

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
 Data File : VL042377.D
 Acq On : 18 Apr 2025 02:01
 Operator : SY/MD
 Sample : Q1726-02DL 20X
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B2-6-03312025DL

Quant Time: Apr 18 04:40:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Apr 18 02:14:00 2025
 Response via : Initial Calibration

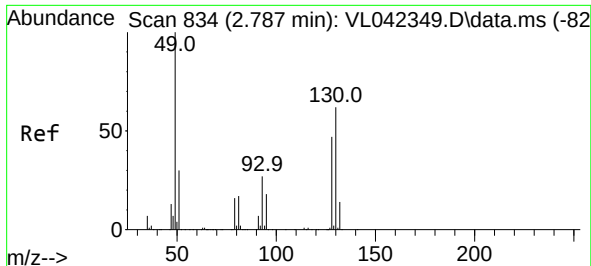
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.784	49	99418	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	272592	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	237645	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	202954	10.393	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.900%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.496	85	855	0.049	ppbv #	77
3) Chlorodifluoromethane	1.463	51	2780	0.166	ppbv #	88
4) Chloromethane	1.531	50	2346	0.337	ppbv	99
9) Propene	1.619	41	5227	0.686	ppbv	92
10) Heptane	4.975	43	4130	0.193	ppbv #	12
13) Ethanol	1.719	45	17233	14.234	ppbv	84
15) Acetone	1.832	43	269648	16.568	ppbv	98
16) 1,3-Butadiene	1.599	39	621	0.080	ppbv #	75
17) tert-Butyl alcohol	2.043	59	1350	0.067	ppbv #	1
19) Isopropyl Alcohol	1.884	45	13751	1.521	ppbv #	1
20) Methylene Chloride	2.059	84	5948	0.933	ppbv #	95
23) Vinyl Acetate	2.454	43	1337	0.203	ppbv #	1
25) Ethyl Acetate	2.823	43	7282	0.181	ppbv #	87
26) Hexane	2.823	57	9658	0.595	ppbv #	31
30) Cyclohexane	3.852	84	905	0.069	ppbv #	14
34) 2-Butanone	2.560	43	2582	0.120	ppbv #	88
36) Benzene	3.651	78	2479	0.084	ppbv #	90
39) 1,2-Dichloropropane	3.952	63	74190	6.771	ppbv #	22
44) 2,2,4-Trimethylpentane	4.635	57	39733	0.782	ppbv #	90
53) Toluene	6.927	91	79886	2.264	ppbv	100
58) Ethyl Benzene	9.348	91	21503	0.457	ppbv	98
59) m/p-Xylene	9.545	91	13227	0.349	ppbv #	32
60) o-Xylene	9.959	91	25512	0.668	ppbv	97
62) Isopropylbenzene	10.539	105	2498	0.045	ppbv	95
64) n-propylbenzene	10.982	120	1664	0.118	ppbv #	57
65) tert-Butylbenzene	11.532	119	4564	0.089	ppbv #	73
66) Benzyl Chloride	11.532	91	5150	0.909	ppbv #	70
71) 2-Chlorotoluene	10.898	91	2213	0.050	ppbv	92
72) 4-Ethyltoluene	11.121	105	10921	0.234	ppbv #	64
73) 1,3,5-Trimethylbenzene	11.202	105	11199	0.272	ppbv #	84
74) 1,2,4-Trimethylbenzene	11.532	105	41057	0.853	ppbv #	66

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

Quant Time: Apr 18 04:40:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

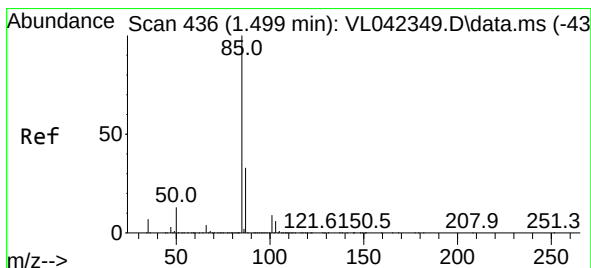
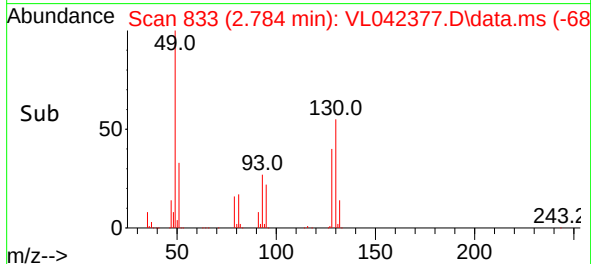
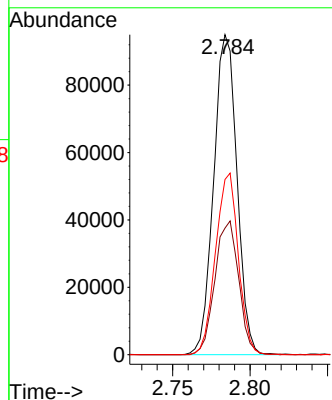
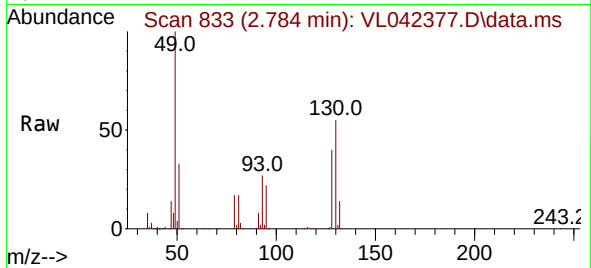




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 81
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

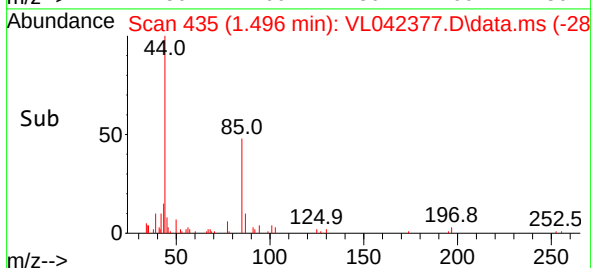
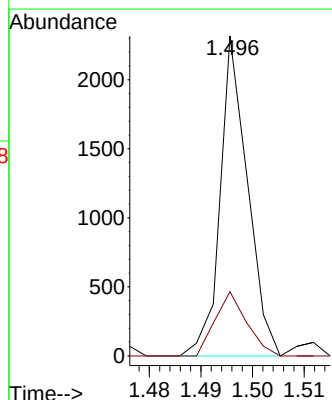
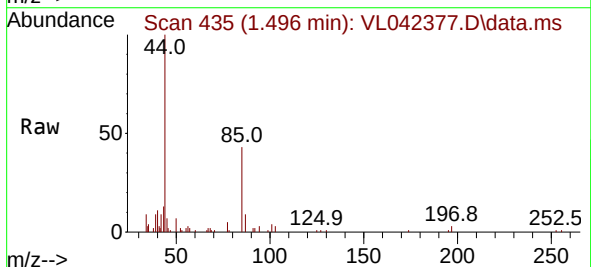
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

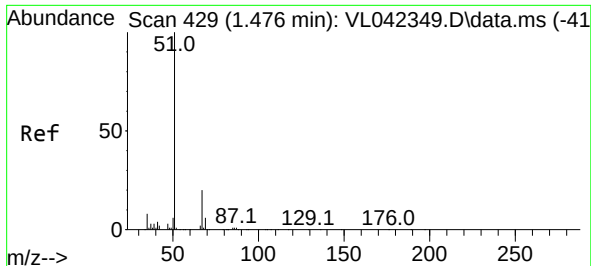
Tgt Ion: 49 Resp: 99418
Ion Ratio Lower Upper
49 100
128 42.9 22.8 68.4
130 55.5 29.3 88.0



#2
Dichlorodifluoromethane
Concen: 0.049 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 85 Resp: 855
Ion Ratio Lower Upper
85 100
87 20.1 26.6 39.8#

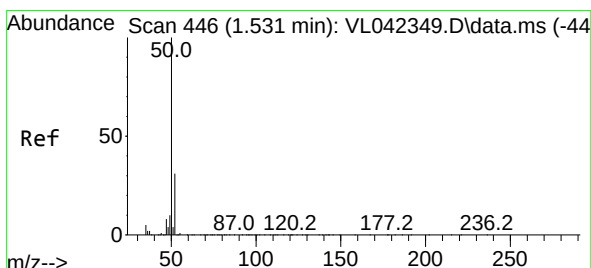
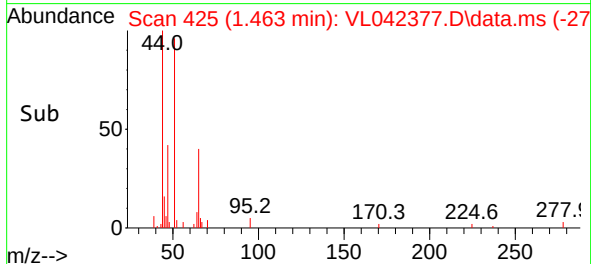
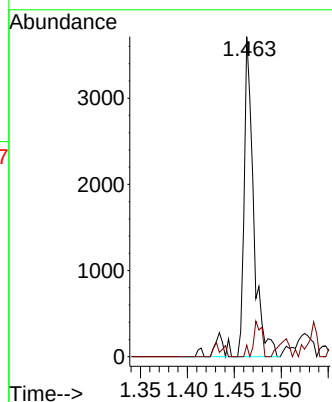
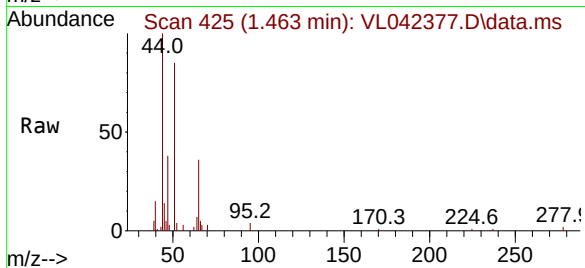




#3
Chlorodifluoromethane
Concen: 0.166 ppbv
RT: 1.463 min Scan# 41
Delta R.T. -0.013 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

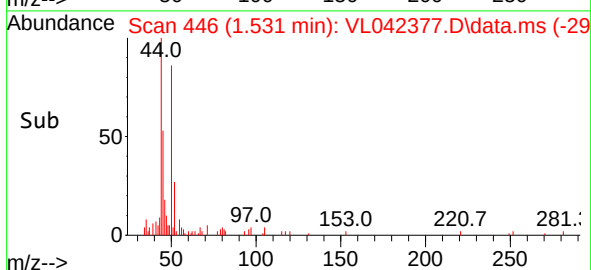
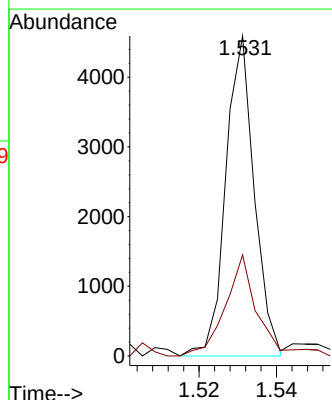
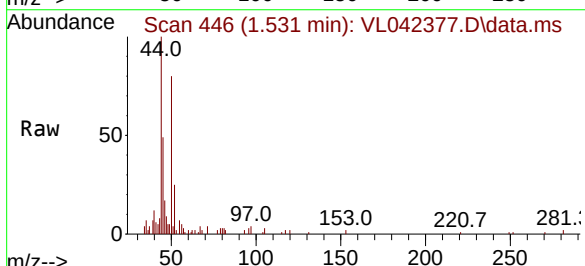
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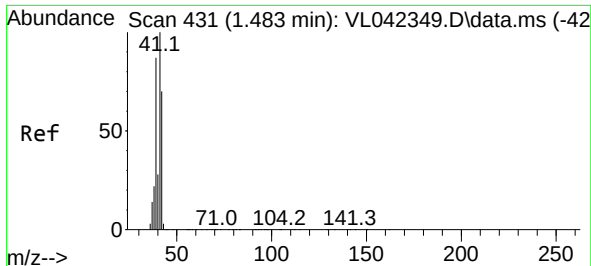
Tgt Ion: 51 Resp: 2780
Ion Ratio Lower Upper
51 100
67 15.0 16.2 24.4#



#4
Chloromethane
Concen: 0.337 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 50 Resp: 2346
Ion Ratio Lower Upper
50 100
52 31.6 24.7 37.1

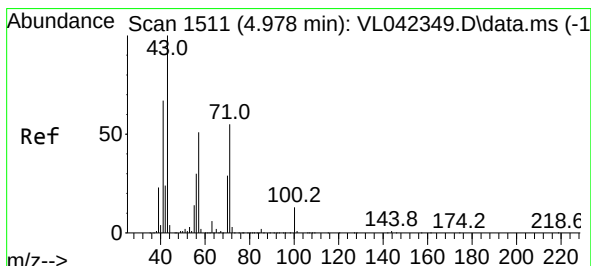
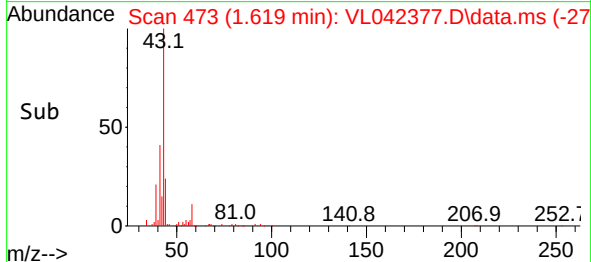
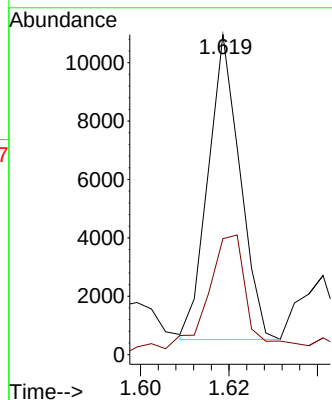
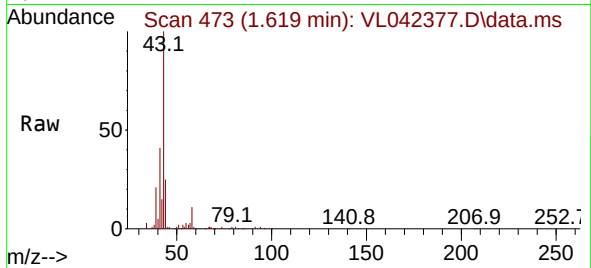




#9
 Propene
 Concen: 0.686 ppbv
 RT: 1.619 min Scan# 41
 Delta R.T. 0.136 min
 Lab File: VL042377.D
 Acq: 18 Apr 2025 02:01

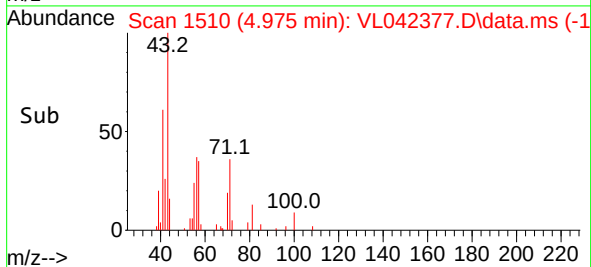
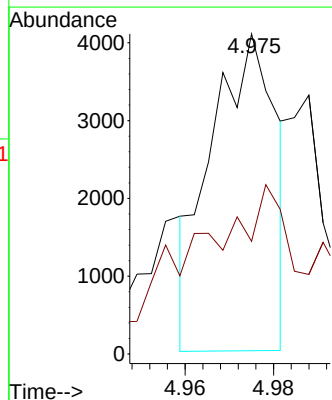
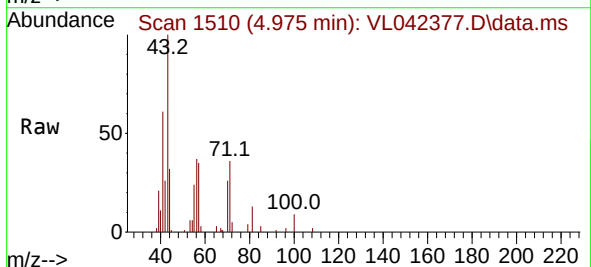
Instrument :
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 IA-B2-6-03312025DL

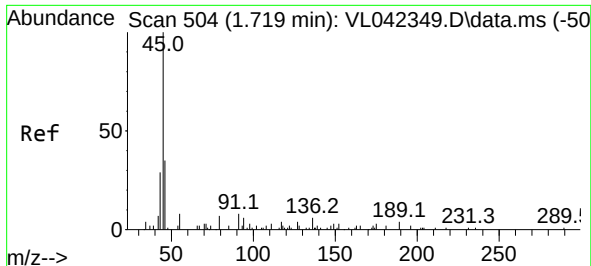
Tgt Ion: 41 Resp: 5227
 Ion Ratio Lower Upper
 41 100
 42 63.9 56.2 84.4



#10
 Heptane
 Concen: 0.193 ppbv
 RT: 4.975 min Scan# 1510
 Delta R.T. -0.003 min
 Lab File: VL042377.D
 Acq: 18 Apr 2025 02:01

Tgt Ion: 43 Resp: 4130
 Ion Ratio Lower Upper
 43 100
 57 110.7 39.9 59.9#

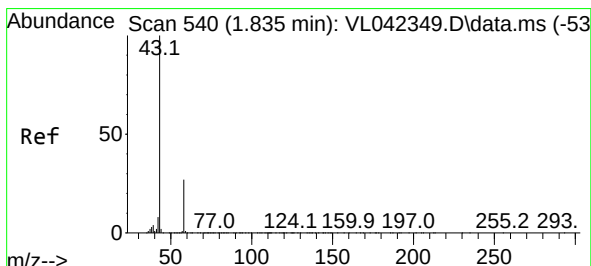
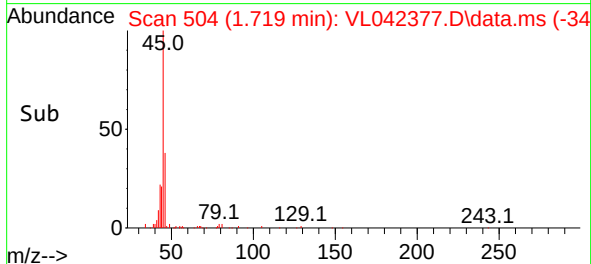
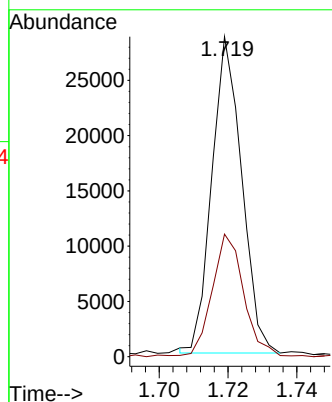
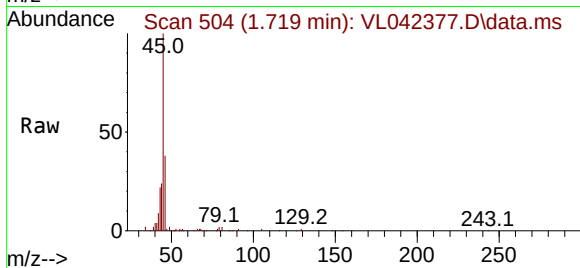




#13
Ethanol
Concen: 14.234 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.000 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

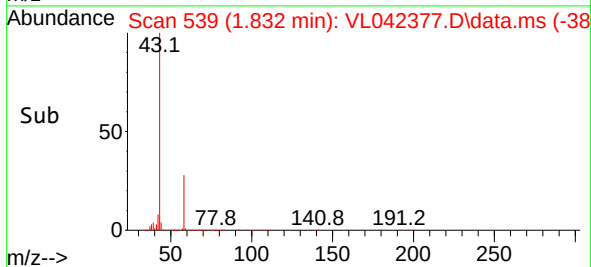
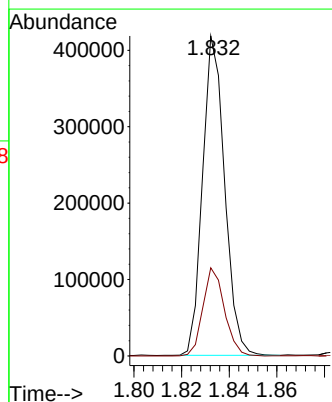
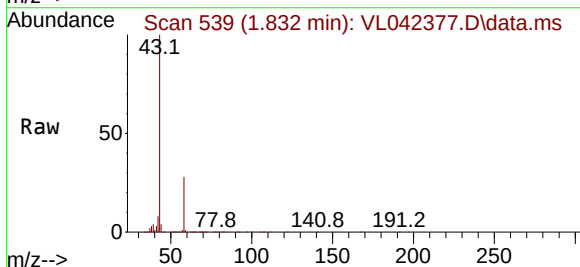
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

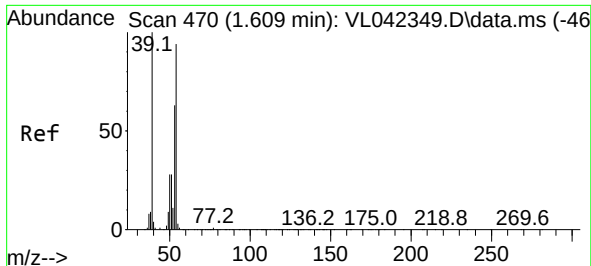
Tgt Ion: 45 Resp: 17233
Ion Ratio Lower Upper
45 100
46 43.5 21.9 87.7



#15
Acetone
Concen: 16.568 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 43 Resp: 269648
Ion Ratio Lower Upper
43 100
58 27.0 22.4 33.6

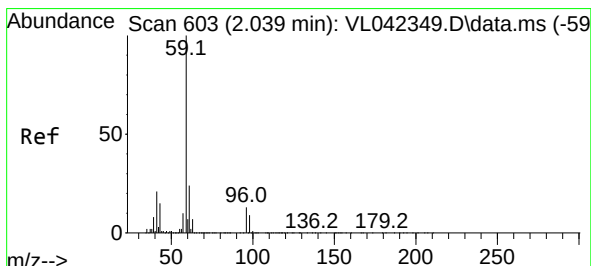
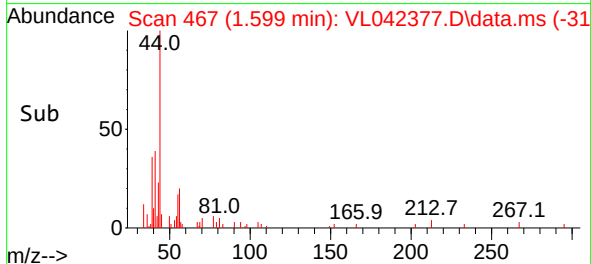
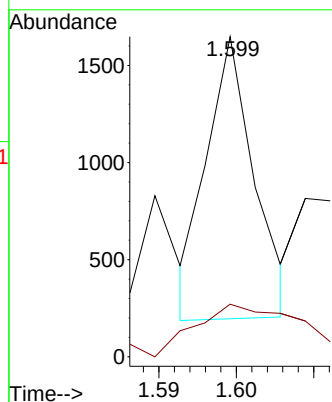
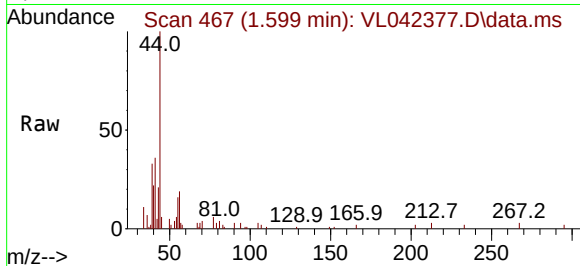




#16
1,3-Butadiene
Concen: 0.080 ppbv
RT: 1.599 min Scan# 41
Delta R.T. -0.010 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

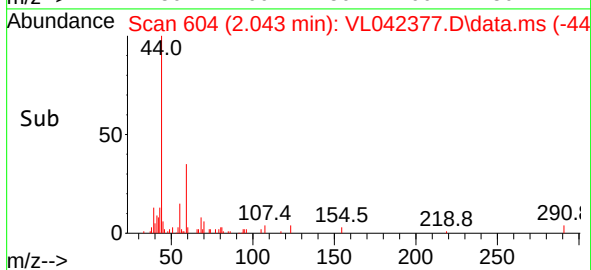
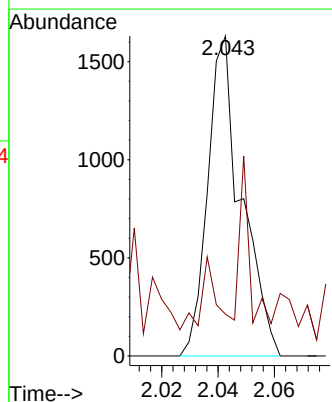
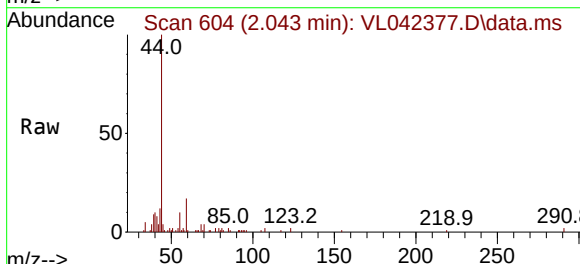
Instrument :
MSVOA_L
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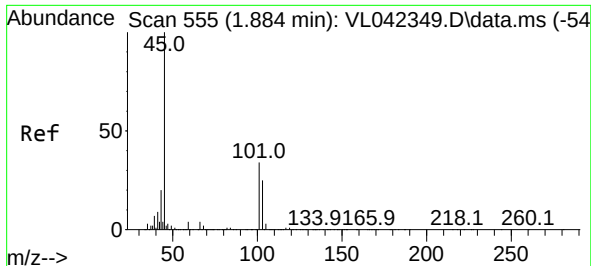
Tgt Ion: 39 Resp: 621
Ion Ratio Lower Upper
39 100
54 58.5 64.9 97.3#



#17
tert-Butyl alcohol
Concen: 0.067 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 59 Resp: 1350
Ion Ratio Lower Upper
59 100
57 81.9 8.7 13.1#

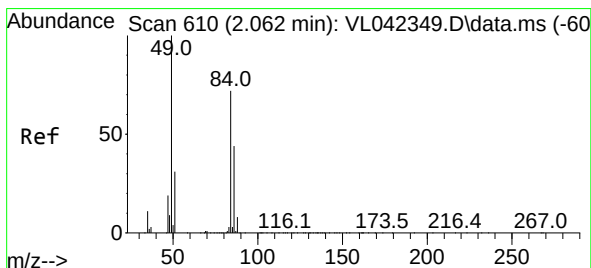
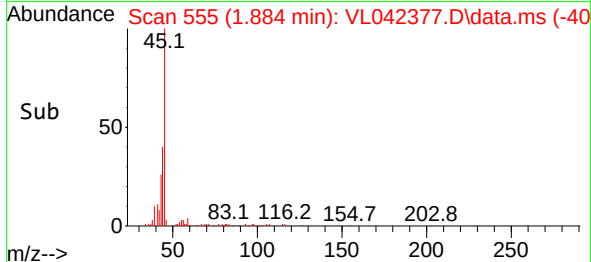
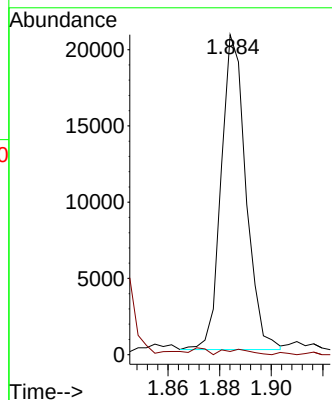
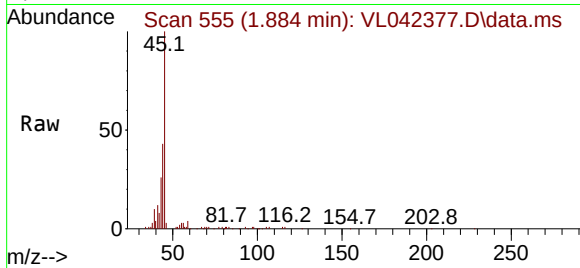




#19
Isopropyl Alcohol
Concen: 1.521 ppbv
RT: 1.884 min Scan# 51
Delta R.T. 0.000 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

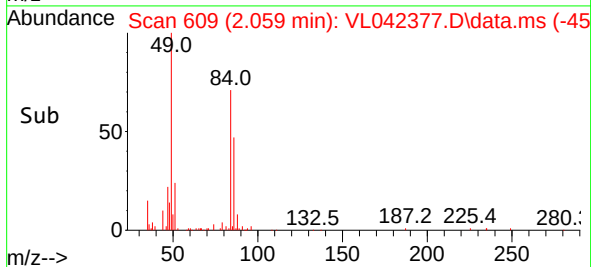
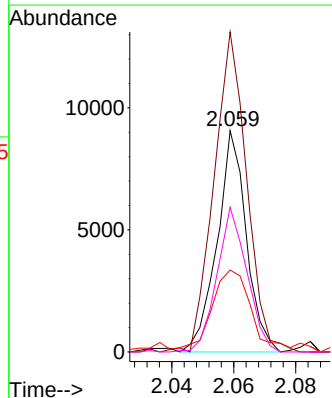
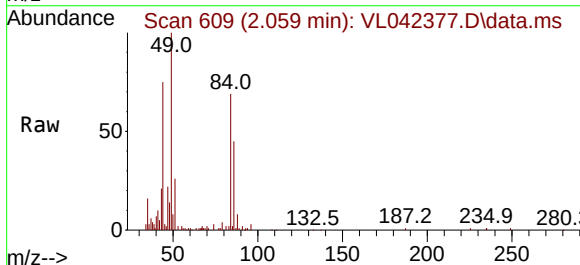
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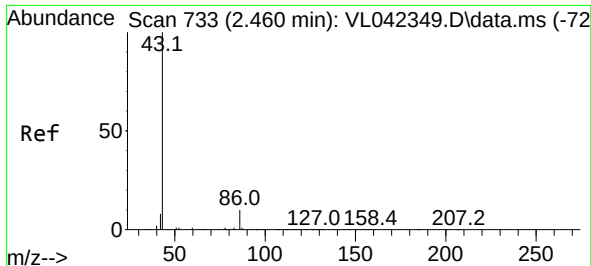
Tgt Ion: 45 Resp: 13751
Ion Ratio Lower Upper
45 100
58 530.4 34.5 51.7#



#20
Methylene Chloride
Concen: 0.933 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 84 Resp: 5948
Ion Ratio Lower Upper
84 100
49 142.8 111.6 167.4
51 35.1 35.1 52.7#
86 65.3 48.9 73.3

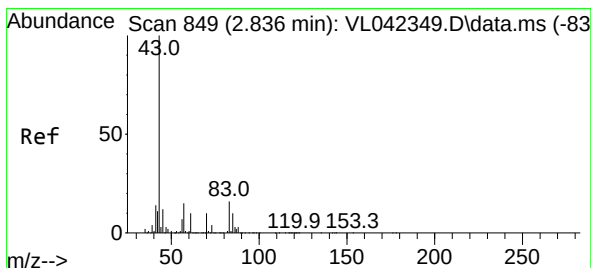
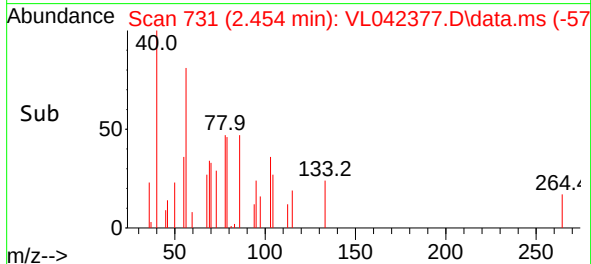
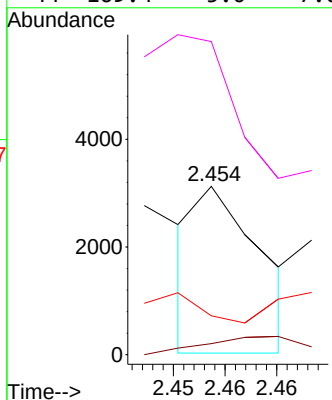
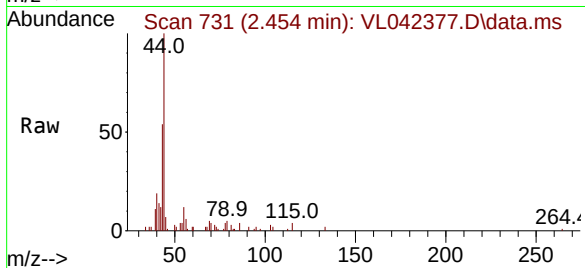




#23
 Vinyl Acetate
 Concen: 0.203 ppbv
 RT: 2.454 min Scan# 71
 Delta R.T. -0.006 min
 Lab File: VL042377.D
 Acq: 18 Apr 2025 02:01

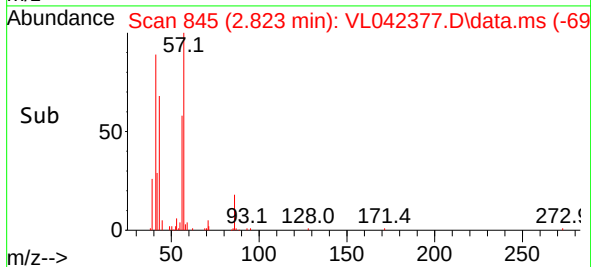
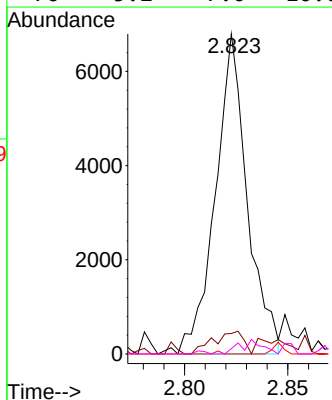
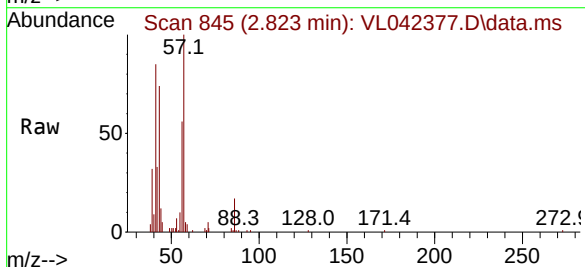
Instrument :
 MSVOA_L
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 IA-B2-6-03312025DL

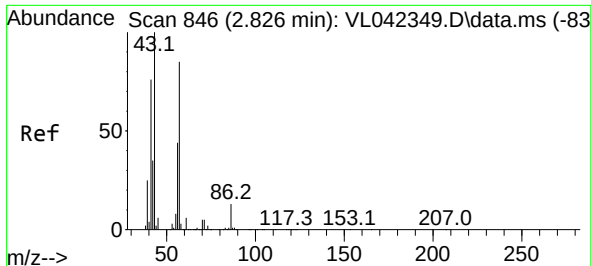
Tgt Ion: 43	Resp: 1337
Ion Ratio	Lower Upper
43 100	
86 5.5	6.5 9.7#
42 0.0	7.8 11.8#
44 169.4	5.0 7.6#



#25
 Ethyl Acetate
 Concen: 0.181 ppbv
 RT: 2.823 min Scan# 845
 Delta R.T. -0.013 min
 Lab File: VL042377.D
 Acq: 18 Apr 2025 02:01

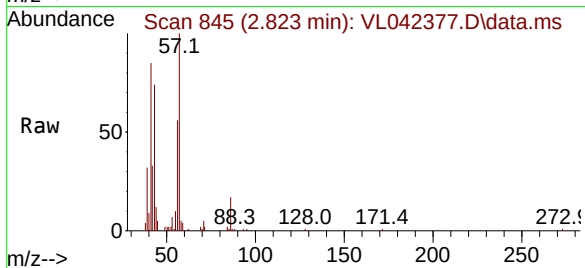
Tgt	Ion: 43	Resp:	7282
Ion	Ratio	Lower	Upper
43	100		
45	12.2	8.3	12.5
61	0.0	7.3	10.9#
70	5.2	7.0	10.6#



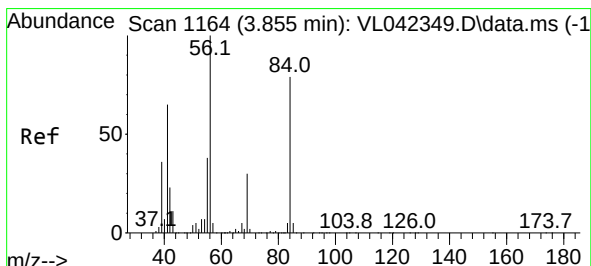
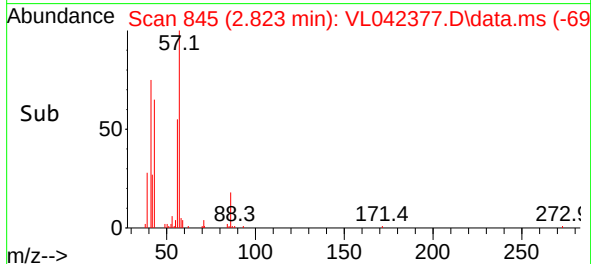
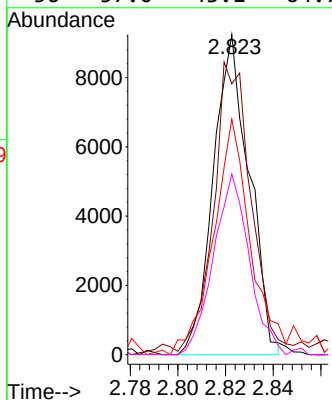


#26
Hexane
Concen: 0.595 ppbv
RT: 2.823 min Scan# 846
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

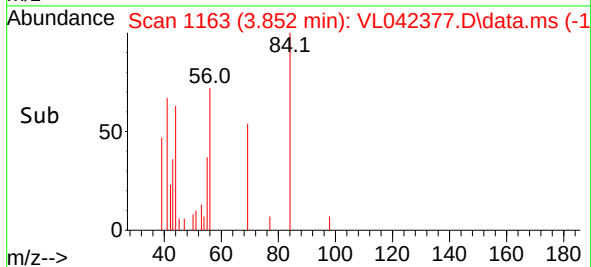
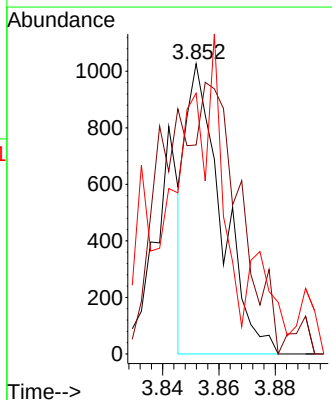
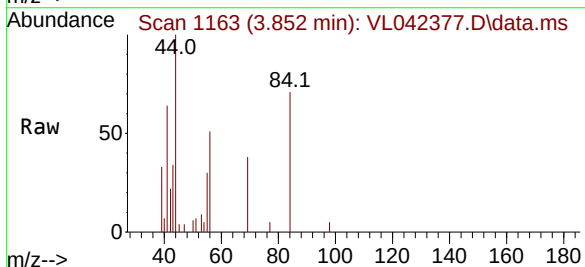


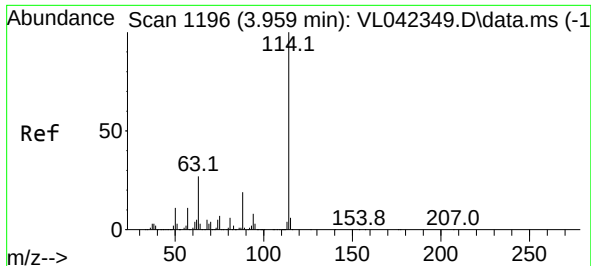
Tgt Ion: 57 Resp: 9658
Ion Ratio Lower Upper
57 100
41 103.4 77.9 116.9
43 70.9 208.4 312.6#
56 57.0 43.1 64.7



#30
Cyclohexane
Concen: 0.069 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 84 Resp: 905
Ion Ratio Lower Upper
84 100
56 205.2 101.0 151.4#
41 184.3 67.4 101.0#

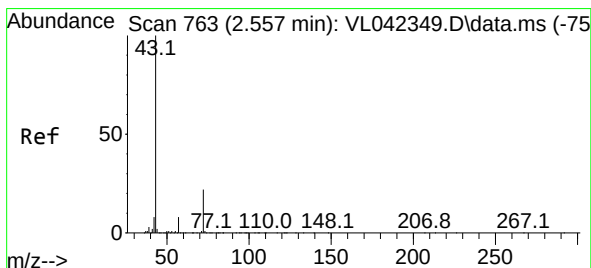
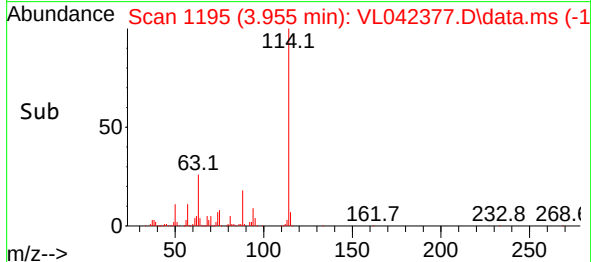
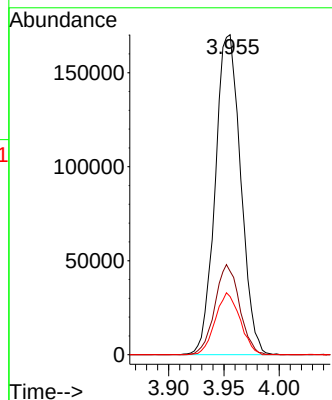
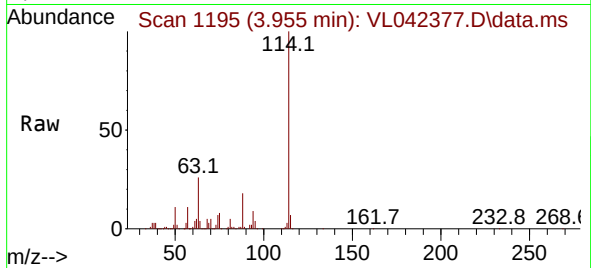




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

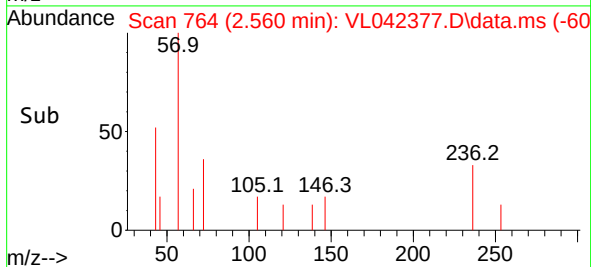
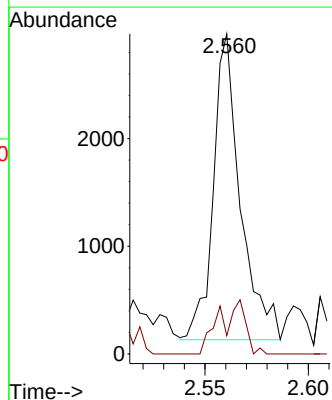
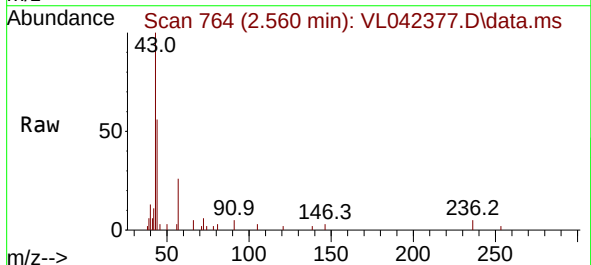
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

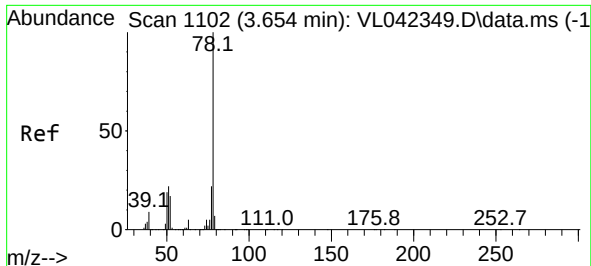
Tgt Ion:114 Resp: 272592
Ion Ratio Lower Upper
114 100
63 27.3 21.8 32.6
88 18.8 15.5 23.3



#34
2-Butanone
Concen: 0.120 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 43 Resp: 2582
Ion Ratio Lower Upper
43 100
72 17.0 18.2 27.2#

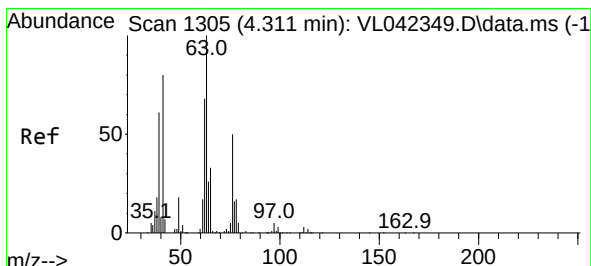
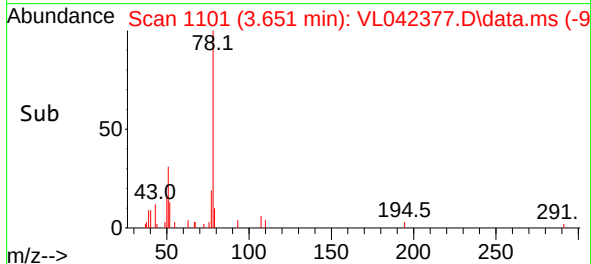
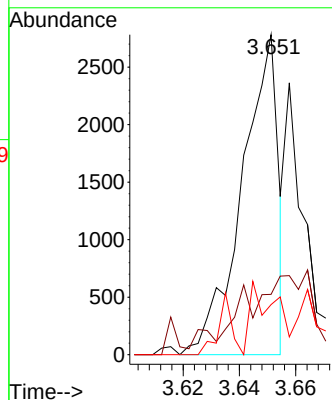
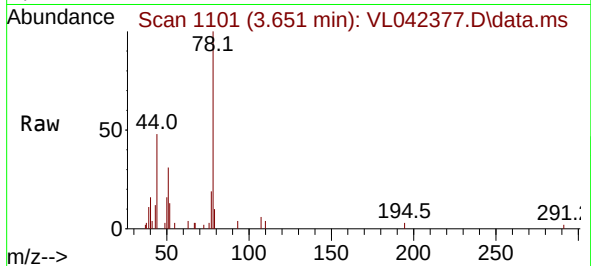




#36
Benzene
Concen: 0.084 ppbv
RT: 3.651 min Scan# 1102
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

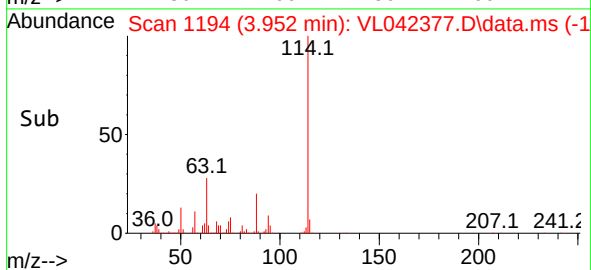
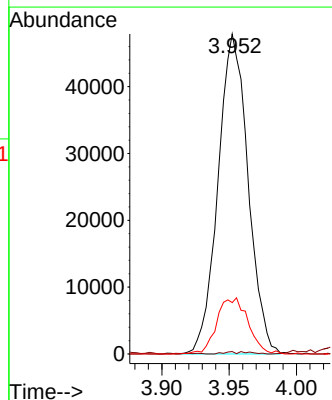
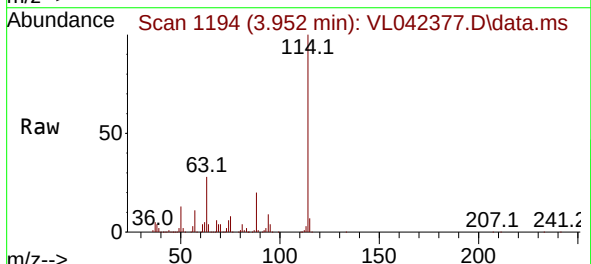
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

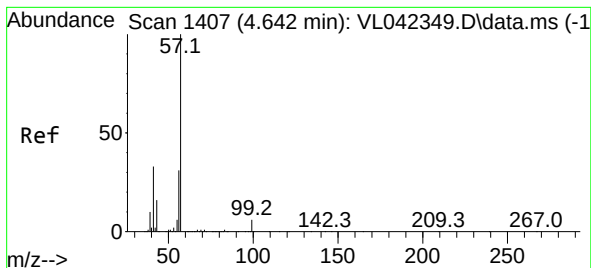
Tgt Ion: 78 Resp: 2479
Ion Ratio Lower Upper
78 100
77 16.4 17.4 26.0#
50 15.7 15.5 23.3



#39
1,2-Dichloropropane
Concen: 6.771 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.359 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 63 Resp: 74190
Ion Ratio Lower Upper
63 100
41 0.6 64.2 96.2#
62 16.0 54.3 81.5#





#44

2,2,4-Trimethylpentane

Concen: 0.782 ppbv

RT: 4.635 min Scan# 1405

Delta R.T. -0.006 min

Lab File: VL042377.D

Acq: 18 Apr 2025 02:01

Instrument :

MSVOA_L

ClientSampleId :

IA-B2-6-03312025DL

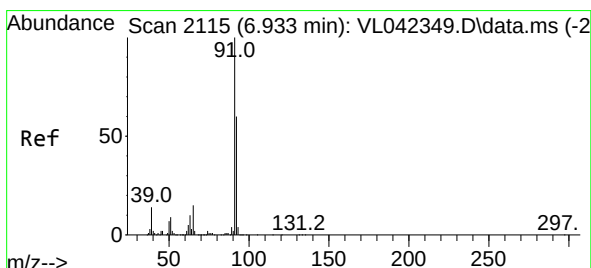
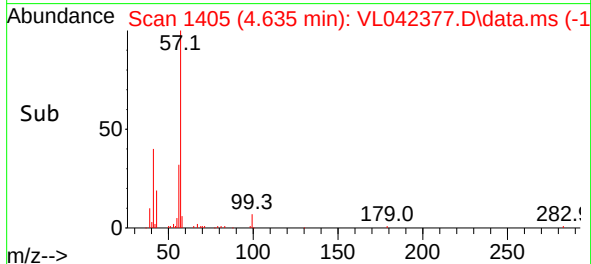
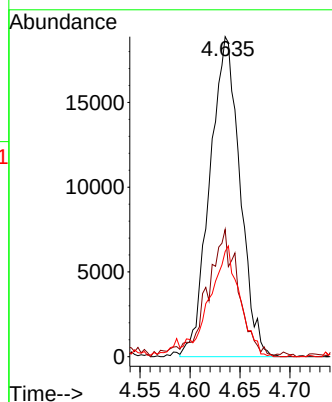
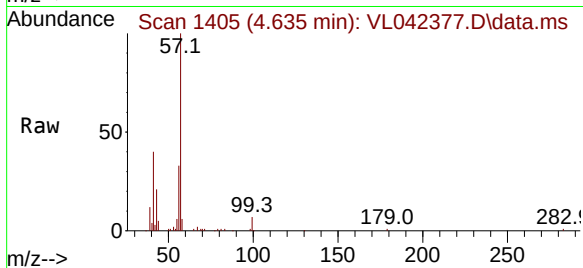
Tgt Ion: 57 Resp: 39733

Ion Ratio Lower Upper

57 100

41 41.9 27.2 40.8#

56 36.0 25.7 38.5



#53

Toluene

Concen: 2.264 ppbv

RT: 6.927 min Scan# 2113

Delta R.T. -0.006 min

Lab File: VL042377.D

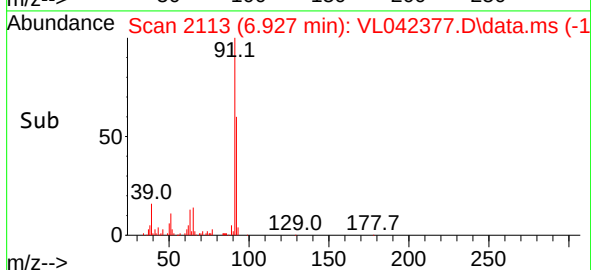
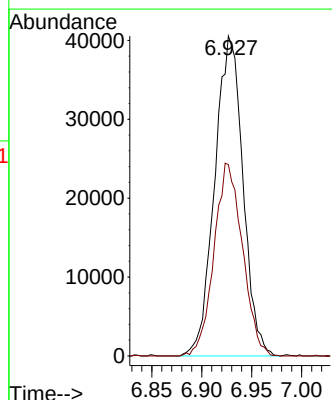
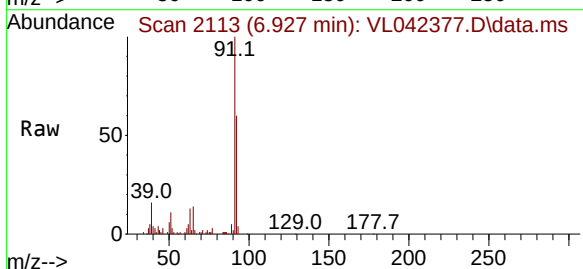
Acq: 18 Apr 2025 02:01

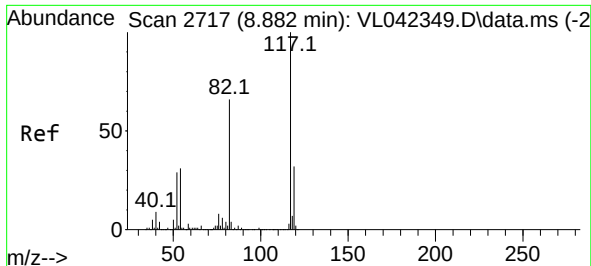
Tgt Ion: 91 Resp: 79886

Ion Ratio Lower Upper

91 100

92 60.5 48.2 72.4

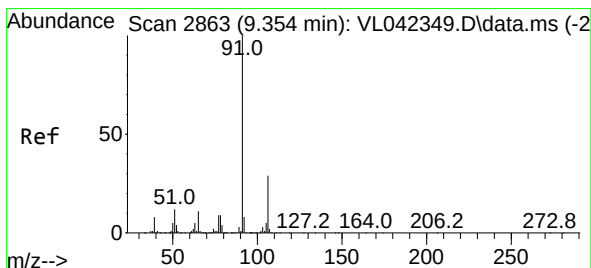
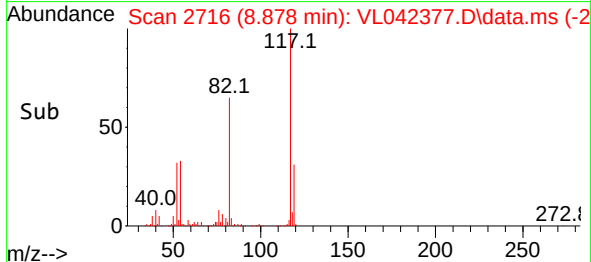
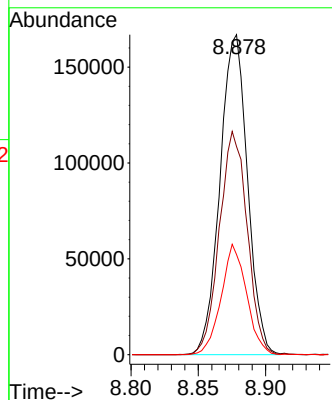
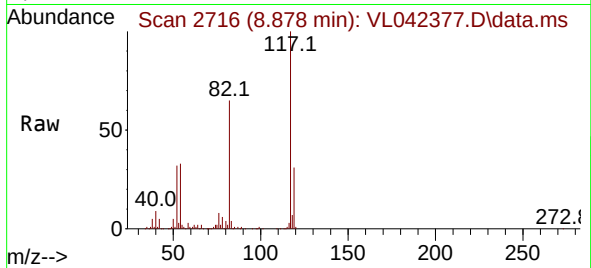




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

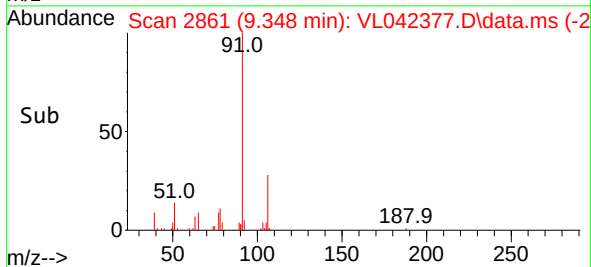
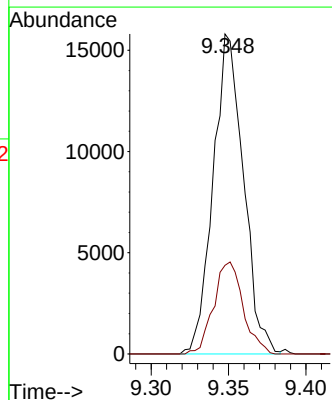
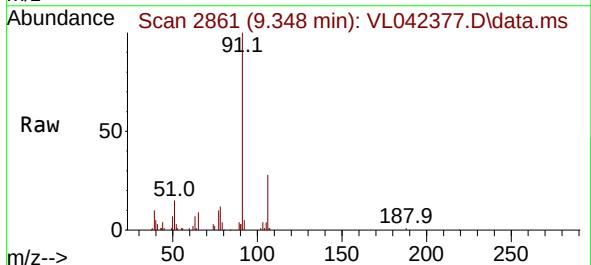
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

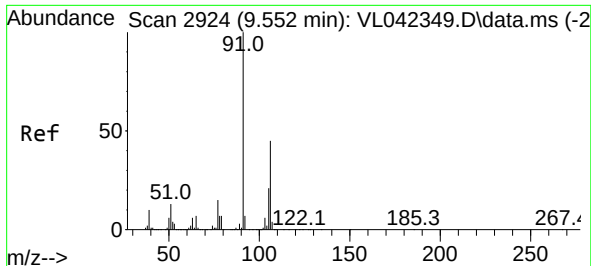
Tgt Ion:117 Resp: 237645
Ion Ratio Lower Upper
117 100
82 70.3 57.8 86.6
119 31.9 25.2 37.8



#58
Ethyl Benzene
Concen: 0.457 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.006 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 91 Resp: 21503
Ion Ratio Lower Upper
91 100
106 27.7 23.0 34.4





#59

m/p-Xylene

Concen: 0.349 ppbv

RT: 9.545 min Scan# 29

Delta R.T. -0.006 min

Lab File: VL042377.D

Acq: 18 Apr 2025 02:01

Instrument :

MSVOA_L

ClientSampleId :

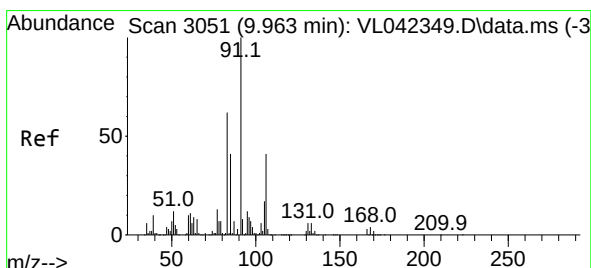
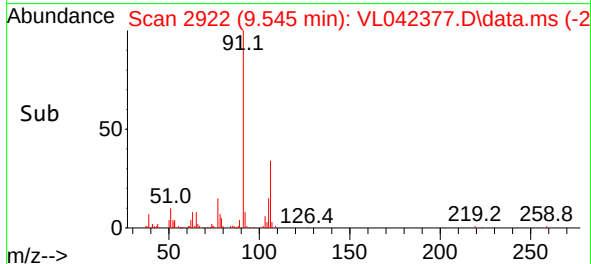
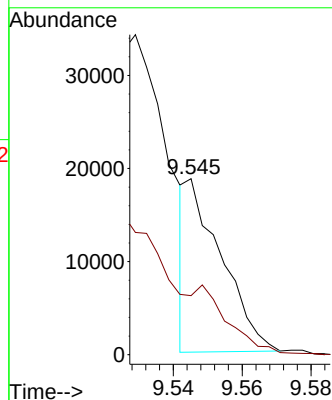
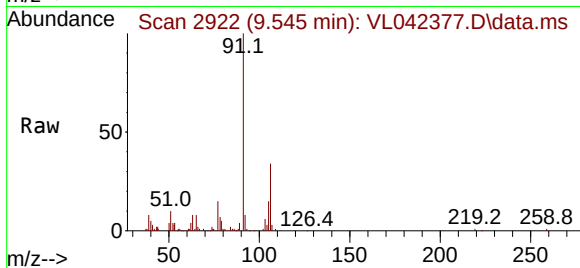
IA-B2-6-03312025DL

Tgt Ion: 91 Resp: 13227

Ion Ratio Lower Upper

91 100

106 0.0 35.4 53.2#



#60

o-Xylene

Concen: 0.668 ppbv

RT: 9.959 min Scan# 3050

Delta R.T. -0.003 min

Lab File: VL042377.D

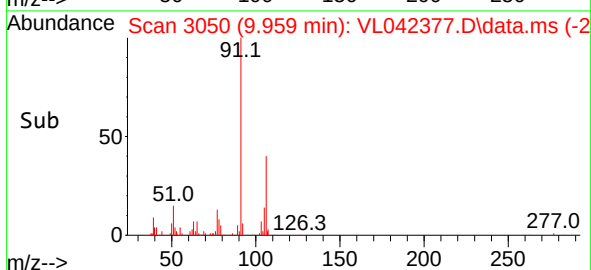
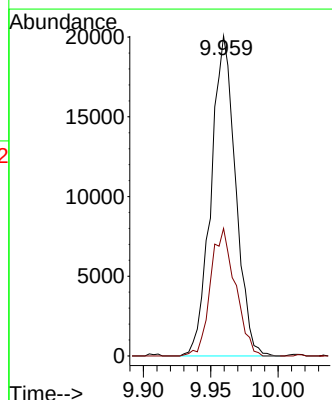
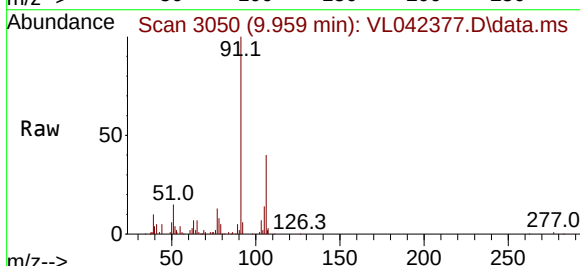
Acq: 18 Apr 2025 02:01

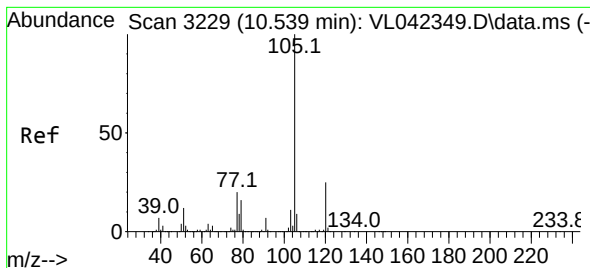
Tgt Ion: 91 Resp: 25512

Ion Ratio Lower Upper

91 100

106 40.1 21.1 63.4

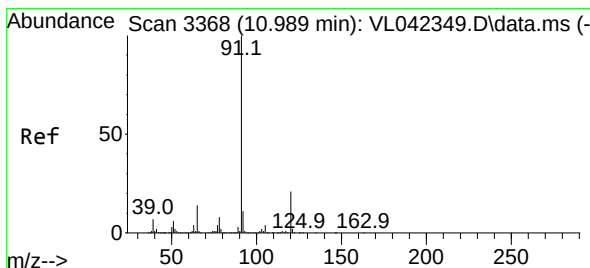
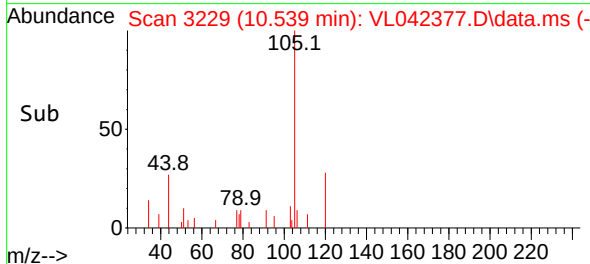
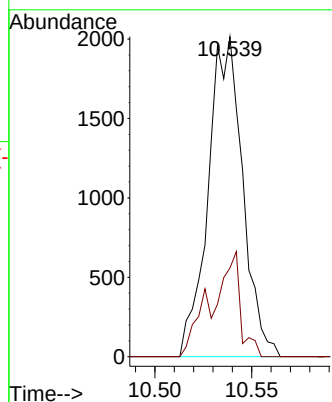
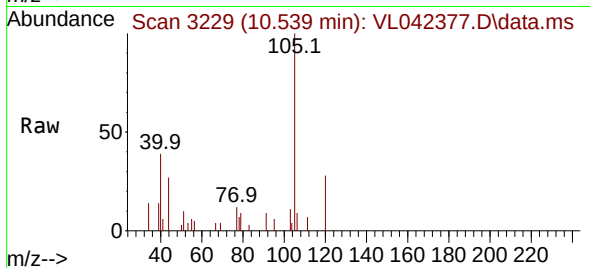




#62
Isopropylbenzene
Concen: 0.045 ppbv
RT: 10.539 min Scan# 31
Delta R.T. 0.000 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

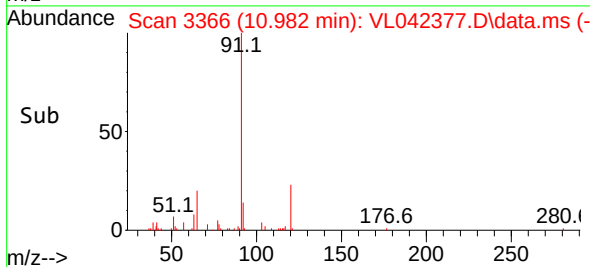
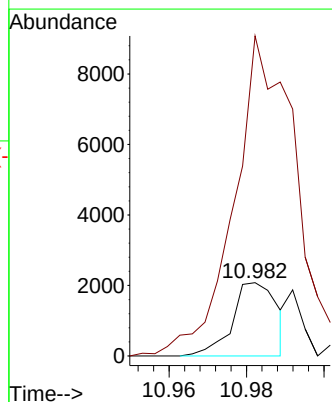
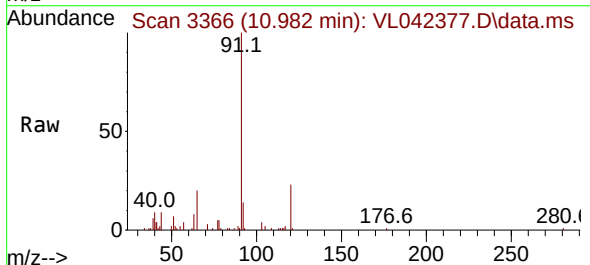
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

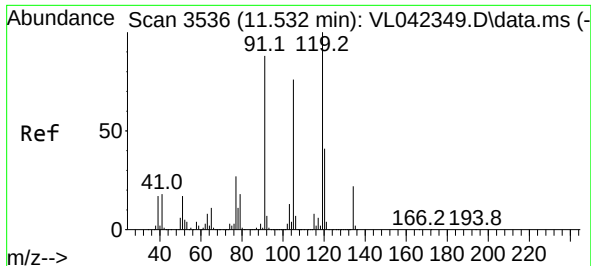
Tgt Ion:105 Resp: 2498
Ion Ratio Lower Upper
105 100
120 27.5 19.8 29.8



#64
n-propylbenzene
Concen: 0.118 ppbv
RT: 10.982 min Scan# 3366
Delta R.T. -0.006 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion:120 Resp: 1664
Ion Ratio Lower Upper
120 100
91 607.5 392.4 588.6#

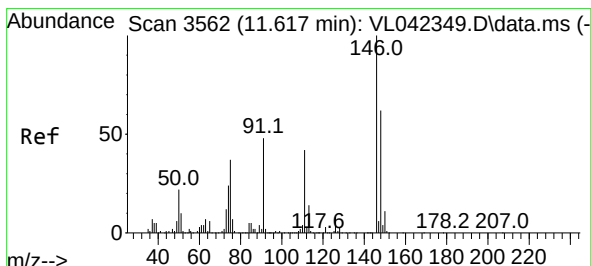
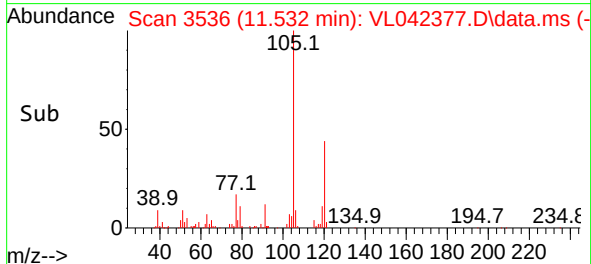
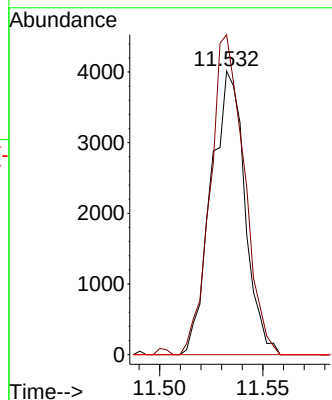
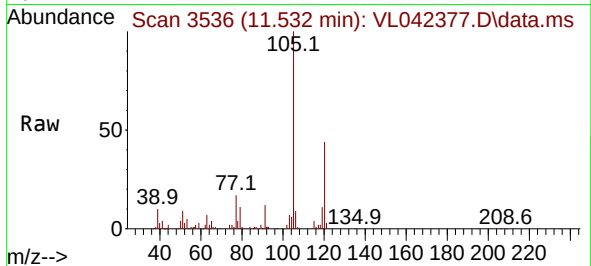




#65
tert-Butylbenzene
Concen: 0.089 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. 0.000 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

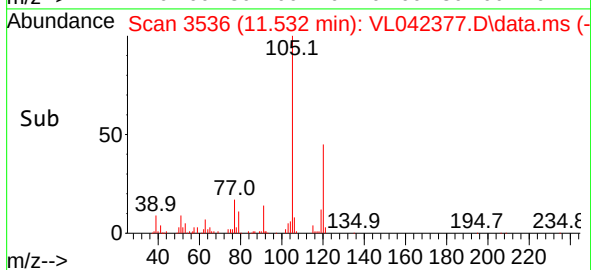
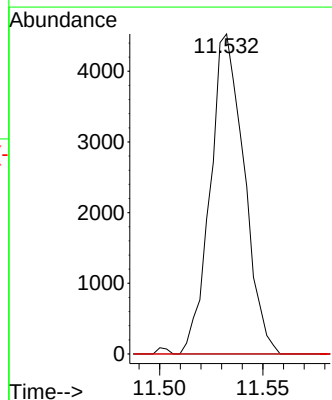
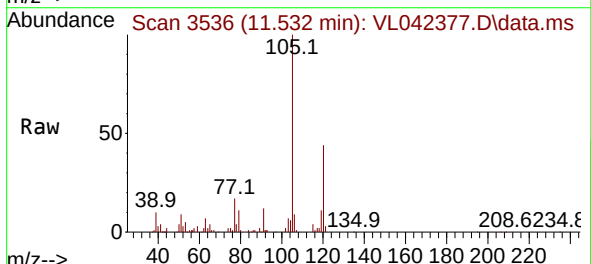
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

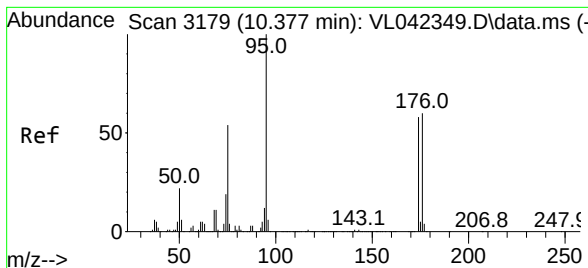
Tgt Ion: 119 Resp: 4564
Ion Ratio Lower Upper
119 100
91 113.5 74.6 111.8#
134 0.0 18.8 28.2#



#66
Benzyl Chloride
Concen: 0.909 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.084 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion: 91 Resp: 5150
Ion Ratio Lower Upper
91 100
126 0.0 11.8 17.6#
128 0.0 4.5 6.7#

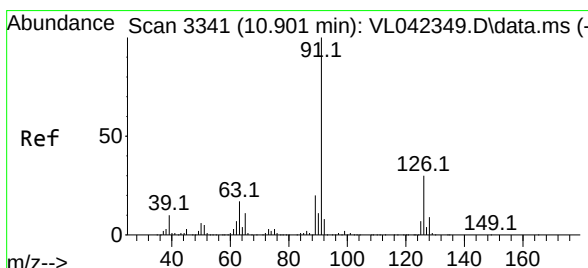
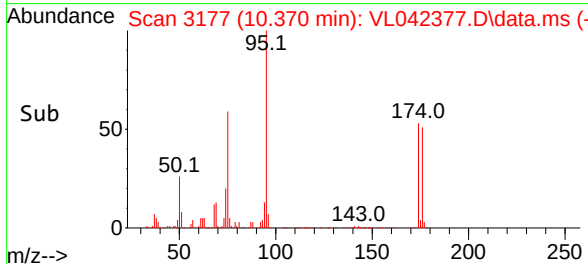
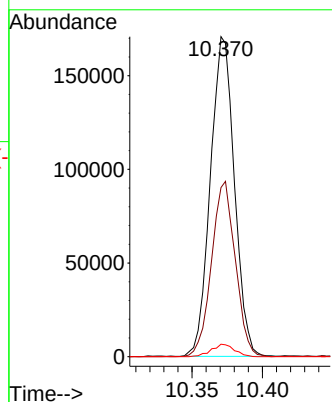
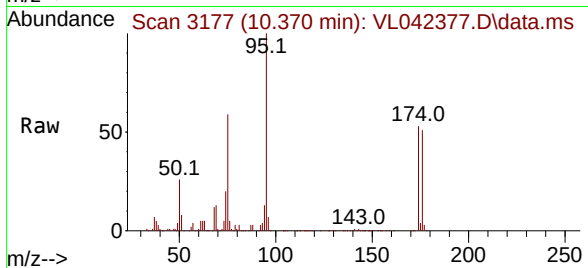




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.393 ppbv
 RT: 10.370 min Scan# 3179
 Delta R.T. -0.006 min
 Lab File: VL042377.D
 Acq: 18 Apr 2025 02:01

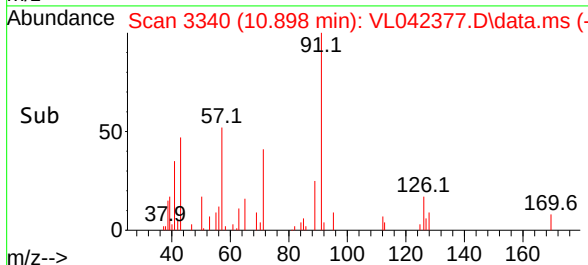
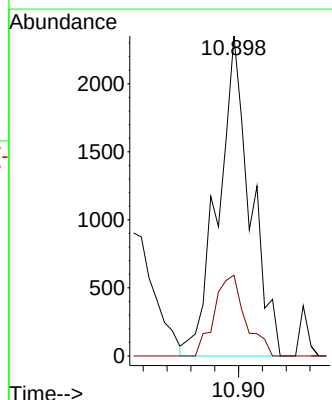
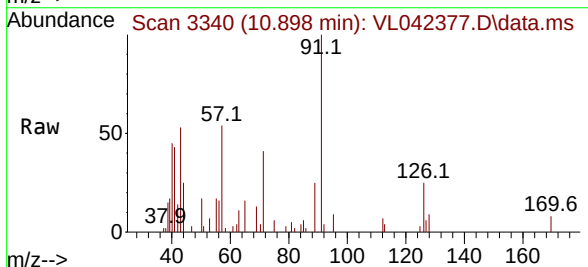
Instrument :
 MSVOA_1
 ClientSampleId :
 IA-B2-6-03312025DL

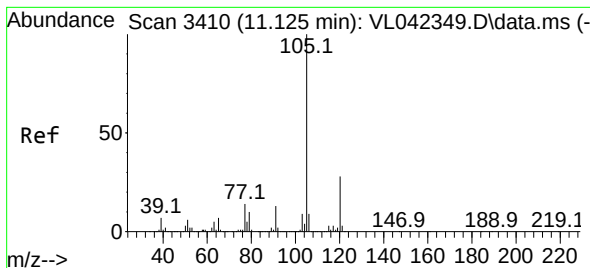
Tgt Ion: 95 Resp: 202954
 Ion Ratio Lower Upper
 95 100
 174 54.2 48.5 72.7
 175 3.8 3.7 5.5



#71
 2-Chlorotoluene
 Concen: 0.050 ppbv
 RT: 10.898 min Scan# 3340
 Delta R.T. -0.003 min
 Lab File: VL042377.D
 Acq: 18 Apr 2025 02:01

Tgt Ion: 91 Resp: 2213
 Ion Ratio Lower Upper
 91 100
 126 24.1 11.4 45.4

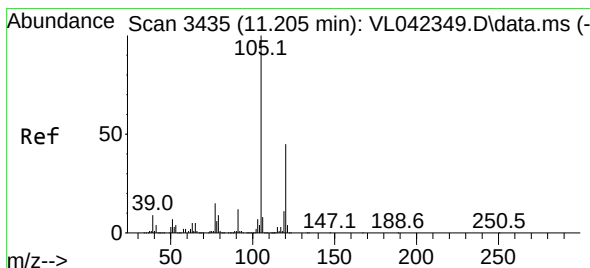
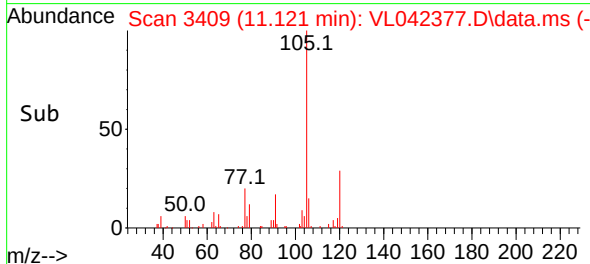
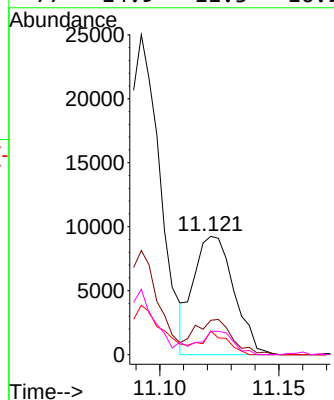
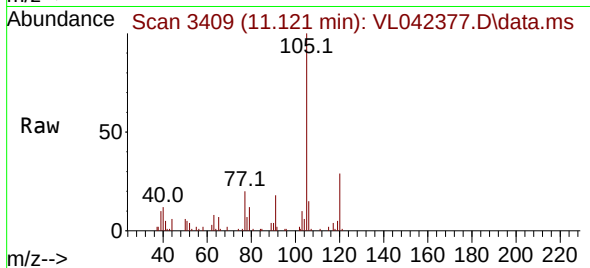




#72
4-Ethyltoluene
Concen: 0.234 ppbv
RT: 11.121 min Scan# 3410
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

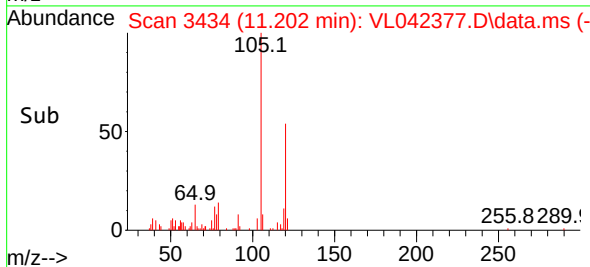
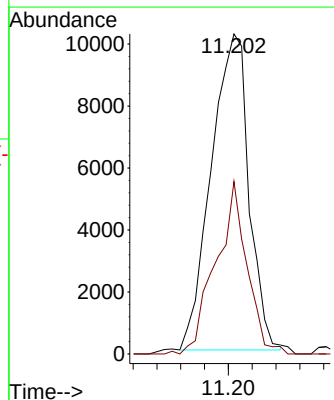
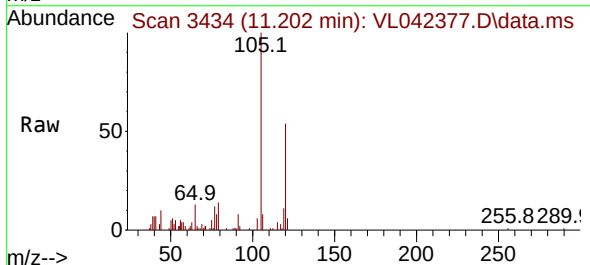
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-03312025DL

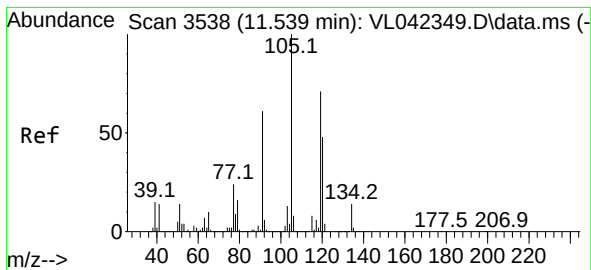
Tgt Ion:105	Resp:	10921
Ion Ratio	Lower	Upper
105	100	
120	0.0	23.2 34.8#
91	0.0	10.4 15.6#
77	14.9	11.3 16.9



#73
1,3,5-Trimethylbenzene
Concen: 0.272 ppbv
RT: 11.202 min Scan# 3434
Delta R.T. -0.003 min
Lab File: VL042377.D
Acq: 18 Apr 2025 02:01

Tgt Ion:105	Resp:	11199
Ion Ratio	Lower	Upper
105	100	
120	54.6	35.6 53.4#





#74

1,2,4-Trimethylbenzene

Concen: 0.853 ppbv

RT: 11.532 min Scan# 3536

Delta R.T. -0.006 min

Lab File: VL042377.D

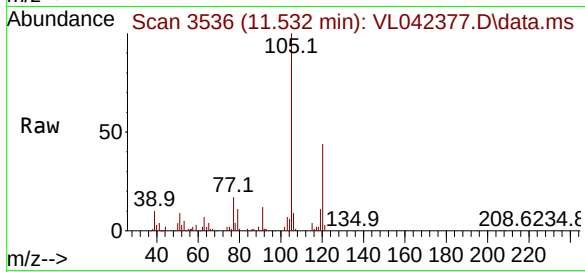
Acq: 18 Apr 2025 02:01

Instrument :

MSVOA_L

ClientSampleId :

IA-B2-6-03312025DL



Tgt Ion:105 Resp: 41057

Ion Ratio Lower Upper

105 100

120 43.6 38.1 57.1

91 11.9 48.8 73.2#

77 16.5 19.0 28.4#

