

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111925\
 Data File : VL043242.D
 Acq On : 19 Nov 2025 16:39
 Operator : SY/MD
 Sample : Q3626-08 2X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 12-SG-2

Quant Time: Nov 20 00:07:09 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

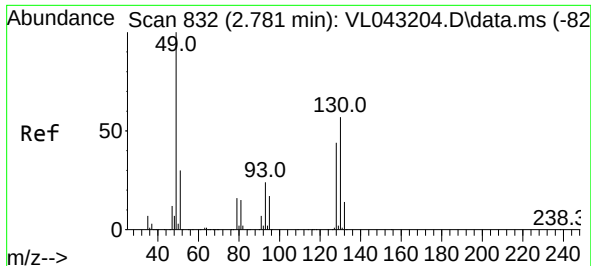
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.780	49	105972	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.949	114	291718	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.872	117	225662	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.367	95	163410	9.879	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.496	85	4114	0.275	ppbv	90
4) Chloromethane	1.531	50	1064	0.190	ppbv #	30
9) Propene	1.486	41	2573	0.412	ppbv #	1
11) Trichlorofluoromethane	1.874	101	1791	0.124	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.140	101	427	0.038	ppbv	86
13) Ethanol	1.719	45	21091	9.609	ppbv	98
15) Acetone	1.832	43	203704	13.836	ppbv	98
16) 1,3-Butadiene	1.599	39	1671	0.255	ppbv #	22
17) tert-Butyl alcohol	2.042	59	1619	0.084	ppbv #	87
19) Isopropyl Alcohol	1.884	45	9293	1.117	ppbv #	1
20) Methylene Chloride	2.059	84	72858	17.373	ppbv	94
23) Vinyl Acetate	2.470	43	1750	0.098	ppbv #	67
25) Ethyl Acetate	2.823	43	110568	3.482	ppbv #	77
26) Hexane	2.823	57	164266	11.799	ppbv #	41
27) Carbon Disulfide	2.146	76	825	0.058	ppbv #	61
34) 2-Butanone	2.554	43	5323	0.258	ppbv	93
36) Benzene	3.648	78	3190	0.114	ppbv #	94
39) 1,2-Dichloropropane	3.949	63	72355	7.076	ppbv #	24
41) Tetrahydrofuran	2.823	42	57567	5.062	ppbv #	52
52) Tetrachloroethene	8.215	164	96249	9.262	ppbv	98
53) Toluene	6.923	91	2201	0.067	ppbv #	1
60) o-Xylene	9.522	91	2308	0.066	ppbv	73
61) Styrene	9.862	104	954	0.063	ppbv #	84

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

Quant Time: Nov 20 00:07:09 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

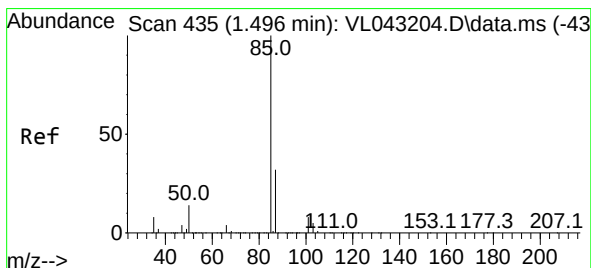
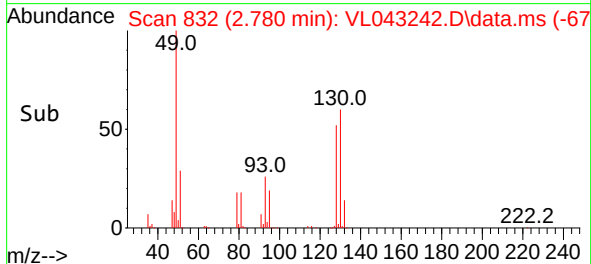
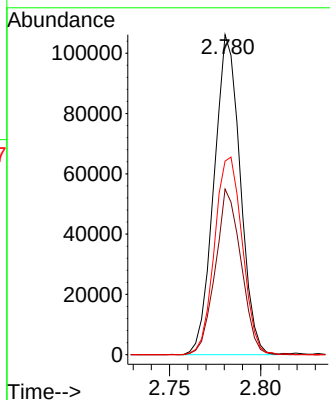
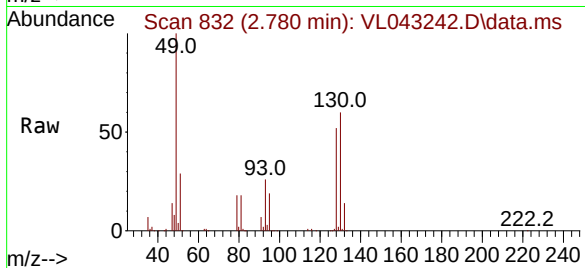




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 832
Delta R.T. -0.001 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

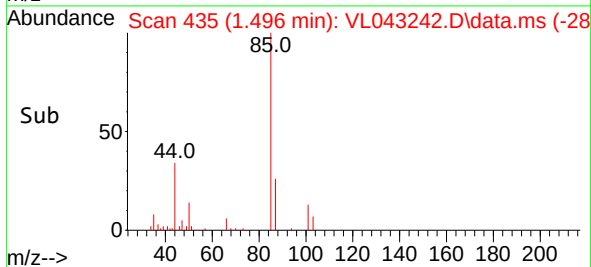
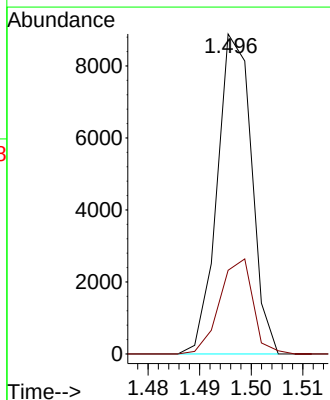
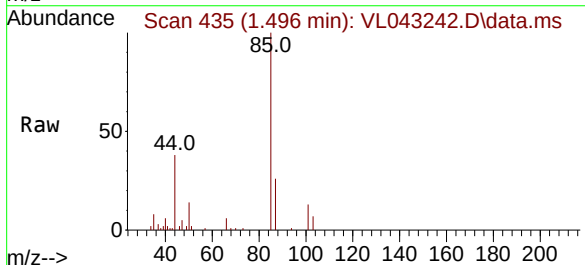
Instrument :
MSVOA_L
ClientSampleId :
12-SG-2

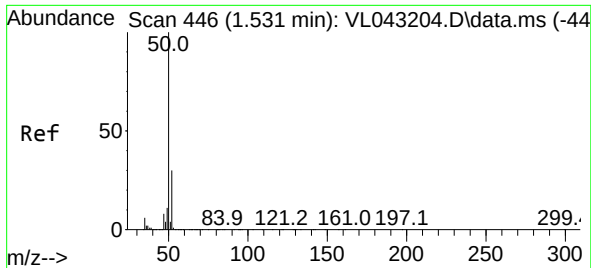
Tgt Ion: 49 Resp: 105972
Ion Ratio Lower Upper
49 100
128 50.7 23.0 69.0
130 65.5 29.9 89.7



#2
Dichlorodifluoromethane
Concen: 0.275 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 85 Resp: 4114
Ion Ratio Lower Upper
85 100
87 26.2 25.4 38.2

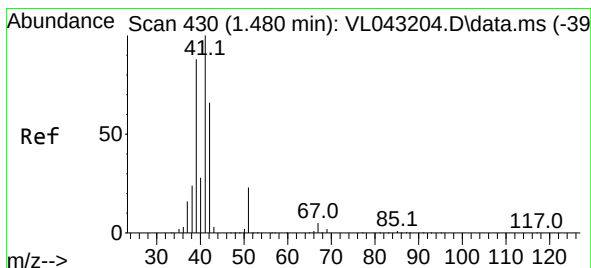
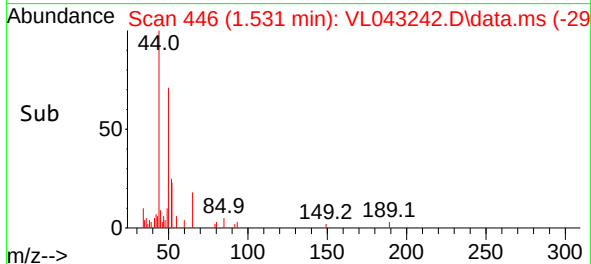
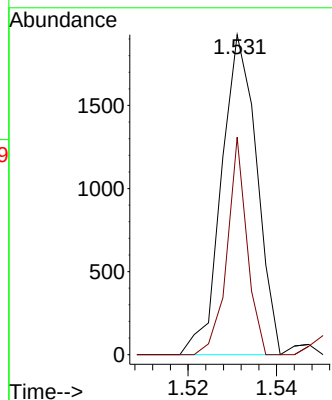
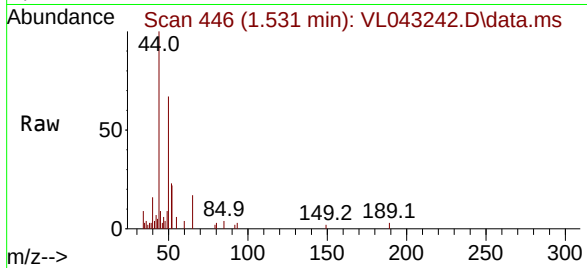




#4
Chloromethane
Concen: 0.190 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

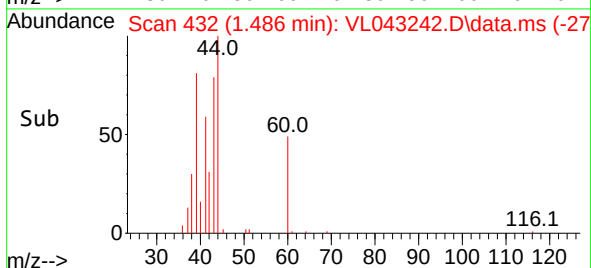
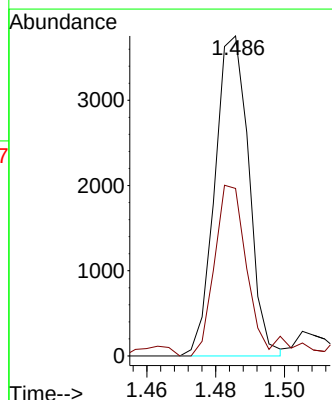
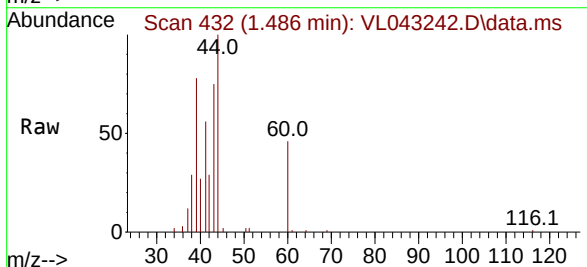
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

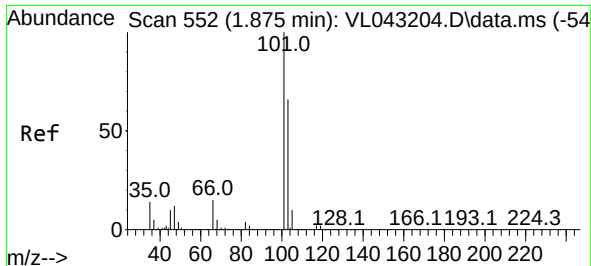
Tgt Ion: 50 Resp: 1064
Ion Ratio Lower Upper
50 100
52 68.0 24.1 36.1#



#9
Propene
Concen: 0.412 ppbv
RT: 1.486 min Scan# 432
Delta R.T. 0.006 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 41 Resp: 2573
Ion Ratio Lower Upper
41 100
42 57.6 3.7 5.5#

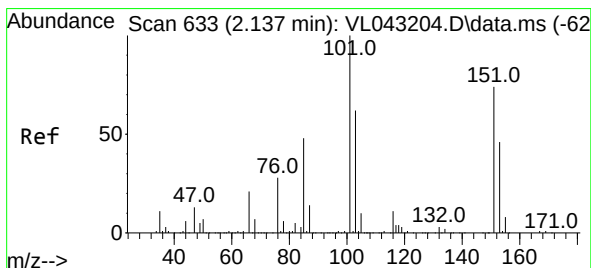
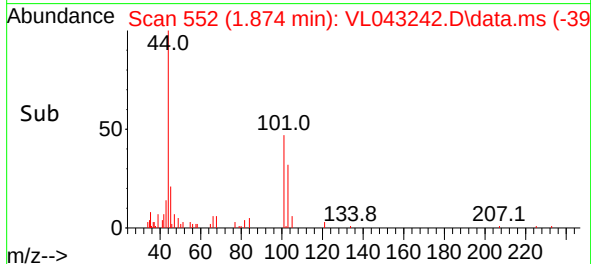
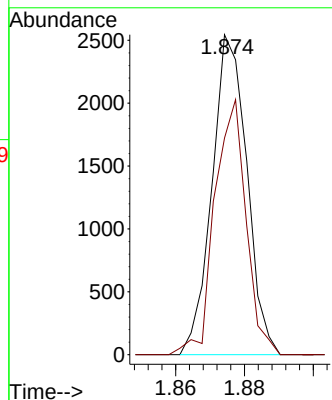
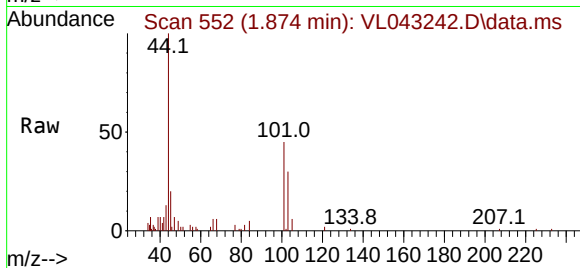




#11
 Trichlorofluoromethane
 Concen: 0.124 ppbv
 RT: 1.874 min Scan# 51
 Delta R.T. -0.000 min
 Lab File: VL043242.D
 Acq: 19 Nov 2025 16:39

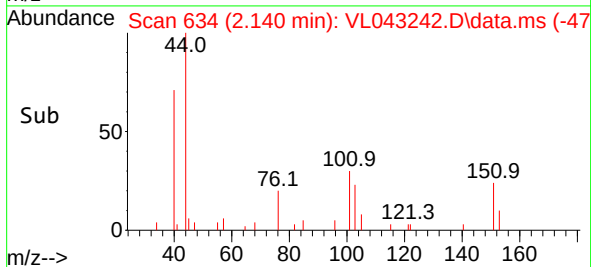
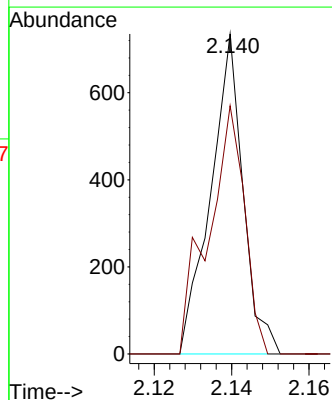
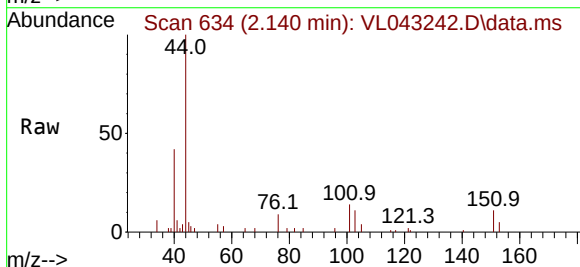
Instrument :
 MSVOA_1
 ClientSampleId :
 12-SG-2

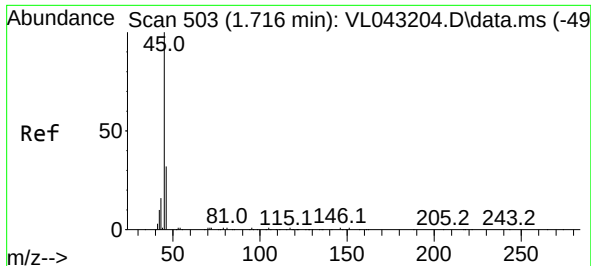
Tgt Ion:101 Resp: 1791
 Ion Ratio Lower Upper
 101 100
 103 67.7 52.6 79.0



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.038 ppbv
 RT: 2.140 min Scan# 634
 Delta R.T. 0.003 min
 Lab File: VL043242.D
 Acq: 19 Nov 2025 16:39

Tgt Ion:101 Resp: 427
 Ion Ratio Lower Upper
 101 100
 151 85.9 59.2 88.8

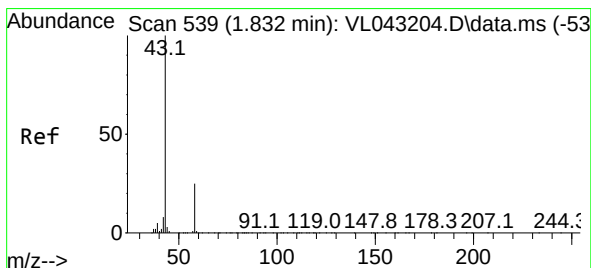
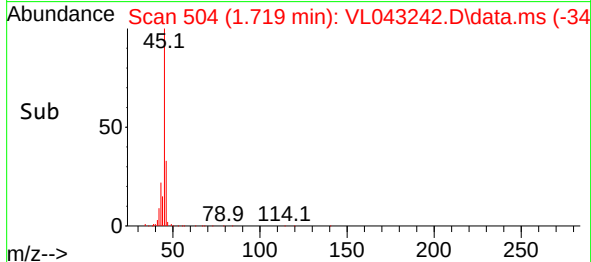
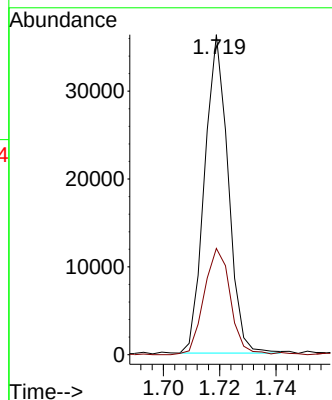
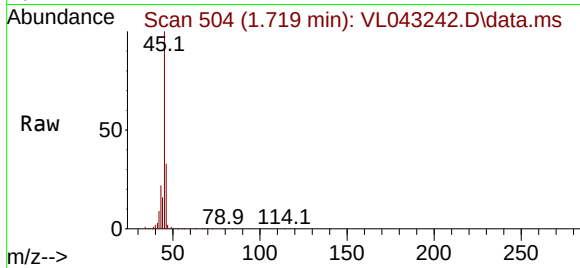




#13
Ethanol
Concen: 9.609 ppbv
RT: 1.719 min Scan# 503
Delta R.T. 0.003 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

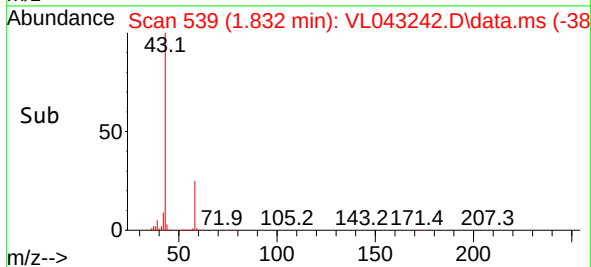
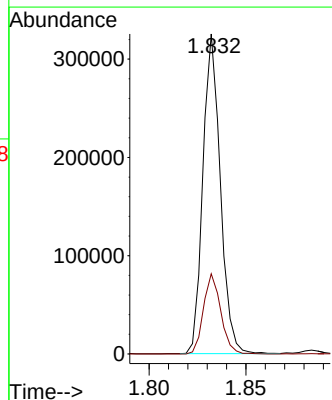
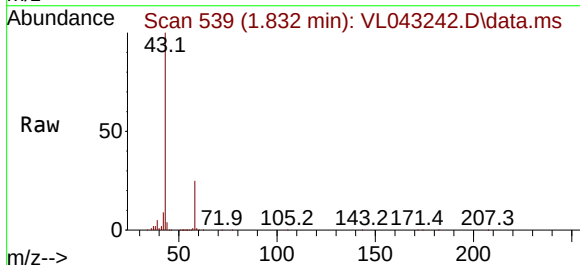
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

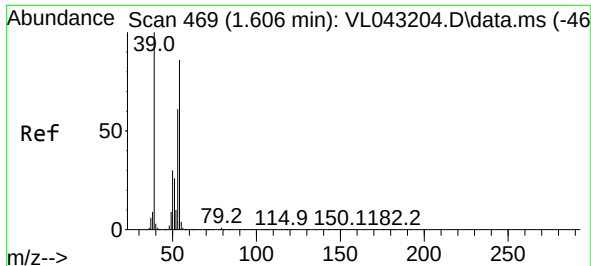
Tgt Ion: 45 Resp: 21091
Ion Ratio Lower Upper
45 100
46 38.4 15.0 59.8



#15
Acetone
Concen: 13.836 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 43 Resp: 203704
Ion Ratio Lower Upper
43 100
58 24.8 20.7 31.1

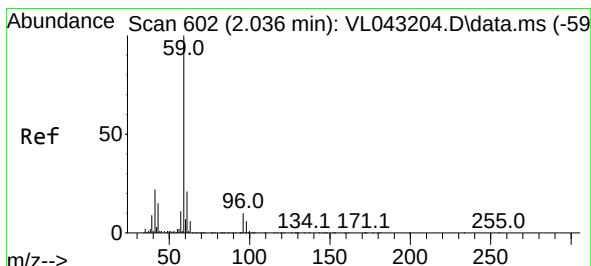
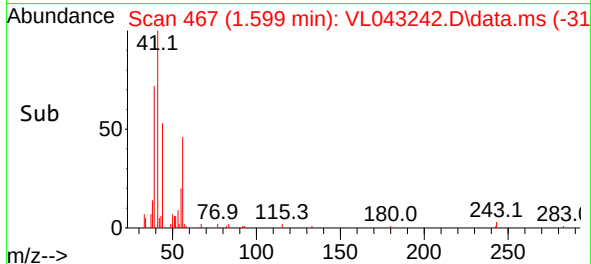
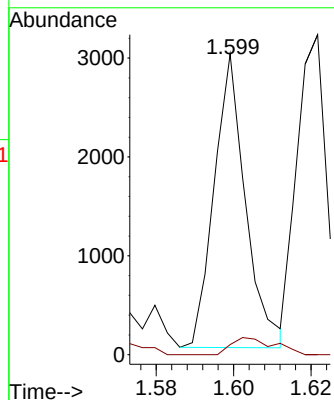
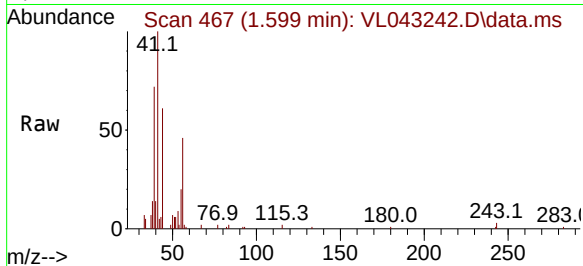




#16
1,3-Butadiene
Concen: 0.255 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

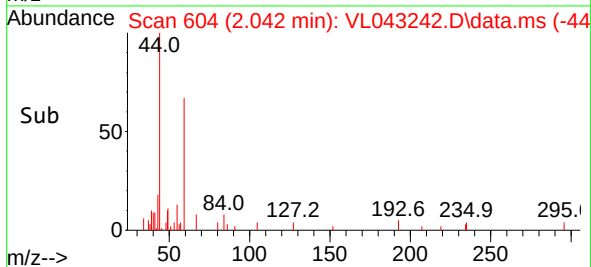
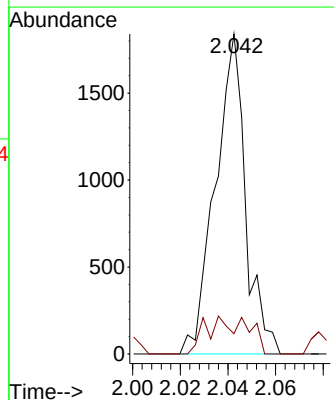
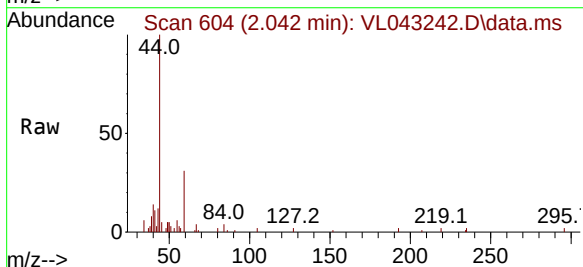
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

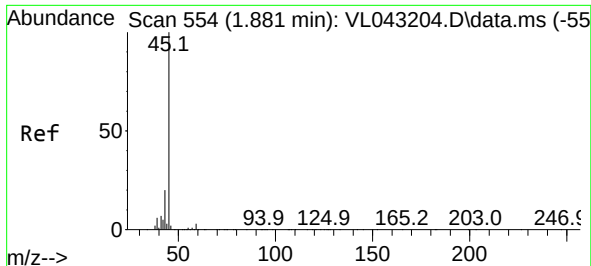
Tgt Ion: 39 Resp: 1671
Ion Ratio Lower Upper
39 100
54 8.0 59.4 89.2#



#17
tert-Butyl alcohol
Concen: 0.084 ppbv
RT: 2.042 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 59 Resp: 1619
Ion Ratio Lower Upper
59 100
57 16.2 9.0 13.4#

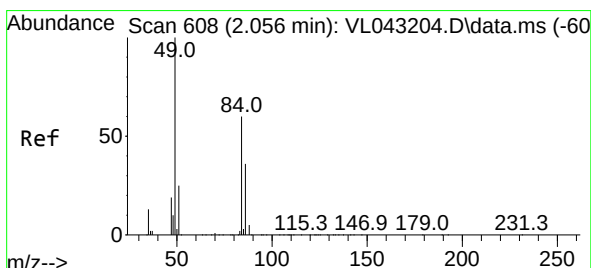
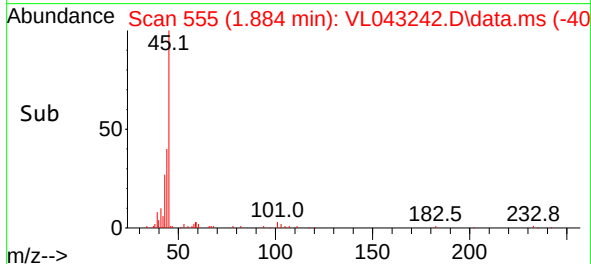
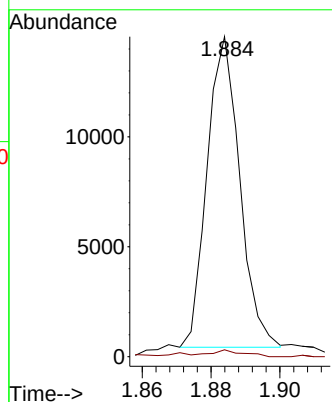
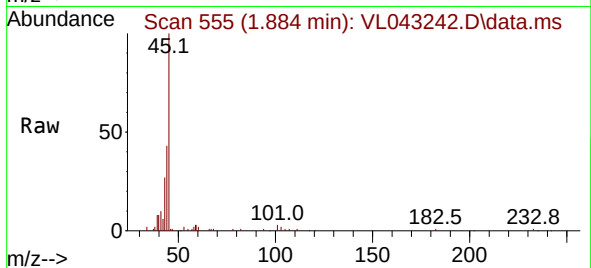




#19
Isopropyl Alcohol
Concen: 1.117 ppbv
RT: 1.884 min Scan# 511
Delta R.T. 0.003 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

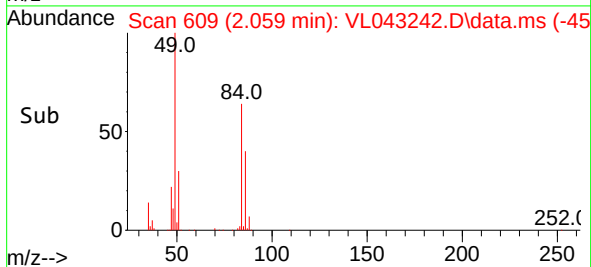
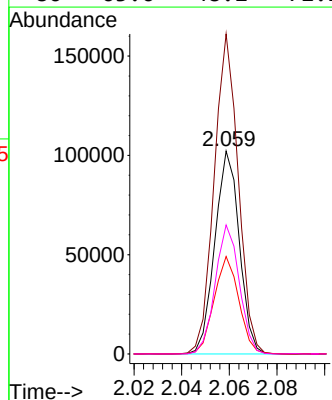
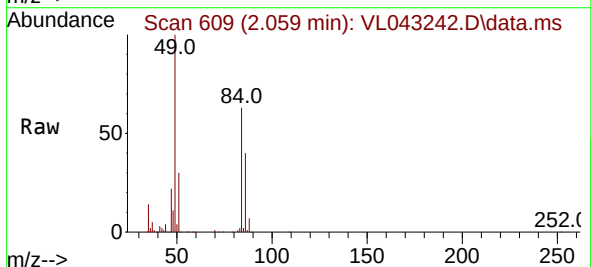
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

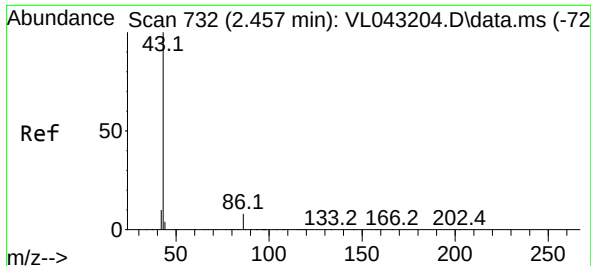
Tgt Ion: 45 Resp: 9293
Ion Ratio Lower Upper
45 100
58 544.2 31.3 46.9#



#20
Methylene Chloride
Concen: 17.373 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.003 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 84 Resp: 72858
Ion Ratio Lower Upper
84 100
49 157.6 132.9 199.3
51 47.9 34.8 52.2
86 63.6 48.2 72.2





#23

Vinyl Acetate

Concen: 0.098 ppbv

RT: 2.470 min Scan# 71

Delta R.T. 0.013 min

Lab File: VL043242.D

Acq: 19 Nov 2025 16:39

Instrument :

MSVOA_1

ClientSampleId :

12-SG-2

Tgt Ion: 43 Resp: 1750

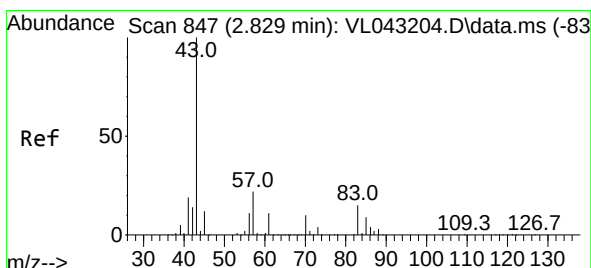
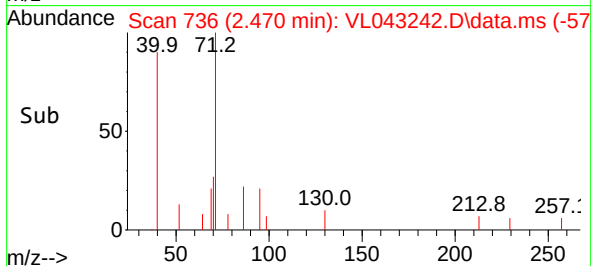
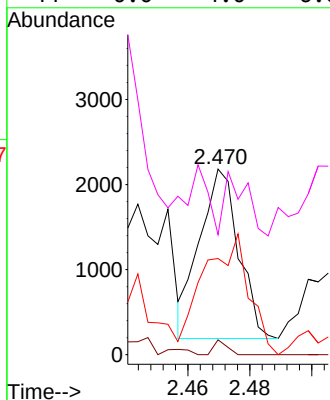
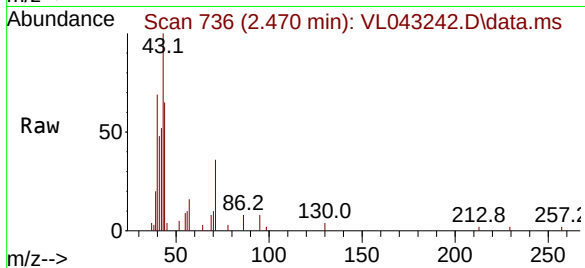
Ion Ratio Lower Upper

43 100

86 5.1 6.2 9.2#

42 33.2 8.0 12.0#

44 0.0 4.0 6.0#



#25

Ethyl Acetate

Concen: 3.482 ppbv

RT: 2.823 min Scan# 845

Delta R.T. -0.007 min

Lab File: VL043242.D

Acq: 19 Nov 2025 16:39

Tgt Ion: 43 Resp: 110568

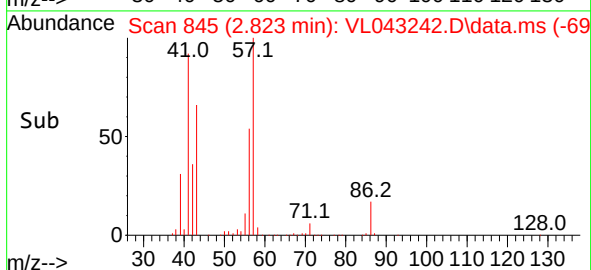
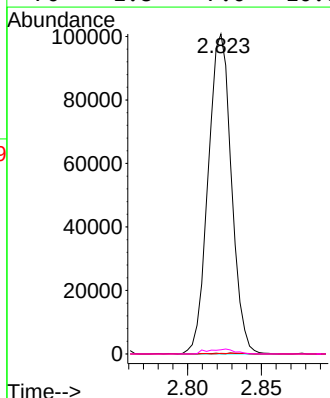
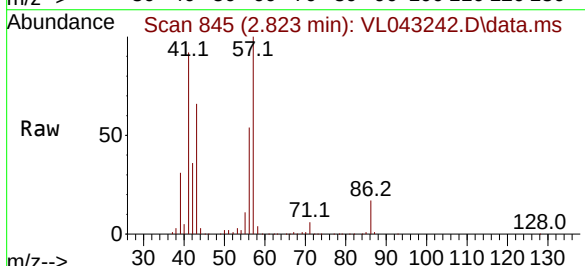
Ion Ratio Lower Upper

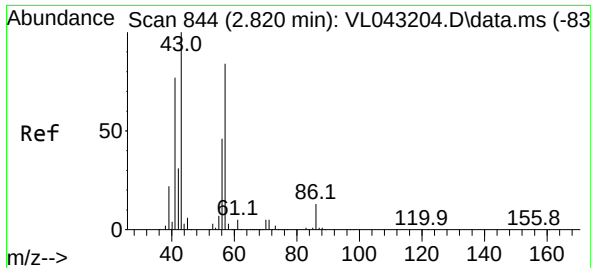
43 100

45 0.3 8.1 12.1#

61 0.3 7.0 10.4#

70 1.8 7.0 10.6#

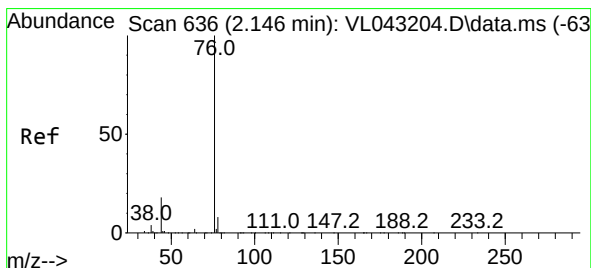
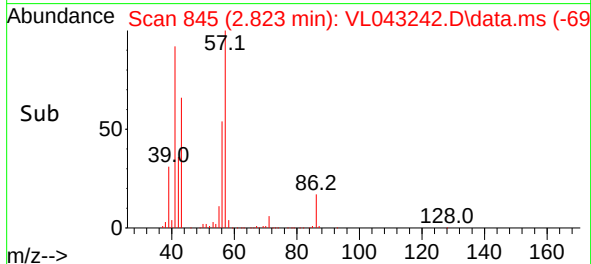
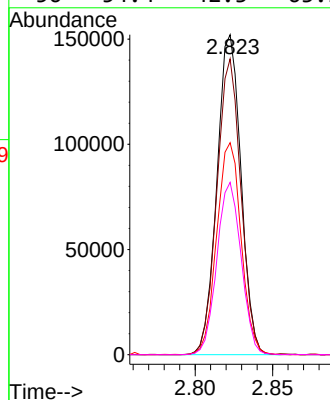
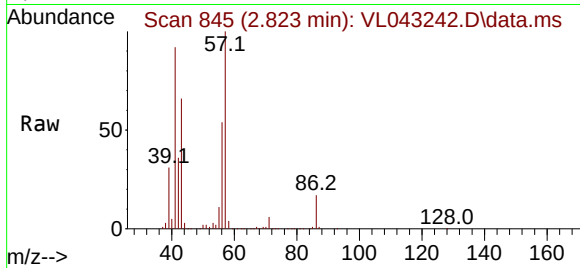




#26
Hexane
Concen: 11.799 ppbv
RT: 2.823 min Scan# 844
Delta R.T. 0.003 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

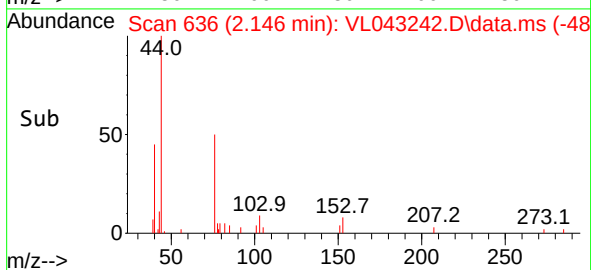
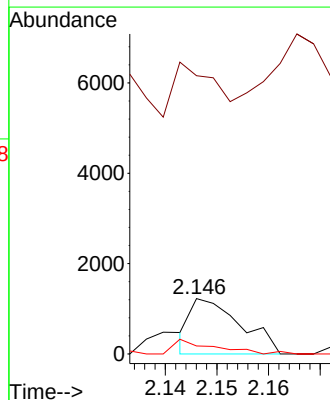
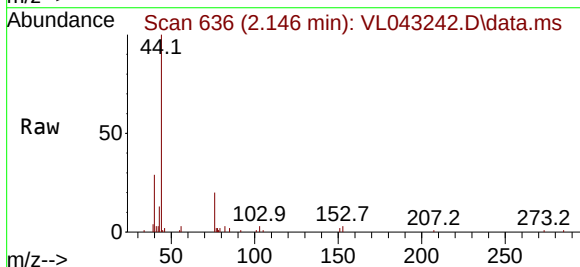
Instrument :
MSVOA_L
ClientSampleId :
12-SG-2

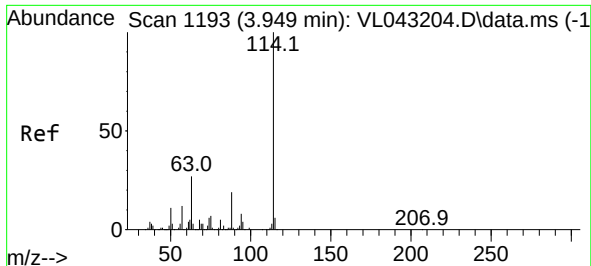
Tgt Ion: 57 Resp: 164266
Ion Ratio Lower Upper
57 100
41 92.6 74.6 111.8
43 67.4 179.0 268.4#
56 54.4 42.3 63.5



#27
Carbon Disulfide
Concen: 0.058 ppbv
RT: 2.146 min Scan# 636
Delta R.T. -0.000 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 76 Resp: 825
Ion Ratio Lower Upper
76 100
44 0.0 16.1 24.1#
78 24.6 9.6 14.4#

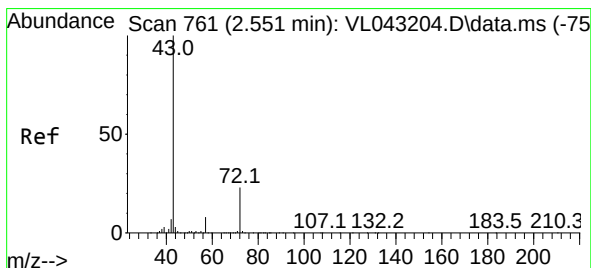
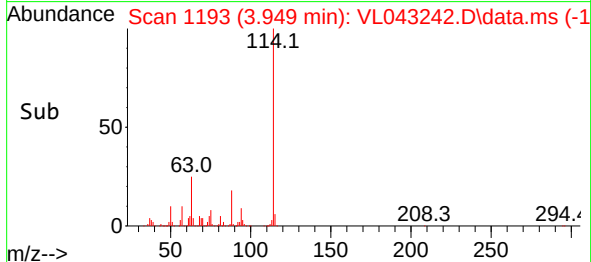
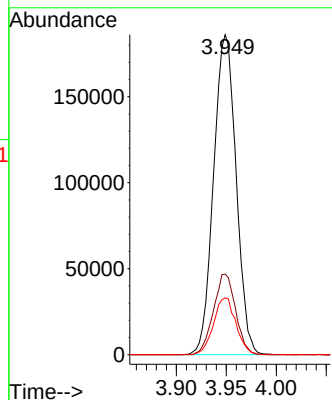
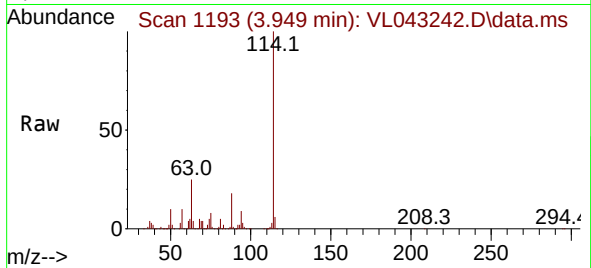




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.000 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

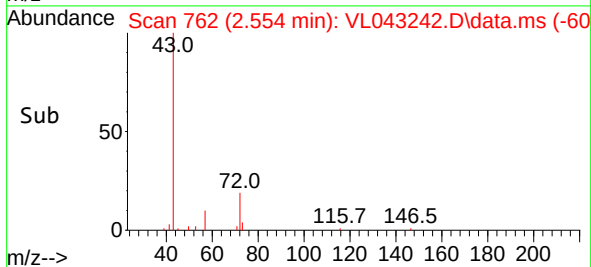
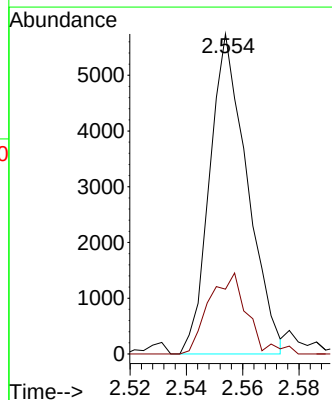
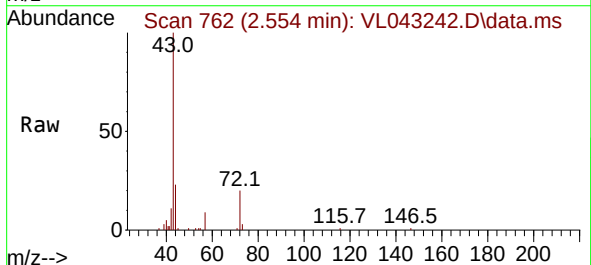
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

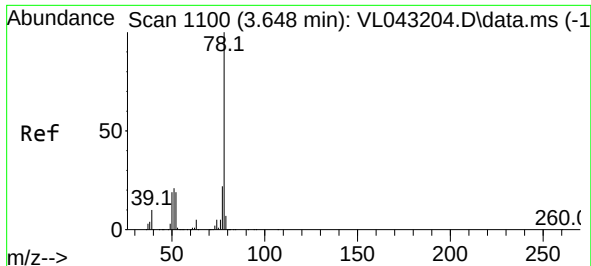
Tgt Ion:114 Resp: 291718
Ion Ratio Lower Upper
114 100
63 24.8 21.0 31.6
88 17.7 14.9 22.3



#34
2-Butanone
Concen: 0.258 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.003 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 43 Resp: 5323
Ion Ratio Lower Upper
43 100
72 25.9 18.1 27.1

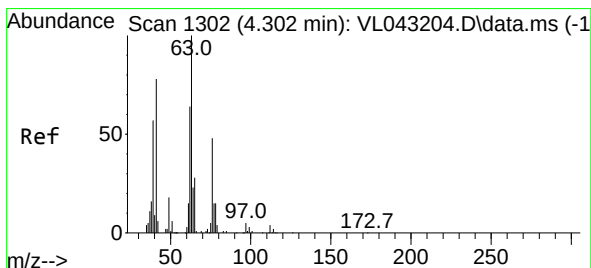
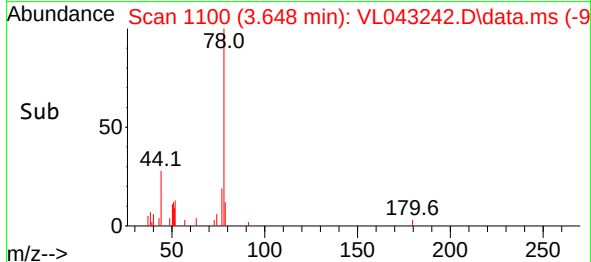
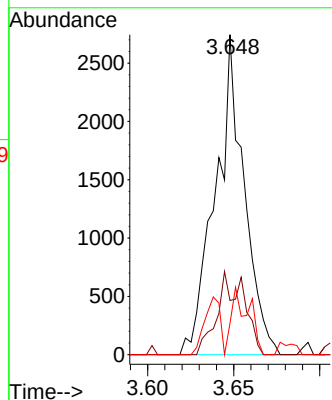
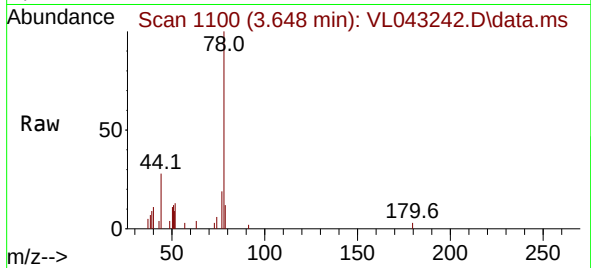




#36
Benzene
Concen: 0.114 ppbv
RT: 3.648 min Scan# 1100
Delta R.T. -0.000 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

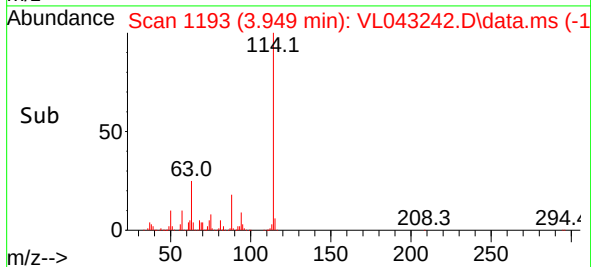
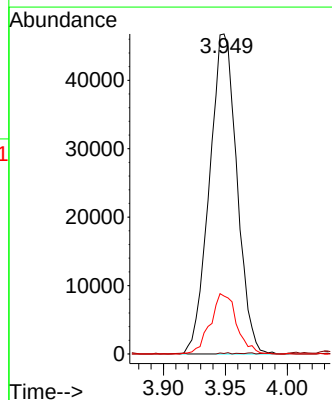
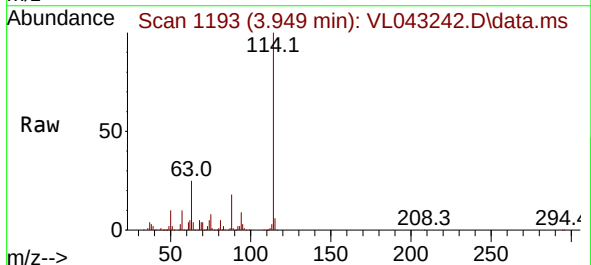
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

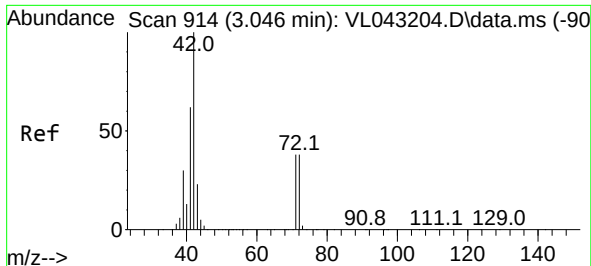
Tgt Ion	Ratio	Lower	Upper
78	100		
77	16.9	17.5	26.3#
50	20.3	15.5	23.3



#39
1,2-Dichloropropane
Concen: 7.076 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.353 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion	Ratio	Lower	Upper
63	100		
41	0.2	62.6	93.8#
62	18.1	51.0	76.6#

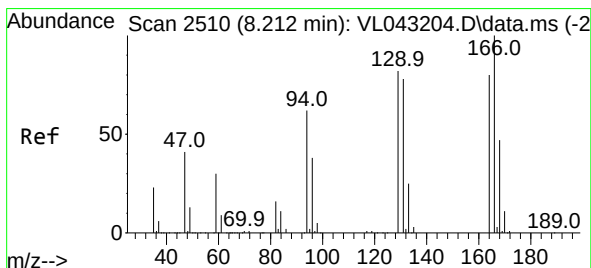
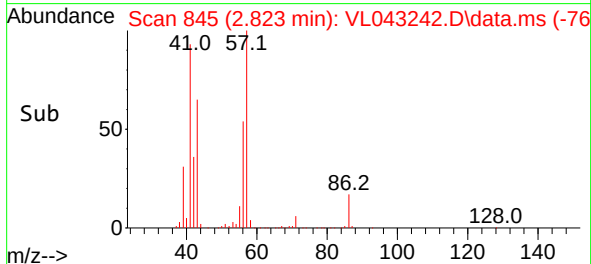
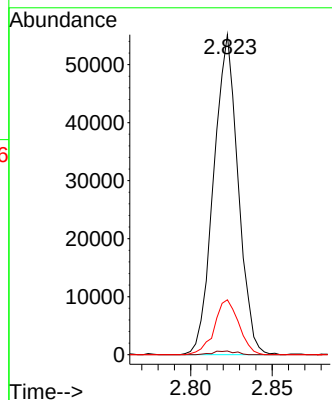
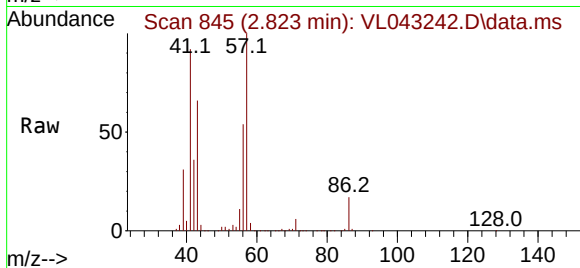




#41
Tetrahydrofuran
Concen: 5.062 ppbv
RT: 2.823 min Scan# 841
Delta R.T. -0.224 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

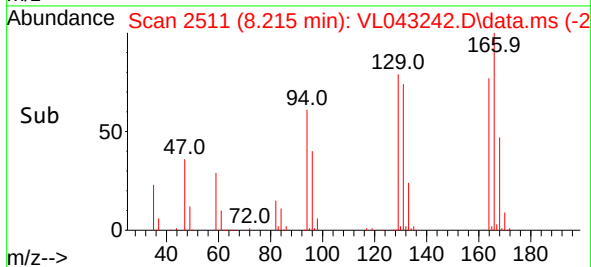
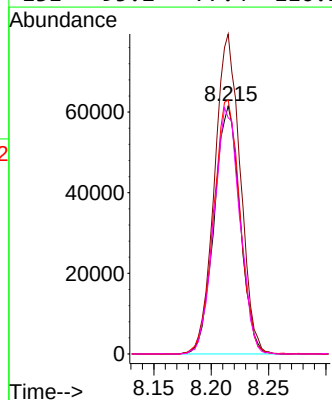
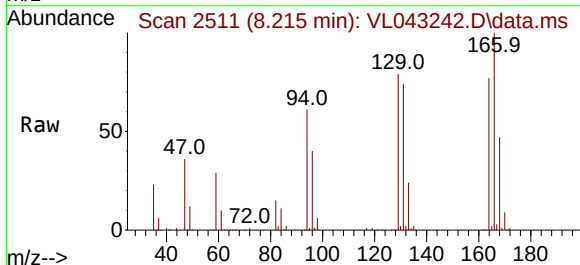
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

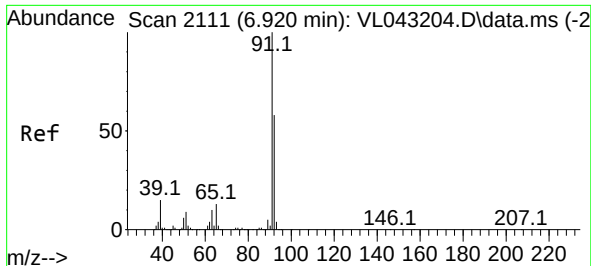
Tgt Ion: 42 Resp: 57567
Ion Ratio Lower Upper
42 100
72 1.1 30.6 46.0#
71 17.1 30.5 45.7#



#52
Tetrachloroethene
Concen: 9.262 ppbv
RT: 8.215 min Scan# 2511
Delta R.T. 0.003 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion:164 Resp: 96249
Ion Ratio Lower Upper
164 100
166 129.0 99.4 149.2
129 102.4 81.8 122.8
131 95.2 77.4 116.2

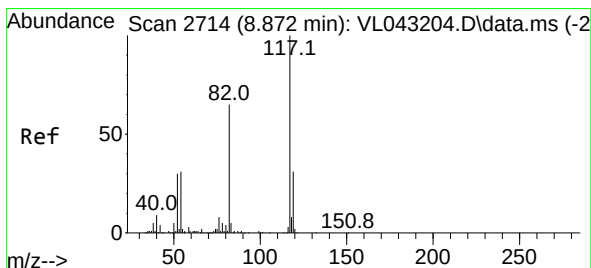
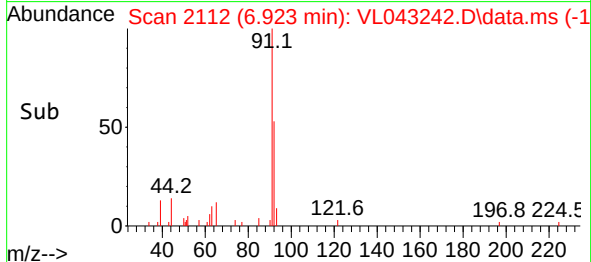
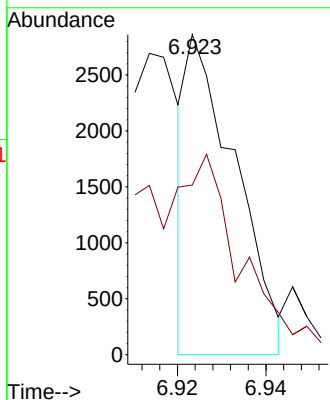
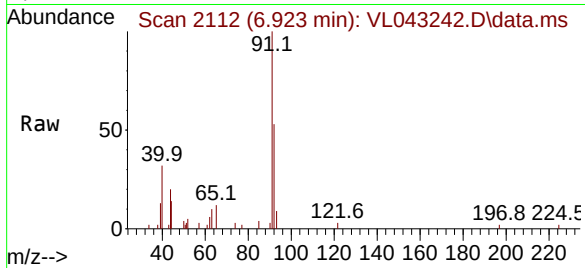




#53
Toluene
Concen: 0.067 ppbv
RT: 6.923 min Scan# 2111
Delta R.T. 0.003 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

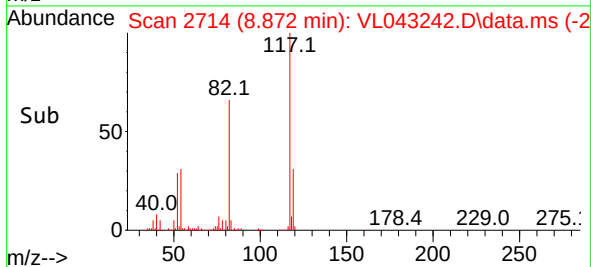
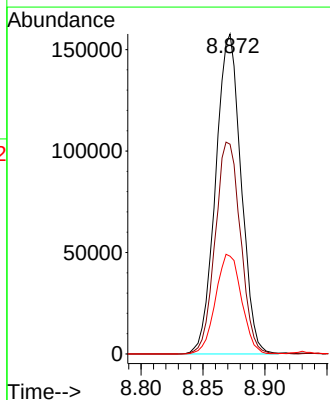
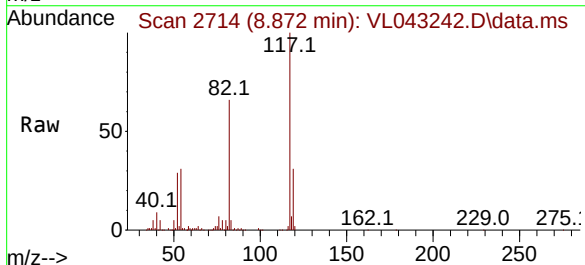
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

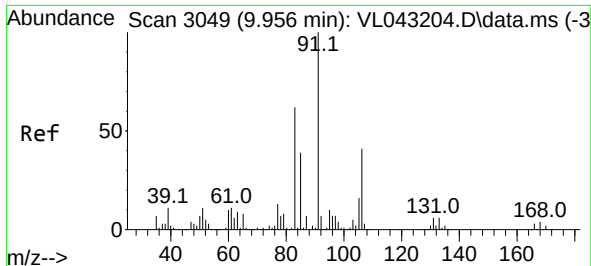
Tgt Ion: 91 Resp: 2201
Ion Ratio Lower Upper
91 100
92 140.2 47.4 71.0#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.872 min Scan# 2714
Delta R.T. -0.000 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 117 Resp: 225662
Ion Ratio Lower Upper
117 100
82 66.0 56.1 84.1
119 31.8 25.0 37.6

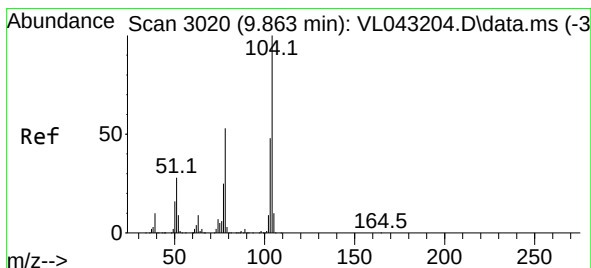
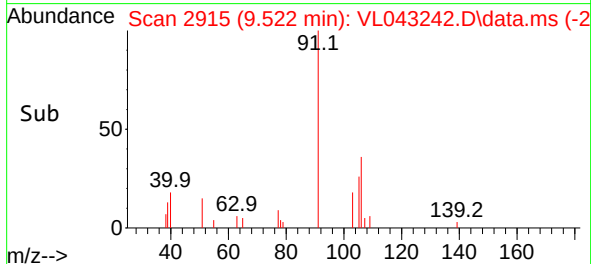
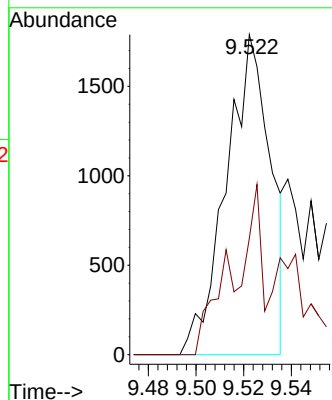
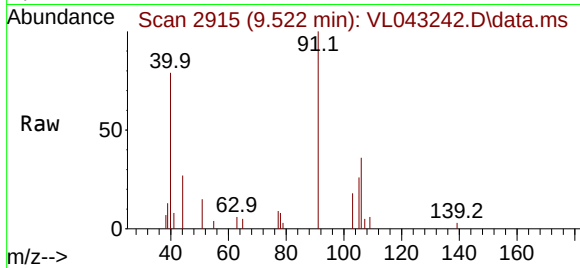




#60
o-Xylene
Concen: 0.066 ppbv
RT: 9.522 min Scan# 2915
Delta R.T. -0.434 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

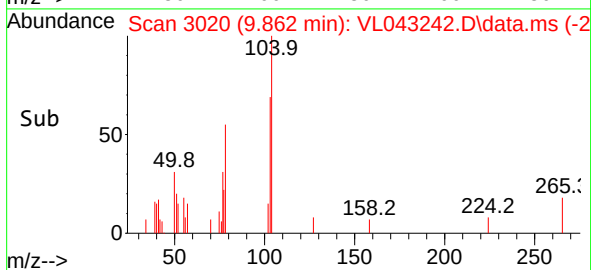
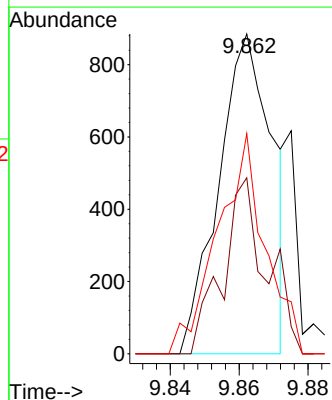
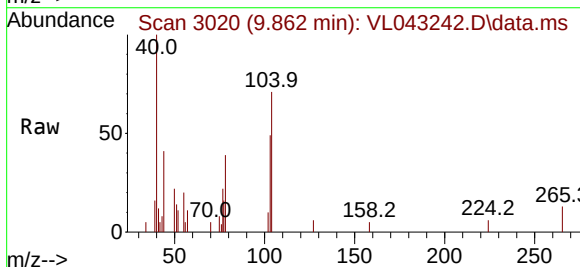
Instrument :
MSVOA_1
ClientSampleId :
12-SG-2

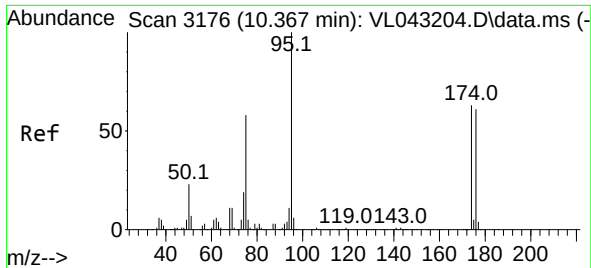
Tgt Ion: 91 Resp: 2308
Ion Ratio Lower Upper
91 100
106 58.8 20.9 62.8



#61
Styrene
Concen: 0.063 ppbv
RT: 9.862 min Scan# 3020
Delta R.T. -0.000 min
Lab File: VL043242.D
Acq: 19 Nov 2025 16:39

Tgt Ion: 104 Resp: 954
Ion Ratio Lower Upper
104 100
78 45.2 42.1 63.1
103 61.0 37.2 55.8#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.879 ppbv
 RT: 10.367 min Scan# 31
 Delta R.T. -0.000 min
 Lab File: VL043242.D
 Acq: 19 Nov 2025 16:39

Instrument :
 MSVOA_L
 ClientSampleId :
 12-SG-2

Tgt Ion: 95 Resp: 163410
 Ion Ratio Lower Upper
 95 100
 174 67.3 50.2 75.2
 175 5.1 4.1 6.1

