

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060722\
 Data File : VL039210.D
 Acq On : 7 Jun 2022 15:33
 Operator : SY/AP
 Sample : N3199-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 08 04:59:09 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	5.66	49	1055528	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2650432	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2327188	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1828176	9.50	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.00%

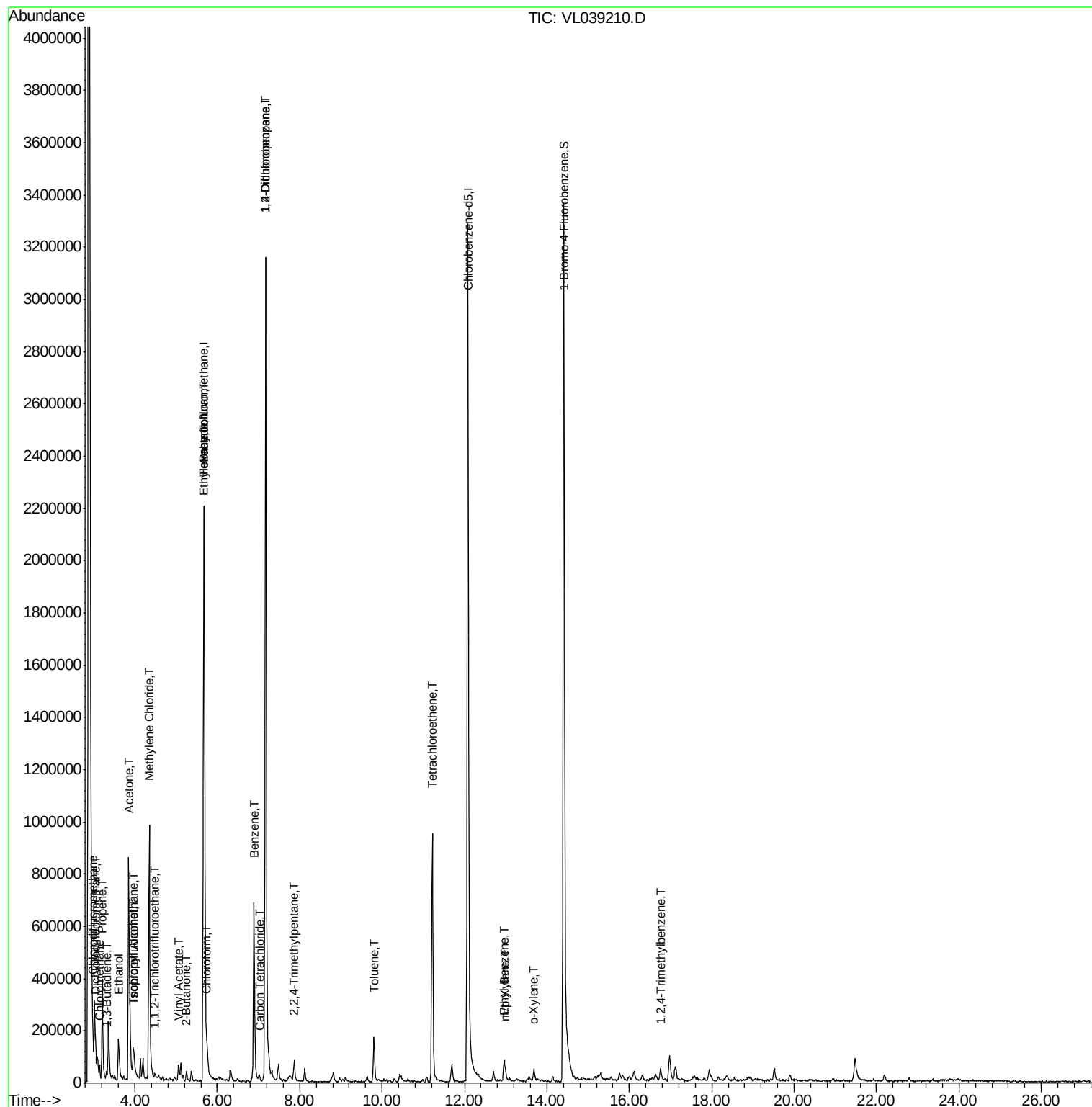
Target Compounds

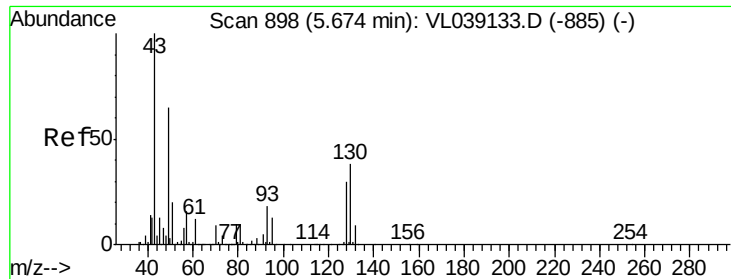
					Ovalue
2) Dichlorodifluoromethane	3.05	85	56363	0.304	ppbv 91
3) Chlorodifluoromethane	2.98	51	111711	0.832	ppbv # 75
4) Chloromethane	3.14	50	41398	0.600	ppbv # 80
9) Propene	3.21	41	104478	1.784	ppbv 85
11) Trichlorofluoromethane	3.95	101	35124	0.209	ppbv 96
12) 1,1,2-Trichlorotrifluoroet	4.49	101	5183	0.047	ppbv # 53
13) Ethanol	3.60	45	209496	65.597	ppbv # 100
15) Acetone	3.85	43	1139589	10.364	ppbv 97
16) 1,3-Butadiene	3.33	39	3019	0.051	ppbv # 1
19) Isopropyl Alcohol	3.97	45	115577	2.241	ppbv # 1
20) Methylene Chloride	4.35	84	416053	8.979	ppbv 92
23) Vinyl Acetate	5.06	43	36417	0.400	ppbv # 48
25) Ethyl Acetate	5.69	43	322143	1.300	ppbv # 78
26) Hexane	5.68	57	437105	4.014	ppbv # 40
29) Chloroform	5.75	83	52158	0.285	ppbv 99
34) 2-Butanone	5.25	43	34422	0.239	ppbv # 71
35) Carbon Tetrachloride	7.02	117	6019	0.031	ppbv # 67
36) Benzene	6.89	78	624948	2.904	ppbv 96
39) 1,2-Dichloropropane	7.18	63	675389	7.891	ppbv # 24
41) Tetrahydrofuran	5.68	42	162063	1.871	ppbv # 49
44) 2,2,4-Trimethylpentane	7.87	57	36271	0.096	ppbv # 43
52) Tetrachloroethene	11.22	164	246479	2.934	ppbv 97
53) Toluene	9.80	91	120390	0.486	ppbv 94
58) Ethyl Benzene	12.96	91	31067	0.097	ppbv 98
59) m/p-Xylene	12.99	91	19121	0.068	ppbv # 33
60) o-Xylene	13.69	91	19663	0.074	ppbv # 31
74) 1,2,4-Trimethylbenzene	16.75	105	30107	0.096	ppbv # 57

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

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

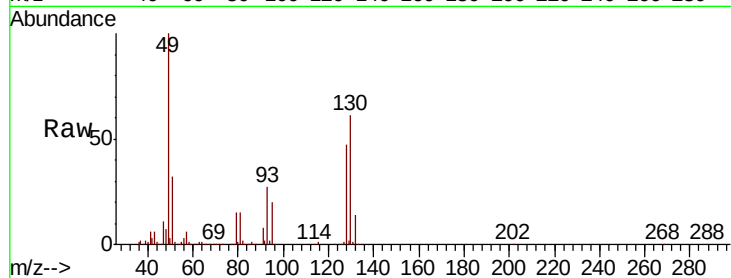
Delta R.T. -0.01 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

Tot Ion: 49 Resp: 1055528

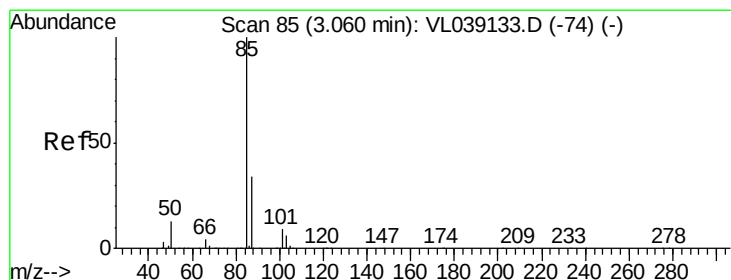
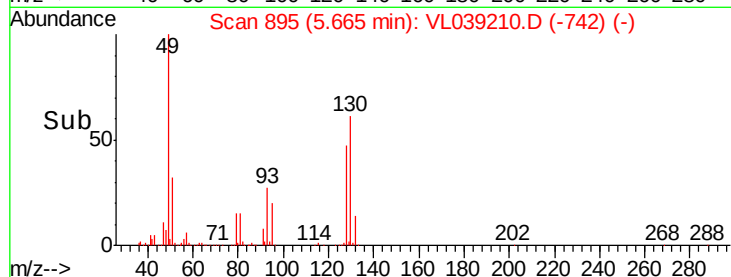
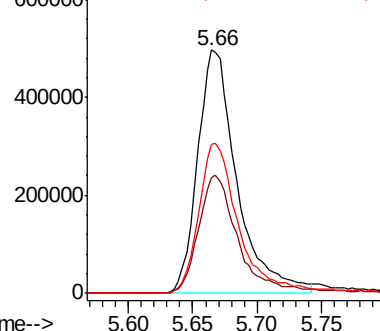
Ion	Ratio	Lower	Upper
49	100		
128	50.4	24.7	74.1
130	64.4	31.4	94.0



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



#2

Dichlorodifluoromethane

Concen: 0.304 ppbv

RT: 3.05 min Scan# 82

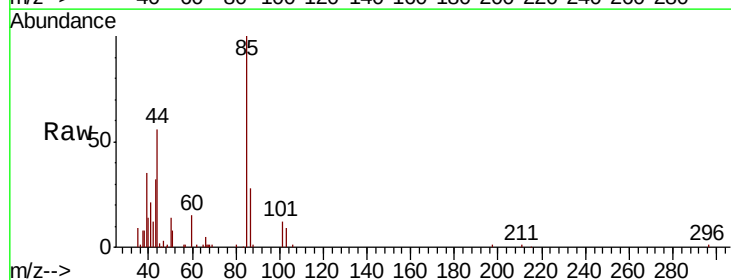
Delta R.T. -0.01 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

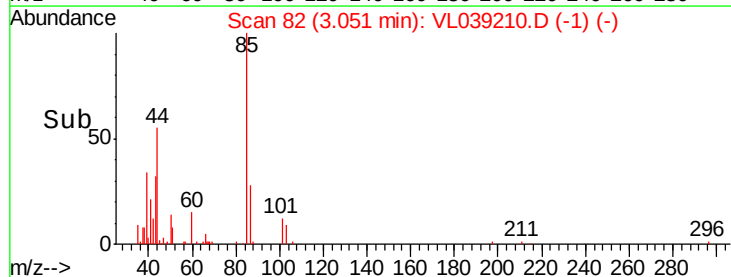
Tgt Ion: 85 Resp: 56363

Ion	Ratio	Lower	Upper
85	100		
87	28.4	26.9	40.3

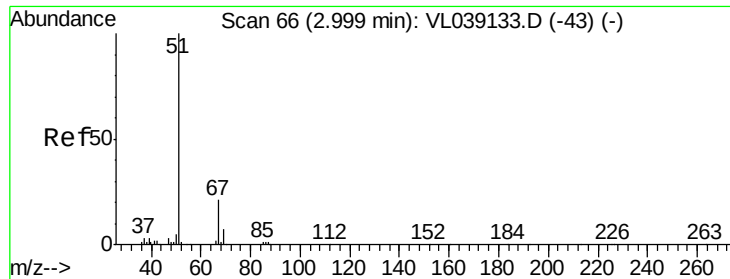


Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0



Time-->



#3

Chlorodifluoromethane

Concen: 0.832 ppbv

RT: 2.98 min Scan# 61

Delta R.T. -0.02 min

Lab File: VL039210.D

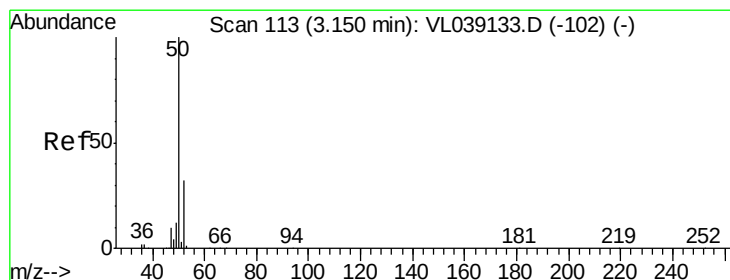
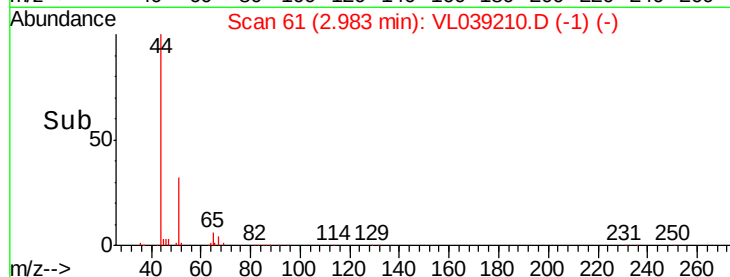
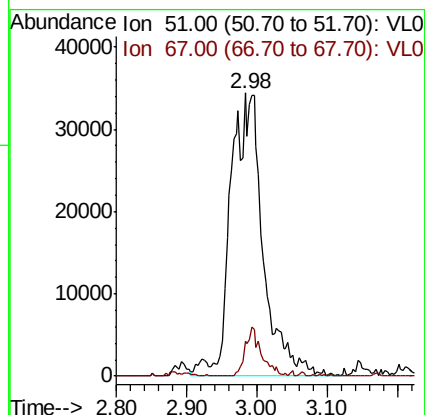
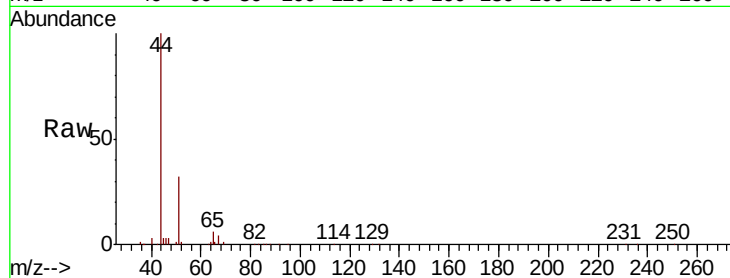
Acq: 7 Jun 2022 15:33

Tot Ion: 51 Resp: 111711

Ion Ratio Lower Upper

51 100

67 8.9 16.2 24.4#



#4

Chloromethane

Concen: 0.600 ppbv

RT: 3.14 min Scan# 111

Delta R.T. -0.01 min

Lab File: VL039210.D

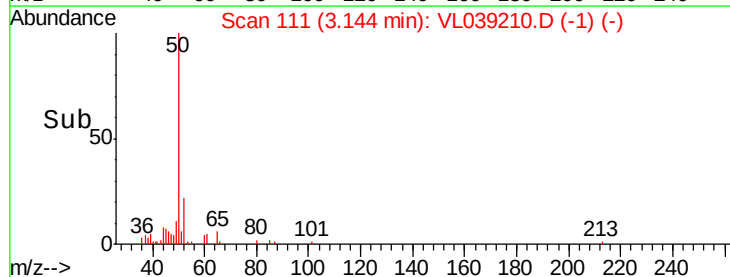
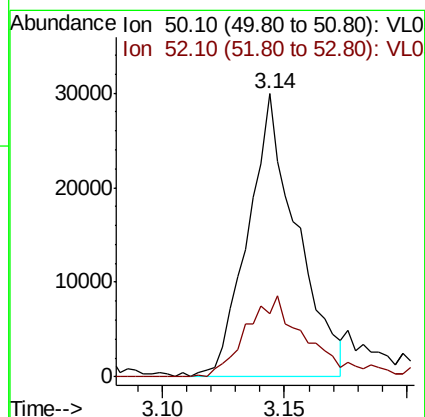
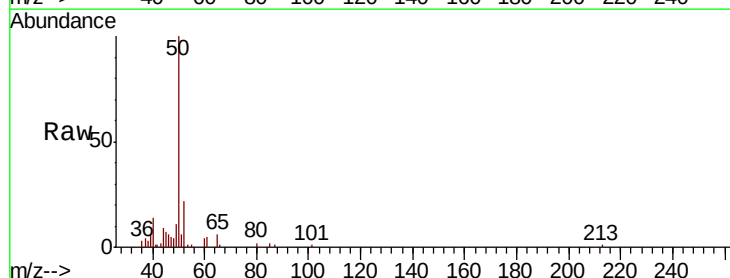
Acq: 7 Jun 2022 15:33

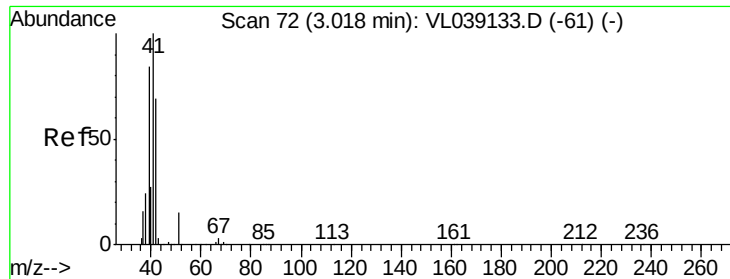
Tgt Ion: 50 Resp: 41398

Ion Ratio Lower Upper

50 100

52 21.1 25.9 38.9#





#9

Propene

Concen: 1.784 ppbv

RT: 3.21 min Scan# 131

Delta R.T. 0.19 min

Lab File: VL039210.D

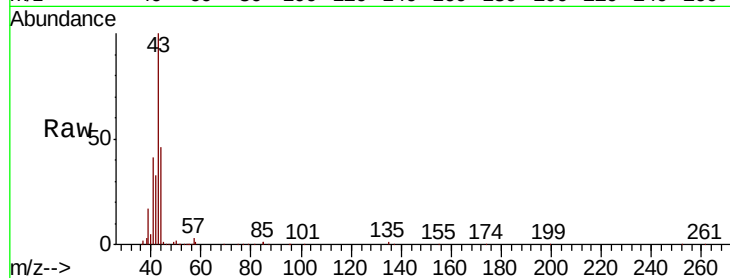
Acq: 7 Jun 2022 15:33

Tot Ion: 41 Resp: 104478

Ion Ratio Lower Upper

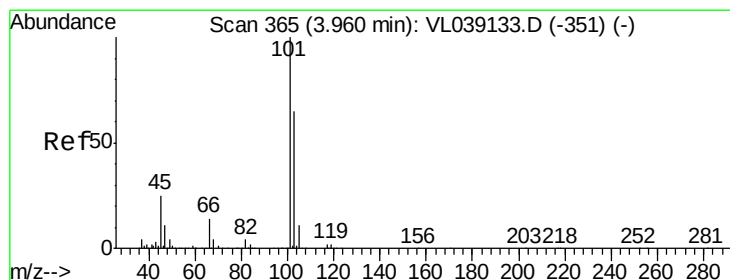
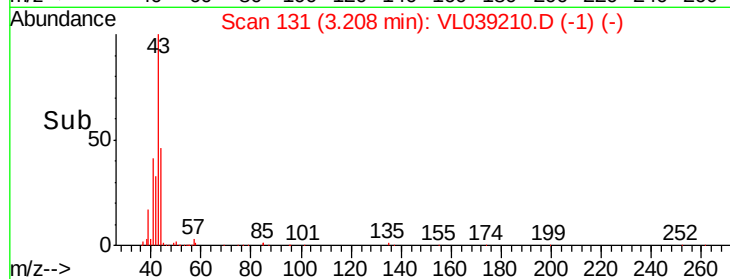
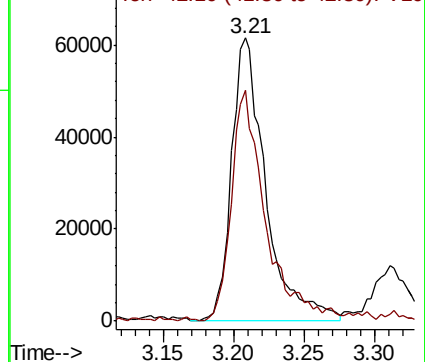
41 100

42 81.3 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: 0.209 ppbv

RT: 3.95 min Scan# 362

Delta R.T. -0.01 min

Lab File: VL039210.D

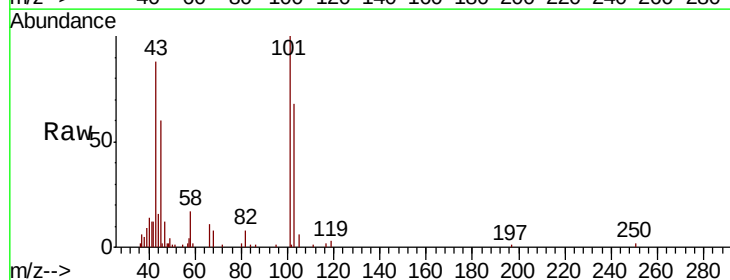
Acq: 7 Jun 2022 15:33

Tgt Ion: 101 Resp: 35124

Ion Ratio Lower Upper

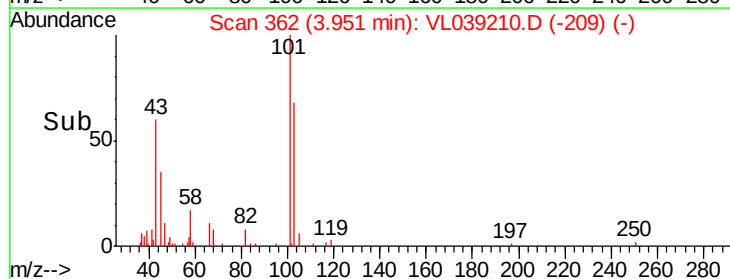
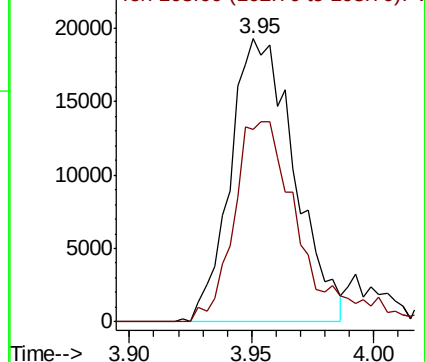
101 100

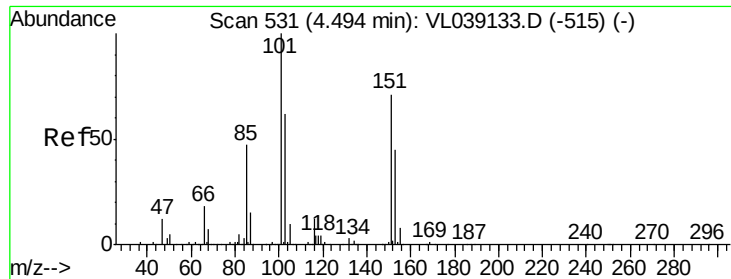
103 68.1 51.7 77.5



Abundance Ion 101.00 (100.70 to 101.70): V

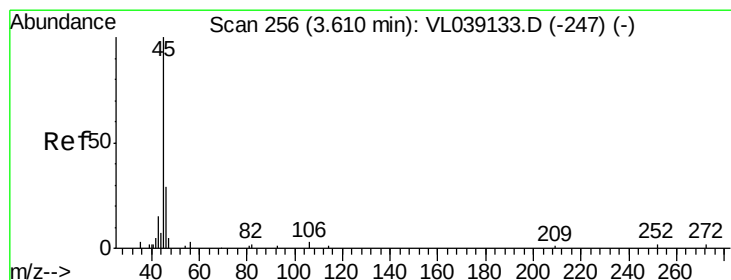
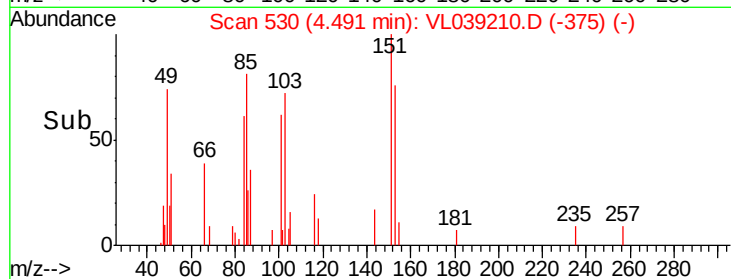
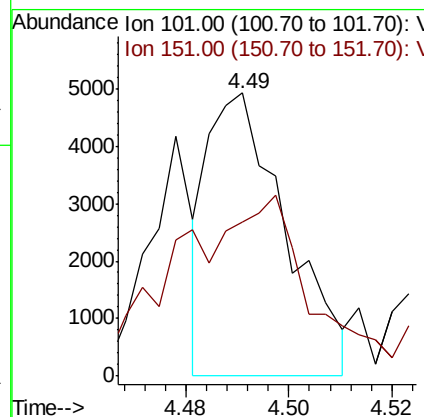
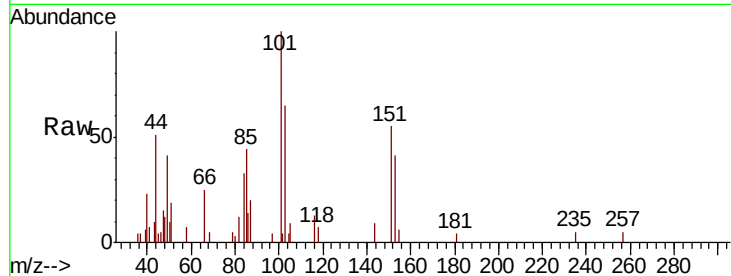
Ion 103.00 (102.70 to 103.70): V





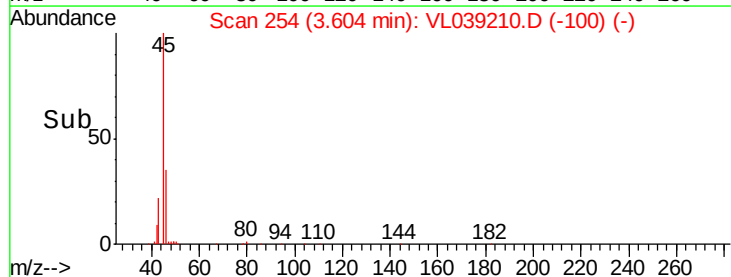
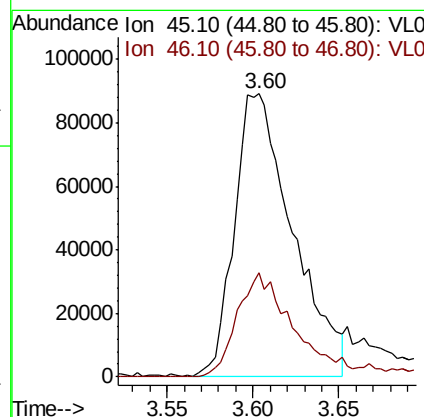
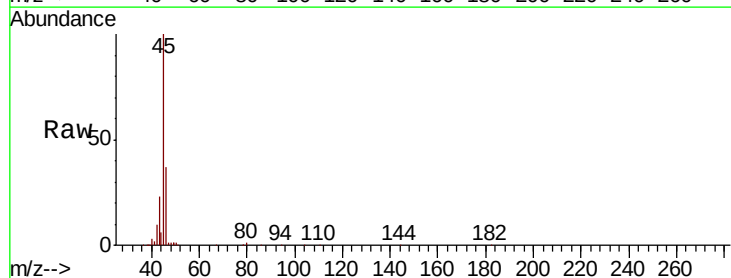
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.047 ppbv
 RT: 4.49 min Scan# 530
 Delta R.T. -0.00 min
 Lab File: VL039210.D
 Acq: 7 Jun 2022 15:33

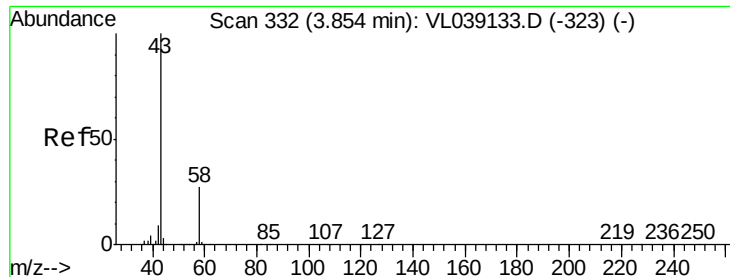
Tot Ion:101 Resp: 5183
 Ion Ratio Lower Upper
 101 100
 151 113.7 59.4 89.0#



#13
 Ethanol
 Concen: 65.597 ppbv
 RT: 3.60 min Scan# 254
 Delta R.T. -0.01 min
 Lab File: VL039210.D
 Acq: 7 Jun 2022 15:33

Tgt Ion: 45 Resp: 209496
 Ion Ratio Lower Upper
 45 100
 46 41.0 0.0 0.0#





#15

Acetone

Concen: 10.364 ppbv

RT: 3.85 min Scan# 330

Delta R.T. -0.01 min

Lab File: VL039210.D

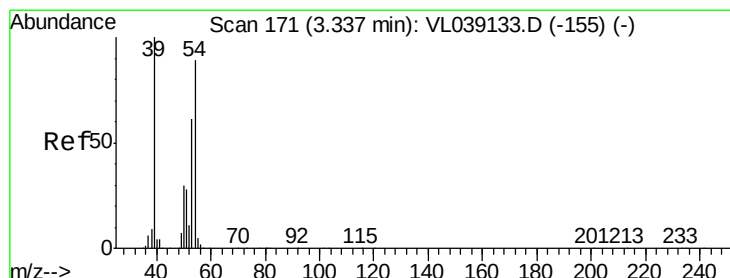
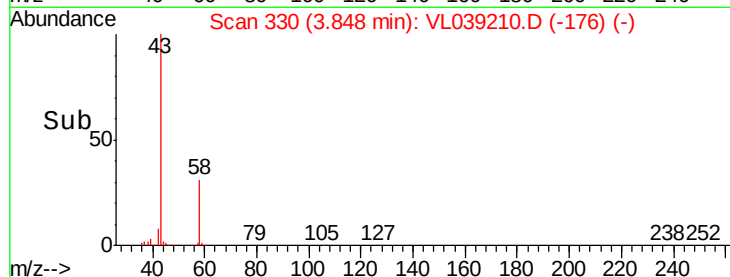
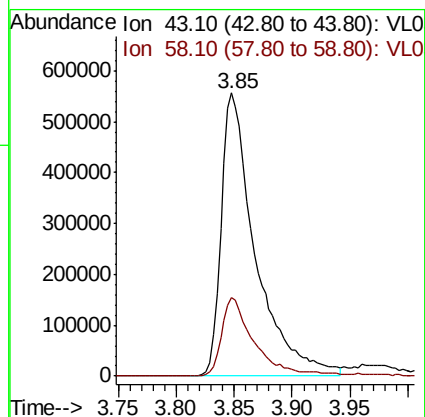
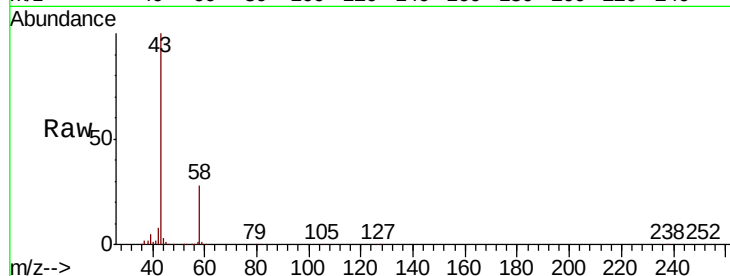
Acq: 7 Jun 2022 15:33

Tot Ion: 43 Resp: 1139589

Ion Ratio Lower Upper

43 100

58 26.7 22.5 33.7



#16

1,3-Butadiene

Concen: 0.051 ppbv

RT: 3.33 min Scan# 168

Delta R.T. -0.01 min

Lab File: VL039210.D

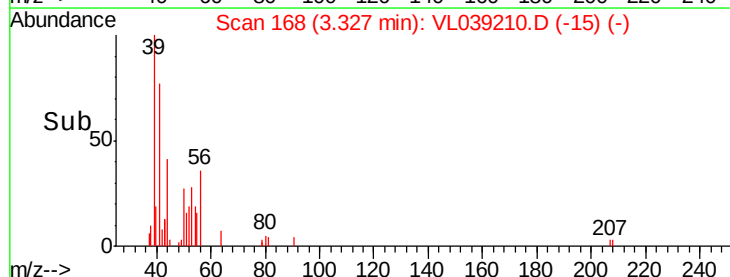
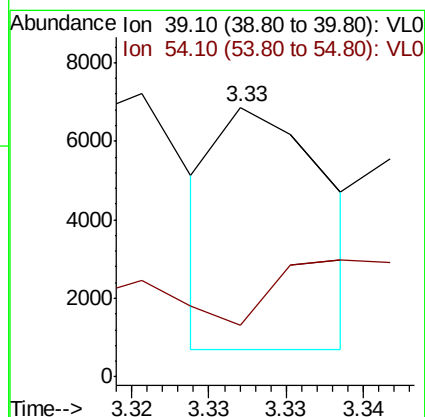
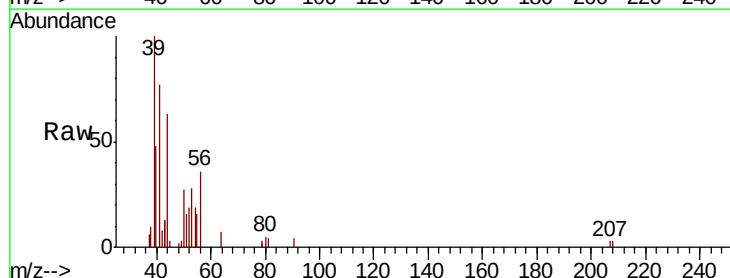
Acq: 7 Jun 2022 15:33

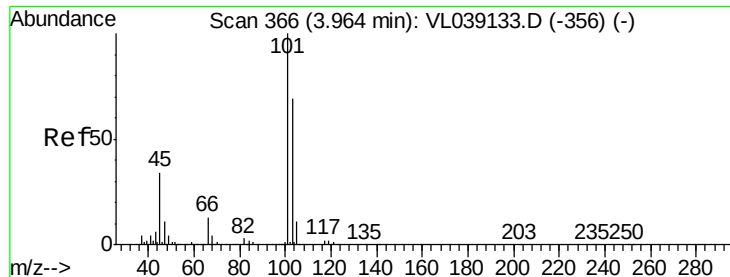
Tgt Ion: 39 Resp: 3019

Ion Ratio Lower Upper

39 100

54 191.6 65.8 98.6#





#19

Isopropyl Alcohol

Concen: 2.241 ppbv

RT: 3.97 min Scan# 368

Delta R.T. 0.01 min

Lab File: VL039210.D

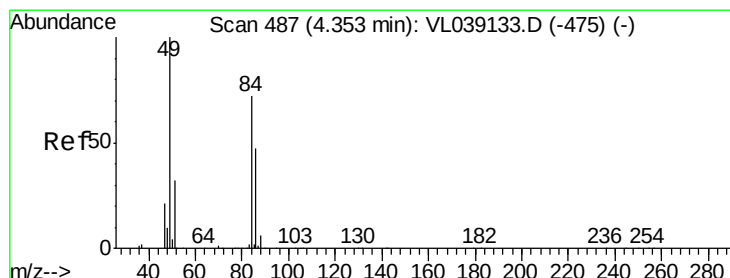
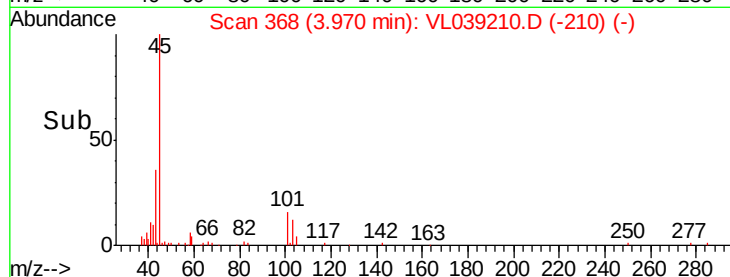
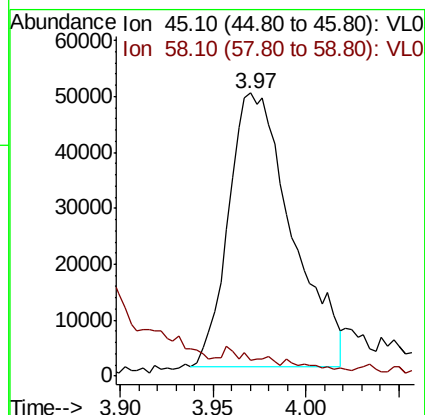
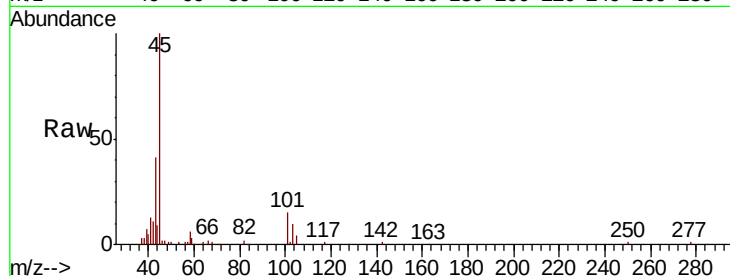
Acq: 7 Jun 2022 15:33

Tot Ion: 45 Resp: 115577

Ion Ratio Lower Upper

45 100

58 277.2 1.8 2.8#



#20

Methylene Chloride

Concen: 8.979 ppbv

RT: 4.35 min Scan# 485

Delta R.T. -0.01 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

Tgt Ion: 84 Resp: 416053

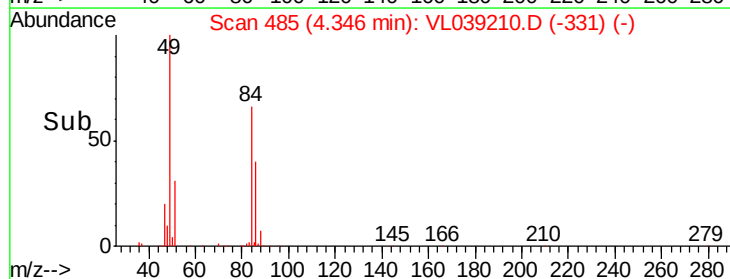
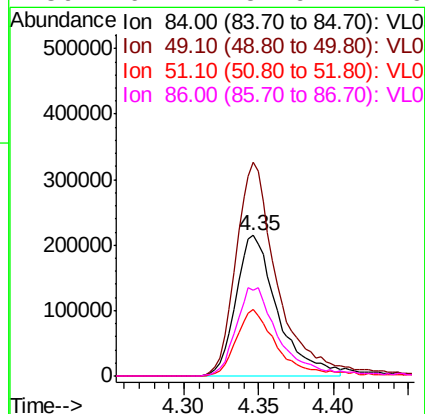
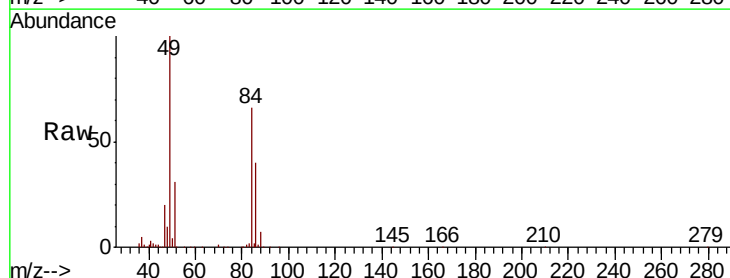
Ion Ratio Lower Upper

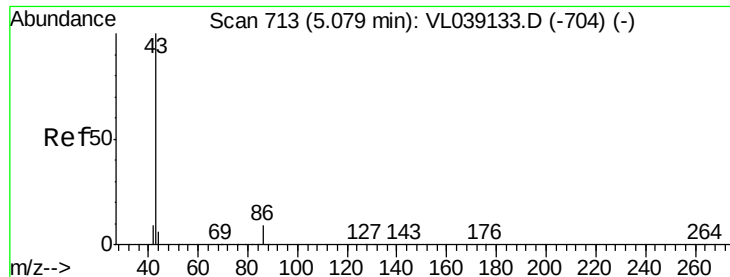
84 100

49 151.9 111.1 166.7

51 47.1 35.3 52.9

86 61.1 51.9 77.9





#23

Vinyl Acetate

Concen: 0.400 ppbv

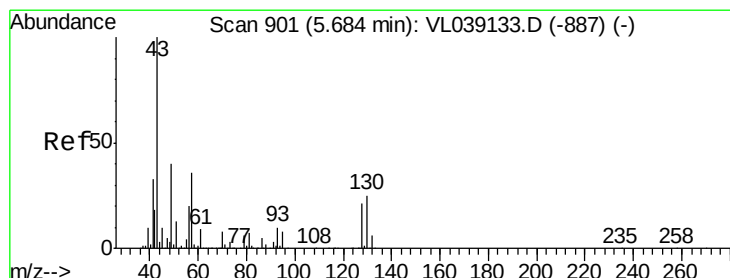
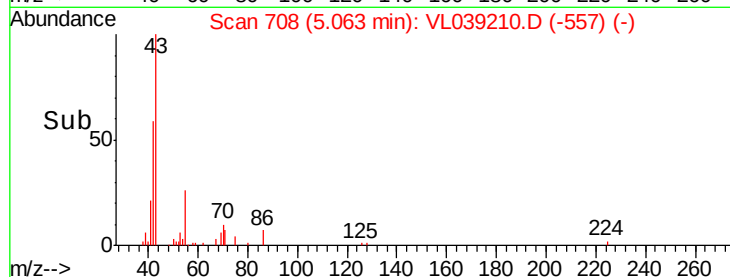
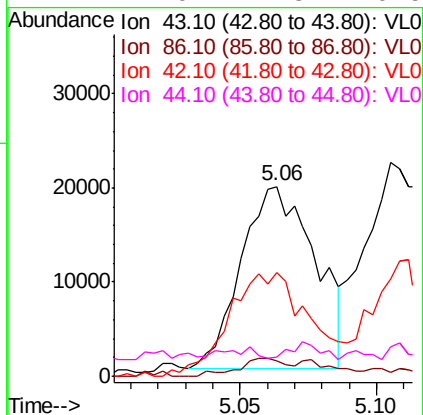
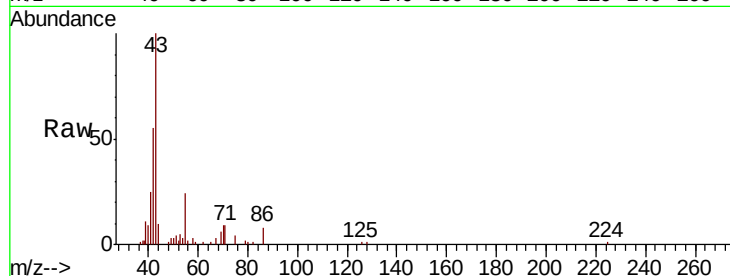
RT: 5.06 min Scan# 708

Delta R.T. -0.02 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

Tot Ion:	43	Resp:	36417
Ion	Ratio	Lower	Upper
43	100		
86	8.3	6.0	9.0
42	50.8	8.2	12.4#
44	1.0	4.3	6.5#



#25

Ethyl Acetate

Concen: 1.300 ppbv

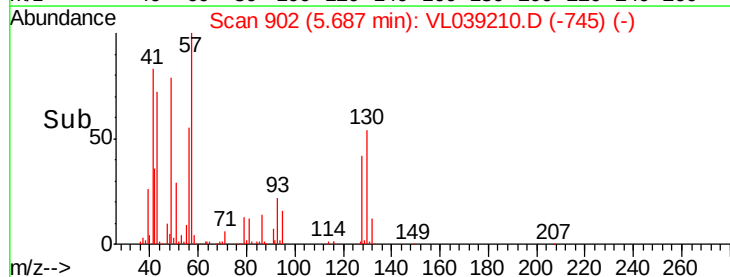
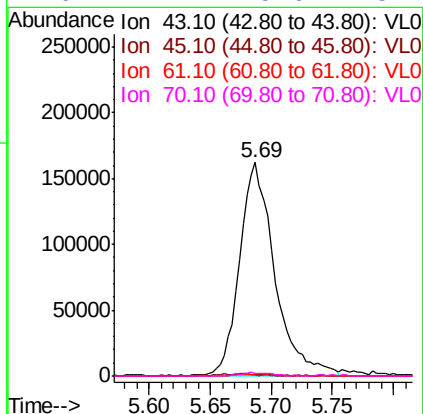
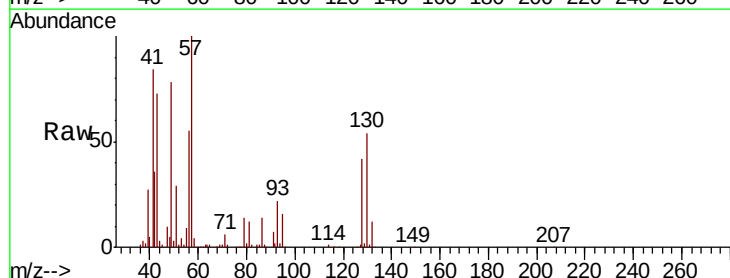
RT: 5.69 min Scan# 902

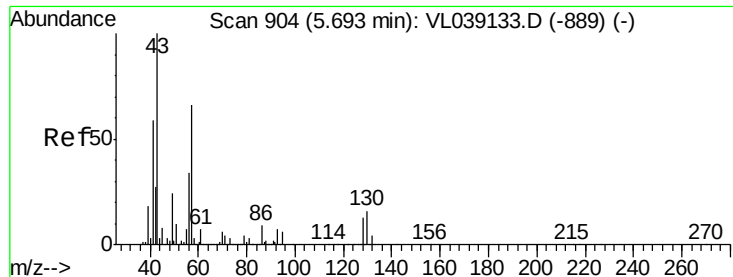
Delta R.T. 0.00 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

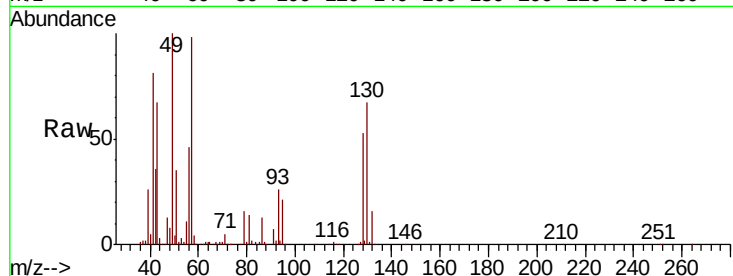
Tgt Ion:	43	Resp:	322143
Ion	Ratio	Lower	Upper
43	100		
45	1.6	8.2	12.2#
61	0.8	8.4	12.6#
70	1.7	5.6	8.4#



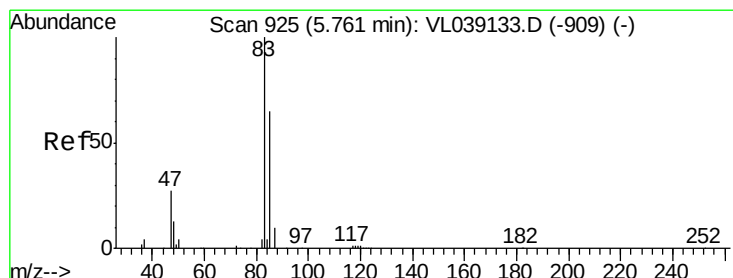
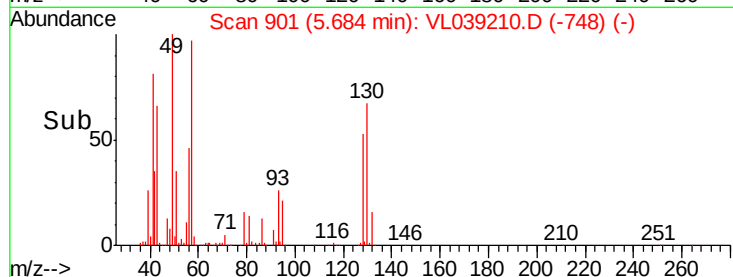
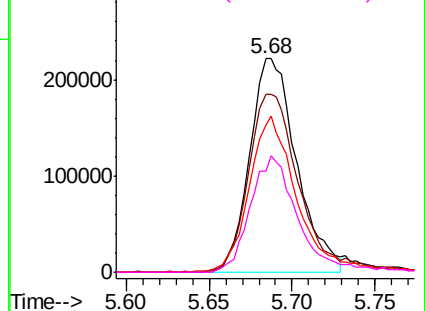


#26
Hexane
Concen: 4.014 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.01 min
Lab File: VL039210.D
Acq: 7 Jun 2022 15:33

Tot Ion:	57	Resp:	437105
Ion	Ratio	Lower	Upper
57	100		
41	92.7	72.4	108.6
43	76.7	187.0	280.6#
56	55.8	41.8	62.6

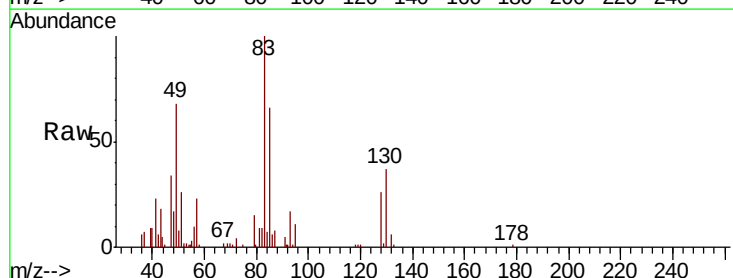


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

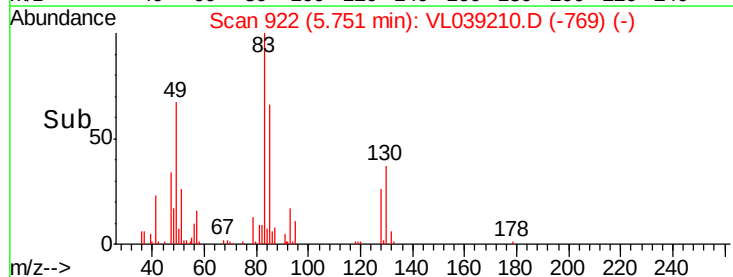
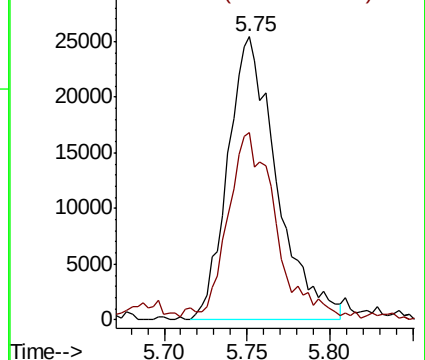


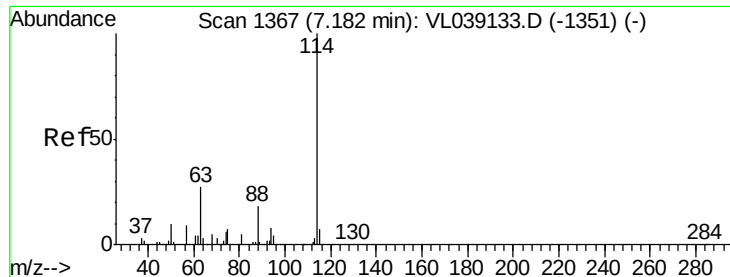
#29
Chloroform
Concen: 0.285 ppbv
RT: 5.75 min Scan# 922
Delta R.T. -0.01 min
Lab File: VL039210.D
Acq: 7 Jun 2022 15:33

Tgt Ion:	83	Resp:	52158
Ion	Ratio	Lower	Upper
83	100		
85	64.7	52.4	78.6



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: 7.17 min Scan# 1364

Delta R.T. -0.01 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

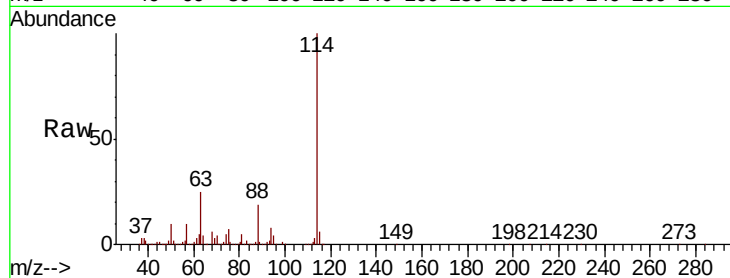
Tot Ion:114 Resp: 2650432

Ion Ratio Lower Upper

114 100

63 26.2 21.7 32.5

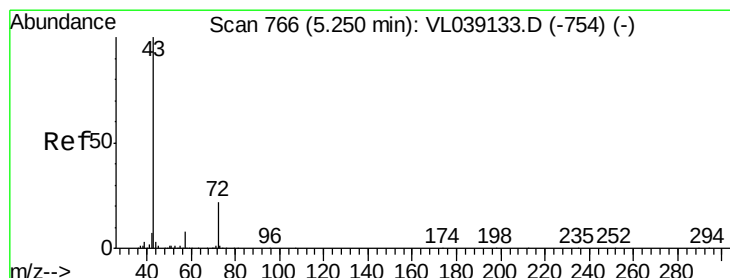
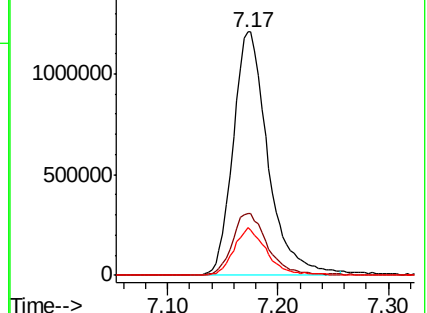
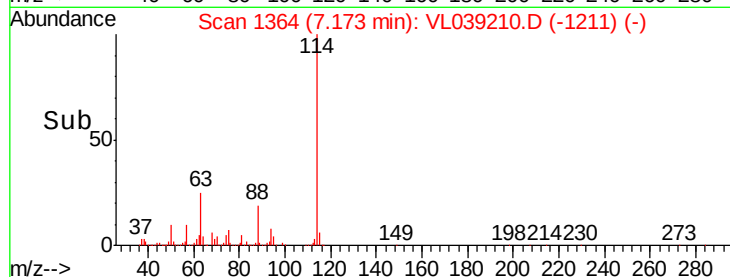
88 18.6 14.8 22.2



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: 0.239 ppbv

RT: 5.25 min Scan# 766

Delta R.T. 0.00 min

Lab File: VL039210.D

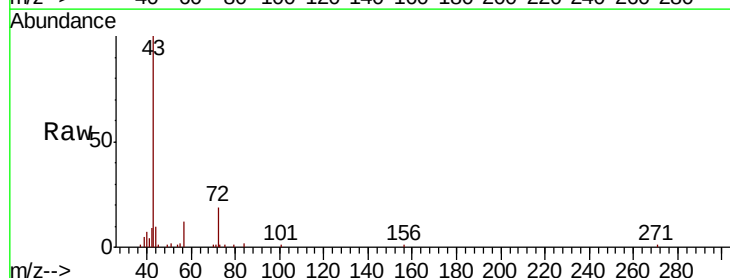
Acq: 7 Jun 2022 15:33

Tgt Ion: 43 Resp: 34422

Ion Ratio Lower Upper

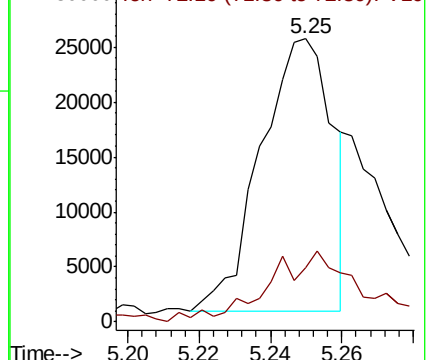
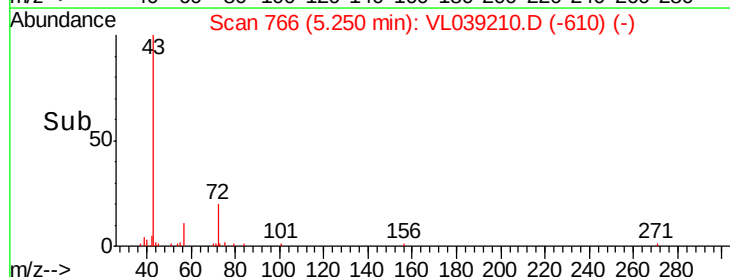
43 100

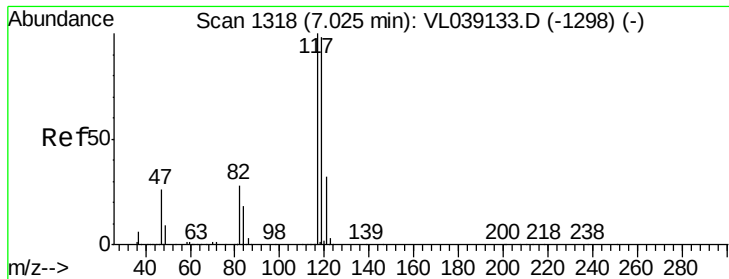
72 36.8 18.2 27.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.031 ppbv

RT: 7.02 min Scan# 1315

Delta R.T. -0.01 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

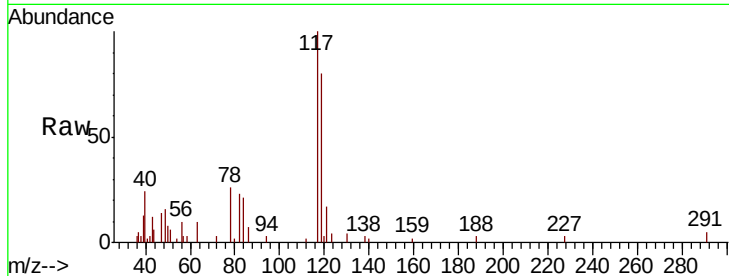
Tot Ion:117 Resp: 6019

Ion Ratio Lower Upper

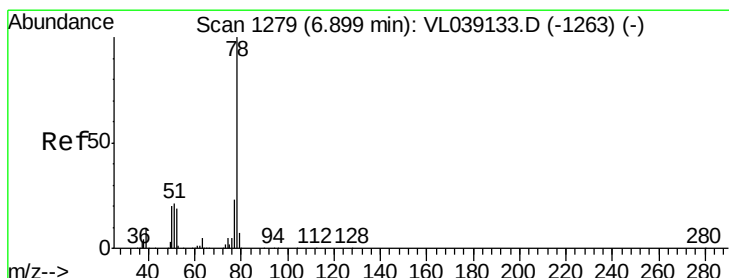
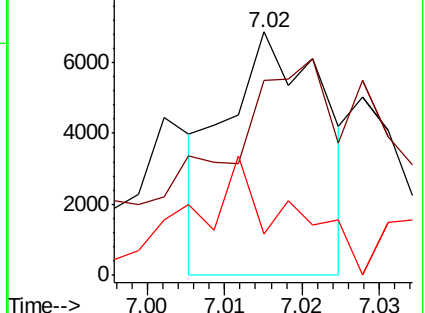
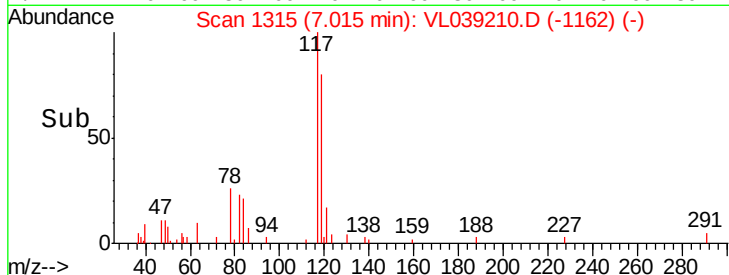
117 100

119 73.4 78.6 118.0#

121 0.0 25.4 38.0#



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: 2.904 ppbv

RT: 6.89 min Scan# 1275

Delta R.T. -0.01 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

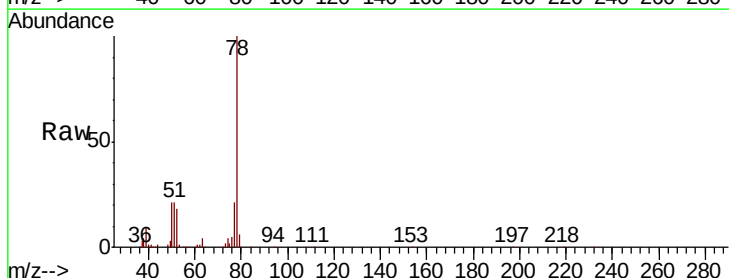
Tgt Ion: 78 Resp: 624948

Ion Ratio Lower Upper

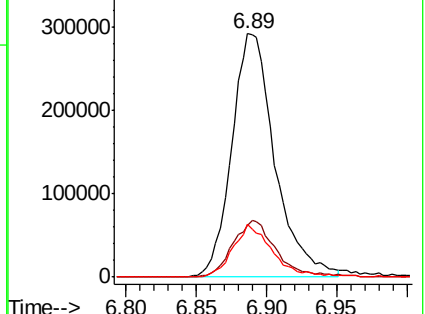
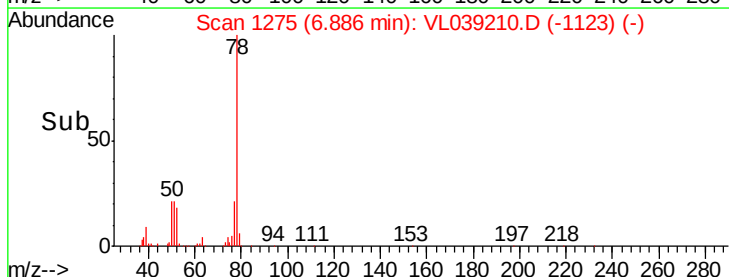
78 100

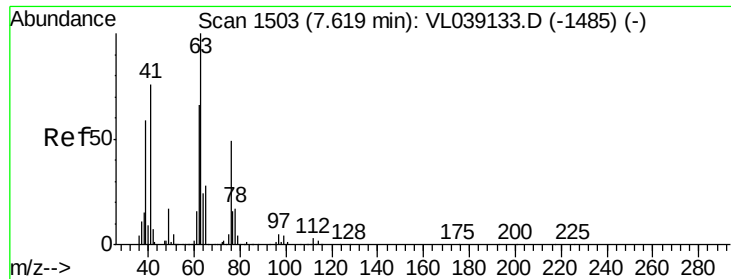
77 21.2 18.6 27.8

50 21.4 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: 7.891 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.44 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

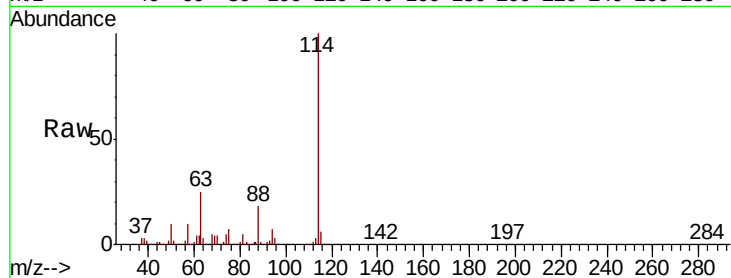
Tot Ion: 63 Resp: 675389

Ion Ratio Lower Upper

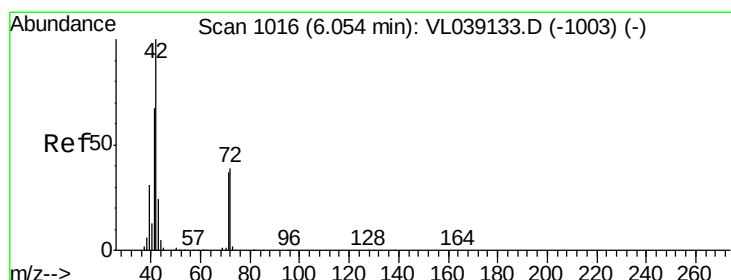
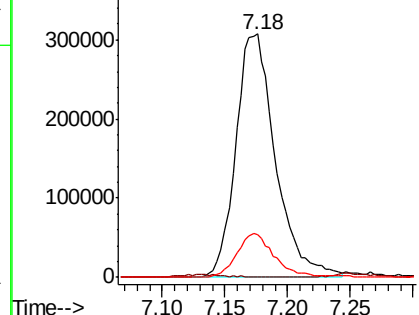
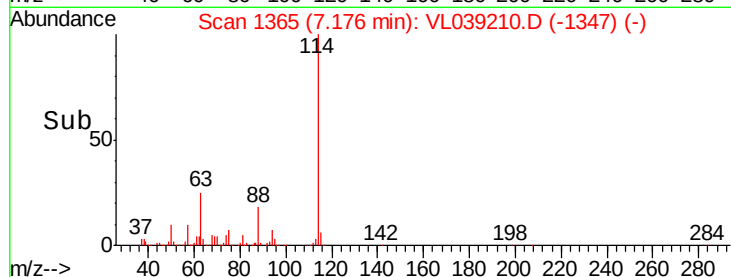
63 100

41 0.0 60.8 91.2#

62 17.3 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



#41

Tetrahydrofuran

Concen: 1.871 ppbv

RT: 5.68 min Scan# 901

Delta R.T. -0.37 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

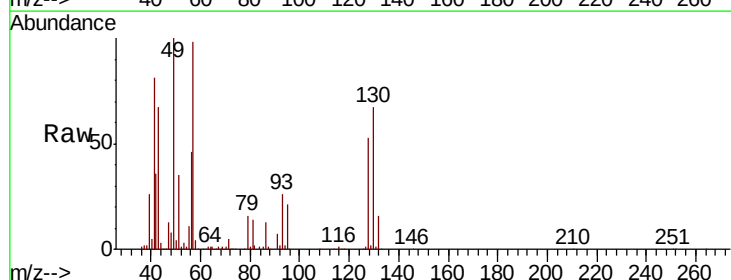
Tgt Ion: 42 Resp: 162063

Ion Ratio Lower Upper

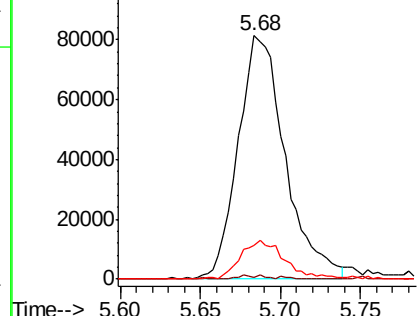
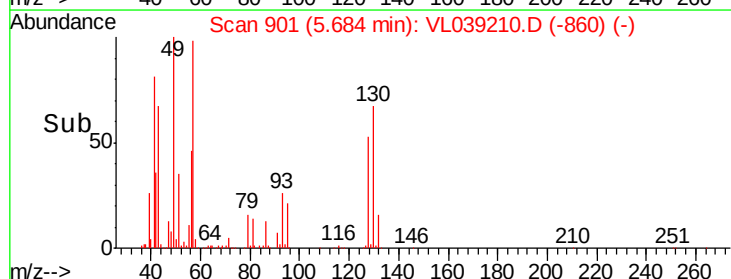
42 100

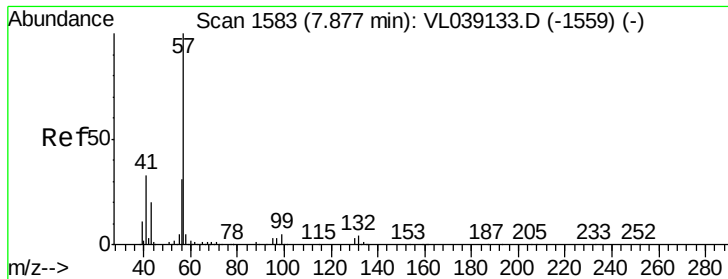
72 1.1 32.0 48.0#

71 15.6 31.1 46.7#



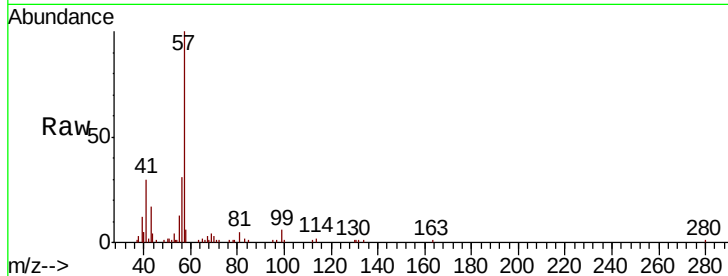
Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0





#44
2,2,4-Trimethylpentane
Concen: 0.096 ppbv
RT: 7.87 min Scan# 1580
Delta R.T. -0.01 min
Lab File: VL039210.D
Acq: 7 Jun 2022 15:33

Tot Ion	57	Resp	36271
Ion Ratio	100	Lower	Upper
41	0.0	26.2	39.4#
56	0.0	24.7	37.1#

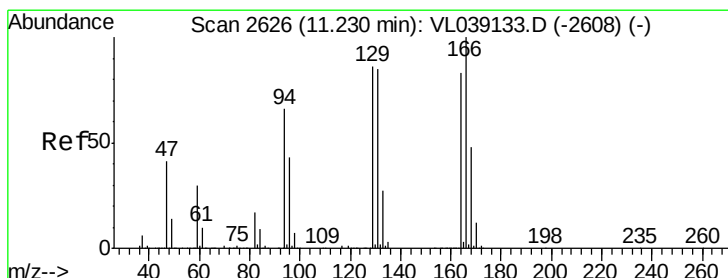
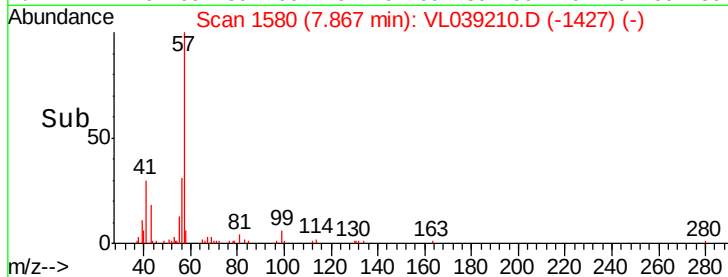
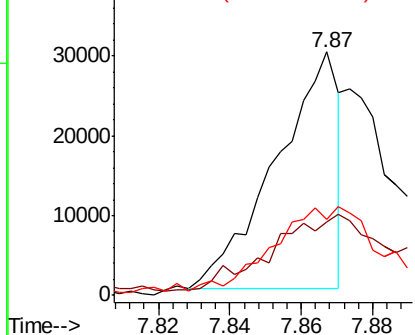


Abundance

Ion 57.10 (56.80 to 57.80): VL0

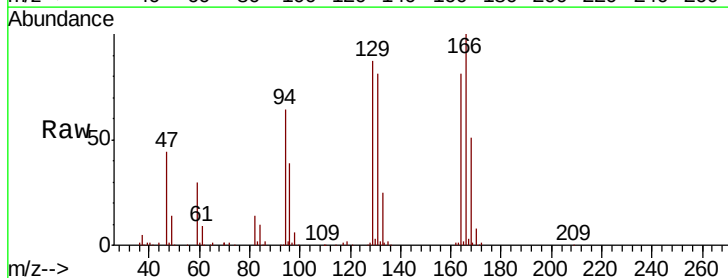
Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#52
Tetrachloroethene
Concen: 2.934 ppbv
RT: 11.22 min Scan# 2623
Delta R.T. -0.01 min
Lab File: VL039210.D
Acq: 7 Jun 2022 15:33

Tgt Ion	164	Resp	246479
Ion Ratio	100	Lower	Upper
166	123.5	96.3	144.5
129	106.7	82.5	123.7
131	100.4	82.1	123.1



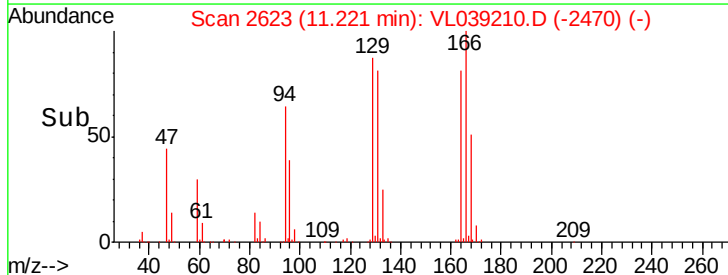
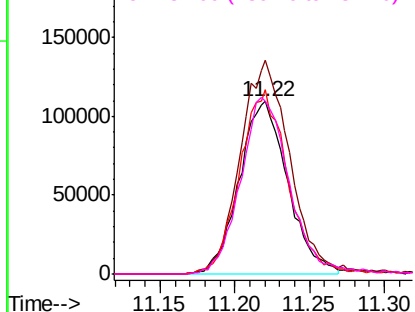
Abundance

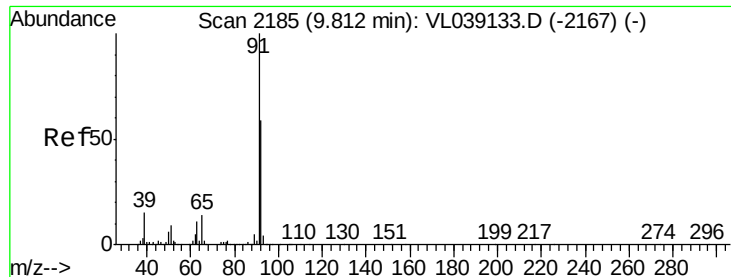
Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 0.486 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL039210.D

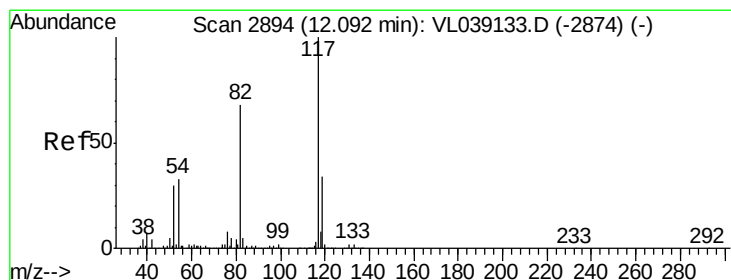
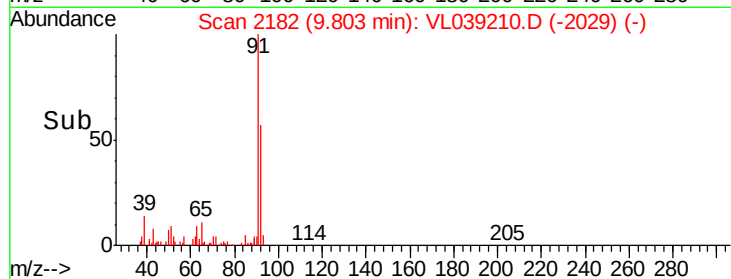
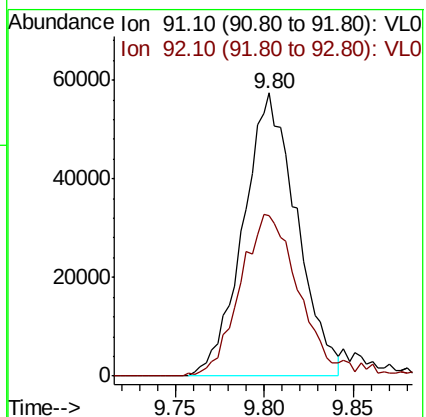
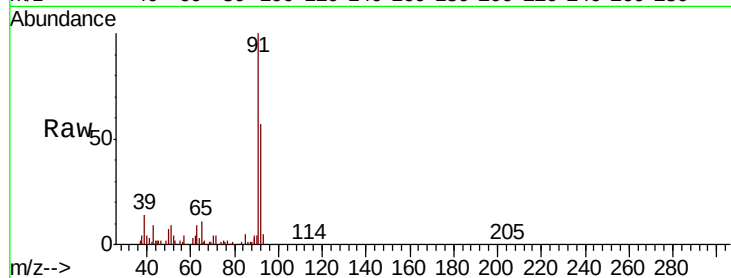
Acq: 7 Jun 2022 15:33

Tot Ion: 91 Resp: 120390

Ion Ratio Lower Upper

91 100

92 64.9 48.1 72.1



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. -0.01 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

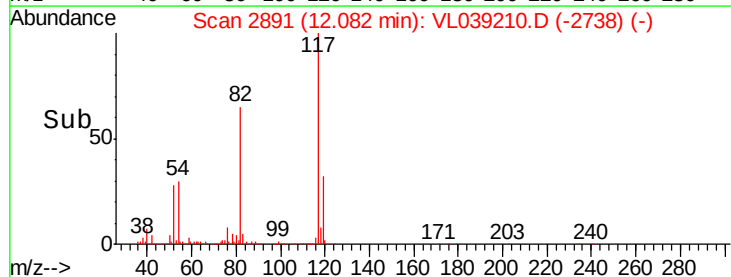
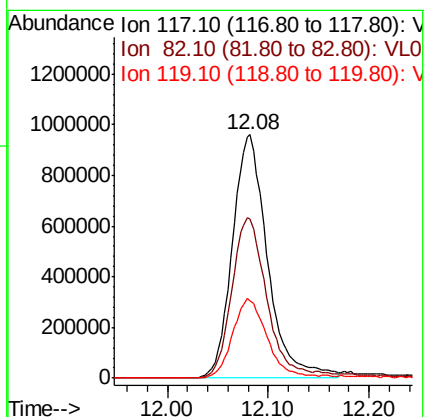
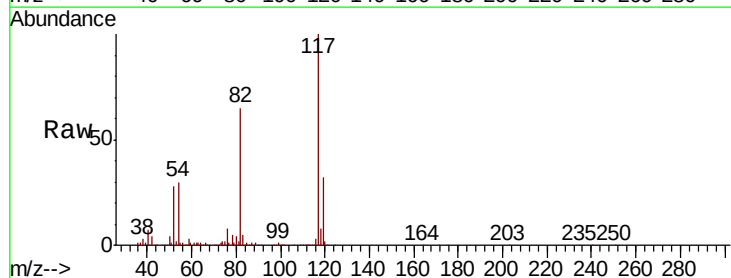
Tgt Ion: 117 Resp: 2327188

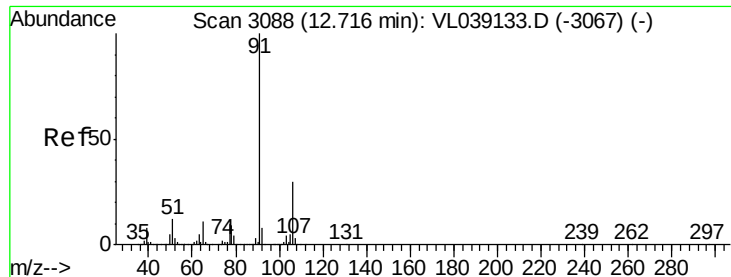
Ion Ratio Lower Upper

117 100

82 69.2 55.1 82.7

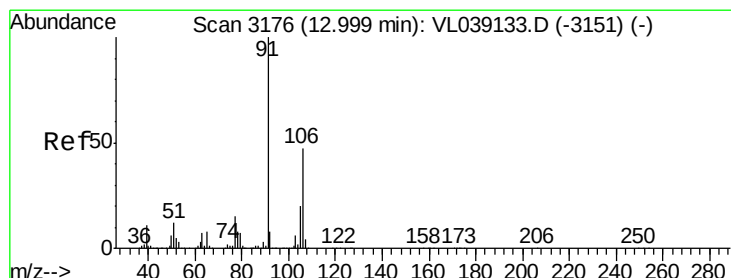
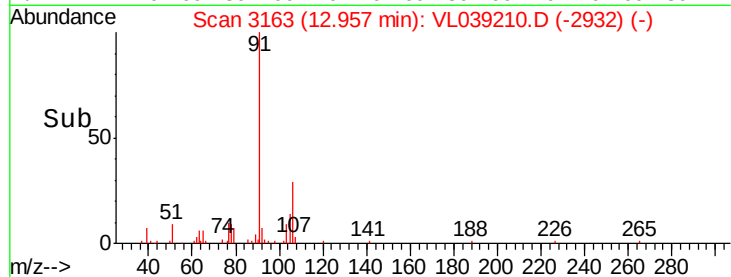
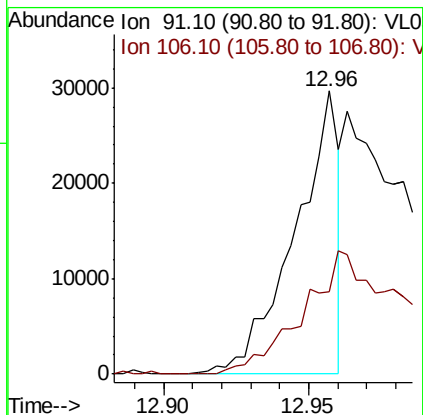
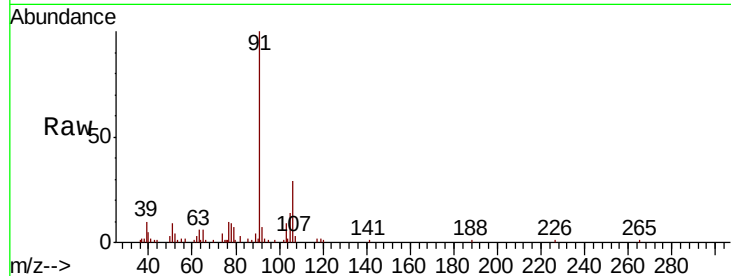
119 33.6 24.7 37.1





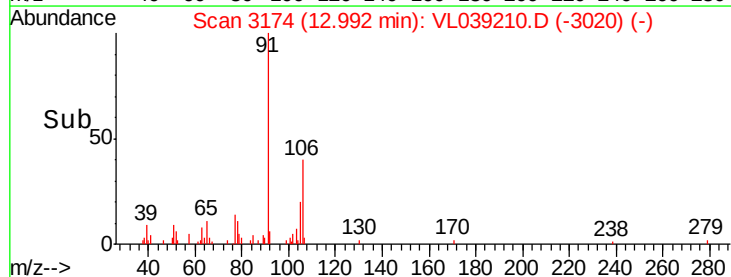
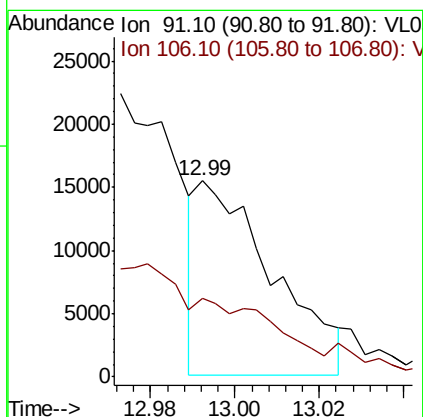
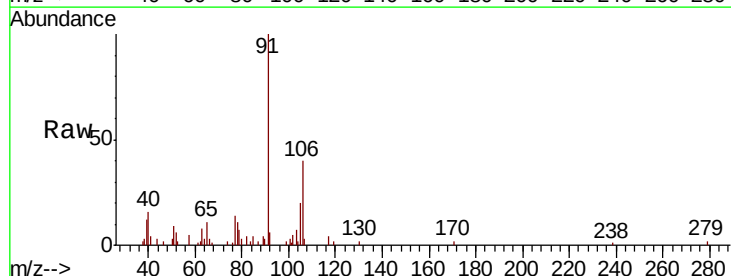
#58
Ethyl Benzene
Concen: 0.097 ppbv
RT: 12.96 min Scan# 3163
Delta R.T. 0.24 min
Lab File: VL039210.D
Acq: 7 Jun 2022 15:33

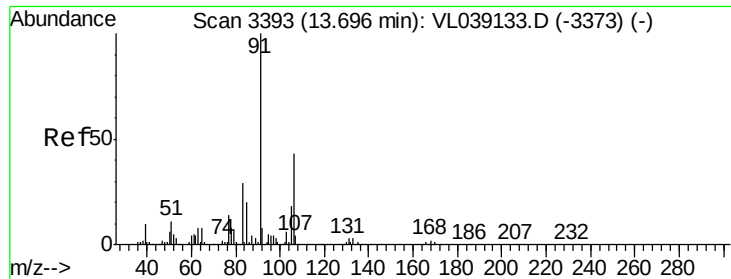
Tot Ion: 91 Resp: 31067
Ion Ratio Lower Upper
91 100
106 29.0 24.2 36.4



#59
m/p-Xylene
Concen: 0.068 ppbv
RT: 12.99 min Scan# 3174
Delta R.T. -0.01 min
Lab File: VL039210.D
Acq: 7 Jun 2022 15:33

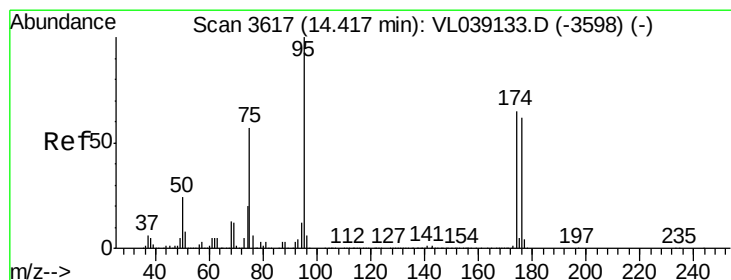
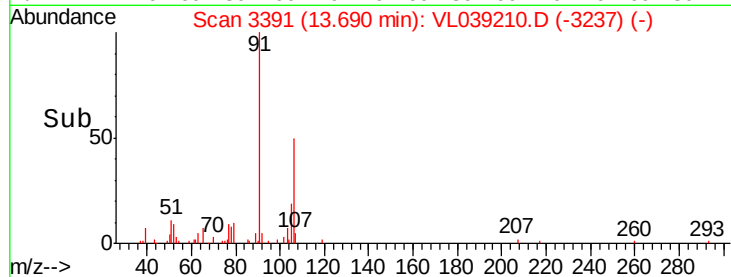
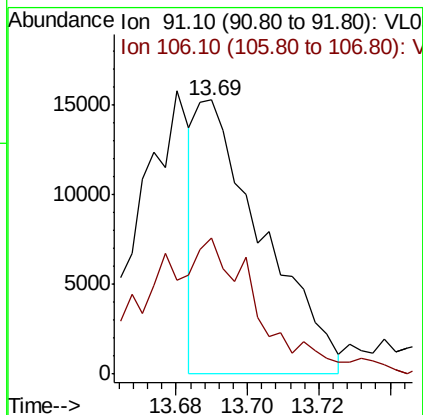
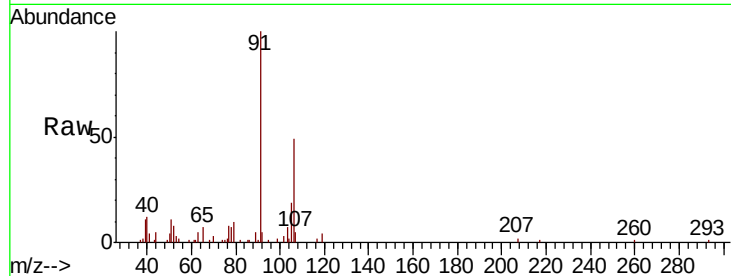
Tgt Ion: 91 Resp: 19121
Ion Ratio Lower Upper
91 100
106 0.0 34.3 51.5#





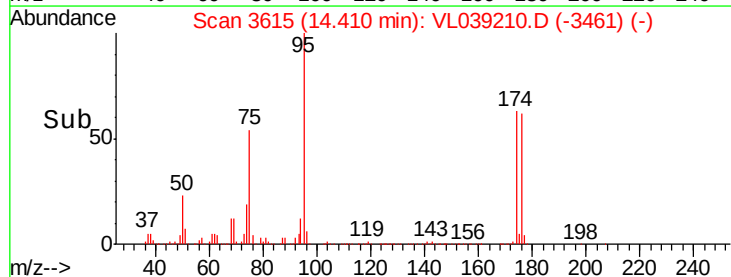
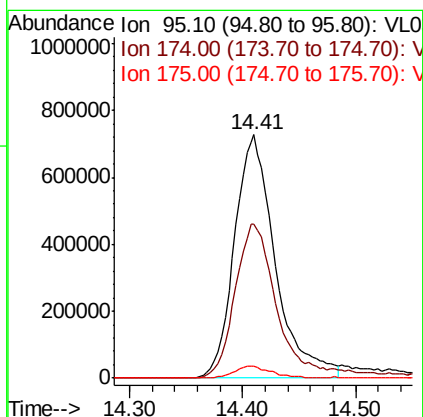
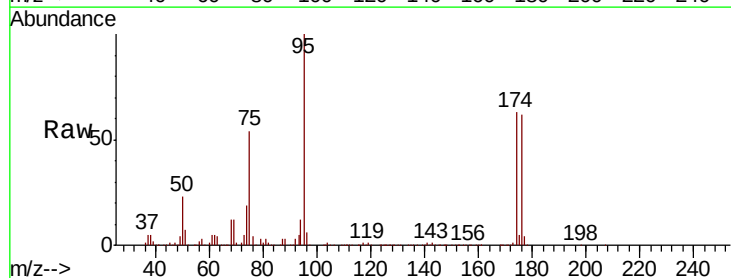
#60
o-Xylene
Concen: 0.074 ppbv
RT: 13.69 min Scan# 3391
Delta R.T. -0.01 min
Lab File: VL039210.D
Acq: 7 Jun 2022 15:33

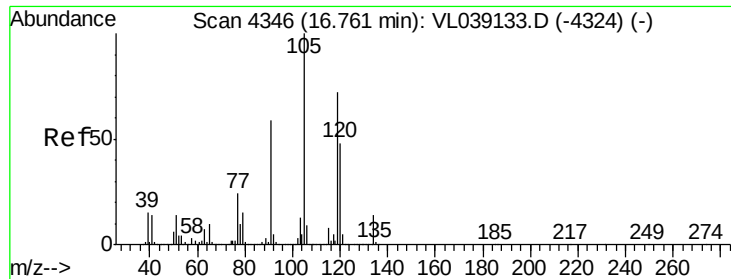
Tot Ion: 91 Resp: 19663
Ion Ratio Lower Upper
91 100
106 89.4 22.3 66.9#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.502 ppbv
RT: 14.41 min Scan# 3615
Delta R.T. -0.01 min
Lab File: VL039210.D
Acq: 7 Jun 2022 15:33

Tgt Ion: 95 Resp: 1828176
Ion Ratio Lower Upper
95 100
174 69.2 53.8 80.8
175 4.6 4.1 6.1





#74

1,2,4-Trimethylbenzene

Concen: 0.096 ppbv

RT: 16.75 min Scan# 4344

Delta R.T. -0.01 min

Lab File: VL039210.D

Acq: 7 Jun 2022 15:33

Tot Ion:105	Resp:	30107
Ion Ratio	Lower	Upper
105	100	
120	34.4	38.1 57.1#
91	10.5	47.4 71.0#
77	7.3	19.5 29.3#

