

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL110724\
 Data File : VL041689.D
 Acq On : 7 Nov 2024 22:24
 Operator : SY/MD
 Sample : P4696-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

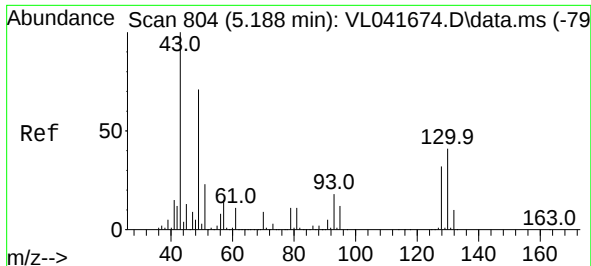
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP

Quant Time: Nov 08 03:54:21 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL110724AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Nov 08 01:01:00 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.189	49	964603	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.645	114	2690604	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.455	117	2290180	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.770	95	1658535	9.829	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.300%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.729	85	87126	0.500	ppbv	99
3) Chlorodifluoromethane	2.677	51	89188	0.710	ppbv #	90
4) Chloromethane	2.812	50	29766	0.447	ppbv #	88
9) Propene	2.703	41	51328	0.937	ppbv #	76
11) Trichlorofluoromethane	3.558	101	31794	0.209	ppbv	97
12) 1,1,2-Trichlorotrifluo...	4.066	101	8065	0.073	ppbv	94
13) Ethanol	3.243	45	2677510	798.484	ppbv	99
15) Acetone	3.462	43	2167486	18.258	ppbv	100
16) 1,3-Butadiene	2.967	39	4106	0.069	ppbv #	59
17) tert-Butyl alcohol	3.587	59	1128264	10.831	ppbv #	94
19) Isopropyl Alcohol	3.587	45	19048572	335.702	ppbv #	95
20) Methylene Chloride	3.931	84	22450	0.514	ppbv	97
21) Allyl Chloride	3.587	41	2727663	37.183	ppbv #	76
23) Vinyl Acetate	4.613	43	14188	0.271	ppbv #	31
25) Ethyl Acetate	5.205	43	28011	0.114	ppbv #	81
26) Hexane	5.208	57	6448	0.068	ppbv #	1
27) Carbon Disulfide	4.121	76	24649	0.232	ppbv #	74
29) Chloroform	5.269	83	50667	0.325	ppbv	92
34) 2-Butanone	4.790	43	50383	0.376	ppbv	97
35) Carbon Tetrachloride	6.484	117	5774	0.041	ppbv #	88
36) Benzene	6.362	78	13288	0.067	ppbv #	70
39) 1,2-Dichloropropane	6.645	63	661223	8.393	ppbv #	24
41) Tetrahydrofuran	5.555	42	7939	0.104	ppbv #	55
53) Toluene	9.214	91	145885	0.696	ppbv	97
60) o-Xylene	13.040	91	9859	0.046	ppbv #	30
64) n-propylbenzene	14.902	120	6342	0.073	ppbv #	1
72) 4-Ethyltoluene	15.188	105	117780	0.473	ppbv #	92
73) 1,3,5-Trimethylbenzene	15.339	105	76575	0.350	ppbv	92
74) 1,2,4-Trimethylbenzene	16.105	105	326698	1.286	ppbv #	67

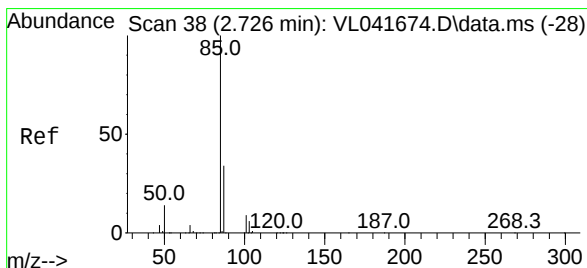
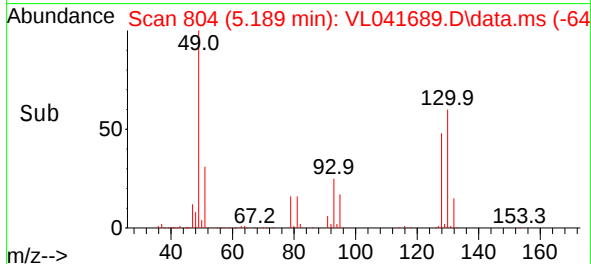
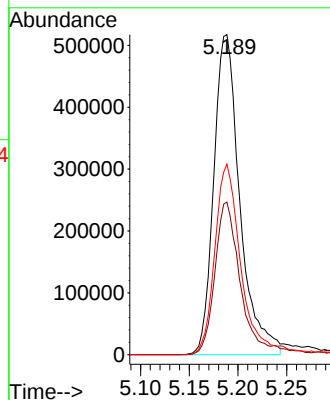
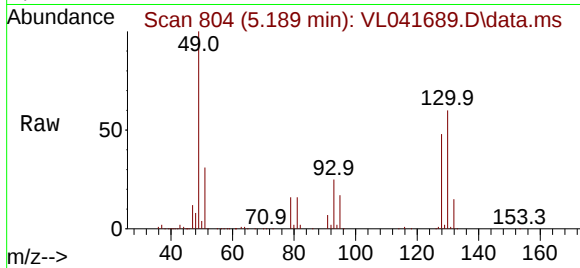
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.189 min Scan# 80
Delta R.T. 0.001 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

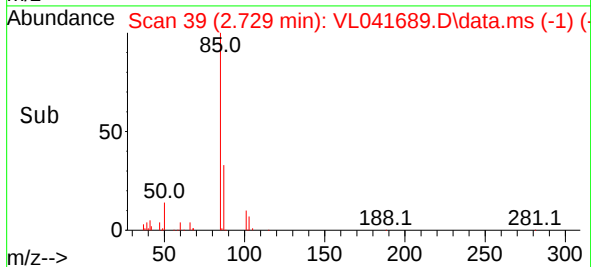
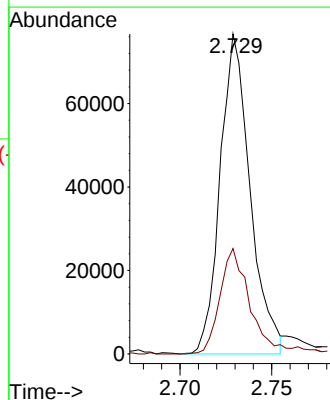
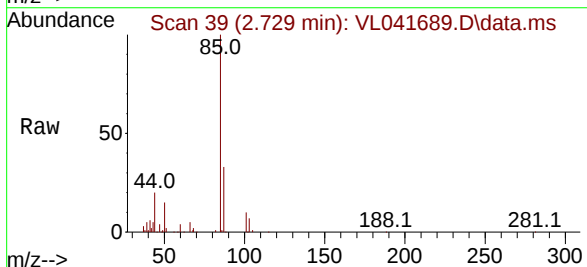
Instrument :
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ClientSampleId :
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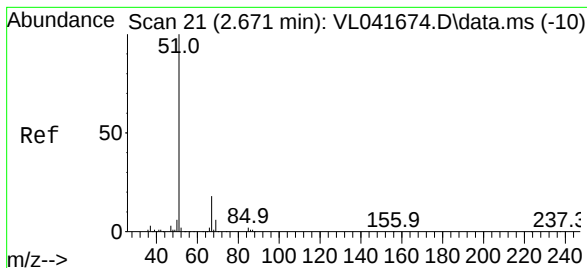
Tgt Ion: 49 Resp: 964603
Ion Ratio Lower Upper
49 100
128 48.3 23.8 71.2
130 61.8 30.1 90.5



#2
Dichlorodifluoromethane
Concen: 0.500 ppbv
RT: 2.729 min Scan# 39
Delta R.T. 0.003 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Tgt Ion: 85 Resp: 87126
Ion Ratio Lower Upper
85 100
87 32.9 26.8 40.2

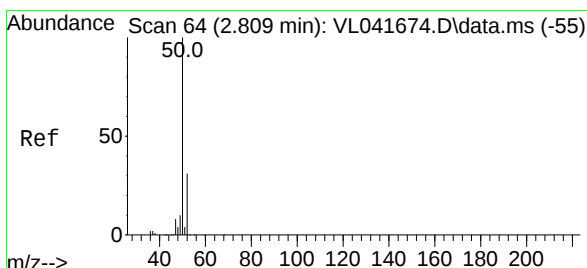
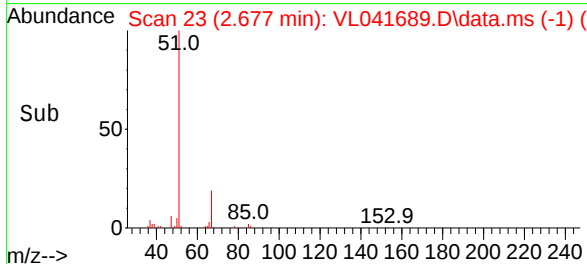
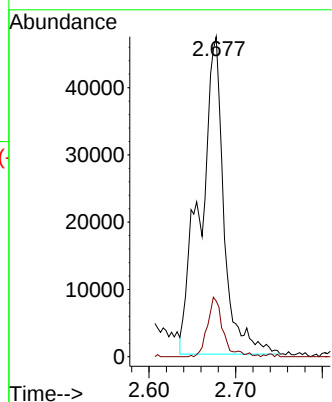
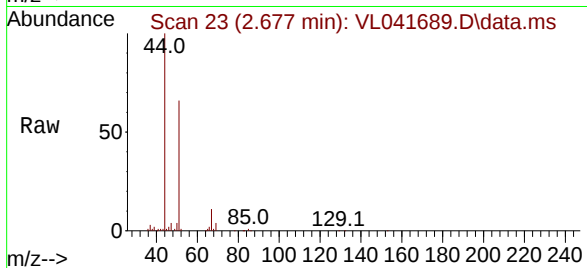




#3
Chlorodifluoromethane
Concen: 0.710 ppbv
RT: 2.677 min Scan# 21
Delta R.T. 0.007 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

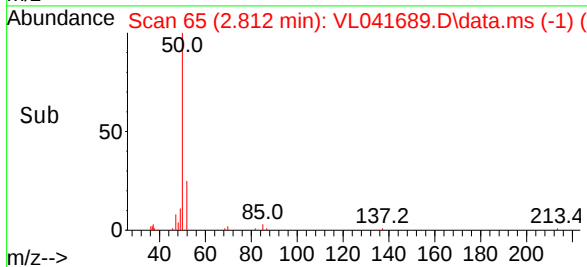
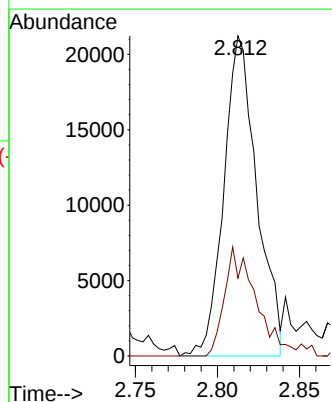
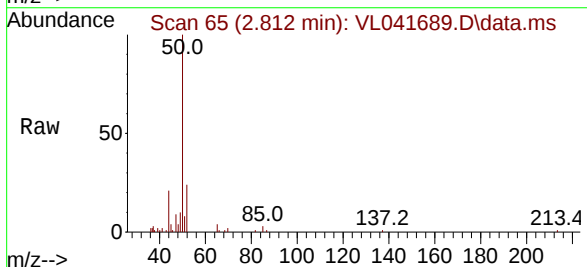
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

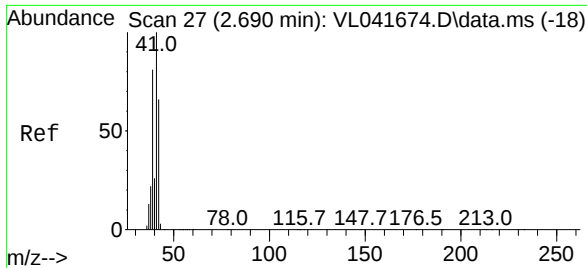
Tgt Ion: 51 Resp: 89188
Ion Ratio Lower Upper
51 100
67 12.8 13.9 20.9#



#4
Chloromethane
Concen: 0.447 ppbv
RT: 2.812 min Scan# 65
Delta R.T. 0.003 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Tgt Ion: 50 Resp: 29766
Ion Ratio Lower Upper
50 100
52 24.4 24.9 37.3#

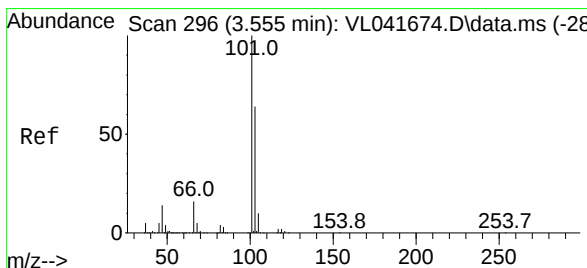
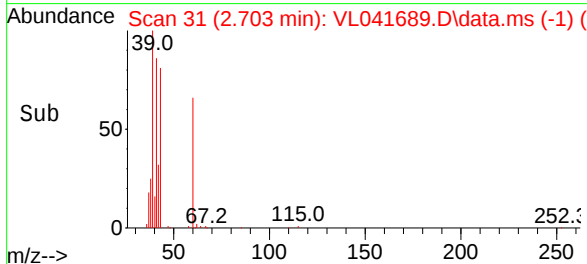
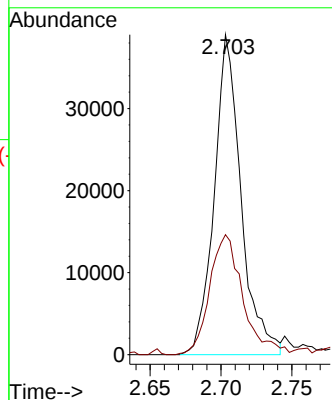
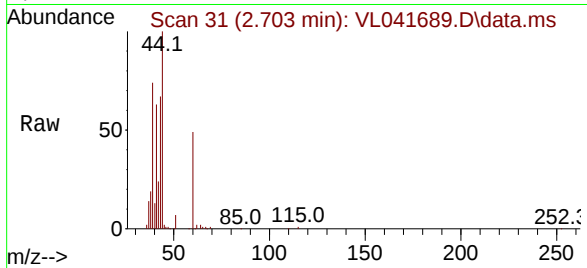




#9
Propene
Concen: 0.937 ppbv
RT: 2.703 min Scan# 31
Delta R.T. 0.013 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

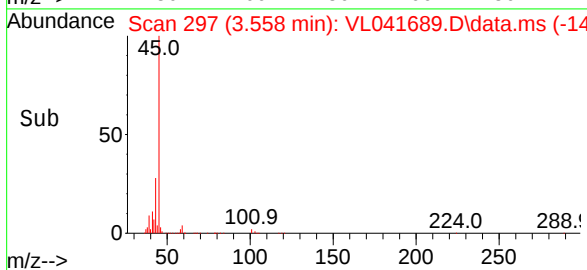
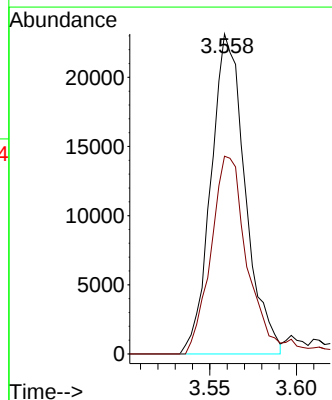
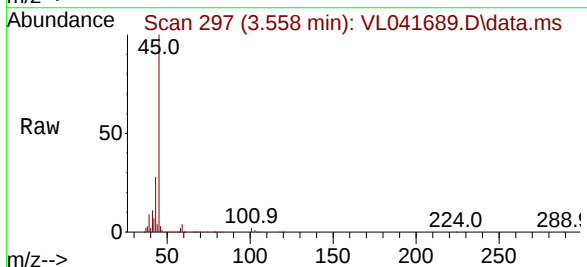
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

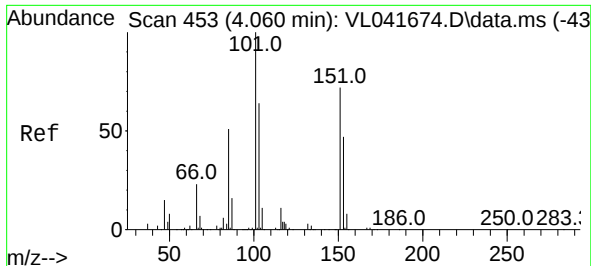
Tgt Ion: 41 Resp: 51328
Ion Ratio Lower Upper
41 100
42 49.6 55.0 82.4#



#11
Trichlorofluoromethane
Concen: 0.209 ppbv
RT: 3.558 min Scan# 297
Delta R.T. 0.003 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Tgt Ion:101 Resp: 31794
Ion Ratio Lower Upper
101 100
103 61.8 51.0 76.6

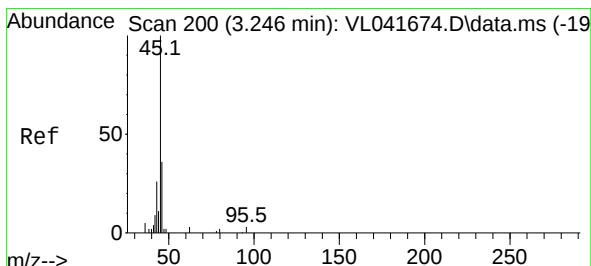
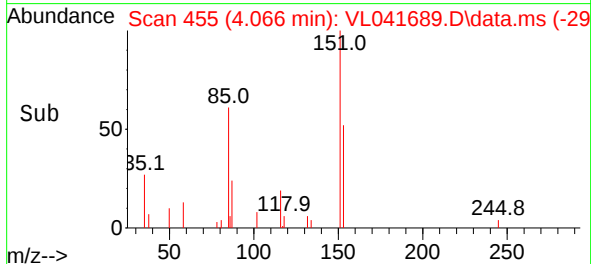
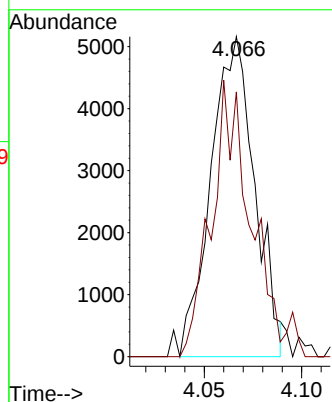
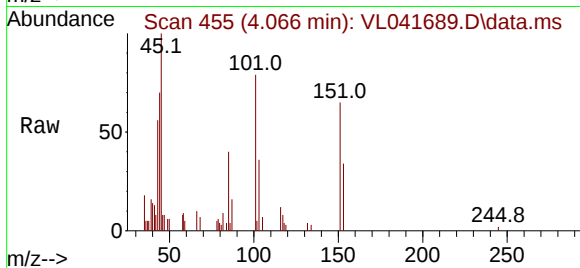




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.073 ppbv
RT: 4.066 min Scan# 41
Delta R.T. 0.007 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

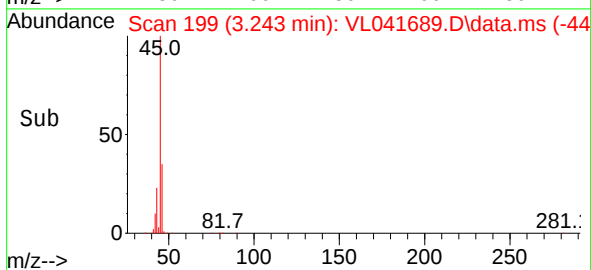
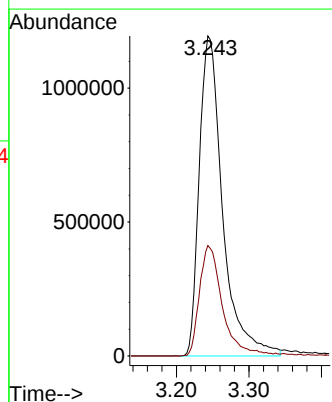
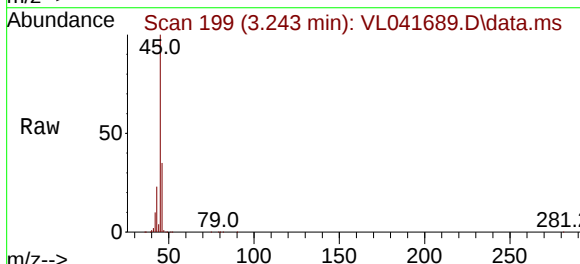
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

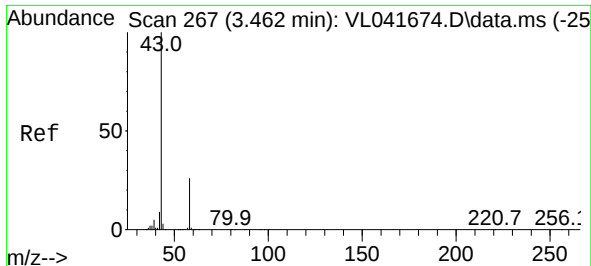
Tgt Ion:101 Resp: 8065
Ion Ratio Lower Upper
101 100
151 79.1 59.1 88.7



#13
Ethanol
Concen: 798.484 ppbv
RT: 3.243 min Scan# 199
Delta R.T. -0.003 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Tgt Ion: 45 Resp: 2677510
Ion Ratio Lower Upper
45 100
46 34.9 13.8 55.2





#15

Acetone

Concen: 18.258 ppbv

RT: 3.462 min Scan# 2

Delta R.T. 0.000 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

Instrument :

MSVOA_L

ClientSampleId :

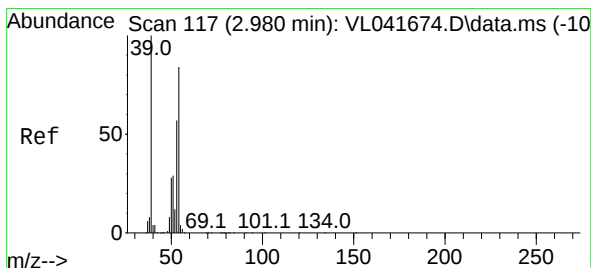
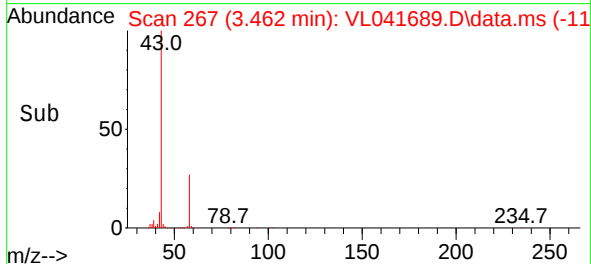
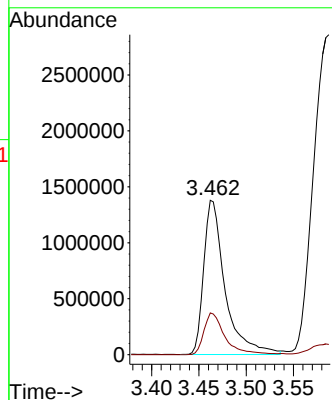
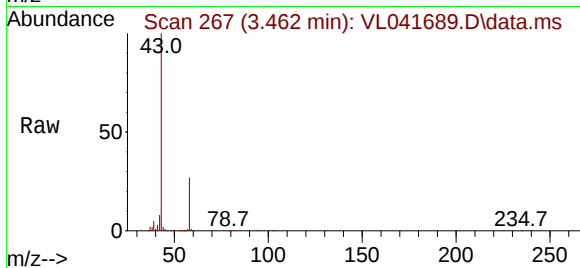
IA1DUP

Tgt Ion: 43 Resp: 2167486

Ion Ratio Lower Upper

43 100

58 26.9 21.4 32.0



#16

1,3-Butadiene

Concen: 0.069 ppbv

RT: 2.967 min Scan# 113

Delta R.T. -0.013 min

Lab File: VL041689.D

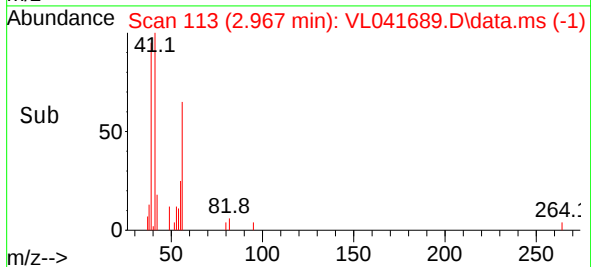
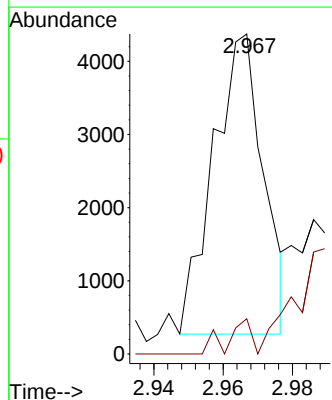
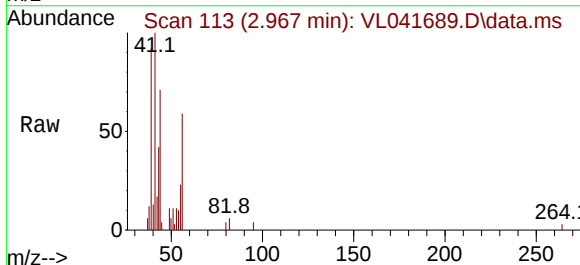
Acq: 7 Nov 2024 22:24

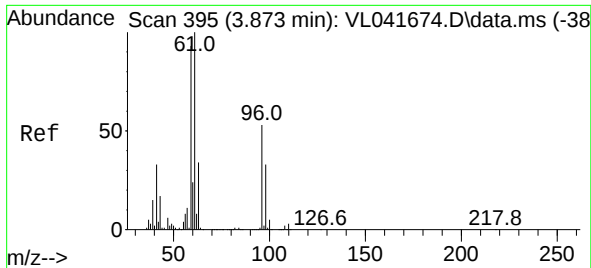
Tgt Ion: 39 Resp: 4106

Ion Ratio Lower Upper

39 100

54 40.9 61.3 91.9#

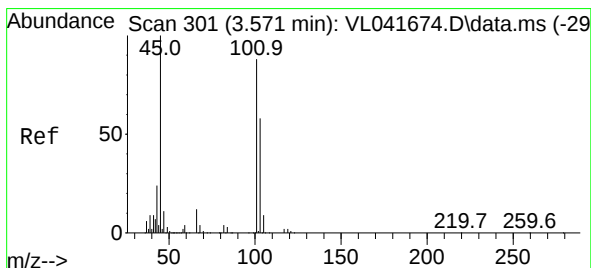
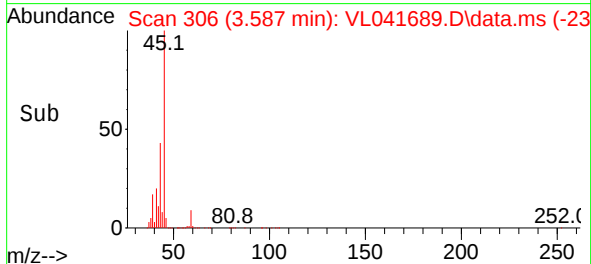
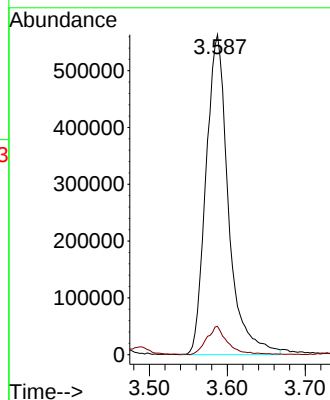
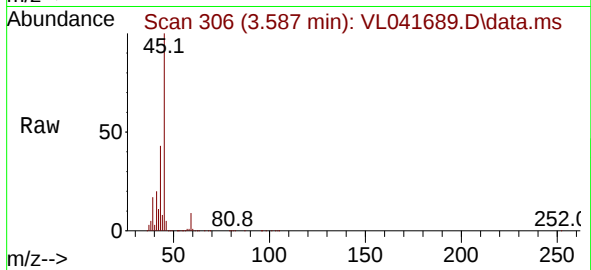




#17
tert-Butyl alcohol
Concen: 10.831 ppbv
RT: 3.587 min Scan# 306
Delta R.T. -0.286 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

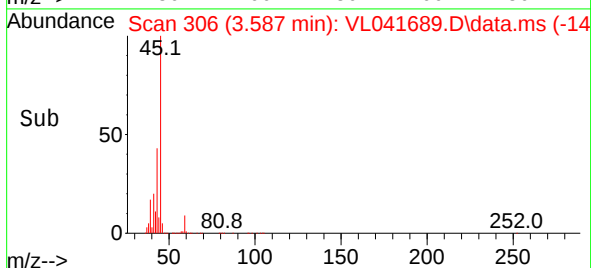
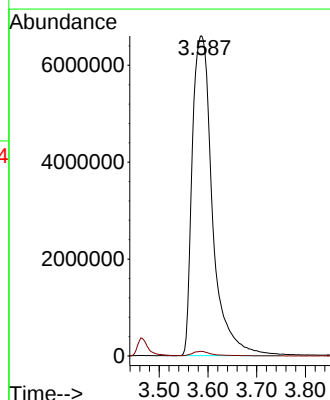
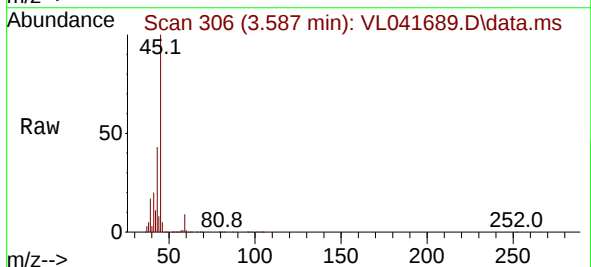
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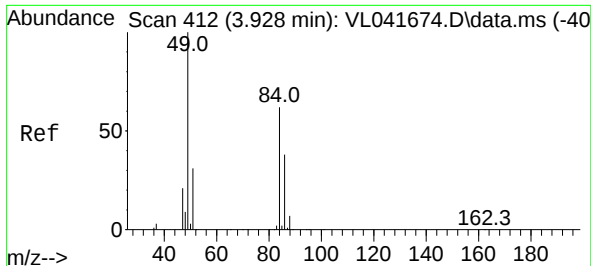
Tgt Ion: 59 Resp: 1128264
Ion Ratio Lower Upper
59 100
57 8.4 8.5 12.7#



#19
Isopropyl Alcohol
Concen: 335.702 ppbv
RT: 3.587 min Scan# 306
Delta R.T. 0.016 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Tgt Ion: 45 Resp:19048572
Ion Ratio Lower Upper
45 100
58 1.5 2.5 3.7#





#20

Methylene Chloride

Concen: 0.514 ppbv

RT: 3.931 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

Tgt Ion: 84 Resp: 22450

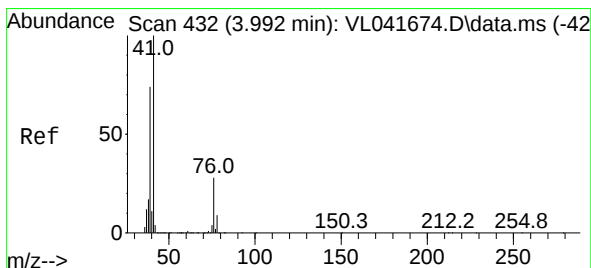
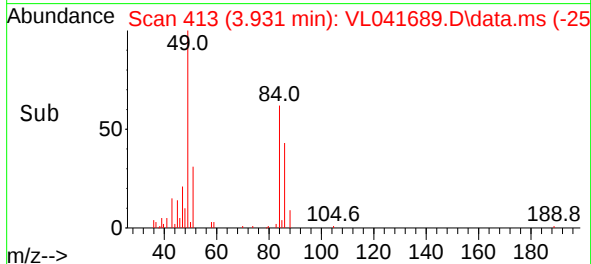
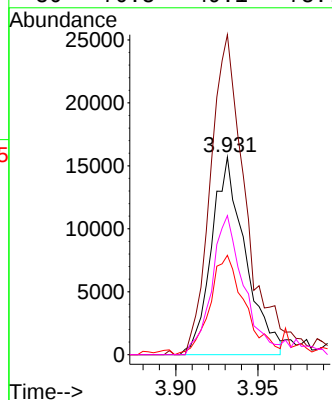
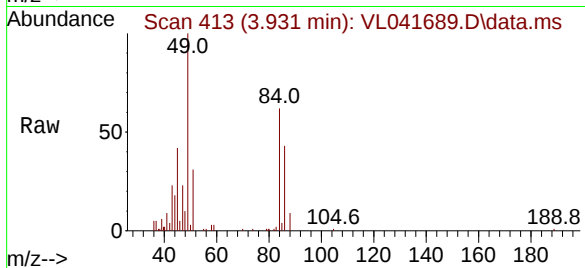
Ion Ratio Lower Upper

84 100

49 161.9 129.7 194.5

51 49.2 39.8 59.6

86 70.3 49.1 73.7



#21

Allyl Chloride

Concen: 37.183 ppbv

RT: 3.587 min Scan# 306

Delta R.T. -0.405 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

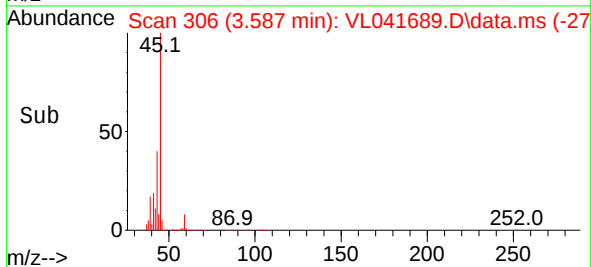
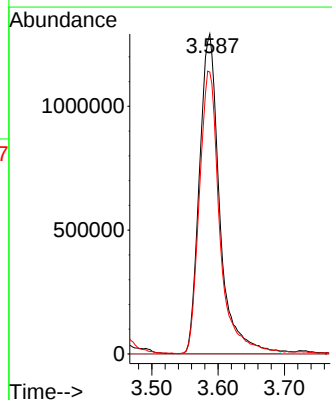
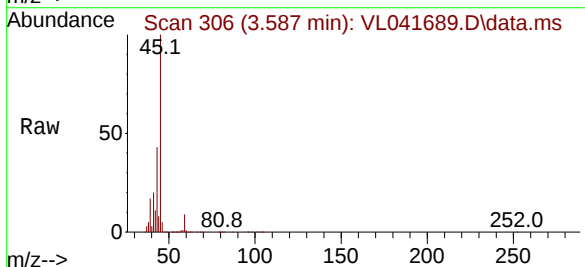
Tgt Ion: 41 Resp: 2727663

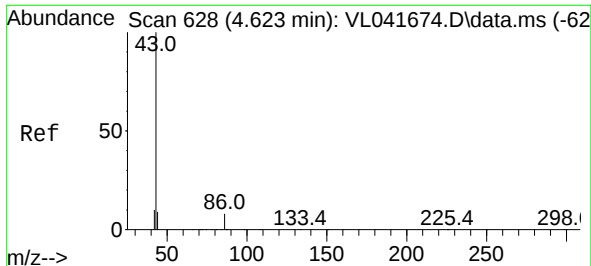
Ion Ratio Lower Upper

41 100

76 0.0 23.5 35.3#

39 89.2 63.0 94.4



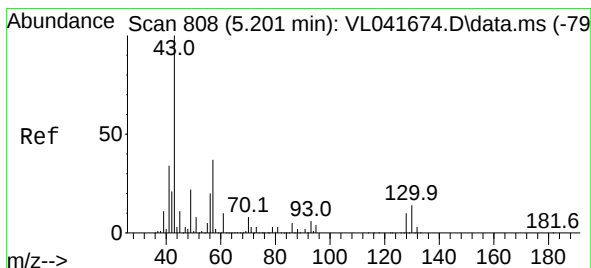
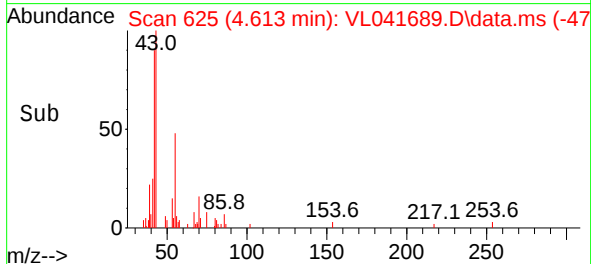
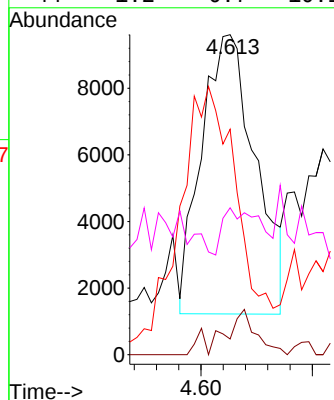
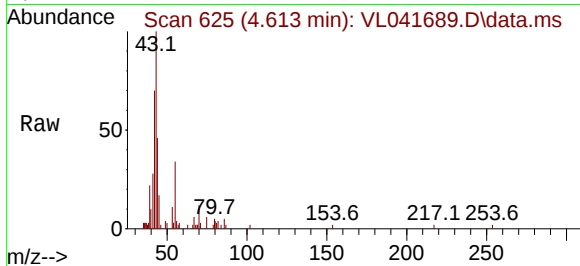


#23
Vinyl Acetate
Concen: 0.271 ppbv
RT: 4.613 min Scan# 61
Delta R.T. -0.010 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

Tgt Ion: 43 Resp: 14188

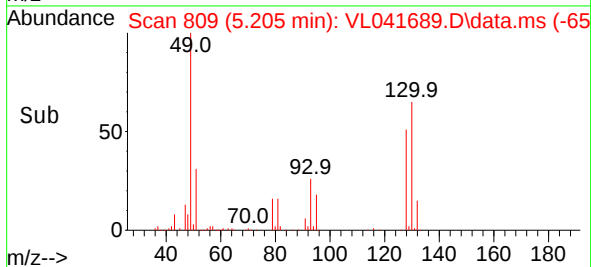
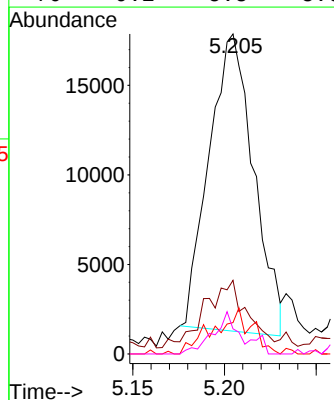
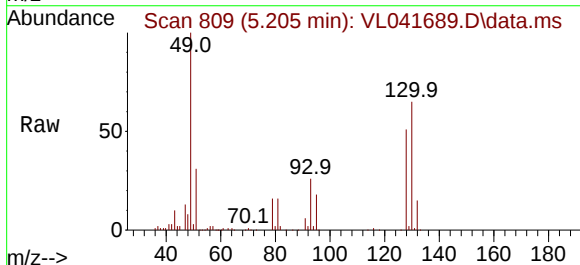
Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.3	7.9#
42	66.5	8.5	12.7#
44	1.2	6.7	10.1#

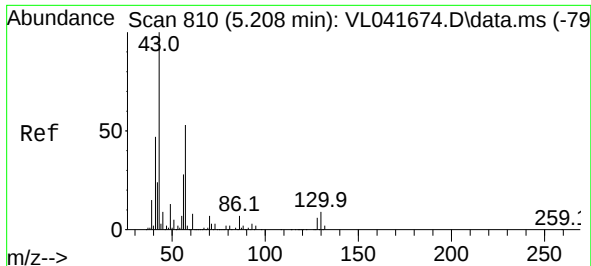


#25
Ethyl Acetate
Concen: 0.114 ppbv
RT: 5.205 min Scan# 809
Delta R.T. 0.003 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Tgt Ion: 43 Resp: 28011

Ion	Ratio	Lower	Upper
43	100		
45	24.9	8.6	13.0#
61	13.6	8.4	12.6#
70	9.2	5.8	8.6#





#26

Hexane

Concen: 0.068 ppbv

RT: 5.208 min Scan# 810

Delta R.T. 0.000 min

Lab File: VL041689.D

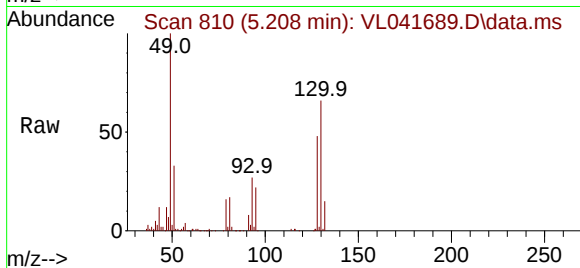
Acq: 7 Nov 2024 22:24

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP



Tgt Ion: 57 Resp: 6448

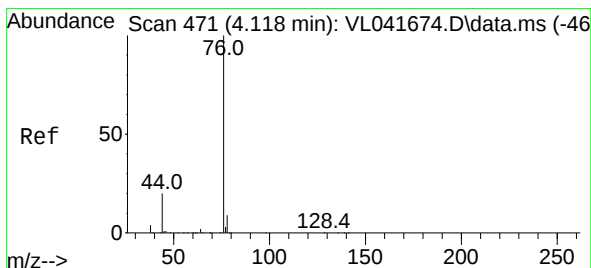
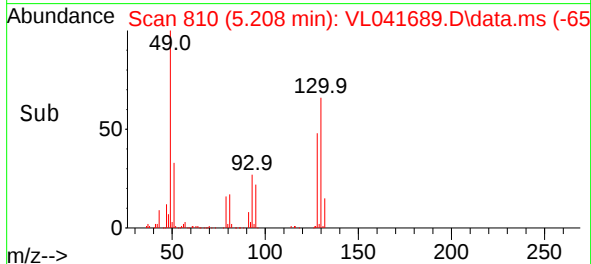
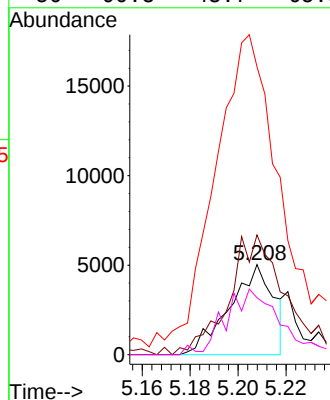
Ion Ratio Lower Upper

57 100

41 179.0 76.1 114.1#

43 594.5 207.0 310.6#

56 90.8 43.7 65.5#



#27

Carbon Disulfide

Concen: 0.232 ppbv

RT: 4.121 min Scan# 472

Delta R.T. 0.003 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

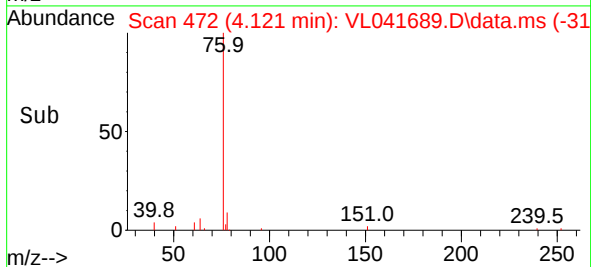
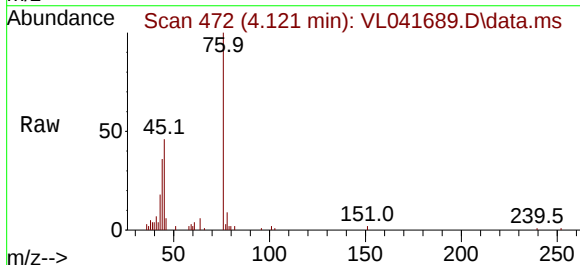
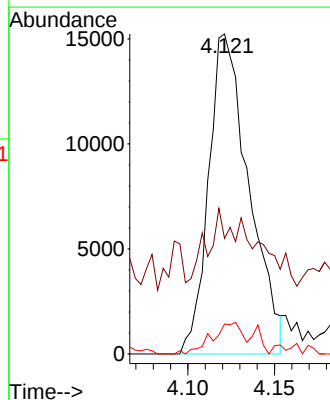
Tgt Ion: 76 Resp: 24649

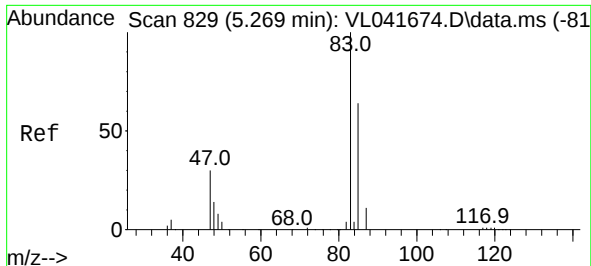
Ion Ratio Lower Upper

76 100

44 36.4 15.8 23.8#

78 11.4 7.5 11.3#





#29

Chloroform

Concen: 0.325 ppbv

RT: 5.269 min Scan# 81

Delta R.T. 0.000 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

Instrument :

MSVOA_L

ClientSampleId :

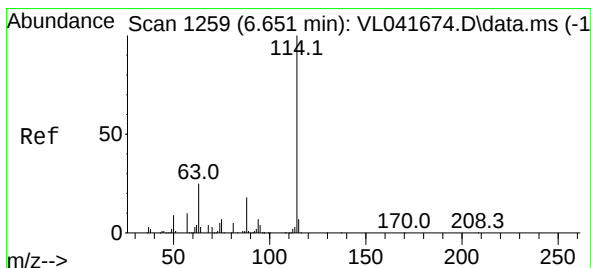
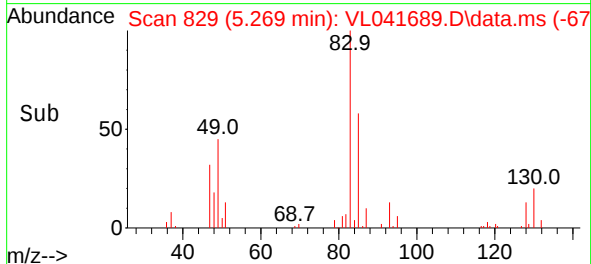
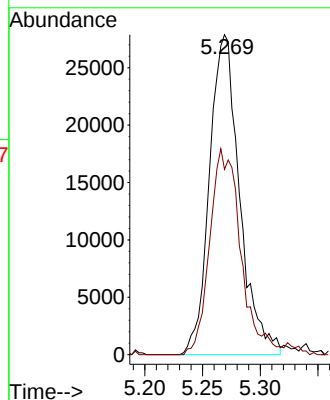
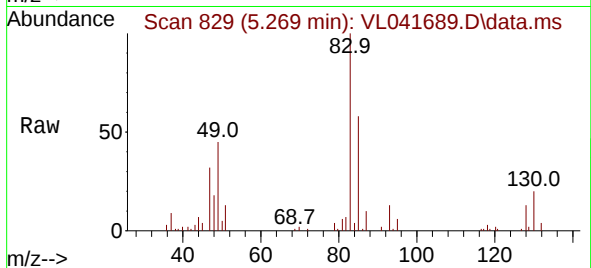
IA1DUP

Tgt Ion: 83 Resp: 50667

Ion Ratio Lower Upper

83 100

85 57.9 51.1 76.7



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.645 min Scan# 1257

Delta R.T. -0.006 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

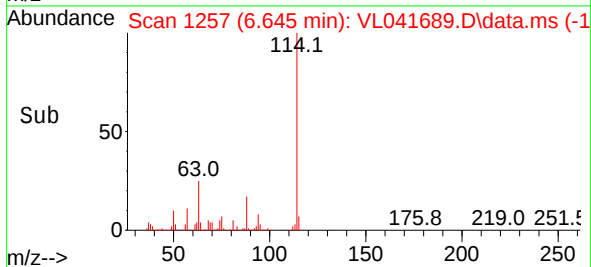
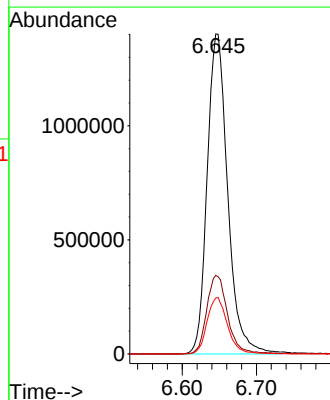
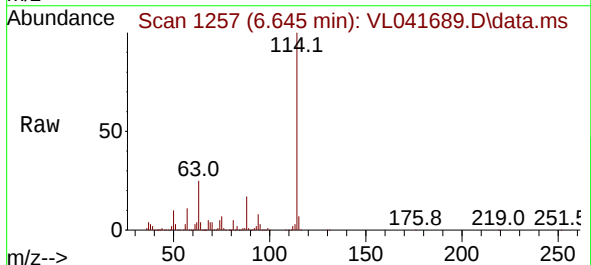
Tgt Ion:114 Resp: 2690604

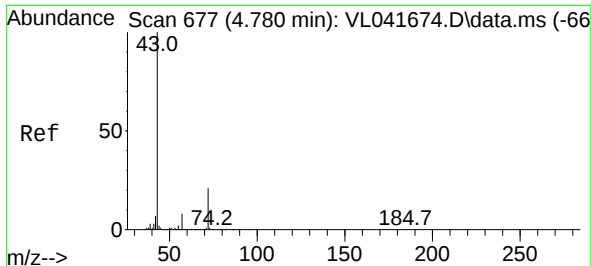
Ion Ratio Lower Upper

114 100

63 25.1 20.3 30.5

88 17.6 14.2 21.4

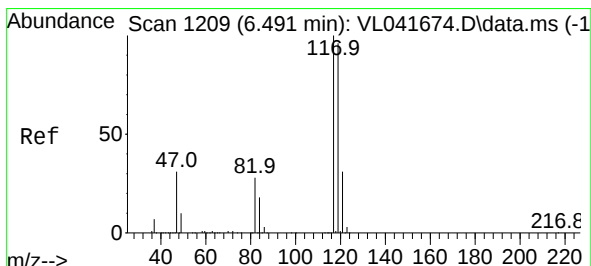
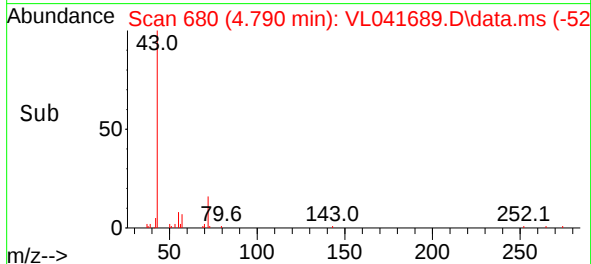
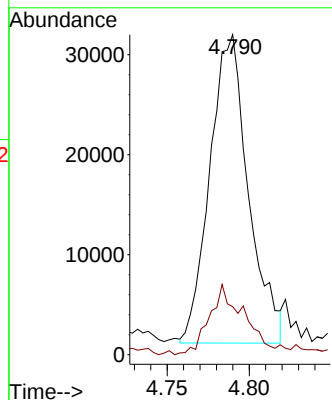
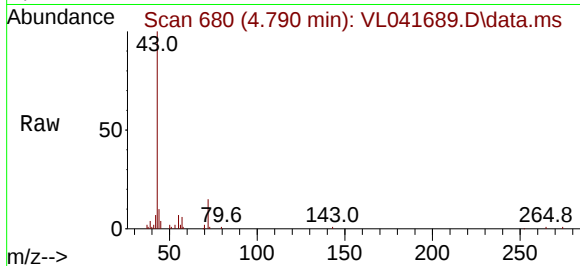




#34
2-Butanone
Concen: 0.376 ppbv
RT: 4.790 min Scan# 61
Delta R.T. 0.010 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

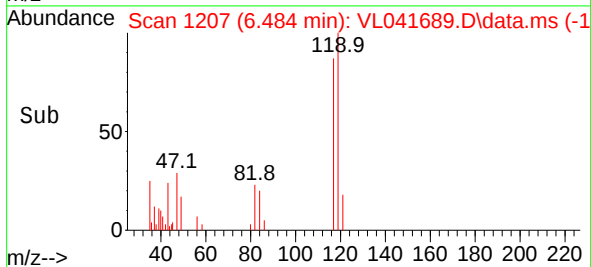
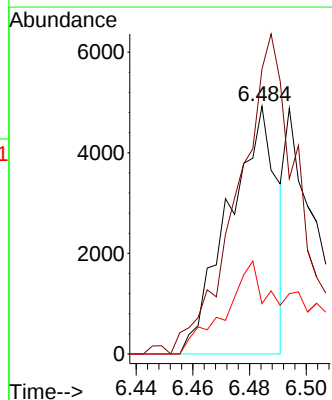
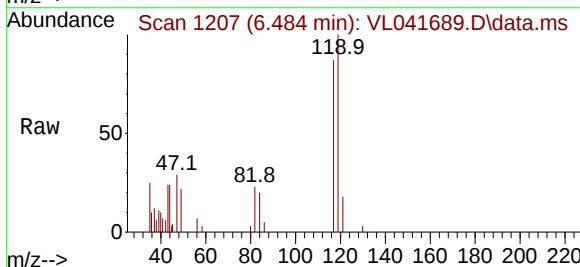
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

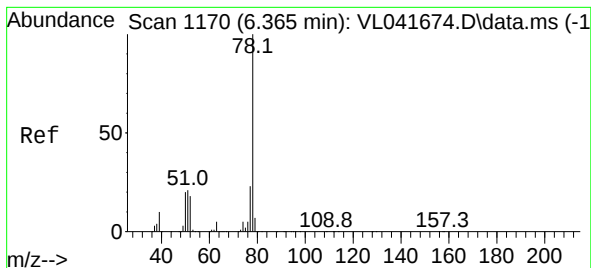
Tgt Ion: 43 Resp: 50383
Ion Ratio Lower Upper
43 100
72 23.0 17.4 26.0



#35
Carbon Tetrachloride
Concen: 0.041 ppbv
RT: 6.484 min Scan# 1207
Delta R.T. -0.006 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Tgt Ion: 117 Resp: 5774
Ion Ratio Lower Upper
117 100
119 106.4 77.2 115.8
121 20.3 25.0 37.4#





#36

Benzene

Concen: 0.067 ppbv

RT: 6.362 min Scan# 1169

Delta R.T. -0.003 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

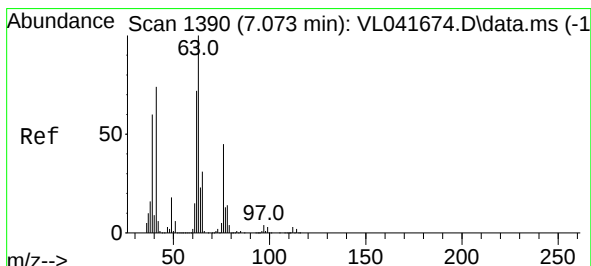
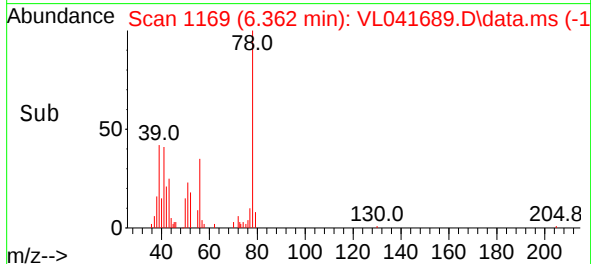
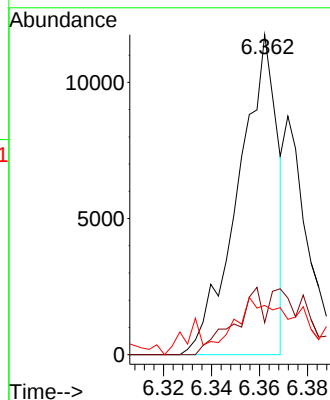
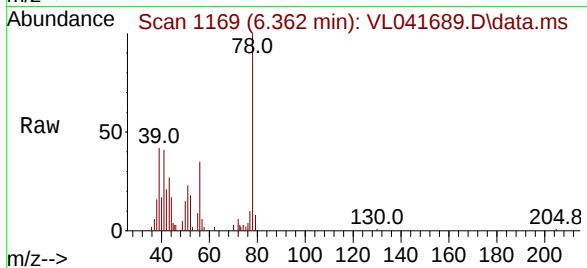
Tgt Ion: 78 Resp: 13288

Ion Ratio Lower Upper

78 100

77 10.0 18.5 27.7#

50 4.4 15.6 23.4#



#39

1,2-Dichloropropane

Concen: 8.393 ppbv

RT: 6.645 min Scan# 1257

Delta R.T. -0.428 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

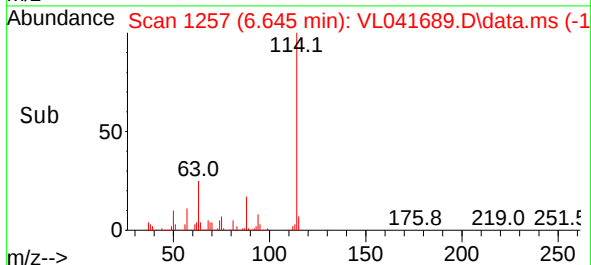
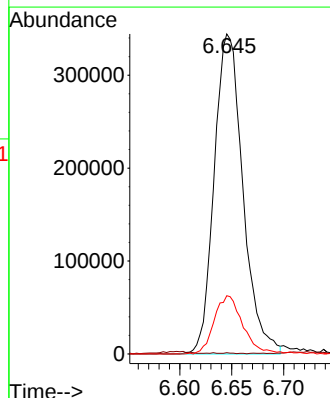
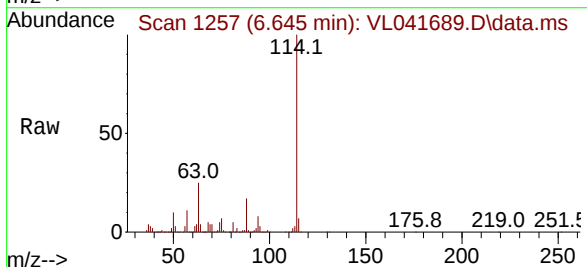
Tgt Ion: 63 Resp: 661223

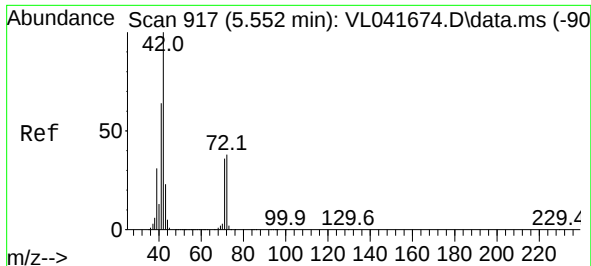
Ion Ratio Lower Upper

63 100

41 0.1 59.1 88.7#

62 18.2 57.7 86.5#

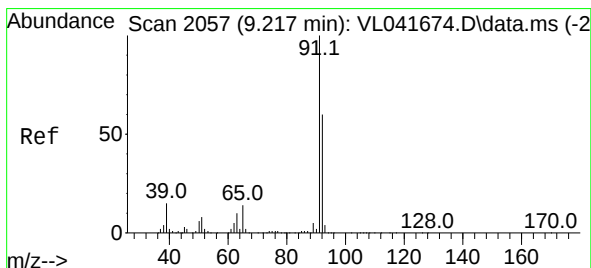
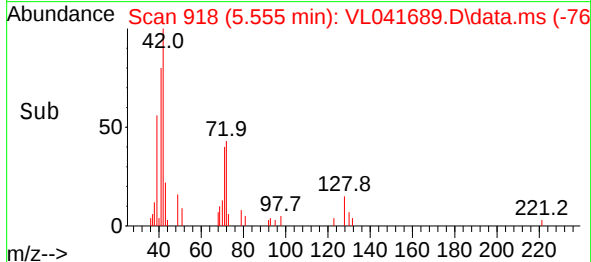
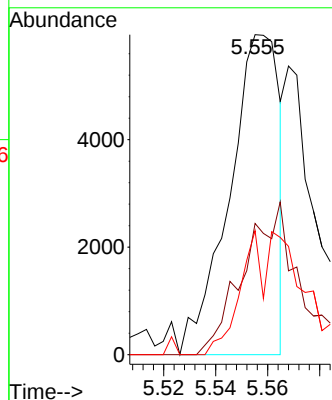
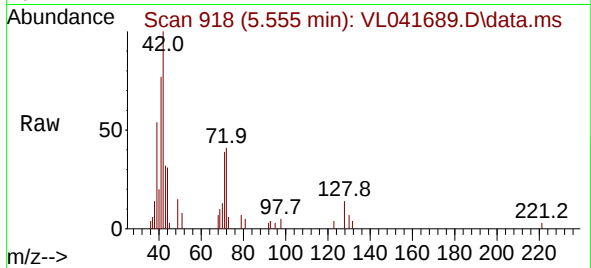




#41
Tetrahydrofuran
Concen: 0.104 ppbv
RT: 5.555 min Scan# 917
Delta R.T. 0.003 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

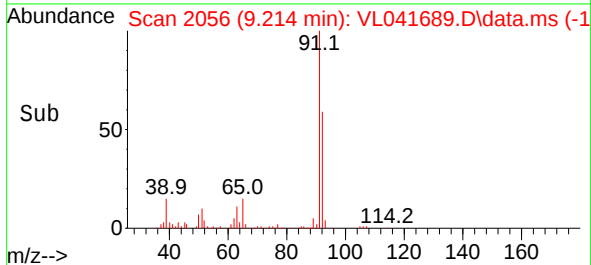
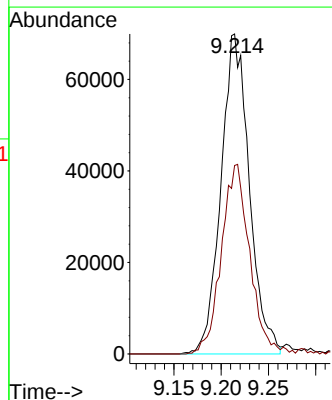
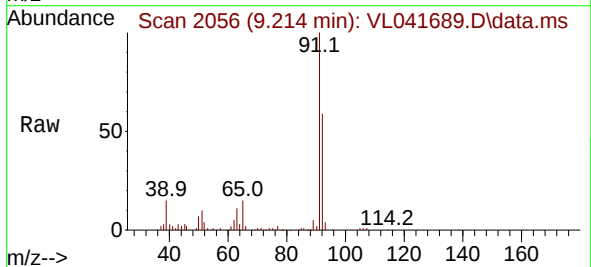
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

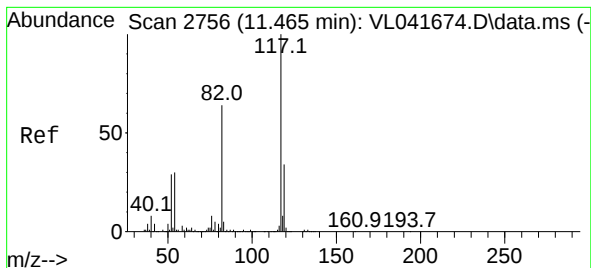
Tgt Ion: 42 Resp: 7939
Ion Ratio Lower Upper
42 100
72 0.0 29.8 44.6#
71 52.9 29.4 44.2#



#53
Toluene
Concen: 0.696 ppbv
RT: 9.214 min Scan# 2056
Delta R.T. -0.003 min
Lab File: VL041689.D
Acq: 7 Nov 2024 22:24

Tgt Ion: 91 Resp: 145885
Ion Ratio Lower Upper
91 100
92 59.2 49.0 73.4





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.455 min Scan# 21

Delta R.T. -0.009 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

Instrument :

MSVOA_1

ClientSampleId :

IA1DUP

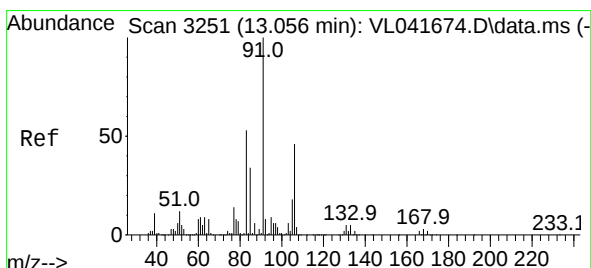
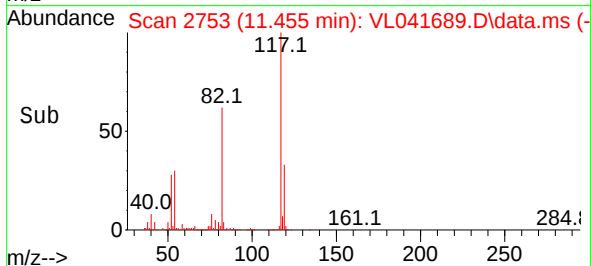
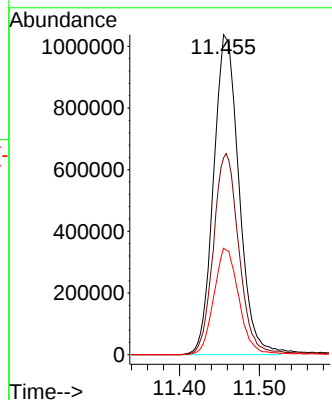
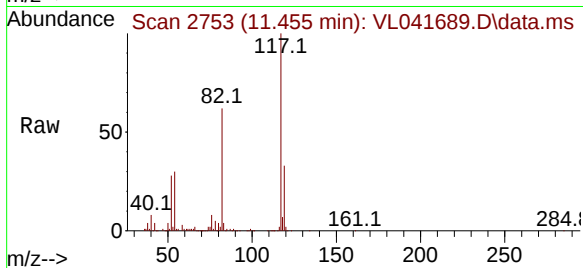
Tgt Ion:117 Resp: 2290180

Ion Ratio Lower Upper

117 100

82 63.9 49.8 74.8

119 33.2 24.2 36.4



#60

o-Xylene

Concen: 0.046 ppbv

RT: 13.040 min Scan# 3246

Delta R.T. -0.016 min

Lab File: VL041689.D

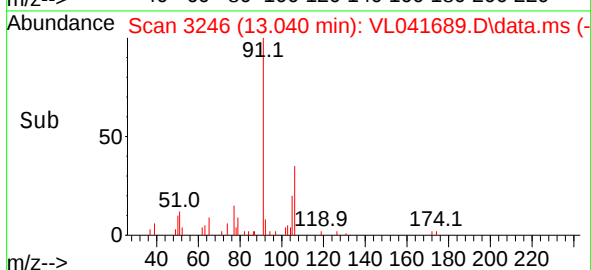
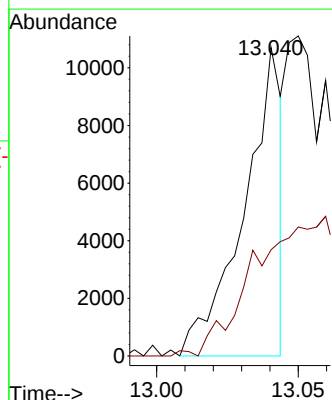
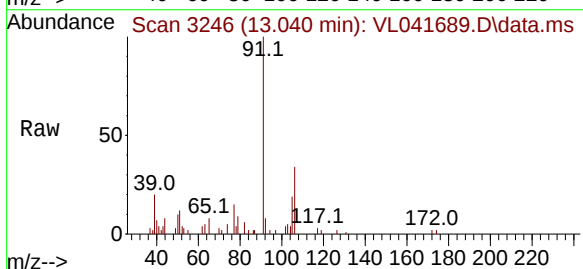
Acq: 7 Nov 2024 22:24

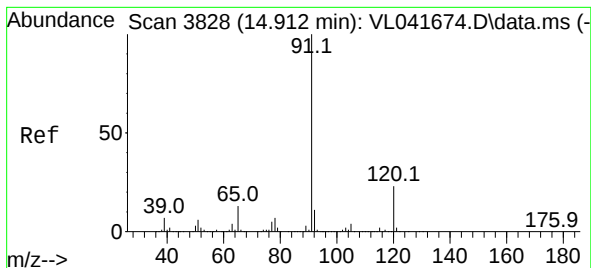
Tgt Ion: 91 Resp: 9859

Ion Ratio Lower Upper

91 100

106 0.0 23.2 69.6#





#64

n-propylbenzene

Concen: 0.073 ppbv

RT: 14.902 min Scan# 3828

Delta R.T. -0.010 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

Instrument :

MSVOA_L

ClientSampleId :

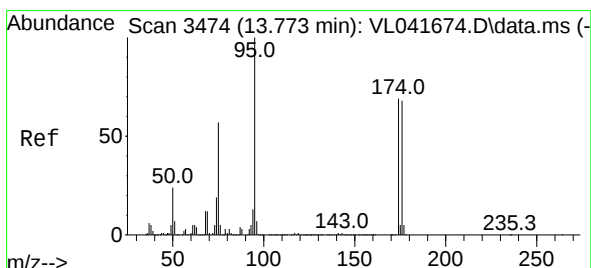
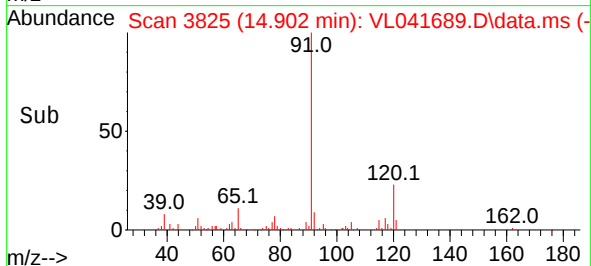
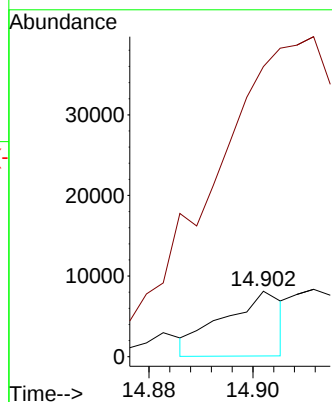
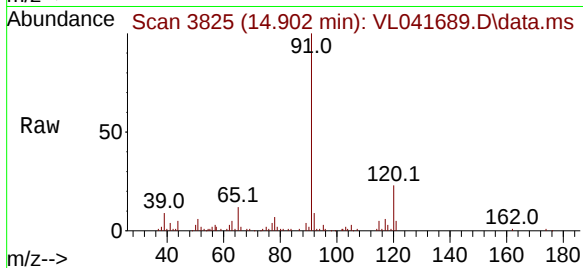
IA1DUP

Tgt Ion:120 Resp: 6342

Ion Ratio Lower Upper

120 100

91 0.0 362.4 543.6#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.829 ppbv

RT: 13.770 min Scan# 3473

Delta R.T. -0.003 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

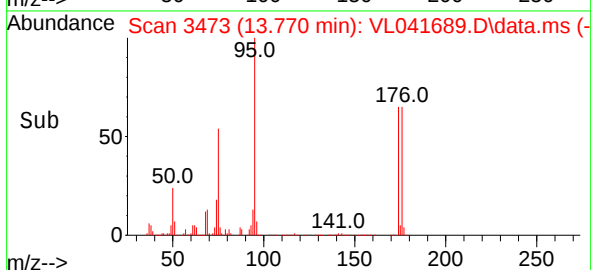
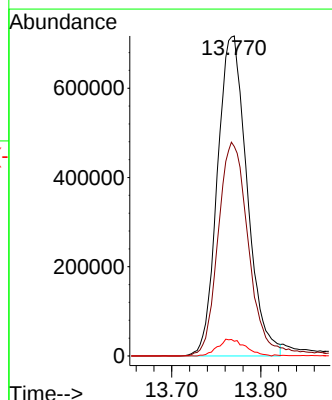
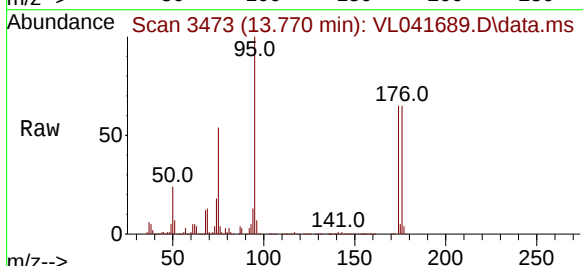
Tgt Ion: 95 Resp: 1658535

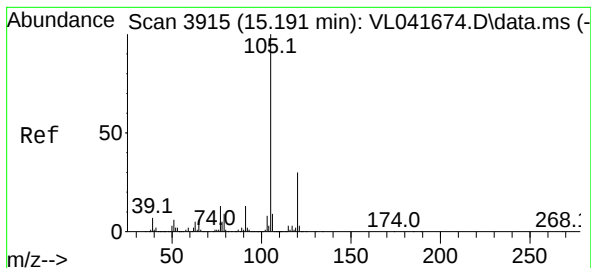
Ion Ratio Lower Upper

95 100

174 70.2 55.6 83.4

175 5.0 4.2 6.2





#72

4-Ethyltoluene

Concen: 0.473 ppbv

RT: 15.188 min Scan# 3914

Delta R.T. -0.003 min

Lab File: VL041689.D

Acq: 7 Nov 2024 22:24

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

Tgt Ion:105 Resp: 117780

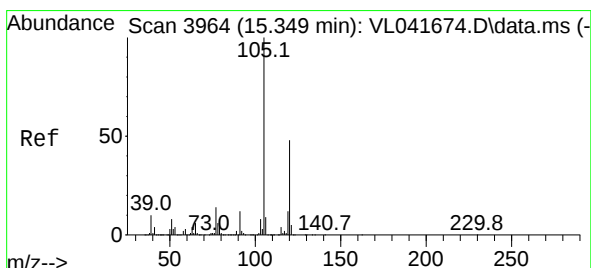
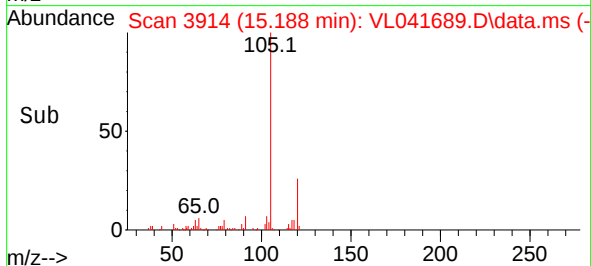
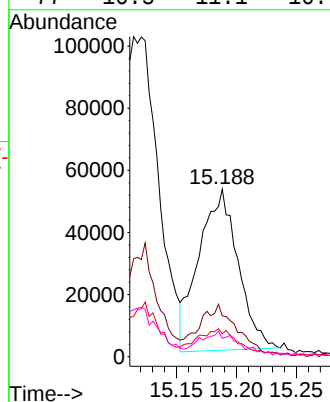
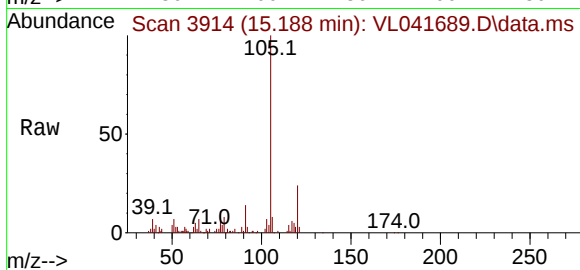
Ion Ratio Lower Upper

105 100

120 33.8 25.0 37.4

91 20.2 10.6 15.8#

77 16.5 11.1 16.7



#73

1,3,5-Trimethylbenzene

Concen: 0.350 ppbv

RT: 15.339 min Scan# 3961

Delta R.T. -0.010 min

Lab File: VL041689.D

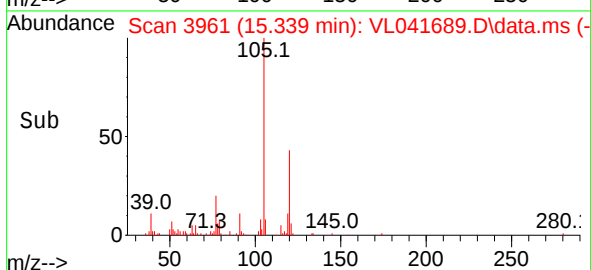
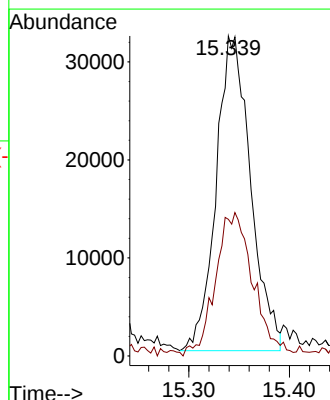
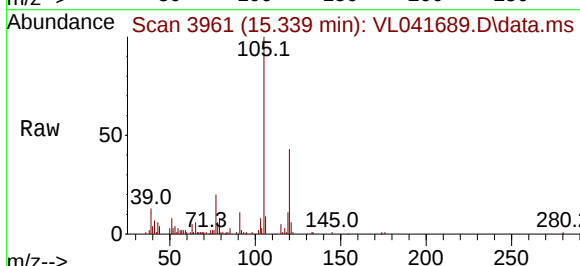
Acq: 7 Nov 2024 22:24

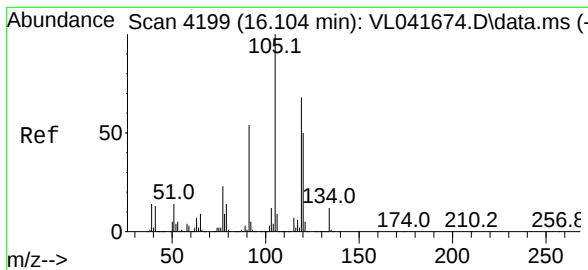
Tgt Ion:105 Resp: 76575

Ion Ratio Lower Upper

105 100

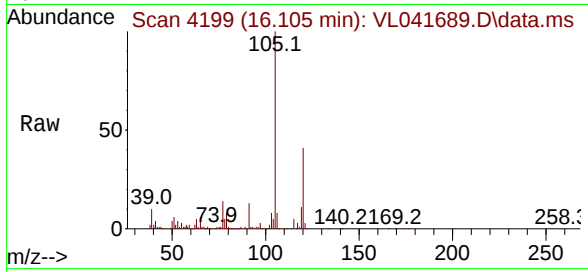
120 42.3 38.4 57.6





#74
 1,2,4-Trimethylbenzene
 Concen: 1.286 ppbv
 RT: 16.105 min Scan# 4199
 Delta R.T. 0.000 min
 Lab File: VL041689.D
 Acq: 7 Nov 2024 22:24

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP



Tgt Ion:	105	Resp:	326698
Ion	Ratio	Lower	Upper
105	100		
120	41.4	39.8	59.8
91	12.0	43.2	64.8#
77	13.8	18.5	27.7#

