

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
 Data File : VL042290.D
 Acq On : 09 Apr 2025 13:25
 Operator : SY/MD
 Sample : Q1665-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 AA-DUP-1-3242025

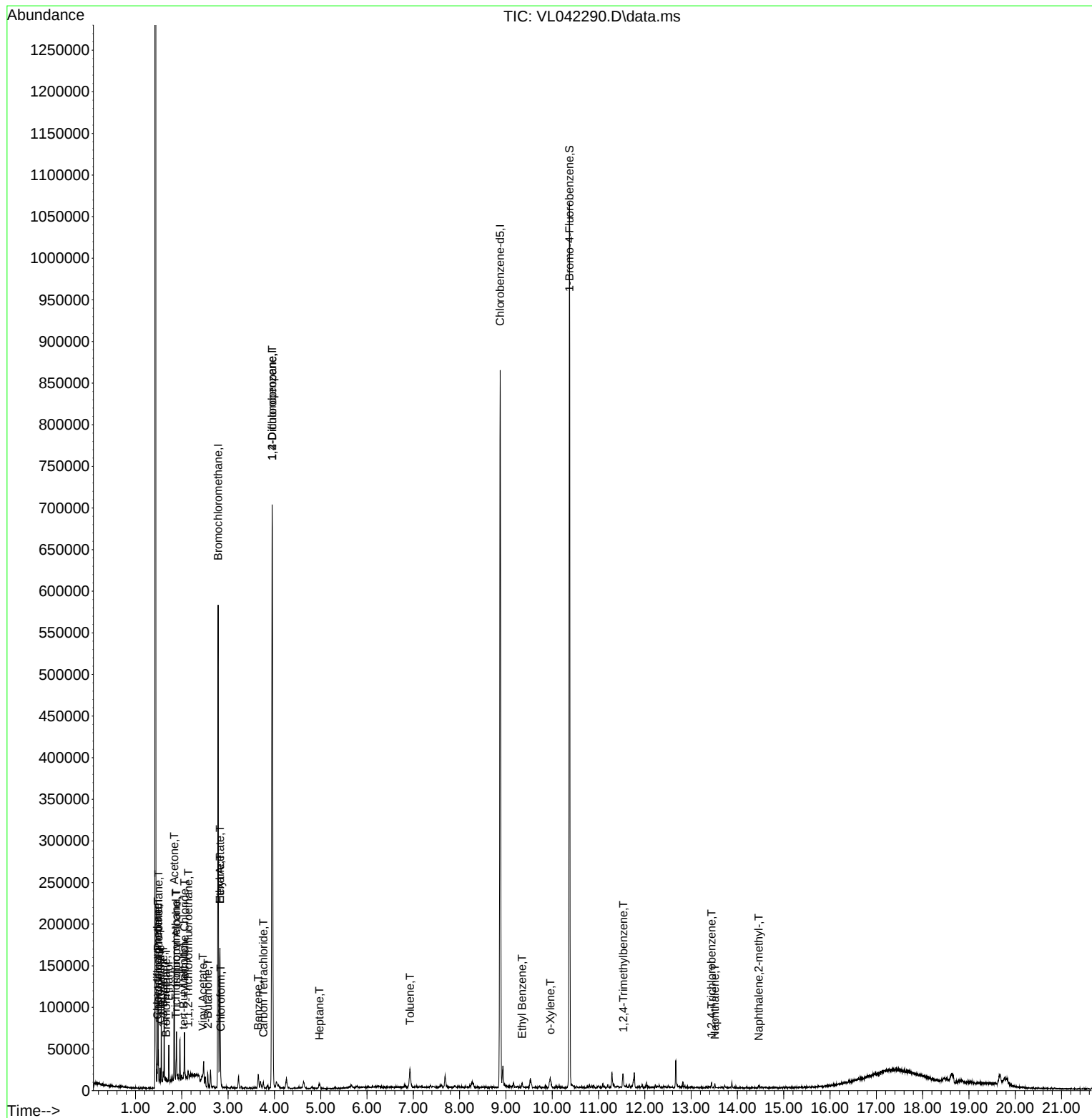
Quant Time: Apr 10 01:43:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Mar 28 02:00:52 2025
 Response via : Initial Calibration

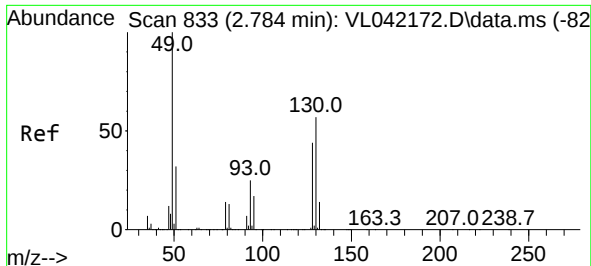
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.784	49	159221	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	408039	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	345931	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	258960	9.116	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	91.200%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.496	85	9289	0.395	ppbv	96
3) Chlorodifluoromethane	1.473	51	12980	0.540	ppbv #	84
4) Chloromethane	1.531	50	5425	0.565	ppbv	93
6) Bromomethane	1.661	94	185	0.042	ppbv #	4
9) Propene	1.486	41	9320	0.847	ppbv #	80
10) Heptane	4.972	43	1334	0.046	ppbv #	68
11) Trichlorofluoromethane	1.874	101	4760	0.208	ppbv	94
12) 1,1,2-Trichlorotrifluo...	2.140	101	1389	0.074	ppbv	84
13) Ethanol	1.719	45	13916	13.373	ppbv	84
15) Acetone	1.835	43	79179	3.556	ppbv	93
16) 1,3-Butadiene	1.599	39	1987	0.183	ppbv #	71
17) tert-Butyl alcohol	2.039	59	1723	0.062	ppbv #	53
19) Isopropyl Alcohol	1.884	45	22614	1.800	ppbv #	35
20) Methylene Chloride	2.059	84	7901	0.953	ppbv	93
23) Vinyl Acetate	2.454	43	6464	0.671	ppbv #	80
25) Ethyl Acetate	2.823	43	28683	0.496	ppbv #	81
26) Hexane	2.823	57	34660	1.553	ppbv #	37
29) Chloroform	2.842	83	1363	0.042	ppbv #	73
34) 2-Butanone	2.561	43	10562	0.357	ppbv	99
35) Carbon Tetrachloride	3.761	117	1242	0.039	ppbv	84
36) Benzene	3.651	78	6629	0.164	ppbv	95
39) 1,2-Dichloropropane	3.952	63	103630	7.034	ppbv #	22
53) Toluene	6.930	91	12275	0.256	ppbv #	79
58) Ethyl Benzene	9.348	91	2673	0.044	ppbv	99
60) o-Xylene	9.959	91	2526	0.051	ppbv	98
74) 1,2,4-Trimethylbenzene	11.536	105	3147	0.051	ppbv #	71
79) Naphthalene	13.513	128	2423	0.036	ppbv #	92
80) Naphthalene,2-methyl-	14.462	142	999	0.030	ppbv	91
81) 1,2,4-Trichlorobenzene	13.442	180	1092	0.035	ppbv	93

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

Quant Time: Apr 10 01:43:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

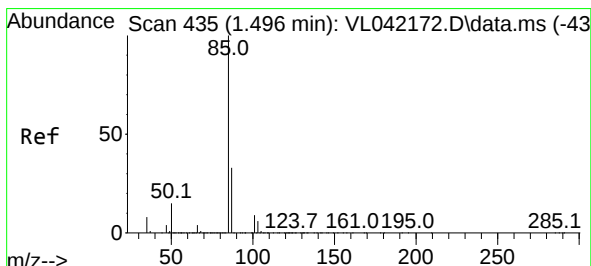
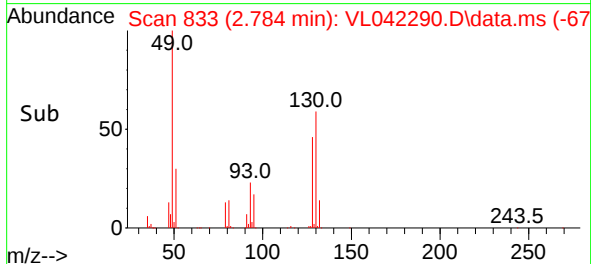
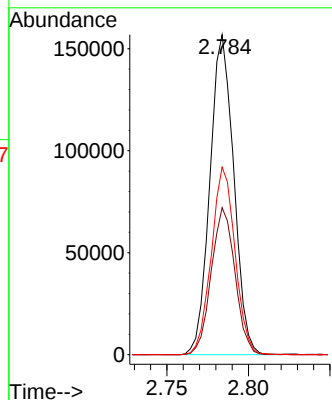
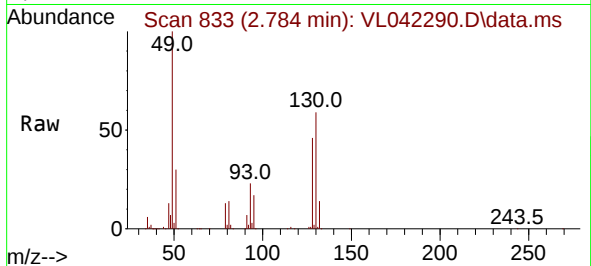




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.784 min Scan# 81
 Delta R.T. -0.000 min
 Lab File: VL042290.D
 Acq: 09 Apr 2025 13:25

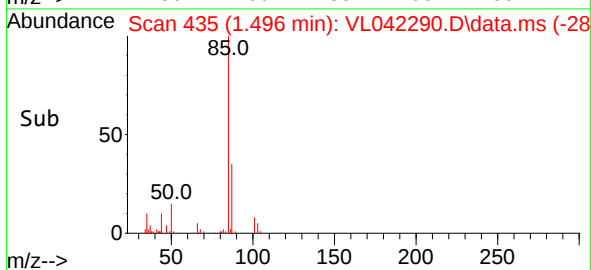
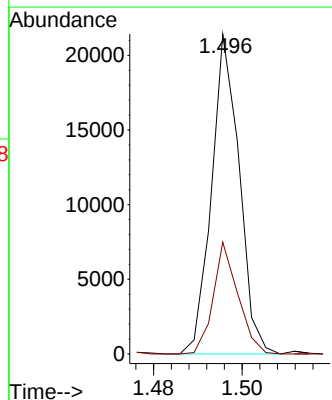
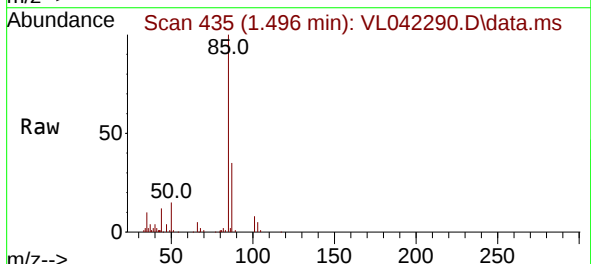
Instrument :
 MSVOA_L
 ClientSampleId :
 AA-DUP-1-3242025

Tgt Ion: 49 Resp: 159221
 Ion Ratio Lower Upper
 49 100
 128 45.7 22.9 68.5
 130 58.4 28.8 86.4



#2
 Dichlorodifluoromethane
 Concen: 0.395 ppbv
 RT: 1.496 min Scan# 435
 Delta R.T. -0.000 min
 Lab File: VL042290.D
 Acq: 09 Apr 2025 13:25

Tgt Ion: 85 Resp: 9289
 Ion Ratio Lower Upper
 85 100
 87 34.9 26.1 39.1

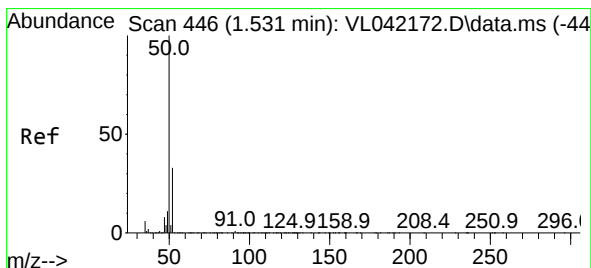
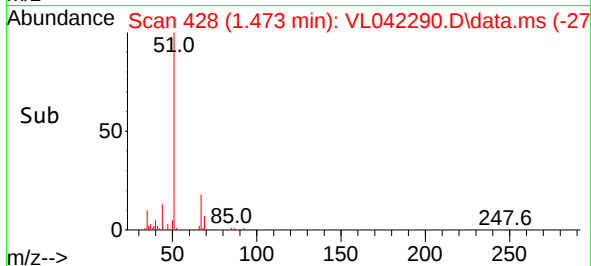
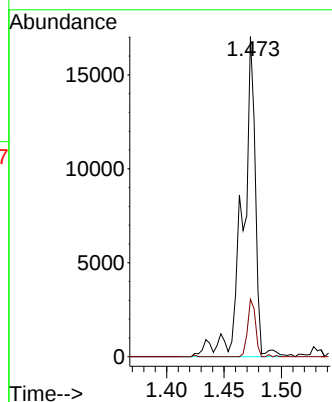
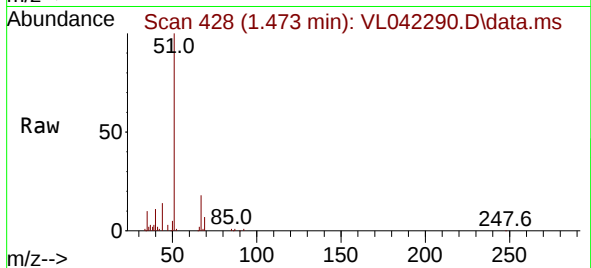




#3
Chlorodifluoromethane
Concen: 0.540 ppbv
RT: 1.473 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

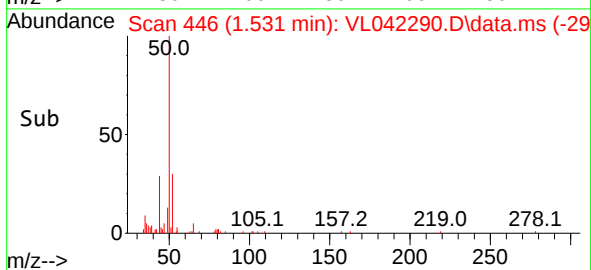
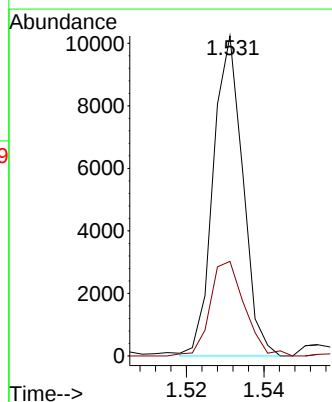
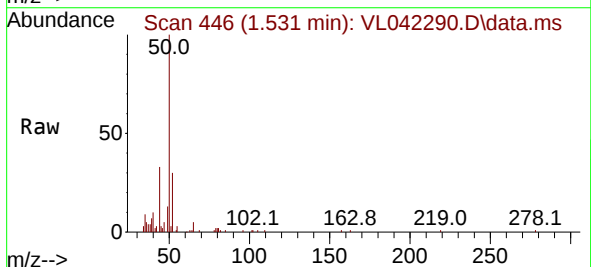
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ClientSampleId :
AA-DUP-1-3242025

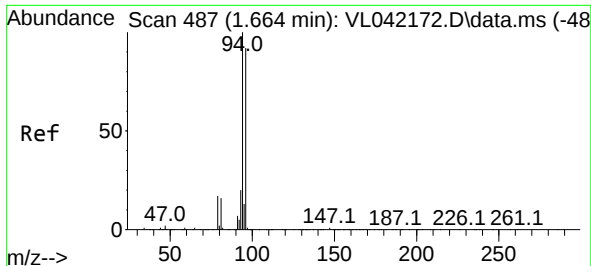
Tgt Ion: 51 Resp: 12980
Ion Ratio Lower Upper
51 100
67 11.4 15.0 22.6#



#4
Chloromethane
Concen: 0.565 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 50 Resp: 5425
Ion Ratio Lower Upper
50 100
52 28.9 26.1 39.1

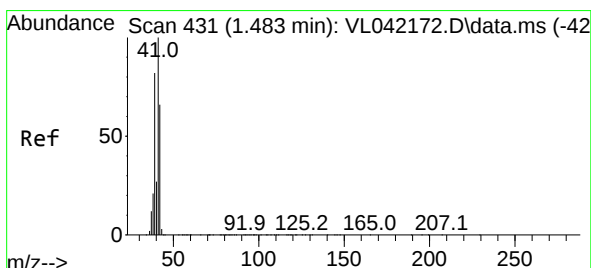
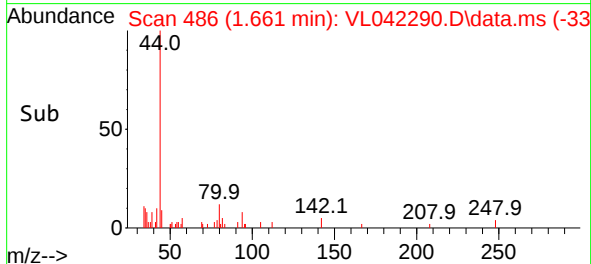
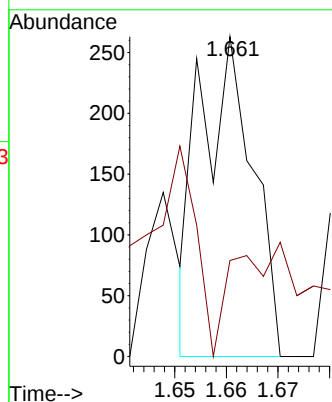
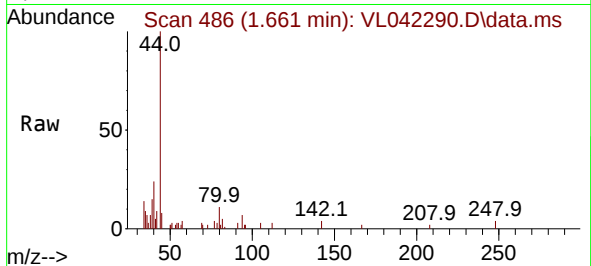




#6
Bromomethane
Concen: 0.042 ppbv
RT: 1.661 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

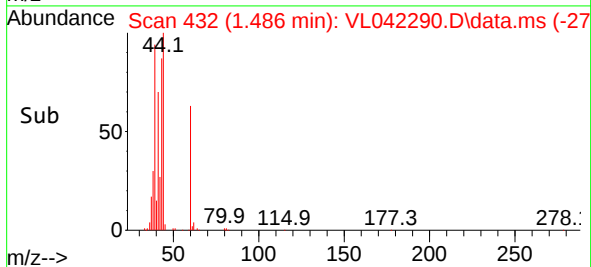
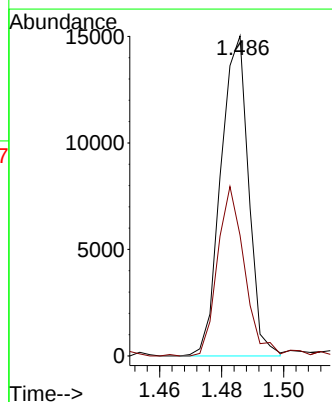
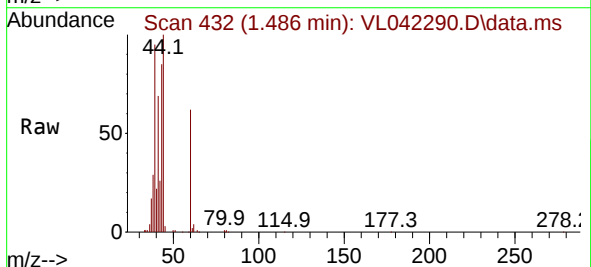
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

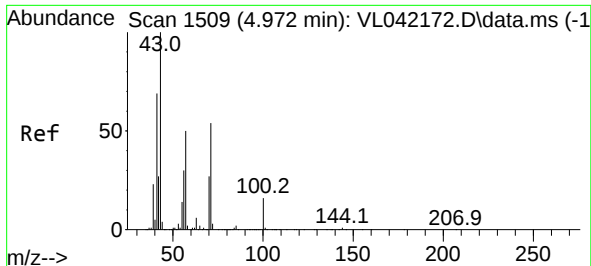
Tgt Ion: 94 Resp: 185
Ion Ratio Lower Upper
94 100
96 0.0 73.1 109.7#



#9
Propene
Concen: 0.847 ppbv
RT: 1.486 min Scan# 432
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 41 Resp: 9320
Ion Ratio Lower Upper
41 100
42 52.7 55.4 83.2#

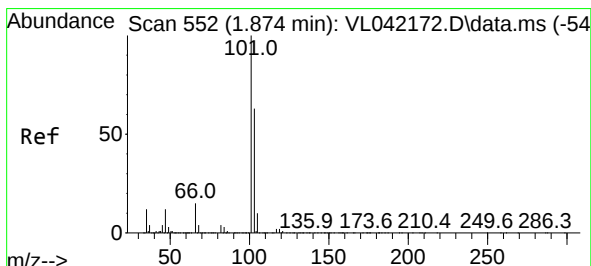
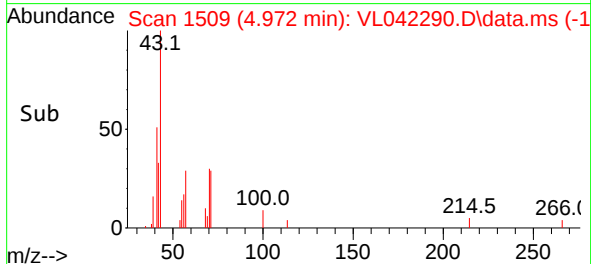
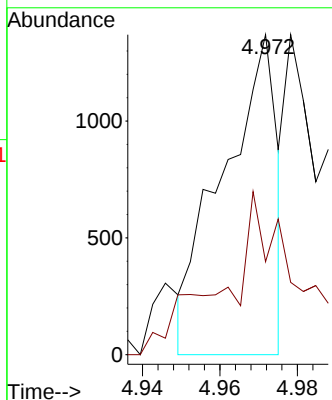
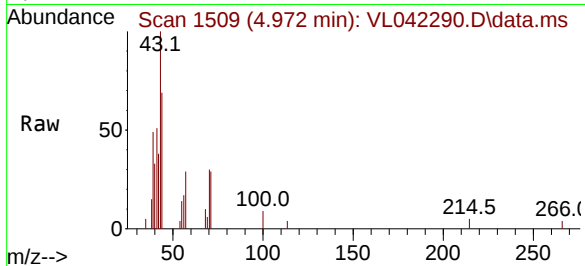




#10
Heptane
Concen: 0.046 ppbv
RT: 4.972 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

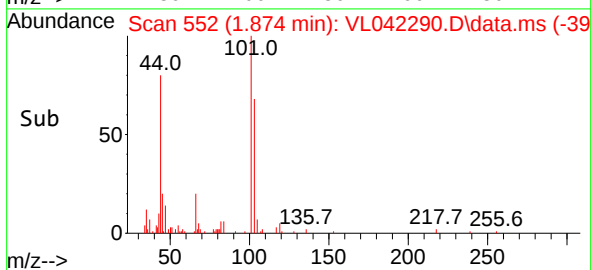
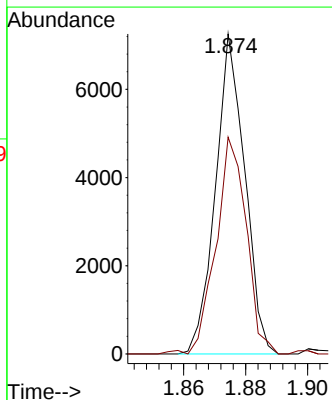
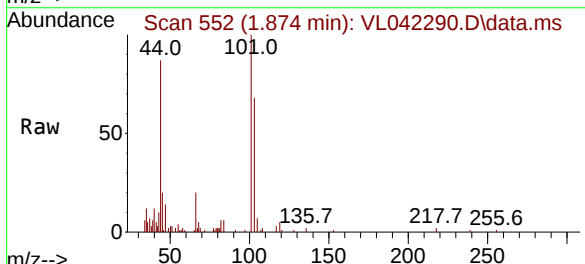
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

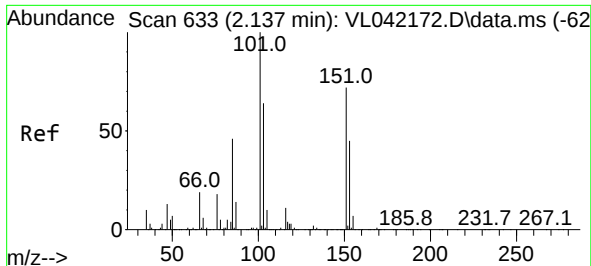
Tgt Ion: 43 Resp: 1334
Ion Ratio Lower Upper
43 100
57 71.4 39.4 59.2#



#11
Trichlorofluoromethane
Concen: 0.208 ppbv
RT: 1.874 min Scan# 552
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:101 Resp: 4760
Ion Ratio Lower Upper
101 100
103 67.7 50.2 75.2

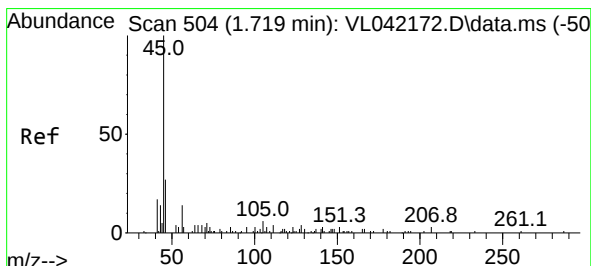
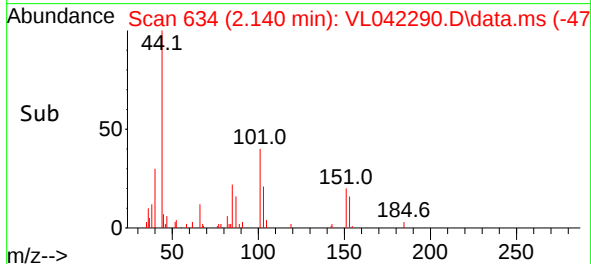
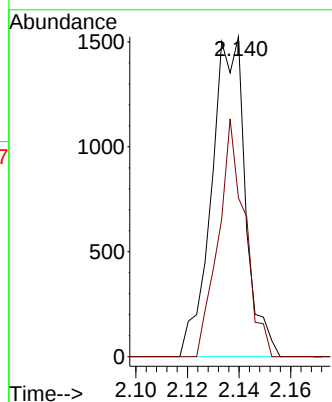
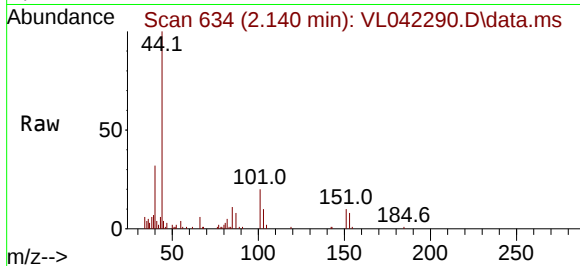




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.074 ppbv
RT: 2.140 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

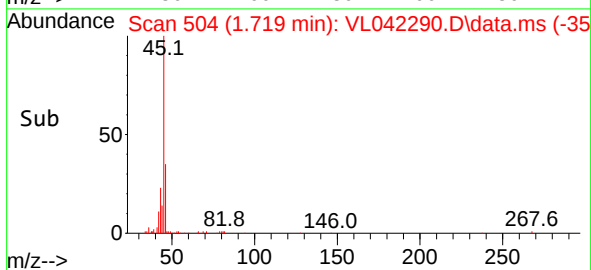
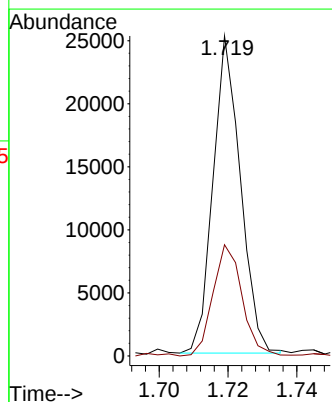
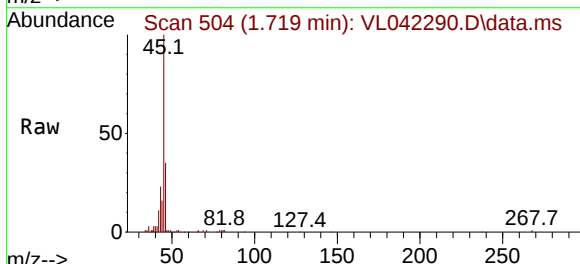
Instrument :
MSVOA_L
ClientSampleId :
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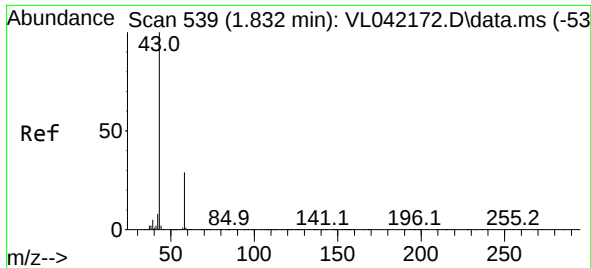
Tgt Ion:101 Resp: 1389
Ion Ratio Lower Upper
101 100
151 58.2 57.1 85.7



#13
Ethanol
Concen: 13.373 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 45 Resp: 13916
Ion Ratio Lower Upper
45 100
46 39.5 20.2 80.8





#15

Acetone

Concen: 3.556 ppbv

RT: 1.835 min Scan# 54

Delta R.T. 0.003 min

Lab File: VL042290.D

Acq: 09 Apr 2025 13:25

Instrument :

MSVOA_L

ClientSampleId :

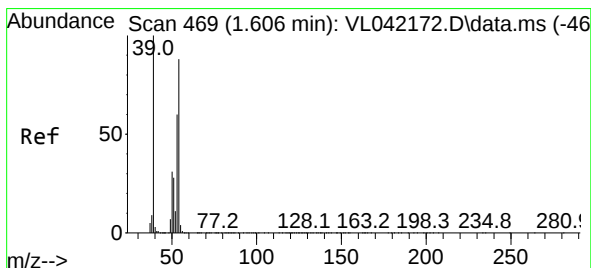
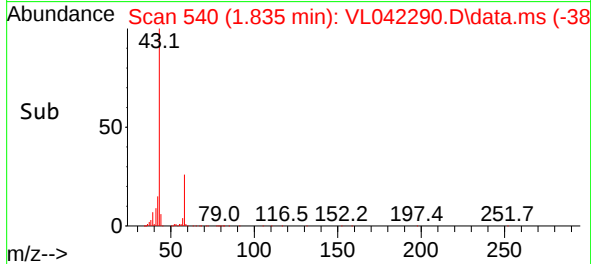
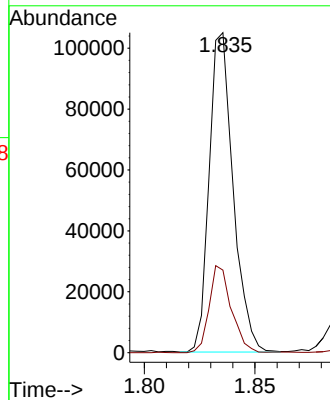
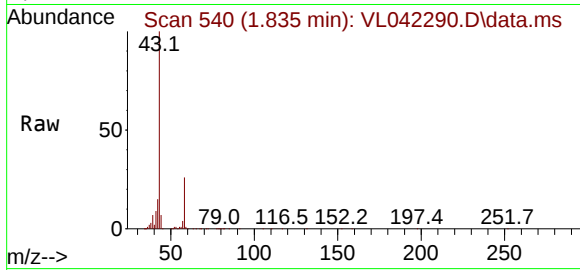
AA-DUP-1-3242025

Tgt Ion: 43 Resp: 79179

Ion Ratio Lower Upper

43 100

58 25.4 23.2 34.8



#16

1,3-Butadiene

Concen: 0.183 ppbv

RT: 1.599 min Scan# 467

Delta R.T. -0.007 min

Lab File: VL042290.D

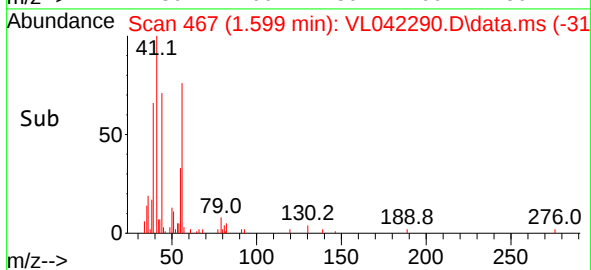
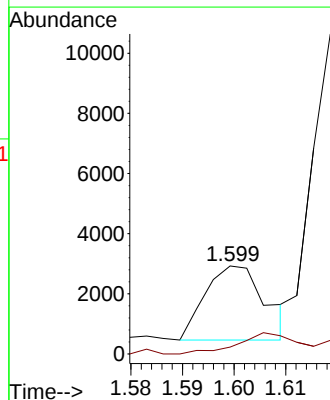
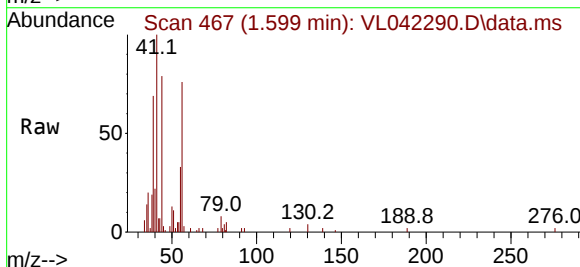
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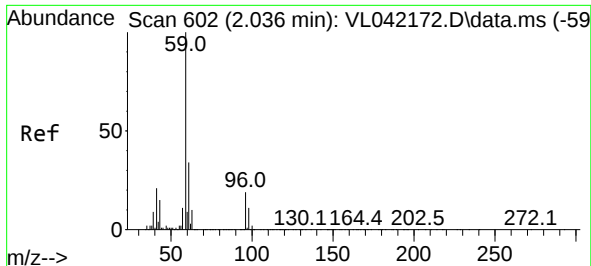
Tgt Ion: 39 Resp: 1987

Ion Ratio Lower Upper

39 100

54 51.0 60.7 91.1#

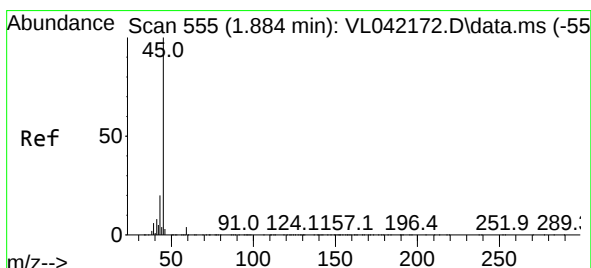
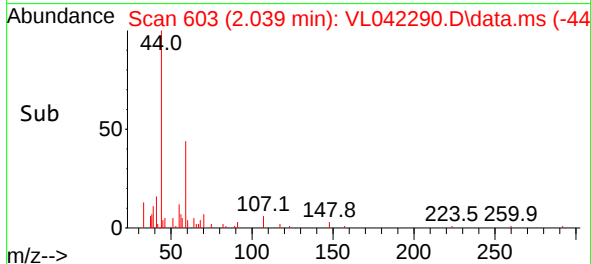
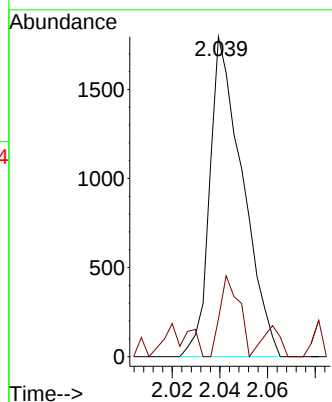
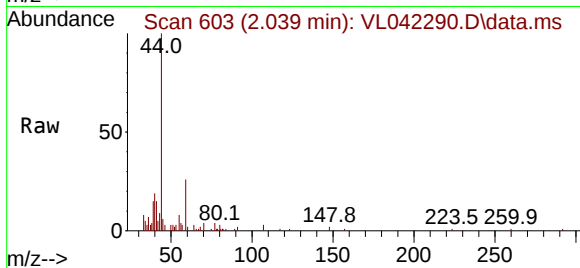




#17
tert-Butyl alcohol
Concen: 0.062 ppbv
RT: 2.039 min Scan# 602
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

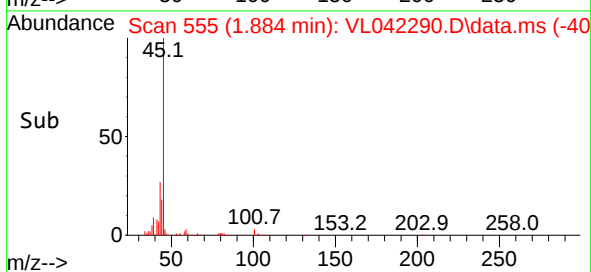
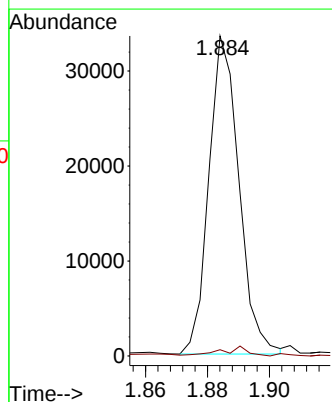
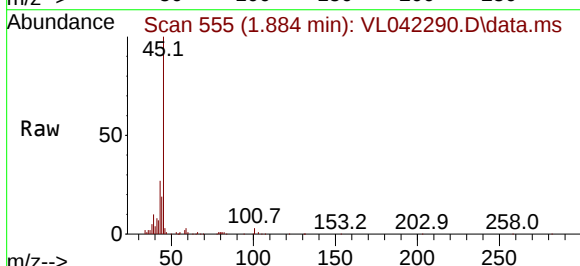
Instrument :
MSVOA_1
ClientSampleId :
AA-DUP-1-3242025

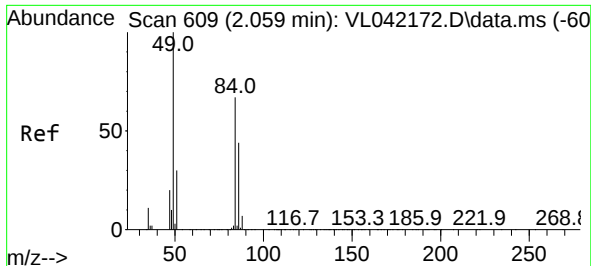
Tgt Ion: 59 Resp: 1723
Ion Ratio Lower Upper
59 100
57 28.8 8.9 13.3#



#19
Isopropyl Alcohol
Concen: 1.800 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 45 Resp: 22614
Ion Ratio Lower Upper
45 100
58 89.0 36.9 55.3#

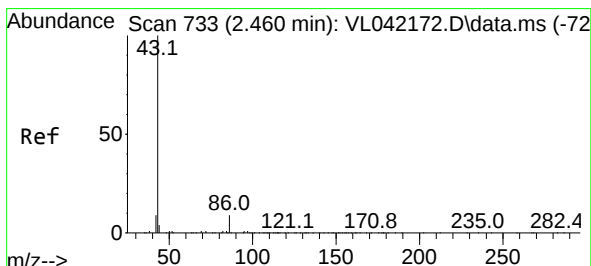
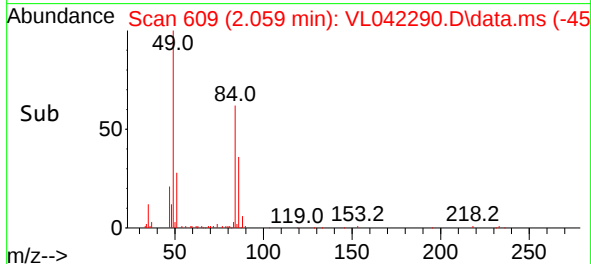
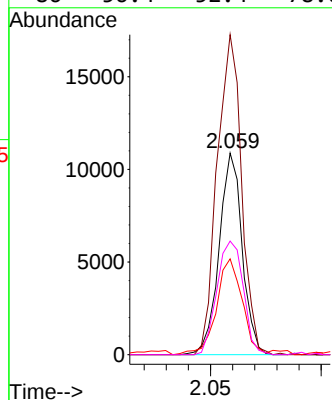
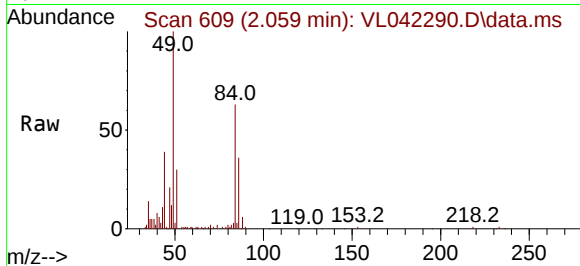




#20
Methylene Chloride
Concen: 0.953 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

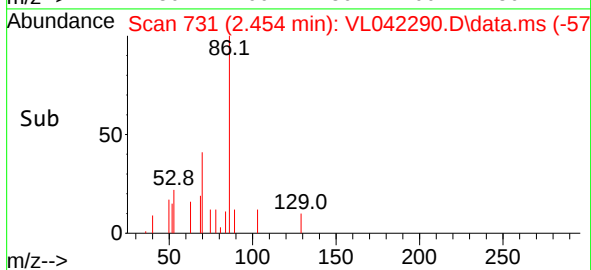
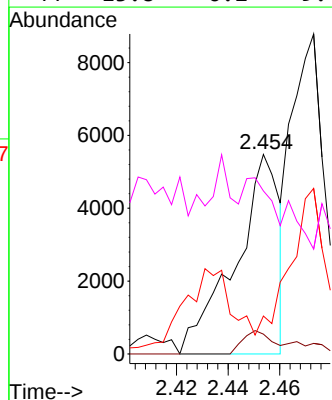
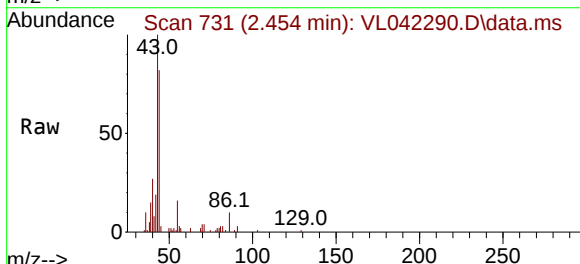
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

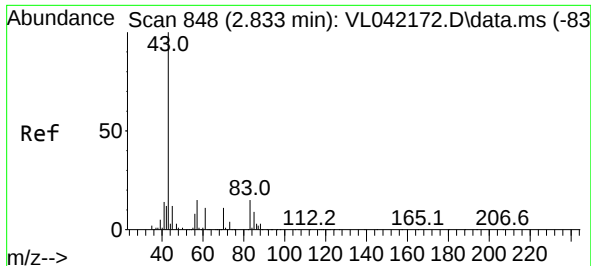
Tgt Ion: 84	Resp: 7901
Ion Ratio	Lower Upper
84 100	
49 158.8	120.2 180.4
51 47.0	37.4 56.0
86 56.4	52.4 78.6



#23
Vinyl Acetate
Concen: 0.671 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.007 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt	Ion: 43	Resp:	6464
Ion	Ratio	Lower	Upper
43	100		
86	10.0	5.5	8.3#
42	0.0	8.6	13.0#
44	13.8	6.2	9.4#

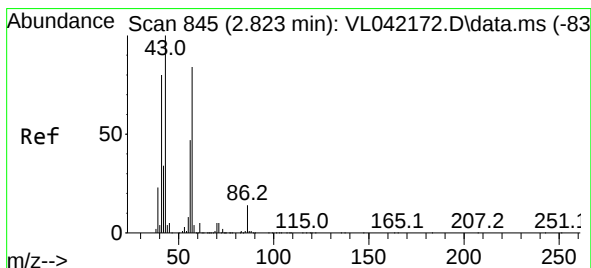
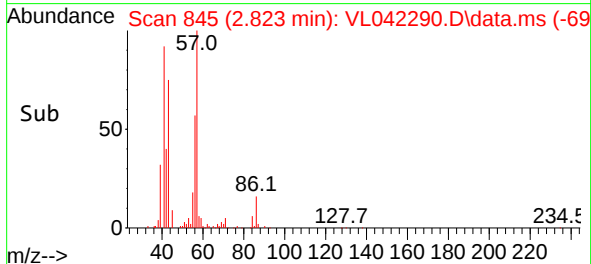
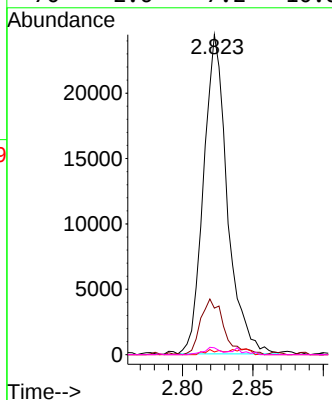
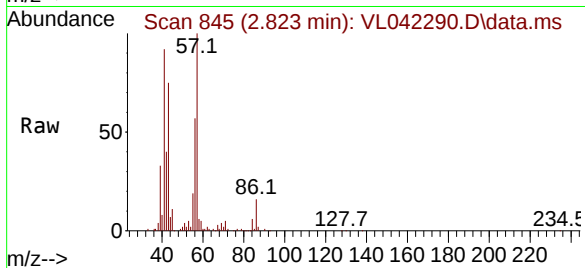




#25
Ethyl Acetate
Concen: 0.496 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.010 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

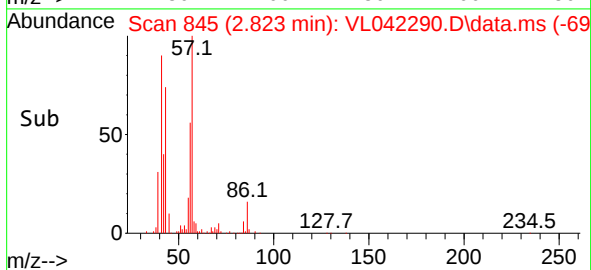
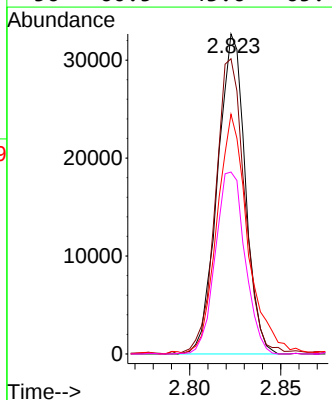
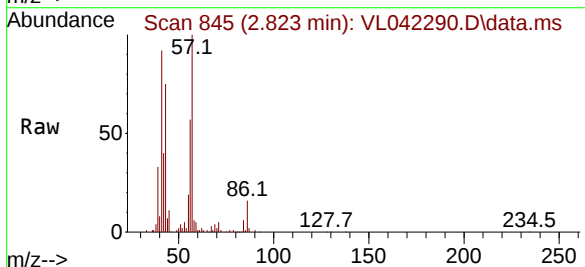
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

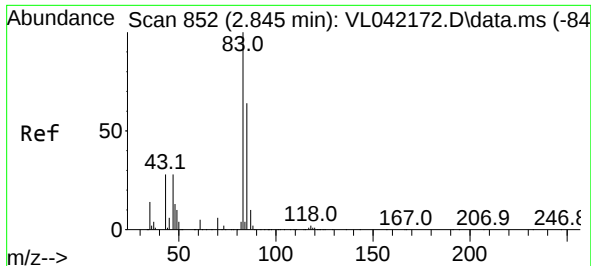
Tgt Ion: 43 Resp: 28683
Ion Ratio Lower Upper
43 100
45 18.4 8.2 12.2#
61 2.4 7.3 10.9#
70 2.6 7.2 10.8#



#26
Hexane
Concen: 1.553 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 57 Resp: 34660
Ion Ratio Lower Upper
57 100
41 96.0 76.6 114.8
43 85.4 207.8 311.8#
56 60.5 43.6 65.4





#29

Chloroform

Concen: 0.042 ppbv

RT: 2.842 min Scan# 81

Delta R.T. -0.003 min

Lab File: VL042290.D

Acq: 09 Apr 2025 13:25

Instrument :

MSVOA_L

ClientSampleId :

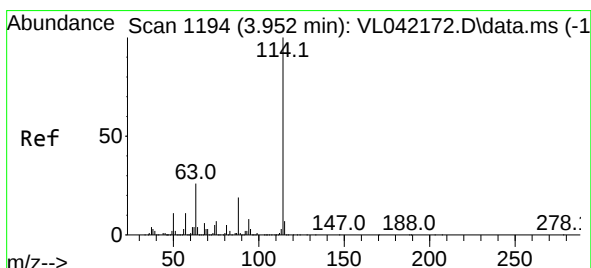
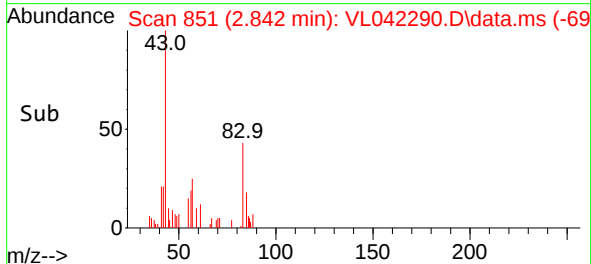
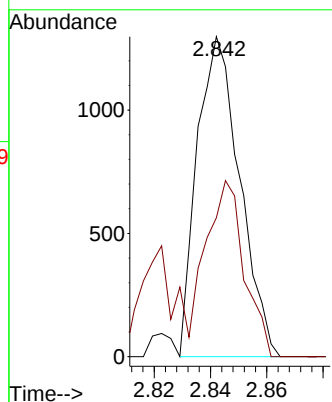
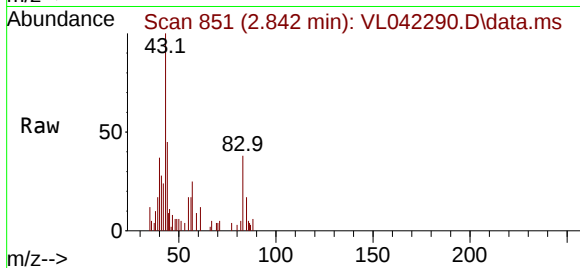
AA-DUP-1-3242025

Tgt Ion: 83 Resp: 1363

Ion Ratio Lower Upper

83 100

85 43.4 51.4 77.2#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.952 min Scan# 1194

Delta R.T. -0.000 min

Lab File: VL042290.D

Acq: 09 Apr 2025 13:25

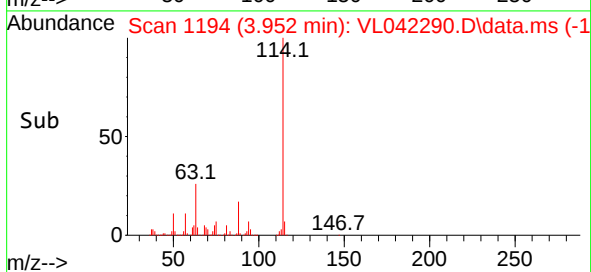
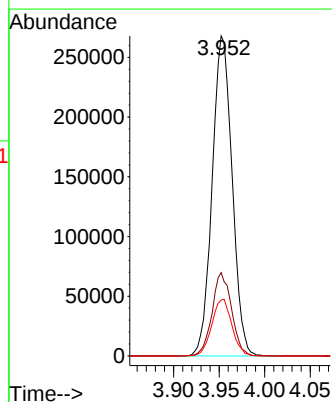
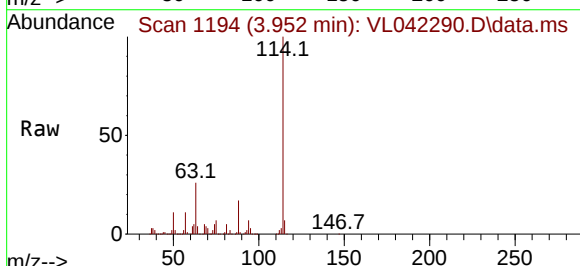
Tgt Ion: 114 Resp: 408039

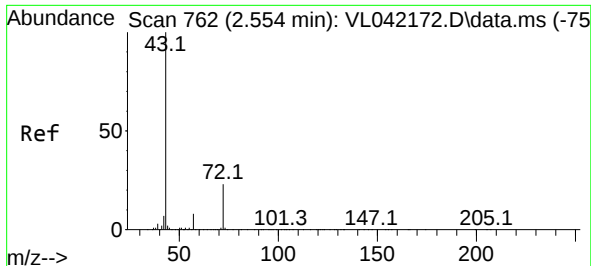
Ion Ratio Lower Upper

114 100

63 25.4 20.7 31.1

88 17.8 15.0 22.4

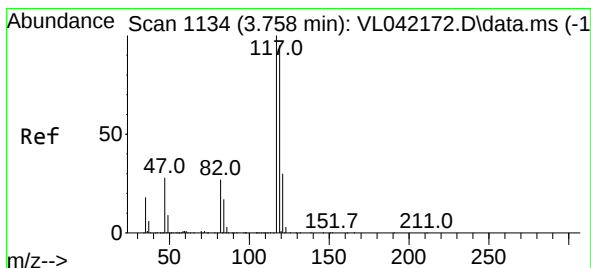
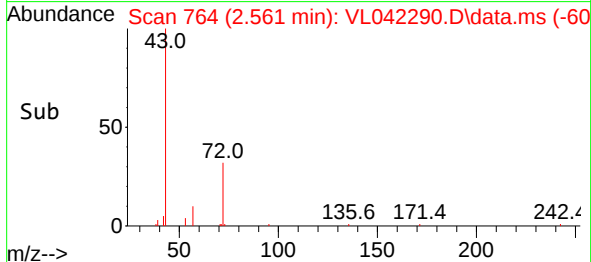
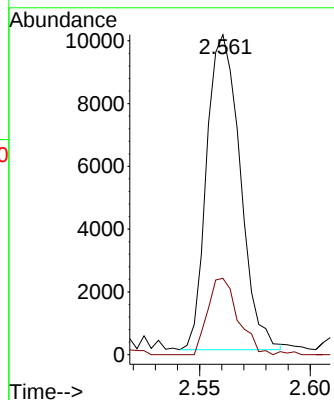
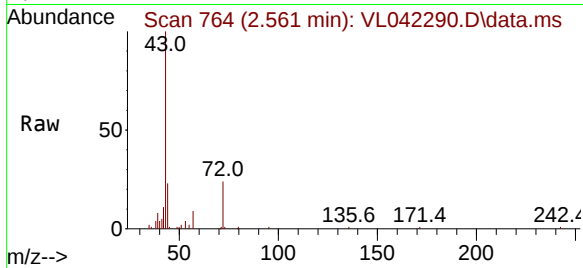




#34
2-Butanone
Concen: 0.357 ppbv
RT: 2.561 min Scan# 764
Delta R.T. 0.006 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

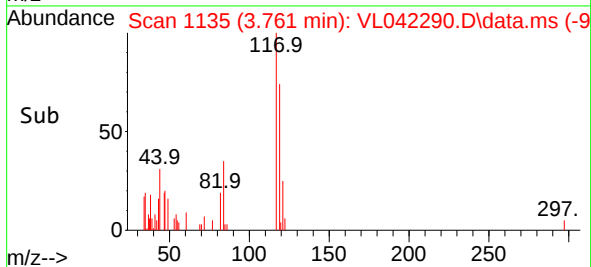
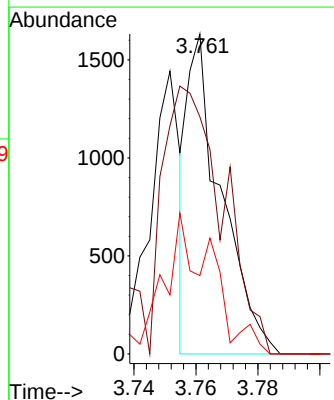
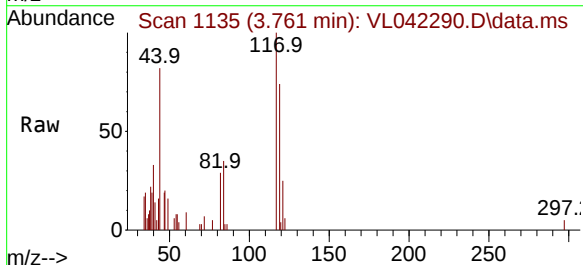
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

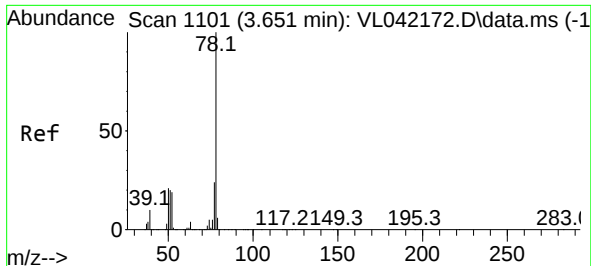
Tgt Ion: 43 Resp: 10562
Ion Ratio Lower Upper
43 100
72 22.3 18.2 27.2



#35
Carbon Tetrachloride
Concen: 0.039 ppbv
RT: 3.761 min Scan# 1135
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 117 Resp: 1242
Ion Ratio Lower Upper
117 100
119 78.2 76.2 114.2
121 24.5 24.2 36.4

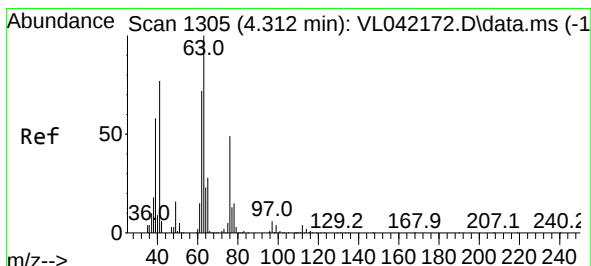
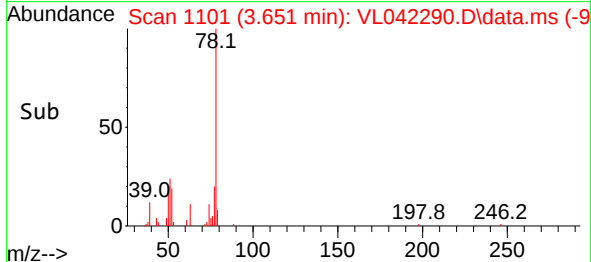
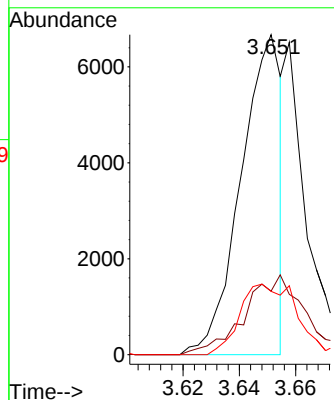
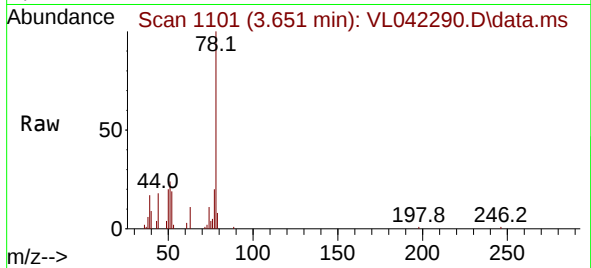




#36
Benzene
Concen: 0.164 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

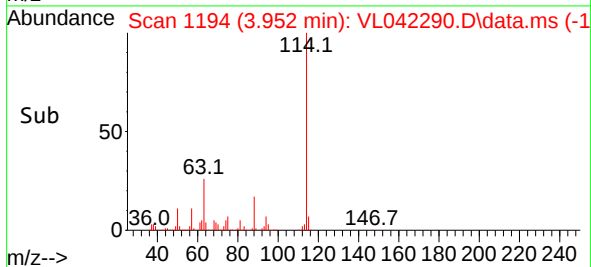
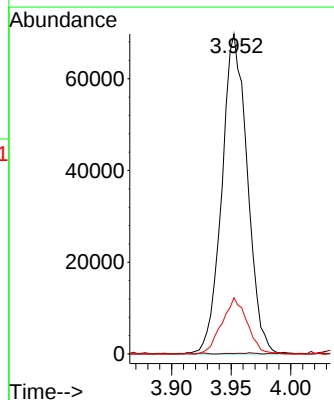
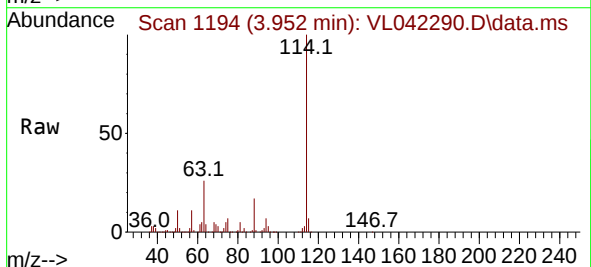
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

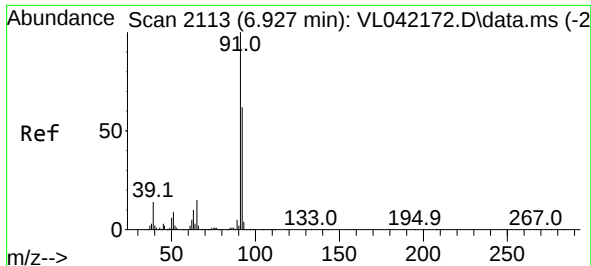
Tgt Ion: 78 Resp: 6629
Ion Ratio Lower Upper
78 100
77 19.9 19.1 28.7
50 19.8 16.6 24.8



#39
1,2-Dichloropropane
Concen: 7.034 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.359 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 63 Resp: 103630
Ion Ratio Lower Upper
63 100
41 0.0 61.7 92.5#
62 17.5 57.6 86.4#

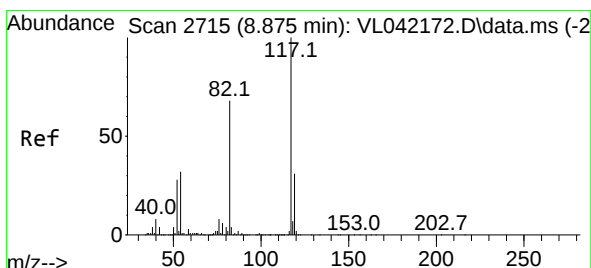
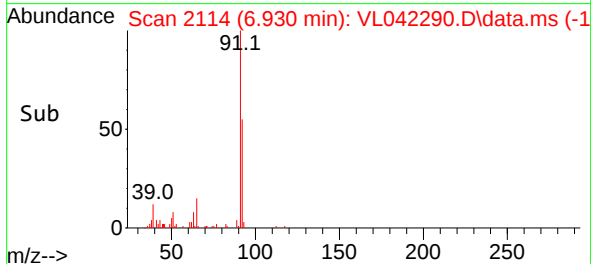
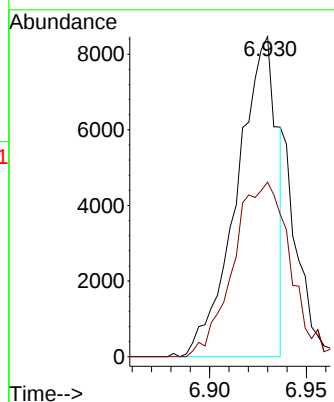
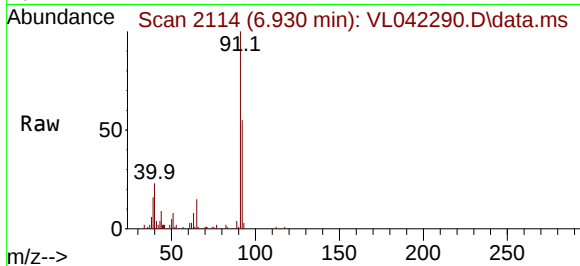




#53
Toluene
Concen: 0.256 ppbv
RT: 6.930 min Scan# 2113
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

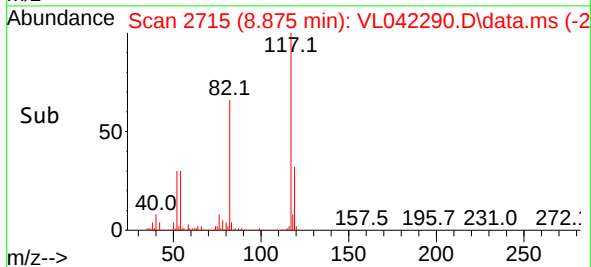
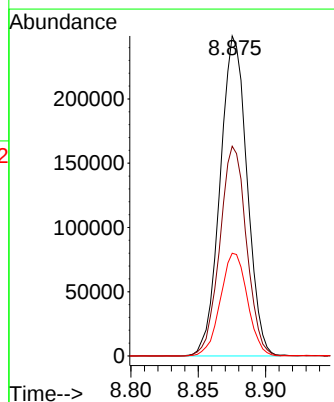
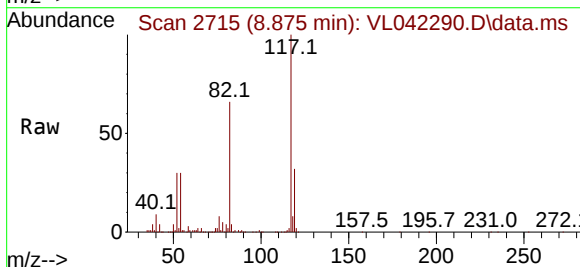
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

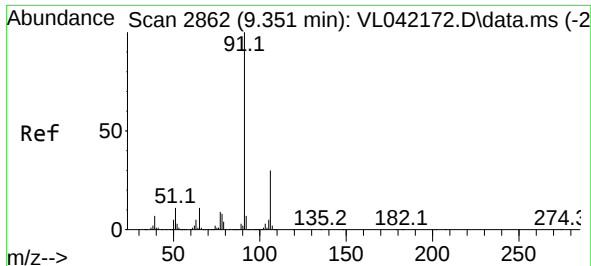
Tgt Ion: 91 Resp: 12275
Ion Ratio Lower Upper
91 100
92 76.4 48.4 72.6#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 117 Resp: 345931
Ion Ratio Lower Upper
117 100
82 65.1 55.8 83.6
119 32.4 25.5 38.3





#58

Ethyl Benzene

Concen: 0.044 ppbv

RT: 9.348 min Scan# 21

Delta R.T. -0.003 min

Lab File: VL042290.D

Acq: 09 Apr 2025 13:25

Instrument :

MSVOA_L

ClientSampleId :

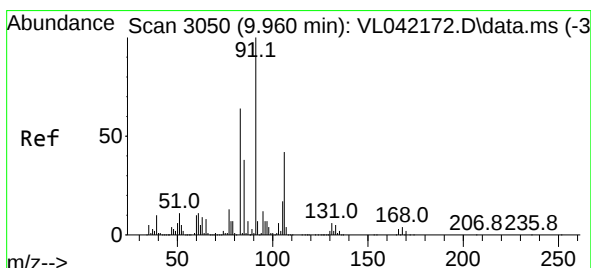
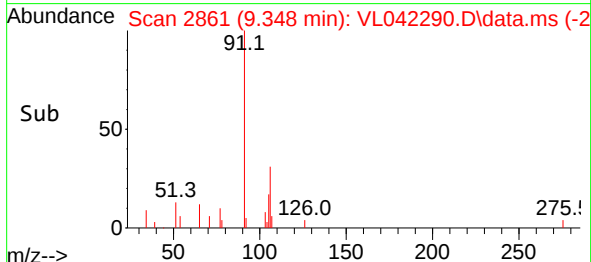
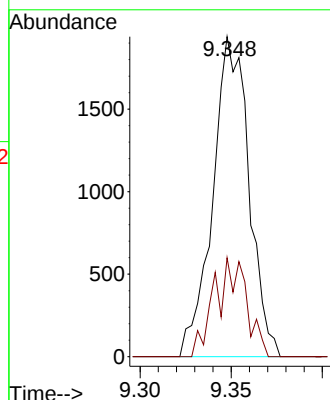
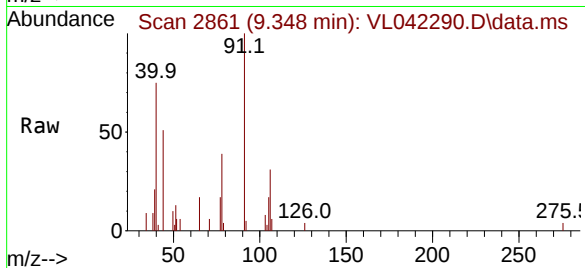
AA-DUP-1-3242025

Tgt Ion: 91 Resp: 2673

Ion Ratio Lower Upper

91 100

106 30.9 24.2 36.2



#60

o-Xylene

Concen: 0.051 ppbv

RT: 9.959 min Scan# 3050

Delta R.T. -0.000 min

Lab File: VL042290.D

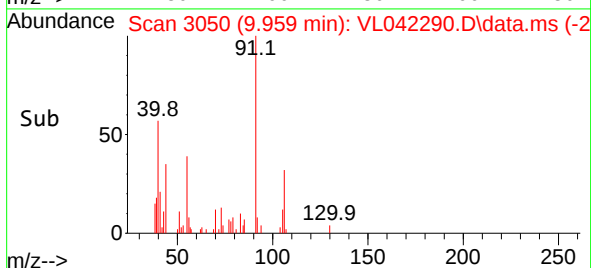
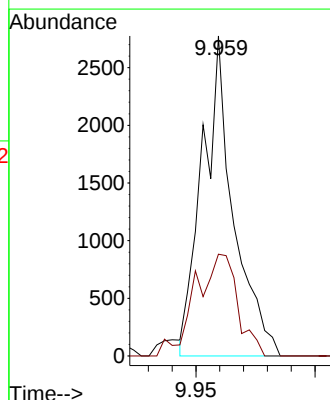
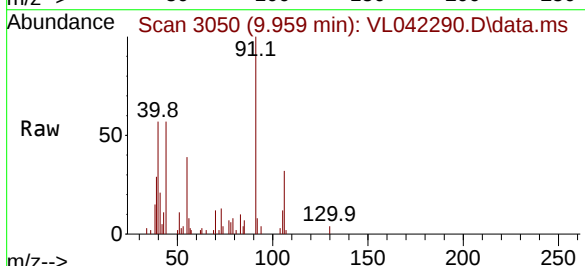
Acq: 09 Apr 2025 13:25

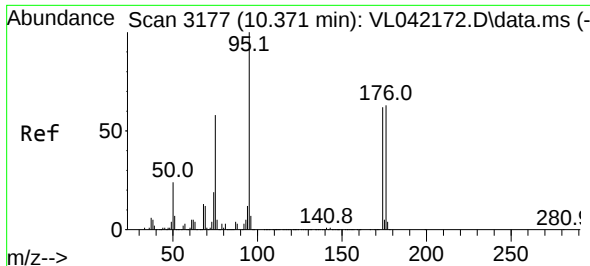
Tgt Ion: 91 Resp: 2526

Ion Ratio Lower Upper

91 100

106 43.2 20.8 62.5

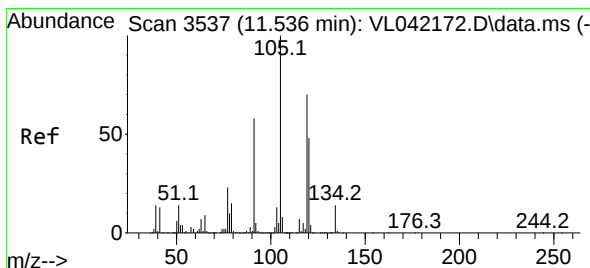
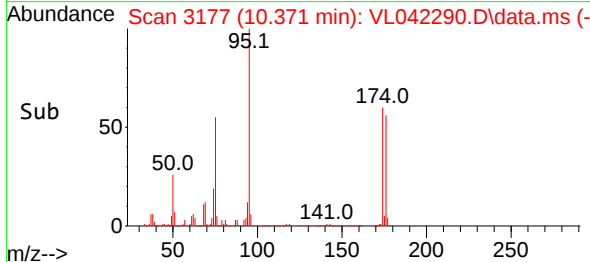
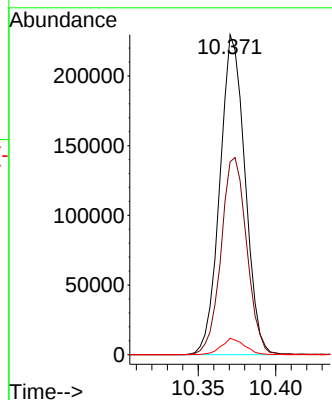
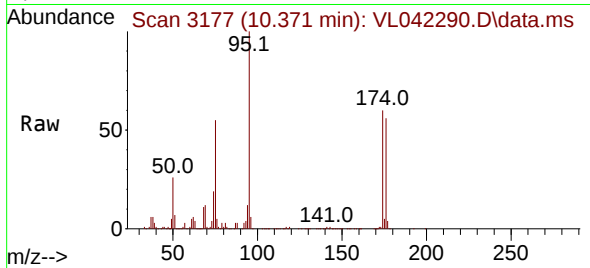




#68
1-Bromo-4-Fluorobenzene
Concen: 9.116 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

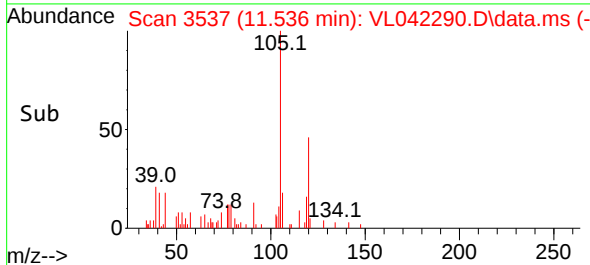
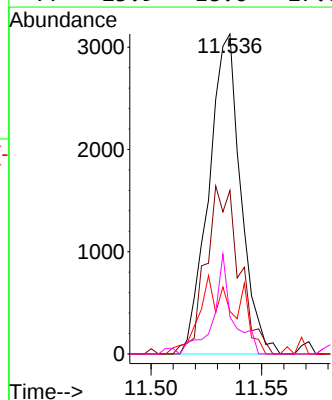
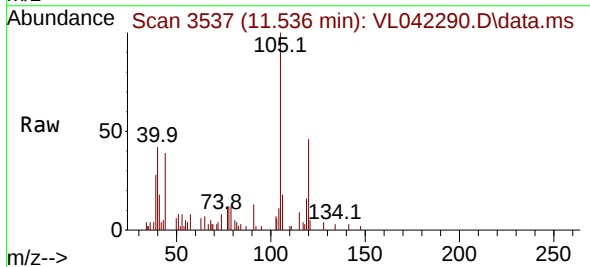
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

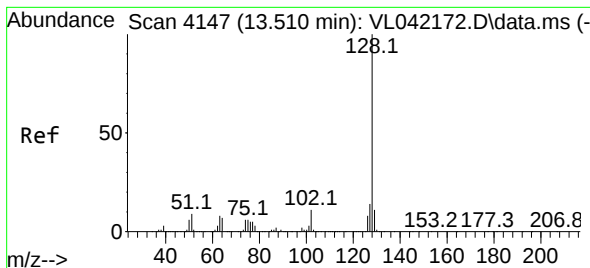
Tgt Ion: 95 Resp: 258960
Ion Ratio Lower Upper
95 100
174 63.3 50.6 76.0
175 4.8 3.8 5.6



#74
1,2,4-Trimethylbenzene
Concen: 0.051 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 105 Resp: 3147
Ion Ratio Lower Upper
105 100
120 51.1 38.6 58.0
91 13.3 46.2 69.2#
77 23.9 18.6 27.8





#79

Naphthalene

Concen: 0.036 ppbv

RT: 13.513 min Scan# 4147

Delta R.T. 0.003 min

Lab File: VL042290.D

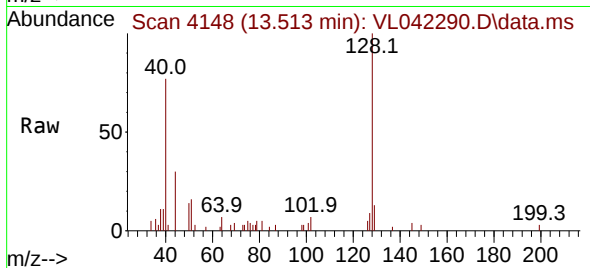
Acq: 09 Apr 2025 13:25

Instrument :

MSVOA_L

ClientSampleId :

AA-DUP-1-3242025



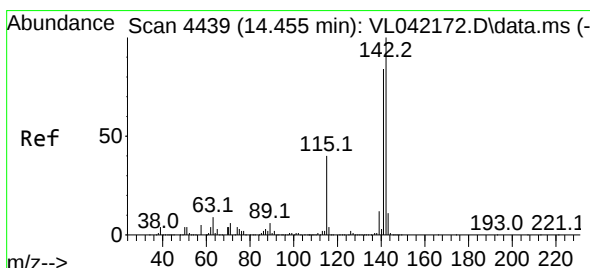
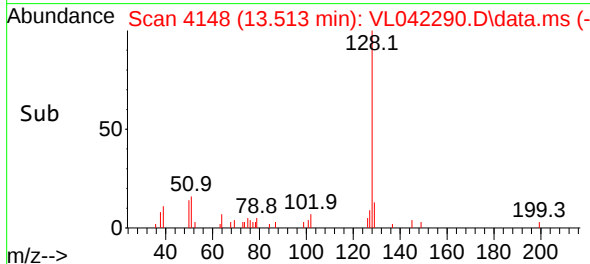
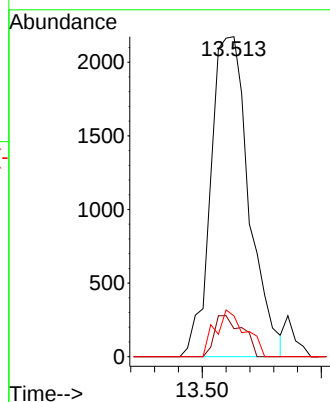
Tgt Ion:128 Resp: 2423

Ion Ratio Lower Upper

128 100

127 8.7 10.8 16.2#

129 12.7 9.0 13.4



#80

Naphthalene,2-methyl-

Concen: 0.030 ppbv

RT: 14.462 min Scan# 4441

Delta R.T. 0.006 min

Lab File: VL042290.D

Acq: 09 Apr 2025 13:25

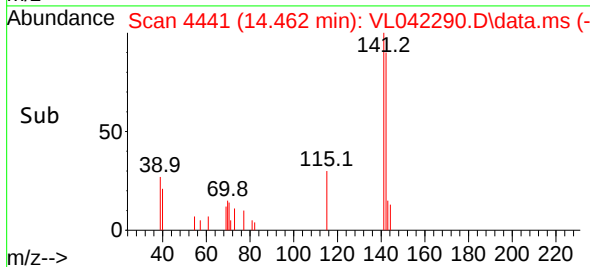
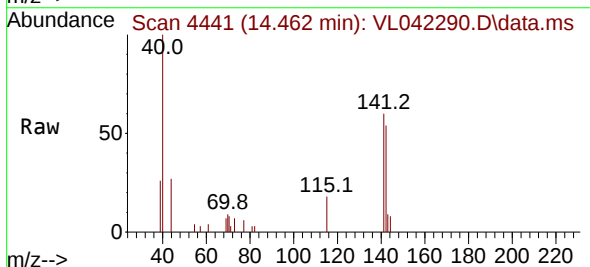
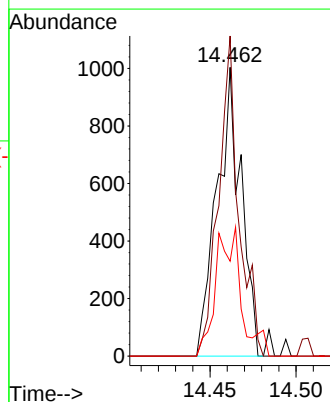
Tgt Ion:142 Resp: 999

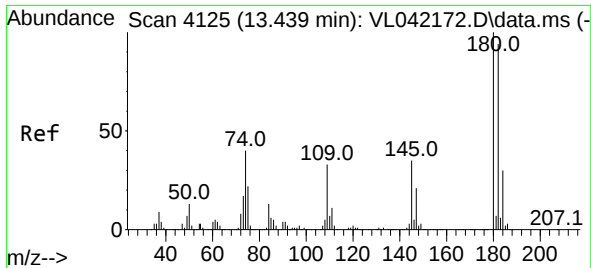
Ion Ratio Lower Upper

142 100

141 90.9 66.3 99.5

115 45.1 31.6 47.4





#81

1,2,4-Trichlorobenzene

Concen: 0.035 ppbv

RT: 13.442 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL042290.D

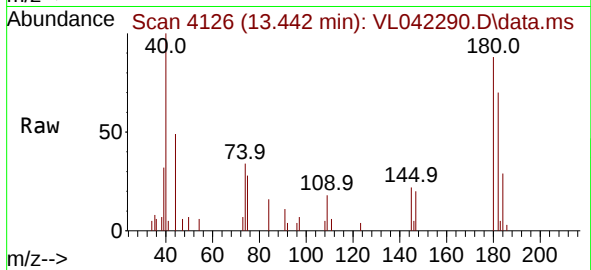
Acq: 09 Apr 2025 13:25

Instrument :

MSVOA_L

ClientSampleId :

AA-DUP-1-3242025



Tgt Ion:180 Resp: 1092

Ion Ratio Lower Upper

180 100

182 102.4 75.1 112.7

184 31.3 24.4 36.6

