

Data File : VL033092.D
Acq On : 16 Jan 2019 14:59
Operator : SY/AP
Sample : K1130-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA1A

Quant Time: Jan 17 01:52:51 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL010419AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jan 04 16:09:05 2019
QLast Update : Fri Jan 04 16:09:05 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1058006	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2566395	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2287498	10.00	ppbv	-0.01

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.57 95 1797793 10.25 ppbv -0.01
Spiked Amount 10.000 Range 65 - 135 Recovery = 102.50%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.07	85	45359	0.230	ppbv #	88
3) Chlorodifluoromethane	3.01	51	143713	1.200	ppbv #	80
4) Chloromethane	3.17	50	36315	0.529	ppbv	97
9) Propene	3.04	41	33030	0.738	ppbv	85
11) Trichlorofluoromethane	4.00	101	44793	0.206	ppbv	89
12) 1,1,2-Trichlorotrifluoroet	4.55	101	9492	0.069	ppbv	99
13) Ethanol	3.64	45	921693	51.660	ppbv	94
15) Acetone	3.90	43	720732	4.922	ppbv	100
16) 1,3-Butadiene	3.34	39	12037	0.218	ppbv #	42
17) tert-Butyl alcohol	4.18	59	197511	6.367	ppbv #	88
19) Isopropyl Alcohol	4.02	45	29637	0.294	ppbv #	1
20) Methylene Chloride	4.40	84	787251	12.895	ppbv	99
21) Allyl Chloride	4.41	41	13881	0.153	ppbv #	42
23) Vinyl Acetate	5.14	43	11943	0.064	ppbv #	63
25) Ethyl Acetate	5.78	43	763383	3.084	ppbv #	77
26) Hexane	5.78	57	1107700	9.504	ppbv #	43
34) 2-Butanone	5.33	43	18541	0.124	ppbv	93
36) Benzene	7.00	78	15203	0.072	ppbv	93
39) 1,2-Dichloropropane	7.28	63	638420	8.084	ppbv #	23
41) Tetrahydrofuran	5.78	42	411845	5.426	ppbv #	48
44) 2,2,4-Trimethylpentane	7.98	57	10884	0.031	ppbv #	7
53) Toluene	9.94	91	900779	3.998	ppbv	99

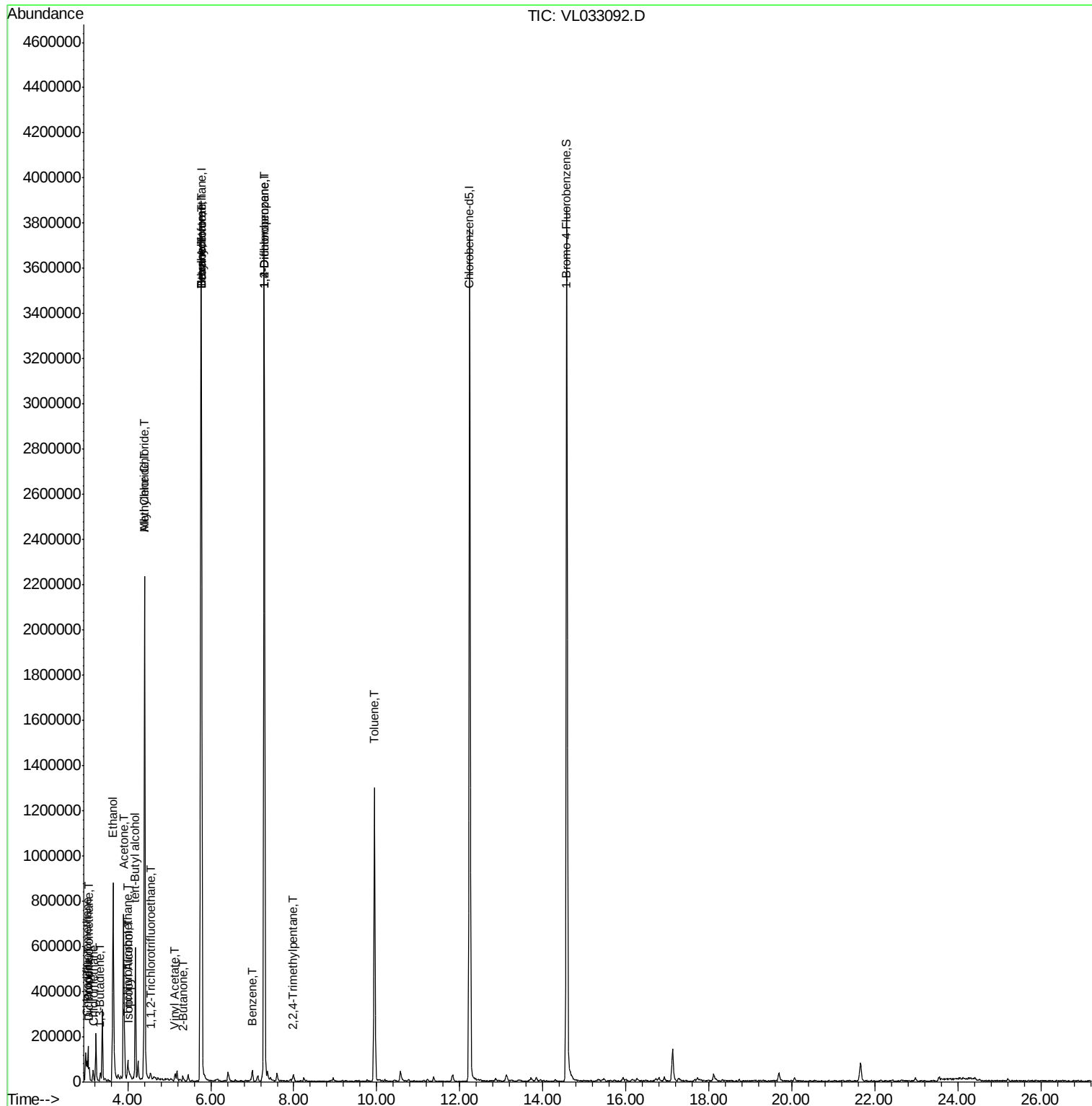
(#) = qualifier out of range (m) = manual integration (+) = signals summed

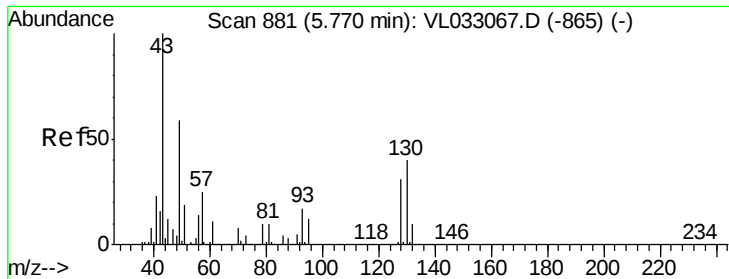
Data File : VL033092.D

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Acq On       : 16 Jan 2019  14:59
Operator     : SY/AP
Sample       : K1130-01
Misc         : 400ml/MSVOA_L
ALS Vial     : 1      Sample Multipl
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Instrument :
MSVOA_L
ClientSampleId :
IA1A

Quant Time: Jan 17 01:52:51 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL010419AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Jan 04 16:09:05 2019
QLast Update : Fri Jan 04 16:09:05 2019
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

IA1A

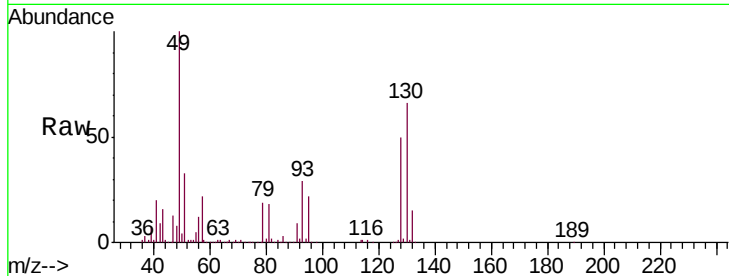
Tgt Ion: 49 Resp: 1058006

Ion Ratio Lower Upper

49 100

128 51.6 26.2 78.5

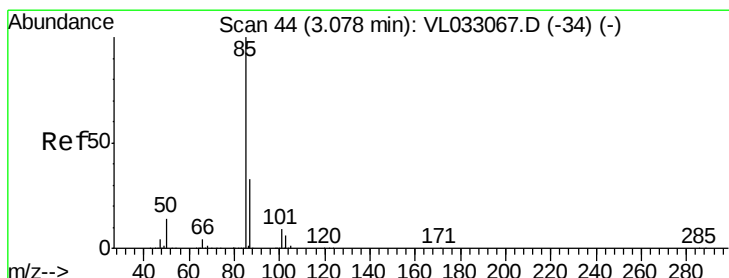
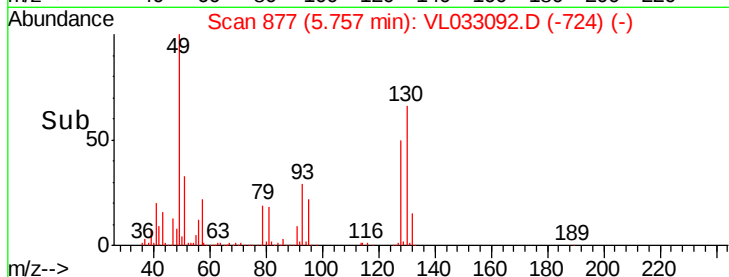
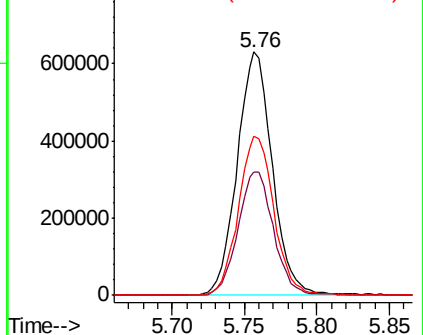
130 66.9 33.6 100.6



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.230 ppbv

RT: 3.07 min Scan# 42

Delta R.T. -0.01 min

Lab File: VL033092.D

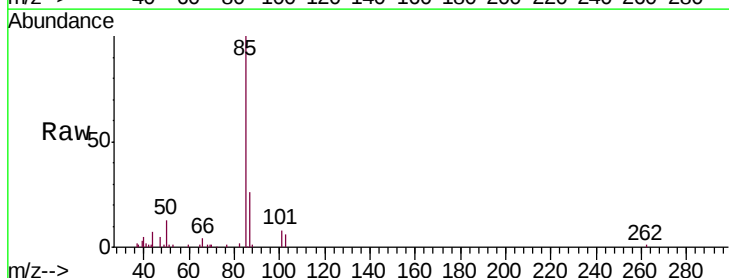
Acq: 16 Jan 2019 14:59

Tgt Ion: 85 Resp: 45359

Ion Ratio Lower Upper

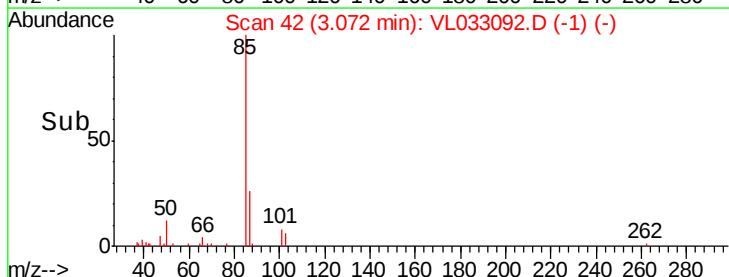
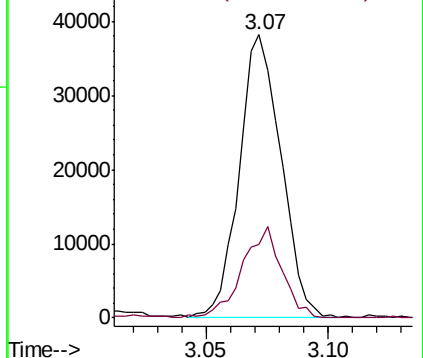
85 100

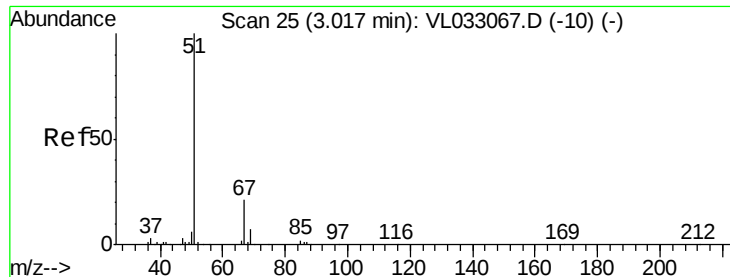
87 26.0 26.3 39.5#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.200 ppbv

RT: 3.01 min Scan# 23

Delta R.T. -0.00 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

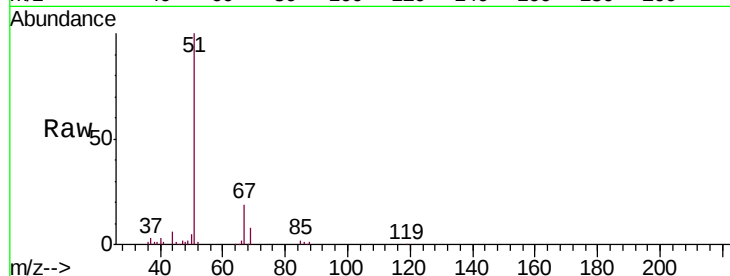
IA1A

Tgt Ion: 51 Resp: 143713

Ion Ratio Lower Upper

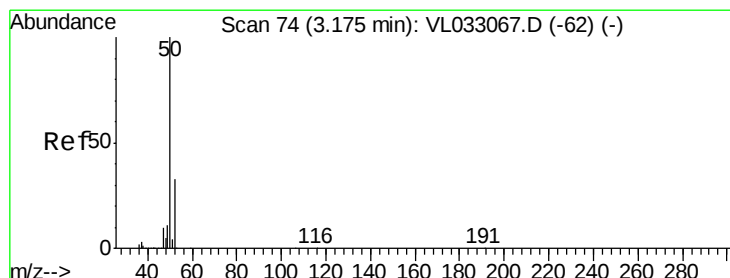
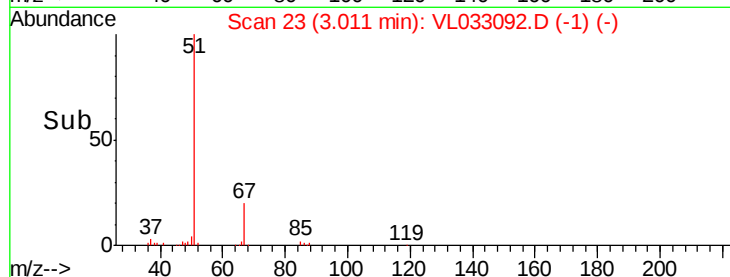
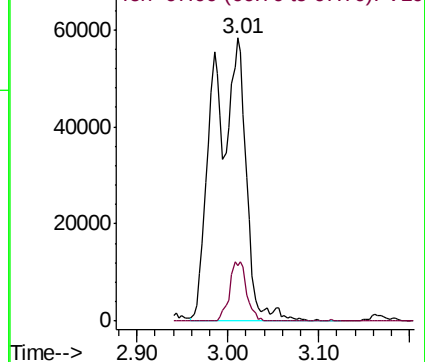
51 100

67 11.0 16.3 24.5#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.529 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL033092.D

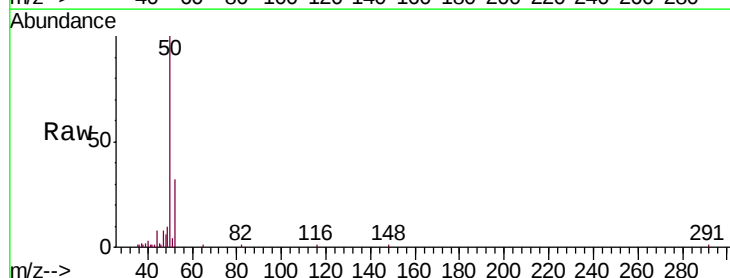
Acq: 16 Jan 2019 14:59

Tgt Ion: 50 Resp: 36315

Ion Ratio Lower Upper

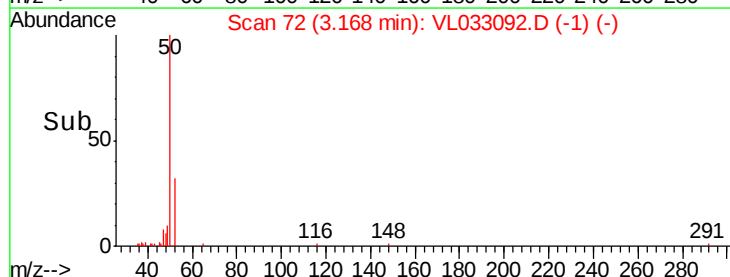
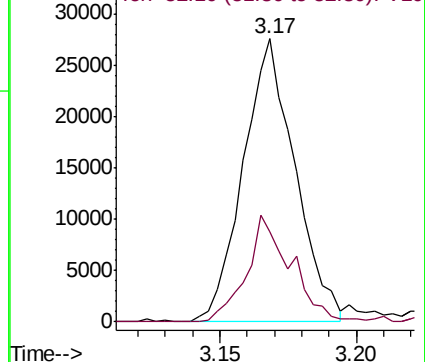
50 100

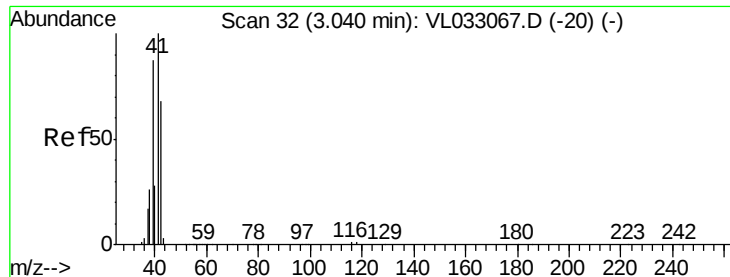
52 31.9 26.9 40.3



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.738 ppbv

RT: 3.04 min Scan# 33

Delta R.T. 0.01 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

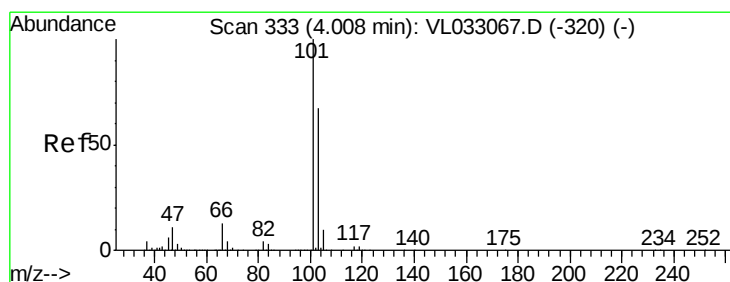
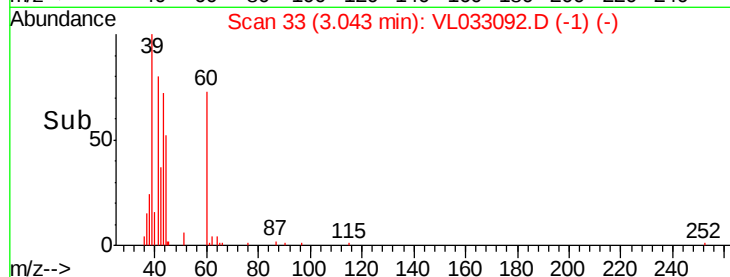
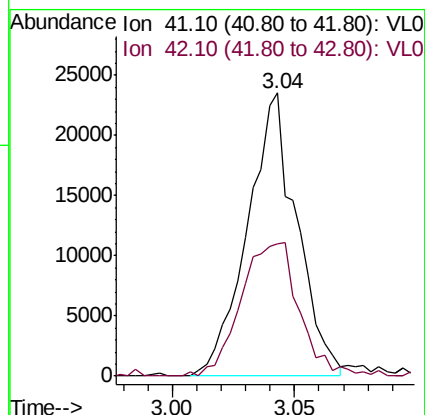
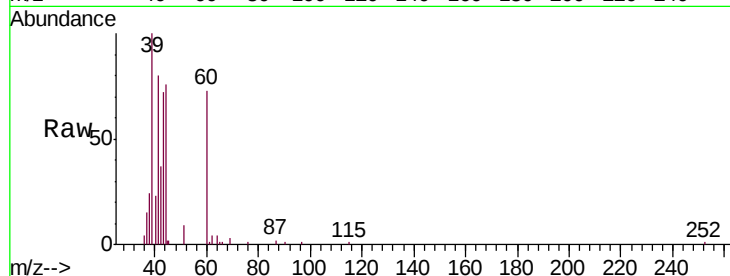
IA1A

Tgt Ion: 41 Resp: 33030

Ion Ratio Lower Upper

41 100

42 56.5 55.3 82.9



#11

Trichlorofluoromethane

Concen: 0.206 ppbv

RT: 4.00 min Scan# 331

Delta R.T. -0.00 min

Lab File: VL033092.D

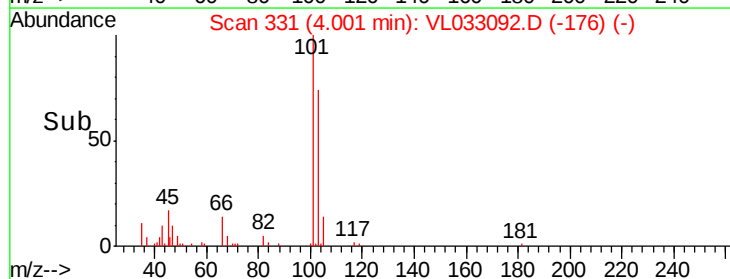
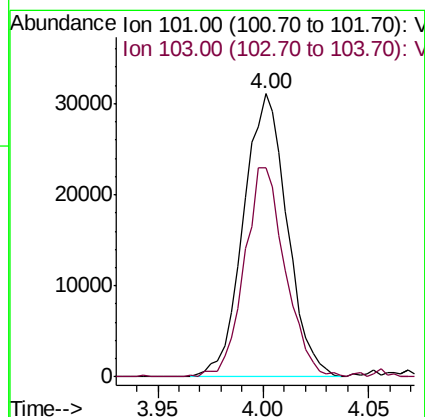
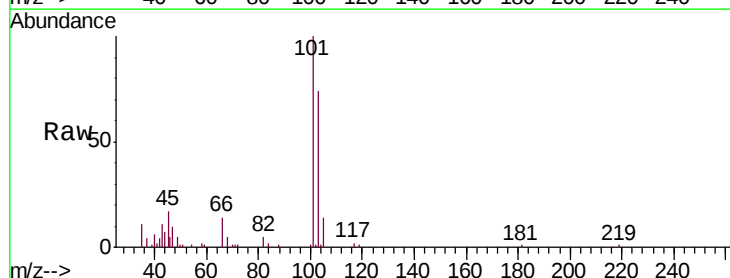
Acq: 16 Jan 2019 14:59

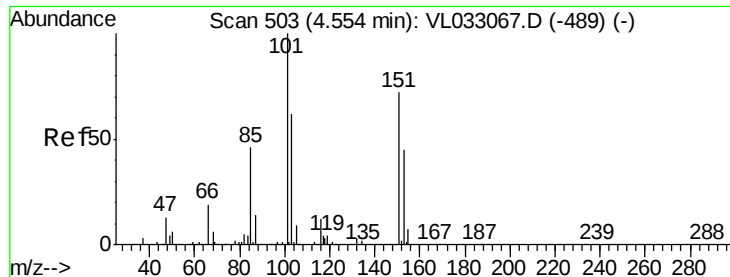
Tgt Ion: 101 Resp: 44793

Ion Ratio Lower Upper

101 100

103 73.2 51.7 77.5





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.069 ppbv

RT: 4.55 min Scan# 501

Delta R.T. -0.01 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

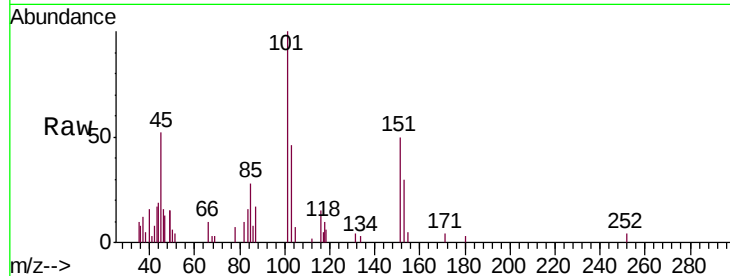
IA1A

Tgt Ion:101 Resp: 9492

Ion Ratio Lower Upper

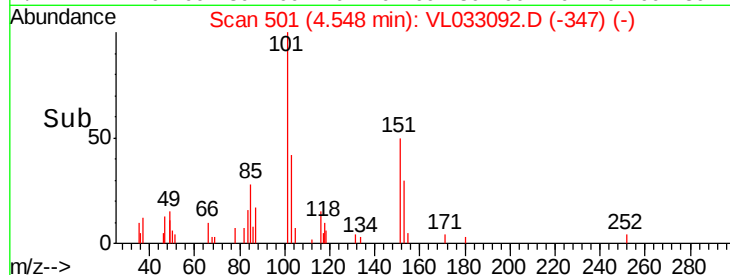
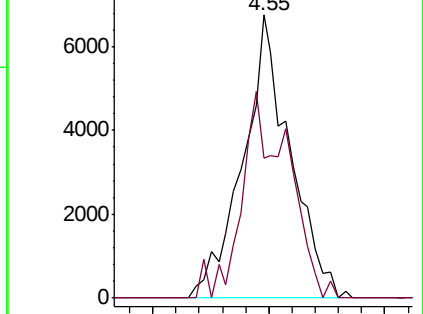
101 100

151 72.0 58.3 87.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 51.660 ppbv

RT: 3.64 min Scan# 220

Delta R.T. -0.01 min

Lab File: VL033092.D

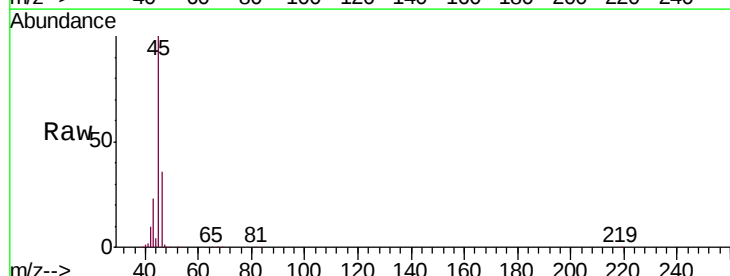
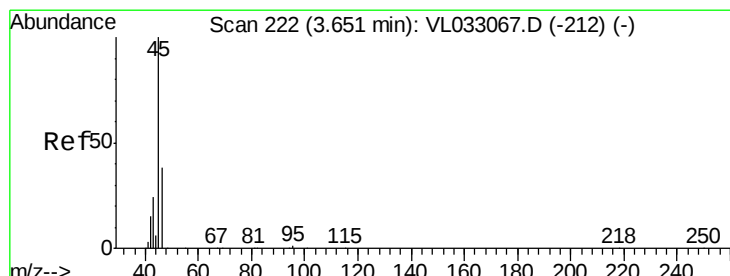
Acq: 16 Jan 2019 14:59

Tgt Ion: 45 Resp: 921693

Ion Ratio Lower Upper

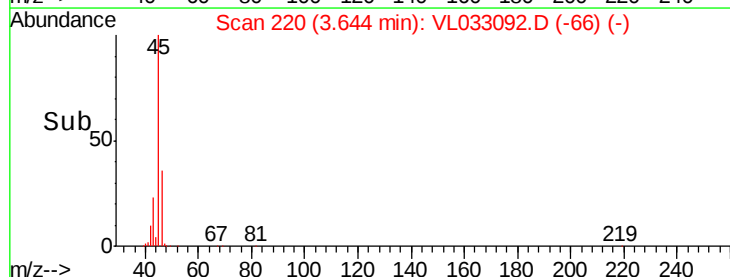
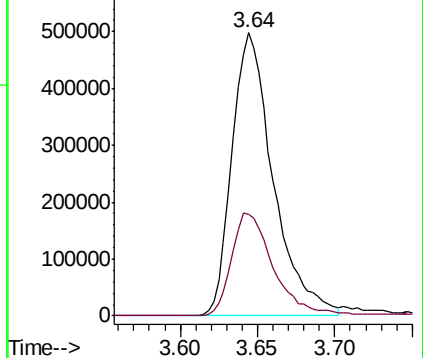
45 100

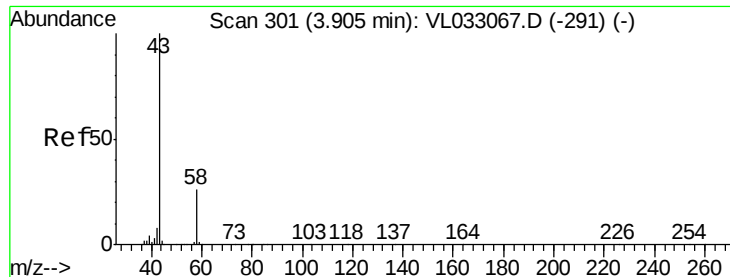
46 38.1 13.8 55.2



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 4.922 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.00 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

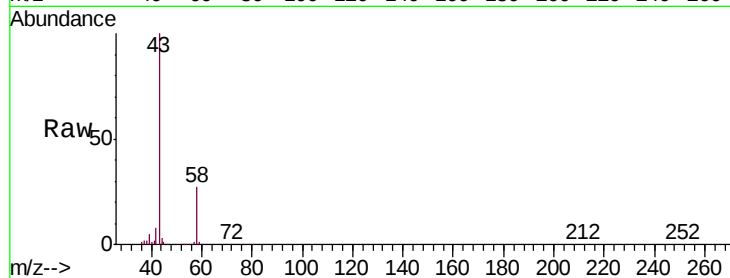
IA1A

Tgt Ion: 43 Resp: 720732

Ion Ratio Lower Upper

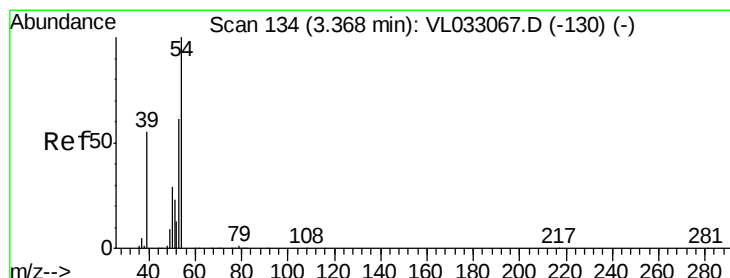
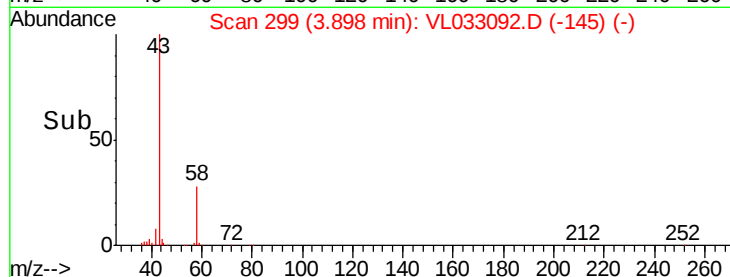
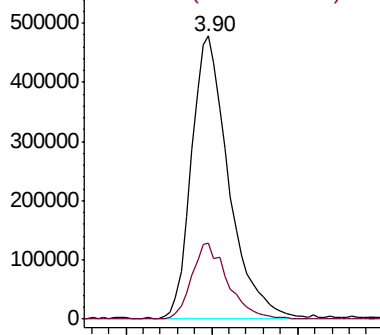
43 100

58 26.4 21.1 31.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.218 ppbv

RT: 3.34 min Scan# 125

Delta R.T. -0.03 min

Lab File: VL033092.D

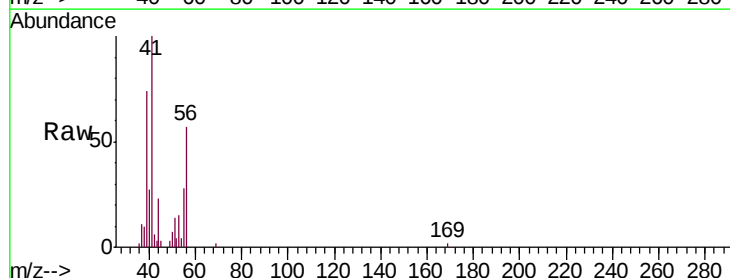
Acq: 16 Jan 2019 14:59

Tgt Ion: 39 Resp: 12037

Ion Ratio Lower Upper

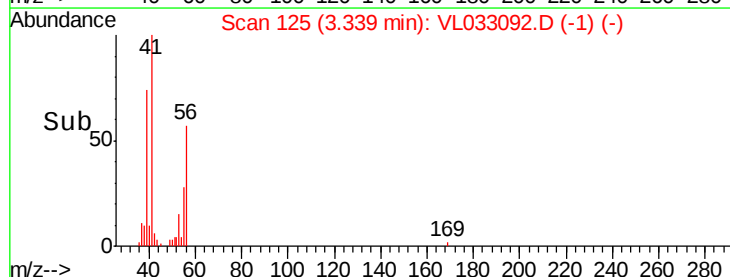
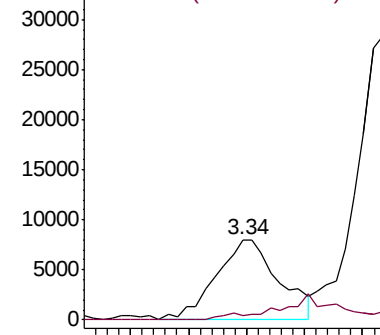
39 100

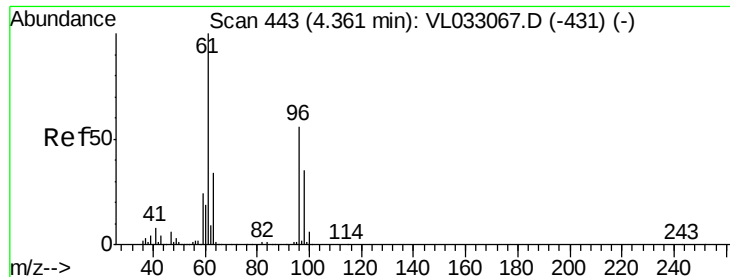
54 36.5 73.7 110.5#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

tert-Butyl alcohol

Concen: 6.367 ppbv

RT: 4.18 min Scan# 387

Delta R.T. -0.18 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

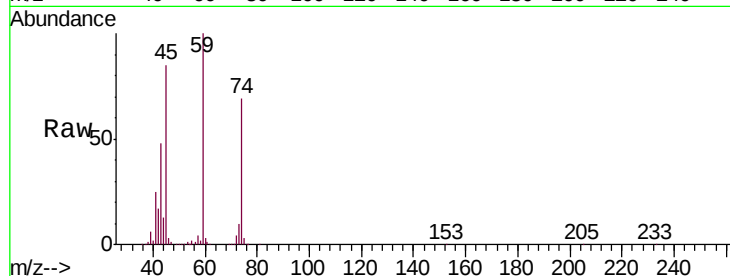
IA1A

Tgt Ion: 59 Resp: 197511

Ion Ratio Lower Upper

59 100

57 5.3 7.7 11.5#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

4.18

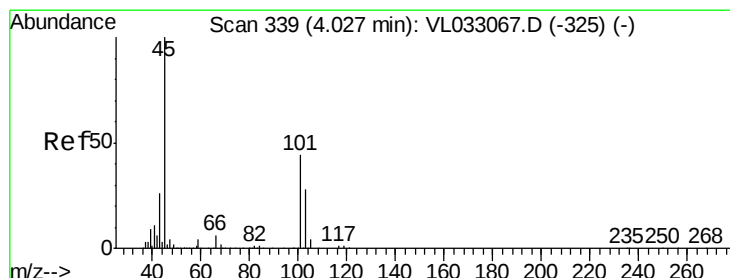
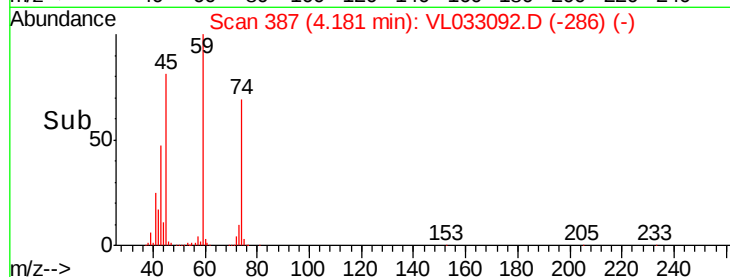
150000

100000

50000

0

Time-->



#19

Isopropyl Alcohol

Concen: 0.294 ppbv

RT: 4.02 min Scan# 338

Delta R.T. 0.00 min

Lab File: VL033092.D

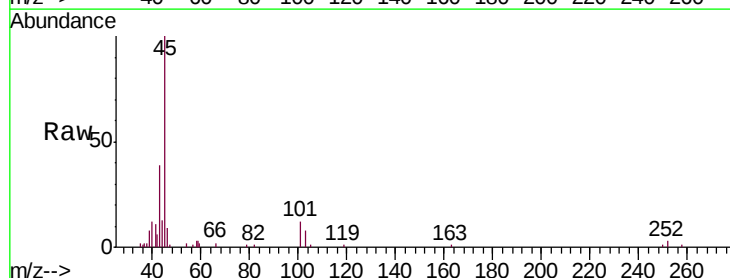
Acq: 16 Jan 2019 14:59

Tgt Ion: 45 Resp: 29637

Ion Ratio Lower Upper

45 100

58 640.4 1.4 2.2#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.02

25000

20000

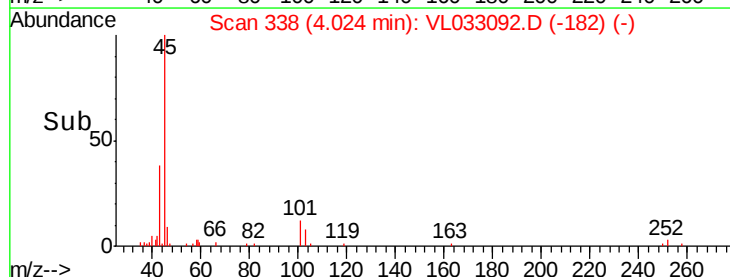
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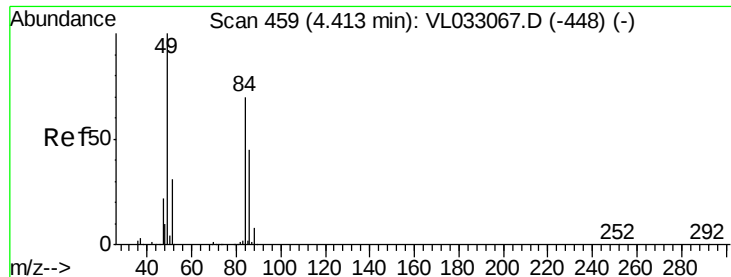
10000

5000

0

Time-->

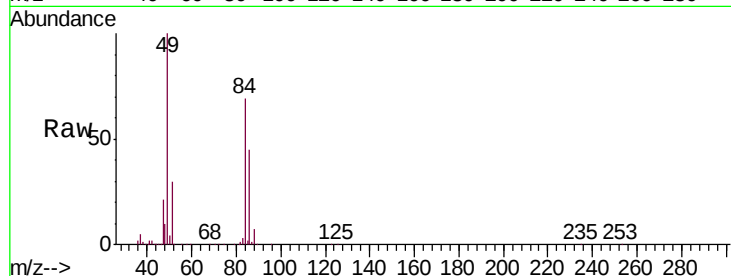




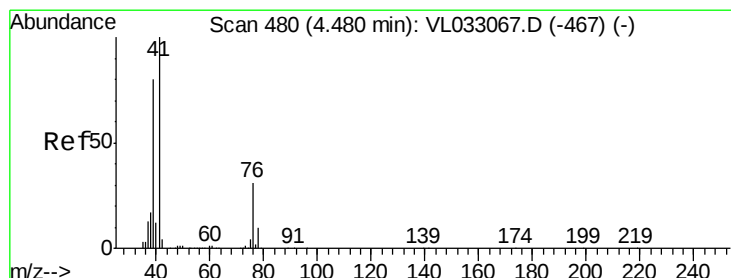
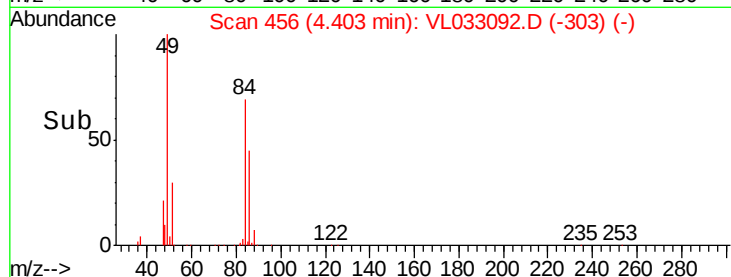
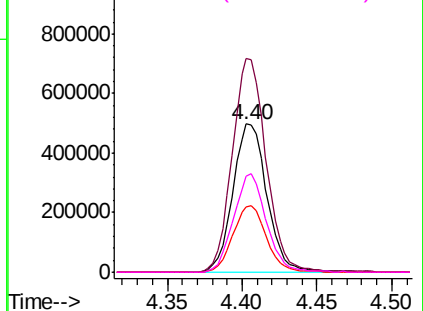
#20
Methylene Chloride
Concen: 12.895 ppbv
RT: 4.40 min Scan# 456
Delta R.T. -0.01 min
Lab File: VL033092.D
Acq: 16 Jan 2019 14:59

Instrument :
MSVOA_L
ClientSampleId :
IA1A

Tgt Ion: 84 Resp: 787251
Ion Ratio Lower Upper
84 100
49 143.9 115.8 173.6
51 43.9 35.7 53.5
86 64.6 49.7 74.5

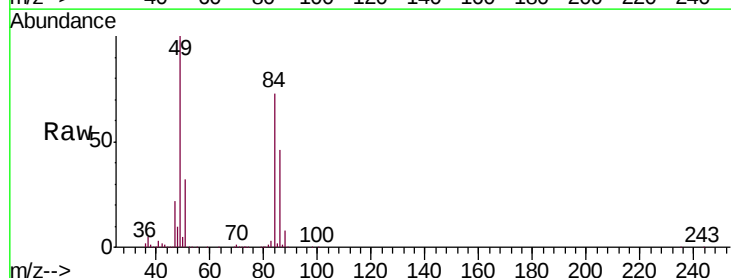


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

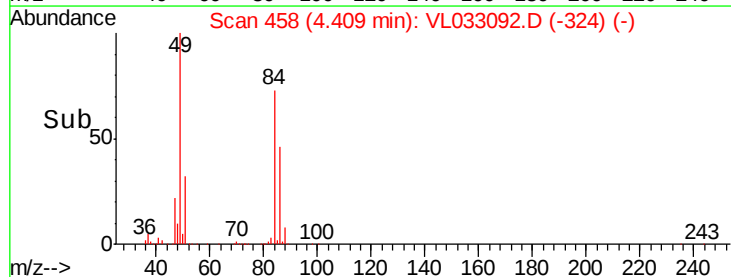
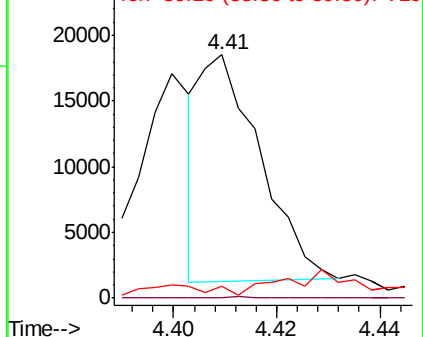


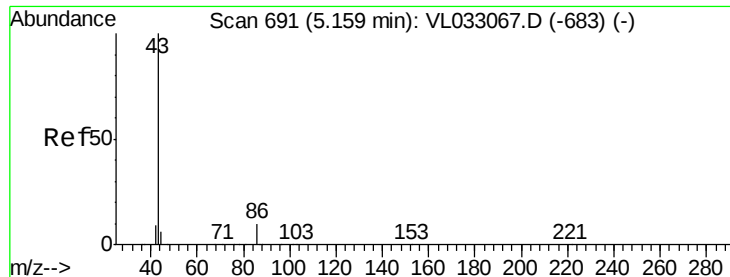
#21
Allyl Chloride
Concen: 0.153 ppbv
RT: 4.41 min Scan# 458
Delta R.T. -0.07 min
Lab File: VL033092.D
Acq: 16 Jan 2019 14:59

Tgt Ion: 41 Resp: 13881
Ion Ratio Lower Upper
41 100
76 0.0 24.6 36.8#
39 27.1 62.8 94.2#



Abundance Ion 41.10 (40.80 to 41.80): VL0
Ion 76.10 (75.80 to 76.80): VL0
Ion 39.10 (38.80 to 39.80): VL0





#23

Vinyl Acetate

Concen: 0.064 ppbv

RT: 5.14 min Scan# 686

Delta R.T. -0.02 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

IA1A

Tgt Ion: 43 Resp: 11943

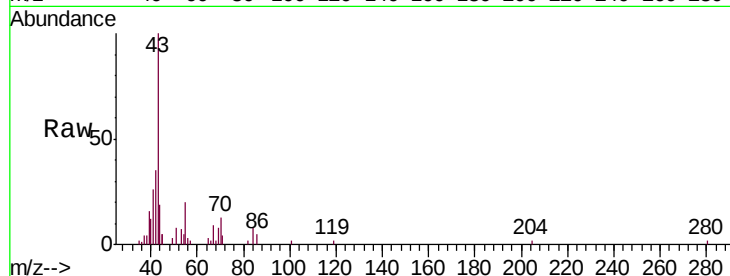
Ion Ratio Lower Upper

43 100

86 7.7 6.2 9.4

42 38.0 8.1 12.1#

44 11.8 4.3 6.5#

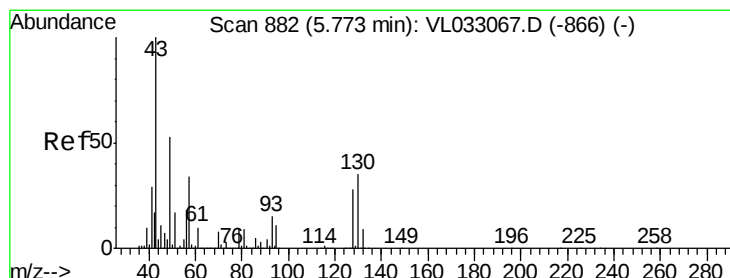
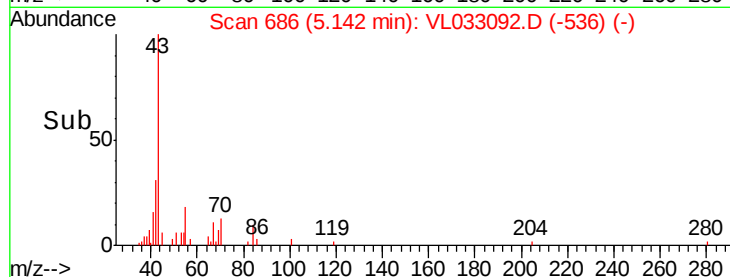
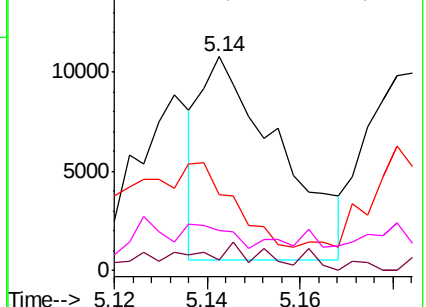


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 3.084 ppbv

RT: 5.78 min Scan# 883

Delta R.T. 0.01 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Tgt Ion: 43 Resp: 763383

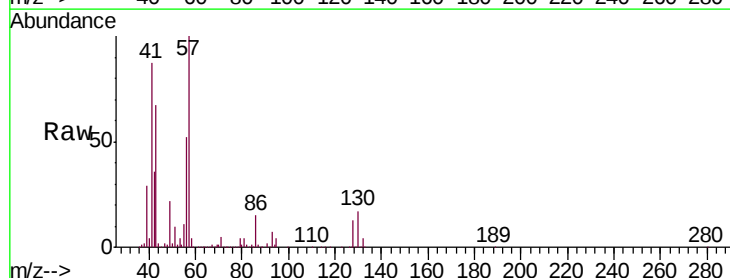
Ion Ratio Lower Upper

43 100

45 0.6 7.9 11.9#

61 0.5 7.8 11.8#

70 1.8 6.0 9.0#

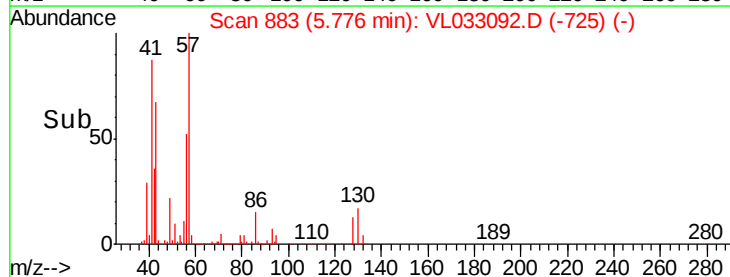
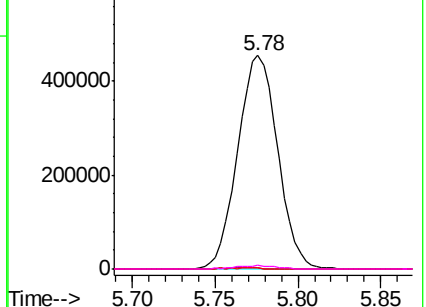


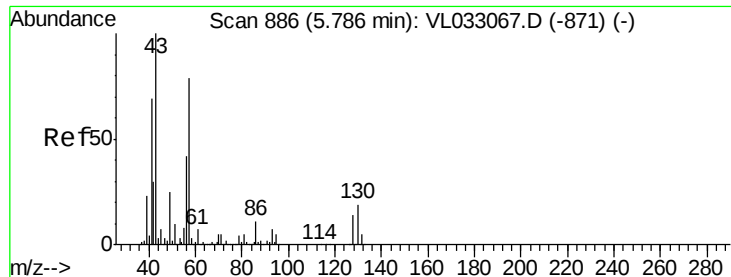
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



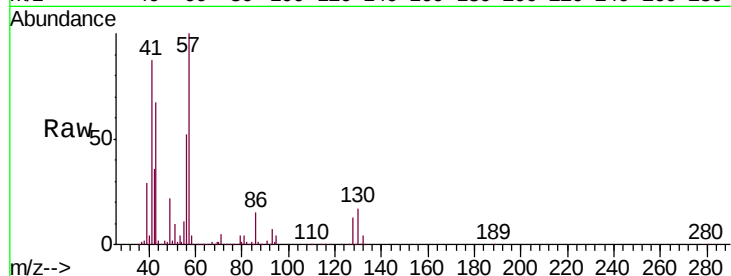


#26
Hexane
Concen: 9.504 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.01 min
Lab File: VL033092.D
Acq: 16 Jan 2019 14:59

Instrument :
MSVOA_L
ClientSampleId :
IA1A

Tgt Ion: 57 Resp: 1107700

Ion	Ratio	Lower	Upper
57	100		
41	91.4	70.8	106.2
43	69.3	171.8	257.6#
56	54.5	41.9	62.9



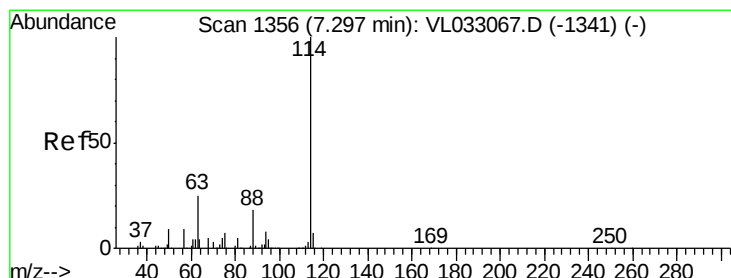
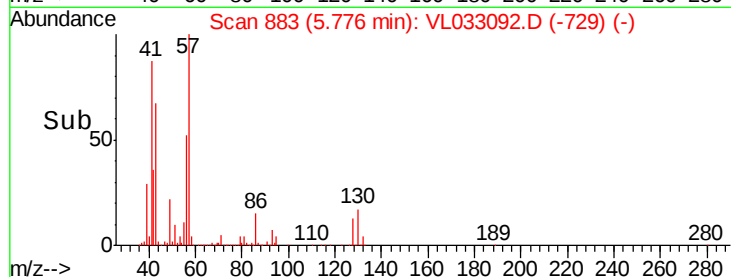
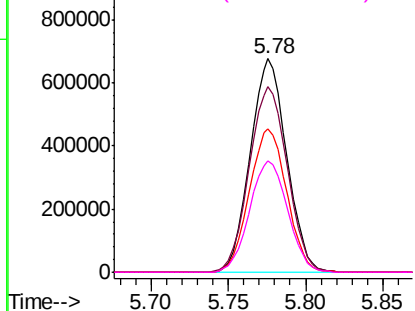
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

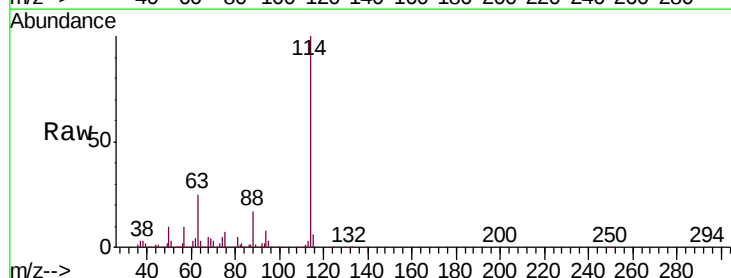
Ion 56.10 (55.80 to 56.80): VL0



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1353
Delta R.T. -0.01 min
Lab File: VL033092.D
Acq: 16 Jan 2019 14:59

Tgt Ion: 114 Resp: 2566395

Ion	Ratio	Lower	Upper
114	100		
63	25.1	20.1	30.1
88	17.7	14.0	21.0

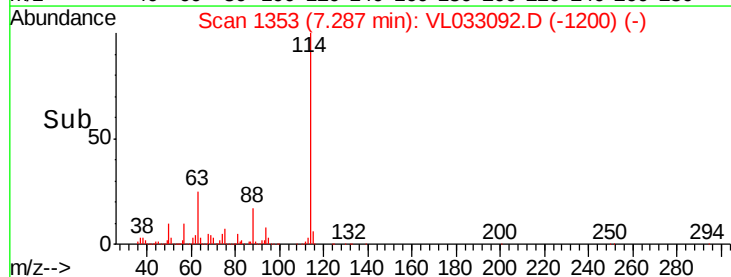
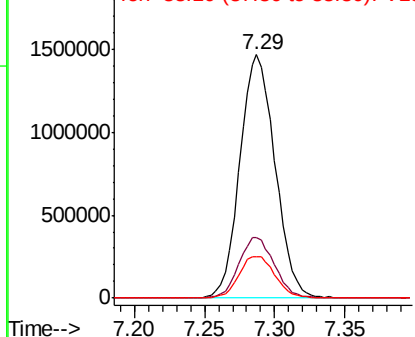


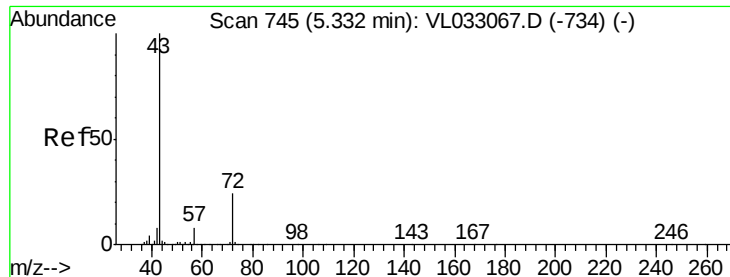
Abundance

Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

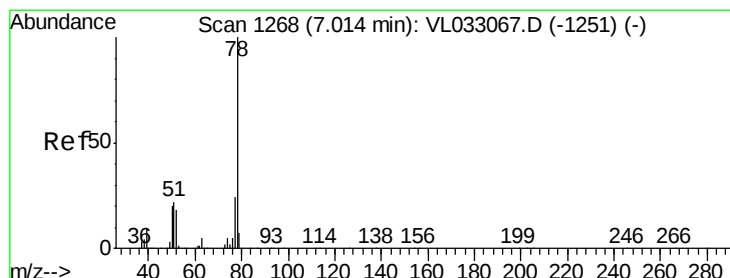
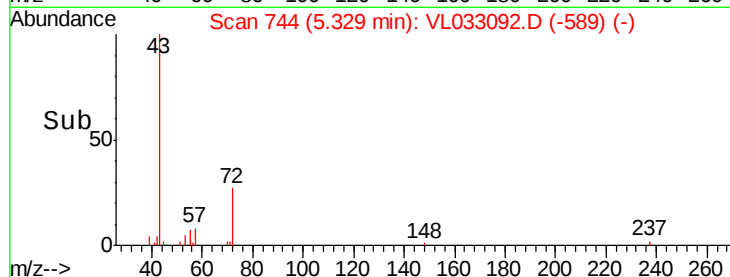
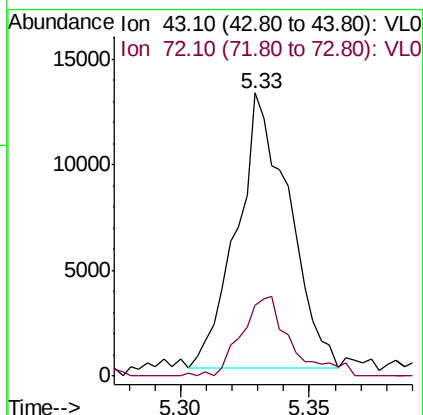
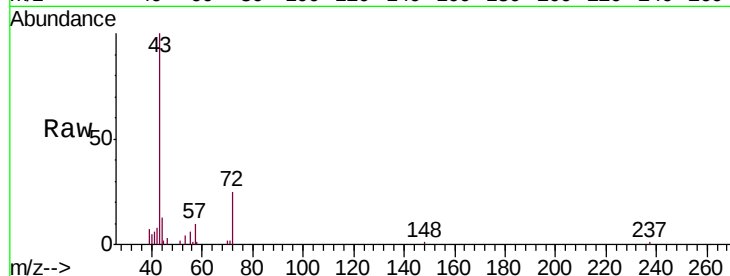




#34
2-Butanone
Concen: 0.124 ppbv
RT: 5.33 min Scan# 744
Delta R.T. -0.00 min
Lab File: VL033092.D
Acq: 16 Jan 2019 14:59

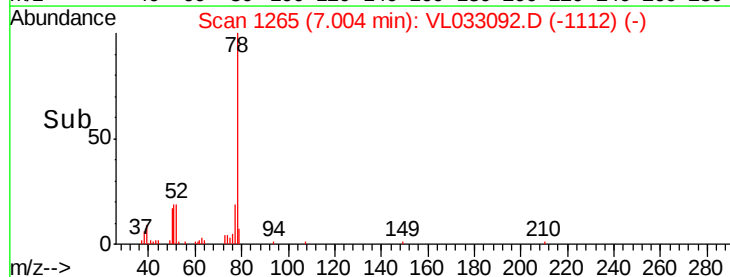
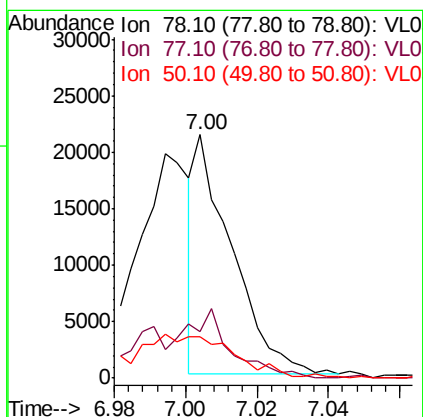
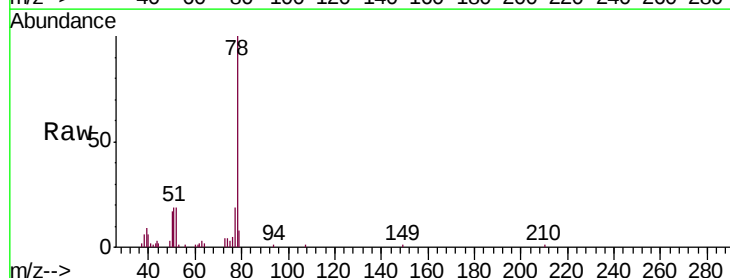
Instrument :
MSVOA_L
ClientSampleID :
IA1A

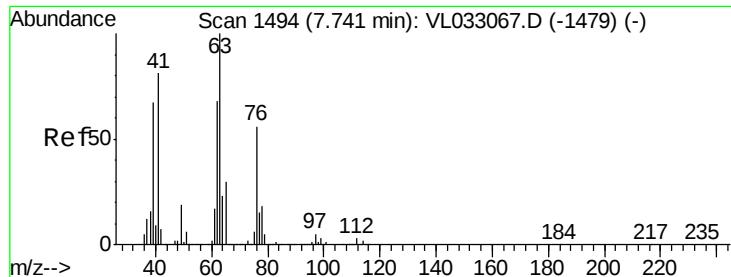
Tgt Ion: 43 Resp: 18541
Ion Ratio Lower Upper
43 100
72 27.2 18.9 28.3



#36
Benzene
Concen: 0.072 ppbv
RT: 7.00 min Scan# 1265
Delta R.T. -0.01 min
Lab File: VL033092.D
Acq: 16 Jan 2019 14:59

Tgt Ion: 78 Resp: 15203
Ion Ratio Lower Upper
78 100
77 19.5 18.5 27.7
50 16.4 15.7 23.5





#39

1,2-Dichloropropane

Concen: 8.084 ppbv

RT: 7.28 min Scan# 1352

Delta R.T. -0.46 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

IA1A

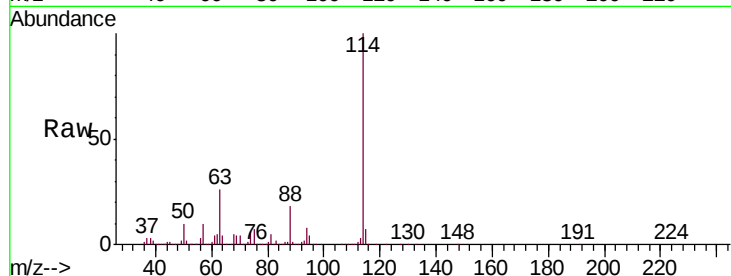
Tgt Ion: 63 Resp: 638420

Ion Ratio Lower Upper

63 100

41 0.0 61.9 92.9#

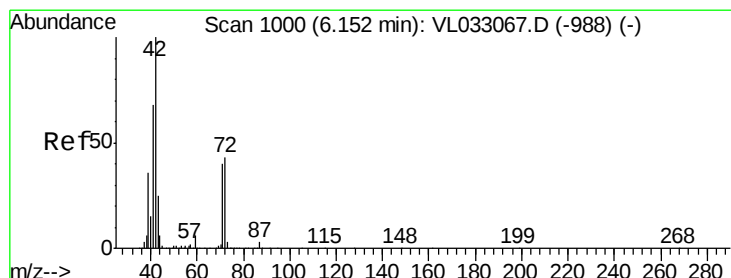
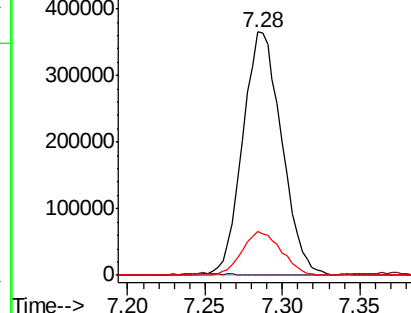
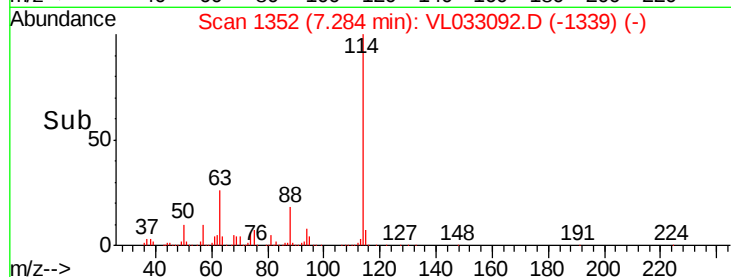
62 18.0 55.8 83.6#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#41

Tetrahydrofuran

Concen: 5.426 ppbv

RT: 5.78 min Scan# 883

Delta R.T. -0.38 min

Lab File: VL033092.D

Acq: 16 Jan 2019 14:59

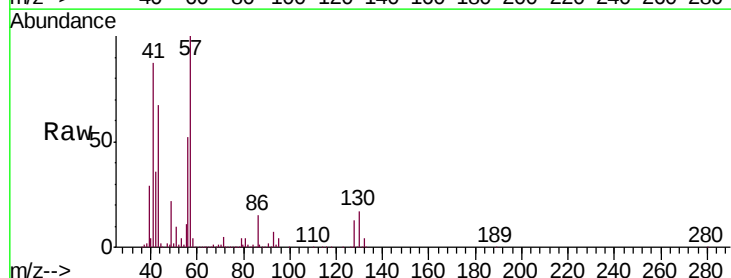
Tgt Ion: 42 Resp: 411845

Ion Ratio Lower Upper

42 100

72 1.0 32.9 49.3#

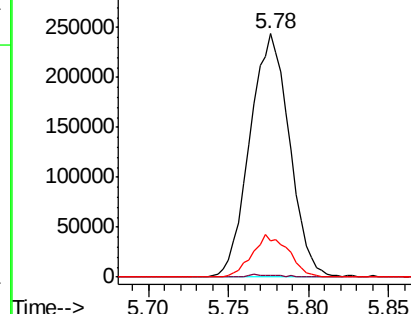
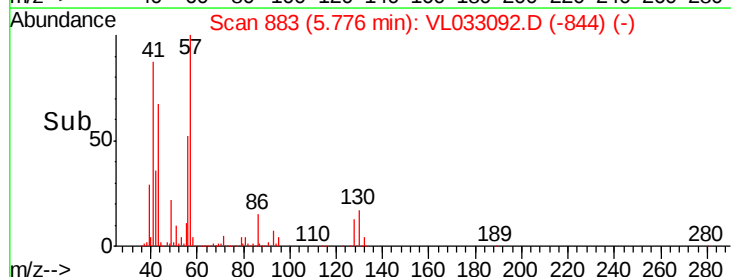
71 16.0 31.8 47.6#

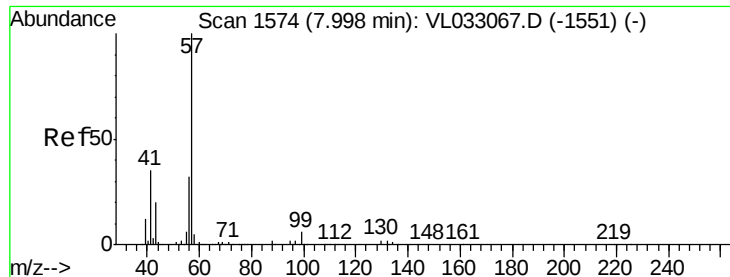


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0

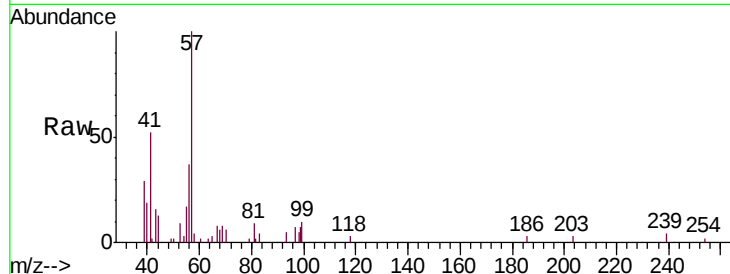




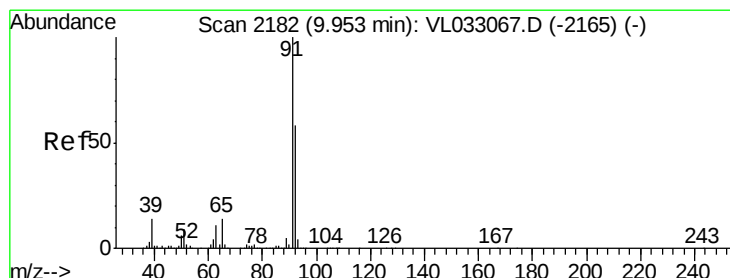
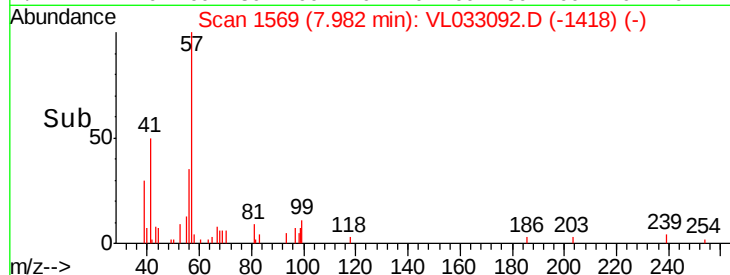
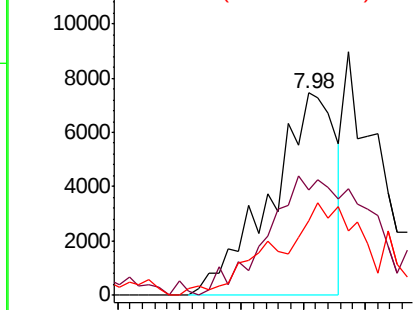
#44
 2,2,4-Trimethylpentane
 Concen: 0.031 ppbv
 RT: 7.98 min Scan# 1569
 Delta R.T. -0.01 min
 Lab File: VL033092.D
 Acq: 16 Jan 2019 14:59

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1A

Tgt Ion: 57 Resp: 10884
 Ion Ratio Lower Upper
 57 100
 41 96.4 26.2 39.2#
 56 70.1 24.9 37.3#

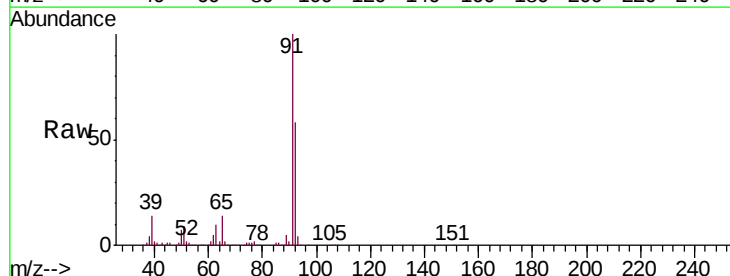


Abundance Ion 57.10 (56.80 to 57.80): VL0
 Ion 41.10 (40.80 to 41.80): VL0
 Ion 56.10 (55.80 to 56.80): VL0

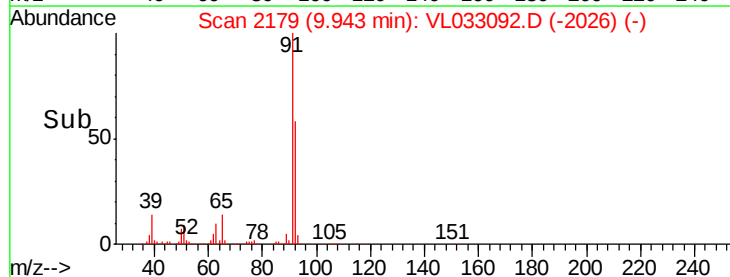
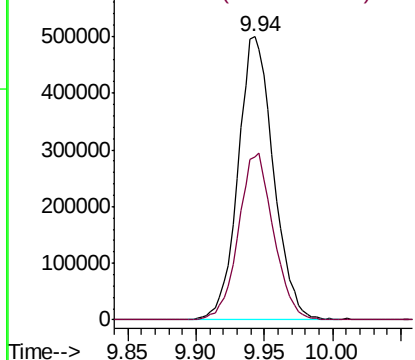


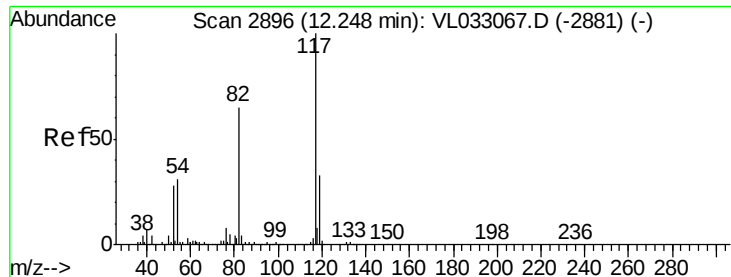
#53
 Toluene
 Concen: 3.998 ppbv
 RT: 9.94 min Scan# 2179
 Delta R.T. -0.01 min
 Lab File: VL033092.D
 Acq: 16 Jan 2019 14:59

Tgt Ion: 91 Resp: 900779
 Ion Ratio Lower Upper
 91 100
 92 58.5 47.7 71.5



Abundance Ion 91.10 (90.80 to 91.80): VL0
 Ion 92.10 (91.80 to 92.80): VL0

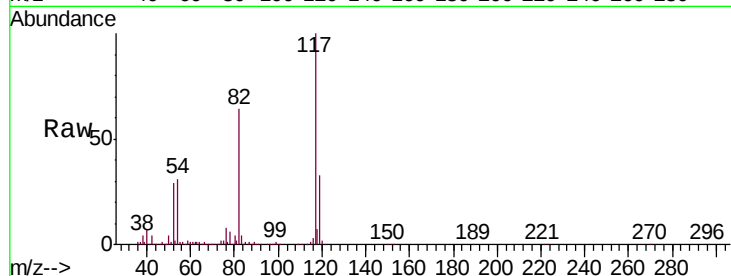




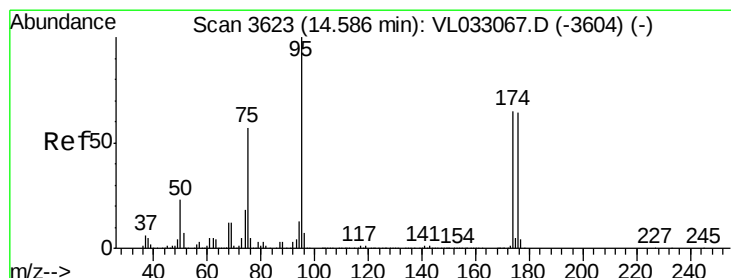
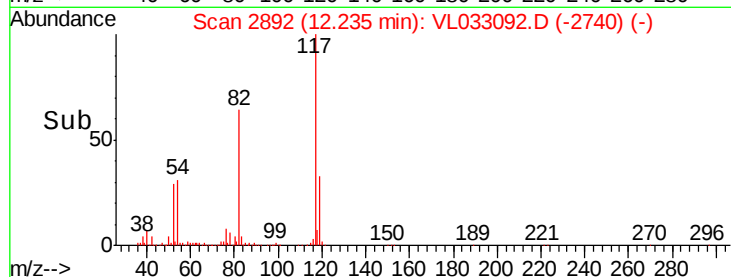
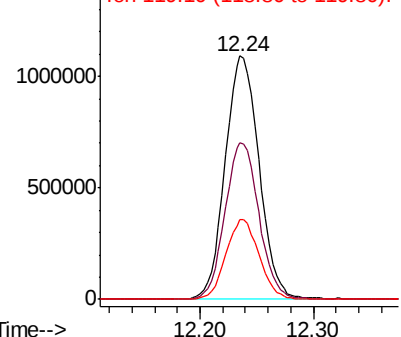
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL033092.D
Acq: 16 Jan 2019 14:59

Instrument :
MSVOA_L
ClientSampled :
IA1A

Tgt Ion:117 Resp: 2287498
Ion Ratio Lower Upper
117 100
82 64.5 48.9 73.3
119 32.3 24.6 37.0

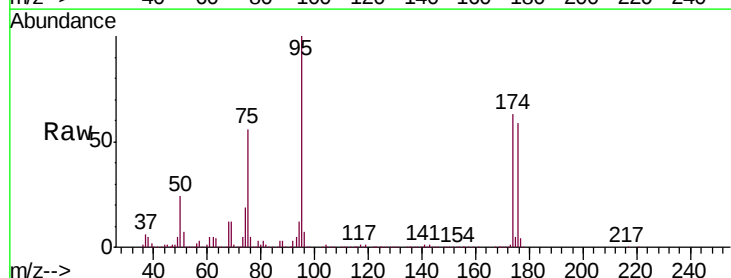


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 10.253 ppbv
RT: 14.57 min Scan# 3619
Delta R.T. -0.01 min
Lab File: VL033092.D
Acq: 16 Jan 2019 14:59

Tgt Ion: 95 Resp: 1797793
Ion Ratio Lower Upper
95 100
174 64.1 51.9 77.9
175 4.7 3.9 5.9



Abundance Ion 95.10 (94.80 to 95.80): VL0
Ion 174.00 (173.70 to 174.70): V
Ion 175.00 (174.70 to 175.70): V

