

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL050224\
 Data File : VL041202.D
 Acq On : 2 May 2024 19:21
 Operator : SY/MD
 Sample : P2334-06DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 BA-20-IA01-20240425DUP

Quant Time: May 03 03:43:31 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL042924AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri May 03 03:34:47 2024
 Response via : Initial Calibration

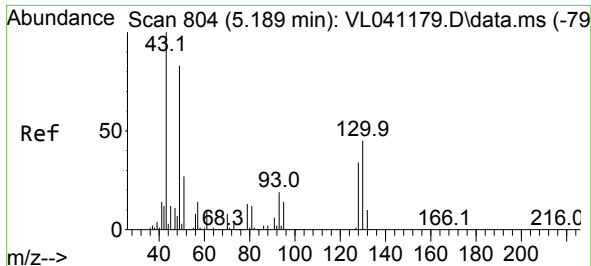
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.192	49	852250	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.652	114	2147204	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.468	117	1966126	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.773	95	1464859	9.869	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.729	85	46116	0.400	ppbv	94
3) Chlorodifluoromethane	2.655	51	226776	1.752	ppbv #	68
4) Chloromethane	2.816	50	31226	0.615	ppbv #	82
9) Propene	2.874	41	185332	3.659	ppbv	96
10) Heptane	7.587	43	4054	0.033	ppbv #	1
11) Trichlorofluoromethane	3.562	101	29294	0.250	ppbv	94
12) 1,1,2-Trichlorotrifluo...	4.063	101	6274	0.072	ppbv	89
13) Ethanol	3.240	45	456752	40.224	ppbv	98
15) Acetone	3.468	43	1341444	13.337	ppbv	91
16) 1,3-Butadiene	2.970	39	7728	0.152	ppbv #	76
17) tert-Butyl alcohol	3.899	59	20155	0.186	ppbv #	72
19) Isopropyl Alcohol	3.591	45	23663	0.359	ppbv #	41
20) Methylene Chloride	3.935	84	1380406	39.467	ppbv	98
21) Allyl Chloride	3.931	41	43786	0.668	ppbv #	24
23) Vinyl Acetate	4.619	43	16495	0.149	ppbv #	52
25) Ethyl Acetate	5.214	43	862225	4.295	ppbv #	78
26) Hexane	5.214	57	1189476	13.277	ppbv #	41
30) Cyclohexane	6.594	84	2987	0.042	ppbv #	1
34) 2-Butanone	4.790	43	142340	1.302	ppbv	100
36) Benzene	6.369	78	23021	0.128	ppbv	92
37) 1,2-Dichloroethane	5.809	62	3345	0.036	ppbv #	82
39) 1,2-Dichloropropane	6.652	63	546032	7.863	ppbv #	23
41) Tetrahydrofuran	5.568	42	9822	0.124	ppbv #	40
53) Toluene	9.221	91	268692	1.286	ppbv	100
59) m/p-Xylene	12.372	91	18702	0.083	ppbv #	31
60) o-Xylene	13.063	91	7530	0.035	ppbv #	1
61) Styrene	12.896	104	16239	0.145	ppbv #	79

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

Quant Time: May 03 03:43:31 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL042924AIR.M
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QLast Update : Fri May 03 03:34:47 2024
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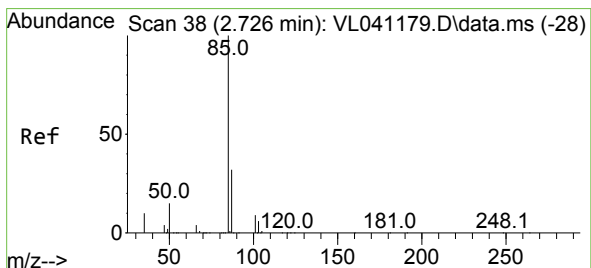
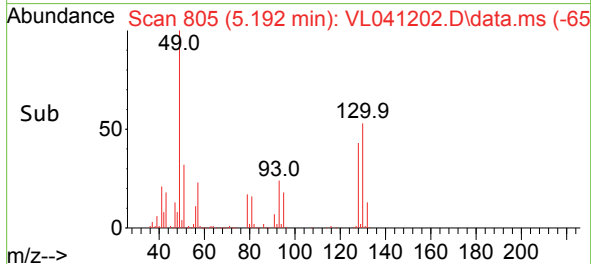
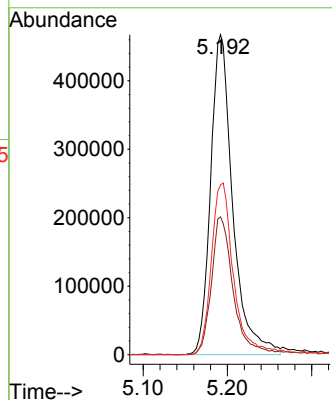
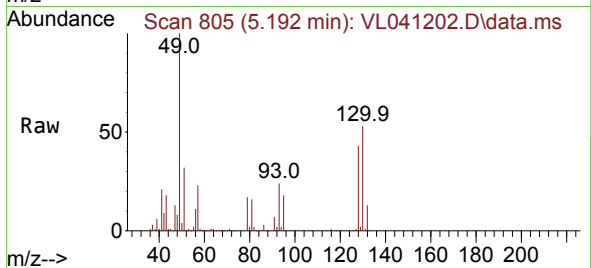




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.192 min Scan# 80
 Delta R.T. -0.000 min
 Lab File: VL041202.D
 Acq: 2 May 2024 19:21

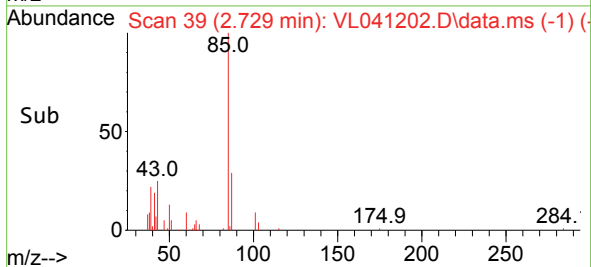
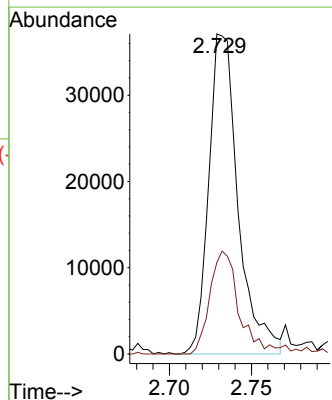
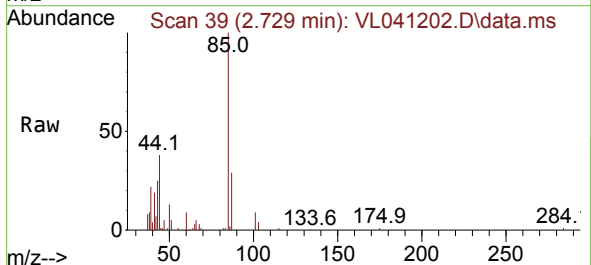
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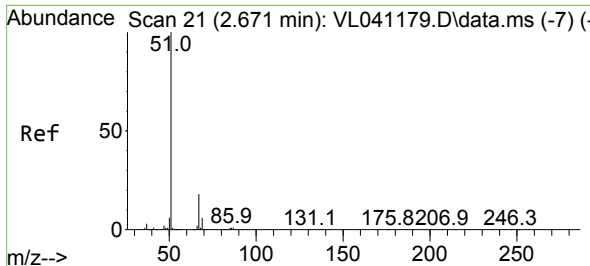
Tgt Ion: 49 Resp: 852250
 Ion Ratio Lower Upper
 49 100
 128 43.8 21.5 64.5
 130 55.3 27.2 81.6



#2
 Dichlorodifluoromethane
 Concen: 0.400 ppbv
 RT: 2.729 min Scan# 39
 Delta R.T. 0.000 min
 Lab File: VL041202.D
 Acq: 2 May 2024 19:21

Tgt Ion: 85 Resp: 46116
 Ion Ratio Lower Upper
 85 100
 87 28.6 25.7 38.5

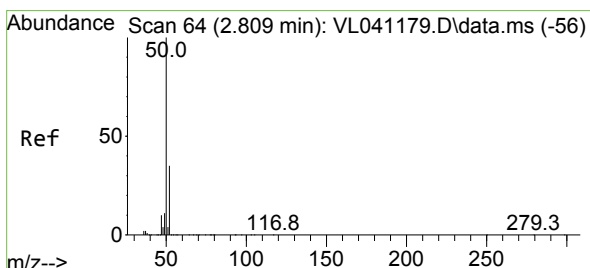
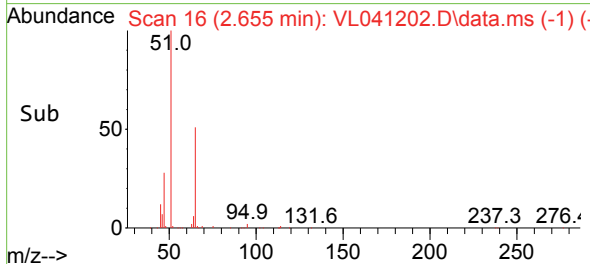
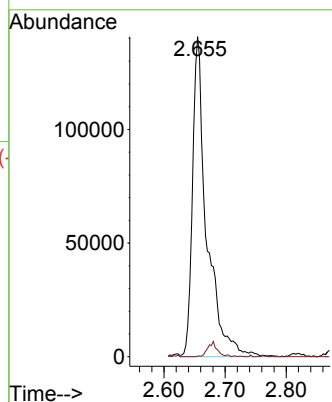
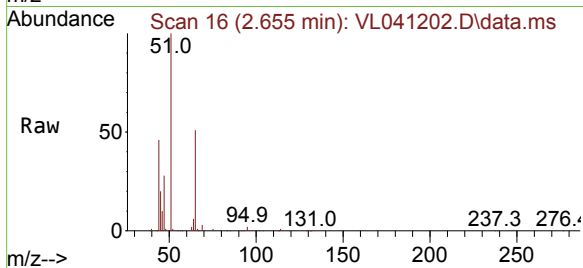




#3
Chlorodifluoromethane
Concen: 1.752 ppbv
RT: 2.655 min Scan# 16
Delta R.T. -0.019 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

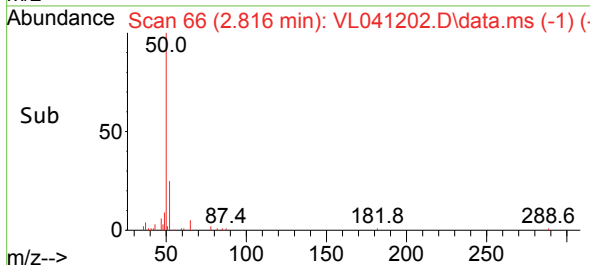
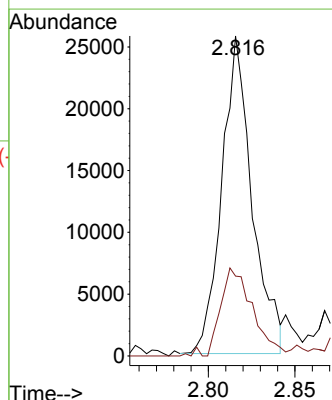
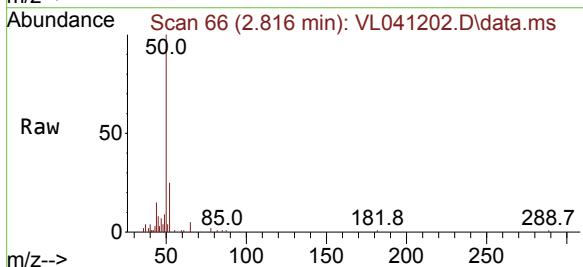
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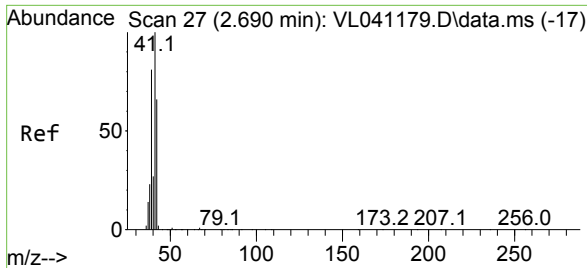
Tgt Ion: 51 Resp: 226776
Ion Ratio Lower Upper
51 100
67 3.3 14.0 21.0#



#4
Chloromethane
Concen: 0.615 ppbv
RT: 2.816 min Scan# 66
Delta R.T. 0.003 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

Tgt Ion: 50 Resp: 31226
Ion Ratio Lower Upper
50 100
52 25.1 28.3 42.5#

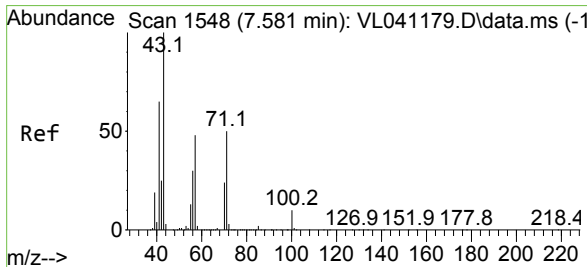
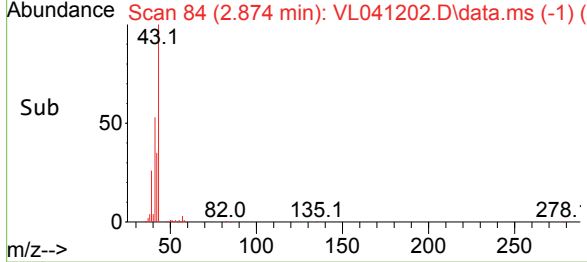
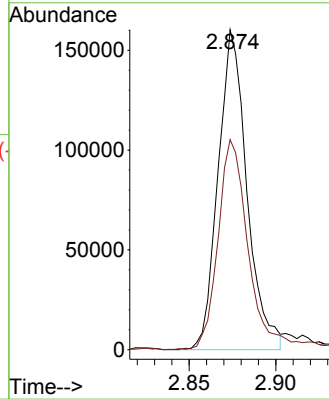
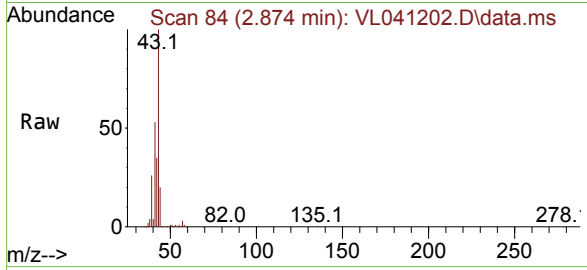




#9
Propene
Concen: 3.659 ppbv
RT: 2.874 min Scan# 84
Delta R.T. 0.180 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

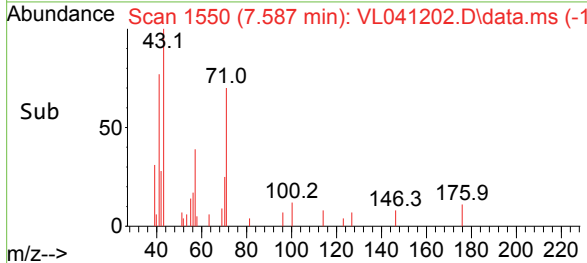
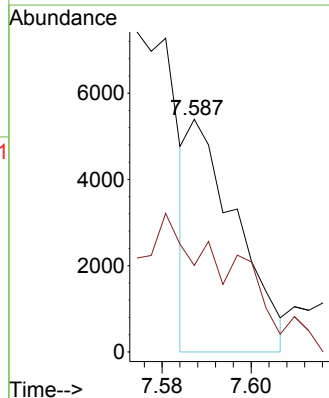
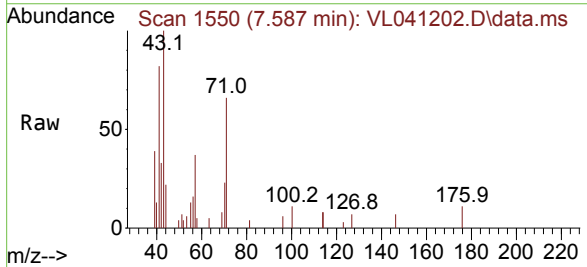
Instrument :
MSVOA_L
ClientSampleId :
BA-20-IA01-20240425DUP

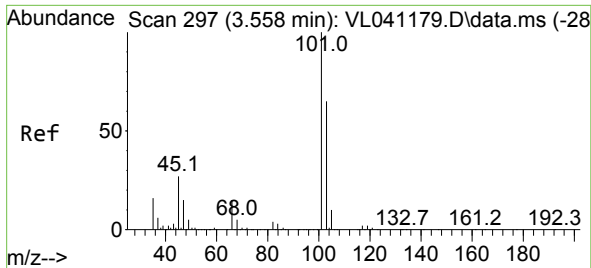
Tgt Ion: 41 Resp: 185332
Ion Ratio Lower Upper
41 100
42 72.4 55.3 82.9



#10
Heptane
Concen: 0.033 ppbv
RT: 7.587 min Scan# 1550
Delta R.T. 0.007 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

Tgt Ion: 43 Resp: 4054
Ion Ratio Lower Upper
43 100
57 164.5 38.7 58.1#

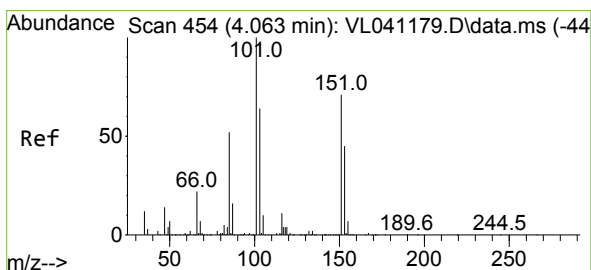
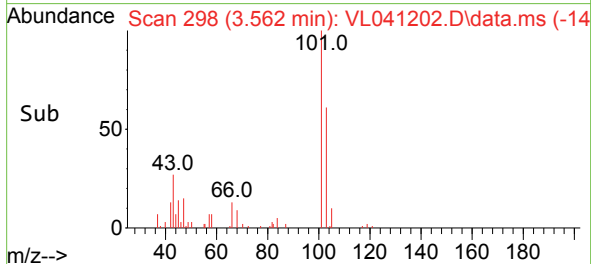
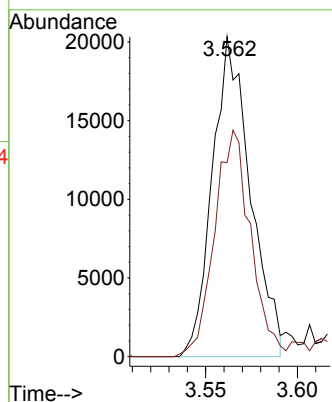
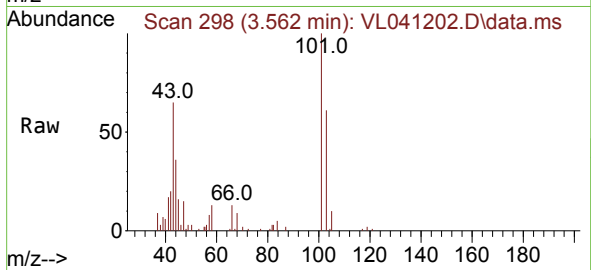




#11
 Trichlorofluoromethane
 Concen: 0.250 ppbv
 RT: 3.562 min Scan# 297
 Delta R.T. 0.003 min
 Lab File: VL041202.D
 Acq: 2 May 2024 19:21

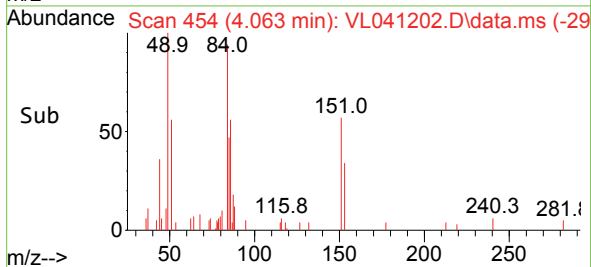
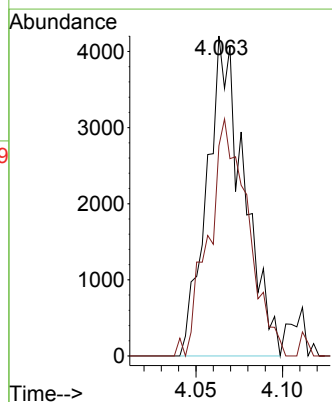
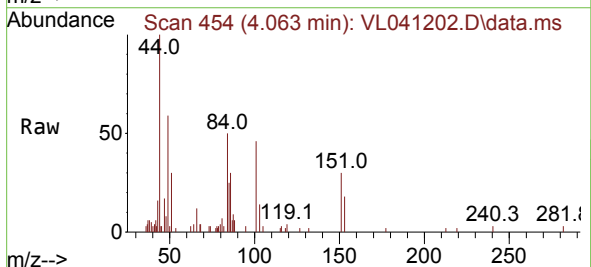
Instrument :
 MSVOA_L
 ClientSampleId :
 BA-20-IA01-20240425DUP

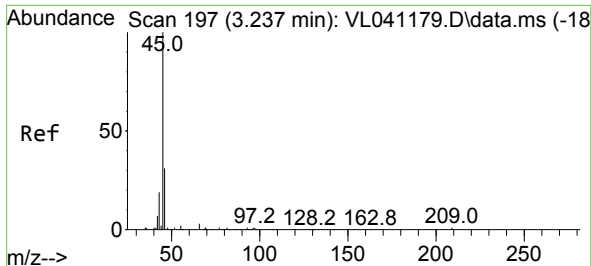
Tgt Ion:101 Resp: 29294
 Ion Ratio Lower Upper
 101 100
 103 59.8 51.6 77.4



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.072 ppbv
 RT: 4.063 min Scan# 454
 Delta R.T. 0.000 min
 Lab File: VL041202.D
 Acq: 2 May 2024 19:21

Tgt Ion:101 Resp: 6274
 Ion Ratio Lower Upper
 101 100
 151 79.8 56.8 85.2

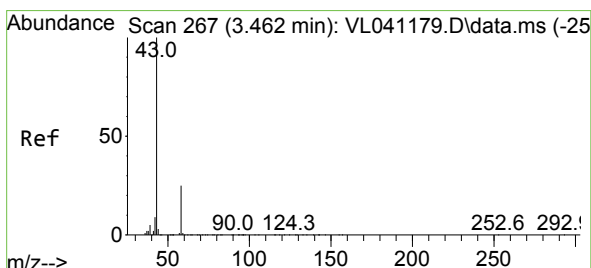
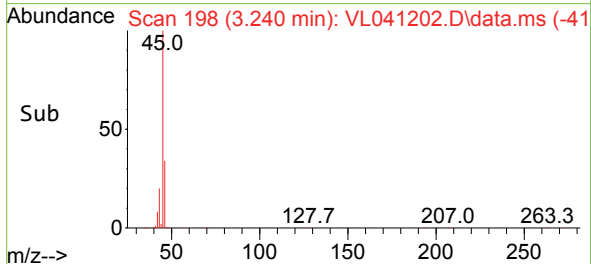
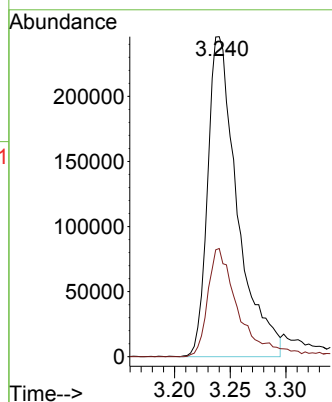
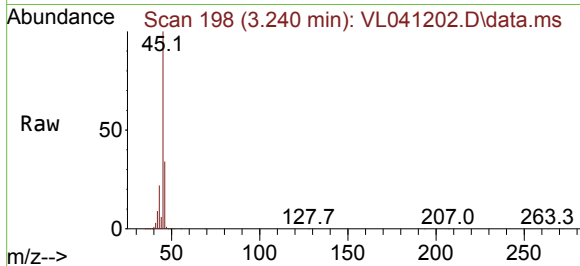




#13
Ethanol
Concen: 40.224 ppbv
RT: 3.240 min Scan# 197
Delta R.T. 0.003 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

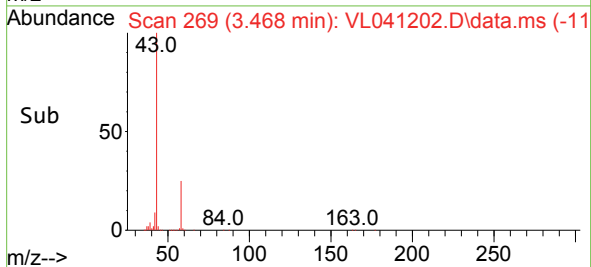
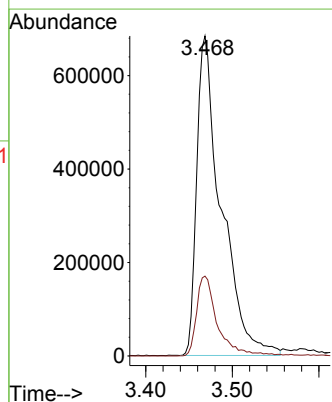
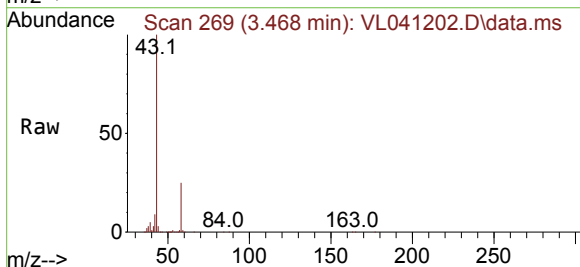
Instrument :
MSVOA_L
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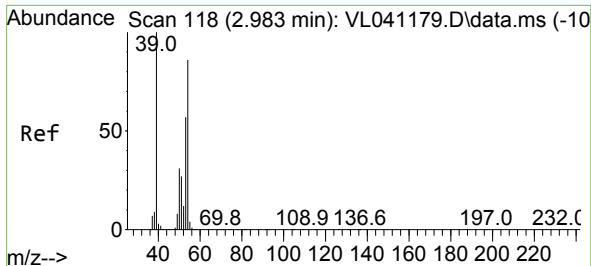
Tgt Ion: 45 Resp: 456752
Ion Ratio Lower Upper
45 100
46 35.4 14.8 59.0



#15
Acetone
Concen: 13.337 ppbv
RT: 3.468 min Scan# 269
Delta R.T. 0.003 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

Tgt Ion: 43 Resp: 1341444
Ion Ratio Lower Upper
43 100
58 21.9 21.4 32.0

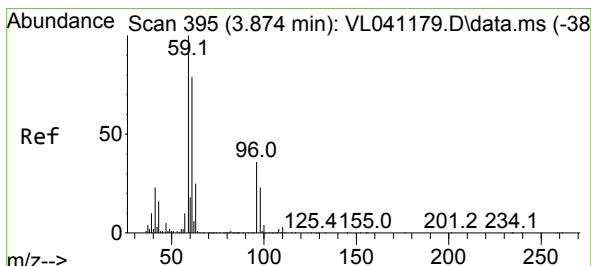
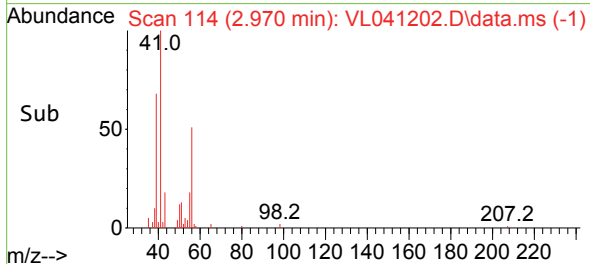
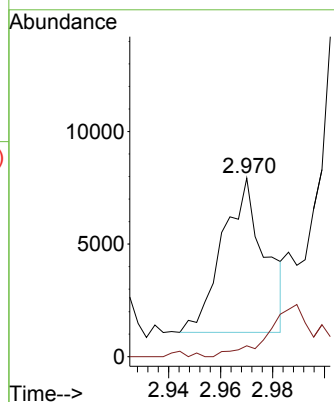
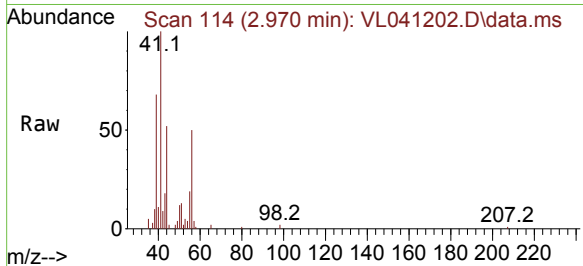




#16
1,3-Butadiene
Concen: 0.152 ppbv
RT: 2.970 min Scan# 118
Delta R.T. -0.013 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

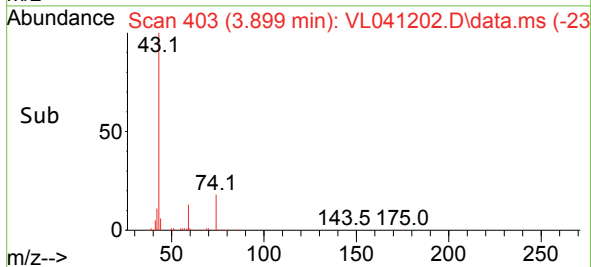
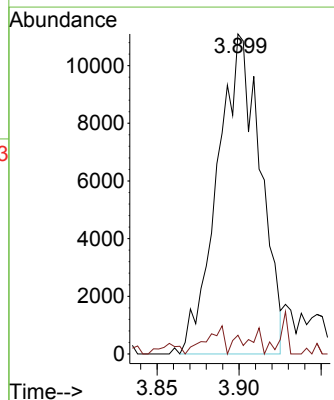
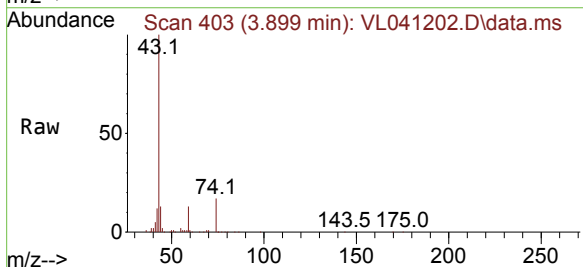
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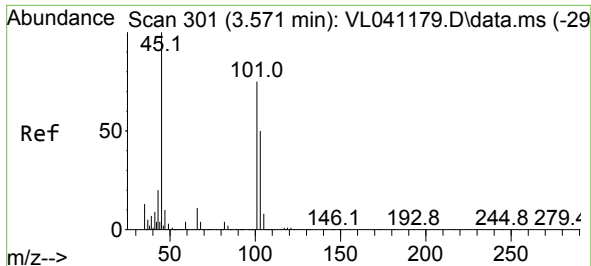
Tgt Ion: 39 Resp: 7728
Ion Ratio Lower Upper
39 100
54 57.1 62.2 93.4#



#17
tert-Butyl alcohol
Concen: 0.186 ppbv
RT: 3.899 min Scan# 403
Delta R.T. 0.026 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

Tgt Ion: 59 Resp: 20155
Ion Ratio Lower Upper
59 100
57 0.0 8.4 12.6#





#19

Isopropyl Alcohol

Concen: 0.359 ppbv

RT: 3.591 min Scan# 301

Delta R.T. 0.019 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

Instrument :

MSVOA_L

ClientSampleId :

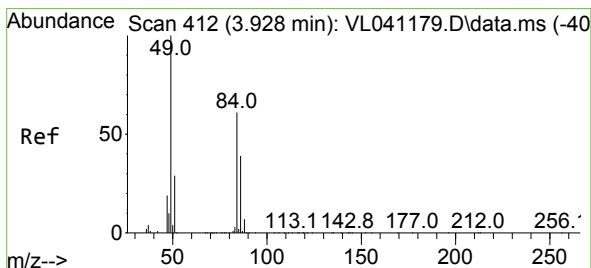
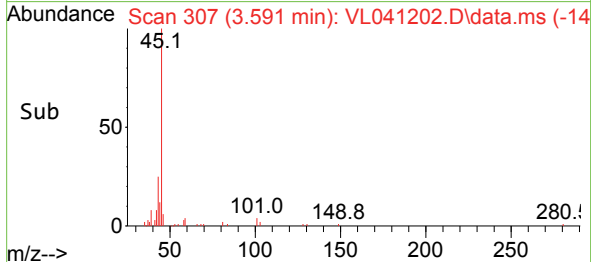
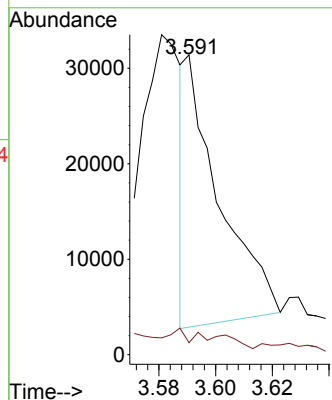
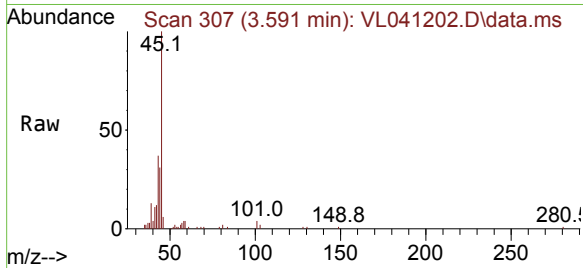
BA-20-IA01-20240425DUP

Tgt Ion: 45 Resp: 23663

Ion Ratio Lower Upper

45 100

58 0.0 26.8 40.2#



#20

Methylene Chloride

Concen: 39.467 ppbv

RT: 3.935 min Scan# 414

Delta R.T. 0.003 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

Tgt Ion: 84 Resp: 1380406

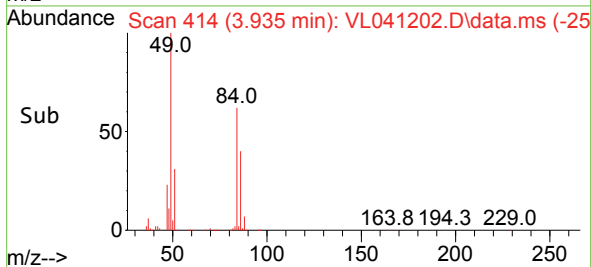
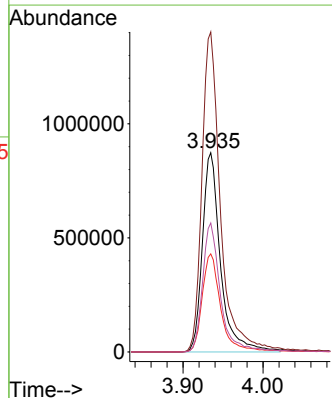
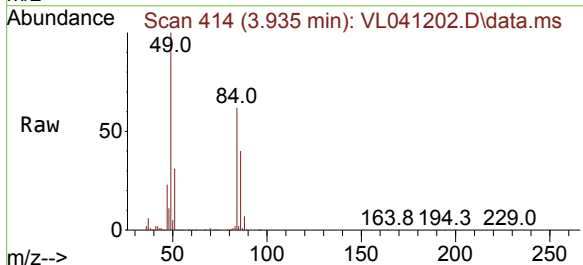
Ion Ratio Lower Upper

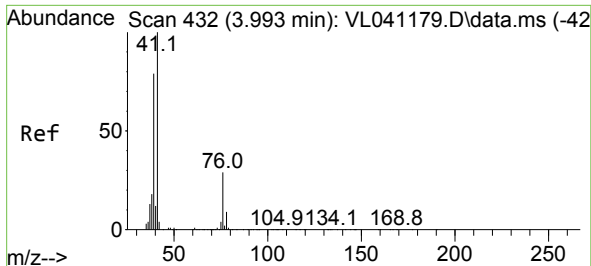
84 100

49 160.7 130.4 195.6

51 49.3 38.0 57.0

86 64.8 50.3 75.5





#21

Allyl Chloride

Concen: 0.668 ppbv

RT: 3.931 min Scan# 41

Delta R.T. -0.064 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

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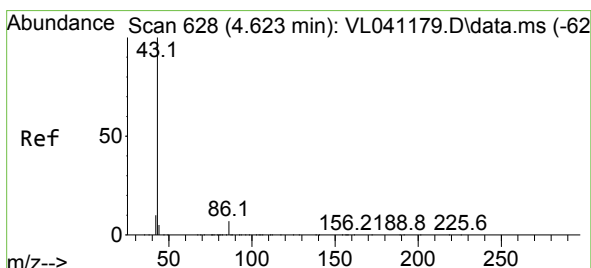
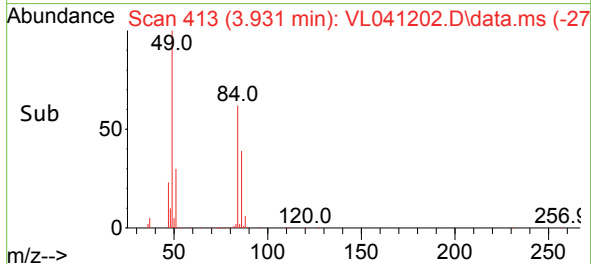
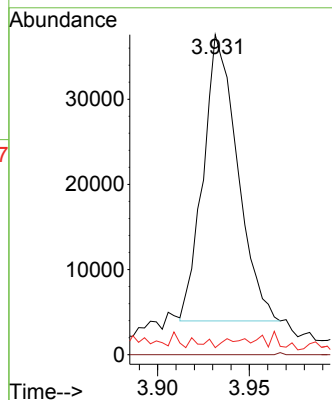
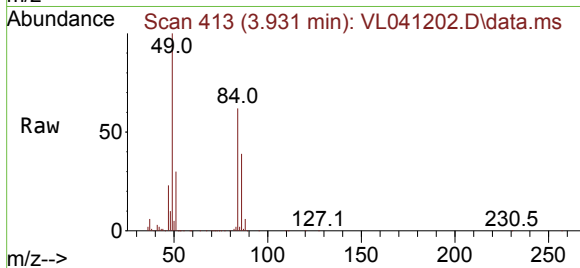
Tgt Ion: 41 Resp: 43786

Ion Ratio Lower Upper

41 100

76 0.0 23.7 35.5#

39 6.8 64.7 97.1#



#23

Vinyl Acetate

Concen: 0.149 ppbv

RT: 4.619 min Scan# 627

Delta R.T. -0.006 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

Tgt Ion: 43 Resp: 16495

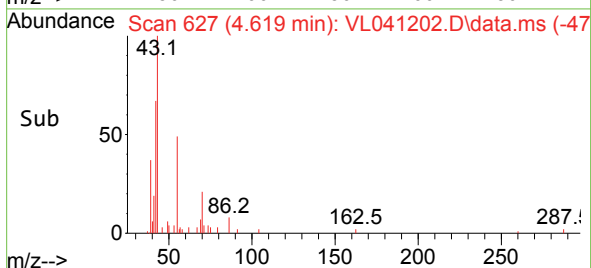
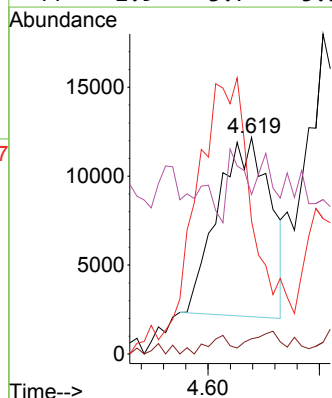
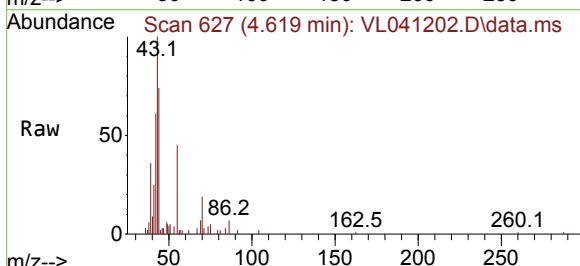
Ion Ratio Lower Upper

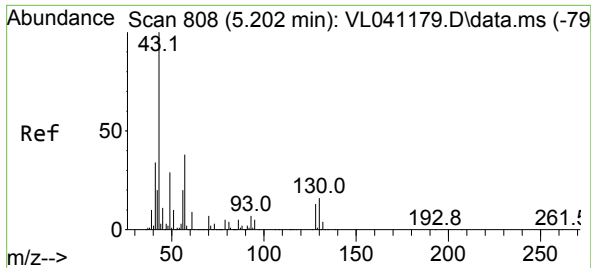
43 100

86 8.7 4.9 7.3#

42 44.4 8.0 12.0#

44 2.9 3.7 5.5#

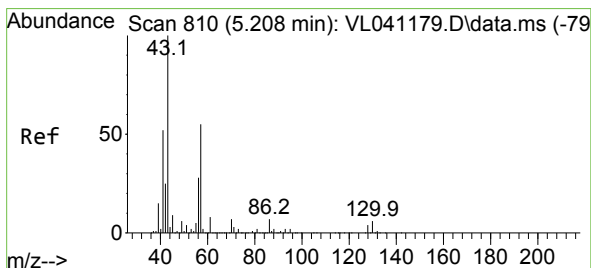
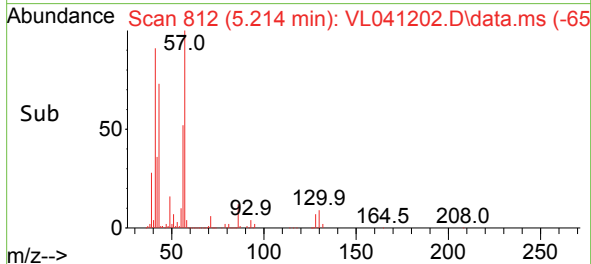
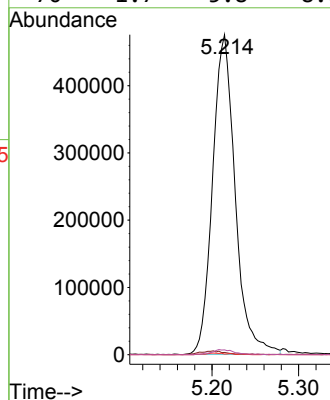
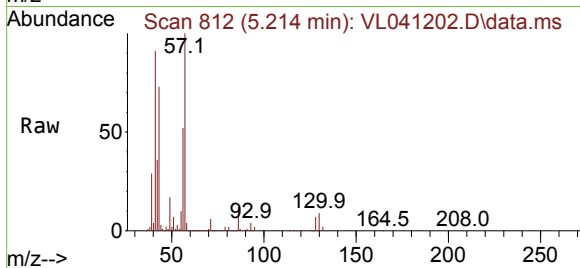




#25
Ethyl Acetate
Concen: 4.295 ppbv
RT: 5.214 min Scan# 812
Delta R.T. 0.013 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

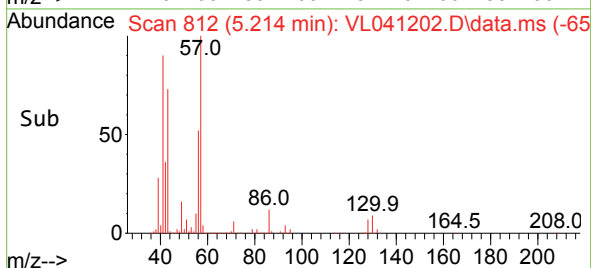
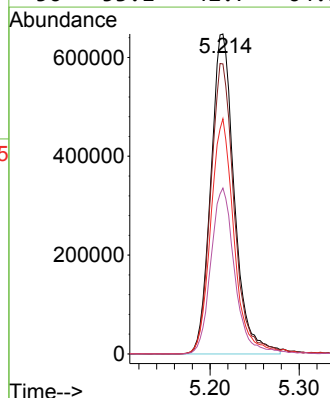
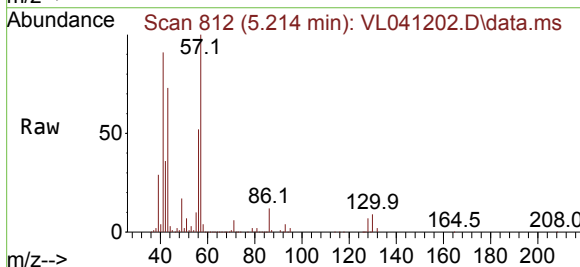
Instrument :
MSVOA_L
ClientSampleId :
BA-20-IA01-20240425DUP

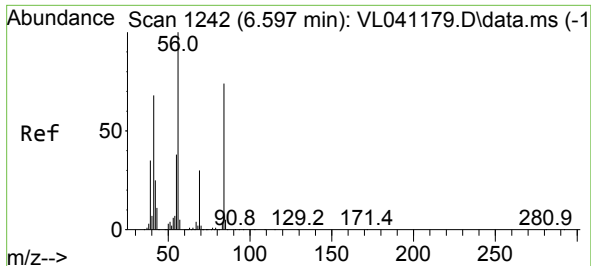
Tgt Ion: 43	Resp: 862225
Ion Ratio	Lower Upper
43 100	
45 1.4	8.2 12.2#
61 0.5	7.7 11.5#
70 1.7	5.8 8.6#



#26
Hexane
Concen: 13.277 ppbv
RT: 5.214 min Scan# 812
Delta R.T. 0.003 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

Tgt Ion: 57	Resp: 1189476
Ion Ratio	Lower Upper
57 100	
41 92.1	75.8 113.8
43 73.5	187.0 280.4#
56 53.1	42.7 64.1

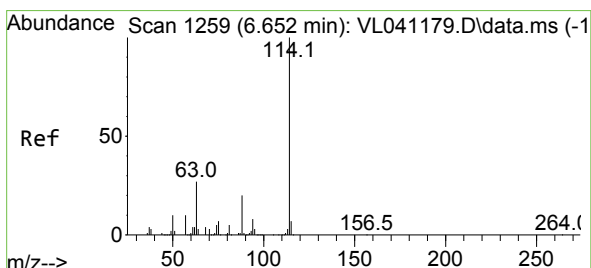
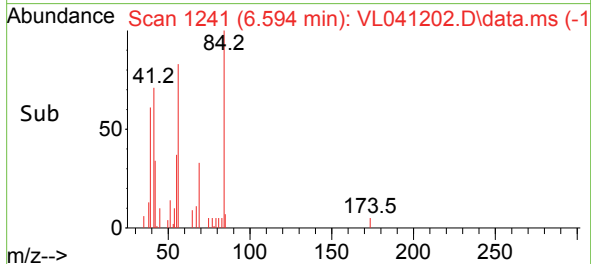
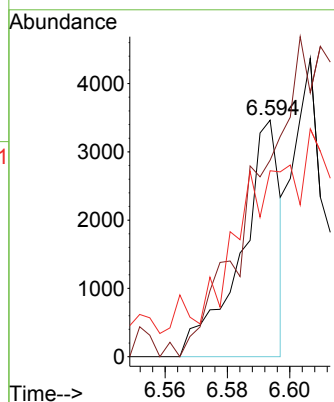
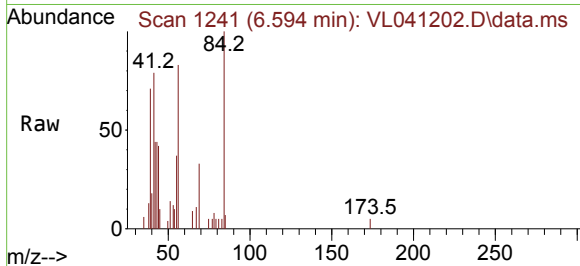




#30
Cyclohexane
Concen: 0.042 ppbv
RT: 6.594 min Scan# 1241
Delta R.T. -0.006 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

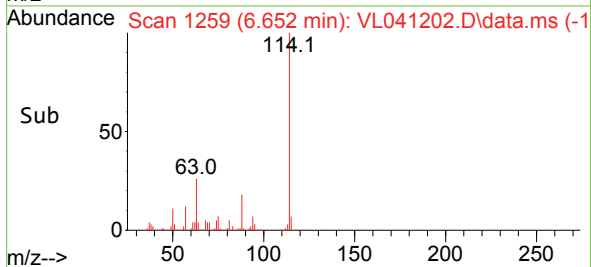
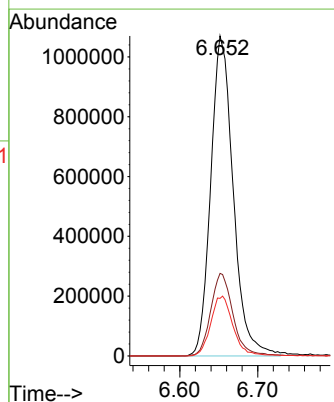
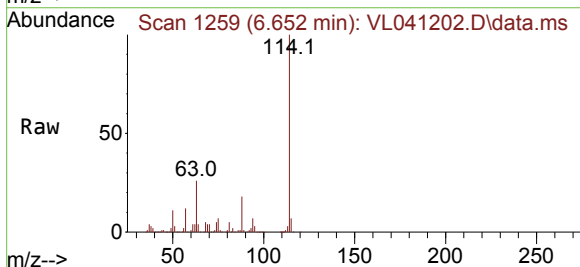
Instrument :
MSVOA_L
ClientSampleId :
BA-20-IA01-20240425DUP

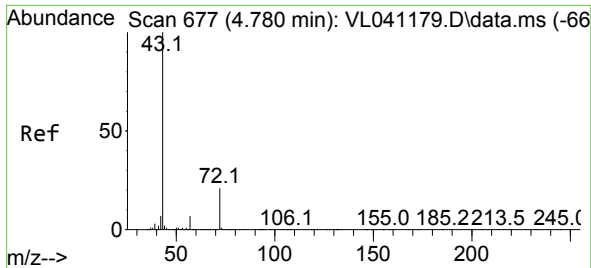
Tgt Ion: 84 Resp: 2987
Ion Ratio Lower Upper
84 100
56 0.0 116.8 175.2#
41 0.0 73.8 110.8#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.652 min Scan# 1259
Delta R.T. 0.000 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

Tgt Ion: 114 Resp: 2147204
Ion Ratio Lower Upper
114 100
63 25.9 21.8 32.6
88 18.7 15.2 22.8

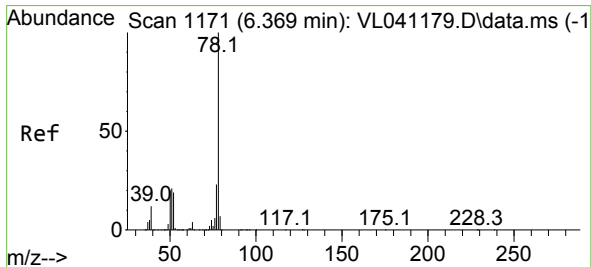
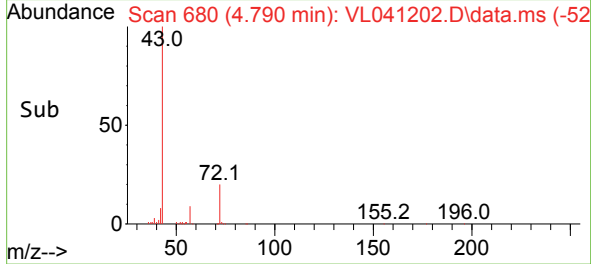
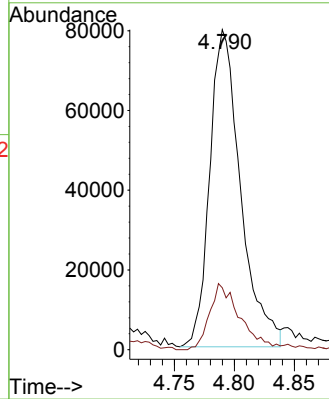
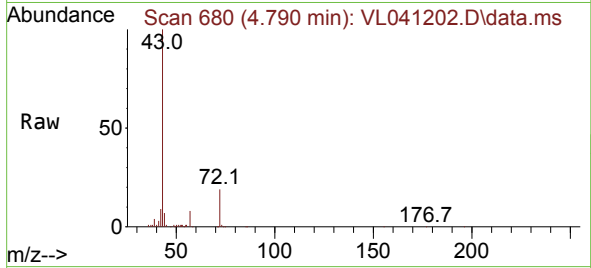




#34
2-Butanone
Concen: 1.302 ppbv
RT: 4.790 min Scan# 61
Delta R.T. 0.007 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

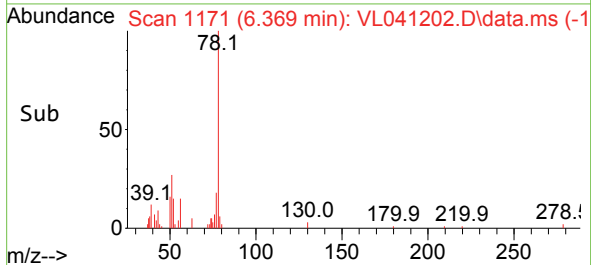
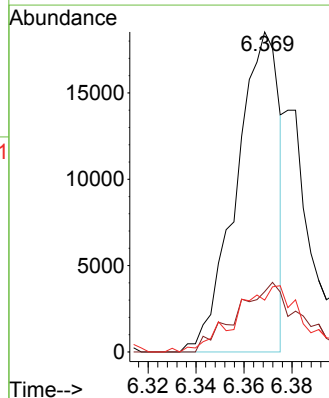
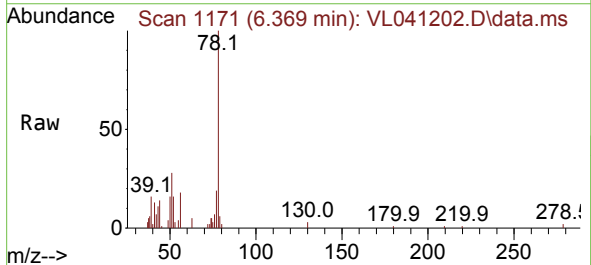
Instrument :
MSVOA_L
ClientSampleId :
BA-20-IA01-20240425DUP

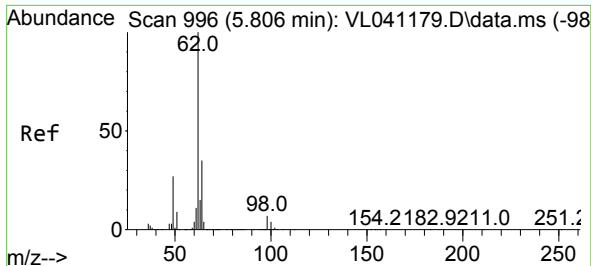
Tgt Ion: 43 Resp: 142340
Ion Ratio Lower Upper
43 100
72 21.4 17.3 25.9



#36
Benzene
Concen: 0.128 ppbv
RT: 6.369 min Scan# 1171
Delta R.T. 0.000 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

Tgt Ion: 78 Resp: 23021
Ion Ratio Lower Upper
78 100
77 18.9 18.3 27.5
50 16.2 15.9 23.9





#37

1,2-Dichloroethane

Concen: 0.036 ppbv

RT: 5.809 min Scan# 996

Delta R.T. 0.003 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

Instrument :

MSVOA_L

ClientSampleId :

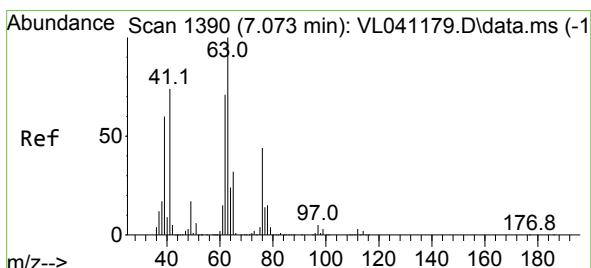
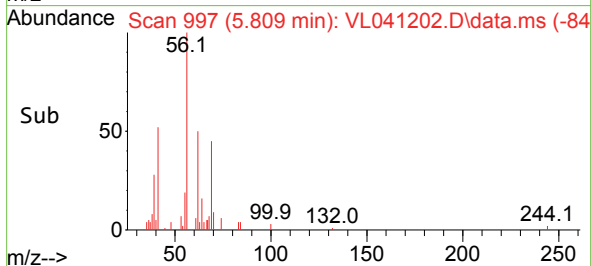
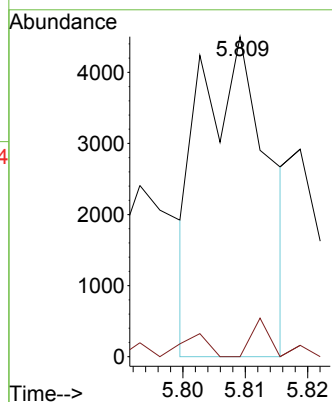
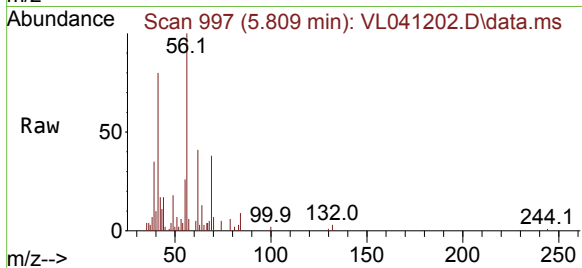
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Tgt Ion: 62 Resp: 3345

Ion Ratio Lower Upper

62 100

98 0.0 5.0 7.4#



#39

1,2-Dichloropropane

Concen: 7.863 ppbv

RT: 6.652 min Scan# 1259

Delta R.T. -0.421 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

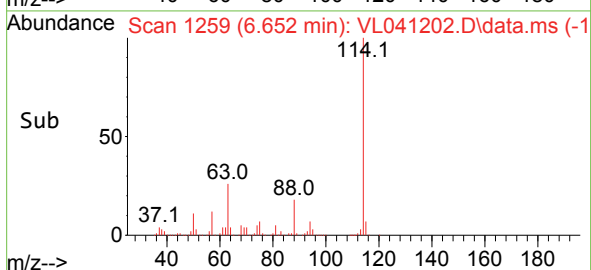
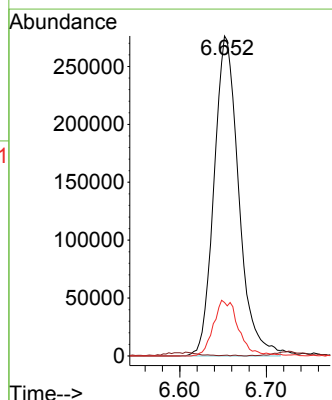
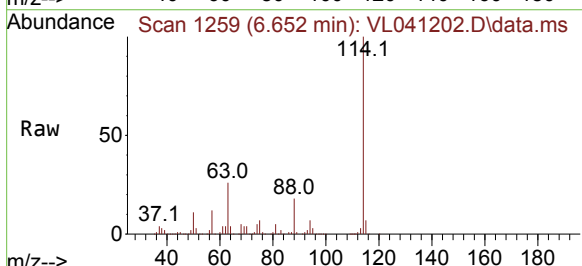
Tgt Ion: 63 Resp: 546032

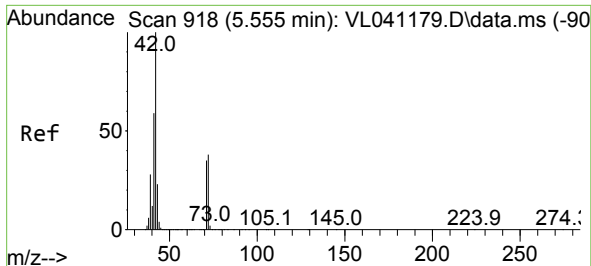
Ion Ratio Lower Upper

63 100

41 0.0 59.4 89.0#

62 16.7 56.8 85.2#

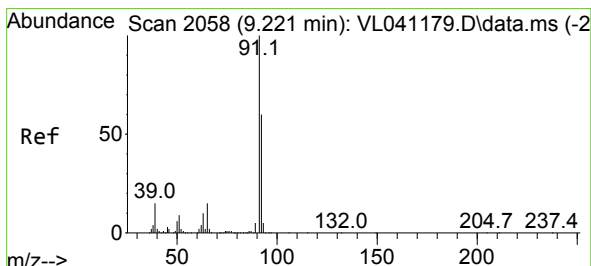
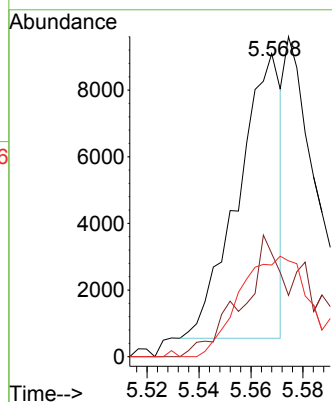
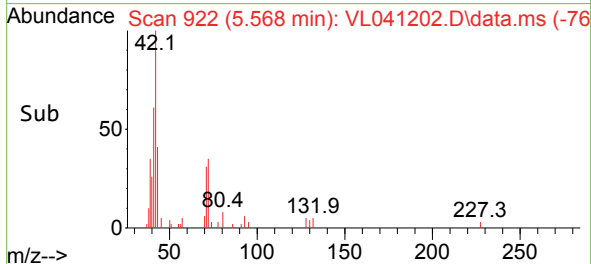
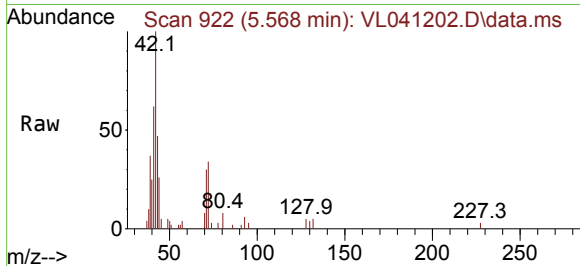




#41
Tetrahydrofuran
Concen: 0.124 ppbv
RT: 5.568 min Scan# 918
Delta R.T. 0.016 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

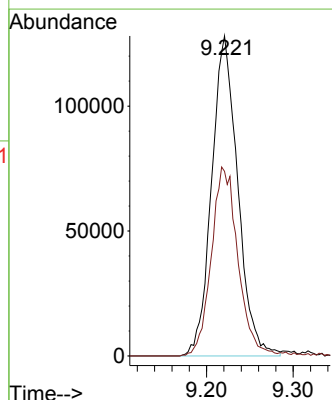
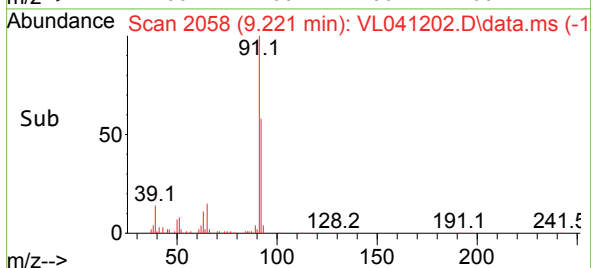
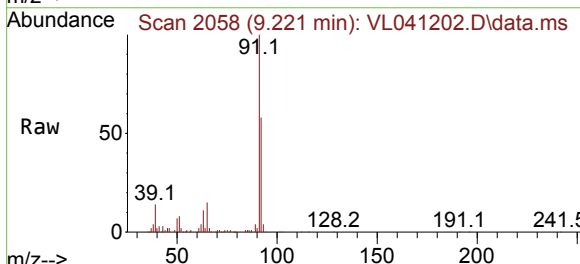
Instrument :
MSVOA_L
ClientSampleId :
BA-20-IA01-20240425DUP

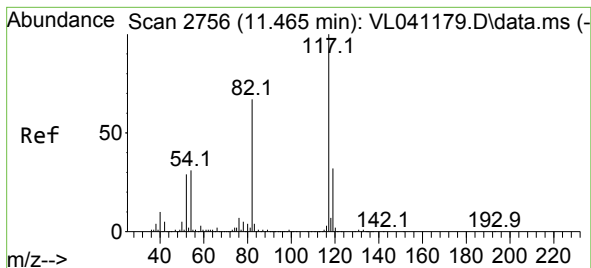
Tgt Ion: 42 Resp: 9822
Ion Ratio Lower Upper
42 100
72 71.2 29.4 44.0#
71 0.0 29.1 43.7#



#53
Toluene
Concen: 1.286 ppbv
RT: 9.221 min Scan# 2058
Delta R.T. 0.000 min
Lab File: VL041202.D
Acq: 2 May 2024 19:21

Tgt Ion: 91 Resp: 268692
Ion Ratio Lower Upper
91 100
92 60.7 48.2 72.4





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.468 min Scan# 21

Delta R.T. 0.003 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

Instrument :

MSVOA_L

ClientSampleId :

BA-20-IA01-20240425DUP

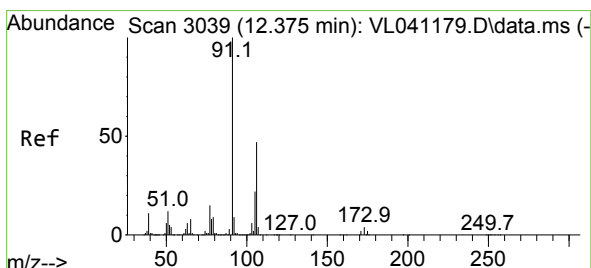
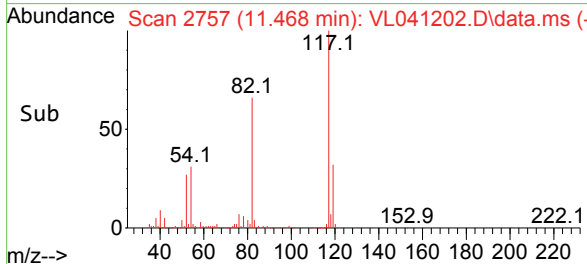
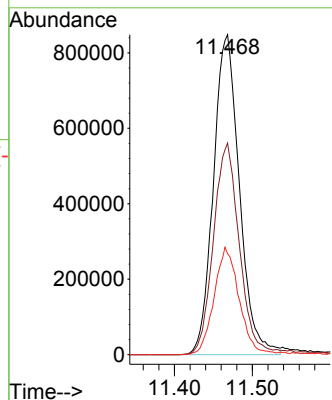
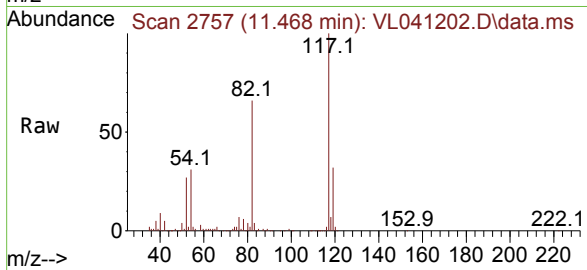
Tgt Ion:117 Resp: 1966126

Ion Ratio Lower Upper

117 100

82 67.7 53.6 80.4

119 33.0 27.2 40.8



#59

m/p-Xylene

Concen: 0.083 ppbv

RT: 12.372 min Scan# 3038

Delta R.T. 0.000 min

Lab File: VL041202.D

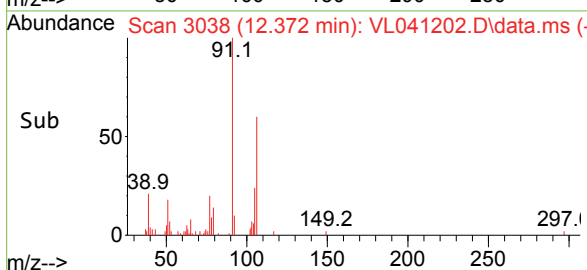
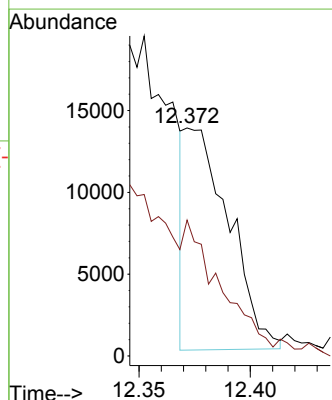
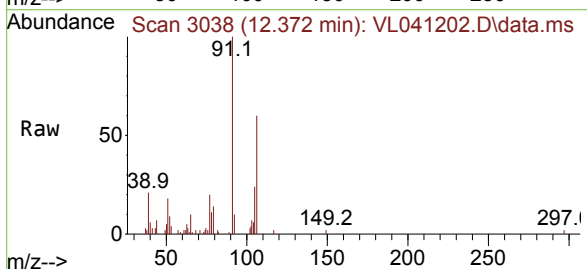
Acq: 2 May 2024 19:21

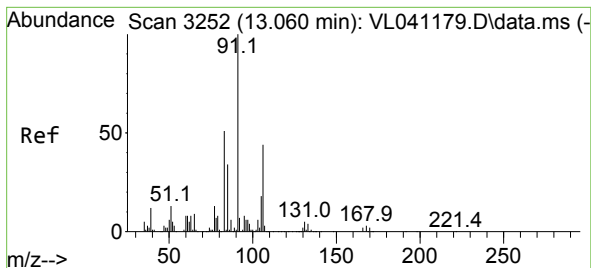
Tgt Ion: 91 Resp: 18702

Ion Ratio Lower Upper

91 100

106 0.0 35.7 53.5#





#60

o-Xylene

Concen: 0.035 ppbv

RT: 13.063 min Scan# 31

Delta R.T. 0.007 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

Instrument :

MSVOA_L

ClientSampleId :

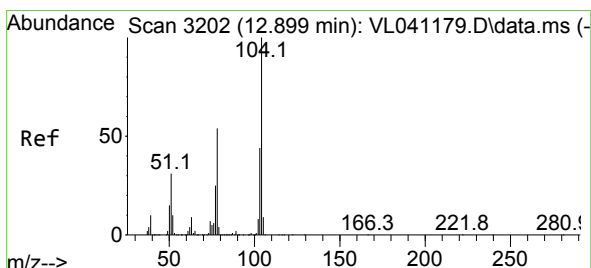
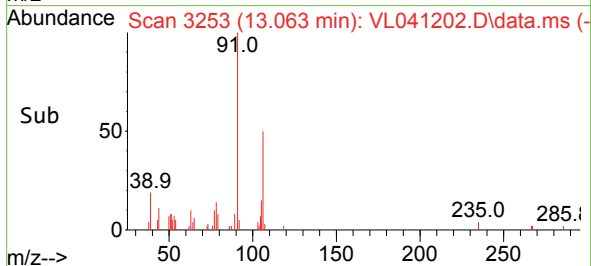
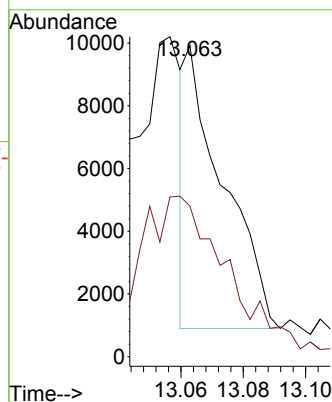
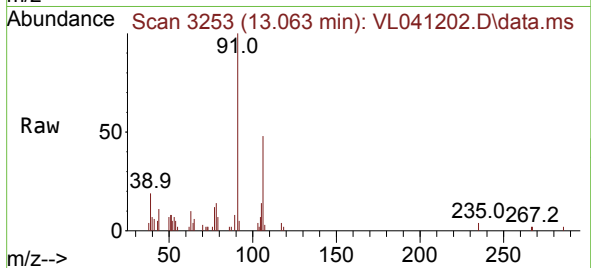
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Tgt Ion: 91 Resp: 7530

Ion Ratio Lower Upper

91 100

106 151.3 22.4 67.3#



#61

Styrene

Concen: 0.145 ppbv

RT: 12.896 min Scan# 3201

Delta R.T. 0.000 min

Lab File: VL041202.D

Acq: 2 May 2024 19:21

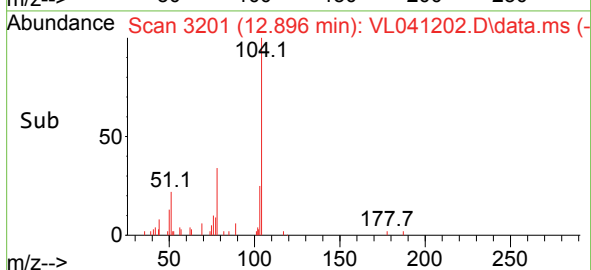
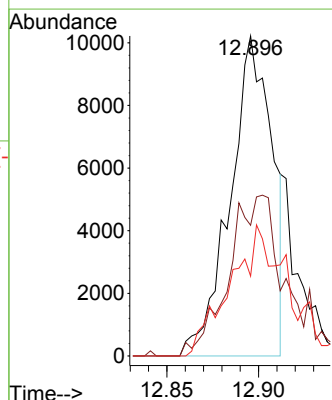
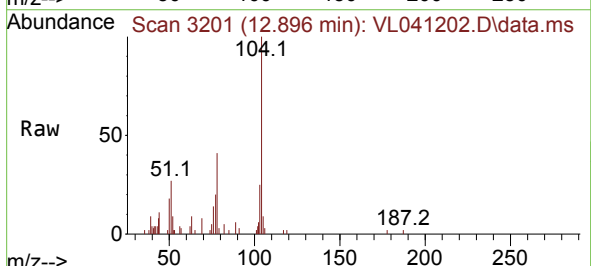
Tgt Ion: 104 Resp: 16239

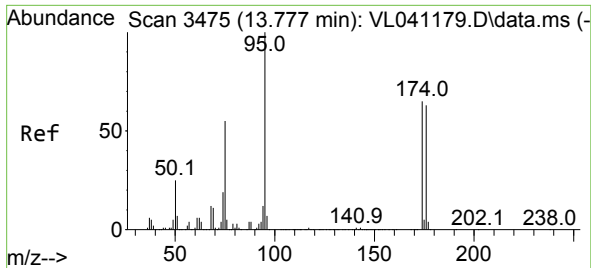
Ion Ratio Lower Upper

104 100

78 72.7 42.6 63.8#

103 57.0 38.4 57.6





#68

1-Bromo-4-Fluorobenzene

Concen: 9.869 ppbv

RT: 13.773 min Scan# 34

Delta R.T. 0.000 min

Lab File: VL041202.D

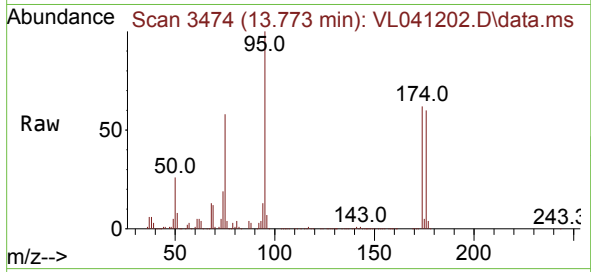
Acq: 2 May 2024 19:21

Instrument :

MSVOA_L

ClientSampleId :

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Tgt Ion: 95 Resp: 1464859

Ion Ratio Lower Upper

95 100

174 68.5 53.6 80.4

175 5.3 4.2 6.4

