

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060722\
 Data File : VL039208.D
 Acq On : 7 Jun 2022 14:13
 Operator : SY/AP
 Sample : N3199-01 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 08 04:58:42 2022

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 01 01:22:18 2022

QLast Update : Wed Jun 01 01:22:18 2022

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1004166	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2698480	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.08	117	2348411	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1946291	10.02	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.20%

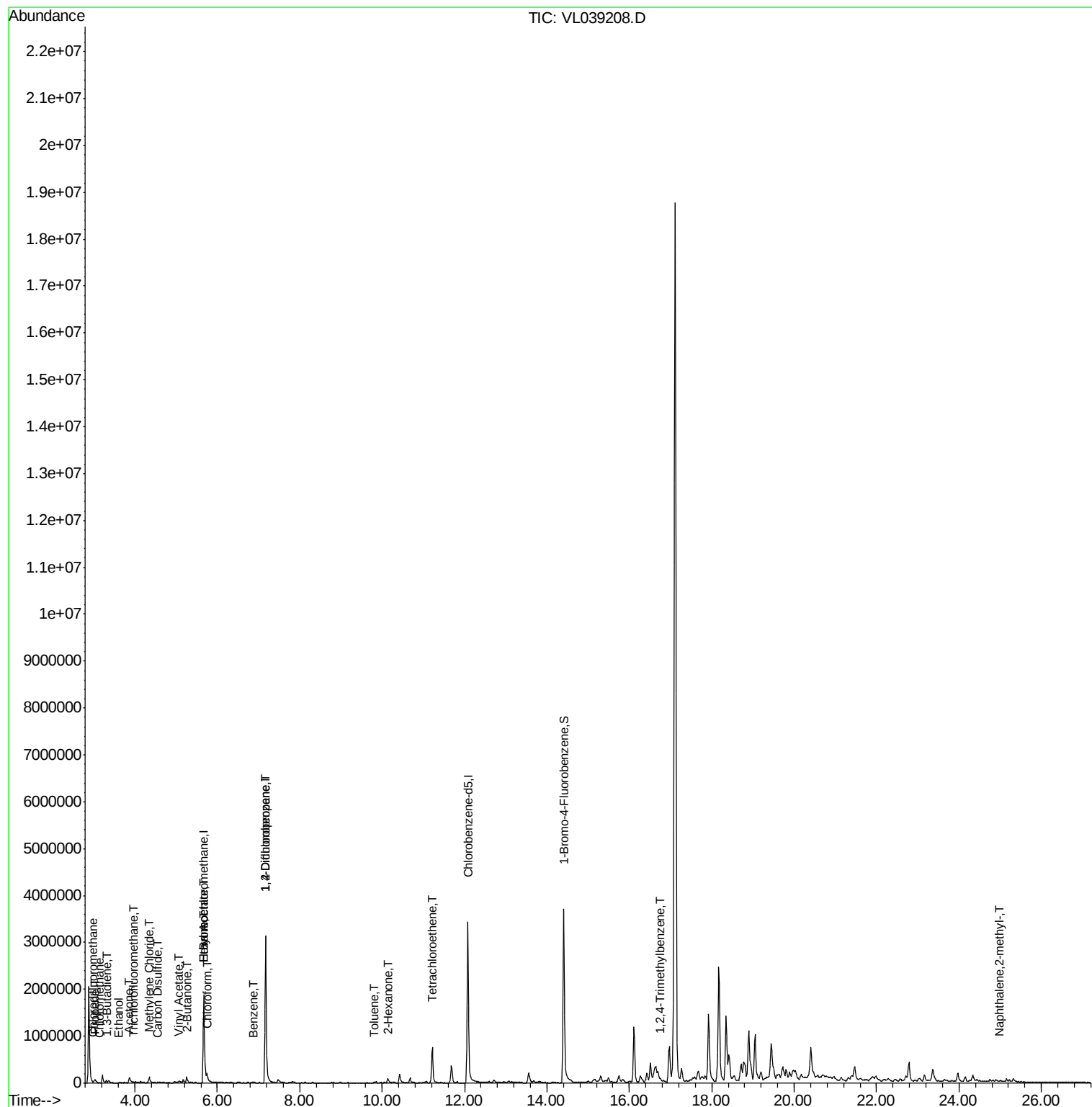
Target Compounds

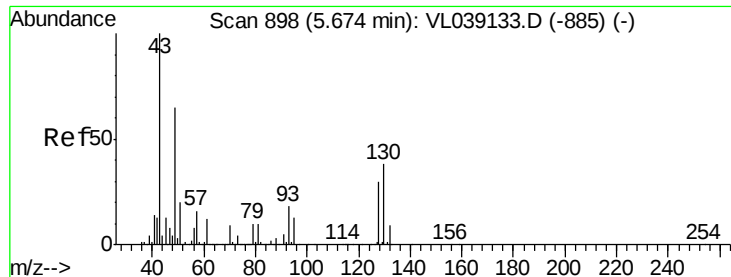
					Ovalue	
3) Chlorodifluoromethane	2.99	51	23627	0.185	ppbv	# 90
4) Chloromethane	3.15	50	2006	0.031	ppbv	99
9) Propene	3.02	41	13339	0.239	ppbv	# 76
11) Trichlorofluoromethane	3.95	101	9901	0.062	ppbv	88
13) Ethanol	3.61	45	5562	1.831	ppbv	# 100
15) Acetone	3.86	43	128422	1.228	ppbv	# 75
16) 1,3-Butadiene	3.31	39	16609	0.295	ppbv	# 22
20) Methylene Chloride	4.34	84	52533	1.192	ppbv	# 91
23) Vinyl Acetate	5.07	43	39863	0.461	ppbv	# 91
25) Ethyl Acetate	5.68	43	63740	0.270	ppbv	# 79
26) Hexane	5.68	57	88663	0.856	ppbv	# 36
27) Carbon Disulfide	4.56	76	6865	0.064	ppbv	# 9
29) Chloroform	5.75	83	90445	0.519	ppbv	96
34) 2-Butanone	5.25	43	155314	1.059	ppbv	# 87
36) Benzene	6.89	78	9818	0.045	ppbv	# 85
39) 1,2-Dichloropropane	7.17	63	671612	7.707	ppbv	# 24
51) 2-Hexanone	10.14	43	82945	0.486	ppbv	# 95
52) Tetrachloroethene	11.22	164	193997	2.268	ppbv	96
53) Toluene	9.80	91	7828	0.031	ppbv	# 27
74) 1,2,4-Trimethylbenzene	16.74	105	21130	0.067	ppbv	# 67
80) Naphthalene,2-methyl-	24.98	142	3501	0.039	ppbv	# 83

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

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL039208.D

Acq: 7 Jun 2022 14:13

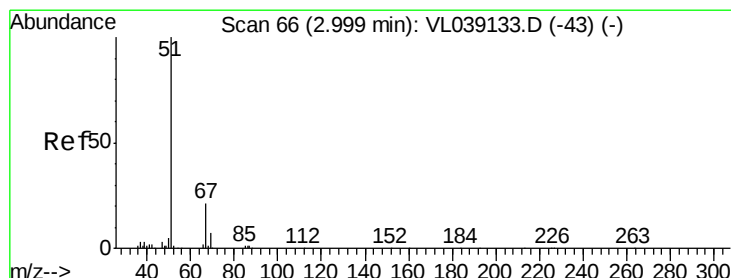
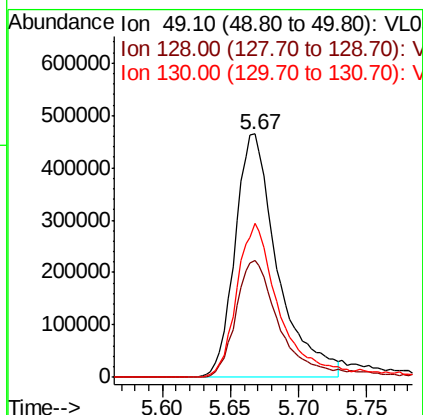
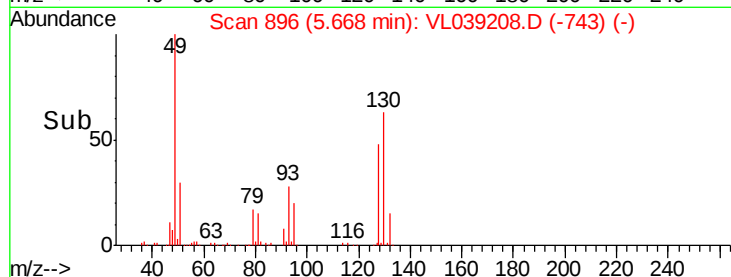
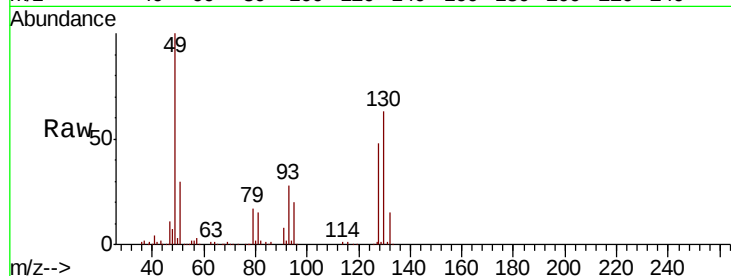
Tot Ion: 49 Resp: 1004166

Ion Ratio Lower Upper

49 100

128 51.1 24.7 74.1

130 66.7 31.4 94.0



#3

Chlorodifluoromethane

Concen: 0.185 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.01 min

Lab File: VL039208.D

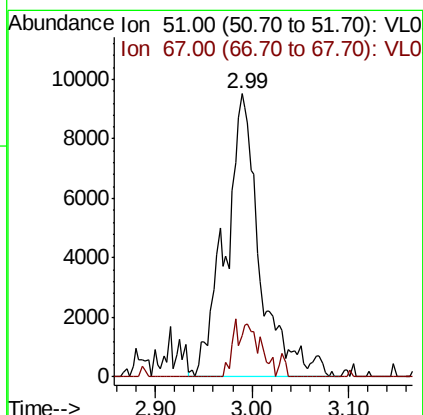
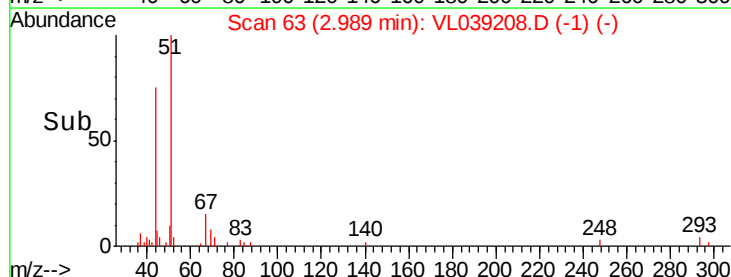
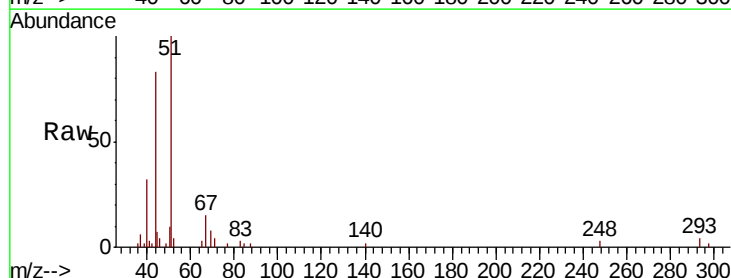
Acq: 7 Jun 2022 14:13

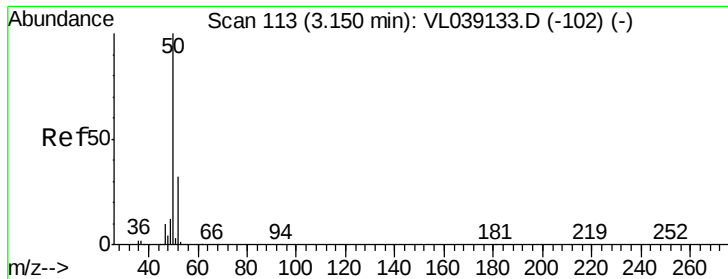
Tgt Ion: 51 Resp: 23627

Ion Ratio Lower Upper

51 100

67 15.7 16.2 24.4#





#4

Chloromethane

Concen: 0.031 ppbv

RT: 3.15 min Scan# 112

Delta R.T. -0.00 min

Lab File: VL039208.D

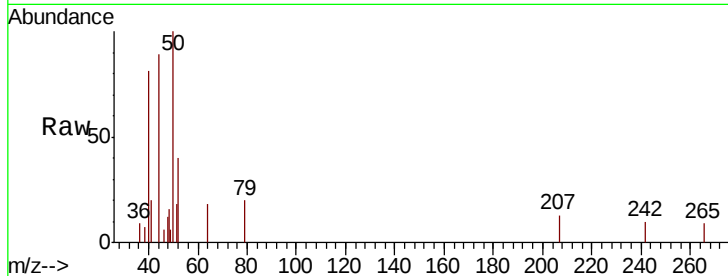
Acq: 7 Jun 2022 14:13

Tot Ion: 50 Resp: 2006

Ion Ratio Lower Upper

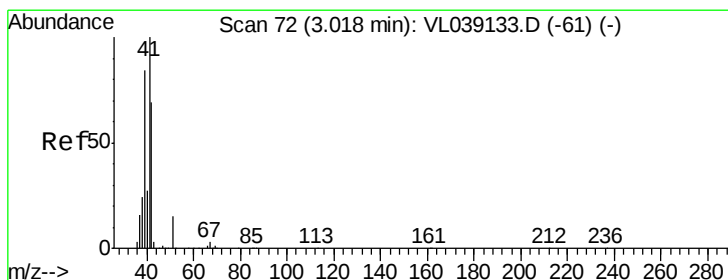
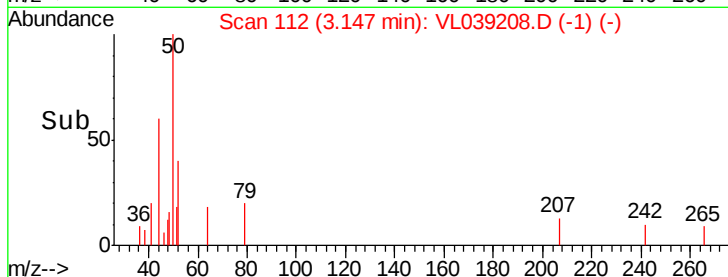
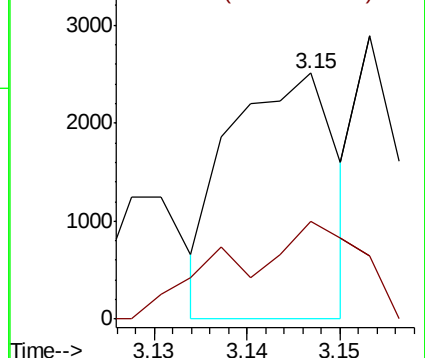
50 100

52 31.6 25.9 38.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 0.239 ppbv

RT: 3.02 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL039208.D

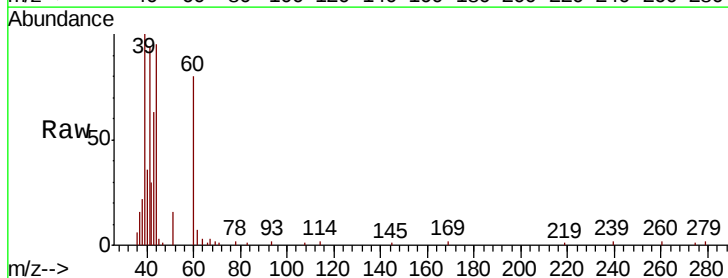
Acq: 7 Jun 2022 14:13

Tgt Ion: 41 Resp: 13339

Ion Ratio Lower Upper

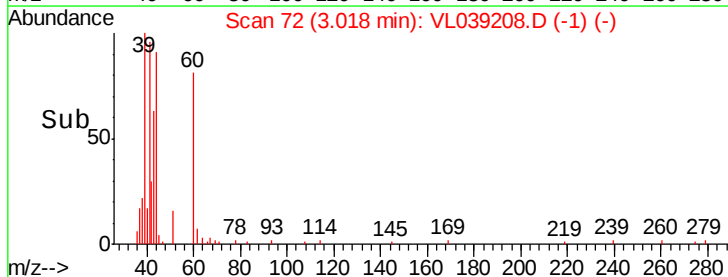
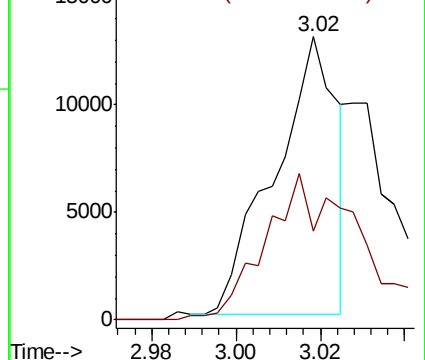
41 100

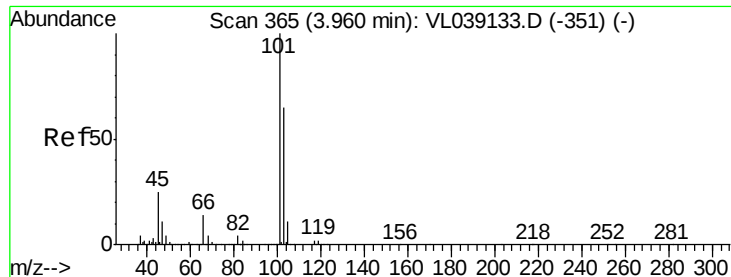
42 89.1 55.4 83.2#



Abundance Ion 41.10 (40.80 to 41.80): VL0

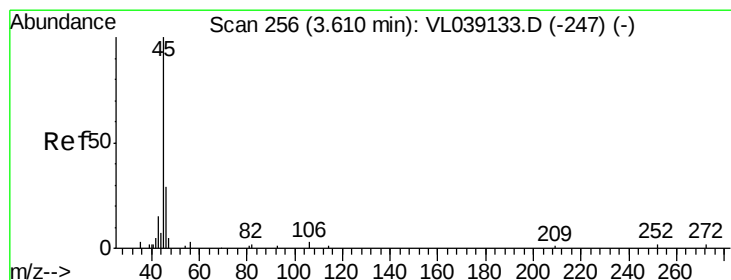
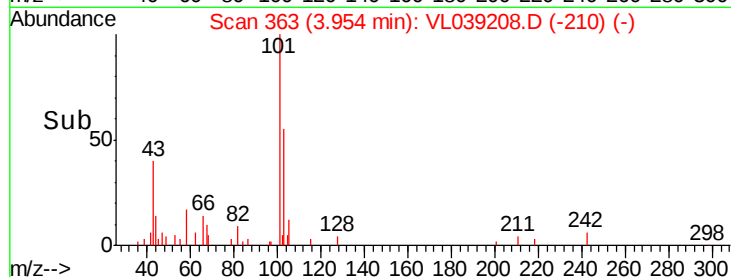
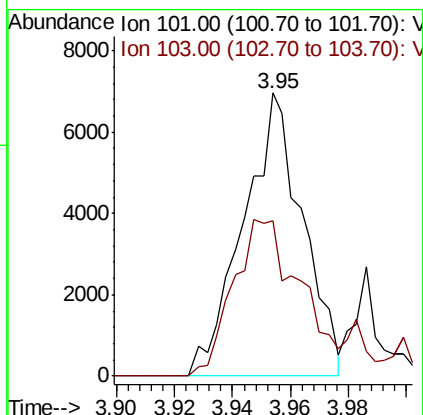
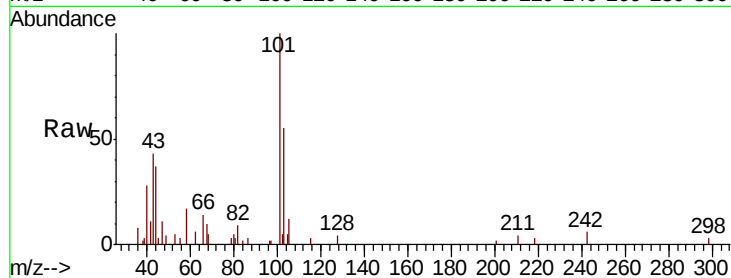
Ion 42.10 (41.80 to 42.80): VL0





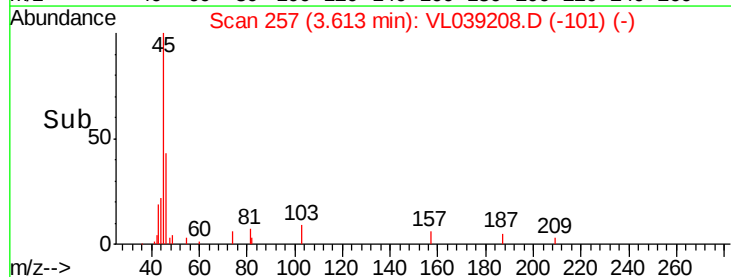
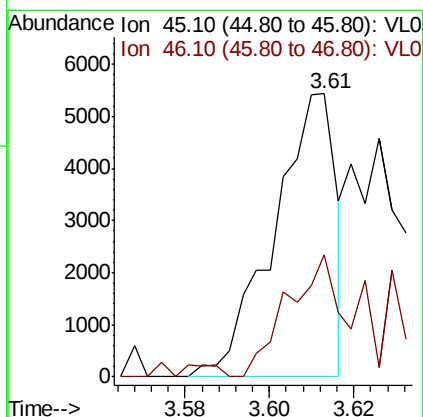
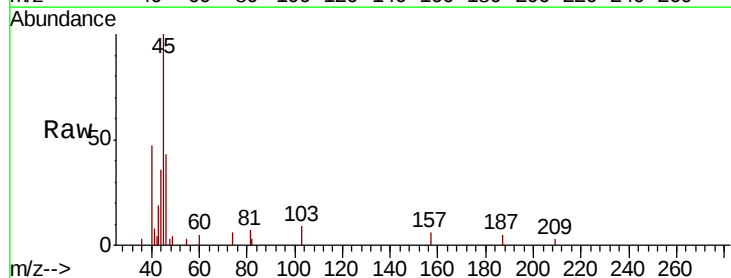
#11
 Trichlorofluoromethane
 Concen: 0.062 ppbv
 RT: 3.95 min Scan# 363
 Delta R.T. -0.01 min
 Lab File: VL039208.D
 Acq: 7 Jun 2022 14:13

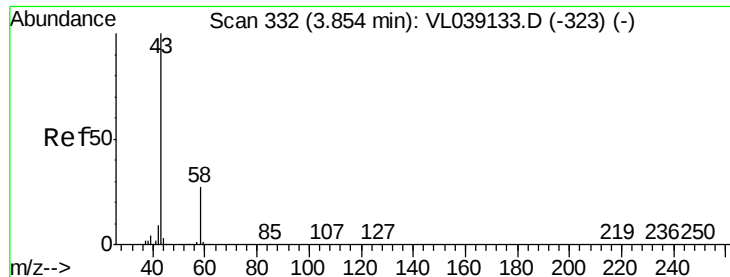
Tot Ion:101 Resp: 9901
 Ion Ratio Lower Upper
 101 100
 103 54.9 51.7 77.5



#13
 Ethanol
 Concen: 1.831 ppbv
 RT: 3.61 min Scan# 257
 Delta R.T. 0.00 min
 Lab File: VL039208.D
 Acq: 7 Jun 2022 14:13

Tgt Ion: 45 Resp: 5562
 Ion Ratio Lower Upper
 45 100
 46 73.2 0.0 0.0#





#15

Acetone

Concen: 1.228 ppbv

RT: 3.86 min Scan# 333

Delta R.T. 0.00 min

Lab File: VL039208.D

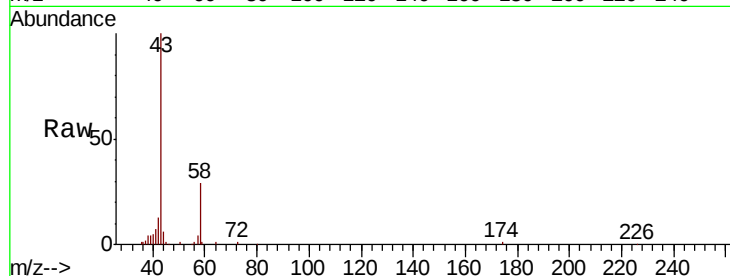
Acq: 7 Jun 2022 14:13

Tot Ion: 43 Resp: 128422

Ion Ratio Lower Upper

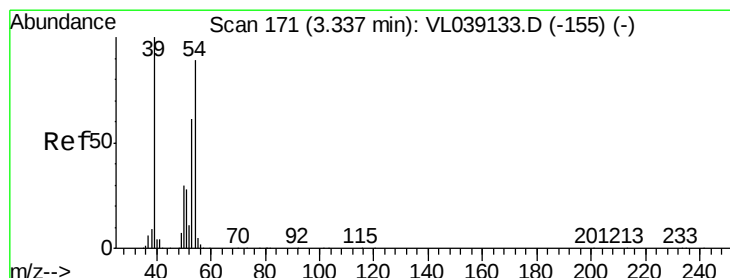
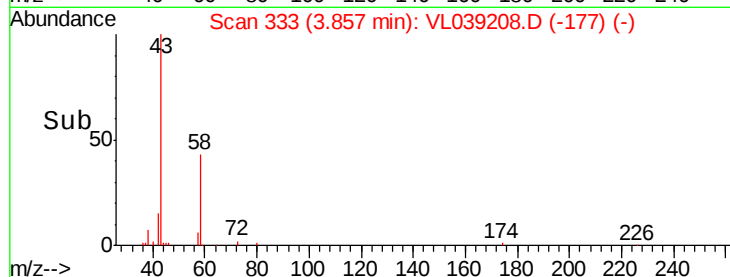
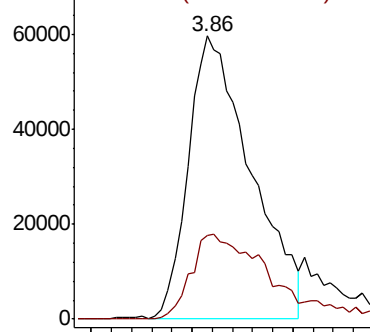
43 100

58 41.1 22.5 33.7#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.295 ppbv

RT: 3.31 min Scan# 164

Delta R.T. -0.02 min

Lab File: VL039208.D

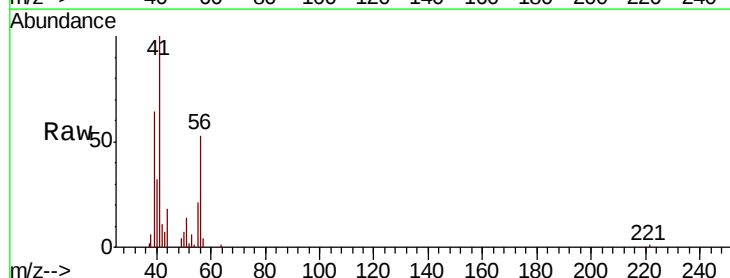
Acq: 7 Jun 2022 14:13

Tgt Ion: 39 Resp: 16609

Ion Ratio Lower Upper

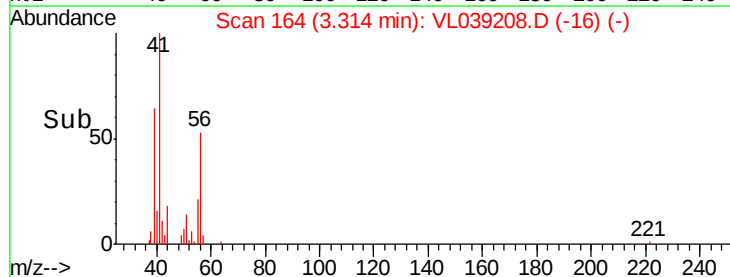
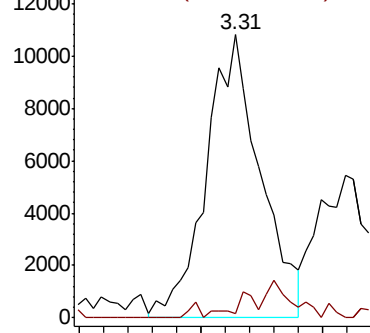
39 100

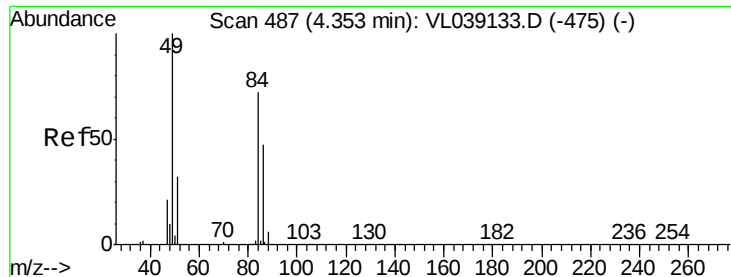
54 12.6 65.8 98.6#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#20

Methylene Chloride

Concen: 1.192 ppbv

RT: 4.34 min Scan# 484

Delta R.T. -0.01 min

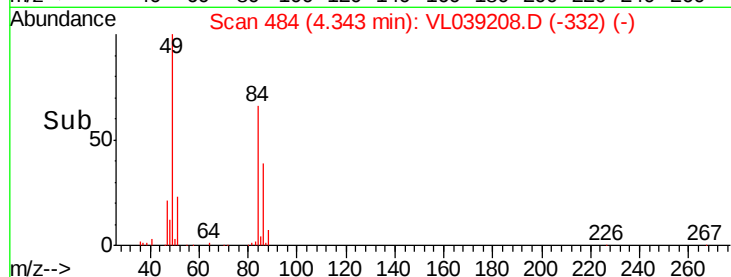
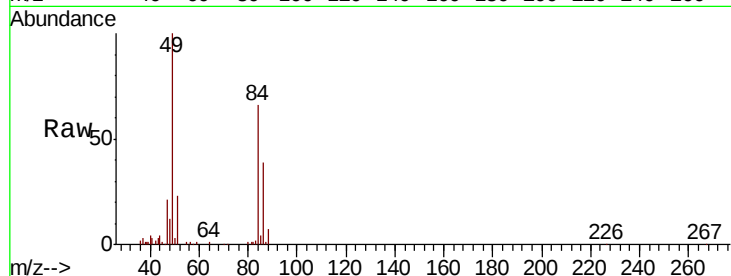
Lab File: VL039208.D

Acq: 7 Jun 2022 14:13

Tot Ion: 84 Resp: 52533

Ion Ratio Lower Upper

84	100		
49	150.3	111.1	166.7
51	35.1	35.3	52.9#
86	59.6	51.9	77.9

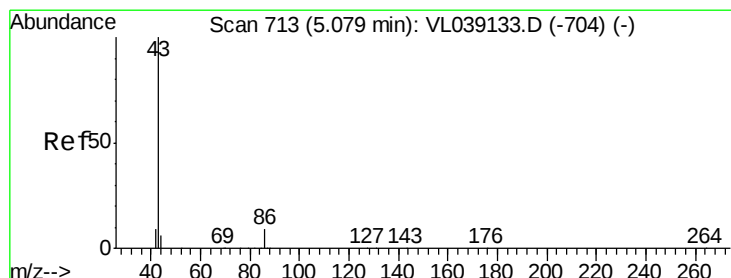
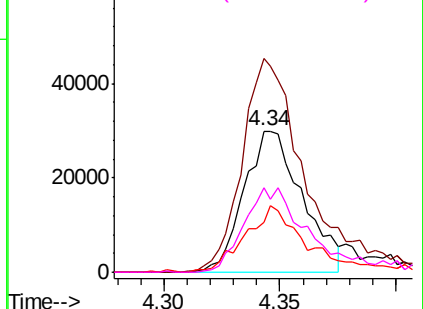


Abundance Ion 84.00 (83.70 to 84.70): VL0

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



#23

Vinyl Acetate

Concen: 0.461 ppbv

RT: 5.07 min Scan# 711

Delta R.T. -0.01 min

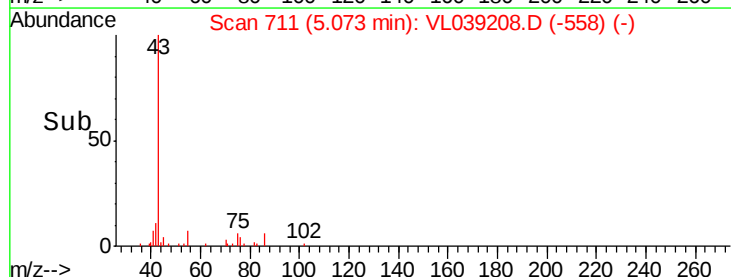
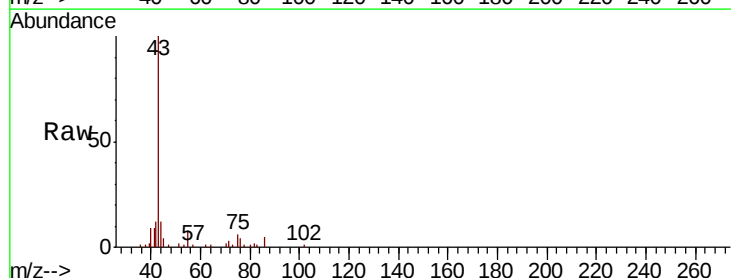
Lab File: VL039208.D

Acq: 7 Jun 2022 14:13

Tgt Ion: 43 Resp: 39863

Ion Ratio Lower Upper

43	100		
86	5.6	6.0	9.0#
42	6.9	8.2	12.4#
44	0.8	4.3	6.5#

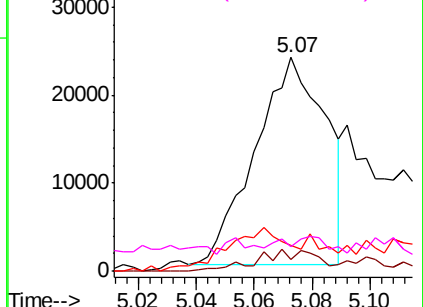


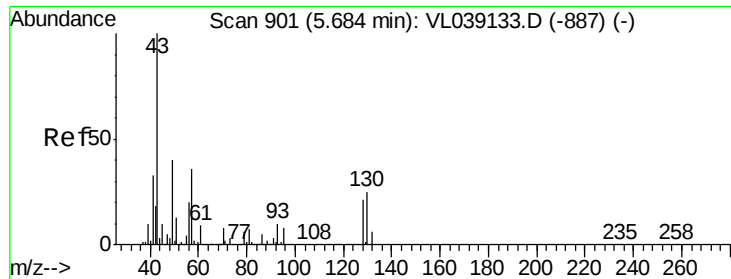
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

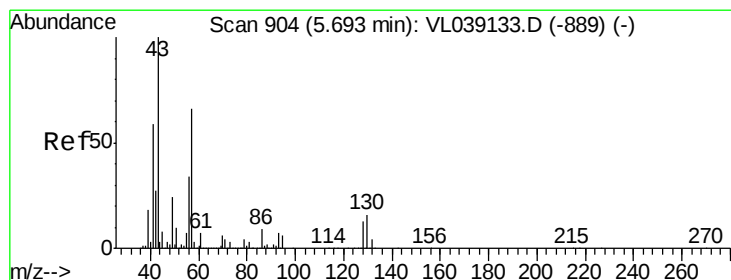
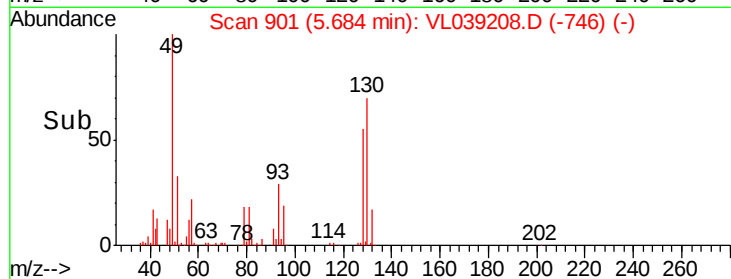
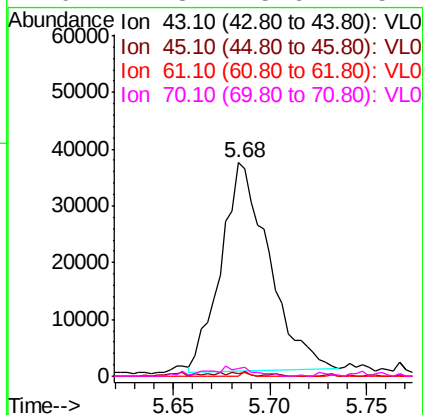
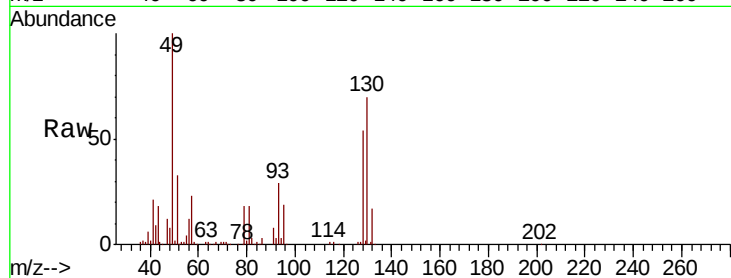
Ion 44.10 (43.80 to 44.80): VL0





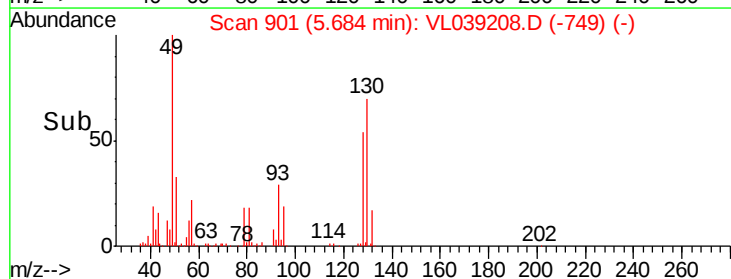
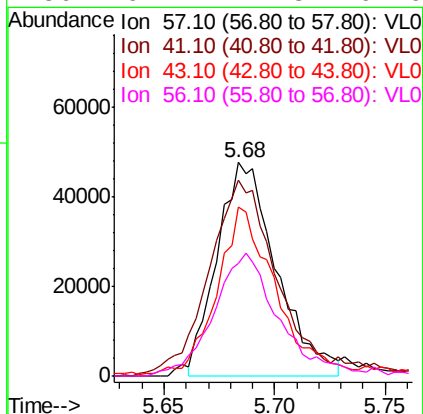
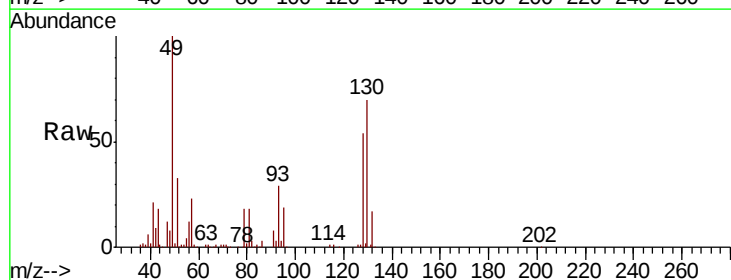
#25
Ethyl Acetate
Concen: 0.270 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL039208.D
Acq: 7 Jun 2022 14:13

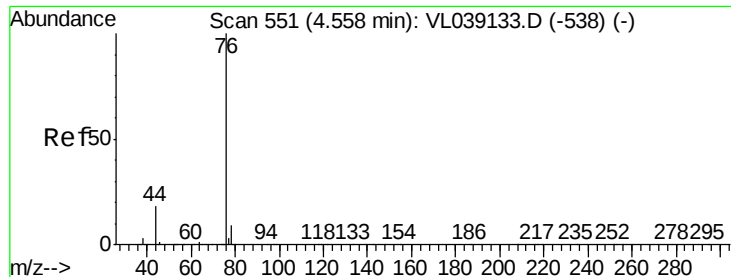
Tot Ion:	43	Resp:	63740
Ion	Ratio	Lower	Upper
43	100		
45	1.2	8.2	12.2#
61	0.3	8.4	12.6#
70	4.3	5.6	8.4#



#26
Hexane
Concen: 0.856 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.01 min
Lab File: VL039208.D
Acq: 7 Jun 2022 14:13

Tgt Ion:	57	Resp:	88663
Ion	Ratio	Lower	Upper
57	100		
41	111.2	72.4	108.6#
43	82.5	187.0	280.6#
56	64.2	41.8	62.6#





#27

Carbon Disulfide

Concen: 0.064 ppbv

RT: 4.56 min Scan# 550

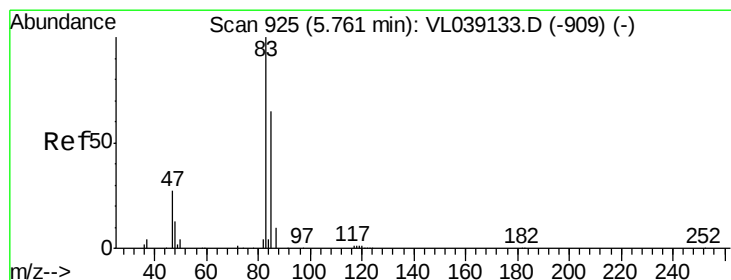
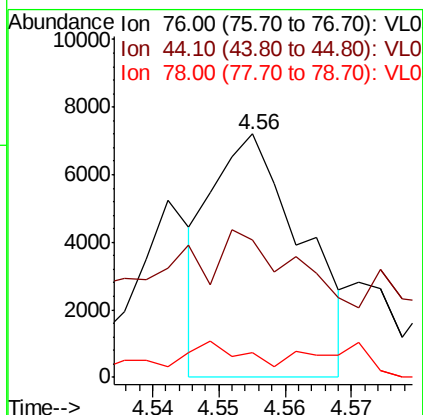
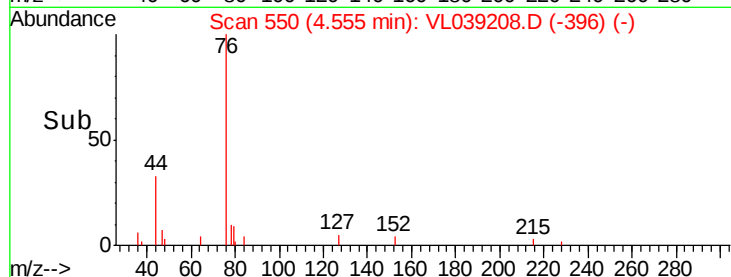
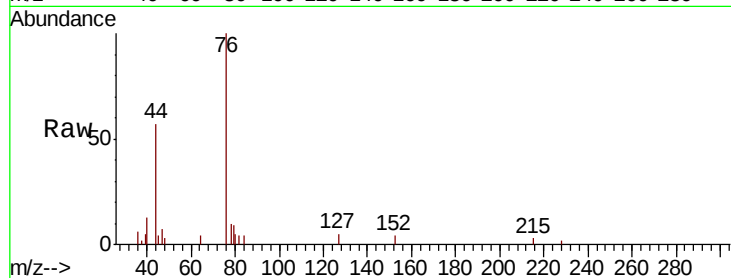
Delta R.T. -0.00 min

Lab File: VL039208.D

Acq: 7 Jun 2022 14:13

Tot Ion: 76 Resp: 6865

Ion	Ratio	Lower	Upper
76	100		
44	69.8	14.4	21.6#
78	24.7	7.7	11.5#



#29

Chloroform

Concen: 0.519 ppbv

RT: 5.75 min Scan# 922

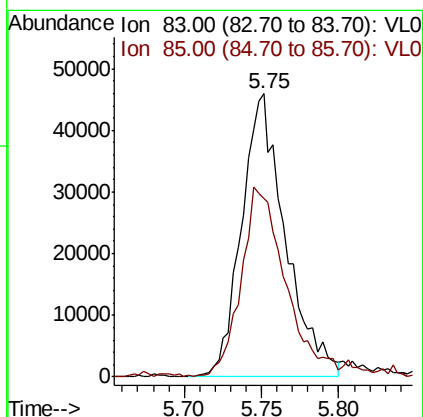
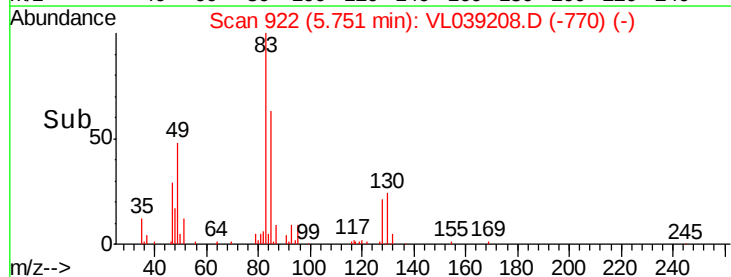
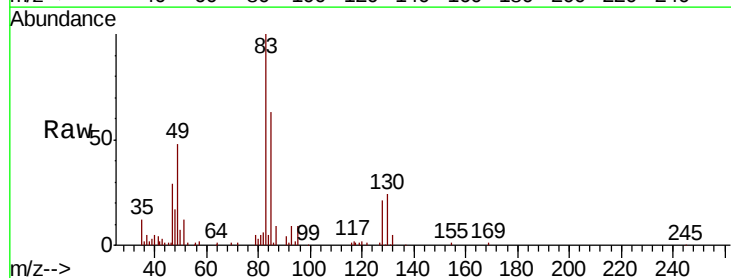
Delta R.T. -0.01 min

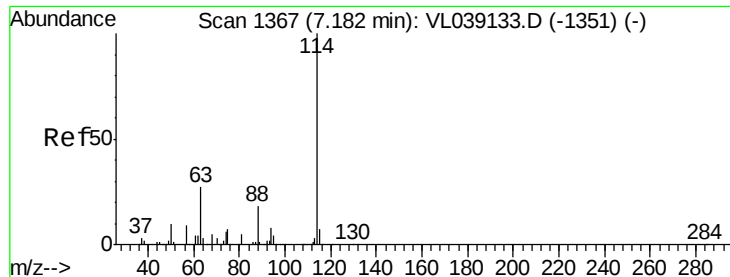
Lab File: VL039208.D

Acq: 7 Jun 2022 14:13

Tgt Ion: 83 Resp: 90445

Ion	Ratio	Lower	Upper
83	100		
85	62.5	52.4	78.6





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1363

Delta R.T. -0.01 min

Lab File: VL039208.D

Acq: 7 Jun 2022 14:13

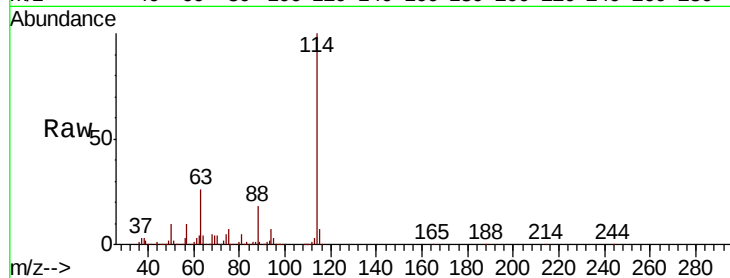
Tot Ion:114 Resp: 2698480

Ion Ratio Lower Upper

114 100

63 25.5 21.7 32.5

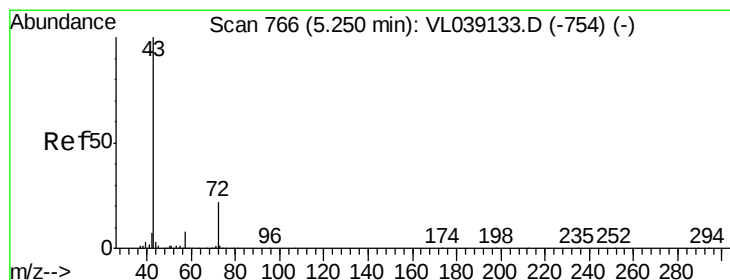
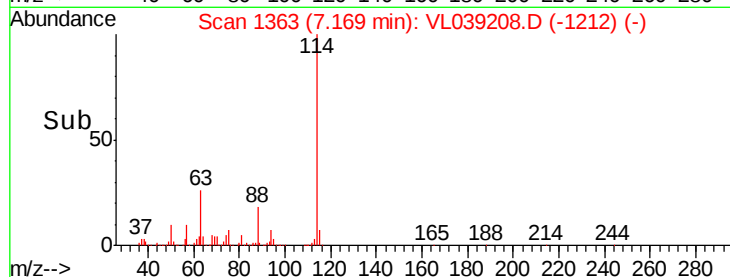
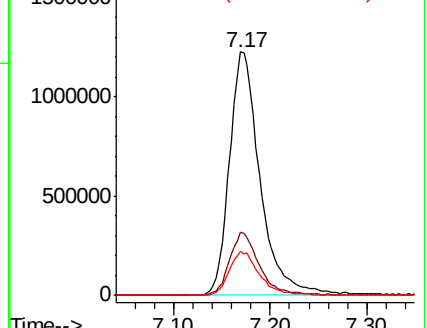
88 17.9 14.8 22.2



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 1.059 ppbv

RT: 5.25 min Scan# 767

Delta R.T. 0.00 min

Lab File: VL039208.D

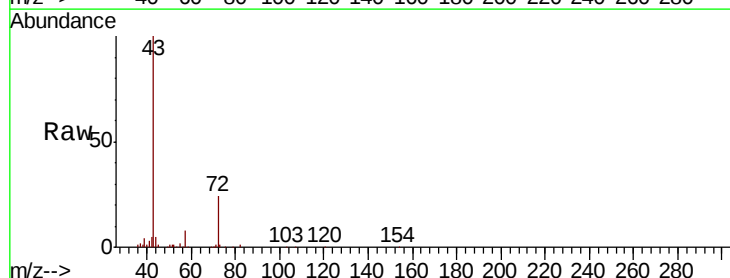
Acq: 7 Jun 2022 14:13

Tgt Ion: 43 Resp: 155314

Ion Ratio Lower Upper

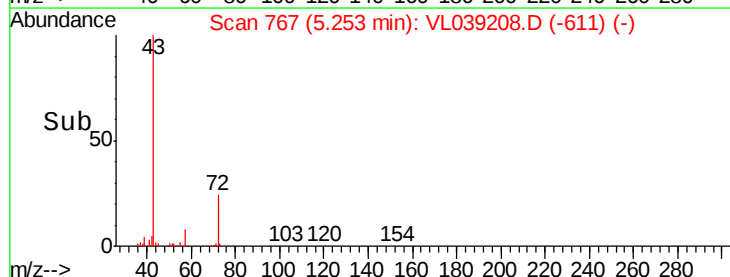
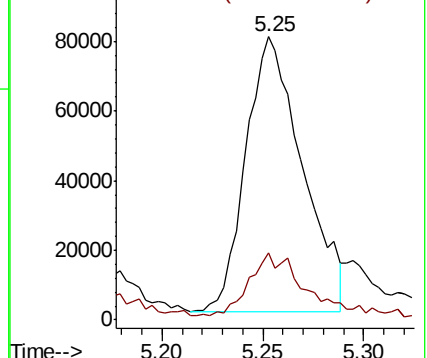
43 100

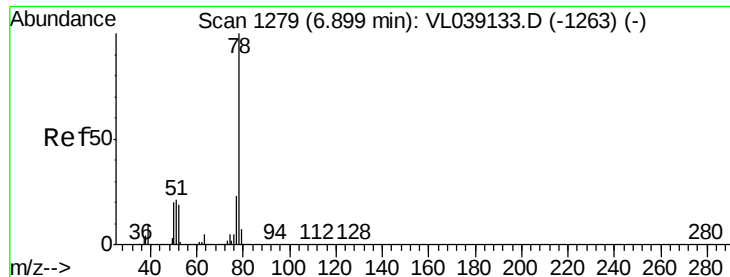
72 29.2 18.2 27.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.045 ppbv

RT: 6.89 min Scan# 1275

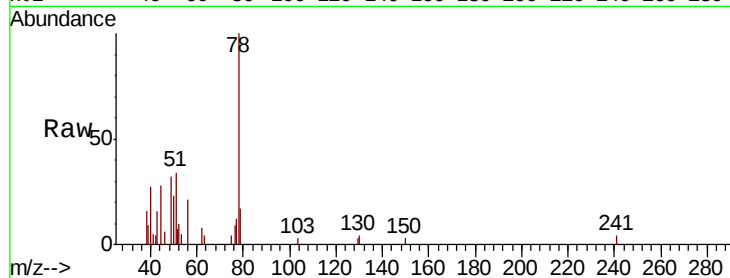
Delta R.T. -0.01 min

Lab File: VL039208.D

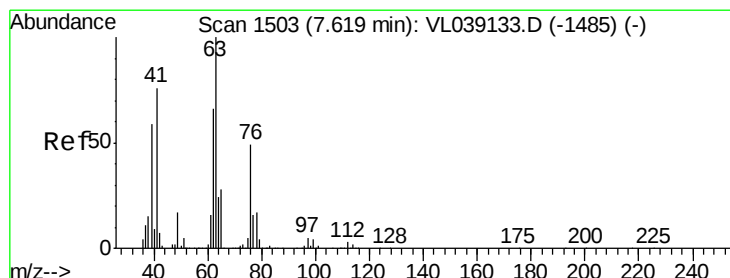
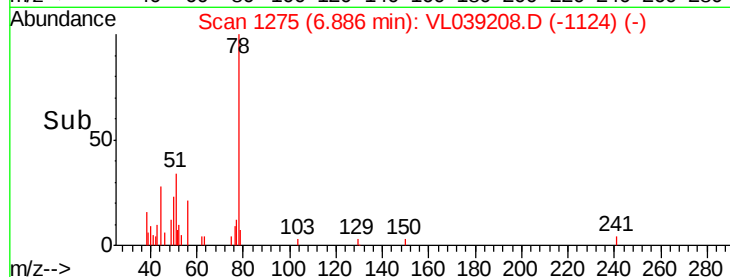
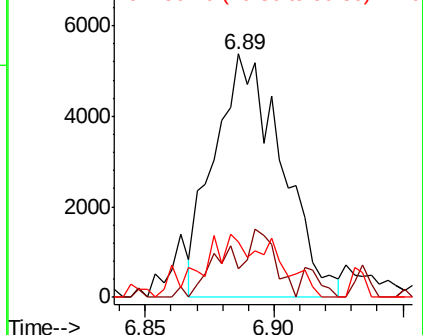
Acq: 7 Jun 2022 14:13

Tot Ion: 78 Resp: 9818

Ion	Ratio	Lower	Upper
78	100		
77	10.9	18.6	27.8#
50	20.7	15.8	23.8



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: 7.707 ppbv

RT: 7.17 min Scan# 1363

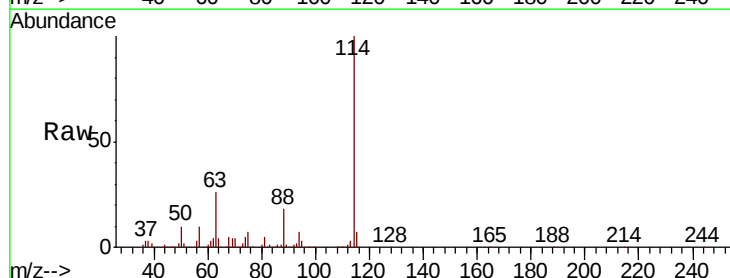
Delta R.T. -0.45 min

Lab File: VL039208.D

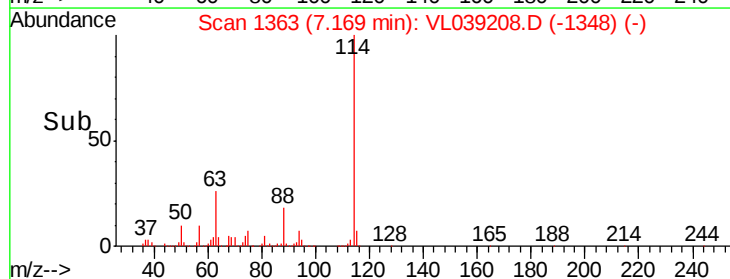
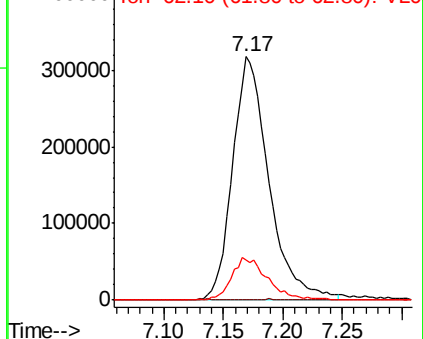
Acq: 7 Jun 2022 14:13

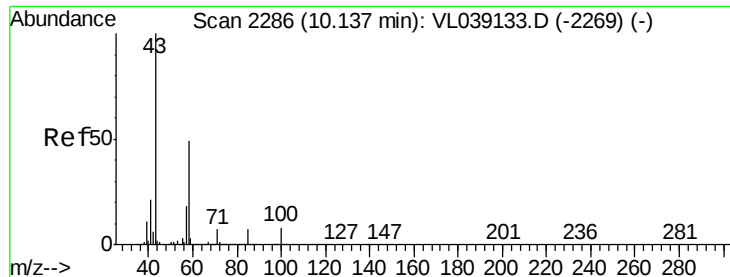
Tgt Ion: 63 Resp: 671612

Ion	Ratio	Lower	Upper
63	100		
41	0.0	60.8	91.2#
62	16.6	52.9	79.3#



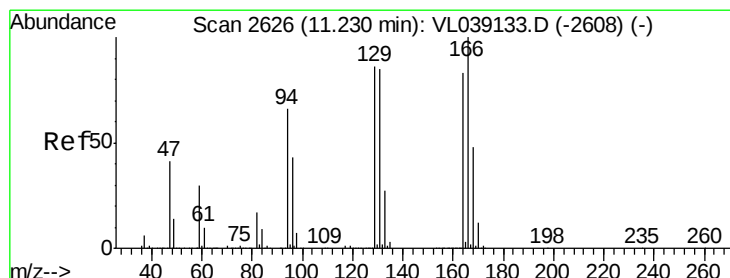
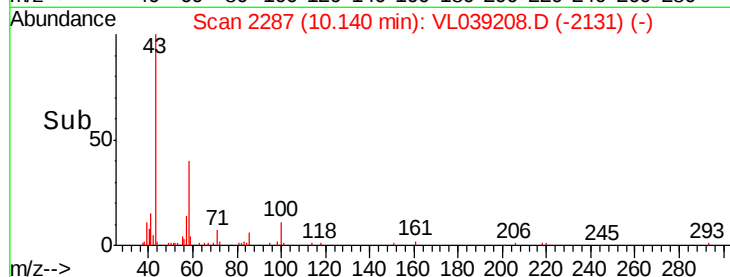
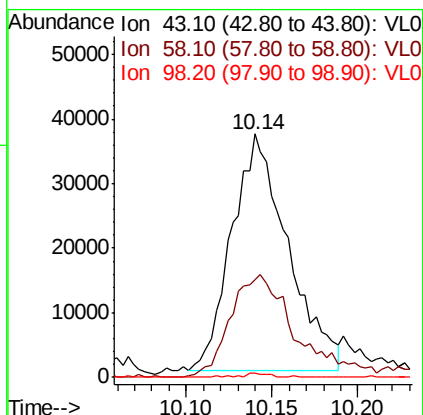
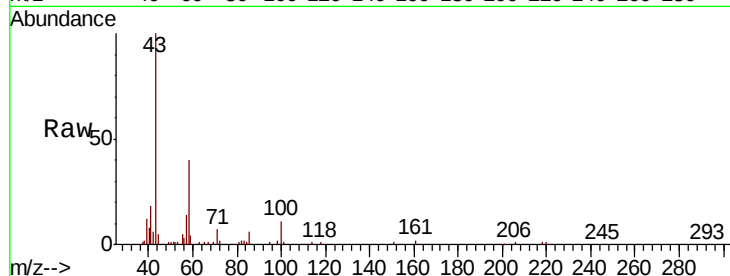
Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0





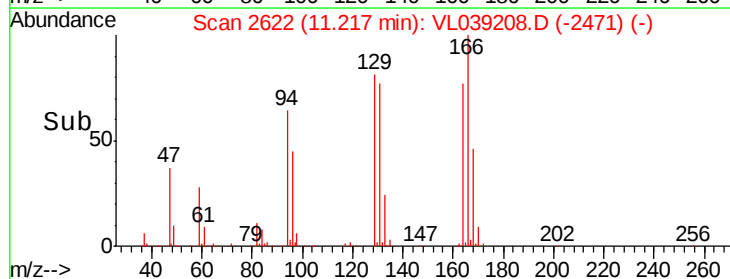
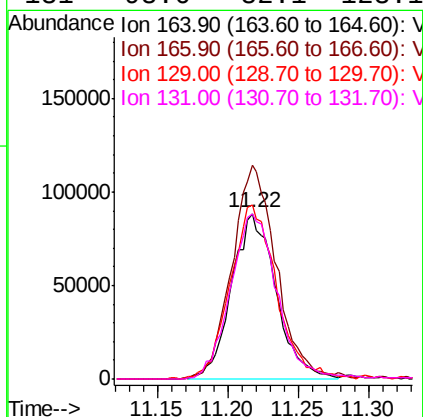
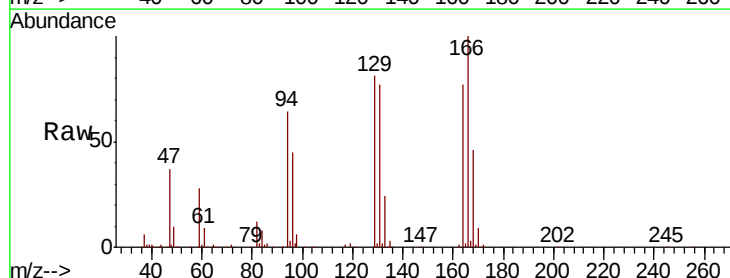
#51
2-Hexanone
Concen: 0.486 ppbv
RT: 10.14 min Scan# 2287
Delta R.T. 0.00 min
Lab File: VL039208.D
Acq: 7 Jun 2022 14:13

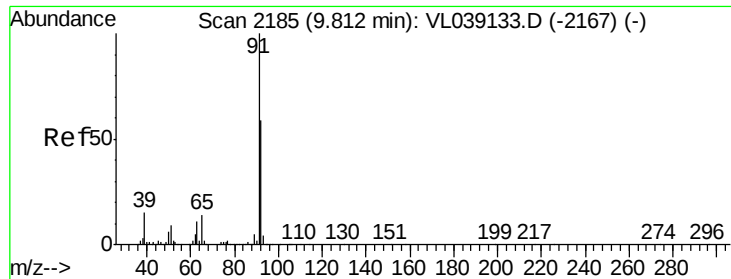
Tot Ion: 43 Resp: 82945
Ion Ratio Lower Upper
43 100
58 53.2 40.0 60.0
98 0.8 0.1 0.1#



#52
Tetrachloroethene
Concen: 2.268 ppbv
RT: 11.22 min Scan# 2622
Delta R.T. -0.01 min
Lab File: VL039208.D
Acq: 7 Jun 2022 14:13

Tgt Ion: 164 Resp: 193997
Ion Ratio Lower Upper
164 100
166 128.3 96.3 144.5
129 103.3 82.5 123.7
131 98.6 82.1 123.1





#53

Toluene

Concen: 0.031 ppbv

RT: 9.80 min Scan# 2181

Delta R.T. -0.01 min

Lab File: VL039208.D

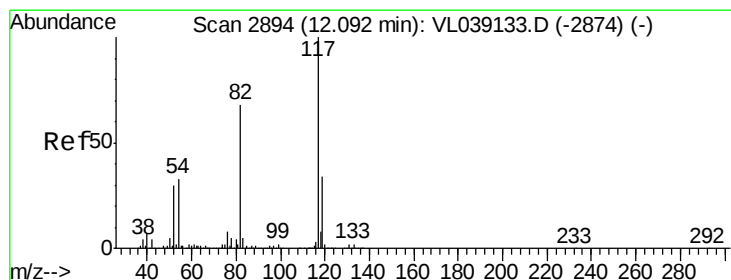
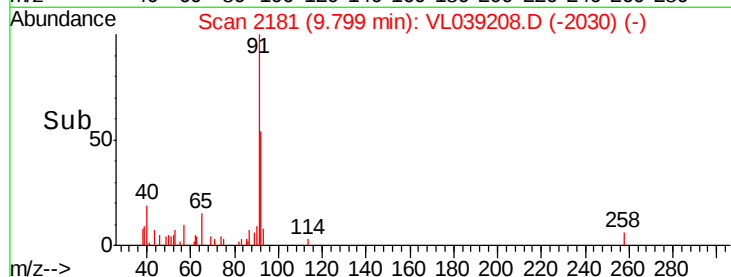
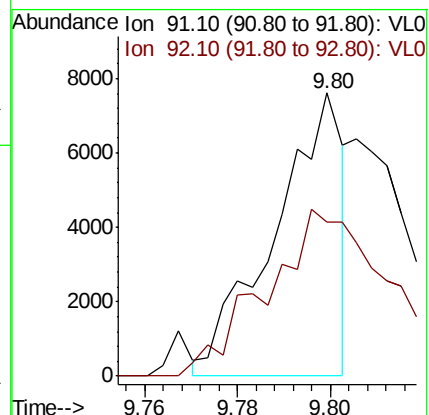
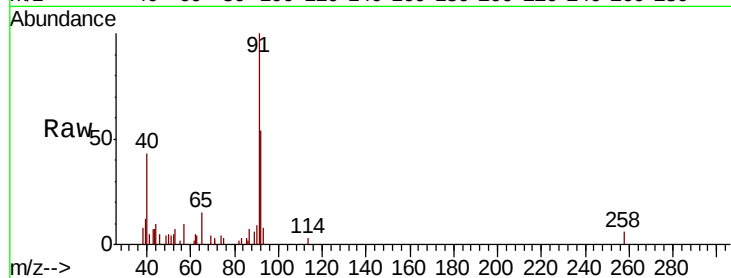
Acq: 7 Jun 2022 14:13

Tot Ion: 91 Resp: 7828

Ion Ratio Lower Upper

91 100

92 115.6 48.1 72.1#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2890

Delta R.T. -0.01 min

Lab File: VL039208.D

Acq: 7 Jun 2022 14:13

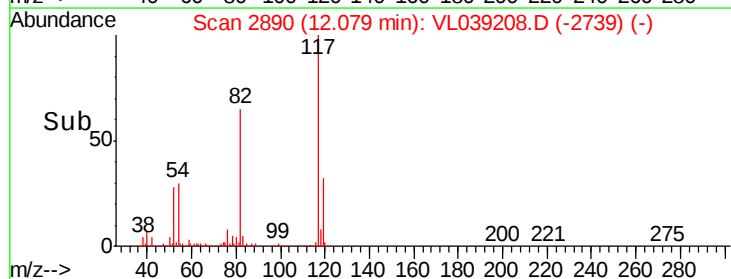
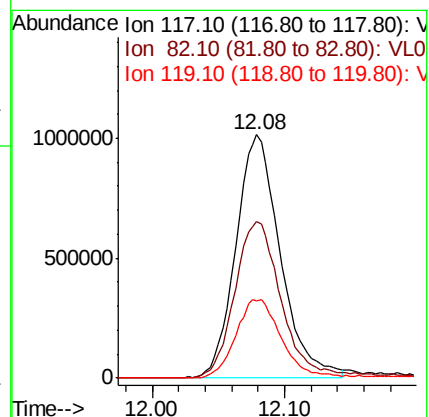
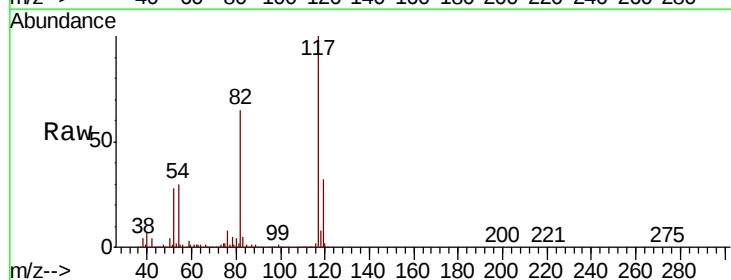
Tgt Ion: 117 Resp: 2348411

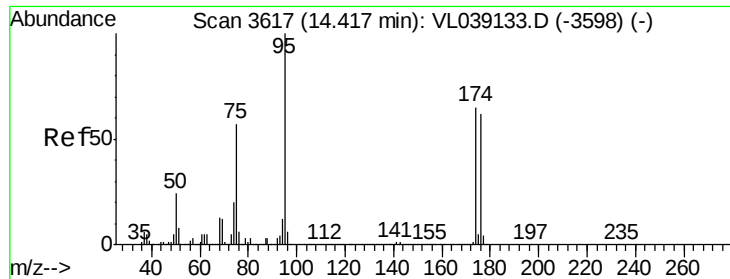
Ion Ratio Lower Upper

117 100

82 70.4 55.1 82.7

119 34.6 24.7 37.1

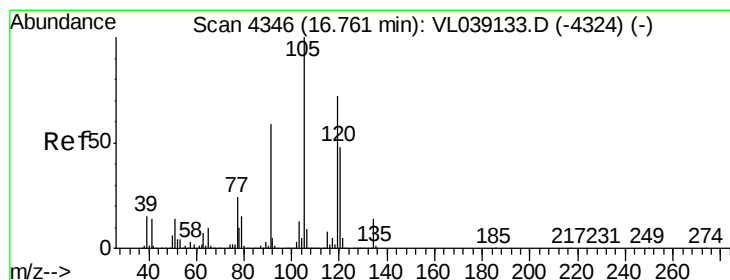
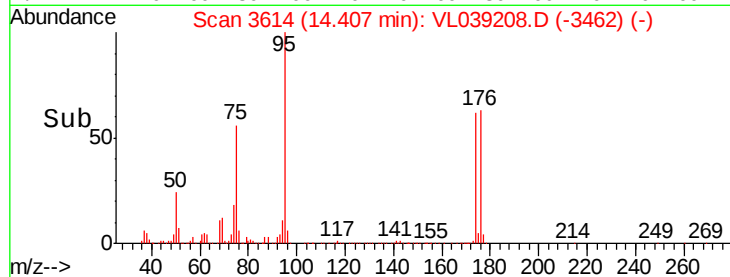
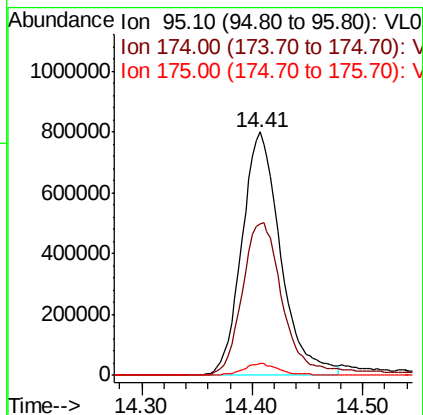
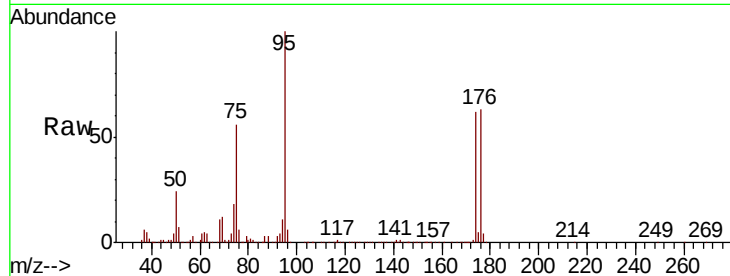




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.025 ppbv
 RT: 14.41 min Scan# 3614
 Delta R.T. -0.01 min
 Lab File: VL039208.D
 Acq: 7 Jun 2022 14:13

Tot Ion: 95 Resp: 1946291

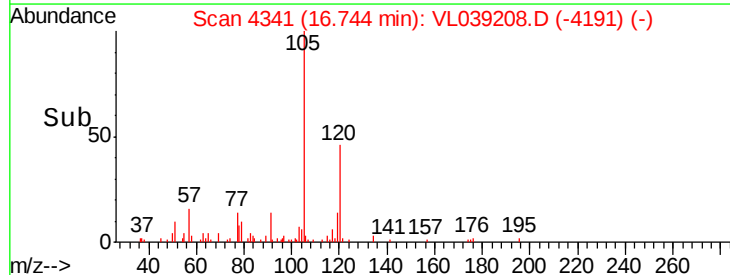
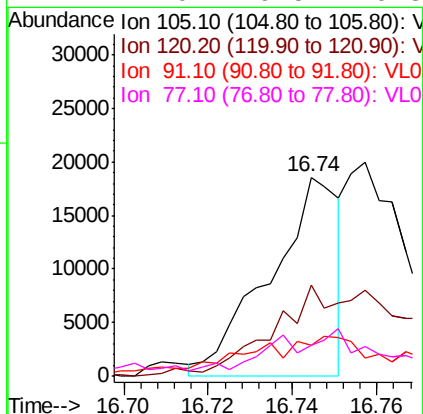
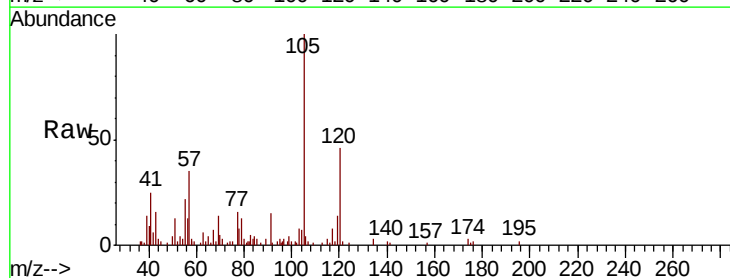
Ion	Ratio	Lower	Upper
95	100		
174	68.9	53.8	80.8
175	4.8	4.1	6.1

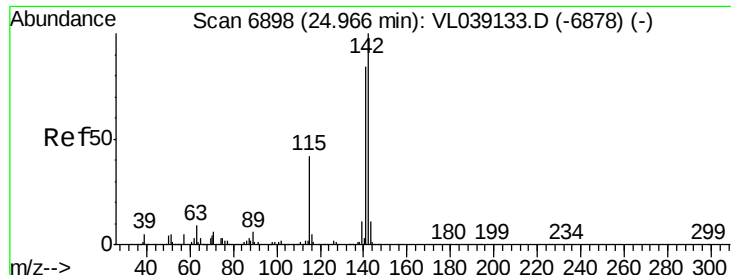


#74
 1,2,4-Trimethylbenzene
 Concen: 0.067 ppbv
 RT: 16.74 min Scan# 4341
 Delta R.T. -0.02 min
 Lab File: VL039208.D
 Acq: 7 Jun 2022 14:13

Tgt Ion: 105 Resp: 21130

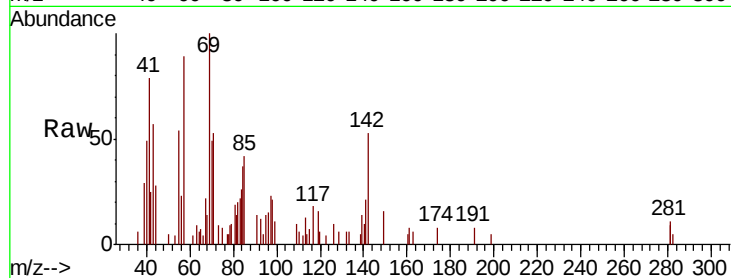
Ion	Ratio	Lower	Upper
105	100		
120	46.2	38.1	57.1
91	12.2	47.4	71.0#
77	14.0	19.5	29.3#





#80
 Naphthalene,2-methyl-
 Concen: 0.039 ppbv
 RT: 24.98 min Scan# 6901
 Delta R.T. 0.01 min
 Lab File: VL039208.D
 Acq: 7 Jun 2022 14:13

Tot Ion	Ratio	Lower	Upper
142	100		
141	88.8	64.6	96.8
115	61.5	32.7	49.1



Abundance Ion 142.00 (141.70 to 142.70): V
 Ion 141.00 (140.70 to 141.70): V
 Ion 115.00 (114.70 to 115.70): V

