

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032822\
 Data File : VL038777.D
 Acq On : 28 Mar 2022 18:58
 Operator : SY/AP
 Sample : N2078-05
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 V-9

Quant Time: Mar 29 06:11:38 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 21 17:09:26 2022
 QLast Update : Mon Mar 21 17:09:26 2022
 Response via : Initial Calibration

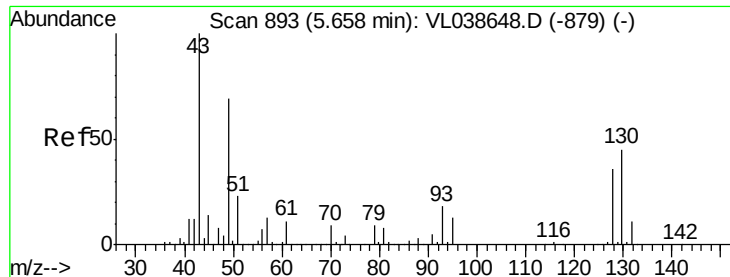
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	771379	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2043412	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	1693060	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1268519	9.77	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.70%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.06	85	50531	0.487 ppbv	95
3) Chlorodifluoromethane	3.00	51	31809	0.390 ppbv	93
4) Chloromethane	3.14	50	24473	0.547 ppbv	98
9) Propene	3.03	41	25338	0.644 ppbv	84
10) Heptane	8.13	43	5682	0.060 ppbv	86
11) Trichlorofluoromethane	3.96	101	28692	0.313 ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.49	101	6161	0.087 ppbv	92
13) Ethanol	3.61	45	118120	27.224 ppbv	99
15) Acetone	3.85	43	277452	4.168 ppbv	98
16) 1,3-Butadiene	3.31	39	11008	0.291 ppbv #	34
17) tert-Butyl alcohol	4.31	59	2696	0.046 ppbv #	73
19) Isopropyl Alcohol	3.98	45	15277	0.414 ppbv #	49
20) Methylene Chloride	4.35	84	311226	11.101 ppbv	98
23) Vinyl Acetate	5.07	43	18059	0.280 ppbv #	60
25) Ethyl Acetate	5.69	43	152449	0.910 ppbv #	85
26) Hexane	5.69	57	205719	2.742 ppbv #	40
27) Carbon Disulfide	4.56	76	2233	0.030 ppbv #	71
34) 2-Butanone	5.25	43	36209	0.448 ppbv #	86
35) Carbon Tetrachloride	7.02	117	8076	0.068 ppbv #	77
36) Benzene	6.89	78	33002	0.209 ppbv	93
39) 1,2-Dichloropropane	7.17	63	470231	7.627 ppbv #	29
44) 2,2,4-Trimethylpentane	7.87	57	17206	0.065 ppbv #	47
53) Toluene	9.80	91	108827	0.642 ppbv	95
60) o-Xylene	13.68	91	4935	0.030 ppbv #	57

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 28 Mar 2022 18:58

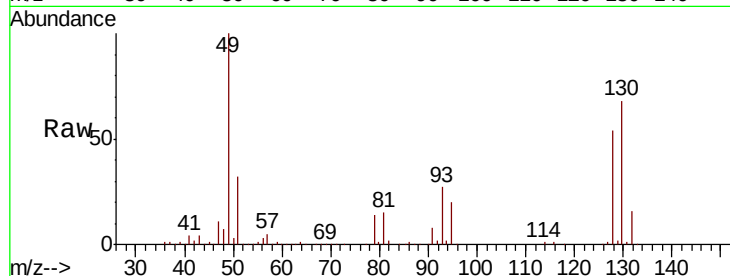
Tot Ion: 49 Resp: 771379

Ion Ratio Lower Upper

49 100

128 56.7 26.2 78.6

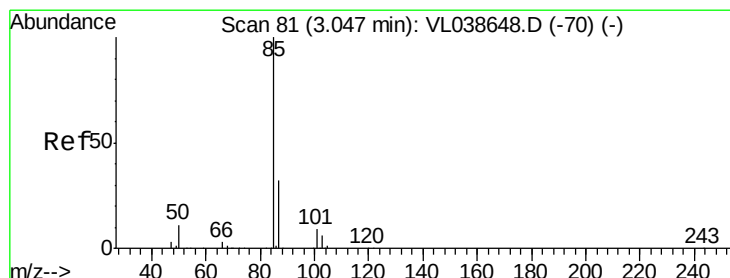
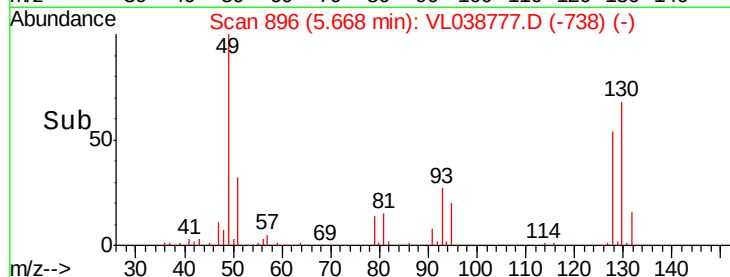
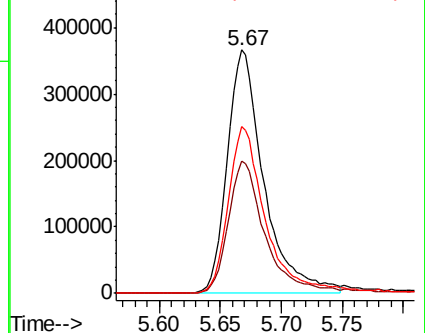
130 70.8 33.7 101.1



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: 0.487 ppbv

RT: 3.06 min Scan# 84

Delta R.T. 0.01 min

Lab File: VL038777.D

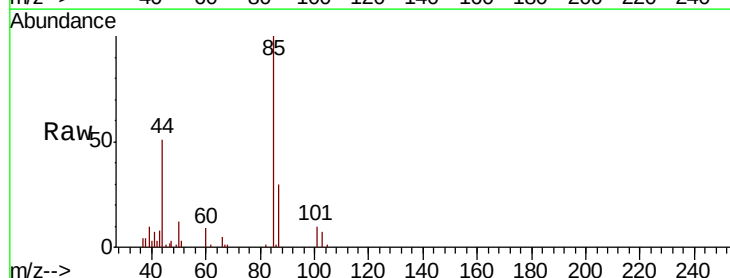
Acq: 28 Mar 2022 18:58

Tgt Ion: 85 Resp: 50531

Ion Ratio Lower Upper

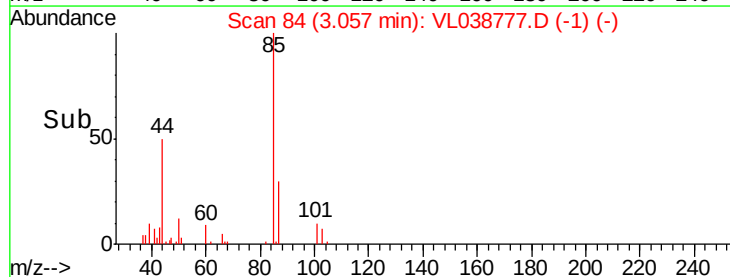
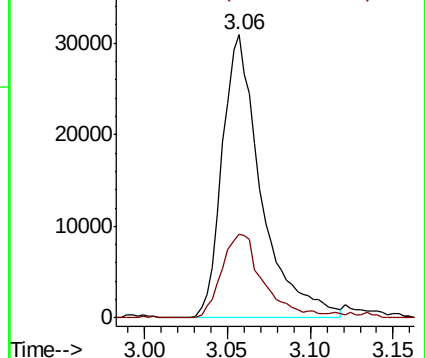
85 100

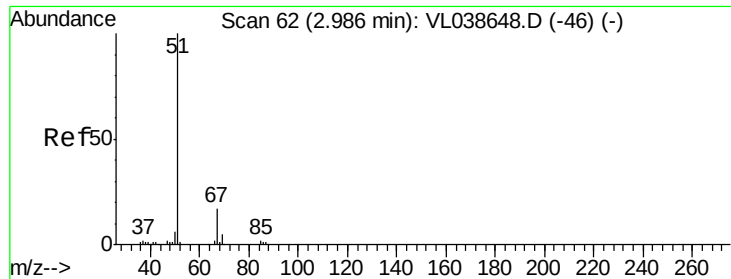
87 29.5 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

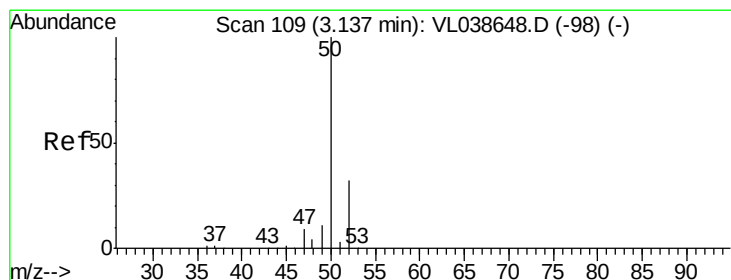
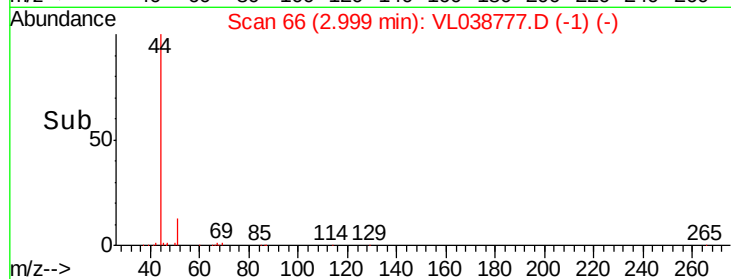
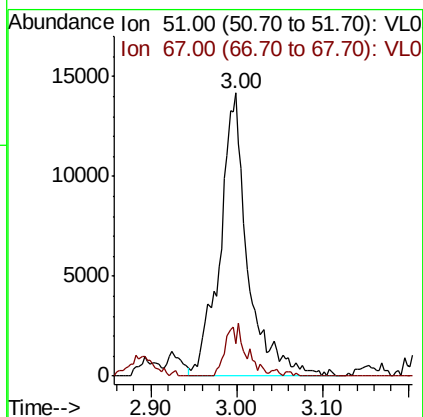
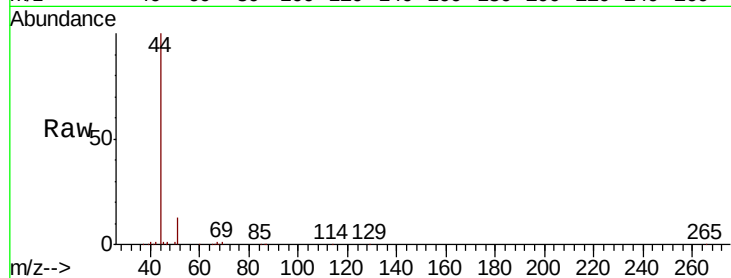
Ion 87.00 (86.70 to 87.70): VL0





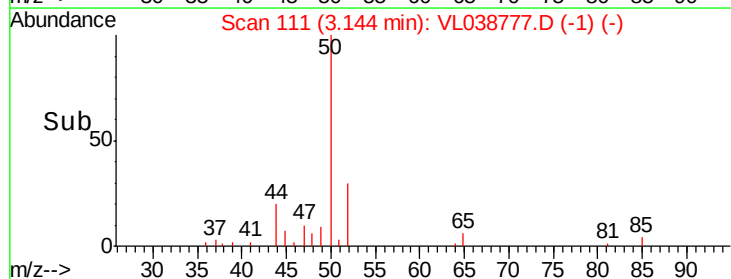
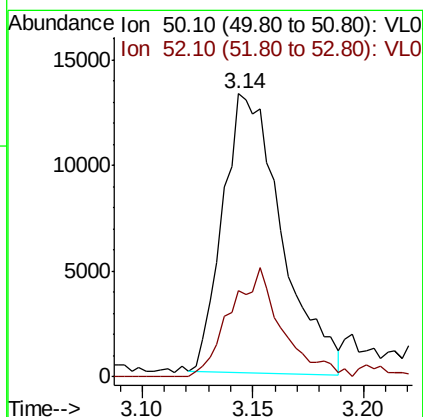
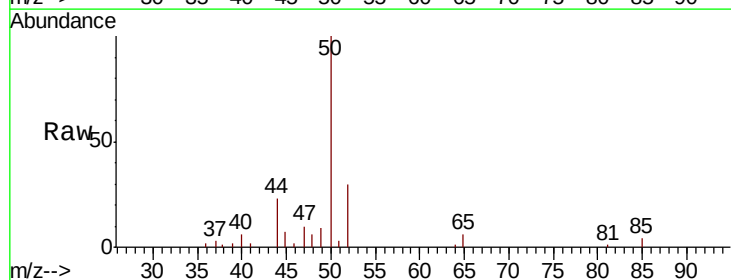
#3
 Chlorodifluoromethane
 Concen: 0.390 ppbv
 RT: 3.00
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 V-9
 Acq: 28 Mar 2022 18:58

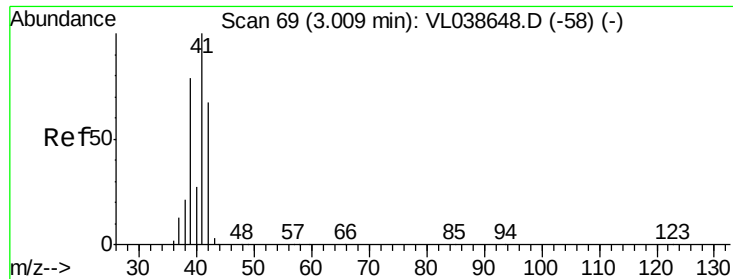
Tot Ion: 51 Resp: 31809
 Ion Ratio Lower Upper
 51 100
 67 14.6 14.1 21.1



#4
 Chloromethane
 Concen: 0.547 ppbv
 RT: 3.14 min Scan# 111
 Delta R.T. 0.01 min
 Lab File: VL038777.D
 Acq: 28 Mar 2022 18:58

Tgt Ion: 50 Resp: 24473
 Ion Ratio Lower Upper
 50 100
 52 30.8 25.5 38.3





#9

Propene

Concen: 0.644 ppbv

RT: 3.03 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId :

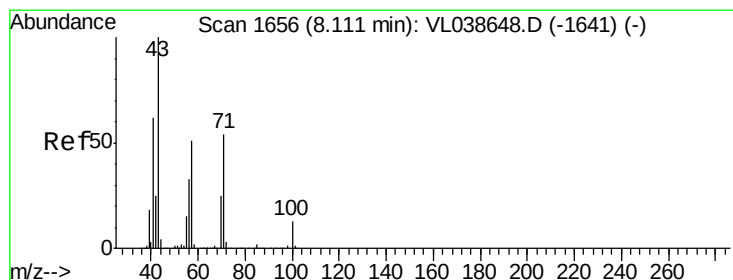
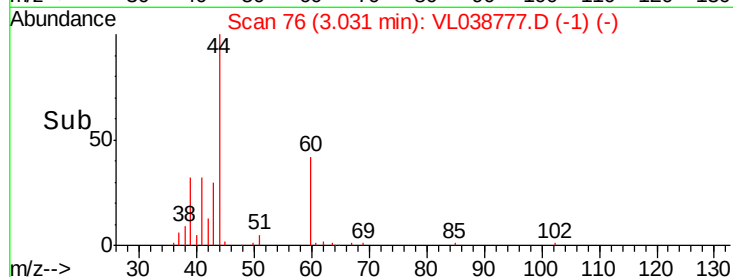
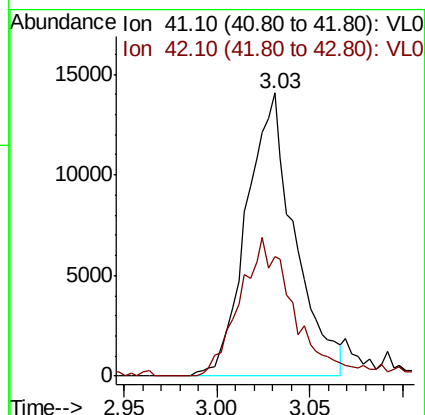
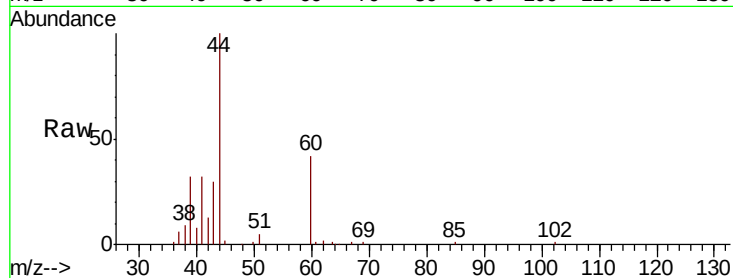
Acq: 28 Mar 2022 18:58

Tot Ion: 41 Resp: 25338

Ion Ratio Lower Upper

41 100

42 57.1 56.2 84.4



#10

Heptane

Concen: 0.060 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. 0.02 min

Lab File: VL038777.D

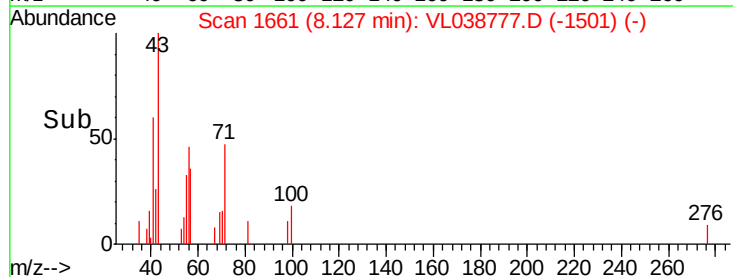
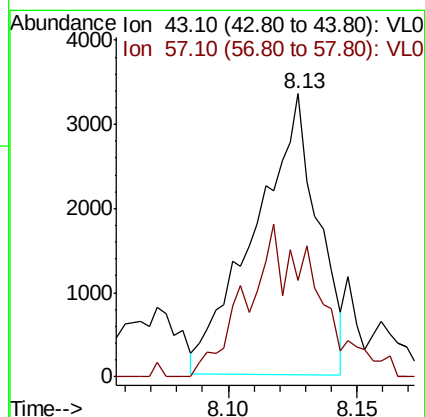
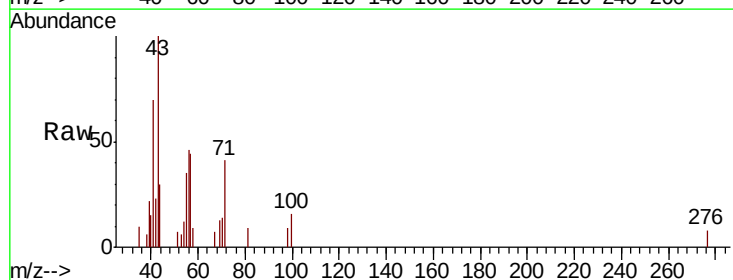
Acq: 28 Mar 2022 18:58

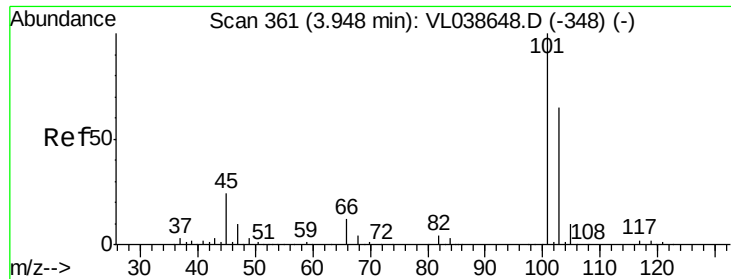
Tgt Ion: 43 Resp: 5682

Ion Ratio Lower Upper

43 100

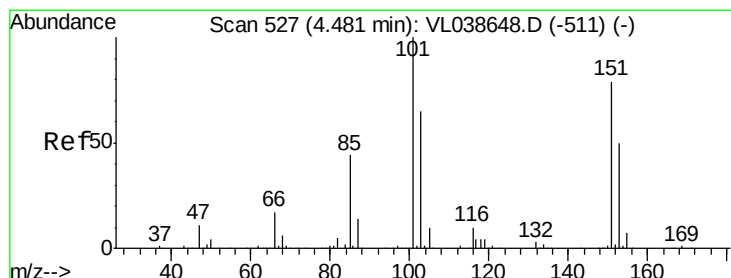
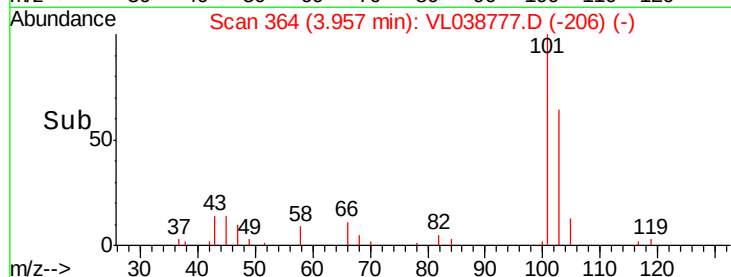
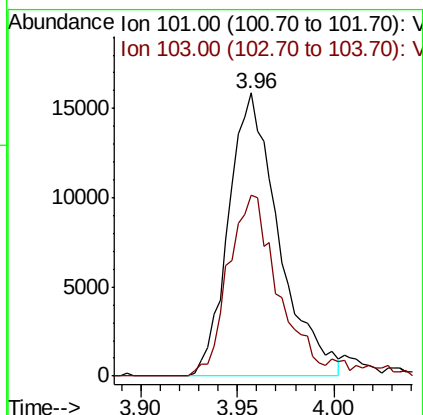
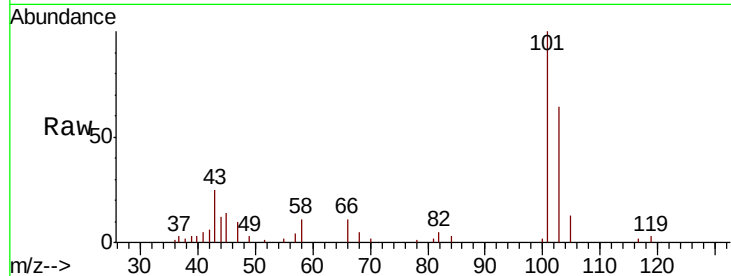
57 61.4 41.4 62.2





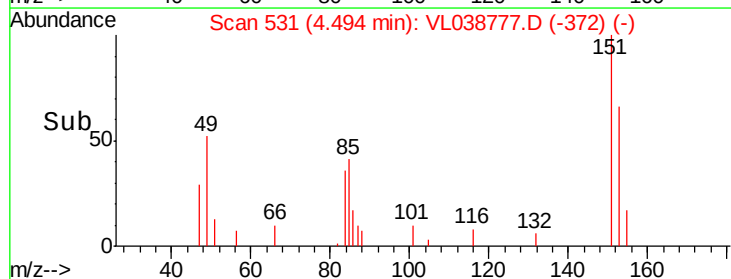
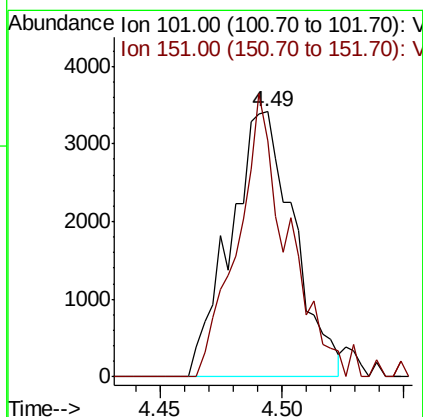
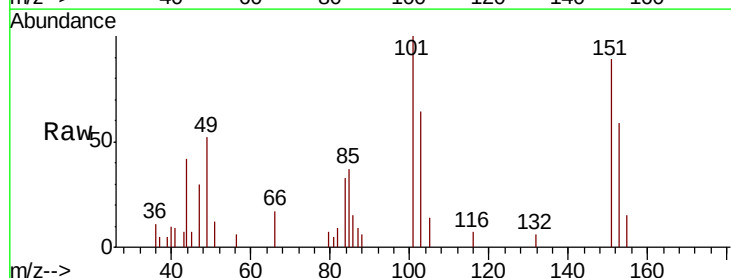
#11
 Trichlorofluoromethane
 Concen: 0.313 ppbv
 RT: 3.96
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 V-9
 Acq: 28 Mar 2022 18:58

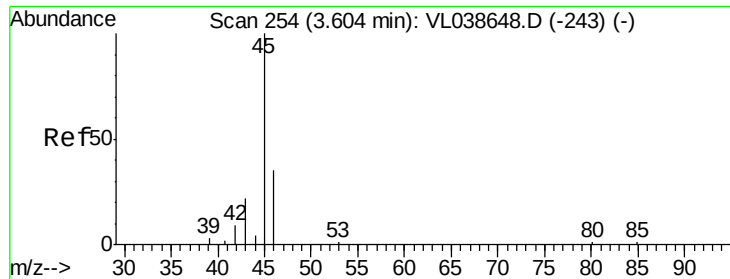
Tot Ion:101 Resp: 28692
 Ion Ratio Lower Upper
 101 100
 103 64.2 51.9 77.9



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.087 ppbv
 RT: 4.49 min Scan# 531
 Delta R.T. 0.01 min
 Lab File: VL038777.D
 Acq: 28 Mar 2022 18:58

Tgt Ion:101 Resp: 6161
 Ion Ratio Lower Upper
 101 100
 151 86.0 62.9 94.3





#13

Ethanol

Concen: 27.224 ppbv

RT: 3.61 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

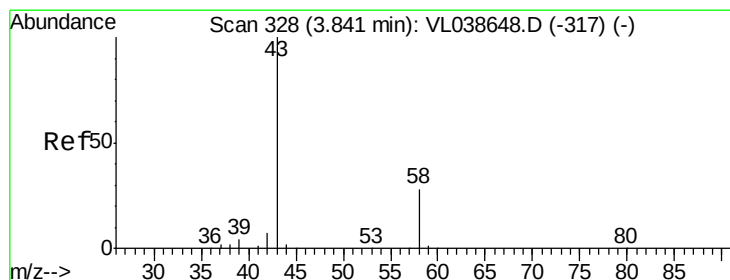
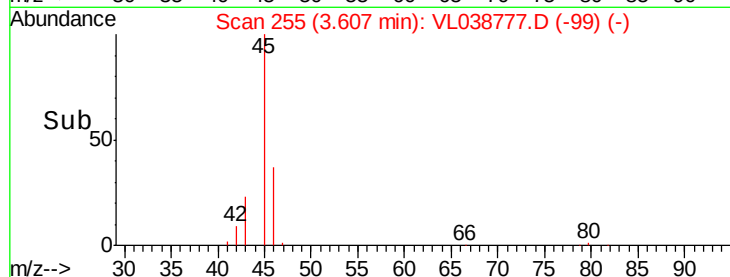
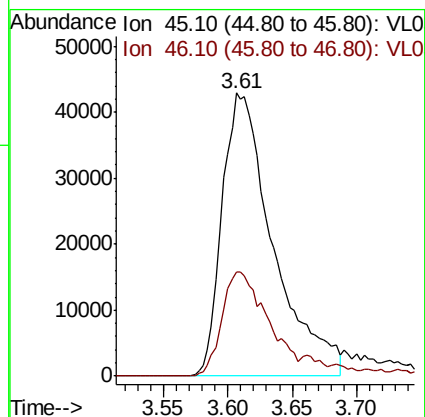
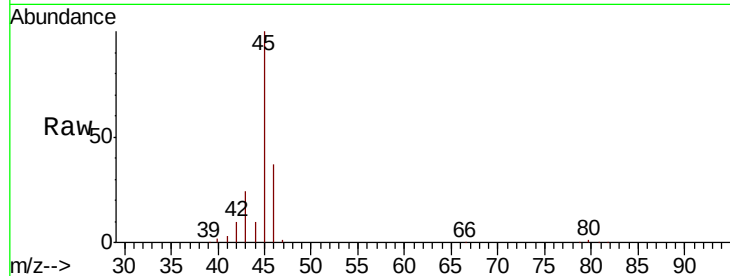
Acq: 28 Mar 2022 18:58

Tot Ion: 45 Resp: 118120

Ion Ratio Lower Upper

45 100

46 38.2 15.1 60.5



#15

Acetone

Concen: 4.168 ppbv

RT: 3.85 min Scan# 332

Delta R.T. 0.01 min

Lab File: VL038777.D

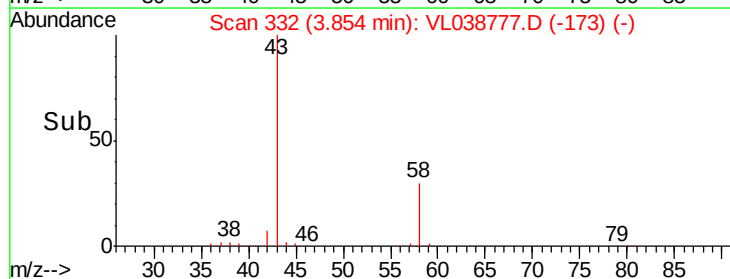
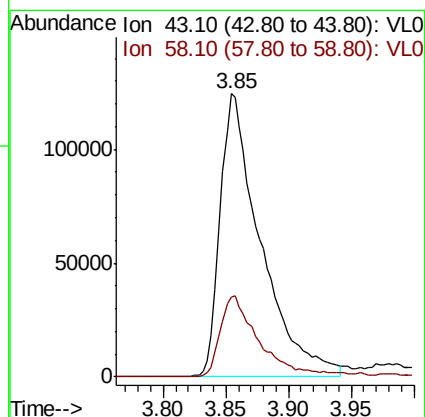
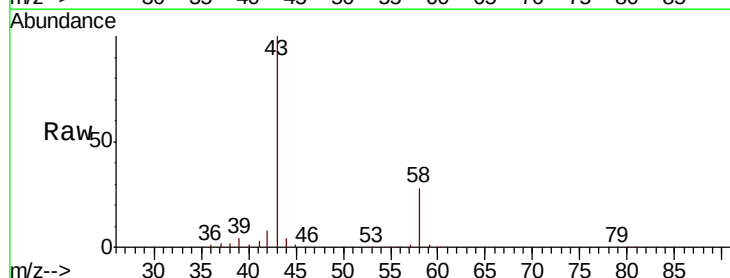
Acq: 28 Mar 2022 18:58

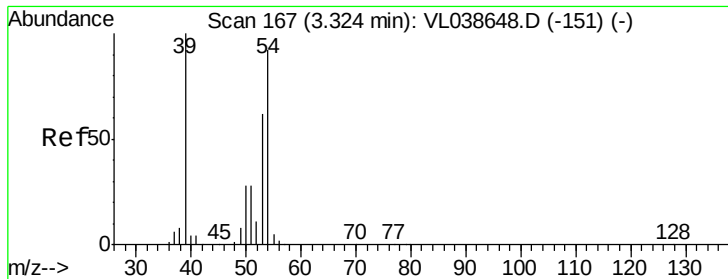
Tgt Ion: 43 Resp: 277452

Ion Ratio Lower Upper

43 100

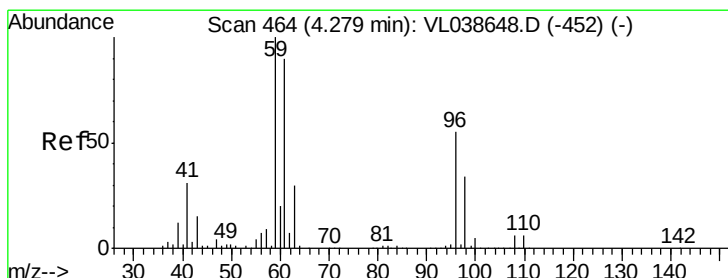
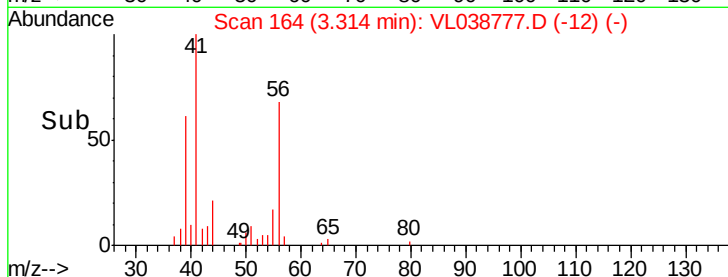
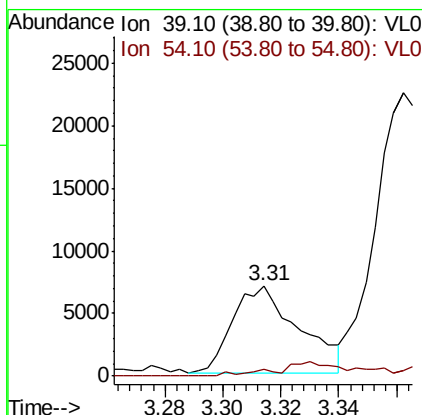
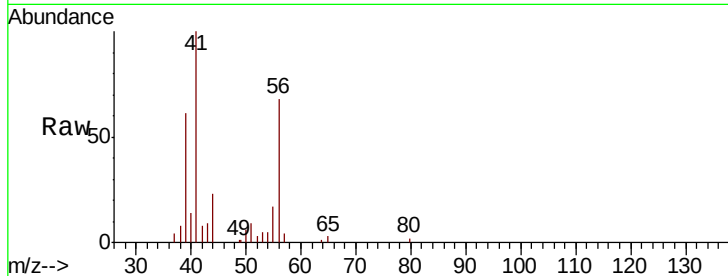
58 28.3 23.3 34.9





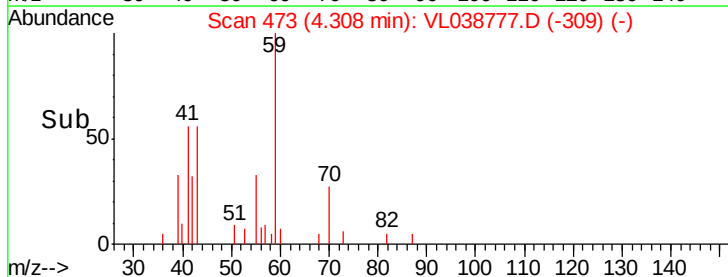
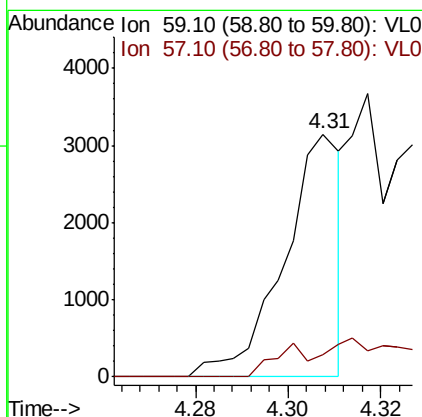
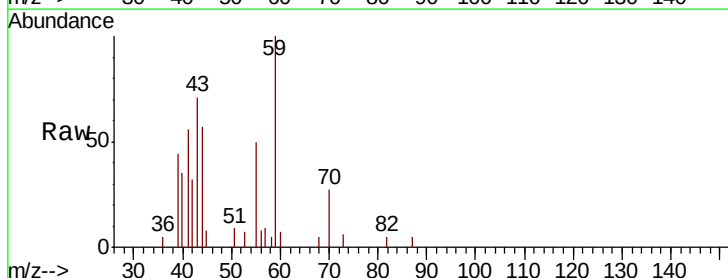
#16
 1,3-Butadiene
 Concen: 0.291 ppbv
 RT: 3.31 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 28 Mar 2022 18:58

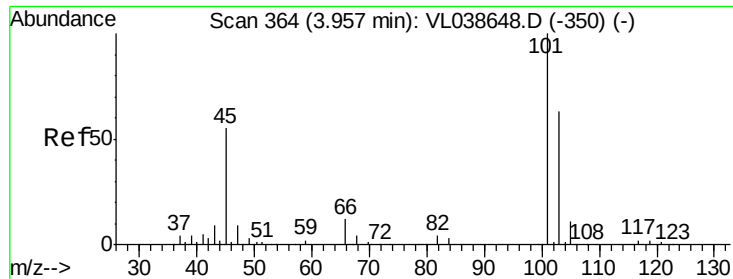
Tot Ion: 39 Resp: 11008
 Ion Ratio Lower Upper
 39 100
 54 25.3 69.1 103.7#



#17
 tert-Butyl alcohol
 Concen: 0.046 ppbv
 RT: 4.31 min Scan# 473
 Delta R.T. 0.03 min
 Lab File: VL038777.D
 Acq: 28 Mar 2022 18:58

Tgt Ion: 59 Resp: 2696
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.2 12.2#





#19

Isopropyl Alcohol

Concen: 0.414 ppbv

RT: 3.98 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

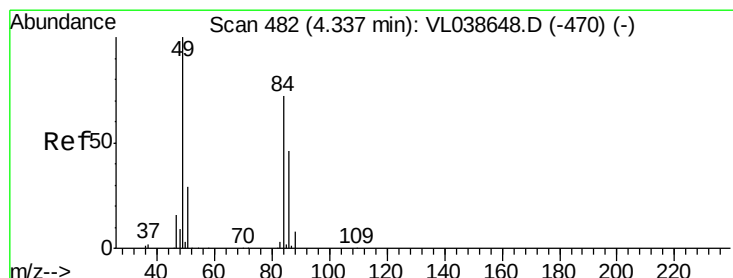
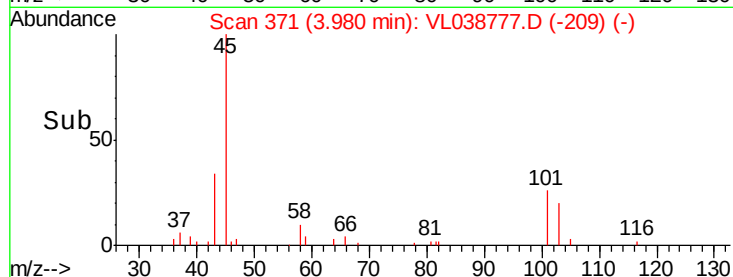
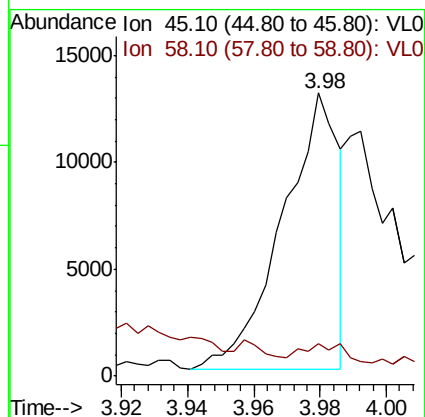
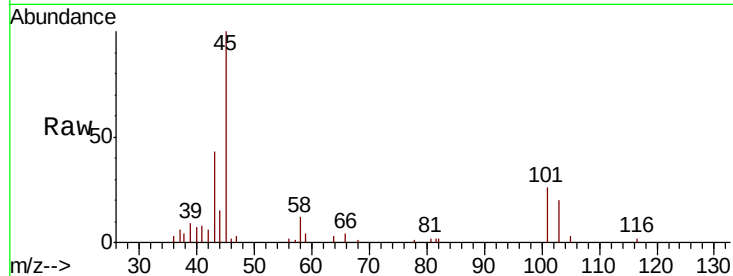
Acq: 28 Mar 2022 18:58

Tot Ion: 45 Resp: 15277

Ion Ratio Lower Upper

45 100

58 19.9 2.3 3.5#



#20

Methylene Chloride

Concen: 11.101 ppbv

RT: 4.35 min Scan# 485

Delta R.T. 0.01 min

Lab File: VL038777.D

Acq: 28 Mar 2022 18:58

Tgt Ion: 84 Resp: 311226

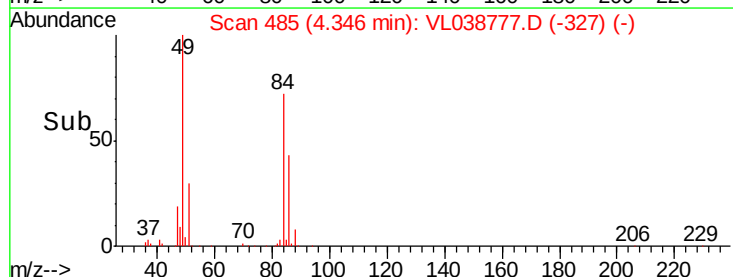
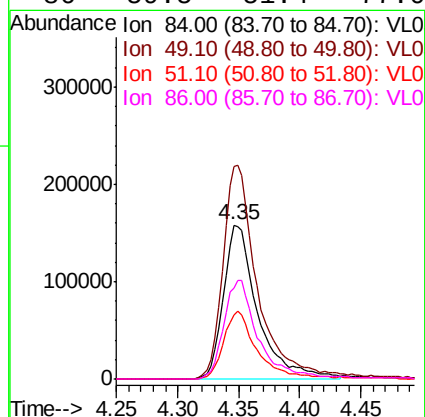
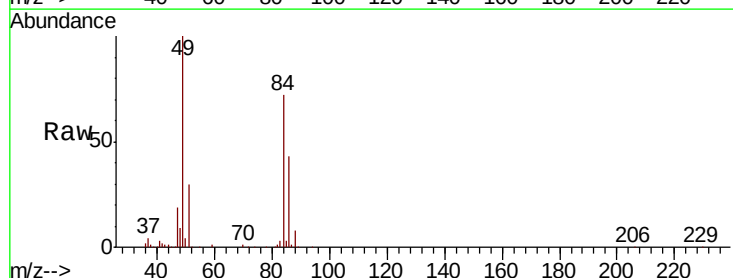
Ion Ratio Lower Upper

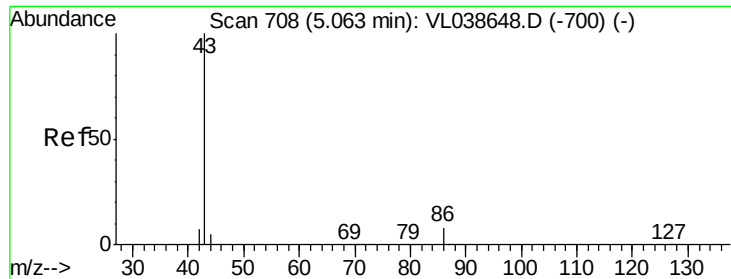
84 100

49 138.3 111.2 166.8

51 42.0 32.8 49.2

86 59.5 51.4 77.0





#23

Vinyl Acetate

Concen: 0.280 ppbv

RT: 5.07 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 28 Mar 2022 18:58

Tot Ion: 43 Resp: 18059

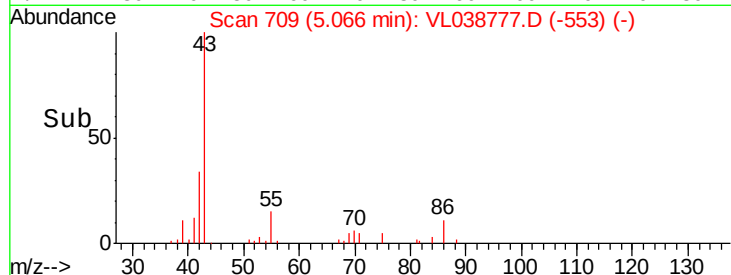
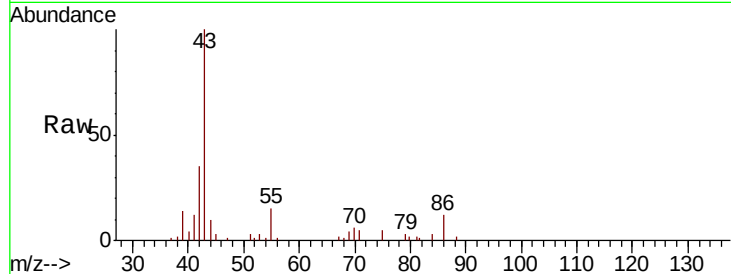
Ion Ratio Lower Upper

43 100

86 11.7 5.6 8.4#

42 35.9 6.8 10.2#

44 0.0 4.2 6.2#

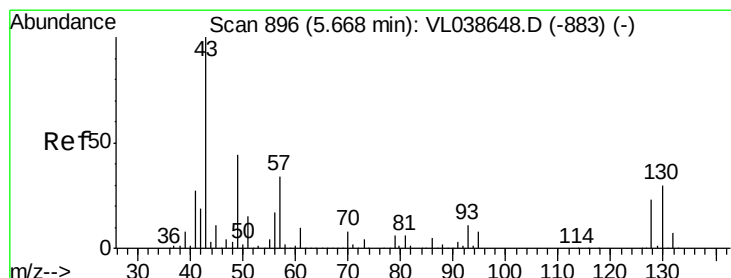
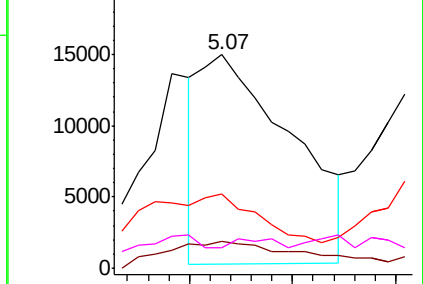


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.910 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.02 min

Lab File: VL038777.D

Acq: 28 Mar 2022 18:58

Tgt Ion: 43 Resp: 152449

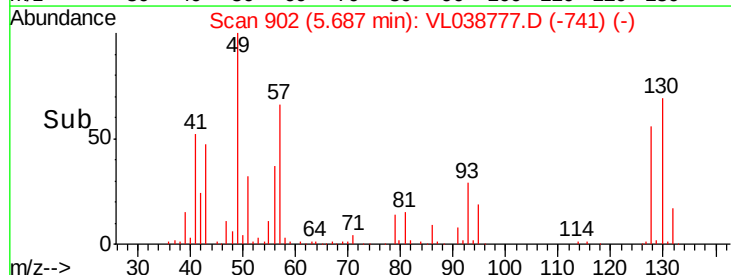
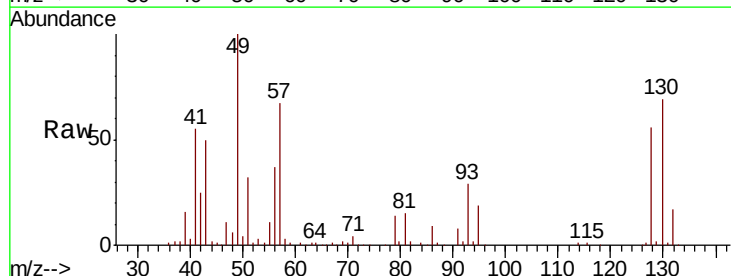
Ion Ratio Lower Upper

43 100

45 7.4 8.2 12.4#

61 1.7 8.3 12.5#

70 2.6 5.6 8.4#

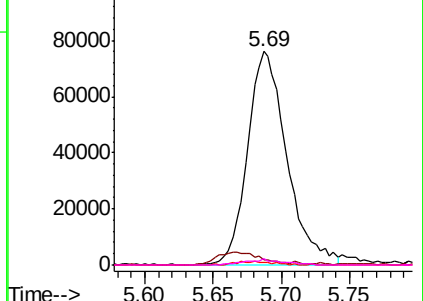


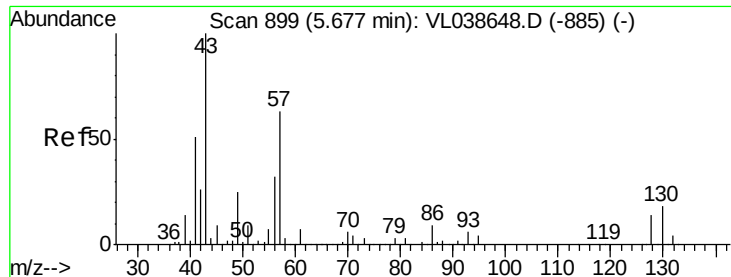
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

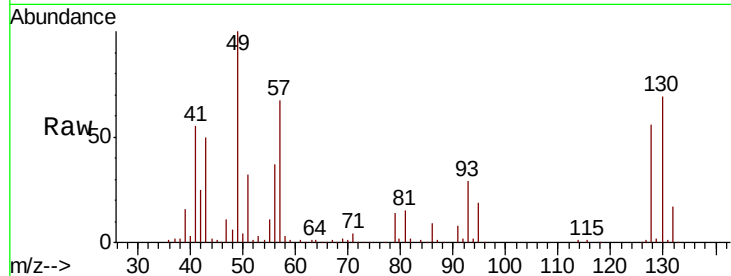
Ion 70.10 (69.80 to 70.80): VL0



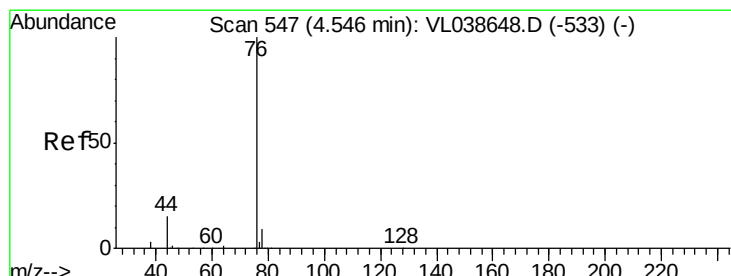
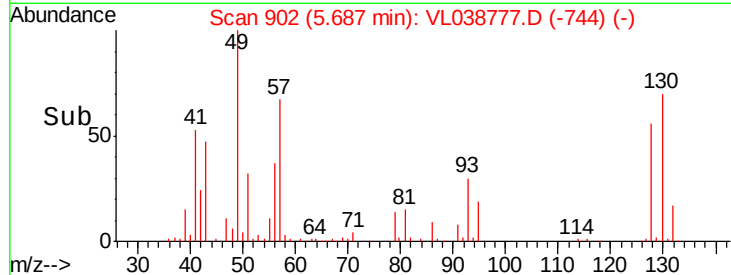
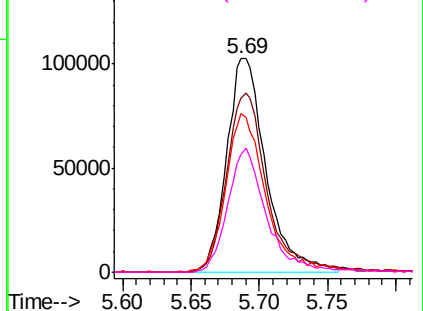


#26
Hexane
Concen: 2.742 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 28 Mar 2022 18:58

Tot Ion:	57	Resp:	205719
Ion	Ratio	Lower	Upper
57	100		
41	87.7	67.0	100.4
43	76.9	184.2	276.2#
56	57.3	42.6	64.0

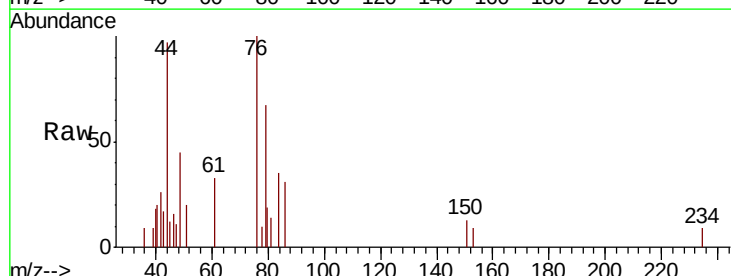


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

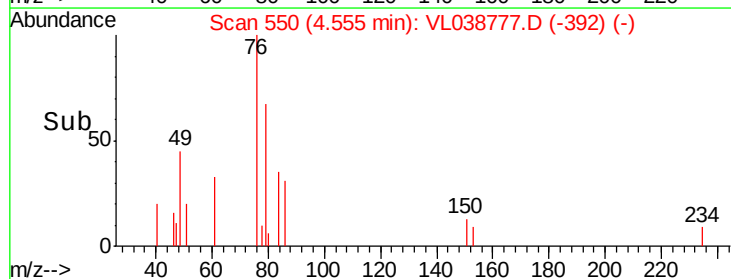
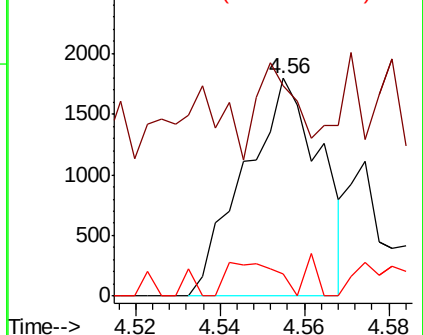


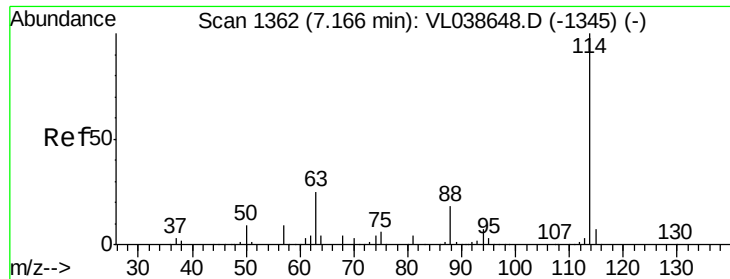
#27
Carbon Disulfide
Concen: 0.030 ppbv
RT: 4.56 min Scan# 550
Delta R.T. 0.01 min
Lab File: VL038777.D
Acq: 28 Mar 2022 18:58

Tgt Ion:	76	Resp:	2233
Ion	Ratio	Lower	Upper
76	100		
44	0.0	12.4	18.6#
78	15.5	7.8	11.8#



Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 28 Mar 2022 18:58

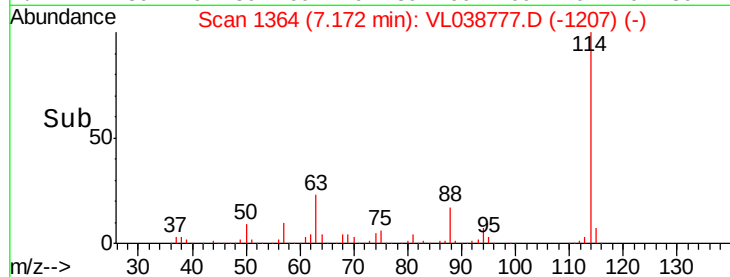
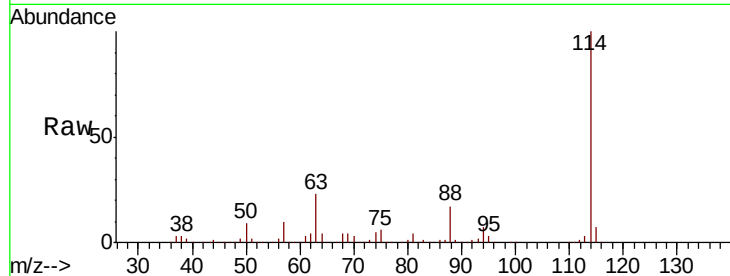
Tot Ion:114 Resp: 2043412

Ion Ratio Lower Upper

114 100

63 23.5 19.4 29.0

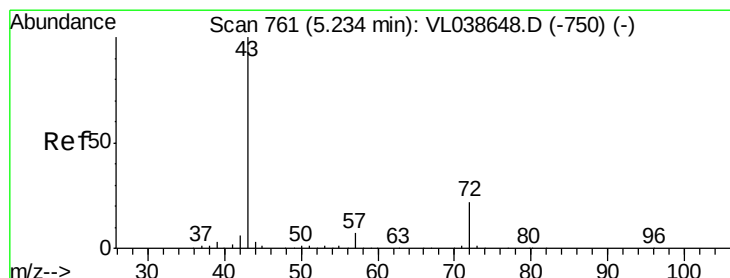
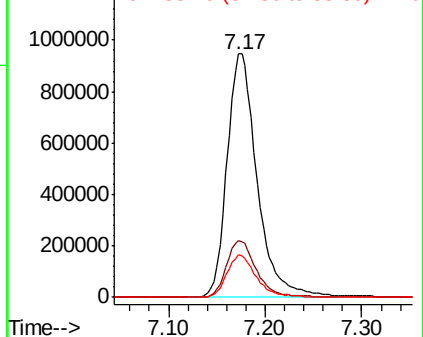
88 17.3 13.9 20.9



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: 0.448 ppbv

RT: 5.25 min Scan# 766

Delta R.T. 0.02 min

Lab File: VL038777.D

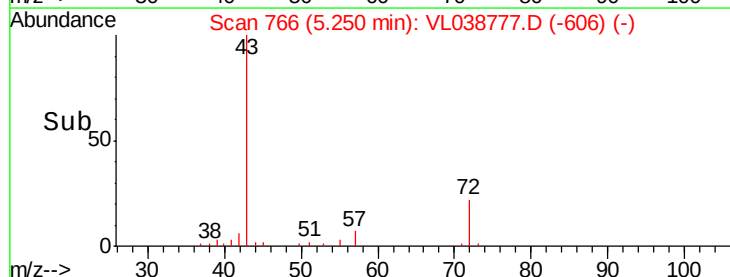
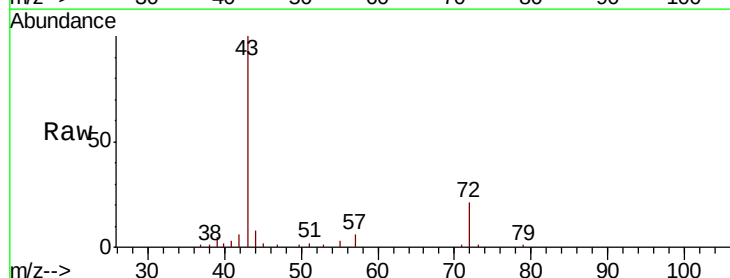
Acq: 28 Mar 2022 18:58

Tgt Ion: 43 Resp: 36209

Ion Ratio Lower Upper

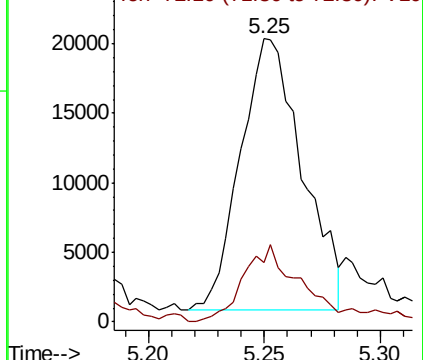
43 100

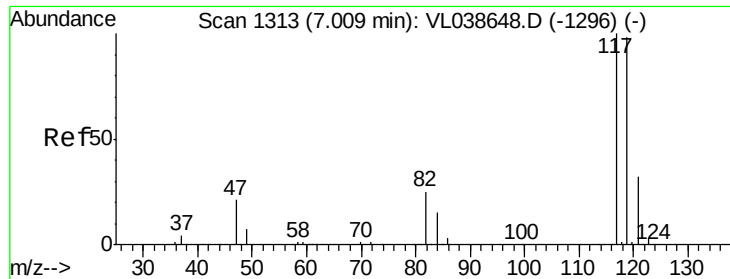
72 29.0 17.8 26.8#



Abundance Ion 43.10 (42.80 to 43.80): VL0

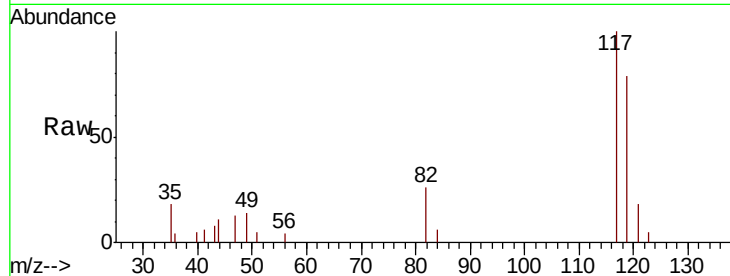
Ion 72.10 (71.80 to 72.80): VL0



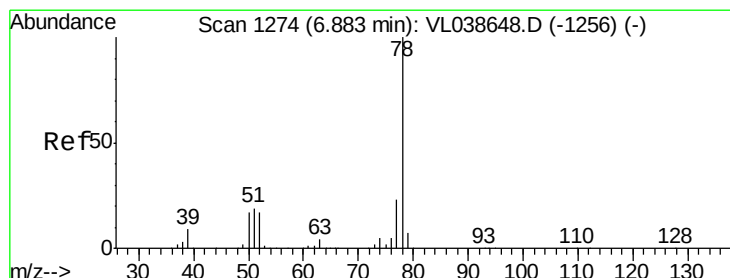
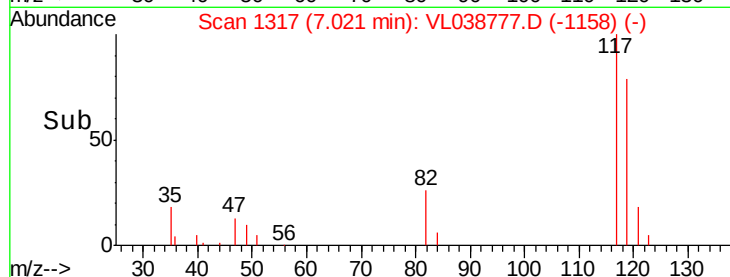
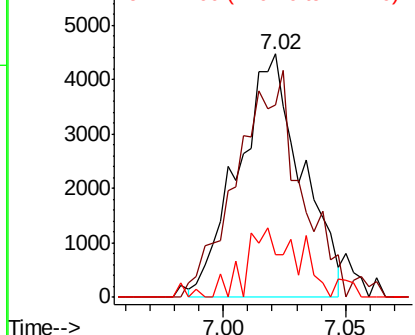


#35
Carbon Tetrachloride
Concen: 0.068 ppbv
RT: 7.02
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 28 Mar 2022 18:58

Tot Ion:117 Resp: 8076
Ion Ratio Lower Upper
117 100
119 76.0 78.1 117.1#
121 18.2 25.8 38.6#

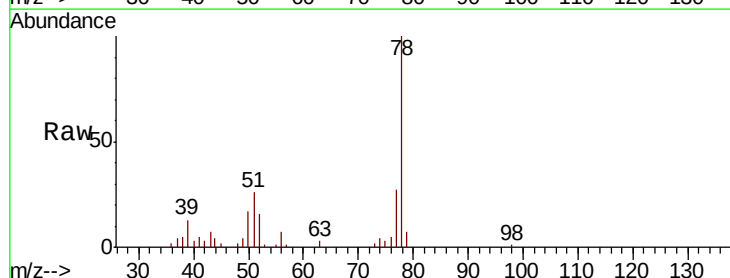


Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V

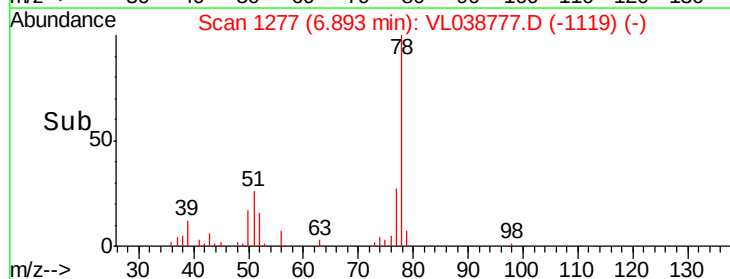
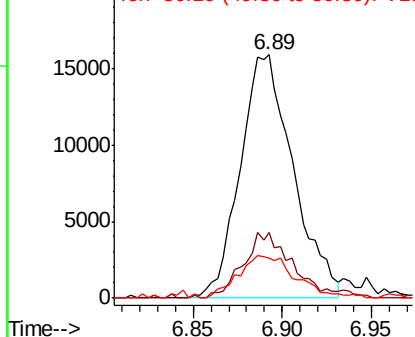


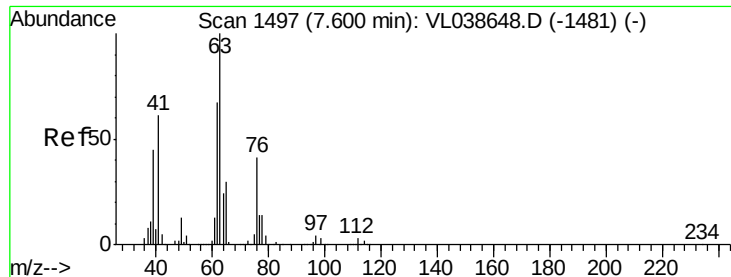
#36
Benzene
Concen: 0.209 ppbv
RT: 6.89 min Scan# 1277
Delta R.T. 0.01 min
Lab File: VL038777.D
Acq: 28 Mar 2022 18:58

Tgt Ion: 78 Resp: 33002
Ion Ratio Lower Upper
78 100
77 27.0 18.1 27.1
50 15.6 13.6 20.4



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: 7.627 ppbv

RT: 7.17 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 28 Mar 2022 18:58

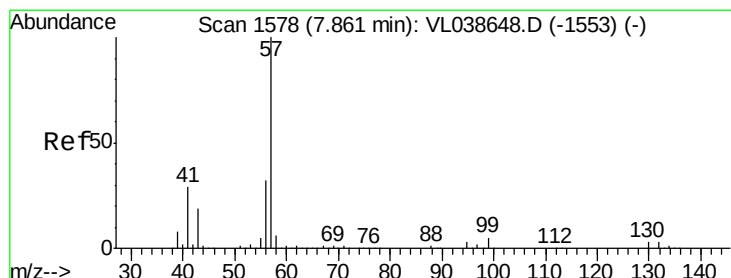
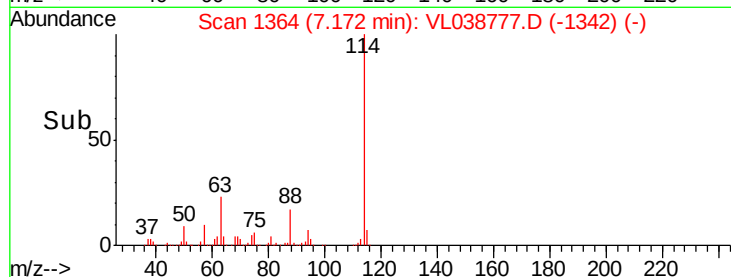
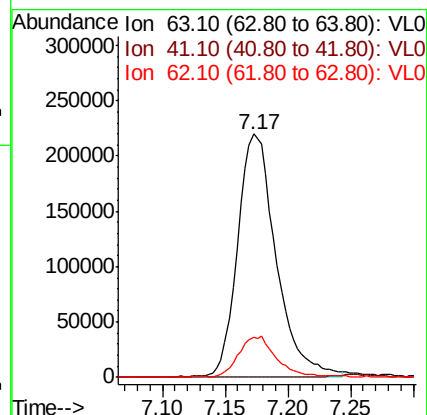
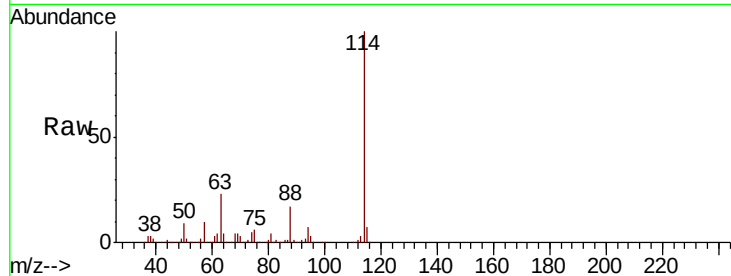
Tot Ion: 63 Resp: 470231

Ion Ratio Lower Upper

63 100

41 0.0 49.0 73.6#

62 16.4 53.9 80.9#



#44

2,2,4-Trimethylpentane

Concen: 0.065 ppbv

RT: 7.87 min Scan# 1581

Delta R.T. 0.01 min

Lab File: VL038777.D

Acq: 28 Mar 2022 18:58

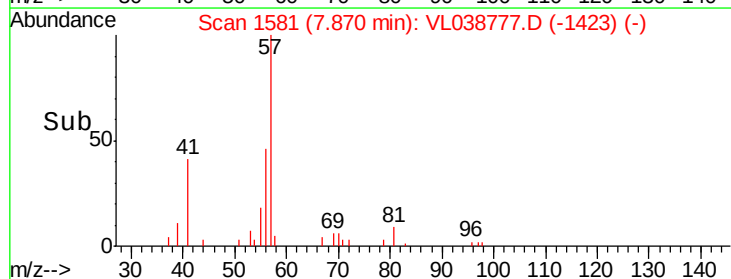
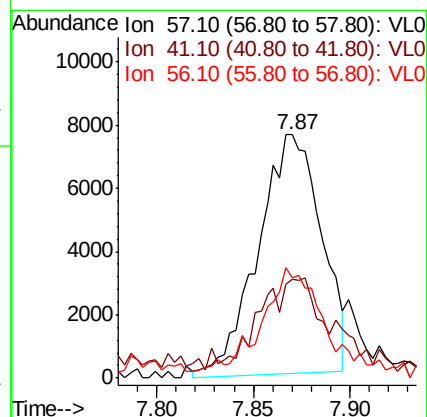
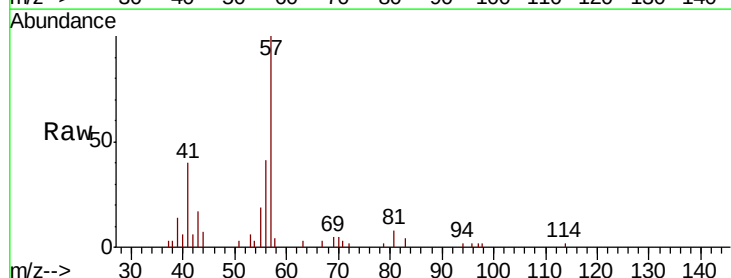
Tgt Ion: 57 Resp: 17206

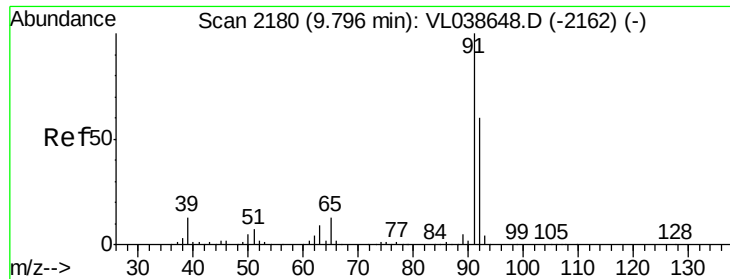
Ion Ratio Lower Upper

57 100

41 65.6 23.0 34.4#

56 52.9 25.3 37.9#





#53

Toluene

Concen: 0.642 ppbv

RT: 9.80 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

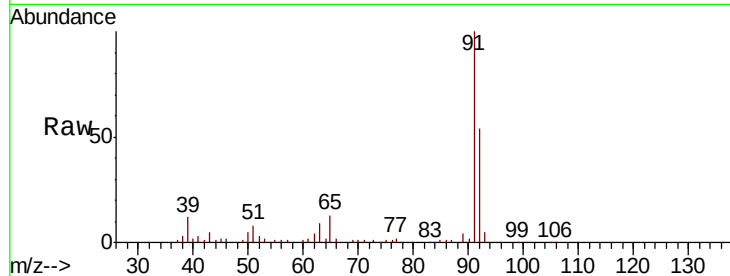
Acq: 28 Mar 2022 18:58

Tot Ion: 91 Resp: 108827

Ion Ratio Lower Upper

91 100

92 57.3 48.7 73.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

60000

50000

40000

30000

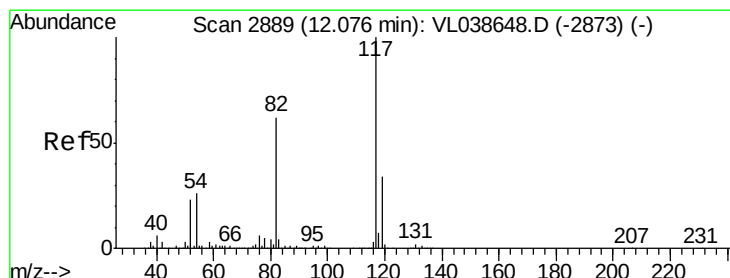
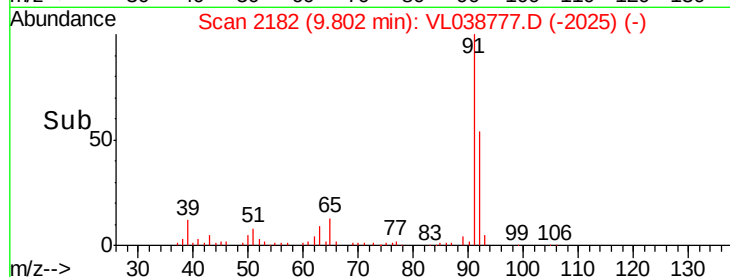
20000

10000

0

9.70 9.75 9.80 9.85 9.90

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. 0.01 min

Lab File: VL038777.D

Acq: 28 Mar 2022 18:58

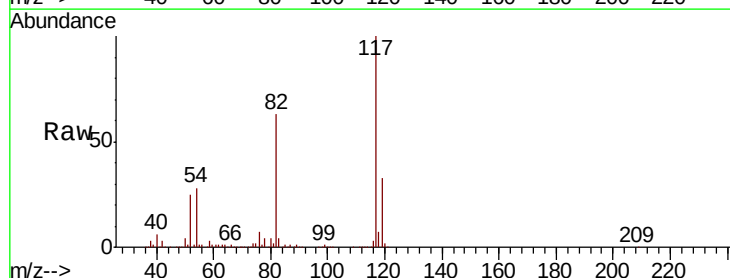
Tgt Ion: 117 Resp: 1693060

Ion Ratio Lower Upper

117 100

82 67.2 51.6 77.4

119 34.7 26.9 40.3



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

1000000

800000

600000

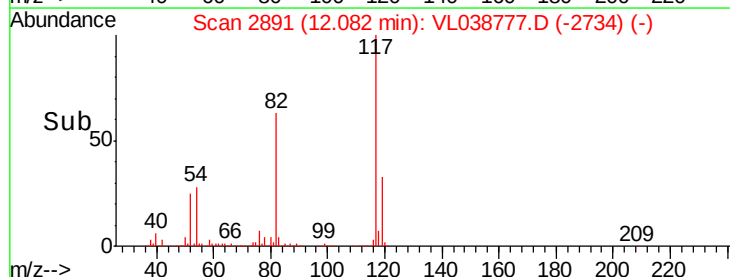
400000

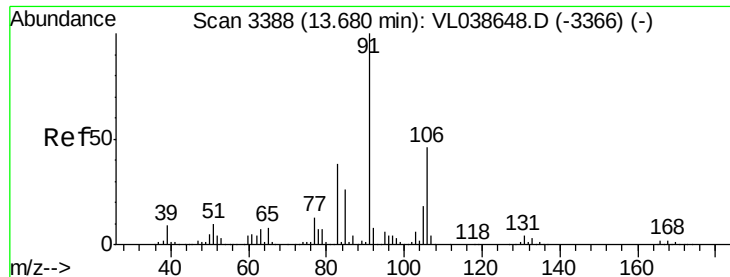
200000

0

12.00 12.10

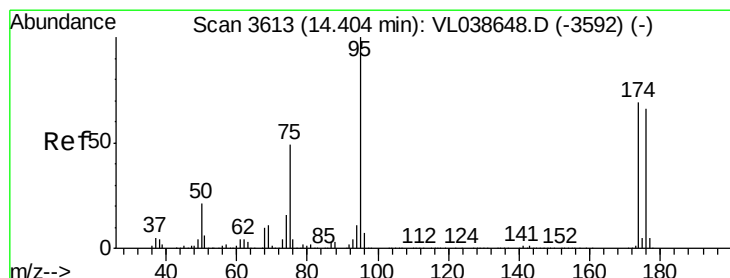
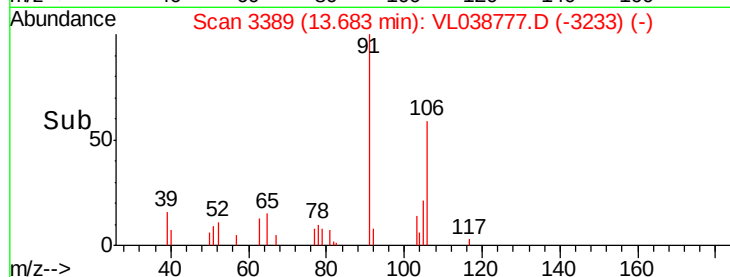
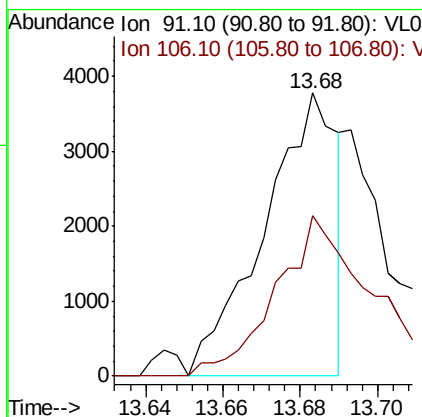
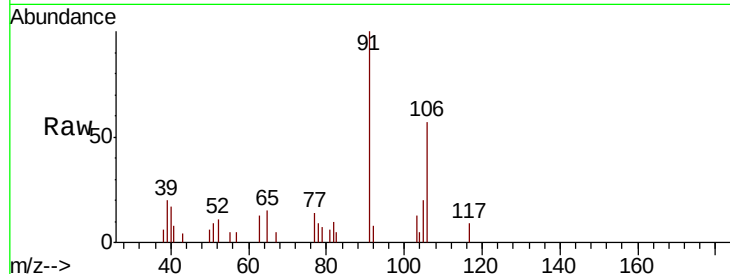
Time-->





#60
o-Xylene
Concen: 0.030 ppbv
RT: 13.68 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 28 Mar 2022 18:58

Tot Ion: 91 Resp: 4935
Ion Ratio Lower Upper
91 100
106 76.0 23.5 70.5#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.773 ppbv
RT: 14.41 min Scan# 3615
Delta R.T. 0.01 min
Lab File: VL038777.D
Acq: 28 Mar 2022 18:58

Tgt Ion: 95 Resp: 1268519
Ion Ratio Lower Upper
95 100
174 73.4 56.1 84.1
175 5.2 4.2 6.2

