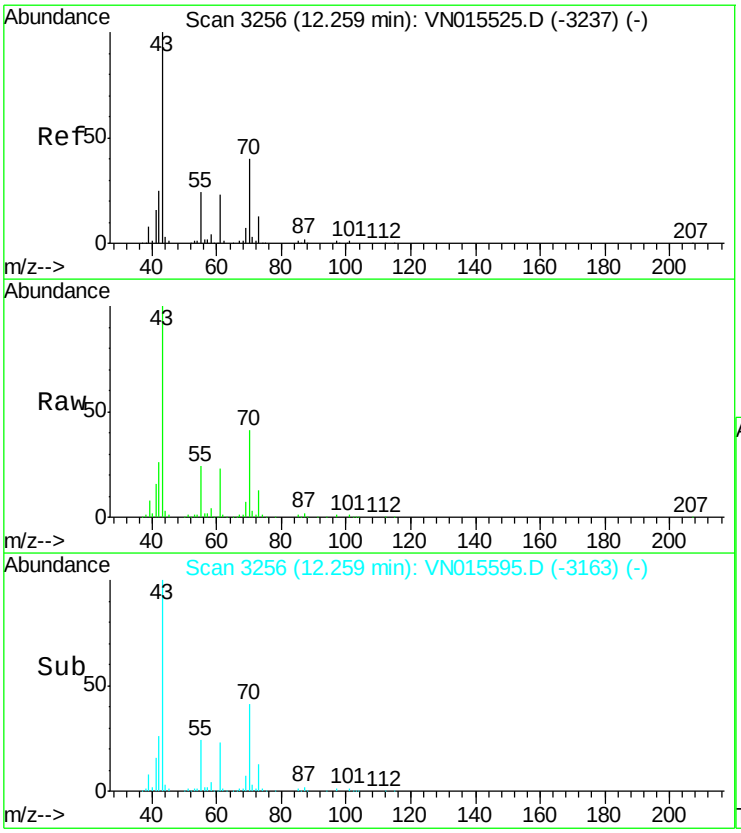
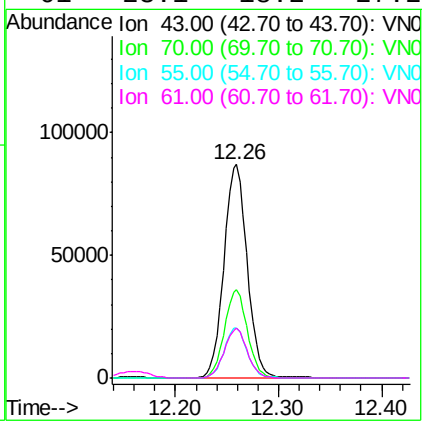


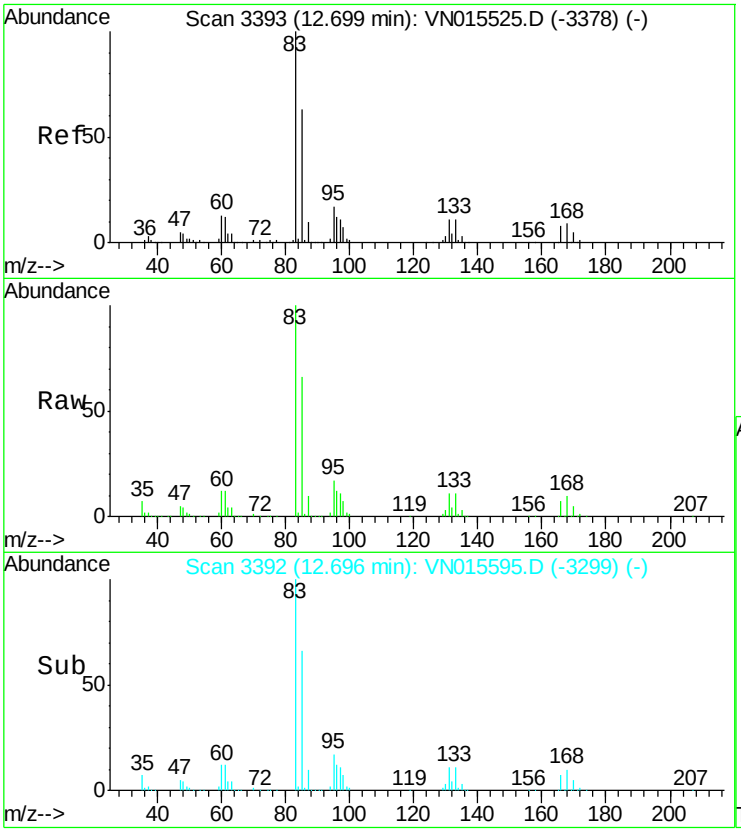


#75
N-amyl acetate
Concen: 52.21 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 43 Resp: 136924

Ion	Ratio	Lower	Upper
43	100		
70	41.0	32.0	48.0
55	23.2	18.5	27.7
61	23.1	18.2	27.2





#76
1,1,2,2-Tetrachloroethane
Concen: 60.89 ug/l
RT: 12.70 min Scan# 3392
Delta R.T. -0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 83 Resp: 117808

Ion	Ratio	Lower	Upper
83	100		
131	11.9	5.9	17.6
85	64.8	31.9	95.7

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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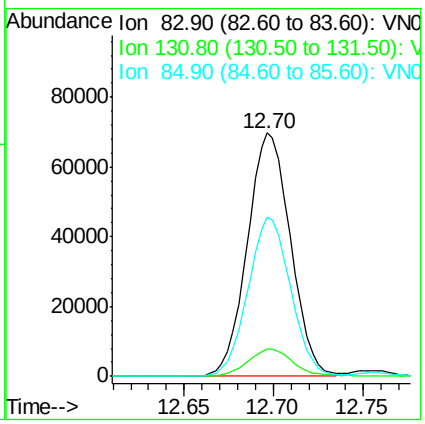
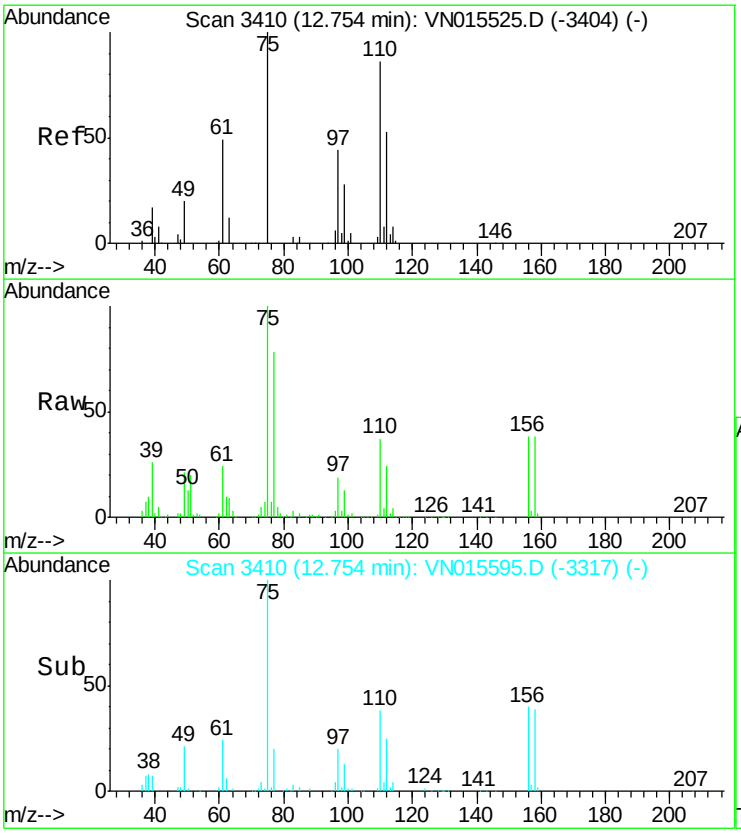
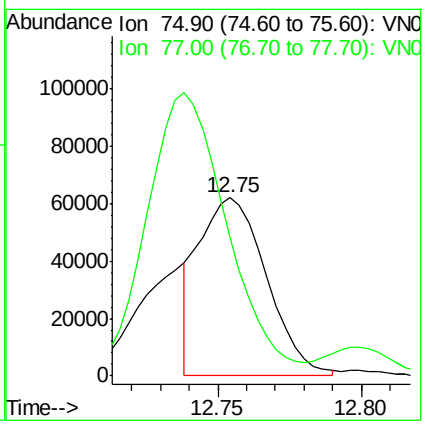


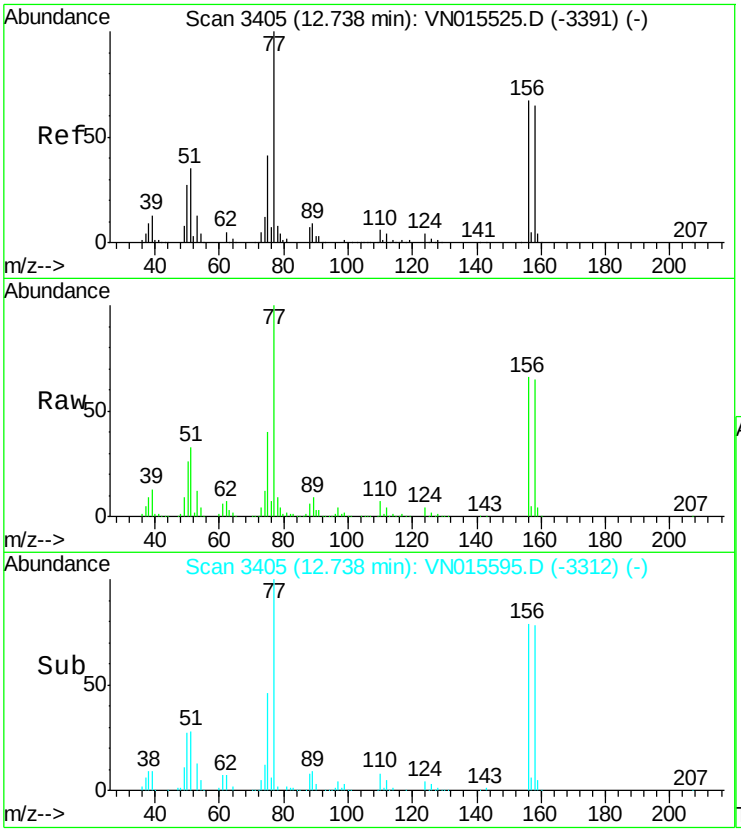


#77
1,2,3-Trichloropropane
Concen: 59.50 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 75 Resp: 100961

Ion	Ratio	Lower	Upper
75	100		
77	190.8	90.4	271.2





#78
Bromobenzene
Concen: 50.49 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:156 Resp: 109624

Ion	Ratio	Lower	Upper
156	100		
77	175.7	86.0	258.0
158	98.3	48.7	146.1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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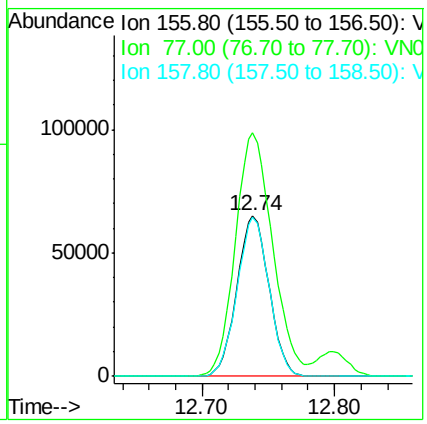
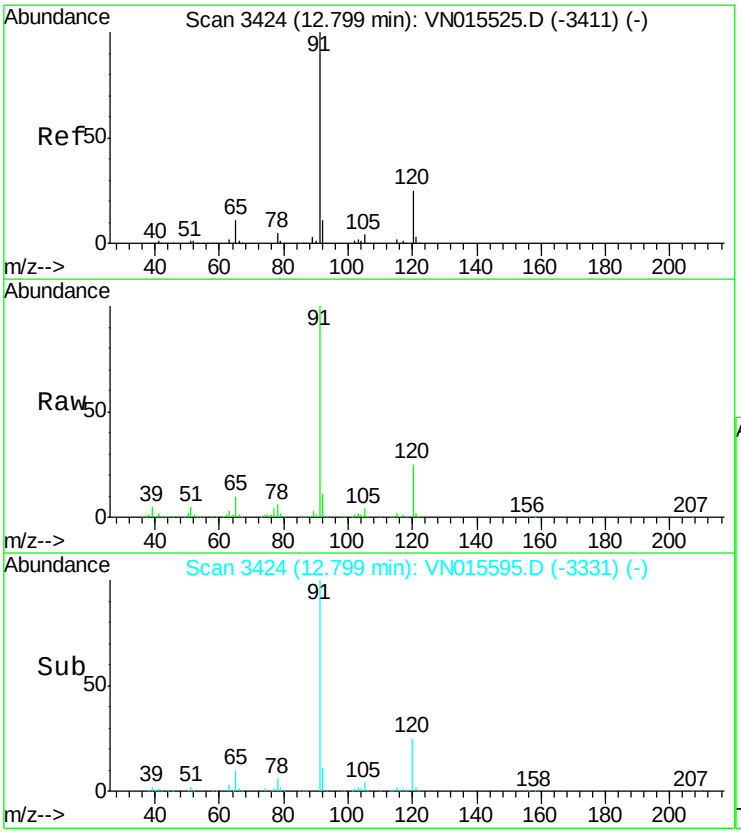
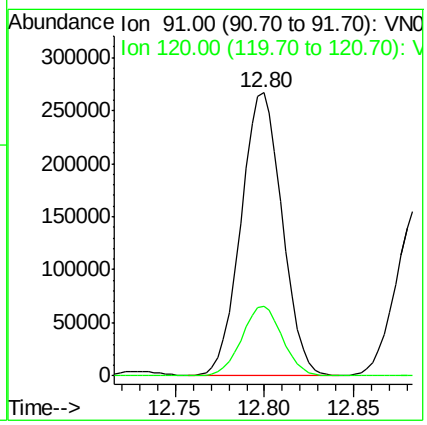




#79
n-propylbenzene
Concen: 50.40 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 91 Resp: 430876

Ion	Ratio	Lower	Upper
91	100		
120	24.3	12.2	36.4



Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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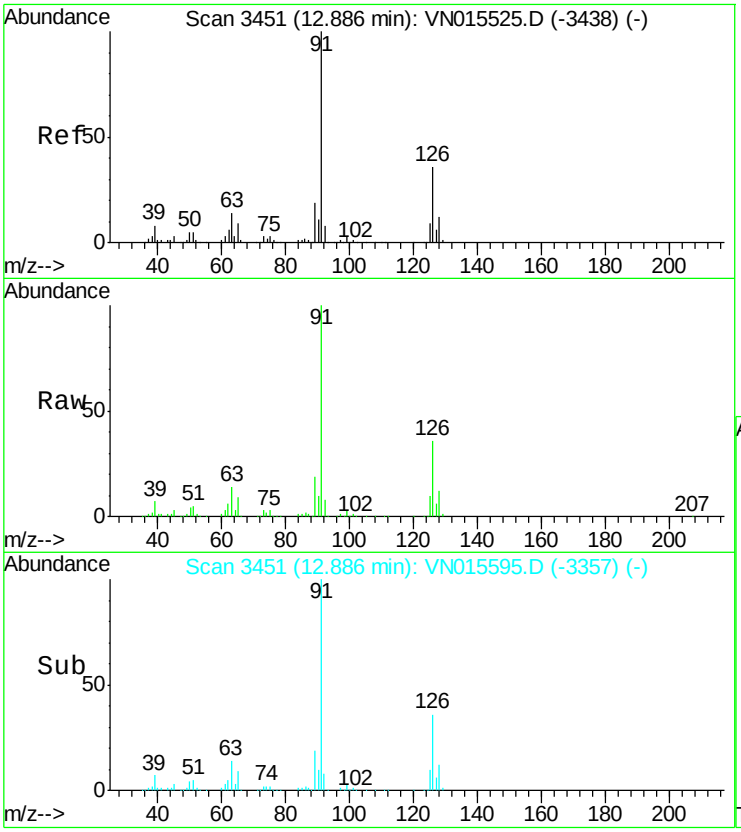
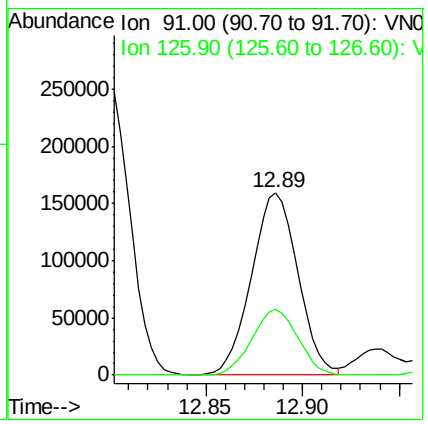
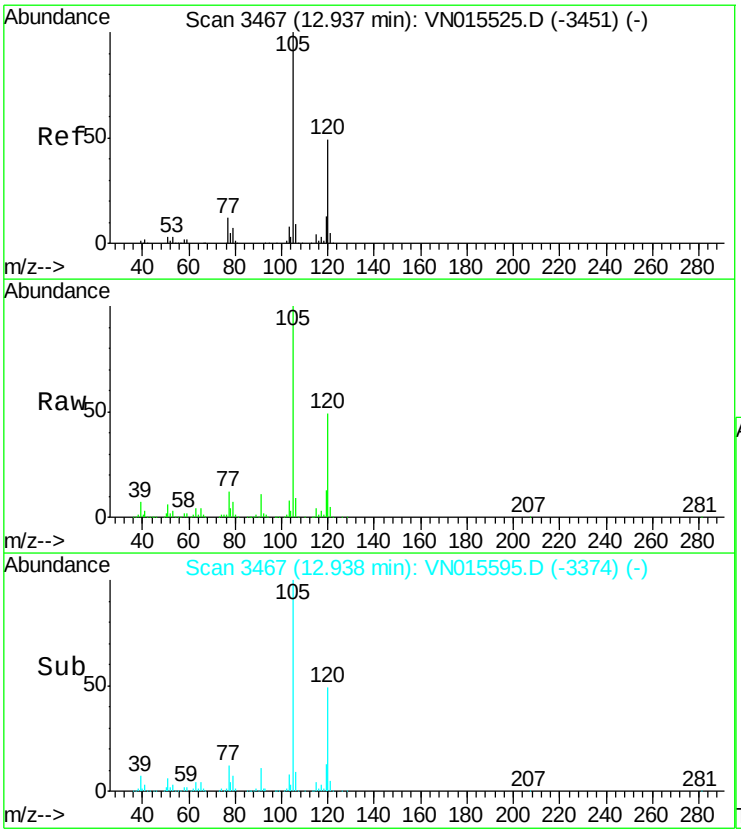


#80
2-Chlorotoluene
Concen: 54.53 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 91 Resp: 266965

Ion	Ratio	Lower	Upper
91	100		
126	35.8	17.9	53.8

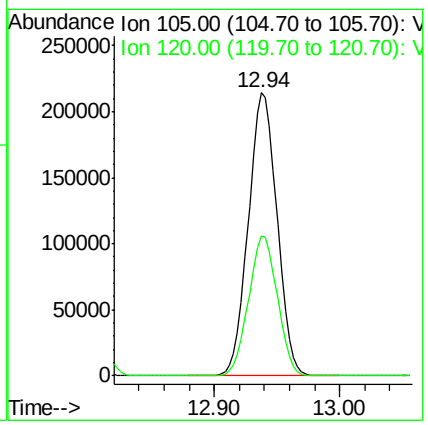


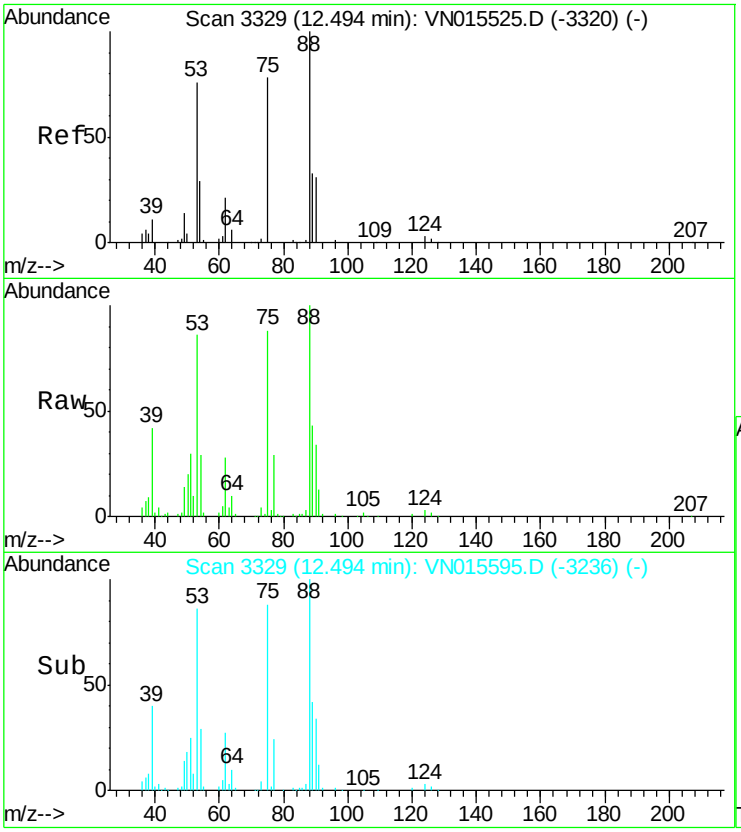


#81
1,3,5-Trimethylbenzene
Concen: 50.10 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:105 Resp: 341233

Ion	Ratio	Lower	Upper
105	100		
120	49.7	24.6	73.8





#82
trans-1,4-Dichloro-2-butene
Concen: 51.92 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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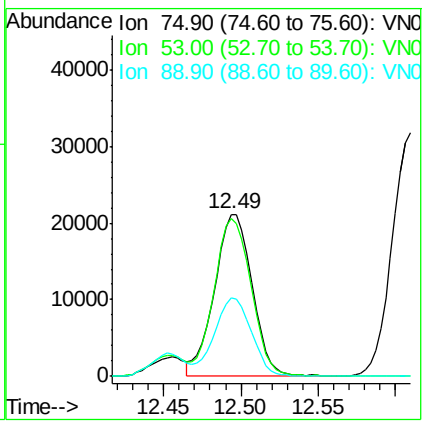
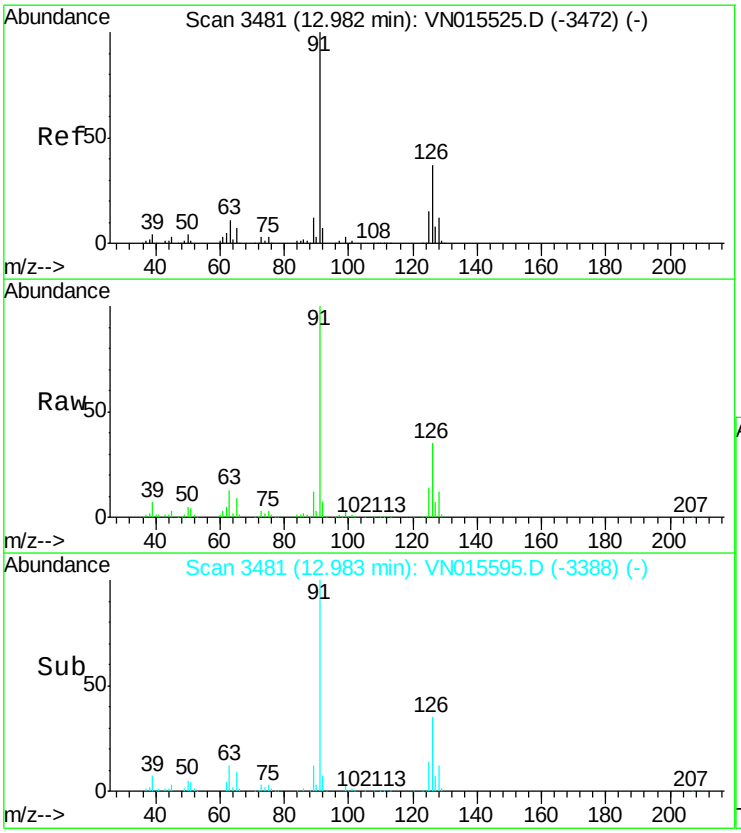
Tgt Ion: 75 Resp: 35795

Ion	Ratio	Lower	Upper
75	100		
53	94.5	77.5	116.3
89	47.6	37.7	56.5

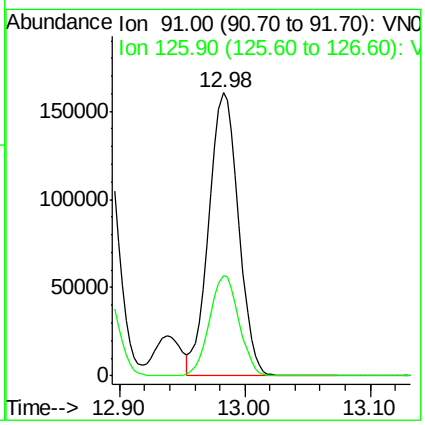


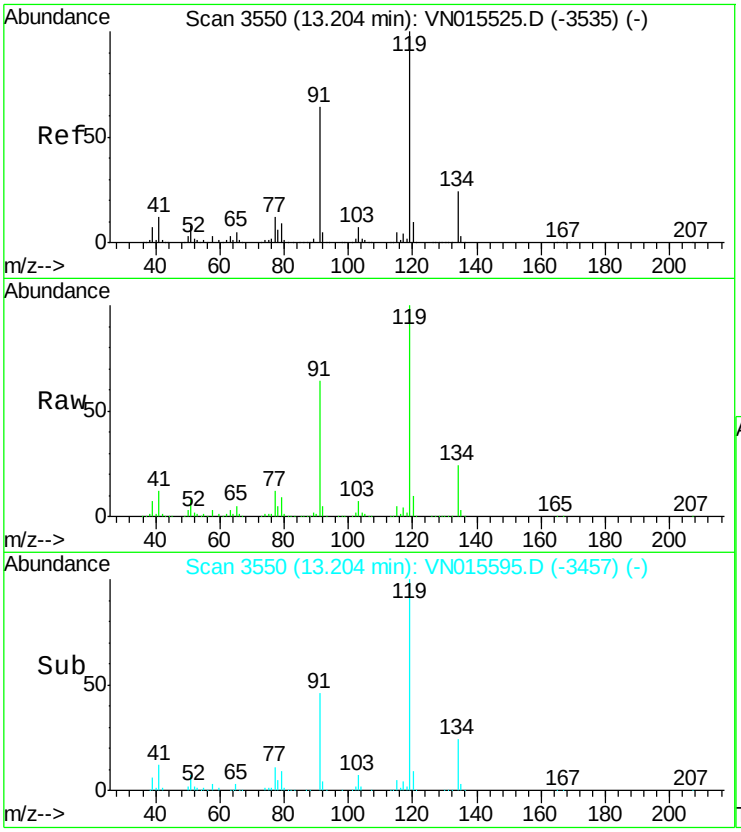


#83
4-Chlorotoluene
Concen: 50.64 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 91 Resp: 262599

Ion	Ratio	Lower	Upper
91	100		
126	35.3	17.5	52.6





#84
tert-Butylbenzene
Concen: 54.04 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:119 Resp: 296970

Ion	Ratio	Lower	Upper
119	100		
91	63.0	31.9	95.9
134	24.3	12.1	36.3

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
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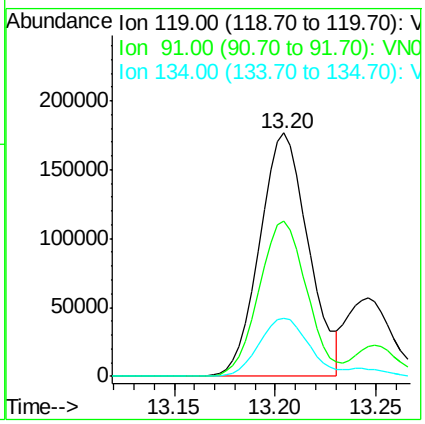
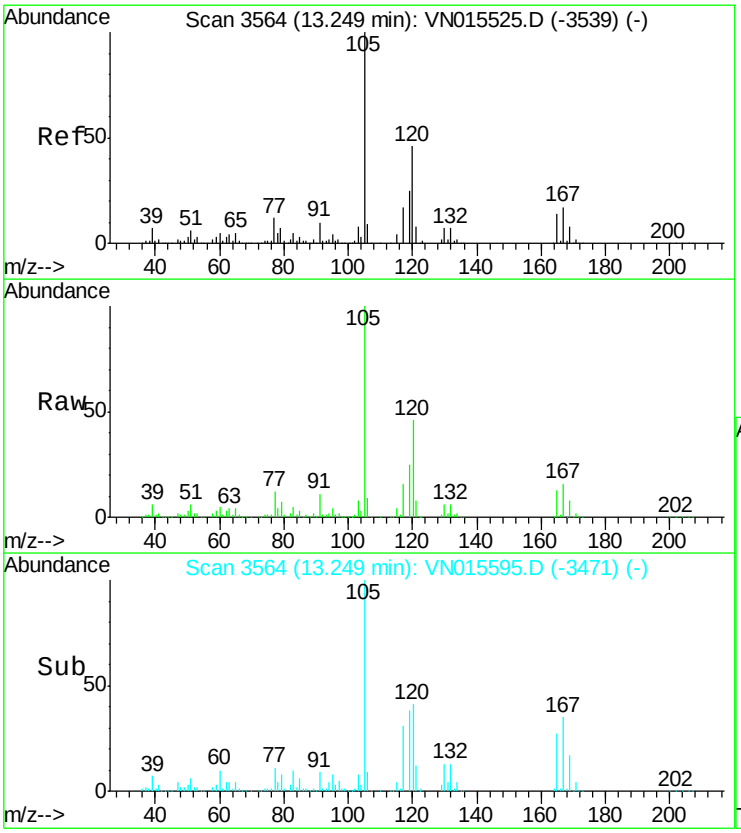
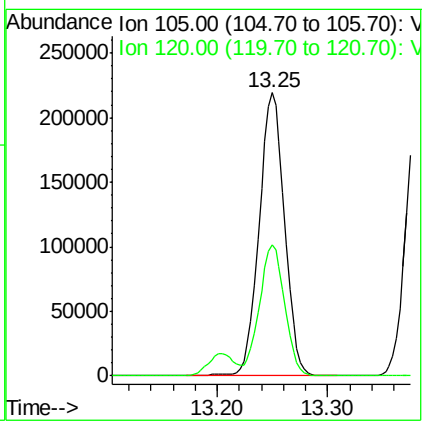


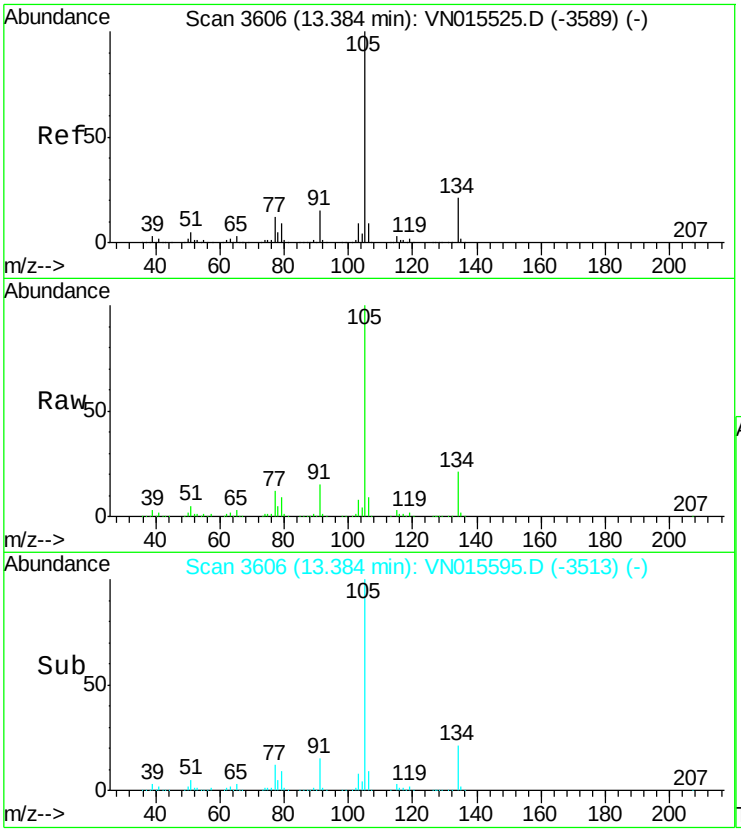


#85
1,2,4-Trimethylbenzene
Concen: 51.31 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:105 Resp: 349680

Ion	Ratio	Lower	Upper
105	100		
120	46.1	23.1	69.3





#86
sec-Butylbenzene
Concen: 49.70 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:105 Resp: 387630

Ion	Ratio	Lower	Upper
105	100		
134	21.3	10.6	31.8

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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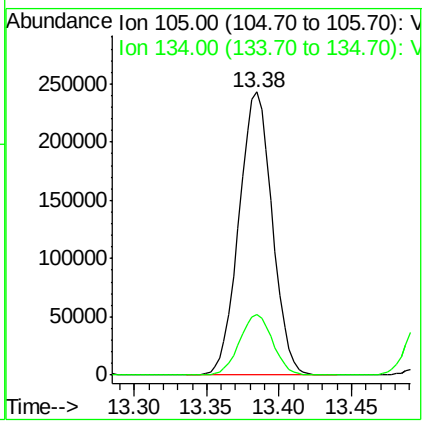
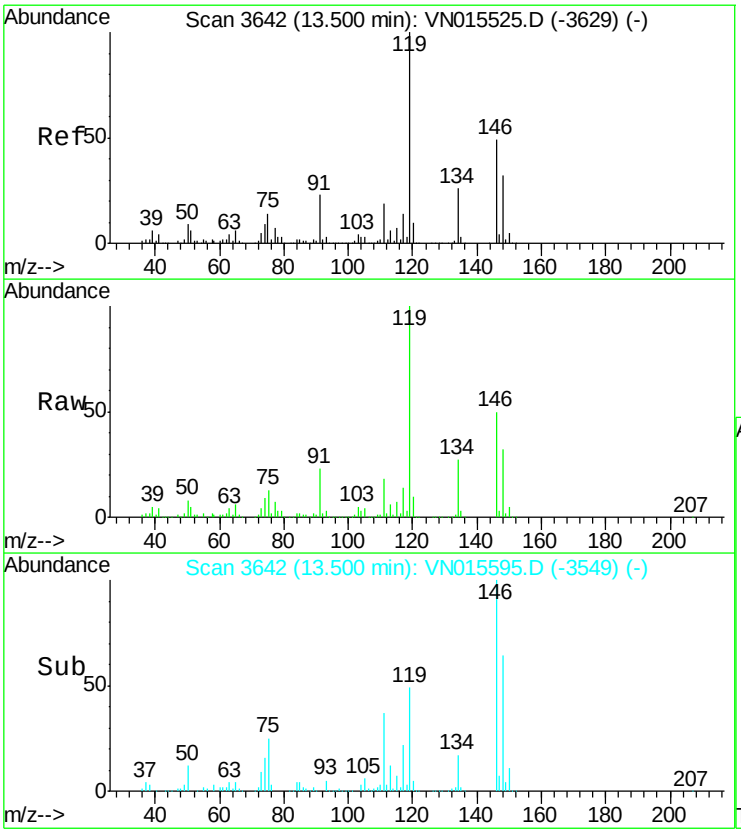
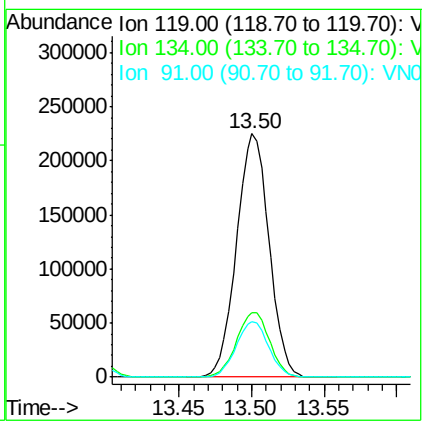


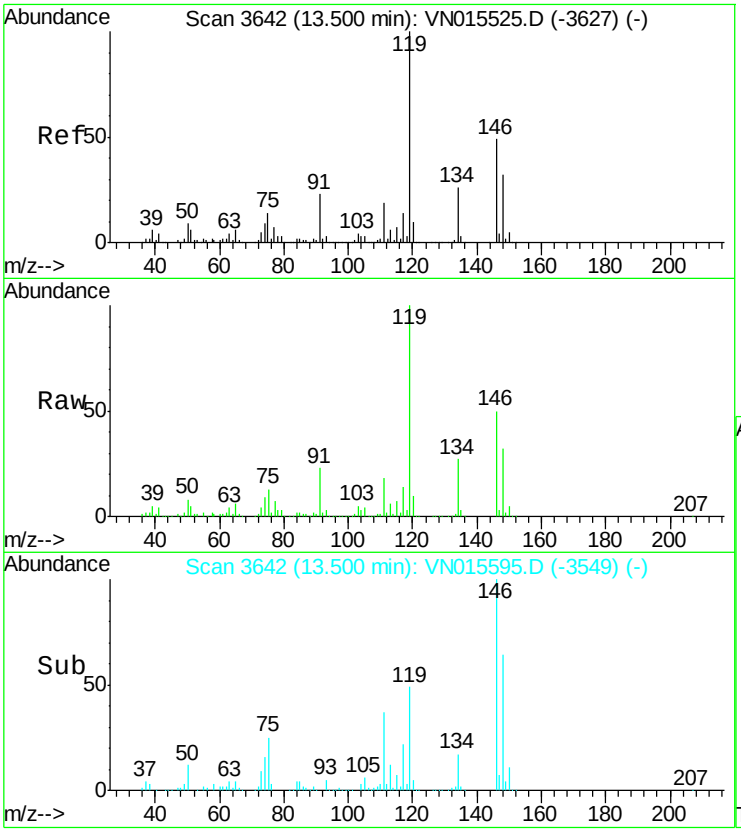


#87
p-Isopropyltoluene
Concen: 51.91 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:119 Resp: 350183

Ion	Ratio	Lower	Upper
119	100		
134	26.9	13.3	39.9
91	22.7	11.7	35.1





#88
1,3-Dichlorobenzene
Concen: 52.07 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:146 Resp: 183845

Ion	Ratio	Lower	Upper
146	100		
111	37.4	19.1	57.1
148	64.4	32.4	97.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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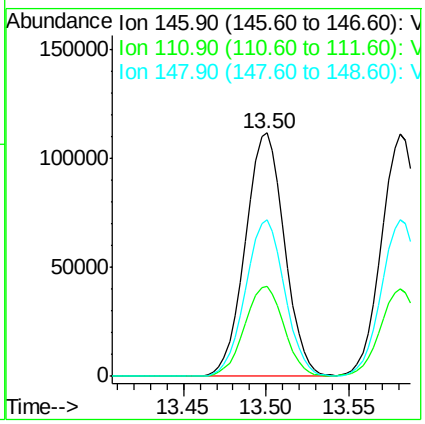
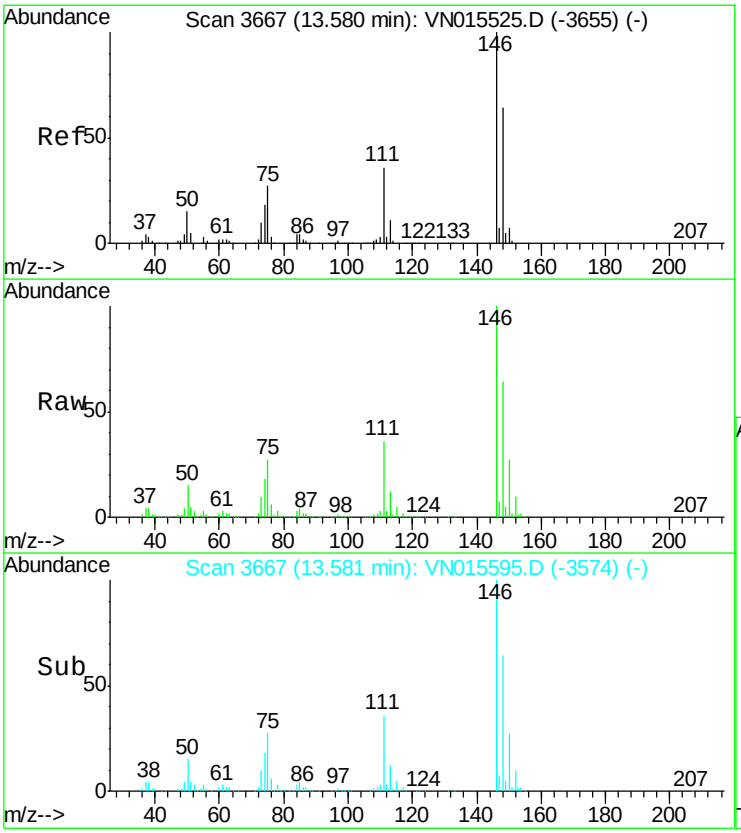
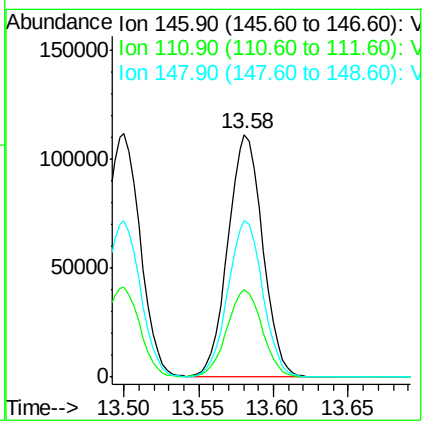


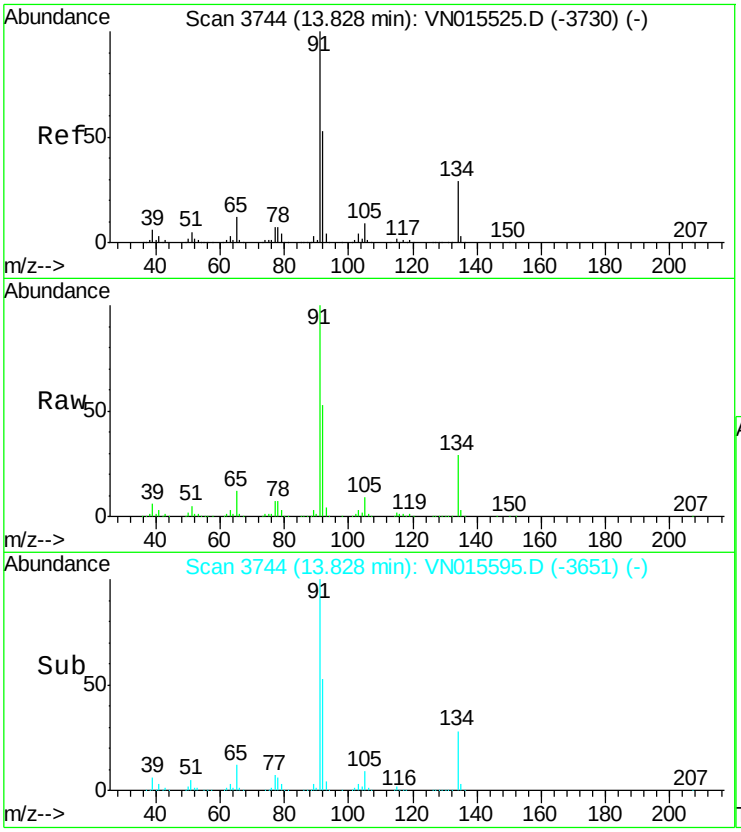


#89
1,4-Dichlorobenzene
Concen: 51.87 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:146 Resp: 179762

Ion	Ratio	Lower	Upper
146	100		
111	36.9	18.4	55.4
148	64.8	32.3	96.9





#90
n-Butylbenzene
Concen: 54.17 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 91 Resp: 275663

Ion	Ratio	Lower	Upper
91	100		
92	53.5	26.6	79.8
134	28.7	14.4	43.4

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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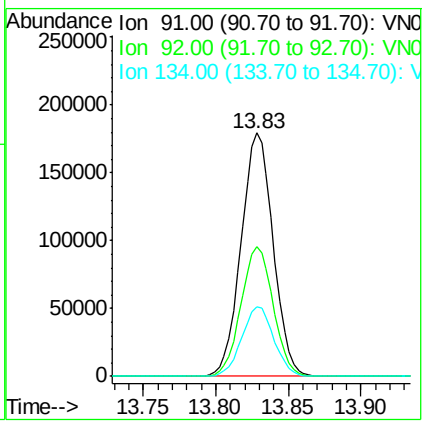
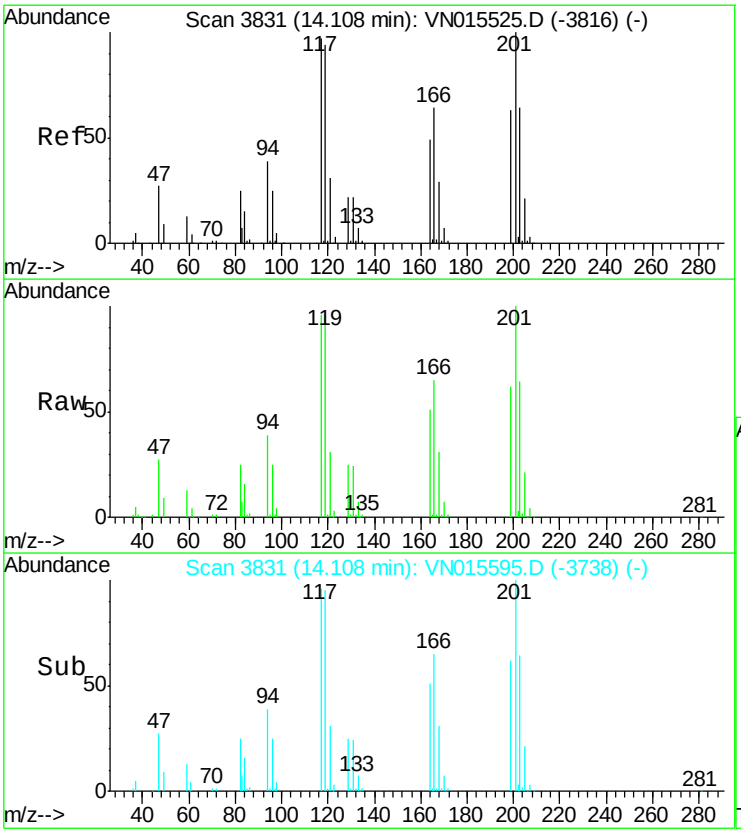
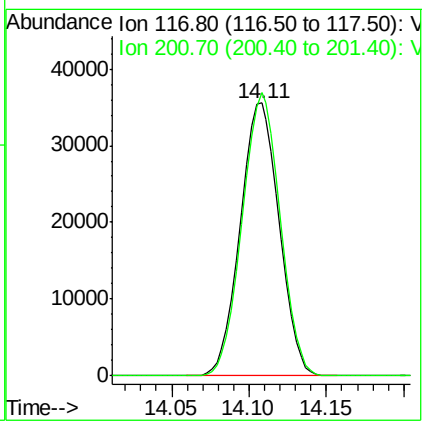


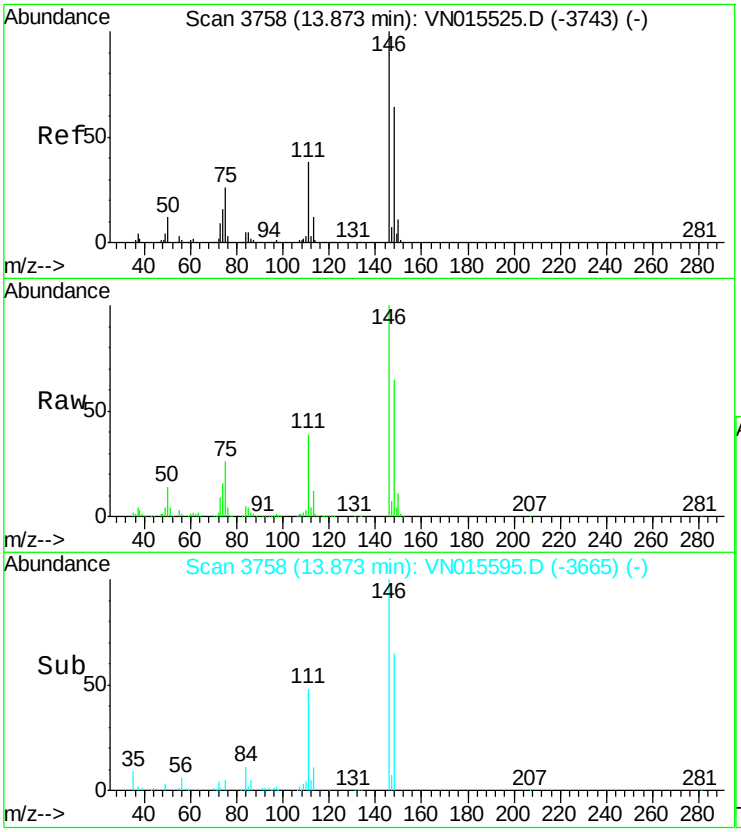


#91
Hexachloroethane
Concen: 48.49 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:117 Resp: 62252

Ion	Ratio	Lower	Upper
117	100		
201	101.2	51.7	155.2





#92
1,2-Dichlorobenzene
Concen: 52.39 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:146 Resp: 183417

Ion	Ratio	Lower	Upper
146	100		
111	38.7	19.4	58.2
148	64.3	32.4	97.0

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

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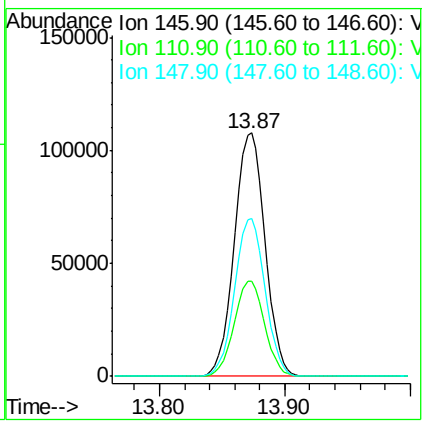
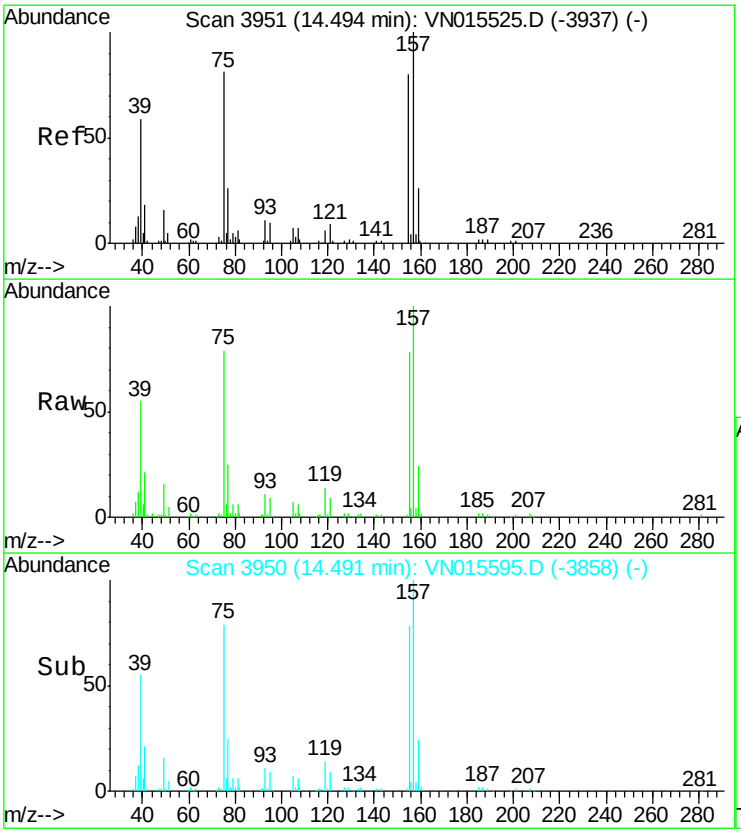
MMDadoda
5/23/2014 3:00:30 PM

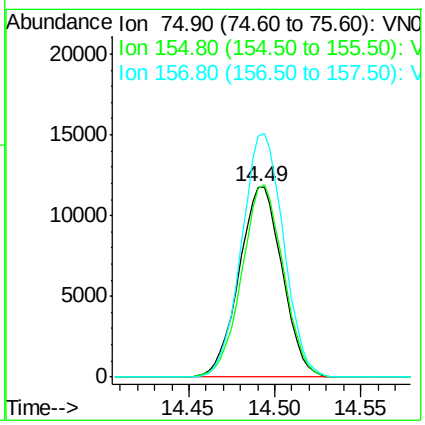


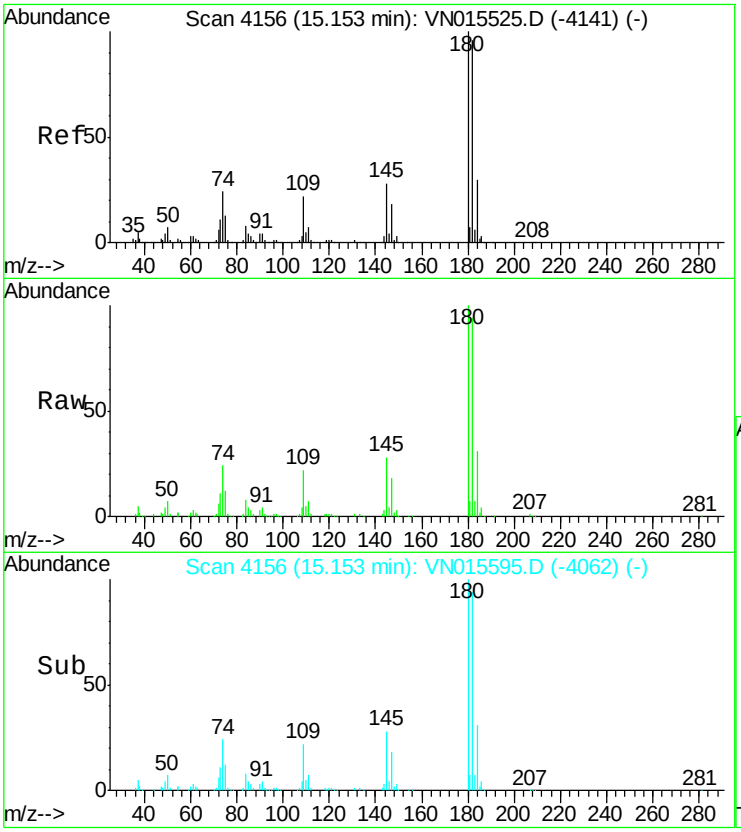


#93
1,2-Dibromo-3-Chloropropane
Concen: 54.65 ug/l
RT: 14.49 min Scan# 3950
Delta R.T. -0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion: 75 Resp: 20484

Ion	Ratio	Lower	Upper
75	100		
155	97.1	49.4	148.2
157	124.5	61.3	183.8





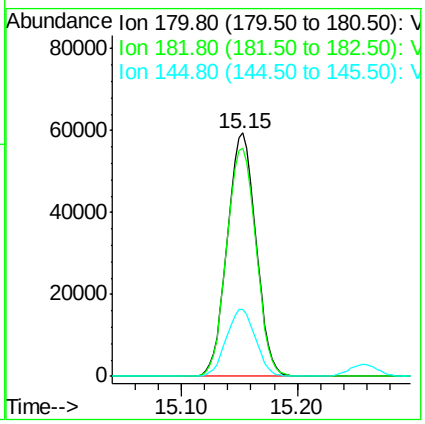
#94
1,2,4-Trichlorobenzene
Concen: 51.93 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

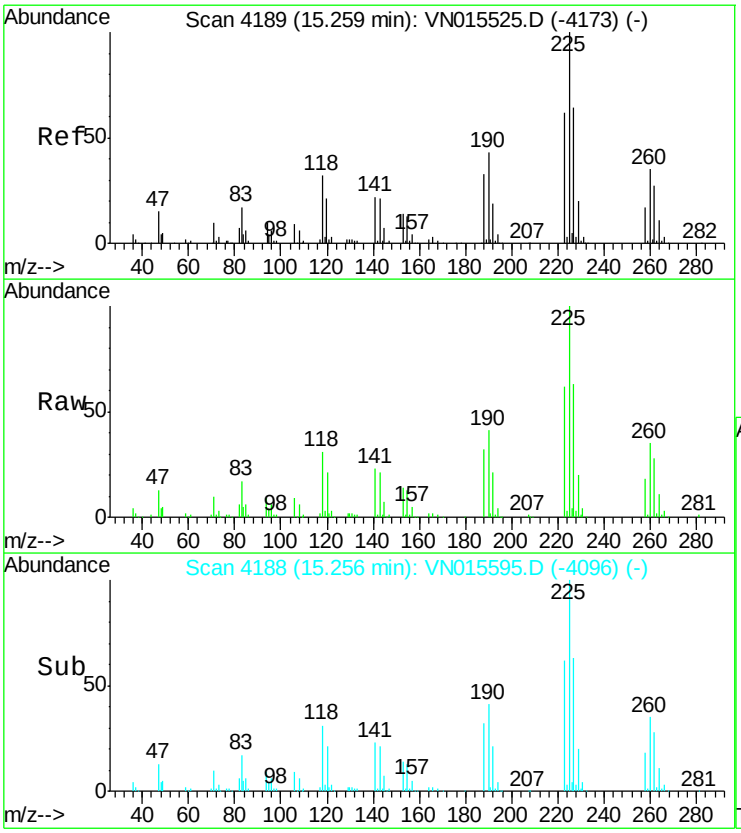
Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

Tgt Ion:180 Resp: 101604

Ion	Ratio	Lower	Upper
180	100		
182	95.6	48.0	144.0
145	27.9	14.0	42.0

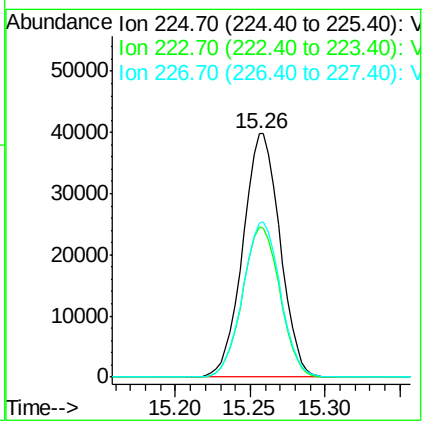


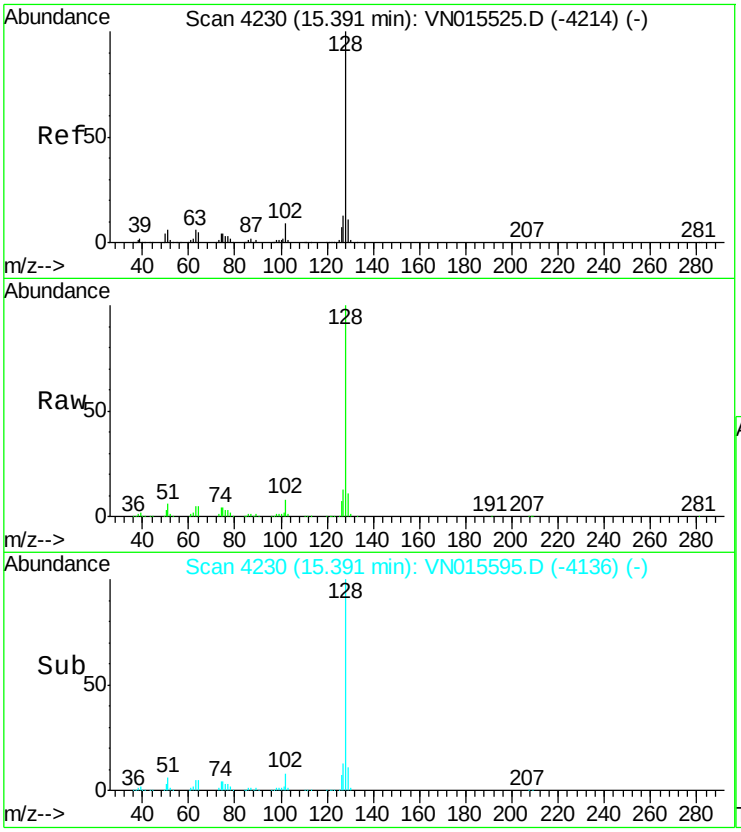


#95
Hexachlorobutadiene
Concen: 53.72 ug/l
RT: 15.26 min Scan# 4188
Delta R.T. -0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:225 Resp: 68901

Ion	Ratio	Lower	Upper
225	100		
223	62.3	31.6	95.0
227	64.1	32.1	96.5





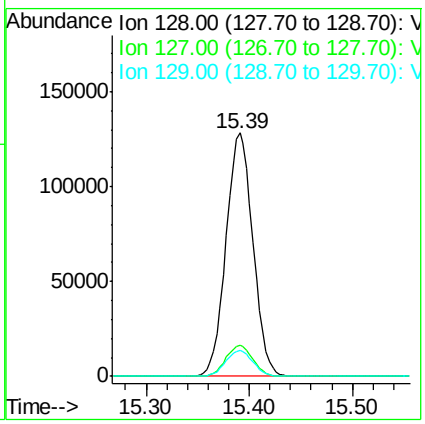
#96
Naphthalene
Concen: 48.71 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

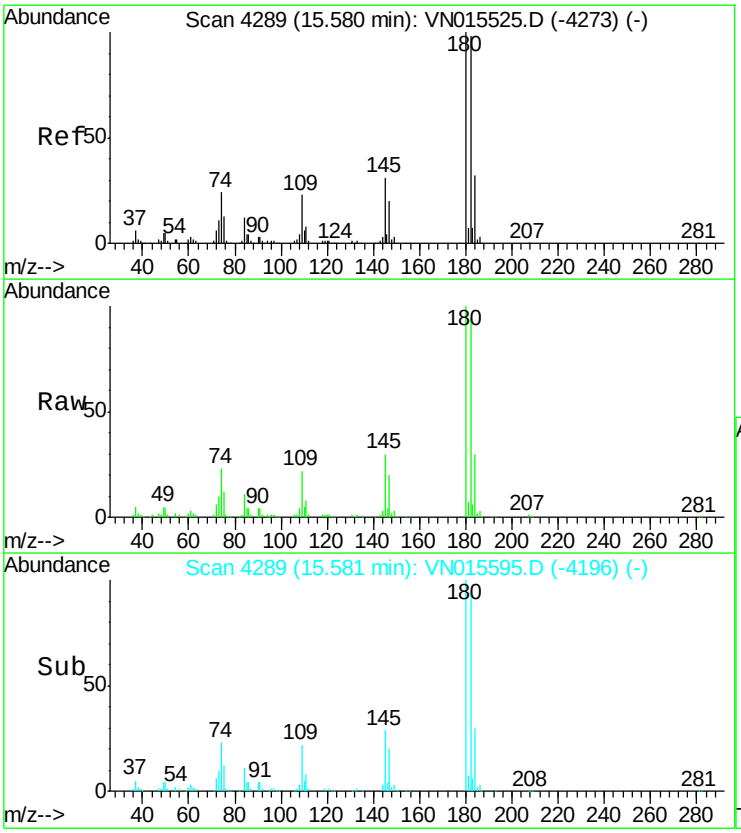
Tgt Ion:128 Resp: 232989

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.3	15.5
129	10.7	8.7	13.1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:00:30 PM

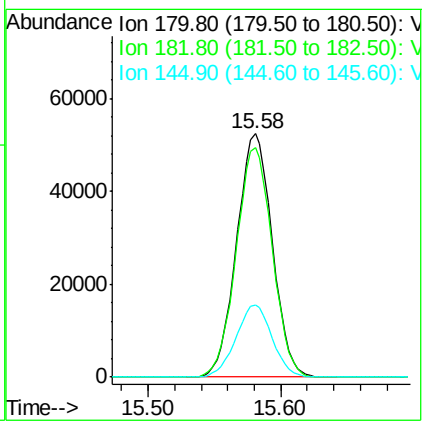




#97
1,2,3-Trichlorobenzene
Concen: 51.16 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015595.D
Acq: 22 May 2014 13:03

Tgt Ion:180 Resp: 97715

Ion	Ratio	Lower	Upper
180	100		
182	95.3	47.8	143.4
145	30.2	14.9	44.7



Evaluate Continuing Calibration Report

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	86	0.00
2	T	Dichlorodifluoromethane	0.429	0.387	9.8	88	0.00
3	T	Chlorodifluoromethane	0.270	0.000	100.0#	0#	-1.87#
4	P	Chloromethane	0.559	0.545	2.5	102	0.00
5	C	Vinyl Chloride	0.467	0.453	3.0#	89	0.00
6	T	Bromomethane	0.291	0.252	13.4	84	0.00
7	T	Chloroethane	0.294	0.304	-3.4	93	0.00
8	T	Trichlorofluoromethane	0.759	0.711	6.3	87	0.00
9	T	Diethyl Ether	0.281	0.315	-12.1	99	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.428	0.432	-0.9	93	0.00
11	T	Methyl Iodide	0.450	0.452	-0.4	72	0.00
12	T	Tert butyl alcohol	0.071	0.068	4.2	96	0.00
13	CM	1,1-Dichloroethene	0.409	0.397	2.9#	89	0.00
14	T	Acrolein	0.052	0.085	-63.5#	149	0.00
15	T	Allyl chloride	0.716	0.723	-1.0	91	0.00
16	T	Acrylonitrile	0.184	0.226	-22.8#	99	0.00
17	T	Acetone	0.180	0.201	-11.7	95	0.00
18	T	Carbon Disulfide	1.153	1.097	4.9	86	0.00
19	T	Methyl Acetate	0.873	0.992	-13.6	99	0.00
20	T	Methyl tert-butyl Ether	1.440	1.581	-9.8	97	0.00
21	T	Methylene Chloride	0.468	0.504	-7.7	98	0.00
22	T	trans-1,2-Dichloroethene	0.431	0.447	-3.7	94	0.00
23	T	Diisopropyl ether	1.474	1.615	-9.6	96	0.00
24	T	Vinyl Acetate	0.732	0.899	-22.8#	101	0.00
25	P	1,1-Dichloroethane	0.812	0.851	-4.8	92	0.00
26	T	2-Butanone	0.255	0.294	-15.3	98	0.00
27	T	2,2-Dichloropropane	0.717	0.697	2.8	88	0.00
28	T	cis-1,2-Dichloroethene	0.506	0.550	-8.7	96	0.00
29	T	Bromochloromethane	0.337	0.419	-24.3#	95	0.00
30	T	Tetrahydrofuran	0.171	0.189	-10.5	97	0.00
31	C	Chloroform	0.838	0.887	-5.8#	95	0.00
32	T	Cyclohexane	0.916	0.754	17.7	90	0.00
33	T	1,1,1-Trichloroethane	0.785	0.768	2.2	87	0.00
34	S	1,2-Dichloroethane-d4	0.575	0.594	-3.3	96	0.00
35	I	1,4-Difluorobenzene	1.000	1.000	0.0	87	0.00
36	S	Dibromofluoromethane	0.326	0.354	-8.6	99	0.00
37	T	1,1-Dichloropropene	0.446	0.447	-0.2	89	0.00
38	T	Ethyl Acetate	0.393	0.447	-13.7	97	0.00
39	T	Carbon Tetrachloride	0.510	0.494	3.1	87	0.00
40	T	Methylcyclohexane	0.570	0.574	-0.7	93	0.00
41	TM	Benzene	1.330	1.395	-4.9	94	0.00
42	T	Methacrylonitrile	0.233	0.269	-15.5	100	0.00
43	TM	1,2-Dichloroethane	0.486	0.517	-6.4	94	0.00
44	T	Isopropyl Acetate	0.708	0.766	-8.2	95	0.00
45	TM	Trichloroethene	0.372	0.385	-3.5	93	0.00

Evaluate Continuing Calibration Report

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	C	1,2-Dichloropropane	0.342	0.373	-9.1#	98	0.00
47	T	Dibromomethane	0.225	0.243	-8.0	95	0.00
48	T	Bromodichloromethane	0.461	0.496	-7.6	94	0.00
49	T	Methyl methacrylate	0.341	0.388	-13.8	95	0.00
50	T	1,4-Dioxane	0.005	0.006	-20.0	99	0.00
51	S	Toluene-d8	1.200	1.249	-4.1	96	0.00
52	T	4-Methyl-2-Pentanone	0.391	0.436	-11.5	96	0.00
53	CM	Toluene	0.843	0.884	-4.9#	93	0.00
54	T	t-1,3-Dichloropropene	0.472	0.528	-11.9	94	0.00
55	T	cis-1,3-Dichloropropene	0.525	0.574	-9.3	95	0.00
56	T	1,1,2-Trichloroethane	0.326	0.369	-13.2	99	0.00
57	T	Ethyl methacrylate	0.482	0.553	-14.7	97	0.00
58	T	1,3-Dichloropropane	0.546	0.601	-10.1	97	0.00
59	T	2-Chloroethyl Vinyl ether	0.045	0.046	-2.2	64	0.00
60	T	2-Hexanone	0.256	0.292	-14.1	95	0.00
61	T	Dibromochloromethane	0.389	0.436	-12.1	95	0.00
62	T	1,2-Dibromoethane	0.337	0.380	-12.8	97	0.00
63	S	4-Bromofluorobenzene	0.411	0.438	-6.6	94	0.00
64	I	Chlorobenzene-d5	1.000	1.000	0.0	87	0.00
65	T	Tetrachloroethene	0.394	0.404	-2.5	91	0.00
66	PM	Chlorobenzene	1.082	1.131	-4.5	95	0.00
67	T	1,1,1,2-Tetrachloroethane	0.412	0.437	-6.1	92	0.00
68	C	Ethyl Benzene	1.772	1.870	-5.5#	92	0.00
69	T	m/p-Xylenes	0.689	0.723	-4.9	92	0.00
70	T	o-Xylene	0.678	0.733	-8.1	93	0.00
71	T	Styrene	1.066	1.179	-10.6	93	0.00
72	P	Bromoform	0.345	0.384	-11.3	94	0.00
73	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	0.00
74	T	Isopropylbenzene	4.165	4.014	3.6	91	0.00
75	T	N-amyl acetate	1.310	1.368	-4.4	93	0.00
76	P	1,1,2,2-Tetrachloroethane	1.133	1.177	-3.9	97	0.00
77	T	1,2,3-Trichloropropane	0.980	1.009	-3.0	96	0.00
78	T	Bromobenzene	1.084	1.095	-1.0	92	0.00
79	T	n-propylbenzene	4.270	4.304	-0.8	92	0.00
80	T	2-Chlorotoluene	2.733	2.667	2.4	92	0.00
81	T	1,3,5-Trimethylbenzene	3.402	3.409	-0.2	92	0.00
82	T	trans-1,4-Dichloro-2-butene	0.344	0.358	-4.1	91	0.00
83	T	4-Chlorotoluene	2.590	2.623	-1.3	93	0.00
84	T	tert-Butylbenzene	3.104	2.967	4.4	91	0.00
85	T	1,2,4-Trimethylbenzene	3.404	3.493	-2.6	93	0.00
86	T	sec-Butylbenzene	3.896	3.872	0.6	91	0.00
87	T	p-Isopropyltoluene	3.370	3.498	-3.8	93	0.00
88	T	1,3-Dichlorobenzene	1.764	1.837	-4.1	94	0.00
89	T	1,4-Dichlorobenzene	1.731	1.796	-3.8	93	0.00

Evaluate Continuing Calibration Report

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90	T	n-Butylbenzene	2.542	2.754	-8.3	93	0.00
91	T	Hexachloroethane	0.641	0.622	3.0	87	0.00
92	T	1,2-Dichlorobenzene	1.749	1.832	-4.7	93	0.00
93	T	1,2-Dibromo-3-Chloropropane	0.187	0.205	-9.6	95	0.00
94	T	1,2,4-Trichlorobenzene	0.836	1.015	-21.4#	92	0.00
95	T	Hexachlorobutadiene	0.641	0.688	-7.3	95	0.00
96	T	Naphthalene	2.044	2.328	-13.9	90	0.00
97	T	1,2,3-Trichlorobenzene	0.839	0.976	-16.3	92	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	86	0.00
2	T	Dichlorodifluoromethane	50.000	50.073	-0.1	88	0.00
3	T	Chlorodifluoromethane	50.000	0.000	100.0#	0	-1.87#
4	P	Chloromethane	50.000	58.913	-17.8	102	0.00
5	C	Vinyl Chloride	50.000	48.478	3.0#	89	0.00
6	T	Bromomethane	50.000	46.464	7.1	84	0.00
7	T	Chloroethane	50.000	51.597	-3.2	93	0.00
8	T	Trichlorofluoromethane	50.000	46.873	6.3	87	0.00
9	T	Diethyl Ether	50.000	56.090	-12.2	99	0.00
10	T	1,1,2-Trichlorotrifluoroeth	50.000	50.450	-0.9	93	0.00
11	T	Methyl Iodide	50.000	42.318	15.4	72	0.00
12	T	Tert butyl alcohol	250.000	294.306	-17.7	96	0.00
13	CM	1,1-Dichloroethene	50.000	48.514	3.0#	89	0.00
14	T	Acrolein	250.000	410.928	-64.4#	149	0.00
15	T	Allyl chloride	50.000	50.544	-1.1	91	0.00
16	T	Acrylonitrile	250.000	306.485	-22.6#	99	0.00
17	T	Acetone	250.000	278.699	-11.5	95	0.00
18	T	Carbon Disulfide	50.000	47.569	4.9	86	0.00
19	T	Methyl Acetate	50.000	56.806	-13.6	99	0.00
20	T	Methyl tert-butyl Ether	50.000	54.909	-9.8	97	0.00
21	T	Methylene Chloride	50.000	53.854	-7.7	98	0.00
22	T	trans-1,2-Dichloroethene	50.000	51.792	-3.6	94	0.00
23	T	Diisopropyl ether	50.000	54.772	-9.5	96	0.00
24	T	Vinyl Acetate	250.000	306.821	-22.7#	101	0.00
25	P	1,1-Dichloroethane	50.000	52.455	-4.9	92	0.00
26	T	2-Butanone	250.000	289.091	-15.6	98	0.00
27	T	2,2-Dichloropropane	50.000	48.655	2.7	88	0.00
28	T	cis-1,2-Dichloroethene	50.000	54.325	-8.7	96	0.00
29	T	Bromochloromethane	50.000	58.894	-17.8	95	0.00
30	T	Tetrahydrofuran	250.000	276.131	-10.5	97	0.00
31	C	Chloroform	50.000	52.922	-5.8#	95	0.00
32	T	Cyclohexane	50.000	52.324	-4.6	90	0.00
33	T	1,1,1-Trichloroethane	50.000	48.914	2.2	87	0.00
34	S	1,2-Dichloroethane-d4	50.000	51.648	-3.3	96	0.00
35	I	1,4-Difluorobenzene	50.000	50.000	0.0	87	0.00
36	S	Dibromofluoromethane	50.000	54.361	-8.7	99	0.00
37	T	1,1-Dichloropropene	50.000	50.108	-0.2	89	0.00
38	T	Ethyl Acetate	50.000	56.738	-13.5	97	0.00
39	T	Carbon Tetrachloride	50.000	48.417	3.2	87	0.00
40	T	Methylcyclohexane	50.000	50.358	-0.7	93	0.00
41	TM	Benzene	50.000	52.466	-4.9	94	0.00
42	T	Methacrylonitrile	50.000	57.878	-15.8	100	0.00
43	TM	1,2-Dichloroethane	50.000	53.199	-6.4	94	0.00
44	T	Isopropyl Acetate	50.000	54.118	-8.2	95	0.00
45	TM	Trichloroethene	50.000	51.662	-3.3	93	0.00

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
46	C	1,2-Dichloropropane	50.000	54.627	-9.3#	98	0.00
47	T	Dibromomethane	50.000	54.166	-8.3	95	0.00
48	T	Bromodichloromethane	50.000	53.739	-7.5	94	0.00
49	T	Methyl methacrylate	50.000	56.864	-13.7	95	0.00
50	T	1,4-Dioxane	1000.000	1226.890	-22.7#	99	0.00
51	S	Toluene-d8	50.000	52.043	-4.1	96	0.00
52	T	4-Methyl-2-Pentanone	250.000	278.579	-11.4	96	0.00
53	CM	Toluene	50.000	52.443	-4.9#	93	0.00
54	T	t-1,3-Dichloropropene	50.000	55.970	-11.9	94	0.00
55	T	cis-1,3-Dichloropropene	50.000	54.672	-9.3	95	0.00
56	T	1,1,2-Trichloroethane	50.000	56.672	-13.3	99	0.00
57	T	Ethyl methacrylate	50.000	57.423	-14.8	97	0.00
58	T	1,3-Dichloropropane	50.000	55.025	-10.0	97	0.00
59	T	2-Chloroethyl Vinyl ether	250.000	215.992	13.6	64	0.00
60	T	2-Hexanone	250.000	286.168	-14.5	95	0.00
61	T	Dibromochloromethane	50.000	56.003	-12.0	95	0.00
62	T	1,2-Dibromoethane	50.000	56.465	-12.9	97	0.00
63	S	4-Bromofluorobenzene	50.000	53.235	-6.5	94	0.00
64	I	Chlorobenzene-d5	50.000	50.000	0.0	87	0.00
65	T	Tetrachloroethene	50.000	51.220	-2.4	91	0.00
66	PM	Chlorobenzene	50.000	52.242	-4.5	95	0.00
67	T	1,1,1,2-Tetrachloroethane	50.000	53.040	-6.1	92	0.00
68	C	Ethyl Benzene	50.000	52.790	-5.6#	92	0.00
69	T	m/p-Xylenes	100.000	104.853	-4.9	92	0.00
70	T	o-Xylene	50.000	54.000	-8.0	93	0.00
71	T	Styrene	50.000	55.334	-10.7	93	0.00
72	P	Bromoform	50.000	55.586	-11.2	94	0.00
73	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	86	0.00
74	T	Isopropylbenzene	50.000	53.793	-7.6	91	0.00
75	T	N-amyl acetate	50.000	52.206	-4.4	93	0.00
76	P	1,1,2,2-Tetrachloroethane	50.000	60.889	-21.8#	97	0.00
77	T	1,2,3-Trichloropropane	50.000	59.502	-19.0	96	0.00
78	T	Bromobenzene	50.000	50.495	-1.0	92	0.00
79	T	n-propylbenzene	50.000	50.400	-0.8	92	0.00
80	T	2-Chlorotoluene	50.000	54.532	-9.1	92	0.00
81	T	1,3,5-Trimethylbenzene	50.000	50.097	-0.2	92	0.00
82	T	trans-1,4-Dichloro-2-butene	50.000	51.921	-3.8	91	0.00
83	T	4-Chlorotoluene	50.000	50.637	-1.3	93	0.00
84	T	tert-Butylbenzene	50.000	54.043	-8.1	91	0.00
85	T	1,2,4-Trimethylbenzene	50.000	51.306	-2.6	93	0.00
86	T	sec-Butylbenzene	50.000	49.695	0.6	91	0.00
87	T	p-Isopropyltoluene	50.000	51.909	-3.8	93	0.00
88	T	1,3-Dichlorobenzene	50.000	52.071	-4.1	94	0.00
89	T	1,4-Dichlorobenzene	50.000	51.871	-3.7	93	0.00

Evaluate Continuing Calibration Report

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015595.D
Acq On : 22 May 2014 13:03
Operator : MD
Sample : VSTDCCC050
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 23 00:28:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
90	T	n-Butylbenzene	50.000	54.168	-8.3	93	0.00
91	T	Hexachloroethane	50.000	48.492	3.0	87	0.00
92	T	1,2-Dichlorobenzene	50.000	52.392	-4.8	93	0.00
93	T	1,2-Dibromo-3-Chloropropane	50.000	54.655	-9.3	95	0.00
94	T	1,2,4-Trichlorobenzene	50.000	51.930	-3.9	92	0.00
95	T	Hexachlorobutadiene	50.000	53.724	-7.4	95	0.00
96	T	Naphthalene	50.000	48.707	2.6	90	0.00
97	T	1,2,3-Trichlorobenzene	50.000	51.160	-2.3	92	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

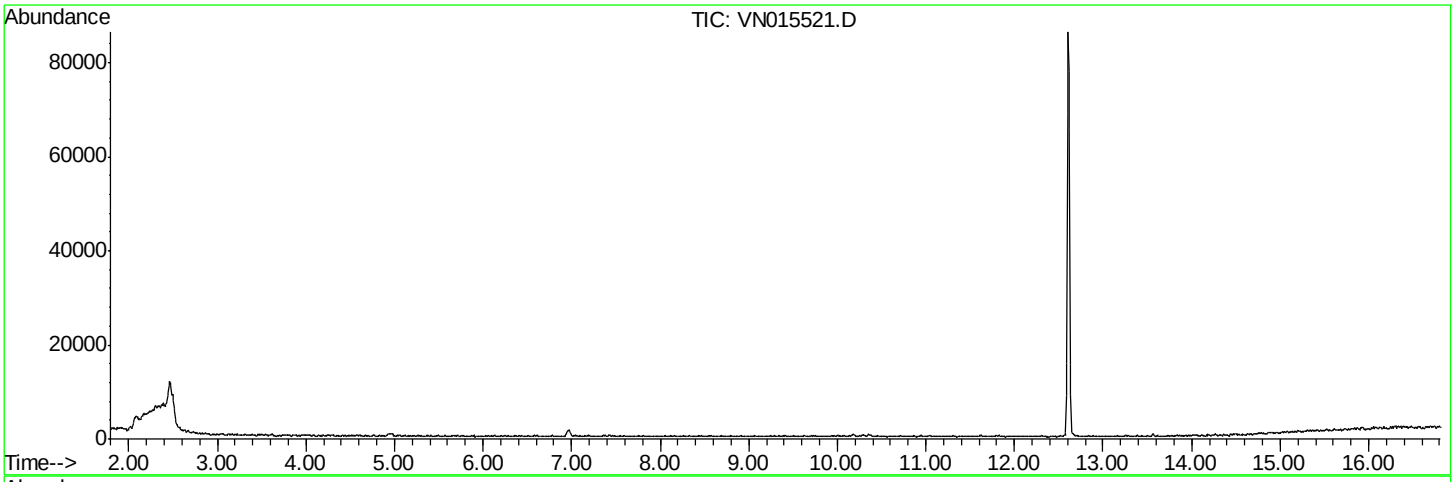
QC SAMPLE DATA

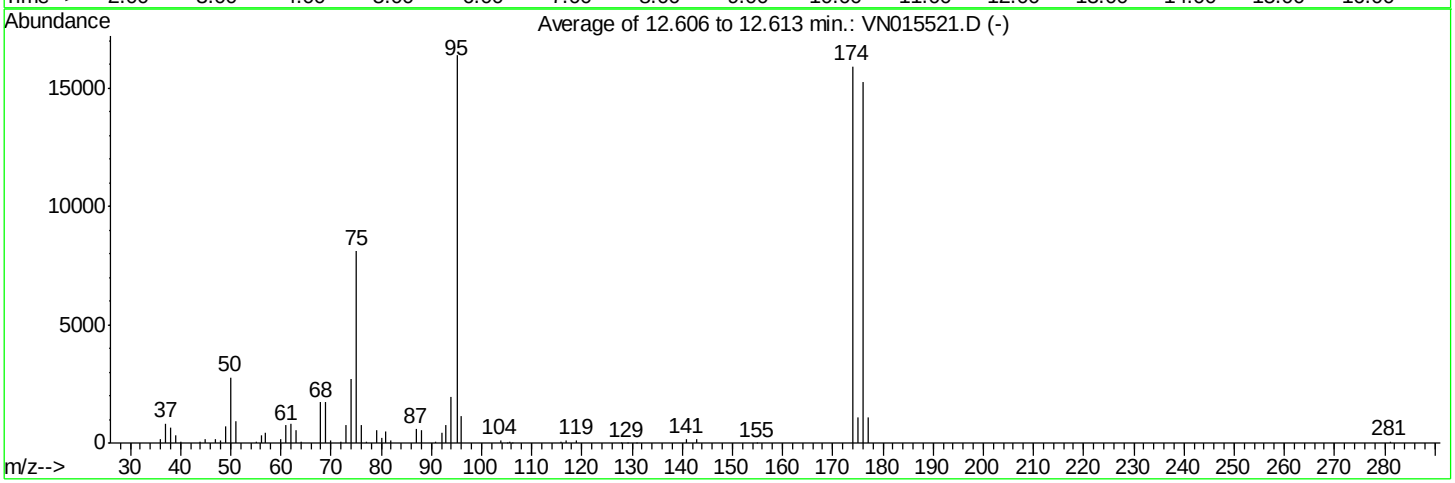
Data Path : W:\HPCHEM1\MSVOA_N\Data\VN052014\
Data File : VN015521.D
Acq On : 20 May 2014 15:11
Operator : MD
Sample : BFB
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Title : SW846 8260
Last Update : Wed May 21 02:16:40 2014





Spectrum Information: Average of 12.606 to 12.613 min.

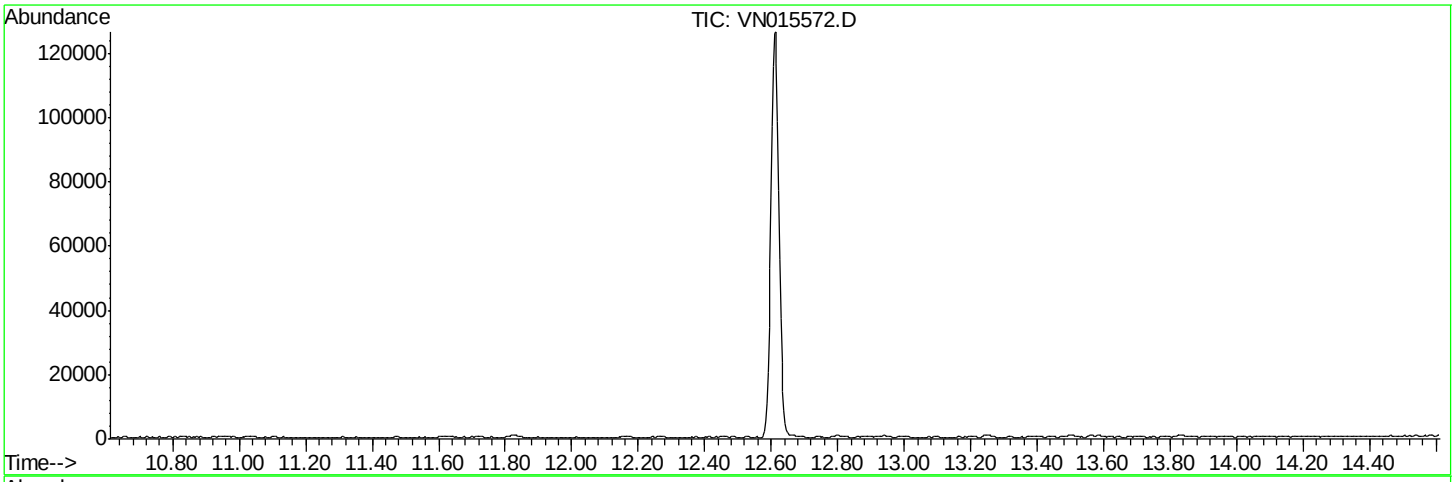
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	2763	PASS
75	95	30	60	49.6	8127	PASS
95	95	100	100	100.0	16388	PASS
96	95	5	9	6.9	1132	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	97.2	15932	PASS
175	174	5	9	6.8	1084	PASS
176	174	95	101	95.9	15278	PASS
177	176	5	9	7.1	1080	PASS

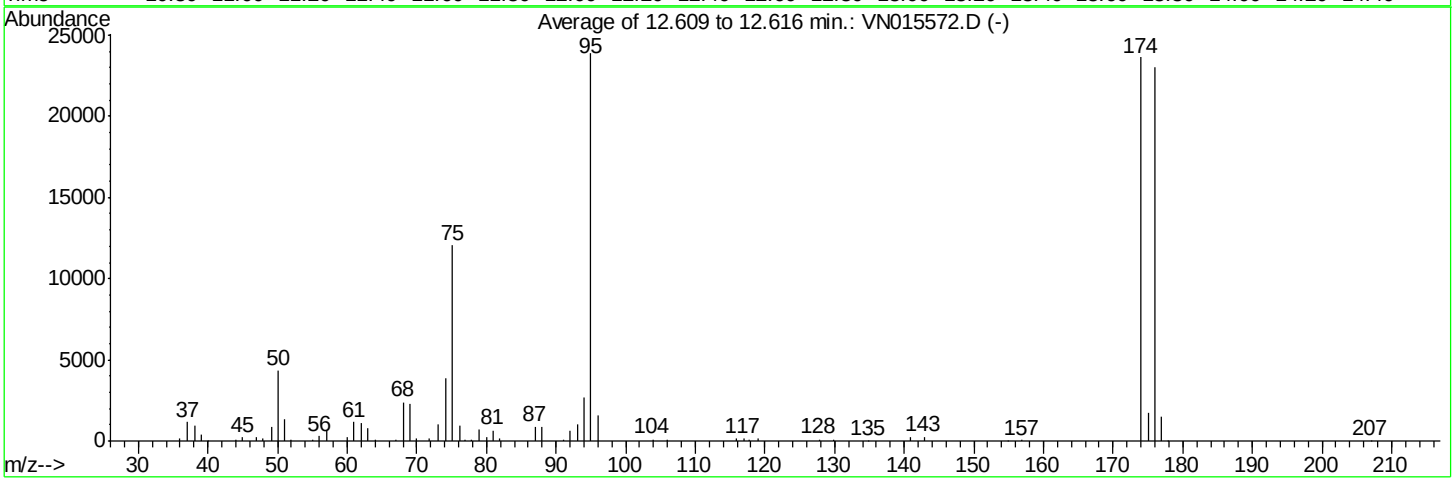
Data Path : W:\HPCHEM1\MSVOA N\Data\VN052114\
Data File : VN015572.D
Acq On : 22 May 2014 00:14
Operator : MD
Sample : BFB
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Title : SW846 8260
Last Update : Wed May 21 02:16:40 2014





AutoFind: Scans 3365, 3366, 3367; Background Corrected with Scan 3351

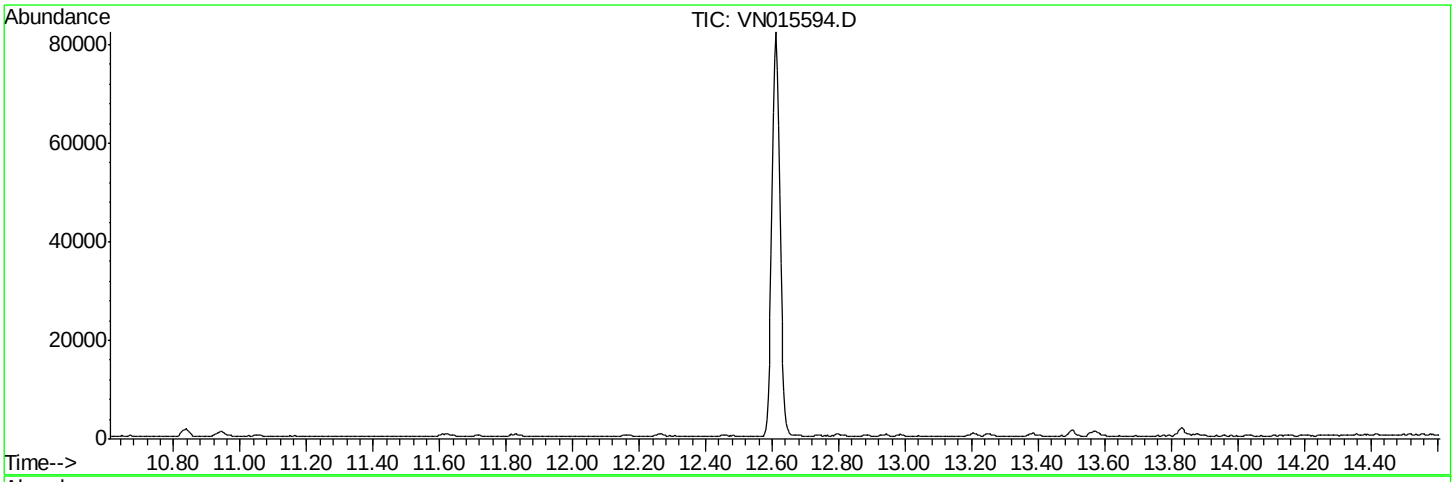
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	4304	PASS
75	95	30	60	50.4	12033	PASS
95	95	100	100	100.0	23877	PASS
96	95	5	9	6.6	1568	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	99.2	23677	PASS
175	174	5	9	7.4	1762	PASS
176	174	95	101	97.1	22989	PASS
177	176	5	9	6.5	1493	PASS

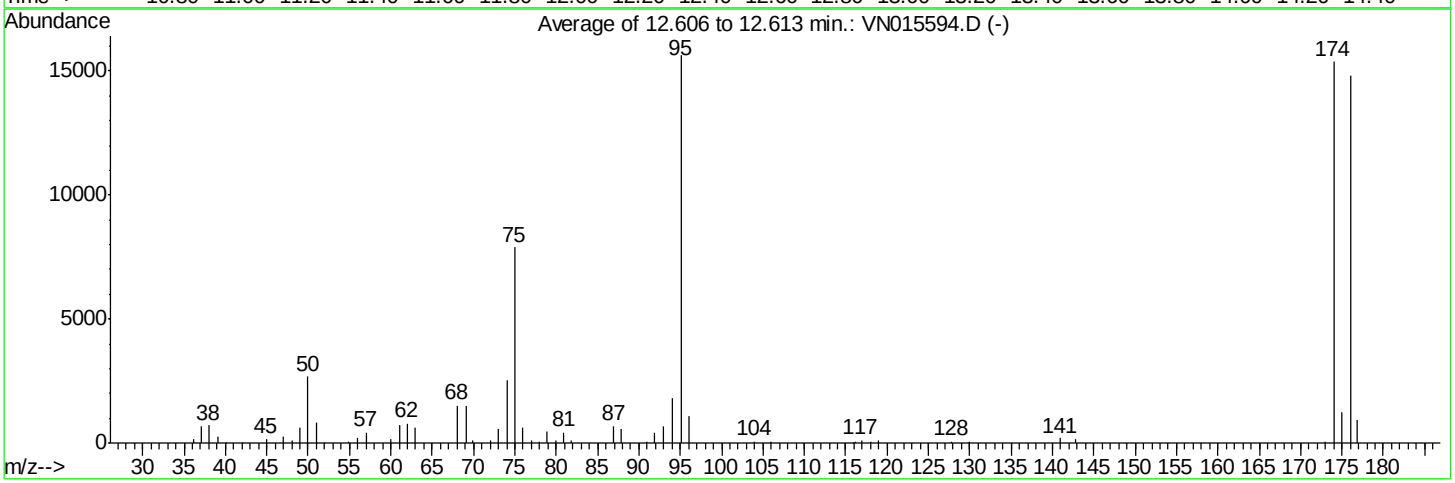
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015594.D
Acq On : 22 May 2014 12:32
Operator : MD
Sample : BFB
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Title : SW846 8260
Last Update : Wed May 21 02:16:40 2014





AutoFind: Scans 3364, 3365, 3366; Background Corrected with Scan 3352

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	2674	PASS
75	95	30	60	50.4	7883	PASS
95	95	100	100	100.0	15635	PASS
96	95	5	9	6.9	1075	PASS
173	174	0.00	2	0.4	59	PASS
174	95	50	100	98.3	15376	PASS
175	174	5	9	8.0	1235	PASS
176	174	95	101	96.5	14833	PASS
177	176	5	9	6.4	953	PASS

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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	
Project:	37-14 36th Street	Date Received:	
Client Sample ID:	VN0521WBL02	SDG No.:	F2352
Lab Sample ID:	VN0521WBL02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015574.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	3	U	0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.9		70 - 120		92%	SPK: 50

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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	
Project:	37-14 36th Street	Date Received:	
Client Sample ID:	VN0521WBL02	SDG No.:	F2352
Lab Sample ID:	VN0521WBL02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015574.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	45.9		85 - 115		92%	SPK: 50
2037-26-5	Toluene-d8	49.6		85 - 120		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.2		75 - 120		114%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	236602	7.87				
540-36-3	1,4-Difluorobenzene	363398	8.79				
3114-55-4	Chlorobenzene-d5	371531	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	162510	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015574.D
Acq On : 22 May 2014 1:44
Operator : MD
Sample : VN0521WBL02
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBL02

Quant Time: May 22 02:19:18 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	236602	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	363398	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	371531	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	162510	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	124824	45.86	ug/l	0.00
Spiked Amount 50.000			Recovery = 91.72%			
36) Dibromofluoromethane	7.80	113	108537	45.86	ug/l	0.00
Spiked Amount 50.000			Recovery = 91.72%			
51) Toluene-d8	10.29	98	432583	49.61	ug/l	0.00
Spiked Amount 50.000			Recovery = 99.22%			
63) 4-Bromofluorobenzene	12.61	95	170785	57.17	ug/l	0.00
Spiked Amount 50.000			Recovery = 114.34%			

Target Compounds Qvalue

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

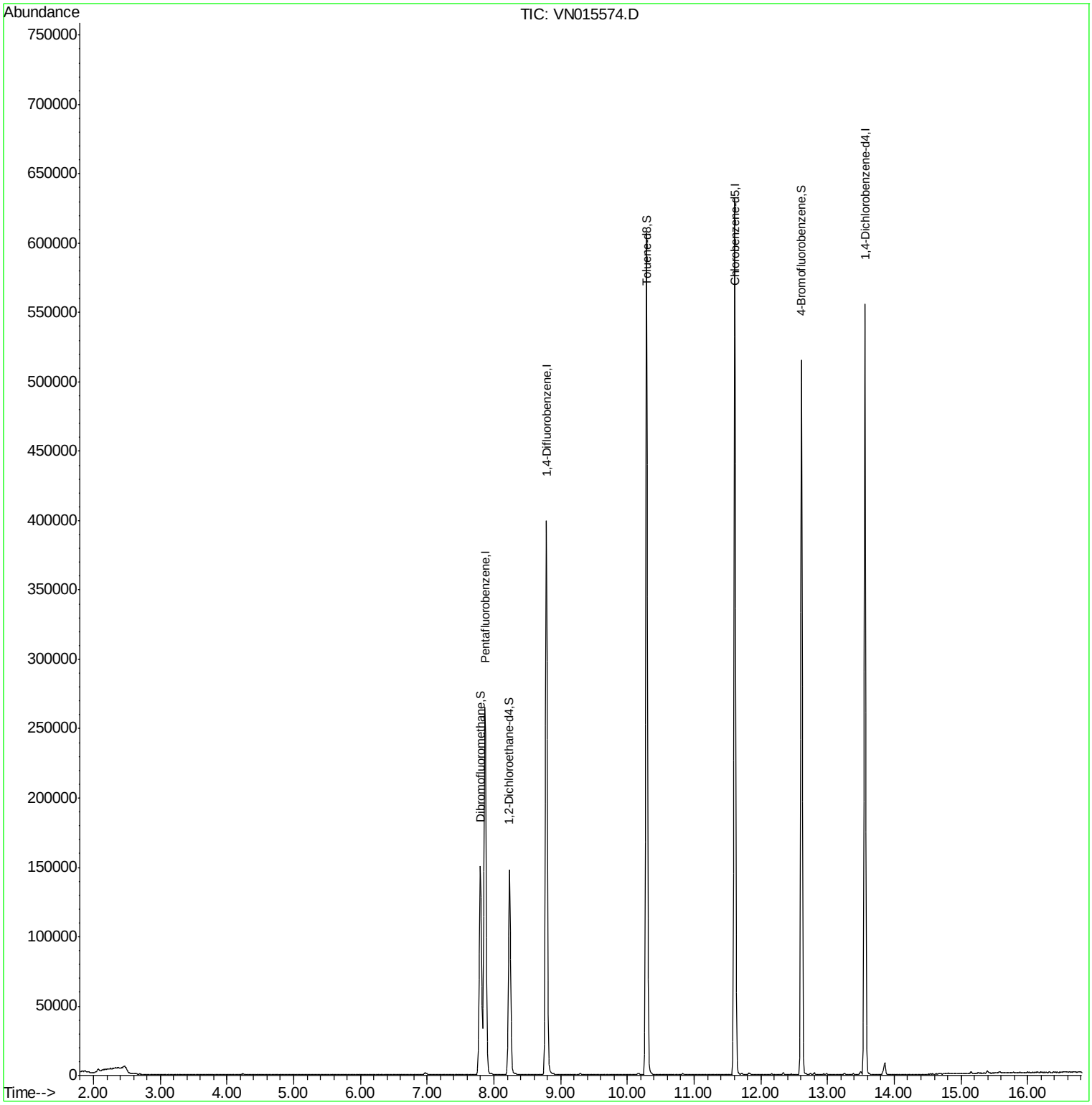
Quantitation Report (QT Reviewed)

Sample Results: **VN015574.D**

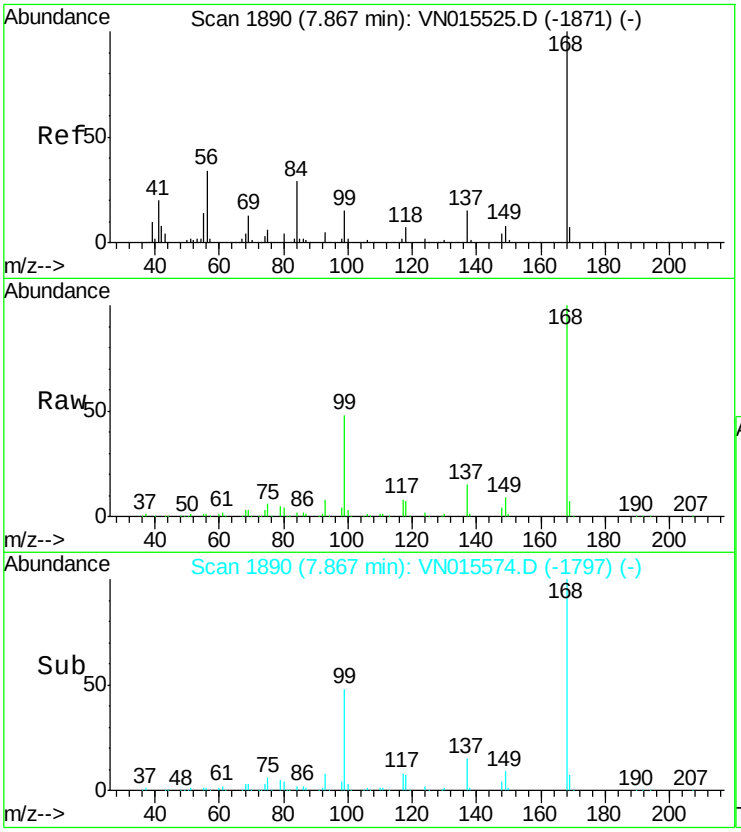
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015574.D
Acq On : 22 May 2014 1:44
Operator : MD
Sample : VN0521WBL02
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBL02

Quant Time: May 22 02:19:18 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration



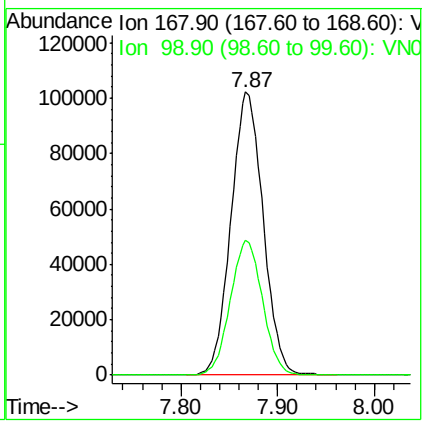
Instrument :
MSVOA_N
ClientSampleId :
VN0521WBL02

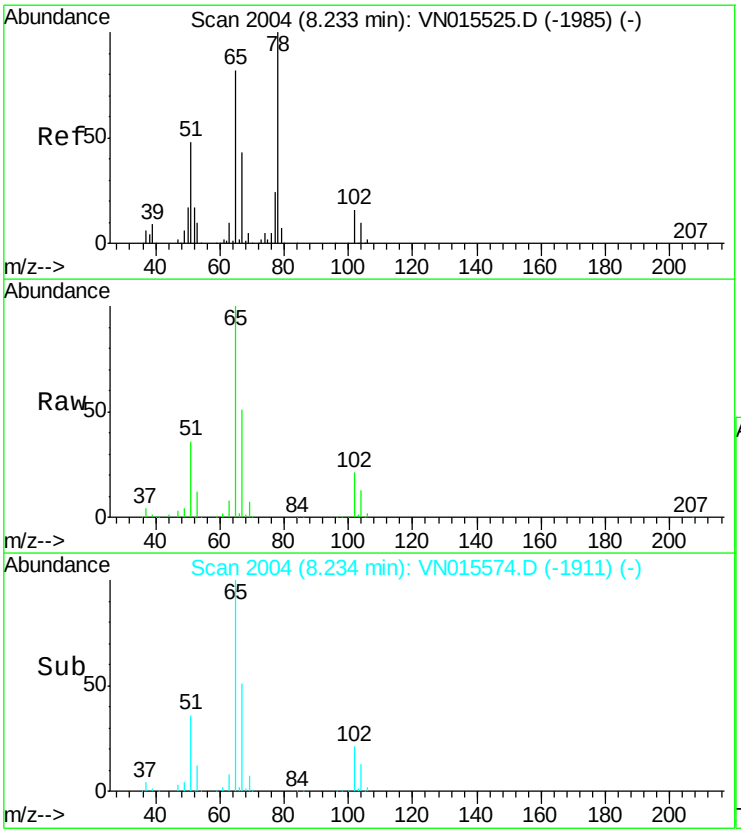


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015574.D
Acq: 22 May 2014 1:44

Tgt Ion:168 Resp: 236602

Ion	Ratio	Lower	Upper
168	100		
99	47.6	39.0	58.4

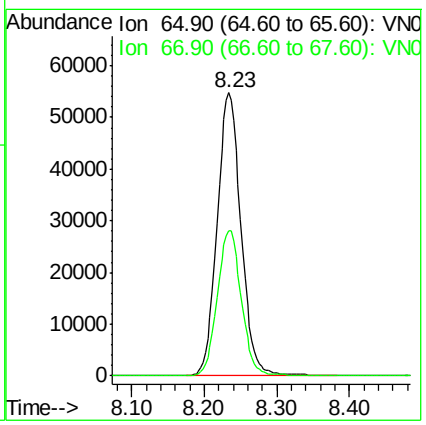




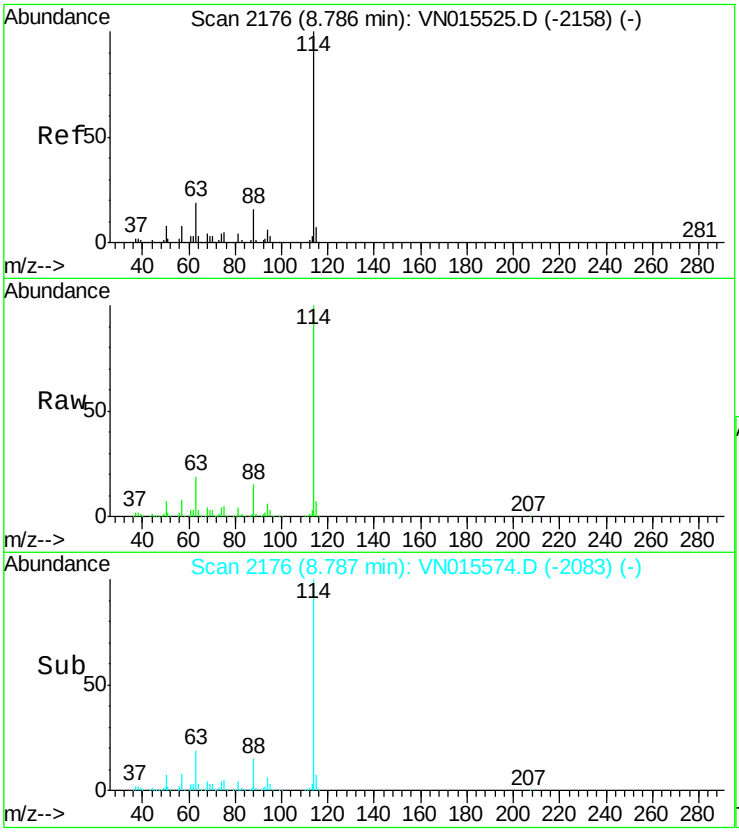
#34
1,2-Dichloroethane-d4
Concen: 45.86 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015574.D
Acq: 22 May 2014 1:44

Tgt Ion: 65 Resp: 124824

Ion	Ratio	Lower	Upper
65	100		
67	51.9	0.0	103.6



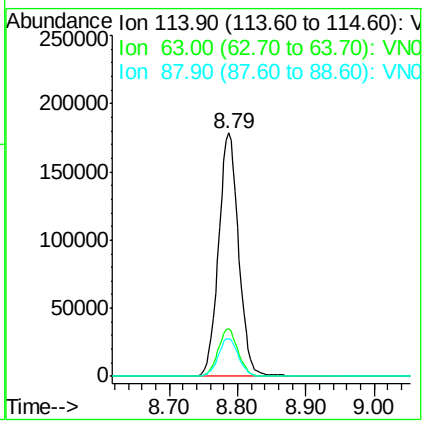
Instrument :
MSVOA_N
ClientSampleId :
VN0521WBL02

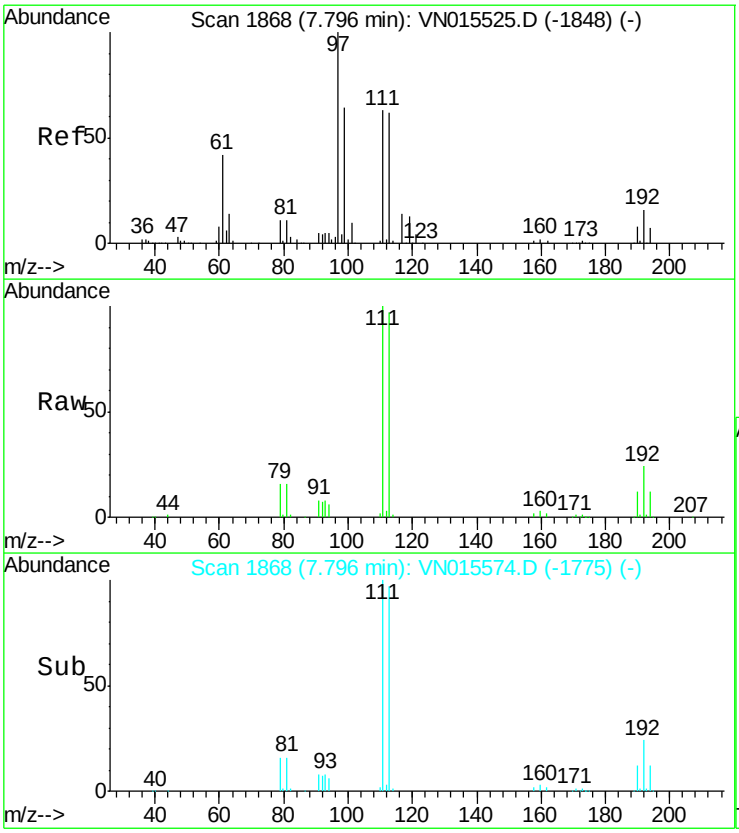


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015574.D
Acq: 22 May 2014 1:44

Tgt Ion:114 Resp: 363398

Ion	Ratio	Lower	Upper
114	100		
63	19.5	0.0	38.6
88	15.4	0.0	32.2

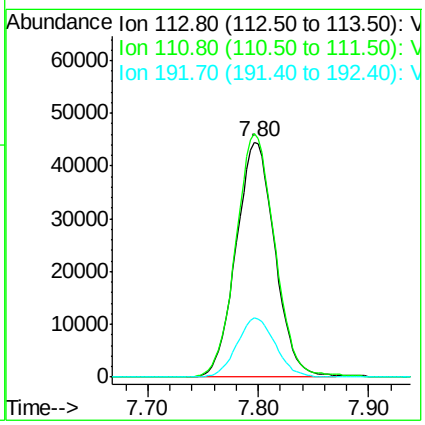




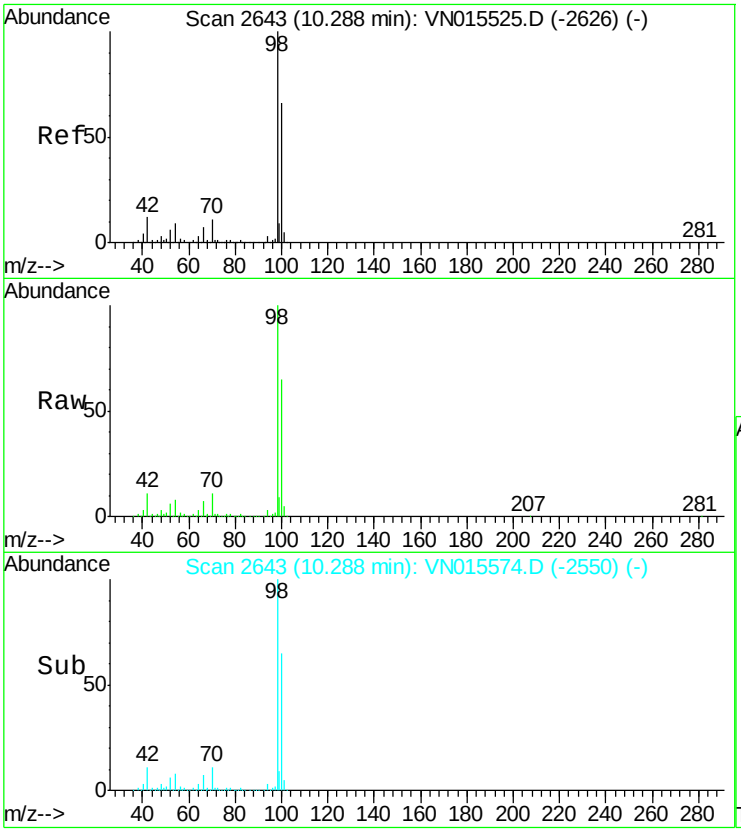
#36
Dibromofluoromethane
Concen: 45.86 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015574.D
Acq: 22 May 2014 1:44

Tgt Ion:113 Resp: 108537

Ion	Ratio	Lower	Upper
113	100		
111	104.3	81.5	122.3
192	25.0	20.0	30.0



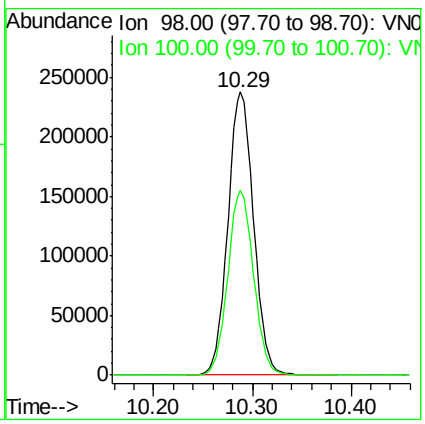
Instrument :
MSVOA_N
ClientSampleId :
VN0521WBL02

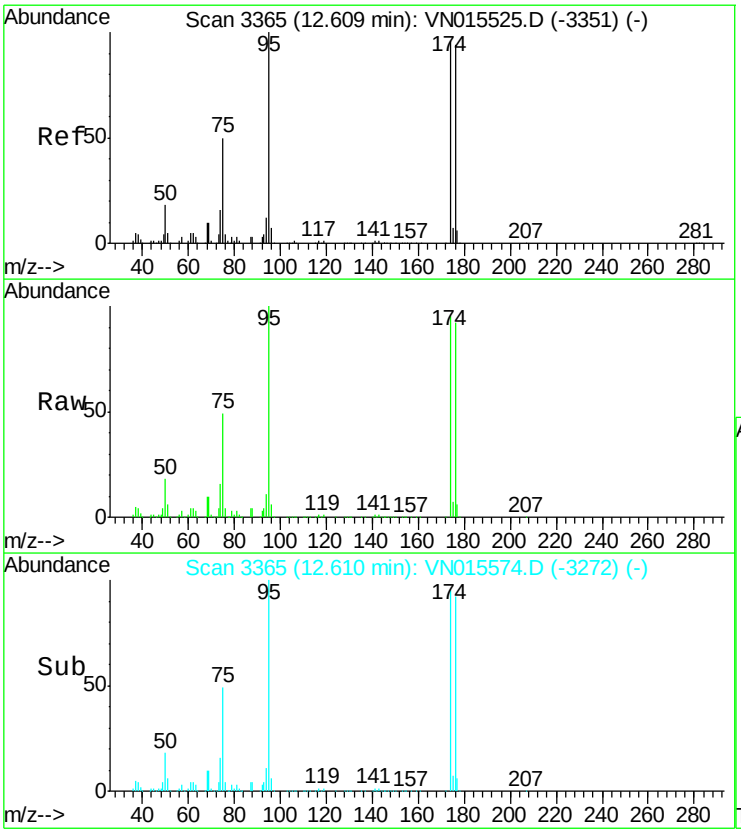


#51
Toluene-d8
Concen: 49.61 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015574.D
Acq: 22 May 2014 1:44

Tgt Ion: 98 Resp: 432583

Ion	Ratio	Lower	Upper
98	100		
100	65.4	52.3	78.5

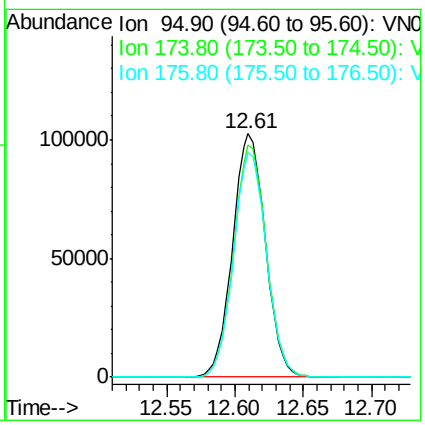




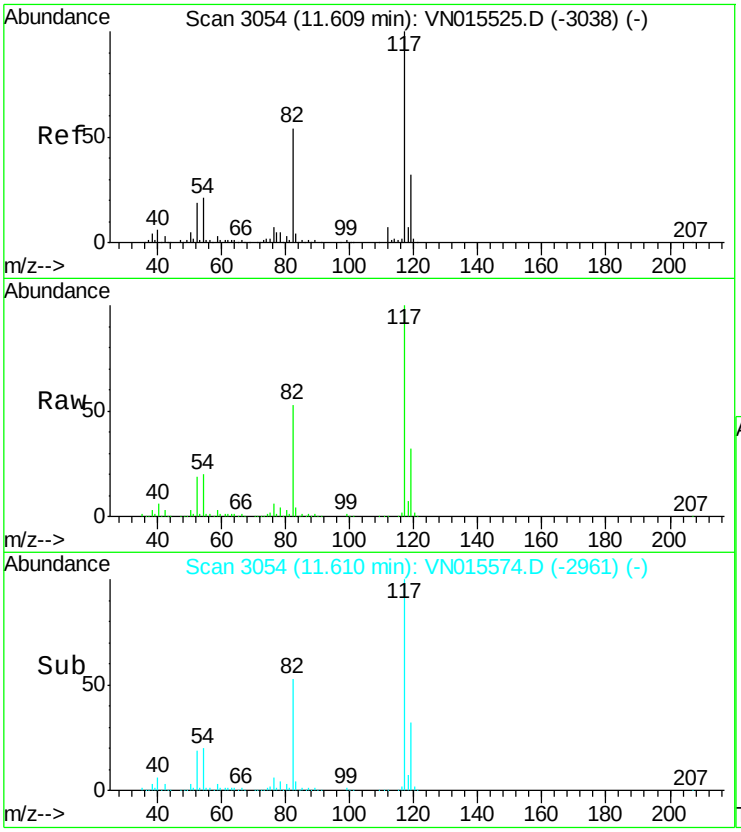
#63
4-Bromofluorobenzene
Concen: 57.17 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015574.D
Acq: 22 May 2014 1:44

Tgt Ion: 95 Resp: 170785

Ion	Ratio	Lower	Upper
95	100		
174	95.5	0.0	191.8
176	93.0	0.0	186.8



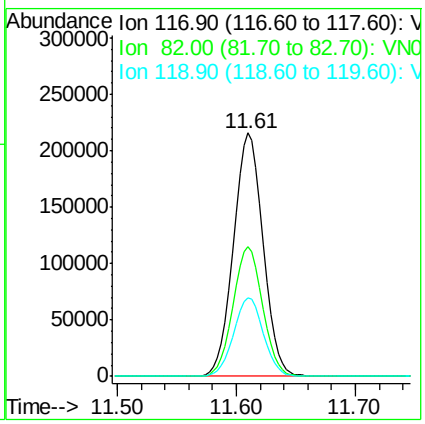
Instrument :
MSVOA_N
ClientSampleId :
VN0521WBL02

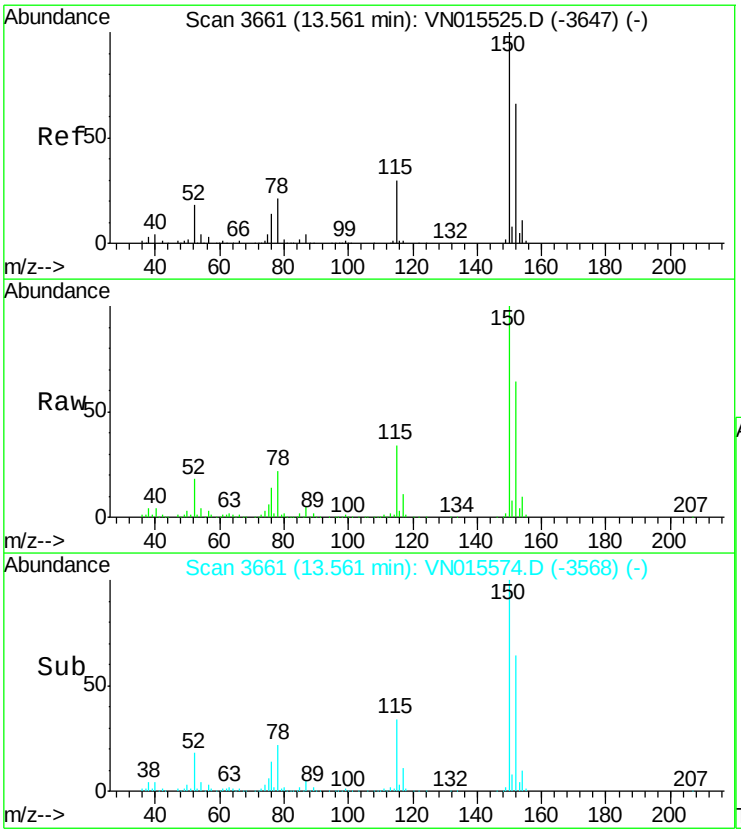


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015574.D
Acq: 22 May 2014 1:44

Tgt Ion:117 Resp: 371531

Ion	Ratio	Lower	Upper
117	100		
82	53.3	43.3	64.9
119	32.3	25.6	38.4

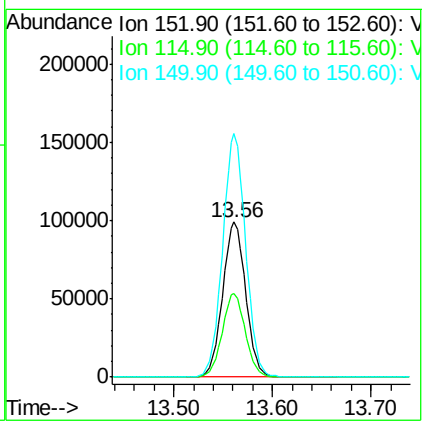




#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015574.D
Acq: 22 May 2014 1:44

Tgt Ion:152 Resp: 162510

Ion	Ratio	Lower	Upper
152	100		
115	53.9	27.2	81.6
150	156.2	0.0	343.6



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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	
Project:	37-14 36th Street	Date Received:	
Client Sample ID:	VN0522WBL01	SDG No.:	F2352
Lab Sample ID:	VN0522WBL01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015596.D	1		05/22/14	VN052214

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	3	U	0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.8		70 - 120		92%	SPK: 50

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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	
Project:	37-14 36th Street	Date Received:	
Client Sample ID:	VN0522WBL01	SDG No.:	F2352
Lab Sample ID:	VN0522WBL01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015596.D	1		05/22/14	VN052214

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	45.9		85 - 115		92%	SPK: 50
2037-26-5	Toluene-d8	49.5		85 - 120		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.9		75 - 120		108%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	233506	7.87				
540-36-3	1,4-Difluorobenzene	361177	8.79				
3114-55-4	Chlorobenzene-d5	361218	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	143539	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015596.D
Acq On : 22 May 2014 14:23
Operator : MD
Sample : VN0522WBL01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBL01

Quant Time: May 23 00:33:32 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	233506	50.00 ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	361177	50.00 ug/l	0.00
64) Chlorobenzene-d5	11.61	117	361218	50.00 ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	143539	50.00 ug/l	0.00
System Monitoring Compounds					
34) 1,2-Dichloroethane-d4	8.23	65	122997	45.79 ug/l	0.00
Spiked Amount 50.000			Recovery	= 91.58%	
36) Dibromofluoromethane	7.80	113	107907	45.87 ug/l	0.00
Spiked Amount 50.000			Recovery	= 91.74%	
51) Toluene-d8	10.29	98	428722	49.47 ug/l	0.00
Spiked Amount 50.000			Recovery	= 98.94%	
63) 4-Bromofluorobenzene	12.61	95	160109	53.92 ug/l	0.00
Spiked Amount 50.000			Recovery	= 107.84%	

Target Compounds Qvalue

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

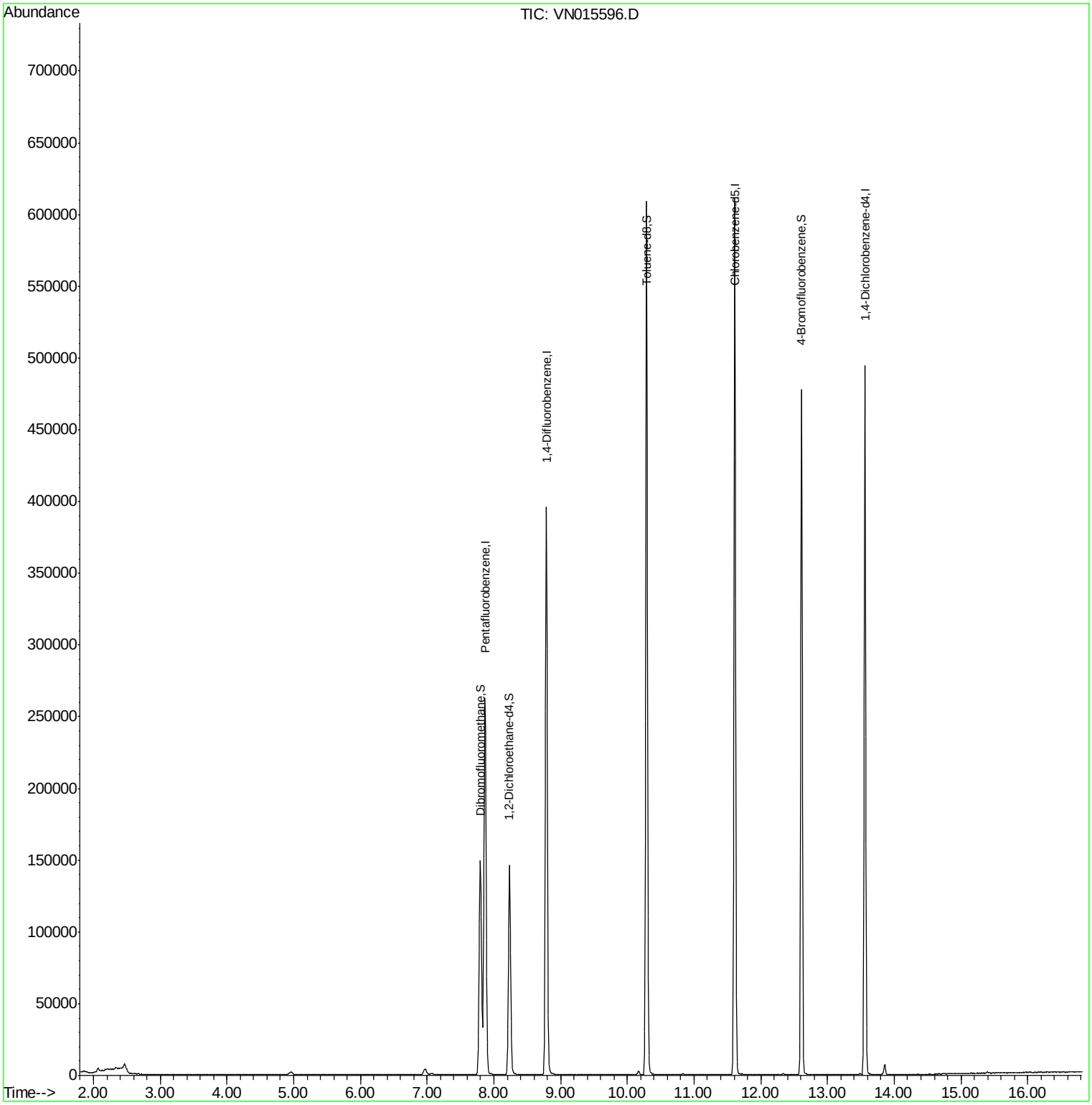
Quantitation Report (QT Reviewed)

Sample Results: **VN015596.D**

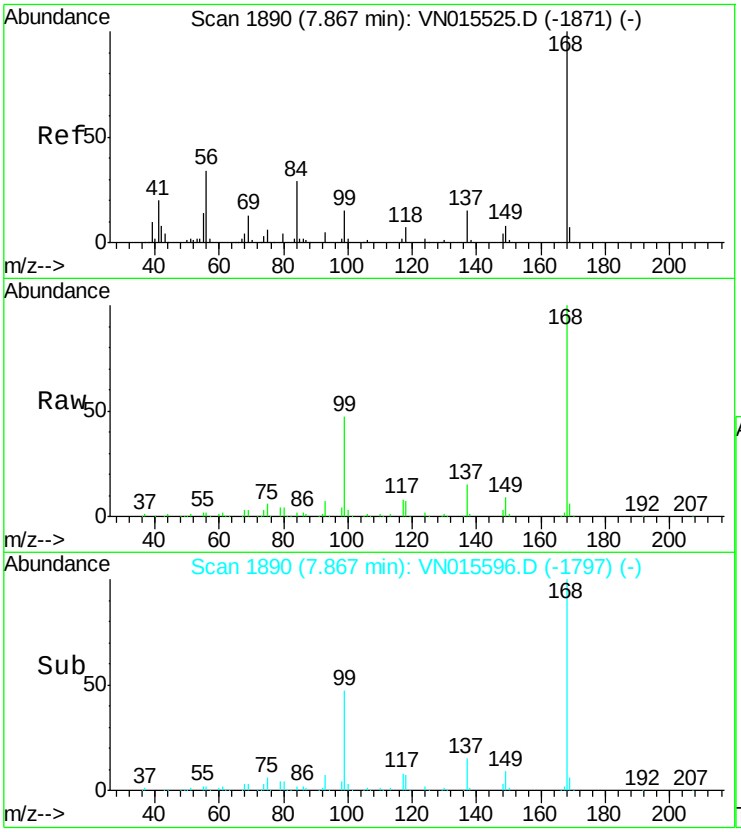
Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015596.D
Acq On : 22 May 2014 14:23
Operator : MD
Sample : VN0522WBL01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBL01

Quant Time: May 23 00:33:32 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration



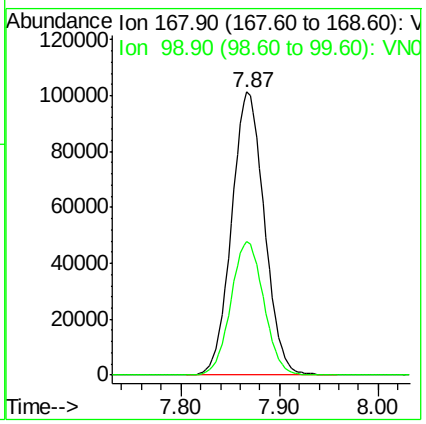
Instrument :
MSVOA_N
ClientSampleId :
VN0522WBL01

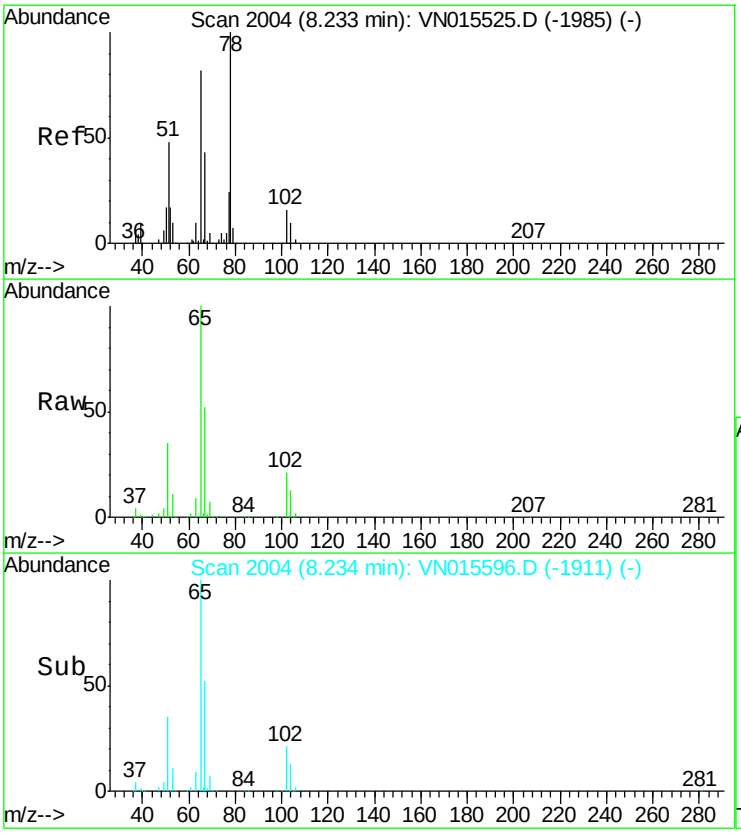


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015596.D
Acq: 22 May 2014 14:23

Tgt Ion:168 Resp: 233506

Ion	Ratio	Lower	Upper
168	100		
99	47.1	39.0	58.4

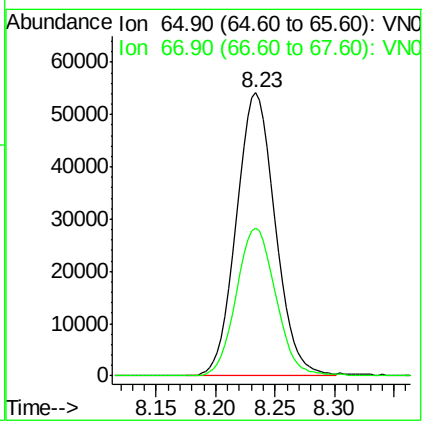




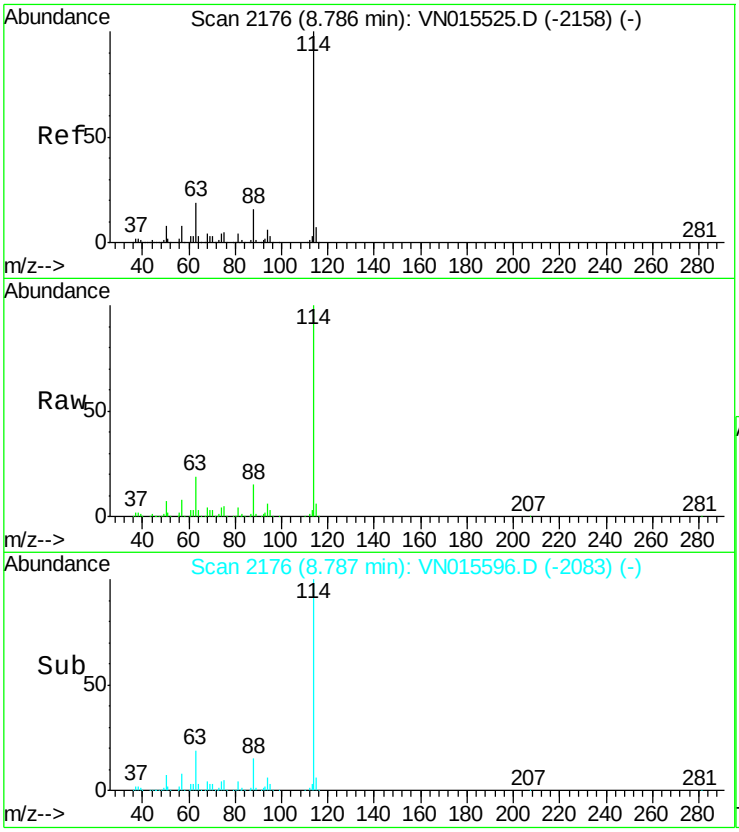
#34
1,2-Dichloroethane-d4
Concen: 45.79 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015596.D
Acq: 22 May 2014 14:23

Tgt Ion: 65 Resp: 122997

Ion	Ratio	Lower	Upper
65	100		
67	53.1	0.0	103.6



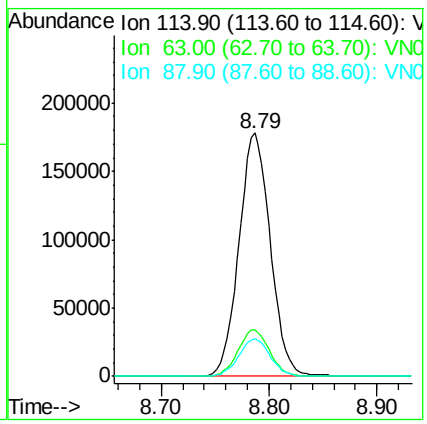
Instrument :
MSVOA_N
ClientSampleId :
VN0522WBL01

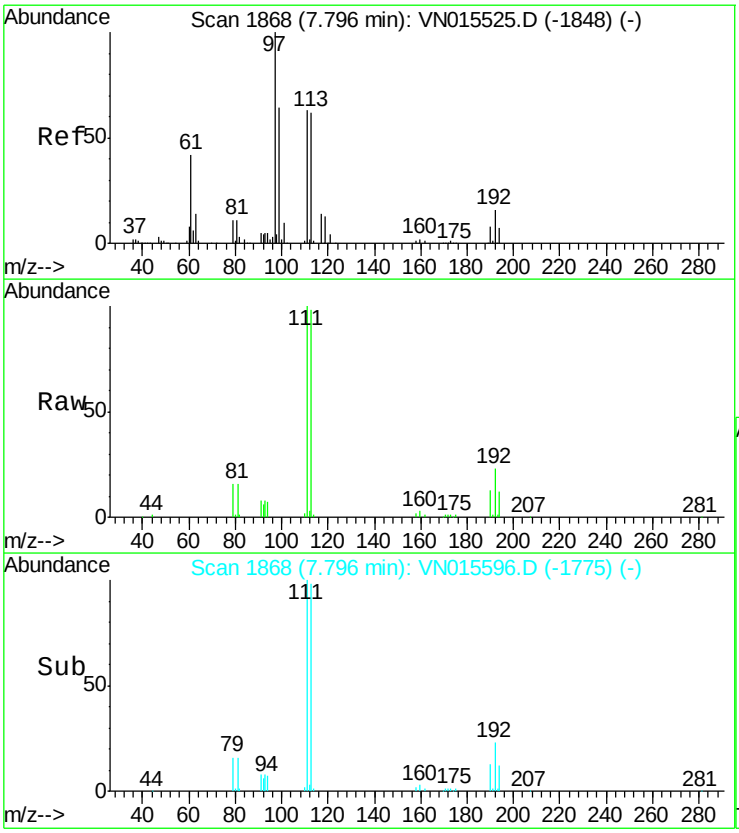


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015596.D
Acq: 22 May 2014 14:23

Tgt Ion:114 Resp: 361177

Ion	Ratio	Lower	Upper
114	100		
63	19.1	0.0	38.6
88	15.2	0.0	32.2

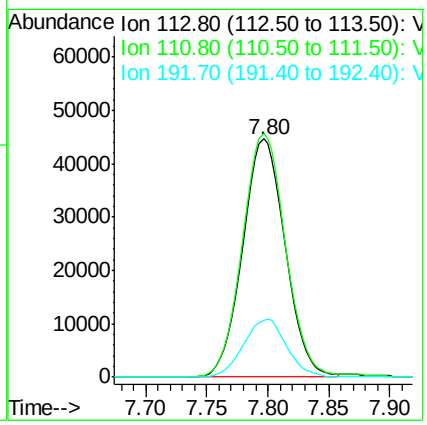




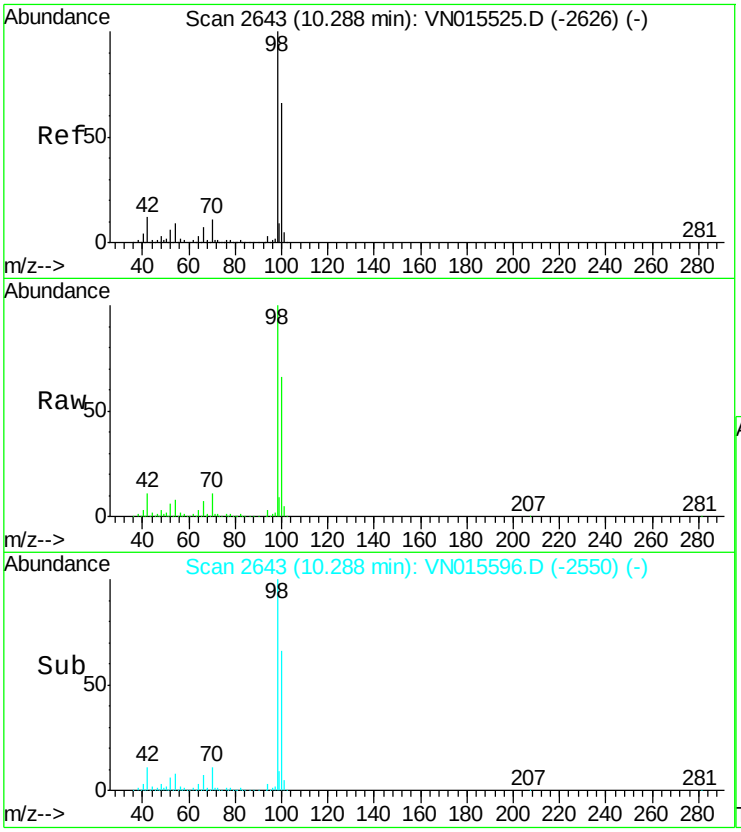
#36
Dibromofluoromethane
Concen: 45.87 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015596.D
Acq: 22 May 2014 14:23

Tgt Ion:113 Resp: 107907

Ion	Ratio	Lower	Upper
113	100		
111	104.2	81.5	122.3
192	24.8	20.0	30.0



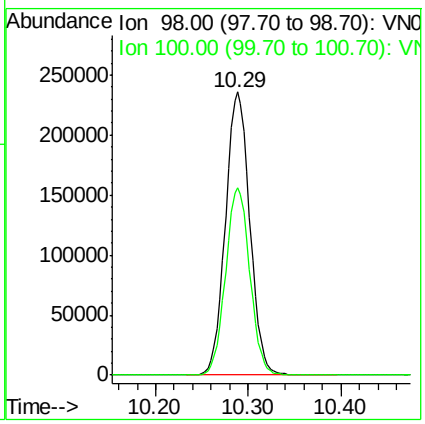
Instrument :
MSVOA_N
ClientSampleId :
VN0522WBL01

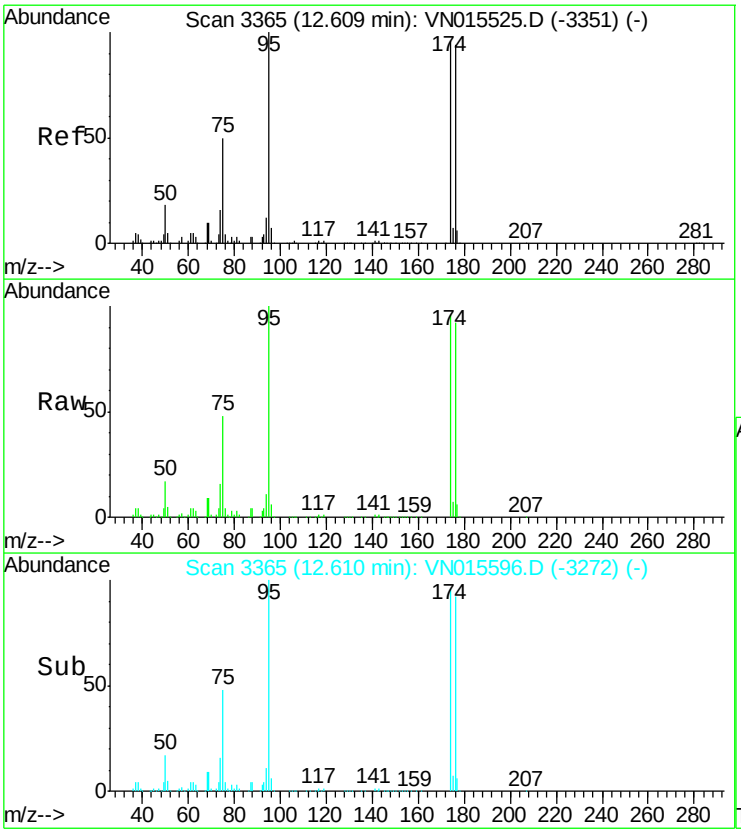


#51
Toluene-d8
Concen: 49.47 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015596.D
Acq: 22 May 2014 14:23

Tgt Ion: 98 Resp: 428722

Ion	Ratio	Lower	Upper
98	100		
100	66.0	52.3	78.5

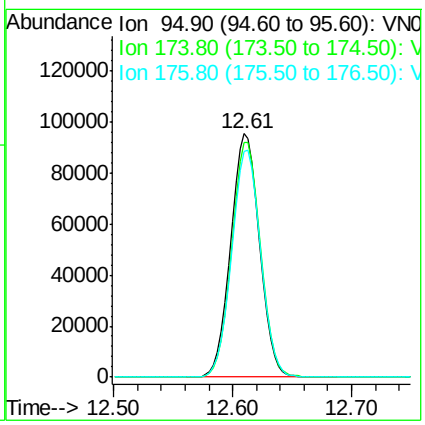




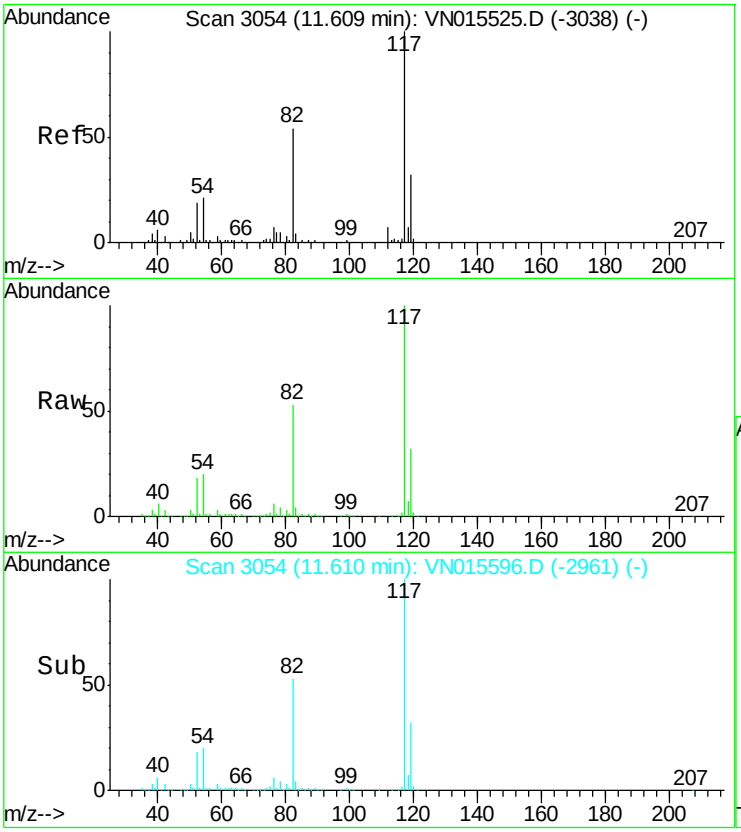
#63
4-Bromofluorobenzene
Concen: 53.92 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015596.D
Acq: 22 May 2014 14:23

Tgt Ion: 95 Resp: 160109

Ion	Ratio	Lower	Upper
95	100		
174	96.5	0.0	191.8
176	93.5	0.0	186.8



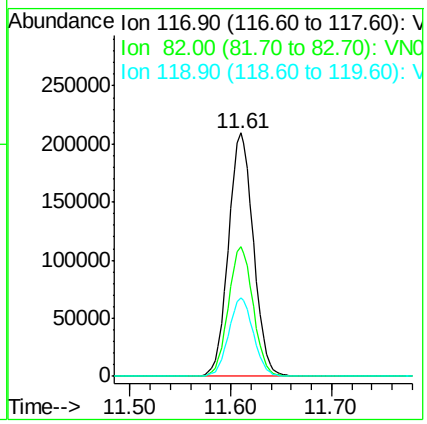
Instrument :
MSVOA_N
ClientSampleId :
VN0522WBL01

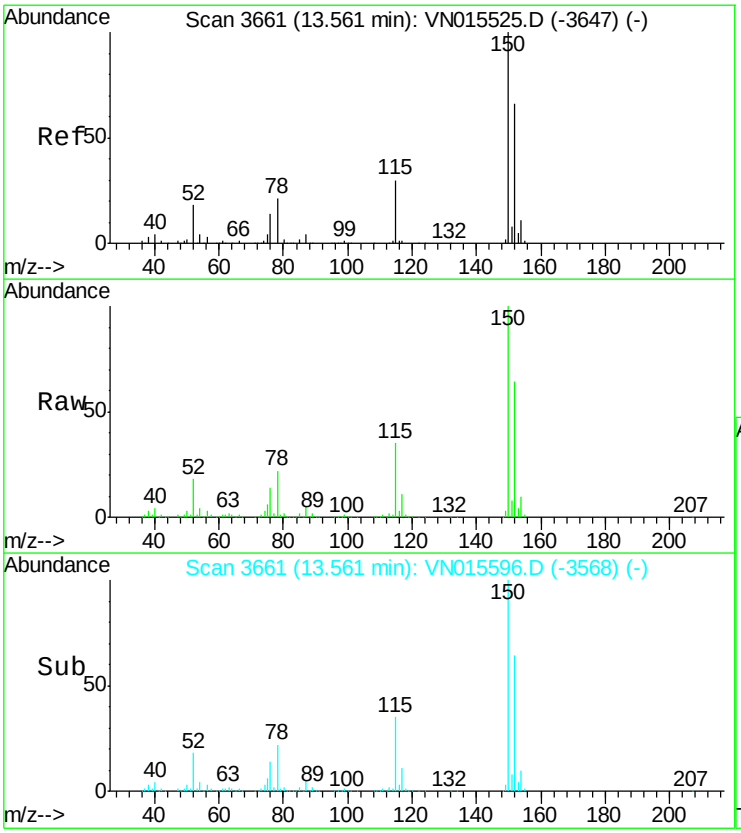


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015596.D
Acq: 22 May 2014 14:23

Tgt Ion:117 Resp: 361218

Ion	Ratio	Lower	Upper
117	100		
82	53.1	43.3	64.9
119	32.2	25.6	38.4

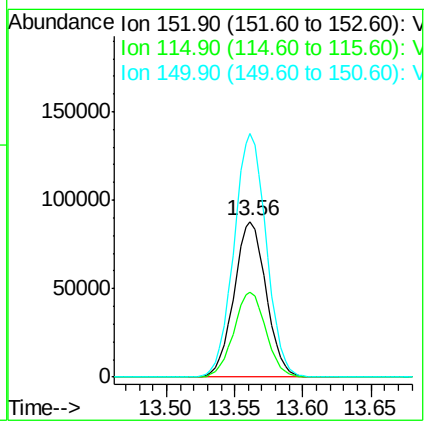




#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015596.D
Acq: 22 May 2014 14:23

Tgt Ion:152 Resp: 143539

Ion	Ratio	Lower	Upper
152	100		
115	54.7	27.2	81.6
150	157.9	0.0	343.6



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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	
Project:	37-14 36th Street	Date Received:	
Client Sample ID:	VN0521WBS02	SDG No.:	F2352
Lab Sample ID:	VN0521WBS02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015575.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	20.8		0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	21.2		0.2	0.2	1	ug/L
67-64-1	Acetone	94.5		0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	20.9		0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	21.1		0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	21.4		0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	20.9		0.2	0.2	1	ug/L
78-93-3	2-Butanone	100		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	19.6		0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	21.4		0.2	0.2	1	ug/L
67-66-3	Chloroform	20.9		0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	20.7		0.2	0.2	1	ug/L
71-43-2	Benzene	20.2		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	19.6		0.2	0.2	1	ug/L
79-01-6	Trichloroethene	19.9		0.2	0.2	1	ug/L
108-88-3	Toluene	20.5		0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	20.9		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	20.2		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	20.5		0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	61.4		0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	19.6		0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	20.4		0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	19.3		0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	19.7		0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	19.9		0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	20.1		0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	20.3		0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	20.1		0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	410		100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47		70 - 120		94%	SPK: 50

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	
Project:	37-14 36th Street	Date Received:	
Client Sample ID:	VN0521WBS02	SDG No.:	F2352
Lab Sample ID:	VN0521WBS02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015575.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	47.5		85 - 115		95%	SPK: 50
2037-26-5	Toluene-d8	47.7		85 - 120		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.2		75 - 120		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	184193	7.87				
540-36-3	1,4-Difluorobenzene	267805	8.79				
3114-55-4	Chlorobenzene-d5	234672	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	109601	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015575.D
Acq On : 22 May 2014 2:15
Operator : MD
Sample : VN0521WBS02
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:16:09 PM

Quant Time: May 22 02:57:42 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	184193	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	267805	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	234672	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	109601	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	99470	46.95	ug/l	0.00
Spiked Amount 50.000			Recovery	=	93.90%	
36) Dibromofluoromethane	7.80	113	82773	47.46	ug/l	0.00
Spiked Amount 50.000			Recovery	=	94.92%	
51) Toluene-d8	10.29	98	306479	47.69	ug/l	0.00
Spiked Amount 50.000			Recovery	=	95.38%	
63) 4-Bromofluorobenzene	12.61	95	106026	48.16	ug/l	0.00
Spiked Amount 50.000			Recovery	=	96.32%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	30217	20.66	ug/l	100
4) Chloromethane	2.06	50	40055	22.77	ug/l	98
5) Vinyl Chloride	2.20	62	35803	20.80	ug/l	99
6) Bromomethane	2.62	94	20873	21.60	ug/l	95
7) Chloroethane	2.77	64	22960	21.17	ug/l	99
8) Trichlorofluoromethane	3.11	101	57155	20.45	ug/l	97
9) Diethyl Ether	3.53	74	21490	20.80	ug/l	98
10) 1,1,2-Trichlorotrifluoroet	3.91	101	32251	20.46	ug/l	98
11) Methyl Iodide	4.11	142	16418	9.76	ug/l	99
12) Tert butyl alcohol	4.96	59	23371	102.06	ug/l	97
13) 1,1-Dichloroethene	3.88	96	31969	21.22	ug/l	95
14) Acrolein	3.74	56	18410	96.24	ug/l	96
15) Allyl chloride	4.51	41	51303	19.46	ug/l	98
16) Acrylonitrile	5.19	53	73818	108.75	ug/l	98
17) Acetone	3.95	43	62792	94.46	ug/l	99
18) Carbon Disulfide	4.24	76	86596	20.39	ug/l	99
19) Methyl Acetate	4.50	43	67421	20.97	ug/l	99
20) Methyl tert-butyl Ether	5.27	73	110623	20.86	ug/l	99
21) Methylene Chloride	4.74	84	36366	21.10	ug/l	98
22) trans-1,2-Dichloroethene	5.28	96	34006	21.40	ug/l	95
23) Diisopropyl ether	6.19	45	114136	21.02	ug/l	98
24) Vinyl Acetate	6.12	43	295248m	109.46	ug/l	
25) 1,1-Dichloroethane	6.08	63	62615	20.94	ug/l	99
26) 2-Butanone	7.06	43	95990	102.35	ug/l	100
27) 2,2-Dichloropropane	7.06	77	41657	15.78	ug/l	99
28) cis-1,2-Dichloroethene	7.06	96	39847	21.36	ug/l	95
29) Bromochloromethane	7.42	49	28229	20.57	ug/l #	95
30) Tetrahydrofuran	7.45	42	67726	107.32	ug/l	99
31) Chloroform	7.58	83	64465	20.88	ug/l	97
32) Cyclohexane	7.89	56	60814	21.85	ug/l	96
33) 1,1,1-Trichloroethane	7.79	97	59949	20.74	ug/l	99
37) 1,1-Dichloropropene	8.01	75	48578	20.34	ug/l	99
38) Ethyl Acetate	7.15	43	43450	20.62	ug/l	98
39) Carbon Tetrachloride	8.00	117	53495	19.59	ug/l	99

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015575.D
Acq On : 22 May 2014 2:15
Operator : MD
Sample : VN0521WBS02
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

Manual Integrations APPROVED
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5/22/2014 4:16:09 PM

Quant Time: May 22 02:57:42 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Methylcyclohexane	9.29	83	60457	19.79 ug/l	98
41) Benzene	8.26	78	144000	20.22 ug/l	99
42) Methacrylonitrile	7.37	41	25234	20.26 ug/l	98
43) 1,2-Dichloroethane	8.33	62	51097	19.64 ug/l	99
44) Isopropyl Acetate	8.36	43	73066	19.27 ug/l	97
45) Trichloroethene	9.04	130	39783	19.94 ug/l	99
46) 1,2-Dichloropropane	9.32	63	37322	20.40 ug/l	97
47) Dibromomethane	9.41	93	24290	20.18 ug/l	97
48) Bromodichloromethane	9.59	83	48916	19.81 ug/l	99
49) Methyl methacrylate	9.39	41	36702	20.08 ug/l	97
50) 1,4-Dioxane	9.40	88	10537	413.25 ug/l	96
52) 4-Methyl-2-Pentanone	10.16	43	210285	100.33 ug/l	99
53) Toluene	10.35	92	92655	20.52 ug/l	100
54) t-1,3-Dichloropropene	10.57	75	48824	19.33 ug/l	99
55) cis-1,3-Dichloropropene	10.03	75	53812	19.14 ug/l	97
56) 1,1,2-Trichloroethane	10.75	97	35402	20.29 ug/l	96
57) Ethyl methacrylate	10.61	69	52797	20.46 ug/l	97
58) 1,3-Dichloropropane	10.90	76	59758	20.44 ug/l	97
59) 2-Chloroethyl Vinyl ether	9.88	63	10906	41.67 ug/l	99
60) 2-Hexanone	10.93	43	139275	101.77 ug/l	98
61) Dibromochloromethane	11.10	129	42040	20.18 ug/l	99
62) 1,2-Dibromoethane	11.21	107	37508	20.80 ug/l	100
65) Tetrachloroethene	10.83	164	38645	20.87 ug/l	99
66) Chlorobenzene	11.64	112	102519	20.19 ug/l	100
67) 1,1,1,2-Tetrachloroethane	11.71	131	38832	20.06 ug/l	99
68) Ethyl Benzene	11.71	91	170481	20.50 ug/l	97
69) m/p-Xylenes	11.82	106	131812	40.73 ug/l	100
70) o-Xylene	12.15	106	65765	20.65 ug/l	99
71) Styrene	12.17	104	103740	20.74 ug/l	99
72) Bromoform	12.33	173	31265	19.28 ug/l #	98
74) Isopropylbenzene	12.46	105	172897	20.47 ug/l	100
75) N-amyl acetate	12.26	43	48996	17.06 ug/l	99
76) 1,1,2,2-Tetrachloroethane	12.70	83	47948	20.76 ug/l	98
77) 1,2,3-Trichloropropane	12.75	75	41632m	20.48 ug/l	
78) Bromobenzene	12.74	156	46401	19.52 ug/l	100
79) n-propylbenzene	12.80	91	183261	19.58 ug/l	100
80) 2-Chlorotoluene	12.89	91	113916	20.58 ug/l	100
81) 1,3,5-Trimethylbenzene	12.94	105	144858	19.42 ug/l	99
82) trans-1,4-Dichloro-2-buten	12.49	75	11678	15.47 ug/l	96
83) 4-Chlorotoluene	12.98	91	110834	19.52 ug/l	99
84) tert-Butylbenzene	13.20	119	128113	20.40 ug/l	99
85) 1,2,4-Trimethylbenzene	13.25	105	144176	19.32 ug/l	100
86) sec-Butylbenzene	13.38	105	168509	19.73 ug/l	100
87) p-Isopropyltoluene	13.50	119	146608	19.85 ug/l	99
88) 1,3-Dichlorobenzene	13.50	146	76982	19.91 ug/l	99
89) 1,4-Dichlorobenzene	13.58	146	76420	20.14 ug/l	99
90) n-Butylbenzene	13.83	91	113285	20.33 ug/l	99
91) Hexachloroethane	14.11	117	26311	18.72 ug/l	100
92) 1,2-Dichlorobenzene	13.87	146	76935	20.07 ug/l	99
93) 1,2-Dibromo-3-Chloropropan	14.49	75	8232	20.06 ug/l	98

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015575.D
Acq On : 22 May 2014 2:15
Operator : MD
Sample : VN0521WBS02
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

Manual Integrations APPROVED
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5/22/2014 4:16:09 PM

Quant Time: May 22 02:57:42 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
94) 1,2,4-Trichlorobenzene	15.15	180	39085	20.34 ug/l	99
95) Hexachlorobutadiene	15.26	225	27937	19.90 ug/l	97
96) Naphthalene	15.39	128	84023	19.09 ug/l	99
97) 1,2,3-Trichlorobenzene	15.58	180	39540	20.99 ug/l	99

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

Quantitation Report (QT Reviewed)

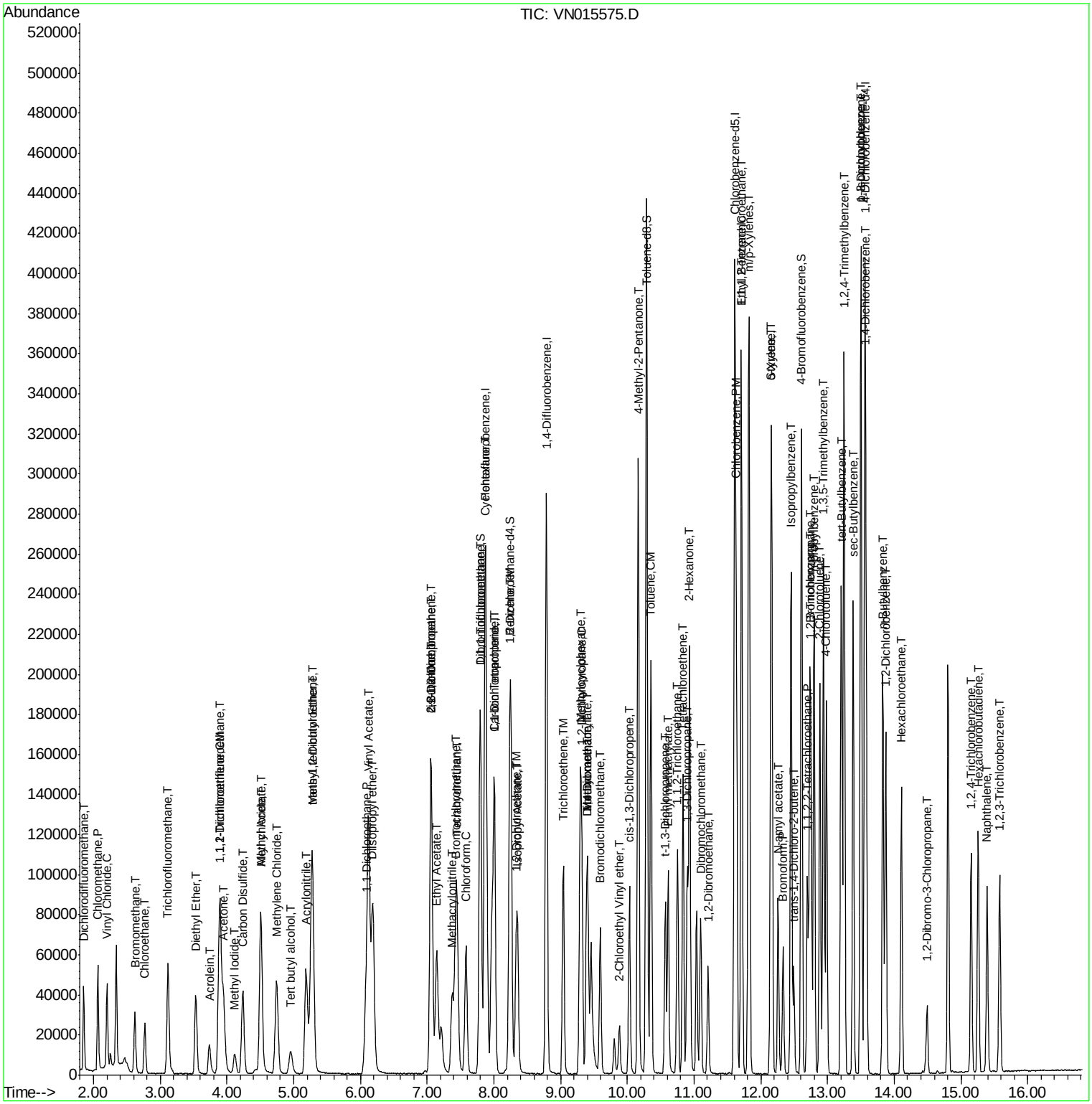
Sample Results: **VN015575.D**

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015575.D
Acq On : 22 May 2014 2:15
Operator : MD
Sample : VN0521WBS02
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 22 02:57:42 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

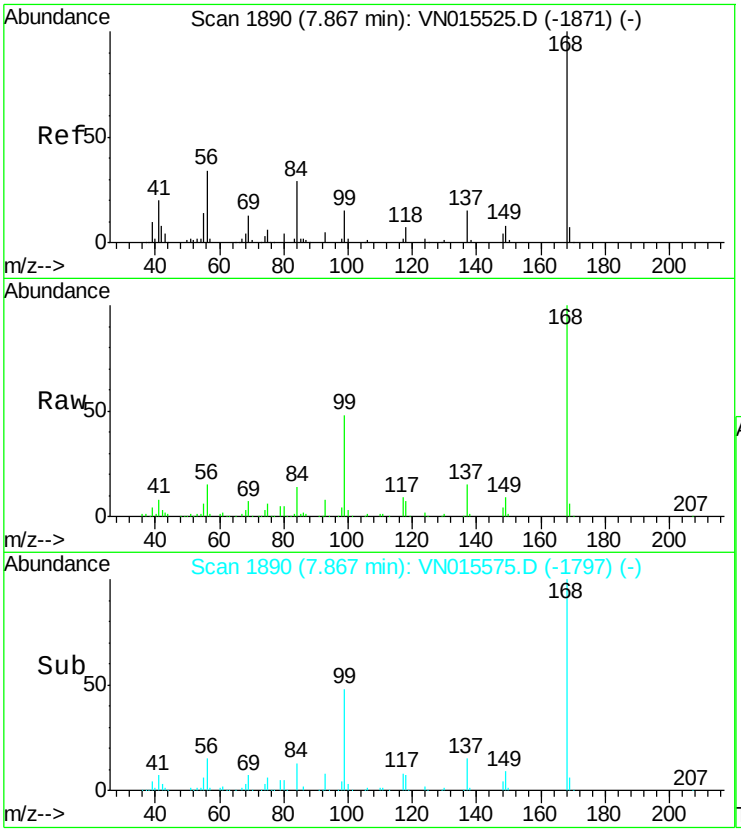
Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:16:09 PM



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

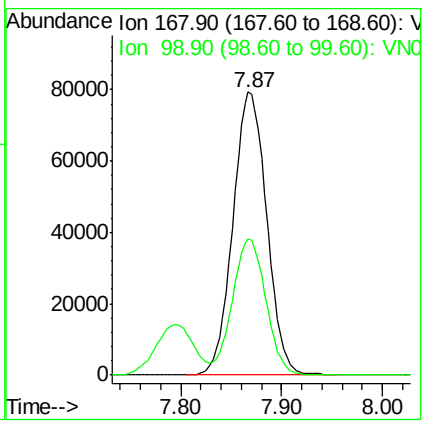
Manual Integrations APPROVED
MMDadoda
5/22/2014 4:16:09 PM

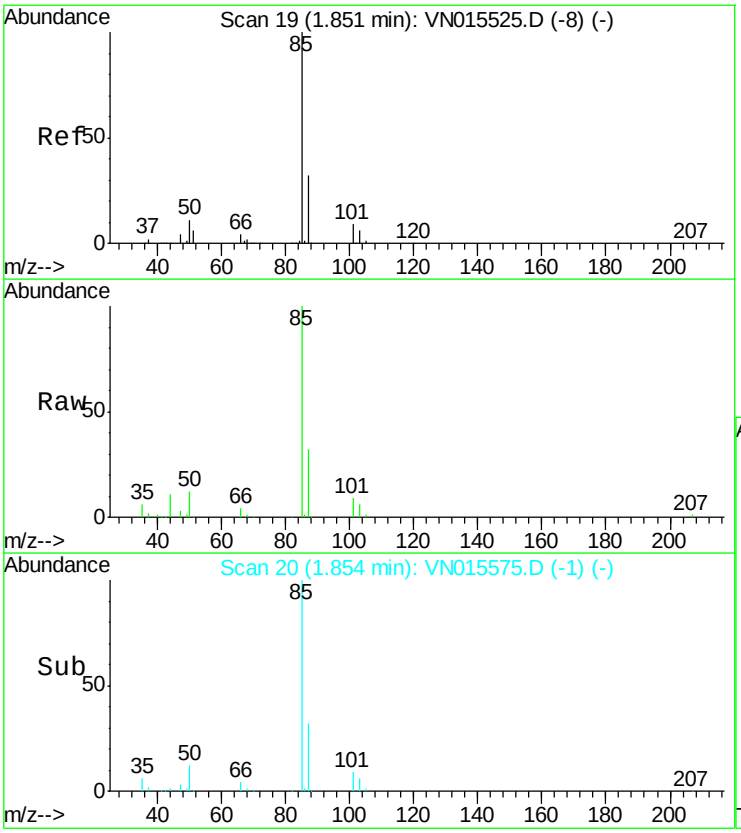


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:168 Resp: 184193

Ion	Ratio	Lower	Upper
168	100		
99	48.0	39.0	58.4

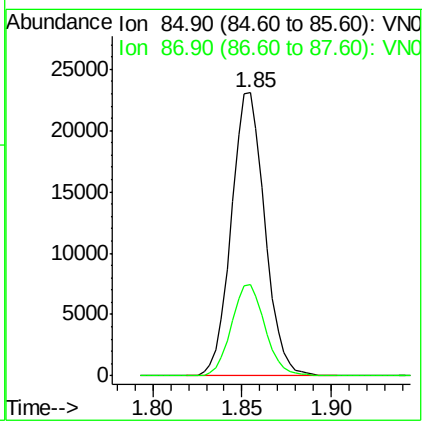




#2
Dichlorodifluoromethane
Concen: 20.66 ug/l
RT: 1.85 min Scan# 20
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

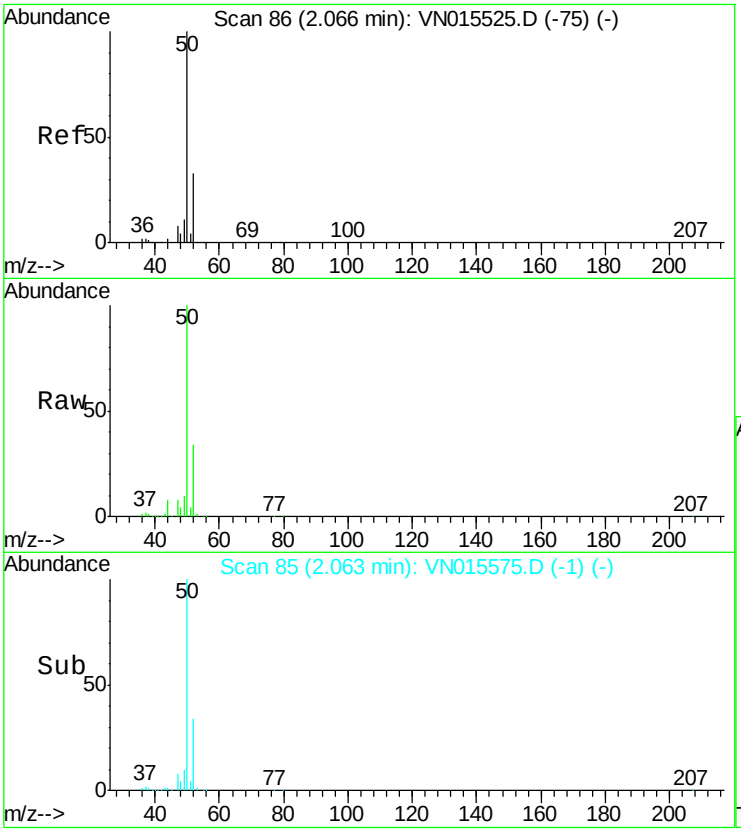
Tgt Ion: 85 Resp: 30217

Ion	Ratio	Lower	Upper
85	100		
87	32.3	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

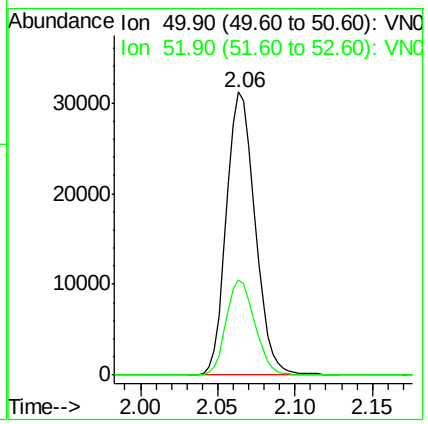
Manual Integrations APPROVED
MMDadoda
5/22/2014 4:16:09 PM

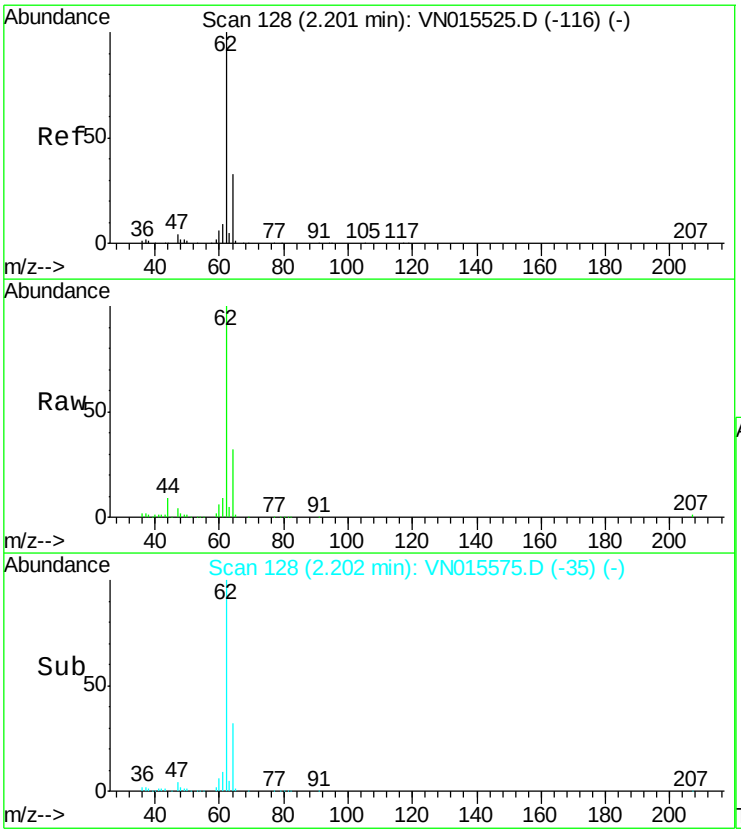


#4
Chloromethane
Concen: 22.77 ug/l
RT: 2.06 min Scan# 85
Delta R.T. -0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 50 Resp: 40055

Ion	Ratio	Lower	Upper
50	100		
52	33.9	26.2	39.2

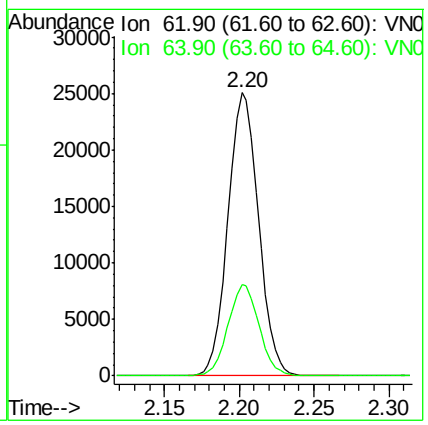




#5
Vinyl Chloride
Concen: 20.80 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

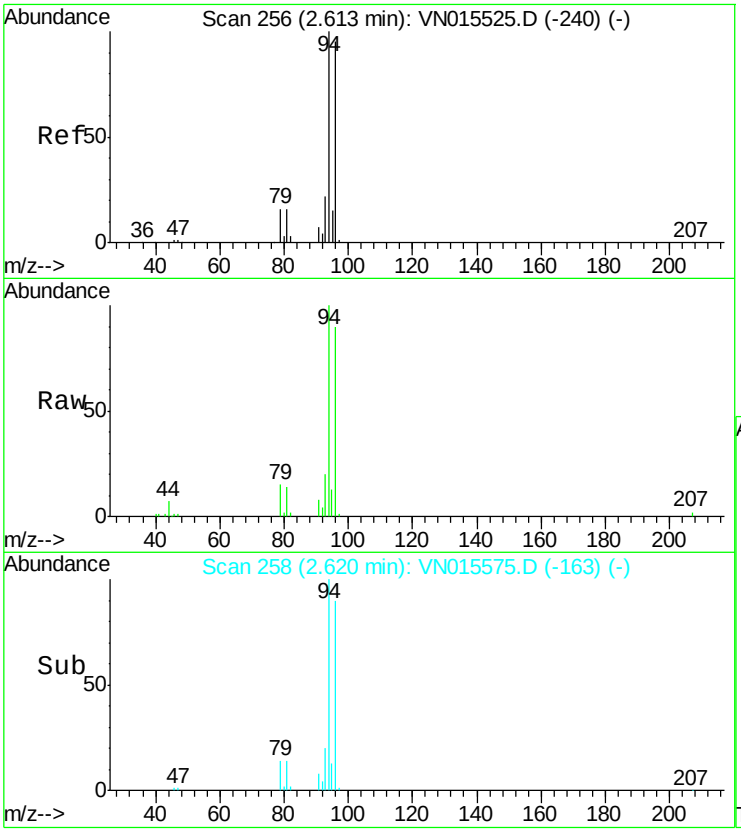
Tgt Ion: 62 Resp: 35803

Ion	Ratio	Lower	Upper
62	100		
64	32.4	26.2	39.4



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

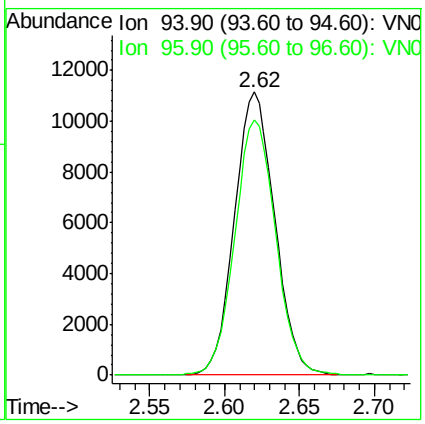
Manual Integrations APPROVED
MMDadoda
5/22/2014 4:16:09 PM

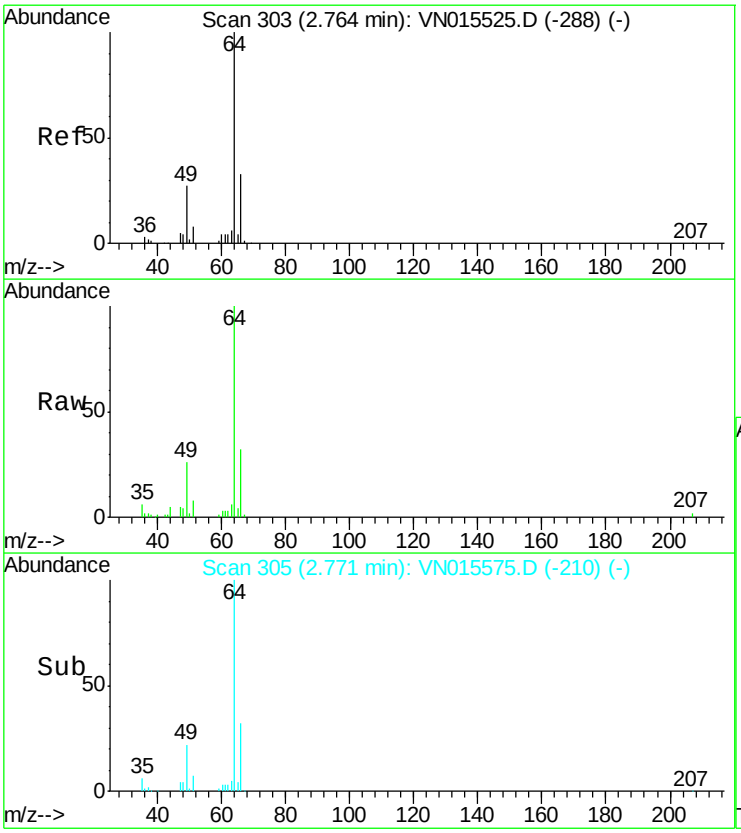


#6
Bromomethane
Concen: 21.60 ug/l
RT: 2.62 min Scan# 258
Delta R.T. 0.01 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 94 Resp: 20873

Ion	Ratio	Lower	Upper
94	100		
96	89.9	75.8	113.6

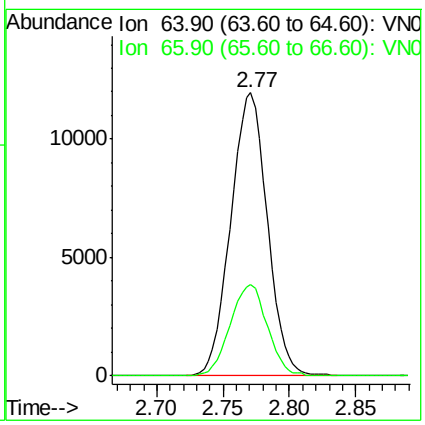




#7
Chloroethane
Concen: 21.17 ug/l
RT: 2.77 min Scan# 305
Delta R.T. 0.01 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

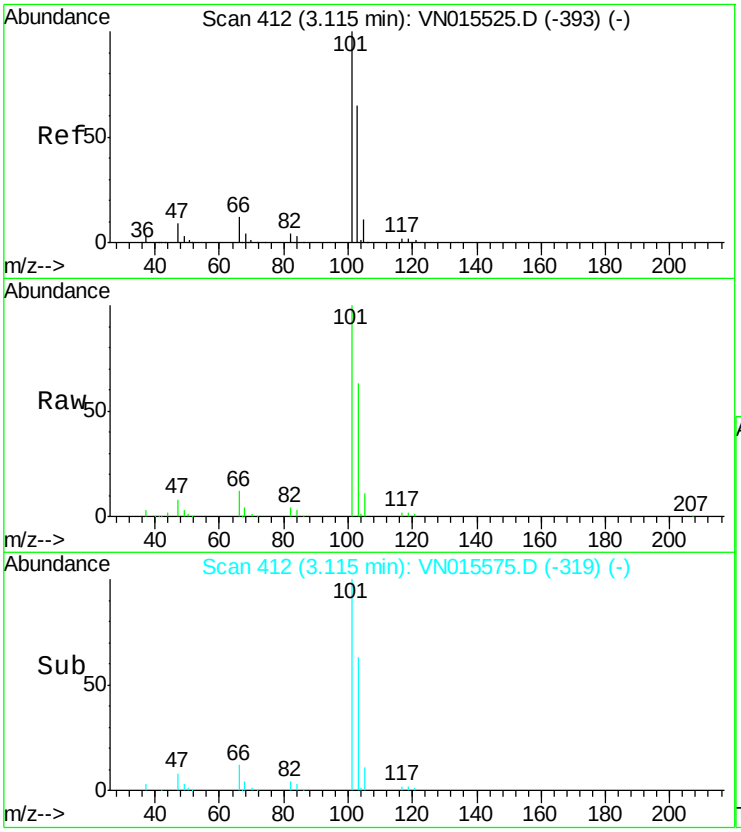
Tgt Ion: 64 Resp: 22960

Ion	Ratio	Lower	Upper
64	100		
66	32.2	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

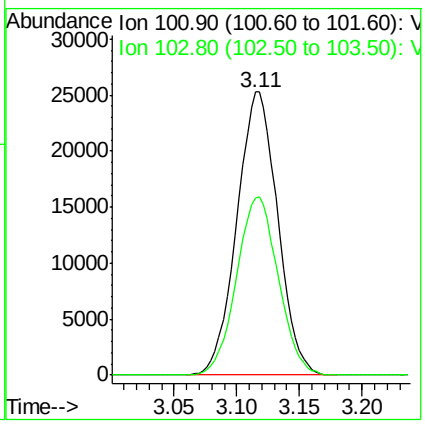
Manual Integrations APPROVED
MMDadoda
5/22/2014 4:16:09 PM

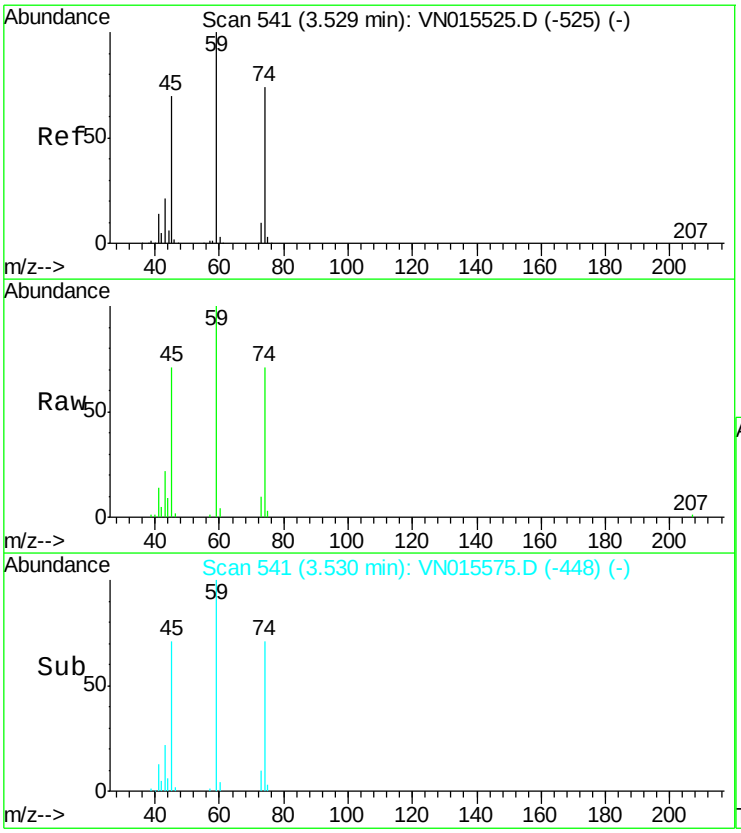


#8
Trichlorofluoromethane
Concen: 20.45 ug/l
RT: 3.11 min Scan# 412
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:101 Resp: 57155

Ion	Ratio	Lower	Upper
101	100		
103	62.8	52.1	78.1

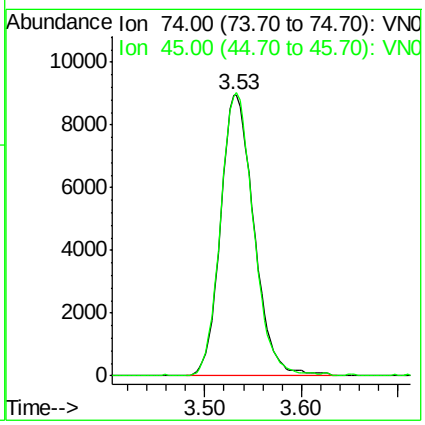


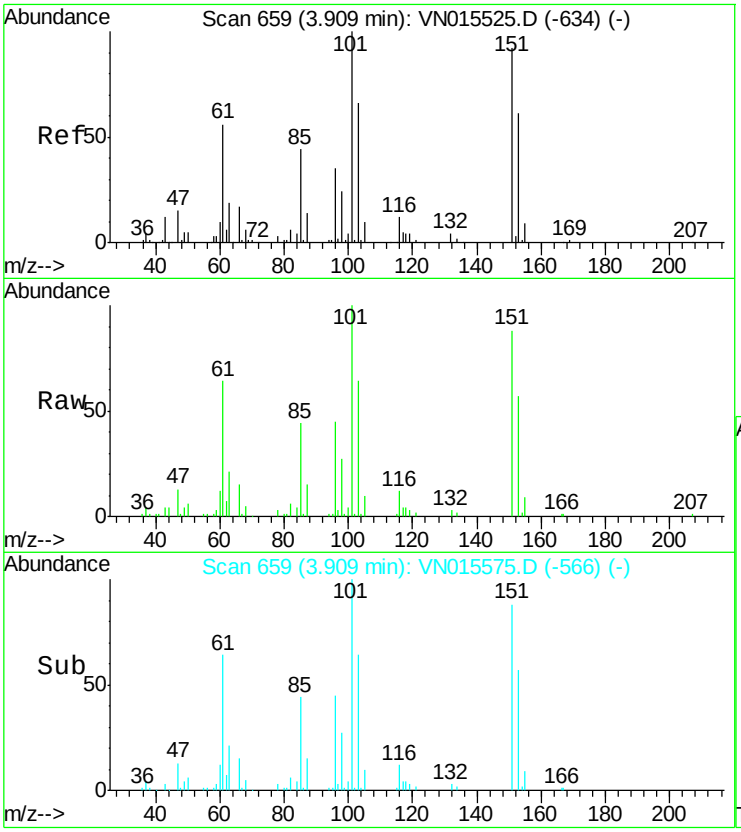


#9
Diethyl Ether
Concen: 20.80 ug/l
RT: 3.53 min Scan# 541
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 74 Resp: 21490

Ion	Ratio	Lower	Upper
74	100		
45	99.5	48.9	146.8





#10
1,1,2-Trichlorotrifluoroethane
Concen: 20.46 ug/l
RT: 3.91 min Scan# 659
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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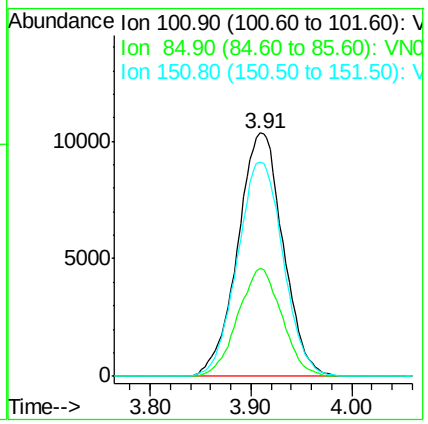
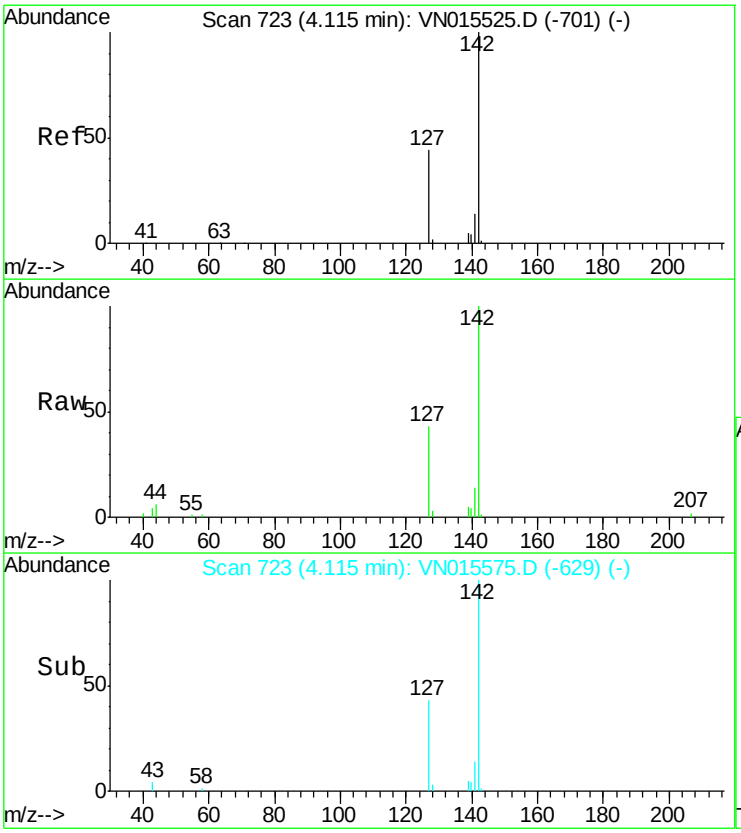
Tgt Ion:101 Resp: 32251

Ion	Ratio	Lower	Upper
101	100		
85	43.0	34.5	51.7
151	89.0	72.9	109.3

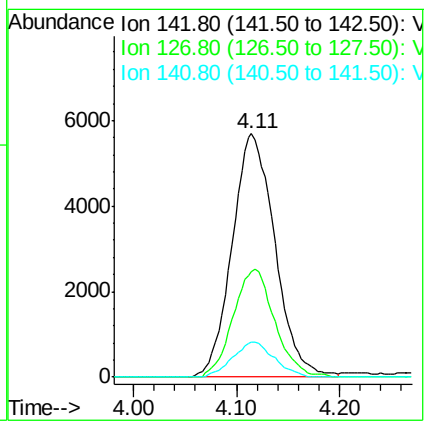




#11
Methyl Iodide
Concen: 9.76 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:142 Resp: 16418

Ion	Ratio	Lower	Upper
142	100		
127	43.0	34.7	52.1
141	14.1	11.4	17.0



Instrument :
MSVOA_N
ClientSampleId :
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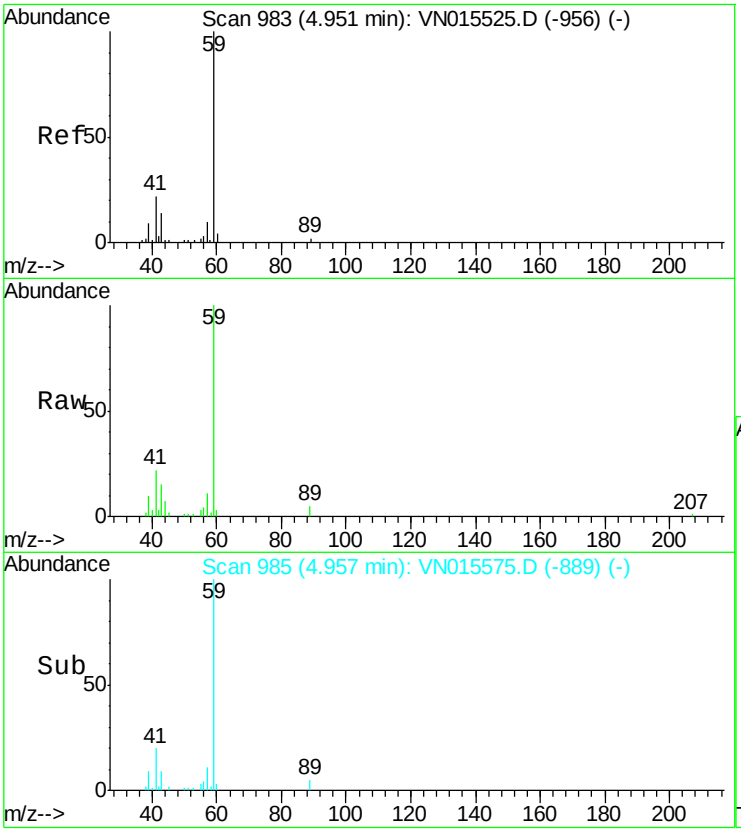
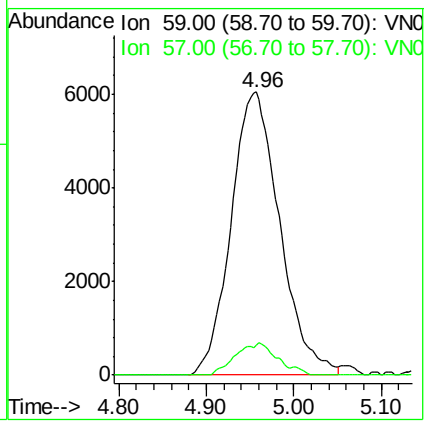
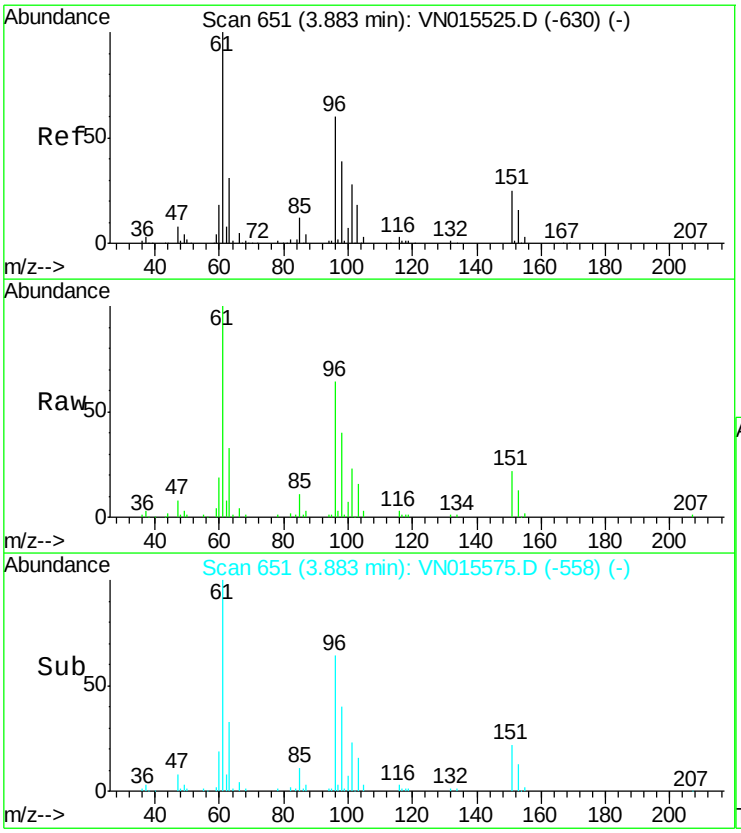


#12
Tert butyl alcohol
Concen: 102.06 ug/l
RT: 4.96 min Scan# 985
Delta R.T. 0.01 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 59 Resp: 23371

Ion	Ratio	Lower	Upper
59	100		
57	9.2	8.4	12.6

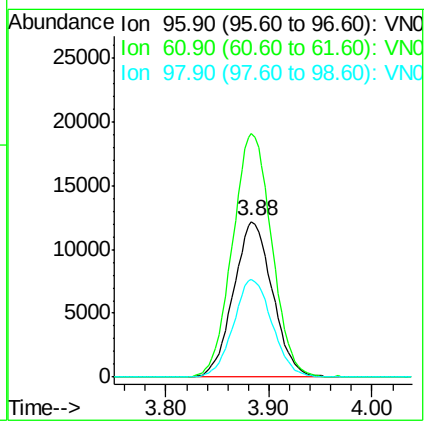




#13
1,1-Dichloroethene
Concen: 21.22 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 96 Resp: 31969

Ion	Ratio	Lower	Upper
96	100		
61	156.6	132.3	198.5
98	63.2	51.8	77.6



Instrument :
MSVOA_N
ClientSampleId :
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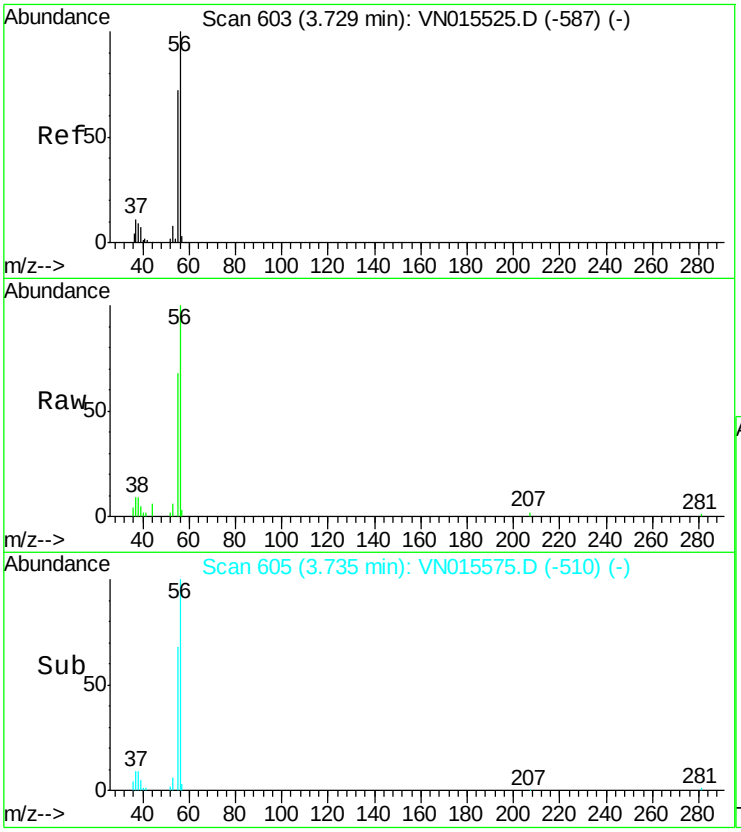
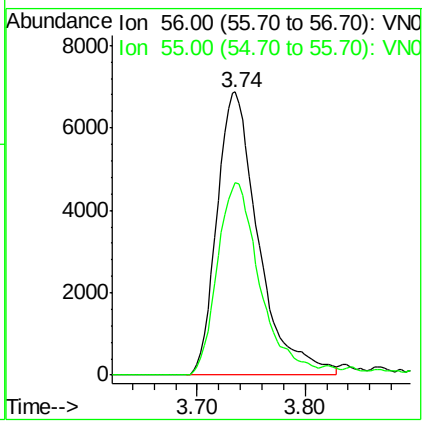
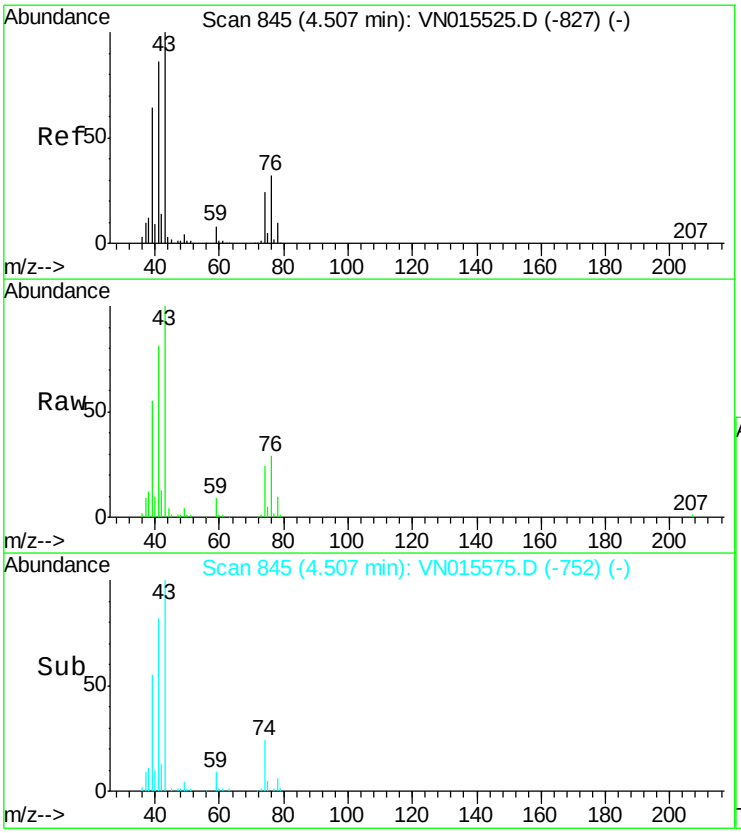


#14
Acrolein
Concen: 96.24 ug/l
RT: 3.74 min Scan# 605
Delta R.T. 0.01 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 56 Resp: 18410

Ion	Ratio	Lower	Upper
56	100		
55	69.3	57.9	86.9

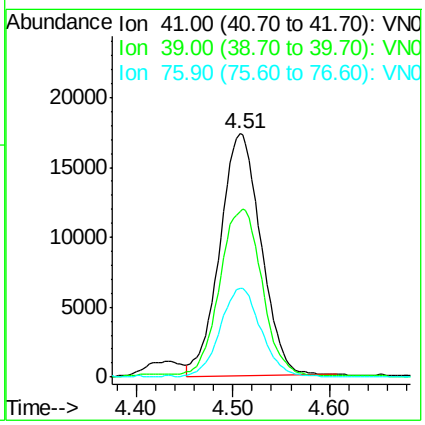




#15
Allyl chloride
Concen: 19.46 ug/l
RT: 4.51 min Scan# 845
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 41 Resp: 51303

Ion	Ratio	Lower	Upper
41	100		
39	70.1	57.4	86.2
76	36.6	28.5	42.7



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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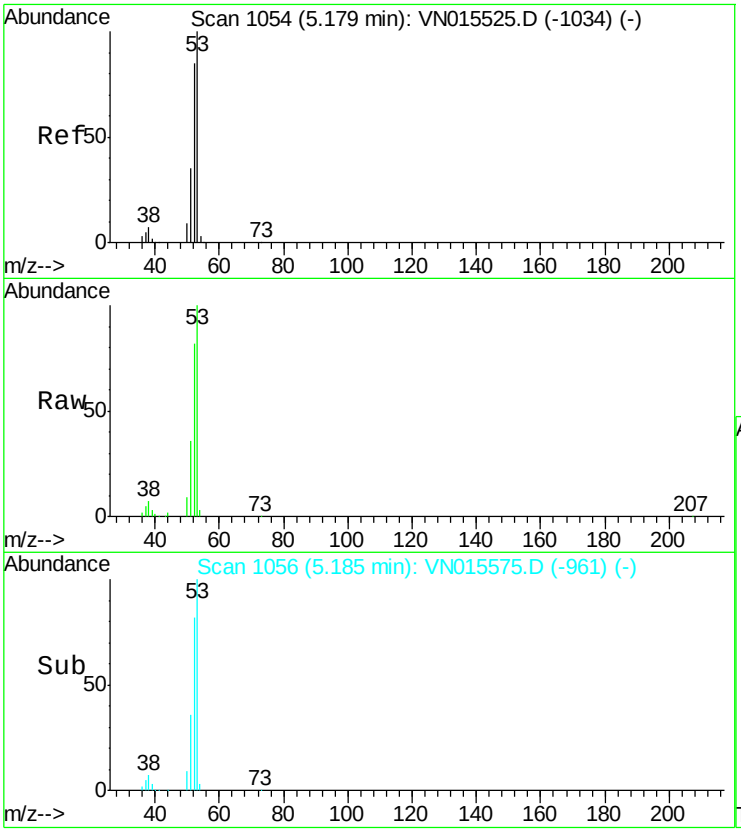
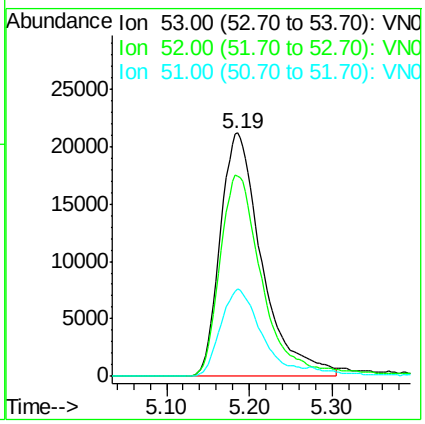
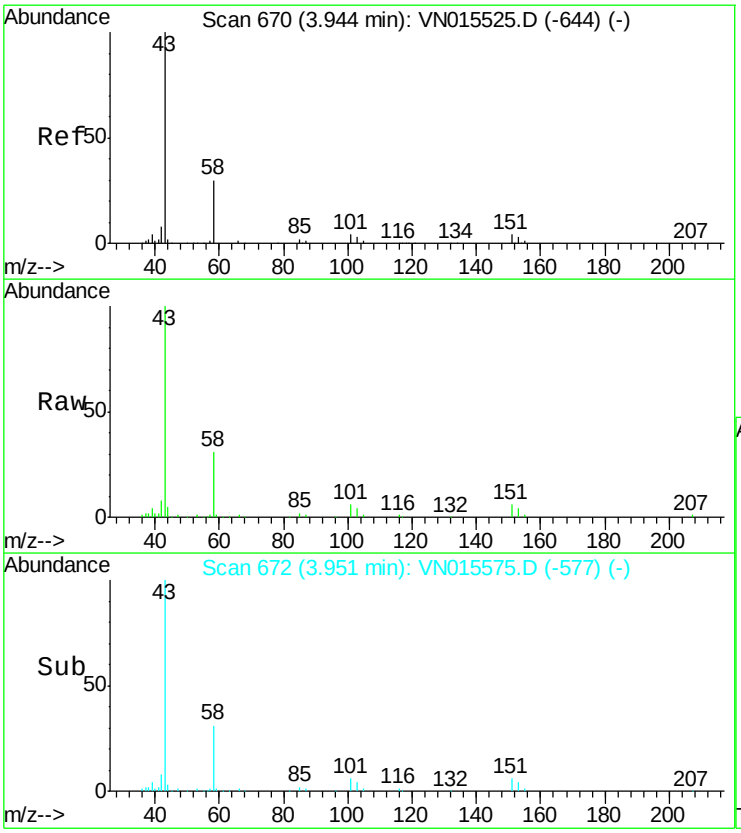


#16
Acrylonitrile
Concen: 108.75 ug/l
RT: 5.19 min Scan# 1056
Delta R.T. 0.01 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 53 Resp: 73818

Ion	Ratio	Lower	Upper
53	100		
52	84.4	65.7	98.5
51	35.1	29.1	43.7

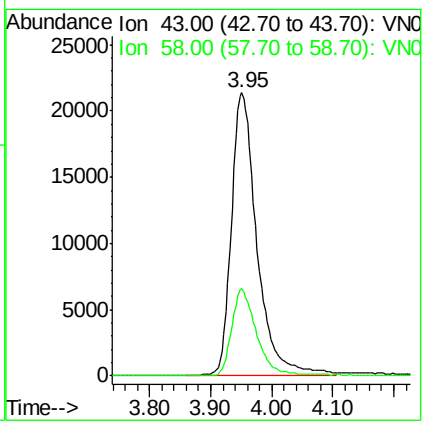




#17
Acetone
Concen: 94.46 ug/l
RT: 3.95 min Scan# 672
Delta R.T. 0.01 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 62792

Ion	Ratio	Lower	Upper
43	100		
58	30.8	24.2	36.2



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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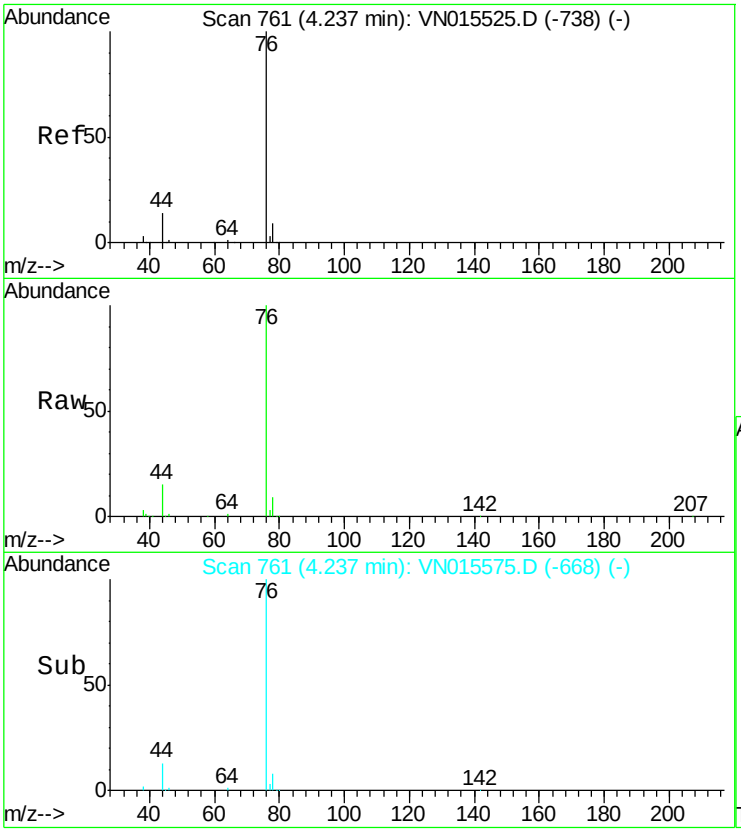
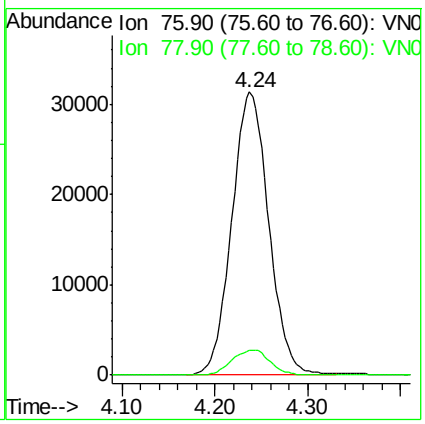
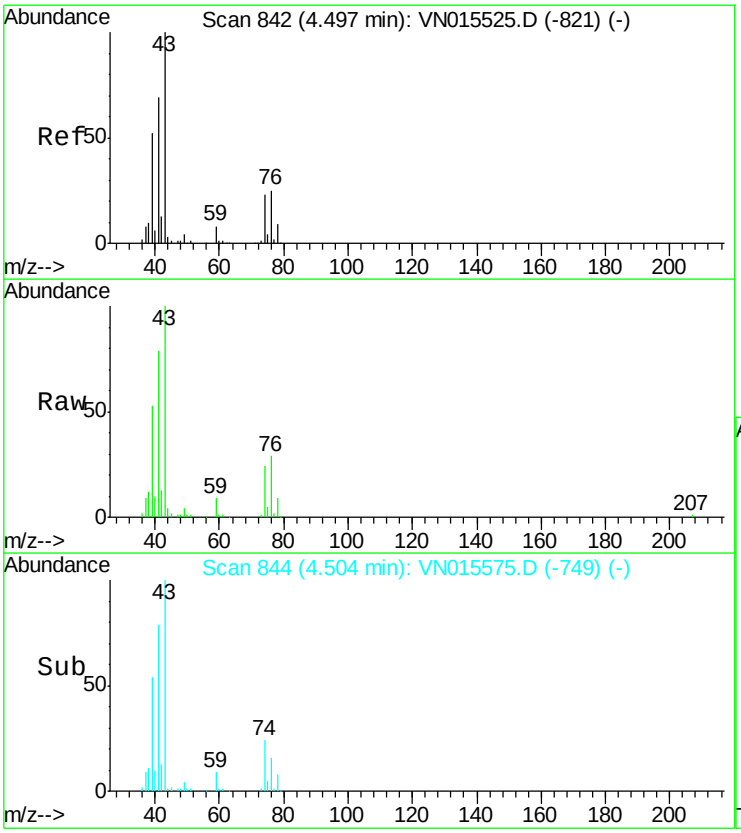


#18
Carbon Disulfide
Concen: 20.39 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 76 Resp: 86596

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.5	11.3

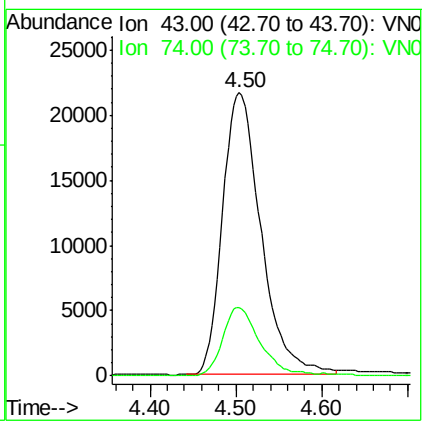




#19
Methyl Acetate
Concen: 20.97 ug/l
RT: 4.50 min Scan# 844
Delta R.T. 0.01 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 67421

Ion	Ratio	Lower	Upper
43	100		
74	23.6	18.5	27.7



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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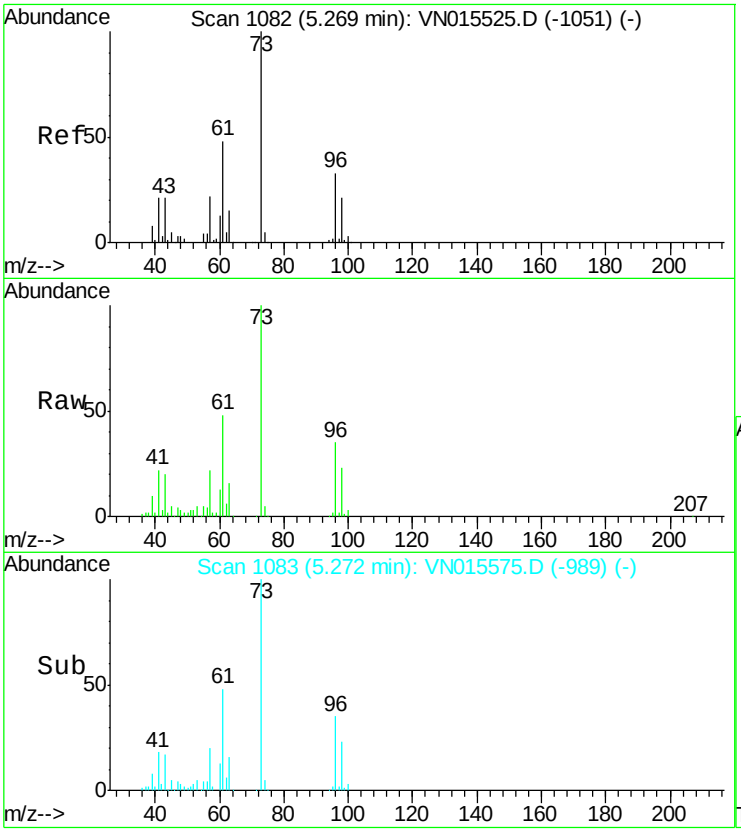
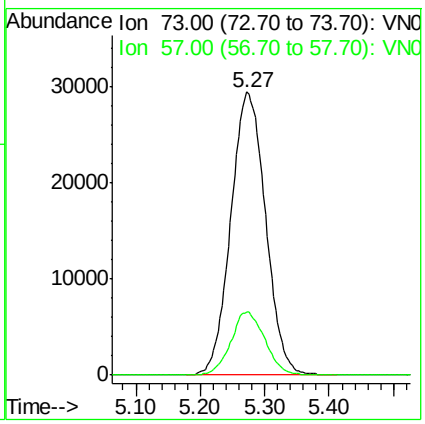
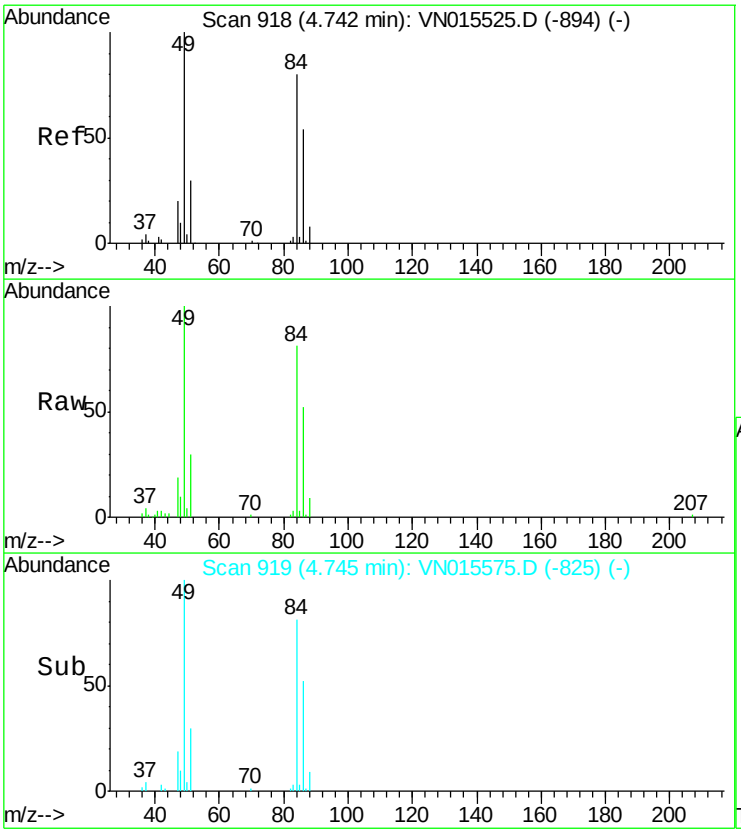


#20
Methyl tert-butyl Ether
Concen: 20.86 ug/l
RT: 5.27 min Scan# 1083
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 73 Resp: 110623

Ion	Ratio	Lower	Upper
73	100		
57	22.3	17.3	25.9

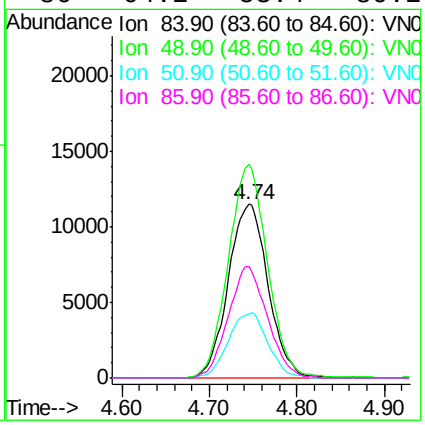




#21
Methylene Chloride
Concen: 21.10 ug/l
RT: 4.74 min Scan# 919
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 84 Resp: 36366

Ion	Ratio	Lower	Upper
84	100		
49	123.0	99.8	149.6
51	36.8	30.2	45.2
86	64.2	53.4	80.2



Instrument :
MSVOA_N
ClientSampleId :
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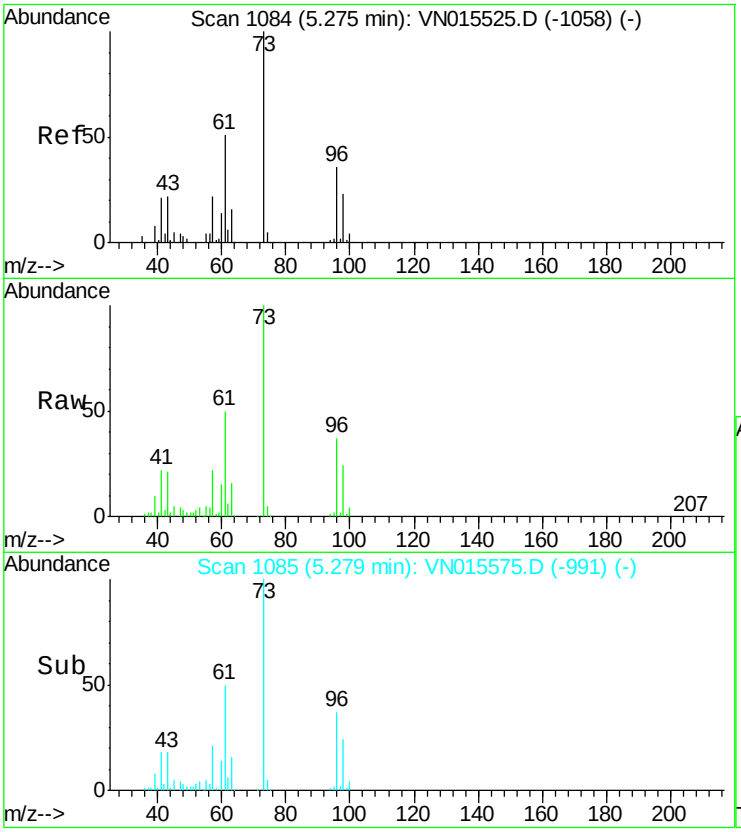
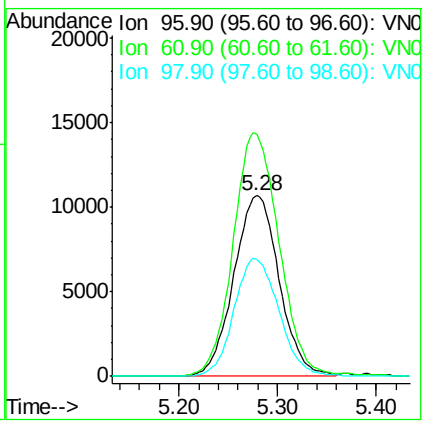
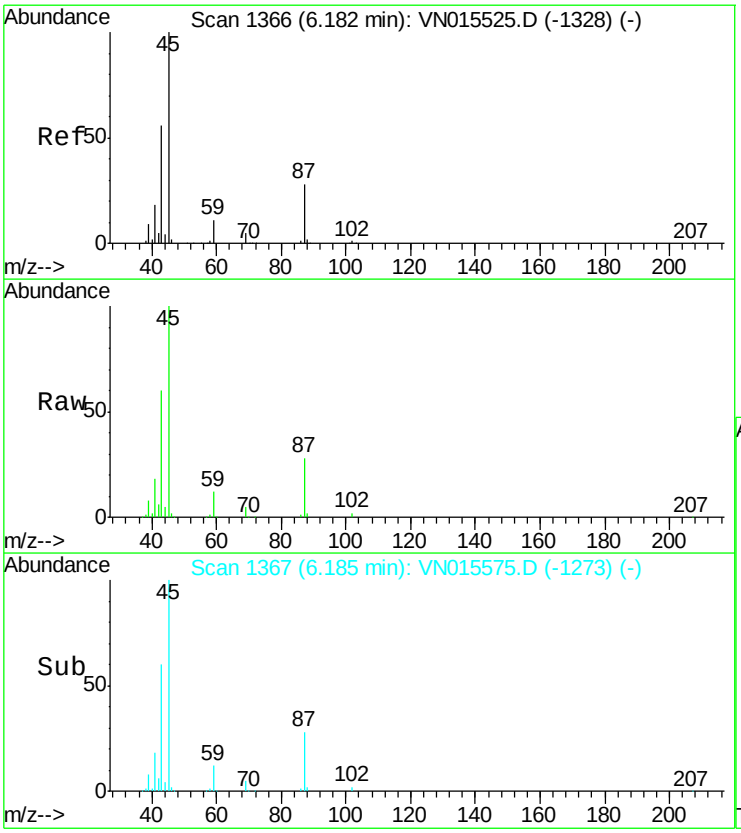


#22
trans-1,2-Dichloroethene
Concen: 21.40 ug/l
RT: 5.28 min Scan# 1085
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 96 Resp: 34006

Ion	Ratio	Lower	Upper
96	100		
61	133.7	113.3	169.9
98	64.7	50.4	75.6

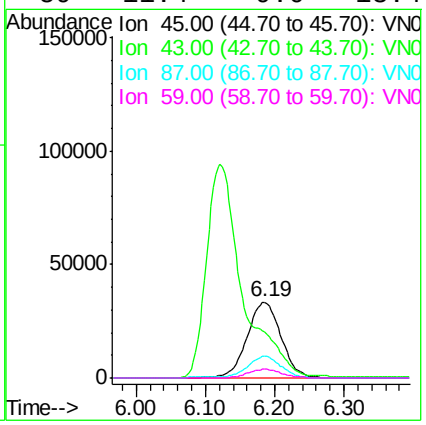




#23
Diisopropyl ether
Concen: 21.02 ug/l
RT: 6.19 min Scan# 1367
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 45 Resp: 114136

Ion	Ratio	Lower	Upper
45	100		
43	57.9	44.6	67.0
87	28.1	22.3	33.5
59	11.4	9.0	13.4



Instrument :
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ClientSampleId :
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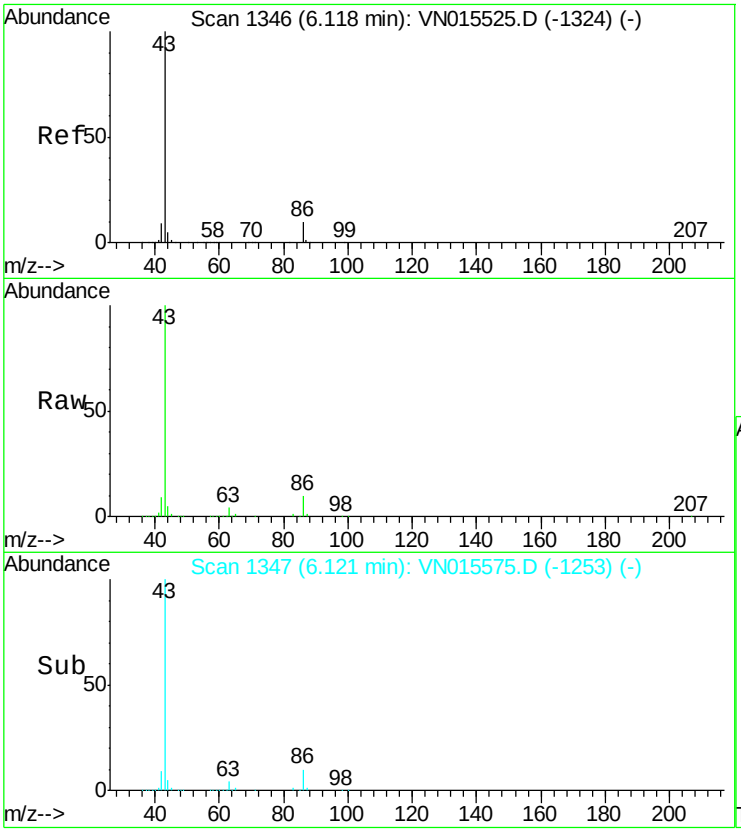
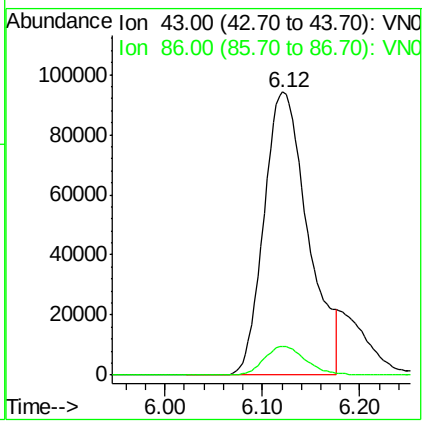
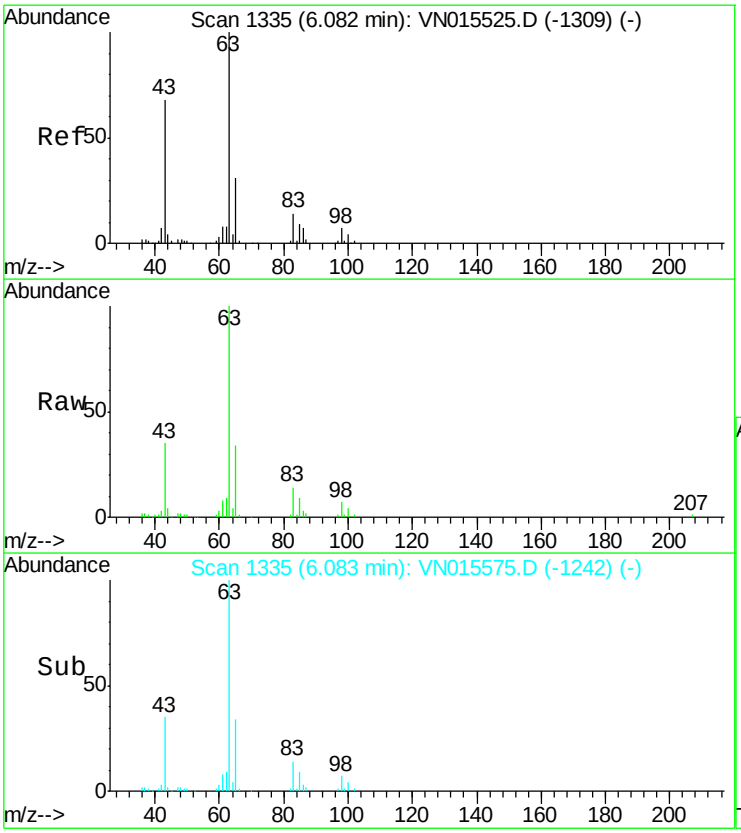


#24
Vinyl Acetate
Concen: 109.46 ug/l m
RT: 6.12 min Scan# 1347
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 295248

Ion	Ratio	Lower	Upper
43	100		
86	10.3	7.9	11.9

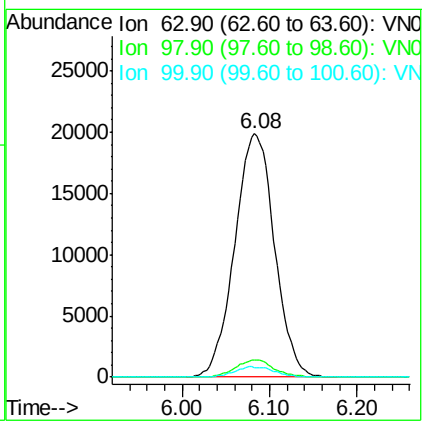


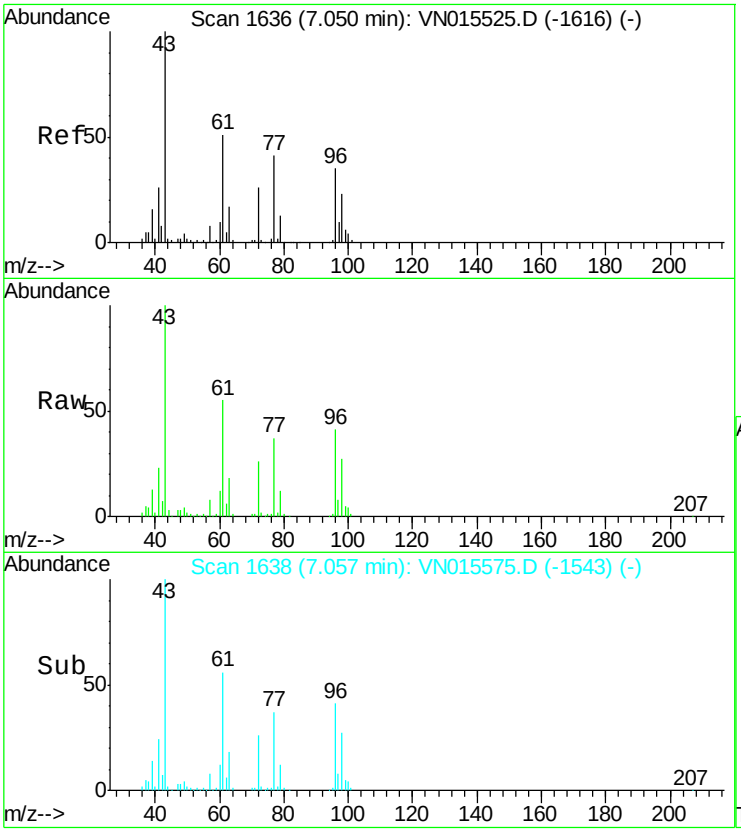


#25
1,1-Dichloroethane
Concen: 20.94 ug/l
RT: 6.08 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 63 Resp: 62615

Ion	Ratio	Lower	Upper
63	100		
98	7.1	3.3	9.9
100	3.8	2.1	6.3





#26
2-Butanone
Concen: 102.35 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.01 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 95990

Ion	Ratio	Lower	Upper
43	100		
72	25.7	20.7	31.1

Instrument :
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ClientSampleId :
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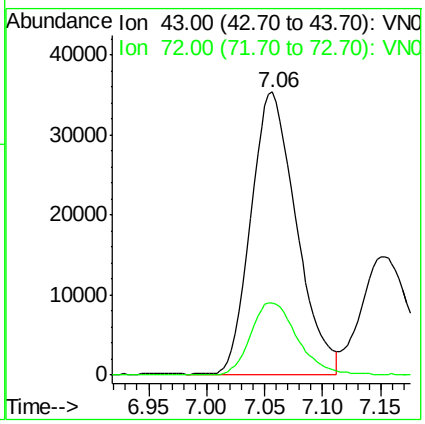
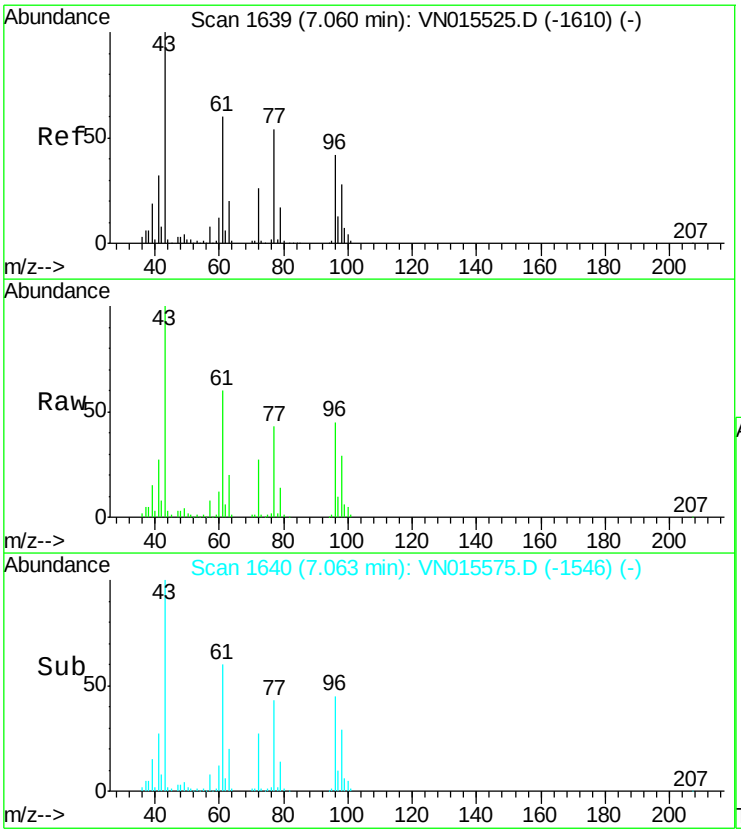
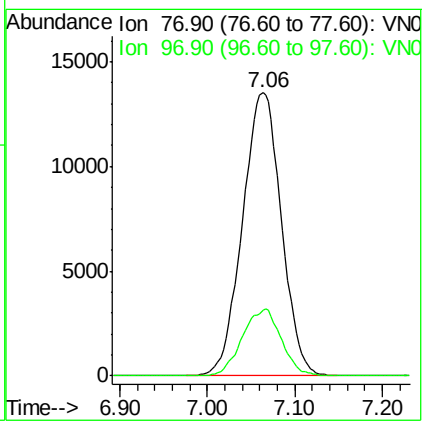


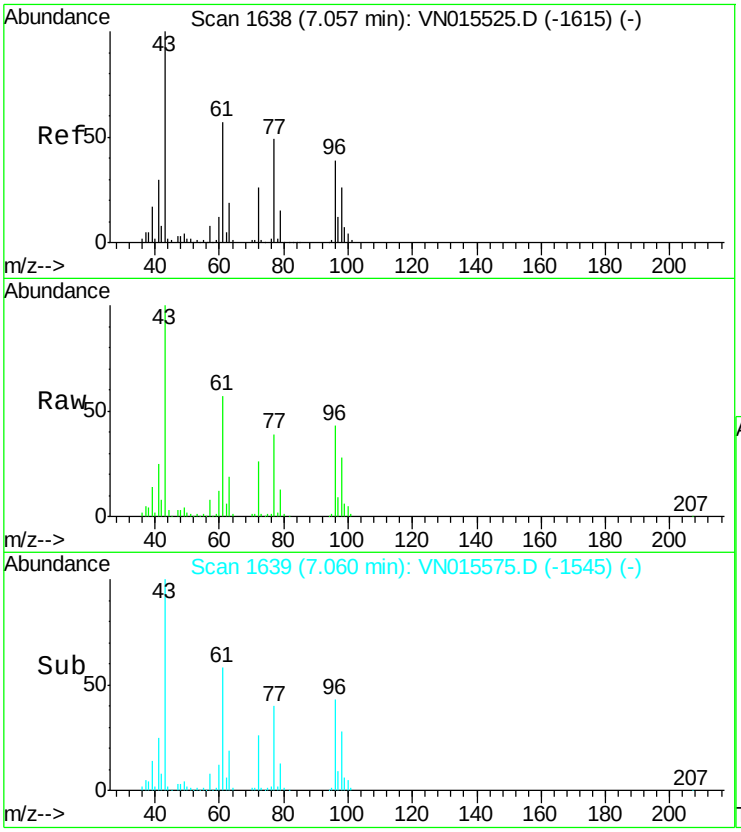


#27
2,2-Dichloropropane
Concen: 15.78 ug/l
RT: 7.06 min Scan# 1640
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 77 Resp: 41657

Ion	Ratio	Lower	Upper
77	100		
97	23.7	11.6	34.7





#28
cis-1,2-Dichloroethene
Concen: 21.36 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 96 Resp: 39847

Ion	Ratio	Lower	Upper
96	100		
61	137.9	0.0	292.0
98	64.4	0.0	129.4

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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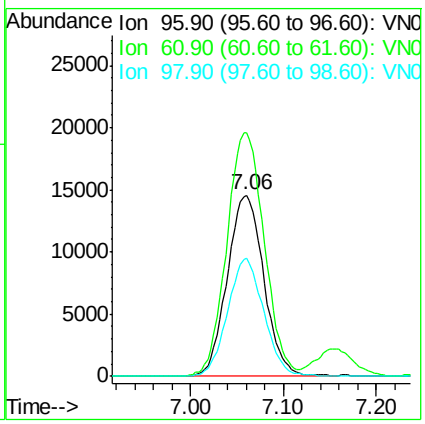
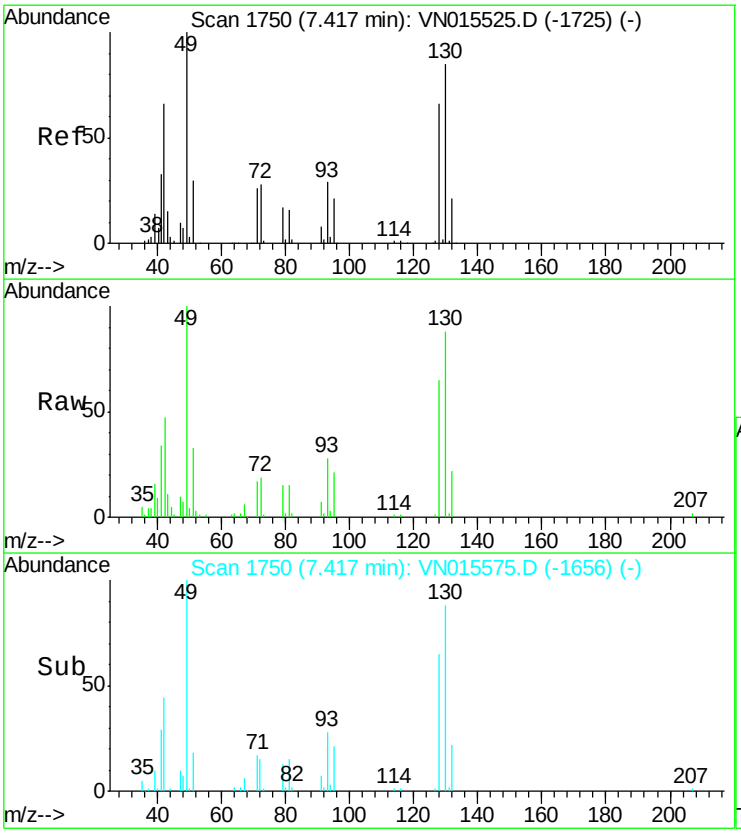
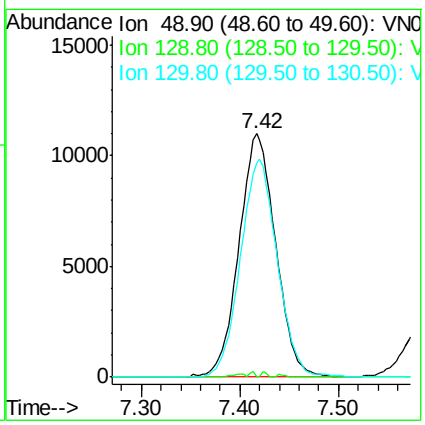




#29
Bromochloromethane
Concen: 20.57 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 49 Resp: 28229

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.2
130	89.9	68.6	102.8



Instrument :
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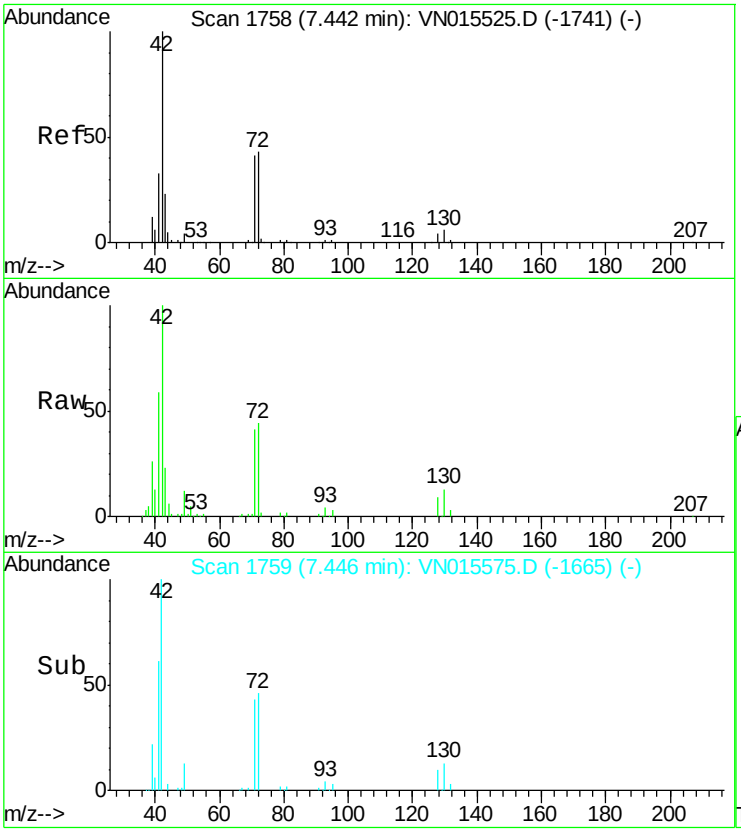
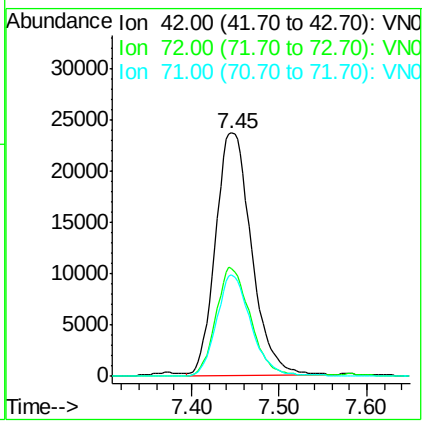
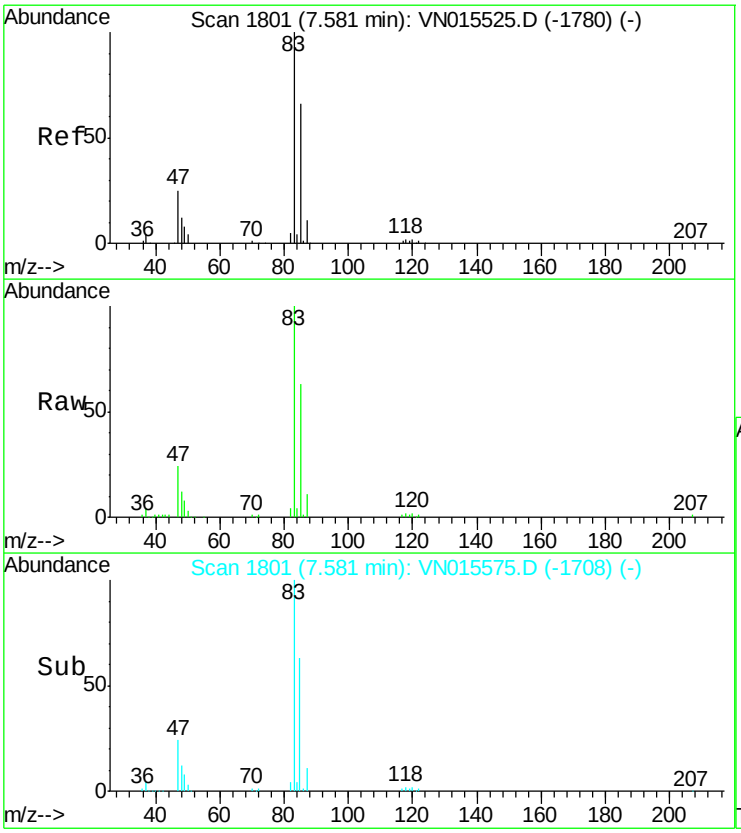


#30
Tetrahydrofuran
Concen: 107.32 ug/l
RT: 7.45 min Scan# 1759
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 42 Resp: 67726

Ion	Ratio	Lower	Upper
42	100		
72	43.0	34.2	51.2
71	40.1	32.5	48.7

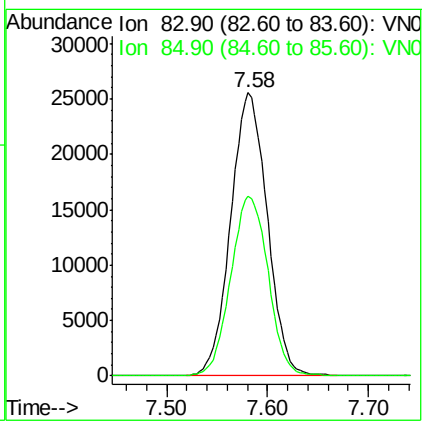


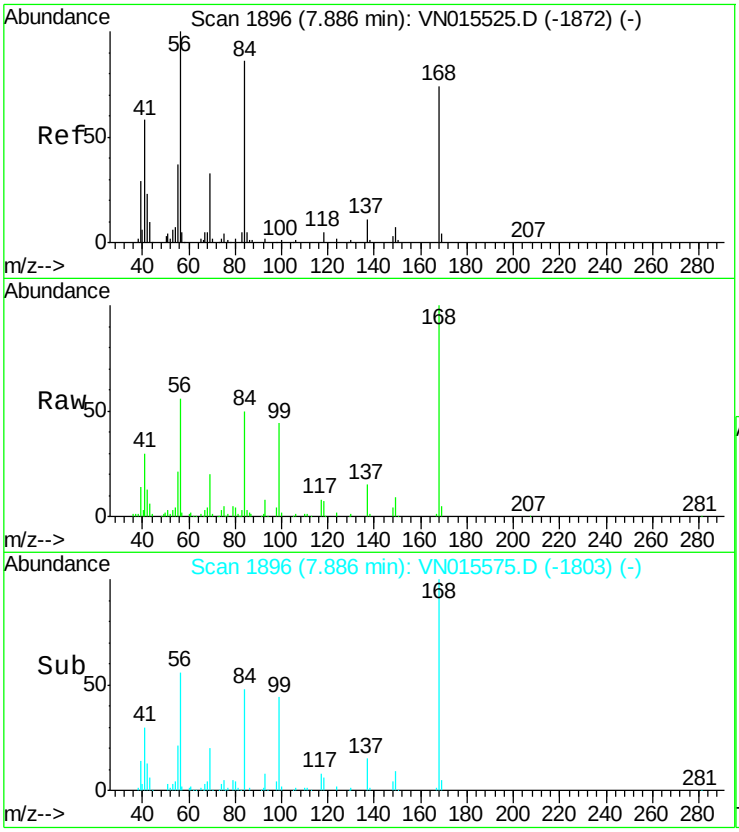


#31
Chloroform
Concen: 20.88 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 83 Resp: 64465

Ion	Ratio	Lower	Upper
83	100		
85	63.3	52.6	78.8





#32
Cyclohexane
Concen: 21.85 ug/l
RT: 7.89 min Scan# 1896
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 56 Resp: 60814

Ion	Ratio	Lower	Upper
56	100		
69	36.3	26.6	39.8
84	89.6	69.0	103.4

Instrument :
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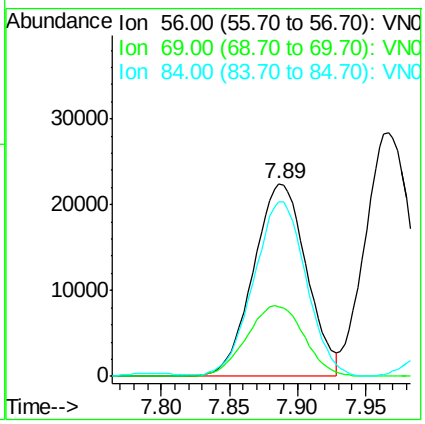
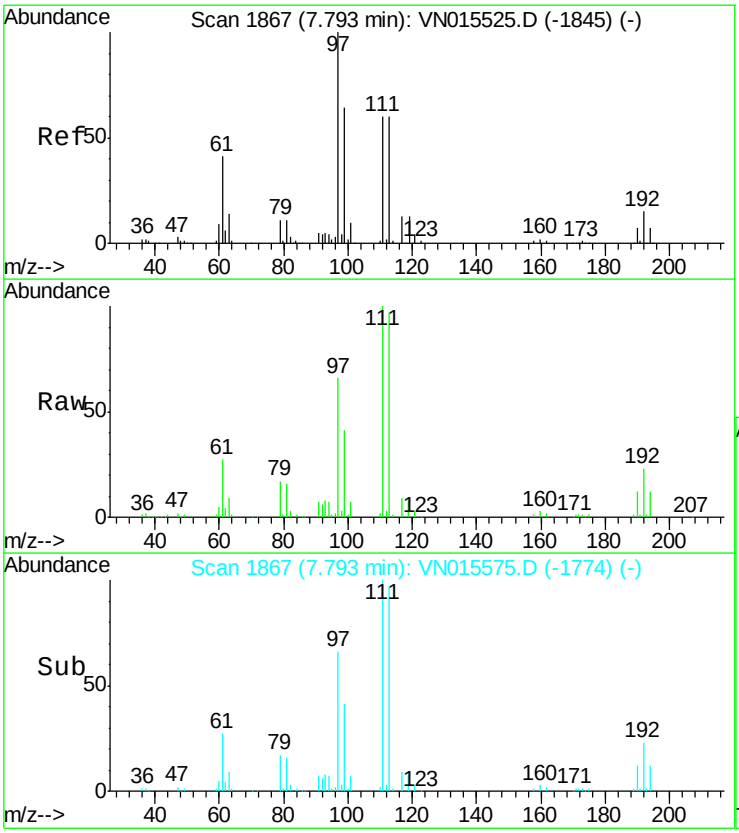
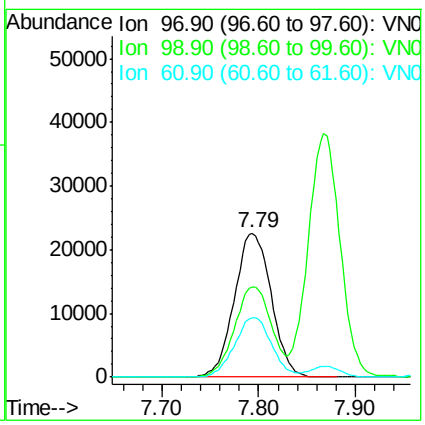




#33
1,1,1-Trichloroethane
Concen: 20.74 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 97 Resp: 59949

Ion	Ratio	Lower	Upper
97	100		
99	63.0	51.2	76.8
61	41.4	33.9	50.9



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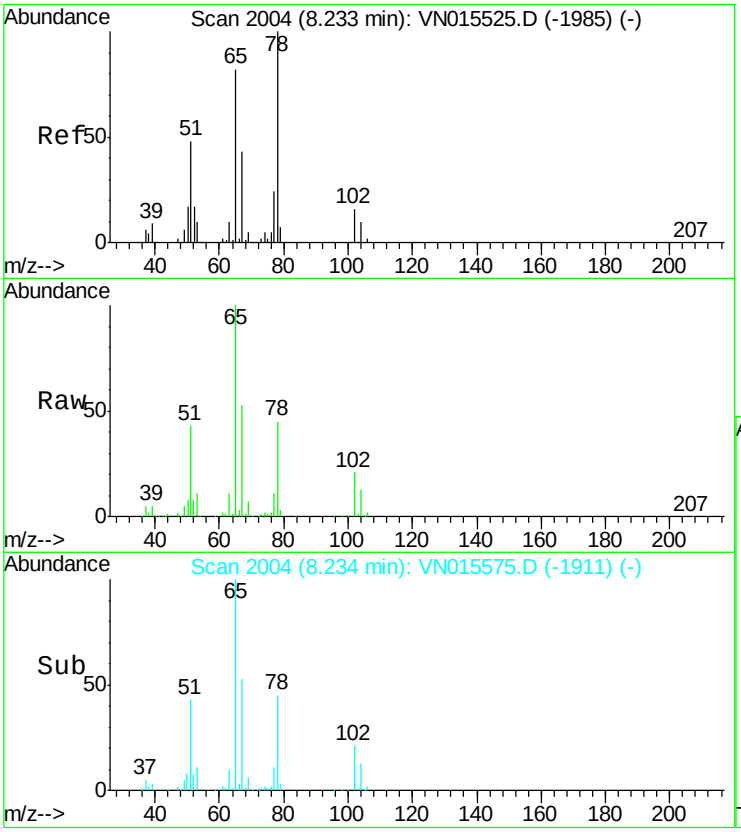
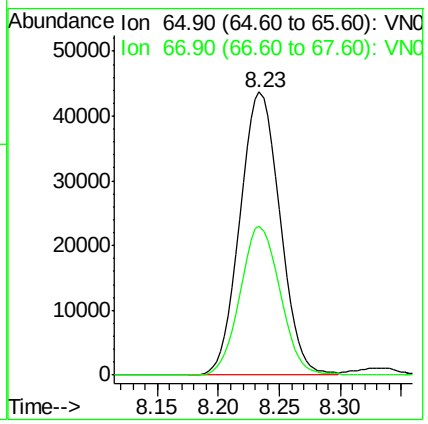
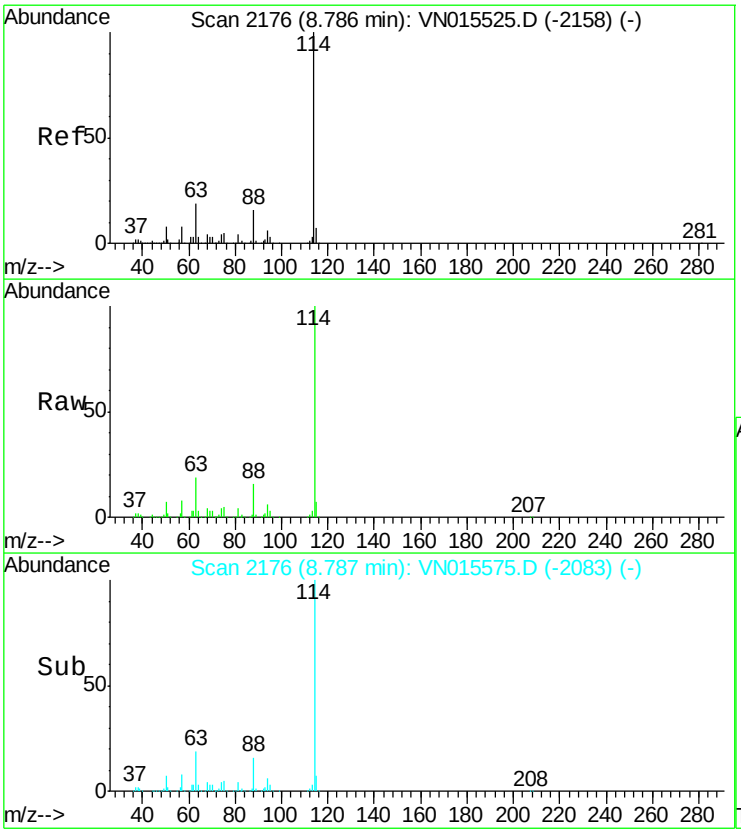


#34
1,2-Dichloroethane-d4
Concen: 46.95 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 65 Resp: 99470

Ion	Ratio	Lower	Upper
65	100		
67	52.6	0.0	103.6

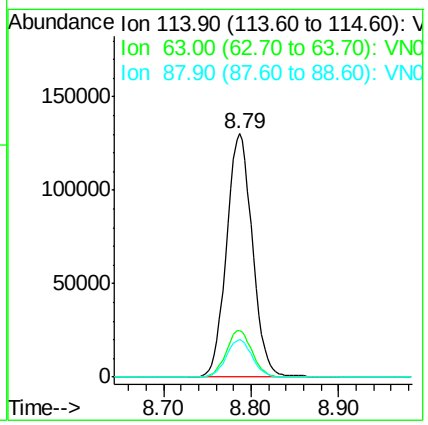




#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:114 Resp: 267805

Ion	Ratio	Lower	Upper
114	100		
63	19.3	0.0	38.6
88	15.5	0.0	32.2



Instrument :
MSVOA_N
ClientSampleId :
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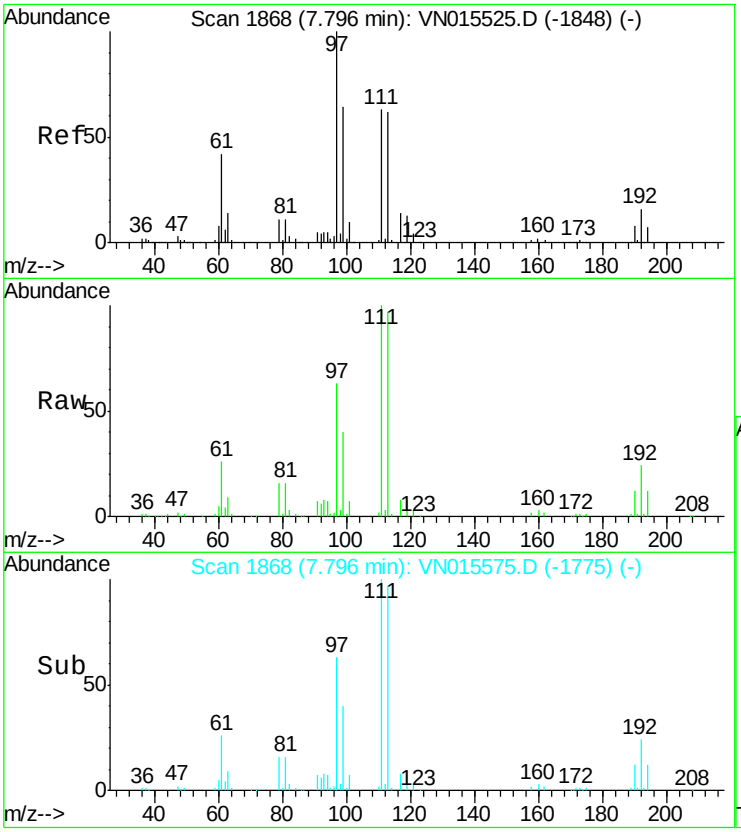
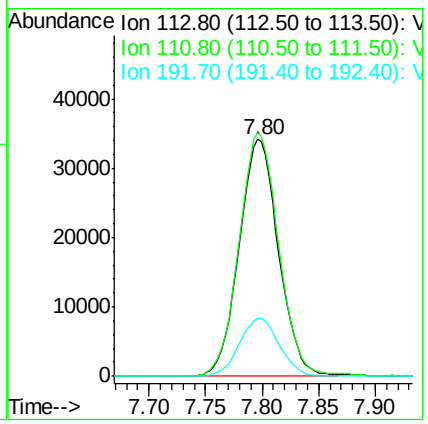
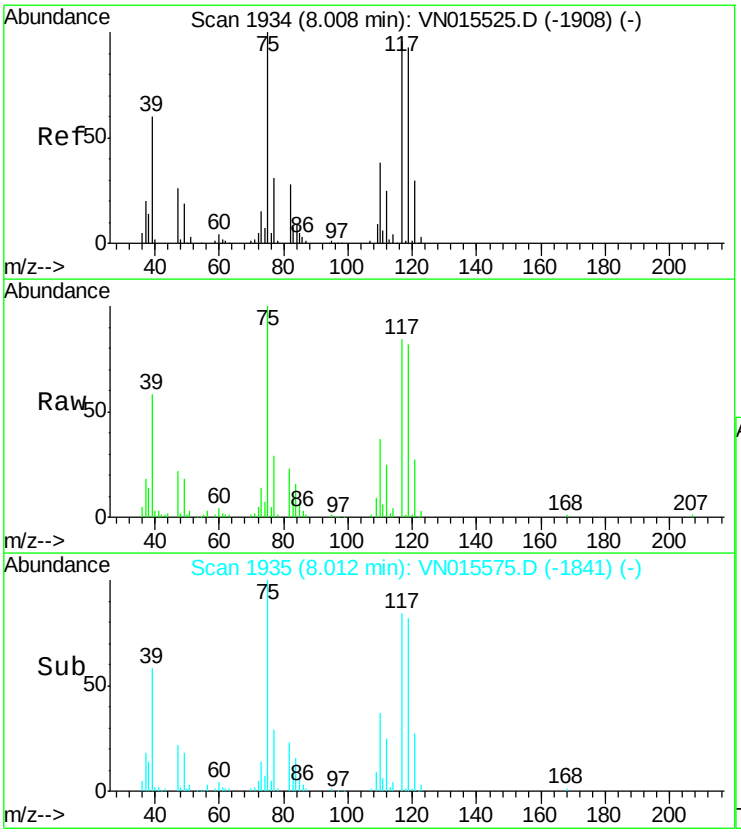


#36
Dibromofluoromethane
Concen: 47.46 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:113 Resp: 82773

Ion	Ratio	Lower	Upper
113	100		
111	103.8	81.5	122.3
192	24.7	20.0	30.0

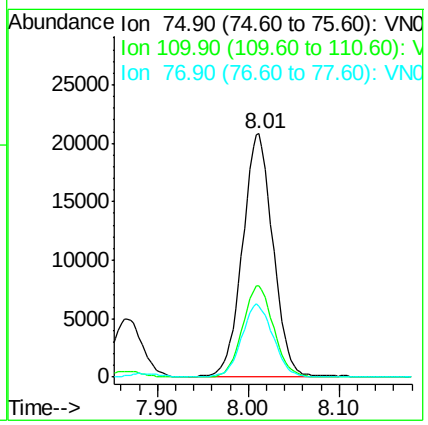




#37
1,1-Dichloropropene
Concen: 20.34 ug/l
RT: 8.01 min Scan# 1935
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 75 Resp: 48578

Ion	Ratio	Lower	Upper
75	100		
110	37.9	18.6	55.6
77	30.8	24.4	36.6



Instrument :
MSVOA_N
ClientSampleId :
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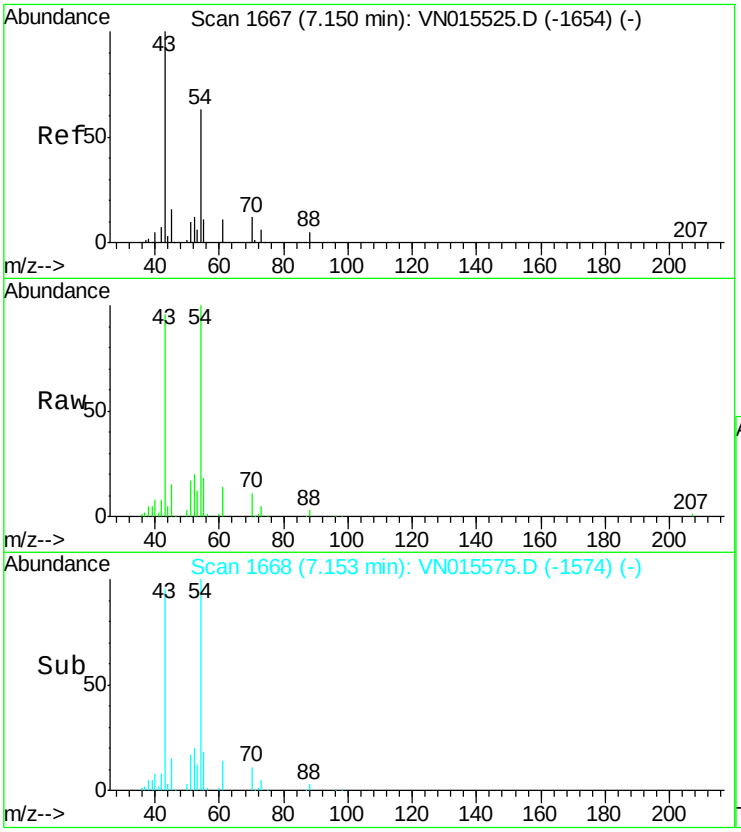
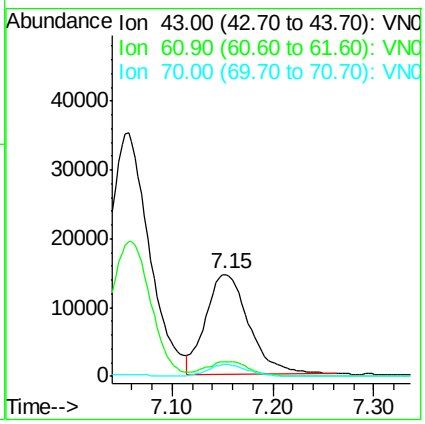
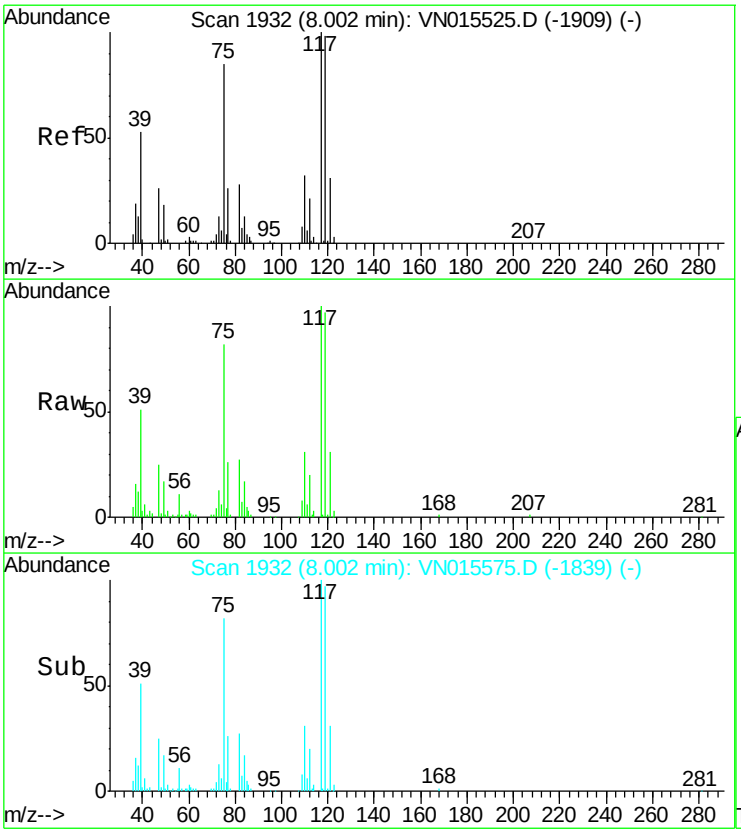


#38
Ethyl Acetate
Concen: 20.62 ug/l
RT: 7.15 min Scan# 1668
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 43450

Ion	Ratio	Lower	Upper
43	100		
61	14.7	10.8	16.2
70	11.0	8.5	12.7

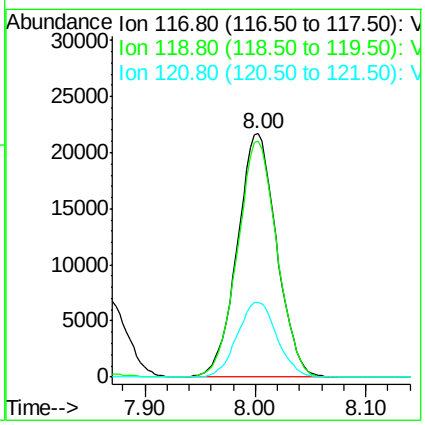




#39
Carbon Tetrachloride
Concen: 19.59 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:117 Resp: 53495

Ion	Ratio	Lower	Upper
117	100		
119	96.7	78.0	117.0
121	30.9	24.5	36.7



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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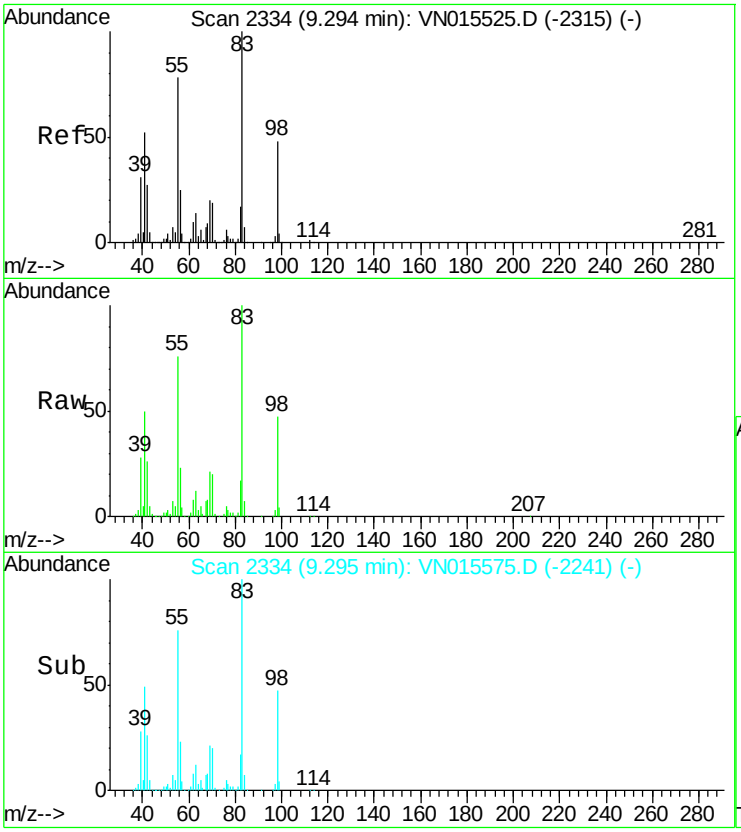
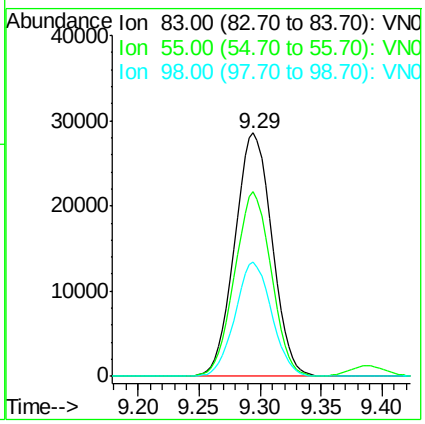
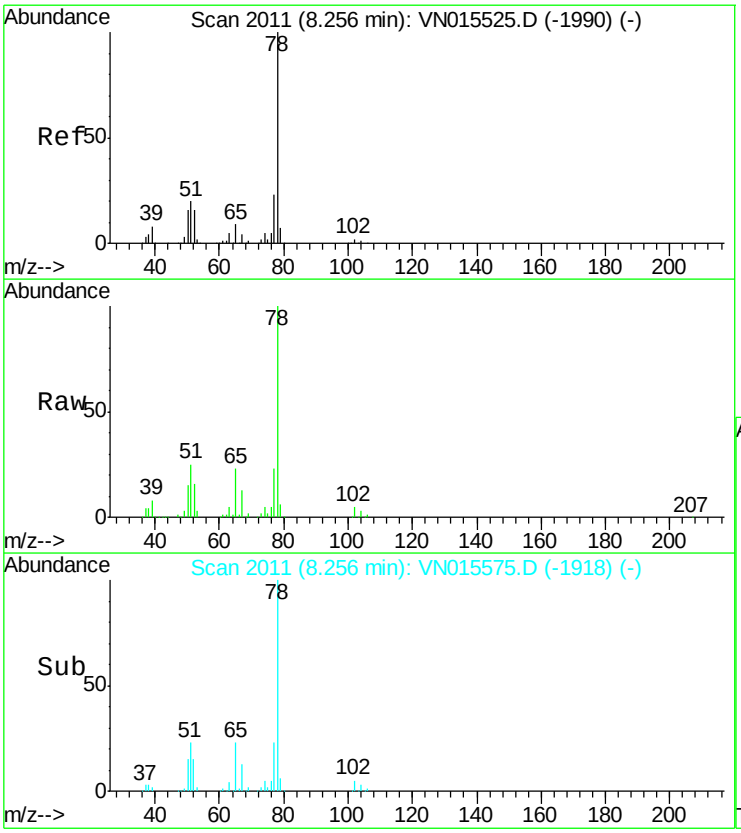


#40
Methylcyclohexane
Concen: 19.79 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 83 Resp: 60457

Ion	Ratio	Lower	Upper
83	100		
55	75.9	62.5	93.7
98	46.8	38.2	57.2

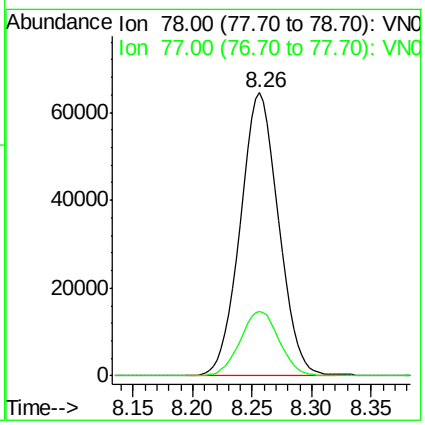




#41
Benzene
Concen: 20.22 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 78 Resp: 144000

Ion	Ratio	Lower	Upper
78	100		
77	22.7	18.5	27.7



Instrument :
MSVOA_N
ClientSampleId :
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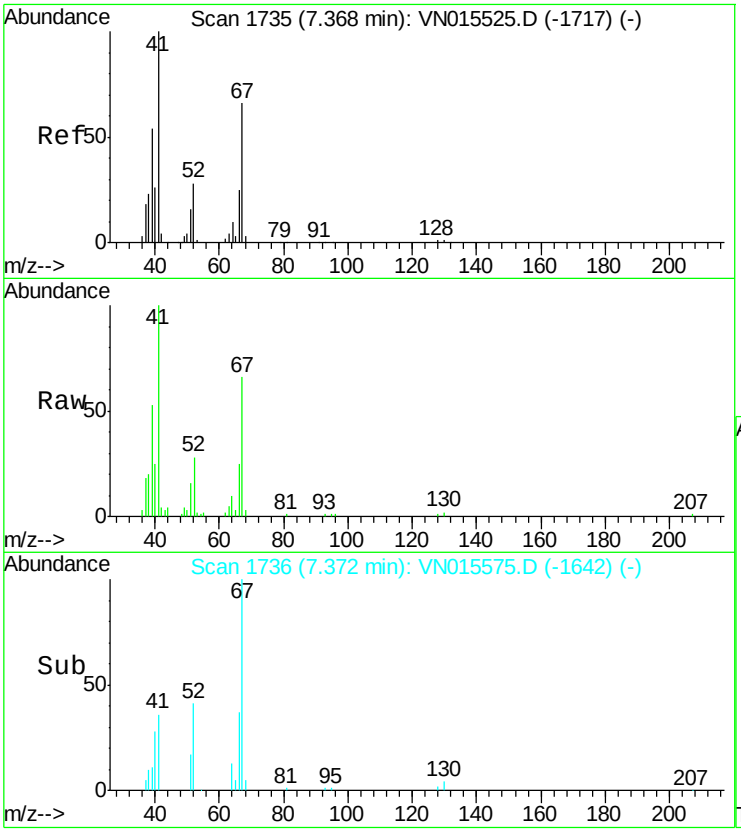
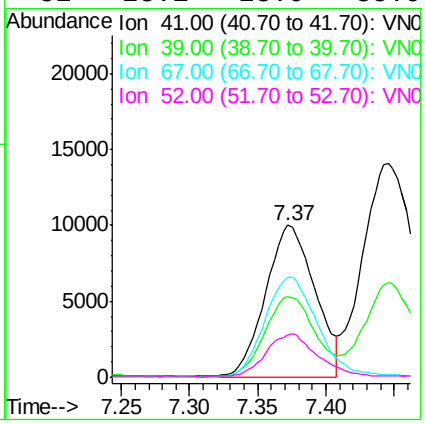
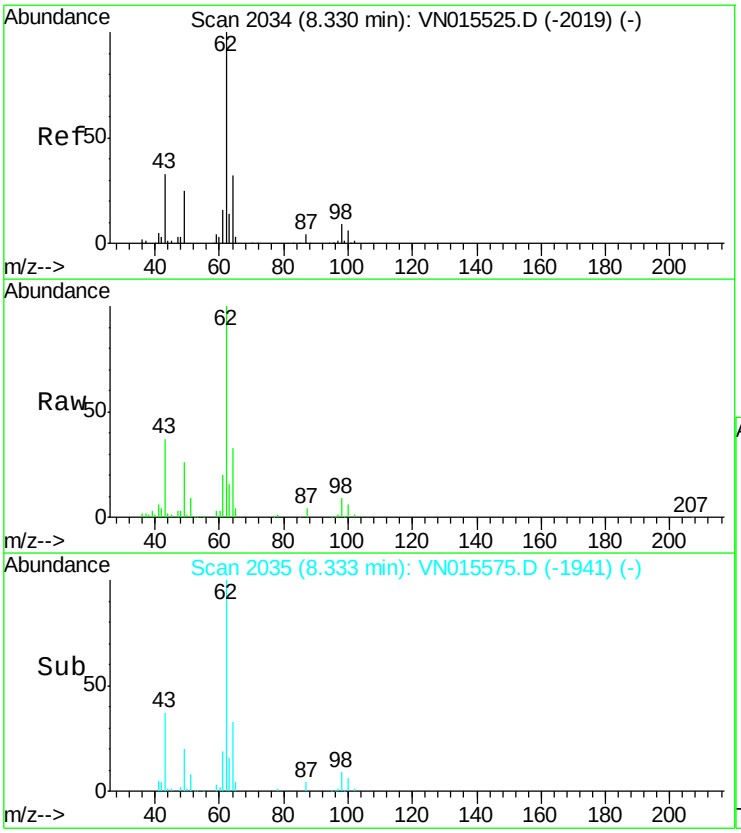


#42
Methacrylonitrile
Concen: 20.26 ug/l
RT: 7.37 min Scan# 1736
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 41 Resp: 25234

Ion	Ratio	Lower	Upper
41	100		
39	55.3	45.0	67.4
67	71.0	54.9	82.3
52	28.1	23.9	35.9

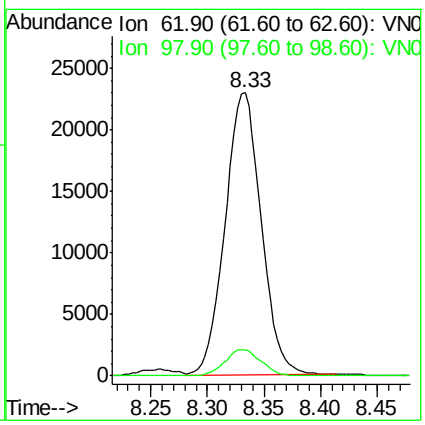




#43
1,2-Dichloroethane
Concen: 19.64 ug/l
RT: 8.33 min Scan# 2035
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 62 Resp: 51097

Ion	Ratio	Lower	Upper
62	100		
98	9.4	0.0	18.2



Instrument :
MSVOA_N
ClientSampleId :
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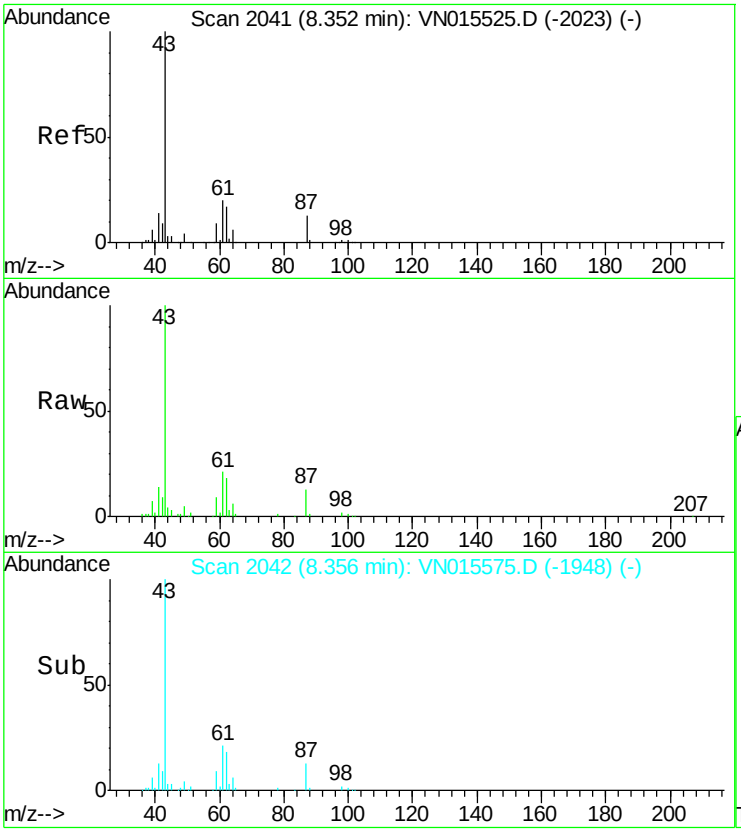
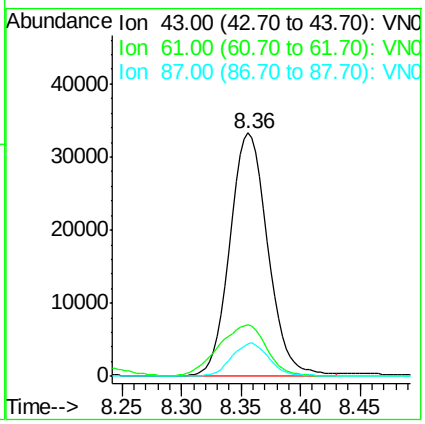
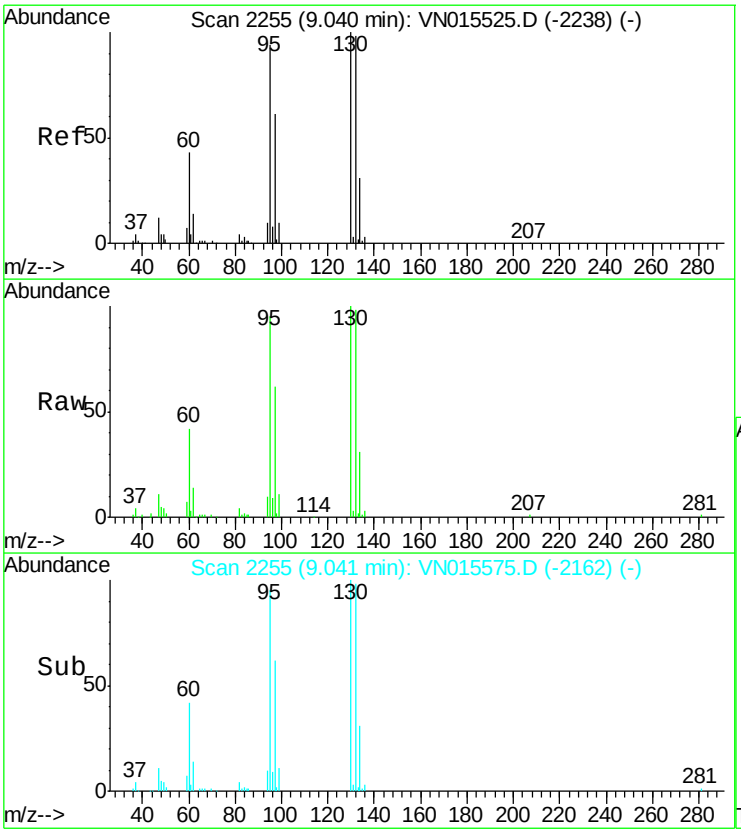


#44
Isopropyl Acetate
Concen: 19.27 ug/l
RT: 8.36 min Scan# 2042
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 73066

Ion	Ratio	Lower	Upper
43	100		
61	27.4	20.4	30.6
87	13.6	10.4	15.6

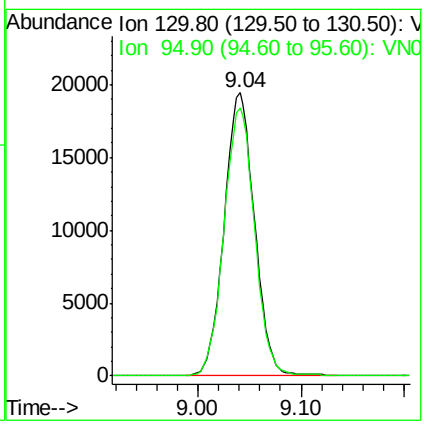


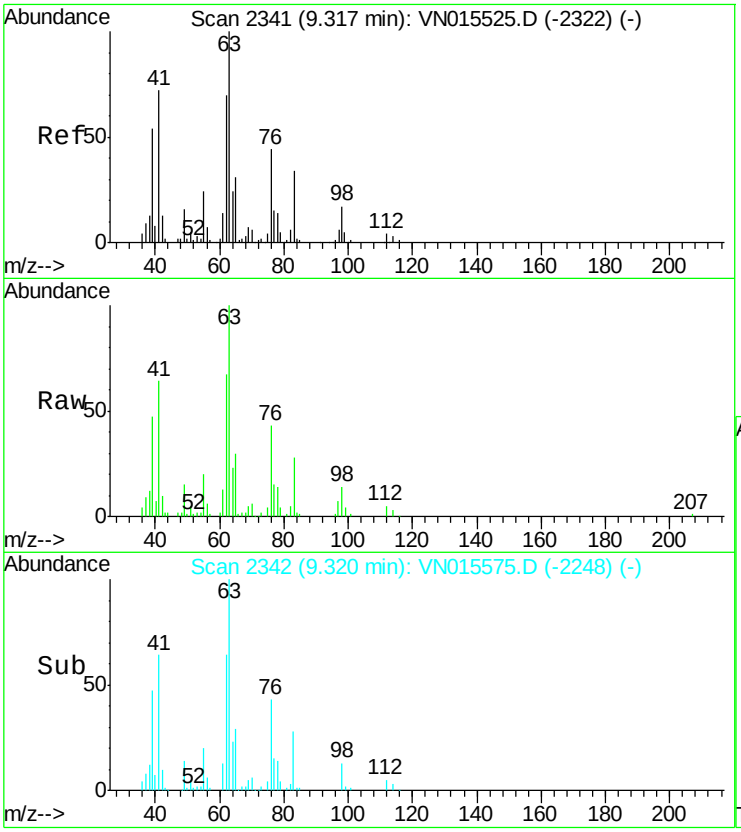


#45
Trichloroethene
Concen: 19.94 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:130 Resp: 39783

Ion	Ratio	Lower	Upper
130	100		
95	94.7	0.0	187.0

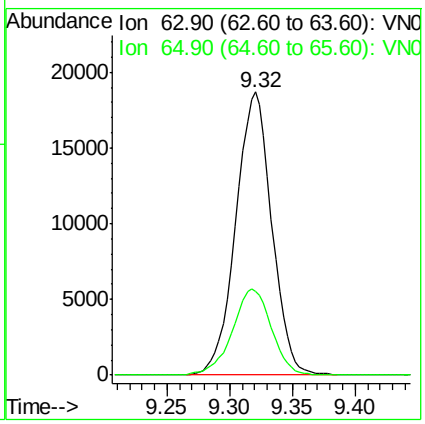




#46
1,2-Dichloropropane
Concen: 20.40 ug/l
RT: 9.32 min Scan# 2342
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 63 Resp: 37322

Ion	Ratio	Lower	Upper
63	100		
65	29.8	25.0	37.4



Instrument :
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ClientSampleId :
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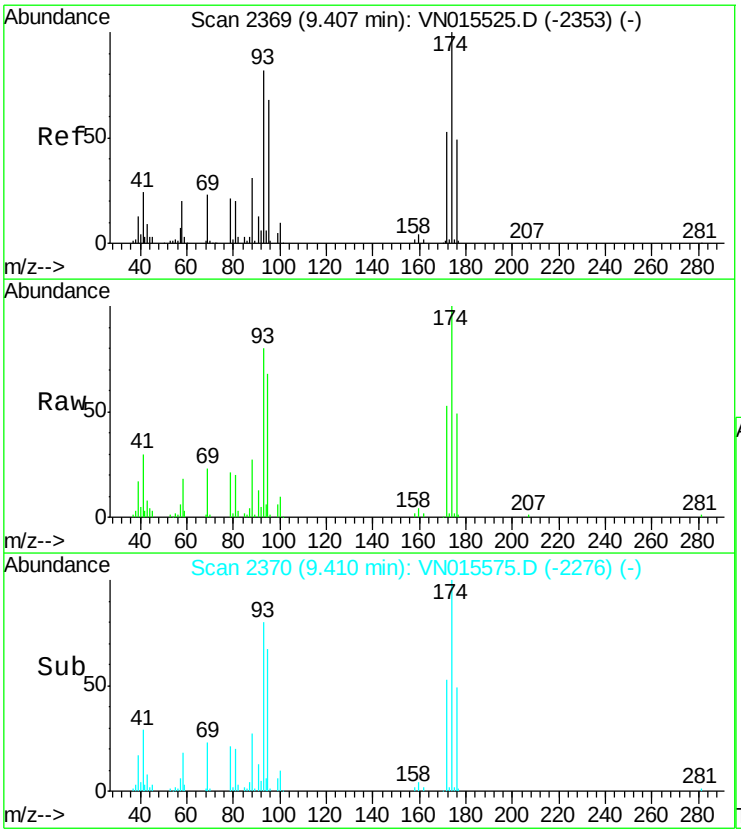
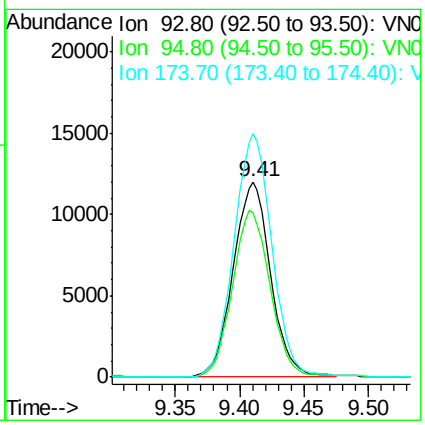


#47
Dibromomethane
Concen: 20.18 ug/l
RT: 9.41 min Scan# 2370
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 93 Resp: 24290

Ion	Ratio	Lower	Upper
93	100		
95	85.4	66.9	100.3
174	126.6	98.6	148.0



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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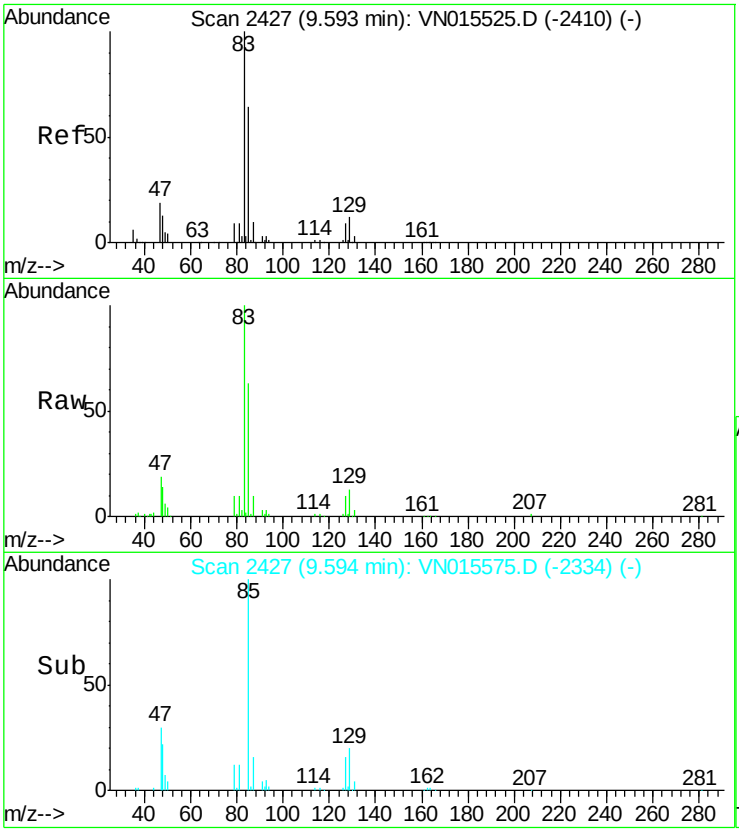
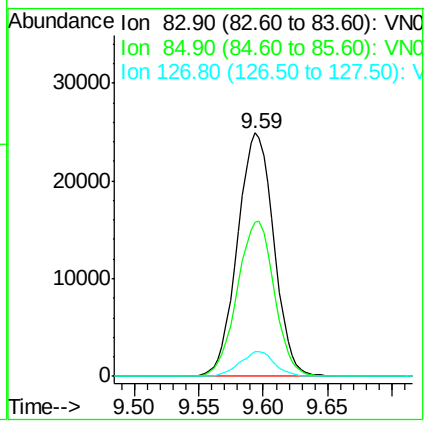
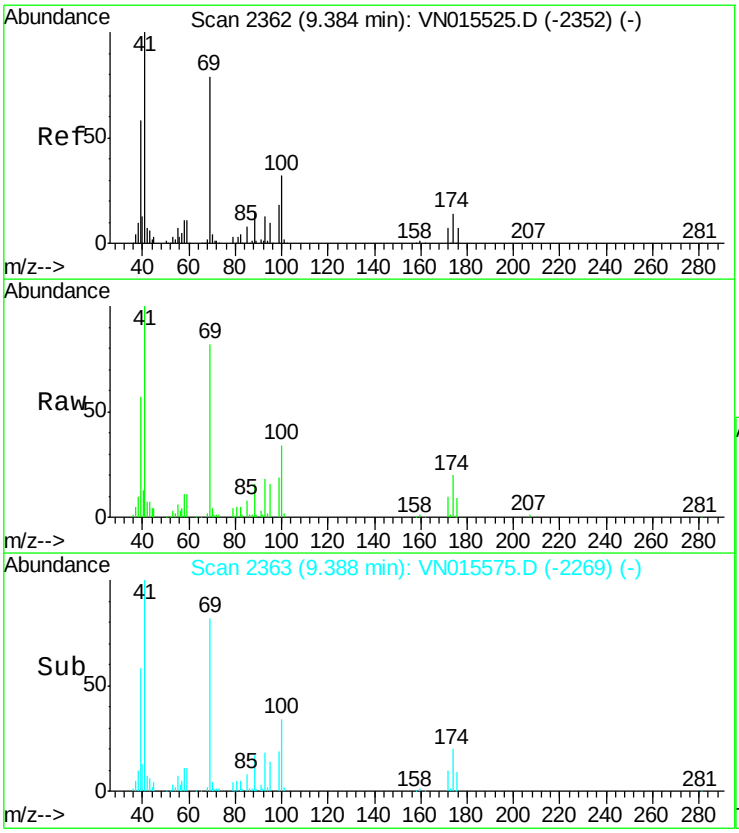


#48
Bromodichloromethane
Concen: 19.81 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 83 Resp: 48916

Ion	Ratio	Lower	Upper
83	100		
85	63.5	51.1	76.7
127	9.9	7.6	11.4

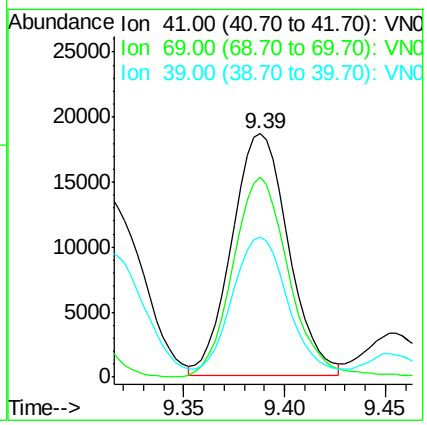


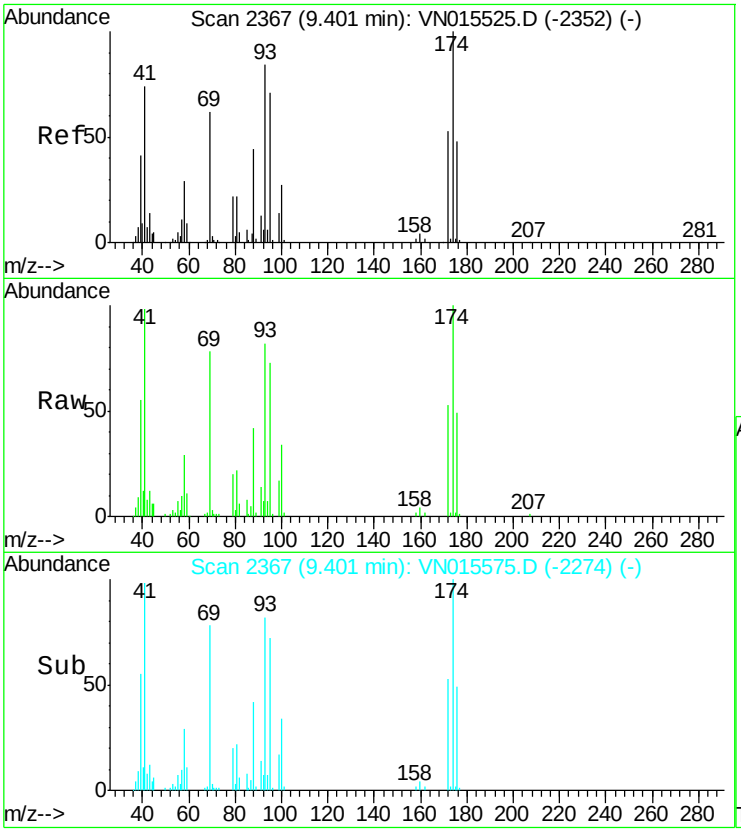


#49
Methyl methacrylate
Concen: 20.08 ug/l
RT: 9.39 min Scan# 2363
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 41 Resp: 36702

Ion	Ratio	Lower	Upper
41	100		
69	82.1	62.8	94.2
39	57.3	46.4	69.6





#50
1,4-Dioxane
Concen: 413.25 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 88 Resp: 10537

Ion	Ratio	Lower	Upper
88	100		
43	28.1	26.4	39.6
58	69.3	56.6	84.8

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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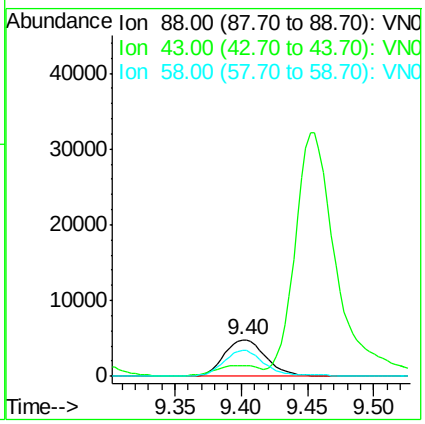
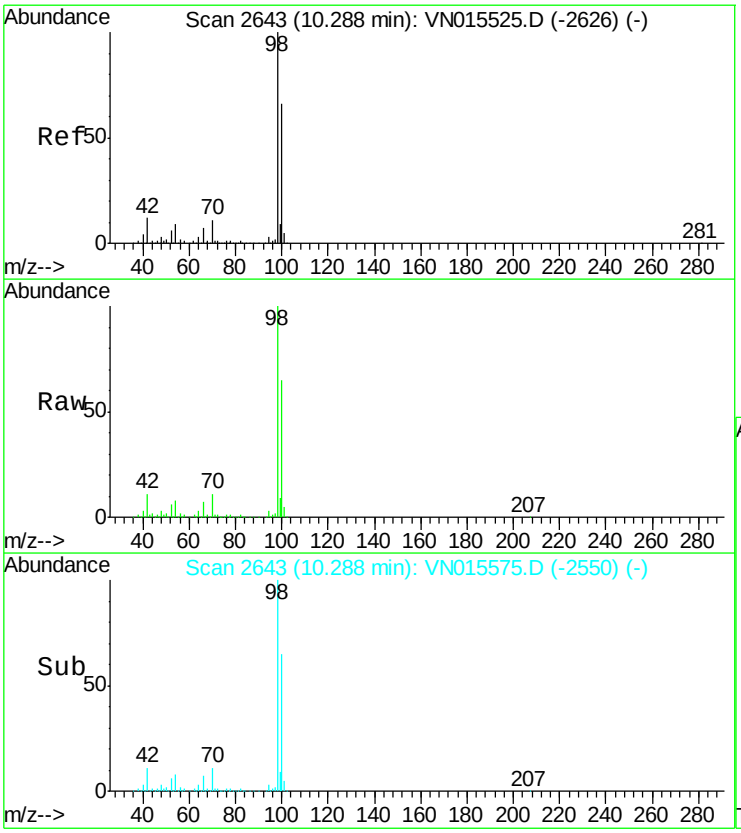
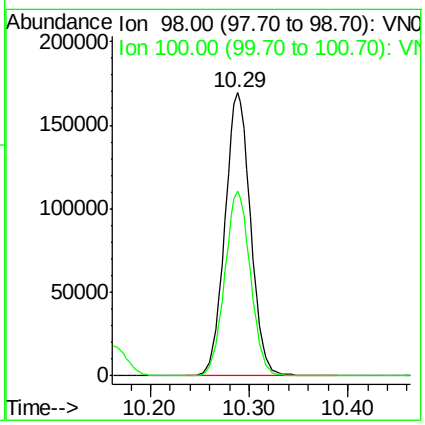


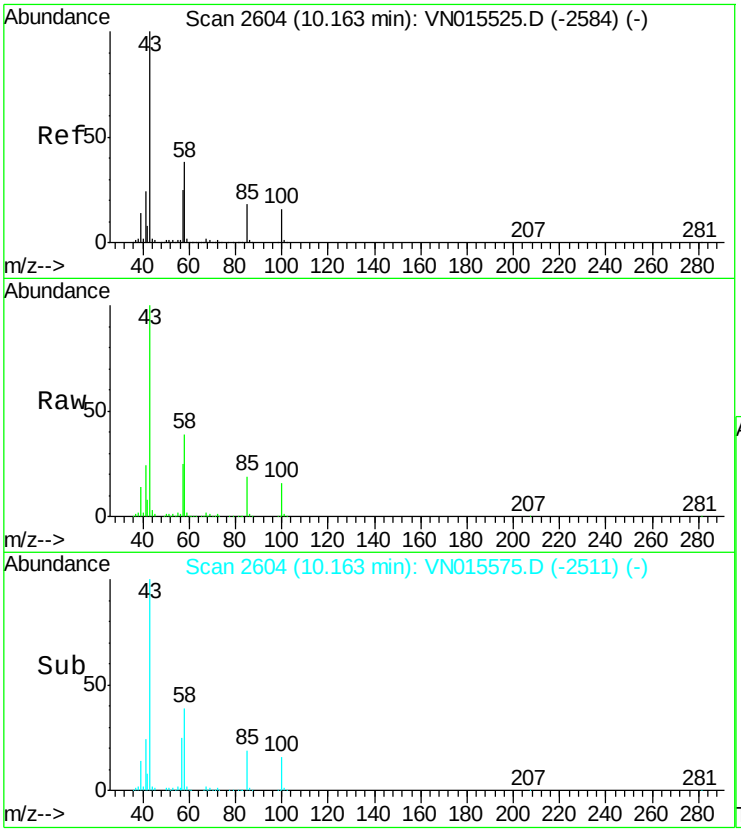


#51
Toluene-d8
Concen: 47.69 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 98 Resp: 306479

Ion	Ratio	Lower	Upper
98	100		
100	65.6	52.3	78.5





#52
4-Methyl-2-Pentanone
Concen: 100.33 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 210285

Ion	Ratio	Lower	Upper
43	100		
58	38.2	30.2	45.2

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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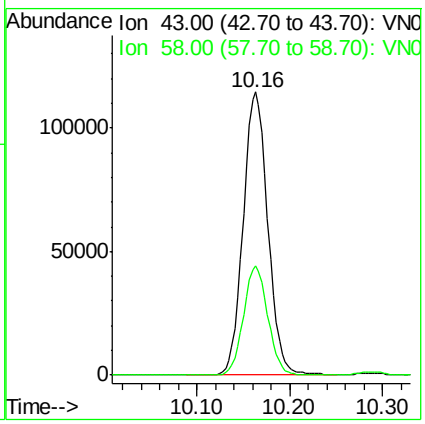
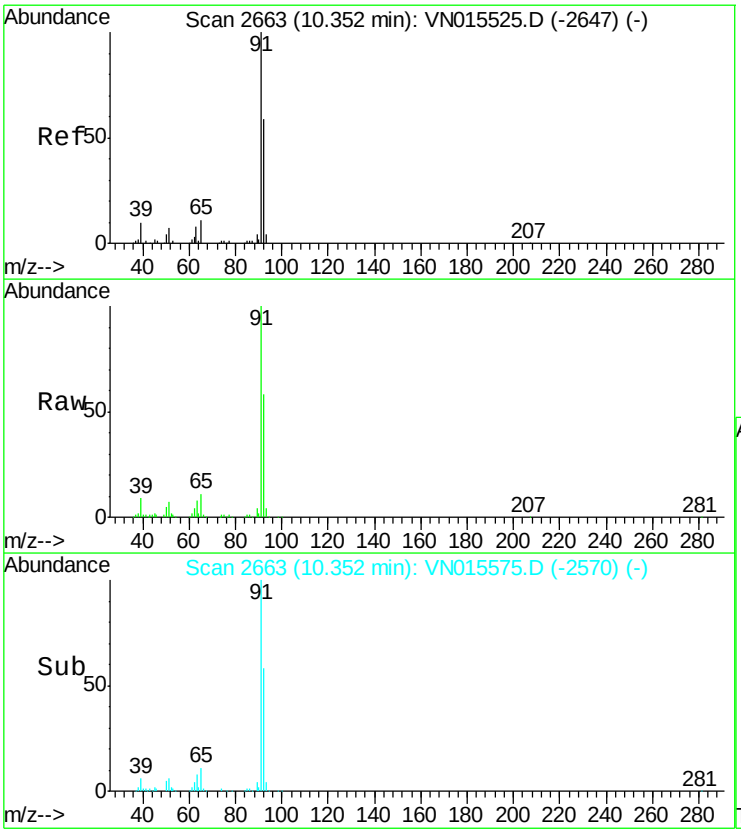
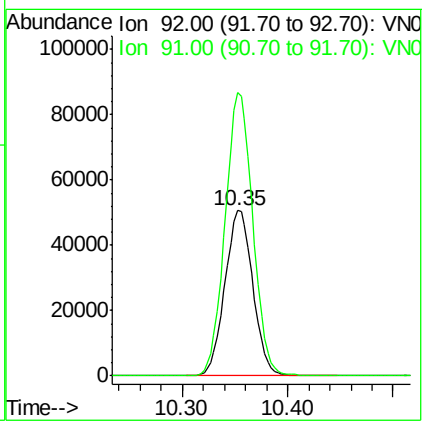




#53
Toluene
Concen: 20.52 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 92 Resp: 92655

Ion	Ratio	Lower	Upper
92	100		
91	169.9	136.2	204.4



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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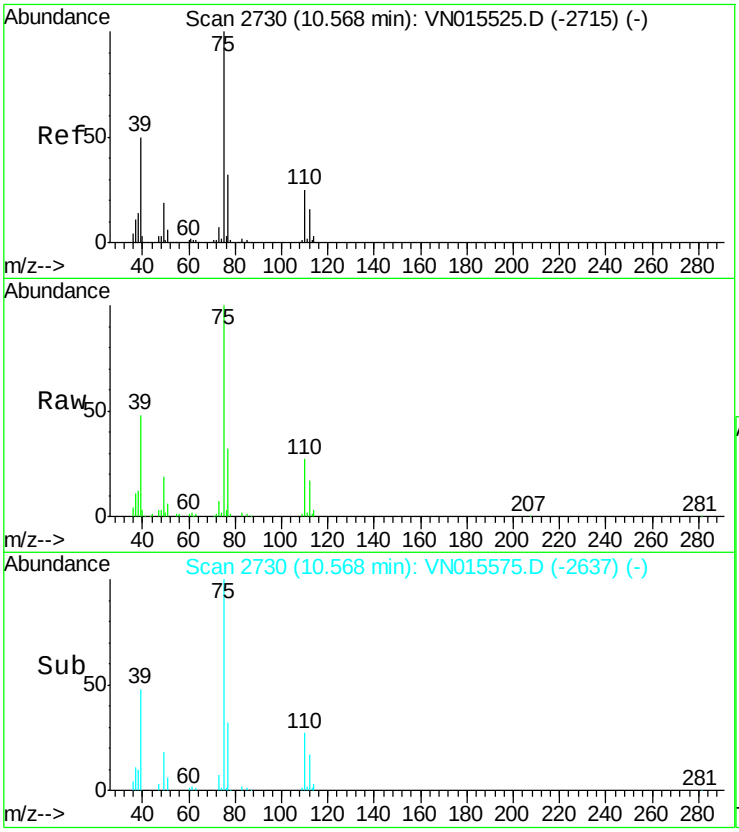
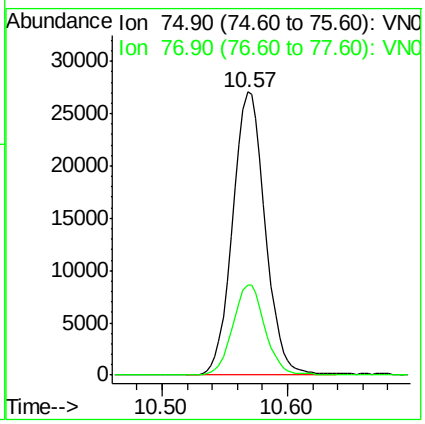
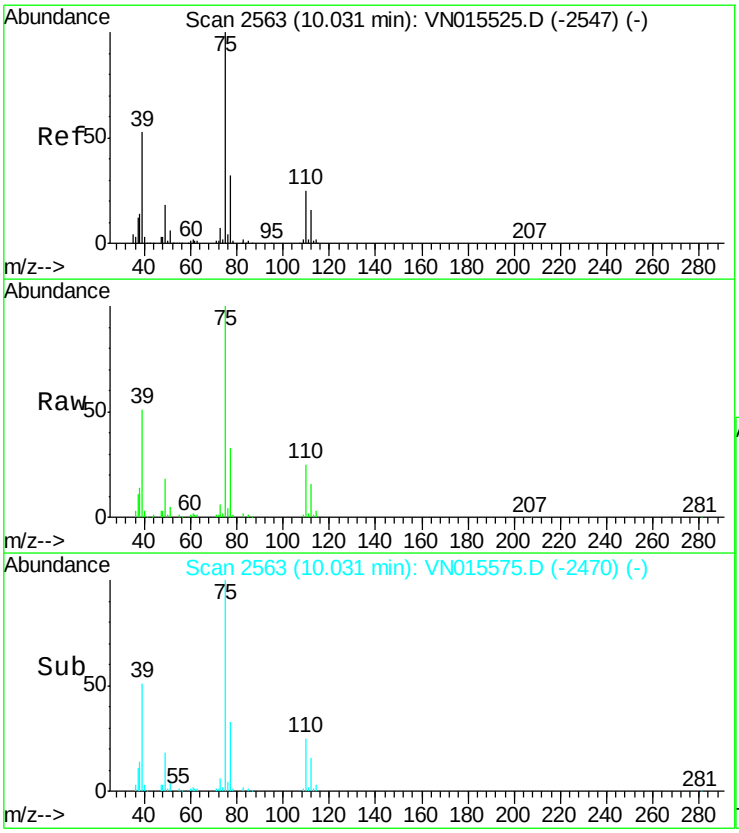


#54
t-1,3-Dichloropropene
Concen: 19.33 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 75 Resp: 48824

Ion	Ratio	Lower	Upper
75	100		
77	32.0	26.0	39.0

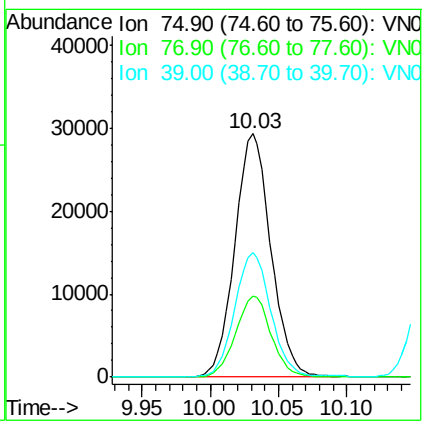


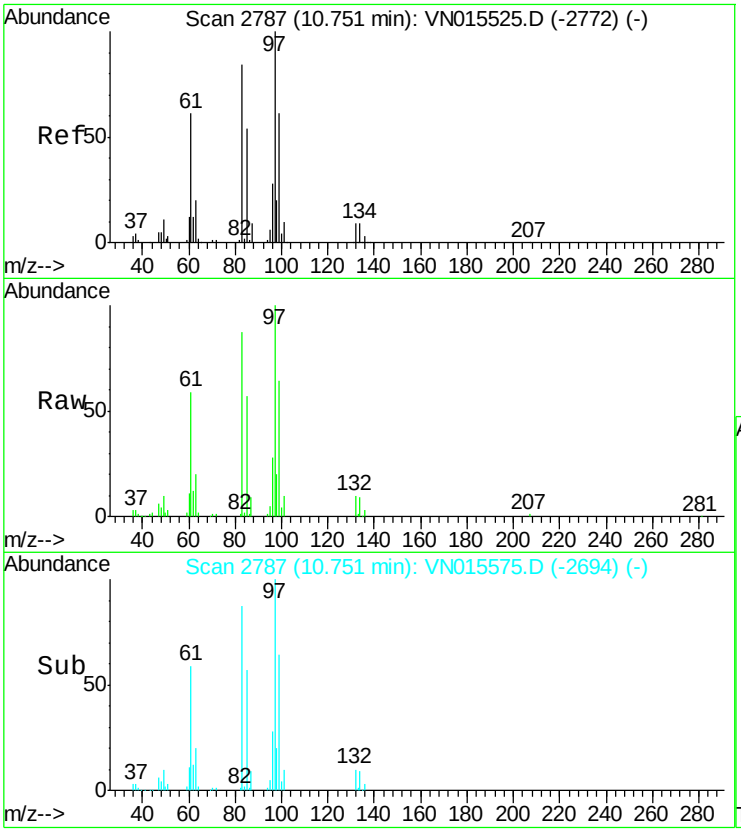


#55
cis-1,3-Dichloropropene
Concen: 19.14 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 75 Resp: 53812

Ion	Ratio	Lower	Upper
75	100		
77	33.2	25.4	38.2
39	50.8	42.2	63.4





#56
1,1,2-Trichloroethane
Concen: 20.29 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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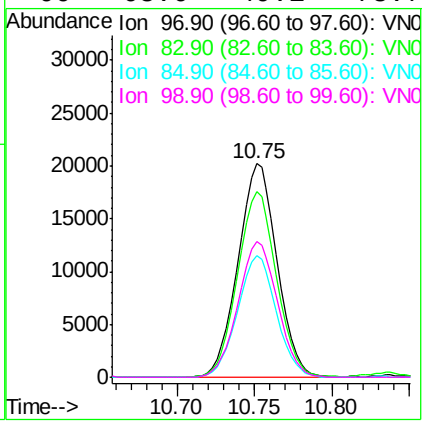
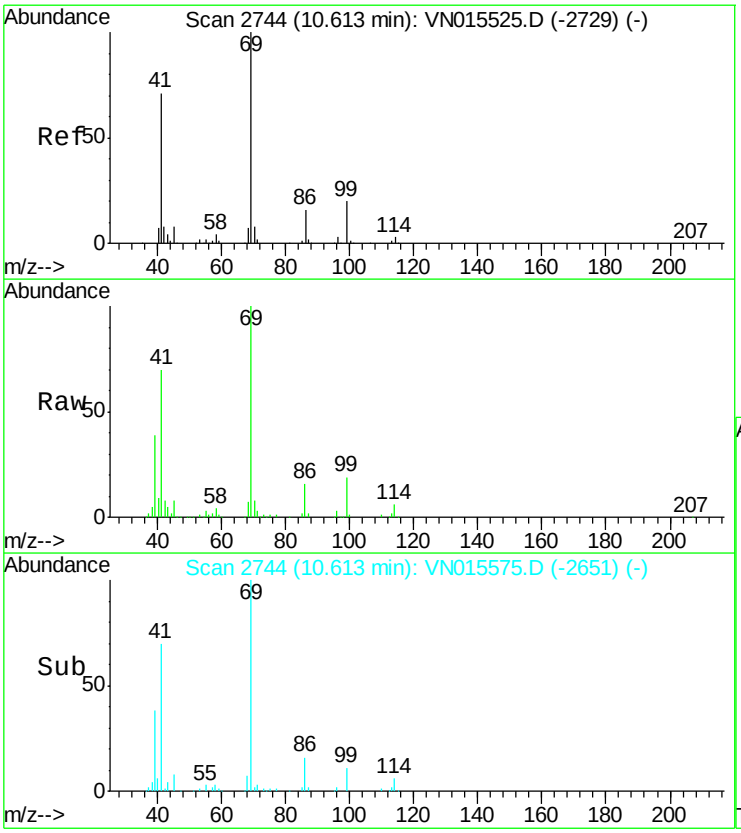
Tgt Ion: 97 Resp: 35402

Ion	Ratio	Lower	Upper
97	100		
83	86.8	67.0	100.4
85	56.8	42.9	64.3
99	63.6	49.1	73.7

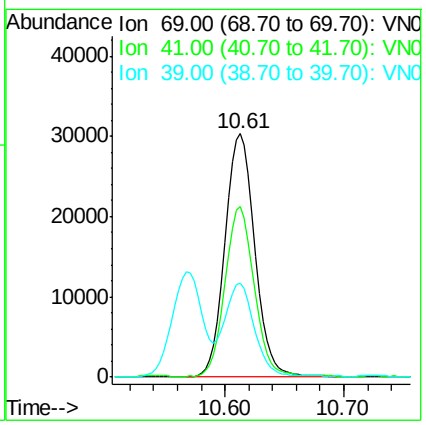


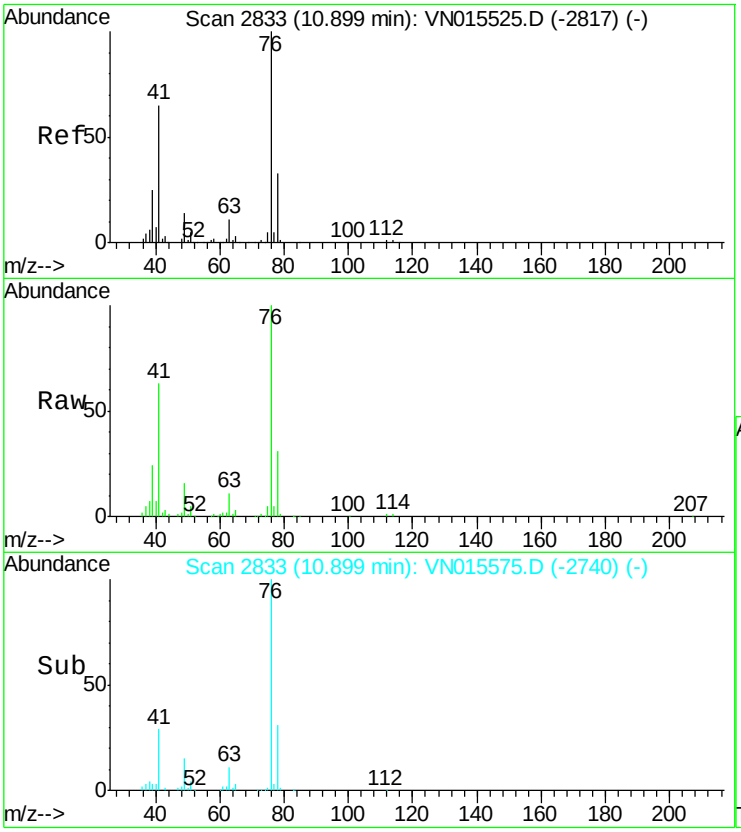


#57
Ethyl methacrylate
Concen: 20.46 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 69 Resp: 52797

Ion	Ratio	Lower	Upper
69	100		
41	67.9	56.9	85.3
39	38.5	32.0	48.0





#58
1,3-Dichloropropane
Concen: 20.44 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 76 Resp: 59758

Ion	Ratio	Lower	Upper
76	100		
78	31.4	26.3	39.5

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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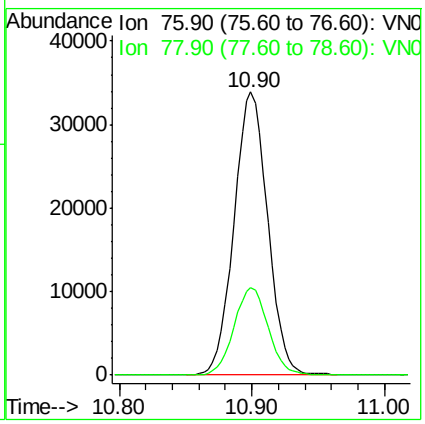
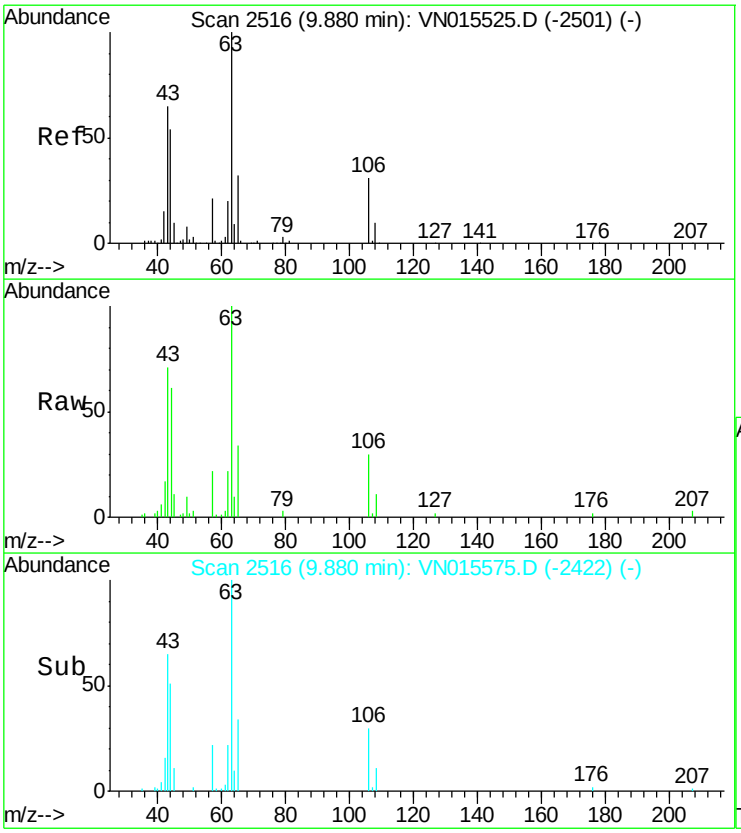
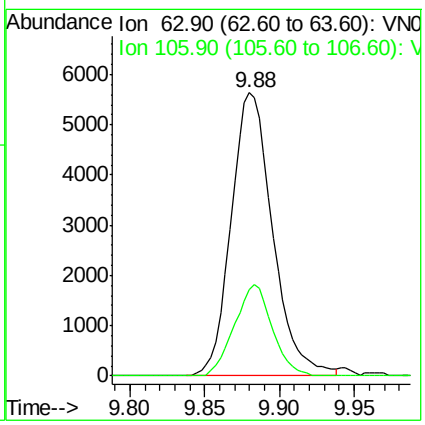


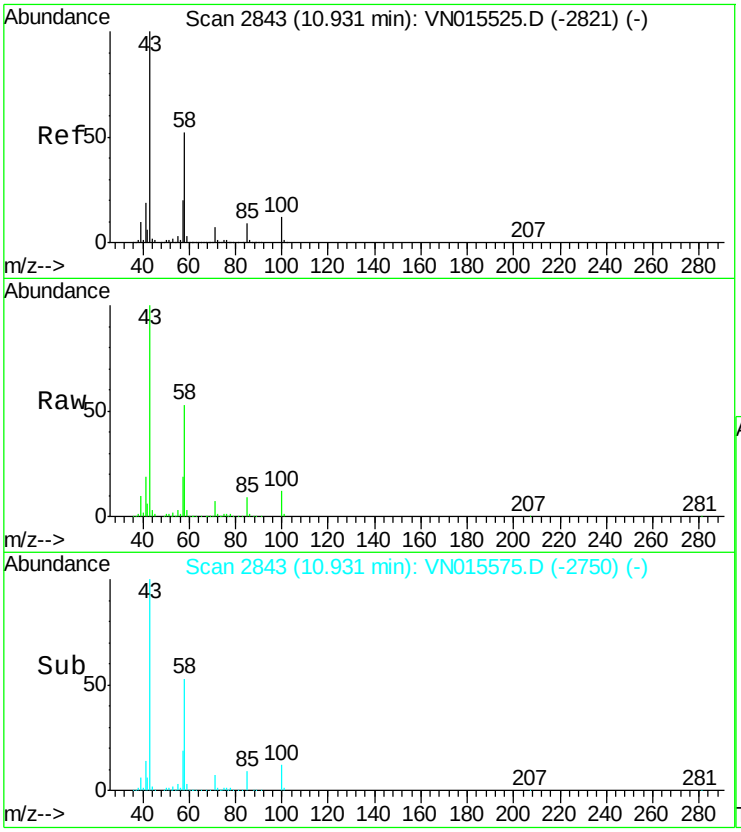


#59
2-Chloroethyl Vinyl ether
Concen: 41.67 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 63 Resp: 10906

Ion	Ratio	Lower	Upper
63	100		
106	29.1	23.7	35.5





#60
2-Hexanone
Concen: 101.77 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 139275

Ion	Ratio	Lower	Upper
43	100		
58	53.4	26.0	78.0

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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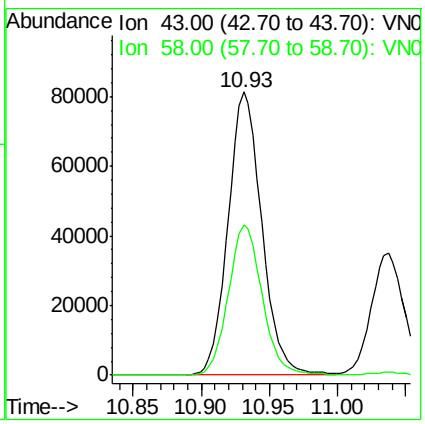
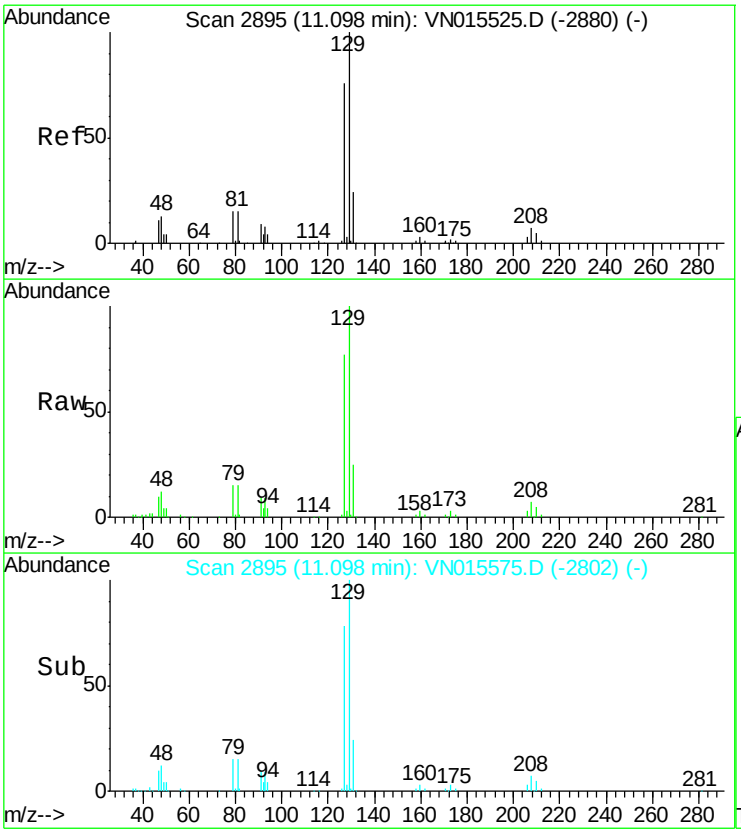
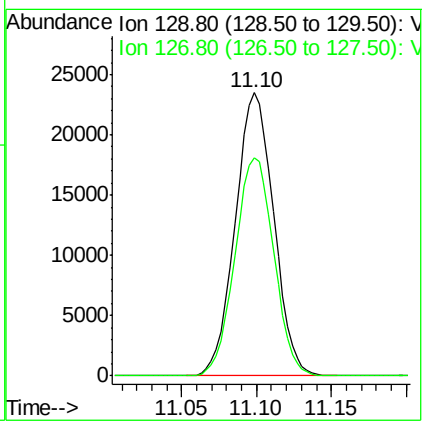


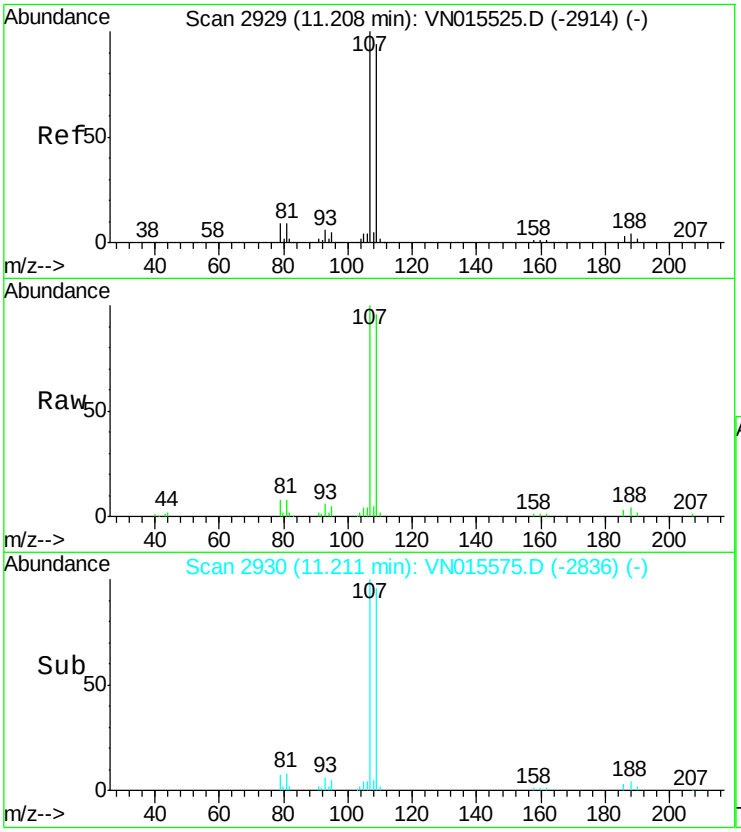


#61
Dibromochloromethane
Concen: 20.18 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:129 Resp: 42040

Ion	Ratio	Lower	Upper
129	100		
127	77.9	38.6	116.0





#62
1,2-Dibromoethane
Concen: 20.80 ug/l
RT: 11.21 min Scan# 2930
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:107 Resp: 37508

Ion	Ratio	Lower	Upper
107	100		
109	94.5	75.8	113.6

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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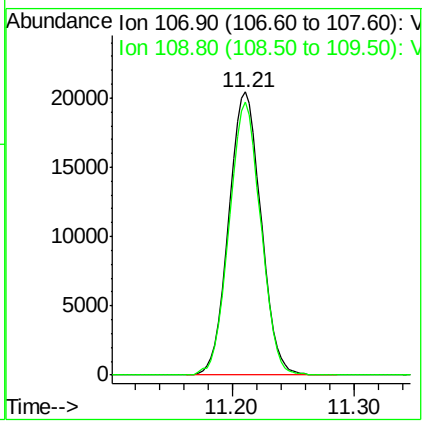
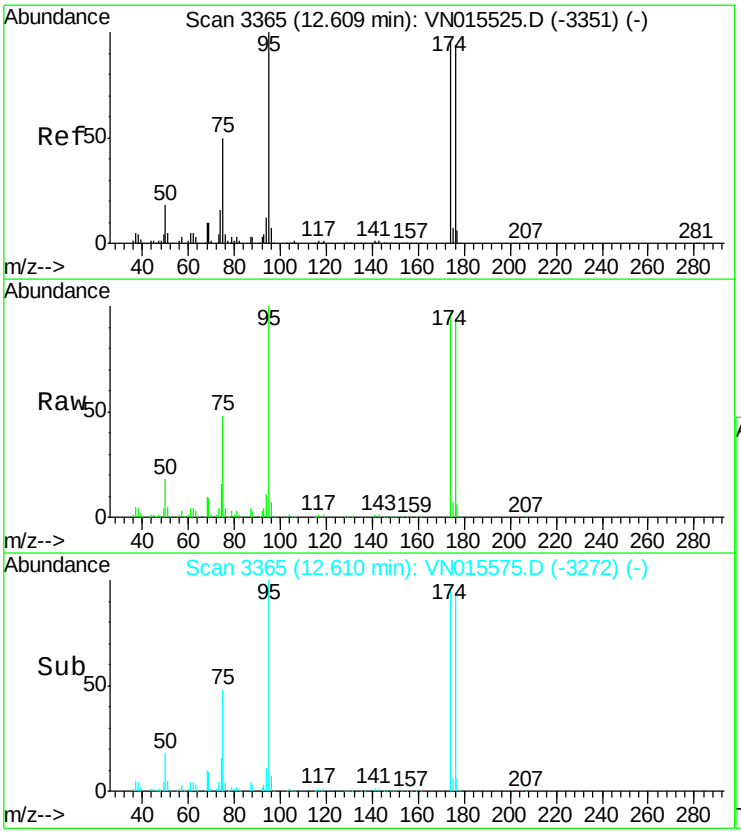
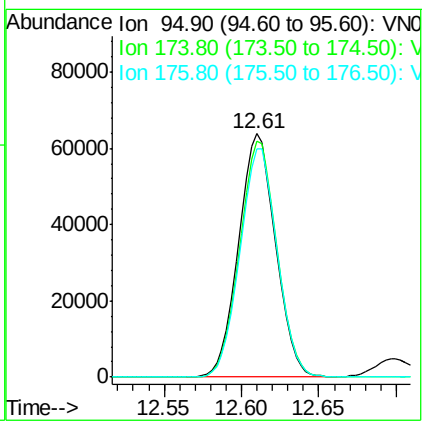


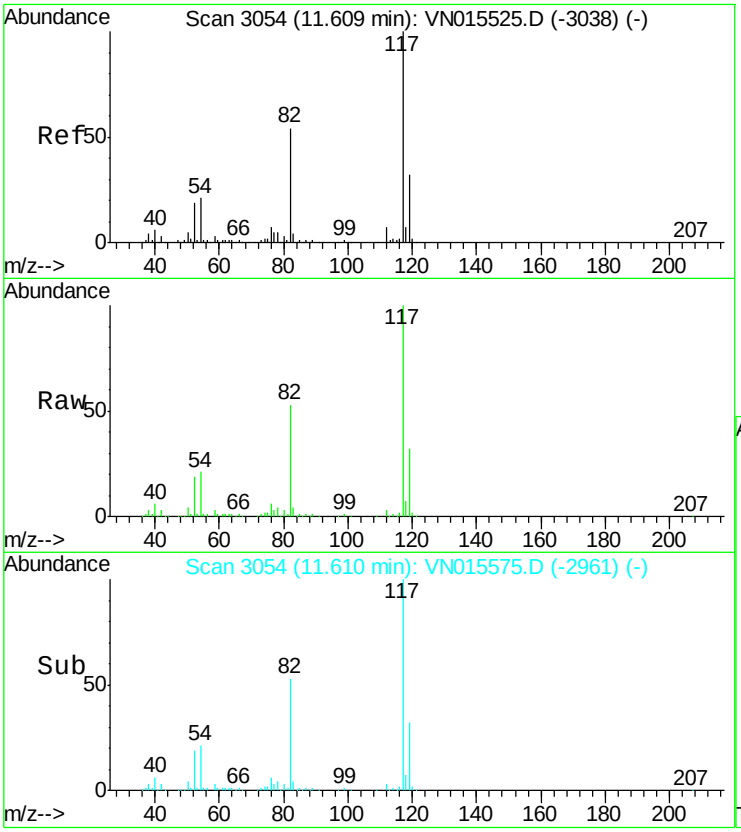


#63
4-Bromofluorobenzene
Concen: 48.16 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 95 Resp: 106026

Ion	Ratio	Lower	Upper
95	100		
174	97.5	0.0	191.8
176	94.9	0.0	186.8





#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:117 Resp: 234672

Ion	Ratio	Lower	Upper
117	100		
82	53.4	43.3	64.9
119	32.2	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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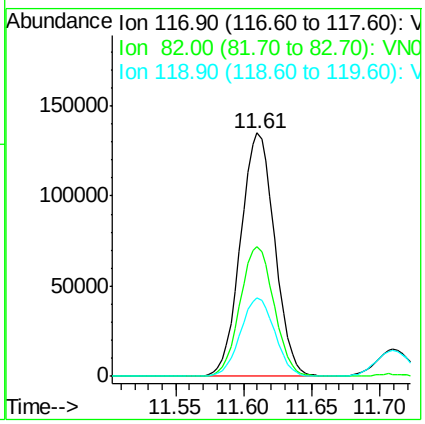
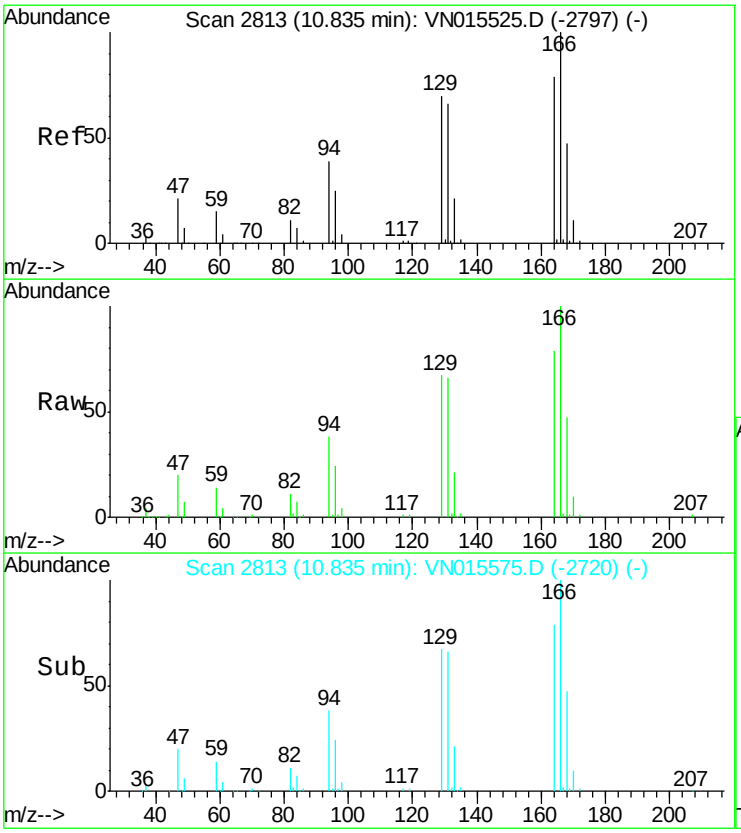
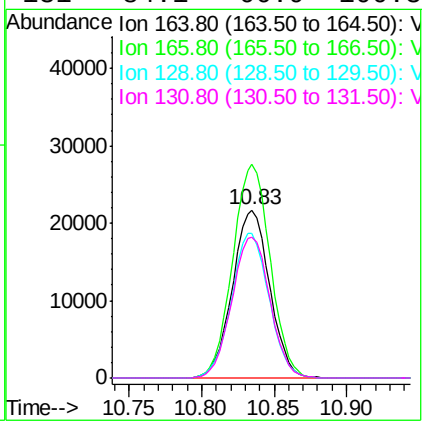


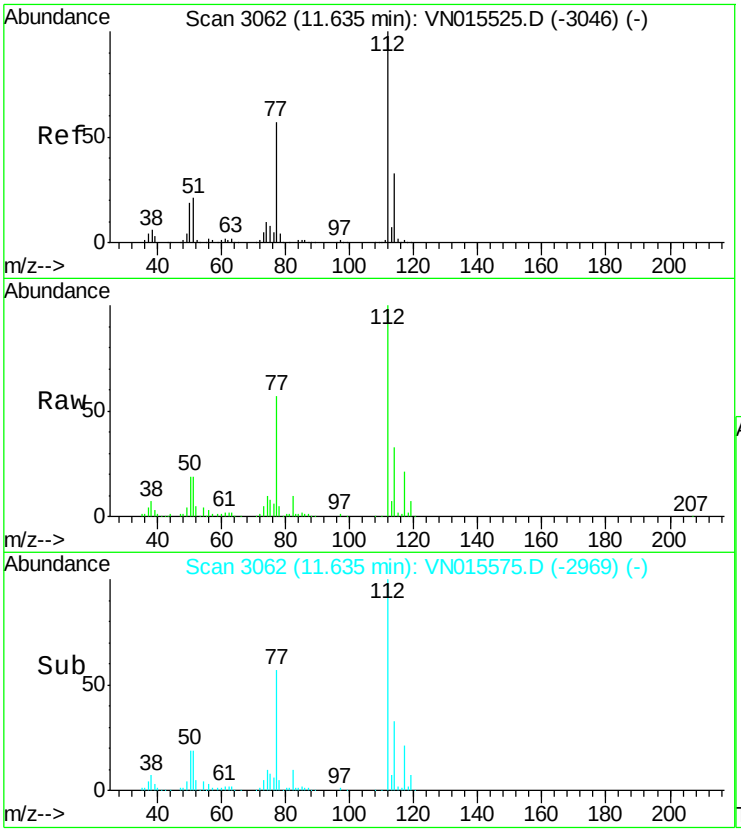


#65
Tetrachloroethene
Concen: 20.87 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:164 Resp: 38645

Ion	Ratio	Lower	Upper
164	100		
166	127.3	101.7	152.5
129	85.9	70.7	106.1
131	84.1	66.9	100.3





#66
Chlorobenzene
Concen: 20.19 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:112 Resp: 102519

Ion	Ratio	Lower	Upper
112	100		
114	32.6	26.2	39.2

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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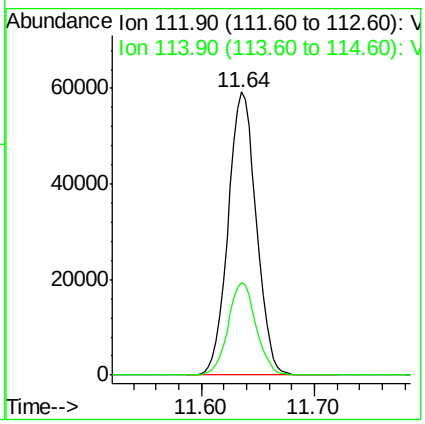
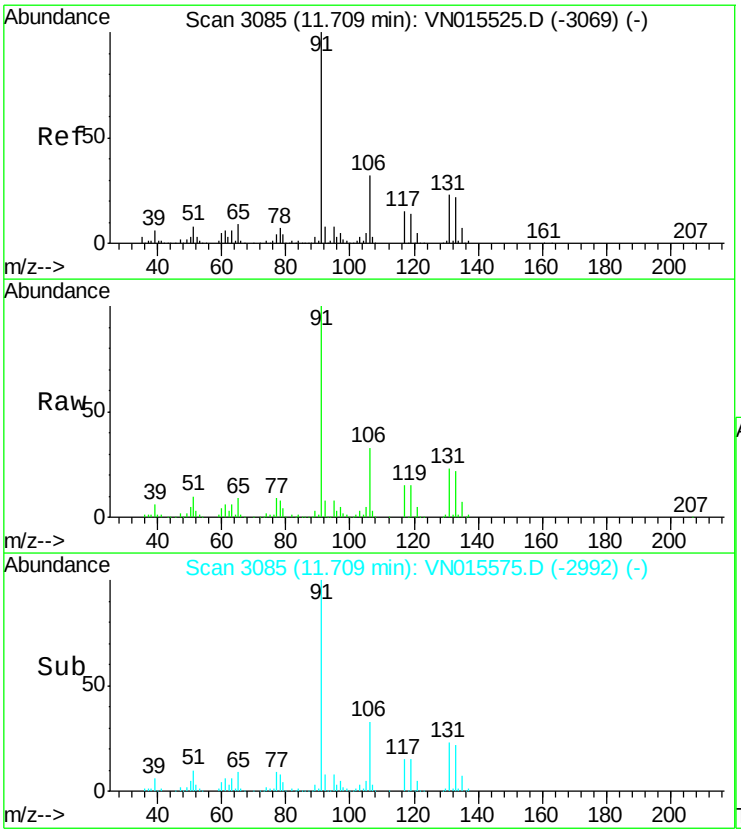
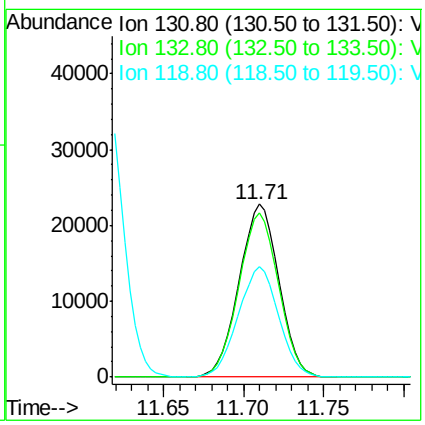


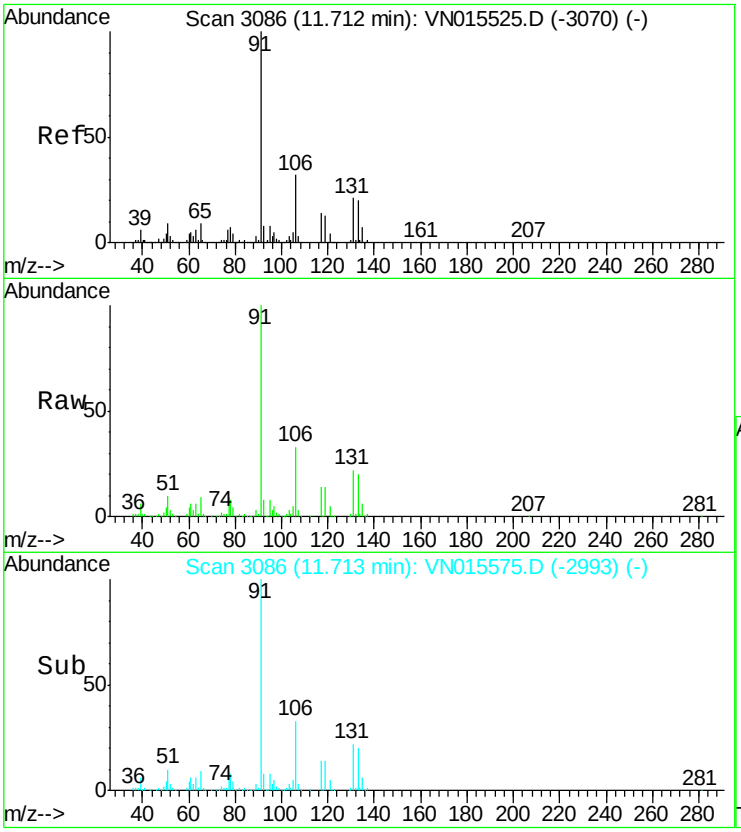


#67
1,1,1,2-Tetrachloroethane
Concen: 20.06 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:131 Resp: 38832

Ion	Ratio	Lower	Upper
131	100		
133	95.0	47.7	143.1
119	64.7	31.5	94.5





#68
Ethyl Benzene
Concen: 20.50 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 91 Resp: 170481

Ion	Ratio	Lower	Upper
91	100		
106	33.3	25.5	38.3

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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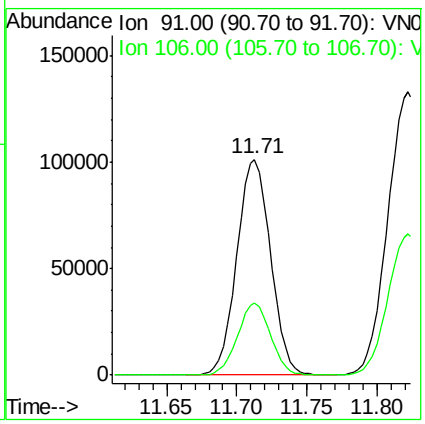
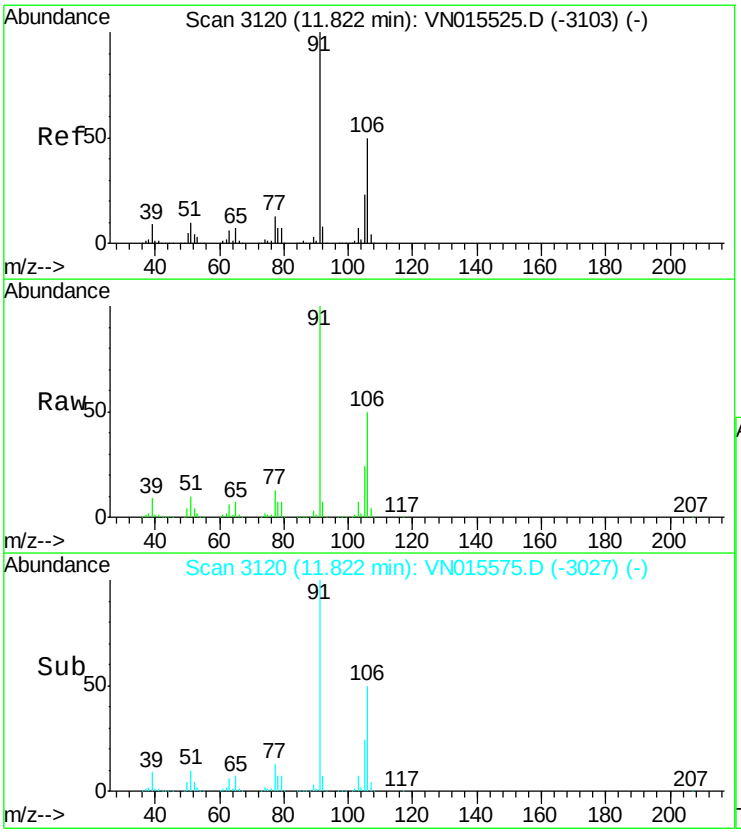
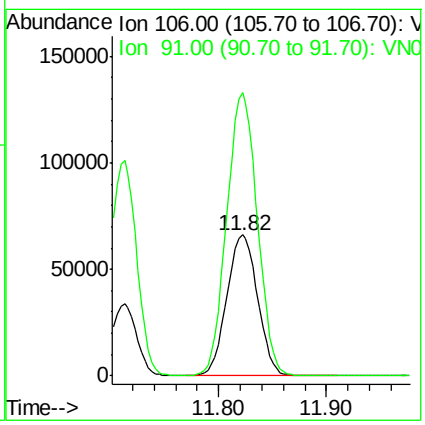


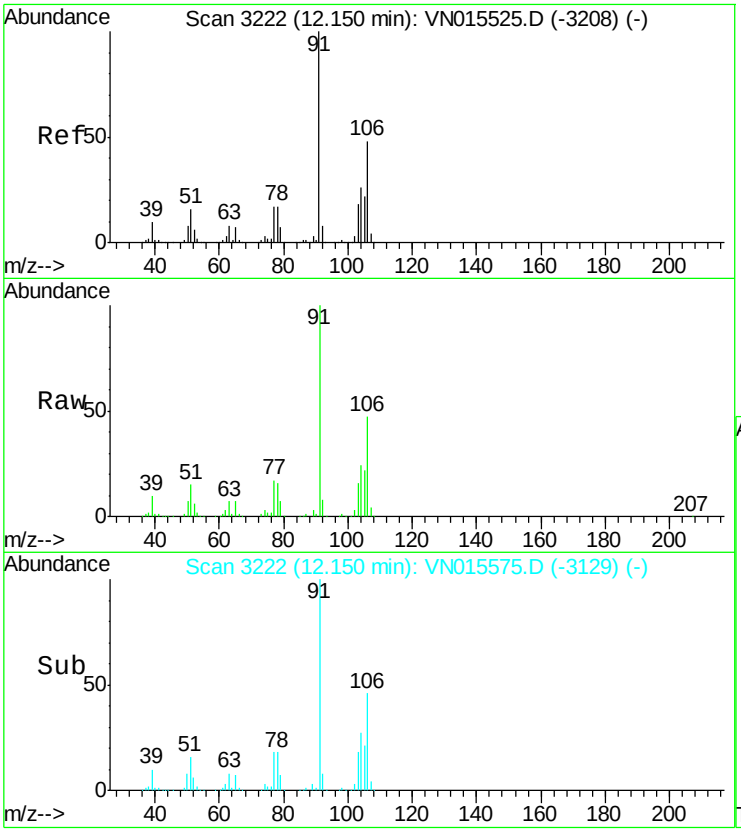


#69
m/p-Xylenes
Concen: 40.73 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:106 Resp: 131812

Ion	Ratio	Lower	Upper
106	100		
91	199.9	160.5	240.7





#70
o-Xylene
Concen: 20.65 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:106 Resp: 65765

Ion	Ratio	Lower	Upper
106	100		
91	211.6	104.9	314.7

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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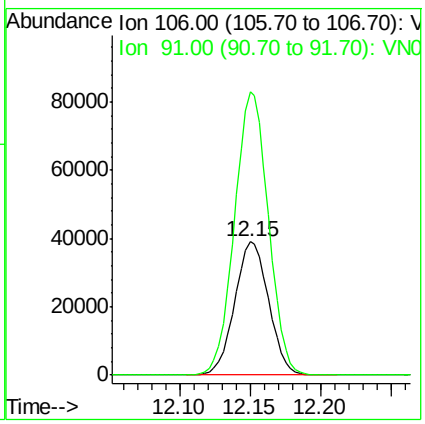
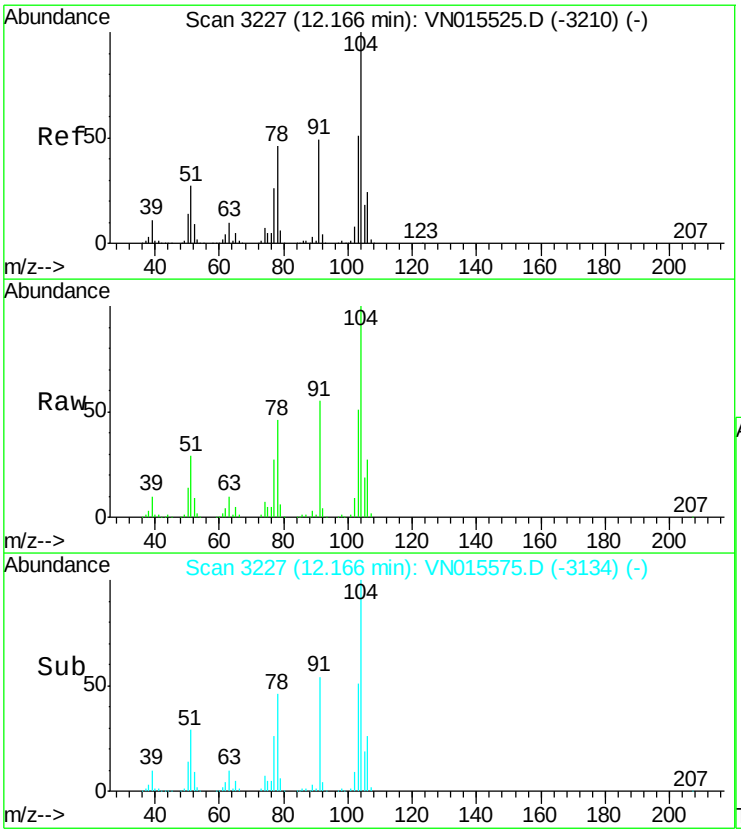
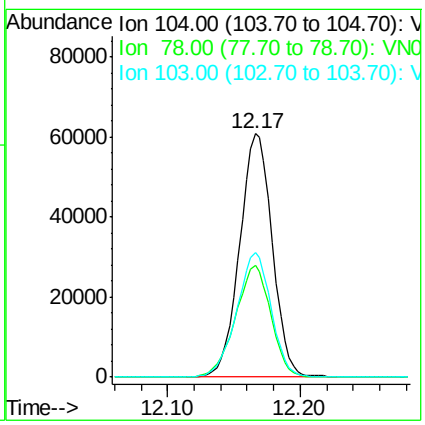


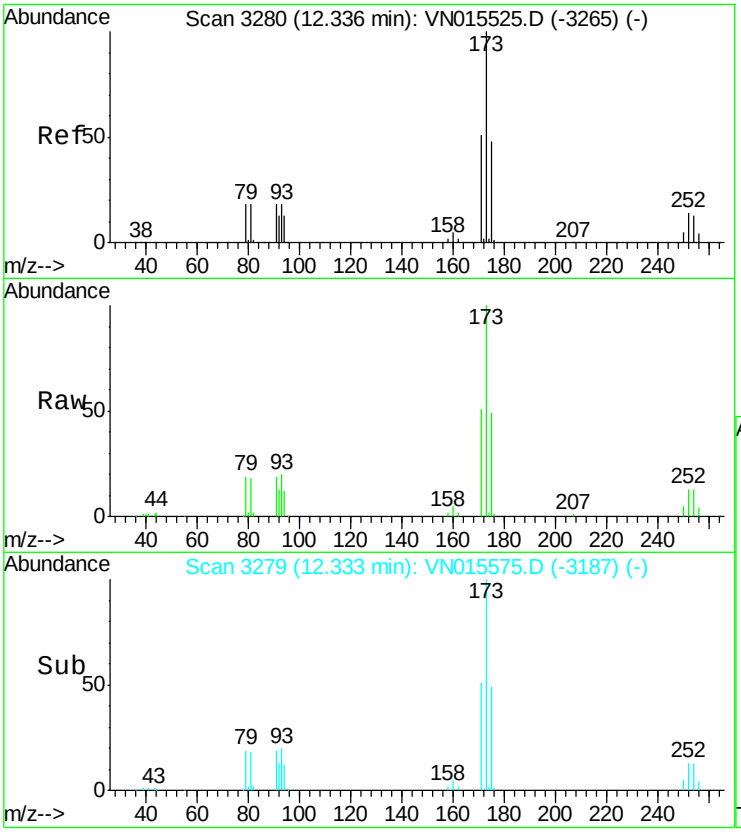


#71
Styrene
Concen: 20.74 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:104 Resp: 103740

Ion	Ratio	Lower	Upper
104	100		
78	49.8	40.1	60.1
103	54.2	44.0	66.0





#72
Bromoform
Concen: 19.28 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:173 Resp: 31265

Ion	Ratio	Lower	Upper
173	100		
175	49.9	24.3	72.9
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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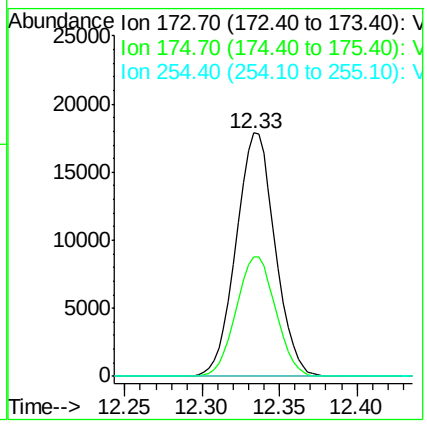
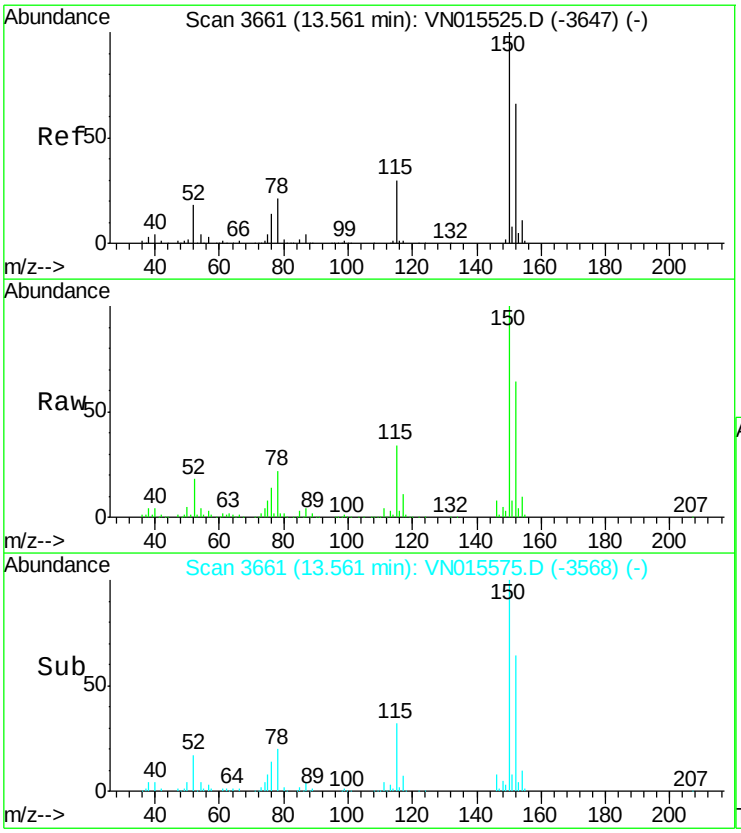
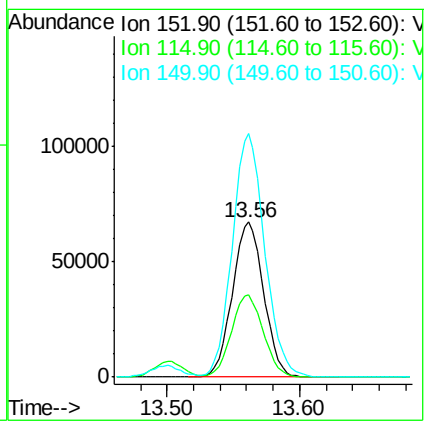


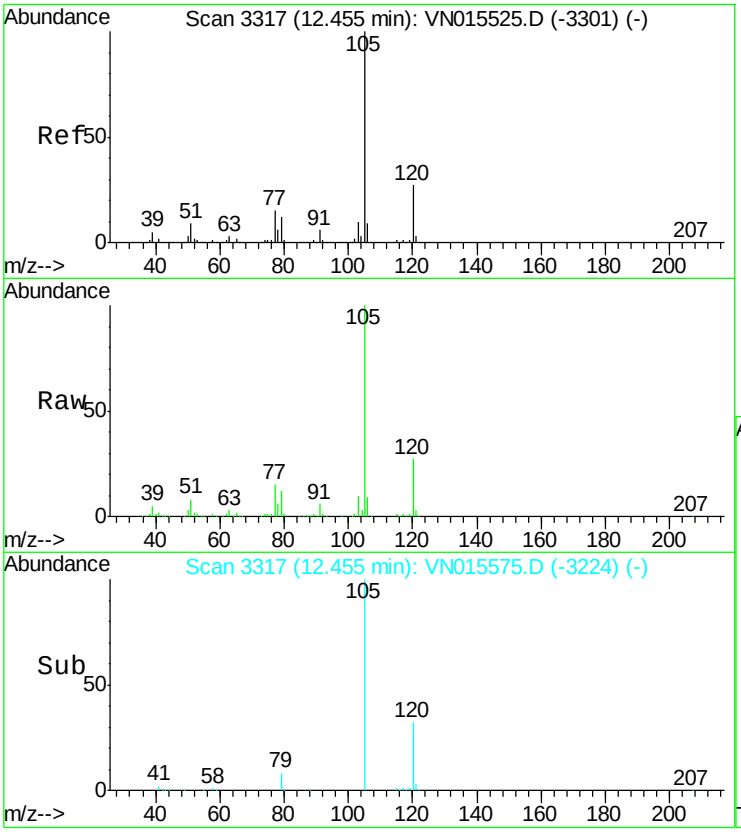


#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:152 Resp: 109601

Ion	Ratio	Lower	Upper
152	100		
115	54.0	27.2	81.6
150	163.3	0.0	343.6





#74
Isopropylbenzene
Concen: 20.47 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:105 Resp: 172897

Ion	Ratio	Lower	Upper
105	100		
120	27.1	13.7	41.0

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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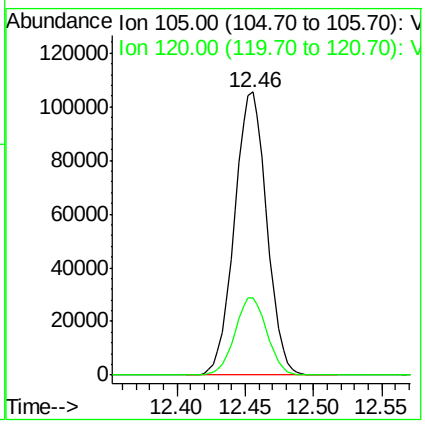
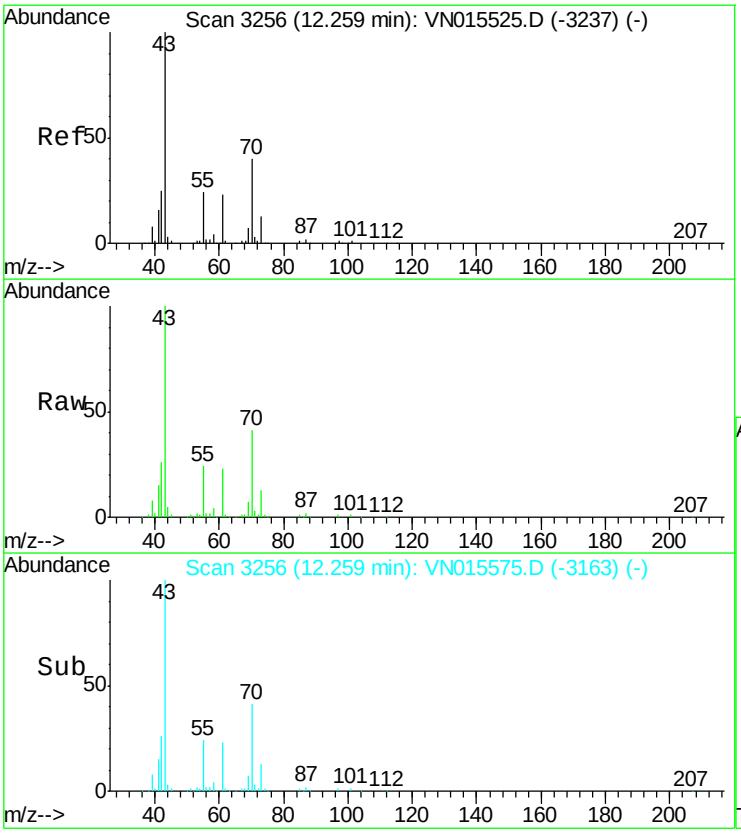
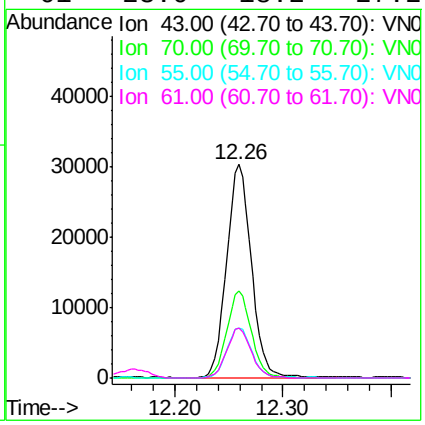


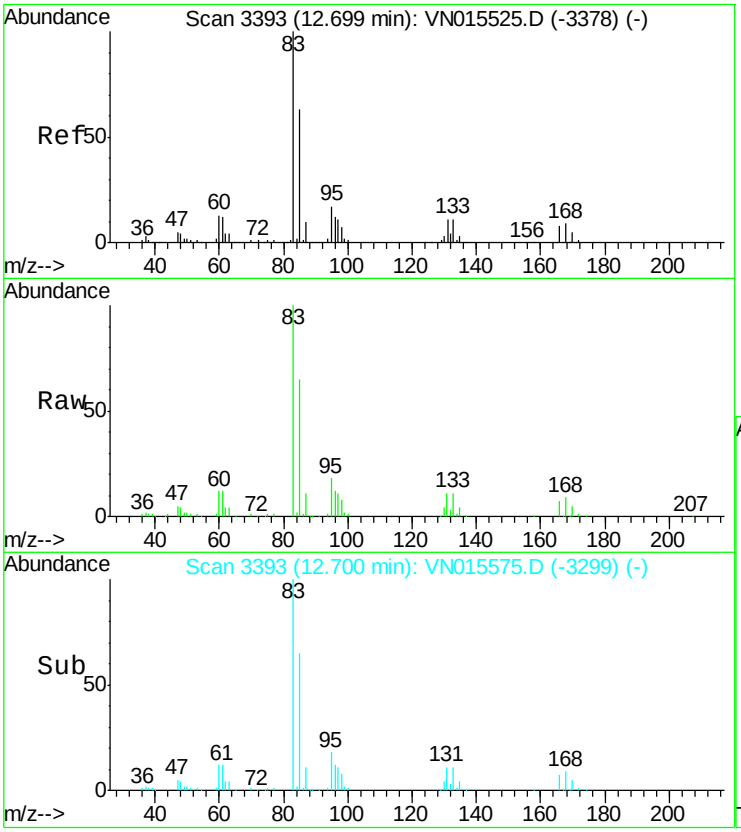


#75
N-amyl acetate
Concen: 17.06 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 43 Resp: 48996

Ion	Ratio	Lower	Upper
43	100		
70	39.9	32.0	48.0
55	23.7	18.5	27.7
61	23.0	18.2	27.2





#76
1,1,2,2-Tetrachloroethane
Concen: 20.76 ug/l
RT: 12.70 min Scan# 3393
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 83 Resp: 47948

Ion	Ratio	Lower	Upper
83	100		
131	11.8	5.9	17.6
85	65.3	31.9	95.7

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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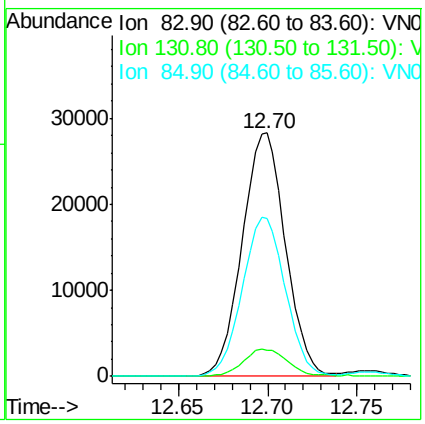
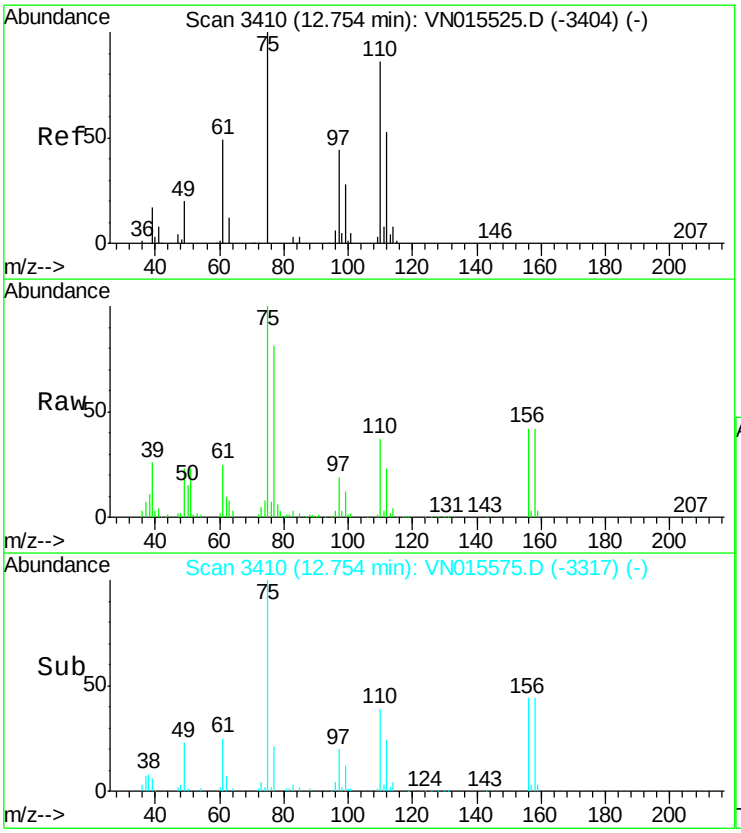
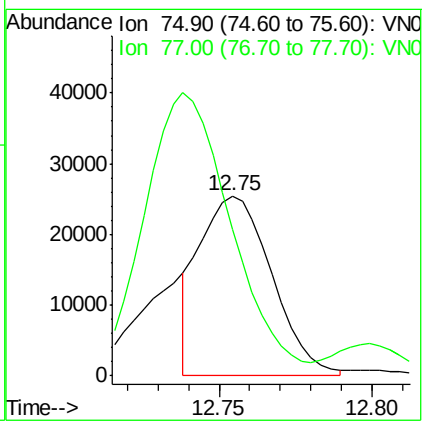


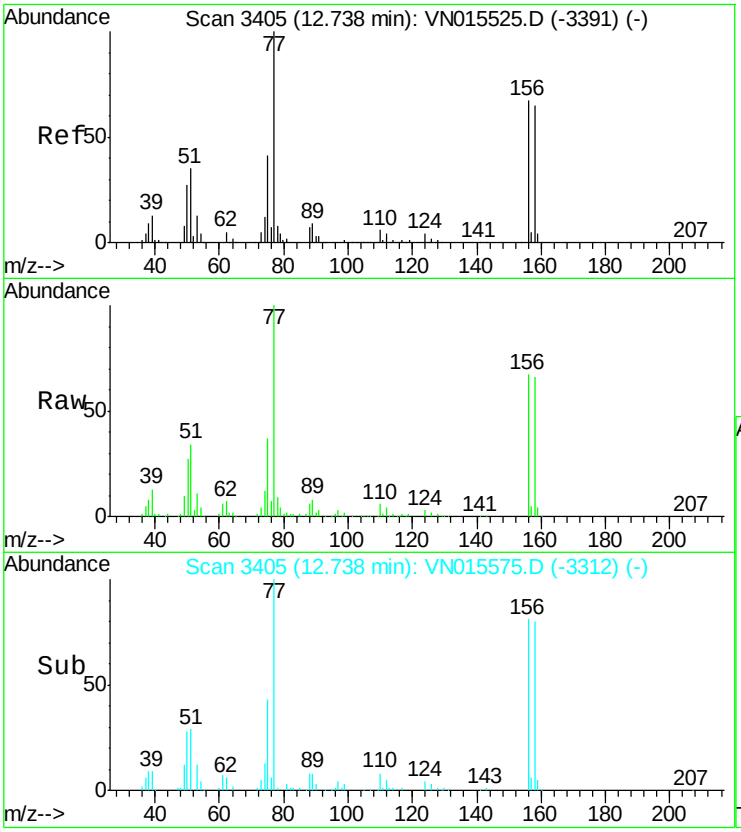


#77
1,2,3-Trichloropropane
Concen: 20.48 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 75 Resp: 41632

Ion	Ratio	Lower	Upper
75	100		
77	190.6	90.4	271.2





#78
Bromobenzene
Concen: 19.52 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:156 Resp: 46401

Ion	Ratio	Lower	Upper
156	100		
77	171.0	86.0	258.0
158	97.5	48.7	146.1

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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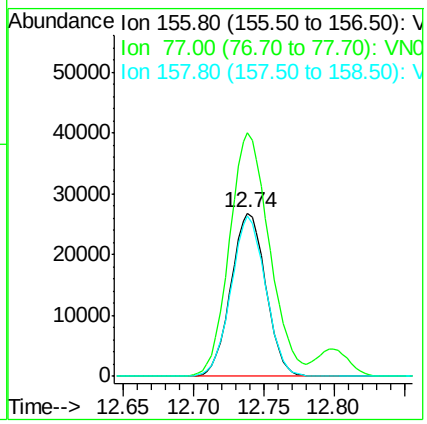
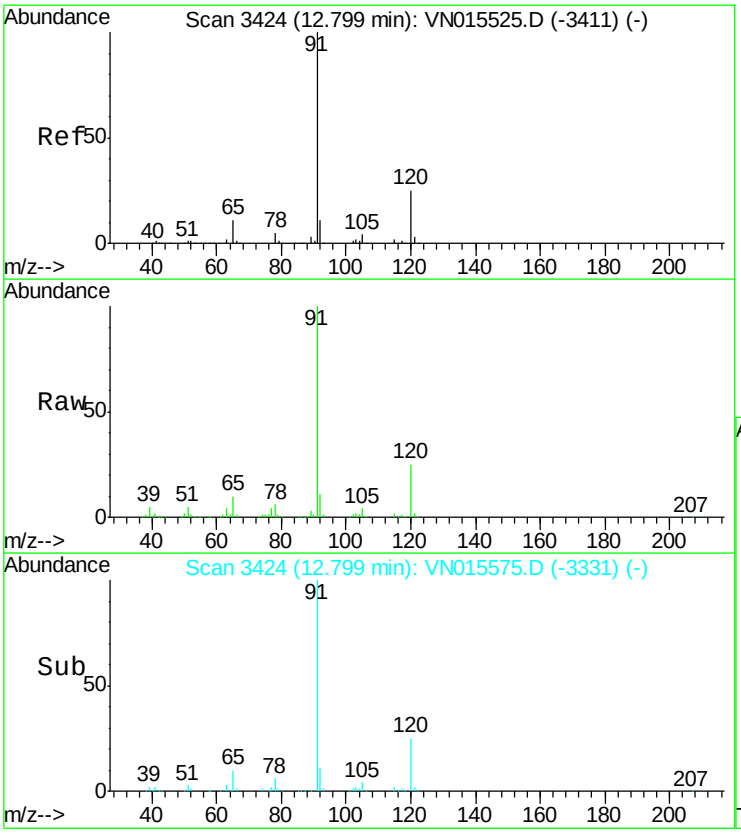
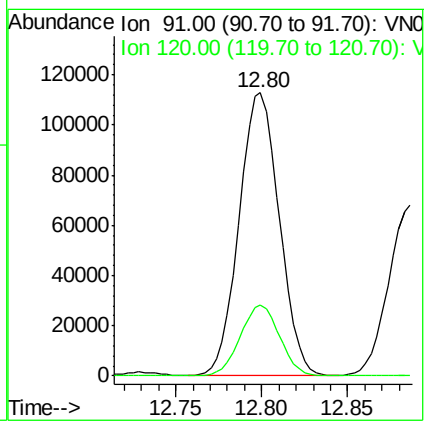


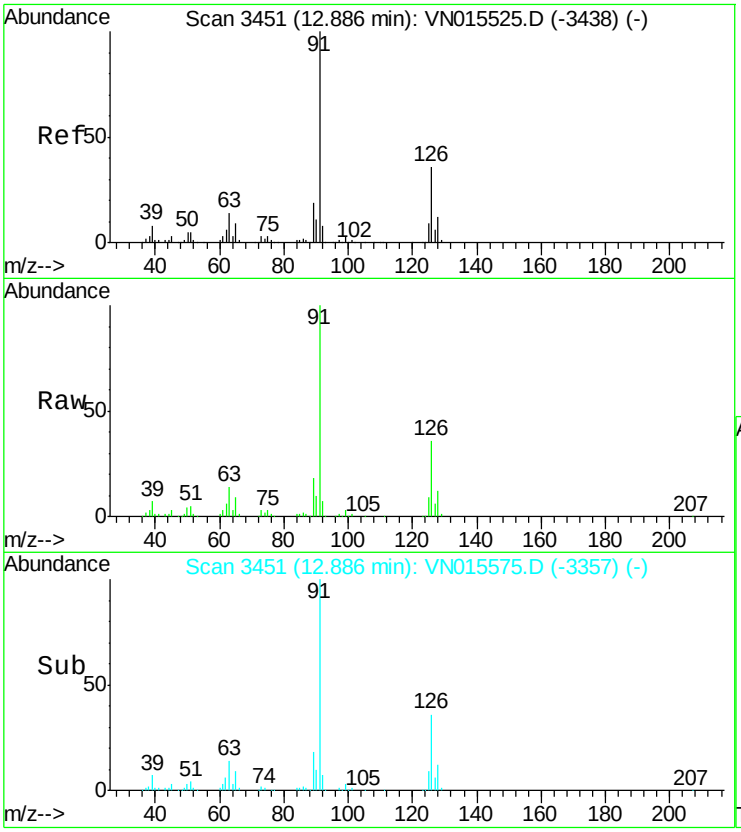


#79
n-propylbenzene
Concen: 19.58 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 91 Resp: 183261

Ion	Ratio	Lower	Upper
91	100		
120	24.4	12.2	36.4





#80
2-Chlorotoluene
Concen: 20.58 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 91 Resp: 113916

Ion	Ratio	Lower	Upper
91	100		
126	36.0	17.9	53.8

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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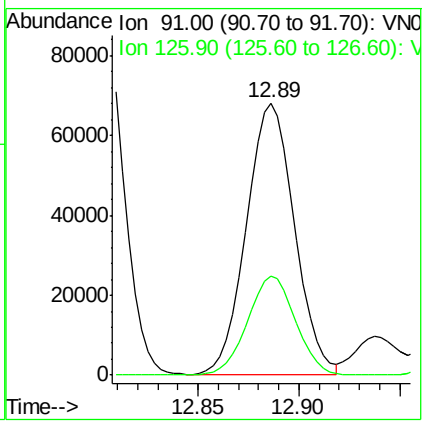
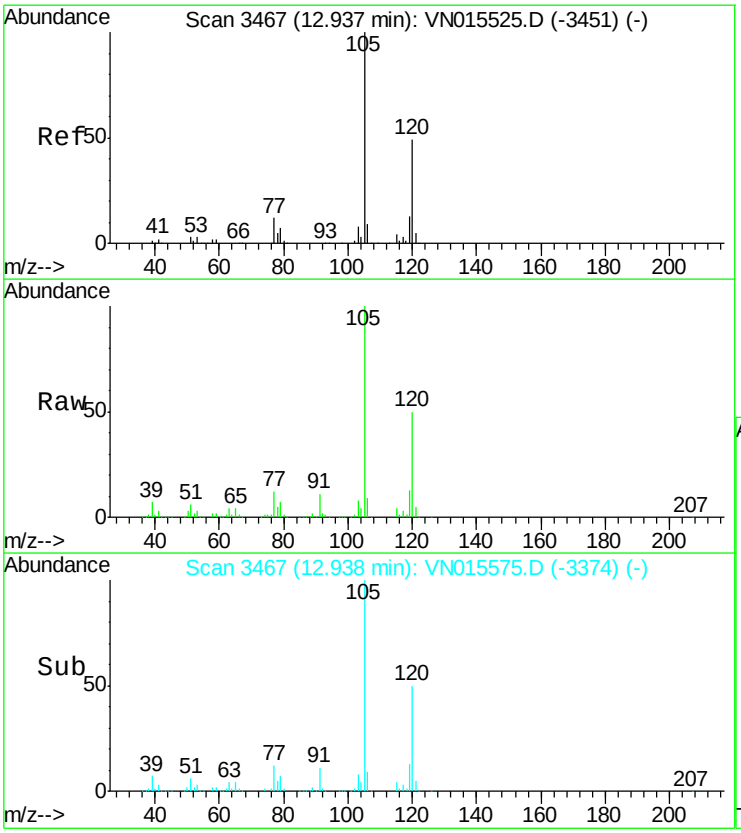
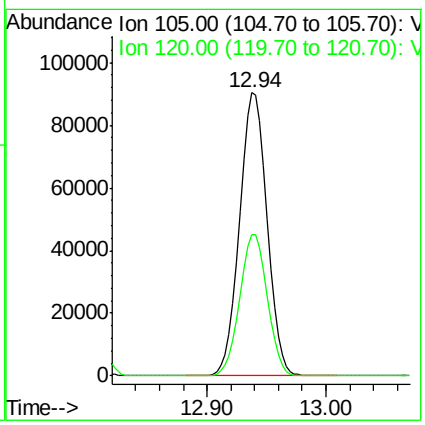


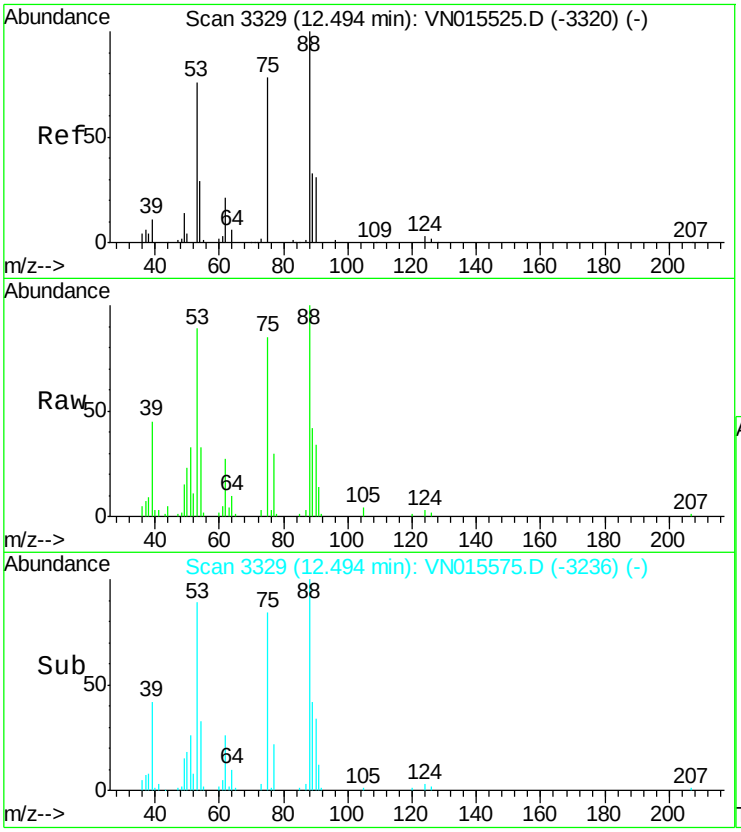


#81
1,3,5-Trimethylbenzene
Concen: 19.42 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:105 Resp: 144858

Ion	Ratio	Lower	Upper
105	100		
120	50.1	24.6	73.8





#82
trans-1,4-Dichloro-2-butene
Concen: 15.47 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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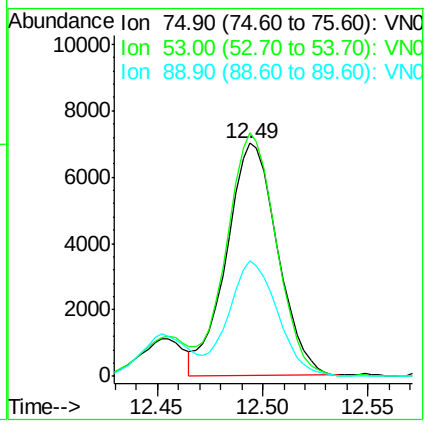
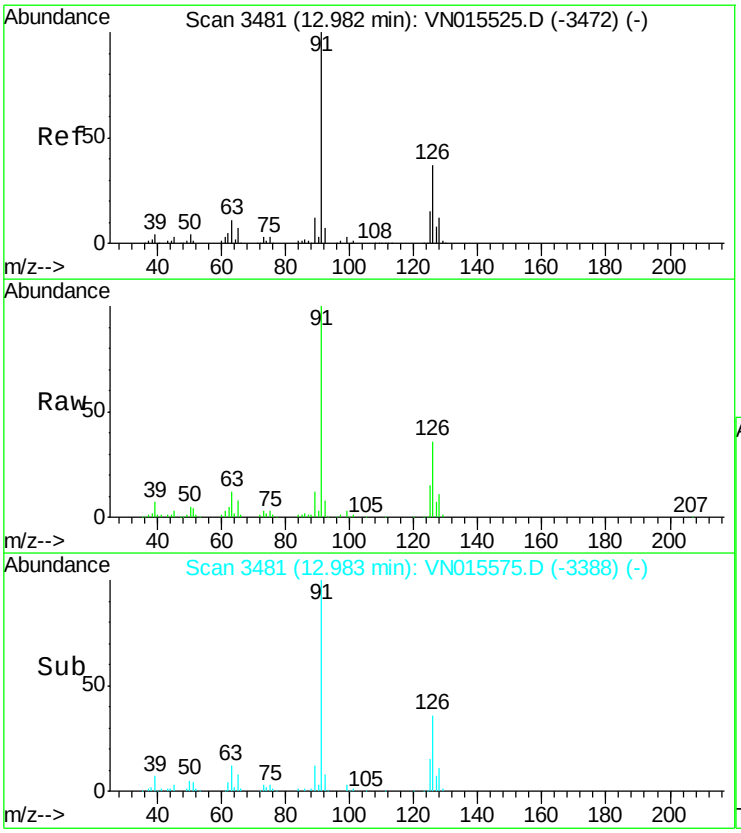
Tgt Ion: 75 Resp: 11678

Ion	Ratio	Lower	Upper
75	100		
53	102.3	77.5	116.3
89	47.8	37.7	56.5

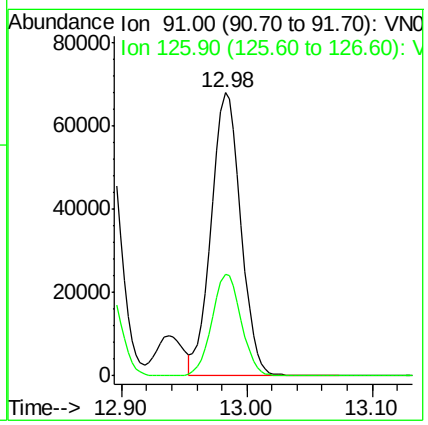




#83
4-Chlorotoluene
Concen: 19.52 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 91 Resp: 110834

Ion	Ratio	Lower	Upper
91	100		
126	35.6	17.5	52.6



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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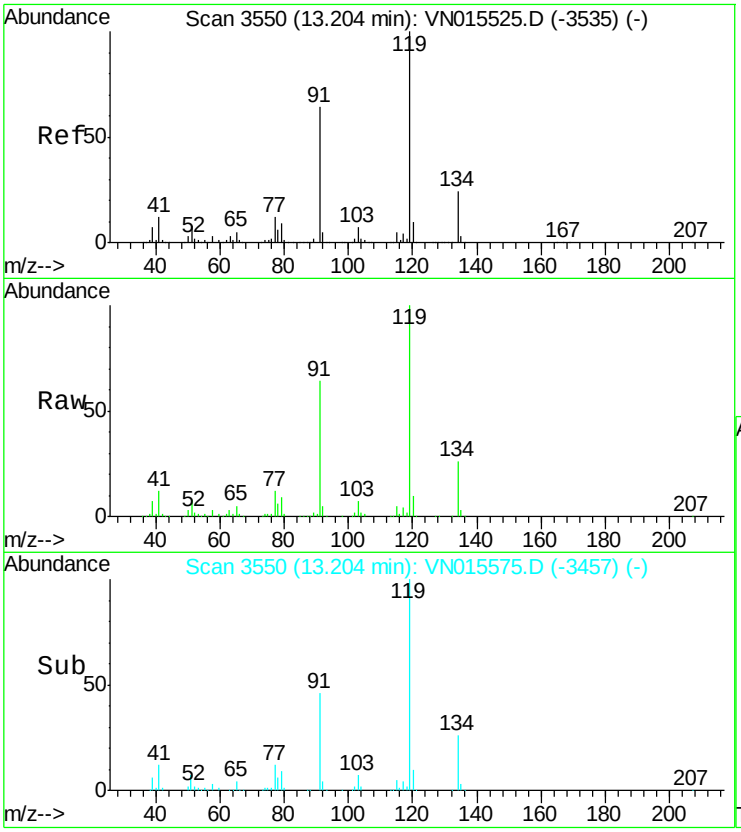
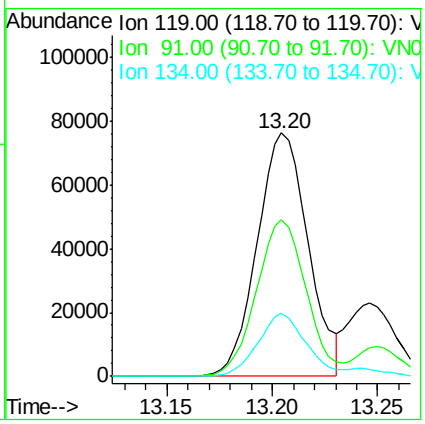
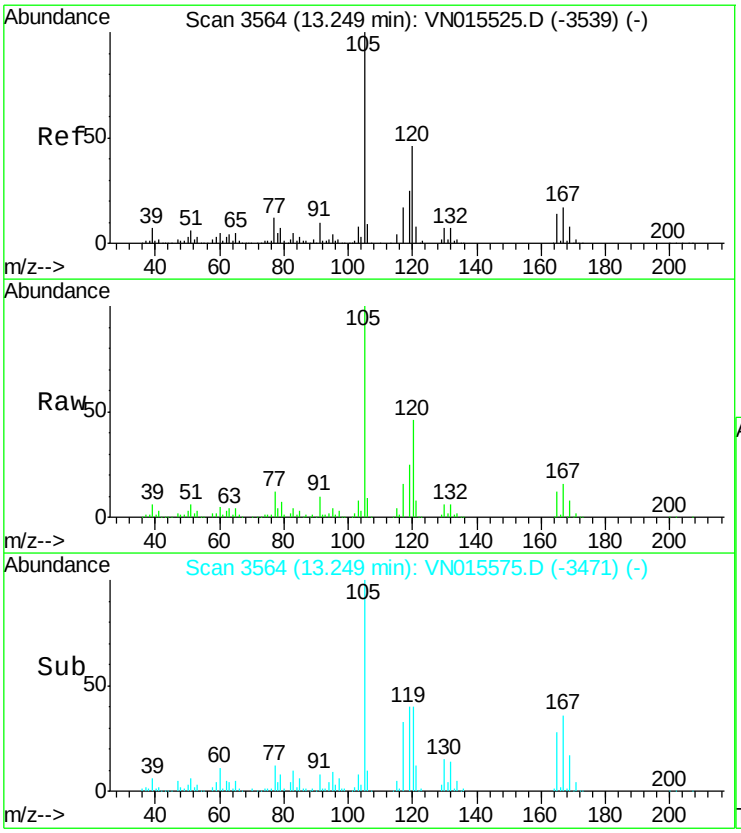


#84
tert-Butylbenzene
Concen: 20.40 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:119 Resp: 128113

Ion	Ratio	Lower	Upper
119	100		
91	63.2	31.9	95.9
134	24.5	12.1	36.3

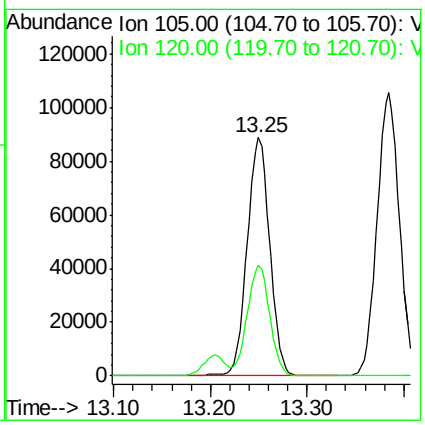


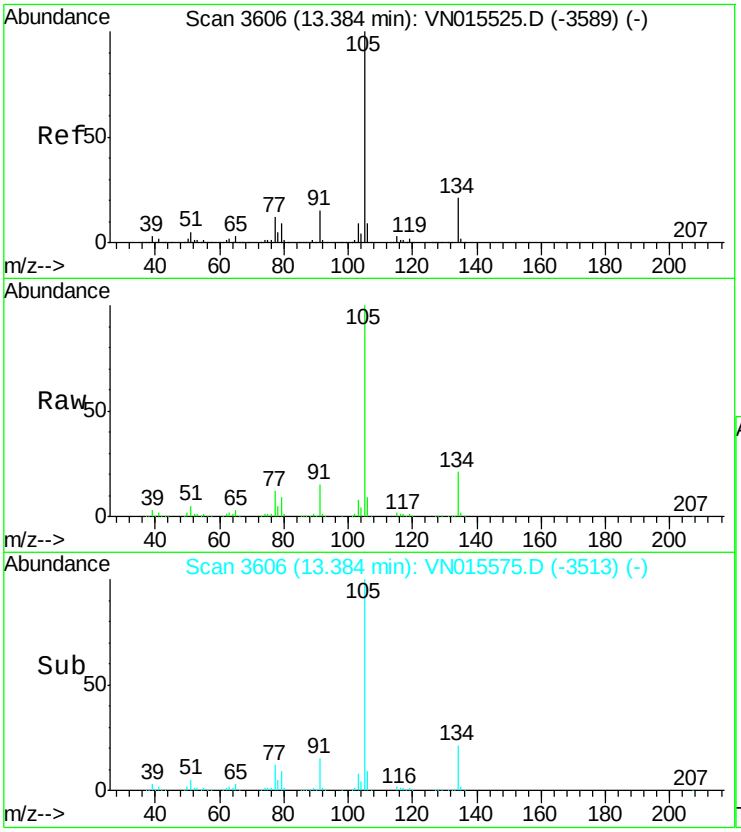


#85
1,2,4-Trimethylbenzene
Concen: 19.32 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:105 Resp: 144176

Ion	Ratio	Lower	Upper
105	100		
120	46.2	23.1	69.3





#86
sec-Butylbenzene
Concen: 19.73 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:105 Resp: 168509

Ion	Ratio	Lower	Upper
105	100		
134	21.1	10.6	31.8

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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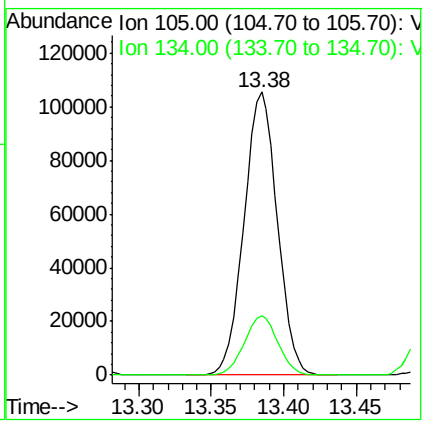
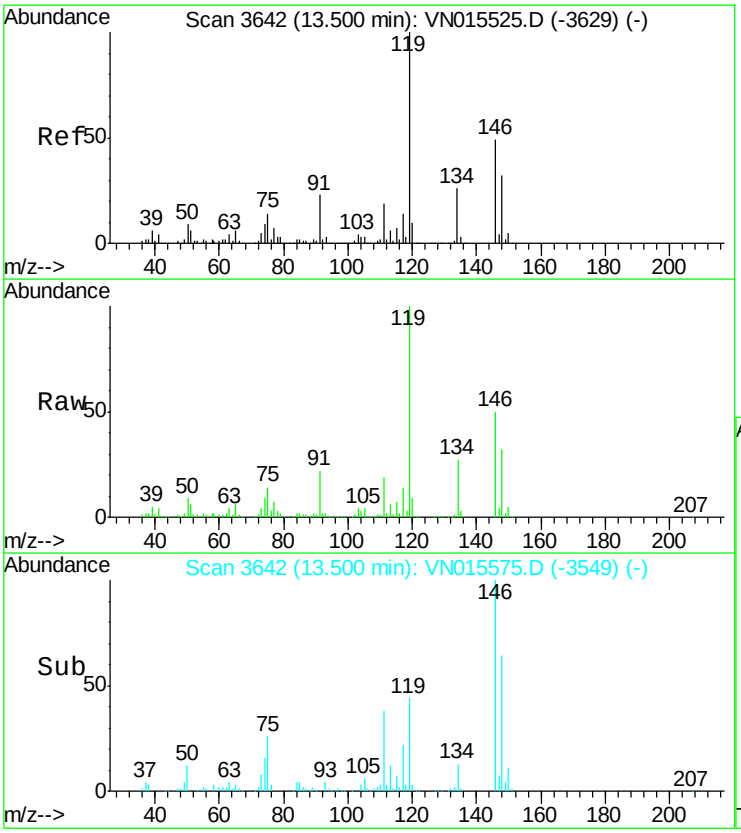
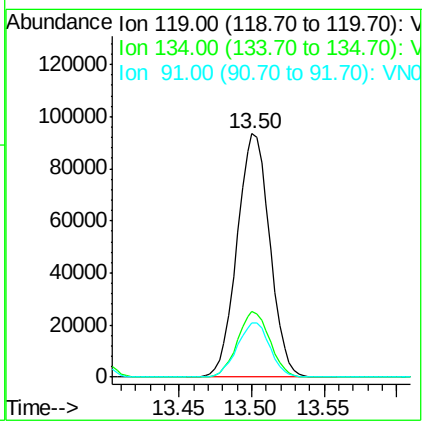


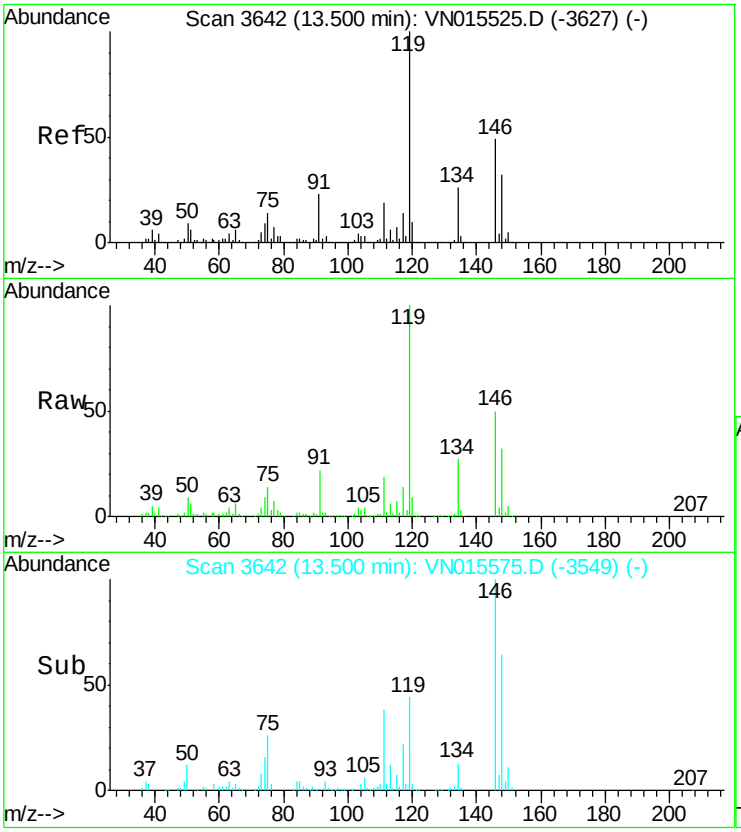


#87
p-Isopropyltoluene
Concen: 19.85 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:119 Resp: 146608

Ion	Ratio	Lower	Upper
119	100		
134	26.7	13.3	39.9
91	22.4	11.7	35.1





#88
1,3-Dichlorobenzene
Concen: 19.91 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:146 Resp: 76982

Ion	Ratio	Lower	Upper
146	100		
111	37.8	19.1	57.1
148	63.8	32.4	97.0

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

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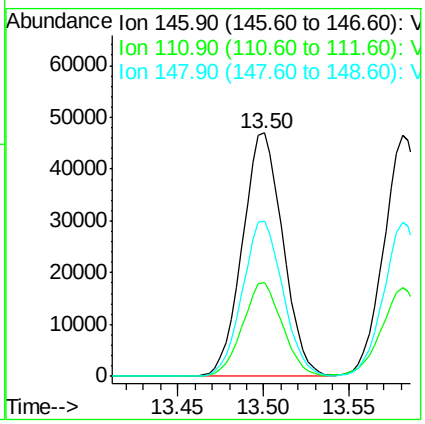
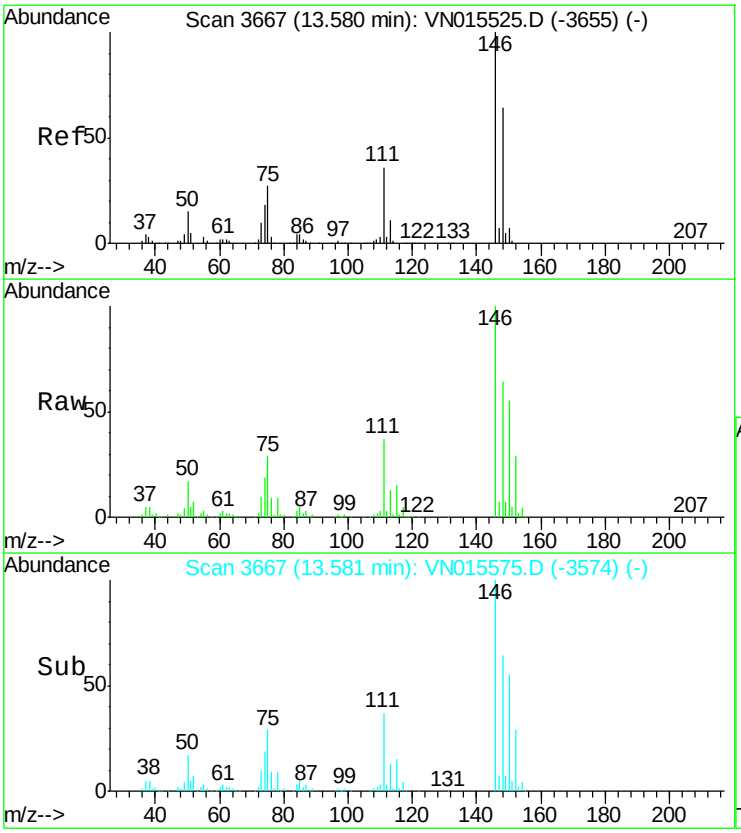
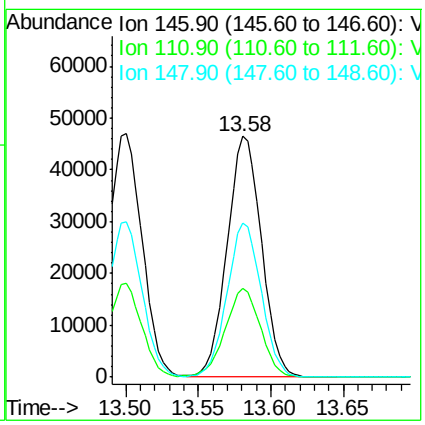


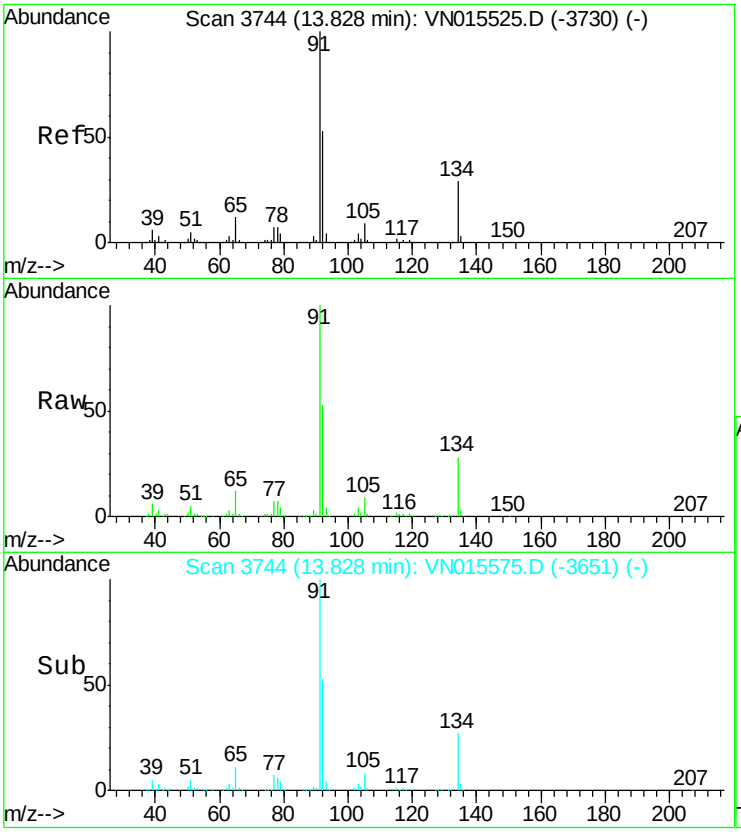


#89
1,4-Dichlorobenzene
Concen: 20.14 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:146 Resp: 76420

Ion	Ratio	Lower	Upper
146	100		
111	37.6	18.4	55.4
148	63.8	32.3	96.9





#90
n-Butylbenzene
Concen: 20.33 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 91 Resp: 113285

Ion	Ratio	Lower	Upper
91	100		
92	52.3	26.6	79.8
134	28.4	14.4	43.4

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

Manual Integrations APPROVED
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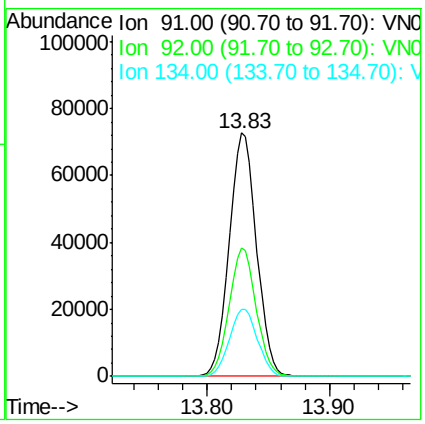
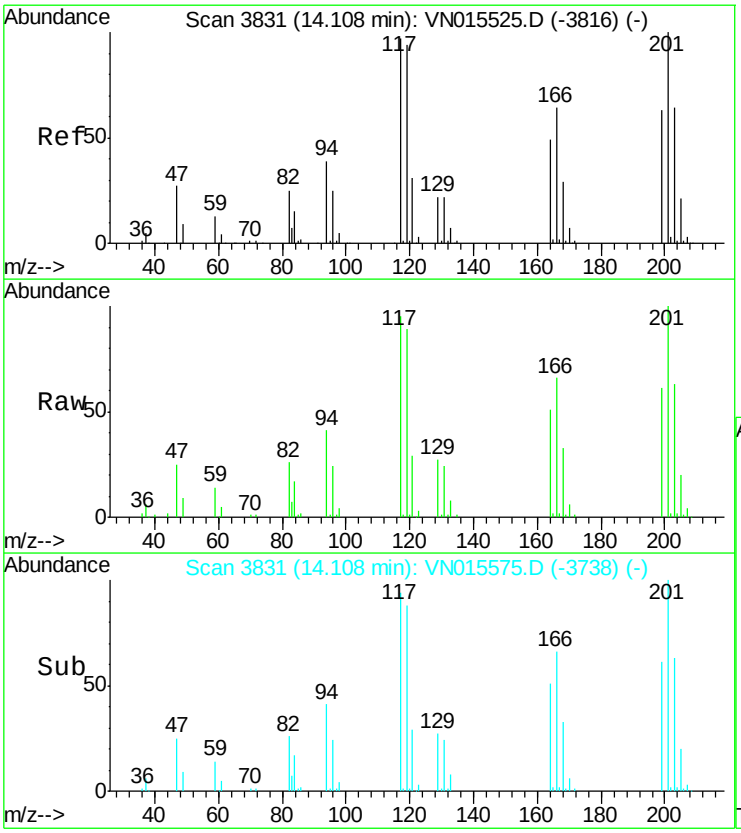
5/22/2014 4:16:09 PM

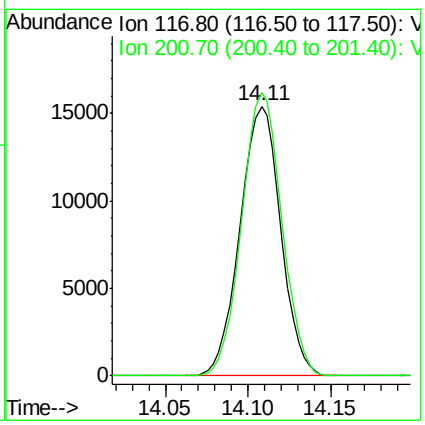


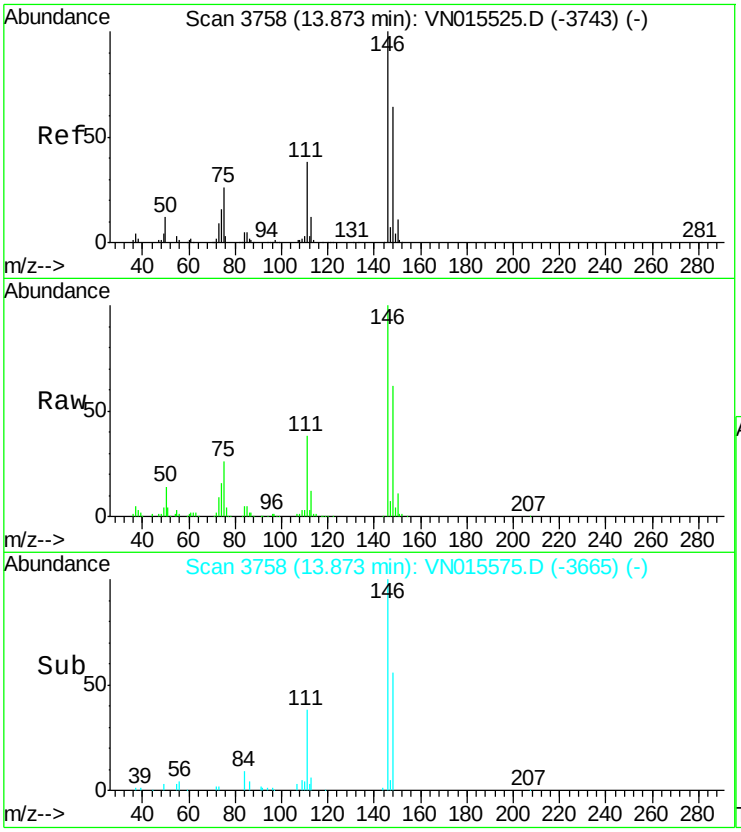


#91
Hexachloroethane
Concen: 18.72 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:117 Resp: 26311

Ion	Ratio	Lower	Upper
117	100		
201	103.5	51.7	155.2





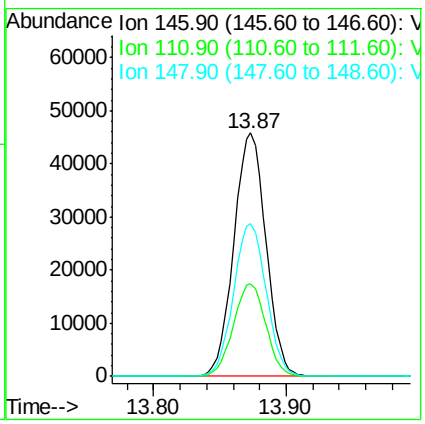
#92
1,2-Dichlorobenzene
Concen: 20.07 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

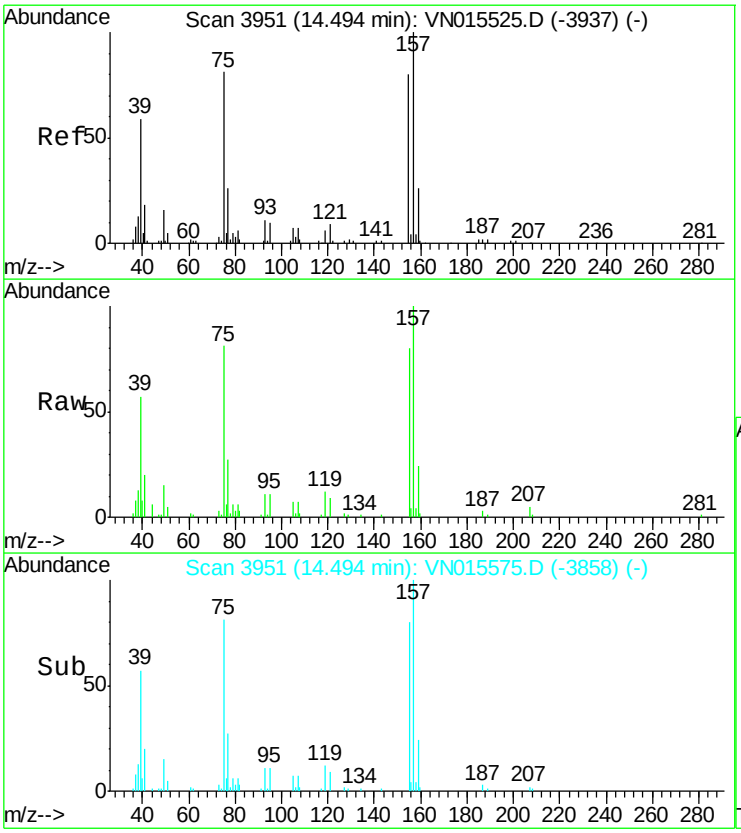
Tgt Ion:146 Resp: 76935

Ion	Ratio	Lower	Upper
146	100		
111	38.5	19.4	58.2
148	63.8	32.4	97.0

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:16:09 PM

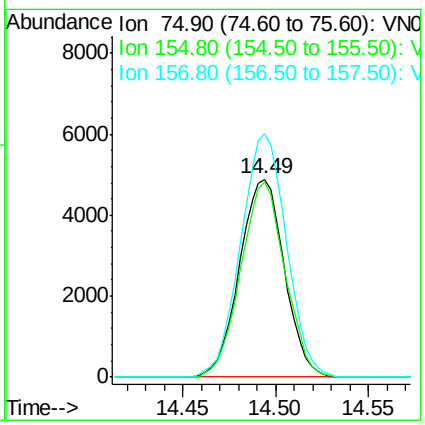


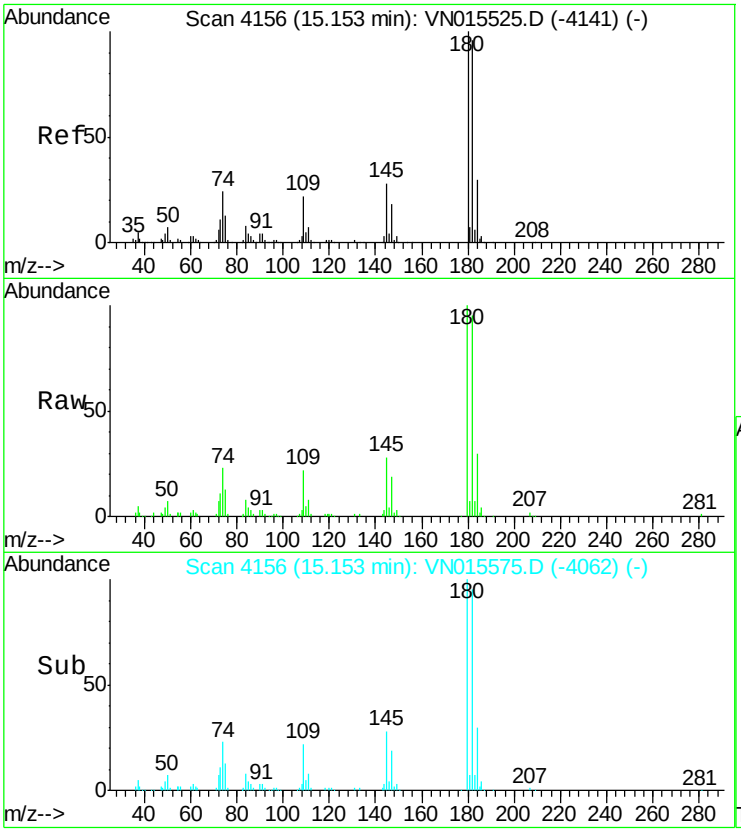


#93
1,2-Dibromo-3-Chloropropane
Concen: 20.06 ug/l
RT: 14.49 min Scan# 3951
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion: 75 Resp: 8232

Ion	Ratio	Lower	Upper
75	100		
155	97.2	49.4	148.2
157	125.3	61.3	183.8





#94
1,2,4-Trichlorobenzene
Concen: 20.34 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:180 Resp: 39085

Ion	Ratio	Lower	Upper
180	100		
182	96.7	48.0	144.0
145	28.2	14.0	42.0

Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

Manual Integrations APPROVED
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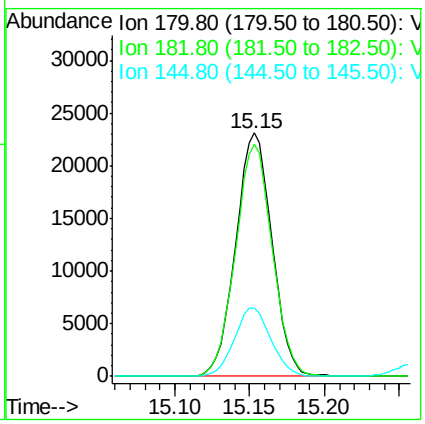
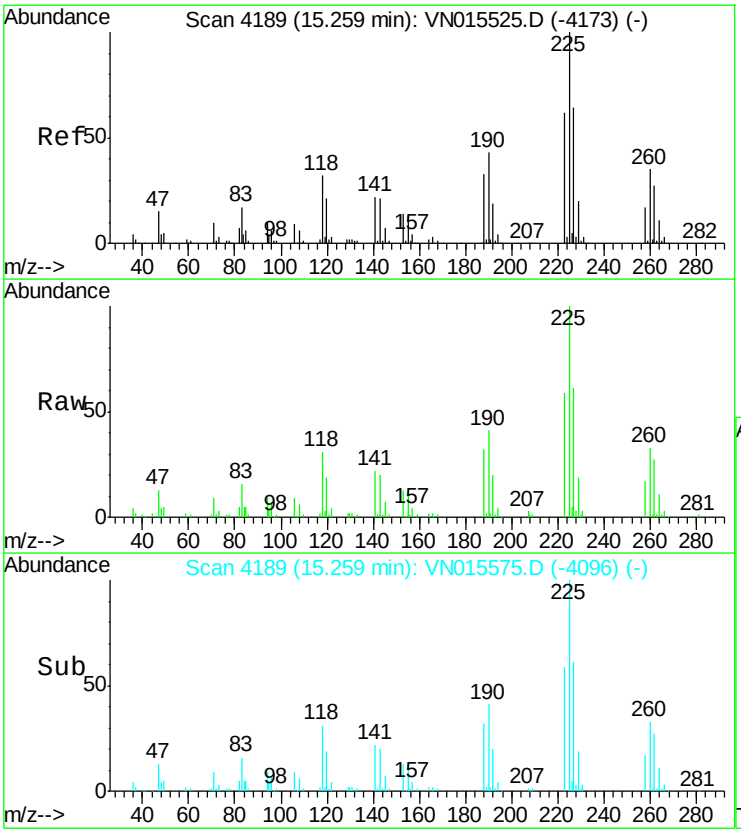
5/22/2014 4:16:09 PM

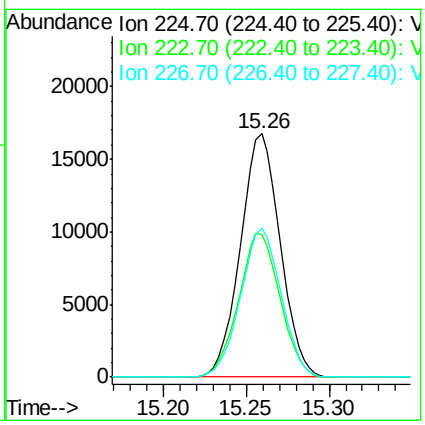


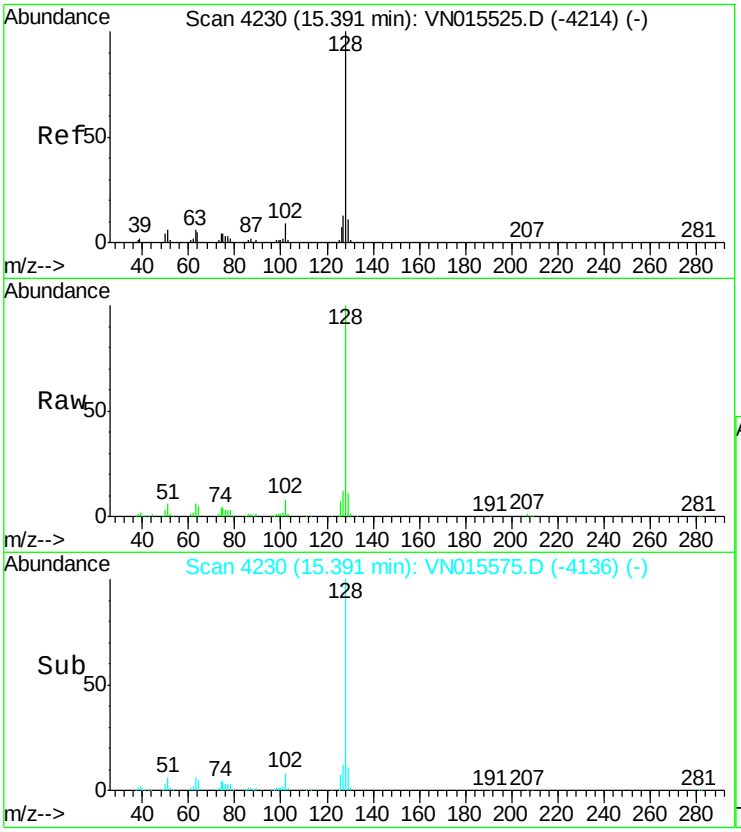


#95
Hexachlorobutadiene
Concen: 19.90 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:225 Resp: 27937

Ion	Ratio	Lower	Upper
225	100		
223	61.3	31.6	95.0
227	62.3	32.1	96.5

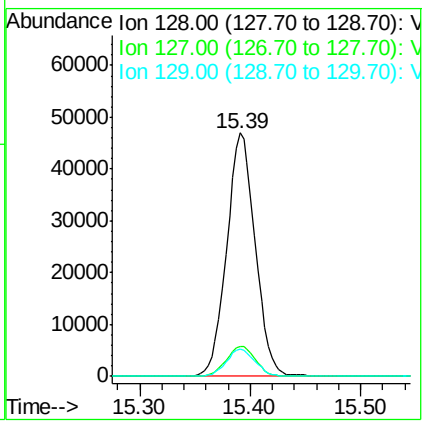




#96
Naphthalene
Concen: 19.09 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:128 Resp: 84023

Ion	Ratio	Lower	Upper
128	100		
127	12.6	10.3	15.5
129	11.2	8.7	13.1



Instrument :
MSVOA_N
ClientSampleId :
VN0521WBS02

Manual Integrations APPROVED
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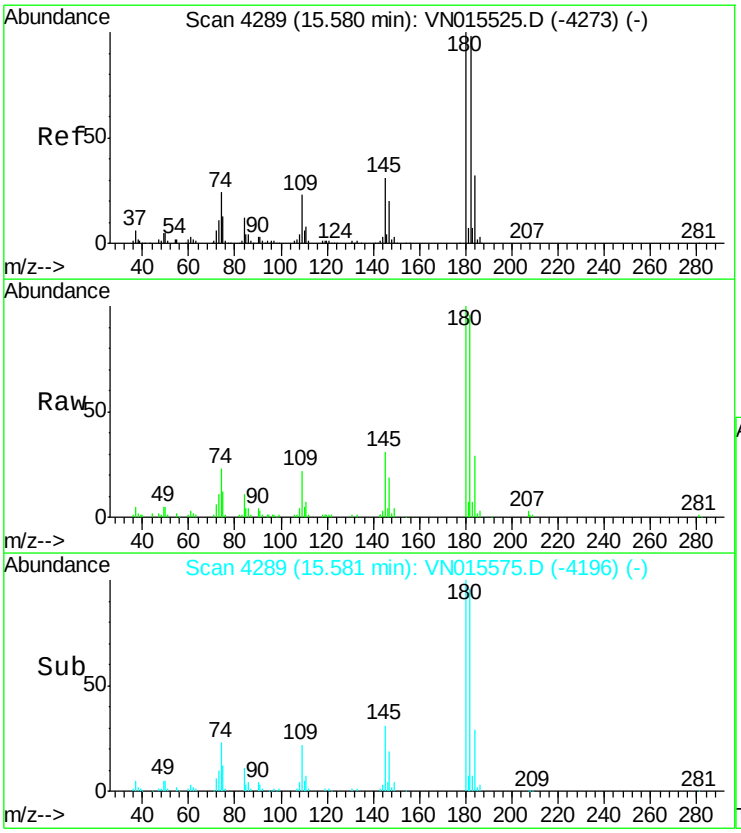
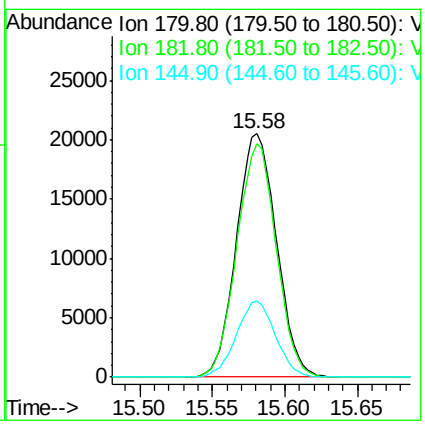
5/22/2014 4:16:09 PM



#97
1,2,3-Trichlorobenzene
Concen: 20.99 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015575.D
Acq: 22 May 2014 2:15

Tgt Ion:180 Resp: 39540

Ion	Ratio	Lower	Upper
180	100		
182	94.0	47.8	143.4
145	30.3	14.9	44.7



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	
Project:	37-14 36th Street	Date Received:	
Client Sample ID:	VN0522WBS01	SDG No.:	F2352
Lab Sample ID:	VN0522WBS01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015597.D	1		05/22/14	VN052214

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	19.2		0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	18.9		0.2	0.2	1	ug/L
67-64-1	Acetone	140		0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	19.3		0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	19.6		0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	18.9		0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	19.6		0.2	0.2	1	ug/L
78-93-3	2-Butanone	110		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	18.7		0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	20.2		0.2	0.2	1	ug/L
67-66-3	Chloroform	19.2		0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	19		0.2	0.2	1	ug/L
71-43-2	Benzene	19.6		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	19.4		0.2	0.2	1	ug/L
79-01-6	Trichloroethene	19.5		0.2	0.2	1	ug/L
108-88-3	Toluene	19.6		0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	19.8		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	19.2		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	19.5		0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	57.8		0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	19.5		0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	21		0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	19.7		0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	19.3		0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	19.1		0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	19.2		0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	19.4		0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	19.9		0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	410		100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.2		70 - 120		92%	SPK: 50

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Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	
Project:	37-14 36th Street	Date Received:	
Client Sample ID:	VN0522WBS01	SDG No.:	F2352
Lab Sample ID:	VN0522WBS01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015597.D	1		05/22/14	VN052214

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	49.4		85 - 115		99%	SPK: 50
2037-26-5	Toluene-d8	49		85 - 120		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.6		75 - 120		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	197105	7.87				
540-36-3	1,4-Difluorobenzene	275670	8.79				
3114-55-4	Chlorobenzene-d5	239976	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	106078	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015597.D
Acq On : 22 May 2014 14:54
Operator : MD
Sample : VN0522WBS01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:03:43 PM

Quant Time: May 23 12:00:32 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	197105	50.00 ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	275670	50.00 ug/l	0.00
64) Chlorobenzene-d5	11.61	117	239976	50.00 ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	106078	50.00 ug/l	0.00
System Monitoring Compounds					
34) 1,2-Dichloroethane-d4	8.23	65	104684	46.17 ug/l	0.00
Spiked Amount 50.000			Recovery	= 92.34%	
36) Dibromofluoromethane	7.80	113	88636	49.37 ug/l	0.00
Spiked Amount 50.000			Recovery	= 98.74%	
51) Toluene-d8	10.29	98	324331	49.03 ug/l	0.00
Spiked Amount 50.000			Recovery	= 98.06%	
63) 4-Bromofluorobenzene	12.61	95	107865	47.60 ug/l	0.00
Spiked Amount 50.000			Recovery	= 95.20%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.85	85	29564	18.81 ug/l	96
4) Chloromethane	2.06	50	40239	21.30 ug/l	99
5) Vinyl Chloride	2.20	62	35325	19.18 ug/l	99
6) Bromomethane	2.62	94	20039	19.51 ug/l	95
7) Chloroethane	2.77	64	22810	19.66 ug/l	100
8) Trichlorofluoromethane	3.11	101	55677	18.62 ug/l	98
9) Diethyl Ether	3.53	74	21680	19.61 ug/l	99
10) 1,1,2-Trichlorotrifluoroet	3.91	101	32959	19.54 ug/l	100
11) Methyl Iodide	4.11	142	28887	14.91 ug/l	97
12) Tert butyl alcohol	4.95	59	24008	97.45 ug/l	100
13) 1,1-Dichloroethene	3.88	96	30476	18.90 ug/l	96
14) Acrolein	3.74	56	16575	80.97 ug/l	99
15) Allyl chloride	4.51	41	52779	18.71 ug/l	98
16) Acrylonitrile	5.18	53	76271	105.00 ug/l	99
17) Acetone	3.95	43	96956	136.29 ug/l	99
18) Carbon Disulfide	4.24	76	81615	17.96 ug/l	100
19) Methyl Acetate	4.50	43	66622	19.36 ug/l	100
20) Methyl tert-butyl Ether	5.27	73	109332	19.26 ug/l	99
21) Methylene Chloride	4.74	84	36142	19.59 ug/l	96
22) trans-1,2-Dichloroethene	5.28	96	32060	18.86 ug/l	96
23) Diisopropyl ether	6.18	45	113301	19.50 ug/l	95
24) Vinyl Acetate	6.12	43	278960m	96.65 ug/l	
25) 1,1-Dichloroethane	6.08	63	62609	19.57 ug/l	99
26) 2-Butanone	7.05	43	114022	113.61 ug/l	99
27) 2,2-Dichloropropane	7.06	77	54705	19.37 ug/l	98
28) cis-1,2-Dichloroethene	7.06	96	40278	20.18 ug/l	97
29) Bromochloromethane	7.42	49	28383	19.23 ug/l	95
30) Tetrahydrofuran	7.45	42	65640	97.20 ug/l	97
31) Chloroform	7.58	83	63378	19.18 ug/l	99
32) Cyclohexane	7.89	56	61287	20.46 ug/l	100
33) 1,1,1-Trichloroethane	7.79	97	58774	19.00 ug/l	100
37) 1,1-Dichloropropene	8.01	75	47680	19.39 ug/l	98
38) Ethyl Acetate	7.15	43	42775	19.72 ug/l	98
39) Carbon Tetrachloride	8.00	117	52598	18.71 ug/l	98

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015597.D
Acq On : 22 May 2014 14:54
Operator : MD
Sample : VN0522WBS01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:03:43 PM

Quant Time: May 23 12:00:32 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Methylcyclohexane	9.29	83	60635	19.29 ug/l	98
41) Benzene	8.26	78	143706	19.60 ug/l	99
42) Methacrylonitrile	7.37	41	24747	19.30 ug/l	97
43) 1,2-Dichloroethane	8.33	62	51838	19.36 ug/l	100
44) Isopropyl Acetate	8.36	43	73309	18.78 ug/l	98
45) Trichloroethene	9.04	130	39978	19.47 ug/l	98
46) 1,2-Dichloropropane	9.32	63	37236	19.77 ug/l	99
47) Dibromomethane	9.41	93	24030	19.39 ug/l	99
48) Bromodichloromethane	9.59	83	48249	18.98 ug/l	99
49) Methyl methacrylate	9.39	41	37077	19.71 ug/l	99
50) 1,4-Dioxane	9.40	88	10817	412.12 ug/l	94
52) 4-Methyl-2-Pentanone	10.16	43	211133	97.86 ug/l	99
53) Toluene	10.35	92	90894	19.56 ug/l	100
54) t-1,3-Dichloropropene	10.57	75	51108	19.66 ug/l	99
55) cis-1,3-Dichloropropene	10.03	75	55516	19.18 ug/l	99
56) 1,1,2-Trichloroethane	10.75	97	36012	20.05 ug/l	98
57) Ethyl methacrylate	10.61	69	51935	19.55 ug/l	98
58) 1,3-Dichloropropane	10.90	76	58976	19.60 ug/l	99
59) 2-Chloroethyl Vinyl ether	9.88	63	17102	61.33 ug/l	98
60) 2-Hexanone	10.93	43	150497	106.83 ug/l	99
61) Dibromochloromethane	11.10	129	41511	19.36 ug/l	99
62) 1,2-Dibromoethane	11.21	107	37372	20.13 ug/l	98
65) Tetrachloroethene	10.83	164	37462	19.79 ug/l	99
66) Chlorobenzene	11.64	112	99565	19.17 ug/l	98
67) 1,1,1,2-Tetrachloroethane	11.71	131	38206	19.31 ug/l	97
68) Ethyl Benzene	11.71	91	165801	19.50 ug/l	99
69) m/p-Xylenes	11.82	106	126545	38.24 ug/l	99
70) o-Xylene	12.15	106	63854	19.61 ug/l	98
71) Styrene	12.17	104	100017	19.55 ug/l	99
72) Bromoform	12.33	173	30608	18.46 ug/l #	98
74) Isopropylbenzene	12.46	105	170717	20.90 ug/l	99
75) N-amyl acetate	12.26	43	48857	17.58 ug/l	98
76) 1,1,2,2-Tetrachloroethane	12.70	83	47935	21.54 ug/l	100
77) 1,2,3-Trichloropropane	12.75	75	40900m	20.83 ug/l	
78) Bromobenzene	12.74	156	44604	19.39 ug/l	99
79) n-propylbenzene	12.80	91	176222	19.45 ug/l	100
80) 2-Chlorotoluene	12.89	91	110469	20.62 ug/l	100
81) 1,3,5-Trimethylbenzene	12.94	105	141960	19.67 ug/l	99
82) trans-1,4-Dichloro-2-buten	12.49	75	13444	18.40 ug/l	98
83) 4-Chlorotoluene	12.98	91	104458	19.01 ug/l	100
84) tert-Butylbenzene	13.20	119	127271	20.97 ug/l	99
85) 1,2,4-Trimethylbenzene	13.25	105	142292	19.70 ug/l	99
86) sec-Butylbenzene	13.38	105	159641	19.31 ug/l	99
87) p-Isopropyltoluene	13.50	119	140938	19.71 ug/l	100
88) 1,3-Dichlorobenzene	13.50	146	71353	19.07 ug/l	99
89) 1,4-Dichlorobenzene	13.58	146	70629	19.23 ug/l	99
90) n-Butylbenzene	13.83	91	104645	19.40 ug/l	99
91) Hexachloroethane	14.11	117	25669	18.87 ug/l	99
92) 1,2-Dichlorobenzene	13.87	146	73709	19.87 ug/l	98
93) 1,2-Dibromo-3-Chloropropan	14.49	75	7616	19.18 ug/l	96

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015597.D
Acq On : 22 May 2014 14:54
Operator : MD
Sample : VN0522WBS01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
MMDadoda
5/23/2014 3:03:43 PM

Quant Time: May 23 12:00:32 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) 1,2,4-Trichlorobenzene	15.15	180	34302	18.74	ug/l	99
95) Hexachlorobutadiene	15.26	225	26825	19.74	ug/l	99
96) Naphthalene	15.39	128	73222	17.64	ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	34542	19.27	ug/l	98

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

Quantitation Report (QT Reviewed)

Sample Results: **VN015597.D**

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052214\
Data File : VN015597.D
Acq On : 22 May 2014 14:54
Operator : MD
Sample : VN0522WBS01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 23 12:00:32 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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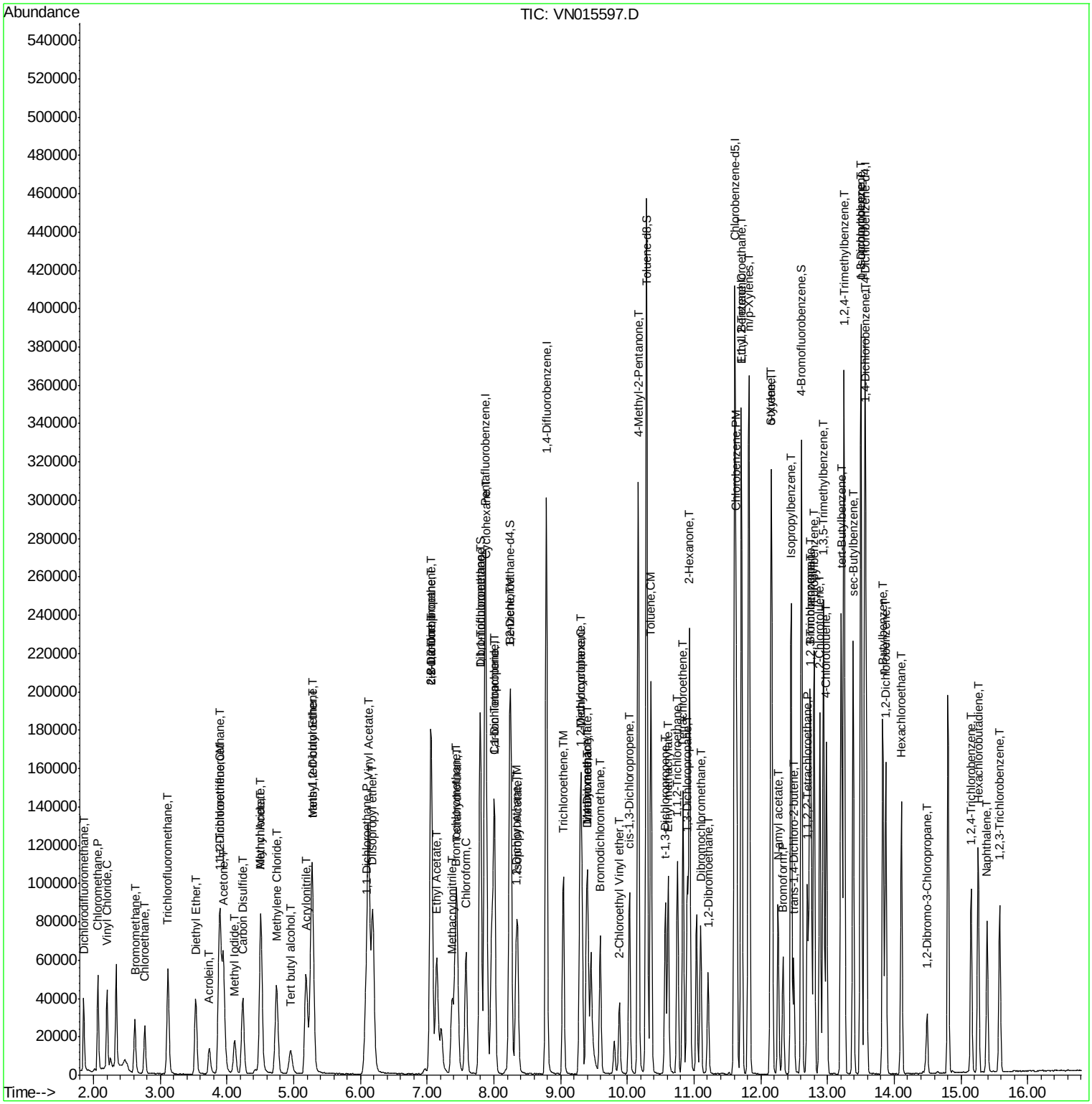
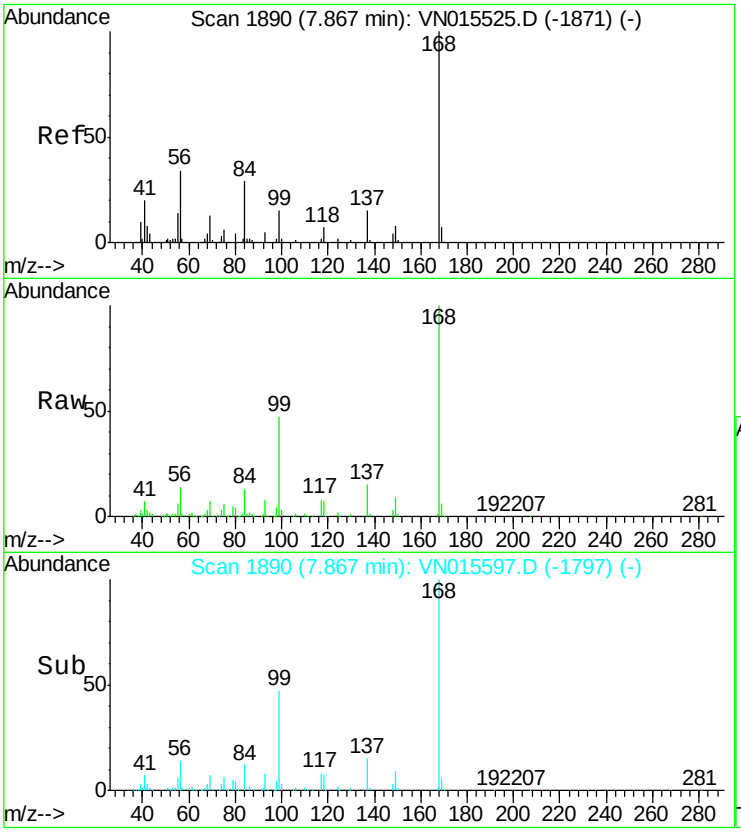


Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

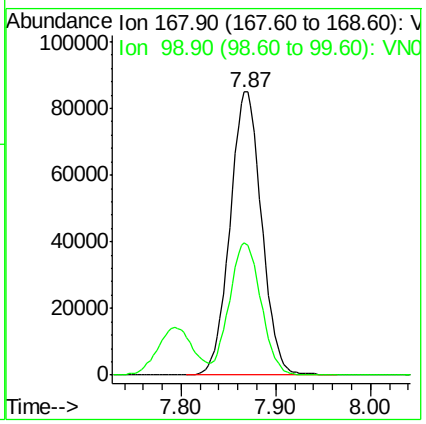
Manual Integrations APPROVED
MMDadoda
5/23/2014 3:03:43 PM

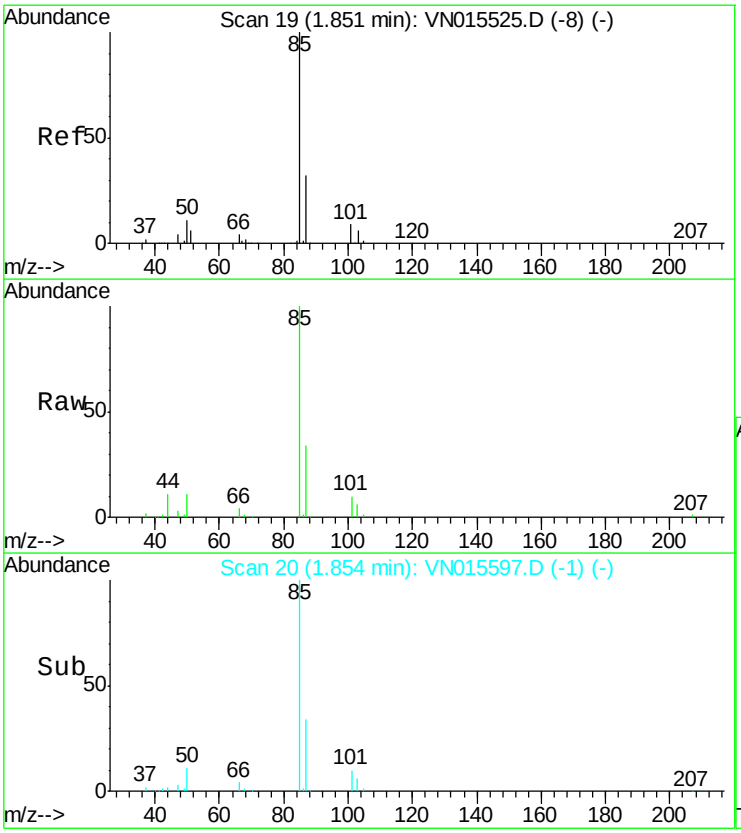


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:168 Resp: 197105

Ion	Ratio	Lower	Upper
168	100		
99	46.7	39.0	58.4

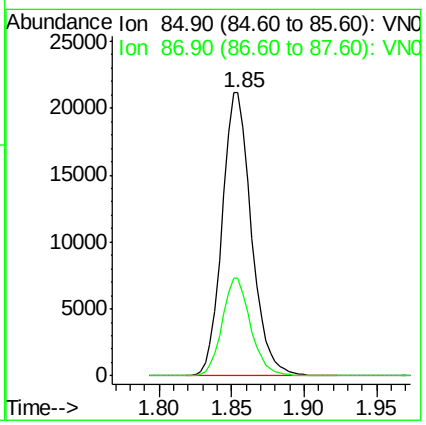




#2
Dichlorodifluoromethane
Concen: 18.81 ug/l
RT: 1.85 min Scan# 20
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 85 Resp: 29564

Ion	Ratio	Lower	Upper
85	100		
87	34.5	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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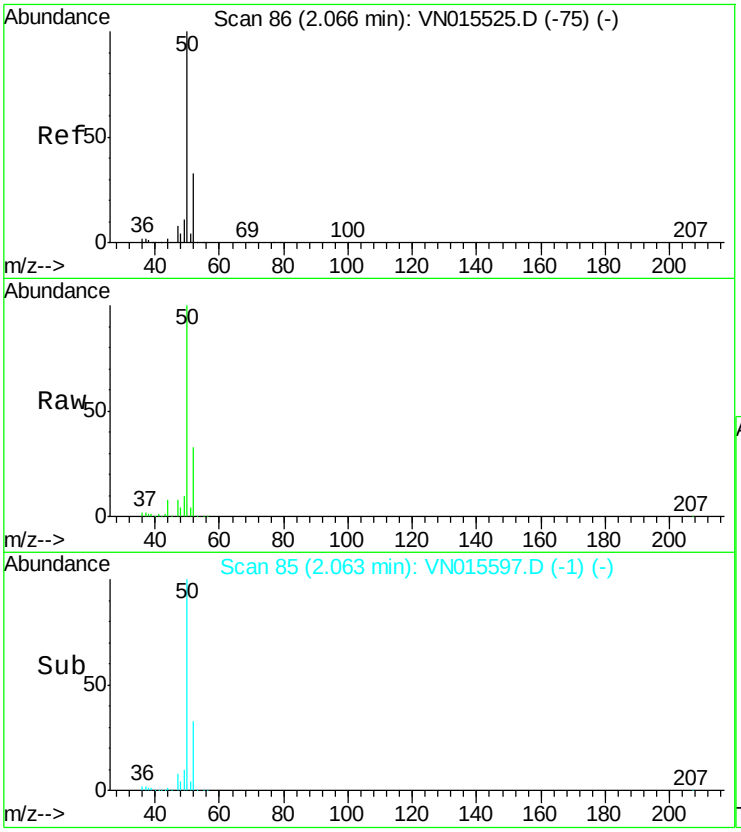
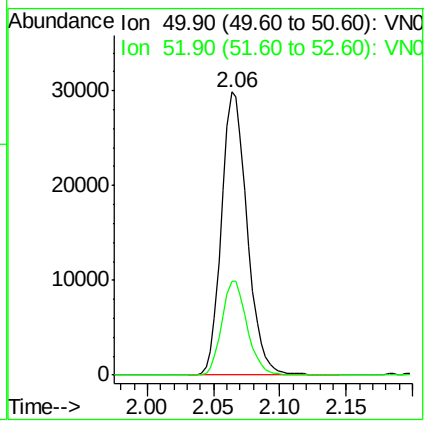
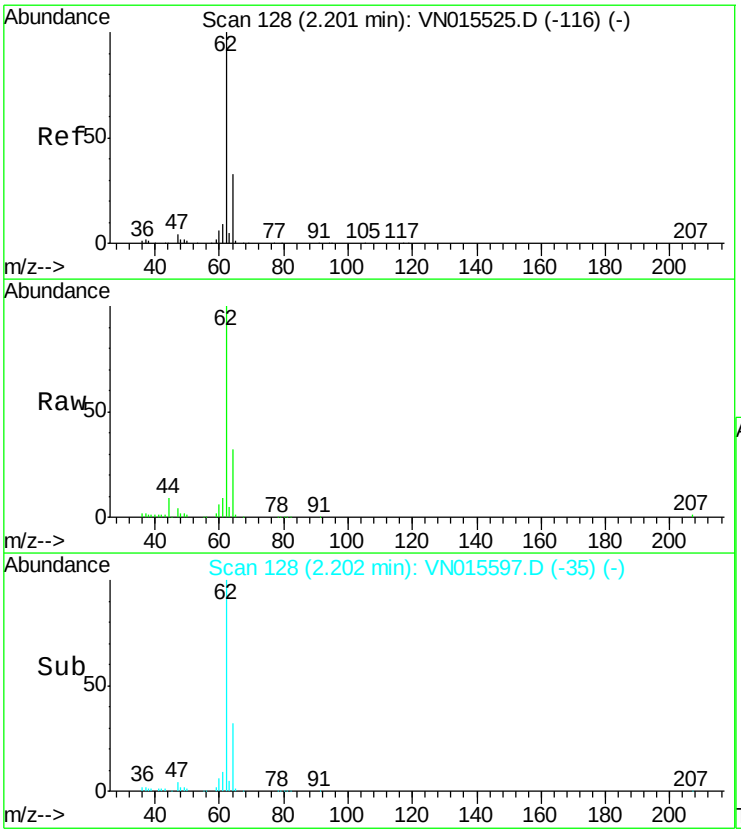


#4
Chloromethane
Concen: 21.30 ug/l
RT: 2.06 min Scan# 85
Delta R.T. -0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 50 Resp: 40239

Ion	Ratio	Lower	Upper
50	100		
52	33.4	26.2	39.2

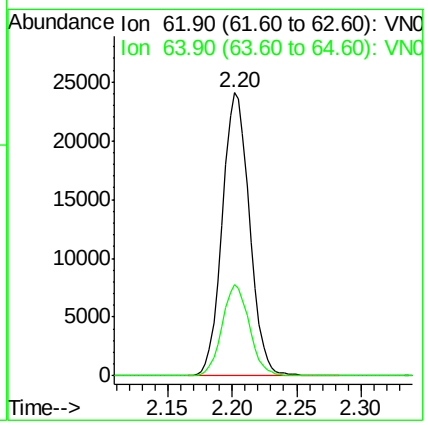




#5
Vinyl Chloride
Concen: 19.18 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 62 Resp: 35325

Ion	Ratio	Lower	Upper
62	100		
64	32.1	26.2	39.4



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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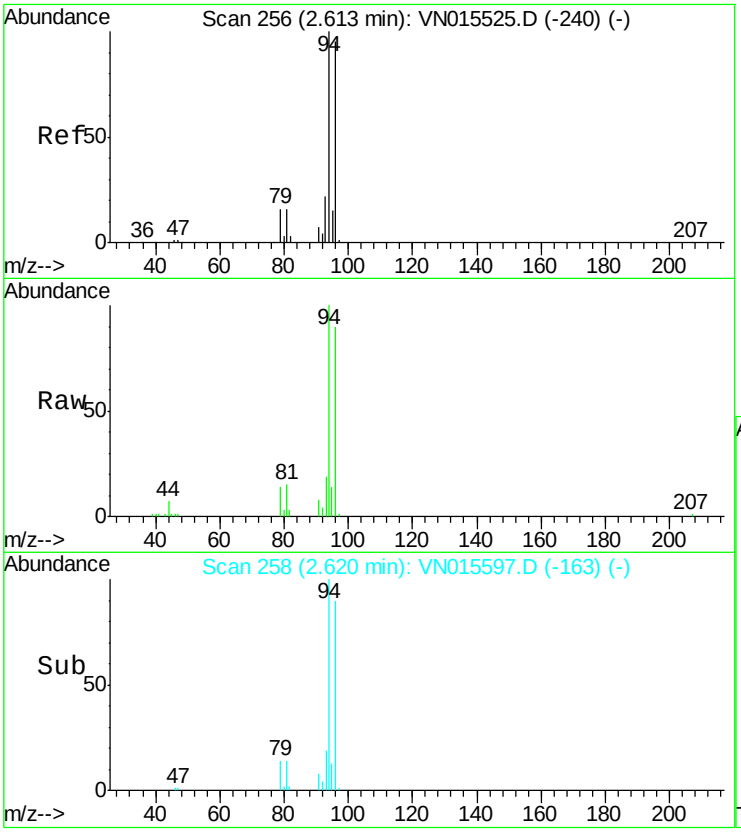
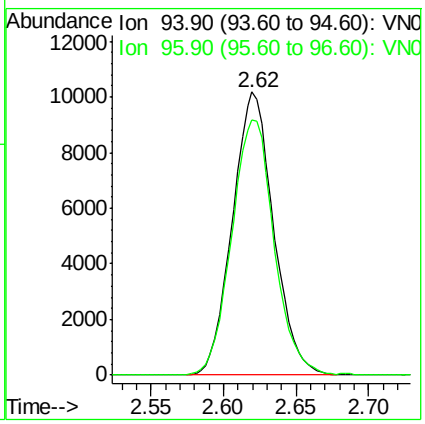
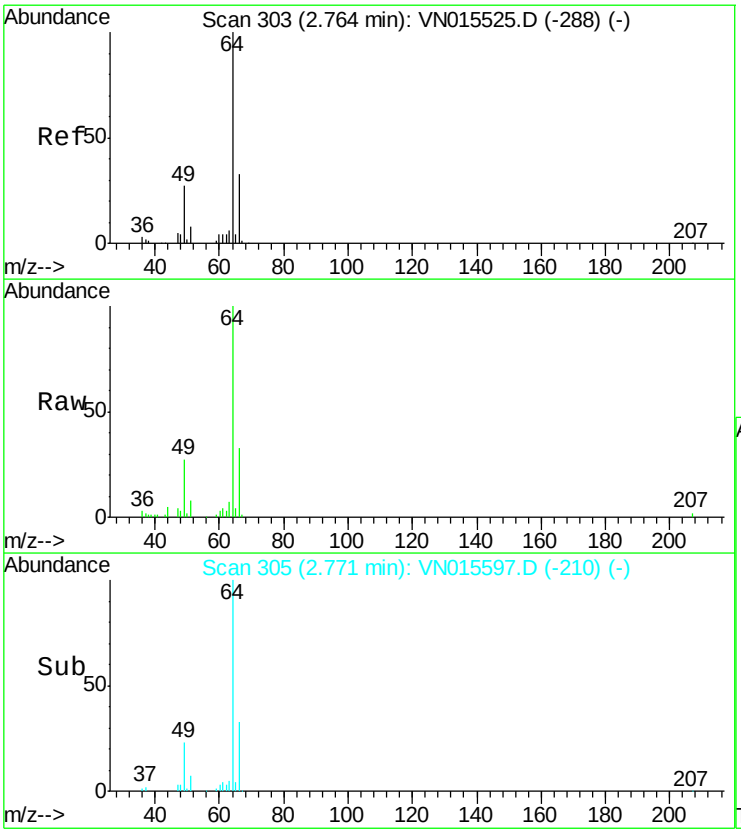


#6
Bromomethane
Concen: 19.51 ug/l
RT: 2.62 min Scan# 258
Delta R.T. 0.01 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 94 Resp: 20039

Ion	Ratio	Lower	Upper
94	100		
96	90.2	75.8	113.6

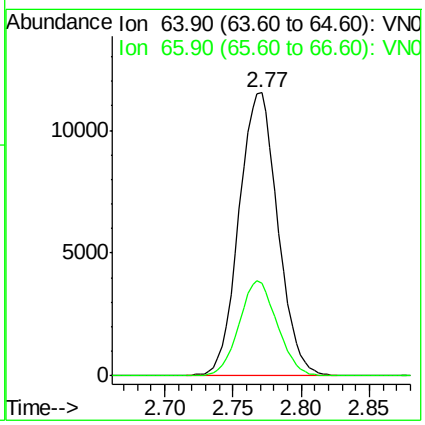




#7
Chloroethane
Concen: 19.66 ug/l
RT: 2.77 min Scan# 305
Delta R.T. 0.01 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 64 Resp: 22810

Ion	Ratio	Lower	Upper
64	100		
66	32.7	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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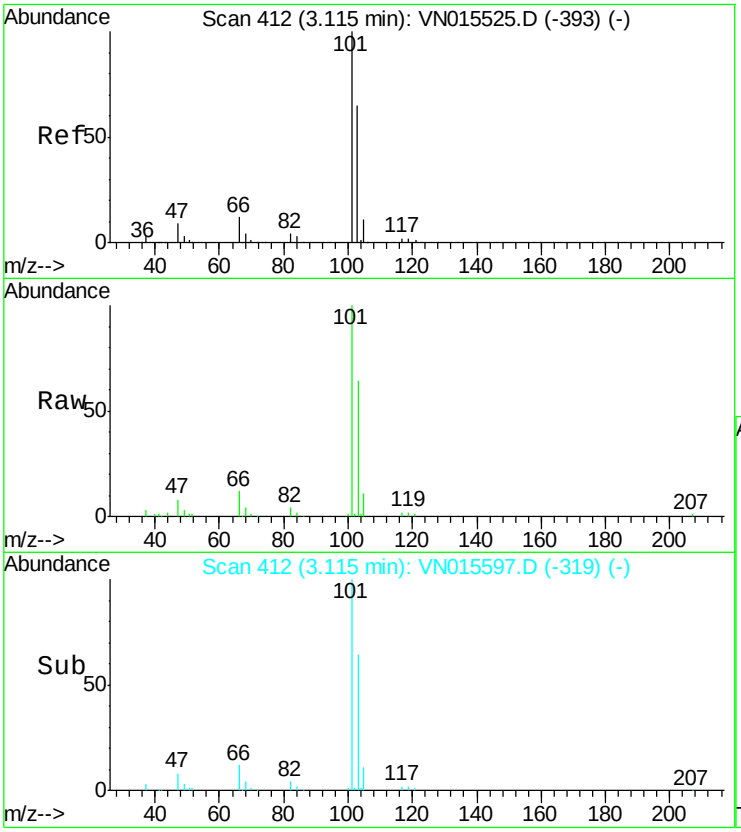
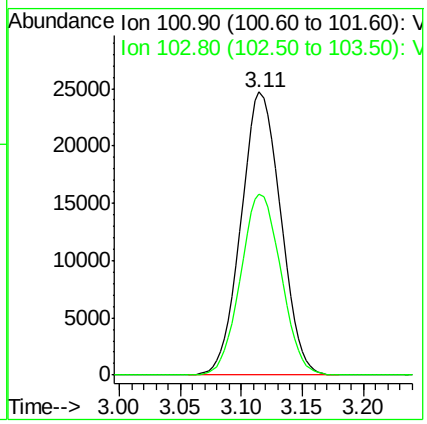
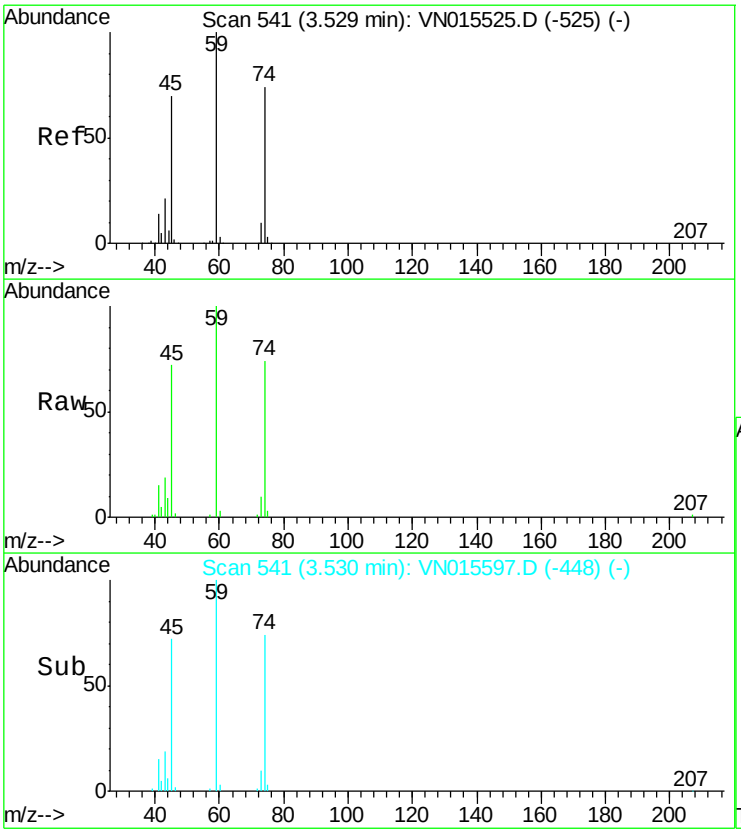


#8
Trichlorofluoromethane
Concen: 18.62 ug/l
RT: 3.11 min Scan# 412
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:101 Resp: 55677

Ion	Ratio	Lower	Upper
101	100		
103	63.9	52.1	78.1

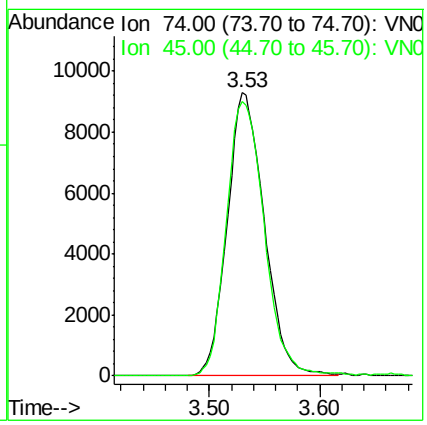


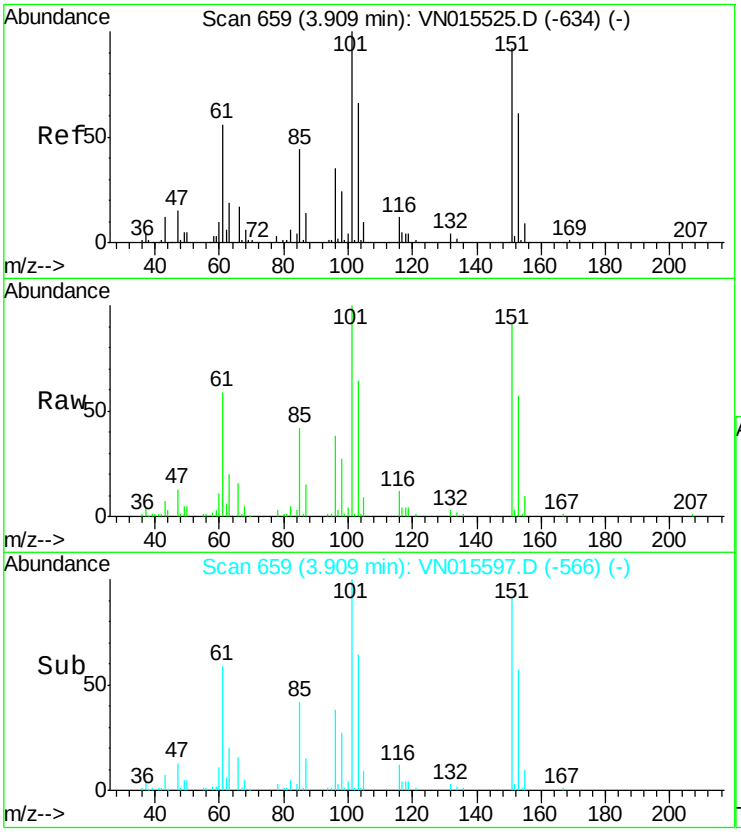


#9
Diethyl Ether
Concen: 19.61 ug/l
RT: 3.53 min Scan# 541
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 74 Resp: 21680

Ion	Ratio	Lower	Upper
74	100		
45	99.1	48.9	146.8





#10
1,1,2-Trichlorotrifluoroethane
Concen: 19.54 ug/l
RT: 3.91 min Scan# 659
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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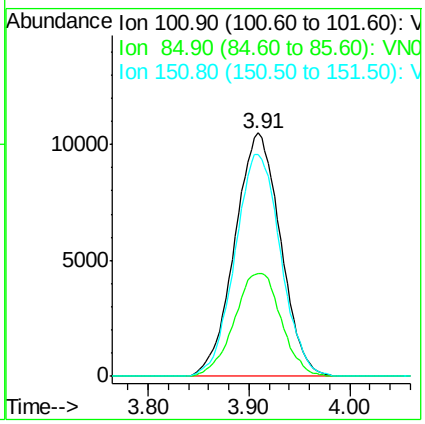
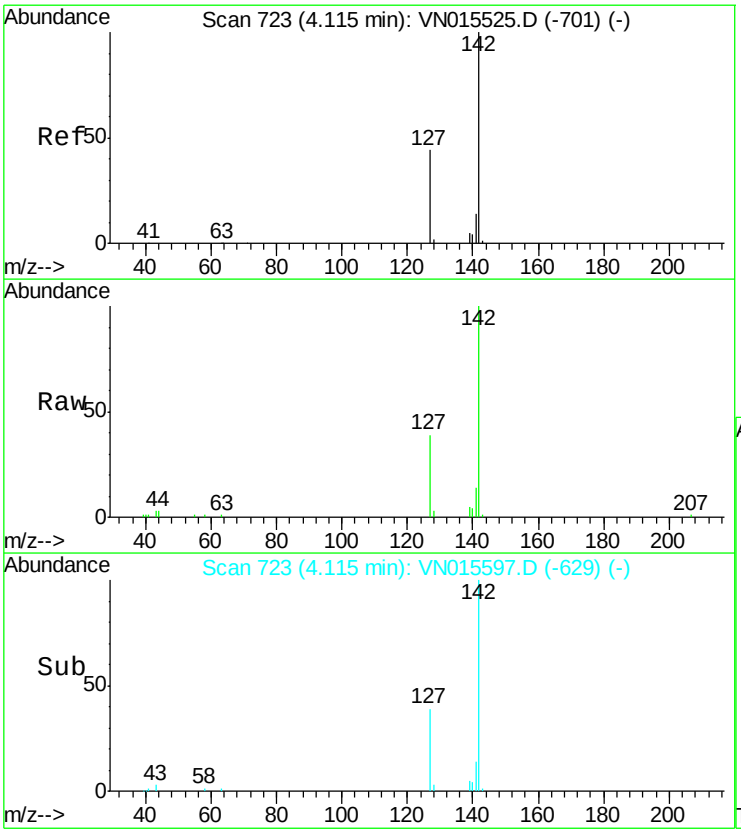
Tgt Ion:101 Resp: 32959

Ion	Ratio	Lower	Upper
101	100		
85	43.4	34.5	51.7
151	91.2	72.9	109.3

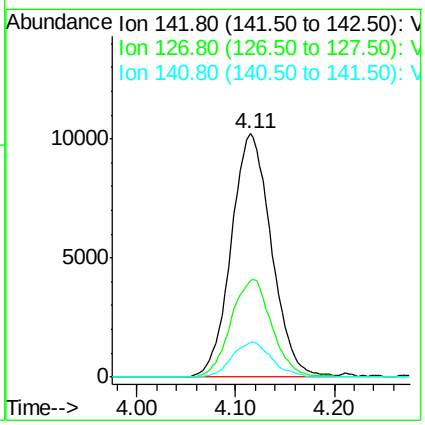




#11
Methyl Iodide
Concen: 14.91 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:142 Resp: 28887

Ion	Ratio	Lower	Upper
142	100		
127	40.6	34.7	52.1
141	14.2	11.4	17.0



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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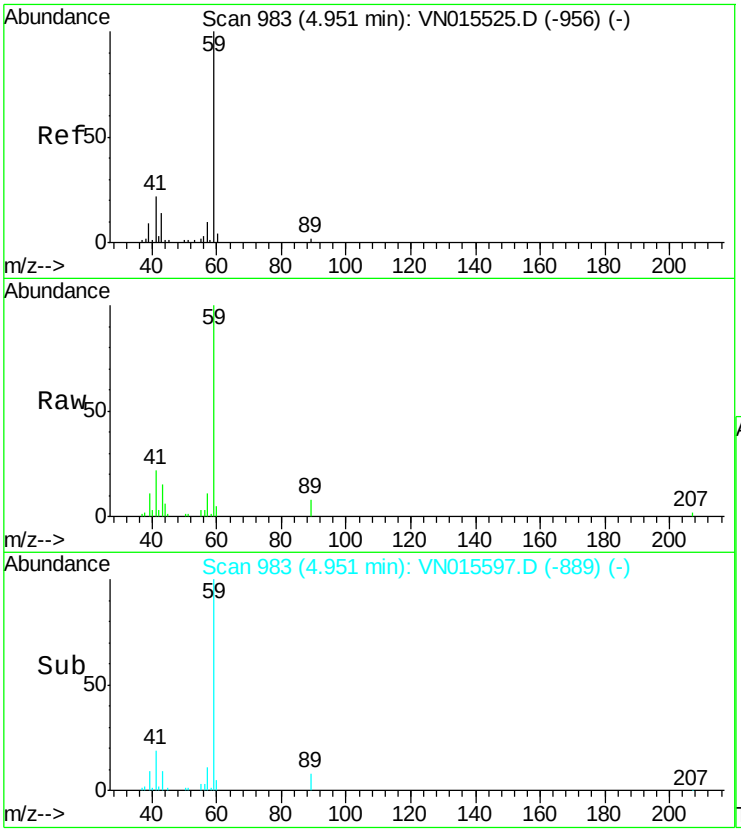
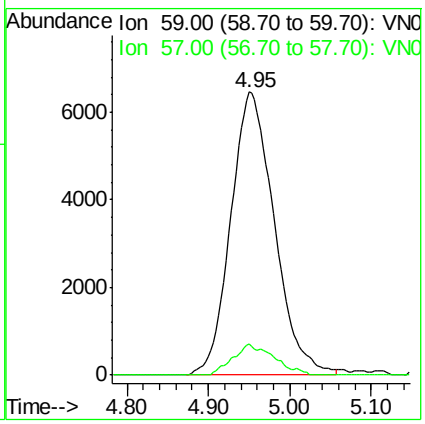
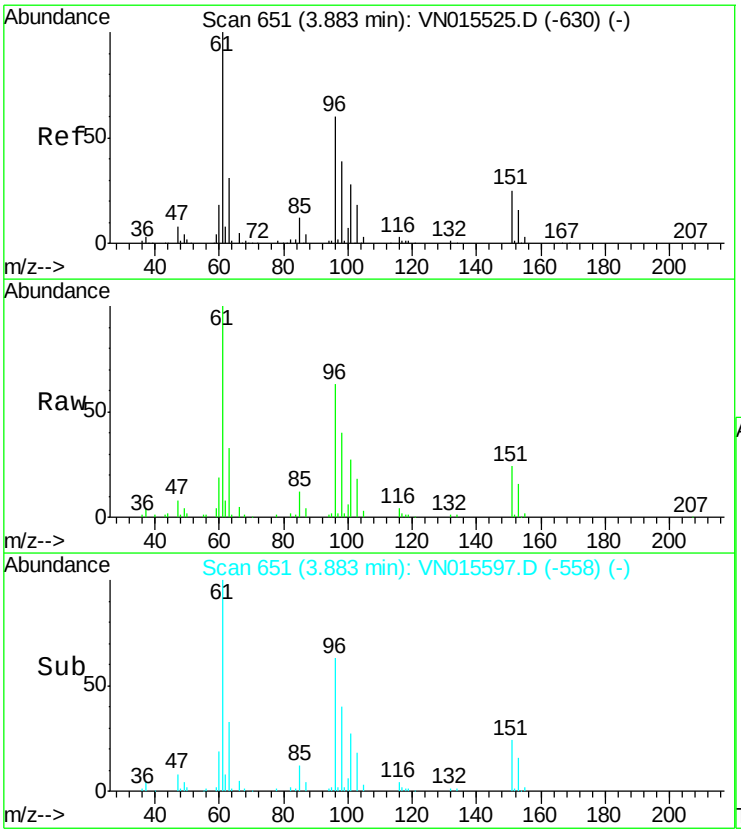


#12
Tert butyl alcohol
Concen: 97.45 ug/l
RT: 4.95 min Scan# 983
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 59 Resp: 24008

Ion	Ratio	Lower	Upper
59	100		
57	10.3	8.4	12.6

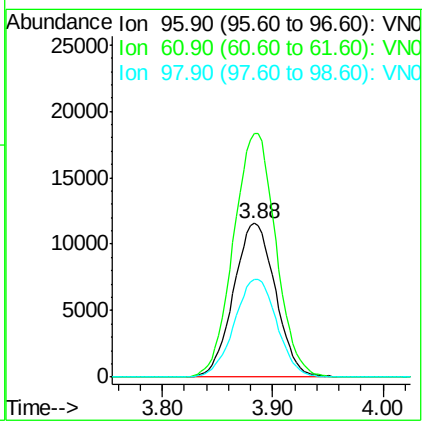




#13
1,1-Dichloroethene
Concen: 18.90 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 96 Resp: 30476

Ion	Ratio	Lower	Upper
96	100		
61	158.0	132.3	198.5
98	63.7	51.8	77.6



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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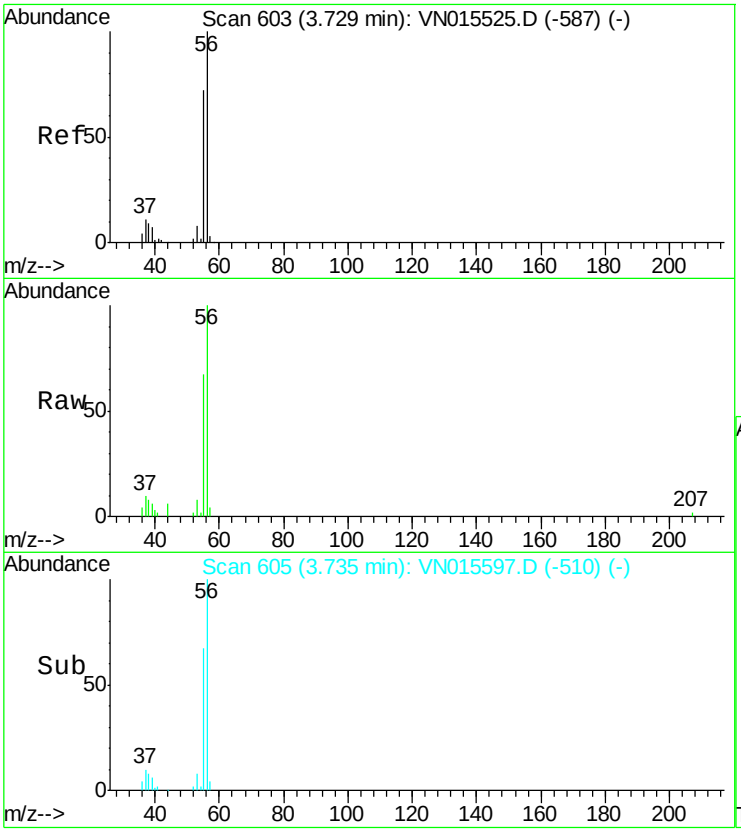
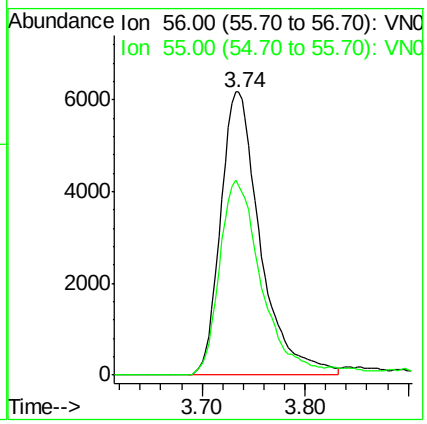
5/23/2014 3:03:43 PM

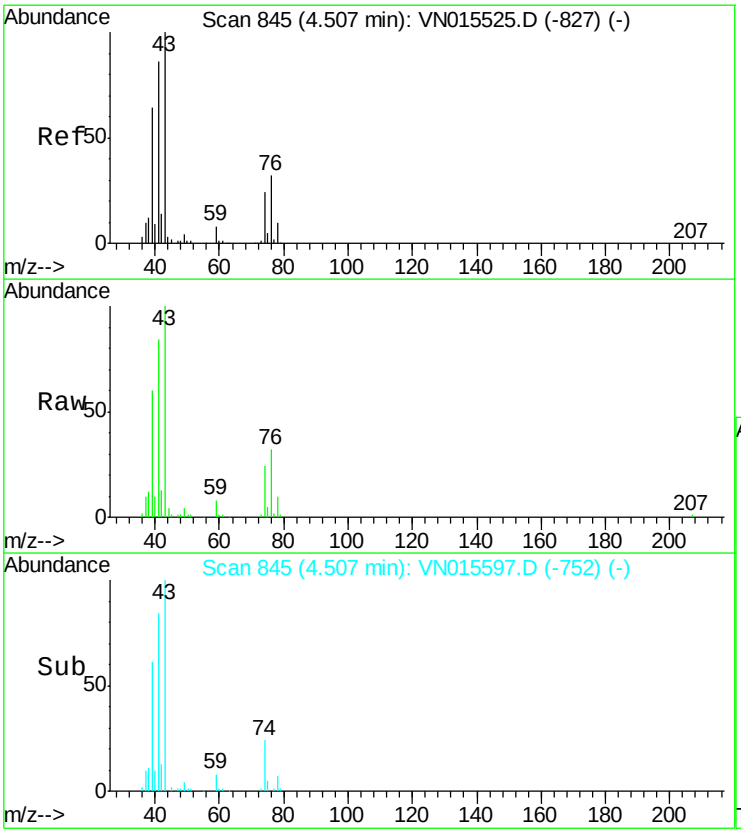


#14
Acrolein
Concen: 80.97 ug/l
RT: 3.74 min Scan# 605
Delta R.T. 0.01 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 56 Resp: 16575

Ion	Ratio	Lower	Upper
56	100		
55	71.6	57.9	86.9

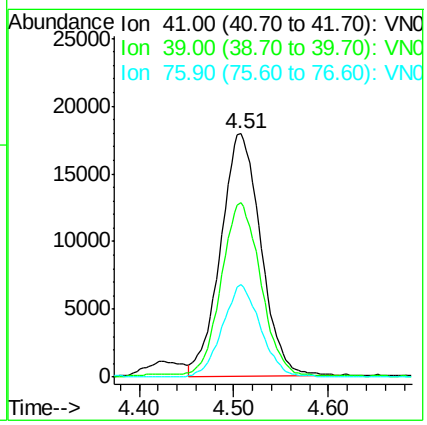




#15
Allyl chloride
Concen: 18.71 ug/l
RT: 4.51 min Scan# 845
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 41 Resp: 52779

Ion	Ratio	Lower	Upper
41	100		
39	70.2	57.4	86.2
76	36.3	28.5	42.7



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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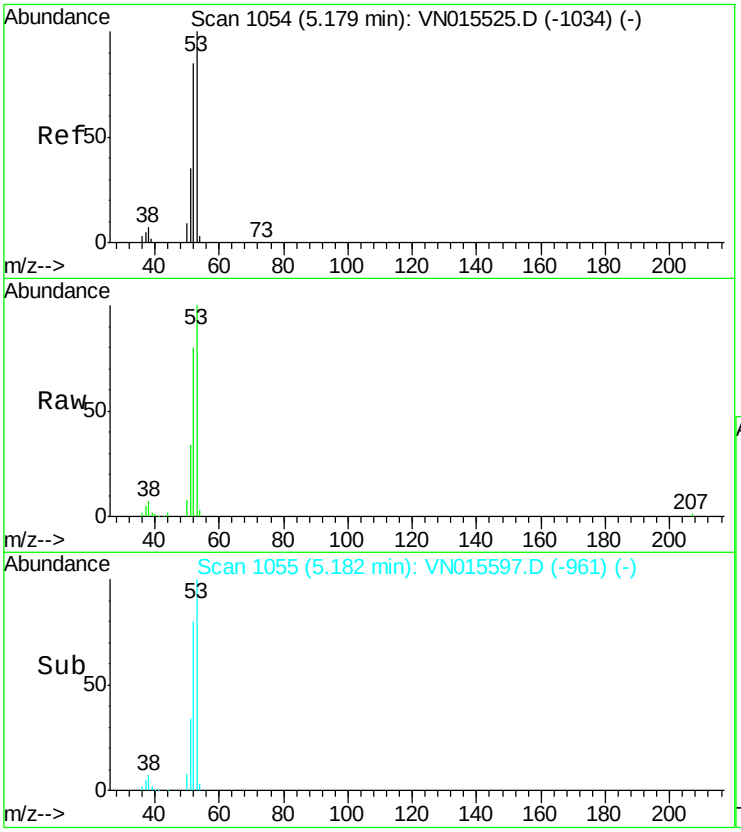
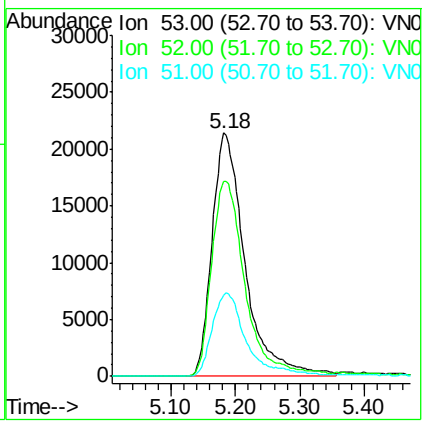
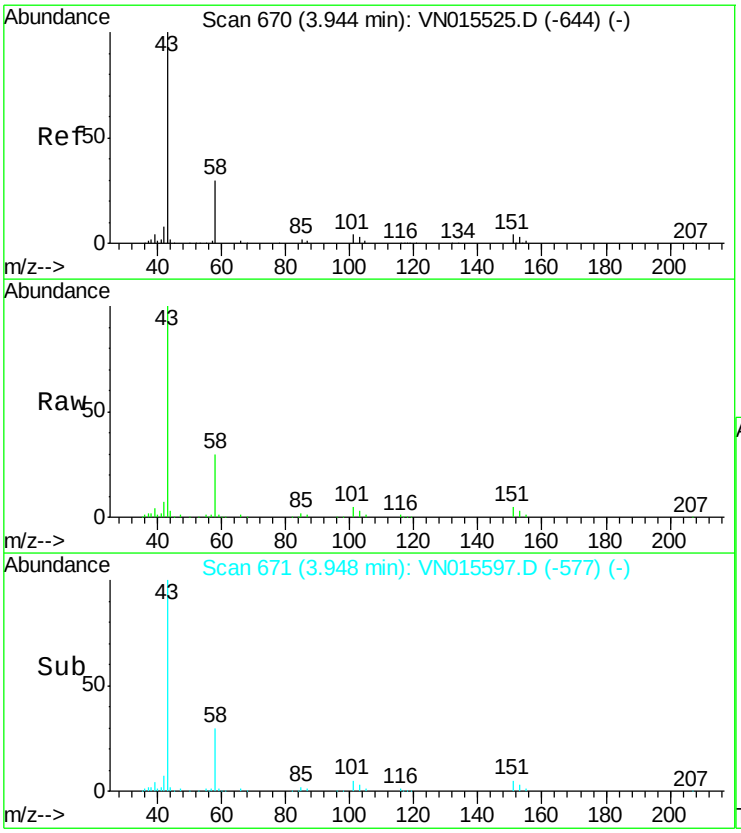


#16
Acrylonitrile
Concen: 105.00 ug/l
RT: 5.18 min Scan# 1055
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 53 Resp: 76271

Ion	Ratio	Lower	Upper
53	100		
52	81.5	65.7	98.5
51	35.6	29.1	43.7

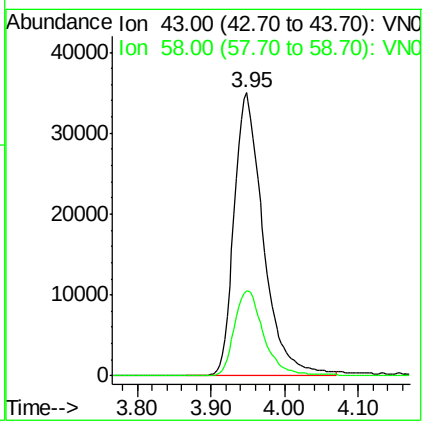




#17
Acetone
Concen: 136.29 ug/l
RT: 3.95 min Scan# 671
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 96956

Ion	Ratio	Lower	Upper
43	100		
58	29.9	24.2	36.2



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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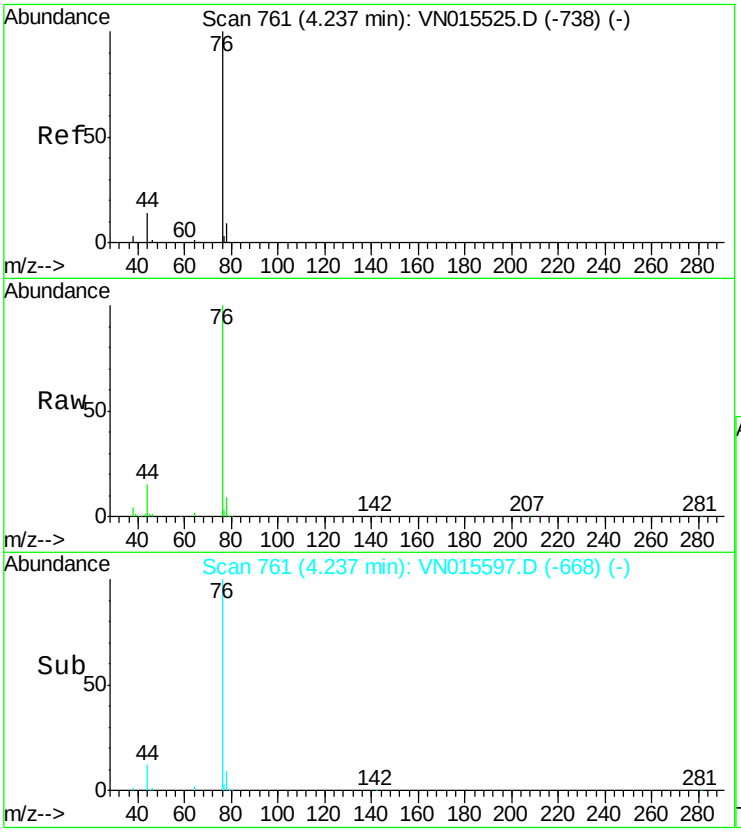
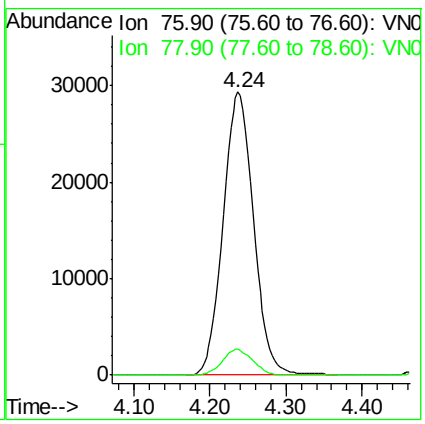
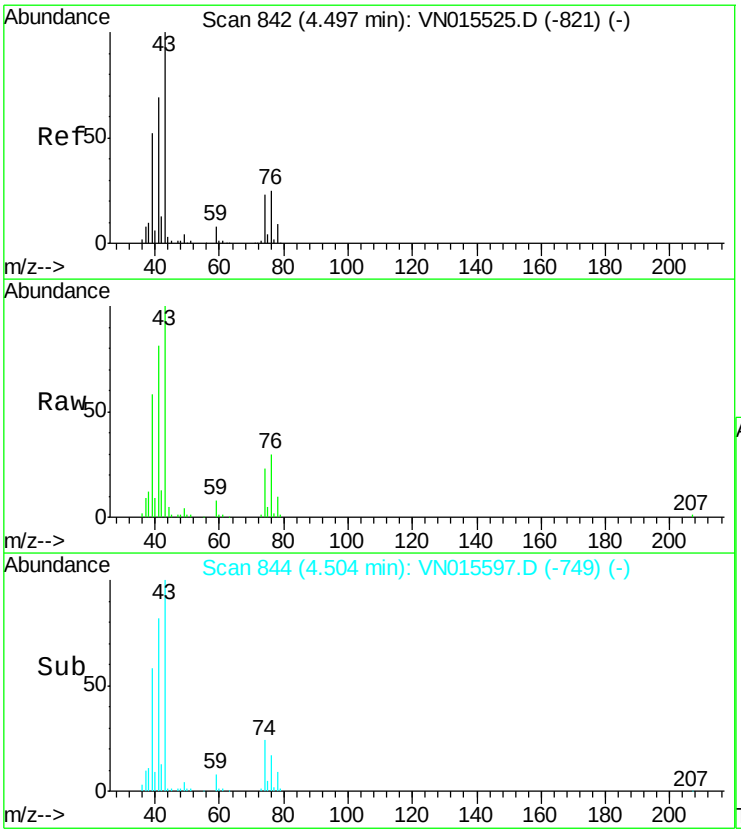


#18
Carbon Disulfide
Concen: 17.96 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 76 Resp: 81615

Ion	Ratio	Lower	Upper
76	100		
78	9.3	7.5	11.3

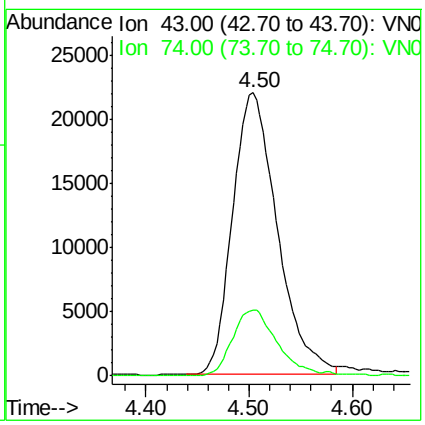




#19
Methyl Acetate
Concen: 19.36 ug/l
RT: 4.50 min Scan# 844
Delta R.T. 0.01 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 66622

Ion	Ratio	Lower	Upper
43	100		
74	23.2	18.5	27.7



Instrument :
MSVOA_N
ClientSampleId :
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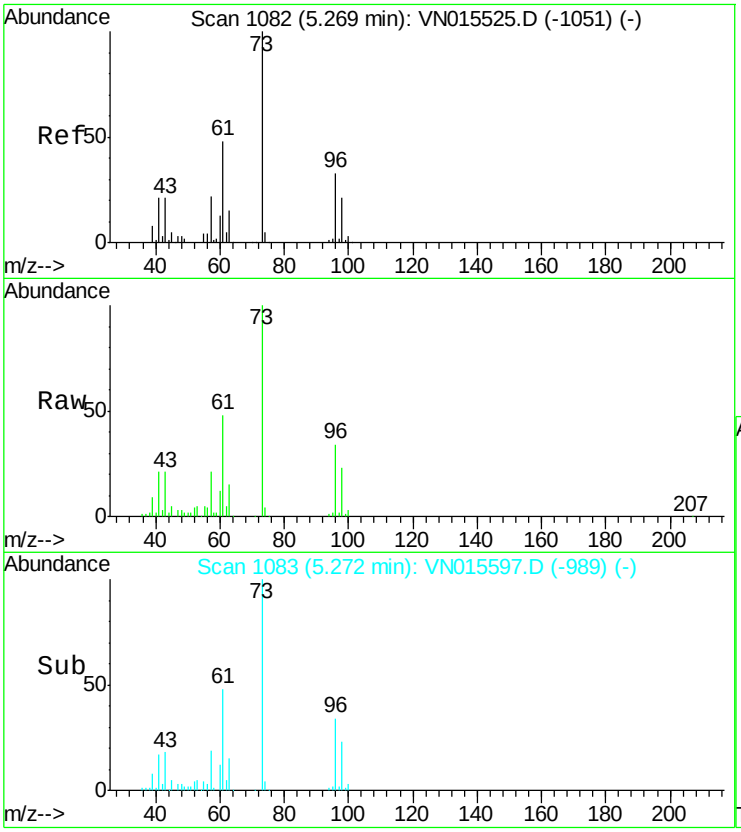
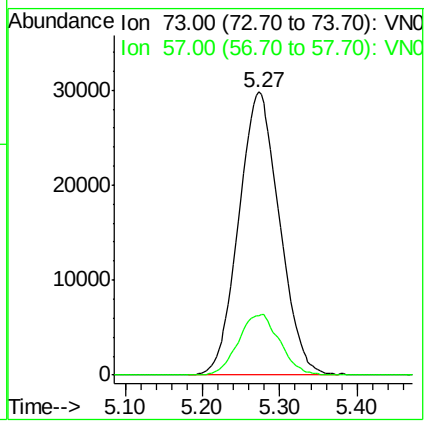
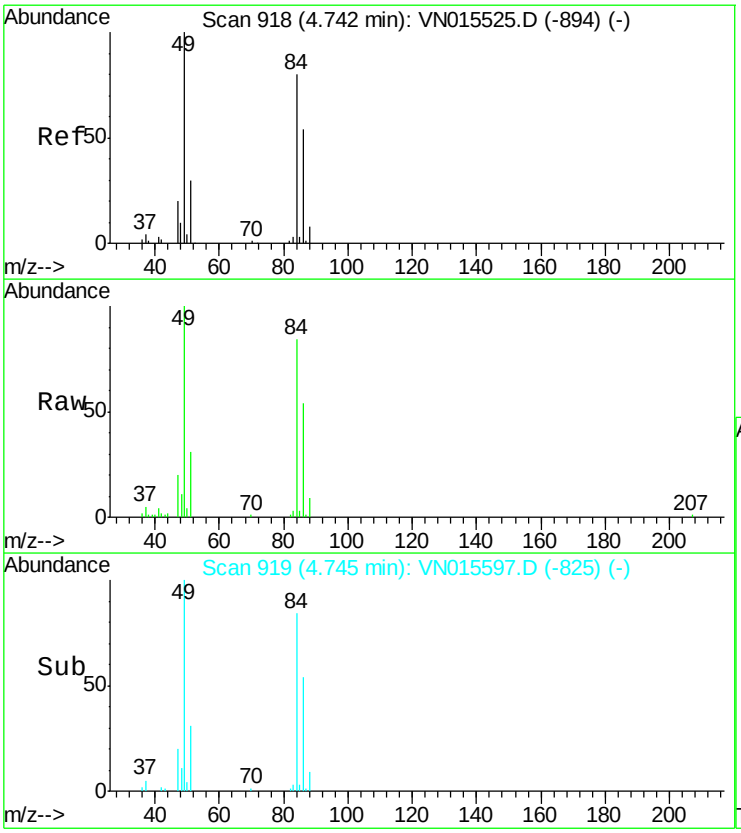


#20
Methyl tert-butyl Ether
Concen: 19.26 ug/l
RT: 5.27 min Scan# 1083
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 73 Resp: 109332

Ion	Ratio	Lower	Upper
73	100		
57	21.1	17.3	25.9

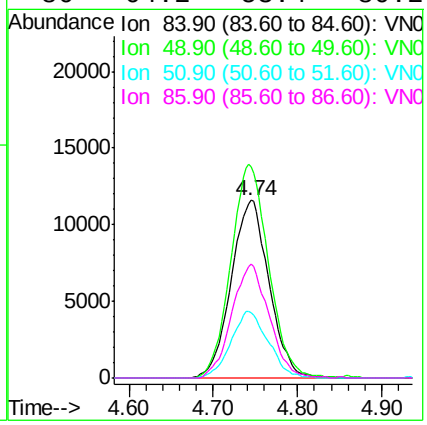




#21
Methylene Chloride
Concen: 19.59 ug/l
RT: 4.74 min Scan# 919
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 84 Resp: 36142

Ion	Ratio	Lower	Upper
84	100		
49	119.1	99.8	149.6
51	36.9	30.2	45.2
86	64.2	53.4	80.2



Instrument :
MSVOA_N
ClientSampleId :
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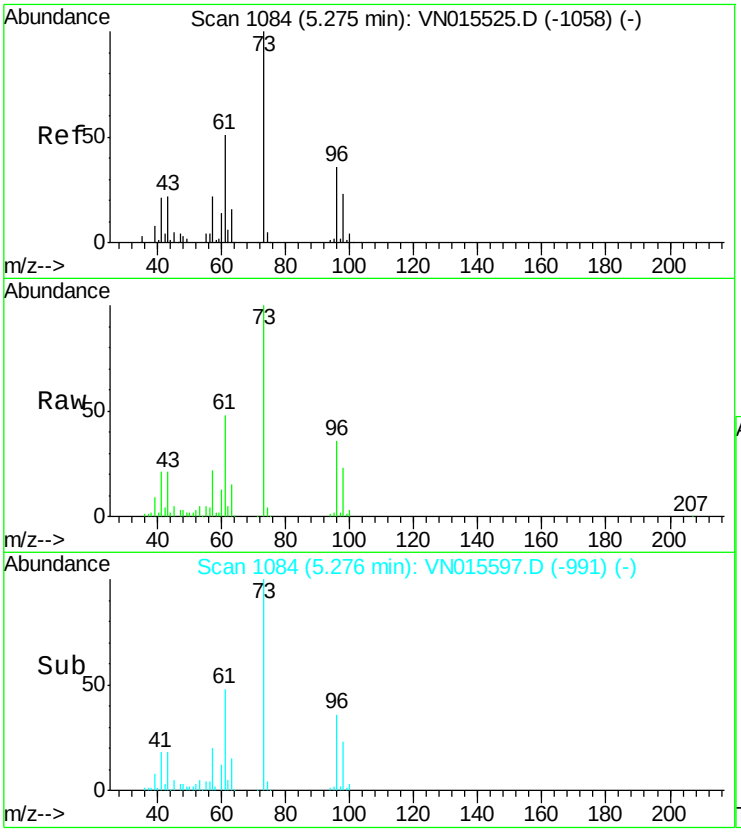
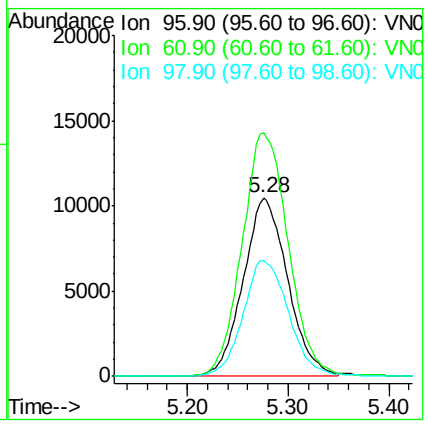
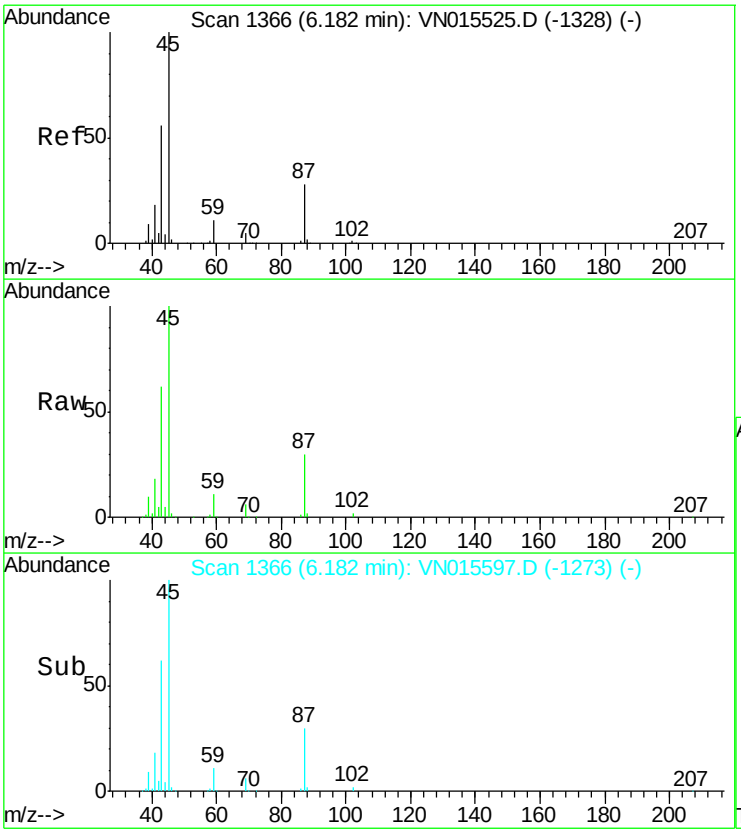


#22
trans-1,2-Dichloroethene
Concen: 18.86 ug/l
RT: 5.28 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 96 Resp: 32060

Ion	Ratio	Lower	Upper
96	100		
61	136.4	113.3	169.9
98	64.7	50.4	75.6

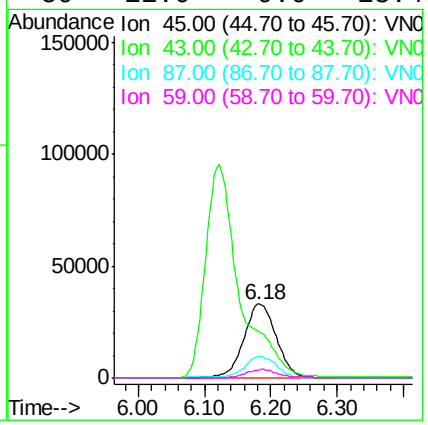




#23
Diisopropyl ether
Concen: 19.50 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 45 Resp: 113301

Ion	Ratio	Lower	Upper
45	100		
43	60.2	44.6	67.0
87	30.0	22.3	33.5
59	11.0	9.0	13.4



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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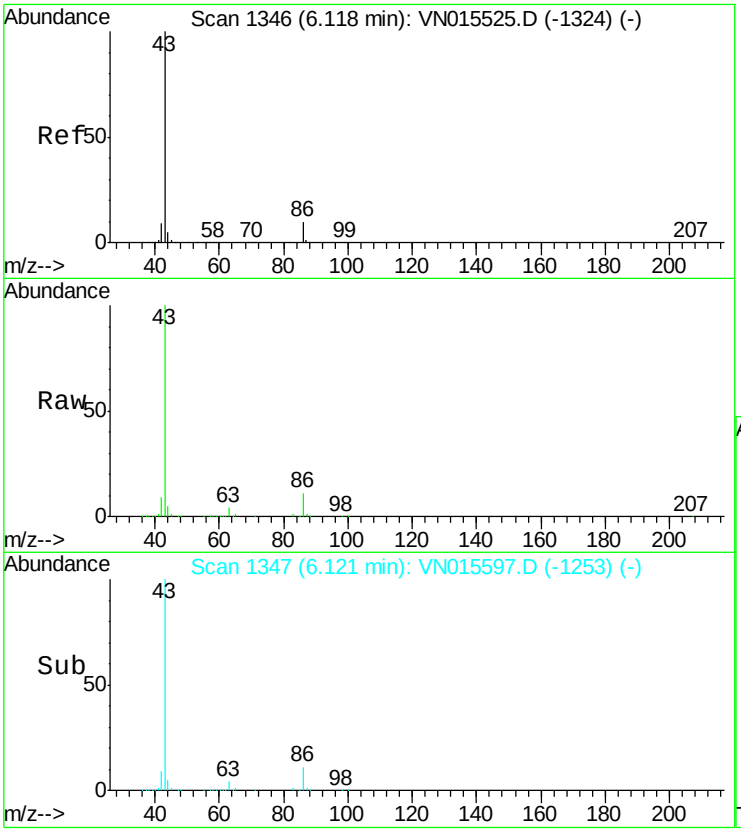
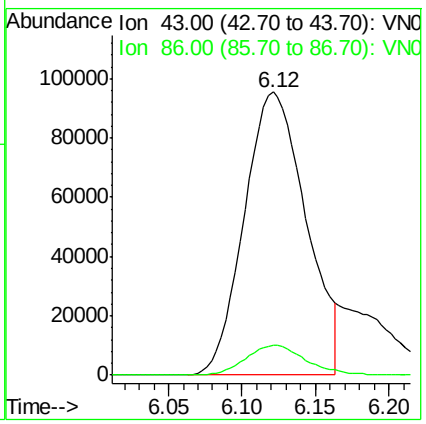
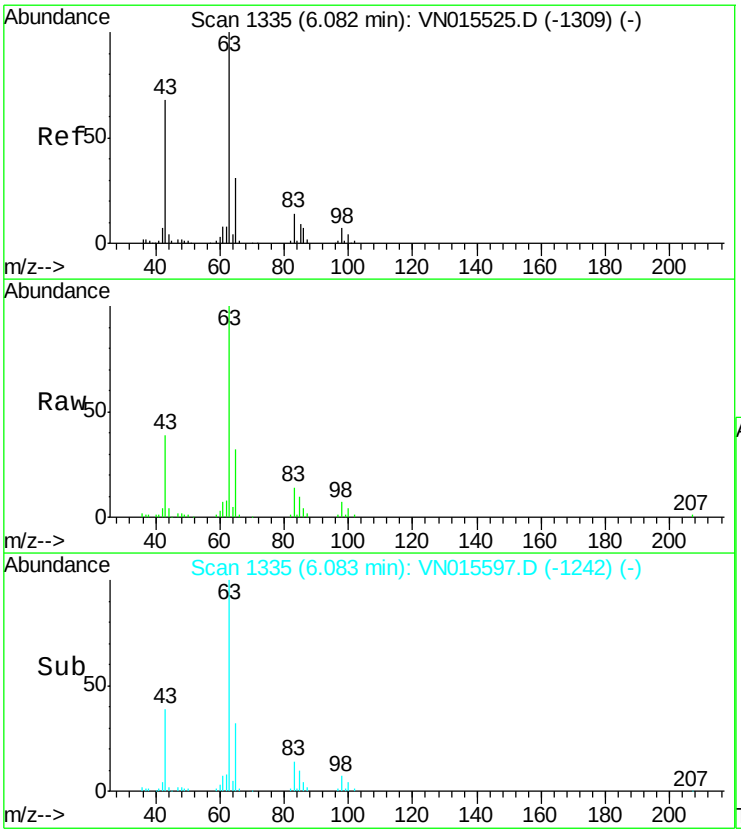


#24
Vinyl Acetate
Concen: 96.65 ug/l m
RT: 6.12 min Scan# 1347
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 278960

Ion	Ratio	Lower	Upper
43	100		
86	10.6	7.9	11.9

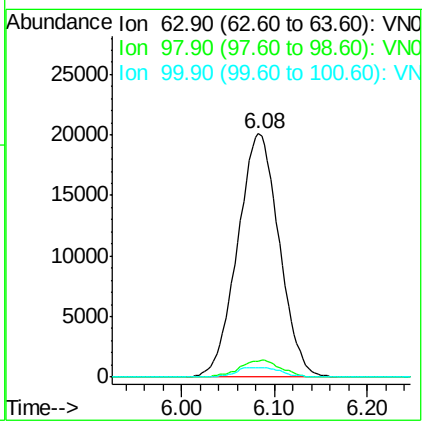




#25
1,1-Dichloroethane
Concen: 19.57 ug/l
RT: 6.08 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 63 Resp: 62609

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	3.8	2.1	6.3



Instrument :
MSVOA_N
ClientSampleId :
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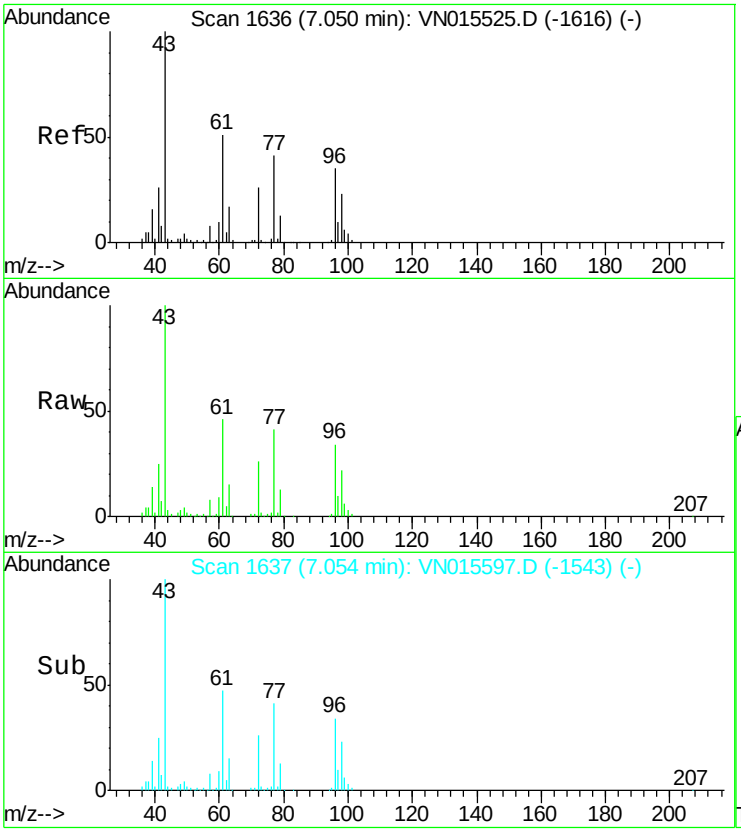
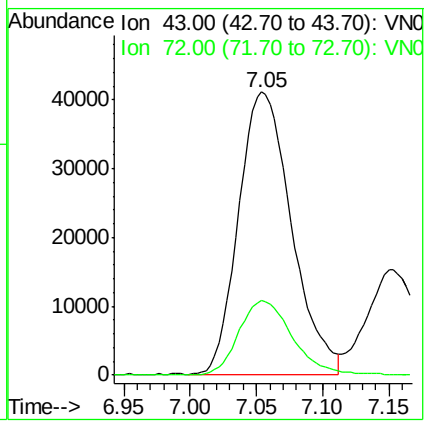
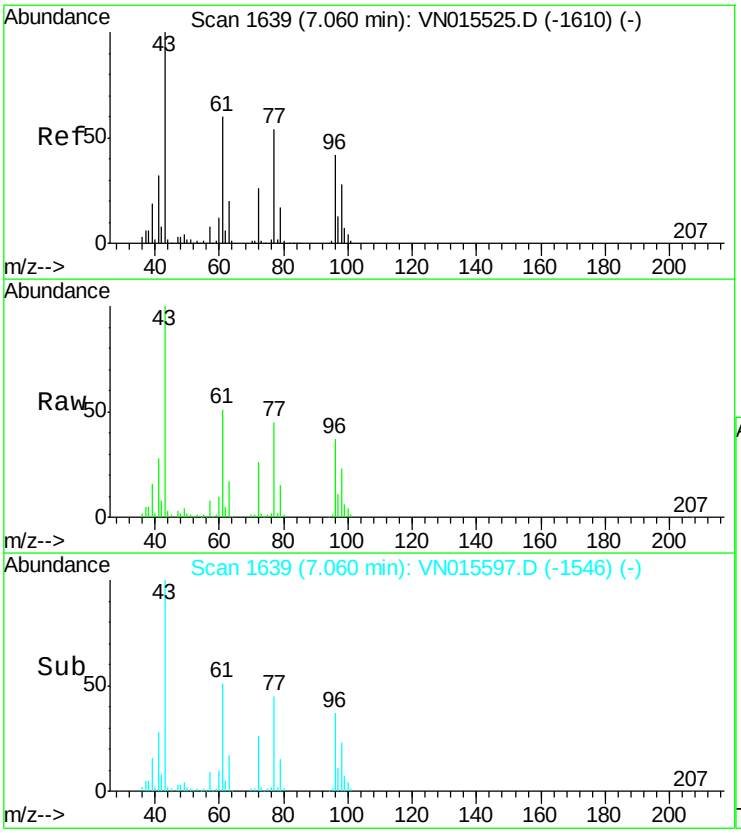


#26
2-Butanone
Concen: 113.61 ug/l
RT: 7.05 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 114022

Ion	Ratio	Lower	Upper
43	100		
72	26.4	20.7	31.1

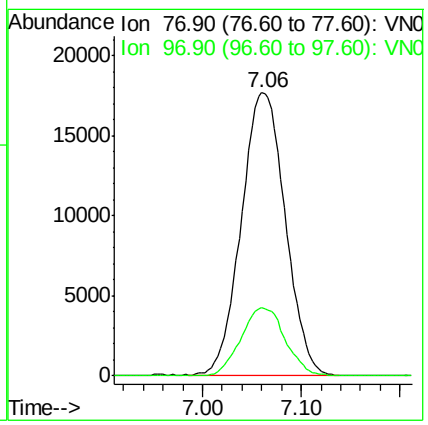




#27
2,2-Dichloropropane
Concen: 19.37 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 77 Resp: 54705

Ion	Ratio	Lower	Upper
77	100		
97	24.1	11.6	34.7



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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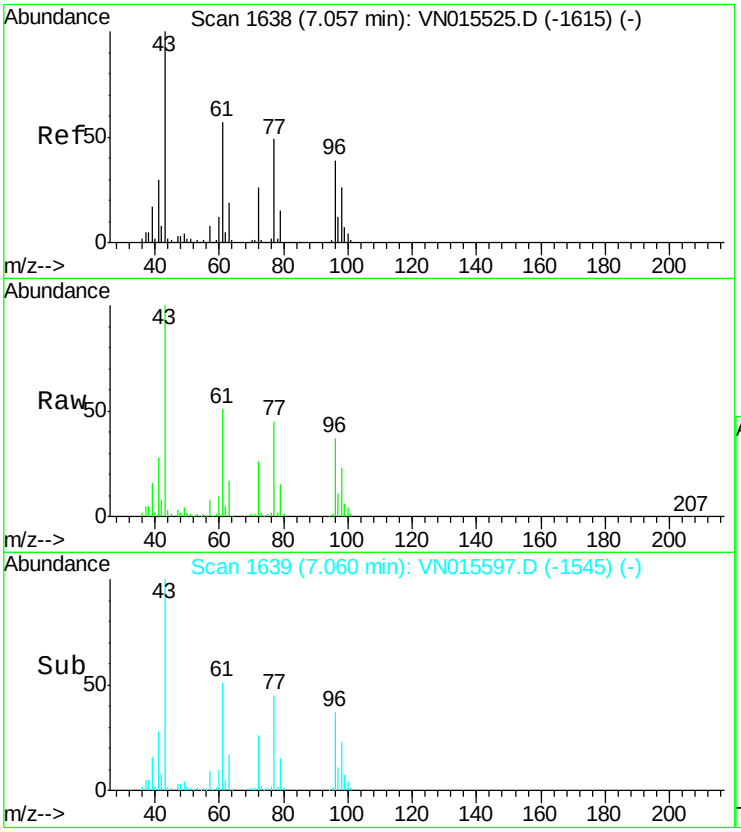
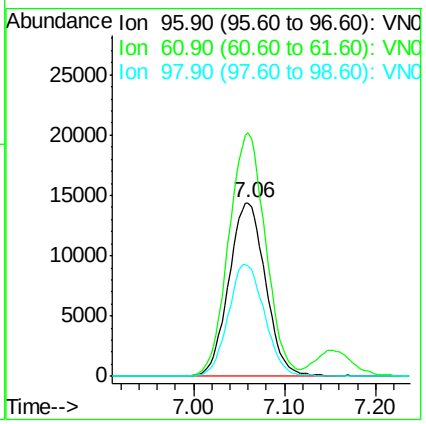
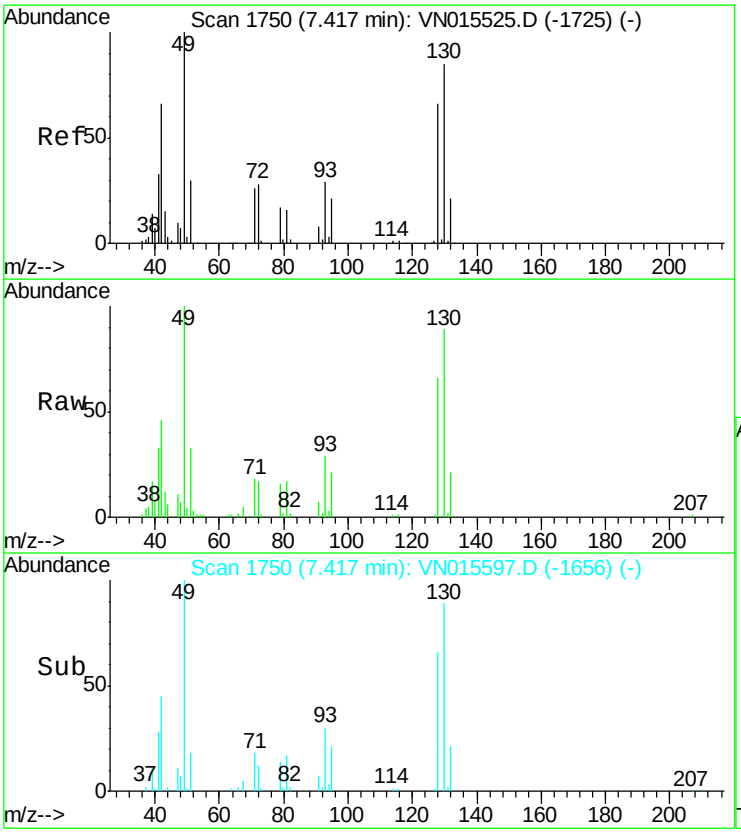


#28
cis-1,2-Dichloroethene
Concen: 20.18 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 96 Resp: 40278

Ion	Ratio	Lower	Upper
96	100		
61	140.5	0.0	292.0
98	63.8	0.0	129.4

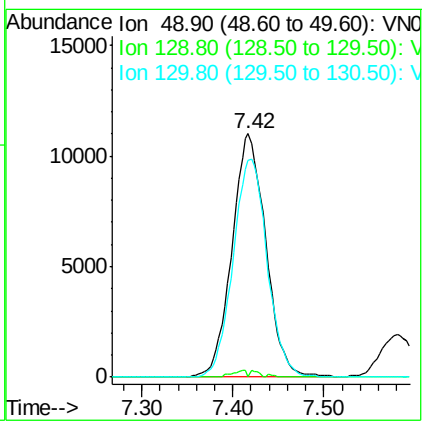




#29
Bromochloromethane
Concen: 19.23 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 49 Resp: 28383

Ion	Ratio	Lower	Upper
49	100		
129	0.7	0.0	4.2
130	90.2	68.6	102.8



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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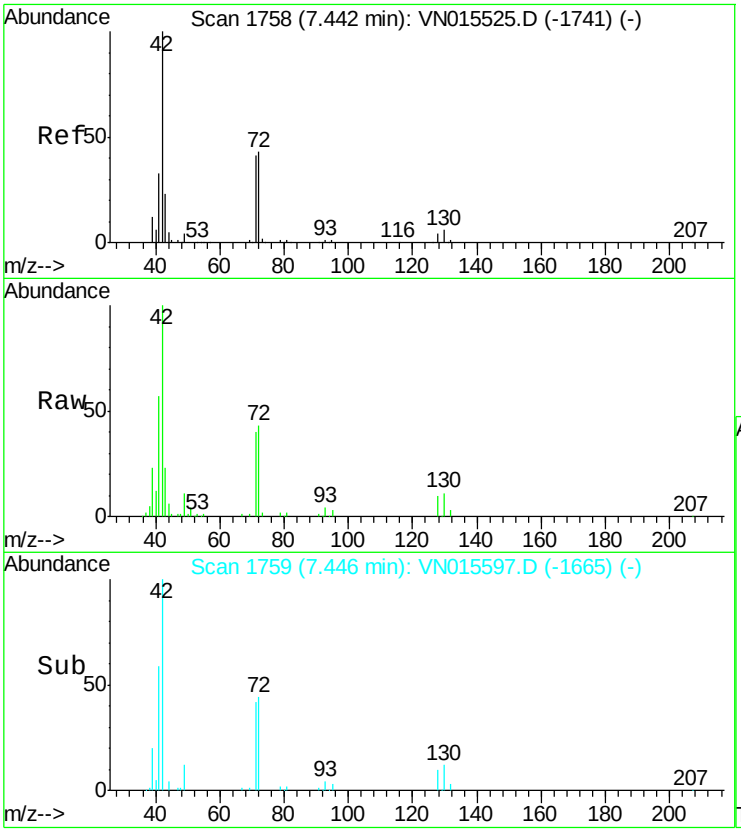
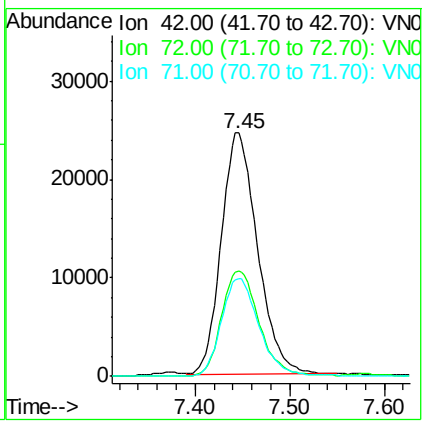
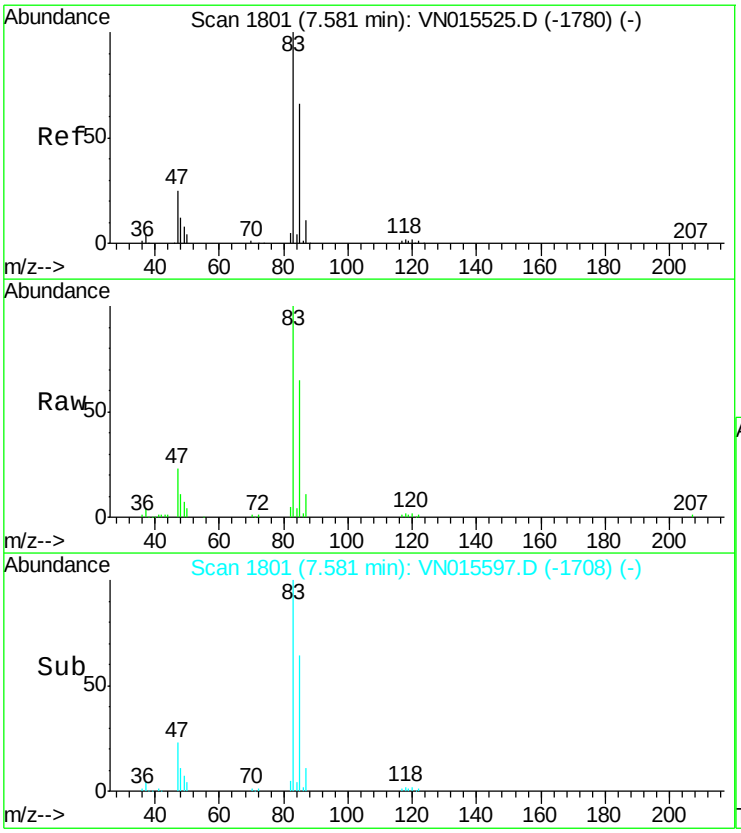


#30
Tetrahydrofuran
Concen: 97.20 ug/l
RT: 7.45 min Scan# 1759
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 42 Resp: 65640

Ion	Ratio	Lower	Upper
42	100		
72	45.0	34.2	51.2
71	42.1	32.5	48.7

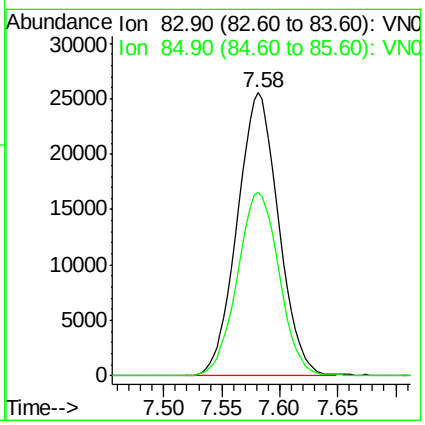


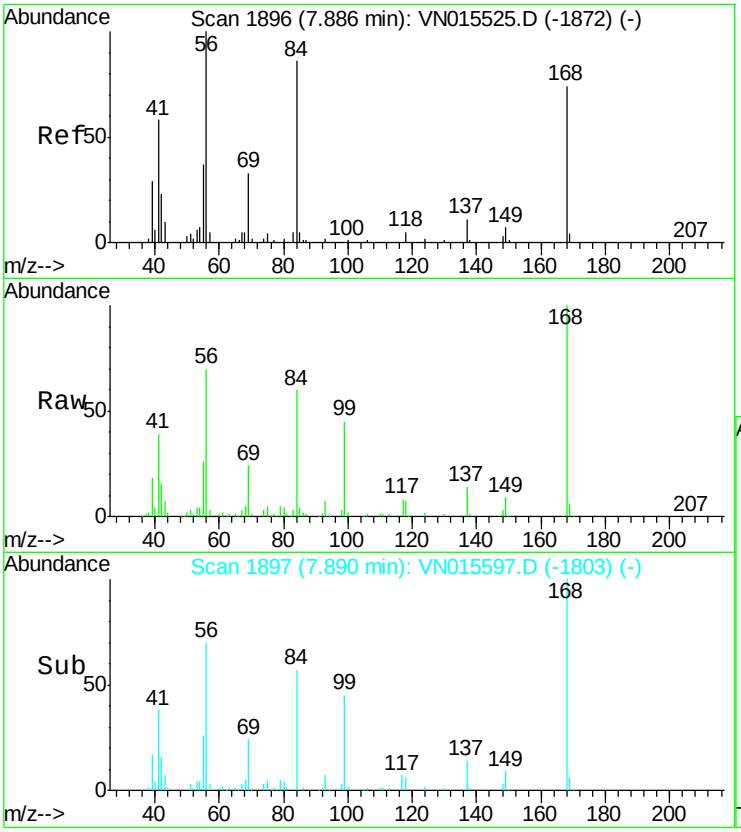


#31
Chloroform
Concen: 19.18 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 83 Resp: 63378

Ion	Ratio	Lower	Upper
83	100		
85	64.7	52.6	78.8





#32
Cyclohexane
Concen: 20.46 ug/l
RT: 7.89 min Scan# 1897
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 56 Resp: 61287

Ion	Ratio	Lower	Upper
56	100		
69	33.7	26.6	39.8
84	85.9	69.0	103.4

Instrument :
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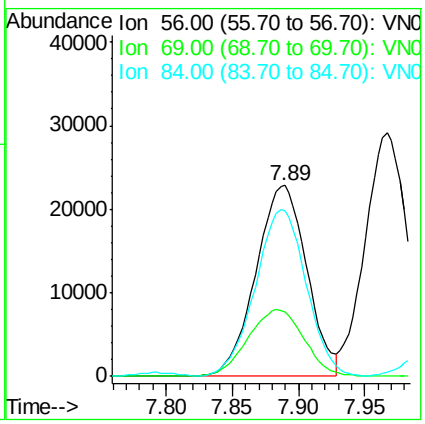
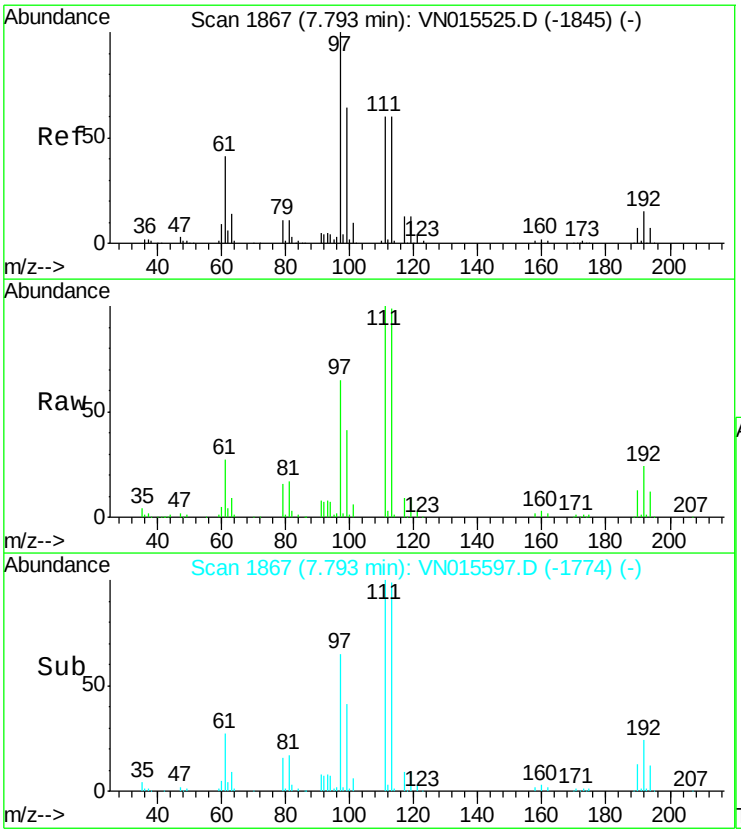
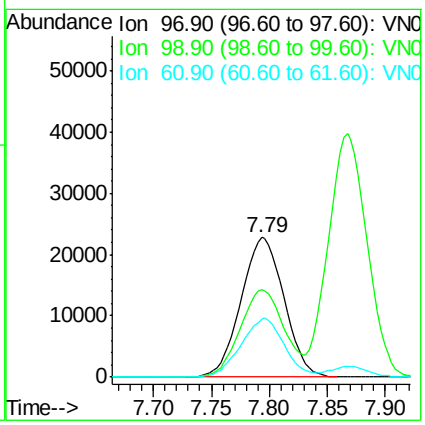




#33
1,1,1-Trichloroethane
Concen: 19.00 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 97 Resp: 58774

Ion	Ratio	Lower	Upper
97	100		
99	64.0	51.2	76.8
61	42.4	33.9	50.9



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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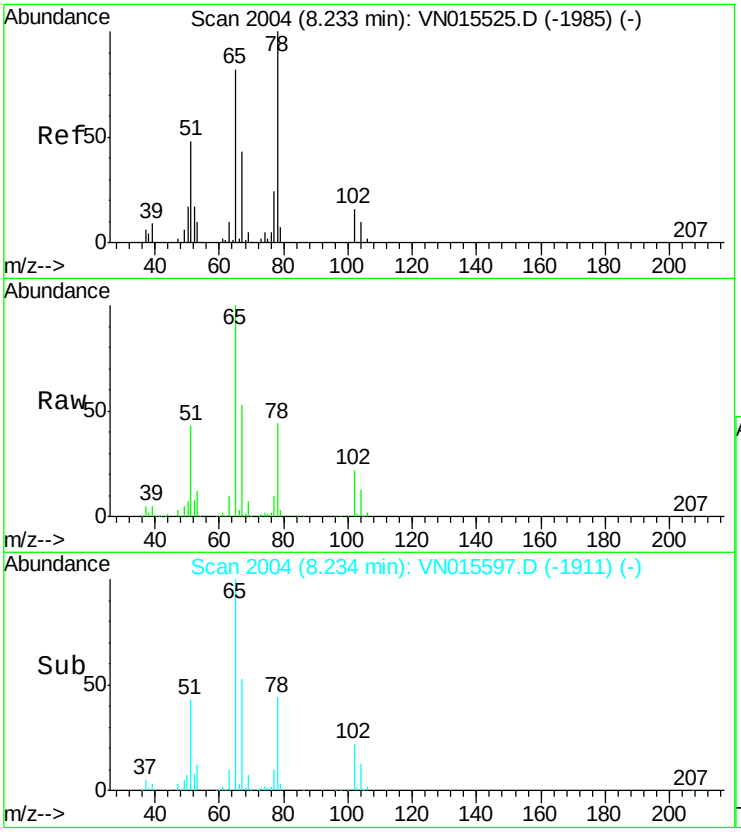
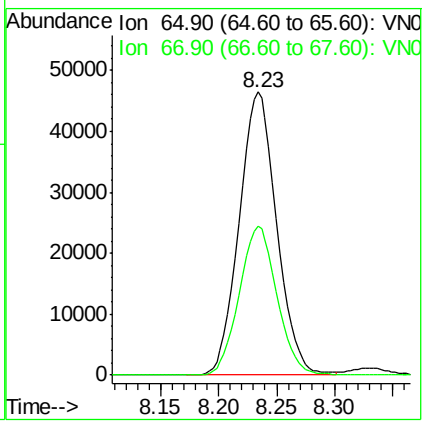
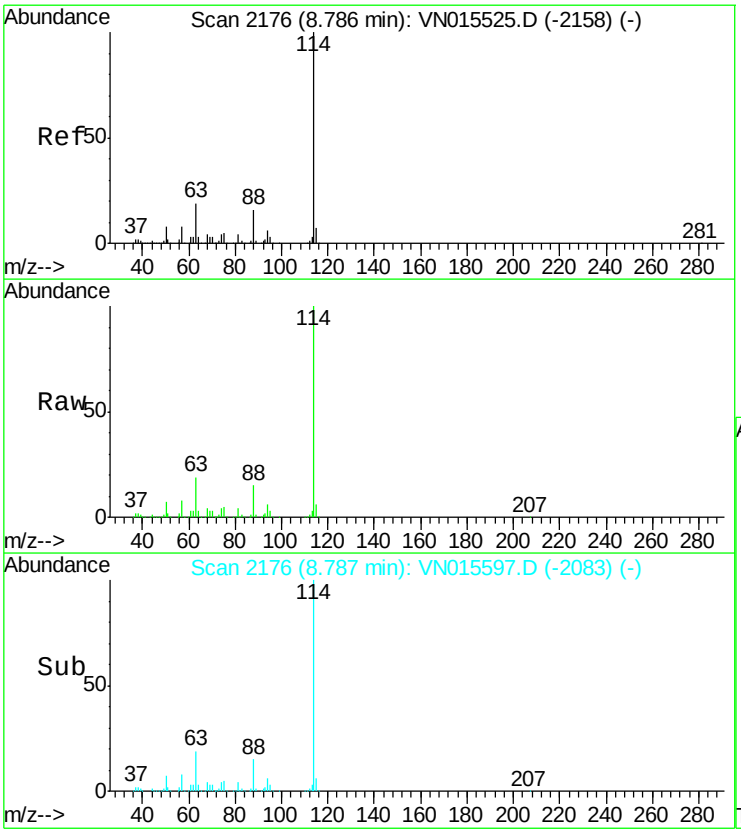


#34
1,2-Dichloroethane-d4
Concen: 46.17 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 65 Resp: 104684

Ion	Ratio	Lower	Upper
65	100		
67	52.6	0.0	103.6

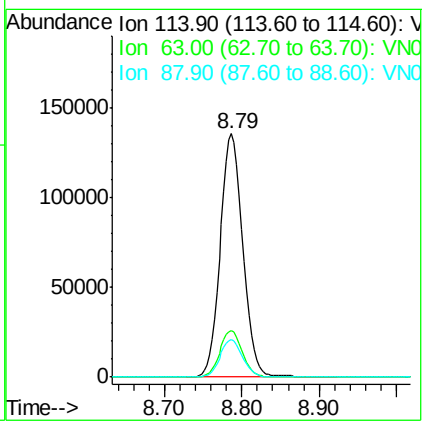




#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:114 Resp: 275670

Ion	Ratio	Lower	Upper
114	100		
63	19.2	0.0	38.6
88	15.2	0.0	32.2



Instrument :
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ClientSampleId :
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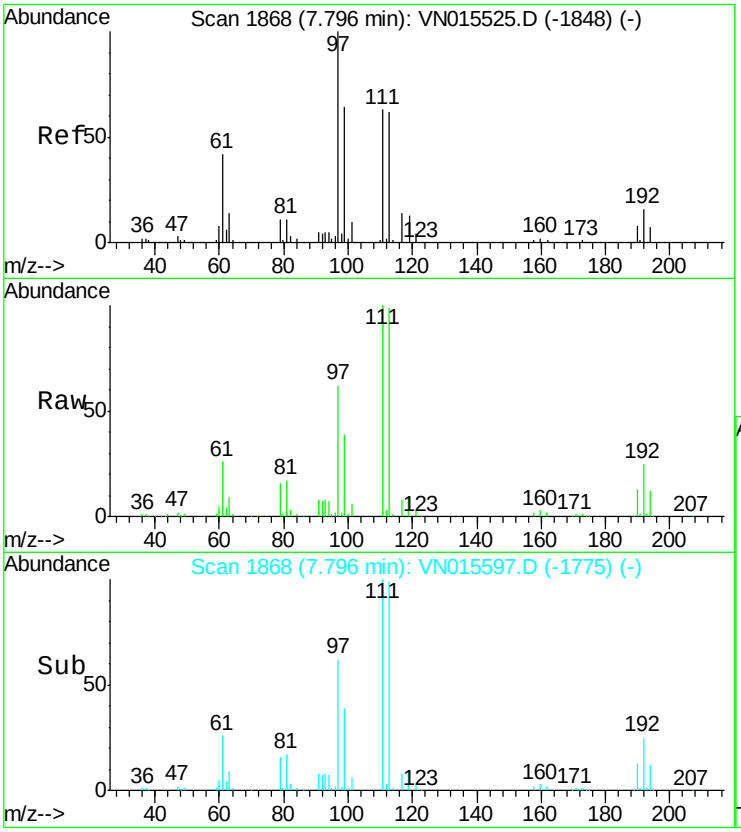
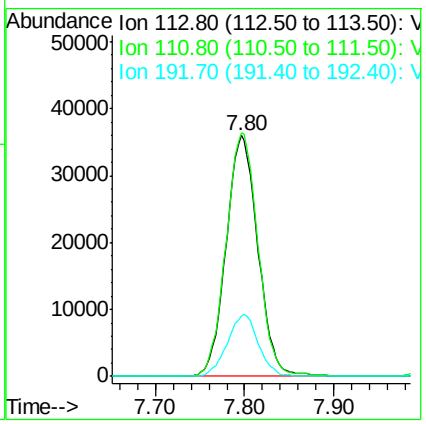
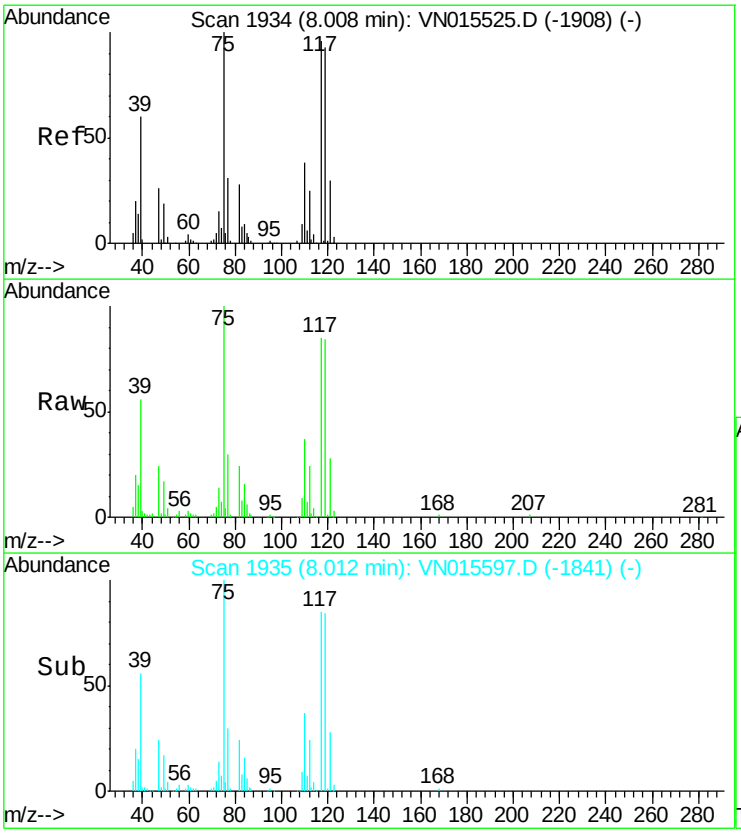


#36
Dibromofluoromethane
Concen: 49.37 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:113 Resp: 88636

Ion	Ratio	Lower	Upper
113	100		
111	101.6	81.5	122.3
192	25.2	20.0	30.0

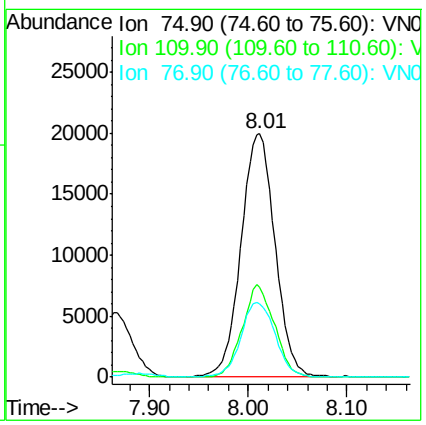




#37
1,1-Dichloropropene
Concen: 19.39 ug/l
RT: 8.01 min Scan# 1935
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 75 Resp: 47680

Ion	Ratio	Lower	Upper
75	100		
110	35.6	18.6	55.6
77	30.9	24.4	36.6



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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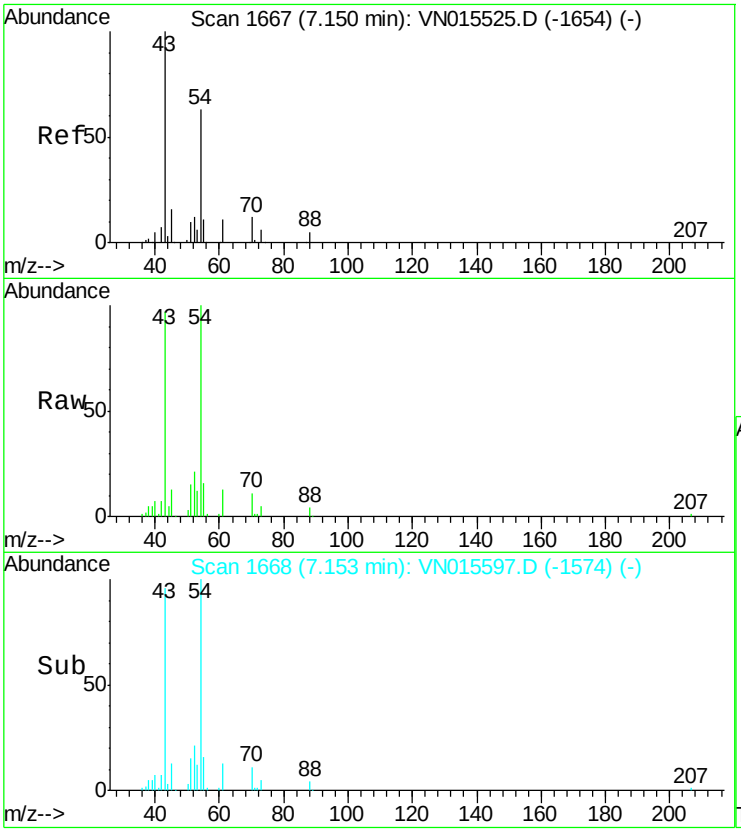
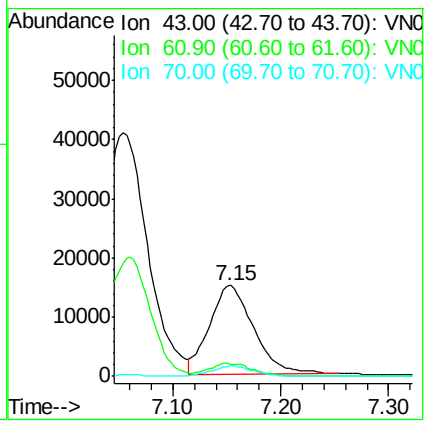
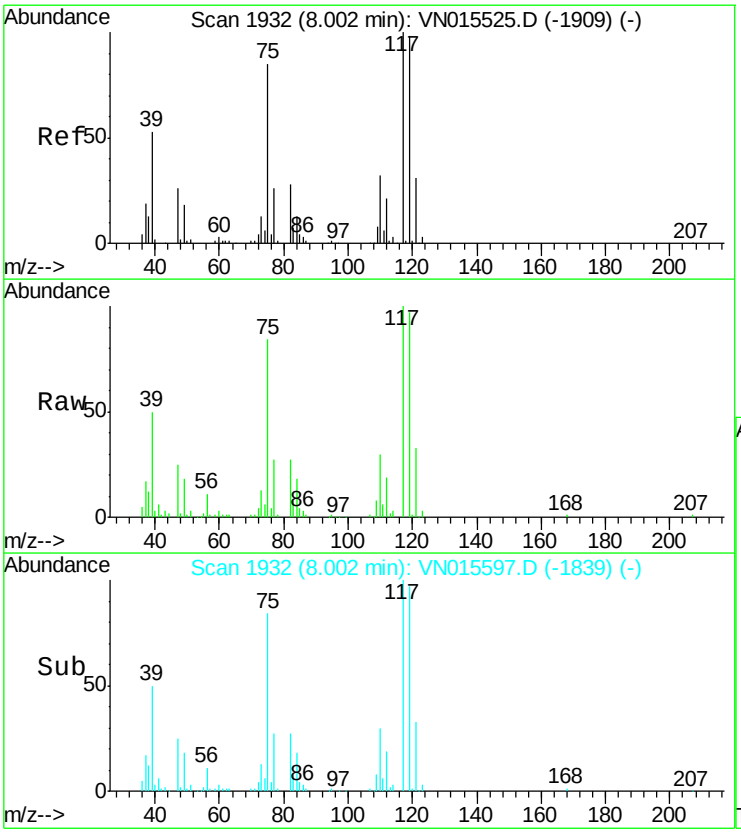


#38
Ethyl Acetate
Concen: 19.72 ug/l
RT: 7.15 min Scan# 1668
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 42775

Ion	Ratio	Lower	Upper
43	100		
61	14.3	10.8	16.2
70	11.1	8.5	12.7

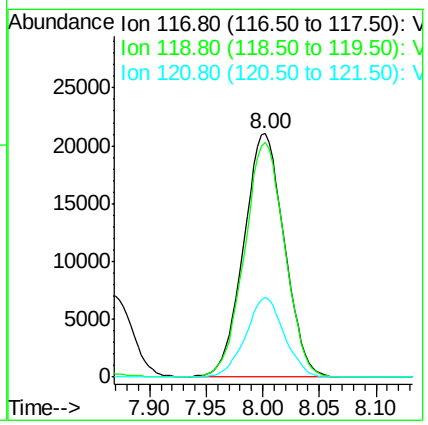


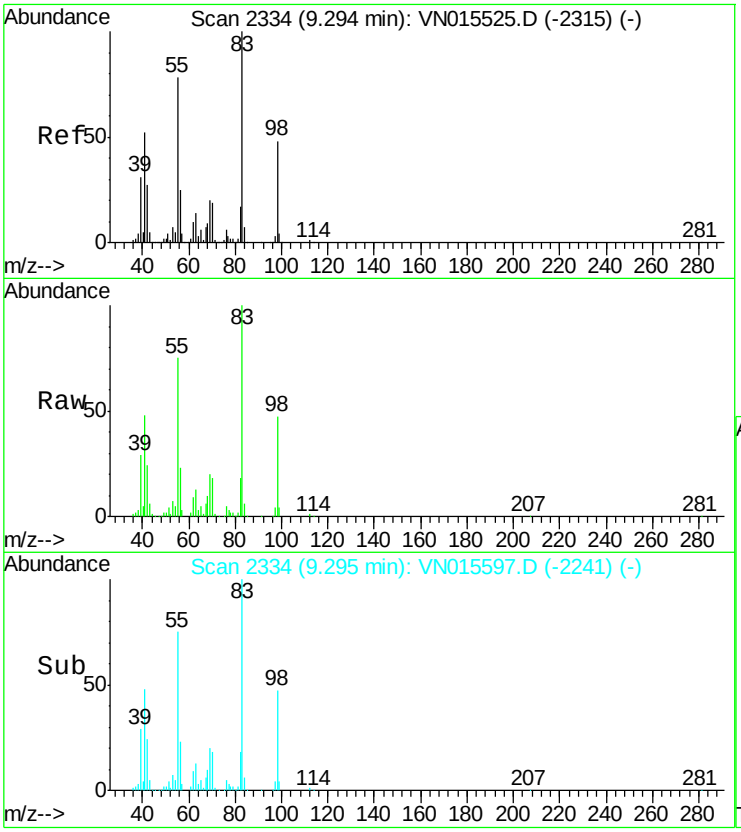


#39
Carbon Tetrachloride
Concen: 18.71 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:117 Resp: 52598

Ion	Ratio	Lower	Upper
117	100		
119	96.5	78.0	117.0
121	32.9	24.5	36.7





#40
Methylcyclohexane
Concen: 19.29 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 83 Resp: 60635

Ion	Ratio	Lower	Upper
83	100		
55	75.4	62.5	93.7
98	47.4	38.2	57.2

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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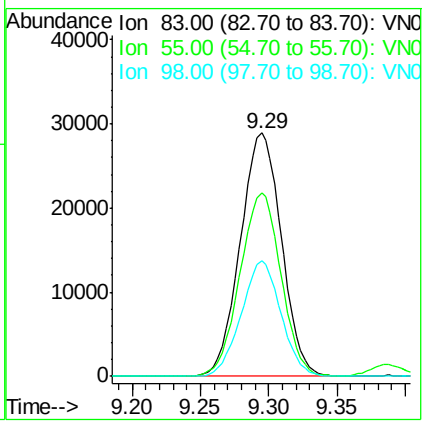
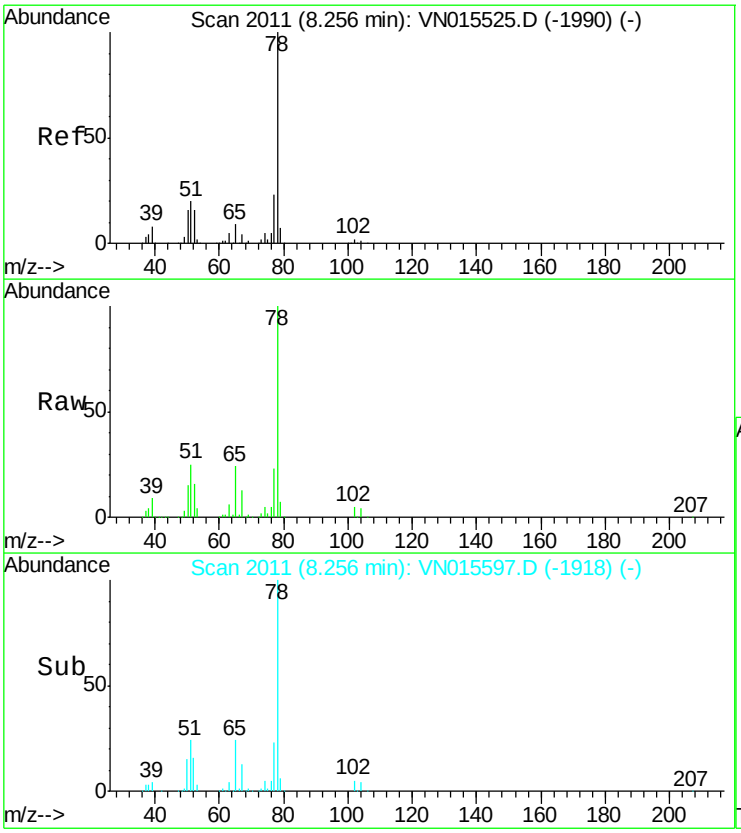
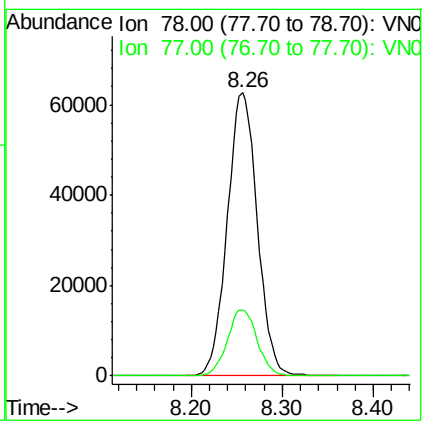




#41
Benzene
Concen: 19.60 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 78 Resp: 143706

Ion	Ratio	Lower	Upper
78	100		
77	23.4	18.5	27.7



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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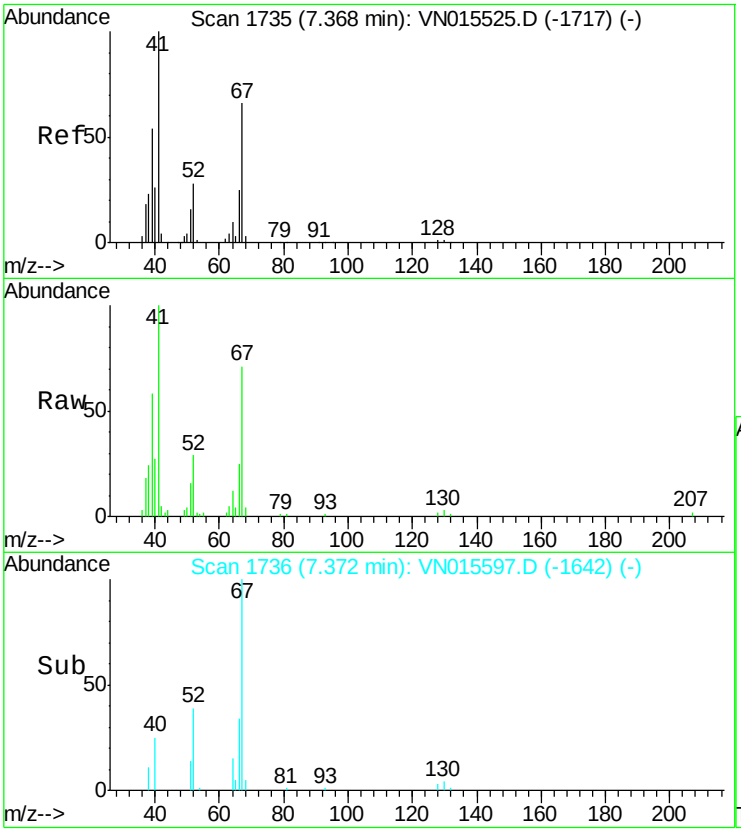
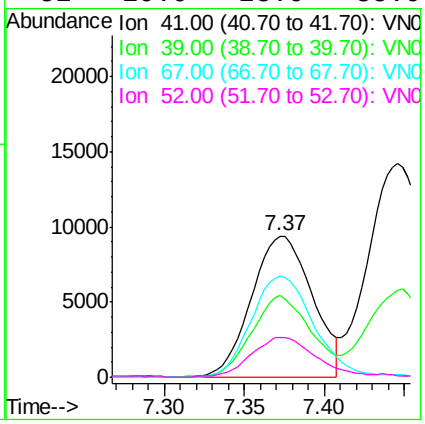
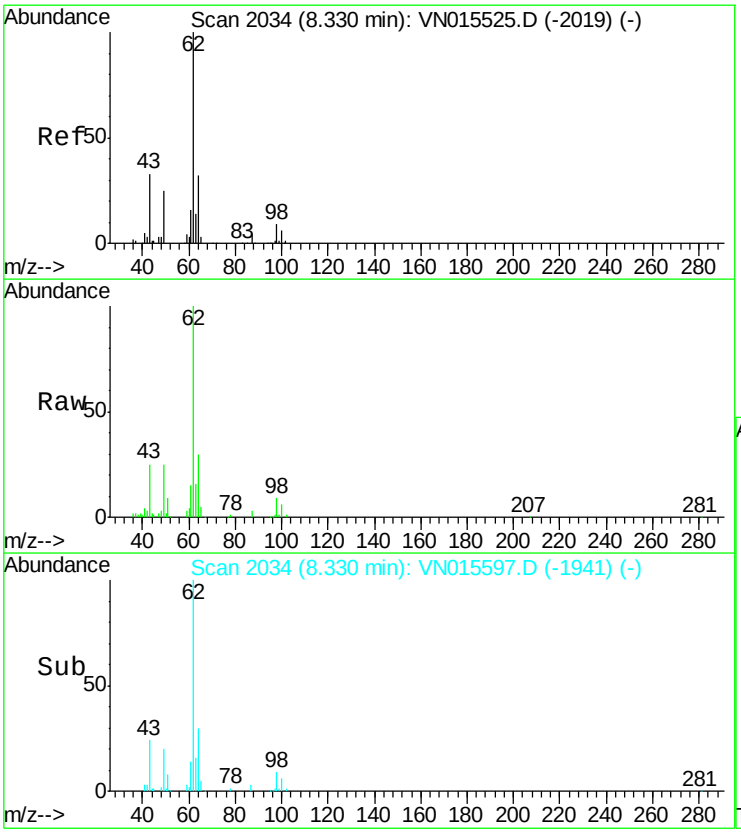


#42
Methacrylonitrile
Concen: 19.30 ug/l
RT: 7.37 min Scan# 1736
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 41 Resp: 24747

Ion	Ratio	Lower	Upper
41	100		
39	56.1	45.0	67.4
67	73.6	54.9	82.3
52	29.9	23.9	35.9

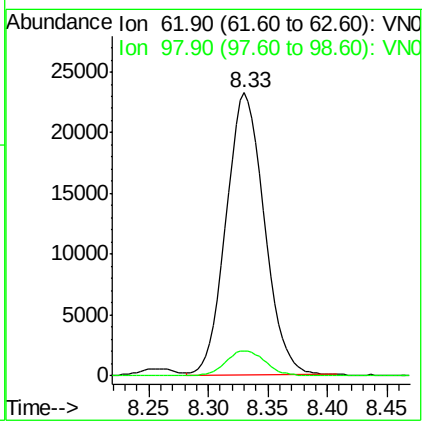




#43
1,2-Dichloroethane
Concen: 19.36 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 62 Resp: 51838

Ion	Ratio	Lower	Upper
62	100		
98	9.2	0.0	18.2



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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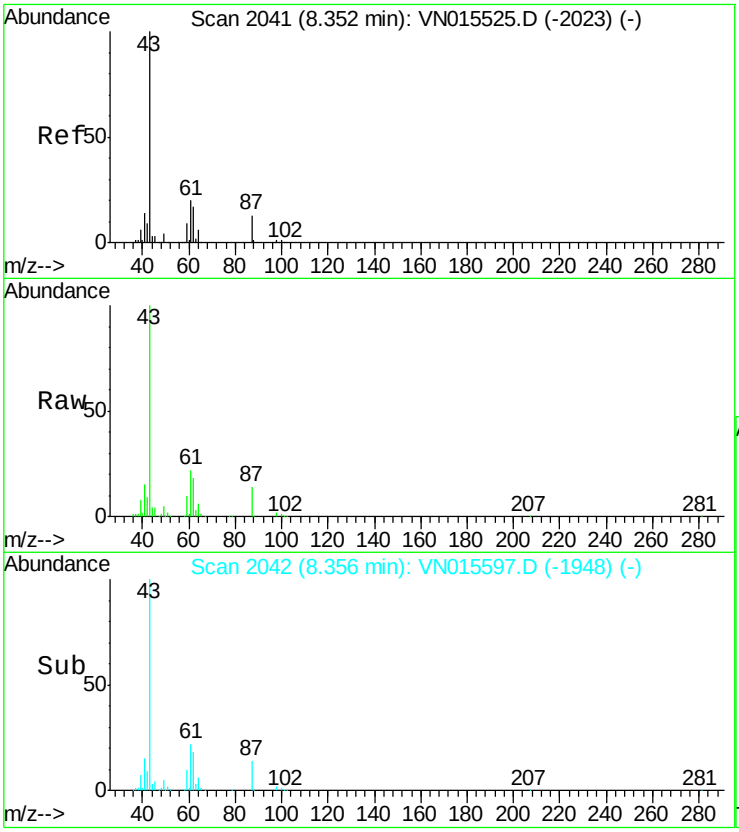
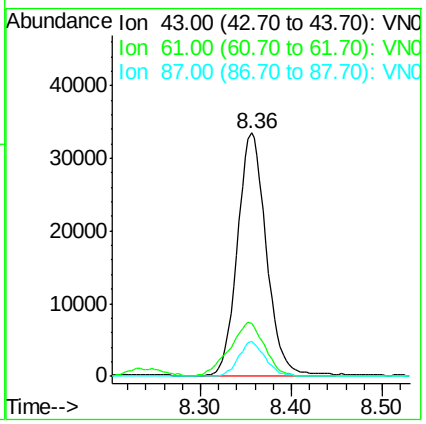
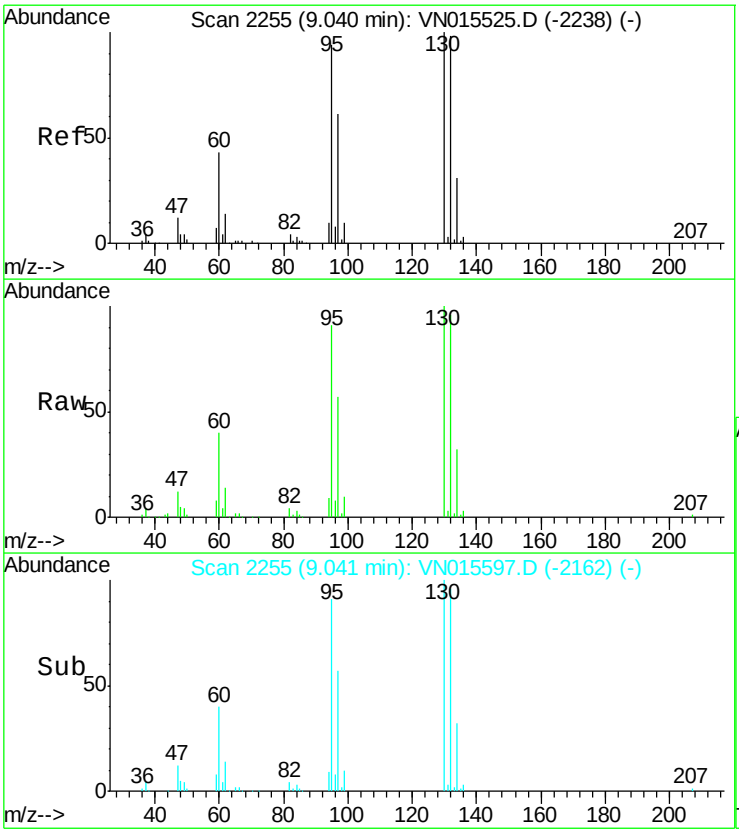


#44
Isopropyl Acetate
Concen: 18.78 ug/l
RT: 8.36 min Scan# 2042
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 73309

Ion	Ratio	Lower	Upper
43	100		
61	26.5	20.4	30.6
87	13.3	10.4	15.6

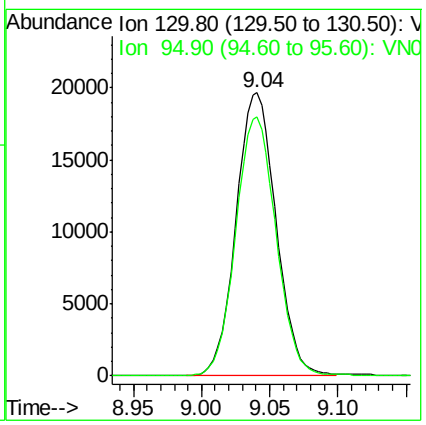




#45
Trichloroethene
Concen: 19.47 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:130 Resp: 39978

Ion	Ratio	Lower	Upper
130	100		
95	91.4	0.0	187.0



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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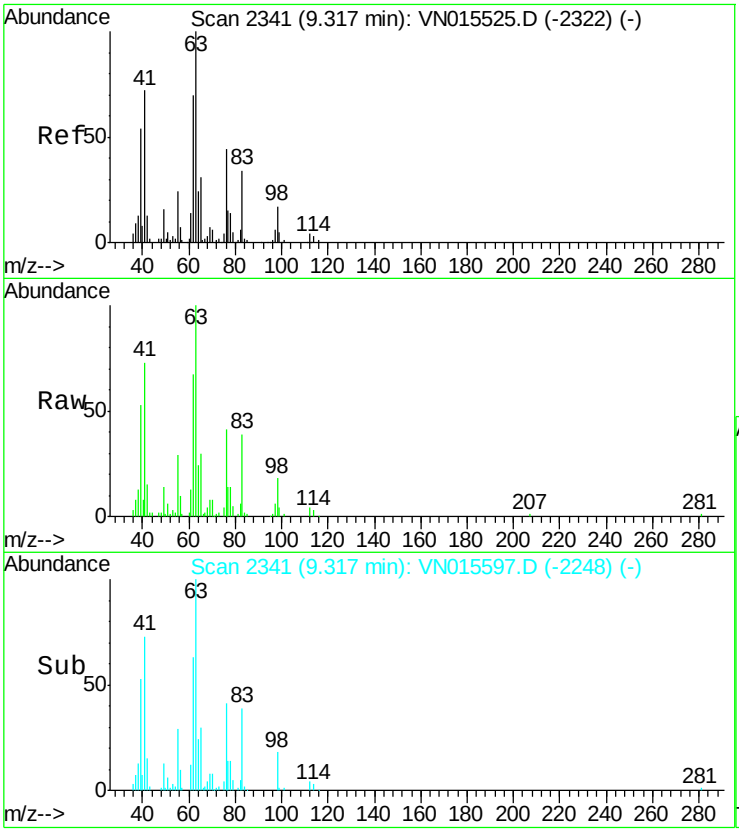
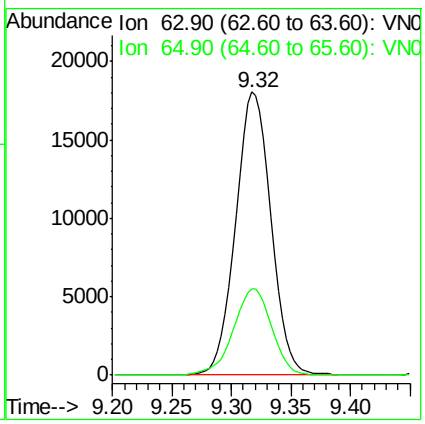
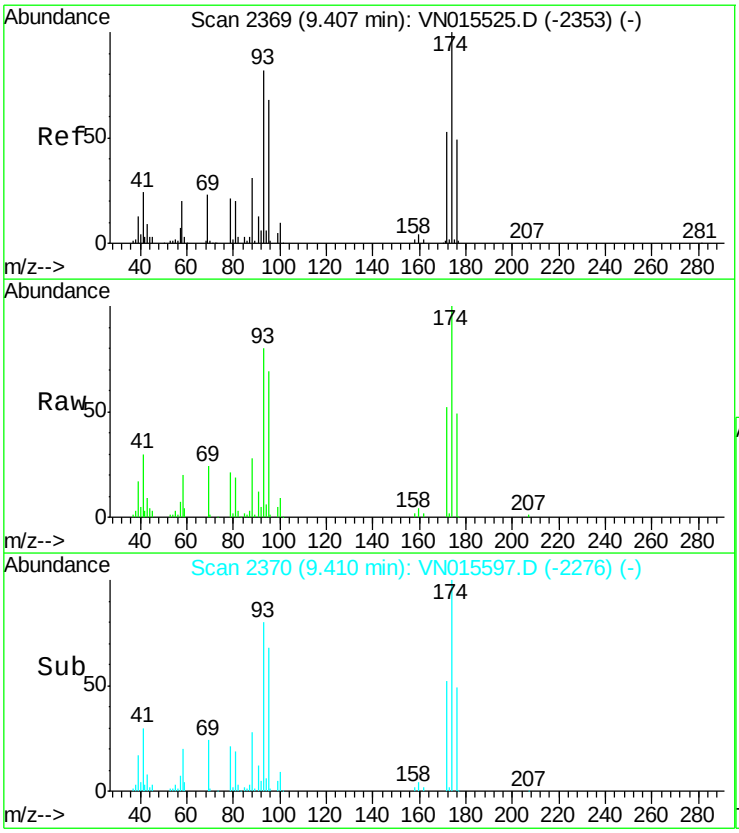


#46
1,2-Dichloropropane
Concen: 19.77 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 63 Resp: 37236

Ion	Ratio	Lower	Upper
63	100		
65	30.5	25.0	37.4

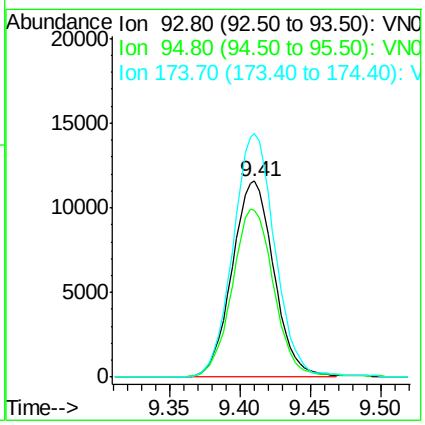




#47
Dibromomethane
Concen: 19.39 ug/l
RT: 9.41 min Scan# 2370
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 93 Resp: 24030

Ion	Ratio	Lower	Upper
93	100		
95	85.3	66.9	100.3
174	124.3	98.6	148.0



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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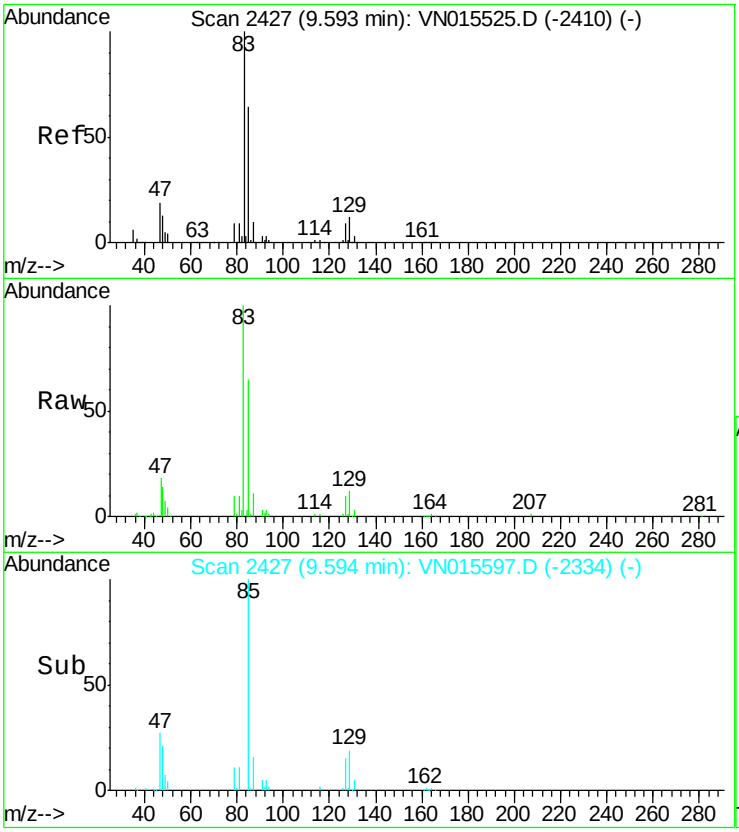
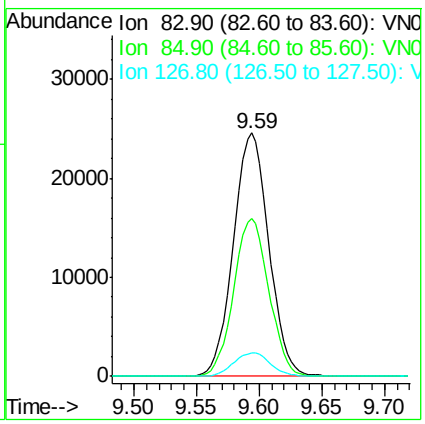
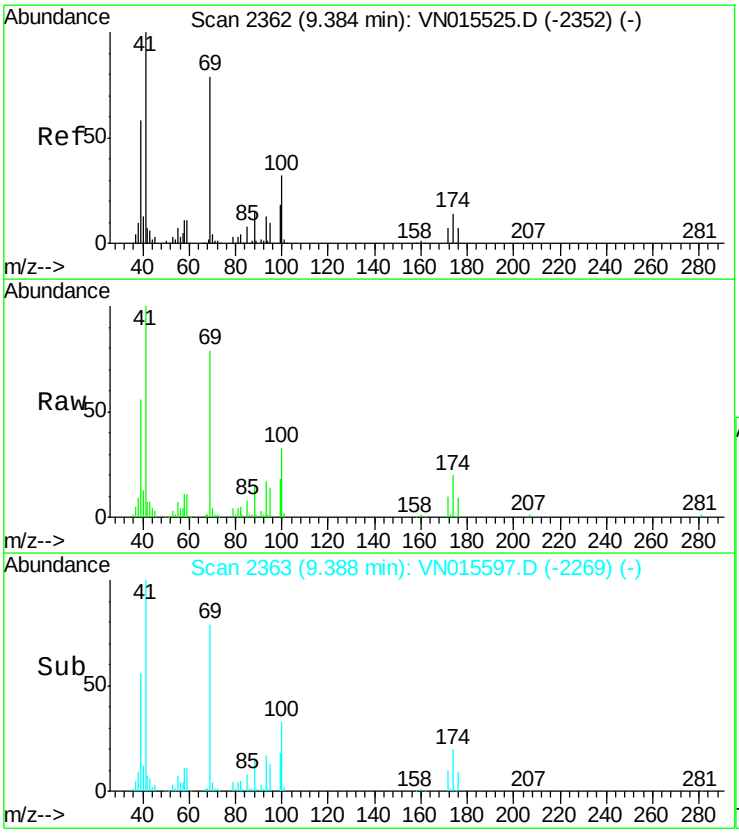


#48
Bromodichloromethane
Concen: 18.98 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 83 Resp: 48249

Ion	Ratio	Lower	Upper
83	100		
85	65.1	51.1	76.7
127	9.6	7.6	11.4

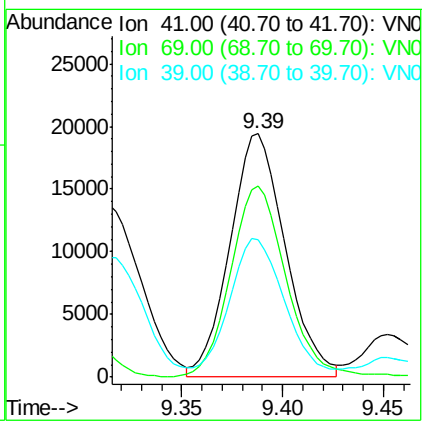


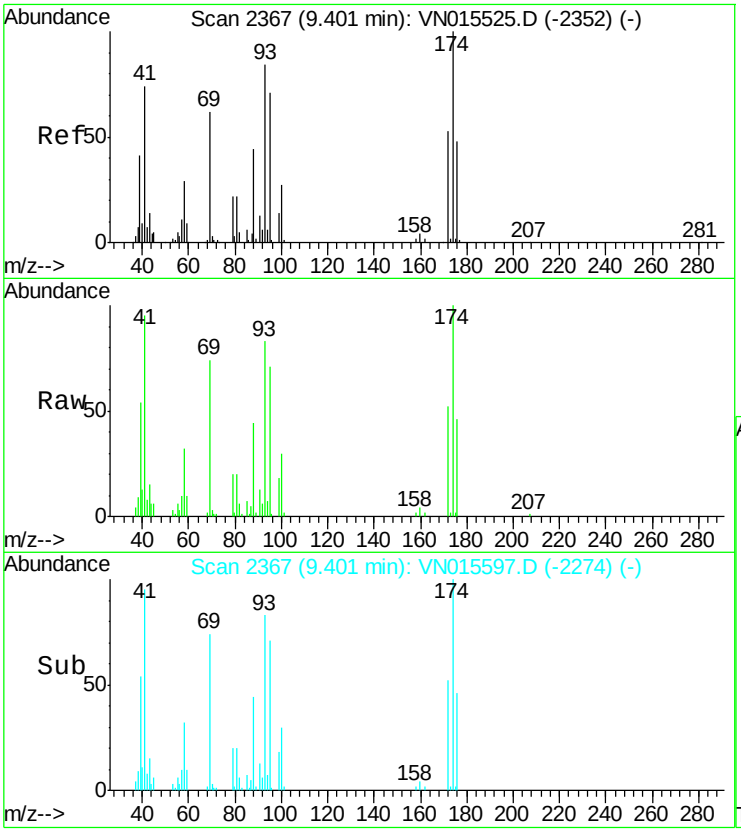


#49
Methyl methacrylate
Concen: 19.71 ug/l
RT: 9.39 min Scan# 2363
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 41 Resp: 37077

Ion	Ratio	Lower	Upper
41	100		
69	79.6	62.8	94.2
39	56.8	46.4	69.6





#50
1,4-Dioxane
Concen: 412.12 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 88 Resp: 10817

Ion	Ratio	Lower	Upper
88	100		
43	31.6	26.4	39.6
58	76.9	56.6	84.8

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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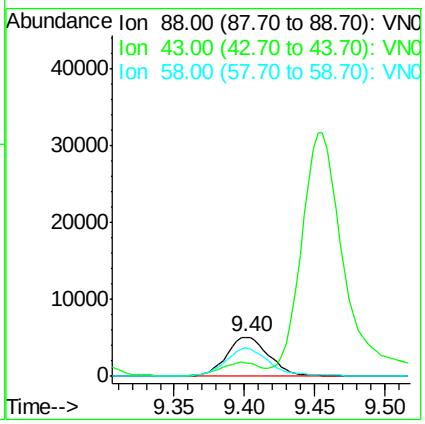
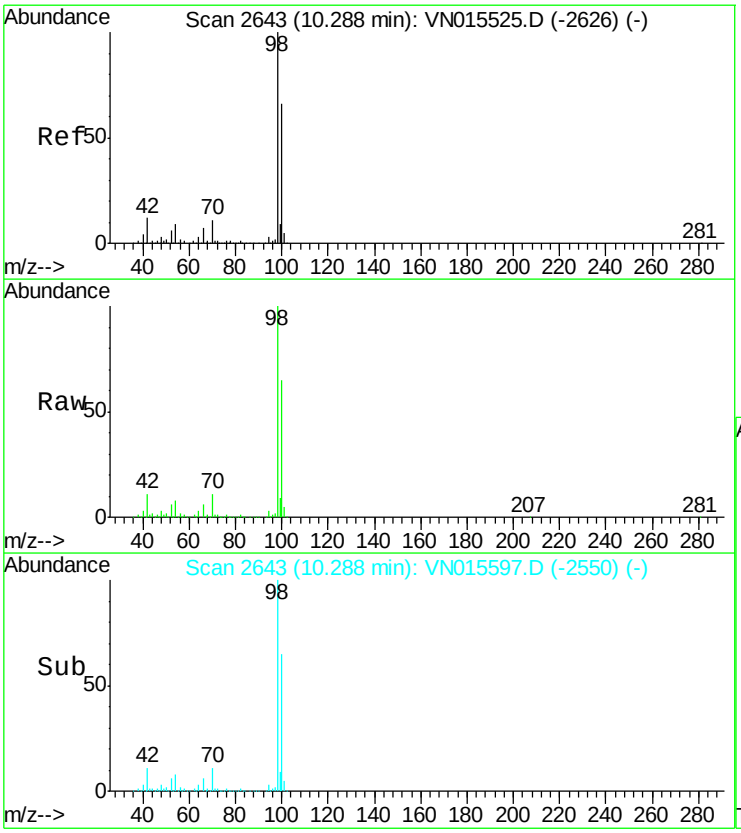
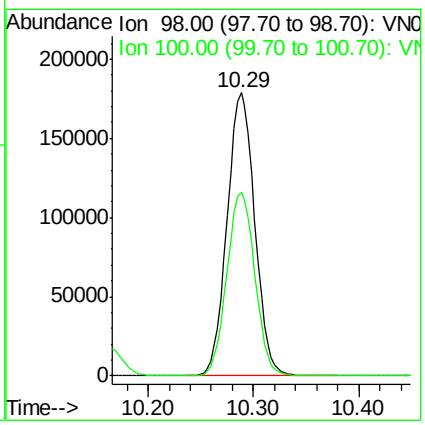


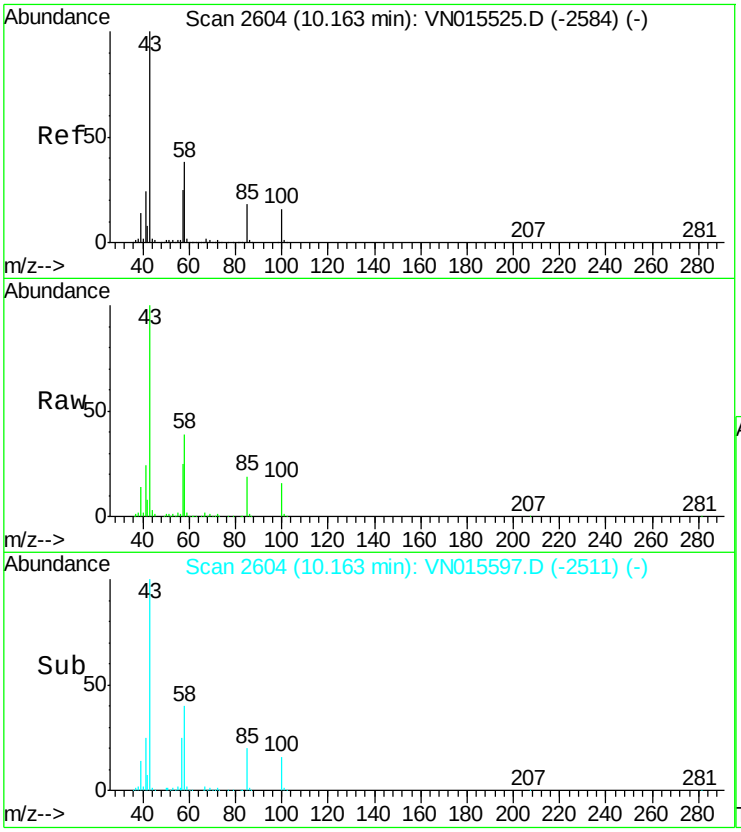


#51
Toluene-d8
Concen: 49.03 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 98 Resp: 324331

Ion	Ratio	Lower	Upper
98	100		
100	65.7	52.3	78.5





#52
4-Methyl-2-Pentanone
Concen: 97.86 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 211133

Ion	Ratio	Lower	Upper
43	100		
58	38.4	30.2	45.2

Instrument :
MSVOA_N
ClientSampleId :
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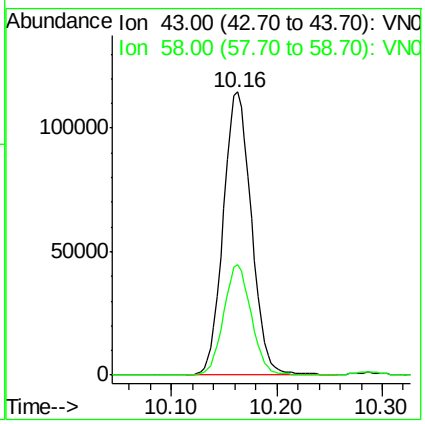
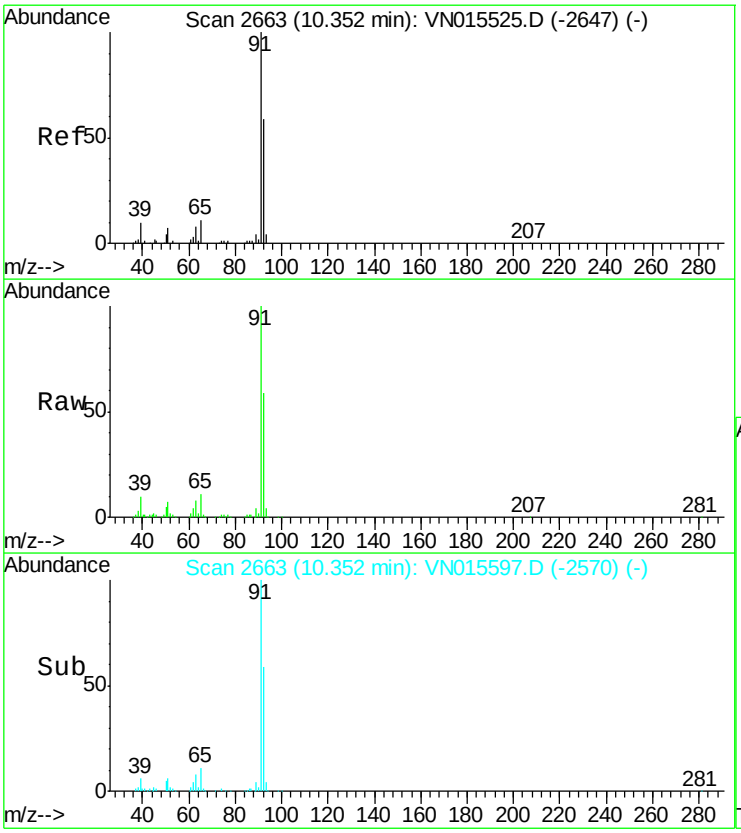
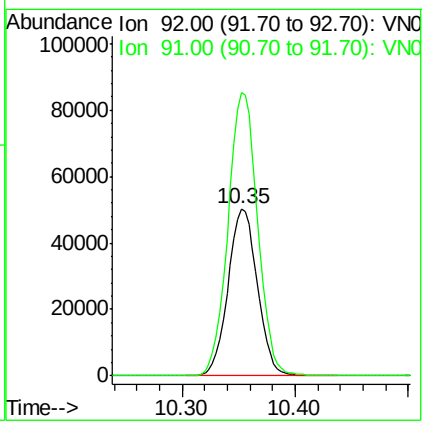




#53
Toluene
Concen: 19.56 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 92 Resp: 90894

Ion	Ratio	Lower	Upper
92	100		
91	170.9	136.2	204.4



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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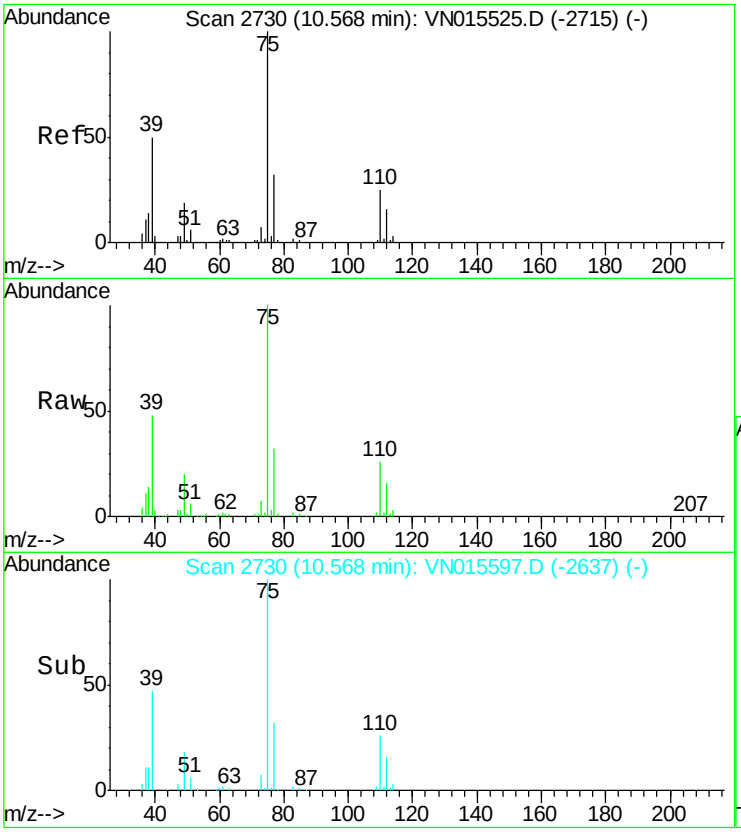
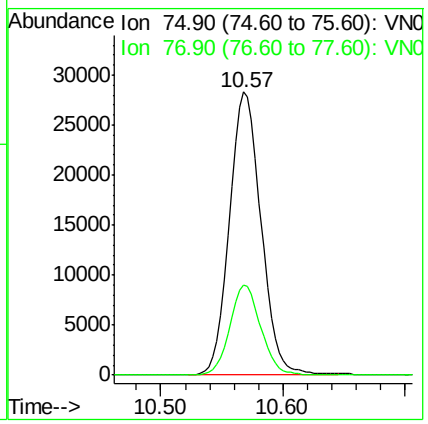
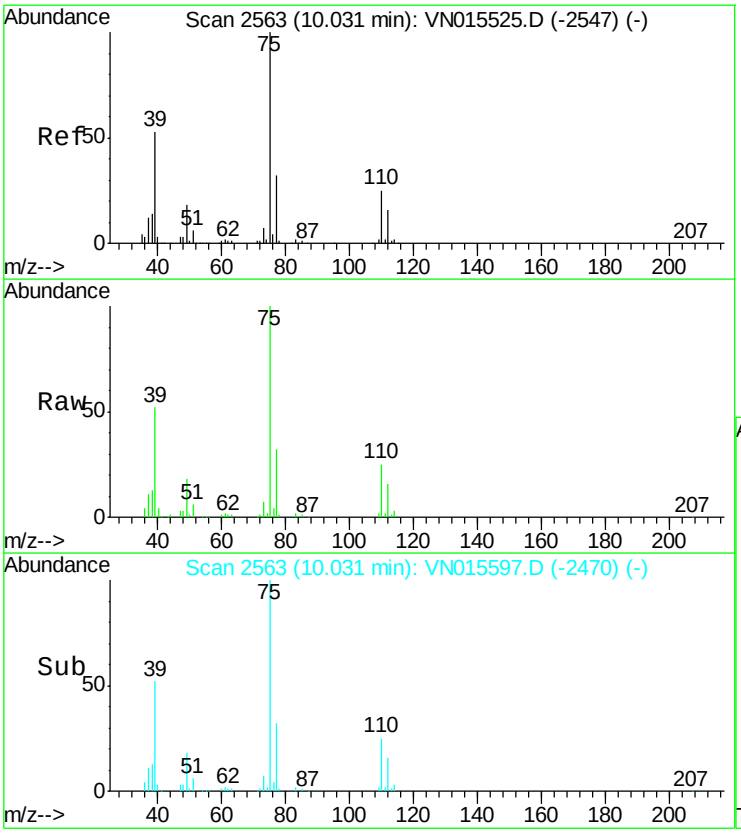


#54
t-1,3-Dichloropropene
Concen: 19.66 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 75 Resp: 51108

Ion	Ratio	Lower	Upper
75	100		
77	31.8	26.0	39.0

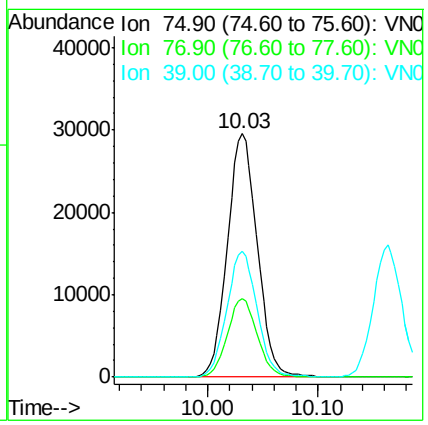


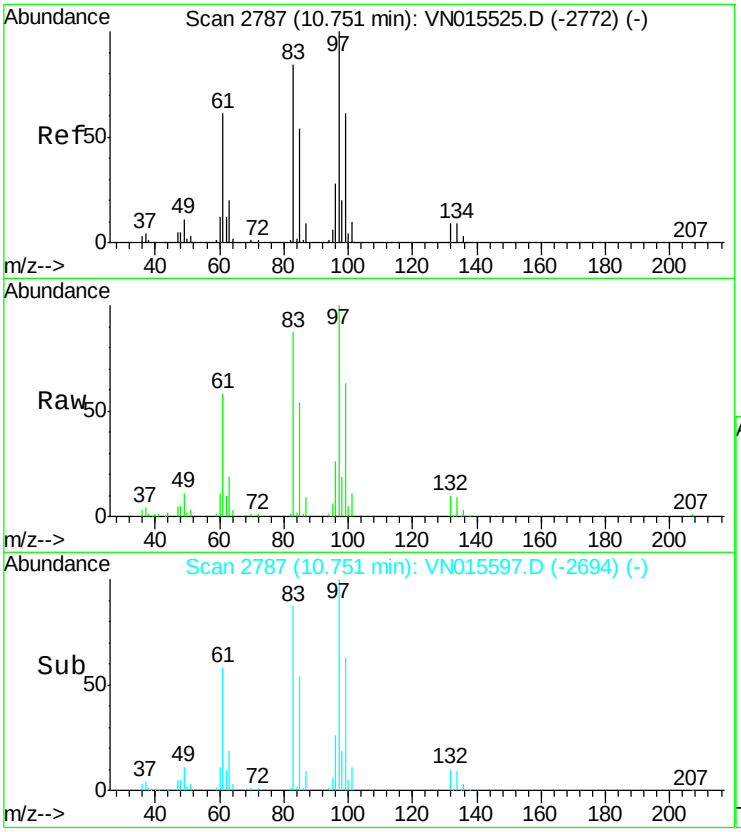


#55
cis-1,3-Dichloropropene
Concen: 19.18 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 75 Resp: 55516

Ion	Ratio	Lower	Upper
75	100		
77	32.5	25.4	38.2
39	51.7	42.2	63.4





#56
1,1,2-Trichloroethane
Concen: 20.05 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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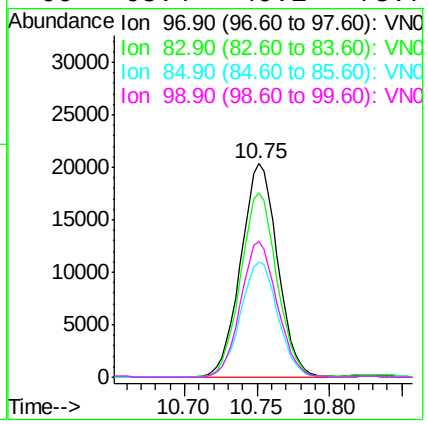
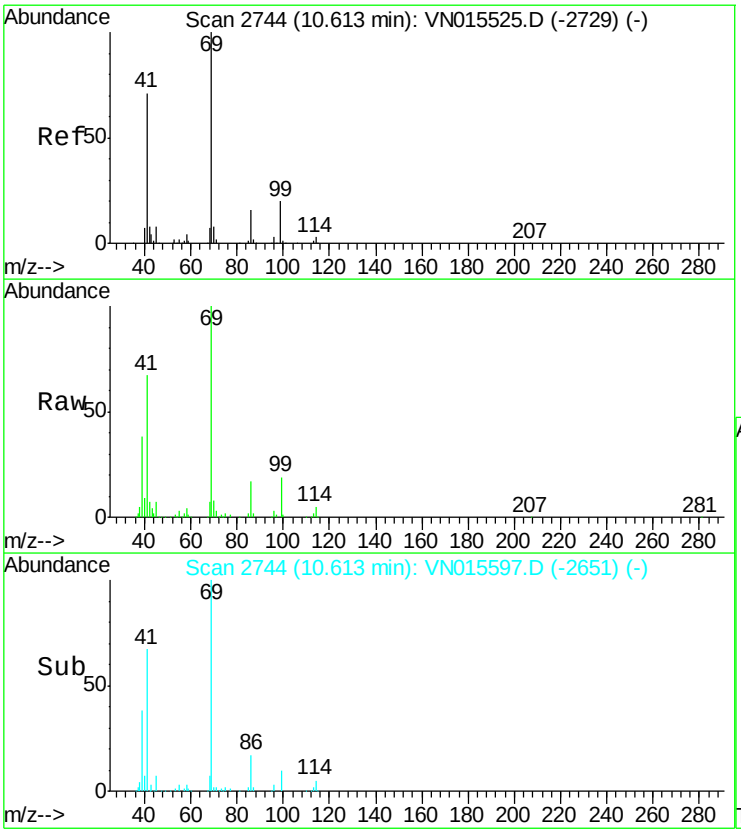
Tgt Ion: 97 Resp: 36012

Ion	Ratio	Lower	Upper
97	100		
83	86.6	67.0	100.4
85	54.0	42.9	64.3
99	63.4	49.1	73.7

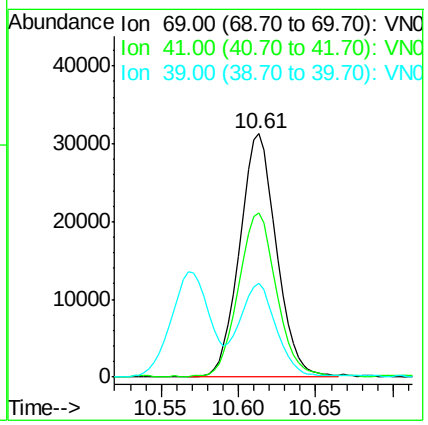


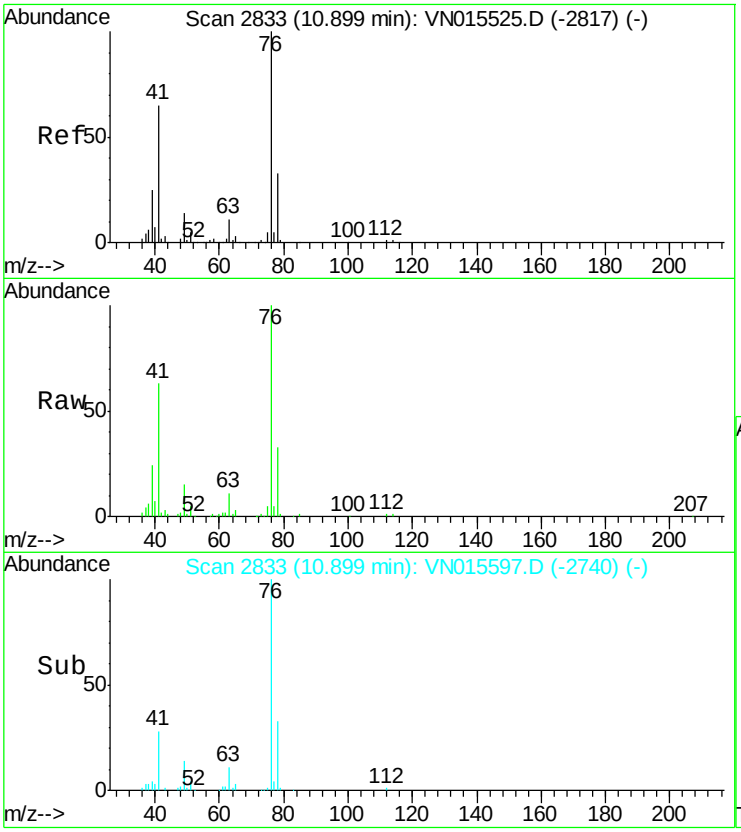


#57
Ethyl methacrylate
Concen: 19.55 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 69 Resp: 51935

Ion	Ratio	Lower	Upper
69	100		
41	69.2	56.9	85.3
39	38.3	32.0	48.0





#58
1,3-Dichloropropane
Concen: 19.60 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 76 Resp: 58976

Ion	Ratio	Lower	Upper
76	100		
78	32.3	26.3	39.5

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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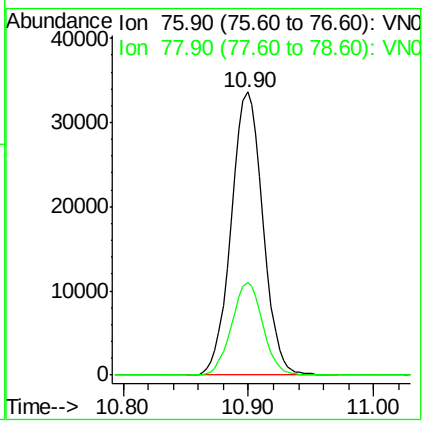
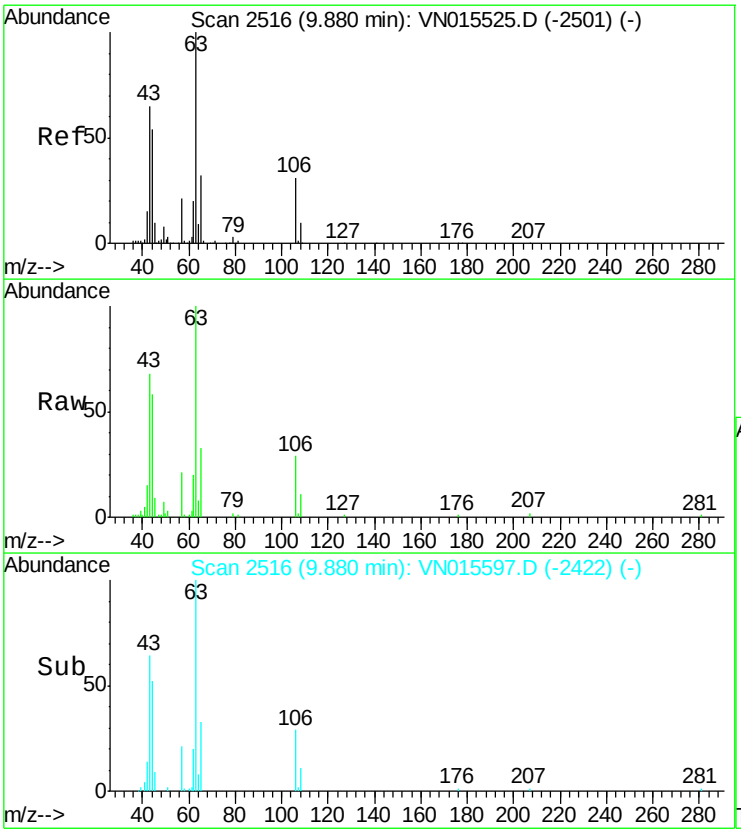
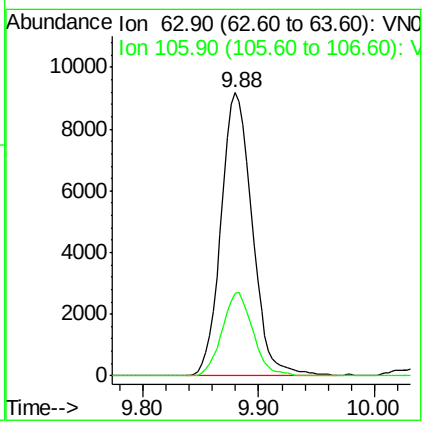


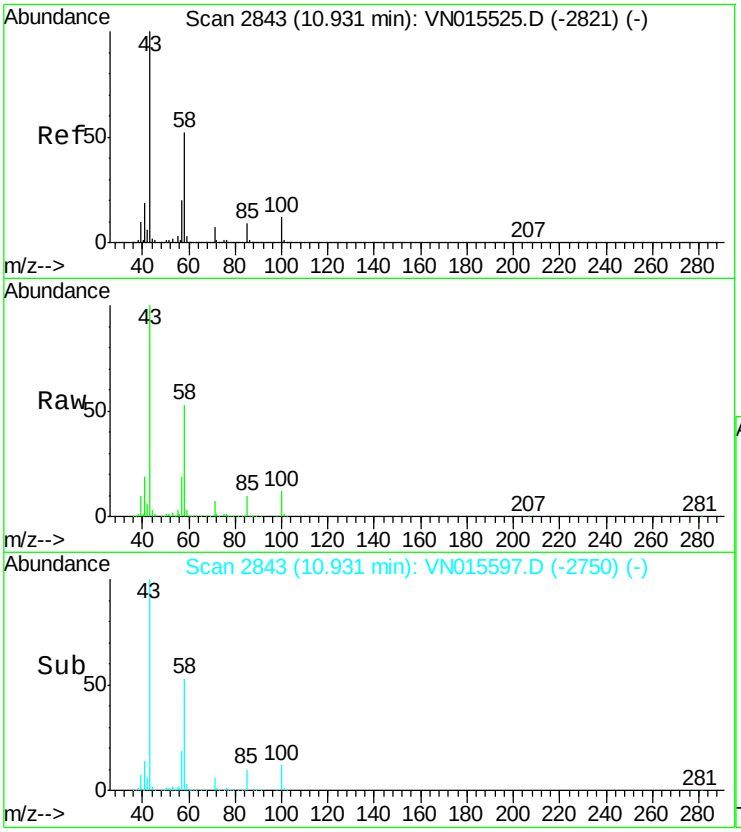


#59
2-Chloroethyl Vinyl ether
Concen: 61.33 ug/l
RT: 9.88 min Scan# 2516
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 63 Resp: 17102

Ion	Ratio	Lower	Upper
63	100		
106	28.7	23.7	35.5





#60
2-Hexanone
Concen: 106.83 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 150497

Ion	Ratio	Lower	Upper
43	100		
58	52.9	26.0	78.0

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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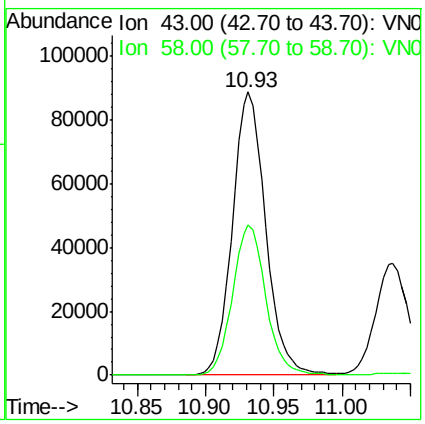
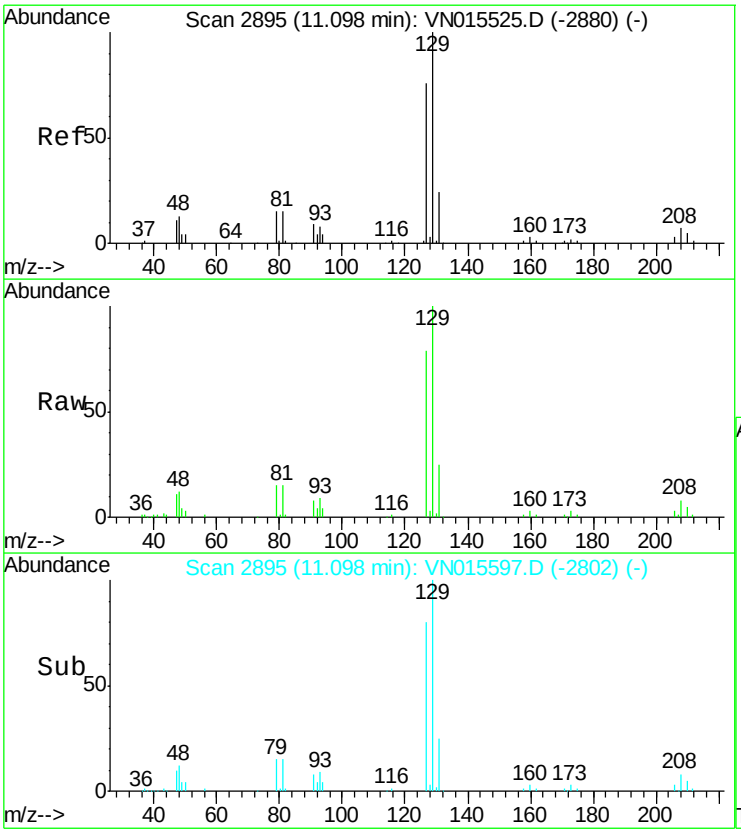
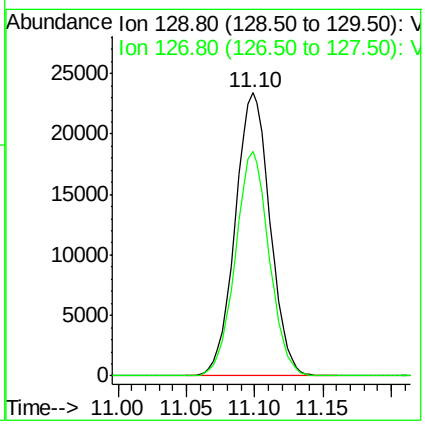


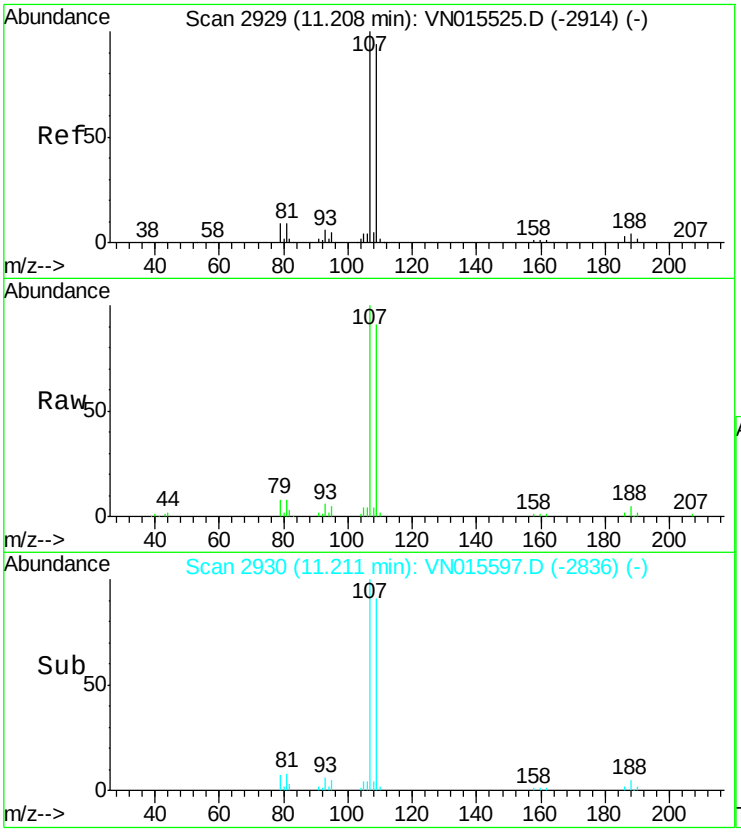


#61
Dibromochloromethane
Concen: 19.36 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:129 Resp: 41511

Ion	Ratio	Lower	Upper
129	100		
127	76.7	38.6	116.0





#62
1,2-Dibromoethane
Concen: 20.13 ug/l
RT: 11.21 min Scan# 2930
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:107 Resp: 37372

Ion	Ratio	Lower	Upper
107	100		
109	93.2	75.8	113.6

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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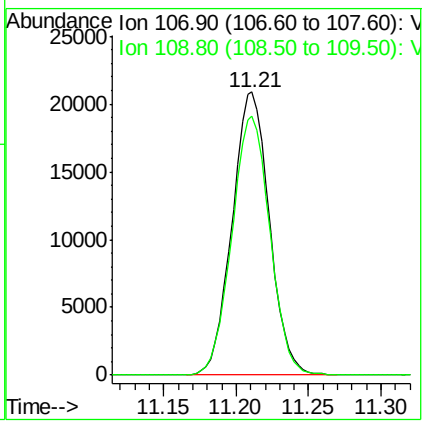
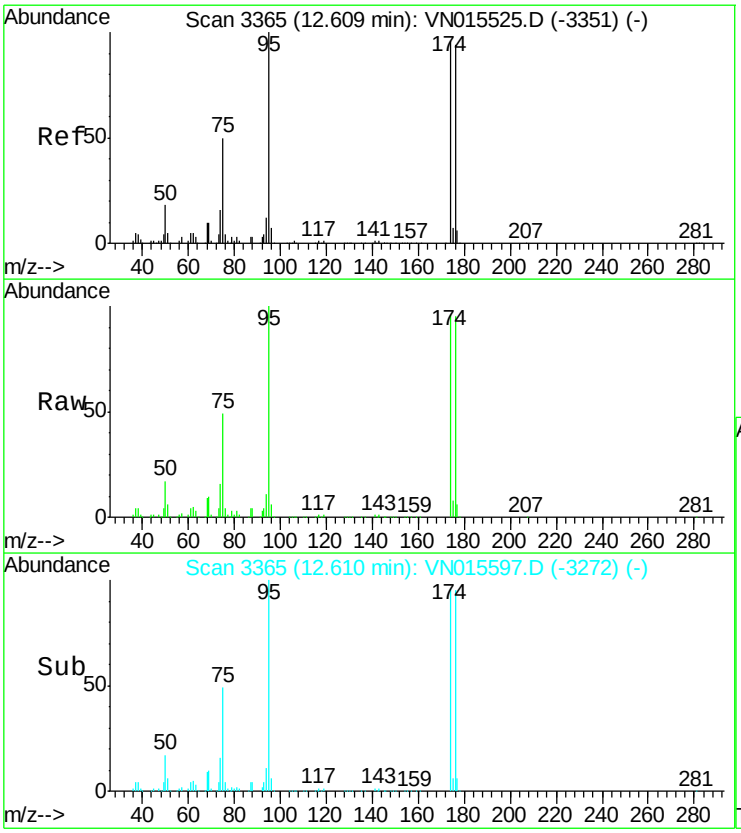
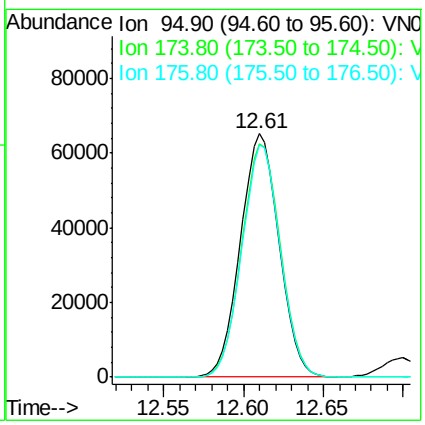


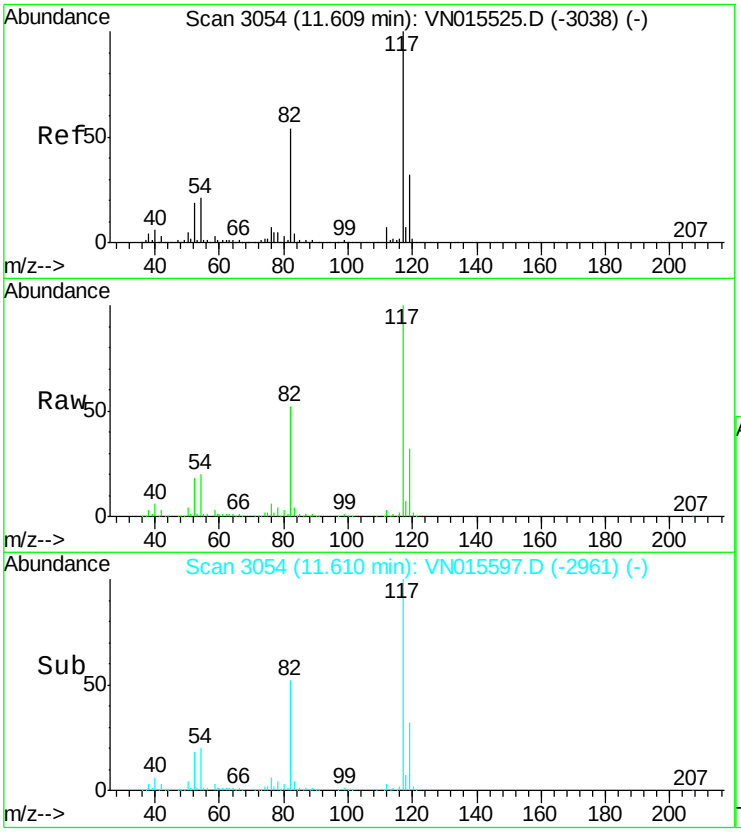


#63
4-Bromofluorobenzene
Concen: 47.60 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 95 Resp: 107865

Ion	Ratio	Lower	Upper
95	100		
174	96.2	0.0	191.8
176	94.7	0.0	186.8





#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:117 Resp: 239976

Ion	Ratio	Lower	Upper
117	100		
82	52.5	43.3	64.9
119	32.1	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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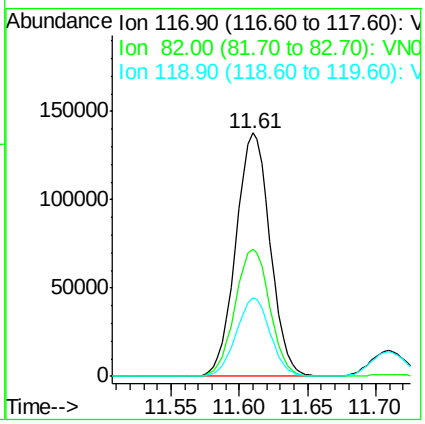
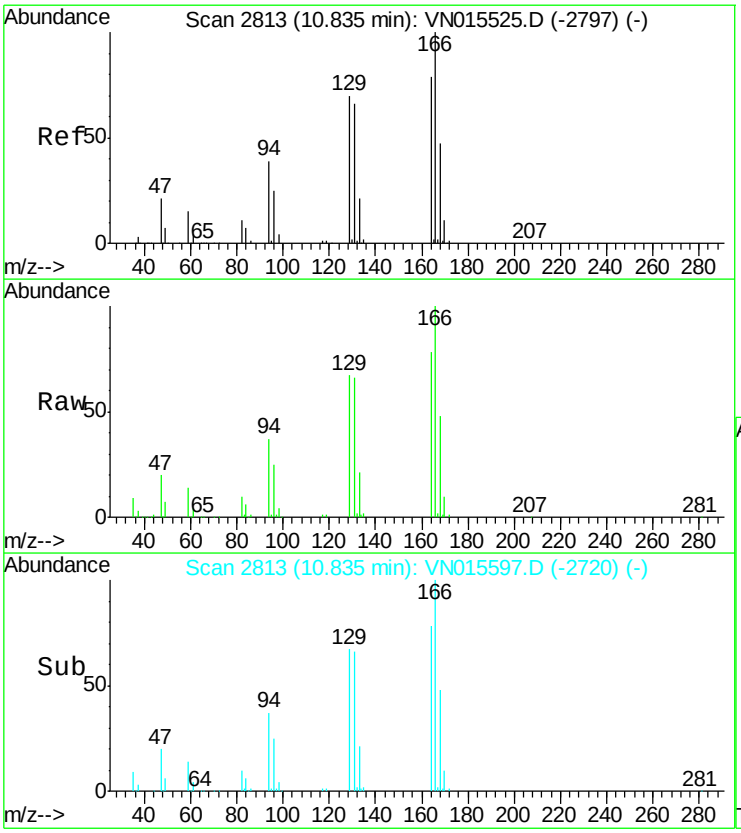
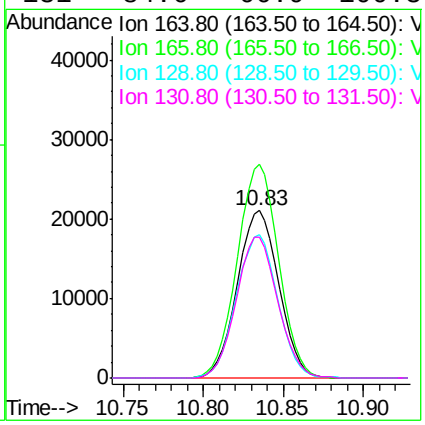


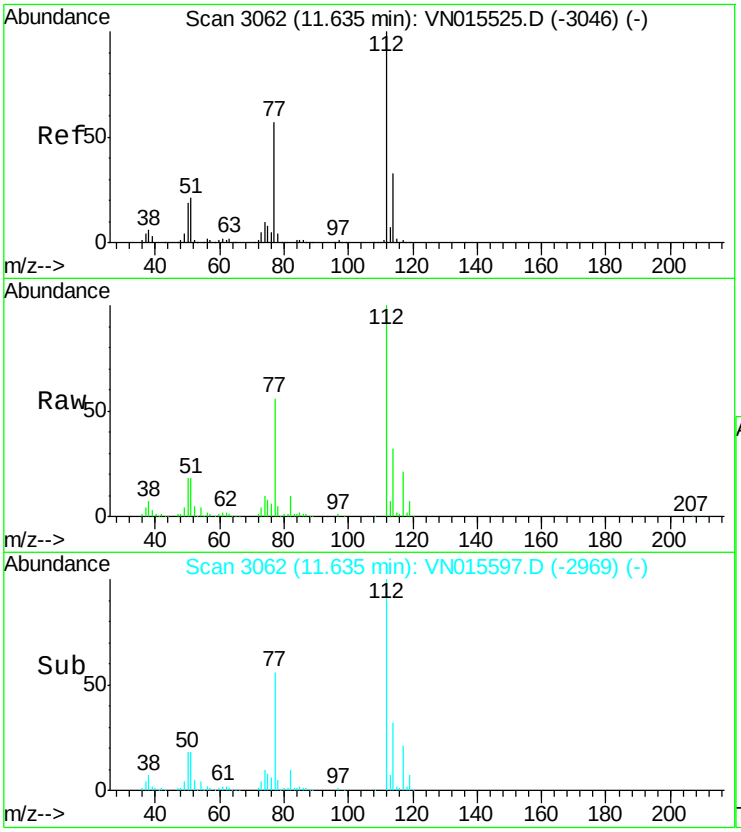


#65
Tetrachloroethene
Concen: 19.79 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:164 Resp: 37462

Ion	Ratio	Lower	Upper
164	100		
166	127.7	101.7	152.5
129	86.1	70.7	106.1
131	84.6	66.9	100.3





#66
Chlorobenzene
Concen: 19.17 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:112 Resp: 99565

Ion	Ratio	Lower	Upper
112	100		
114	31.7	26.2	39.2

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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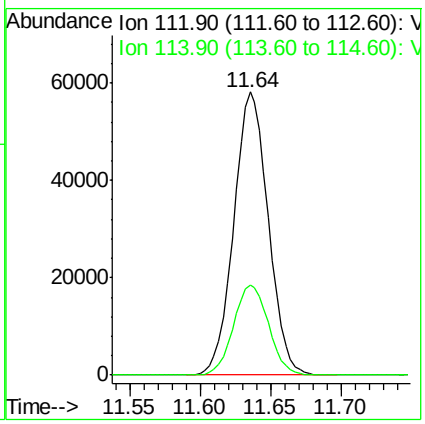
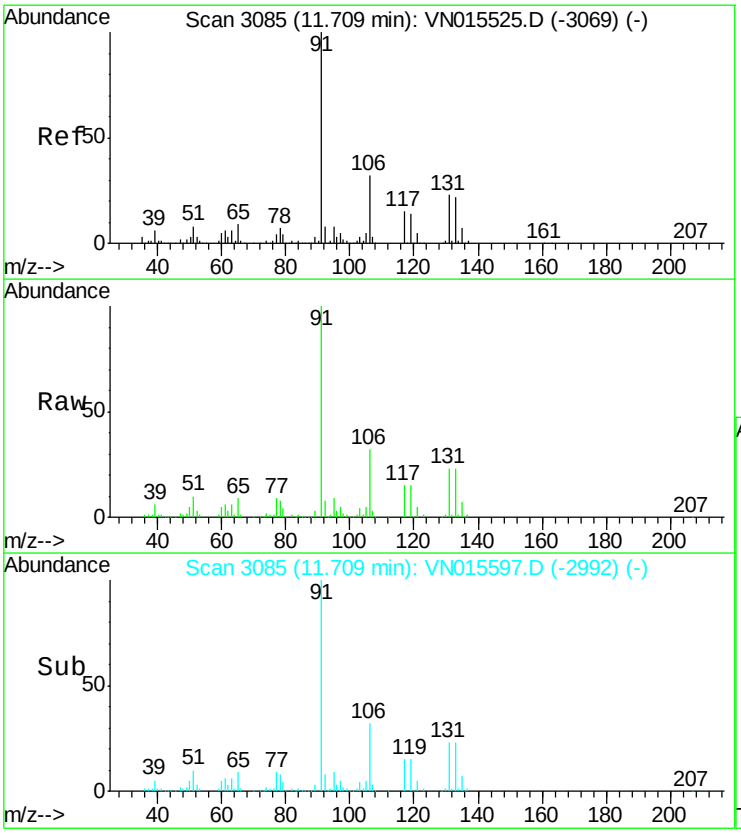
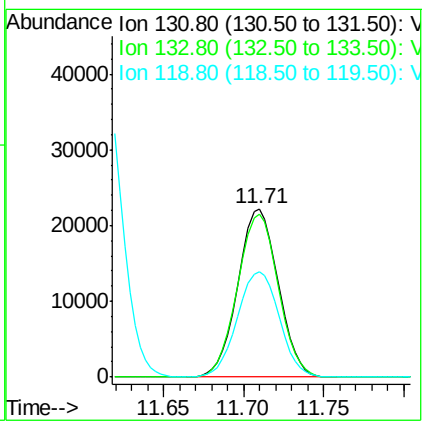


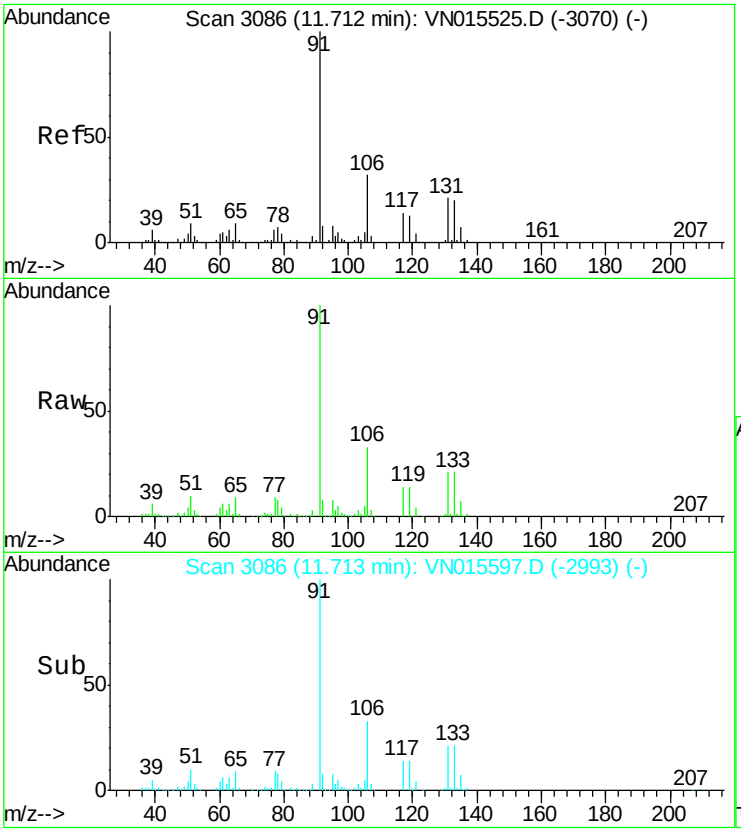


#67
1,1,1,2-Tetrachloroethane
Concen: 19.31 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:131 Resp: 38206

Ion	Ratio	Lower	Upper
131	100		
133	98.0	47.7	143.1
119	65.1	31.5	94.5





#68
Ethyl Benzene
Concen: 19.50 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 91 Resp: 165801

Ion	Ratio	Lower	Upper
91	100		
106	32.5	25.5	38.3

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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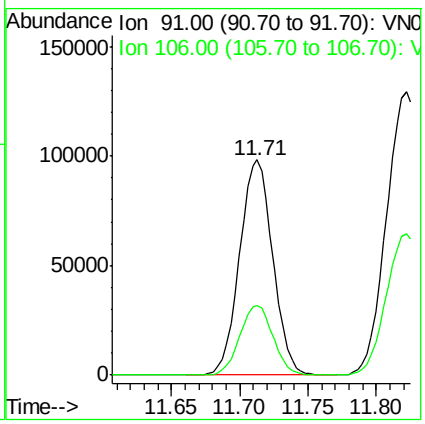
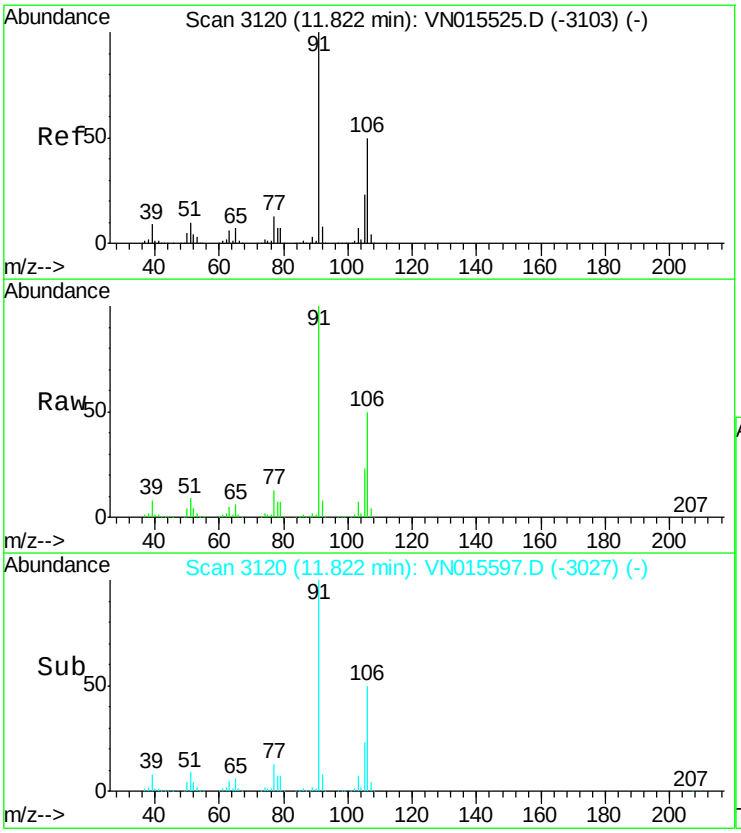
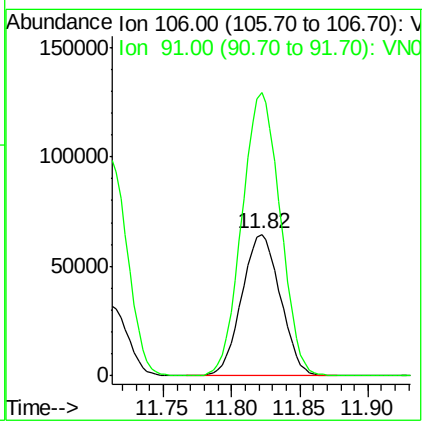


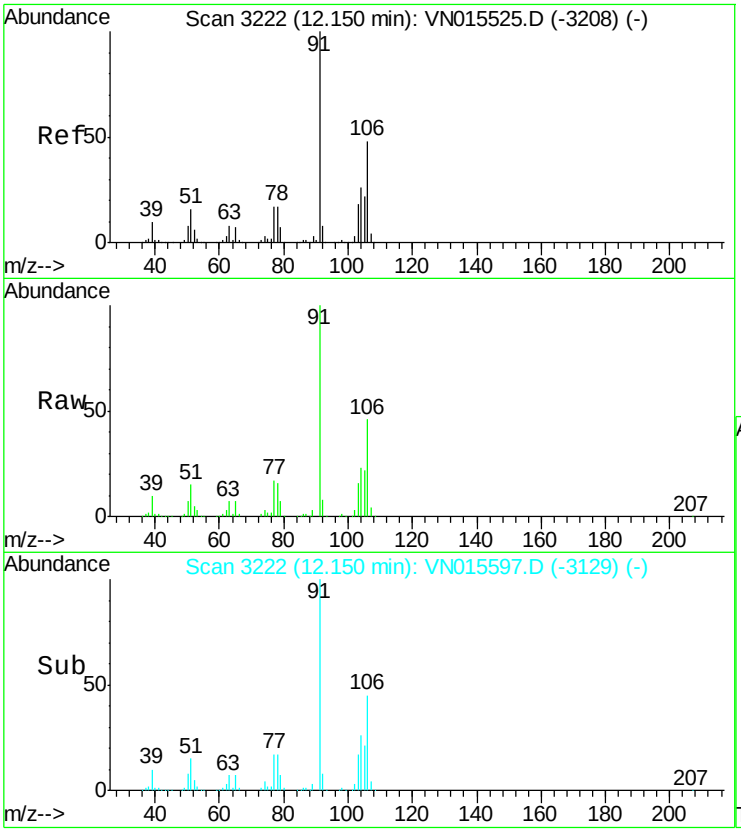


#69
m/p-Xylenes
Concen: 38.24 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:106 Resp: 126545

Ion	Ratio	Lower	Upper
106	100		
91	199.2	160.5	240.7





#70
o-Xylene
Concen: 19.61 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:106 Resp: 63854

Ion	Ratio	Lower	Upper
106	100		
91	212.8	104.9	314.7

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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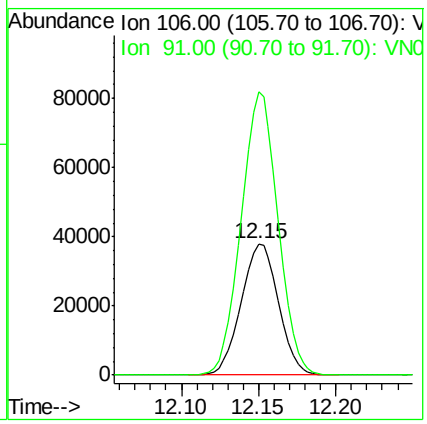
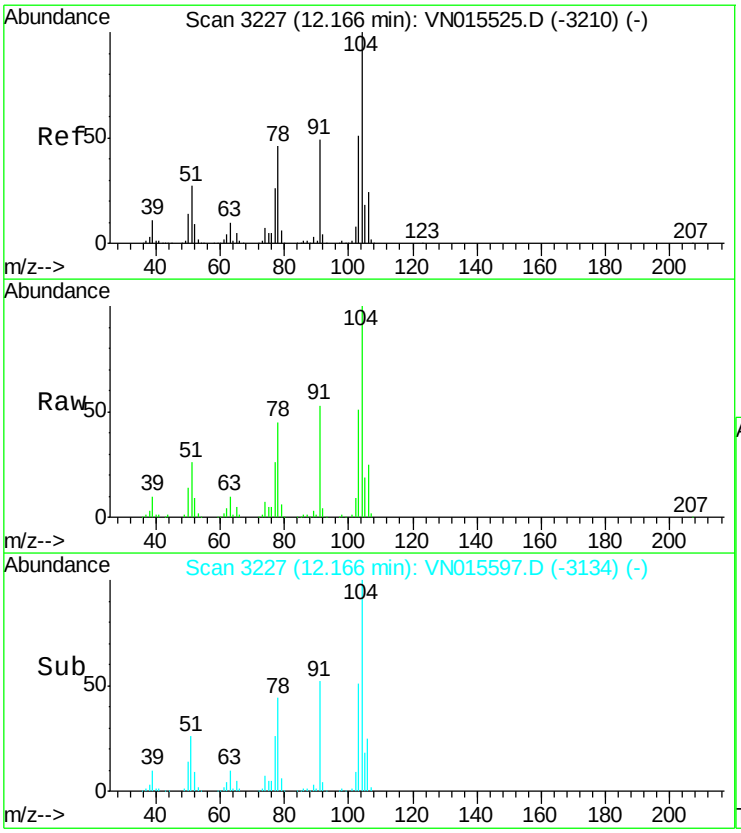
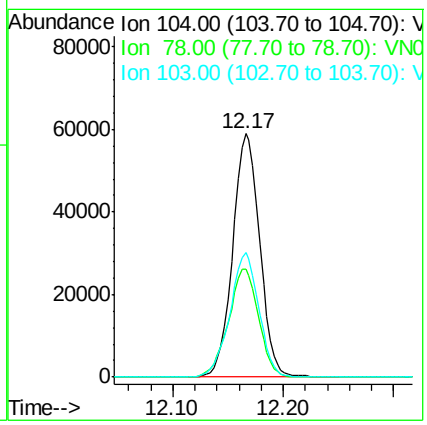


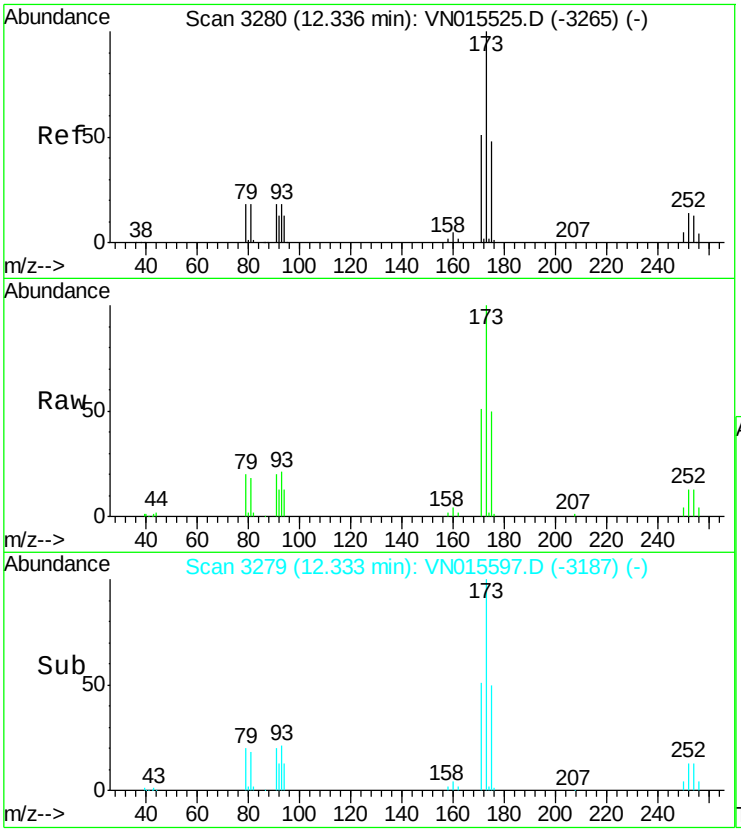


#71
Styrene
Concen: 19.55 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:104 Resp: 100017

Ion	Ratio	Lower	Upper
104	100		
78	49.5	40.1	60.1
103	54.8	44.0	66.0





#72
Bromoform
Concen: 18.46 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:173 Resp: 30608

Ion	Ratio	Lower	Upper
173	100		
175	49.9	24.3	72.9
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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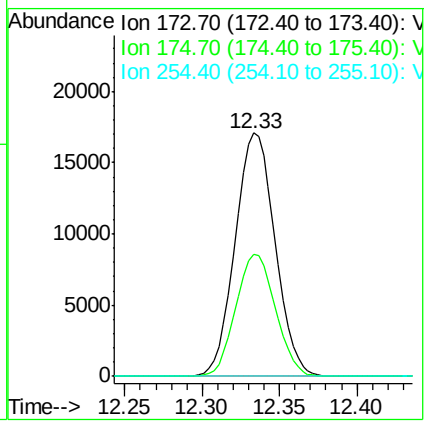
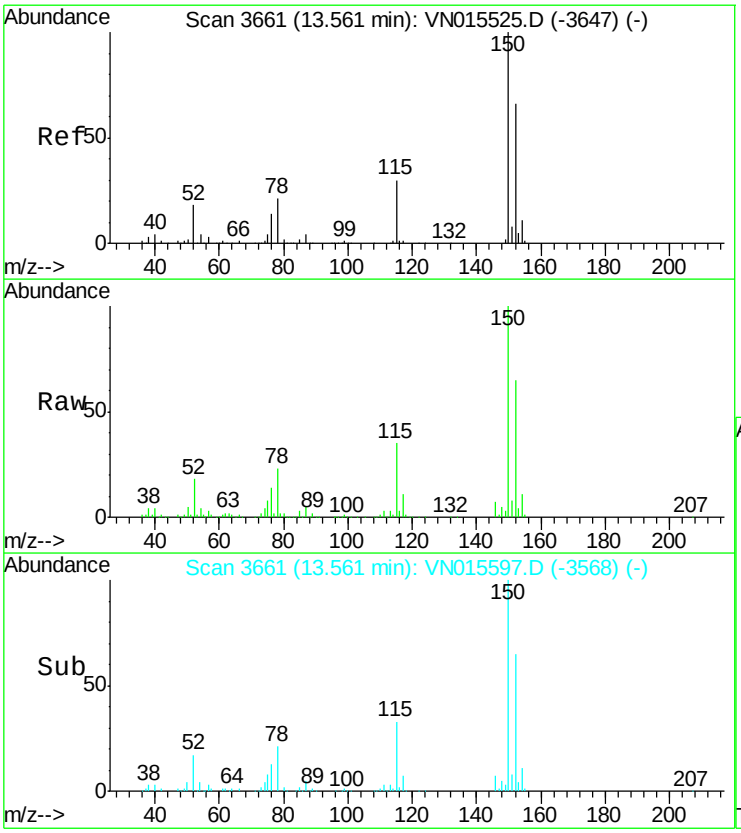
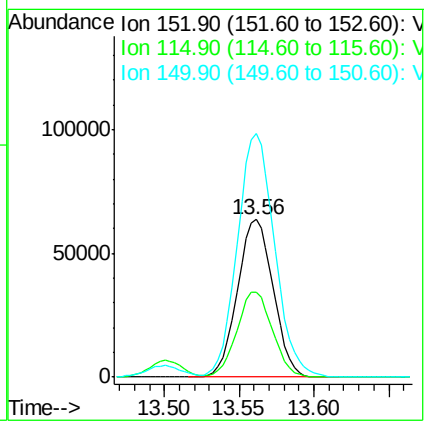


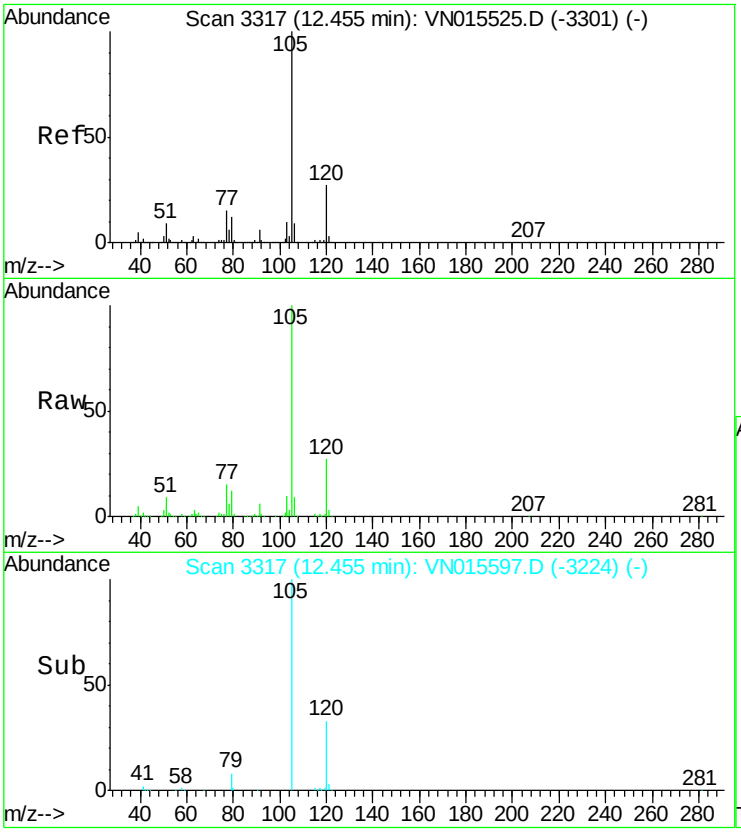


#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:152 Resp: 106078

Ion	Ratio	Lower	Upper
152	100		
115	53.8	27.2	81.6
150	161.4	0.0	343.6





#74
Isopropylbenzene
Concen: 20.90 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:105 Resp: 170717

Ion	Ratio	Lower	Upper
105	100		
120	26.8	13.7	41.0

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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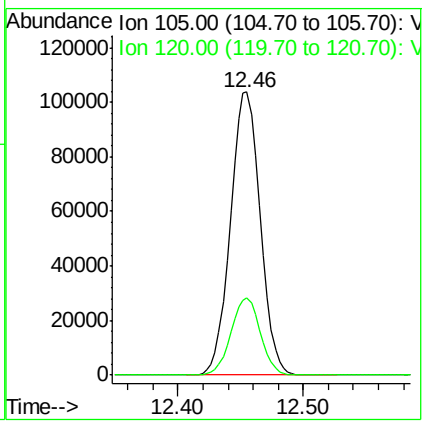
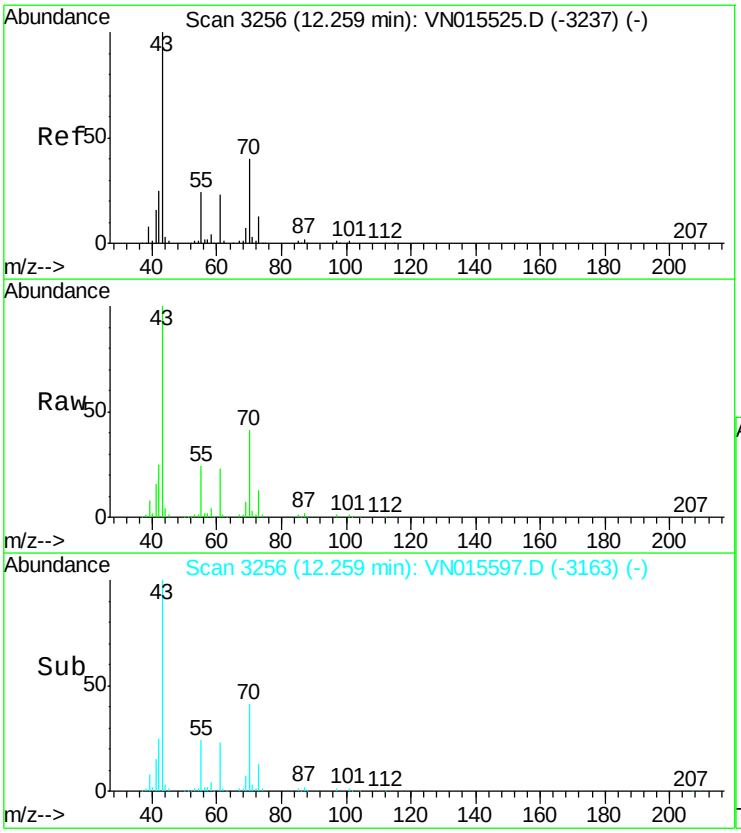
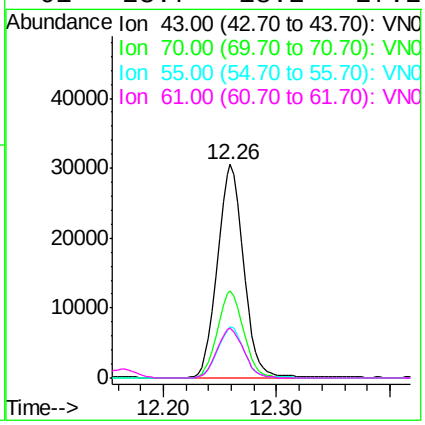


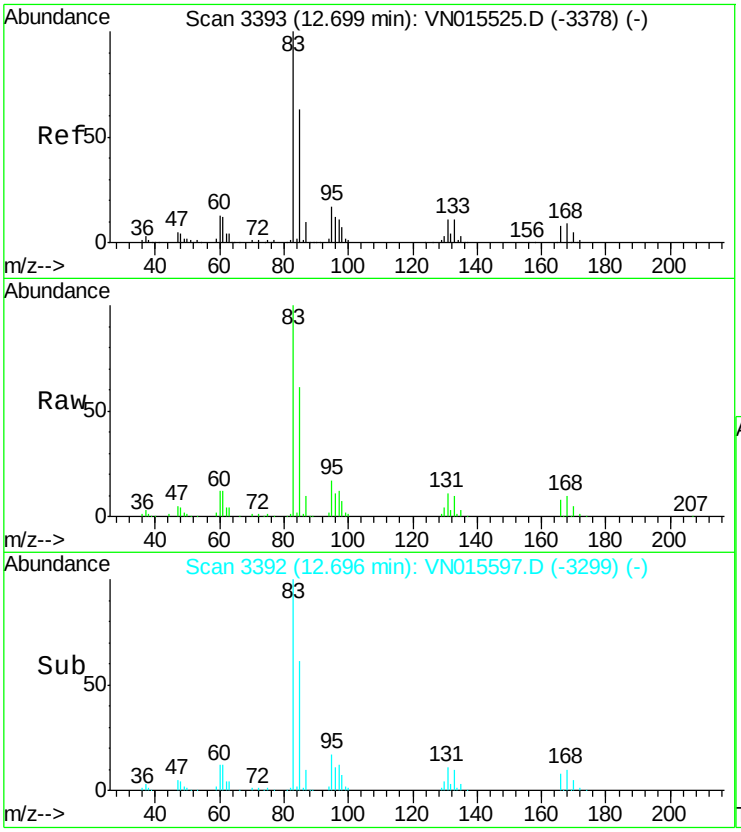


#75
N-amyl acetate
Concen: 17.58 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 43 Resp: 48857

Ion	Ratio	Lower	Upper
43	100		
70	41.1	32.0	48.0
55	24.1	18.5	27.7
61	23.7	18.2	27.2





#76
1,1,2,2-Tetrachloroethane
Concen: 21.54 ug/l
RT: 12.70 min Scan# 3392
Delta R.T. -0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 83 Resp: 47935

Ion	Ratio	Lower	Upper
83	100		
131	11.9	5.9	17.6
85	63.7	31.9	95.7

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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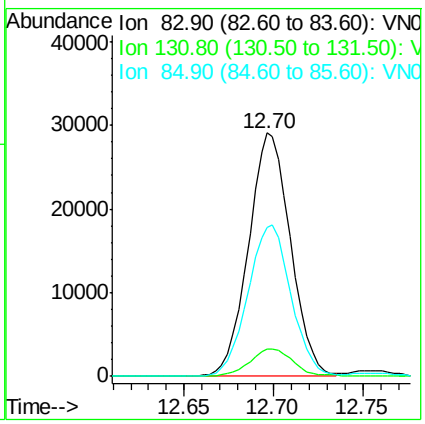
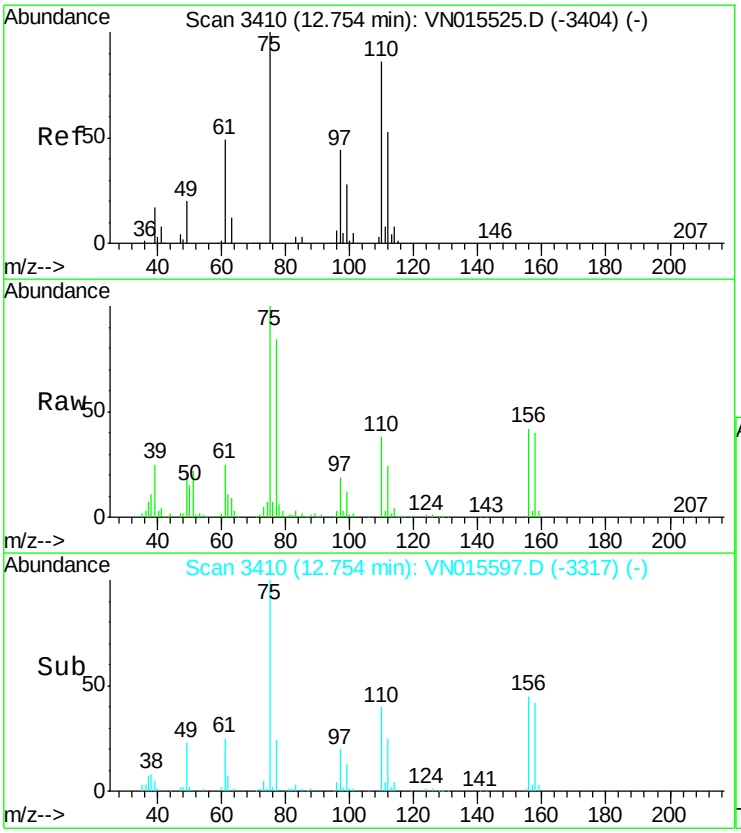
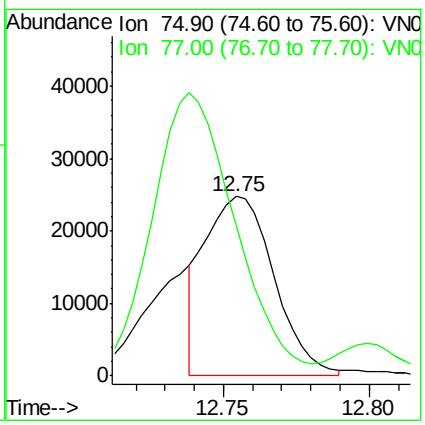


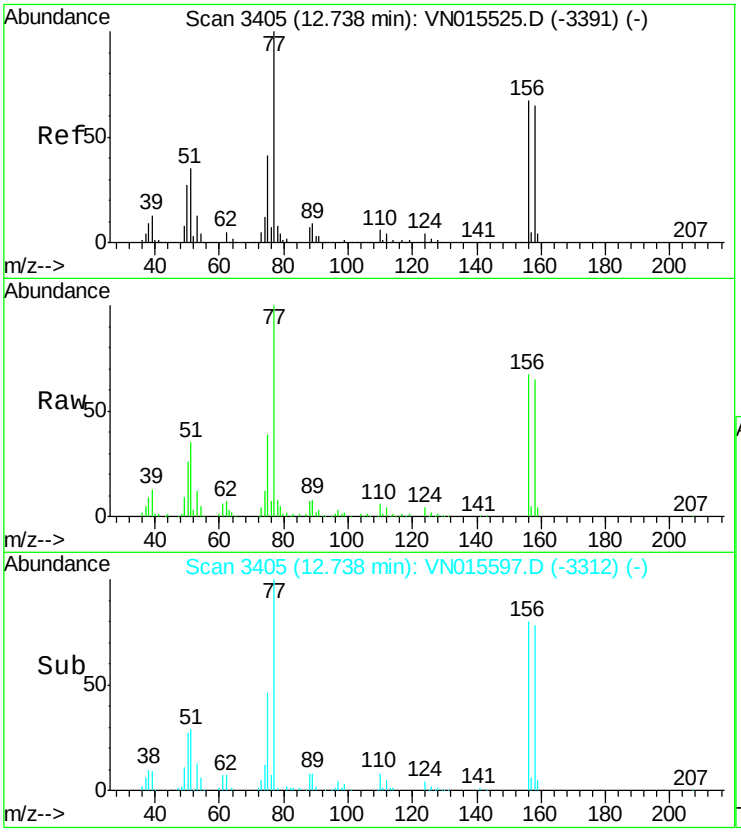


#77
1,2,3-Trichloropropane
Concen: 20.83 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 75 Resp: 40900

Ion	Ratio	Lower	Upper
75	100		
77	189.8	90.4	271.2





#78
Bromobenzene
Concen: 19.39 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:156 Resp: 44604

Ion	Ratio	Lower	Upper
156	100		
77	174.0	86.0	258.0
158	96.9	48.7	146.1

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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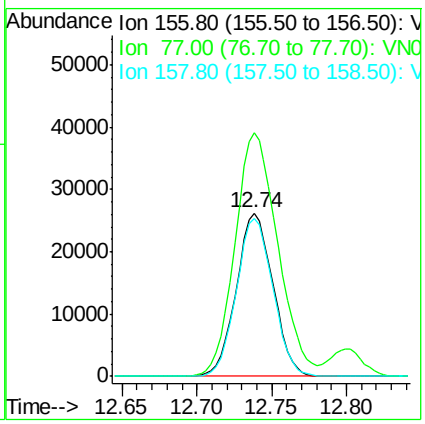
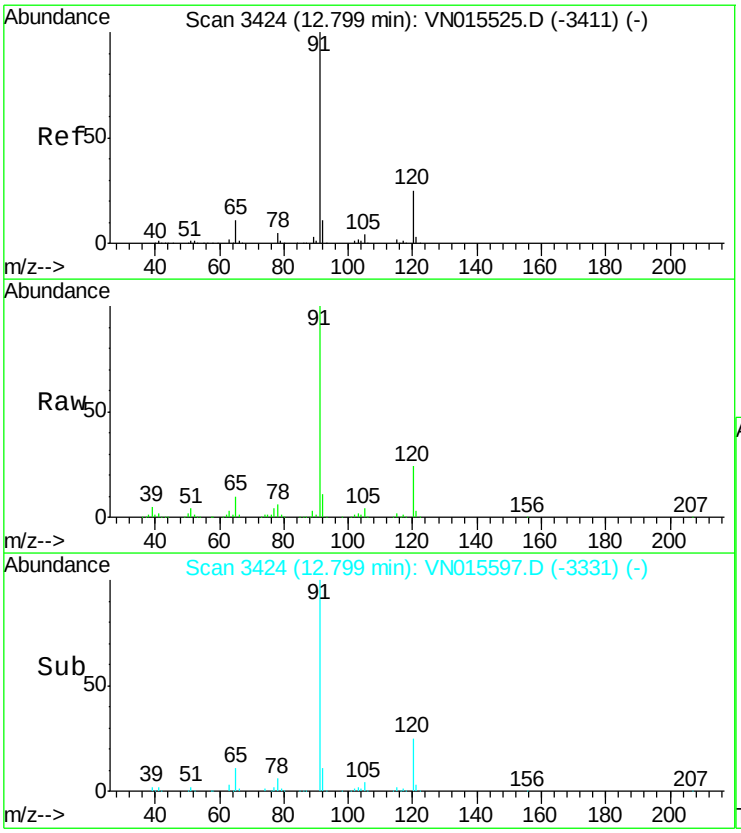
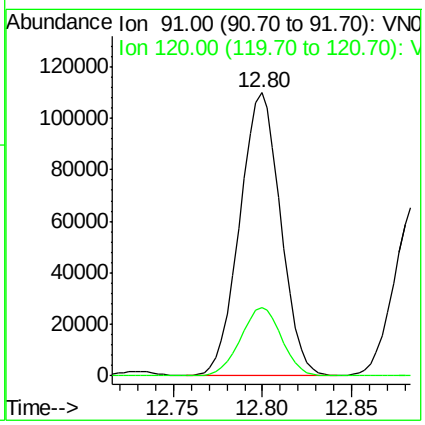


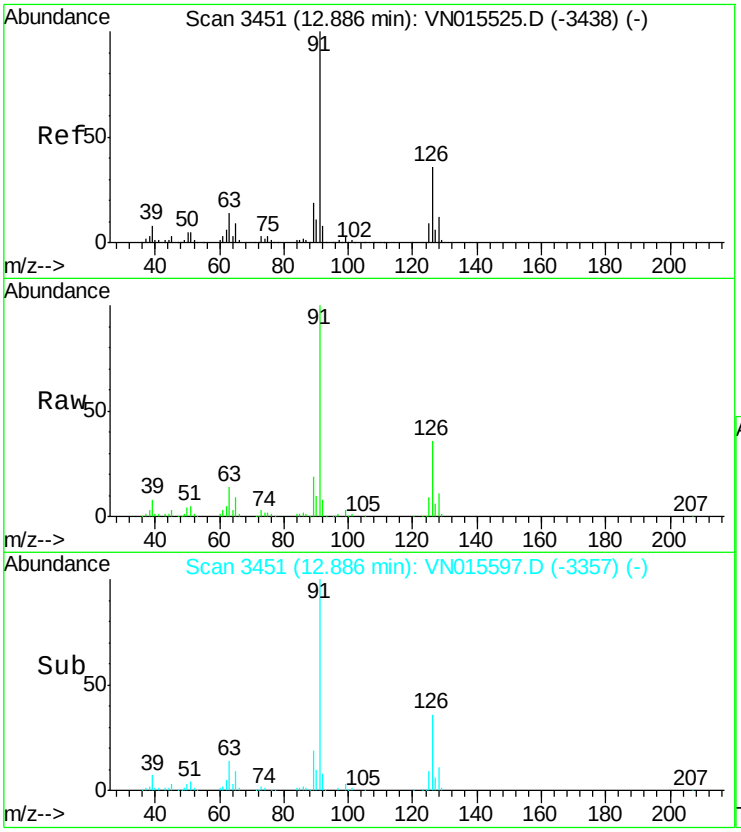


#79
n-propylbenzene
Concen: 19.45 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 91 Resp: 176222

Ion	Ratio	Lower	Upper
91	100		
120	24.4	12.2	36.4





#80
2-Chlorotoluene
Concen: 20.62 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 91 Resp: 110469

Ion	Ratio	Lower	Upper
91	100		
126	35.7	17.9	53.8

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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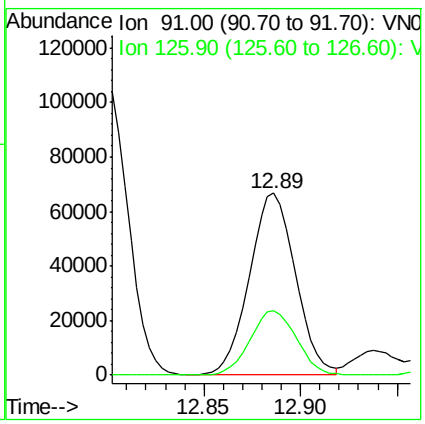
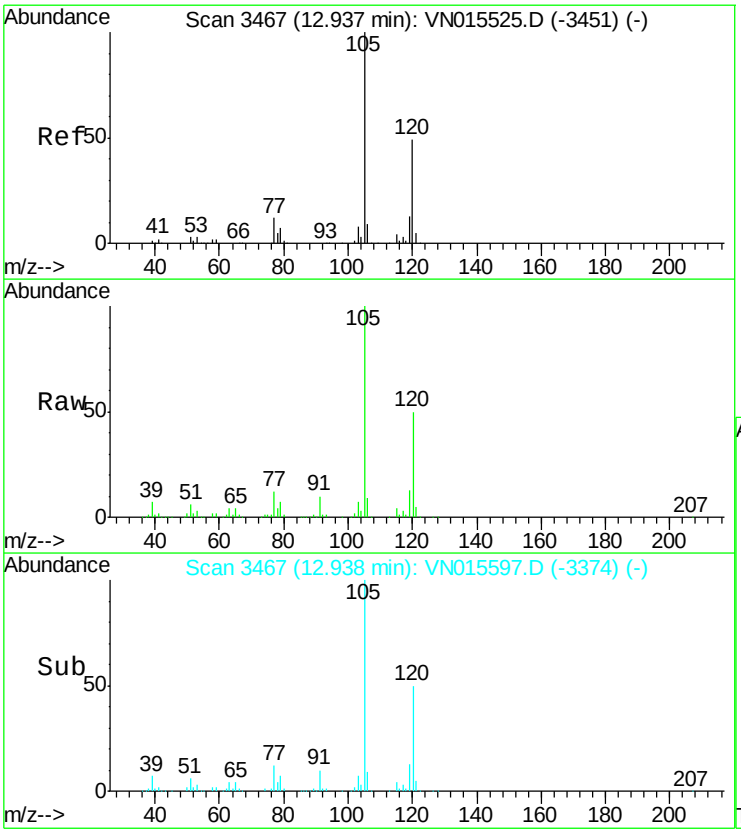
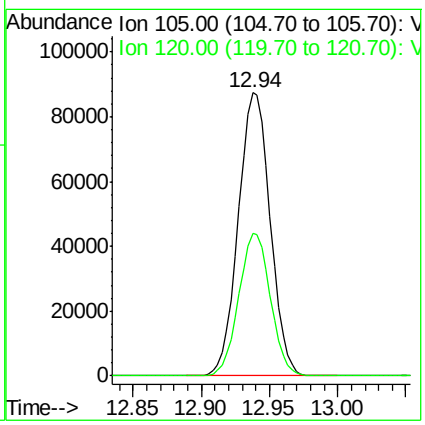


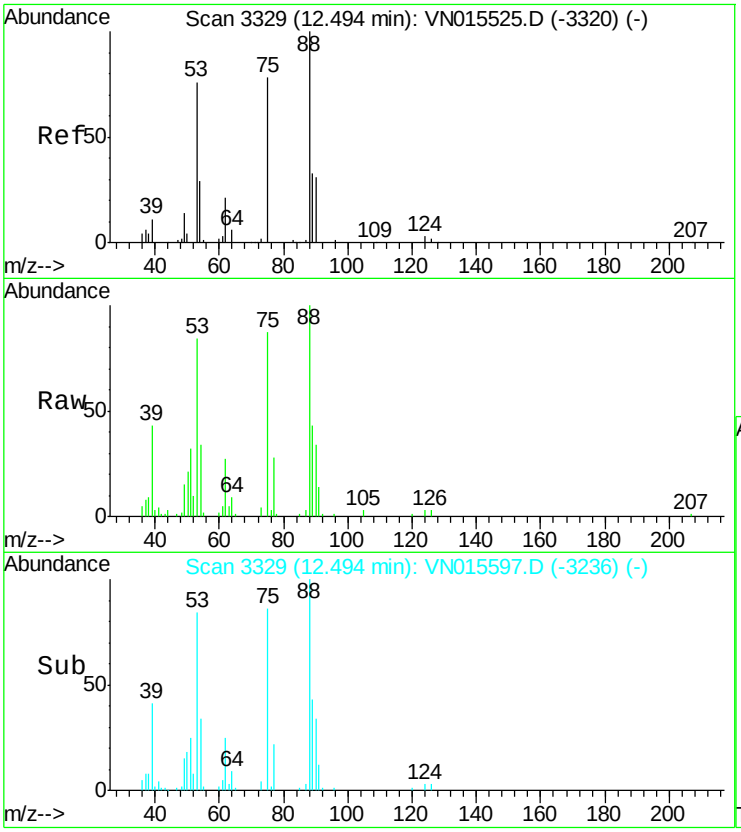


#81
1,3,5-Trimethylbenzene
Concen: 19.67 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:105 Resp: 141960

Ion	Ratio	Lower	Upper
105	100		
120	49.8	24.6	73.8





#82
trans-1,4-Dichloro-2-butene
Concen: 18.40 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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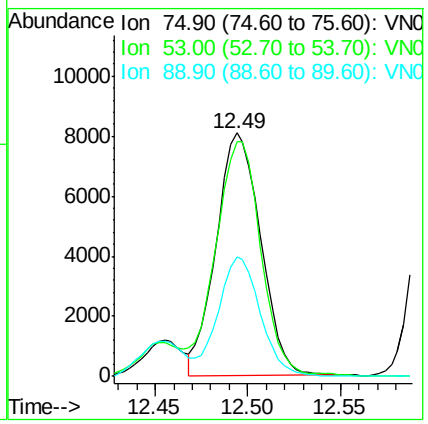
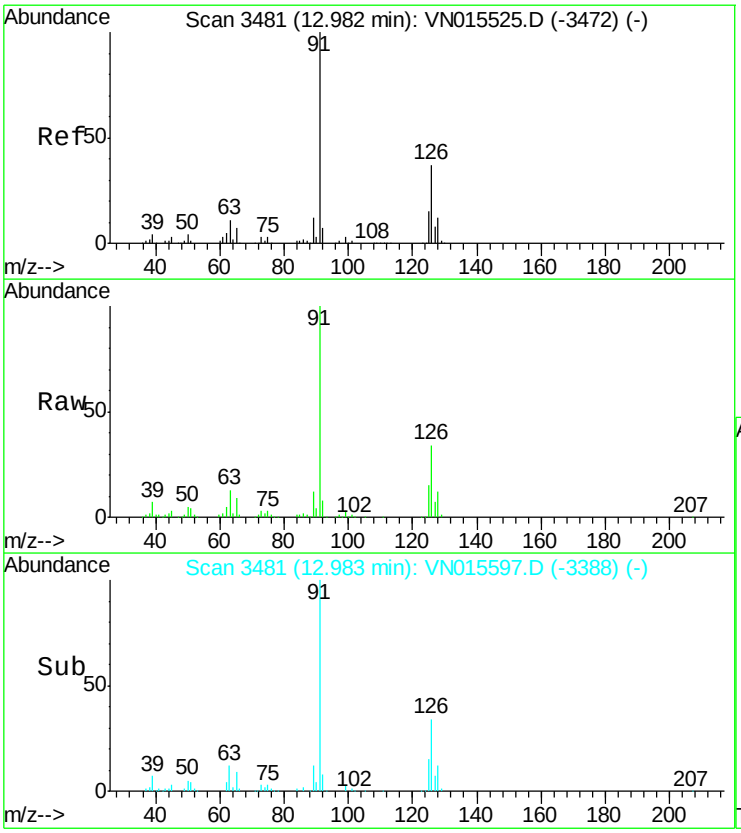
Tgt Ion: 75 Resp: 13444

Ion	Ratio	Lower	Upper
75	100		
53	99.8	77.5	116.3
89	46.4	37.7	56.5

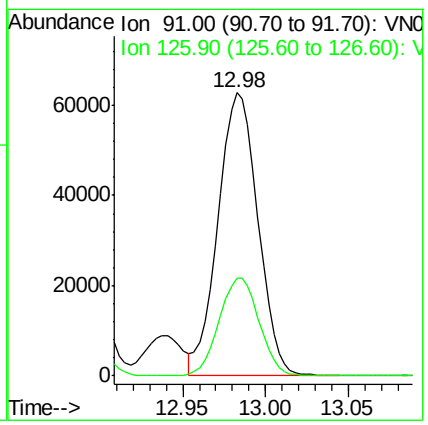


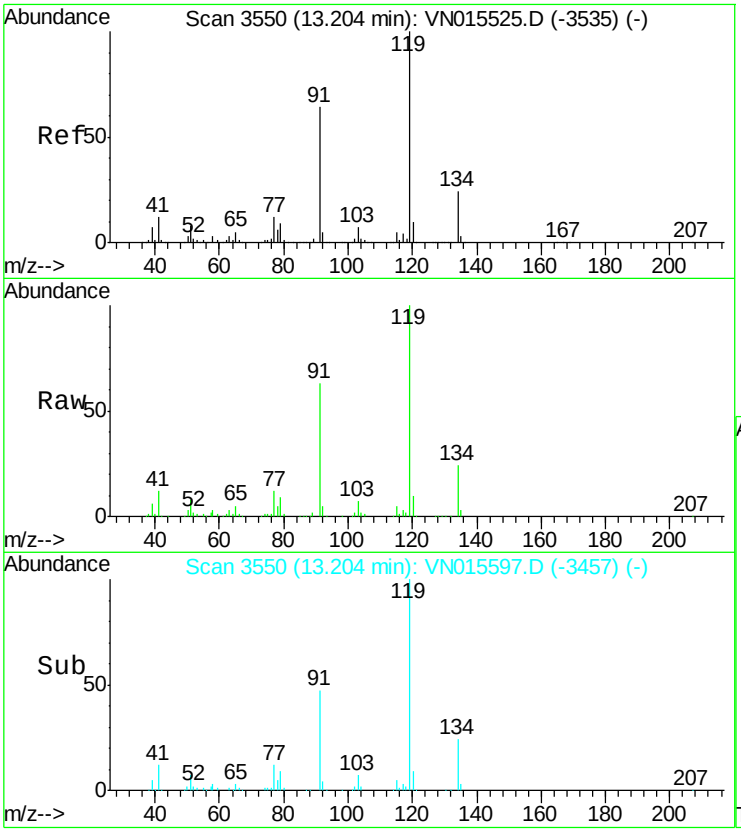


#83
4-Chlorotoluene
Concen: 19.01 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 91 Resp: 104458

Ion	Ratio	Lower	Upper
91	100		
126	35.0	17.5	52.6





#84
tert-Butylbenzene
Concen: 20.97 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:119 Resp: 127271

Ion	Ratio	Lower	Upper
119	100		
91	62.5	31.9	95.9
134	24.0	12.1	36.3

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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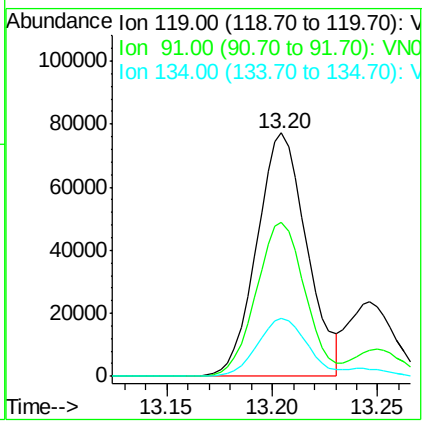
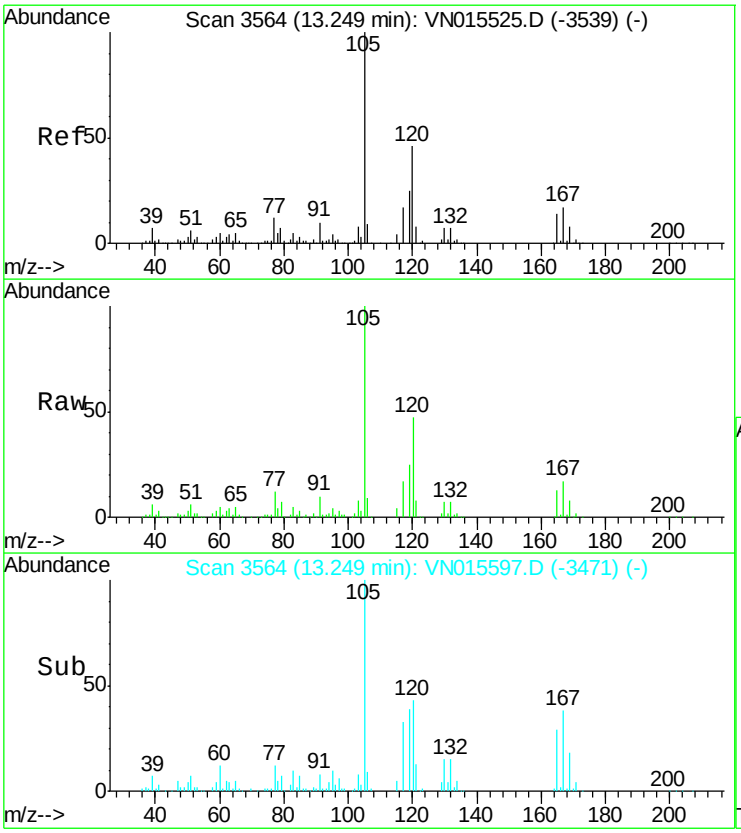
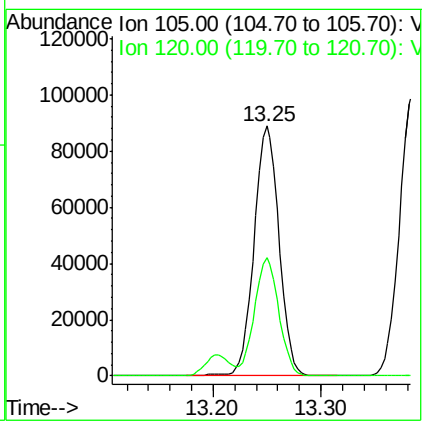


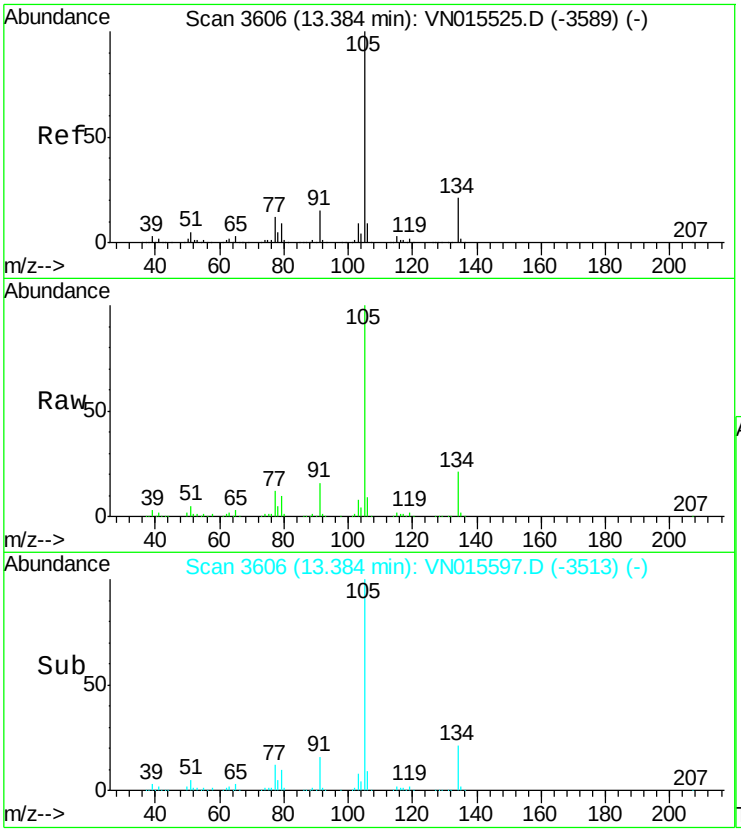


#85
1,2,4-Trimethylbenzene
Concen: 19.70 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:105 Resp: 142292

Ion	Ratio	Lower	Upper
105	100		
120	46.6	23.1	69.3





#86
sec-Butylbenzene
Concen: 19.31 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:105 Resp: 159641

Ion	Ratio	Lower	Upper
105	100		
134	20.9	10.6	31.8

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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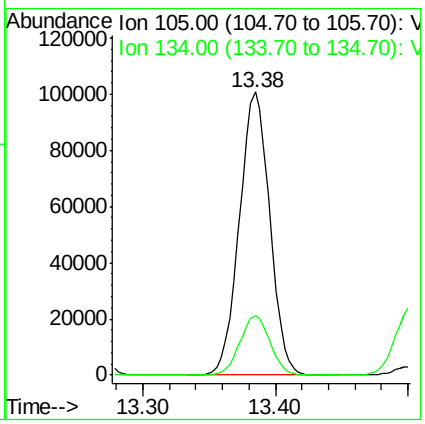
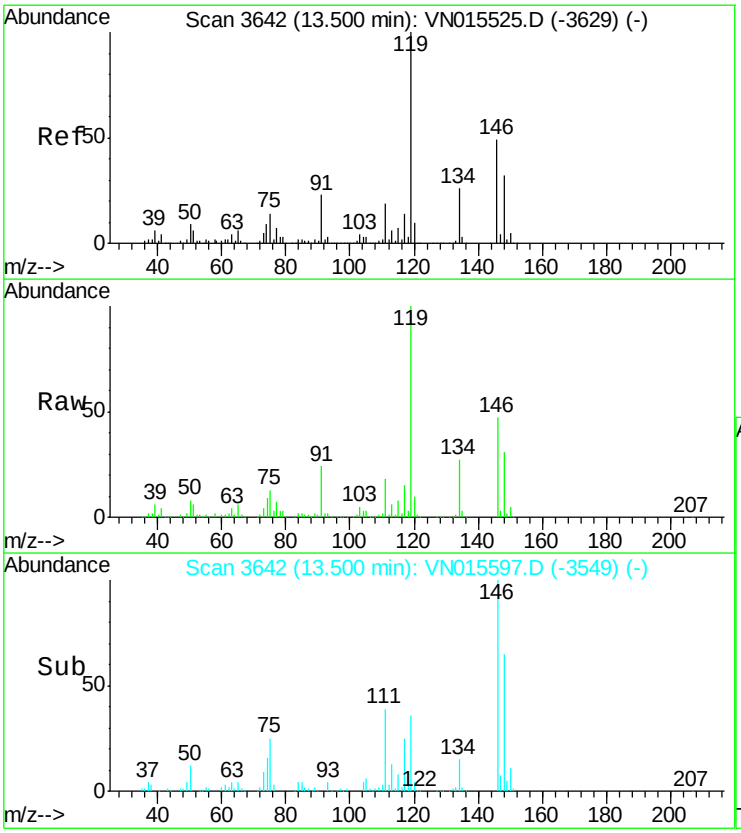
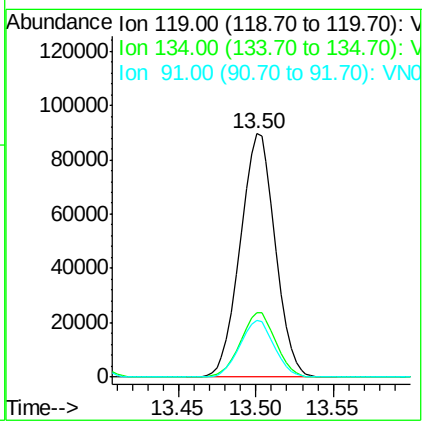


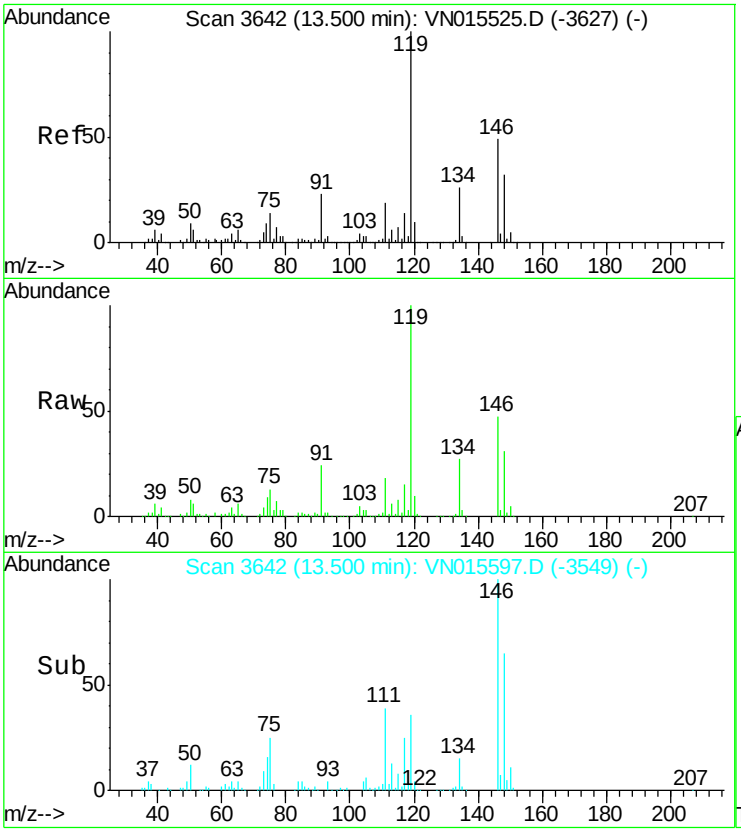


#87
p-Isopropyltoluene
Concen: 19.71 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:119 Resp: 140938

Ion	Ratio	Lower	Upper
119	100		
134	26.6	13.3	39.9
91	23.0	11.7	35.1





#88
1,3-Dichlorobenzene
Concen: 19.07 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:146 Resp: 71353

Ion	Ratio	Lower	Upper
146	100		
111	38.4	19.1	57.1
148	65.6	32.4	97.0

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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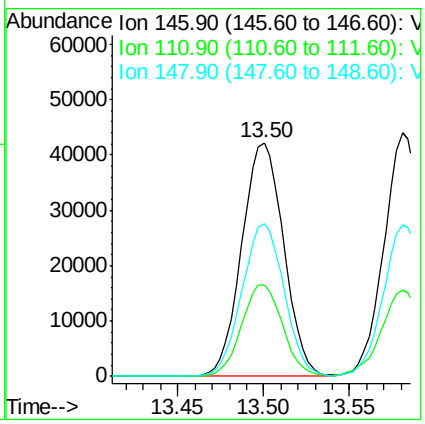
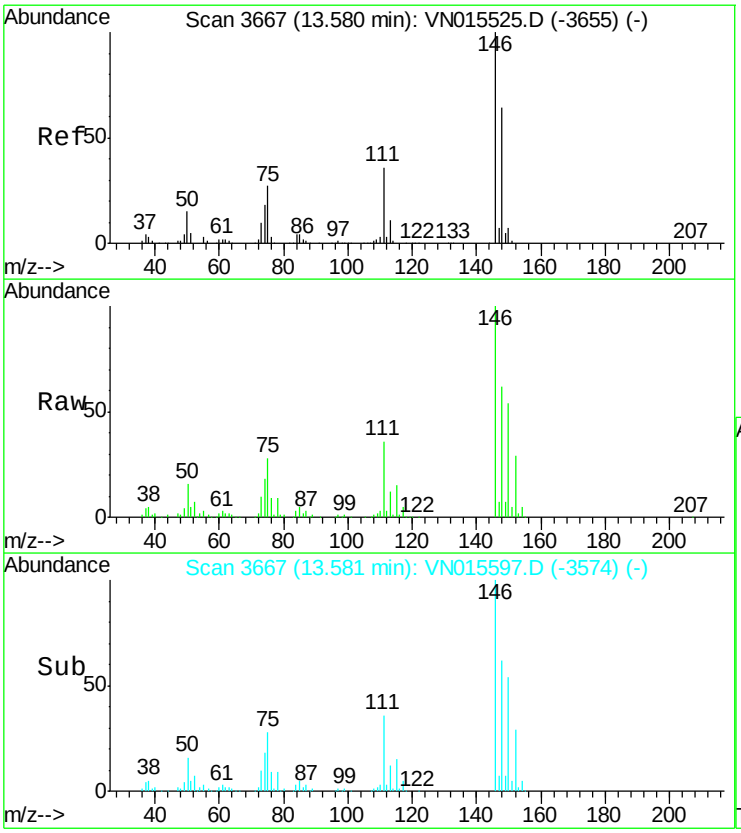
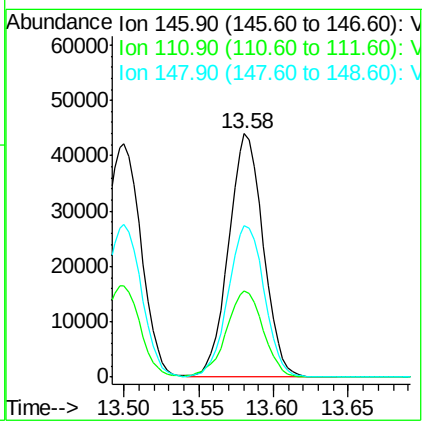


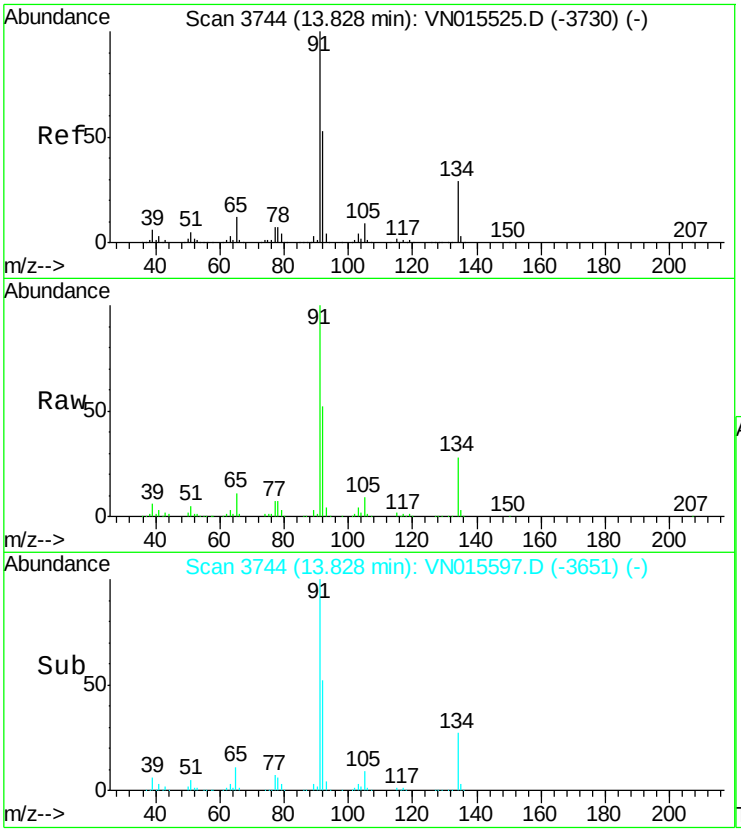


#89
1,4-Dichlorobenzene
Concen: 19.23 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:146 Resp: 70629

Ion	Ratio	Lower	Upper
146	100		
111	38.0	18.4	55.4
148	65.3	32.3	96.9





#90
n-Butylbenzene
Concen: 19.40 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 91 Resp: 104645

Ion	Ratio	Lower	Upper
91	100		
92	52.5	26.6	79.8
134	28.9	14.4	43.4

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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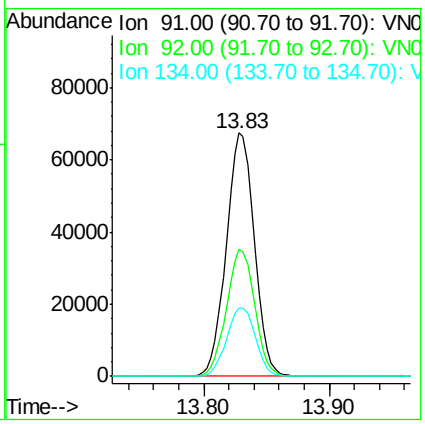
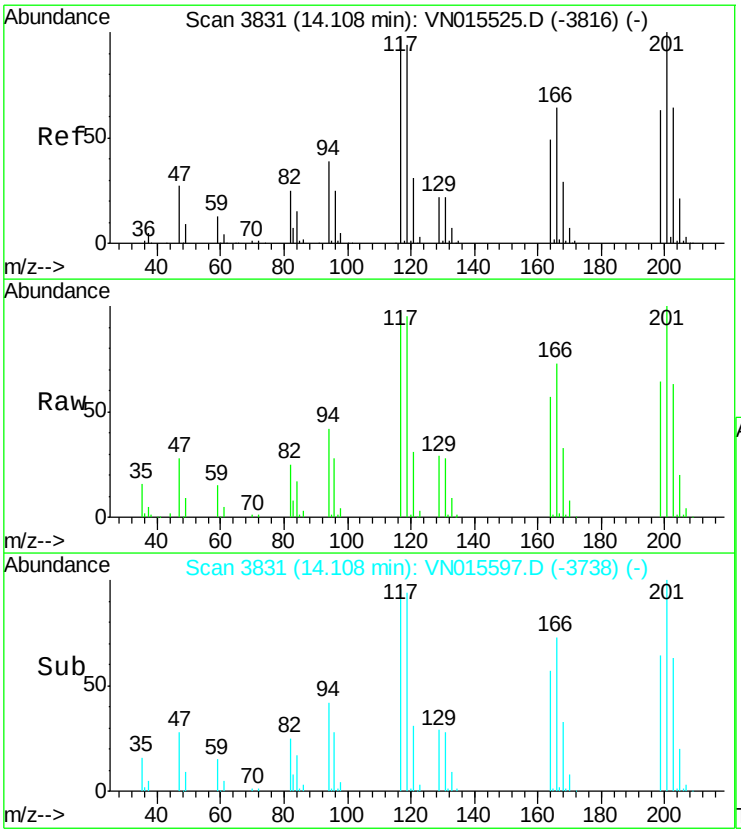
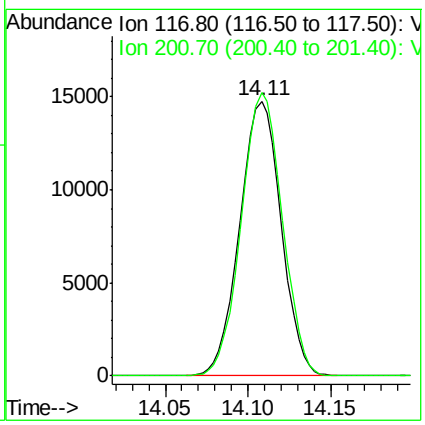


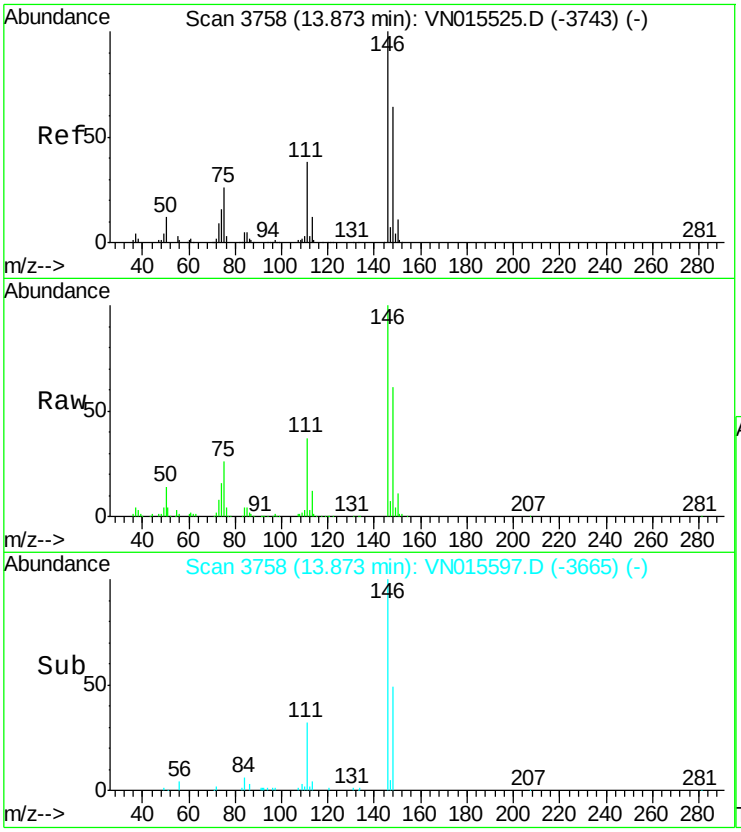


#91
Hexachloroethane
Concen: 18.87 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:117 Resp: 25669

Ion	Ratio	Lower	Upper
117	100		
201	102.0	51.7	155.2





#92
1,2-Dichlorobenzene
Concen: 19.87 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:146 Resp: 73709

Ion	Ratio	Lower	Upper
146	100		
111	39.1	19.4	58.2
148	62.8	32.4	97.0

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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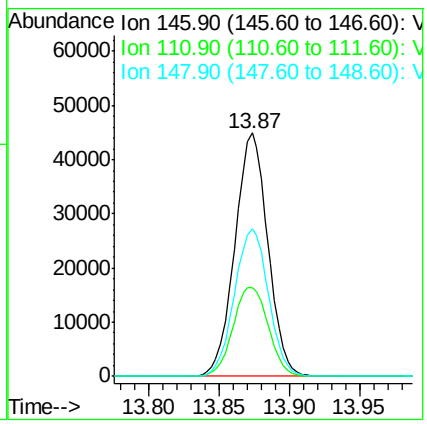
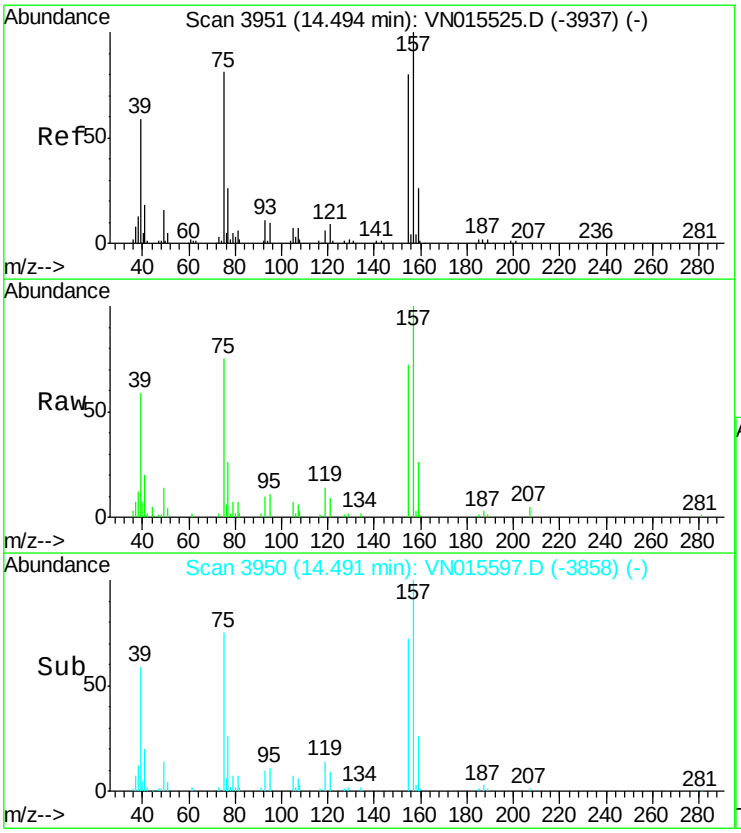
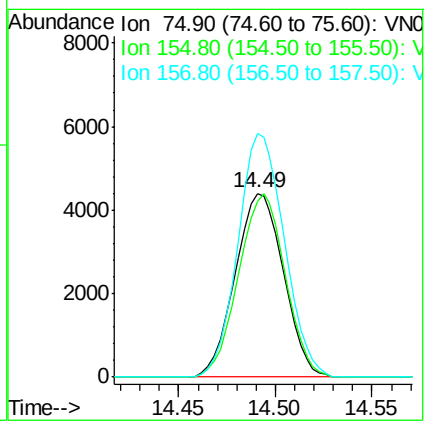




#93
1,2-Dibromo-3-Chloropropane
Concen: 19.18 ug/l
RT: 14.49 min Scan# 3950
Delta R.T. -0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion: 75 Resp: 7616

Ion	Ratio	Lower	Upper
75	100		
155	96.6	49.4	148.2
157	127.9	61.3	183.8



Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

Manual Integrations APPROVED
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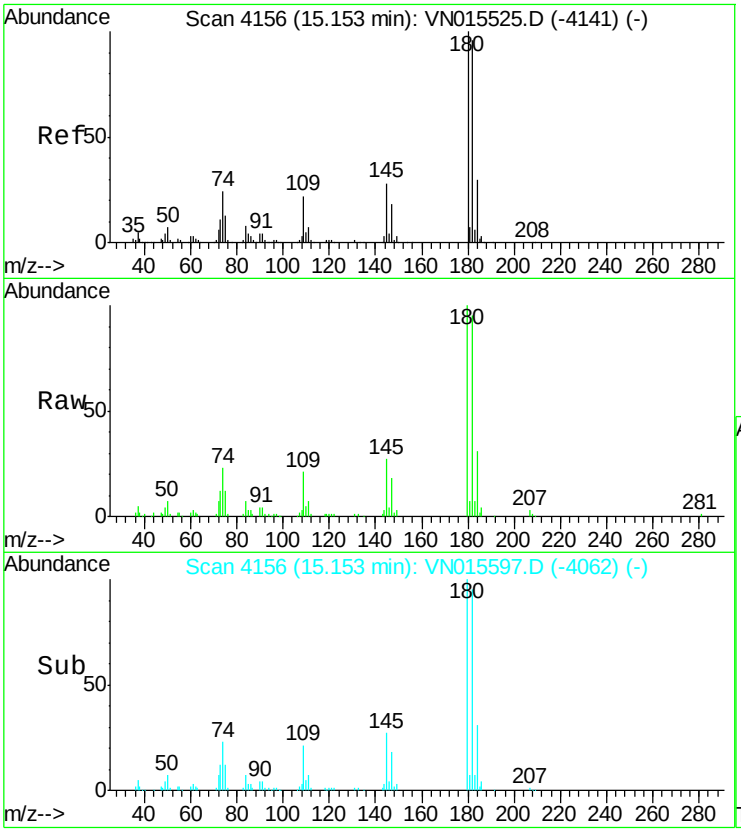
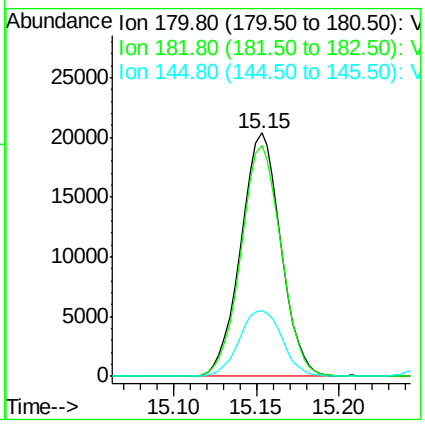
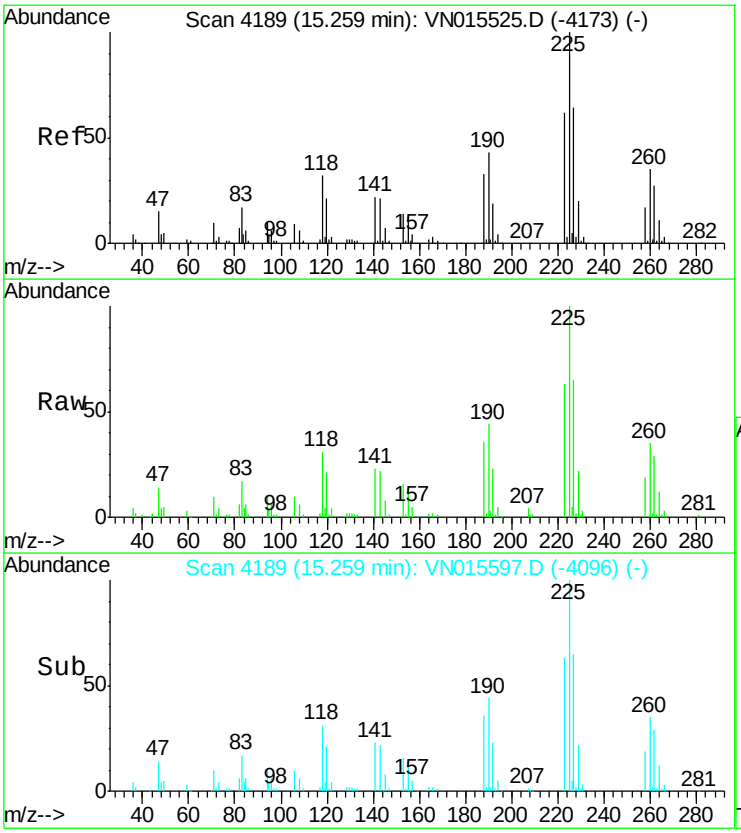


#94
1,2,4-Trichlorobenzene
Concen: 18.74 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:180 Resp: 34302

Ion	Ratio	Lower	Upper
180	100		
182	95.4	48.0	144.0
145	29.0	14.0	42.0

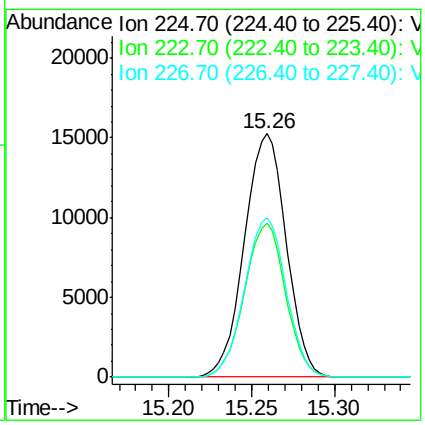


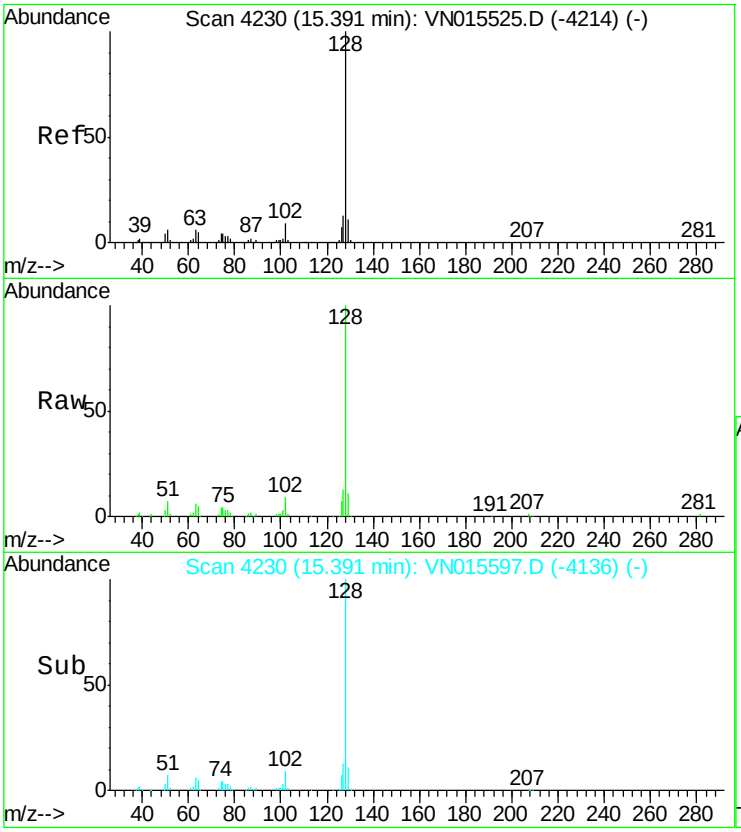


#95
Hexachlorobutadiene
Concen: 19.74 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:225 Resp: 26825

Ion	Ratio	Lower	Upper
225	100		
223	61.9	31.6	95.0
227	64.7	32.1	96.5





#96
Naphthalene
Concen: 17.64 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:128 Resp: 73222

Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.3	15.5
129	11.1	8.7	13.1

Instrument :
MSVOA_N
ClientSampleId :
VN0522WBS01

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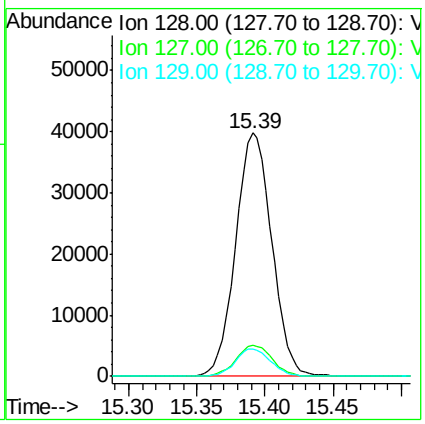
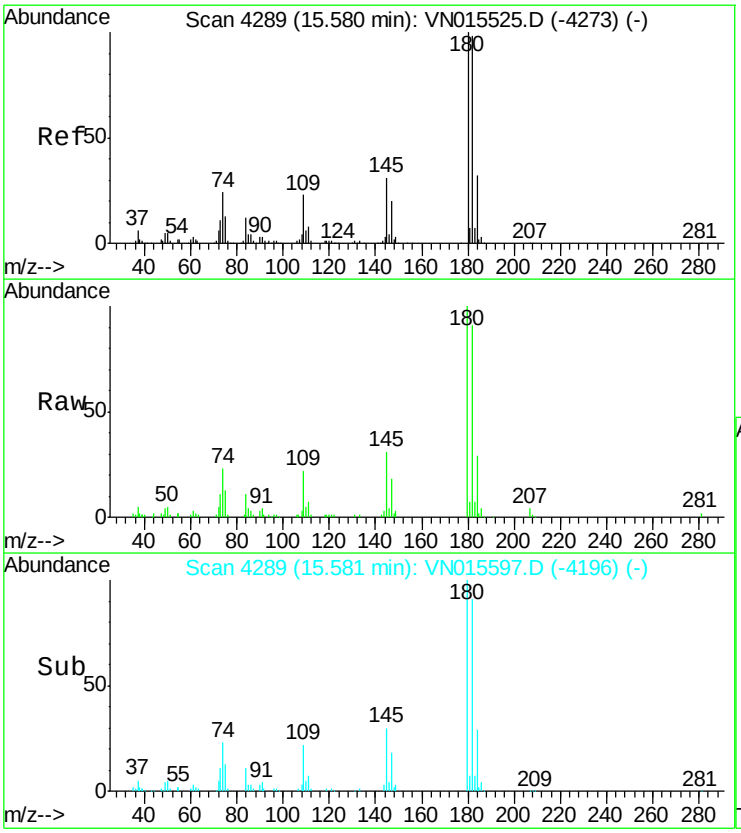
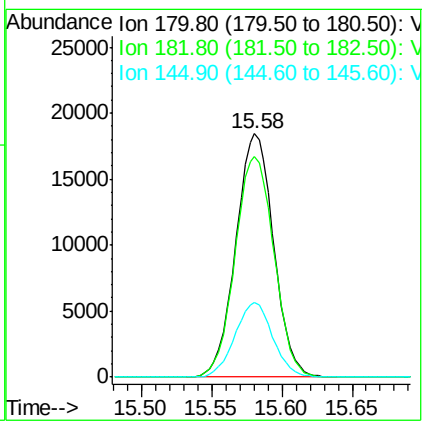




#97
1,2,3-Trichlorobenzene
Concen: 19.27 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015597.D
Acq: 22 May 2014 14:54

Tgt Ion:180 Resp: 34542

Ion	Ratio	Lower	Upper
180	100		
182	93.4	47.8	143.4
145	30.6	14.9	44.7



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/14/14
Project:	37-14 36th Street	Date Received:	05/14/14
Client Sample ID:	MLW-4-35-40MS	SDG No.:	F2352
Lab Sample ID:	F2314-06MS	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015591.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	780	E	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	53.8		0.2	0.2	1	ug/L
67-64-1	Acetone	230		0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	76.8		0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	51.1		0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	56		0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	63.6		0.2	0.2	1	ug/L
78-93-3	2-Butanone	260		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	48.2		0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	2600	E	0.2	0.2	1	ug/L
67-66-3	Chloroform	51.3		0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	50		0.2	0.2	1	ug/L
71-43-2	Benzene	51		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	48.5		0.2	0.2	1	ug/L
79-01-6	Trichloroethene	50.4		0.2	0.2	1	ug/L
108-88-3	Toluene	50.5		0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	48.4		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	49.7		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	50.2		0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	150		0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	47.9		0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	52.2		0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	48.2		0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	47.7		0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	48.8		0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	48.5		0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	49.7		0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	49.1		0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	1200		100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51.6		70 - 120		103%	SPK: 50

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/14/14
Project:	37-14 36th Street	Date Received:	05/14/14
Client Sample ID:	MLW-4-35-40MS	SDG No.:	F2352
Lab Sample ID:	F2314-06MS	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015591.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	53.4		85 - 115		107%	SPK: 50
2037-26-5	Toluene-d8	52.8		85 - 120		106%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.2		75 - 120		108%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	179348	7.87				
540-36-3	1,4-Difluorobenzene	258091	8.79				
3114-55-4	Chlorobenzene-d5	228735	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	107814	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015591.D
Acq On : 22 May 2014 10:50
Operator : MD
Sample : F2314-06MS
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 42 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:19:56 PM

Quant Time: May 22 16:02:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	179348	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	258091	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	228735	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	107814	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	106475	51.61	ug/l	0.00
Spiked Amount 50.000			Recovery	=	103.22%	
36) Dibromofluoromethane	7.80	113	89674	53.35	ug/l	0.00
Spiked Amount 50.000			Recovery	=	106.70%	
51) Toluene-d8	10.29	98	327212	52.83	ug/l	0.00
Spiked Amount 50.000			Recovery	=	105.66%	
63) 4-Bromofluorobenzene	12.61	95	114949	54.18	ug/l	0.00
Spiked Amount 50.000			Recovery	=	108.36%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	72464	52.32	ug/l	99
4) Chloromethane	2.06	50	97574	58.84	ug/l	98
5) Vinyl Chloride	2.20	62	1306260	779.30	ug/l	99
6) Bromomethane	2.61	94	41454	42.76	ug/l	97
7) Chloroethane	2.76	64	55532	52.59	ug/l	96
8) Trichlorofluoromethane	3.11	101	134385	49.39	ug/l	99
9) Diethyl Ether	3.53	74	53719	53.39	ug/l	97
10) 1,1,2-Trichlorotrifluoroet	3.91	101	77410	50.44	ug/l	99
11) Methyl Iodide	4.11	142	70011	36.76	ug/l	98
12) Tert butyl alcohol	4.95	59	182816	912.58	ug/l	99
13) 1,1-Dichloroethene	3.88	96	78946	53.81	ug/l	94
14) Acrolein	3.73	56	44339	238.04	ug/l	98
15) Allyl chloride	4.51	41	115052	44.83	ug/l	98
16) Acrylonitrile	5.18	53	189362	286.50	ug/l	99
17) Acetone	3.94	43	151933	234.72	ug/l	99
18) Carbon Disulfide	4.24	76	208532	50.43	ug/l	99
19) Methyl Acetate	4.50	43	156876	50.10	ug/l	100
20) Methyl tert-butyl Ether	5.27	73	396844	76.84	ug/l	100
21) Methylene Chloride	4.74	84	85690	51.05	ug/l	98
22) trans-1,2-Dichloroethene	5.28	96	86702	56.04	ug/l	99
23) Diisopropyl ether	6.18	45	276139	52.23	ug/l	100
24) Vinyl Acetate	6.12	43	679253m	258.63	ug/l	
25) 1,1-Dichloroethane	6.08	63	185066	63.58	ug/l	100
26) 2-Butanone	7.05	43	238739	261.44	ug/l #	74
27) 2,2-Dichloropropane	7.06	77	68417	26.62	ug/l #	1
28) cis-1,2-Dichloroethene	7.06	96	4636116	2552.35	ug/l	89
29) Bromochloromethane	7.42	49	65613	51.21	ug/l	96
30) Tetrahydrofuran	7.44	42	156608	254.87	ug/l	98
31) Chloroform	7.58	83	154122	51.27	ug/l	99
32) Cyclohexane	7.89	56	140237	54.35	ug/l	100
33) 1,1,1-Trichloroethane	7.79	97	140592	49.95	ug/l	100
37) 1,1-Dichloropropene	8.01	75	113986	49.52	ug/l	99
38) Ethyl Acetate	7.15	43	95874	47.20	ug/l #	81
39) Carbon Tetrachloride	8.00	117	126969	48.24	ug/l	97

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015591.D
Acq On : 22 May 2014 10:50
Operator : MD
Sample : F2314-06MS
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 42 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
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5/22/2014 4:19:56 PM

Quant Time: May 22 16:02:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Methylcyclohexane	9.29	83	144143	48.97 ug/l	98
41) Benzene	8.26	78	349827	50.96 ug/l	99
42) Methacrylonitrile	7.37	41	60738	50.59 ug/l	98
43) 1,2-Dichloroethane	8.33	62	121601	48.50 ug/l	99
44) Isopropyl Acetate	8.36	43	176638	48.34 ug/l	98
45) Trichloroethene	9.04	130	96857	50.38 ug/l	98
46) 1,2-Dichloropropane	9.32	63	88089	49.95 ug/l	99
47) Dibromomethane	9.41	93	58058	50.04 ug/l	99
48) Bromodichloromethane	9.59	83	118215	49.67 ug/l	99
49) Methyl methacrylate	9.38	41	91966	52.22 ug/l	98
50) 1,4-Dioxane	9.40	88	28314	1152.23 ug/l	99
52) 4-Methyl-2-Pentanone	10.16	43	515736	255.33 ug/l	98
53) Toluene	10.35	92	219932	50.54 ug/l	100
54) t-1,3-Dichloropropene	10.57	75	114396	47.00 ug/l	98
55) cis-1,3-Dichloropropene	10.03	75	124510	45.96 ug/l	98
56) 1,1,2-Trichloroethane	10.75	97	86508	51.45 ug/l	98
57) Ethyl methacrylate	10.61	69	130256	52.37 ug/l	96
58) 1,3-Dichloropropane	10.90	76	141693	50.29 ug/l	99
60) 2-Hexanone	10.93	43	346195	262.48 ug/l	98
61) Dibromochloromethane	11.10	129	102804	51.20 ug/l	100
62) 1,2-Dibromoethane	11.21	107	90761	52.23 ug/l	100
65) Tetrachloroethene	10.83	164	87358	48.41 ug/l	99
66) Chlorobenzene	11.64	112	245884	49.67 ug/l	100
67) 1,1,1,2-Tetrachloroethane	11.71	131	93848	49.75 ug/l	99
68) Ethyl Benzene	11.71	91	406759	50.19 ug/l	99
69) m/p-Xylenes	11.82	106	314058	99.57 ug/l	99
70) o-Xylene	12.15	106	157938	50.89 ug/l	99
71) Styrene	12.17	104	253127	51.92 ug/l	99
72) Bromoform	12.33	173	78829	49.88 ug/l #	99
74) Isopropylbenzene	12.46	105	418072	51.93 ug/l	100
75) N-amyl acetate	12.26	43	128516	45.50 ug/l	98
76) 1,1,2,2-Tetrachloroethane	12.70	83	115600	55.21 ug/l	99
77) 1,2,3-Trichloropropane	12.75	75	97746m	53.17 ug/l	
78) Bromobenzene	12.74	156	111950	47.88 ug/l	99
79) n-propylbenzene	12.80	91	440729	47.87 ug/l	99
80) 2-Chlorotoluene	12.89	91	275155	52.14 ug/l	100
81) 1,3,5-Trimethylbenzene	12.94	105	351388	47.90 ug/l	99
82) trans-1,4-Dichloro-2-buten	12.49	75	28995	39.05 ug/l	98
83) 4-Chlorotoluene	12.98	91	265959	47.62 ug/l	100
84) tert-Butylbenzene	13.20	119	309383	52.23 ug/l	99
85) 1,2,4-Trimethylbenzene	13.25	105	353787	48.20 ug/l	99
86) sec-Butylbenzene	13.38	105	401060	47.74 ug/l	100
87) p-Isopropyltoluene	13.50	119	352332	48.49 ug/l	99
88) 1,3-Dichlorobenzene	13.50	146	185624	48.81 ug/l	99
89) 1,4-Dichlorobenzene	13.58	146	181038	48.50 ug/l	100
90) n-Butylbenzene	13.83	91	272570	49.73 ug/l	100
91) Hexachloroethane	14.11	117	65948	47.70 ug/l	99
92) 1,2-Dichlorobenzene	13.87	146	185020	49.07 ug/l	100
93) 1,2-Dibromo-3-Chloropropan	14.49	75	19676	48.74 ug/l	97
94) 1,2,4-Trichlorobenzene	15.15	180	99125	47.34 ug/l	99

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015591.D
Acq On : 22 May 2014 10:50
Operator : MD
Sample : F2314-06MS
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 22 16:02:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:19:56 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Hexachlorobutadiene	15.26	225	66547	48.18	ug/l	99
96) Naphthalene	15.39	128	224336	44.02	ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	95721	46.83	ug/l	99

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

Quantitation Report (QT Reviewed)

Sample Results: **VN015591.D**

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015591.D
Acq On : 22 May 2014 10:50
Operator : MD
Sample : F2314-06MS
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 22 16:02:16 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
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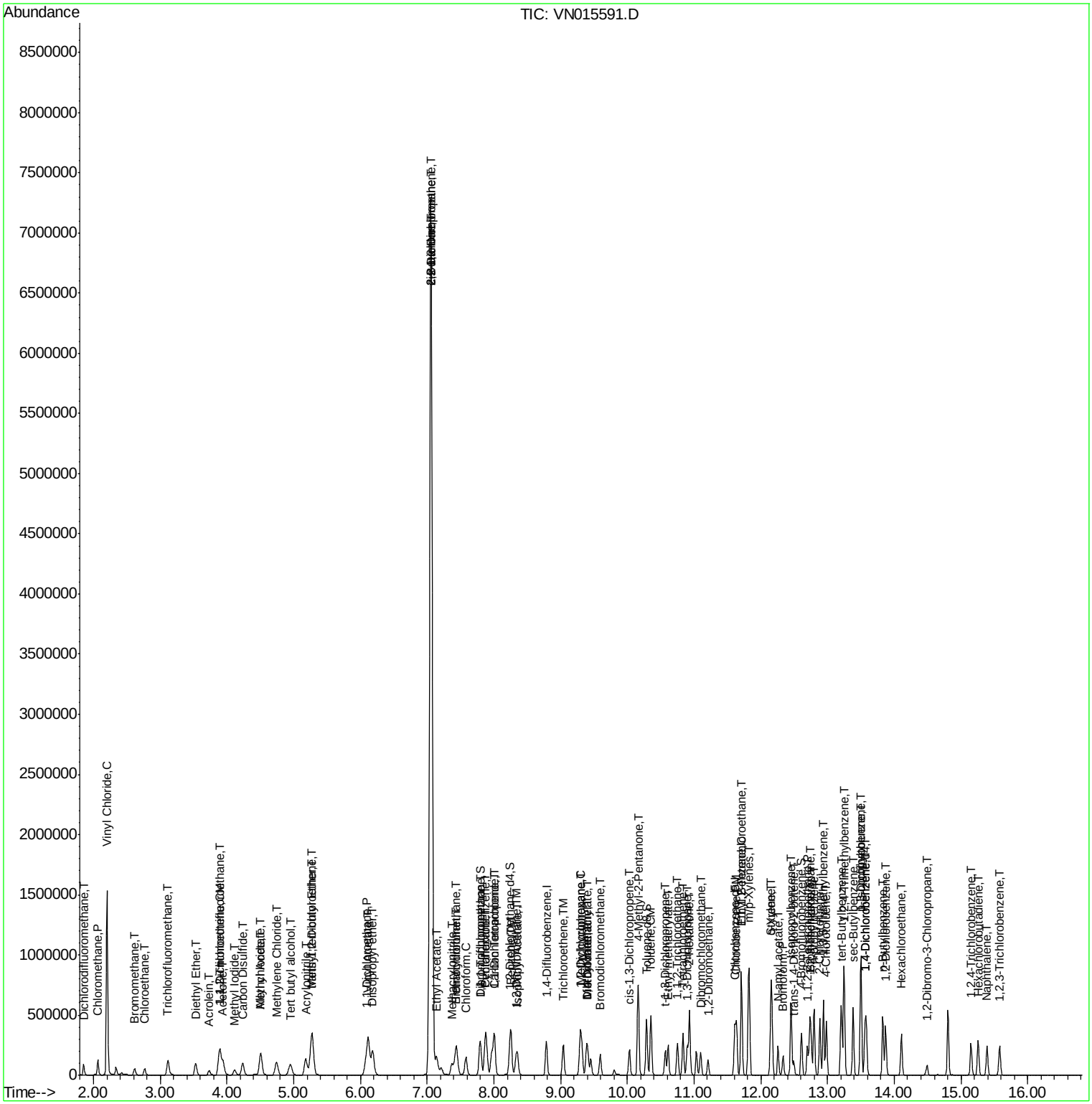
5/22/2014 4:19:56 PM



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
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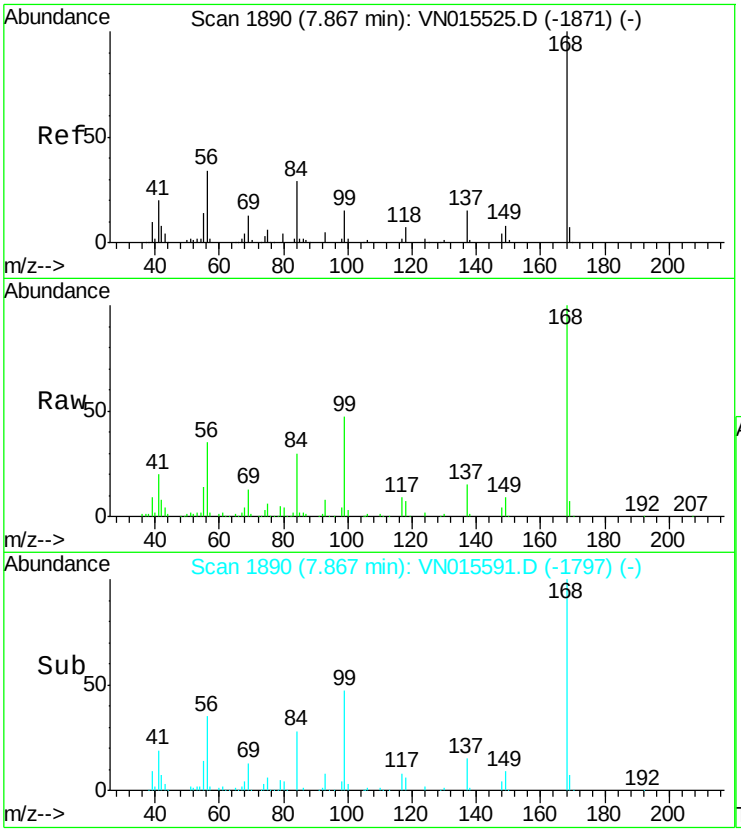
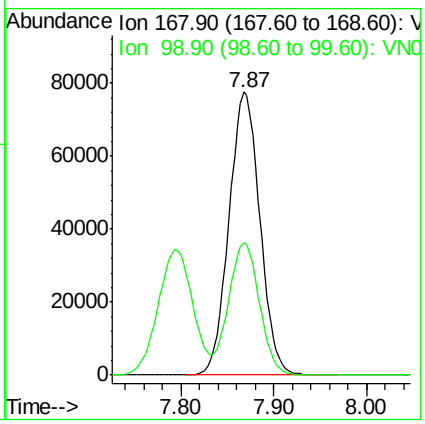
5/22/2014 4:19:56 PM

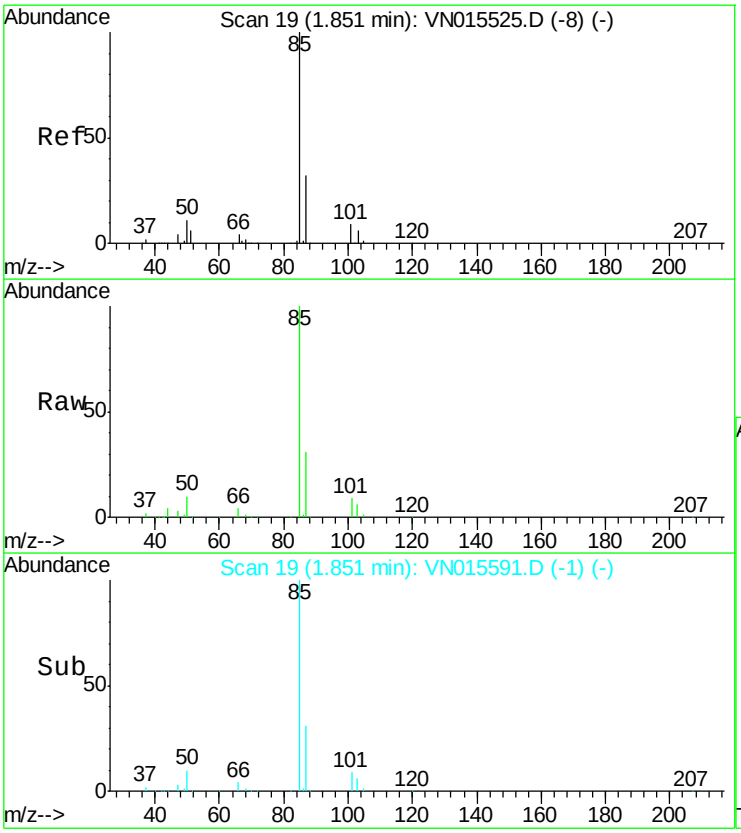


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:168 Resp: 179348

Ion	Ratio	Lower	Upper
168	100		
99	46.8	39.0	58.4

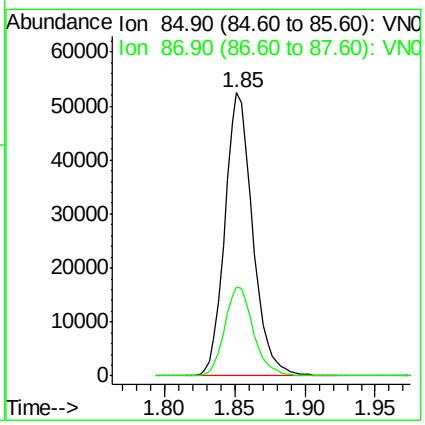




#2
Dichlorodifluoromethane
Concen: 52.32 ug/l
RT: 1.85 min Scan# 19
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

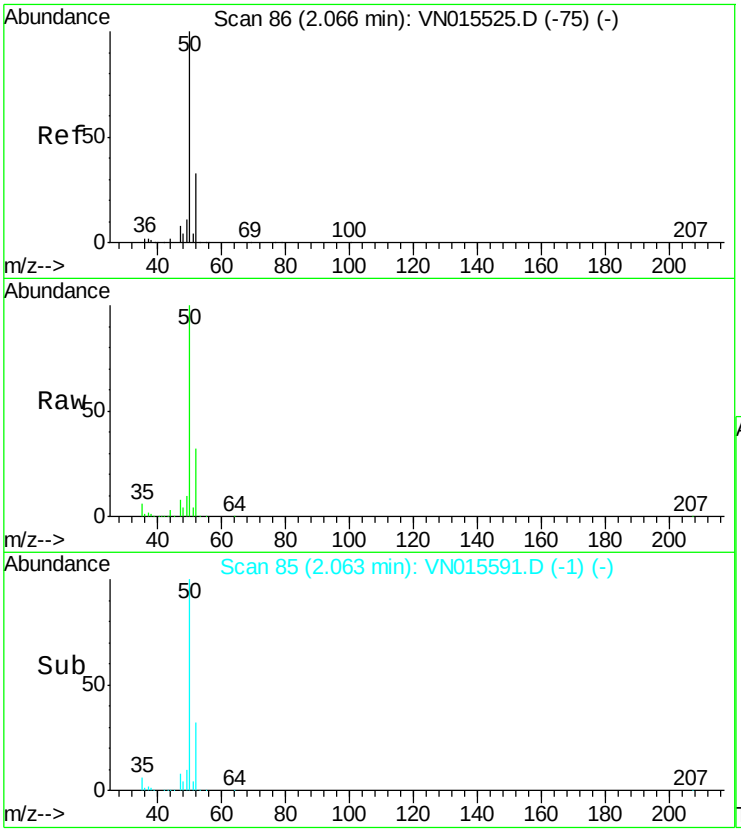
Tgt Ion: 85 Resp: 72464

Ion	Ratio	Lower	Upper
85	100		
87	31.5	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

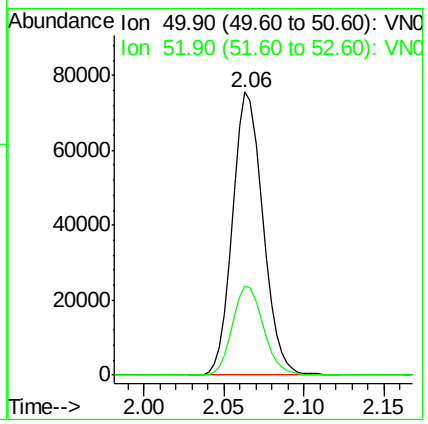
Manual Integrations APPROVED
MMDadoda
5/22/2014 4:19:56 PM

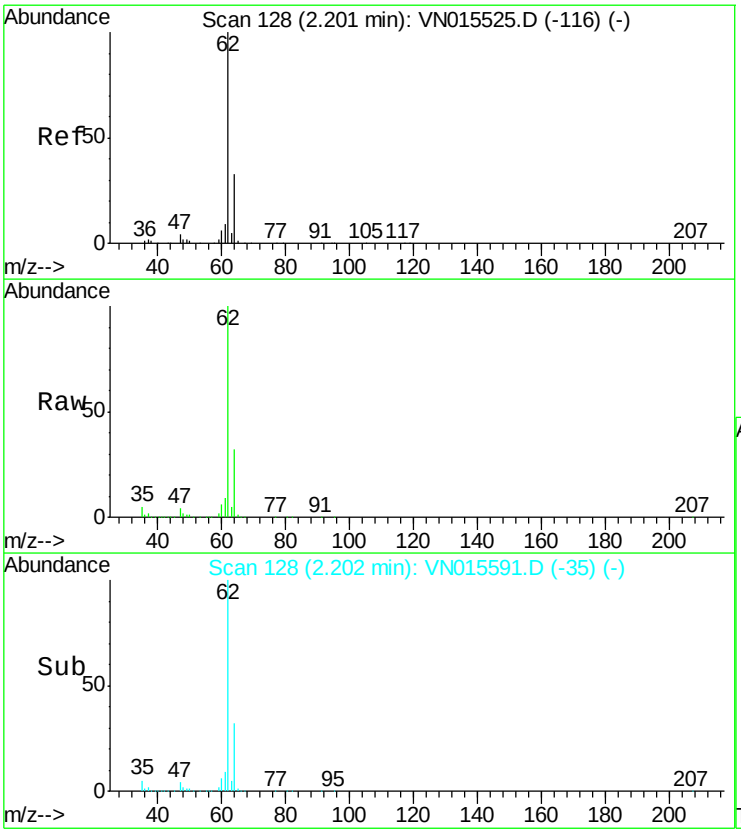


#4
Chloromethane
Concen: 58.84 ug/l
RT: 2.06 min Scan# 85
Delta R.T. -0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 50 Resp: 97574

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.2	39.2

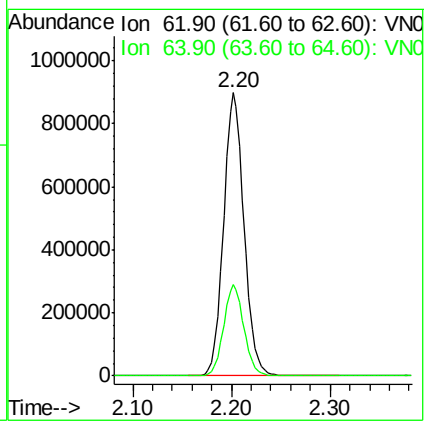




#5
Vinyl Chloride
Concen: 779.30 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

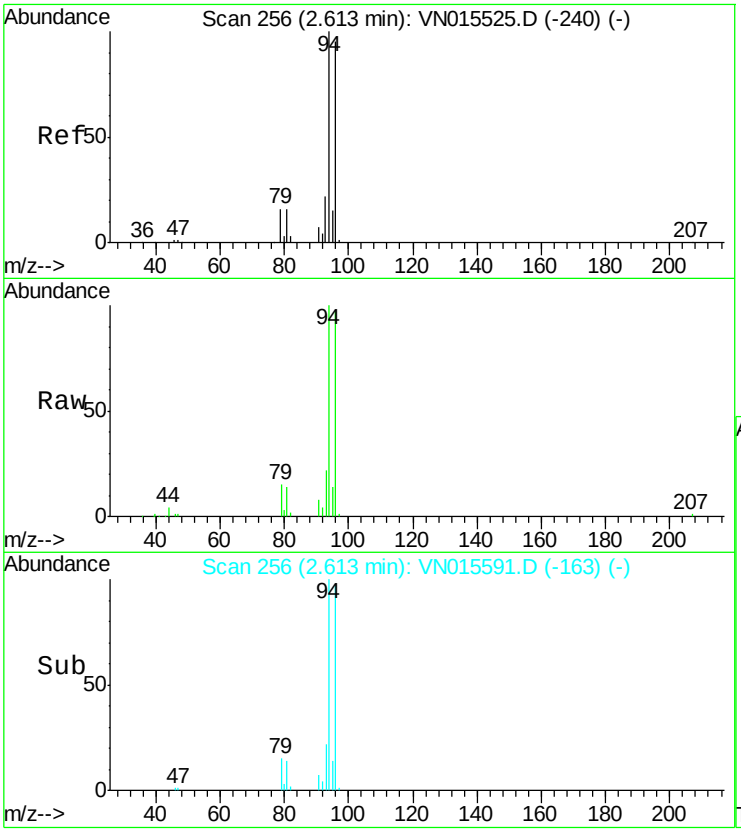
Tgt Ion: 62 Resp: 1306260

Ion	Ratio	Lower	Upper
62	100		
64	32.1	26.2	39.4



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

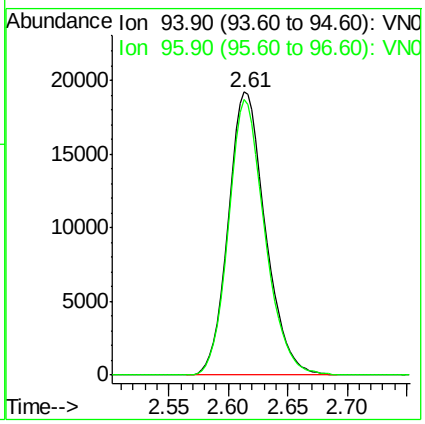
Manual Integrations APPROVED
MMDadoda
5/22/2014 4:19:56 PM

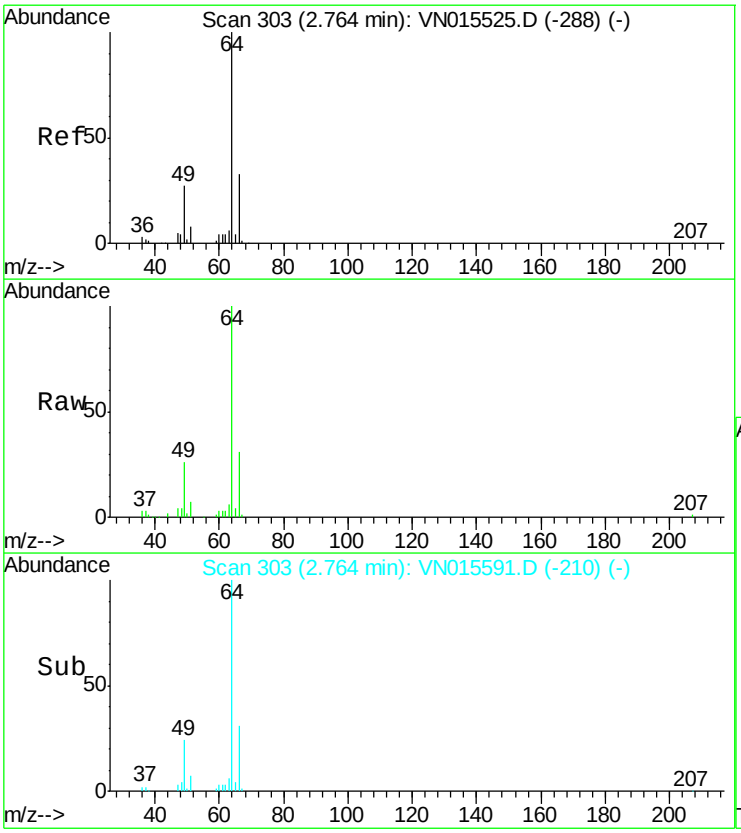


#6
Bromomethane
Concen: 42.76 ug/l
RT: 2.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 94 Resp: 41454

Ion	Ratio	Lower	Upper
94	100		
96	97.3	75.8	113.6

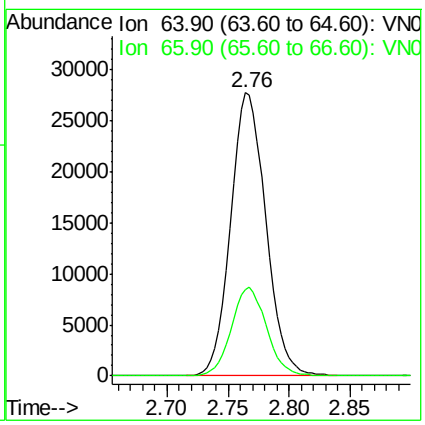




#7
Chloroethane
Concen: 52.59 ug/l
RT: 2.76 min Scan# 303
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 64 Resp: 55532

Ion	Ratio	Lower	Upper
64	100		
66	30.7	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
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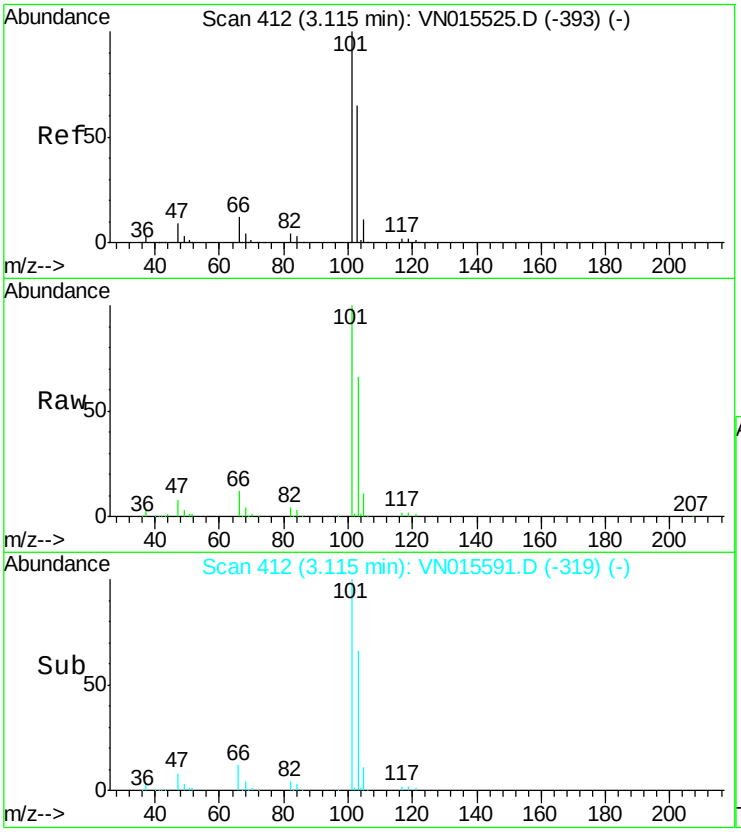
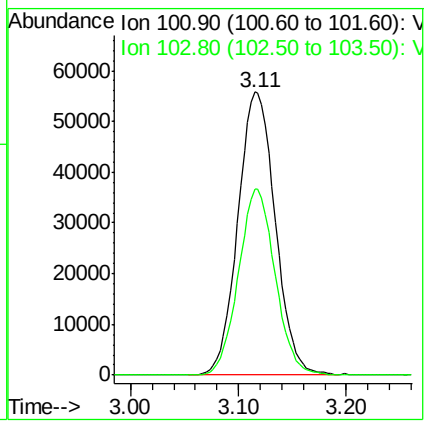
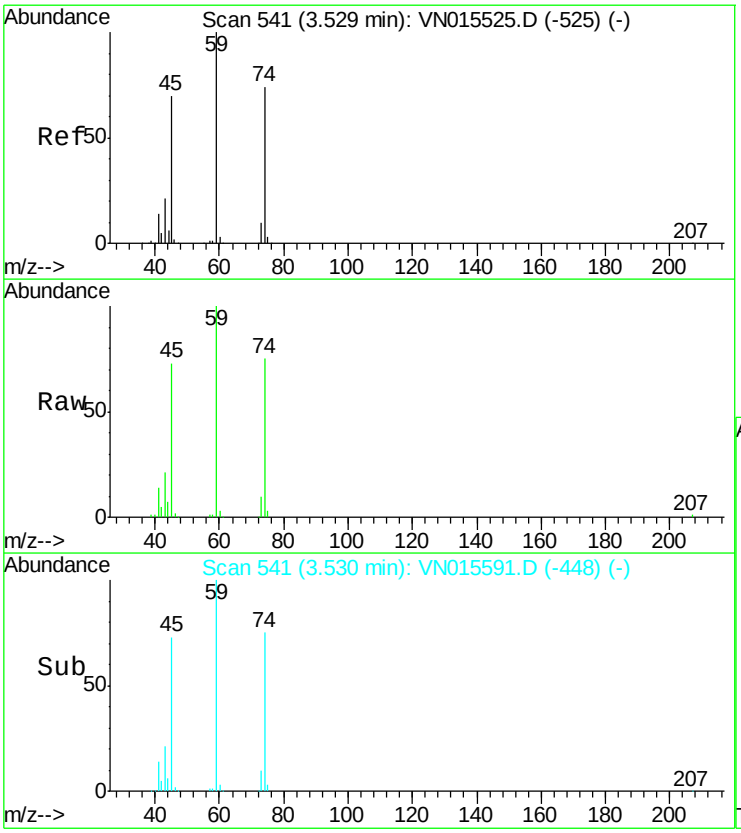


#8
Trichlorofluoromethane
Concen: 49.39 ug/l
RT: 3.11 min Scan# 412
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:101 Resp: 134385

Ion	Ratio	Lower	Upper
101	100		
103	65.5	52.1	78.1

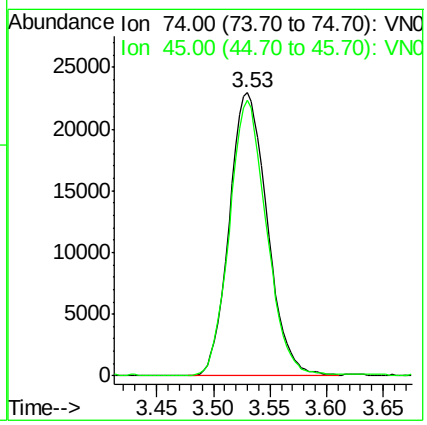


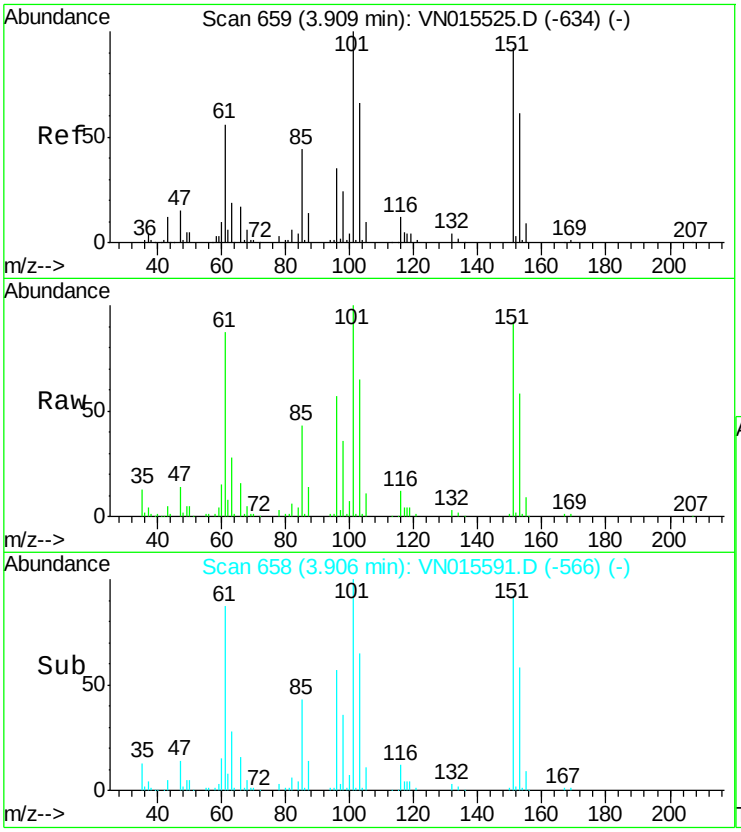


#9
Diethyl Ether
Concen: 53.39 ug/l
RT: 3.53 min Scan# 541
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 74 Resp: 53719

Ion	Ratio	Lower	Upper
74	100		
45	95.3	48.9	146.8





#10
1,1,2-Trichlorotrifluoroethane
Concen: 50.44 ug/l
RT: 3.91 min Scan# 658
Delta R.T. -0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Instrument :
MSVOA_N
ClientSampleId :
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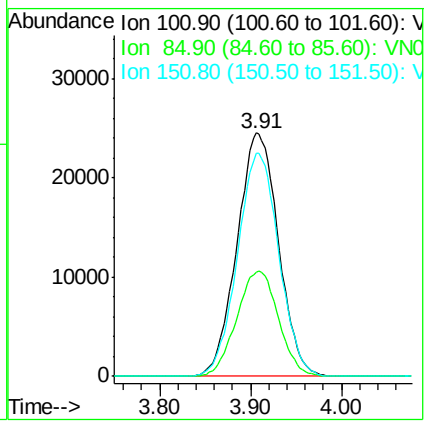
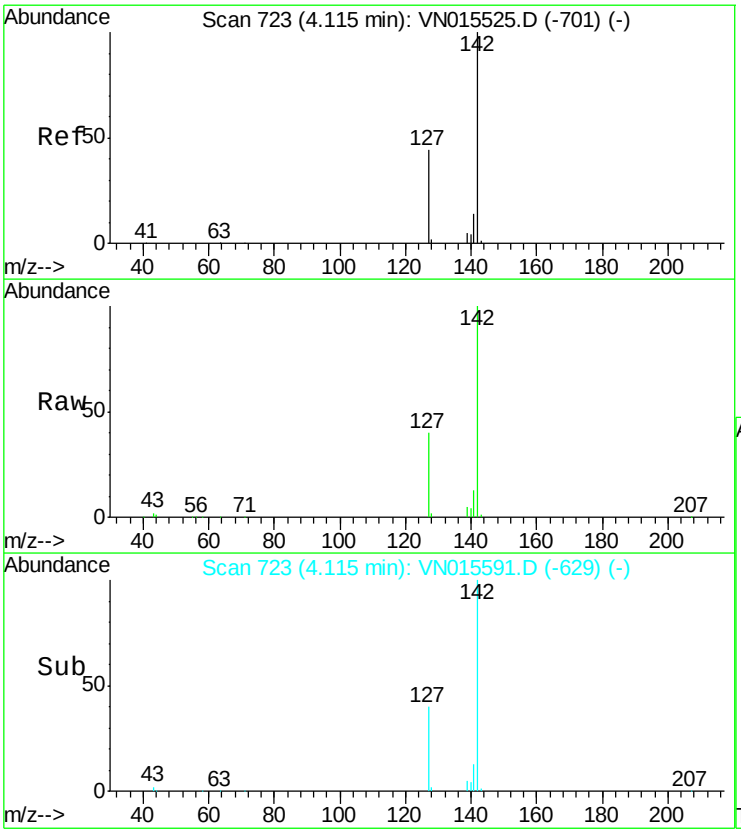
Tgt Ion:101 Resp: 77410

Ion	Ratio	Lower	Upper
101	100		
85	43.6	34.5	51.7
151	91.6	72.9	109.3

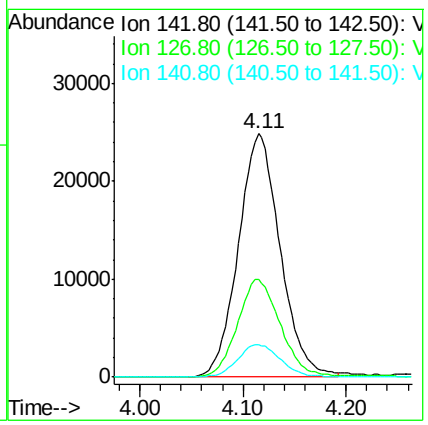




#11
Methyl Iodide
Concen: 36.76 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:142 Resp: 70011

Ion	Ratio	Lower	Upper
142	100		
127	41.5	34.7	52.1
141	13.8	11.4	17.0



Instrument :
MSVOA_N
ClientSampleId :
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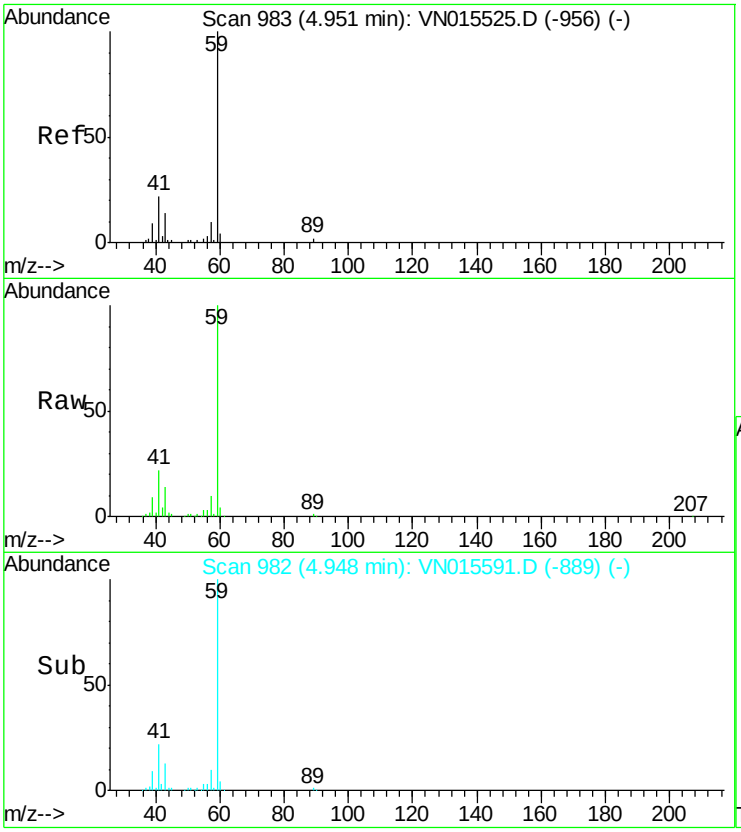
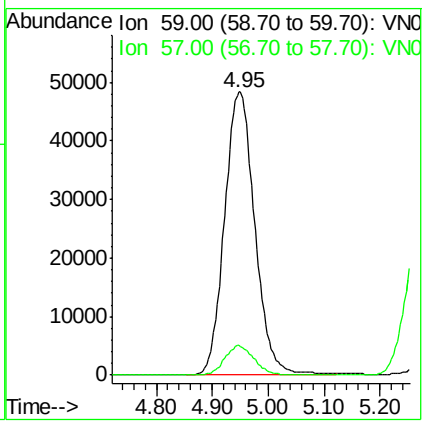
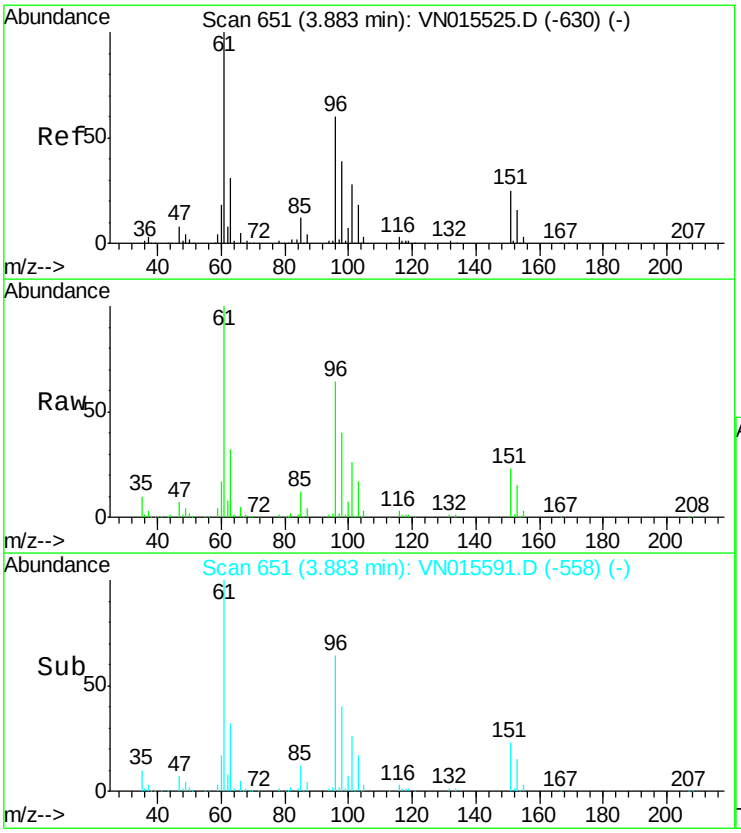


#12
Tert butyl alcohol
Concen: 912.58 ug/l
RT: 4.95 min Scan# 982
Delta R.T. -0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 59 Resp: 182816

Ion	Ratio	Lower	Upper
59	100		
57	10.1	8.4	12.6

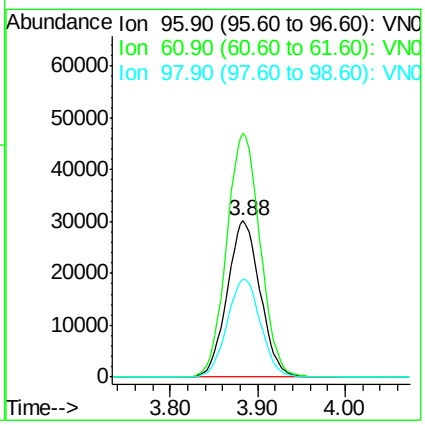




#13
1,1-Dichloroethene
Concen: 53.81 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 96 Resp: 78946

Ion	Ratio	Lower	Upper
96	100		
61	156.1	132.3	198.5
98	62.8	51.8	77.6



Instrument :
MSVOA_N
ClientSampleId :
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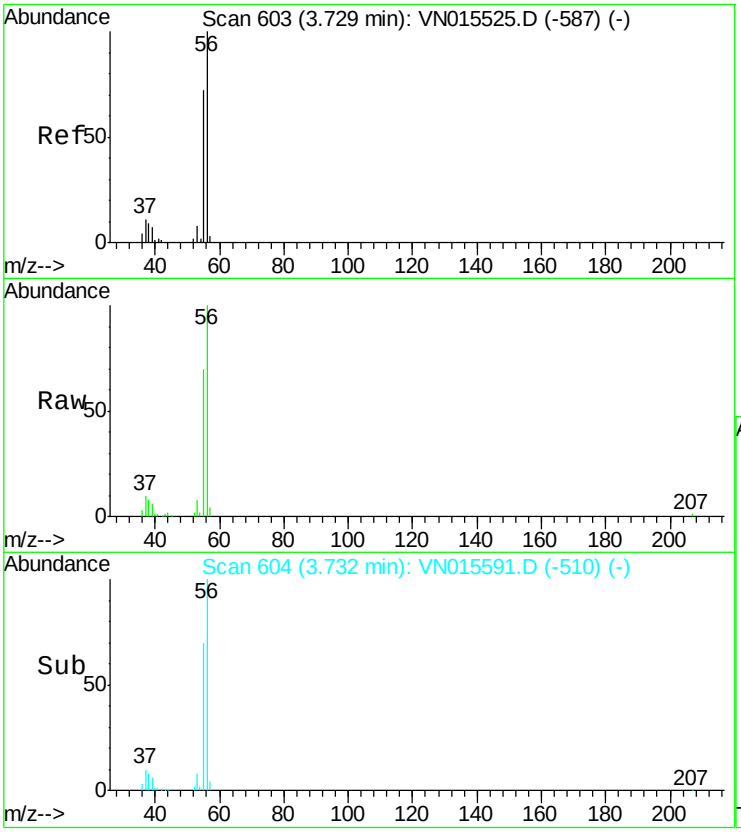
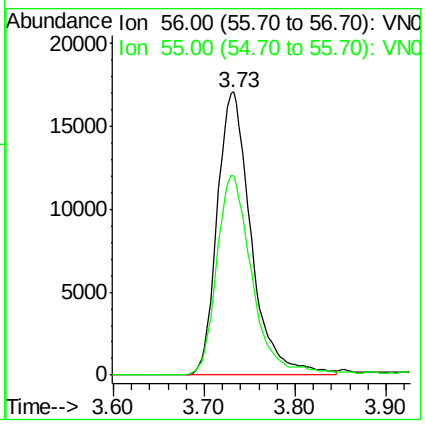
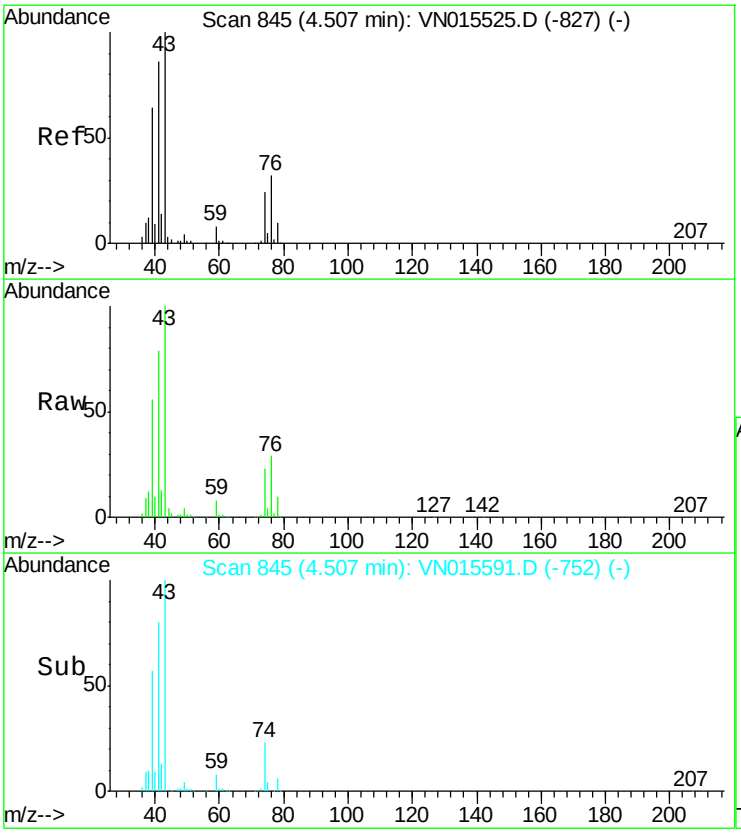


#14
Acrolein
Concen: 238.04 ug/l
RT: 3.73 min Scan# 604
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 56 Resp: 44339

Ion	Ratio	Lower	Upper
56	100		
55	70.9	57.9	86.9

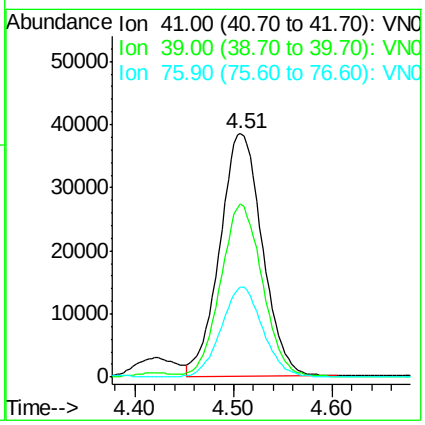


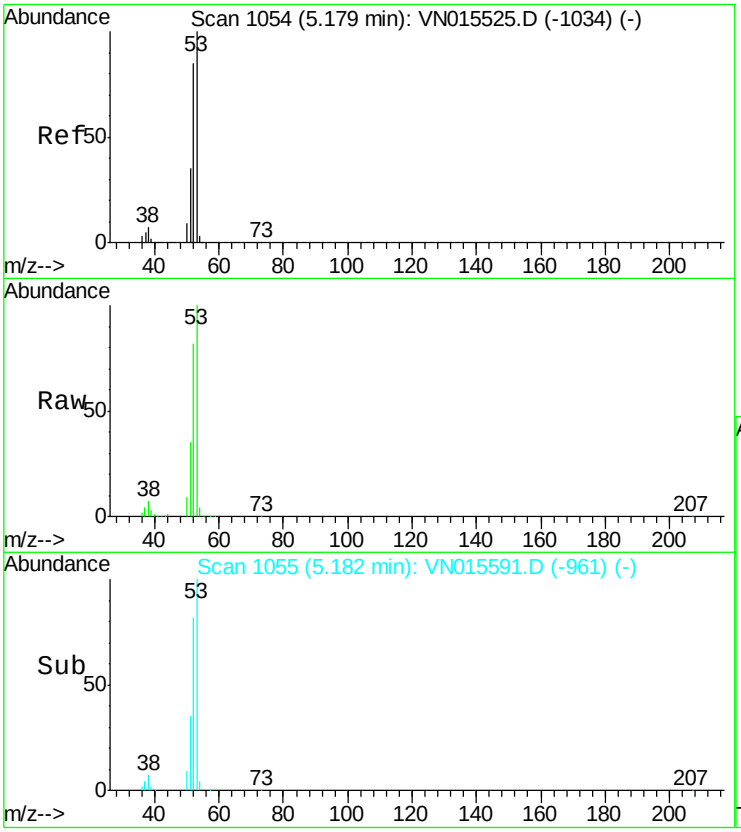


#15
Allyl chloride
Concen: 44.83 ug/l
RT: 4.51 min Scan# 845
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 41 Resp: 115052

Ion	Ratio	Lower	Upper
41	100		
39	70.0	57.4	86.2
76	35.9	28.5	42.7





#16
Acrylonitrile
Concen: 286.50 ug/l
RT: 5.18 min Scan# 1055
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 53 Resp: 189362

Ion	Ratio	Lower	Upper
53	100		
52	81.8	65.7	98.5
51	34.2	29.1	43.7

Instrument :
MSVOA_N
ClientSampleId :
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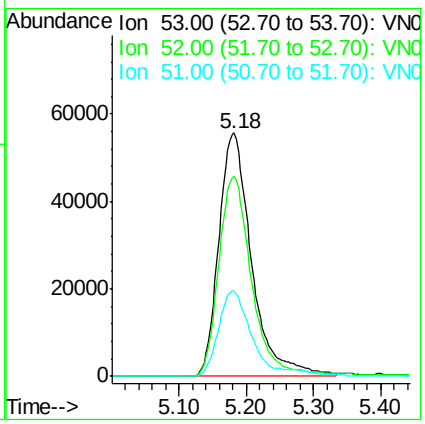
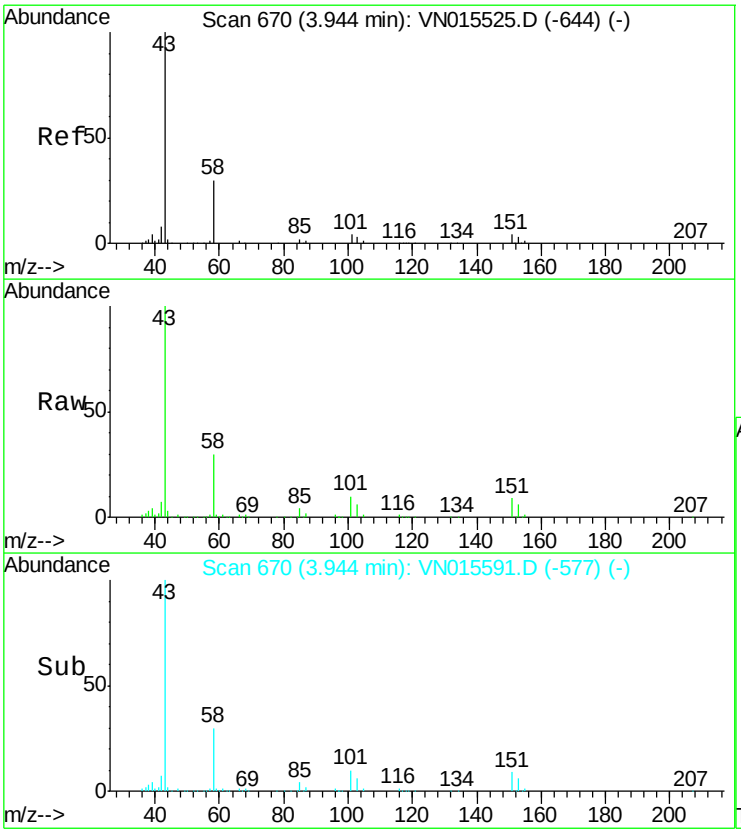
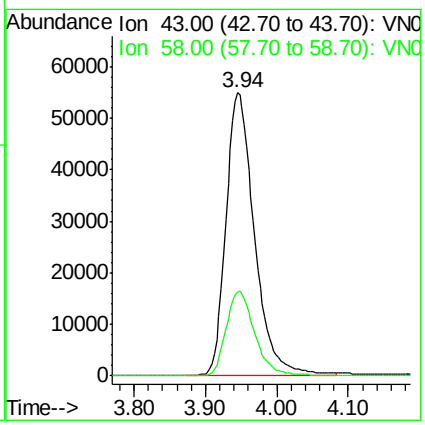




#17
Acetone
Concen: 234.72 ug/l
RT: 3.94 min Scan# 670
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 151933

Ion	Ratio	Lower	Upper
43	100		
58	29.7	24.2	36.2



Instrument :
MSVOA_N
ClientSampleId :
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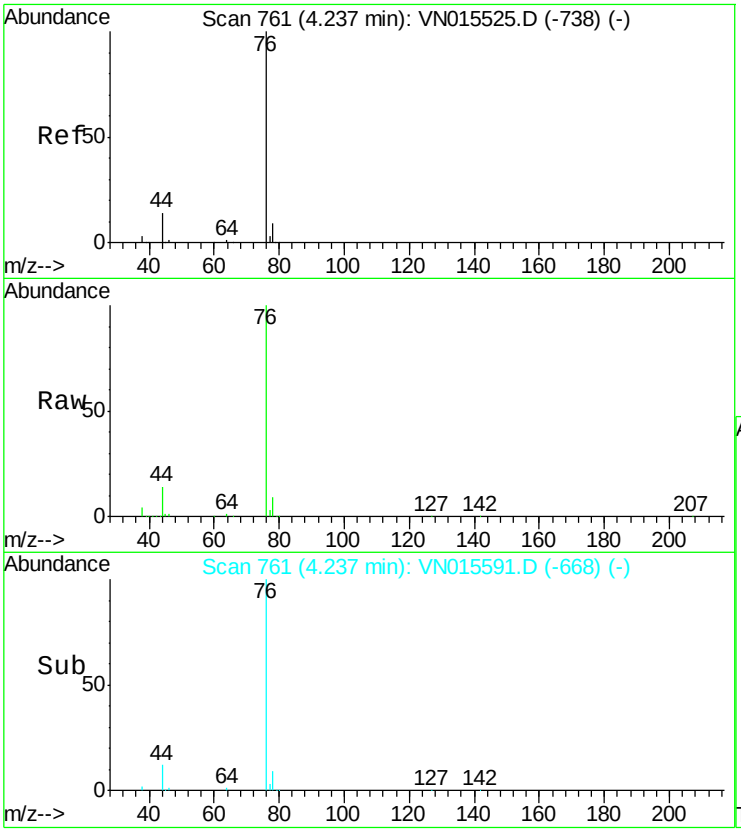
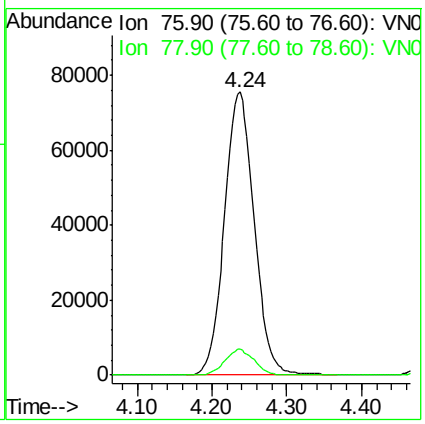
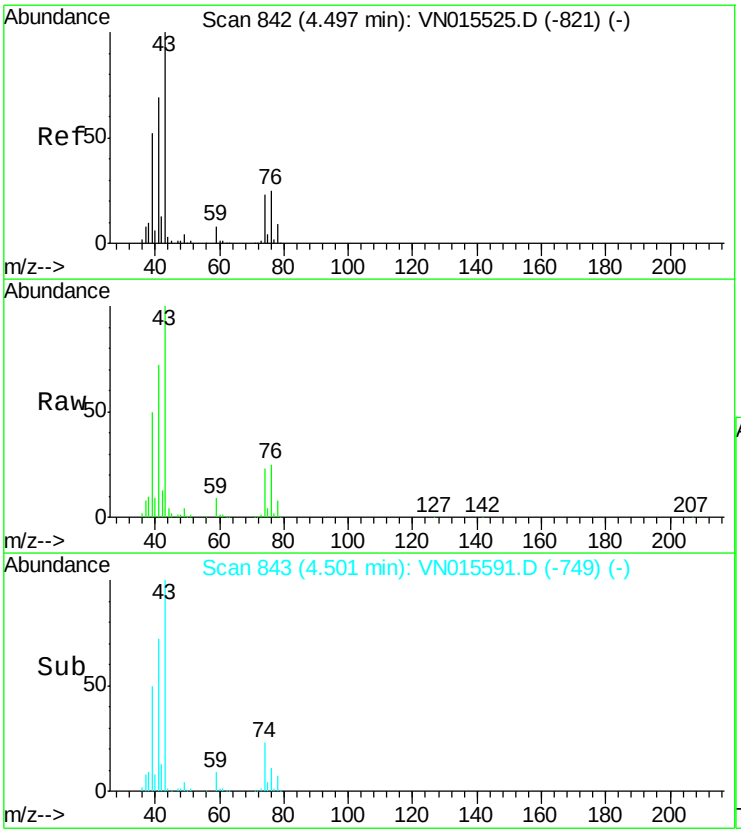


#18
Carbon Disulfide
Concen: 50.43 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 76 Resp: 208532

Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.5	11.3

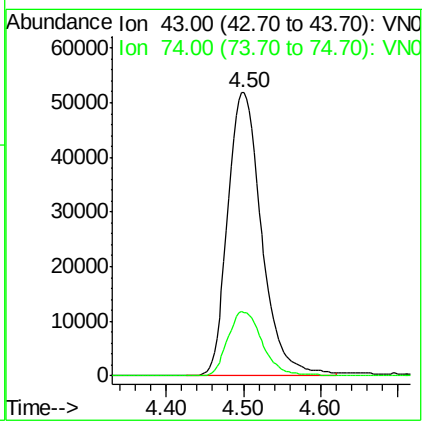




#19
Methyl Acetate
Concen: 50.10 ug/l
RT: 4.50 min Scan# 843
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 156876

Ion	Ratio	Lower	Upper
43	100		
74	23.3	18.5	27.7



Instrument :
MSVOA_N
ClientSampleId :
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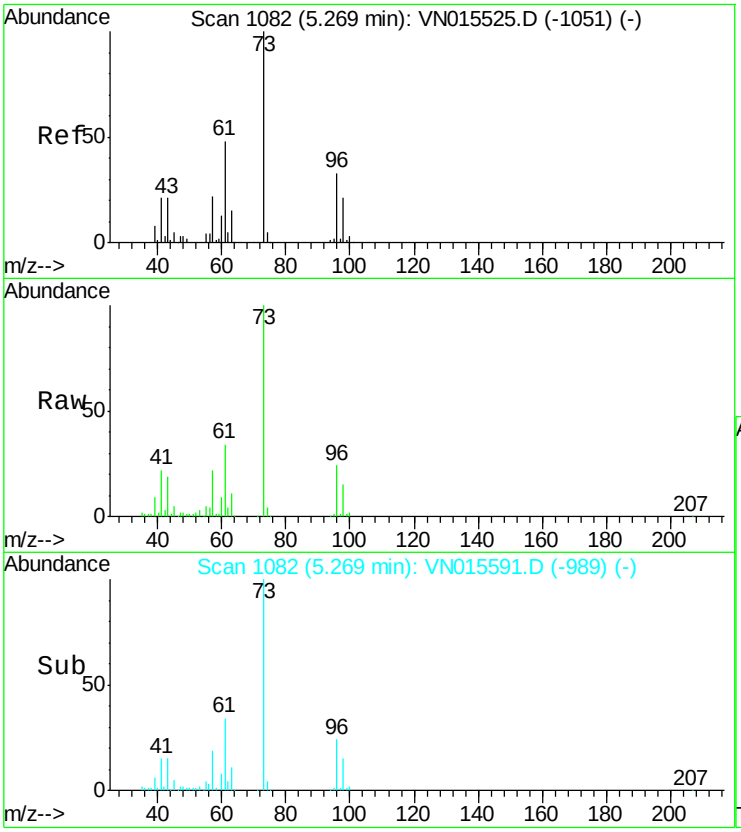
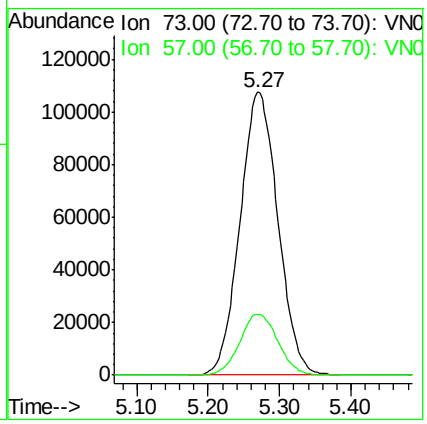
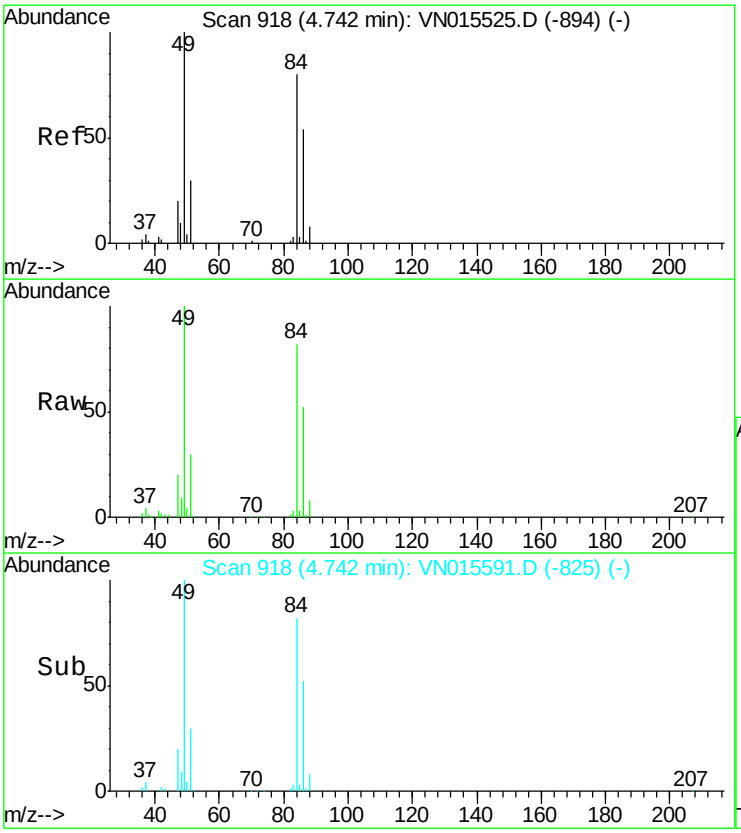


#20
Methyl tert-butyl Ether
Concen: 76.84 ug/l
RT: 5.27 min Scan# 1082
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 73 Resp: 396844

Ion	Ratio	Lower	Upper
73	100		
57	21.6	17.3	25.9

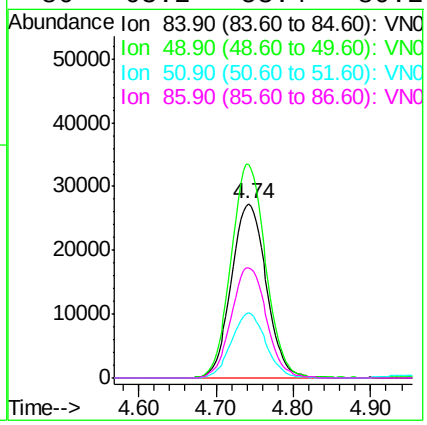




#21
Methylene Chloride
Concen: 51.05 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 84 Resp: 85690

Ion	Ratio	Lower	Upper
84	100		
49	122.5	99.8	149.6
51	37.3	30.2	45.2
86	63.2	53.4	80.2



Instrument :
MSVOA_N
ClientSampleId :
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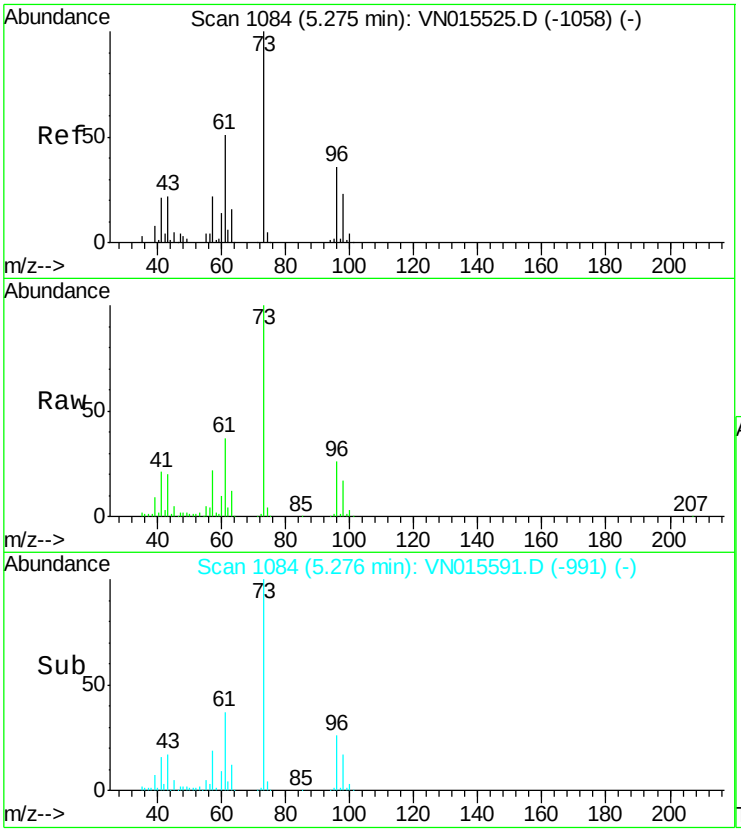
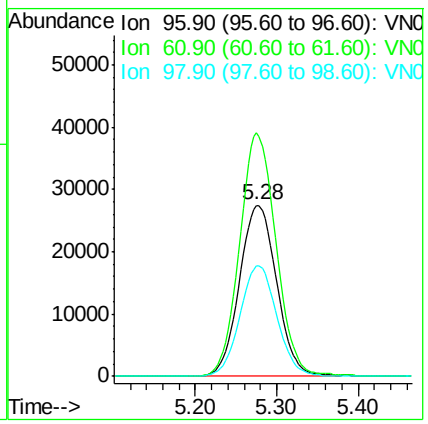
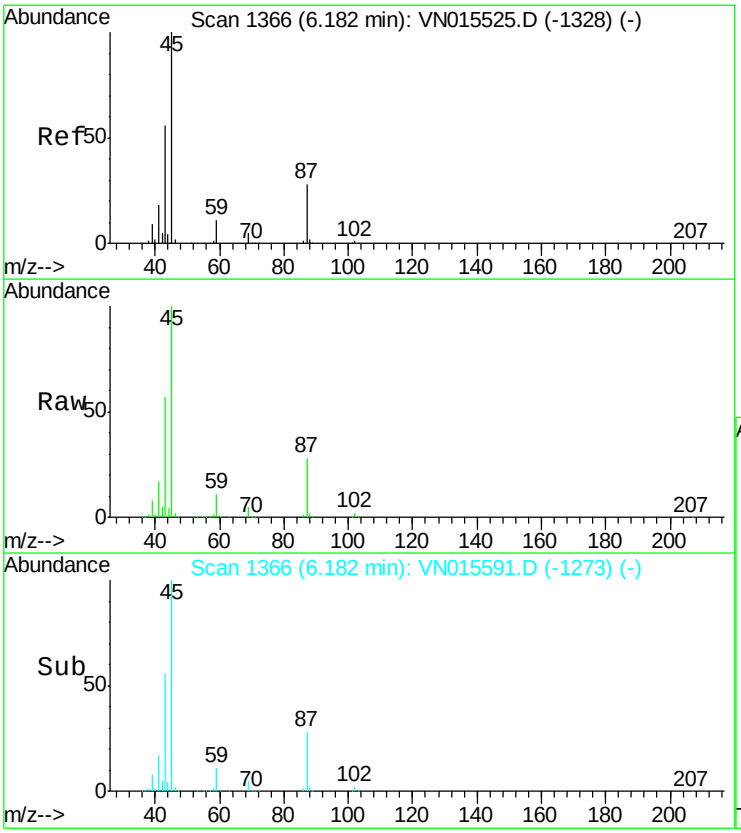


#22
trans-1,2-Dichloroethene
Concen: 56.04 ug/l
RT: 5.28 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 96 Resp: 86702

Ion	Ratio	Lower	Upper
96	100		
61	142.2	113.3	169.9
98	64.5	50.4	75.6

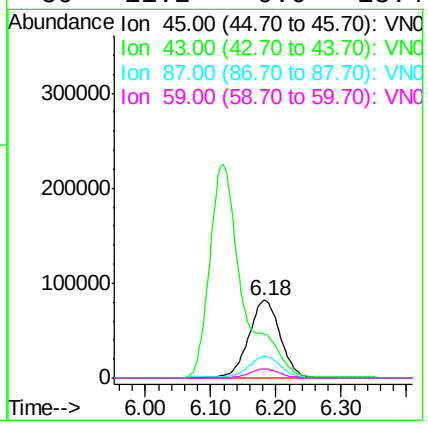


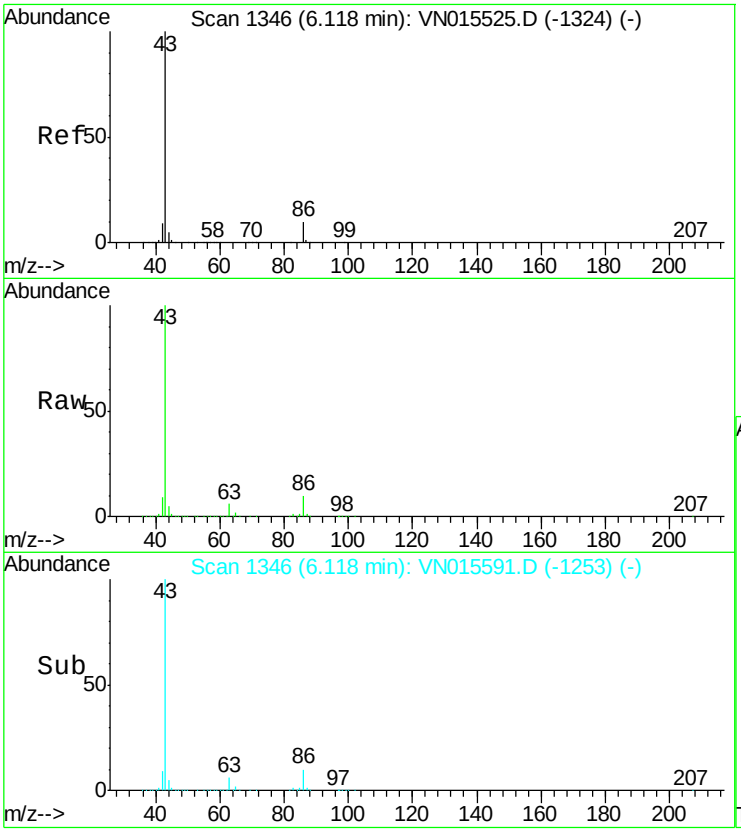


#23
Diisopropyl ether
Concen: 52.23 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 45 Resp: 276139

Ion	Ratio	Lower	Upper
45	100		
43	55.3	44.6	67.0
87	27.7	22.3	33.5
59	11.2	9.0	13.4





#24
Vinyl Acetate
Concen: 258.63 ug/l m
RT: 6.12 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 679253

Ion	Ratio	Lower	Upper
43	100		
86	10.1	7.9	11.9

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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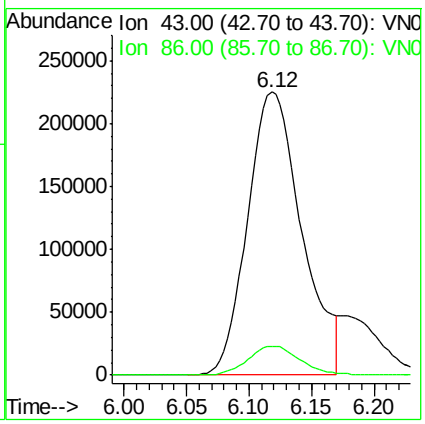
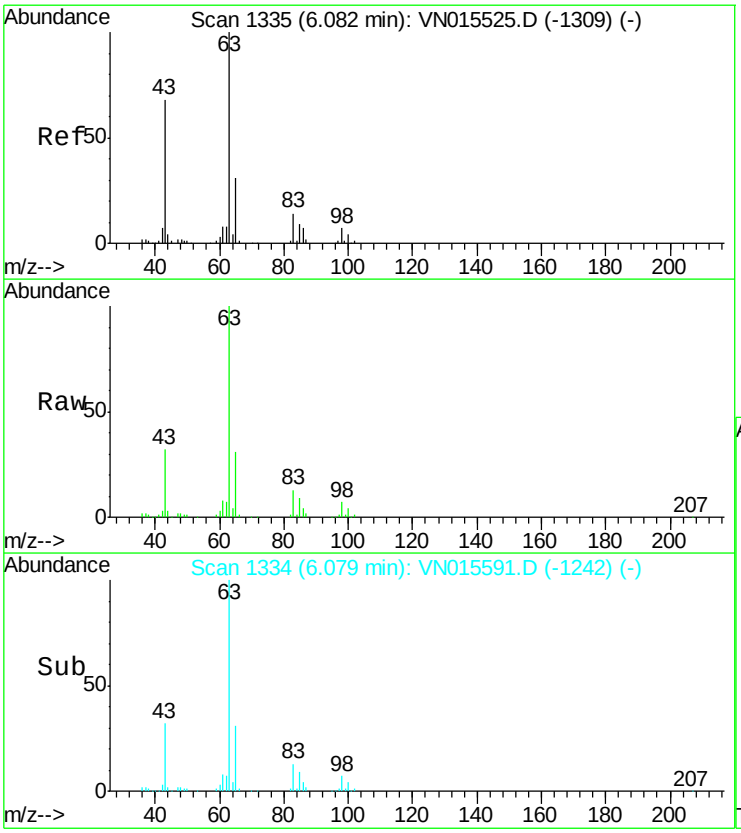
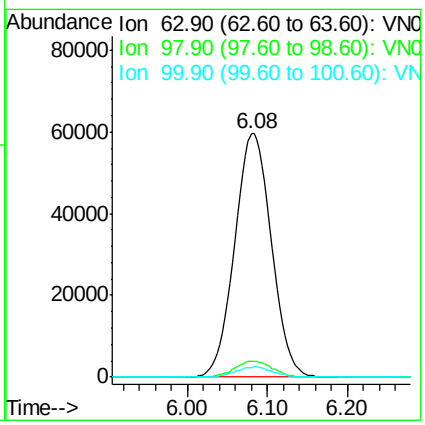


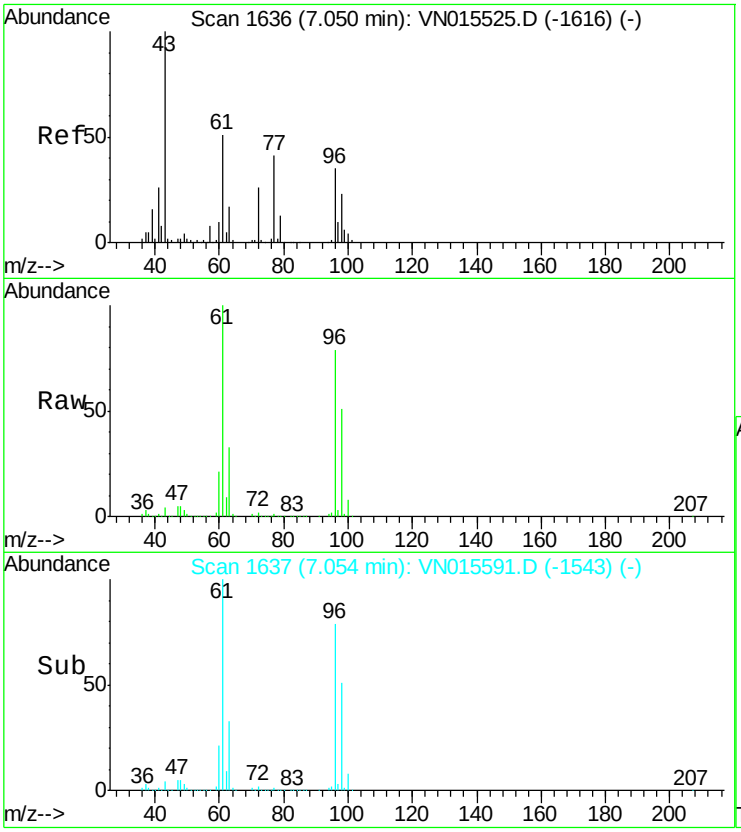


#25
1,1-Dichloroethane
Concen: 63.58 ug/l
RT: 6.08 min Scan# 1334
Delta R.T. -0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 63 Resp: 185066

Ion	Ratio	Lower	Upper
63	100		
98	6.6	3.3	9.9
100	4.0	2.1	6.3





#26
2-Butanone
Concen: 261.44 ug/l
RT: 7.05 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 238739

Ion	Ratio	Lower	Upper
43	100		
72	39.4	20.7	31.1#

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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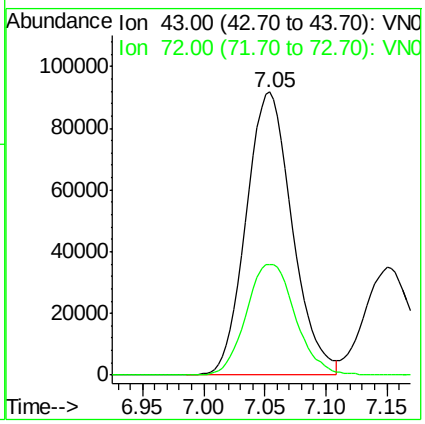
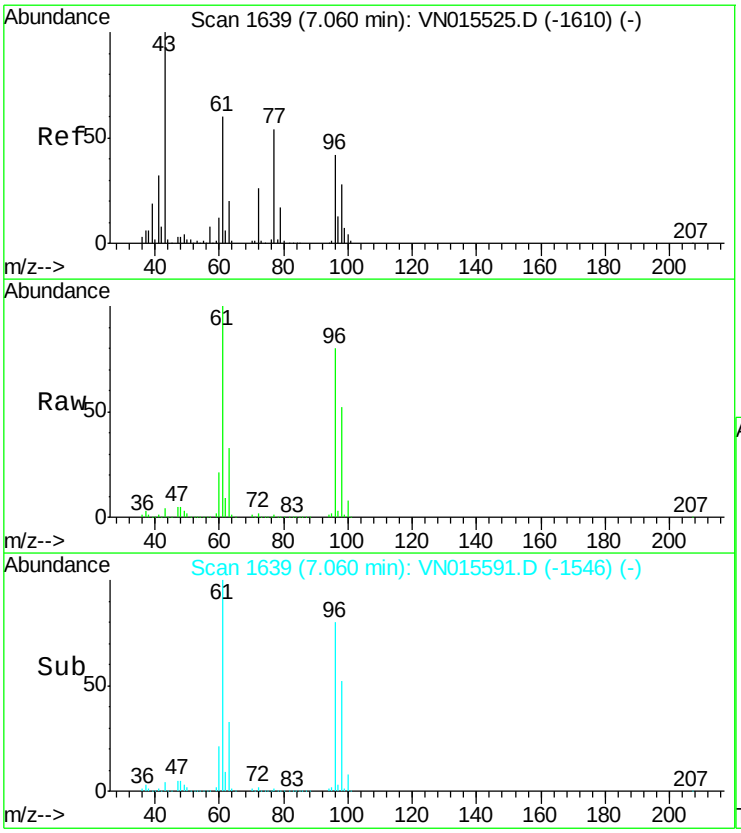
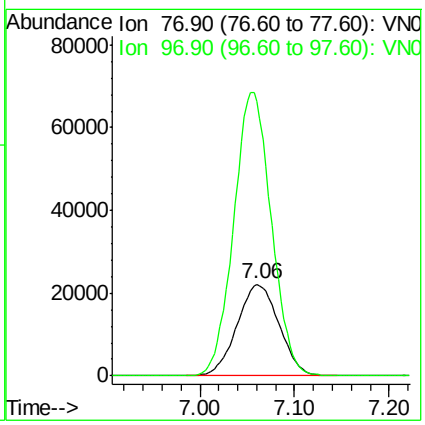




#27
2,2-Dichloropropane
Concen: 26.62 ug/l
RT: 7.06 min Scan# 1639
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 77 Resp: 68417

Ion	Ratio	Lower	Upper
77	100		
97	276.5	11.6	34.7#



Instrument :
MSVOA_N
ClientSampleId :
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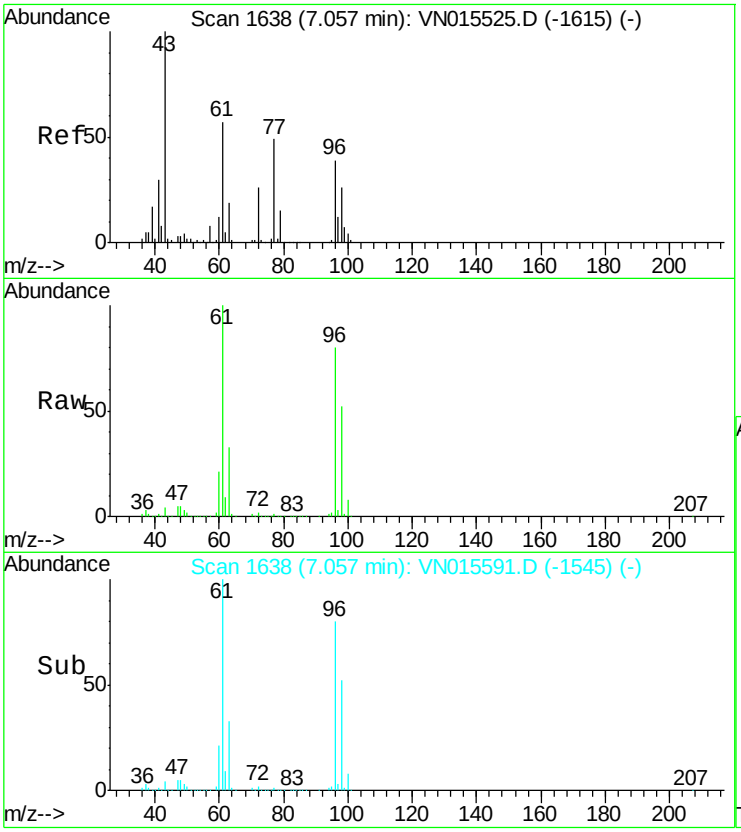
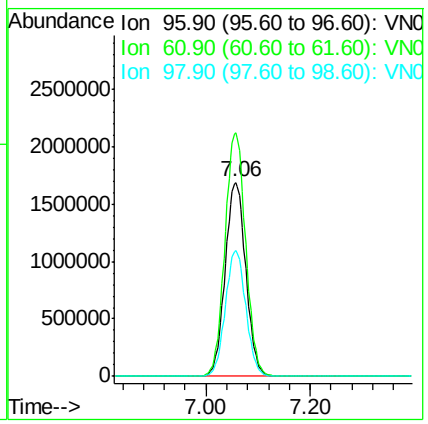
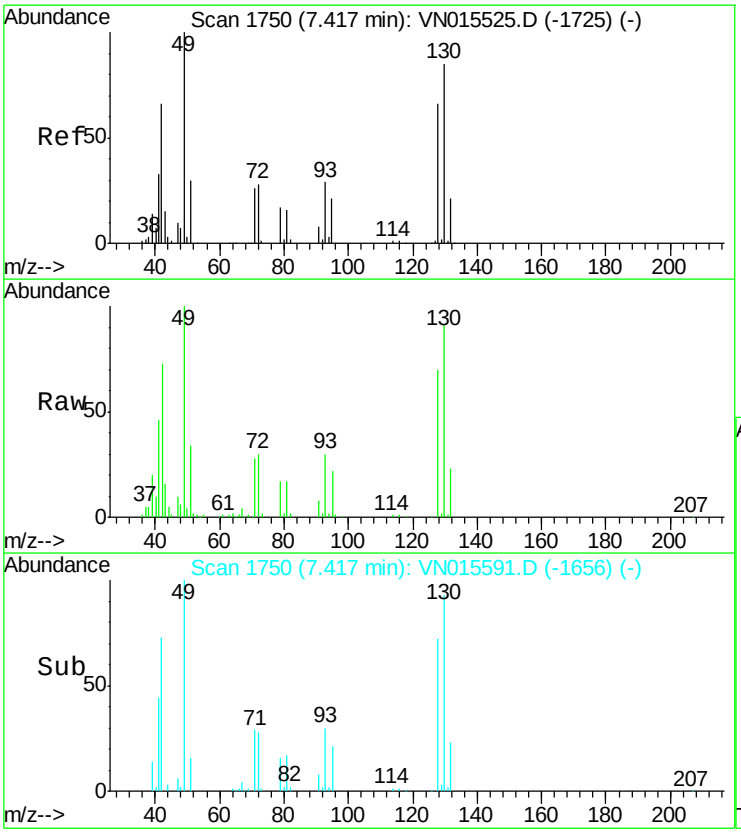


#28
cis-1,2-Dichloroethene
Concen: 2552.35 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 96 Resp: 4636116

Ion	Ratio	Lower	Upper
96	100		
61	125.9	0.0	292.0
98	64.6	0.0	129.4

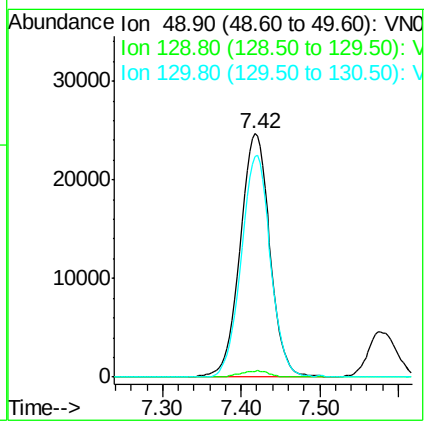


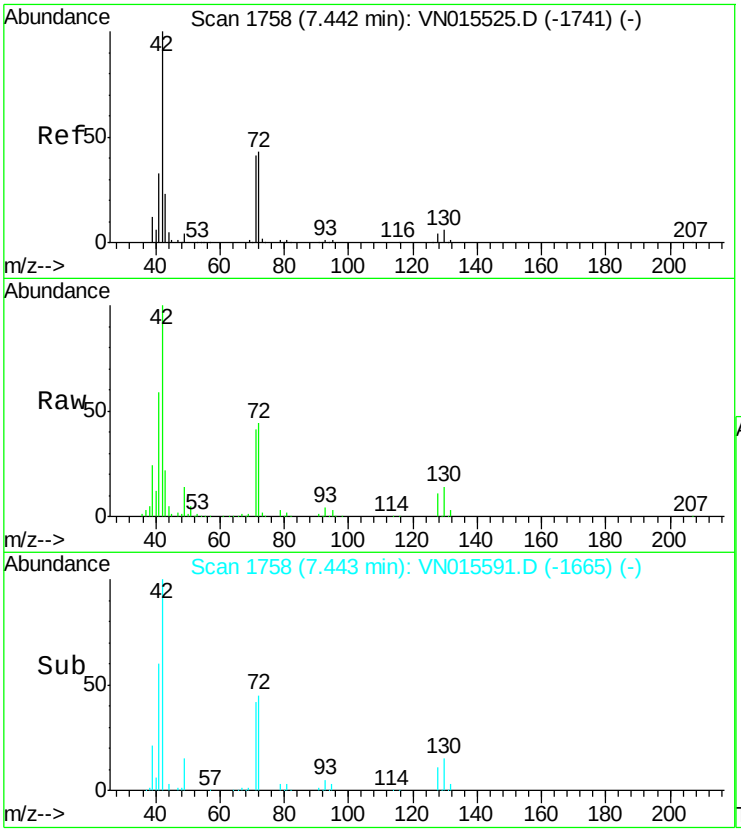


#29
Bromochloromethane
Concen: 51.21 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 49 Resp: 65613

Ion	Ratio	Lower	Upper
49	100		
129	2.4	0.0	4.2
130	89.4	68.6	102.8

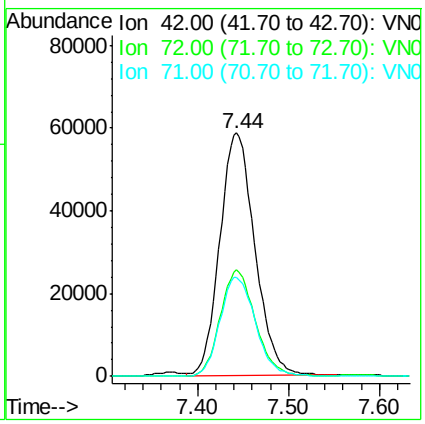




#30
Tetrahydrofuran
Concen: 254.87 ug/l
RT: 7.44 min Scan# 1758
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 42 Resp: 156608

Ion	Ratio	Lower	Upper
42	100		
72	43.9	34.2	51.2
71	41.5	32.5	48.7



Instrument :
MSVOA_N
ClientSampleId :
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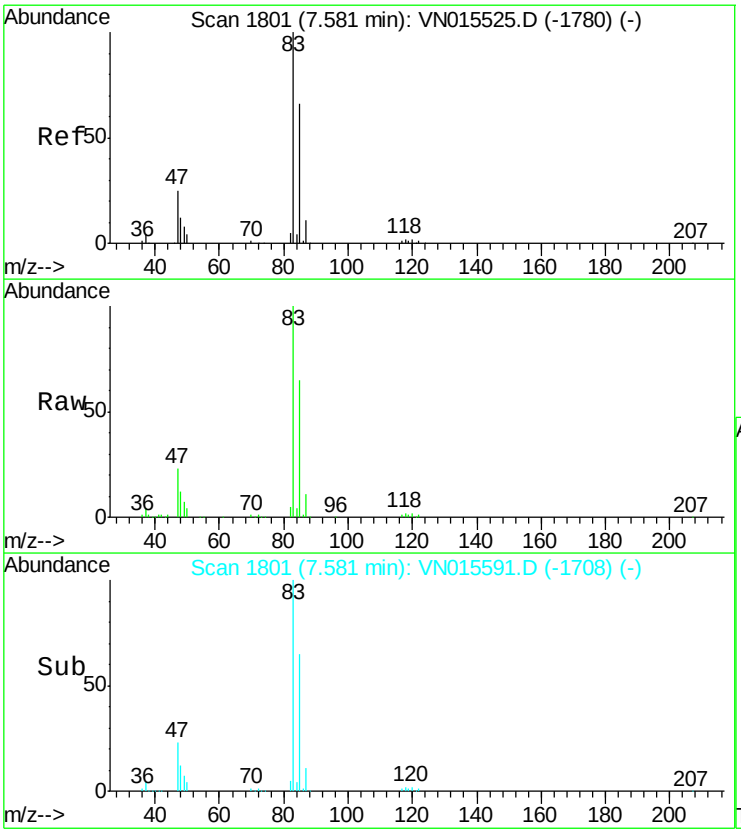
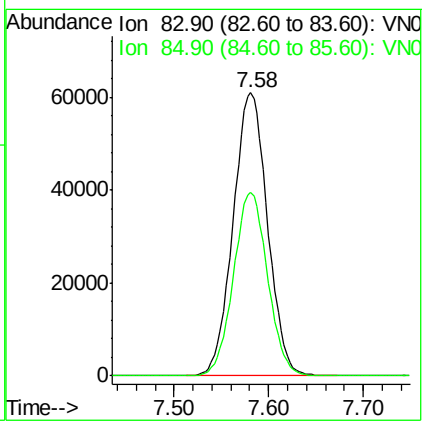
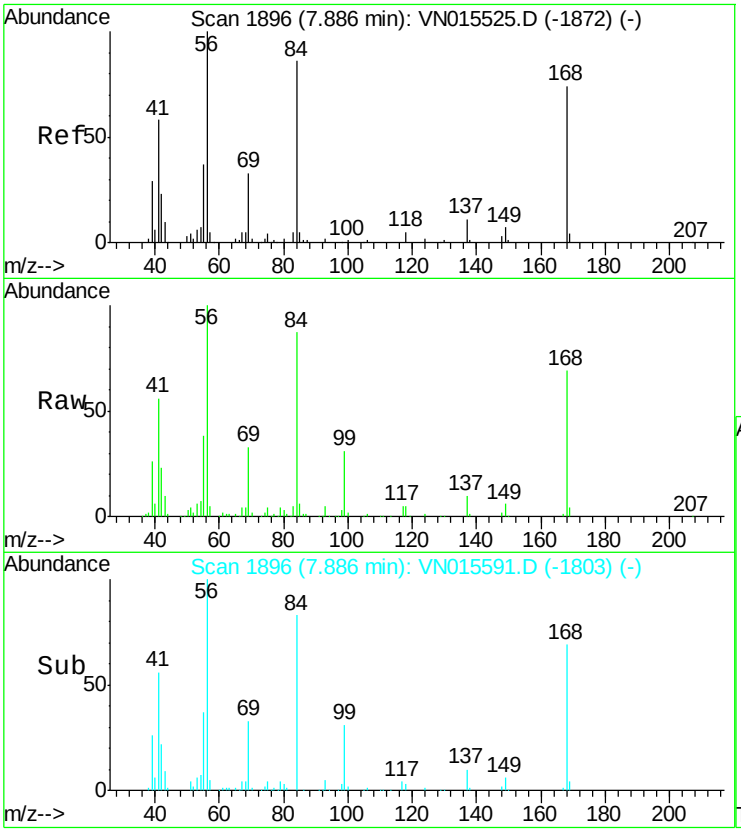


#31
Chloroform
Concen: 51.27 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 83 Resp: 154122

Ion	Ratio	Lower	Upper
83	100		
85	65.1	52.6	78.8

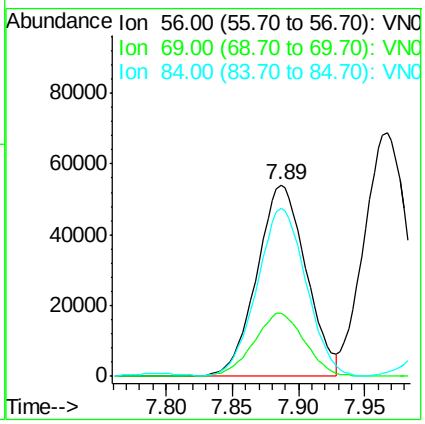




#32
Cyclohexane
Concen: 54.35 ug/l
RT: 7.89 min Scan# 1896
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 56 Resp: 140237

Ion	Ratio	Lower	Upper
56	100		
69	33.0	26.6	39.8
84	86.6	69.0	103.4



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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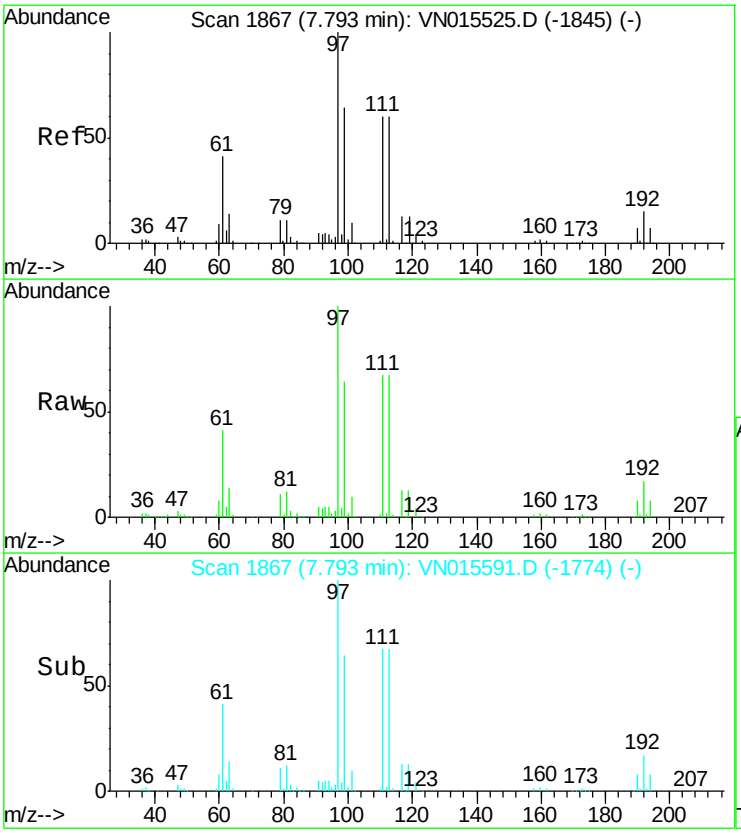
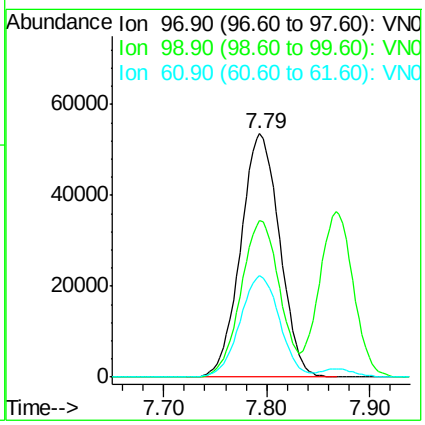


#33
1,1,1-Trichloroethane
Concen: 49.95 ug/l
RT: 7.79 min Scan# 1867
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 97 Resp: 140592

Ion	Ratio	Lower	Upper
97	100		
99	64.0	51.2	76.8
61	42.1	33.9	50.9



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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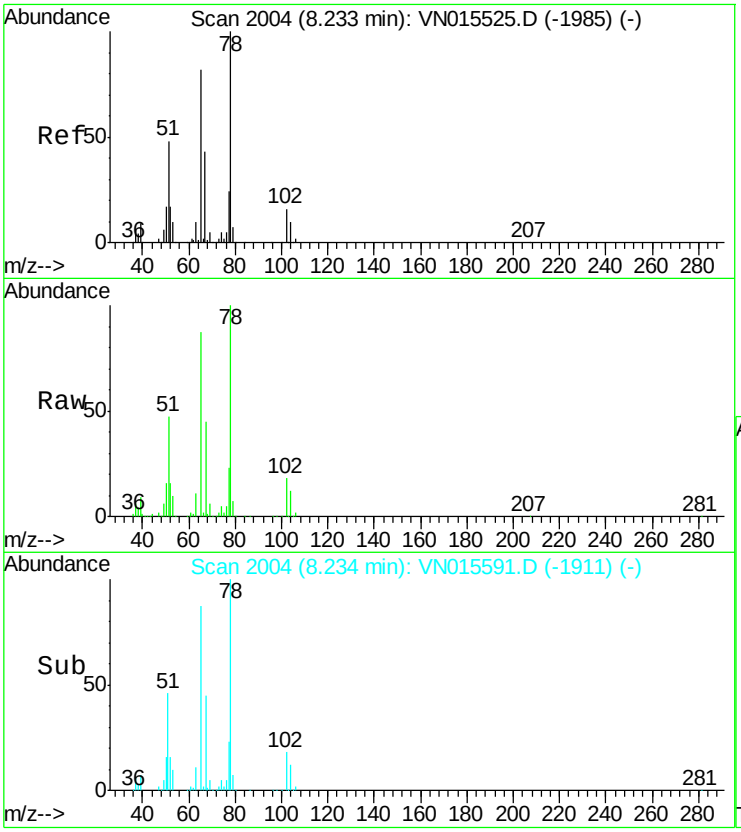
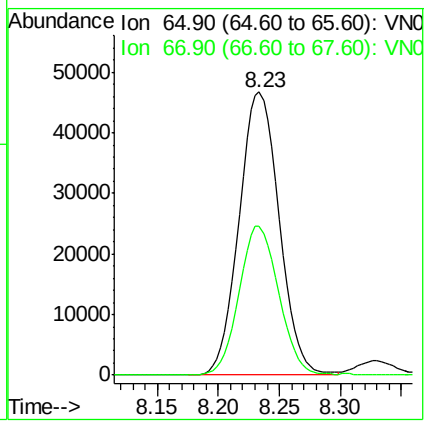
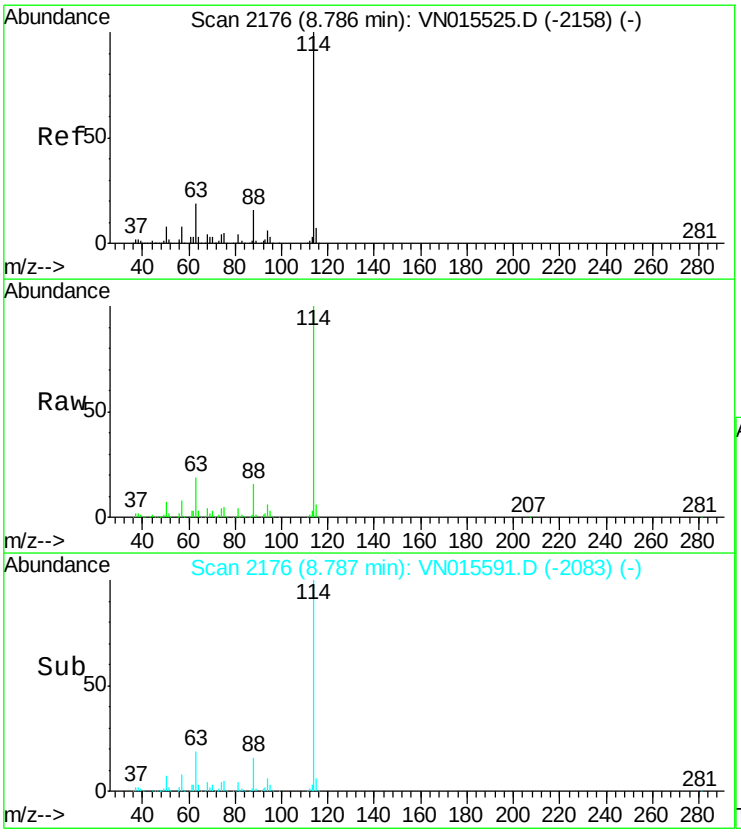


#34
1,2-Dichloroethane-d4
Concen: 51.61 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 65 Resp: 106475

Ion	Ratio	Lower	Upper
65	100		
67	51.9	0.0	103.6

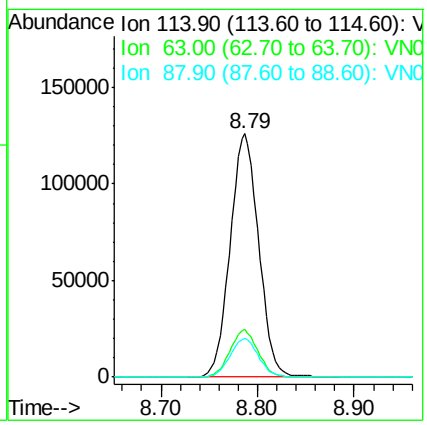


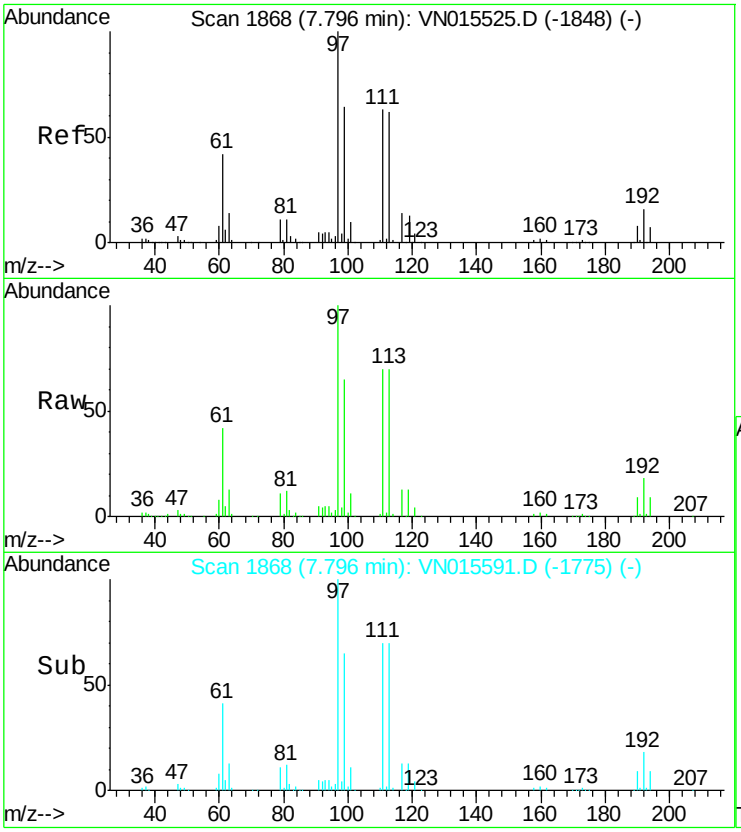


#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:114 Resp: 258091

Ion	Ratio	Lower	Upper
114	100		
63	19.4	0.0	38.6
88	15.9	0.0	32.2

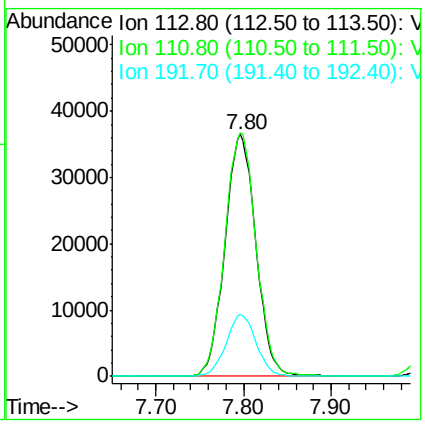




#36
Dibromofluoromethane
Concen: 53.35 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:113 Resp: 89674

Ion	Ratio	Lower	Upper
113	100		
111	101.9	81.5	122.3
192	24.9	20.0	30.0



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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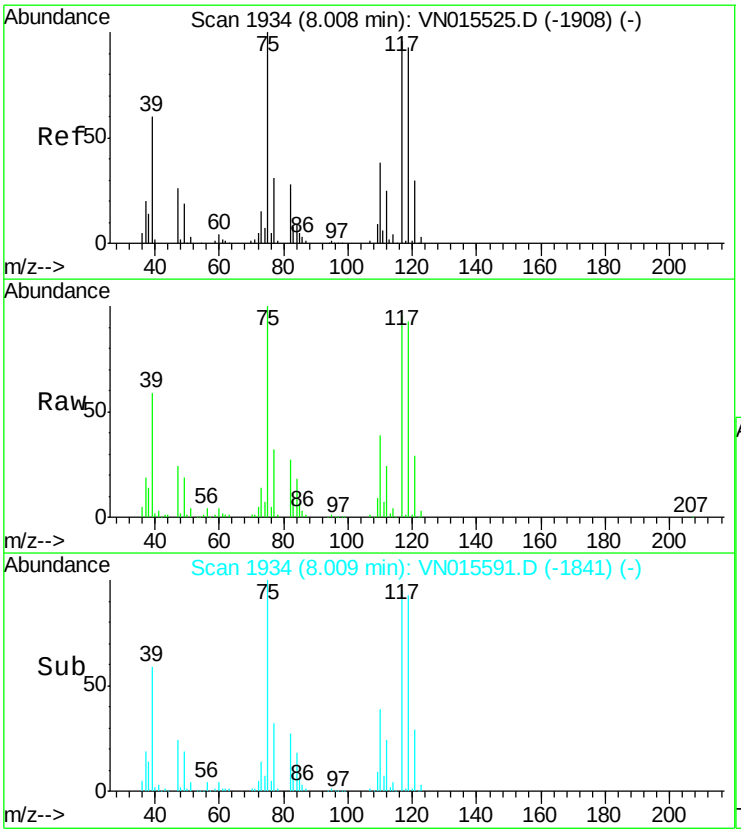
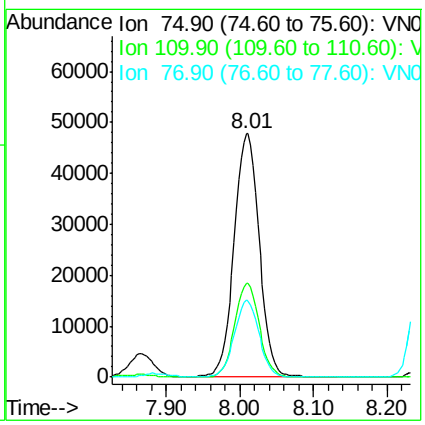
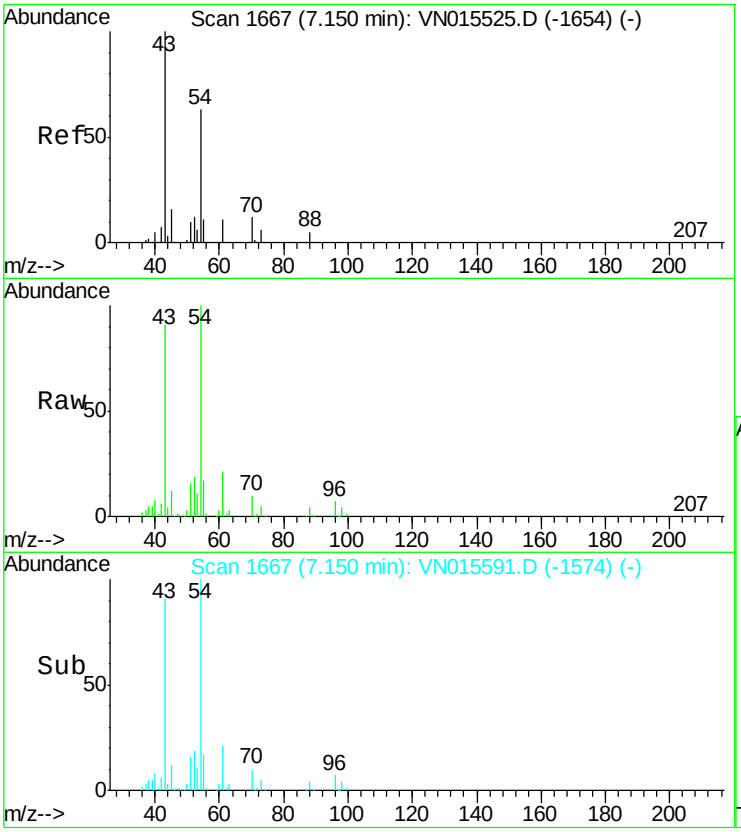


#37
1,1-Dichloropropene
Concen: 49.52 ug/l
RT: 8.01 min Scan# 1934
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 75 Resp: 113986

Ion	Ratio	Lower	Upper
75	100		
110	37.7	18.6	55.6
77	31.2	24.4	36.6





#38
Ethyl Acetate
Concen: 47.20 ug/l
RT: 7.15 min Scan# 1667
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 95874

Ion	Ratio	Lower	Upper
43	100		
61	0.0	10.8	16.2#
70	10.6	8.5	12.7

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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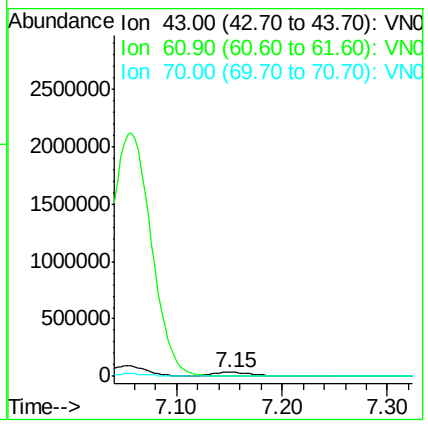
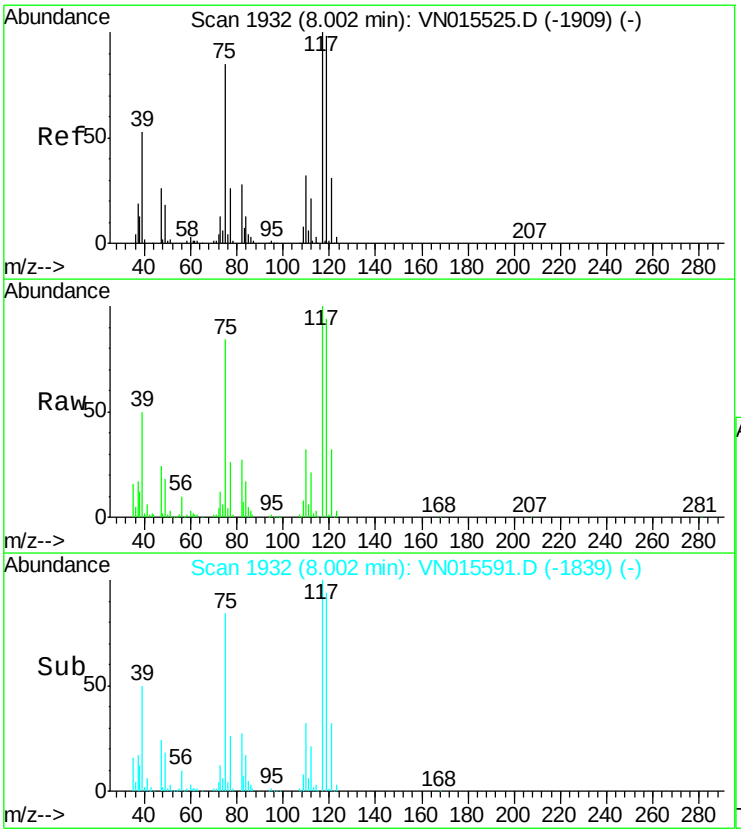
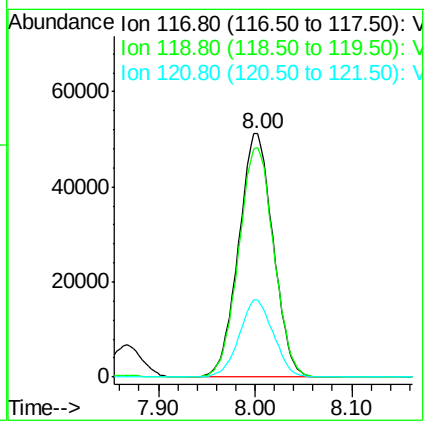




#39
Carbon Tetrachloride
Concen: 48.24 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:117 Resp: 126969

Ion	Ratio	Lower	Upper
117	100		
119	94.0	78.0	117.0
121	31.7	24.5	36.7



Instrument :
MSVOA_N
ClientSampleId :
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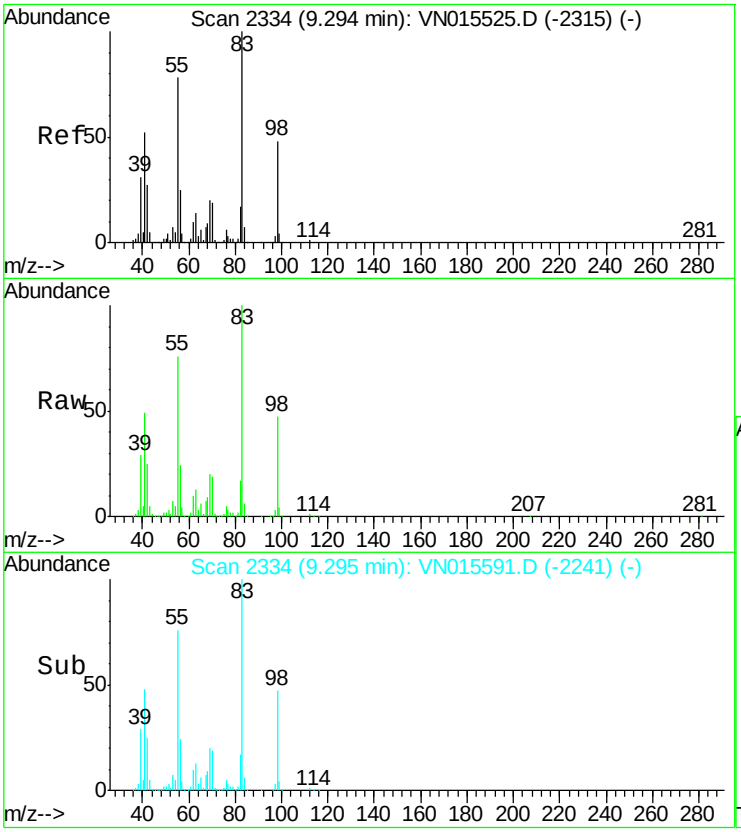
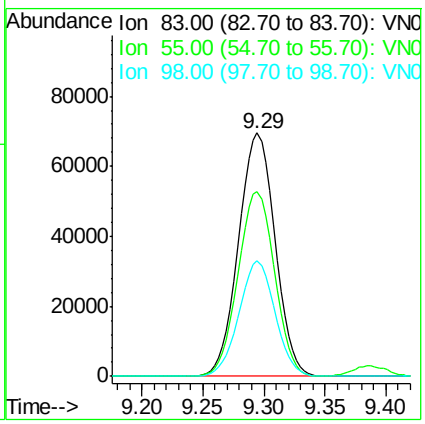
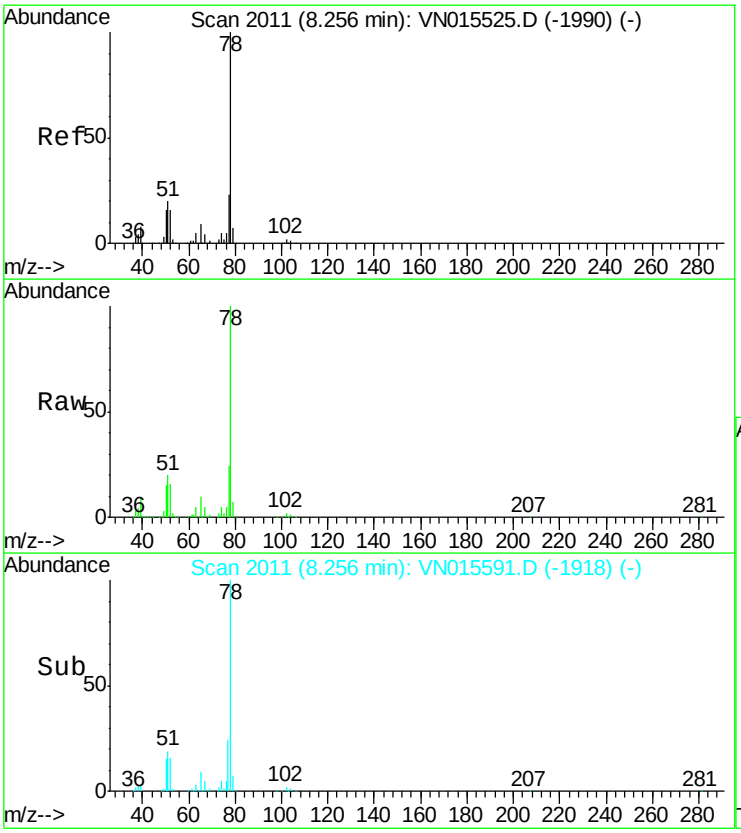


#40
Methylcyclohexane
Concen: 48.97 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 83 Resp: 144143

Ion	Ratio	Lower	Upper
83	100		
55	76.0	62.5	93.7
98	47.2	38.2	57.2

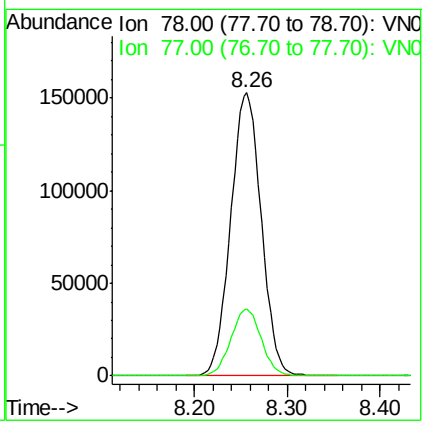




#41
Benzene
Concen: 50.96 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 78 Resp: 349827

Ion	Ratio	Lower	Upper
78	100		
77	23.7	18.5	27.7



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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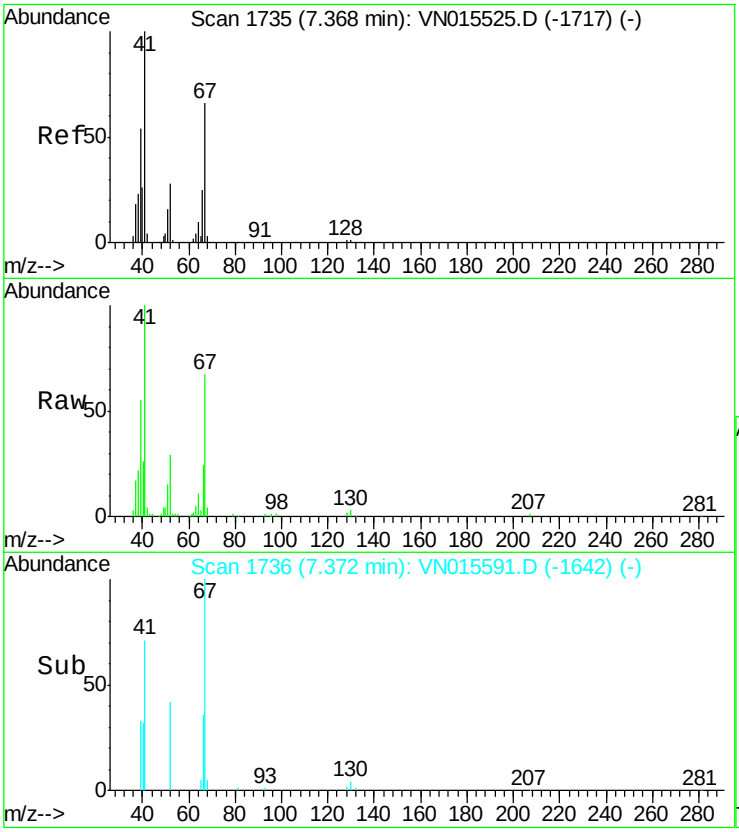
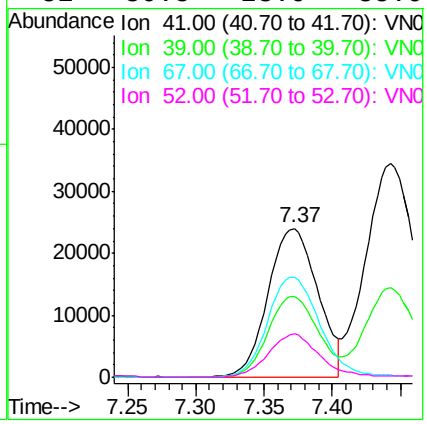
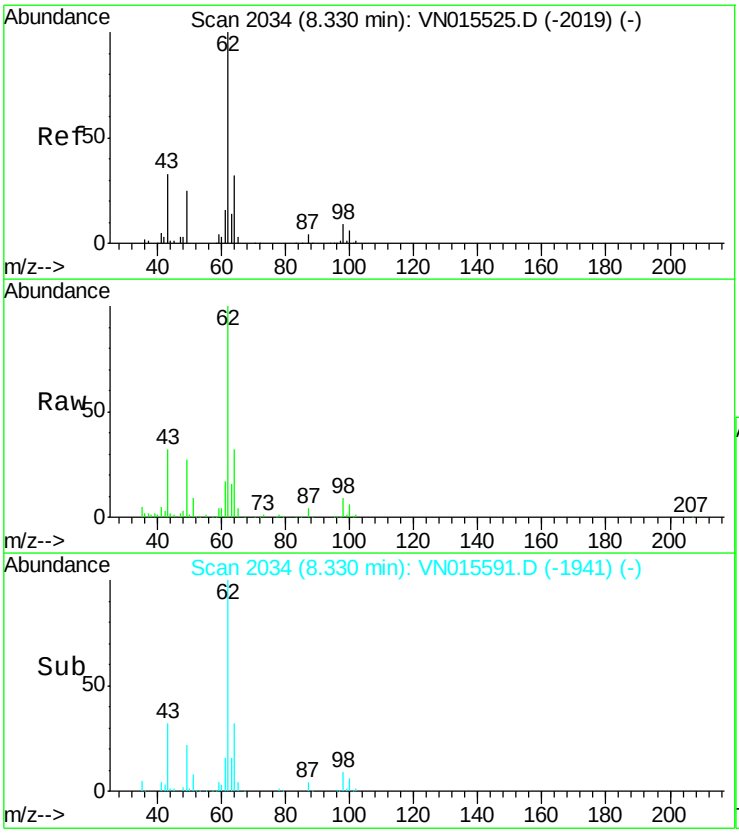


#42
Methacrylonitrile
Concen: 50.59 ug/l
RT: 7.37 min Scan# 1736
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 41 Resp: 60738

Ion	Ratio	Lower	Upper
41	100		
39	55.7	45.0	67.4
67	71.5	54.9	82.3
52	30.5	23.9	35.9

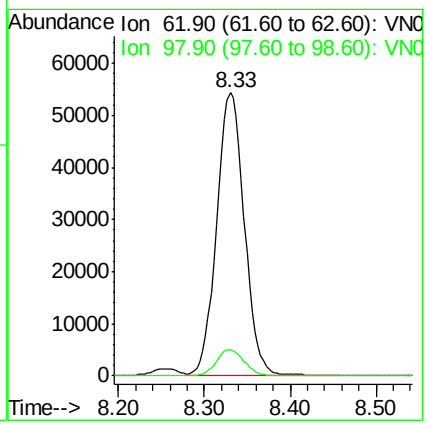


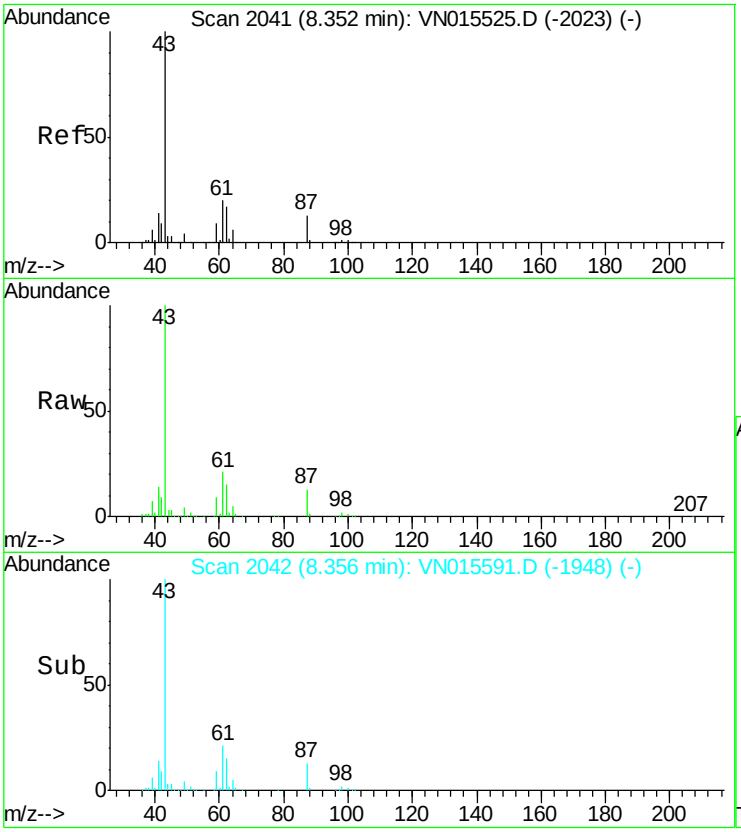


#43
1,2-Dichloroethane
Concen: 48.50 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 62 Resp: 121601

Ion	Ratio	Lower	Upper
62	100		
98	9.4	0.0	18.2





#44
Isopropyl Acetate
Concen: 48.34 ug/l
RT: 8.36 min Scan# 2042
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 176638

Ion	Ratio	Lower	Upper
43	100		
61	26.5	20.4	30.6
87	13.5	10.4	15.6

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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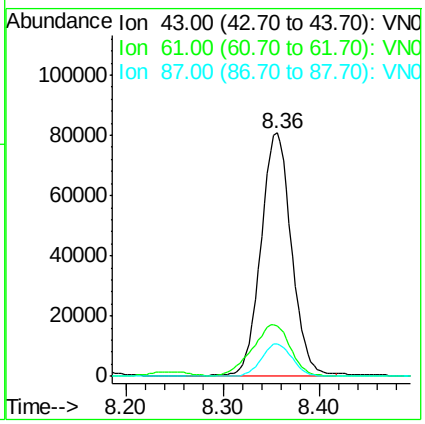
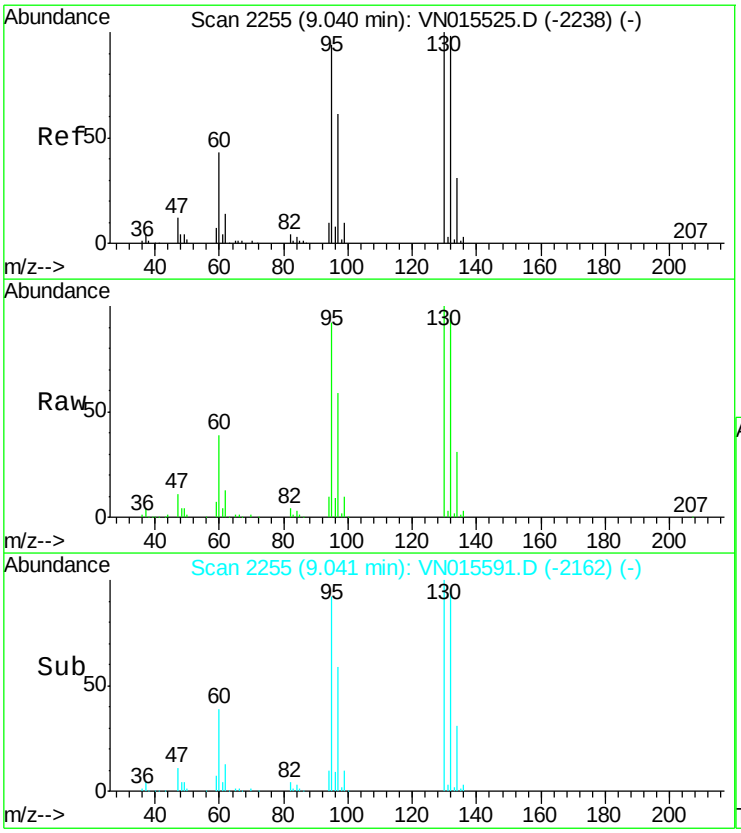
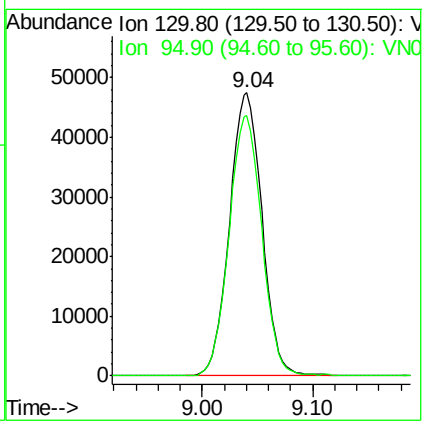




#45
Trichloroethene
Concen: 50.38 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:130 Resp: 96857

Ion	Ratio	Lower	Upper
130	100		
95	91.8	0.0	187.0



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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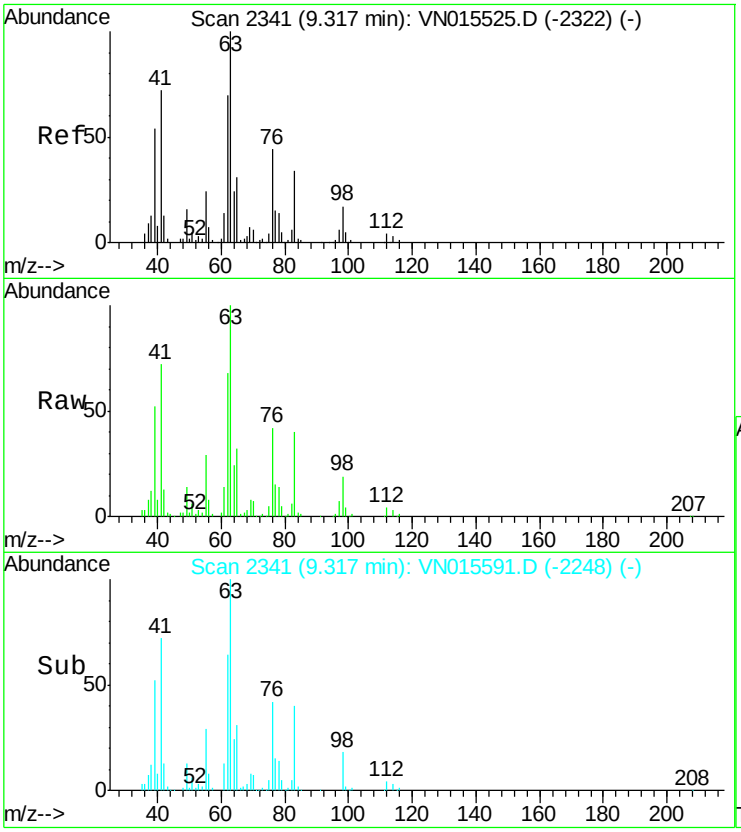
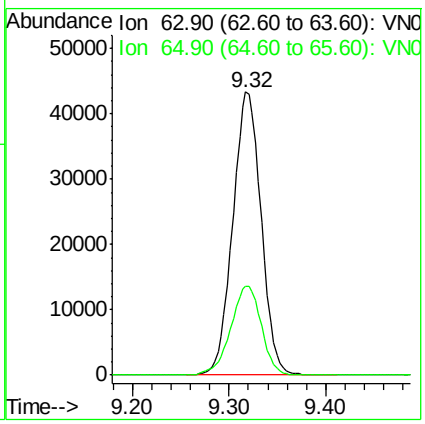
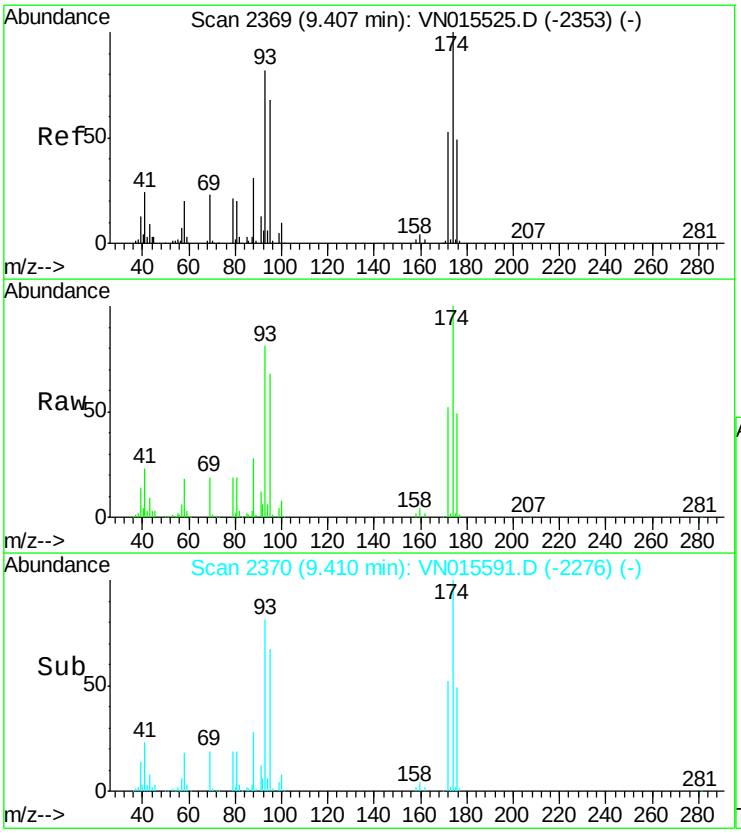


#46
1,2-Dichloropropane
Concen: 49.95 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 63 Resp: 88089

Ion	Ratio	Lower	Upper
63	100		
65	31.6	25.0	37.4

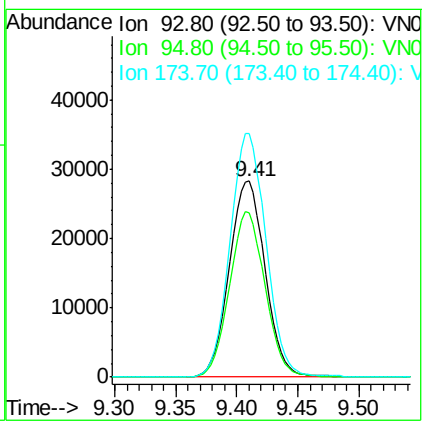




#47
Dibromomethane
Concen: 50.04 ug/l
RT: 9.41 min Scan# 2370
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 93 Resp: 58058

Ion	Ratio	Lower	Upper
93	100		
95	83.6	66.9	100.3
174	124.3	98.6	148.0



Instrument :
MSVOA_N
ClientSampleId :
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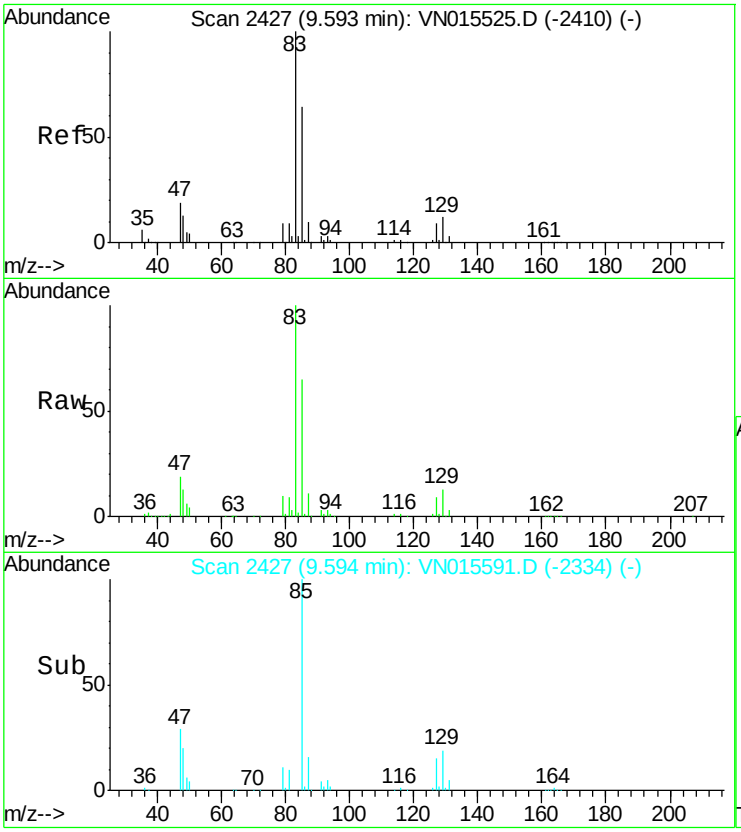
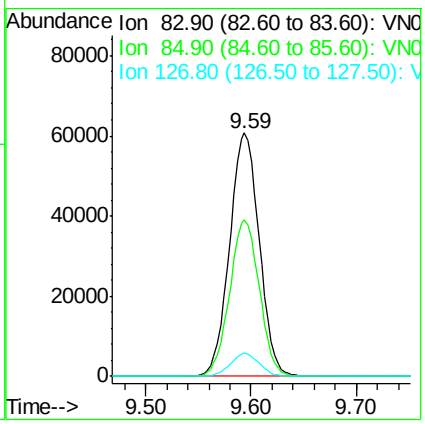
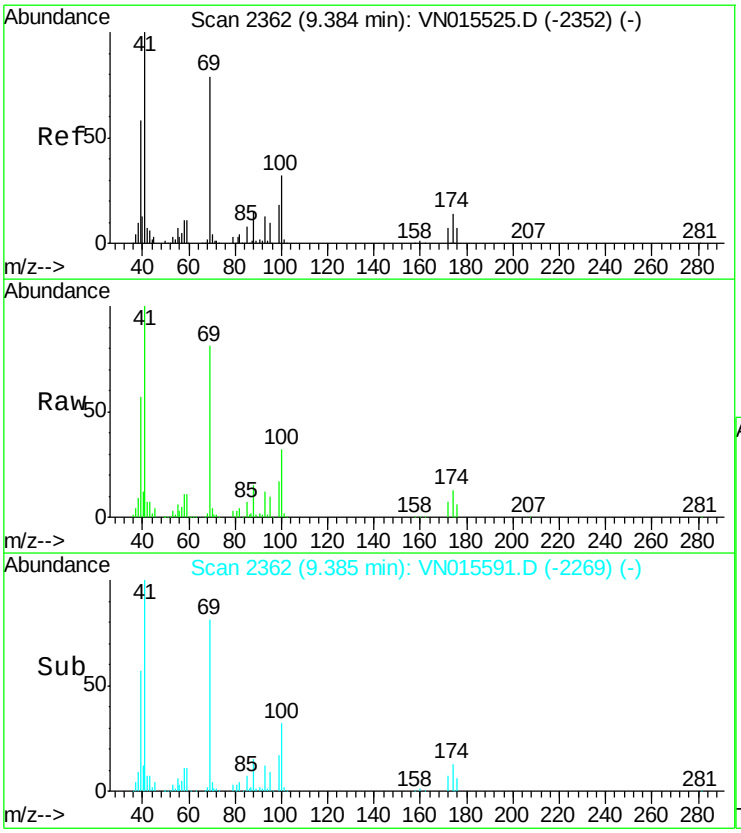


#48
Bromodichloromethane
Concen: 49.67 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 83 Resp: 118215

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.1	76.7
127	9.5	7.6	11.4

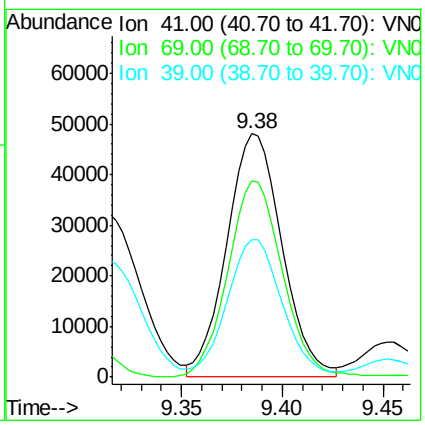


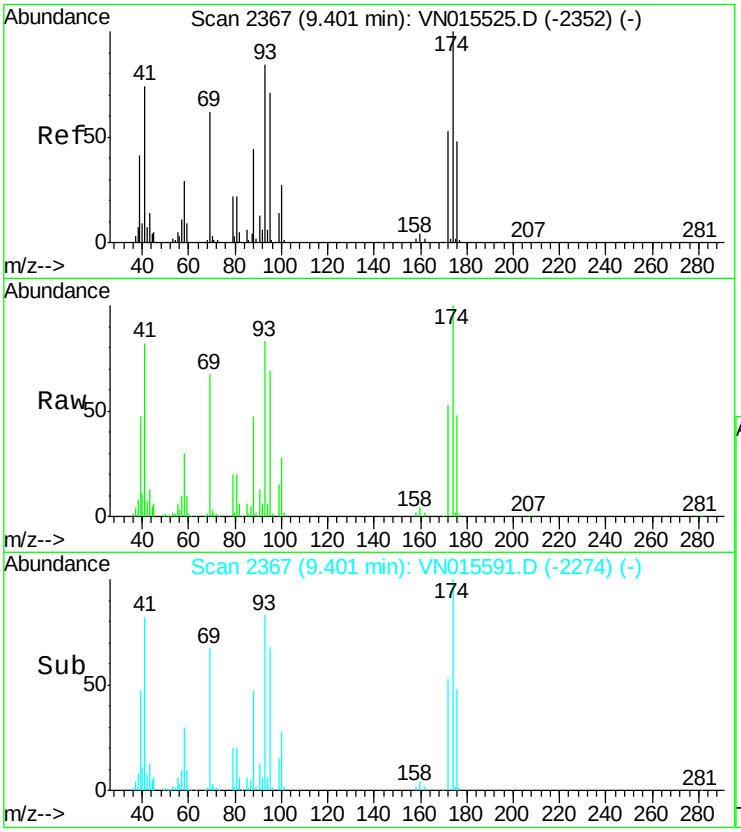


#49
Methyl methacrylate
Concen: 52.22 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 41 Resp: 91966

Ion	Ratio	Lower	Upper
41	100		
69	80.0	62.8	94.2
39	56.9	46.4	69.6





#50
1,4-Dioxane
Concen: 1152.23 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 88 Resp: 28314

Ion	Ratio	Lower	Upper
88	100		
43	31.0	26.4	39.6
58	70.5	56.6	84.8

Instrument :
MSVOA_N
ClientSampleId :
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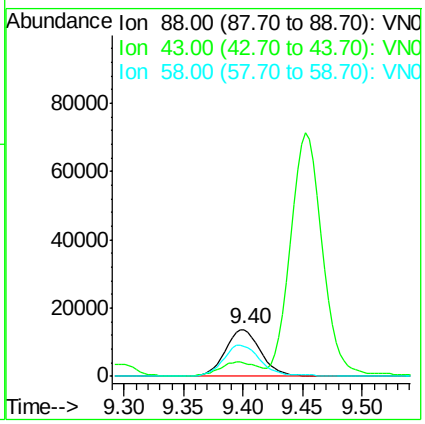
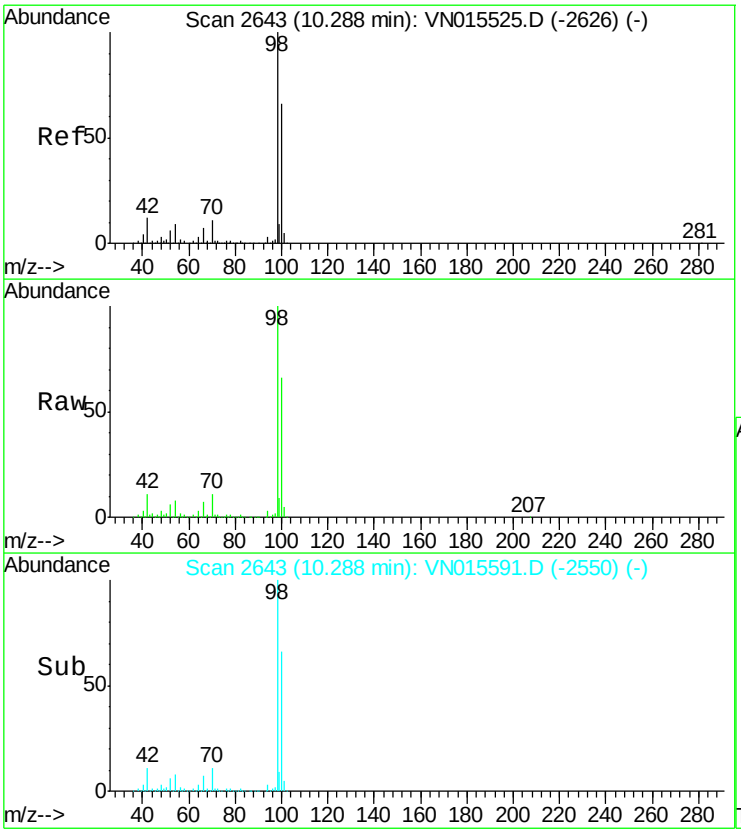
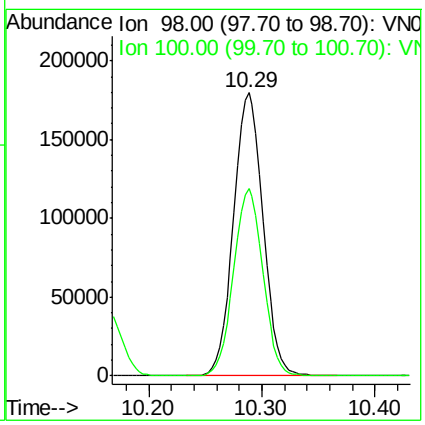


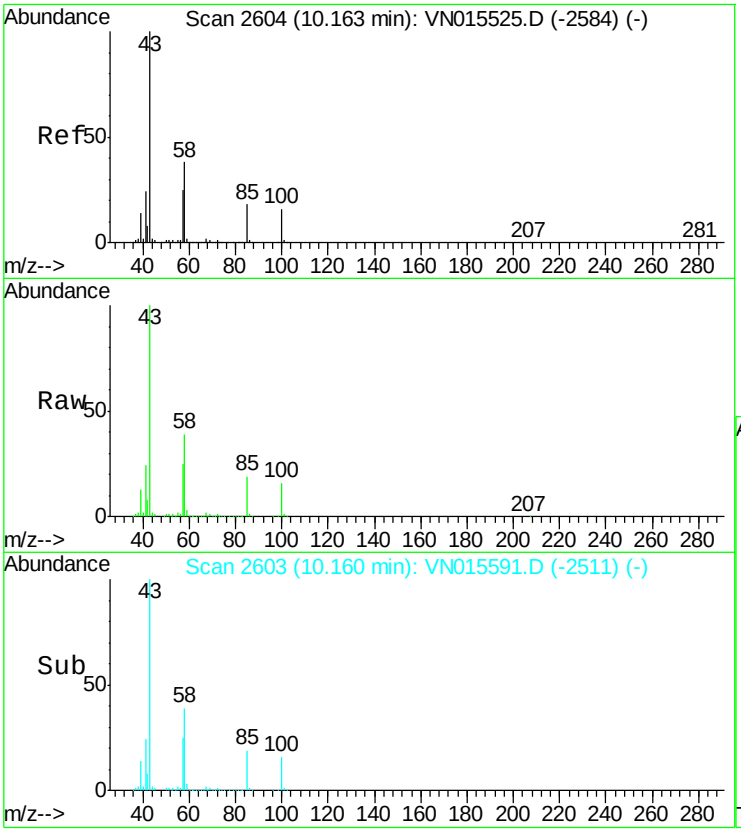


#51
Toluene-d8
Concen: 52.83 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 98 Resp: 327212

Ion	Ratio	Lower	Upper
98	100		
100	65.7	52.3	78.5





#52
4-Methyl-2-Pentanone
Concen: 255.33 ug/l
RT: 10.16 min Scan# 2603
Delta R.T. -0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 515736

Ion	Ratio	Lower	Upper
43	100		
58	39.0	30.2	45.2

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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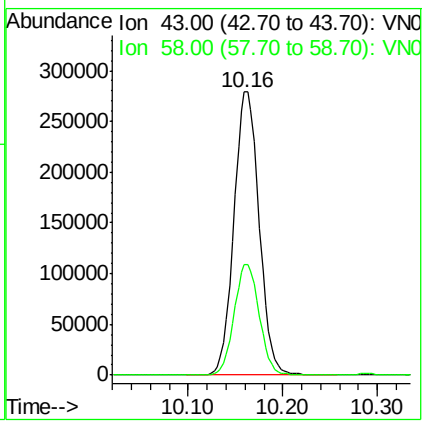
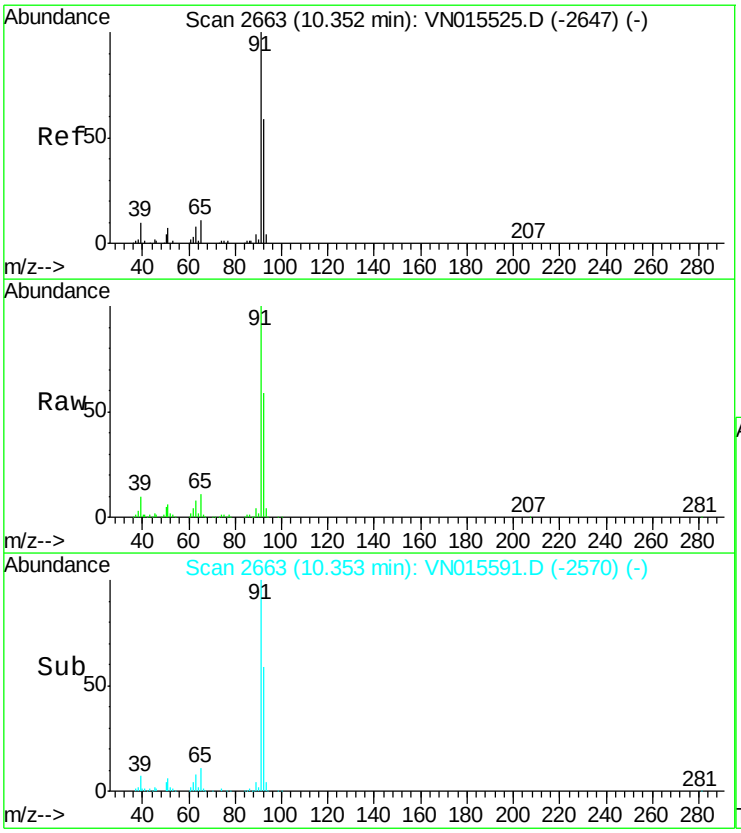
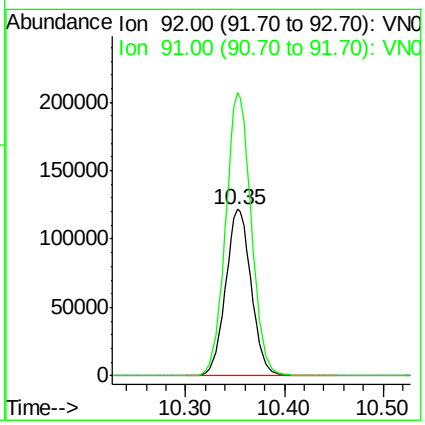


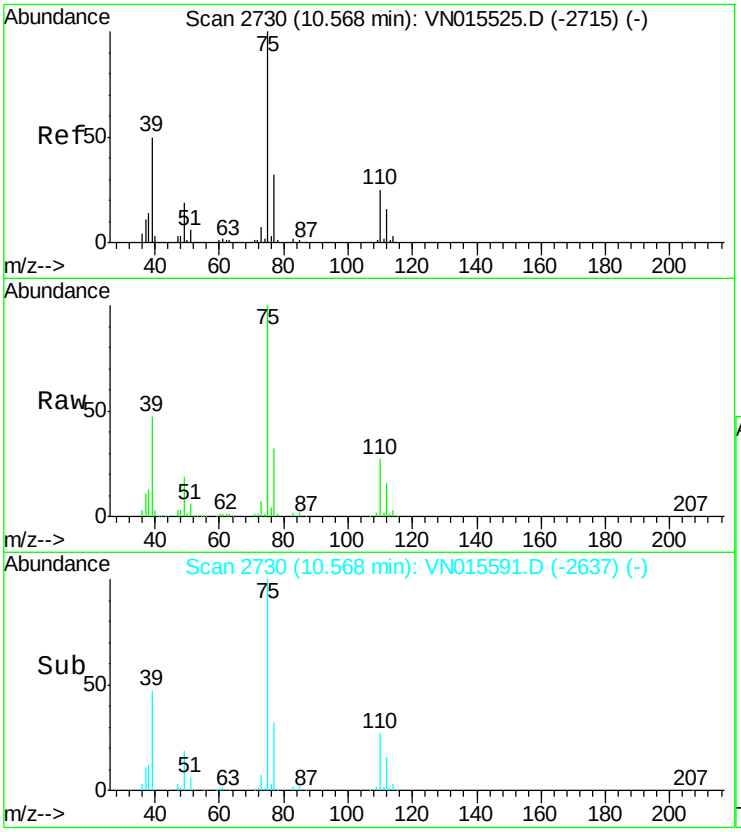


#53
Toluene
Concen: 50.54 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 92 Resp: 219932

Ion	Ratio	Lower	Upper
92	100		
91	170.3	136.2	204.4





#54
t-1,3-Dichloropropene
Concen: 47.00 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 75 Resp: 114396

Ion	Ratio	Lower	Upper
75	100		
77	31.6	26.0	39.0

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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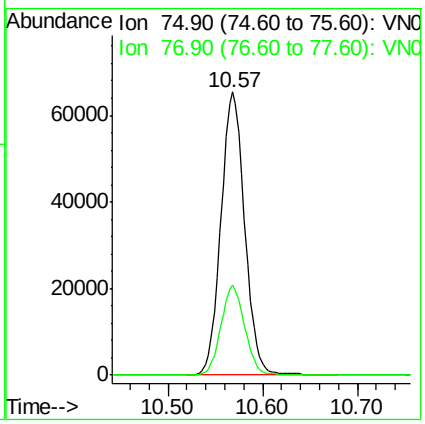
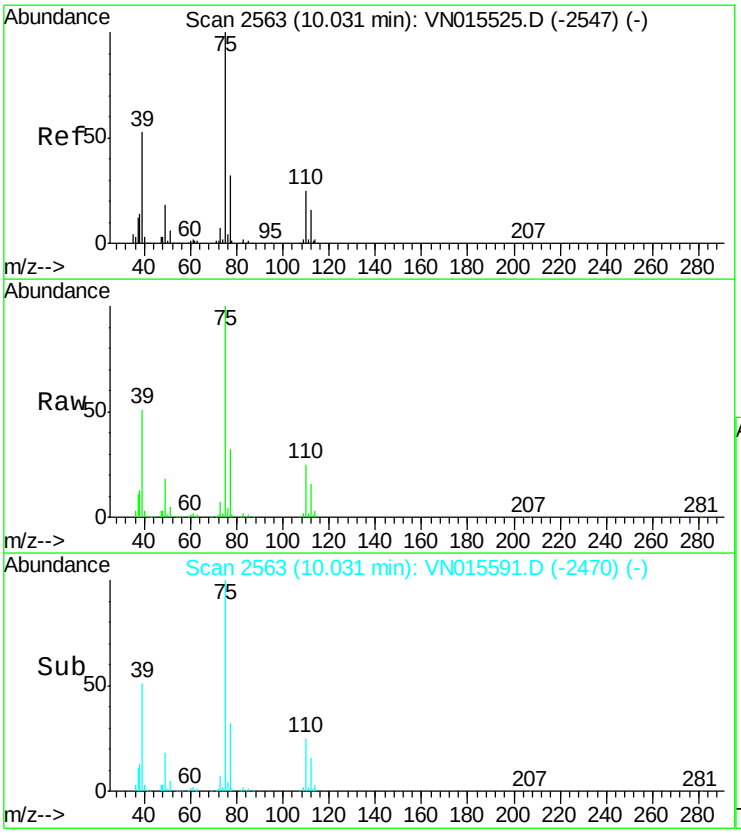
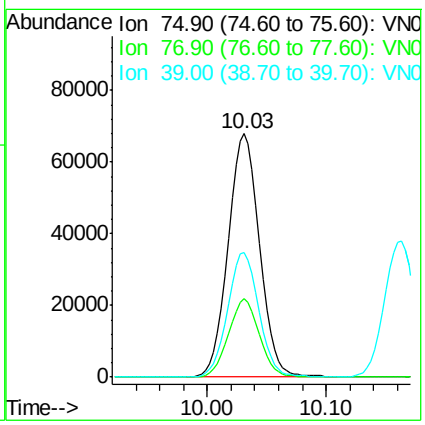


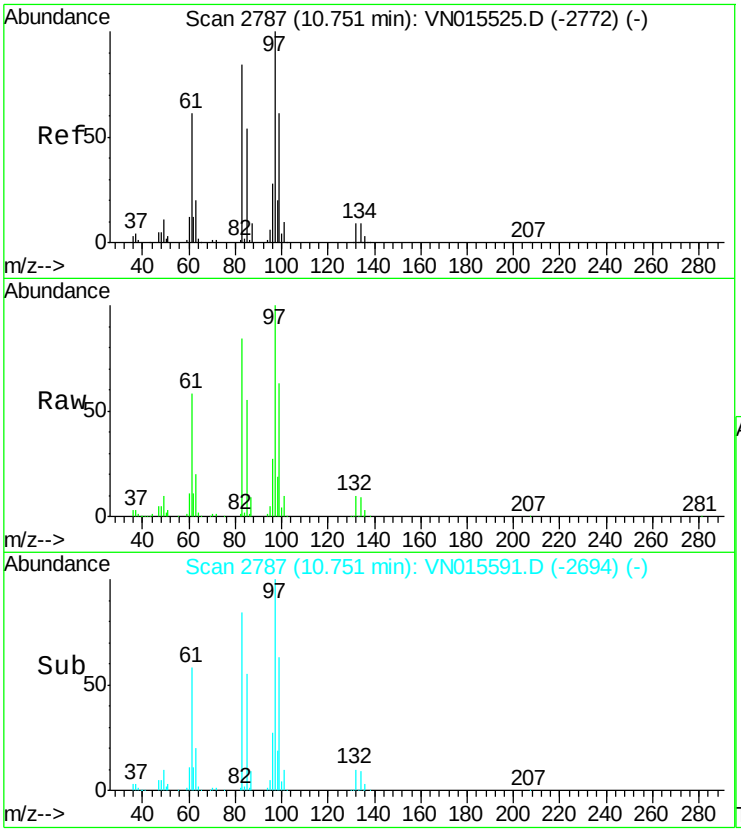


#55
cis-1,3-Dichloropropene
Concen: 45.96 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 75 Resp: 124510

Ion	Ratio	Lower	Upper
75	100		
77	32.2	25.4	38.2
39	51.0	42.2	63.4





#56
1,1,2-Trichloroethane
Concen: 51.45 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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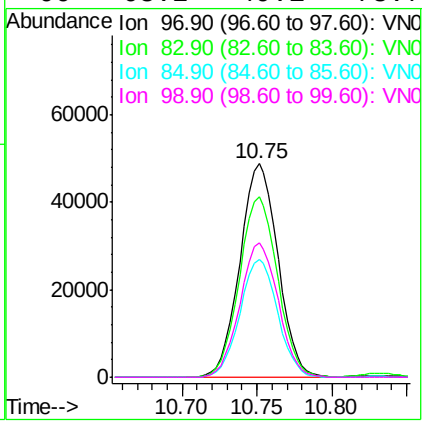
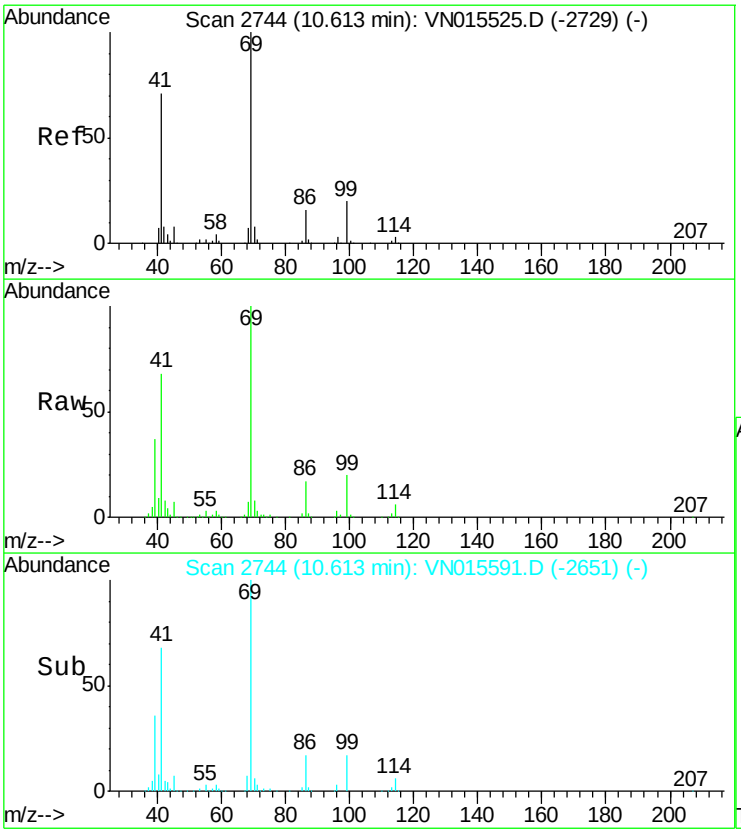
Tgt Ion: 97 Resp: 86508

Ion	Ratio	Lower	Upper
97	100		
83	84.3	67.0	100.4
85	55.4	42.9	64.3
99	63.2	49.1	73.7

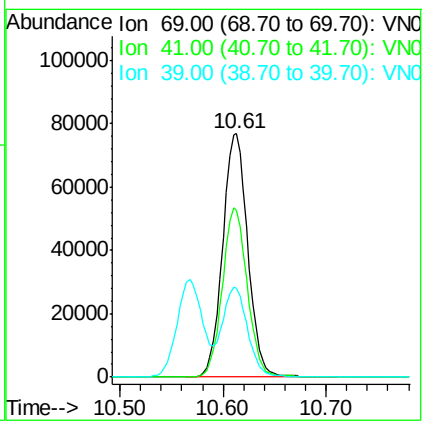


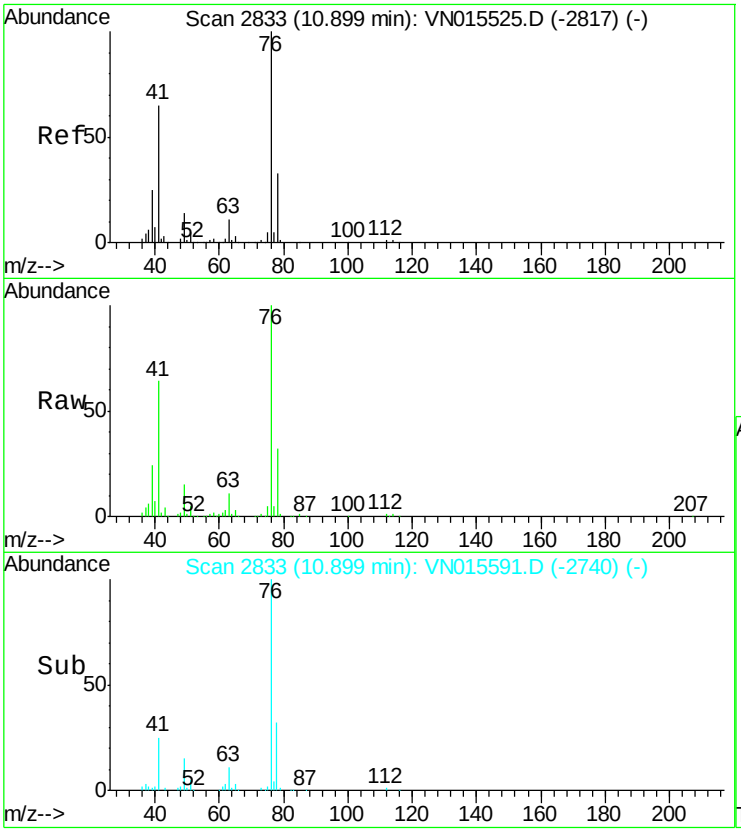


#57
Ethyl methacrylate
Concen: 52.37 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 69 Resp: 130256

Ion	Ratio	Lower	Upper
69	100		
41	68.0	56.9	85.3
39	36.7	32.0	48.0





#58
1,3-Dichloropropane
Concen: 50.29 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 76 Resp: 141693

Ion	Ratio	Lower	Upper
76	100		
78	32.5	26.3	39.5

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
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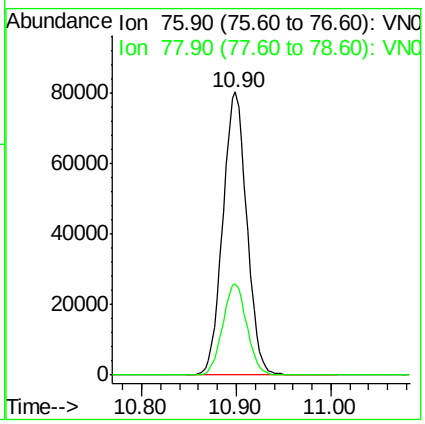
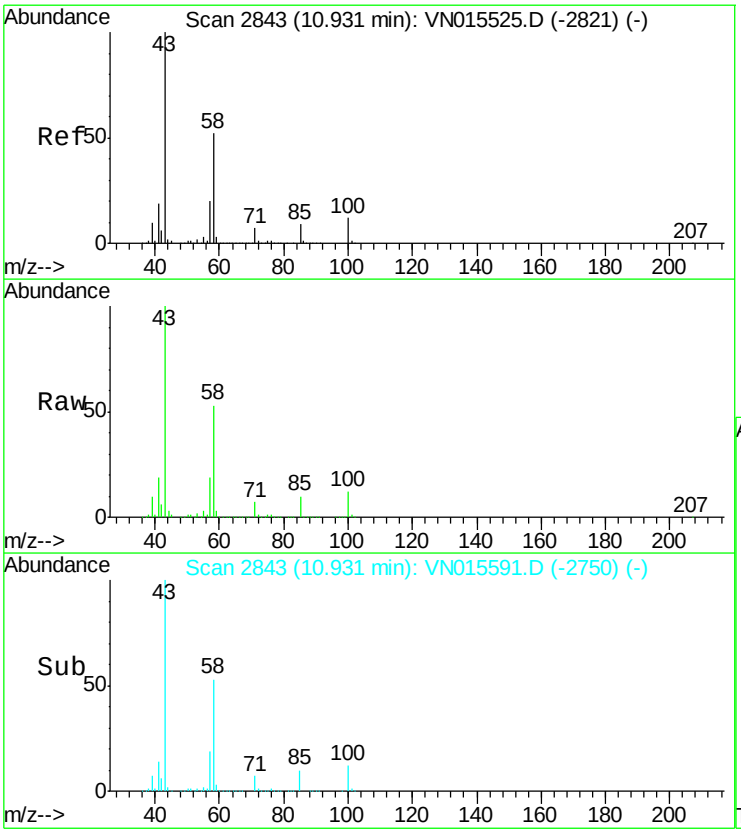
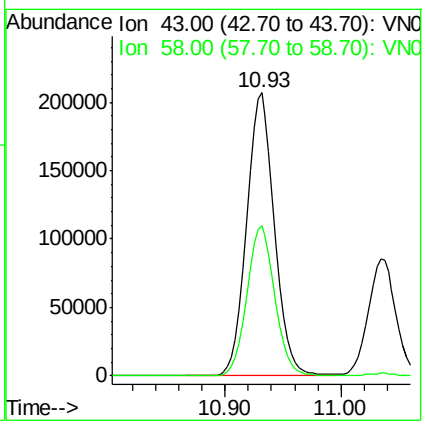


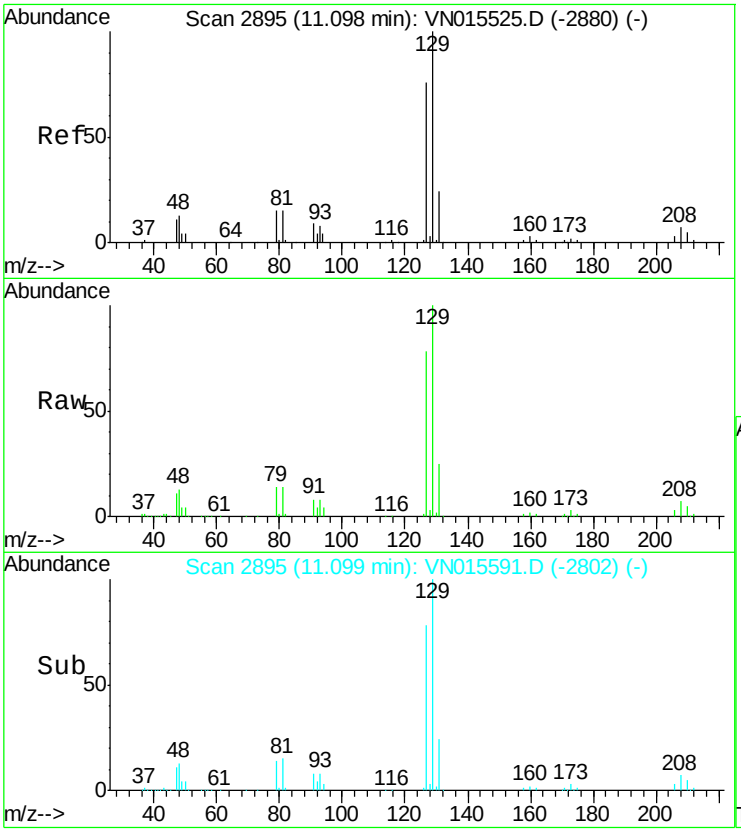


#60
2-Hexanone
Concen: 262.48 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 346195

Ion	Ratio	Lower	Upper
43	100		
58	53.3	26.0	78.0

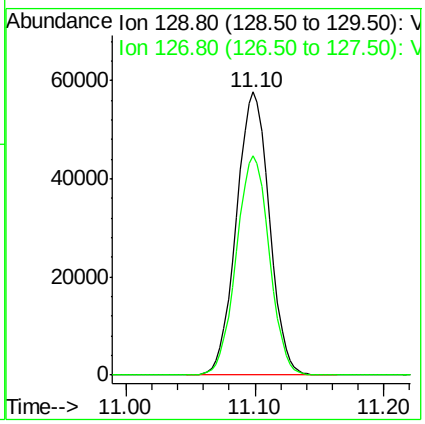




#61
Dibromochloromethane
Concen: 51.20 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:129 Resp: 102804

Ion	Ratio	Lower	Upper
129	100		
127	77.4	38.6	116.0



Instrument :
MSVOA_N
ClientSampleId :
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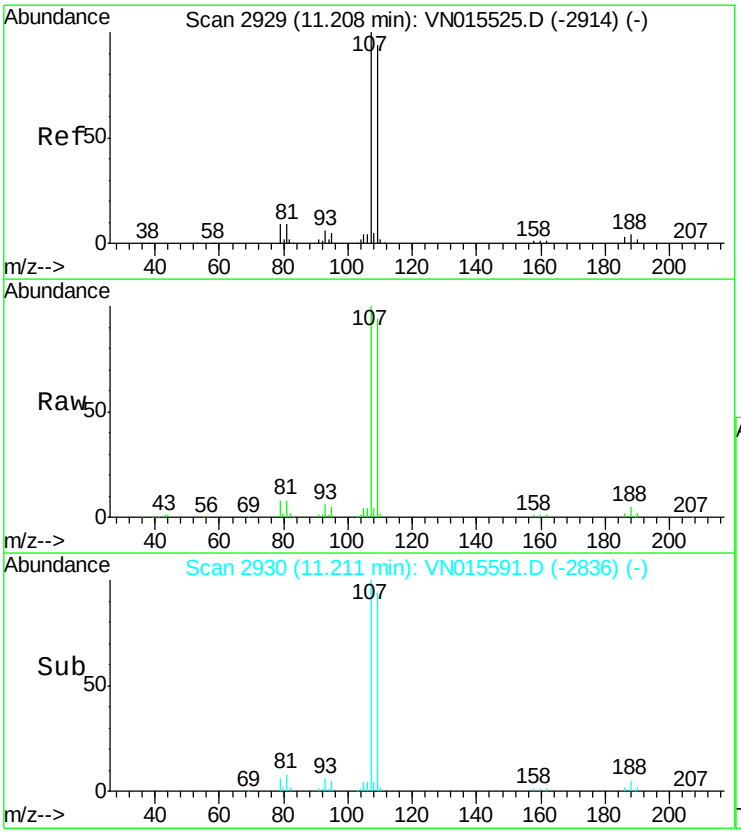
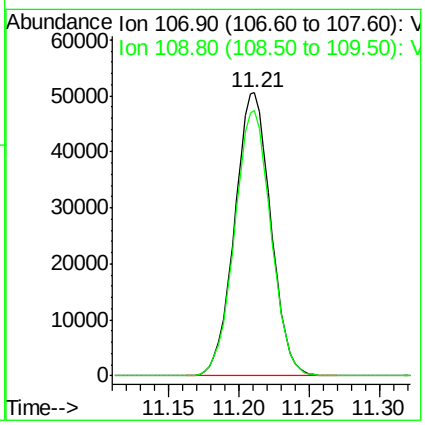
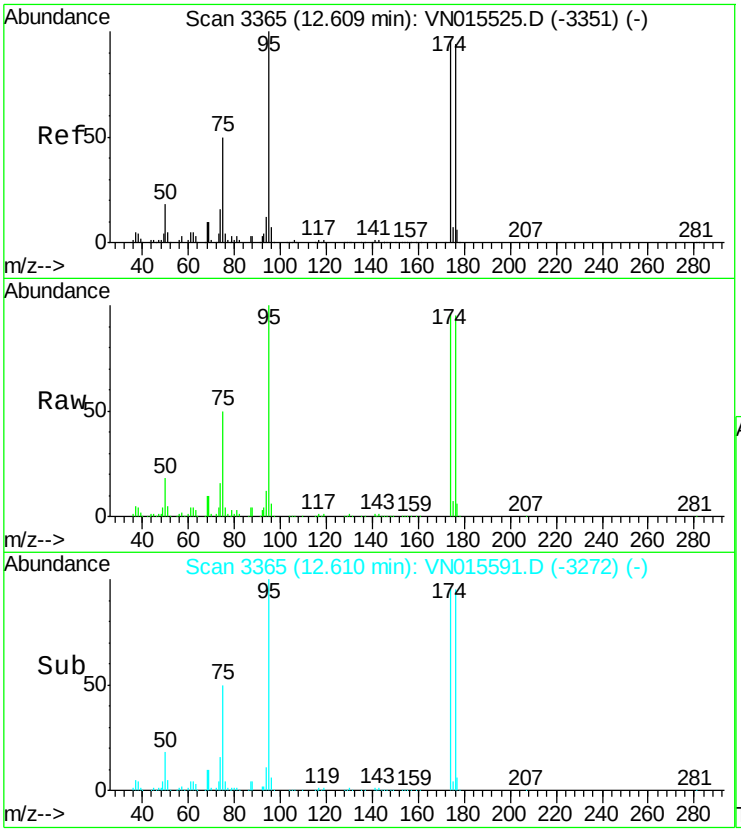


#62
1,2-Dibromoethane
Concen: 52.23 ug/l
RT: 11.21 min Scan# 2930
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:107 Resp: 90761

Ion	Ratio	Lower	Upper
107	100		
109	94.5	75.8	113.6





#63
4-Bromofluorobenzene
Concen: 54.18 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 95 Resp: 114949

Ion	Ratio	Lower	Upper
95	100		
174	97.1	0.0	191.8
176	94.2	0.0	186.8

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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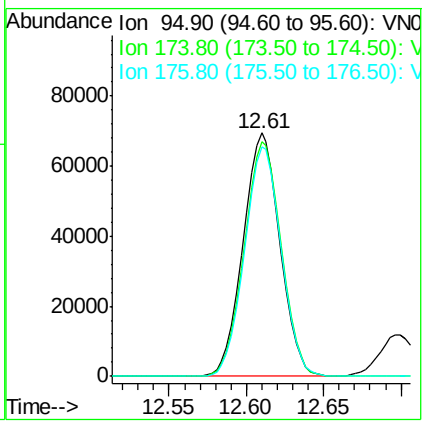
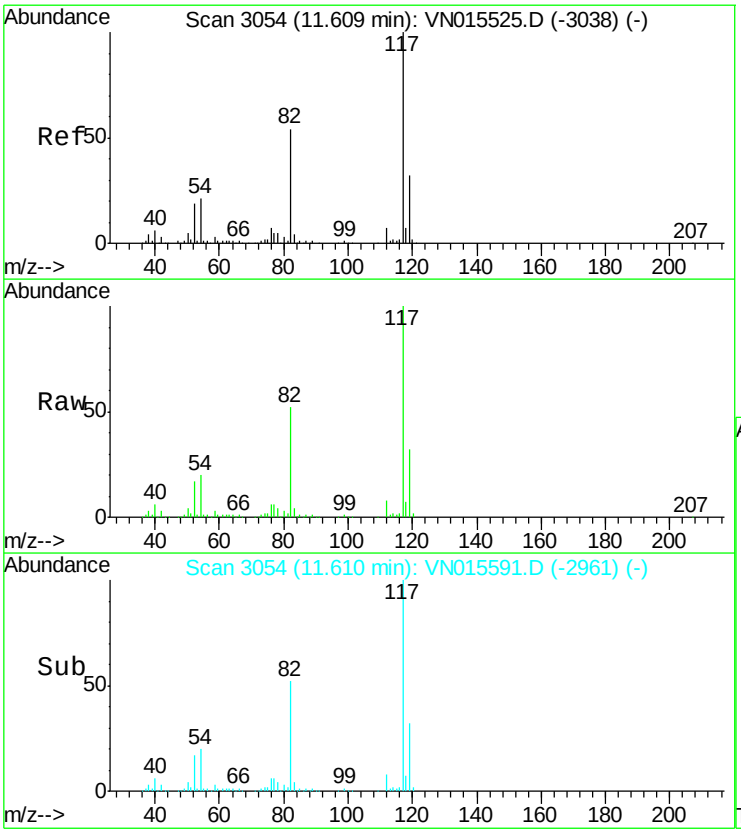
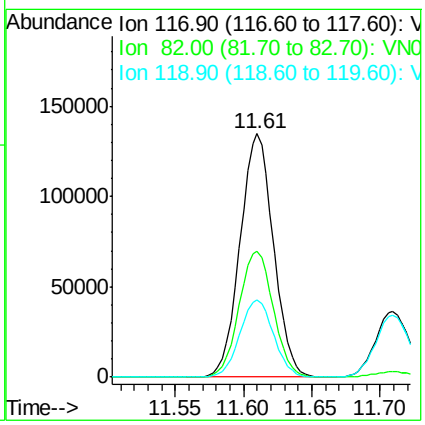


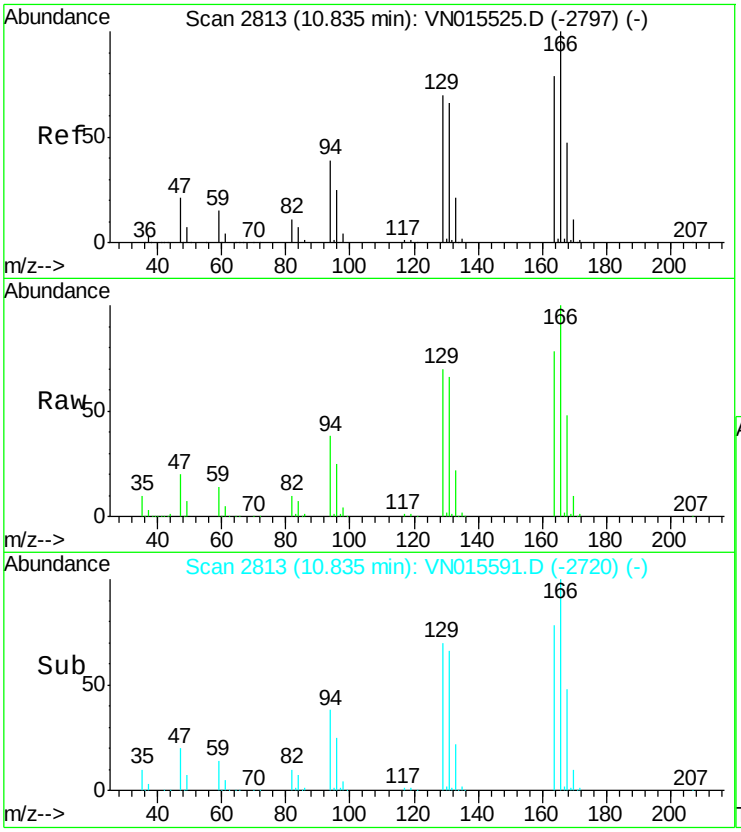


#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:117 Resp: 228735

Ion	Ratio	Lower	Upper
117	100		
82	51.8	43.3	64.9
119	31.7	25.6	38.4





#65
Tetrachloroethene
Concen: 48.41 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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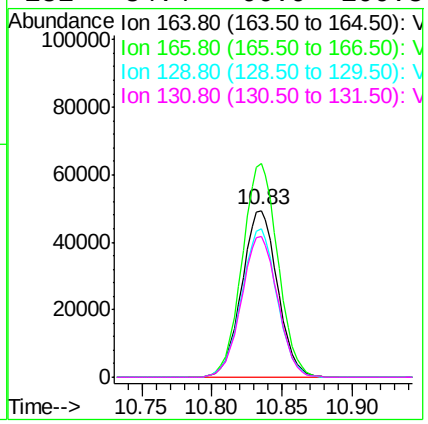
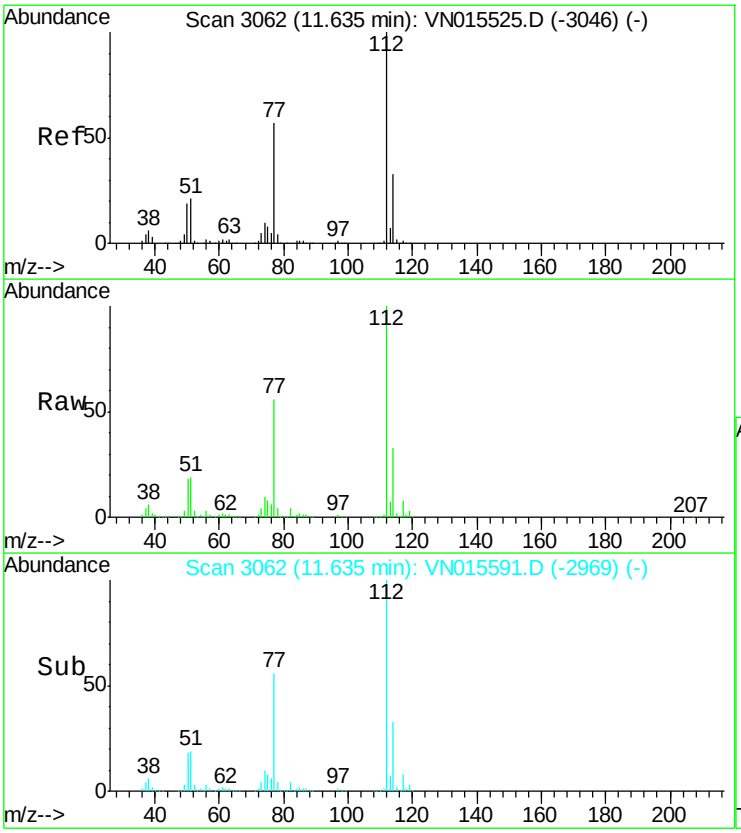
Tgt Ion:164 Resp: 87358

Ion	Ratio	Lower	Upper
164	100		
166	127.9	101.7	152.5
129	89.3	70.7	106.1
131	84.4	66.9	100.3

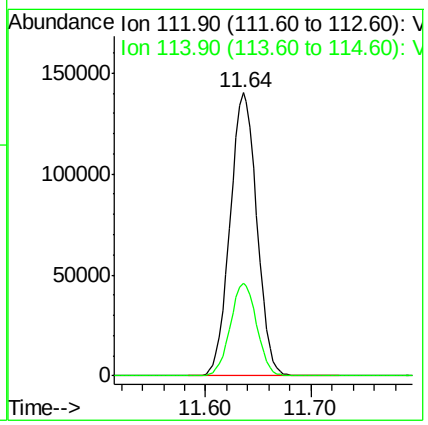


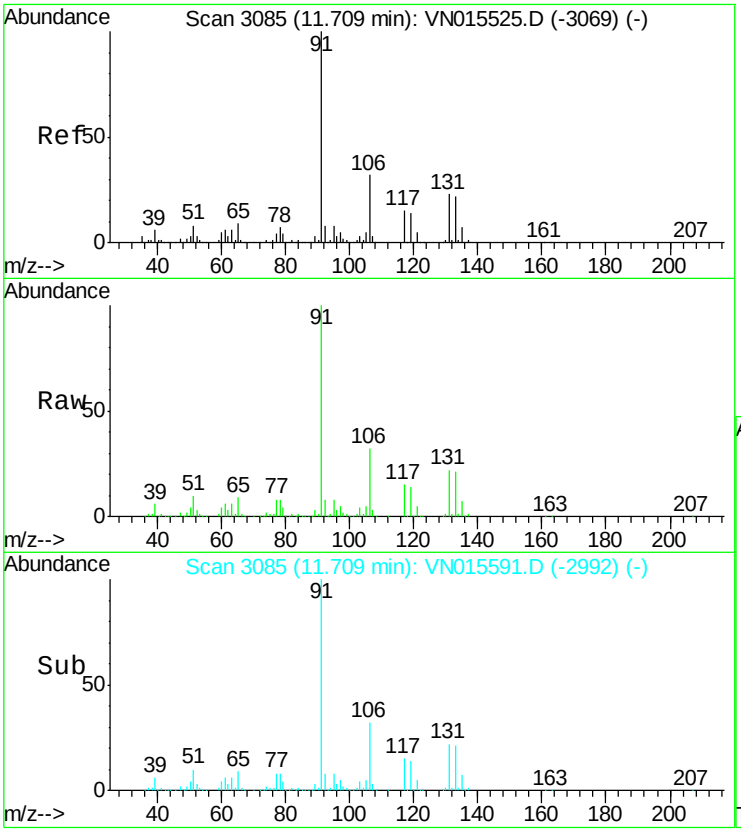


#66
Chlorobenzene
Concen: 49.67 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:112 Resp: 245884

Ion	Ratio	Lower	Upper
112	100		
114	32.7	26.2	39.2





#67
1,1,1,2-Tetrachloroethane
Concen: 49.75 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:131 Resp: 93848

Ion	Ratio	Lower	Upper
131	100		
133	96.4	47.7	143.1
119	63.9	31.5	94.5

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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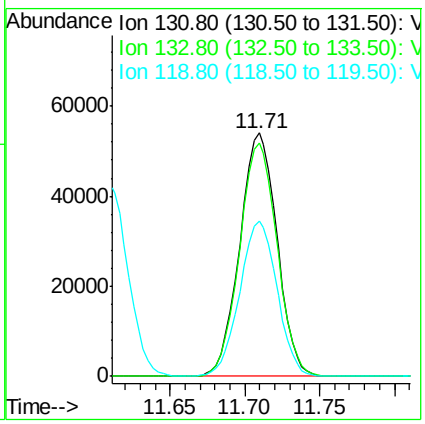
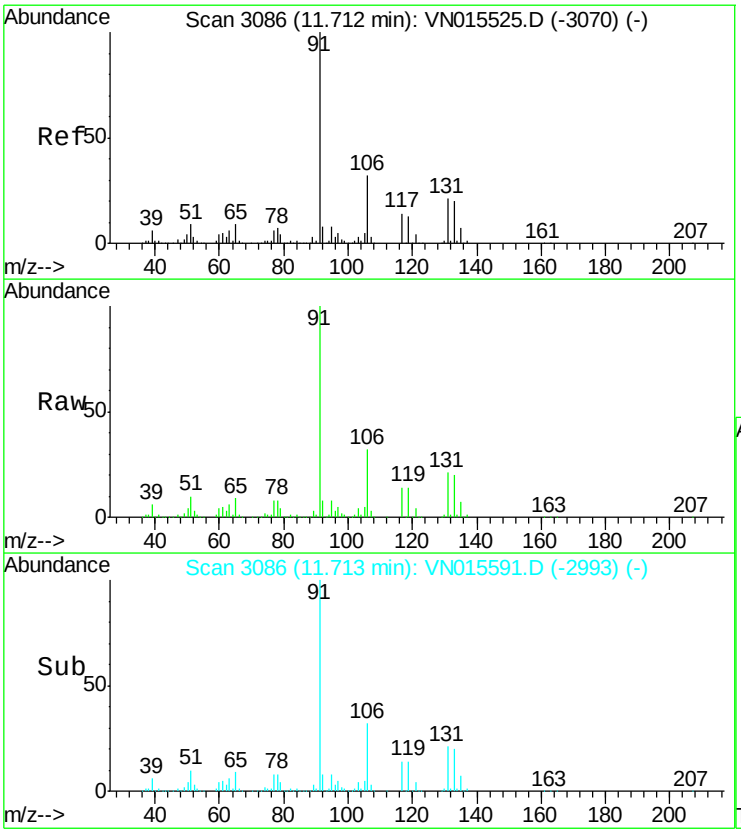
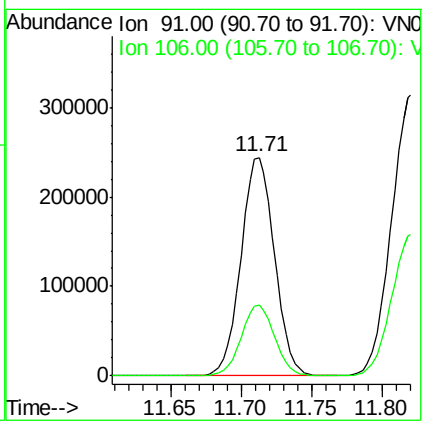


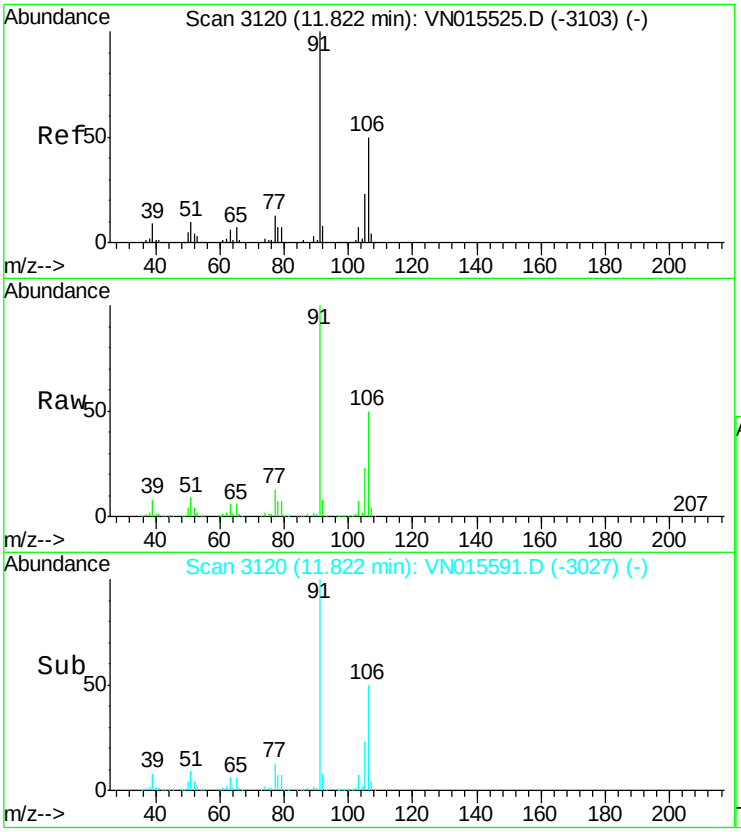


#68
Ethyl Benzene
Concen: 50.19 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 91 Resp: 406759

Ion	Ratio	Lower	Upper
91	100		
106	32.3	25.5	38.3

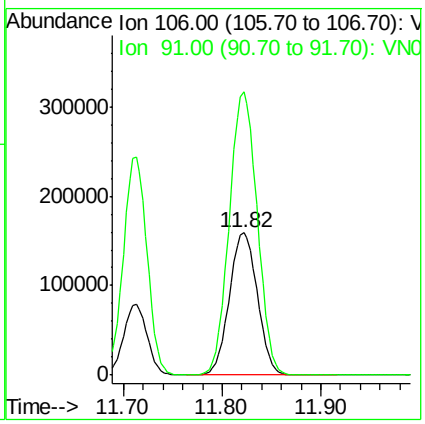




#69
m/p-Xylenes
Concen: 99.57 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:106 Resp: 314058

Ion	Ratio	Lower	Upper
106	100		
91	198.7	160.5	240.7



Instrument :
MSVOA_N
ClientSampleId :
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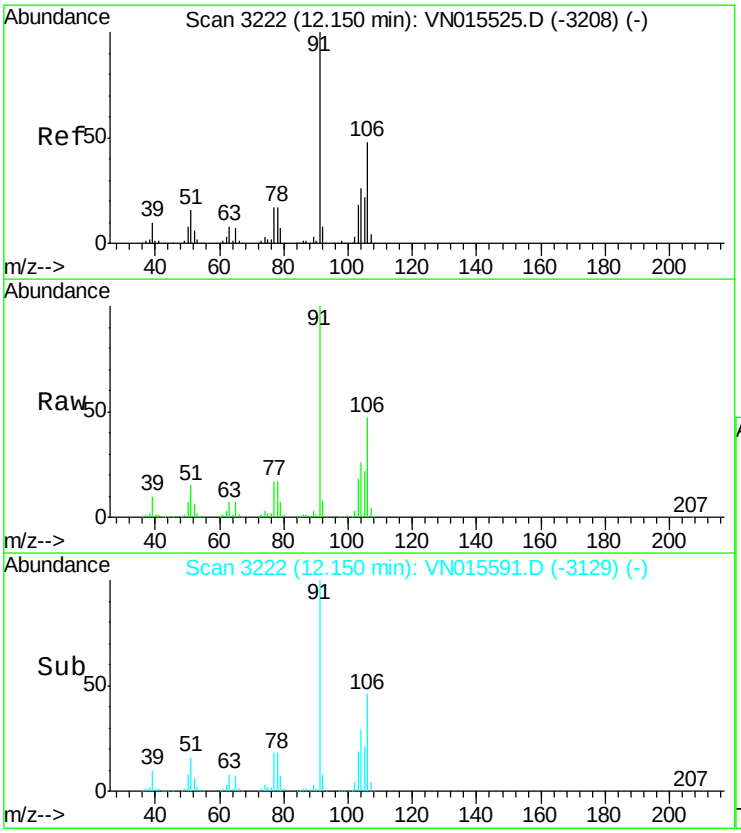
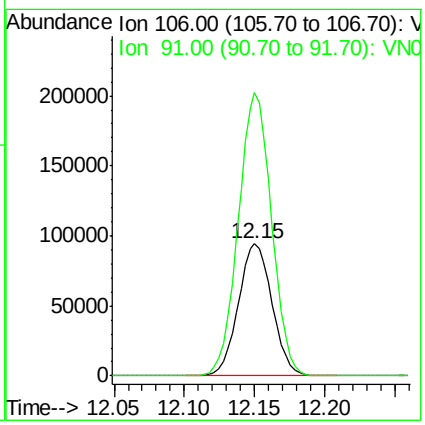
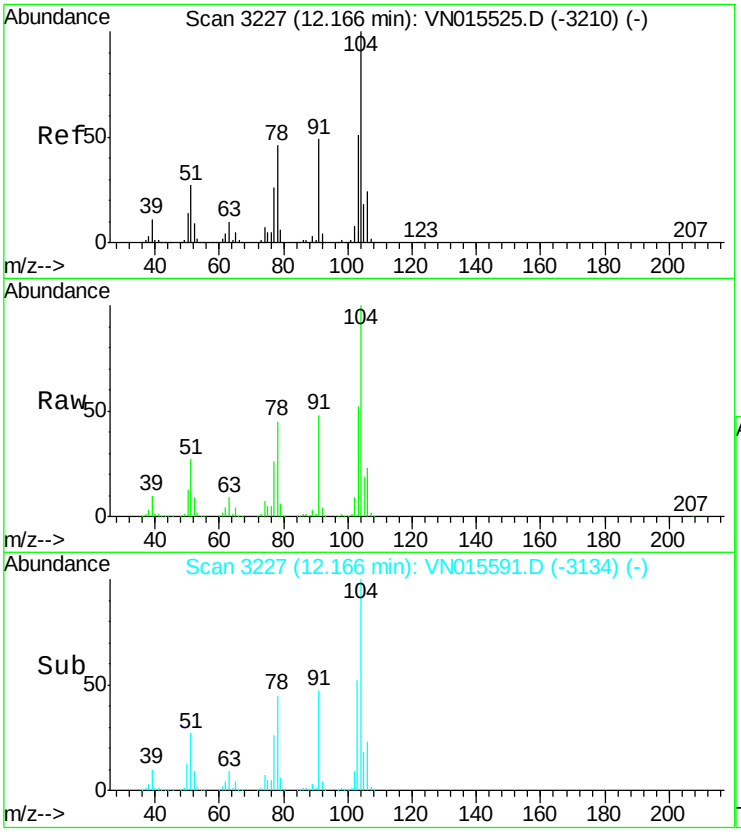


#70
o-Xylene
Concen: 50.89 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:106 Resp: 157938

Ion	Ratio	Lower	Upper
106	100		
91	211.5	104.9	314.7

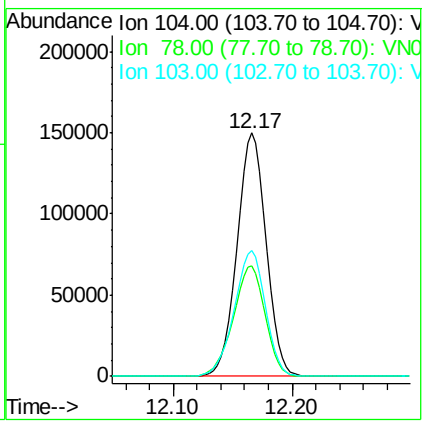




#71
Styrene
Concen: 51.92 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:104 Resp: 253127

Ion	Ratio	Lower	Upper
104	100		
78	49.8	40.1	60.1
103	55.7	44.0	66.0



Instrument :
MSVOA_N
ClientSampleId :
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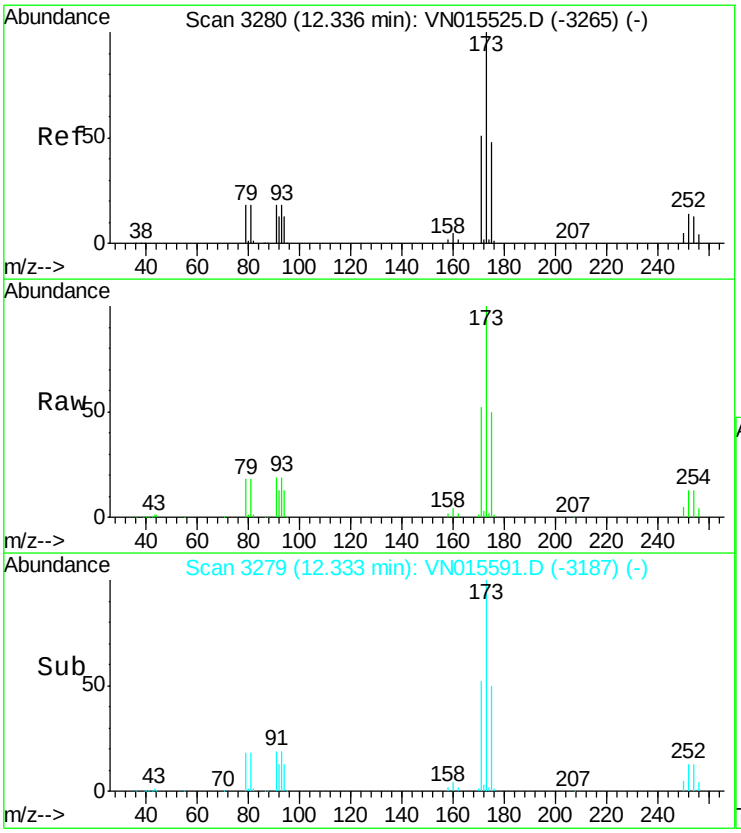
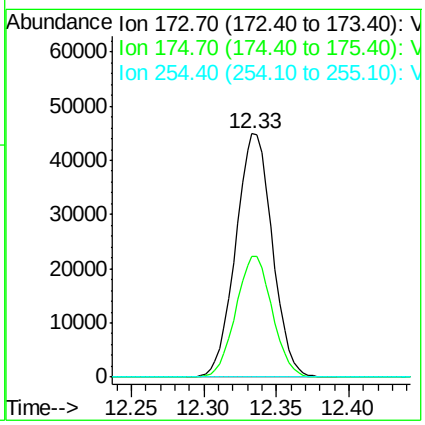
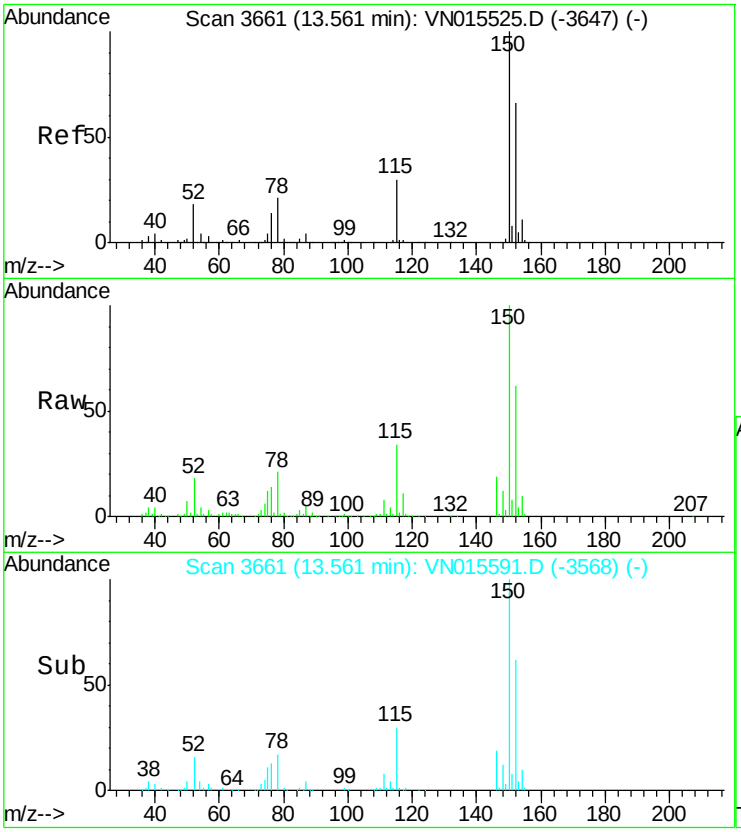


#72
Bromoform
Concen: 49.88 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:173 Resp: 78829

Ion	Ratio	Lower	Upper
173	100		
175	49.3	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:152 Resp: 107814

Ion	Ratio	Lower	Upper
152	100		
115	53.8	27.2	81.6
150	173.0	0.0	343.6

Instrument :
MSVOA_N
ClientSampleId :
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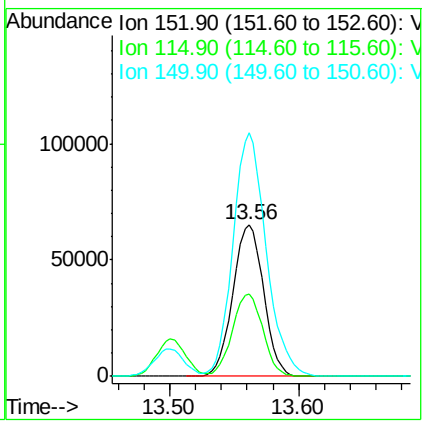
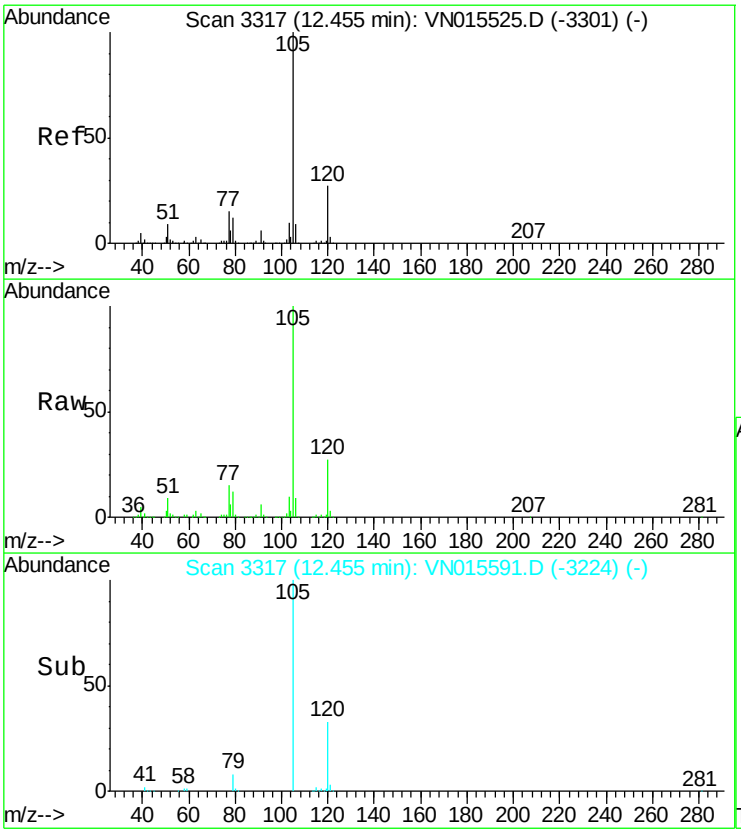
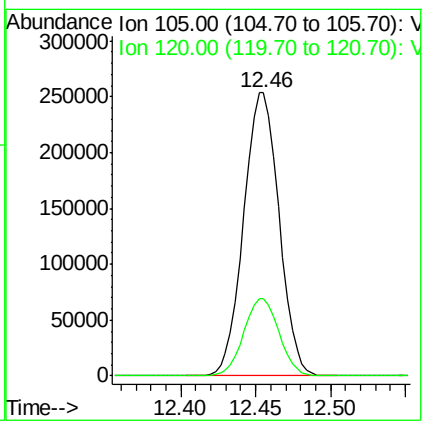


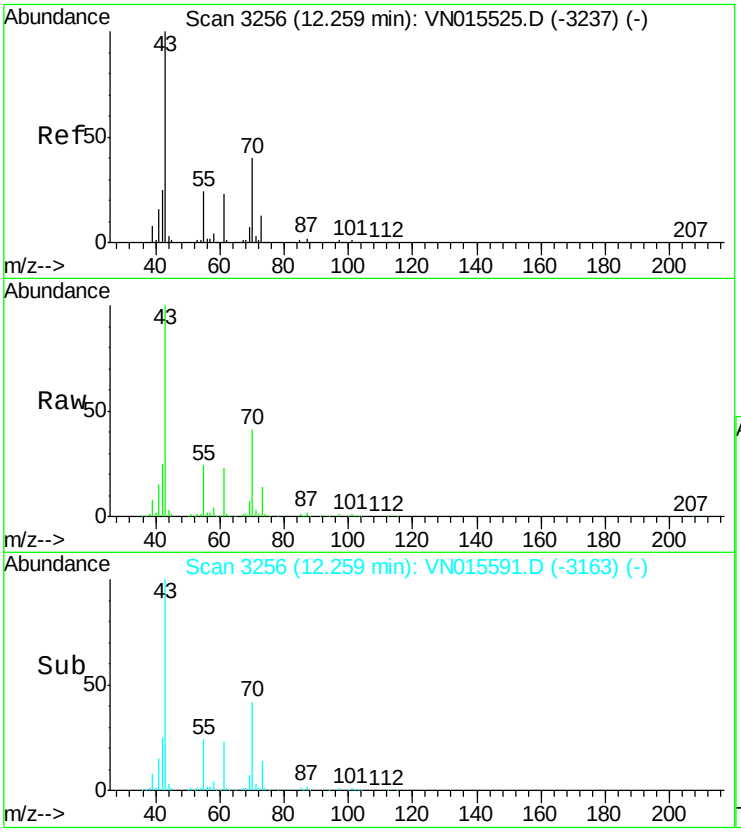


#74
Isopropylbenzene
Concen: 51.93 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:105 Resp: 418072

Ion	Ratio	Lower	Upper
105	100		
120	27.2	13.7	41.0

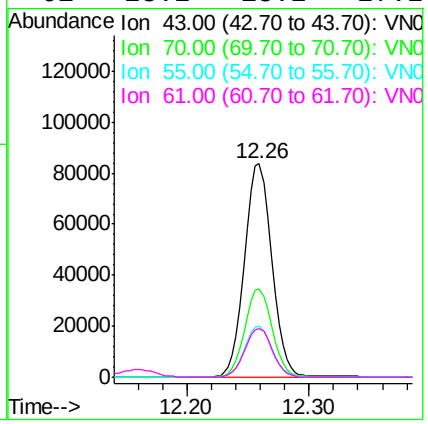




#75
N-amyl acetate
Concen: 45.50 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 43 Resp: 128516

Ion	Ratio	Lower	Upper
43	100		
70	41.5	32.0	48.0
55	24.1	18.5	27.7
61	23.2	18.2	27.2



Instrument :
MSVOA_N
ClientSampleId :
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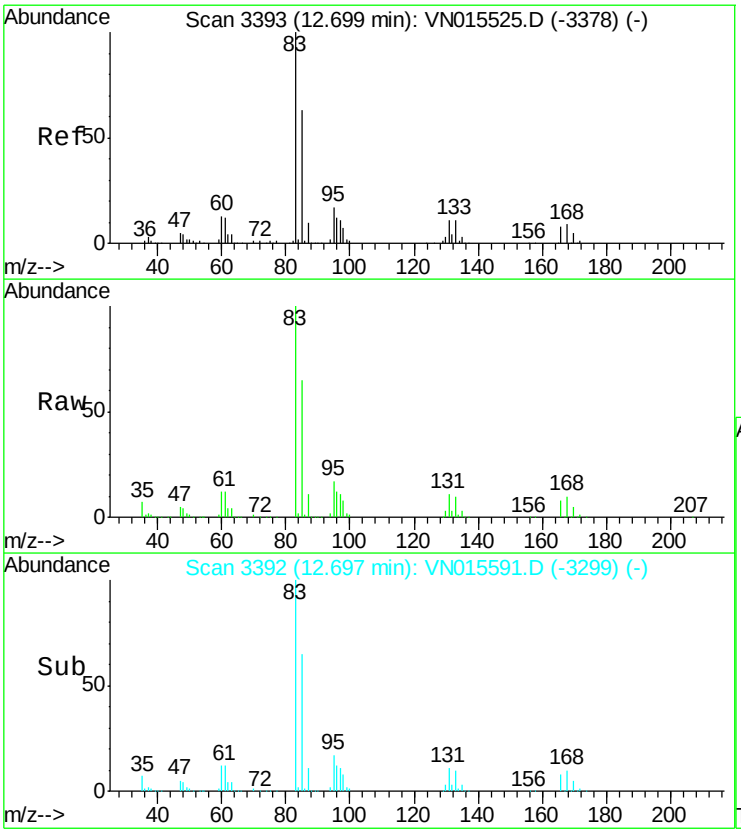
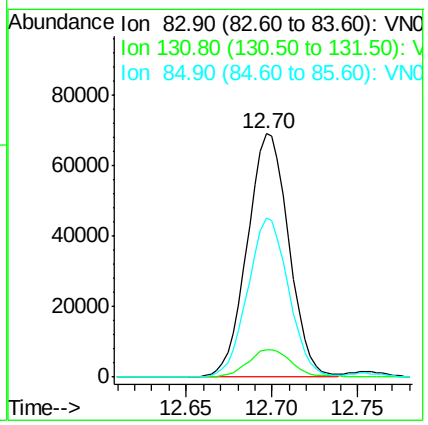
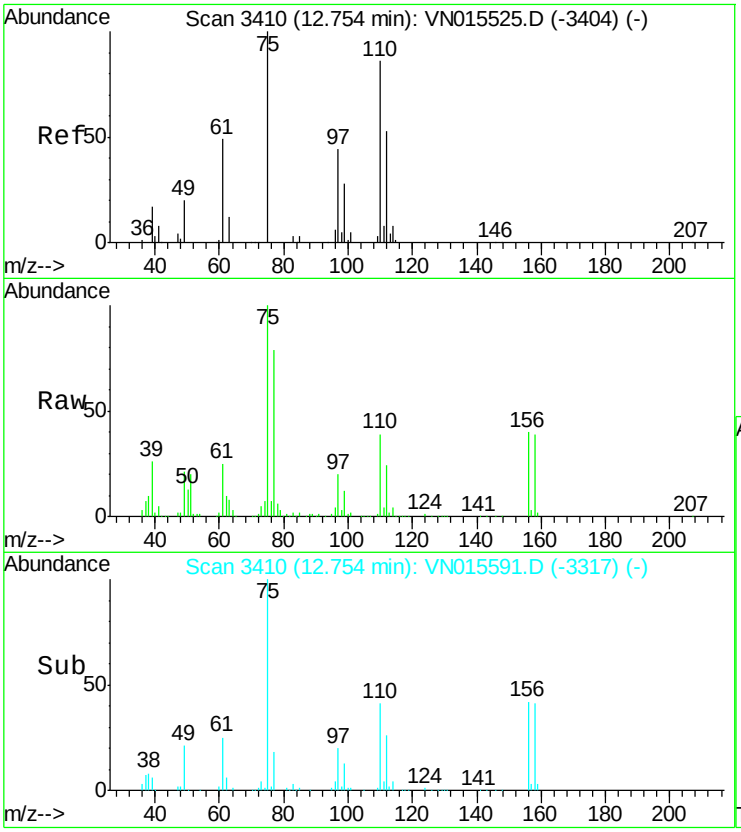


#76
1,1,2,2-Tetrachloroethane
Concen: 55.21 ug/l
RT: 12.70 min Scan# 3392
Delta R.T. -0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 83 Resp: 115600

Ion	Ratio	Lower	Upper
83	100		
131	12.0	5.9	17.6
85	64.5	31.9	95.7





#77
1,2,3-Trichloropropane
Concen: 53.17 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 75 Resp: 97746

Ion	Ratio	Lower	Upper
75	100		
77	196.1	90.4	271.2

Instrument :
MSVOA_N
ClientSampleId :
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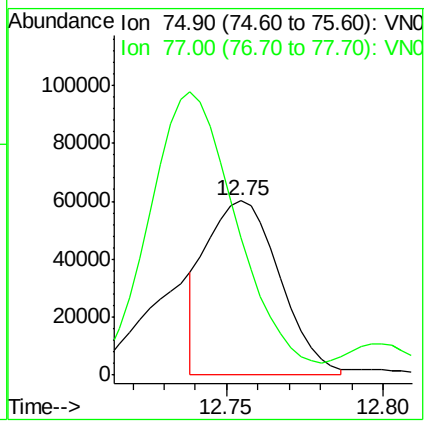
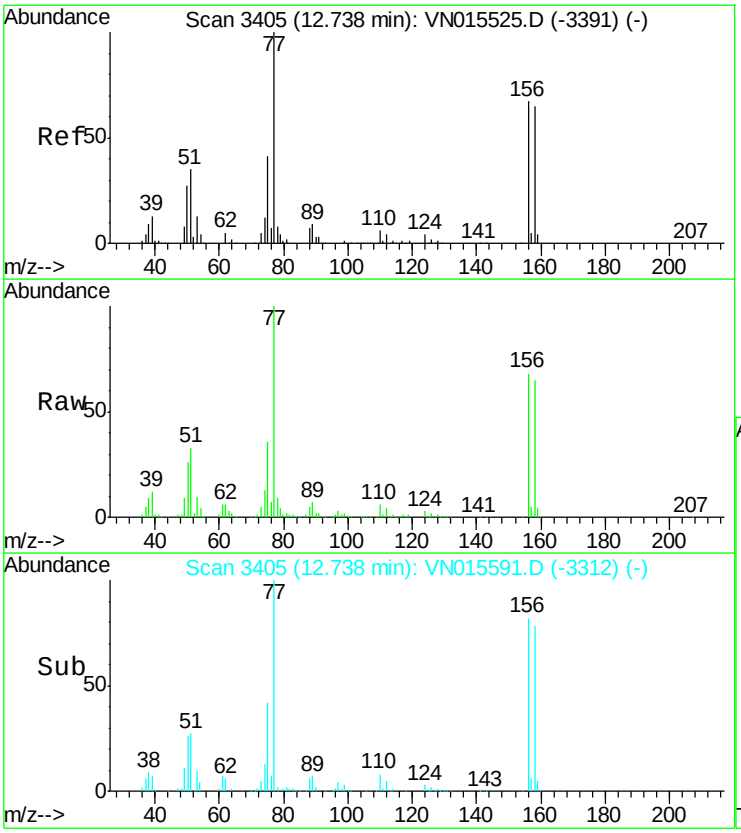
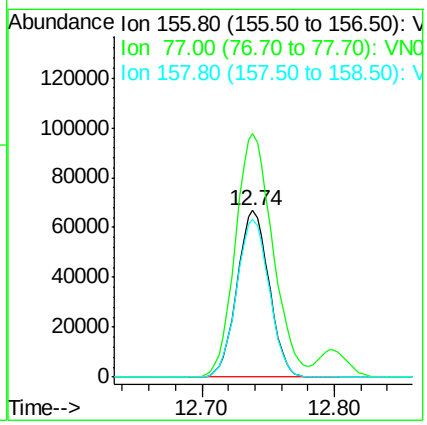


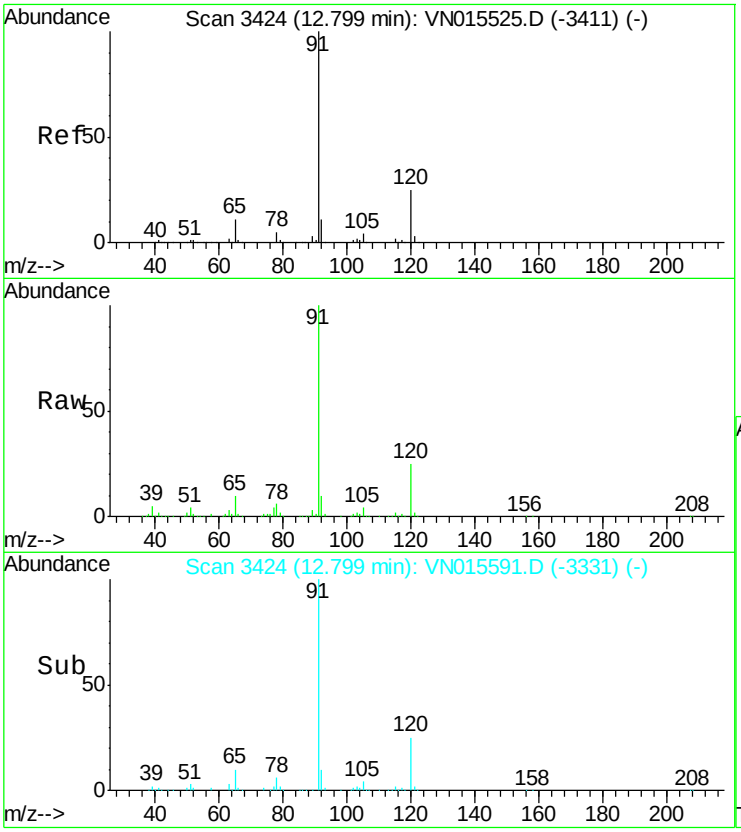


#78
Bromobenzene
Concen: 47.88 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:156 Resp: 111950

Ion	Ratio	Lower	Upper
156	100		
77	171.2	86.0	258.0
158	96.6	48.7	146.1





#79
n-propylbenzene
Concen: 47.87 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 91 Resp: 440729

Ion	Ratio	Lower	Upper
91	100		
120	24.7	12.2	36.4

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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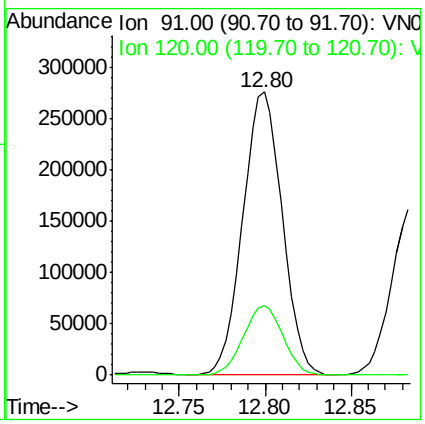
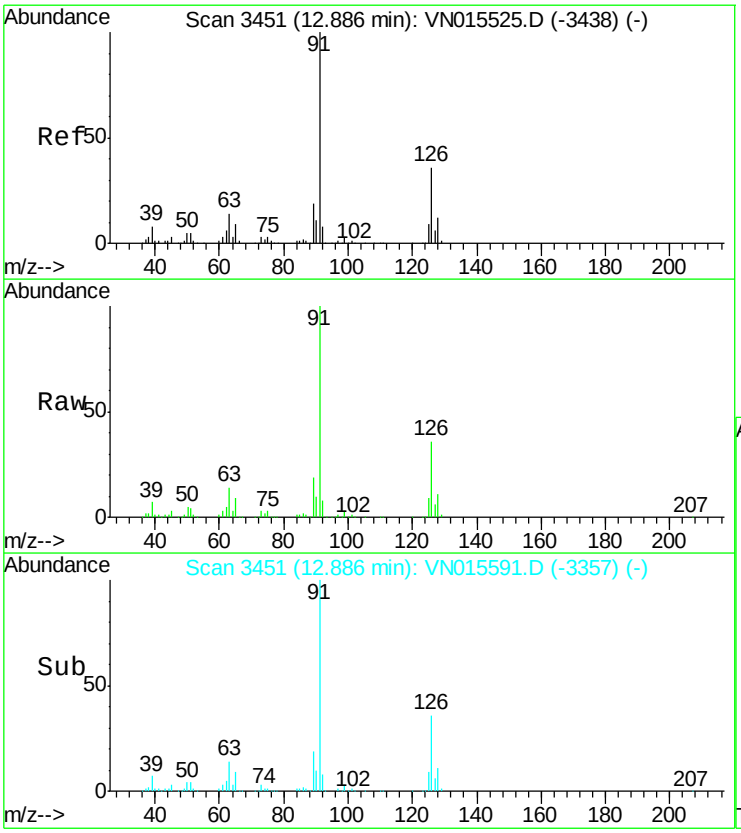
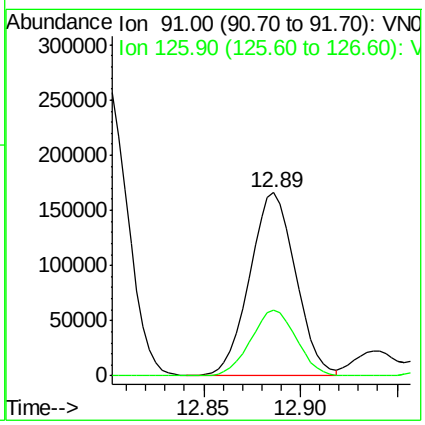


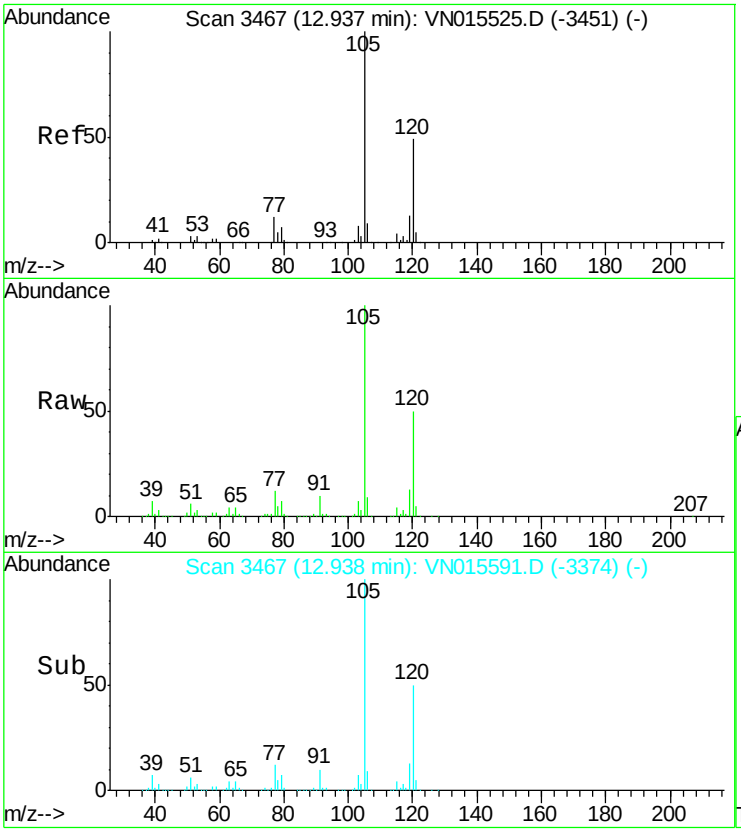


#80
2-Chlorotoluene
Concen: 52.14 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 91 Resp: 275155

Ion	Ratio	Lower	Upper
91	100		
126	35.6	17.9	53.8





#81
1,3,5-Trimethylbenzene
Concen: 47.90 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:105 Resp: 351388

Ion	Ratio	Lower	Upper
105	100		
120	49.6	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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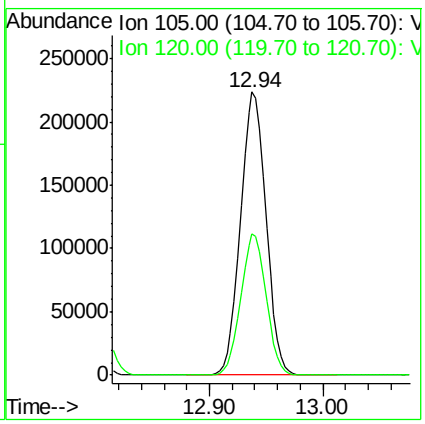
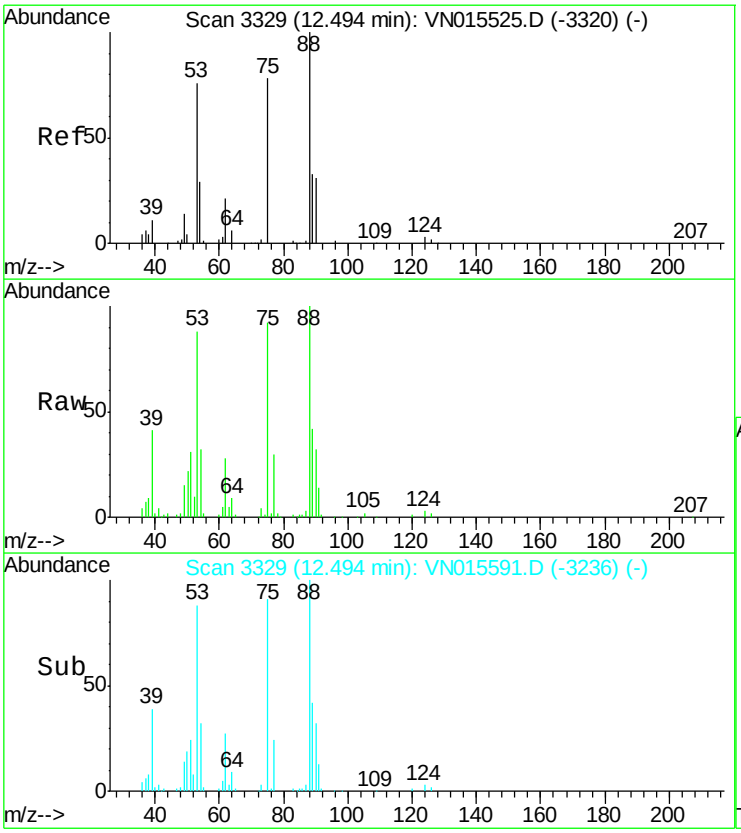
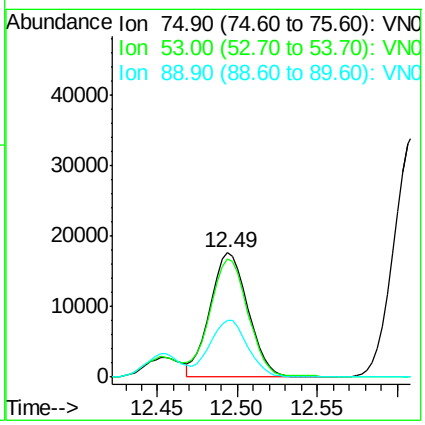




#82
trans-1,4-Dichloro-2-butene
Concen: 39.05 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 75 Resp: 28995

Ion	Ratio	Lower	Upper
75	100		
53	95.2	77.5	116.3
89	45.4	37.7	56.5



Instrument :
MSVOA_N
ClientSampleId :
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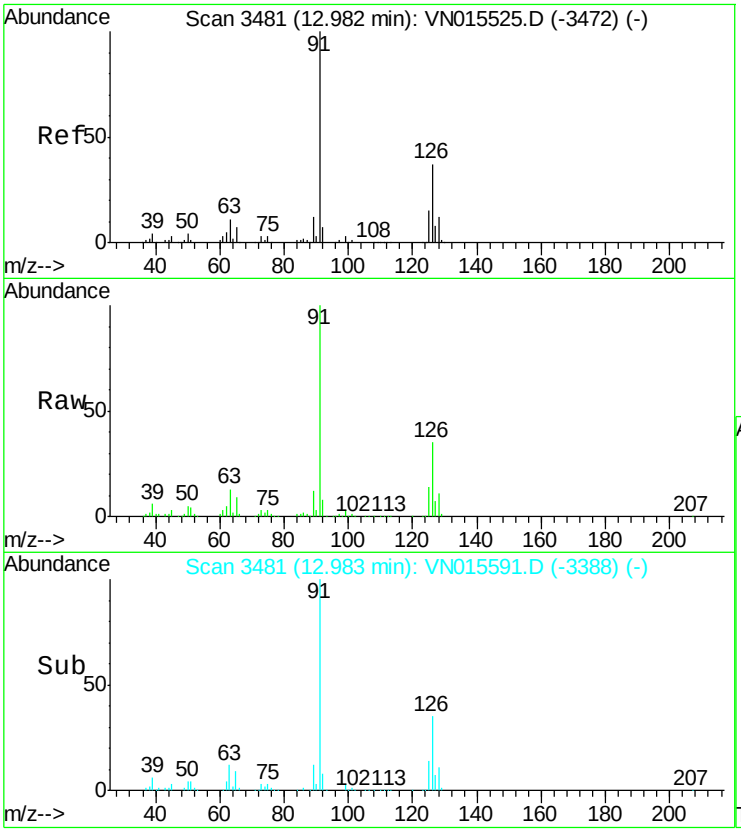
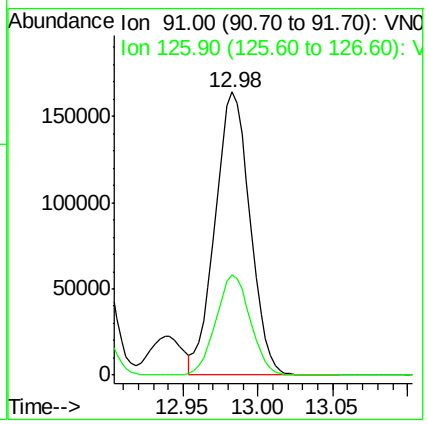
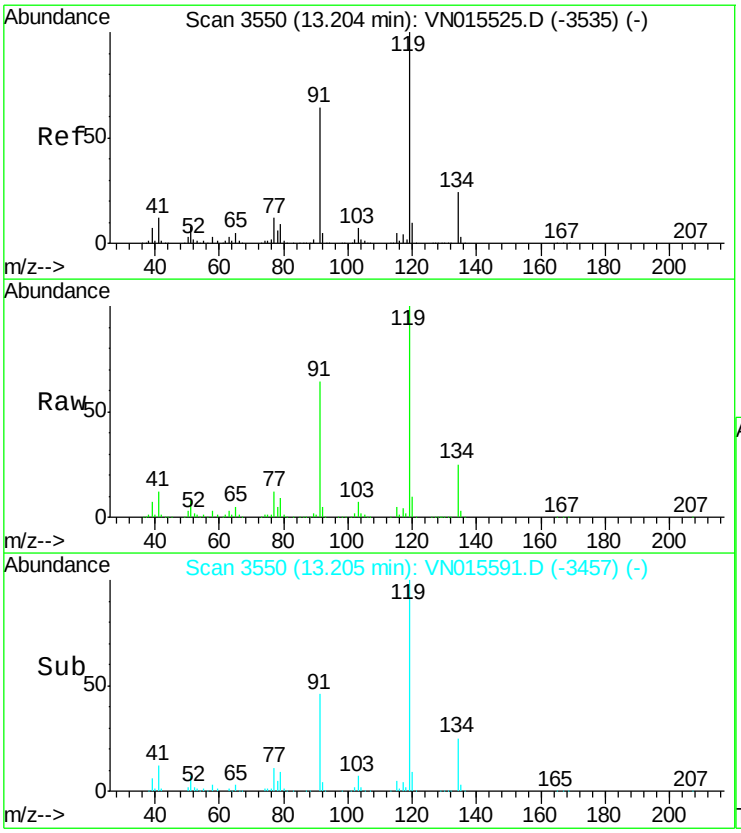


#83
4-Chlorotoluene
Concen: 47.62 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 91 Resp: 265959

Ion	Ratio	Lower	Upper
91	100		
126	35.1	17.5	52.6

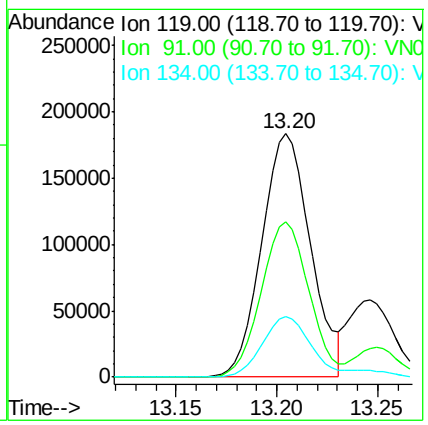


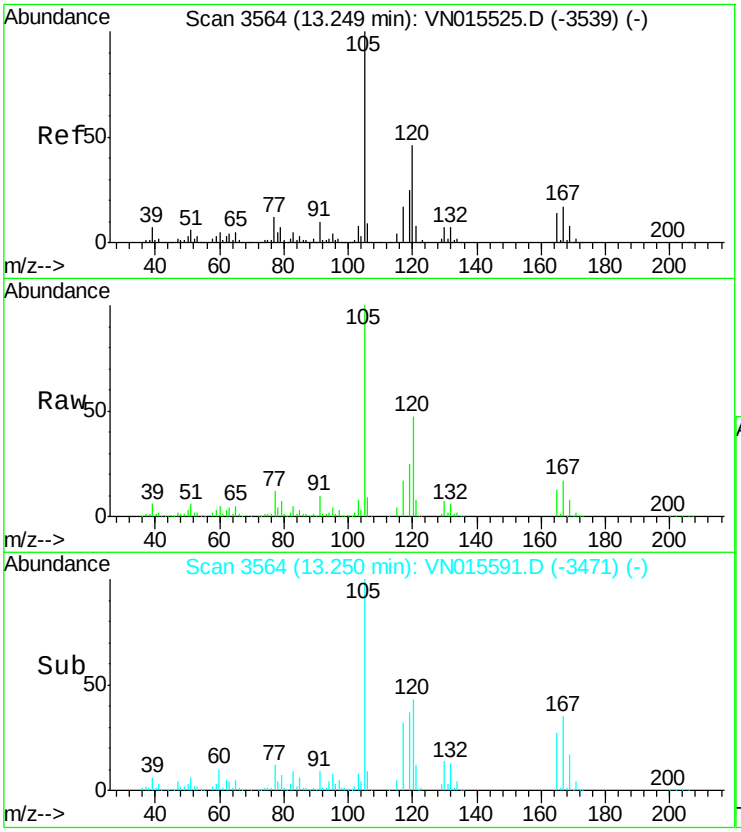


#84
tert-Butylbenzene
Concen: 52.23 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:119 Resp: 309383

Ion	Ratio	Lower	Upper
119	100		
91	62.6	31.9	95.9
134	24.5	12.1	36.3





#85
1,2,4-Trimethylbenzene
Concen: 48.20 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:105 Resp: 353787

Ion	Ratio	Lower	Upper
105	100		
120	46.7	23.1	69.3

Instrument :
MSVOA_N
ClientSampleId :
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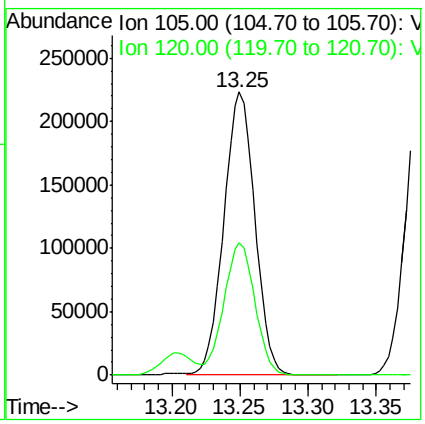
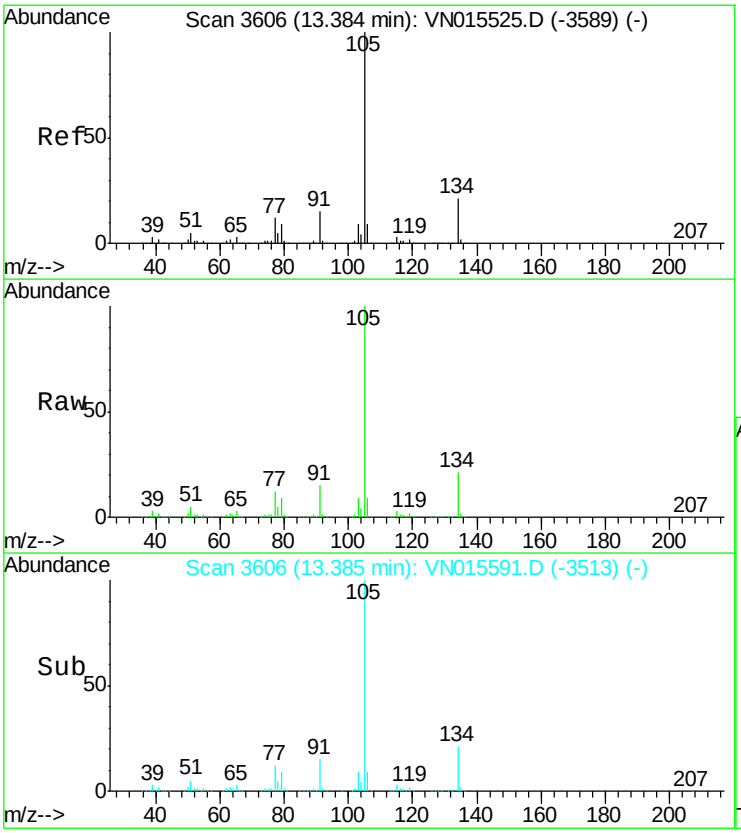
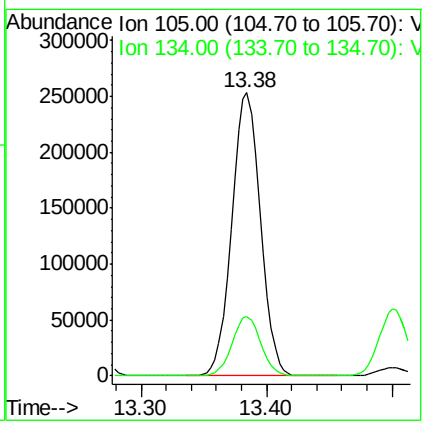


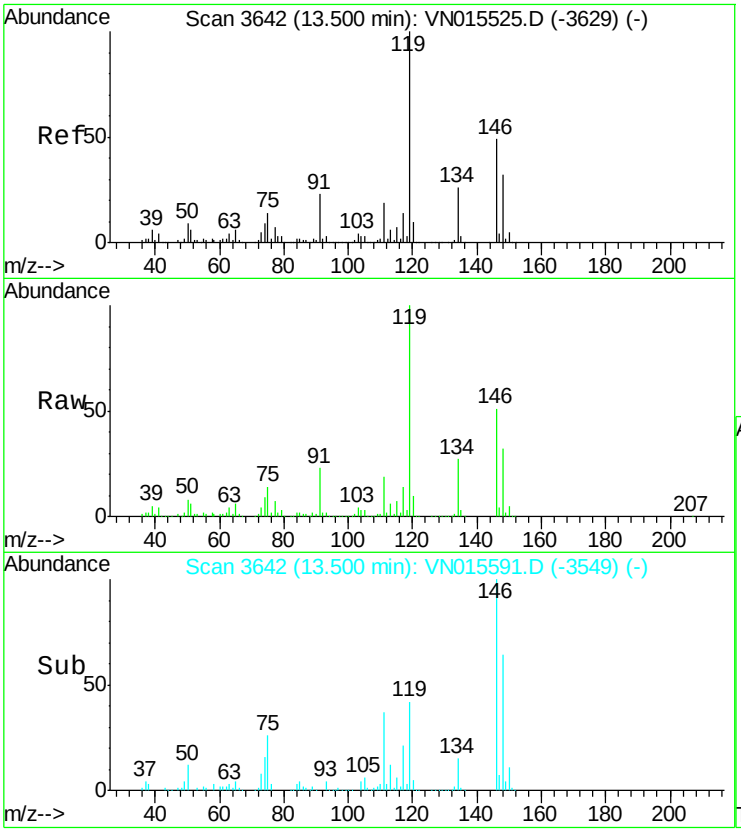


#86
sec-Butylbenzene
Concen: 47.74 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:105 Resp: 401060

Ion	Ratio	Lower	Upper
105	100		
134	21.1	10.6	31.8





#87
p-Isopropyltoluene
Concen: 48.49 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:119 Resp: 352332

Ion	Ratio	Lower	Upper
119	100		
134	26.9	13.3	39.9
91	22.8	11.7	35.1

Instrument :
MSVOA_N
ClientSampleId :
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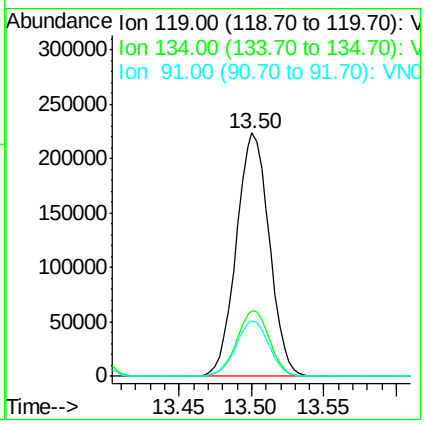
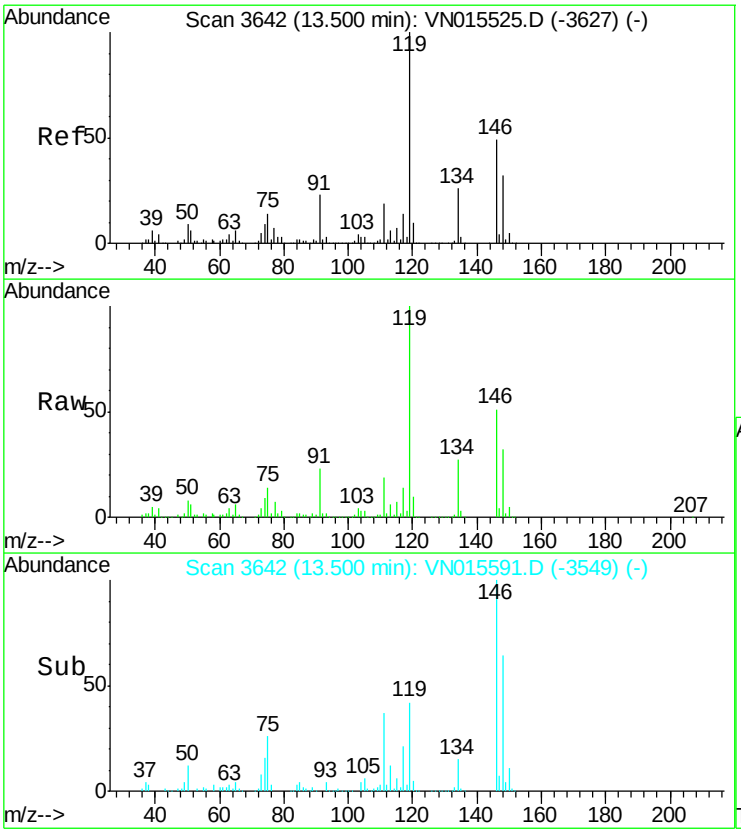
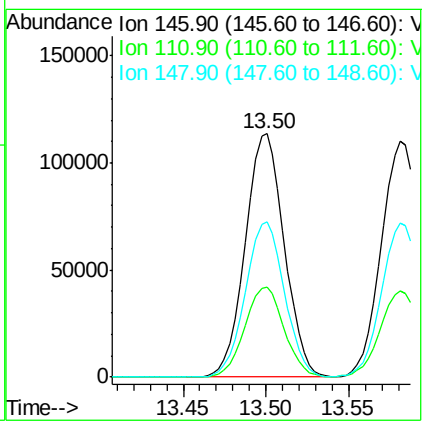




#88
1,3-Dichlorobenzene
Concen: 48.81 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:146 Resp: 185624

Ion	Ratio	Lower	Upper
146	100		
111	37.3	19.1	57.1
148	63.8	32.4	97.0



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
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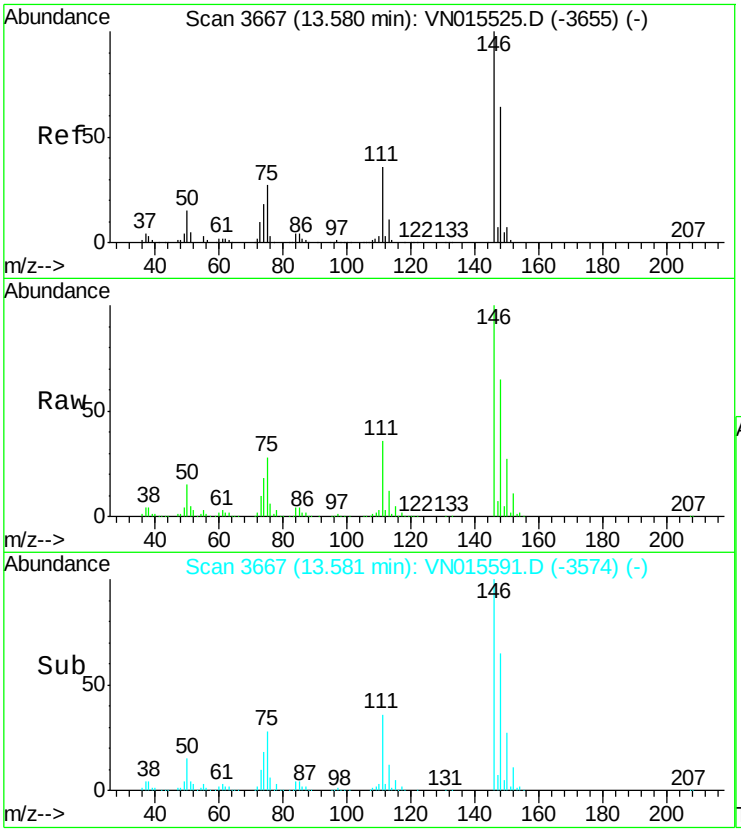
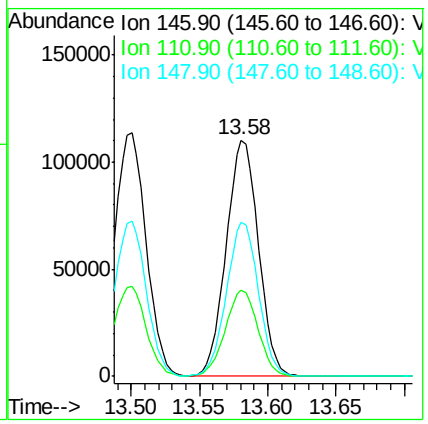
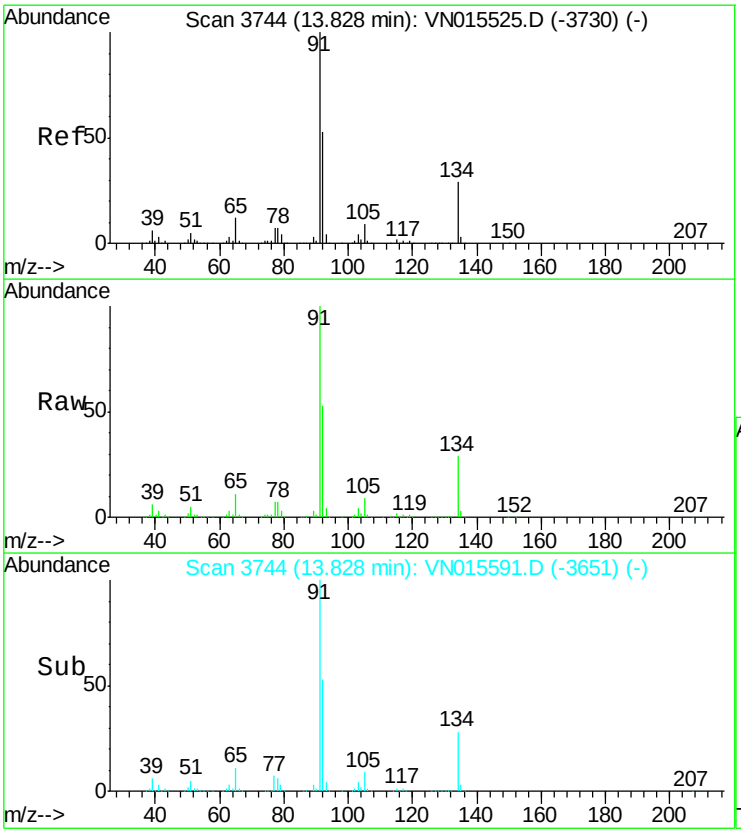


#89
1,4-Dichlorobenzene
Concen: 48.50 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:146 Resp: 181038

Ion	Ratio	Lower	Upper
146	100		
111	37.1	18.4	55.4
148	64.5	32.3	96.9

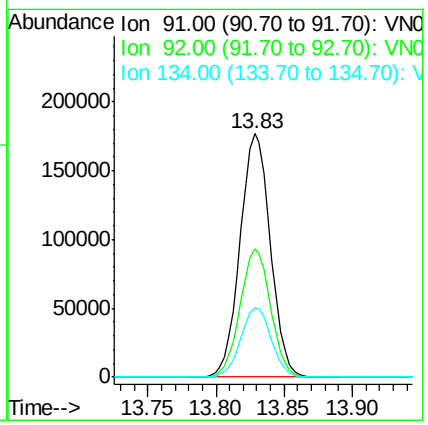


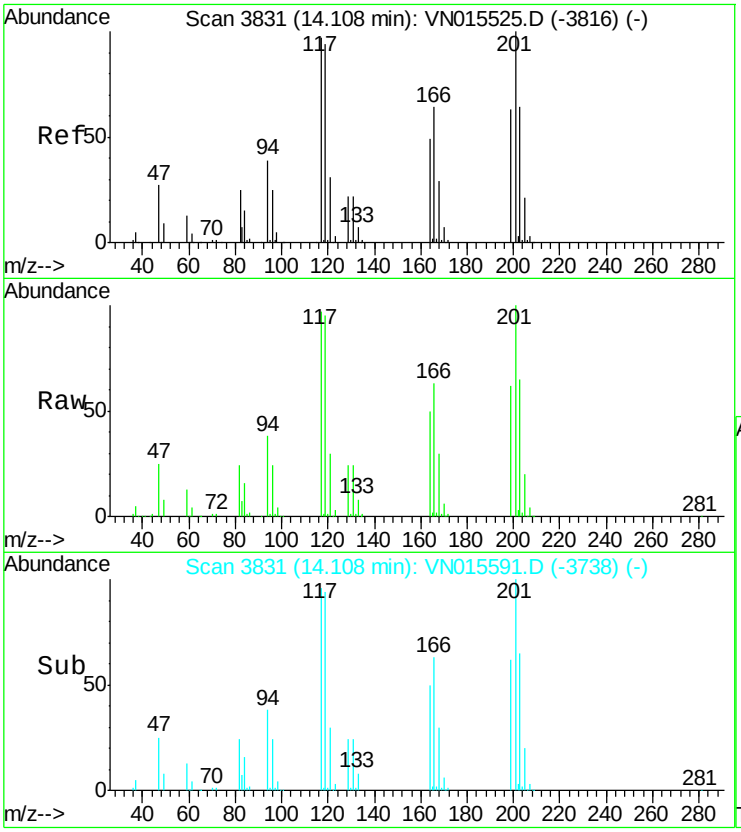


#90
n-Butylbenzene
Concen: 49.73 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion: 91 Resp: 272570

Ion	Ratio	Lower	Upper
91	100		
92	52.8	26.6	79.8
134	28.8	14.4	43.4





#91
Hexachloroethane
Concen: 47.70 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:117 Resp: 65948

Ion	Ratio	Lower	Upper
117	100		
201	102.2	51.7	155.2

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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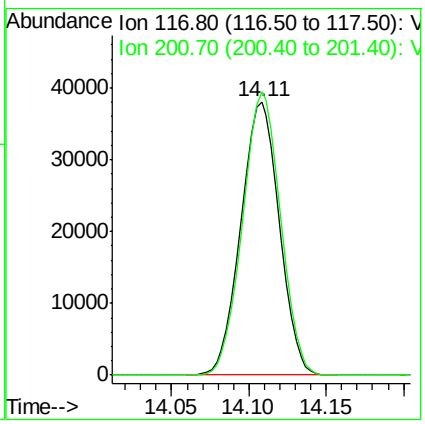
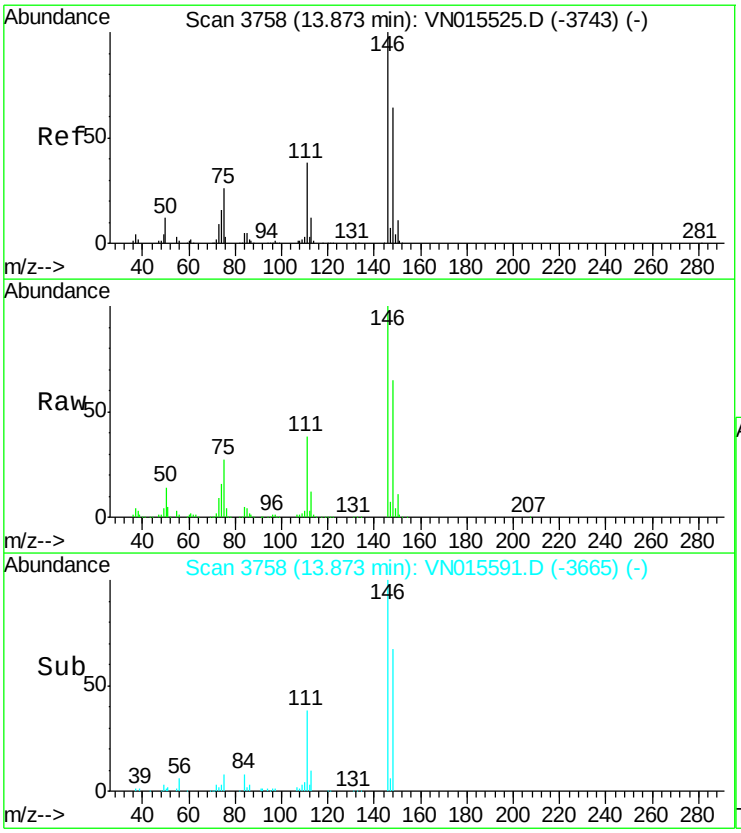
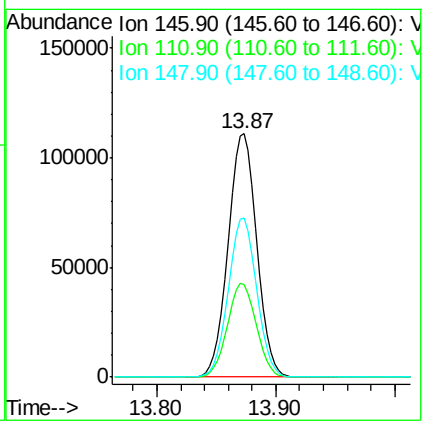


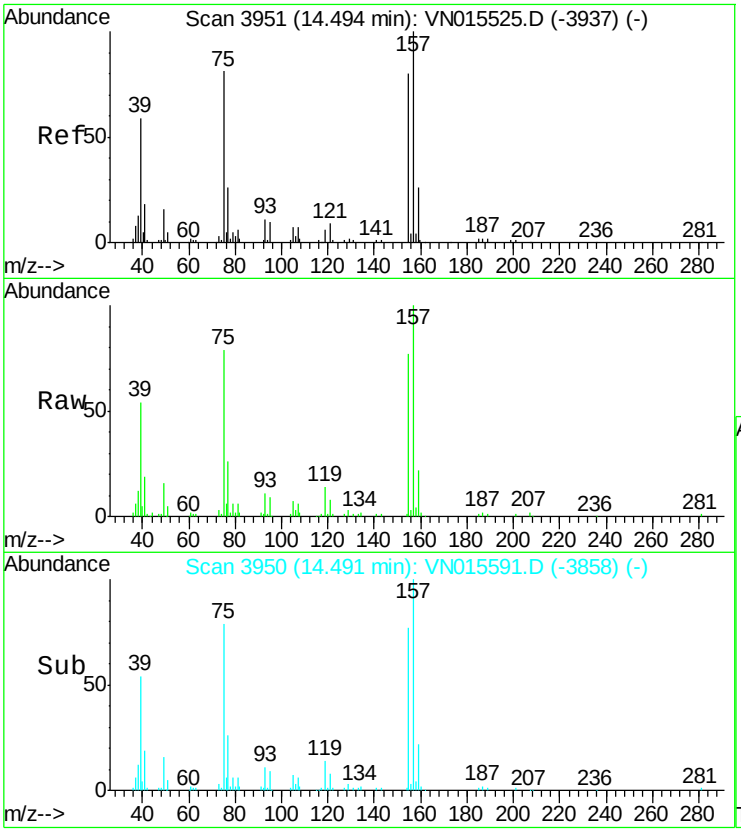


#92
1,2-Dichlorobenzene
Concen: 49.07 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:146 Resp: 185020

Ion	Ratio	Lower	Upper
146	100		
111	39.0	19.4	58.2
148	64.9	32.4	97.0





#93
1,2-Dibromo-3-Chloropropane
Concen: 48.74 ug/l
RT: 14.49 min Scan# 3950
Delta R.T. -0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
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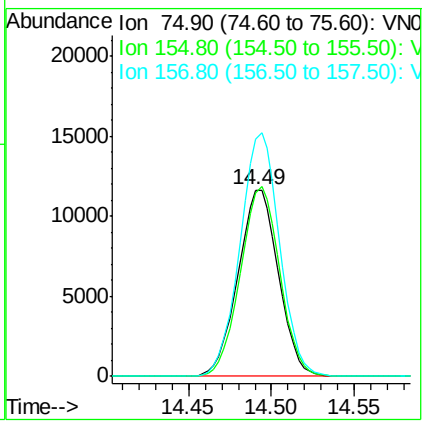
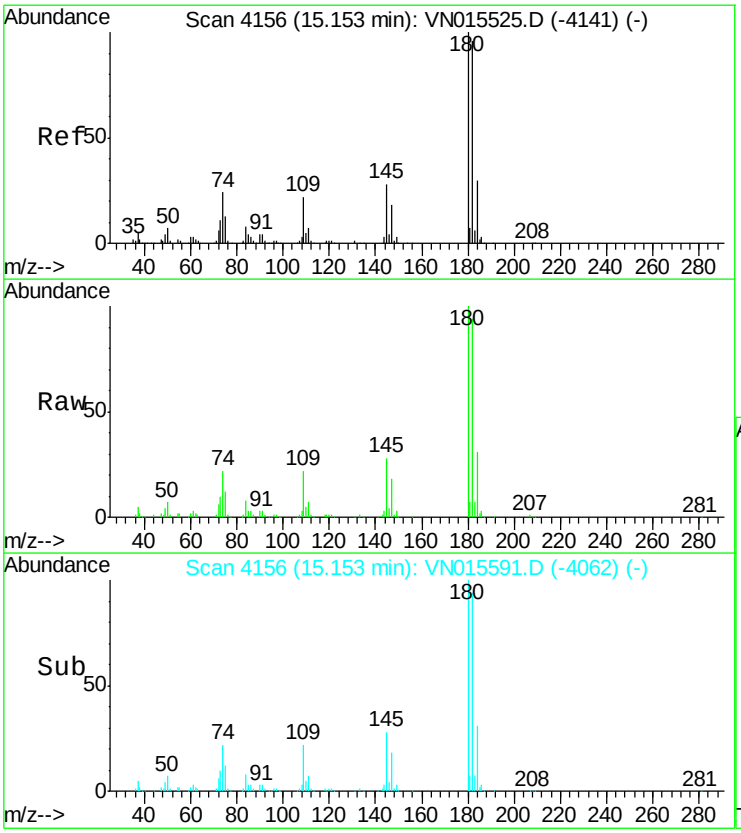
Tgt Ion: 75 Resp: 19676

Ion	Ratio	Lower	Upper
75	100		
155	99.2	49.4	148.2
157	128.1	61.3	183.8

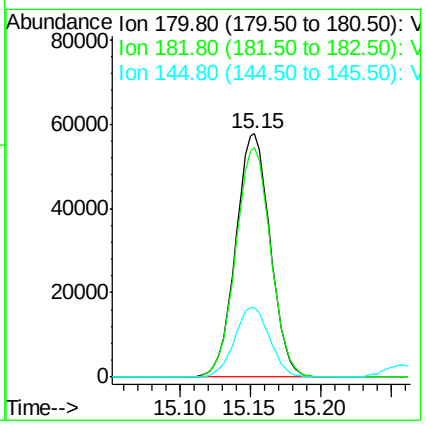


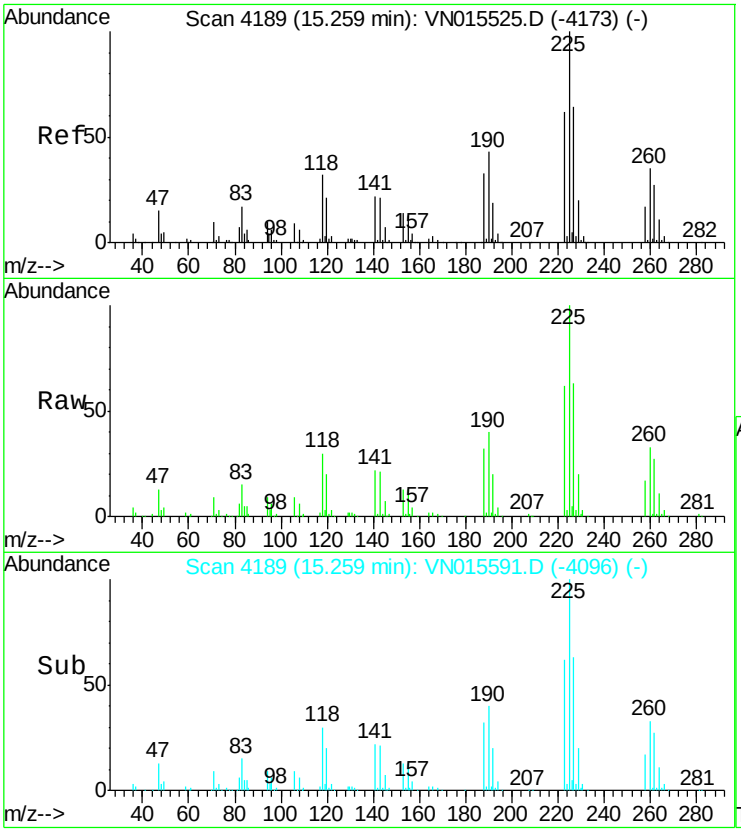


#94
1,2,4-Trichlorobenzene
Concen: 47.34 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:180 Resp: 99125

Ion	Ratio	Lower	Upper
180	100		
182	95.7	48.0	144.0
145	29.1	14.0	42.0





#95
Hexachlorobutadiene
Concen: 48.18 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:225 Resp: 66547

Ion	Ratio	Lower	Upper
225	100		
223	62.8	31.6	95.0
227	64.5	32.1	96.5

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

Manual Integrations APPROVED
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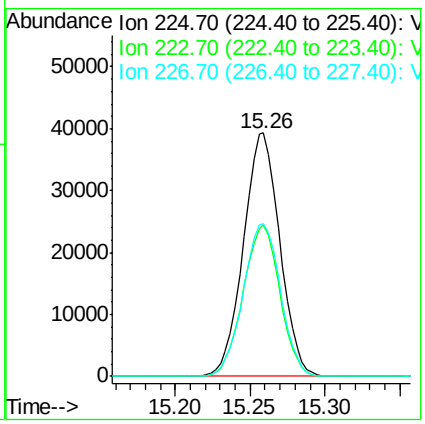
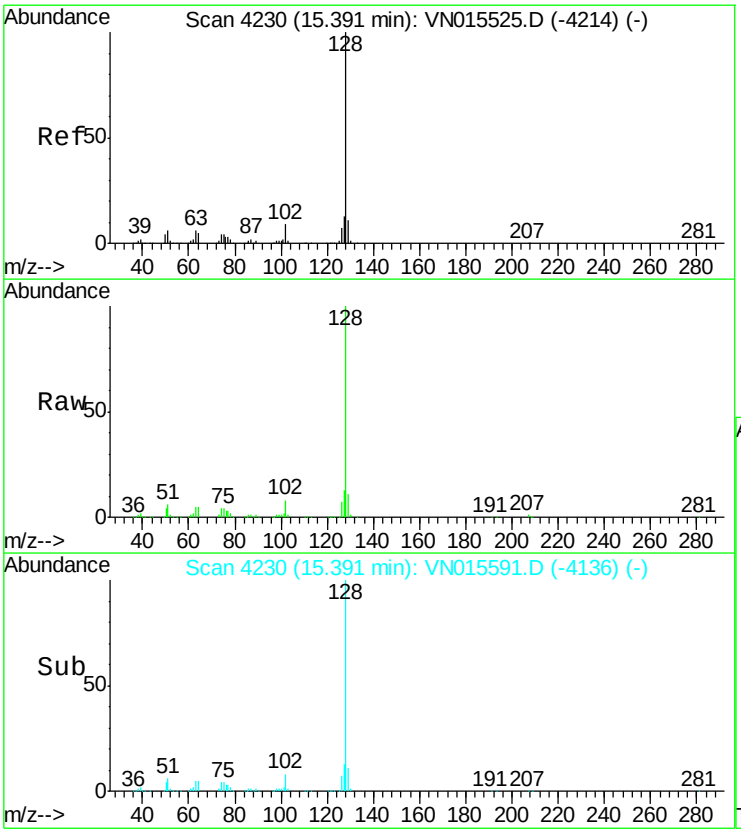
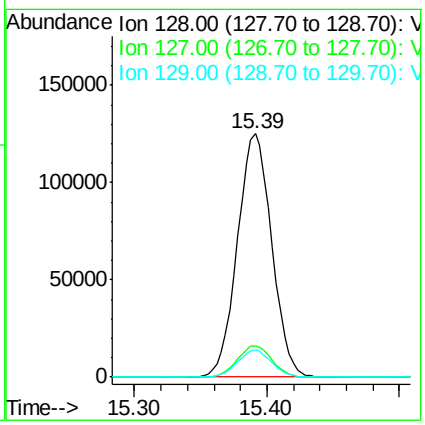


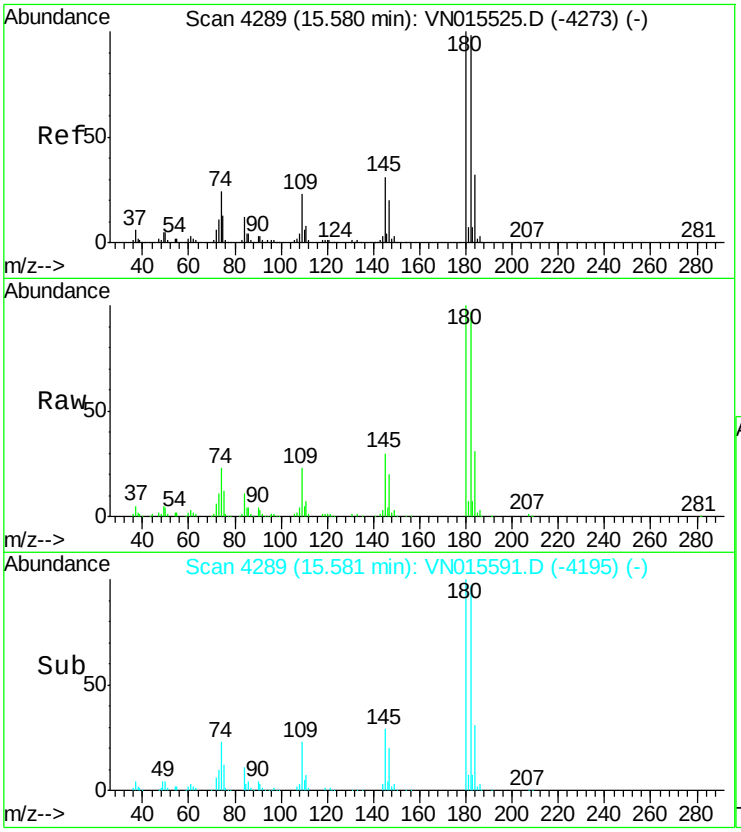


#96
Naphthalene
Concen: 44.02 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:128 Resp: 224336

Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.3	15.5
129	11.1	8.7	13.1

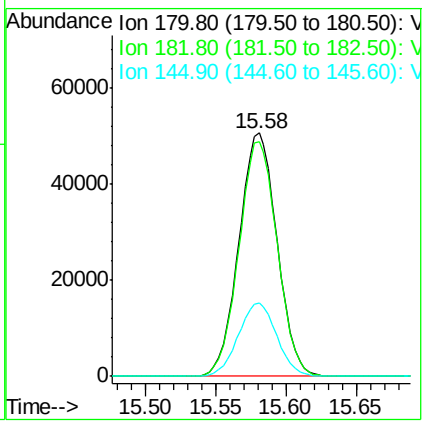




#97
1,2,3-Trichlorobenzene
Concen: 46.83 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015591.D
Acq: 22 May 2014 10:50

Tgt Ion:180 Resp: 95721

Ion	Ratio	Lower	Upper
180	100		
182	96.9	47.8	143.4
145	30.5	14.9	44.7



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MS

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5/22/2014 4:19:56 PM

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/14/14
Project:	37-14 36th Street	Date Received:	05/14/14
Client Sample ID:	MLW-4-35-40MSD	SDG No.:	F2352
Lab Sample ID:	F2314-07MSD	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015592.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	750	E	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	51.3		0.2	0.2	1	ug/L
67-64-1	Acetone	230		0.5	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	73		0.35	0.5	1	ug/L
75-09-2	Methylene Chloride	49		0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	53.1		0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	60.6		0.2	0.2	1	ug/L
78-93-3	2-Butanone	250		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	45.2		0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	2400	E	0.2	0.2	1	ug/L
67-66-3	Chloroform	48.4		0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	47.2		0.2	0.2	1	ug/L
71-43-2	Benzene	48		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	44.8		0.2	0.2	1	ug/L
79-01-6	Trichloroethene	47		0.2	0.2	1	ug/L
108-88-3	Toluene	47.6		0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	45.8		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	46.9		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	47.7		0.2	0.2	1	ug/L
1330-20-7	Total Xylenes	142		0.6	0.6	3	ug/L
103-65-1	n-propylbenzene	46		0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	50.1		0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	46.6		0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	45.6		0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	46.9		0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	46.9		0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	48.3		0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	47.5		0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	1100		100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.7		70 - 120		93%	SPK: 50

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA Geoenvironmental	Date Collected:	05/14/14
Project:	37-14 36th Street	Date Received:	05/14/14
Client Sample ID:	MLW-4-35-40MSD	SDG No.:	F2352
Lab Sample ID:	F2314-07MSD	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN015592.D	1		05/22/14	VN052114

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	46.8		85 - 115		94%	SPK: 50
2037-26-5	Toluene-d8	47.3		85 - 120		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.1		75 - 120		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	183304	7.87				
540-36-3	1,4-Difluorobenzene	268261	8.79				
3114-55-4	Chlorobenzene-d5	234362	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	109834	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Quantitation Report (QT Reviewed)

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015592.D
Acq On : 22 May 2014 11:20
Operator : MD
Sample : F2314-07MSD
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 43 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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5/22/2014 4:20:14 PM

Quant Time: May 22 16:05:00 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.87	168	183304	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	8.79	114	268261	50.00	ug/l	0.00
64) Chlorobenzene-d5	11.61	117	234362	50.00	ug/l	0.00
73) 1,4-Dichlorobenzene-d4	13.56	152	109834	50.00	ug/l	0.00
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	8.23	65	98455	46.69	ug/l	0.00
Spiked Amount 50.000			Recovery	=	93.38%	
36) Dibromofluoromethane	7.80	113	81748	46.79	ug/l	0.00
Spiked Amount 50.000			Recovery	=	93.58%	
51) Toluene-d8	10.29	98	304573	47.31	ug/l	0.00
Spiked Amount 50.000			Recovery	=	94.62%	
63) 4-Bromofluorobenzene	12.61	95	106022	48.08	ug/l	0.00
Spiked Amount 50.000			Recovery	=	96.16%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.85	85	70632	49.85	ug/l	100
4) Chloromethane	2.07	50	91902	54.12	ug/l	100
5) Vinyl Chloride	2.20	62	1282422	748.57	ug/l	98
6) Bromomethane	2.61	94	47122	47.41	ug/l	99
7) Chloroethane	2.77	64	54188	50.21	ug/l	97
8) Trichlorofluoromethane	3.12	101	130230	46.83	ug/l	97
9) Diethyl Ether	3.53	74	51195	49.78	ug/l	98
10) 1,1,2-Trichlorotrifluoroet	3.91	101	74953	47.79	ug/l	99
11) Methyl Iodide	4.11	142	73301	37.62	ug/l	98
12) Tert butyl alcohol	4.95	59	176935	863.47	ug/l	99
13) 1,1-Dichloroethene	3.88	96	76865	51.26	ug/l	95
14) Acrolein	3.73	56	41266	216.76	ug/l	100
15) Allyl chloride	4.51	41	109871	41.88	ug/l	98
16) Acrylonitrile	5.18	53	187503	277.57	ug/l	98
17) Acetone	3.95	43	150431	227.39	ug/l	99
18) Carbon Disulfide	4.24	76	204659	48.43	ug/l	99
19) Methyl Acetate	4.50	43	142681	44.58	ug/l	99
20) Methyl tert-butyl Ether	5.27	73	385189	72.97	ug/l	99
21) Methylene Chloride	4.74	84	84029	48.98	ug/l	96
22) trans-1,2-Dichloroethene	5.28	96	83890	53.06	ug/l	99
23) Diisopropyl ether	6.18	45	267553	49.51	ug/l	98
24) Vinyl Acetate	6.12	43	605368m	225.53	ug/l	
25) 1,1-Dichloroethane	6.08	63	180219	60.57	ug/l	100
26) 2-Butanone	7.05	43	233841	250.55	ug/l #	69
27) 2,2-Dichloropropane	7.06	77	66295	25.24	ug/l #	1
28) cis-1,2-Dichloroethene	7.06	96	4512277	2430.56	ug/l	89
29) Bromochloromethane	7.42	49	62972	47.99	ug/l	97
30) Tetrahydrofuran	7.44	42	155334	247.34	ug/l	99
31) Chloroform	7.58	83	148679	48.39	ug/l	99
32) Cyclohexane	7.89	56	136427	51.64	ug/l	100
33) 1,1,1-Trichloroethane	7.80	97	135780	47.20	ug/l	99
37) 1,1-Dichloropropene	8.01	75	111255	46.50	ug/l	99
38) Ethyl Acetate	7.15	43	88819	42.07	ug/l #	81
39) Carbon Tetrachloride	8.00	117	123627	45.19	ug/l	99

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015592.D
Acq On : 22 May 2014 11:20
Operator : MD
Sample : F2314-07MSD
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 43 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:20:14 PM

Quant Time: May 22 16:05:00 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) Methylcyclohexane	9.29	83	140431	45.90	ug/l		97
41) Benzene	8.26	78	342769	48.04	ug/l		99
42) Methacrylonitrile	7.37	41	58914	47.21	ug/l		97
43) 1,2-Dichloroethane	8.33	62	116701	44.78	ug/l		98
44) Isopropyl Acetate	8.36	43	165076	43.46	ug/l		97
45) Trichloroethene	9.04	130	93837	46.96	ug/l		97
46) 1,2-Dichloropropane	9.32	63	86606	47.25	ug/l		100
47) Dibromomethane	9.41	93	56577	46.92	ug/l		99
48) Bromodichloromethane	9.59	83	114517	46.29	ug/l		100
49) Methyl methacrylate	9.38	41	88290	48.23	ug/l		97
50) 1,4-Dioxane	9.40	88	28358	1110.27	ug/l		98
52) 4-Methyl-2-Pentanone	10.16	43	510725	243.26	ug/l		99
53) Toluene	10.35	92	215093	47.56	ug/l		100
54) t-1,3-Dichloropropene	10.57	75	111731	44.17	ug/l		99
55) cis-1,3-Dichloropropene	10.03	75	121156	43.02	ug/l		97
56) 1,1,2-Trichloroethane	10.75	97	85095	48.69	ug/l		99
57) Ethyl methacrylate	10.61	69	127444	49.30	ug/l		97
58) 1,3-Dichloropropane	10.90	76	139671	47.69	ug/l		99
60) 2-Hexanone	10.93	43	338741	247.10	ug/l		98
61) Dibromochloromethane	11.10	129	101362	48.57	ug/l		100
62) 1,2-Dibromoethane	11.21	107	88526	49.01	ug/l		100
65) Tetrachloroethene	10.83	164	84671	45.79	ug/l		99
66) Chlorobenzene	11.64	112	237616	46.85	ug/l		98
67) 1,1,1,2-Tetrachloroethane	11.71	131	91950	47.57	ug/l		100
68) Ethyl Benzene	11.71	91	395978	47.69	ug/l		100
69) m/p-Xylenes	11.82	106	303987	94.06	ug/l		100
70) o-Xylene	12.15	106	154504	48.59	ug/l		100
71) Styrene	12.17	104	247622	49.57	ug/l		100
72) Bromoform	12.33	173	78004	48.17	ug/l	#	100
74) Isopropylbenzene	12.46	105	405790	49.43	ug/l		100
75) N-amyl acetate	12.26	43	116482	40.48	ug/l		97
76) 1,1,2,2-Tetrachloroethane	12.70	83	114396	53.54	ug/l		99
77) 1,2,3-Trichloropropane	12.75	75	96206m	51.27	ug/l		
78) Bromobenzene	12.74	156	108637	45.61	ug/l		99
79) n-propylbenzene	12.80	91	431313	45.98	ug/l		100
80) 2-Chlorotoluene	12.89	91	267362	49.68	ug/l		100
81) 1,3,5-Trimethylbenzene	12.94	105	343114	45.91	ug/l		99
82) trans-1,4-Dichloro-2-buten	12.49	75	27886	36.86	ug/l		100
83) 4-Chlorotoluene	12.98	91	260893	45.85	ug/l		100
84) tert-Butylbenzene	13.20	119	302895	50.13	ug/l		99
85) 1,2,4-Trimethylbenzene	13.25	105	348655	46.62	ug/l		100
86) sec-Butylbenzene	13.38	105	390349	45.61	ug/l		100
87) p-Isopropyltoluene	13.50	119	348665	47.10	ug/l		99
88) 1,3-Dichlorobenzene	13.50	146	181814	46.93	ug/l		99
89) 1,4-Dichlorobenzene	13.58	146	178133	46.85	ug/l		99
90) n-Butylbenzene	13.83	91	269418	48.25	ug/l		100
91) Hexachloroethane	14.11	117	65695	46.64	ug/l		98
92) 1,2-Dichlorobenzene	13.87	146	182622	47.54	ug/l		99
93) 1,2-Dibromo-3-Chloropropan	14.49	75	19385	47.14	ug/l		97
94) 1,2,4-Trichlorobenzene	15.15	180	101429	47.54	ug/l		99

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015592.D
Acq On : 22 May 2014 11:20
Operator : MD
Sample : F2314-07MSD
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 43 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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5/22/2014 4:20:14 PM

Quant Time: May 22 16:05:00 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
95) Hexachlorobutadiene	15.26	225	65442	46.51 ug/l	99
96) Naphthalene	15.39	128	241859	46.33 ug/l	100
97) 1,2,3-Trichlorobenzene	15.58	180	98367	47.21 ug/l	99

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

Quantitation Report (QT Reviewed)

Sample Results: **VN015592.D**

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN052114\
Data File : VN015592.D
Acq On : 22 May 2014 11:20
Operator : MD
Sample : F2314-07MSD
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 43 Sample Multiplier: 1

Quant Time: May 22 16:05:00 2014
Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\82N052014W.M
Quant Title : SW846 8260
QLast Update : Wed May 21 02:16:40 2014
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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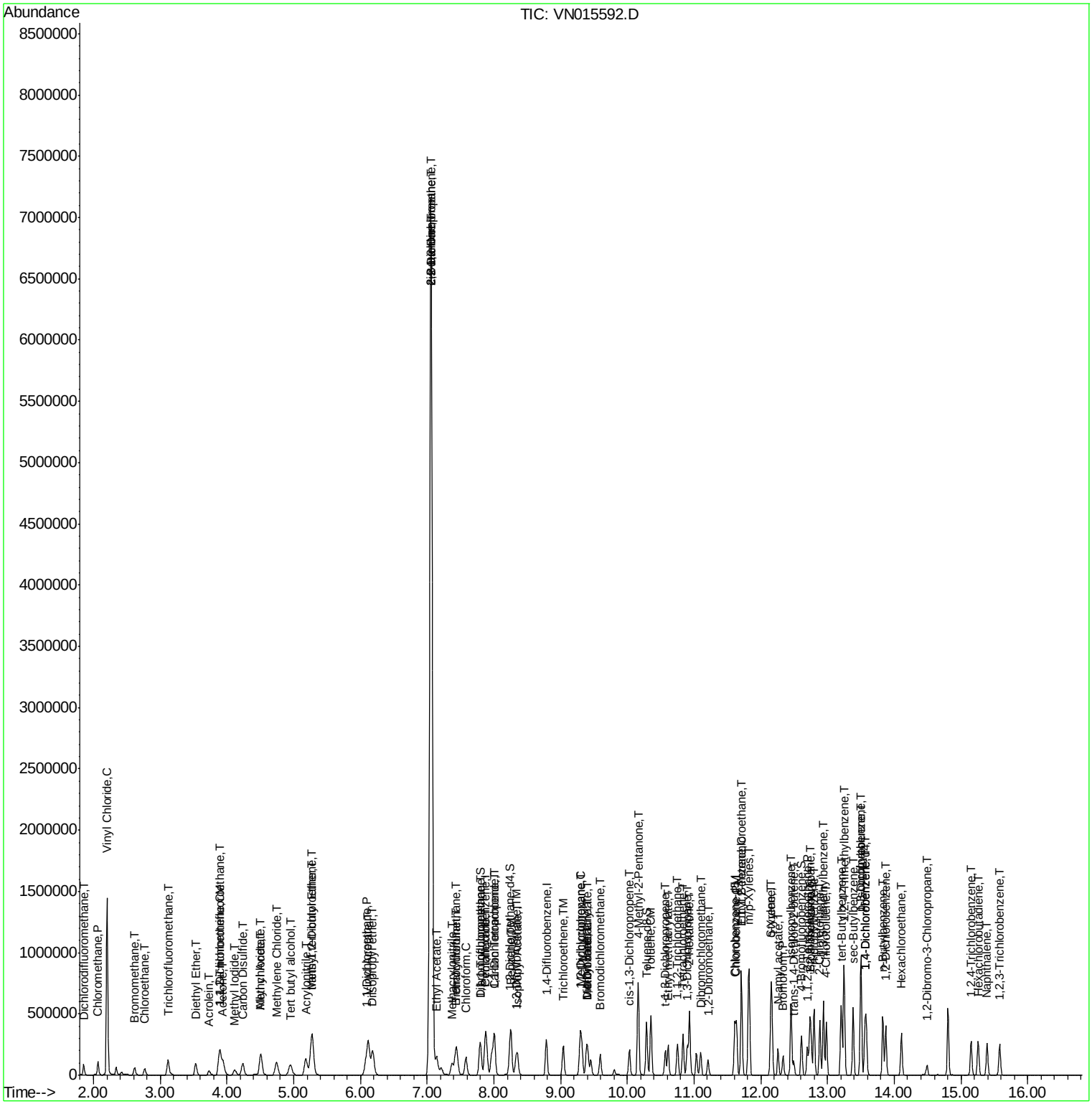

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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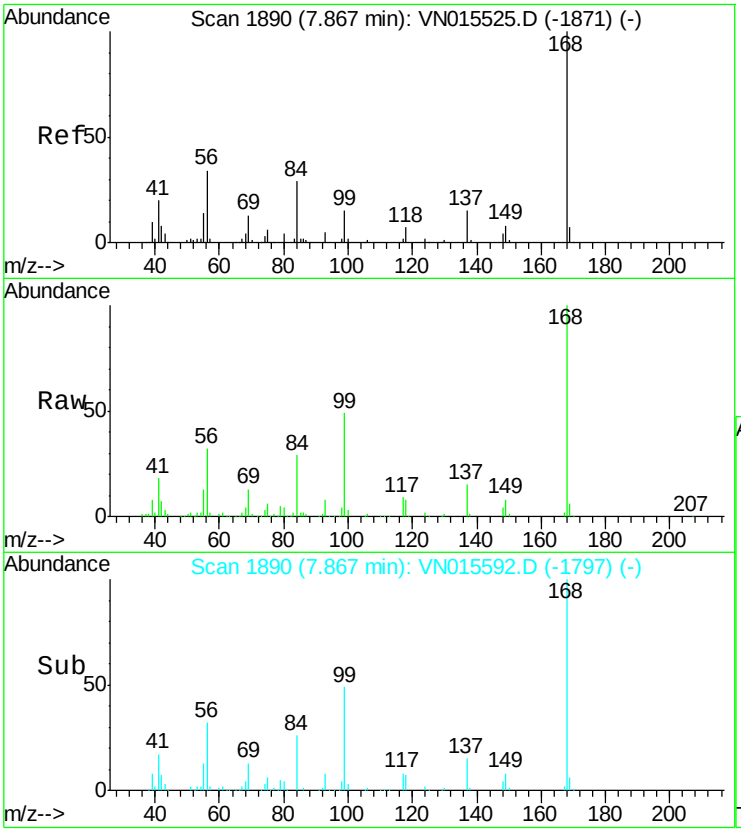
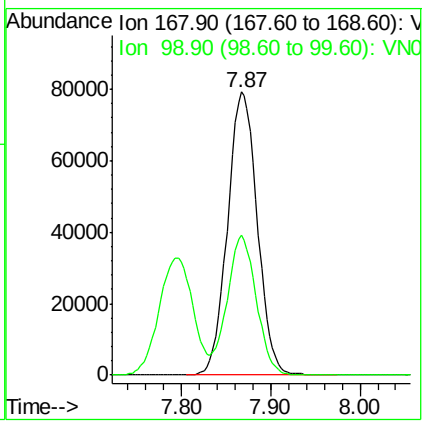
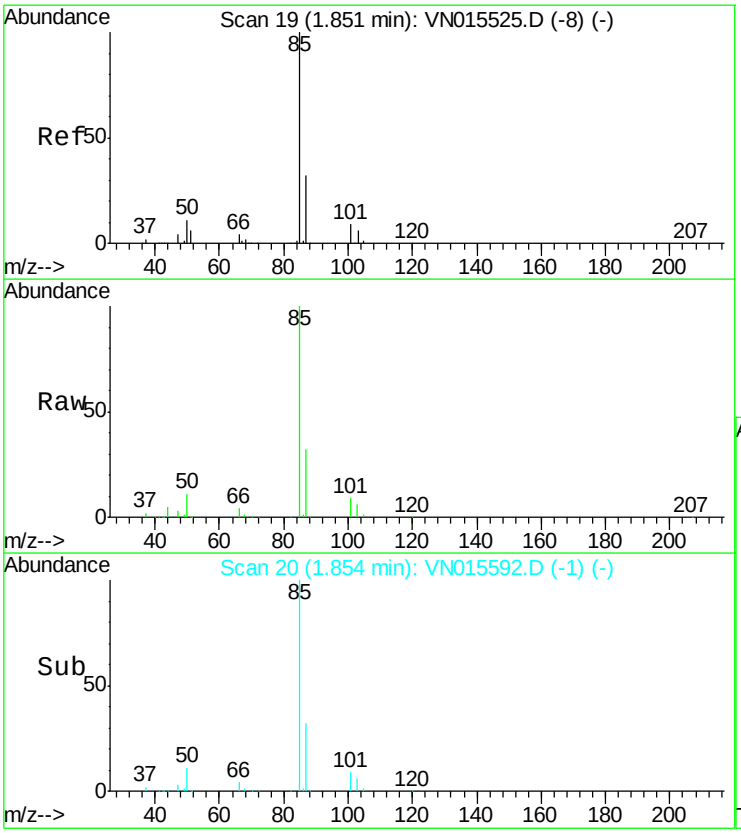


#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 7.87 min Scan# 1890
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:168 Resp: 183304

Ion	Ratio	Lower	Upper
168	100		
99	49.2	39.0	58.4

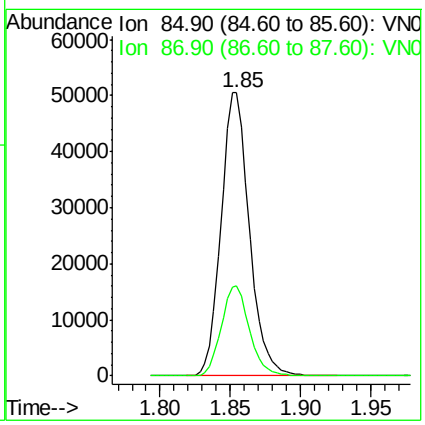




#2
Dichlorodifluoromethane
Concen: 49.85 ug/l
RT: 1.85 min Scan# 20
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 85 Resp: 70632

Ion	Ratio	Lower	Upper
85	100		
87	31.8	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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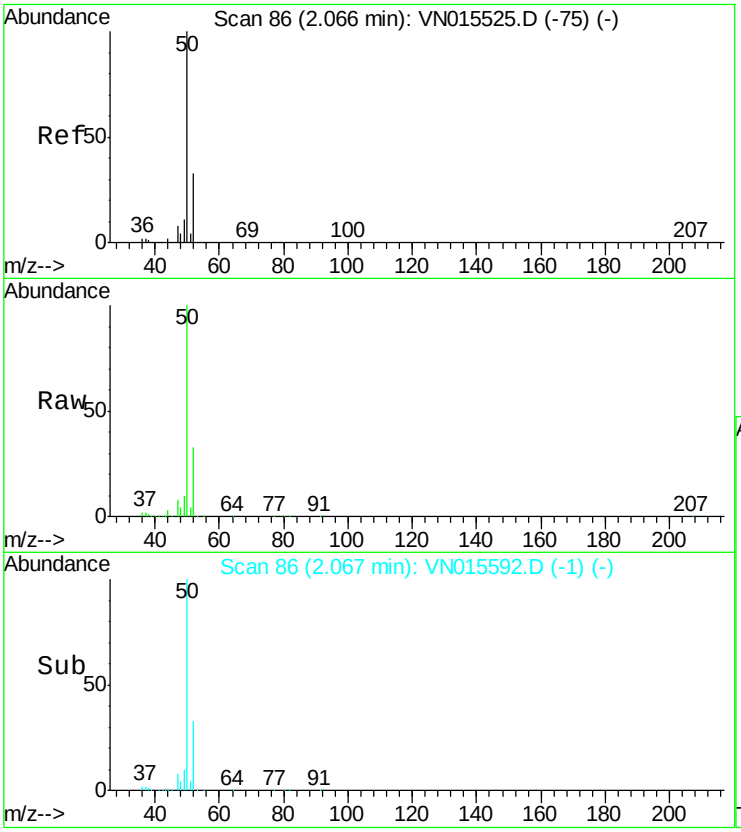
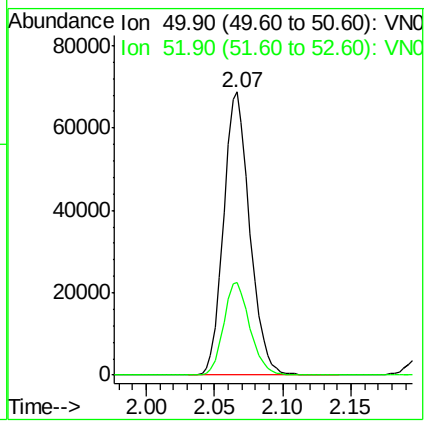
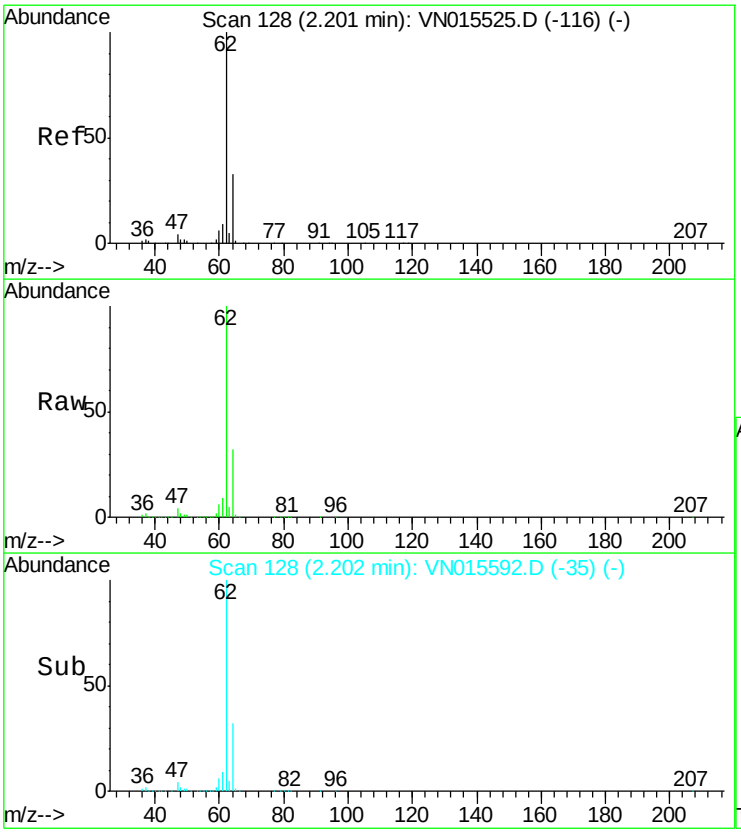


#4
Chloromethane
Concen: 54.12 ug/l
RT: 2.07 min Scan# 86
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 50 Resp: 91902

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.2	39.2

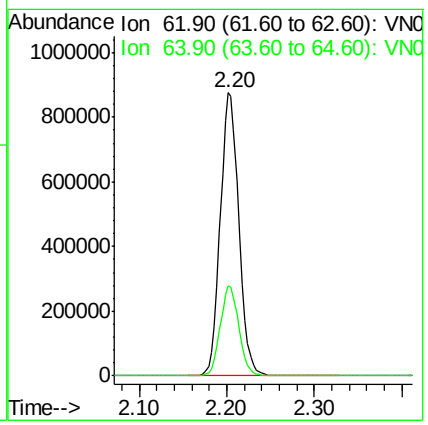




#5
Vinyl Chloride
Concen: 748.57 ug/l
RT: 2.20 min Scan# 128
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 62 Resp: 1282422

Ion	Ratio	Lower	Upper
62	100		
64	31.9	26.2	39.4



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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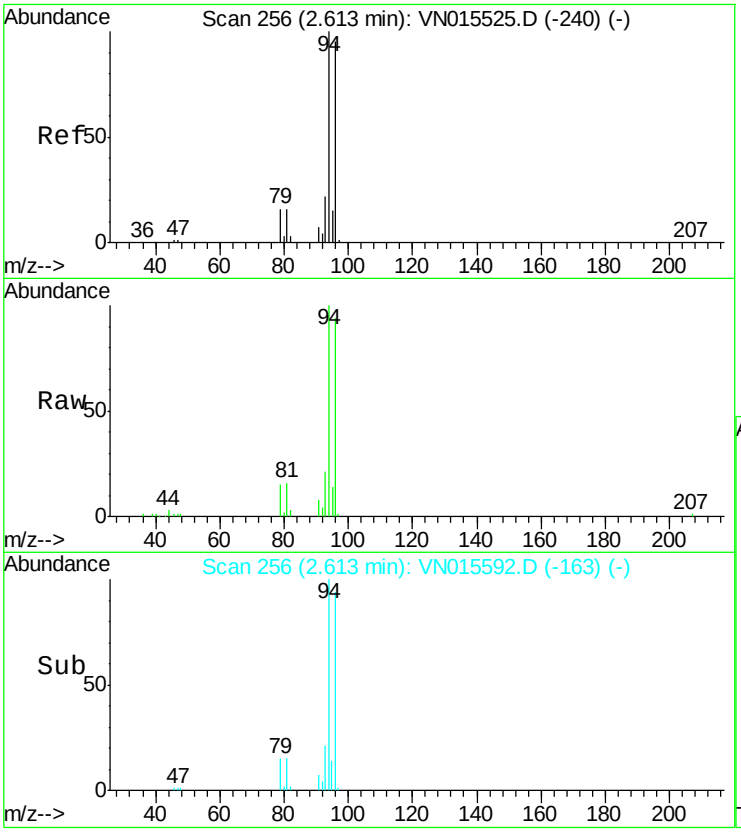
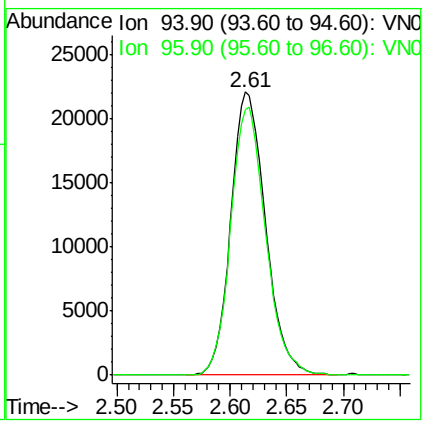
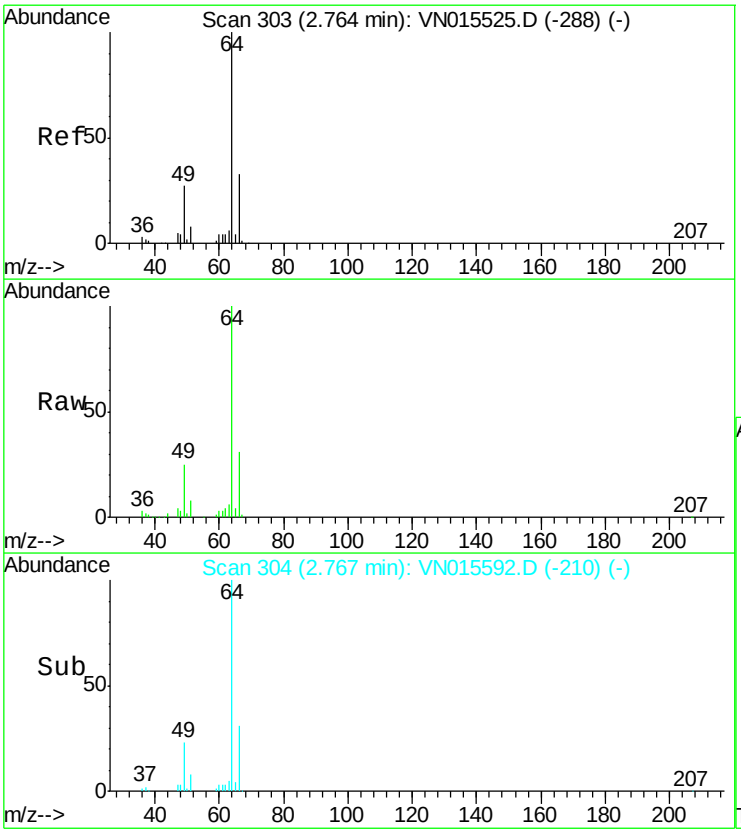


#6
Bromomethane
Concen: 47.41 ug/l
RT: 2.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 94 Resp: 47122

Ion	Ratio	Lower	Upper
94	100		
96	93.9	75.8	113.6

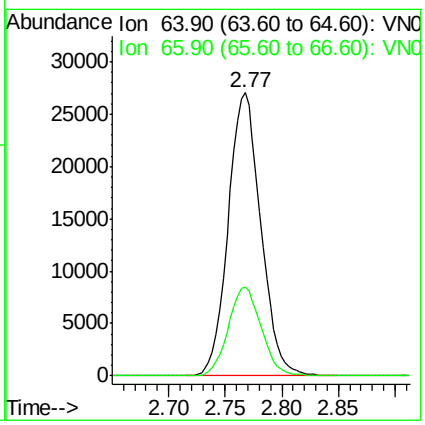




#7
Chloroethane
Concen: 50.21 ug/l
RT: 2.77 min Scan# 304
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 64 Resp: 54188

Ion	Ratio	Lower	Upper
64	100		
66	31.4	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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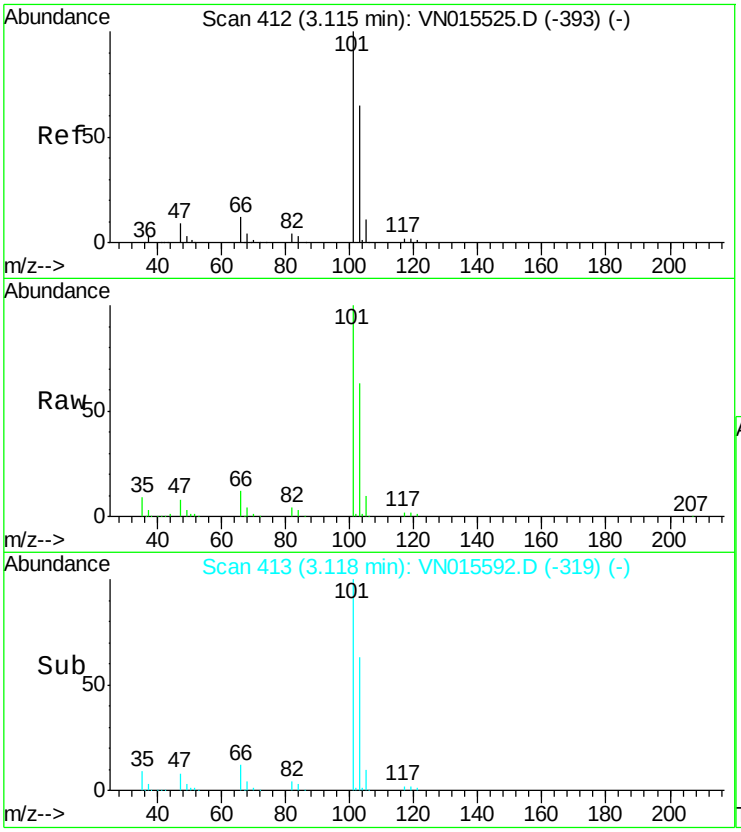
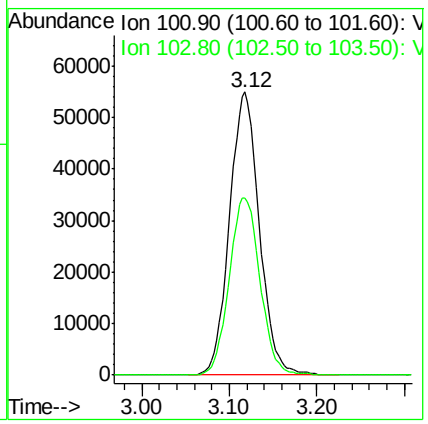
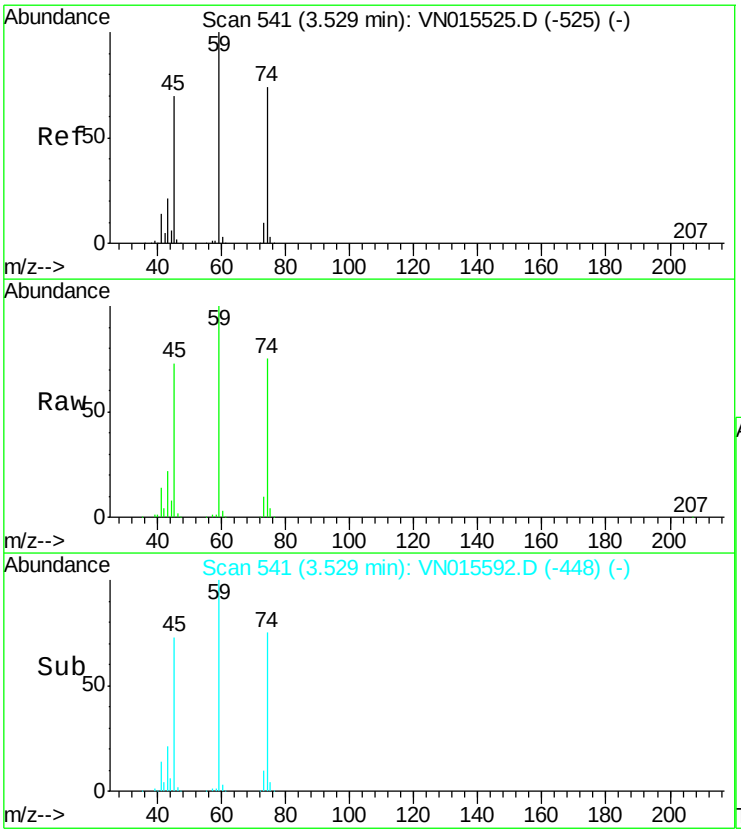


#8
Trichlorofluoromethane
Concen: 46.83 ug/l
RT: 3.12 min Scan# 413
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:101 Resp: 130230

Ion	Ratio	Lower	Upper
101	100		
103	62.8	52.1	78.1

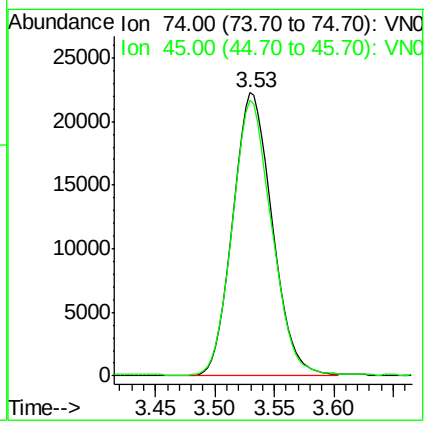


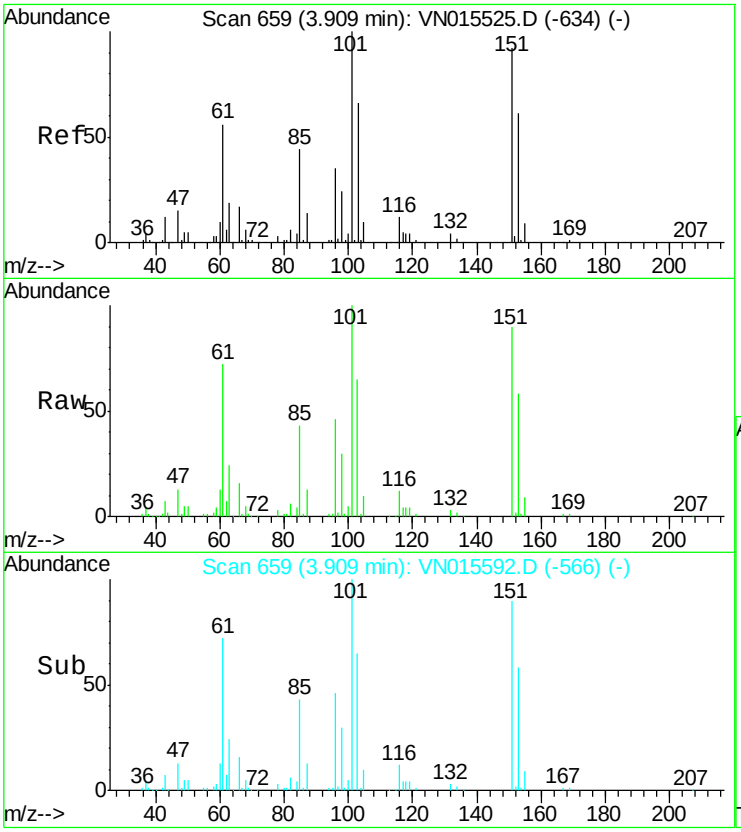


#9
Diethyl Ether
Concen: 49.78 ug/l
RT: 3.53 min Scan# 541
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 74 Resp: 51195

Ion	Ratio	Lower	Upper
74	100		
45	96.4	48.9	146.8





#10
1,1,2-Trichlorotrifluoroethane
Concen: 47.79 ug/l
RT: 3.91 min Scan# 659
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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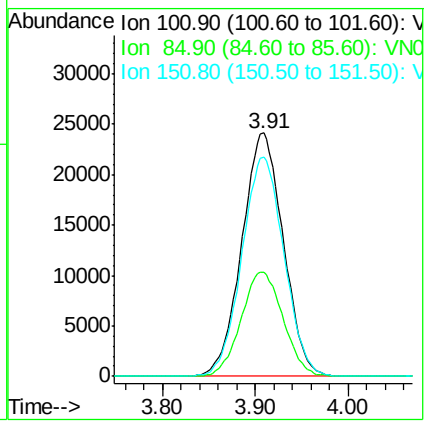
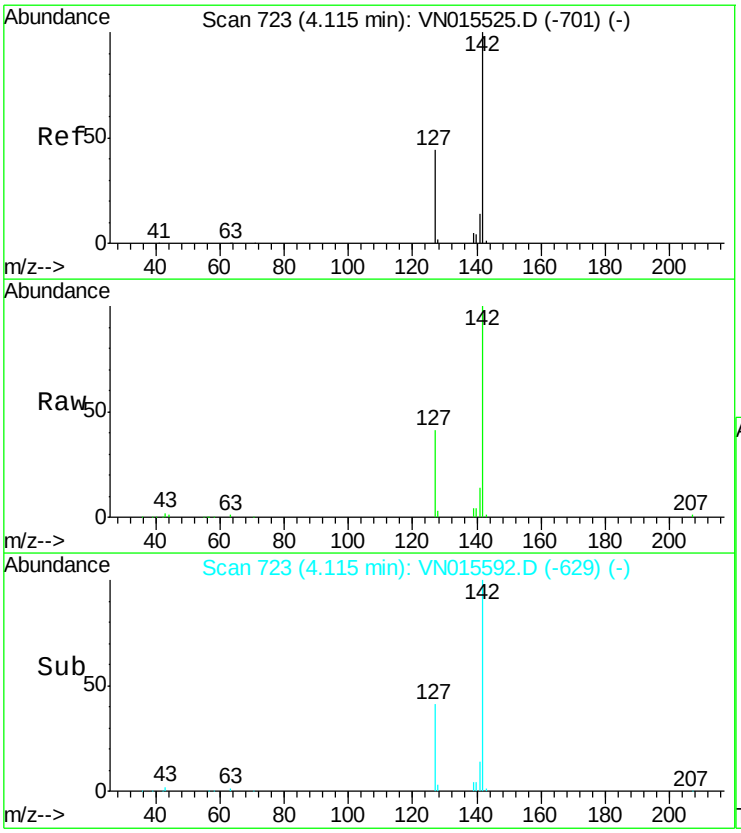
Tgt Ion:101 Resp: 74953

Ion	Ratio	Lower	Upper
101	100		
85	43.2	34.5	51.7
151	91.7	72.9	109.3

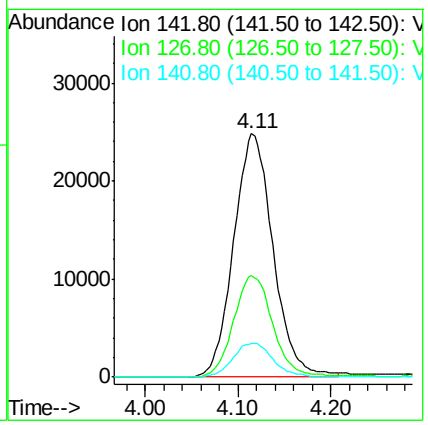




#11
Methyl Iodide
Concen: 37.62 ug/l
RT: 4.11 min Scan# 723
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:142 Resp: 73301

Ion	Ratio	Lower	Upper
142	100		
127	41.6	34.7	52.1
141	14.3	11.4	17.0



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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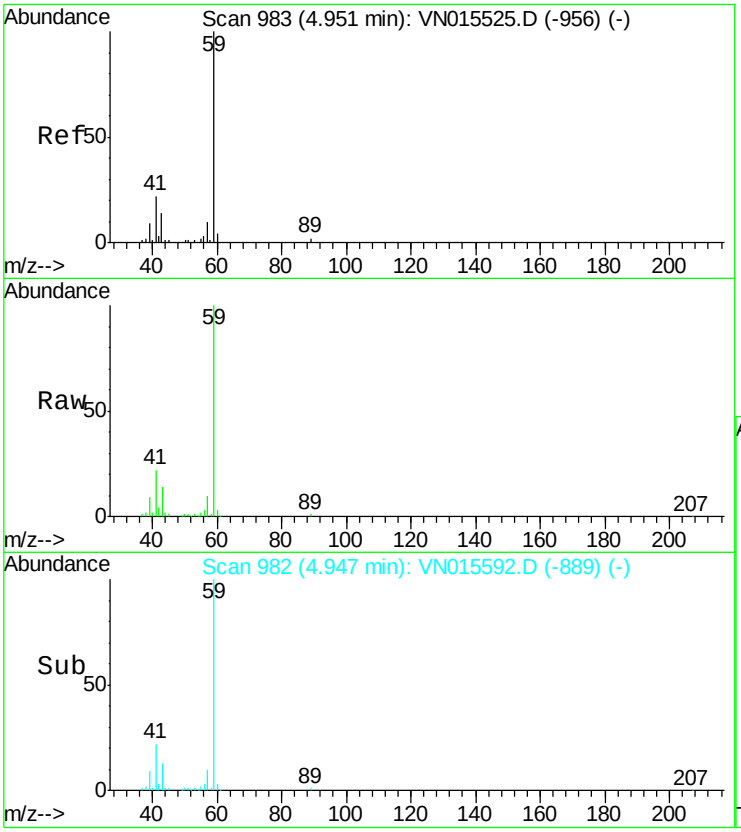
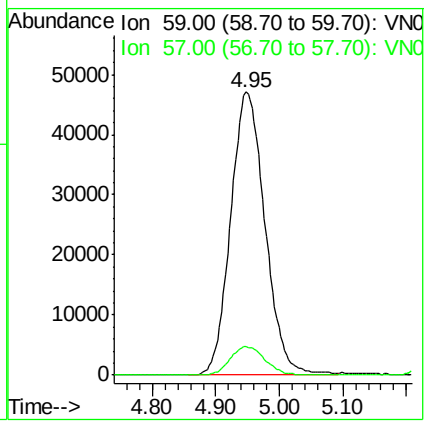
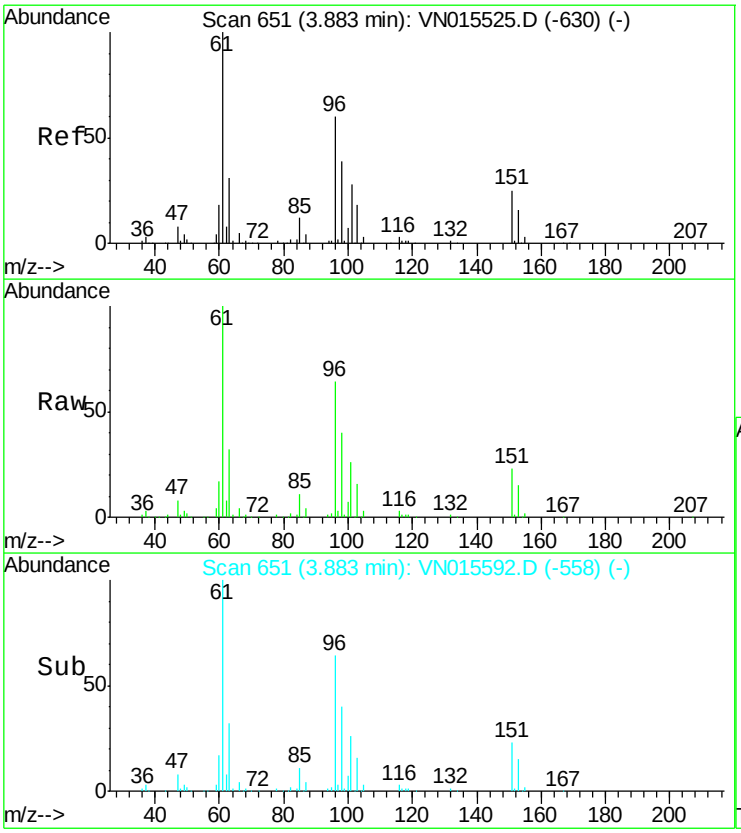


#12
Tert butyl alcohol
Concen: 863.47 ug/l
RT: 4.95 min Scan# 982
Delta R.T. -0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 59 Resp: 176935

Ion	Ratio	Lower	Upper
59	100		
57	10.2	8.4	12.6

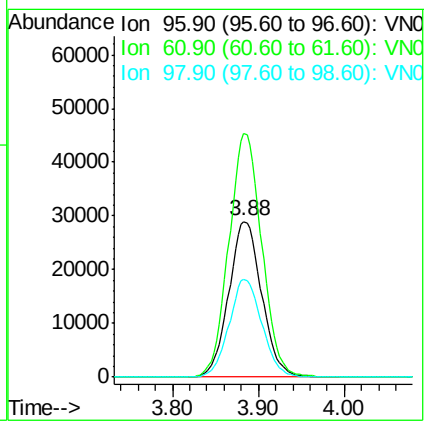




#13
1,1-Dichloroethene
Concen: 51.26 ug/l
RT: 3.88 min Scan# 651
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 96 Resp: 76865

Ion	Ratio	Lower	Upper
96	100		
61	156.6	132.3	198.5
98	63.1	51.8	77.6



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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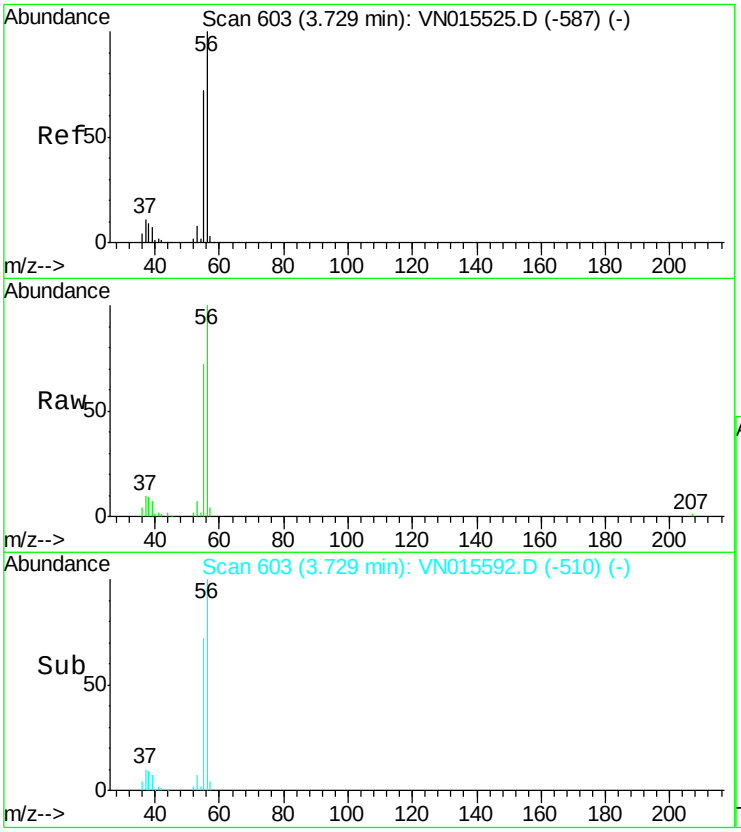
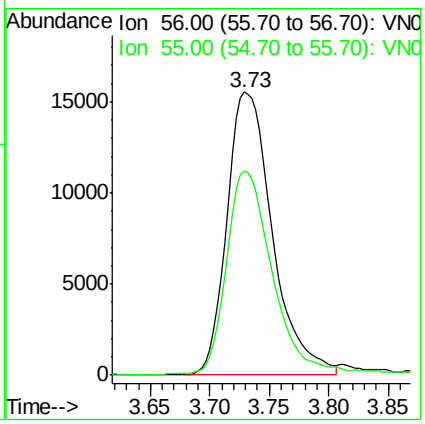
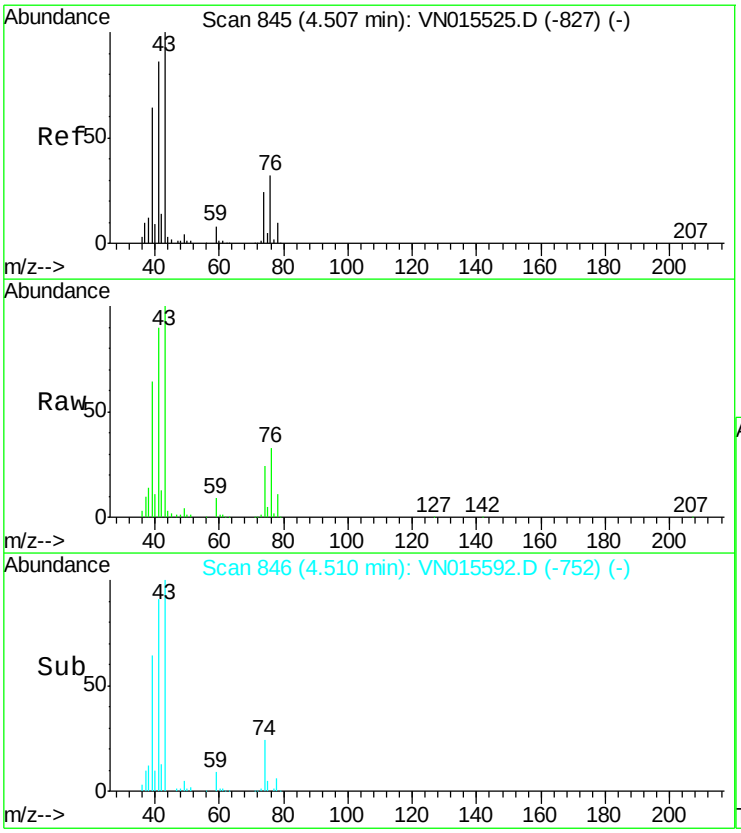


#14
Acrolein
Concen: 216.76 ug/l
RT: 3.73 min Scan# 603
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 56 Resp: 41266

Ion	Ratio	Lower	Upper
56	100		
55	72.7	57.9	86.9

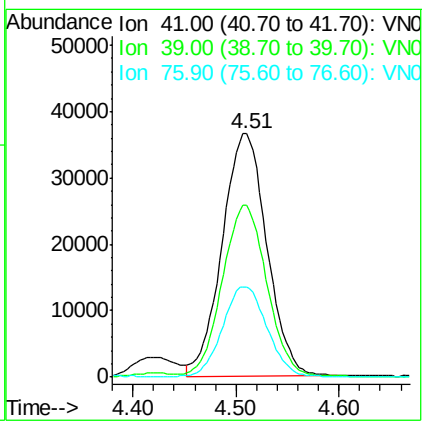


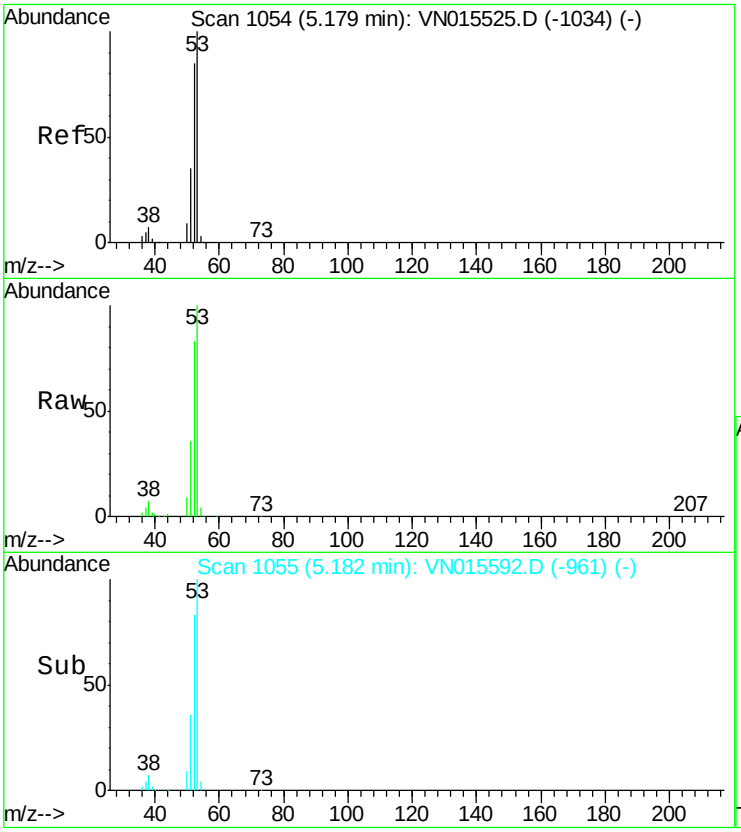


#15
Allyl chloride
Concen: 41.88 ug/l
RT: 4.51 min Scan# 846
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 41 Resp: 109871

Ion	Ratio	Lower	Upper
41	100		
39	70.8	57.4	86.2
76	37.1	28.5	42.7





#16
Acrylonitrile
Concen: 277.57 ug/l
RT: 5.18 min Scan# 1055
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 53 Resp: 187503

Ion	Ratio	Lower	Upper
53	100		
52	80.6	65.7	98.5
51	34.2	29.1	43.7

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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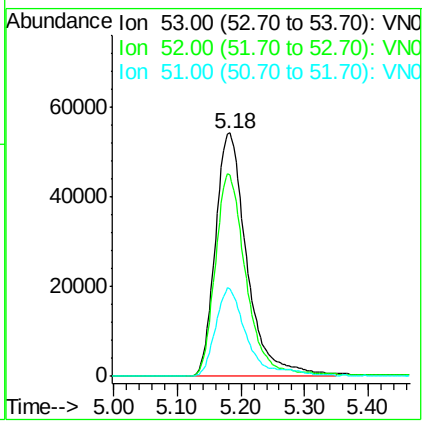
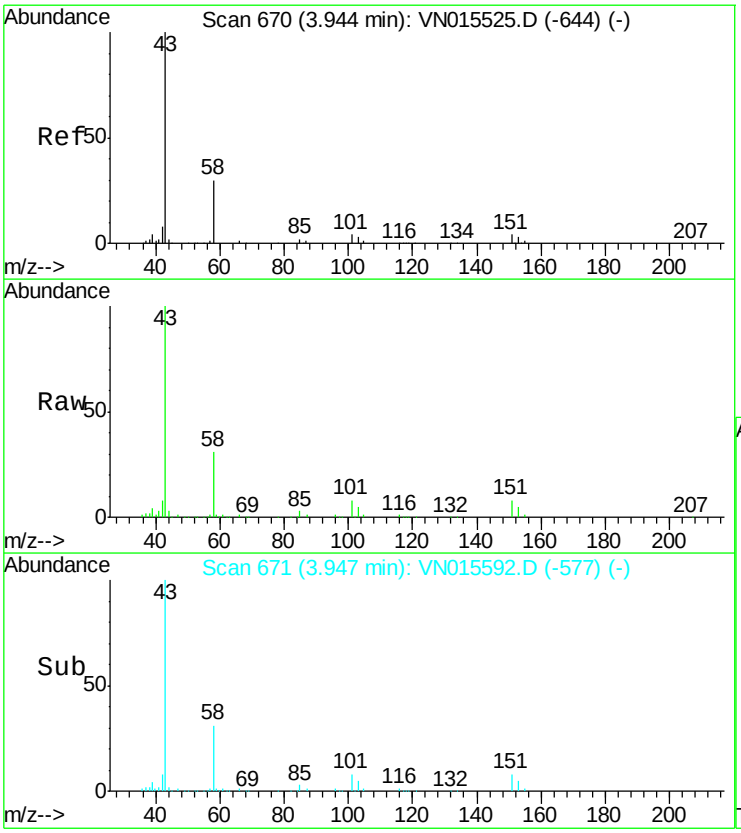
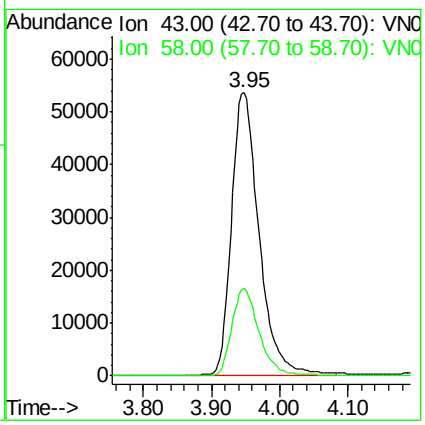




#17
Acetone
Concen: 227.39 ug/l
RT: 3.95 min Scan# 671
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 150431

Ion	Ratio	Lower	Upper
43	100		
58	30.7	24.2	36.2



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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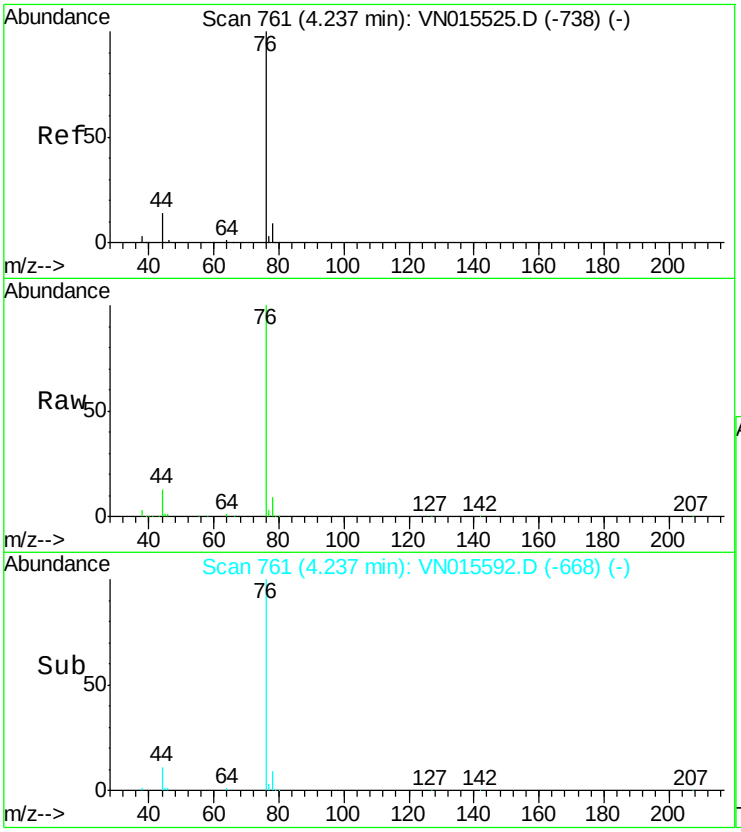
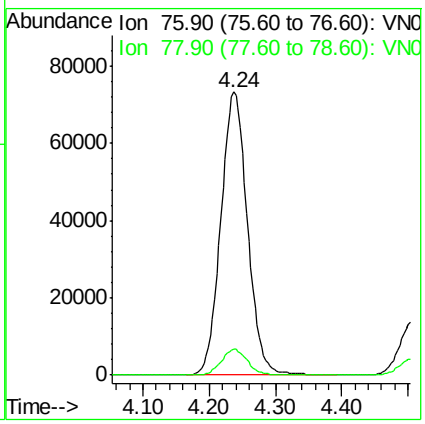
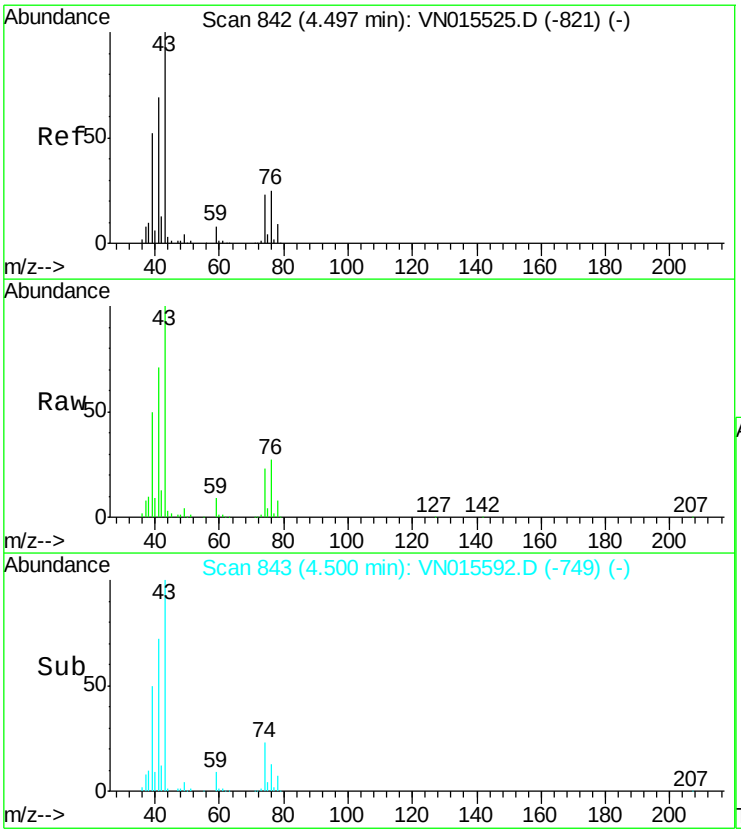


#18
Carbon Disulfide
Concen: 48.43 ug/l
RT: 4.24 min Scan# 761
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 76 Resp: 204659

Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.5	11.3

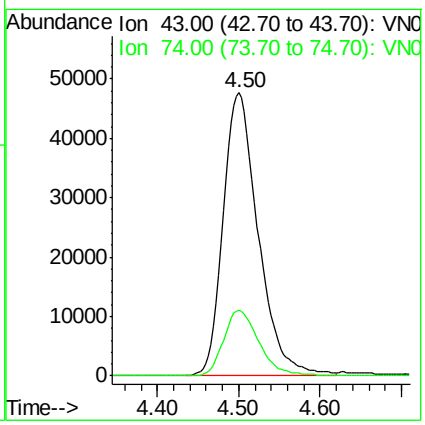




#19
Methyl Acetate
Concen: 44.58 ug/l
RT: 4.50 min Scan# 843
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 142681

Ion	Ratio	Lower	Upper
43	100		
74	23.5	18.5	27.7



Instrument :
MSVOA_N
ClientSampleId :
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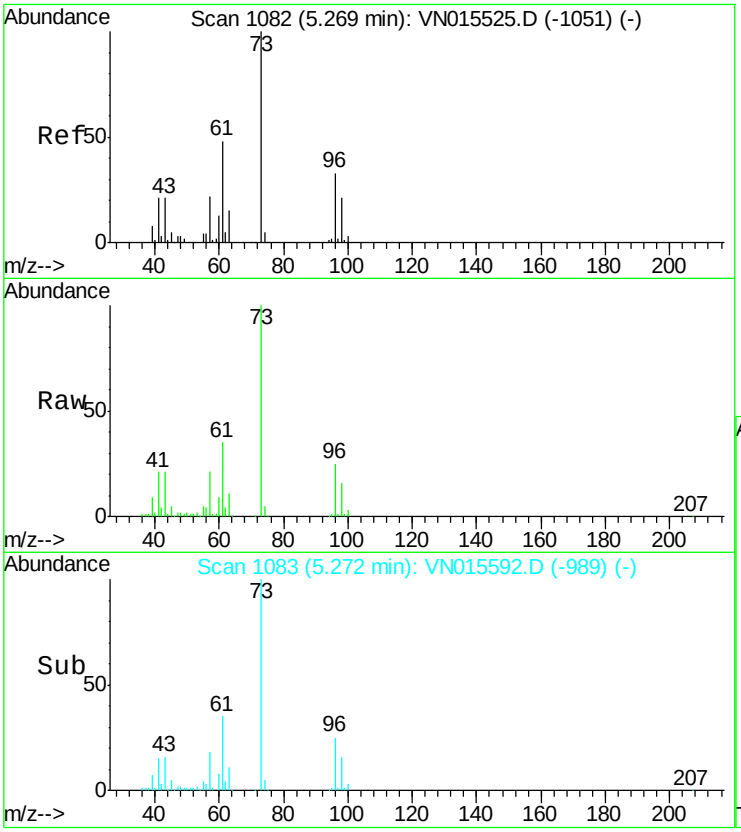
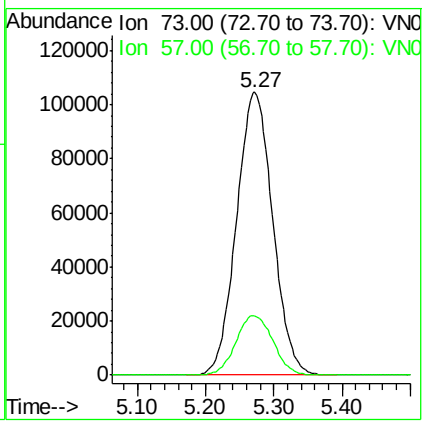
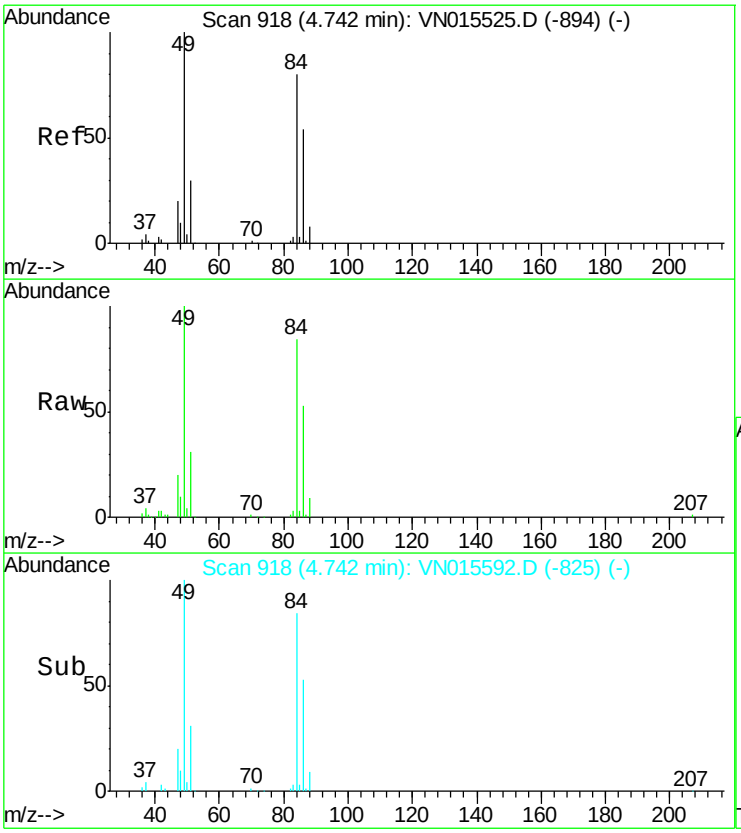


#20
Methyl tert-butyl Ether
Concen: 72.97 ug/l
RT: 5.27 min Scan# 1083
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 73 Resp: 385189

Ion	Ratio	Lower	Upper
73	100		
57	21.0	17.3	25.9

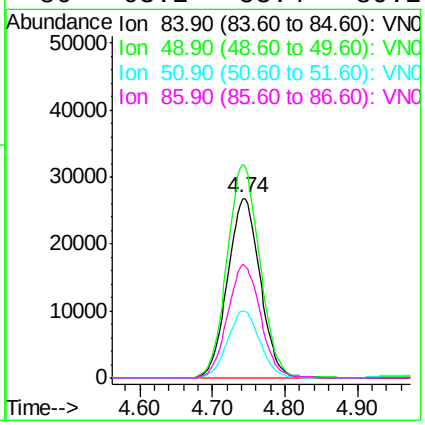




#21
Methylene Chloride
Concen: 48.98 ug/l
RT: 4.74 min Scan# 918
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 84 Resp: 84029

Ion	Ratio	Lower	Upper
84	100		
49	119.0	99.8	149.6
51	37.4	30.2	45.2
86	63.2	53.4	80.2



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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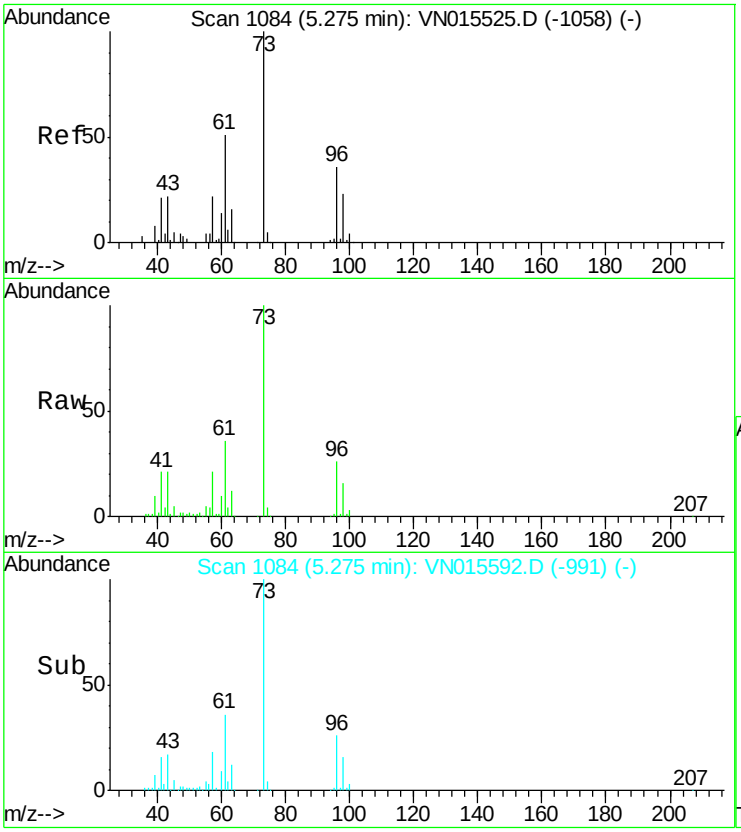
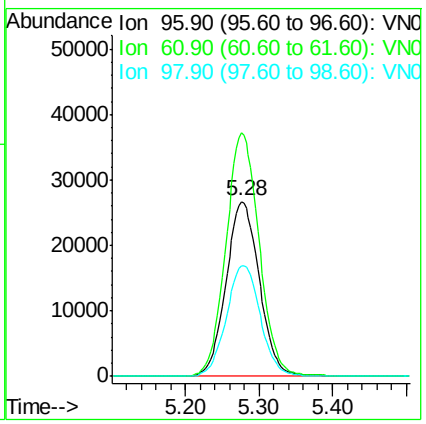
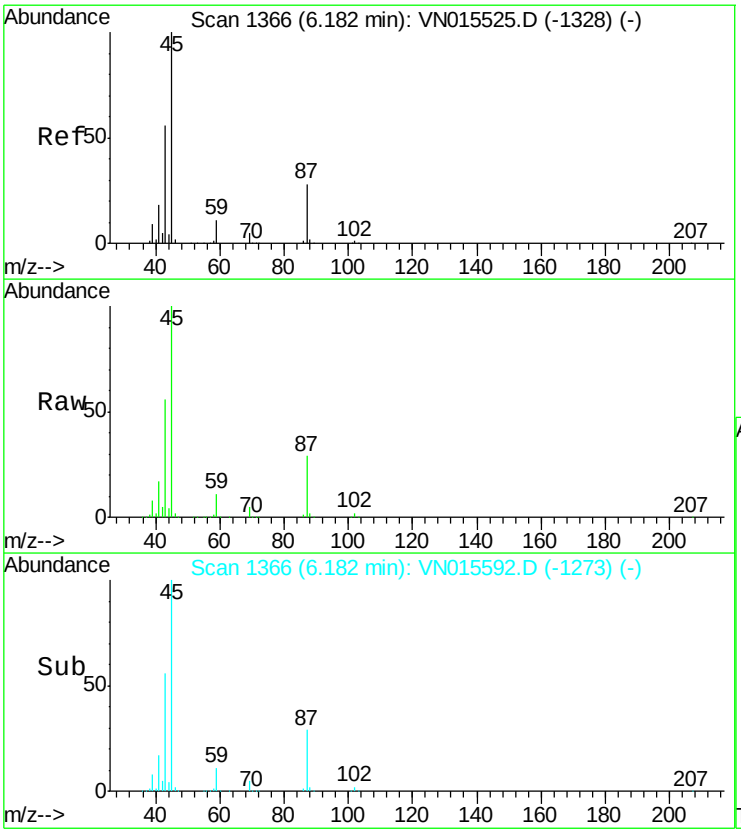


#22
trans-1,2-Dichloroethene
Concen: 53.06 ug/l
RT: 5.28 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 96 Resp: 83890

Ion	Ratio	Lower	Upper
96	100		
61	139.5	113.3	169.9
98	63.2	50.4	75.6

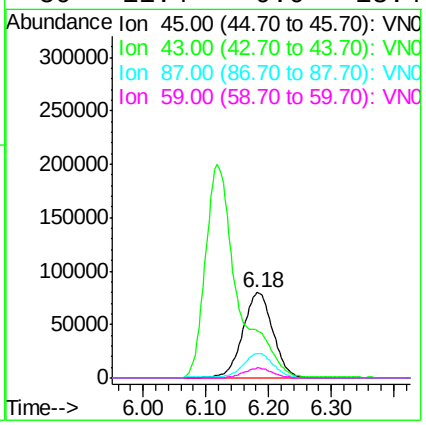




#23
Diisopropyl ether
Concen: 49.51 ug/l
RT: 6.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 45 Resp: 267553

Ion	Ratio	Lower	Upper
45	100		
43	54.8	44.6	67.0
87	29.3	22.3	33.5
59	11.4	9.0	13.4



Instrument :
MSVOA_N
ClientSampleId :
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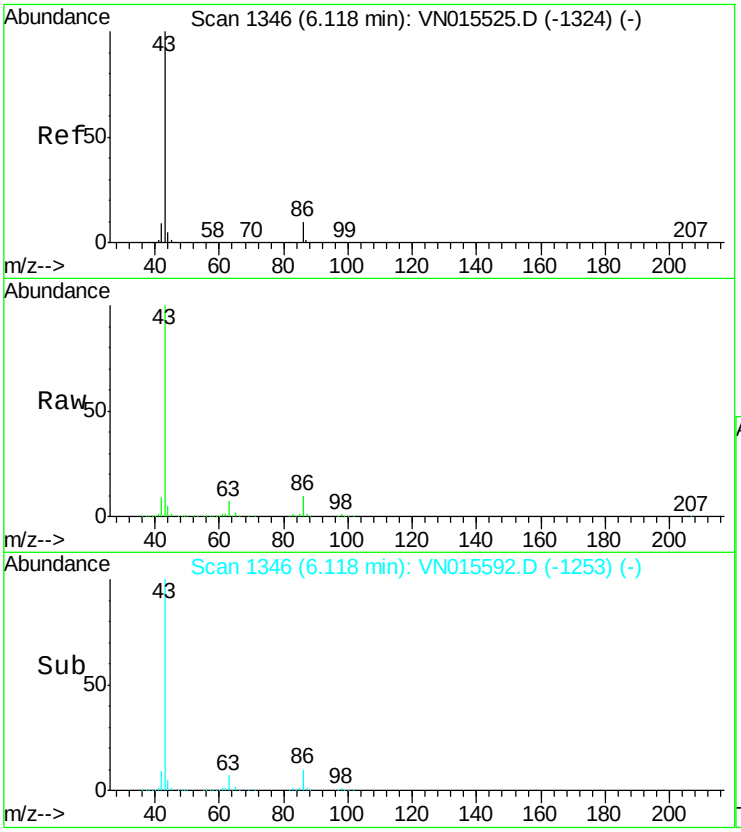
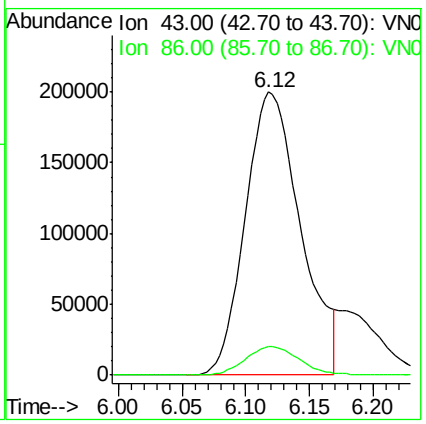
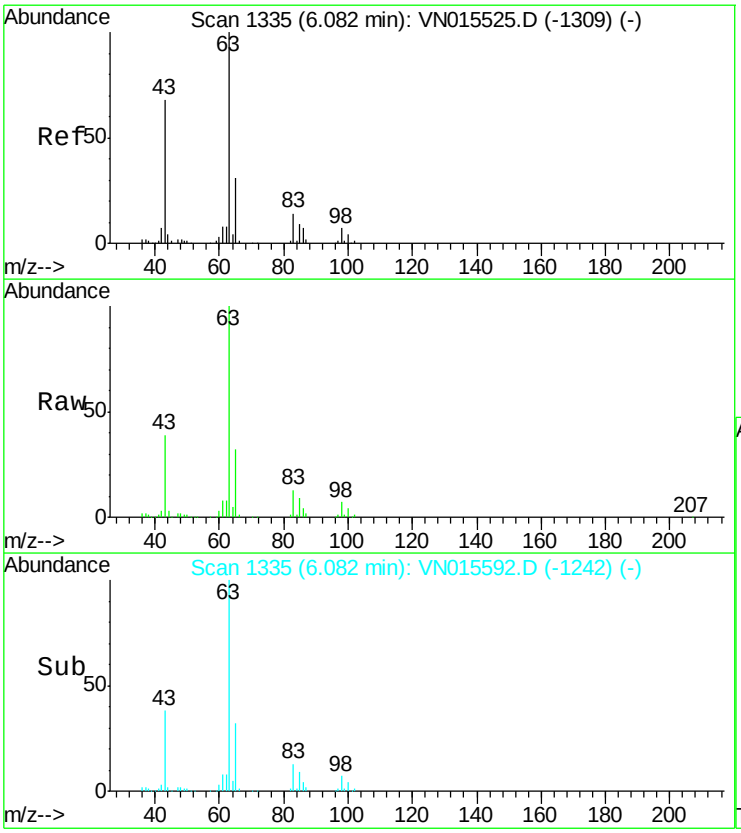


#24
Vinyl Acetate
Concen: 225.53 ug/l m
RT: 6.12 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 605368

Ion	Ratio	Lower	Upper
43	100		
86	10.2	7.9	11.9

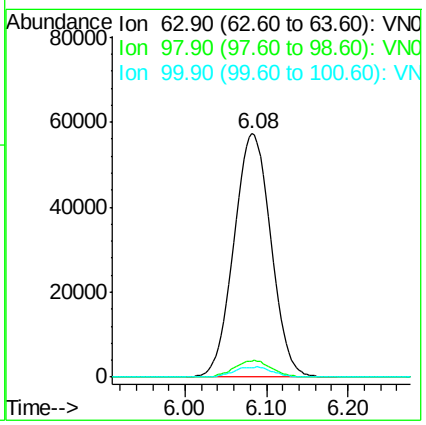


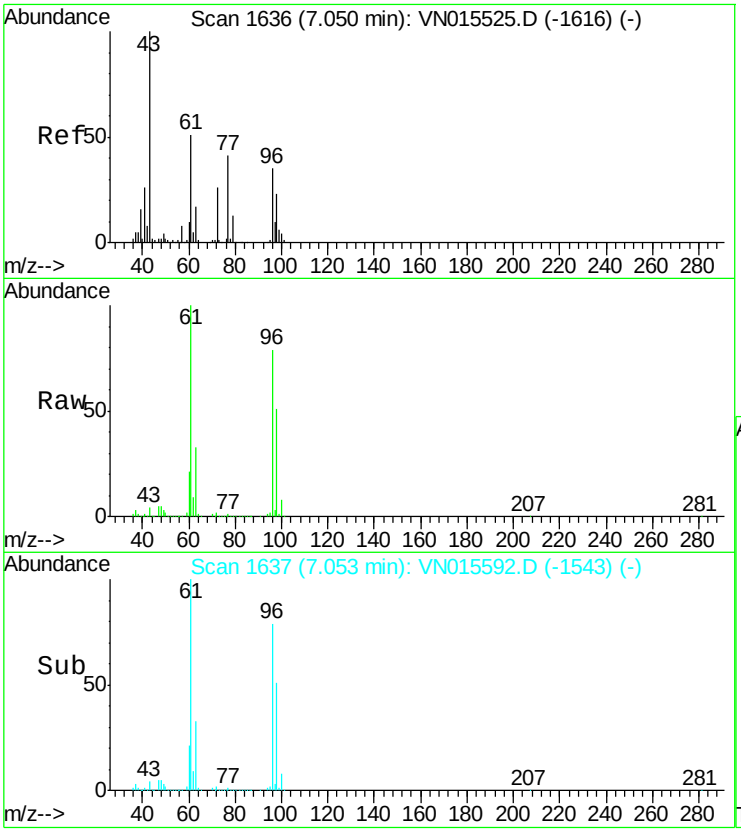


#25
1,1-Dichloroethane
Concen: 60.57 ug/l
RT: 6.08 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 63 Resp: 180219

Ion	Ratio	Lower	Upper
63	100		
98	6.7	3.3	9.9
100	4.1	2.1	6.3





#26
2-Butanone
Concen: 250.55 ug/l
RT: 7.05 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 233841

Ion	Ratio	Lower	Upper
43	100		
72	41.5	20.7	31.1#

Instrument :
MSVOA_N
ClientSampleId :
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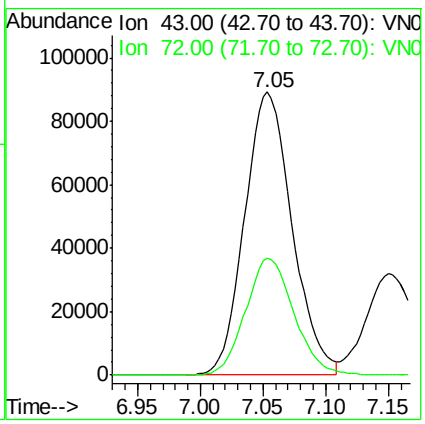
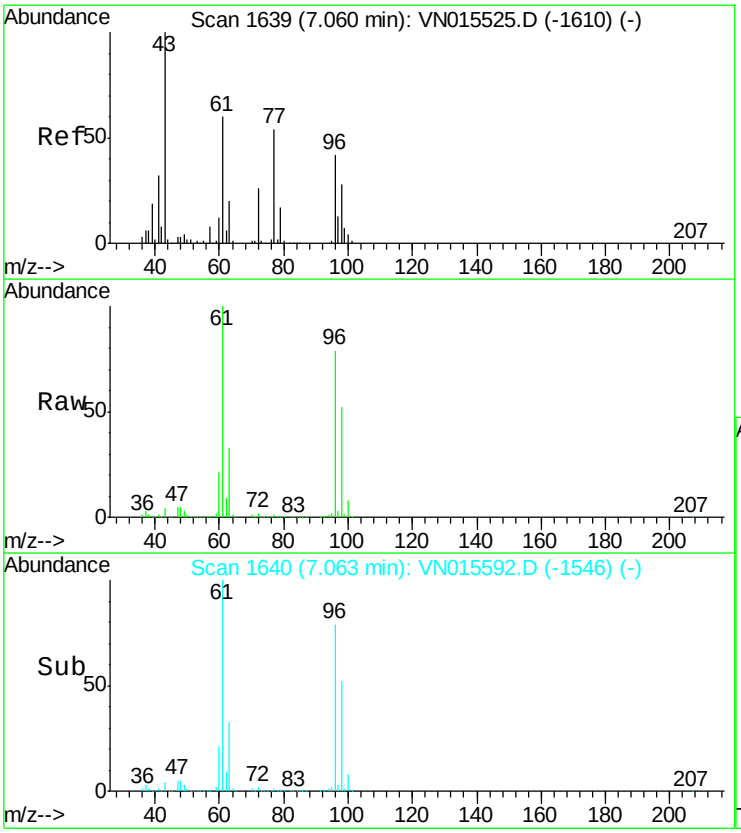
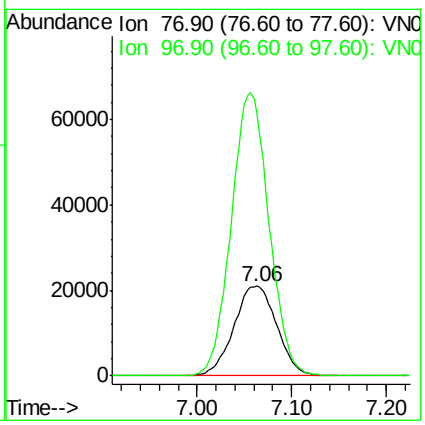




#27
2,2-Dichloropropane
Concen: 25.24 ug/l
RT: 7.06 min Scan# 1640
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 77 Resp: 66295

Ion	Ratio	Lower	Upper
77	100		
97	276.9	11.6	34.7#



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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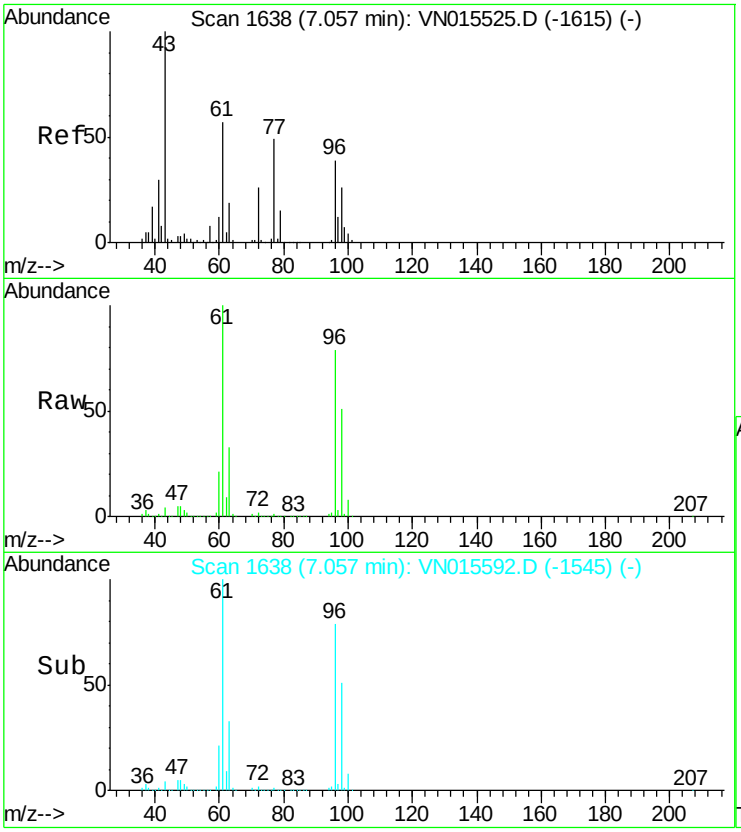
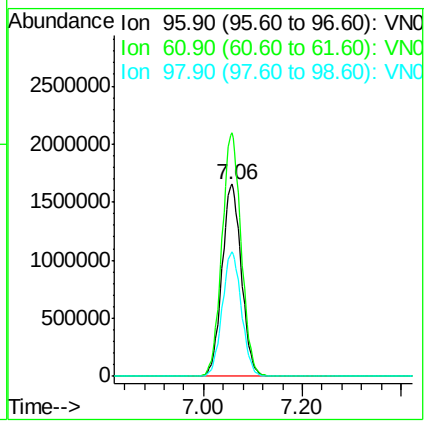
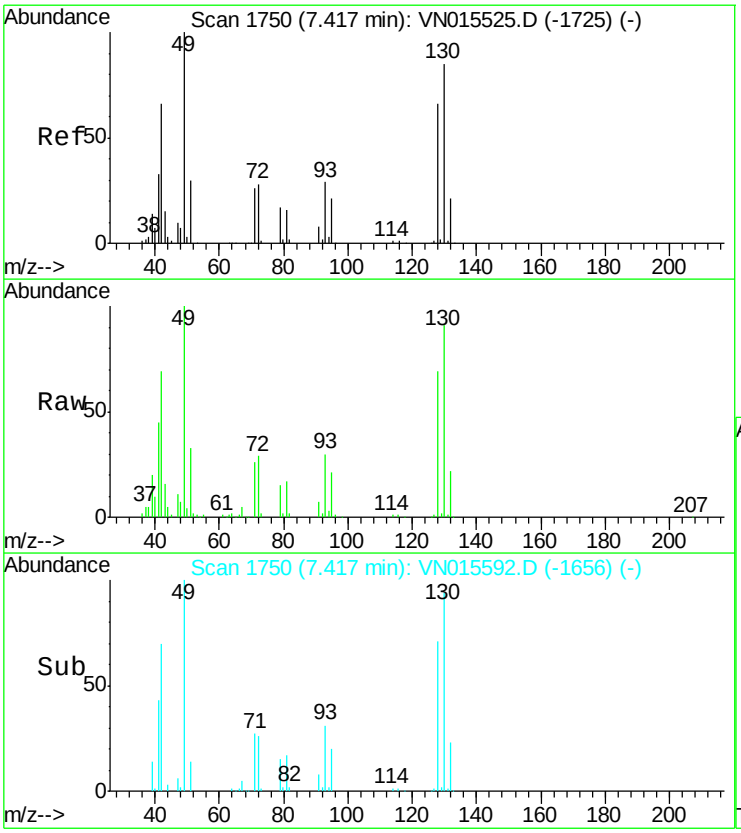


#28
cis-1,2-Dichloroethene
Concen: 2430.56 ug/l
RT: 7.06 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 96 Resp: 4512277

Ion	Ratio	Lower	Upper
96	100		
61	126.5	0.0	292.0
98	64.6	0.0	129.4

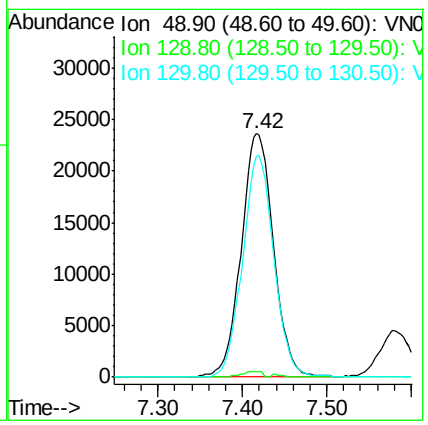




#29
Bromochloromethane
Concen: 47.99 ug/l
RT: 7.42 min Scan# 1750
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 49 Resp: 62972

Ion	Ratio	Lower	Upper
49	100		
129	1.5	0.0	4.2
130	88.3	68.6	102.8



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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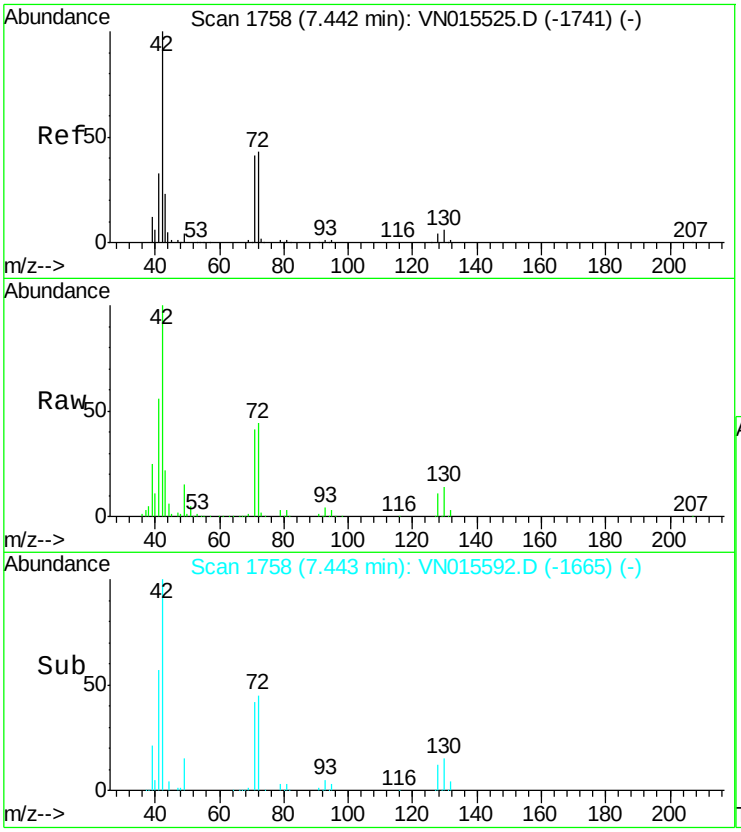
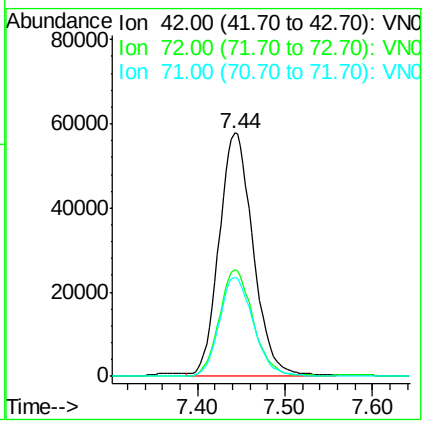
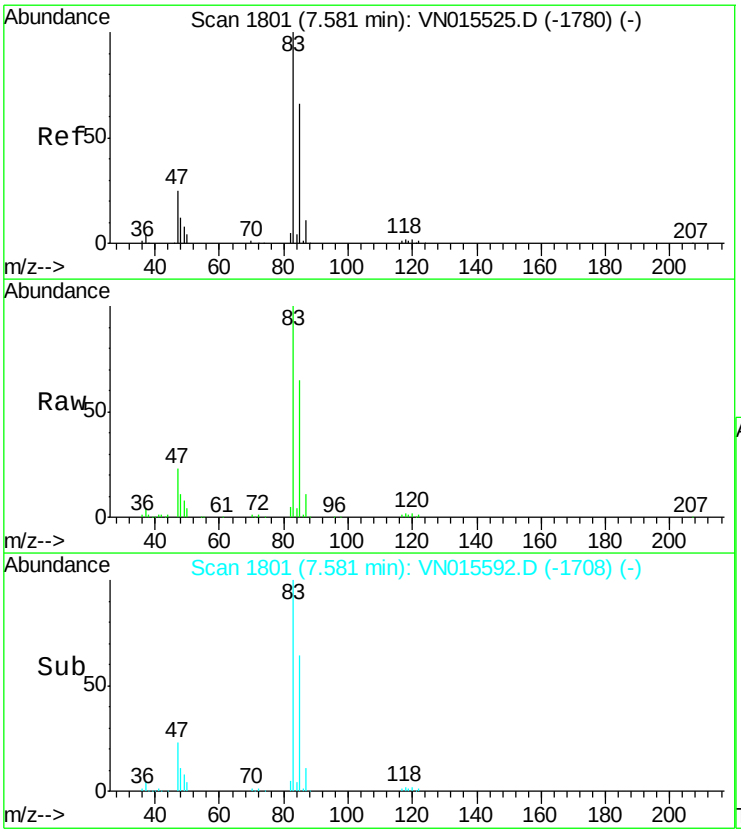


#30
Tetrahydrofuran
Concen: 247.34 ug/l
RT: 7.44 min Scan# 1758
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 42 Resp: 155334

Ion	Ratio	Lower	Upper
42	100		
72	43.9	34.2	51.2
71	40.8	32.5	48.7

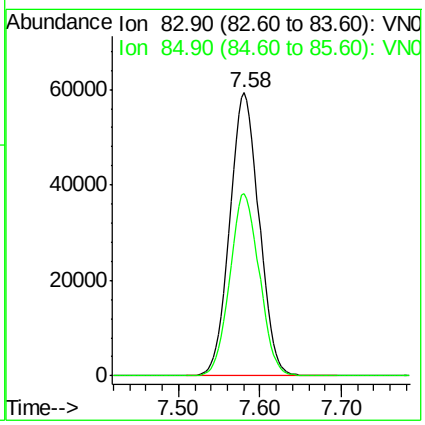




#31
Chloroform
Concen: 48.39 ug/l
RT: 7.58 min Scan# 1801
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 83 Resp: 148679

Ion	Ratio	Lower	Upper
83	100		
85	64.6	52.6	78.8



Instrument :
MSVOA_N
ClientSampleId :
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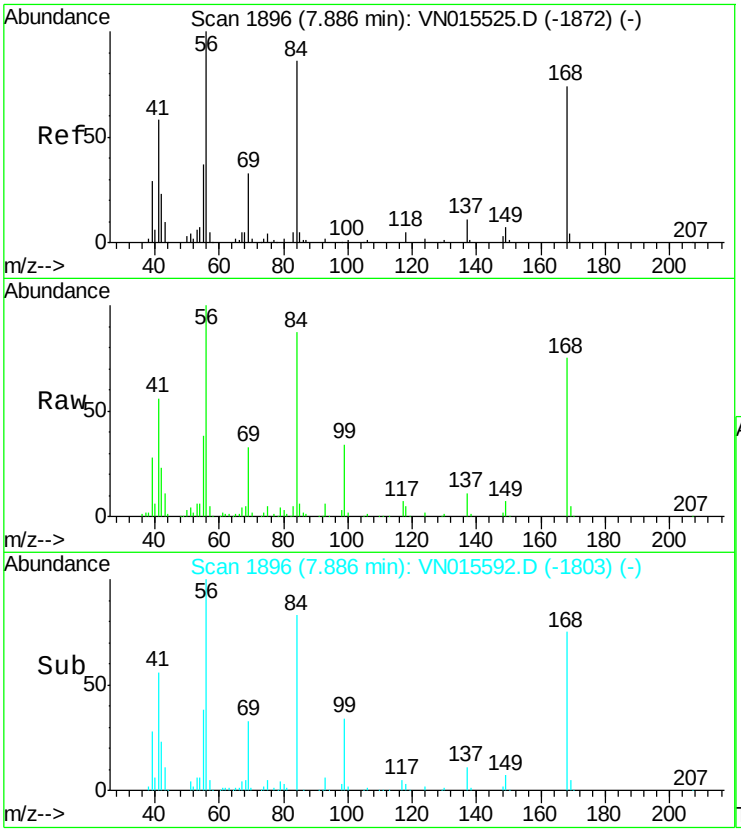
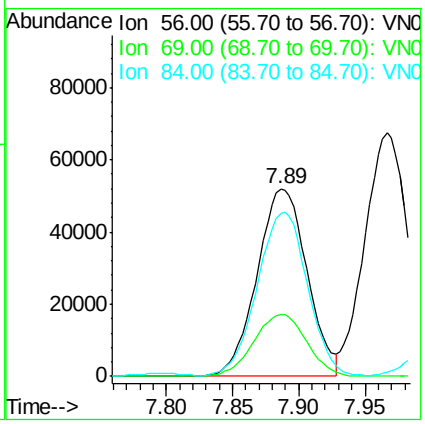
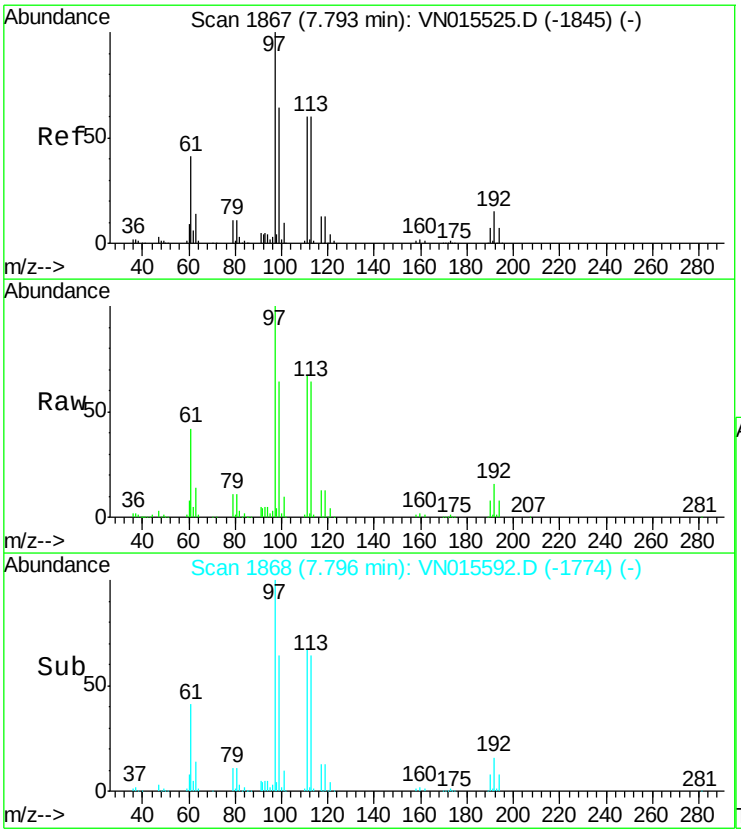


#32
Cyclohexane
Concen: 51.64 ug/l
RT: 7.89 min Scan# 1896
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 56 Resp: 136427

Ion	Ratio	Lower	Upper
56	100		
69	33.1	26.6	39.8
84	86.3	69.0	103.4

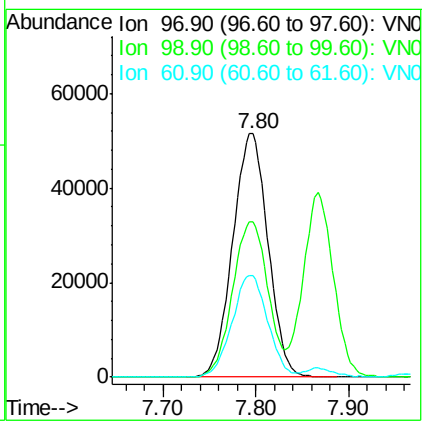




#33
1,1,1-Trichloroethane
Concen: 47.20 ug/l
RT: 7.80 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 97 Resp: 135780

Ion	Ratio	Lower	Upper
97	100		
99	64.5	51.2	76.8
61	41.9	33.9	50.9



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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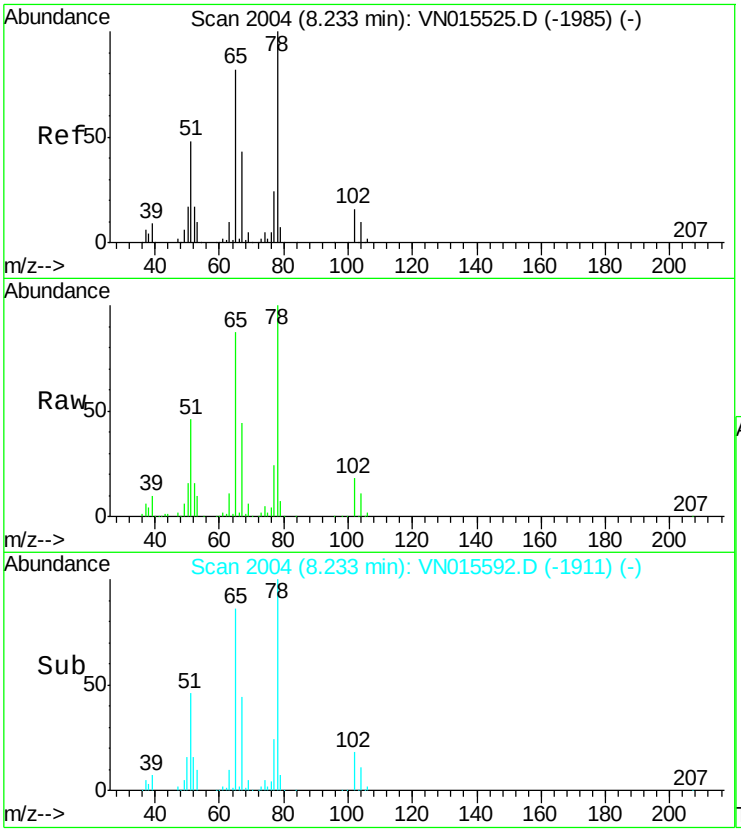
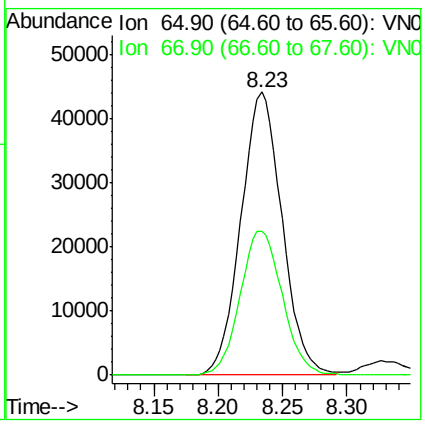
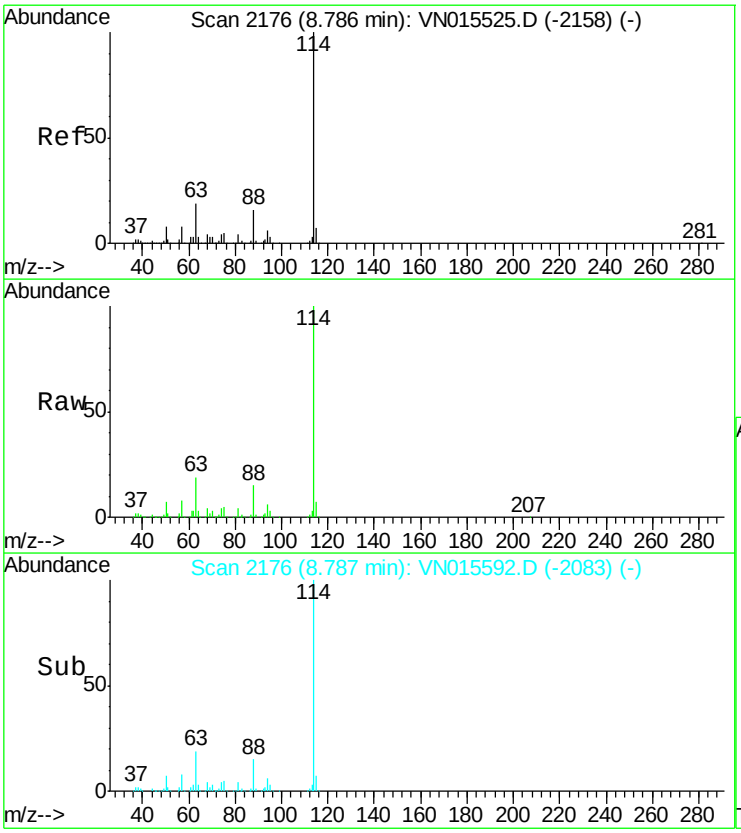


#34
1,2-Dichloroethane-d4
Concen: 46.69 ug/l
RT: 8.23 min Scan# 2004
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 65 Resp: 98455

Ion	Ratio	Lower	Upper
65	100		
67	52.2	0.0	103.6

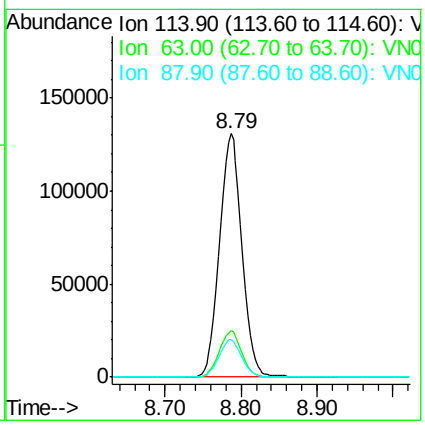




#35
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 8.79 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:114 Resp: 268261

Ion	Ratio	Lower	Upper
114	100		
63	18.9	0.0	38.6
88	15.4	0.0	32.2



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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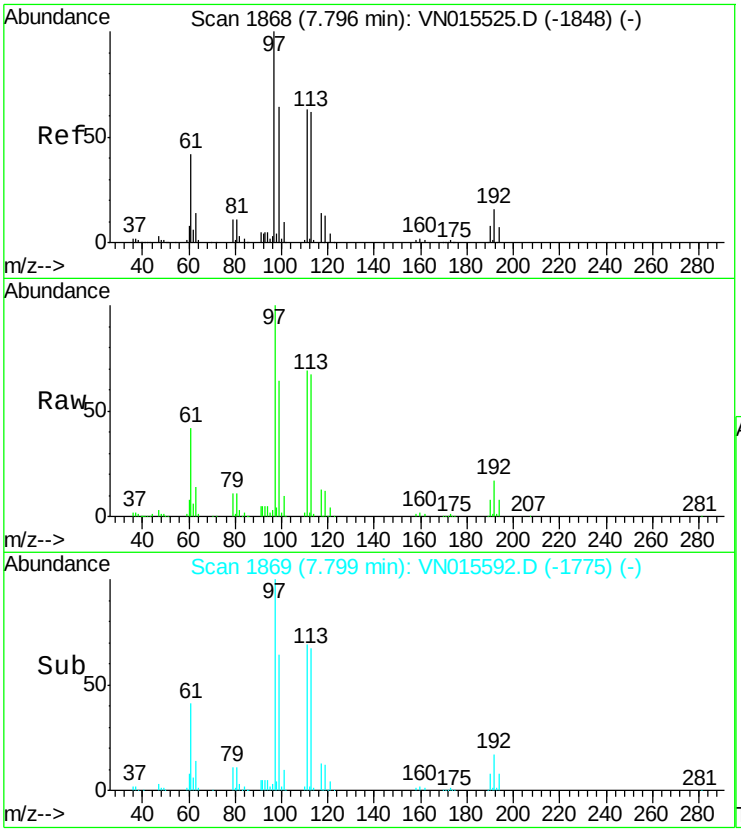
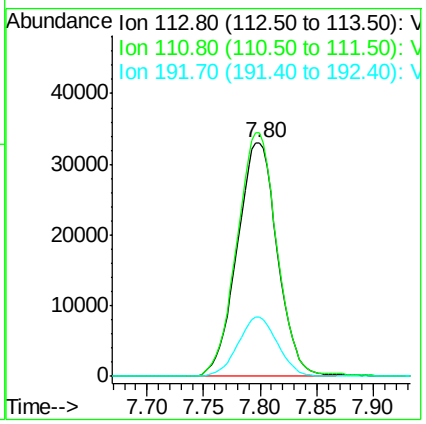
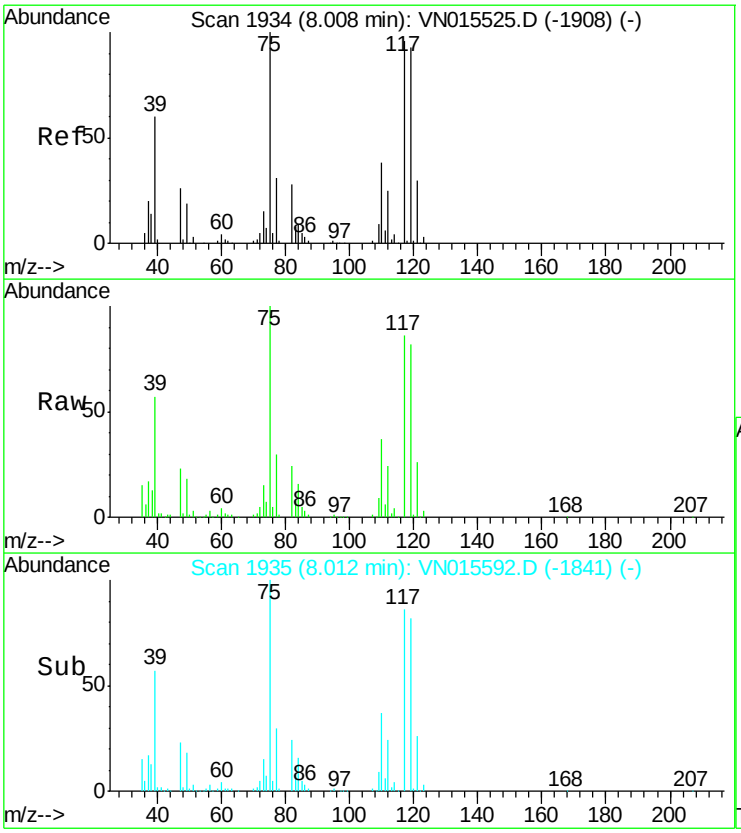


#36
Dibromofluoromethane
Concen: 46.79 ug/l
RT: 7.80 min Scan# 1869
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:113 Resp: 81748

Ion	Ratio	Lower	Upper
113	100		
111	103.4	81.5	122.3
192	24.9	20.0	30.0

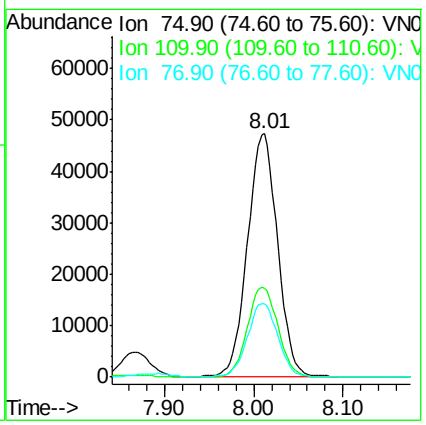




#37
1,1-Dichloropropene
Concen: 46.50 ug/l
RT: 8.01 min Scan# 1935
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 75 Resp: 111255

Ion	Ratio	Lower	Upper
75	100		
110	37.5	18.6	55.6
77	30.9	24.4	36.6



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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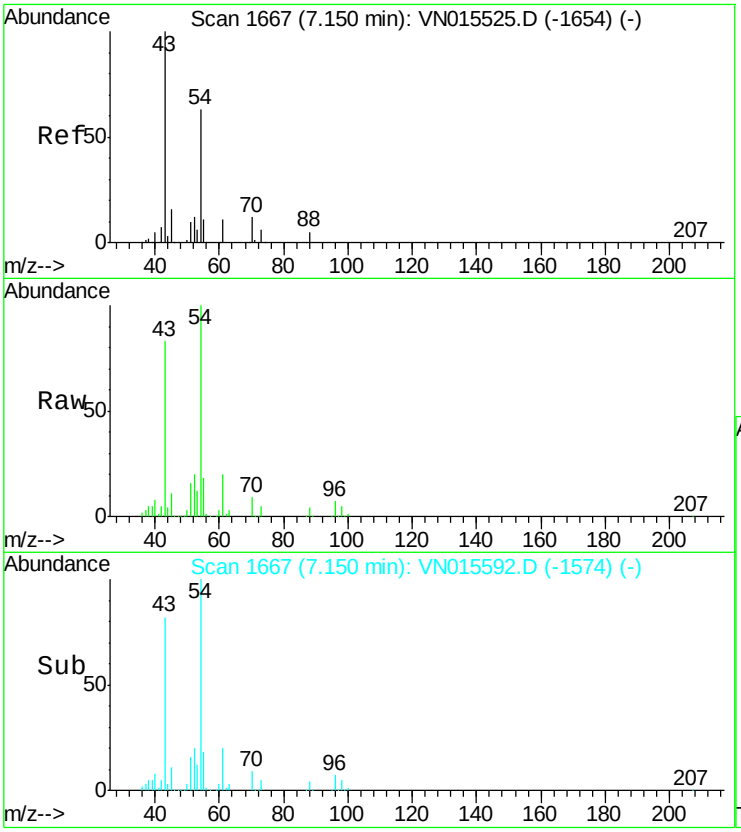
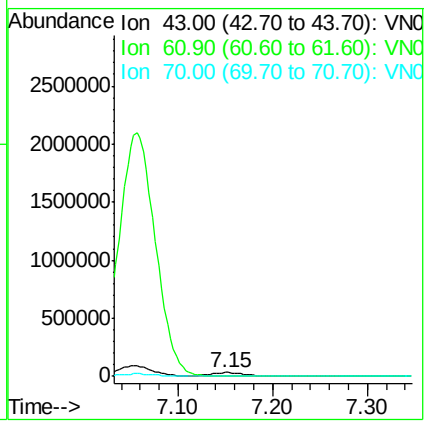
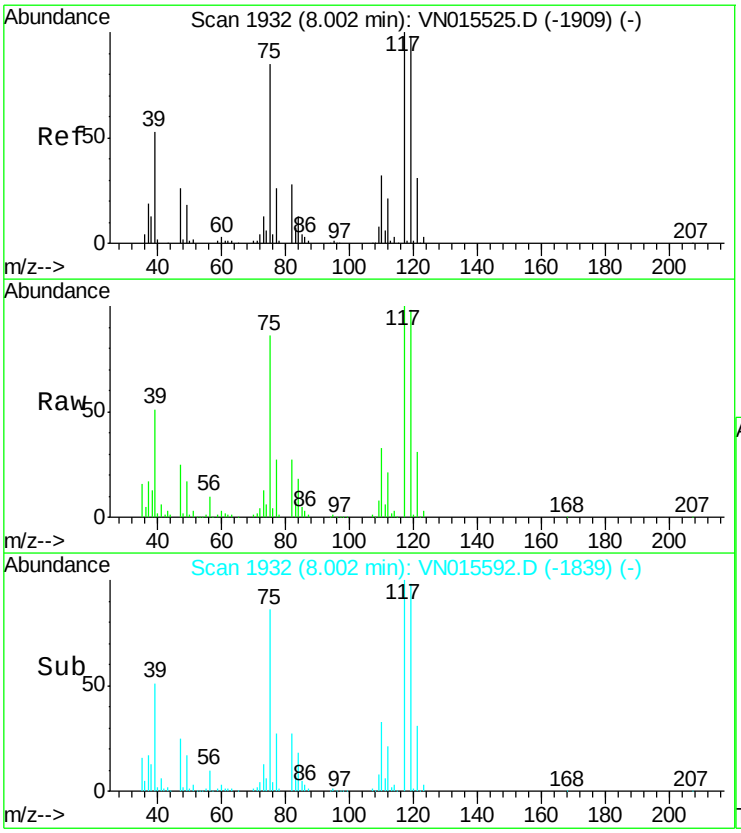


#38
Ethyl Acetate
Concen: 42.07 ug/l
RT: 7.15 min Scan# 1667
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 88819

Ion	Ratio	Lower	Upper
43	100		
61	0.0	10.8	16.2#
70	10.8	8.5	12.7

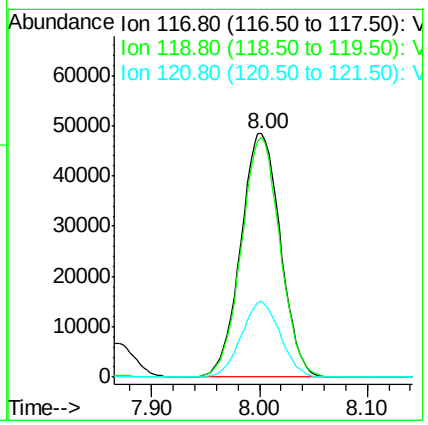




#39
Carbon Tetrachloride
Concen: 45.19 ug/l
RT: 8.00 min Scan# 1932
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:117 Resp: 123627

Ion	Ratio	Lower	Upper
117	100		
119	98.4	78.0	117.0
121	31.0	24.5	36.7



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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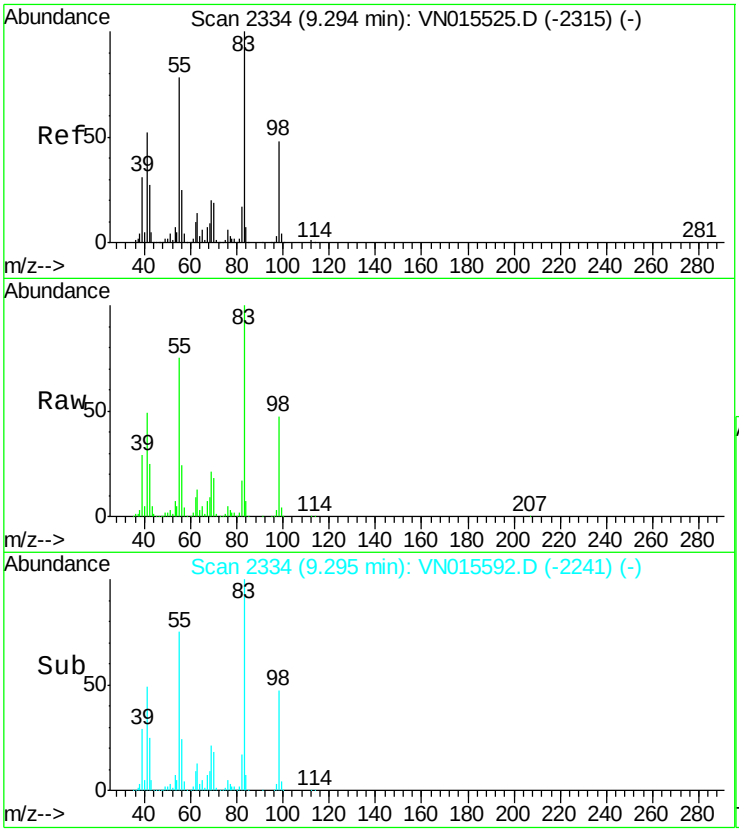
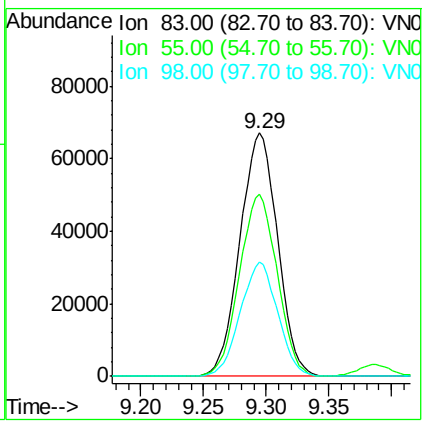
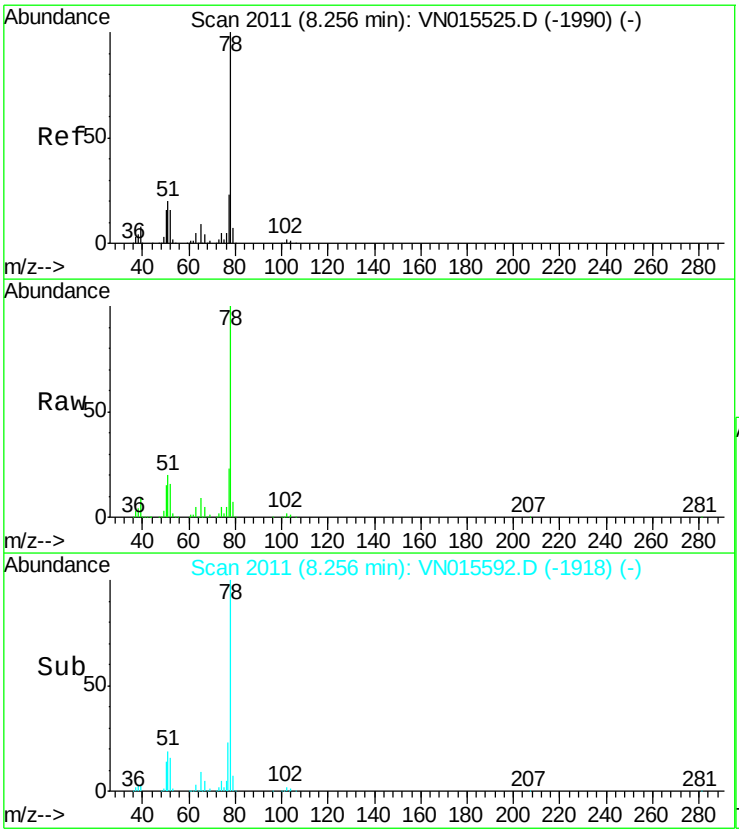


#40
Methylcyclohexane
Concen: 45.90 ug/l
RT: 9.29 min Scan# 2334
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 83 Resp: 140431

Ion	Ratio	Lower	Upper
83	100		
55	74.7	62.5	93.7
98	46.8	38.2	57.2

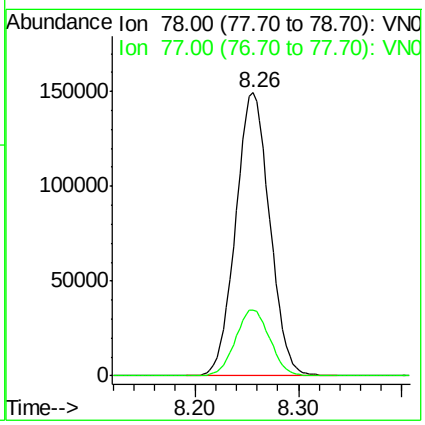




#41
Benzene
Concen: 48.04 ug/l
RT: 8.26 min Scan# 2011
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 78 Resp: 342769

Ion	Ratio	Lower	Upper
78	100		
77	23.5	18.5	27.7



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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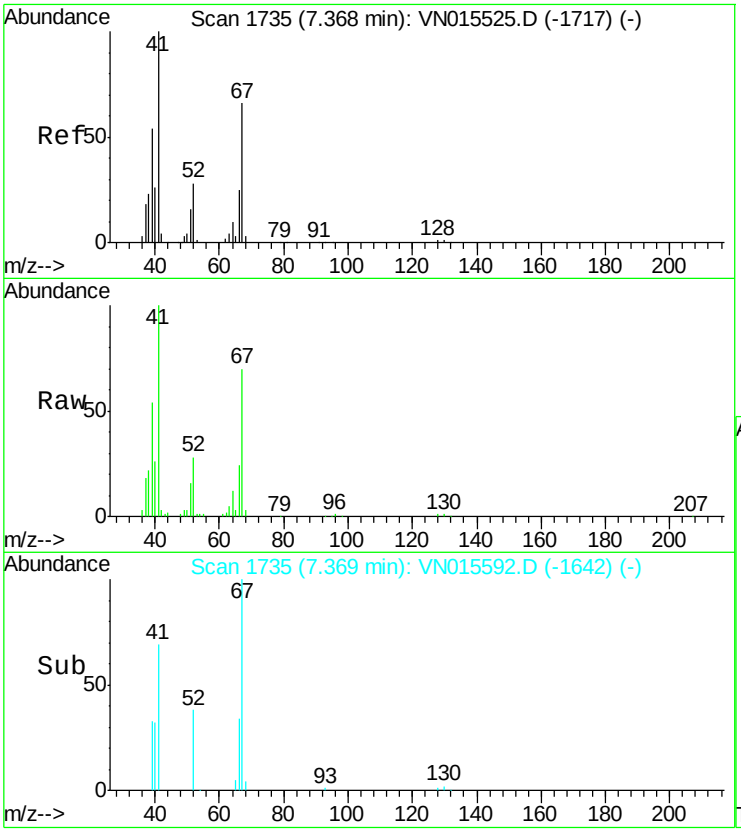
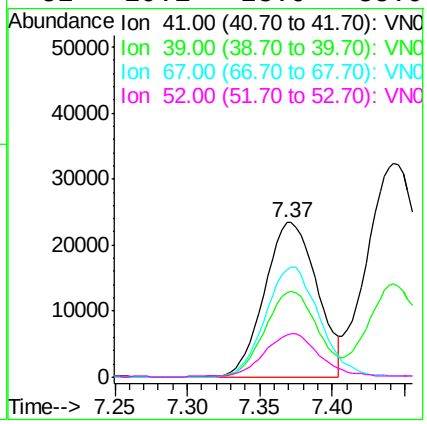
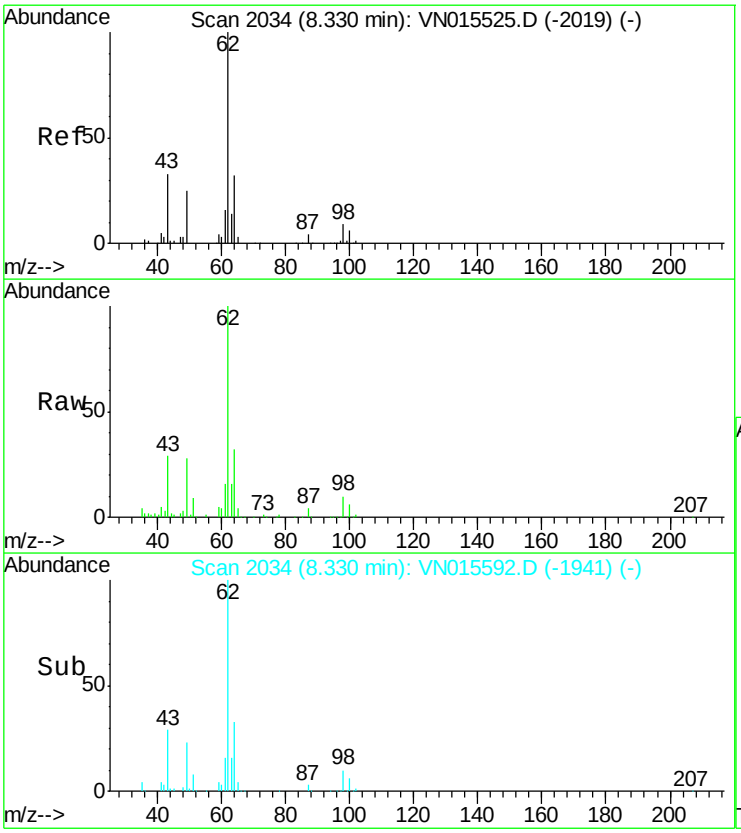


#42
Methacrylonitrile
Concen: 47.21 ug/l
RT: 7.37 min Scan# 1735
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 41 Resp: 58914

Ion	Ratio	Lower	Upper
41	100		
39	56.2	45.0	67.4
67	74.0	54.9	82.3
52	29.1	23.9	35.9

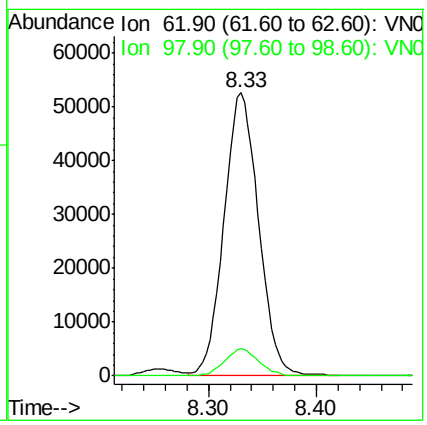




#43
1,2-Dichloroethane
Concen: 44.78 ug/l
RT: 8.33 min Scan# 2034
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 62 Resp: 116701

Ion	Ratio	Lower	Upper
62	100		
98	9.6	0.0	18.2



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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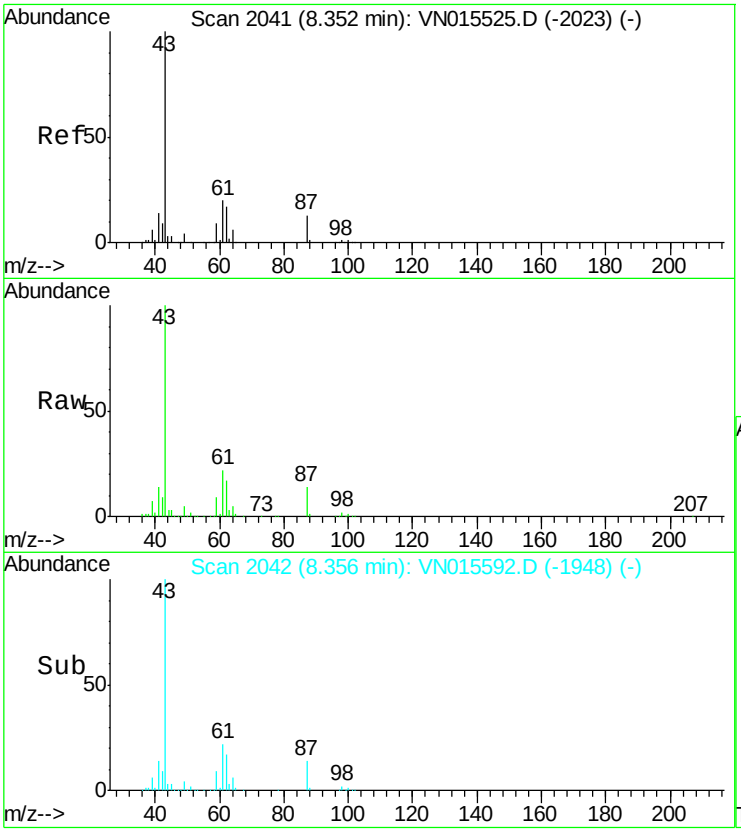
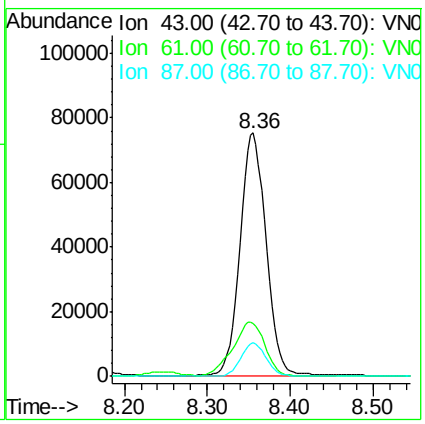
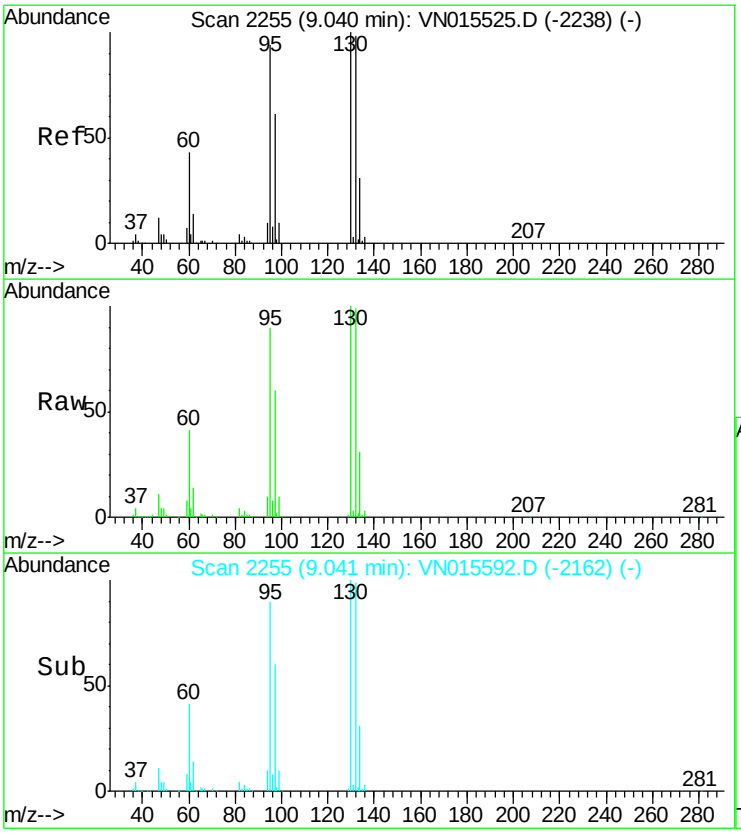


#44
Isopropyl Acetate
Concen: 43.46 ug/l
RT: 8.36 min Scan# 2042
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 165076

Ion	Ratio	Lower	Upper
43	100		
61	27.5	20.4	30.6
87	13.4	10.4	15.6

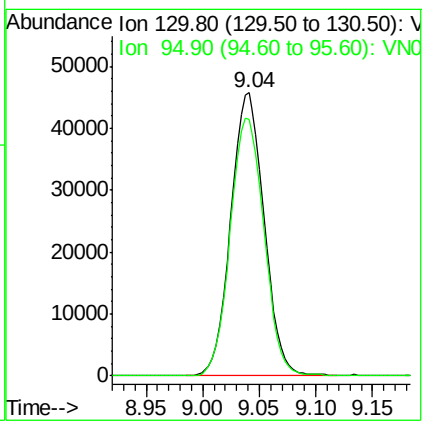




#45
Trichloroethene
Concen: 46.96 ug/l
RT: 9.04 min Scan# 2255
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:130 Resp: 93837

Ion	Ratio	Lower	Upper
130	100		
95	90.4	0.0	187.0



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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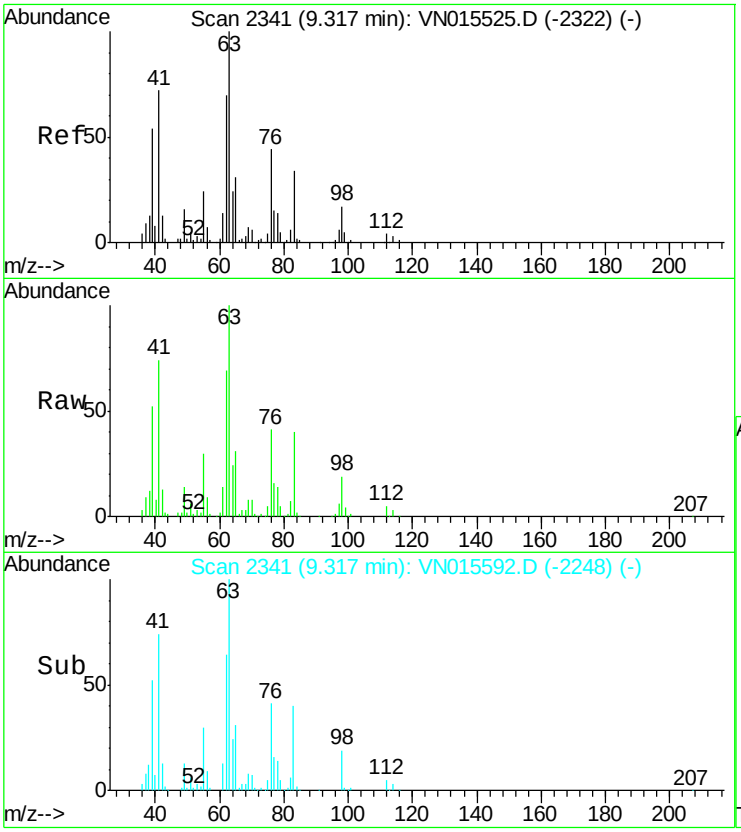
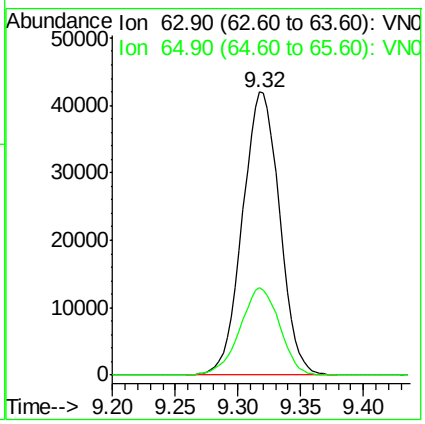
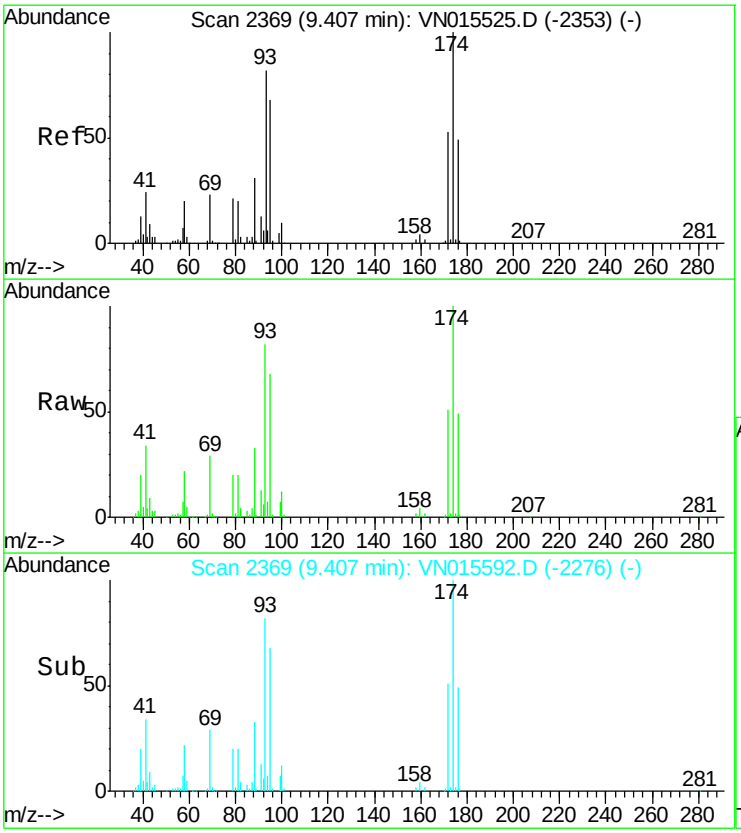


#46
1,2-Dichloropropane
Concen: 47.25 ug/l
RT: 9.32 min Scan# 2341
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 63 Resp: 86606

Ion	Ratio	Lower	Upper
63	100		
65	31.1	25.0	37.4

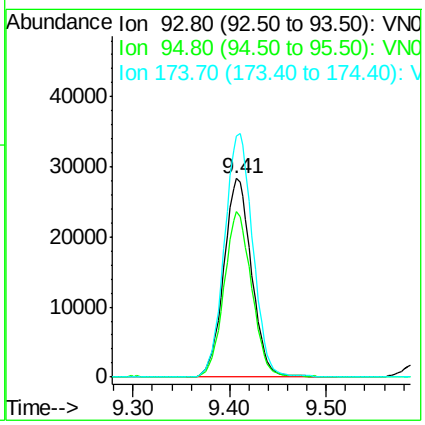




#47
Dibromomethane
Concen: 46.92 ug/l
RT: 9.41 min Scan# 2369
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 93 Resp: 56577

Ion	Ratio	Lower	Upper
93	100		
95	83.0	66.9	100.3
174	125.2	98.6	148.0



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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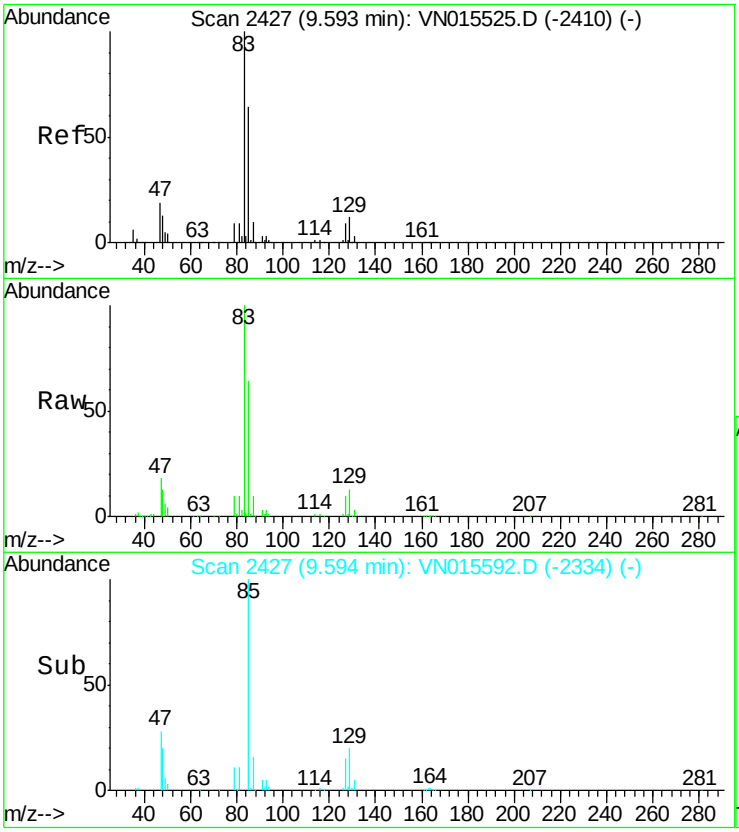
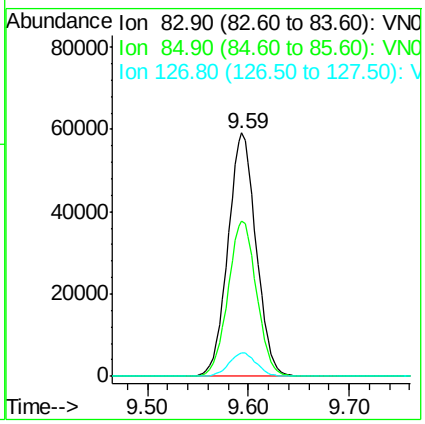
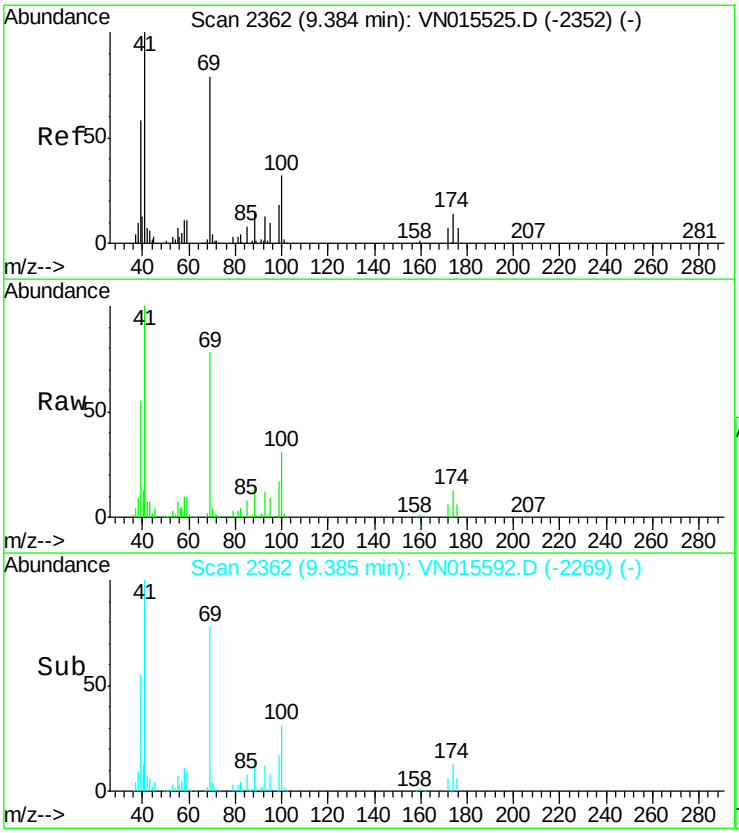


#48
Bromodichloromethane
Concen: 46.29 ug/l
RT: 9.59 min Scan# 2427
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 83 Resp: 114517

Ion	Ratio	Lower	Upper
83	100		
85	63.8	51.1	76.7
127	9.5	7.6	11.4

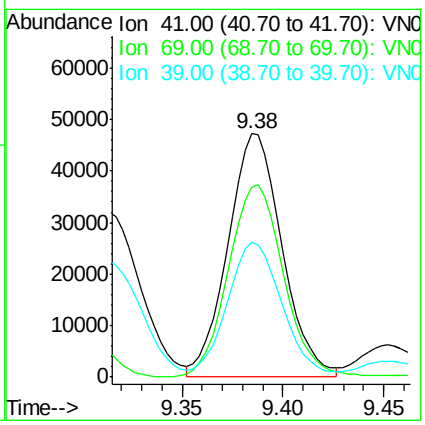


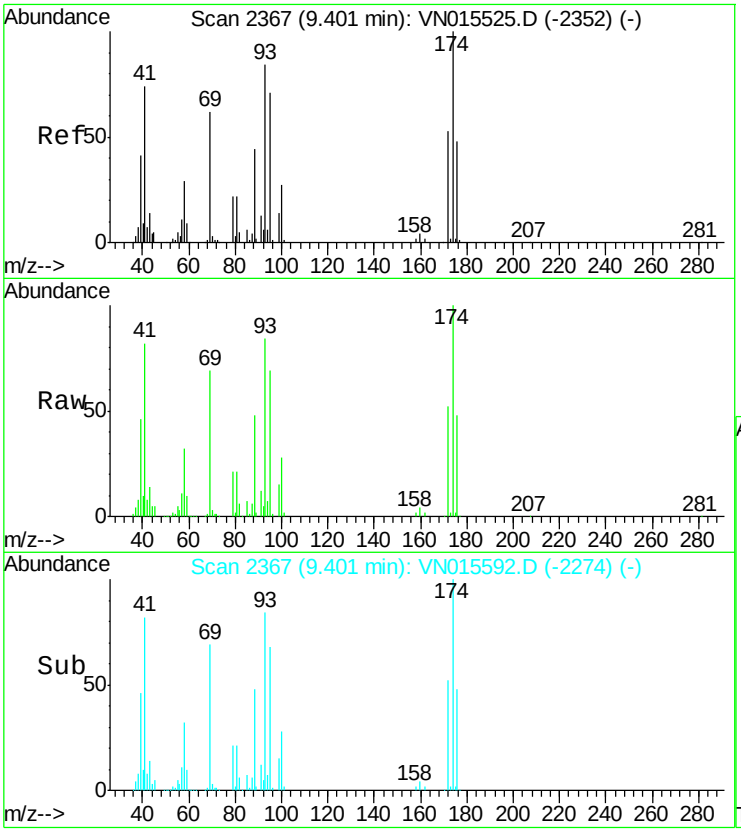


#49
Methyl methacrylate
Concen: 48.23 ug/l
RT: 9.38 min Scan# 2362
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 41 Resp: 88290

Ion	Ratio	Lower	Upper
41	100		
69	81.4	62.8	94.2
39	56.2	46.4	69.6





#50
1,4-Dioxane
Concen: 1110.27 ug/l
RT: 9.40 min Scan# 2367
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 88 Resp: 28358

Ion	Ratio	Lower	Upper
88	100		
43	30.7	26.4	39.6
58	69.6	56.6	84.8

Instrument :
MSVOA_N
ClientSampleId :
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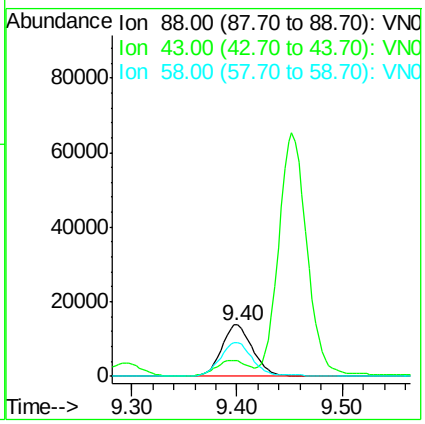
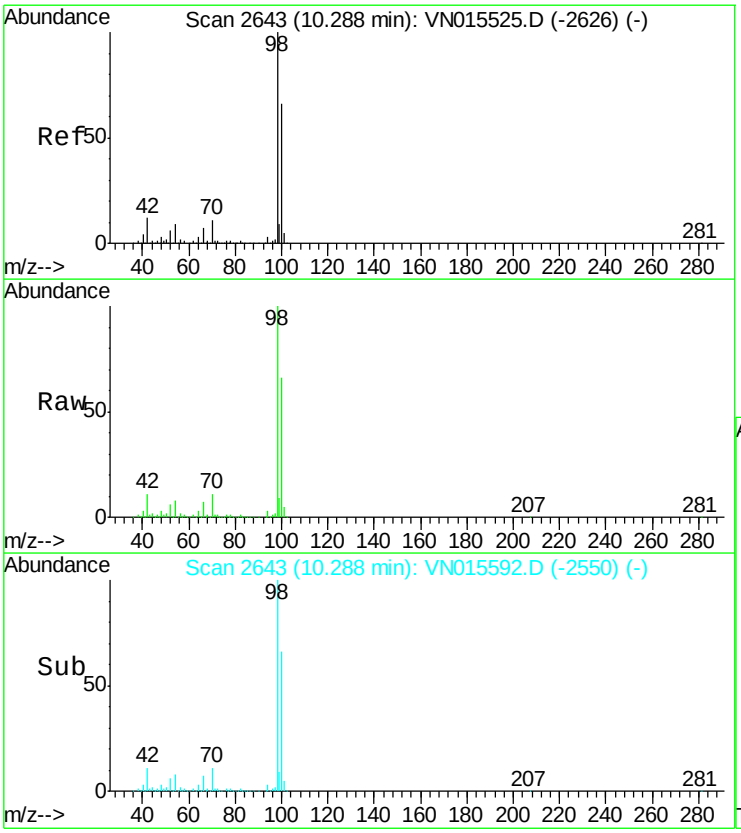
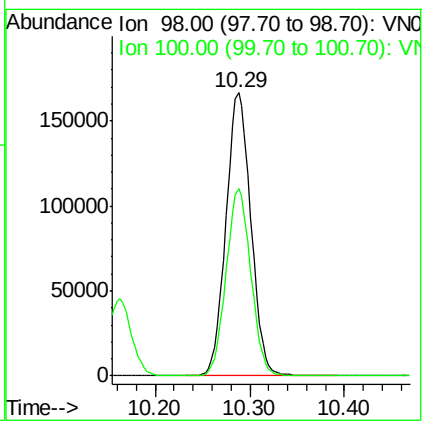


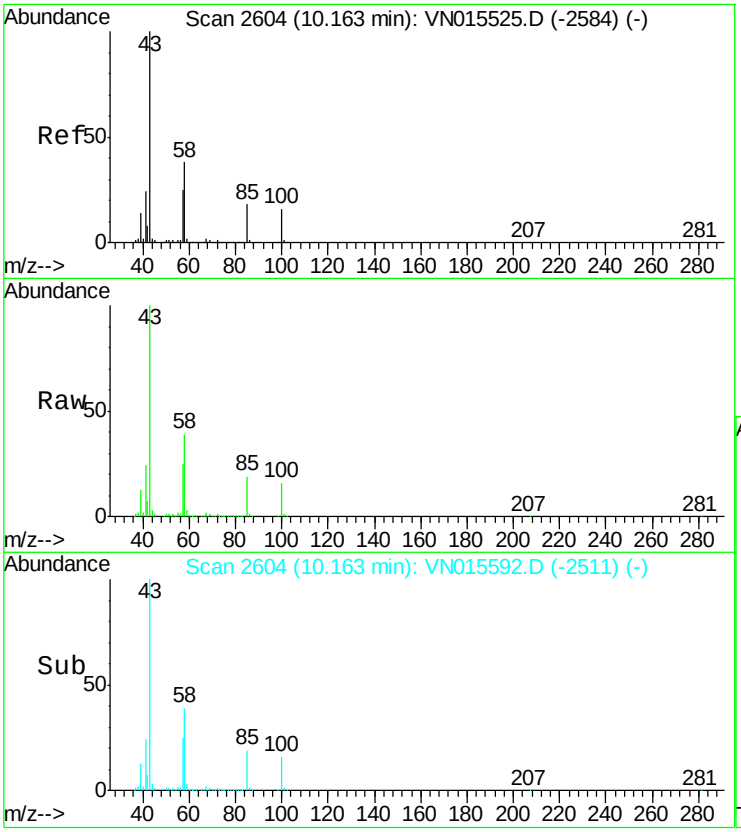


#51
Toluene-d8
Concen: 47.31 ug/l
RT: 10.29 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 98 Resp: 304573

Ion	Ratio	Lower	Upper
98	100		
100	65.5	52.3	78.5





#52
4-Methyl-2-Pentanone
Concen: 243.26 ug/l
RT: 10.16 min Scan# 2604
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 510725

Ion	Ratio	Lower	Upper
43	100		
58	38.4	30.2	45.2

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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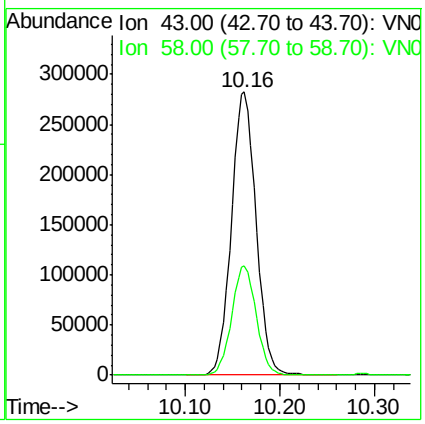
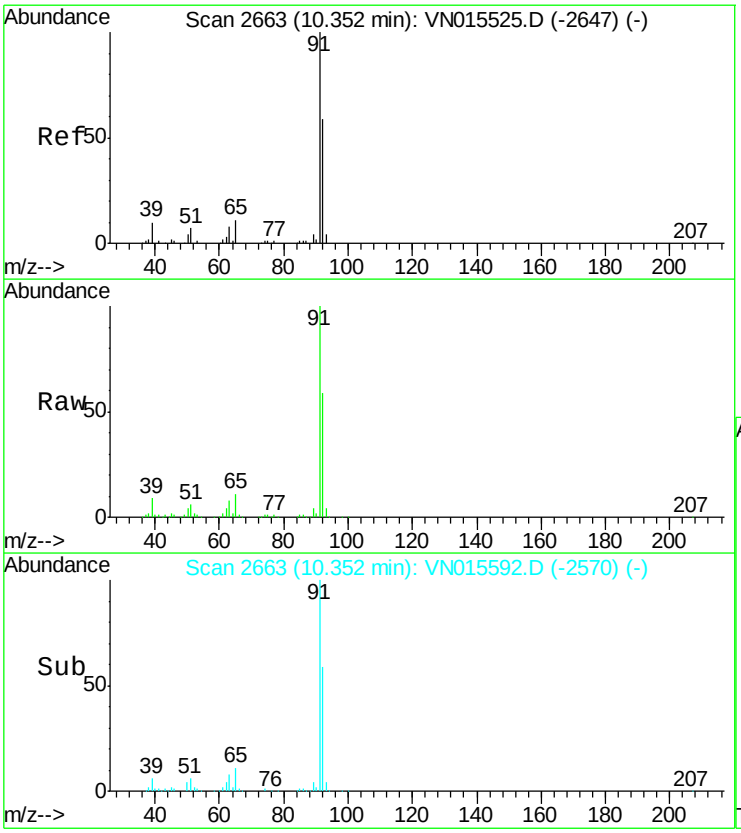
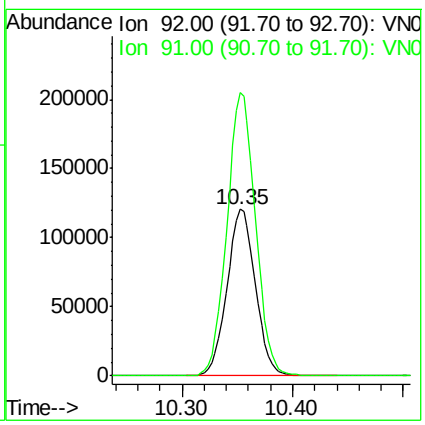


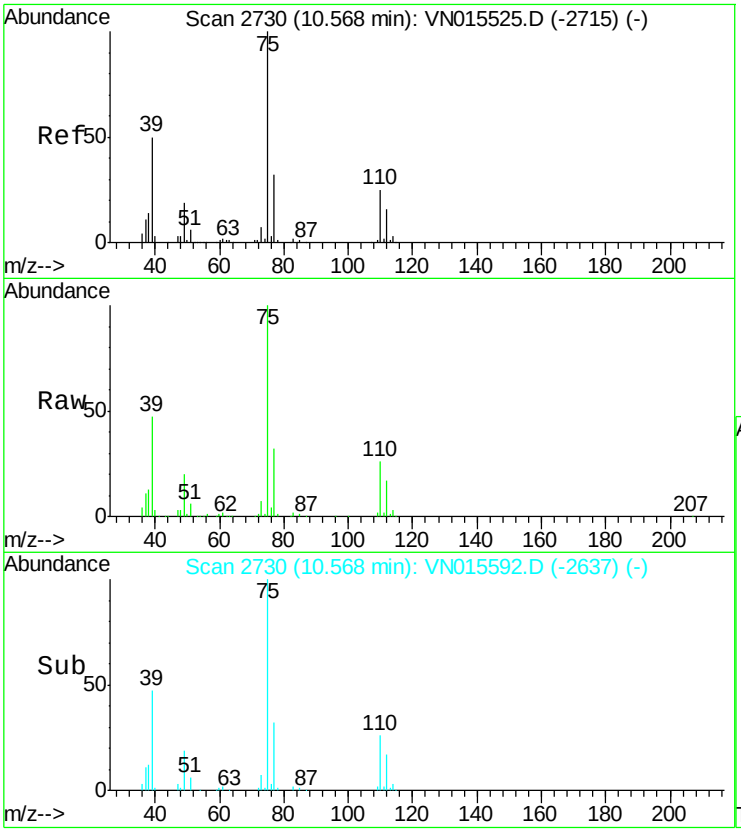


#53
Toluene
Concen: 47.56 ug/l
RT: 10.35 min Scan# 2663
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 92 Resp: 215093

Ion	Ratio	Lower	Upper
92	100		
91	170.8	136.2	204.4





#54
t-1,3-Dichloropropene
Concen: 44.17 ug/l
RT: 10.57 min Scan# 2730
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 75 Resp: 111731

Ion	Ratio	Lower	Upper
75	100		
77	31.8	26.0	39.0

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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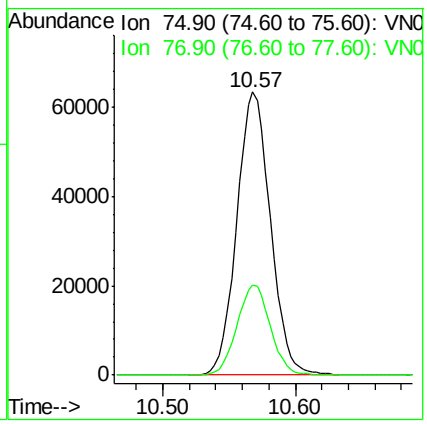
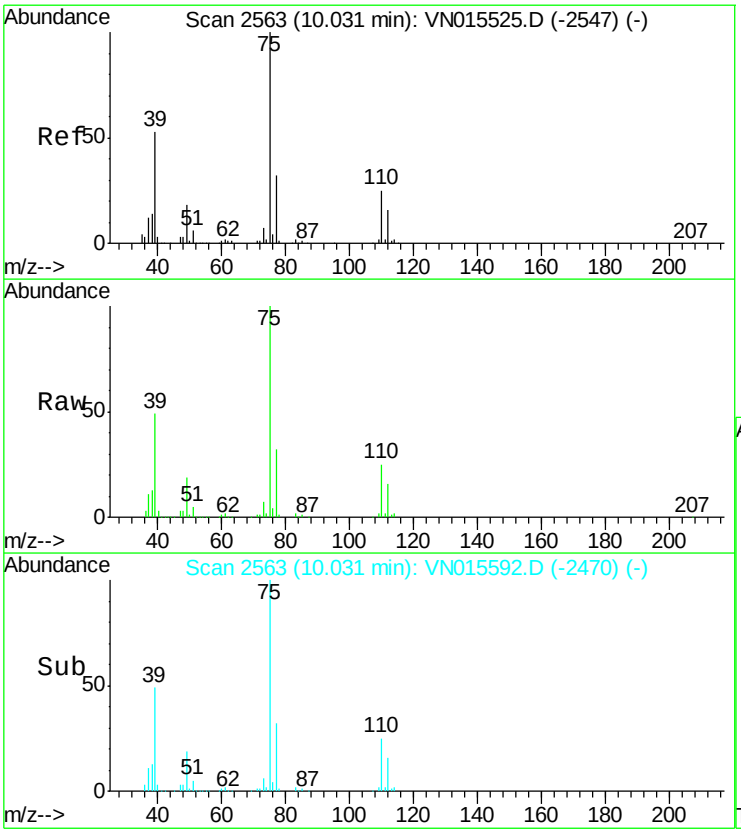
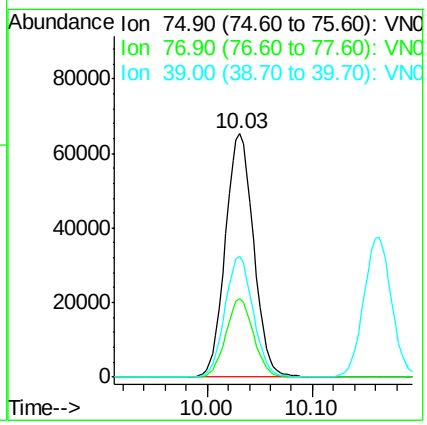


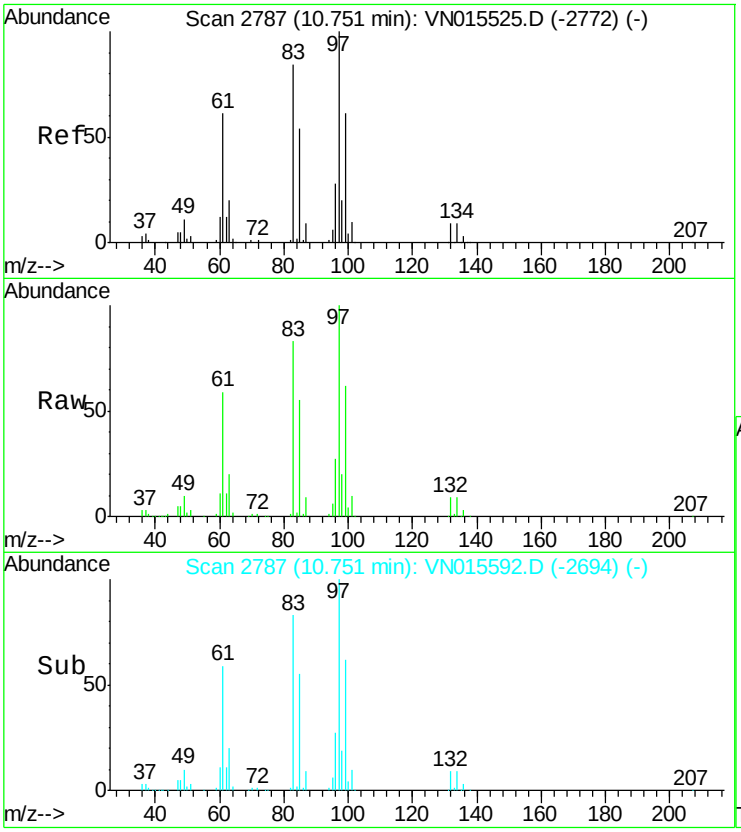


#55
cis-1,3-Dichloropropene
Concen: 43.02 ug/l
RT: 10.03 min Scan# 2563
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 75 Resp: 121156

Ion	Ratio	Lower	Upper
75	100		
77	32.3	25.4	38.2
39	49.2	42.2	63.4





#56
1,1,2-Trichloroethane
Concen: 48.69 ug/l
RT: 10.75 min Scan# 2787
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Instrument : MSVOA_N
ClientSampleId : MLW-4-35-40MSD

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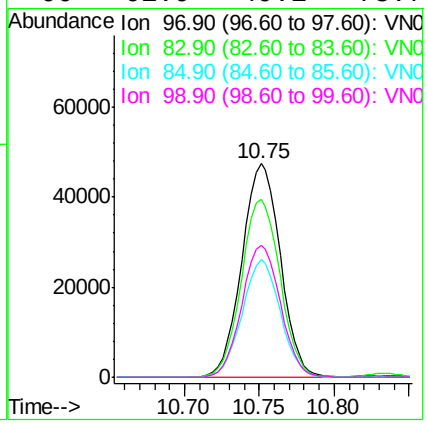
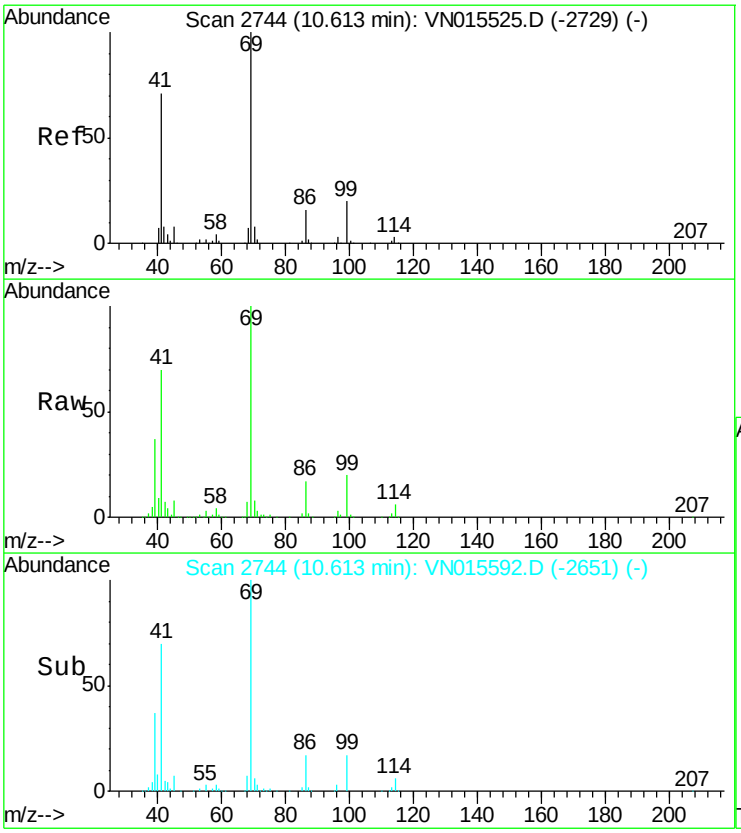
Tgt Ion: 97 Resp: 85095

Ion	Ratio	Lower	Upper
97	100		
83	83.4	67.0	100.4
85	55.1	42.9	64.3
99	61.9	49.1	73.7

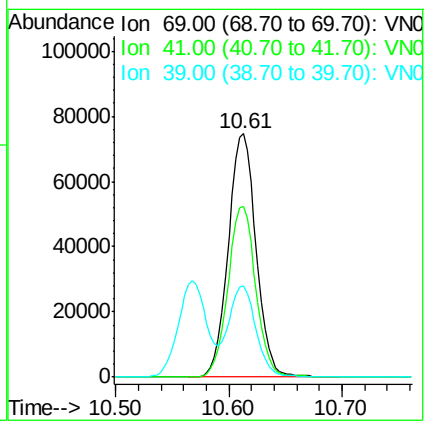


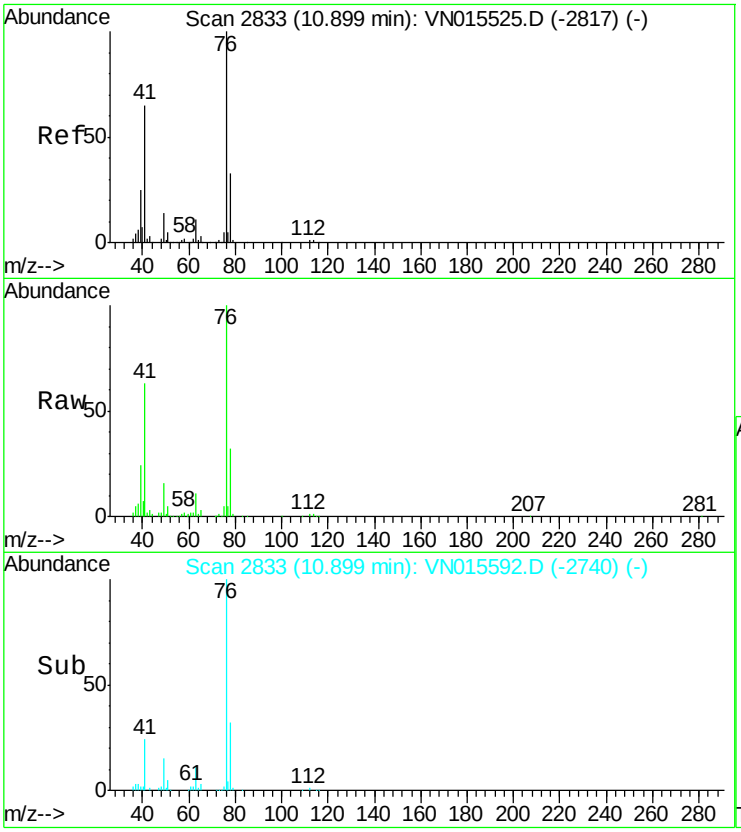


#57
Ethyl methacrylate
Concen: 49.30 ug/l
RT: 10.61 min Scan# 2744
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 69 Resp: 127444

Ion	Ratio	Lower	Upper
69	100		
41	69.7	56.9	85.3
39	36.6	32.0	48.0





#58
1,3-Dichloropropane
Concen: 47.69 ug/l
RT: 10.90 min Scan# 2833
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 76 Resp: 139671

Ion	Ratio	Lower	Upper
76	100		
78	32.1	26.3	39.5

Instrument :
MSVOA_N
ClientSampleId :
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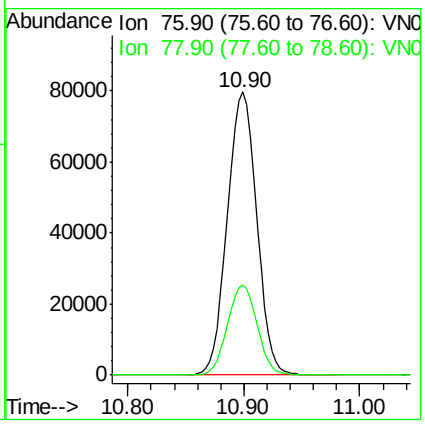
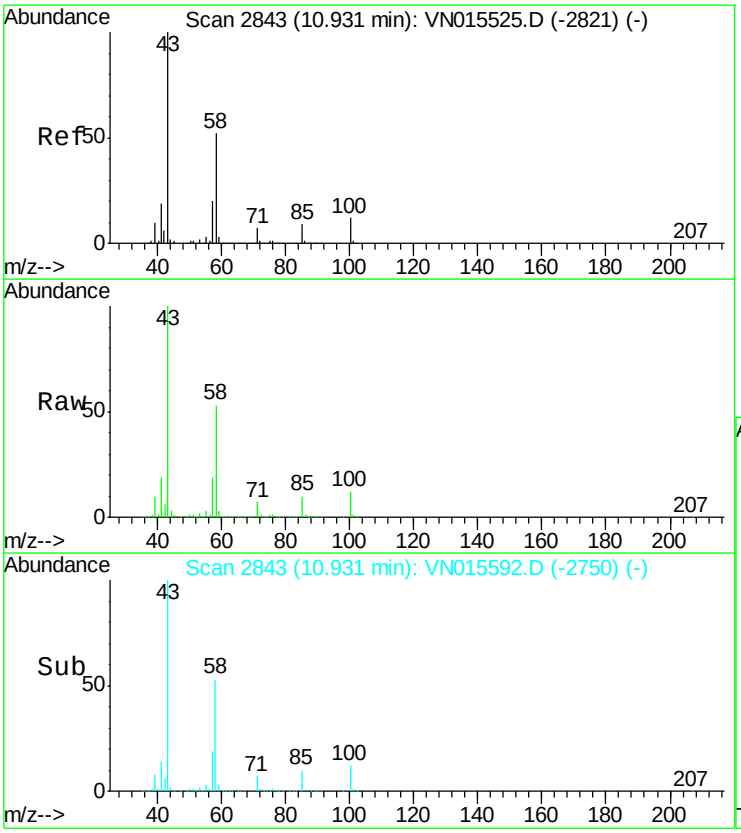
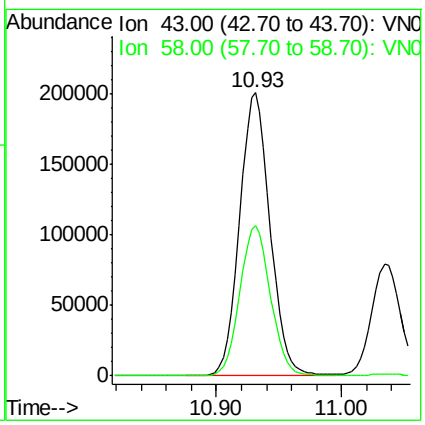


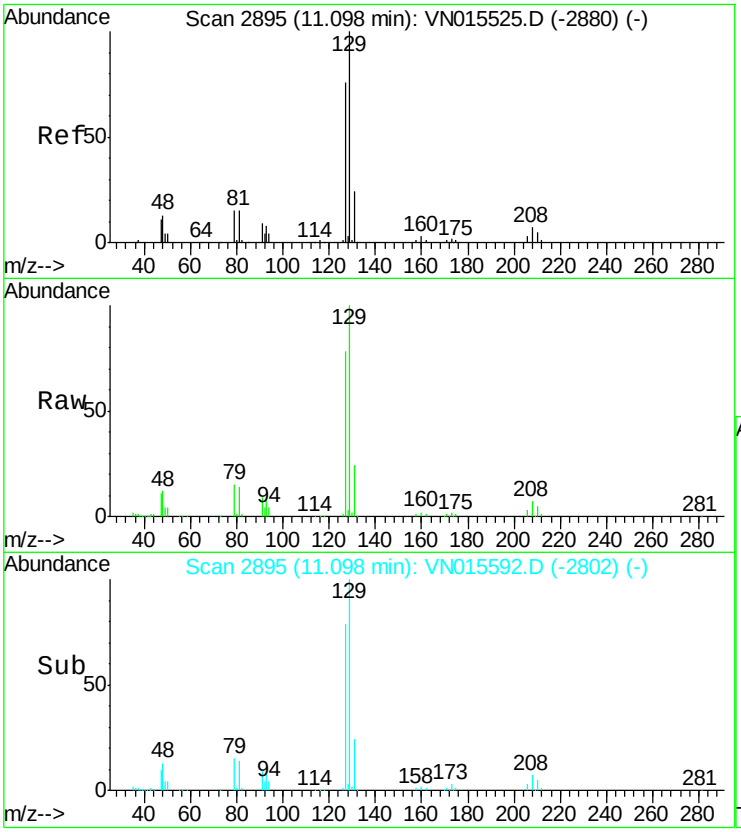


#60
2-Hexanone
Concen: 247.10 ug/l
RT: 10.93 min Scan# 2843
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 338741

Ion	Ratio	Lower	Upper
43	100		
58	53.5	26.0	78.0





#61
Dibromochloromethane
Concen: 48.57 ug/l
RT: 11.10 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:129 Resp: 101362

Ion	Ratio	Lower	Upper
129	100		
127	77.4	38.6	116.0

Instrument :
MSVOA_N
ClientSampleId :
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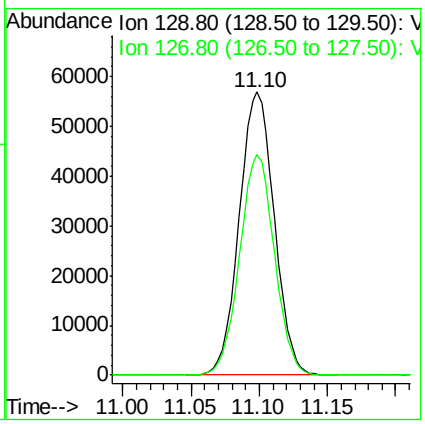
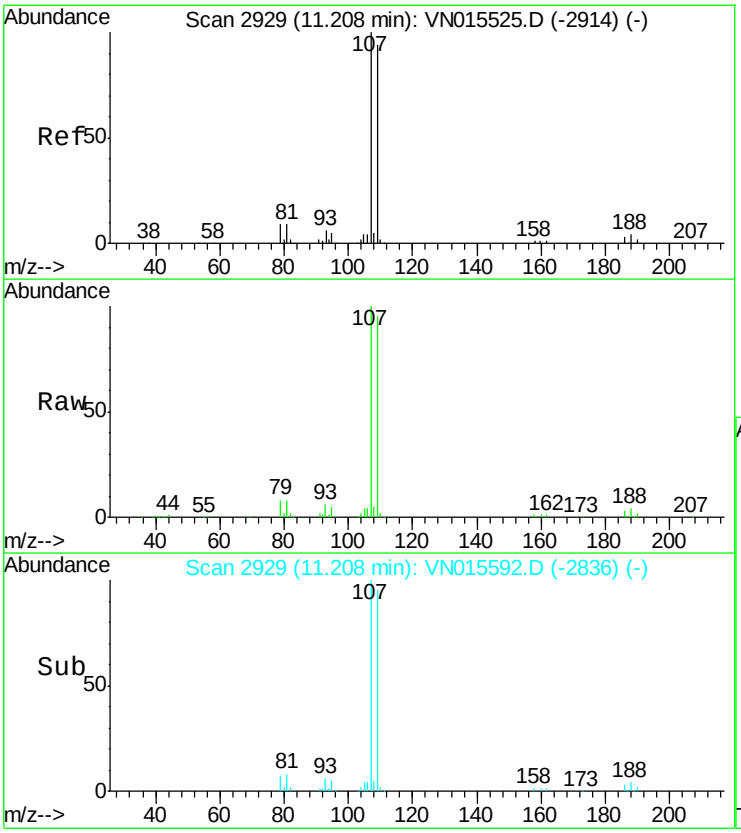
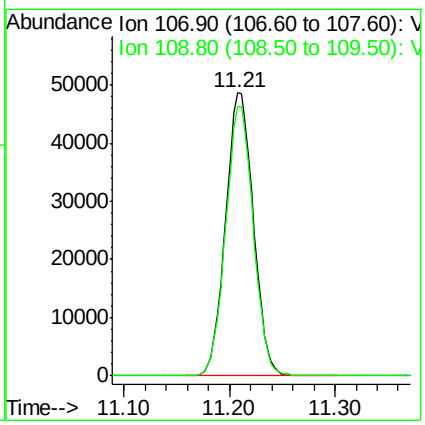


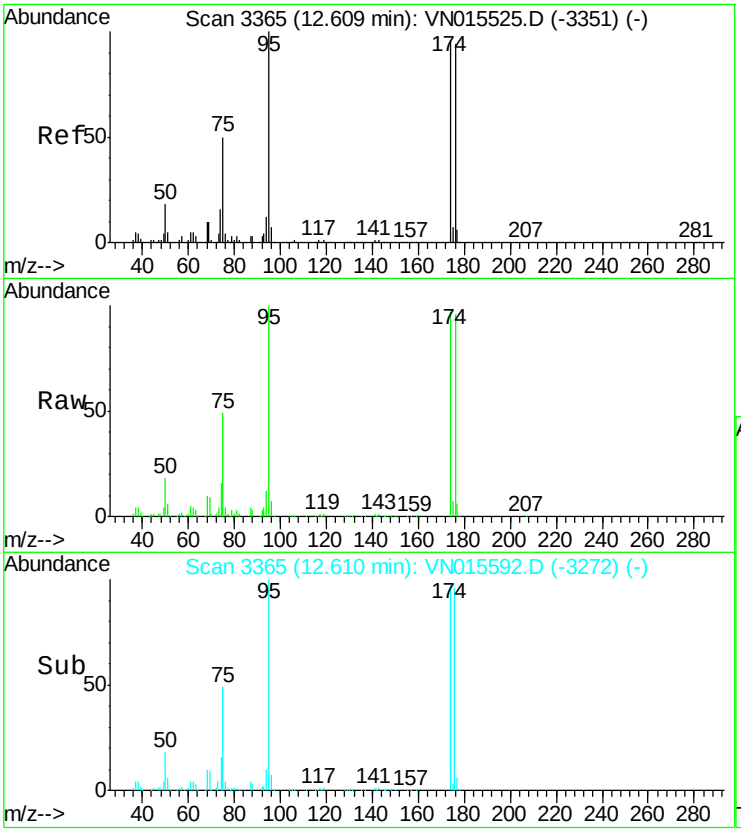


#62
1,2-Dibromoethane
Concen: 49.01 ug/l
RT: 11.21 min Scan# 2929
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:107 Resp: 88526

Ion	Ratio	Lower	Upper
107	100		
109	94.7	75.8	113.6





#63
4-Bromofluorobenzene
Concen: 48.08 ug/l
RT: 12.61 min Scan# 3365
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 95 Resp: 106022

Ion	Ratio	Lower	Upper
95	100		
174	96.8	0.0	191.8
176	94.9	0.0	186.8

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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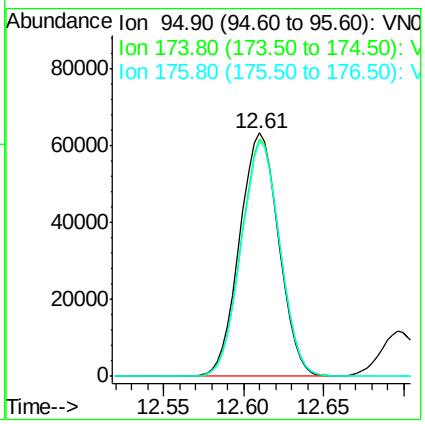
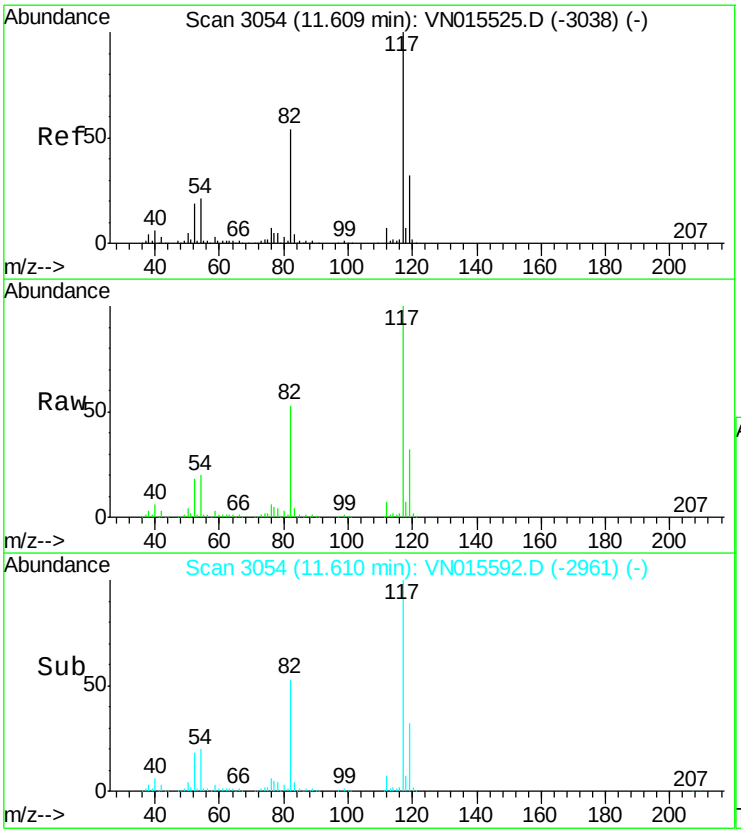
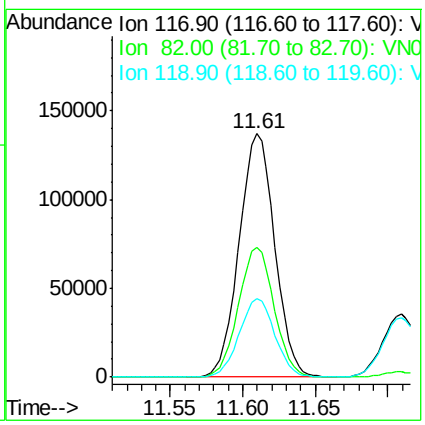




#64
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.61 min Scan# 3054
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:117 Resp: 234362

Ion	Ratio	Lower	Upper
117	100		
82	53.4	43.3	64.9
119	32.3	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
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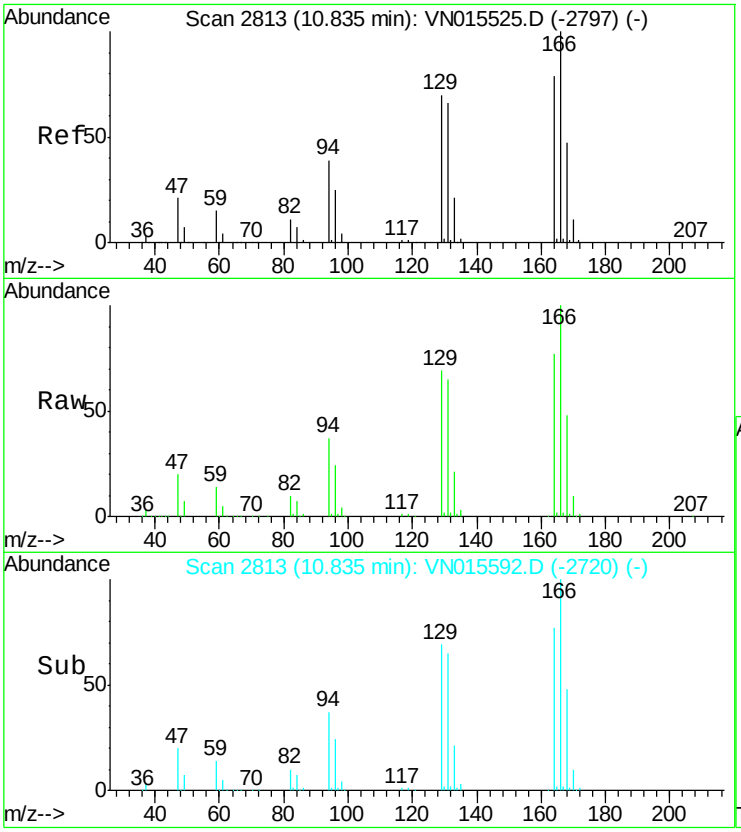
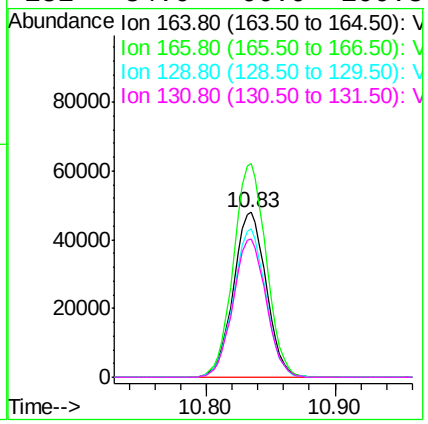
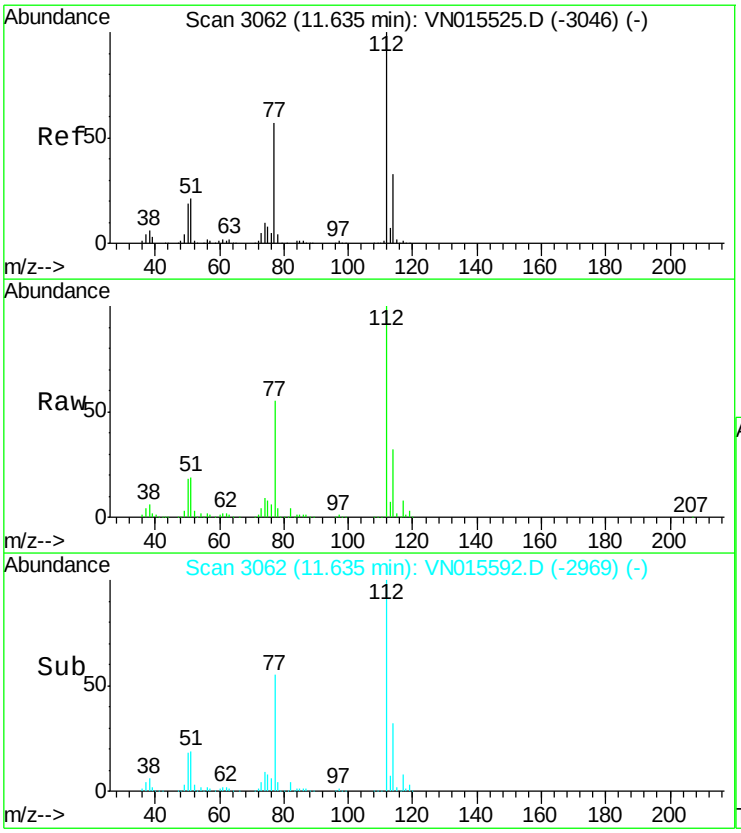


#65
Tetrachloroethene
Concen: 45.79 ug/l
RT: 10.83 min Scan# 2813
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:164 Resp: 84671

Ion	Ratio	Lower	Upper
164	100		
166	129.4	101.7	152.5
129	89.9	70.7	106.1
131	84.0	66.9	100.3

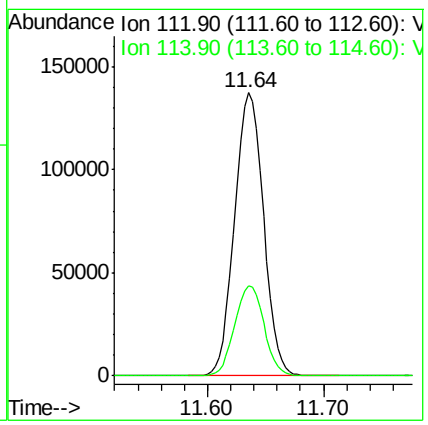


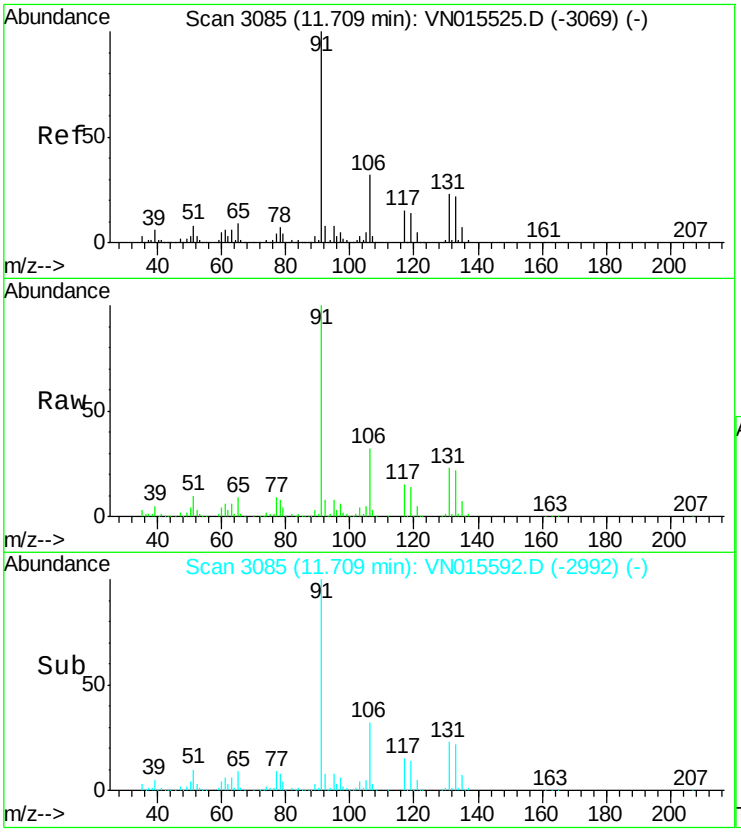


#66
Chlorobenzene
Concen: 46.85 ug/l
RT: 11.64 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:112 Resp: 237616

Ion	Ratio	Lower	Upper
112	100		
114	31.8	26.2	39.2





#67
1,1,1,2-Tetrachloroethane
Concen: 47.57 ug/l
RT: 11.71 min Scan# 3085
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:131 Resp: 91950

Ion	Ratio	Lower	Upper
131	100		
133	95.3	47.7	143.1
119	63.5	31.5	94.5

Instrument :
MSVOA_N
ClientSampleId :
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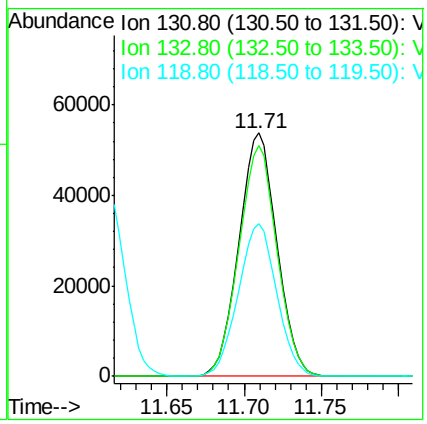
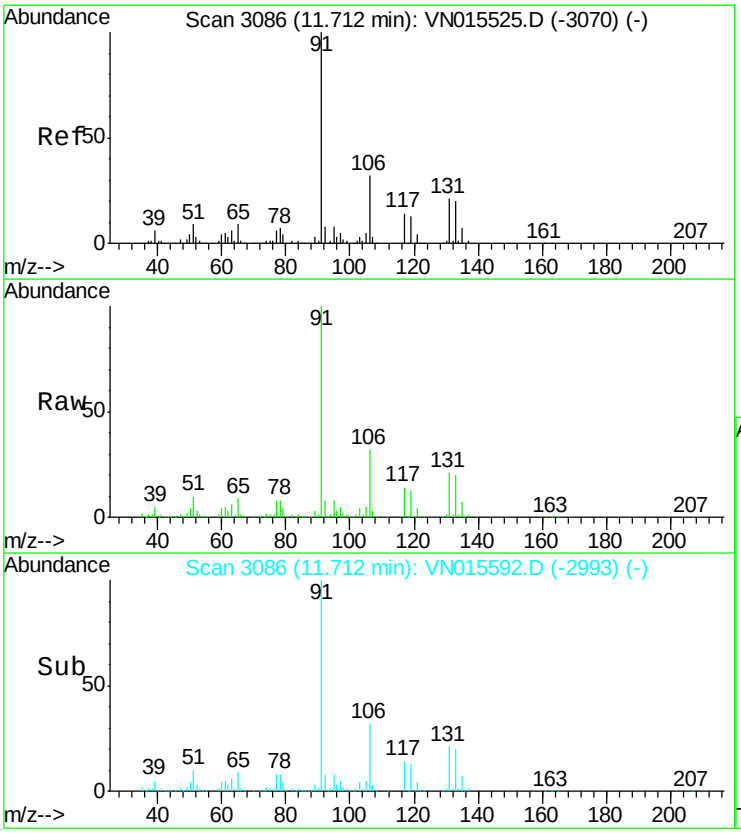
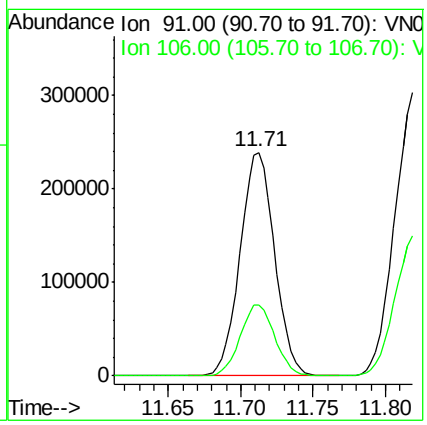


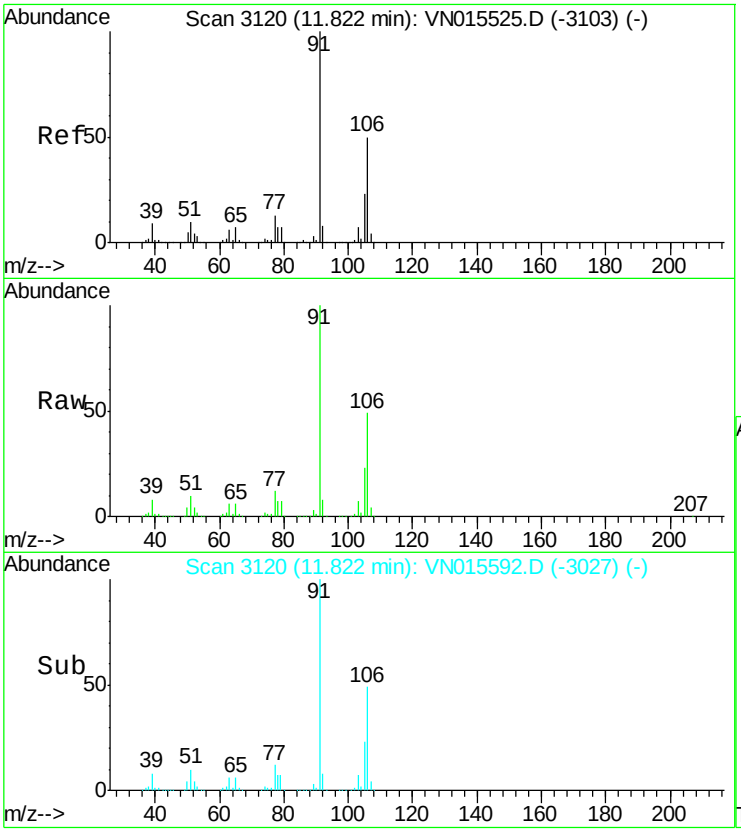


#68
Ethyl Benzene
Concen: 47.69 ug/l
RT: 11.71 min Scan# 3086
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 91 Resp: 395978

Ion	Ratio	Lower	Upper
91	100		
106	31.8	25.5	38.3





#69
m/p-Xylenes
Concen: 94.06 ug/l
RT: 11.82 min Scan# 3120
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:106 Resp: 303987

Ion	Ratio	Lower	Upper
106	100		
91	200.9	160.5	240.7

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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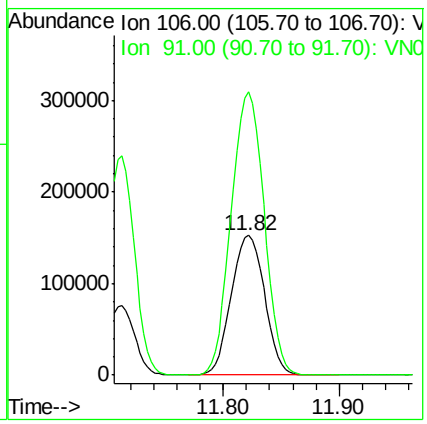
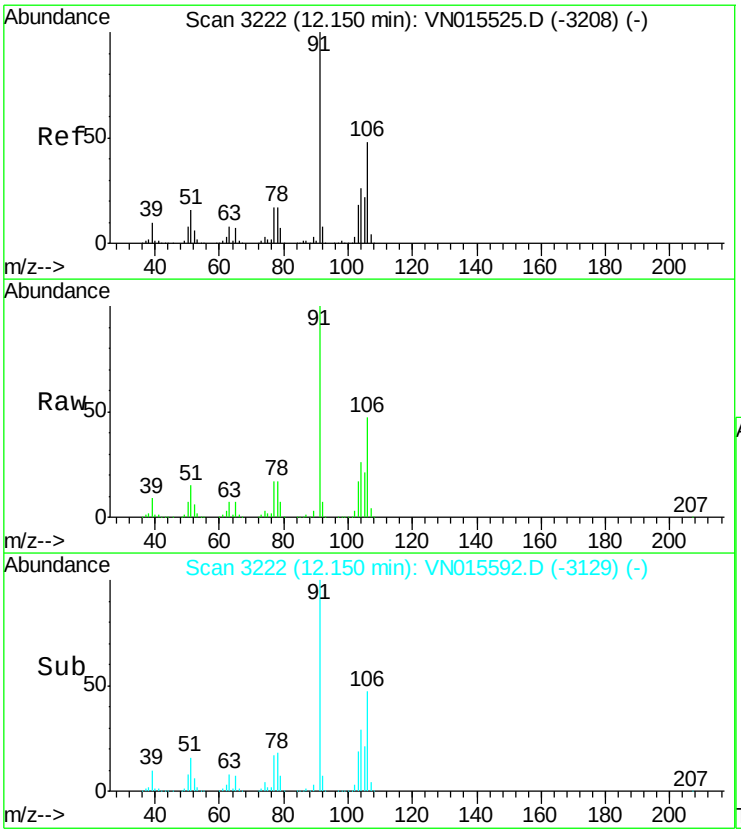
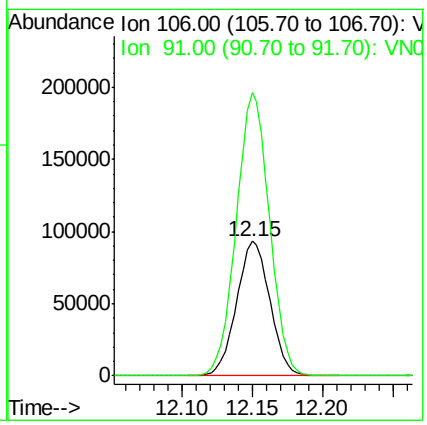


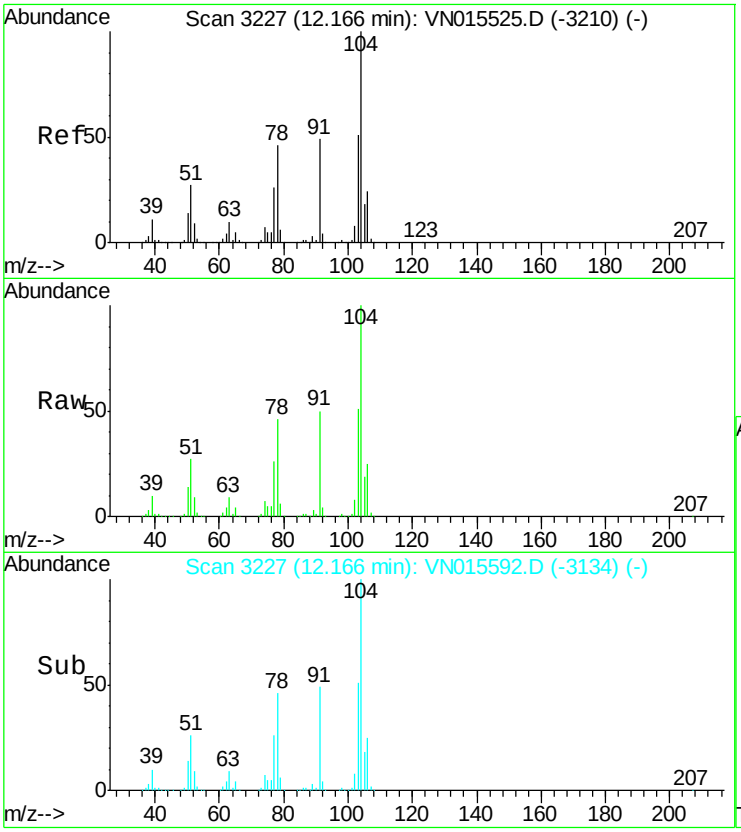


#70
o-Xylene
Concen: 48.59 ug/l
RT: 12.15 min Scan# 3222
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:106 Resp: 154504

Ion	Ratio	Lower	Upper
106	100		
91	209.2	104.9	314.7

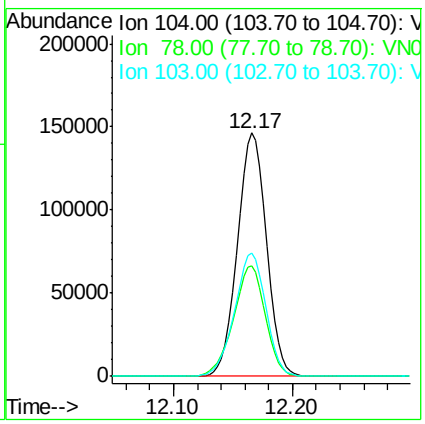




#71
Styrene
Concen: 49.57 ug/l
RT: 12.17 min Scan# 3227
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:104 Resp: 247622

Ion	Ratio	Lower	Upper
104	100		
78	49.9	40.1	60.1
103	54.6	44.0	66.0



Instrument :
MSVOA_N
ClientSampleId :
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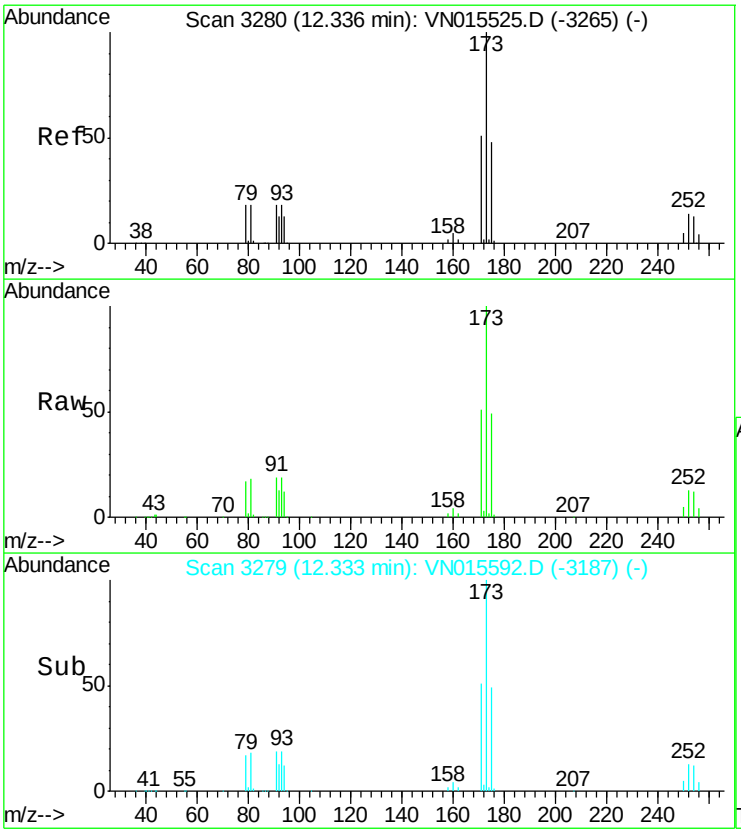
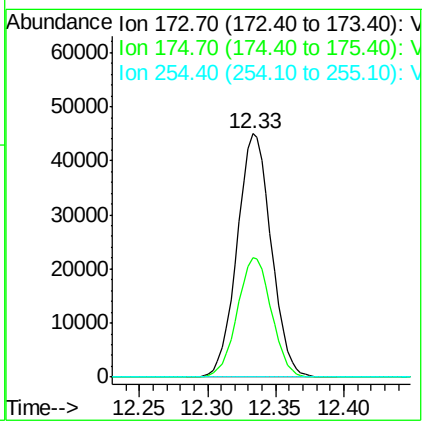
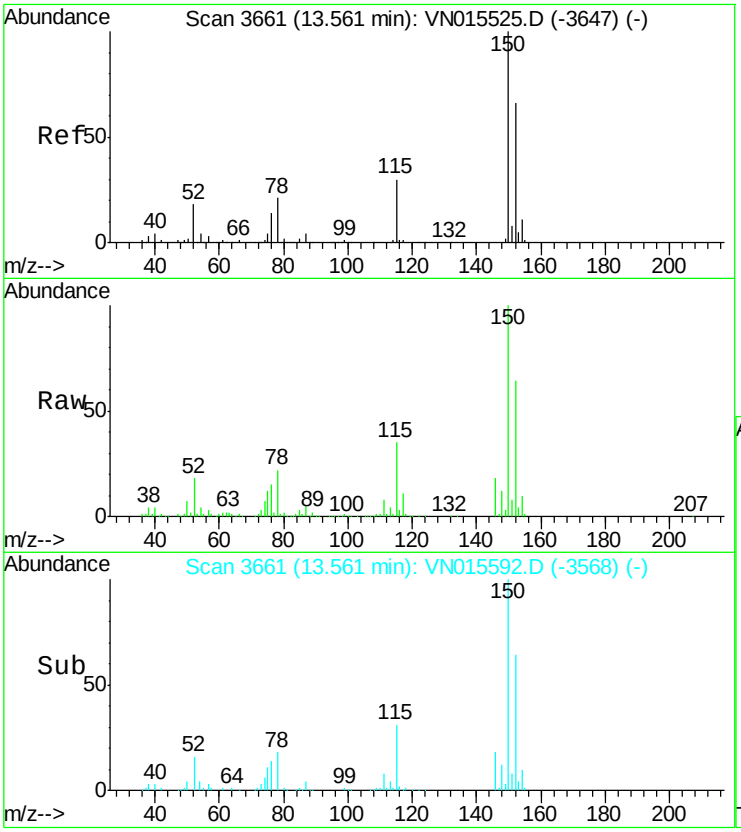


#72
Bromoform
Concen: 48.17 ug/l
RT: 12.33 min Scan# 3279
Delta R.T. -0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:173 Resp: 78004

Ion	Ratio	Lower	Upper
173	100		
175	48.9	24.3	72.9
254	0.0	0.0	0.0





#73
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.56 min Scan# 3661
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:152 Resp: 109834

Ion	Ratio	Lower	Upper
152	100		
115	54.9	27.2	81.6
150	172.3	0.0	343.6

Instrument :
MSVOA_N
ClientSampleId :
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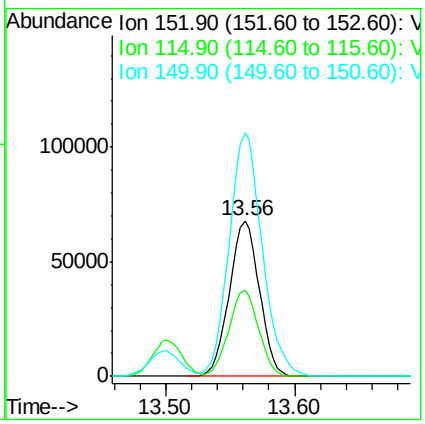
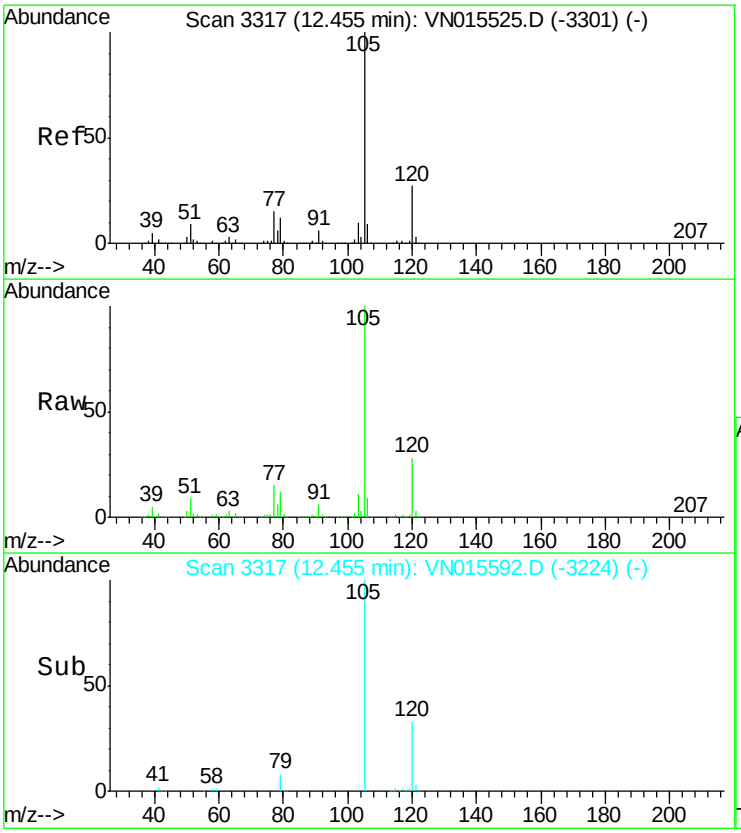
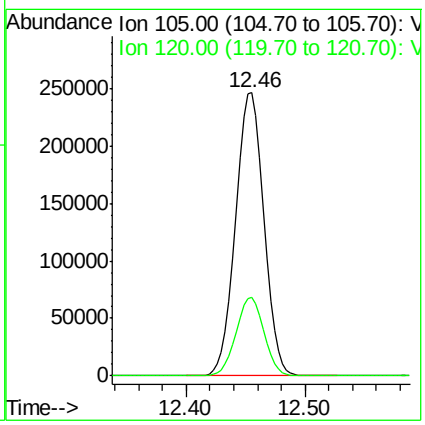


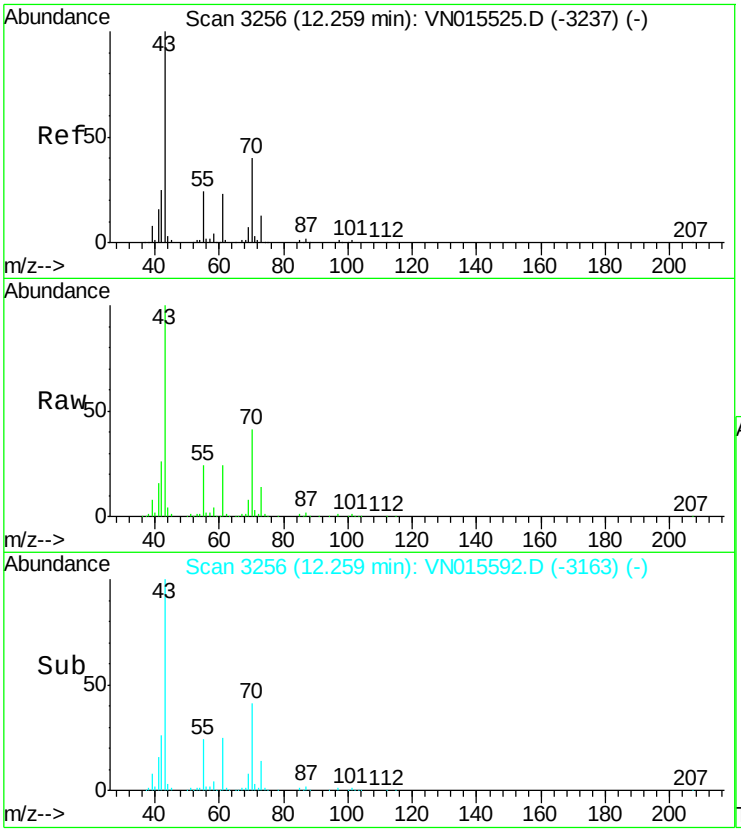


#74
Isopropylbenzene
Concen: 49.43 ug/l
RT: 12.46 min Scan# 3317
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:105 Resp: 405790

Ion	Ratio	Lower	Upper
105	100		
120	27.4	13.7	41.0

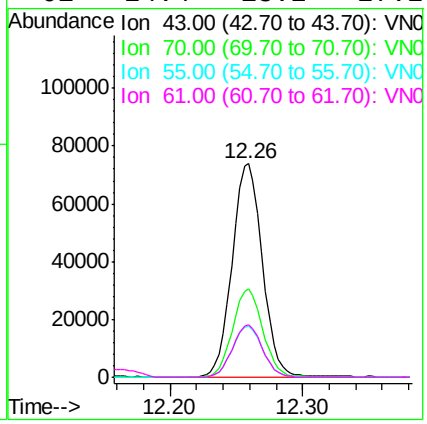




#75
N-amyl acetate
Concen: 40.48 ug/l
RT: 12.26 min Scan# 3256
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 43 Resp: 116482

Ion	Ratio	Lower	Upper
43	100		
70	41.8	32.0	48.0
55	24.3	18.5	27.7
61	24.4	18.2	27.2



Instrument :
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ClientSampleId :
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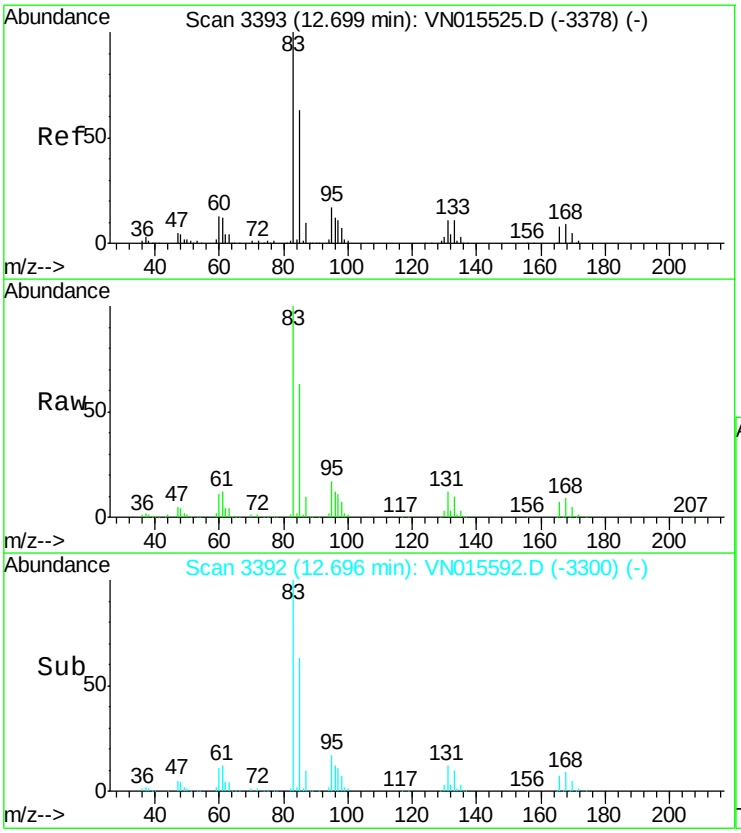
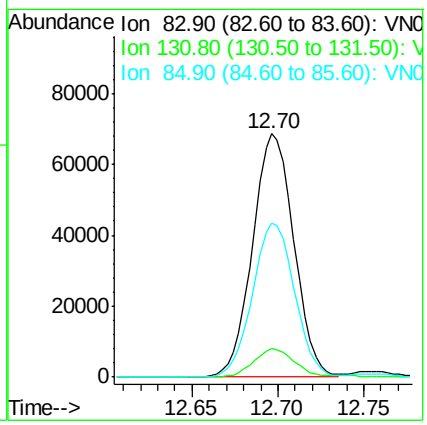
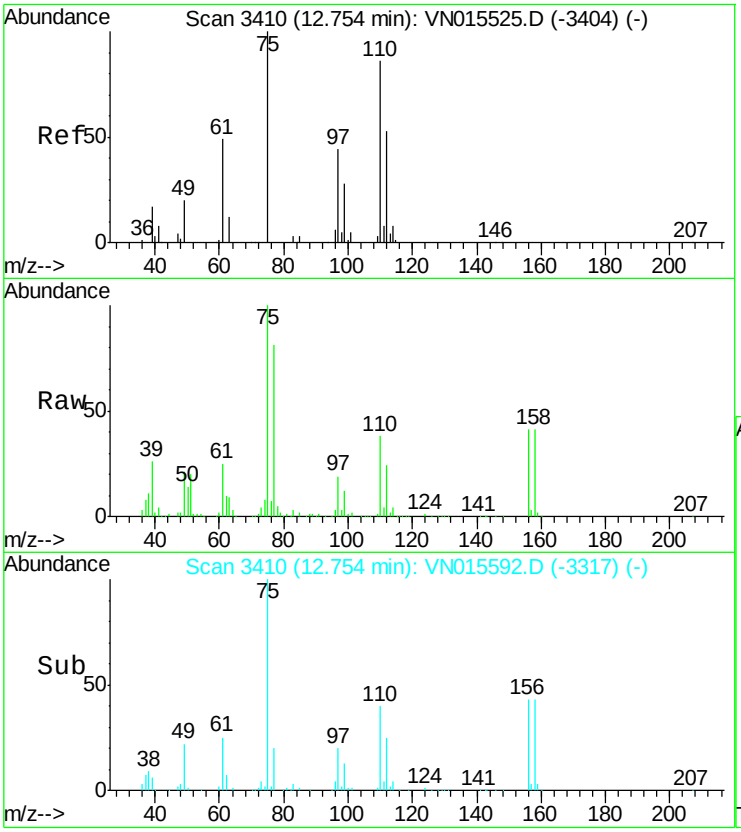


#76
1,1,2,2-Tetrachloroethane
Concen: 53.54 ug/l
RT: 12.70 min Scan# 3392
Delta R.T. -0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 83 Resp: 114396

Ion	Ratio	Lower	Upper
83	100		
131	11.8	5.9	17.6
85	64.3	31.9	95.7





#77
1,2,3-Trichloropropane
Concen: 51.27 ug/l m
RT: 12.75 min Scan# 3410
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 75 Resp: 96206

Ion	Ratio	Lower	Upper
75	100		
77	192.6	90.4	271.2

Instrument :
MSVOA_N
ClientSampleId :
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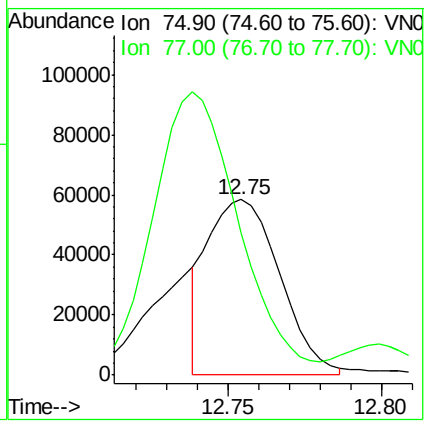
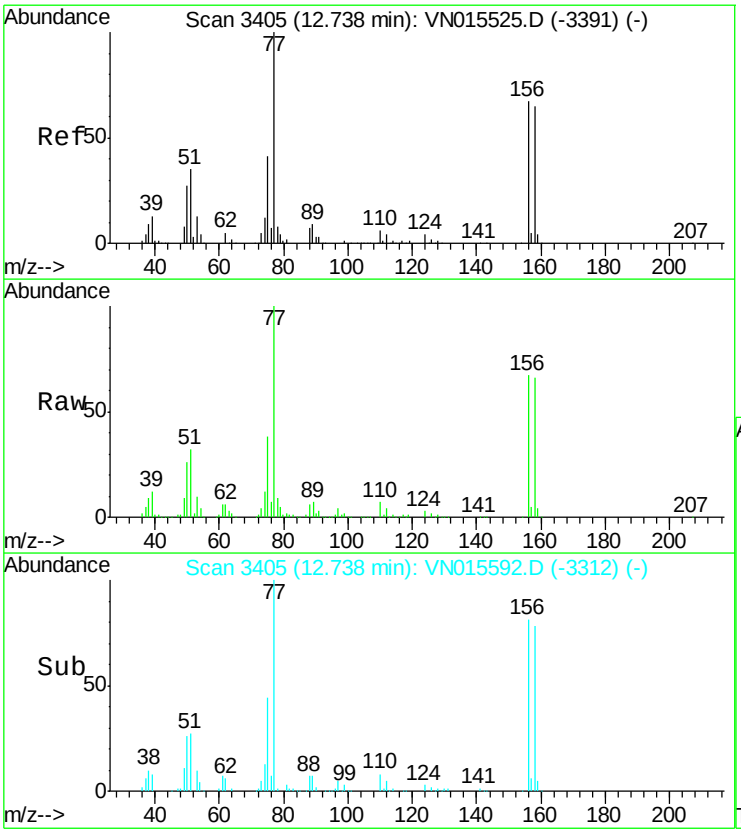
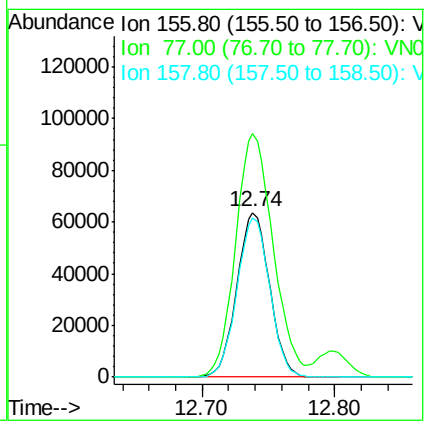


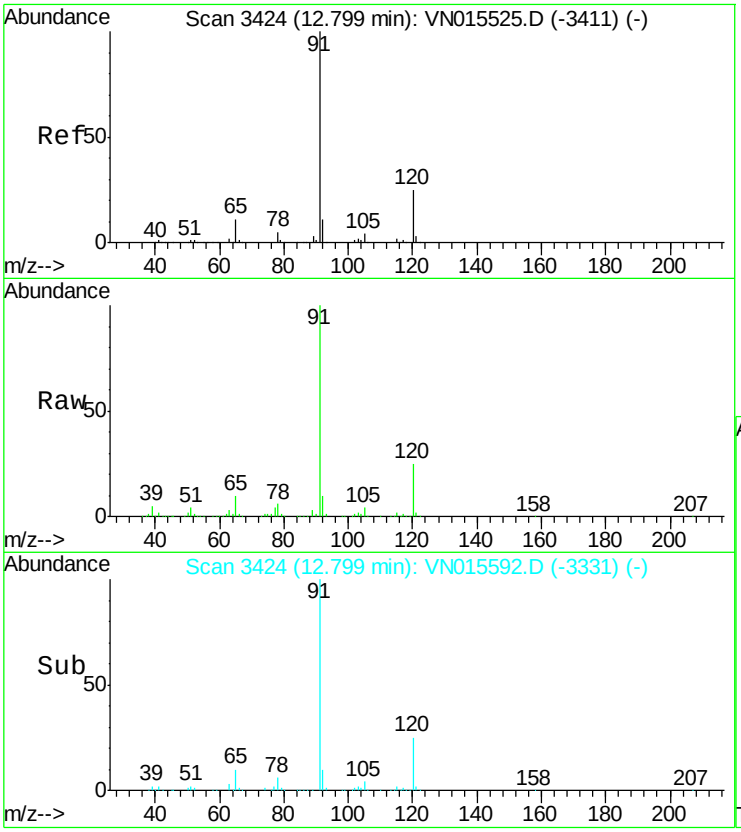


#78
Bromobenzene
Concen: 45.61 ug/l
RT: 12.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:156 Resp: 108637

Ion	Ratio	Lower	Upper
156	100		
77	170.6	86.0	258.0
158	97.4	48.7	146.1





#79
n-propylbenzene
Concen: 45.98 ug/l
RT: 12.80 min Scan# 3424
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 91 Resp: 431313

Ion	Ratio	Lower	Upper
91	100		
120	24.5	12.2	36.4

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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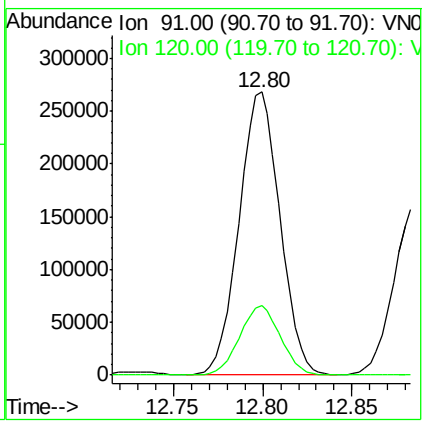
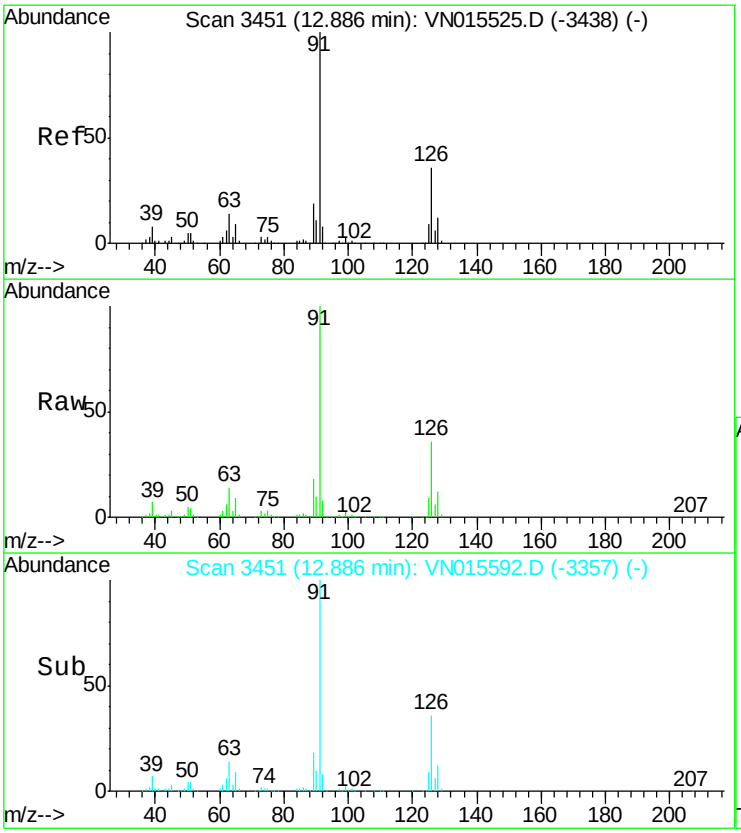
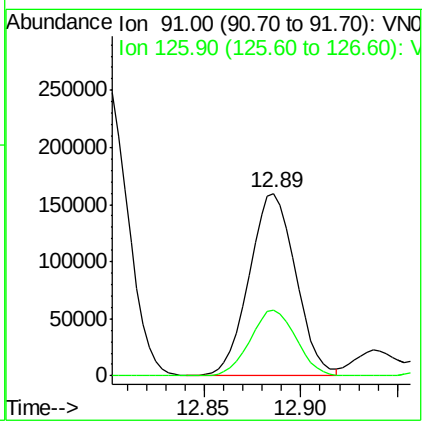


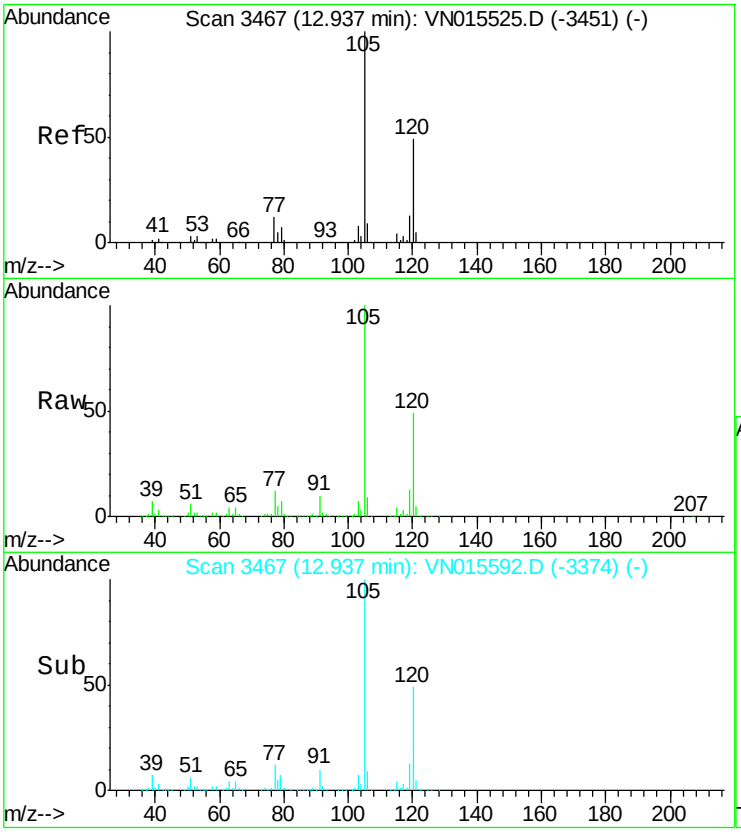


#80
2-Chlorotoluene
Concen: 49.68 ug/l
RT: 12.89 min Scan# 3451
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 91 Resp: 267362

Ion	Ratio	Lower	Upper
91	100		
126	35.8	17.9	53.8





#81
1,3,5-Trimethylbenzene
Concen: 45.91 ug/l
RT: 12.94 min Scan# 3467
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:105 Resp: 343114

Ion	Ratio	Lower	Upper
105	100		
120	49.7	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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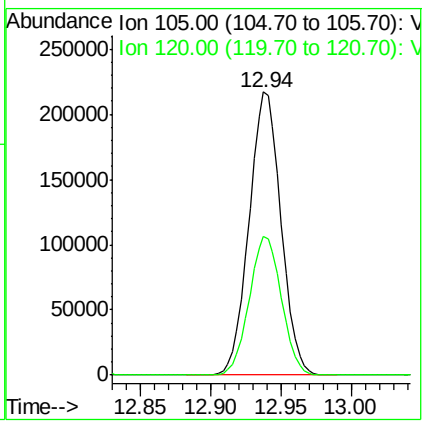
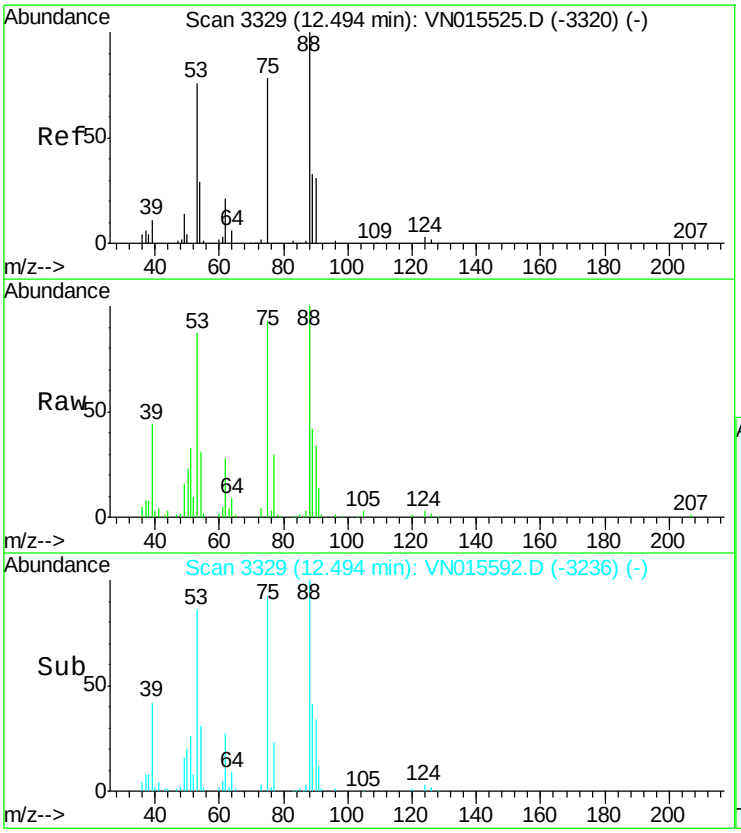
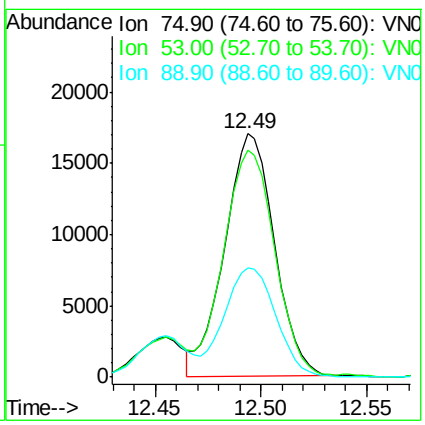


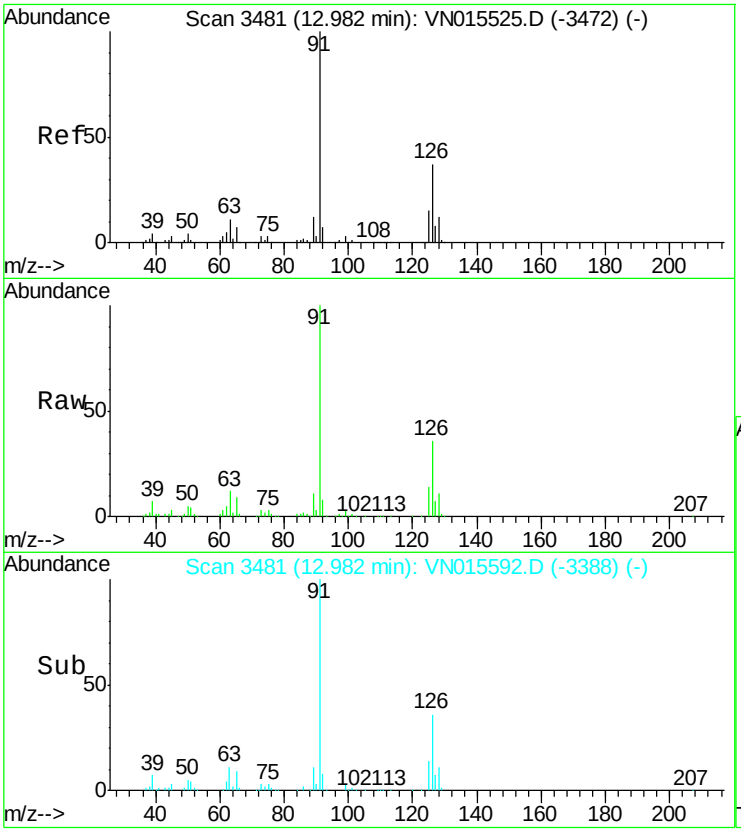


#82
trans-1,4-Dichloro-2-butene
Concen: 36.86 ug/l
RT: 12.49 min Scan# 3329
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 75 Resp: 27886

Ion	Ratio	Lower	Upper
75	100		
53	96.8	77.5	116.3
89	46.5	37.7	56.5





#83
4-Chlorotoluene
Concen: 45.85 ug/l
RT: 12.98 min Scan# 3481
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 91 Resp: 260893

Ion	Ratio	Lower	Upper
91	100		
126	35.2	17.5	52.6

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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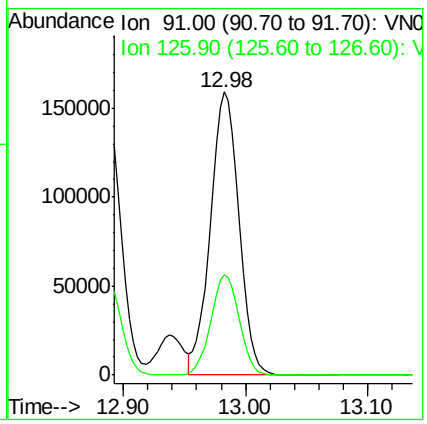
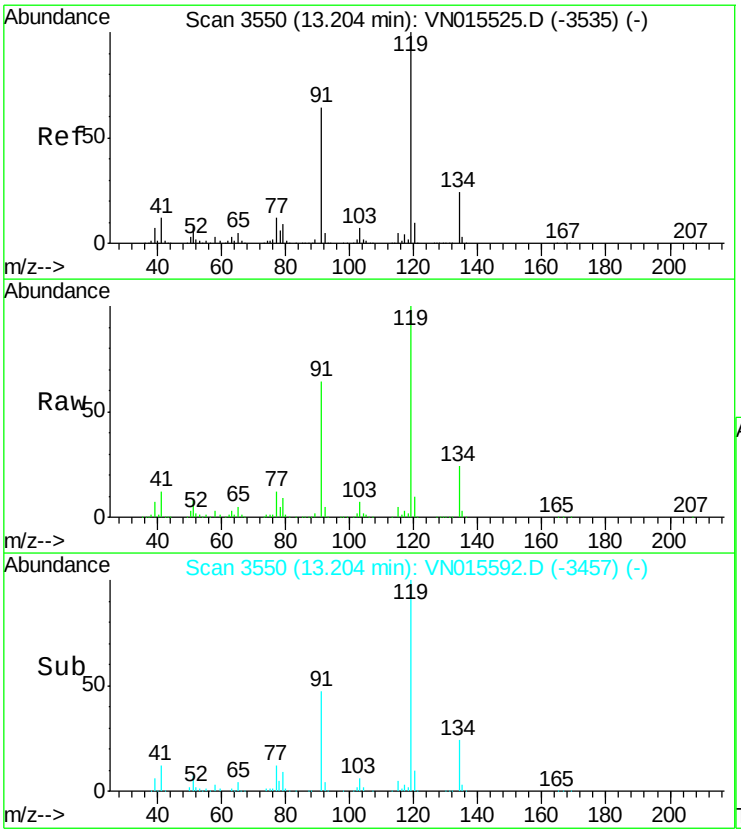
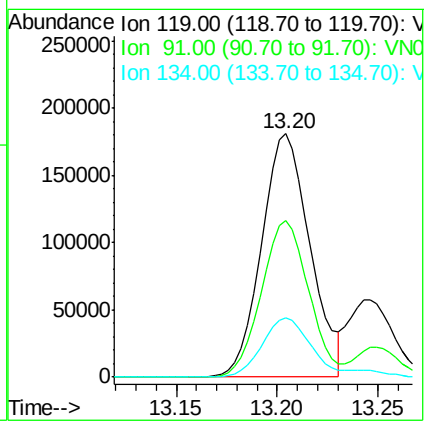


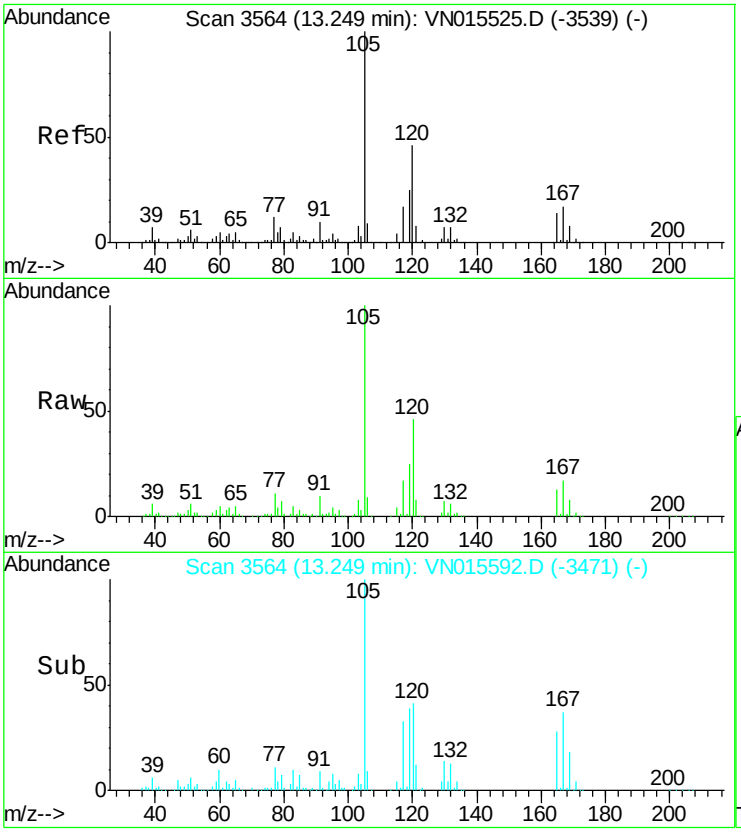


#84
tert-Butylbenzene
Concen: 50.13 ug/l
RT: 13.20 min Scan# 3550
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:119 Resp: 302895

Ion	Ratio	Lower	Upper
119	100		
91	62.9	31.9	95.9
134	24.3	12.1	36.3





#85
1,2,4-Trimethylbenzene
Concen: 46.62 ug/l
RT: 13.25 min Scan# 3564
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:105 Resp: 348655

Ion	Ratio	Lower	Upper
105	100		
120	46.1	23.1	69.3

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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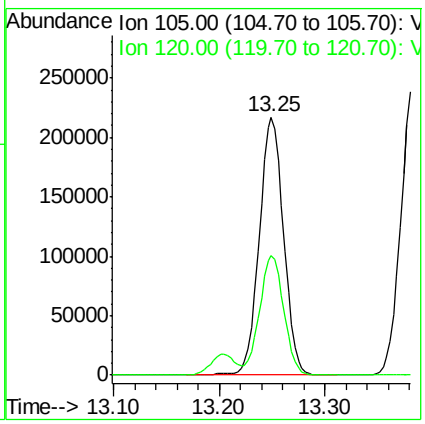
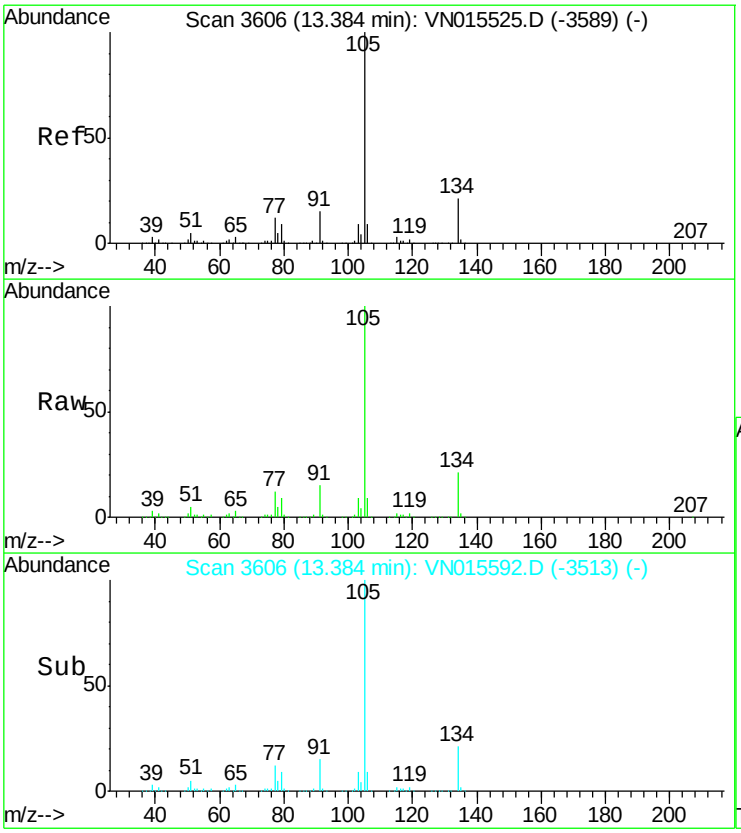
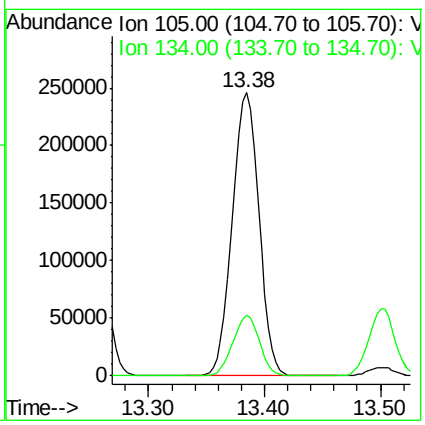


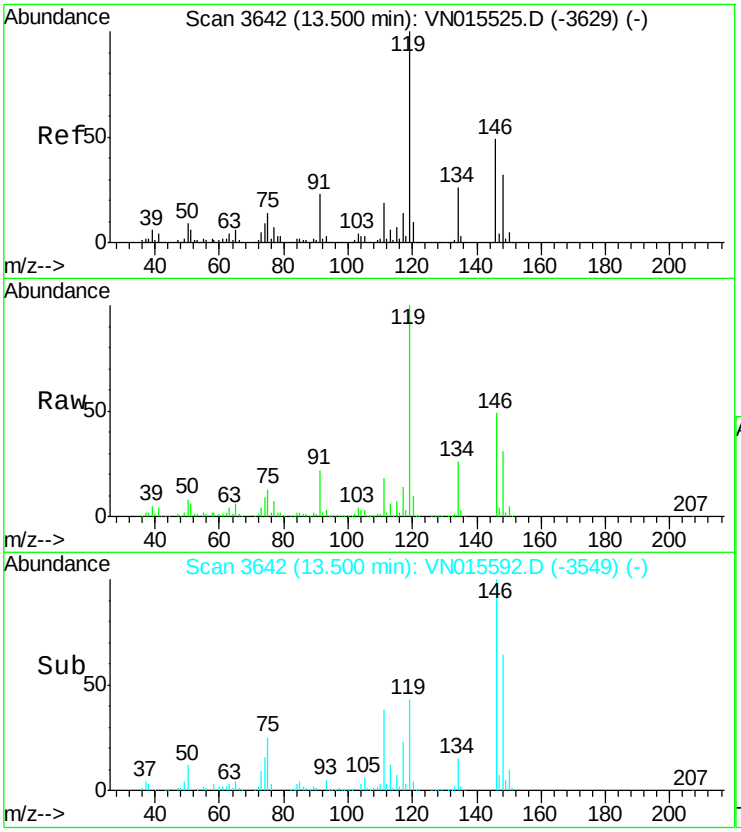


#86
sec-Butylbenzene
Concen: 45.61 ug/l
RT: 13.38 min Scan# 3606
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:105 Resp: 390349

Ion	Ratio	Lower	Upper
105	100		
134	21.3	10.6	31.8





#87
p-Isopropyltoluene
Concen: 47.10 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:119 Resp: 348665

Ion	Ratio	Lower	Upper
119	100		
134	26.4	13.3	39.9
91	22.2	11.7	35.1

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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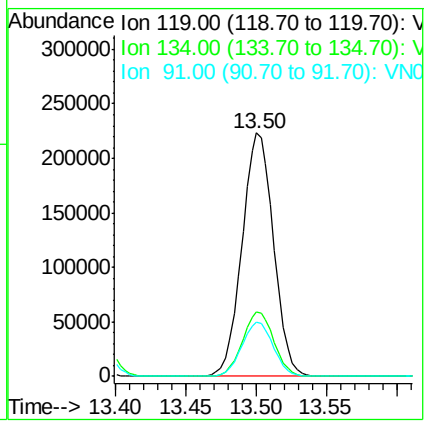
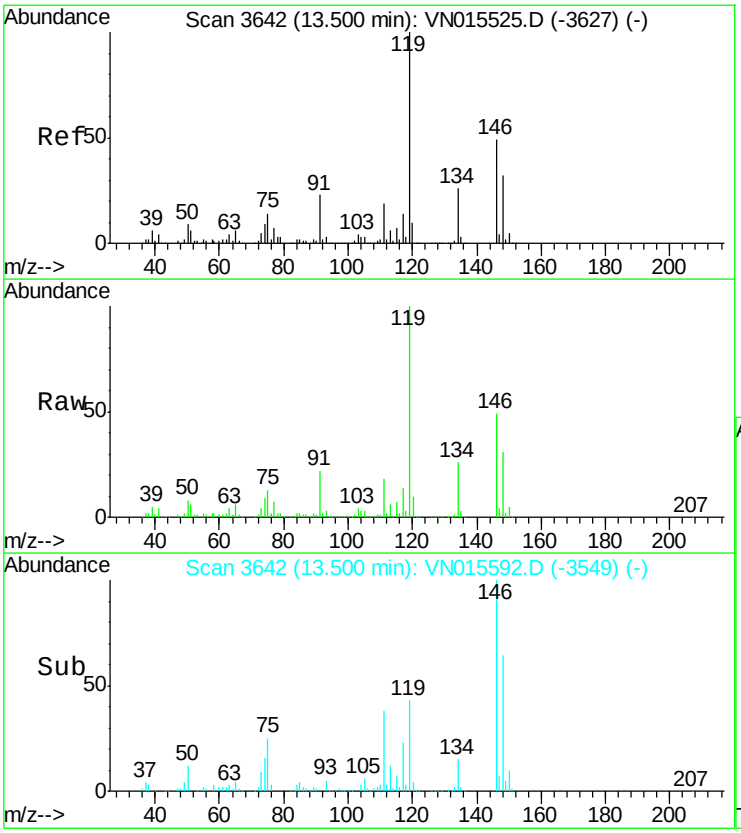
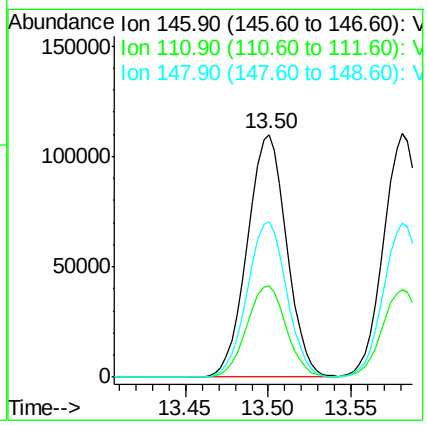


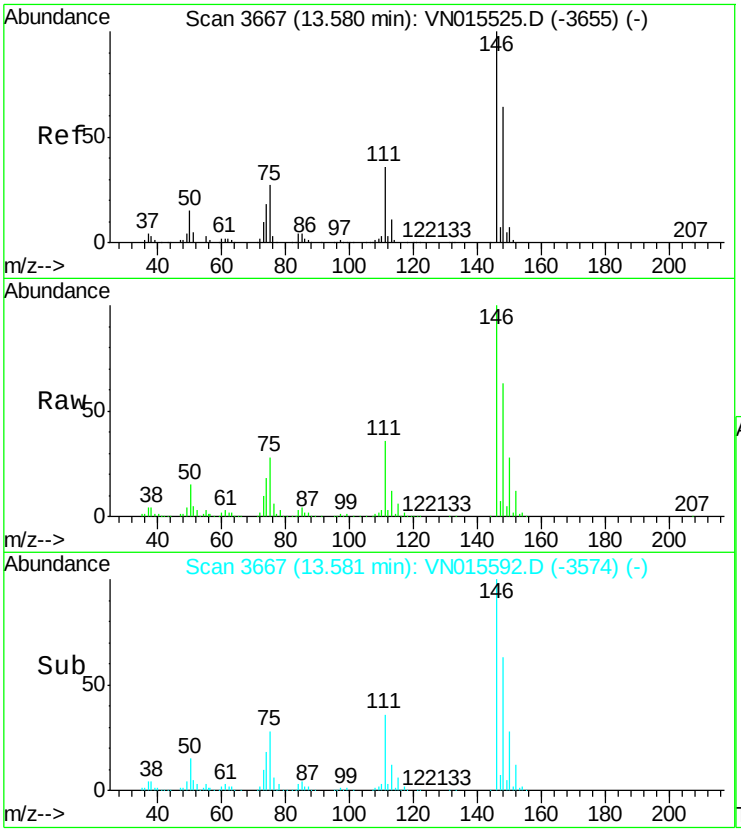


#88
1,3-Dichlorobenzene
Concen: 46.93 ug/l
RT: 13.50 min Scan# 3642
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:146 Resp: 181814

Ion	Ratio	Lower	Upper
146	100		
111	37.7	19.1	57.1
148	64.2	32.4	97.0





#89
1,4-Dichlorobenzene
Concen: 46.85 ug/l
RT: 13.58 min Scan# 3667
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:146 Resp: 178133

Ion	Ratio	Lower	Upper
146	100		
111	37.0	18.4	55.4
148	64.0	32.3	96.9

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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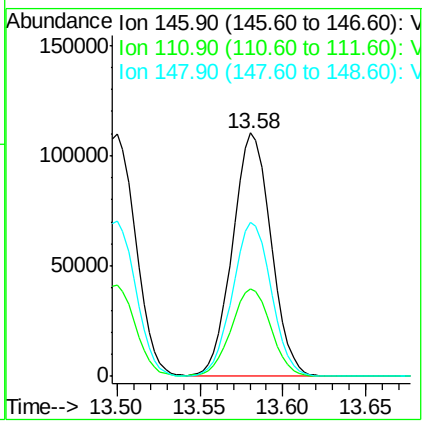
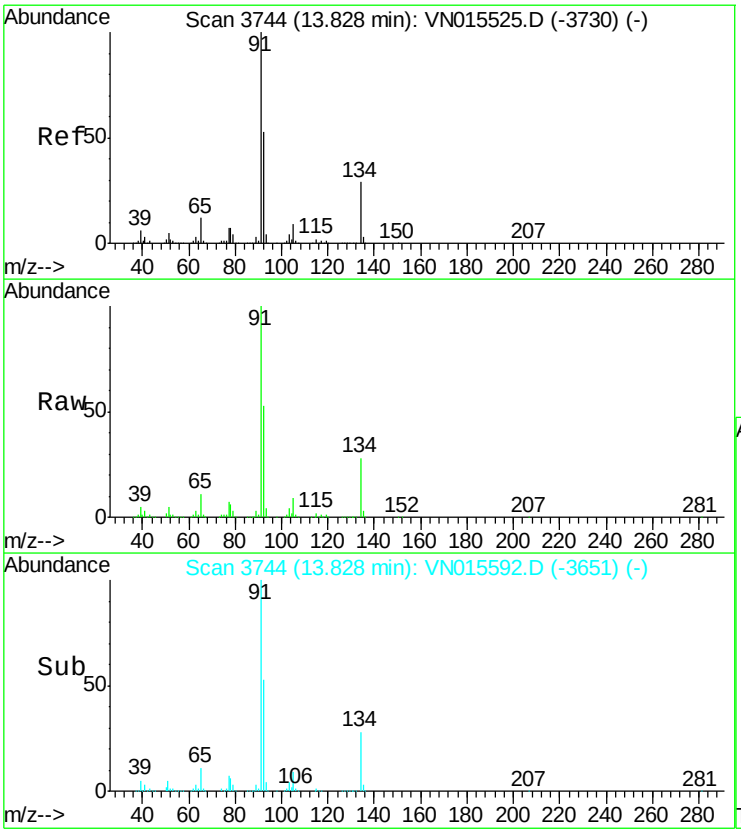
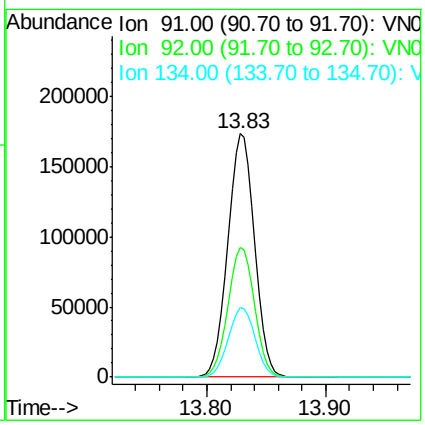


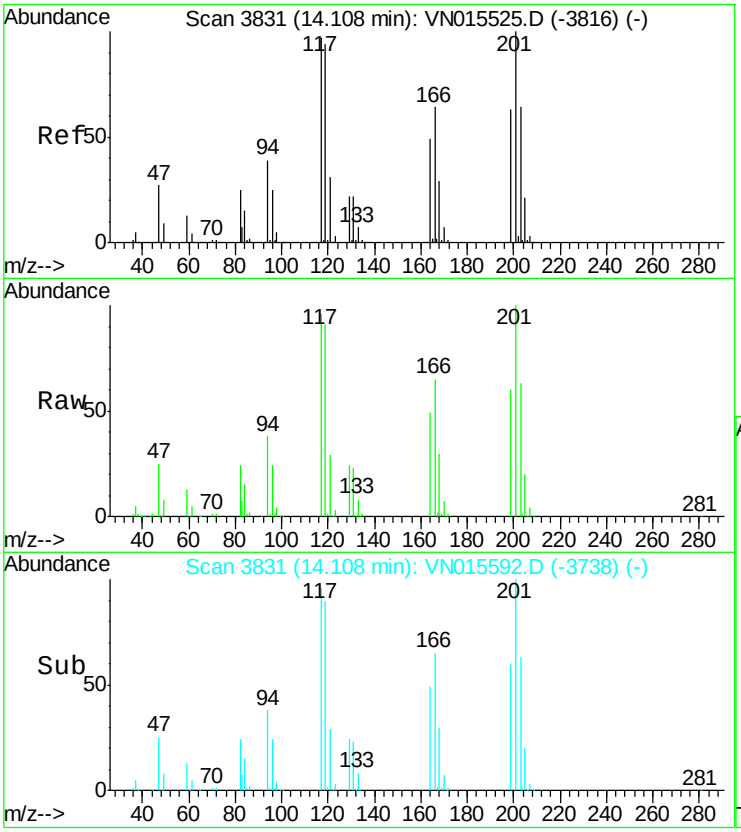


#90
n-Butylbenzene
Concen: 48.25 ug/l
RT: 13.83 min Scan# 3744
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion: 91 Resp: 269418

Ion	Ratio	Lower	Upper
91	100		
92	52.9	26.6	79.8
134	28.7	14.4	43.4





#91
Hexachloroethane
Concen: 46.64 ug/l
RT: 14.11 min Scan# 3831
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:117 Resp: 65695

Ion	Ratio	Lower	Upper
117	100		
201	101.8	51.7	155.2

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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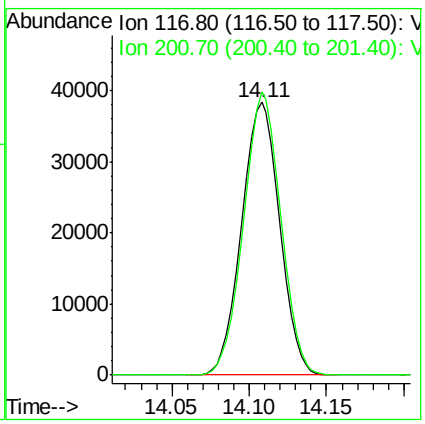
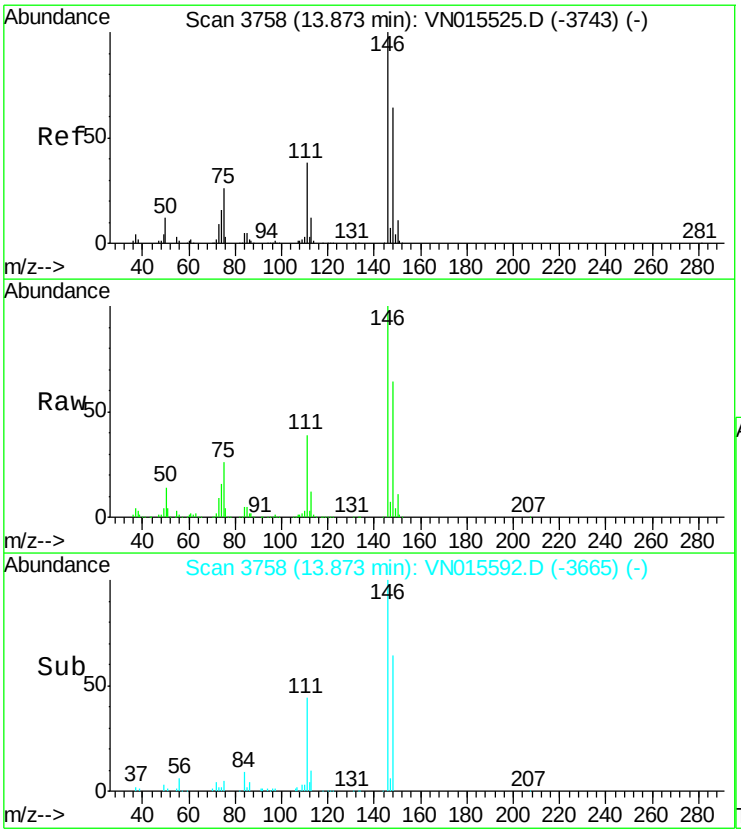
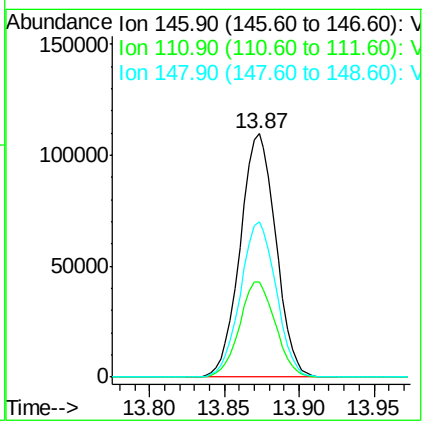


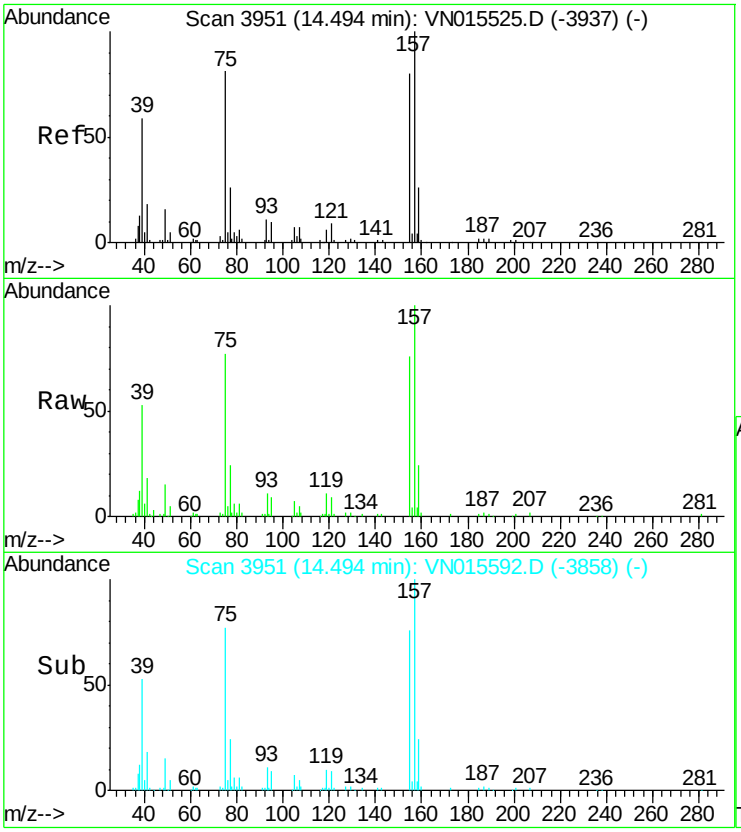


#92
1,2-Dichlorobenzene
Concen: 47.54 ug/l
RT: 13.87 min Scan# 3758
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:146 Resp: 182622

Ion	Ratio	Lower	Upper
146	100		
111	39.1	19.4	58.2
148	63.7	32.4	97.0





#93
1,2-Dibromo-3-Chloropropane
Concen: 47.14 ug/l
RT: 14.49 min Scan# 3951
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

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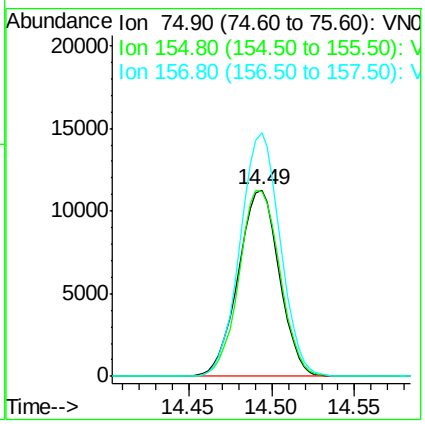
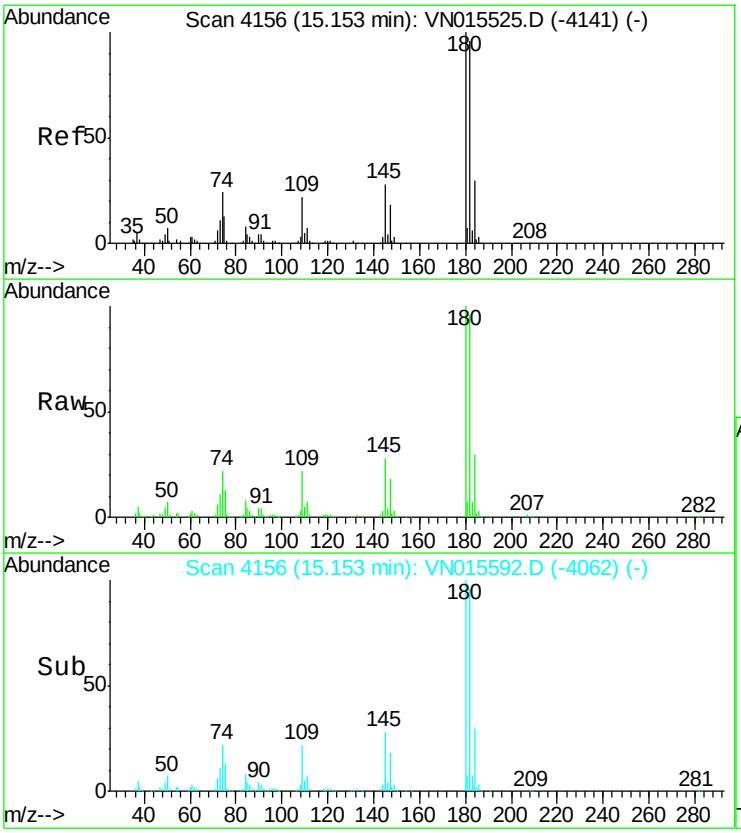
Tgt Ion: 75 Resp: 19385

Ion	Ratio	Lower	Upper
75	100		
155	99.4	49.4	148.2
157	127.8	61.3	183.8

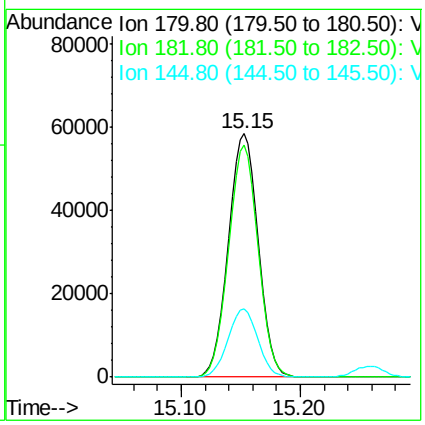


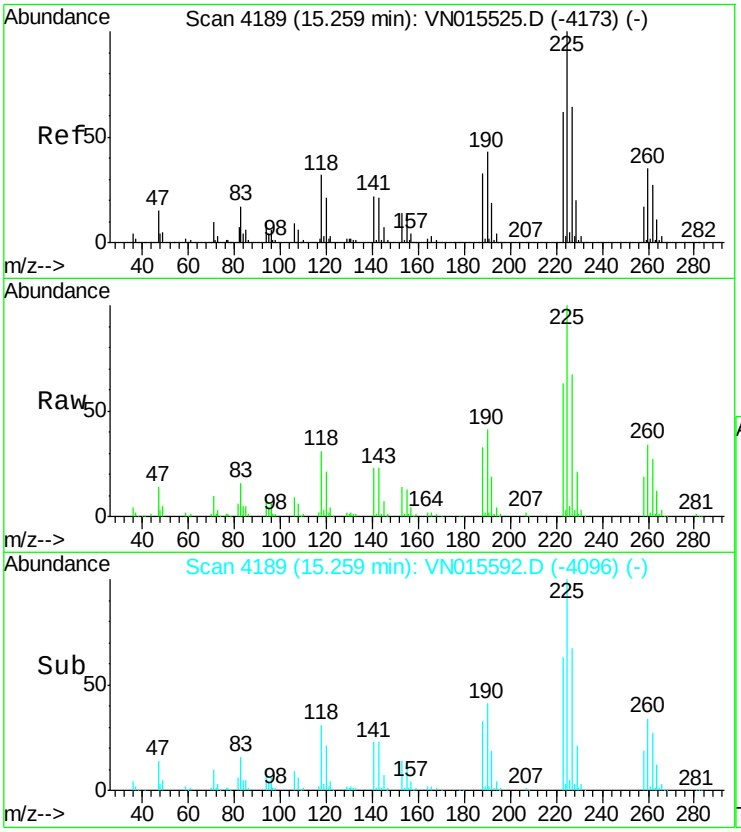


#94
1,2,4-Trichlorobenzene
Concen: 47.54 ug/l
RT: 15.15 min Scan# 4156
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:180 Resp: 101429

Ion	Ratio	Lower	Upper
180	100		
182	94.4	48.0	144.0
145	27.8	14.0	42.0





#95
Hexachlorobutadiene
Concen: 46.51 ug/l
RT: 15.26 min Scan# 4189
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:225 Resp: 65442

Ion	Ratio	Lower	Upper
225	100		
223	62.6	31.6	95.0
227	65.1	32.1	96.5

Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
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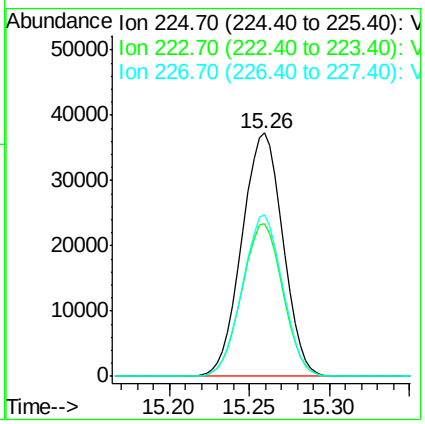
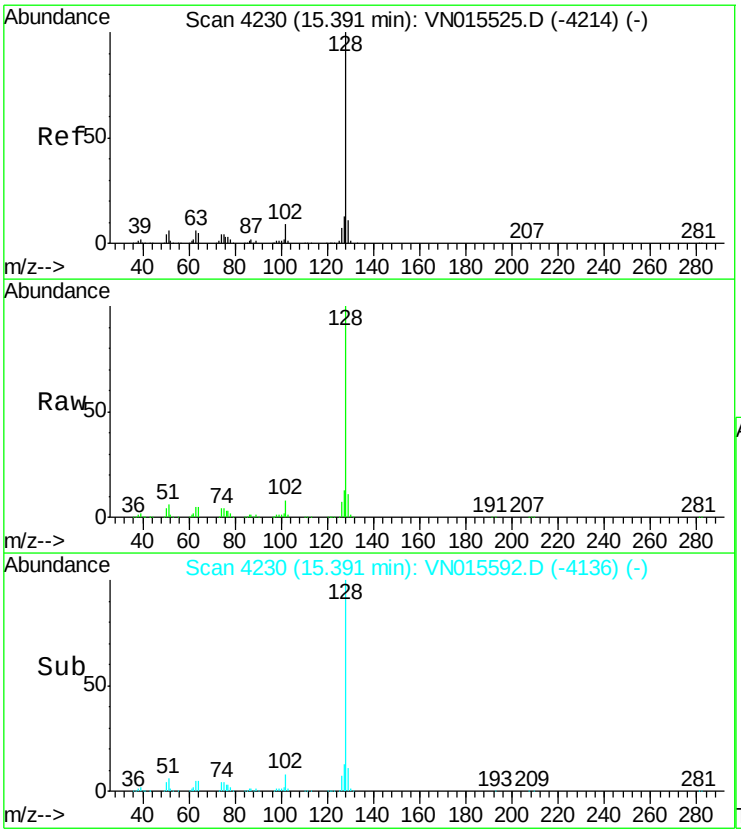
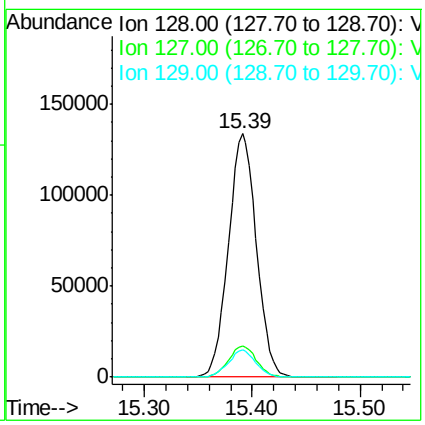


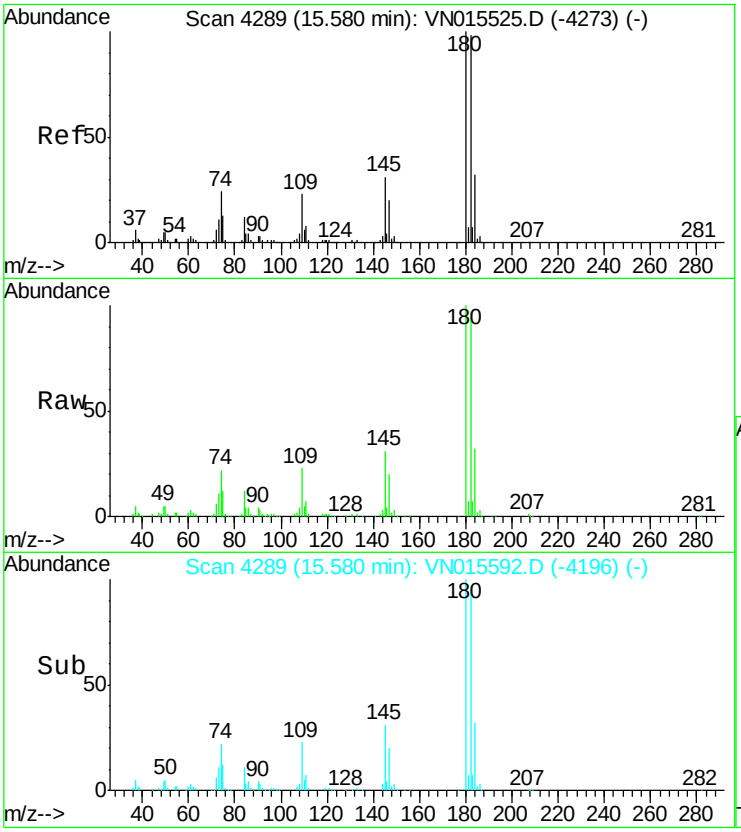


#96
Naphthalene
Concen: 46.33 ug/l
RT: 15.39 min Scan# 4230
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:128 Resp: 241859

Ion	Ratio	Lower	Upper
128	100		
127	12.7	10.3	15.5
129	11.0	8.7	13.1

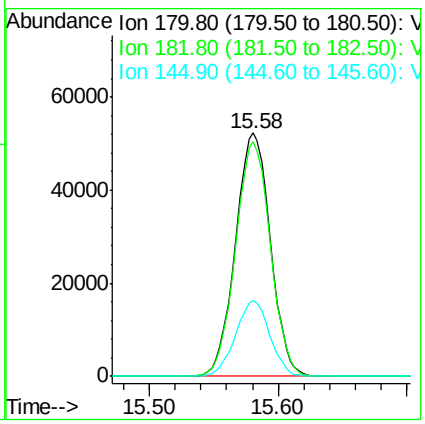




#97
1,2,3-Trichlorobenzene
Concen: 47.21 ug/l
RT: 15.58 min Scan# 4289
Delta R.T. 0.00 min
Lab File: VN015592.D
Acq: 22 May 2014 11:20

Tgt Ion:180 Resp: 98367

Ion	Ratio	Lower	Upper
180	100		
182	96.3	47.8	143.4
145	30.7	14.9	44.7



Instrument :
MSVOA_N
ClientSampleId :
MLW-4-35-40MSD

Manual Integrations APPROVED
MMDadoda
5/22/2014 4:20:14 PM

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Manual Integration Report

Sequence:	VN052014	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VN015522.D	1,2,3-Trichloropropane	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Coelution Of the peak
VSTDICC001	VN015522.D	1,4-Dichlorobenzene	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN015522.D	Acrolein	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN015522.D	Acrylonitrile	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN015522.D	Allyl chloride	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN015522.D	Ethyl Acetate	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN015522.D	Methyl Acetate	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN015522.D	Tert butyl alcohol	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN015522.D	trans-1,2-Dichloroethene	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN015522.D	Vinyl Acetate	sonal	5/21/2014 3:12:38 AM	MMDadoda	5/21/2014 11:01:16 AM	Coelution Of the peak
VSTDICC005	VN015523.D	1,2,3-Trichloropropane	sonal	5/21/2014 3:12:48 AM	MMDadoda	5/21/2014 11:01:31 AM	Coelution Of the peak
VSTDICC005	VN015523.D	Allyl chloride	sonal	5/21/2014 3:12:48 AM	MMDadoda	5/21/2014 11:01:31 AM	Peak Integrated by Software incorrectly
VSTDICC005	VN015523.D	Methyl methacrylate	sonal	5/21/2014 3:12:48 AM	MMDadoda	5/21/2014 11:01:31 AM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	VN052014	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VN015523.D	Vinyl Acetate	sonal	5/21/2014 3:12:48 AM	MMDadoda	5/21/2014 11:01:31 AM	Coelution Of the peak
VSTDICC020	VN015524.D	1,2,3-Trichloropropane	sonal	5/21/2014 3:12:56 AM	MMDadoda	5/21/2014 11:01:45 AM	Coelution Of the peak
VSTDICC020	VN015524.D	Vinyl Acetate	sonal	5/21/2014 3:12:56 AM	MMDadoda	5/21/2014 11:01:45 AM	Coelution Of the peak
VSTDICCC050	VN015525.D	1,2,3-Trichloropropane	sonal	5/21/2014 3:13:02 AM	MMDadoda	5/21/2014 11:01:58 AM	Coelution Of the peak
VSTDICCC050	VN015525.D	Vinyl Acetate	sonal	5/21/2014 3:13:02 AM	MMDadoda	5/21/2014 11:01:58 AM	Coelution Of the peak
VSTDICC100	VN015526.D	1,2,3-Trichloropropane	sonal	5/21/2014 3:13:08 AM	MMDadoda	5/21/2014 11:02:18 AM	Coelution Of the peak
VSTDICC100	VN015526.D	Vinyl Acetate	sonal	5/21/2014 3:13:08 AM	MMDadoda	5/21/2014 11:02:18 AM	Coelution Of the peak
VSTDICC200	VN015527.D	1,2,3-Trichloropropane	sonal	5/21/2014 3:13:17 AM	MMDadoda	5/21/2014 11:02:31 AM	Coelution Of the peak
VSTDICV050	VN015528.D	1,2,3-Trichloropropane	sonal	5/21/2014 3:13:44 AM	MMDadoda	5/21/2014 11:02:44 AM	Coelution Of the peak
VSTDICV050	VN015528.D	Vinyl Acetate	sonal	5/21/2014 3:13:44 AM	MMDadoda	5/21/2014 11:02:44 AM	Coelution Of the peak
VSTDCCC050	VN015530.D	1,2,3-Trichloropropane	bhavesh	5/21/2014 5:20:12 AM	MMDadoda	5/21/2014 11:03:09 AM	Coelution Of the peak
VSTDCCC050	VN015530.D	Vinyl Acetate	bhavesh	5/21/2014 5:20:12 AM	MMDadoda	5/21/2014 11:03:09 AM	Coelution Of the peak
VN0520WBS01	VN015532.D	1,2,3-Trichloropropane	bhavesh	5/21/2014 5:20:26 AM	MMDadoda	5/21/2014 11:03:21 AM	Coelution Of the peak

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Manual Integration Report

Sequence:	VN052014	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VN0520WBS01	VN015532.D	Vinyl Acetate	bhavesh	5/21/2014 5:20:26 AM	MMDadoda	5/21/2014 11:03:21 AM	Coelution Of the peak
VN0520WBSD01	VN015533.D	1,2,3-Trichloropropane	bhavesh	5/21/2014 5:20:37 AM	MMDadoda	5/21/2014 11:03:35 AM	Coelution Of the peak
VN0520WBSD01	VN015533.D	Vinyl Acetate	bhavesh	5/21/2014 5:20:37 AM	MMDadoda	5/21/2014 11:03:35 AM	Coelution Of the peak
F2327-06MS	VN015547.D	1,2,3-Trichloropropane	MMDadoda	5/21/2014 11:05:49 AM	priyanka	5/21/2014 12:21:36 PM	Coelution Of the peak
F2327-06MS	VN015547.D	Vinyl Acetate	MMDadoda	5/21/2014 11:05:49 AM	priyanka	5/21/2014 12:21:36 PM	Coelution Of the peak
F2327-07MSD	VN015548.D	1,2,3-Trichloropropane	MMDadoda	5/21/2014 11:06:05 AM	priyanka	5/21/2014 12:21:38 PM	Coelution Of the peak
F2327-07MSD	VN015548.D	Vinyl Acetate	MMDadoda	5/21/2014 11:06:05 AM	priyanka	5/21/2014 12:21:38 PM	Coelution Of the peak
VSTDCCC050	VN015549.D	1,2,3-Trichloropropane	MMDadoda	5/21/2014 11:06:23 AM	priyanka	5/21/2014 12:21:40 PM	Coelution Of the peak
VSTDCCC050	VN015549.D	Vinyl Acetate	MMDadoda	5/21/2014 11:06:23 AM	priyanka	5/21/2014 12:21:40 PM	Coelution Of the peak

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Manual Integration Report

Sequence:	VN052114	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN015551.D	1,2,3-Trichloropropane	bhavesh	5/22/2014 5:14:42 AM	MMDadoda	5/22/2014 4:13:58 PM	Coelution Of the peak
VSTDCCC050	VN015551.D	Vinyl Acetate	bhavesh	5/22/2014 5:14:42 AM	MMDadoda	5/22/2014 4:13:58 PM	Coelution Of the peak
VN0521WBS01	VN015553.D	1,2,3-Trichloropropane	bhavesh	5/22/2014 5:15:00 AM	MMDadoda	5/22/2014 4:14:11 PM	Coelution Of the peak
VN0521WBS01	VN015553.D	Vinyl Acetate	bhavesh	5/22/2014 5:15:00 AM	MMDadoda	5/22/2014 4:14:11 PM	Coelution Of the peak
F2319-12	VN015564.D	Methyl tert-butyl Ether	bhavesh	5/22/2014 5:15:16 AM	MMDadoda	5/22/2014 4:14:25 PM	Coelution Of the peak
F2292-01	VN015567.D	n-Butylbenzene	bhavesh	5/22/2014 5:19:04 AM	MMDadoda	5/22/2014 4:14:39 PM	Peak Integrated by Software incorrectly
F2292-02	VN015568.D	n-Butylbenzene	bhavesh	5/22/2014 5:18:56 AM	MMDadoda	5/22/2014 4:14:52 PM	Peak Integrated by Software incorrectly
F2319-10MS	VN015569.D	1,2,3-Trichloropropane	bhavesh	5/22/2014 5:17:56 AM	MMDadoda	5/22/2014 4:15:06 PM	Coelution Of the peak
F2319-10MS	VN015569.D	Vinyl Acetate	bhavesh	5/22/2014 5:17:56 AM	MMDadoda	5/22/2014 4:15:06 PM	Coelution Of the peak
F2319-11MSD	VN015570.D	1,2,3-Trichloropropane	bhavesh	5/22/2014 5:17:28 AM	MMDadoda	5/22/2014 4:15:22 PM	Coelution Of the peak
F2319-11MSD	VN015570.D	Vinyl Acetate	bhavesh	5/22/2014 5:17:28 AM	MMDadoda	5/22/2014 4:15:22 PM	Coelution Of the peak
VSTDCCC050	VN015571.D	1,2,3-Trichloropropane	bhavesh	5/22/2014 5:17:15 AM	MMDadoda	5/22/2014 4:15:35 PM	Coelution Of the peak
VSTDCCC050	VN015571.D	Vinyl Acetate	bhavesh	5/22/2014 5:17:15 AM	MMDadoda	5/22/2014 4:15:35 PM	Coelution Of the peak

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Manual Integration Report

Sequence:	VN052114	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN015573.D	1,2,3-Trichloropropane	bhavesh	5/22/2014 5:17:00 AM	MMDadoda	5/22/2014 4:15:56 PM	Coelution Of the peak
VSTDCCC050	VN015573.D	Vinyl Acetate	bhavesh	5/22/2014 5:17:00 AM	MMDadoda	5/22/2014 4:15:56 PM	Coelution Of the peak
VN0521WBS02	VN015575.D	1,2,3-Trichloropropane	bhavesh	5/22/2014 5:16:44 AM	MMDadoda	5/22/2014 4:16:09 PM	Coelution Of the peak
VN0521WBS02	VN015575.D	Vinyl Acetate	bhavesh	5/22/2014 5:16:44 AM	MMDadoda	5/22/2014 4:16:09 PM	Coelution Of the peak
VN0521WBSD02	VN015576.D	1,2,3-Trichloropropane	bhavesh	5/22/2014 5:16:24 AM	MMDadoda	5/22/2014 4:16:23 PM	Coelution Of the peak
VN0521WBSD02	VN015576.D	Vinyl Acetate	bhavesh	5/22/2014 5:16:24 AM	MMDadoda	5/22/2014 4:16:23 PM	Coelution Of the peak
F2314-06MS	VN015591.D	1,2,3-Trichloropropane	Feifei	5/22/2014 4:17:23 PM	MMDadoda	5/22/2014 4:19:56 PM	Coelution Of the peak
F2314-06MS	VN015591.D	Vinyl Acetate	Feifei	5/22/2014 4:17:23 PM	MMDadoda	5/22/2014 4:19:56 PM	Coelution Of the peak
F2314-07MSD	VN015592.D	1,2,3-Trichloropropane	Feifei	5/22/2014 4:17:29 PM	MMDadoda	5/22/2014 4:20:14 PM	Coelution Of the peak
F2314-07MSD	VN015592.D	Vinyl Acetate	Feifei	5/22/2014 4:17:29 PM	MMDadoda	5/22/2014 4:20:14 PM	Coelution Of the peak
VSTDCCC050	VN015593.D	1,2,3-Trichloropropane	Feifei	5/22/2014 4:17:33 PM	MMDadoda	5/22/2014 4:20:38 PM	Coelution Of the peak
VSTDCCC050	VN015593.D	Vinyl Acetate	Feifei	5/22/2014 4:17:33 PM	MMDadoda	5/22/2014 4:20:38 PM	Coelution Of the peak

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Manual Integration Report

Sequence:	VN052214	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN015595.D	1,2,3-Trichloropropane	bhavesh	5/23/2014 4:53:42 AM	MMDadoda	5/23/2014 3:00:30 PM	Coelution Of the peak
VSTDCCC050	VN015595.D	Vinyl Acetate	bhavesh	5/23/2014 4:53:42 AM	MMDadoda	5/23/2014 3:00:30 PM	Coelution Of the peak
VN0522WBS01	VN015597.D	1,2,3-Trichloropropane	Feifei	5/23/2014 3:00:29 PM	MMDadoda	5/23/2014 3:03:43 PM	Coelution Of the peak
VN0522WBS01	VN015597.D	Vinyl Acetate	Feifei	5/23/2014 3:00:29 PM	MMDadoda	5/23/2014 3:03:43 PM	Coelution Of the peak
VN0522WBS01	VN015597.D	Vinyl Acetate	Feifei	5/23/2014 3:00:29 PM	MMDadoda	5/23/2014 3:03:43 PM	Peak Integrated by Software incorrectly
F2314-04DL	VN015603.D	Methyl tert-butyl Ether	bhavesh	5/23/2014 4:53:59 AM	MMDadoda	5/23/2014 3:00:48 PM	Coelution Of the peak
VN0522WBSD01	VN015614.D	1,2,3-Trichloropropane	Feifei	5/23/2014 3:00:37 PM	MMDadoda	5/23/2014 3:01:04 PM	Coelution Of the peak
VN0522WBSD01	VN015614.D	Vinyl Acetate	Feifei	5/23/2014 3:00:37 PM	MMDadoda	5/23/2014 3:01:04 PM	Coelution Of the peak
VN0522WBSD01	VN015614.D	Vinyl Acetate	Feifei	5/23/2014 3:00:37 PM	MMDadoda	5/23/2014 3:01:04 PM	Peak Integrated by Software incorrectly
VSTDCCC050	VN015615.D	1,2,3-Trichloropropane	bhavesh	5/23/2014 4:54:28 AM	MMDadoda	5/23/2014 3:03:57 PM	Coelution Of the peak
VSTDCCC050	VN015615.D	Vinyl Acetate	bhavesh	5/23/2014 4:54:28 AM	MMDadoda	5/23/2014 3:03:57 PM	Coelution Of the peak
VSTDCCC050	VN015617.D	1,2,3-Trichloropropane	Feifei	5/23/2014 3:00:41 PM	MMDadoda	5/23/2014 3:04:11 PM	Peak Integrated by Software incorrectly
VSTDCCC050	VN015617.D	Vinyl Acetate	Feifei	5/23/2014 3:00:41 PM	MMDadoda	5/23/2014 3:04:11 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	VN052214	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VN0522WBS02	VN015619.D	1,2,3-Trichloropropane	Feifei	5/23/2014 3:00:45 PM	MMDadoda	5/23/2014 3:04:37 PM	Coelution Of the peak
VN0522WBS02	VN015619.D	Vinyl Acetate	Feifei	5/23/2014 3:00:45 PM	MMDadoda	5/23/2014 3:04:37 PM	Coelution Of the peak
F2322-12	VN015629.D	4-Methyl-2-Pentanone	Feifei	5/23/2014 3:00:51 PM	MMDadoda	5/23/2014 3:04:56 PM	Peak Integrated by Software incorrectly
F2322-12	VN015629.D	tert-Butylbenzene	Feifei	5/23/2014 3:00:51 PM	MMDadoda	5/23/2014 3:04:56 PM	Peak Integrated by Software incorrectly
F2322-10MS	VN015636.D	1,2,3-Trichloropropane	Feifei	5/23/2014 3:00:55 PM	MMDadoda	5/23/2014 3:05:22 PM	Coelution Of the peak
F2322-10MS	VN015636.D	2-Chlorotoluene	Feifei	5/23/2014 3:00:55 PM	MMDadoda	5/23/2014 3:05:22 PM	Peak Integrated by Software incorrectly
F2322-10MS	VN015636.D	Vinyl Acetate	Feifei	5/23/2014 3:00:55 PM	MMDadoda	5/23/2014 3:05:22 PM	Coelution Of the peak
F2322-11MSD	VN015637.D	1,2,3-Trichloropropane	Feifei	5/23/2014 3:00:59 PM	MMDadoda	5/23/2014 3:05:57 PM	Coelution Of the peak
F2322-11MSD	VN015637.D	2-Chlorotoluene	Feifei	5/23/2014 3:00:59 PM	MMDadoda	5/23/2014 3:05:57 PM	Peak Integrated by Software incorrectly
F2322-11MSD	VN015637.D	Vinyl Acetate	Feifei	5/23/2014 3:00:59 PM	MMDadoda	5/23/2014 3:05:57 PM	Coelution Of the peak
VSTDCCC050	VN015638.D	1,2,3-Trichloropropane	Feifei	5/23/2014 3:01:03 PM	MMDadoda	5/23/2014 3:06:23 PM	Coelution Of the peak
VSTDCCC050	VN015638.D	Vinyl Acetate	Feifei	5/23/2014 3:01:03 PM	MMDadoda	5/23/2014 3:06:23 PM	Coelution Of the peak

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052014

Review By	MMDadoda	Review On	5/22/2014 8:12:59 AM		
SubDirectory	VN052014	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35818,VP35819
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35832,VP35833
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN015521.D	20 May 2014 15:11	MD	Ok
2	VSTDICC001	VN015522.D	20 May 2014 17:24	MD	Ok,M
3	VSTDICC005	VN015523.D	20 May 2014 17:54	MD	Ok,M
4	VSTDICC020	VN015524.D	20 May 2014 18:24	MD	Ok,M
5	VSTDICCC050	VN015525.D	20 May 2014 18:54	MD	Ok,M
6	VSTDICC100	VN015526.D	20 May 2014 19:24	MD	Ok,M
7	VSTDICC200	VN015527.D	20 May 2014 19:55	MD	Ok,M
8	VSTDICV050	VN015528.D	20 May 2014 21:25	MD	Ok,M
9	BFB	VN015529.D	20 May 2014 23:25	MD	Ok
10	VSTDCCC050	VN015530.D	20 May 2014 23:55	MD	Ok,M
11	VN0520WBL01	VN015531.D	21 May 2014 00:56	MD	Ok
12	VN0520WBS01	VN015532.D	21 May 2014 1:26	MD	Ok,M
13	VN0520WBSD01	VN015533.D	21 May 2014 1:56	MD	Ok,M
14	F2345-19	VN015534.D	21 May 2014 2:57	MD	Ok
15	F2348-16	VN015535.D	21 May 2014 3:27	MD	Ok
16	F2355-01	VN015536.D	21 May 2014 3:57	MD	Ok
17	F2355-02	VN015537.D	21 May 2014 4:28	MD	Ok
18	F2355-03	VN015538.D	21 May 2014 4:58	MD	Ok
19	F2355-04	VN015539.D	21 May 2014 5:28	MD	Ok
20	F2327-01	VN015540.D	21 May 2014 5:58	MD	Ok
21	F2345-12	VN015541.D	21 May 2014 6:29	MD	Ok
22	F2345-13	VN015542.D	21 May 2014 6:59	MD	Ok
23	F2327-02	VN015543.D	21 May 2014 7:29	MD	Ok
24	F2327-03	VN015544.D	21 May 2014 8:00	MD	Ok
25	F2327-05	VN015545.D	21 May 2014 8:30	MD	Ok
26	F2327-04	VN015546.D	21 May 2014 9:00	MD	Ok

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052014

Review By	MMDadoda	Review On	5/22/2014 8:12:59 AM		
SubDirectory	VN052014	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35818,VP35819
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35832,VP35833
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

27	F2327-06MS	VN015547.D	21 May 2014 9:30	MD	Ok,M
28	F2327-07MSD	VN015548.D	21 May 2014 10:01	MD	Ok,M
29	VSTDCCC050	VN015549.D	21 May 2014 10:31	MD	Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052114

Review By	MMDadoda	Review On	5/22/2014 4:22:26 PM		
SubDirectory	VN052114	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35867 ,VP35868
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35878,VP35879,VP35880,VP35881
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN015550.D	21 May 2014 11:01	MD	Ok
2	VSTDCCC050	VN015551.D	21 May 2014 11:32	MD	Ok,M
3	VN0521WBL01	VN015552.D	21 May 2014 13:07	MD	Ok
4	VN0521WBS01	VN015553.D	21 May 2014 13:38	MD	Ok,M
5	F2319-16	VN015554.D	21 May 2014 14:08	MD	Ok
6	F2319-01	VN015555.D	21 May 2014 14:38	MD	Ok
7	F2319-02	VN015556.D	21 May 2014 15:08	MD	Ok
8	F2319-03	VN015557.D	21 May 2014 15:39	MD	Ok
9	F2319-04	VN015558.D	21 May 2014 16:09	MD	Ok
10	F2319-05	VN015559.D	21 May 2014 16:39	MD	Ok
11	F2319-06	VN015560.D	21 May 2014 17:10	MD	Ok
12	F2319-07	VN015561.D	21 May 2014 17:40	MD	Ok
13	F2319-08	VN015562.D	21 May 2014 18:10	MD	Ok
14	F2319-09	VN015563.D	21 May 2014 18:41	MD	Ok
15	F2319-12	VN015564.D	21 May 2014 19:11	MD	Ok,M
16	F2319-13	VN015565.D	21 May 2014 19:41	MD	Ok
17	F2319-15	VN015566.D	21 May 2014 20:12	MD	Ok
18	F2292-01	VN015567.D	21 May 2014 20:42	MD	Ok,M
19	F2292-02	VN015568.D	21 May 2014 21:12	MD	Ok,M
20	F2319-10MS	VN015569.D	21 May 2014 21:43	MD	Ok,M
21	F2319-11MSD	VN015570.D	21 May 2014 22:13	MD	Ok,M
22	VSTDCCC050	VN015571.D	21 May 2014 22:43	MD	Ok,M
23	BFB	VN015572.D	22 May 2014 00:14	MD	Ok
24	VSTDCCC050	VN015573.D	22 May 2014 00:44	MD	Ok,M
25	VN0521WBL02	VN015574.D	22 May 2014 1:44	MD	Ok
26	VN0521WBS02	VN015575.D	22 May 2014 2:15	MD	Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052114

Review By	MMDadoda	Review On	5/22/2014 4:22:26 PM		
SubDirectory	VN052114	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35867 ,VP35868
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35878,VP35879,VP35880,VP35881
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

27	VN0521WBSD02	VN015576.D	22 May 2014 2:45	MD	Ok,M
28	F2314-11	VN015577.D	22 May 2014 3:45	MD	Ok
29	F2314-10	VN015578.D	22 May 2014 4:16	MD	Ok
30	F2352-04	VN015579.D	22 May 2014 4:46	MD	Ok
31	F2352-01	VN015580.D	22 May 2014 5:16	MD	Dilution
32	F2352-02	VN015581.D	22 May 2014 5:47	MD	Dilution
33	F2352-03	VN015582.D	22 May 2014 6:17	MD	Ok
34	F2314-01	VN015583.D	22 May 2014 6:48	MD	Not Ok
35	F2314-02	VN015584.D	22 May 2014 7:18	MD	Not Ok
36	F2314-03	VN015585.D	22 May 2014 7:48	MD	Ok
37	F2314-04	VN015586.D	22 May 2014 8:18	MD	Dilution
38	F2314-05	VN015587.D	22 May 2014 8:49	MD	Dilution
39	F2314-08	VN015588.D	22 May 2014 9:19	MD	Dilution
40	F2314-09	VN015589.D	22 May 2014 9:49	MD	Dilution
41	F2029-01	VN015590.D	22 May 2014 10:20	MD	Dilution
42	F2314-06MS	VN015591.D	22 May 2014 10:50	MD	Ok,M
43	F2314-07MSD	VN015592.D	22 May 2014 11:20	MD	Ok,M
44	VSTDCCC050	VN015593.D	22 May 2014 11:50	MD	Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052214

Review By	mohammad	Review On	5/23/2014 6:23:03 PM		
SubDirectory	VN052214	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35899,VP35900
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35903,VP35904,VP35905,VP35906
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN015594.D	22 May 2014 12:32	MD	Ok
2	VSTDCCC050	VN015595.D	22 May 2014 13:03	MD	Ok,M
3	VN0522WBL01	VN015596.D	22 May 2014 14:23	MD	Ok
4	VN0522WBS01	VN015597.D	22 May 2014 14:54	MD	Ok,M
5	F2352-01DL	VN015598.D	22 May 2014 15:24	MD	Ok
6	F2314-05DL	VN015599.D	22 May 2014 15:54	MD	Ok
7	F2314-01	VN015600.D	22 May 2014 16:24	MD	Ok
8	F2314-02	VN015601.D	22 May 2014 16:55	MD	Ok
9	F2352-02DL	VN015602.D	22 May 2014 17:25	MD	Ok
10	F2314-04DL	VN015603.D	22 May 2014 17:55	MD	Ok,M
11	F2314-09DL	VN015604.D	22 May 2014 18:25	MD	Ok
12	F2314-08DL	VN015605.D	22 May 2014 18:56	MD	Ok
13	F2342-07	VN015606.D	22 May 2014 19:26	MD	Ok
14	F2342-08	VN015607.D	22 May 2014 19:56	MD	Ok
15	F2342-01	VN015608.D	22 May 2014 20:26	MD	Ok
16	F2342-02	VN015609.D	22 May 2014 20:57	MD	Ok
17	F2342-03	VN015610.D	22 May 2014 21:27	MD	Ok
18	F2342-04	VN015611.D	22 May 2014 21:57	MD	Ok
19	F2342-05	VN015612.D	22 May 2014 22:28	MD	Ok
20	F2342-06	VN015613.D	22 May 2014 22:58	MD	Ok
21	VN0522WBSD01	VN015614.D	22 May 2014 23:28	MD	Ok,M
22	VSTDCCC050	VN015615.D	22 May 2014 23:58	MD	Ok,M
23	BFB	VN015616.D	23 May 2014 1:29	MD	Ok
24	VSTDCCC050	VN015617.D	23 May 2014 1:59	MD	Ok,M
25	VN0522WBL02	VN015618.D	23 May 2014 2:59	MD	Ok
26	VN0522WBS02	VN015619.D	23 May 2014 3:29	MD	Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052214

Review By	mohammad	Review On	5/23/2014 6:23:03 PM		
SubDirectory	VN052214	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35899,VP35900
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35903,VP35904,VP35905,VP35906
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

27	F2322-05	VN015620.D	23 May 2014 4:00	MD	Ok
28	F2322-06	VN015621.D	23 May 2014 4:30	MD	Ok
29	F2322-01	VN015622.D	23 May 2014 5:00	MD	Dilution
30	F2322-02	VN015623.D	23 May 2014 5:31	MD	Dilution
31	F2322-03	VN015624.D	23 May 2014 6:01	MD	Dilution
32	F2322-04	VN015625.D	23 May 2014 6:31	MD	Not Ok
33	F2322-07	VN015626.D	23 May 2014 7:01	MD	Ok
34	F2322-08	VN015627.D	23 May 2014 7:32	MD	Ok
35	F2322-09	VN015628.D	23 May 2014 8:02	MD	Dilution
36	F2322-12	VN015629.D	23 May 2014 8:32	MD	Dilution
37	F2322-13	VN015630.D	23 May 2014 9:02	MD	Not Ok
38	F2322-09DL	VN015631.D	23 May 2014 9:32	MD	Ok
39	F2322-02DL	VN015632.D	23 May 2014 10:03	MD	Ok
40	F2322-03DL	VN015633.D	23 May 2014 10:33	MD	Ok
41	F2322-01DL	VN015634.D	23 May 2014 11:03	MD	Not Ok
42	F2322-12DL	VN015635.D	23 May 2014 11:34	MD	Ok
43	F2322-10MS	VN015636.D	23 May 2014 12:04	MD	Ok,M
44	F2322-11MSD	VN015637.D	23 May 2014 12:34	MD	Ok,M
45	VSTDCCC050	VN015638.D	23 May 2014 13:04	MD	Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052014

Review By	MMDadoda	Review On	5/22/2014 8:12:59 AM		
SubDirectory	VN052014	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35818,VP35819
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35832,VP35833
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

Sr#	SampleId	ClientID	Data File Name	Comment	Status
1	BFB	BFB	VN015521.D		Ok
2	VSTDICC001	VSTDICC001	VN015522.D	LR used for Comp# 2,4,6,11,12,29,32,59,74,76,77,80,84,94,96,97	Ok,M
3	VSTDICC005	VSTDICC005	VN015523.D		Ok,M
4	VSTDICC020	VSTDICC020	VN015524.D		Ok,M
5	VSTDICCC050	VSTDICCC050	VN015525.D		Ok,M
6	VSTDICC100	VSTDICC100	VN015526.D		Ok,M
7	VSTDICC200	VSTDICC200	VN015527.D		Ok,M
8	VSTDICV050	ICVVN052014	VN015528.D		Ok,M
9	BFB	BFB	VN015529.D		Ok
10	VSTDCCC050	VSTDCCC050	VN015530.D		Ok,M
11	VN0520WBL01	VN0520WBL01	VN015531.D		Ok
12	VN0520WBS01	VN0520WBS01	VN015532.D		Ok,M
13	VN0520WBSD01	VN0520WBSD01	VN015533.D		Ok,M
14	F2345-19	TB051514B	VN015534.D	pH < 2A	Ok
15	F2348-16	RB051514	VN015535.D	pH < 2A	Ok
16	F2355-01	STORAGEBLANK-SOILRE	VN015536.D	pH < 2A	Ok
17	F2355-02	STORAGEBLANK-WATER	VN015537.D	pH < 2A	Ok
18	F2355-03	STORAGEBLANK-WATER	VN015538.D	pH < 2A	Ok
19	F2355-04	STORAGEBLANK-SAMPL	VN015539.D	pH < 2A	Ok
20	F2327-01	TB051214A	VN015540.D	pH < 2A	Ok
21	F2345-12	SP14MMW0018A	VN015541.D	pH < 2A	Ok
22	F2345-13	SP14MMW0018B	VN015542.D	pH < 2B	Ok

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052014

Review By	MMDadoda	Review On	5/22/2014 8:12:59 AM		
SubDirectory	VN052014	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35818,VP35819
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35832,VP35833
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

23	F2327-02	SP14MMW0001	VN015543.D	pH < 2C	Ok
24	F2327-03	SP14MMW00019006	VN015544.D	pH < 2C	Ok
25	F2327-05	SP14LF2MW4	VN015545.D	pH < 2C	Ok
26	F2327-04	SP14LF2MW3	VN015546.D	pH < 2C	Ok
27	F2327-06MS	SP14LF2MW4MS	VN015547.D	pH < 2C	Ok,M
28	F2327-07MSD	SP14LF2MW4MSD	VN015548.D	pH < 2C	Ok,M
29	VSTDCCC050	VSTDCCC050	VN015549.D		Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052114

Review By	MMDadoda	Review On	5/22/2014 4:22:26 PM		
SubDirectory	VN052114	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35867 ,VP35868
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35878,VP35879,VP35880,VP35881
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

Sr#	SampleId	ClientID	Data File Name	Comment	Status
1	BFB	BFB	VN015550.D		Ok
2	VSTDCCC050	VSTDCCC050	VN015551.D		Ok,M
3	VN0521WBL01	VN0521WBL01	VN015552.D		Ok
4	VN0521WBS01	VN0521WBS01	VN015553.D		Ok,M
5	F2319-16	TB-051414	VN015554.D	pH < 2A	Ok
6	F2319-01	RAV-GT-106	VN015555.D	pH < 2A	Ok
7	F2319-02	RAV-GT-110	VN015556.D	pH < 2A	Ok
8	F2319-03	RAV-MW-11	VN015557.D	pH < 2A	Ok
9	F2319-04	RAV-MW-6	VN015558.D	pH < 2A	Ok
10	F2319-05	RAV-RMW-1	VN015559.D	pH < 2A	Ok
11	F2319-06	RAV-RMW-3	VN015560.D	pH < 2A	Ok
12	F2319-07	RAV-RMW-2	VN015561.D	pH < 2A	Ok
13	F2319-08	RAV-RMW-4	VN015562.D	pH < 2A	Ok
14	F2319-09	RAV-GTMW-1	VN015563.D	pH < 2A	Ok
15	F2319-12	RAV-GTMW-5	VN015564.D	pH < 2A	Ok,M
16	F2319-13	RAV-GTMW-3	VN015565.D	pH < 2A	Ok
17	F2319-15	RAV-GTMW-2	VN015566.D	pH < 2A	Ok
18	F2292-01	FL-0191	VN015567.D	pH < 2A	Ok,M
19	F2292-02	FL-0192	VN015568.D	pH < 2A	Ok,M
20	F2319-10MS	RAV-GTMW-1MS	VN015569.D	pH < 2A	Ok,M
21	F2319-11MSD	RAV-GTMW-1MSD	VN015570.D	pH < 2A	Ok,M
22	VSTDCCC050	VSTDCCC050	VN015571.D		Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052114

Review By	MMDadoda	Review On	5/22/2014 4:22:26 PM		
SubDirectory	VN052114	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35867 ,VP35868
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35878,VP35879,VP35880,VP35881
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

23	BFB	BFB	VN015572.D		Ok
24	VSTDCCC050	VSTDCCC050	VN015573.D		Ok,M
25	VN0521WBL02	VN0521WBL02	VN015574.D		Ok
26	VN0521WBS02	VN0521WBS02	VN015575.D		Ok,M
27	VN0521WBSD02	VN0521WBSD02	VN015576.D		Ok,M
28	F2314-11	TRIPBLANK	VN015577.D	pH < 2A	Ok
29	F2314-10	FB-01	VN015578.D	pH < 2A	Ok
30	F2352-04	TRIPBLANK	VN015579.D	pH < 2A	Ok
31	F2352-01	MW4-5-15-14	VN015580.D	pH < 2A Need dilution 40X	Dilution
32	F2352-02	MW5-5-15-14	VN015581.D	pH < 2A ,Need dilution 10X	Dilution
33	F2352-03	MW6-5-15-14	VN015582.D	pH < 2A	Ok
34	F2314-01	MLW-1-CH5	VN015583.D	pH < 2A ,confirm conc.	Not Ok
35	F2314-02	MLW-1-CH3	VN015584.D	pH < 2A ,confirm conc.	Not Ok
36	F2314-03	MLW-1-CH2	VN015585.D	pH < 2A	Ok
37	F2314-04	MLW-4-5-15	VN015586.D	pH < 2A ,Need dilution 40X	Dilution
38	F2314-05	MLW-4-35-40	VN015587.D	pH < 2A ,Need dilution 40X	Dilution
39	F2314-08	DUP	VN015588.D	pH < 2A ,Need dilution 10X	Dilution
40	F2314-09	MLW-4-25-30	VN015589.D	pH < 2A ,Need dilution 10X	Dilution
41	F2029-01	SS050MW513-140416	VN015590.D	pH < 2C ,Need dilution 50X	Dilution
42	F2314-06MS	MLW-4-35-40MS	VN015591.D	pH < 2A	Ok,M
43	F2314-07MSD	MLW-4-35-40MSD	VN015592.D	pH < 2A	Ok,M
44	VSTDCCC050	VSTDCCC050	VN015593.D		Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052214

Review By	mohammad	Review On	5/23/2014 6:23:03 PM		
SubDirectory	VN052214	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35899,VP35900
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35903,VP35904,VP35905,VP35906
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

Sr#	SampleId	ClientID	Data File Name	Comment	Status
1	BFB	BFB	VN015594.D		Ok
2	VSTDCCC050	VSTDCCC050	VN015595.D		Ok,M
3	VN0522WBL01	VN0522WBL01	VN015596.D		Ok
4	VN0522WBS01	VN0522WBS01	VN015597.D		Ok,M
5	F2352-01DL	MW4-5-15-14DL	VN015598.D		Ok
6	F2314-05DL	MLW-4-35-40DL	VN015599.D		Ok
7	F2314-01	MLW-1-CH5	VN015600.D	pH < 2B	Ok
8	F2314-02	MLW-1-CH3	VN015601.D	pH < 2B	Ok
9	F2352-02DL	MW5-5-15-14DL	VN015602.D		Ok
10	F2314-04DL	MLW-4-5-15DL	VN015603.D		Ok,M
11	F2314-09DL	MLW-4-25-30DL	VN015604.D		Ok
12	F2314-08DL	DUPDL	VN015605.D		Ok
13	F2342-07	TB-S81-2014-1	VN015606.D	TB, pH < 2	Ok
14	F2342-08	EB-S81-2014-1	VN015607.D	pH < 2A	Ok
15	F2342-01	S81-0059	VN015608.D	pH < 2A	Ok
16	F2342-02	S81-0060	VN015609.D	pH < 2A	Ok
17	F2342-03	S81-0065	VN015610.D	pH < 2A	Ok
18	F2342-04	S81-0063	VN015611.D	pH < 2A	Ok
19	F2342-05	S81-0064	VN015612.D	pH < 2A	Ok
20	F2342-06	S81-0062	VN015613.D	pH < 2A	Ok
21	VN0522WBSD01	VN0522WBSD01	VN015614.D		Ok,M
22	VSTDCCC050	VSTDCCC050	VN015615.D		Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN052214

Review By	mohammad	Review On	5/23/2014 6:23:03 PM		
SubDirectory	VN052214	HP Acquire Method	MSVOA_N.M	HP Processing Method	82N052014W.M

STD. NAME	STD REF.#
Tune/Reschk	VP35899,VP35900
Initial Calibration Stds	VP35825,VP35826,VP35827,VP35828,VP35829,VP35830
CCC	VP35903,VP35904,VP35905,VP35906
Internal Standard/PEM	VP33249
ICV/I.BLK	VP35831

23	BFB	BFB	VN015616.D		Ok
24	VSTDCCC050	VSTDCCC050	VN015617.D		Ok,M
25	VN0522WBL02	VN0522WBL02	VN015618.D		Ok
26	VN0522WBS02	VN0522WBS02	VN015619.D		Ok,M
27	F2322-05	TB-PH2-2014-1	VN015620.D	pH < 2A	Ok
28	F2322-06	EB-PH2-2014-1	VN015621.D	pH < 2A	Ok
29	F2322-01	PH2-0070	VN015622.D	pH < 2A ,Need 5x	Dilution
30	F2322-02	PH2-0060	VN015623.D	pH < 2A ,Need 40x	Dilution
31	F2322-03	PH2-0059	VN015624.D	pH < 2A ,Need 40x	Dilution
32	F2322-04	PH2-0081	VN015625.D	pH < 2A ,E flag in previous samples	Not Ok
33	F2322-07	PH2-0065	VN015626.D	pH < 2A	Ok
34	F2322-08	PH2-0066	VN015627.D	pH < 2A	Ok
35	F2322-09	PH2-0074	VN015628.D	pH < 2A,Need 40x	Dilution
36	F2322-12	PH2-0069	VN015629.D	pH < 2A ,Need 20x	Dilution
37	F2322-13	PH2-0083	VN015630.D	pH < 2A ,E flag in previous samples	Not Ok
38	F2322-09DL	PH2-0074DL	VN015631.D		Ok
39	F2322-02DL	PH2-0060DL	VN015632.D		Ok
40	F2322-03DL	PH2-0059DL	VN015633.D		Ok
41	F2322-01DL	PH2-0070DL	VN015634.D	Not matching	Not Ok
42	F2322-12DL	PH2-0069DL	VN015635.D		Ok
43	F2322-10MS	PH2-0074MS	VN015636.D	pH < 2A	Ok,M
44	F2322-11MSD	PH2-0074MSD	VN015637.D	pH < 2A	Ok,M
45	VSTDCCC050	VSTDCCC050	VN015638.D		Ok,M

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Prep Standard - Chemical Standard Summary

Order ID : F2352

Test : VOCMS Group1

Prepbatch ID :

Sequence ID/Qc Batch ID: vn052114,VN052214,

Standard ID :
VP33249,VP33439,VP33543,VP33631,VP33632,VP33633,VP34241,VP34242,VP34244,VP35346,VP35348,VP35350,VP35692,VP35746,VP35747,VP35793,VP35807,VP35809,VP35811,VP35814,VP35823,VP35825,VP35826,VP35827,VP35828,VP35829,VP35830,VP35831,VP35867,VP35868,VP35878,VP35879,VP35880,VP35881,VP35899,VP35900,VP35903,VP35904,VP35905,VP35906,

Chemical ID :
V1456,V3454,V3599,V3737,V4029,V4068,V4069,V4087,V4128,V4218,V4263,V4264,V4270,V4337,V4486,V4543,V4544,V4557,V4597,V4598,V4599,V4600,V4601,V4610,V4682,V4690,V4705,V4748,V4767,V4768,V4769,V4776,V4825,V4826,V4842,V4905,V4906,V5012,V5017,V5020,V5022,V5053,V5057,V5065,V5069,V5070,V5071,V5072,V5073,V5074,V5076,

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
247	8260 Internal Standard, 250PPM	VP33249	01/30/2014	07/30/2014	sam

FROM 1.000ml of V4087(Custom Standard, 8260 Internal Std [CS 5179-1]) + 99.000ml of V4337(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 100.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
252	8260 Working STD (BCM)-First source, 100PPM	VP33439	02/07/2014	08/07/2014	sam

FROM 1.200ml of V4600(VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul) + 1.300ml of V4610(VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul) + 47.500ml of V4337(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 50.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
253	8260 Working STD (BCM)-First source, 20PPM	VP33543	02/17/2014	08/17/2014	sam

FROM 0.500ml of V4601(VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul) + 49.500ml of V4337(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 50.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2669	8260 Chlorodifluoromethane, 160ppm	VP33631	02/24/2014	08/24/2014	sam

FROM 0.800ml of V4905(Chlorodifluoromethane, Freon 22, 2000 PPM) + 9.200ml of V4486(Methanol, Purge & Trap (cs/6x1L)) = Final Quantity: 10.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2670	8260 Chlorodifluoromethane, 20ppm	VP33632	02/24/2014	08/24/2014	sam

FROM 8.750ml of V4486(Methanol, Purge & Trap (cs/6x1L)) + 1.250ml of VP33631(8260 Chlorodifluoromethane, 160ppm) = Final Quantity: 10.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2671	8260 Chlorodifluoromethane, 160ppm-ss	VP33633	02/24/2014	08/24/2014	sam

FROM 0.400ml of V4906(Chlorodifluoromethane, Freon 22, 2000 PPM) + 4.600ml of V4486(Methanol, Purge & Trap (cs/6x1L)) = Final Quantity: 5.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
249	8260 Surrogate, 100PPM	VP34241	03/21/2014	09/21/2014	sam

FROM 0.400ml of V4029(Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]) + 99.600ml of V4337(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 100.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
617	8260 Surrogate, 400PPM	VP34242	03/21/2014	09/21/2014	sam

FROM 0.160ml of V4029(Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]) + 9.840ml of V4337(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 10.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1738	8260 surrogate 20 ppm	VP34244	03/21/2014	09/21/2014	sam

FROM 0.040ml of V4029(Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]) + 49.980ml of V4337(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 50.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP35346	04/29/2014	05/28/2014	sam

FROM 0.400ml of V5074(Acrolin Std (Min = 5)) + 1.500ml of V5070(Acrolin Std (Min = 5)) + 1.500ml of V5071(Acrolin Std (Min = 5)) + 1.500ml of V5072(Acrolin Std (Min = 5)) + 1.500ml of V5073(Acrolin Std (Min = 5)) + 33.600ml of V5053(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
180	8260 Working STD (Acrolein)-First source, 100PPM	VP35348	04/29/2014	05/28/2014	sam

FROM 17.500ml of V5053(Methanol, Purge/Trap (cs=6x1L)) + 2.500ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) = Final Quantity: 20.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
263	8260 Working STD (Acrolein)-Second source, 800PPM	VP35350	04/29/2014	05/26/2014	sam

FROM 1.600ml of V5076(Acrolin Std (Min = 5)) + 8.400ml of V5053(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 10.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
719	8260 Working STD (BCM)-First source, 400PPM	VP35692	05/14/2014	11/15/2014	sam

FROM 1.600ml of V4599(VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul) + 1.700ml of V4597(VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul) + 1.700ml of V4598(VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul) + 20.000ml of V5057(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 25.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP35746	05/17/2014	06/17/2014	sam

FROM 0.200ml of V4769(Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS) + 0.200ml of V4842(Universal VOA Mega Mix (Min order = 5)) + 0.640ml of V3737(VOA Stock Solution, tert-butanol std, 1mL, P&TM) + 1.500ml of V4767(Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS) + 1.500ml of V4768(Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS) + 1.500ml of V4825(Universal VOA Mega Mix (Min order = 5)) + 1.500ml of V4826(Universal VOA Mega Mix (Min order = 5)) + 1.600ml of V4068(VOA Mix, 8260B Acetates Mix, P&TM, 1mL) + 1.600ml of V4069(VOA Mix, 8260B Acetates Mix, P&TM, 1mL) + 1.600ml of V4543(Revised Additions Mix (Min = 5)) + 1.600ml of V4544(Revised Additions Mix (Min = 5)) + 1.600ml of V4690(VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml) + 1.600ml of V4705(VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml) + 1.600ml of V5012(VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml) + 1.600ml of V5017(VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml) + 1.600ml of V5020(VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml) + 1.600ml of V5022(VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml) + 16.960ml of V5065(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
259	8260 Calibration Working STD Mix-Second source, 160PPM	VP35747	05/17/2014	06/17/2014	sam

FROM 0.160ml of V4128(VOA Stock Solution, tert-butanol std, 1mL, P&TM) + 0.800ml of V4557(Revised Additions Mix (Min = 5)) + 0.800ml of V4682(VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml) + 0.800ml of V4748(VOA Mix, 8260B Acetates Mix, P&TM, 1mL) + 0.800ml of V4776(Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS) + 0.800ml of V4842(Universal VOA Mega Mix (Min order = 5)) + 1.600ml of V4218(VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml) + 4.240ml of V5065(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 10.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
218	BFB, 25PPM	VP35793	05/19/2014	11/19/2014	sam

FROM 0.400ml of V3599(BFB tuneing solution) + 39.600ml of V5053(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1810	8260 Working Std(2-CVE)-800ppm	VP35807	05/20/2014	11/20/2014	sam

FROM 1.600ml of V4263(2-Chloroethyl Vinyl Ether (Min = 5)) + 1.600ml of V4264(2-Chloroethyl Vinyl Ether (Min = 5)) + 36.800ml of V5069(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1812	8260 Working Std(2-CVE)-100ppm	VP35809	05/20/2014	11/20/2014	sam

FROM 26.250ml of V5069(Methanol, Purge/Trap (cs=6x1L)) + 3.750ml of VP35807(8260 Working Std(2-CVE) -800ppm) = Final Quantity: 30.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1817	8260 Working Std(2-CVE)-SS, 800ppm	VP35811	05/20/2014	11/20/2014	sam

FROM 0.800ml of V4270(2-Chloroethyl Vinyl Ether (Min = 5)) + 9.200ml of V5069(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 10.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
262	8260 Working STD (BCM)-Second source, 100PPM	VP35814	05/20/2014	11/20/2014	sam

FROM 1.000ml of V3454(Bromochloromethane Std. sol/methanol 1000ppm) + 9.000ml of V5069(Methanol, Purge/Trap (cs=6x1L)) = Final Quantity: 10.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
245	8260 Calibration Working STD Mix-First source, 20PPM	VP35823	05/17/2014	06/17/2014	sam

FROM 26.250ml of V5065(Methanol, Purge/Trap (cs=6x1L)) + 3.750ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) = Final Quantity: 30.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2672	1 PPB ICC,8260+Chlorodifluoromethane-water	VP35825	05/20/2014	05/21/2014	MMDadoda

FROM 39.980ml of V1456(DI Water) + 0.002ml of VP33543(8260 Working STD (BCM)-First source, 20PPM) + 0.002ml of VP33632(8260 Chlorodifluoromethane, 20ppm) + 0.002ml of VP34244(8260 surrogate 20 ppm) + 0.002ml of VP35348(8260 Working STD (Acrolein)-First source, 100PPM) + 0.002ml of VP35809(8260 Working Std(2-CVE)-100ppm) + 0.002ml of VP35823(8260 Calibration Working STD Mix-First source, 20PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2673	5 PPB ICC,8260+Chlorodifluoromethane-water	VP35826	05/20/2014	05/21/2014	MMDadoda

FROM 39.932ml of V1456(DI Water) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.010ml of VP33543(8260 Working STD (BCM)-First source, 20PPM) + 0.010ml of VP33632(8260 Chlorodifluoromethane, 20ppm) + 0.010ml of VP34244(8260 surrogate 20 ppm) + 0.010ml of VP35348(8260 Working STD (Acrolein)-First source, 100PPM) + 0.010ml of VP35809(8260 Working Std(2-CVE)-100ppm) + 0.010ml of VP35823(8260 Calibration Working STD Mix-First source, 20PPM) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2674	20 PPB ICC,8260+Chlorodifluoromethane-water	VP35827	05/20/2014	05/21/2014	MMDadoda

FROM 39.956ml of V1456(DI Water) + 0.005ml of VP33631(8260 Chlorodifluoromethane, 160ppm) + 0.005ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.005ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.005ml of VP35807(8260 Working Std(2-CVE)-800ppm) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.008ml of VP33439(8260 Working STD (BCM) -First source, 100PPM) + 0.008ml of VP34241(8260 Surrogate, 100PPM) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2675	50 PPB ICC,8260+Chlorodifluoromethane-water	VP35828	05/20/2014	05/21/2014	MMDadoda

FROM 39.932ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP33631(8260 Chlorodifluoromethane, 160ppm) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2676	100 PPB ICC,8260+Chlorodifluoromethane-water	VP35829	05/20/2014	05/21/2014	MMDadoda

FROM 39.872ml of V1456(DI Water) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.010ml of VP34242(8260 Surrogate, 400PPM) + 0.010ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.025ml of VP33631(8260 Chlorodifluoromethane, 160ppm) + 0.025ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.025ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.025ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2677	200 PPB ICC,8260+Chlorodifluoromethane-water	VP35830	05/20/2014	05/21/2014	MMDadoda

FROM 39.752ml of V1456(DI Water) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.020ml of VP34242(8260 Surrogate, 400PPM) + 0.020ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.050ml of VP33631(8260 Chlorodifluoromethane, 160ppm) + 0.050ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.050ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.050ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2678	50 PPB ICV,8260+Chlorodifluoromethane-water	VP35831	05/20/2014	05/21/2014	MMDadoda

FROM 39.917ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35814(8260 Working STD (BCM)-Second source, 100PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP33633(8260 Chlorodifluoromethane, 160ppm-ss) + 0.013ml of VP35350(8260 Working STD (Acrolein)-Second source, 800PPM) + 0.013ml of VP35747(8260 Calibration Working STD Mix-Second source, 160PPM) + 0.013ml of VP35811(8260 Working Std(2-CVE)-SS, 800ppm) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
589	BFB TUNE CHECK	VP35867	05/21/2014	05/22/2014	MMDadoda

FROM 39.984ml of V1456(DI Water) + 0.016ml of VP35793(BFB, 25PPM) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
589	BFB TUNE CHECK	VP35868	05/21/2014	05/22/2014	MMDadoda

FROM 39.984ml of V1456(DI Water) + 0.016ml of VP35793(BFB, 25PPM) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
620	50 PPB CCC, 8260-Water	VP35878	05/21/2014	05/22/2014	MMDadoda

FROM 39.945ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
620	50 PPB CCC, 8260-Water	VP35879	05/21/2014	05/22/2014	MMDadoda

FROM 39.945ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
620	50 PPB CCC, 8260-Water	VP35880	05/21/2014	05/22/2014	MMDadoda

FROM 39.945ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
620	50 PPB CCC, 8260-Water	VP35881	05/21/2014	05/22/2014	MMDadoda

FROM 39.945ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
589	BFB TUNE CHECK	VP35899	05/22/2014	05/23/2014	MMDadoda

FROM 39.984ml of V1456(DI Water) + 0.016ml of VP35793(BFB, 25PPM) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
589	BFB TUNE CHECK	VP35900	05/22/2014	05/23/2014	MMDadoda

FROM 39.984ml of V1456(DI Water) + 0.016ml of VP35793(BFB, 25PPM) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
620	50 PPB CCC, 8260-Water	VP35903	05/22/2014	05/23/2014	MMDadoda

FROM 39.945ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
620	50 PPB CCC, 8260-Water	VP35904	05/22/2014	05/23/2014	MMDadoda

FROM 39.945ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
620	50 PPB CCC, 8260-Water	VP35905	05/22/2014	05/23/2014	MMDadoda

FROM 39.945ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
620	50 PPB CCC, 8260-Water	VP35906	05/22/2014	05/23/2014	MMDadoda

FROM 39.945ml of V1456(DI Water) + 0.005ml of VP34242(8260 Surrogate, 400PPM) + 0.005ml of VP35692(8260 Working STD (BCM)-First source, 400PPM) + 0.008ml of VP33249(8260 Internal Standard, 250PPM) + 0.013ml of VP35346(8260 Working STD (Acrolein) -first source, 800PPM) + 0.013ml of VP35746(8260 Calibration Working STD Mix-First source, 160PPM) + 0.013ml of VP35807(8260 Working Std(2-CVE)-800ppm) = Final Quantity: 40.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Res-Kem General water	DIW / DI Water	DAILY	12/31/2019	03/01/2010 / apatel	03/02/2010 / apatel	V1456

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	70046 / Bromochloromethane Std. sol/methanol 1000ppm	012612	01/26/2017	05/20/2014 / sam	06/04/2012 / sam	V3454

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A089601	07/31/2017	05/19/2014 / sam	08/17/2012 / sam	V3599

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	a090808	09/30/2015	04/11/2014 / sam	11/30/2012 / sam	V3737

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	a094269	03/31/2016	02/10/2014 / sam	03/26/2013 / sam	V4029

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A089095	06/30/2014	05/16/2014 / sam	03/28/2013 / sam	V4068

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A089095	06/30/2014	05/16/2014 / sam	03/28/2013 / sam	V4069

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A094532	04/30/2016	01/30/2014 / sam	04/05/2013 / sam	V4087

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A094296	03/31/2016	11/11/2013 / sam	04/18/2013 / sam	V4128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A090981	12/31/2015	05/16/2014 / sam	05/24/2013 / sam	V4218

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	052913	05/29/2016	05/20/2014 / sam	05/31/2013 / sam	V4263

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	052913	05/29/2016	05/20/2014 / sam	05/31/2013 / sam	V4264

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	041812	04/18/2015	05/20/2014 / sam	05/31/2013 / sam	V4270

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	52292	07/21/2023	10/23/2013 / priyanka	10/25/2012 / apatel	V4337

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge & Trap (cs/6x1L)	0000049909	10/21/2018	12/05/2013 / Kedar	10/21/2013 / apatel	V4486

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	062612	06/26/2015	05/16/2014 / sam	11/14/2013 / sam	V4543

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	062612	06/26/2015	05/16/2014 / sam	11/14/2013 / sam	V4544

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	062712	06/27/2015	05/16/2014 / sam	11/14/2013 / sam	V4557

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A096646	07/31/2018	05/14/2014 / sam	11/14/2013 / sam	V4597

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A096646	07/31/2018	05/14/2014 / sam	11/14/2013 / sam	V4598

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A096646	07/31/2018	05/14/2014 / sam	11/14/2013 / sam	V4599

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A096646	07/31/2018	02/07/2014 / sam	11/14/2013 / sam	V4600

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A096646	07/31/2018	02/07/2014 / sam	11/14/2013 / sam	V4601

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A096646	07/31/2018	12/06/2013 / sam	11/14/2013 / sam	V4610

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A098774	06/30/2020	05/16/2014 / sam	12/23/2013 / sam	V4682

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A097263	04/30/2020	05/16/2014 / sam	12/19/2013 / sam	V4690

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A097263	04/30/2020	05/16/2014 / sam	12/19/2013 / sam	V4705

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0100297	06/30/2014	05/16/2014 / sam	01/22/2014 / sam	V4748

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A010084	07/31/2014	03/15/2014 / sam	01/24/2014 / sam	V4767

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A010084	07/31/2014	05/16/2014 / sam	01/24/2014 / sam	V4768

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A010084	07/31/2014	05/16/2014 / sam	01/24/2014 / sam	V4769

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A010085	07/31/2014	04/11/2014 / sam	01/24/2014 / sam	V4776

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	012314	01/23/2017	05/16/2014 / sam	01/24/2014 / sam	V4825

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	012314	01/23/2017	05/16/2014 / sam	01/24/2014 / sam	V4826

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	012214	01/22/2017	04/11/2014 / sam	01/24/2014 / sam	V4842

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	34541 / Chlorodifluoromethane, Freon 22, 2000 PPM	072712	07/27/2017	02/24/2014 / sam	02/24/2014 / sam	V4905

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	34541 / Chlorodifluoromethane, Freon 22, 2000 PPM	073012	07/30/2017	02/24/2014 / sam	02/24/2014 / sam	V4906

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A097663	11/30/2016	05/16/2014 / sam	04/11/2014 / sam	V5012

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A097663	11/30/2016	05/16/2014 / sam	04/11/2014 / sam	V5017

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A097663	11/30/2016	05/16/2014 / sam	04/11/2014 / sam	V5020

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A097663	11/30/2016	05/16/2014 / sam	04/11/2014 / sam	V5022

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	49909	06/02/2018	04/23/2014 / sam	04/21/2014 / sam	V5053

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	49909	06/02/2018	04/30/2014 / sam	04/21/2014 / sam	V5057

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	49909	06/02/2018	05/16/2014 / sam	04/21/2014 / sam	V5065

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	49909	06/02/2018	05/19/2014 / sam	04/21/2014 / sam	V5069

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	042814	05/28/2014	04/29/2014 / sam	04/29/2014 / sam	V5070

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	042814	05/28/2014	04/29/2014 / sam	04/29/2014 / sam	V5071

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	042814	05/28/2014	04/29/2014 / sam	04/29/2014 / sam	V5072

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	042814	05/28/2014	04/29/2014 / sam	04/29/2014 / sam	V5073

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	042814	05/28/2014	04/29/2014 / sam	04/29/2014 / sam	V5074

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	042614	05/26/2014	04/29/2014 / sam	04/29/2014 / sam	V5076

Exp:- 10/21/18 V4480 to V4503

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

10/21/13

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Material No.: 9077-02
Batch No.: 0000049909
Manufactured Date: 2013/06/03
Retest Date: 2018/06/02

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	>= 99.9 %	100.0
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.1	<0.01
Water (by KF, coulometric)	<= 0.08 %	< 0.01
Photoionization Detection (PID) Below CRQL	Passes Test	PT
Electroconductivity Detection (ELCD) Below CRQL	Passes Test	PT

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600 Series for Wastewater
846 for Solid Waste

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Packaging Site: Phillipsburg Mfg Ctr & DC

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Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 17025:2005
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008, 17025:2005
Panoli, India 9001:2008

Richard M Siberski
Global Director of Quality Assurance

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor ™ Performance Materials Inc.
3477 Corporate Parkway. Suite #200. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

Rec 03/28/13
20 vials
lot #1 SY

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Testing Laboratory
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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A089095

Description : 8260B Acetates Mix

8260B Acetates Mix 2000ug/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 2014 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Methyl acetate	2,000.0 ug/mL	+/- 11.7371	ug/mL	Gravimetric
	CAS # 79-20-9		+/- 159.7459	ug/mL	Unstressed
	Purity 99%		+/- 159.8242	ug/mL	Stressed
2	Vinyl acetate	2,000.0 ug/mL	+/- 11.7371	ug/mL	Gravimetric
	CAS # 108-05-4		+/- 159.7459	ug/mL	Unstressed
	Purity ----%		+/- 159.8242	ug/mL	Stressed
3	Ethyl acetate	2,000.0 ug/mL	+/- 11.7371	ug/mL	Gravimetric
	CAS # 141-78-6		+/- 159.7459	ug/mL	Unstressed
	Purity 99%		+/- 159.8242	ug/mL	Stressed
4	Isopropyl acetate	2,000.0 ug/mL	+/- 11.7371	ug/mL	Gravimetric
	CAS # 108-21-4		+/- 159.7459	ug/mL	Unstressed
	Purity 99%		+/- 159.8242	ug/mL	Stressed
5	Propyl acetate	2,000.0 ug/mL	+/- 11.7371	ug/mL	Gravimetric
	CAS # 109-60-4		+/- 159.7459	ug/mL	Unstressed
	Purity 99%		+/- 159.8242	ug/mL	Stressed
6	Butyl acetate	2,000.0 ug/mL	+/- 11.7371	ug/mL	Gravimetric
	CAS # 123-86-4		+/- 159.7459	ug/mL	Unstressed
	Purity 99%		+/- 159.8242	ug/mL	Stressed
7	Amyl acetate	2,000.0 ug/mL	+/- 11.7371	ug/mL	Gravimetric
	CAS # 628-63-7		+/- 159.7459	ug/mL	Unstressed
	Purity 99%		+/- 159.8242	ug/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A090808

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butanol (TBA)	50,000.0 µg/mL	+/- 292.7610 µg/mL	Gravimetric
	CAS # 75-65-0		+/- 1,106.8690 µg/mL	Unstressed
	Purity 99%		+/- 1,111.3771 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

RESTEK

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A090981

Description : VOA Calibration Mix #1

Calibration Std #1 ketones 5000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	5,000.0 µg/mL	+/- 29.0704	µg/mL	Gravimetric
	CAS # 67-64-1		+/- 399.3449	µg/mL	Unstressed
	Purity 99%		+/- 399.5405	µg/mL	Stressed
2	2-Butanone (MEK)	5,000.0 µg/mL	+/- 29.0704	µg/mL	Gravimetric
	CAS # 78-93-3		+/- 399.3449	µg/mL	Unstressed
	Purity 99%		+/- 399.5405	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	5,000.0 µg/mL	+/- 29.0704	µg/mL	Gravimetric
	CAS # 108-10-1		+/- 399.3449	µg/mL	Unstressed
	Purity 99%		+/- 399.5405	µg/mL	Stressed
4	2-Hexanone	5,000.0 µg/mL	+/- 29.0704	µg/mL	Gravimetric
	CAS # 591-78-6		+/- 399.3449	µg/mL	Unstressed
	Purity ----%		+/- 399.5405	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Rec 04/21/14 18 Bottles

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

J.T.Baker

Part of AVANTOR™ PERFORMANCE MATERIALS

SEIDLER CHEMICAL COMPANY
537 Raymond Boulevard
Newark, NJ 07105

Material No.: 9077-02
Batch No.: 0000049909
Manufactured Date: 2013/06/03
Retest Date: 2018/06/02

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	>= 99.9 %	100.0
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.1	<0.01
Water (by KF, coulometric)	<= 0.08 %	< 0.01
Photoionization Detection (PID) Below CRQL	Passes Test	PT
Electroconductivity Detection (ELCD) Below CRQL	Passes Test	PT

For Laboratory, Research or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2008, 14001:2004
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 17025:2005
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008, 17025:2005
Panoli, India 9001:2008

Richard M Siberski
Global Director of Quality Assurance

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor ™ Performance Materials Inc.
3477 Corporate Parkway. Suite #200. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

EMD Chemicals Inc.
480 S. Democrat Road
Gibbstown, NJ 08027
Phone 856–423–6300
Fax 856–423–4389

Name: Methanol
OmniSolv® Purge & Trap Grade

Formula: CH_3OH

Item Number: MX0482–6, MX0482–7, MX0482–901, MX0482–NP20

Formula Wt: 32.04

Lot Number: 52292

Data Order No: 000430444

CHARACTERISTIC	REQUIREMENT		RESULTS	UNITS
	Min.	Max.		
Assay (GC)	99.9		99.99	%
Color (APHA)		10	< 10	
Form			Clear liquid	
Titrable acid		0.0003	0.00020	meq/g
Titrable base		0.0002	0.00002	meq/g
Volatile impurities (P&T) Methyl ethyl ketone		0.1	0.02	ppm
Volatile impurities (P&T) other organics		0.05	0.04	ppm

Gene A. Desotelle,
Quality Control Manager

Release Date: 10/24/2012

EMD Chemicals Inc.
(Formerly EM Science, A Division of EM Industries, Inc.)

An Affiliate of Merck KGaA, Darmstadt, Germany

Absolute Standards, Inc.
800-368-1131
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Analytical Reference Material ARM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT: Uncertainty < +,-0.5% Stated Values.

Part Number: 95317
Lot Number: 012214
Description: Universal VOA Megamix
69 components
Expiration Date: 012217
Recommended Storage: Freezer (0 °C)
Nominal Concentration(ug/mL): 2000

Solvent(s):	Lot#
Methanol	DG596Q10

Formulated By: 012214
Justin Dippold DATE

Reviewed By: 012214
Pedro L. Rentas DATE

Weight(s) & Volume(s) shown below were combined and diluted to: 100 mL

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Max. Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	12186PE	na	na	na	2000	99.8	0.20040	0.20063	2002.3	00075-05-8	40 ppm (70mg/m3/8H)	orl-rat 2730mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	na	na	na	2000	99	0.20202	0.20218	2001.6	00107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	PO 12273PO	na	na	na	2000	99	0.20202	0.20224	2002.2	00075-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	na	na	na	2000	95	0.21053	0.21071	2001.7	01476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0486)	12218HC	na	na	na	2000	98	0.20408	0.20433	2002.4	00110-57-6	N/A	N/A
6. Diethyl ether (Ethyl ether)	(0153)	02553HC	na	na	na	2000	99.9	0.20020	0.20041	2002.1	00060-29-7	400ppm (1200mg/m3/8H)	orl-rat 1215mg/kg
7. Ethyl methacrylate	(0381)	06126PX	na	na	na	2000	99	0.20202	0.20240	2003.8	00097-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	12909DQ	na	na	na	2000	99	0.20202	0.20229	2002.7	00074-88-4	5 ppm(28mg/m3/8H)(skin)	scu-rat 110mg/kg
9. Isobutanol	(0445)	15241EB	na	na	na	2000	99.5	0.20101	0.20131	2003.0	00078-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	na	na	na	2000	99	0.20202	0.20225	2002.3	00126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	05208KY	na	na	na	2000	99	0.20202	0.20231	2002.9	00096-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	03021BX	na	na	na	2000	99	0.20202	0.20237	2003.5	00080-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	na	na	na	2000	99	0.20202	0.20212	2001.0	00098-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	na	na	na	2000	95	0.21053	0.21064	2001.1	00079-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	na	na	na	2000	98	0.20408	0.20421	2001.3	00076-01-7	N/A	N/A
16. 1,1,2-Trichloro-1,2,2-trifluoroethane	(0474)	01221PY	na	na	na	2000	99	0.20202	0.20239	2003.7	00076-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	30171	122112	0.10	10.00	20016.1	2000	na	na	na	2001.6	00075-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	30171	122112	0.10	10.00	20011.7	2000	na	na	na	2001.2	00124-48-1	N/A	orl-rat 848mg/kg
19. cis-1,2-Dichloroethene	30171	122112	0.10	10.00	20018.4	2000	na	na	na	2001.8	00156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	30171	122112	0.10	10.00	20001.9	2000	na	na	na	2000.2	00156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	30171	122112	0.10	10.00	20004.5	2000	na	na	na	2000.4	00075-09-2	500 ppm	orl-rat 2136mg/kg
22. 1,1-Dichloroethene	32251	100113	0.10	10.00	20009.8	2000	na	na	na	2001.0	00075-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	012114	0.10	10.00	20004.6	2000	na	na	na	2000.5	00075-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 1147mg/kg
24. Carbon tetrachloride	95321	012114	0.10	10.00	20004.4	2000	na	na	na	2000.4	00056-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	012114	0.10	10.00	20005.9	2000	na	na	na	2000.6	00067-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	012114	0.10	10.00	20006.8	2000	na	na	na	2000.7	00074-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	012114	0.10	10.00	20004.9	2000	na	na	na	2000.5	00075-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	012114	0.10	10.00	20002.7	2000	na	na	na	2000.3	00594-20-7	N/A	N/A
29. Tetrachloroethene	95321	012114	0.10	10.00	20003.7	2000	na	na	na	2000.4	00127-18-4	25 ppm (170mg/m3/8H)(final	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	012114	0.10	10.00	20005.9	2000	na	na	na	2000.6	00071-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	30161	012114	0.10	10.00	20006.0	2000	na	na	na	2000.6	00096-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	30161	012114	0.10	10.00	20005.7	2000	na	na	na	2000.6	00106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	30161	012114	0.10	10.00	20005.5	2000	na	na	na	2000.5	00107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	30161	012114	0.10	10.00	20002.5	2000	na	na	na	2000.3	00078-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	30161	012114	0.10	10.00	20003.5	2000	na	na	na	2000.4	00142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	30161	012114	0.10	10.00	20005.0	2000	na	na	na	2000.5	00563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	30161	012114	0.10	10.00	20005.5	2000	na	na	na	2000.5	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	30161	012114	0.10	10.00	20003.0	2000	na	na	na	2000.3	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	30161	012114	0.10	10.00	20002.4	2000	na	na	na	2000.2	00087-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	30161	012114	0.10	10.00	20006.0	2000	na	na	na	2000.6	00630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	30161	012114	0.10	10.00	20005.5	2000	na	na	na	2000.5	00079-34-5	5 ppm (35mg/m3/9H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	30161	012114	0.10	10.00	20003.6	2000	na	na	na	2000.4	00079-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	30161	012114	0.10	10.00	20006.0	2000	na	na	na	2000.6	00079-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	30161	012114	0.10	10.00	20002.9	2000	na	na	na	2000.3	00096-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	30162	071613	0.10	10.00	20006.4	2000	na	na	na	2000.6	00071-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	30162	071613	0.10	10.00	20008.2	2000	na	na	na	2000.8	00108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	30162	071613	0.10	10.00	20014.4	2000	na	na	na	2001.4	00104-51-8	N/A	N/A
48. Ethyl benzene	30162	071613	0.10	10.00	20010.0	2000	na	na	na	2001.0	00100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	30162	071613	0.10	10.00	20012.0	2000	na	na	na	2001.2	00099-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	30162	071613	0.10	10.00	20018.7	2000	na	na	na	2001.9	00091-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	30162	071613	0.10	10.00	20019.9	2000	na	na	na	2002.0	00100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	30162	071613	0.10	10.00	20011.6	2000	na	na	na	2001.2	00108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	30162	071613	0.10	10.00	20020.0	2000	na	na	na	2002.0	00087-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	30162	071613	0.10	10.00	20013.4	2000	na	na	na	2001.3	00120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	30162	071613	0.10	10.00	20012.6	2000	na	na	na	2001.3	00095-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	30162	071613	0.10	10.00	20007.4	2000	na	na	na	2000.7	00108-67-8	N/A	N/A
57. m-Xylene	30162	071613	0.10	10.00	20010.8	2000	na	na	na	2001.1	00108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	30163	071913	0.10	10.00	20010.9	2000	na	na	na	2001.1	00098-06-6	N/A	N/A
59. sec-Butyl benzene	30163	071913	0.10	10.00	20014.4	2000	na	na	na	2001.4	00135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	30163	071913	0.10	10.00	20011.0	2000	na	na	na	2001.1	00108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	30163	071913	0.10	10.00	20014.5	2000	na	na	na	2001.5	00095-49-8	50 ppm (250mg/m3/8H)	unr-rat 5700mg/kg
62. 4-Chlorotoluene	30163	071913	0.10	10.00	20009.4	2000	na	na	na	2000.9	00106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	30163	071913	0.10	10.00	20006.1	2000	na	na	na	2000.6	00095-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	30163	071913	0.10	10.00	20006.6	2000	na	na	na	2000.7	00541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	30163	071913	0.10	10.00	20017.2	2000	na	na	na	2001.7	00106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	30163	071913	0.10	10.00	20011.4	2000	na	na	na	2001.1	00098-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	30163	071913	0.10	10.00	20010.0	2000	na	na	na	2001.0	00103-65-1	N/A	orl-rat 6040mg/kg
68. o-Xylene	30163	071913	0.10	10.00	20005.6	2000	na	na	na	2000.6	00095-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	30163	071913	0.10	10.00	20013.8	2000	na	na	na	2001.4	00106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

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Analytical Reference Material ARM

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CERTIFIED WEIGHT REPORT: Uncertainty < +,-0.5% Stated Values.

Part Number: 95317
Lot Number: 012314
Description: Universal VOA Megamix
69 components — **Solvent(s):** Methanol — **Lot#** DG596Q10
Expiration Date: 012317
Recommended Storage: Freezer (0 °C)
Nominal Concentration(ug/mL): 2000

Weight(s) & Volume(s) shown below were combined and diluted to: 100 mL

Formulated By: Paul Barron 012314
Paul Barron DATE

Reviewed By: Pedro Rentas 012314
Pedro L. Rentas DATE

MSDS Information (Solvent Safety Info. On Attached pg.)

	Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Max. Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1.	Acetonitrile	(0324)	12186PE	na	na	na	2000	99.8	0.20040	0.20060	2002.0	00075-05-8	40 ppm (70mg/m3/8H)	orl-rat 2730mg/kg
2.	Allyl chloride (3-Chloropropene)	(0325)	102396	na	na	na	2000	99	0.20202	0.20240	2003.8	00107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3.	Carbon disulphide	(0060)	PO 12273PO	na	na	na	2000	99	0.20202	0.20230	2002.8	00075-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4.	cis-1,4-Dichloro-2-butene	(1196)	14718EF	na	na	na	2000	95	0.21053	0.21090	2003.6	01476-11-5	N/A	N/A
5.	trans-1,4-Dichloro-2-butene	(0486)	12218HC	na	na	na	2000	98	0.20408	0.20425	2001.7	00110-57-6	N/A	N/A
6.	Diethyl ether (Ethyl ether)	(0153)	02553HC	na	na	na	2000	99.9	0.20020	0.20040	2002.0	00060-29-7	400ppm (1200mg/m3/8H)	orl-rat 1215mg/kg
7.	Ethyl methacrylate	(0381)	06126PX	na	na	na	2000	99	0.20202	0.20225	2002.3	00097-63-2	N/A	orl-rat 14800mg/kg
8.	Iodomethane	(0489)	12909DQ	na	na	na	2000	99	0.20202	0.20225	2002.3	00074-88-4	5 ppm(28mg/m3/8H)(skin)	scu-rat 110mg/kg
9.	Isobutanol	(0445)	15241EB	na	na	na	2000	99.5	0.20101	0.20140	2003.9	00078-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10.	Methacrylonitrile	(0442)	00427ET	na	na	na	2000	99	0.20202	0.20220	2001.8	00126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11.	Methyl acrylate	(1075)	05208KY	na	na	na	2000	99	0.20202	0.20230	2002.8	00096-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12.	Methyl methacrylate	(0404)	03021BX	na	na	na	2000	99	0.20202	0.20249	2004.7	00080-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13.	Nitrobenzene	(0228)	01213TV	na	na	na	2000	99	0.20202	0.20213	2001.1	00098-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14.	2-Nitropropane	(0461)	14002JX	na	na	na	2000	95	0.21053	0.21060	2000.7	00079-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15.	Pentachloroethane	(0450)	HGA01	na	na	na	2000	98	0.20408	0.20422	2001.4	00076-01-7	N/A	N/A
16.	1,1,2-Trichloro-1,2,2-trifluoroethane	(0474)	01221PY	na	na	na	2000	99	0.20202	0.20230	2002.8	00076-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17.	Bromodichloromethane	30171	122112	0.10	10.00	20016.1	2000	na	na	na	2001.6	00075-27-4	N/A	orl-rat 916mg/kg
18.	Dibromochloromethane	30171	122112	0.10	10.00	20011.7	2000	na	na	na	2001.2	00124-48-1	N/A	orl-rat 848mg/kg
19.	cis-1,2-Dichloroethene	30171	122112	0.10	10.00	20018.4	2000	na	na	na	2001.8	00156-59-2	N/A	N/A
20.	trans-1,2-Dichloroethene	30171	122112	0.10	10.00	20001.9	2000	na	na	na	2000.2	00156-60-5	N/A	orl-rat 1235mg/kg
21.	Methylene chloride	30171	122112	0.10	10.00	20004.5	2000	na	na	na	2000.4	00075-09-2	500 ppm	orl-rat 2136mg/kg
22.	1,1-Dichloroethene	32251	100113	0.10	10.00	20009.8	2000	na	na	na	2001.0	00075-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23.	Bromoform	95321	012114	0.10	10.00	20004.6	2000	na	na	na	2000.5	00075-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 1147mg/kg
24.	Carbon tetrachloride	95321	012114	0.10	10.00	20004.4	2000	na	na	na	2000.4	00056-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25.	Chloroform	95321	012114	0.10	10.00	20005.9	2000	na	na	na	2000.6	00067-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26.	Dibromomethane	95321	012114	0.10	10.00	20006.8	2000	na	na	na	2000.7	00074-95-3	N/A	orl-rat 108mg/kg
27.	1,1-Dichloroethane	95321	012114	0.10	10.00	20004.9	2000	na	na	na	2000.5	00075-34-3	100 ppm	orl-rat 725mg/kg
28.	2,2-Dichloropropane	95321	012114	0.10	10.00	20002.7	2000	na	na	na	2000.3	00594-20-7	N/A	N/A
29.	Tetrachloroethene	95321	012114	0.10	10.00	20003.7	2000	na	na	na	2000.4	00127-18-4	25 ppm (170mg/m3/8H)(final	orl-rat 2629mg/kg
30.	1,1,1-Trichloroethane	95321	012114	0.10	10.00	20005.9	2000	na	na	na	2000.6	00071-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31.	1,2-Dibromo-3-chloropropane	30161	012114	0.10	10.00	20006.0	2000	na	na	na	2000.6	00096-12-8	0.001 ppm	orl-rat 170mg/kg
32.	1,2-Dibromoethane	30161	012114	0.10	10.00	20005.7	2000	na	na	na	2000.6	00106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33.	1,2-Dichloroethane	30161	012114	0.10	10.00	20005.5	2000	na	na	na	2000.5	00107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34.	1,2-Dichloropropane	30161	012114	0.10	10.00	20002.5	2000	na	na	na	2000.3	00078-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35.	1,3-Dichloropropane	30161	012114	0.10	10.00	20003.5	2000	na	na	na	2000.4	00142-28-9	N/A	unr-mus 3600mg/kg
36.	1,1-Dichloropropene	30161	012114	0.10	10.00	20005.0	2000	na	na	na	2000.5	00563-58-6	N/A	N/A
37.	cis-1,3-Dichloropropene	30161	012114	0.10	10.00	20005.5	2000	na	na	na	2000.5	10061-01-5	N/A	N/A
38.	trans-1,3-Dichloropropene	30161	012114	0.10	10.00	20003.0	2000	na	na	na	2000.3	10061-02-6	N/A	N/A
39.	Hexachloro-1,3-butadiene	30161	012114	0.10	10.00	20002.4	2000	na	na	na	2000.2	00087-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40.	1,1,1,2-Tetrachloroethane	30161	012114	0.10	10.00	20006.0	2000	na	na	na	2000.6	00630-20-6	N/A	orl-rat 670mg/kg
41.	1,1,2,2-Tetrachloroethane	30161	012114	0.10	10.00	20005.5	2000	na	na	na	2000.5	00079-34-5	5 ppm (35mg/m3/9H)(skin)	orl-rat 800mg/kg
42.	1,1,2-Trichloroethane	30161	012114	0.10	10.00	20003.6	2000	na	na	na	2000.4	00079-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43.	Trichloroethene	30161	012114	0.10	10.00	20006.0	2000	na	na	na	2000.6	00079-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44.	1,2,3-Trichloropropane	30161	012114	0.10	10.00	20002.9	2000	na	na	na	2000.3	00096-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45.	Benzene	30162	071613	0.10	10.00	20006.4	2000	na	na	na	2000.6	00071-43-2	1 ppm	orl-rat 4894mg/kg
46.	Bromobenzene	30162	071613	0.10	10.00	20008.2	2000	na	na	na	2000.8	00108-86-1	N/A	orl-rat 2699mg/kg
47.	n-Butyl benzene	30162	071613	0.10	10.00	20014.4	2000	na	na	na	2001.4	00104-51-8	N/A	N/A
48.	Ethyl benzene	30162	071613	0.10	10.00	20010.0	2000	na	na	na	2001.0	00100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49.	p-Isopropyl toluene	30162	071613	0.10	10.00	20012.0	2000	na	na	na	2001.2	00099-87-6	N/A	orl-rat 4750mg/kg
50.	Naphthalene	30162	071613	0.10	10.00	20018.7	2000	na	na	na	2001.9	00091-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51.	Styrene	30162	071613	0.10	10.00	20019.9	2000	na	na	na	2002.0	00100-42-5	100 ppm	orl-rat 5000mg/kg
52.	Toluene	30162	071613	0.10	10.00	20011.6	2000	na	na	na	2001.2	00108-88-3	200 ppm	orl-rat 5000mg/kg
53.	1,2,3-Trichlorobenzene	30162	071613	0.10	10.00	20020.0	2000	na	na	na	2002.0	00087-61-6	N/A	ipr-mus 1390mg/kg
54.	1,2,4-Trichlorobenzene	30162	071613	0.10	10.00	20013.4	2000	na	na	na	2001.3	00120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55.	1,2,4-Trimethylbenzene	30162	071613	0.10	10.00	20012.6	2000	na	na	na	2001.3	00095-63-6	N/A	orl-rat 5g/kg
56.	1,3,5-Trimethylbenzene	30162	071613	0.10	10.00	20007.4	2000	na	na	na	2000.7	00108-67-8	N/A	N/A
57.	m-Xylene	30162	071613	0.10	10.00	20010.8	2000	na	na	na	2001.1	00108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58.	tert-Butyl benzene	30163	071913	0.10	10.00	20010.9	2000	na	na	na	2001.1	00098-06-6	N/A	N/A
59.	sec-Butyl benzene	30163	071913	0.10	10.00	20014.4	2000	na	na	na	2001.4	00135-98-8	N/A	orl-rat 2240mg/kg
60.	Chlorobenzene	30163	071913	0.10	10.00	20011.0	2000	na	na	na	2001.1	00108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61.	2-Chlorotoluene	30163	071913	0.10	10.00	20014.5	2000	na	na	na	2001.5	00095-49-8	50 ppm (250mg/m3/8H)	unr-rat 5700mg/kg
62.	4-Chlorotoluene	30163	071913	0.10	10.00	20009.4	2000	na	na	na	2000.9	00106-43-4	N/A	orl-rat 2100mg/kg
63.	1,2-Dichlorobenzene	30163	071913	0.10	10.00	20006.1	2000	na	na	na	2000.6	00095-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64.	1,3-Dichlorobenzene	30163	071913	0.10	10.00	20006.6	2000	na	na	na	2000.7	00541-73-1	N/A	ipr-mus 1062mg/kg
65.	1,4-Dichlorobenzene	30163	071913	0.10	10.00	20017.2	2000	na	na	na	2001.7	00106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66.	Isopropylbenzene	30163	071913	0.10	10.00	20011.4	2000	na	na	na	2001.1	00098-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67.	n-Propylbenzene	30163	071913	0.10	10.00	20010.0	2000	na	na	na	2001.0	00103-65-1	N/A	orl-rat 6040mg/kg
68.	o-Xylene	30163	071913	0.10	10.00	20005.6	2000	na	na	na	2000.6	00095-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69.	p-Xylene	30163	071913	0.10	10.00	20013.8	2000	na	na	na	2001.4	00106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

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CERTIFIED WEIGHT REPORT

		Lot #	Solvent(s):
Part Number:	34541	51182	Methanol
Lot Number:	072712		
Description:	Chlorodifluoromethane		
Expiration Date:	072717		
Storage:	4 °C		
Nominal Concentration (μg/mL):	2000		

Rec 02/24/14

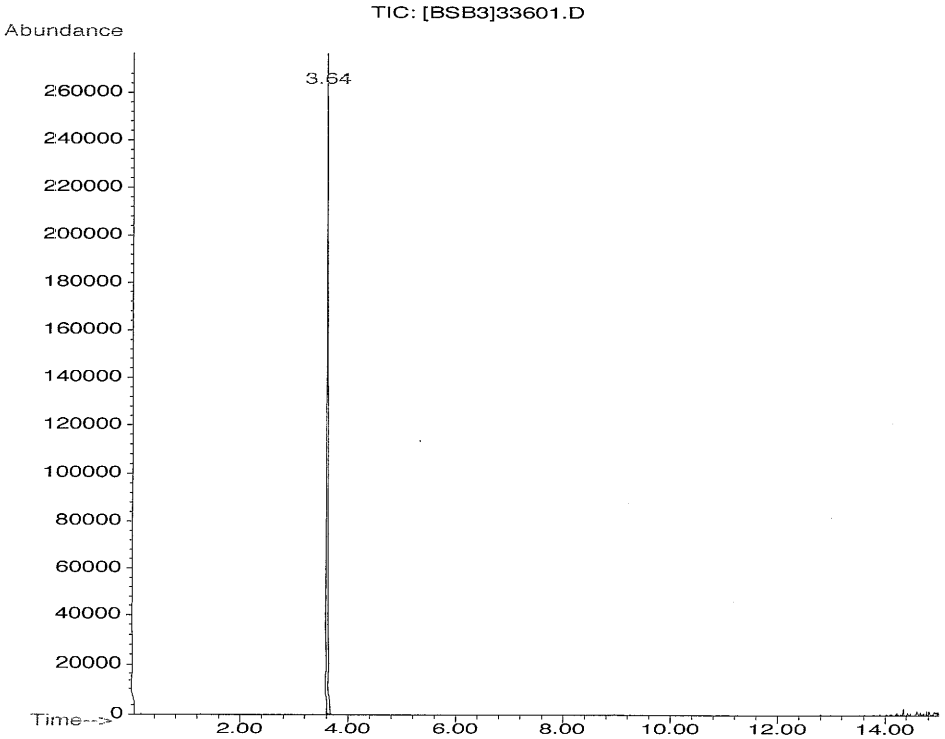
Gabriel Helland		072712
Formulated By:	Gabriel Helland	DATE
Pedro Rentas		072712
Reviewed By:	Pedro L. Rentas	DATE

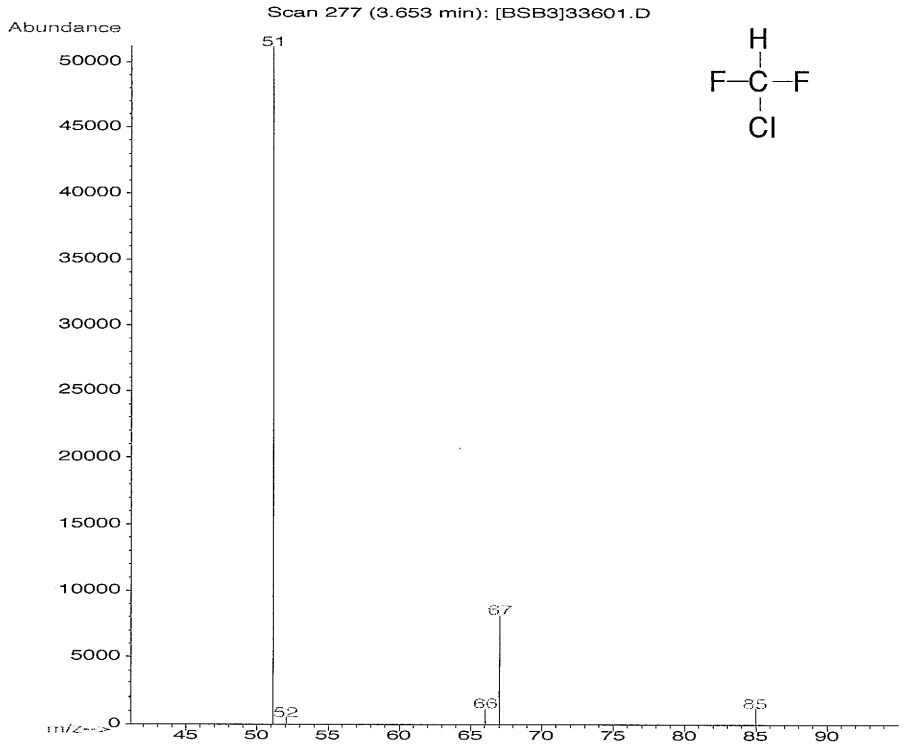
5E-05 Balance Uncertainty

Volume(s) shown below were combined and diluted to (mL): 10.0 0.003 Flask Uncertainty

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette	Initial Conc.(ug/mL)	Final Conc.(ug/mL)	Expanded Uncertainty (+/-)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Chlorodifluoromethane	33601	041508	0.10	1.00	0.002	20041.8	2004.9	0.00423	00075-45-6	1000 ppm(3500mg/m3/8H)	N/A

Method: GC6GAS. **Detector:** MSD (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5μm film thickness). **Oven Profile:** Temp. 1=35°C (9 min.), Temp. 2=200°C (1 min.), Rate=33°C/min., Injector Temp.=200°C, Detector Temp.=200°C. **Analyst:** Candice Warren





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CERTIFIED WEIGHT REPORT

		Lot #	Solvent(s):
Part Number:	**34541**	51182	Methanol
Lot Number:	073012		
Description:	Chlorodifluoromethane		
Expiration Date:	073017		
Storage:	4 °C		
Nominal Concentration (μg/mL):	2000		

Re 02/24/14

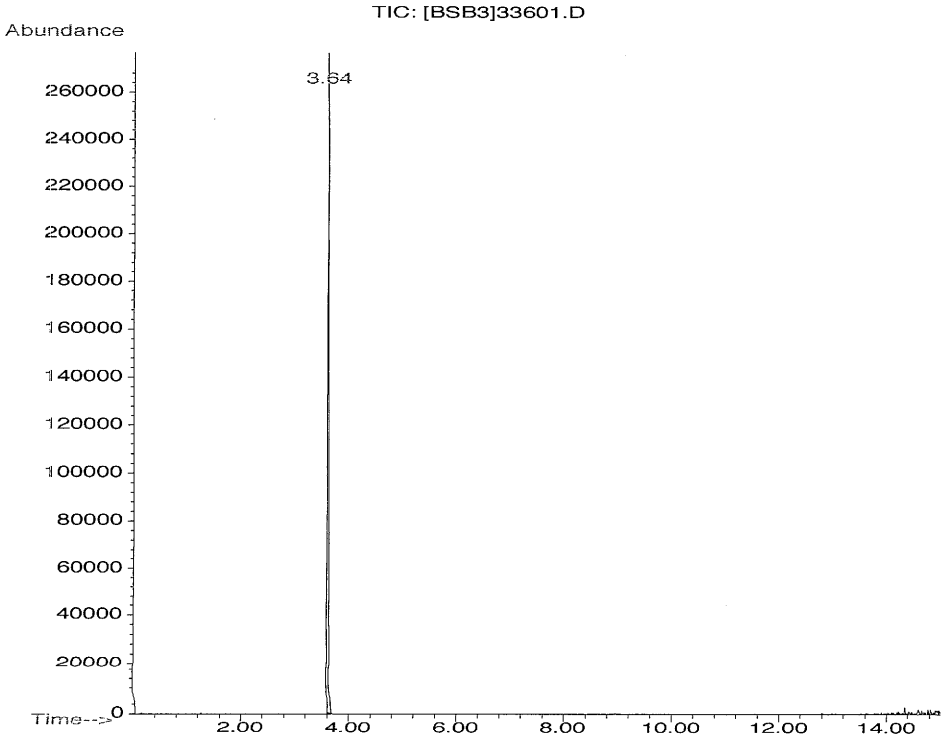
Gabriel Helland		073012
Formulated By:	Gabriel Helland	DATE
Pedro Rentas		073012
Reviewed By:	Pedro L. Rentas	DATE

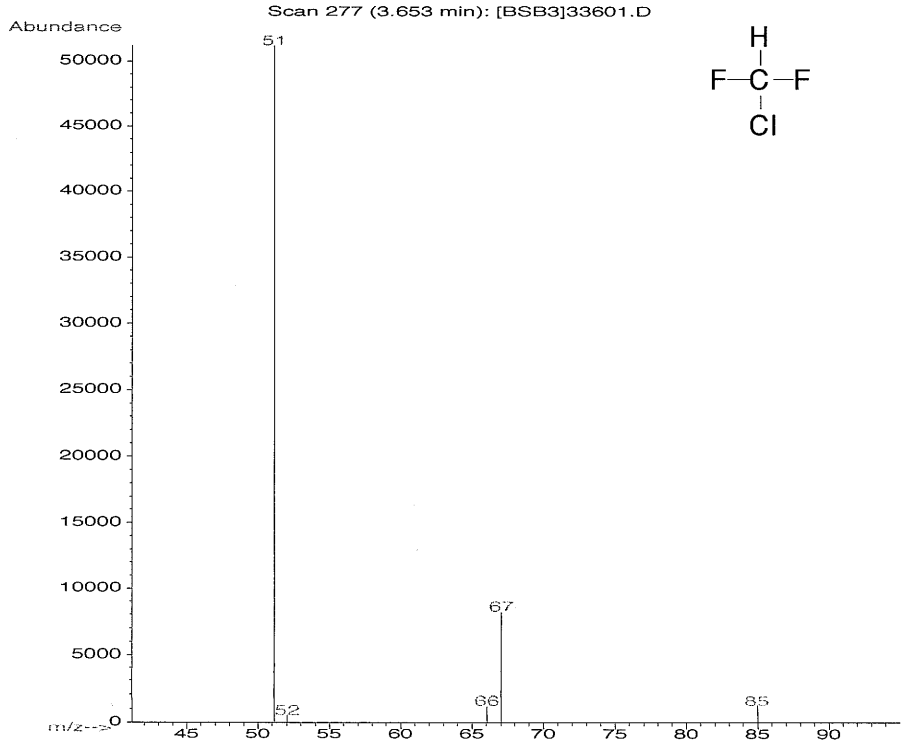
5E-05 Balance Uncertainty

Volume(s) shown below were combined and diluted to (mL): 10.0 0.003 Flask Uncertainty

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette	Initial Conc.(ug/mL)	Final Conc.(ug/mL)	Expanded Uncertainty (+/-)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Chlorodifluoromethane	33601	092311	0.10	1.00	0.002	20052.4	2006.0	0.00404	00075-45-6	1000 ppm(3500mg/m3/8H)	N/A

Method: GC6GAS. **Detector:** MSD (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5μm film thickness). **Oven Profile:** Temp. 1=35°C (9 min.), Temp. 2=200°C (1 min.), Rate=33°C/min., Injector Temp.=200°C, Detector Temp.=200°C. **Analyst:** Candice Warren





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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0100297

Description : 8260B Acetates Mix

8260B Acetates Mix 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2014 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Methyl acetate **CAS #** 79-20-9 **Purity** 99%	(Lot 56696JMV)	2,005.0 µg/mL	+/- 11.7665 µg/mL +/- 106.7137 µg/mL +/- 106.8313 µg/mL		Gravimetric Unstressed Stressed
2	Vinyl acetate **CAS #** 108-05-4 **Purity** 99%	(Lot 131011JLM)	1,994.0 µg/mL	+/- 11.8438 µg/mL +/- 106.1439 µg/mL +/- 106.2609 µg/mL		Gravimetric Unstressed Stressed
3	Ethyl acetate **CAS #** 141-78-6 **Purity** 99%	(Lot SHBD3394V)	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 106.7669 µg/mL +/- 106.8846 µg/mL		Gravimetric Unstressed Stressed
4	Isopropyl acetate **CAS #** 108-21-4 **Purity** 99%	(Lot BCBH2979V)	2,004.0 µg/mL	+/- 11.7606 µg/mL +/- 106.6604 µg/mL +/- 106.7780 µg/mL		Gravimetric Unstressed Stressed
5	Propyl acetate **CAS #** 109-60-4 **Purity** 99%	(Lot FGL01)	2,005.0 µg/mL	+/- 11.7665 µg/mL +/- 106.7137 µg/mL +/- 106.8313 µg/mL		Gravimetric Unstressed Stressed
6	Butyl acetate **CAS #** 123-86-4 **Purity** 99%	(Lot SHBC9340V)	2,007.0 µg/mL	+/- 11.7782 µg/mL +/- 106.8201 µg/mL +/- 106.9379 µg/mL		Gravimetric Unstressed Stressed
7	Amyl acetate **CAS #** 628-63-7 **Purity** 99%	(Lot 41325/1)	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 106.7669 µg/mL +/- 106.8846 µg/mL		Gravimetric Unstressed Stressed

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Gravimetric Certificate

Rec 01/24/14 SG
16 vials.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408 **Lot No.:** A0100844

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	8,024.0 µg/mL	+/- 47.0893	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 131011JLM)		+/- 427.0676	µg/mL	Unstressed
	Purity 99%		+/- 427.5384	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Kendra Swope - Mix Technician **Date Mixed:** 23-Jan-2014 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

RESTEK® CERTIFIED REFERENCE MATERIAL

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ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Gravimetric Certificate

3 vials Rec
1/24/14 SZ

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408 **Lot No.:** A0100845

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	8,080.0 µg/mL	+/- 47.4180	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 131011JLM)		+/- 430.0481	µg/mL	Unstressed
	Purity 99%		+/- 430.5222	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Mary Ellen Wood
Mary Ellen Wood - Mix Technician

Date Mixed: 23-Jan-2014 **Balance:** 1125113331

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

RESTEK CERTIFIED REFERENCE MATERIAL

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20 vials.

ACCREDITED ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A096646

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Bromochloromethane	2,002.0 µg/mL	+/- 11.8913	µg/mL	Gravimetric
	CAS # 74-97-5 (Lot Q18A-135)		+/- 21.2512	µg/mL	Unstressed
	Purity 99%		+/- 24.7122	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

RESTEK

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 30091 **Lot No.:** A092683

Description: L/C VOA Internal Standard Mix

L/C Internal Std 2500µg/mL, P&T Methanol, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: December 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Difluorobenzene	2,500.0 µg/mL	+/- 14.6714	µg/mL	Gravimetric
	CAS # 540-36-3		+/- 30.2004	µg/mL	Unstressed
	Purity 99%		+/- 34.0606	µg/mL	Stressed
2	Chlorobenzene-d5	2,500.0 µg/mL	+/- 14.6714	µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 30.2004	µg/mL	Unstressed
	Purity 99%		+/- 34.0606	µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,500.0 µg/mL	+/- 14.6714	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 30.2004	µg/mL	Unstressed
	Purity 99%		+/- 34.0606	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

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Analytical Reference Material ARM

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ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 042614
Description: Acrolein

Expiration Date: 052614
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000

Solvent(s): Lot # 010714Q Water

2 vials

Formulated By: Justin Dippold 042614 DATE

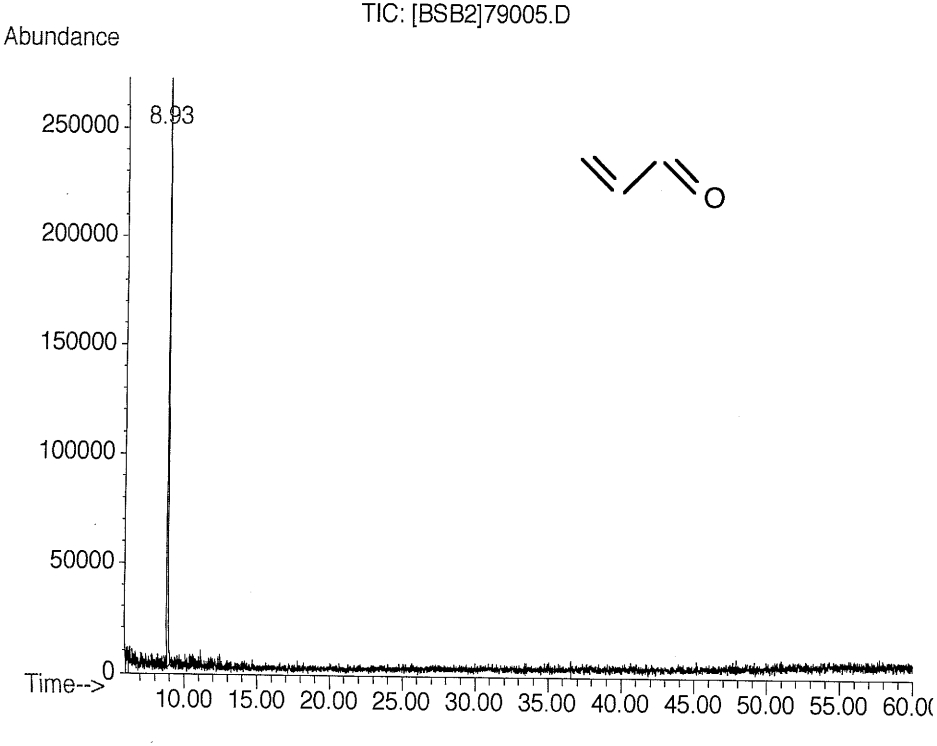
Reviewed By: Pedro L. Rentas 042614 DATE

Weight(s) shown below were combined and diluted to: 10.0 5E-05 Balance Uncertainty 0.007 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	MSDS Information (Solvent Safety Info. On Attached pg.) OSHA PEL (TWA)	LD50
1. Acrolein	5	04715LL	5000	97	0.2	0.05157	0.05162	5005.2	0.0048	00107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D



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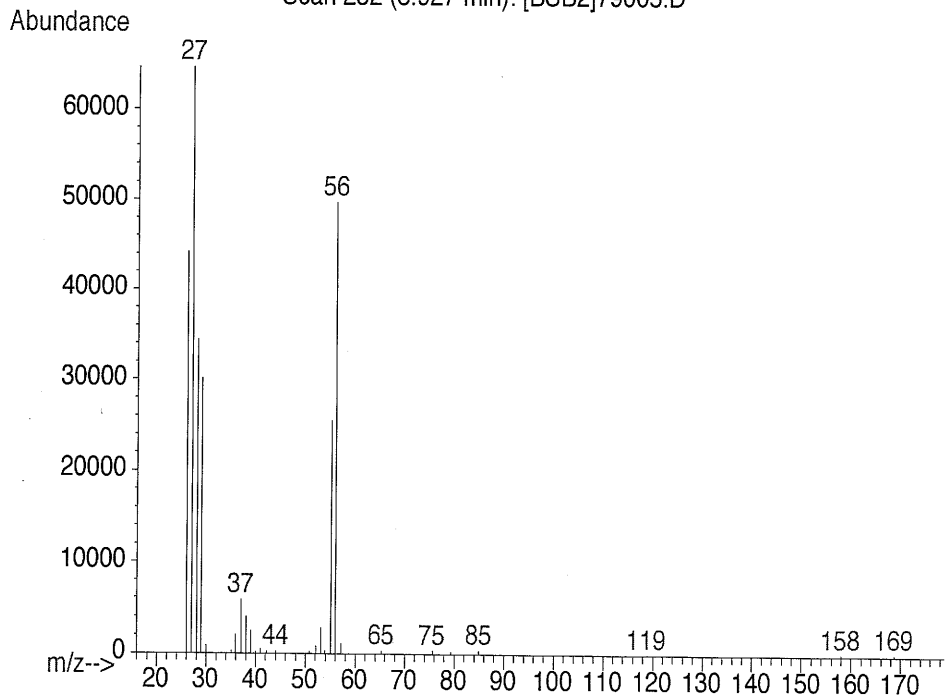

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CERTIFIED WEIGHT REPORT

Part Number:	91980	**Solvent(s):**	Lot # 010714Q	Water
Lot Number:	042814			
Description:	Acrolein			
Expiration Date:	052814			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	5000			

6 vials

Formulated By: Paul Barron — DATE 042814

Reviewed By: Pedro L. Rentas — DATE 042814

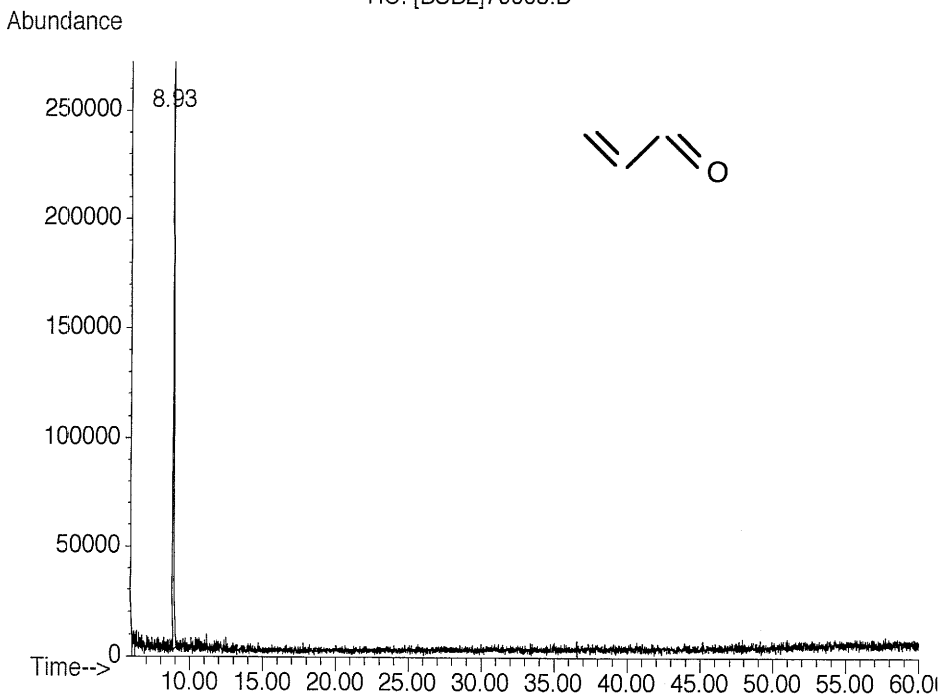
Weight(s) shown below were combined and diluted to: 25.0 — 5E-05 Balance Uncertainty; 0.006 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	07813BN	5000	97	0.2	0.12887	0.12910	5008.8	0.0042	00107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile**: Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D



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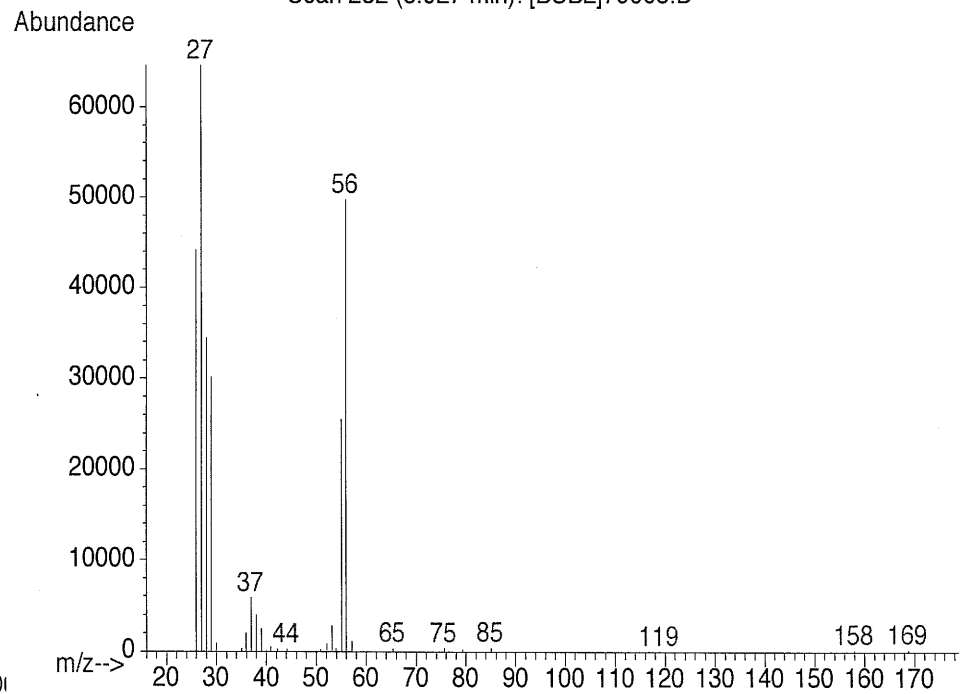

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CERTIFIED WEIGHT REPORT

Part Number:	**95318**	**Solvent(s):**	Lot # DH247	Methanol
Lot Number:	052913			
Description:	2-Chloroethyl vinyl ether			
Expiration Date:	052916			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (μg/mL):	10000			

Rec 05/30/13 SG

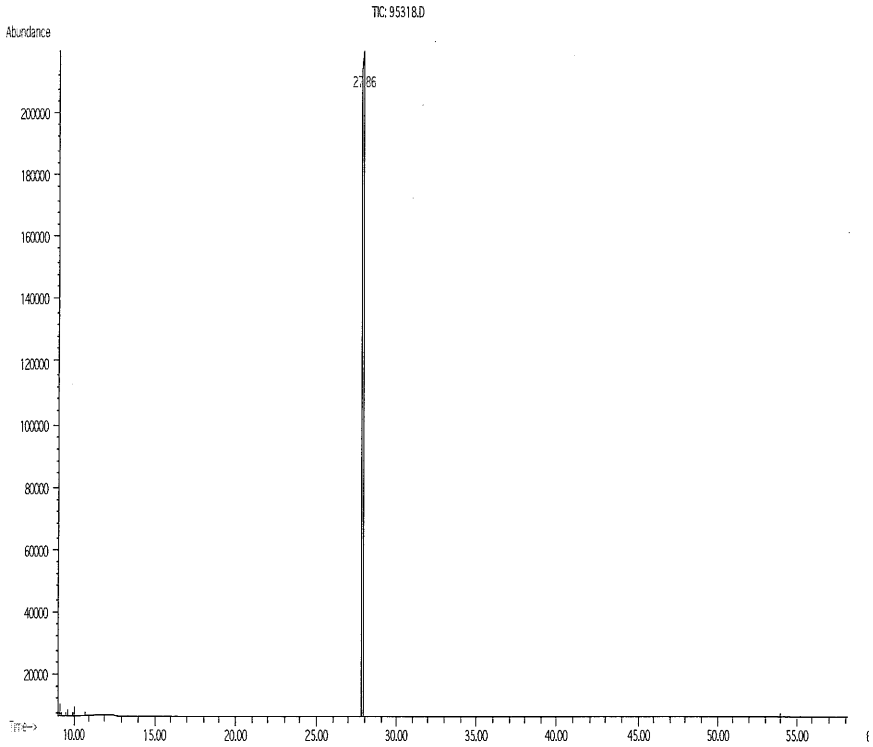
Weight(s) shown below were combined and diluted to: 100.0 0.001 Flask Uncertainty; 5E-05 Balance Uncertainty

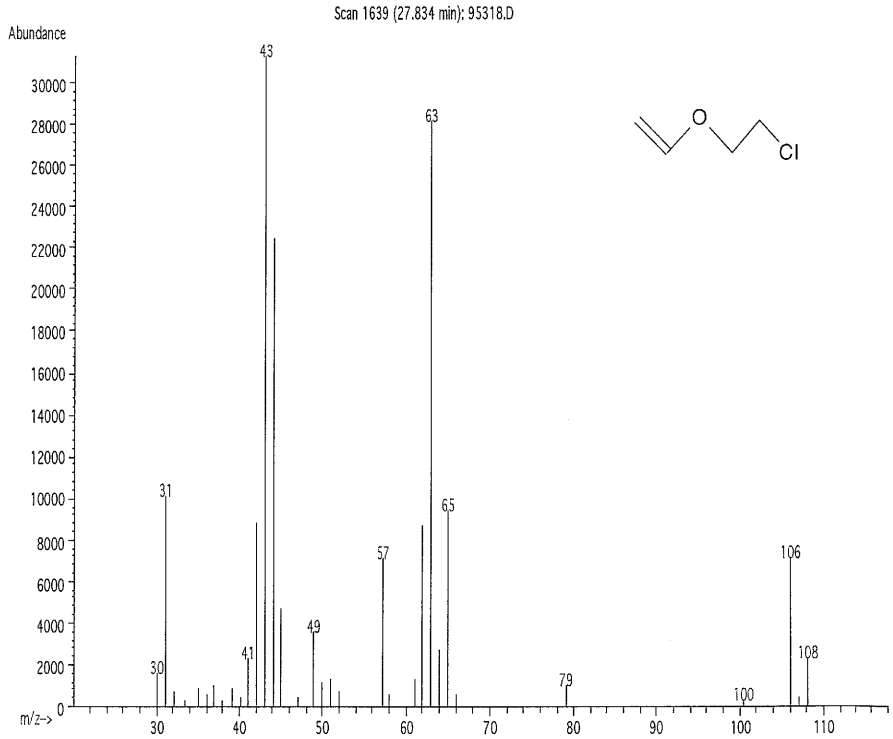
Paul Barron	052913
Formulated By: Paul Barron	DATE
Pedro Rentas	052913
Reviewed By: Pedro L. Rentas	DATE

MSDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (μg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(μg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	03206CI	10000	99	0.2	1.01020	1.01060	10003.9	0.00404	00110-75-8	N/A	orl-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 μm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min. Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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CERTIFIED WEIGHT REPORT

Part Number: 95319
Lot Number: 062612
Description: Revised Additions Mix
11 components
Expiration Date: 062615

Solvent(s): Lot # 51182 Methanol

Storage: 4 °C

Nominal Concentration (µg/mL): Varied

Weight(s) shown below were combined and diluted to (mL): 100.0

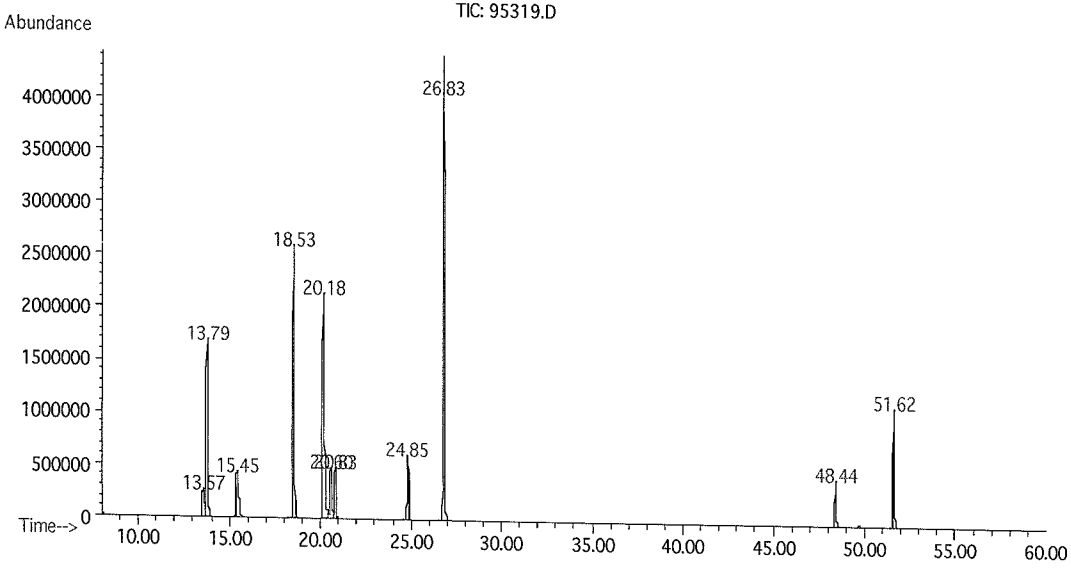
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Ree
O
First lot
10 vers.

Gabriel Helland 062612
Formulated By: Gabriel Helland DATE

Pedro Rentas 062612
Reviewed By: Pedro L. Rentas DATE

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty : Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acrylonitrile	7	03010CC	10000	99	0.2	1.01020	1.01098	10007.7	0.0040	00107-13-1	N/A	orl-rat 78 mg/kg
2.	1-Chlorobutane	1072	15538EZ	2000	99.5	0.2	0.20103	0.20123	2002.0	0.0041	00109-69-3	N/A	orl-rat 2670mg/kg
3.	Cyclohexane	1023	13096TK	2000	99.5	0.2	0.20103	0.20113	2001.0	0.0041	00110-82-7	300 ppm (1050mg/m3/8H)	orl-rat 12705mg/kg
4.	Di-isopropyl ether	987	03858KY	2000	99	0.2	0.20204	0.20255	2005.0	0.0041	00108-20-3	500 ppm (2100mg/m3/8H)	orl-rat 8470mg/kg
5.	1,4-Dioxane	373	03853KE	40000	99	0.2	4.04082	4.04205	40012.2	0.0040	00123-91-1	25 ppm (90mg/m3/8H)(skin)	orl-mus 5700mg/kg
6.	Hexachloroethane	199	02624BW	2000	99	0.2	0.20204	0.20223	2001.9	0.0041	00067-72-1	1 ppm (10mg/m3/8H)(skin)	orl-rat 4460mg/kg
7.	Methylcyclohexane	1627	08046KN	2000	99	0.2	0.20204	0.20234	2003.0	0.0041	00108-87-2	N/A	N/A
8.	Methyl tert-butyl ether (MTBE)	209	AU 01134TR	2000	99.8	0.2	0.20042	0.20075	2003.3	0.0040	01634-04-4	N/A	orl-rat 4g/kg
9.	Propionitrile	349	1395468	20000	99	0.2	2.02041	2.02240	20019.7	0.0040	00107-12-0	N/A	orl-rat 39mg/kg
10.	Tetrahydrofuran	380	03944KA	10000	99.9	0.2	1.00110	1.00530	10041.9	0.0040	00109-99-9	20 ppm (590mg/m3/8H)	orl-rat 2500mg/kg
11.	1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21508	0.21535	2002.6	0.0043	00488-23-3	N/A	orl-rat 6408mg/kg



Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Solvent Delay: 8 minutes. Analysis performed by Candice Warren

Name	MSD RT (min.)
Methyl tert-butyl ether (MTBE)	13.56
Acrylonitrile	13.79
Di-isopropyl ether	15.44
Propionitrile	18.53
Tetrahydrofuran	20.17
Cyclohexane	20.58
1-Chlorobutane	20.83
Methylcyclohexane	24.84
1,4-Dioxane	26.84
Hexachloroethane	48.44
1,2,3,4-Tetramethylbenzene	51.62

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CERTIFIED WEIGHT REPORT

Part Number: 95319
Lot Number: 062712
Description: Revised Additions Mix
11 components
Expiration Date: 062715
Storage: 4 °C
Nominal Concentration (µg/mL): Varied

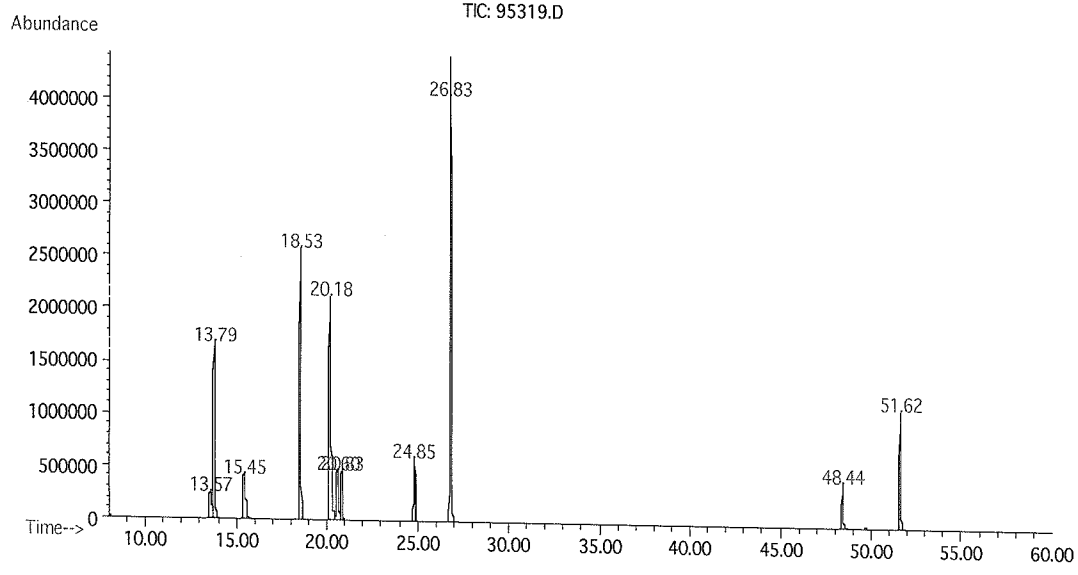
Solvent(s): Lot # 51182 Methanol

Rec 6 vials
Second lot

Weight(s) shown below were combined and diluted to (mL): 100.0
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By: Justin Dippold	062712	DATE
Reviewed By: Pedro L. Rentas	062712	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrylonitrile	7	03010CC	10000	99	0.2	1.01020	1.01067	10004.6	0.0040	00107-13-1	N/A	orl-rat 78 mg/kg
2. 1-Chlorobutane	1072	15538EZ	2000	99.5	0.2	0.20103	0.20144	2004.1	0.0041	00109-69-3	N/A	orl-rat 2670mg/kg
3. Cyclohexane	1023	13096TK	2000	99.5	0.2	0.20103	0.20135	2003.2	0.0041	00110-82-7	300 ppm (1050mg/m3/8H)	orl-rat 12705mg/kg
4. Di-isopropyl ether	987	03858KY	2000	99	0.2	0.20204	0.20241	2003.7	0.0041	00108-20-3	500 ppm (2100mg/m3/8H)	orl-rat 8470mg/kg
5. 1,4-Dioxane	373	03853KE	40000	99	0.2	4.04082	4.04176	40009.3	0.0040	00123-91-1	25 ppm (90mg/m3/8H)(skin)	orl-mus 5700mg/kg
6. Hexachloroethane	199	02624BW	2000	99	0.2	0.20204	0.20256	2005.1	0.0041	00067-72-1	1 ppm (10mg/m3/8H)(skin)	orl-rat 4460mg/kg
7. Methylcyclohexane	1627	08046KN	2000	99	0.2	0.20204	0.20242	2003.8	0.0041	00108-87-2	N/A	N/A
8. Methyl tert-butyl ether (MTBE)	209	AU 01134TR	2000	99.8	0.2	0.20042	0.20088	2004.6	0.0040	01634-04-4	N/A	orl-rat 4g/kg
9. Propionitrile	349	1395468	20000	99	0.2	2.02041	2.02147	20010.5	0.0040	00107-12-0	N/A	orl-rat 39mg/kg
10. Tetrahydrofuran	380	03944KA	10000	99.9	0.2	1.00110	1.00350	10023.9	0.0040	00109-99-9	20 ppm (590mg/m3/8H)	orl-rat 2500mg/kg
11. 1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21508	0.21604	2009.0	0.0043	00488-23-3	N/A	orl-rat 6408mg/kg



Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Solvent Delay: 8 minutes. Analysis performed by Candice Warren

Name	MSD RT (min.)
Methyl tert-butyl ether (MTBE)	13.56
Acrylonitrile	13.79
Di-isopropyl ether	15.44
Propionitrile	18.53
Tetrahydrofuran	20.17
Cyclohexane	20.58
1-Chlorobutane	20.83
Methylcyclohexane	24.84
1,4-Dioxane	26.84
Hexachloroethane	48.44
1,2,3,4-Tetramethylbenzene	51.62

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A094269

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 **Purity** 99%	25,000.0 µg/mL	+/- 231.3547 +/- 351.0075 +/- 384.7239	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 **Purity** 99%	25,000.0 µg/mL	+/- 231.3547 +/- 351.0075 +/- 384.7239	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Dibromofluoromethane **CAS #** 1868-53-7 **Purity** 99%	25,000.0 µg/mL	+/- 231.3547 +/- 351.0075 +/- 384.7239	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	25,000.0 µg/mL	+/- 231.3547 +/- 351.0075 +/- 384.7239	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Date Mixed: 22-Mar-2013 **Balance:** 1128342313

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A094296

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	tert-Butanol (TBA)	50,020.0 µg/mL	+/-	292.8781	µg/mL	Gravimetric
	CAS # 75-65-0		+/-	1,107.3118	µg/mL	Unstressed
	Purity 99%		+/-	1,111.8216	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

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Rec 10 vials
04/05/13 Cy

Gravimetric Certificate

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555581 **Lot No.:** A094532

Description : Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 **Purity** 99%	25,004.0 µg/mL	+/- 231.3917 µg/mL +/- 351.0636 µg/mL +/- 384.7855 µg/mL		Gravimetric Unstressed Stressed
2	1,4-Difluorobenzene **CAS #** 540-36-3 **Purity** 99%	25,000.0 µg/mL	+/- 231.3547 µg/mL +/- 351.0075 µg/mL +/- 384.7239 µg/mL		Gravimetric Unstressed Stressed
3	Chlorobenzene-d5 **CAS #** 3114-55-4 **Purity** 99%	25,000.0 µg/mL	+/- 231.3547 µg/mL +/- 351.0075 µg/mL +/- 384.7239 µg/mL		Gravimetric Unstressed Stressed
4	Pentafluorobenzene **CAS #** 363-72-4 **Purity** 99%	25,000.0 µg/mL	+/- 231.3547 µg/mL +/- 351.0075 µg/mL +/- 384.7239 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Michael Maye

Date Mixed: 03-Apr-2013 **Balance:** 1125113331

Manufactured under Restek's ISO 9001:2008
Registered Quality System
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A097263

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot Q167-08) Purity 99%	2,000.0 µg/mL	+/- 17.4371 µg/mL +/- 21.2823 µg/mL +/- 24.7325 µg/mL		Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBB3606V) Purity 99%	2,000.7 µg/mL	+/- 12.9740 µg/mL +/- 21.2471 µg/mL +/- 24.7043 µg/mL		Gravimetric Unstressed Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot E2890) Purity 99%	1,999.9 µg/mL	+/- 17.1009 µg/mL +/- 21.2779 µg/mL +/- 24.7284 µg/mL		Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	1,999.0 µg/mL	+/- 13.9324 µg/mL +/- 21.2386 µg/mL +/- 24.6917 µg/mL		Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot SHBB8515V) Purity 99%	1,999.9 µg/mL	+/- 14.6498 µg/mL +/- 21.2551 µg/mL +/- 24.7088 µg/mL		Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 (Lot SHBB0593V) Purity 99%	2,002.5 µg/mL	+/- 18.7834 µg/mL +/- 21.3214 µg/mL +/- 24.7742 µg/mL		Gravimetric Unstressed Stressed

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A097663

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		5,036.1 µg/mL	+/- 29.2803	µg/mL	Gravimetric
	CAS # 67-64-1	(Lot SHBC6350V)		+/- 401.1978	µg/mL	Unstressed
	Purity 99%			+/- 401.3953	µg/mL	Stressed
2	2-Butanone (MEK)		5,014.5 µg/mL	+/- 29.1547	µg/mL	Gravimetric
	CAS # 78-93-3	(Lot BCBG5320V)		+/- 399.4770	µg/mL	Unstressed
	Purity 99%			+/- 399.6737	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		5,021.8 µg/mL	+/- 29.1972	µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBD0462V)		+/- 400.0586	µg/mL	Unstressed
	Purity 99%			+/- 400.2555	µg/mL	Stressed
4	2-Hexanone		5,014.8 µg/mL	+/- 29.1565	µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKBF3977V)		+/- 399.5009	µg/mL	Unstressed
	Purity 99%			+/- 399.6976	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A098774

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12)	2,000.6 µg/mL	+/- 14.2704	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot Q167-08)		+/- 21.2588	µg/mL	Unstressed
	Purity 99%		+/- 24.7142	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,000.3 µg/mL	+/- 12.8955	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBB3606V)		+/- 21.2430	µg/mL	Unstressed
	Purity 99%		+/- 24.6998	µg/mL	Stressed
3	Vinyl chloride	2,000.1 µg/mL	+/- 13.2500	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot E2890)		+/- 21.2434	µg/mL	Unstressed
	Purity 99%		+/- 24.6992	µg/mL	Stressed
4	Bromomethane (methyl bromide)	2,000.1 µg/mL	+/- 12.9780	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 21.2417	µg/mL	Unstressed
	Purity 99%		+/- 24.6980	µg/mL	Stressed
5	Chloroethane (ethyl chloride)	2,000.7 µg/mL	+/- 12.8116	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot SHBB8515V)		+/- 21.2456	µg/mL	Unstressed
	Purity 99%		+/- 24.7030	µg/mL	Stressed
6	Trichlorofluoromethane (CFC-11)	2,000.3 µg/mL	+/- 18.1304	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot SHBB0593V)		+/- 21.2921	µg/mL	Unstressed
	Purity 99%		+/- 24.7419	µg/mL	Stressed

5 vials.
Dee
08/17/12
SY

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.Restek.com

Certificate of Analysis

ACCREDITED Reference Material Producer Certificate #3222.01

ACCREDITED Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A089601

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene 2500ug/mL, P & T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,500.0 ug/mL	+/- 14.6714	ug/mL	Gravimetric
	CAS # 460-00-4		+/- 30.2004	ug/mL	Unstressed
	Purity 99%		+/- 34.0606	ug/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

Rec 06/04/12 SY

CERTIFIED WEIGHT REPORT

Part Number: 70046
Lot Number: 012612
Description: Bromochloromethane

Expiration Date: 012617

Storage: 4 °C

Nominal Concentration (µg/mL): 1000

Solvent(s): Lot # 51145 Methanol

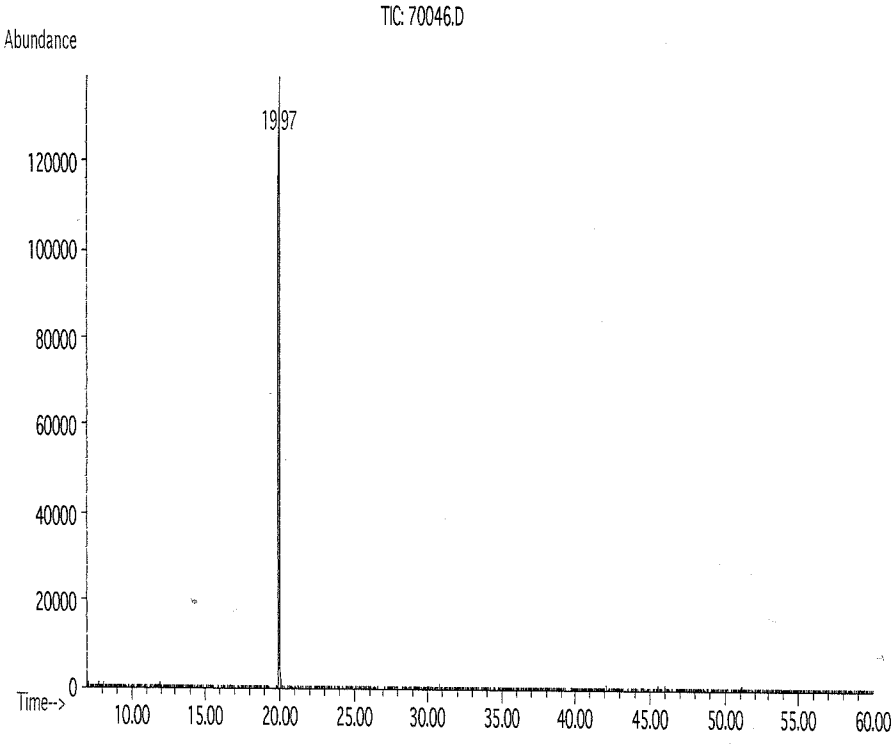
Formulated By: Vincent K. Criscio, Jr. 012612 DATE

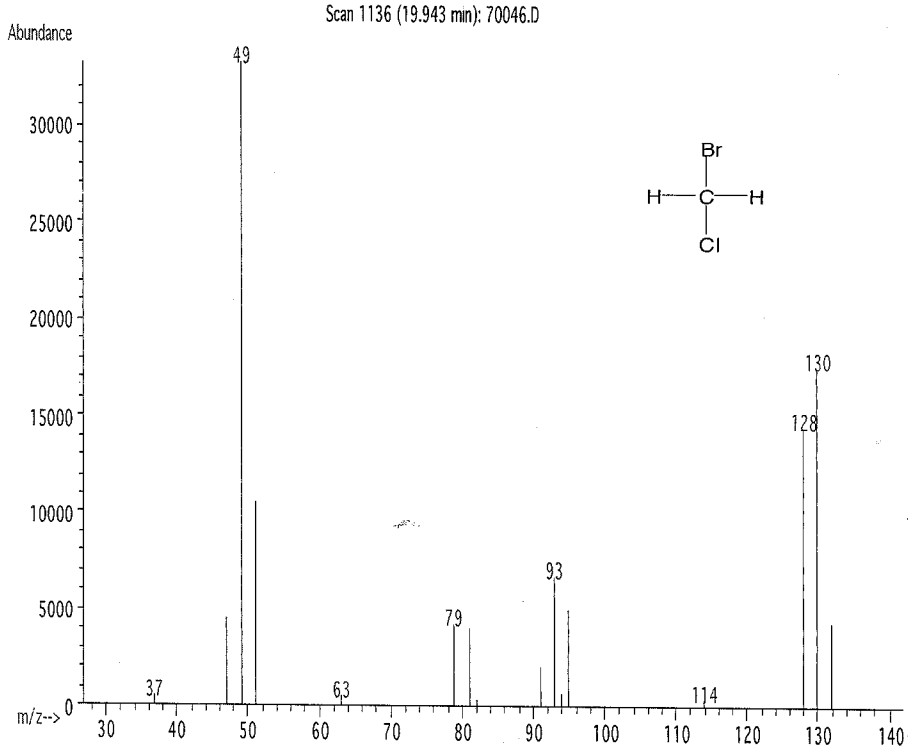
Reviewed By: Pedro L. Rentas 012612 DATE

Weight(s) shown below were combined and diluted to: 25.0 5E-05 Balance Uncertainty 0.011 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Bromochloromethane	46	AY01	1000	99	0.2	0.02525	0.02529	1001.5	0.0057	00074-97-5	200 ppm (1050mg/m3/8H)	orl-rat 5000mg/kg

Method GC6MSD-1.M: Column : (60m X 0.25mm X 1.5 µm) Temp 1 = 35°C (10min.), Temp 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector B= 200°C, Detector B = 220°C.
Analyst: Candice Warren





SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. F2352
QUOTE NO.
COC Number 028384

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY: GZA
ADDRESS: 55 Lane Rd, Suite 407
CITY: Fairfield STATE: NJ ZIP: 07004
ATTENTION: Brett Engard
PHONE: 973-774-3300 FAX: " " 3350

CLIENT PROJECT INFORMATION

PROJECT NAME: Silverstar
PROJECT NO.: 76185 LOCATION: LIC
PROJECT MANAGER: B. Engard
e-mail: brett.engard@gza.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: GZA PO#:
ADDRESS: SAME
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *
PREAPPROVED TAT: ☐ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ LEVEL 1: Results only ☐ Others_____
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format: _____

ANALYSIS: VOC 8260

PRESERVATIVES

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1 (A)	2 (~~A~~)	3 (~~A~~)	4	5	6	7	8	9	COMMENTS
1.	~~GZ~~ MW4 5/15/14	H_2O			5/15	1100	3	X									~~A~~ ~~VOC~~
2.	MW5 5/15/14	H_2O			5/15	1250	3	X									~~A~~ VOC
3.	MW6 5/15/14	H_2O			5/15	1215	3	X									~~VOC~~
4.	Trip Blank	H_2O			5/15	—	2	X									
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME: 1600 5/16/14	RECEIVED BY: 1.
RELINQUISHED BY: 2.	DATE/TIME:	RECEIVED BY: 2.
RELINQUISHED BY: 3.	DATE/TIME: 1720 5-16-14	RECEIVED FOR LAB BY: 3.

Conditions of bottles or coolers at receipt: ☒ Compliant ☐ Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments:

Cooler Temp. 5°
Ice in Cooler?: yes

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☒ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☒ YES ☐ NO

Revision 8/2007

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street Mountainside NJ 07092 Tel. 908-7898900

Laboratory Certification

State	License No.
New Jersey	20012
New York	11376
Connecticut	PH-0649
Florida	E87935
Louisiana	5035
Maryland	296
Massachusetts	M-NJ503
Pennsylvania	68-548
Rhode Island	LAO00259
Virginia	460220
Texas	T10470448-10-1

Other :

DOD ELAP Certified (L-A-B Accredited), ISO/IEC 17025	L2219
Soil Permit	P330-11-00012
CLP Inorganic Contract	EPW09038
CLP Organic Contract	EPW11030

QA Control Code: A2070148

LOGIN REPORT/SAMPLE TRANSFER

Order ID:	F2352 GZAG02	**Order Date:**	5/16/2014	**Project Mgr:**	Wolski
Client Name:	GZA Geoenvironmental	**Project Name:**	37-14 36th Street	**Report Type:**	NYS ASP B
Client Contact:	Brett Engard	**Rec DateTime**	5/16/2014 5:20:00 PM	**EDD:**	Excel NY 375
Invoice Name:	GZA Geoenvironmental	**Purchase Order:**	76185	**Hard Copy Date:**	
Invoice Contact	Accounts Payable	**Login Tech:**	chris	**Date Signoff:**	5/16/2014 5:56:04 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	QTY	TEST	TEST GROUP	METHOD	COMMENT	FAX DATE	Due Dates
F2352-01	MW4-5-15-14	Water	5/15/2014	11:00	3						
							VOCMS Group1	8260-Low	10 Bus.	5/29/2014	5/29/20
F2352-02	MW5-5-15-14	Water	5/15/2014	12:50	3						
							VOCMS Group1	8260-Low	10 Bus.	5/29/2014	5/29/20
F2352-03	MW6-5-15-14	Water	5/15/2014	12:15	3						
							VOCMS Group1	8260-Low	10 Bus.	5/29/2014	5/29/20
F2352-04	TRIPBLANK	Water	5/15/2014		2						
							VOCMS Group1	8260-Low	10 Bus.	5/29/2014	5/29/20

SAMPLE CONDITION RECORD

Are samples submitted with a chain of custody?	Yes
Are the number of samples the same as stated on the chain of custody?	Yes
Are bottle caps tight and securely in place?	Yes
Were all containers intact when received?	Yes
Were samples submitted in an ice chest?	Yes
Were samples received cold?	Yes
Were samples within the holding time for the requested test(s)?	Yes
Is the volume of sample submitted sufficient for the requested test(s)?	Yes
Are all samples for volatile organic analyses free of headspace?	Yes

ORDER COMMENT

--NYS----

Relinquished By: CW

Date / Time: 5-16-14 18:00

Received By: PP

Date / Time: 05/16/14

Storage Area: VOA Refridgerator Room