

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062419\
 Data File : VL033945.D
 Acq On : 24 Jun 2019 20:36
 Operator : SY/AP
 Sample : K3481-01DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 TZC-SSDS-AREA-A-1DL

Manual Integrations
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 7/1/2019 5:01:30 PM

Quant Time: Jun 25 09:38:57 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 0
 QLast Update : Fri Jun 07 08:53:27 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.75	49	1064753	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.27	114	2773929	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.21	117	2859702	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.55	95	2306116	9.82	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	3.00	51	20769m	0.166	ppbv	
9) Propene	3.03	41	17423	0.371	ppbv	98
10) Heptane	8.22	43	303265	2.558	ppbv	85
11) Trichlorofluoromethane	3.99	101	38867	0.174	ppbv	94
13) Ethanol	3.64	45	128957	8.451	ppbv	96
15) Acetone	3.88	43	11270514	72.577	ppbv #	84
17) tert-Butyl alcohol	4.35	59	1847320	15.218	ppbv	99
19) Isopropyl Alcohol	4.02	45	91130	1.027	ppbv #	94
20) Methylene Chloride	4.40	84	13184	0.218	ppbv #	79
26) Hexane	5.76	57	58765	0.546	ppbv #	40
27) Carbon Disulfide	4.60	76	29494	0.197	ppbv #	62
34) 2-Butanone	5.31	43	919595	5.876	ppbv	98
36) Benzene	6.98	78	534711	2.523	ppbv	96
50) 4-Methyl-2-Pentanone	8.85	43	139419	0.597	ppbv	99
51) 2-Hexanone	10.26	43	22631m	0.124	ppbv	
52) Tetrachloroethene	11.35	164	9478m	0.127	ppbv	
53) Toluene	9.92	91	2529469	10.787	ppbv	99
58) Ethyl Benzene	12.83	91	898159	2.786	ppbv	99
59) m/p-Xylene	13.09	91	3036866	10.358	ppbv	97
60) o-Xylene	13.82	91	1829025	6.042	ppbv	99
61) Styrene	13.66	104	6706144	34.232	ppbv	96
62) Isopropylbenzene	14.80	105	332723	0.815	ppbv	99
64) n-propylbenzene	15.69	120	61281	0.587	ppbv	92

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

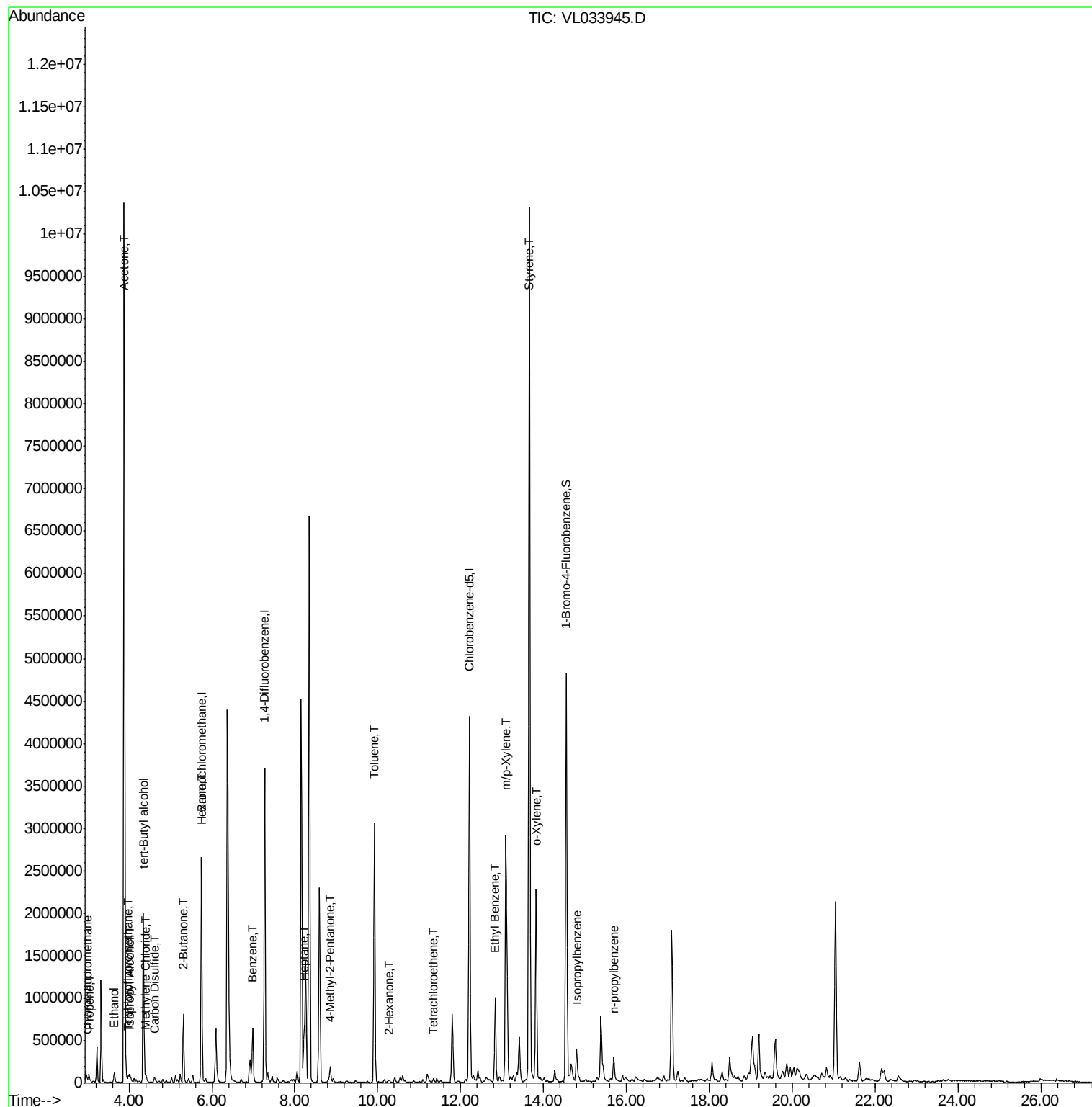
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL062419\
Data File : VL033945.D
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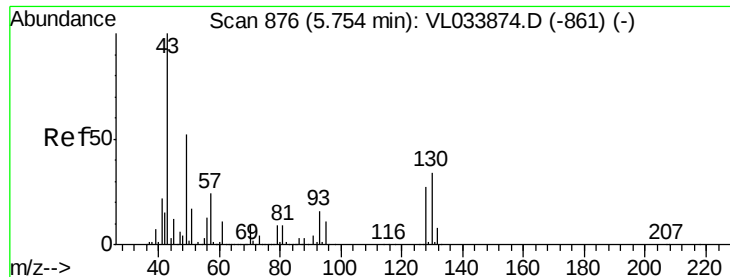
Instrument :
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ClientSampleId :
TZC-SSDS-AREA-A-1DL

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Quant Time: Jun 25 09:38:57 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun
QLast Update : Fri Jun 07 08:53:27 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 874

Delta R.T. -0.01 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-A-1DL

Tot Ion: 49 Resp: 1064753

Ion Ratio Lower Upper

49 100

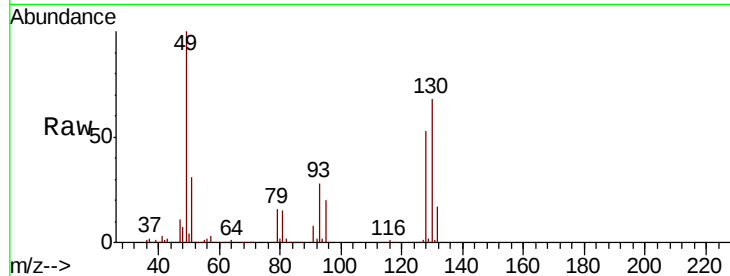
128 52.9 25.5 76.5

130 68.0 32.5 97.4

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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

800000

600000

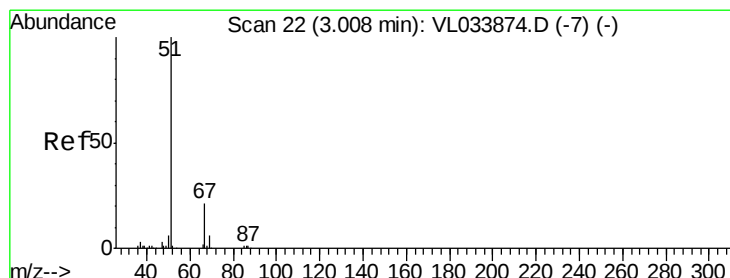
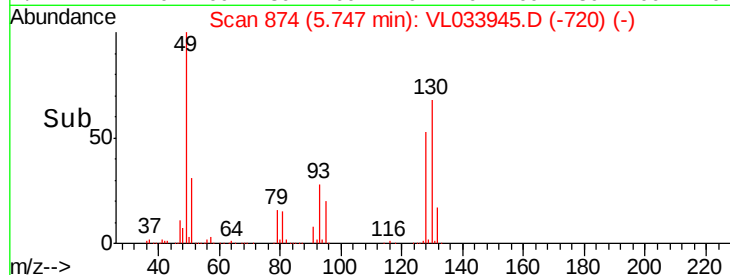
400000

200000

0

5.65 5.70 5.75 5.80

Time-->



#3

Chlorodifluoromethane

Concen: 0.166 ppbv m

RT: 3.00 min Scan# 21

Delta R.T. -0.00 min

Lab File: VL033945.D

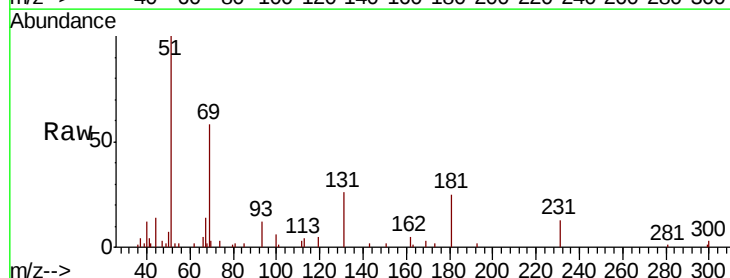
Acq: 24 Jun 2019 20:36

Tgt Ion: 51 Resp: 20769

Ion Ratio Lower Upper

51 100

67 0.0 16.4 24.6#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

15000

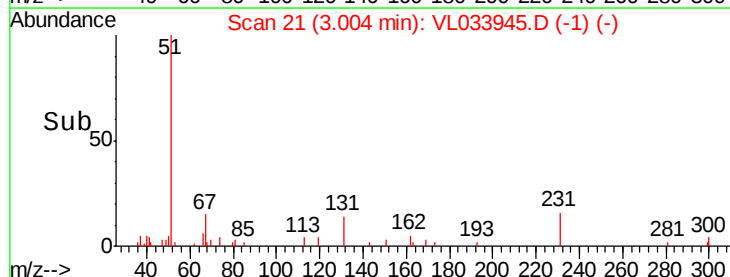
10000

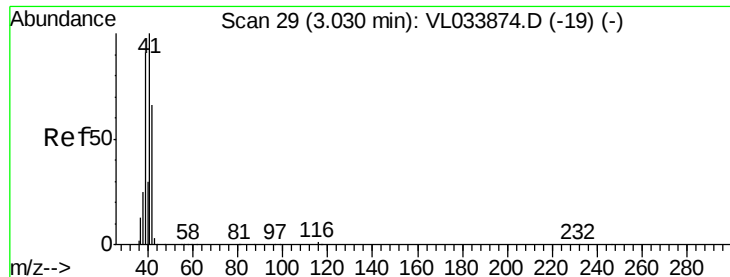
5000

0

2.96 2.98 3.00 3.02 3.04

Time-->





#9

Propene

Concen: 0.371 ppbv

RT: 3.03 min Scan# 28

Delta R.T. -0.00 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-A-1DL

Tot Ion: 41 Resp: 17423

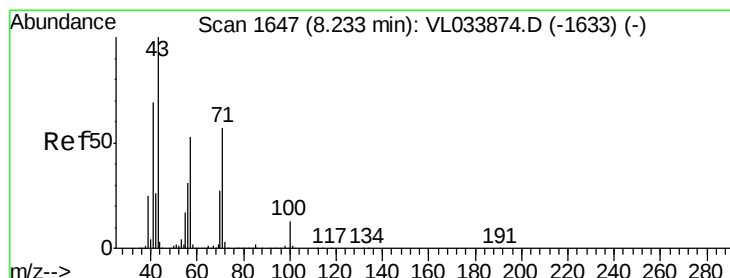
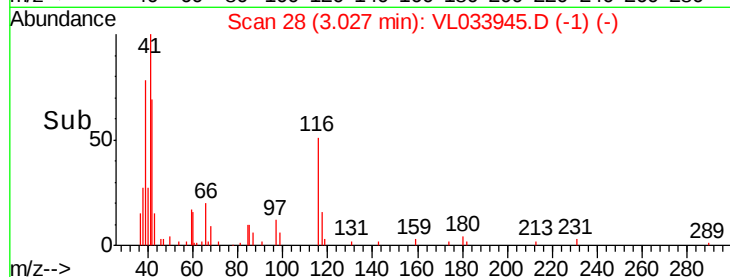
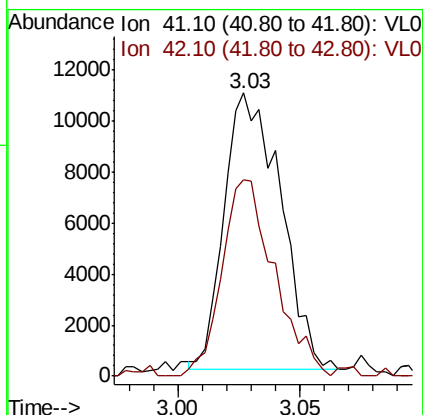
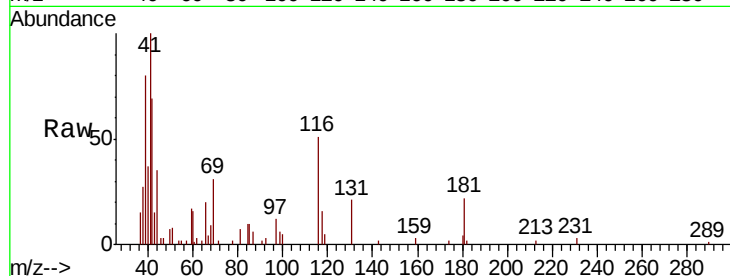
Ion Ratio Lower Upper

41 100

42 68.5 56.3 84.5

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#10

Heptane

Concen: 2.558 ppbv

RT: 8.22 min Scan# 1644

Delta R.T. -0.01 min

Lab File: VL033945.D

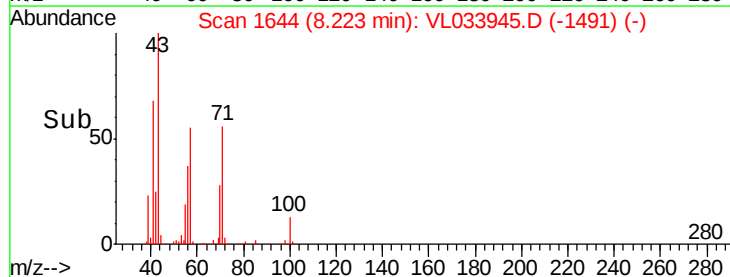
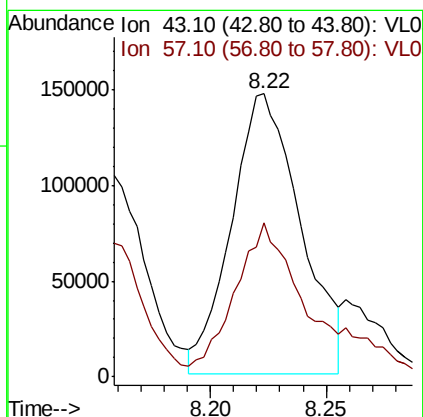
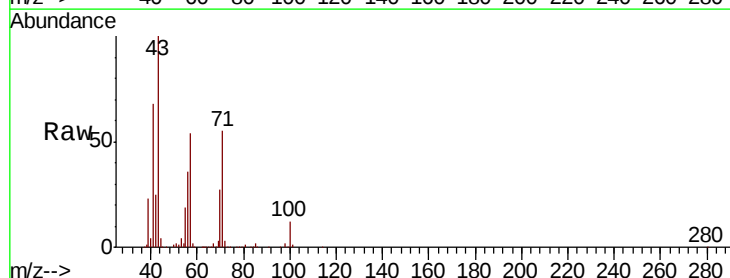
Acq: 24 Jun 2019 20:36

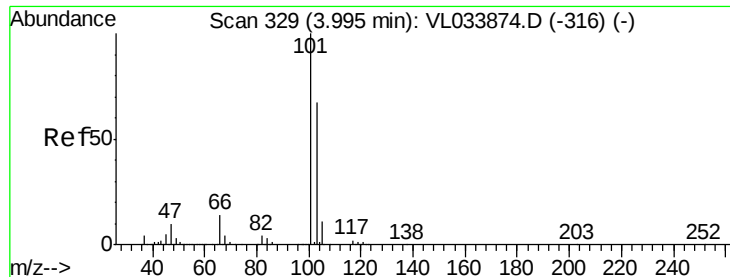
Tgt Ion: 43 Resp: 303265

Ion Ratio Lower Upper

43 100

57 62.4 41.7 62.5





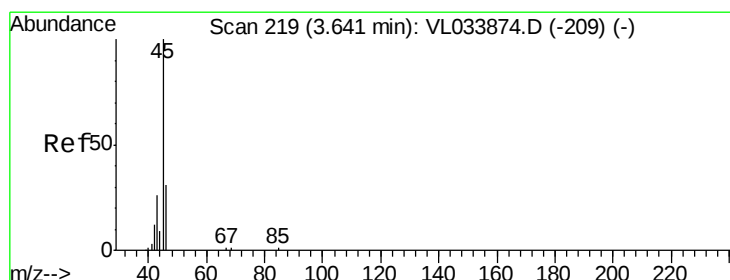
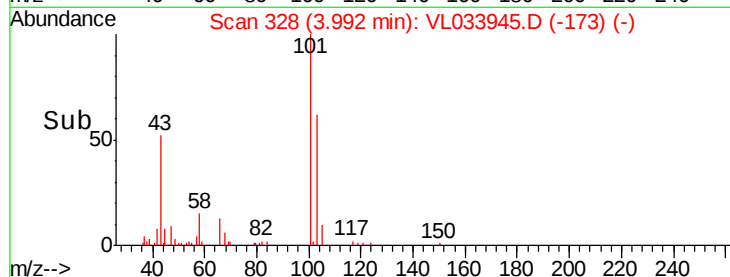
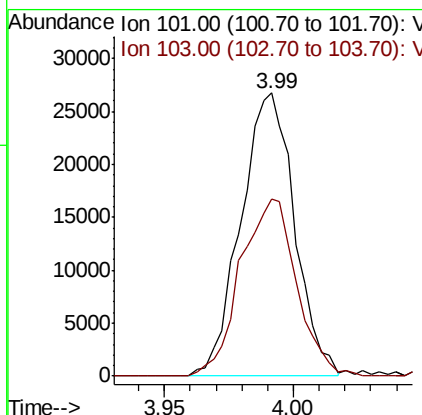
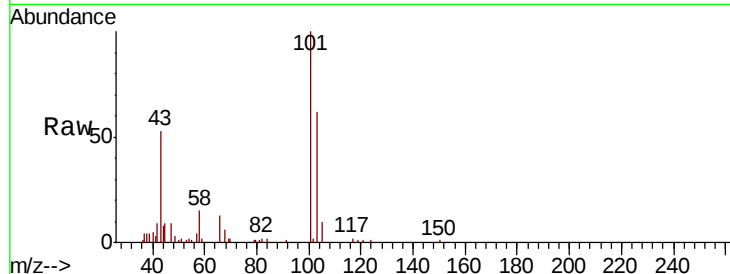
#11
Trichlorofluoromethane
Concen: 0.174 ppbv
RT: 3.99 min Scan# 328
Delta R.T. -0.00 min
Lab File: VL033945.D
Acq: 24 Jun 2019 20:36

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-A-1DL

Tot Ion:101 Resp: 38867
Ion Ratio Lower Upper
101 100
103 62.4 53.6 80.4

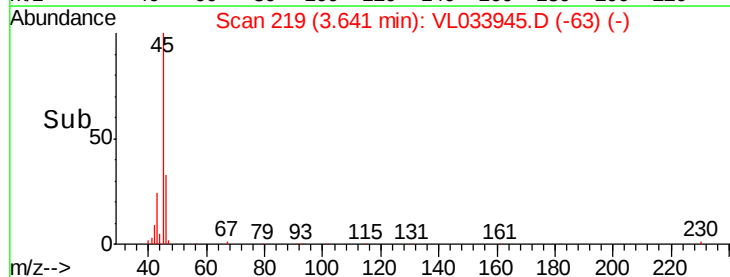
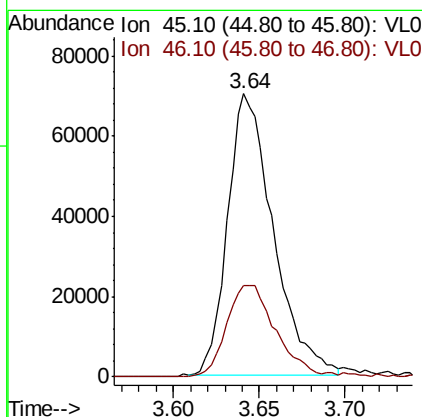
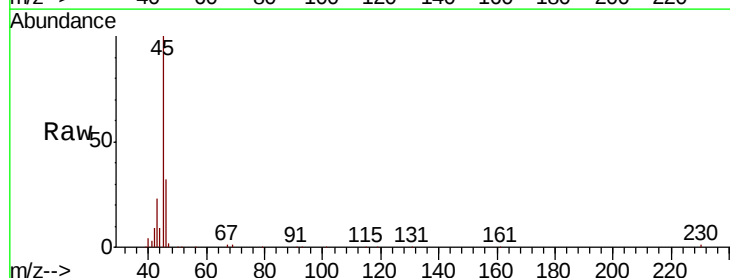
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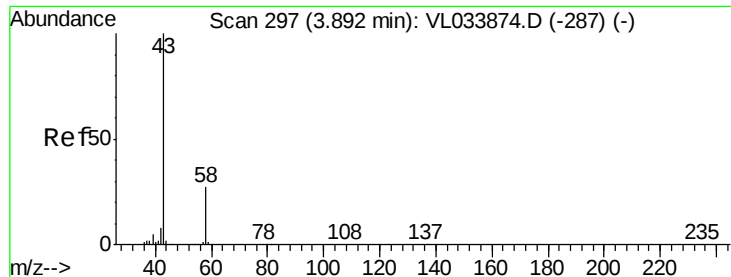
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#13
Ethanol
Concen: 8.451 ppbv
RT: 3.64 min Scan# 219
Delta R.T. 0.00 min
Lab File: VL033945.D
Acq: 24 Jun 2019 20:36

Tgt Ion: 45 Resp: 128957
Ion Ratio Lower Upper
45 100
46 36.1 15.3 61.1





#15

Acetone

Concen: 72.577 ppbv

RT: 3.88 min Scan# 294

Delta R.T. -0.01 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-A-1DL

Tot Ion: 43 Resp:11270514

Ion Ratio Lower Upper

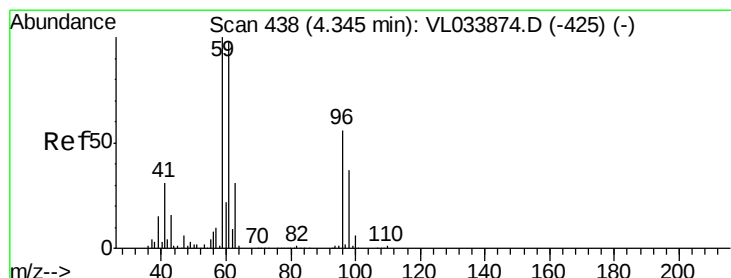
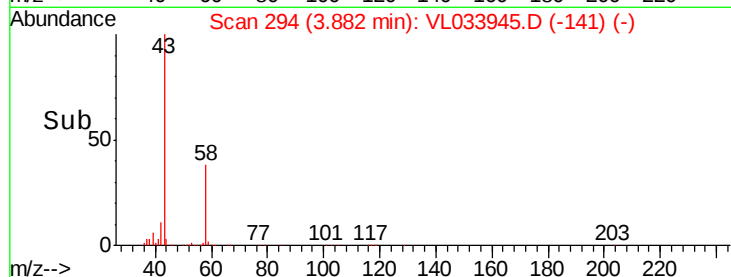
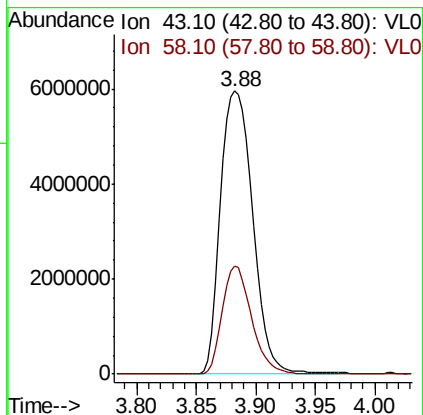
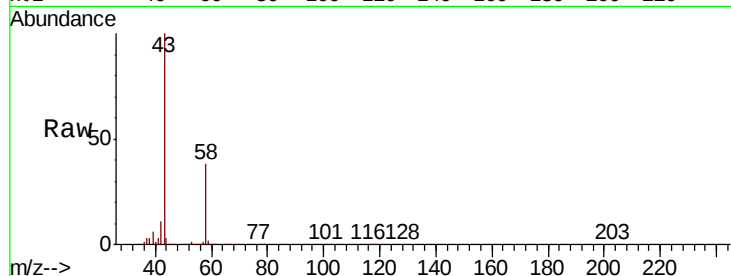
43 100

58 34.7 21.3 31.9#

Manual Integrations
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#17

tert-Butyl alcohol

Concen: 15.218 ppbv

RT: 4.35 min Scan# 438

Delta R.T. 0.00 min

Lab File: VL033945.D

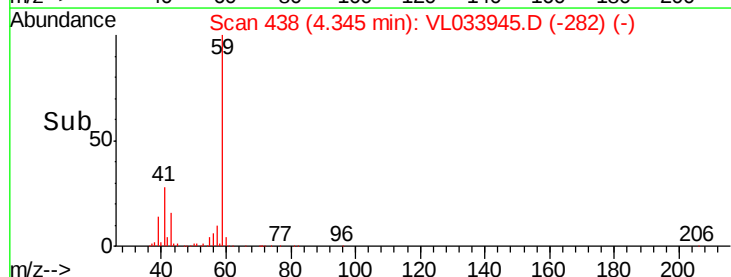
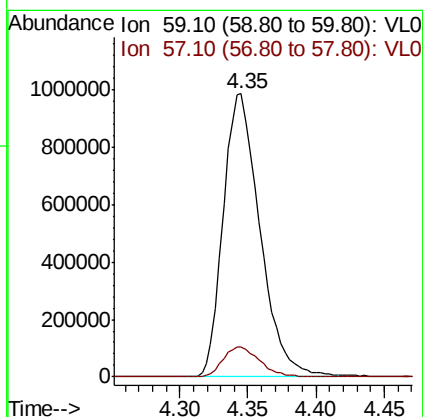
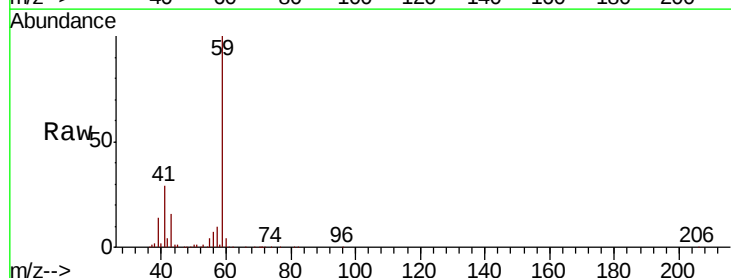
Acq: 24 Jun 2019 20:36

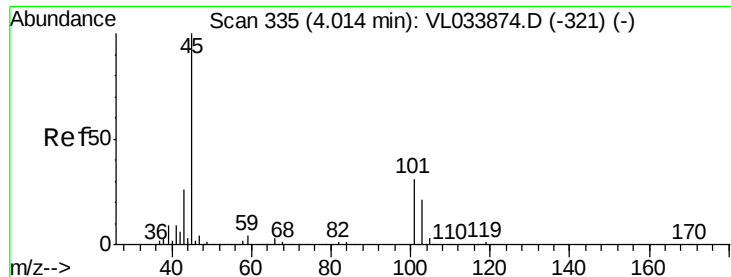
Tgt Ion: 59 Resp: 1847320

Ion Ratio Lower Upper

59 100

57 10.7 8.4 12.6





#19

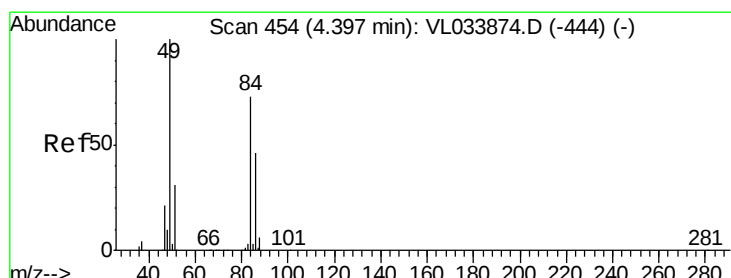
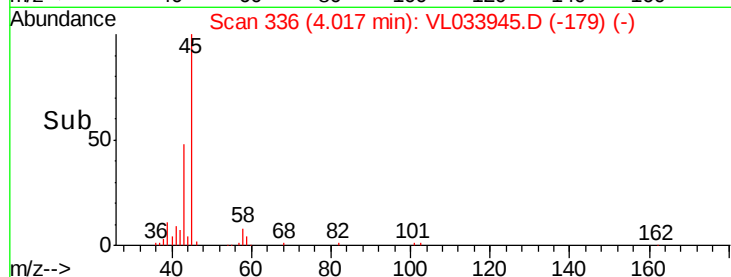
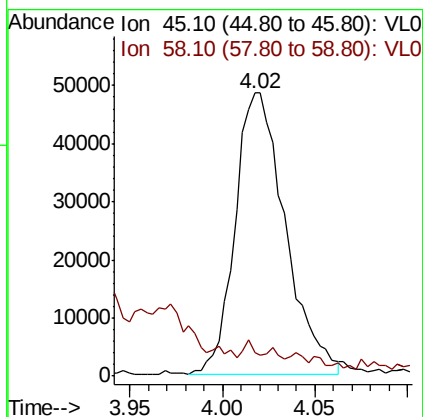
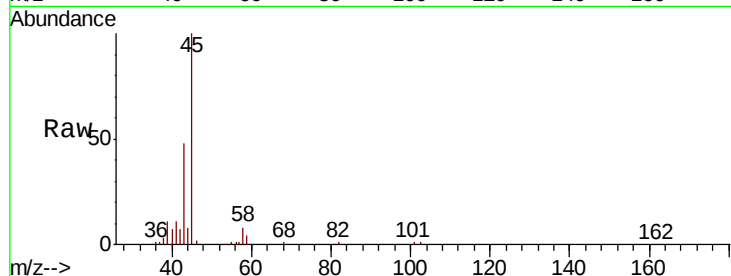
Isopropyl Alcohol
 Concen: 1.027 ppbv
 RT: 4.02 min Scan# 336
 Delta R.T. 0.00 min
 Lab File: VL033945.D
 Acq: 24 Jun 2019 20:36

Instrument :
 MSVOA_L
 ClientSampleId :
 TZC-SSDS-AREA-A-1DL

Tot Ion: 45 Resp: 91130
 Ion Ratio Lower Upper
 45 100
 58 0.0 1.8 2.6#

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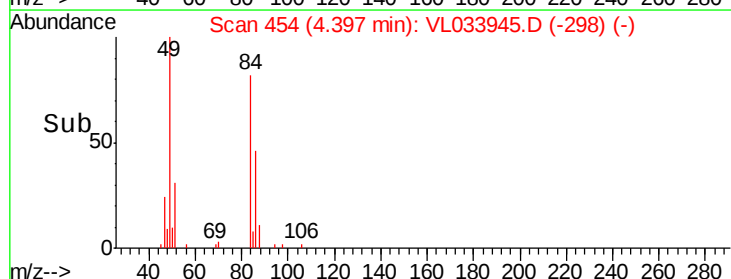
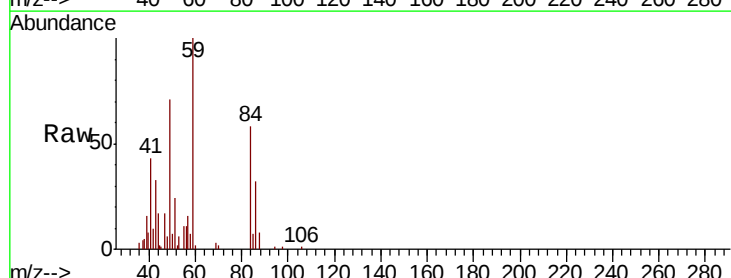
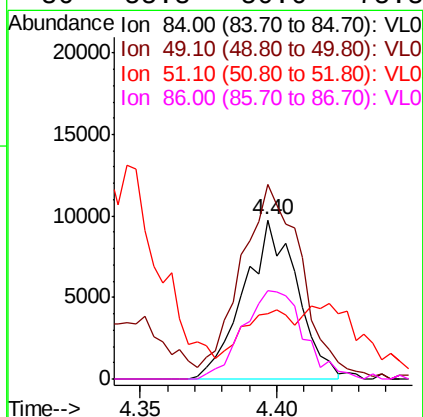
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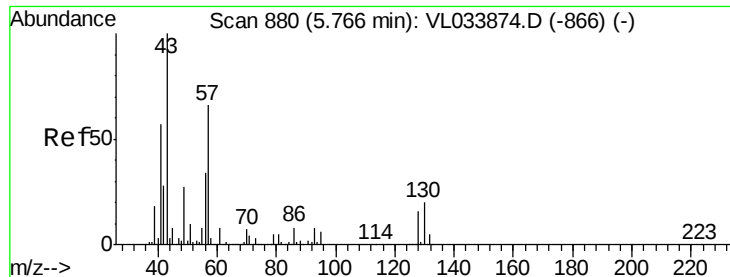


#20

Methylene Chloride
 Concen: 0.218 ppbv
 RT: 4.40 min Scan# 454
 Delta R.T. 0.00 min
 Lab File: VL033945.D
 Acq: 24 Jun 2019 20:36

Tgt Ion: 84 Resp: 13184
 Ion Ratio Lower Upper
 84 100
 49 112.4 110.0 165.0
 51 19.4 34.6 51.8#
 86 55.8 50.6 75.8





#26

Hexane

Concen: 0.546 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.01 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Instrument :

MSVOA_L

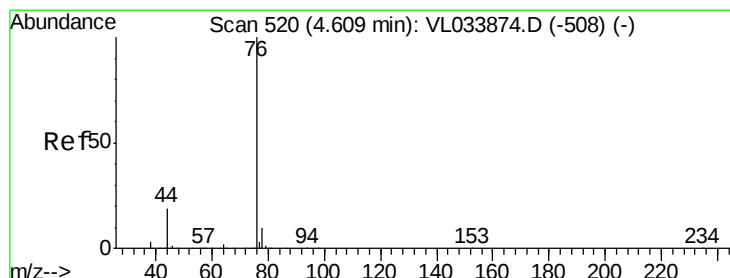
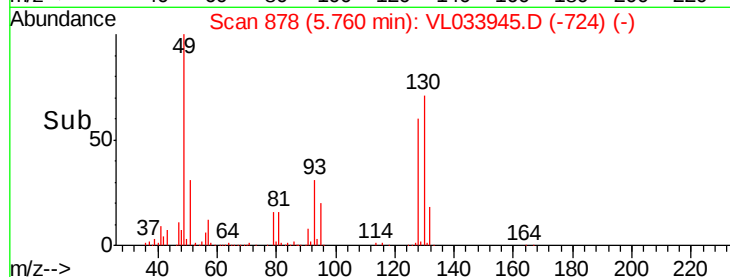
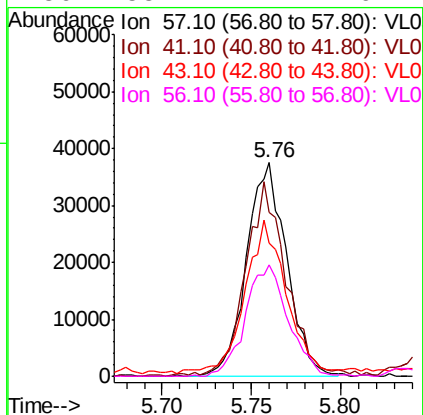
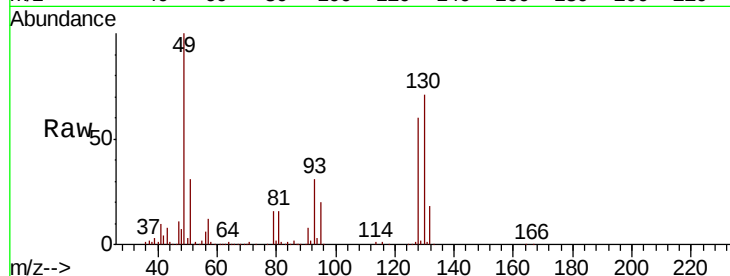
ClientSampleId :

TZC-SSDS-AREA-A-1DL

Tot Ion	Ratio	Lower	Upper
57	100		
41	93.9	71.4	107.2
43	73.8	183.7	275.5#
56	55.7	42.7	64.1

Manual Integrations
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#27

Carbon Disulfide

Concen: 0.197 ppbv

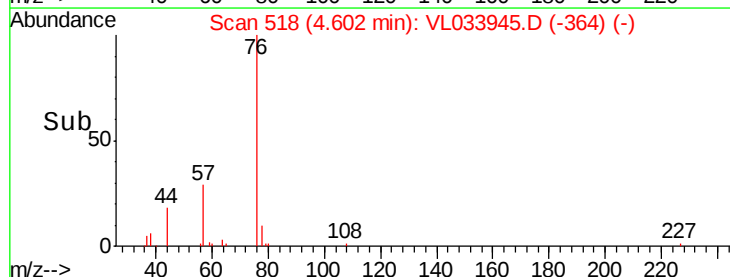
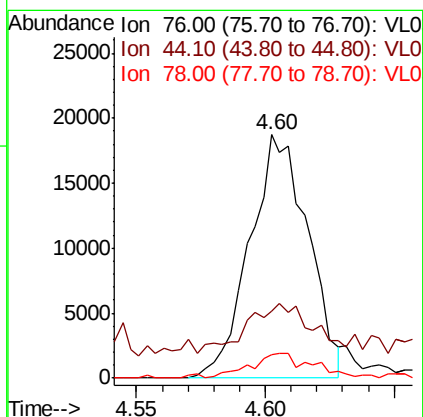
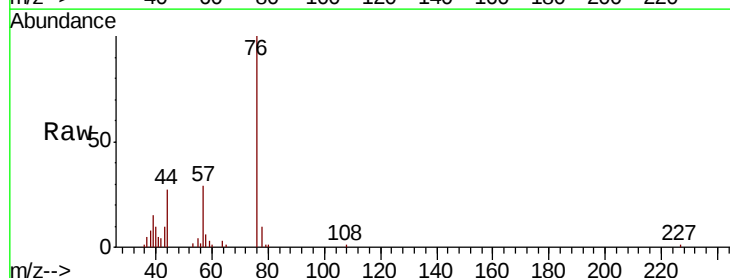
RT: 4.60 min Scan# 518

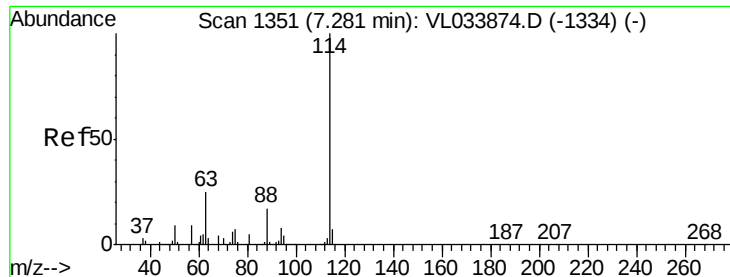
Delta R.T. -0.01 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Tgt Ion	Ratio	Lower	Upper
76	100		
44	42.2	14.4	21.6#
78	11.2	7.5	11.3





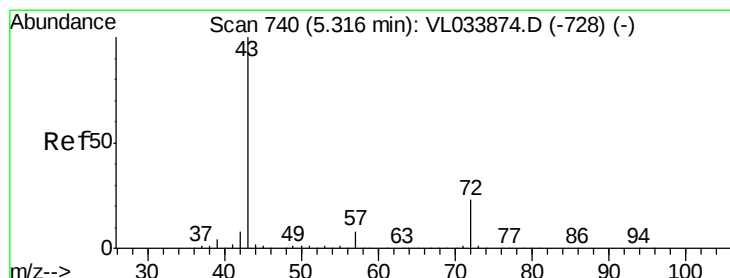
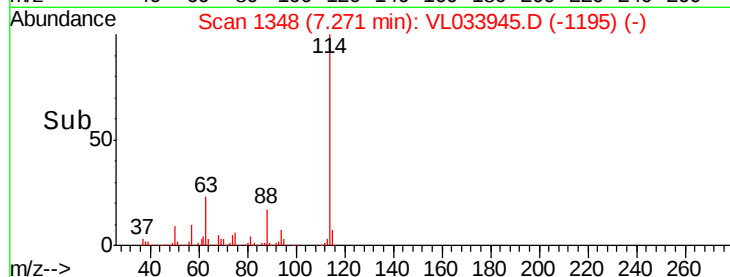
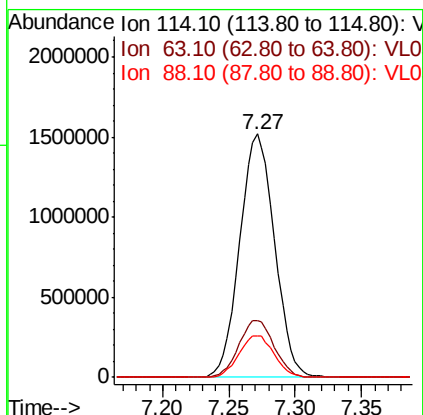
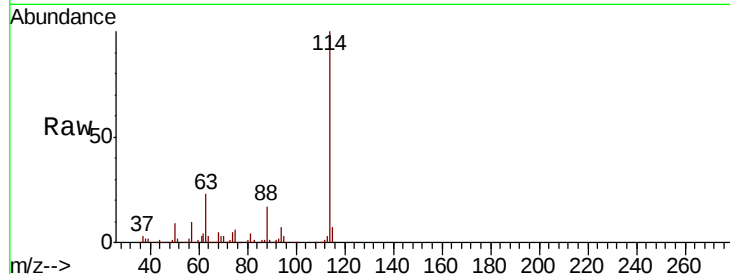
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.27 min Scan# 1348
 Delta R.T. -0.01 min
 Lab File: VL033945.D
 Acq: 24 Jun 2019 20:36

Instrument :
 MSVOA_L
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 TZC-SSDS-AREA-A-1DL

Tot Ion	Ratio	Lower	Upper
114	100		
63	23.8	21.1	31.7
88	17.4	14.2	21.4

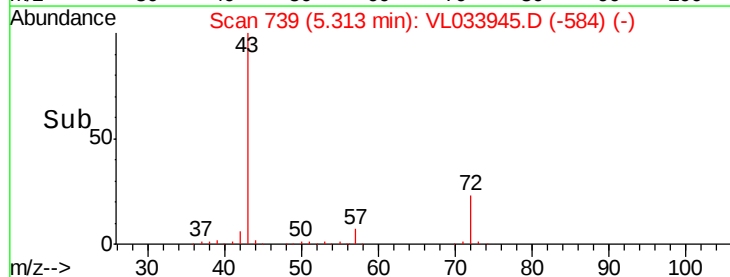
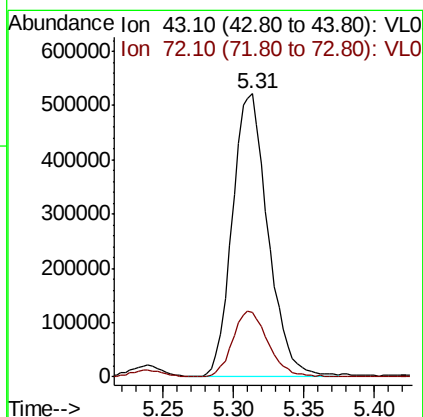
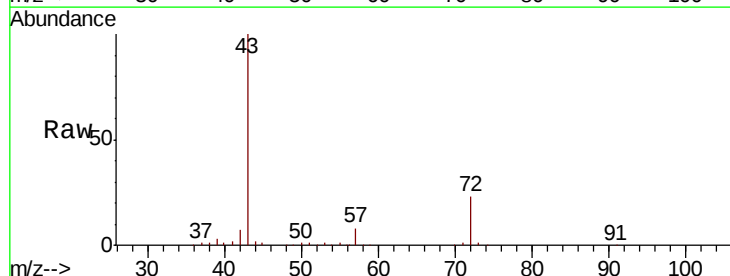
Manual Integrations
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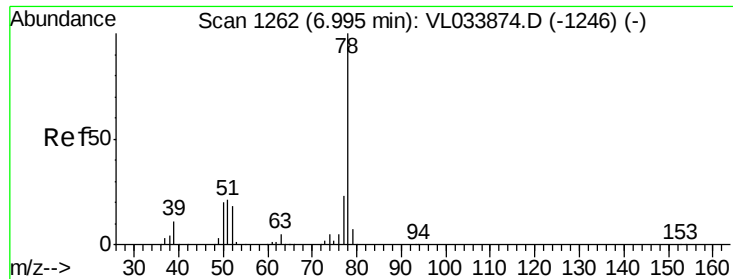
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#34
 2-Butanone
 Concen: 5.876 ppbv
 RT: 5.31 min Scan# 739
 Delta R.T. -0.00 min
 Lab File: VL033945.D
 Acq: 24 Jun 2019 20:36

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.5	17.9	26.9





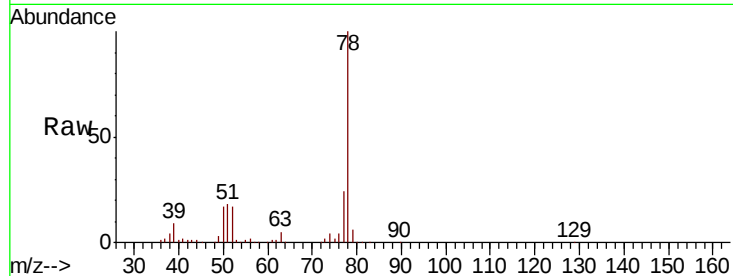
#36
Benzene
Concen: 2.523 ppbv
RT: 6.98 min Scan# 1258
Delta R.T. -0.01 min
Lab File: VL033945.D
Acq: 24 Jun 2019 20:36

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-A-1DL

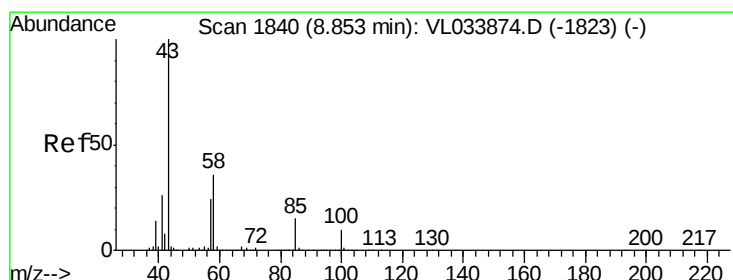
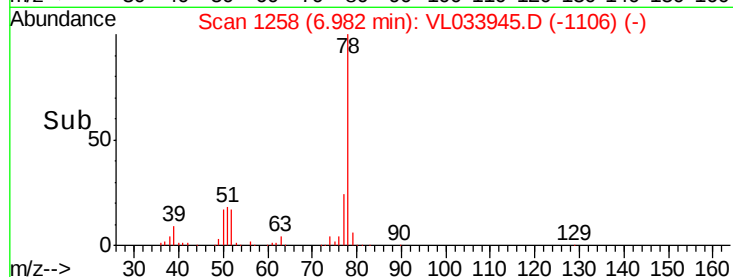
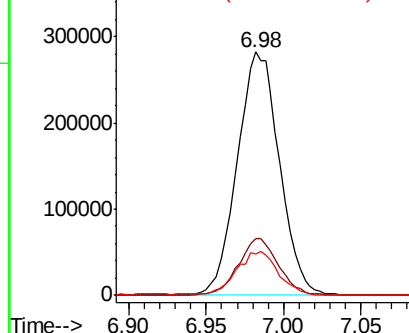
Tot Ion	Ratio	Lower	Upper
78	100		
77	23.4	18.2	27.2
50	16.9	15.9	23.9

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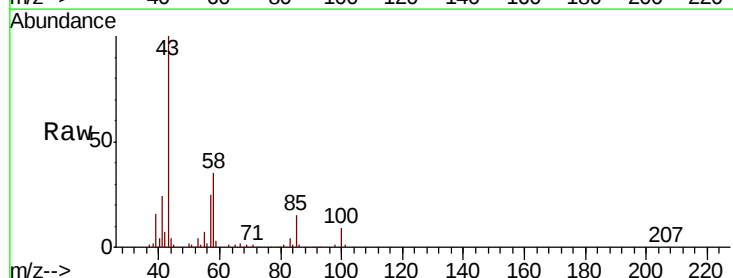


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

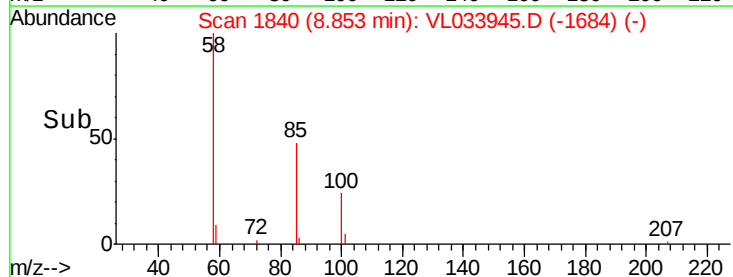
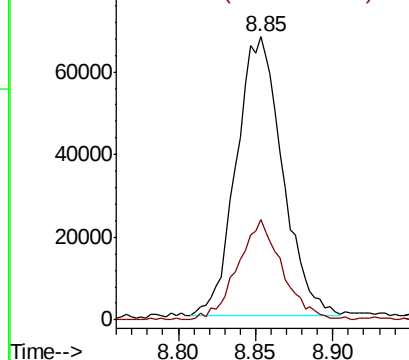


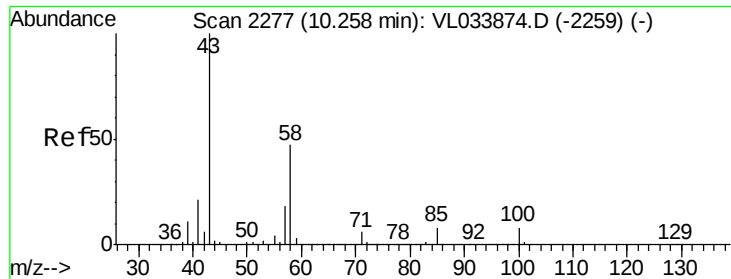
#50
4-Methyl-2-Pentanone
Concen: 0.597 ppbv
RT: 8.85 min Scan# 1840
Delta R.T. 0.00 min
Lab File: VL033945.D
Acq: 24 Jun 2019 20:36

Tgt Ion	Ratio	Lower	Upper
43	100		
58	35.3	28.6	42.8



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 0.124 ppbv m

RT: 10.26 min Scan# 2277

Delta R.T. 0.00 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-A-1DL

Tot Ion: 43 Resp: 22631

Ion Ratio Lower Upper

43 100

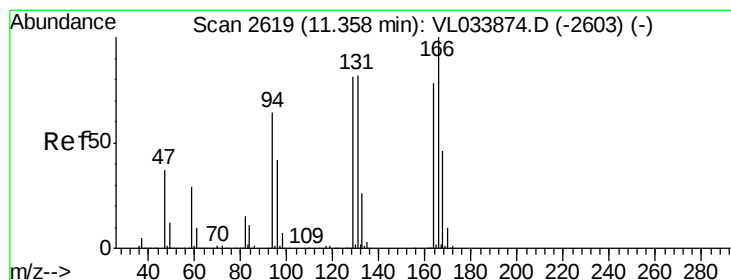
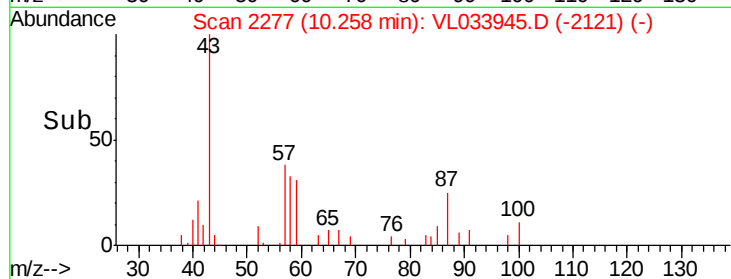
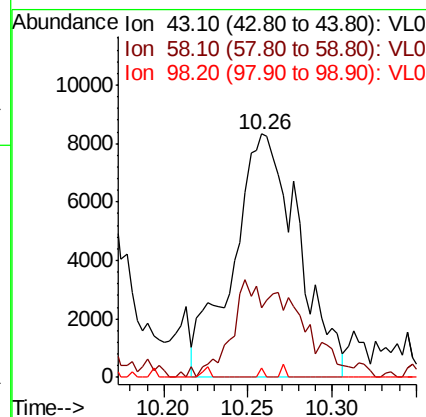
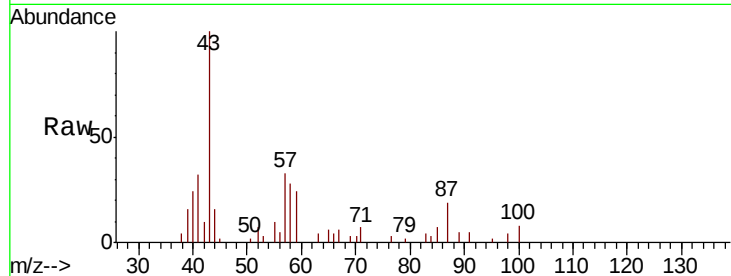
58 0.0 38.2 57.4#

98 0.0 0.2 0.2#

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#52

Tetrachloroethene

Concen: 0.127 ppbv m

RT: 11.35 min Scan# 2616

Delta R.T. -0.01 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Tgt Ion: 164 Resp: 9478

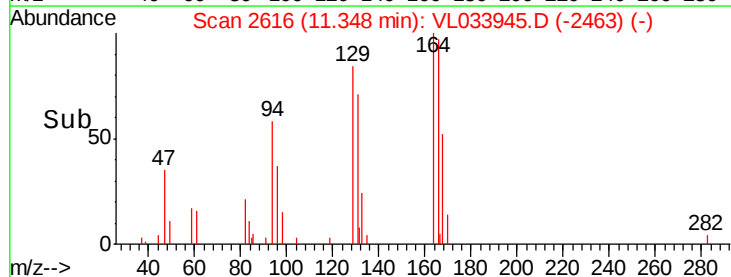
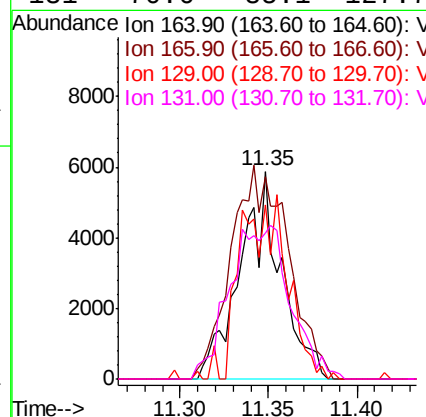
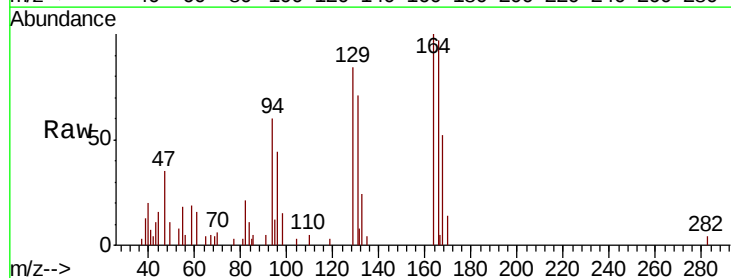
Ion Ratio Lower Upper

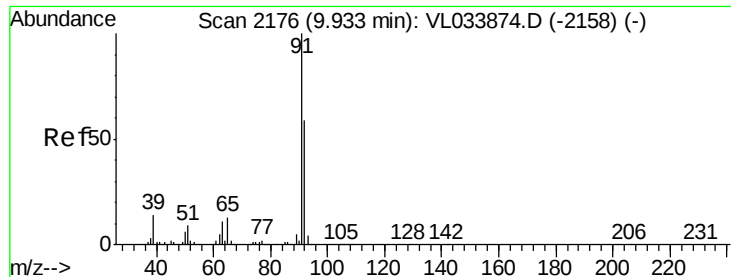
164 100

166 97.1 103.1 154.7#

129 83.8 83.9 125.9#

131 70.6 85.1 127.7#





#53

Toluene

Concen: 10.787 ppbv

RT: 9.92 min Scan# 2172

Delta R.T. -0.01 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-A-1DL

Tot Ion: 91 Resp: 2529469

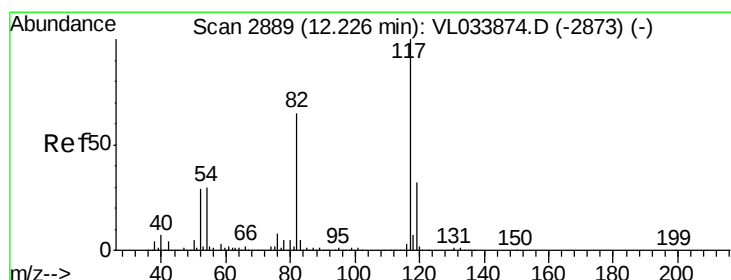
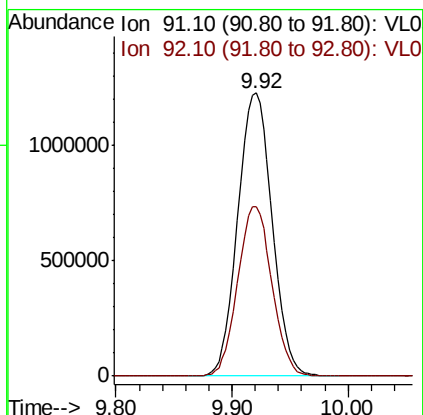
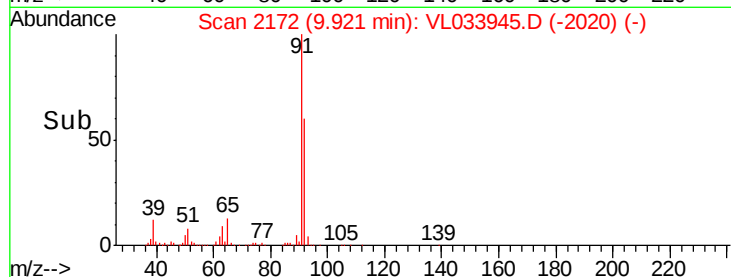
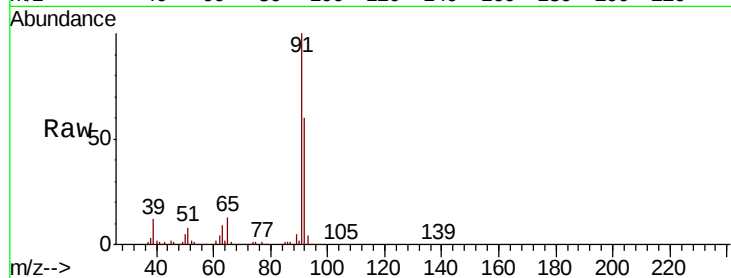
Ion Ratio Lower Upper

91 100

92 59.7 47.0 70.6

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.21 min Scan# 2884

Delta R.T. -0.02 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

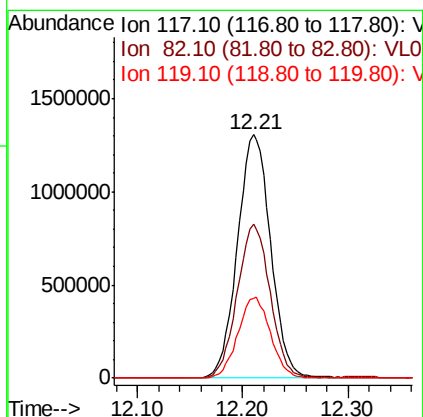
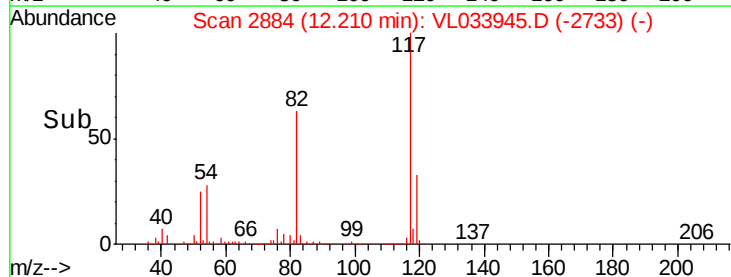
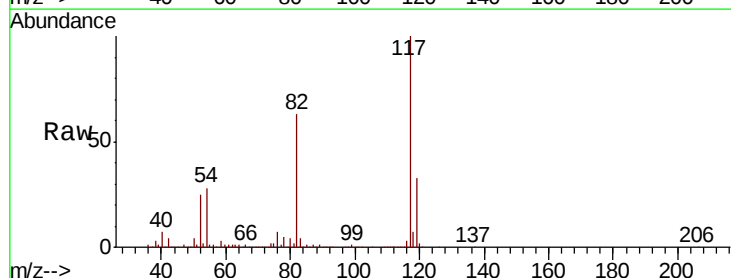
Tgt Ion: 117 Resp: 2859702

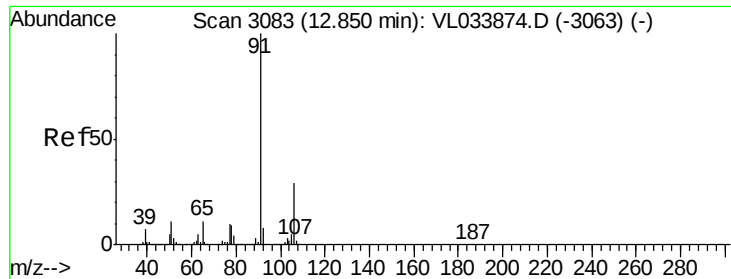
Ion Ratio Lower Upper

117 100

82 62.7 50.2 75.2

119 32.9 24.8 37.2





#58

Ethyl Benzene

Concen: 2.786 ppbv

RT: 12.83 min Scan# 3078

Delta R.T. -0.02 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-A-1DL

Tot Ion: 91 Resp: 898159

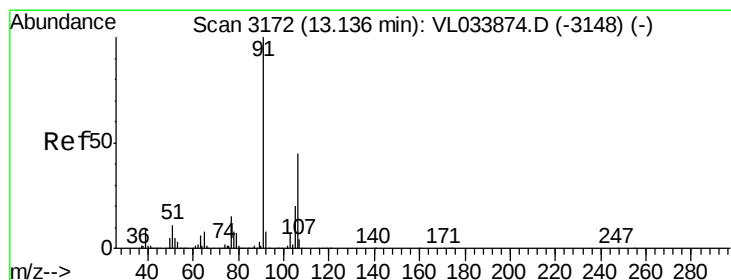
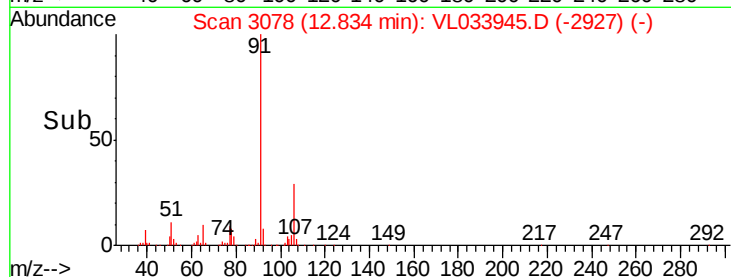
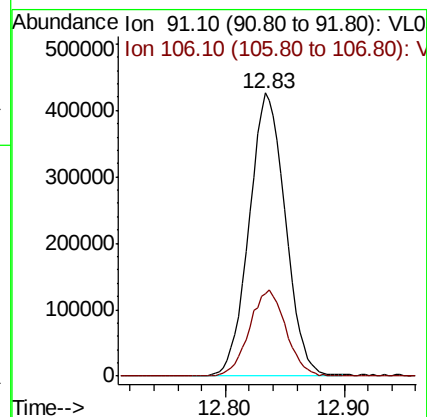
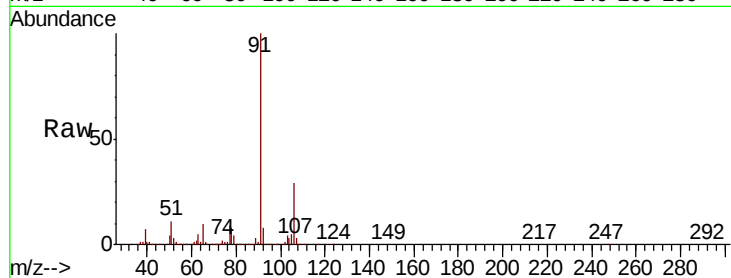
Ion Ratio Lower Upper

91 100

106 29.1 23.0 34.6

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#59

m/p-Xylene

Concen: 10.358 ppbv

RT: 13.09 min Scan# 3158

Delta R.T. -0.04 min

Lab File: VL033945.D

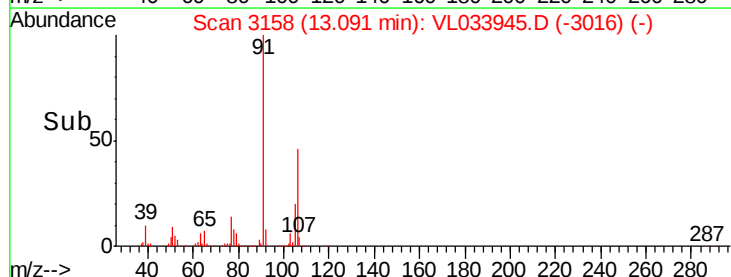
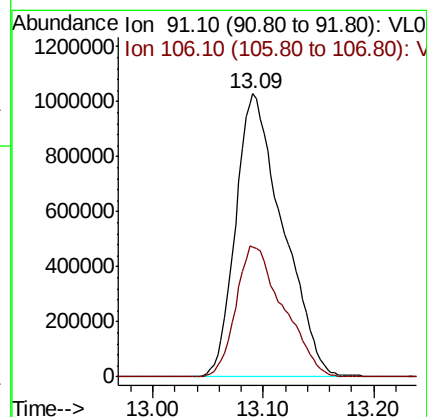
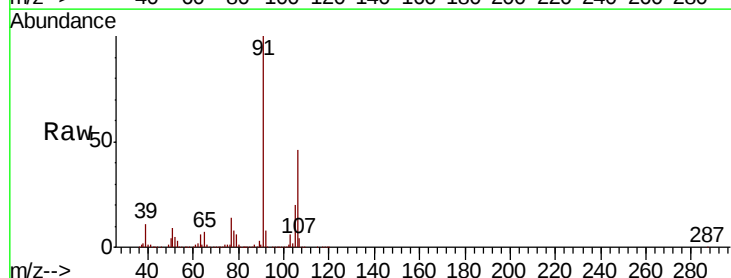
Acq: 24 Jun 2019 20:36

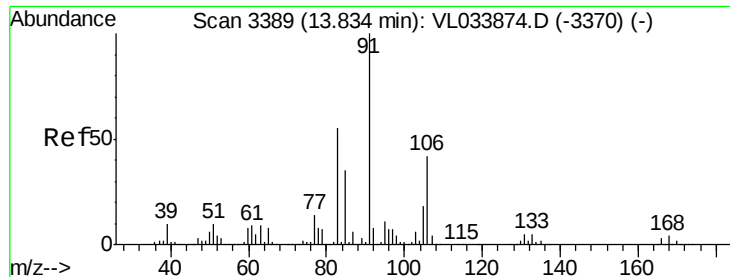
Tgt Ion: 91 Resp: 3036866

Ion Ratio Lower Upper

91 100

106 46.7 35.8 53.8





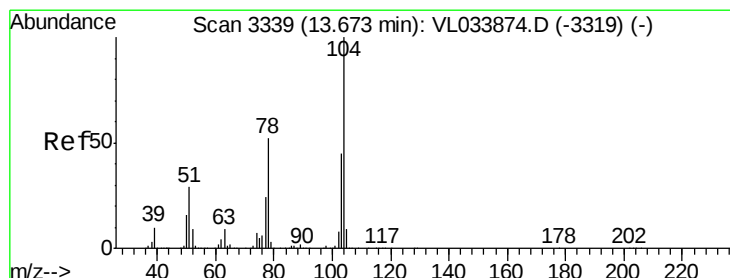
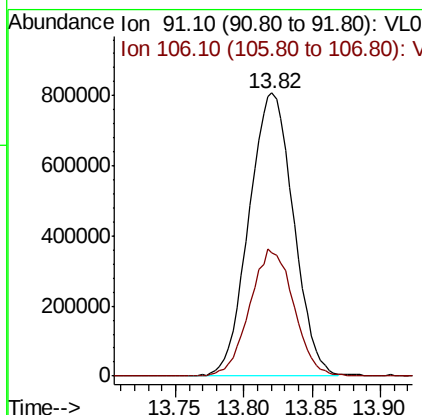
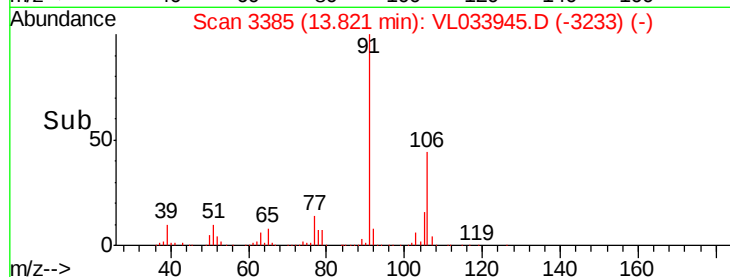
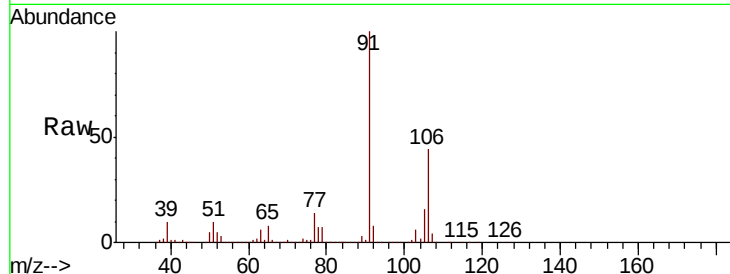
#60
o-Xylene
Concen: 6.042 ppbv
RT: 13.82 min Scan# 3385
Delta R.T. -0.01 min
Lab File: VL033945.D
Acq: 24 Jun 2019 20:36

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-A-1DL

Tot Ion: 91 Resp: 1829025
Ion Ratio Lower Upper
91 100
106 44.3 21.7 65.1

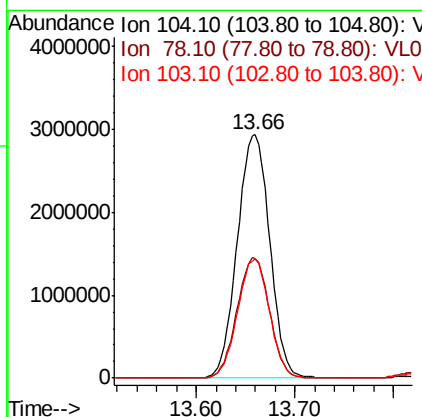
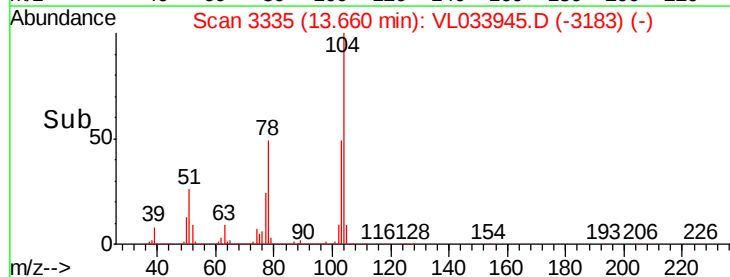
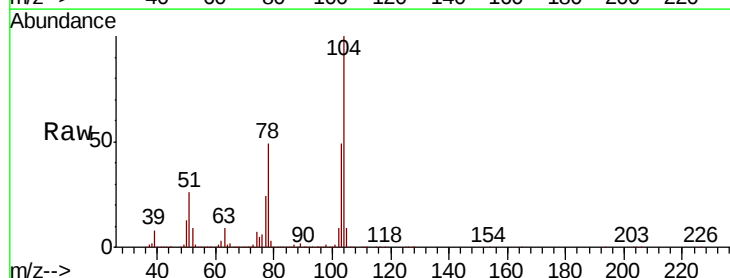
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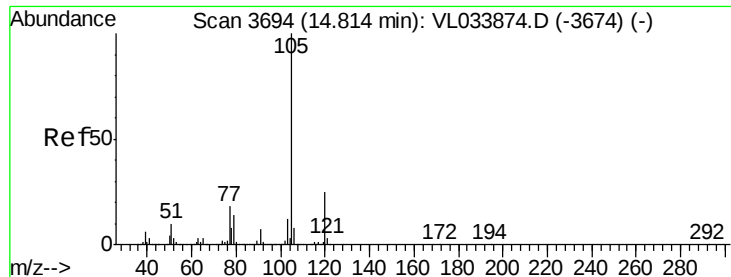
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#61
Styrene
Concen: 34.232 ppbv
RT: 13.66 min Scan# 3335
Delta R.T. -0.01 min
Lab File: VL033945.D
Acq: 24 Jun 2019 20:36

Tgt Ion: 104 Resp: 6706144
Ion Ratio Lower Upper
104 100
78 49.4 43.4 65.0
103 48.1 37.6 56.4





#62

Isopropylbenzene

Concen: 0.815 ppbv

RT: 14.80 min Scan# 3689

Delta R.T. -0.02 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-A-1DL

Tot Ion:105 Resp: 332723

Ion Ratio Lower Upper

105 100

120 26.0

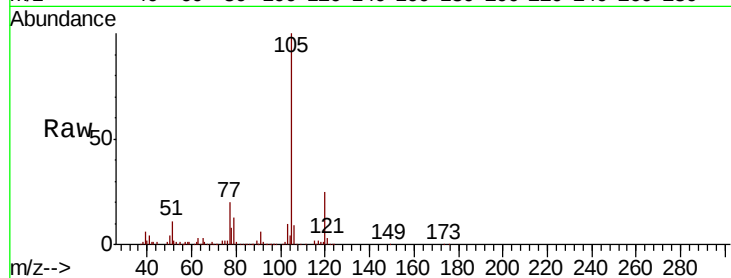
20.3

30.5

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

14.80

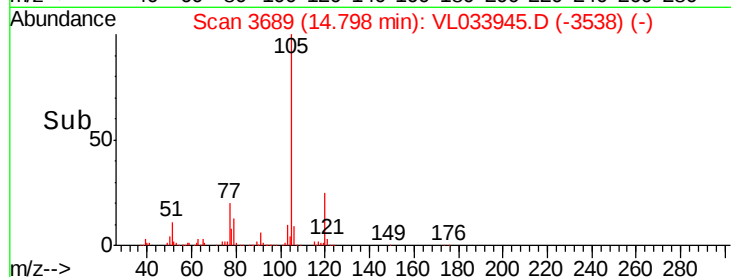
150000

100000

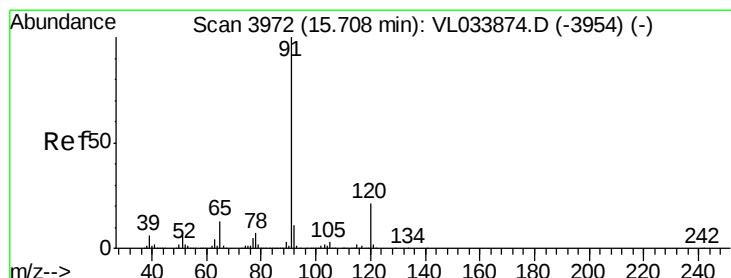
50000

0

Time-->



Time-->



#64

n-propylbenzene

Concen: 0.587 ppbv

RT: 15.69 min Scan# 3967

Delta R.T. -0.02 min

Lab File: VL033945.D

Acq: 24 Jun 2019 20:36

Tgt Ion:120 Resp: 61281

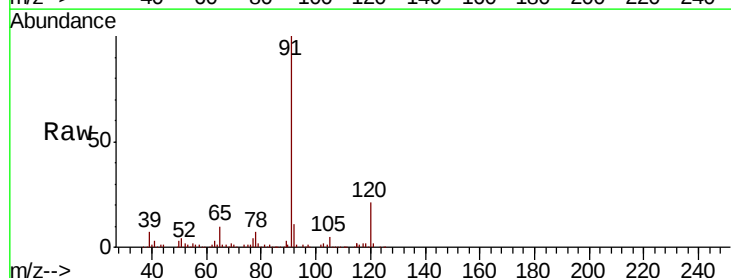
Ion Ratio Lower Upper

120 100

91 462.6

387.0

580.6



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

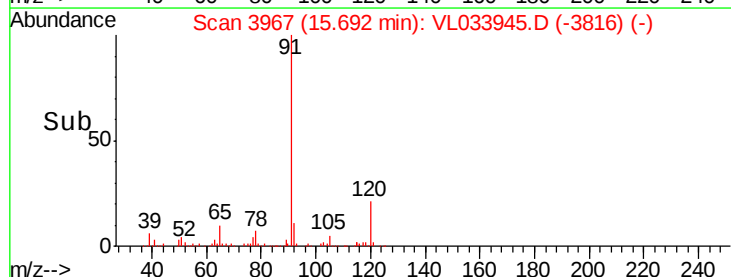
150000

100000

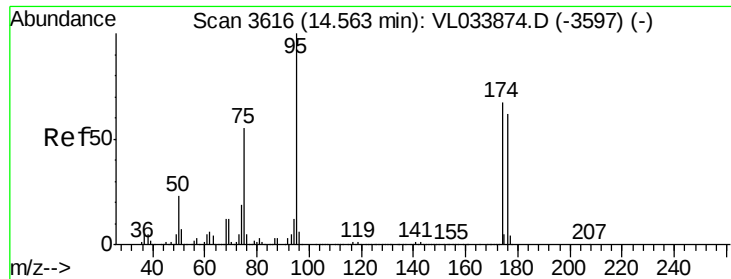
50000

0

Time-->



Time-->



#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.818 ppbv
 RT: 14.55 min Scan# 3611
 Delta R.T. -0.02 min
 Lab File: VL033945.D
 Acq: 24 Jun 2019 20:36

Instrument :
 MSVOA_L
 ClientSampleId :
 TZC-SSDS-AREA-A-1DL

Tot Ion	Ratio	Lower	Upper
95	100		
174	70.4	54.0	81.0
175	5.1	3.8	5.8

Manual Integrations
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 7/1/2019 5:01:30 PM

