

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
 Data File : VL042443.D
 Acq On : 29 Apr 2025 13:11
 Operator : SY/MD
 Sample : Q1908-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 B-1

Quant Time: Apr 30 01:19:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Apr 18 02:14:00 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	116167	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	309224	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	265424	10.000	ppbv	0.00

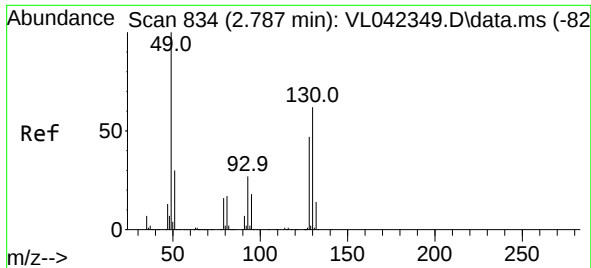
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	240596	11.031	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.300%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	10046	0.489	ppbv	100
3) Chlorodifluoromethane	1.476	51	6435	0.329	ppbv	98
4) Chloromethane	1.534	50	3300	0.406	ppbv	100
9) Propene	1.486	41	1749	0.197	ppbv	92
11) Trichlorofluoromethane	1.881	101	4172	0.214	ppbv	86
12) 1,1,2-Trichlorotrifluo...	2.143	101	1267	0.079	ppbv #	79
13) Ethanol	1.728	45	15309	10.821	ppbv	80
15) Acetone	1.839	43	209166	10.999	ppbv	98
16) 1,3-Butadiene	1.612	39	274	0.030	ppbv #	9
17) tert-Butyl alcohol	2.052	59	1884	0.080	ppbv #	67
19) Isopropyl Alcohol	1.894	45	15167	1.436	ppbv #	1
20) Methylene Chloride	2.065	84	4052	0.544	ppbv	91
23) Vinyl Acetate	2.457	43	10243	1.331	ppbv #	71
25) Ethyl Acetate	2.848	43	1953	0.042	ppbv #	17
26) Hexane	2.829	57	4458	0.235	ppbv #	1
34) 2-Butanone	2.564	43	58507	2.392	ppbv	95
35) Carbon Tetrachloride	3.764	117	1618	0.058	ppbv #	63
39) 1,2-Dichloropropane	3.965	63	90929	7.316	ppbv #	24
41) Tetrahydrofuran	3.078	42	653	0.046	ppbv #	40
52) Tetrachloroethene	8.228	164	484	0.038	ppbv #	19
53) Toluene	6.943	91	2557	0.064	ppbv #	1
69) p-Isopropyltoluene	11.927	119	5582	0.080	ppbv	99
73) 1,3,5-Trimethylbenzene	11.205	105	2303	0.050	ppbv	92
74) 1,2,4-Trimethylbenzene	11.539	105	7145	0.133	ppbv #	61

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

Quant Time: Apr 30 01:19:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

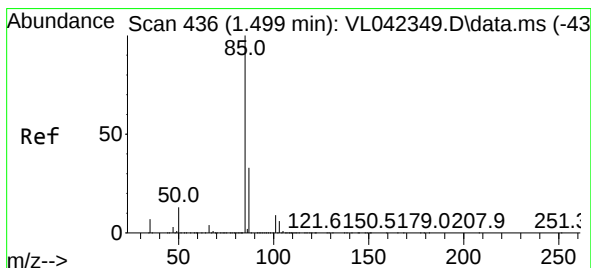
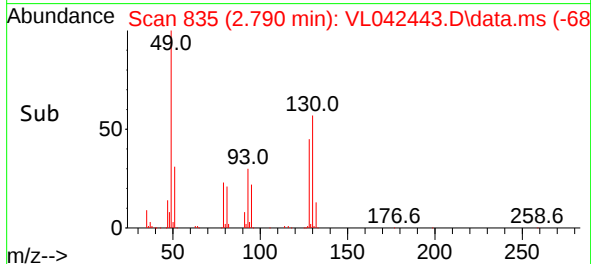
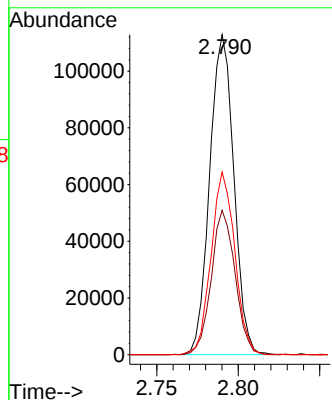
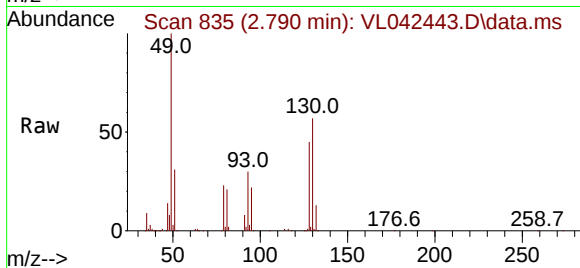




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 834
Delta R.T. 0.003 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

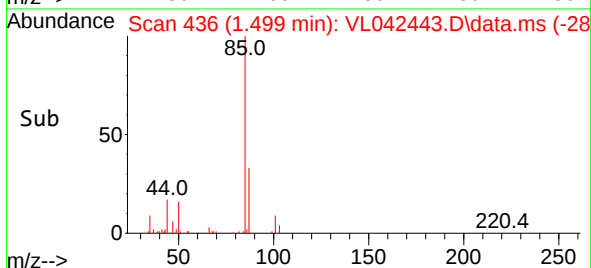
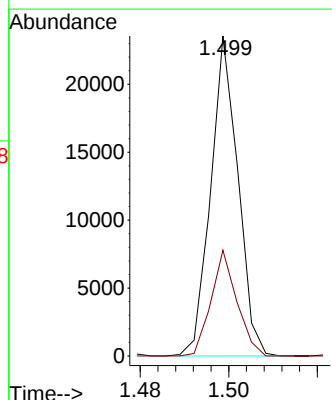
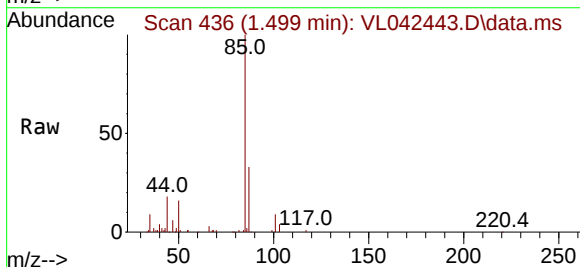
Instrument :
MSVOA_L
ClientSampleId :
B-1

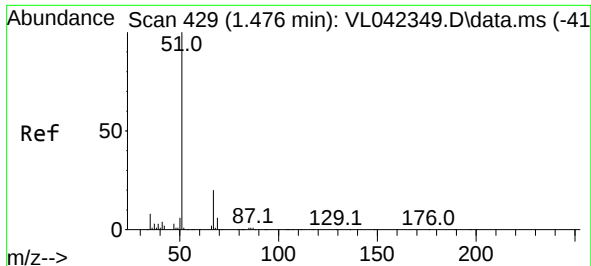
Tgt Ion: 49 Resp: 116167
Ion Ratio Lower Upper
49 100
128 44.6 22.8 68.4
130 56.3 29.3 88.0



#2
Dichlorodifluoromethane
Concen: 0.489 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

Tgt Ion: 85 Resp: 10046
Ion Ratio Lower Upper
85 100
87 33.0 26.6 39.8

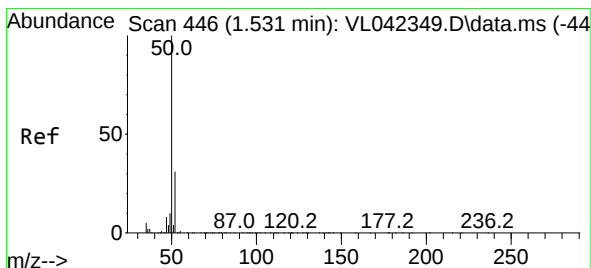
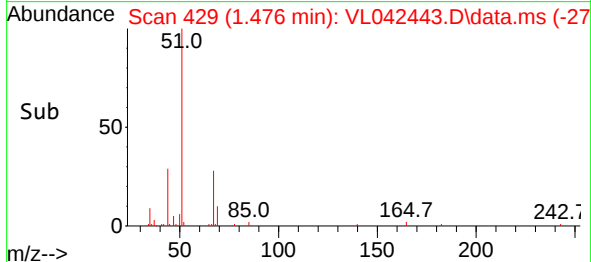
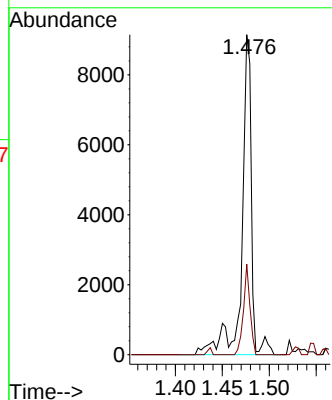
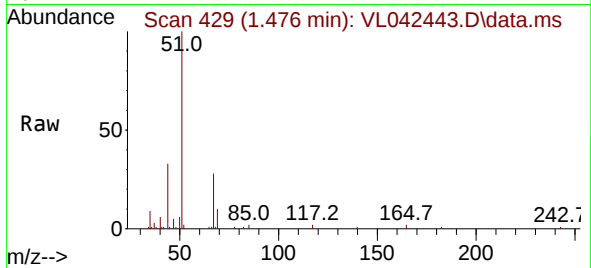




#3
Chlorodifluoromethane
Concen: 0.329 ppbv
RT: 1.476 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

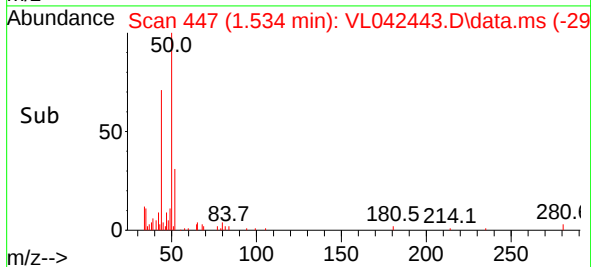
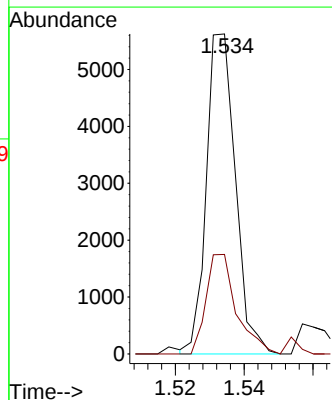
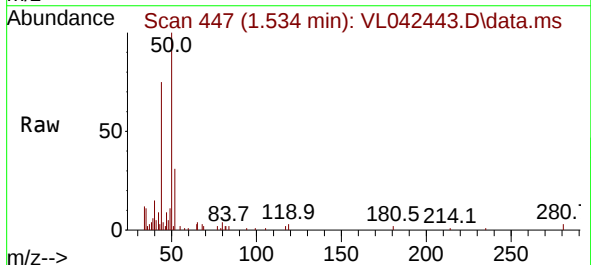
Instrument :
MSVOA_L
ClientSampleId :
B-1

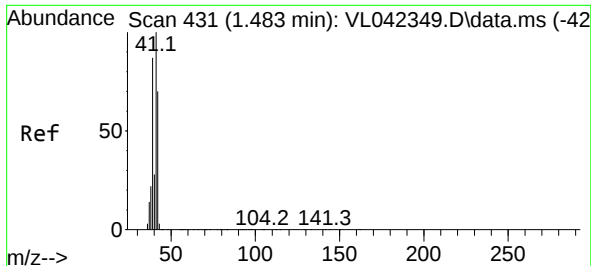
Tgt Ion: 51 Resp: 6435
Ion Ratio Lower Upper
51 100
67 19.6 16.2 24.4



#4
Chloromethane
Concen: 0.406 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

Tgt Ion: 50 Resp: 3300
Ion Ratio Lower Upper
50 100
52 31.1 24.7 37.1





#9

Propene

Concen: 0.197 ppbv

RT: 1.486 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Instrument :

MSVOA_L

ClientSampleId :

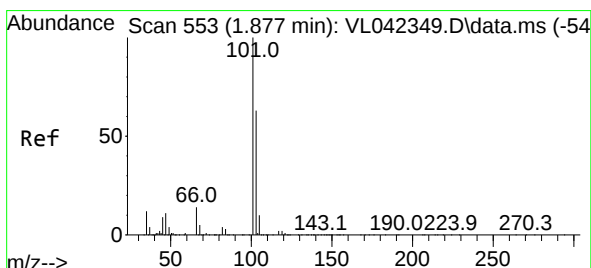
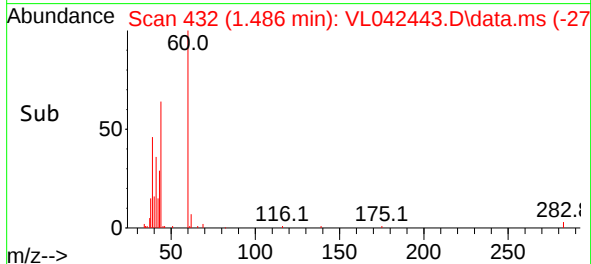
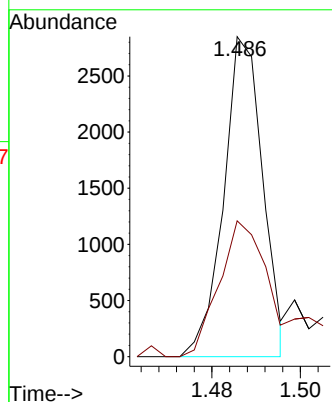
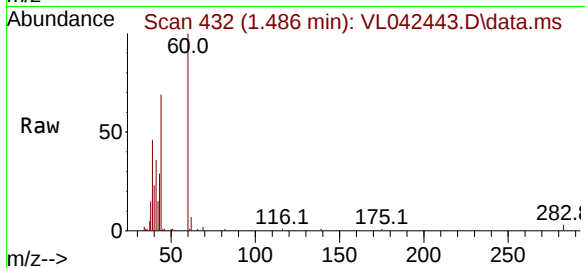
B-1

Tgt Ion: 41 Resp: 1749

Ion Ratio Lower Upper

41 100

42 64.1 56.2 84.4



#11

Trichlorofluoromethane

Concen: 0.214 ppbv

RT: 1.881 min Scan# 554

Delta R.T. 0.003 min

Lab File: VL042443.D

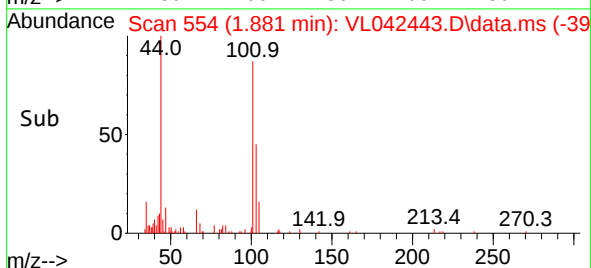
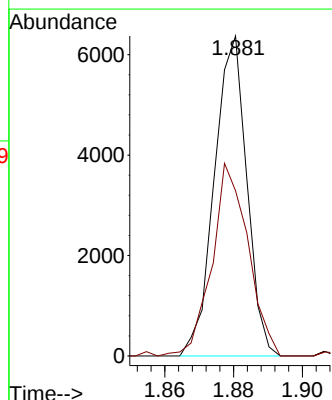
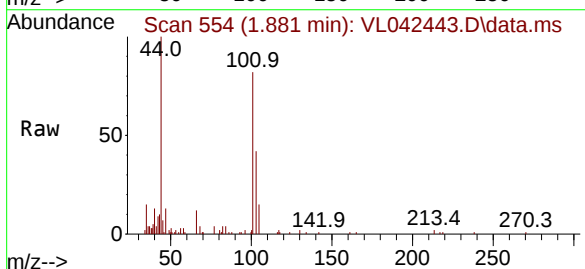
Acq: 29 Apr 2025 13:11

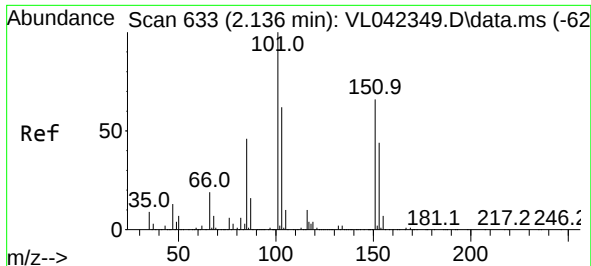
Tgt Ion: 101 Resp: 4172

Ion Ratio Lower Upper

101 100

103 51.6 50.1 75.1





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.079 ppbv

RT: 2.143 min Scan# 61

Delta R.T. 0.006 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Instrument :

MSVOA_L

ClientSampleId :

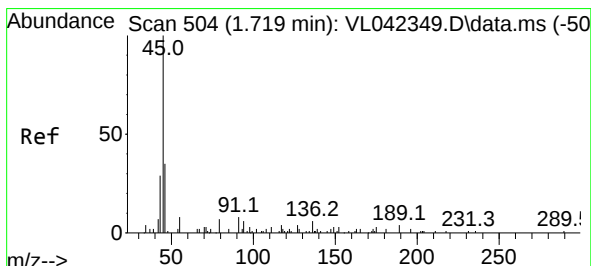
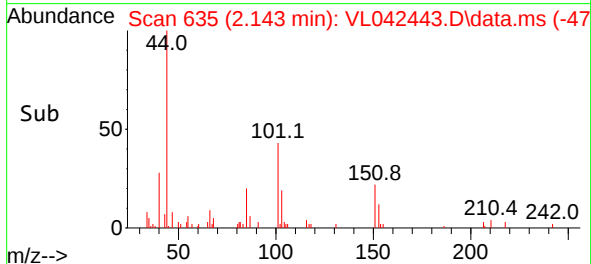
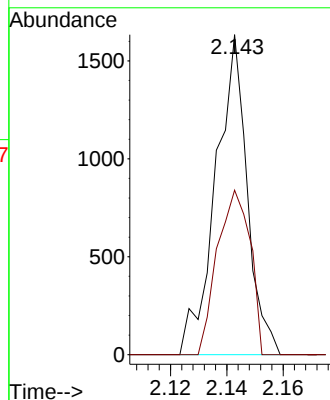
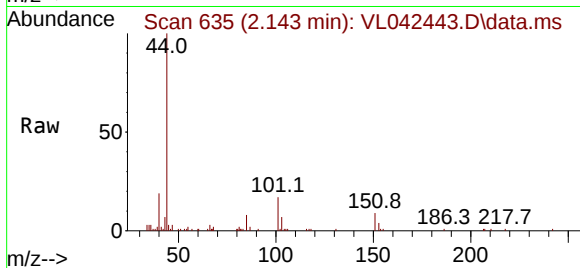
B-1

Tgt Ion:101 Resp: 1267

Ion Ratio Lower Upper

101 100

151 53.7 57.0 85.6#



#13

Ethanol

Concen: 10.821 ppbv

RT: 1.728 min Scan# 507

Delta R.T. 0.010 min

Lab File: VL042443.D

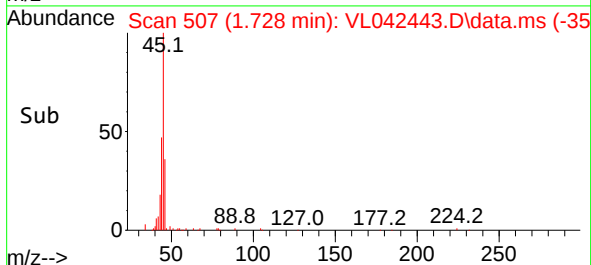
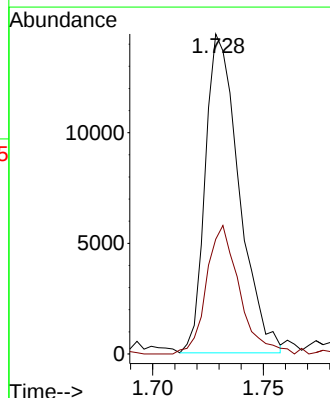
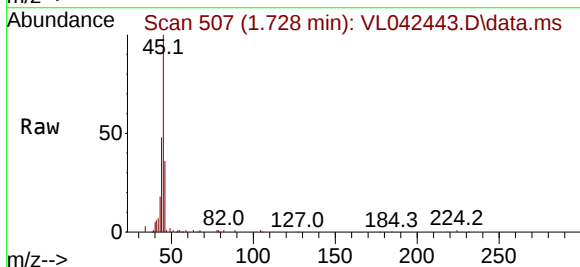
Acq: 29 Apr 2025 13:11

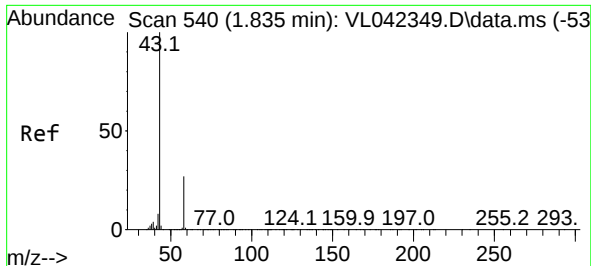
Tgt Ion: 45 Resp: 15309

Ion Ratio Lower Upper

45 100

46 40.3 21.9 87.7

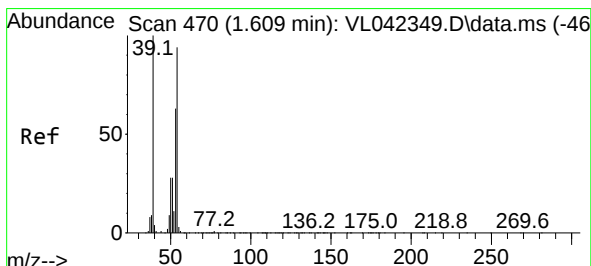
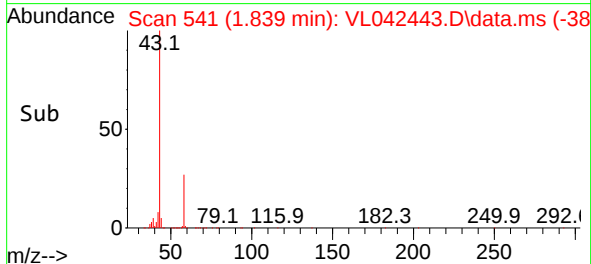
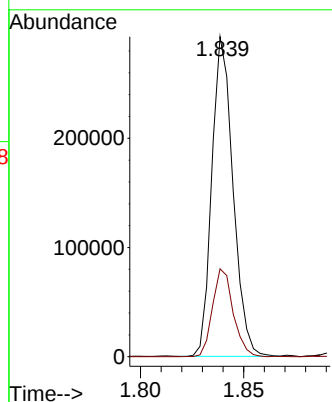
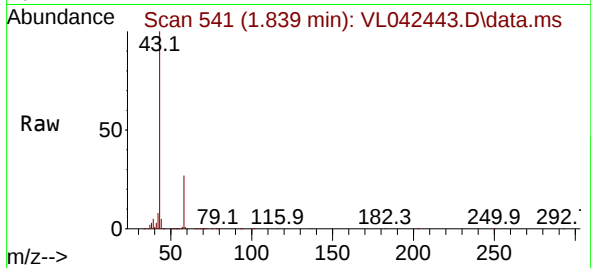




#15
Acetone
Concen: 10.999 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.003 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

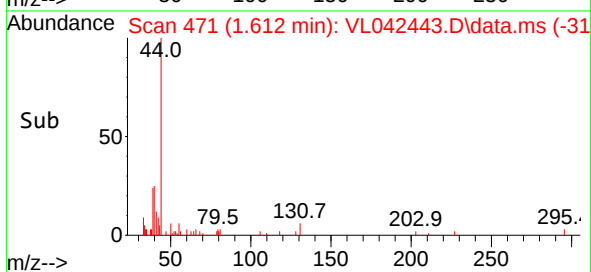
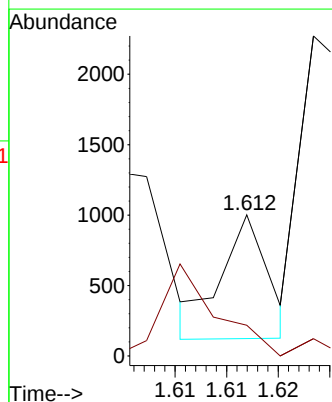
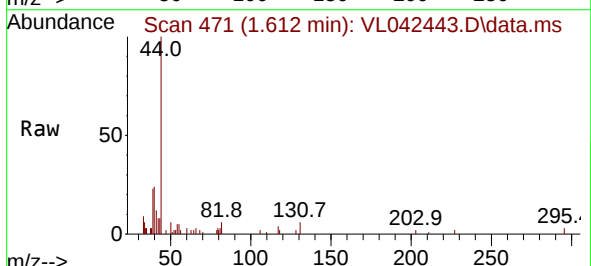
Instrument :
MSVOA_L
ClientSampleId :
B-1

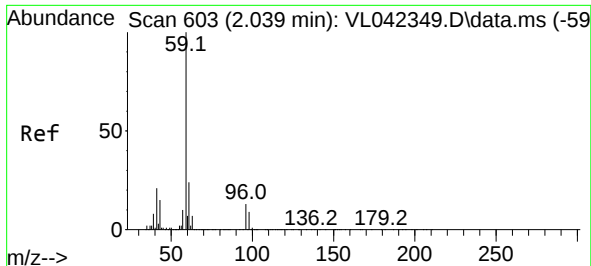
Tgt Ion: 43 Resp: 209166
Ion Ratio Lower Upper
43 100
58 26.8 22.4 33.6



#16
1,3-Butadiene
Concen: 0.030 ppbv
RT: 1.612 min Scan# 471
Delta R.T. 0.003 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

Tgt Ion: 39 Resp: 274
Ion Ratio Lower Upper
39 100
54 0.0 64.9 97.3#





#17

tert-Butyl alcohol

Concen: 0.080 ppbv

RT: 2.052 min Scan# 603

Delta R.T. 0.013 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Instrument :

MSVOA_L

ClientSampleId :

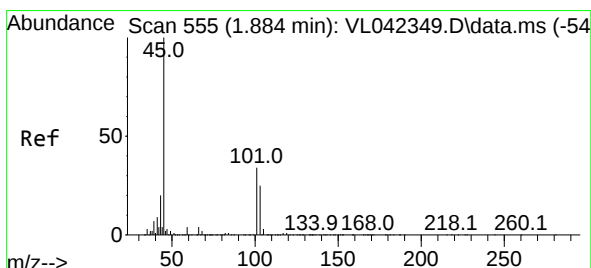
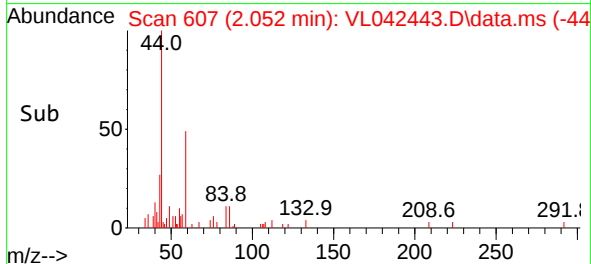
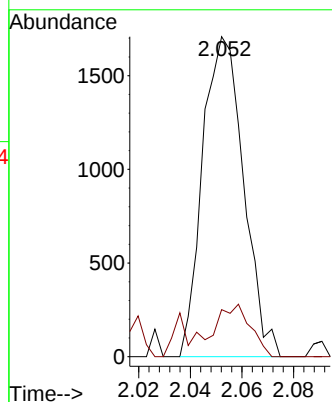
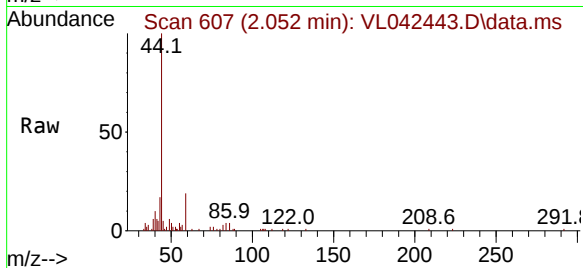
B-1

Tgt Ion: 59 Resp: 1884

Ion Ratio Lower Upper

59 100

57 23.5 8.7 13.1#



#19

Isopropyl Alcohol

Concen: 1.436 ppbv

RT: 1.894 min Scan# 558

Delta R.T. 0.010 min

Lab File: VL042443.D

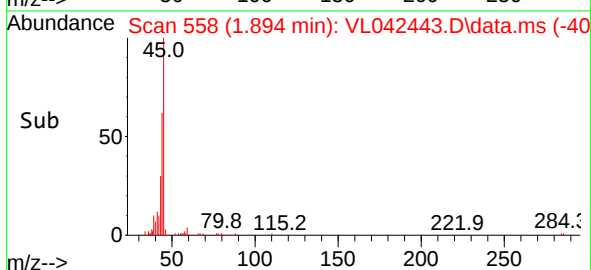
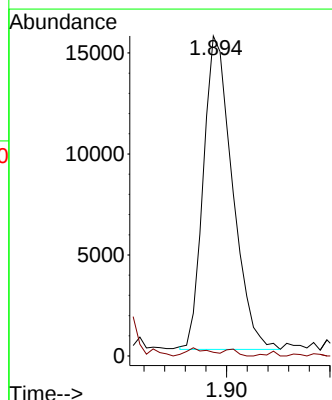
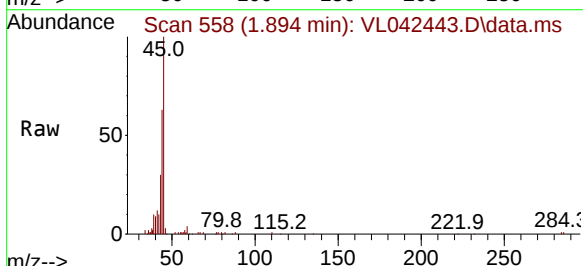
Acq: 29 Apr 2025 13:11

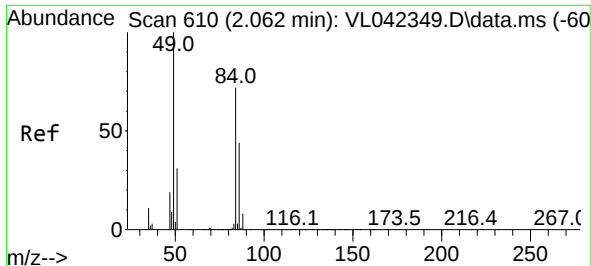
Tgt Ion: 45 Resp: 15167

Ion Ratio Lower Upper

45 100

58 369.6 34.5 51.7#





#20

Methylene Chloride

Concen: 0.544 ppbv

RT: 2.065 min Scan# 610

Delta R.T. 0.003 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Instrument :

MSVOA_L

ClientSampleId :

B-1

Tgt Ion: 84 Resp: 4052

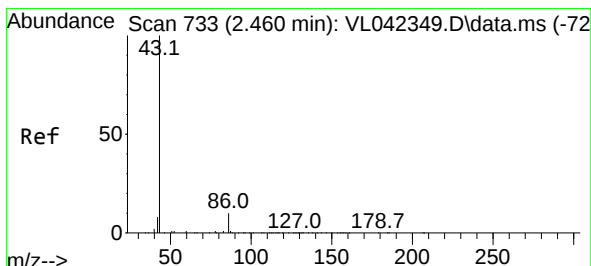
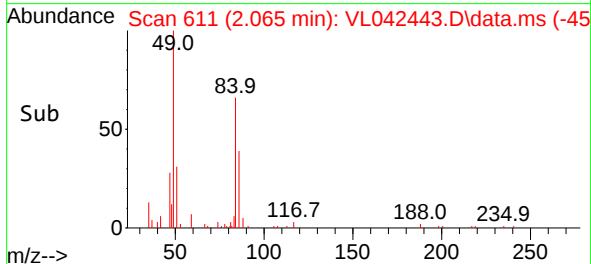
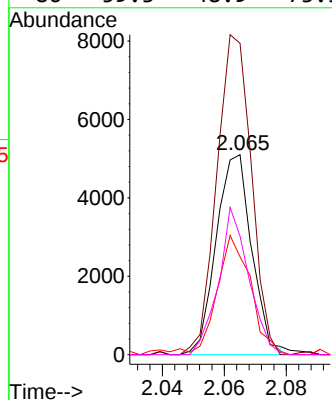
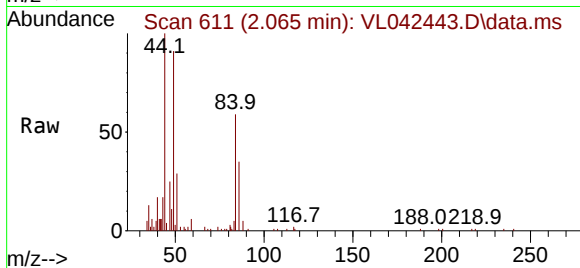
Ion Ratio Lower Upper

84 100

49 155.6 111.6 167.4

51 47.2 35.1 52.7

86 59.3 48.9 73.3



#23

Vinyl Acetate

Concen: 1.331 ppbv

RT: 2.457 min Scan# 732

Delta R.T. -0.003 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Tgt Ion: 43 Resp: 10243

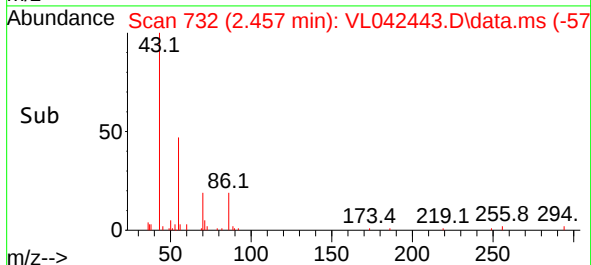
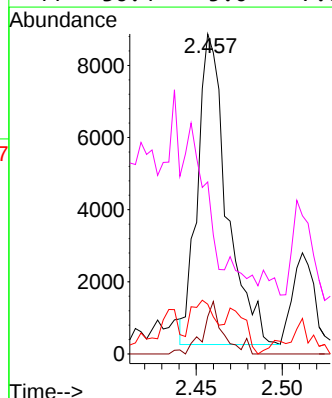
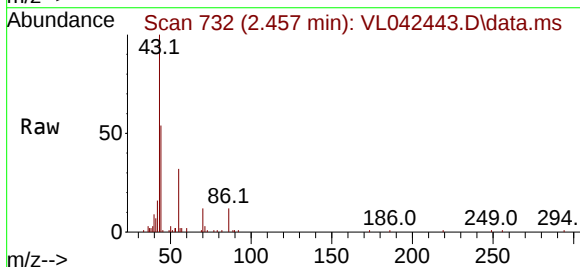
Ion Ratio Lower Upper

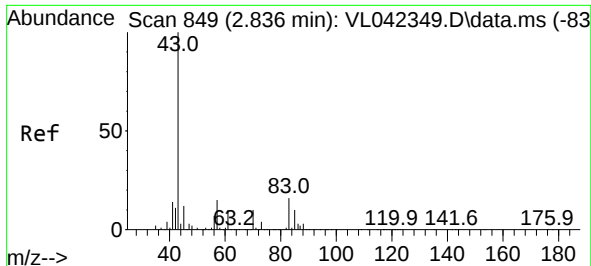
43 100

86 12.0 6.5 9.7#

42 11.9 7.8 11.8#

44 36.4 5.0 7.6#





#25

Ethyl Acetate

Concen: 0.042 ppbv

RT: 2.848 min Scan# 81

Delta R.T. 0.013 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Instrument :

MSVOA_L

ClientSampleId :

B-1

Tgt Ion: 43 Resp: 1953

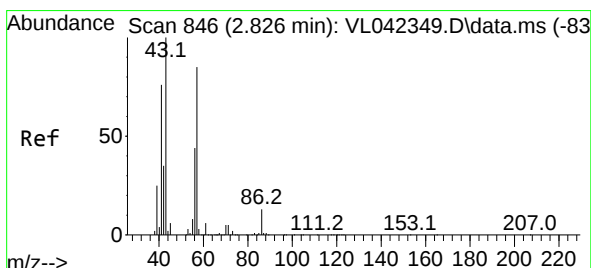
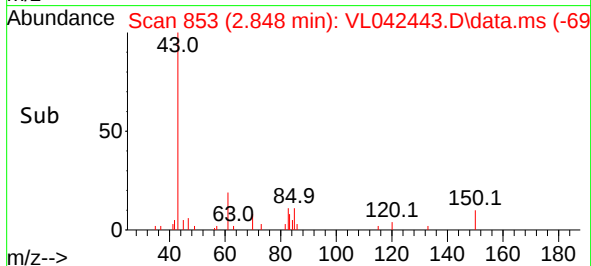
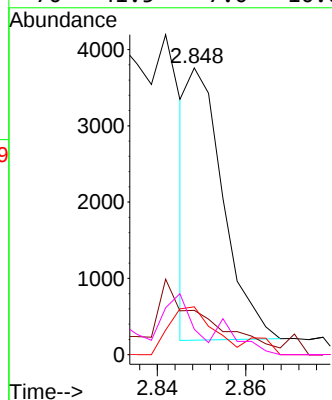
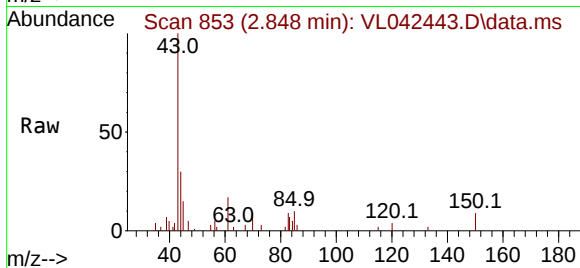
Ion Ratio Lower Upper

43 100

45 50.2 8.3 12.5#

61 26.9 7.3 10.9#

70 41.5 7.0 10.6#



#26

Hexane

Concen: 0.235 ppbv

RT: 2.829 min Scan# 847

Delta R.T. 0.003 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Tgt Ion: 57 Resp: 4458

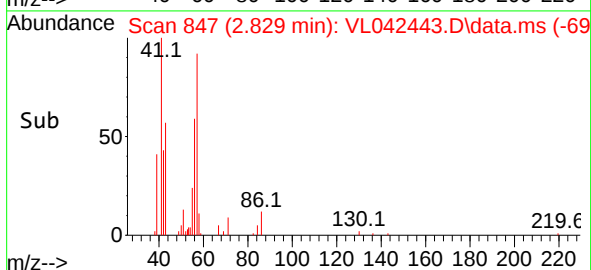
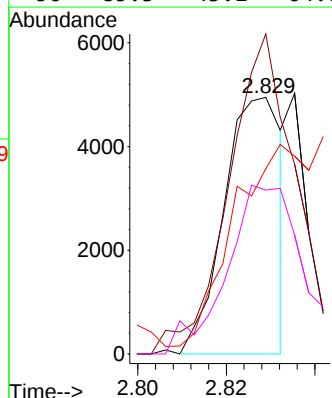
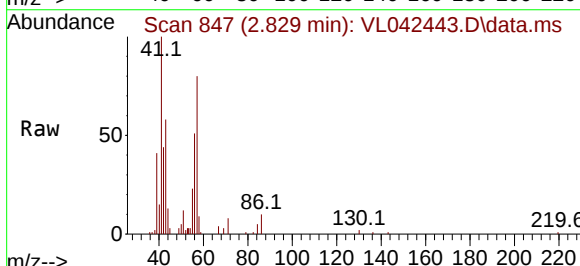
Ion Ratio Lower Upper

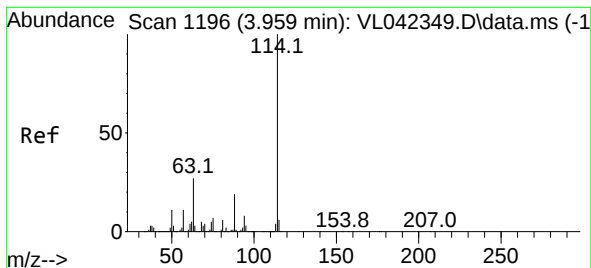
57 100

41 146.5 77.9 116.9#

43 0.0 208.4 312.6#

56 85.3 43.1 64.7#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.965 min Scan# 1198

Delta R.T. 0.006 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Instrument :

MSVOA_L

ClientSampleId :

B-1

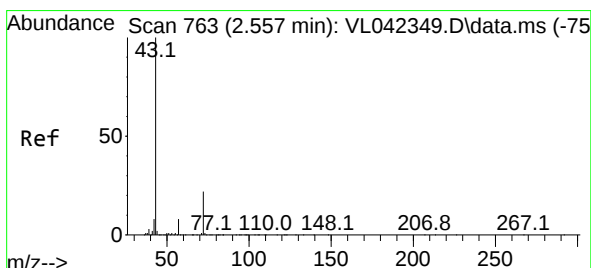
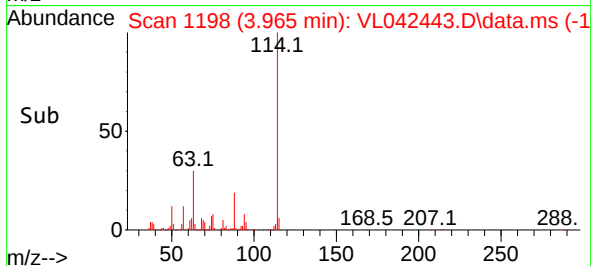
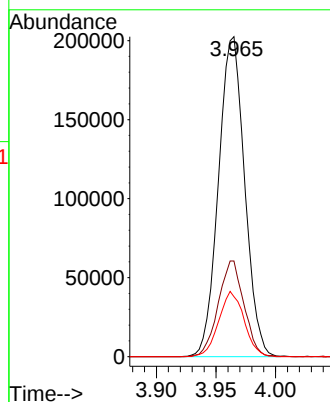
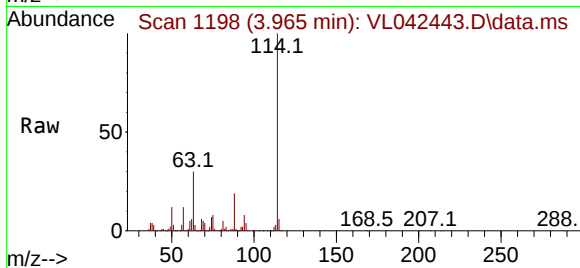
Tgt Ion:114 Resp: 309224

Ion Ratio Lower Upper

114 100

63 29.4 21.8 32.6

88 19.8 15.5 23.3



#34

2-Butanone

Concen: 2.392 ppbv

RT: 2.564 min Scan# 765

Delta R.T. 0.006 min

Lab File: VL042443.D

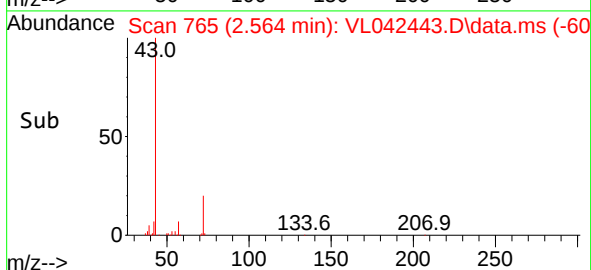
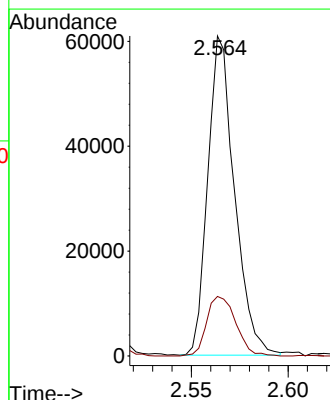
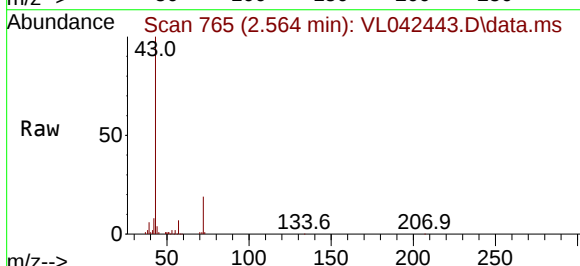
Acq: 29 Apr 2025 13:11

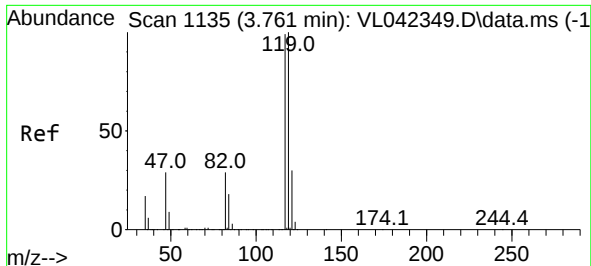
Tgt Ion: 43 Resp: 58507

Ion Ratio Lower Upper

43 100

72 20.4 18.2 27.2

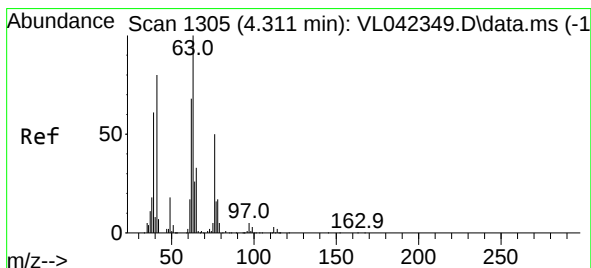
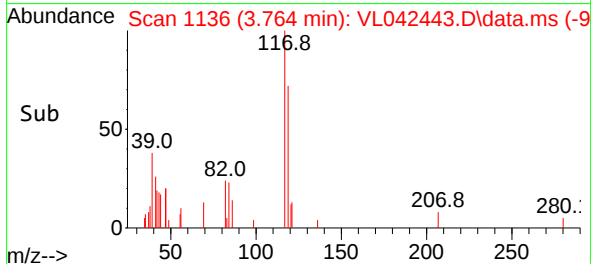
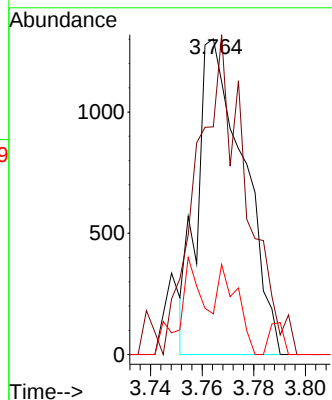
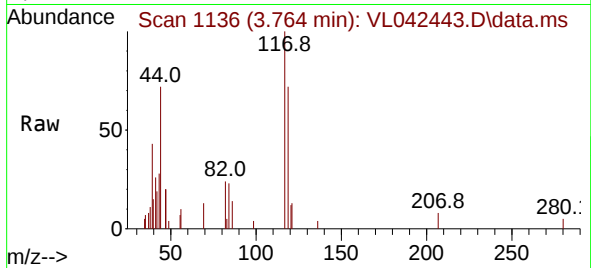




#35
Carbon Tetrachloride
Concen: 0.058 ppbv
RT: 3.764 min Scan# 1135
Delta R.T. 0.003 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

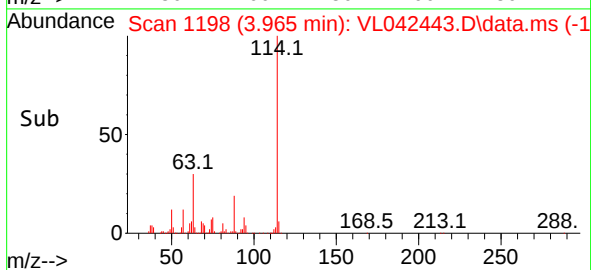
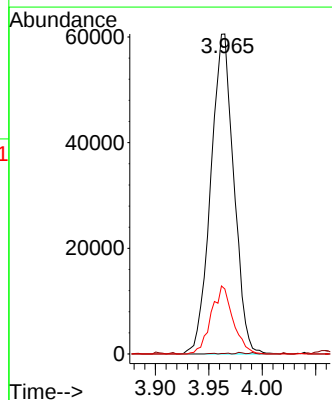
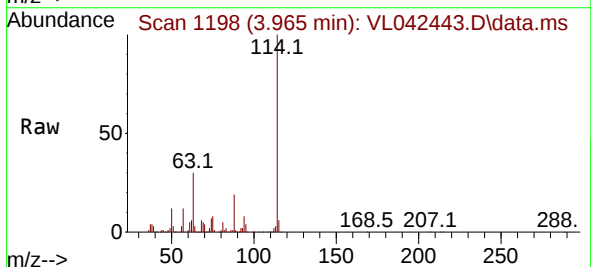
Instrument :
MSVOA_L
ClientSampleId :
B-1

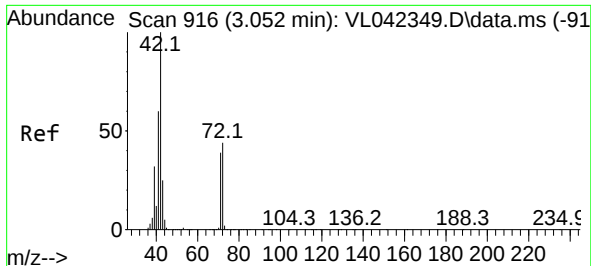
Tgt Ion:117 Resp: 1618
Ion Ratio Lower Upper
117 100
119 65.9 80.5 120.7#
121 5.1 24.2 36.2#



#39
1,2-Dichloropropane
Concen: 7.316 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. -0.346 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

Tgt Ion: 63 Resp: 90929
Ion Ratio Lower Upper
63 100
41 0.1 64.2 96.2#
62 20.3 54.3 81.5#

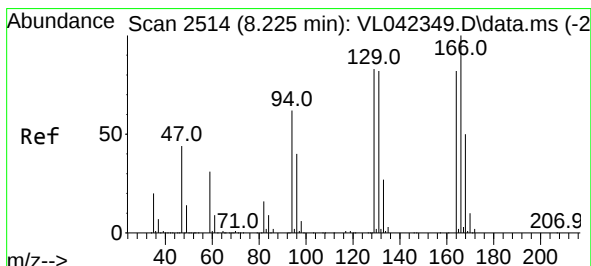
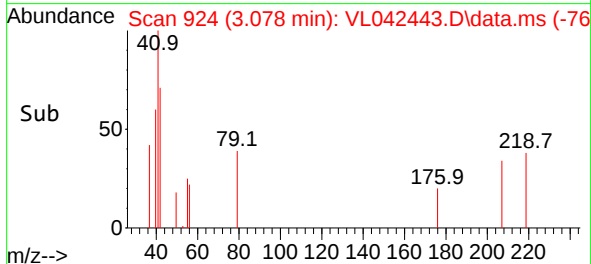
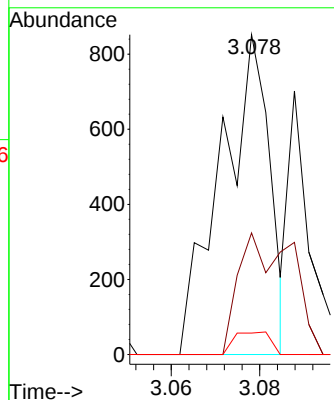
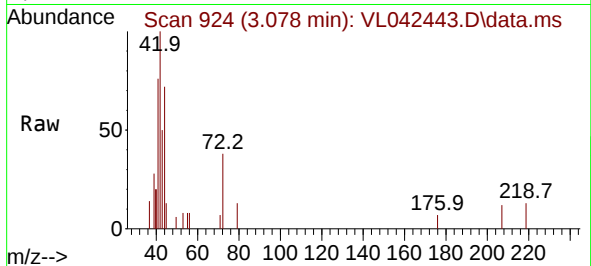




#41
Tetrahydrofuran
Concen: 0.046 ppbv
RT: 3.078 min Scan# 916
Delta R.T. 0.026 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

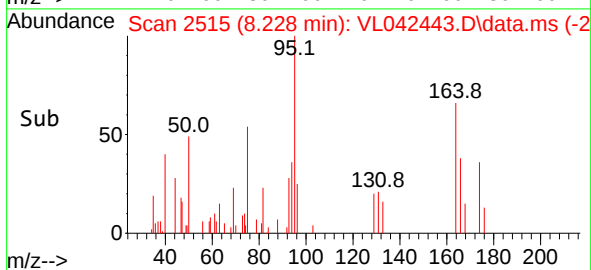
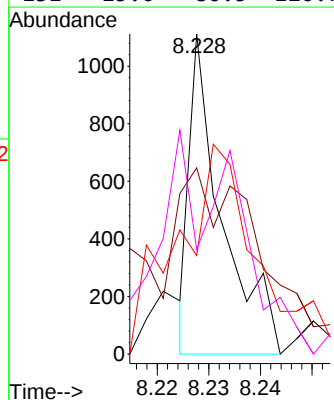
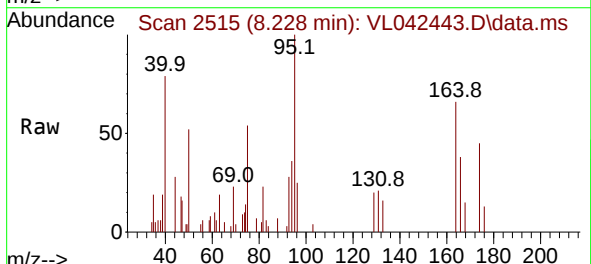
Instrument :
MSVOA_L
ClientSampleId :
B-1

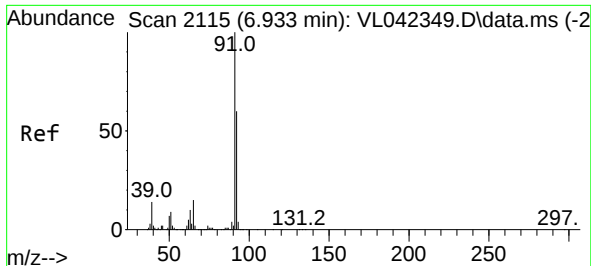
Tgt Ion: 42 Resp: 653
Ion Ratio Lower Upper
42 100
72 0.0 32.3 48.5#
71 5.2 31.4 47.2#



#52
Tetrachloroethene
Concen: 0.038 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.003 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

Tgt Ion: 164 Resp: 484
Ion Ratio Lower Upper
164 100
166 36.6 98.2 147.2#
129 17.4 81.8 122.8#
131 15.0 80.5 120.7#

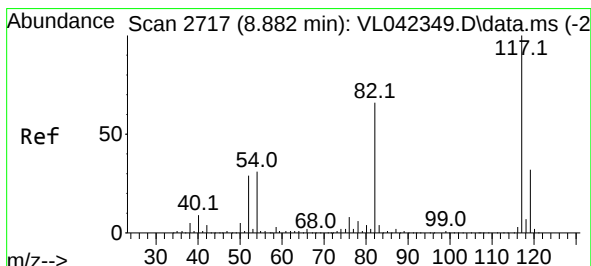
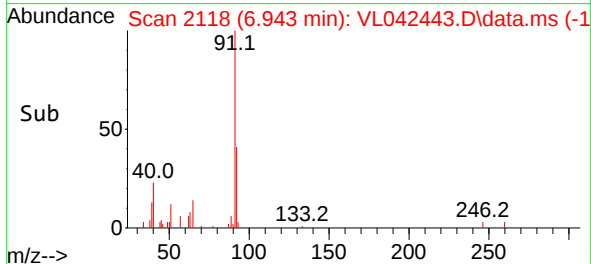
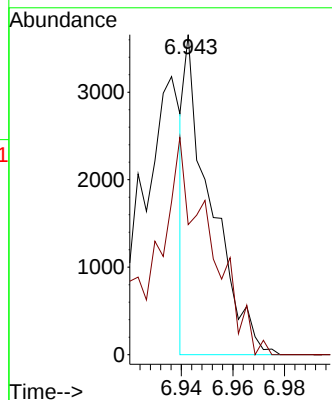
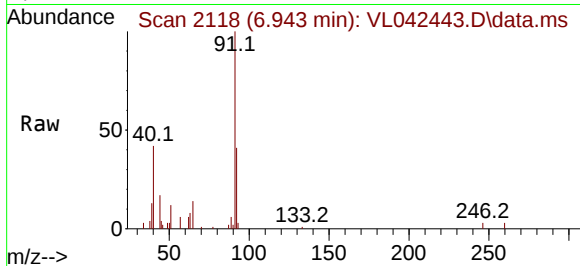




#53
Toluene
Concen: 0.064 ppbv
RT: 6.943 min Scan# 2115
Delta R.T. 0.010 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

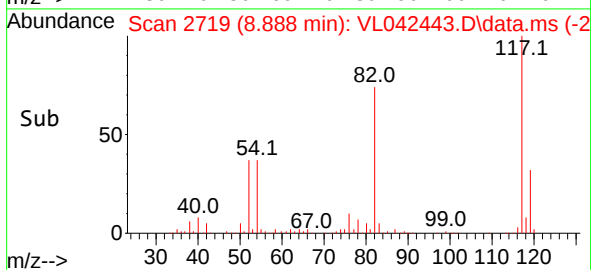
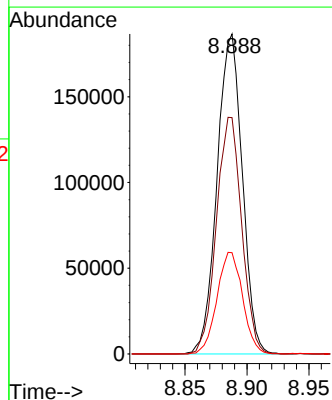
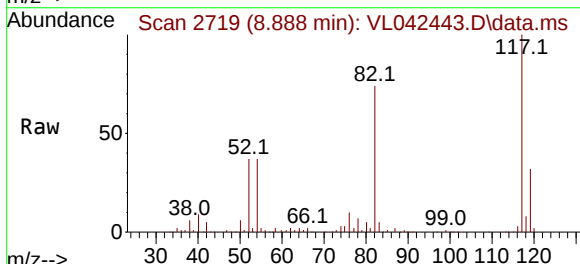
Instrument :
MSVOA_L
ClientSampleId :
B-1

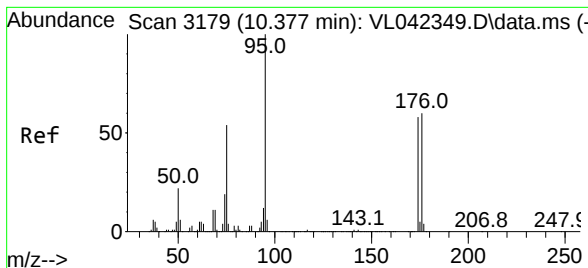
Tgt Ion: 91 Resp: 2557
Ion Ratio Lower Upper
91 100
92 142.0 48.2 72.4#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2719
Delta R.T. 0.006 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

Tgt Ion: 117 Resp: 265424
Ion Ratio Lower Upper
117 100
82 73.9 57.8 86.6
119 32.1 25.2 37.8

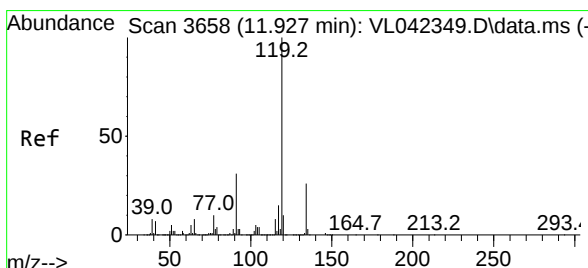
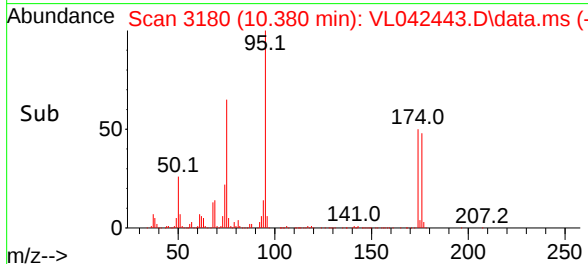
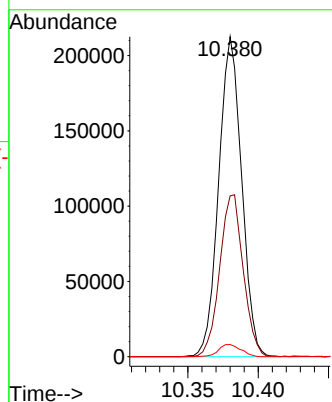
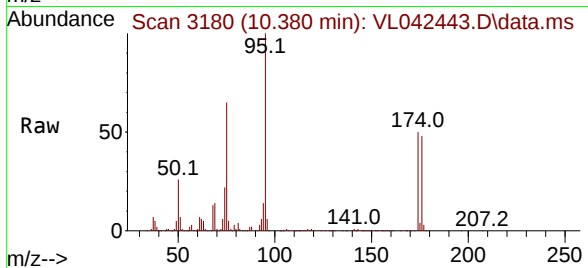




#68
1-Bromo-4-Fluorobenzene
Concen: 11.031 ppbv
RT: 10.380 min Scan# 3179
Delta R.T. 0.003 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

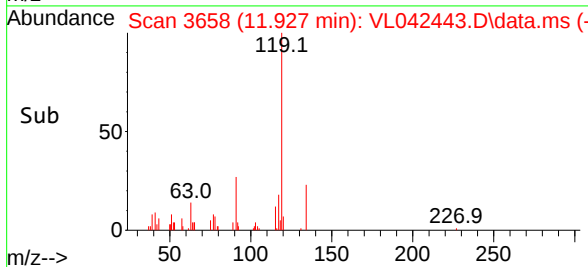
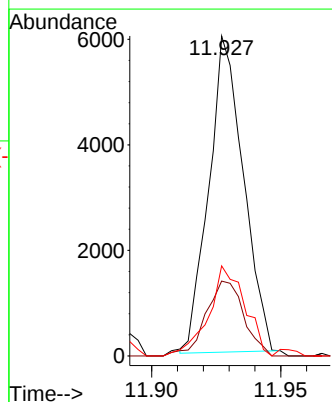
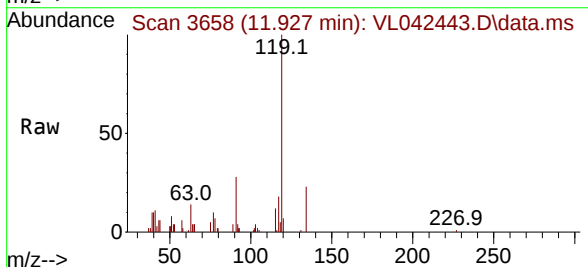
Instrument :
MSVOA_L
ClientSampleId :
B-1

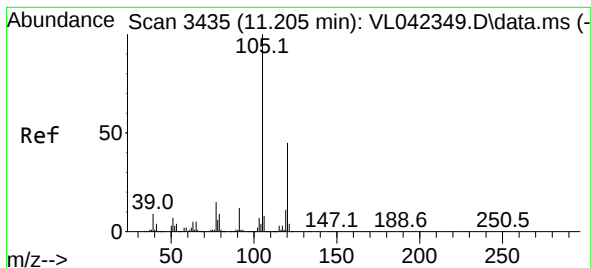
Tgt Ion: 95 Resp: 240596
Ion Ratio Lower Upper
95 100
174 52.0 48.5 72.7
175 3.7 3.7 5.5



#69
p-Isopropyltoluene
Concen: 0.080 ppbv
RT: 11.927 min Scan# 3658
Delta R.T. -0.000 min
Lab File: VL042443.D
Acq: 29 Apr 2025 13:11

Tgt Ion: 119 Resp: 5582
Ion Ratio Lower Upper
119 100
134 25.9 20.0 30.0
91 30.8 24.4 36.6





#73

1,3,5-Trimethylbenzene

Concen: 0.050 ppbv

RT: 11.205 min Scan# 3435

Delta R.T. -0.000 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Instrument :

MSVOA_L

ClientSampleId :

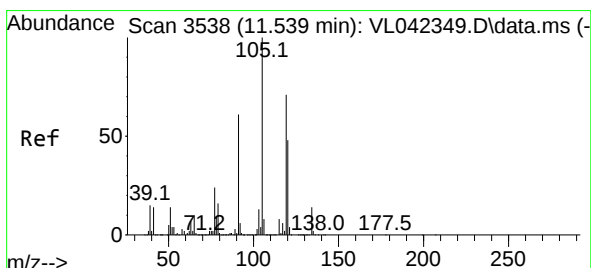
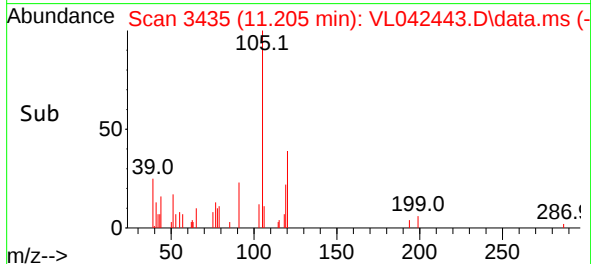
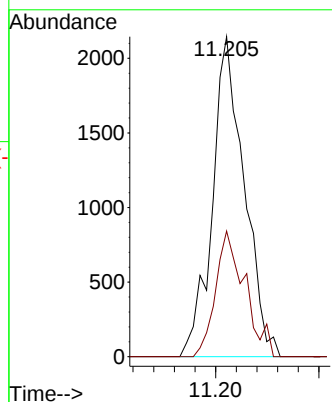
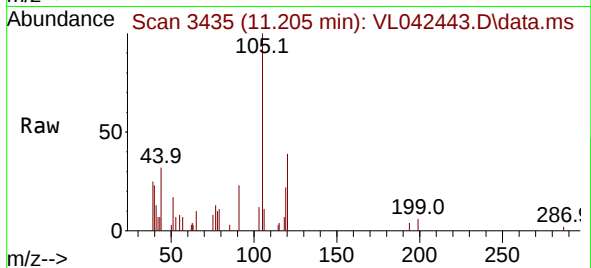
B-1

Tgt Ion:105 Resp: 2303

Ion Ratio Lower Upper

105 100

120 39.3 35.6 53.4



#74

1,2,4-Trimethylbenzene

Concen: 0.133 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. -0.000 min

Lab File: VL042443.D

Acq: 29 Apr 2025 13:11

Tgt Ion:105 Resp: 7145

Ion Ratio Lower Upper

105 100

120 33.3 38.1 57.1#

91 12.7 48.8 73.2#

77 19.0 19.0 28.4

