

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092425\
 Data File : VL043004.D
 Acq On : 24 Sep 2025 11:29
 Operator : SY/MD
 Sample : Q3154-02DL 80X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2DL

Quant Time: Sep 25 01:53:43 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

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

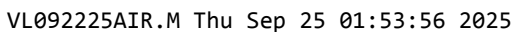
Internal Standards						
1) Bromochloromethane	2.787	49	156444	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	471426	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	405809	10.000	ppbv	0.00

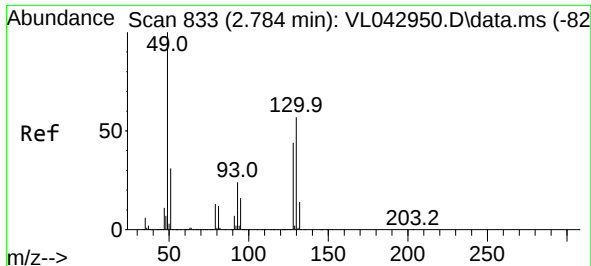
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	291749	9.631	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.300%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) Chloromethane	1.531	50	305	0.032	ppbv #	86
9) Propene	1.489	41	9158	0.803	ppbv #	71
13) Ethanol	1.431	45	286955	259.270	ppbv	93
15) Acetone	1.839	43	10633	0.522	ppbv #	84
16) 1,3-Butadiene	1.602	39	487	0.051	ppbv #	39
19) Isopropyl Alcohol	1.431	45	286955	23.426	ppbv #	36
20) Methylene Chloride	2.062	84	2343	Below Cal		88
25) Ethyl Acetate	2.829	43	1843	0.036	ppbv #	75
26) Hexane	2.826	57	2242	0.096	ppbv #	42
27) Carbon Disulfide	2.153	76	1240	0.059	ppbv #	1
30) Cyclohexane	3.858	84	1170	0.060	ppbv #	1
36) Benzene	3.658	78	1509	0.034	ppbv #	80
39) 1,2-Dichloropropane	3.959	63	111709	6.912	ppbv #	23
61) Styrene	9.875	104	1079	0.043	ppbv #	54
78) Hexachloro-1,3-Butadiene	13.882	225	1148	0.042	ppbv	89
79) Naphthalene	13.517	128	1916	0.037	ppbv #	84
80) Naphthalene,2-methyl-	14.462	142	1333	0.083	ppbv #	80

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

Quant Time: Sep 25 01:53:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

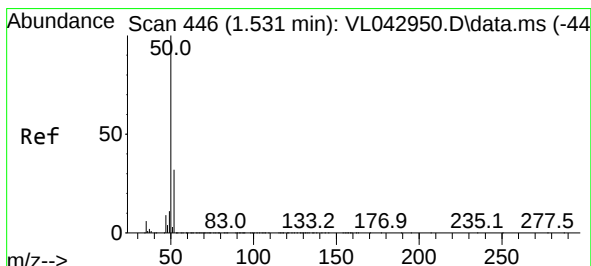
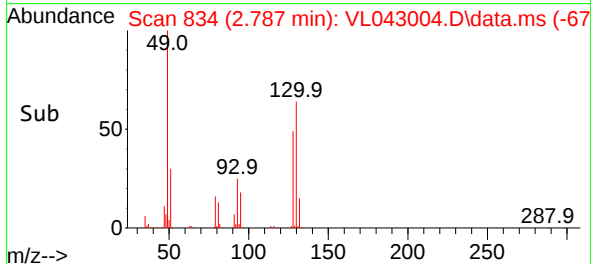
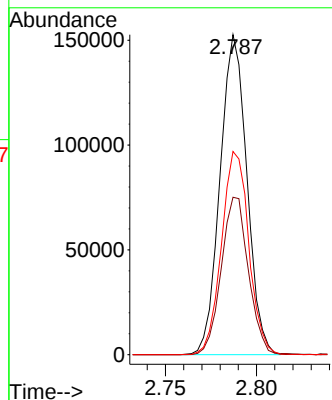
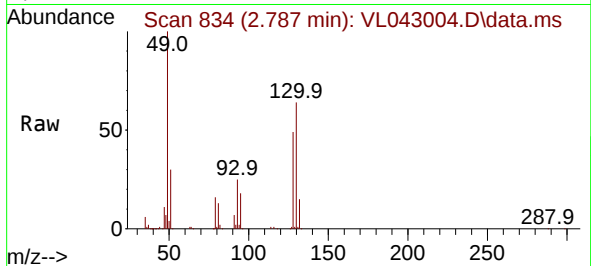




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 833
Delta R.T. 0.003 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

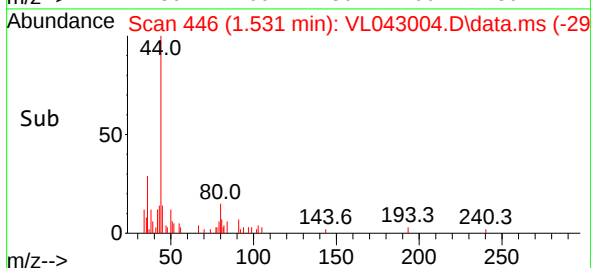
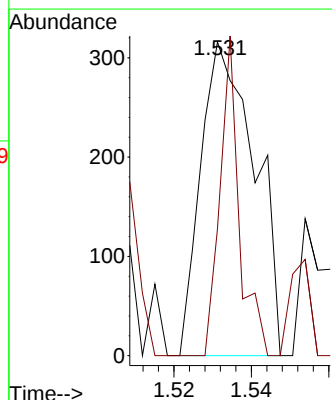
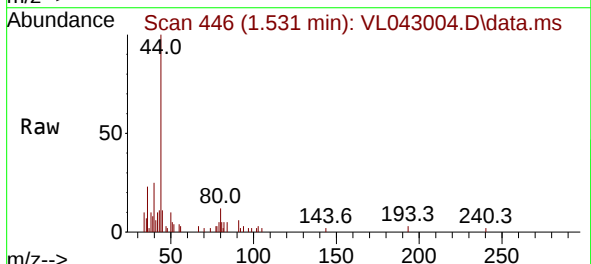
Instrument :
MSVOA_L
ClientSampleId :
SV2DL

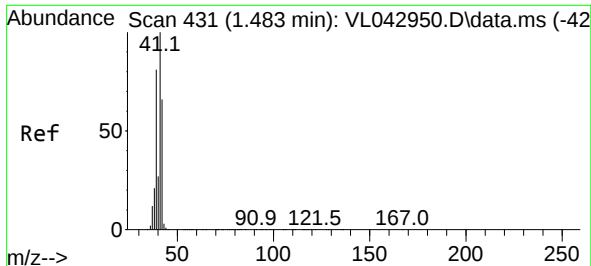
Tgt Ion: 49 Resp: 156444
Ion Ratio Lower Upper
49 100
128 49.8 22.9 68.8
130 64.7 29.1 87.3



#4
Chloromethane
Concen: 0.032 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

Tgt Ion: 50 Resp: 305
Ion Ratio Lower Upper
50 100
52 40.5 25.9 38.9#





#9

Propene

Concen: 0.803 ppbv

RT: 1.489 min Scan# 41

Delta R.T. 0.006 min

Lab File: VL043004.D

Acq: 24 Sep 2025 11:29

Instrument :

MSVOA_L

ClientSampleId :

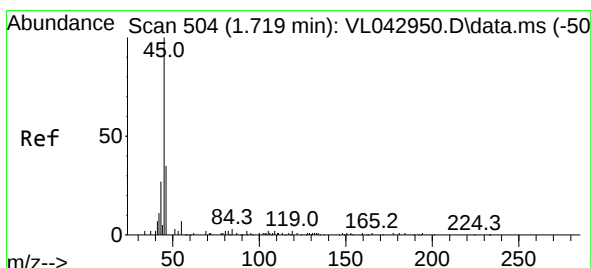
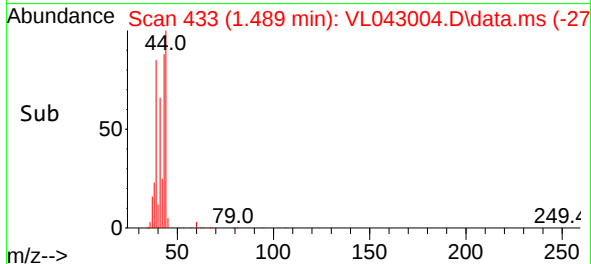
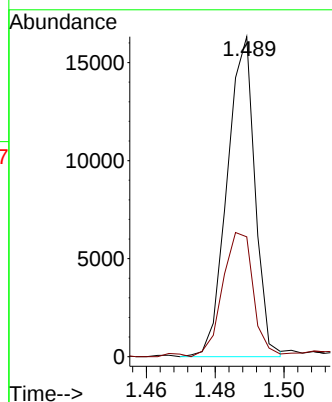
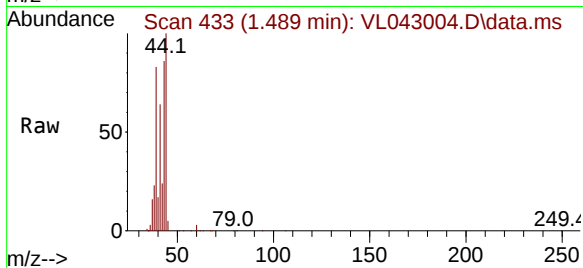
SV2DL

Tgt Ion: 41 Resp: 9158

Ion Ratio Lower Upper

41 100

42 47.9 57.4 86.2#



#13

Ethanol

Concen: 259.270 ppbv

RT: 1.431 min Scan# 415

Delta R.T. -0.288 min

Lab File: VL043004.D

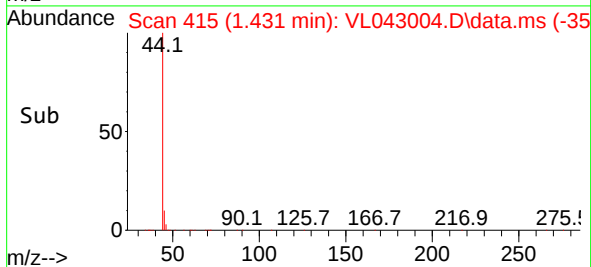
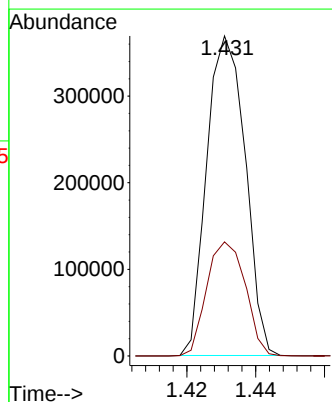
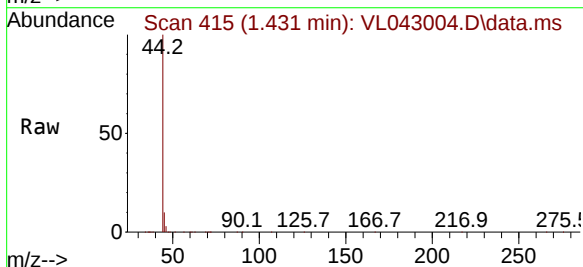
Acq: 24 Sep 2025 11:29

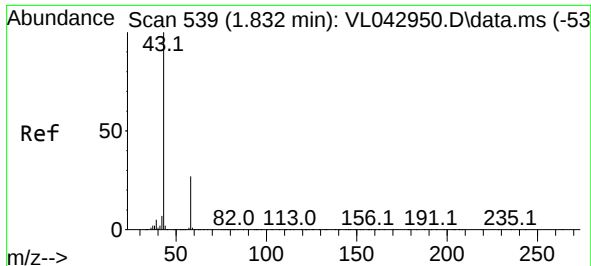
Tgt Ion: 45 Resp: 286955

Ion Ratio Lower Upper

45 100

46 35.8 16.2 64.6





#15

Acetone

Concen: 0.522 ppbv

RT: 1.839 min Scan# 54

Delta R.T. 0.006 min

Lab File: VL043004.D

Acq: 24 Sep 2025 11:29

Instrument :

MSVOA_L

ClientSampleId :

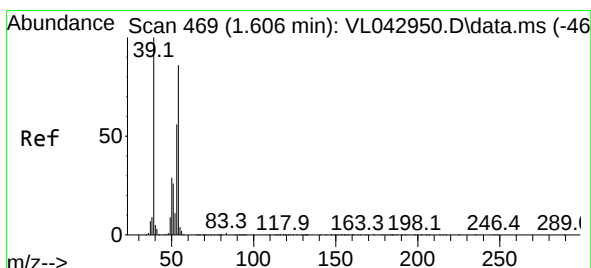
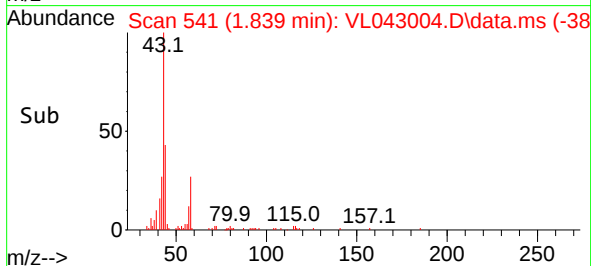
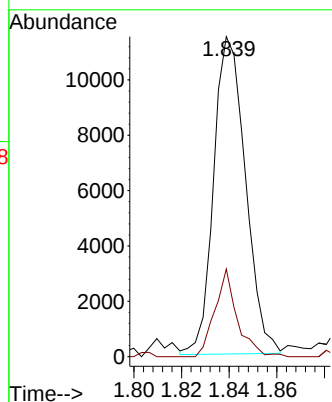
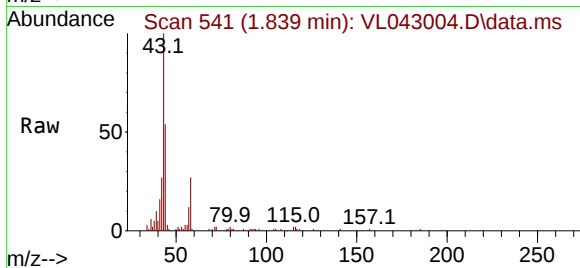
SV2DL

Tgt Ion: 43 Resp: 10633

Ion Ratio Lower Upper

43 100

58 19.4 22.3 33.5#



#16

1,3-Butadiene

Concen: 0.051 ppbv

RT: 1.602 min Scan# 468

Delta R.T. -0.003 min

Lab File: VL043004.D

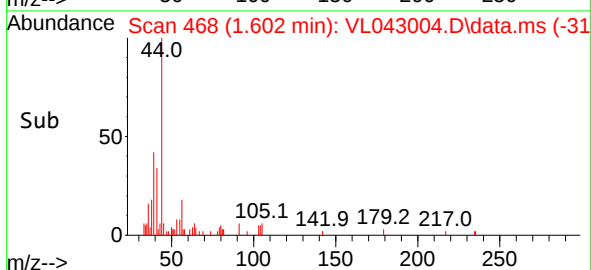
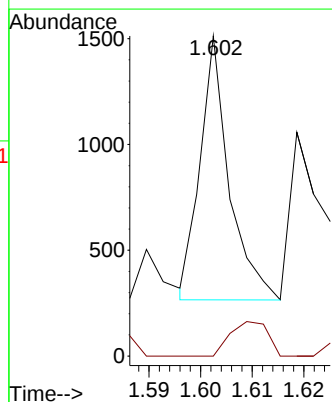
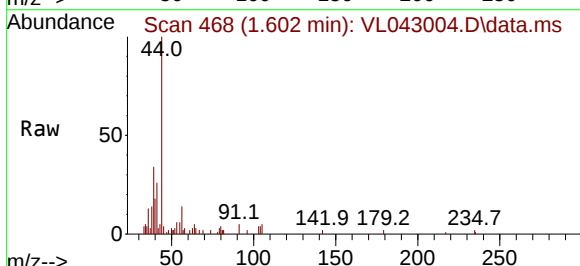
Acq: 24 Sep 2025 11:29

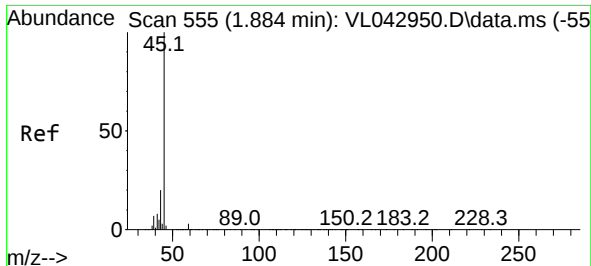
Tgt Ion: 39 Resp: 487

Ion Ratio Lower Upper

39 100

54 23.4 60.8 91.2#

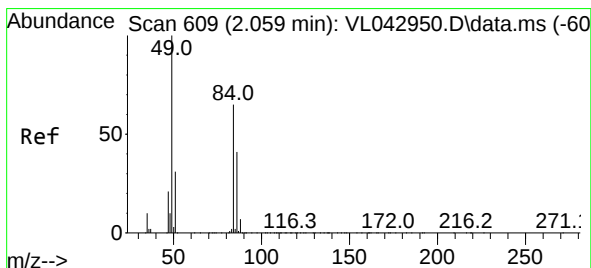
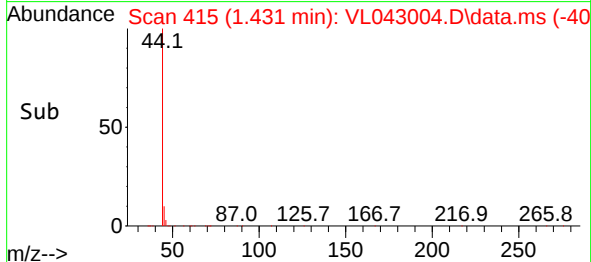
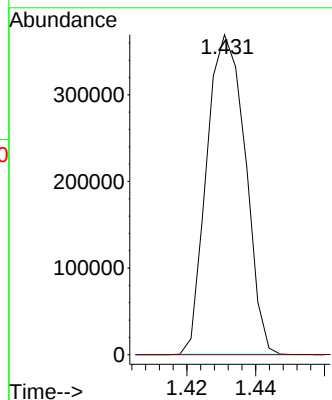
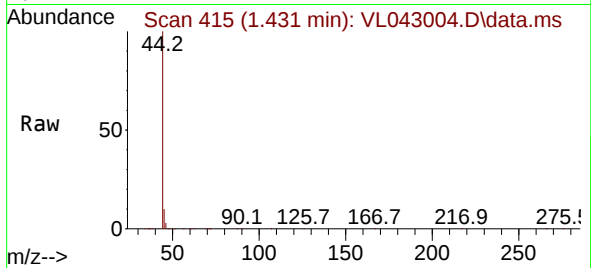




#19
Isopropyl Alcohol
Concen: 23.426 ppbv
RT: 1.431 min Scan# 415
Delta R.T. -0.453 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

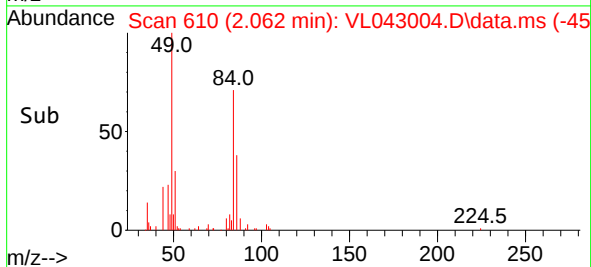
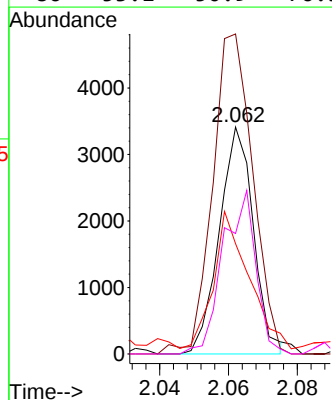
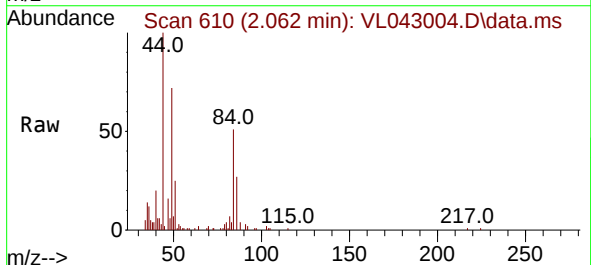
Instrument :
MSVOA_L
ClientSampleId :
SV2DL

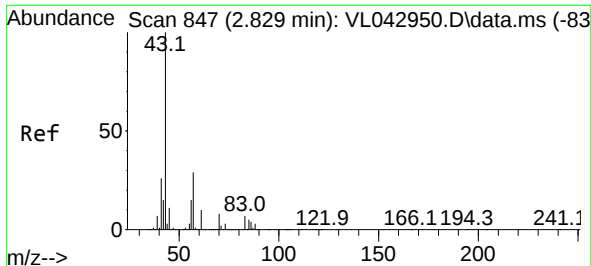
Tgt Ion: 45 Resp: 286955
Ion Ratio Lower Upper
45 100
58 0.1 31.0 46.6#



#20
Methylene Chloride
Concen: Below Cal
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

Tgt Ion: 84 Resp: 2343
Ion Ratio Lower Upper
84 100
49 138.5 124.1 186.1
51 46.1 39.8 59.8
86 53.1 50.9 76.3





#25

Ethyl Acetate

Concen: 0.036 ppbv

RT: 2.829 min Scan# 847

Delta R.T. -0.000 min

Lab File: VL043004.D

Acq: 24 Sep 2025 11:29

Instrument :

MSVOA_L

ClientSampleId :

SV2DL

Tgt Ion: 43 Resp: 1843

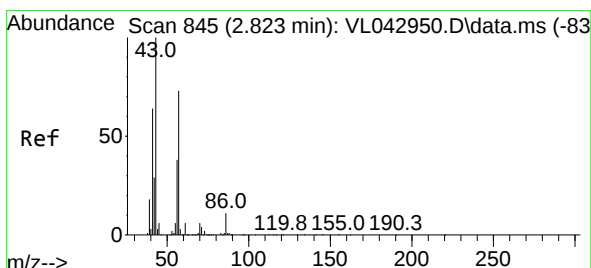
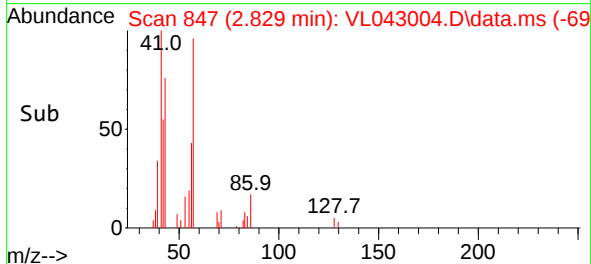
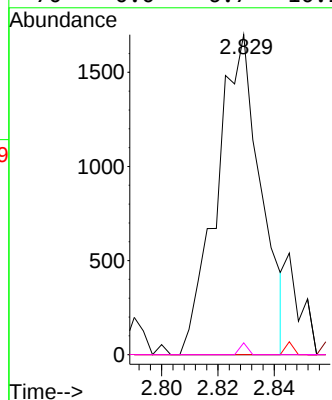
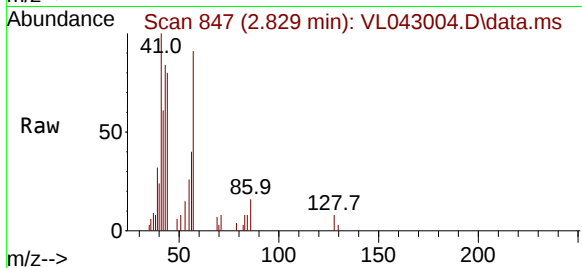
Ion Ratio Lower Upper

43 100

45 0.0 7.7 11.5#

61 0.0 7.1 10.7#

70 0.0 6.7 10.1#



#26

Hexane

Concen: 0.096 ppbv

RT: 2.826 min Scan# 846

Delta R.T. 0.003 min

Lab File: VL043004.D

Acq: 24 Sep 2025 11:29

Tgt Ion: 57 Resp: 2242

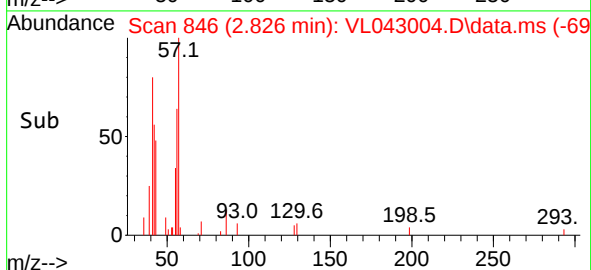
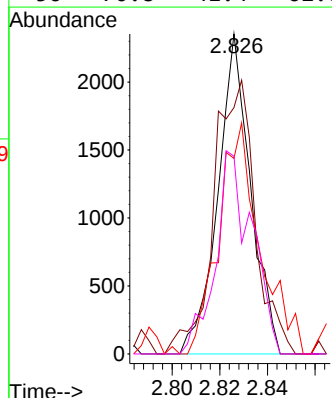
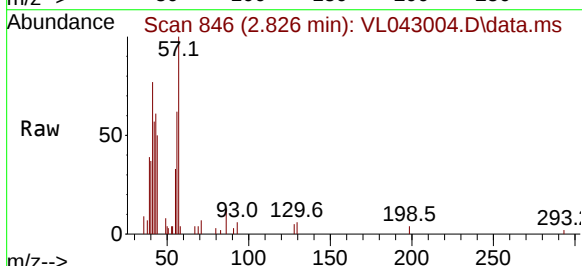
Ion Ratio Lower Upper

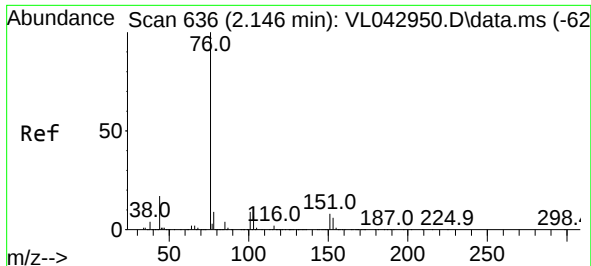
57 100

41 113.3 71.7 107.5#

43 97.7 180.8 271.2#

56 70.8 41.4 62.0#

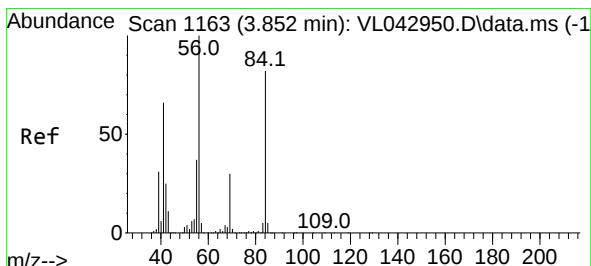
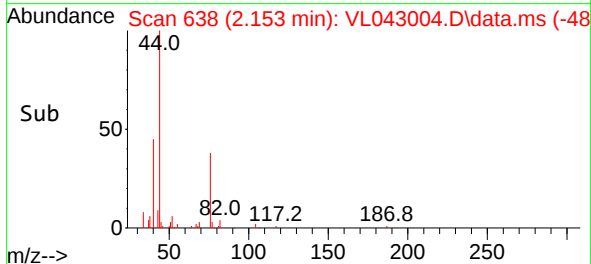
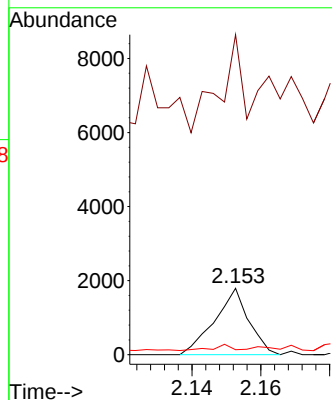
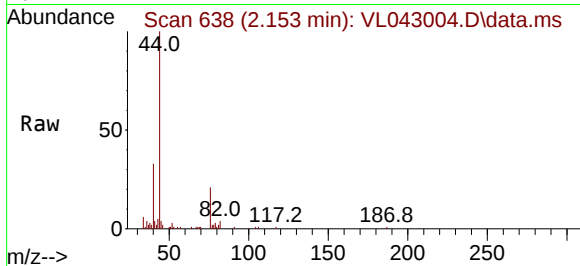




#27
Carbon Disulfide
Concen: 0.059 ppbv
RT: 2.153 min Scan# 61
Delta R.T. 0.006 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

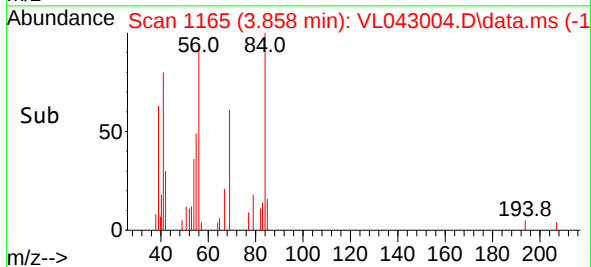
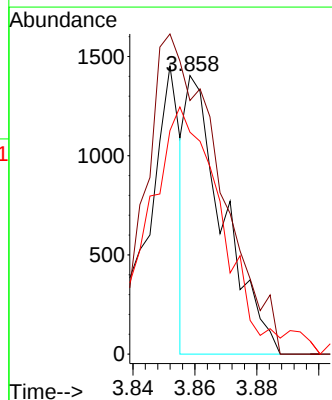
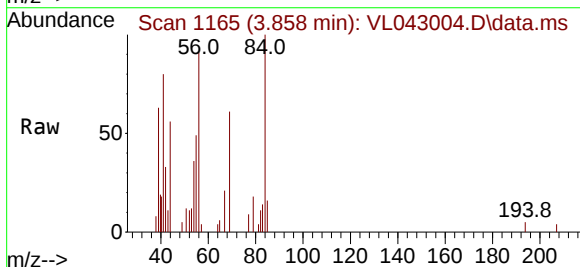
Instrument :
MSVOA_L
ClientSampleId :
SV2DL

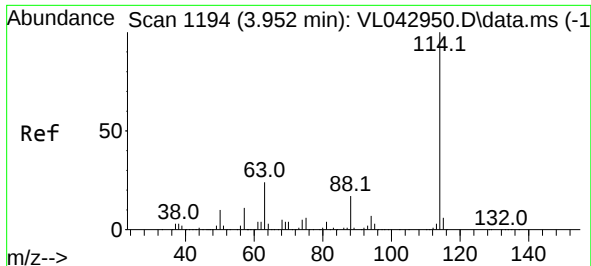
Tgt Ion: 76 Resp: 1240
Ion Ratio Lower Upper
76 100
44 1005.8 15.6 23.4#
78 0.0 8.9 13.3#



#30
Cyclohexane
Concen: 0.060 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.006 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

Tgt Ion: 84 Resp: 1170
Ion Ratio Lower Upper
84 100
56 0.0 102.2 153.4#
41 189.2 65.6 98.4#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. 0.006 min

Lab File: VL043004.D

Acq: 24 Sep 2025 11:29

Instrument :

MSVOA_L

ClientSampleId :

SV2DL

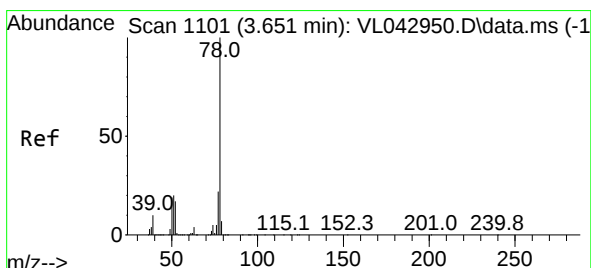
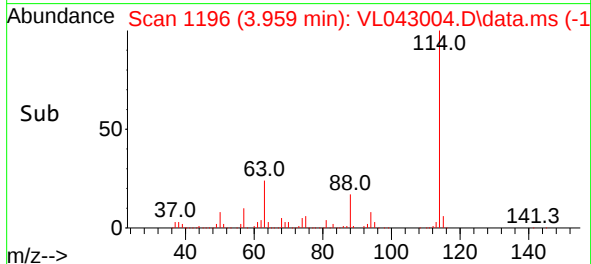
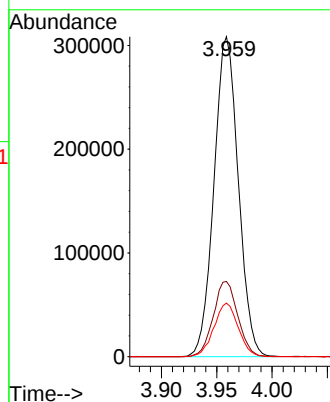
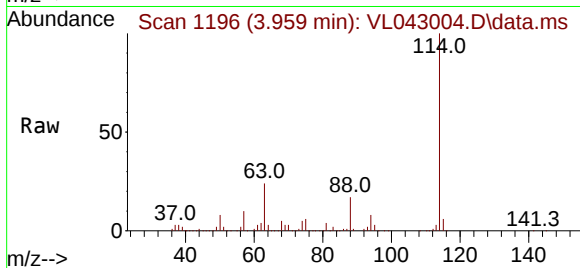
Tgt Ion:114 Resp: 471426

Ion Ratio Lower Upper

114 100

63 23.7 19.4 29.2

88 16.7 14.2 21.2



#36

Benzene

Concen: 0.034 ppbv

RT: 3.658 min Scan# 1103

Delta R.T. 0.006 min

Lab File: VL043004.D

Acq: 24 Sep 2025 11:29

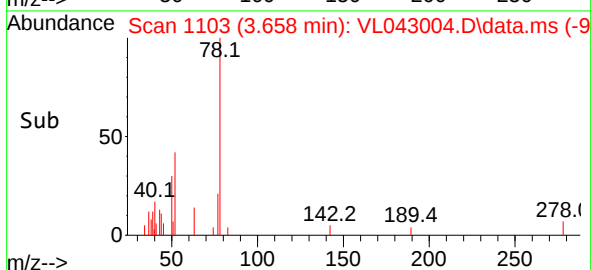
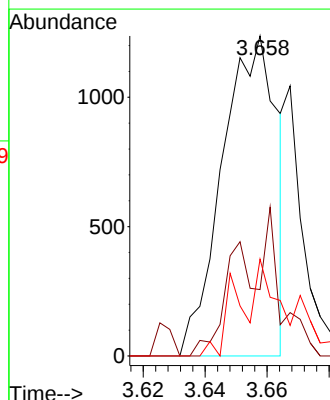
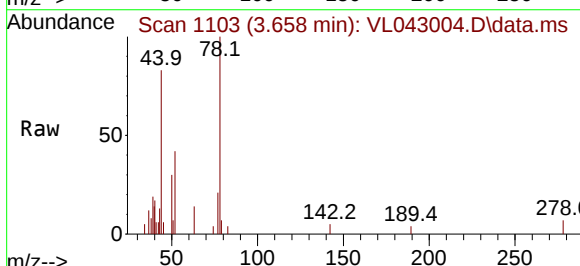
Tgt Ion: 78 Resp: 1509

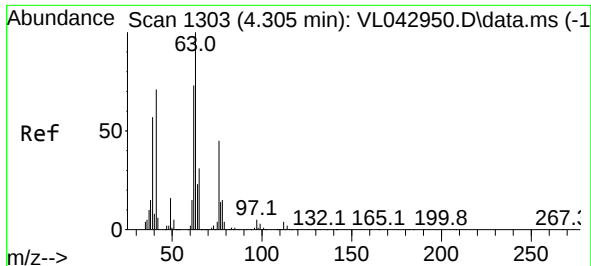
Ion Ratio Lower Upper

78 100

77 20.8 17.8 26.6

50 36.8 15.0 22.4#





#39

1,2-Dichloropropane

Concen: 6.912 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. -0.346 min

Lab File: VL043004.D

Acq: 24 Sep 2025 11:29

Instrument :

MSVOA_L

ClientSampleId :

SV2DL

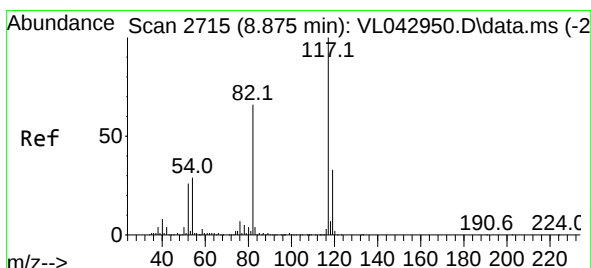
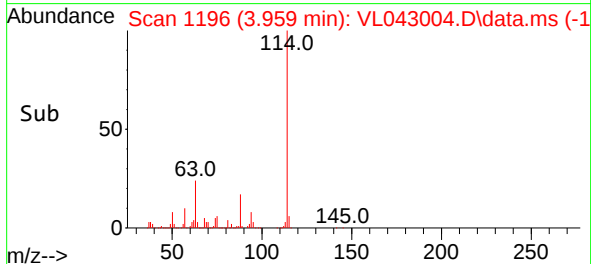
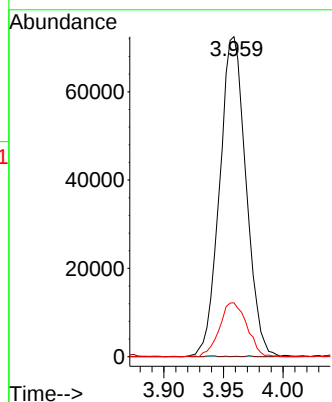
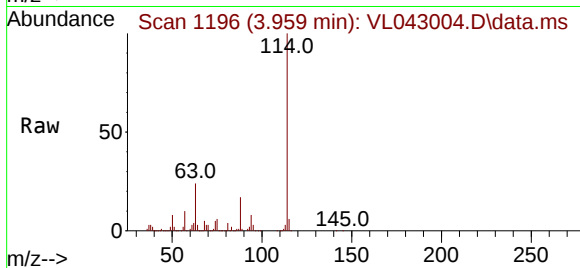
Tgt Ion: 63 Resp: 111709

Ion Ratio Lower Upper

63 100

41 0.1 57.5 86.3#

62 16.9 58.5 87.7#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.882 min Scan# 2717

Delta R.T. 0.006 min

Lab File: VL043004.D

Acq: 24 Sep 2025 11:29

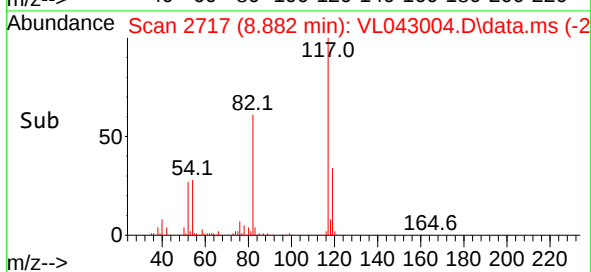
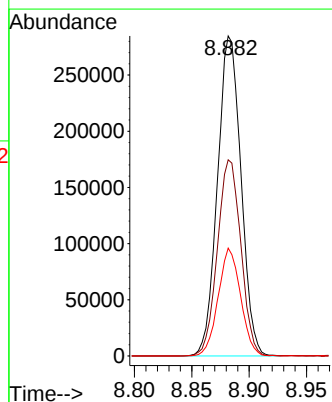
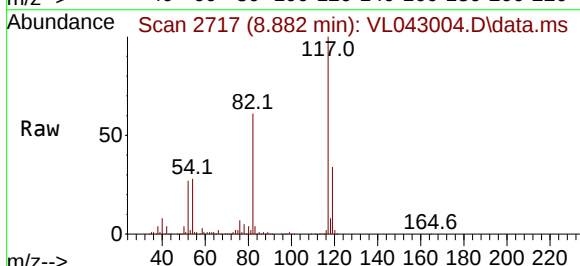
Tgt Ion: 117 Resp: 405809

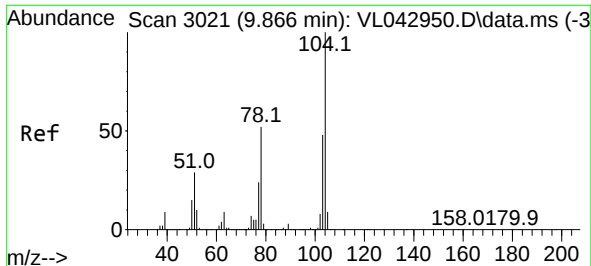
Ion Ratio Lower Upper

117 100

82 61.2 52.8 79.2

119 32.3 26.5 39.7

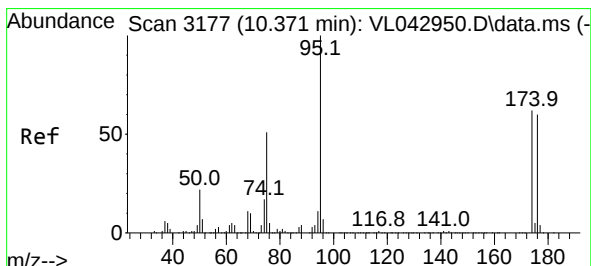
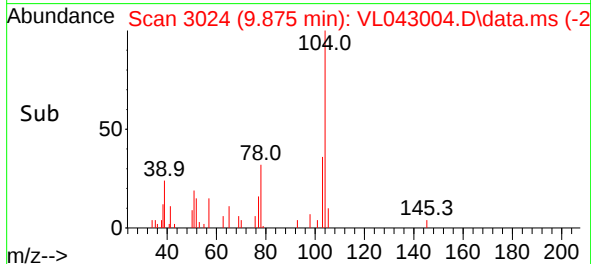
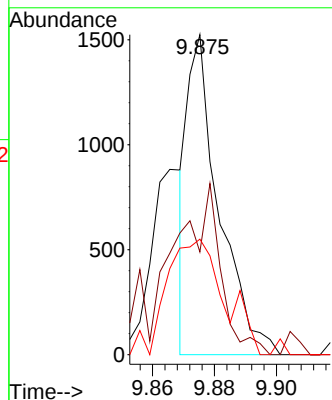
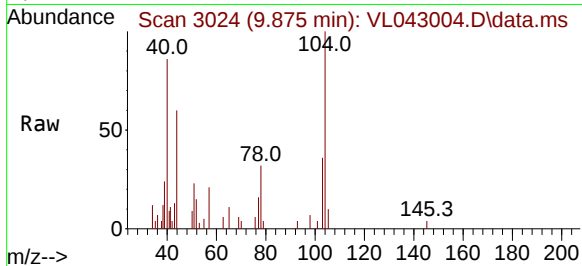




#61
Styrene
Concen: 0.043 ppbv
RT: 9.875 min Scan# 3021
Delta R.T. 0.010 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

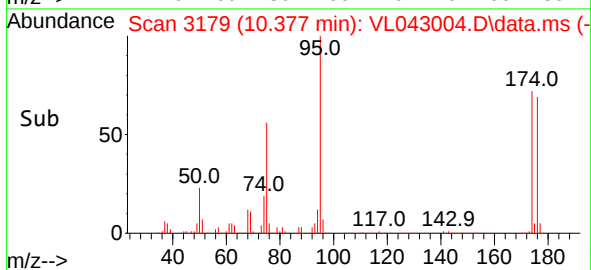
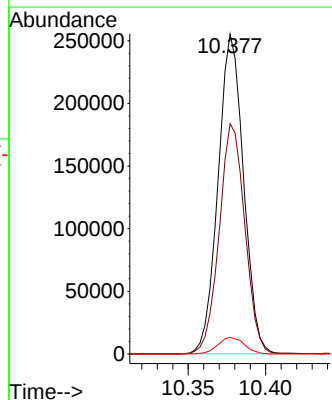
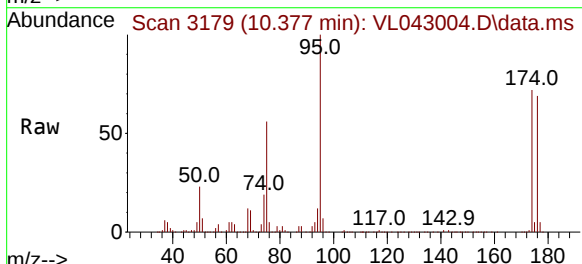
Instrument :
MSVOA_L
ClientSampleId :
SV2DL

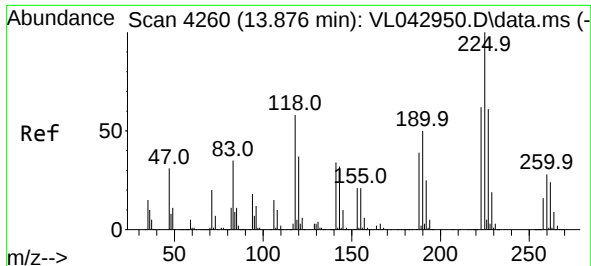
Tgt Ion:104 Resp: 1079
Ion Ratio Lower Upper
104 100
78 89.9 39.9 59.9#
103 67.5 36.9 55.3#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.631 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

Tgt Ion: 95 Resp: 291749
Ion Ratio Lower Upper
95 100
174 73.0 51.4 77.2
175 5.4 4.0 6.0

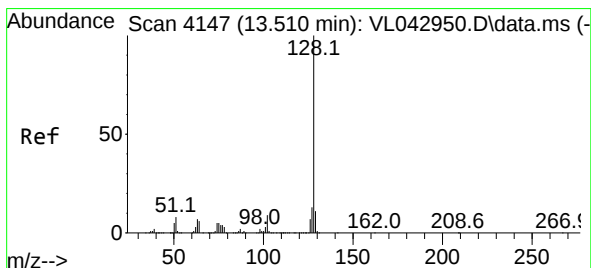
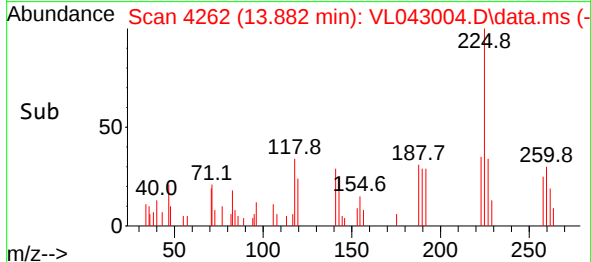
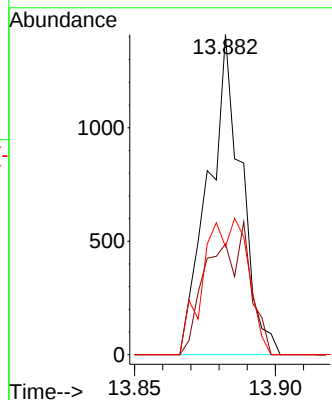
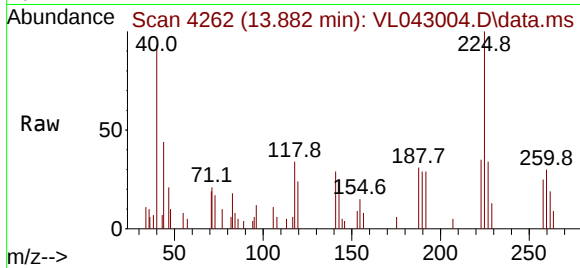




#78
Hexachloro-1,3-Butadiene
Concen: 0.042 ppbv
RT: 13.882 min Scan# 4148
Delta R.T. 0.006 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

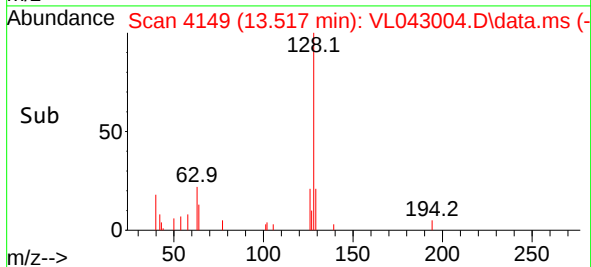
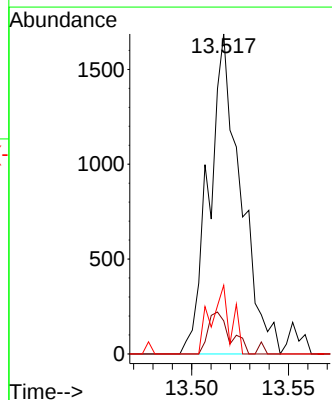
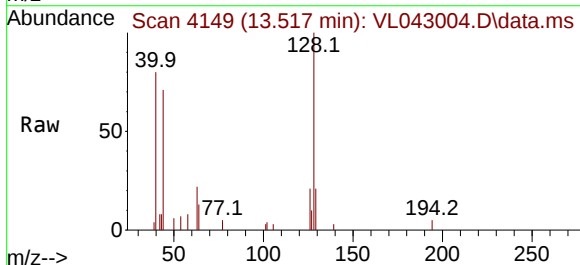
Instrument :
MSVOA_L
ClientSampleId :
SV2DL

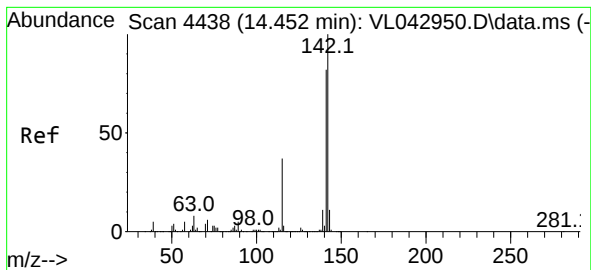
Tgt Ion:	225	Resp:	1148
Ion Ratio	Lower	Upper	
225	100		
223	50.8	50.1	75.1
227	57.7	50.4	75.6



#79
Naphthalene
Concen: 0.037 ppbv
RT: 13.517 min Scan# 4149
Delta R.T. 0.006 min
Lab File: VL043004.D
Acq: 24 Sep 2025 11:29

Tgt Ion:	128	Resp:	1916
Ion Ratio	Lower	Upper	
128	100		
127	10.3	10.6	15.8#
129	21.5	9.0	13.6#





#80

Naphthalene, 2-methyl-

Concen: 0.083 ppbv

RT: 14.462 min Scan# 44

Delta R.T. 0.010 min

Lab File: VL043004.D

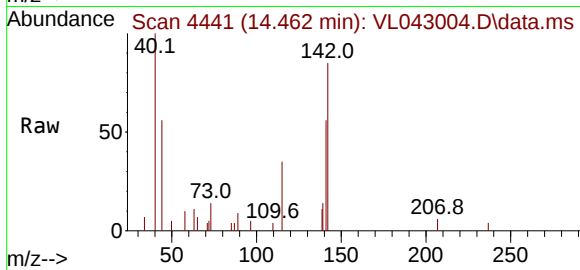
Acq: 24 Sep 2025 11:29

Instrument :

MSVOA_L

ClientSampleId :

SV2DL



Tgt Ion:142 Resp: 1333

Ion Ratio Lower Upper

142 100

141 94.7 65.1 97.7

115 54.2 28.9 43.3#

