

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121621\
 Data File : VL038208.D
 Acq On : 17 Dec 2021 3:36
 Operator : SY/AP
 Sample : M5119-03DL2 40X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Dec 18 04:08:37 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Nov 18 13:16:09 2021
 QLast Update : Thu Nov 18 13:16:09 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	759939	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2404343	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2100852	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	1576962	10.41	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.10%

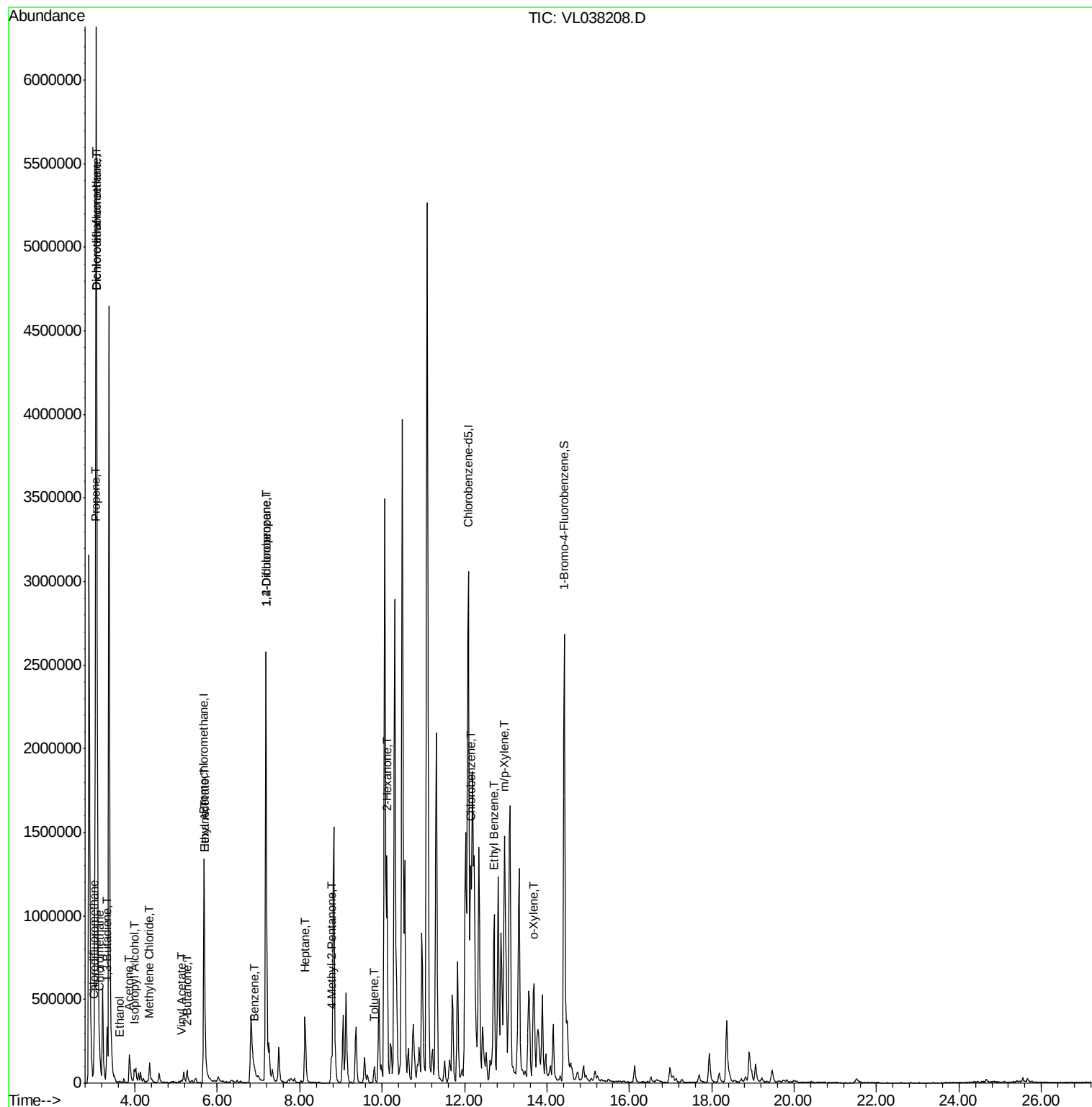
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.06	85	8703890	69.339 ppbv #	85
3) Chlorodifluoromethane	3.00	51	77473	0.485 ppbv	98
4) Chloromethane	3.14	50	12609	0.232 ppbv #	49
8) Dichlorotetrafluoroethane	3.06	85	8703890	69.703 ppbv #	13
9) Propene	3.03	41	653487	11.119 ppbv #	75
10) Heptane	8.13	43	196582	1.353 ppbv	98
13) Ethanol	3.63	45	5029	0.885 ppbv	66
15) Acetone	3.86	43	246005	3.734 ppbv	95
16) 1,3-Butadiene	3.32	39	102558	1.995 ppbv #	43
19) Isopropyl Alcohol	3.99	45	108295	2.275 ppbv #	96
20) Methylene Chloride	4.35	84	46312	1.255 ppbv	96
23) Vinyl Acetate	5.12	43	3846	0.040 ppbv #	33
25) Ethyl Acetate	5.69	43	30752	0.140 ppbv #	88
26) Hexane	5.69	57	32292	0.306 ppbv #	50
34) 2-Butanone	5.26	43	92861	0.958 ppbv #	82
36) Benzene	6.90	78	8786	0.037 ppbv #	79
39) 1,2-Dichloropropane	7.18	63	548354	5.960 ppbv #	26
50) 4-Methyl-2-Pentanone	8.77	43	23628	0.160 ppbv	94
51) 2-Hexanone	10.12	43	819756	11.834 ppbv #	27
53) Toluene	9.82	91	23170	0.084 ppbv	88
57) Chlorobenzene	12.16	112	38117	0.202 ppbv #	26
58) Ethyl Benzene	12.72	91	885367	2.550 ppbv	98
59) m/p-Xylene	12.97	91	1375973	4.707 ppbv	95
60) o-Xylene	13.69	91	292518	1.079 ppbv	99

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL121621\
Data File : VL038208.D
Acq On : 17 Dec 2021 3:36
Operator : SY/AP
Sample : M5119-03DL2 40X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Dec 18 04:08:37 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Nov 18 13:16:09 2021
QLast Update : Thu Nov 18 13:16:09 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 17 Dec 2021 3:30

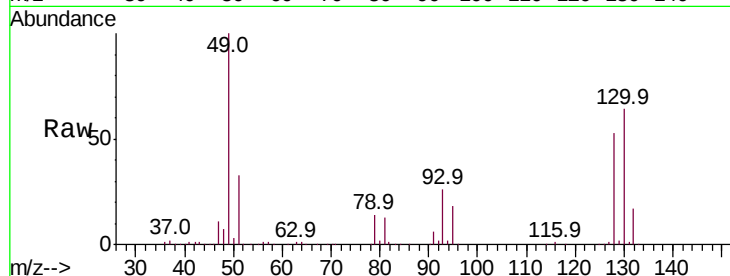
Tot Ion: 49 Resp: 759939

Ion Ratio Lower Upper

49 100

128 54.8 26.5 79.5

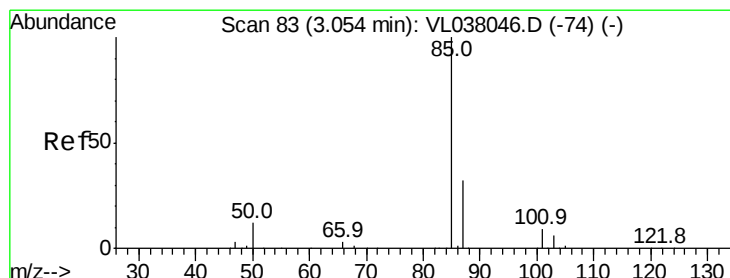
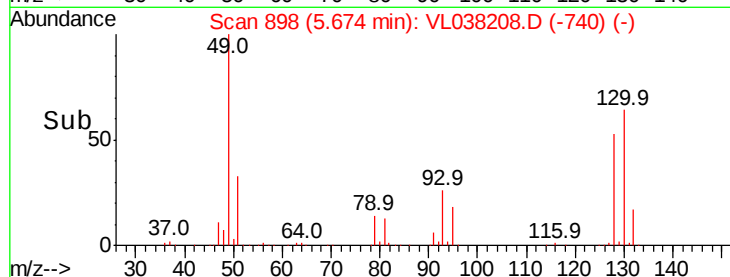
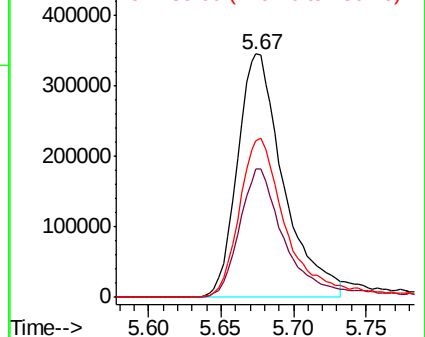
130 69.5 32.5 97.4



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 69.339 ppbv

RT: 3.06 min Scan# 85

Delta R.T. 0.01 min

Lab File: VL038208.D

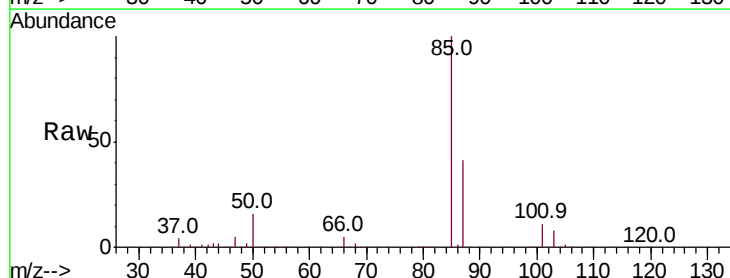
Acq: 17 Dec 2021 3:36

Tgt Ion: 85 Resp: 8703890

Ion Ratio Lower Upper

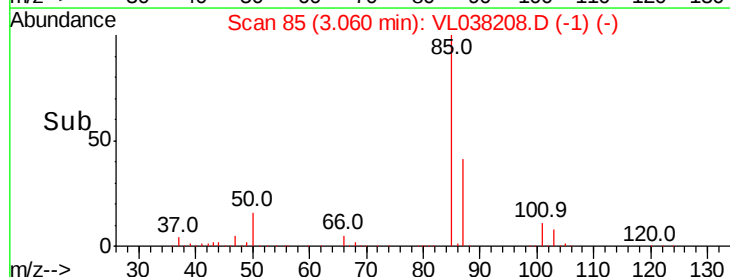
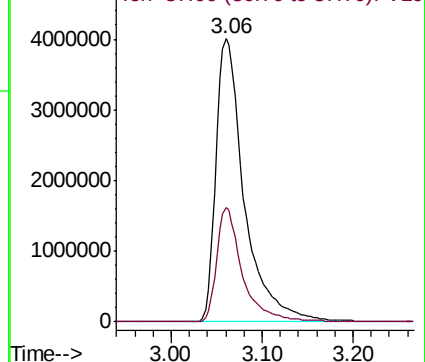
85 100

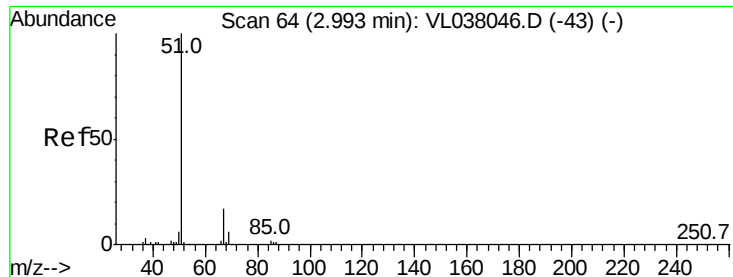
87 40.6 25.8 38.6#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.485 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

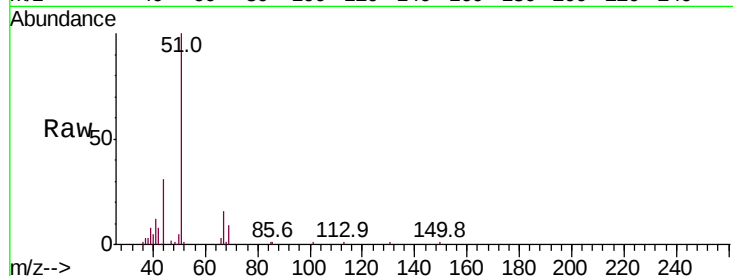
Acq: 17 Dec 2021 3:30

Tot Ion: 51 Resp: 77473

Ion Ratio Lower Upper

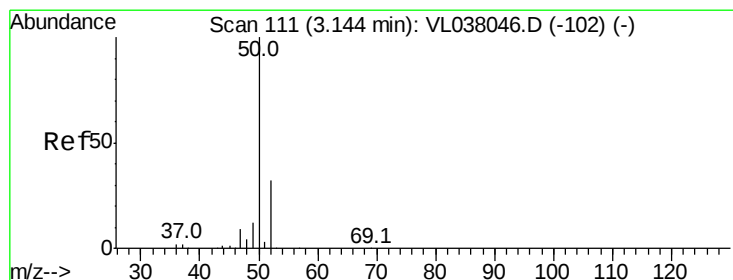
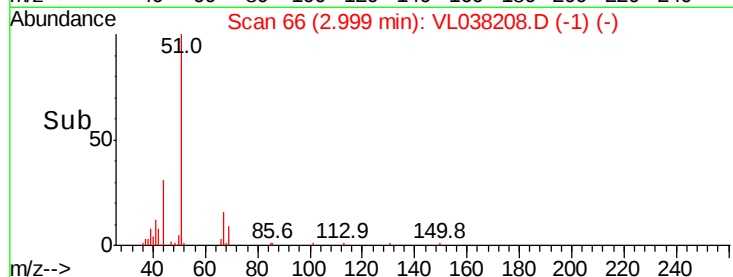
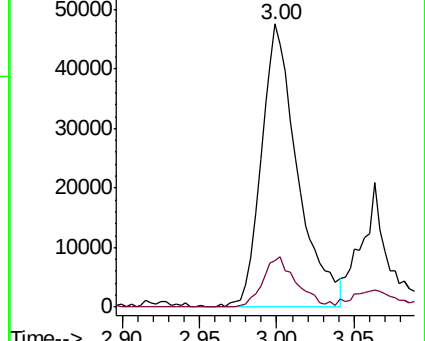
51 100

67 16.2 13.8 20.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.232 ppbv

RT: 3.14 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL038208.D

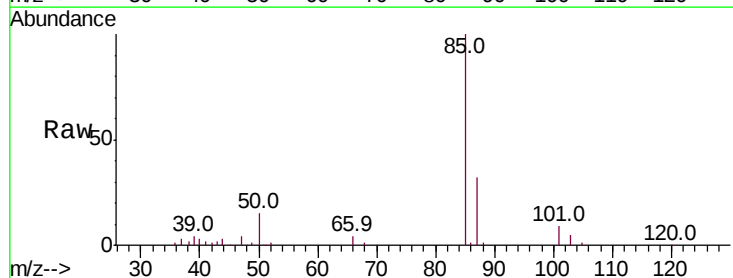
Acq: 17 Dec 2021 3:36

Tgt Ion: 50 Resp: 12609

Ion Ratio Lower Upper

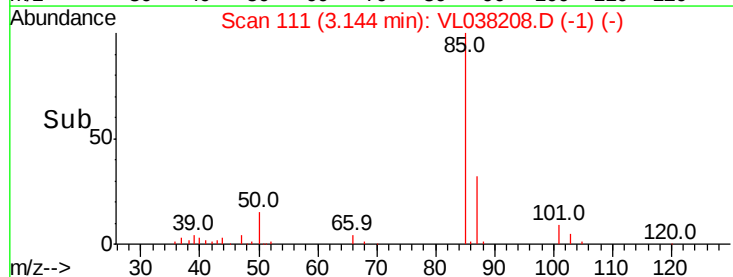
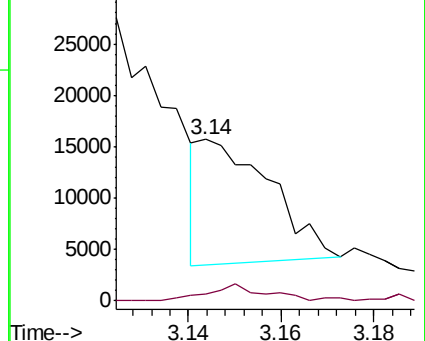
50 100

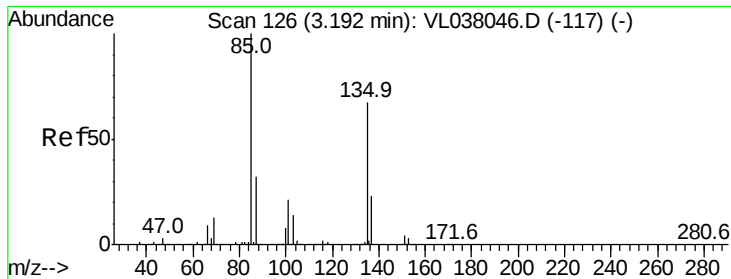
52 3.2 25.4 38.0#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 69.703 ppbv

RT: 3.06 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

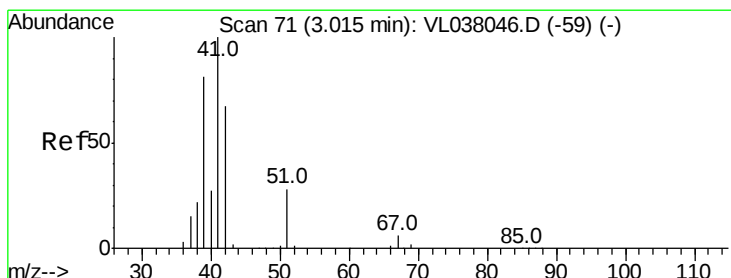
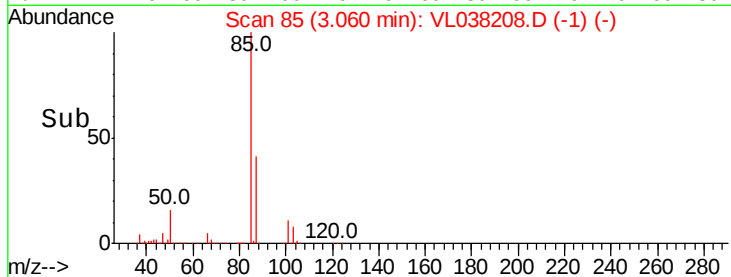
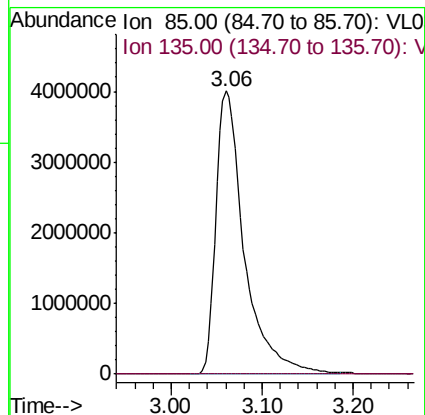
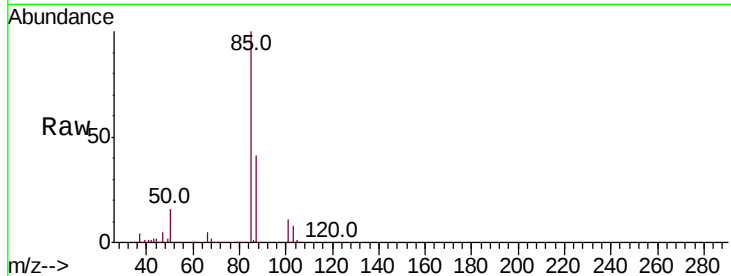
Acq: 17 Dec 2021 3:30

Tot Ion: 85 Resp: 8703890

Ion Ratio Lower Upper

85 100

135 0.0 57.9 86.9#



#9

Propene

Concen: 11.119 ppbv

RT: 3.03 min Scan# 77

Delta R.T. 0.02 min

Lab File: VL038208.D

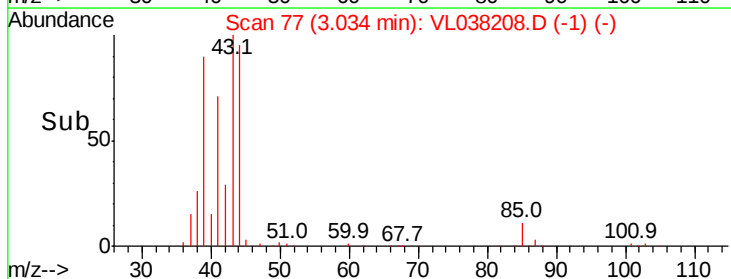
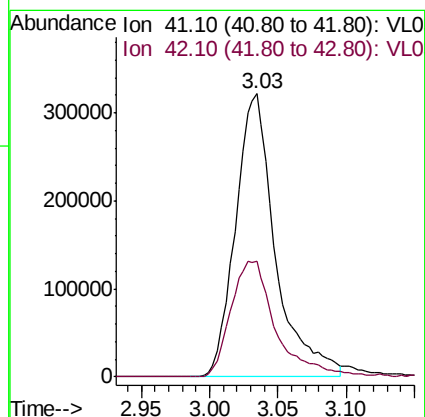
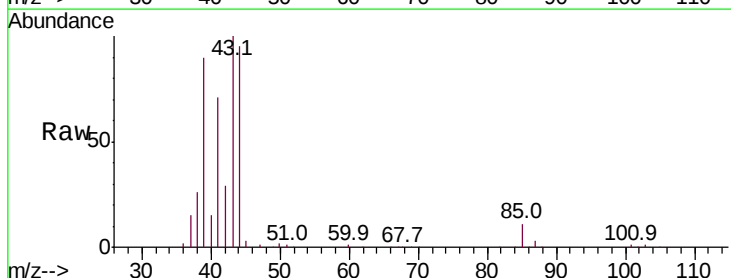
Acq: 17 Dec 2021 3:36

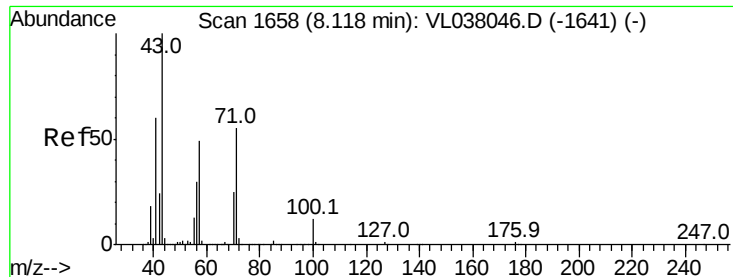
Tgt Ion: 41 Resp: 653487

Ion Ratio Lower Upper

41 100

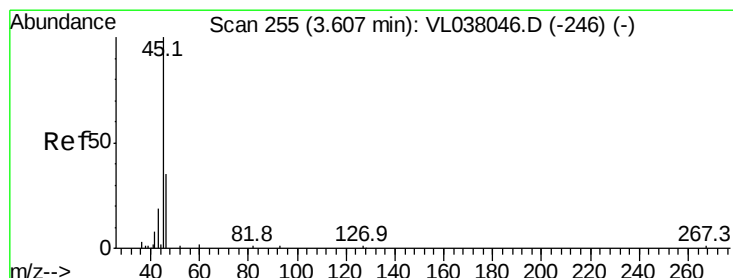
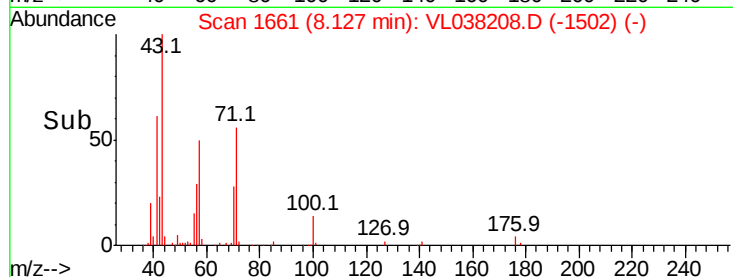
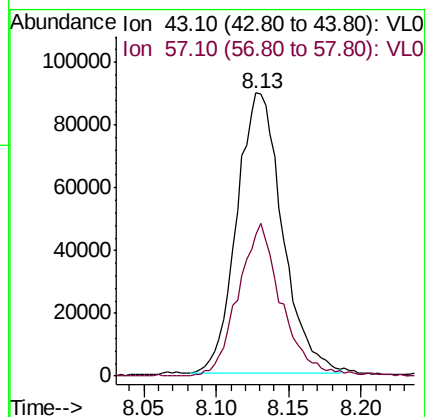
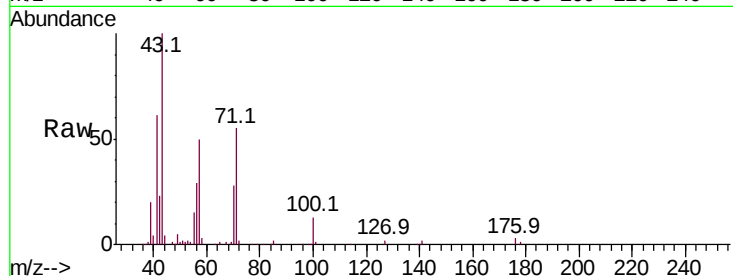
42 46.9 53.8 80.8#





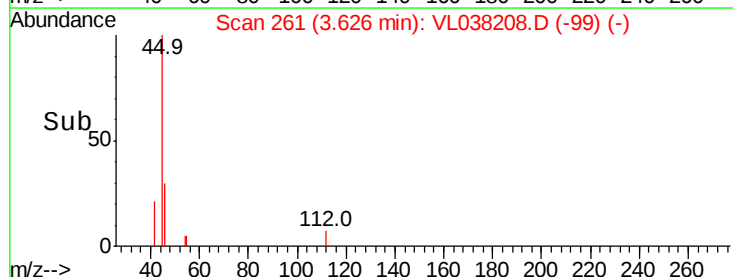
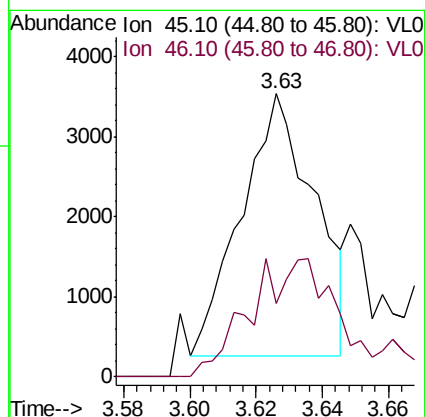
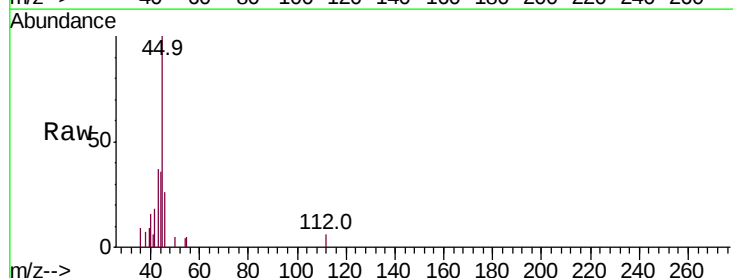
#10
Heptane
Concen: 1.353 ppbv
RT: 8.13
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 17 Dec 2021 3:30

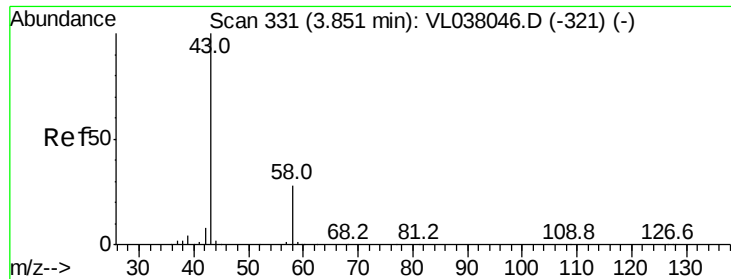
Tot Ion: 43 Resp: 196582
Ion Ratio Lower Upper
43 100
57 52.2 40.4 60.6



#13
Ethanol
Concen: 0.885 ppbv
RT: 3.63 min Scan# 261
Delta R.T. 0.02 min
Lab File: VL038208.D
Acq: 17 Dec 2021 3:36

Tgt Ion: 45 Resp: 5029
Ion Ratio Lower Upper
45 100
46 65.9 17.6 70.2





#15

Acetone

Concen: 3.734 ppbv

RT: 3.86 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

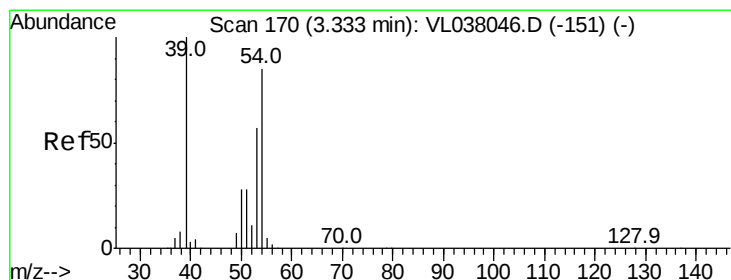
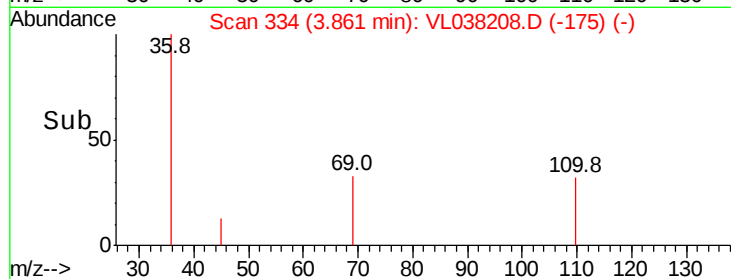
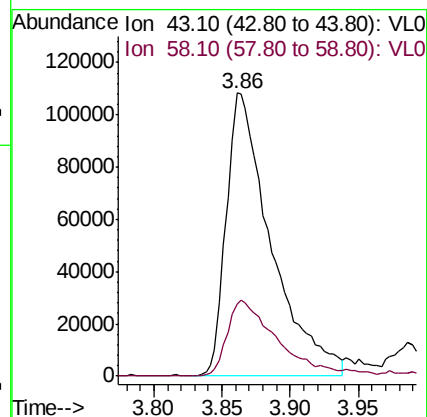
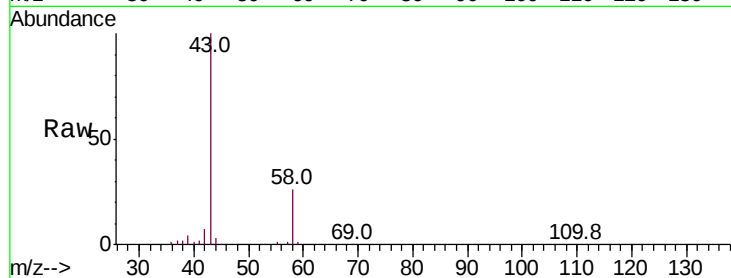
Acq: 17 Dec 2021 3:30

Tot Ion: 43 Resp: 246005

Ion Ratio Lower Upper

43 100

58 30.6 22.4 33.6



#16

1,3-Butadiene

Concen: 1.995 ppbv

RT: 3.32 min Scan# 166

Delta R.T. -0.01 min

Lab File: VL038208.D

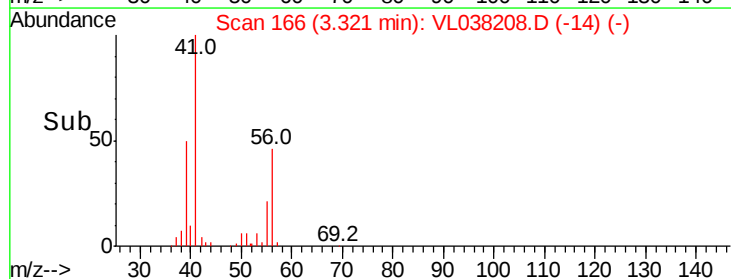
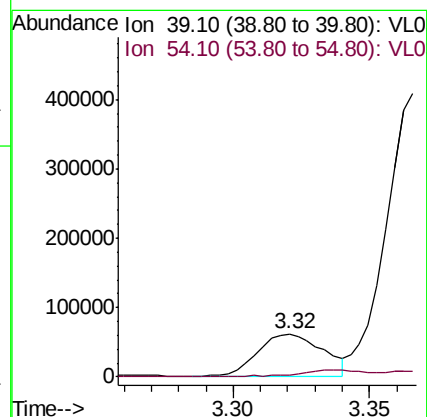
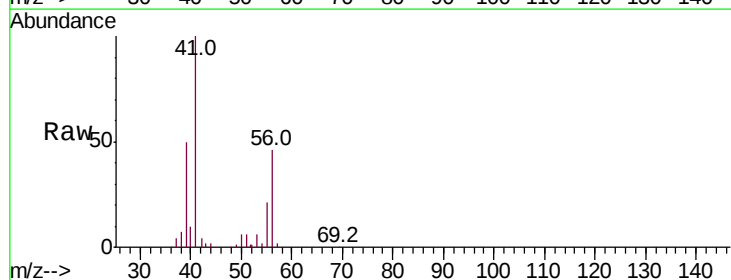
Acq: 17 Dec 2021 3:36

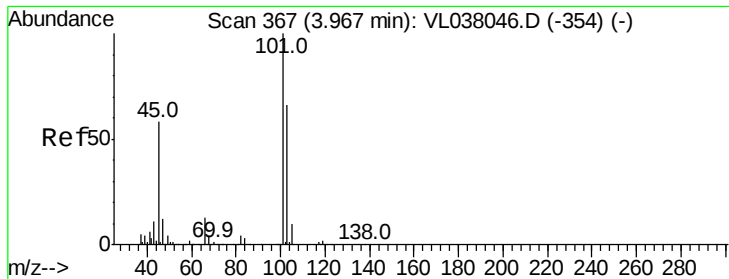
Tgt Ion: 39 Resp: 102558

Ion Ratio Lower Upper

39 100

54 30.3 64.4 96.6#





#19

Isopropyl Alcohol

Concen: 2.275 ppbv

RT: 3.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

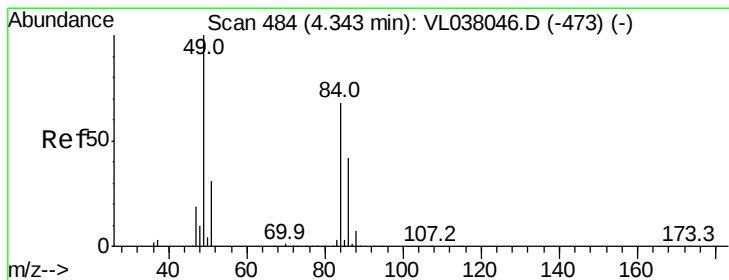
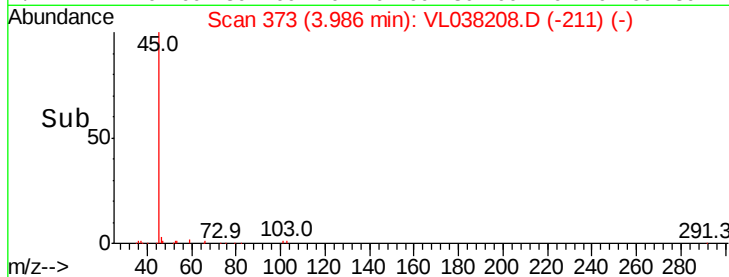
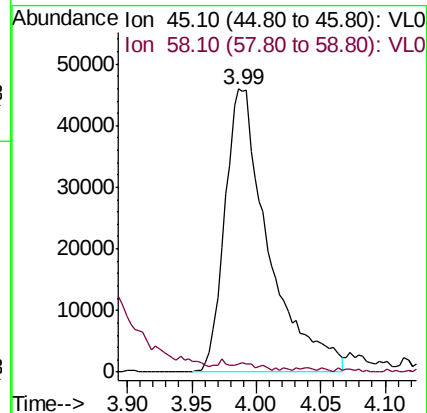
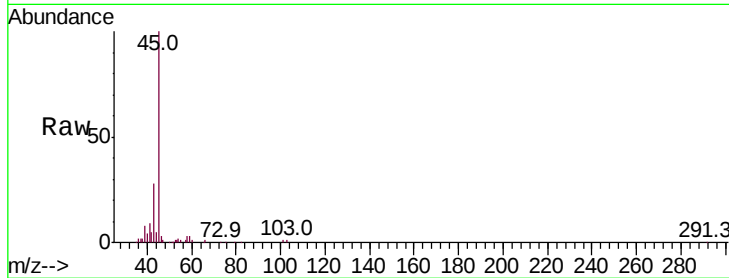
Acq: 17 Dec 2021 3:30

Tot Ion: 45 Resp: 108295

Ion Ratio Lower Upper

45 100

58 3.1 1.4 2.0#



#20

Methylene Chloride

Concen: 1.255 ppbv

RT: 4.35 min Scan# 487

Delta R.T. 0.01 min

Lab File: VL038208.D

Acq: 17 Dec 2021 3:36

Tgt Ion: 84 Resp: 46312

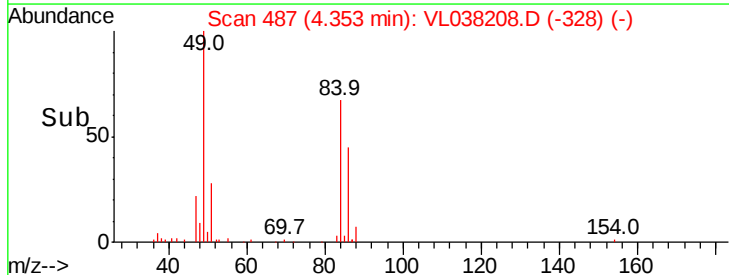
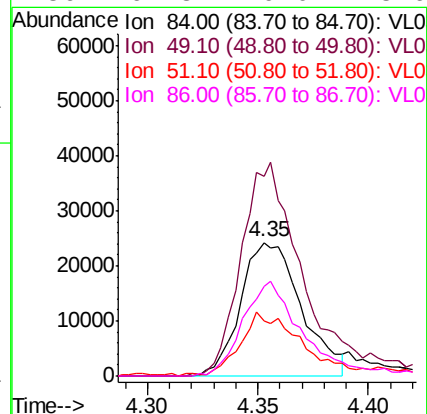
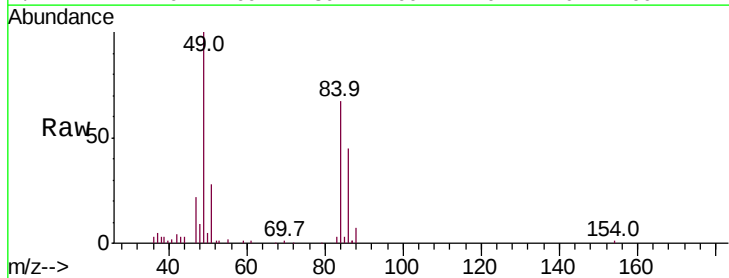
Ion Ratio Lower Upper

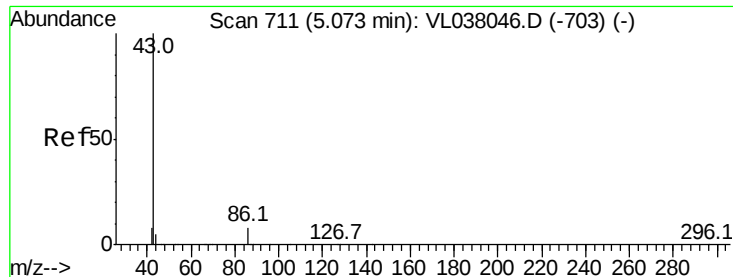
84 100

49 148.1 118.2 177.2

51 39.6 36.8 55.2

86 67.3 49.0 73.6





#23

Vinyl Acetate

Concen: 0.040 ppbv

RT: 5.12 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 17 Dec 2021 3:30

Tot Ion: 43 Resp: 3846

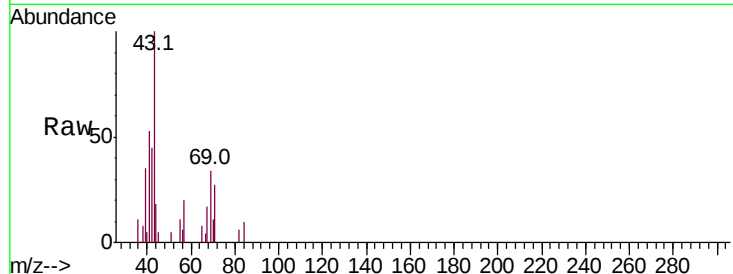
Ion Ratio Lower Upper

43 100

86 0.0 5.3 7.9#

42 57.2 7.0 10.6#

44 8.9 4.0 6.0#

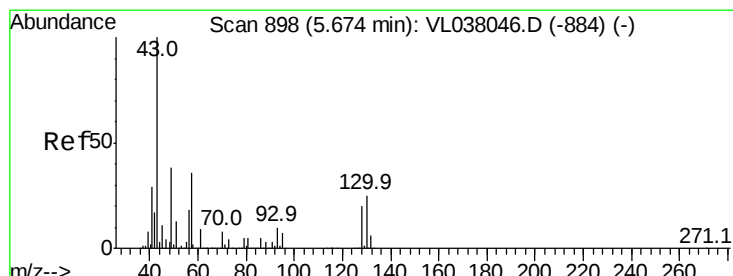
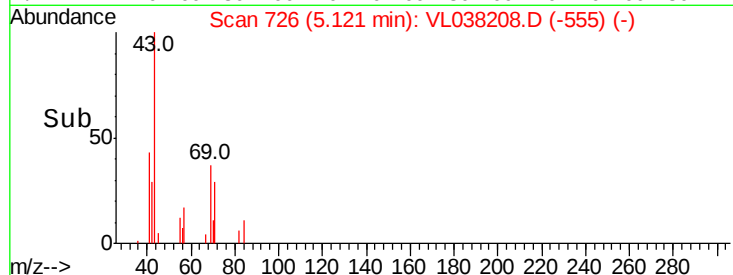
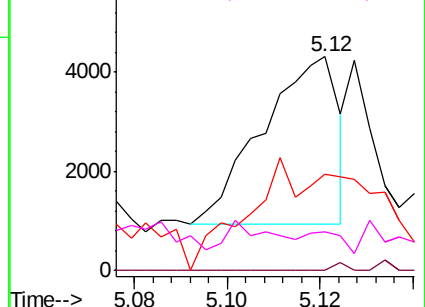


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.140 ppbv

RT: 5.69 min Scan# 904

Delta R.T. 0.02 min

Lab File: VL038208.D

Acq: 17 Dec 2021 3:36

Tgt Ion: 43 Resp: 30752

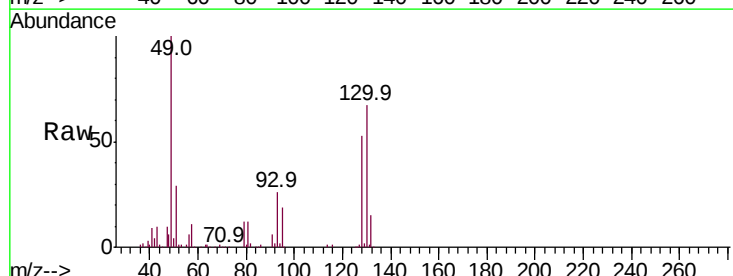
Ion Ratio Lower Upper

43 100

45 5.5 7.9 11.9#

61 3.8 7.8 11.6#

70 4.6 5.8 8.8#

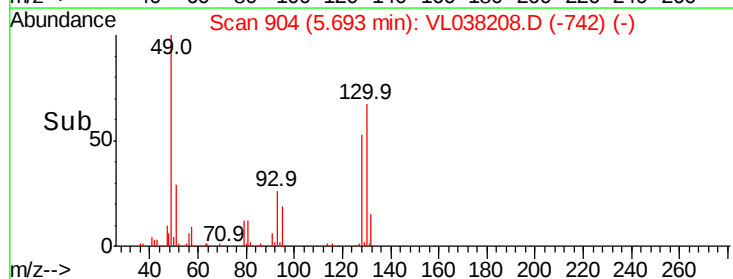
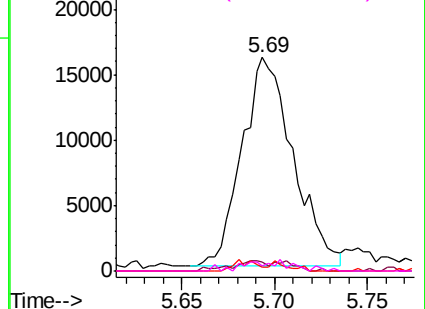


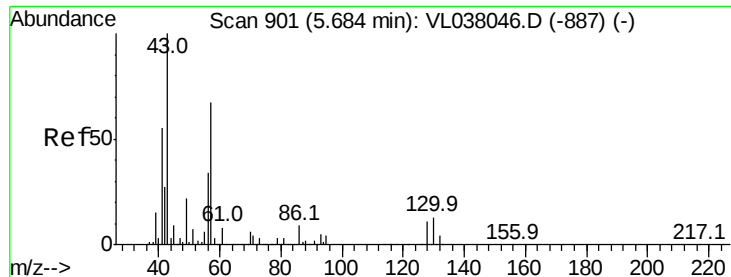
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

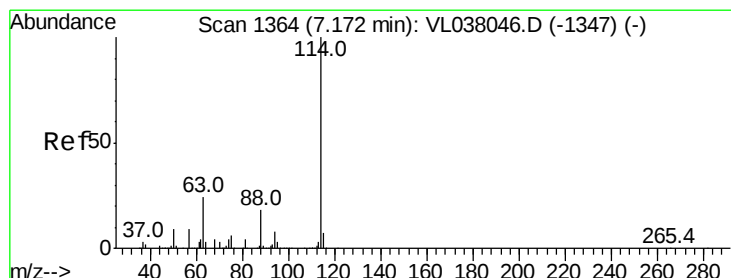
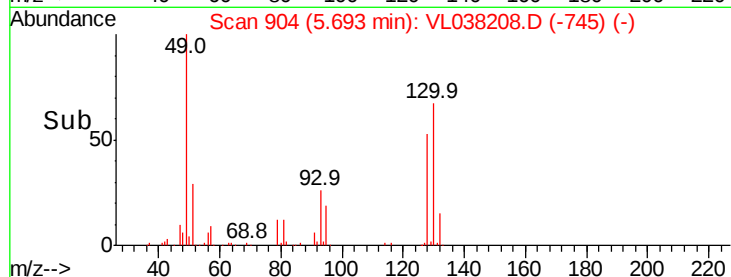
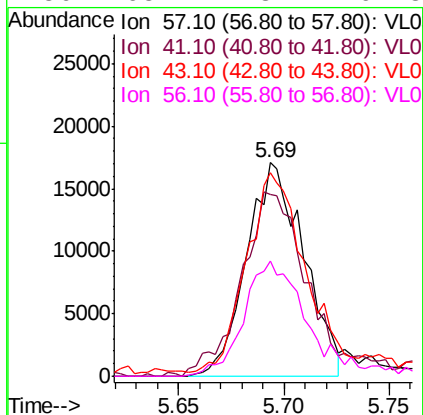
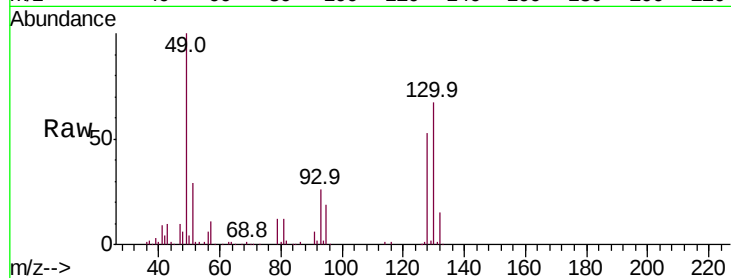
Ion 70.10 (69.80 to 70.80): VL0





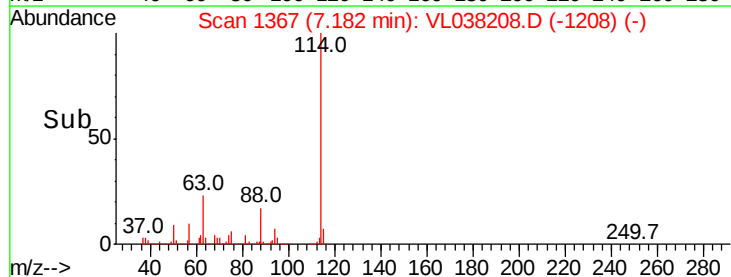
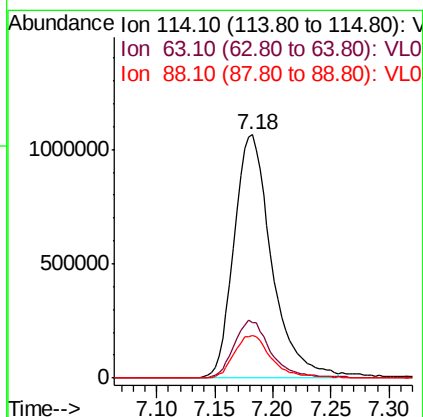
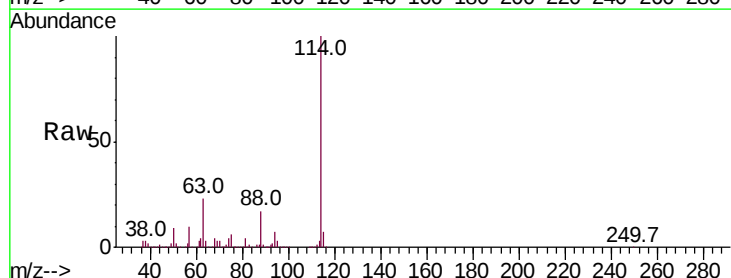
#26
Hexane
Concen: 0.306 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 17 Dec 2021 3:30

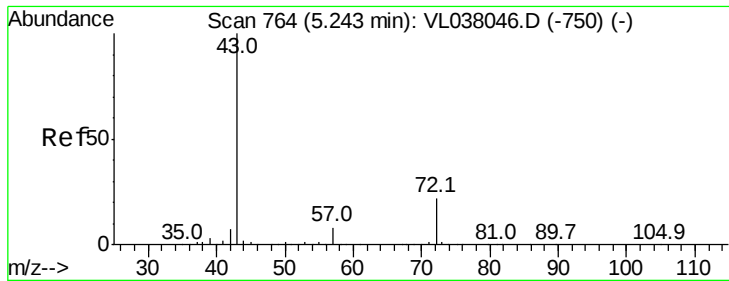
Tot Ion: 57 Resp: 32292
Ion Ratio Lower Upper
57 100
41 104.1 71.4 107.2
43 102.8 174.6 261.8#
56 65.4 43.2 64.8#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1367
Delta R.T. 0.01 min
Lab File: VL038208.D
Acq: 17 Dec 2021 3:36

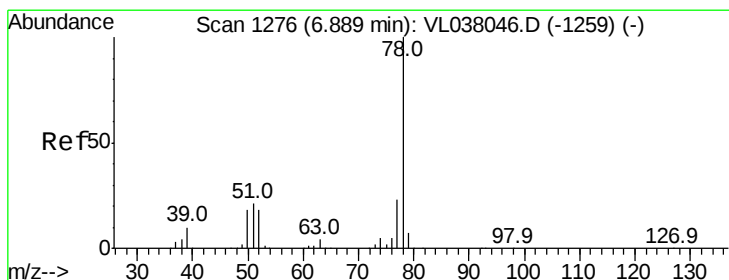
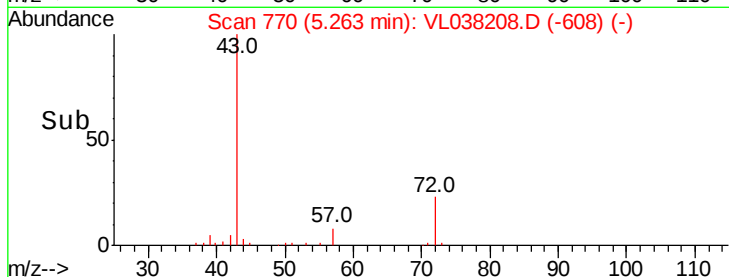
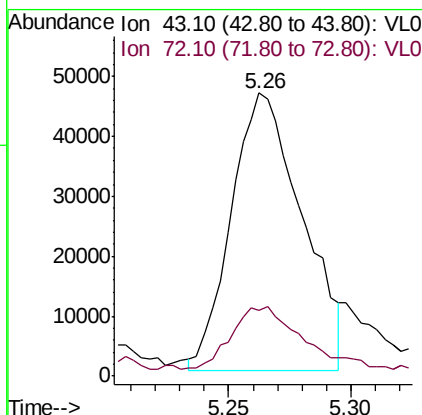
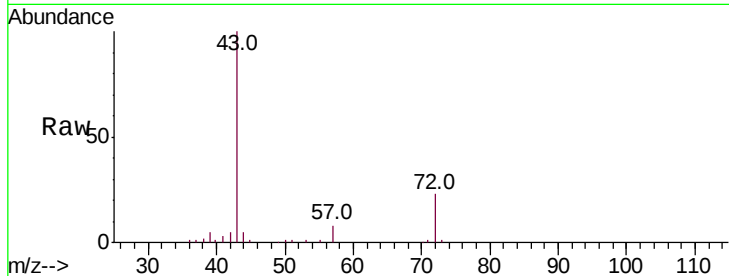
Tgt Ion: 114 Resp: 2404343
Ion Ratio Lower Upper
114 100
63 23.7 19.7 29.5
88 17.7 14.4 21.6





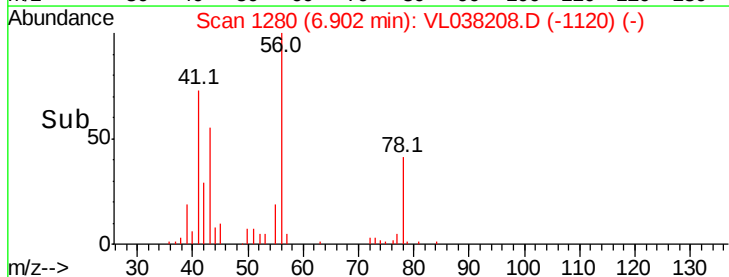
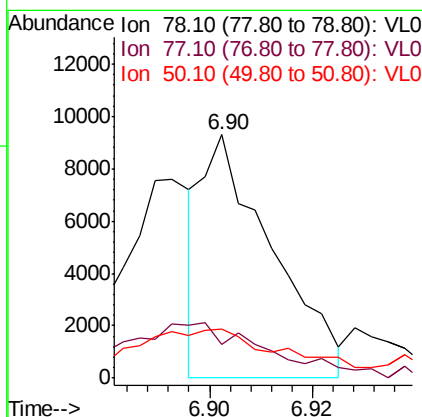
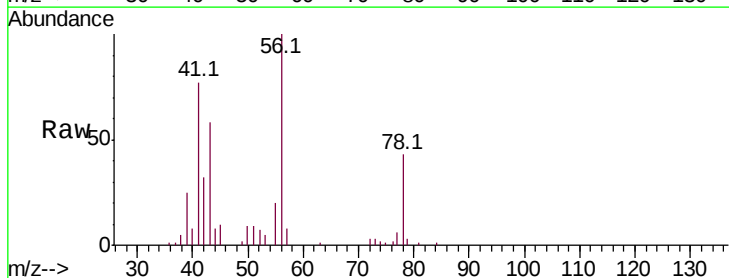
#34
 2-Butanone
 Concen: 0.958 ppbv
 RT: 5.26
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 17 Dec 2021 3:30

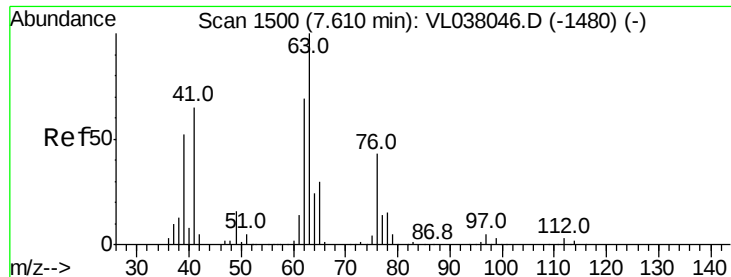
Tot Ion: 43 Resp: 92861
 Ion Ratio Lower Upper
 43 100
 72 32.5 18.8 28.2#



#36
 Benzene
 Concen: 0.037 ppbv
 RT: 6.90 min Scan# 1280
 Delta R.T. 0.01 min
 Lab File: VL038208.D
 Acq: 17 Dec 2021 3:36

Tgt Ion: 78 Resp: 8786
 Ion Ratio Lower Upper
 78 100
 77 9.9 18.2 27.4#
 50 12.4 14.7 22.1#





#39

1,2-Dichloropropane

Concen: 5.960 ppbv

RT: 7.18 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 17 Dec 2021 3:30

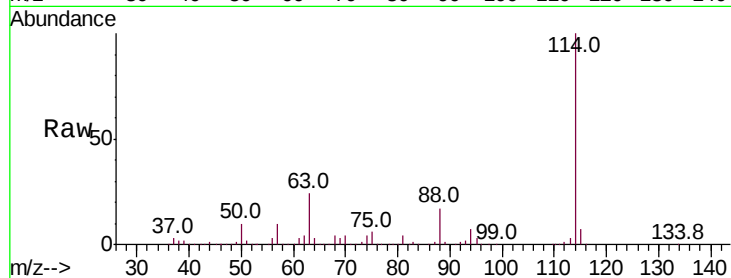
Tot Ion: 63 Resp: 548354

Ion Ratio Lower Upper

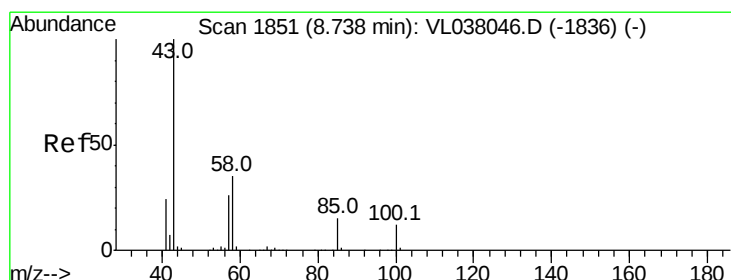
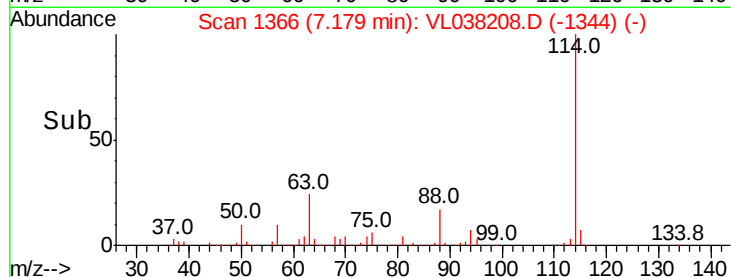
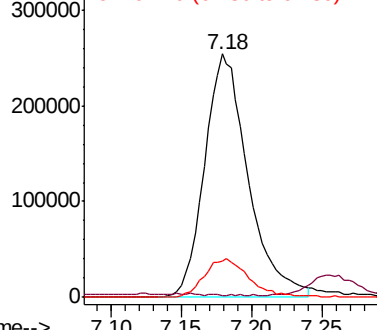
63 100

41 0.0 52.3 78.5#

62 14.7 55.1 82.7#



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



#50

4-Methyl-2-Pentanone

Concen: 0.160 ppbv

RT: 8.77 min Scan# 1861

Delta R.T. 0.03 min

Lab File: VL038208.D

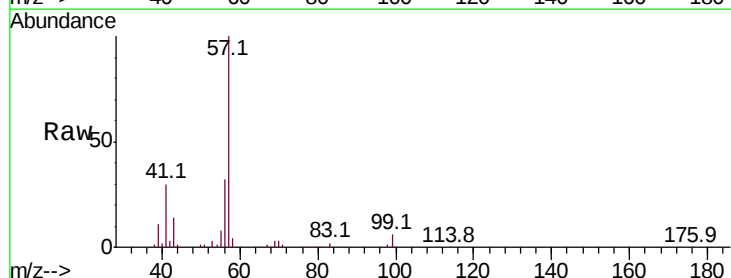
Acq: 17 Dec 2021 3:36

Tgt Ion: 43 Resp: 23628

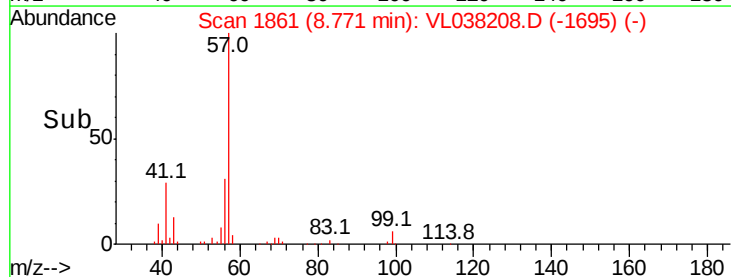
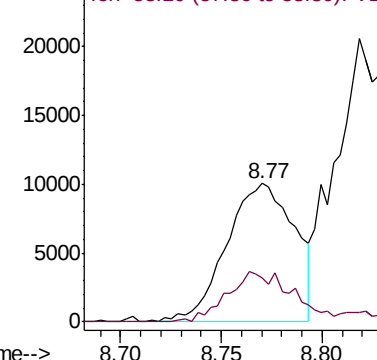
Ion Ratio Lower Upper

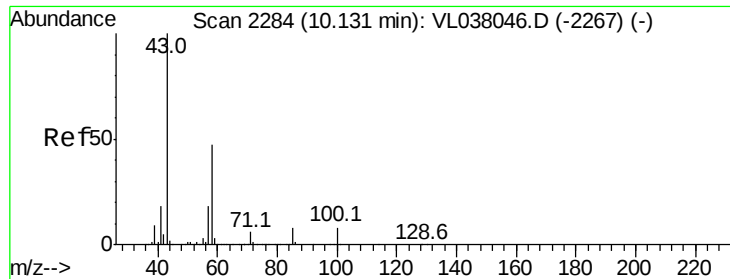
43 100

58 40.2 29.4 44.2



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 11.834 ppbv

RT: 10.12

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 17 Dec 2021 3:30

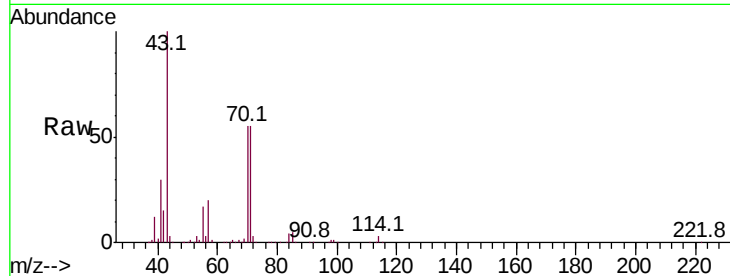
Tot Ion: 43 Resp: 819756

Ion Ratio Lower Upper

43 100

58 0.0 41.1 61.7#

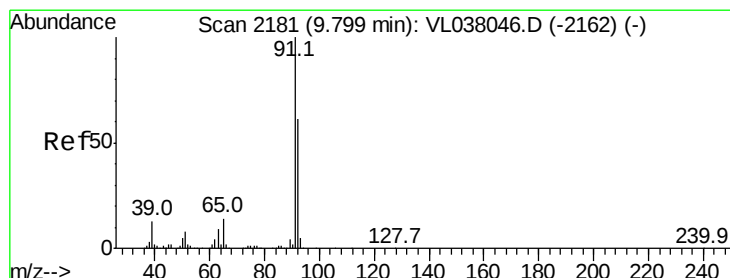
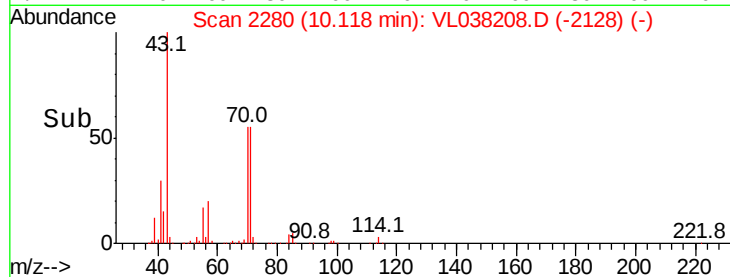
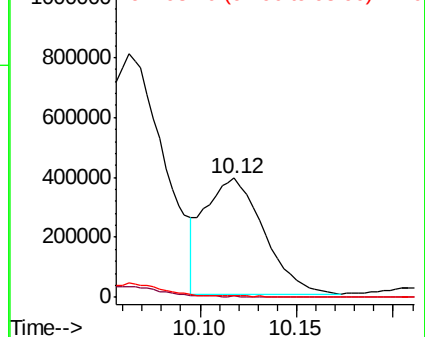
98 0.0 0.1 0.1#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0



#53

Toluene

Concen: 0.084 ppbv

RT: 9.82 min Scan# 2186

Delta R.T. 0.02 min

Lab File: VL038208.D

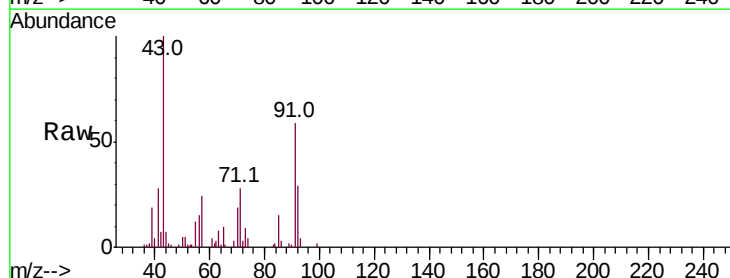
Acq: 17 Dec 2021 3:36

Tgt Ion: 91 Resp: 23170

Ion Ratio Lower Upper

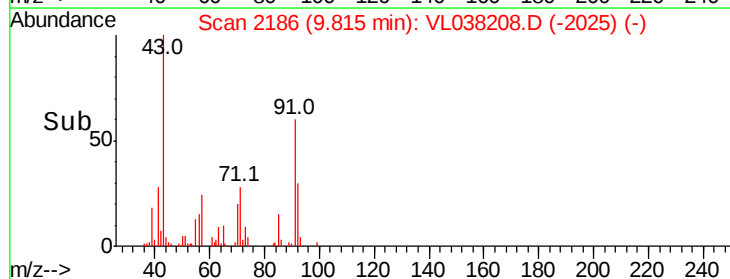
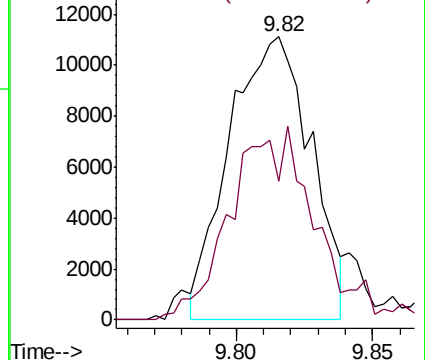
91 100

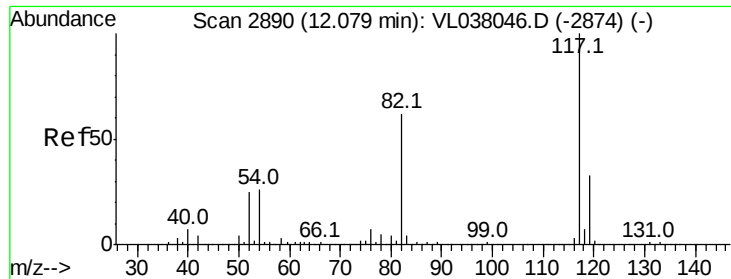
92 71.5 49.7 74.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

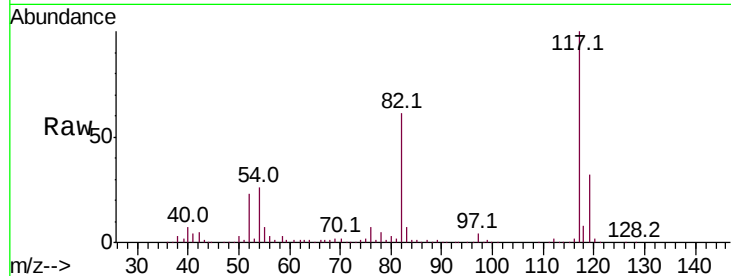




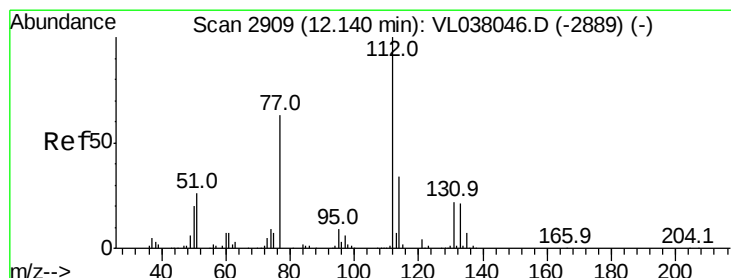
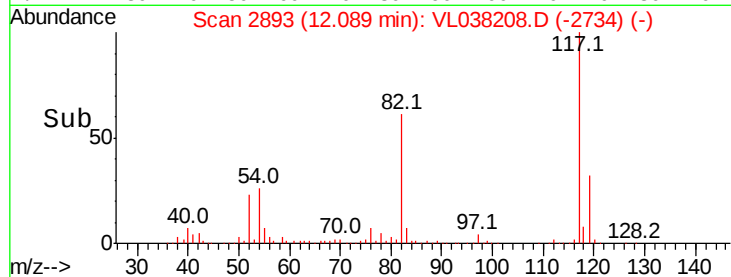
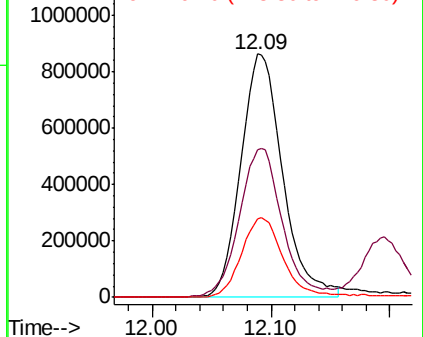
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 17 Dec 2021 3:30

Tot Ion:117 Resp: 2100852

Ion	Ratio	Lower	Upper
117	100		
82	63.4	52.8	79.2
119	34.4	26.8	40.2



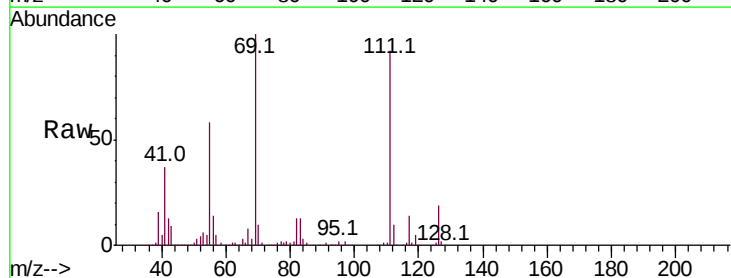
Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V



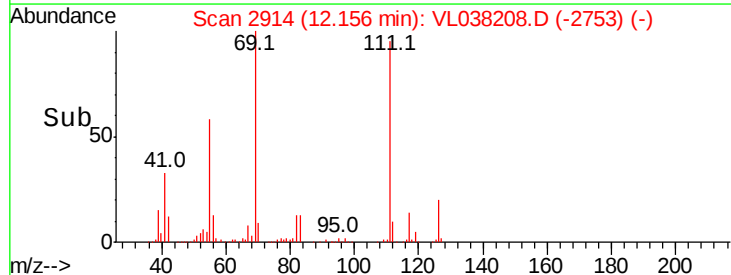
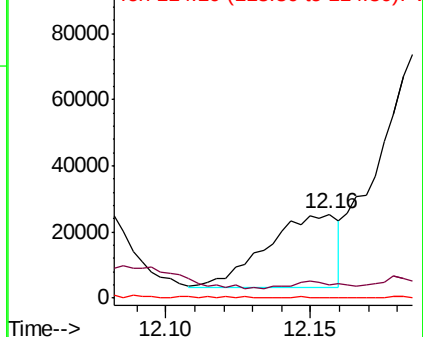
#57
Chlorobenzene
Concen: 0.202 ppbv
RT: 12.16 min Scan# 2914
Delta R.T. 0.02 min
Lab File: VL038208.D
Acq: 17 Dec 2021 3:36

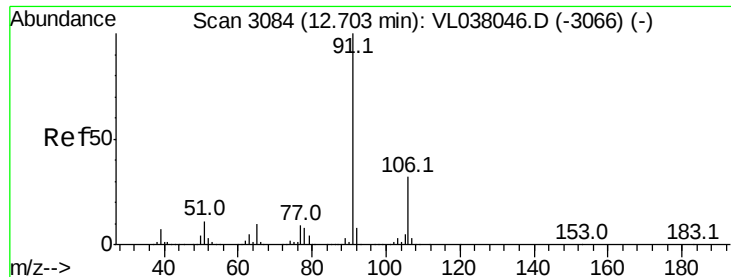
Tgt Ion:112 Resp: 38117

Ion	Ratio	Lower	Upper
112	100		
77	0.0	50.3	75.5#
114	0.0	30.7	37.5#



Abundance Ion 112.10 (111.80 to 112.80): V
Ion 77.10 (76.80 to 77.80): VL0
Ion 114.10 (113.80 to 114.80): V





#58

Ethyl Benzene

Concen: 2.550 ppbv

RT: 12.72

Delta R.T. MSVOA_L

Lab File:

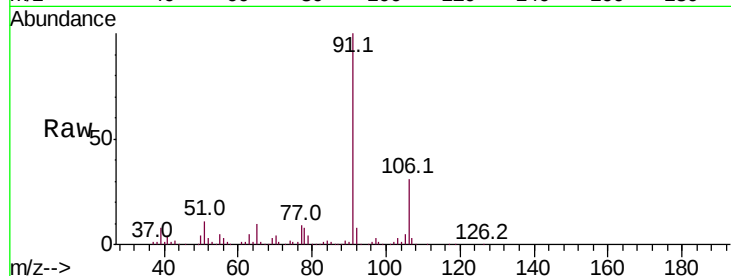
Acq: 17 Dec 2021 3:30

Tot Ion: 91 Resp: 885367

Ion Ratio Lower Upper

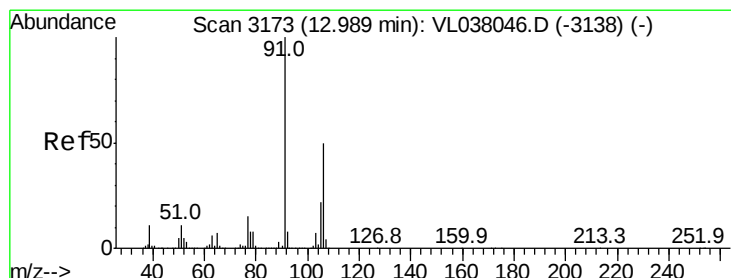
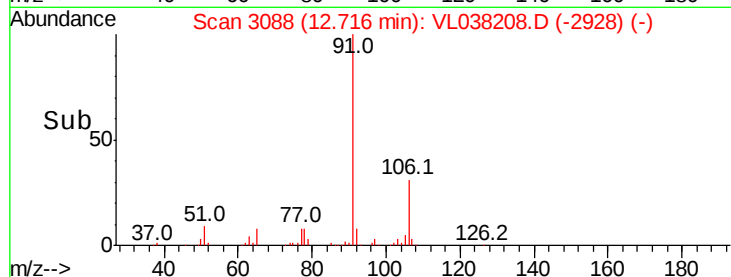
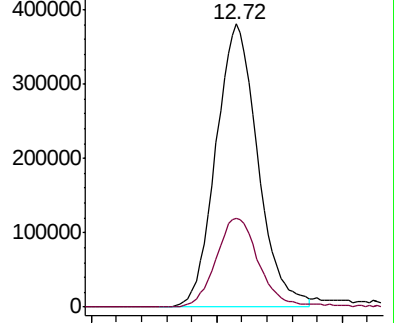
91 100

106 31.3 25.8 38.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 4.707 ppbv

RT: 12.97 min Scan# 3167

Delta R.T. -0.02 min

Lab File: VL038208.D

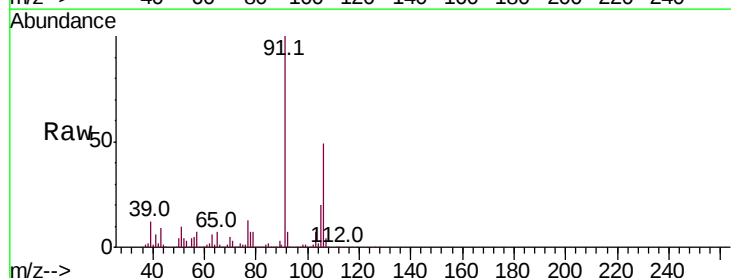
Acq: 17 Dec 2021 3:36

Tgt Ion: 91 Resp: 1375973

Ion Ratio Lower Upper

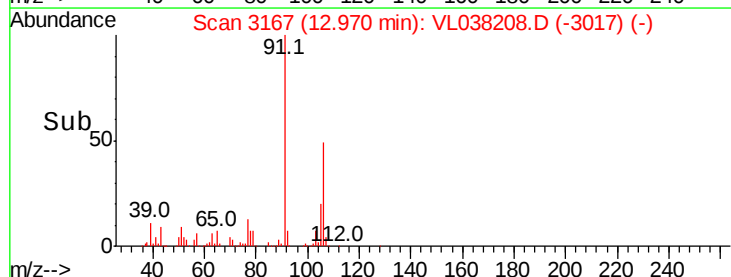
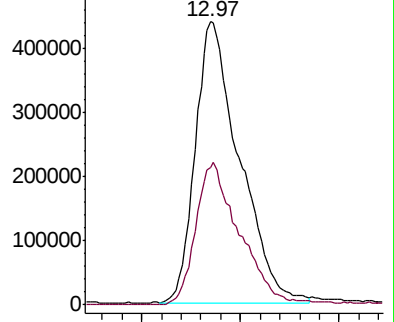
91 100

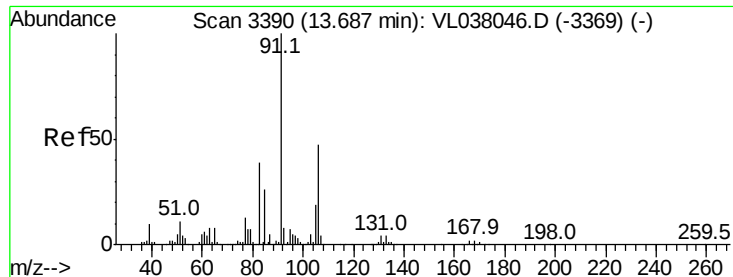
106 51.2 38.1 57.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

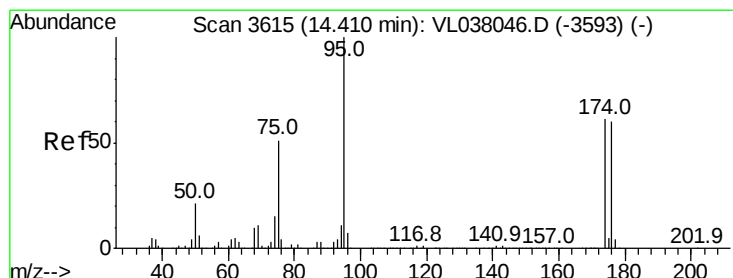
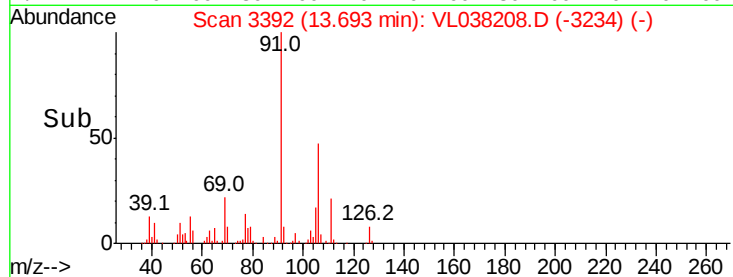
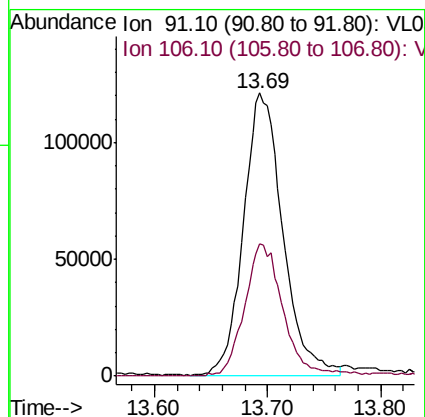
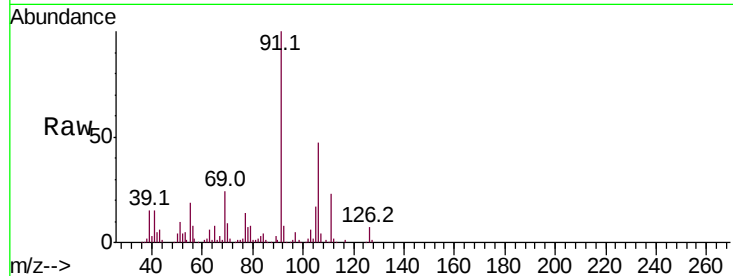
Ion 106.10 (105.80 to 106.80): V





#60
o-Xylene
Concen: 1.079 ppbv
RT: 13.69 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 17 Dec 2021 3:30

Tot Ion: 91 Resp: 292518
Ion Ratio Lower Upper
91 100
106 47.9 24.2 72.6



#68
1-Bromo-4-Fluorobenzene
Concen: 10.406 ppbv
RT: 14.42 min Scan# 3618
Delta R.T. 0.01 min
Lab File: VL038208.D
Acq: 17 Dec 2021 3:36

Tgt Ion: 95 Resp: 1576962
Ion Ratio Lower Upper
95 100
174 67.4 53.1 79.7
175 4.7 4.0 6.0

