

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL120225\
 Data File : VL043295.D
 Acq On : 02 Dec 2025 12:53
 Operator : SY/MD
 Sample : QC112525 CAN 10597
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 QC112525 CAN 10597

Quant Time: Dec 03 00:05:52 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

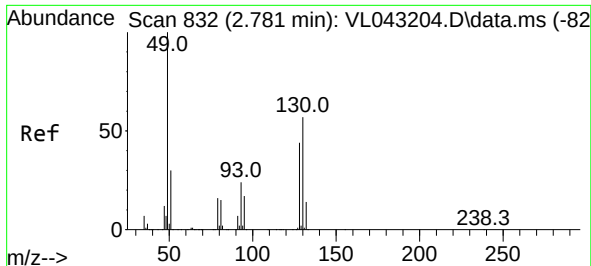
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.797	49	131086	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.972	114	334652	10.000	ppbv	0.02
55) Chlorobenzene-d5	8.891	117	256513	10.000	ppbv	0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	177251	9.427	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.300%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.502	85	1975	0.107	ppbv #	82
3) Chlorodifluoromethane	1.479	51	2877	0.158	ppbv #	78
4) Chloromethane	1.538	50	840	0.122	ppbv #	63
9) Propene	1.492	41	1894	0.245	ppbv #	1
11) Trichlorofluoromethane	1.884	101	1124	0.063	ppbv #	82
13) Ethanol	1.729	45	8254	3.040	ppbv #	38
15) Acetone	1.842	43	40384	2.217	ppbv	99
16) 1,3-Butadiene	1.606	39	510	0.063	ppbv #	12
19) Isopropyl Alcohol	1.729	45	8254	0.802	ppbv #	50
20) Methylene Chloride	2.068	84	64219	12.134	ppbv	96
23) Vinyl Acetate	2.479	43	1292	0.059	ppbv #	8
25) Ethyl Acetate	2.836	43	77253	1.967	ppbv #	77
26) Hexane	2.836	57	112069	6.508	ppbv #	41
34) 2-Butanone	2.573	43	1892	0.080	ppbv #	86
36) Benzene	3.667	78	1298	0.041	ppbv #	90
39) 1,2-Dichloropropane	3.972	63	84414	7.197	ppbv #	24
41) Tetrahydrofuran	2.836	42	41012	3.144	ppbv #	50
53) Toluene	6.949	91	1505	0.040	ppbv #	21

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

Quant Time: Dec 03 00:05:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Nov 19 01:11:25 2025
Response via : Initial Calibration

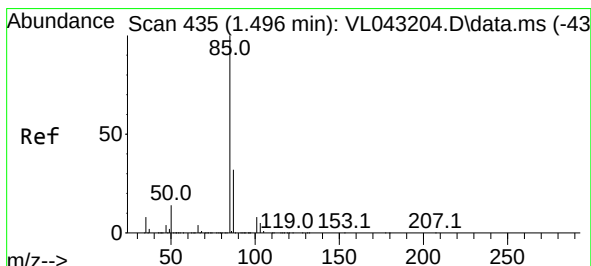
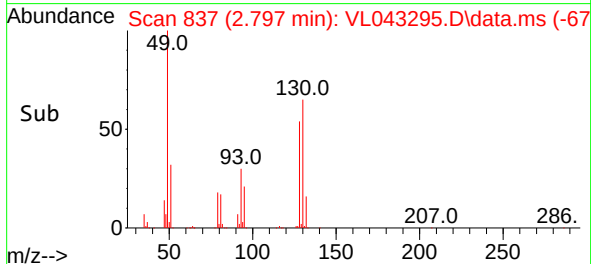
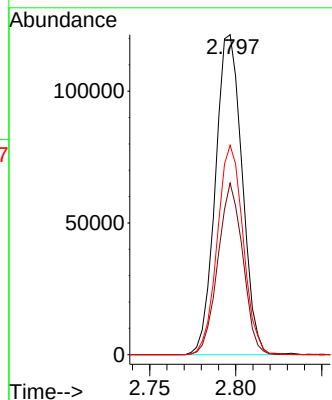
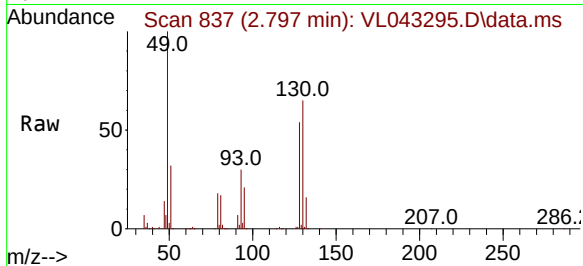




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 81
Delta R.T. 0.016 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

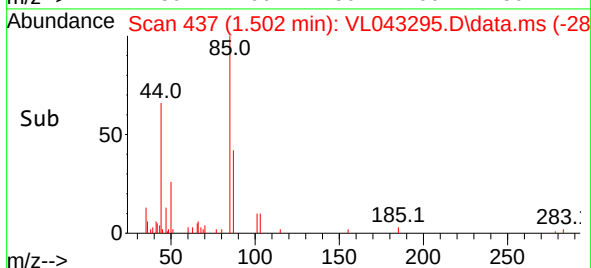
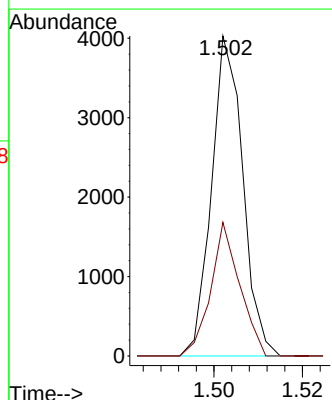
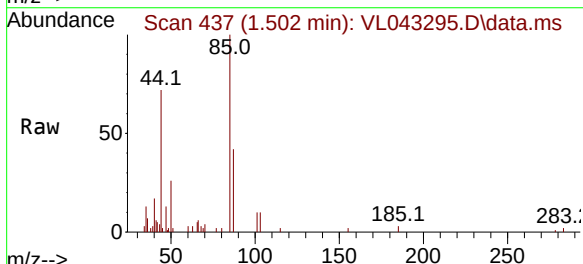
Instrument :
MSVOA_L
ClientSampleId :
QC112525 CAN 10597

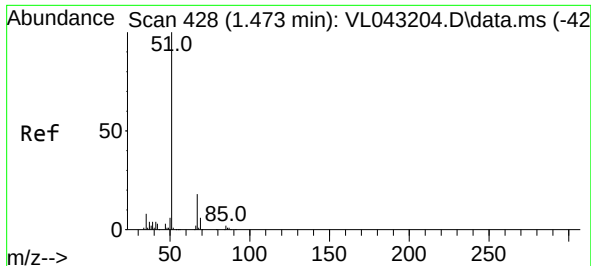
Tgt Ion: 49 Resp: 131086
Ion Ratio Lower Upper
49 100
128 49.9 23.0 69.0
130 63.4 29.9 89.7



#2
Dichlorodifluoromethane
Concen: 0.107 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.006 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Tgt Ion: 85 Resp: 1975
Ion Ratio Lower Upper
85 100
87 41.7 25.4 38.2#

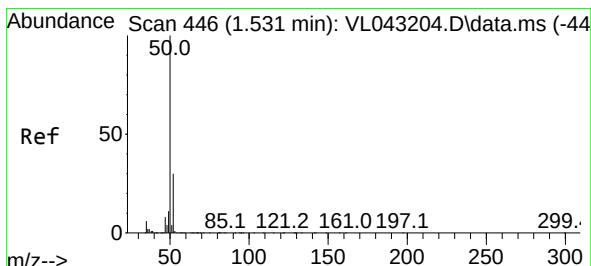
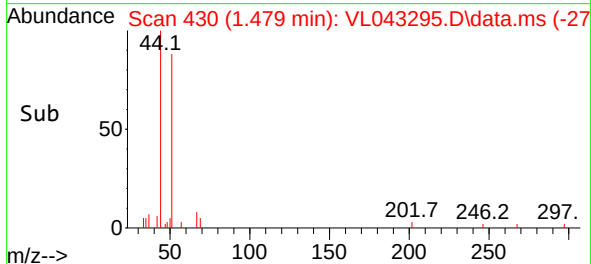
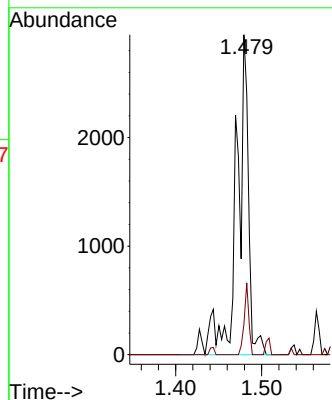
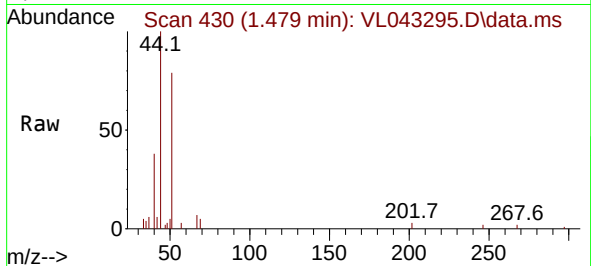




#3
Chlorodifluoromethane
Concen: 0.158 ppbv
RT: 1.479 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

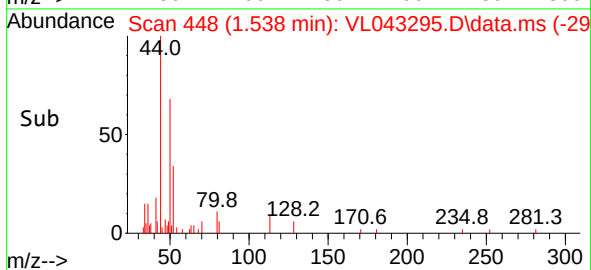
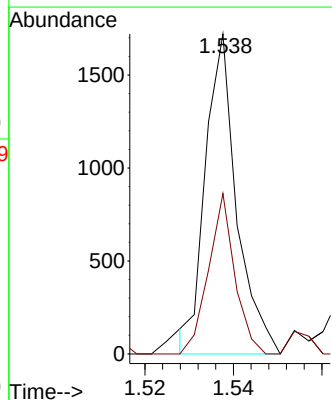
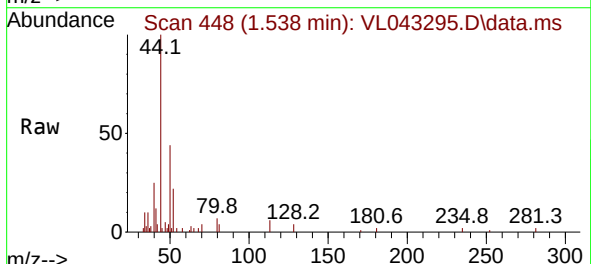
Instrument :
MSVOA_L
ClientSampleId :
QC112525 CAN 10597

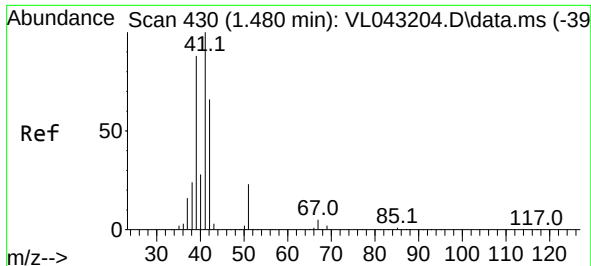
Tgt Ion: 51 Resp: 2877
Ion Ratio Lower Upper
51 100
67 8.6 14.9 22.3#



#4
Chloromethane
Concen: 0.122 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Tgt Ion: 50 Resp: 840
Ion Ratio Lower Upper
50 100
52 50.1 24.1 36.1#





#9

Propene

Concen: 0.245 ppbv

RT: 1.492 min Scan# 41

Delta R.T. 0.013 min

Lab File: VL043295.D

Acq: 02 Dec 2025 12:53

Instrument :

MSVOA_L

ClientSampleId :

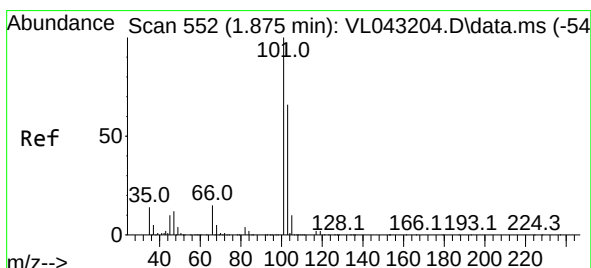
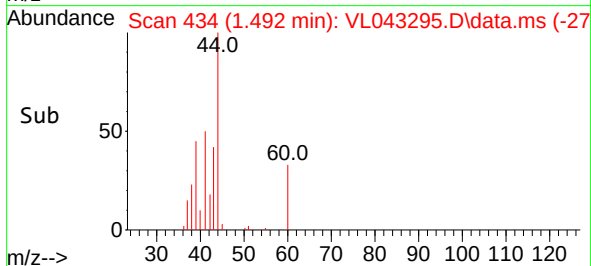
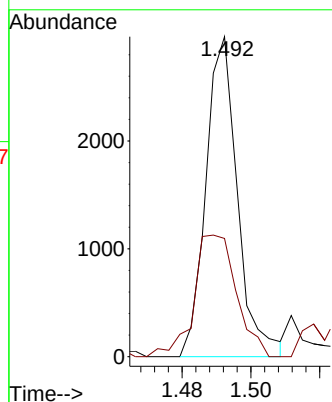
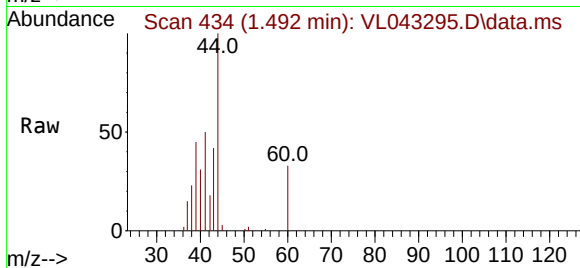
QC112525 CAN 10597

Tgt Ion: 41 Resp: 1894

Ion Ratio Lower Upper

41 100

42 52.3 3.7 5.5#



#11

Trichlorofluoromethane

Concen: 0.063 ppbv

RT: 1.884 min Scan# 555

Delta R.T. 0.009 min

Lab File: VL043295.D

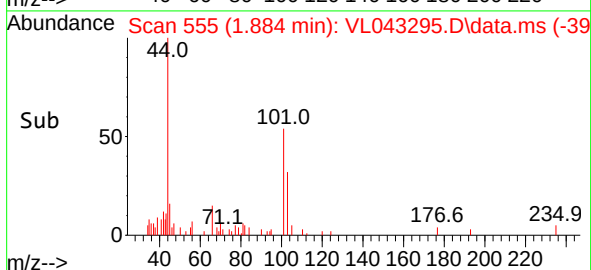
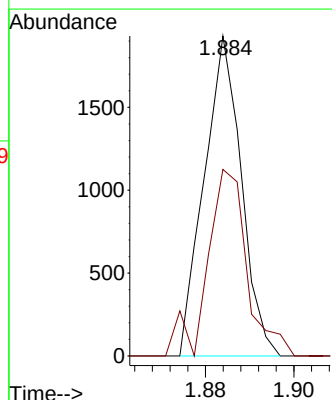
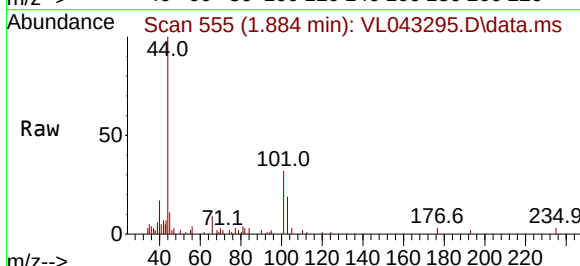
Acq: 02 Dec 2025 12:53

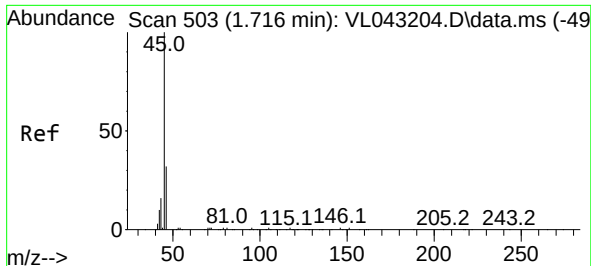
Tgt Ion:101 Resp: 1124

Ion Ratio Lower Upper

101 100

103 51.5 52.6 79.0#

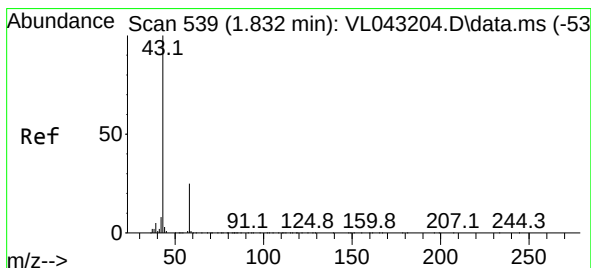
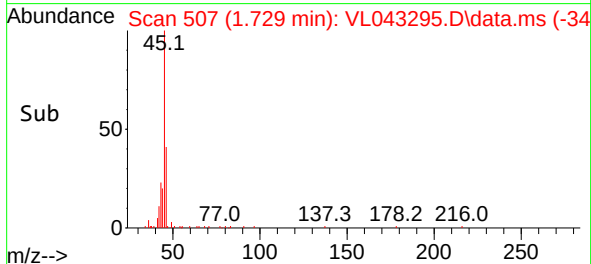
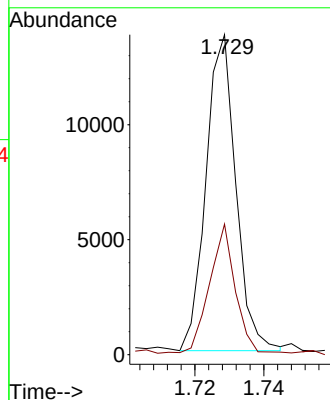
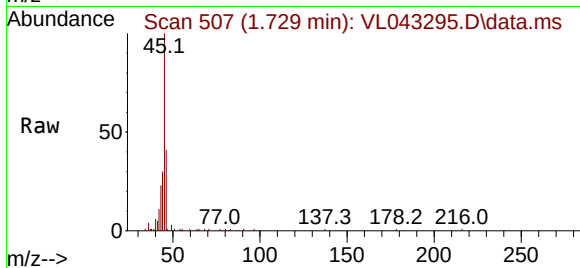




#13
 Ethanol
 Concen: 3.040 ppbv
 RT: 1.729 min Scan# 50
 Delta R.T. 0.013 min
 Lab File: VL043295.D
 Acq: 02 Dec 2025 12:53

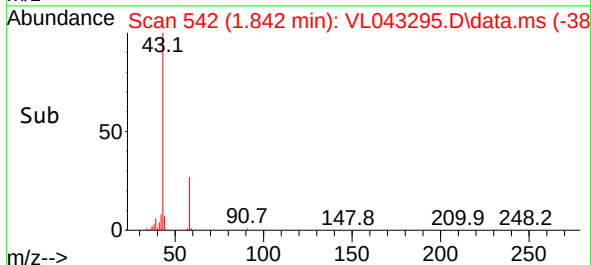
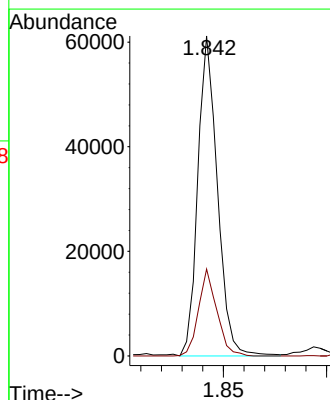
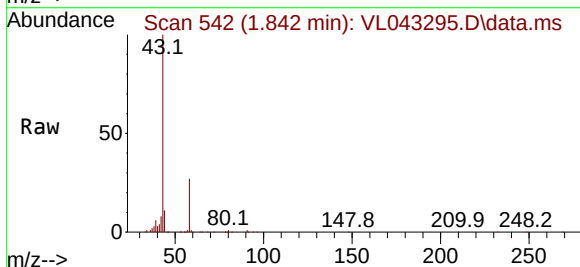
Instrument :
 MSVOA_L
 ClientSampleId :
 QC112525 CAN 10597

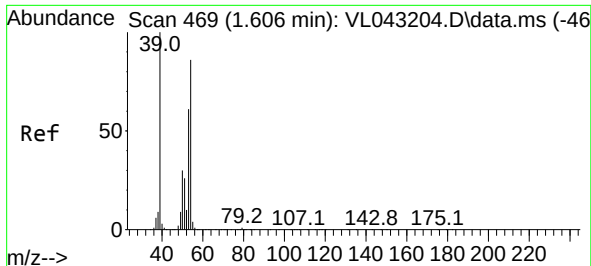
Tgt Ion: 45 Resp: 8254
 Ion Ratio Lower Upper
 45 100
 46 0.0 15.0 59.8#



#15
 Acetone
 Concen: 2.217 ppbv
 RT: 1.842 min Scan# 542
 Delta R.T. 0.009 min
 Lab File: VL043295.D
 Acq: 02 Dec 2025 12:53

Tgt Ion: 43 Resp: 40384
 Ion Ratio Lower Upper
 43 100
 58 25.3 20.7 31.1

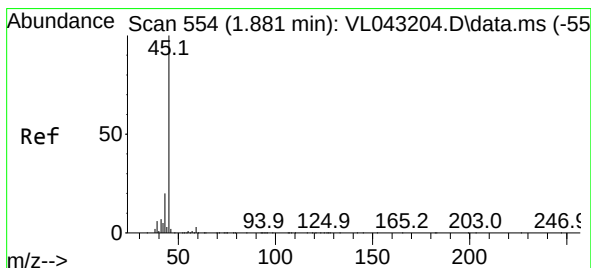
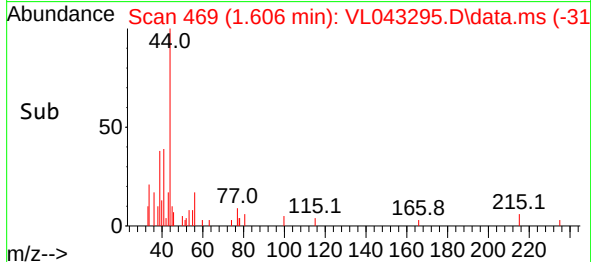
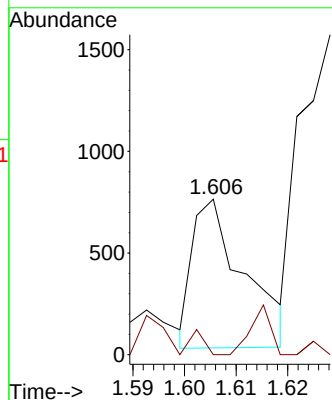
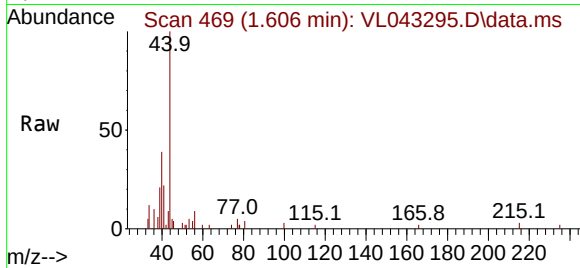




#16
1,3-Butadiene
Concen: 0.063 ppbv
RT: 1.606 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

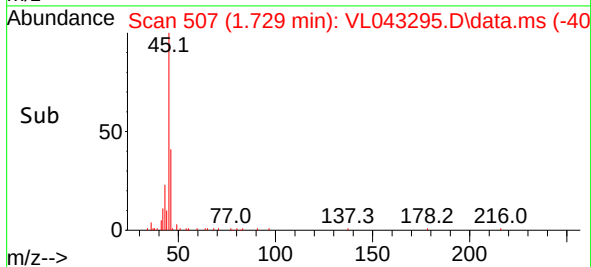
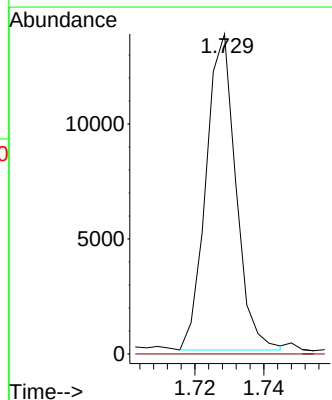
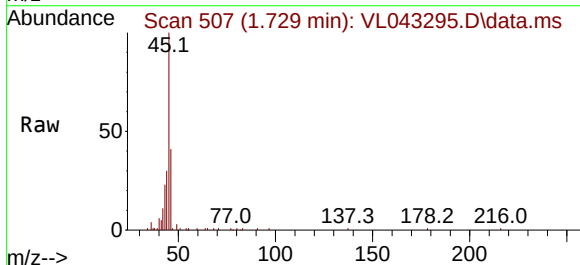
Instrument :
MSVOA_1
ClientSampleId :
QC112525 CAN 10597

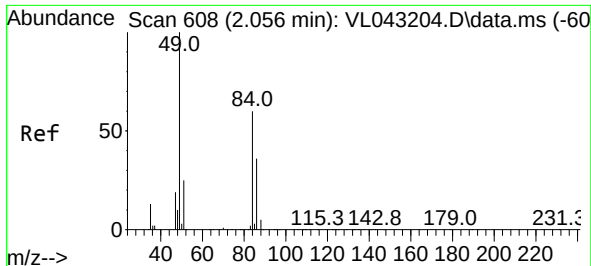
Tgt Ion: 39 Resp: 510
Ion Ratio Lower Upper
39 100
54 0.0 59.4 89.2#



#19
Isopropyl Alcohol
Concen: 0.802 ppbv
RT: 1.729 min Scan# 507
Delta R.T. -0.152 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Tgt Ion: 45 Resp: 8254
Ion Ratio Lower Upper
45 100
58 8.5 31.3 46.9#



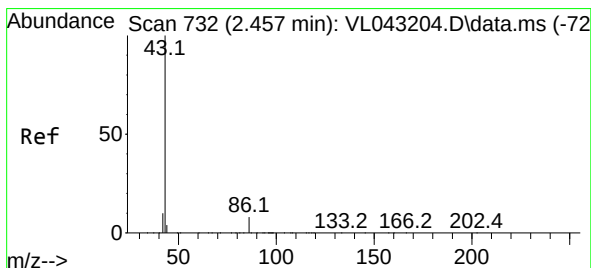
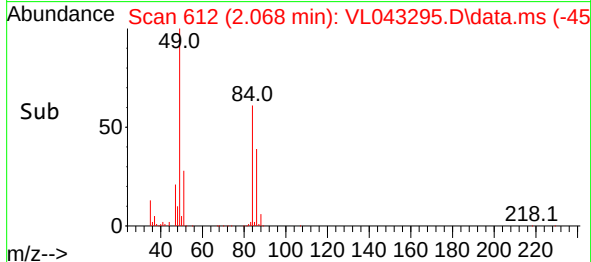
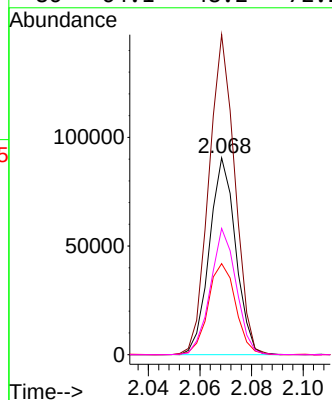
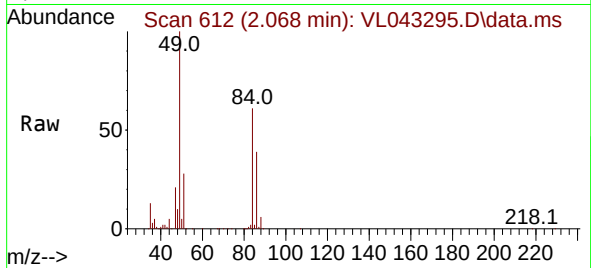


#20
Methylene Chloride
Concen: 12.134 ppbv
RT: 2.068 min Scan# 612
Delta R.T. 0.012 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Instrument :
MSVOA_1
ClientSampleId :
QC112525 CAN 10597

Tgt Ion: 84 Resp: 64219

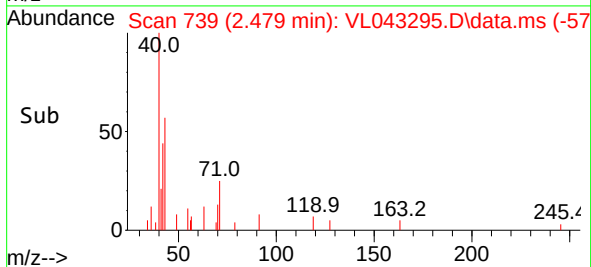
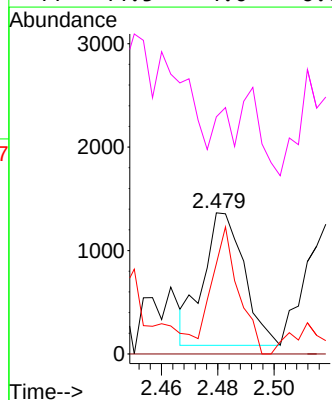
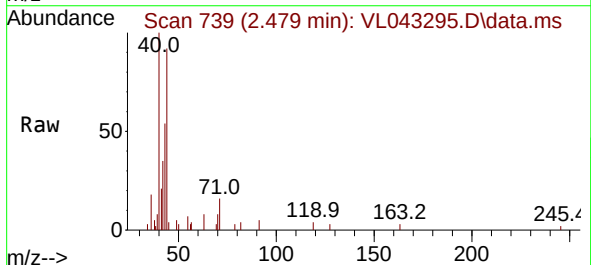
Ion	Ratio	Lower	Upper
84	100		
49	162.5	132.9	199.3
51	46.3	34.8	52.2
86	64.1	48.2	72.2

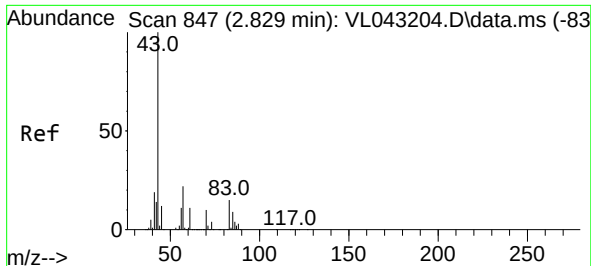


#23
Vinyl Acetate
Concen: 0.059 ppbv
RT: 2.479 min Scan# 739
Delta R.T. 0.022 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Tgt Ion: 43 Resp: 1292

Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.2	9.2#
42	59.0	8.0	12.0#
44	44.5	4.0	6.0#

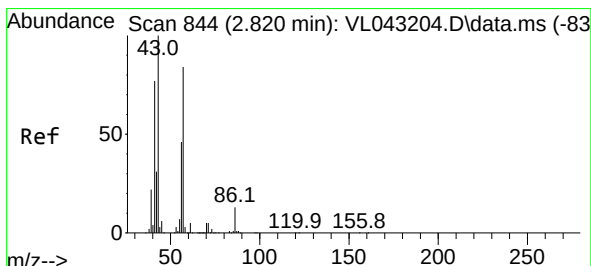
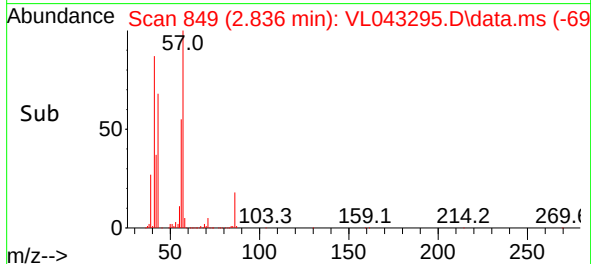
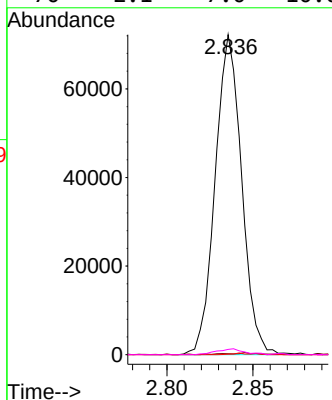
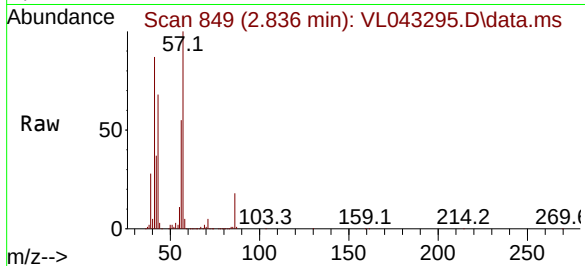




#25
Ethyl Acetate
Concen: 1.967 ppbv
RT: 2.836 min Scan# 849
Delta R.T. 0.006 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

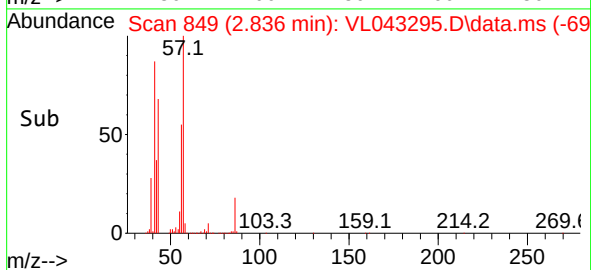
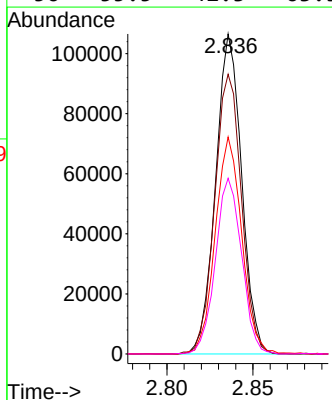
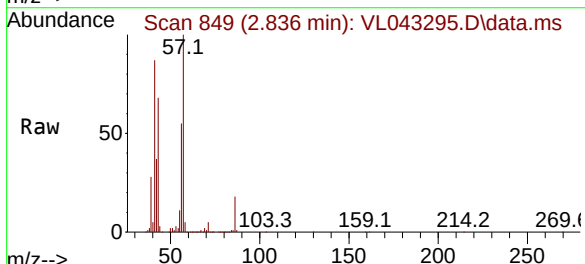
Instrument :
MSVOA_1
ClientSampleId :
QC112525 CAN 10597

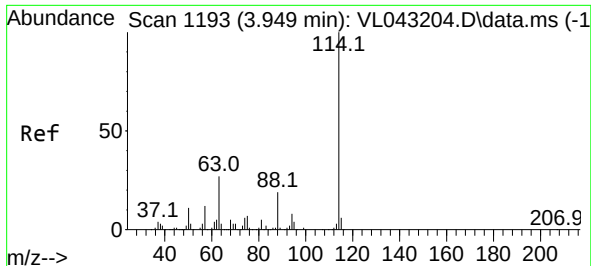
Tgt Ion: 43 Resp: 77253
Ion Ratio Lower Upper
43 100
45 0.7 8.1 12.1#
61 0.4 7.0 10.4#
70 2.1 7.0 10.6#



#26
Hexane
Concen: 6.508 ppbv
RT: 2.836 min Scan# 849
Delta R.T. 0.016 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Tgt Ion: 57 Resp: 112069
Ion Ratio Lower Upper
57 100
41 90.2 74.6 111.8
43 69.2 179.0 268.4#
56 55.5 42.3 63.5





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.972 min Scan# 11

Delta R.T. 0.022 min

Lab File: VL043295.D

Acq: 02 Dec 2025 12:53

Instrument :

MSVOA_1

ClientSampleId :

QC112525 CAN 10597

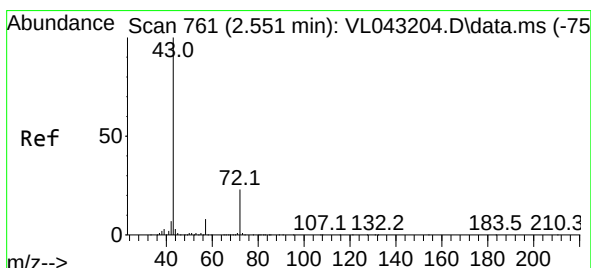
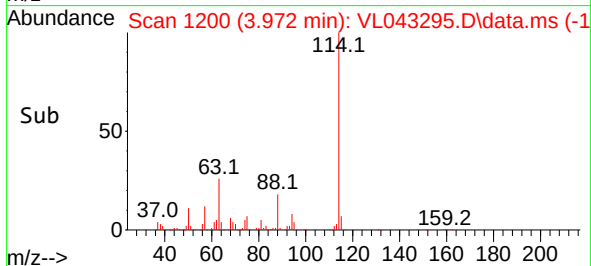
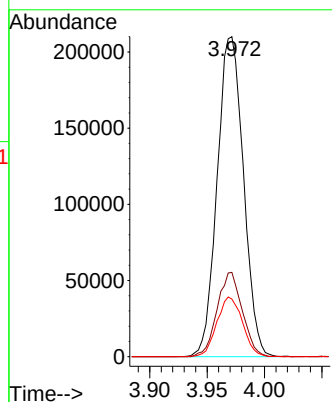
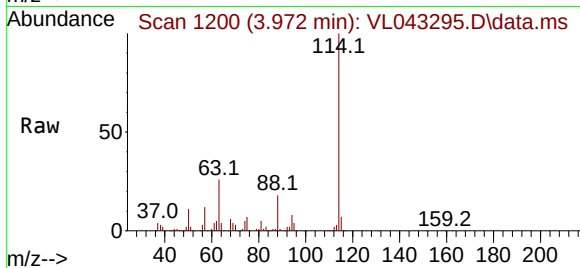
Tgt Ion:114 Resp: 334652

Ion Ratio Lower Upper

114 100

63 25.3 21.0 31.6

88 18.2 14.9 22.3



#34

2-Butanone

Concen: 0.080 ppbv

RT: 2.573 min Scan# 768

Delta R.T. 0.022 min

Lab File: VL043295.D

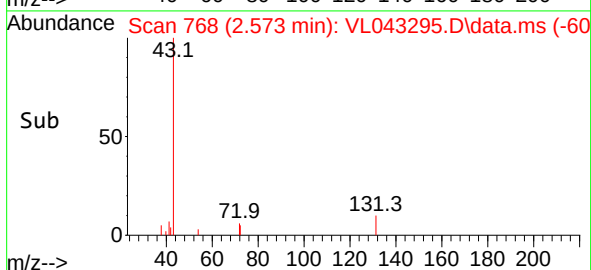
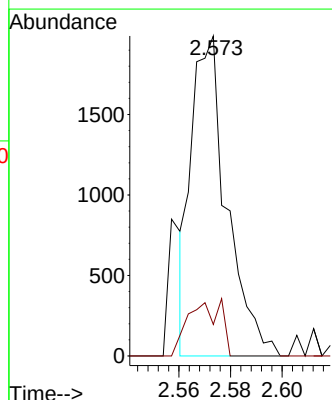
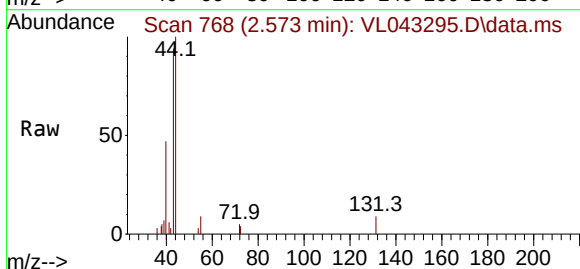
Acq: 02 Dec 2025 12:53

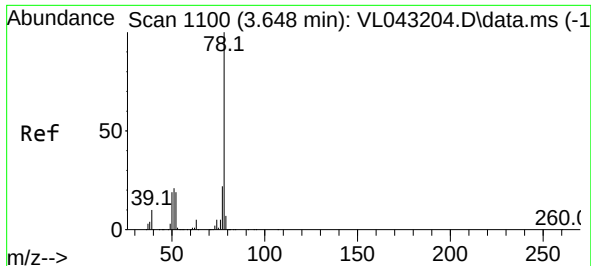
Tgt Ion: 43 Resp: 1892

Ion Ratio Lower Upper

43 100

72 16.0 18.1 27.1#

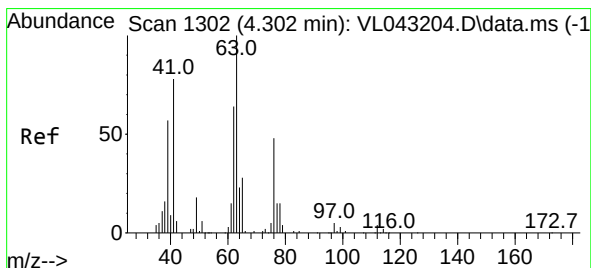
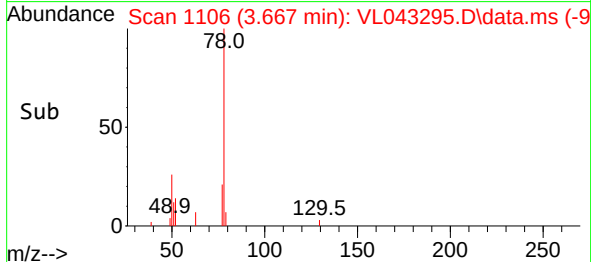
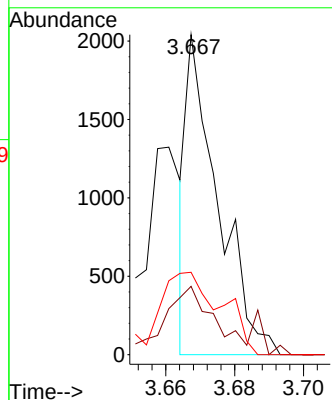
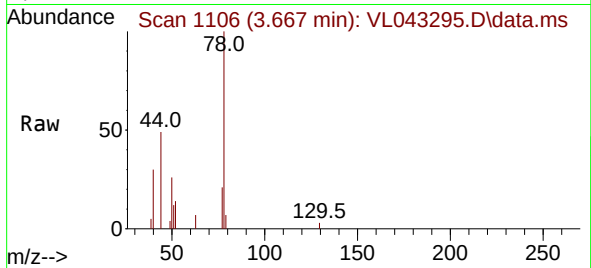




#36
Benzene
Concen: 0.041 ppbv
RT: 3.667 min Scan# 1100
Delta R.T. 0.019 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

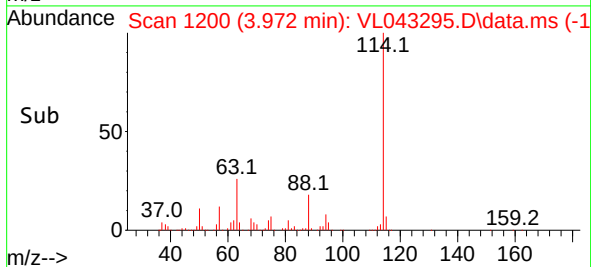
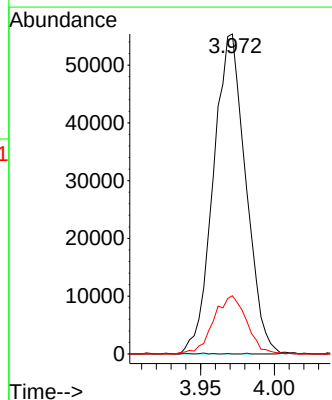
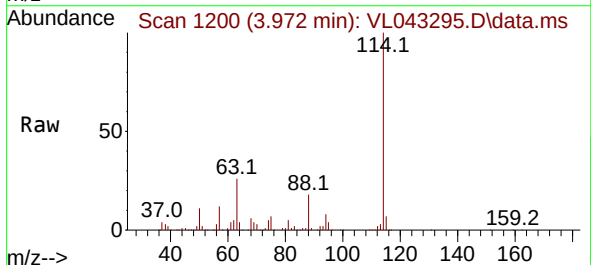
Instrument :
MSVOA_1
ClientSampleId :
QC112525 CAN 10597

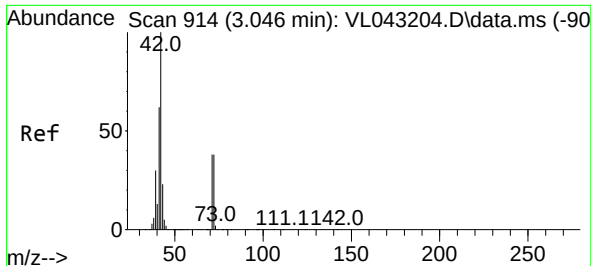
Tgt Ion: 78 Resp: 1298
Ion Ratio Lower Upper
78 100
77 18.4 17.5 26.3
50 25.8 15.5 23.3#



#39
1,2-Dichloropropane
Concen: 7.197 ppbv
RT: 3.972 min Scan# 1200
Delta R.T. -0.330 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Tgt Ion: 63 Resp: 84414
Ion Ratio Lower Upper
63 100
41 0.0 62.6 93.8#
62 17.9 51.0 76.6#

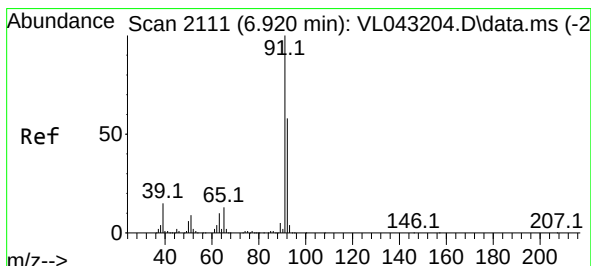
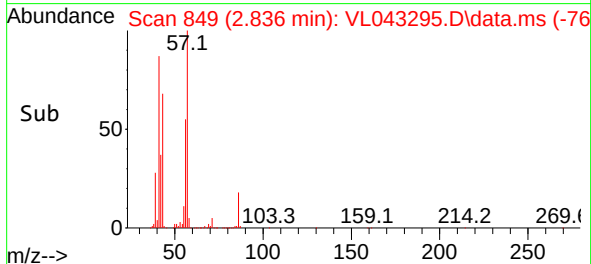
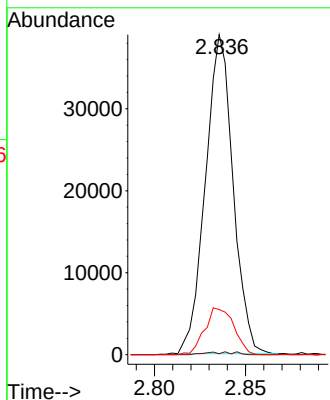
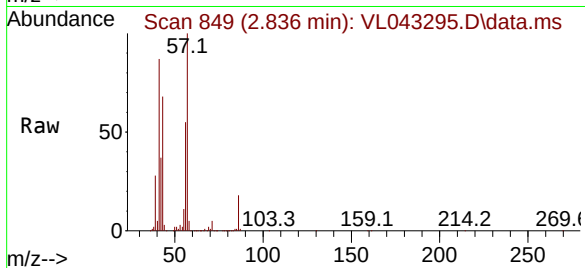




#41
Tetrahydrofuran
Concen: 3.144 ppbv
RT: 2.836 min Scan# 841
Delta R.T. -0.211 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

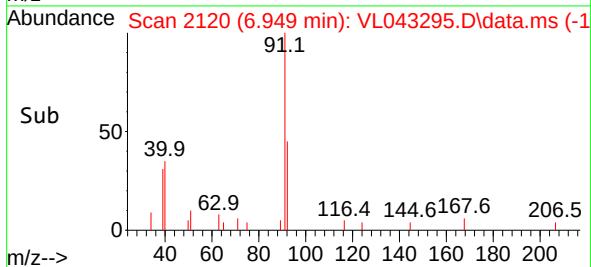
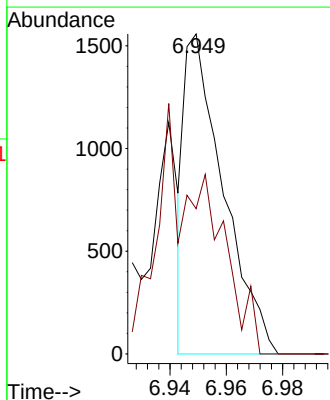
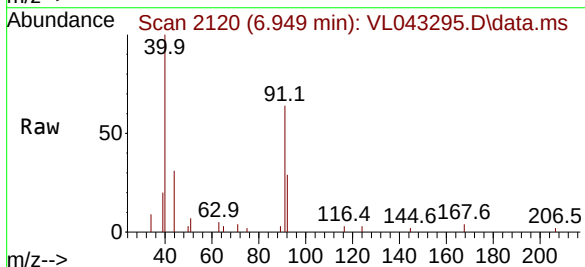
Instrument :
MSVOA_L
ClientSampleId :
QC112525 CAN 10597

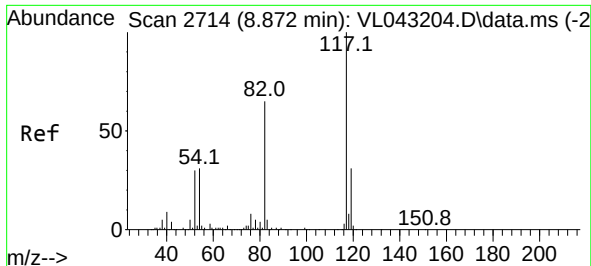
Tgt Ion: 42 Resp: 41012
Ion Ratio Lower Upper
42 100
72 0.9 30.6 46.0#
71 15.5 30.5 45.7#



#53
Toluene
Concen: 0.040 ppbv
RT: 6.949 min Scan# 2120
Delta R.T. 0.029 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Tgt Ion: 91 Resp: 1505
Ion Ratio Lower Upper
91 100
92 0.0 47.4 71.0#

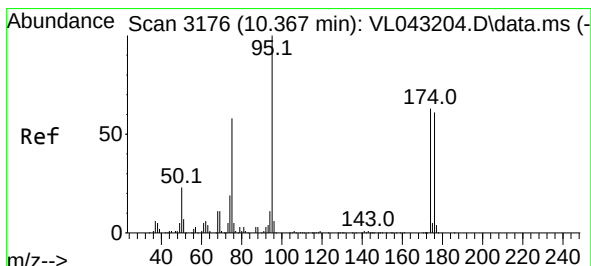
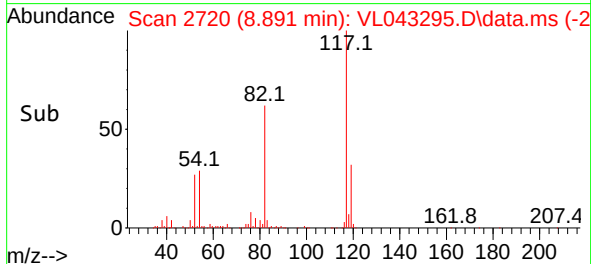
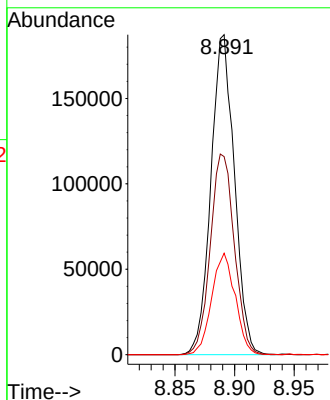
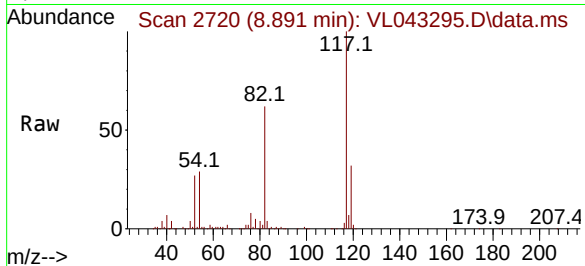




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.891 min Scan# 21
Delta R.T. 0.019 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Instrument :
MSVOA_1
ClientSampleId :
QC112525 CAN 10597

Tgt Ion:117 Resp: 256513
Ion Ratio Lower Upper
117 100
82 64.3 56.1 84.1
119 31.9 25.0 37.6



#68
1-Bromo-4-Fluorobenzene
Concen: 9.427 ppbv
RT: 10.383 min Scan# 3181
Delta R.T. 0.016 min
Lab File: VL043295.D
Acq: 02 Dec 2025 12:53

Tgt Ion: 95 Resp: 177251
Ion Ratio Lower Upper
95 100
174 67.3 50.2 75.2
175 5.0 4.1 6.1

