

Data File : VL033218.D
Acq On : 15 Feb 2019 4:09
Operator : SY/AP
Sample : K1483-10DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 15 06:47:10 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	5.77	49	869834	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	1980814	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1966890	10.00	ppbv	0.00

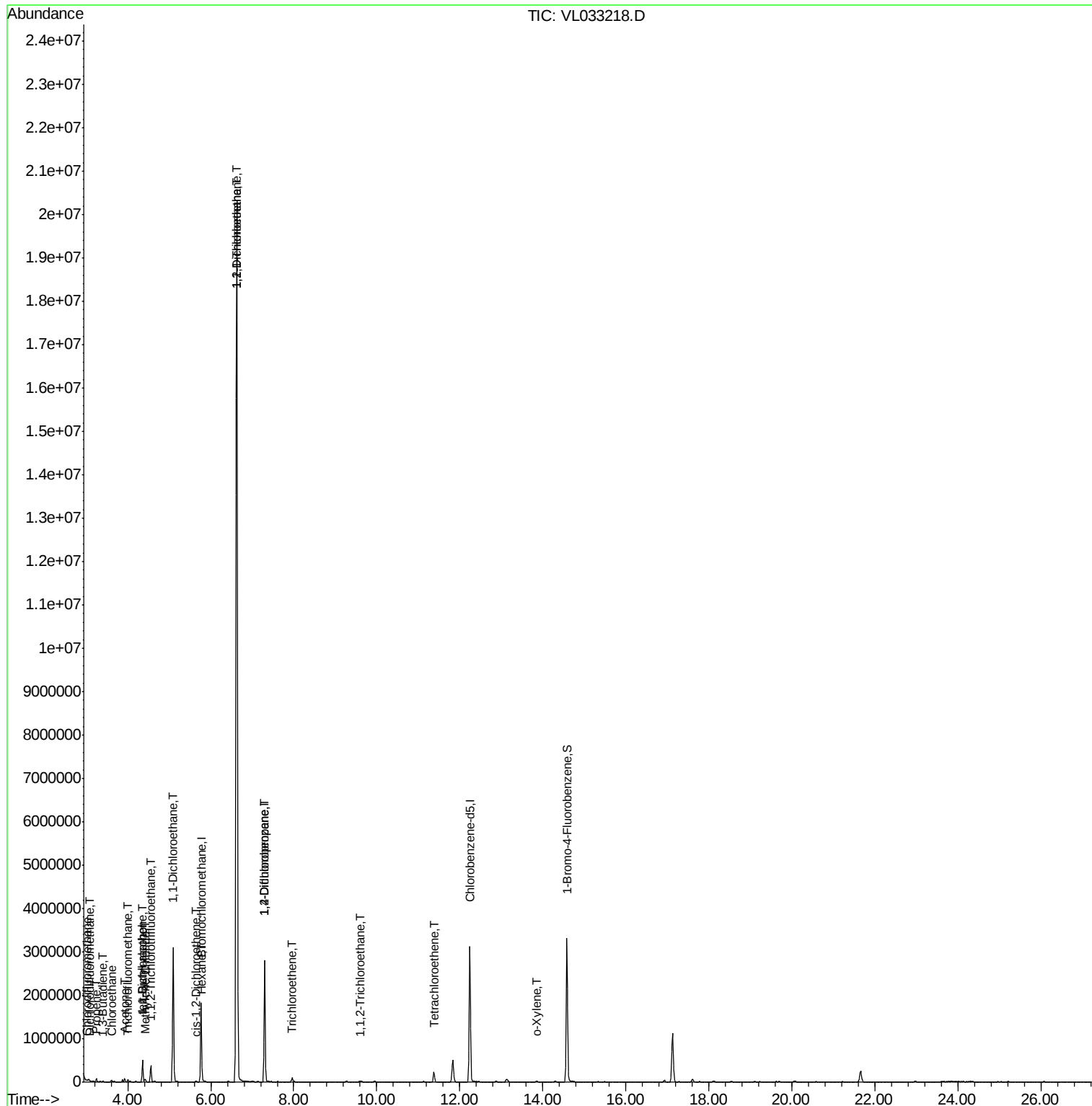
System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.58 95 1613250 10.65 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 106.50%

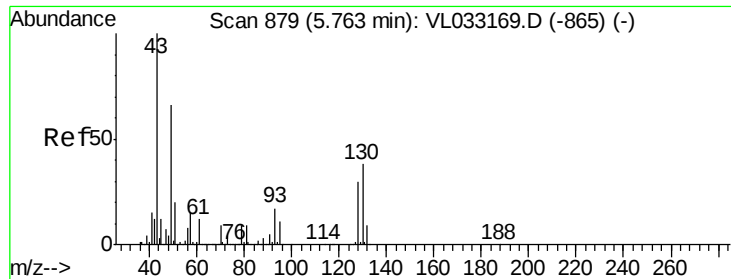
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.07	85	9218	0.055	ppbv	98
3) Chlorodifluoromethane	3.02	51	8323	0.079	ppbv #	83
7) Chloroethane	3.60	64	13393	0.709	ppbv	90
9) Propene	3.24	41	18496	0.366	ppbv	91
11) Trichlorofluoromethane	4.01	101	30469	0.226	ppbv	89
12) 1,1,2-Trichlorotrifluoroet	4.55	101	131053	1.405	ppbv	99
15) Acetone	3.93	43	40714	0.415	ppbv	94
16) 1,3-Butadiene	3.40	39	2578	0.055	ppbv #	12
17) tert-Butyl alcohol	4.36	59	4144	0.222	ppbv #	74
18) 1,1-Dichloroethene	4.35	96	147594	3.534	ppbv	96
20) Methylene Chloride	4.41	84	17664	0.453	ppbv	92
24) 1,1-Dichloroethane	5.09	63	2678121	22.293	ppbv	100
26) Hexane	5.79	57	3926	0.038	ppbv #	59
31) cis-1,2-Dichloroethene	5.65	61	5067	0.049	ppbv #	91
32) 1,1,1-Trichloroethane	6.62	97	14544766	83.330	ppbv	93
37) 1,2-Dichloroethane	6.62	62	1176535	10.575	ppbv #	1
38) Trichloroethene	7.96	130	11484	0.134	ppbv #	80
39) 1,2-Dichloropropane	7.30	63	525933	6.634	ppbv #	26
47) 1,1,2-Trichloroethane	9.61	97	3786	0.046	ppbv #	85
52) Tetrachloroethene	11.37	164	21024	0.273	ppbv	94
60) o-Xylene	13.85	91	8439	0.033	ppbv #	42

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

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QLast Update : Wed Feb 06 09:13:11 2019
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 880

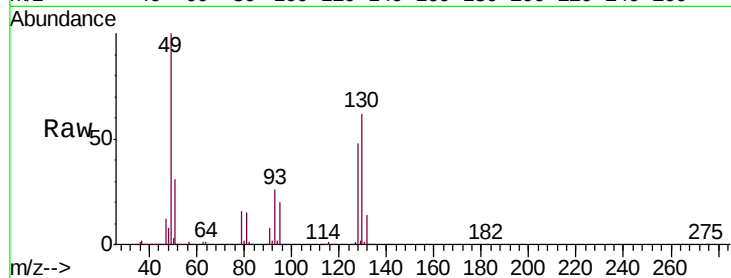
Delta R.T. 0.00 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

Tgt Ion: 49 Resp: 869834

Ion	Ratio	Lower	Upper
49	100		
128	45.8	23.6	71.0
130	59.6	30.3	91.0

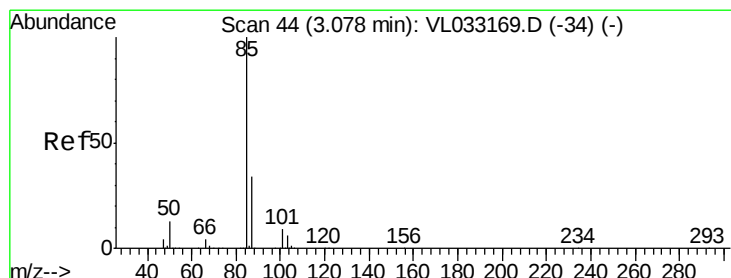
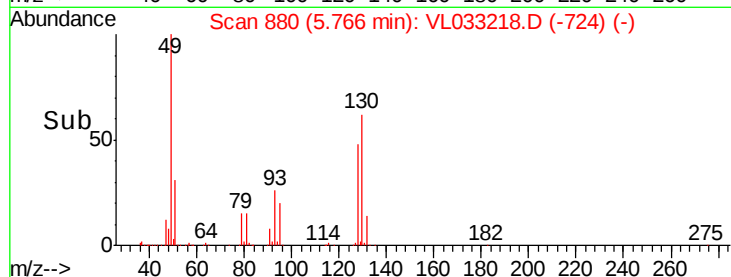


Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

Time-->



#2

Dichlorodifluoromethane

Concen: 0.055 ppbv

RT: 3.07 min Scan# 43

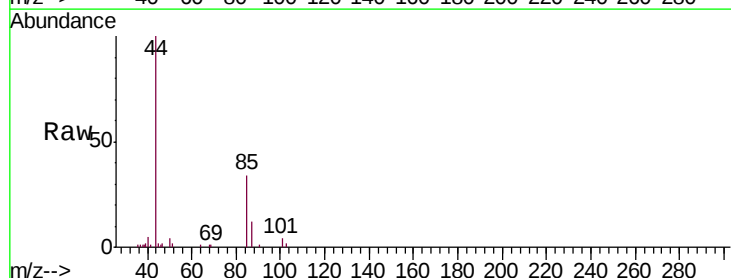
Delta R.T. -0.00 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

Tgt Ion: 85 Resp: 9218

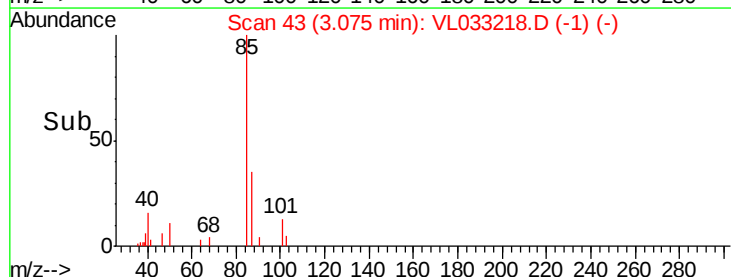
Ion	Ratio	Lower	Upper
85	100		
87	35.3	27.4	41.2

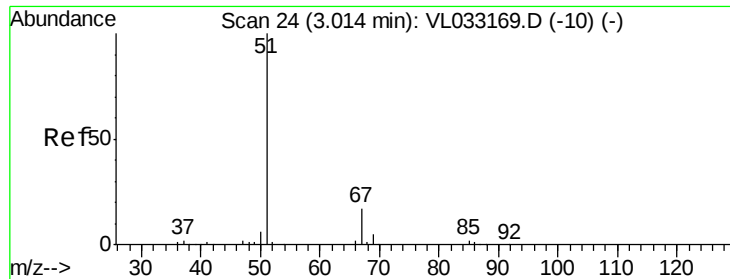


Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

Time-->





#3

Chlorodifluoromethane

Concen: 0.079 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.00 min

Lab File: VL033218.D

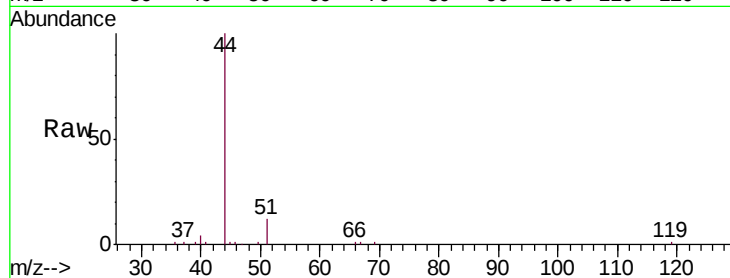
Acq: 15 Feb 2019 4:09

Tgt Ion: 51 Resp: 8323

Ion Ratio Lower Upper

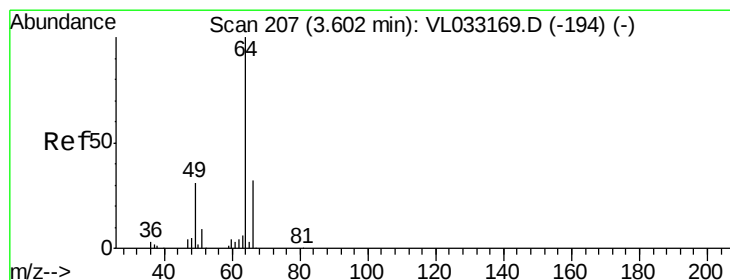
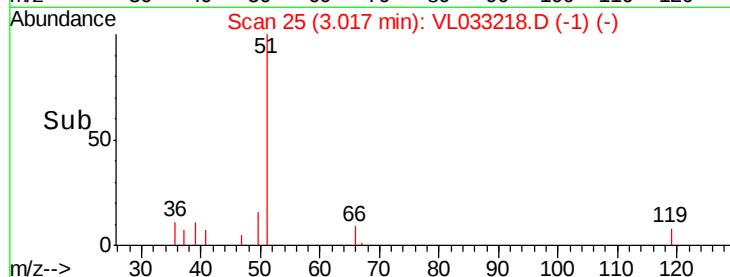
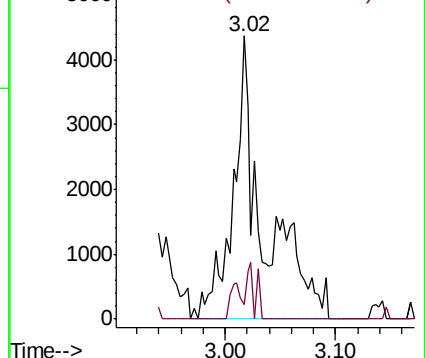
51 100

67 10.3 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: 0.709 ppbv

RT: 3.60 min Scan# 206

Delta R.T. -0.00 min

Lab File: VL033218.D

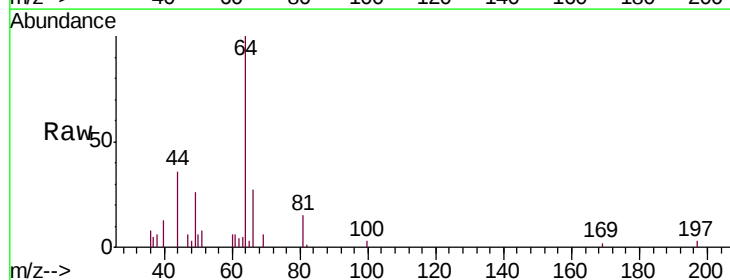
Acq: 15 Feb 2019 4:09

Tgt Ion: 64 Resp: 13393

Ion Ratio Lower Upper

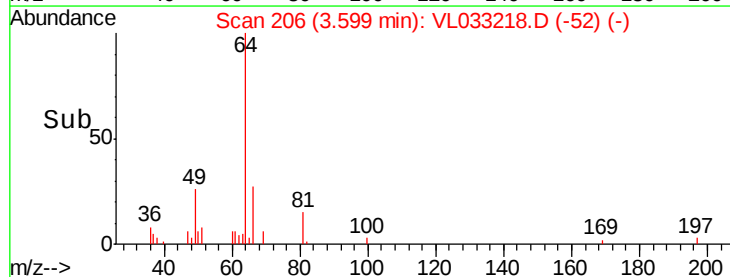
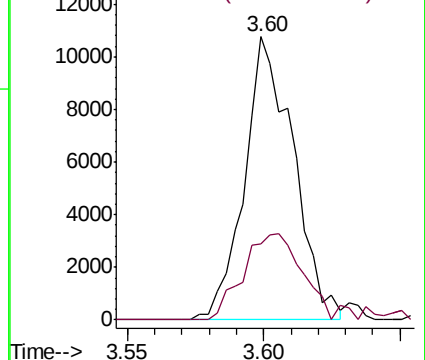
64 100

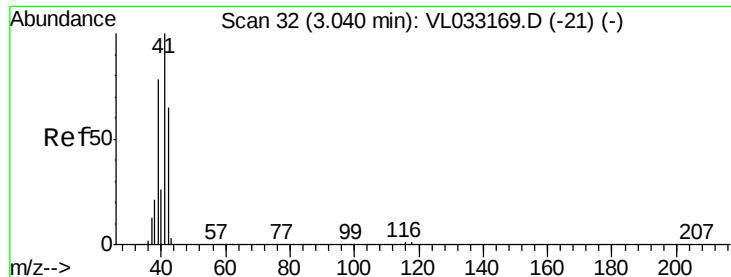
66 26.7 26.0 39.0



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#9

Propene

Concen: 0.366 ppbv

RT: 3.24 min Scan# 94

Delta R.T. 0.20 min

Lab File: VL033218.D

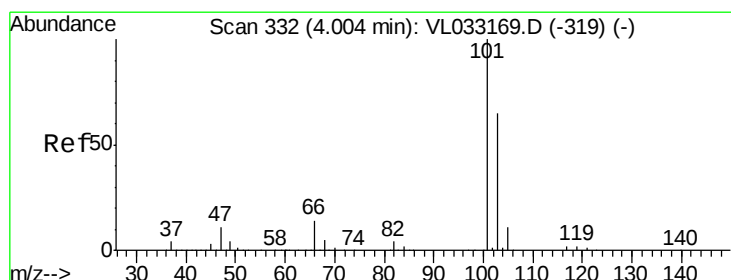
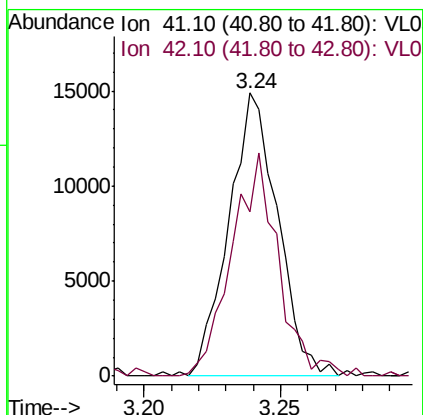
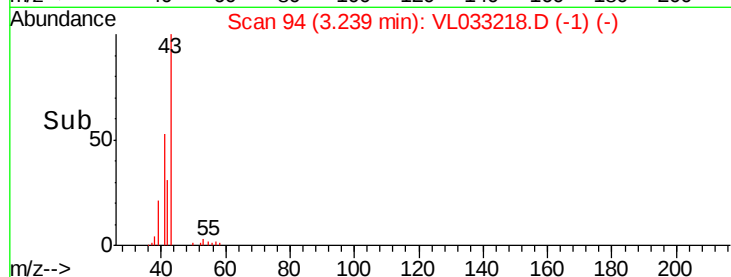
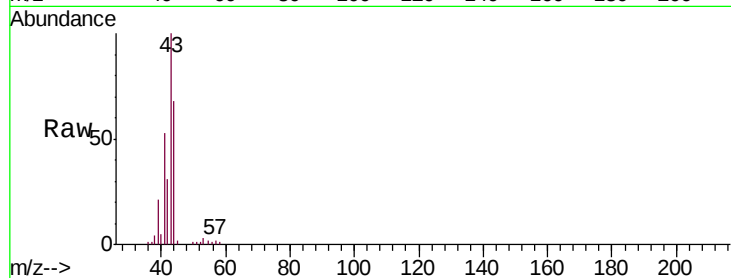
Acq: 15 Feb 2019 4:09

Tgt Ion: 41 Resp: 18496

Ion Ratio Lower Upper

41 100

42 75.8 55.0 82.6



#11

Trichlorofluoromethane

Concen: 0.226 ppbv

RT: 4.01 min Scan# 333

Delta R.T. 0.00 min

Lab File: VL033218.D

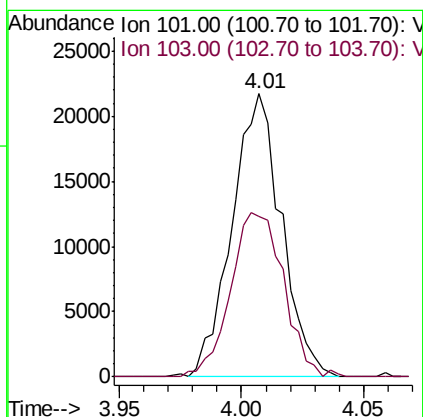
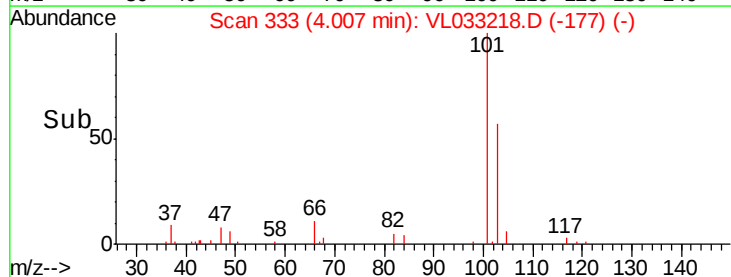
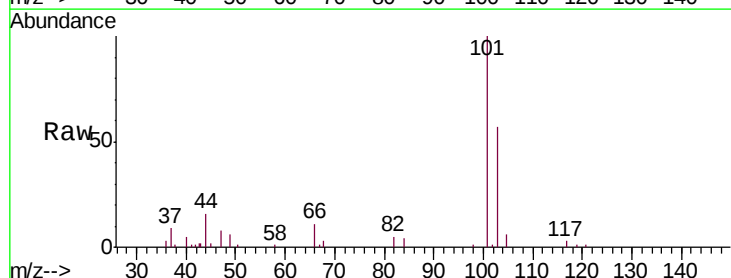
Acq: 15 Feb 2019 4:09

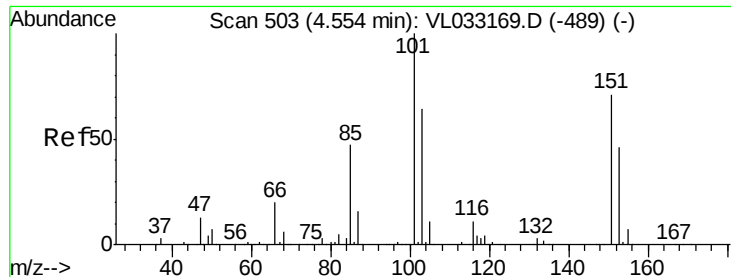
Tgt Ion: 101 Resp: 30469

Ion Ratio Lower Upper

101 100

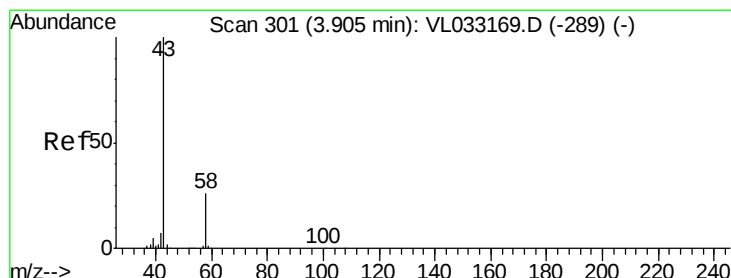
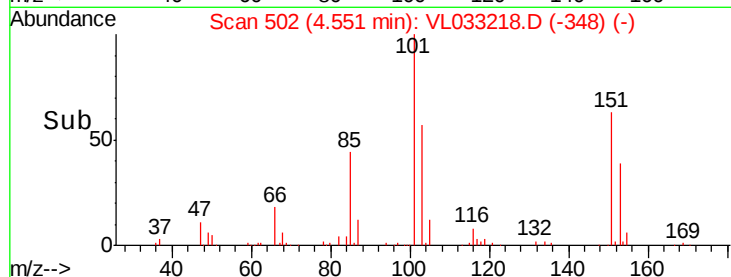
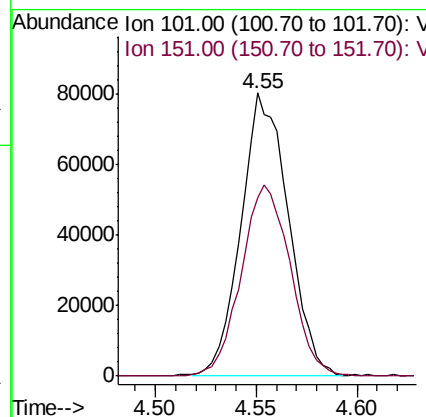
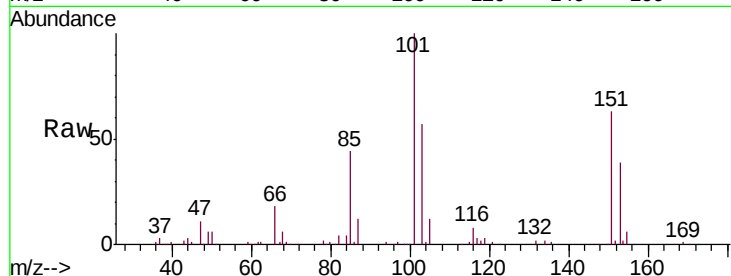
103 55.8 51.7 77.5





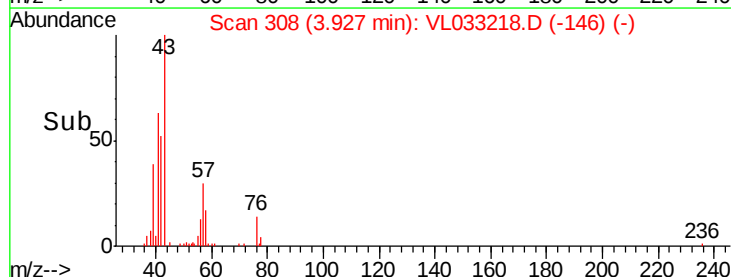
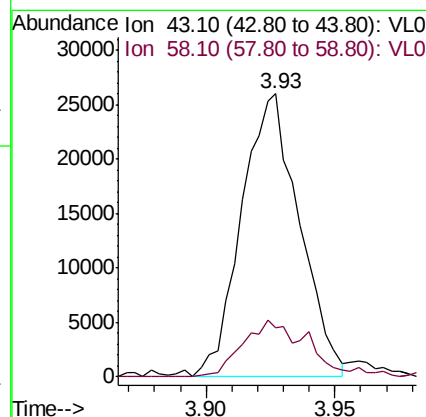
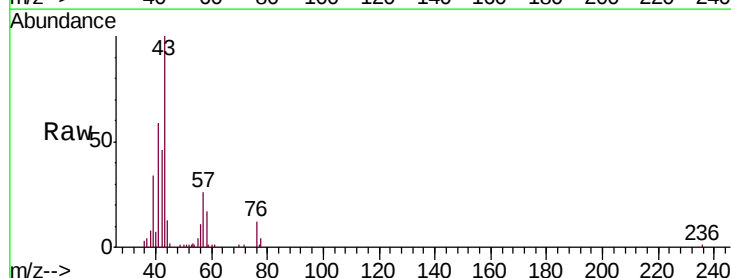
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 1.405 ppbv
 RT: 4.55 min Scan# 502
 Delta R.T. -0.00 min
 Lab File: VL033218.D
 Acq: 15 Feb 2019 4:09

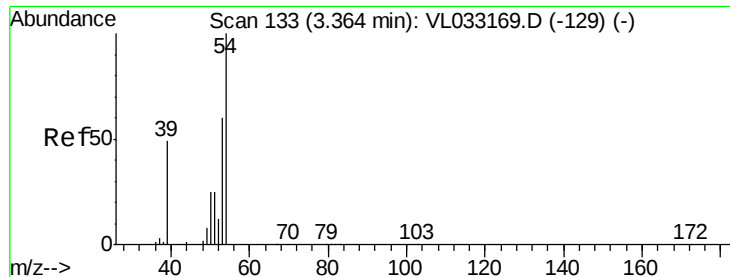
Tgt Ion: 101 Resp: 131053
 Ion Ratio Lower Upper
 101 100
 151 70.7 57.4 86.0



#15
 Acetone
 Concen: 0.415 ppbv
 RT: 3.93 min Scan# 308
 Delta R.T. 0.02 min
 Lab File: VL033218.D
 Acq: 15 Feb 2019 4:09

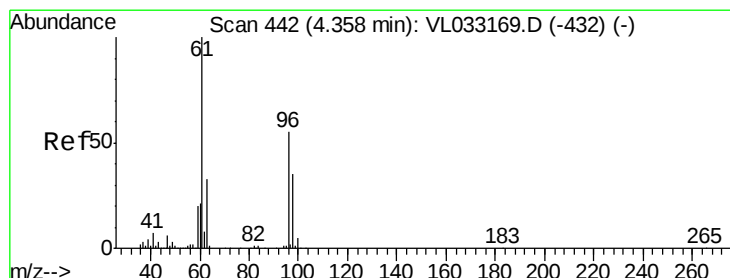
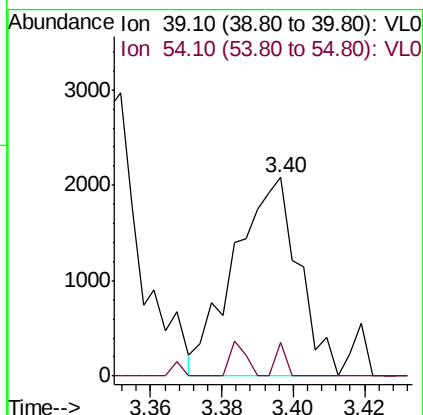
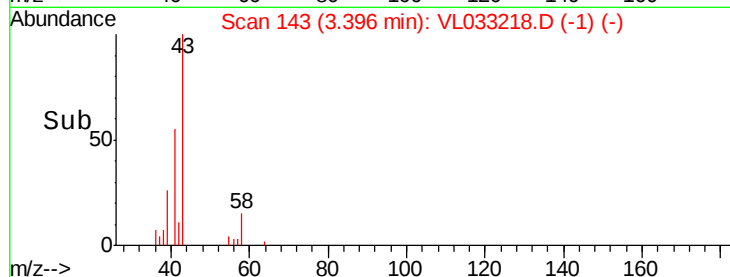
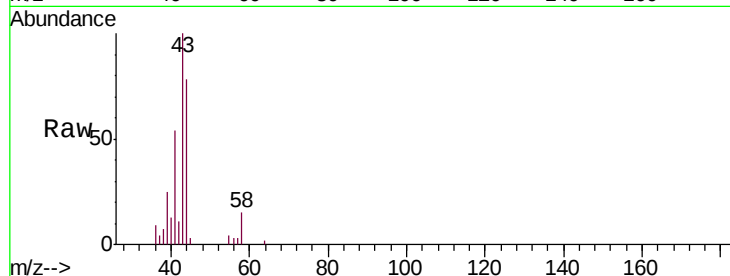
Tgt Ion: 43 Resp: 40714
 Ion Ratio Lower Upper
 43 100
 58 23.4 21.1 31.7





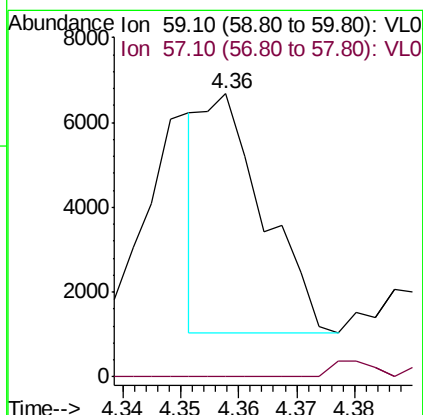
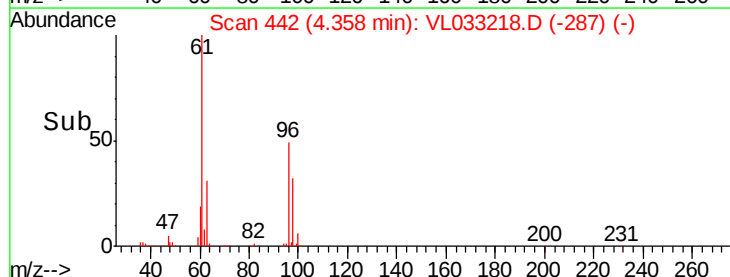
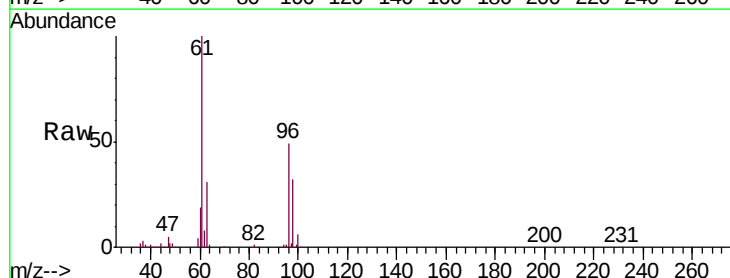
#16
1,3-Butadiene
Concen: 0.055 ppbv
RT: 3.40 min Scan# 143
Delta R.T. 0.03 min
Lab File: VL033218.D
Acq: 15 Feb 2019 4:09

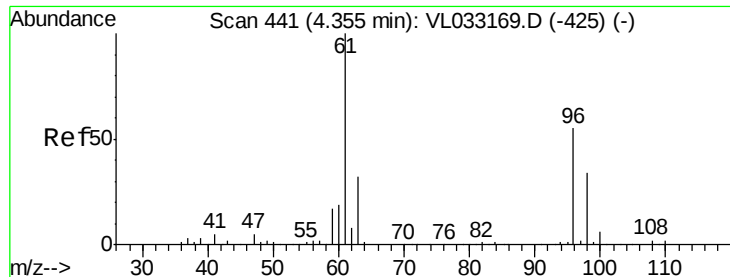
Tgt Ion: 39 Resp: 2578
Ion Ratio Lower Upper
39 100
54 7.0 71.3 106.9#



#17
tert-Butyl alcohol
Concen: 0.222 ppbv
RT: 4.36 min Scan# 442
Delta R.T. -0.00 min
Lab File: VL033218.D
Acq: 15 Feb 2019 4:09

Tgt Ion: 59 Resp: 4144
Ion Ratio Lower Upper
59 100
57 0.0 7.6 11.4#





#18

1,1-Dichloroethene

Concen: 3.534 ppbv

RT: 4.35 min Scan# 441

Delta R.T. -0.00 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

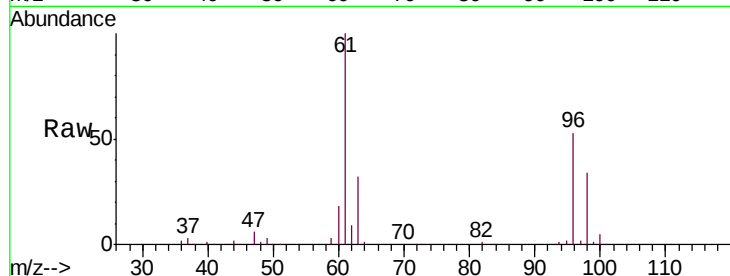
Tgt Ion: 96 Resp: 147594

Ion Ratio Lower Upper

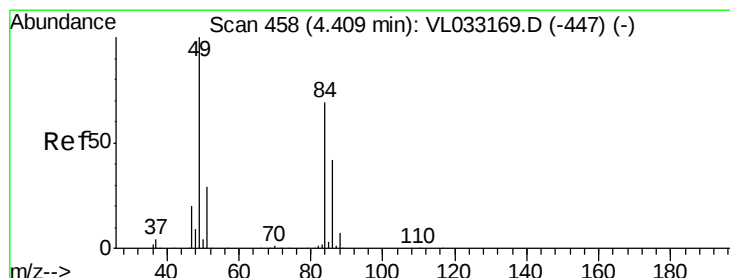
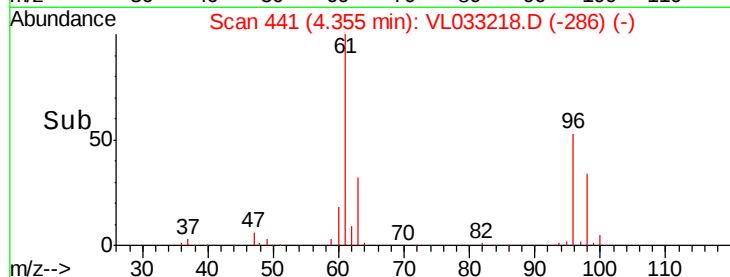
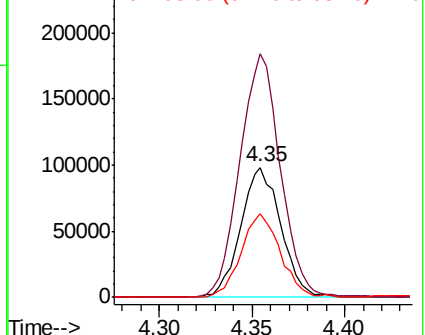
96 100

61 187.3 145.0 217.6

98 64.1 50.0 75.0



Abundance Ion 96.00 (95.70 to 96.70): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 98.00 (97.70 to 98.70): VL0



#20

Methylene Chloride

Concen: 0.453 ppbv

RT: 4.41 min Scan# 459

Delta R.T. 0.00 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

Tgt Ion: 84 Resp: 17664

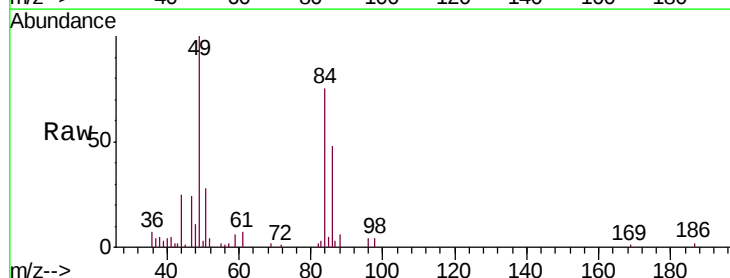
Ion Ratio Lower Upper

84 100

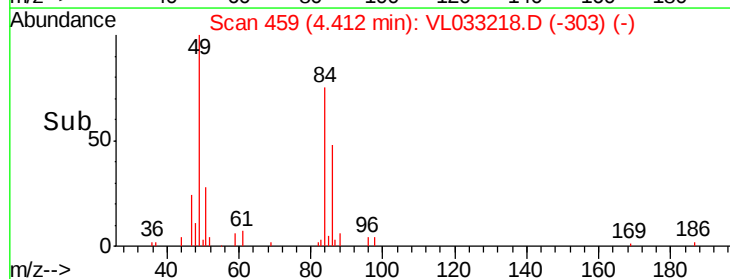
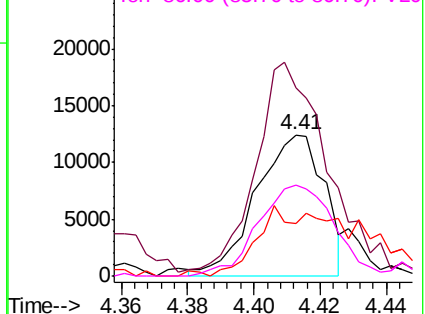
49 135.1 115.8 173.8

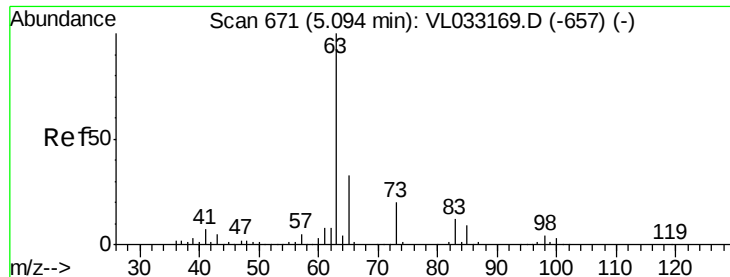
51 40.9 33.0 49.6

86 71.0 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: 22.293 ppbv

RT: 5.09 min Scan# 671

Delta R.T. -0.00 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

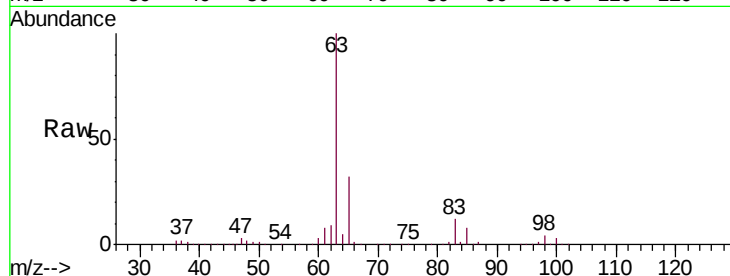
Tgt Ion: 63 Resp: 2678121

Ion Ratio Lower Upper

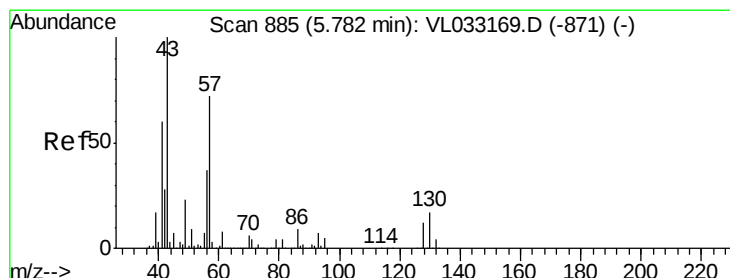
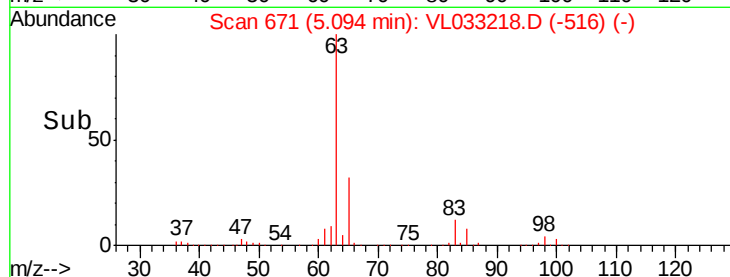
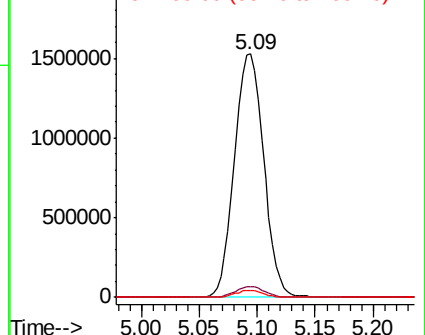
63 100

98 4.3 2.1 6.5

100 2.8 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



#26

Hexane

Concen: 0.038 ppbv

RT: 5.79 min Scan# 887

Delta R.T. 0.01 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

Tgt Ion: 57 Resp: 3926

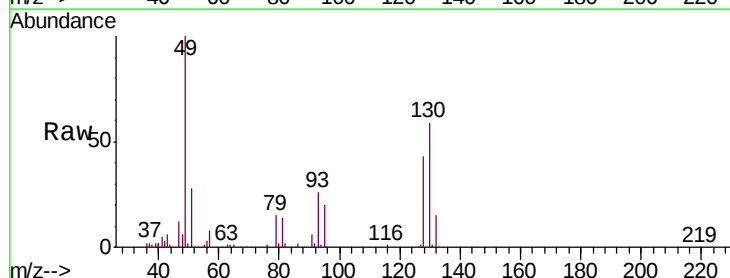
Ion Ratio Lower Upper

57 100

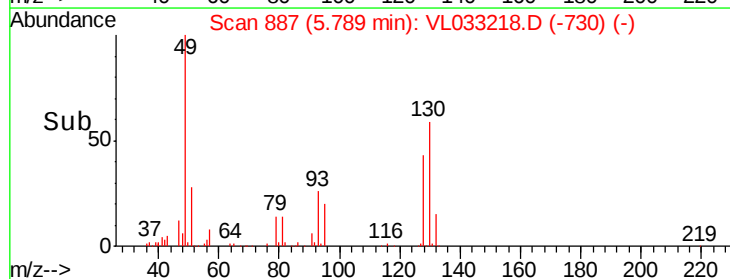
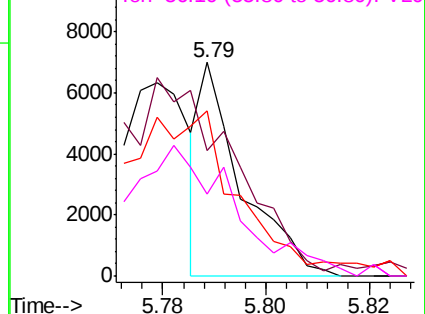
41 0.0 69.4 104.2#

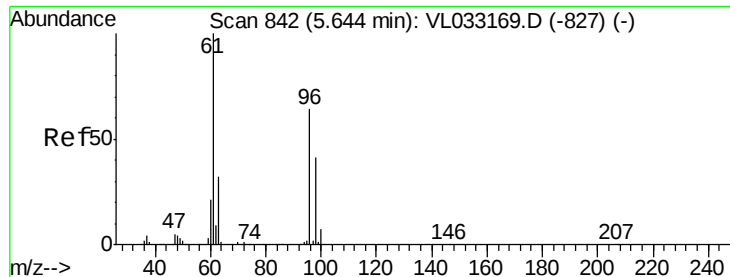
43 241.9 176.7 265.1

56 0.0 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

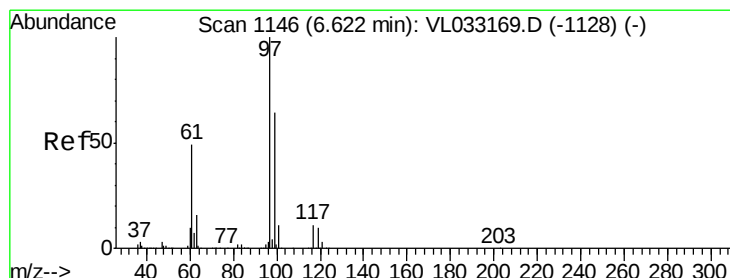
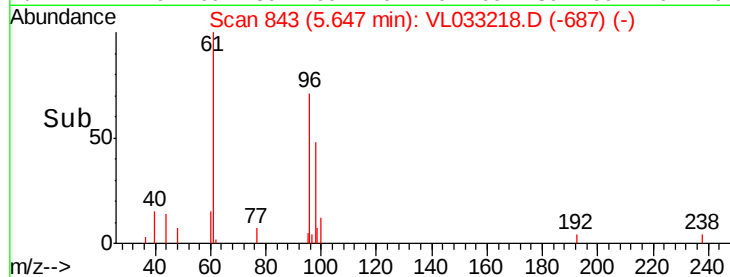
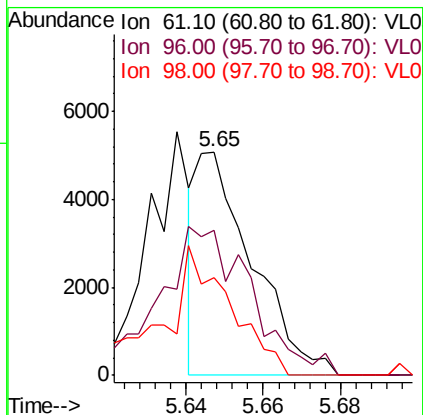
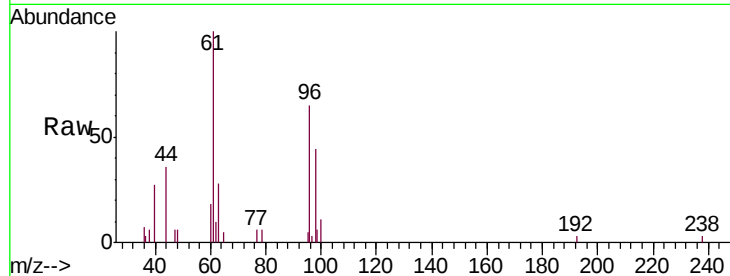




#31

cis-1,2-Dichloroethene
 Concen: 0.049 ppbv
 RT: 5.65 min Scan# 843
 Delta R.T. 0.00 min
 Lab File: VL033218.D
 Acq: 15 Feb 2019 4:09

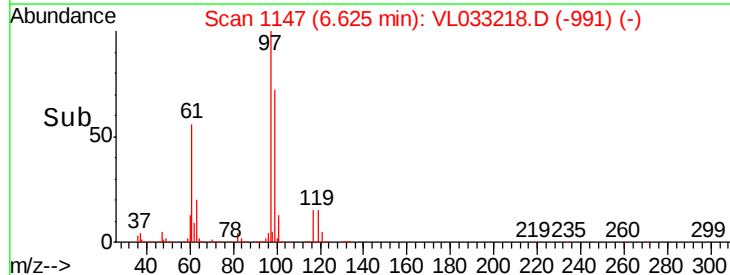
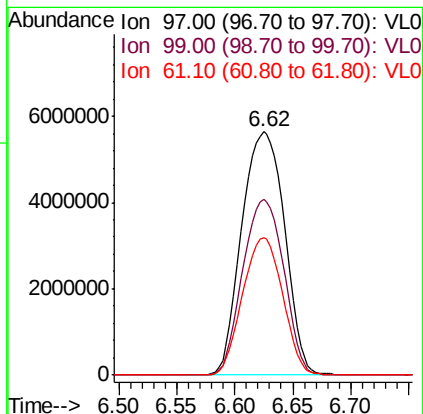
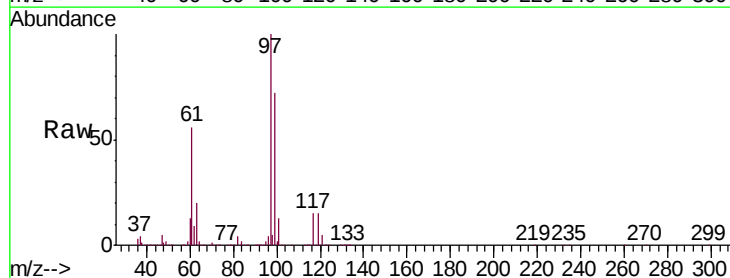
Tgt Ion	Ratio	Lower	Upper
61	100		
96	68.2	51.2	76.8
98	50.3	32.8	49.2

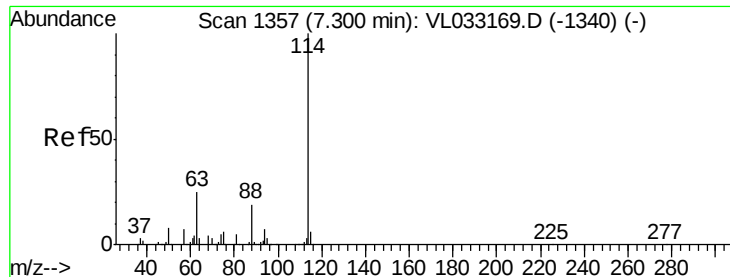


#32

1,1,1-Trichloroethane
 Concen: 83.330 ppbv
 RT: 6.62 min Scan# 1147
 Delta R.T. 0.00 min
 Lab File: VL033218.D
 Acq: 15 Feb 2019 4:09

Tgt Ion	Ratio	Lower	Upper
97	100		
99	69.4	51.4	77.2
61	53.0	38.9	58.3





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1356

Delta R.T. -0.00 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

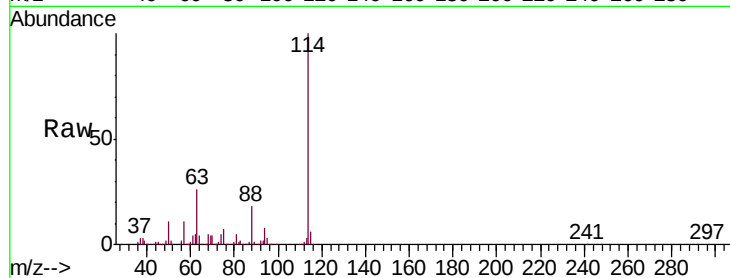
Tgt Ion: 114 Resp: 1980814

Ion Ratio Lower Upper

114 100

63 26.8 20.8 31.2

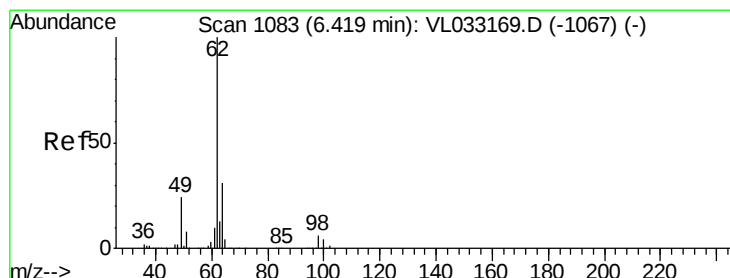
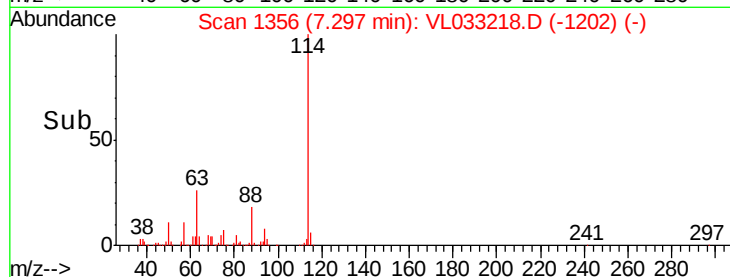
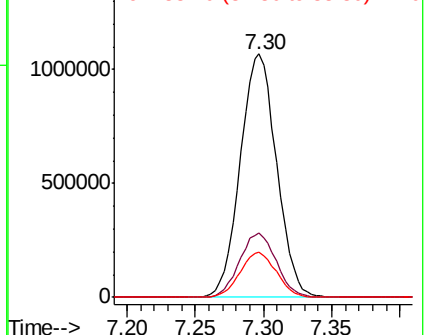
88 18.5 14.6 22.0



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: 10.575 ppbv

RT: 6.62 min Scan# 1146

Delta R.T. 0.20 min

Lab File: VL033218.D

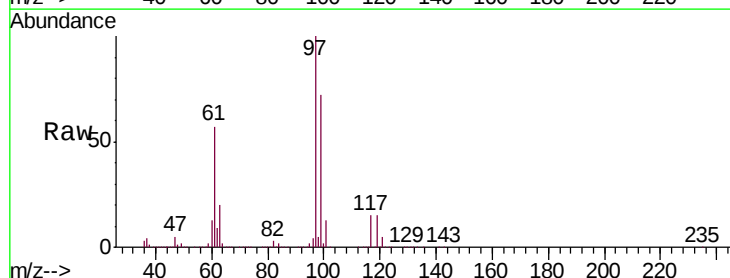
Acq: 15 Feb 2019 4:09

Tgt Ion: 62 Resp: 1176535

Ion Ratio Lower Upper

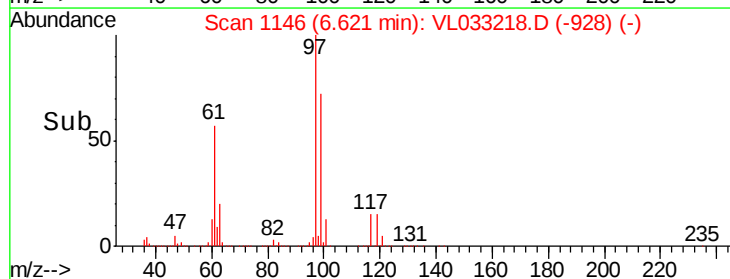
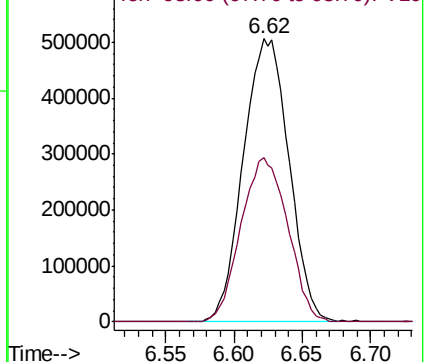
62 100

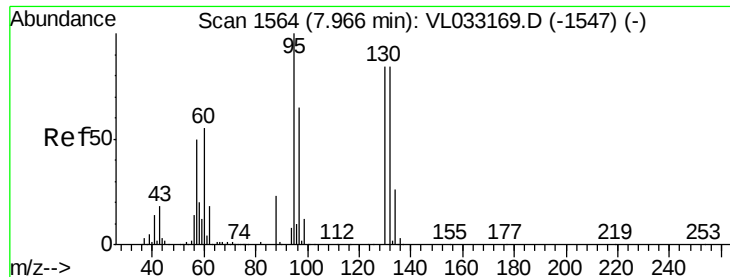
98 59.7 4.7 7.1#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#38

Trichloroethene

Concen: 0.134 ppbv

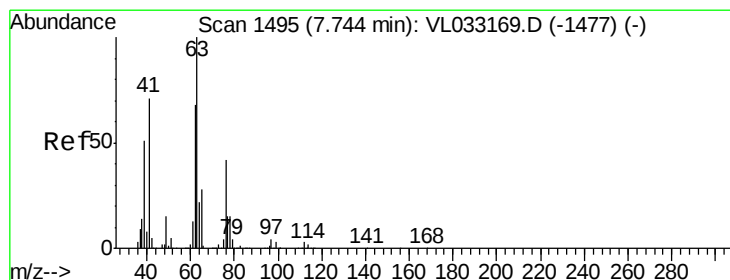
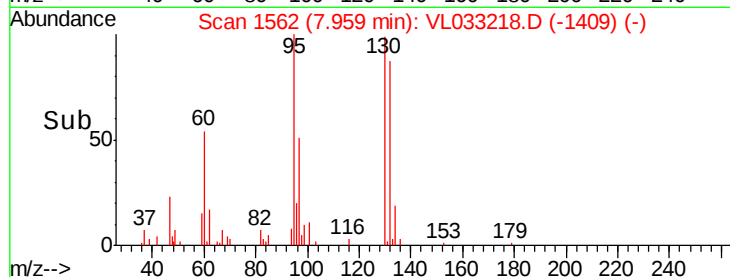
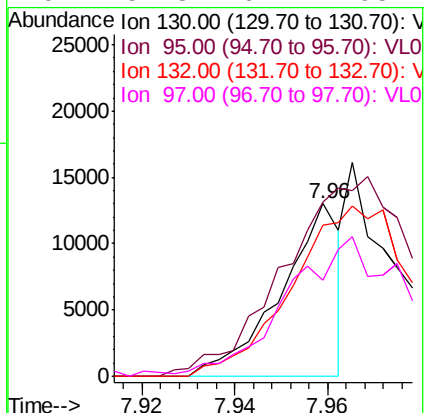
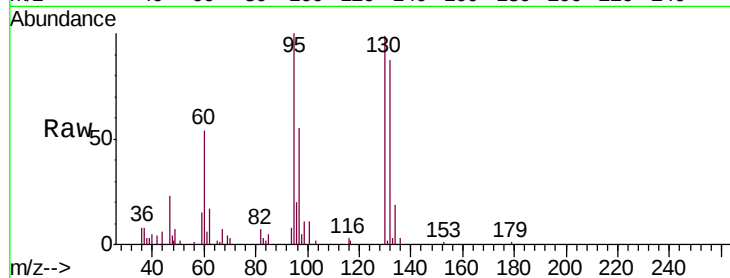
RT: 7.96 min Scan# 1562

Delta R.T. -0.01 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

Tgt Ion:	130	Resp:	11484
Ion	Ratio	Lower	Upper
130	100		
95	96.4	95.5	143.3
132	87.5	80.0	120.0
97	52.8	62.2	93.2#



#39

1,2-Dichloropropane

Concen: 6.634 ppbv

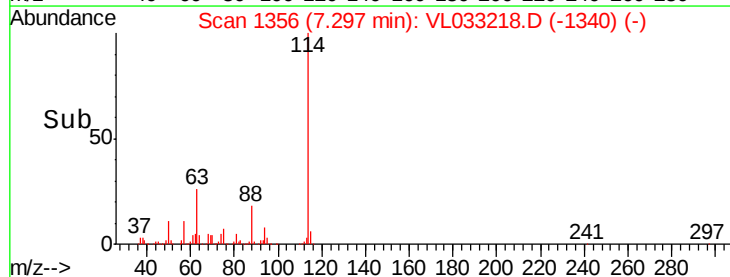
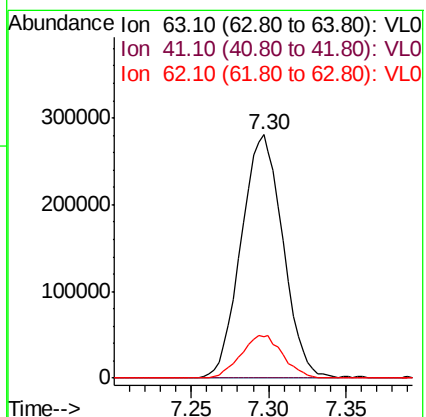
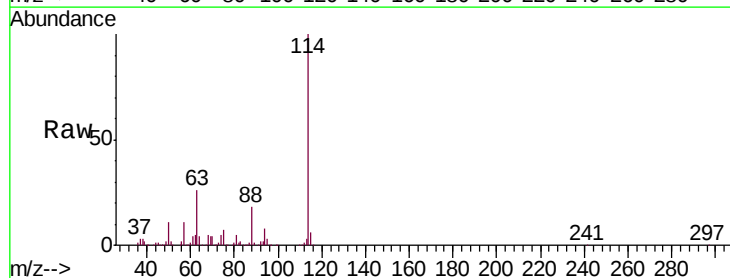
RT: 7.30 min Scan# 1356

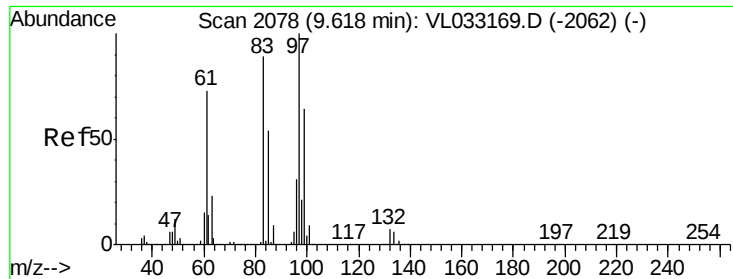
Delta R.T. -0.45 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

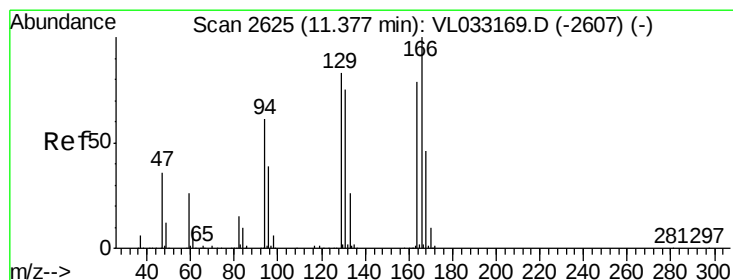
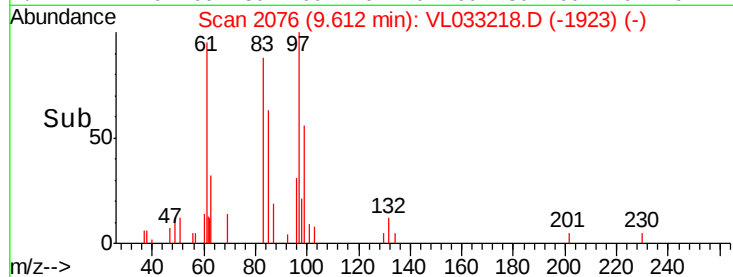
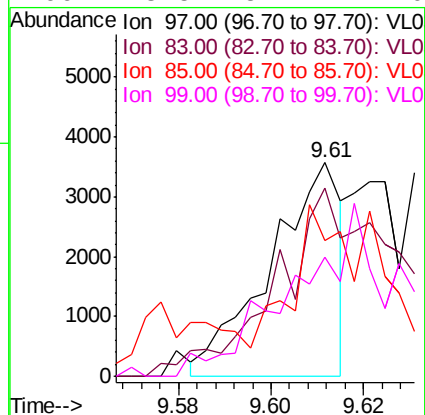
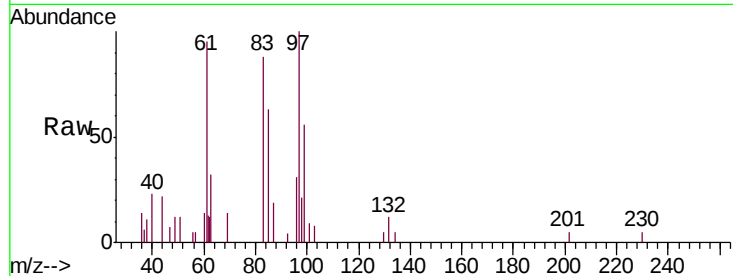
Tgt Ion:	63	Resp:	525933
Ion	Ratio	Lower	Upper
63	100		
41	0.0	56.4	84.6#
62	17.2	54.2	81.4#





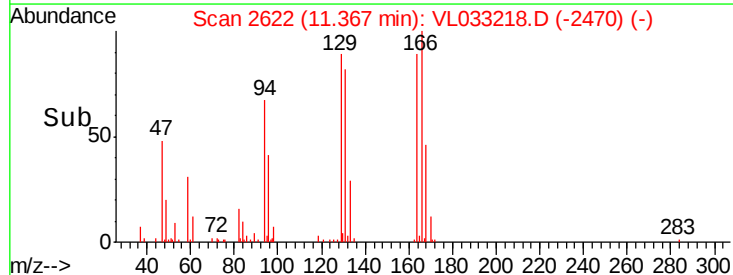
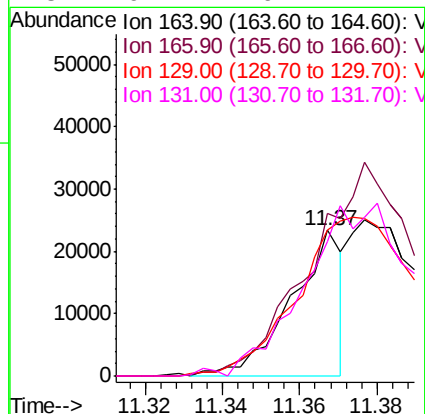
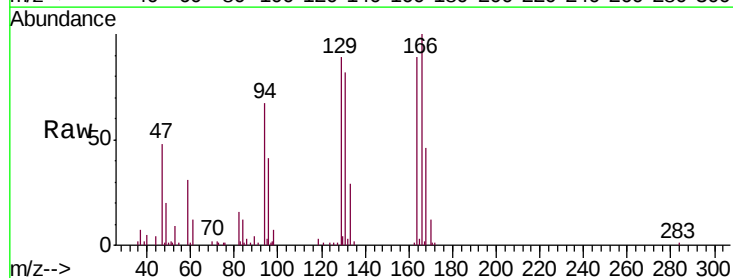
#47
 1,1,2-Trichloroethane
 Concen: 0.046 ppbv
 RT: 9.61 min Scan# 2076
 Delta R.T. -0.01 min
 Lab File: VL033218.D
 Acq: 15 Feb 2019 4:09

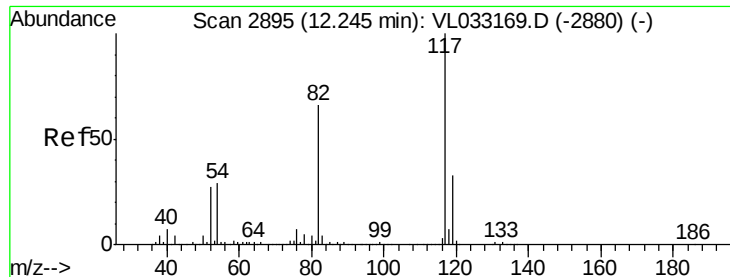
Tgt Ion:	97	Resp:	3786
Ion	Ratio	Lower	Upper
97	100		
83	81.0	71.4	107.2
85	40.8	43.5	65.3#
99	48.5	51.4	77.0#



#52
 Tetrachloroethene
 Concen: 0.273 ppbv
 RT: 11.37 min Scan# 2622
 Delta R.T. -0.01 min
 Lab File: VL033218.D
 Acq: 15 Feb 2019 4:09

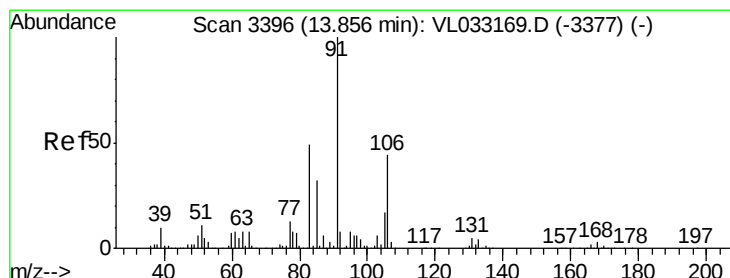
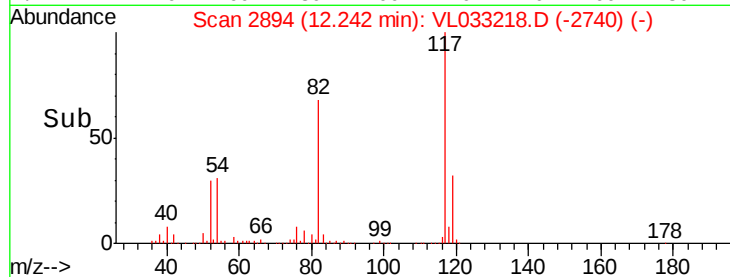
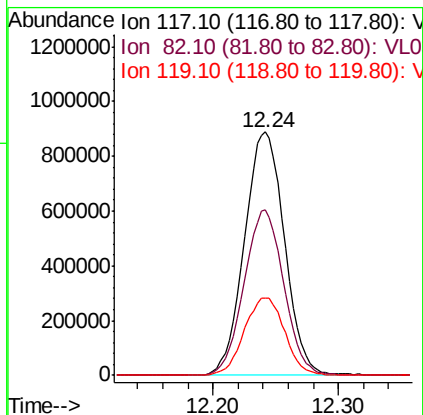
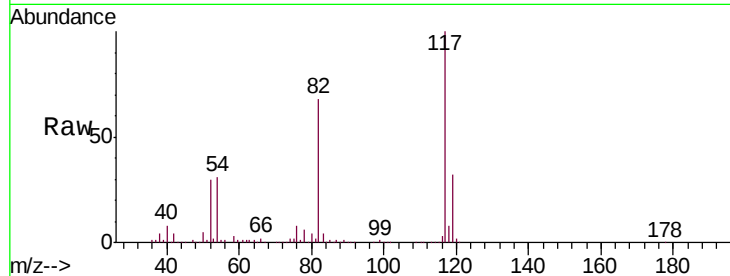
Tgt Ion:	164	Resp:	21024
Ion	Ratio	Lower	Upper
164	100		
166	110.9	100.9	151.3
129	102.3	83.9	125.9
131	94.1	76.2	114.2





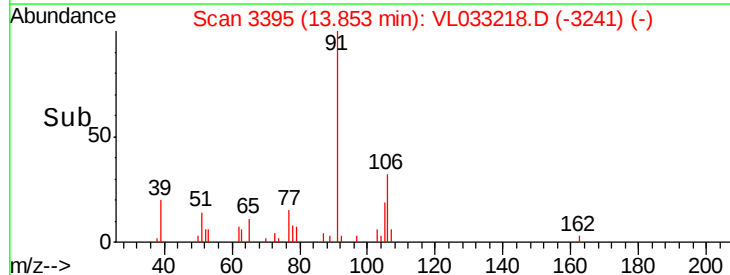
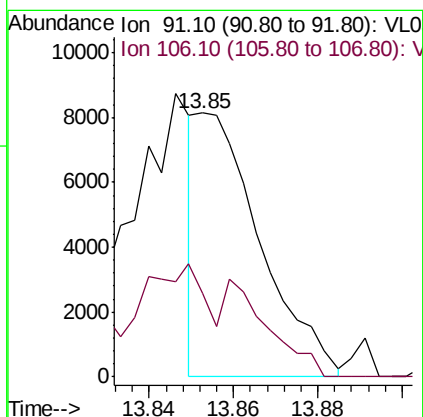
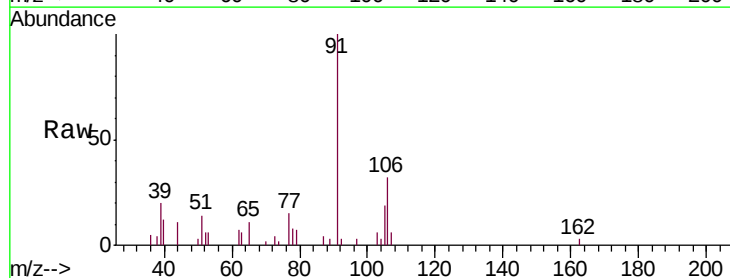
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2894
Delta R.T. -0.00 min
Lab File: VL033218.D
Acq: 15 Feb 2019 4:09

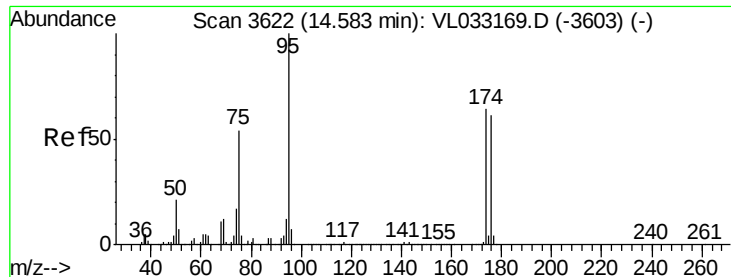
Tgt Ion: 117 Resp: 1966890
Ion Ratio Lower Upper
117 100
82 68.0 49.5 74.3
119 32.3 24.4 36.6



#60
o-Xylene
Concen: 0.033 ppbv
RT: 13.85 min Scan# 3395
Delta R.T. -0.00 min
Lab File: VL033218.D
Acq: 15 Feb 2019 4:09

Tgt Ion: 91 Resp: 8439
Ion Ratio Lower Upper
91 100
106 80.6 21.8 65.3#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.650 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. -0.01 min

Lab File: VL033218.D

Acq: 15 Feb 2019 4:09

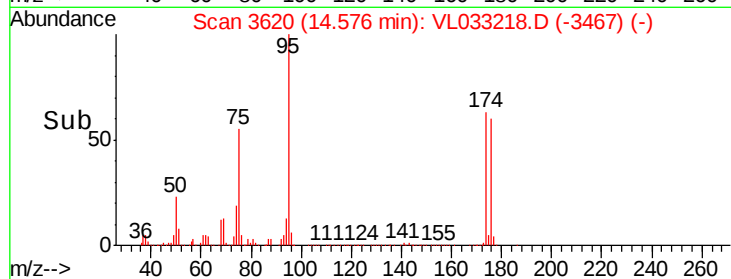
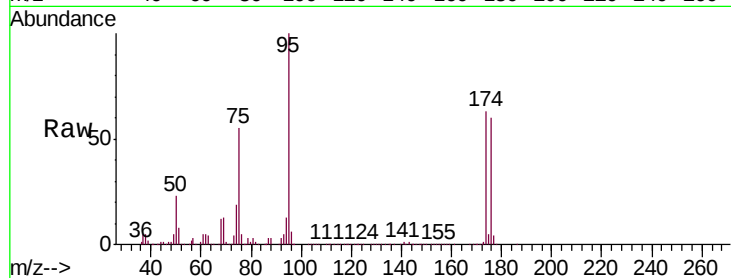
Tgt Ion: 95 Resp: 1613250

Ion Ratio Lower Upper

95 100

174 63.4 51.2 76.8

175 4.6 3.8 5.6



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

800000

600000

400000

200000

0

14.58

14.50

14.60

Time-->