

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040722\
 Data File : VL038845.D
 Acq On : 7 Apr 2022 17:34
 Operator : SY/AP
 Sample : N2273-01DL 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 1160-1A-1DL

Quant Time: Apr 08 05:24:37 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Apr 06 06:12:53 2022
 QLast Update : Wed Apr 06 06:12:53 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1235364	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.20	114	3018300	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.11	117	2692946	10.00	ppbv	0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	2145547	10.50	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.00%

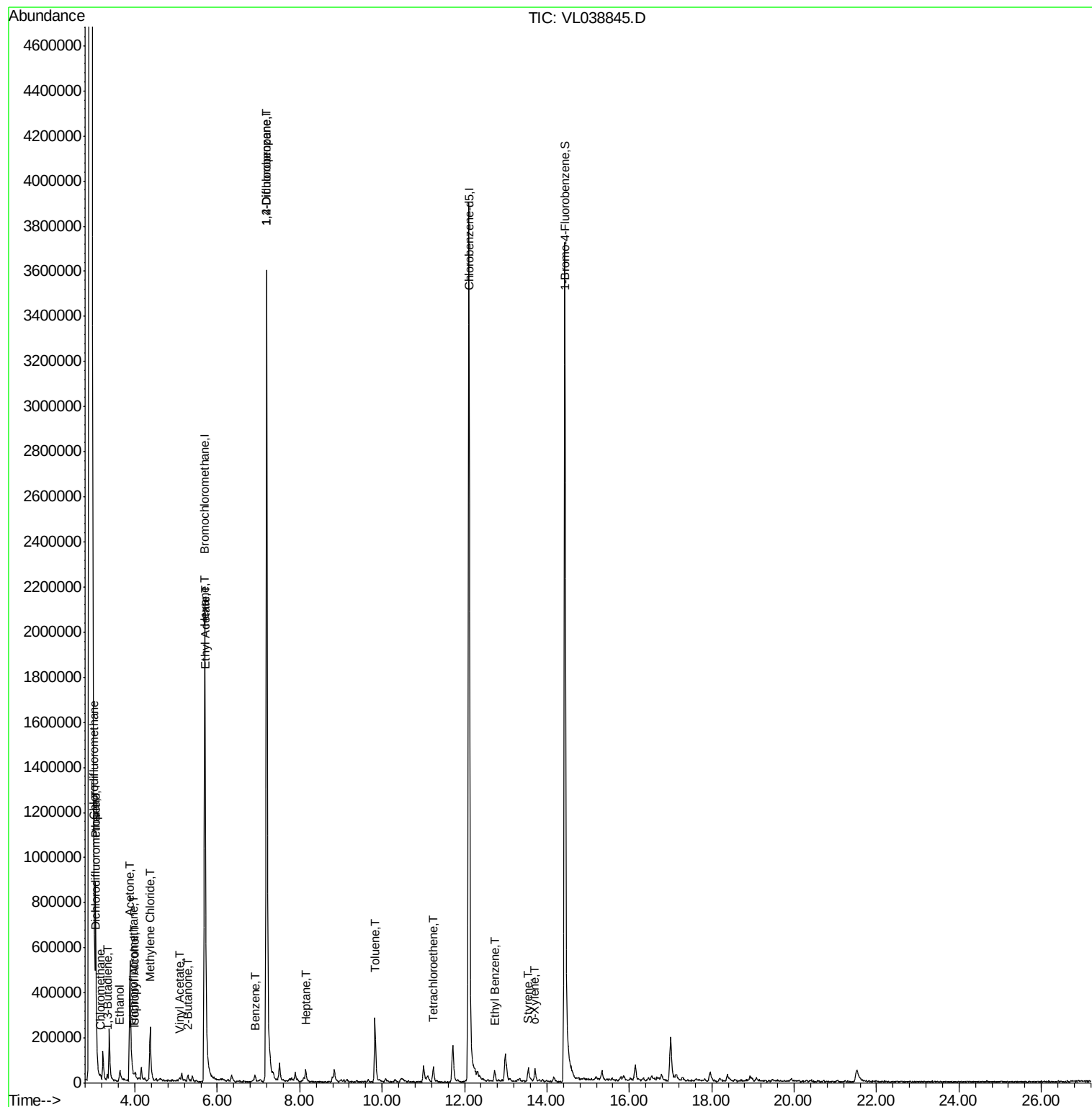
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	30957	0.177	ppbv #	79
3) Chlorodifluoromethane	3.01	51	18611	0.123	ppbv	99
4) Chloromethane	3.16	50	6131	0.079	ppbv #	83
9) Propene	3.04	41	174376	2.186	ppbv #	64
10) Heptane	8.15	43	11519	0.057	ppbv #	28
11) Trichlorofluoromethane	3.97	101	5155	0.037	ppbv	86
13) Ethanol	3.64	45	61009	12.586	ppbv #	100
15) Acetone	3.88	43	784901	6.382	ppbv	97
16) 1,3-Butadiene	3.33	39	6373	0.091	ppbv #	43
19) Isopropyl Alcohol	3.99	45	6925	0.110	ppbv #	100
20) Methylene Chloride	4.37	84	90391	2.026	ppbv	89
23) Vinyl Acetate	5.09	43	4323	0.036	ppbv #	69
25) Ethyl Acetate	5.71	43	55459	0.178	ppbv #	88
26) Hexane	5.71	57	120692	0.850	ppbv #	54
34) 2-Butanone	5.29	43	36689	0.308	ppbv #	84
36) Benzene	6.91	78	12728	0.046	ppbv	99
39) 1,2-Dichloropropane	7.20	63	796526	7.584	ppbv #	27
52) Tetrachloroethene	11.23	164	4278	0.045	ppbv	90
53) Toluene	9.83	91	213045	0.672	ppbv	99
58) Ethyl Benzene	12.73	91	39456	0.098	ppbv	97
60) o-Xylene	13.72	91	15543	0.049	ppbv #	29
61) Styrene	13.55	104	14436	0.075	ppbv #	1

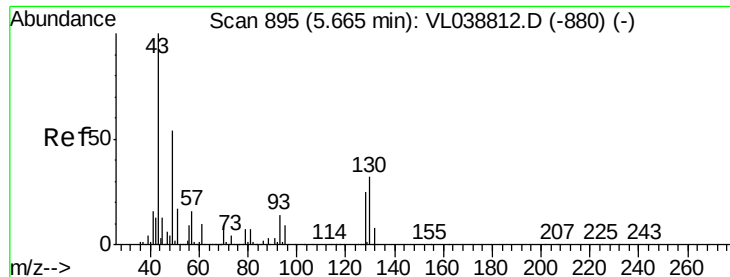
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Apr 08 05:24:37 2022
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M
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QLast Update : Wed Apr 06 06:12:53 2022
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 Instrument: MSVOA_L

Delta R.T.

Lab File: ClientSampleId:

Acq: 7 Apr 2022 17:34

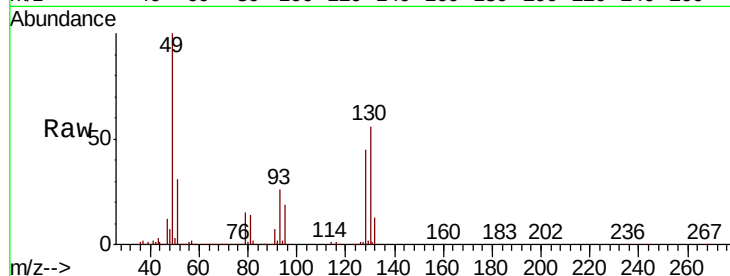
Tot Ion: 49 Resp: 1235364

Ion Ratio Lower Upper

49 100

128 46.8 24.1 72.3

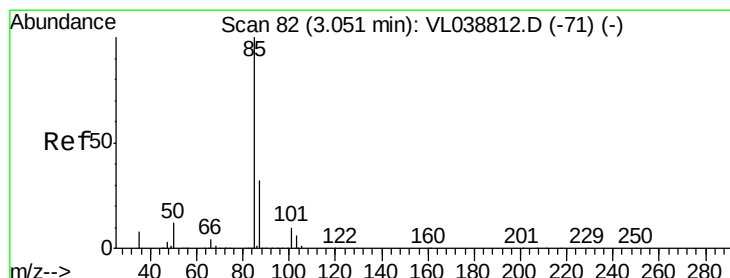
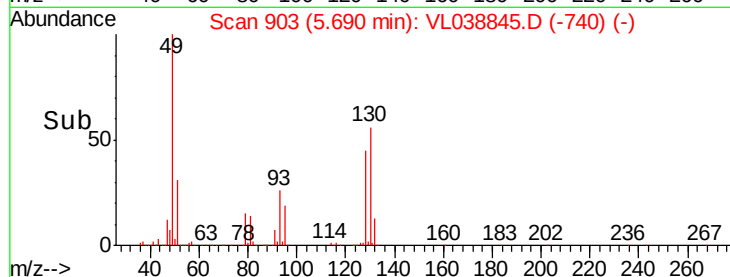
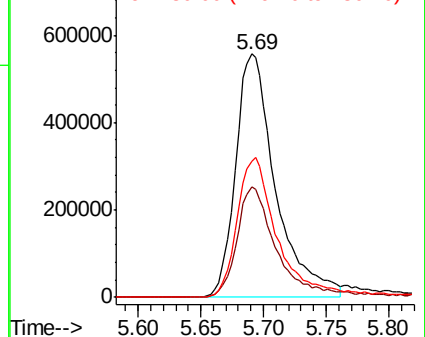
130 60.1 30.9 92.8



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: 0.177 ppbv

RT: 3.07 min Scan# 87

Delta R.T. 0.02 min

Lab File: VL038845.D

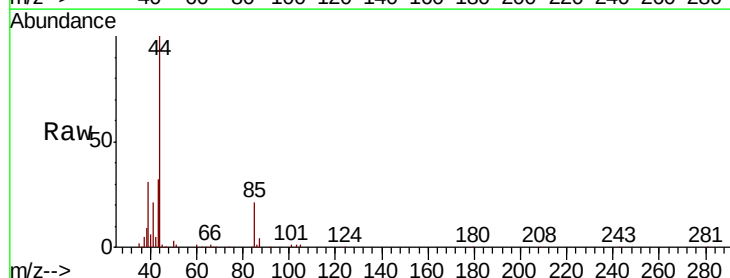
Acq: 7 Apr 2022 17:34

Tgt Ion: 85 Resp: 30957

Ion Ratio Lower Upper

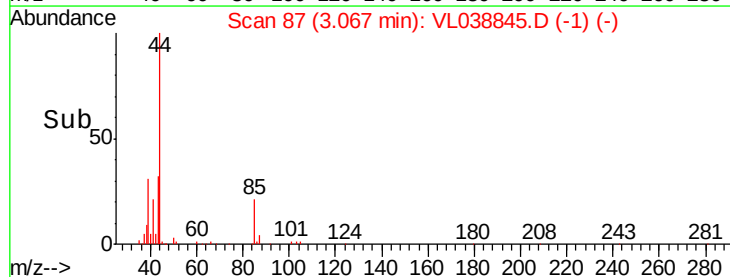
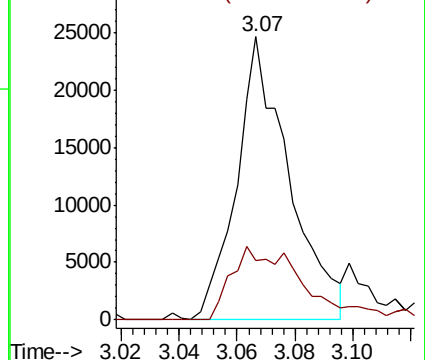
85 100

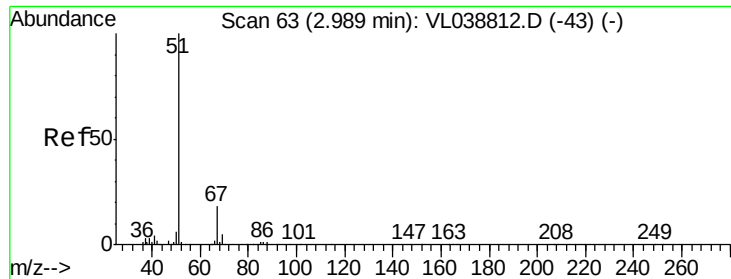
87 20.8 25.9 38.9#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.123 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

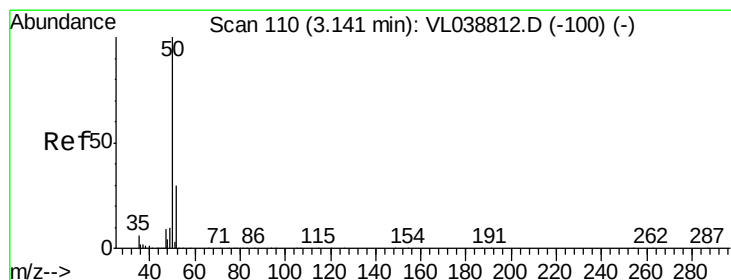
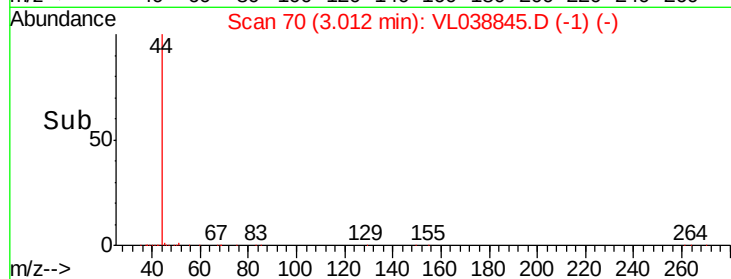
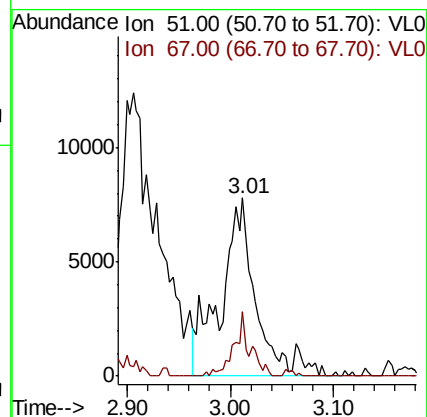
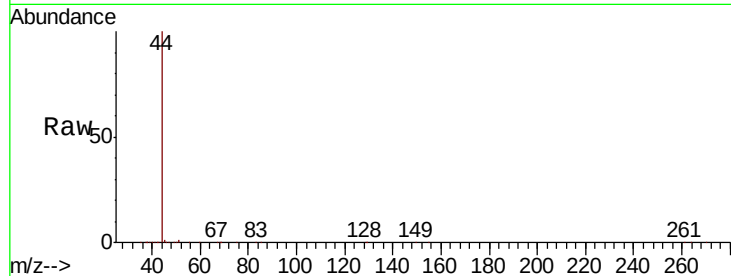
Acq: 7 Apr 2022 17:34

Tot Ion: 51 Resp: 18611

Ion Ratio Lower Upper

51 100

67 16.2 13.4 20.0



#4

Chloromethane

Concen: 0.079 ppbv

RT: 3.16 min Scan# 116

Delta R.T. 0.02 min

Lab File: VL038845.D

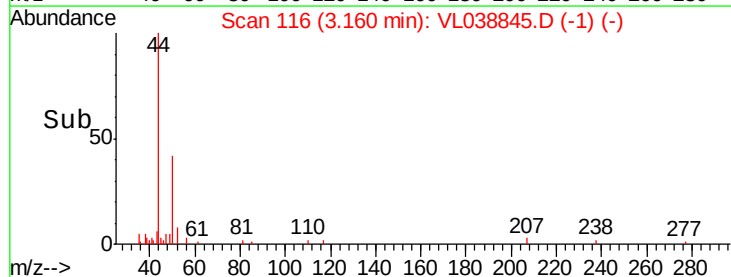
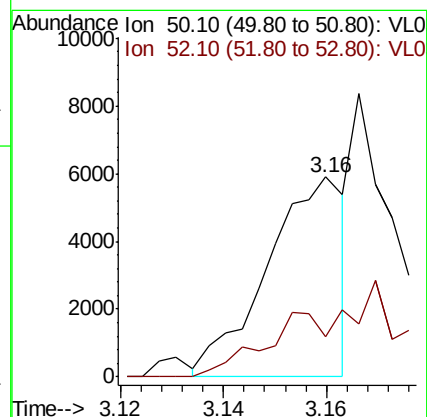
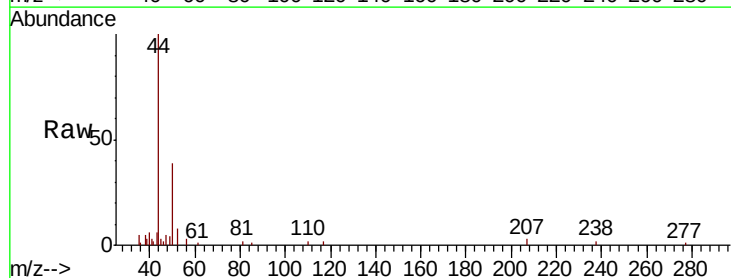
Acq: 7 Apr 2022 17:34

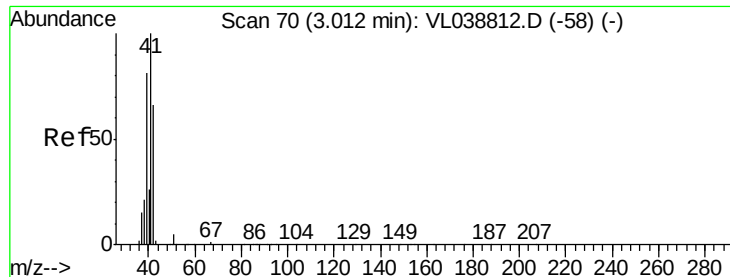
Tgt Ion: 50 Resp: 6131

Ion Ratio Lower Upper

50 100

52 21.3 24.3 36.5#





#9

Propene

Concen: 2.186 ppbv

RT: 3.04 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

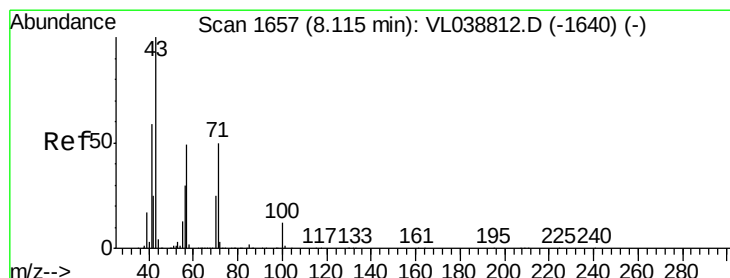
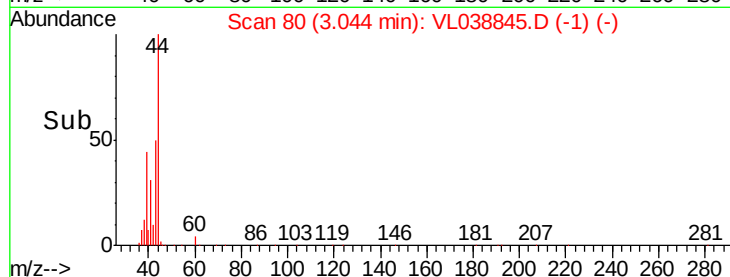
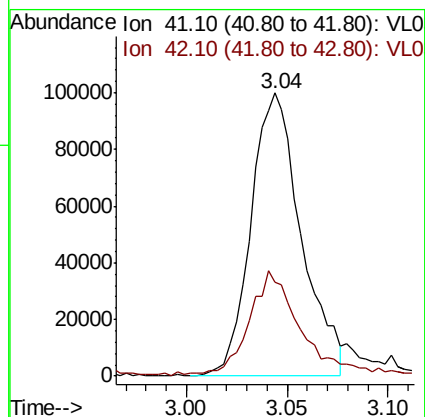
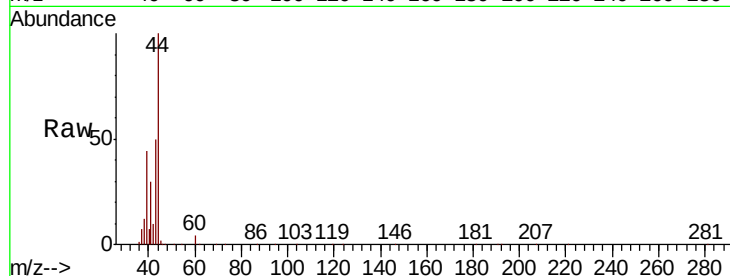
Acq: 7 Apr 2022 17:34

Tot Ion: 41 Resp: 174376

Ion Ratio Lower Upper

41 100

42 38.8 54.2 81.4#



#10

Heptane

Concen: 0.057 ppbv

RT: 8.15 min Scan# 1669

Delta R.T. 0.04 min

Lab File: VL038845.D

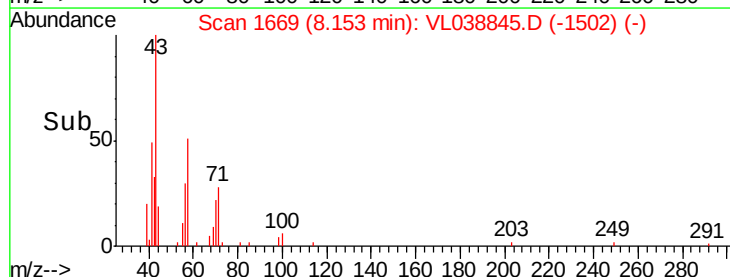
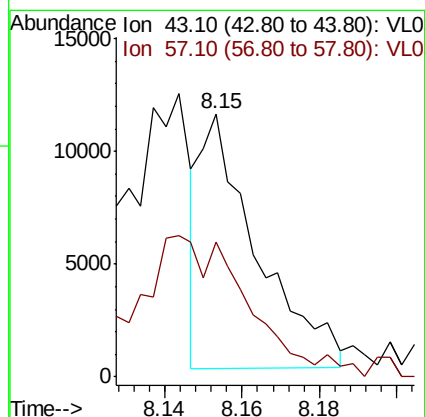
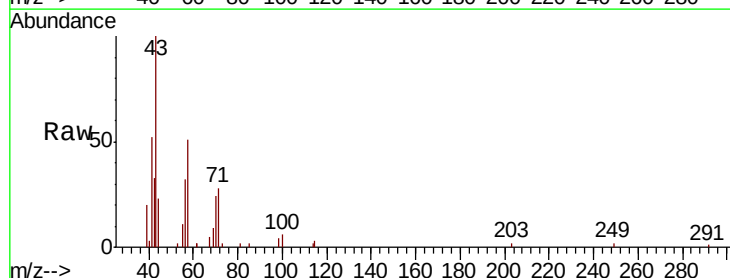
Acq: 7 Apr 2022 17:34

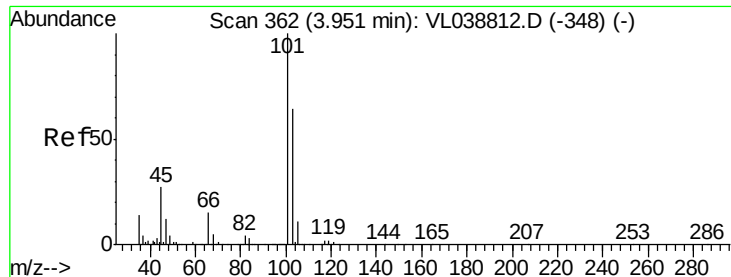
Tgt Ion: 43 Resp: 11519

Ion Ratio Lower Upper

43 100

57 0.0 39.3 58.9#





#11

Trichlorofluoromethane

Concen: 0.037 ppbv

RT: 3.97 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

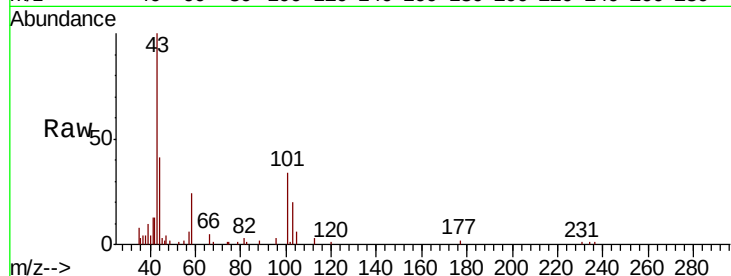
Acq: 7 Apr 2022 17:34

Tot Ion:101 Resp: 5155

Ion Ratio Lower Upper

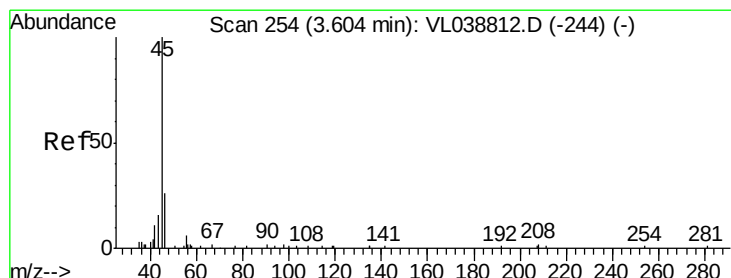
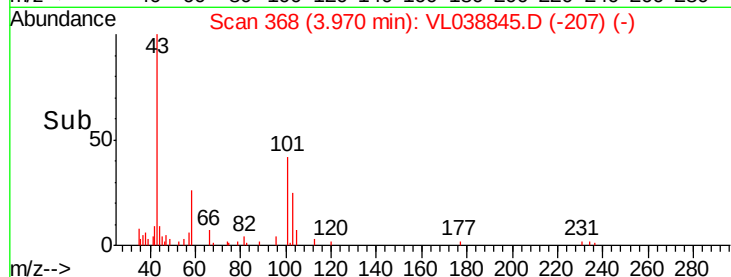
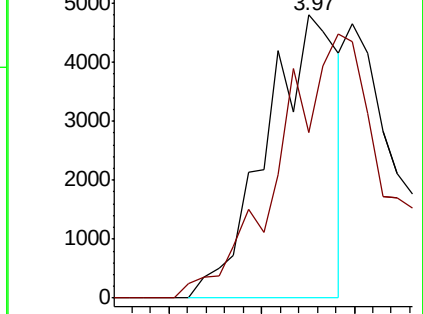
101 100

103 53.1 51.4 77.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#13

Ethanol

Concen: 12.586 ppbv

RT: 3.64 min Scan# 264

Delta R.T. 0.03 min

Lab File: VL038845.D

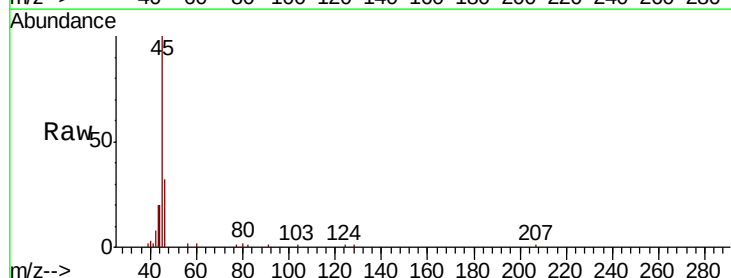
Acq: 7 Apr 2022 17:34

Tgt Ion: 45 Resp: 61009

Ion Ratio Lower Upper

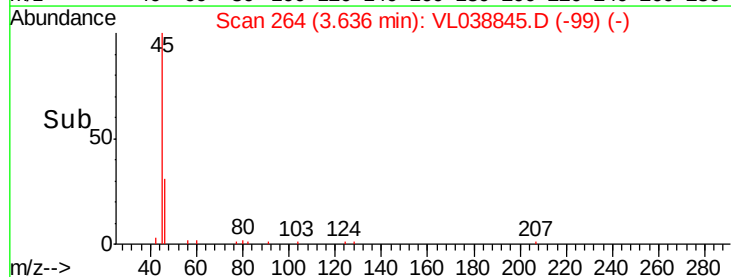
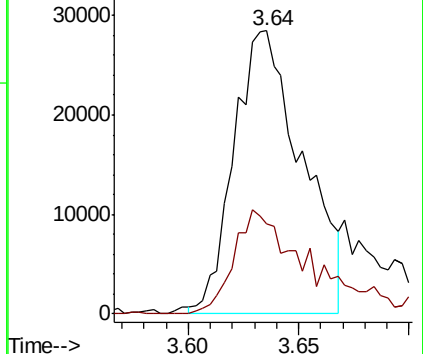
45 100

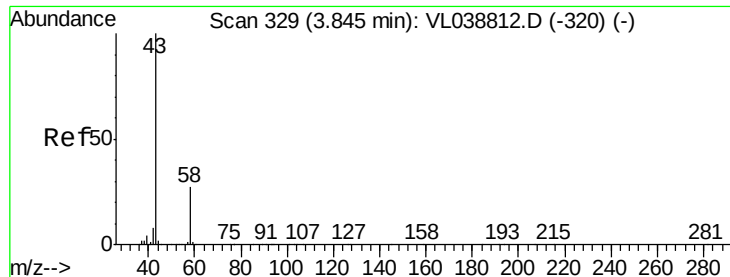
46 44.3 0.0 0.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 6.382 ppbv

RT: 3.88 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

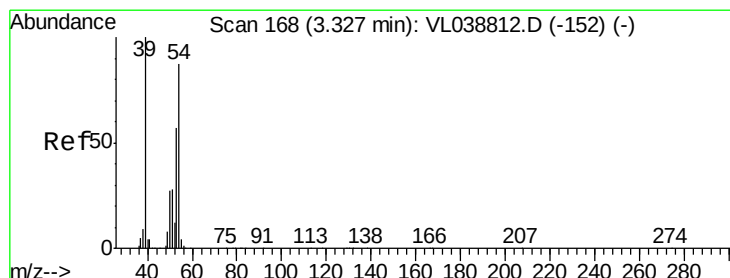
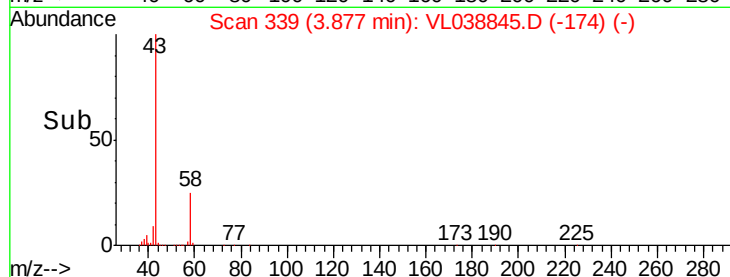
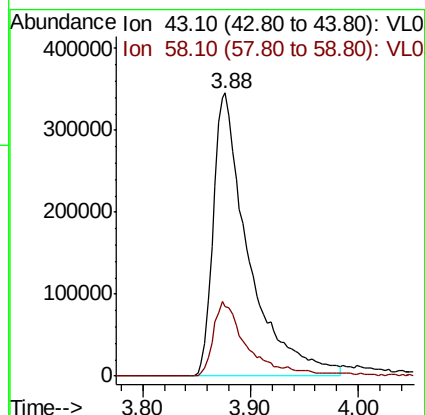
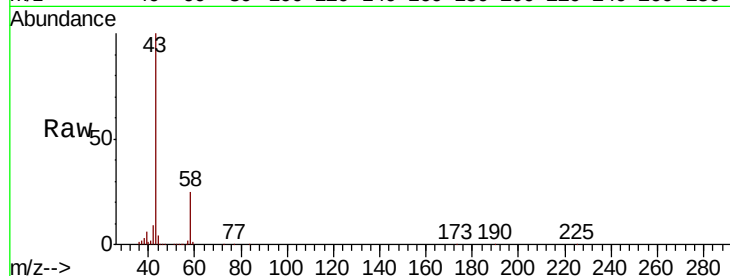
Acq: 7 Apr 2022 17:34

Tot Ion: 43 Resp: 784901

Ion Ratio Lower Upper

43 100

58 26.7 22.5 33.7



#16

1,3-Butadiene

Concen: 0.091 ppbv

RT: 3.33 min Scan# 169

Delta R.T. 0.00 min

Lab File: VL038845.D

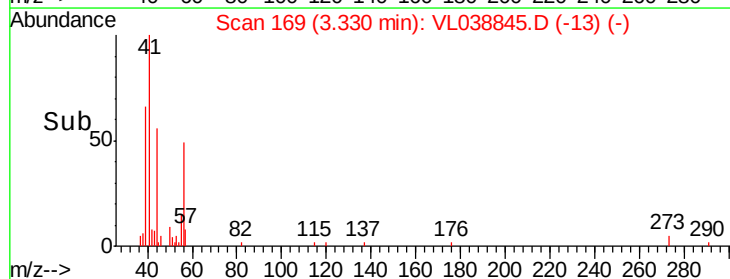
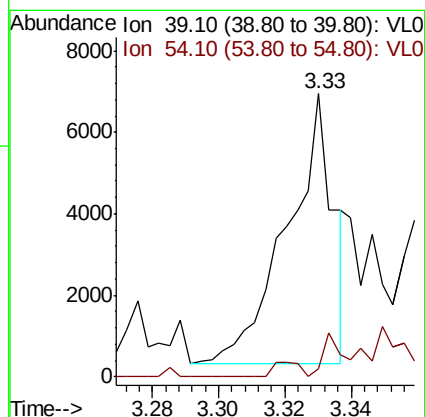
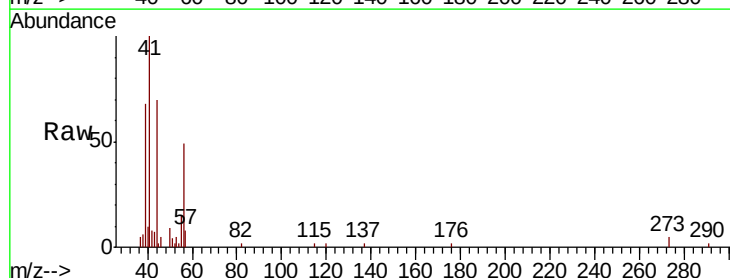
Acq: 7 Apr 2022 17:34

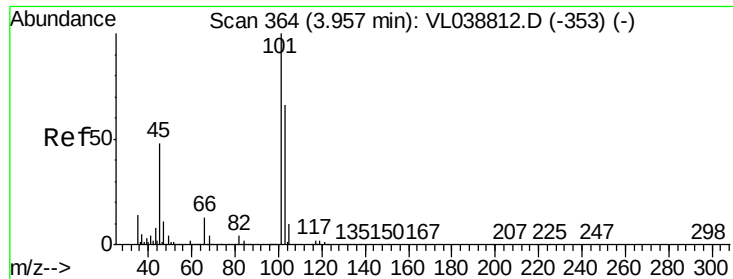
Tgt Ion: 39 Resp: 6373

Ion Ratio Lower Upper

39 100

54 30.1 64.8 97.2#





#19

Isopropyl Alcohol

Concen: 0.110 ppbv

RT: 3.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

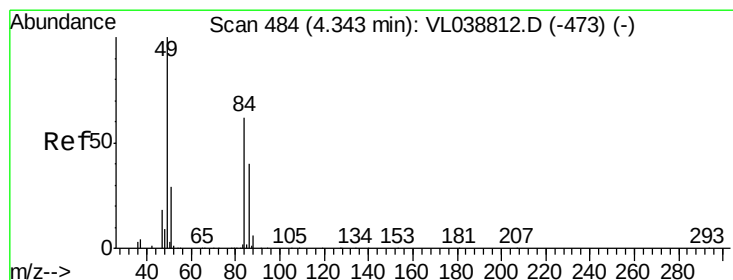
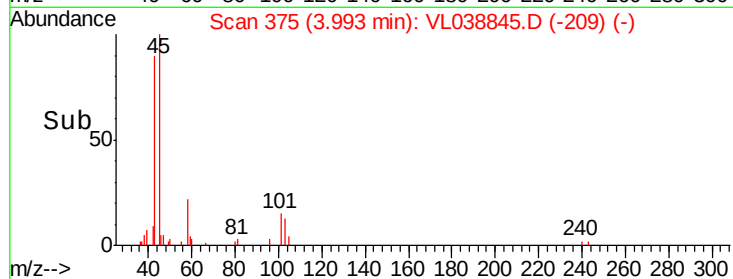
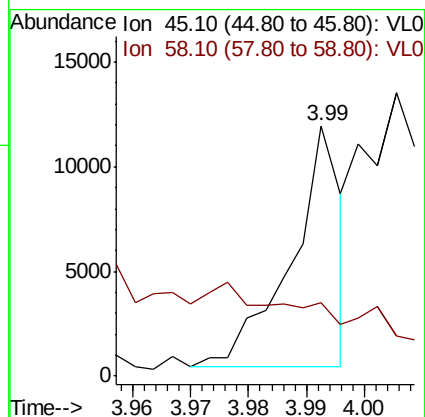
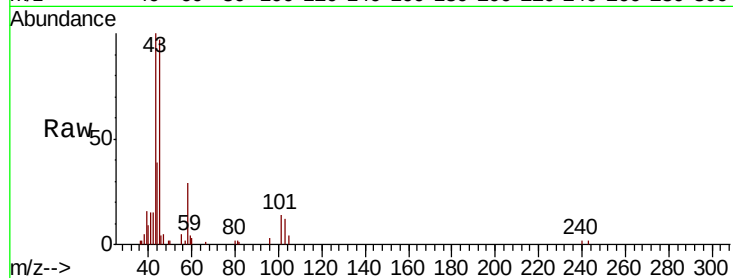
Acq: 7 Apr 2022 17:34

Tot Ion: 45 Resp: 6925

Ion Ratio Lower Upper

45 100

58 0.0 0.0 0.0



#20

Methylene Chloride

Concen: 2.026 ppbv

RT: 4.37 min Scan# 492

Delta R.T. 0.03 min

Lab File: VL038845.D

Acq: 7 Apr 2022 17:34

Tgt Ion: 84 Resp: 90391

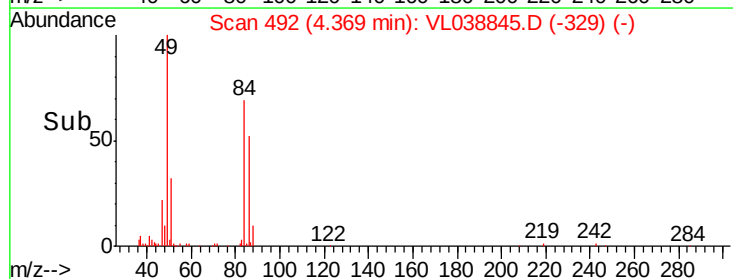
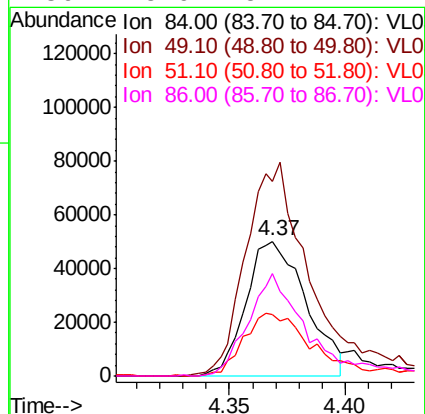
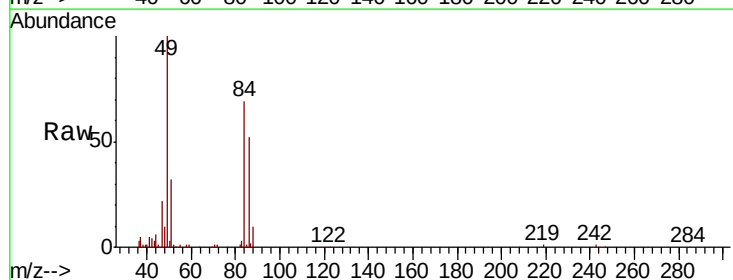
Ion Ratio Lower Upper

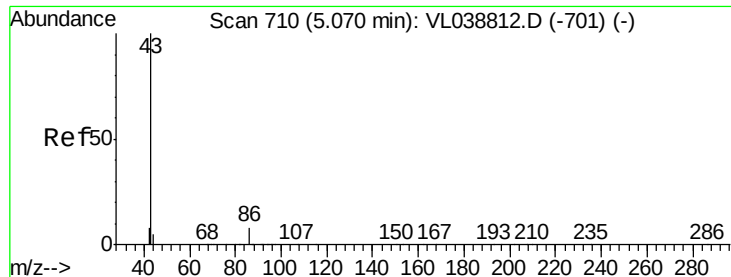
84 100

49 144.4 129.4 194.0

51 45.8 37.4 56.2

86 75.9 51.4 77.2





#23

Vinyl Acetate

Concen: 0.036 ppbv

RT: 5.09 Instrument: MSVOA_1

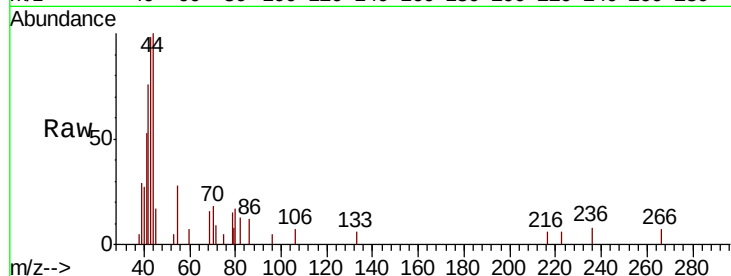
Delta R.T.

Lab File: ClientSampleId:

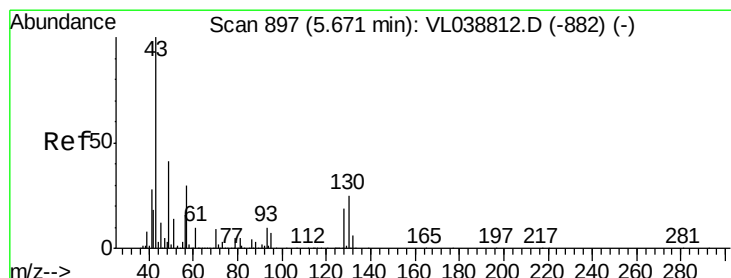
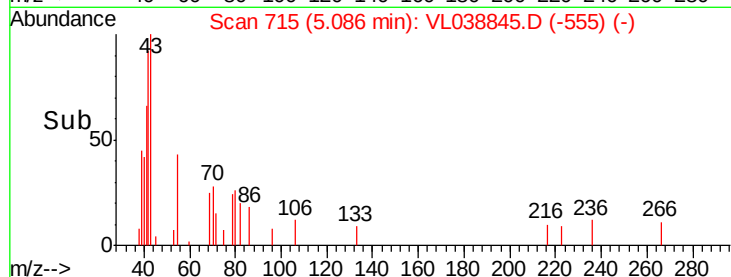
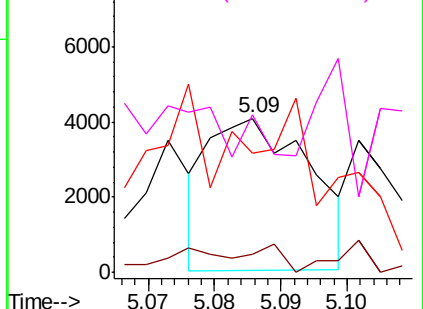
Acq: 7 Apr 2022 17:34

Tot Ion: 43 Resp: 4323

Ion	Ratio	Lower	Upper
43	100		
86	8.5	5.8	8.6
42	31.3	7.8	11.6#
44	0.0	3.6	5.4#



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: 0.178 ppbv

RT: 5.71 min Scan# 910

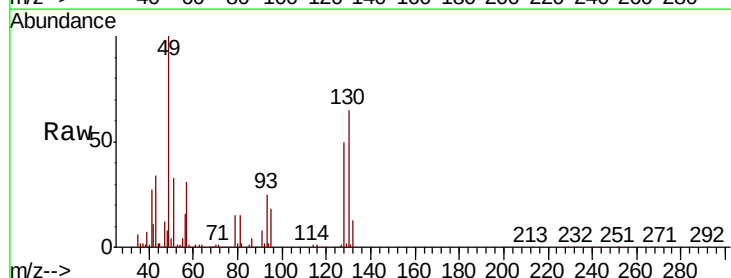
Delta R.T. 0.04 min

Lab File: VL038845.D

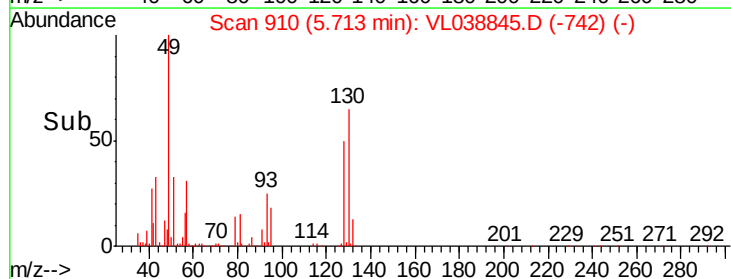
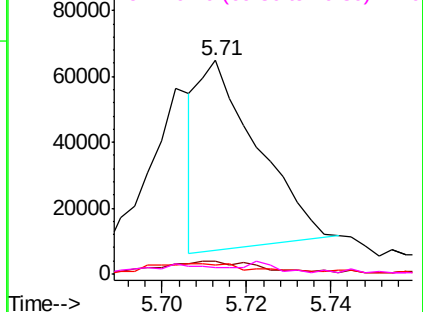
Acq: 7 Apr 2022 17:34

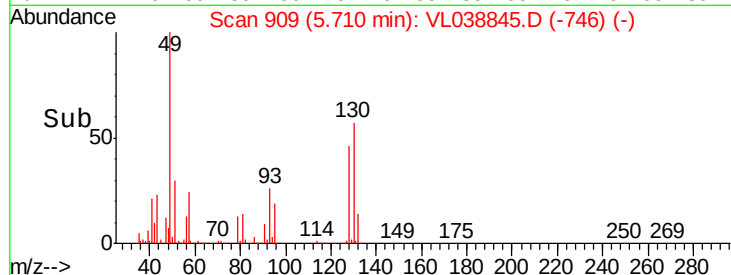
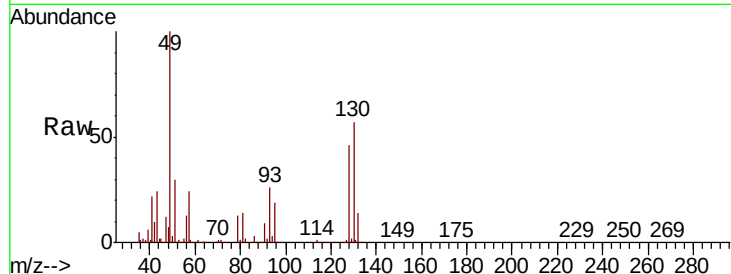
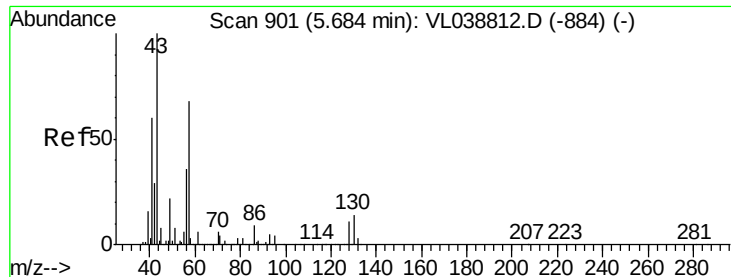
Tgt Ion: 43 Resp: 55459

Ion	Ratio	Lower	Upper
43	100		
45	15.8	8.4	12.6#
61	12.8	7.9	11.9#
70	12.1	5.6	8.4#



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0





#26

Hexane

Concen: 0.850 ppbv

RT: 5.71 Instrument:

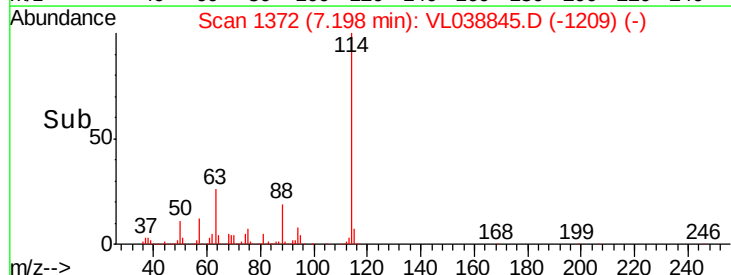
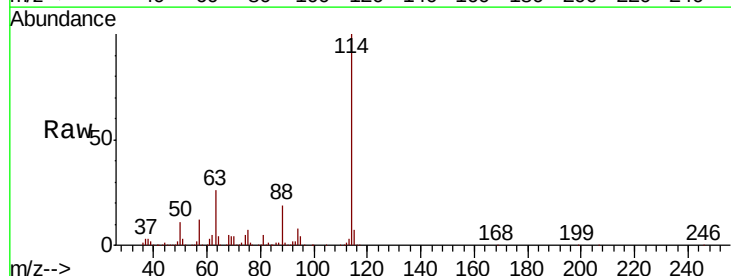
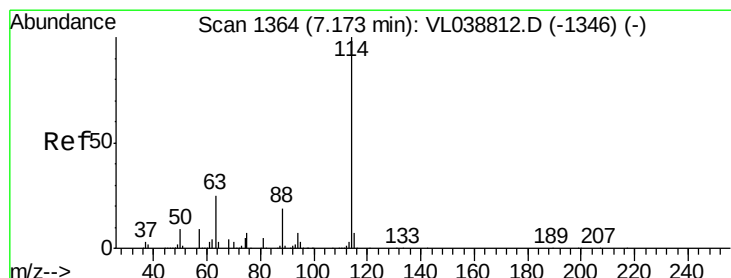
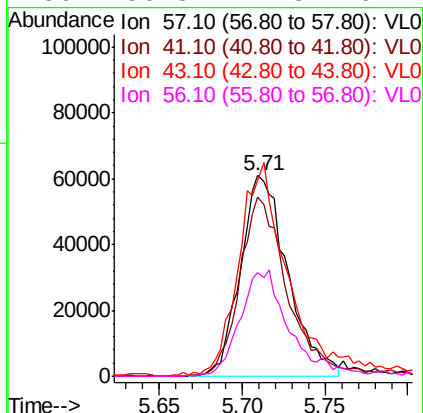
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 7 Apr 2022 17:34

Tot Ion: 57 Resp: 120692

Ion	Ratio	Lower	Upper
57	100		
41	94.3	72.0	108.0
43	114.5	186.6	280.0#
56	56.3	42.8	64.2



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.20 min Scan# 1372

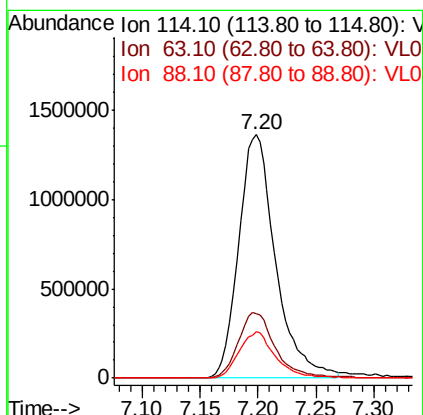
Delta R.T. 0.03 min

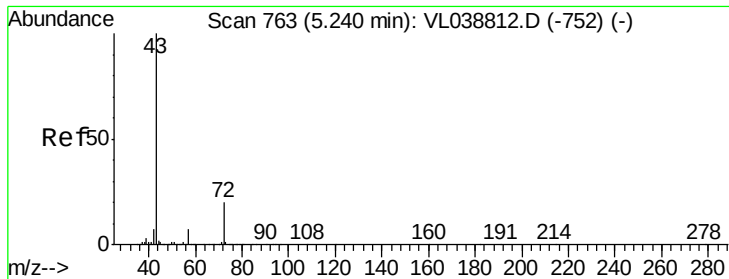
Lab File: VL038845.D

Acq: 7 Apr 2022 17:34

Tgt Ion:114 Resp: 3018300

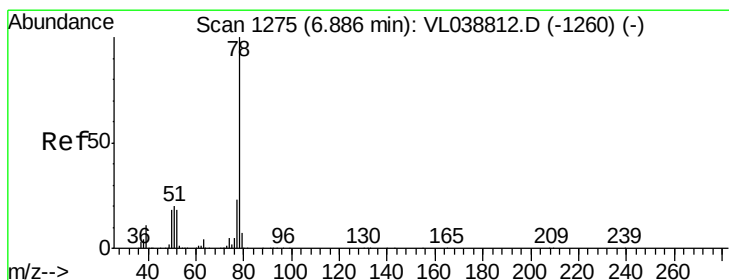
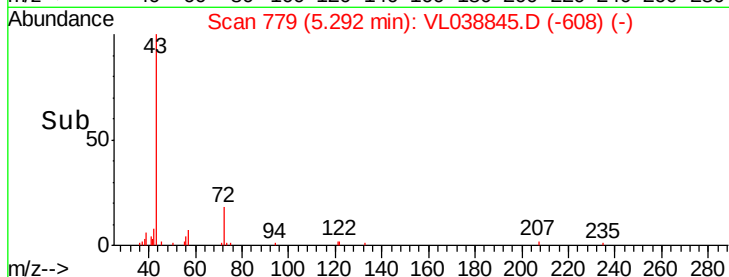
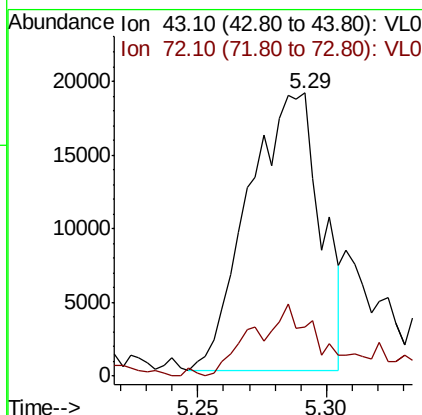
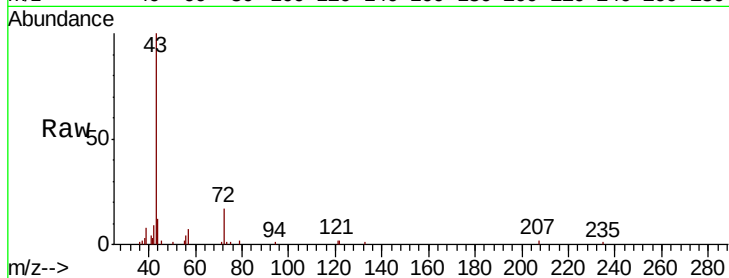
Ion	Ratio	Lower	Upper
114	100		
63	27.7	19.8	29.8
88	19.0	14.2	21.4





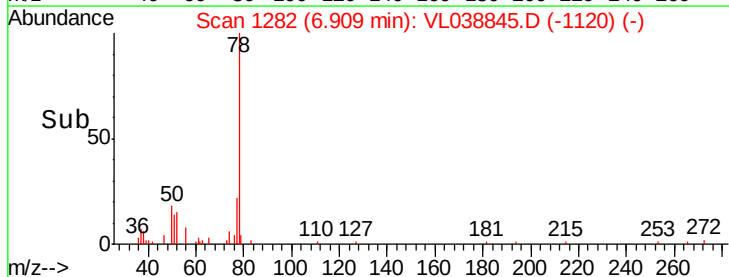
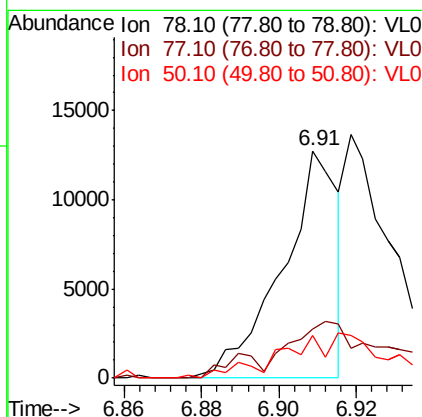
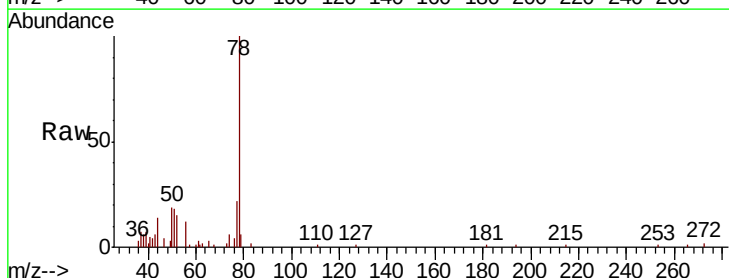
#34
 2-Butanone
 Concen: 0.308 ppbv
 RT: 5.29
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 Acq: 7 Apr 2022 17:34

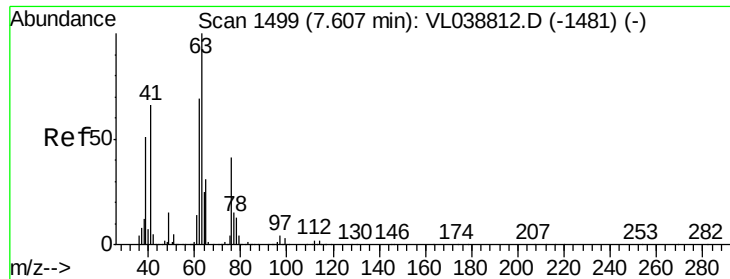
Tot Ion: 43 Resp: 36689
 Ion Ratio Lower Upper
 43 100
 72 28.7 16.9 25.3#



#36
 Benzene
 Concen: 0.046 ppbv
 RT: 6.91 min Scan# 1282
 Delta R.T. 0.02 min
 Lab File: VL038845.D
 Acq: 7 Apr 2022 17:34

Tgt Ion: 78 Resp: 12728
 Ion Ratio Lower Upper
 78 100
 77 21.6 18.2 27.2
 50 17.5 14.0 21.0





#39

1,2-Dichloropropane

Concen: 7.584 ppbv

RT: 7.20 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampled:

Acq: 7 Apr 2022 17:34

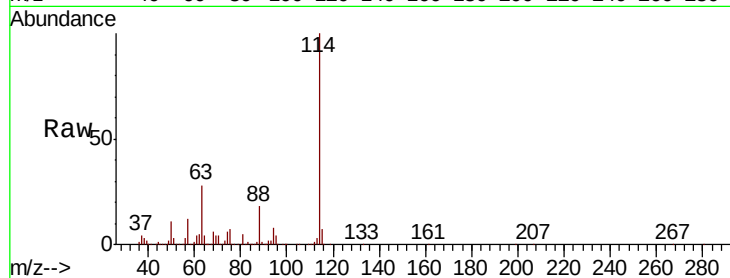
Tot Ion: 63 Resp: 796526

Ion Ratio Lower Upper

63 100

41 0.0 53.0 79.6#

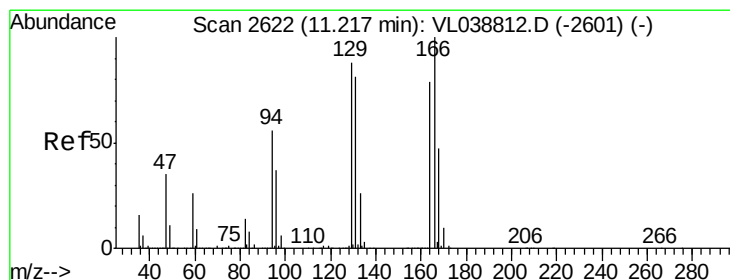
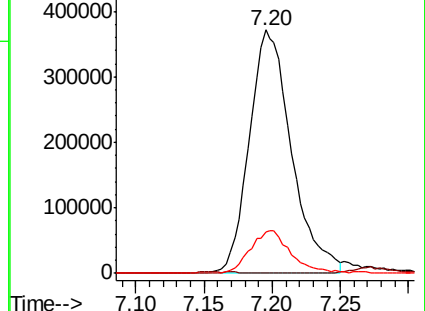
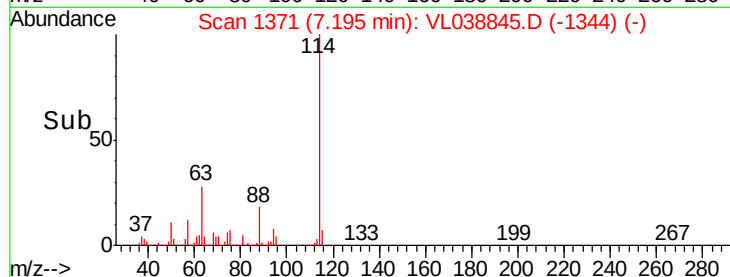
62 17.2 55.0 82.4#



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



#52

Tetrachloroethene

Concen: 0.045 ppbv

RT: 11.23 min Scan# 2627

Delta R.T. 0.02 min

Lab File: VL038845.D

Acq: 7 Apr 2022 17:34

Tgt Ion:164 Resp: 4278

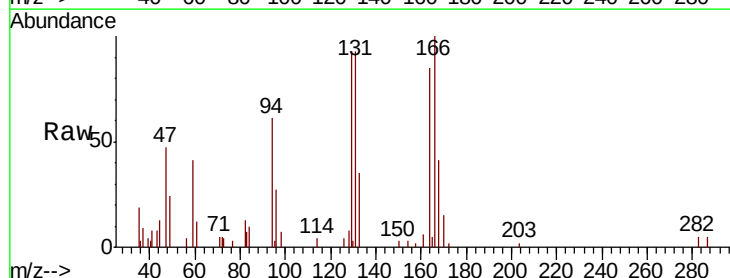
Ion Ratio Lower Upper

164 100

166 104.3 101.0 151.6

129 107.1 88.7 133.1

131 109.5 81.8 122.6

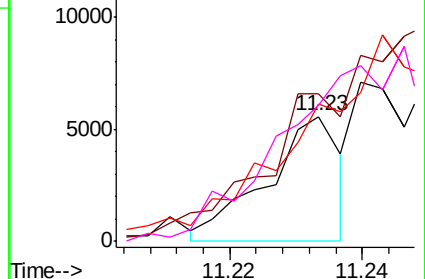
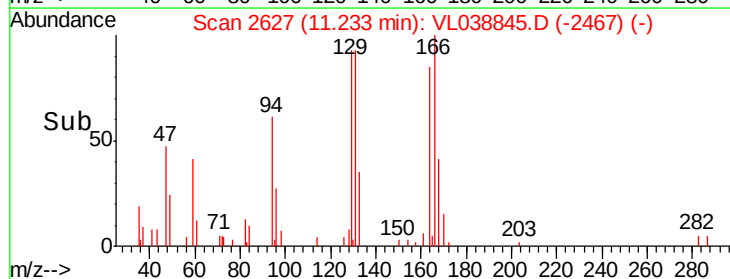


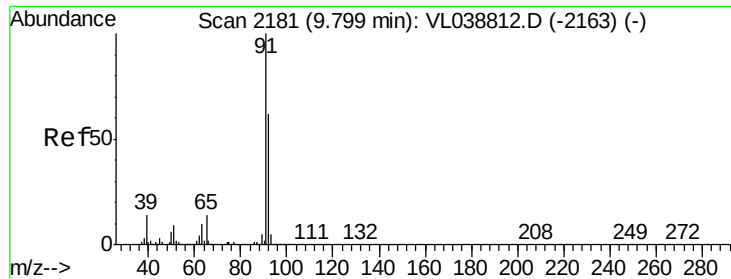
Abundance Ion 163.90 (163.60 to 164.60): V

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: 9.83 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

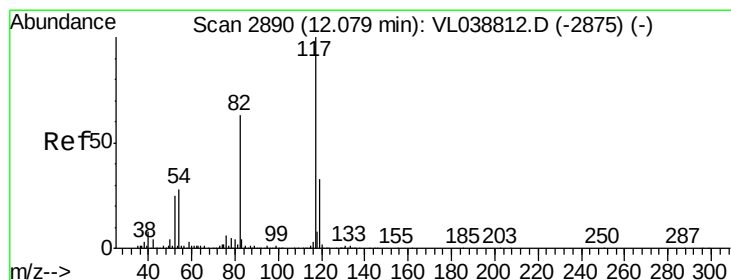
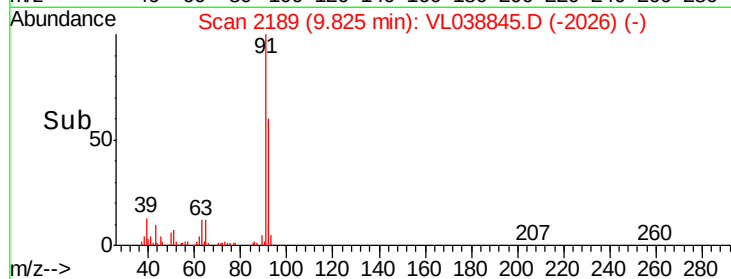
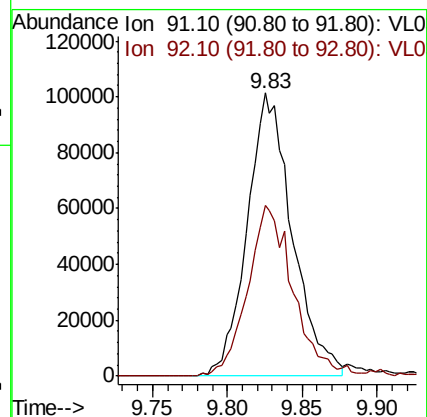
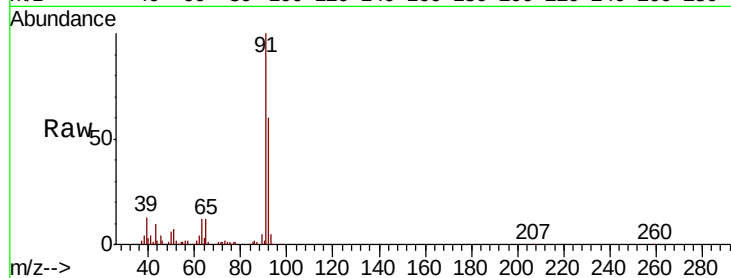
Acq: 7 Apr 2022 17:34

Tot Ion: 91 Resp: 213045

Ion Ratio Lower Upper

91 100

92 60.5 49.2 73.8



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2899

Delta R.T. 0.03 min

Lab File: VL038845.D

Acq: 7 Apr 2022 17:34

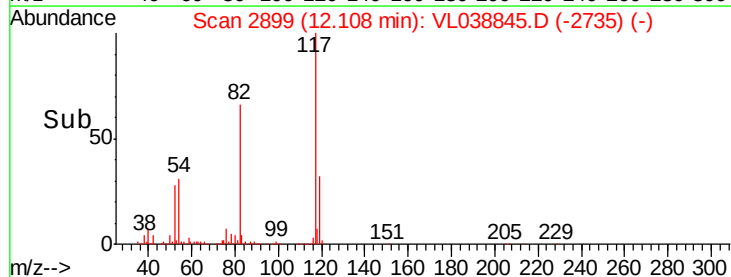
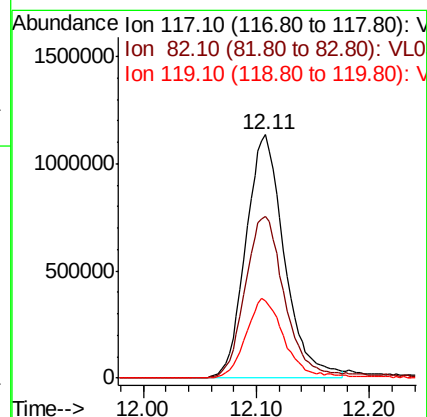
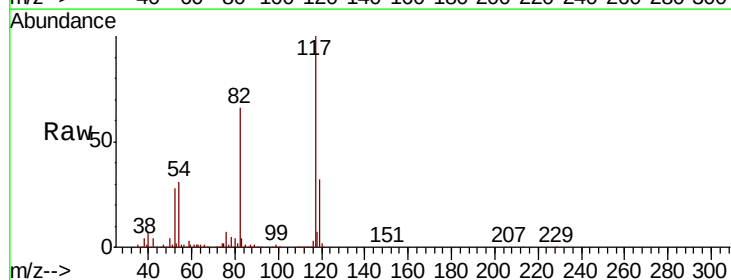
Tgt Ion: 117 Resp: 2692946

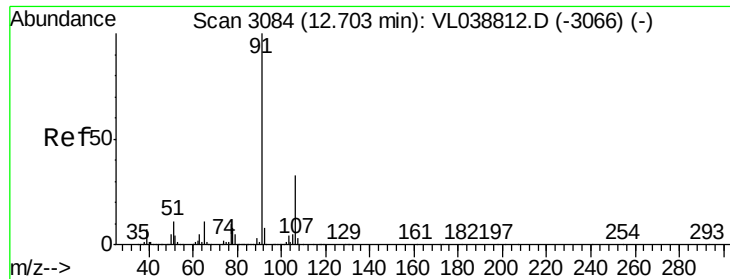
Ion Ratio Lower Upper

117 100

82 71.4 53.0 79.6

119 33.9 24.9 37.3





#58

Ethyl Benzene

Concen: 0.098 ppbv

RT: 12.73

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

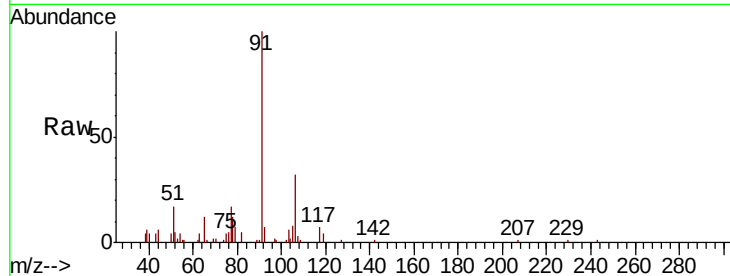
Acq: 7 Apr 2022 17:34

Tot Ion: 91 Resp: 39456

Ion Ratio Lower Upper

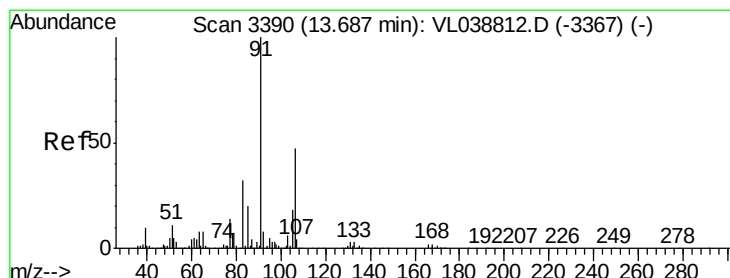
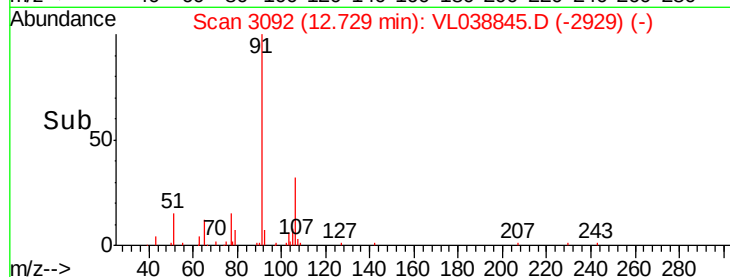
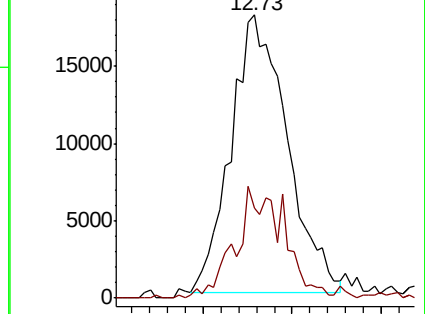
91 100

106 31.7 26.7 40.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 0.049 ppbv

RT: 13.72 min Scan# 3400

Delta R.T. 0.03 min

Lab File: VL038845.D

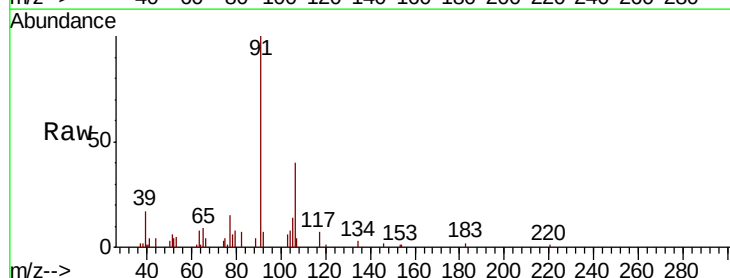
Acq: 7 Apr 2022 17:34

Tgt Ion: 91 Resp: 15543

Ion Ratio Lower Upper

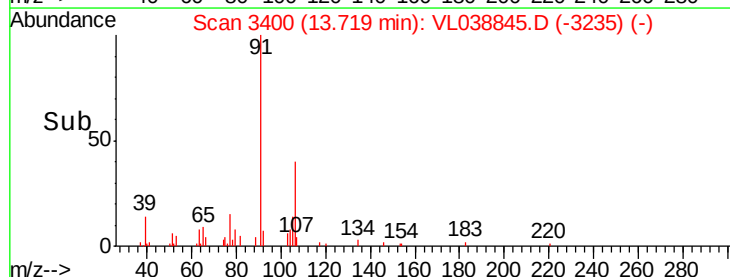
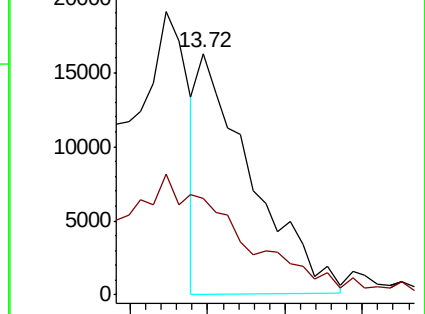
91 100

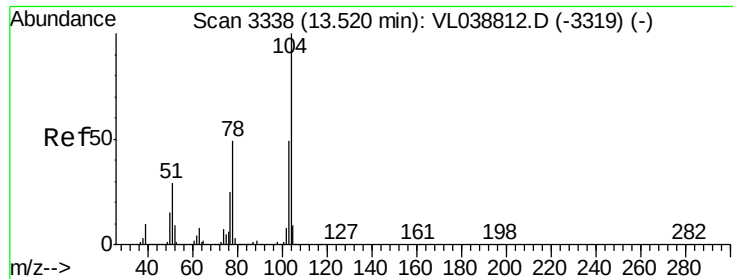
106 0.0 23.8 71.4#



Abundance Ion 91.10 (90.80 to 91.80): VL0

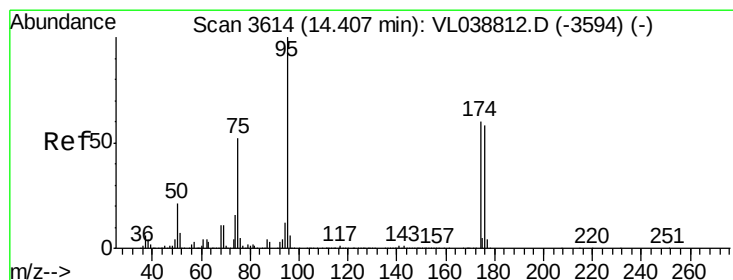
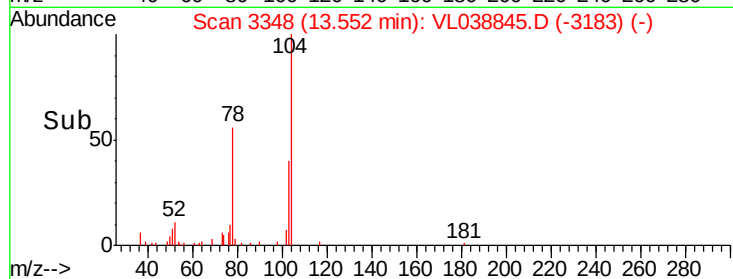
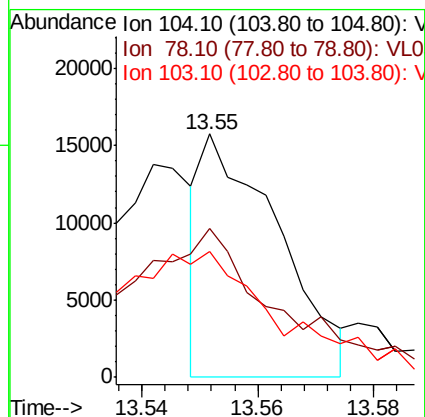
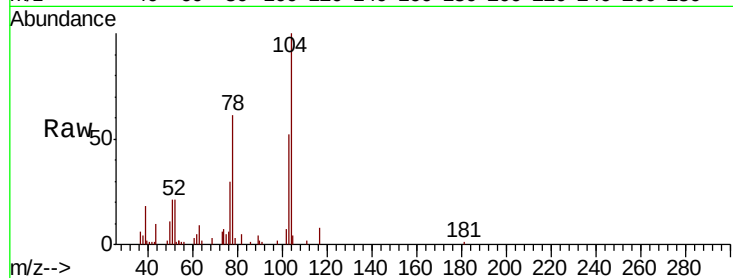
Ion 106.10 (105.80 to 106.80): V





#61
Stvrene
Concen: 0.075 ppbv
RT: 13.55
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 7 Apr 2022 17:34

Tot Ion: 104 Resp: 14436
Ion Ratio Lower Upper
104 100
78 150.6 40.5 60.7#
103 129.7 39.0 58.4#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.504 ppbv
RT: 14.44 min Scan# 3623
Delta R.T. 0.03 min
Lab File: VL038845.D
Acq: 7 Apr 2022 17:34

Tgt Ion: 95 Resp: 2145547
Ion Ratio Lower Upper
95 100
174 61.6 52.0 78.0
175 4.7 4.0 6.0

