

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL090425\
 Data File : VL042894.D
 Acq On : 04 Sep 2025 17:29
 Operator : SY/MD
 Sample : Q3000-03
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Sep 05 01:24:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Aug 14 02:12:54 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.800	49	124375	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.978	114	330230	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.901	117	278452	10.000	ppbv	0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	215513	10.320	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.200%

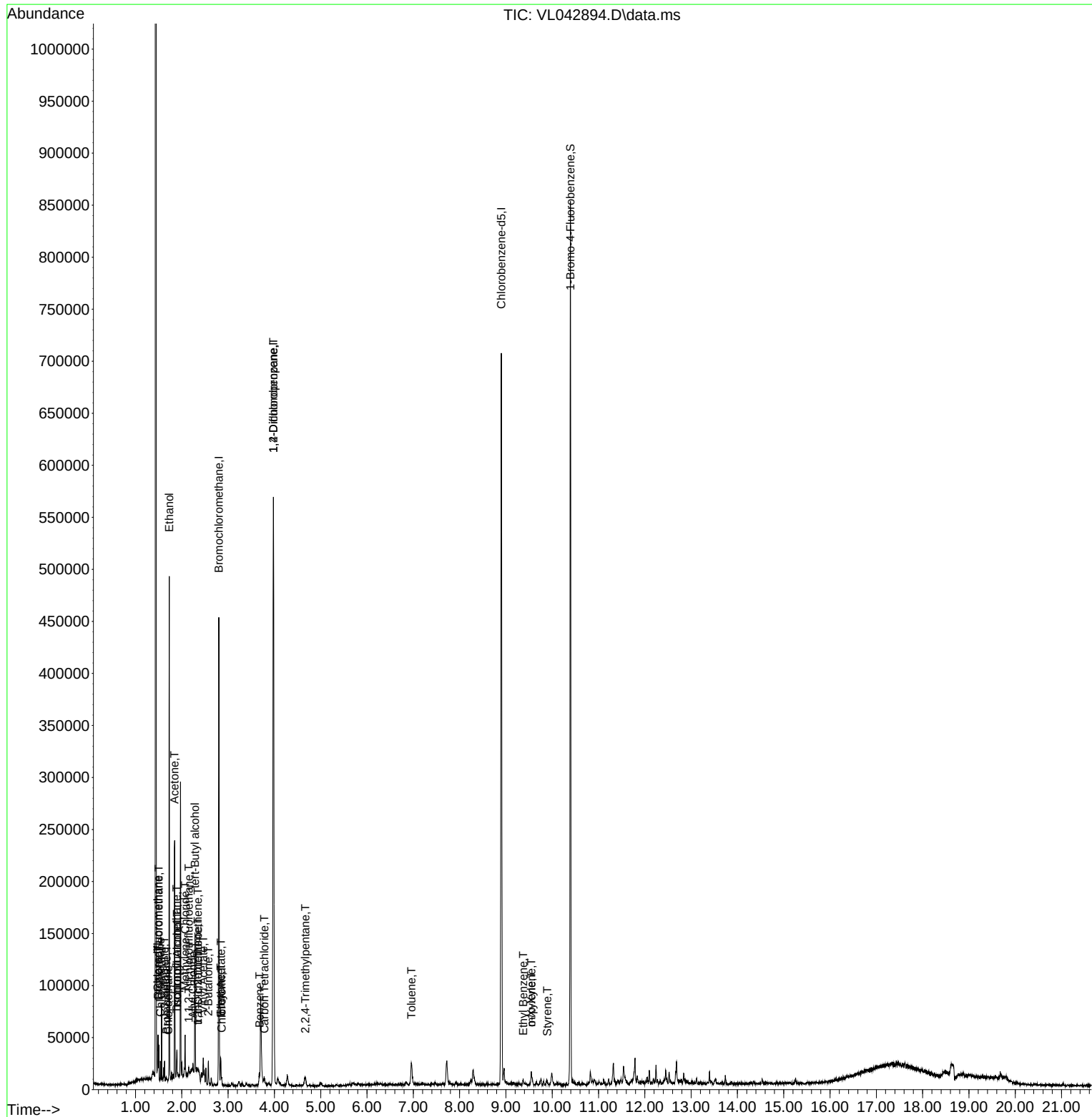
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	8606	0.472	ppbv	97
3) Chlorodifluoromethane	1.479	51	16901	0.839	ppbv	97
4) Chloromethane	1.538	50	5706	0.776	ppbv	94
6) Bromomethane	1.674	94	366	0.126	ppbv	99
7) Chloroethane	1.709	64	130	0.046	ppbv #	36
9) Propene	1.489	41	4649	0.534	ppbv	88
11) Trichlorofluoromethane	1.887	101	4904	0.273	ppbv	89
12) 1,1,2-Trichlorotrifluo...	2.149	101	1196	0.083	ppbv	93
13) Ethanol	1.729	45	165456	207.960	ppbv	90
15) Acetone	1.842	43	100830	6.129	ppbv	99
16) 1,3-Butadiene	1.625	39	1262	0.169	ppbv #	38
17) tert-Butyl alcohol	2.282	59	23819	1.221	ppbv	99
18) 1,1-Dichloroethene	2.350	96	316	0.050	ppbv	95
19) Isopropyl Alcohol	1.897	45	10775	1.096	ppbv #	1
20) Methylene Chloride	2.072	84	5980	0.868	ppbv	99
21) Allyl Chloride	2.240	41	1392	0.120	ppbv #	72
22) trans-1,2-Dichloroethene	2.350	96	316	0.043	ppbv	86
23) Vinyl Acetate	2.463	43	15056	0.666	ppbv #	84
25) Ethyl Acetate	2.845	43	2455	0.062	ppbv #	81
26) Hexane	2.842	57	5276	0.287	ppbv #	54
29) Chloroform	2.861	83	1937	0.074	ppbv #	82
34) 2-Butanone	2.573	43	12924	0.580	ppbv	99
35) Carbon Tetrachloride	3.781	117	2240	0.098	ppbv #	57
36) Benzene	3.677	78	2306	0.073	ppbv #	87
39) 1,2-Dichloropropane	3.978	63	86895	7.524	ppbv #	26
44) 2,2,4-Trimethylpentane	4.667	57	4427	0.082	ppbv #	32
53) Toluene	6.959	91	13707	0.365	ppbv	94
58) Ethyl Benzene	9.370	91	2687	0.055	ppbv #	81
59) m/p-Xylene	9.548	91	4992	0.130	ppbv #	100
60) o-Xylene	9.548	91	4992	0.129	ppbv	77
61) Styrene	9.891	104	1151	0.063	ppbv	98

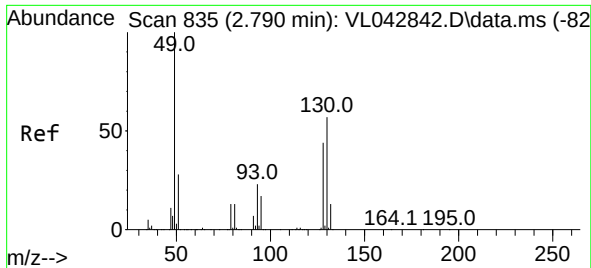
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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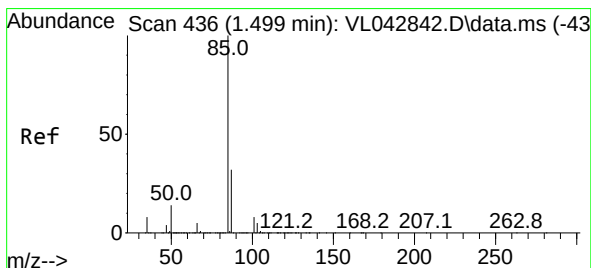
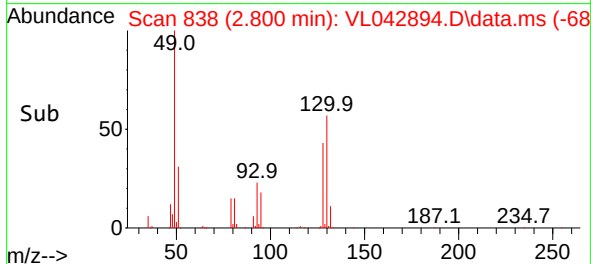
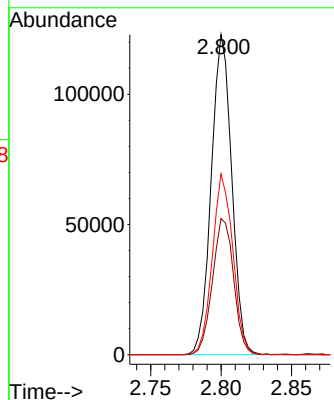
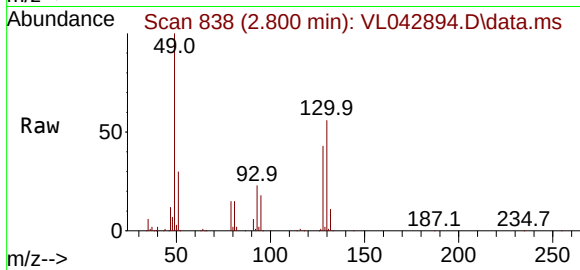




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.800 min Scan# 81
Delta R.T. 0.010 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

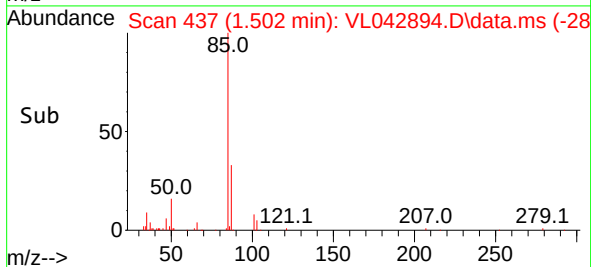
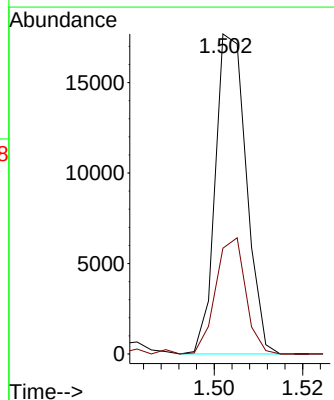
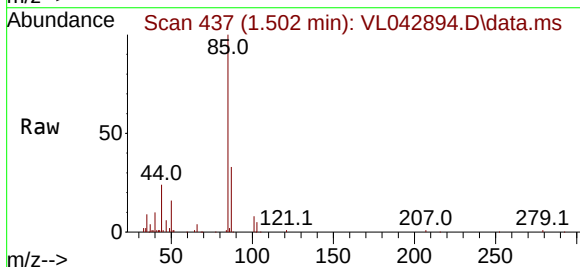
Instrument :
MSVOA_L
ClientSampleId :

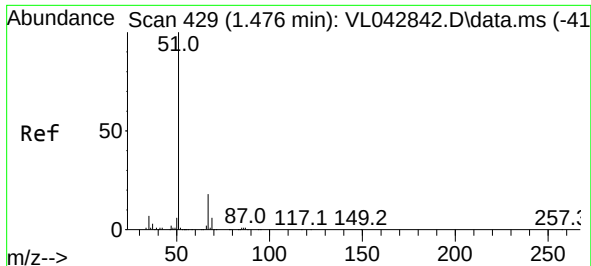
Tgt Ion: 49 Resp: 124375
Ion Ratio Lower Upper
49 100
128 44.0 23.7 71.1
130 56.6 30.6 91.6



#2
Dichlorodifluoromethane
Concen: 0.472 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.003 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

Tgt Ion: 85 Resp: 8606
Ion Ratio Lower Upper
85 100
87 33.0 25.3 37.9

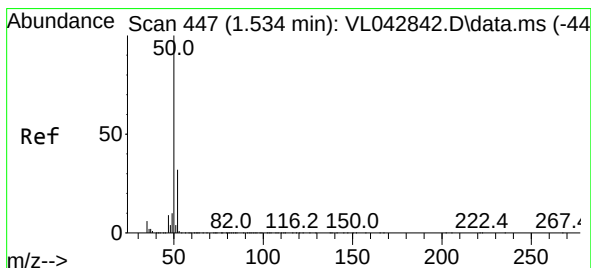
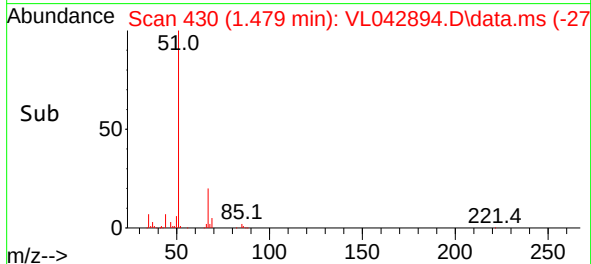
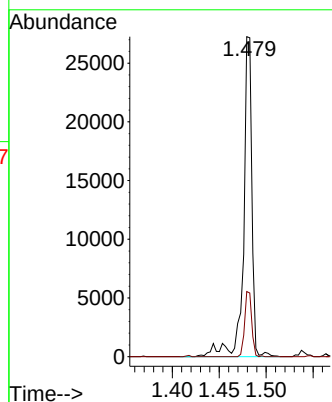
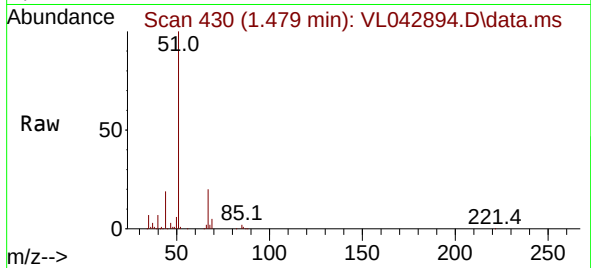




#3
Chlorodifluoromethane
Concen: 0.839 ppbv
RT: 1.479 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

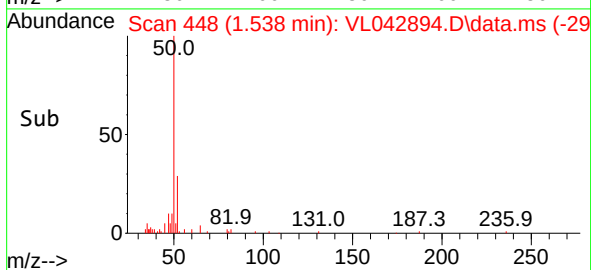
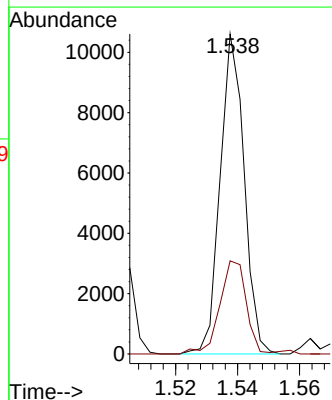
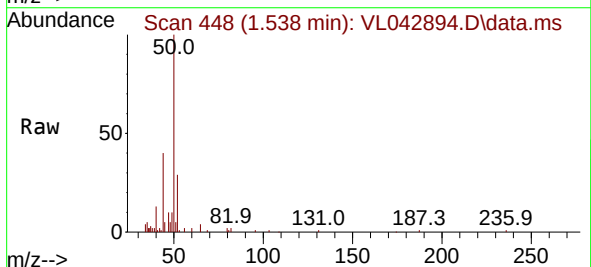
Instrument :
MSVOA_L
ClientSampleId :

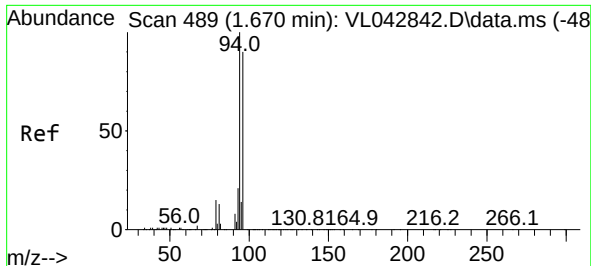
Tgt Ion: 51 Resp: 16901
Ion Ratio Lower Upper
51 100
67 17.1 14.9 22.3



#4
Chloromethane
Concen: 0.776 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.003 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

Tgt Ion: 50 Resp: 5706
Ion Ratio Lower Upper
50 100
52 29.1 25.9 38.9

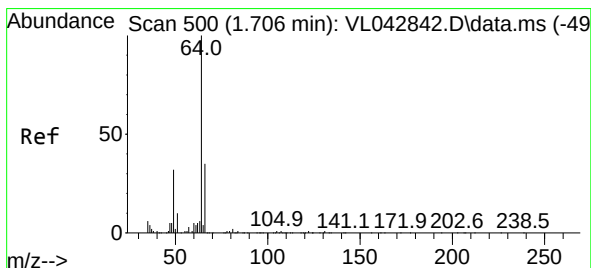
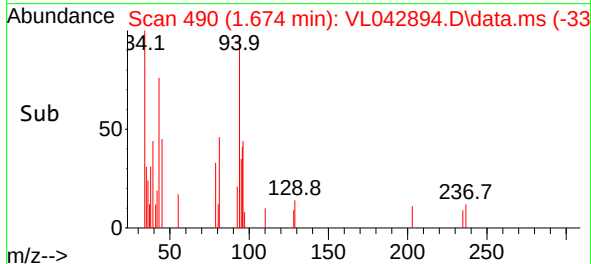
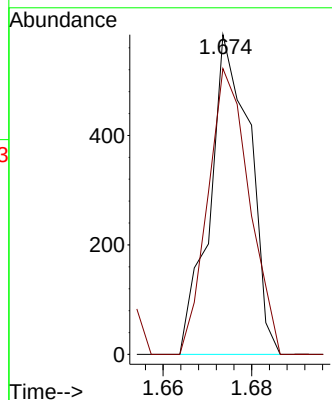
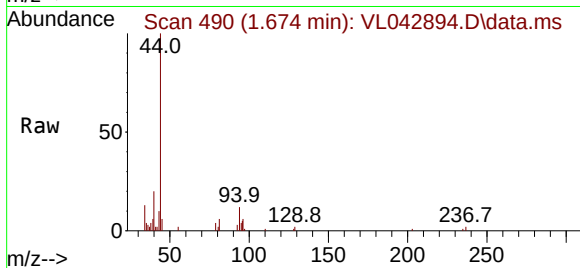




#6
Bromomethane
Concen: 0.126 ppbv
RT: 1.674 min Scan# 490
Delta R.T. 0.003 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

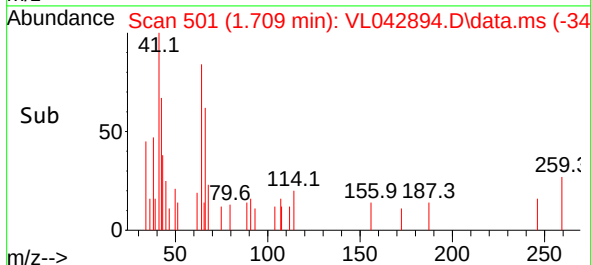
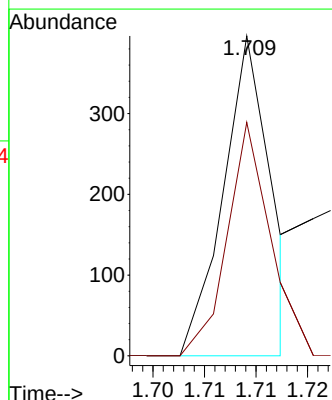
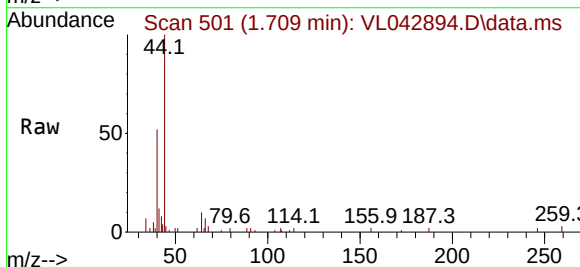
Instrument :
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ClientSampleId :

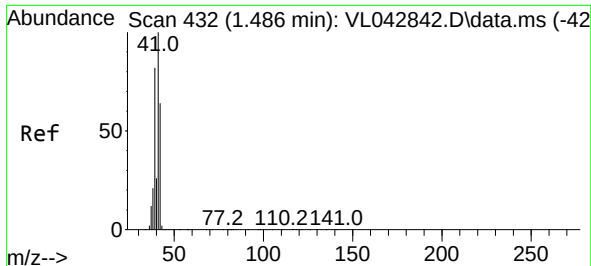
Tgt Ion: 94 Resp: 366
Ion Ratio Lower Upper
94 100
96 89.4 72.1 108.1



#7
Chloroethane
Concen: 0.046 ppbv
RT: 1.709 min Scan# 501
Delta R.T. 0.003 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

Tgt Ion: 64 Resp: 130
Ion Ratio Lower Upper
64 100
66 73.0 28.6 42.8#





#9

Propene

Concen: 0.534 ppbv

RT: 1.489 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL042894.D

Acq: 04 Sep 2025 17:29

Instrument :

MSVOA_L

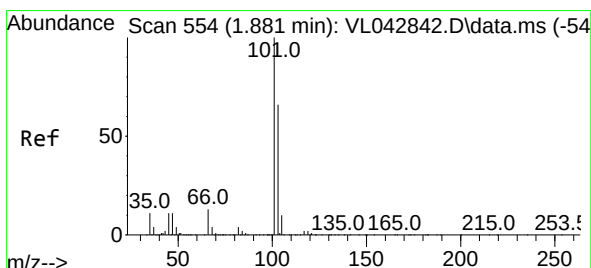
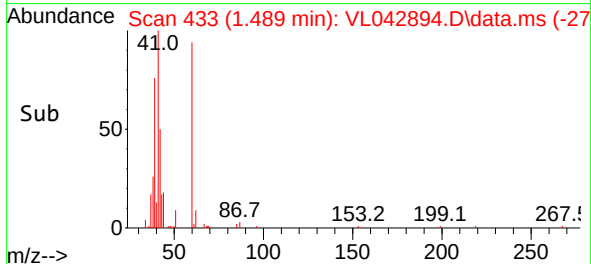
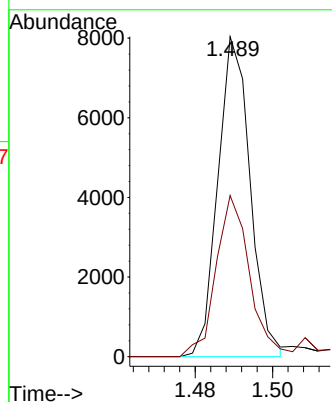
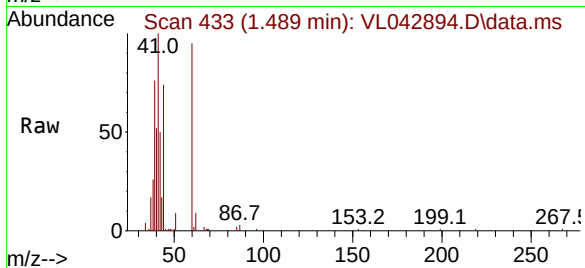
ClientSampleId :

Tgt Ion: 41 Resp: 4649

Ion Ratio Lower Upper

41 100

42 56.9 53.0 79.4



#11

Trichlorofluoromethane

Concen: 0.273 ppbv

RT: 1.887 min Scan# 556

Delta R.T. 0.006 min

Lab File: VL042894.D

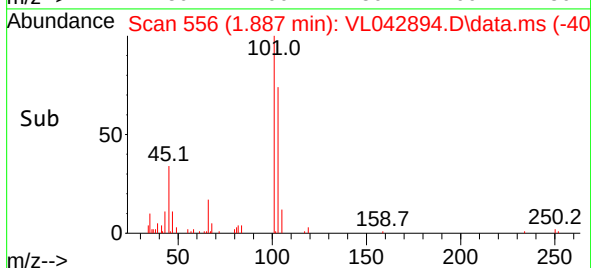
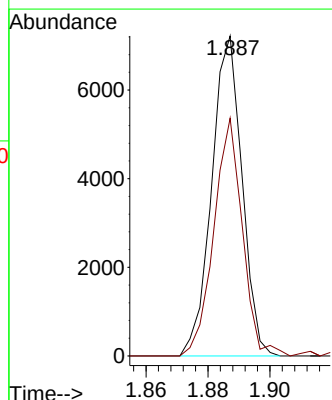
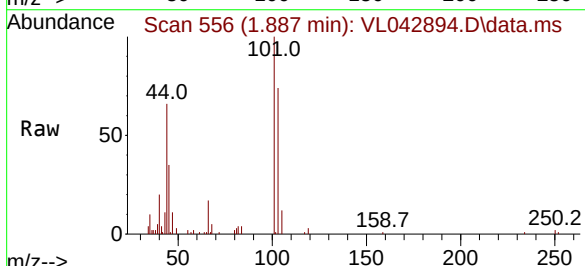
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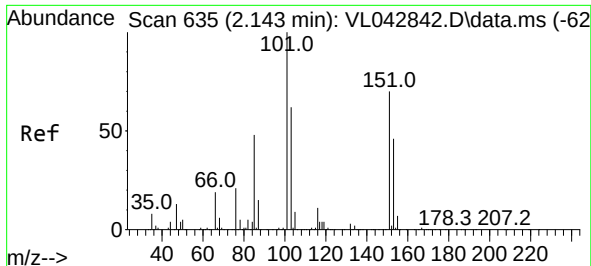
Tgt Ion: 101 Resp: 4904

Ion Ratio Lower Upper

101 100

103 74.3 52.5 78.7

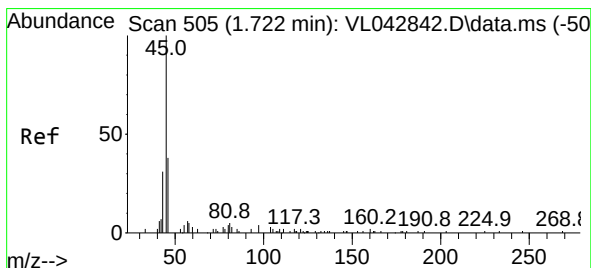
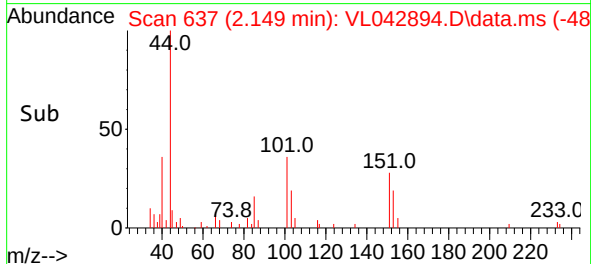
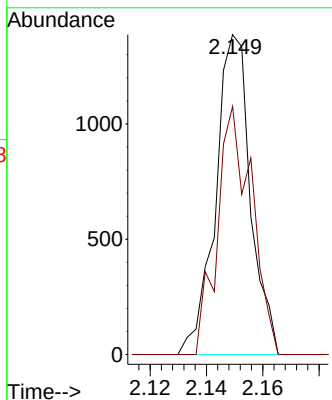
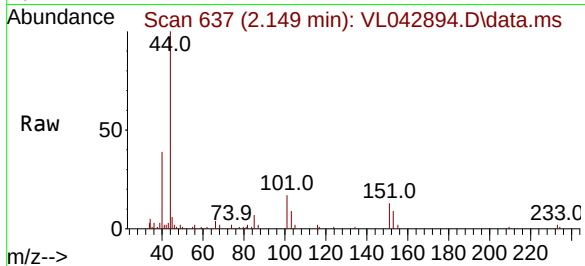




#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.083 ppbv
 RT: 2.149 min Scan# 61
 Delta R.T. 0.006 min
 Lab File: VL042894.D
 Acq: 04 Sep 2025 17:29

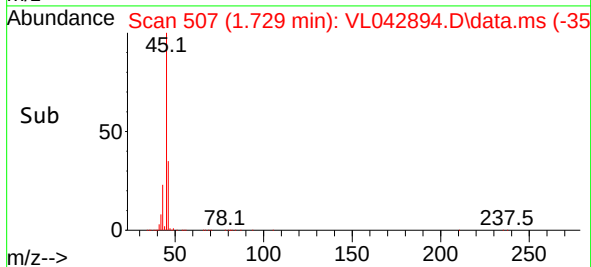
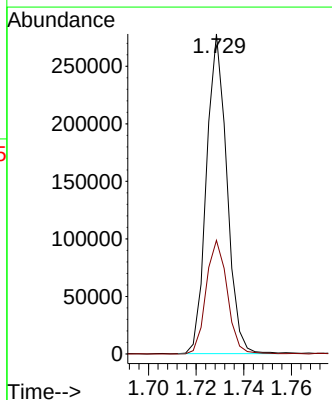
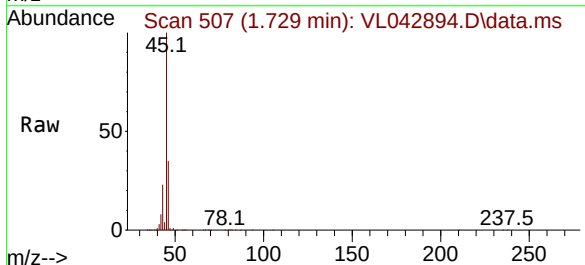
Instrument :
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 ClientSampleId :

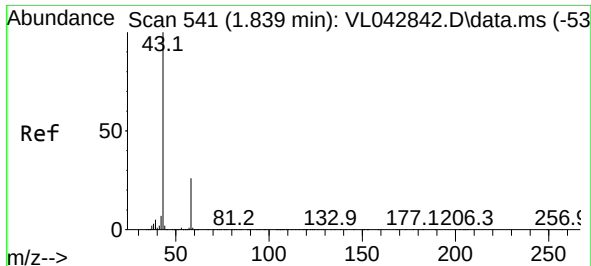
Tgt Ion:101 Resp: 1196
 Ion Ratio Lower Upper
 101 100
 151 76.5 56.4 84.6



#13
 Ethanol
 Concen: 207.960 ppbv
 RT: 1.729 min Scan# 507
 Delta R.T. 0.006 min
 Lab File: VL042894.D
 Acq: 04 Sep 2025 17:29

Tgt Ion: 45 Resp: 165456
 Ion Ratio Lower Upper
 45 100
 46 37.3 17.5 69.9

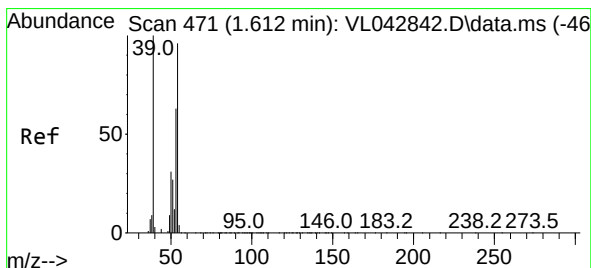
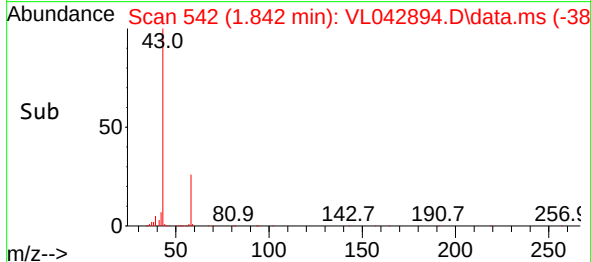
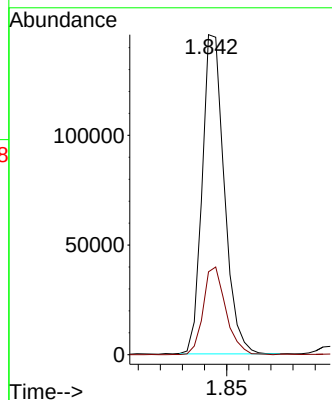
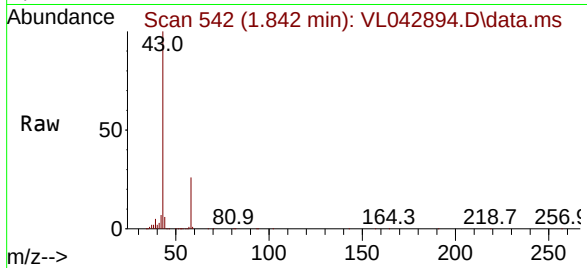




#15
Acetone
Concen: 6.129 ppbv
RT: 1.842 min Scan# 541
Delta R.T. 0.003 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

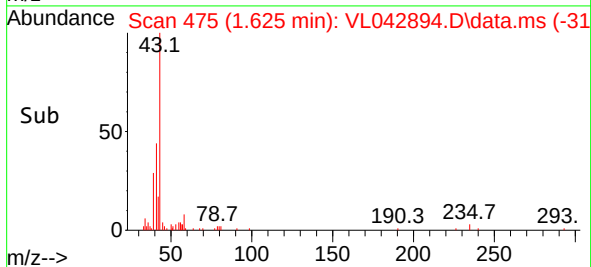
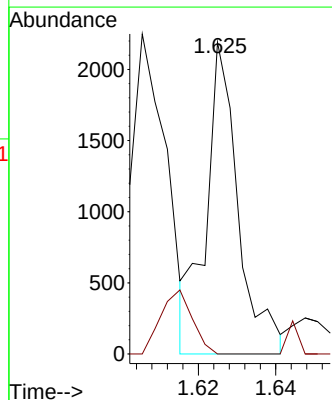
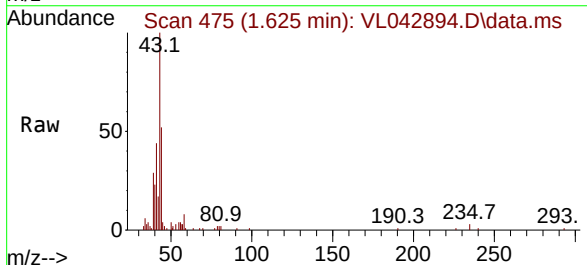
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MSVOA_L
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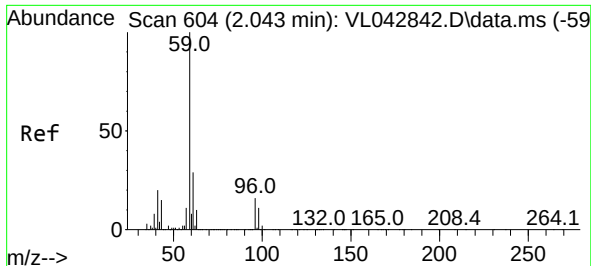
Tgt Ion: 43 Resp: 100830
Ion Ratio Lower Upper
43 100
58 28.5 22.4 33.6



#16
1,3-Butadiene
Concen: 0.169 ppbv
RT: 1.625 min Scan# 475
Delta R.T. 0.013 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

Tgt Ion: 39 Resp: 1262
Ion Ratio Lower Upper
39 100
54 25.4 63.6 95.4#





#17

tert-Butyl alcohol

Concen: 1.221 ppbv

RT: 2.282 min Scan# 617

Delta R.T. 0.239 min

Lab File: VL042894.D

Acq: 04 Sep 2025 17:29

Instrument :

MSVOA_L

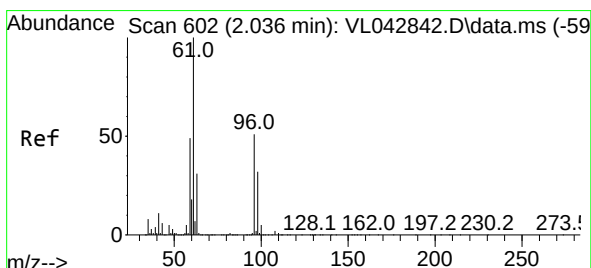
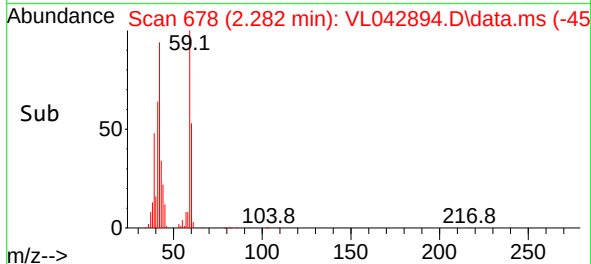
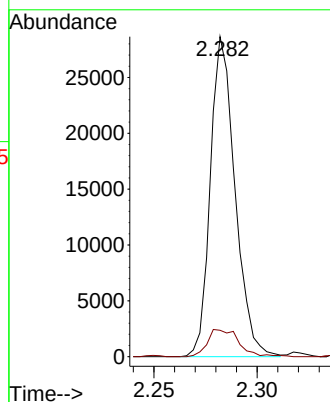
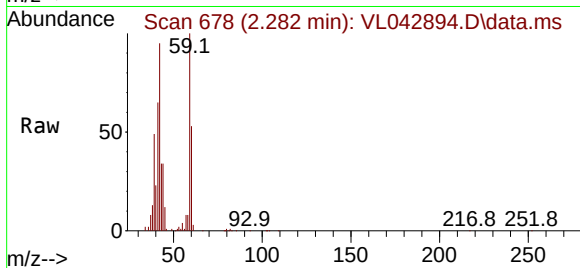
ClientSampleId :

Tgt Ion: 59 Resp: 23819

Ion Ratio Lower Upper

59 100

57 10.8 9.0 13.4



#18

1,1-Dichloroethene

Concen: 0.050 ppbv

RT: 2.350 min Scan# 699

Delta R.T. 0.314 min

Lab File: VL042894.D

Acq: 04 Sep 2025 17:29

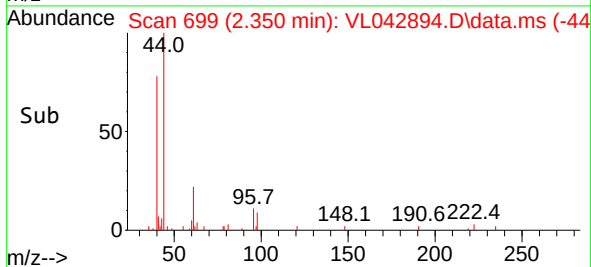
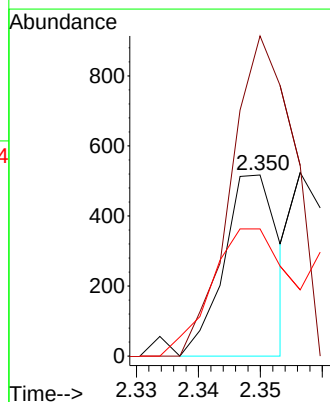
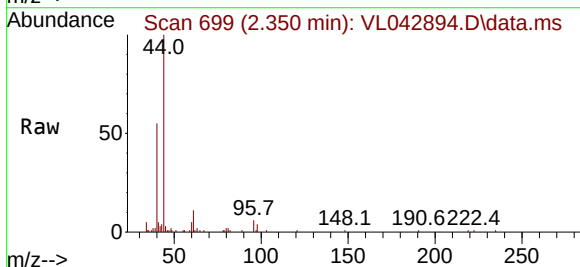
Tgt Ion: 96 Resp: 316

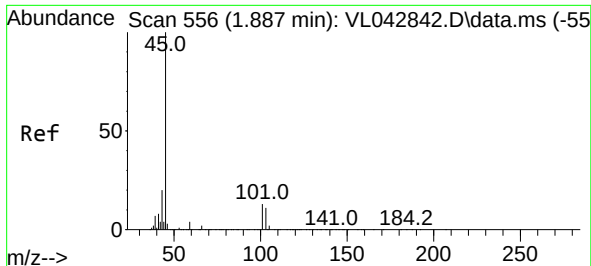
Ion Ratio Lower Upper

96 100

61 190.7 158.2 237.4

98 59.6 50.6 76.0

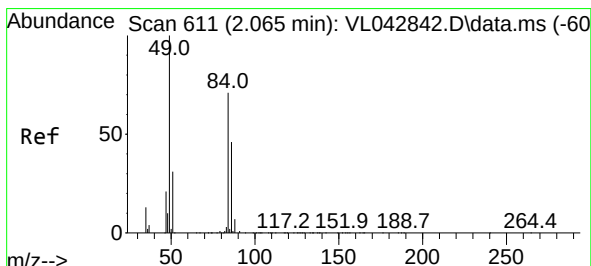
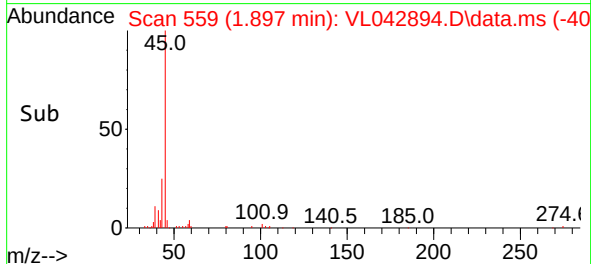
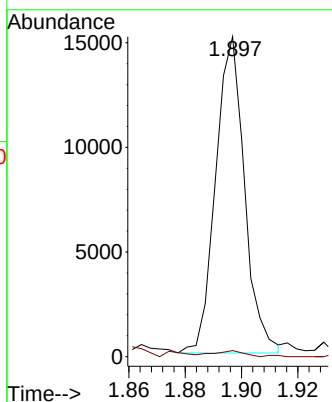
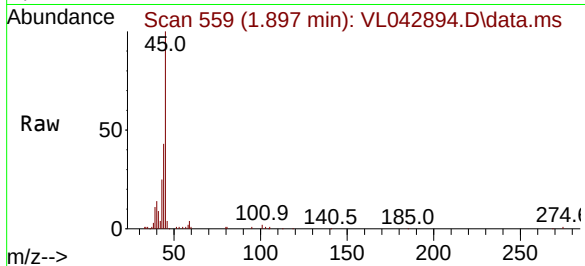




#19
Isopropyl Alcohol
Concen: 1.096 ppbv
RT: 1.897 min Scan# 51
Delta R.T. 0.010 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

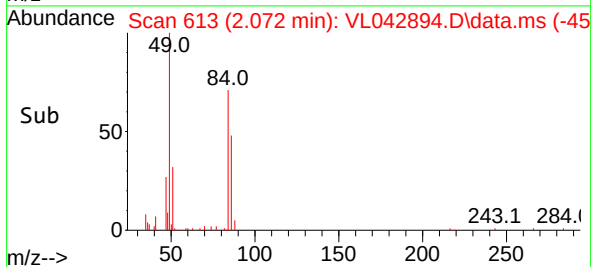
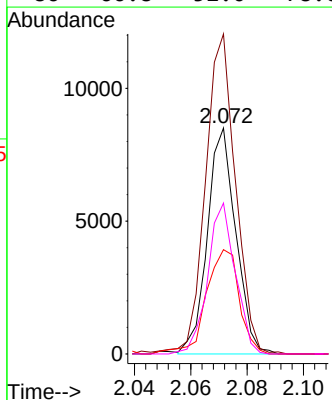
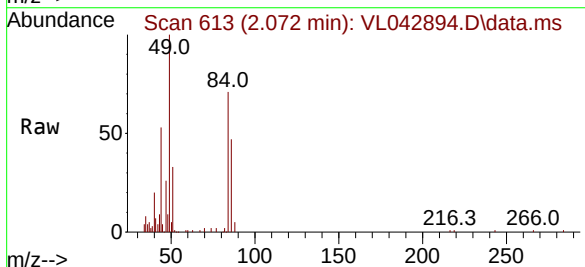
Instrument :
MSVOA_L
ClientSampleId :

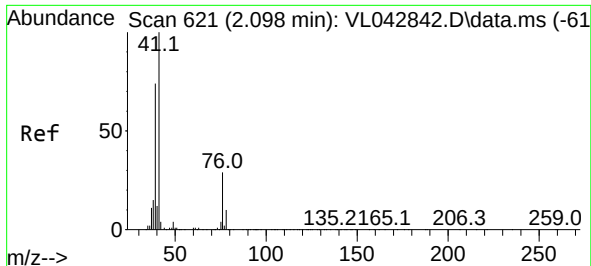
Tgt Ion: 45 Resp: 10775
Ion Ratio Lower Upper
45 100
58 266.5 32.7 49.1#



#20
Methylene Chloride
Concen: 0.868 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.006 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

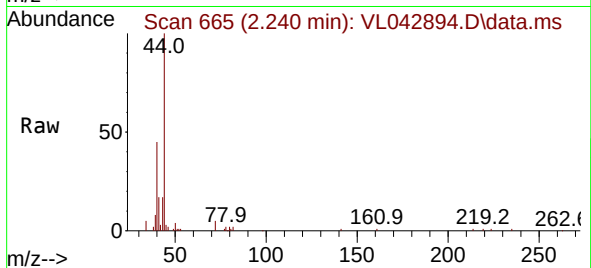
Tgt Ion: 84 Resp: 5980
Ion Ratio Lower Upper
84 100
49 140.8 112.3 168.5
51 46.2 36.0 54.0
86 66.8 52.0 78.0



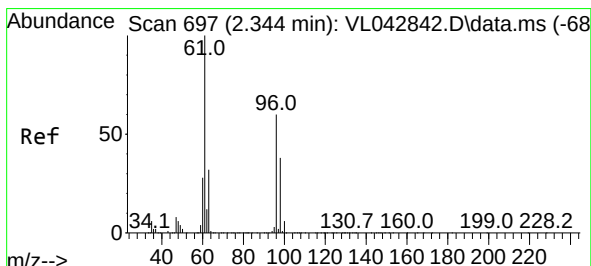
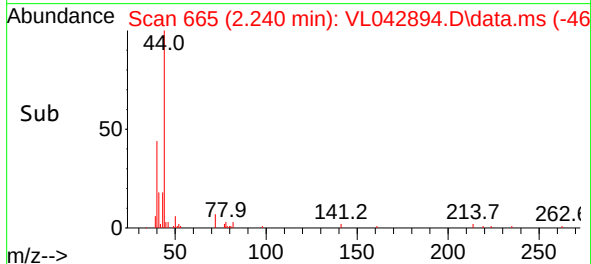
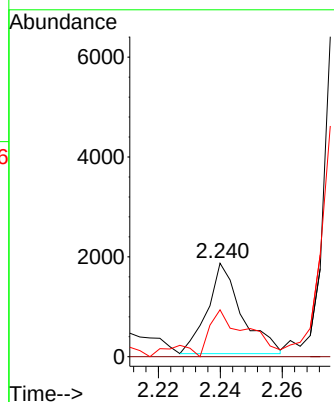


#21
 Allyl Chloride
 Concen: 0.120 ppbv
 RT: 2.240 min Scan# 61
 Delta R.T. 0.142 min
 Lab File: VL042894.D
 Acq: 04 Sep 2025 17:29

Instrument :
 MSVOA_L
 ClientSampleId :

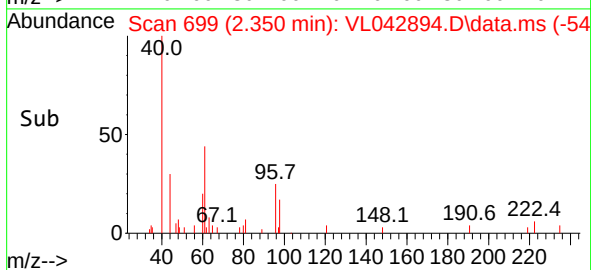
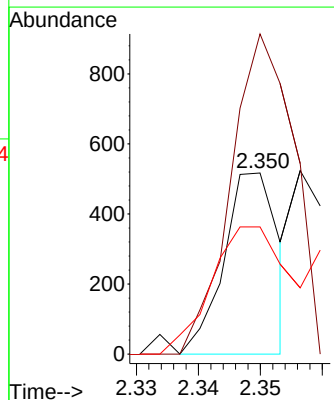
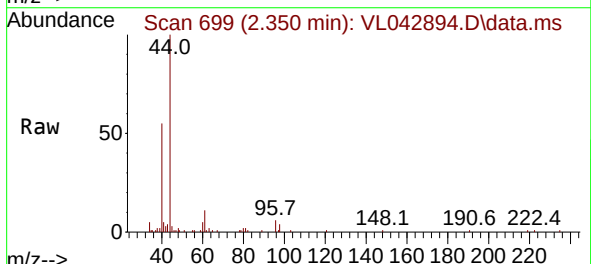


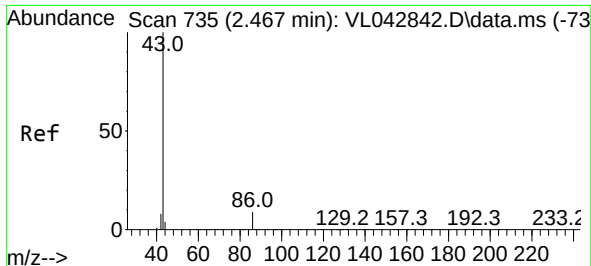
Tgt Ion: 41 Resp: 1392
 Ion Ratio Lower Upper
 41 100
 76 17.7 23.9 35.9#
 39 46.8 57.8 86.6#



#22
 trans-1,2-Dichloroethene
 Concen: 0.043 ppbv
 RT: 2.350 min Scan# 699
 Delta R.T. 0.006 min
 Lab File: VL042894.D
 Acq: 04 Sep 2025 17:29

Tgt Ion: 96 Resp: 316
 Ion Ratio Lower Upper
 96 100
 61 190.7 132.6 199.0
 98 59.6 50.0 75.0

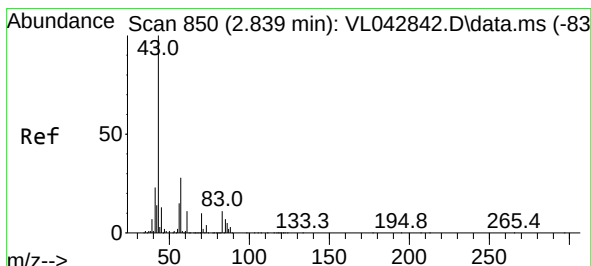
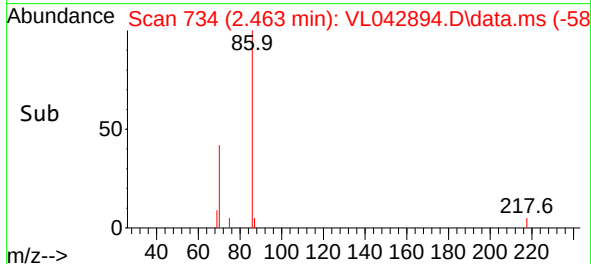
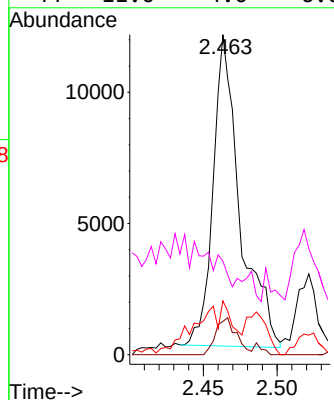
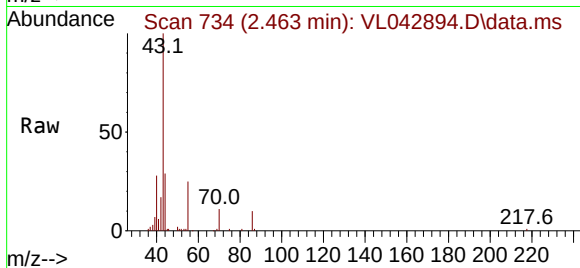




#23
 Vinyl Acetate
 Concen: 0.666 ppbv
 RT: 2.463 min Scan# 71
 Delta R.T. -0.003 min
 Lab File: VL042894.D
 Acq: 04 Sep 2025 17:29

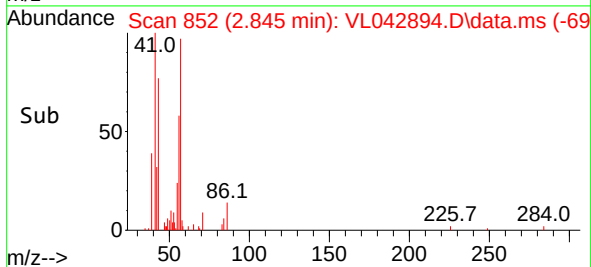
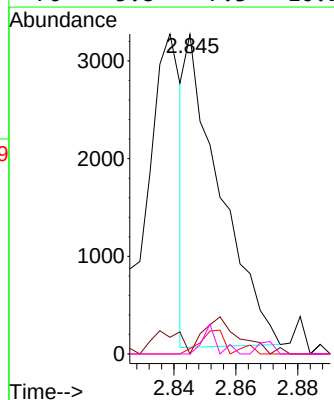
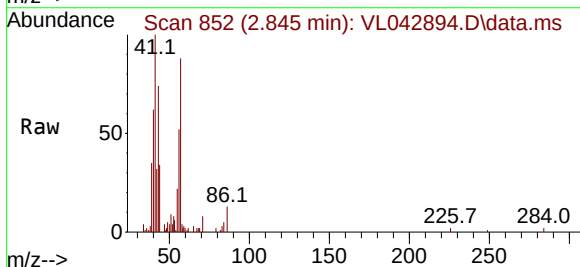
Instrument :
 MSVOA_L
 ClientSampleId :

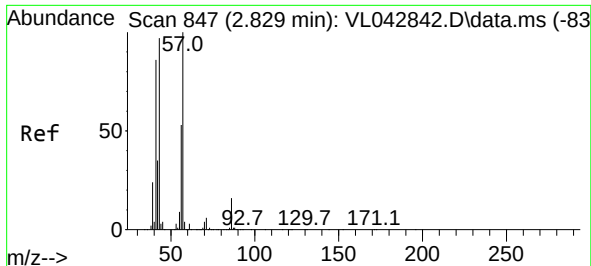
Tgt Ion:	43	Resp:	15056
Ion	Ratio	Lower	Upper
43	100		
86	10.7	6.6	9.8#
42	17.3	7.0	10.6#
44	11.0	4.0	6.0#



#25
 Ethyl Acetate
 Concen: 0.062 ppbv
 RT: 2.845 min Scan# 852
 Delta R.T. 0.006 min
 Lab File: VL042894.D
 Acq: 04 Sep 2025 17:29

Tgt Ion:	43	Resp:	2455
Ion	Ratio	Lower	Upper
43	100		
45	23.7	8.1	12.1#
61	6.3	7.4	11.2#
70	5.8	7.3	10.9#

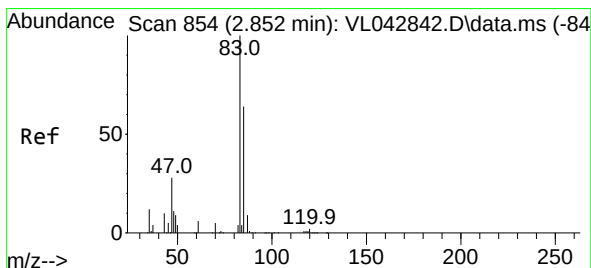
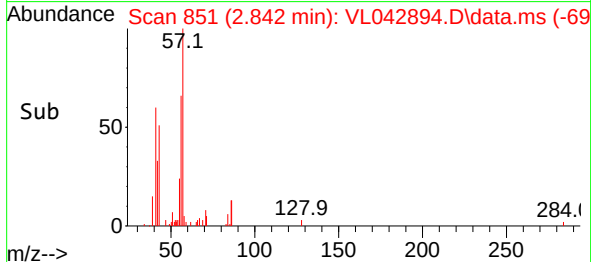
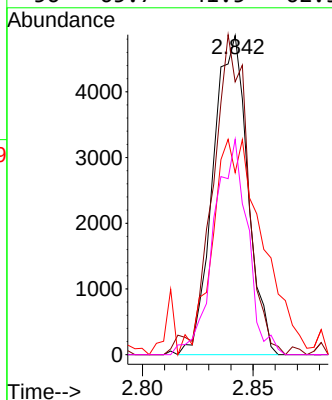
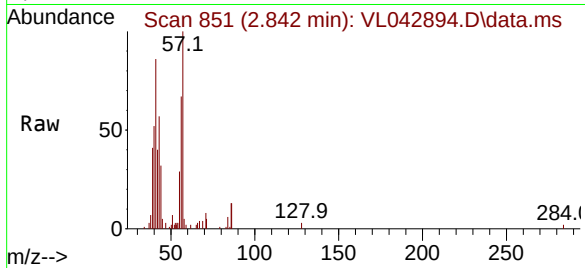




#26
Hexane
Concen: 0.287 ppbv
RT: 2.842 min Scan# 81
Delta R.T. 0.013 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

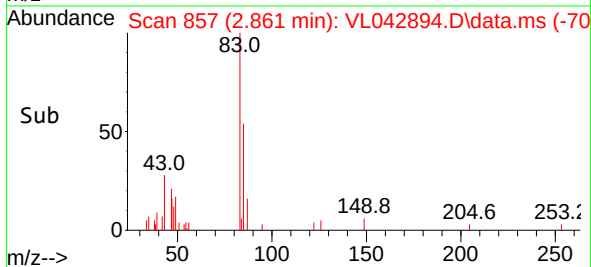
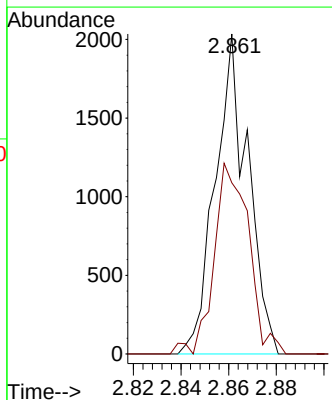
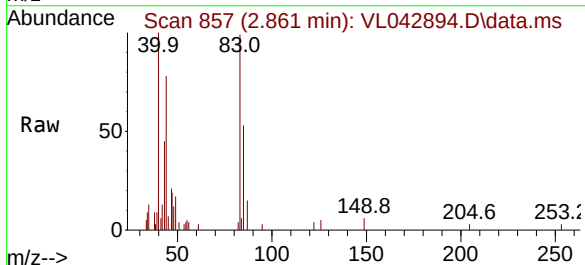
Instrument :
MSVOA_L
ClientSampleId :

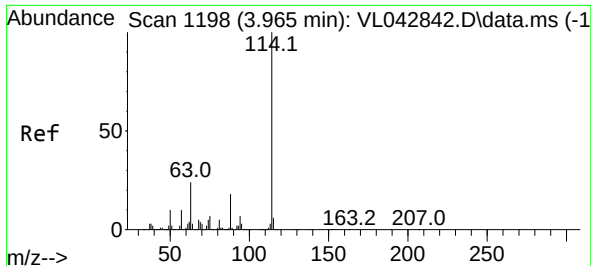
Tgt Ion: 57 Resp: 5276
Ion Ratio Lower Upper
57 100
41 102.5 68.6 103.0
43 110.4 168.5 252.7#
56 65.7 41.5 62.3#



#29
Chloroform
Concen: 0.074 ppbv
RT: 2.861 min Scan# 857
Delta R.T. 0.010 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

Tgt Ion: 83 Resp: 1937
Ion Ratio Lower Upper
83 100
85 50.2 51.1 76.7#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.978 min Scan# 1198

Delta R.T. 0.013 min

Lab File: VL042894.D

Acq: 04 Sep 2025 17:29

Instrument :

MSVOA_L

ClientSampleId :

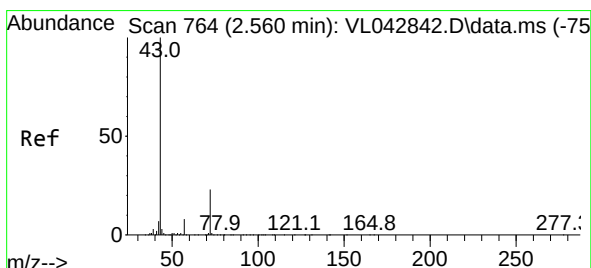
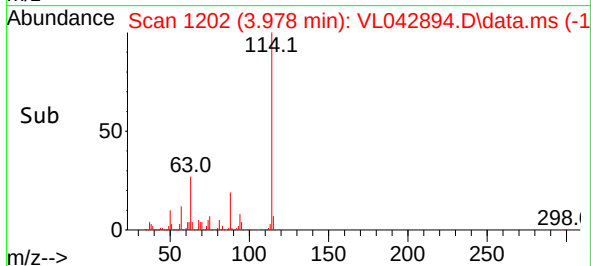
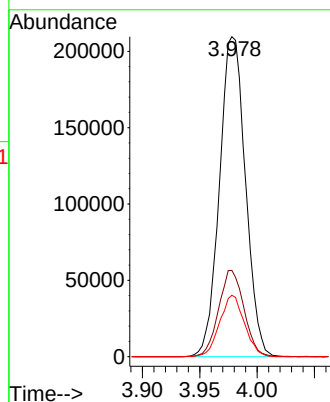
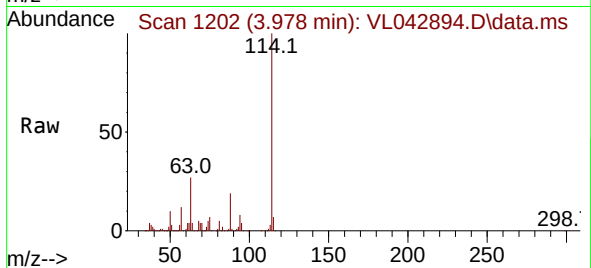
Tgt Ion:114 Resp: 330230

Ion Ratio Lower Upper

114 100

63 26.3 19.7 29.5

88 18.3 14.4 21.6



#34

2-Butanone

Concen: 0.580 ppbv

RT: 2.573 min Scan# 768

Delta R.T. 0.013 min

Lab File: VL042894.D

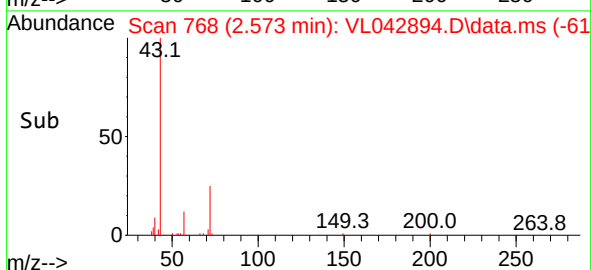
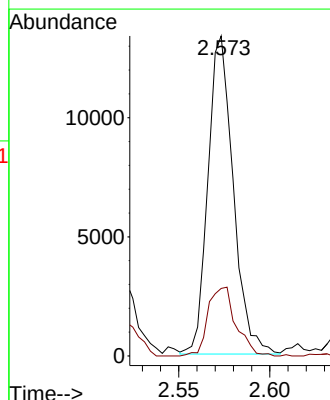
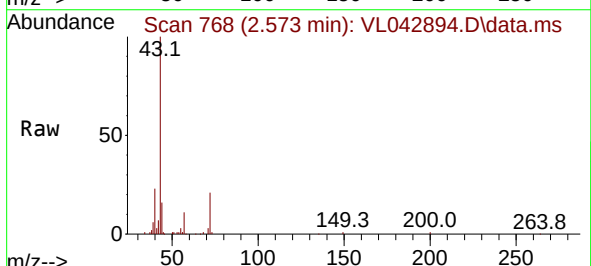
Acq: 04 Sep 2025 17:29

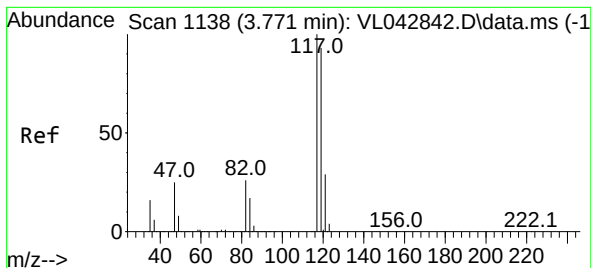
Tgt Ion: 43 Resp: 12924

Ion Ratio Lower Upper

43 100

72 23.8 18.6 28.0





#35

Carbon Tetrachloride

Concen: 0.098 ppbv

RT: 3.781 min Scan# 1138

Delta R.T. 0.010 min

Lab File: VL042894.D

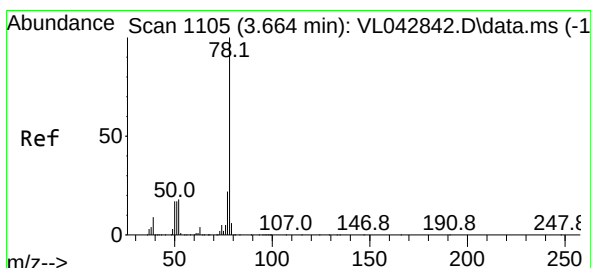
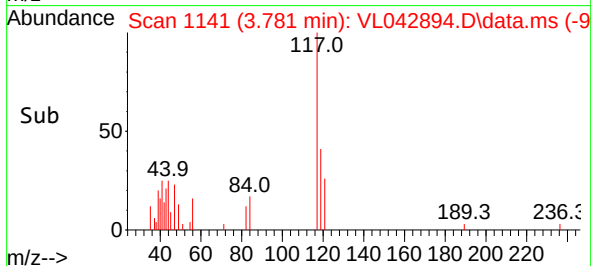
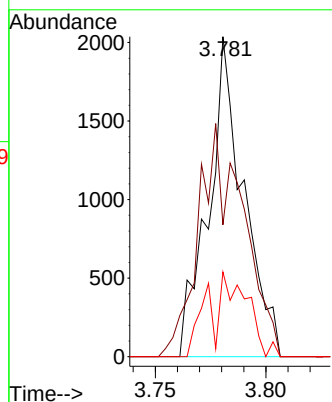
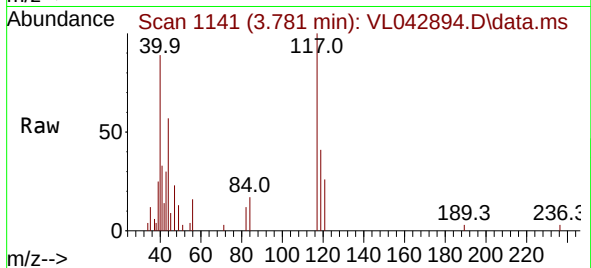
Acq: 04 Sep 2025 17:29

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:	117	Resp:	2240
Ion	Ratio	Lower	Upper
117	100		
119	41.2	74.7	112.1#
121	26.5	23.2	34.8



#36

Benzene

Concen: 0.073 ppbv

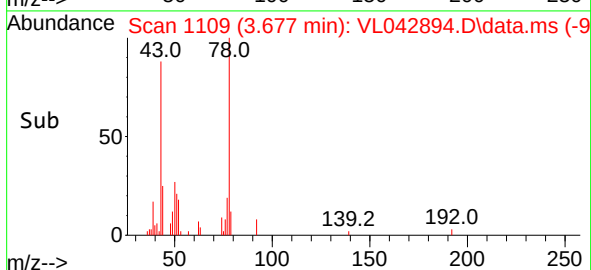
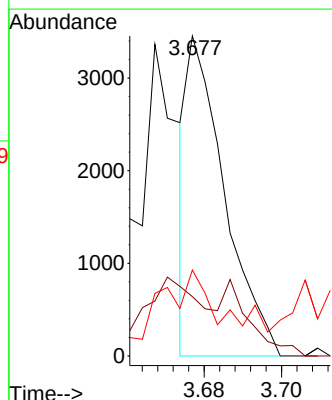
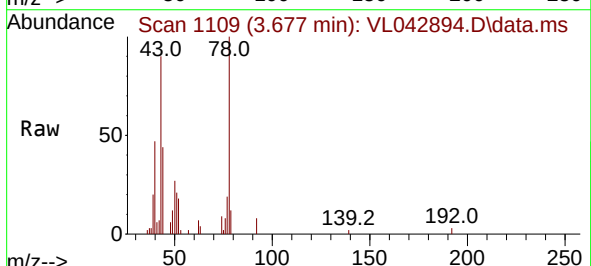
RT: 3.677 min Scan# 1109

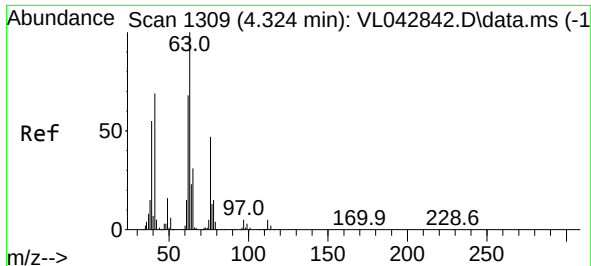
Delta R.T. 0.013 min

Lab File: VL042894.D

Acq: 04 Sep 2025 17:29

Tgt Ion:	78	Resp:	2306
Ion	Ratio	Lower	Upper
78	100		
77	13.7	17.7	26.5#
50	13.9	13.9	20.9





#39

1,2-Dichloropropane

Concen: 7.524 ppbv

RT: 3.978 min Scan# 11

Delta R.T. -0.346 min

Lab File: VL042894.D

Acq: 04 Sep 2025 17:29

Instrument :

MSVOA_L

ClientSampleId :

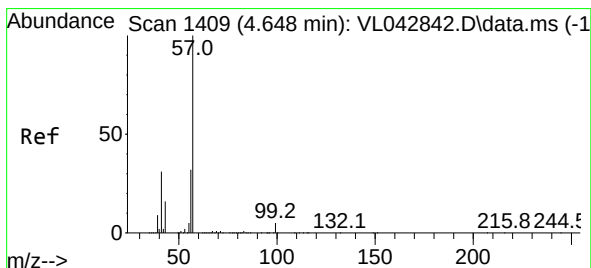
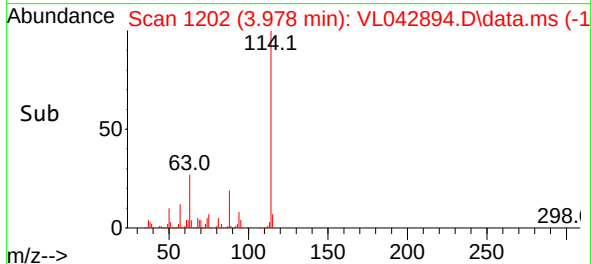
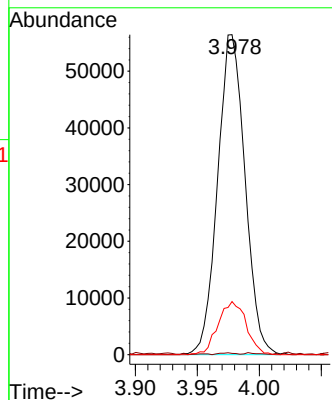
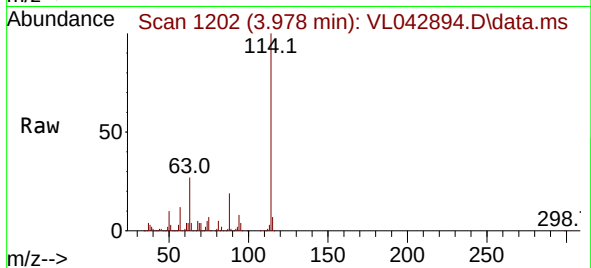
Tgt Ion: 63 Resp: 86895

Ion Ratio Lower Upper

63 100

41 0.4 55.0 82.4#

62 16.6 54.4 81.6#



#44

2,2,4-Trimethylpentane

Concen: 0.082 ppbv

RT: 4.667 min Scan# 1415

Delta R.T. 0.019 min

Lab File: VL042894.D

Acq: 04 Sep 2025 17:29

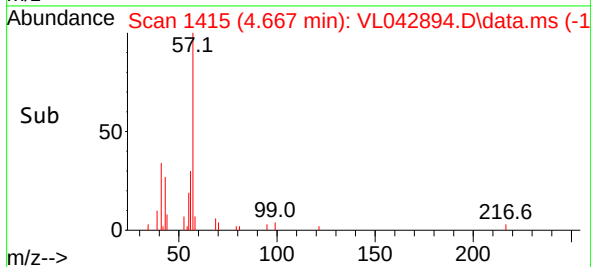
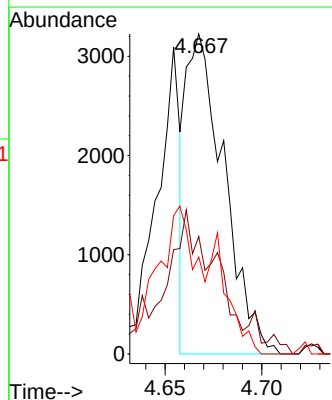
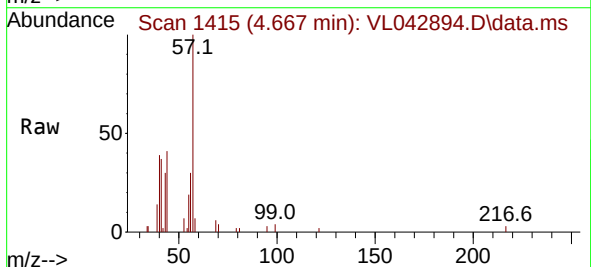
Tgt Ion: 57 Resp: 4427

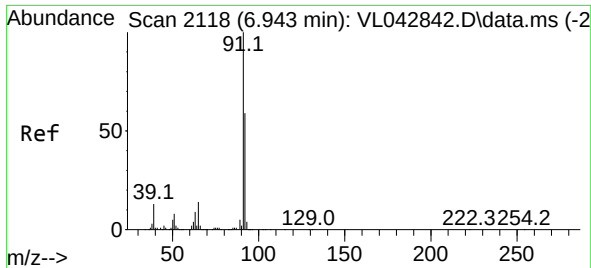
Ion Ratio Lower Upper

57 100

41 74.0 24.8 37.2#

56 0.0 25.5 38.3#

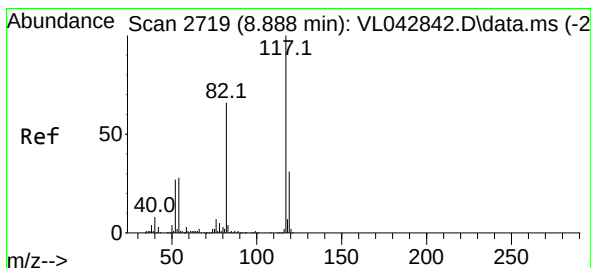
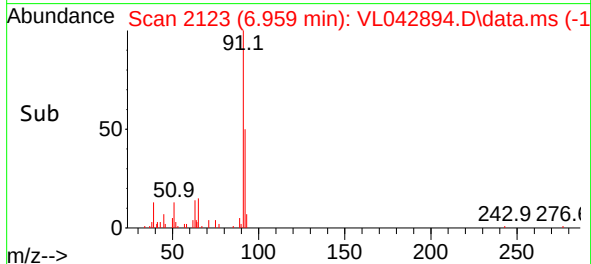
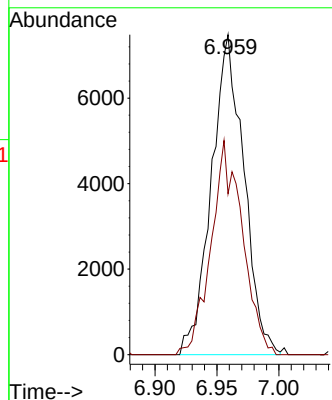
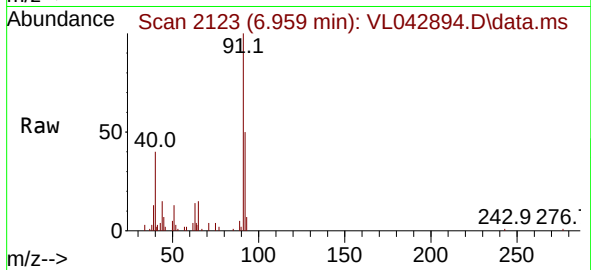




#53
Toluene
Concen: 0.365 ppbv
RT: 6.959 min Scan# 2118
Delta R.T. 0.016 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

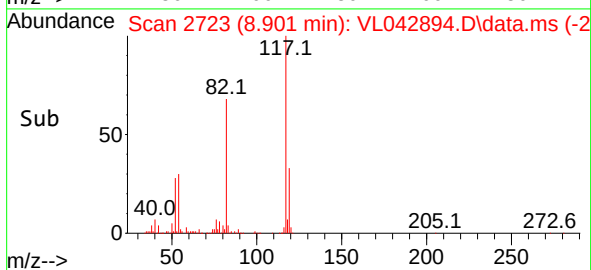
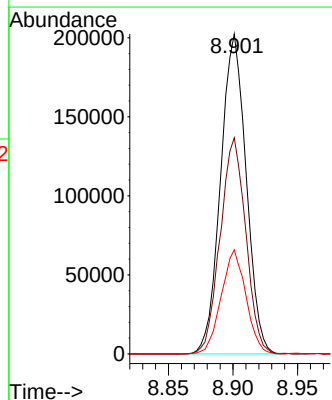
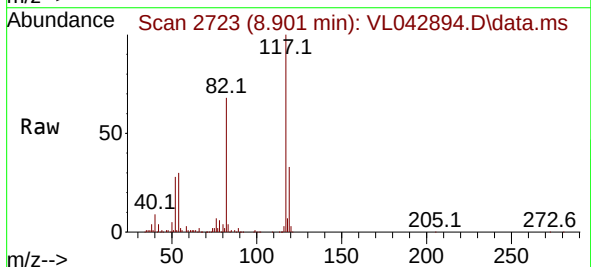
Instrument :
MSVOA_L
ClientSampleId :

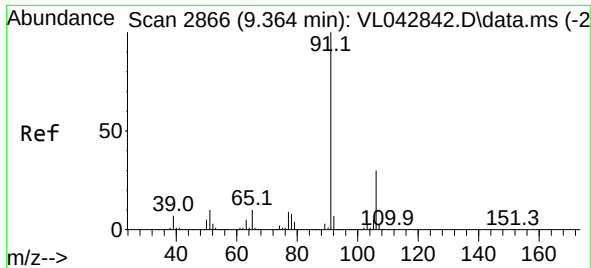
Tgt Ion: 91 Resp: 13707
Ion Ratio Lower Upper
91 100
92 64.5 47.8 71.6



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.901 min Scan# 2723
Delta R.T. 0.013 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

Tgt Ion: 117 Resp: 278452
Ion Ratio Lower Upper
117 100
82 67.7 54.6 81.8
119 31.8 25.9 38.9

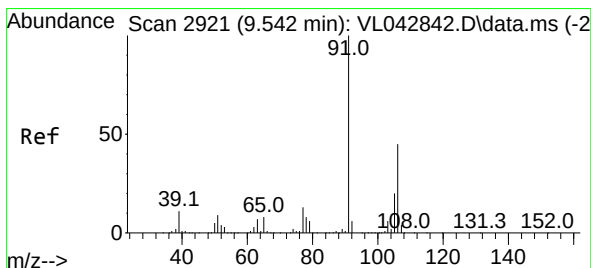
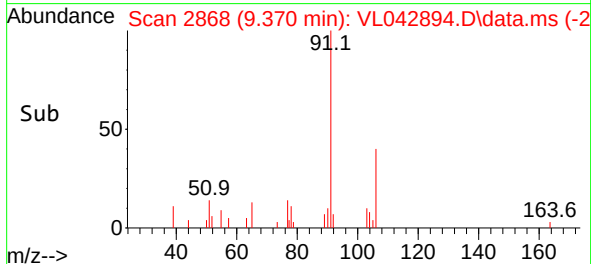
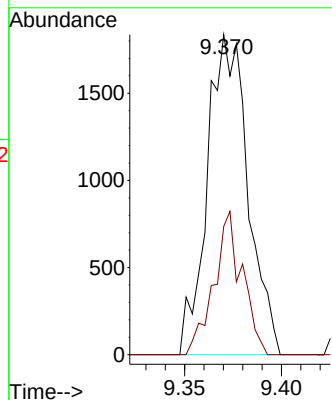
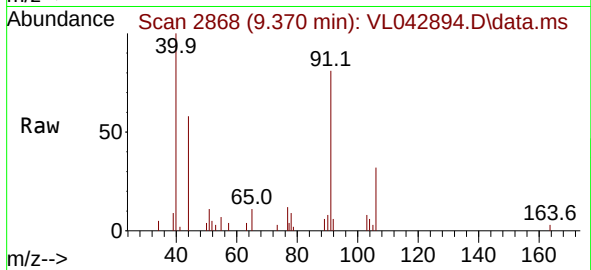




#58
Ethyl Benzene
Concen: 0.055 ppbv
RT: 9.370 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

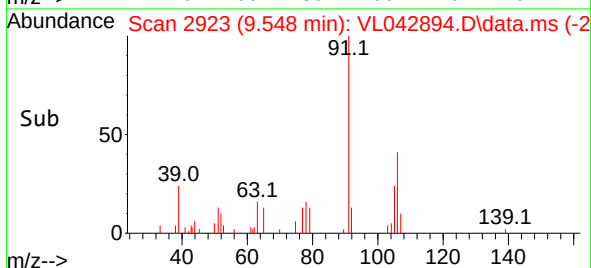
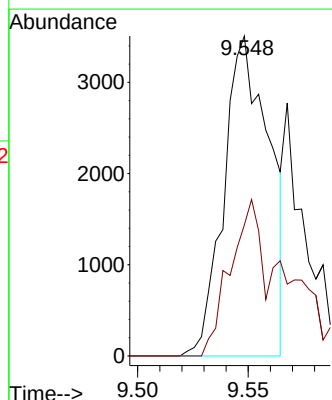
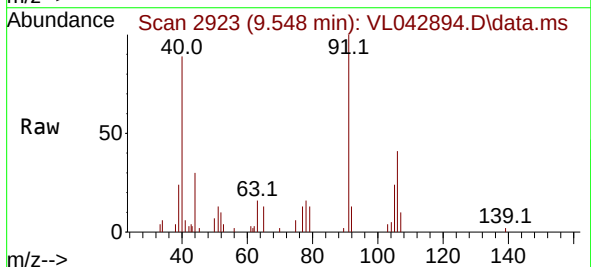
Instrument :
MSVOA_1
ClientSampleId :

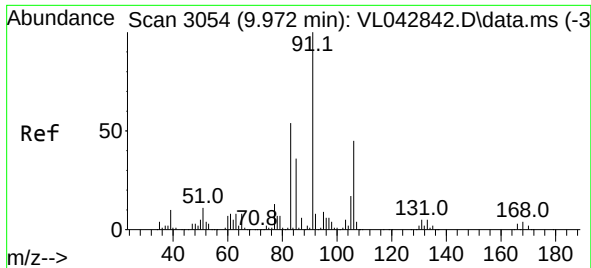
Tgt Ion: 91 Resp: 2687
Ion Ratio Lower Upper
91 100
106 40.1 23.9 35.9#



#59
m/p-Xylene
Concen: 0.130 ppbv
RT: 9.548 min Scan# 2923
Delta R.T. 0.006 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

Tgt Ion: 91 Resp: 4992
Ion Ratio Lower Upper
91 100
106 58.3 0.0 0.0#

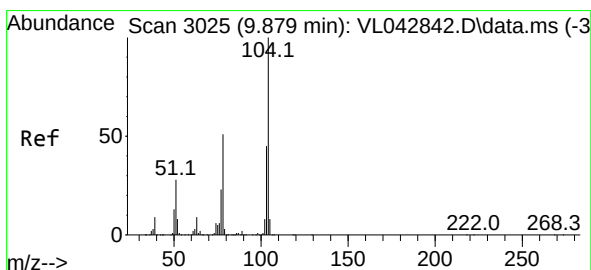
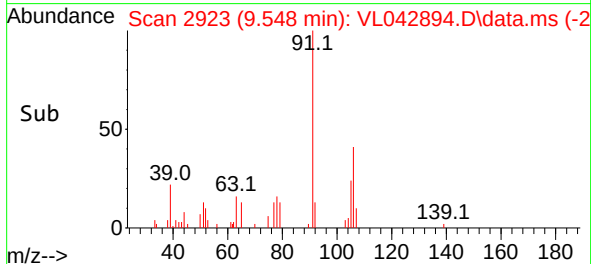
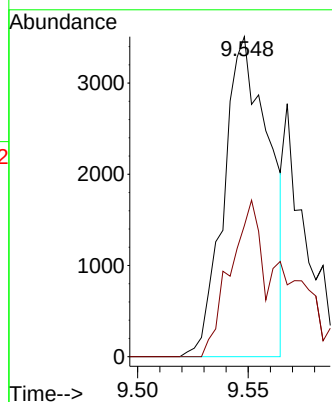
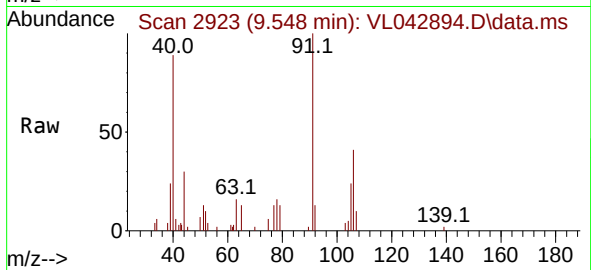




#60
o-Xylene
Concen: 0.129 ppbv
RT: 9.548 min Scan# 29
Delta R.T. -0.424 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

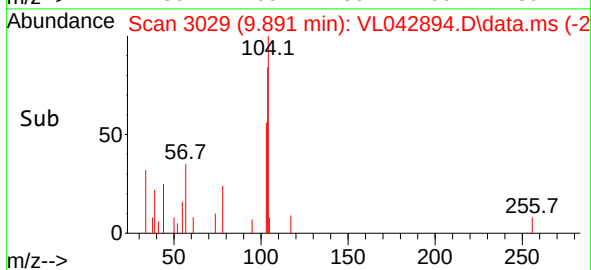
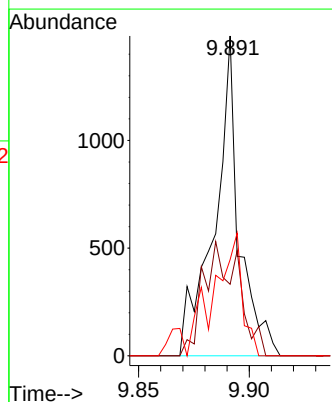
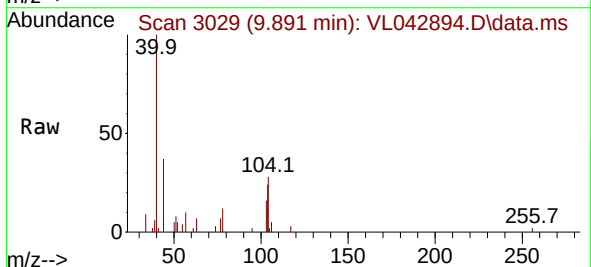
Instrument :
MSVOA_L
ClientSampleId :

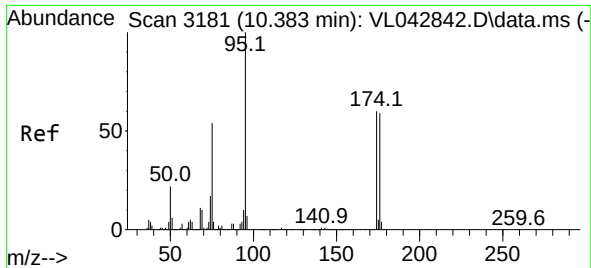
Tgt Ion: 91 Resp: 4992
Ion Ratio Lower Upper
91 100
106 58.3 21.8 65.4



#61
Styrene
Concen: 0.063 ppbv
RT: 9.891 min Scan# 3029
Delta R.T. 0.013 min
Lab File: VL042894.D
Acq: 04 Sep 2025 17:29

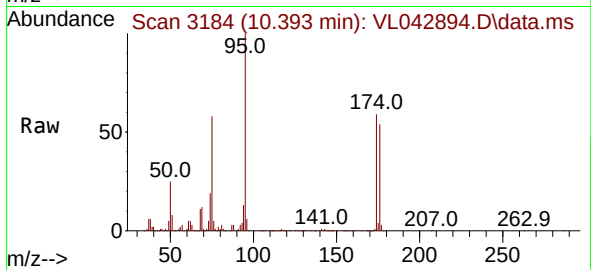
Tgt Ion: 104 Resp: 1151
Ion Ratio Lower Upper
104 100
78 50.1 40.6 61.0
103 49.5 37.7 56.5





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.320 ppbv
 RT: 10.393 min Scan# 31
 Delta R.T. 0.010 min
 Lab File: VL042894.D
 Acq: 04 Sep 2025 17:29

Instrument :
 MSVOA_L
 ClientSampleId :



Tgt Ion:	95	Resp:	215513
Ion	Ratio	Lower	Upper
95	100		
174	56.0	48.4	72.6
175	4.2	3.8	5.8

