

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL100825\
 Data File : VL043073.D
 Acq On : 08 Oct 2025 23:49
 Operator : SY/MD
 Sample : Q3320-09DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA5DL

Quant Time: Oct 09 01:26:25 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)

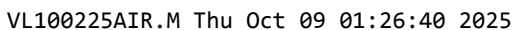
Internal Standards						
1) Bromochloromethane	2.784	49	170732	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	432208	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.872	117	337647	10.000	ppbv	0.00

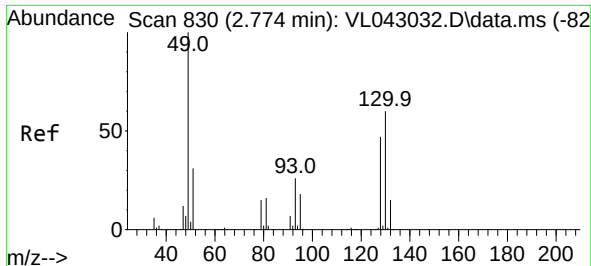
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	229643	9.441	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.400%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	1523	0.053	ppbv	99
3) Chlorodifluoromethane	1.476	51	1884	0.068	ppbv #	78
4) Chloromethane	1.534	50	946	0.090	ppbv	89
9) Propene	1.884	41	8899	0.793	ppbv	90
13) Ethanol	1.719	45	8844	20.474	ppbv #	31
15) Acetone	1.835	43	25523	1.068	ppbv	99
19) Isopropyl Alcohol	1.884	45	78380	6.843	ppbv #	29
20) Methylene Chloride	2.062	84	2845	0.273	ppbv #	89
23) Vinyl Acetate	2.450	43	946	0.186	ppbv #	55
26) Hexane	2.822	57	1000	0.043	ppbv #	44
29) Chloroform	2.845	83	1301	0.033	ppbv	100
30) Cyclohexane	3.949	84	2633	0.139	ppbv #	1
34) 2-Butanone	2.560	43	1277	0.044	ppbv #	53
39) 1,2-Dichloropropane	3.949	63	111636	7.294	ppbv #	23
79) Naphthalene	13.513	128	184	0.238	ppbv #	69
80) Naphthalene,2-methyl-	14.474	142	150	0.669	ppbv #	59

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

Quant Time: Oct 09 01:26:25 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

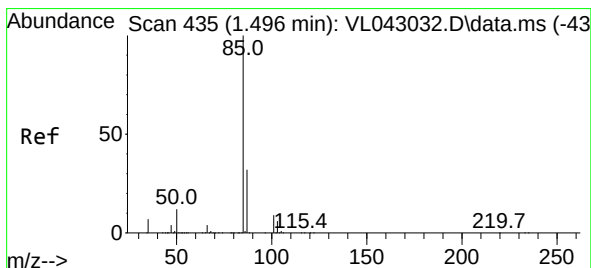
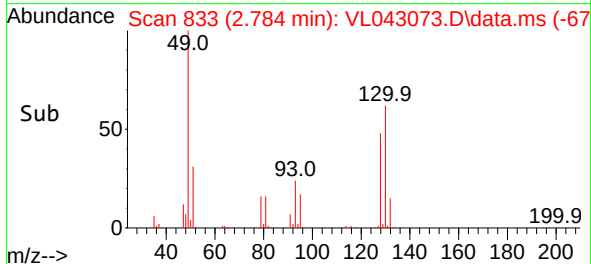
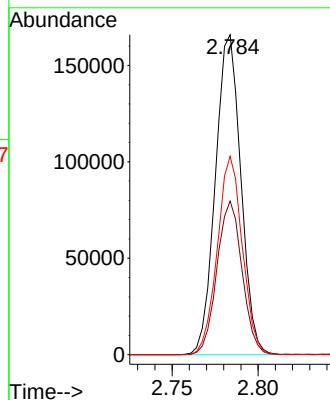
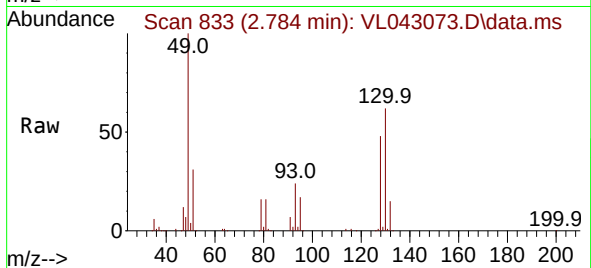




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 81
Delta R.T. 0.010 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

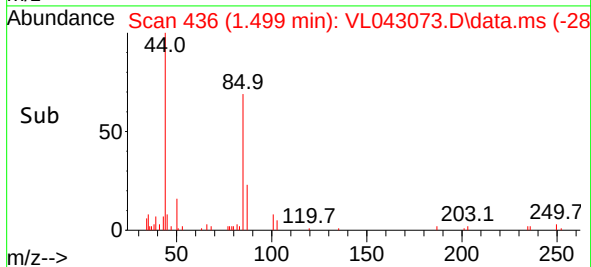
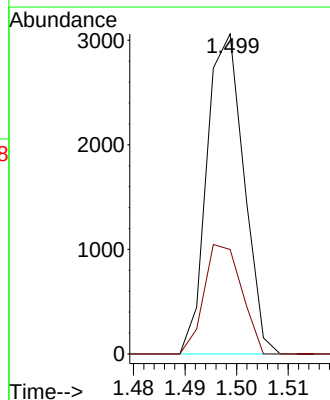
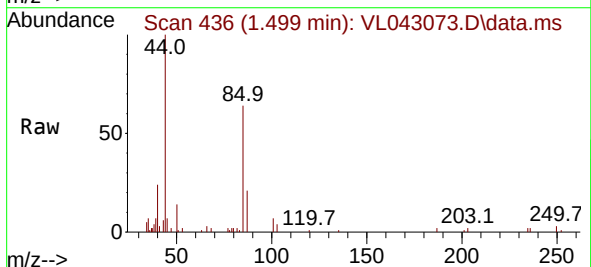
Instrument :
MSVOA_L
ClientSampleId :
IA5DL

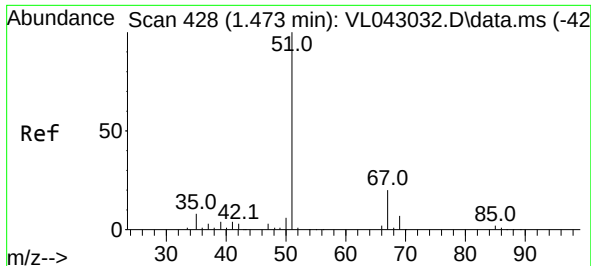
Tgt Ion: 49 Resp: 170732
Ion Ratio Lower Upper
49 100
128 47.5 24.1 72.2
130 60.9 31.4 94.3



#2
Dichlorodifluoromethane
Concen: 0.053 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

Tgt Ion: 85 Resp: 1523
Ion Ratio Lower Upper
85 100
87 32.6 25.8 38.6

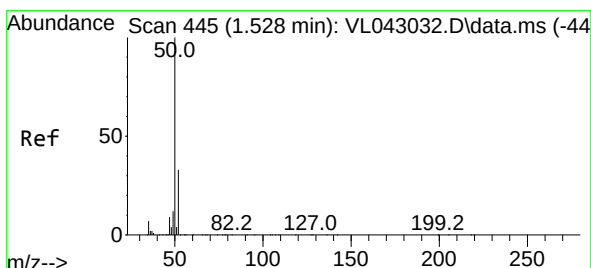
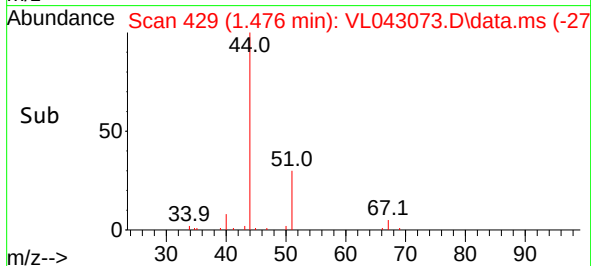
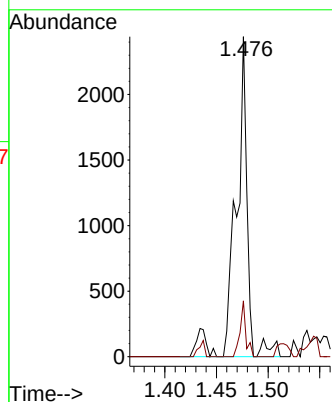
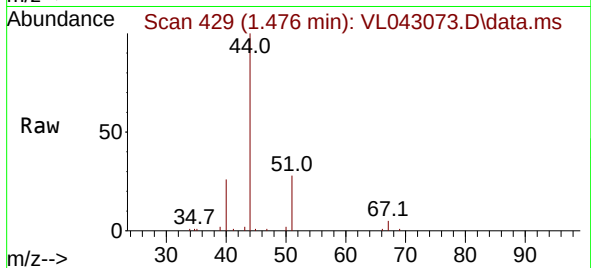




#3
Chlorodifluoromethane
Concen: 0.068 ppbv
RT: 1.476 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

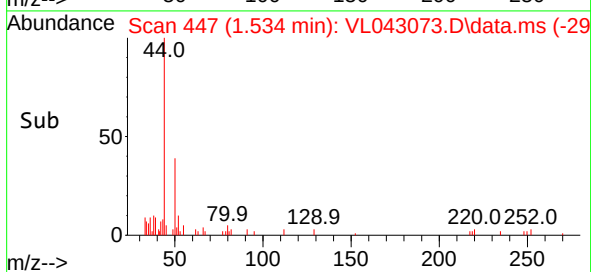
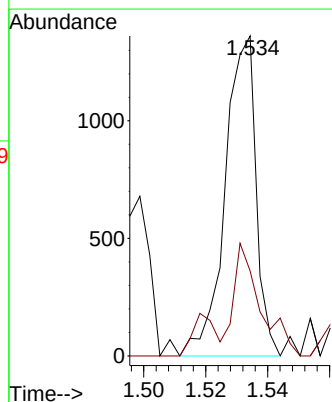
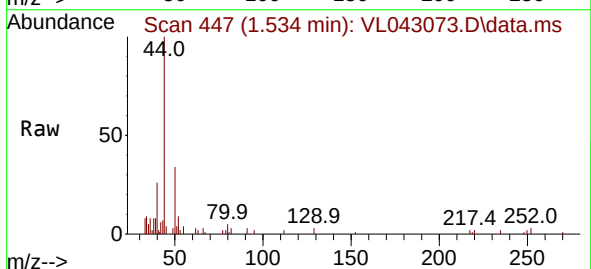
Instrument :
MSVOA_L
ClientSampleId :
IA5DL

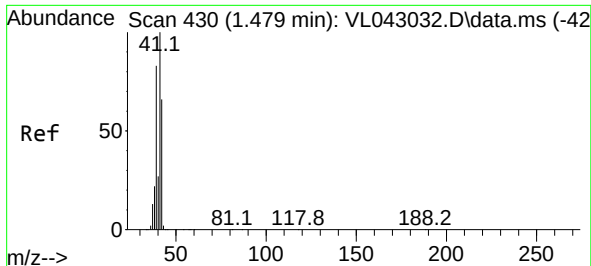
Tgt Ion: 51 Resp: 1884
Ion Ratio Lower Upper
51 100
67 8.8 15.1 22.7#



#4
Chloromethane
Concen: 0.090 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.006 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

Tgt Ion: 50 Resp: 946
Ion Ratio Lower Upper
50 100
52 26.5 26.2 39.2





#9

Propene

Concen: 0.793 ppbv

RT: 1.884 min Scan# 504

Delta R.T. 0.405 min

Lab File: VL043073.D

Acq: 08 Oct 2025 23:49

Instrument :

MSVOA_L

ClientSampleId :

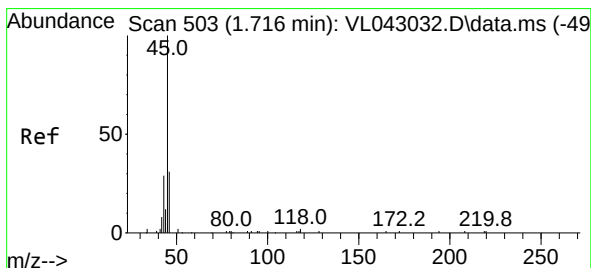
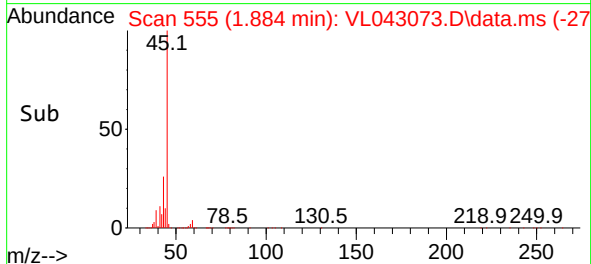
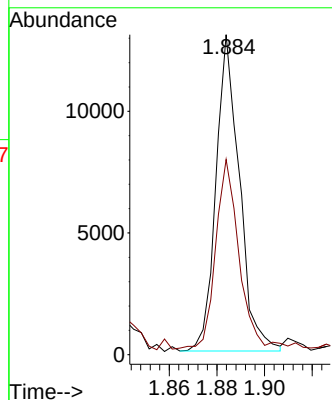
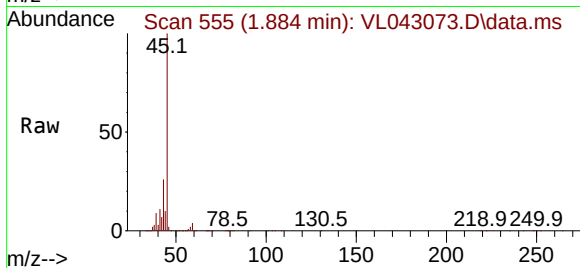
IA5DL

Tgt Ion: 41 Resp: 8899

Ion Ratio Lower Upper

41 100

42 58.8 53.3 79.9



#13

Ethanol

Concen: 20.474 ppbv

RT: 1.719 min Scan# 504

Delta R.T. 0.003 min

Lab File: VL043073.D

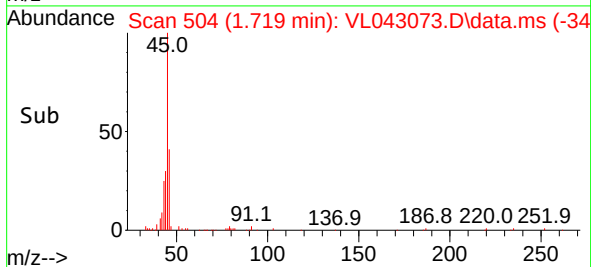
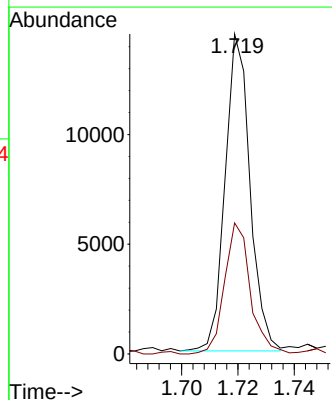
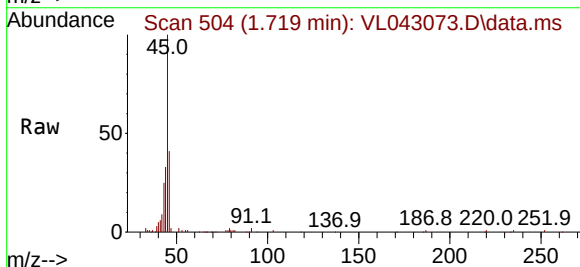
Acq: 08 Oct 2025 23:49

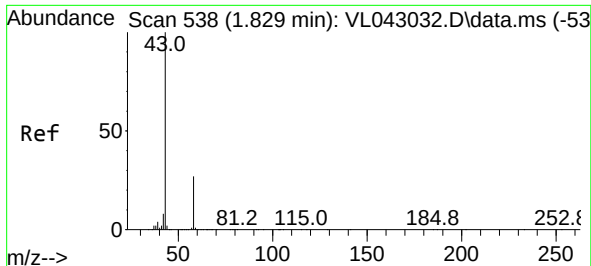
Tgt Ion: 45 Resp: 8844

Ion Ratio Lower Upper

45 100

46 0.0 17.8 71.4#

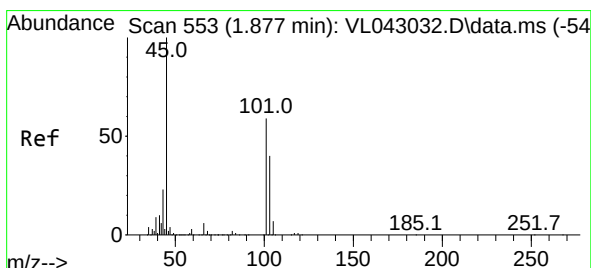
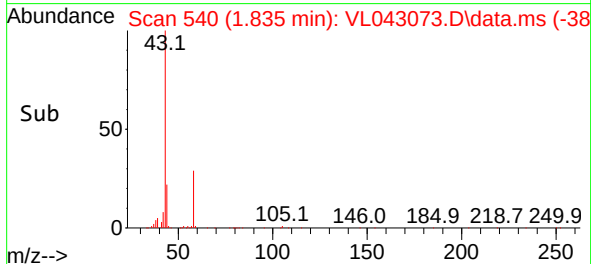
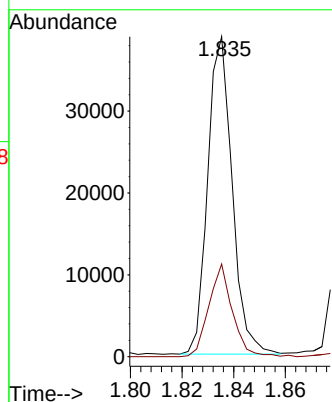
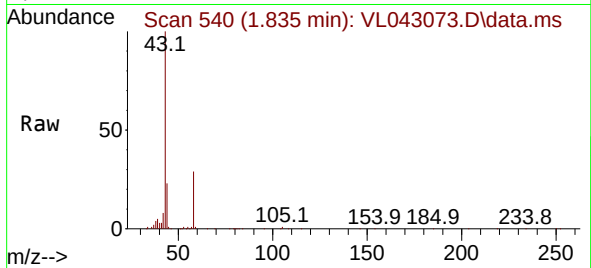




#15
Acetone
Concen: 1.068 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.006 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

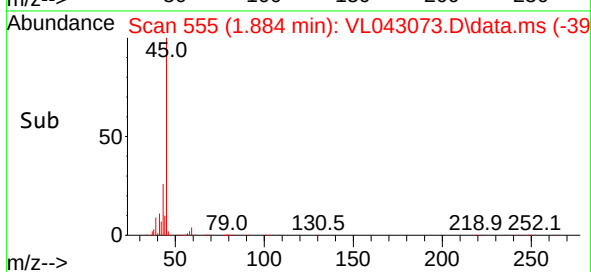
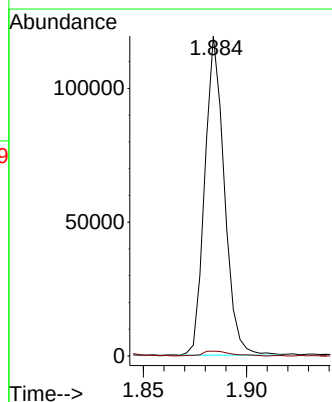
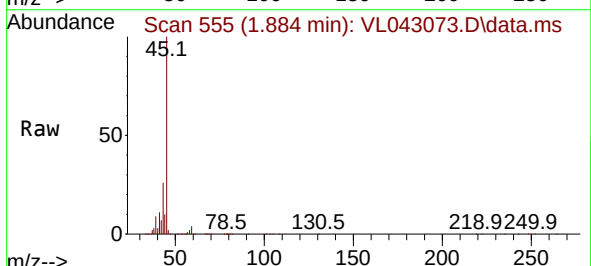
Instrument :
MSVOA_L
ClientSampleId :
IA5DL

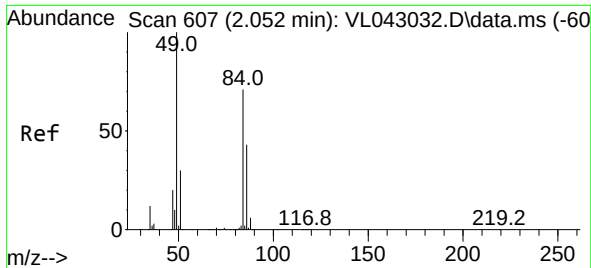
Tgt Ion: 43 Resp: 25523
Ion Ratio Lower Upper
43 100
58 28.1 22.2 33.4



#19
Isopropyl Alcohol
Concen: 6.843 ppbv
RT: 1.884 min Scan# 555
Delta R.T. 0.006 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

Tgt Ion: 45 Resp: 78380
Ion Ratio Lower Upper
45 100
58 2.5 42.3 63.5#

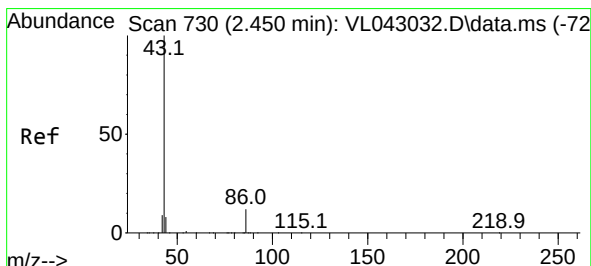
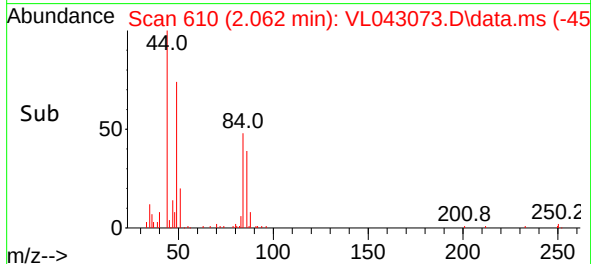
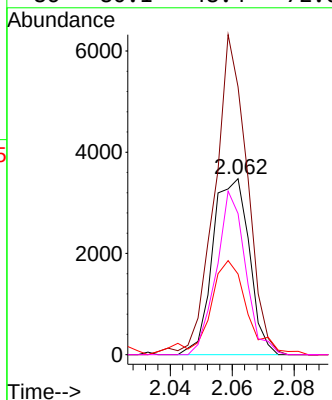
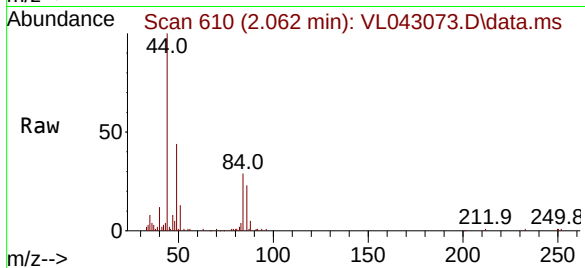




#20
Methylene Chloride
Concen: 0.273 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.010 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

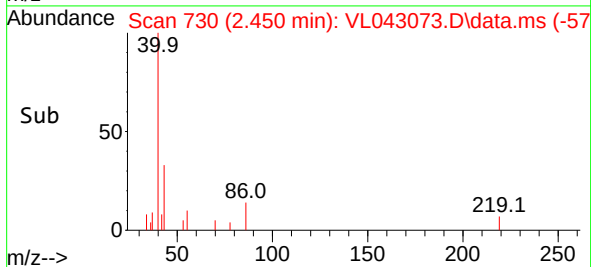
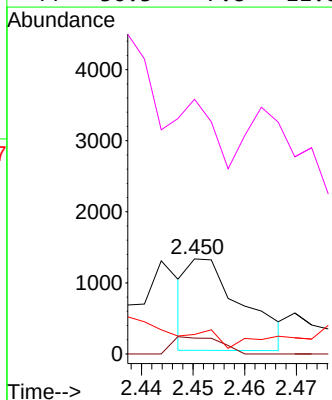
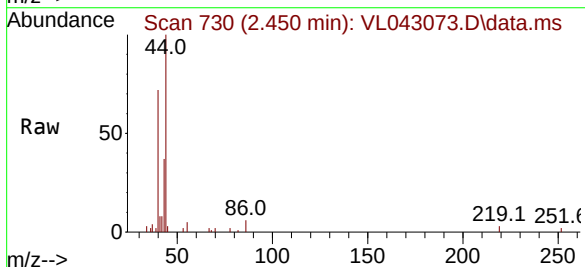
Instrument :
MSVOA_L
ClientSampleId :
IA5DL

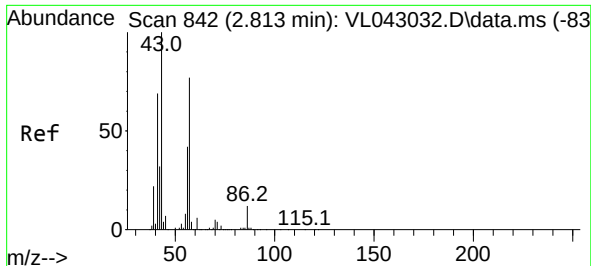
Tgt Ion: 84 Resp: 2845
Ion Ratio Lower Upper
84 100
49 150.2 112.5 168.7
51 43.3 34.2 51.2
86 80.1 48.4 72.6#



#23
Vinyl Acetate
Concen: 0.186 ppbv
RT: 2.450 min Scan# 730
Delta R.T. -0.000 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

Tgt Ion: 43 Resp: 946
Ion Ratio Lower Upper
43 100
86 25.1 7.5 11.3#
42 2.7 8.4 12.6#
44 36.3 7.8 11.8#

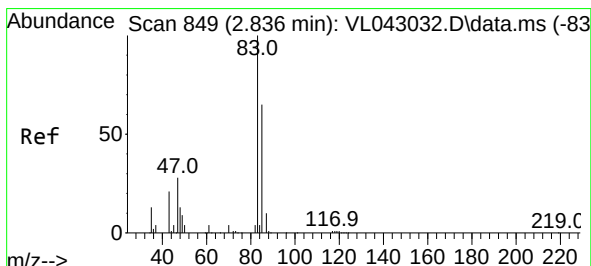
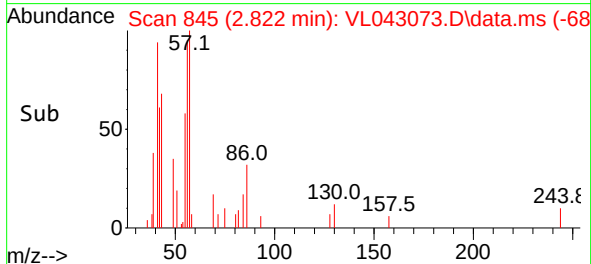
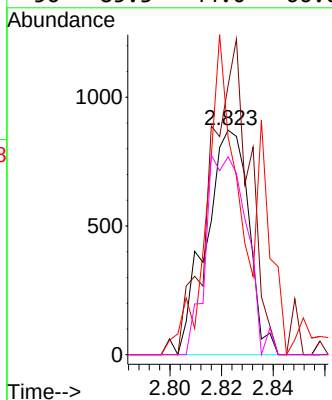
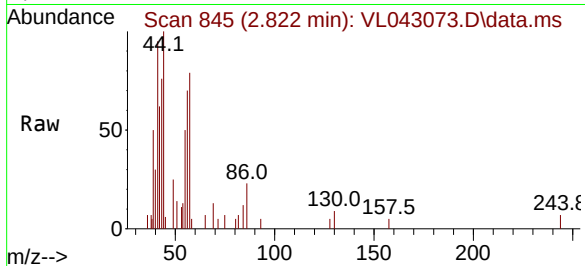




#26
Hexane
Concen: 0.043 ppbv
RT: 2.822 min Scan# 841
Delta R.T. 0.010 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

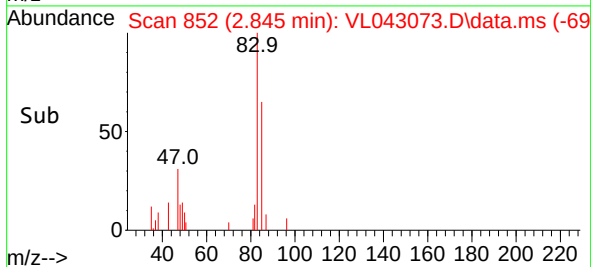
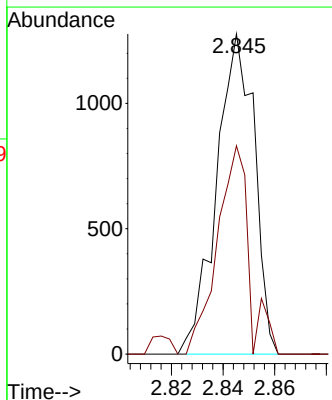
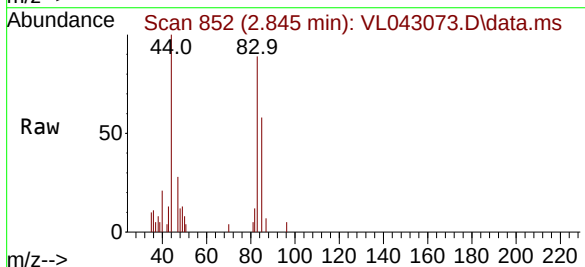
Instrument :
MSVOA_L
ClientSampleId :
IA5DL

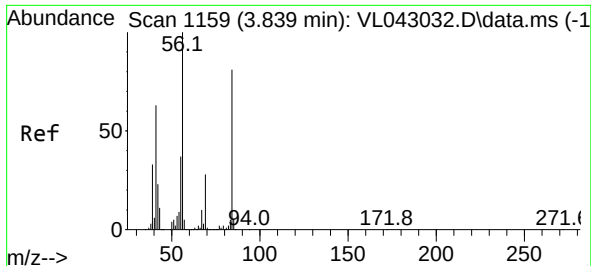
Tgt Ion: 57 Resp: 1000
Ion Ratio Lower Upper
57 100
41 133.4 76.1 114.1#
43 136.8 201.4 302.0#
56 85.3 44.0 66.0#



#29
Chloroform
Concen: 0.033 ppbv
RT: 2.845 min Scan# 852
Delta R.T. 0.010 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

Tgt Ion: 83 Resp: 1301
Ion Ratio Lower Upper
83 100
85 65.1 52.0 78.0

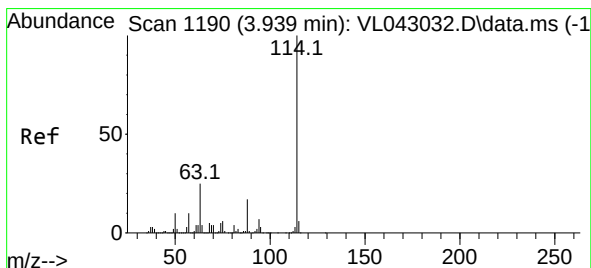
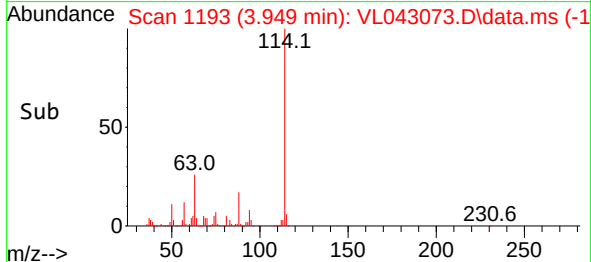
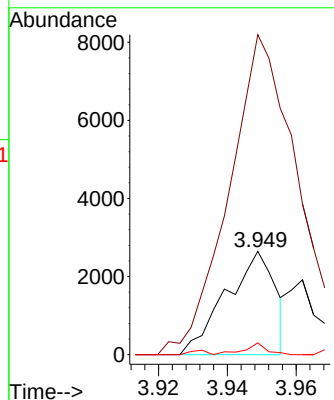
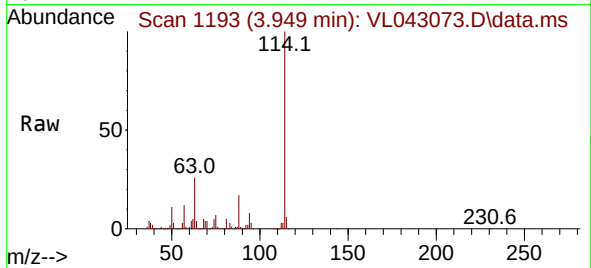




#30
Cyclohexane
Concen: 0.139 ppbv
RT: 3.949 min Scan# 1159
Delta R.T. 0.110 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

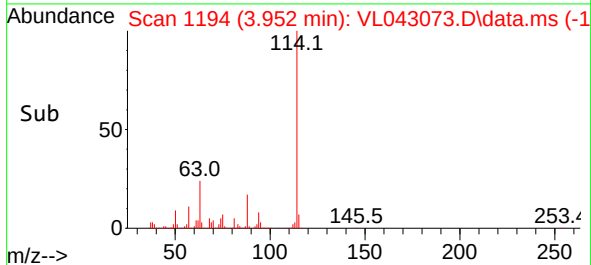
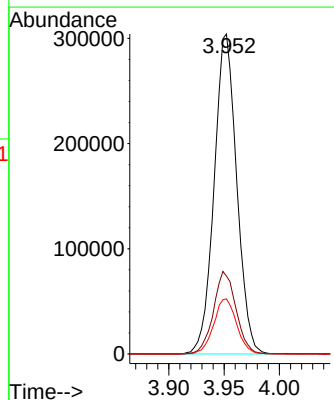
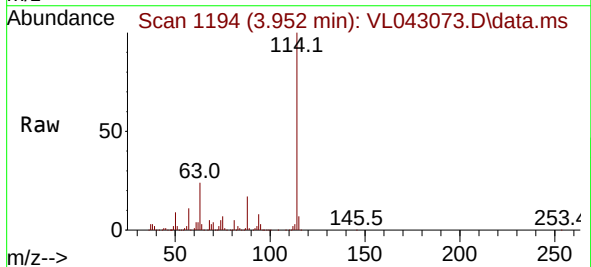
Instrument :
MSVOA_L
ClientSampleId :
IA5DL

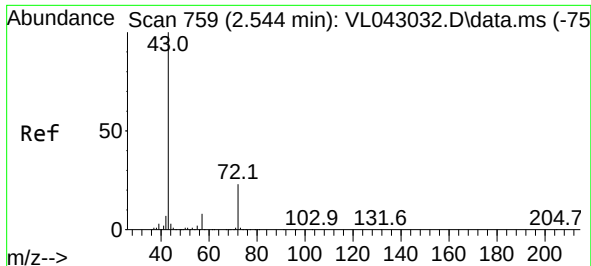
Tgt Ion: 84 Resp: 2633
Ion Ratio Lower Upper
84 100
56 440.7 99.9 149.9#
41 6.5 64.2 96.4#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. 0.013 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

Tgt Ion: 114 Resp: 432208
Ion Ratio Lower Upper
114 100
63 25.9 19.4 29.2
88 17.5 13.9 20.9

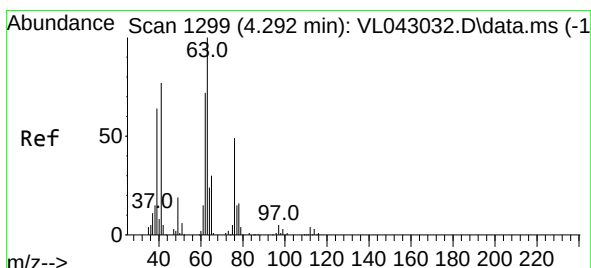
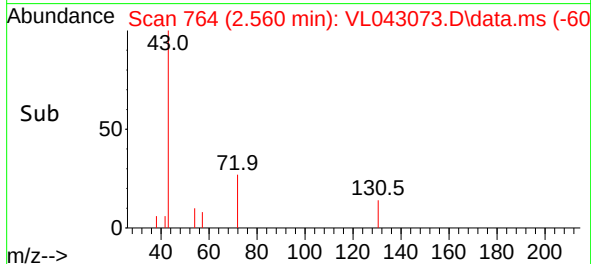
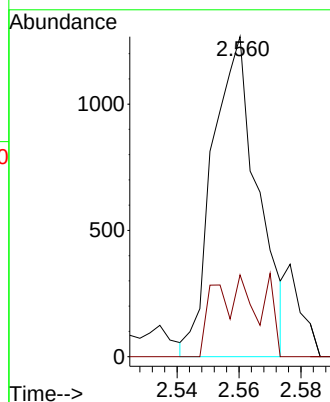
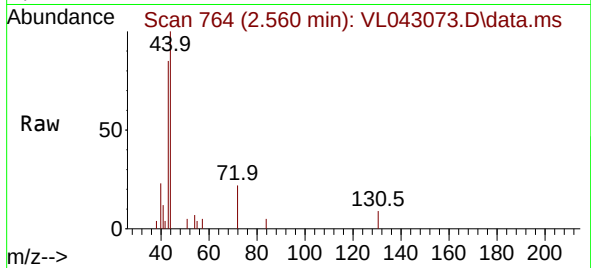




#34
2-Butanone
Concen: 0.044 ppbv
RT: 2.560 min Scan# 71
Delta R.T. 0.016 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

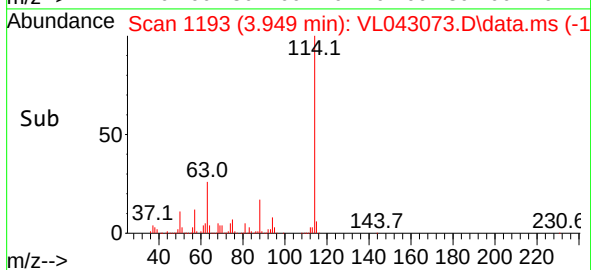
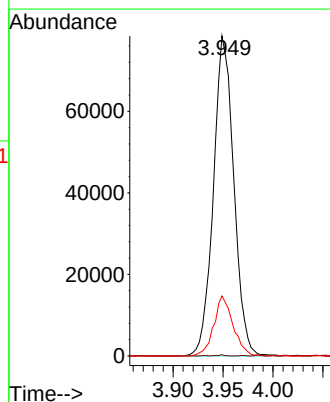
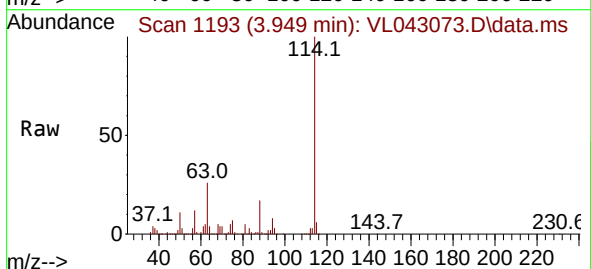
Instrument :
MSVOA_L
ClientSampleId :
IA5DL

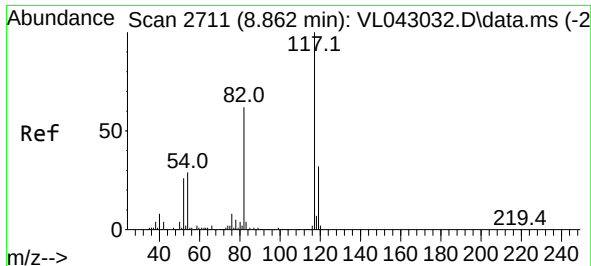
Tgt Ion: 43 Resp: 1277
Ion Ratio Lower Upper
43 100
72 0.0 18.4 27.6#



#39
1,2-Dichloropropane
Concen: 7.294 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.343 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

Tgt Ion: 63 Resp: 111636
Ion Ratio Lower Upper
63 100
41 0.4 61.6 92.4#
62 18.8 58.1 87.1#

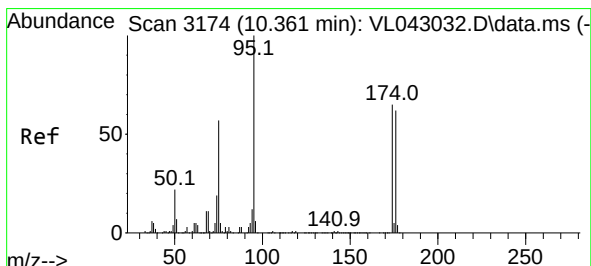
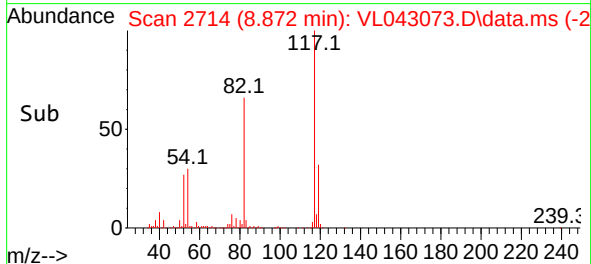
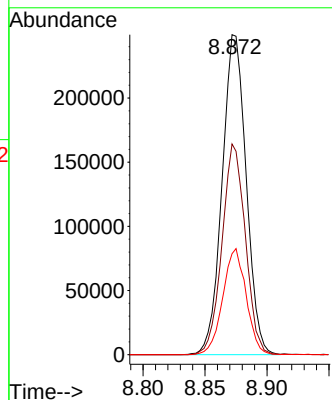
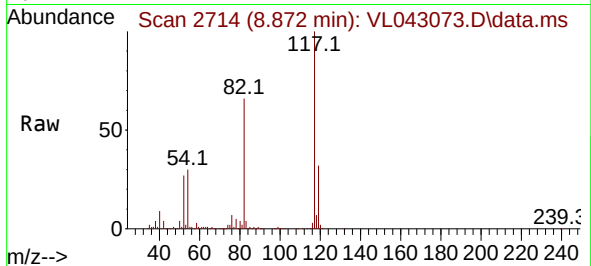




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.872 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

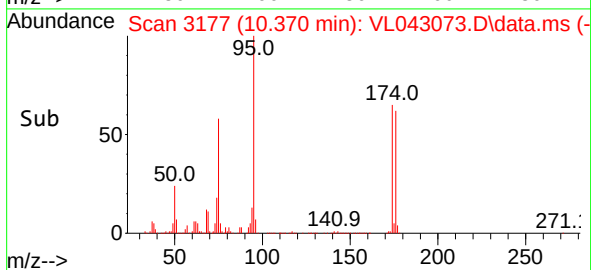
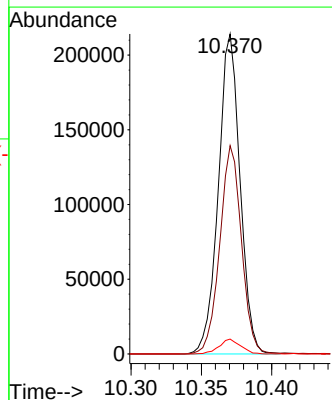
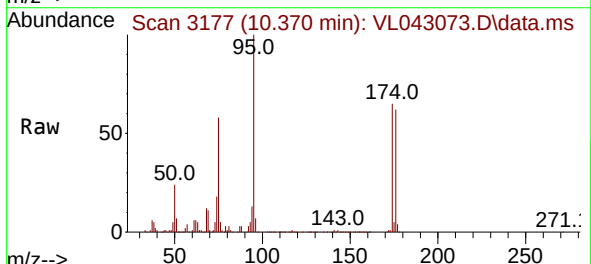
Instrument :
MSVOA_L
ClientSampleId :
IA5DL

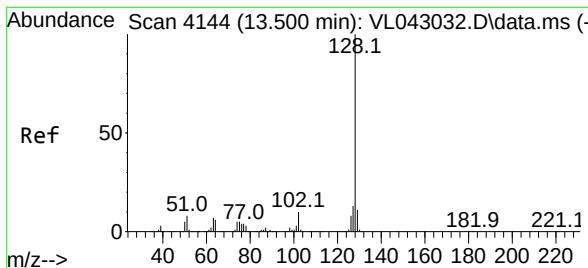
Tgt Ion:117 Resp: 337647
Ion Ratio Lower Upper
117 100
82 63.9 53.0 79.6
119 32.3 25.4 38.2



#68
1-Bromo-4-Fluorobenzene
Concen: 9.441 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. 0.010 min
Lab File: VL043073.D
Acq: 08 Oct 2025 23:49

Tgt Ion: 95 Resp: 229643
Ion Ratio Lower Upper
95 100
174 65.5 52.3 78.5
175 4.6 3.8 5.8





#79

Naphthalene

Concen: 0.238 ppbv

RT: 13.513 min Scan# 4144

Delta R.T. 0.013 min

Lab File: VL043073.D

Acq: 08 Oct 2025 23:49

Instrument :

MSVOA_L

ClientSampleId :

IA5DL

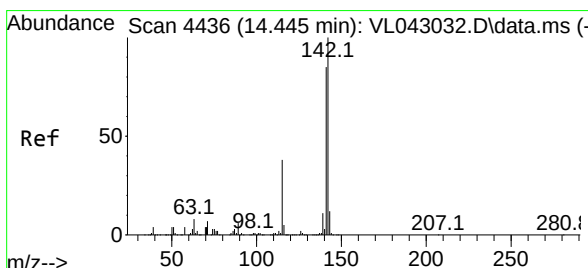
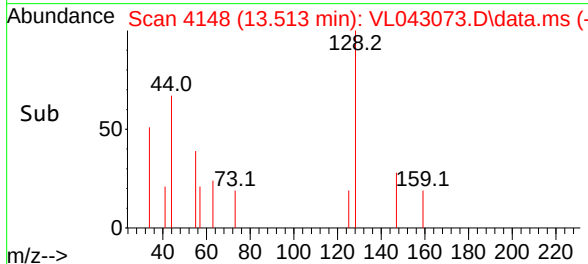
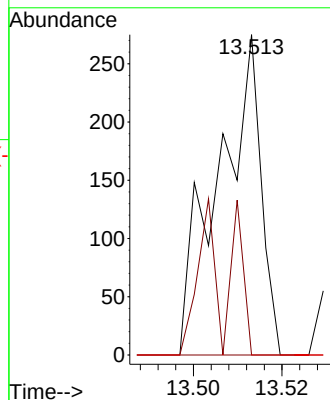
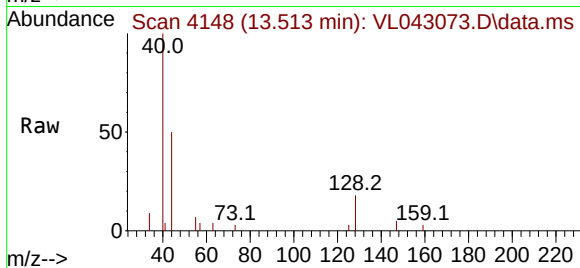
Tgt Ion:128 Resp: 184

Ion Ratio Lower Upper

128 100

127 0.0 10.6 16.0#

129 0.0 8.8 13.2#



#80

Naphthalene,2-methyl-

Concen: 0.669 ppbv

RT: 14.474 min Scan# 4445

Delta R.T. 0.029 min

Lab File: VL043073.D

Acq: 08 Oct 2025 23:49

Tgt Ion:142 Resp: 150

Ion Ratio Lower Upper

142 100

141 124.7 66.6 100.0#

115 56.0 30.1 45.1#

