

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060622\
 Data File : VL039193.D
 Acq On : 6 Jun 2022 20:40
 Operator : SY/AP
 Sample : N3110-03DL 20X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

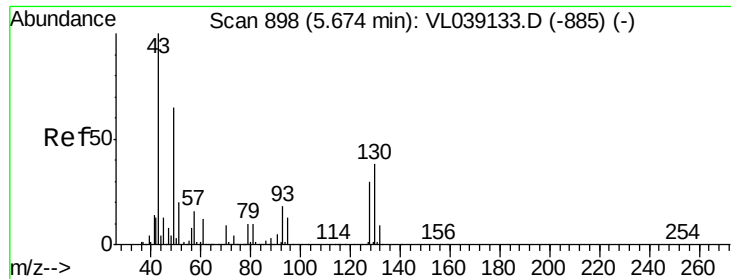
Quant Time: Jun 07 03:18:31 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 01 01:22:18 2022
 QLast Update : Wed Jun 01 01:22:18 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1179404	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	3264929	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.08	117	2899555	10.00	ppbv	-0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	2230256	9.30	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.00%

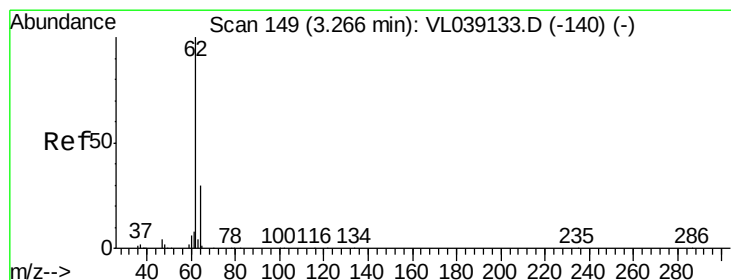
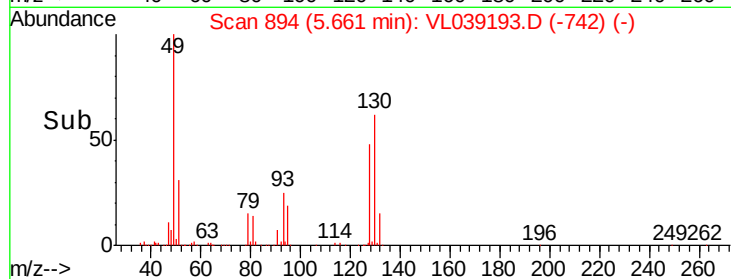
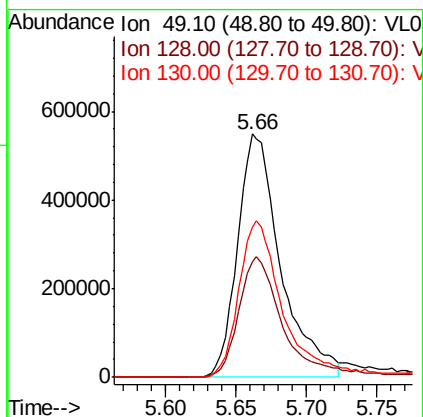
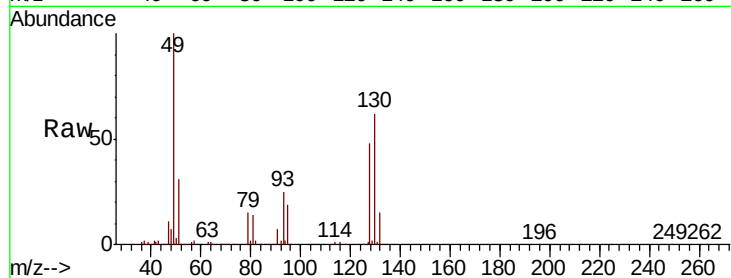
Target Compounds					Ovalue
5) Vinyl Chloride	3.26	62	6115	0.085 ppbv	# 78
9) Propene	3.02	41	124162	1.898 ppbv	83
10) Heptane	8.10	43	6176	0.040 ppbv	# 26
11) Trichlorofluoromethane	3.95	101	235790	1.257 ppbv	99
13) Ethanol	3.60	45	860	0.241 ppbv	# 100
15) Acetone	3.86	43	45861	0.373 ppbv	# 64
16) 1,3-Butadiene	3.31	39	41408	0.627 ppbv	# 19
19) Isopropyl Alcohol	3.97	45	1964	0.034 ppbv	# 93
20) Methylene Chloride	4.34	84	77104	1.489 ppbv	88
25) Ethyl Acetate	5.69	43	115627	0.418 ppbv	# 76
26) Hexane	5.69	57	164553	1.352 ppbv	# 40
27) Carbon Disulfide	4.55	76	22477	0.178 ppbv	# 71
29) Chloroform	5.75	83	6645	0.032 ppbv	# 72
30) Cyclohexane	7.12	84	4229	0.041 ppbv	# 1
31) cis-1,2-Dichloroethene	5.54	61	5906	0.048 ppbv	# 70
38) Trichloroethene	7.83	130	19905	0.163 ppbv	# 87
39) 1,2-Dichloropropane	7.17	63	752653	7.139 ppbv	# 23
44) 2,2,4-Trimethylpentane	7.87	57	19461	0.042 ppbv	# 55
52) Tetrachloroethene	11.22	164	554188	5.355 ppbv	93
53) Toluene	9.80	91	205201	0.672 ppbv	99
58) Ethyl Benzene	12.71	91	23459	0.059 ppbv	93
59) m/p-Xylene	12.99	91	45196	0.129 ppbv	# 33
60) o-Xylene	13.69	91	63652	0.193 ppbv	98
72) 4-Ethyltoluene	15.82	105	13514	0.035 ppbv	# 55
73) 1,3,5-Trimethylbenzene	15.99	105	14969	0.043 ppbv	# 79
74) 1,2,4-Trimethylbenzene	16.75	105	66454	0.170 ppbv	# 71

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



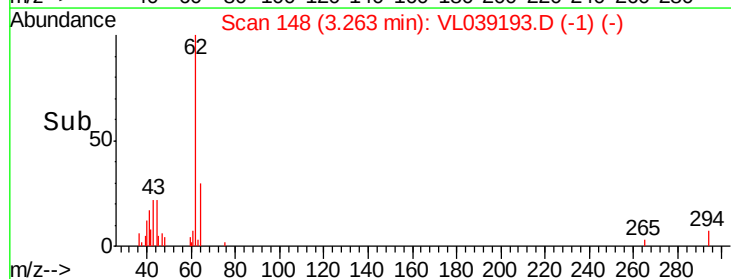
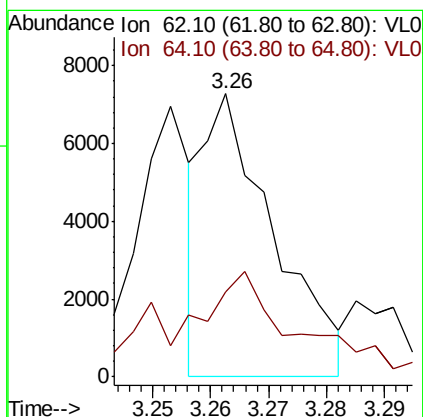
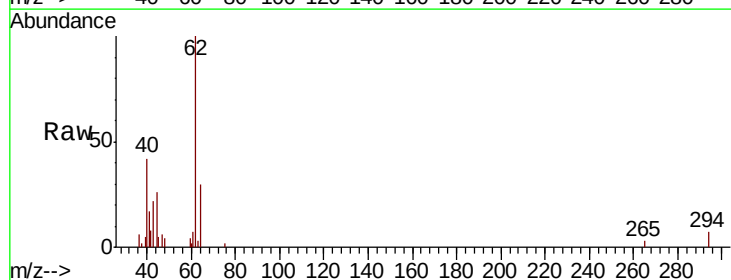
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.66
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 6 Jun 2022 20:40

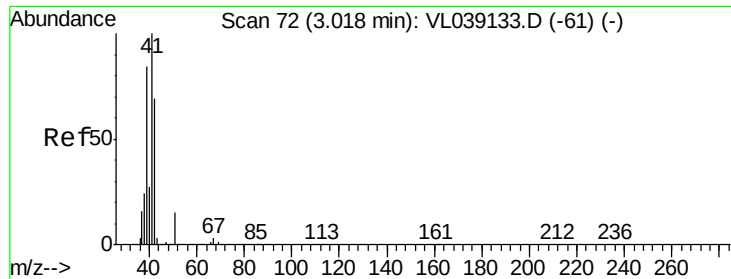
Tot Ion: 49 Resp: 1179404
 Ion Ratio Lower Upper
 49 100
 128 51.9 24.7 74.1
 130 69.3 31.4 94.0



#5
 Vinyl Chloride
 Concen: 0.085 ppbv
 RT: 3.26 min Scan# 148
 Delta R.T. -0.00 min
 Lab File: VL039193.D
 Acq: 6 Jun 2022 20:40

Tgt Ion: 62 Resp: 6115
 Ion Ratio Lower Upper
 62 100
 64 18.4 24.2 36.2#





#9

Propene

Concen: 1.898 ppbv

RT: 3.02 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

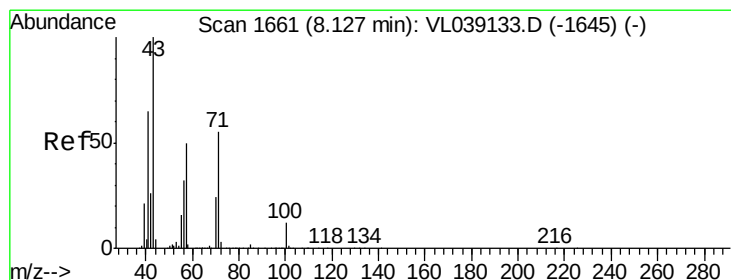
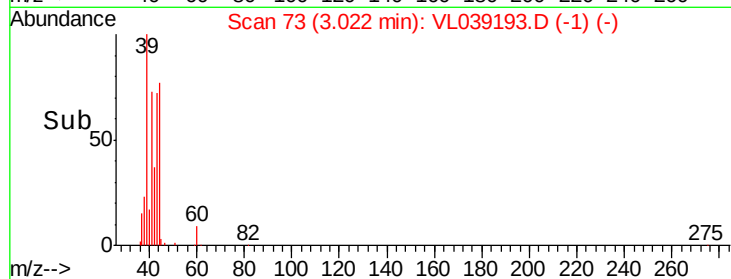
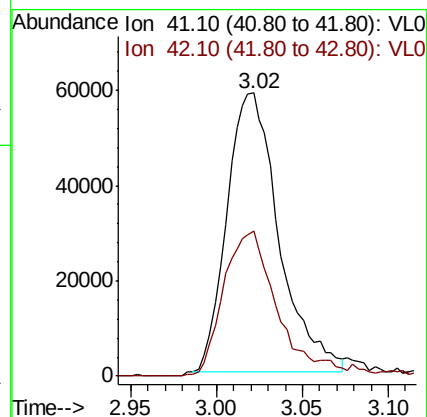
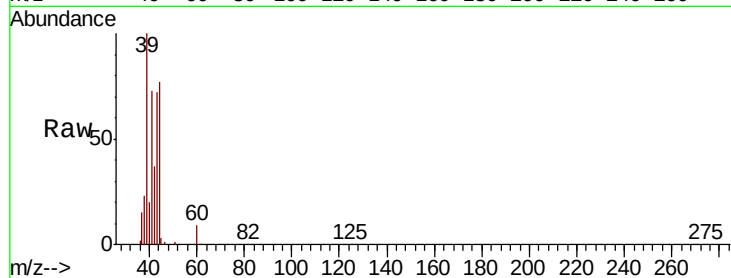
Acq: 6 Jun 2022 20:40

Tot Ion: 41 Resp: 124162

Ion Ratio Lower Upper

41 100

42 55.5 55.4 83.2



#10

Heptane

Concen: 0.040 ppbv

RT: 8.10 min Scan# 1653

Delta R.T. -0.03 min

Lab File: VL039193.D

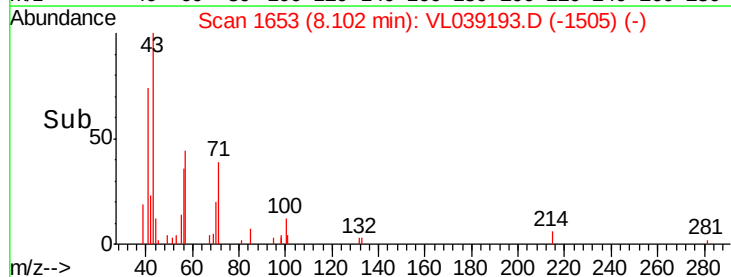
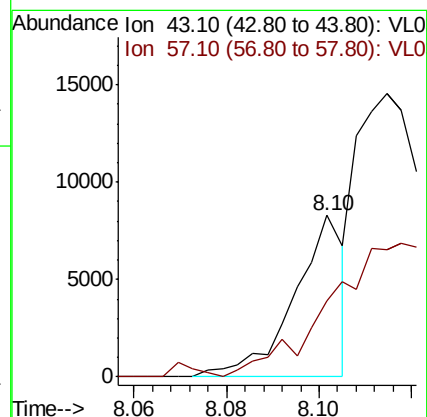
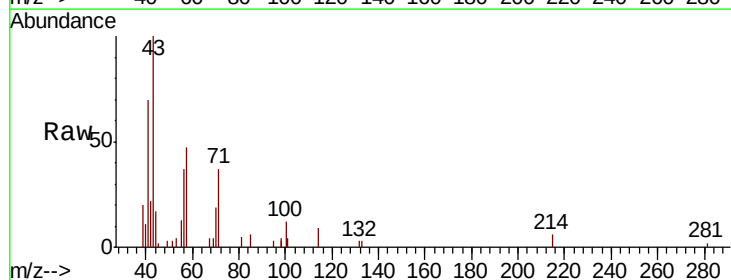
Acq: 6 Jun 2022 20:40

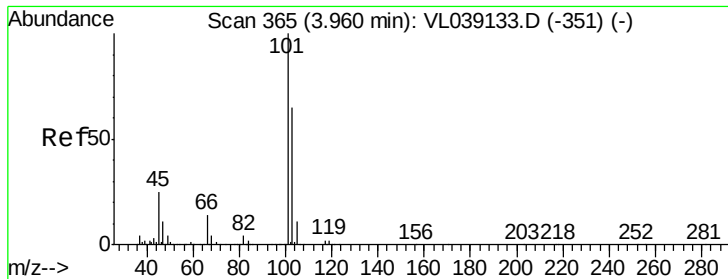
Tgt Ion: 43 Resp: 6176

Ion Ratio Lower Upper

43 100

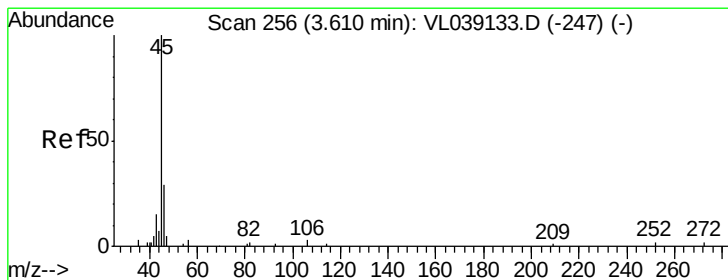
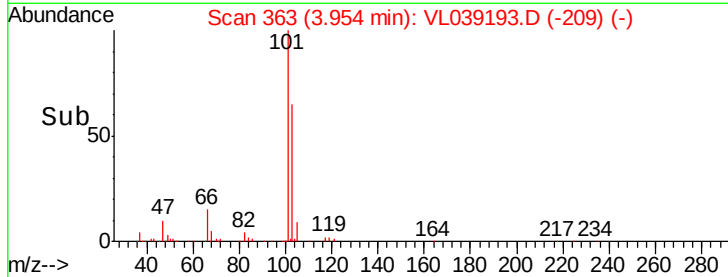
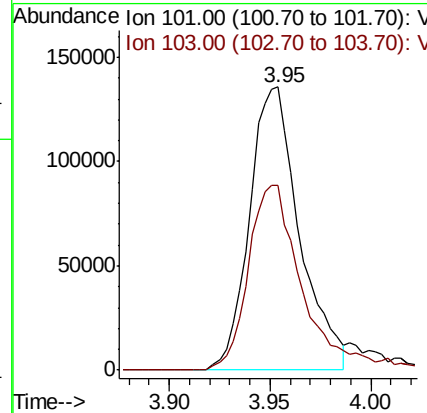
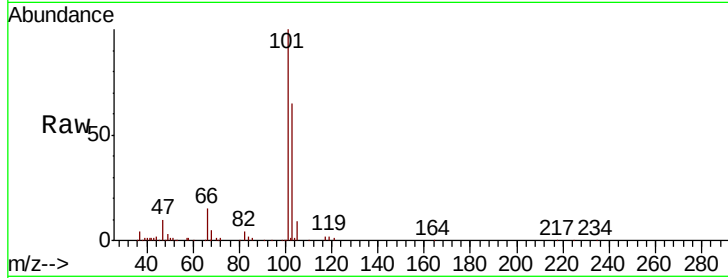
57 0.0 41.4 62.2#





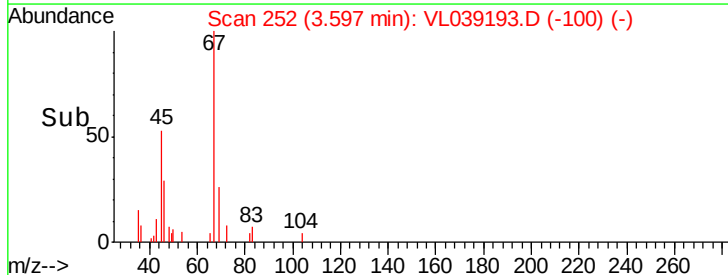
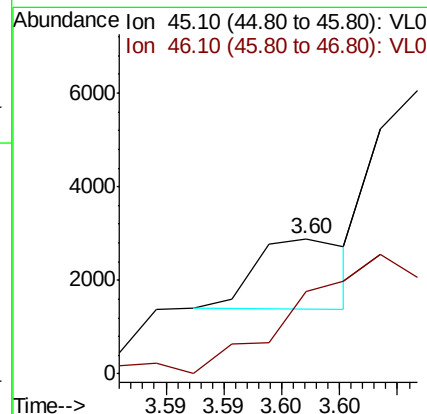
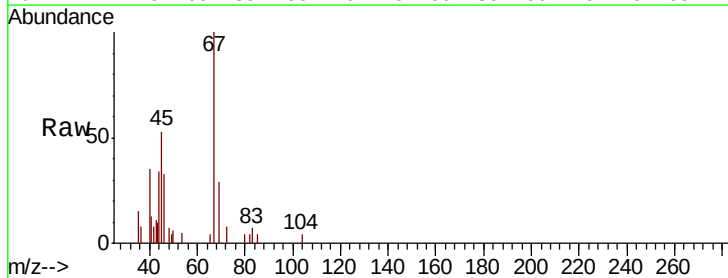
#11
 Trichlorofluoromethane
 Concen: 1.257 ppbv
 RT: 3.95 min
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 6 Jun 2022 20:40

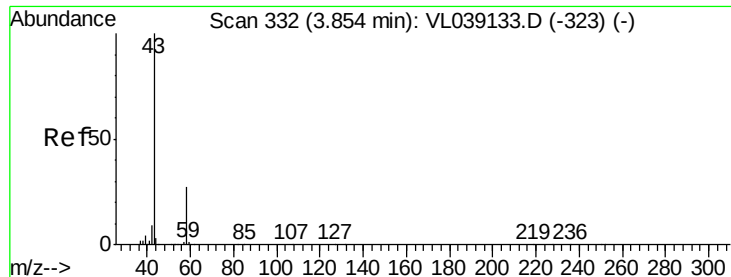
Tot Ion: 101 Resp: 235790
 Ion Ratio Lower Upper
 101 100
 103 65.4 51.7 77.5



#13
 Ethanol
 Concen: 0.241 ppbv
 RT: 3.60 min Scan# 252
 Delta R.T. -0.01 min
 Lab File: VL039193.D
 Acq: 6 Jun 2022 20:40

Tgt Ion: 45 Resp: 860
 Ion Ratio Lower Upper
 45 100
 46 748.6 0.0 0.0#





#15

Acetone

Concen: 0.373 ppbv

RT: 3.86 Instrument:

Delta R.T. MSVOA_L

Lab File:

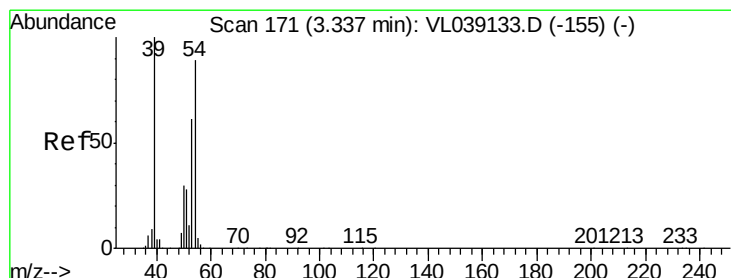
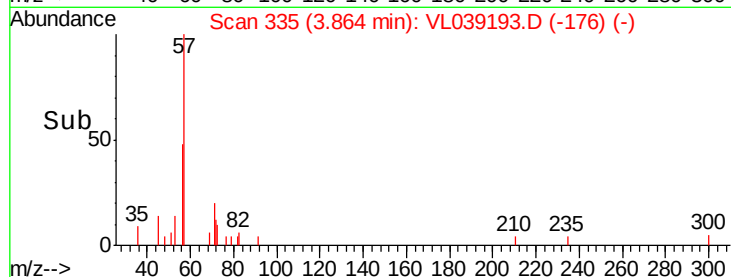
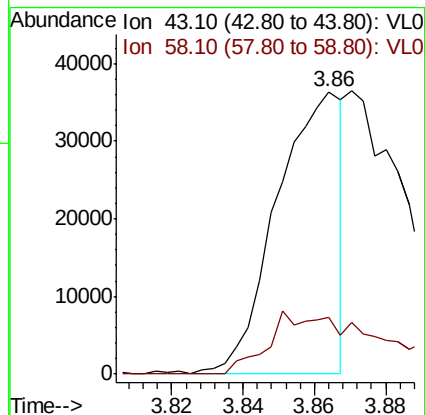
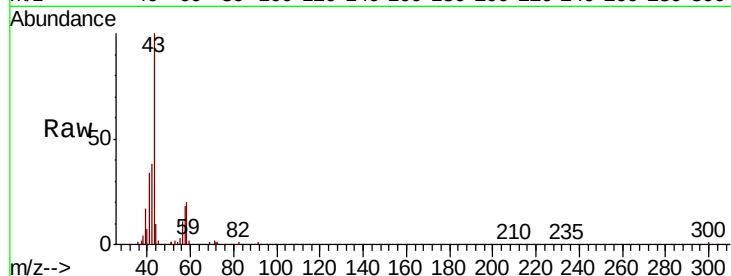
Acq: 6 Jun 2022 20:40 ClientSampleId:

Tot Ion: 43 Resp: 45861

Ion Ratio Lower Upper

43 100

58 47.0 22.5 33.7#



#16

1,3-Butadiene

Concen: 0.627 ppbv

RT: 3.31 min Scan# 162

Delta R.T. -0.03 min

Lab File: VL039133.D

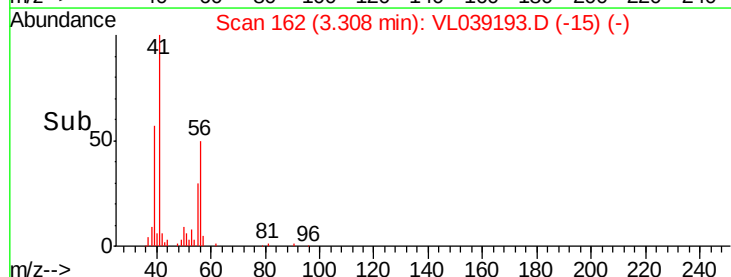
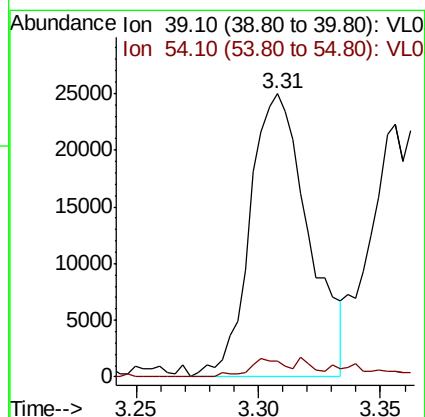
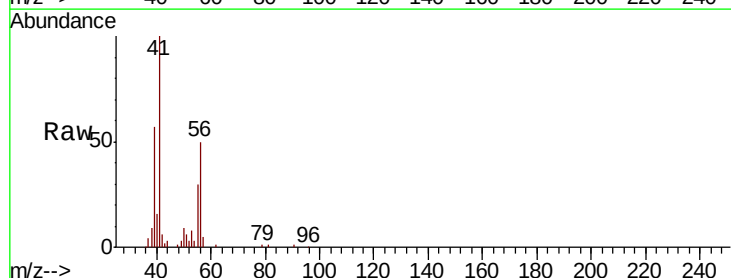
Acq: 6 Jun 2022 20:40

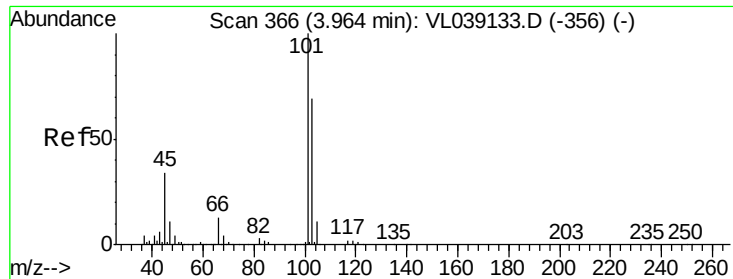
Tgt Ion: 39 Resp: 41408

Ion Ratio Lower Upper

39 100

54 10.0 65.8 98.6#





#19

Isopropyl Alcohol

Concen: 0.034 ppbv

RT: 3.97 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

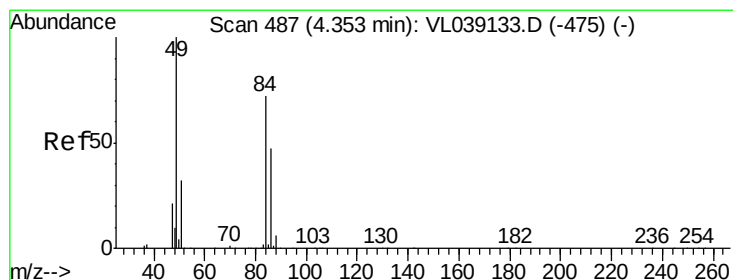
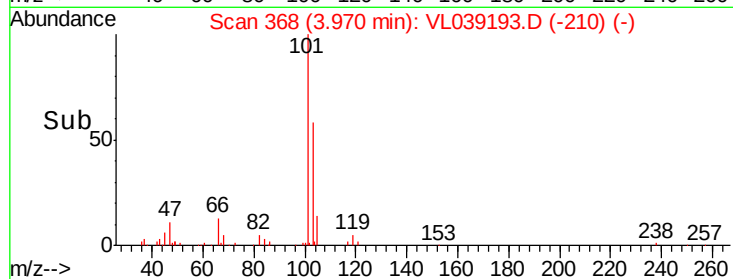
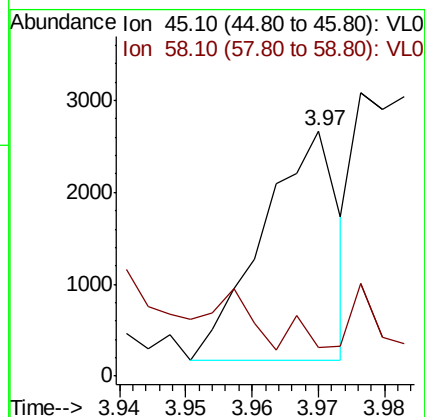
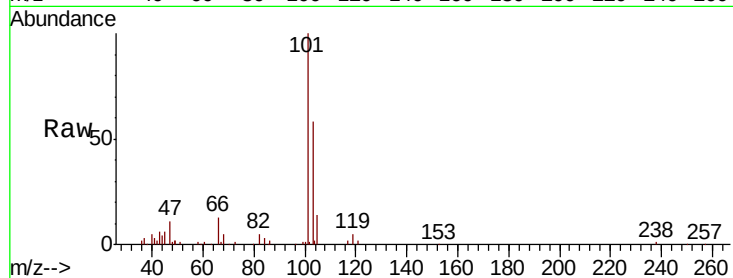
Acq: 6 Jun 2022 20:40

Tot Ion: 45 Resp: 1964

Ion Ratio Lower Upper

45 100

58 0.0 1.8 2.8#



#20

Methylene Chloride

Concen: 1.489 ppbv

RT: 4.34 min Scan# 484

Delta R.T. -0.01 min

Lab File: VL039193.D

Acq: 6 Jun 2022 20:40

Tgt Ion: 84 Resp: 77104

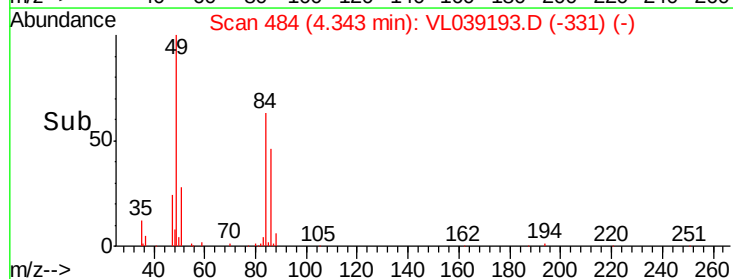
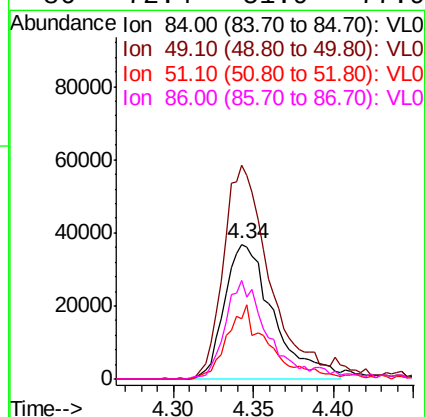
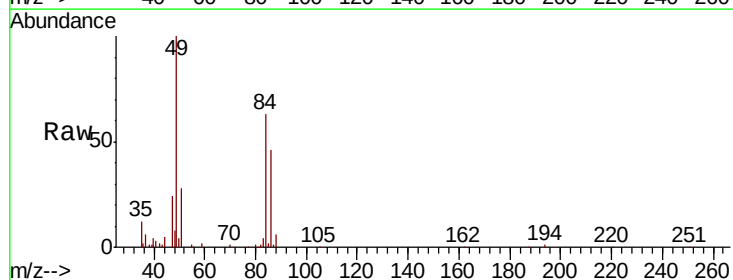
Ion Ratio Lower Upper

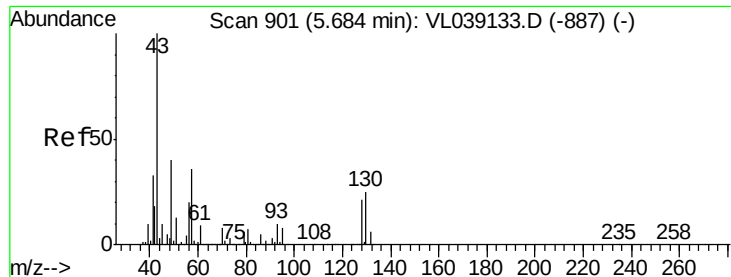
84 100

49 158.8 111.1 166.7

51 44.6 35.3 52.9

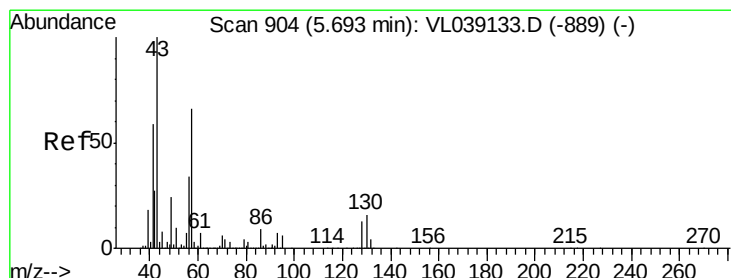
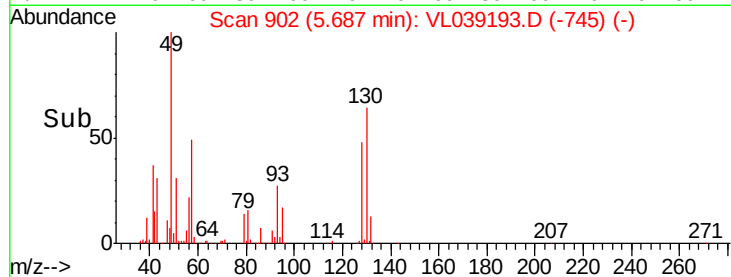
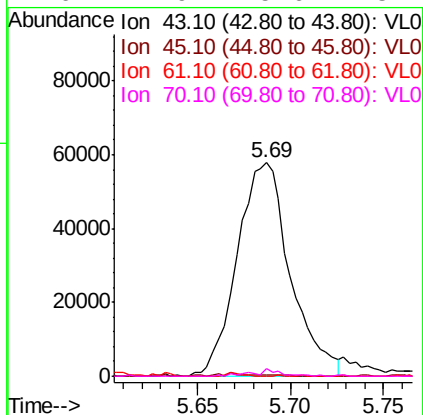
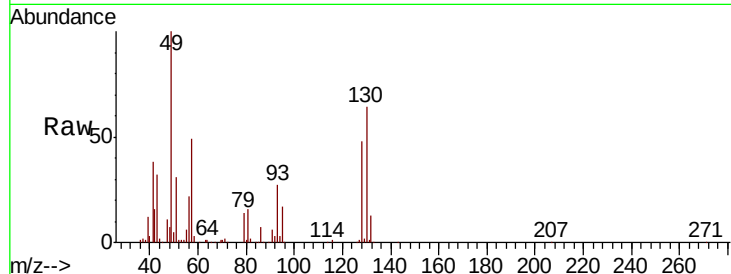
86 72.4 51.9 77.9





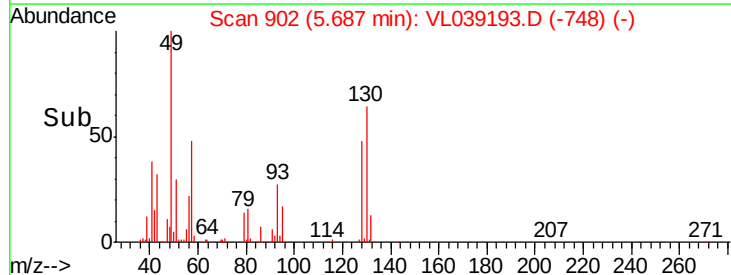
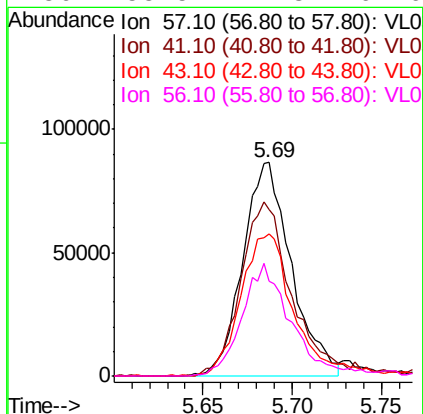
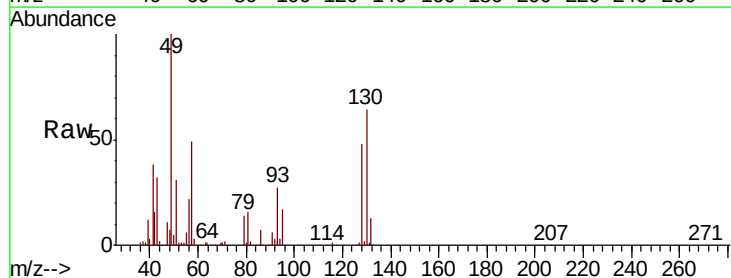
#25
Ethyl Acetate
Concen: 0.418 ppbv
RT: 5.69 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 6 Jun 2022 20:40

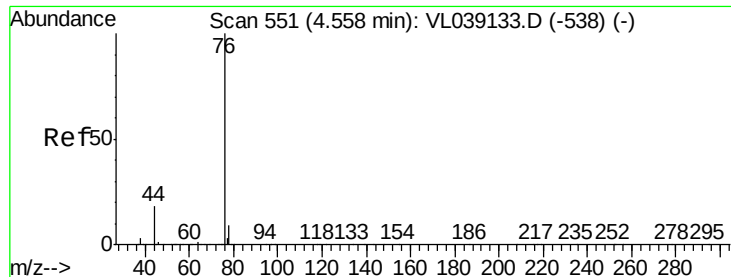
Tot Ion:	43	Resp:	115627
Ion	Ratio	Lower	Upper
43	100		
45	0.8	8.2	12.2#
61	0.0	8.4	12.6#
70	1.9	5.6	8.4#



#26
Hexane
Concen: 1.352 ppbv
RT: 5.69 min Scan# 902
Delta R.T.: -0.01 min
Lab File: VL039193.D
Acq: 6 Jun 2022 20:40

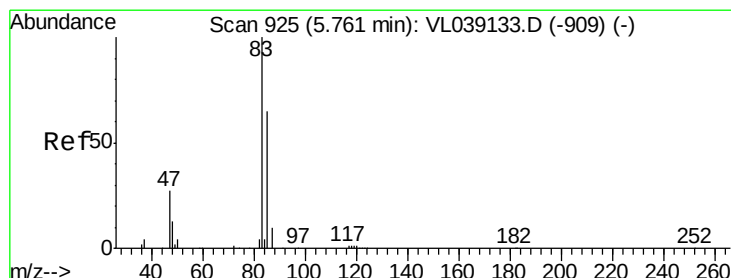
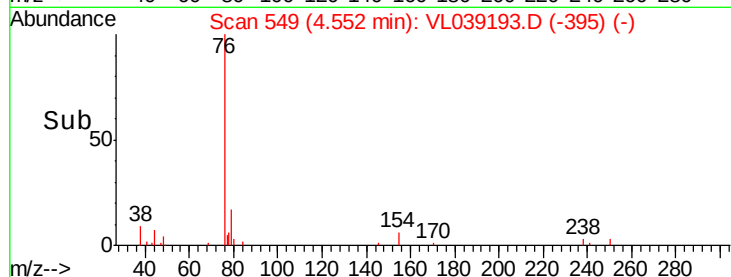
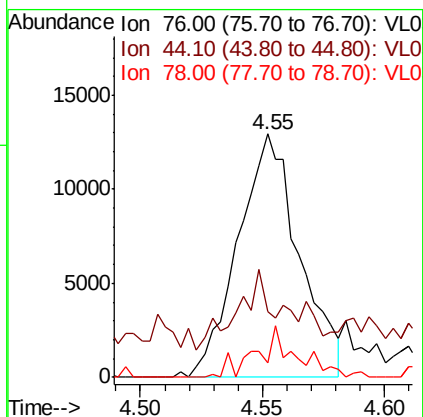
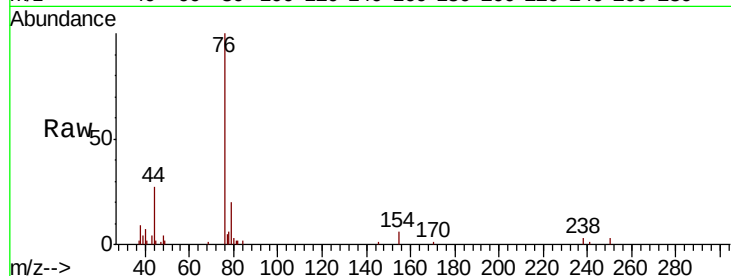
Tgt Ion:	57	Resp:	164553
Ion	Ratio	Lower	Upper
57	100		
41	88.9	72.4	108.6
43	74.1	187.0	280.6#
56	55.5	41.8	62.6





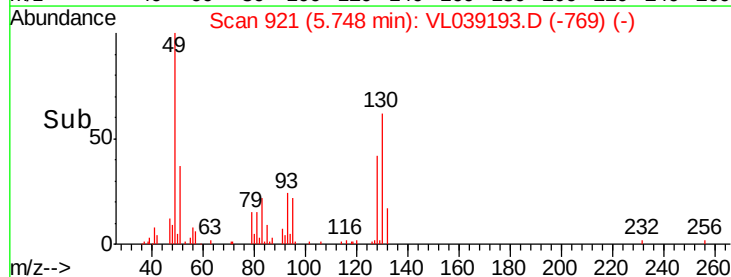
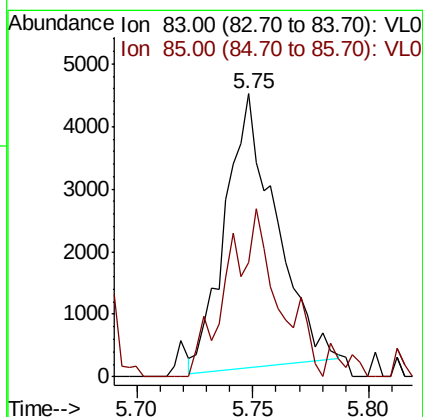
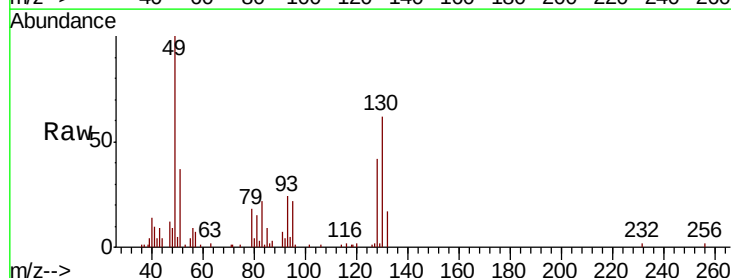
#27
Carbon Disulfide
Concen: 0.178 ppbv
RT: 4.55 Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 6 Jun 2022 20:40

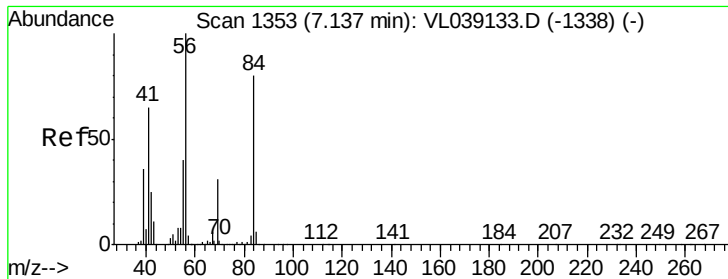
Tot Ion	Ratio	Lower	Upper
76	100		
44	35.0	14.4	21.6#
78	13.8	7.7	11.5#



#29
Chloroform
Concen: 0.032 ppbv
RT: 5.75 min Scan# 921
Delta R.T. -0.01 min
Lab File: VL039193.D
Acq: 6 Jun 2022 20:40

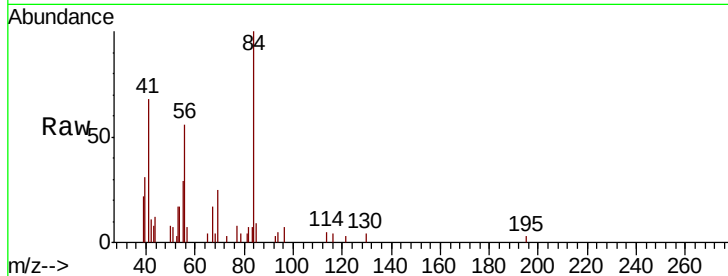
Tgt Ion	Ratio	Lower	Upper
83	100		
85	43.5	52.4	78.6#



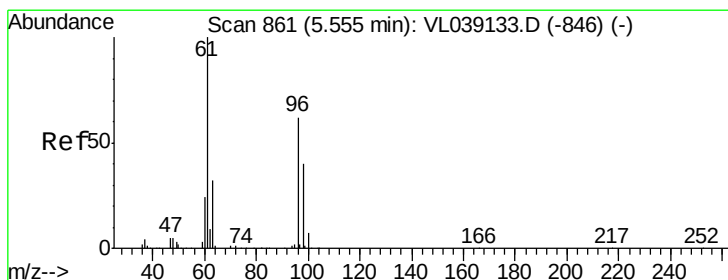
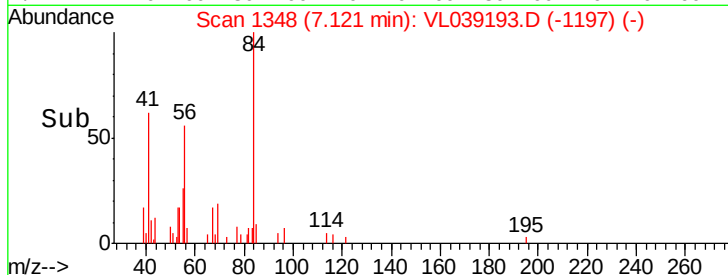
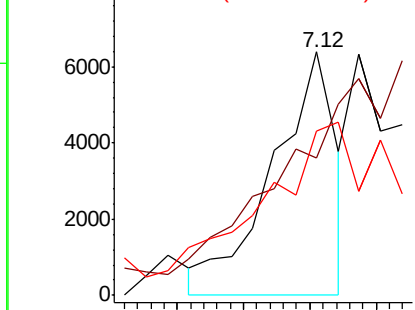


#30
Cvclohexane
Concen: 0.041 ppbv
RT: 7.12
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 6 Jun 2022 20:40

Tot Ion: 84 Resp: 4229
Ion Ratio Lower Upper
84 100
56 0.0 110.6 165.8#
41 0.0 68.9 103.3#

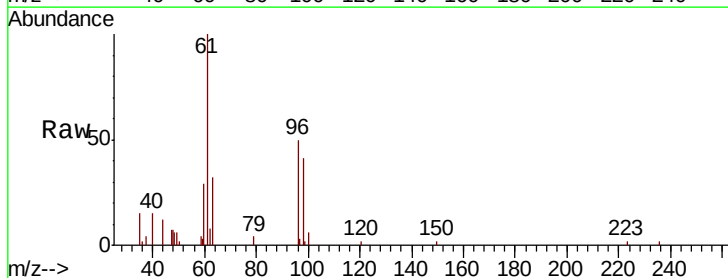


Abundance Ion 84.20 (83.90 to 84.90): VL0
Ion 56.10 (55.80 to 56.80): VL0
Ion 41.10 (40.80 to 41.80): VL0

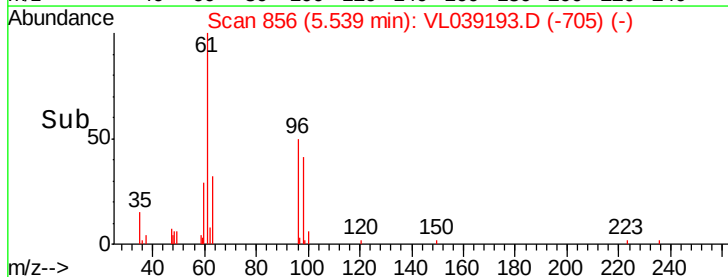
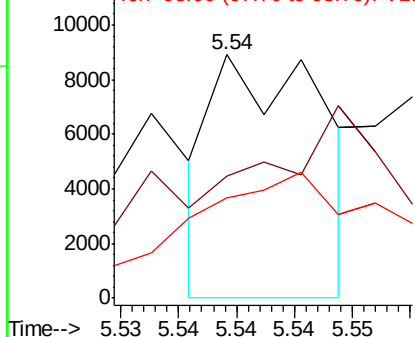


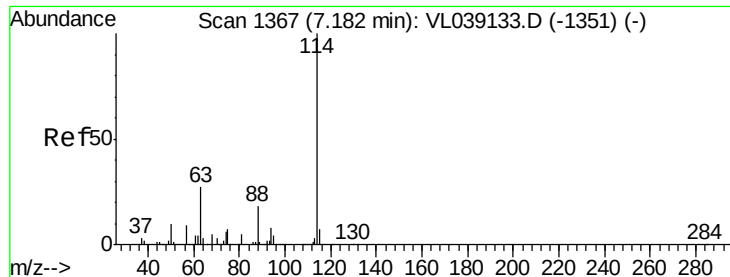
#31
cis-1,2-Dichloroethene
Concen: 0.048 ppbv
RT: 5.54 min Scan# 856
Delta R.T. -0.02 min
Lab File: VL039193.D
Acq: 6 Jun 2022 20:40

Tgt Ion: 61 Resp: 5906
Ion Ratio Lower Upper
61 100
96 37.3 49.9 74.9#
98 23.7 32.0 48.0#



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

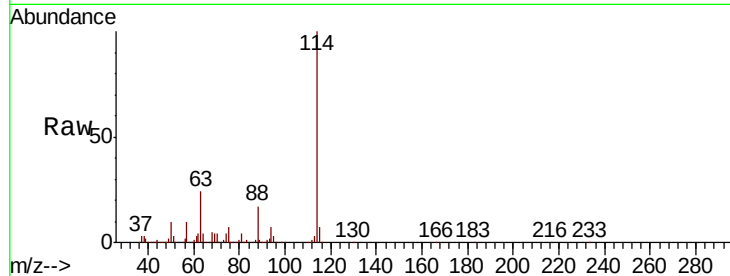




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 6 Jun 2022 20:40

Tot Ion:114 Resp: 3264929

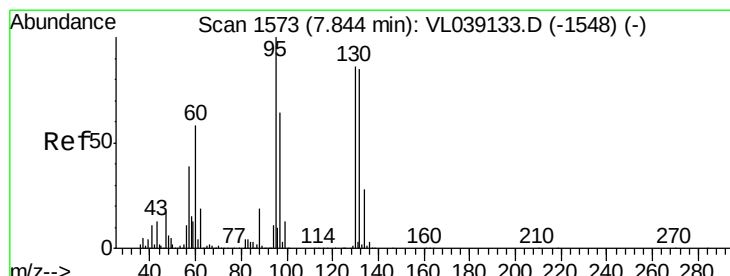
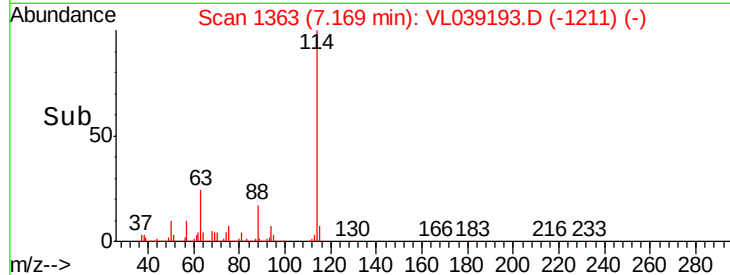
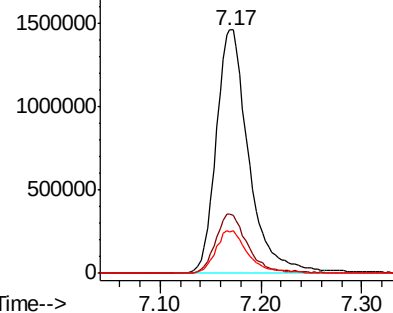
Ion	Ratio	Lower	Upper
114	100		
63	24.7	21.7	32.5
88	17.8	14.8	22.2



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

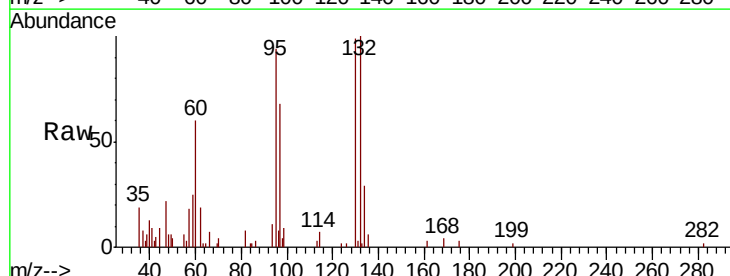
Ion 88.10 (87.80 to 88.80): VL0



#38
 Trichloroethene
 Concen: 0.163 ppbv
 RT: 7.83 min Scan# 1568
 Delta R.T.: -0.02 min
 Lab File: VL039193.D
 Acq: 6 Jun 2022 20:40

Tgt Ion:130 Resp: 19905

Ion	Ratio	Lower	Upper
130	100		
95	92.6	93.3	139.9#
132	98.0	79.0	118.4
97	61.5	59.4	89.2

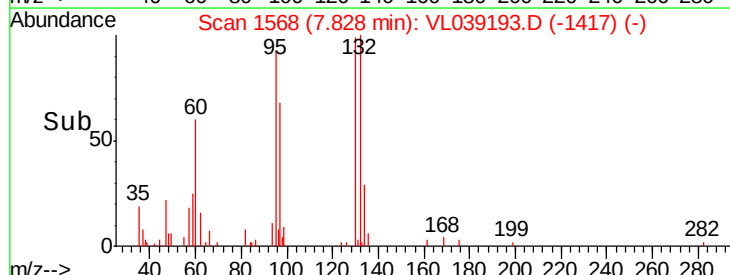
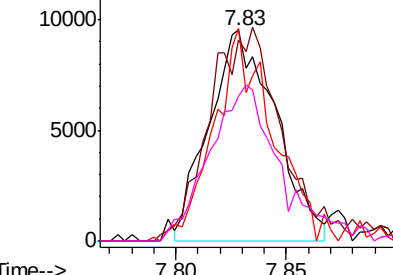


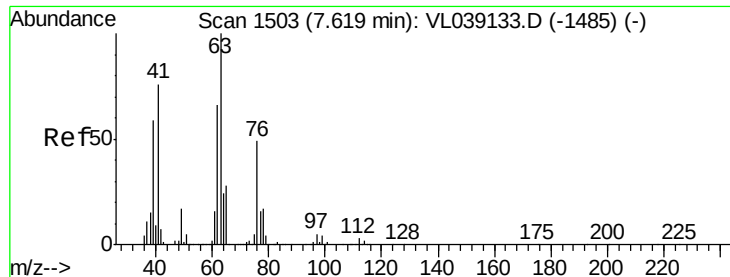
Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

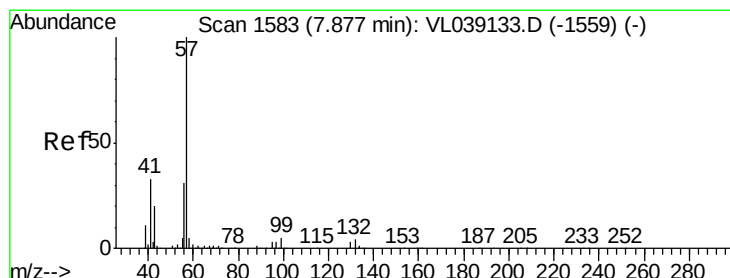
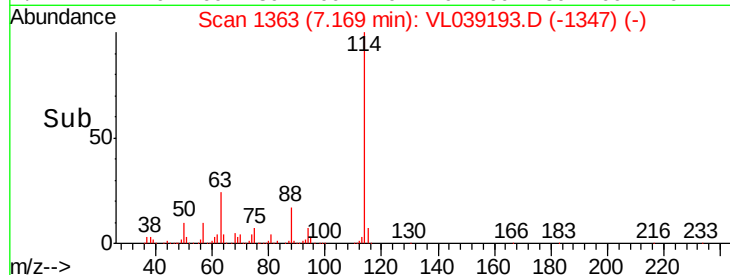
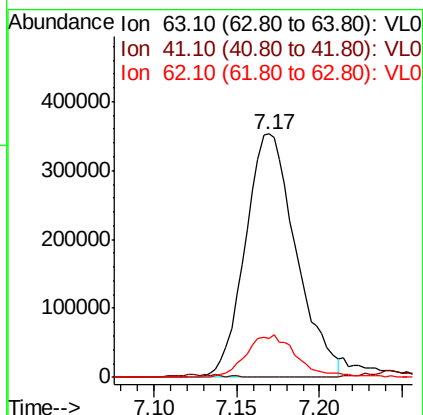
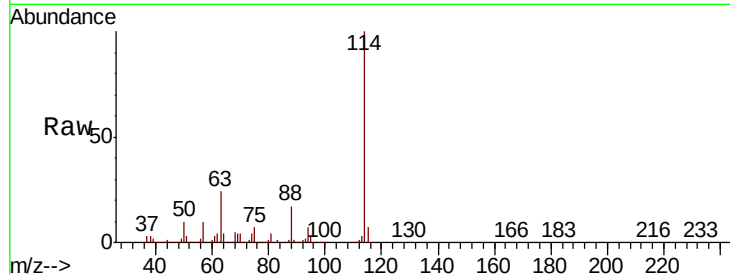
Ion 97.00 (96.70 to 97.70): VL0





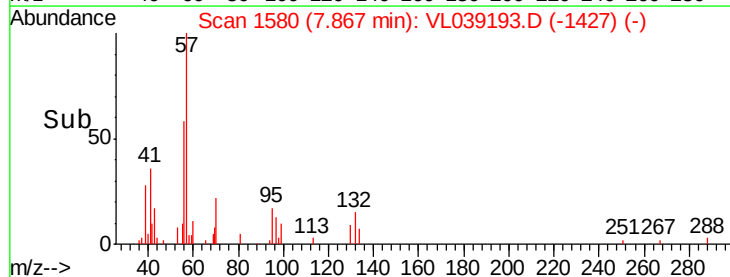
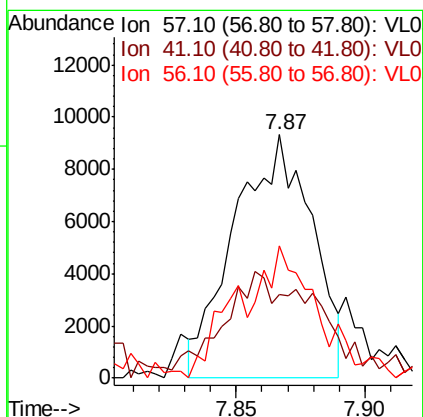
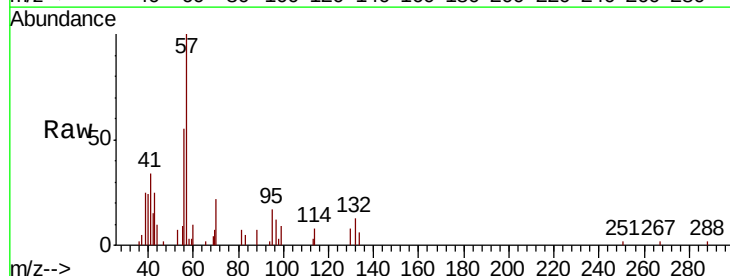
#39
 1,2-Dichloropropane
 Concen: 7.139 ppbv
 RT: 7.17
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 6 Jun 2022 20:40

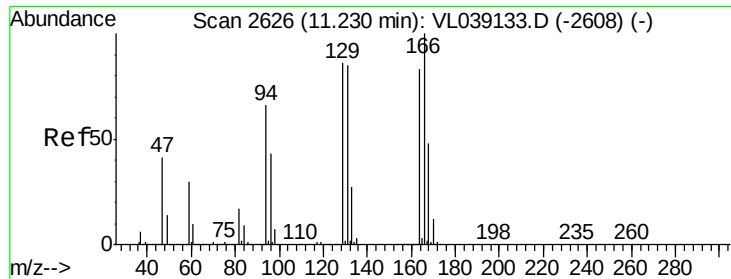
Tot Ion	Ratio	Lower	Upper
63	100		
41	0.0	60.8	91.2#
62	16.1	52.9	79.3#



#44
 2,2,4-Trimethylpentane
 Concen: 0.042 ppbv
 RT: 7.87 min Scan# 1580
 Delta R.T. -0.01 min
 Lab File: VL039193.D
 Acq: 6 Jun 2022 20:40

Tgt Ion	Ratio	Lower	Upper
57	100		
41	56.6	26.2	39.4#
56	57.6	24.7	37.1#





#52

Tetrachloroethene

Concen: 5.355 ppbv

RT: 11.22

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 6 Jun 2022 20:40

Tot Ion:164 Resp: 554188

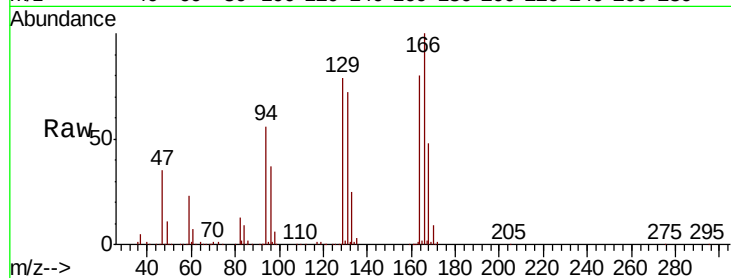
Ion Ratio Lower Upper

164 100

166 124.6 96.3 144.5

129 97.9 82.5 123.7

131 89.9 82.1 123.1

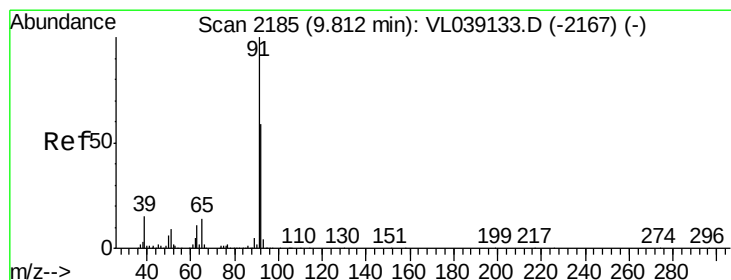
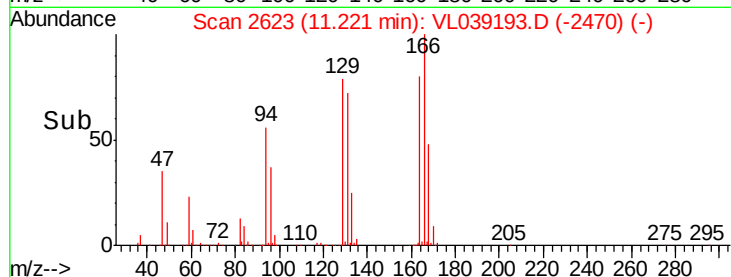
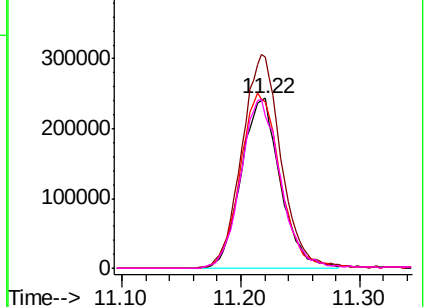


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.672 ppbv

RT: 9.80 min Scan# 2181

Delta R.T. -0.01 min

Lab File: VL039193.D

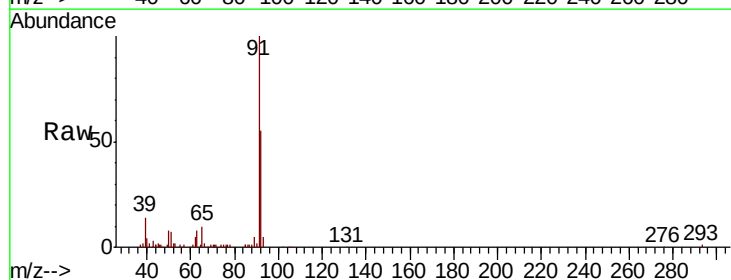
Acq: 6 Jun 2022 20:40

Tgt Ion: 91 Resp: 205201

Ion Ratio Lower Upper

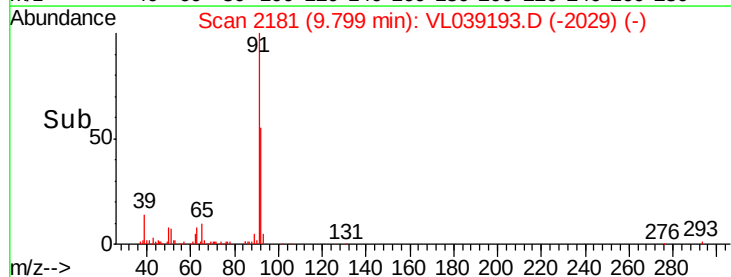
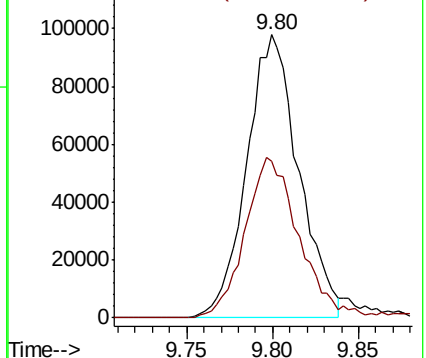
91 100

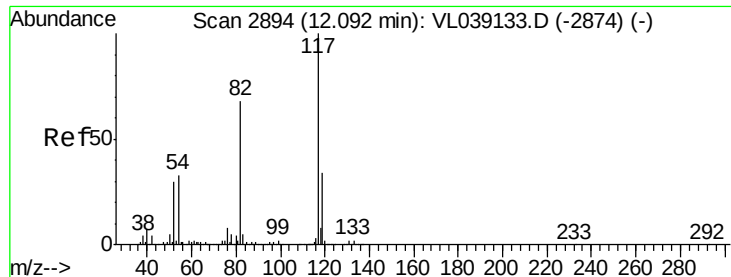
92 59.5 48.1 72.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

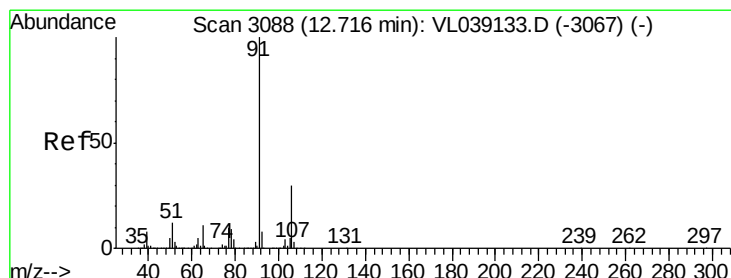
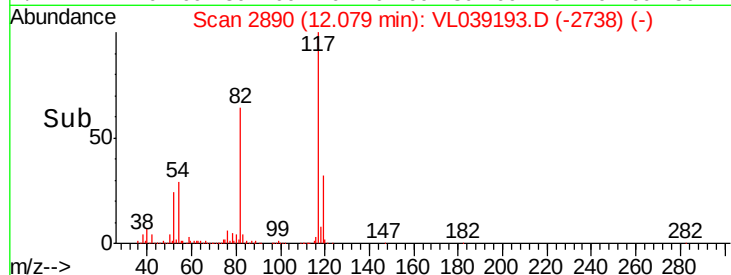
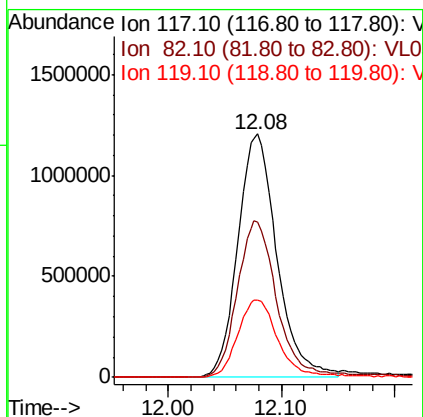
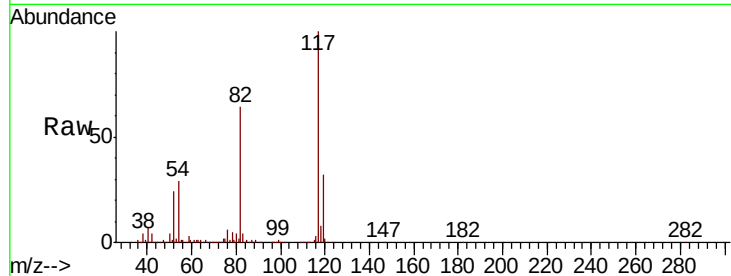
Ion 92.10 (91.80 to 92.80): VL0





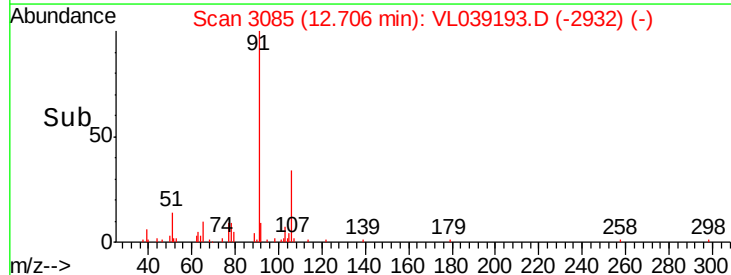
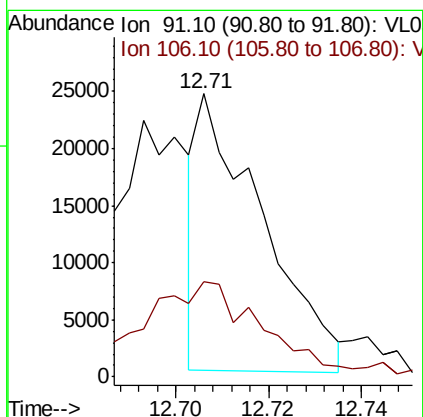
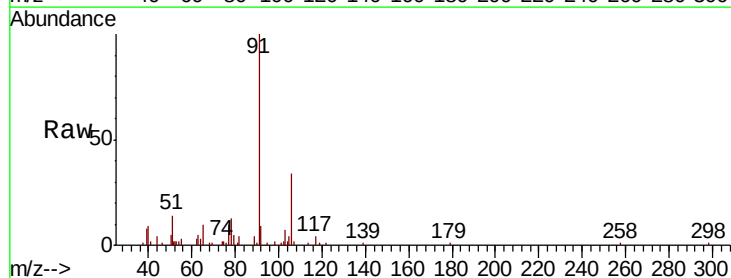
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 6 Jun 2022 20:40

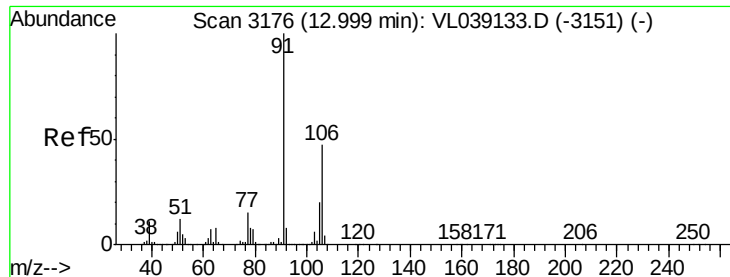
Tot Ion:117 Resp: 2899555
Ion Ratio Lower Upper
117 100
82 66.6 55.1 82.7
119 33.5 24.7 37.1



#58
Ethyl Benzene
Concen: 0.059 ppbv
RT: 12.71 min Scan# 3085
Delta R.T. -0.01 min
Lab File: VL039193.D
Acq: 6 Jun 2022 20:40

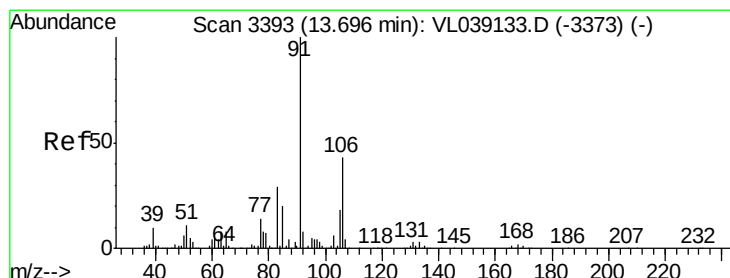
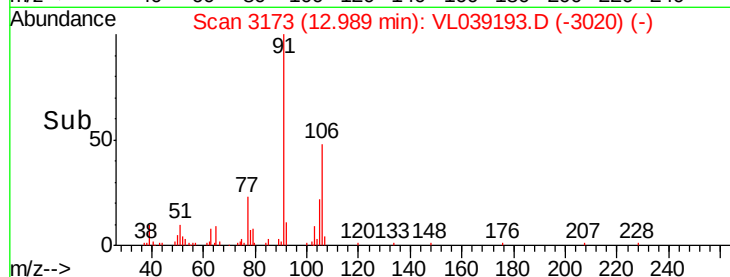
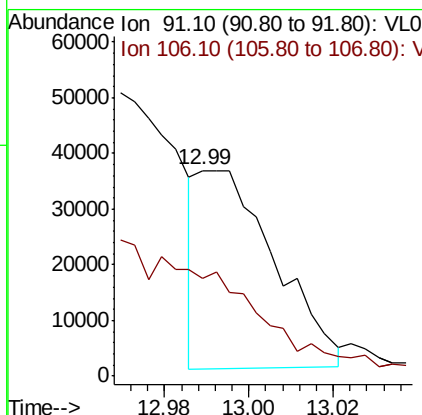
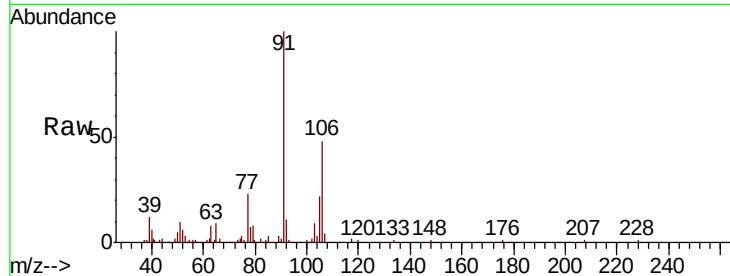
Tgt Ion: 91 Resp: 23459
Ion Ratio Lower Upper
91 100
106 34.1 24.2 36.4





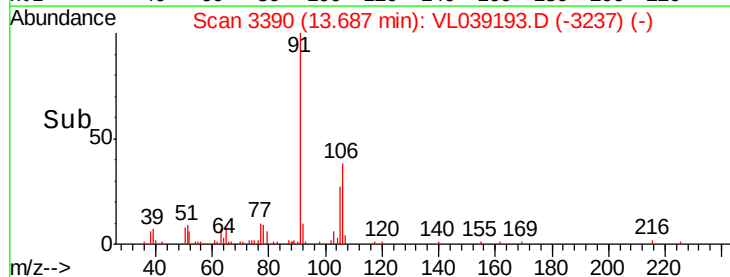
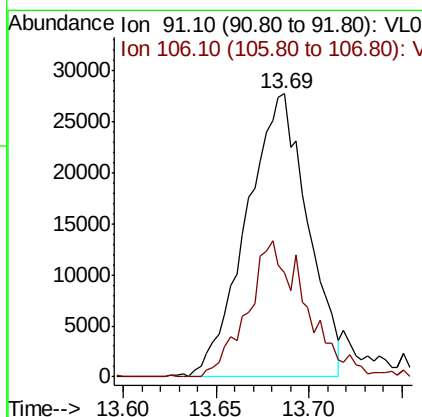
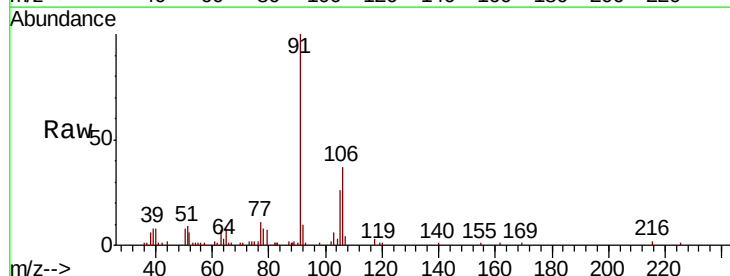
#59
m/p-Xylene
Concen: 0.129 ppbv
RT: 12.99 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 6 Jun 2022 20:40

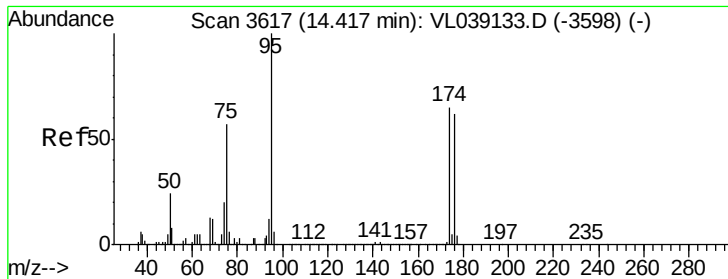
Tot Ion: 91 Resp: 45196
Ion Ratio Lower Upper
91 100
106 0.0 34.3 51.5#



#60
o-Xylene
Concen: 0.193 ppbv
RT: 13.69 min Scan# 3390
Delta R.T. -0.01 min
Lab File: VL039193.D
Acq: 6 Jun 2022 20:40

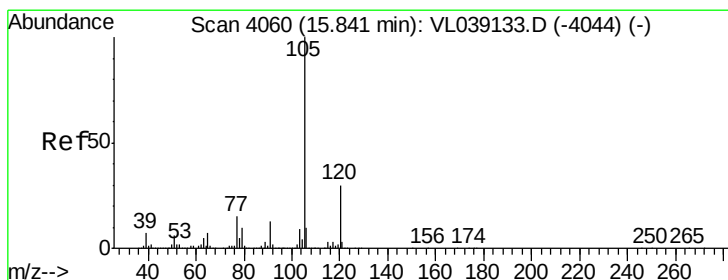
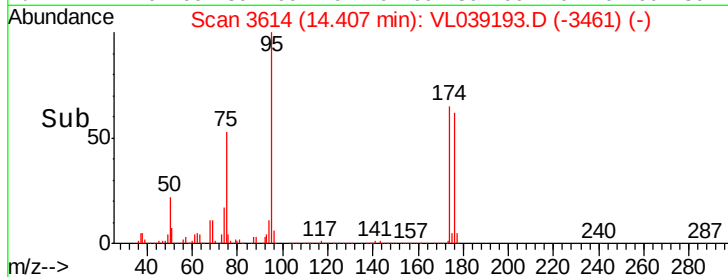
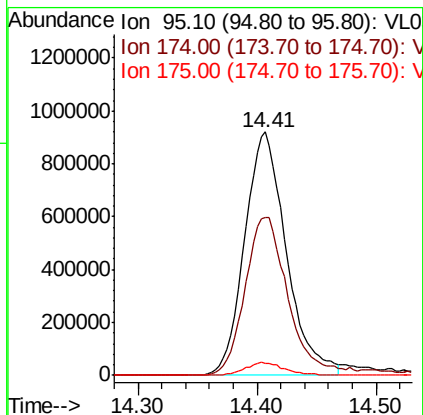
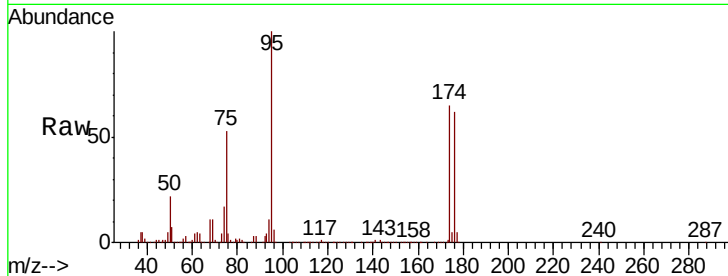
Tgt Ion: 91 Resp: 63652
Ion Ratio Lower Upper
91 100
106 46.0 22.3 66.9





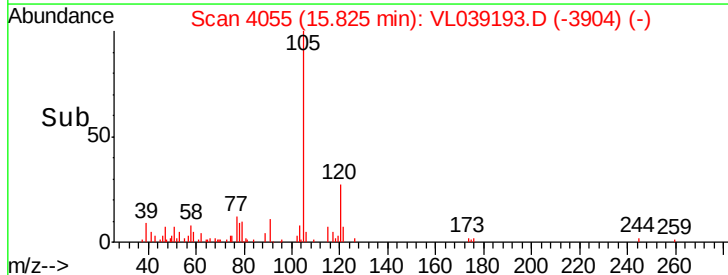
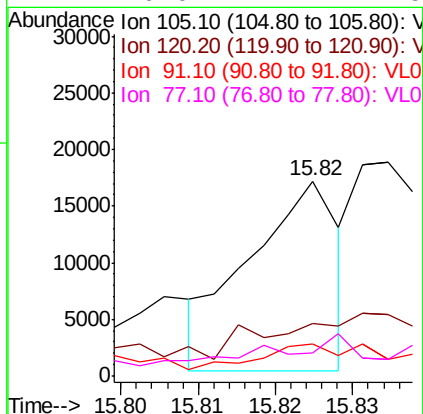
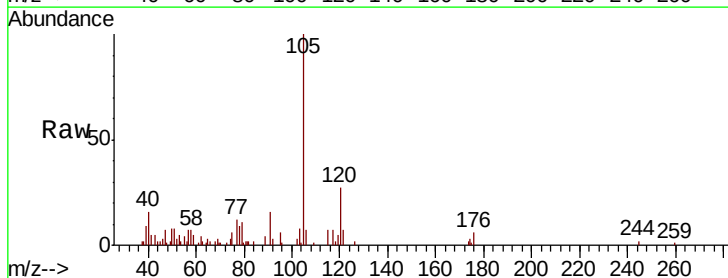
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.304 ppbv
 RT: 14.41 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 6 Jun 2022 20:40

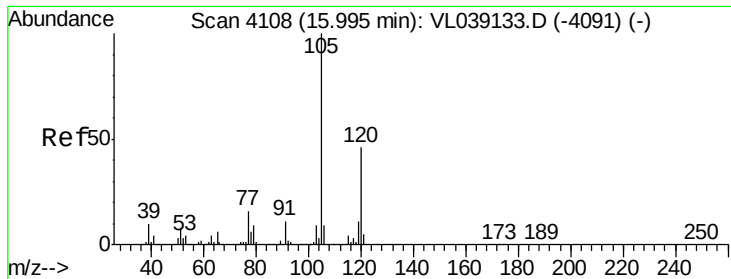
Tot Ion:	95	Resp:	2230256
Ion	Ratio	Lower	Upper
95	100		
174	69.7	53.8	80.8
175	5.2	4.1	6.1



#72
 4-Ethyltoluene
 Concen: 0.035 ppbv
 RT: 15.82 min Scan# 4055
 Delta R.T. -0.02 min
 Lab File: VL039193.D
 Acq: 6 Jun 2022 20:40

Tgt Ion:	105	Resp:	13514
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.9	35.9#
91	0.0	10.6	16.0#
77	0.0	11.7	17.5#





#73

1,3,5-Trimethylbenzene

Concen: 0.043 ppbv

RT: 15.99 min

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

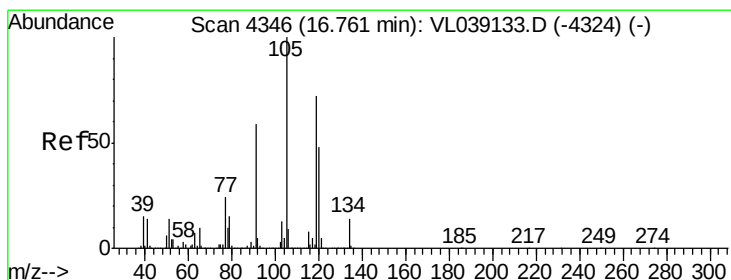
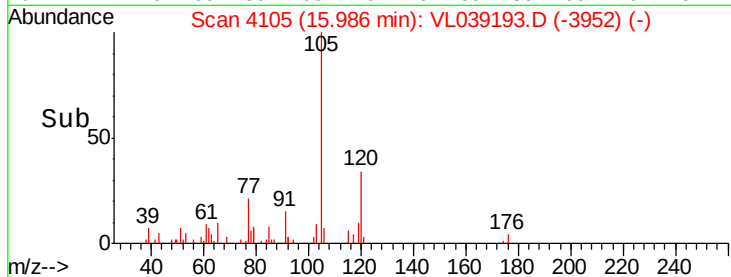
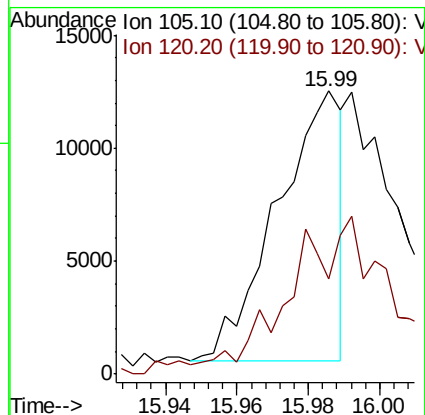
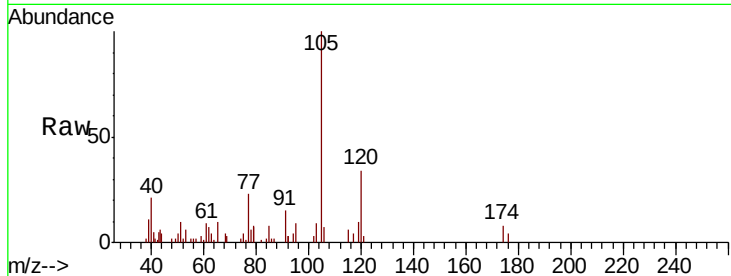
Acq: 6 Jun 2022 20:40

Tot Ion:105 Resp: 14969

Ion Ratio Lower Upper

105 100

120 31.9 36.7 55.1#



#74

1,2,4-Trimethylbenzene

Concen: 0.170 ppbv

RT: 16.75 min Scan# 4343

Delta R.T. -0.01 min

Lab File: VL039193.D

Acq: 6 Jun 2022 20:40

Tgt Ion:105 Resp: 66454

Ion Ratio Lower Upper

105 100

120 50.7 38.1 57.1

91 15.2 47.4 71.0#

77 21.5 19.5 29.3

