

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092723\
 Data File : VL040729.D
 Acq On : 27 Sep 2023 16:06
 Operator : SY/MD
 Sample : 04616-01DUP 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSG2DUP

Quant Time: Sep 28 01:44:57 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091423AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 19 05:12:43 2023
 Response via : Initial Calibration

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

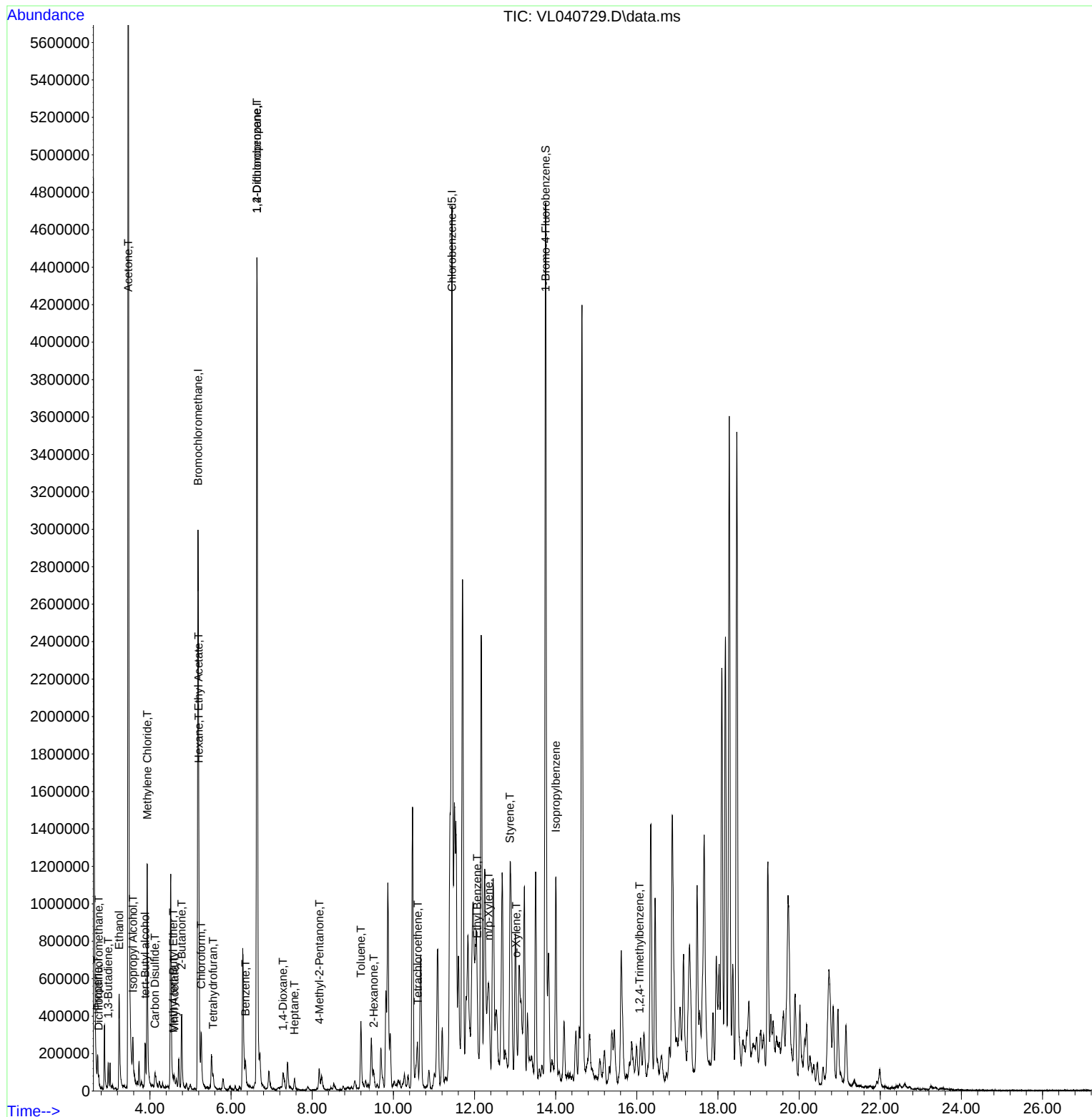
Internal Standards						
1) Bromochloromethane	5.185	49	1276945	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	6.639	114	3494937	10.000	ppbv	-0.02
55) Chlorobenzene-d5	11.442	117	3104513	10.000	ppbv	-0.04
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.754	95	2338703	9.750	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.500%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.738	85	32956	0.117	ppbv	93
9) Propene	2.709	41	57262	0.956	ppbv #	81
10) Heptane	7.558	43	16304	0.121	ppbv #	49
13) Ethanol	3.243	45	558763	31.500	ppbv	97
15) Acetone	3.465	43	7834765	46.516	ppbv	92
16) 1,3-Butadiene	2.970	39	33503	0.456	ppbv #	27
17) tert-Butyl alcohol	3.880	59	204410	1.185	ppbv	100
19) Isopropyl Alcohol	3.581	45	200908	1.980	ppbv #	93
20) Methylene Chloride	3.934	84	411612	4.540	ppbv	94
23) Vinyl Acetate	4.606	43	5942	0.034	ppbv #	59
25) Ethyl Acetate	5.201	43	134848	0.496	ppbv #	79
26) Hexane	5.205	57	362976	2.826	ppbv #	38
27) Carbon Disulfide	4.124	76	84687	0.473	ppbv #	89
28) Methyl tert-Butyl Ether	4.578	73	6707	0.061	ppbv #	41
29) Chloroform	5.266	83	162073	0.731	ppbv	97
34) 2-Butanone	4.783	43	455172	2.590	ppbv	94
36) Benzene	6.352	78	83609	0.323	ppbv #	88
39) 1,2-Dichloropropane	6.639	63	831271	8.345	ppbv #	24
40) 1,4-Dioxane	7.278	88	45753	1.215	ppbv #	74
41) Tetrahydrofuran	5.555	42	38658	0.429	ppbv #	87
50) 4-Methyl-2-Pentanone	8.175	43	87723	0.369	ppbv	95
51) 2-Hexanone	9.516	43	32737	0.200	ppbv #	31
52) Tetrachloroethene	10.600	164	6418	0.076	ppbv	88
53) Toluene	9.198	91	275224	1.007	ppbv	99
58) Ethyl Benzene	12.066	91	96872	0.274	ppbv	94
59) m/p-Xylene	12.346	91	62337	0.188	ppbv #	32
60) o-Xylene	13.031	91	60107	0.190	ppbv #	31
61) Styrene	12.873	104	294678	2.218	ppbv	98
62) Isopropylbenzene	14.005	105	1004897	2.100	ppbv	100
74) 1,2,4-Trimethylbenzene	16.069	105	19397	0.050	ppbv #	57

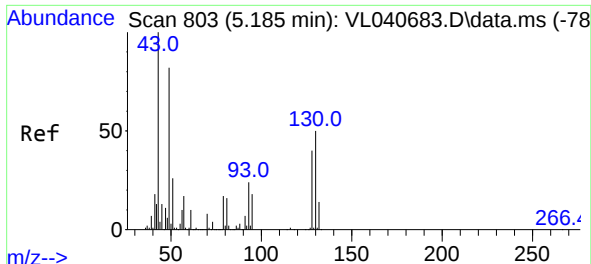
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092723\
Data File : VL040729.D
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ALS Vial : 1 Sample Multiplier: 1

Instrument :
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ClientSampleId :
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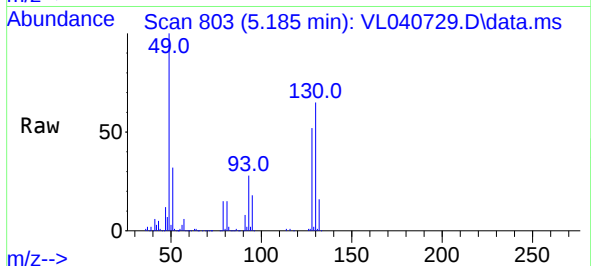
Quant Time: Sep 28 01:44:57 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091423AIR.M
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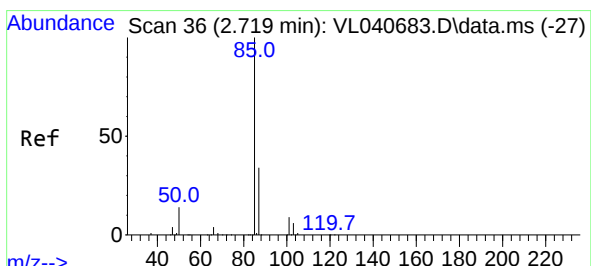
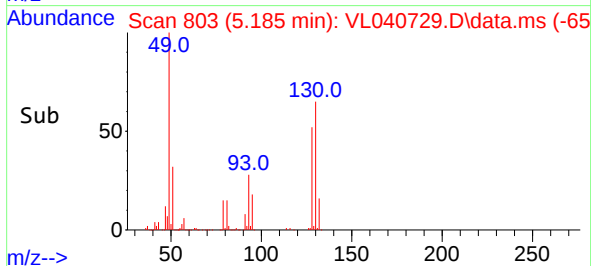
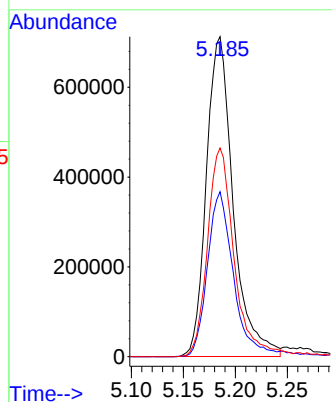


#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.185 min Scan# 80
Delta R.T. -0.013 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

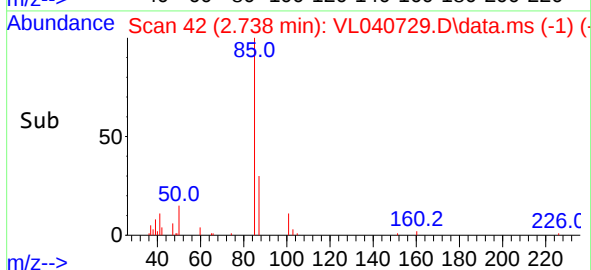
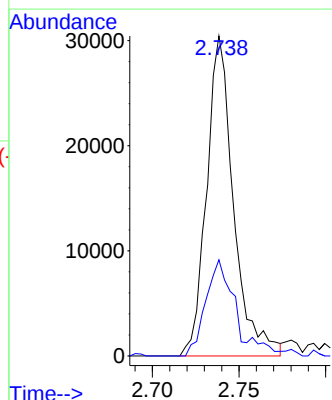
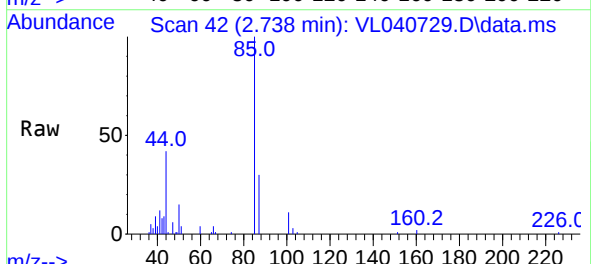


Tgt Ion: 49 Resp: 1276945
Ion Ratio Lower Upper
49 100
128 52.1 25.4 76.0
130 66.0 32.3 96.8

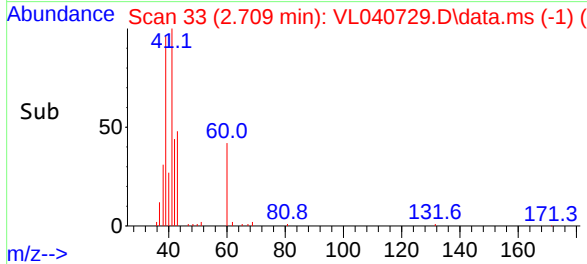
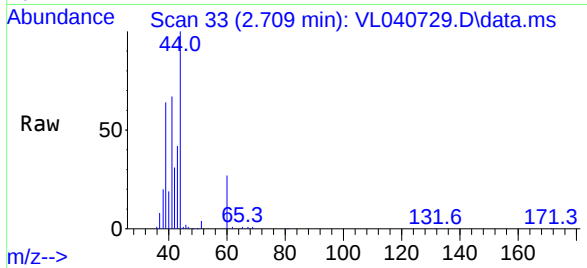
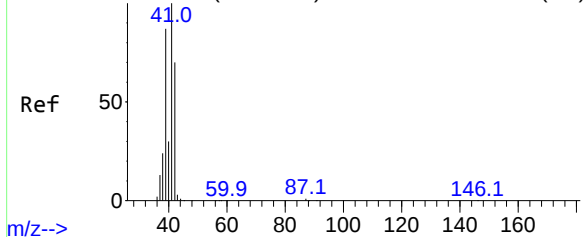


#2
Dichlorodifluoromethane
Concen: 0.117 ppbv
RT: 2.738 min Scan# 42
Delta R.T. 0.006 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 85 Resp: 32956
Ion Ratio Lower Upper
85 100
87 30.0 27.2 40.8



Abundance Scan 25 (2.684 min): VL040683.D\data.ms (-16)



#9

Propene

Concen: 0.956 ppbv

RT: 2.709 min Scan# 31

Delta R.T. 0.013 min

Lab File: VL040729.D

Acq: 27 Sep 2023 16:06

Instrument :

MSVOA_L

ClientSampleId :

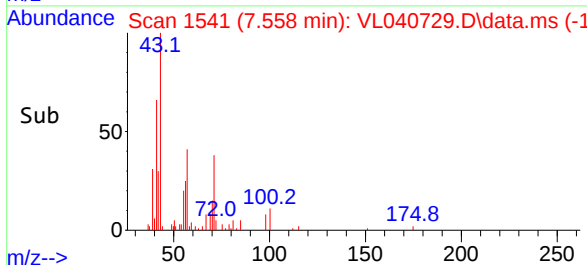
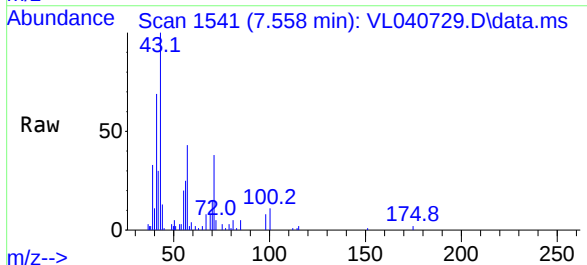
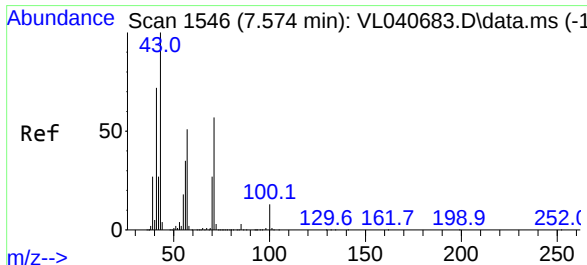
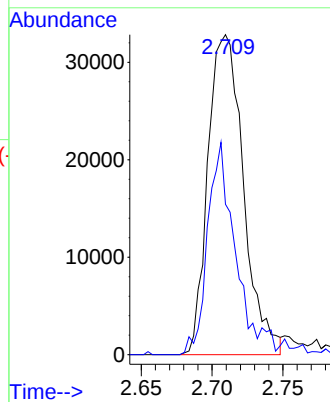
SSG2DUP

Tgt Ion: 41 Resp: 57262

Ion Ratio Lower Upper

41 100

42 54.9 56.7 85.1#



#10

Heptane

Concen: 0.121 ppbv

RT: 7.558 min Scan# 1541

Delta R.T. -0.029 min

Lab File: VL040729.D

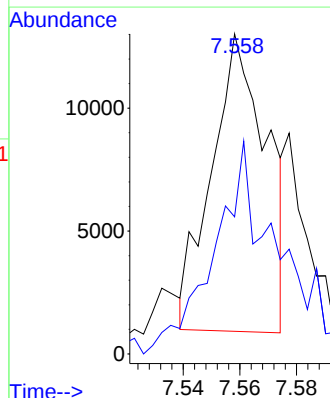
Acq: 27 Sep 2023 16:06

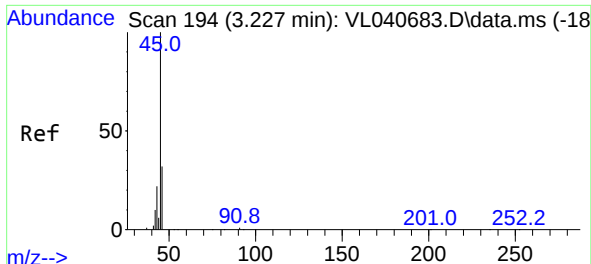
Tgt Ion: 43 Resp: 16304

Ion Ratio Lower Upper

43 100

57 88.2 41.8 62.6#

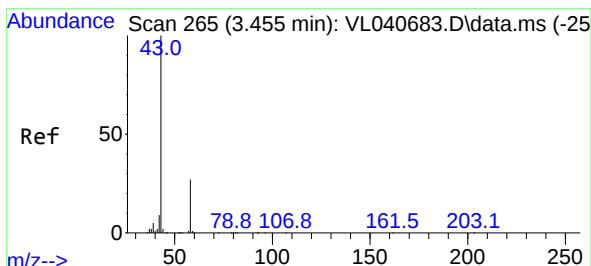
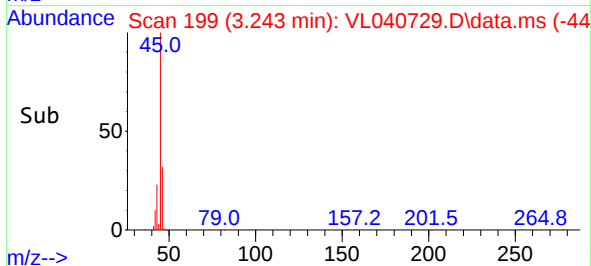
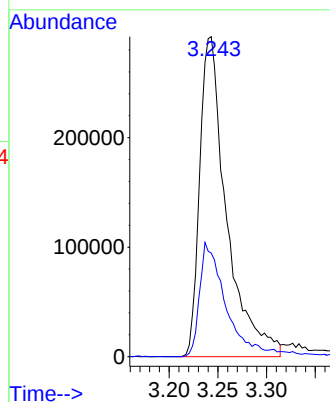
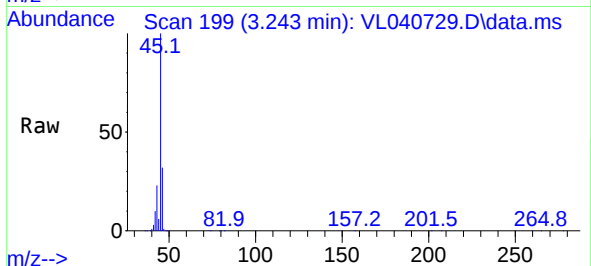




#13
Ethanol
Concen: 31.500 ppbv
RT: 3.243 min Scan# 194
Delta R.T. -0.000 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

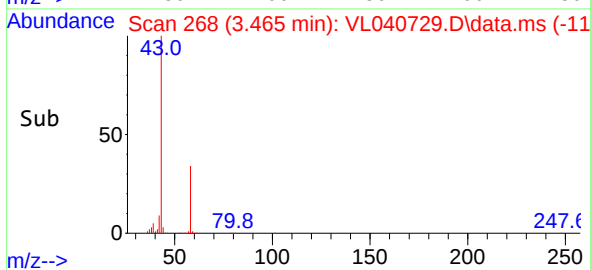
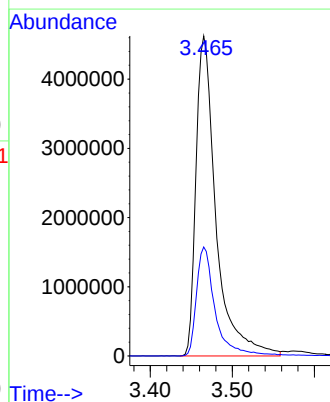
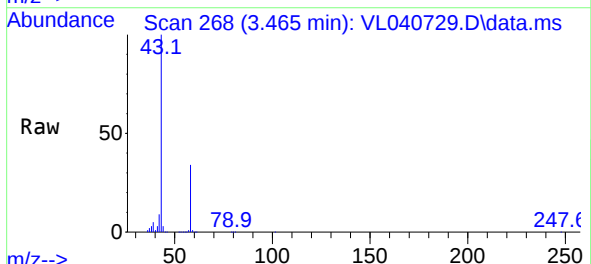
Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

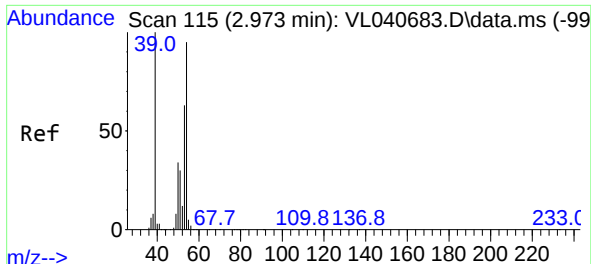
Tgt Ion: 45 Resp: 558763
Ion Ratio Lower Upper
45 100
46 36.5 15.2 61.0



#15
Acetone
Concen: 46.516 ppbv
RT: 3.465 min Scan# 268
Delta R.T. -0.006 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 43 Resp: 7834765
Ion Ratio Lower Upper
43 100
58 32.6 22.6 34.0





#16

1,3-Butadiene

Concen: 0.456 ppbv

RT: 2.970 min Scan# 115

Delta R.T. -0.019 min

Lab File: VL040729.D

Acq: 27 Sep 2023 16:06

Instrument :

MSVOA_L

ClientSampleId :

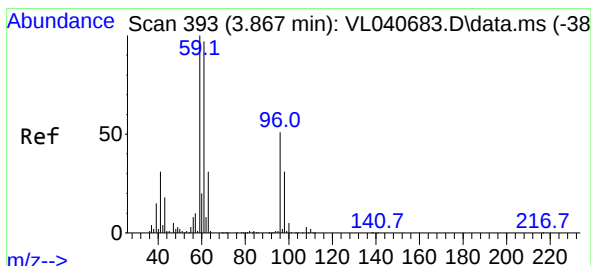
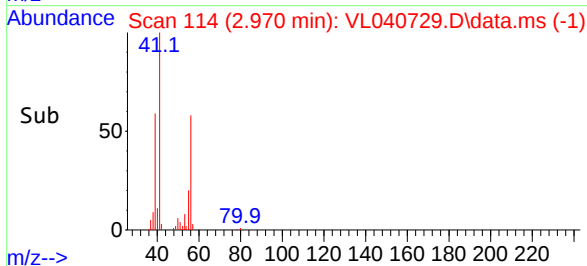
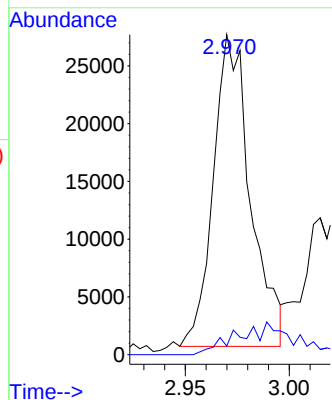
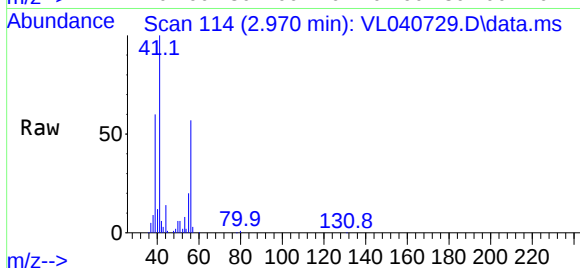
SSG2DUP

Tgt Ion: 39 Resp: 33503

Ion Ratio Lower Upper

39 100

54 16.3 64.8 97.2#



#17

tert-Butyl alcohol

Concen: 1.185 ppbv

RT: 3.880 min Scan# 397

Delta R.T. -0.003 min

Lab File: VL040729.D

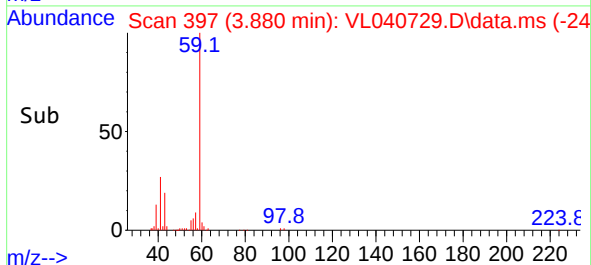
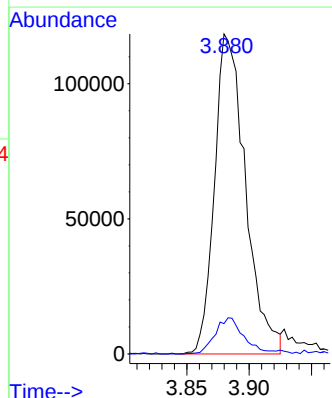
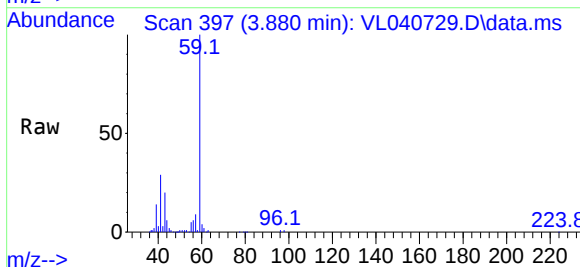
Acq: 27 Sep 2023 16:06

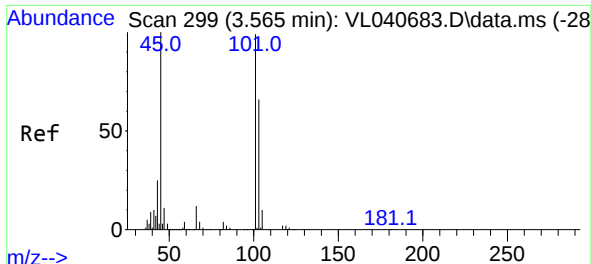
Tgt Ion: 59 Resp: 204410

Ion Ratio Lower Upper

59 100

57 10.9 8.7 13.1

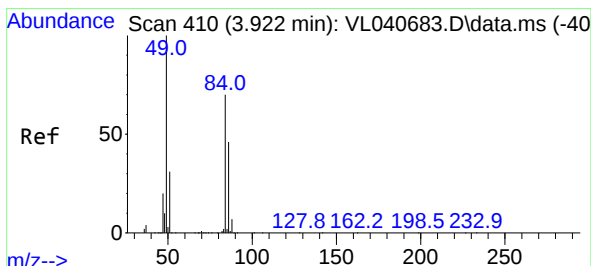
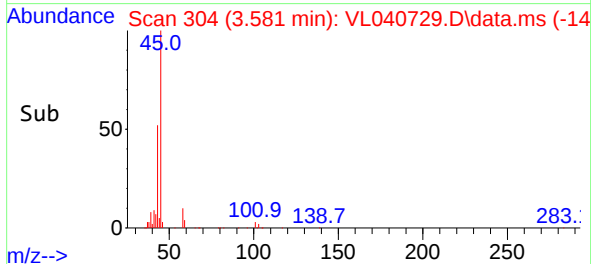
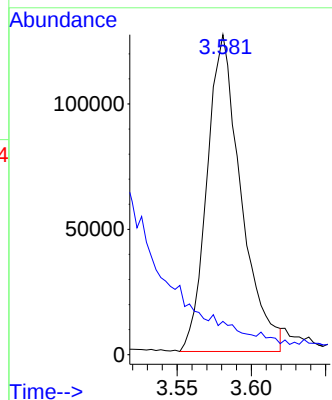
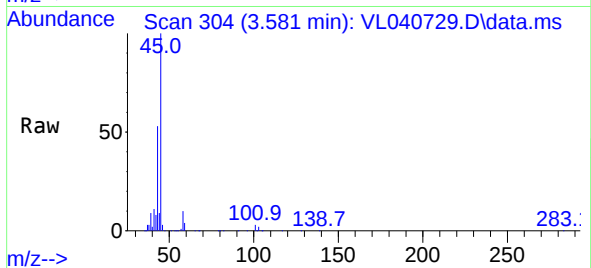




#19
Isopropyl Alcohol
Concen: 1.980 ppbv
RT: 3.581 min Scan# 304
Delta R.T. 0.003 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

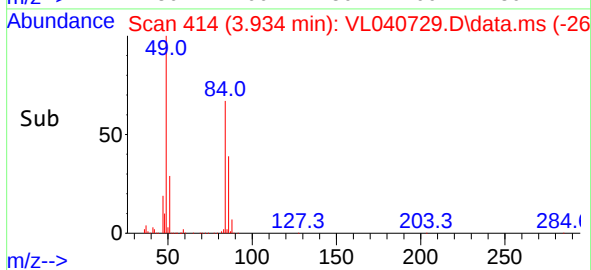
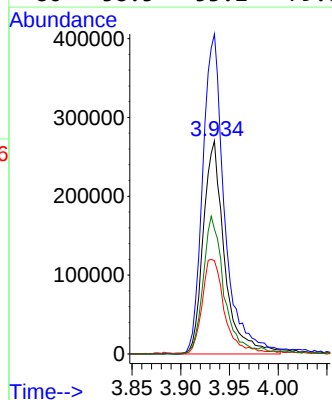
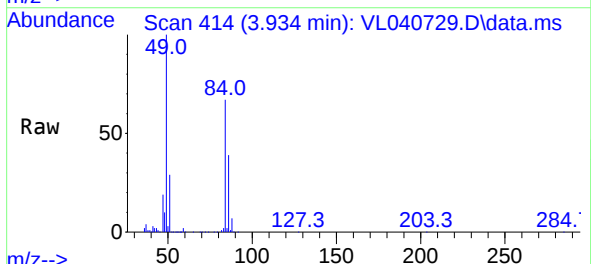
Instrument :
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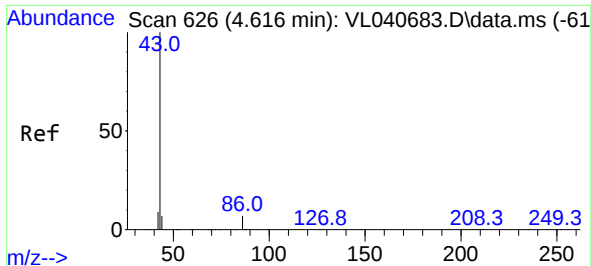
Tgt Ion: 45 Resp: 200908
Ion Ratio Lower Upper
45 100
58 0.0 1.9 2.9#



#20
Methylene Chloride
Concen: 4.540 ppbv
RT: 3.934 min Scan# 414
Delta R.T. -0.003 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 84 Resp: 411612
Ion Ratio Lower Upper
84 100
49 150.1 114.4 171.6
51 43.3 35.5 53.3
86 58.5 53.2 79.8

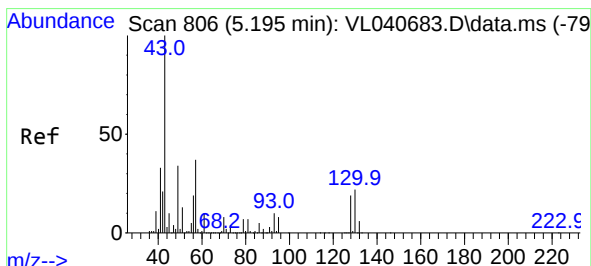
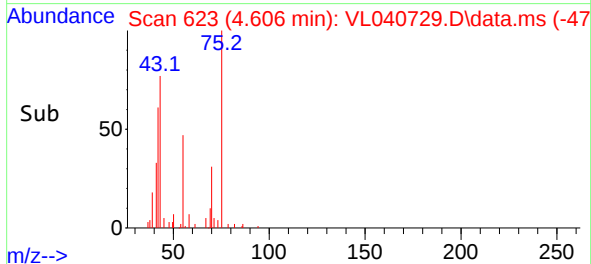
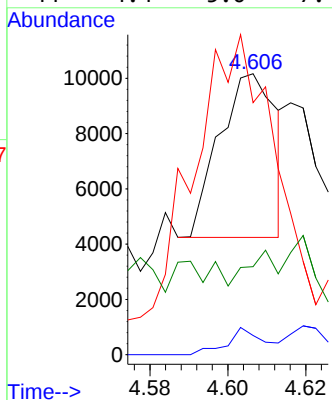
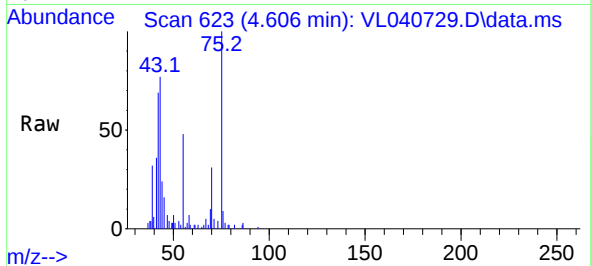




#23
Vinyl Acetate
Concen: 0.034 ppbv
RT: 4.606 min Scan# 61
Delta R.T. -0.026 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

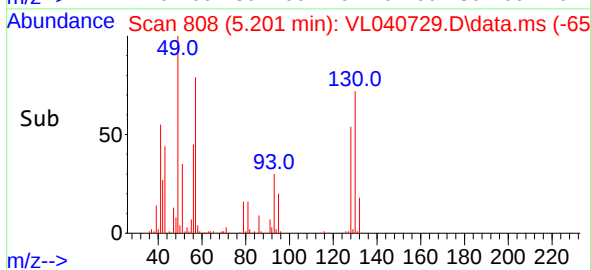
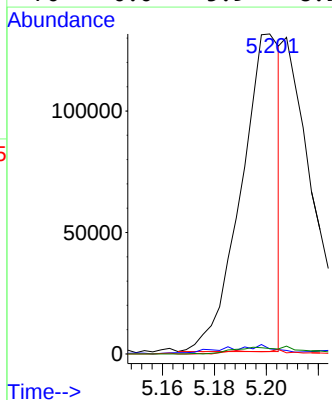
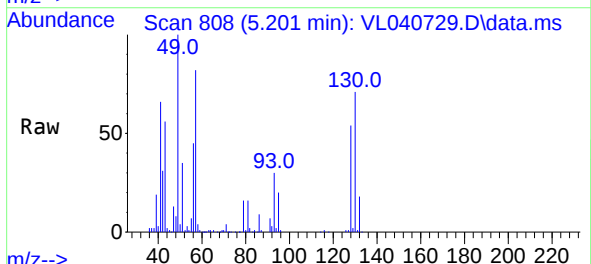
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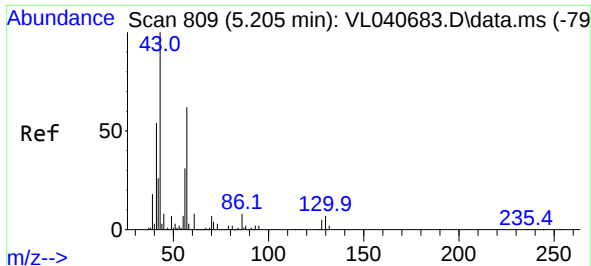
Tgt Ion: 43 Resp: 5942
Ion Ratio Lower Upper
43 100
86 11.7 5.6 8.4#
42 40.3 7.6 11.4#
44 4.4 5.0 7.4#



#25
Ethyl Acetate
Concen: 0.496 ppbv
RT: 5.201 min Scan# 808
Delta R.T. -0.010 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 43 Resp: 134848
Ion Ratio Lower Upper
43 100
45 5.0 8.2 12.4#
61 0.0 8.2 12.4#
70 0.0 5.9 8.9#

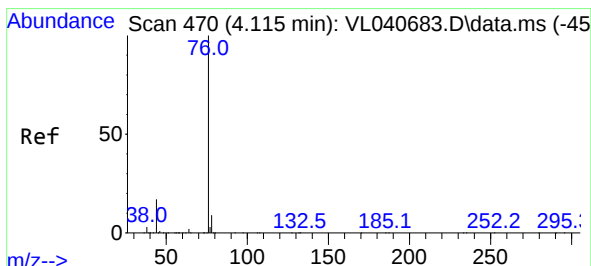
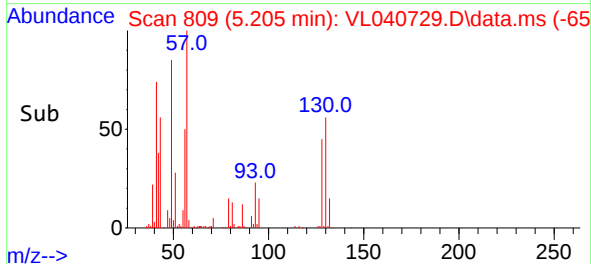
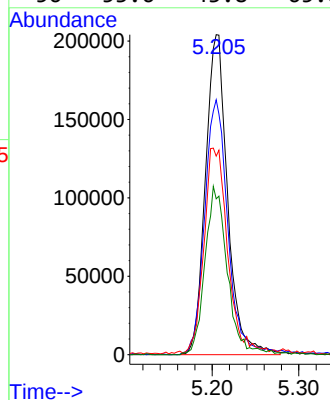
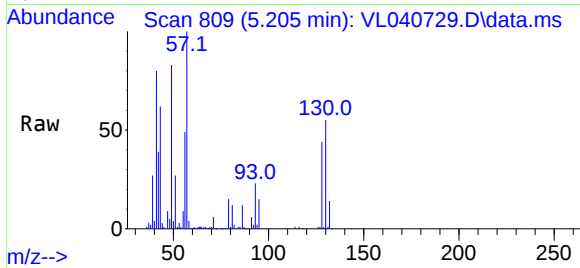




#26
Hexane
Concen: 2.826 ppbv
RT: 5.205 min Scan# 809
Delta R.T. -0.016 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

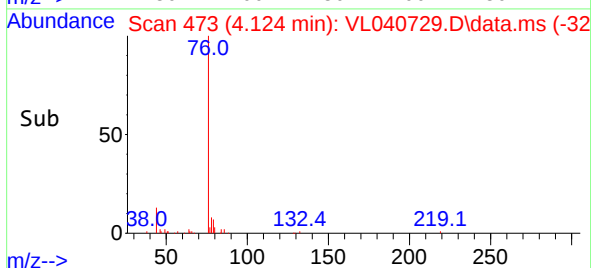
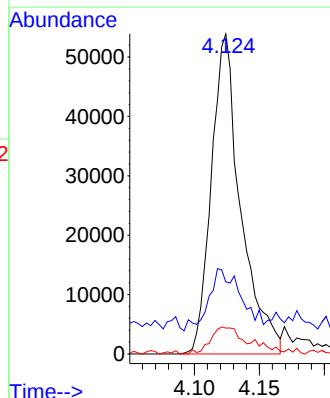
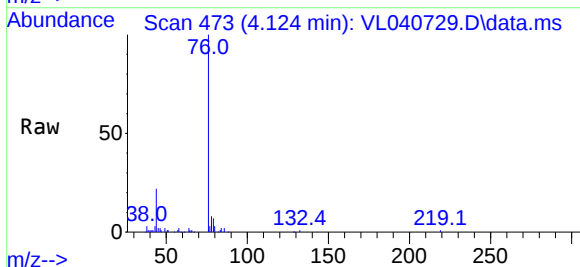
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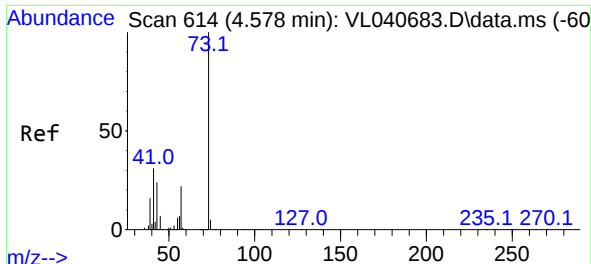
Tgt Ion: 57 Resp: 362976
Ion Ratio Lower Upper
57 100
41 85.2 75.2 112.8
43 70.8 185.6 278.4#
56 53.6 43.8 65.8



#27
Carbon Disulfide
Concen: 0.473 ppbv
RT: 4.124 min Scan# 473
Delta R.T. -0.006 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 76 Resp: 84687
Ion Ratio Lower Upper
76 100
44 23.8 14.5 21.7#
78 11.9 7.7 11.5#

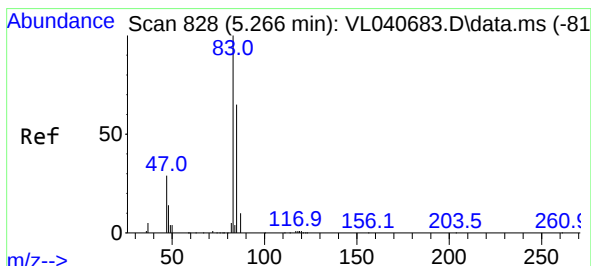
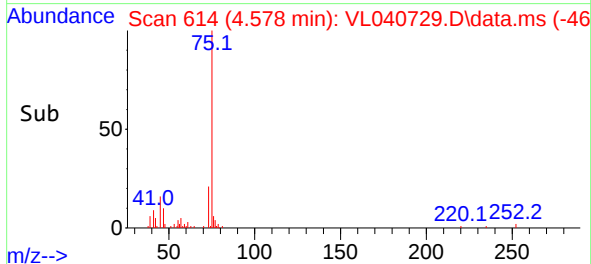
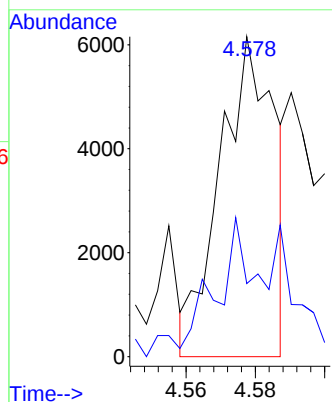
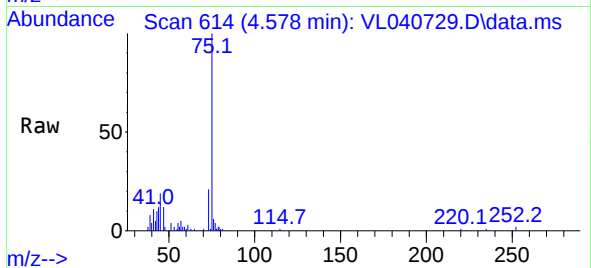




#28
Methyl tert-Butyl Ether
Concen: 0.061 ppbv
RT: 4.578 min Scan# 614
Delta R.T. -0.013 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

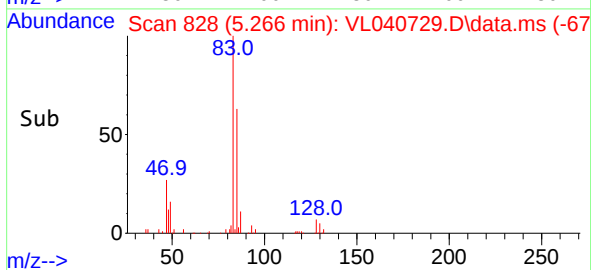
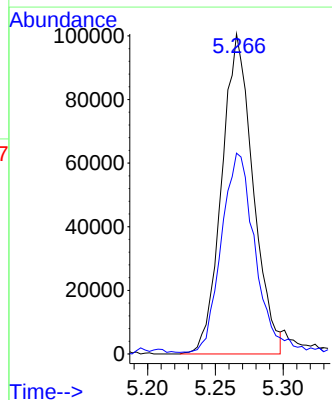
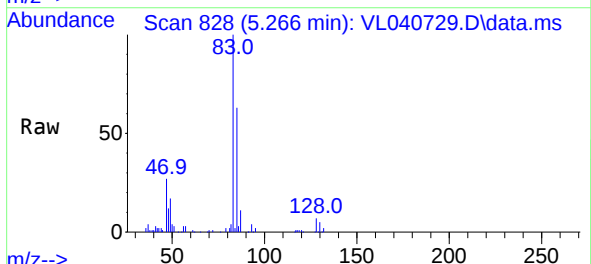
Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

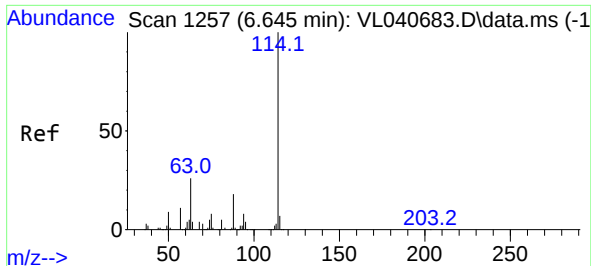
Tgt Ion: 73 Resp: 6707
Ion Ratio Lower Upper
73 100
57 52.3 18.8 28.2#



#29
Chloroform
Concen: 0.731 ppbv
RT: 5.266 min Scan# 828
Delta R.T. -0.016 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 83 Resp: 162073
Ion Ratio Lower Upper
83 100
85 62.4 51.8 77.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.639 min Scan# 11

Delta R.T. -0.023 min

Lab File: VL040729.D

Acq: 27 Sep 2023 16:06

Instrument :

MSVOA_L

ClientSampleId :

SSG2DUP

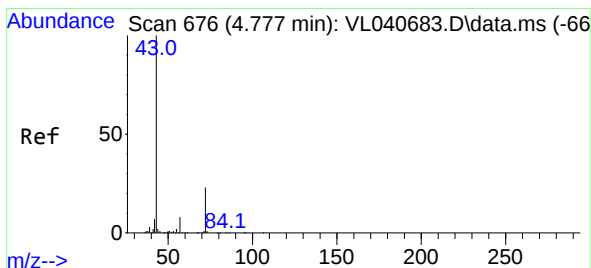
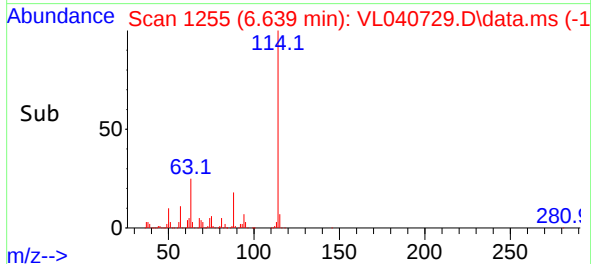
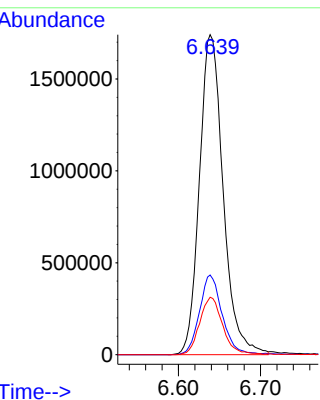
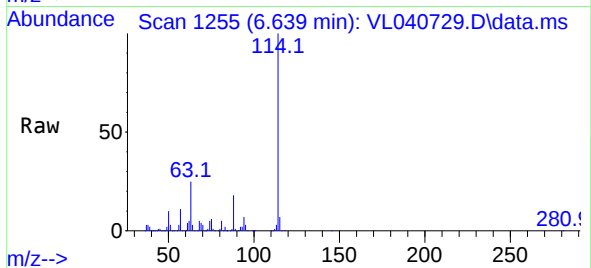
Tgt Ion:114 Resp: 3494937

Ion Ratio Lower Upper

114 100

63 24.2 21.1 31.7

88 17.6 14.5 21.7



#34

2-Butanone

Concen: 2.590 ppbv

RT: 4.783 min Scan# 678

Delta R.T. -0.006 min

Lab File: VL040729.D

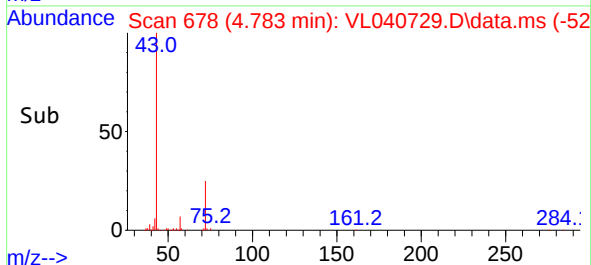
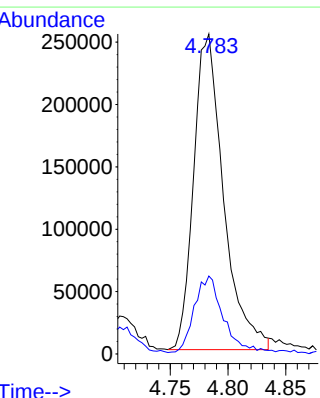
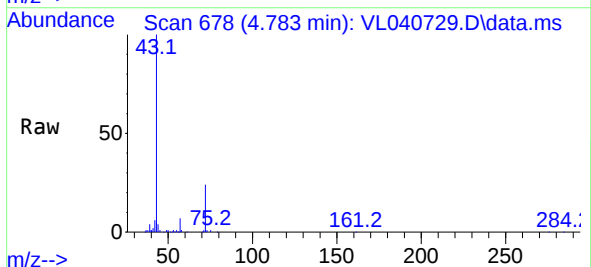
Acq: 27 Sep 2023 16:06

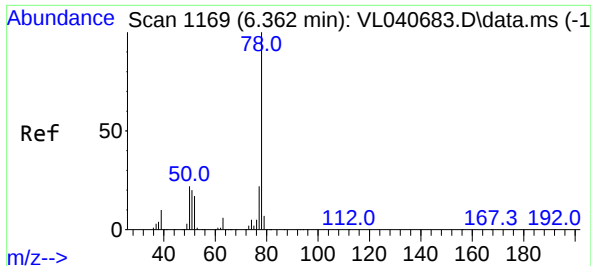
Tgt Ion: 43 Resp: 455172

Ion Ratio Lower Upper

43 100

72 26.1 18.6 27.8

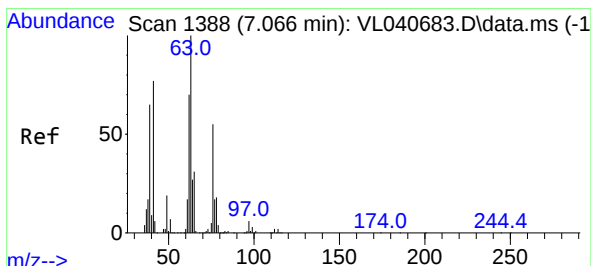
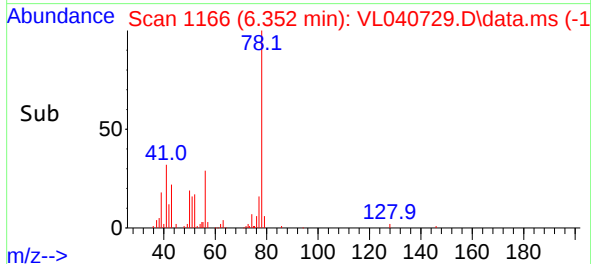
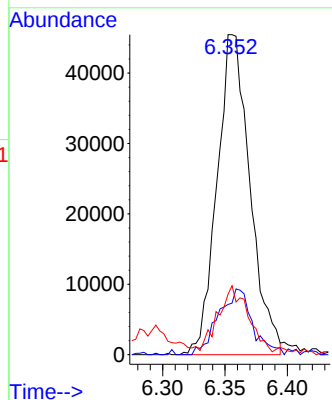
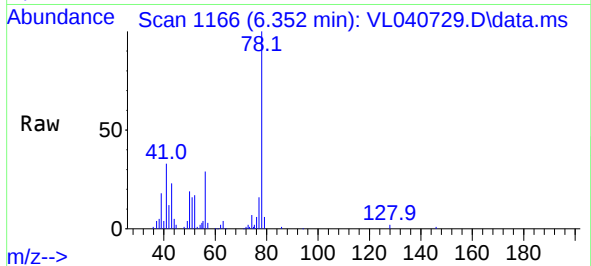




#36
Benzene
Concen: 0.323 ppbv
RT: 6.352 min Scan# 1166
Delta R.T. -0.029 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

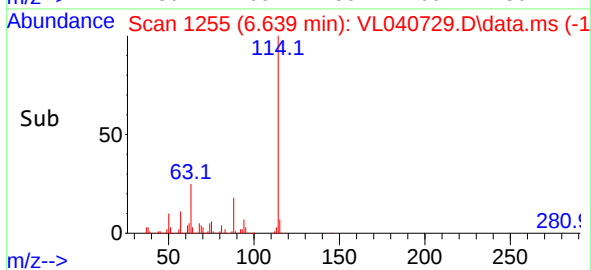
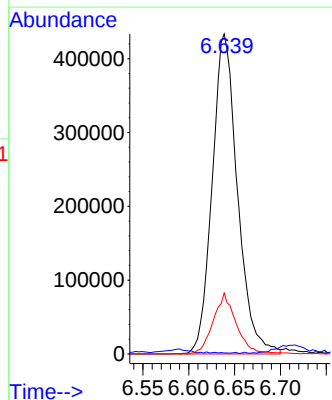
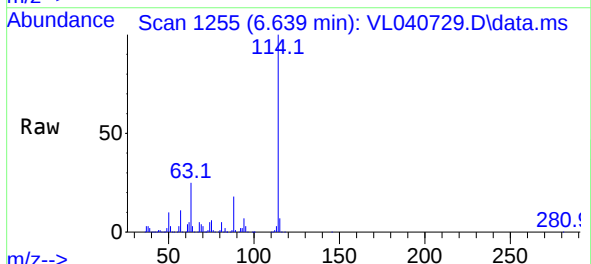
Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

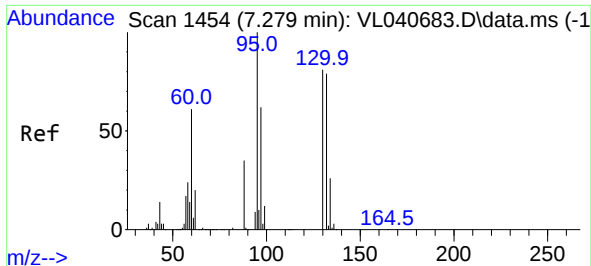
Tgt Ion: 78 Resp: 83609
Ion Ratio Lower Upper
78 100
77 15.7 17.9 26.9#
50 16.6 17.3 25.9#



#39
1,2-Dichloropropane
Concen: 8.345 ppbv
RT: 6.639 min Scan# 1255
Delta R.T. -0.444 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 63 Resp: 831271
Ion Ratio Lower Upper
63 100
41 0.0 61.6 92.4#
62 19.0 55.8 83.8#



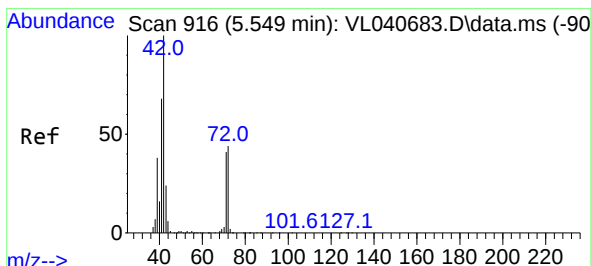
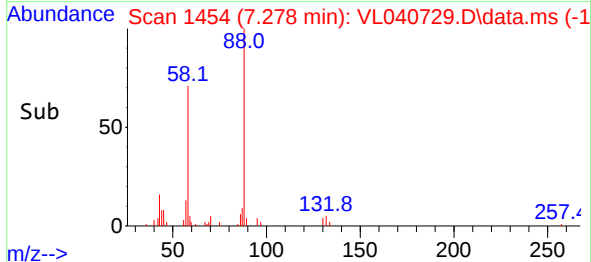
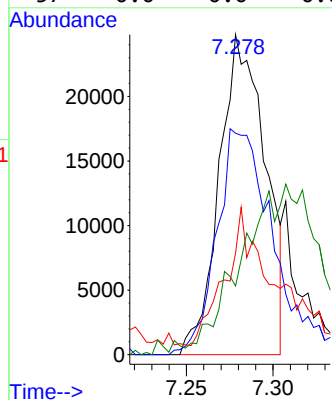
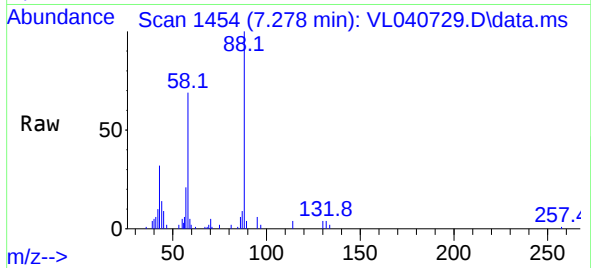


#40
1,4-Dioxane
Concen: 1.215 ppbv
RT: 7.278 min Scan# 14
Delta R.T. -0.016 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

Tgt Ion: 88 Resp: 45753

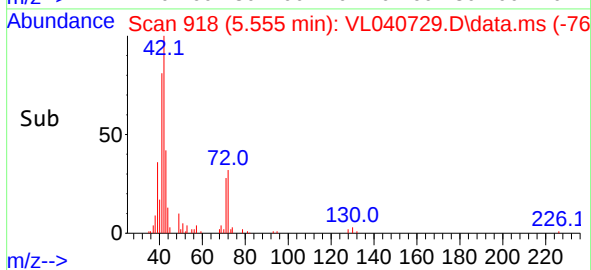
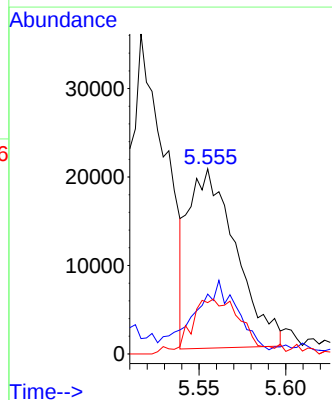
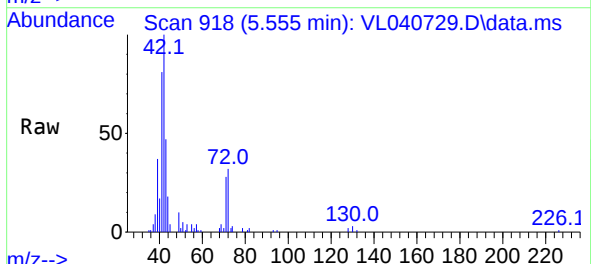
Ion	Ratio	Lower	Upper
88	100		
58	87.1	92.7	139.1#
43	51.7	0.0	0.0#
57	0.0	0.0	0.0

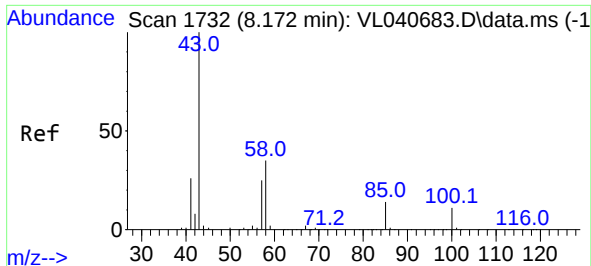


#41
Tetrahydrofuran
Concen: 0.429 ppbv
RT: 5.555 min Scan# 918
Delta R.T. -0.006 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 42 Resp: 38658

Ion	Ratio	Lower	Upper
42	100		
72	52.9	34.9	52.3#
71	35.5	33.8	50.8

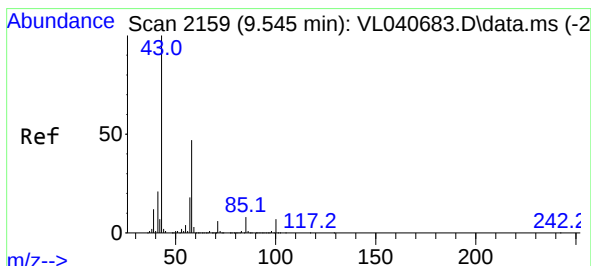
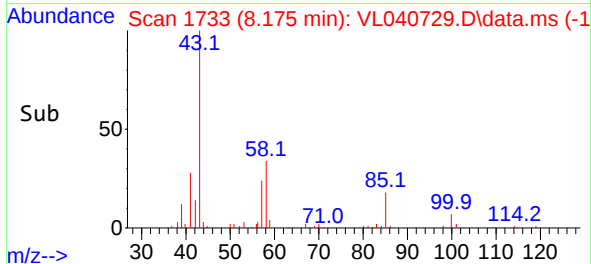
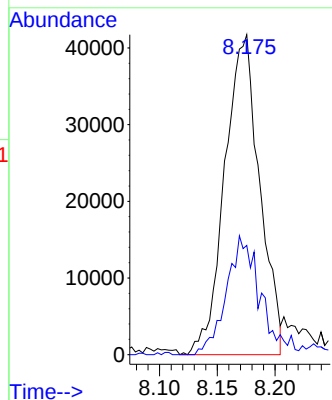
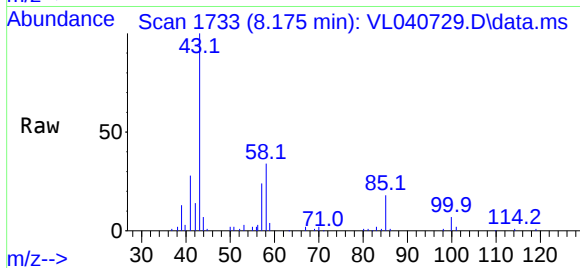




#50
4-Methyl-2-Pentanone
Concen: 0.369 ppbv
RT: 8.175 min Scan# 11
Delta R.T. -0.016 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

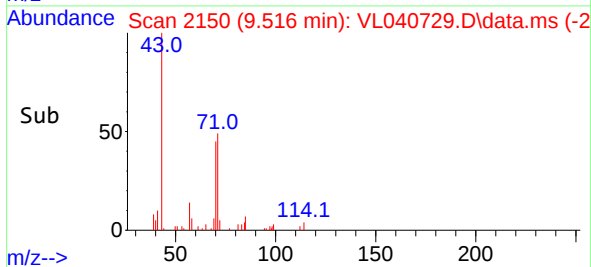
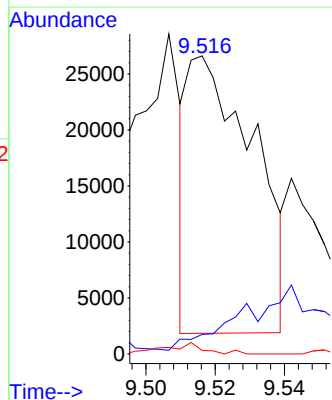
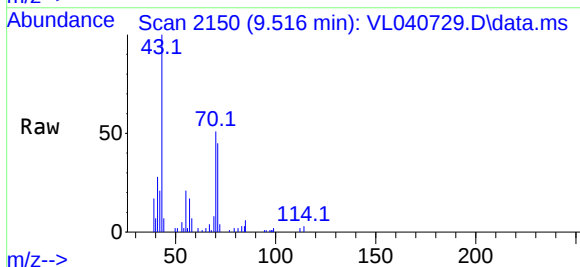
Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

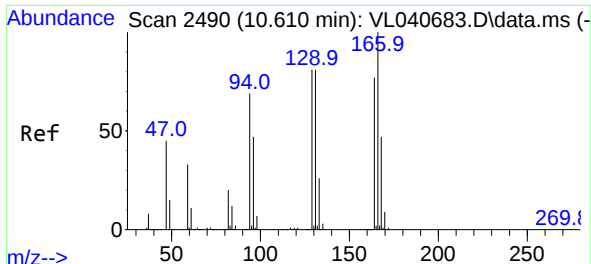
Tgt Ion: 43 Resp: 87723
Ion Ratio Lower Upper
43 100
58 38.0 28.2 42.4



#51
2-Hexanone
Concen: 0.200 ppbv
RT: 9.516 min Scan# 2150
Delta R.T. -0.039 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 43 Resp: 32737
Ion Ratio Lower Upper
43 100
58 0.0 37.6 56.4#
98 0.0 0.6 1.0#



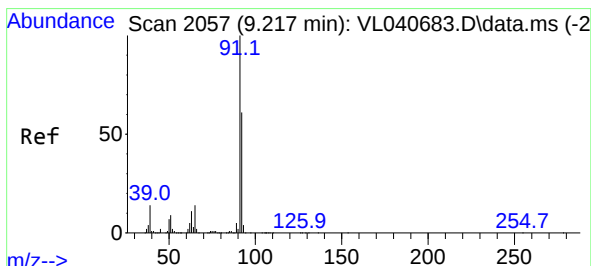
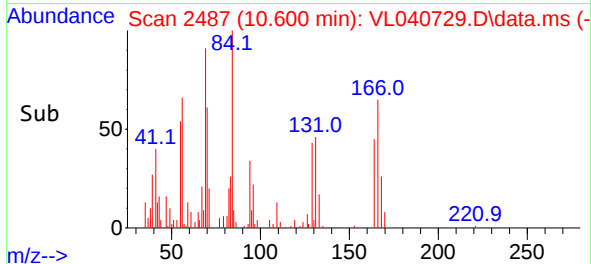
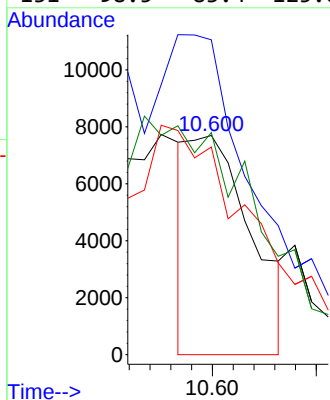
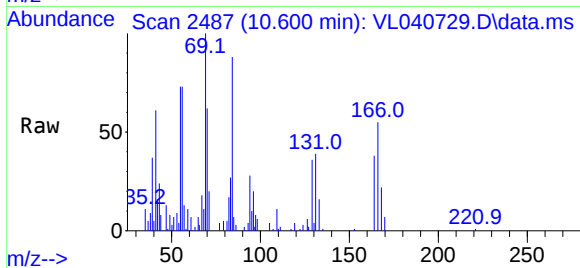


#52
Tetrachloroethene
Concen: 0.076 ppbv
RT: 10.600 min Scan# 2490
Delta R.T. -0.026 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

Tgt Ion:164 Resp: 6418

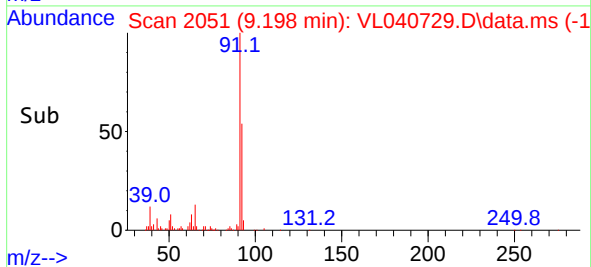
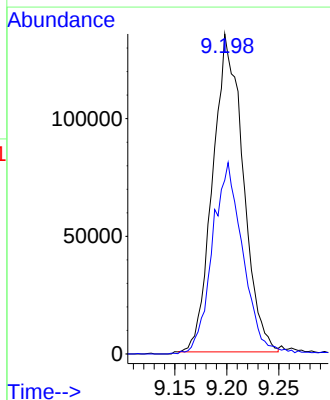
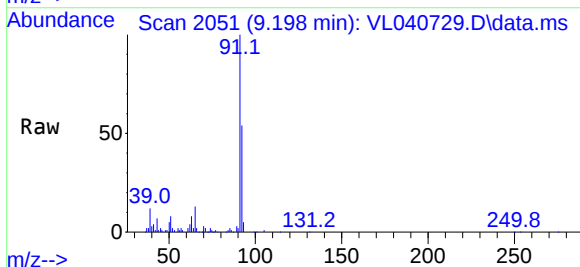
Ion	Ratio	Lower	Upper
164	100		
166	147.9	103.4	155.2
129	92.2	83.5	125.3
131	98.5	83.4	125.0

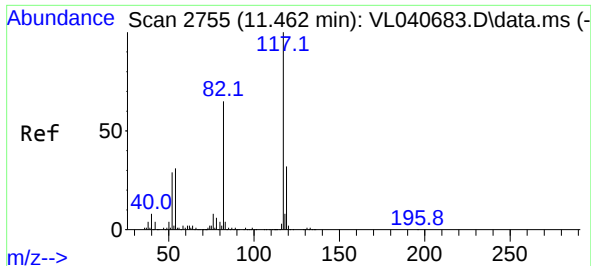


#53
Toluene
Concen: 1.007 ppbv
RT: 9.198 min Scan# 2051
Delta R.T. -0.032 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 91 Resp: 275224

Ion	Ratio	Lower	Upper
91	100		
92	61.2	48.5	72.7

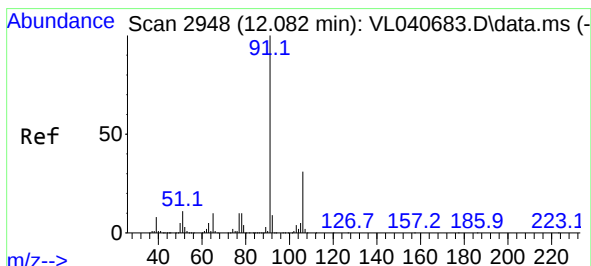
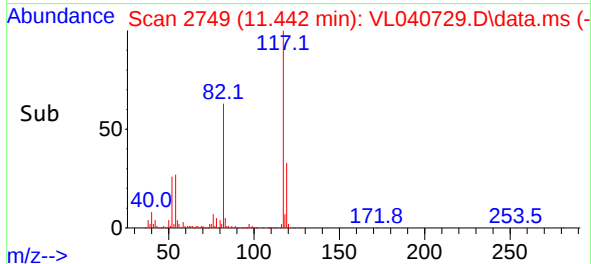
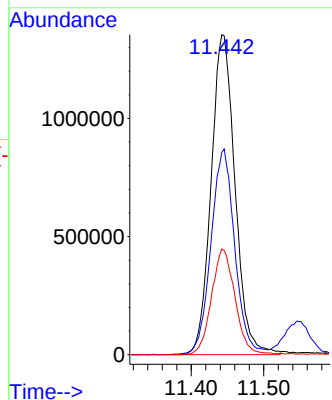
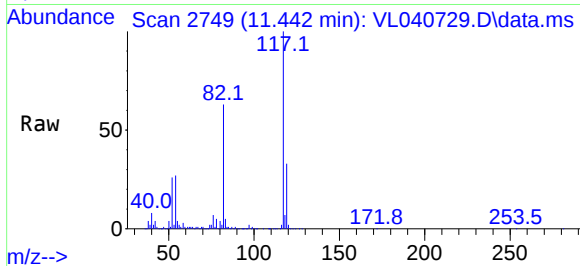




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.442 min Scan# 21
Delta R.T. -0.035 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

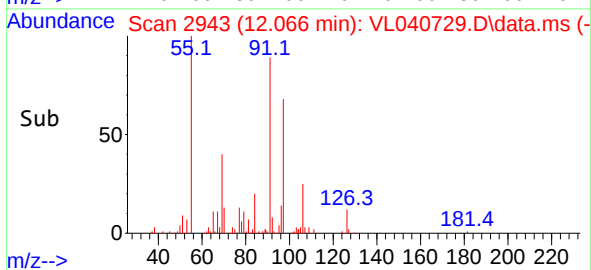
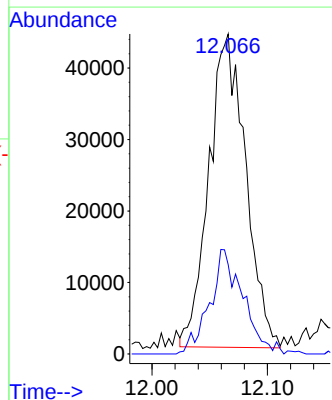
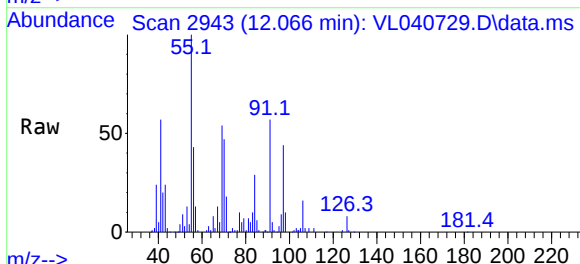
Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

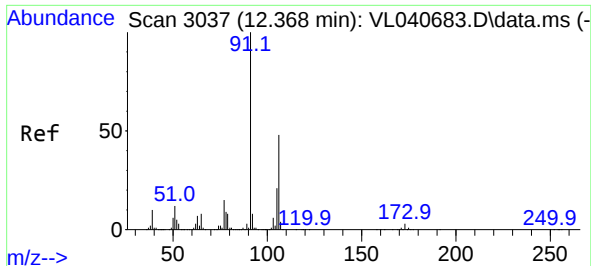
Tgt Ion:117 Resp: 3104513
Ion Ratio Lower Upper
117 100
82 64.3 51.4 77.0
119 32.8 24.7 37.1



#58
Ethyl Benzene
Concen: 0.274 ppbv
RT: 12.066 min Scan# 2943
Delta R.T. -0.035 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion: 91 Resp: 96872
Ion Ratio Lower Upper
91 100
106 27.3 24.7 37.1





#59

m/p-Xylene

Concen: 0.188 ppbv

RT: 12.346 min Scan# 3037

Delta R.T. -0.035 min

Lab File: VL040729.D

Acq: 27 Sep 2023 16:06

Instrument :

MSVOA_L

ClientSampleId :

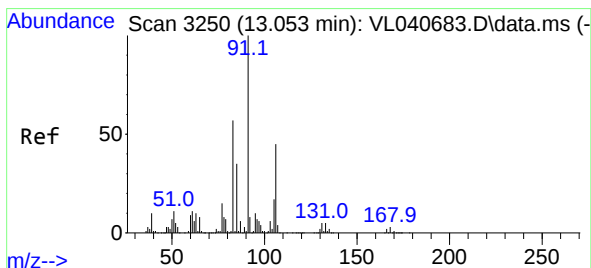
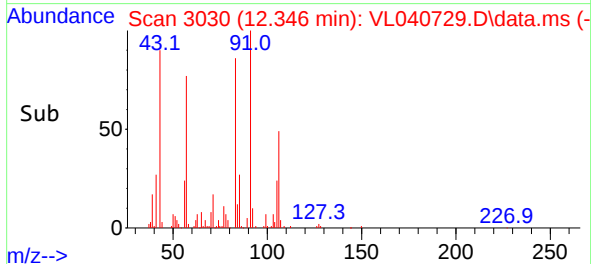
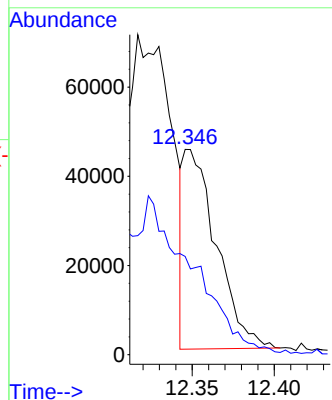
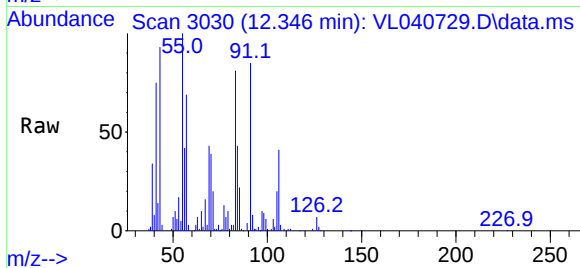
SSG2DUP

Tgt Ion: 91 Resp: 62337

Ion Ratio Lower Upper

91 100

106 0.0 34.8 52.2#



#60

o-Xylene

Concen: 0.190 ppbv

RT: 13.031 min Scan# 3243

Delta R.T. -0.039 min

Lab File: VL040729.D

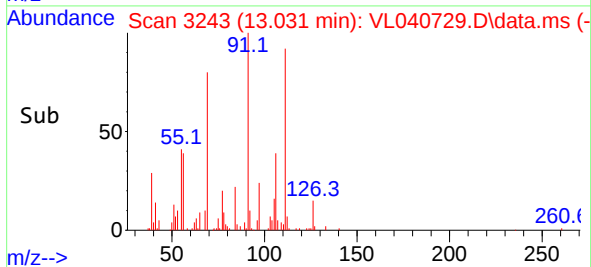
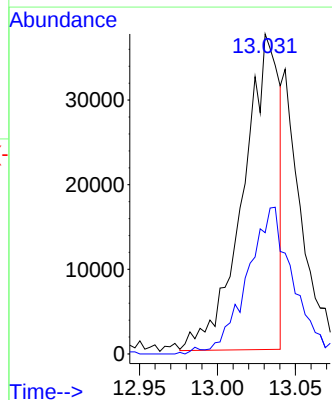
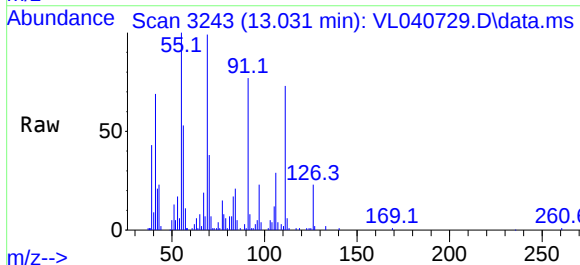
Acq: 27 Sep 2023 16:06

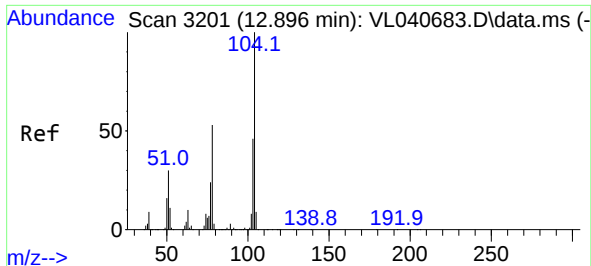
Tgt Ion: 91 Resp: 60107

Ion Ratio Lower Upper

91 100

106 0.0 22.3 66.9#

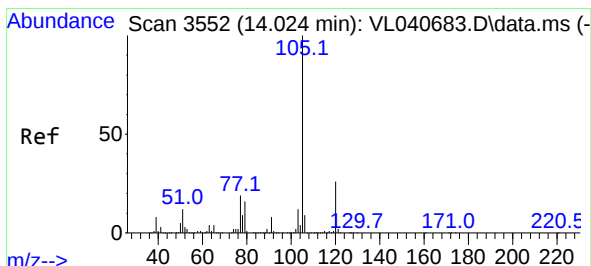
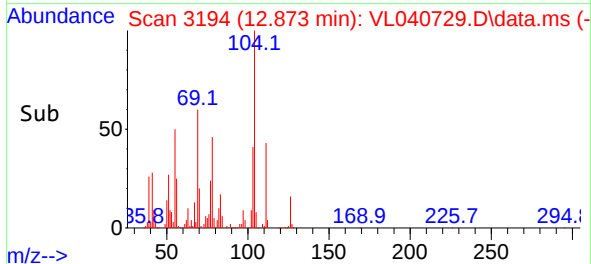
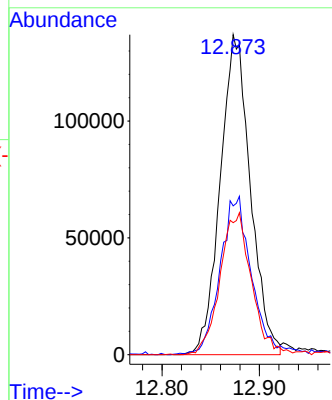
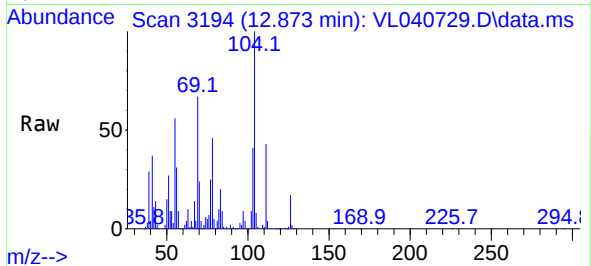




#61
Styrene
Concen: 2.218 ppbv
RT: 12.873 min Scan# 3194
Delta R.T. -0.032 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

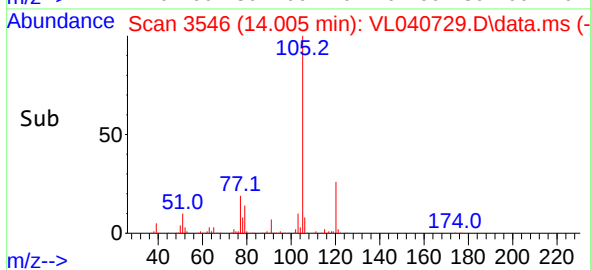
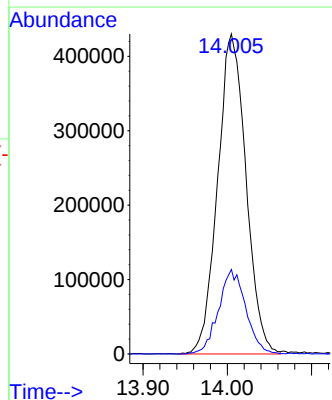
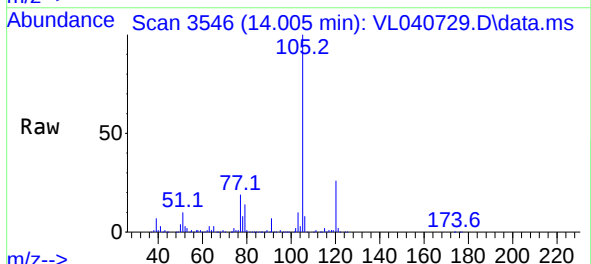
Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

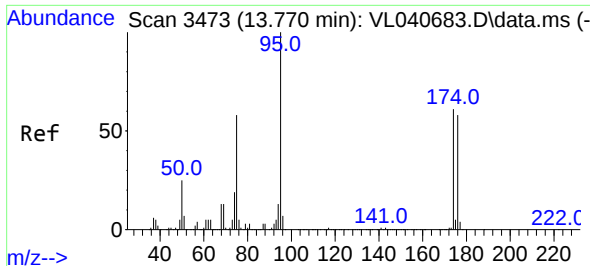
Tgt Ion:104 Resp: 294678
Ion Ratio Lower Upper
104 100
78 51.6 43.4 65.0
103 47.2 37.2 55.8



#62
Isopropylbenzene
Concen: 2.100 ppbv
RT: 14.005 min Scan# 3546
Delta R.T. -0.032 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion:105 Resp: 1004897
Ion Ratio Lower Upper
105 100
120 25.4 20.2 30.4

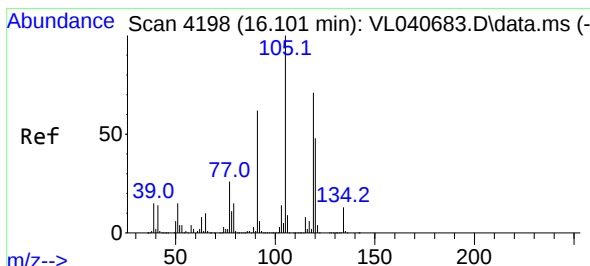
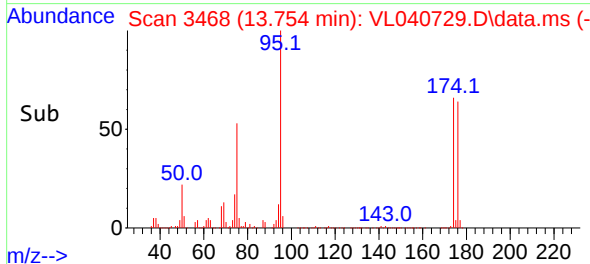
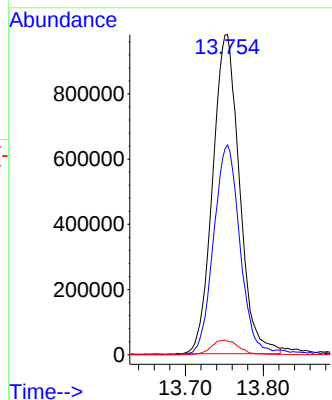
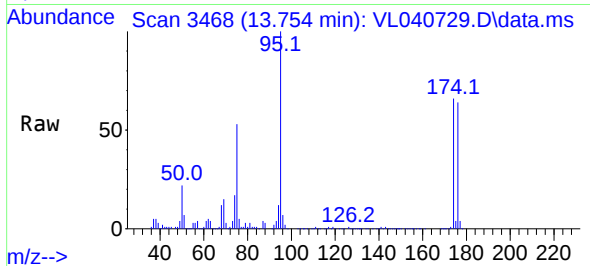




#68
1-Bromo-4-Fluorobenzene
Concen: 9.750 ppbv
RT: 13.754 min Scan# 3473
Delta R.T. -0.032 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Instrument :
MSVOA_L
ClientSampleId :
SSG2DUP

Tgt Ion: 95 Resp: 2338703
Ion Ratio Lower Upper
95 100
174 66.4 48.9 73.3
175 4.7 3.5 5.3



#74
1,2,4-Trimethylbenzene
Concen: 0.050 ppbv
RT: 16.069 min Scan# 4188
Delta R.T. -0.048 min
Lab File: VL040729.D
Acq: 27 Sep 2023 16:06

Tgt Ion:105 Resp: 19397
Ion Ratio Lower Upper
105 100
120 30.3 38.6 57.8#
91 16.7 50.0 75.0#
77 8.5 20.6 31.0#

