

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112723\
 Data File : VL040910.D
 Acq On : 27 Nov 2023 16:39
 Operator : SY/MD
 Sample : 05520-01DL10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Nov 28 04:39:29 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111323AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Nov 28 04:31:59 2023
 Response via : Initial Calibration

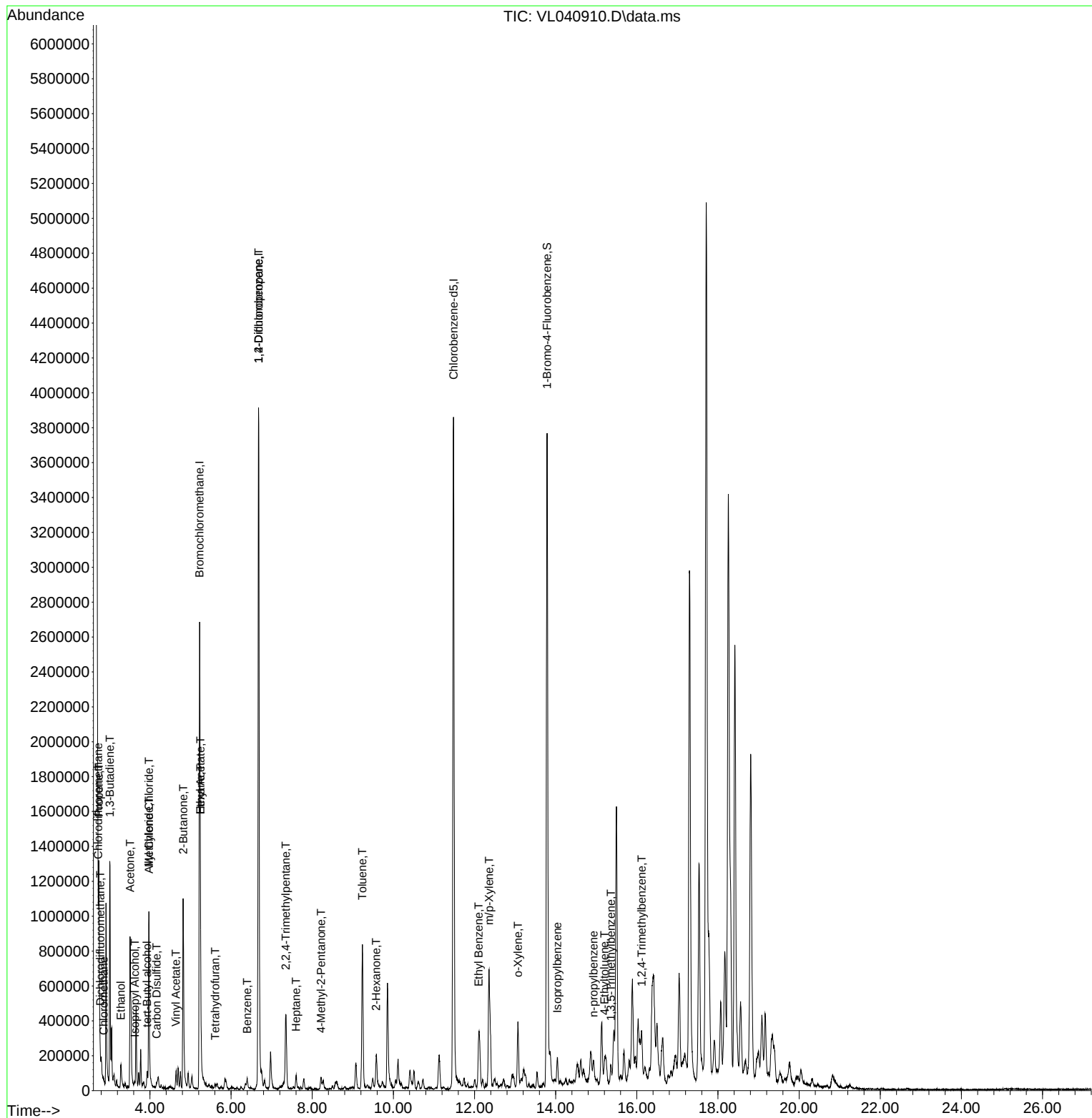
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	5.224	49	1189003	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.677	114	2945783	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.484	117	2523005	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.790	95	1957745	9.911	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.100%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.777	85	8821	0.037	ppbv	95
3) Chlorodifluoromethane	2.726	51	8353	0.044	ppbv #	86
4) Chloromethane	2.861	50	5915	0.087	ppbv	99
9) Propene	2.742	41	336320	5.257	ppbv	92
10) Heptane	7.600	43	22063	0.140	ppbv #	57
13) Ethanol	3.285	45	101704	8.187	ppbv #	100
15) Acetone	3.510	43	892604	7.049	ppbv	90
16) 1,3-Butadiene	3.012	39	338562	5.285	ppbv #	20
17) tert-Butyl alcohol	3.931	59	55195	0.510	ppbv	96
19) Isopropyl Alcohol	3.629	45	19167	0.252	ppbv #	94
20) Methylene Chloride	3.973	84	306766	5.870	ppbv	96
21) Allyl Chloride	3.976	41	7020	0.087	ppbv #	1
23) Vinyl Acetate	4.642	43	50955	0.312	ppbv #	17
25) Ethyl Acetate	5.243	43	210163	0.802	ppbv #	90
26) Hexane	5.243	57	205178	1.768	ppbv #	52
27) Carbon Disulfide	4.166	76	13257	0.090	ppbv #	52
34) 2-Butanone	4.819	43	1293122	8.617	ppbv	100
36) Benzene	6.398	78	39808	0.167	ppbv	99
39) 1,2-Dichloropropane	6.677	63	738150	7.787	ppbv #	24
41) Tetrahydrofuran	5.610	42	8243	0.089	ppbv #	50
44) 2,2,4-Trimethylpentane	7.349	57	418044	1.053	ppbv	90
50) 4-Methyl-2-Pentanone	8.217	43	53424	0.230	ppbv	97
51) 2-Hexanone	9.574	43	80502	0.492	ppbv #	30
53) Toluene	9.237	91	466944	1.775	ppbv	99
58) Ethyl Benzene	12.105	91	241166	0.733	ppbv	97
59) m/p-Xylene	12.359	91	744333	2.655	ppbv	98
60) o-Xylene	13.069	91	279615	1.048	ppbv	100
62) Isopropylbenzene	14.040	105	134764	0.342	ppbv	97
64) n-propylbenzene	14.931	120	7342	0.074	ppbv #	1
72) 4-Ethyltoluene	15.204	105	105646	0.360	ppbv	97
73) 1,3,5-Trimethylbenzene	15.365	105	73759	0.284	ppbv	97
74) 1,2,4-Trimethylbenzene	16.121	105	202813	0.700	ppbv #	63

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

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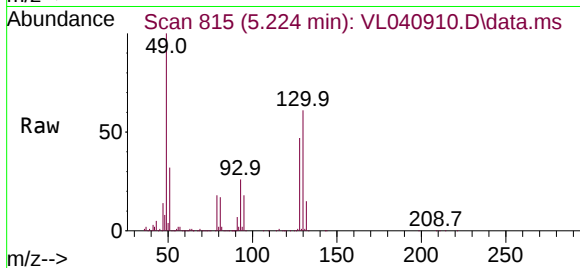
Quant Time: Nov 28 04:39:29 2023
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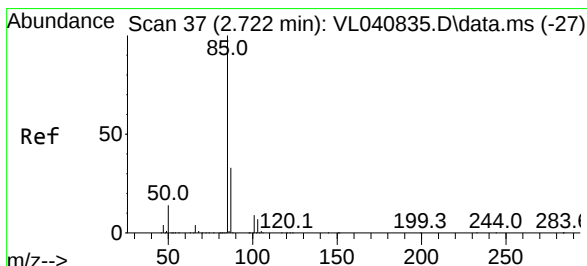
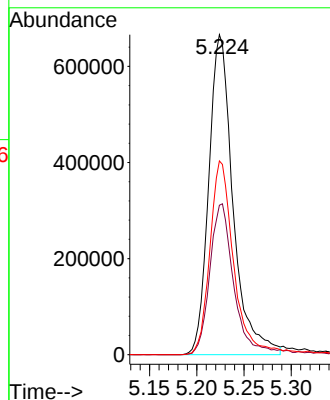
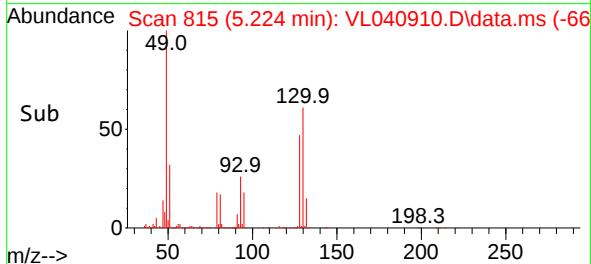


#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.224 min Scan# 81
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

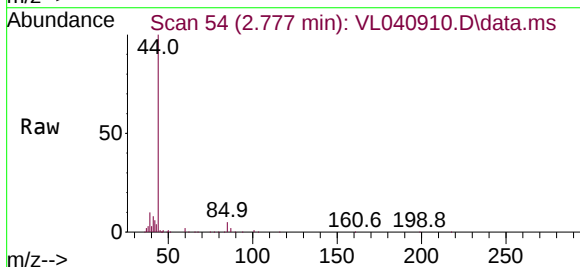
Instrument :
MSVOA_L
ClientSampleId :



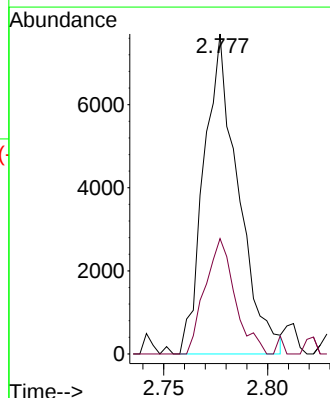
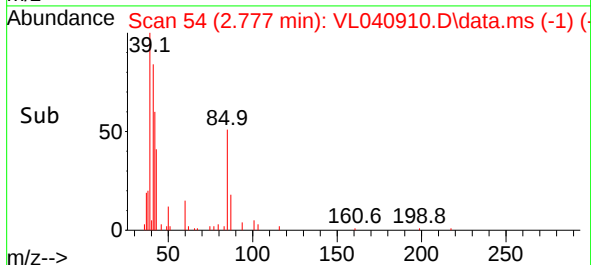
Tgt Ion: 49 Resp: 1189003
Ion Ratio Lower Upper
49 100
128 48.6 23.8 71.2
130 61.7 30.9 92.8

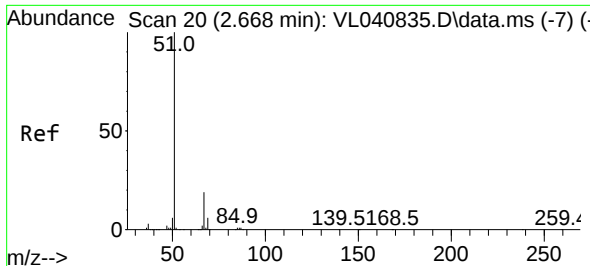


#2
Dichlorodifluoromethane
Concen: 0.037 ppbv
RT: 2.777 min Scan# 54
Delta R.T. -0.006 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39



Tgt Ion: 85 Resp: 8821
Ion Ratio Lower Upper
85 100
87 36.1 26.7 40.1

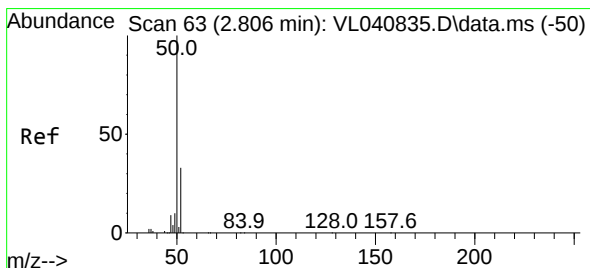
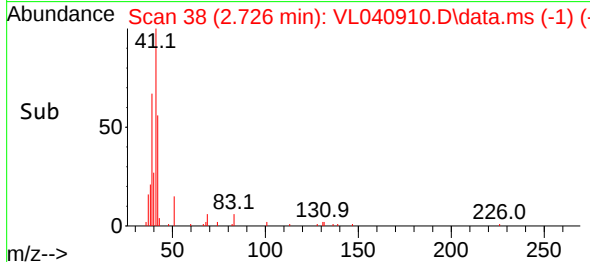
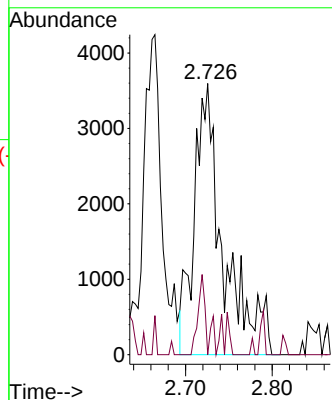
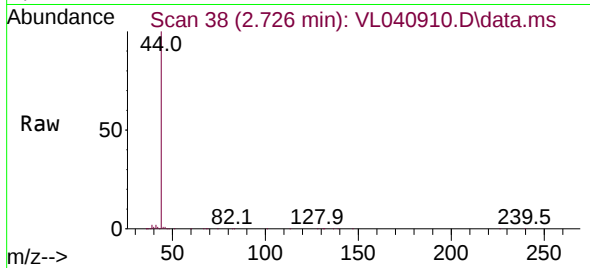




#3
Chlorodifluoromethane
Concen: 0.044 ppbv
RT: 2.726 min Scan# 31
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

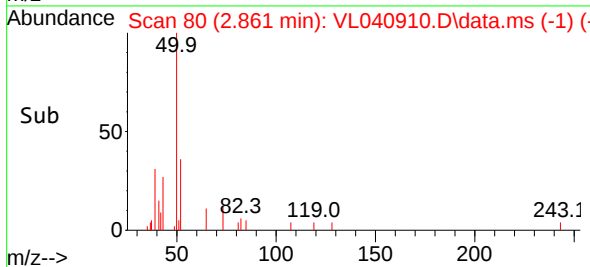
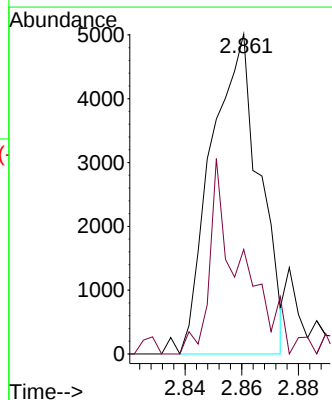
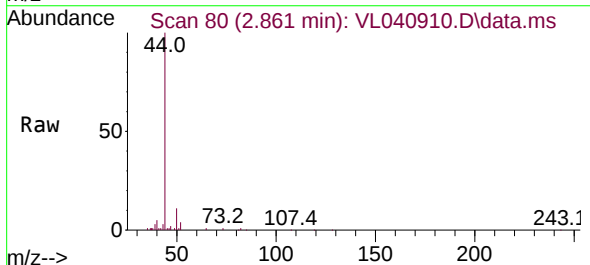
Instrument :
MSVOA_L
ClientSampleId :

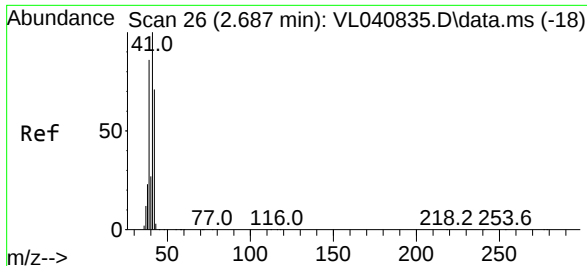
Tgt Ion: 51 Resp: 8353
Ion Ratio Lower Upper
51 100
67 12.5 15.0 22.4#



#4
Chloromethane
Concen: 0.087 ppbv
RT: 2.861 min Scan# 80
Delta R.T. -0.006 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

Tgt Ion: 50 Resp: 5915
Ion Ratio Lower Upper
50 100
52 32.7 26.5 39.7

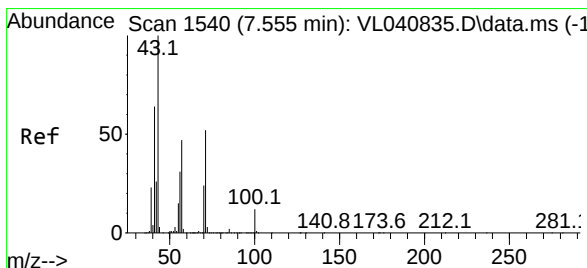
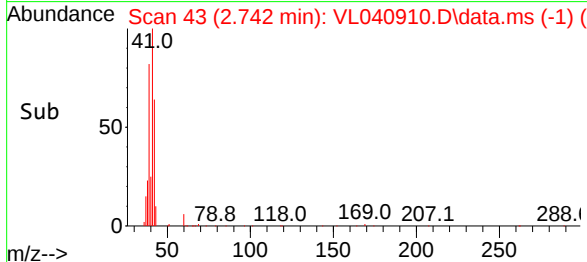
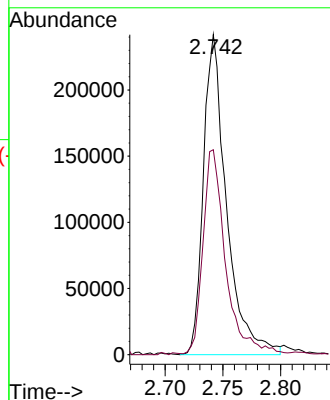
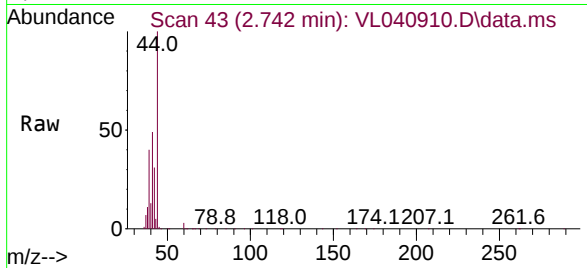




#9
Propene
Concen: 5.257 ppbv
RT: 2.742 min Scan# 41
Delta R.T. -0.006 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

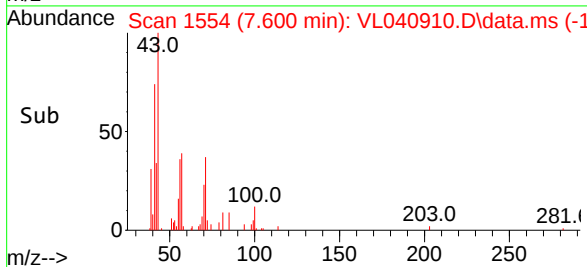
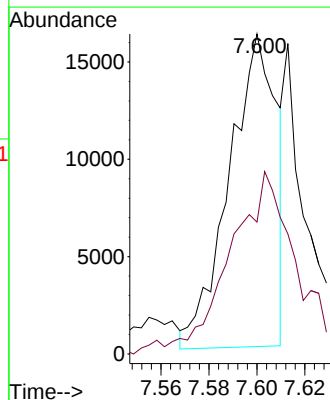
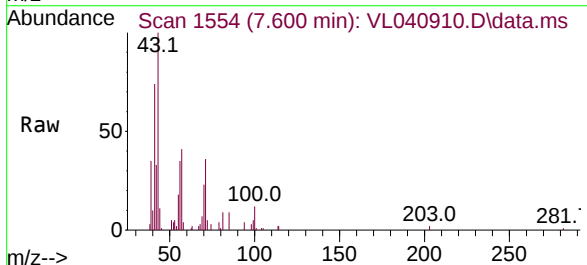
Instrument :
MSVOA_L
ClientSampleId :

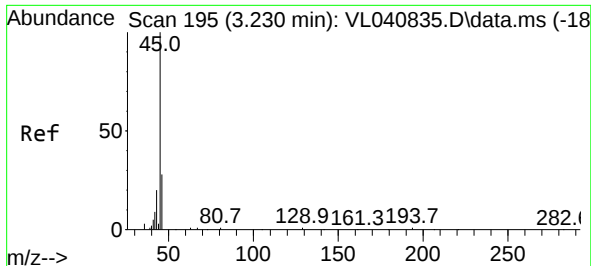
Tgt Ion: 41 Resp: 336320
Ion Ratio Lower Upper
41 100
42 64.2 56.5 84.7



#10
Heptane
Concen: 0.140 ppbv
RT: 7.600 min Scan# 1554
Delta R.T. -0.006 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

Tgt Ion: 43 Resp: 22063
Ion Ratio Lower Upper
43 100
57 78.3 39.4 59.0#

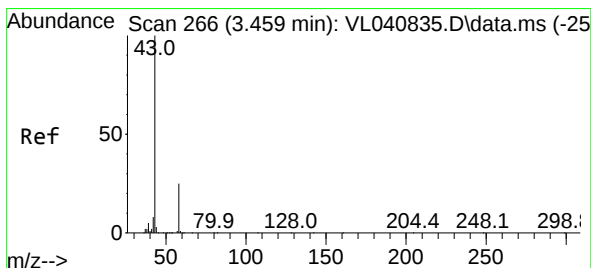
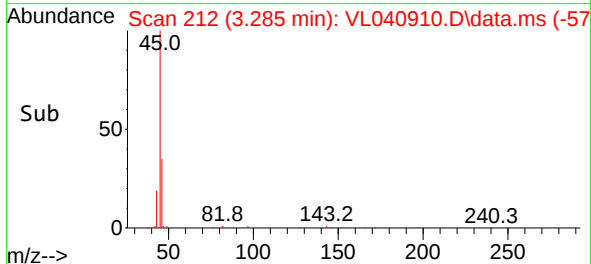
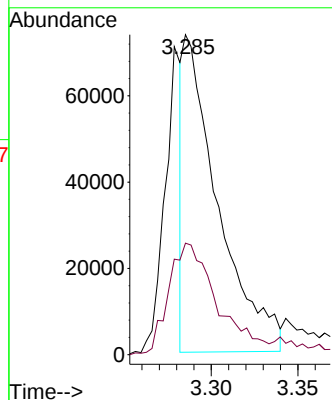
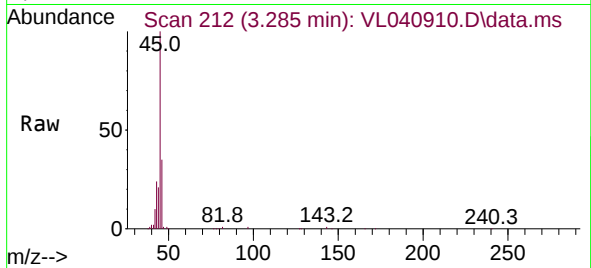




#13
Ethanol
Concen: 8.187 ppbv
RT: 3.285 min Scan# 212
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

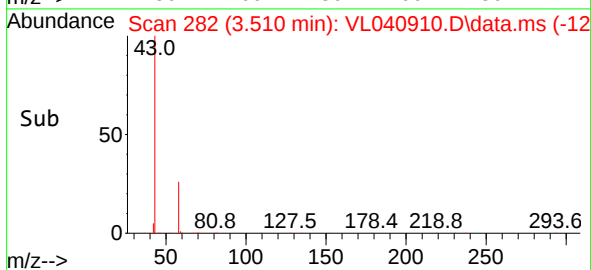
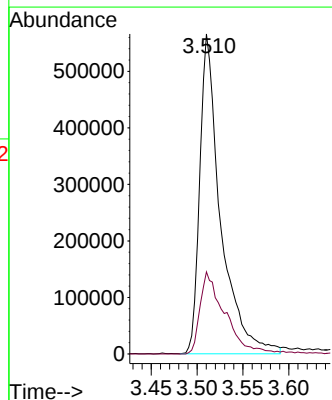
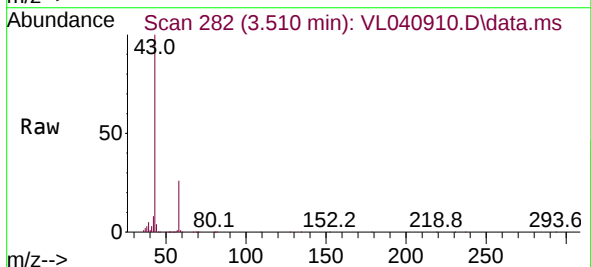
Instrument :
MSVOA_L
ClientSampleId :

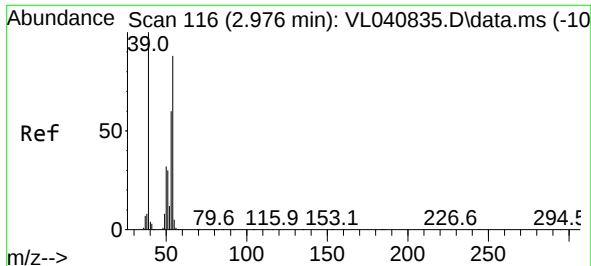
Tgt Ion: 45 Resp: 101704
Ion Ratio Lower Upper
45 100
46 56.4 0.0 0.0#



#15
Acetone
Concen: 7.049 ppbv
RT: 3.510 min Scan# 282
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

Tgt Ion: 43 Resp: 892604
Ion Ratio Lower Upper
43 100
58 31.3 20.9 31.3





#16

1,3-Butadiene

Concen: 5.285 ppbv

RT: 3.012 min Scan# 11

Delta R.T. -0.022 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Instrument :

MSVOA_L

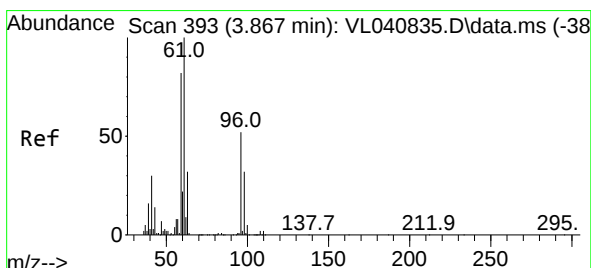
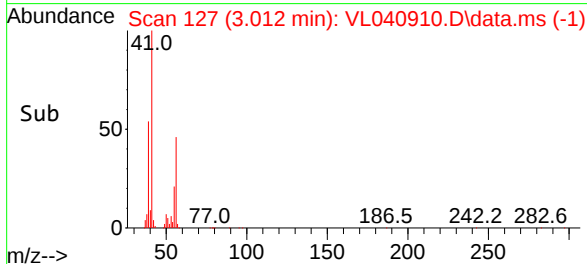
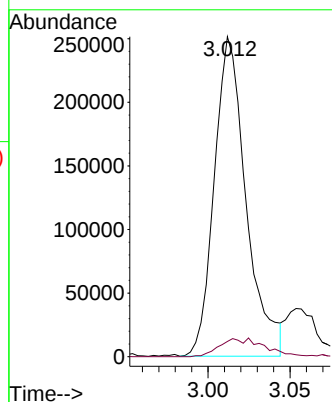
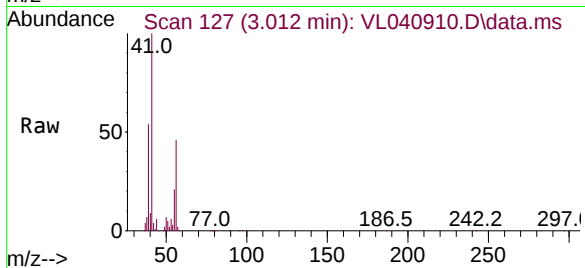
ClientSampleId :

Tgt Ion: 39 Resp: 338562

Ion Ratio Lower Upper

39 100

54 8.3 61.8 92.6#



#17

tert-Butyl alcohol

Concen: 0.510 ppbv

RT: 3.931 min Scan# 413

Delta R.T. 0.010 min

Lab File: VL040910.D

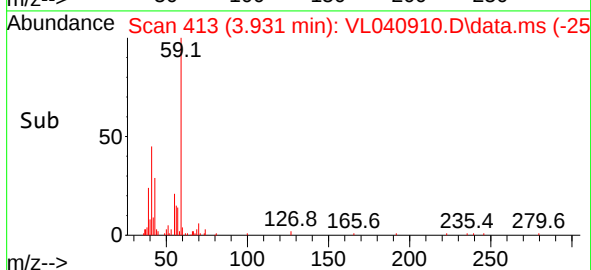
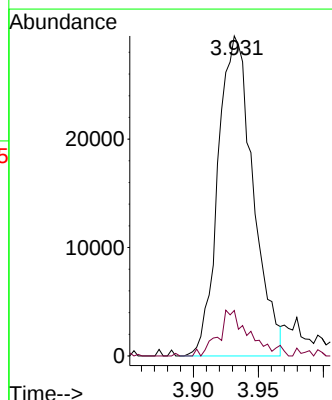
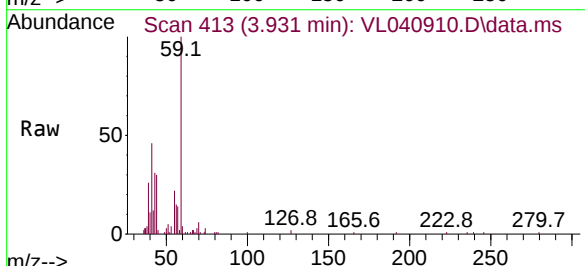
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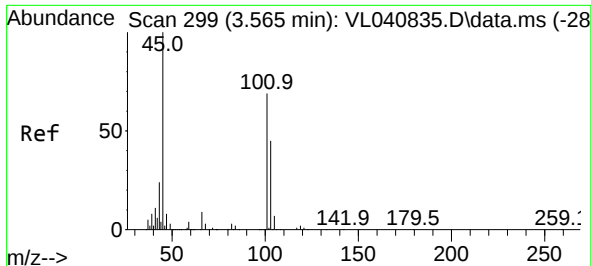
Tgt Ion: 59 Resp: 55195

Ion Ratio Lower Upper

59 100

57 12.8 9.0 13.4





#19

Isopropyl Alcohol

Concen: 0.252 ppbv

RT: 3.629 min Scan# 319

Delta R.T. 0.010 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Instrument :

MSVOA_L

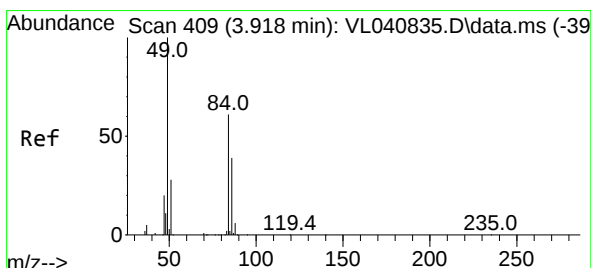
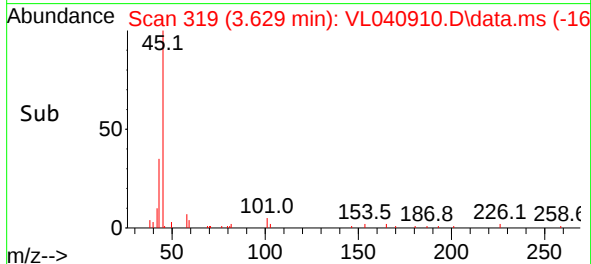
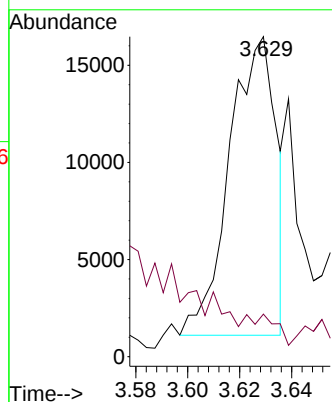
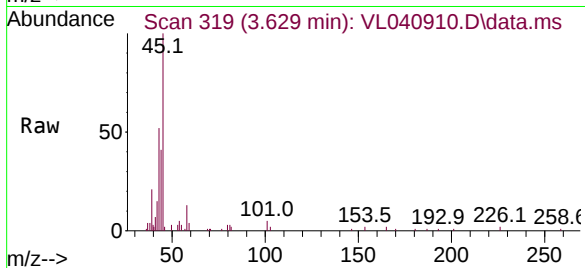
ClientSampleId :

Tgt Ion: 45 Resp: 19167

Ion Ratio Lower Upper

45 100

58 0.0 1.6 2.4#



#20

Methylene Chloride

Concen: 5.870 ppbv

RT: 3.973 min Scan# 426

Delta R.T. -0.003 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Tgt Ion: 84 Resp: 306766

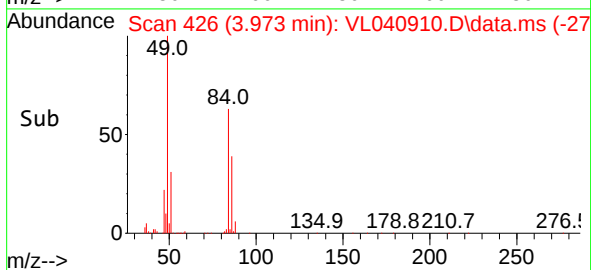
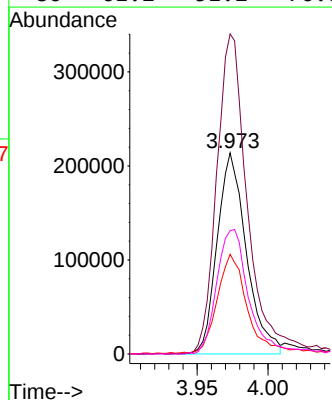
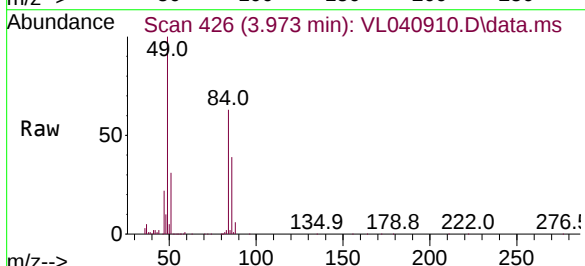
Ion Ratio Lower Upper

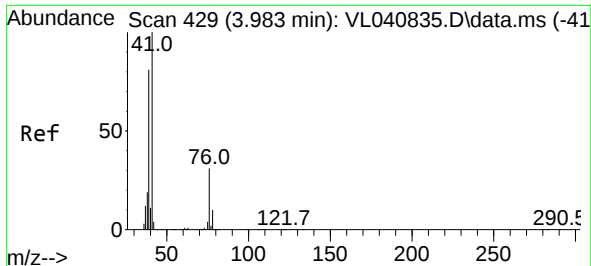
84 100

49 158.9 131.0 196.4

51 49.0 36.9 55.3

86 61.2 51.2 76.8

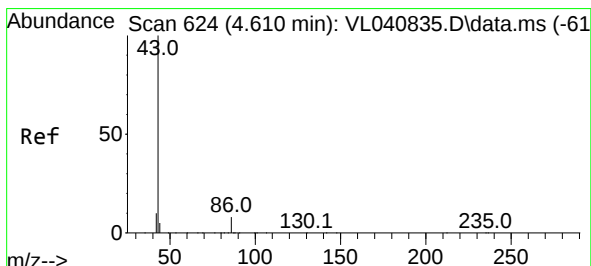
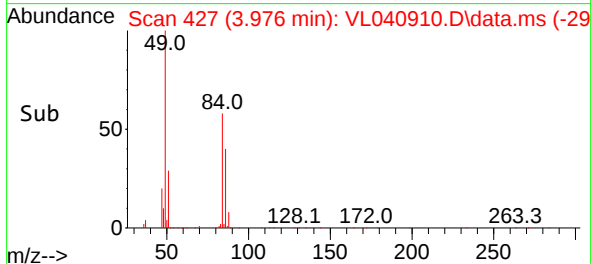
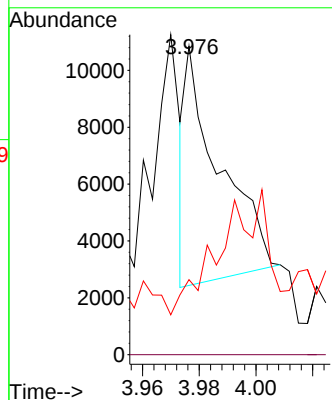
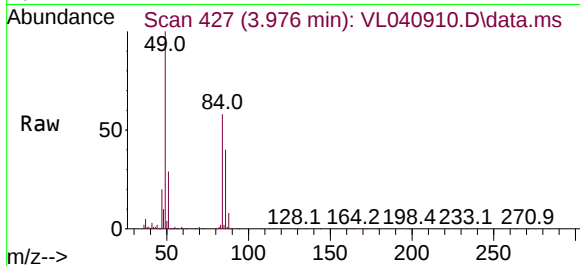




#21
 Allyl Chloride
 Concen: 0.087 ppbv
 RT: 3.976 min Scan# 41
 Delta R.T. -0.061 min
 Lab File: VL040910.D
 Acq: 27 Nov 2023 16:39

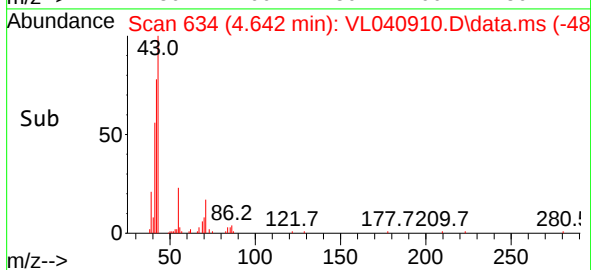
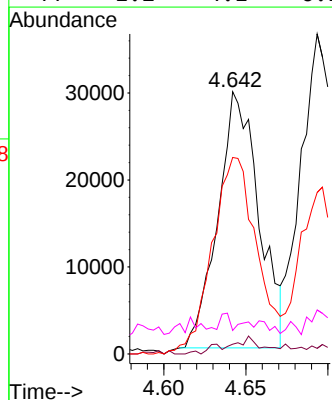
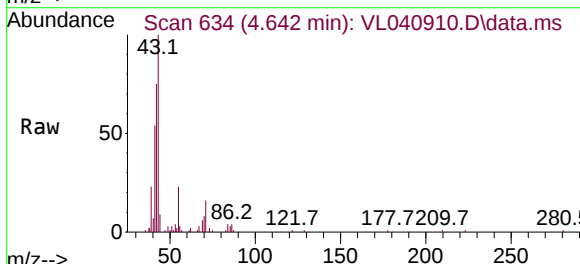
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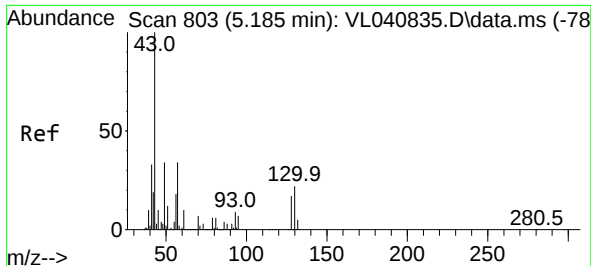
Tgt Ion: 41 Resp: 7020
 Ion Ratio Lower Upper
 41 100
 76 0.0 24.4 36.6#
 39 189.4 68.1 102.1#



#23
 Vinyl Acetate
 Concen: 0.312 ppbv
 RT: 4.642 min Scan# 634
 Delta R.T. -0.022 min
 Lab File: VL040910.D
 Acq: 27 Nov 2023 16:39

Tgt Ion: 43 Resp: 50955
 Ion Ratio Lower Upper
 43 100
 86 3.8 5.5 8.3#
 42 73.3 8.2 12.2#
 44 1.2 4.1 6.1#

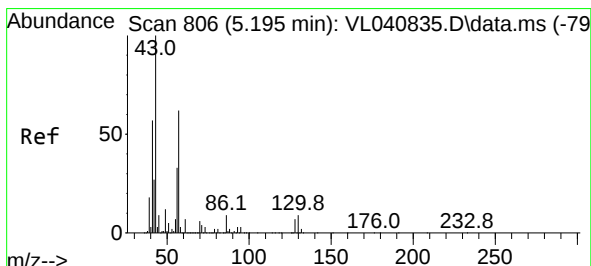
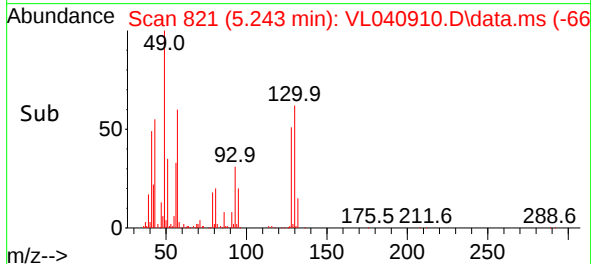
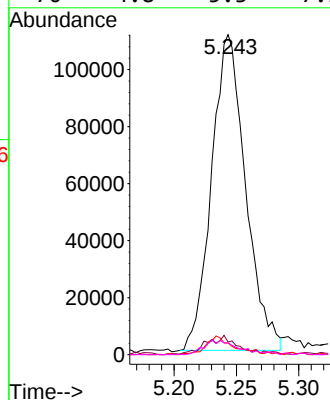
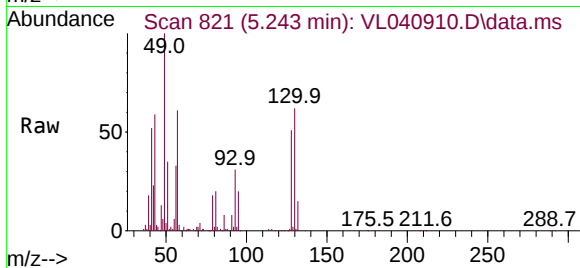




#25
Ethyl Acetate
Concen: 0.802 ppbv
RT: 5.243 min Scan# 803
Delta R.T. 0.006 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

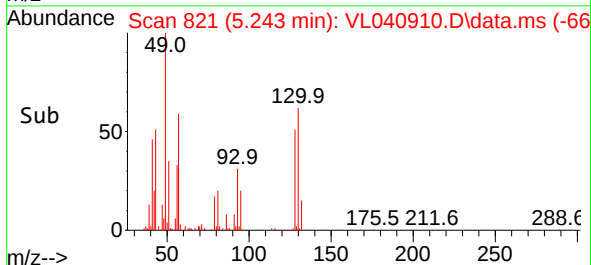
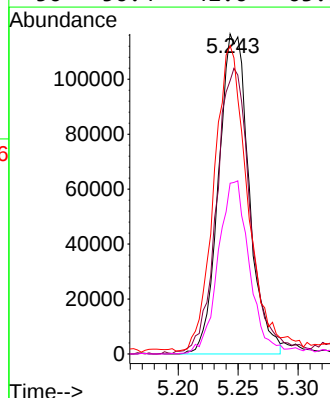
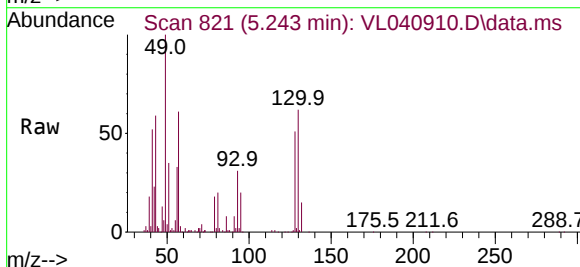
Instrument :
MSVOA_L
ClientSampleId :

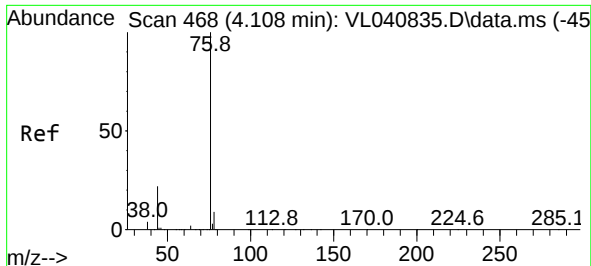
Tgt Ion: 43 Resp: 210163
Ion Ratio Lower Upper
43 100
45 6.0 8.1 12.1#
61 5.2 7.8 11.6#
70 4.8 5.3 7.9#



#26
Hexane
Concen: 1.768 ppbv
RT: 5.243 min Scan# 821
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

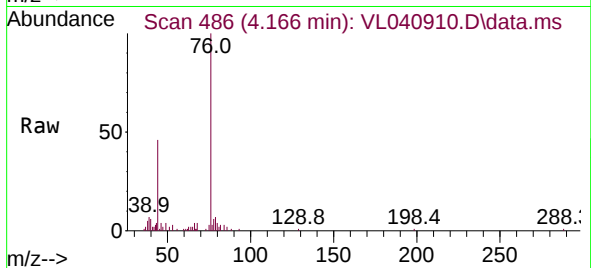
Tgt Ion: 57 Resp: 205178
Ion Ratio Lower Upper
57 100
41 99.9 75.4 113.0
43 108.8 185.9 278.9#
56 56.4 42.6 63.8



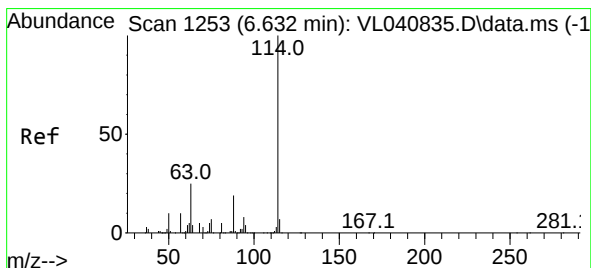
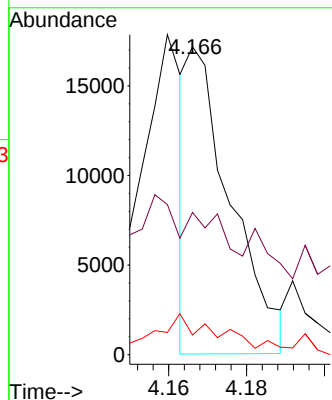
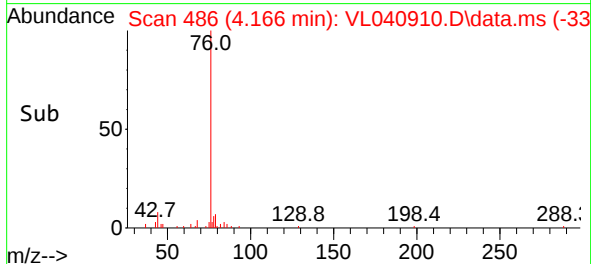


#27
Carbon Disulfide
Concen: 0.090 ppbv
RT: 4.166 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

Instrument :
MSVOA_L
ClientSampleId :

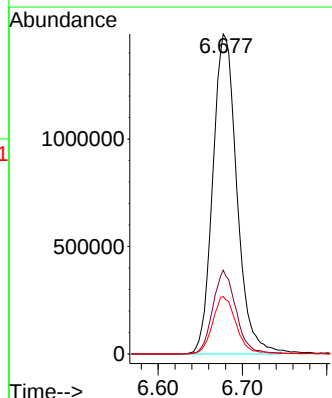
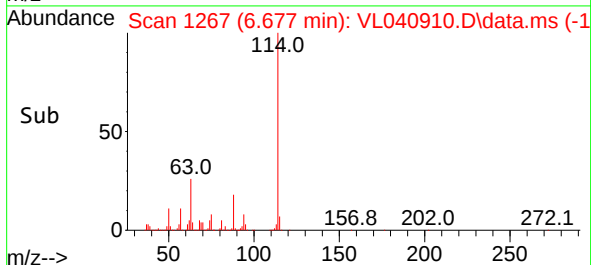
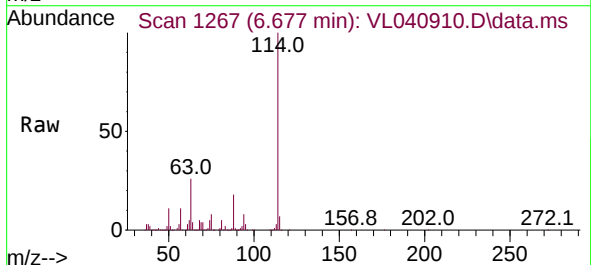


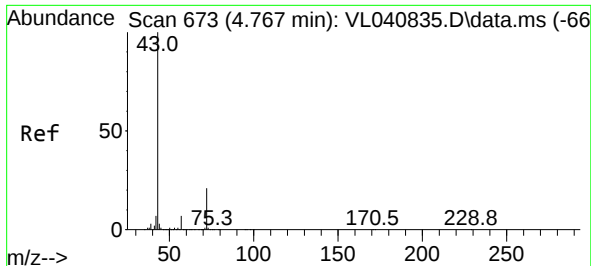
Tgt Ion: 76 Resp: 13257
Ion Ratio Lower Upper
76 100
44 0.0 16.7 25.1#
78 29.3 7.6 11.4#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.677 min Scan# 1267
Delta R.T. -0.006 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

Tgt Ion: 114 Resp: 2945783
Ion Ratio Lower Upper
114 100
63 25.4 20.9 31.3
88 17.7 14.3 21.5

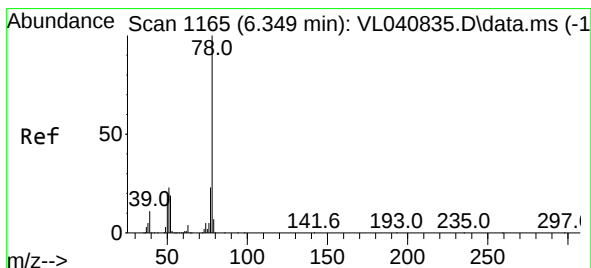
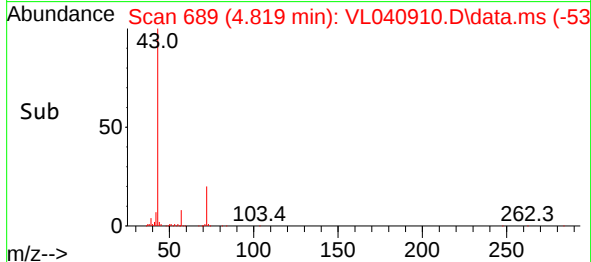
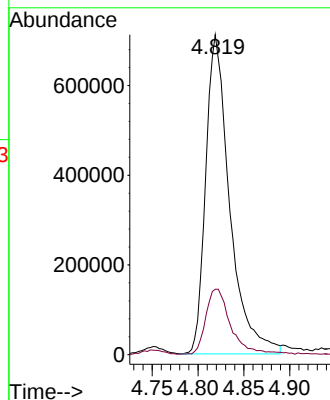
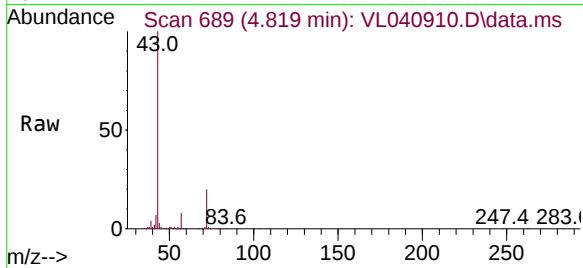




#34
2-Butanone
Concen: 8.617 ppbv
RT: 4.819 min Scan# 61
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

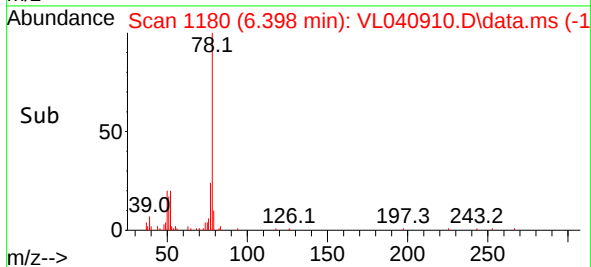
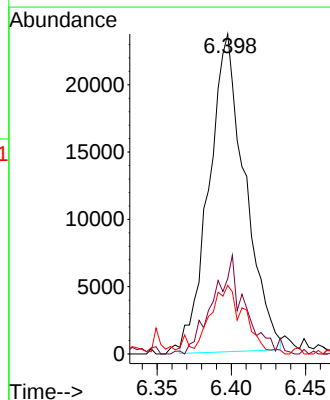
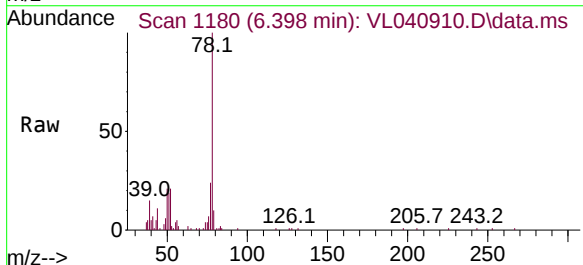
Instrument :
MSVOA_L
ClientSampleId :

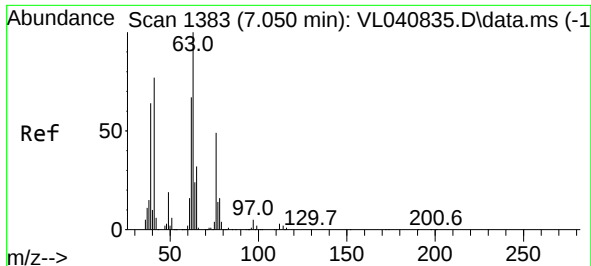
Tgt Ion: 43 Resp: 1293122
Ion Ratio Lower Upper
43 100
72 21.6 17.2 25.8



#36
Benzene
Concen: 0.167 ppbv
RT: 6.398 min Scan# 1180
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

Tgt Ion: 78 Resp: 39808
Ion Ratio Lower Upper
78 100
77 23.1 18.4 27.6
50 20.7 16.2 24.2





#39

1,2-Dichloropropane

Concen: 7.787 ppbv

RT: 6.677 min Scan# 11

Delta R.T. -0.421 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Instrument :

MSVOA_L

ClientSampleId :

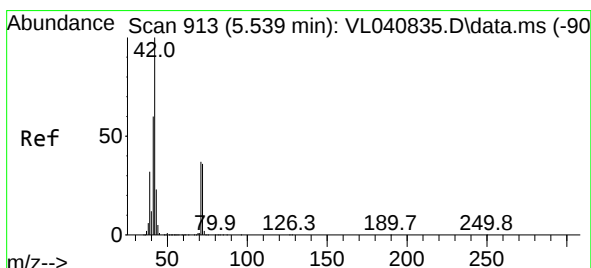
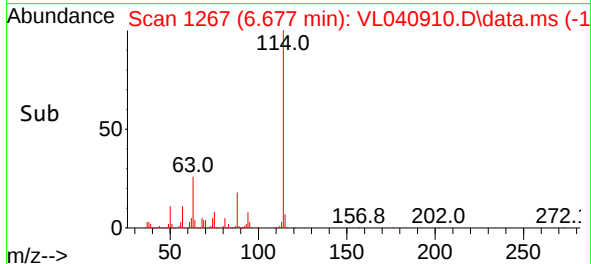
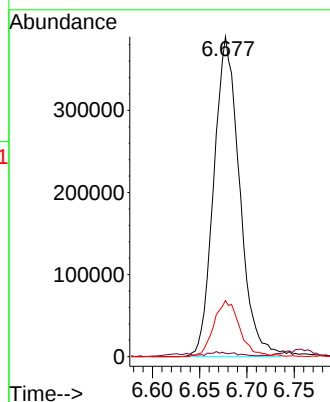
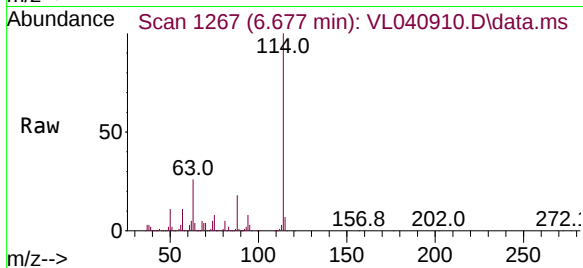
Tgt Ion: 63 Resp: 738150

Ion Ratio Lower Upper

63 100

41 0.4 61.5 92.3#

62 17.5 53.9 80.9#



#41

Tetrahydrofuran

Concen: 0.089 ppbv

RT: 5.610 min Scan# 935

Delta R.T. 0.019 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

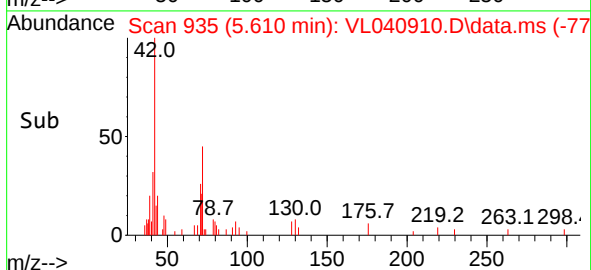
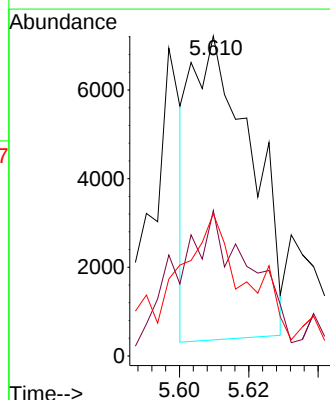
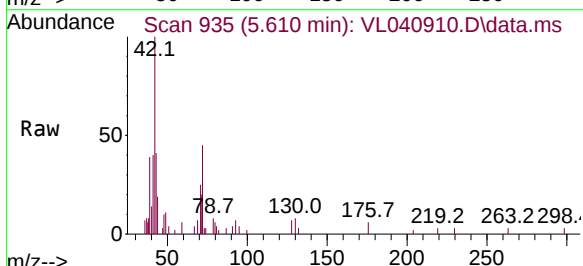
Tgt Ion: 42 Resp: 8243

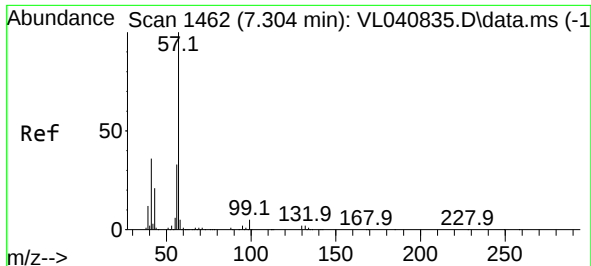
Ion Ratio Lower Upper

42 100

72 69.5 30.8 46.2#

71 67.3 30.0 45.0#





#44

2,2,4-Trimethylpentane

Concen: 1.053 ppbv

RT: 7.349 min Scan# 1462

Delta R.T. -0.003 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Instrument :

MSVOA_L

ClientSampleId :

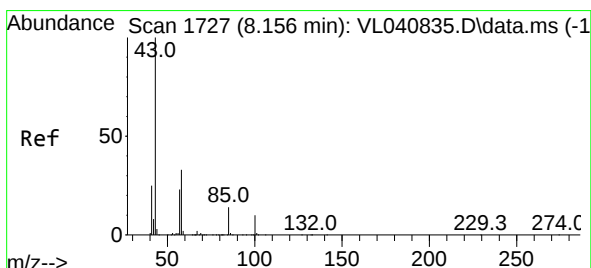
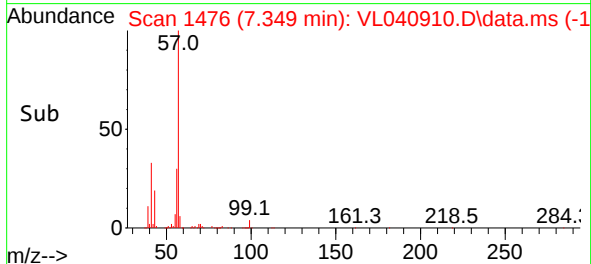
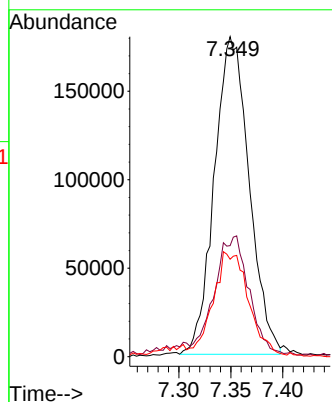
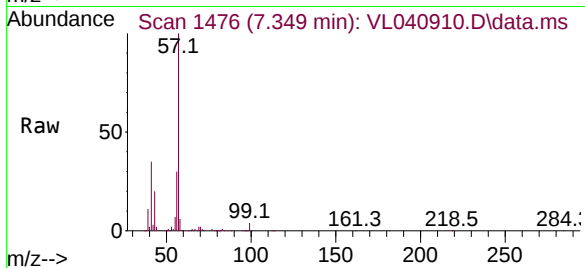
Tgt Ion: 57 Resp: 418044

Ion Ratio Lower Upper

57 100

41 42.6 29.0 43.6

56 37.0 25.2 37.8



#50

4-Methyl-2-Pentanone

Concen: 0.230 ppbv

RT: 8.217 min Scan# 1746

Delta R.T. 0.016 min

Lab File: VL040910.D

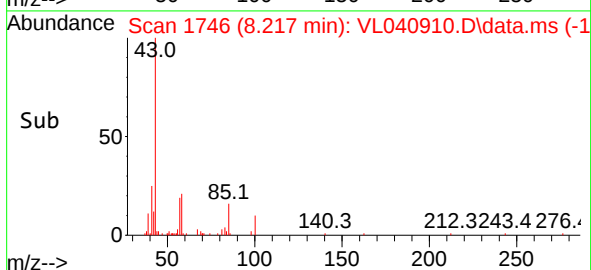
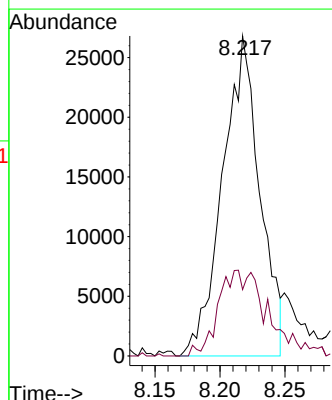
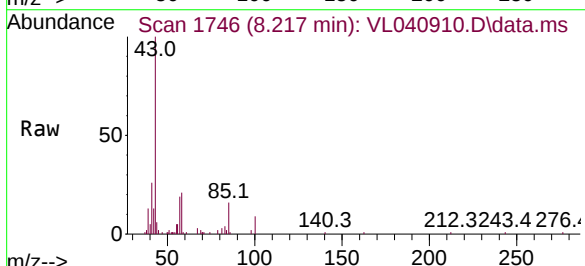
Acq: 27 Nov 2023 16:39

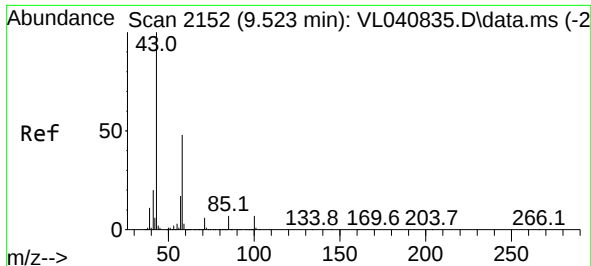
Tgt Ion: 43 Resp: 53424

Ion Ratio Lower Upper

43 100

58 36.3 27.8 41.6

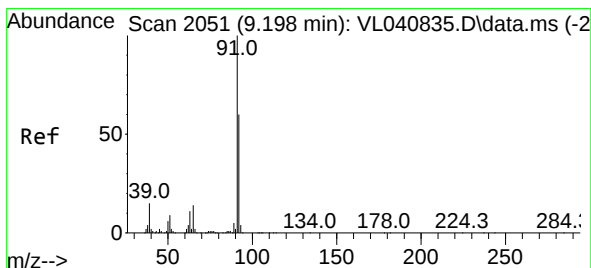
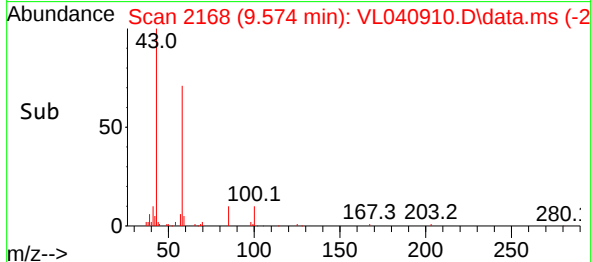
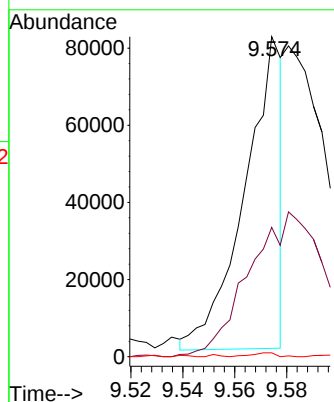
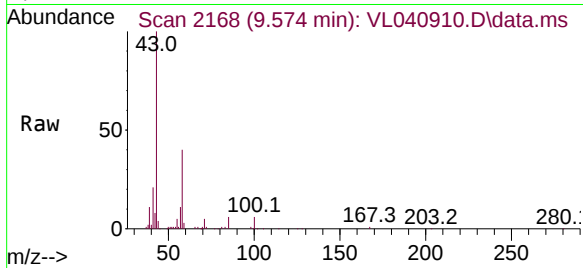




#51
2-Hexanone
Concen: 0.492 ppbv
RT: 9.574 min Scan# 2152
Delta R.T. 0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

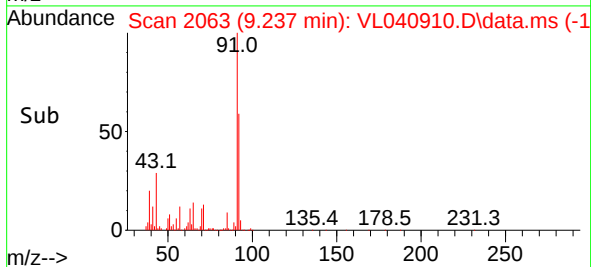
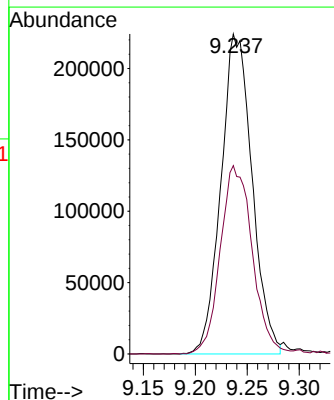
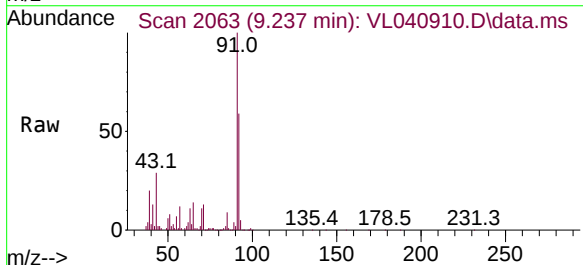
Instrument :
MSVOA_L
ClientSampleId :

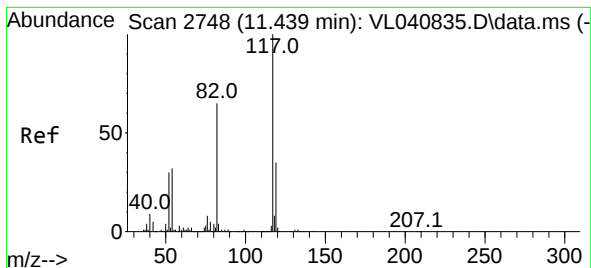
Tgt Ion: 43 Resp: 80502
Ion Ratio Lower Upper
43 100
58 0.0 37.4 56.2#
98 1.3 0.2 0.2#



#53
Toluene
Concen: 1.775 ppbv
RT: 9.237 min Scan# 2063
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

Tgt Ion: 91 Resp: 466944
Ion Ratio Lower Upper
91 100
92 61.3 49.4 74.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.484 min Scan# 21

Delta R.T. 0.000 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Instrument :

MSVOA_L

ClientSampleId :

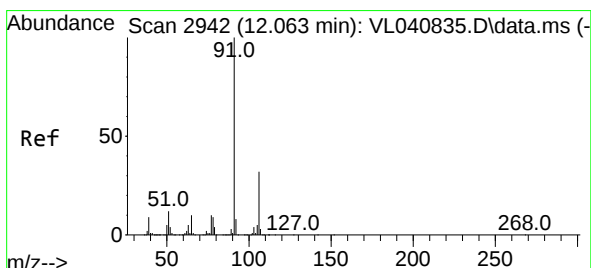
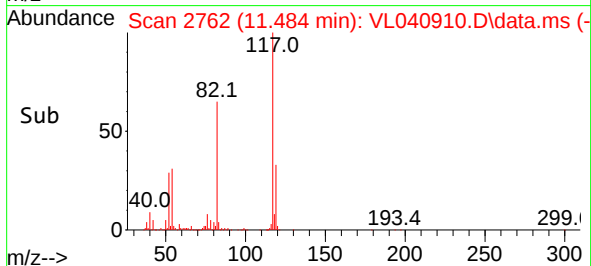
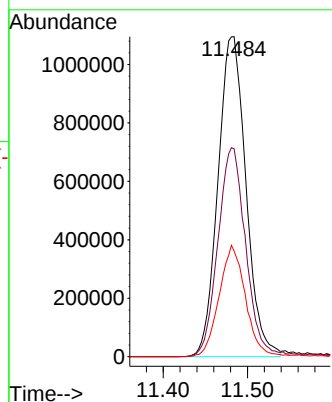
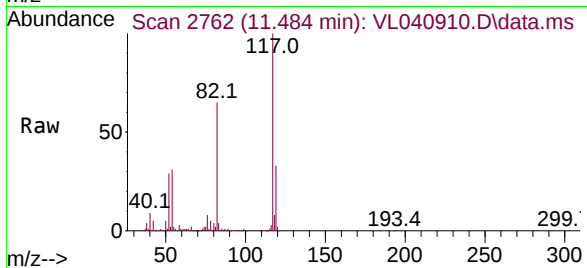
Tgt Ion:117 Resp: 2523005

Ion Ratio Lower Upper

117 100

82 66.1 50.6 75.8

119 33.3 23.3 34.9



#58

Ethyl Benzene

Concen: 0.733 ppbv

RT: 12.105 min Scan# 2955

Delta R.T. 0.000 min

Lab File: VL040910.D

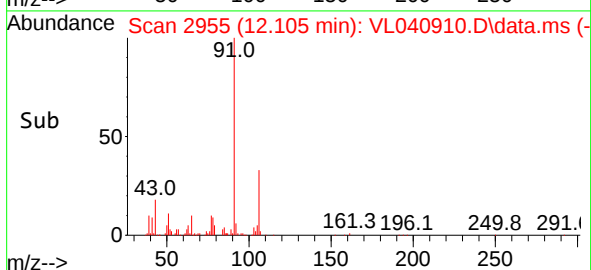
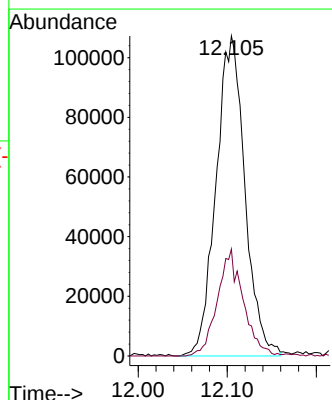
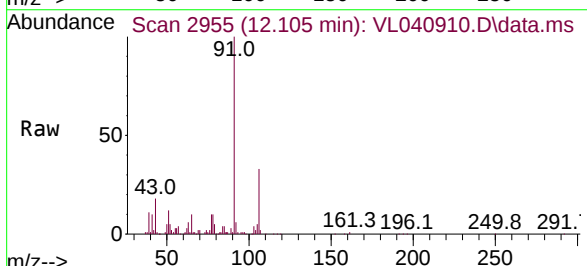
Acq: 27 Nov 2023 16:39

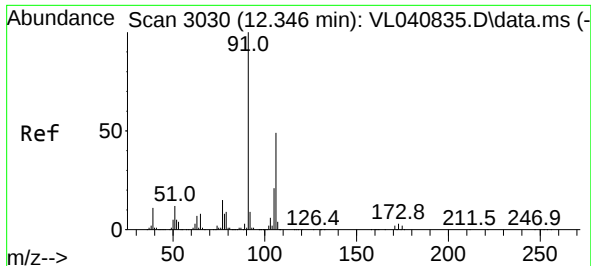
Tgt Ion: 91 Resp: 241166

Ion Ratio Lower Upper

91 100

106 33.4 25.2 37.8





#59

m/p-Xylene

Concen: 2.655 ppbv

RT: 12.359 min Scan# 3034

Delta R.T. -0.026 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Instrument :

MSVOA_L

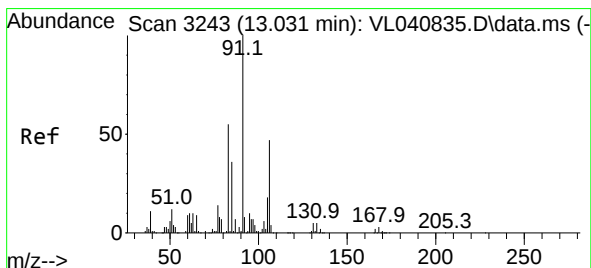
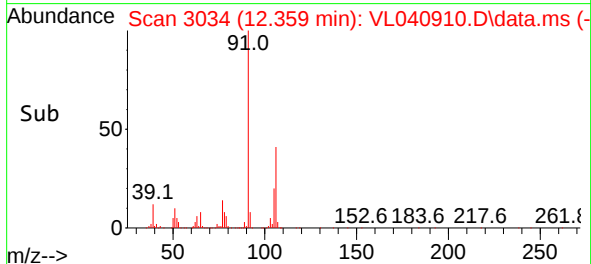
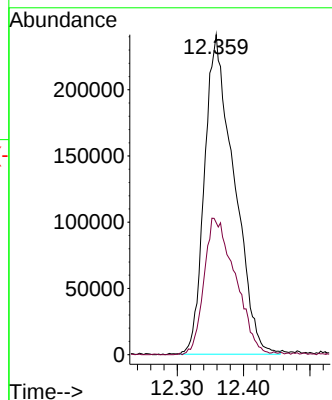
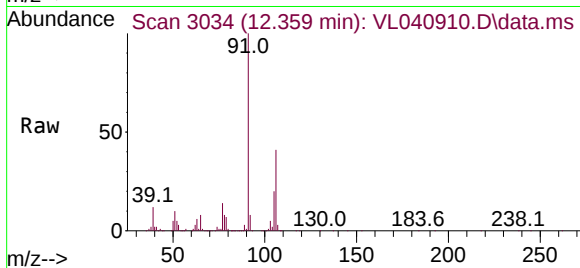
ClientSampleId :

Tgt Ion: 91 Resp: 744333

Ion Ratio Lower Upper

91 100

106 45.7 35.4 53.0



#60

o-Xylene

Concen: 1.048 ppbv

RT: 13.069 min Scan# 3255

Delta R.T. -0.006 min

Lab File: VL040910.D

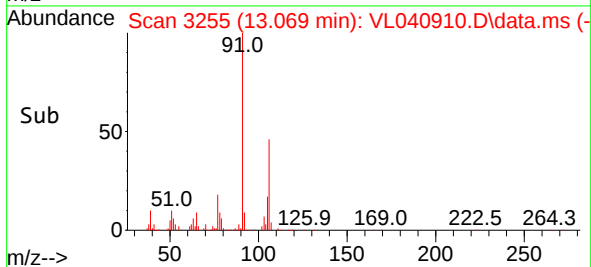
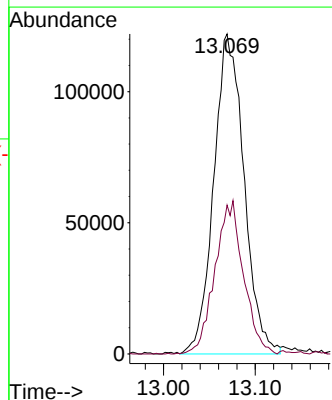
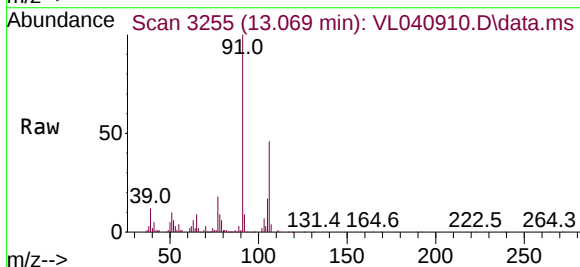
Acq: 27 Nov 2023 16:39

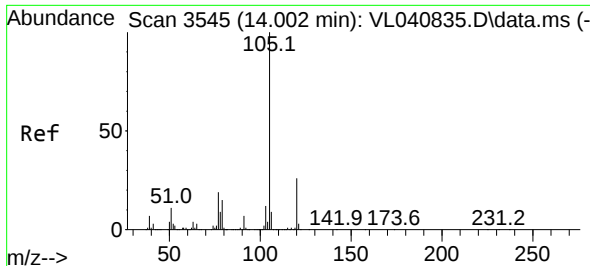
Tgt Ion: 91 Resp: 279615

Ion Ratio Lower Upper

91 100

106 45.4 22.9 68.5

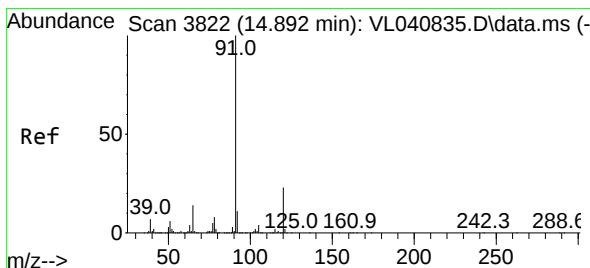
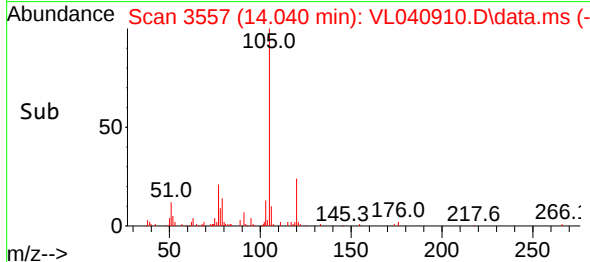
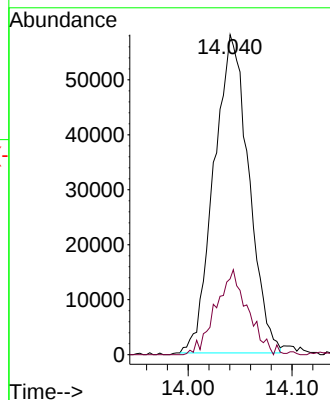
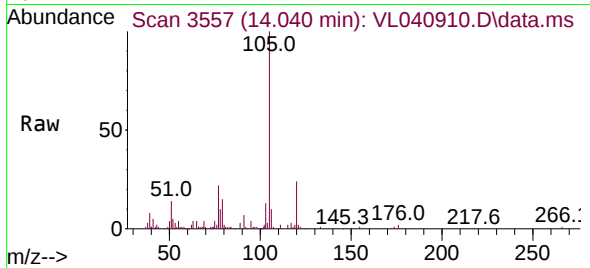




#62
Isopropylbenzene
Concen: 0.342 ppbv
RT: 14.040 min Scan# 31
Delta R.T. -0.003 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

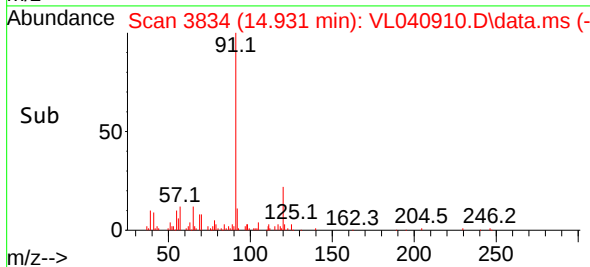
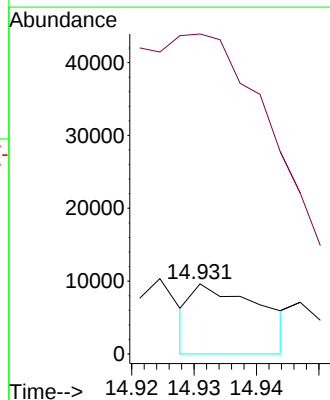
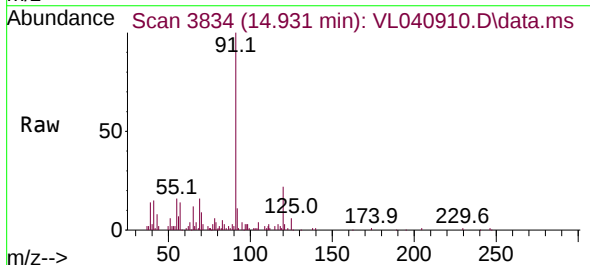
Instrument :
MSVOA_L
ClientSampleId :

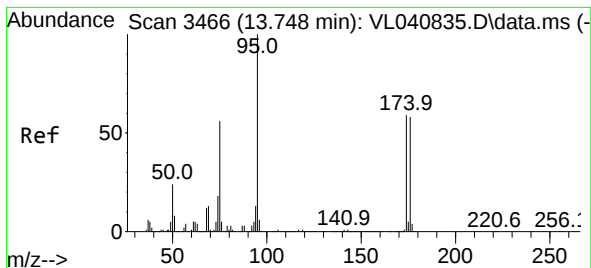
Tgt Ion:105 Resp: 134764
Ion Ratio Lower Upper
105 100
120 24.6 20.7 31.1



#64
n-propylbenzene
Concen: 0.074 ppbv
RT: 14.931 min Scan# 3834
Delta R.T. 0.000 min
Lab File: VL040910.D
Acq: 27 Nov 2023 16:39

Tgt Ion:120 Resp: 7342
Ion Ratio Lower Upper
120 100
91 1581.4 381.1 571.7#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.911 ppbv

RT: 13.790 min Scan# 3466

Delta R.T. -0.003 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Instrument :

MSVOA_L

ClientSampleId :

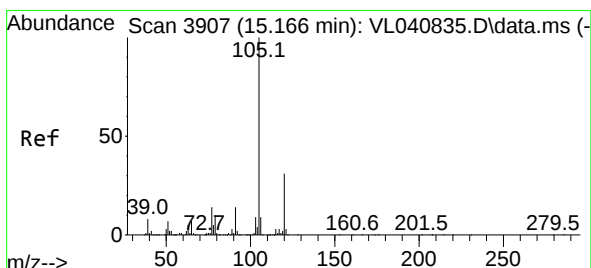
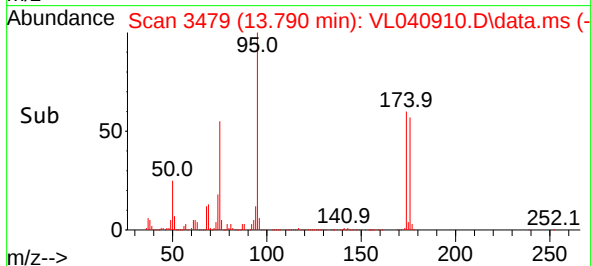
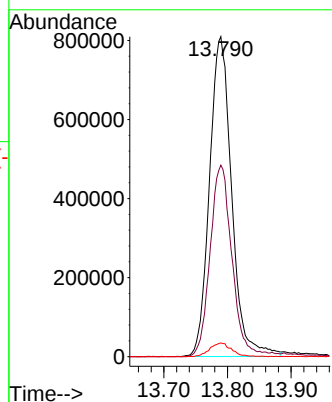
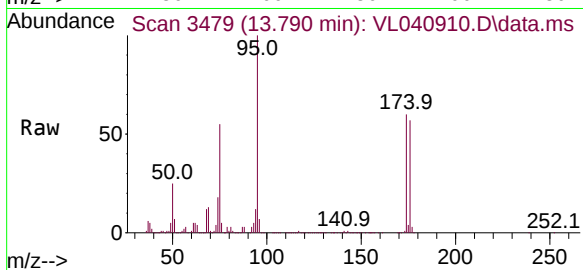
Tgt Ion: 95 Resp: 1957745

Ion Ratio Lower Upper

95 100

174 60.6 47.5 71.3

175 4.4 3.6 5.4



#72

4-Ethyltoluene

Concen: 0.360 ppbv

RT: 15.204 min Scan# 3919

Delta R.T. 0.000 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Tgt Ion: 105 Resp: 105646

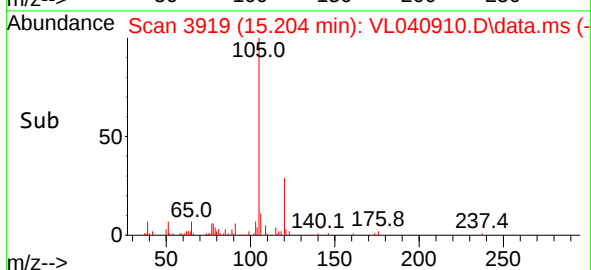
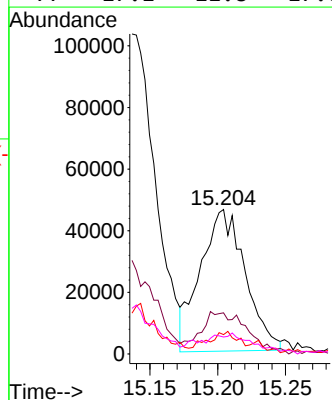
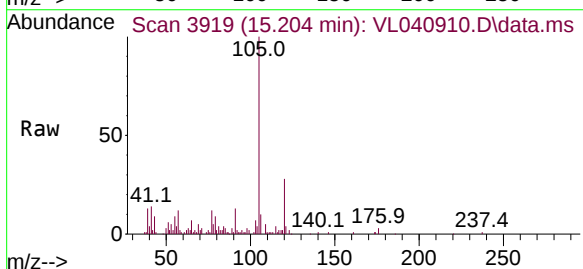
Ion Ratio Lower Upper

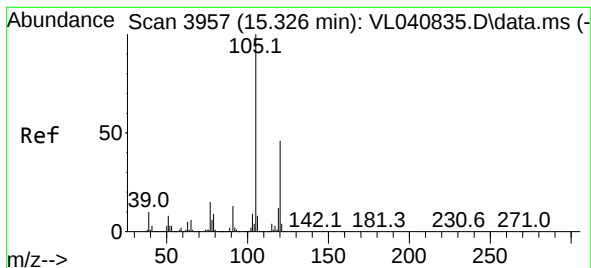
105 100

120 30.3 24.5 36.7

91 11.5 10.6 16.0

77 17.1 11.8 17.6





#73

1,3,5-Trimethylbenzene

Concen: 0.284 ppbv

RT: 15.365 min Scan# 3957

Delta R.T. 0.000 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Instrument :

MSVOA_L

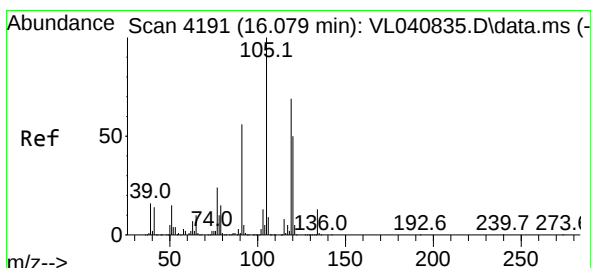
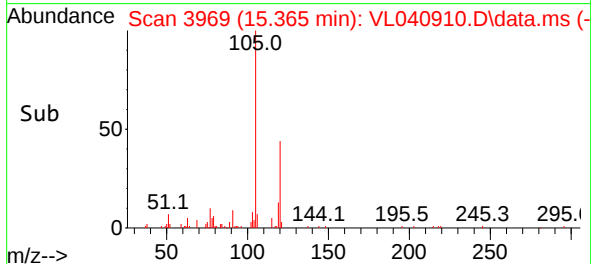
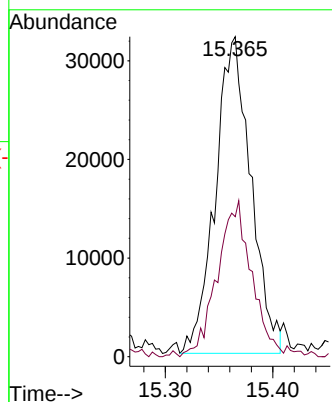
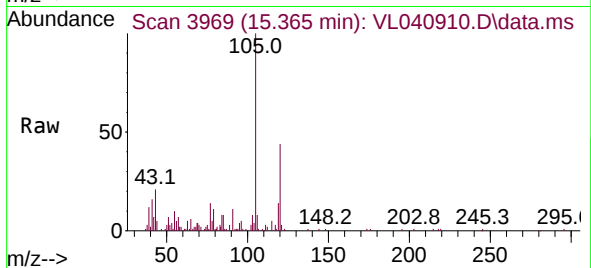
ClientSampleId :

Tgt Ion:105 Resp: 73759

Ion Ratio Lower Upper

105 100

120 44.2 36.8 55.2



#74

1,2,4-Trimethylbenzene

Concen: 0.700 ppbv

RT: 16.121 min Scan# 4204

Delta R.T. 0.000 min

Lab File: VL040910.D

Acq: 27 Nov 2023 16:39

Tgt Ion:105 Resp: 202813

Ion Ratio Lower Upper

105 100

120 40.7 40.2 60.2

91 10.7 45.7 68.5#

77 13.2 19.2 28.8#

