

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041825\
 Data File : VL042387.D
 Acq On : 18 Apr 2025 12:41
 Operator : SY/MD
 Sample : Q1726-01DL2 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-DUP-3-03312025DL2

Quant Time: Apr 18 22:57:54 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

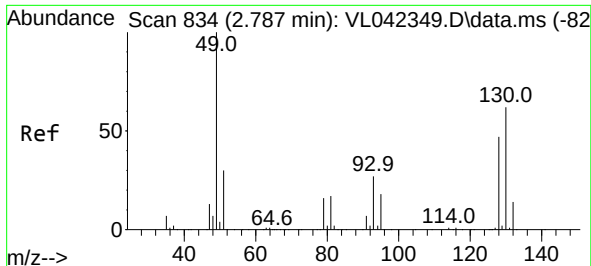
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.784	49	133179	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	411086	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	357783	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	291643	9.920	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.200%
Target Compounds						
					Qvalue	
3) Chlorodifluoromethane	1.466	51	1391	0.062	ppbv #	84
9) Propene	1.486	41	737	0.072	ppbv #	15
10) Heptane	4.968	43	2621	0.091	ppbv #	37
13) Ethanol	1.719	45	9034	5.570	ppbv	89
15) Acetone	1.832	43	267863	12.286	ppbv	99
16) 1,3-Butadiene	1.619	39	1037	0.099	ppbv #	46
19) Isopropyl Alcohol	1.884	45	8878	0.733	ppbv #	1
20) Methylene Chloride	2.059	84	1927	0.226	ppbv	88
23) Vinyl Acetate	2.450	43	665	0.075	ppbv #	44
26) Hexane	2.826	57	2086	0.096	ppbv #	40
36) Benzene	3.654	78	1745	0.039	ppbv #	61
39) 1,2-Dichloropropane	3.952	63	106017	6.416	ppbv #	22
44) 2,2,4-Trimethylpentane	4.629	57	24464	0.319	ppbv #	86
53) Toluene	6.923	91	50250	0.944	ppbv	99
58) Ethyl Benzene	9.348	91	9917	0.140	ppbv	100
59) m/p-Xylene	9.526	91	40839	0.715	ppbv	99
60) o-Xylene	9.959	91	16348	0.284	ppbv	94
64) n-propylbenzene	10.989	120	1431	0.067	ppbv	79
65) tert-Butylbenzene	11.532	119	3021	0.039	ppbv #	75
66) Benzyl Chloride	11.539	91	1010	0.118	ppbv #	70
72) 4-Ethyltoluene	11.121	105	7156	0.102	ppbv #	56
73) 1,3,5-Trimethylbenzene	11.199	105	5458	0.088	ppbv #	73
74) 1,2,4-Trimethylbenzene	11.532	105	26096	0.360	ppbv #	64

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

Quant Time: Apr 18 22:57:54 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

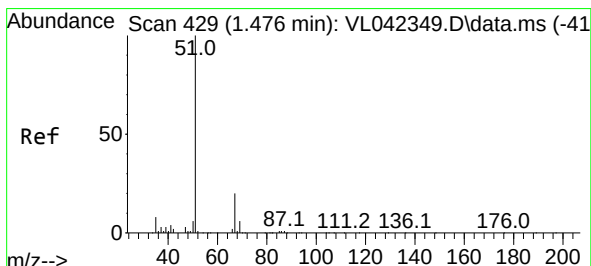
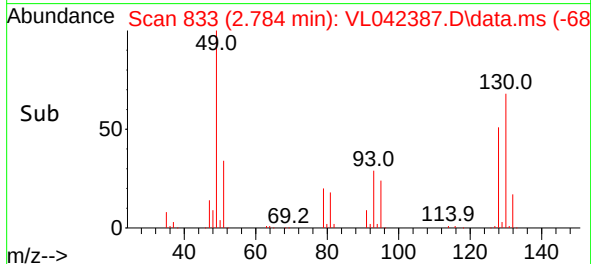
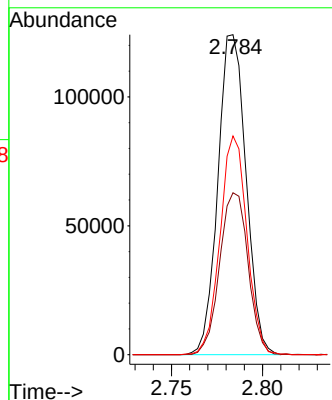
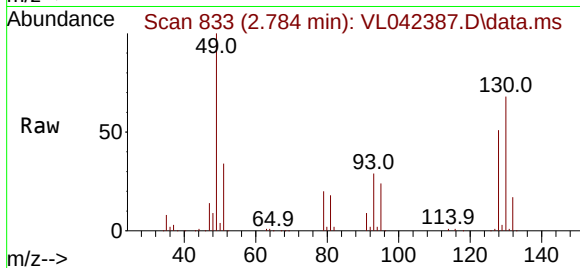




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.784 min Scan# 81
 Delta R.T. -0.003 min
 Lab File: VL042387.D
 Acq: 18 Apr 2025 12:41

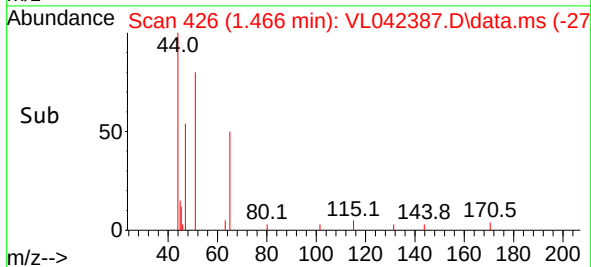
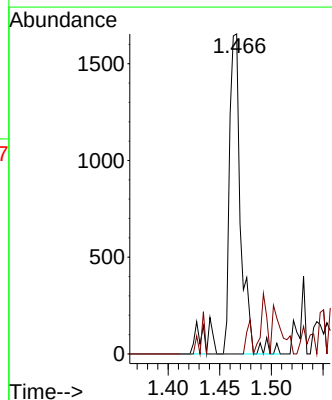
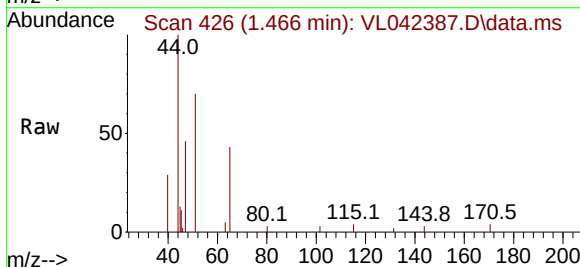
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-DUP-3-03312025DL2

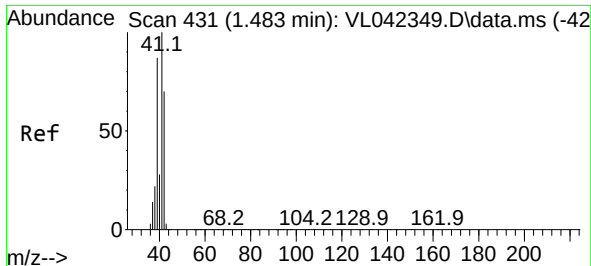
Tgt Ion: 49 Resp: 133179
 Ion Ratio Lower Upper
 49 100
 128 51.2 22.8 68.4
 130 65.3 29.3 88.0



#3
 Chlorodifluoromethane
 Concen: 0.062 ppbv
 RT: 1.466 min Scan# 426
 Delta R.T. -0.010 min
 Lab File: VL042387.D
 Acq: 18 Apr 2025 12:41

Tgt Ion: 51 Resp: 1391
 Ion Ratio Lower Upper
 51 100
 67 12.9 16.2 24.4#





#9

Propene

Concen: 0.072 ppbv

RT: 1.486 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL042387.D

Acq: 18 Apr 2025 12:41

Instrument :

MSVOA_L

ClientSampleId :

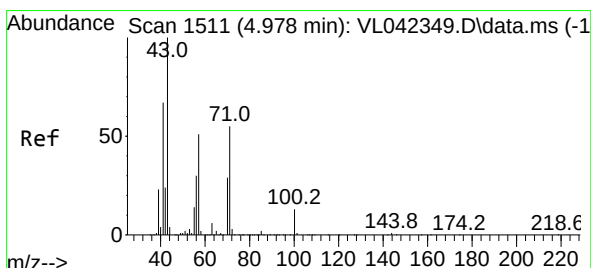
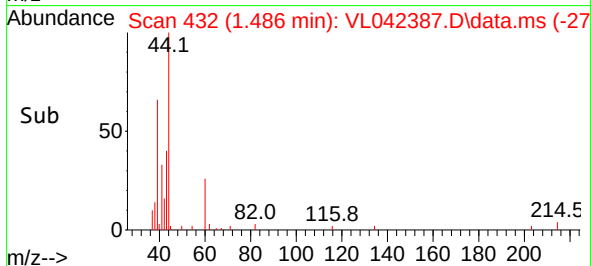
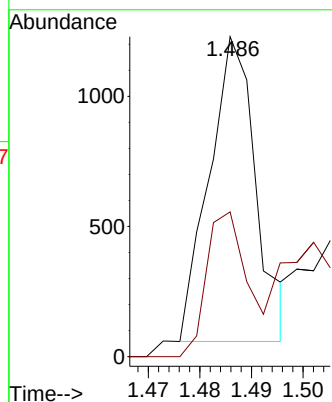
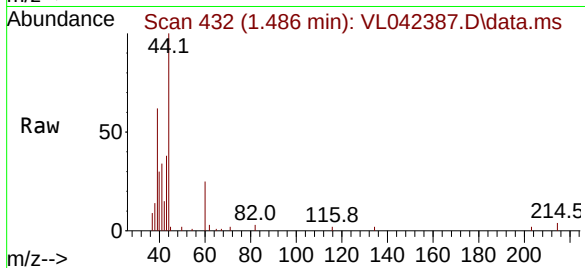
IA-DUP-3-03312025DL2

Tgt Ion: 41 Resp: 737

Ion Ratio Lower Upper

41 100

42 0.0 56.2 84.4#



#10

Heptane

Concen: 0.091 ppbv

RT: 4.968 min Scan# 1508

Delta R.T. -0.010 min

Lab File: VL042387.D

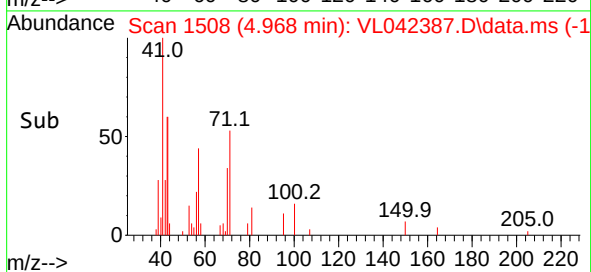
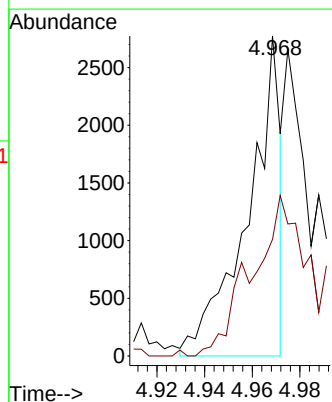
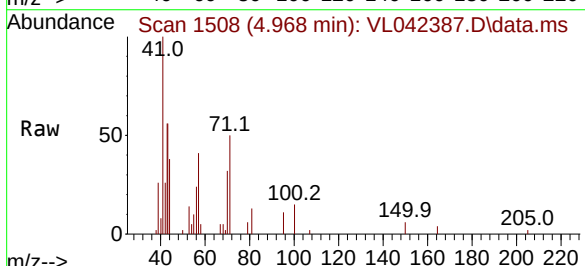
Acq: 18 Apr 2025 12:41

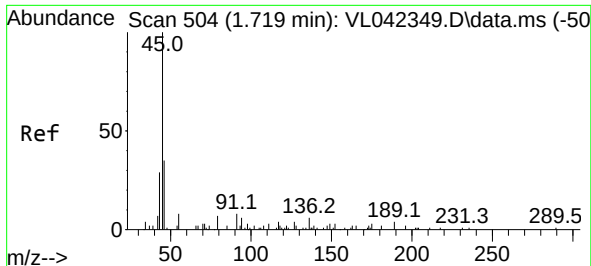
Tgt Ion: 43 Resp: 2621

Ion Ratio Lower Upper

43 100

57 93.2 39.9 59.9#

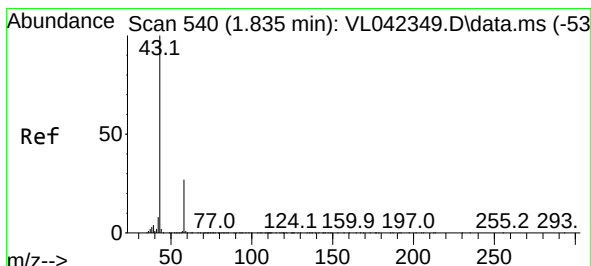
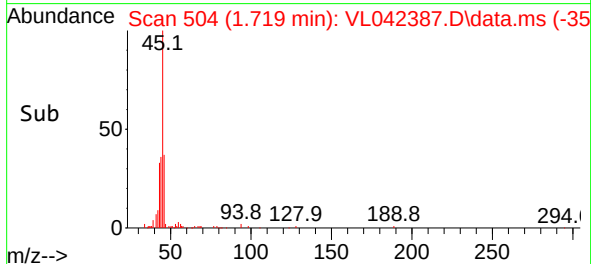
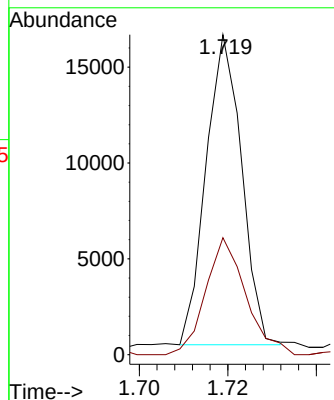
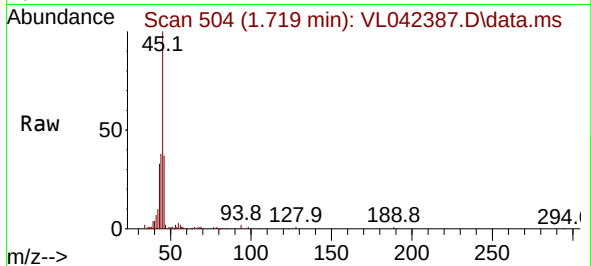




#13
Ethanol
Concen: 5.570 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.000 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

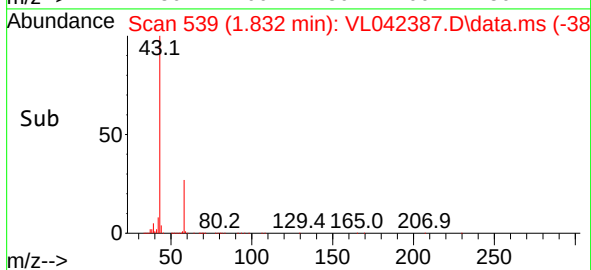
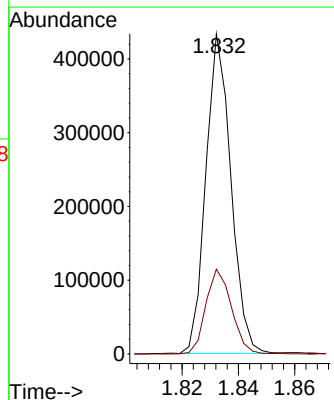
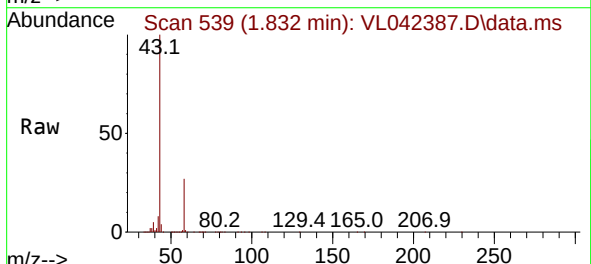
Instrument :
MSVOA_1
ClientSampleId :
IA-DUP-3-03312025DL2

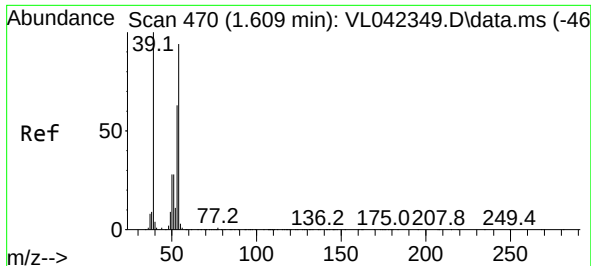
Tgt Ion: 45 Resp: 9034
Ion Ratio Lower Upper
45 100
46 46.7 21.9 87.7



#15
Acetone
Concen: 12.286 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.003 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion: 43 Resp: 267863
Ion Ratio Lower Upper
43 100
58 27.3 22.4 33.6

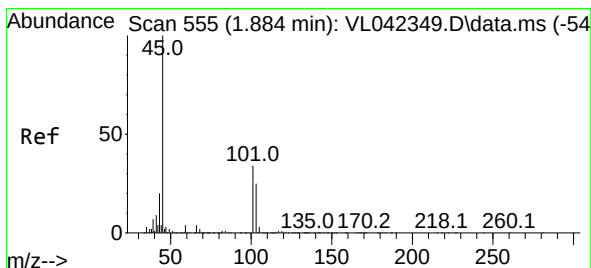
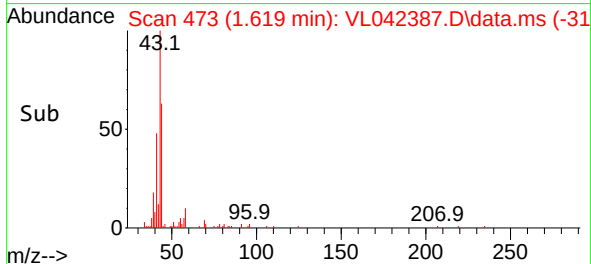
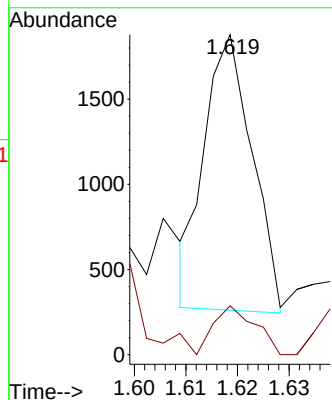
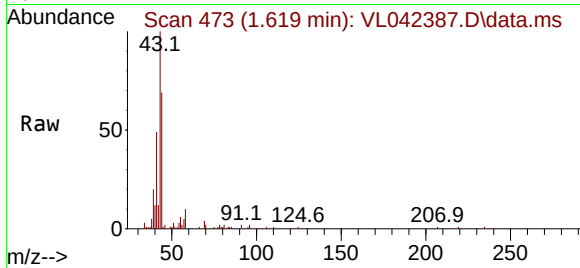




#16
1,3-Butadiene
Concen: 0.099 ppbv
RT: 1.619 min Scan# 473
Delta R.T. 0.010 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

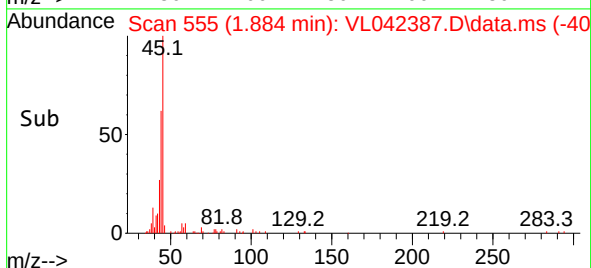
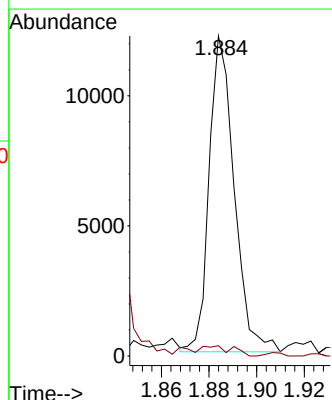
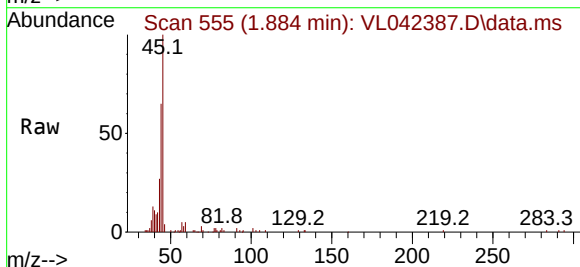
Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-3-03312025DL2

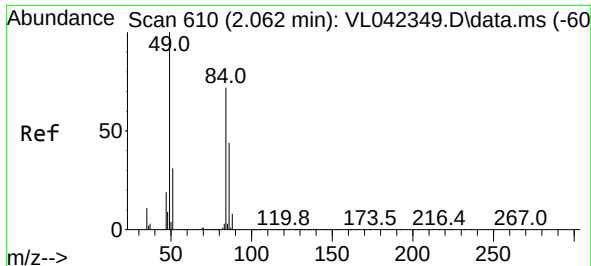
Tgt Ion: 39 Resp: 1037
Ion Ratio Lower Upper
39 100
54 32.7 64.9 97.3#



#19
Isopropyl Alcohol
Concen: 0.733 ppbv
RT: 1.884 min Scan# 555
Delta R.T. 0.000 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion: 45 Resp: 8878
Ion Ratio Lower Upper
45 100
58 823.5 34.5 51.7#



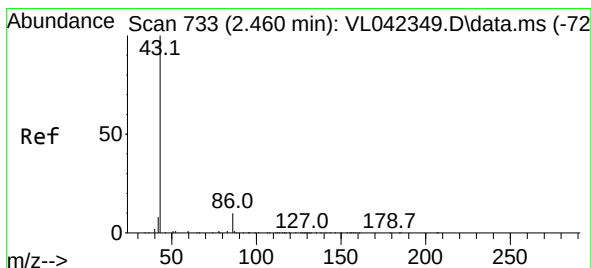
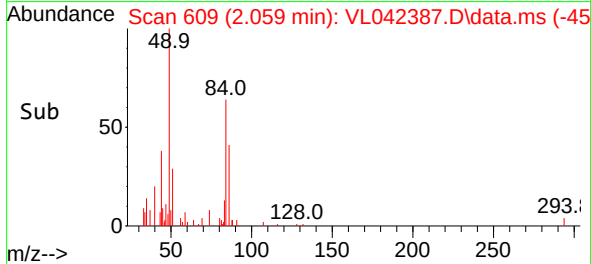
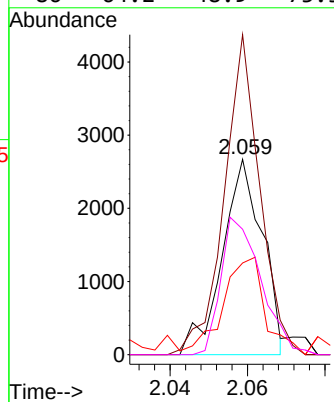
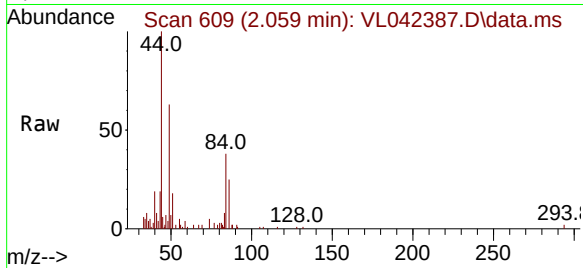


#20
Methylene Chloride
Concen: 0.226 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-3-03312025DL2

Tgt Ion: 84 Resp: 1927

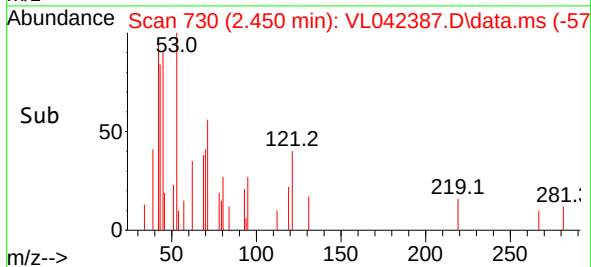
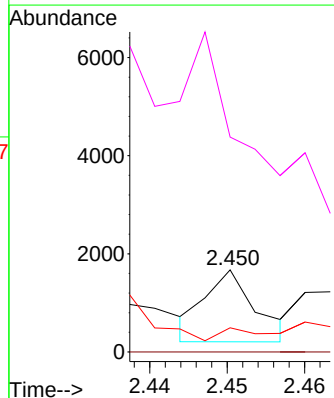
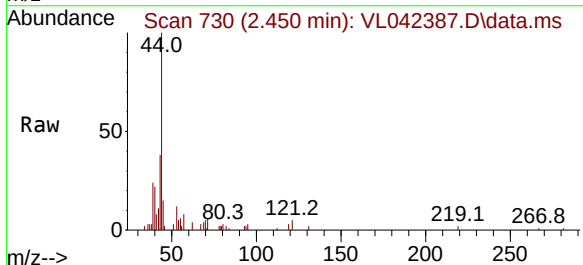
Ion	Ratio	Lower	Upper
84	100		
49	161.2	111.6	167.4
51	45.0	35.1	52.7
86	64.2	48.9	73.3

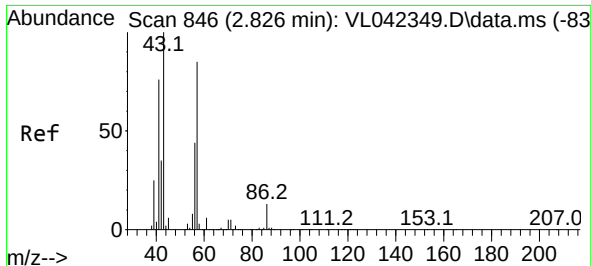


#23
Vinyl Acetate
Concen: 0.075 ppbv
RT: 2.450 min Scan# 730
Delta R.T. -0.010 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion: 43 Resp: 665

Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.5	9.7#
42	11.4	7.8	11.8
44	66.5	5.0	7.6#

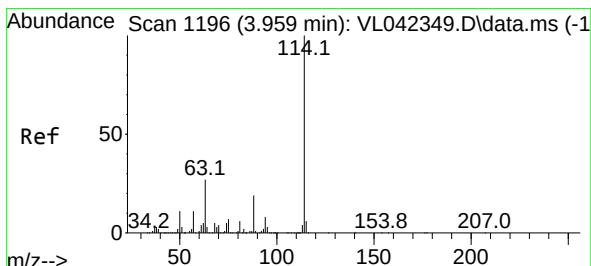
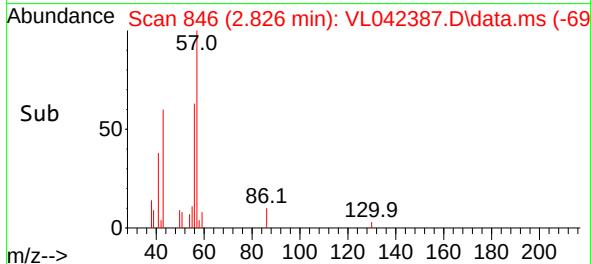
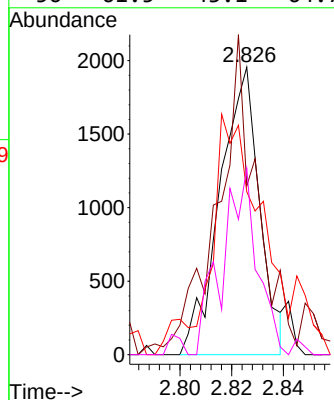
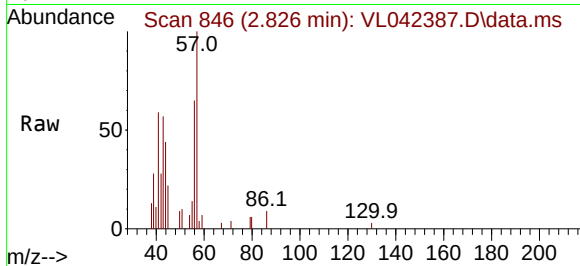




#26
Hexane
Concen: 0.096 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

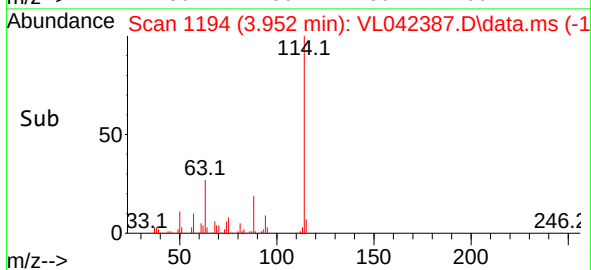
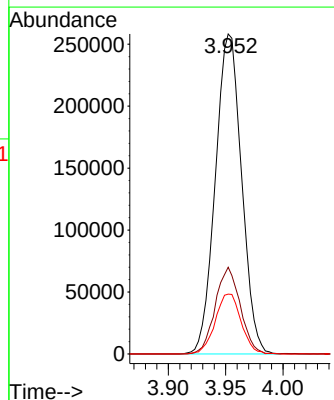
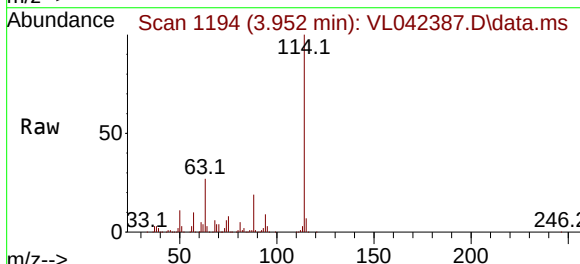
Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-3-03312025DL2

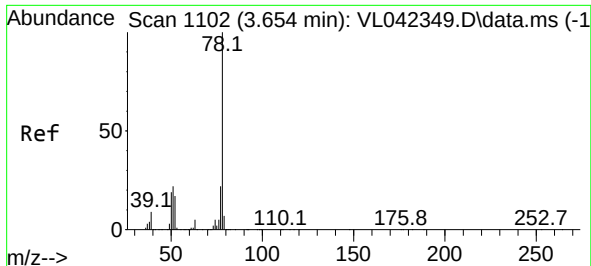
Tgt Ion: 57 Resp: 2086
Ion Ratio Lower Upper
57 100
41 139.7 77.9 116.9#
43 122.0 208.4 312.6#
56 61.5 43.1 64.7



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.006 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion: 114 Resp: 411086
Ion Ratio Lower Upper
114 100
63 25.9 21.8 32.6
88 18.5 15.5 23.3

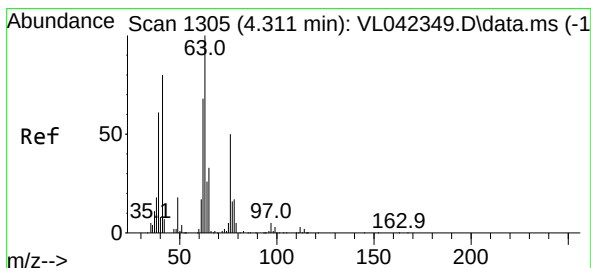
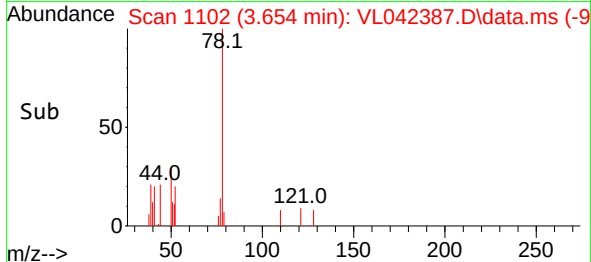
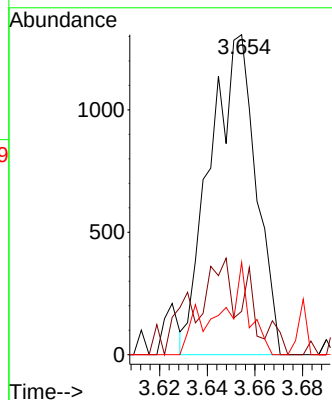
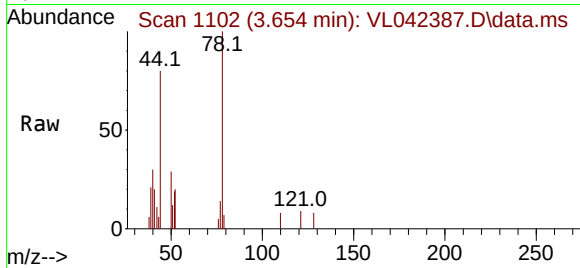




#36
Benzene
Concen: 0.039 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

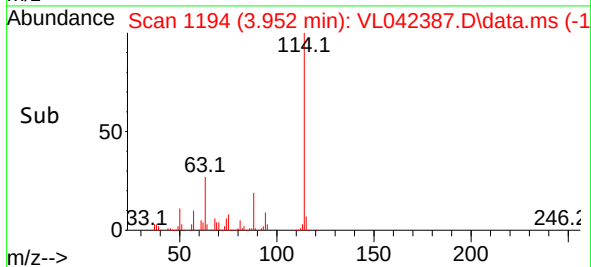
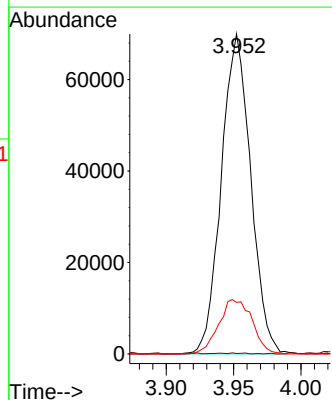
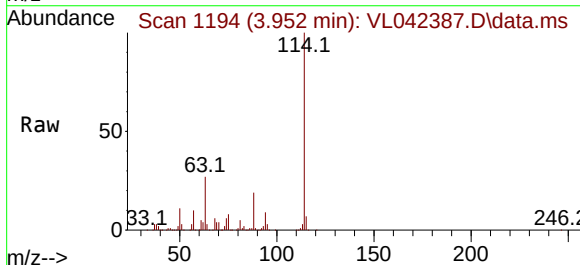
Instrument :
MSVOA_1
ClientSampleId :
IA-DUP-3-03312025DL2

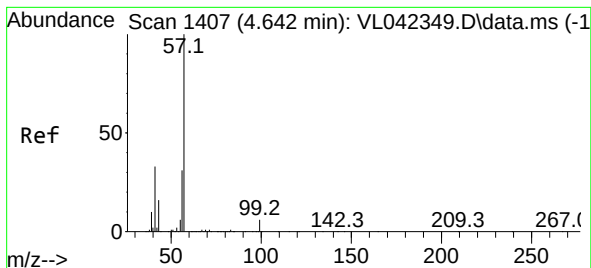
Tgt Ion: 78 Resp: 1745
Ion Ratio Lower Upper
78 100
77 6.6 17.4 26.0#
50 40.8 15.5 23.3#



#39
1,2-Dichloropropane
Concen: 6.416 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.359 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion: 63 Resp: 106017
Ion Ratio Lower Upper
63 100
41 0.2 64.2 96.2#
62 16.1 54.3 81.5#





#44

2,2,4-Trimethylpentane

Concen: 0.319 ppbv

RT: 4.629 min Scan# 1403

Delta R.T. -0.013 min

Lab File: VL042387.D

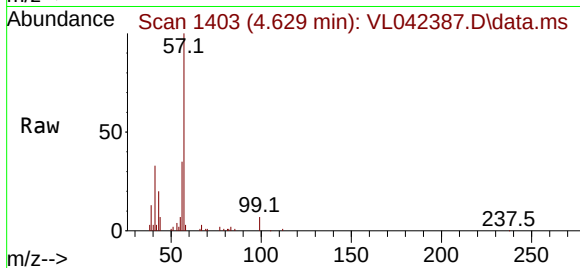
Acq: 18 Apr 2025 12:41

Instrument :

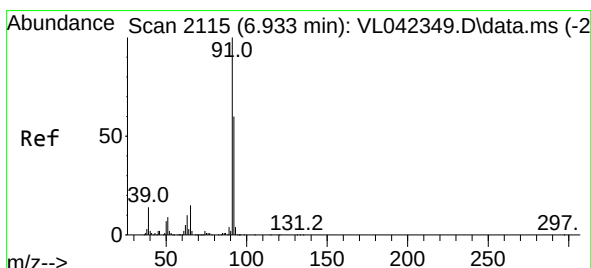
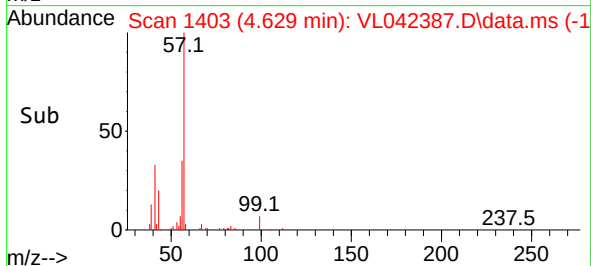
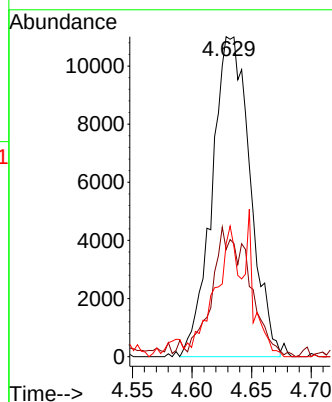
MSVOA_L

ClientSampleId :

IA-DUP-3-03312025DL2



Tgt Ion:	57	Resp:	24464
Ion	Ratio	Lower	Upper
57	100		
41	42.3	27.2	40.8#
56	40.0	25.7	38.5#



#53

Toluene

Concen: 0.944 ppbv

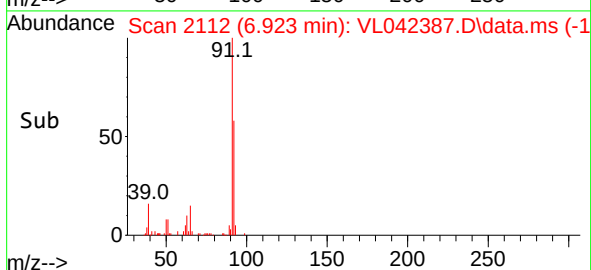
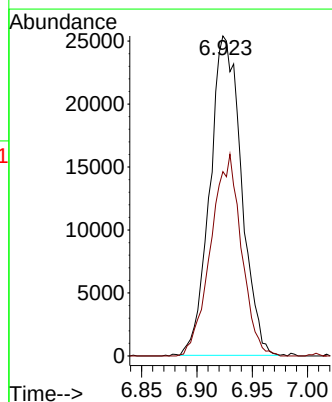
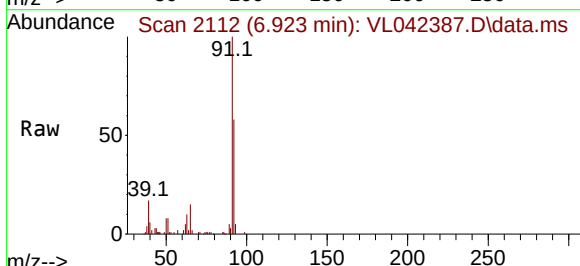
RT: 6.923 min Scan# 2112

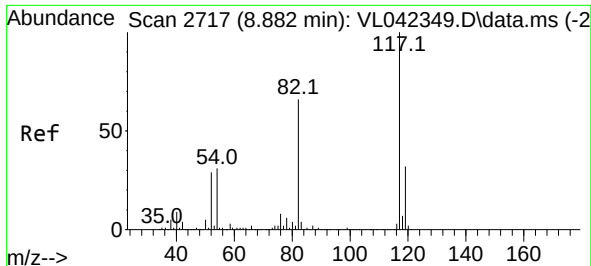
Delta R.T. -0.010 min

Lab File: VL042387.D

Acq: 18 Apr 2025 12:41

Tgt Ion:	91	Resp:	50250
Ion	Ratio	Lower	Upper
91	100		
92	61.3	48.2	72.4

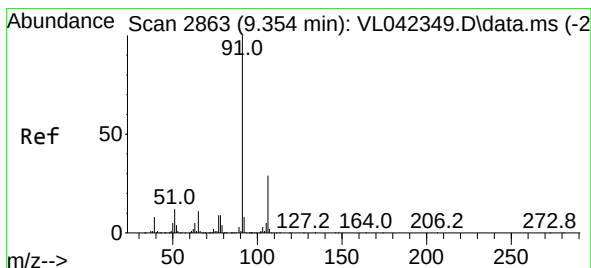
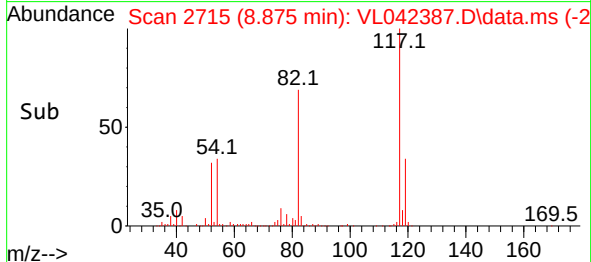
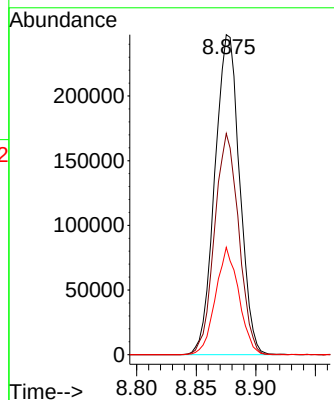
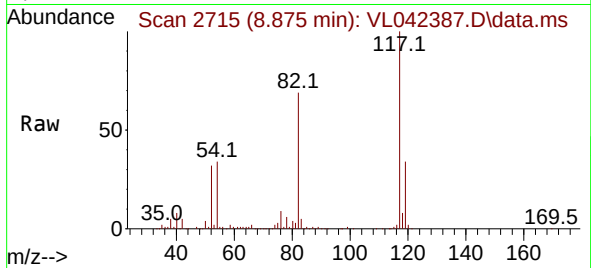




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 21
Delta R.T. -0.006 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

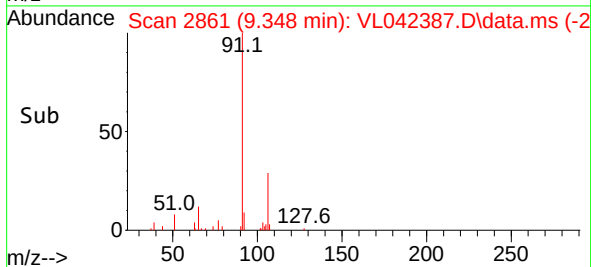
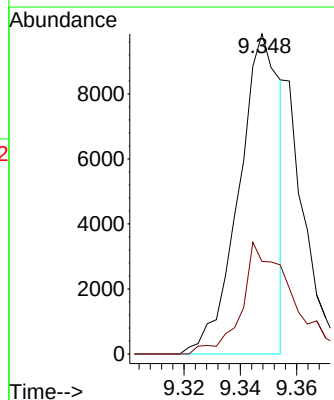
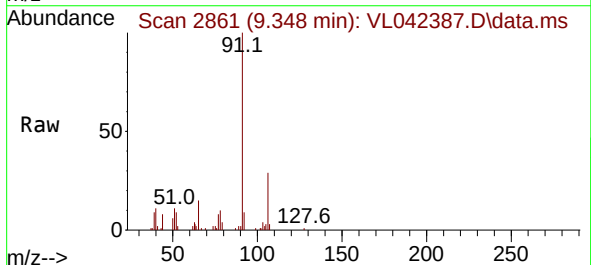
Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-3-03312025DL2

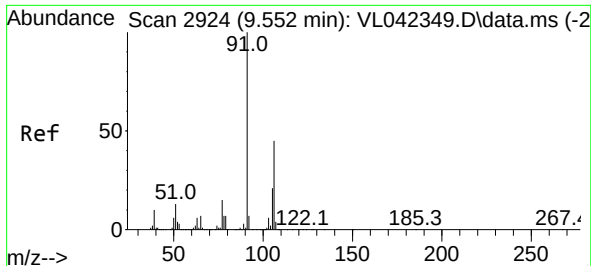
Tgt Ion:117 Resp: 357783
Ion Ratio Lower Upper
117 100
82 67.6 57.8 86.6
119 31.5 25.2 37.8



#58
Ethyl Benzene
Concen: 0.140 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.006 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion: 91 Resp: 9917
Ion Ratio Lower Upper
91 100
106 28.9 23.0 34.4





#59

m/p-Xylene

Concen: 0.715 ppbv

RT: 9.526 min Scan# 2916

Delta R.T. -0.026 min

Lab File: VL042387.D

Acq: 18 Apr 2025 12:41

Instrument :

MSVOA_1

ClientSampleId :

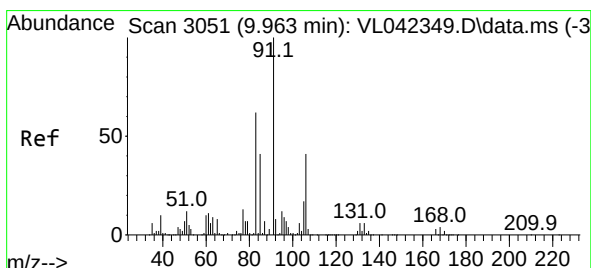
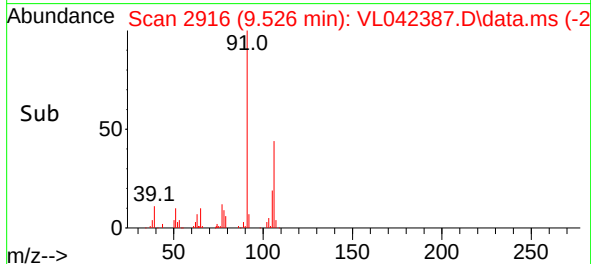
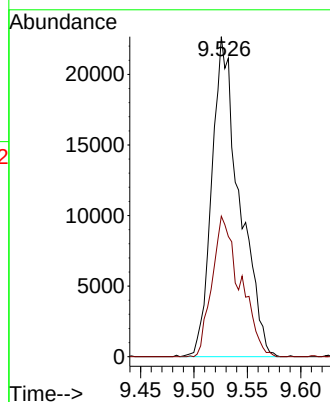
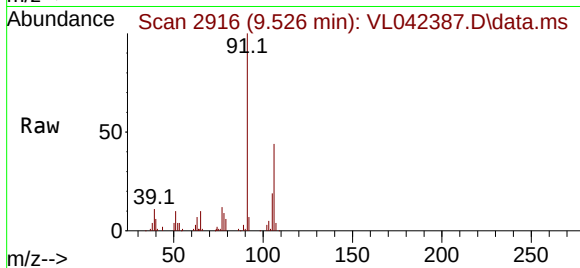
IA-DUP-3-03312025DL2

Tgt Ion: 91 Resp: 40839

Ion Ratio Lower Upper

91 100

106 44.7 35.4 53.2



#60

o-Xylene

Concen: 0.284 ppbv

RT: 9.959 min Scan# 3050

Delta R.T. -0.003 min

Lab File: VL042387.D

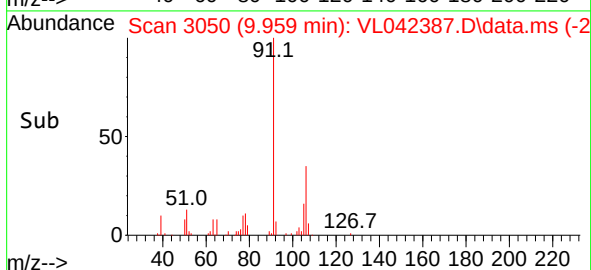
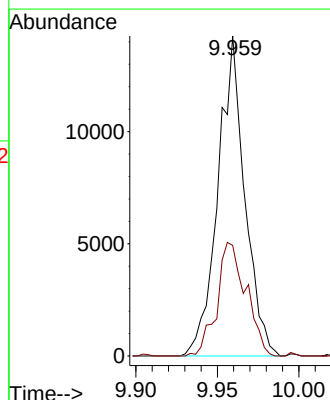
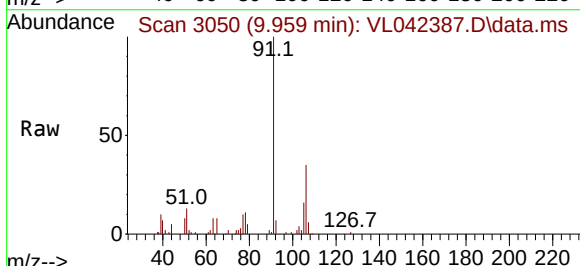
Acq: 18 Apr 2025 12:41

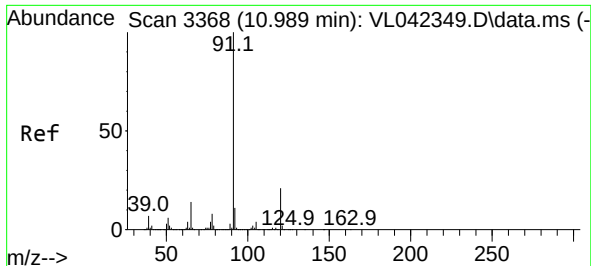
Tgt Ion: 91 Resp: 16348

Ion Ratio Lower Upper

91 100

106 38.7 21.1 63.4

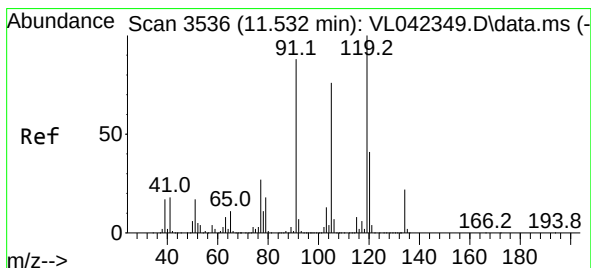
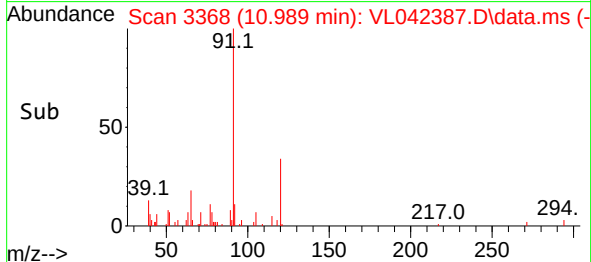
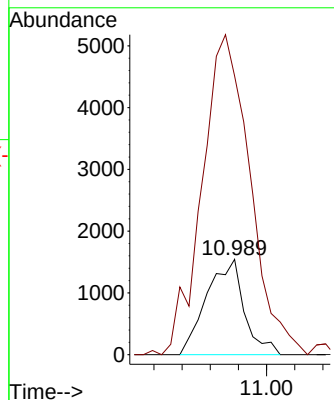
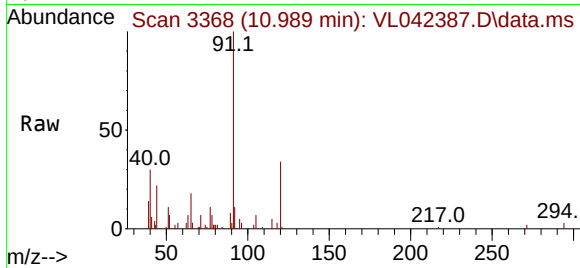




#64
n-propylbenzene
Concen: 0.067 ppbv
RT: 10.989 min Scan# 311
Delta R.T. 0.000 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

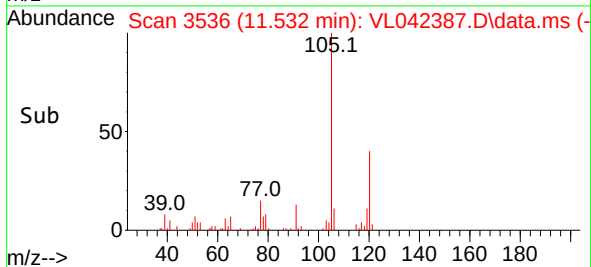
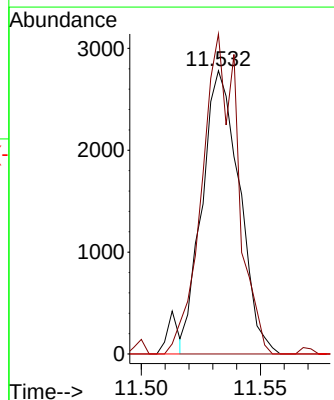
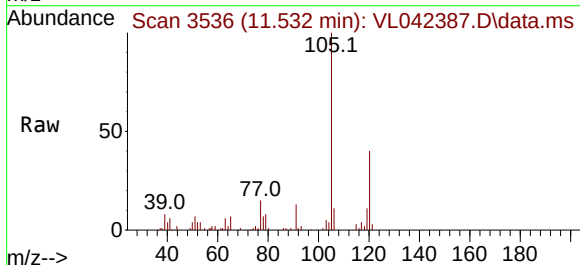
Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-3-03312025DL2

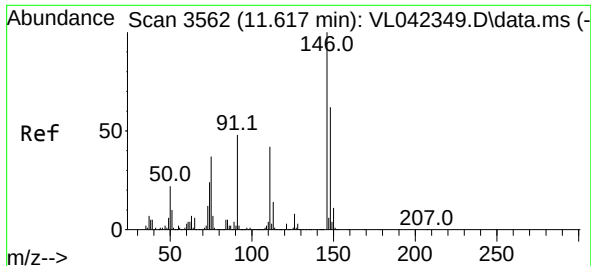
Tgt Ion:120 Resp: 1431
Ion Ratio Lower Upper
120 100
91 434.2 392.4 588.6



#65
tert-Butylbenzene
Concen: 0.039 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. 0.000 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion:119 Resp: 3021
Ion Ratio Lower Upper
119 100
91 111.1 74.6 111.8
134 0.0 18.8 28.2#

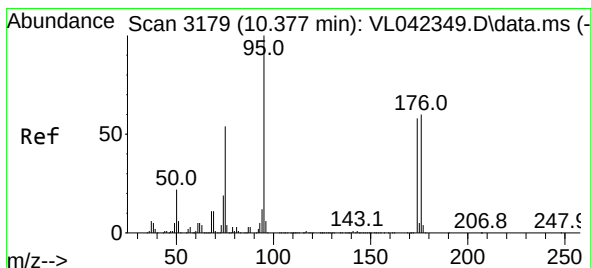
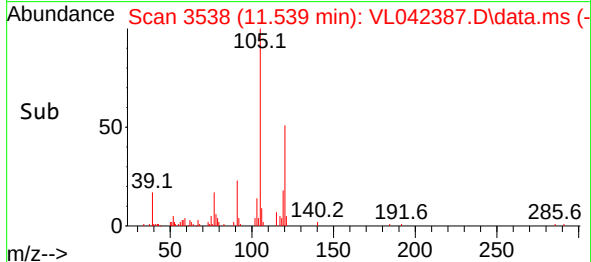
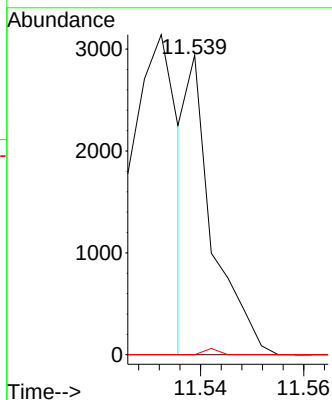
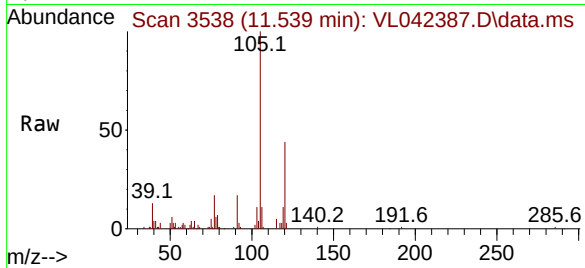




#66
Benzyl Chloride
Concen: 0.118 ppbv
RT: 11.539 min Scan# 31538
Delta R.T. -0.078 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

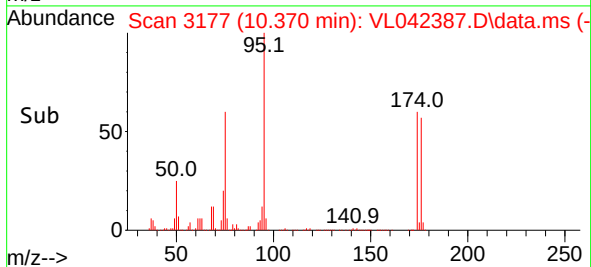
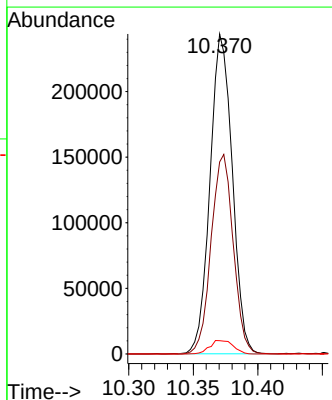
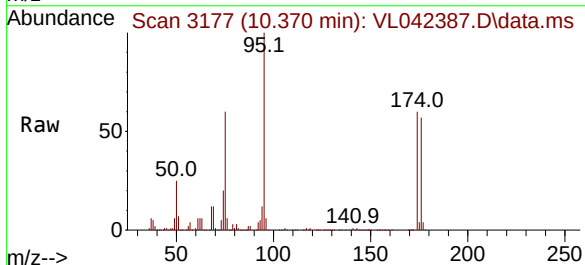
Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-3-03312025DL2

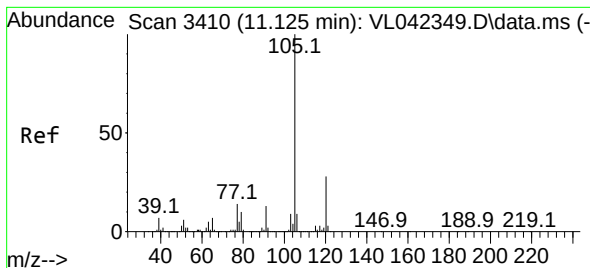
Tgt Ion: 91 Resp: 1010
Ion Ratio Lower Upper
91 100
126 0.0 11.8 17.6#
128 0.0 4.5 6.7#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.920 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.006 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion: 95 Resp: 291643
Ion Ratio Lower Upper
95 100
174 62.1 48.5 72.7
175 4.5 3.7 5.5

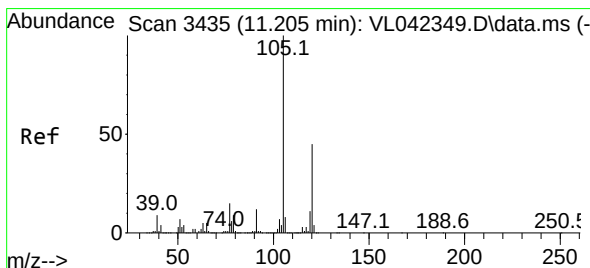
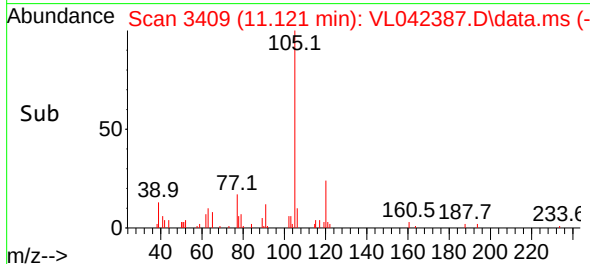
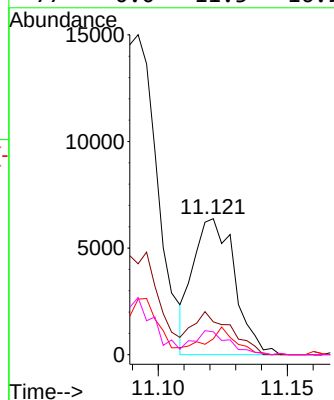
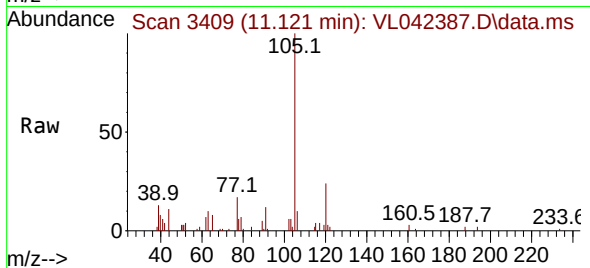




#72
4-Ethyltoluene
Concen: 0.102 ppbv
RT: 11.121 min Scan# 3410
Delta R.T. -0.003 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

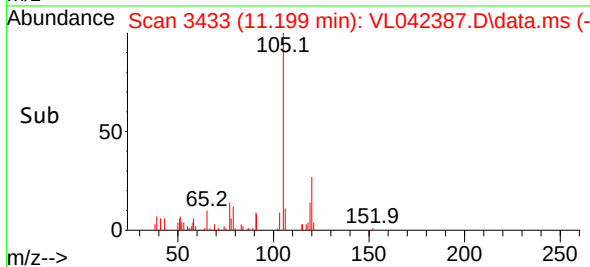
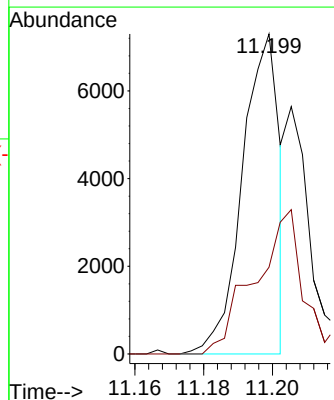
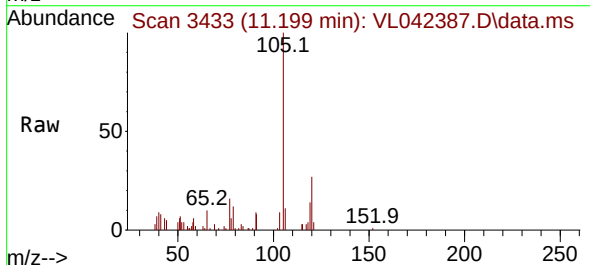
Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-3-03312025DL2

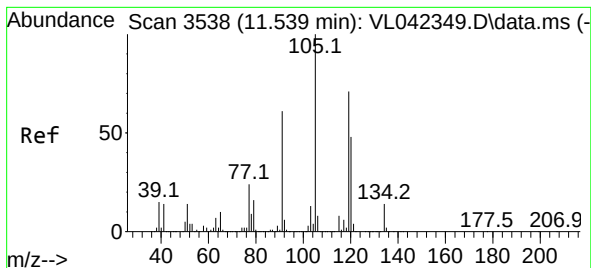
Tgt Ion:105	Resp:	7156
Ion Ratio	Lower	Upper
105	100	
120	0.0	23.2 34.8#
91	0.0	10.4 15.6#
77	0.0	11.3 16.9#



#73
1,3,5-Trimethylbenzene
Concen: 0.088 ppbv
RT: 11.199 min Scan# 3433
Delta R.T. -0.006 min
Lab File: VL042387.D
Acq: 18 Apr 2025 12:41

Tgt Ion:105	Resp:	5458
Ion Ratio	Lower	Upper
105	100	
120	27.1	35.6 53.4#





#74

1,2,4-Trimethylbenzene

Concen: 0.360 ppbv

RT: 11.532 min Scan# 3

Delta R.T. -0.006 min

Lab File: VL042387.D

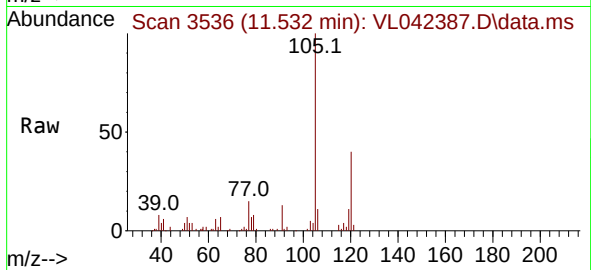
Acq: 18 Apr 2025 12:41

Instrument :

MSVOA_L

ClientSampleId :

IA-DUP-3-03312025DL2



Tgt Ion:105 Resp: 26096

Ion Ratio Lower Upper

105 100

120 40.0 38.1 57.1

91 12.6 48.8 73.2#

77 15.1 19.0 28.4#

