

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL062725\
 Data File : VL042673.D
 Acq On : 27 Jun 2025 10:43
 Operator : SY/MD
 Sample : Q2432-01 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Quant Time: Jun 27 23:02:24 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri May 30 02:01:56 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	115885	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	288301	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	258367	10.000	ppbv	-0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	204936	10.581	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.800%

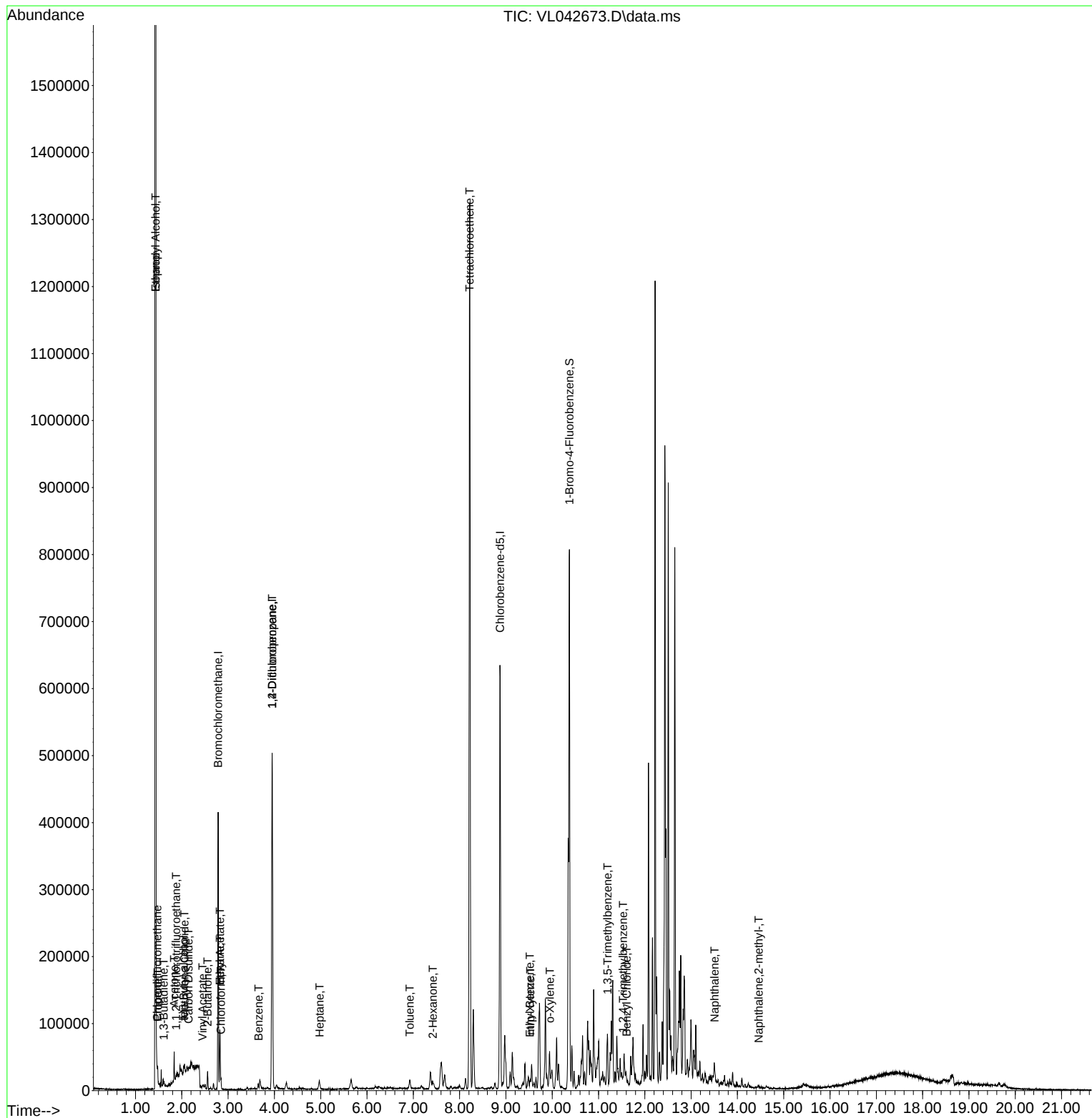
Target Compounds						Qvalue
3) Chlorodifluoromethane	1.470	51	2883	0.147	ppbv #	92
9) Propene	1.479	41	2494	0.316	ppbv #	81
10) Heptane	4.975	43	2406	0.108	ppbv #	42
12) 1,1,2-Trichlorotrifluo...	1.881	101	331	0.032	ppbv #	27
13) Ethanol	1.437	45	96753	102.774	ppbv #	39
15) Acetone	1.835	43	16858	1.208	ppbv	92
16) 1,3-Butadiene	1.609	39	332	0.050	ppbv #	75
17) tert-Butyl alcohol	2.043	59	2367	0.163	ppbv #	93
19) Isopropyl Alcohol	1.437	45	96753	11.595	ppbv #	39
20) Methylene Chloride	2.059	84	1025	0.223	ppbv #	79
23) Vinyl Acetate	2.450	43	666	0.035	ppbv #	1
25) Ethyl Acetate	2.823	43	14484	0.379	ppbv #	78
26) Hexane	2.823	57	18819	1.084	ppbv #	40
27) Carbon Disulfide	2.143	76	547	0.041	ppbv #	1
29) Chloroform	2.845	83	5087	0.225	ppbv	98
34) 2-Butanone	2.557	43	15694	0.763	ppbv	92
36) Benzene	3.658	78	1232	0.043	ppbv #	90
39) 1,2-Dichloropropane	3.952	63	75428	7.184	ppbv #	22
51) 2-Hexanone	7.425	43	2078	0.092	ppbv #	28
52) Tetrachloroethene	8.218	164	241443	22.759	ppbv	96
53) Toluene	6.923	91	4624	0.141	ppbv #	29
58) Ethyl Benzene	9.519	91	3156	0.072	ppbv	92
59) m/p-Xylene	9.526	91	3839	0.111	ppbv #	18
60) o-Xylene	9.953	91	2193	0.064	ppbv #	31
66) Benzyl Chloride	11.610	91	462	0.078	ppbv #	64
73) 1,3,5-Trimethylbenzene	11.196	105	1359	0.038	ppbv #	63
74) 1,2,4-Trimethylbenzene	11.529	105	3152	0.080	ppbv #	59
79) Naphthalene	13.507	128	1489	0.040	ppbv #	52
80) Naphthalene,2-methyl-	14.462	142	531	0.032	ppbv #	81

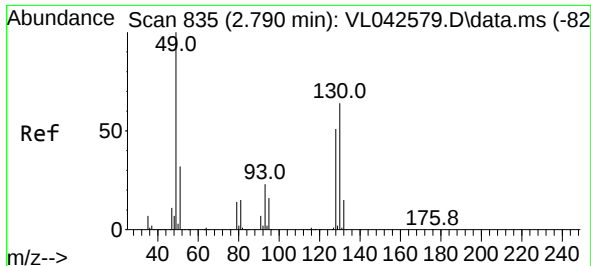
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL062725\
Data File : VL042673.D
Acq On : 27 Jun 2025 10:43
Operator : SY/MD
Sample : Q2432-01 40X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV1

Quant Time: Jun 27 23:02:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Fri May 30 02:01:56 2025
Response via : Initial Calibration

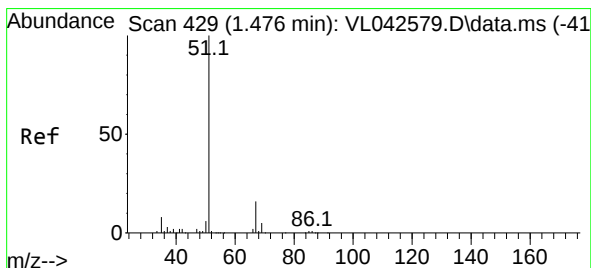
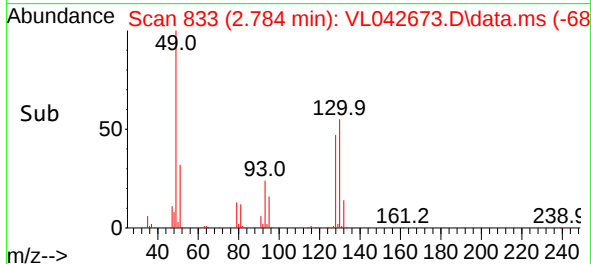
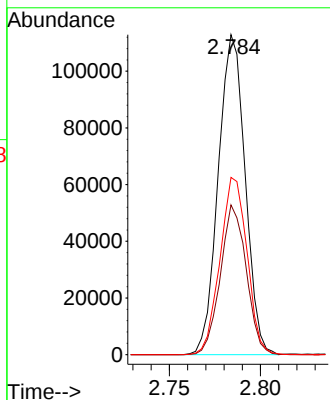
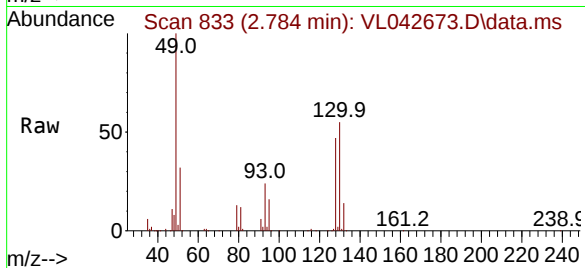




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 81
Delta R.T. -0.006 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

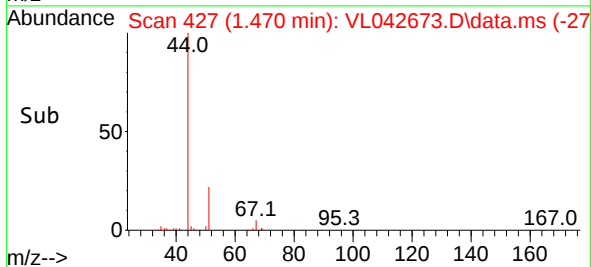
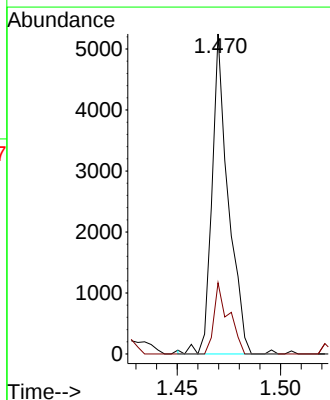
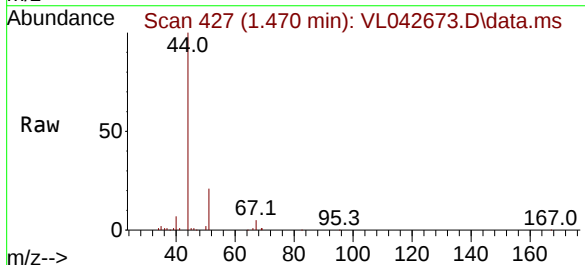
Instrument :
MSVOA_L
ClientSampleId :
SV1

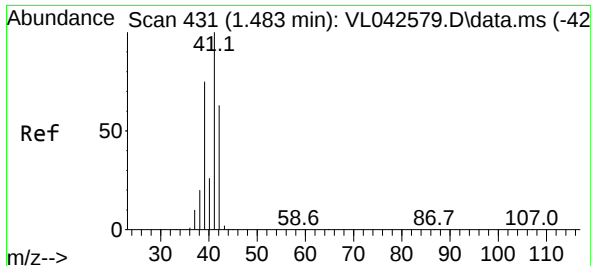
Tgt Ion: 49 Resp: 115885
Ion Ratio Lower Upper
49 100
128 45.1 24.2 72.6
130 55.8 30.4 91.2



#3
Chlorodifluoromethane
Concen: 0.147 ppbv
RT: 1.470 min Scan# 427
Delta R.T. -0.006 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion: 51 Resp: 2883
Ion Ratio Lower Upper
51 100
67 20.2 13.4 20.2#





#9

Propene

Concen: 0.316 ppbv

RT: 1.479 min Scan# 41

Delta R.T. -0.003 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Instrument :

MSVOA_L

ClientSampleId :

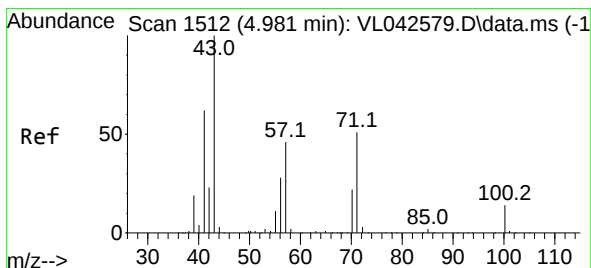
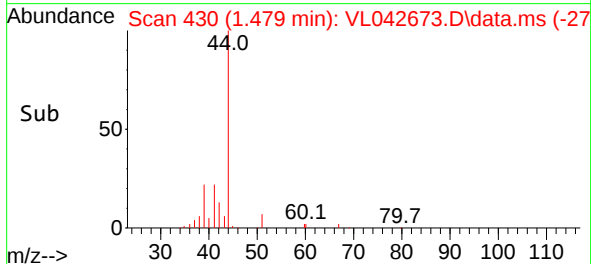
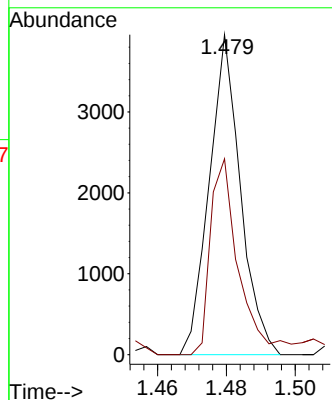
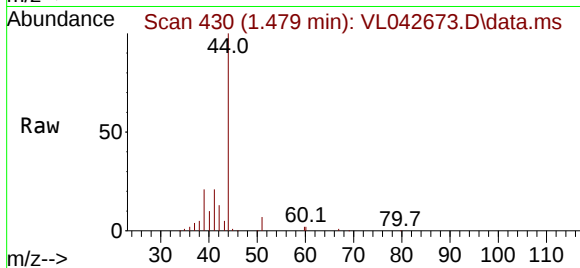
SV1

Tgt Ion: 41 Resp: 2494

Ion Ratio Lower Upper

41 100

42 81.6 53.3 79.9#



#10

Heptane

Concen: 0.108 ppbv

RT: 4.975 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VL042673.D

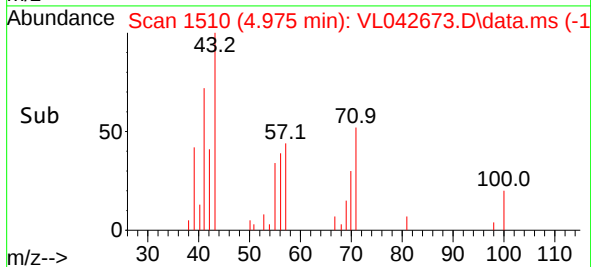
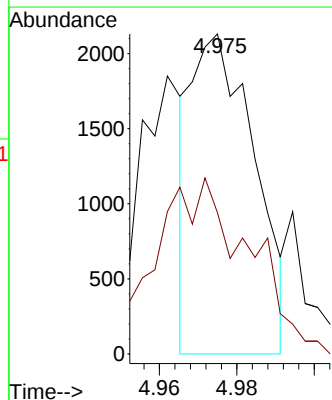
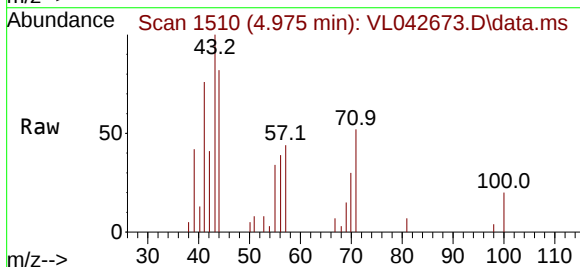
Acq: 27 Jun 2025 10:43

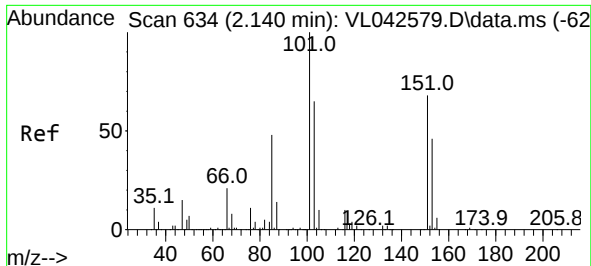
Tgt Ion: 43 Resp: 2406

Ion Ratio Lower Upper

43 100

57 88.2 38.9 58.3#





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.032 ppbv

RT: 1.881 min Scan# 51

Delta R.T. -0.259 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Instrument :

MSVOA_L

ClientSampleId :

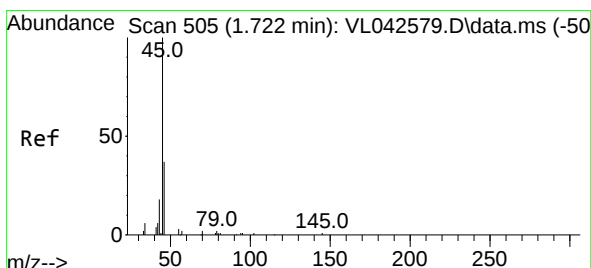
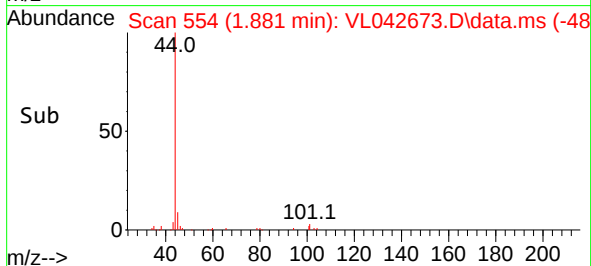
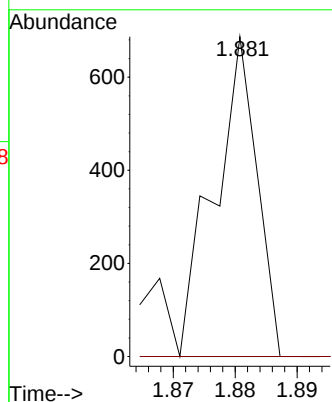
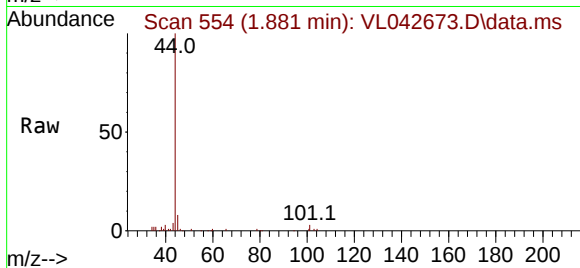
SV1

Tgt Ion:101 Resp: 331

Ion Ratio Lower Upper

101 100

151 9.4 55.3 82.9#



#13

Ethanol

Concen: 102.774 ppbv

RT: 1.437 min Scan# 417

Delta R.T. -0.285 min

Lab File: VL042673.D

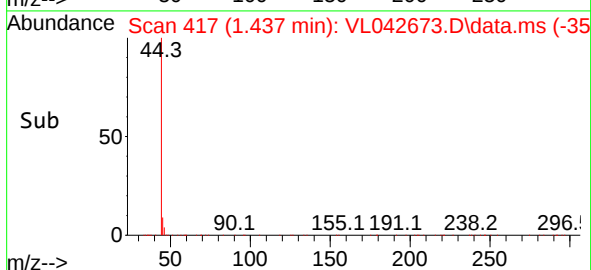
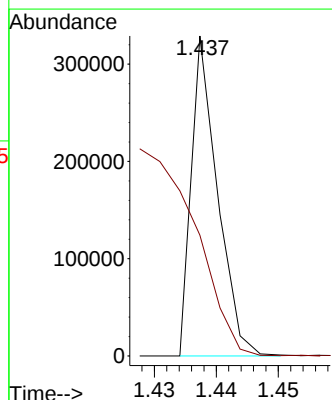
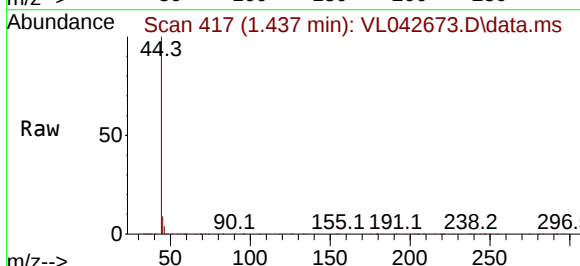
Acq: 27 Jun 2025 10:43

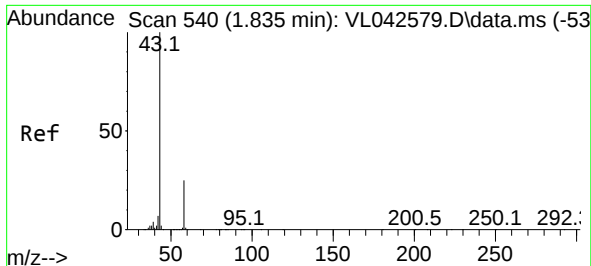
Tgt Ion: 45 Resp: 96753

Ion Ratio Lower Upper

45 100

46 0.0 14.5 58.1#





#15

Acetone

Concen: 1.208 ppbv

RT: 1.835 min Scan# 54

Delta R.T. 0.000 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Instrument :

MSVOA_L

ClientSampleId :

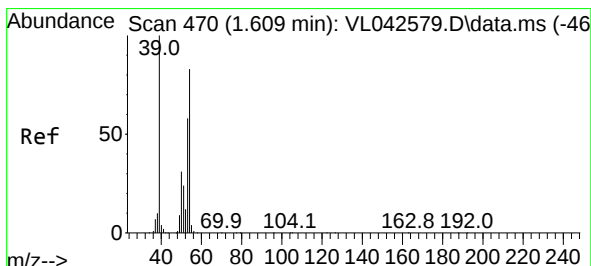
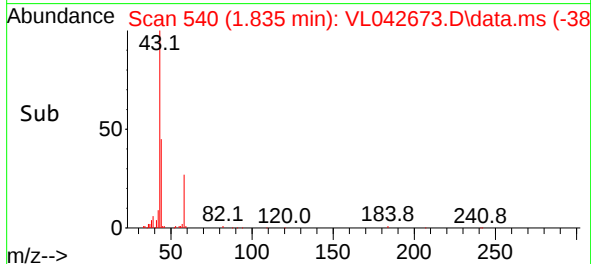
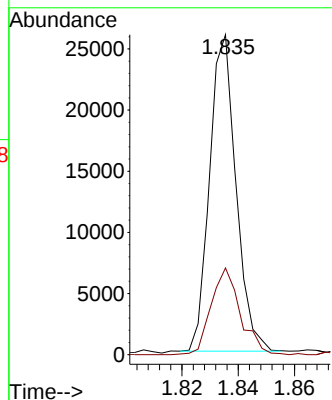
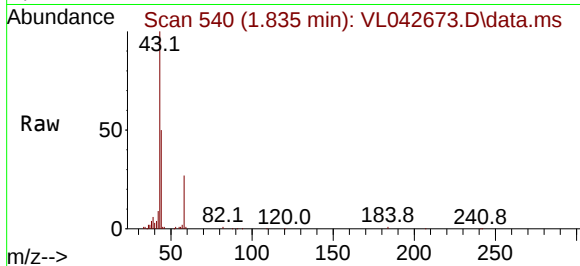
SV1

Tgt Ion: 43 Resp: 16858

Ion Ratio Lower Upper

43 100

58 30.3 21.0 31.4



#16

1,3-Butadiene

Concen: 0.050 ppbv

RT: 1.609 min Scan# 470

Delta R.T. 0.000 min

Lab File: VL042673.D

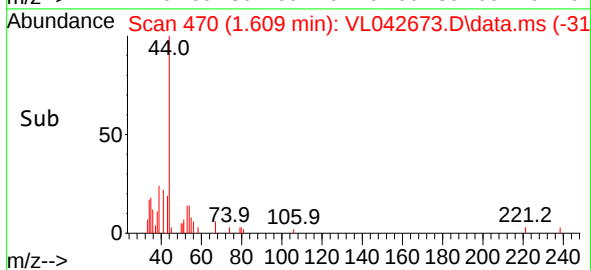
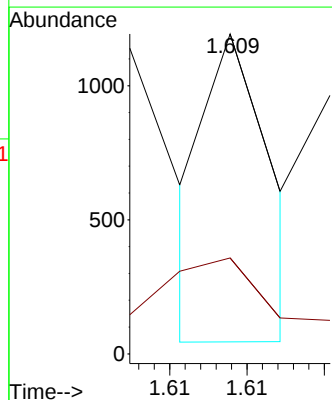
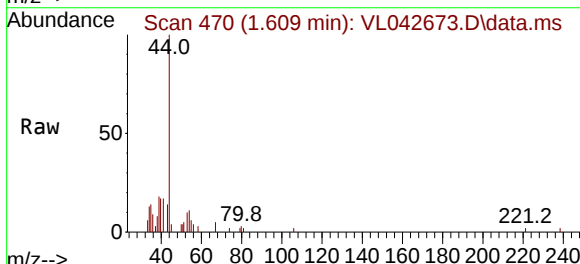
Acq: 27 Jun 2025 10:43

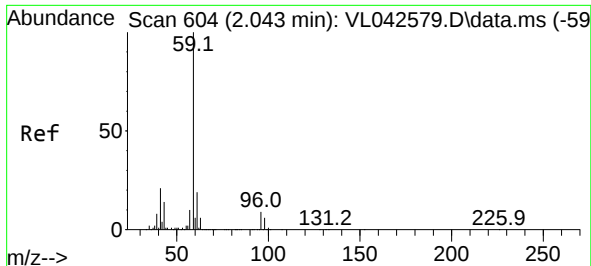
Tgt Ion: 39 Resp: 332

Ion Ratio Lower Upper

39 100

54 93.4 57.9 86.9#

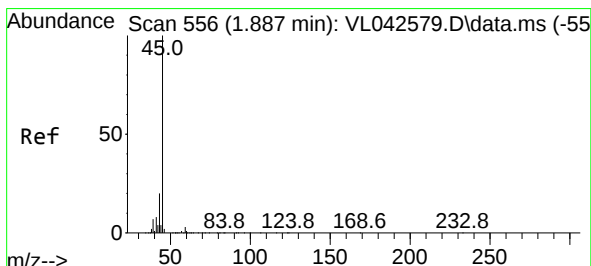
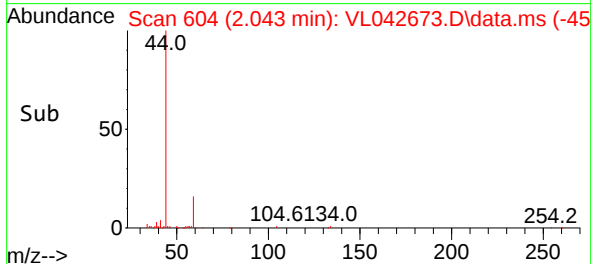
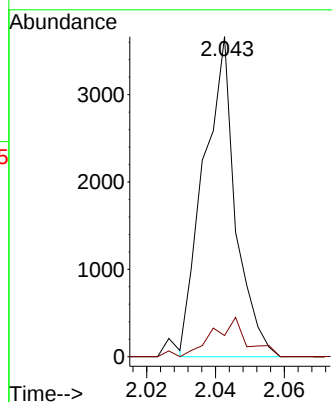
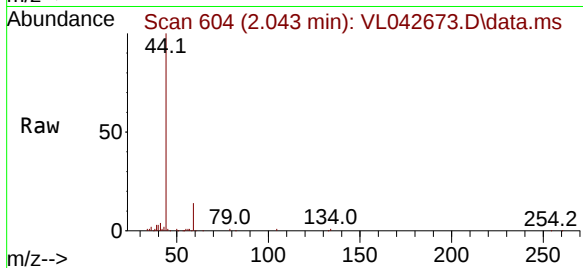




#17
tert-Butyl alcohol
Concen: 0.163 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.000 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

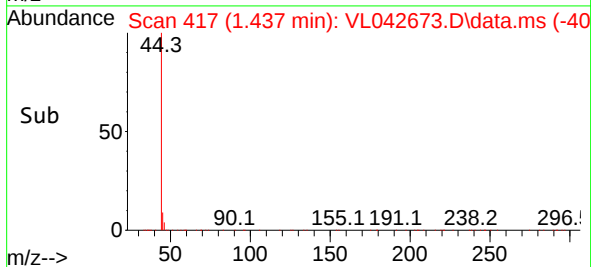
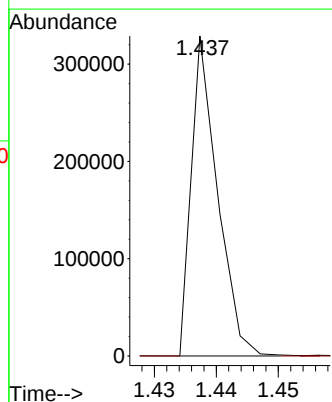
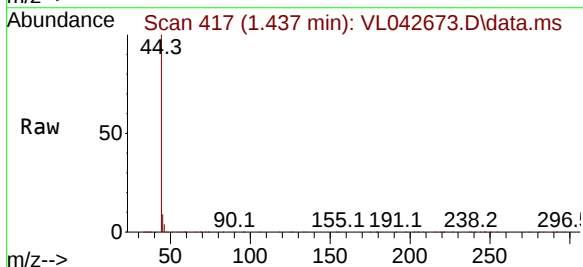
Instrument :
MSVOA_1
ClientSampleId :
SV1

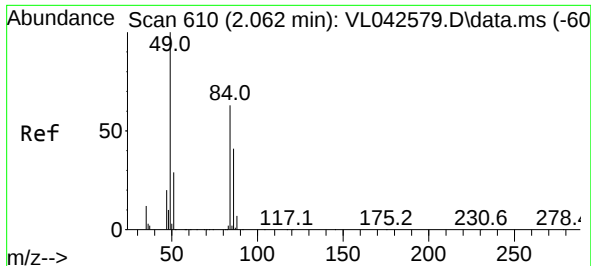
Tgt Ion: 59 Resp: 2367
Ion Ratio Lower Upper
59 100
57 13.5 8.6 12.8#



#19
Isopropyl Alcohol
Concen: 11.595 ppbv
RT: 1.437 min Scan# 417
Delta R.T. -0.450 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion: 45 Resp: 96753
Ion Ratio Lower Upper
45 100
58 0.4 29.4 44.2#





#20

Methylene Chloride

Concen: 0.223 ppbv

RT: 2.059 min Scan# 610

Delta R.T. -0.003 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion: 84 Resp: 1025

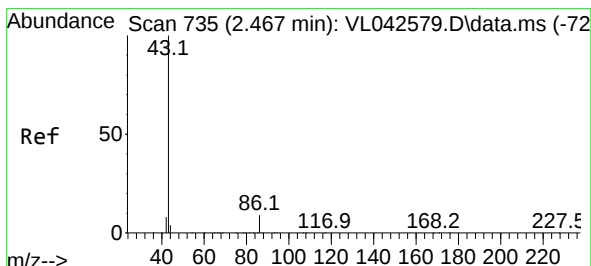
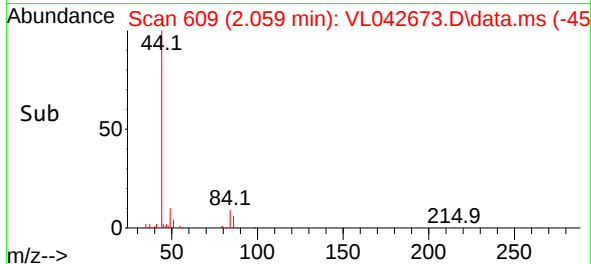
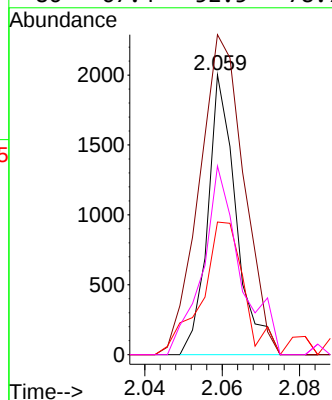
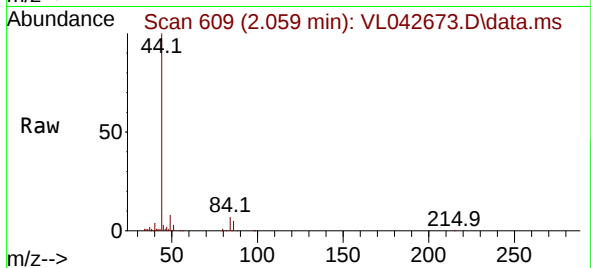
Ion Ratio Lower Upper

84 100

49 114.3 128.8 193.2#

51 47.4 38.6 57.8

86 67.4 52.5 78.7



#23

Vinyl Acetate

Concen: 0.035 ppbv

RT: 2.450 min Scan# 730

Delta R.T. -0.016 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Tgt Ion: 43 Resp: 666

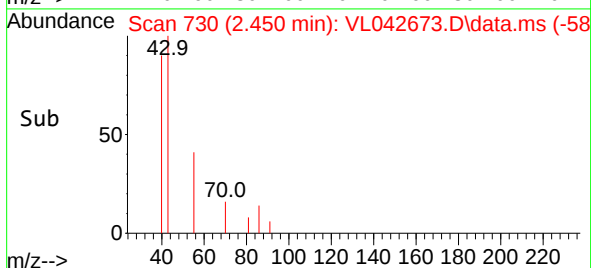
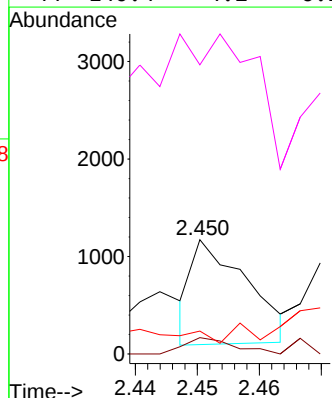
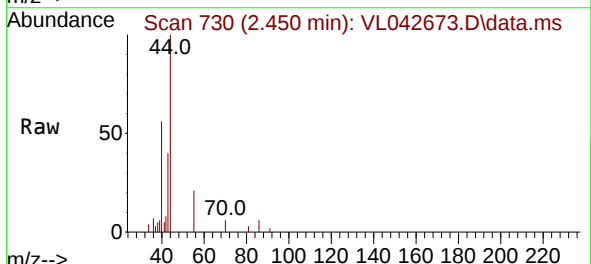
Ion Ratio Lower Upper

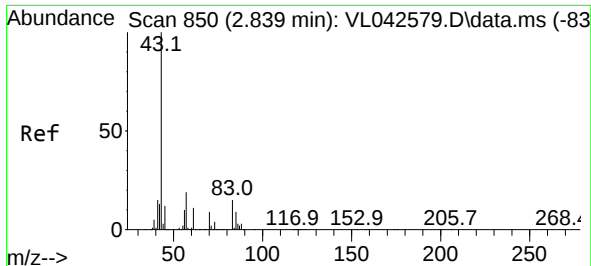
43 100

86 22.0 6.6 9.8#

42 6.2 7.0 10.4#

44 140.4 4.2 6.2#





#25

Ethyl Acetate

Concen: 0.379 ppbv

RT: 2.823 min Scan# 845

Delta R.T. -0.016 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion: 43 Resp: 14484

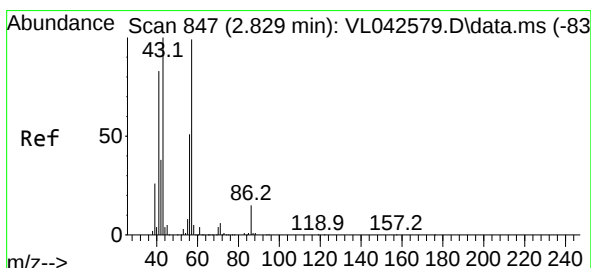
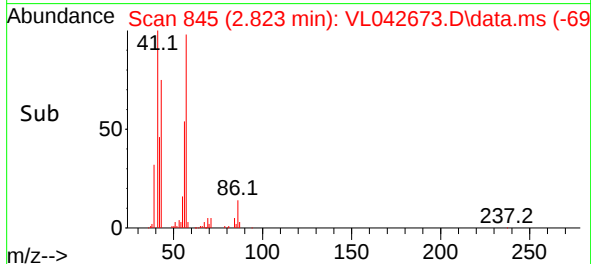
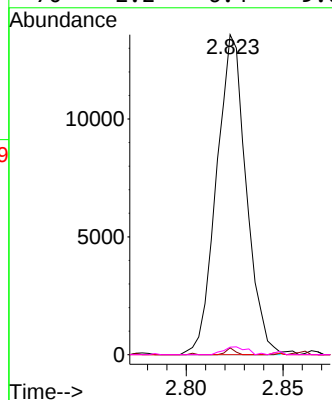
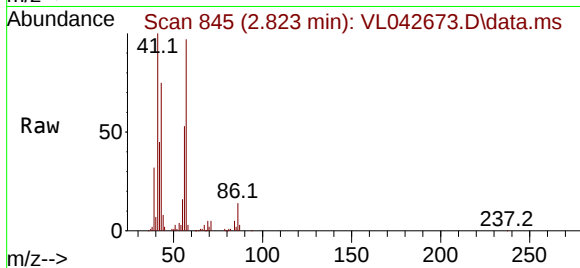
Ion Ratio Lower Upper

43 100

45 0.7 8.2 12.2#

61 0.2 7.1 10.7#

70 2.2 6.4 9.6#



#26

Hexane

Concen: 1.084 ppbv

RT: 2.823 min Scan# 845

Delta R.T. -0.006 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Tgt Ion: 57 Resp: 18819

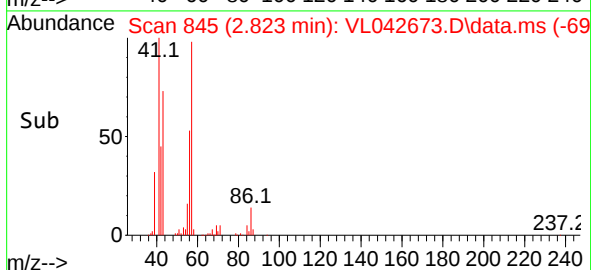
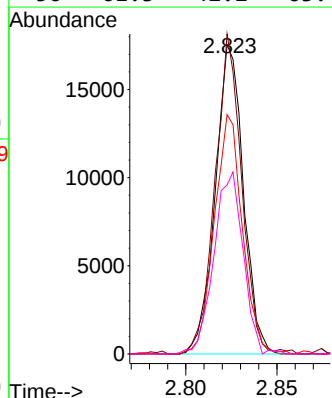
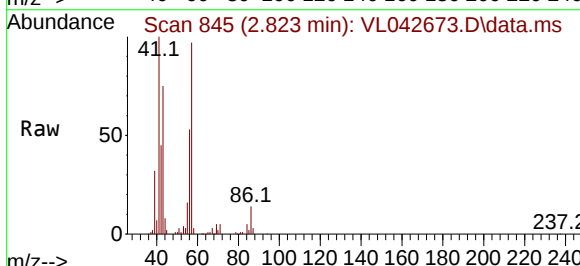
Ion Ratio Lower Upper

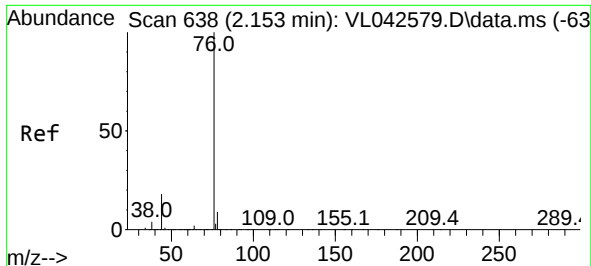
57 100

41 99.3 70.6 106.0

43 77.8 181.1 271.7#

56 61.3 42.2 63.4

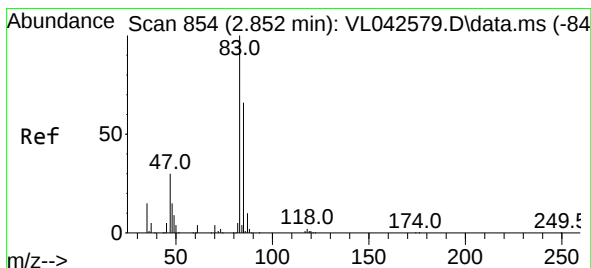
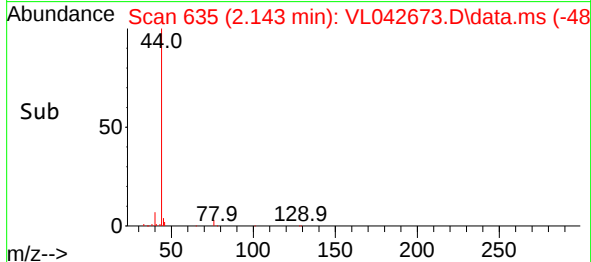
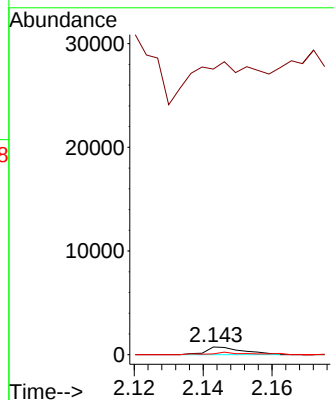
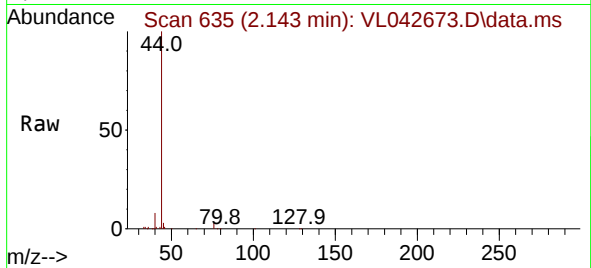




#27
Carbon Disulfide
Concen: 0.041 ppbv
RT: 2.143 min Scan# 61
Delta R.T. -0.010 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

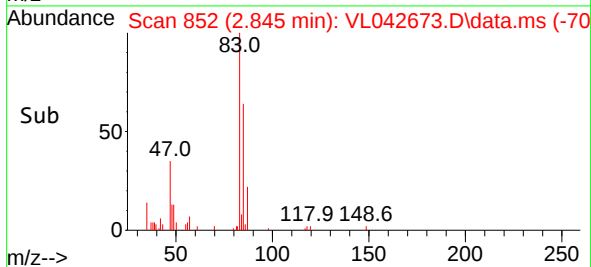
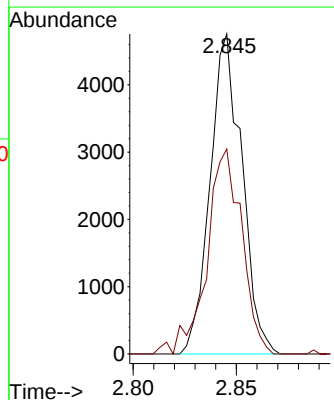
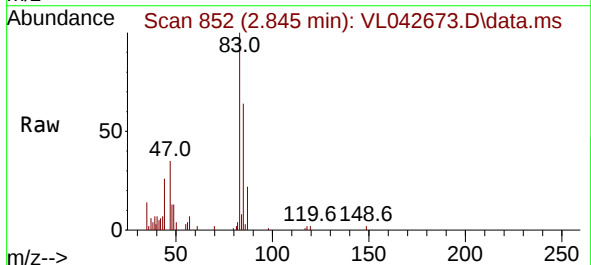
Instrument :
MSVOA_L
ClientSampleId :
SV1

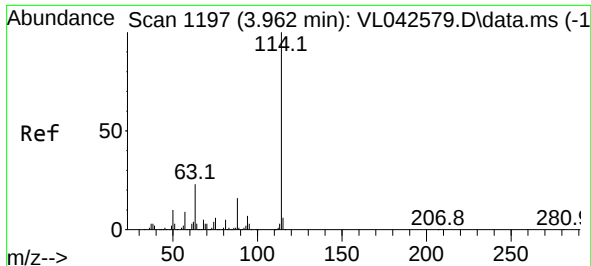
Tgt Ion: 76 Resp: 547
Ion Ratio Lower Upper
76 100
44 15396.2 21.3 31.9#
78 34.0 9.4 14.0#



#29
Chloroform
Concen: 0.225 ppbv
RT: 2.845 min Scan# 852
Delta R.T. -0.006 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion: 83 Resp: 5087
Ion Ratio Lower Upper
83 100
85 64.1 52.8 79.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.952 min Scan# 1194

Delta R.T. -0.010 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Instrument :

MSVOA_L

ClientSampleId :

SV1

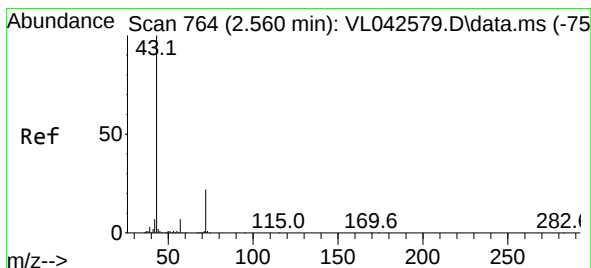
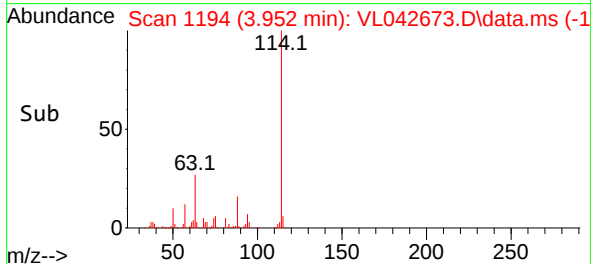
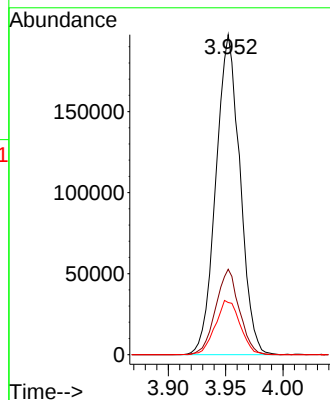
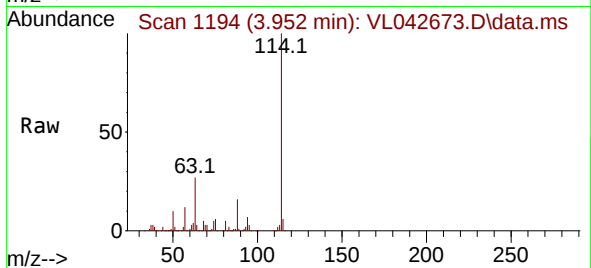
Tgt Ion:114 Resp: 288301

Ion Ratio Lower Upper

114 100

63 26.2 19.0 28.6

88 17.5 13.6 20.4



#34

2-Butanone

Concen: 0.763 ppbv

RT: 2.557 min Scan# 763

Delta R.T. -0.003 min

Lab File: VL042673.D

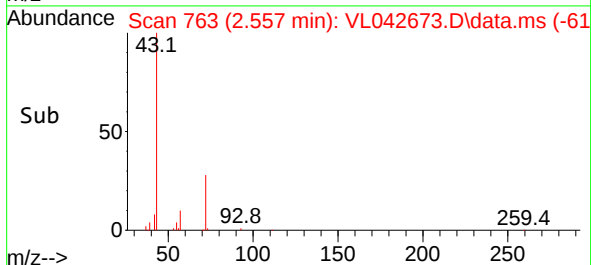
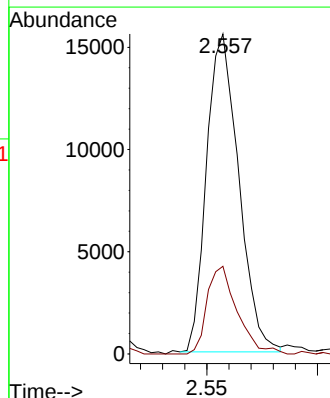
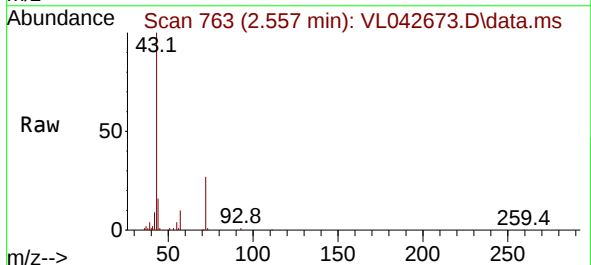
Acq: 27 Jun 2025 10:43

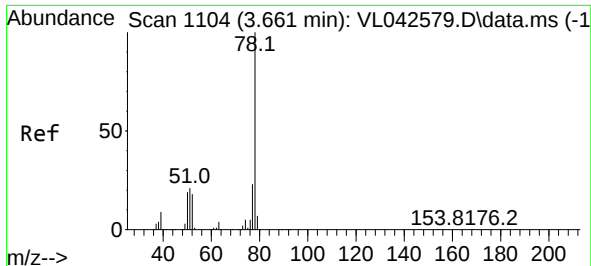
Tgt Ion: 43 Resp: 15694

Ion Ratio Lower Upper

43 100

72 26.0 17.7 26.5

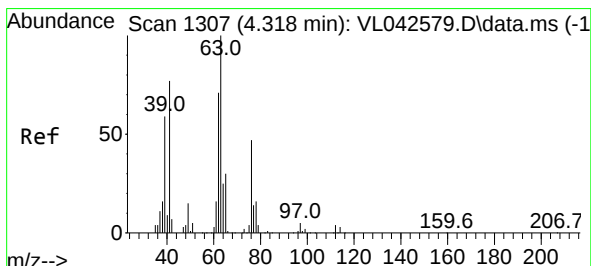
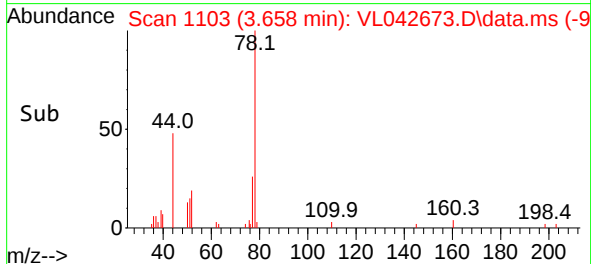
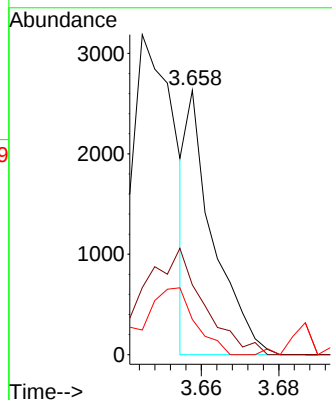
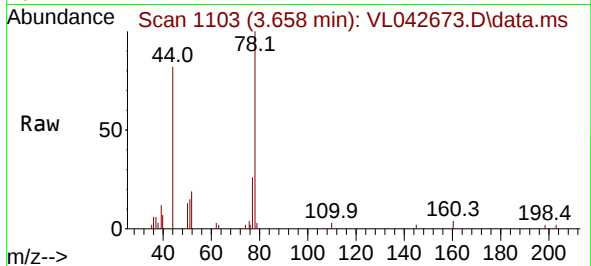




#36
Benzene
Concen: 0.043 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. -0.003 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

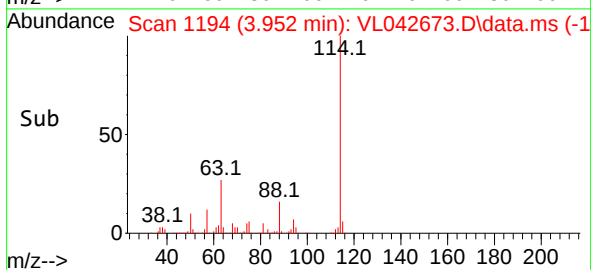
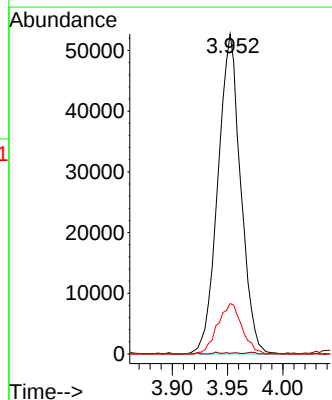
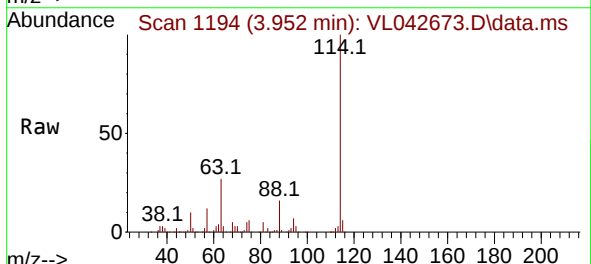
Instrument :
MSVOA_L
ClientSampleId :
SV1

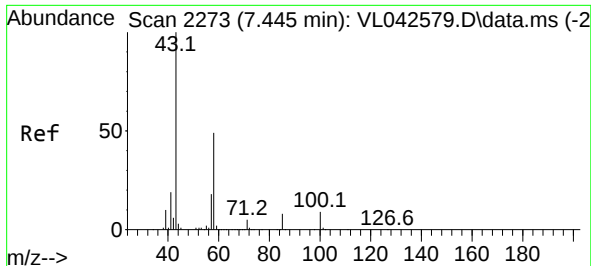
Tgt Ion: 78 Resp: 1232
Ion Ratio Lower Upper
78 100
77 26.4 18.2 27.2
50 13.3 15.2 22.8#



#39
1,2-Dichloropropane
Concen: 7.184 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.366 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion: 63 Resp: 75428
Ion Ratio Lower Upper
63 100
41 0.2 61.8 92.6#
62 15.7 56.6 85.0#

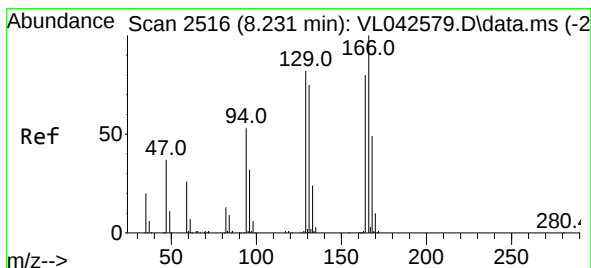
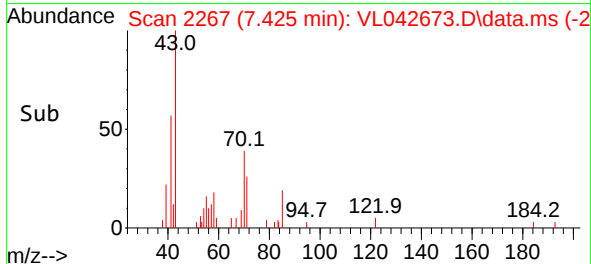
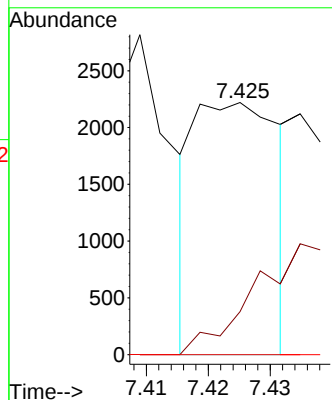
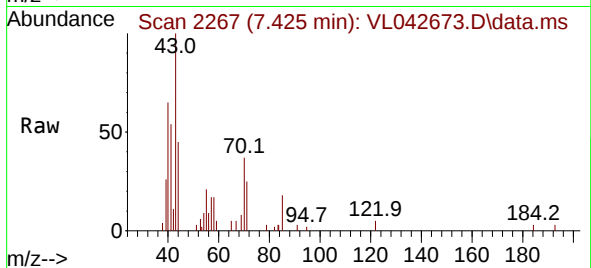




#51
2-Hexanone
Concen: 0.092 ppbv
RT: 7.425 min Scan# 21
Delta R.T. -0.019 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

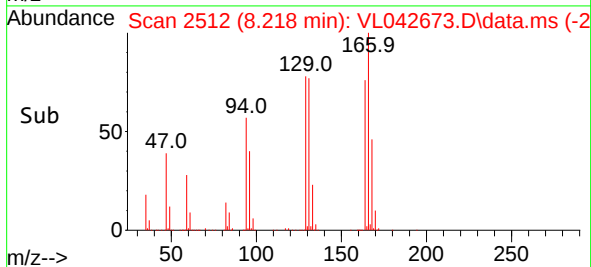
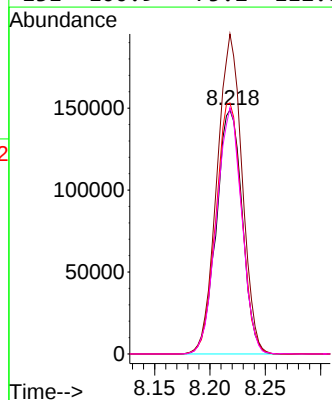
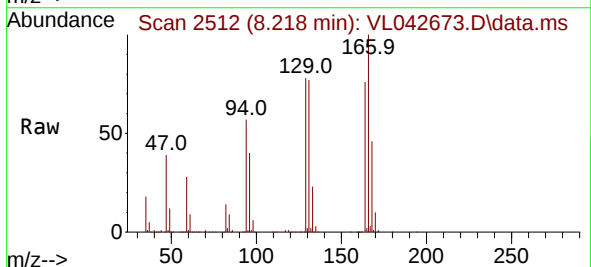
Instrument :
MSVOA_L
ClientSampleId :
SV1

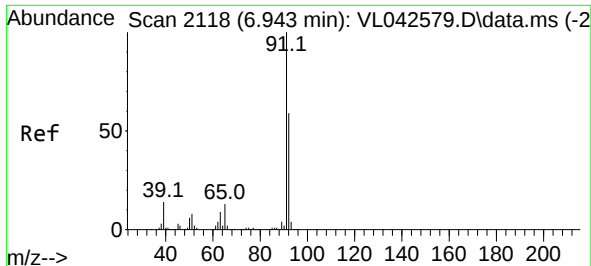
Tgt Ion: 43 Resp: 2078
Ion Ratio Lower Upper
43 100
58 0.0 39.9 59.9#
98 0.0 0.1 0.1#



#52
Tetrachloroethene
Concen: 22.759 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.013 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion: 164 Resp: 241443
Ion Ratio Lower Upper
164 100
166 131.2 100.0 150.0
129 102.9 82.2 123.4
131 100.9 75.2 112.8

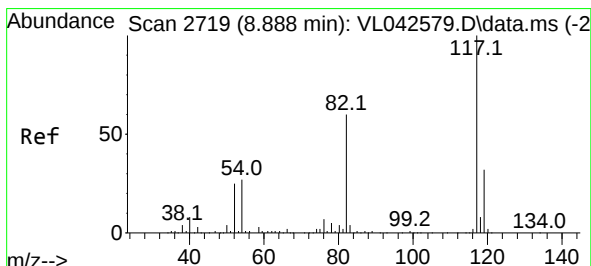
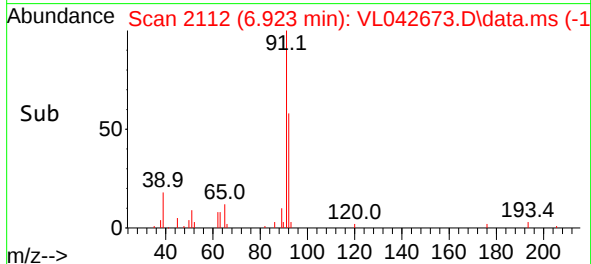
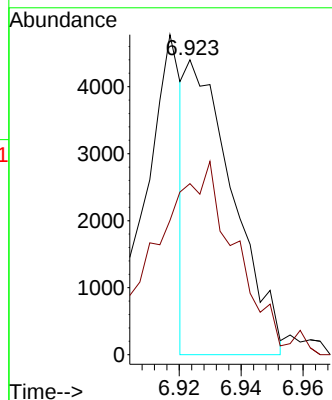
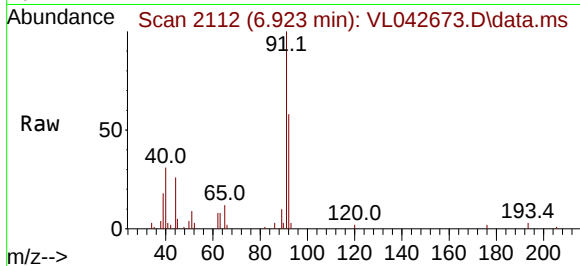




#53
Toluene
Concen: 0.141 ppbv
RT: 6.923 min Scan# 2118
Delta R.T. -0.019 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

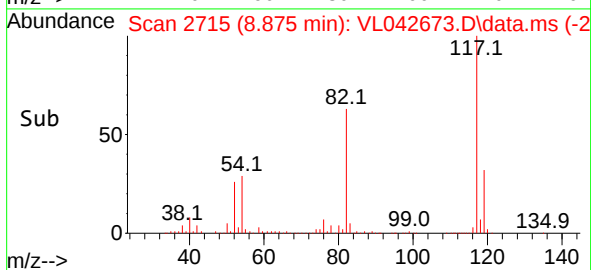
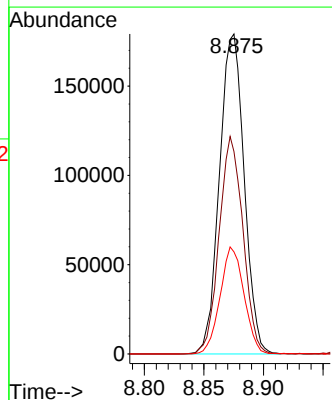
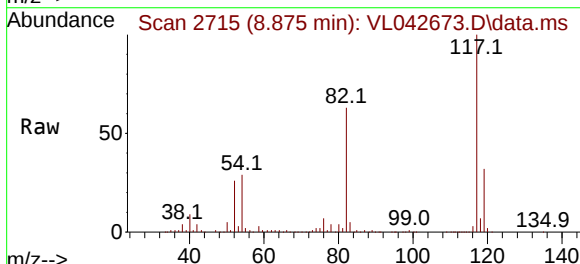
Instrument :
MSVOA_L
ClientSampleId :
SV1

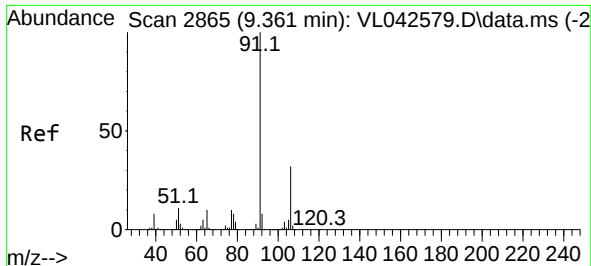
Tgt Ion: 91 Resp: 4624
Ion Ratio Lower Upper
91 100
92 113.8 48.2 72.4#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.013 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion: 117 Resp: 258367
Ion Ratio Lower Upper
117 100
82 65.3 51.2 76.8
119 32.5 26.3 39.5

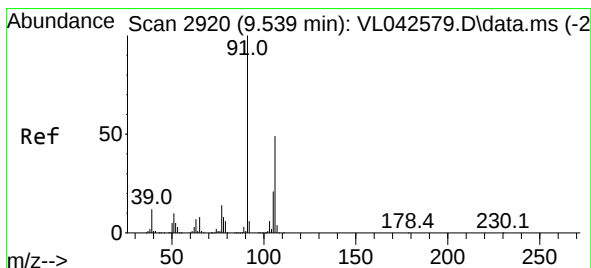
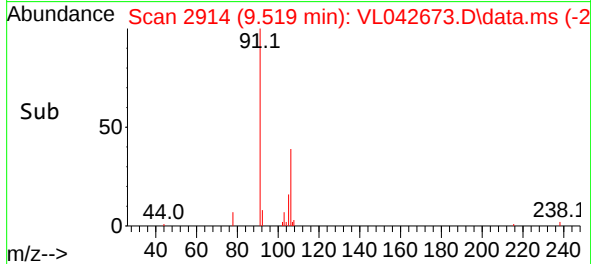
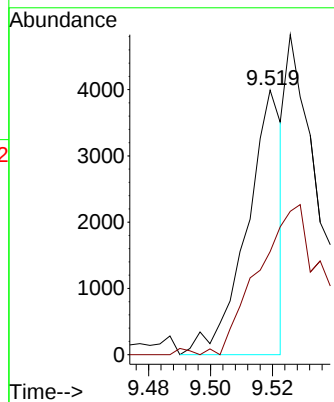
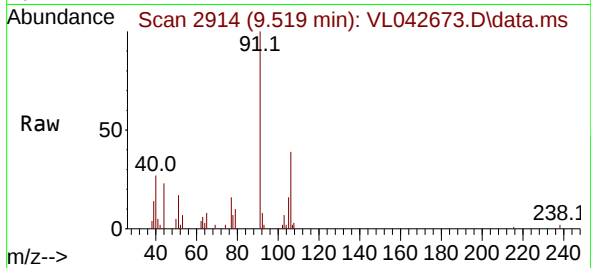




#58
Ethyl Benzene
Concen: 0.072 ppbv
RT: 9.519 min Scan# 2914
Delta R.T. 0.159 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

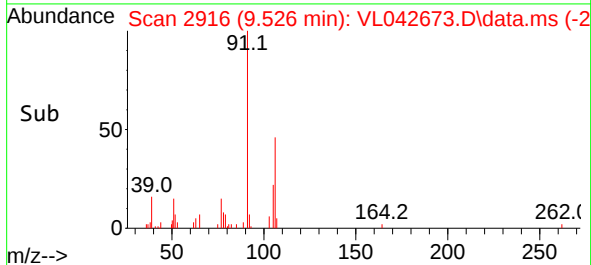
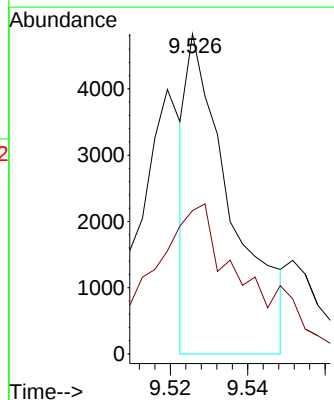
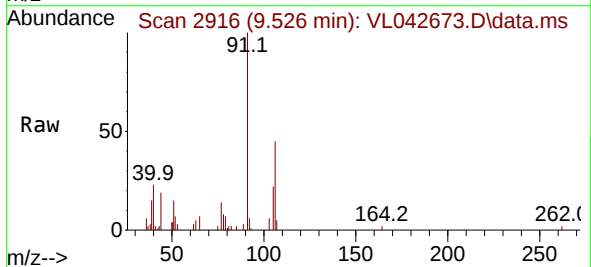
Instrument :
MSVOA_L
ClientSampleId :
SV1

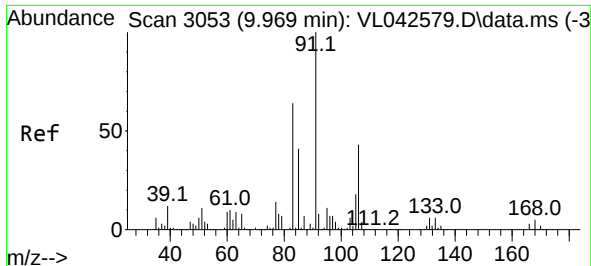
Tgt Ion: 91 Resp: 3156
Ion Ratio Lower Upper
91 100
106 36.6 25.9 38.9



#59
m/p-Xylene
Concen: 0.111 ppbv
RT: 9.526 min Scan# 2916
Delta R.T. -0.013 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion: 91 Resp: 3839
Ion Ratio Lower Upper
91 100
106 103.9 38.8 58.2#





#60

o-Xylene

Concen: 0.064 ppbv

RT: 9.953 min Scan# 3048

Delta R.T. -0.016 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

Instrument :

MSVOA_L

ClientSampleId :

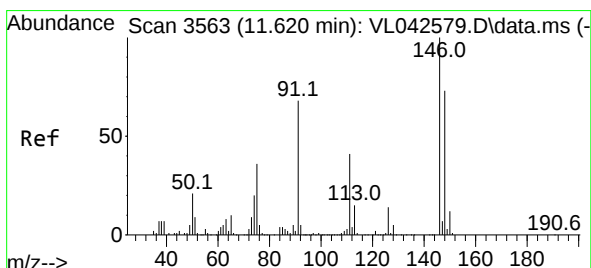
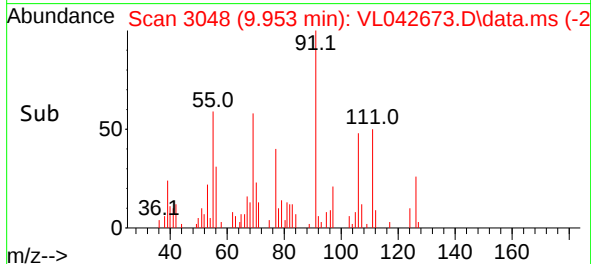
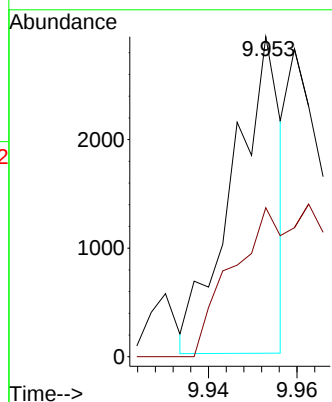
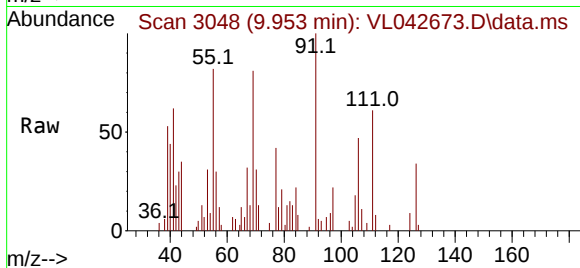
SV1

Tgt Ion: 91 Resp: 2193

Ion Ratio Lower Upper

91 100

106 0.0 22.9 68.5#



#66

Benzyl Chloride

Concen: 0.078 ppbv

RT: 11.610 min Scan# 3560

Delta R.T. -0.010 min

Lab File: VL042673.D

Acq: 27 Jun 2025 10:43

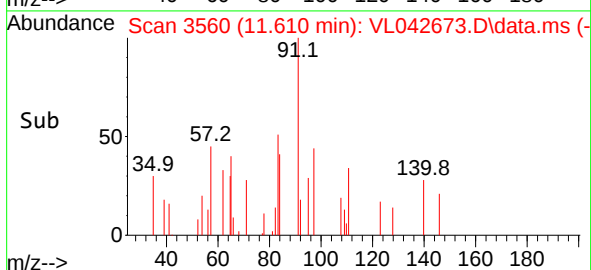
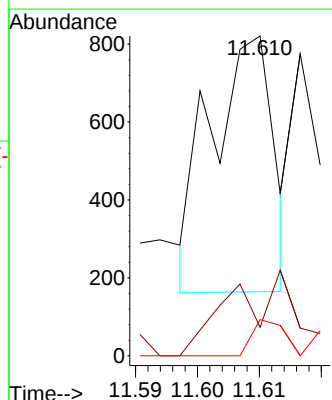
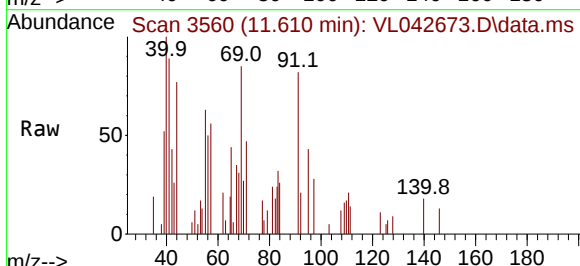
Tgt Ion: 91 Resp: 462

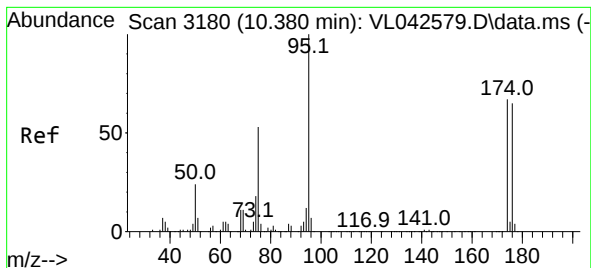
Ion Ratio Lower Upper

91 100

126 0.0 15.1 22.7#

128 0.0 5.0 7.6#

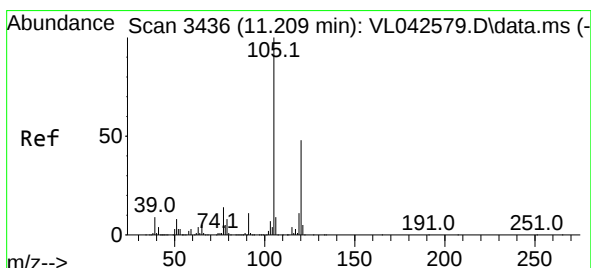
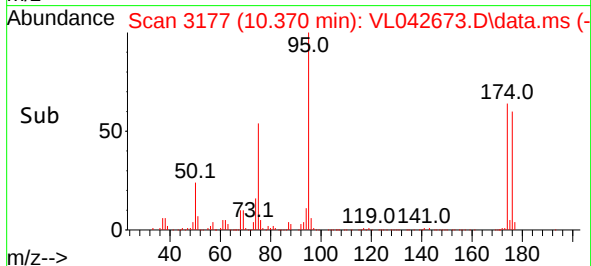
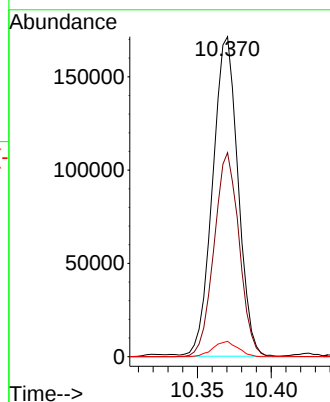
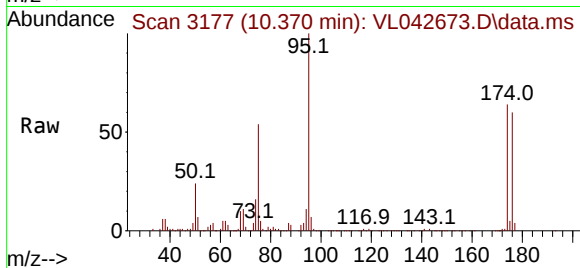




#68
1-Bromo-4-Fluorobenzene
Concen: 10.581 ppbv
RT: 10.370 min Scan# 3180
Delta R.T. -0.010 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

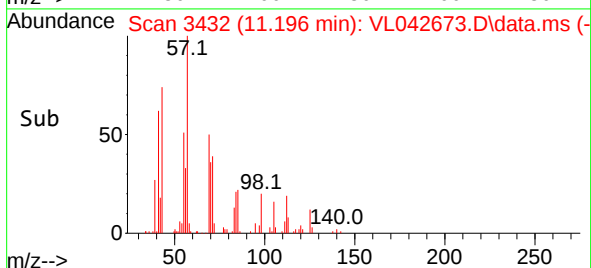
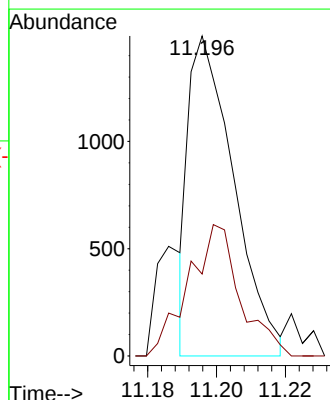
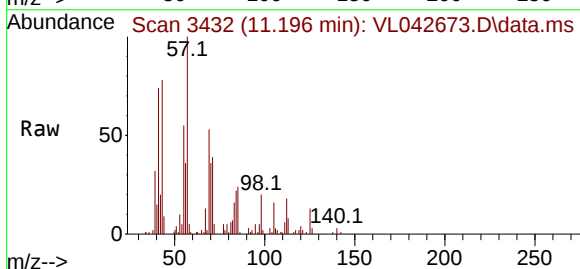
Instrument :
MSVOA_L
ClientSampleId :
SV1

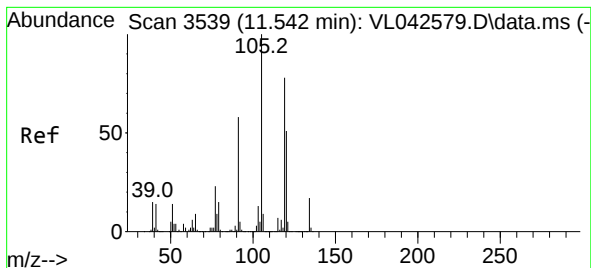
Tgt Ion: 95 Resp: 204936
Ion Ratio Lower Upper
95 100
174 63.3 53.1 79.7
175 4.7 4.2 6.2



#73
1,3,5-Trimethylbenzene
Concen: 0.038 ppbv
RT: 11.196 min Scan# 3432
Delta R.T. -0.013 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion: 105 Resp: 1359
Ion Ratio Lower Upper
105 100
120 23.5 38.8 58.2#

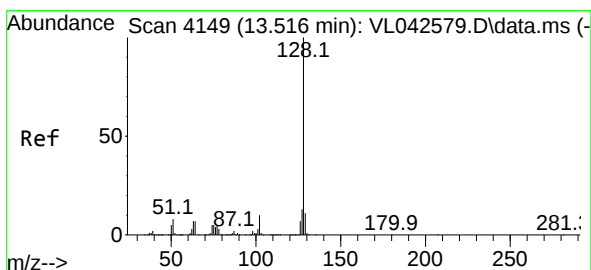
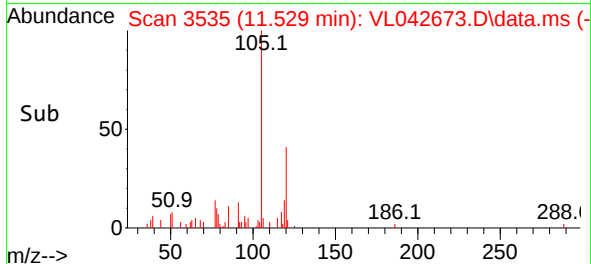
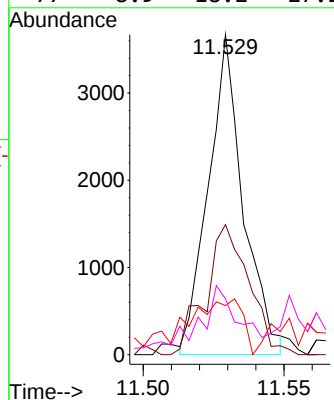
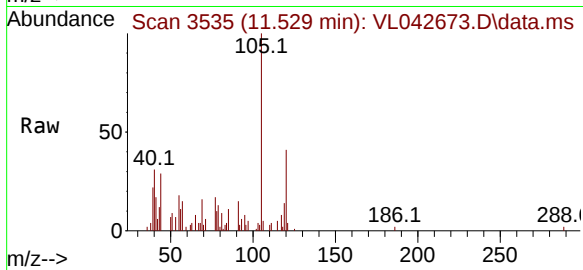




#74
1,2,4-Trimethylbenzene
Concen: 0.080 ppbv
RT: 11.529 min Scan# 3152
Delta R.T. -0.013 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

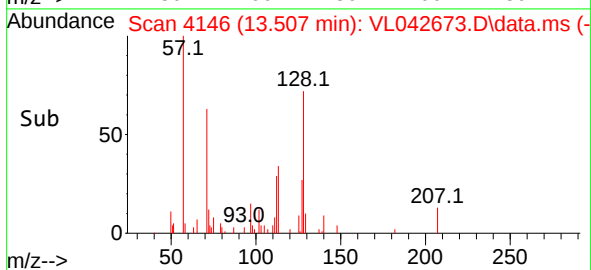
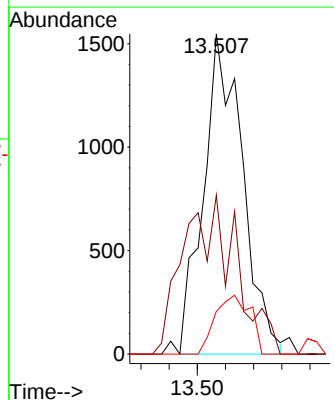
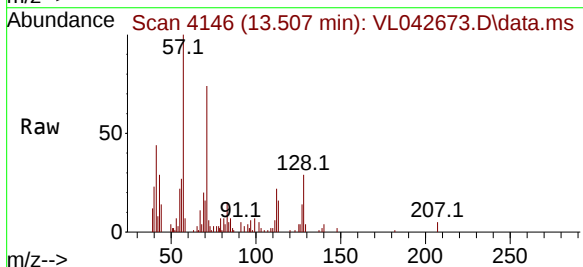
Instrument :
MSVOA_L
ClientSampleId :
SV1

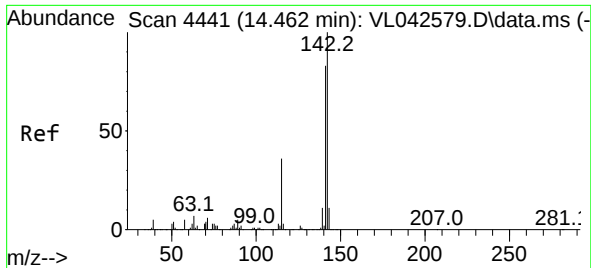
Tgt Ion:	105	Resp:	3152
Ion	Ratio	Lower	Upper
105	100		
120	39.8	40.8	61.2#
91	8.4	46.8	70.2#
77	8.9	18.2	27.2#



#79
Naphthalene
Concen: 0.040 ppbv
RT: 13.507 min Scan# 4146
Delta R.T. -0.010 min
Lab File: VL042673.D
Acq: 27 Jun 2025 10:43

Tgt Ion:	128	Resp:	1489
Ion	Ratio	Lower	Upper
128	100		
127	46.1	10.2	15.4#
129	13.4	8.8	13.2#





#80
 Naphthalene, 2-methyl-
 Concen: 0.032 ppbv
 RT: 14.462 min Scan# 4441
 Delta R.T. 0.000 min
 Lab File: VL042673.D
 Acq: 27 Jun 2025 10:43

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Tgt Ion:	142	Resp:	531
Ion	Ratio	Lower	Upper
142	100		
141	100.2	66.2	99.4#
115	45.8	28.3	42.5#

