

Data File : VL032664.D
Acq On : 19 Oct 2018 1:46
Operator : SY/AP
Sample : J5578-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1

Quant Time: Oct 19 04:21:21 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL101818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Oct 19 01:25:37 2018
QLast Update : Fri Oct 19 01:25:37 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.78	49	1362532	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3400792	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3227426	10.00	ppbv	0.00

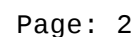
System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.59 95 2333030 9.71 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 97.10%

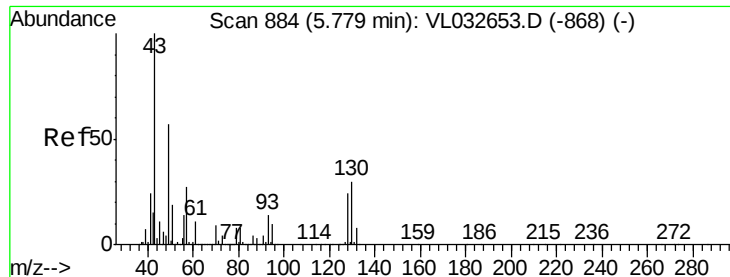
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.08	85	39299	0.283	ppbv	93
3) Chlorodifluoromethane	3.02	51	42207	0.396	ppbv	92
4) Chloromethane	3.18	50	18255	0.307	ppbv #	76
8) Dichlorotetrafluoroethane	3.24	85	3963	0.027	ppbv	88
9) Propene	3.25	41	19465	0.444	ppbv	88
11) Trichlorofluoromethane	4.02	101	43487	0.240	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.56	101	6808	0.045	ppbv #	17
13) Ethanol	3.67	45	66150	5.278	ppbv	95
15) Acetone	3.92	43	220359	1.751	ppbv	96
17) tert-Butyl alcohol	4.40	59	923	0.025	ppbv #	100
19) Isopropyl Alcohol	4.07	45	24383	0.272	ppbv #	1
20) Methylene Chloride	4.43	84	21459	0.336	ppbv	86
23) Vinyl Acetate	5.16	43	25210	0.113	ppbv #	92
25) Ethyl Acetate	5.80	43	12387	0.043	ppbv #	64
26) Hexane	5.79	57	11555	0.084	ppbv #	39
29) Chloroform	5.87	83	4682	0.021	ppbv	87
34) 2-Butanone	5.36	43	47243	0.259	ppbv	98
35) Carbon Tetrachloride	7.15	117	5057	0.021	ppbv #	63
36) Benzene	7.02	78	24522	0.089	ppbv #	85
39) 1,2-Dichloropropane	7.30	63	847017	7.943	ppbv #	26
53) Toluene	9.96	91	33412	0.106	ppbv #	20
80) Naphthalene,2-methyl-	25.14	142	3227	0.060	ppbv #	86

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.78 min Scan# 883

Delta R.T. -0.00 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampleId :

AA-1

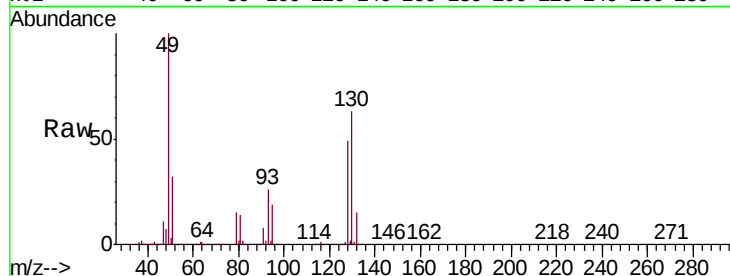
Tgt Ion: 49 Resp: 1362532

Ion Ratio Lower Upper

49 100

128 49.6 22.3 66.8

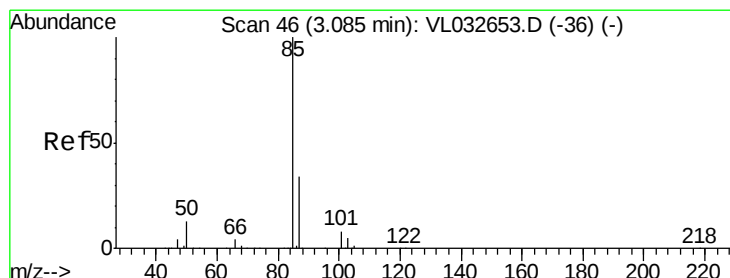
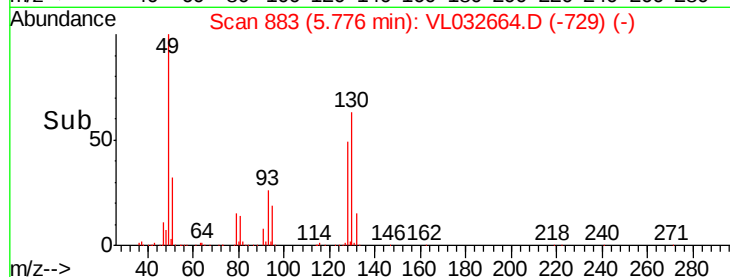
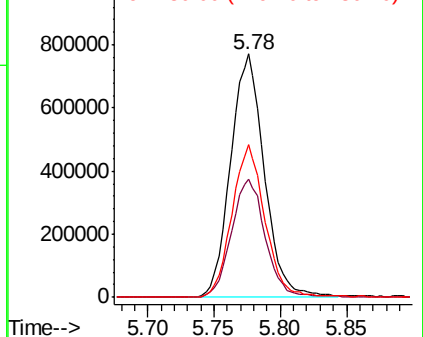
130 62.0 28.4 85.3



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: 0.283 ppbv

RT: 3.08 min Scan# 46

Delta R.T. -0.00 min

Lab File: VL032664.D

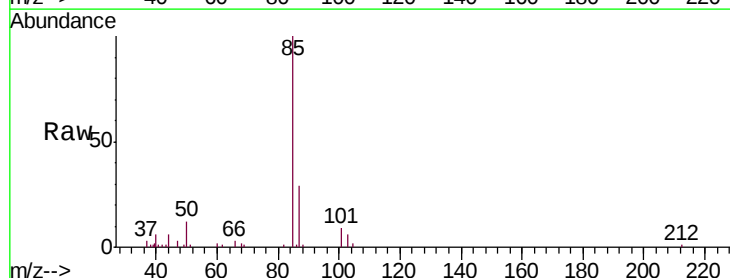
Acq: 19 Oct 2018 1:46

Tgt Ion: 85 Resp: 39299

Ion Ratio Lower Upper

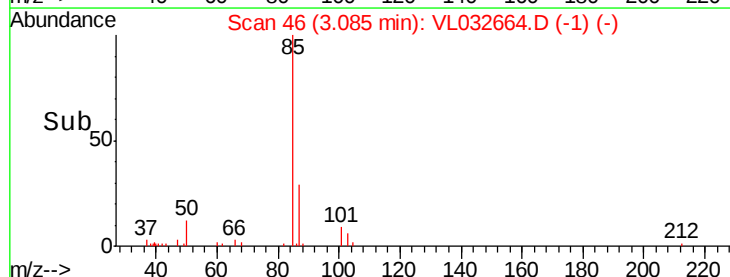
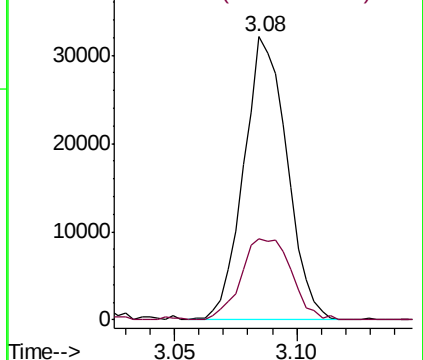
85 100

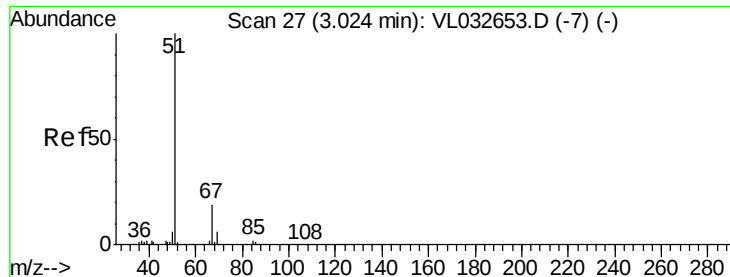
87 28.6 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.396 ppbv

RT: 3.02 min Scan# 27

Delta R.T. -0.00 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampled :

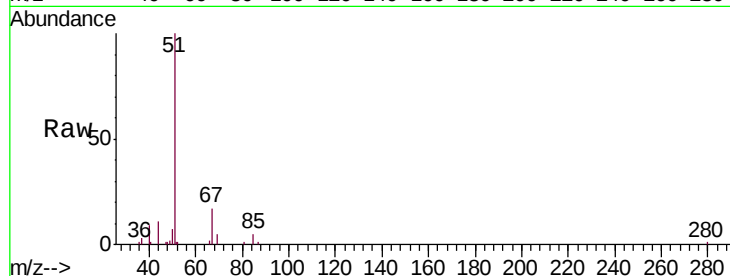
AA-1

Tgt Ion: 51 Resp: 42207

Ion Ratio Lower Upper

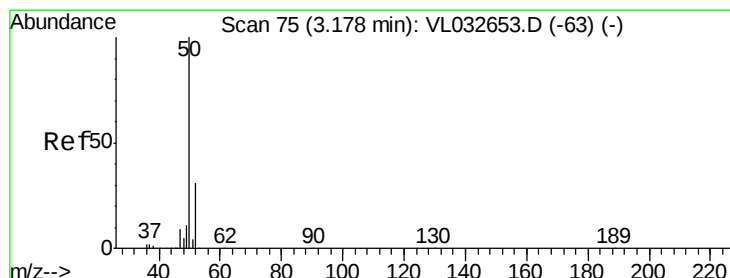
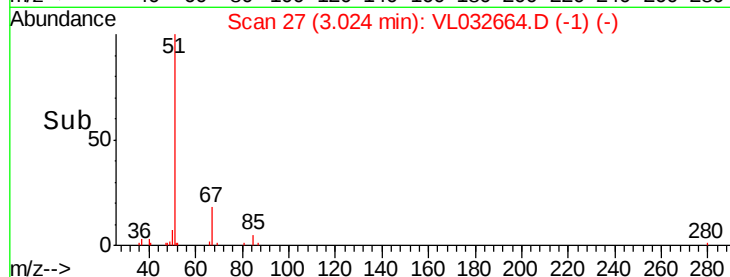
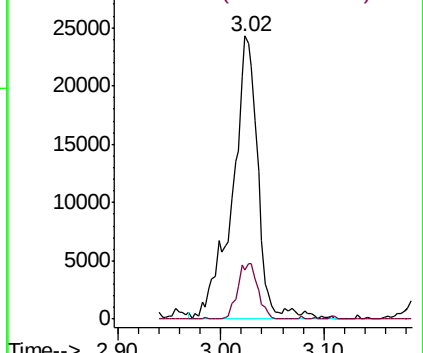
51 100

67 15.4 15.2 22.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.307 ppbv

RT: 3.18 min Scan# 76

Delta R.T. 0.00 min

Lab File: VL032664.D

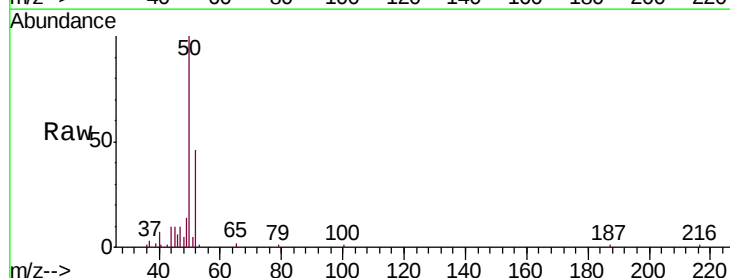
Acq: 19 Oct 2018 1:46

Tgt Ion: 50 Resp: 18255

Ion Ratio Lower Upper

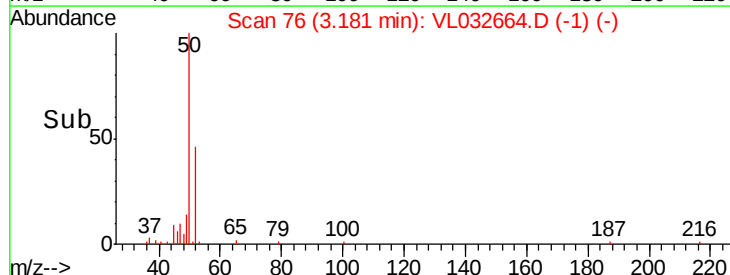
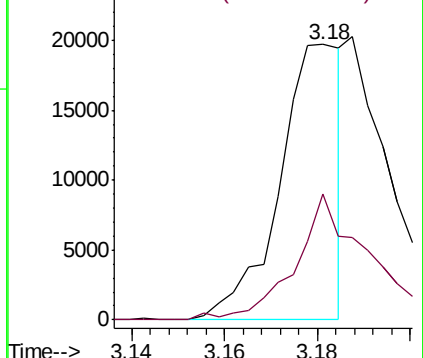
50 100

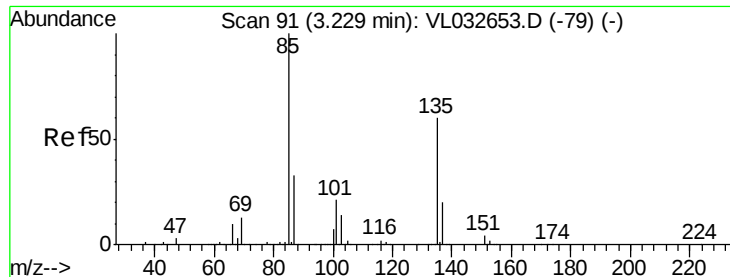
52 45.6 25.9 38.9#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.027 ppbv

RT: 3.24 min Scan# 93

Delta R.T. 0.01 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampleId :

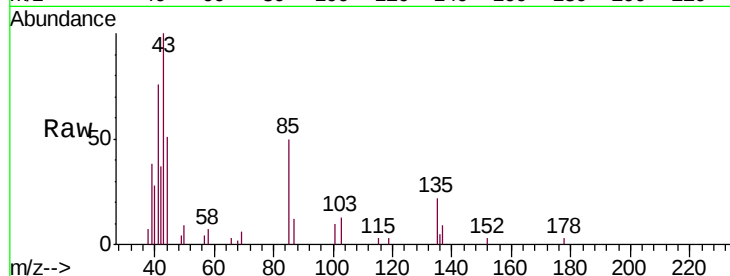
AA-1

Tgt Ion: 85 Resp: 3963

Ion Ratio Lower Upper

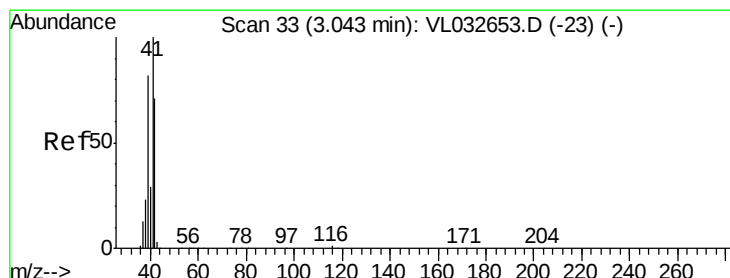
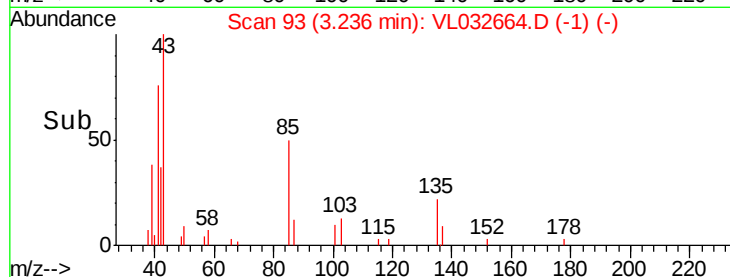
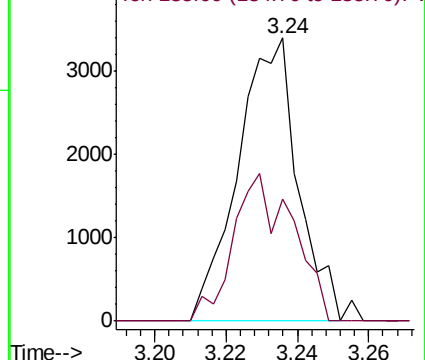
85 100

135 51.7 49.0 73.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): VL0



#9

Propene

Concen: 0.444 ppbv

RT: 3.25 min Scan# 96

Delta R.T. 0.20 min

Lab File: VL032664.D

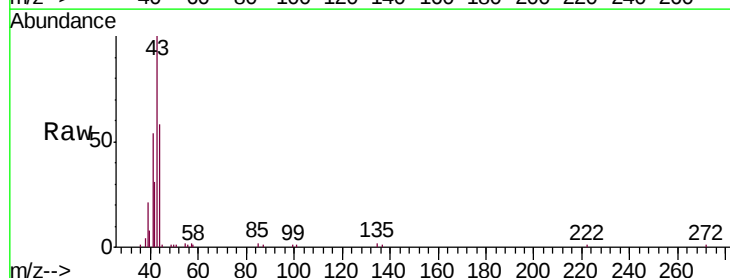
Acq: 19 Oct 2018 1:46

Tgt Ion: 41 Resp: 19465

Ion Ratio Lower Upper

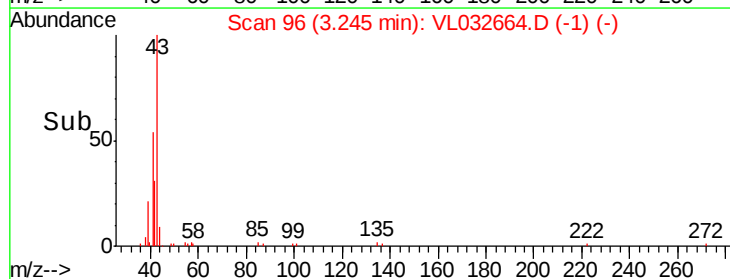
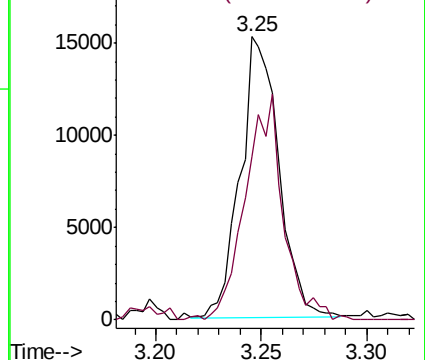
41 100

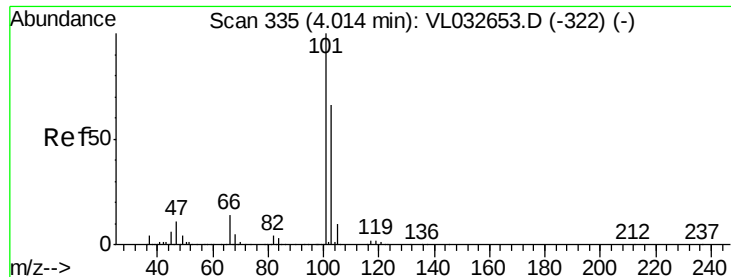
42 79.0 55.4 83.0



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#11

Trichlorofluoromethane

Concen: 0.240 ppbv

RT: 4.02 min Scan# 336

Delta R.T. 0.00 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampleId :

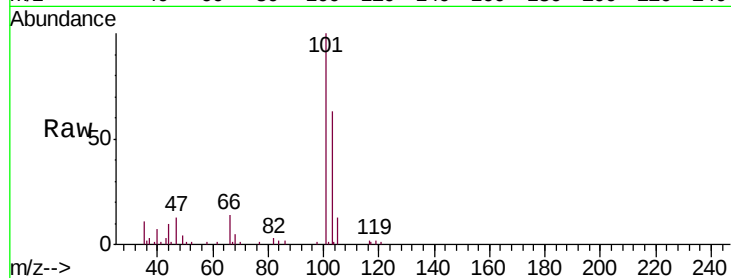
AA-1

Tgt Ion:101 Resp: 43487

Ion Ratio Lower Upper

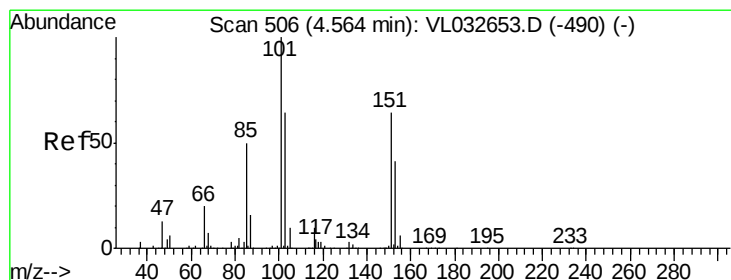
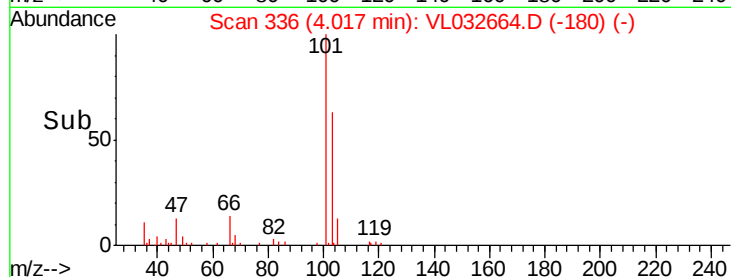
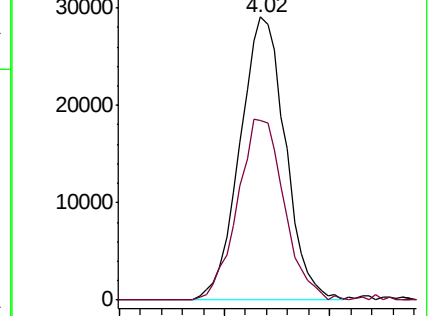
101 100

103 63.3 51.4 77.2



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: 0.045 ppbv

RT: 4.56 min Scan# 506

Delta R.T. -0.00 min

Lab File: VL032664.D

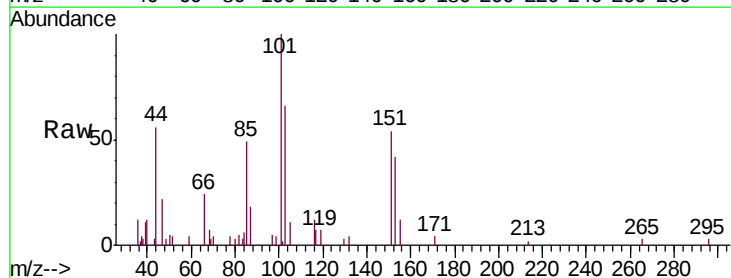
Acq: 19 Oct 2018 1:46

Tgt Ion:101 Resp: 6808

Ion Ratio Lower Upper

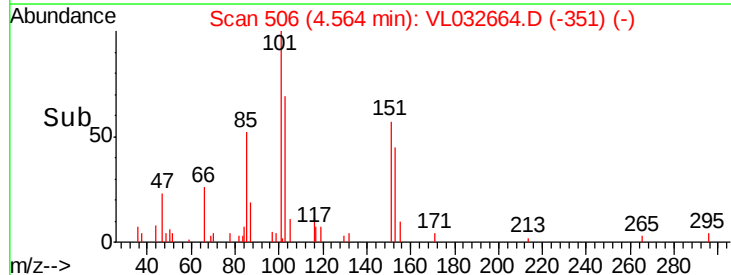
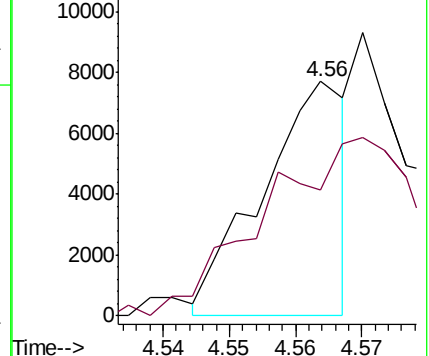
101 100

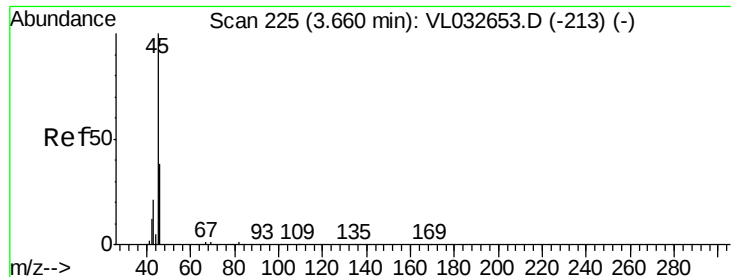
151 0.0 52.3 78.5#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 5.278 ppbv

RT: 3.67 min Scan# 229

Delta R.T. 0.01 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampleId :

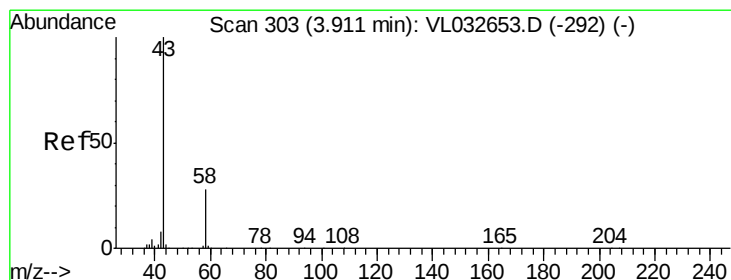
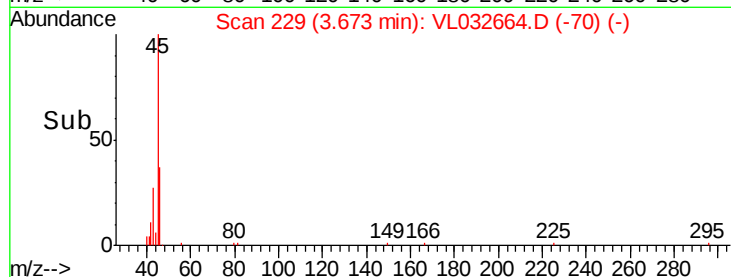
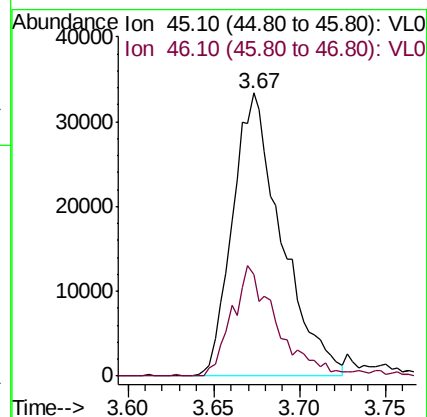
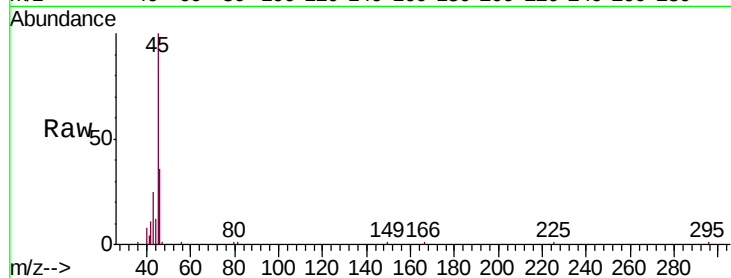
AA-1

Tgt Ion: 45 Resp: 66150

Ion Ratio Lower Upper

45 100

46 35.5 15.4 61.8



#15

Acetone

Concen: 1.751 ppbv

RT: 3.92 min Scan# 306

Delta R.T. 0.01 min

Lab File: VL032664.D

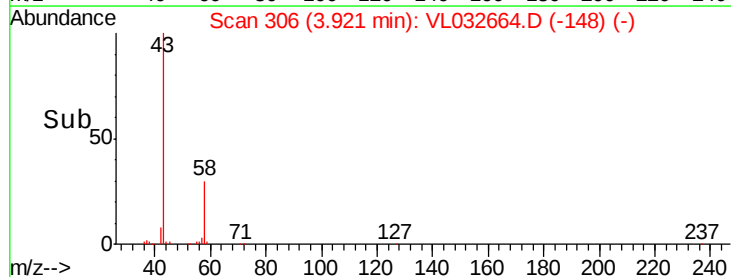
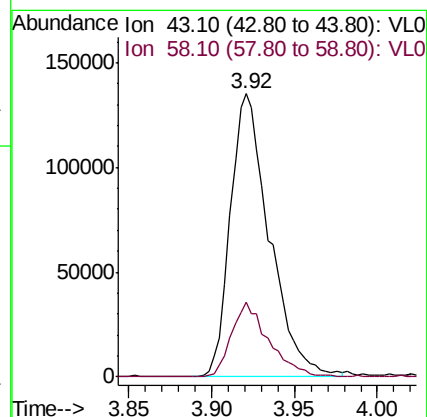
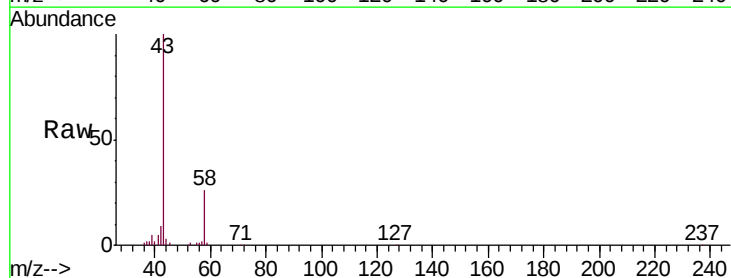
Acq: 19 Oct 2018 1:46

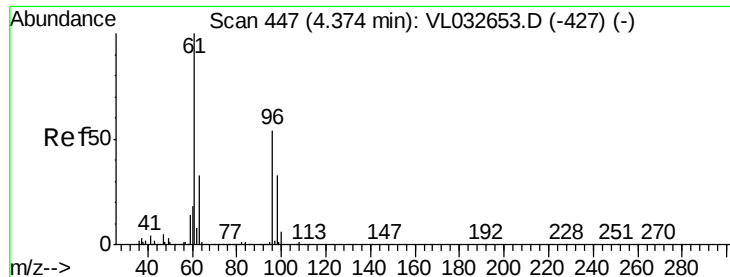
Tgt Ion: 43 Resp: 220359

Ion Ratio Lower Upper

43 100

58 25.8 22.1 33.1

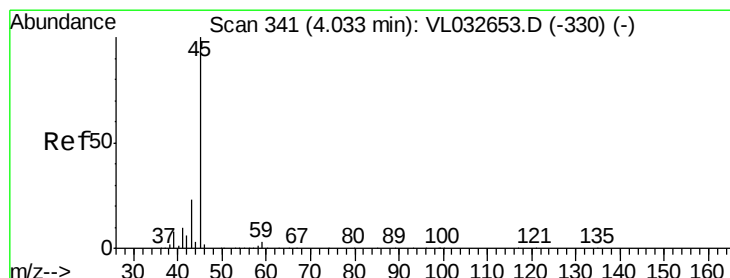
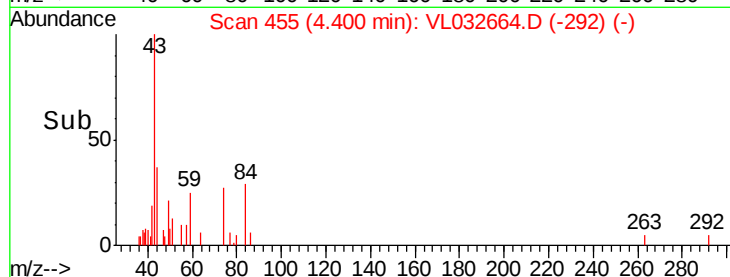
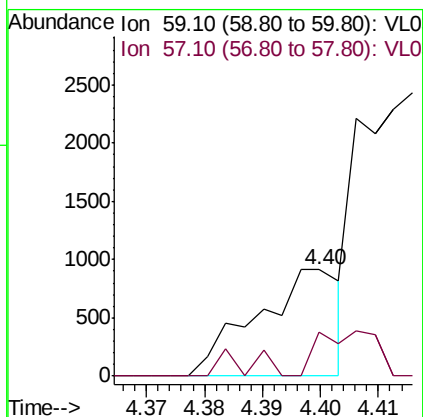
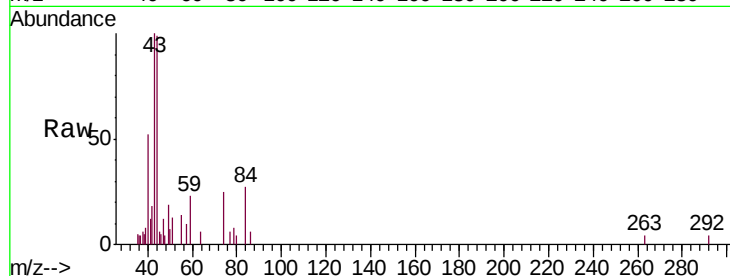




#17
tert-Butyl alcohol
Concen: 0.025 ppbv
RT: 4.40 min Scan# 455
Delta R.T. 0.03 min
Lab File: VL032664.D
Acq: 19 Oct 2018 1:46

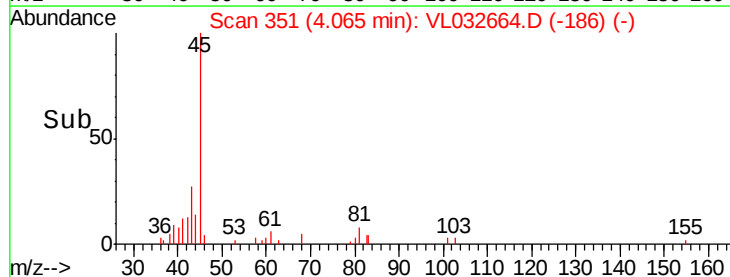
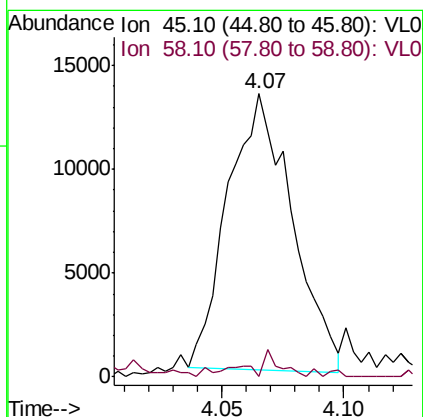
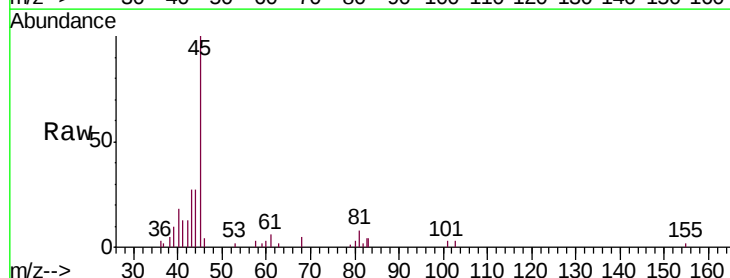
Instrument :
MSVOA_L
ClientSampleId :
AA-1

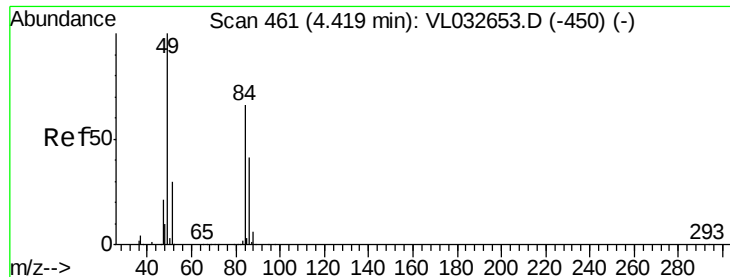
Tgt Ion: 59 Resp: 923
Ion Ratio Lower Upper
59 100
57 0.0 0.0 0.0



#19
Isopropyl Alcohol
Concen: 0.272 ppbv
RT: 4.07 min Scan# 351
Delta R.T. 0.03 min
Lab File: VL032664.D
Acq: 19 Oct 2018 1:46

Tgt Ion: 45 Resp: 24383
Ion Ratio Lower Upper
45 100
58 229.2 2.0 3.0#

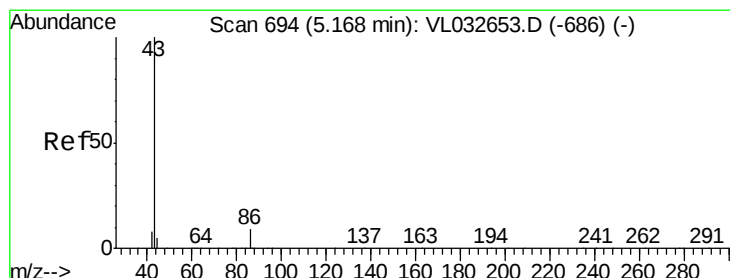
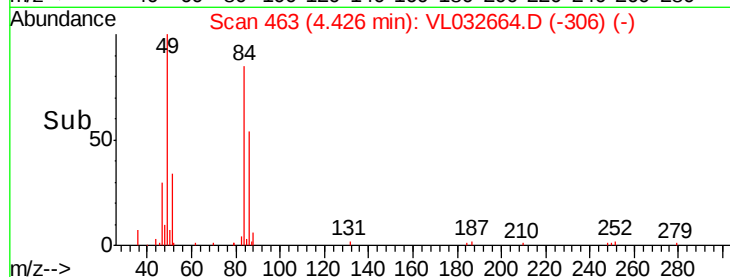
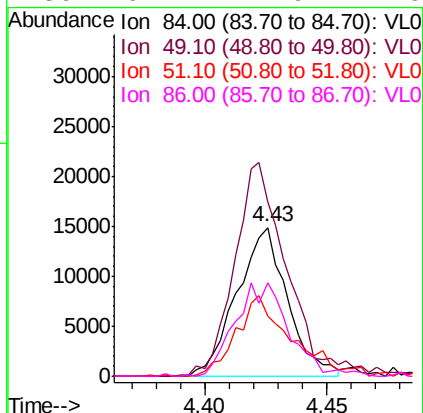
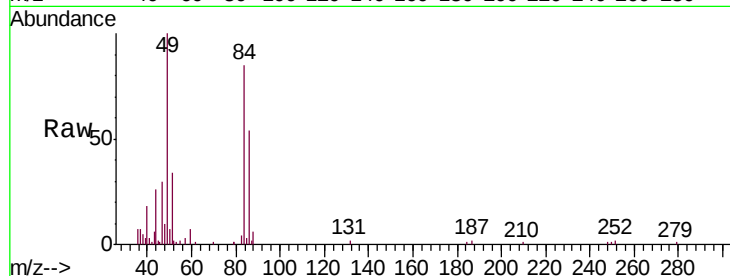




#20
Methylene Chloride
Concen: 0.336 ppbv
RT: 4.43 min Scan# 463
Delta R.T. 0.01 min
Lab File: VL032664.D
Acq: 19 Oct 2018 1:46

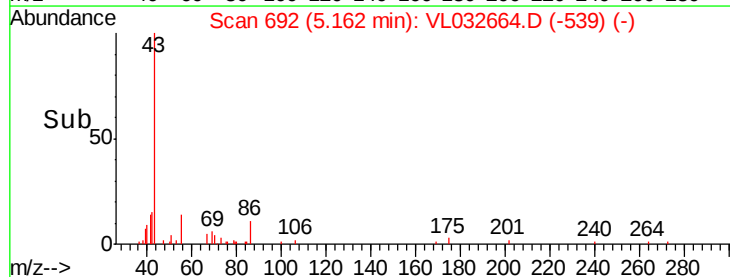
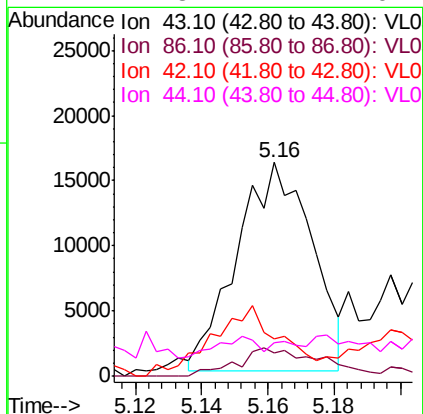
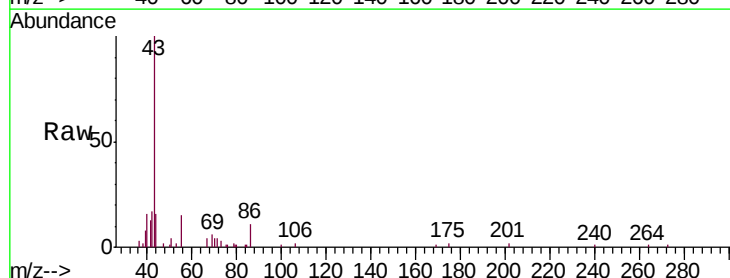
Instrument :
MSVOA_L
ClientSampleId :
AA-1

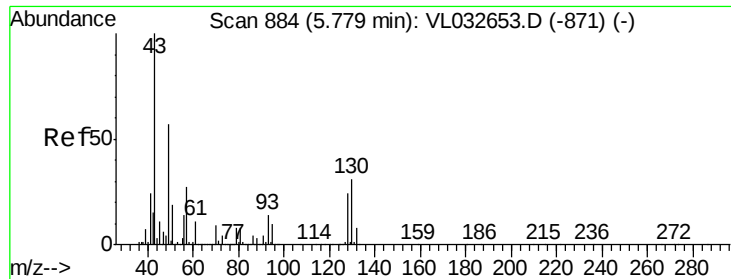
Tgt Ion:	84	Resp:	21459
Ion	Ratio	Lower	Upper
84	100		
49	115.8	113.5	170.3
51	40.0	34.8	52.2
86	61.7	47.9	71.9



#23
Vinyl Acetate
Concen: 0.113 ppbv
RT: 5.16 min Scan# 692
Delta R.T. -0.01 min
Lab File: VL032664.D
Acq: 19 Oct 2018 1:46

Tgt Ion:	43	Resp:	25210
Ion	Ratio	Lower	Upper
43	100		
86	13.0	6.1	9.1#
42	10.3	7.4	11.2
44	7.8	4.2	6.2#

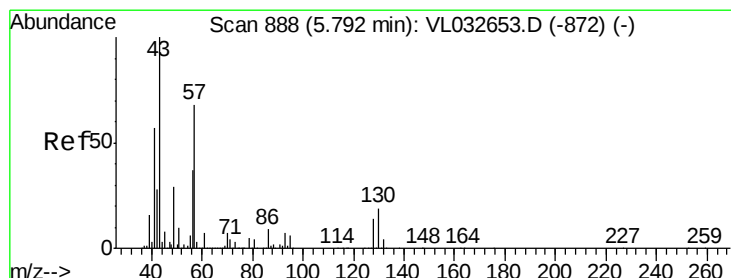
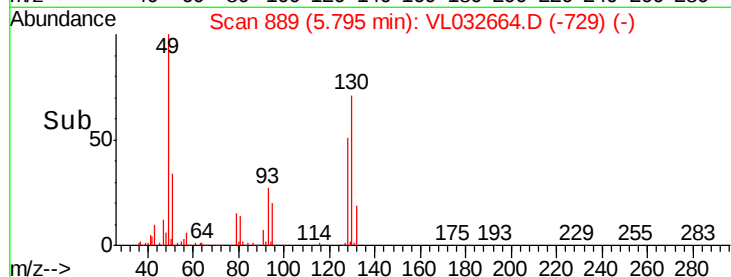
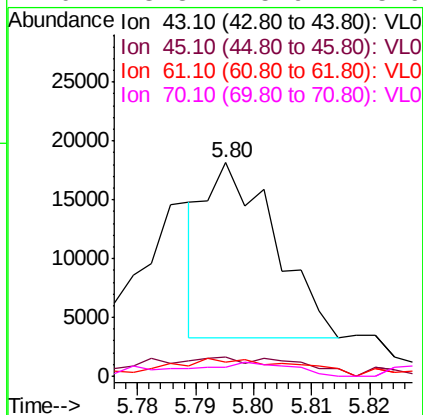
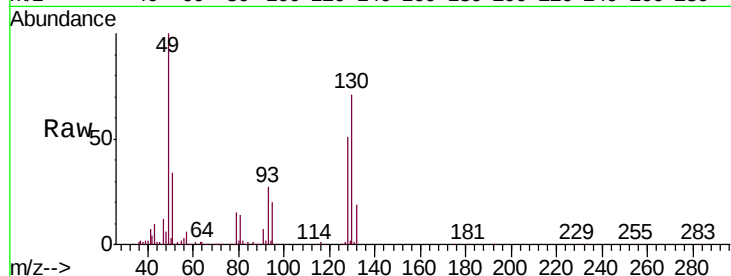




#25
Ethyl Acetate
Concen: 0.043 ppbv
RT: 5.80 min Scan# 889
Delta R.T. 0.02 min
Lab File: VL032664.D
Acq: 19 Oct 2018 1:46

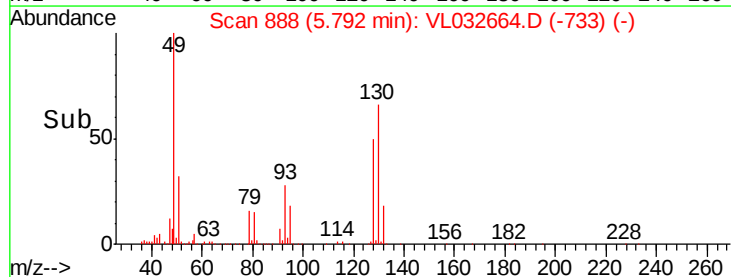
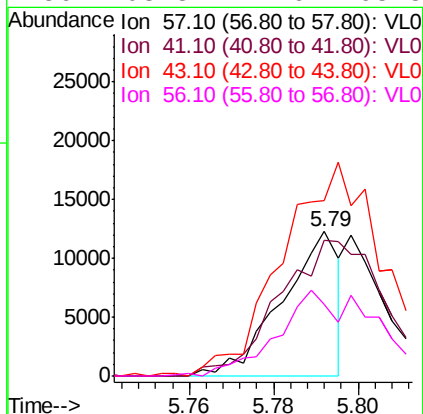
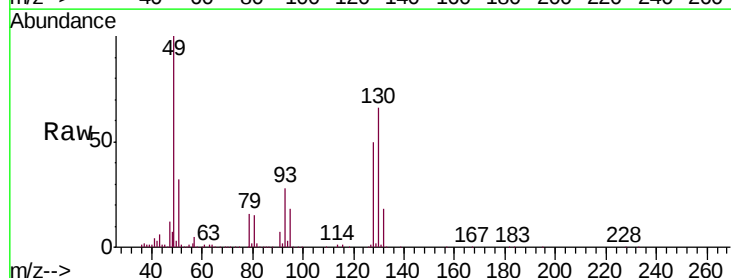
Instrument :
MSVOA_L
ClientSampleId :
AA-1

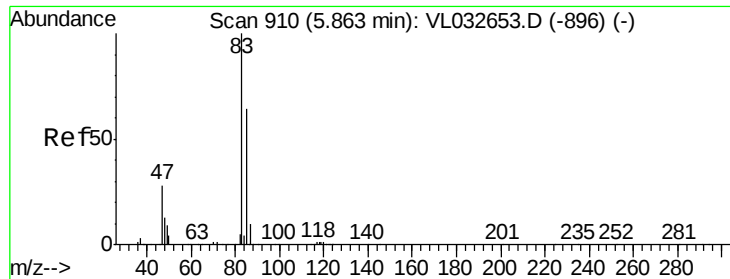
Tgt Ion:	43	Resp:	12387
Ion	Ratio	Lower	Upper
43	100		
45	28.8	8.0	12.0#
61	22.3	8.0	12.0#
70	13.8	5.9	8.9#



#26
Hexane
Concen: 0.084 ppbv
RT: 5.79 min Scan# 888
Delta R.T. -0.00 min
Lab File: VL032664.D
Acq: 19 Oct 2018 1:46

Tgt Ion:	57	Resp:	11555
Ion	Ratio	Lower	Upper
57	100		
41	179.3	67.4	101.0#
43	279.8	171.9	257.9#
56	103.8	42.6	63.8#





#29

Chloroform

Concen: 0.021 ppbv

RT: 5.87 min Scan# 911

Delta R.T. 0.00 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampled :

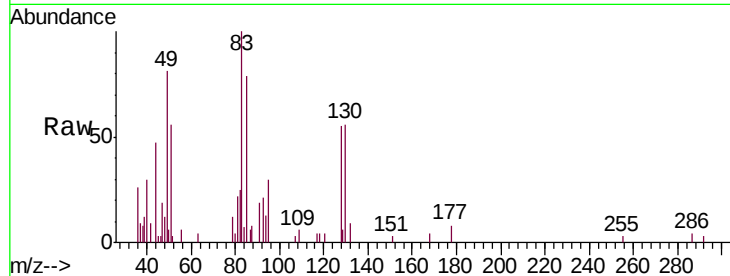
AA-1

Tgt Ion: 83 Resp: 4682

Ion Ratio Lower Upper

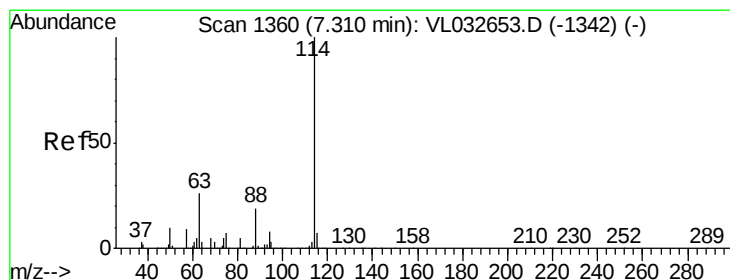
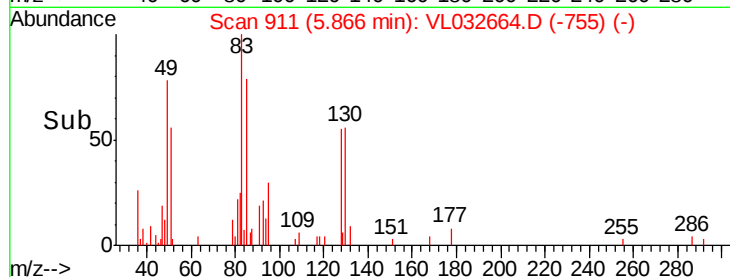
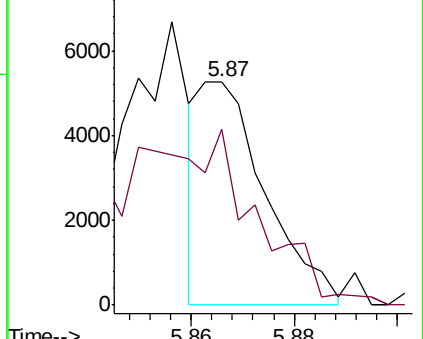
83 100

85 76.6 53.0 79.6



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1358

Delta R.T. -0.01 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

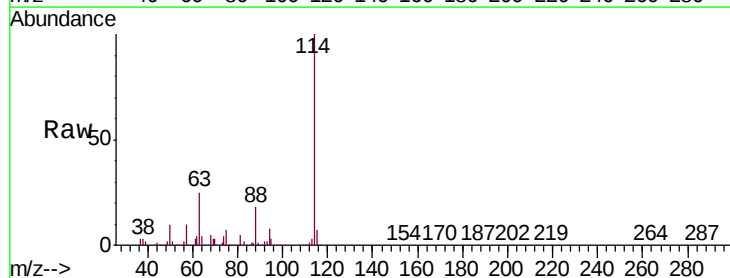
Tgt Ion: 114 Resp: 3400792

Ion Ratio Lower Upper

114 100

63 25.1 21.7 32.5

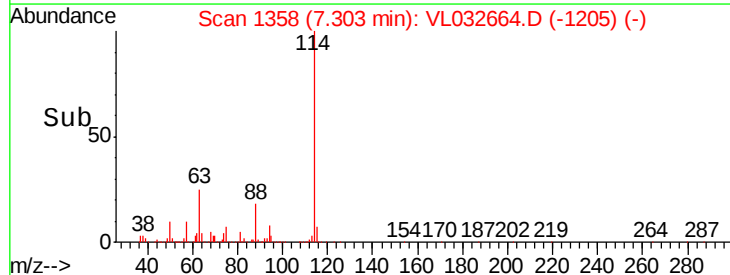
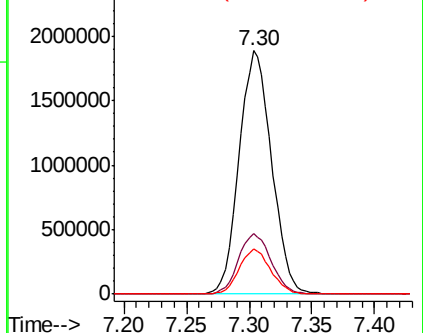
88 18.0 14.9 22.3

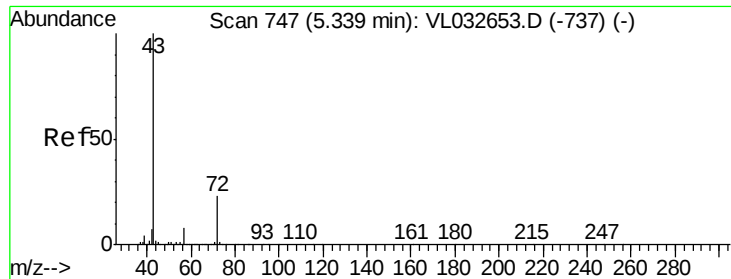


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 0.259 ppbv

RT: 5.36 min Scan# 754

Delta R.T. 0.02 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampleId :

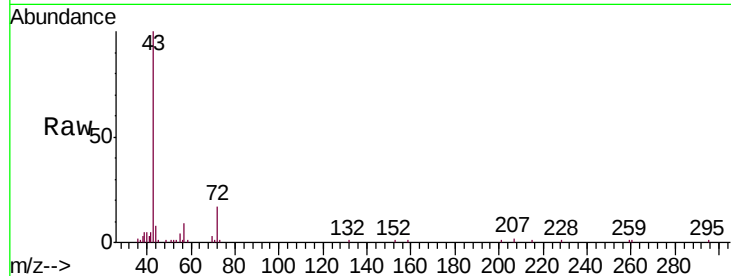
AA-1

Tgt Ion: 43 Resp: 47243

Ion Ratio Lower Upper

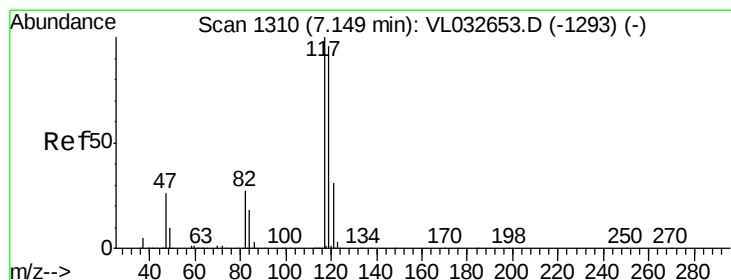
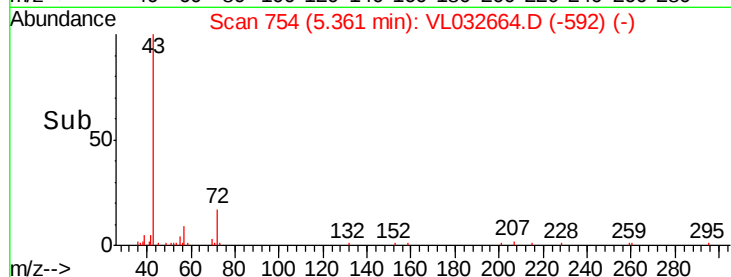
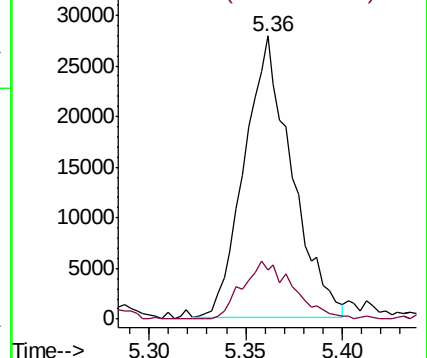
43 100

72 22.3 18.6 27.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#35

Carbon Tetrachloride

Concen: 0.021 ppbv

RT: 7.15 min Scan# 1309

Delta R.T. -0.00 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

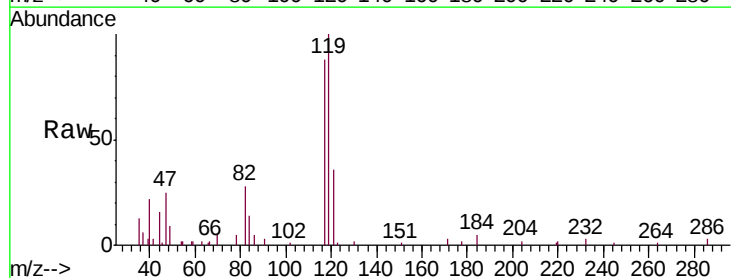
Tgt Ion: 117 Resp: 5057

Ion Ratio Lower Upper

117 100

119 55.3 75.7 113.5#

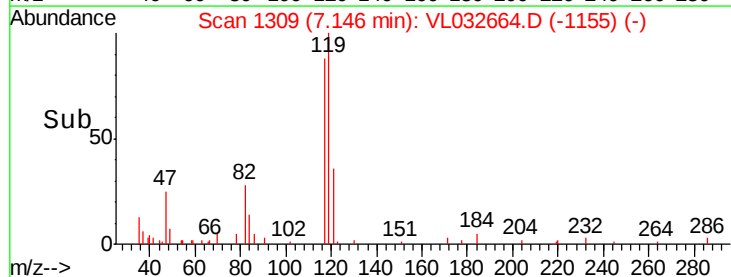
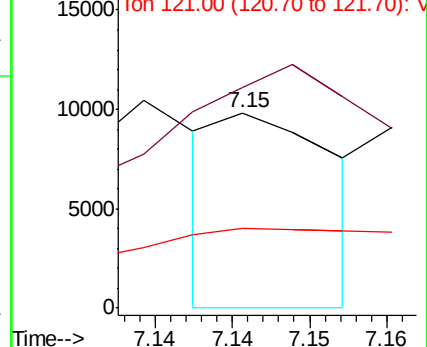
121 15.4 24.7 37.1#

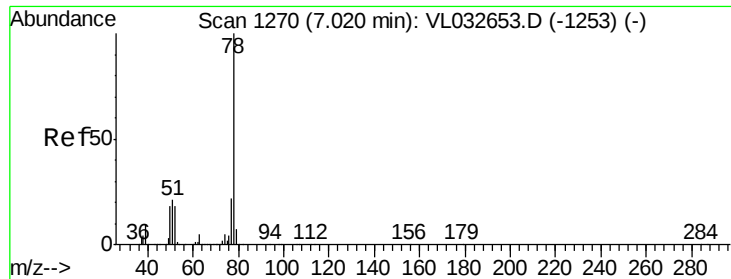


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V





#36

Benzene

Concen: 0.089 ppbv

RT: 7.02 min Scan# 1269

Delta R.T. -0.00 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampleId :

AA-1

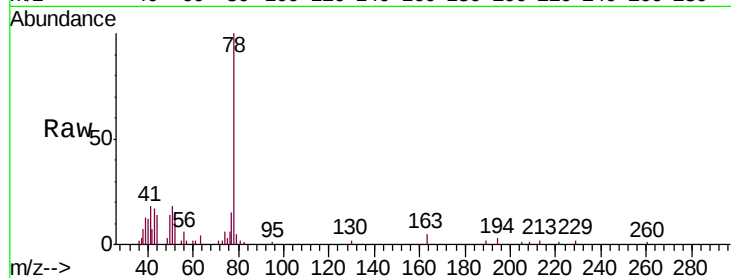
Tgt Ion: 78 Resp: 24522

Ion Ratio Lower Upper

78 100

77 15.4 18.1 27.1#

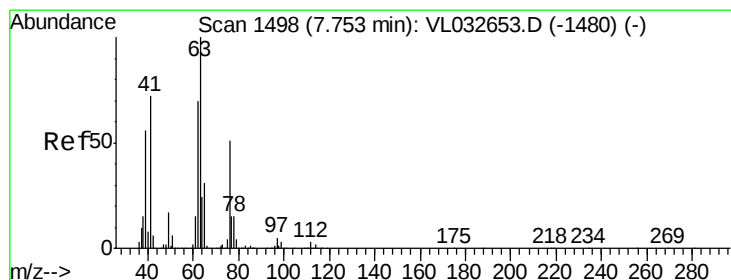
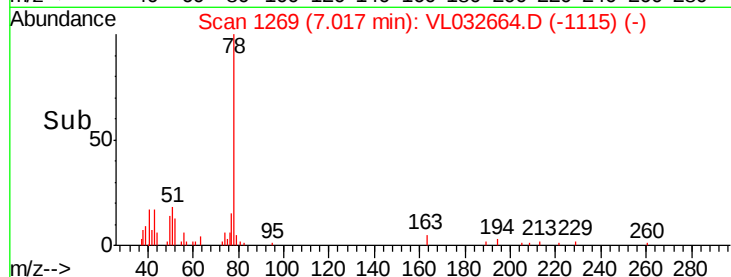
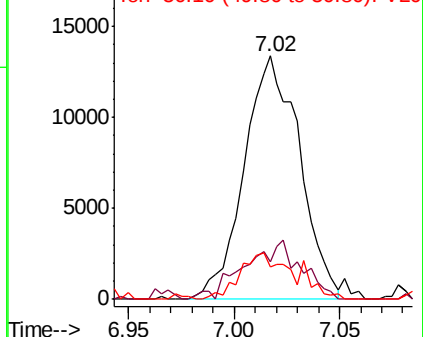
50 12.4 15.1 22.7#



Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0



#39

1,2-Dichloropropane

Concen: 7.943 ppbv

RT: 7.30 min Scan# 1358

Delta R.T. -0.45 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

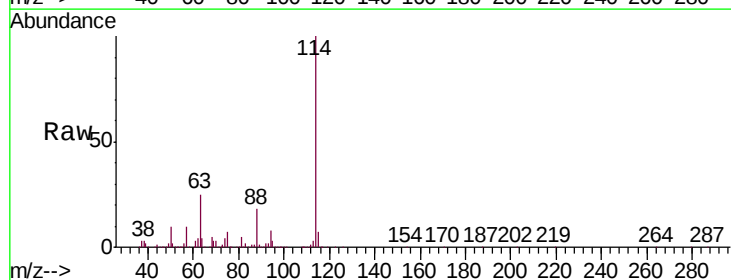
Tgt Ion: 63 Resp: 847017

Ion Ratio Lower Upper

63 100

41 0.0 56.2 84.4#

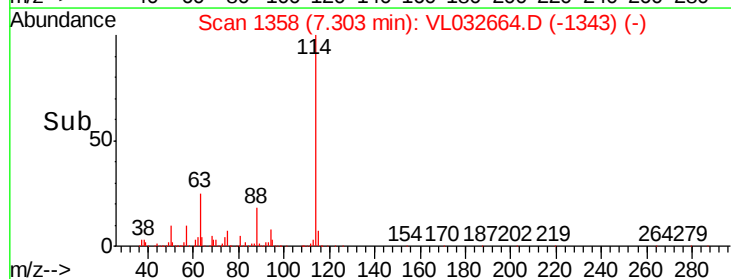
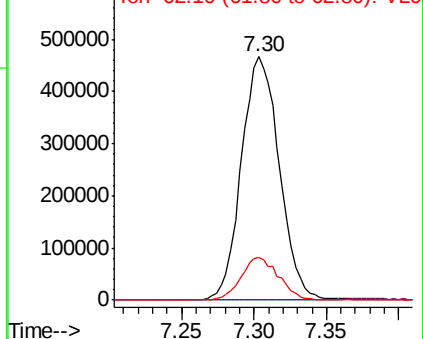
62 17.8 54.4 81.6#

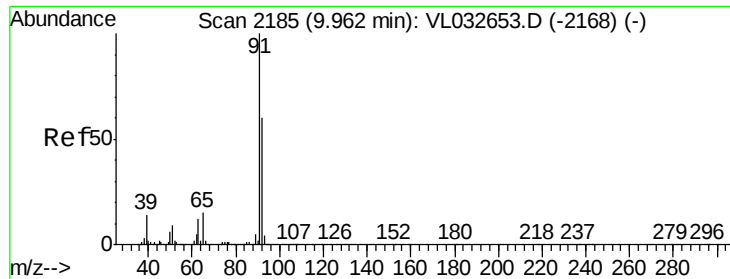


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#53

Toluene

Concen: 0.106 ppbv

RT: 9.96 min Scan# 2183

Delta R.T. -0.01 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

Instrument :

MSVOA_L

ClientSampleId :

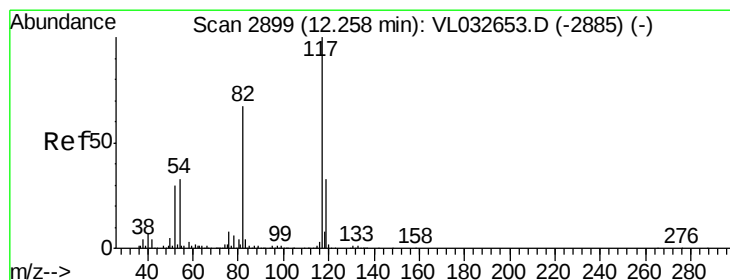
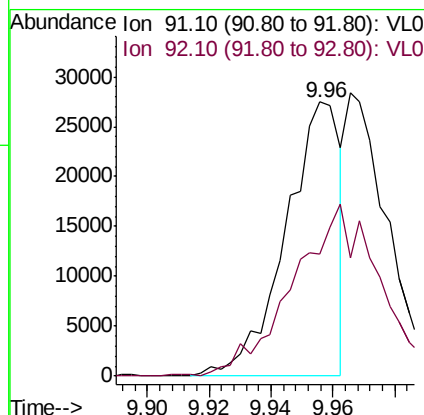
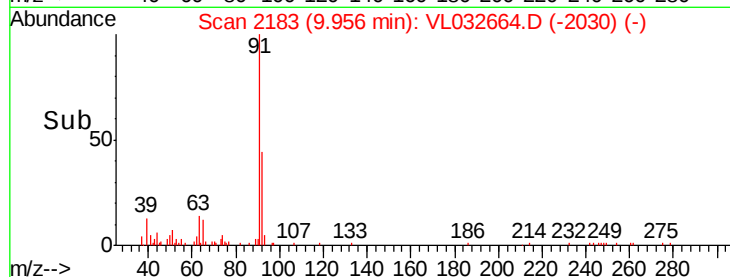
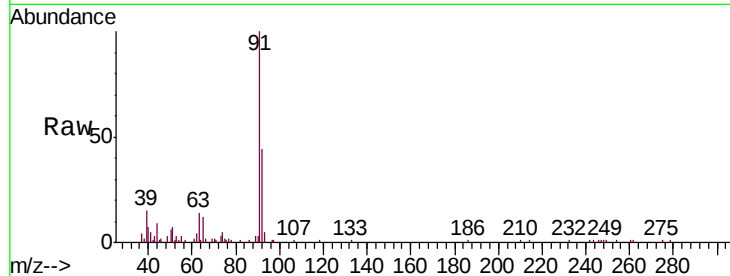
AA-1

Tgt Ion: 91 Resp: 33412

Ion Ratio Lower Upper

91 100

92 0.0 48.4 72.6#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2897

Delta R.T. -0.01 min

Lab File: VL032664.D

Acq: 19 Oct 2018 1:46

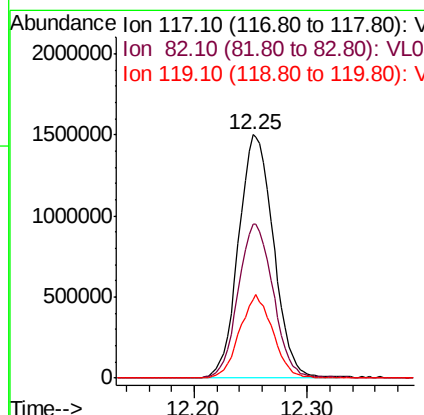
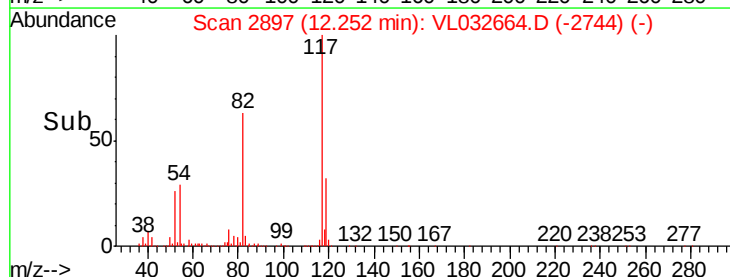
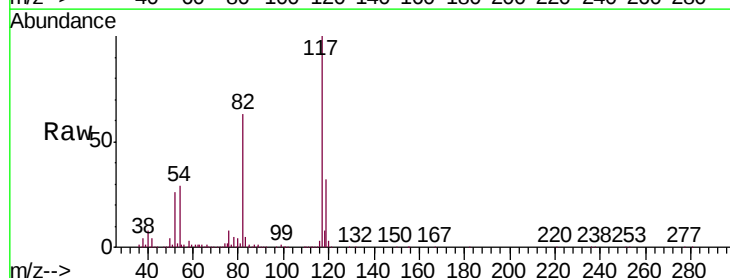
Tgt Ion: 117 Resp: 3227426

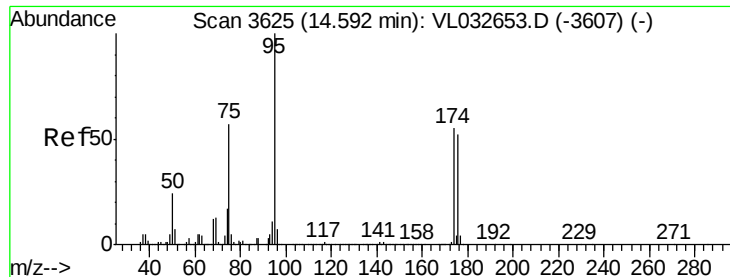
Ion Ratio Lower Upper

117 100

82 63.6 52.7 79.1

119 32.5 26.7 40.1

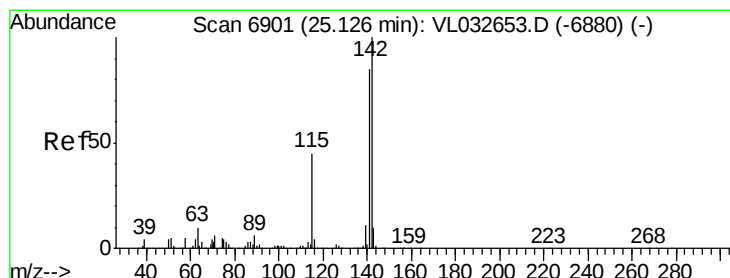
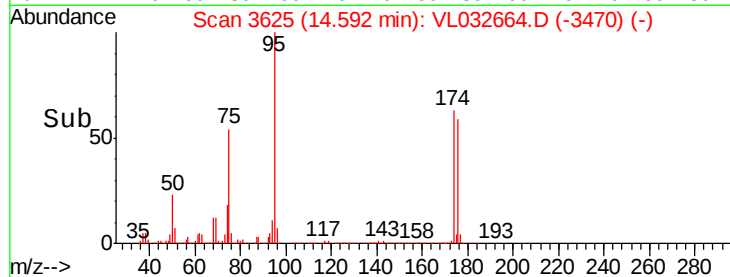
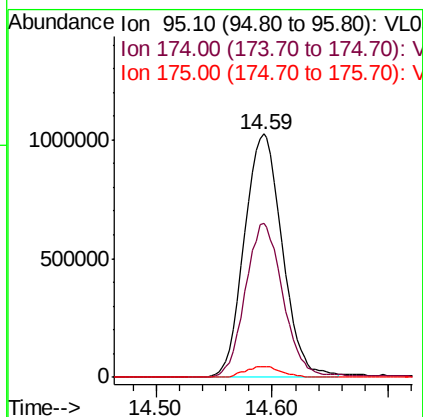
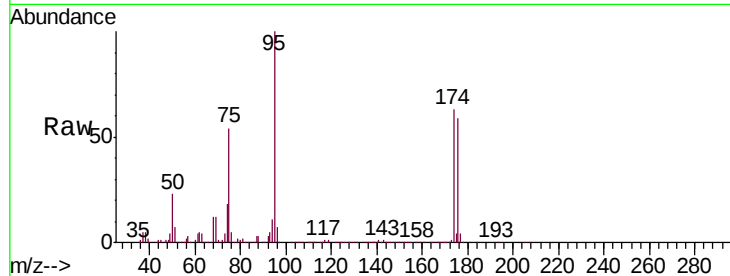




#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.708 ppbv
 RT: 14.59 min Scan# 3625
 Delta R.T. -0.00 min
 Lab File: VL032664.D
 Acq: 19 Oct 2018 1:46

Instrument :
 MSVOA_L
 ClientSampleId :
 AA-1

Tgt Ion: 95 Resp: 2333030
 Ion Ratio Lower Upper
 95 100
 174 64.1 46.0 69.0
 175 4.6 3.4 5.0



#80
 Naphthalene, 2-methyl-
 Concen: 0.060 ppbv
 RT: 25.14 min Scan# 6904
 Delta R.T. 0.01 min
 Lab File: VL032664.D
 Acq: 19 Oct 2018 1:46

Tgt Ion: 142 Resp: 3227
 Ion Ratio Lower Upper
 142 100
 141 71.0 67.5 101.3
 115 33.4 33.5 50.3#

