

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL100825\
 Data File : VL043075.D
 Acq On : 09 Oct 2025 00:55
 Operator : SY/MD
 Sample : Q3320-05DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA3DL

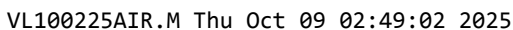
Quant Time: Oct 09 02:48:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL100225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Oct 03 08:23:34 2025
 Response via : Initial Calibration

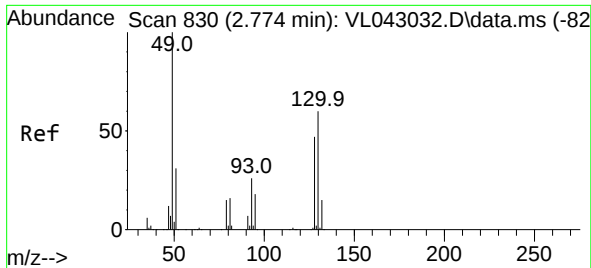
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.780	49	164593	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	413318	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.872	117	322709	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	220238	9.474	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	1635	0.059	ppbv	89
3) Chlorodifluoromethane	1.476	51	2810	0.105	ppbv #	78
4) Chloromethane	1.531	50	756	0.075	ppbv	99
8) Dichlorotetrafluoroethane	1.499	85	1635	0.072	ppbv #	20
9) Propene	1.486	41	1320	0.122	ppbv	94
13) Ethanol	1.719	45	11851	28.954	ppbv	99
15) Acetone	1.835	43	10451	0.453	ppbv	91
16) 1,3-Butadiene	1.618	39	898	0.095	ppbv #	38
19) Isopropyl Alcohol	1.719	45	11851	1.073	ppbv #	31
20) Methylene Chloride	2.059	84	4392	0.437	ppbv #	87
23) Vinyl Acetate	2.454	43	273	0.056	ppbv #	32
25) Ethyl Acetate	2.823	43	2059	0.036	ppbv #	84
26) Hexane	2.823	57	2402	0.108	ppbv #	36
30) Cyclohexane	3.949	84	2769	0.152	ppbv #	1
39) 1,2-Dichloropropane	3.949	63	105199	7.187	ppbv #	21
79) Naphthalene	13.513	128	55	0.235	ppbv #	1
80) Naphthalene,2-methyl-	14.487	142	155	0.670	ppbv #	56

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

Quant Time: Oct 09 02:48:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL100225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Oct 03 08:23:34 2025
Response via : Initial Calibration

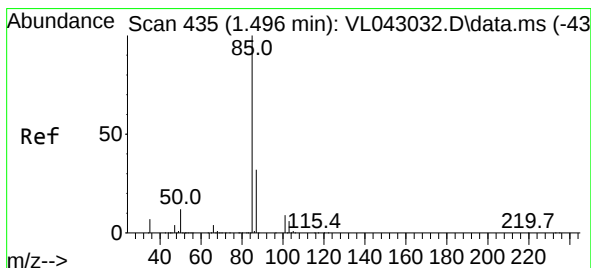
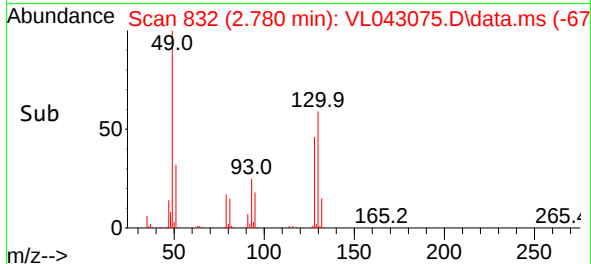
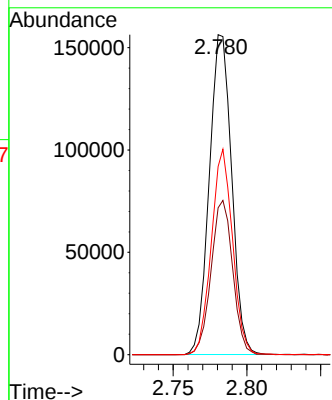
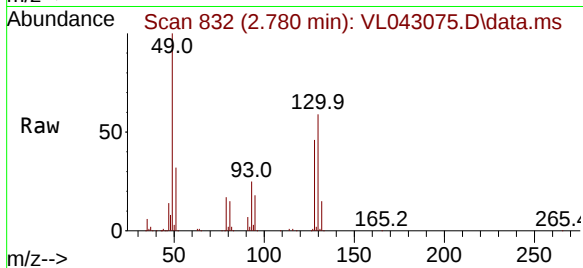




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.780 min Scan# 81
 Delta R.T. 0.006 min
 Lab File: VL043075.D
 Acq: 09 Oct 2025 00:55

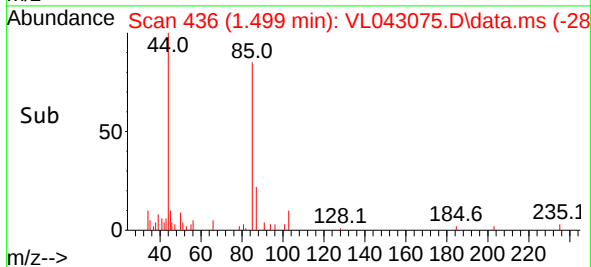
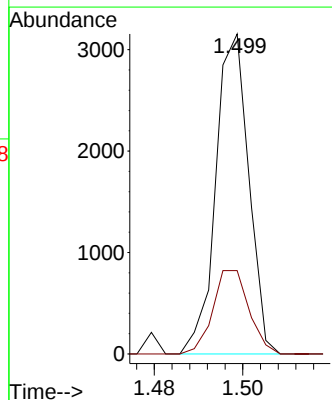
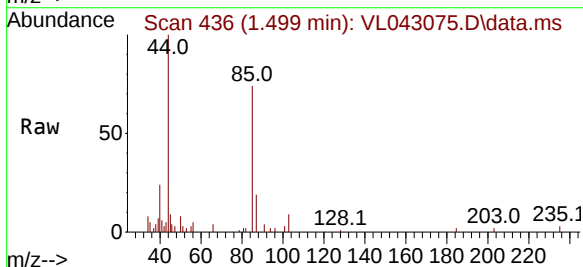
Instrument :
 MSVOA_L
 ClientSampleId :
 IA3DL

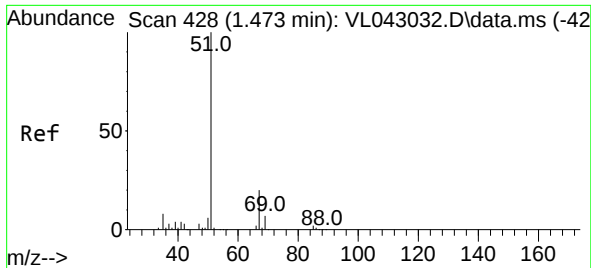
Tgt Ion: 49 Resp: 164593
 Ion Ratio Lower Upper
 49 100
 128 46.8 24.1 72.2
 130 61.0 31.4 94.3



#2
 Dichlorodifluoromethane
 Concen: 0.059 ppbv
 RT: 1.499 min Scan# 436
 Delta R.T. 0.003 min
 Lab File: VL043075.D
 Acq: 09 Oct 2025 00:55

Tgt Ion: 85 Resp: 1635
 Ion Ratio Lower Upper
 85 100
 87 26.1 25.8 38.6

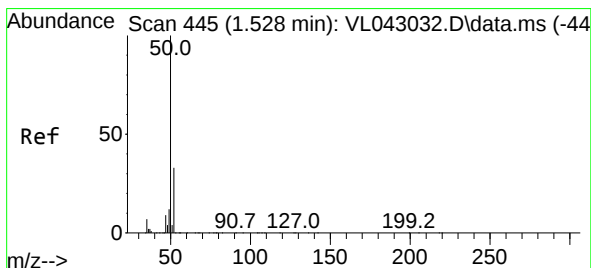
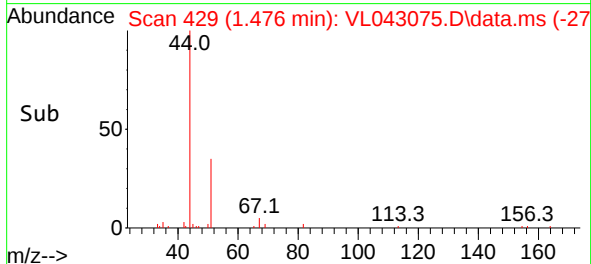
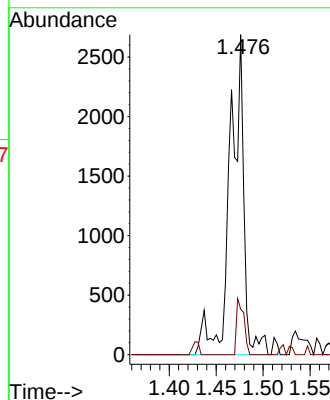
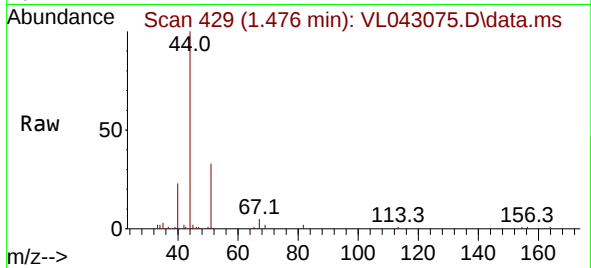




#3
Chlorodifluoromethane
Concen: 0.105 ppbv
RT: 1.476 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

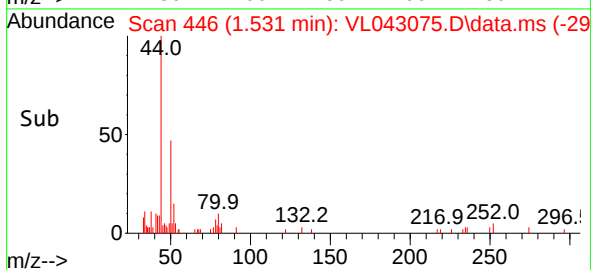
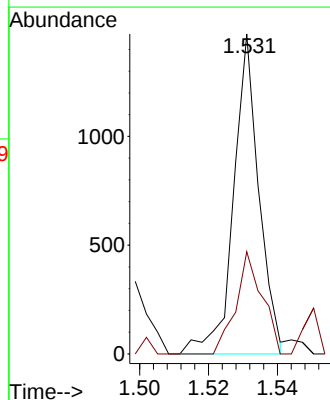
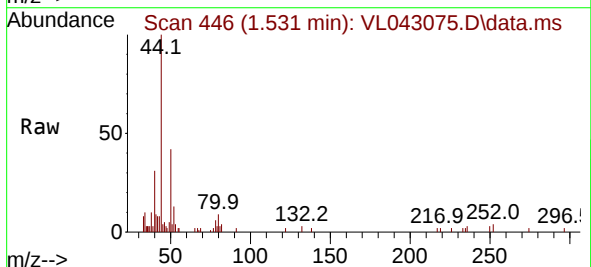
Instrument :
MSVOA_L
ClientSampleId :
IA3DL

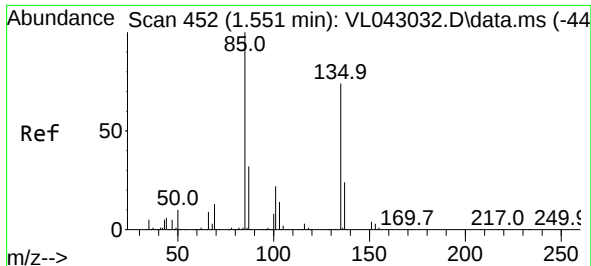
Tgt Ion: 51 Resp: 2810
Ion Ratio Lower Upper
51 100
67 9.0 15.1 22.7#



#4
Chloromethane
Concen: 0.075 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.003 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

Tgt Ion: 50 Resp: 756
Ion Ratio Lower Upper
50 100
52 32.0 26.2 39.2

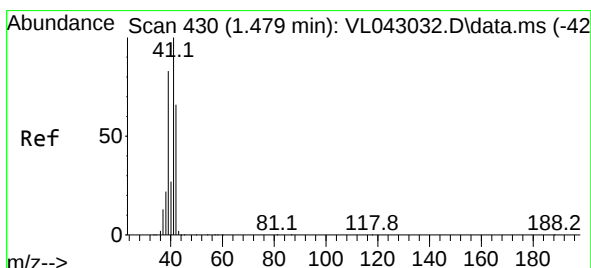
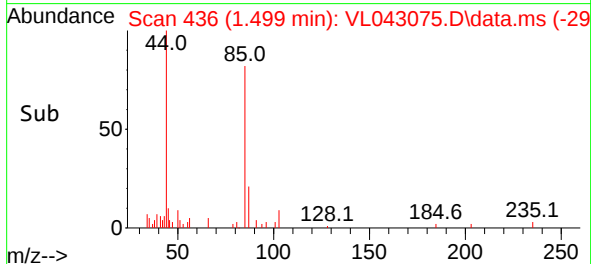
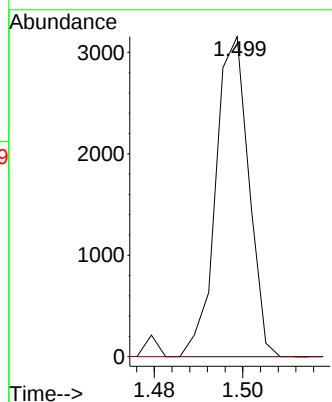
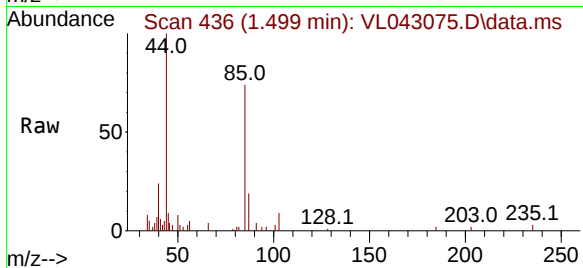




#8
 Dichlorotetrafluoroethane
 Concen: 0.072 ppbv
 RT: 1.499 min Scan# 41
 Delta R.T. -0.052 min
 Lab File: VL043075.D
 Acq: 09 Oct 2025 00:55

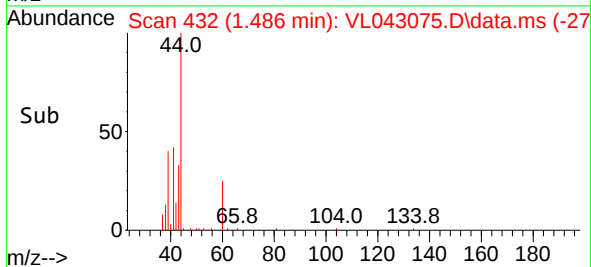
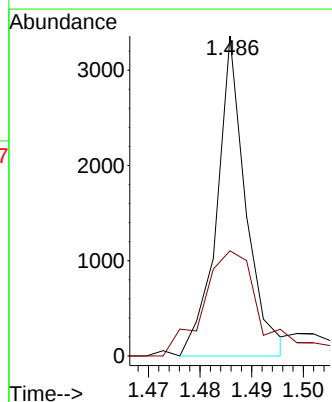
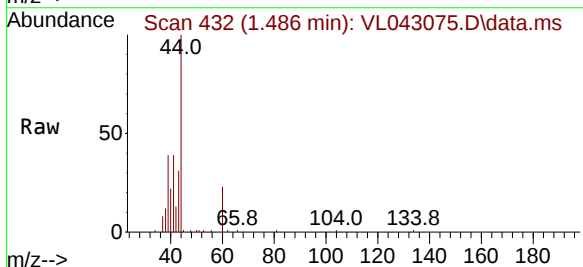
Instrument :
 MSVOA_L
 ClientSampleId :
 IA3DL

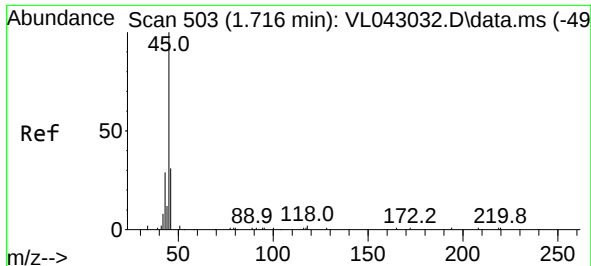
Tgt Ion: 85 Resp: 1635
 Ion Ratio Lower Upper
 85 100
 135 4.6 56.3 84.5#



#9
 Propene
 Concen: 0.122 ppbv
 RT: 1.486 min Scan# 432
 Delta R.T. 0.006 min
 Lab File: VL043075.D
 Acq: 09 Oct 2025 00:55

Tgt Ion: 41 Resp: 1320
 Ion Ratio Lower Upper
 41 100
 42 71.2 53.3 79.9





#13

Ethanol

Concen: 28.954 ppbv

RT: 1.719 min Scan# 50

Delta R.T. 0.003 min

Lab File: VL043075.D

Acq: 09 Oct 2025 00:55

Instrument :

MSVOA_L

ClientSampleId :

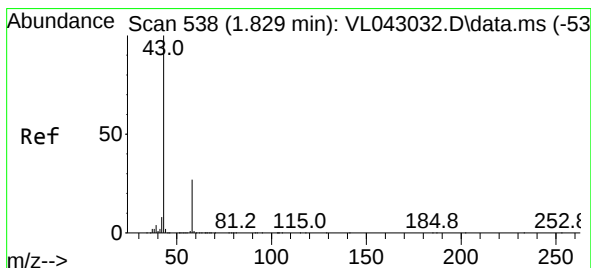
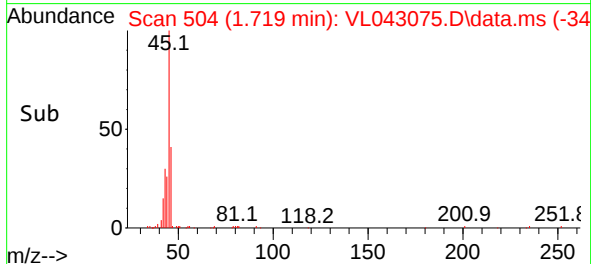
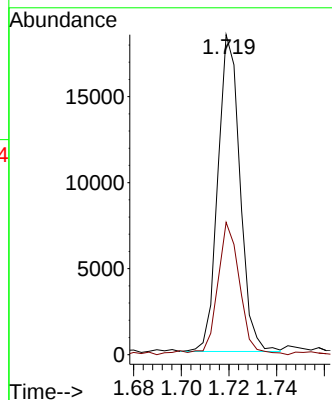
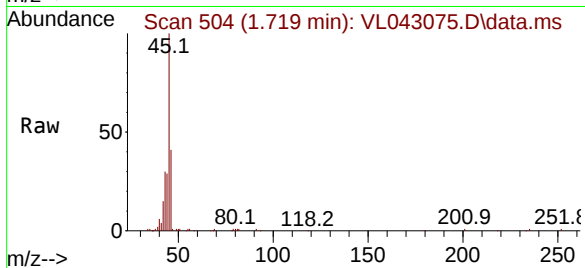
IA3DL

Tgt Ion: 45 Resp: 11851

Ion Ratio Lower Upper

45 100

46 44.1 17.8 71.4



#15

Acetone

Concen: 0.453 ppbv

RT: 1.835 min Scan# 540

Delta R.T. 0.006 min

Lab File: VL043075.D

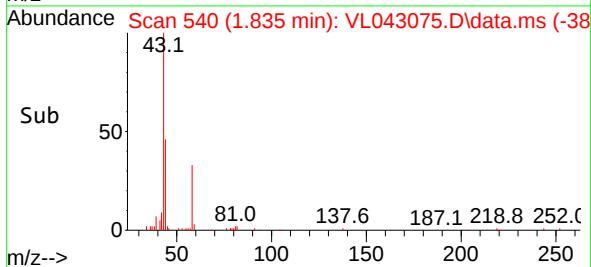
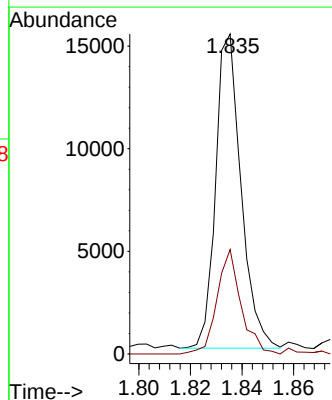
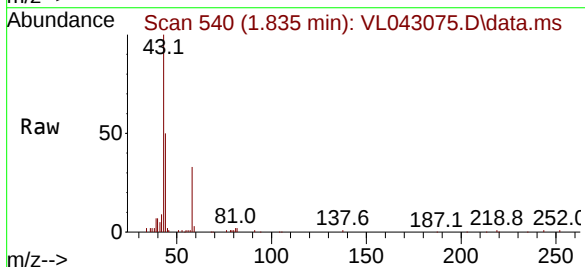
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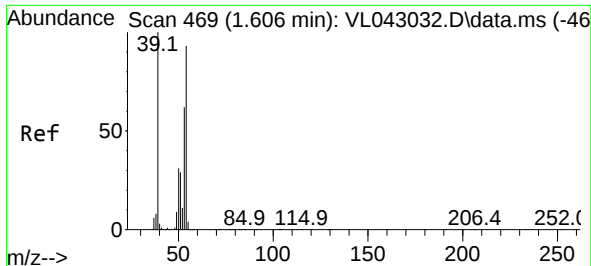
Tgt Ion: 43 Resp: 10451

Ion Ratio Lower Upper

43 100

58 32.6 22.2 33.4

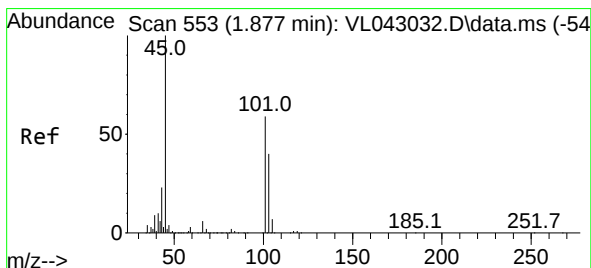
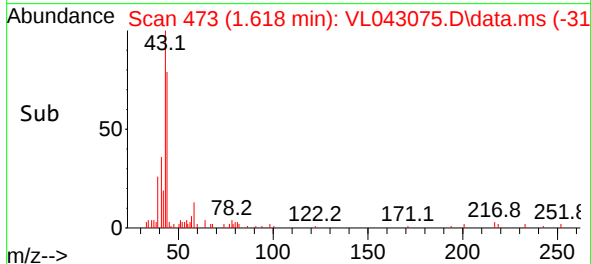
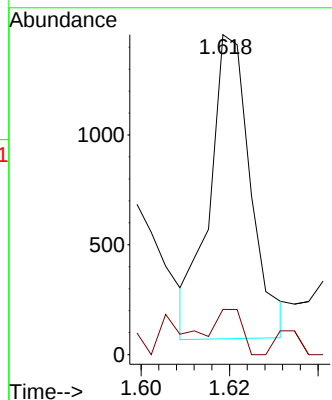
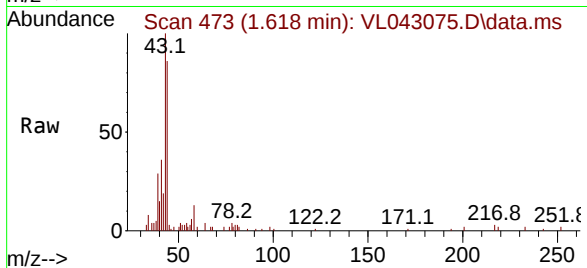




#16
1,3-Butadiene
Concen: 0.095 ppbv
RT: 1.618 min Scan# 41
Delta R.T. 0.013 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

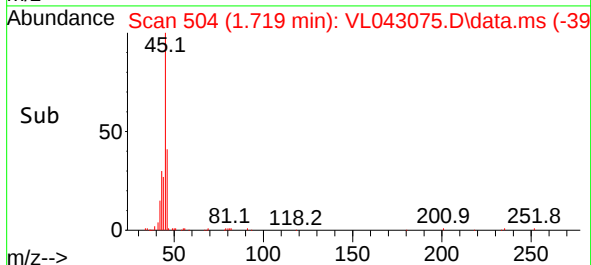
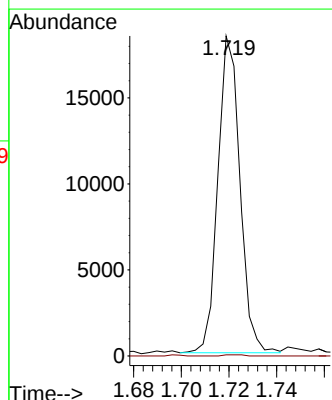
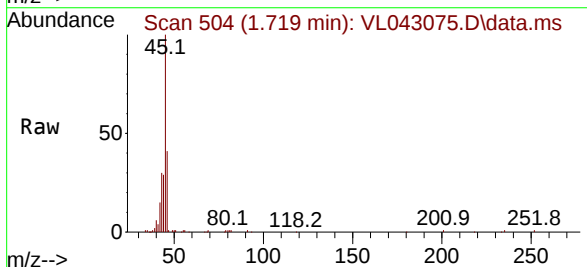
Instrument :
MSVOA_L
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IA3DL

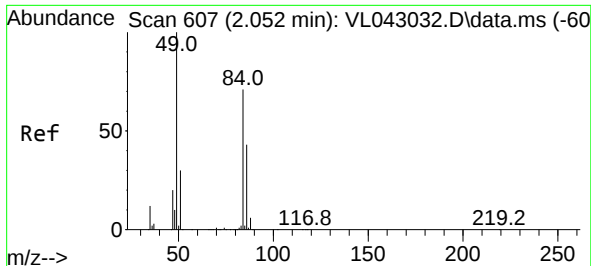
Tgt Ion: 39 Resp: 898
Ion Ratio Lower Upper
39 100
54 23.6 61.4 92.2#



#19
Isopropyl Alcohol
Concen: 1.073 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.159 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

Tgt Ion: 45 Resp: 11851
Ion Ratio Lower Upper
45 100
58 4.0 42.3 63.5#

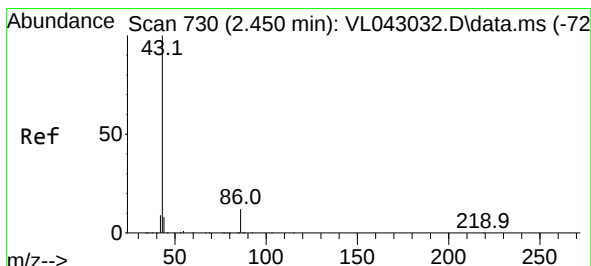
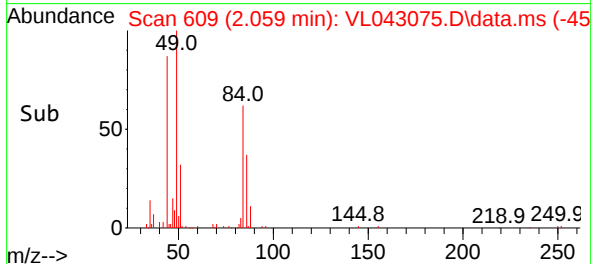
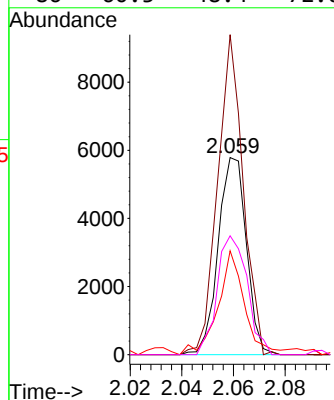
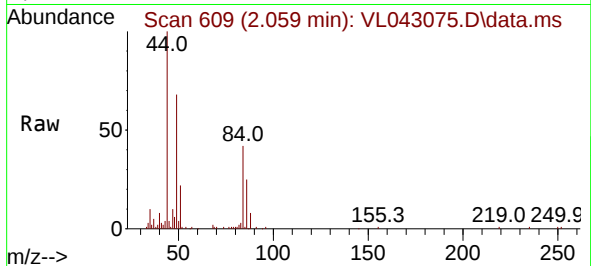




#20
Methylene Chloride
Concen: 0.437 ppbv
RT: 2.059 min Scan# 607
Delta R.T. 0.006 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

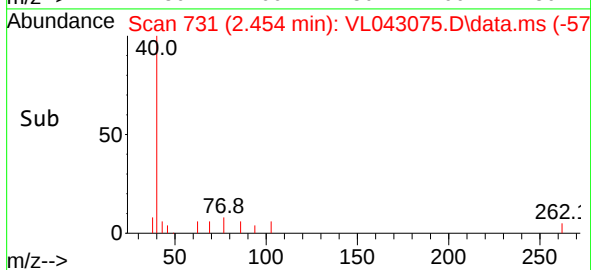
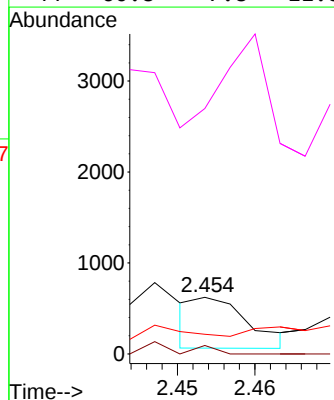
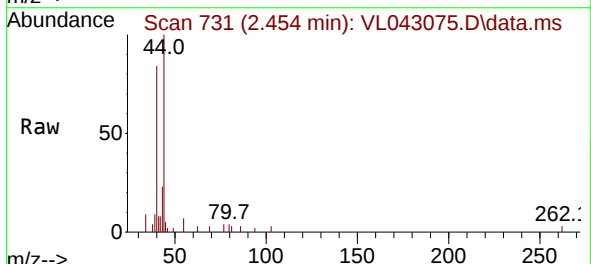
Instrument :
MSVOA_L
ClientSampleId :
IA3DL

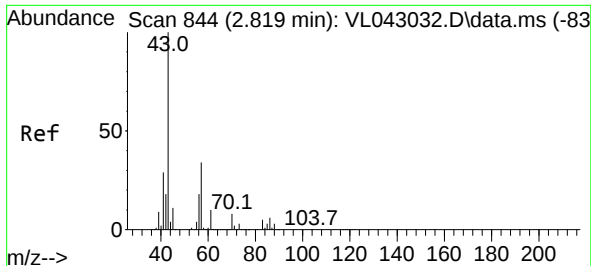
Tgt Ion: 84 Resp: 4392
Ion Ratio Lower Upper
84 100
49 162.3 112.5 168.7
51 52.7 34.2 51.2#
86 60.3 48.4 72.6



#23
Vinyl Acetate
Concen: 0.056 ppbv
RT: 2.454 min Scan# 731
Delta R.T. 0.003 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

Tgt Ion: 43 Resp: 273
Ion Ratio Lower Upper
43 100
86 23.6 7.5 11.3#
42 0.0 8.4 12.6#
44 60.8 7.8 11.8#

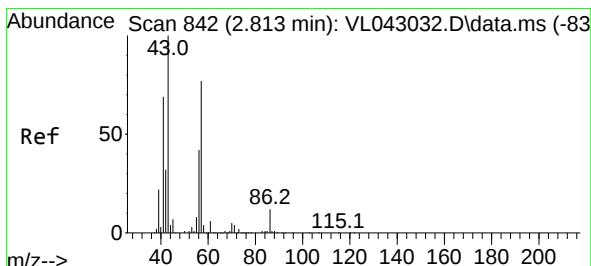
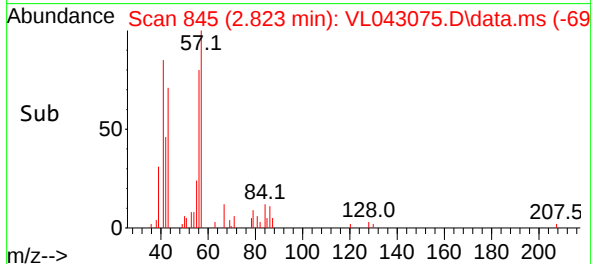
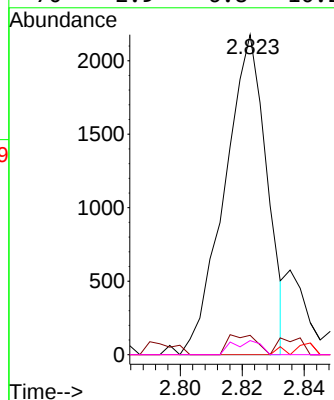
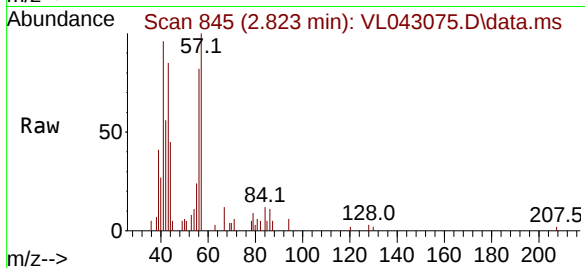




#25
Ethyl Acetate
Concen: 0.036 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.003 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

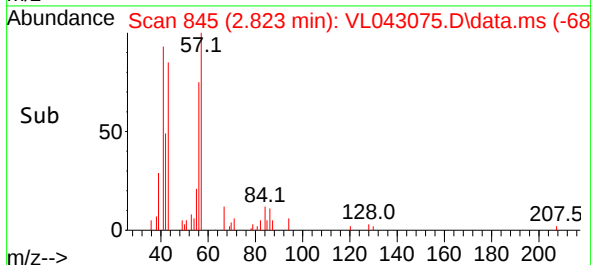
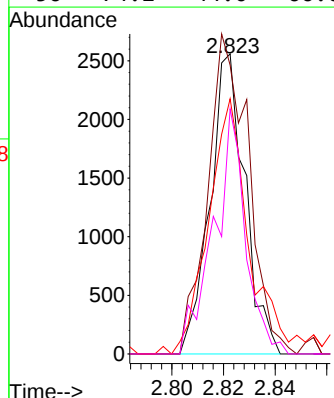
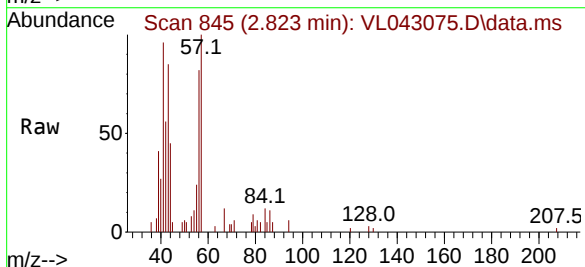
Instrument :
MSVOA_L
ClientSampleId :
IA3DL

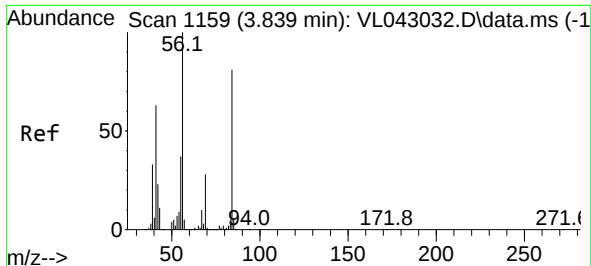
Tgt Ion:	43	Resp:	2059
Ion	Ratio	Lower	Upper
43	100		
45	7.9	8.3	12.5#
61	0.0	7.5	11.3#
70	2.9	6.8	10.2#



#26
Hexane
Concen: 0.108 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.010 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

Tgt Ion:	57	Resp:	2402
Ion	Ratio	Lower	Upper
57	100		
41	126.1	76.1	114.1#
43	105.0	201.4	302.0#
56	74.2	44.0	66.0#

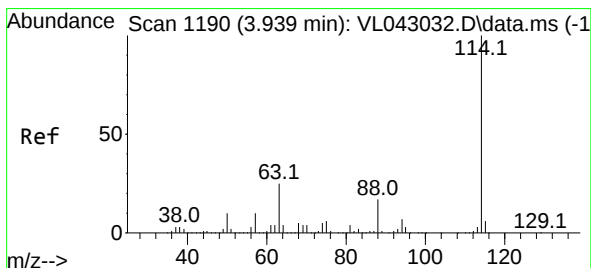
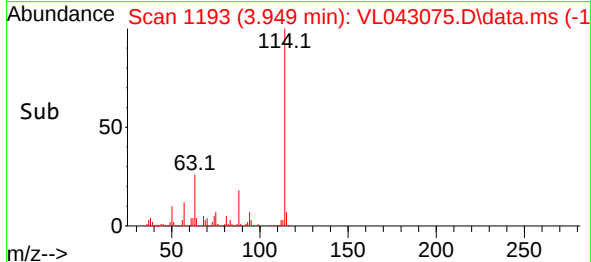
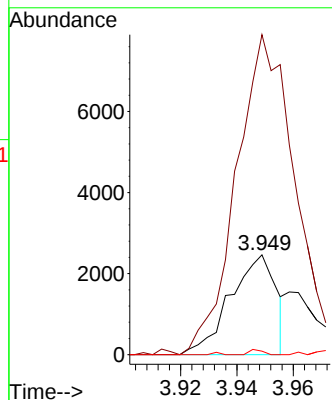
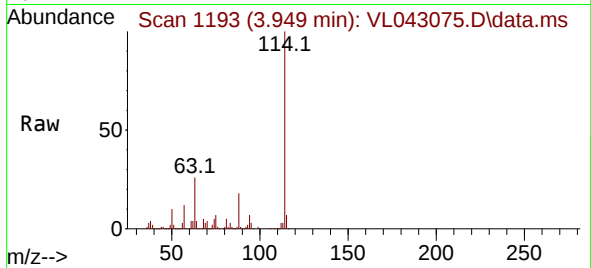




#30
Cyclohexane
Concen: 0.152 ppbv
RT: 3.949 min Scan# 1159
Delta R.T. 0.110 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

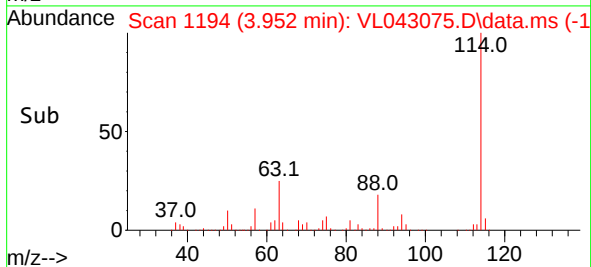
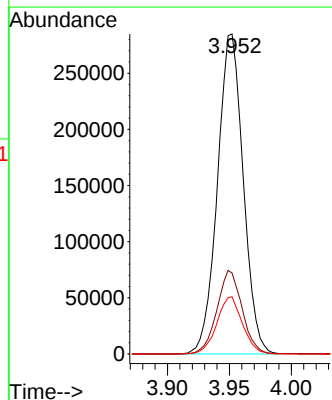
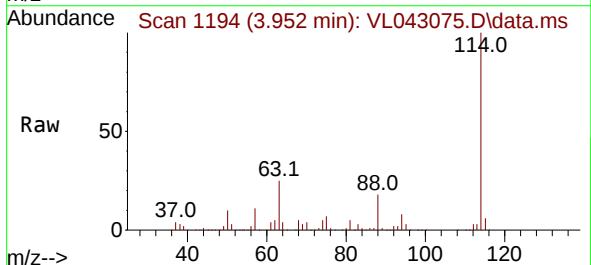
Instrument :
MSVOA_L
ClientSampleId :
IA3DL

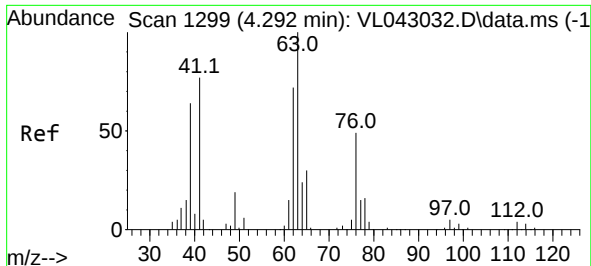
Tgt Ion: 84 Resp: 2769
Ion Ratio Lower Upper
84 100
56 421.9 99.9 149.9#
41 3.0 64.2 96.4#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. 0.013 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

Tgt Ion: 114 Resp: 413318
Ion Ratio Lower Upper
114 100
63 25.5 19.4 29.2
88 17.7 13.9 20.9





#39

1,2-Dichloropropane

Concen: 7.187 ppbv

RT: 3.949 min Scan# 1193

Delta R.T. -0.343 min

Lab File: VL043075.D

Acq: 09 Oct 2025 00:55

Instrument :

MSVOA_L

ClientSampleId :

IA3DL

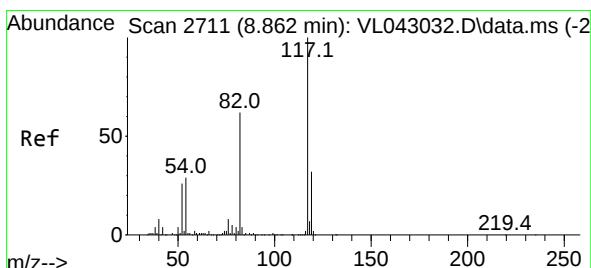
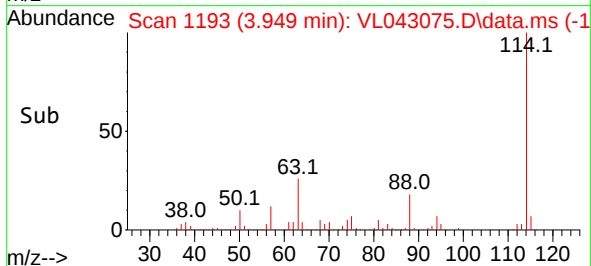
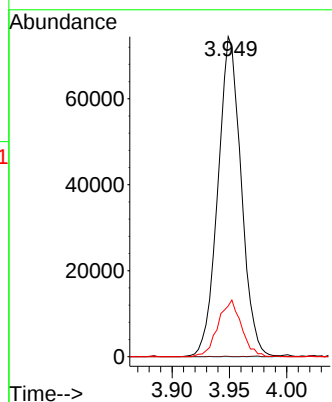
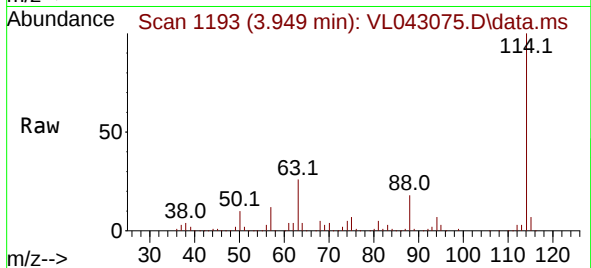
Tgt Ion: 63 Resp: 105199

Ion Ratio Lower Upper

63 100

41 0.1 61.6 92.4#

62 15.9 58.1 87.1#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.872 min Scan# 2714

Delta R.T. 0.010 min

Lab File: VL043075.D

Acq: 09 Oct 2025 00:55

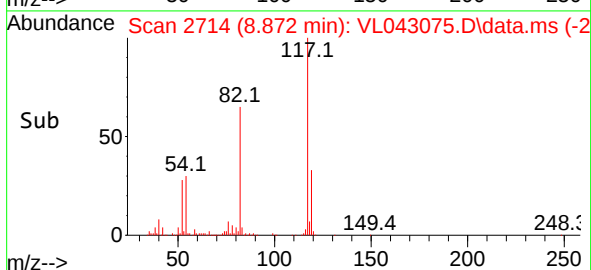
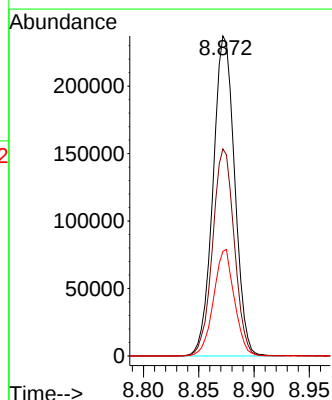
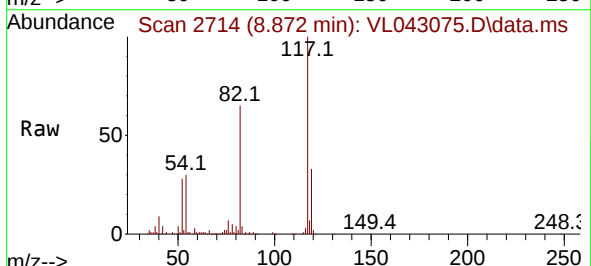
Tgt Ion: 117 Resp: 322709

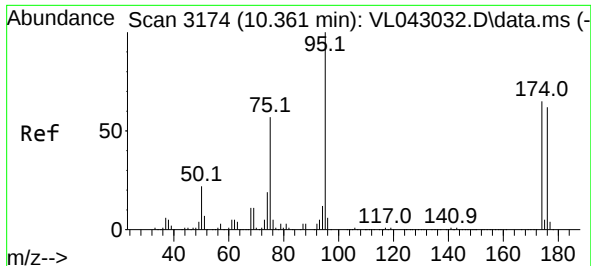
Ion Ratio Lower Upper

117 100

82 64.9 53.0 79.6

119 32.1 25.4 38.2

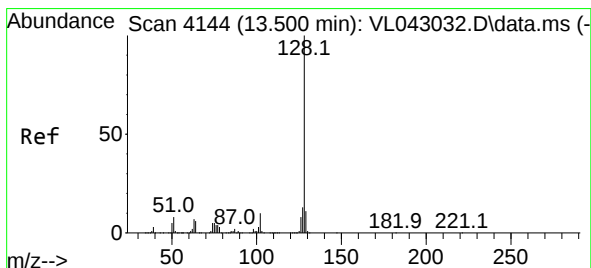
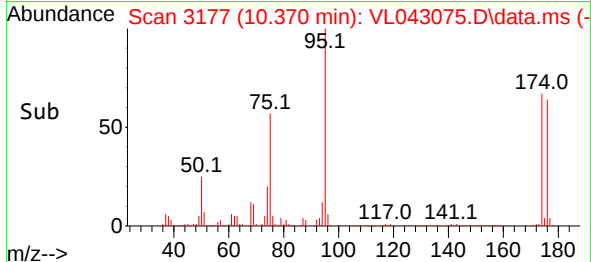
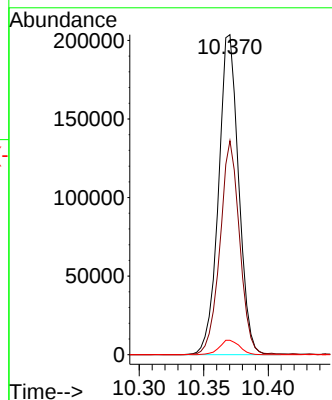
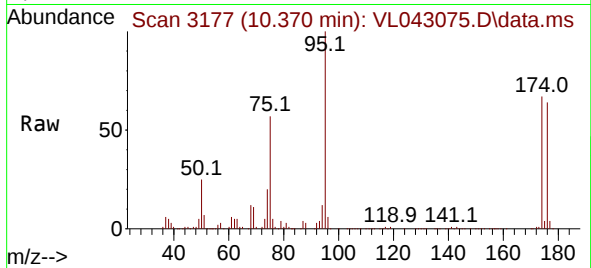




#68
1-Bromo-4-Fluorobenzene
Concen: 9.474 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. 0.010 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

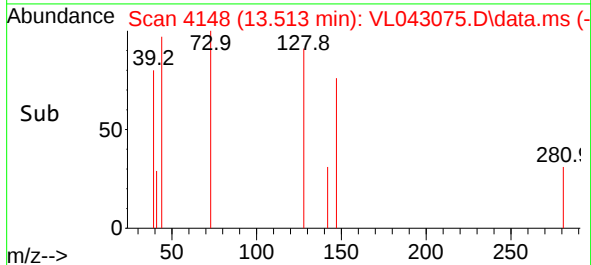
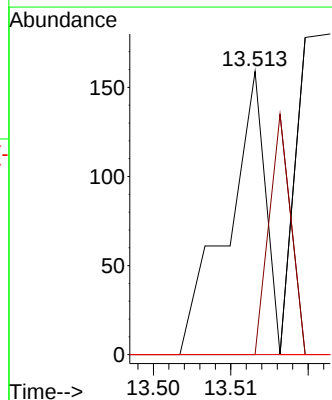
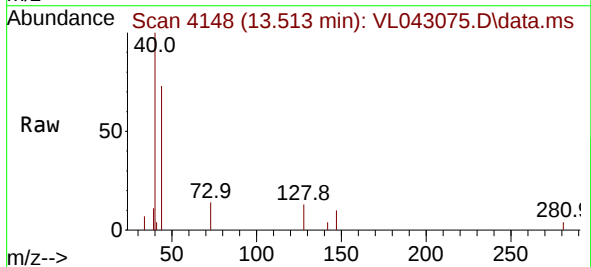
Instrument :
MSVOA_L
ClientSampleId :
IA3DL

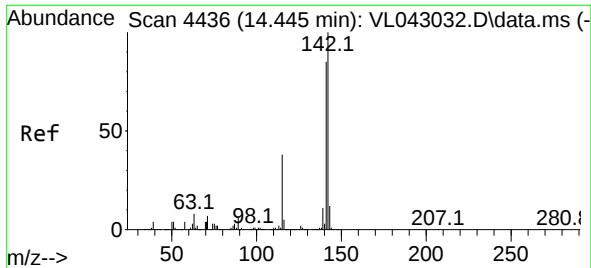
Tgt Ion: 95 Resp: 220238
Ion Ratio Lower Upper
95 100
174 65.3 52.3 78.5
175 4.6 3.8 5.8



#79
Naphthalene
Concen: 0.235 ppbv
RT: 13.513 min Scan# 4148
Delta R.T. 0.013 min
Lab File: VL043075.D
Acq: 09 Oct 2025 00:55

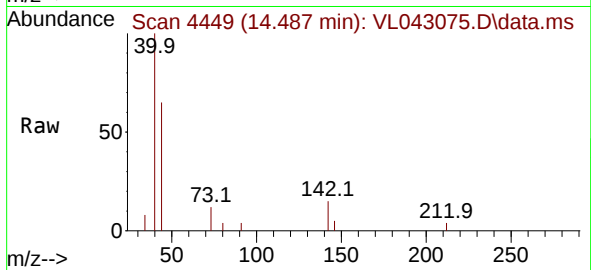
Tgt Ion:128 Resp: 55
Ion Ratio Lower Upper
128 100
127 100.0 10.6 16.0#
129 0.0 8.8 13.2#





#80
 Naphthalene, 2-methyl-
 Concen: 0.670 ppbv
 RT: 14.487 min Scan# 44
 Delta R.T. 0.042 min
 Lab File: VL043075.D
 Acq: 09 Oct 2025 00:55

Instrument :
 MSVOA_L
 ClientSampleId :
 IA3DL



Tgt Ion:	142	Resp:	155
Ion	Ratio	Lower	Upper
142	100		
141	34.8	66.6	100.0#
115	24.5	30.1	45.1#

