

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL021419\
 Data File : VL033214.D
 Acq On : 15 Feb 2019 1:31
 Operator : SY/AP
 Sample : K1483-06DL 10X
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 15 04:21:00 2019

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL020519AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 06 09:13:11 2019

QLast Update : Wed Feb 06 09:13:11 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	921446	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2065420	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2047962	10.00	ppbv	0.00

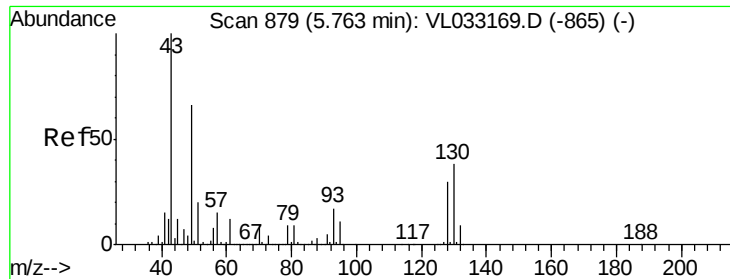
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1651186	10.47	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.70%

Target Compounds

						Qvalue
3) Chlorodifluoromethane	3.01	51	5534	0.050	ppbv	93
7) Chloroethane	3.60	64	12972	0.649	ppbv	99
9) Propene	3.05	41	5110	0.095	ppbv	100
11) Trichlorofluoromethane	4.00	101	12859	0.090	ppbv	96
12) 1,1,2-Trichlorotrifluoroet	4.55	101	23147	0.234	ppbv #	66
13) Ethanol	3.66	45	23543	1.317	ppbv	98
15) Acetone	3.91	43	81904	0.789	ppbv	94
16) 1,3-Butadiene	3.34	39	3691	0.075	ppbv #	7
17) tert-Butyl alcohol	4.36	59	686	0.035	ppbv #	74
18) 1,1-Dichloroethene	4.36	96	19933	0.451	ppbv	83
19) Isopropyl Alcohol	4.04	45	29245	0.415	ppbv #	95
20) Methylene Chloride	4.41	84	24200	0.586	ppbv	89
24) 1,1-Dichloroethane	5.09	63	884360	6.949	ppbv	99
25) Ethyl Acetate	5.78	43	20944	0.090	ppbv #	78
26) Hexane	5.78	57	26603	0.243	ppbv #	43
32) 1,1,1-Trichloroethane	6.62	97	3996908	21.617	ppbv	99
34) 2-Butanone	5.34	43	4321	0.033	ppbv #	35
37) 1,2-Dichloroethane	6.62	62	277614	2.393	ppbv #	1
38) Trichloroethene	7.96	130	3541	0.040	ppbv	96
39) 1,2-Dichloropropane	7.29	63	552638	6.685	ppbv #	26
58) Ethyl Benzene	12.86	91	10043	0.030	ppbv	89
59) m/p-Xylene	13.16	91	8377	0.030	ppbv #	100

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033214.D

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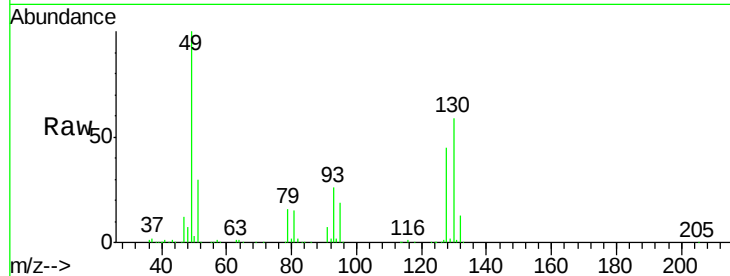
Tgt Ion: 49 Resp: 921446

Ion Ratio Lower Upper

49 100

128 46.0 23.6 71.0

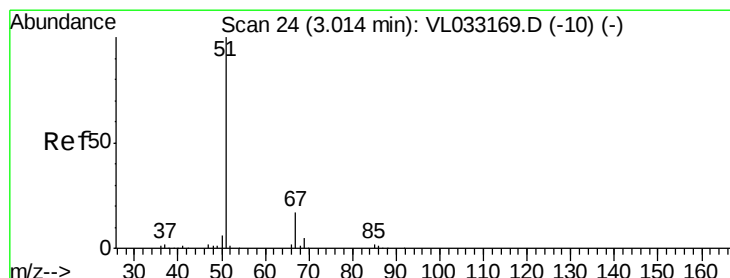
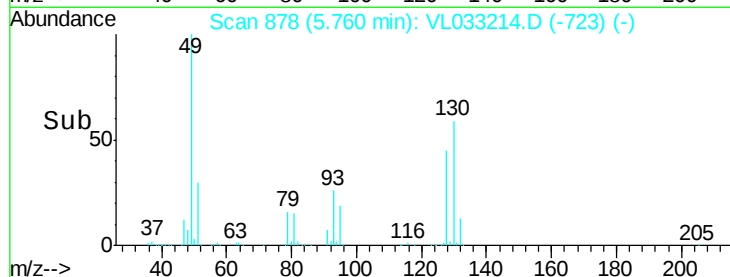
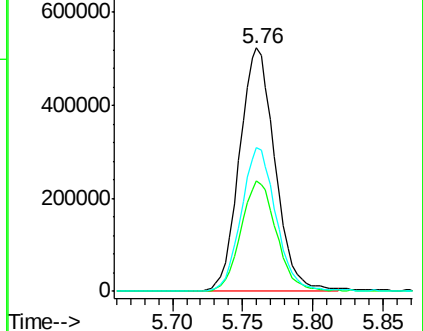
130 58.8 30.3 91.0



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



#3

Chlorodifluoromethane

Concen: 0.050 ppbv

RT: 3.01 min Scan# 23

Delta R.T. -0.00 min

Lab File: VL033214.D

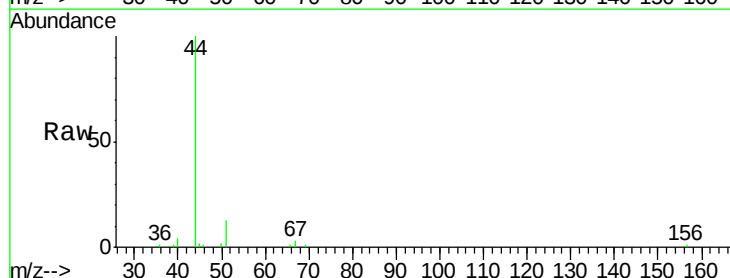
Acq: 15 Feb 2019 1:31

Tgt Ion: 51 Resp: 5534

Ion Ratio Lower Upper

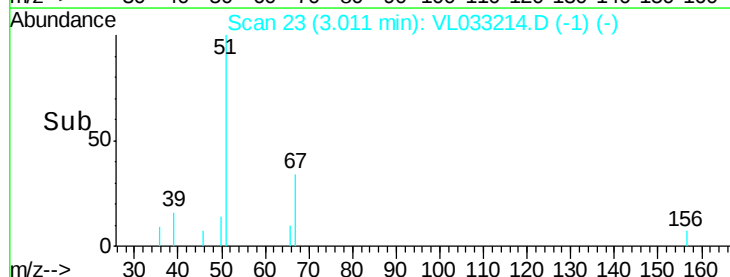
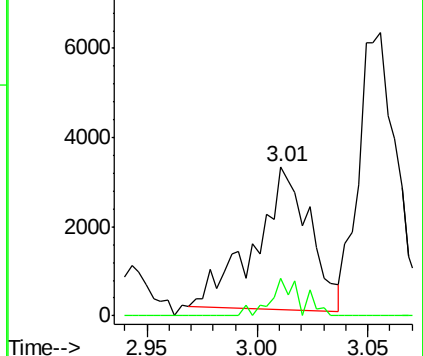
51 100

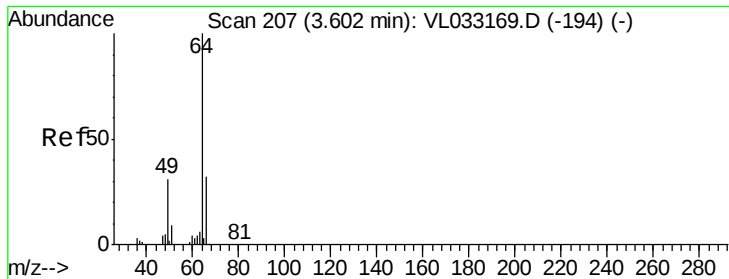
67 14.3 14.0 21.0



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#7

Chloroethane

Concen: 0.649 ppbv

RT: 3.60 min Scan# 206

Delta R.T. -0.00 min

Lab File: VL033214.D

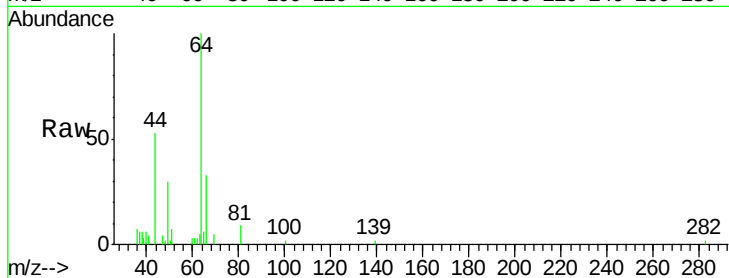
Acq: 15 Feb 2019 1:31

Tgt Ion: 64 Resp: 12972

Ion Ratio Lower Upper

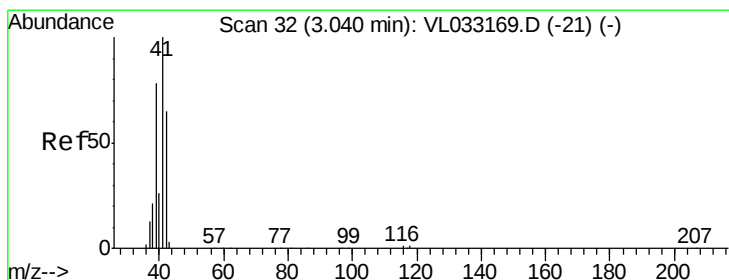
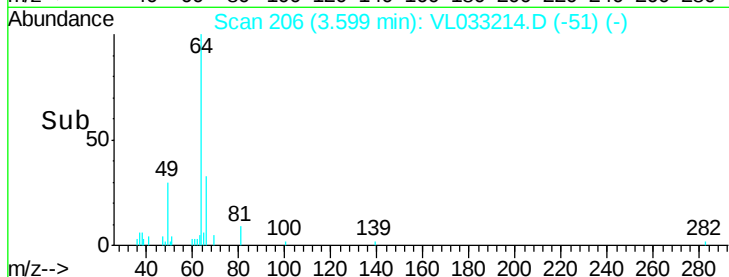
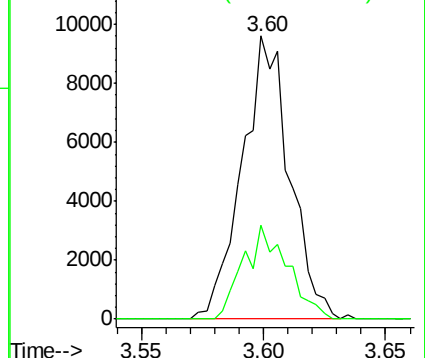
64 100

66 33.2 26.0 39.0



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#9

Propene

Concen: 0.095 ppbv

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033214.D

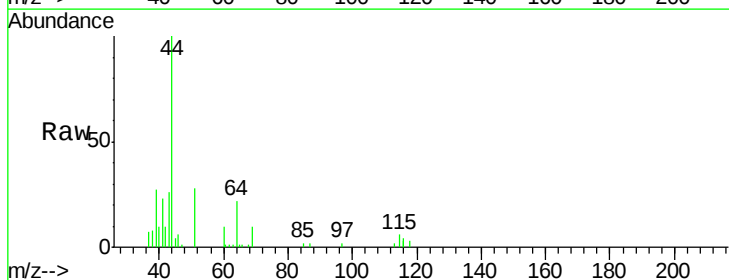
Acq: 15 Feb 2019 1:31

Tgt Ion: 41 Resp: 5110

Ion Ratio Lower Upper

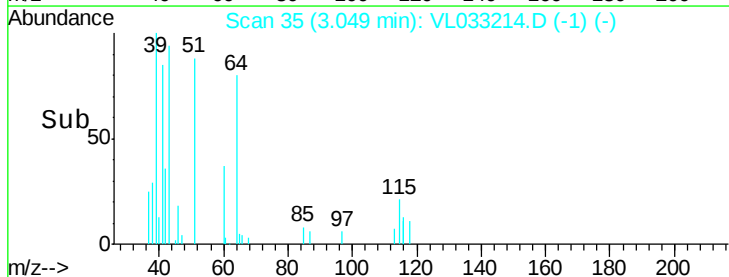
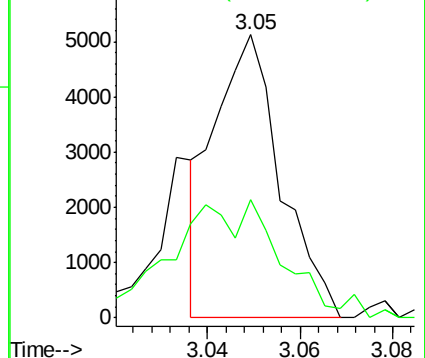
41 100

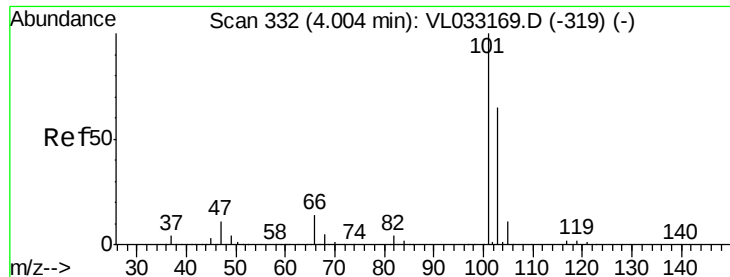
42 68.6 55.0 82.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#11

Trichlorofluoromethane

Concen: 0.090 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033214.D

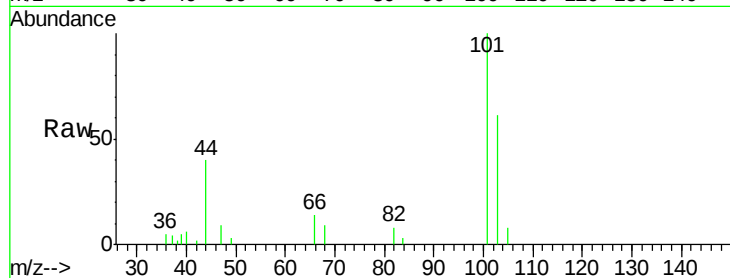
Acq: 15 Feb 2019 1:31

Tgt Ion:101 Resp: 12859

Ion Ratio Lower Upper

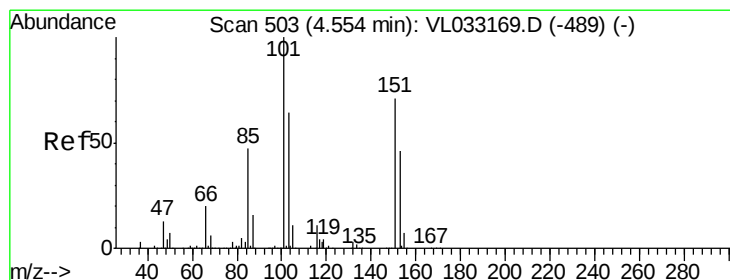
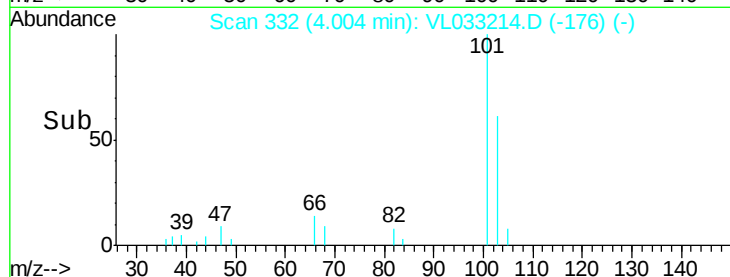
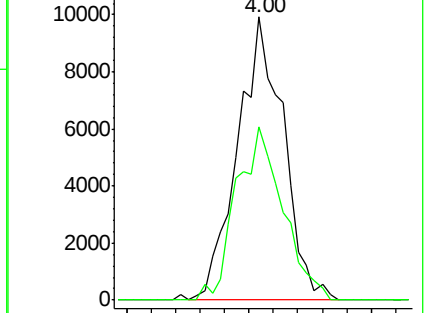
101 100

103 61.2 51.7 77.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.234 ppbv

RT: 4.55 min Scan# 502

Delta R.T. -0.00 min

Lab File: VL033214.D

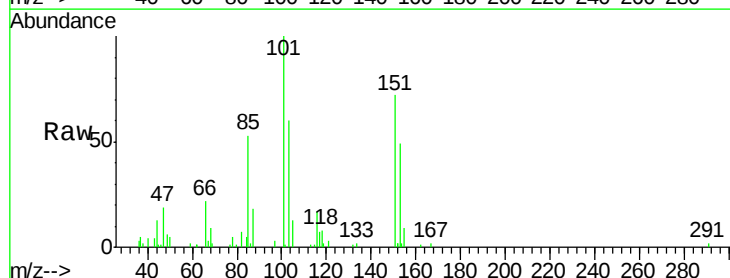
Acq: 15 Feb 2019 1:31

Tgt Ion:101 Resp: 23147

Ion Ratio Lower Upper

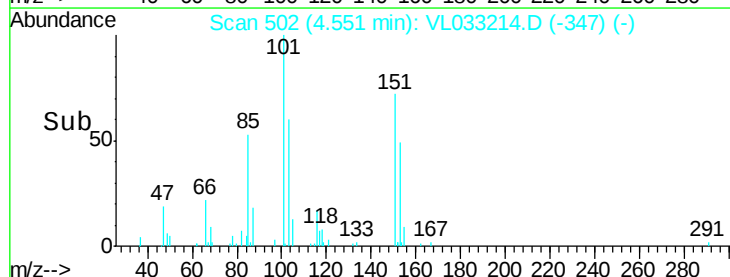
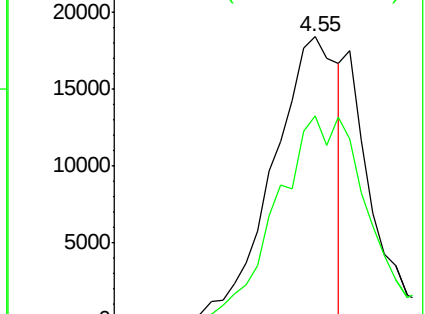
101 100

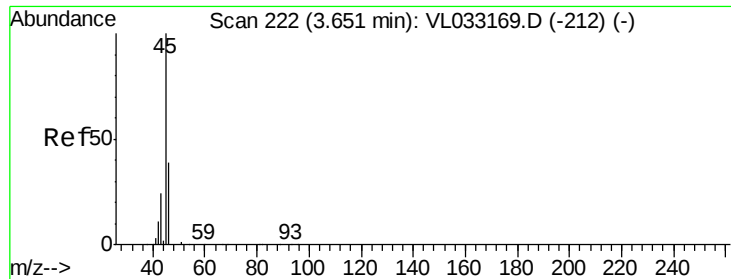
151 99.7 57.4 86.0#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 1.317 ppbv

RT: 3.66 min Scan# 225

Delta R.T. 0.01 min

Lab File: VL033214.D

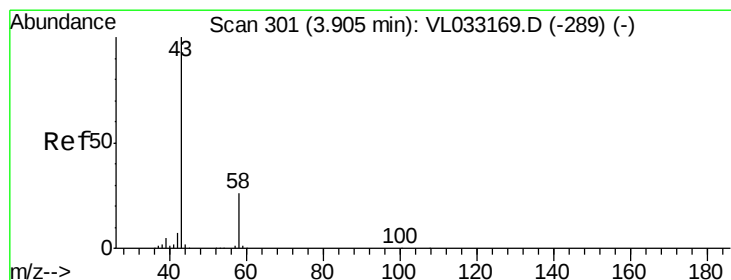
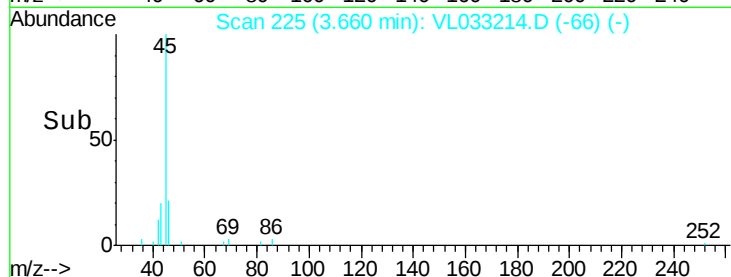
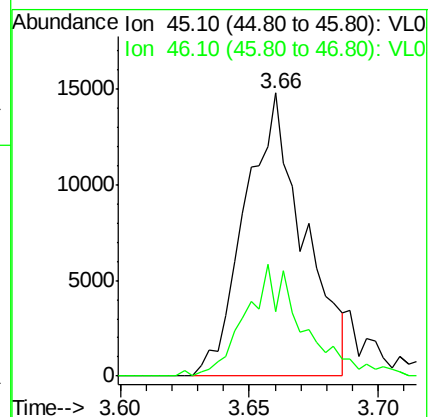
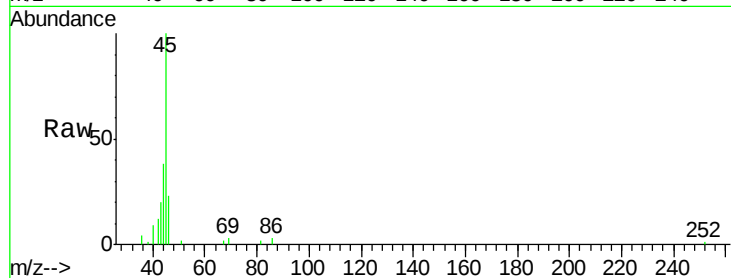
Acq: 15 Feb 2019 1:31

Tgt Ion: 45 Resp: 23543

Ion Ratio Lower Upper

45 100

46 38.5 15.0 60.2



#15

Acetone

Concen: 0.789 ppbv

RT: 3.91 min Scan# 303

Delta R.T. 0.01 min

Lab File: VL033214.D

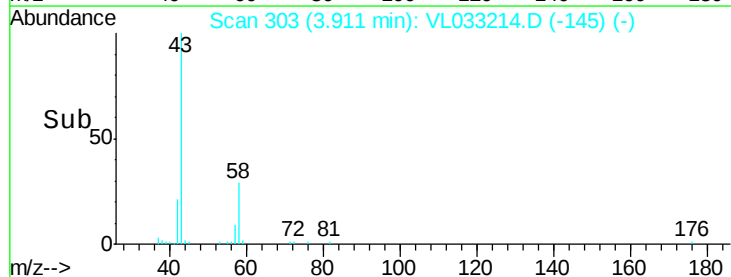
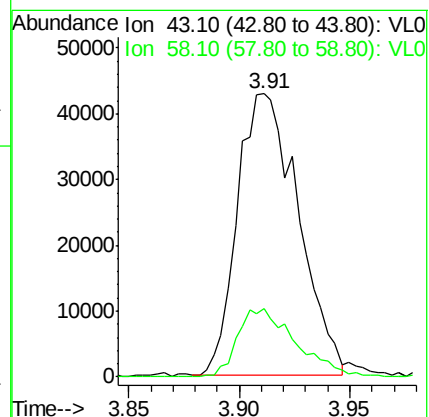
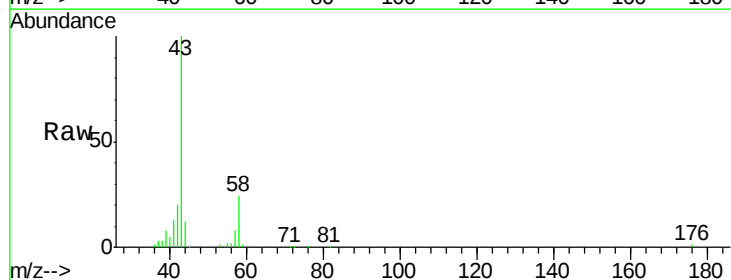
Acq: 15 Feb 2019 1:31

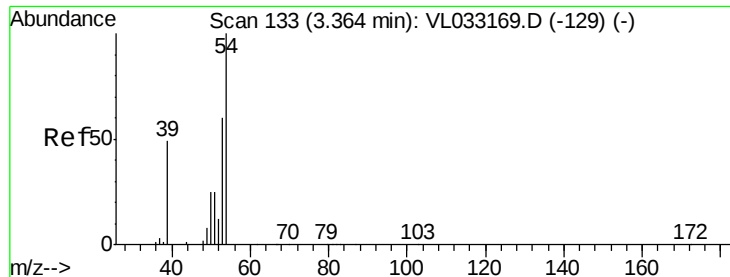
Tgt Ion: 43 Resp: 81904

Ion Ratio Lower Upper

43 100

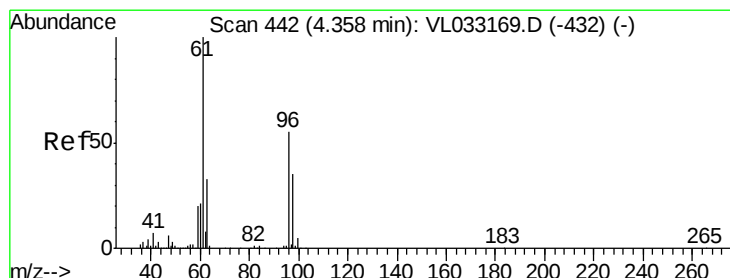
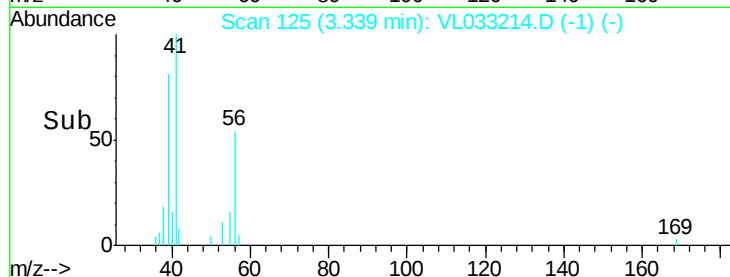
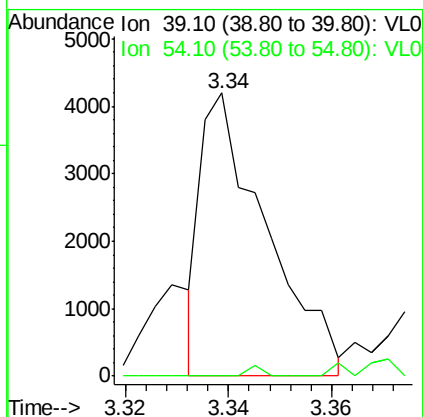
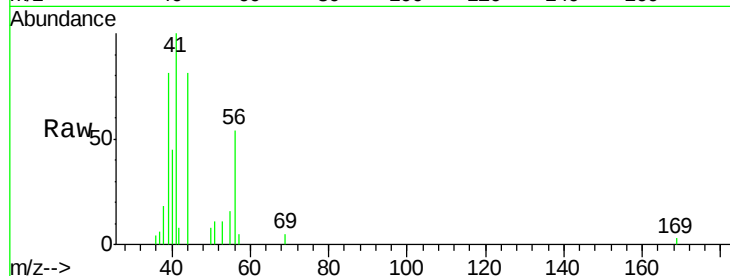
58 23.5 21.1 31.7





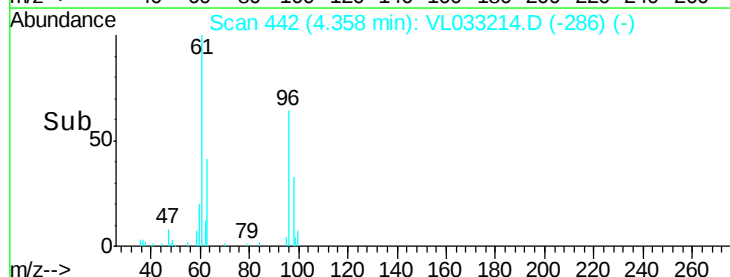
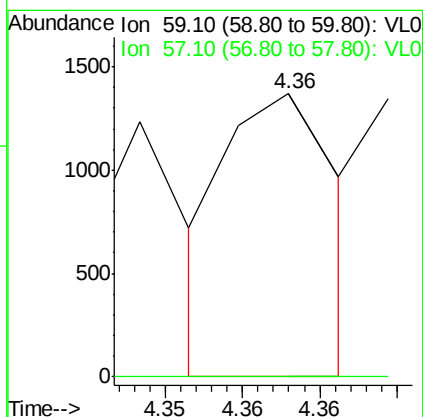
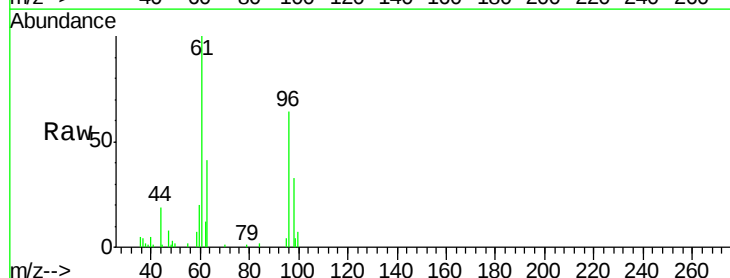
#16
1,3-Butadiene
Concen: 0.075 ppbv
RT: 3.34 min Scan# 125
Delta R.T. -0.03 min
Lab File: VL033214.D
Acq: 15 Feb 2019 1:31

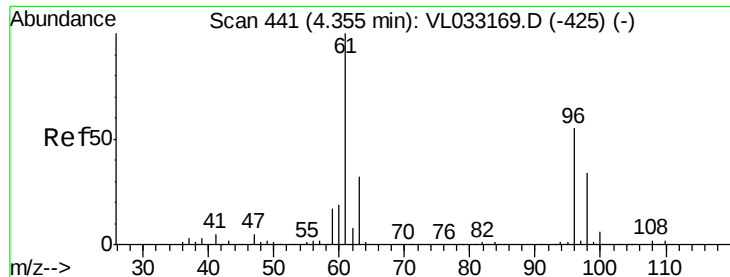
Tgt Ion: 39 Resp: 3691
Ion Ratio Lower Upper
39 100
54 1.8 71.3 106.9#



#17
tert-Butyl alcohol
Concen: 0.035 ppbv
RT: 4.36 min Scan# 442
Delta R.T. 0.00 min
Lab File: VL033214.D
Acq: 15 Feb 2019 1:31

Tgt Ion: 59 Resp: 686
Ion Ratio Lower Upper
59 100
57 0.0 7.6 11.4#





#18

1,1-Dichloroethene

Concen: 0.451 ppbv

RT: 4.36 min Scan# 442

Delta R.T. 0.00 min

Lab File: VL033214.D

Acq: 15 Feb 2019 1:31

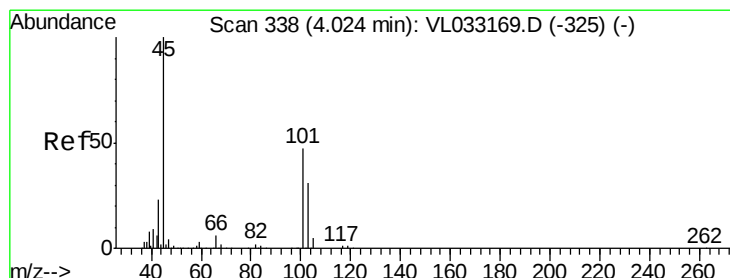
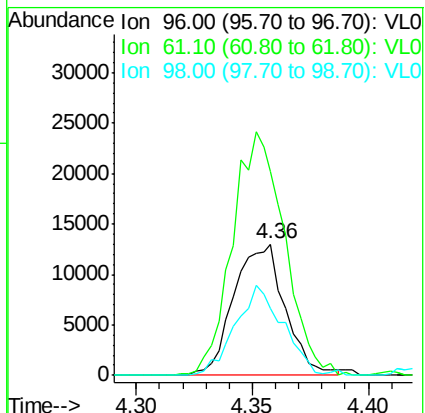
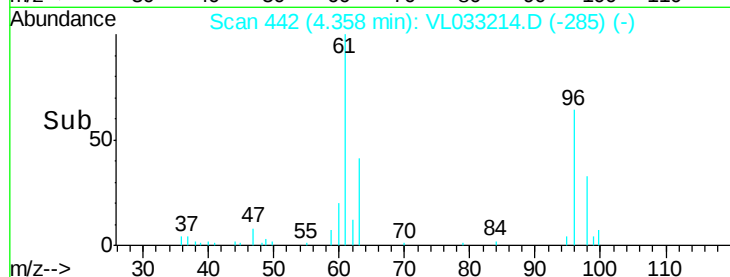
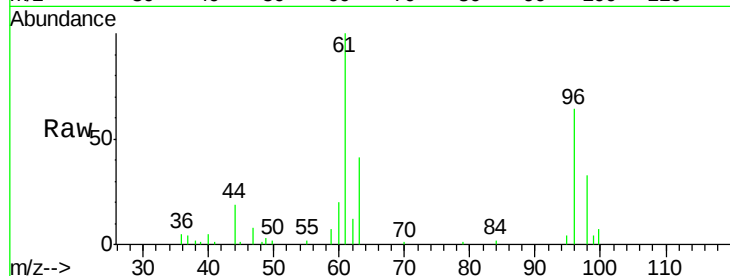
Tgt Ion: 96 Resp: 19933

Ion Ratio Lower Upper

96 100

61 156.1 145.0 217.6

98 50.8 50.0 75.0



#19

Isopropyl Alcohol

Concen: 0.415 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.02 min

Lab File: VL033214.D

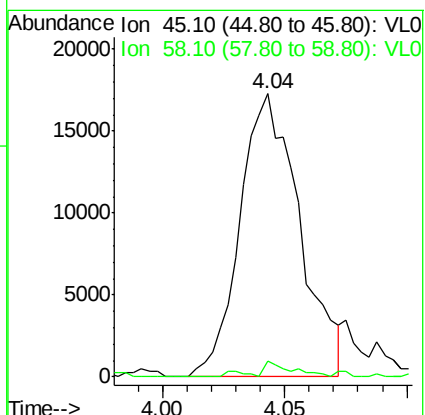
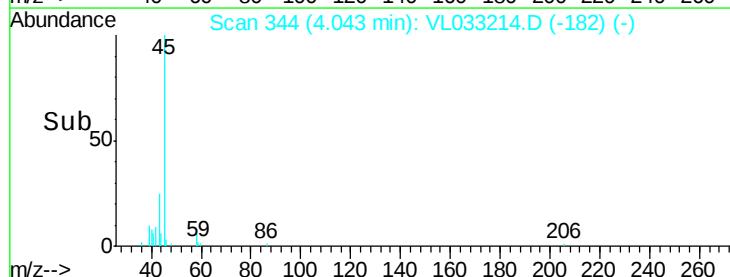
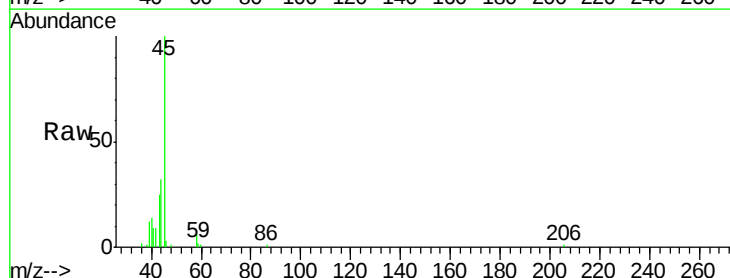
Acq: 15 Feb 2019 1:31

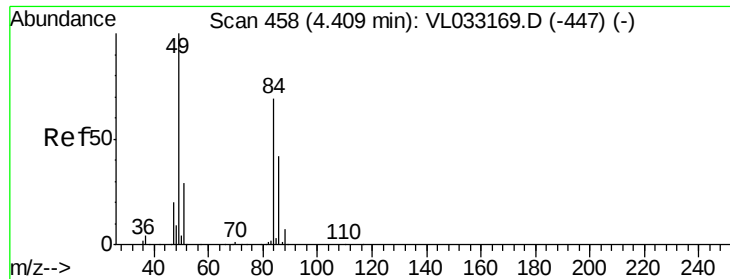
Tgt Ion: 45 Resp: 29245

Ion Ratio Lower Upper

45 100

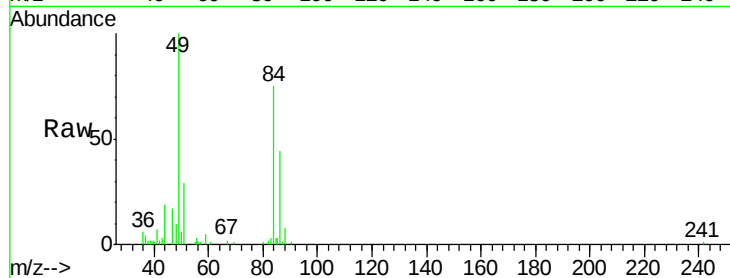
58 3.7 1.5 2.3#





#20
Methylene Chloride
Concen: 0.586 ppbv
RT: 4.41 min Scan# 457
Delta R.T. -0.00 min
Lab File: VL033214.D
Acq: 15 Feb 2019 1:31

Tgt Ion:	84	Resp:	24200
Ion	Ratio	Lower	Upper
84	100		
49	127.2	115.8	173.8
51	35.7	33.0	49.6
86	56.8	48.2	72.2

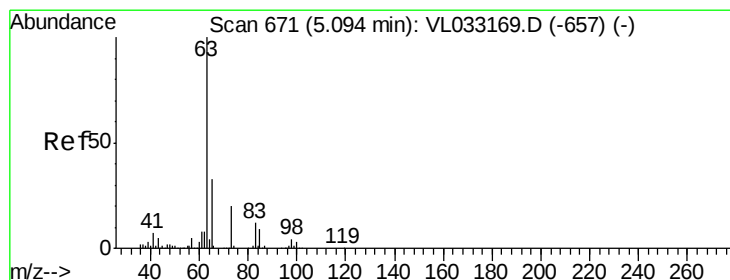
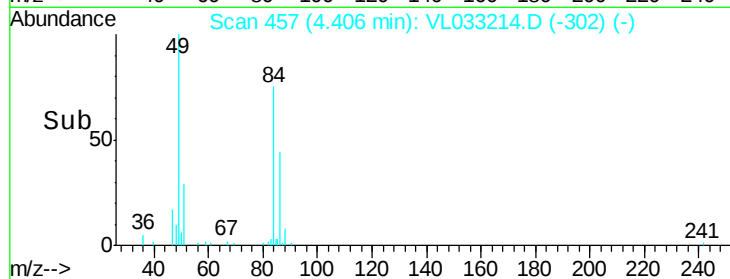
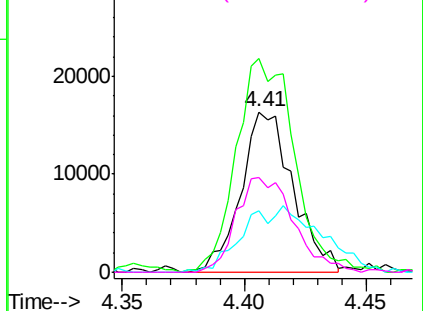


Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

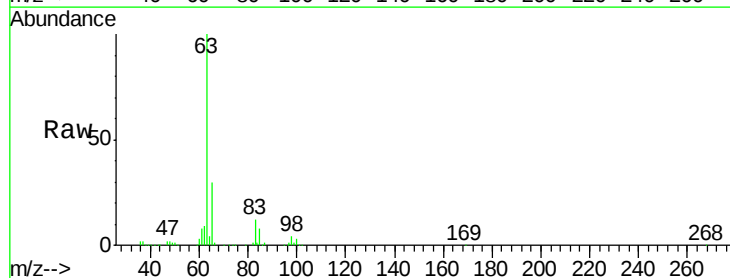
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#24
1,1-Dichloroethane
Concen: 6.949 ppbv
RT: 5.09 min Scan# 670
Delta R.T. -0.00 min
Lab File: VL033214.D
Acq: 15 Feb 2019 1:31

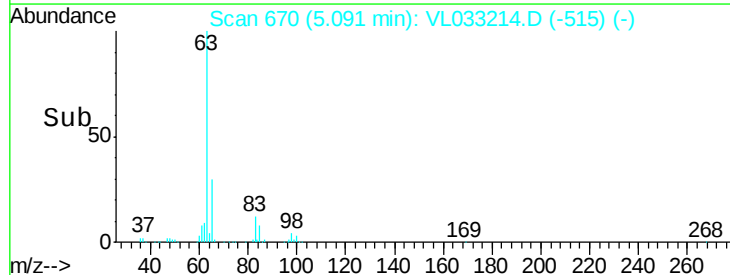
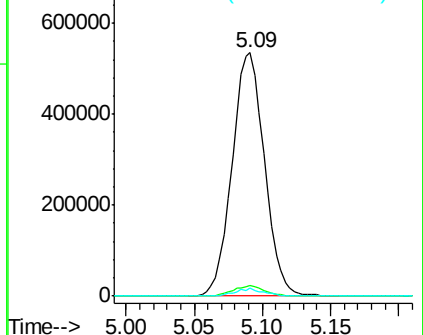
Tgt Ion:	63	Resp:	884360
Ion	Ratio	Lower	Upper
63	100		
98	4.1	2.1	6.5
100	3.1	1.4	4.2

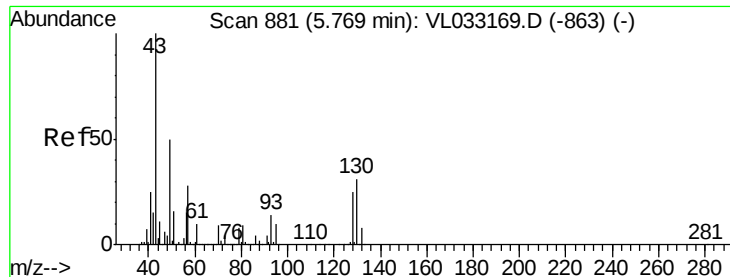


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





#25

Ethyl Acetate

Concen: 0.090 ppbv

RT: 5.78 min Scan# 883

Delta R.T. 0.01 min

Lab File: VL033214.D

Acq: 15 Feb 2019 1:31

Tgt Ion: 43 Resp: 20944

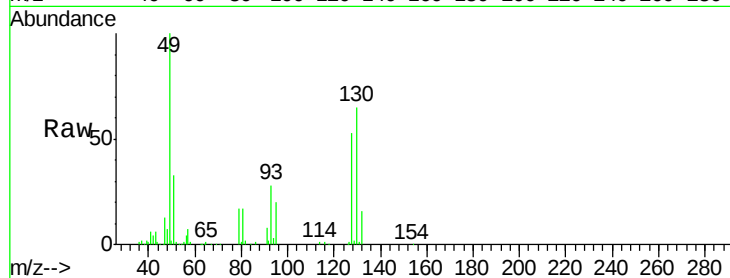
Ion Ratio Lower Upper

43 100

45 2.6 7.9 11.9#

61 0.0 7.5 11.3#

70 0.6 5.8 8.8#

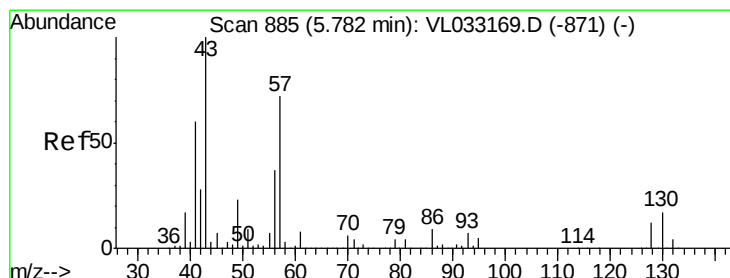
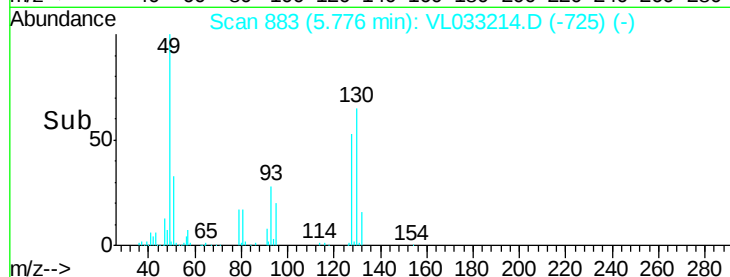
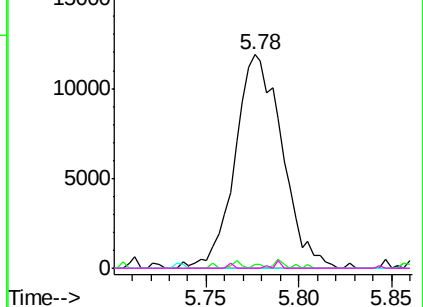


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.243 ppbv

RT: 5.78 min Scan# 885

Delta R.T. 0.00 min

Lab File: VL033214.D

Acq: 15 Feb 2019 1:31

Tgt Ion: 57 Resp: 26603

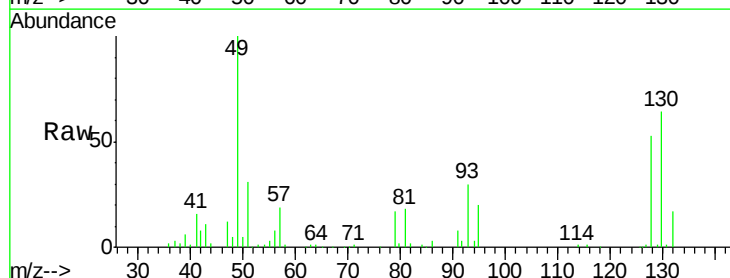
Ion Ratio Lower Upper

57 100

41 97.9 69.4 104.2

43 80.3 176.7 265.1#

56 56.2 41.4 62.0

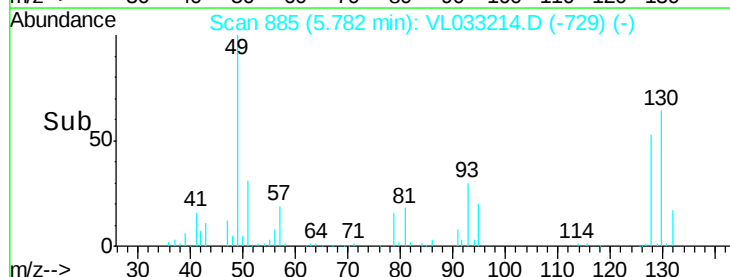
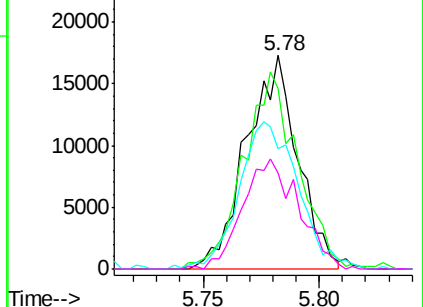


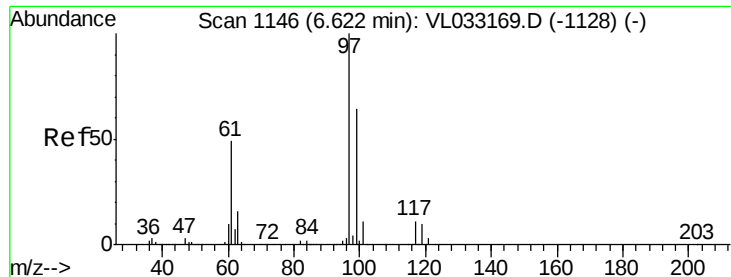
Abundance Ion 57.10 (56.80 to 57.80): VL0

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





#32

1,1,1-Trichloroethane

Concen: 21.617 ppbv

RT: 6.62 min Scan# 1144

Delta R.T. -0.01 min

Lab File: VL033214.D

Acq: 15 Feb 2019 1:31

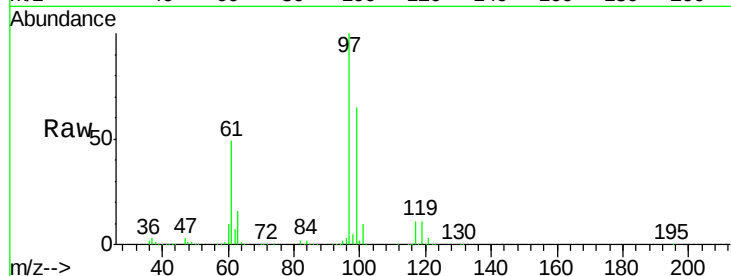
Tgt Ion: 97 Resp: 3996908

Ion Ratio Lower Upper

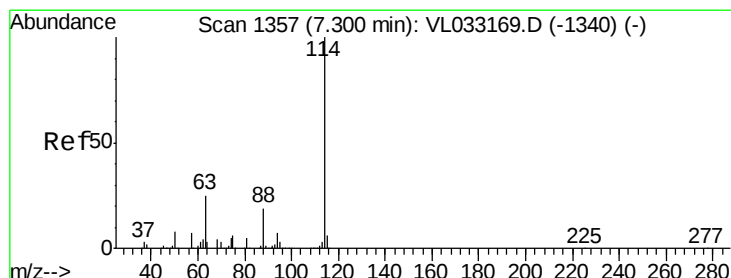
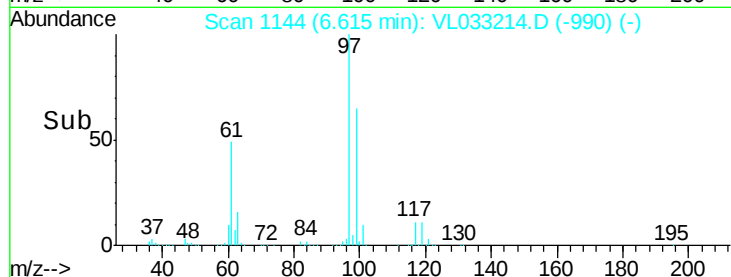
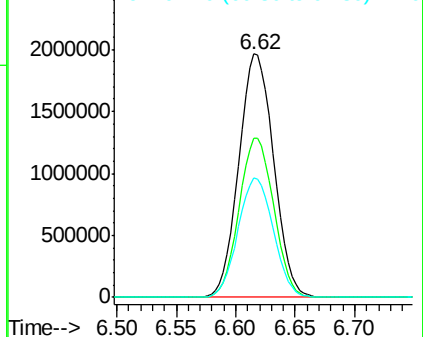
97 100

99 65.1 51.4 77.2

61 49.6 38.9 58.3



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 99.00 (98.70 to 99.70): VL0
Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.01 min

Lab File: VL033214.D

Acq: 15 Feb 2019 1:31

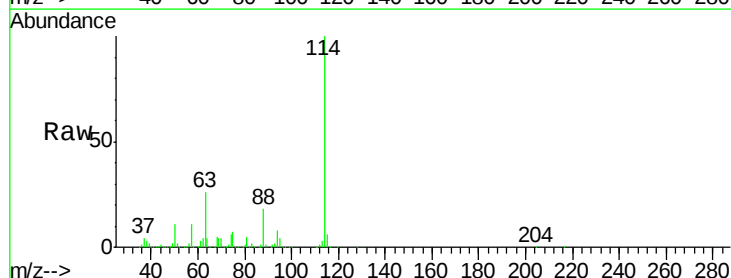
Tgt Ion: 114 Resp: 2065420

Ion Ratio Lower Upper

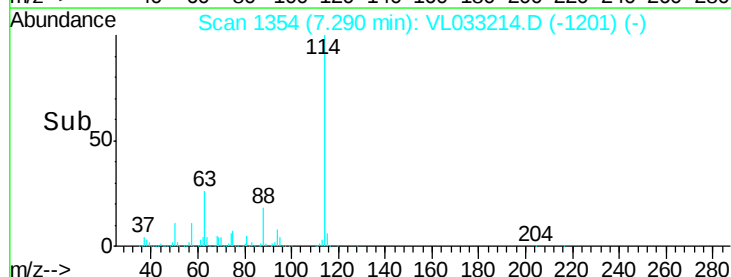
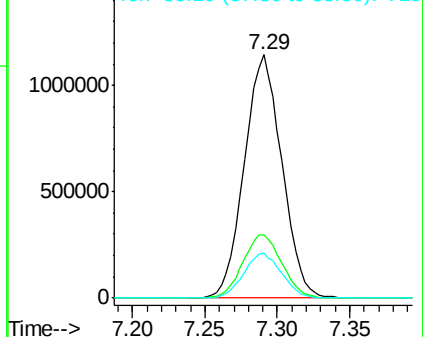
114 100

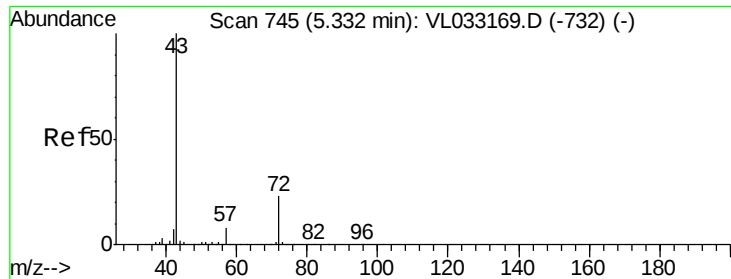
63 27.0 20.8 31.2

88 18.7 14.6 22.0



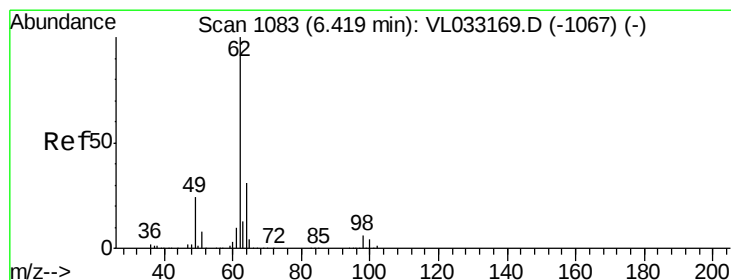
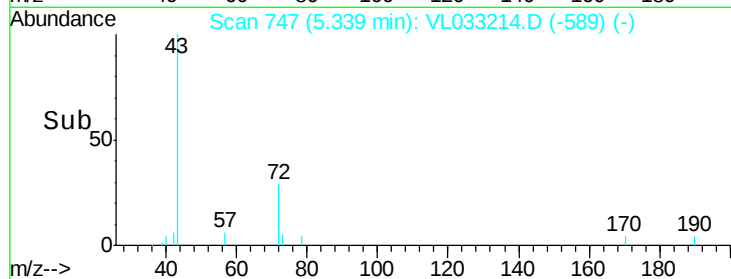
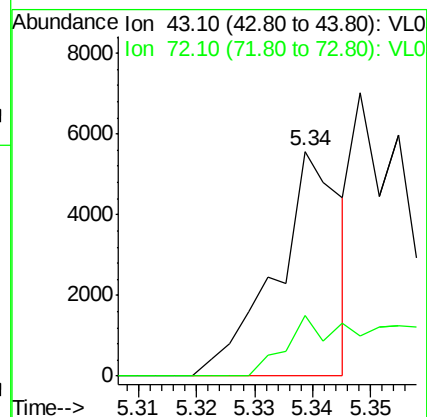
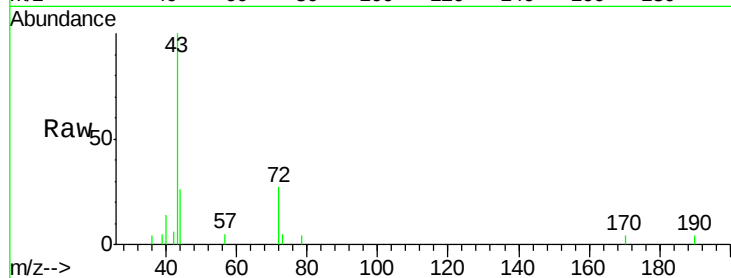
Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





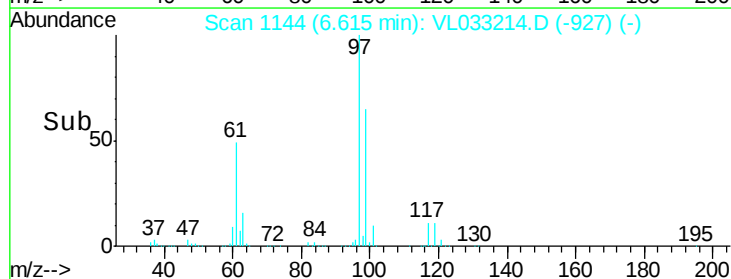
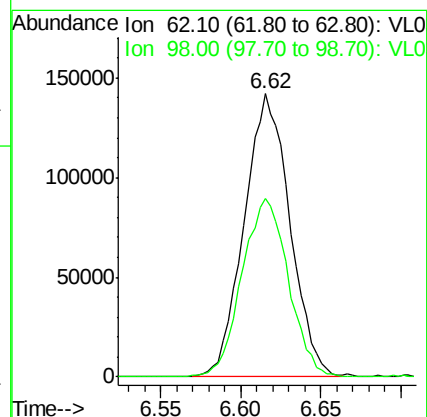
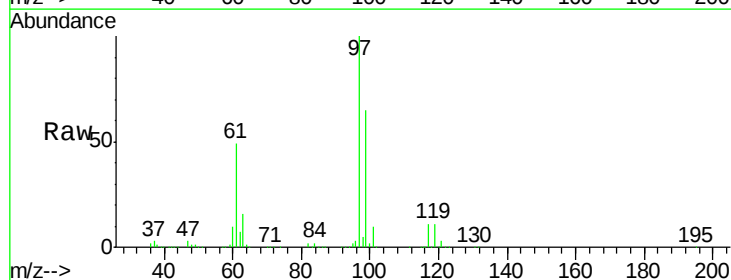
#34
 2-Butanone
 Concen: 0.033 ppbv
 RT: 5.34 min Scan# 747
 Delta R.T. 0.01 min
 Lab File: VL033214.D
 Acq: 15 Feb 2019 1:31

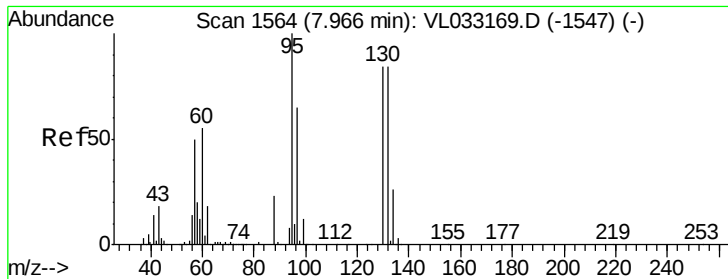
Tgt Ion: 43 Resp: 4321
 Ion Ratio Lower Upper
 43 100
 72 53.1 17.8 26.6#



#37
 1,2-Dichloroethane
 Concen: 2.393 ppbv
 RT: 6.62 min Scan# 1144
 Delta R.T. 0.20 min
 Lab File: VL033214.D
 Acq: 15 Feb 2019 1:31

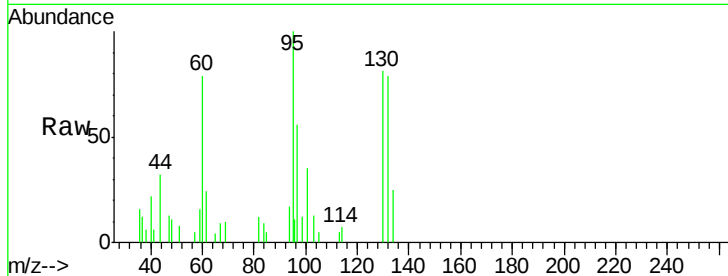
Tgt Ion: 62 Resp: 277614
 Ion Ratio Lower Upper
 62 100
 98 64.1 4.7 7.1#



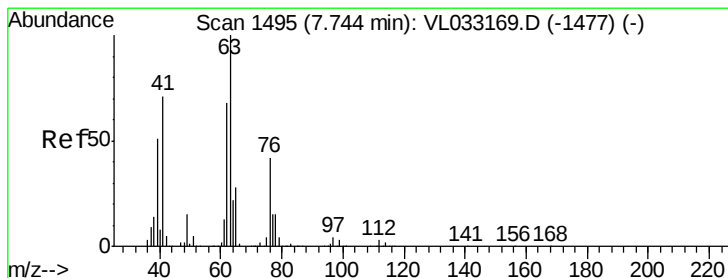
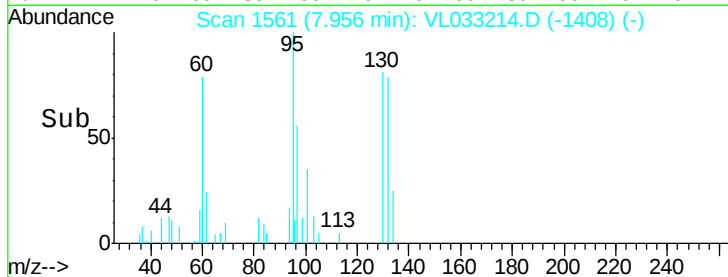
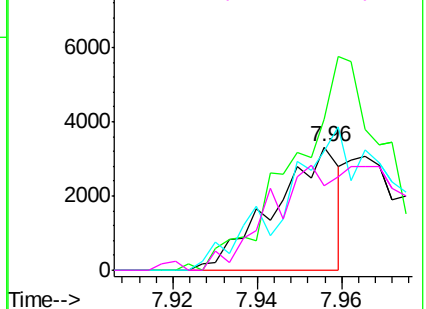


#38
 Trichloroethene
 Concen: 0.040 ppbv
 RT: 7.96 min Scan# 1561
 Delta R.T. -0.01 min
 Lab File: VL033214.D
 Acq: 15 Feb 2019 1:31

Tgt Ion: 130 Resp: 3541
 Ion Ratio Lower Upper
 130 100
 95 118.1 95.5 143.3
 132 96.8 80.0 120.0
 97 68.4 62.2 93.2

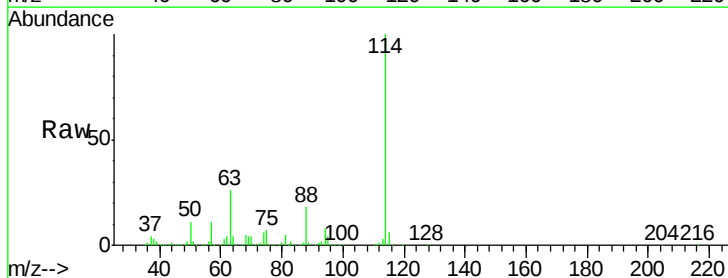


Abundance Ion 130.00 (129.70 to 130.70): V
 Ion 95.00 (94.70 to 95.70): VL0
 Ion 132.00 (131.70 to 132.70): V
 Ion 97.00 (96.70 to 97.70): VL0

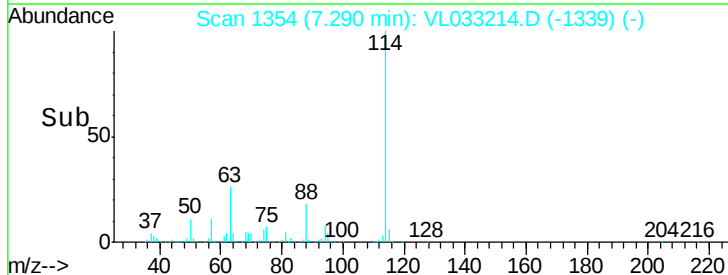
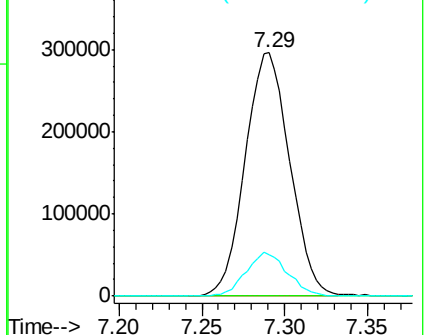


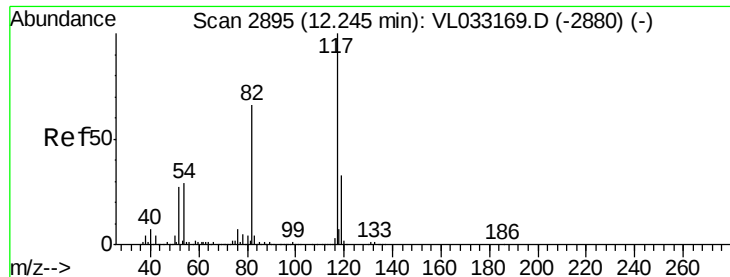
#39
 1,2-Dichloropropane
 Concen: 6.685 ppbv
 RT: 7.29 min Scan# 1354
 Delta R.T. -0.45 min
 Lab File: VL033214.D
 Acq: 15 Feb 2019 1:31

Tgt Ion: 63 Resp: 552638
 Ion Ratio Lower Upper
 63 100
 41 0.2 56.4 84.6#
 62 17.2 54.2 81.4#



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

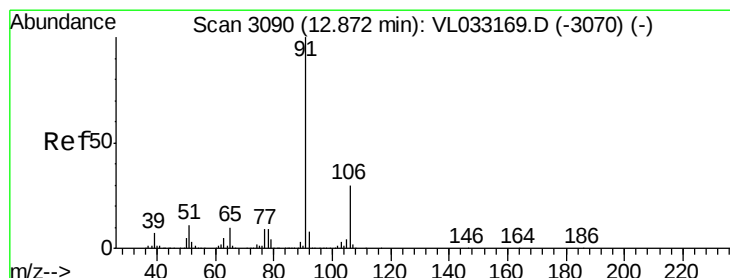
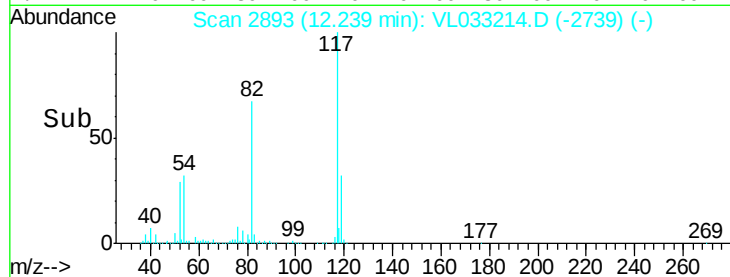
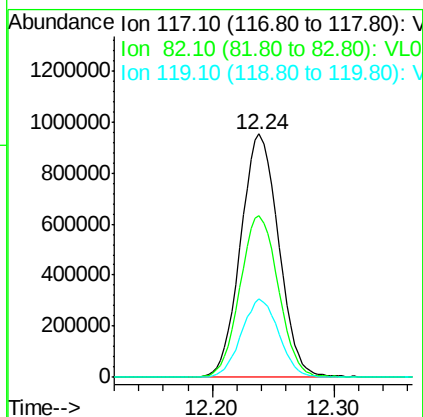
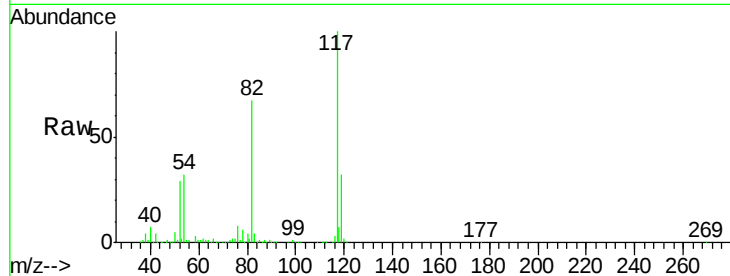




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2893
Delta R.T. -0.01 min
Lab File: VL033214.D
Acq: 15 Feb 2019 1:31

Tgt Ion: 117 Resp: 2047962

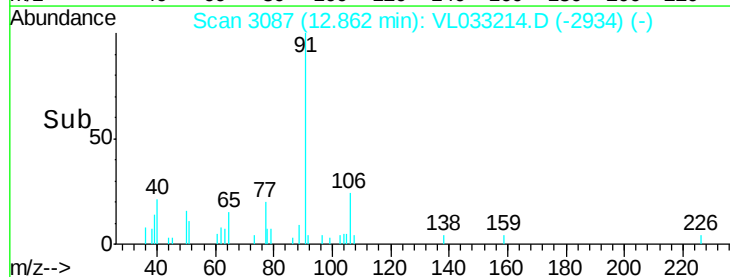
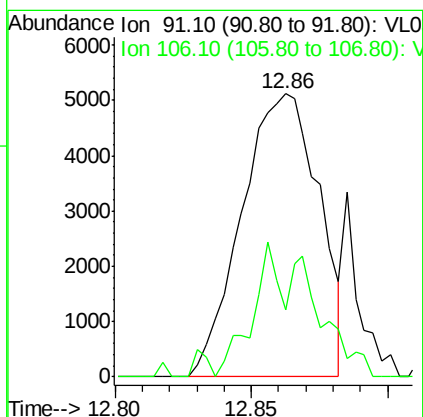
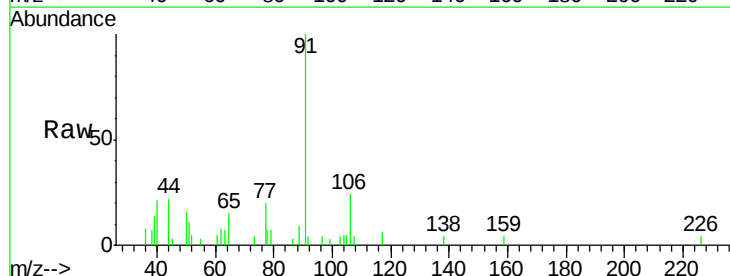
Ion	Ratio	Lower	Upper
117	100		
82	67.7	49.5	74.3
119	32.0	24.4	36.6

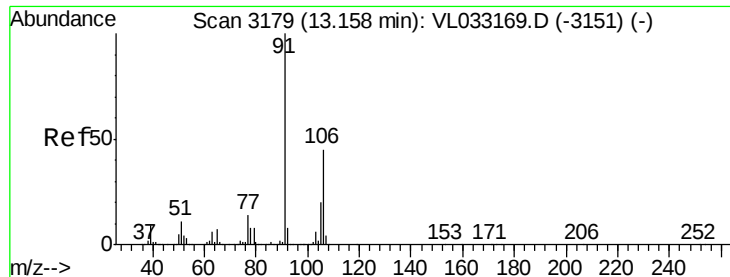


#58
Ethyl Benzene
Concen: 0.030 ppbv
RT: 12.86 min Scan# 3087
Delta R.T. -0.01 min
Lab File: VL033214.D
Acq: 15 Feb 2019 1:31

Tgt Ion: 91 Resp: 10043

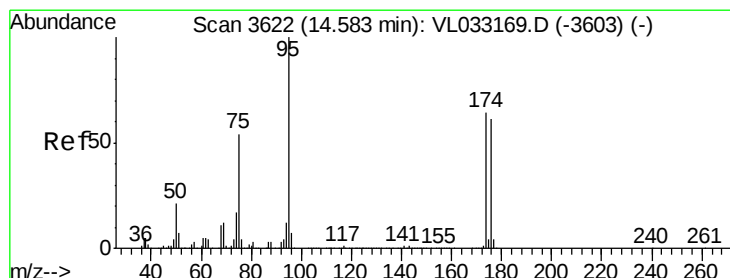
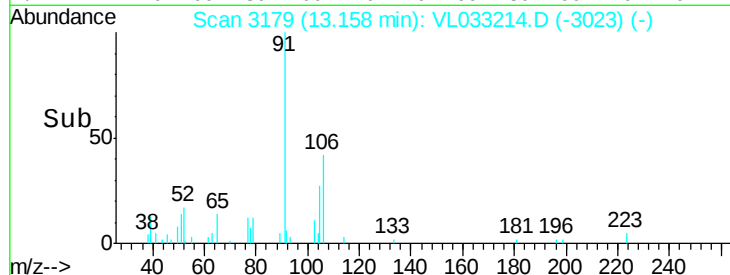
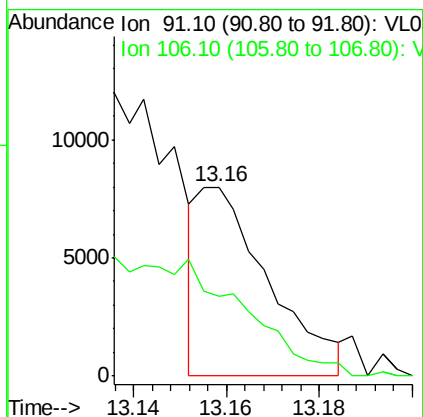
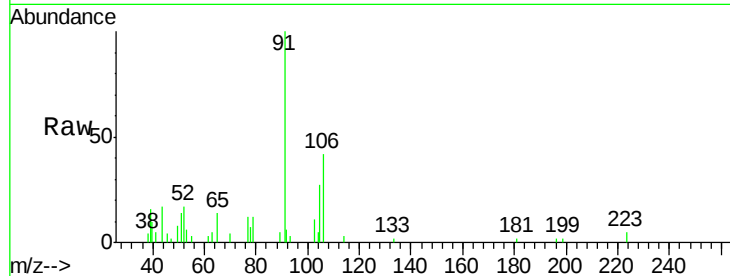
Ion	Ratio	Lower	Upper
91	100		
106	23.9	23.8	35.8





#59
m/p-Xylene
Concen: 0.030 ppbv
RT: 13.16 min Scan# 3179
Delta R.T. 0.00 min
Lab File: VL033214.D
Acq: 15 Feb 2019 1:31

Tgt Ion: 91 Resp: 8377
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0



#68
1-Bromo-4-Fluorobenzene
Concen: 10.469 ppbv
RT: 14.58 min Scan# 3620
Delta R.T. -0.01 min
Lab File: VL033214.D
Acq: 15 Feb 2019 1:31

Tgt Ion: 95 Resp: 1651186
Ion Ratio Lower Upper
95 100
174 63.1 51.2 76.8
175 4.6 3.8 5.6

