

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL010725\
 Data File : VL041849.D
 Acq On : 07 Jan 2025 18:03
 Operator : SY/MD
 Sample : Q1031-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

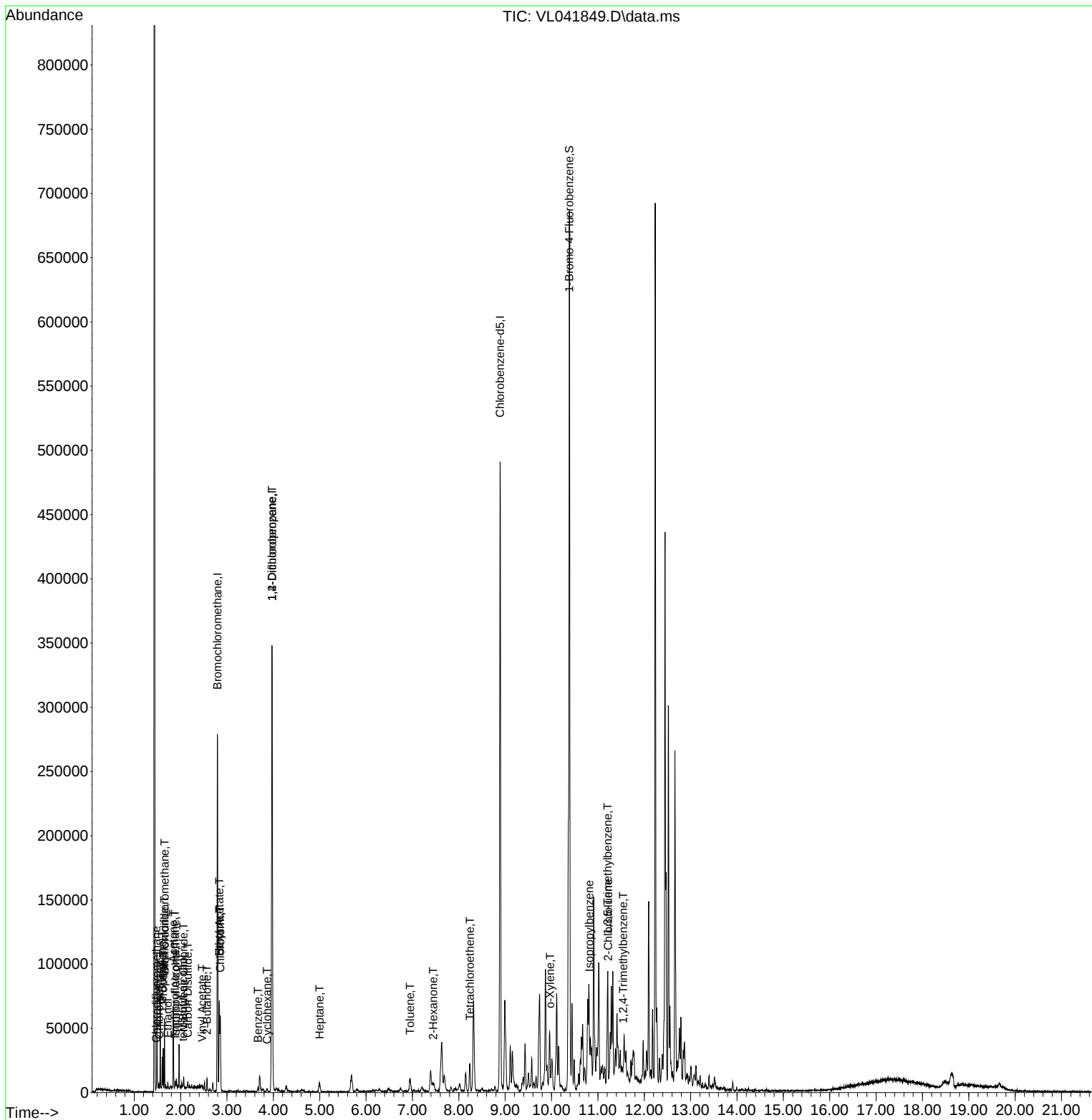
Quant Time: Jan 08 03:56:21 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL010725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Jan 08 03:26:12 2025
 Response via : Initial Calibration

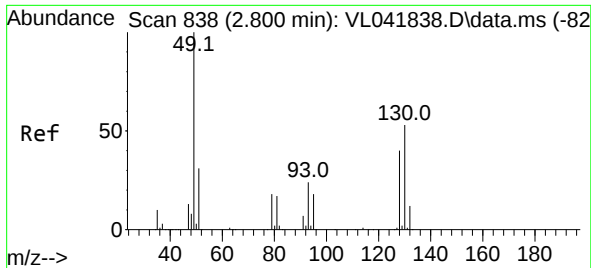
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.793	49	79757	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.971	114	173620	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	172495	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	163694	11.080	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.654	85	865	0.066	ppbv	100
3) Chlorodifluoromethane	1.476	51	1296	0.104	ppbv	97
4) Chloromethane	1.534	50	807	0.150	ppbv	96
5) Vinyl Chloride	1.651	62	170	0.031	ppbv #	1
9) Propene	1.625	41	2999	0.689	ppbv	100
10) Heptane	4.997	43	830	0.077	ppbv #	1
11) Trichlorofluoromethane	1.881	101	922	0.069	ppbv #	81
13) Ethanol	1.722	45	1562	2.731	ppbv #	38
15) Acetone	1.838	43	28044	1.910	ppbv	97
16) 1,3-Butadiene	1.602	39	2944	0.511	ppbv #	30
17) tert-Butyl alcohol	2.052	59	389	0.031	ppbv #	49
19) Isopropyl Alcohol	1.890	45	1488	0.216	ppbv #	1
20) Methylene Chloride	2.065	84	1152	0.274	ppbv	90
23) Vinyl Acetate	2.463	43	1147	0.251	ppbv #	88
25) Ethyl Acetate	2.835	43	9401	0.382	ppbv #	82
26) Hexane	2.835	57	11264	1.318	ppbv #	26
27) Carbon Disulfide	2.156	76	2404	0.296	ppbv #	1
29) Chloroform	2.858	83	21163	1.333	ppbv	99
30) Cyclohexane	3.865	84	218	0.034	ppbv #	1
34) 2-Butanone	2.567	43	5996	0.438	ppbv	99
36) Benzene	3.670	78	1073	0.065	ppbv #	83
39) 1,2-Dichloropropane	3.971	63	48563	7.569	ppbv #	18
51) 2-Hexanone	7.448	43	974	0.081	ppbv #	35
52) Tetrachloroethene	8.241	164	1614	0.328	ppbv	91
53) Toluene	6.949	91	6392	0.433	ppbv	93
60) o-Xylene	9.969	91	2647	0.131	ppbv	86
62) Isopropylbenzene	10.814	105	1256	0.040	ppbv	91
71) 2-Chlorotoluene	11.218	91	877	0.038	ppbv	73
73) 1,3,5-Trimethylbenzene	11.209	105	940	0.044	ppbv #	43
74) 1,2,4-Trimethylbenzene	11.545	105	2507	0.101	ppbv #	74

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

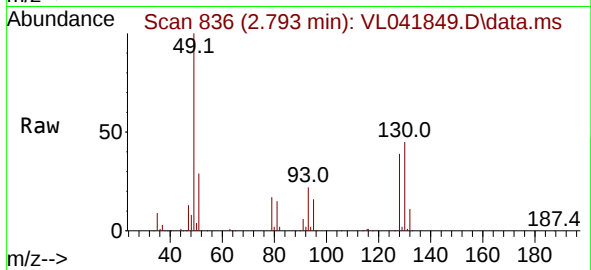
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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Jan 08 03:26:12 2025
Response via : Initial Calibration



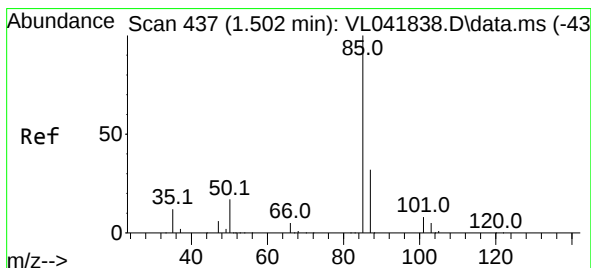
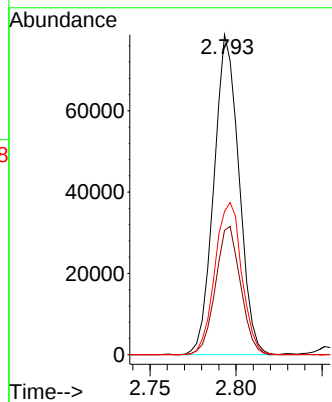
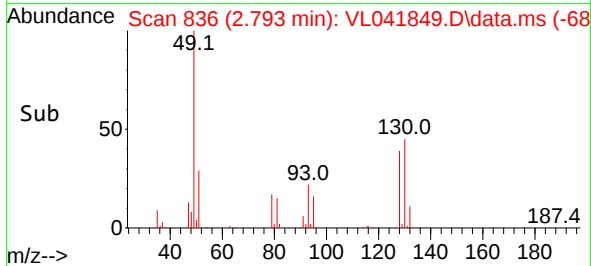


#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.793 min Scan# 81
Delta R.T. -0.007 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Instrument :
MSVOA_L
ClientSampleId :

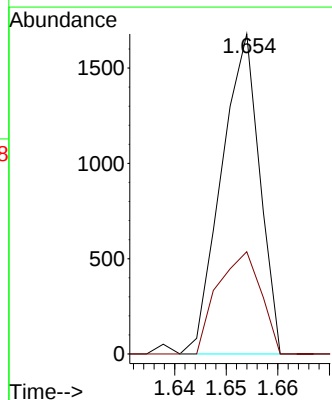
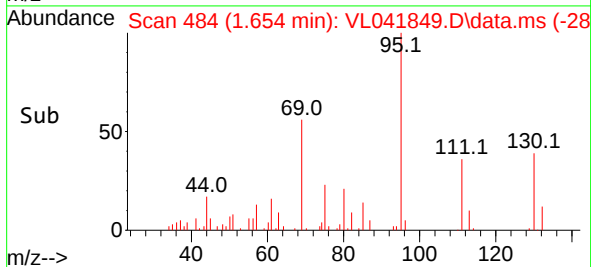
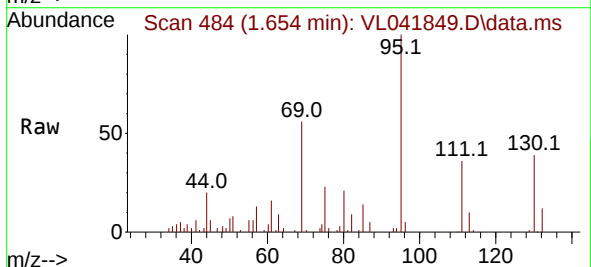


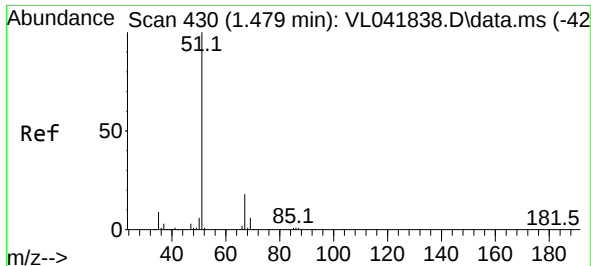
Tgt Ion: 49 Resp: 79757
Ion Ratio Lower Upper
49 100
128 40.1 19.7 59.1
130 50.9 26.4 79.2



#2
Dichlorodifluoromethane
Concen: 0.066 ppbv
RT: 1.654 min Scan# 484
Delta R.T. 0.152 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

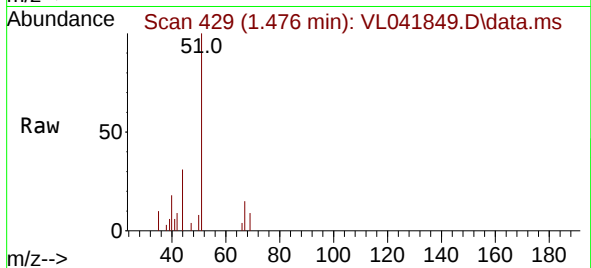
Tgt Ion: 85 Resp: 865
Ion Ratio Lower Upper
85 100
87 32.0 25.6 38.4



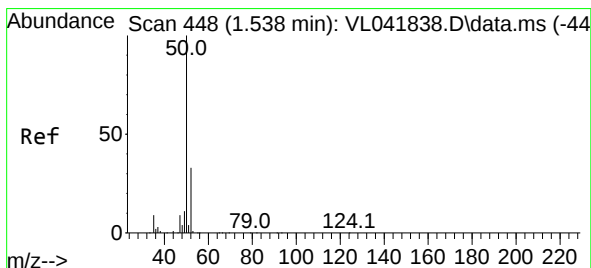
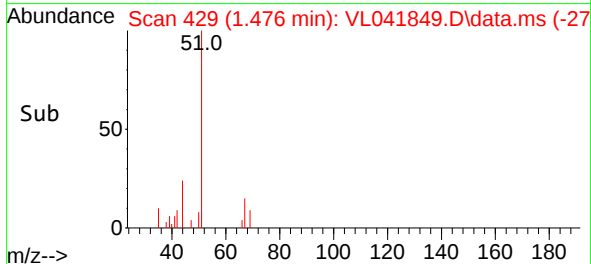
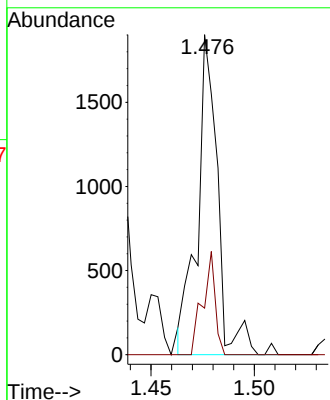


#3
Chlorodifluoromethane
Concen: 0.104 ppbv
RT: 1.476 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Instrument :
MSVOA_L
ClientSampleId :

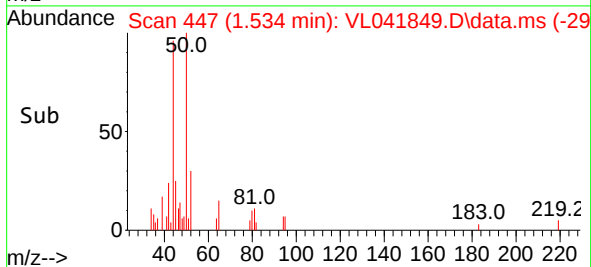
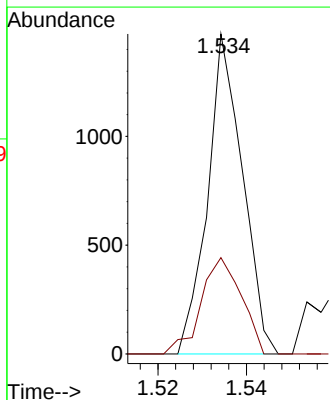
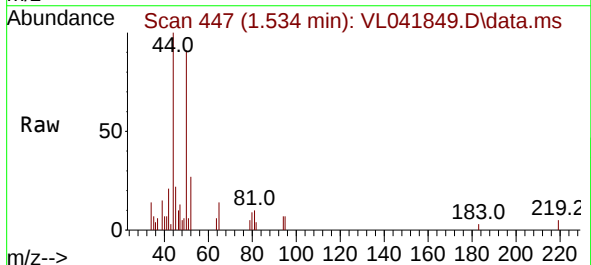


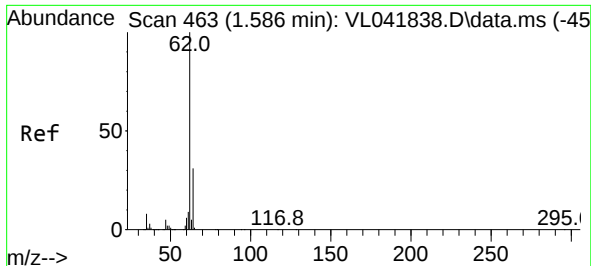
Tgt Ion: 51 Resp: 1296
Ion Ratio Lower Upper
51 100
67 19.8 14.6 22.0



#4
Chloromethane
Concen: 0.150 ppbv
RT: 1.534 min Scan# 447
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Tgt Ion: 50 Resp: 807
Ion Ratio Lower Upper
50 100
52 30.1 26.1 39.1

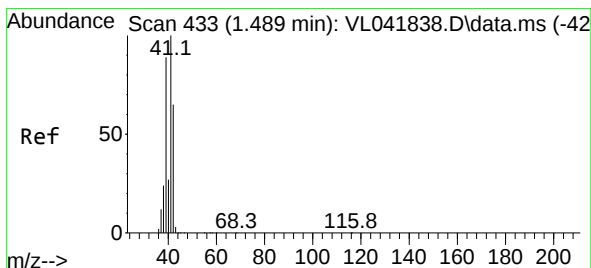
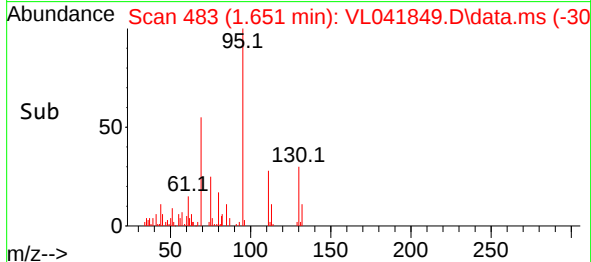
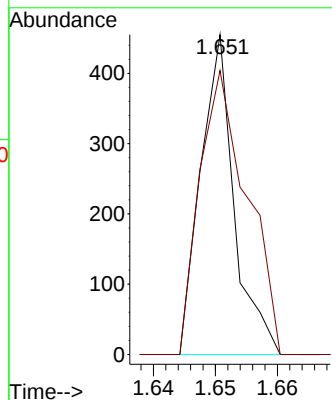
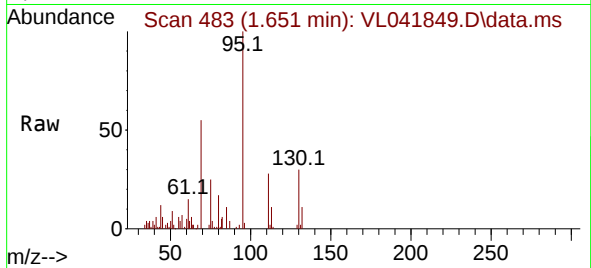




#5
 Vinyl Chloride
 Concen: 0.031 ppbv
 RT: 1.651 min Scan# 41
 Delta R.T. 0.065 min
 Lab File: VL041849.D
 Acq: 07 Jan 2025 18:03

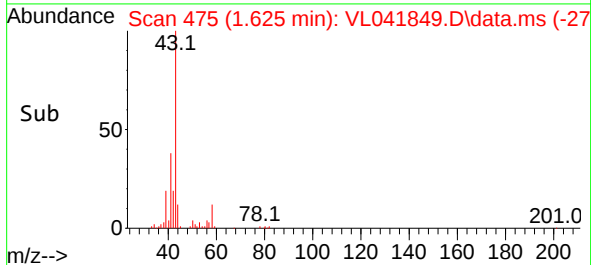
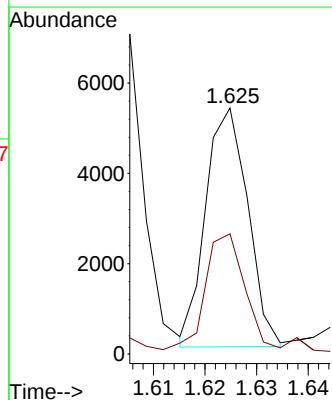
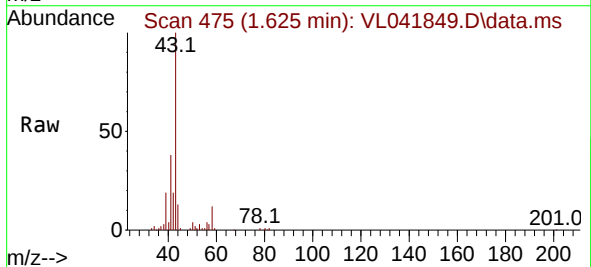
Instrument :
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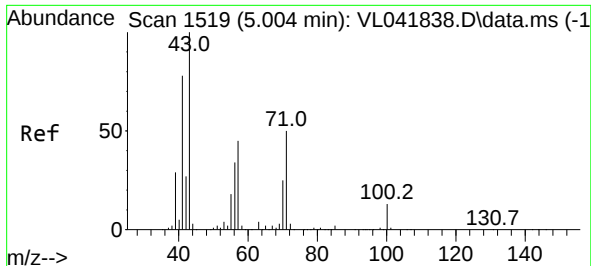
Tgt Ion: 62 Resp: 170
 Ion Ratio Lower Upper
 62 100
 64 88.8 24.9 37.3#



#9
 Propene
 Concen: 0.689 ppbv
 RT: 1.625 min Scan# 475
 Delta R.T. 0.136 min
 Lab File: VL041849.D
 Acq: 07 Jan 2025 18:03

Tgt Ion: 41 Resp: 2999
 Ion Ratio Lower Upper
 41 100
 42 67.6 53.9 80.9

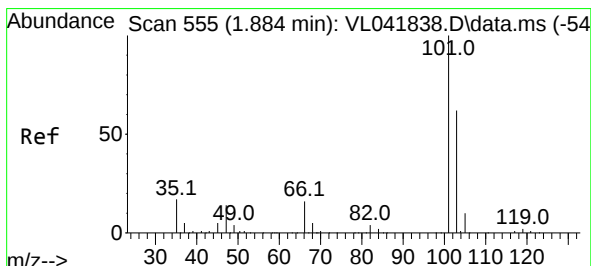
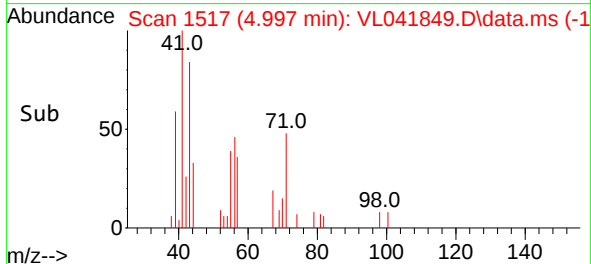
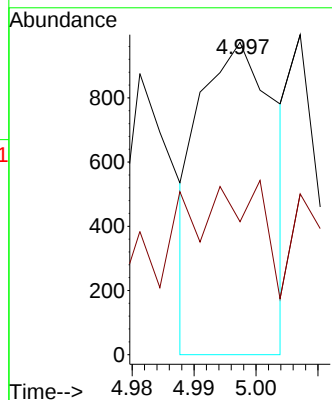
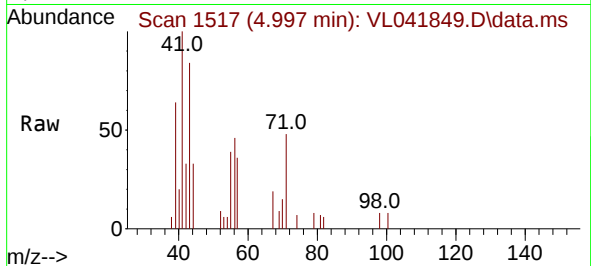




#10
Heptane
Concen: 0.077 ppbv
RT: 4.997 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

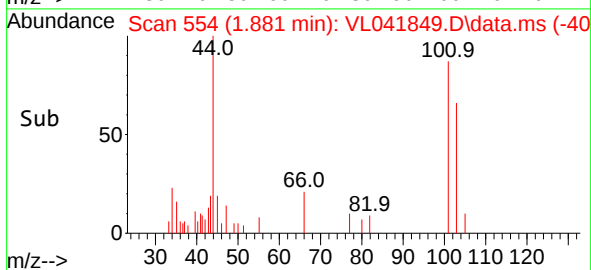
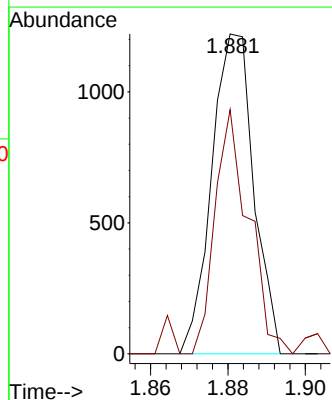
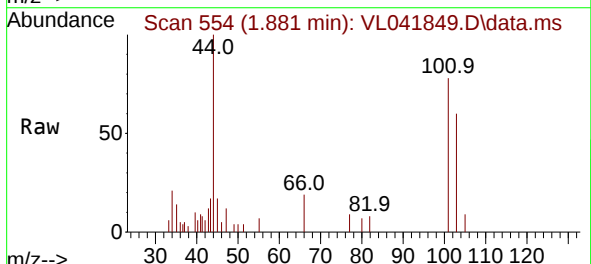
Instrument :
MSVOA_L
ClientSampleId :

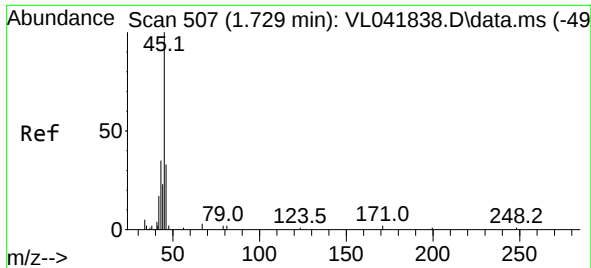
Tgt Ion: 43 Resp: 830
Ion Ratio Lower Upper
43 100
57 116.3 37.8 56.6#



#11
Trichlorofluoromethane
Concen: 0.069 ppbv
RT: 1.881 min Scan# 554
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Tgt Ion:101 Resp: 922
Ion Ratio Lower Upper
101 100
103 76.3 49.4 74.0#

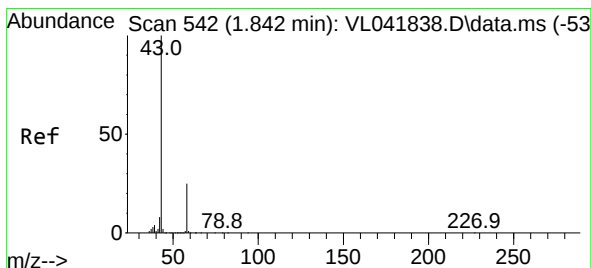
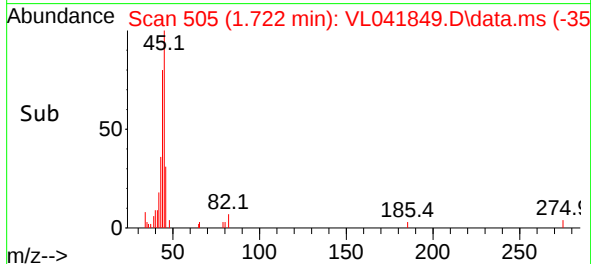
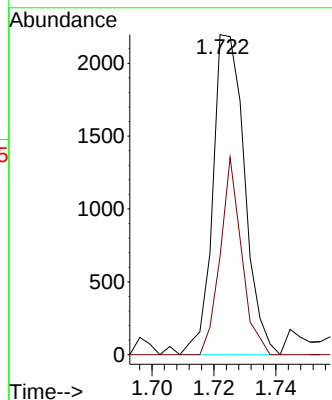
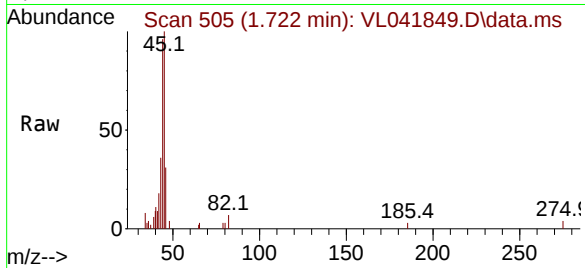




#13
 Ethanol
 Concen: 2.731 ppbv
 RT: 1.722 min Scan# 50
 Delta R.T. -0.007 min
 Lab File: VL041849.D
 Acq: 07 Jan 2025 18:03

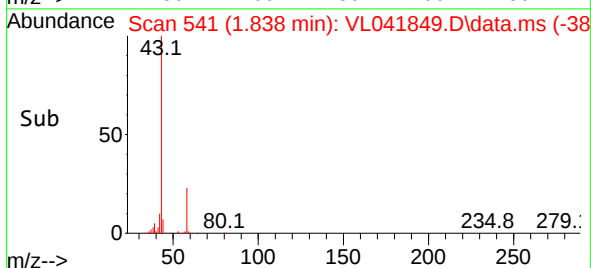
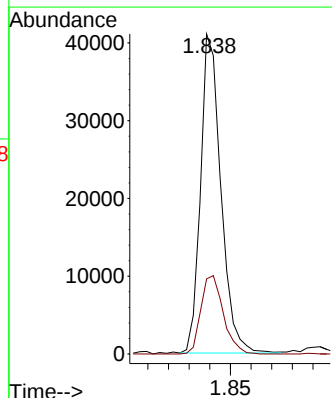
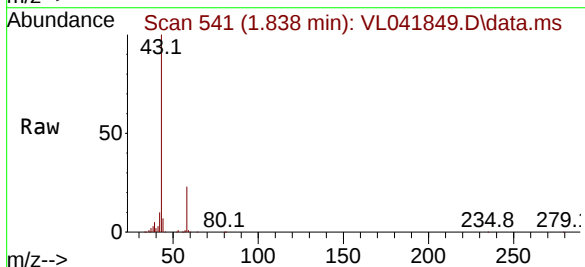
Instrument :
 MSVOA_L
 ClientSampleId :

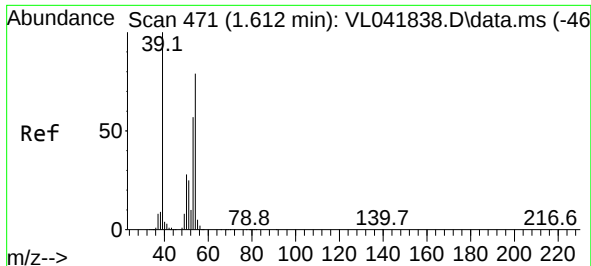
Tgt Ion: 45 Resp: 1562
 Ion Ratio Lower Upper
 45 100
 46 0.0 14.6 58.2#



#15
 Acetone
 Concen: 1.910 ppbv
 RT: 1.838 min Scan# 541
 Delta R.T. -0.003 min
 Lab File: VL041849.D
 Acq: 07 Jan 2025 18:03

Tgt Ion: 43 Resp: 28044
 Ion Ratio Lower Upper
 43 100
 58 27.0 20.2 30.4

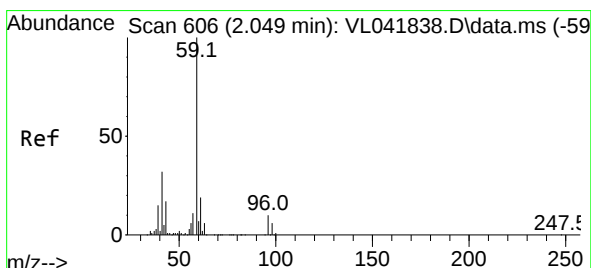
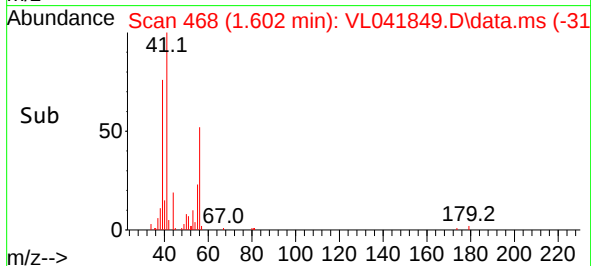
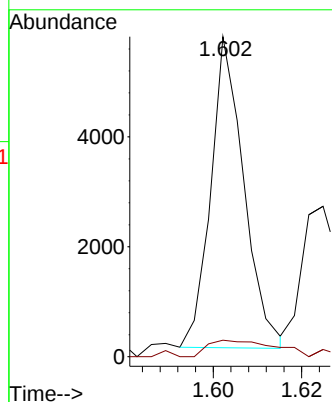
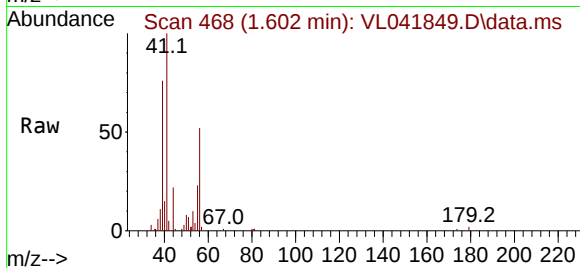




#16
1,3-Butadiene
Concen: 0.511 ppbv
RT: 1.602 min Scan# 41
Delta R.T. -0.010 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

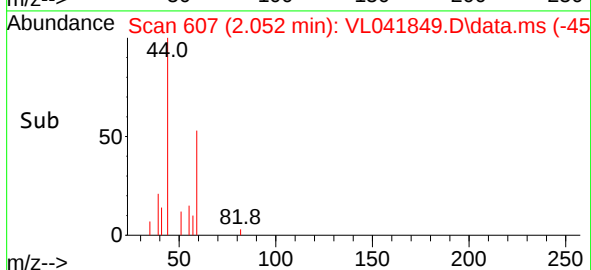
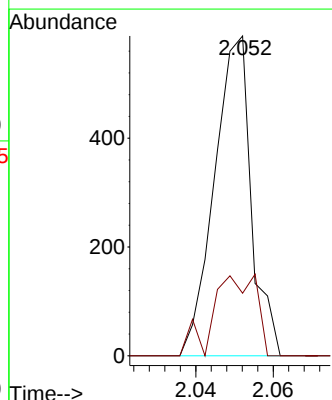
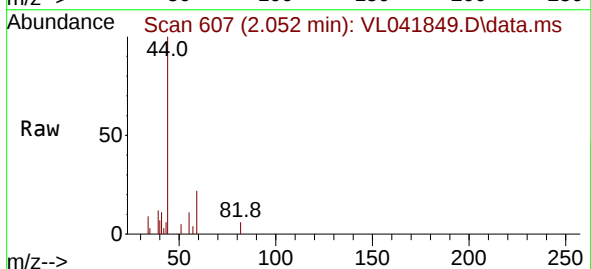
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ClientSampleId :

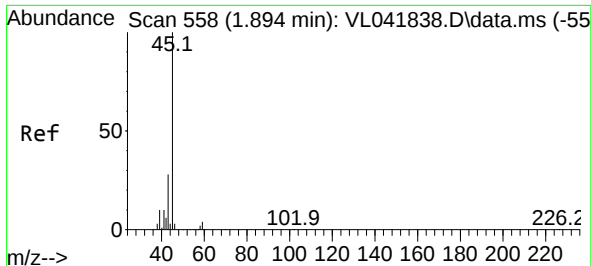
Tgt Ion: 39 Resp: 2944
Ion Ratio Lower Upper
39 100
54 12.4 56.2 84.4#



#17
tert-Butyl alcohol
Concen: 0.031 ppbv
RT: 2.052 min Scan# 607
Delta R.T. 0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Tgt Ion: 59 Resp: 389
Ion Ratio Lower Upper
59 100
57 30.1 8.6 13.0#

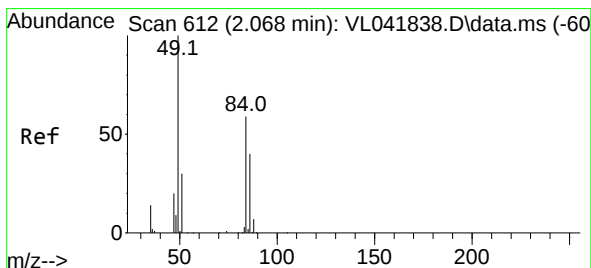
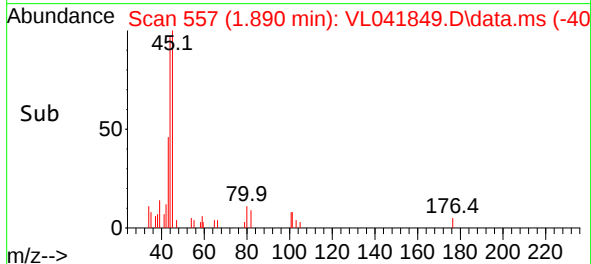
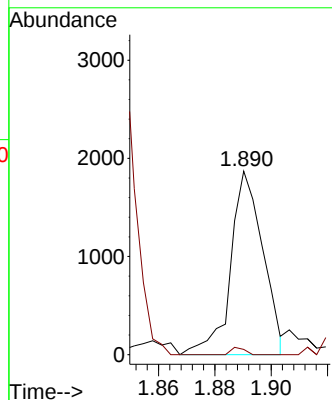
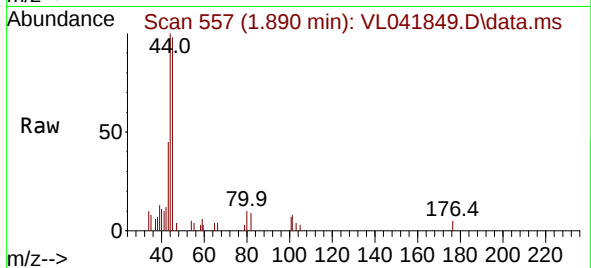




#19
Isopropyl Alcohol
Concen: 0.216 ppbv
RT: 1.890 min Scan# 51
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

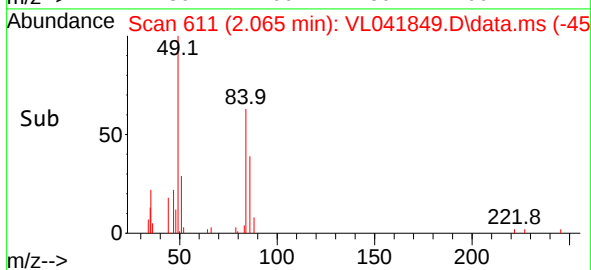
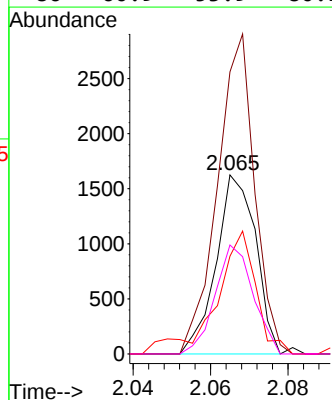
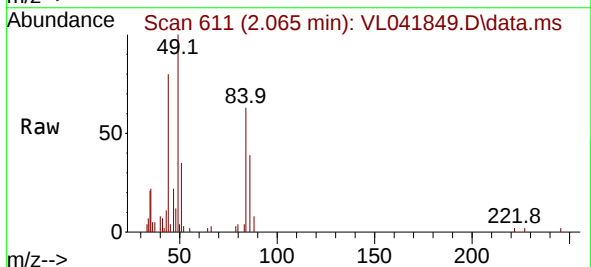
Instrument :
MSVOA_L
ClientSampleId :

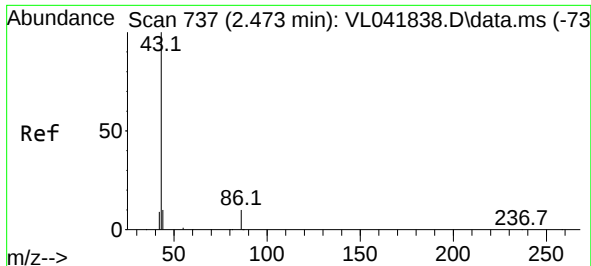
Tgt Ion: 45 Resp: 1488
Ion Ratio Lower Upper
45 100
58 508.5 2.1 3.1#



#20
Methylene Chloride
Concen: 0.274 ppbv
RT: 2.065 min Scan# 611
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

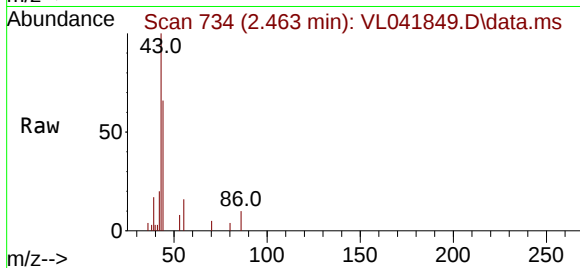
Tgt Ion: 84 Resp: 1152
Ion Ratio Lower Upper
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49 157.6 137.8 206.8
51 47.0 43.9 65.9
86 60.9 53.9 80.9



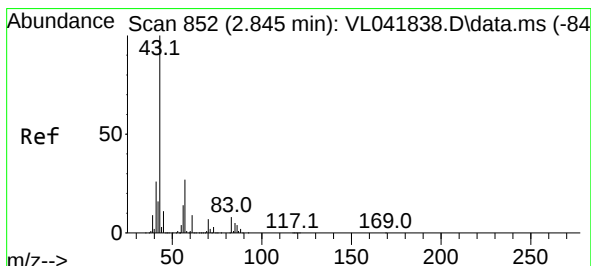
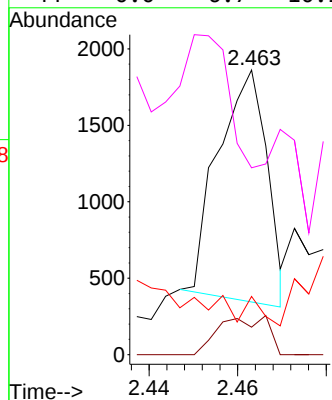
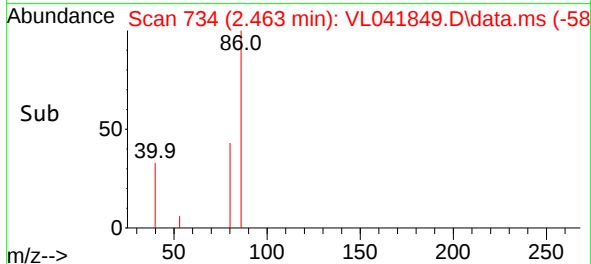


#23
 Vinyl Acetate
 Concen: 0.251 ppbv
 RT: 2.463 min Scan# 71
 Delta R.T. -0.010 min
 Lab File: VL041849.D
 Acq: 07 Jan 2025 18:03

Instrument :
 MSVOA_L
 ClientSampleId :

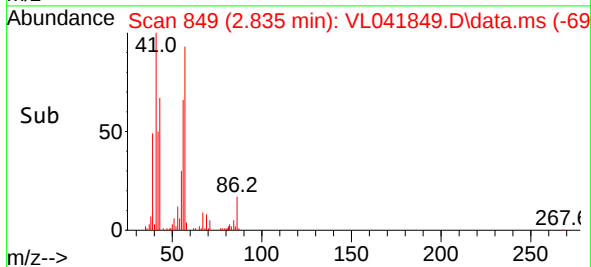
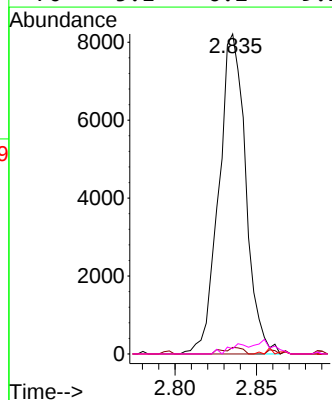
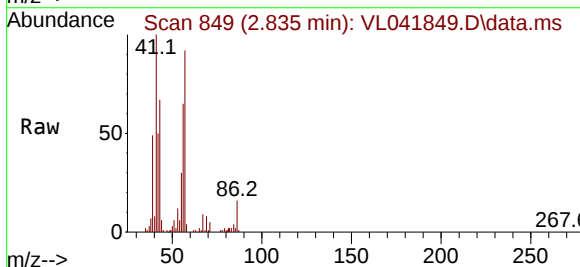


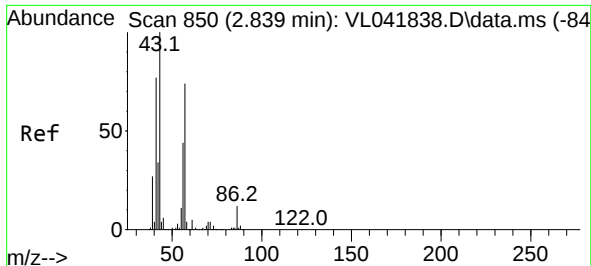
Tgt Ion: 43	Resp: 1147
Ion Ratio	Lower Upper
43 100	
86 12.5	6.4 9.6#
42 13.4	9.5 14.3
44 0.0	6.7 10.1#



#25
 Ethyl Acetate
 Concen: 0.382 ppbv
 RT: 2.835 min Scan# 849
 Delta R.T. -0.010 min
 Lab File: VL041849.D
 Acq: 07 Jan 2025 18:03

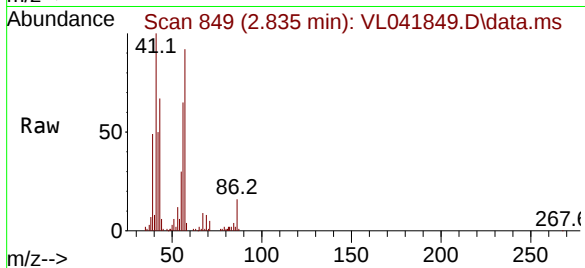
Tgt	Ion: 43	Resp:	9401
Ion	Ratio	Lower	Upper
43	100		
45	1.5	7.8	11.8#
61	0.6	7.0	10.6#
70	5.1	6.2	9.2#



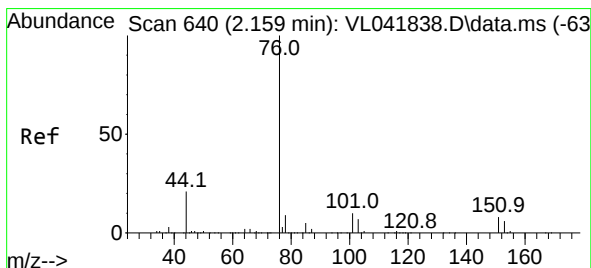
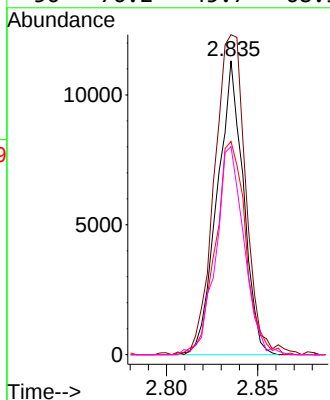
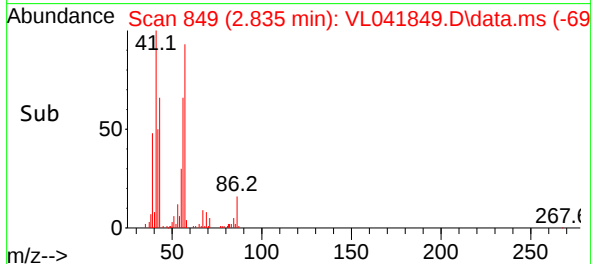


#26
Hexane
Concen: 1.318 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

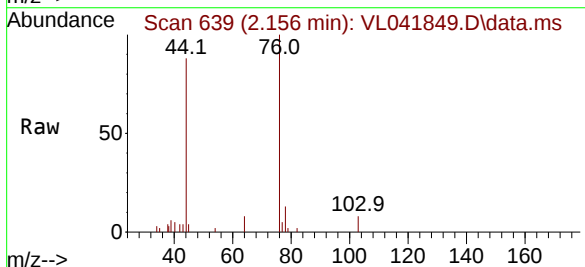
Instrument :
MSVOA_L
ClientSampleId :



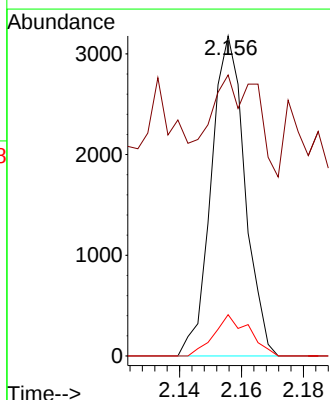
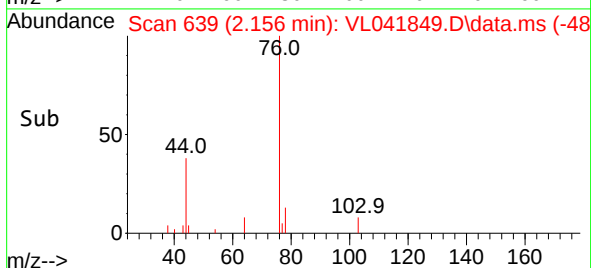
Tgt Ion: 57 Resp: 11264
Ion Ratio Lower Upper
57 100
41 131.2 84.0 126.0#
43 83.6 218.4 327.6#
56 76.2 45.7 68.5#

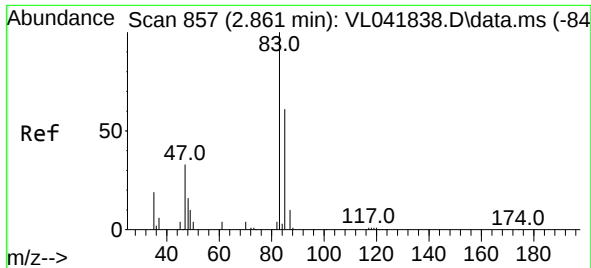


#27
Carbon Disulfide
Concen: 0.296 ppbv
RT: 2.156 min Scan# 639
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03



Tgt Ion: 76 Resp: 2404
Ion Ratio Lower Upper
76 100
44 292.1 19.8 29.8#
78 13.5 9.8 14.8

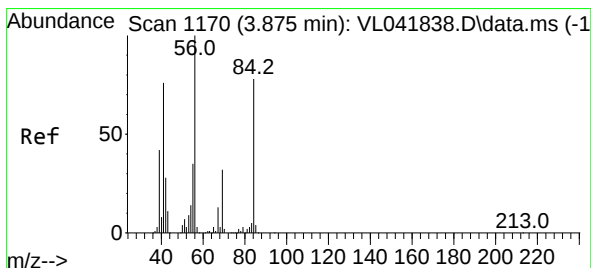
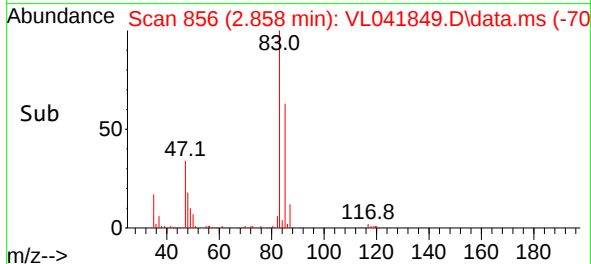
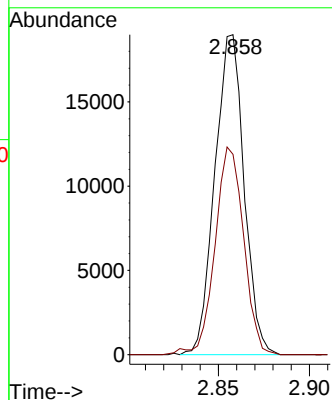
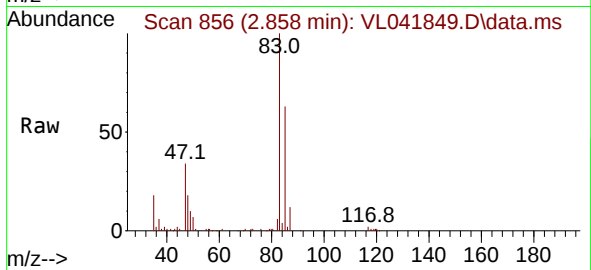




#29
Chloroform
Concen: 1.333 ppbv
RT: 2.858 min Scan# 81
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

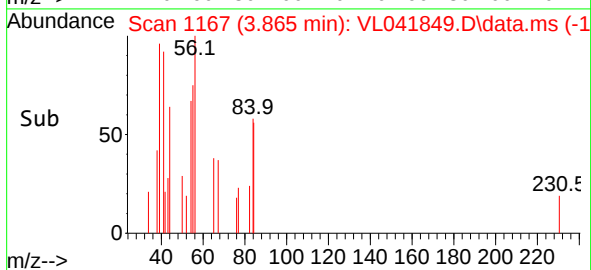
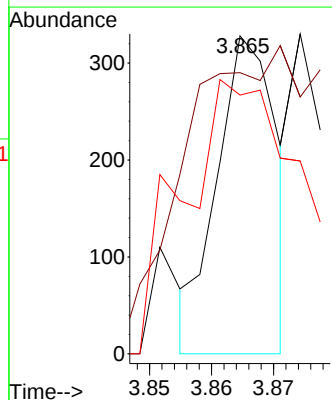
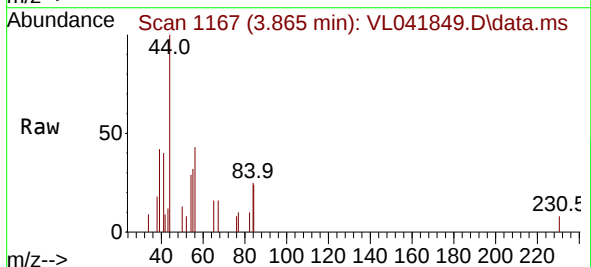
Instrument :
MSVOA_L
ClientSampleId :

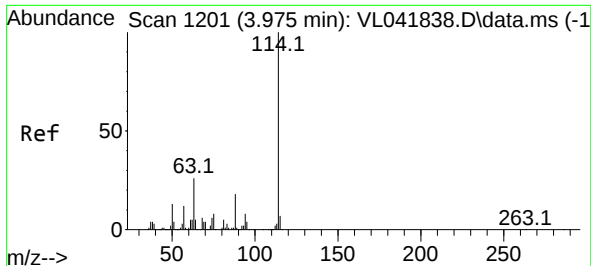
Tgt Ion: 83 Resp: 21163
Ion Ratio Lower Upper
83 100
85 62.6 49.6 74.4



#30
Cyclohexane
Concen: 0.034 ppbv
RT: 3.865 min Scan# 1167
Delta R.T. -0.010 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Tgt Ion: 84 Resp: 218
Ion Ratio Lower Upper
84 100
56 0.0 105.0 157.6#
41 189.9 78.9 118.3#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.971 min Scan# 11

Delta R.T. -0.003 min

Lab File: VL041849.D

Acq: 07 Jan 2025 18:03

Instrument :

MSVOA_L

ClientSampleId :

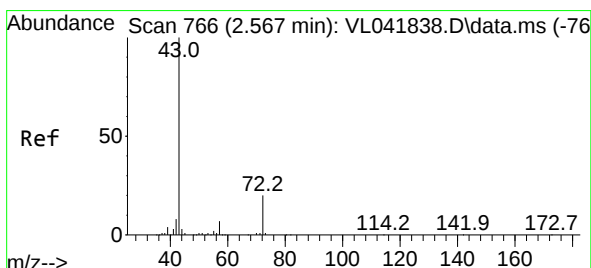
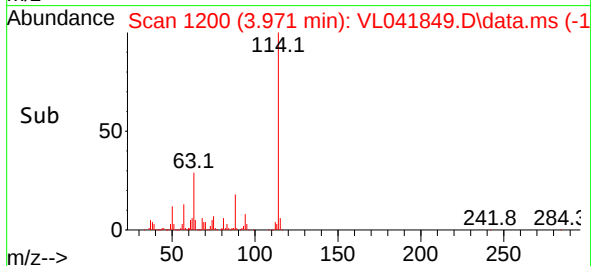
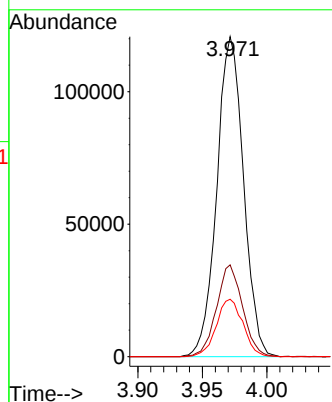
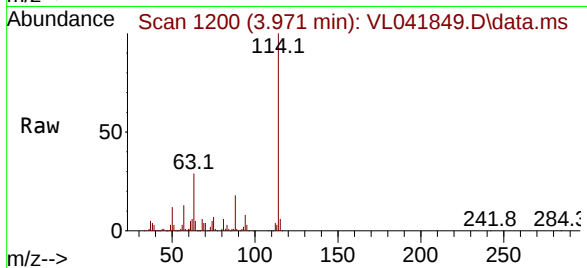
Tgt Ion:114 Resp: 173620

Ion Ratio Lower Upper

114 100

63 28.0 22.3 33.5

88 18.0 14.9 22.3



#34

2-Butanone

Concen: 0.438 ppbv

RT: 2.567 min Scan# 766

Delta R.T. -0.000 min

Lab File: VL041849.D

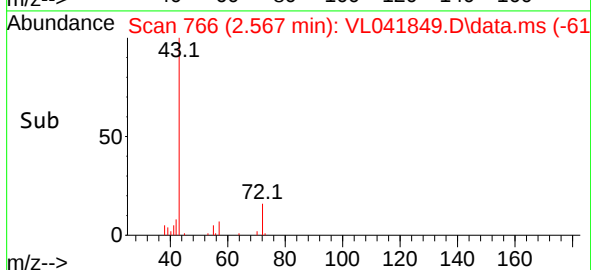
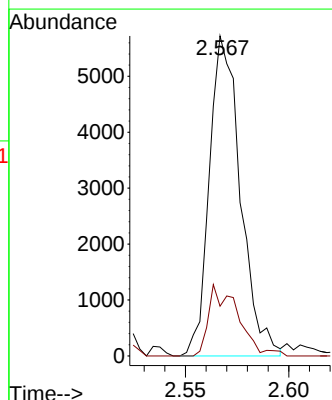
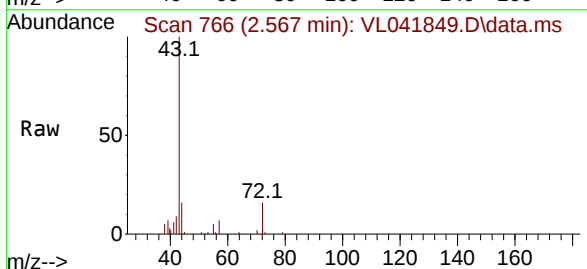
Acq: 07 Jan 2025 18:03

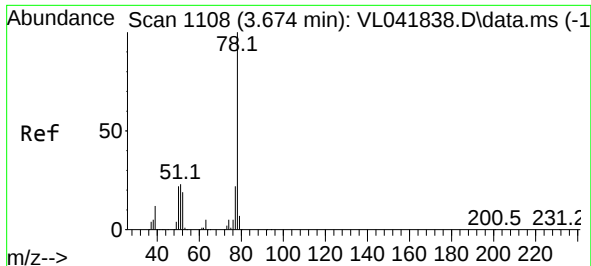
Tgt Ion: 43 Resp: 5996

Ion Ratio Lower Upper

43 100

72 21.1 16.6 25.0

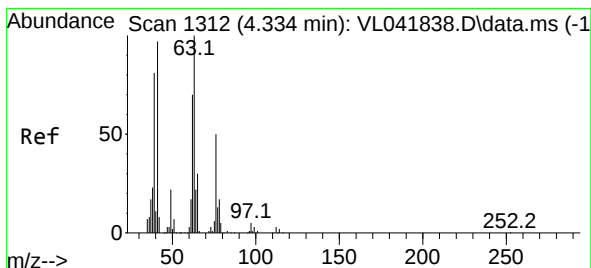
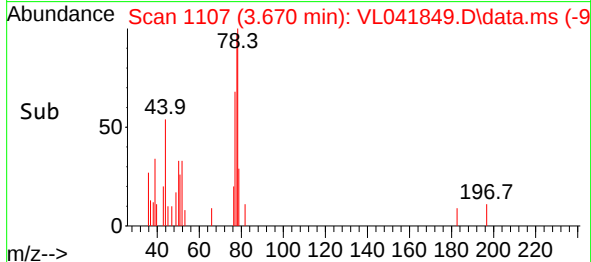
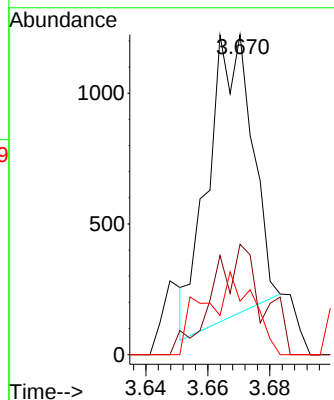
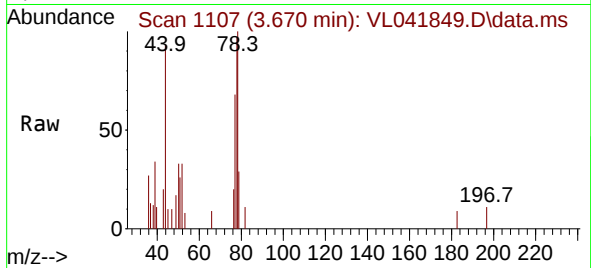




#36
Benzene
Concen: 0.065 ppbv
RT: 3.670 min Scan# 1108
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

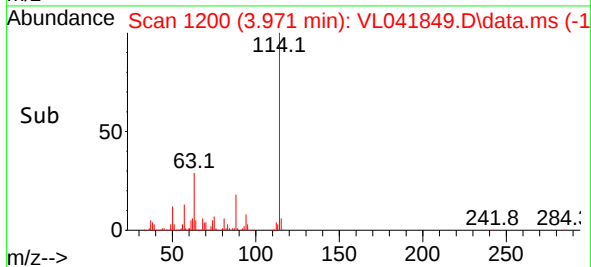
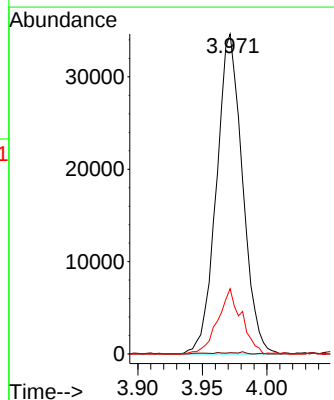
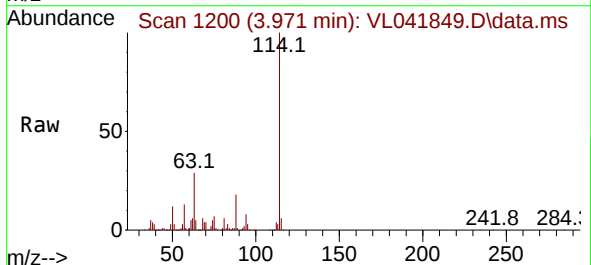
Instrument :
MSVOA_L
ClientSampleId :

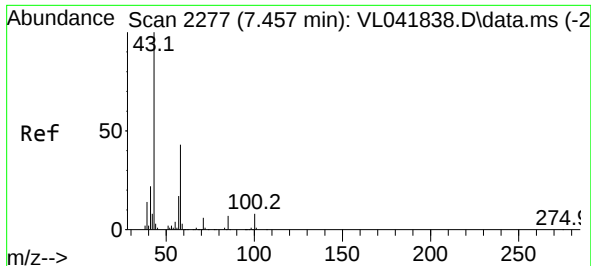
Tgt Ion: 78 Resp: 1073
Ion Ratio Lower Upper
78 100
77 28.1 17.4 26.0#
50 31.1 17.3 25.9#



#39
1,2-Dichloropropane
Concen: 7.569 ppbv
RT: 3.971 min Scan# 1200
Delta R.T. -0.363 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Tgt Ion: 63 Resp: 48563
Ion Ratio Lower Upper
63 100
41 0.6 77.7 116.5#
62 20.4 56.2 84.2#

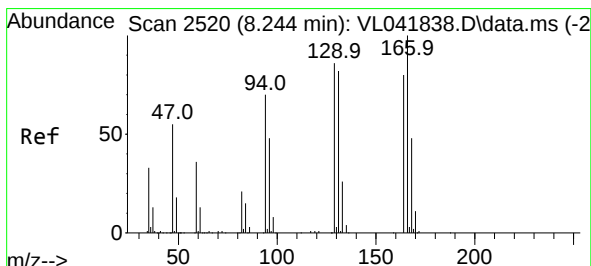
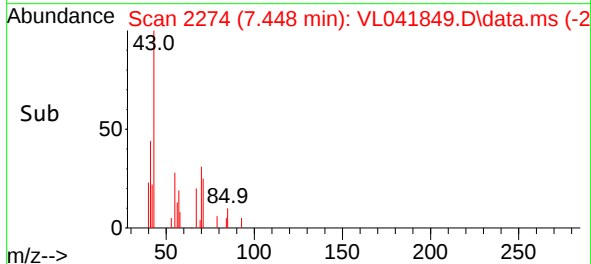
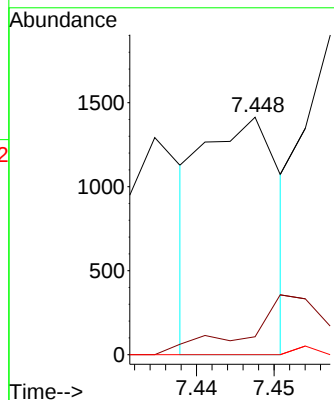
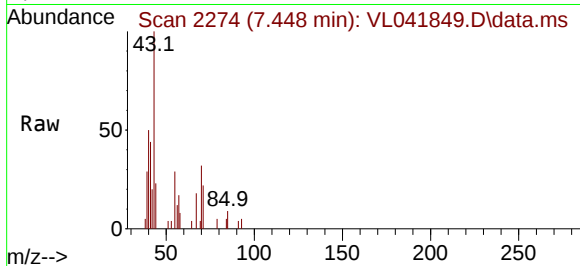




#51
2-Hexanone
Concen: 0.081 ppbv
RT: 7.448 min Scan# 21
Delta R.T. -0.010 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

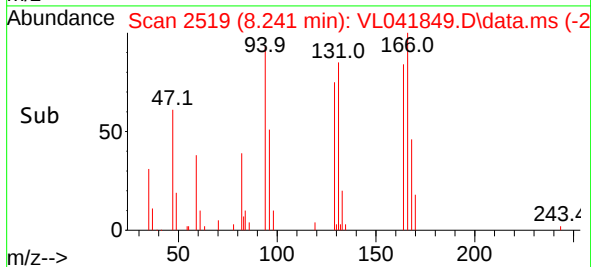
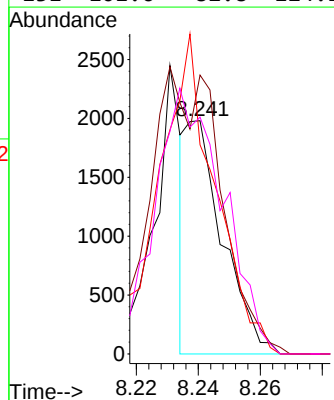
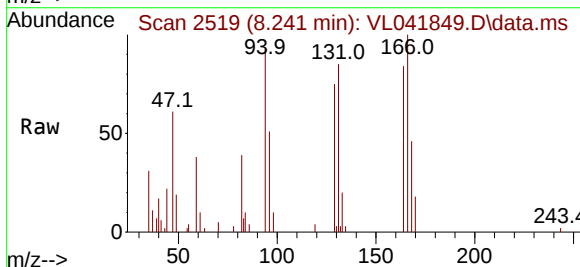
Instrument :
MSVOA_L
ClientSampleId :

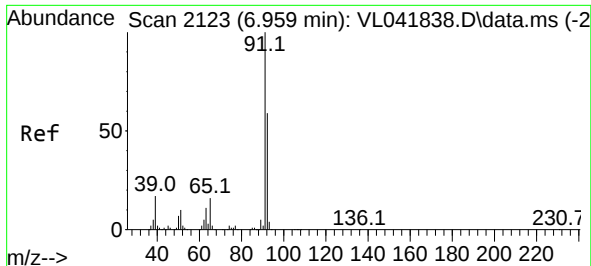
Tgt Ion: 43 Resp: 974
Ion Ratio Lower Upper
43 100
58 0.0 33.8 50.8#
98 0.0 0.7 1.1#



#52
Tetrachloroethene
Concen: 0.328 ppbv
RT: 8.241 min Scan# 2519
Delta R.T. -0.003 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Tgt Ion:164 Resp: 1614
Ion Ratio Lower Upper
164 100
166 116.7 100.4 150.6
129 89.6 85.9 128.9
131 101.6 82.8 124.2

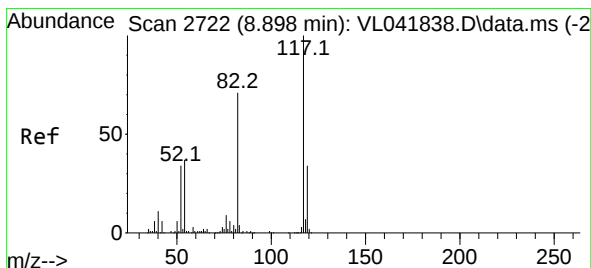
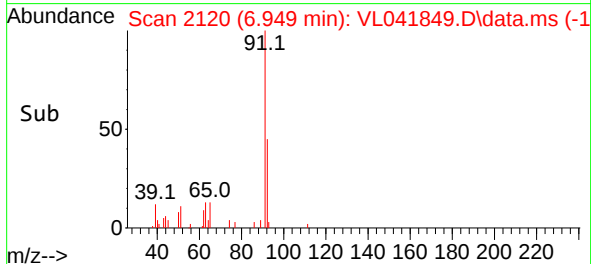
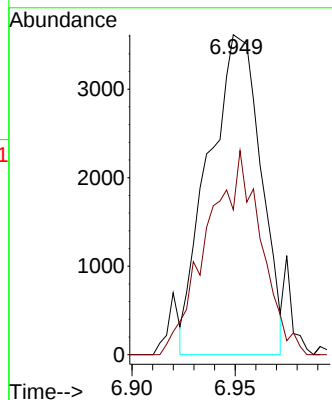
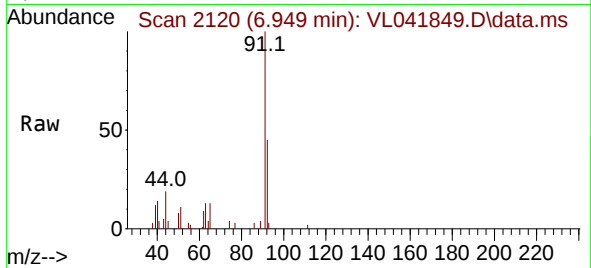




#53
Toluene
Concen: 0.433 ppbv
RT: 6.949 min Scan# 2123
Delta R.T. -0.010 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

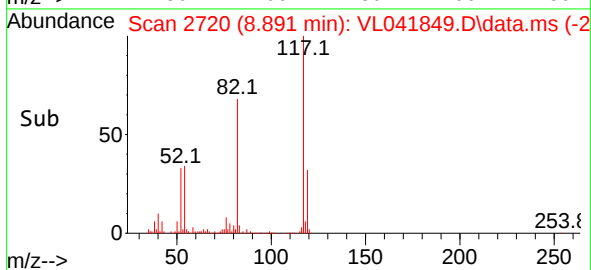
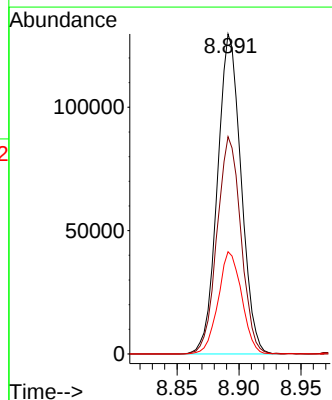
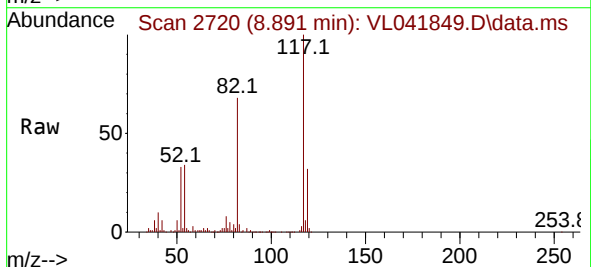
Instrument :
MSVOA_L
ClientSampleId :

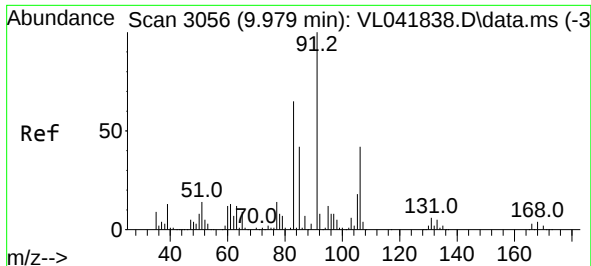
Tgt Ion: 91 Resp: 6392
Ion Ratio Lower Upper
91 100
92 65.2 47.8 71.6



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.891 min Scan# 2720
Delta R.T. -0.007 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Tgt Ion: 117 Resp: 172495
Ion Ratio Lower Upper
117 100
82 68.8 59.1 88.7
119 31.8 27.3 40.9

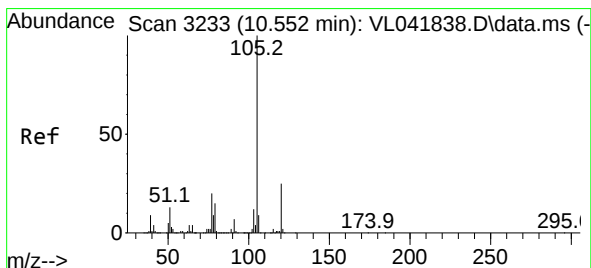
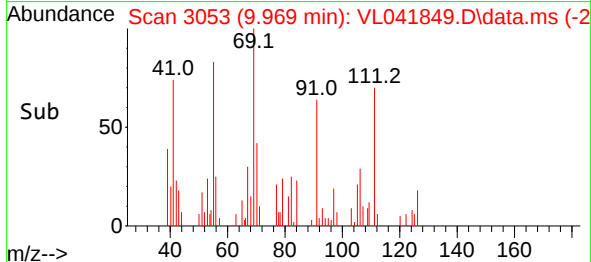
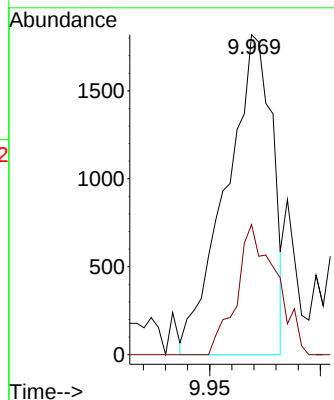
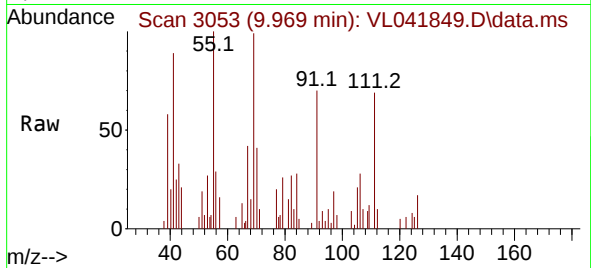




#60
o-Xylene
Concen: 0.131 ppbv
RT: 9.969 min Scan# 3056
Delta R.T. -0.010 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

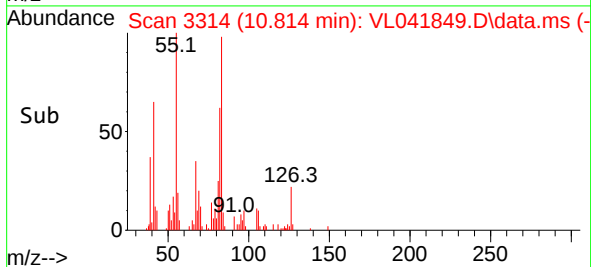
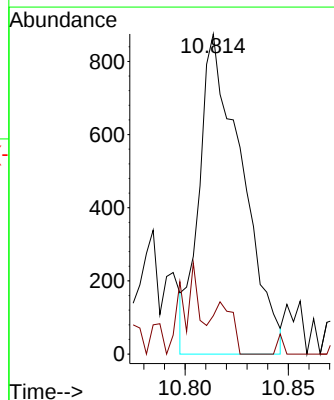
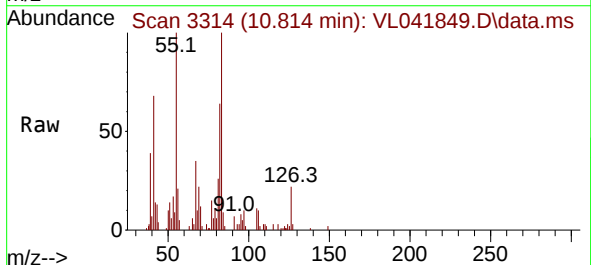
Instrument :
MSVOA_L
ClientSampleId :

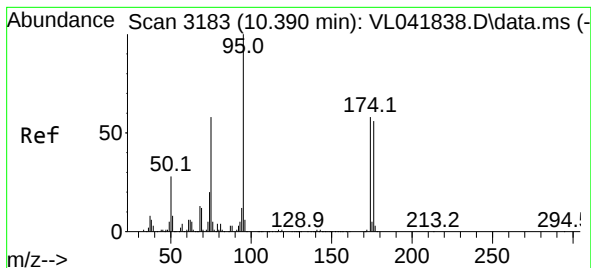
Tgt Ion: 91 Resp: 2647
Ion Ratio Lower Upper
91 100
106 34.6 21.9 65.5



#62
Isopropylbenzene
Concen: 0.040 ppbv
RT: 10.814 min Scan# 3314
Delta R.T. 0.262 min
Lab File: VL041849.D
Acq: 07 Jan 2025 18:03

Tgt Ion: 105 Resp: 1256
Ion Ratio Lower Upper
105 100
120 21.2 20.4 30.6





#68

1-Bromo-4-Fluorobenzene

Concen: 11.080 ppbv

RT: 10.383 min Scan# 3181

Delta R.T. -0.007 min MSVOA_L

Lab File: VL041849.D

Acq: 07 Jan 2025 18:03

Instrument :

MSVOA_L

ClientSampleId :

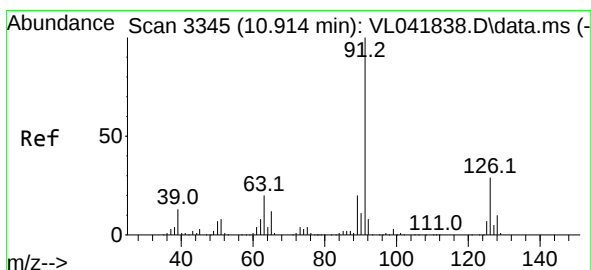
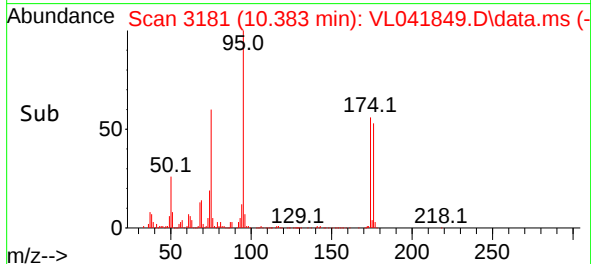
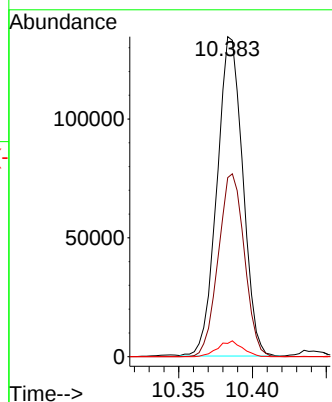
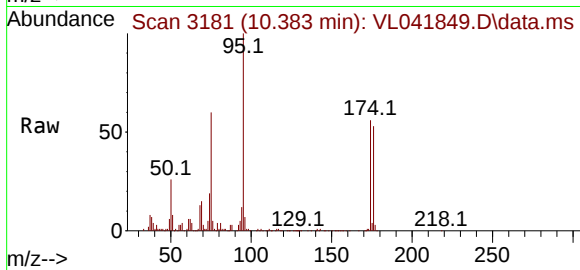
Tgt Ion: 95 Resp: 163694

Ion Ratio Lower Upper

95 100

174 58.0 47.6 71.4

175 4.7 3.8 5.6



#71

2-Chlorotoluene

Concen: 0.038 ppbv

RT: 11.218 min Scan# 3439

Delta R.T. 0.304 min

Lab File: VL041849.D

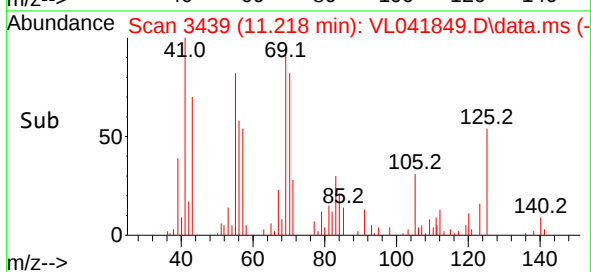
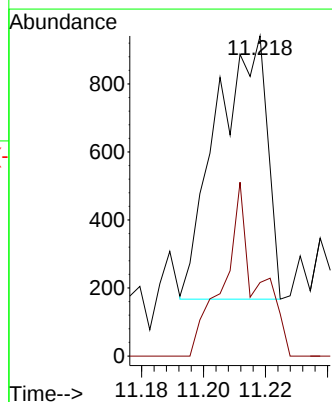
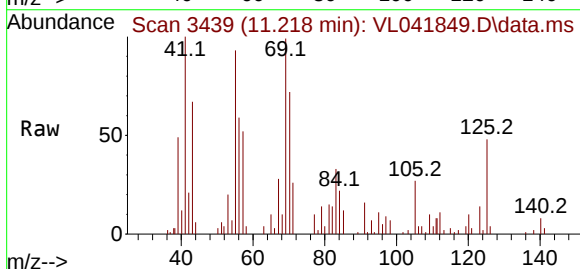
Acq: 07 Jan 2025 18:03

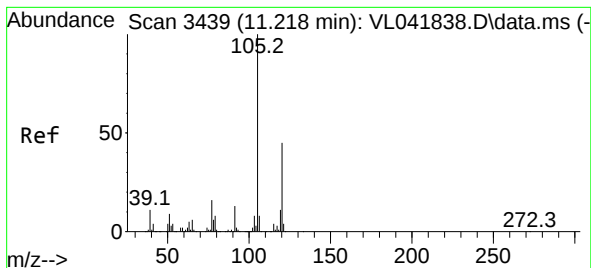
Tgt Ion: 91 Resp: 877

Ion Ratio Lower Upper

91 100

126 43.4 11.6 46.6





#73

1,3,5-Trimethylbenzene

Concen: 0.044 ppbv

RT: 11.209 min Scan# 3439

Delta R.T. -0.010 min

Lab File: VL041849.D

Acq: 07 Jan 2025 18:03

Instrument :

MSVOA_L

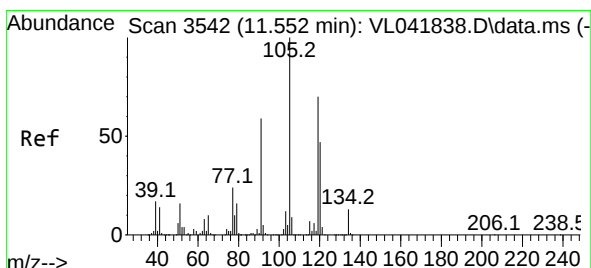
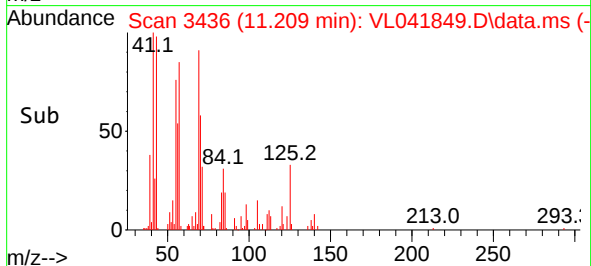
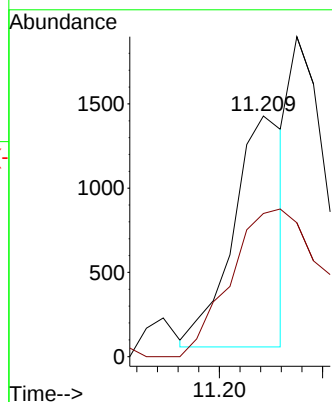
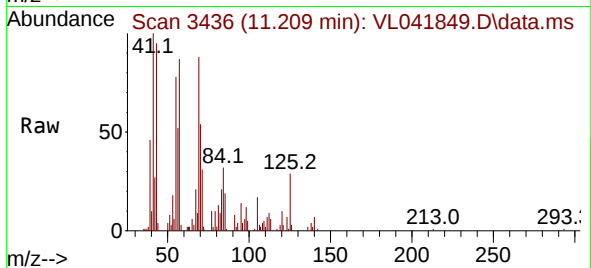
ClientSampleId :

Tgt Ion:105 Resp: 940

Ion Ratio Lower Upper

105 100

120 82.3 35.9 53.9#



#74

1,2,4-Trimethylbenzene

Concen: 0.101 ppbv

RT: 11.545 min Scan# 3540

Delta R.T. -0.007 min

Lab File: VL041849.D

Acq: 07 Jan 2025 18:03

Tgt Ion:105 Resp: 2507

Ion Ratio Lower Upper

105 100

120 42.8 37.4 56.0

91 22.9 47.4 71.2#

77 19.3 19.0 28.6

