

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL021419\
 Data File : VL033216.D
 Acq On : 15 Feb 2019 2:50
 Operator : SY/AP
 Sample : K1483-09DL 10X
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 15 04:21:35 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	822376	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1847337	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2139374	10.00	ppbv	0.00

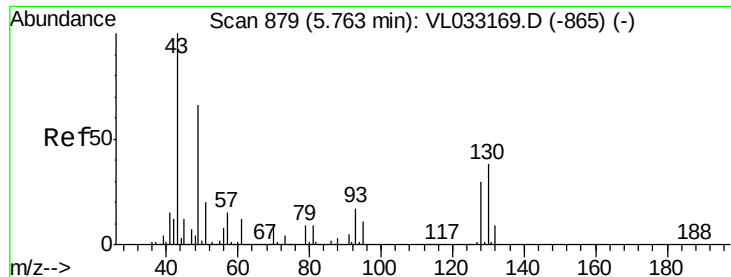
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1717175	10.42	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.20%

Target Compounds

					Qvalue
3) Chlorodifluoromethane	3.01	51	5677	0.057 ppbv	97
4) Chloromethane	3.17	50	1845	0.035 ppbv	92
7) Chloroethane	3.60	64	605	0.034 ppbv	94
8) Dichlorotetrafluoroethane	3.08	85	5715	0.046 ppbv #	16
9) Propene	3.04	41	3476	0.073 ppbv #	15
13) Ethanol	3.65	45	9855	0.618 ppbv #	37
15) Acetone	3.91	43	144126	1.556 ppbv	91
16) 1,3-Butadiene	3.35	39	1950	0.044 ppbv #	5
18) 1,1-Dichloroethene	4.35	96	1890	0.048 ppbv #	60
19) Isopropyl Alcohol	4.03	45	156033	2.483 ppbv #	98
20) Methylene Chloride	4.41	84	13406	0.364 ppbv	95
24) 1,1-Dichloroethane	5.09	63	109782	0.967 ppbv	98
25) Ethyl Acetate	5.78	43	12535	0.060 ppbv #	79
26) Hexane	5.78	57	16447	0.168 ppbv #	41
32) 1,1,1-Trichloroethane	6.62	97	546504	3.312 ppbv	97
37) 1,2-Dichloroethane	6.62	62	37528	0.362 ppbv #	1
39) 1,2-Dichloropropane	7.29	63	497417	6.727 ppbv #	25
44) 2,2,4-Trimethylpentane	7.99	57	13148	0.041 ppbv #	21
53) Toluene	9.95	91	22047	0.099 ppbv	97

(#) = 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: VL033216.D

Acq: 15 Feb 2019 2:50

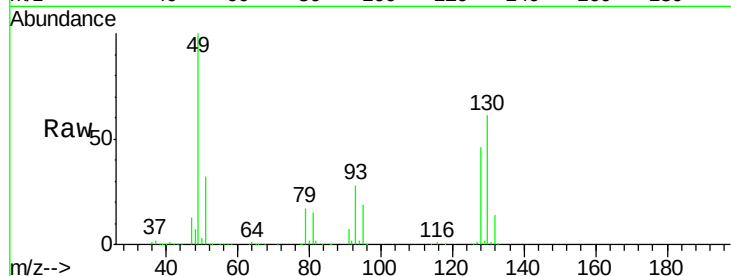
Tgt Ion: 49 Resp: 822376

Ion Ratio Lower Upper

49 100

128 46.1 23.6 71.0

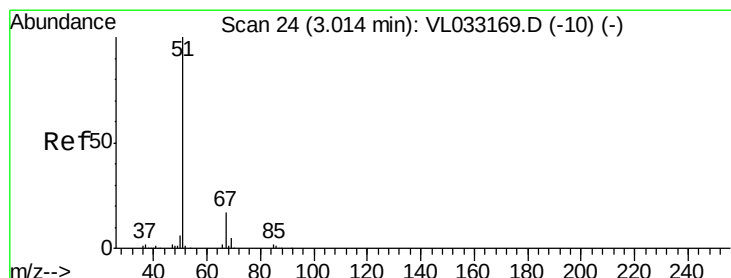
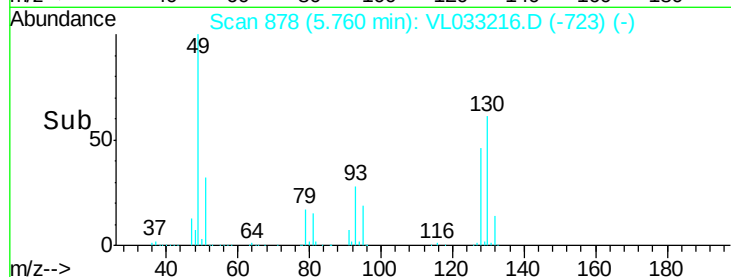
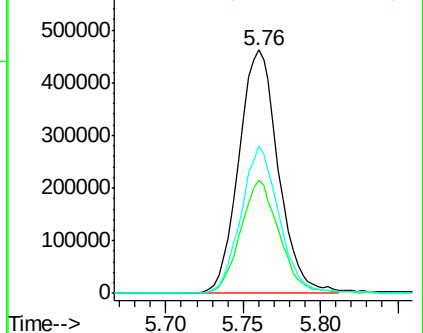
130 59.0 30.3 91.0



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



#3

Chlorodifluoromethane

Concen: 0.057 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033216.D

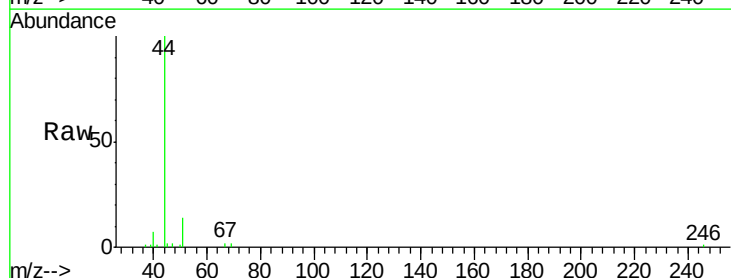
Acq: 15 Feb 2019 2:50

Tgt Ion: 51 Resp: 5677

Ion Ratio Lower Upper

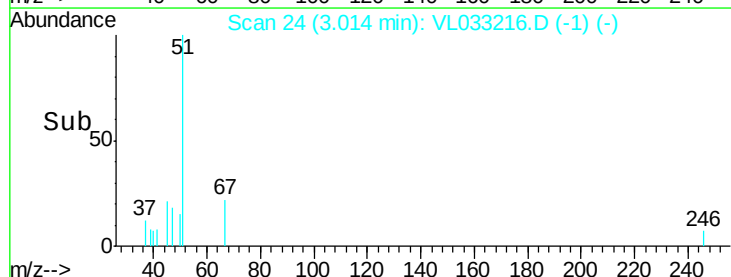
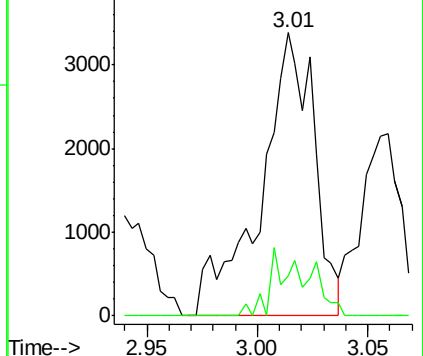
51 100

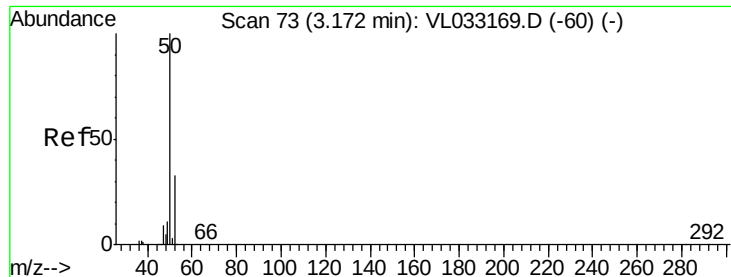
67 16.0 14.0 21.0



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.035 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033216.D

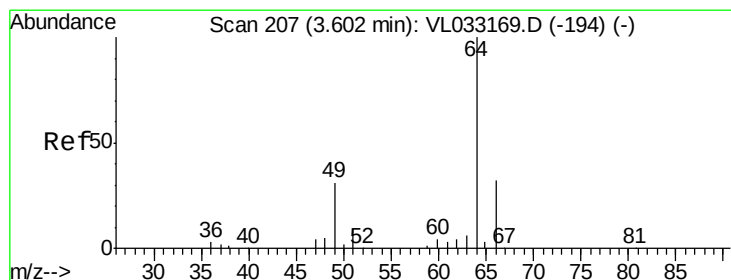
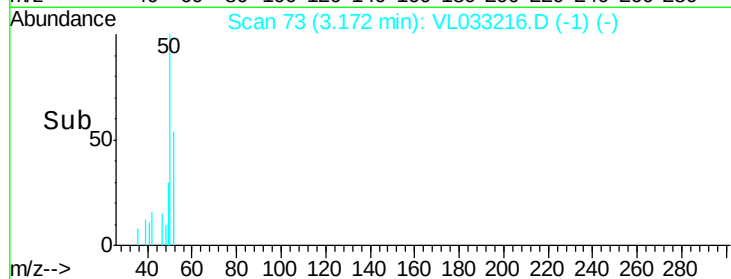
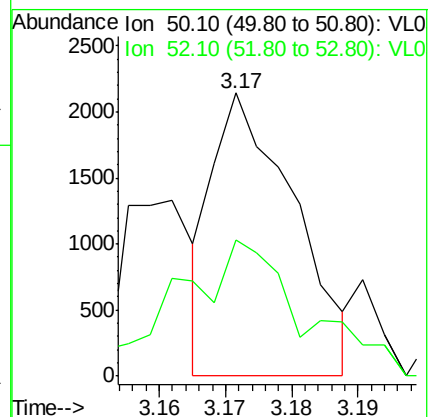
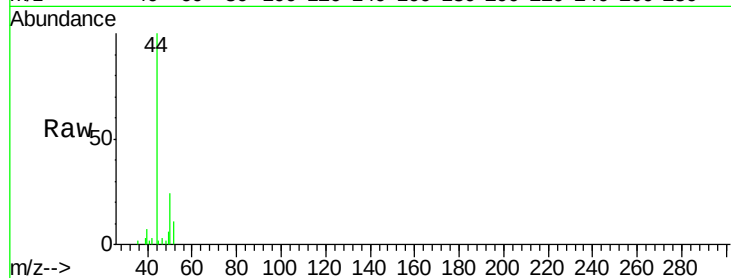
Acq: 15 Feb 2019 2:50

Tgt Ion: 50 Resp: 1845

Ion Ratio Lower Upper

50 100

52 37.6 26.5 39.7



#7

Chloroethane

Concen: 0.034 ppbv

RT: 3.60 min Scan# 206

Delta R.T. -0.00 min

Lab File: VL033216.D

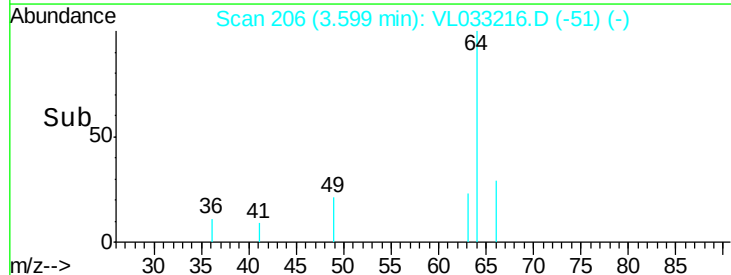
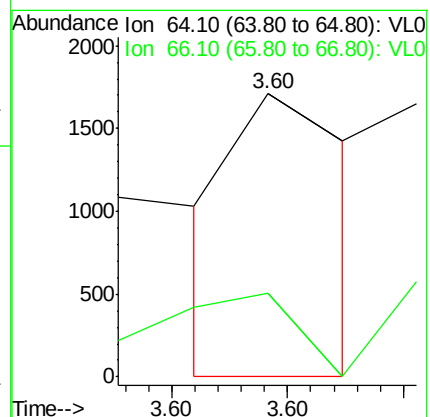
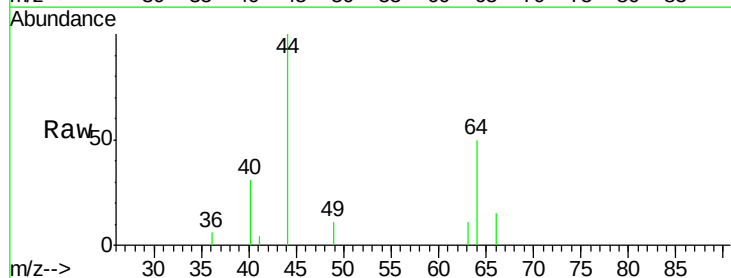
Acq: 15 Feb 2019 2:50

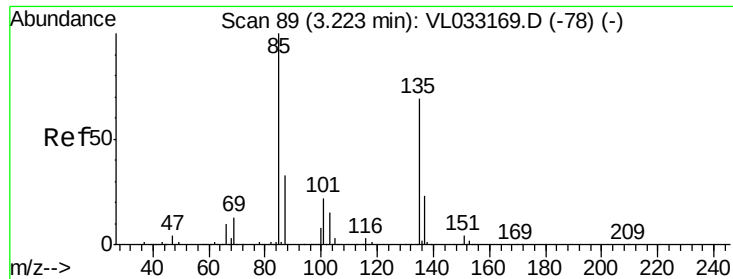
Tgt Ion: 64 Resp: 605

Ion Ratio Lower Upper

64 100

66 29.4 26.0 39.0





#8

Dichlorotetrafluoroethane

Concen: 0.046 ppbv

RT: 3.08 min Scan# 44

Delta R.T. -0.14 min

Lab File: VL033216.D

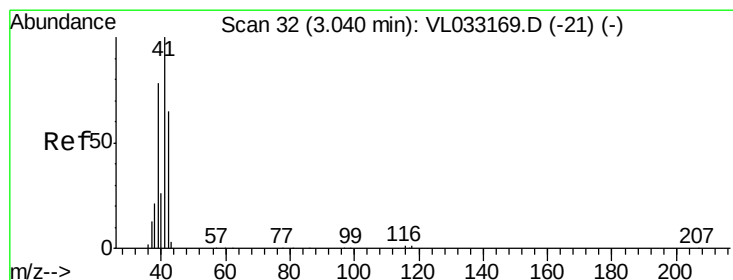
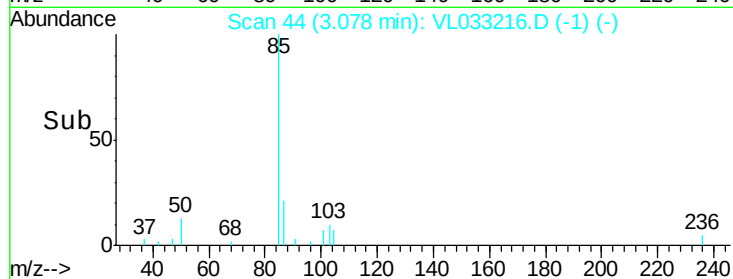
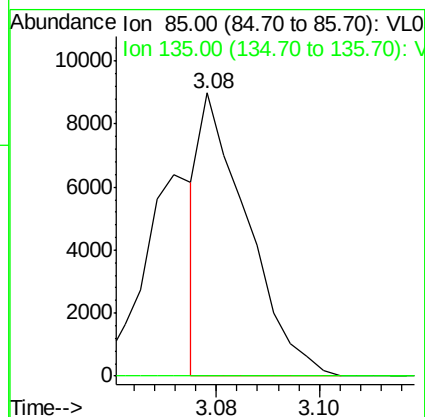
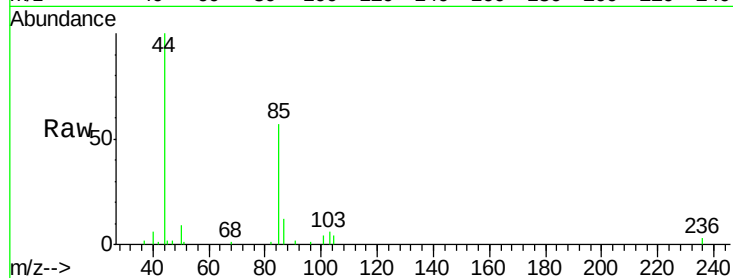
Acq: 15 Feb 2019 2:50

Tgt Ion: 85 Resp: 5715

Ion Ratio Lower Upper

85 100

135 0.0 54.3 81.5#



#9

Propene

Concen: 0.073 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.00 min

Lab File: VL033216.D

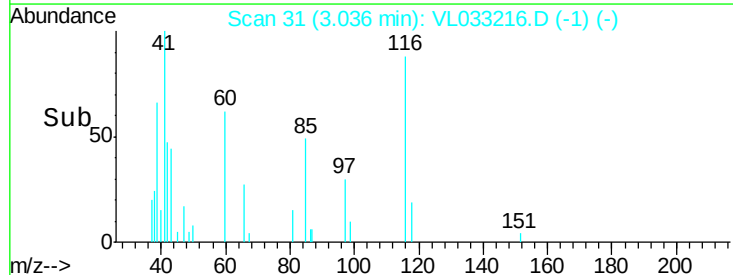
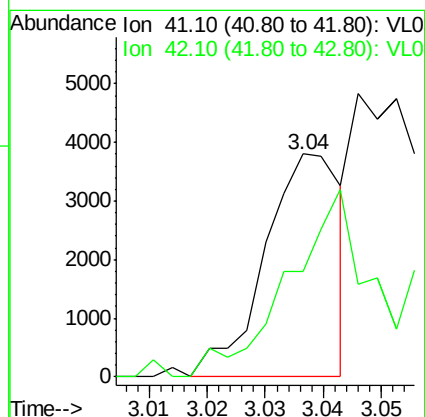
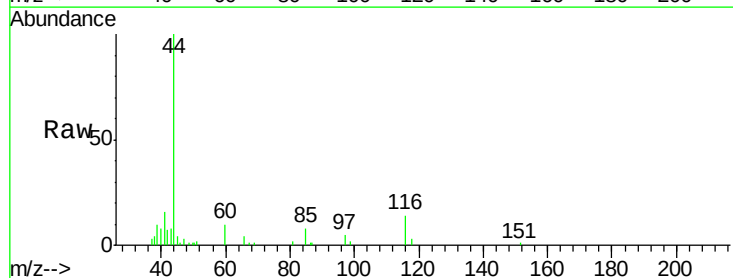
Acq: 15 Feb 2019 2:50

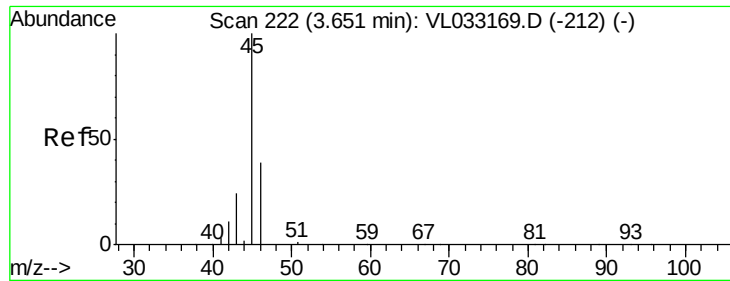
Tgt Ion: 41 Resp: 3476

Ion Ratio Lower Upper

41 100

42 0.0 55.0 82.6#





#13

Ethanol

Concen: 0.618 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.00 min

Lab File: VL033216.D

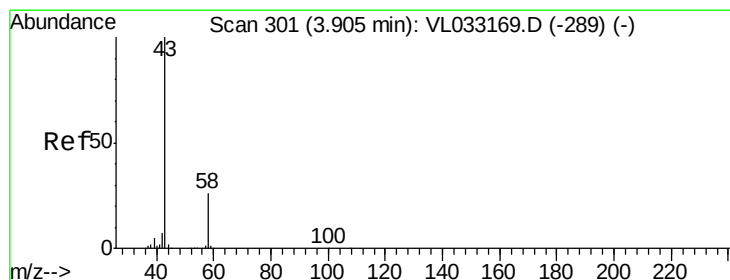
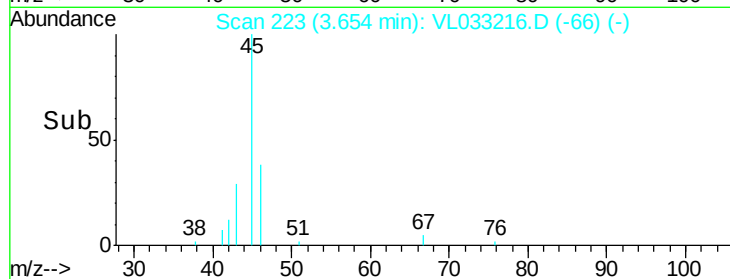
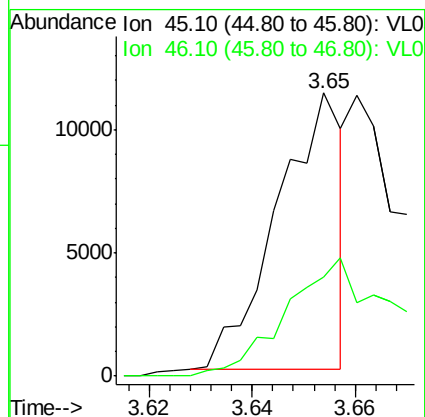
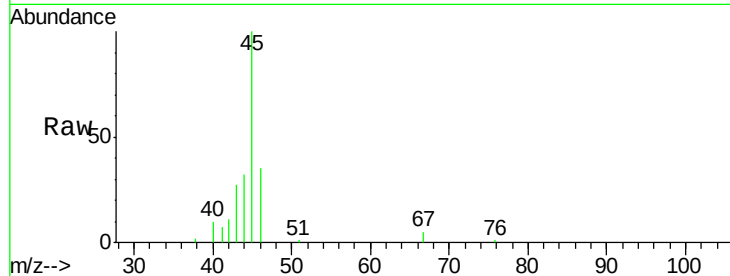
Acq: 15 Feb 2019 2:50

Tgt Ion: 45 Resp: 9855

Ion Ratio Lower Upper

45 100

46 0.0 15.0 60.2#



#15

Acetone

Concen: 1.556 ppbv

RT: 3.91 min Scan# 303

Delta R.T. 0.01 min

Lab File: VL033216.D

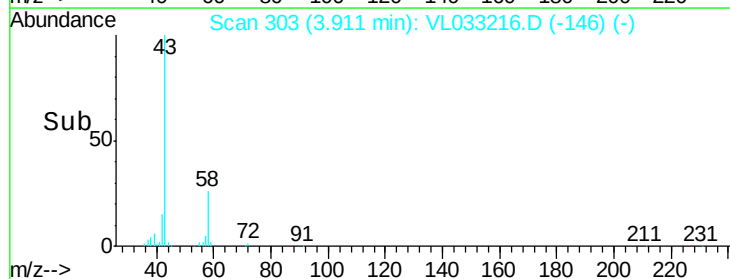
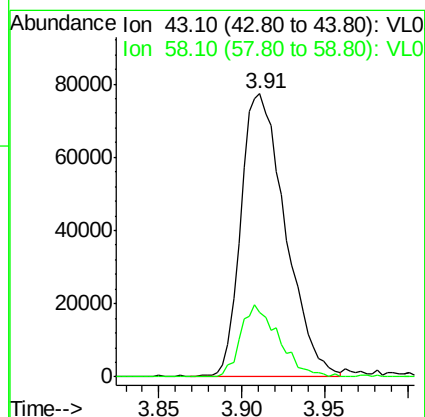
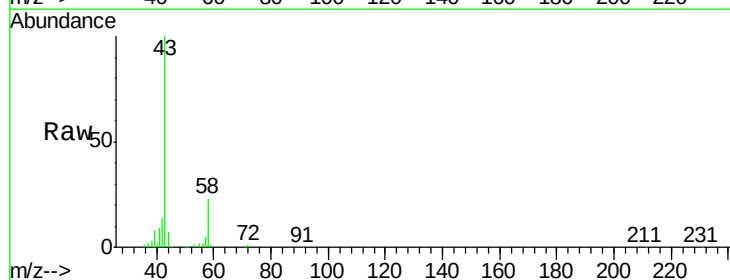
Acq: 15 Feb 2019 2:50

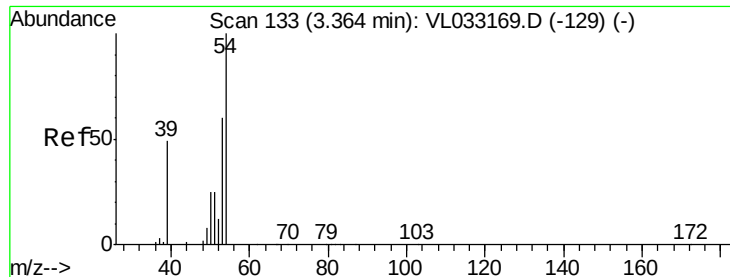
Tgt Ion: 43 Resp: 144126

Ion Ratio Lower Upper

43 100

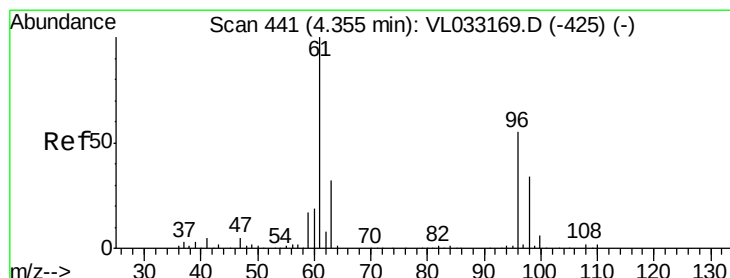
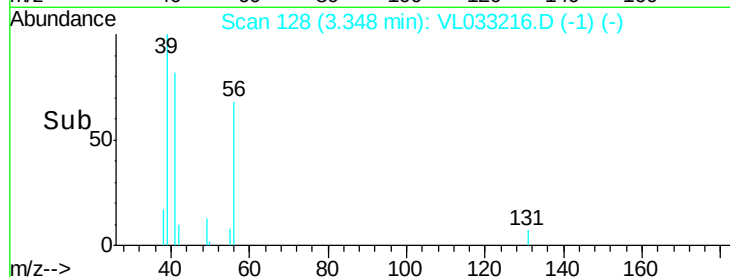
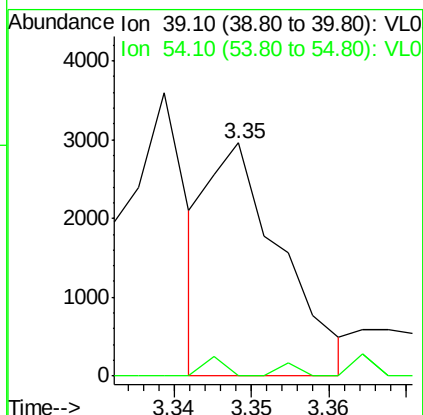
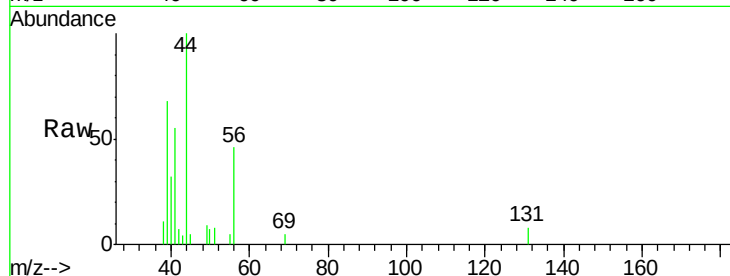
58 21.9 21.1 31.7





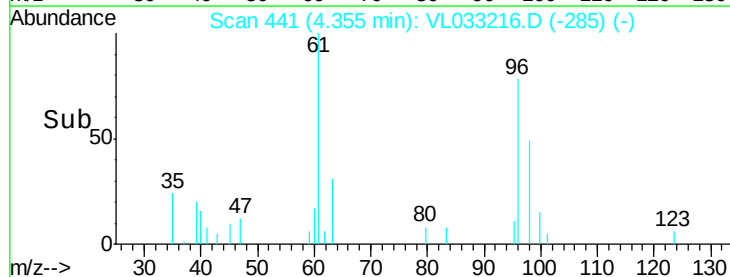
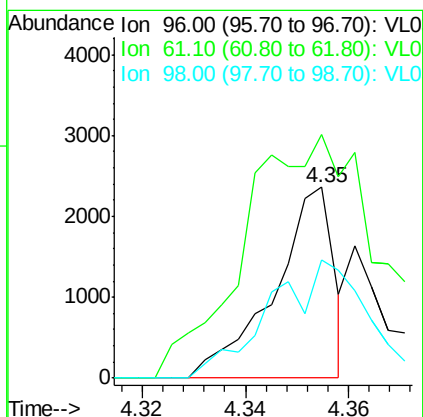
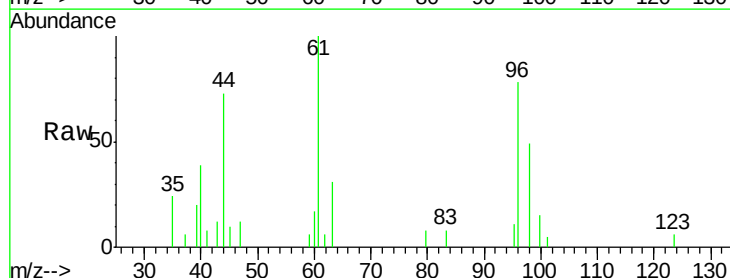
#16
 1,3-Butadiene
 Concen: 0.044 ppbv
 RT: 3.35 min Scan# 128
 Delta R.T. -0.02 min
 Lab File: VL033216.D
 Acq: 15 Feb 2019 2:50

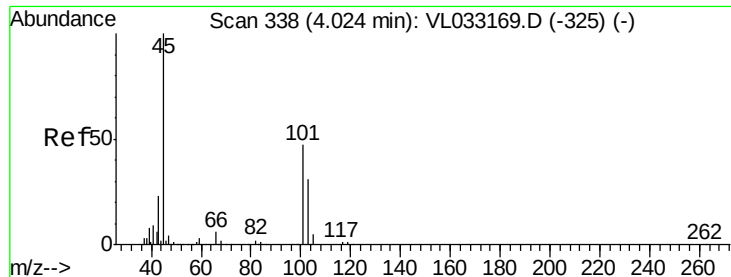
Tgt Ion: 39 Resp: 1950
 Ion Ratio Lower Upper
 39 100
 54 0.0 71.3 106.9#



#18
 1,1-Dichloroethene
 Concen: 0.048 ppbv
 RT: 4.35 min Scan# 441
 Delta R.T. -0.00 min
 Lab File: VL033216.D
 Acq: 15 Feb 2019 2:50

Tgt Ion: 96 Resp: 1890
 Ion Ratio Lower Upper
 96 100
 61 104.2 145.0 217.6#
 98 61.9 50.0 75.0





#19

Isopropyl Alcohol

Concen: 2.483 ppbv

RT: 4.03 min Scan# 341

Delta R.T. 0.01 min

Lab File: VL033216.D

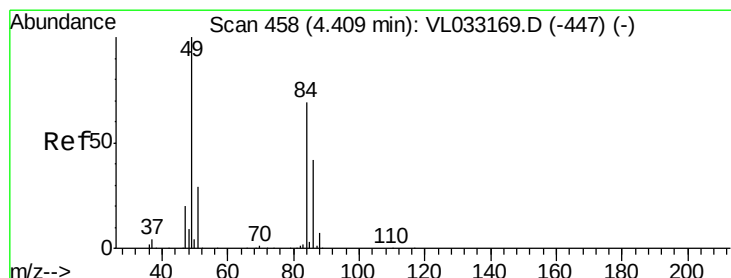
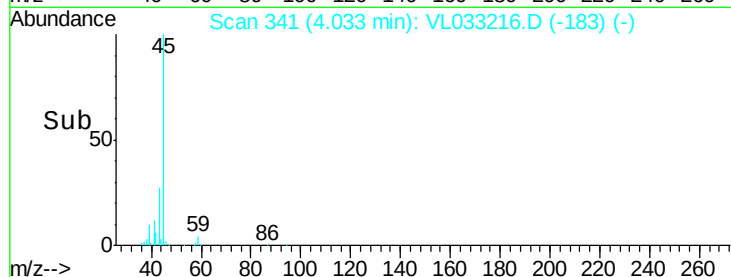
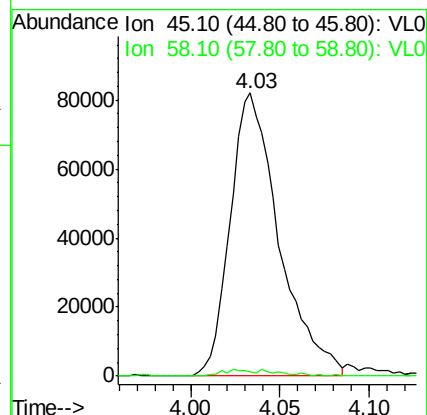
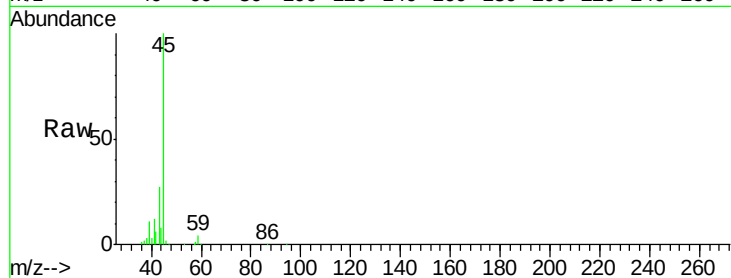
Acq: 15 Feb 2019 2:50

Tgt Ion: 45 Resp: 156033

Ion Ratio Lower Upper

45 100

58 2.8 1.5 2.3#



#20

Methylene Chloride

Concen: 0.364 ppbv

RT: 4.41 min Scan# 457

Delta R.T. -0.00 min

Lab File: VL033216.D

Acq: 15 Feb 2019 2:50

Tgt Ion: 84 Resp: 13406

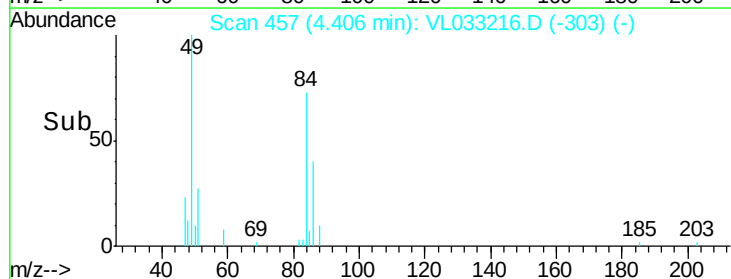
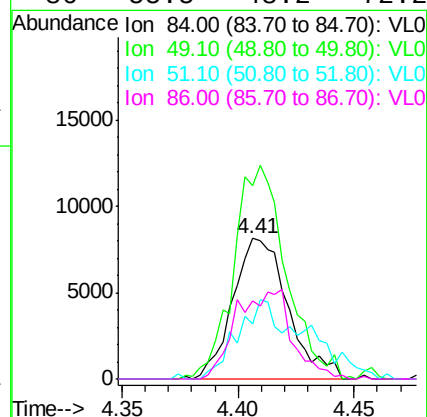
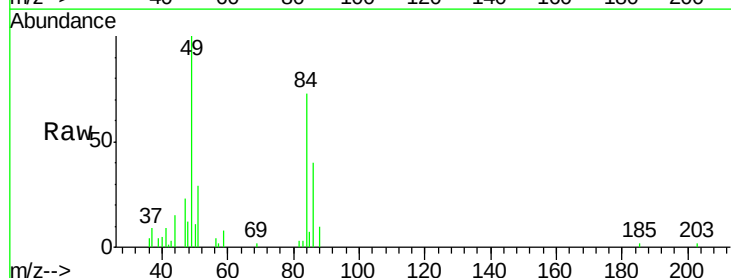
Ion Ratio Lower Upper

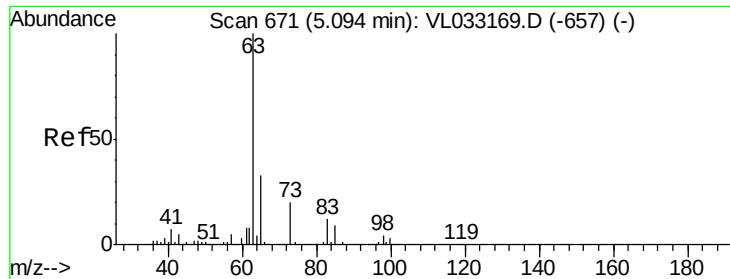
84 100

49 137.8 115.8 173.8

51 39.4 33.0 49.6

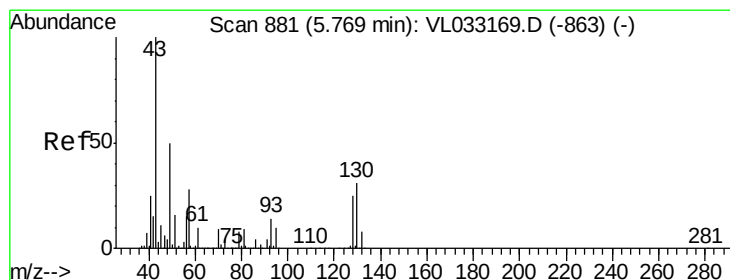
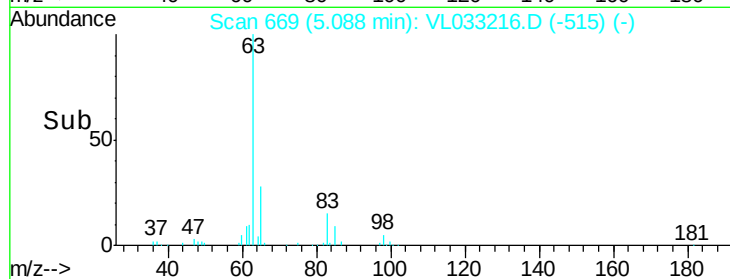
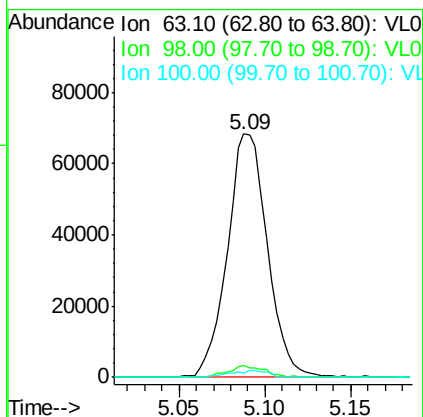
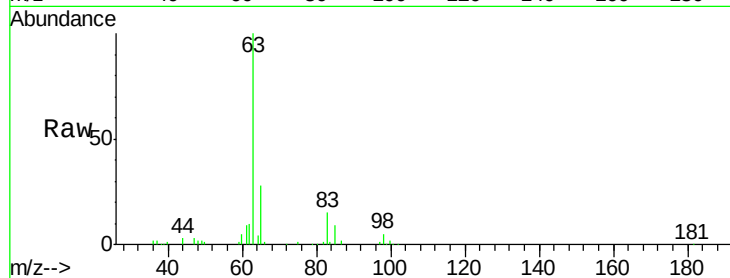
86 55.5 48.2 72.2





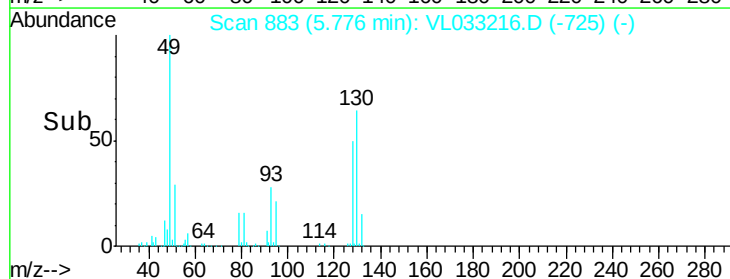
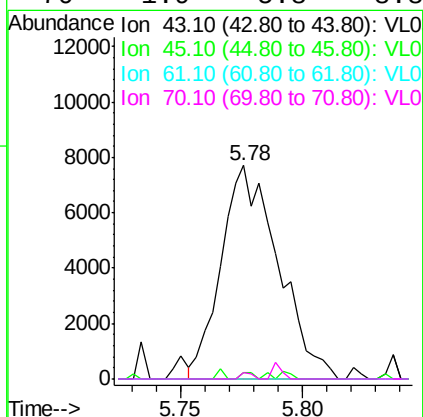
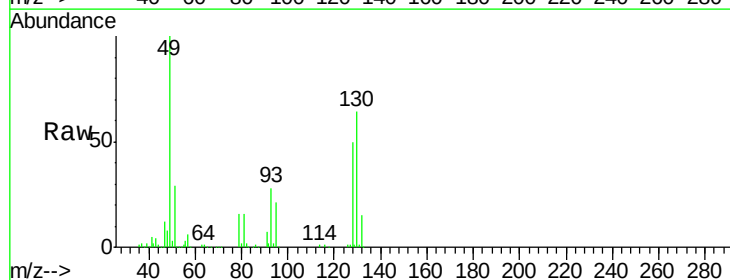
#24
 1,1-Dichloroethane
 Concen: 0.967 ppbv
 RT: 5.09 min Scan# 669
 Delta R.T. -0.01 min
 Lab File: VL033216.D
 Acq: 15 Feb 2019 2:50

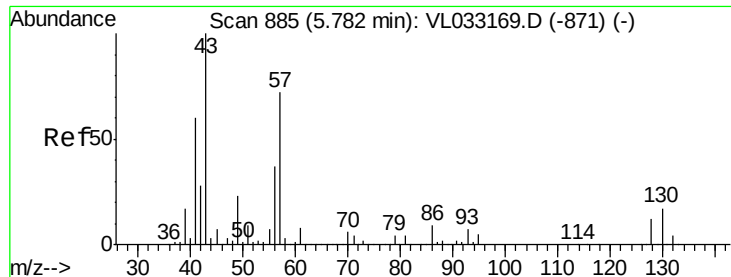
Tgt Ion:	63	Resp:	109782
Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.1	6.5
100	1.9	1.4	4.2



#25
 Ethyl Acetate
 Concen: 0.060 ppbv
 RT: 5.78 min Scan# 883
 Delta R.T. 0.01 min
 Lab File: VL033216.D
 Acq: 15 Feb 2019 2:50

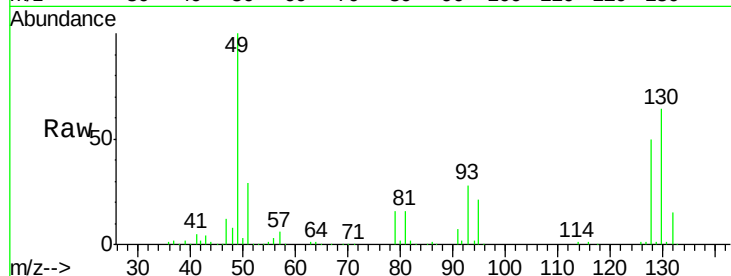
Tgt Ion:	43	Resp:	12535
Ion	Ratio	Lower	Upper
43	100		
45	2.4	7.9	11.9#
61	0.0	7.5	11.3#
70	1.9	5.8	8.8#



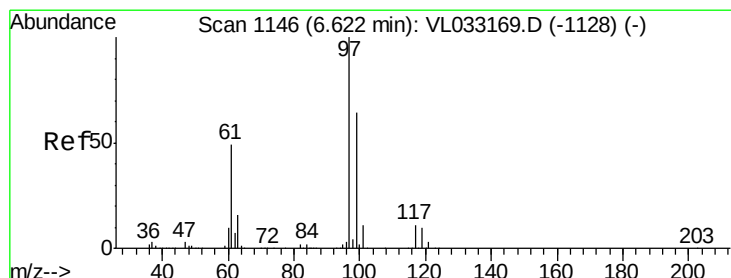
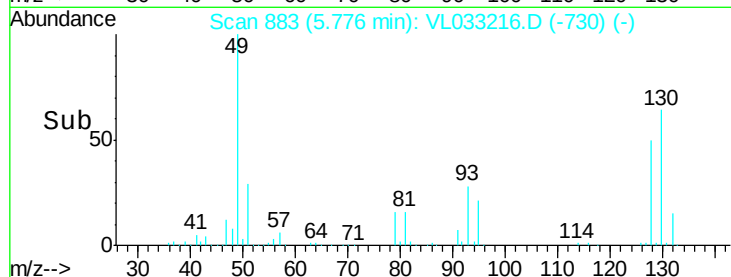
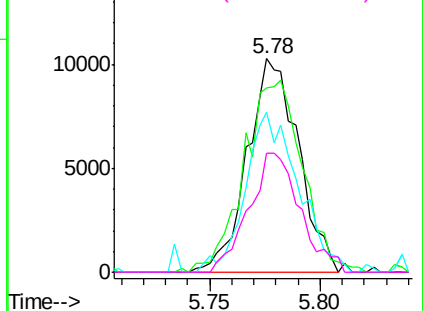


#26
Hexane
Concen: 0.168 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.01 min
Lab File: VL033216.D
Acq: 15 Feb 2019 2:50

Tgt Ion: 57 Resp: 16447
Ion Ratio Lower Upper
57 100
41 103.2 69.4 104.2
43 80.0 176.7 265.1#
56 55.9 41.4 62.0

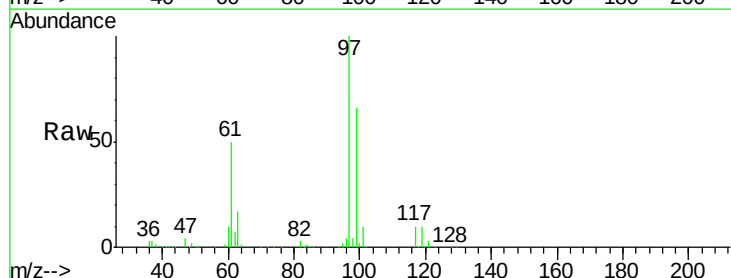


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

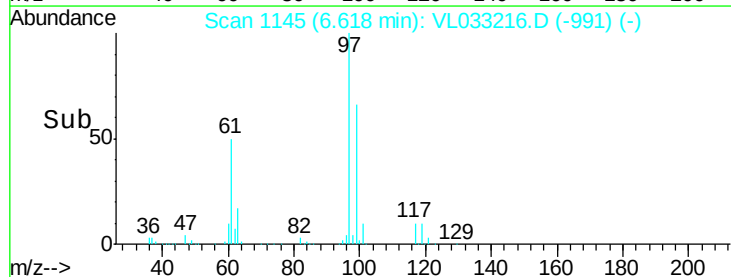
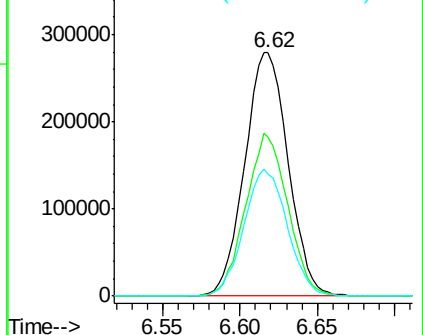


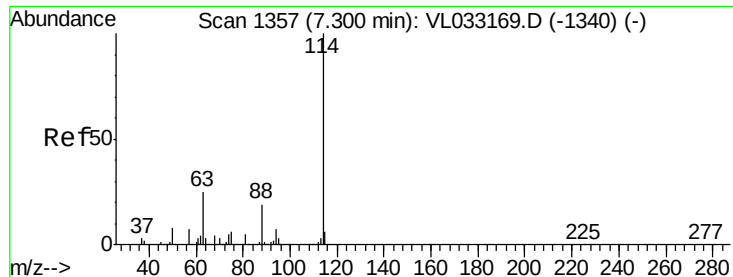
#32
1,1,1-Trichloroethane
Concen: 3.312 ppbv
RT: 6.62 min Scan# 1145
Delta R.T. -0.00 min
Lab File: VL033216.D
Acq: 15 Feb 2019 2:50

Tgt Ion: 97 Resp: 546504
Ion Ratio Lower Upper
97 100
99 64.7 51.4 77.2
61 52.1 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: VL033216.D

Acq: 15 Feb 2019 2:50

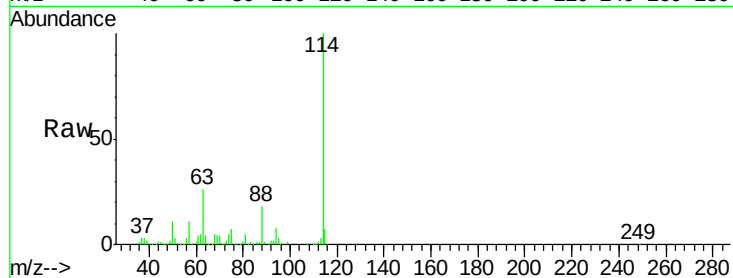
Tgt Ion: 114 Resp: 1847337

Ion Ratio Lower Upper

114 100

63 27.1 20.8 31.2

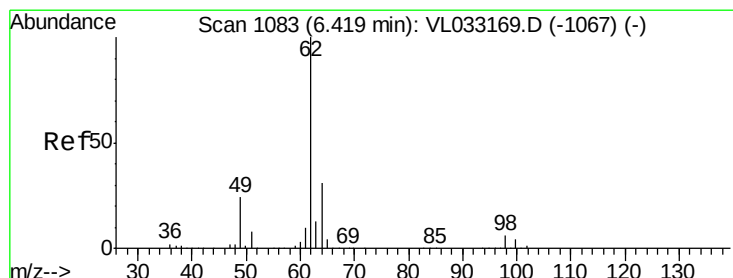
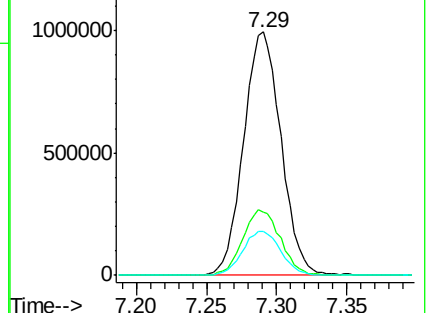
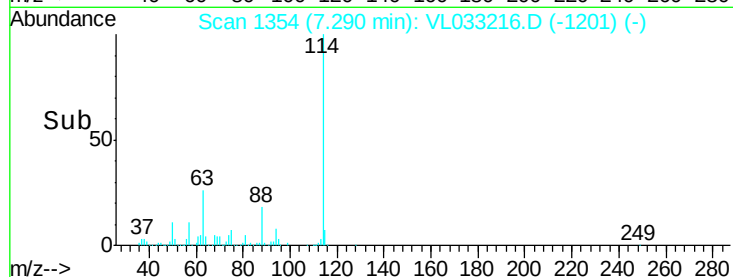
88 18.4 14.6 22.0



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



#37

1,2-Dichloroethane

Concen: 0.362 ppbv

RT: 6.62 min Scan# 1145

Delta R.T. 0.20 min

Lab File: VL033216.D

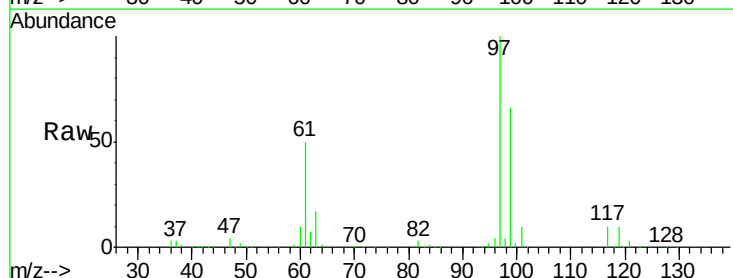
Acq: 15 Feb 2019 2:50

Tgt Ion: 62 Resp: 37528

Ion Ratio Lower Upper

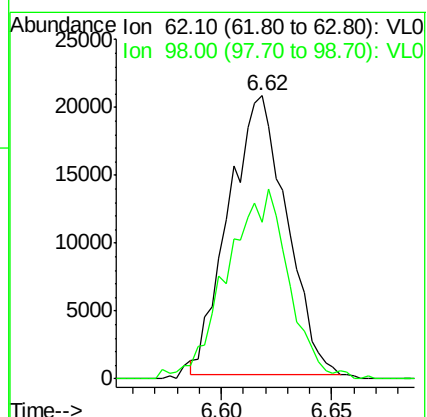
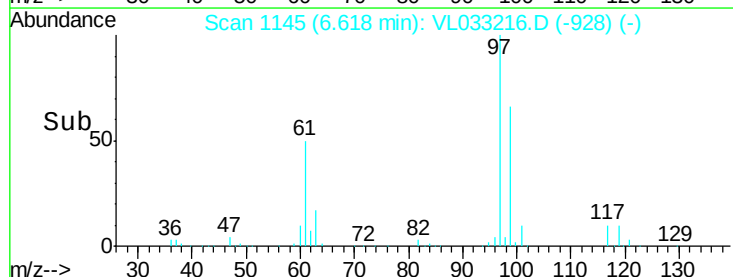
62 100

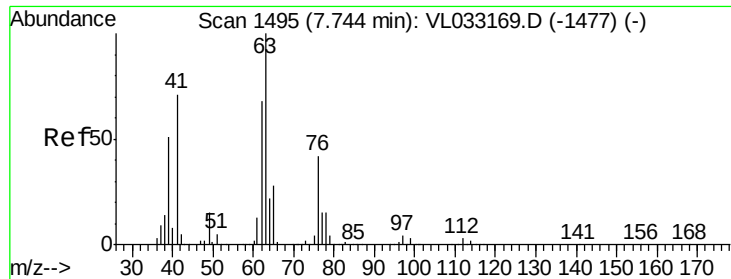
98 72.5 4.7 7.1#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#39

1,2-Dichloropropane

Concen: 6.727 ppbv

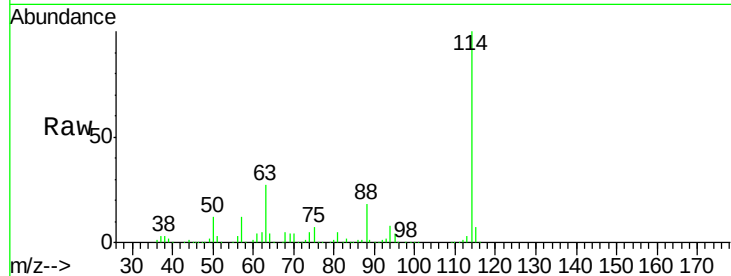
RT: 7.29 min Scan# 1353

Delta R.T. -0.46 min

Lab File: VL033216.D

Acq: 15 Feb 2019 2:50

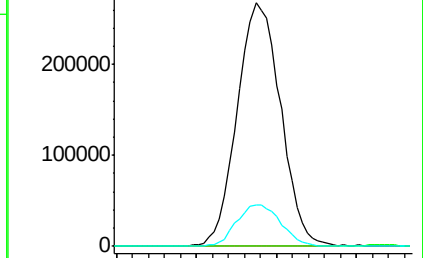
Tgt Ion:	63	Resp:	497417
Ion	Ratio	Lower	Upper
63	100		
41	0.0	56.4	84.6#
62	16.7	54.2	81.4#



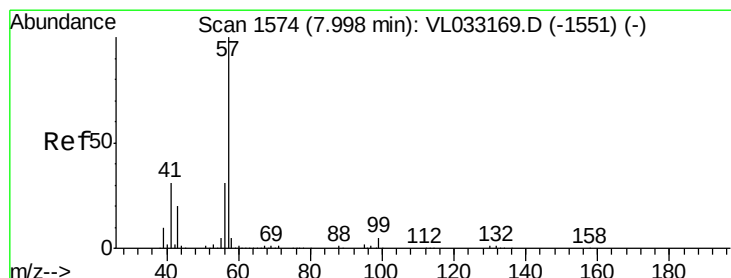
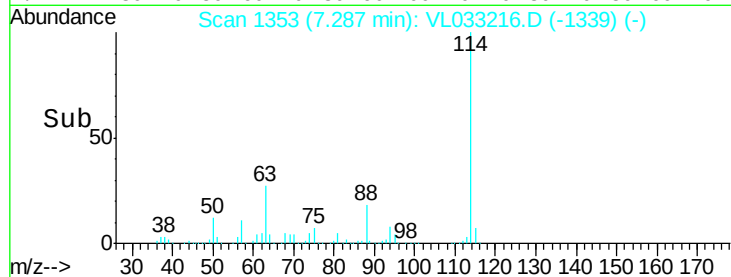
Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



Time--> 7.20 7.25 7.30 7.35



#44

2,2,4-Trimethylpentane

Concen: 0.041 ppbv

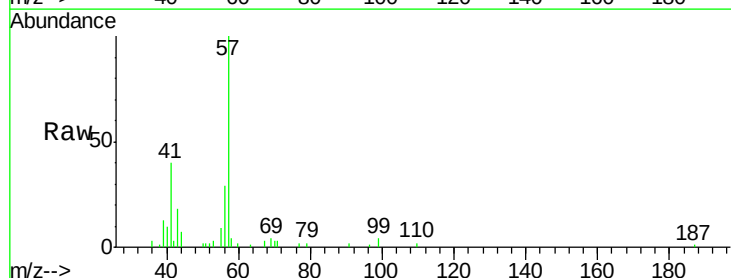
RT: 7.99 min Scan# 1573

Delta R.T. -0.00 min

Lab File: VL033216.D

Acq: 15 Feb 2019 2:50

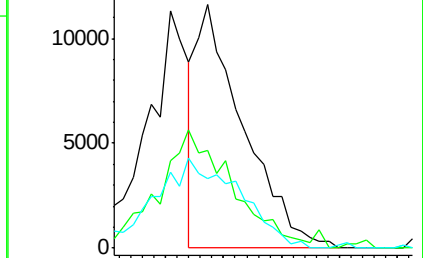
Tgt Ion:	57	Resp:	13148
Ion	Ratio	Lower	Upper
57	100		
41	80.6	25.1	37.7#
56	68.7	24.5	36.7#



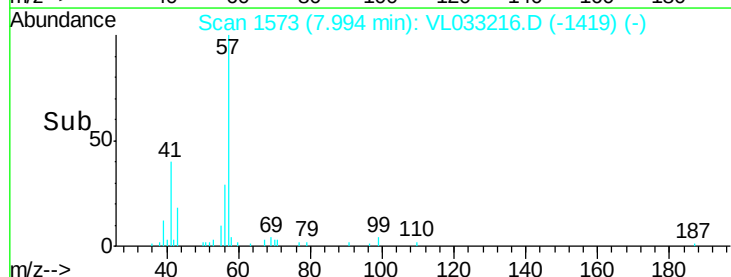
Abundance Ion 57.10 (56.80 to 57.80): VL0

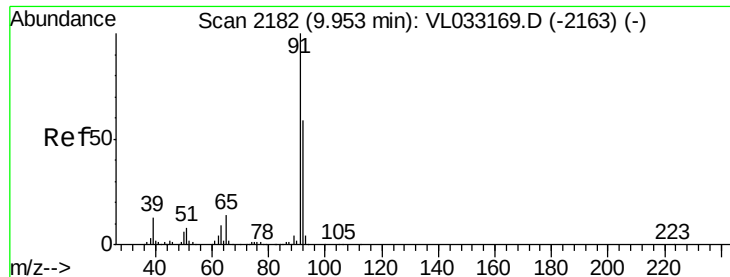
Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



Time--> 7.98 8.00 8.02 8.04





#53

Toluene

Concen: 0.099 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. -0.00 min

Lab File: VL033216.D

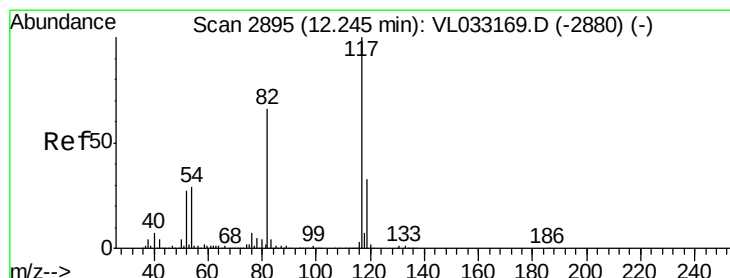
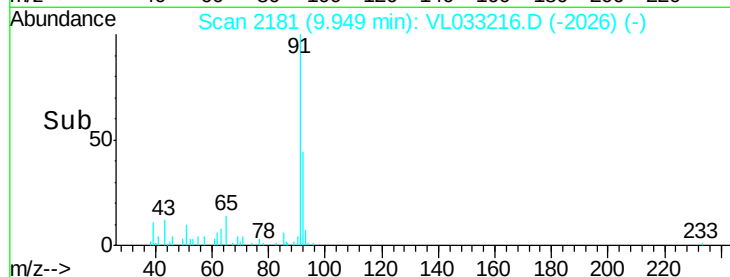
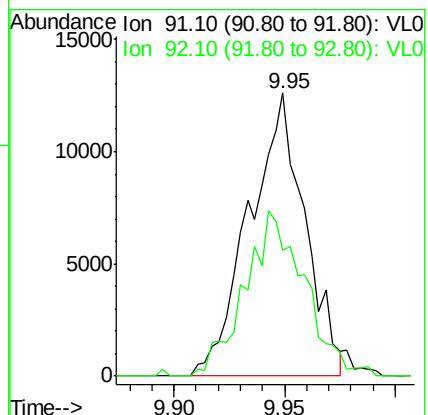
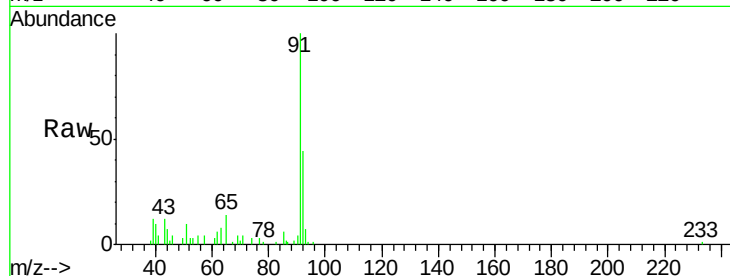
Acq: 15 Feb 2019 2:50

Tgt Ion: 91 Resp: 22047

Ion Ratio Lower Upper

91 100

92 62.6 48.0 72.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL033216.D

Acq: 15 Feb 2019 2:50

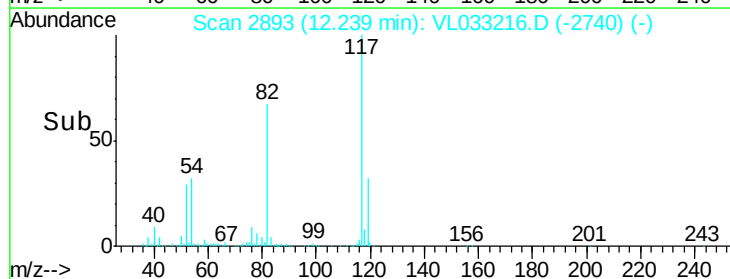
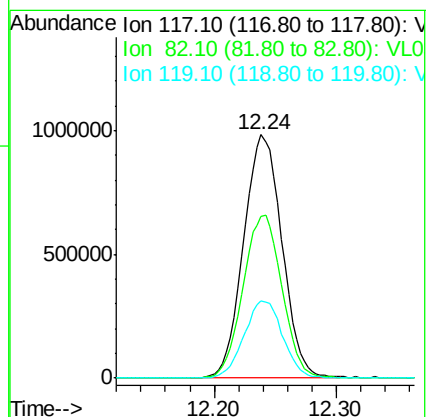
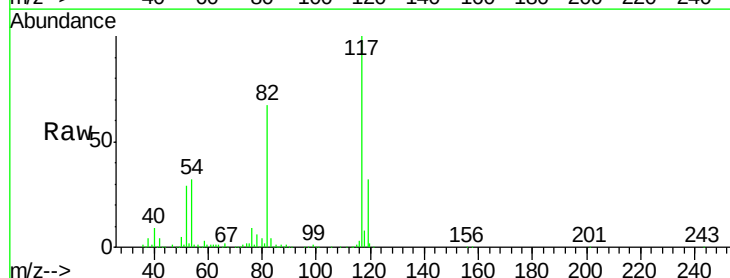
Tgt Ion: 117 Resp: 2139374

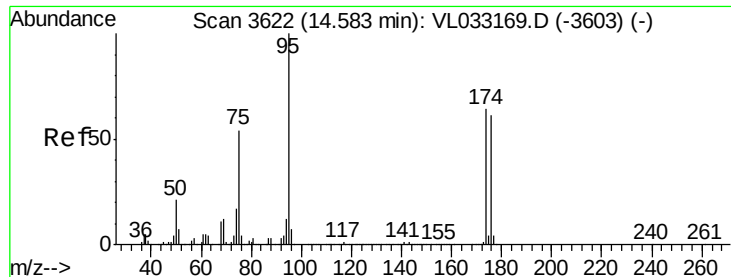
Ion Ratio Lower Upper

117 100

82 68.2 49.5 74.3

119 32.1 24.4 36.6





#68

1-Bromo-4-Fluorobenzene

Concen: 10.422 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. -0.00 min

Lab File: VL033216.D

Acq: 15 Feb 2019 2:50

Tgt Ion: 95 Resp: 1717175

Ion Ratio Lower Upper

95 100

174 63.2 51.2 76.8

175 4.7 3.8 5.6

