

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091823\
 Data File : VL040700.D
 Acq On : 18 Sep 2023 15:43
 Operator : SY/MD
 Sample : 04402-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ST-1DUP

Quant Time: Sep 19 05:18:57 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)

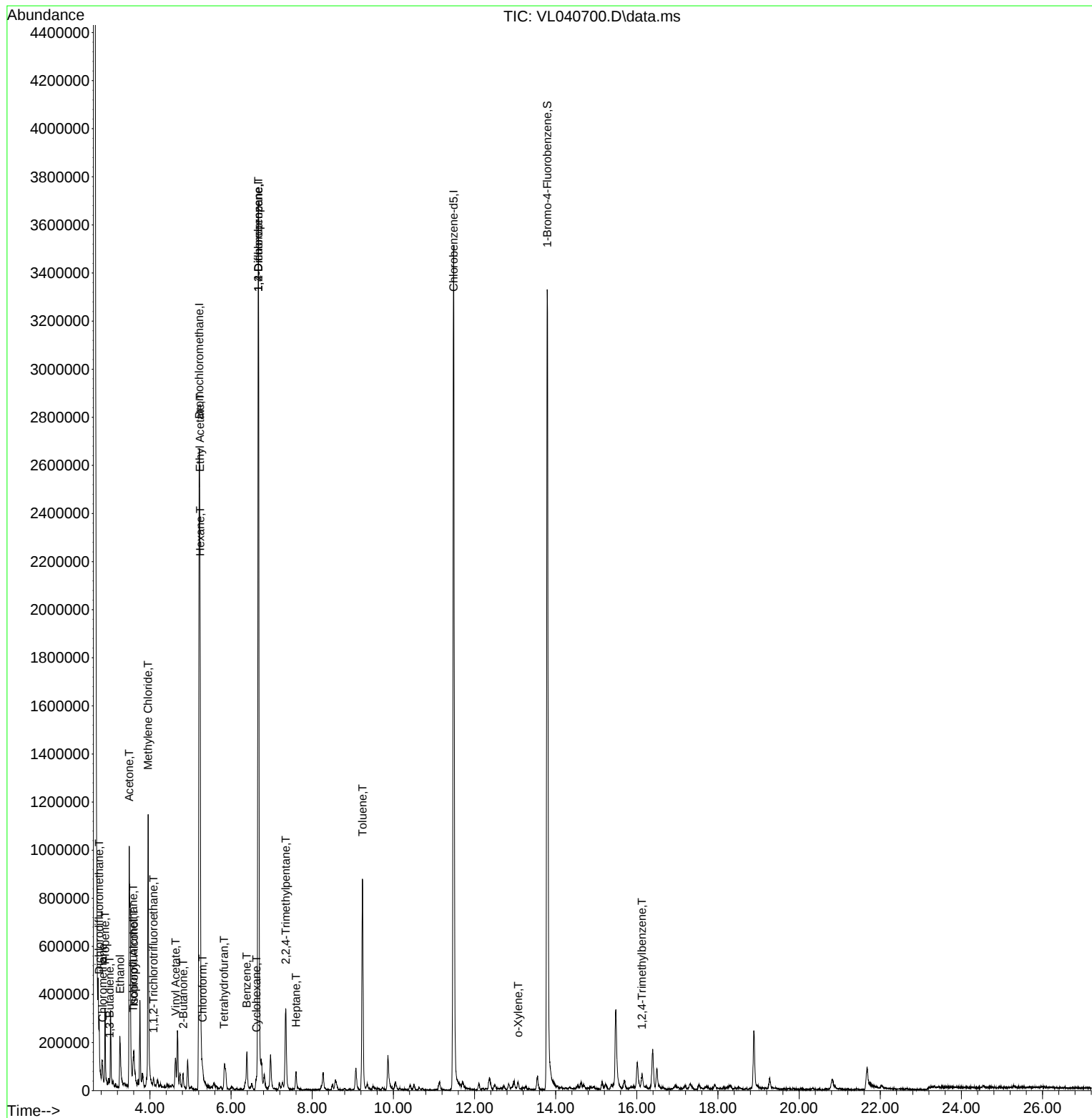
Internal Standards						
1) Bromochloromethane	5.214	49	979359	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	6.674	114	2672092	10.000	ppbv	0.01
55) Chlorobenzene-d5	11.484	117	2173865	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.796	95	1648860	9.817	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.200%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.748	85	108544	0.503	ppbv	92
4) Chloromethane	2.835	50	37052	0.607	ppbv #	88
9) Propene	2.893	41	67437	1.467	ppbv	86
10) Heptane	7.600	43	13579	0.131	ppbv #	35
11) Trichlorofluoromethane	3.587	101	46952	0.248	ppbv	92
12) 1,1,2-Trichlorotrifluo...	4.089	101	8073	0.059	ppbv	87
13) Ethanol	3.263	45	238977	17.566	ppbv	95
15) Acetone	3.491	43	1126162	8.718	ppbv	98
16) 1,3-Butadiene	3.009	39	1815	0.032	ppbv #	8
19) Isopropyl Alcohol	3.607	45	132768	1.706	ppbv #	77
20) Methylene Chloride	3.954	84	384089	5.524	ppbv	96
23) Vinyl Acetate	4.636	43	25188	0.189	ppbv #	1
25) Ethyl Acetate	5.230	43	449131	2.156	ppbv #	78
26) Hexane	5.237	57	654915	6.648	ppbv #	39
29) Chloroform	5.298	83	10696	0.063	ppbv	92
30) Cyclohexane	6.626	84	7952	0.107	ppbv #	1
34) 2-Butanone	4.819	43	63401	0.472	ppbv	92
36) Benzene	6.388	78	121541	0.614	ppbv	93
39) 1,2-Dichloropropane	6.671	63	672713	8.833	ppbv #	23
41) Tetrahydrofuran	5.825	42	3191	0.046	ppbv #	33
44) 2,2,4-Trimethylpentane	7.346	57	272454	0.865	ppbv #	89
53) Toluene	9.240	91	596369	2.855	ppbv	99
60) o-Xylene	13.076	91	8235	0.037	ppbv #	1
74) 1,2,4-Trimethylbenzene	16.127	105	24906	0.091	ppbv #	53

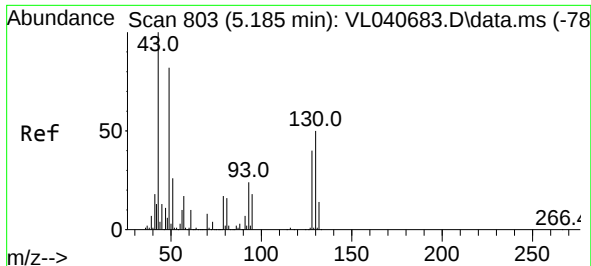
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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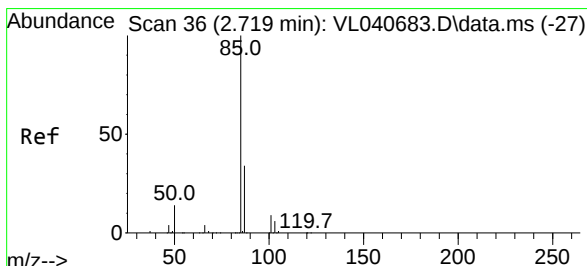
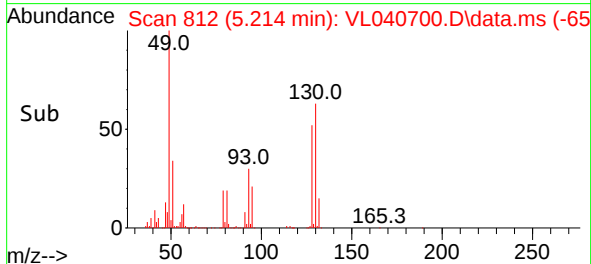
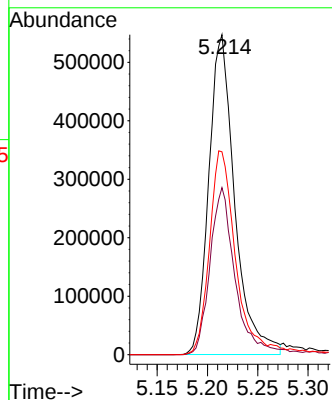
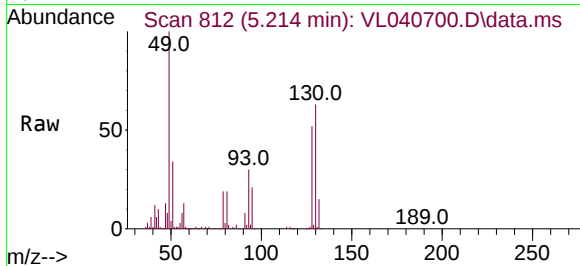




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.214 min Scan# 81
Delta R.T. 0.016 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

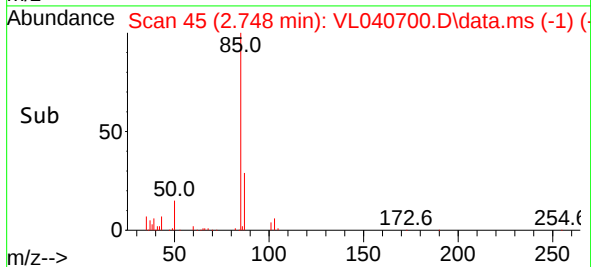
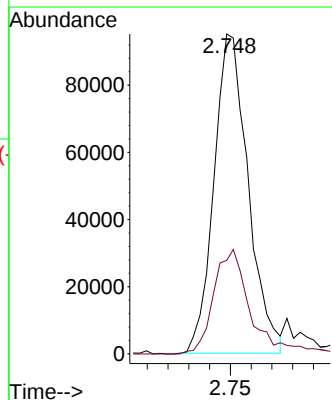
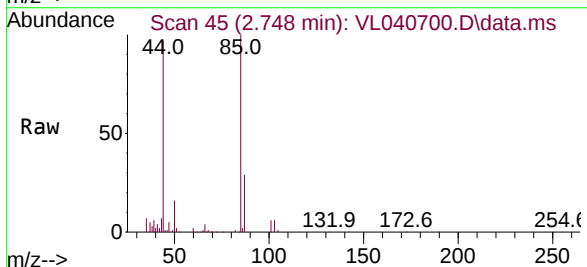
Instrument :
MSVOA_L
ClientSampleId :
ST-1DUP

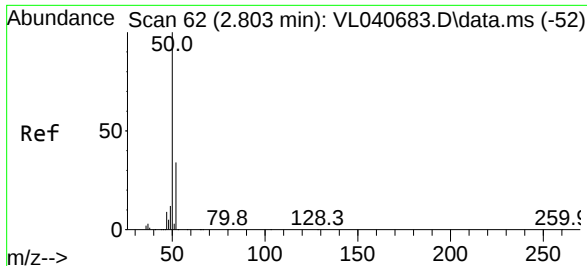
Tgt Ion: 49 Resp: 979359
Ion Ratio Lower Upper
49 100
128 52.3 25.4 76.0
130 66.8 32.3 96.8



#2
Dichlorodifluoromethane
Concen: 0.503 ppbv
RT: 2.748 min Scan# 45
Delta R.T. 0.016 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Tgt Ion: 85 Resp: 108544
Ion Ratio Lower Upper
85 100
87 29.3 27.2 40.8

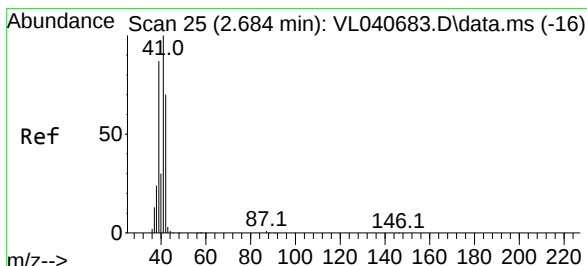
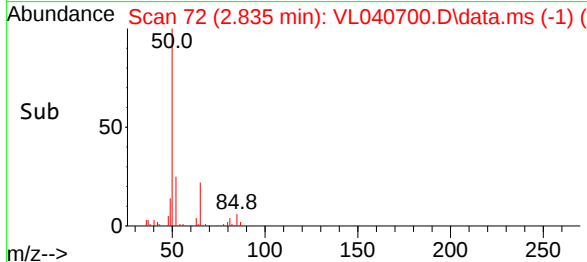
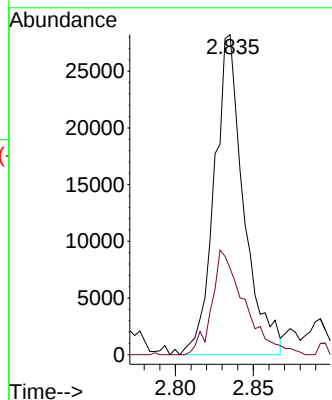
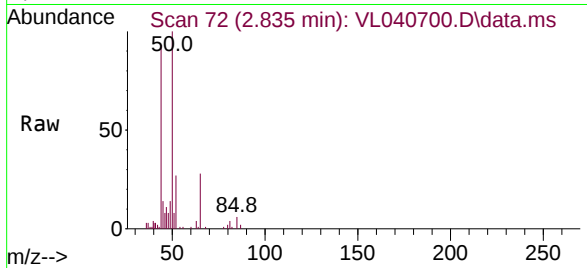




#4
Chloromethane
Concen: 0.607 ppbv
RT: 2.835 min Scan# 71
Delta R.T. 0.019 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

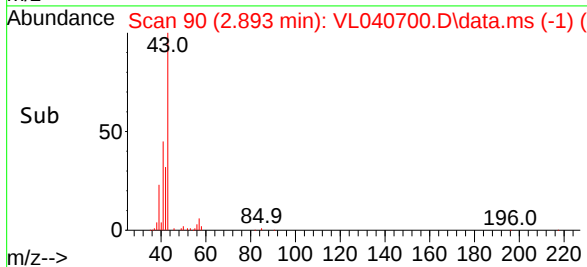
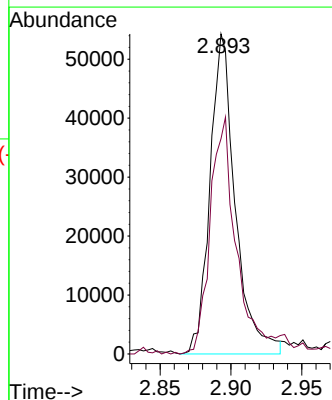
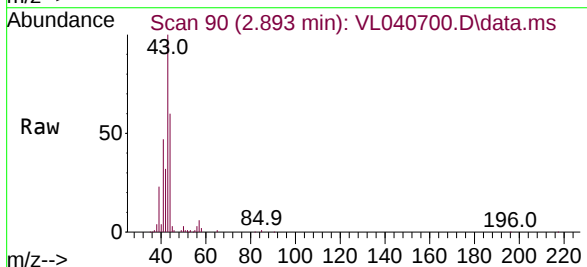
Instrument :
MSVOA_L
ClientSampleId :
ST-1DUP

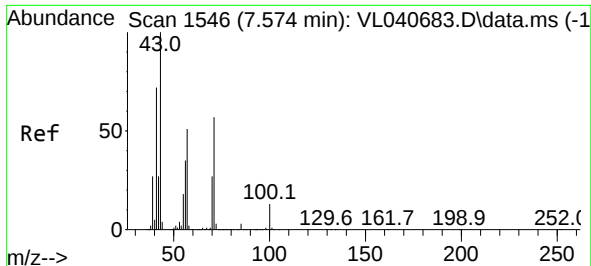
Tgt Ion: 50 Resp: 37052
Ion Ratio Lower Upper
50 100
52 27.0 27.1 40.7#



#9
Propene
Concen: 1.467 ppbv
RT: 2.893 min Scan# 90
Delta R.T. 0.196 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Tgt Ion: 41 Resp: 67437
Ion Ratio Lower Upper
41 100
42 82.3 56.7 85.1

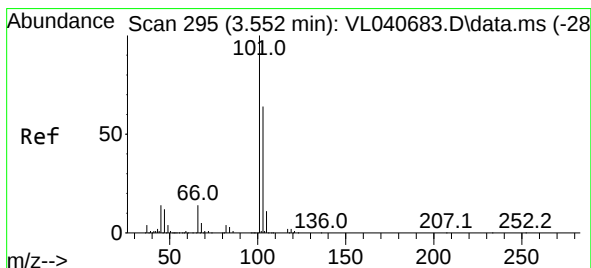
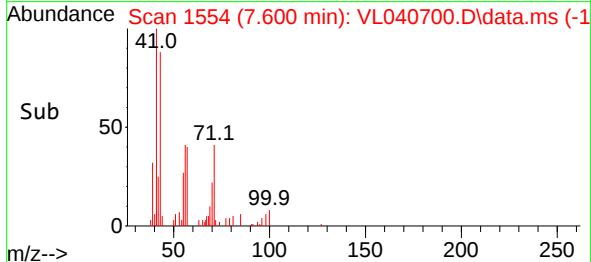
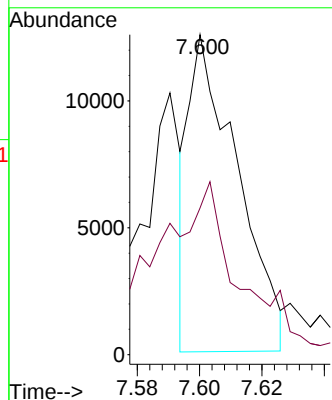
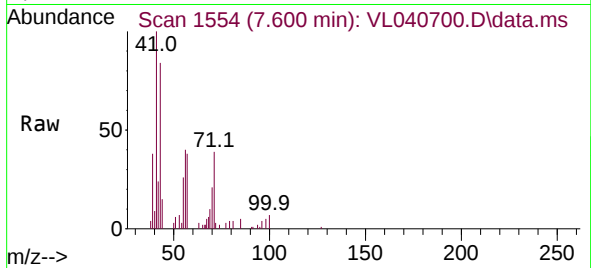




#10
Heptane
Concen: 0.131 ppbv
RT: 7.600 min Scan# 11
Delta R.T. 0.013 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

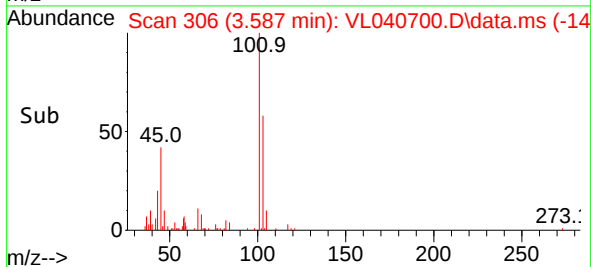
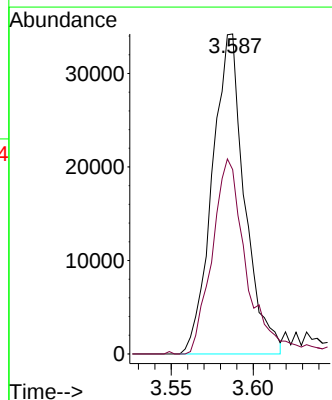
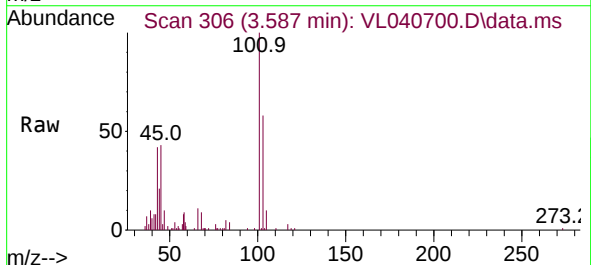
Instrument :
MSVOA_L
ClientSampleId :
ST-1DUP

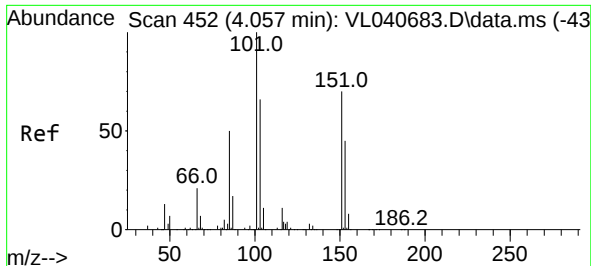
Tgt Ion: 43 Resp: 13579
Ion Ratio Lower Upper
43 100
57 97.7 41.8 62.6#



#11
Trichlorofluoromethane
Concen: 0.248 ppbv
RT: 3.587 min Scan# 306
Delta R.T. 0.019 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Tgt Ion:101 Resp: 46952
Ion Ratio Lower Upper
101 100
103 57.6 51.3 76.9





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.059 ppbv

RT: 4.089 min Scan# 4

Delta R.T. 0.016 min

Lab File: VL040700.D

Acq: 18 Sep 2023 15:43

Instrument :

MSVOA_L

ClientSampleId :

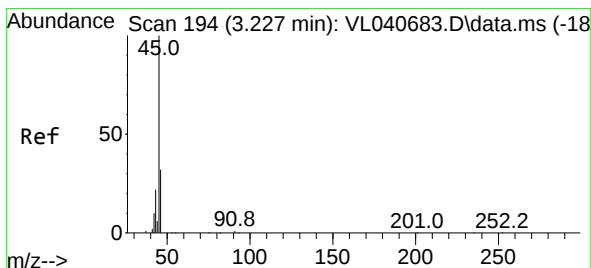
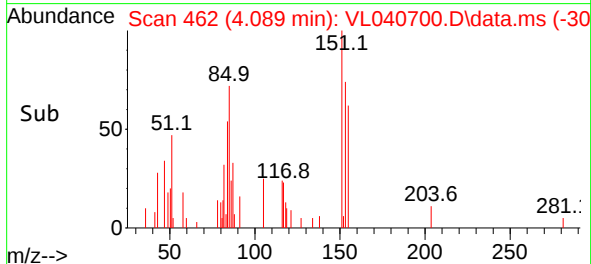
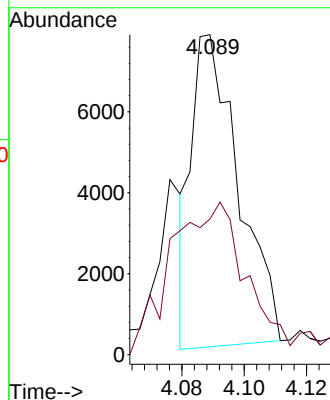
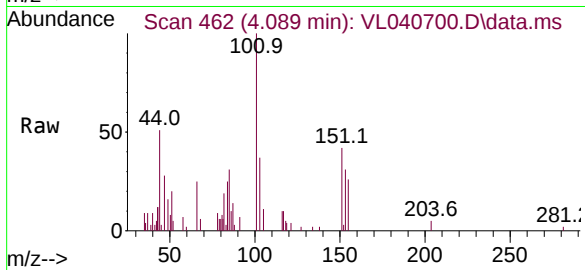
ST-1DUP

Tgt Ion:101 Resp: 8073

Ion Ratio Lower Upper

101 100

151 82.1 56.8 85.2



#13

Ethanol

Concen: 17.566 ppbv

RT: 3.263 min Scan# 205

Delta R.T. 0.019 min

Lab File: VL040700.D

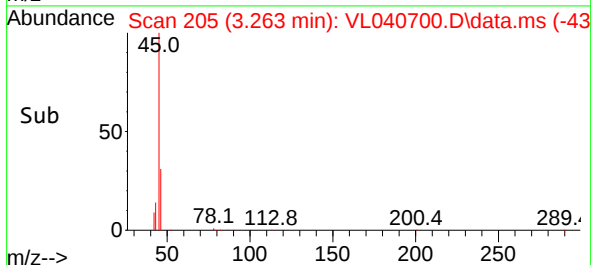
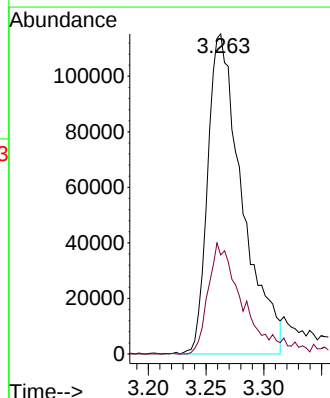
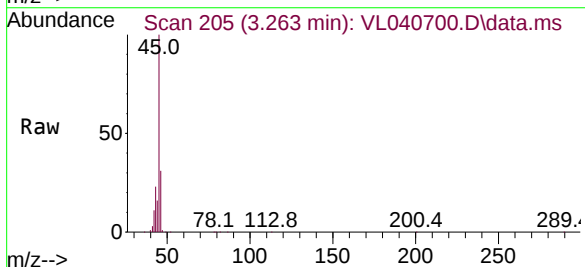
Acq: 18 Sep 2023 15:43

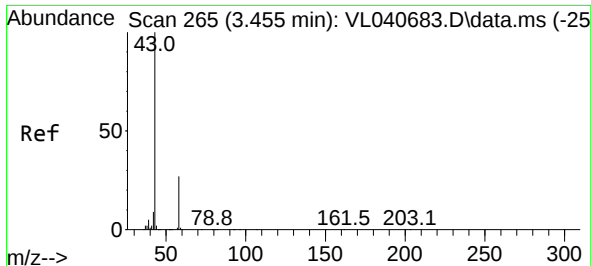
Tgt Ion: 45 Resp: 238977

Ion Ratio Lower Upper

45 100

46 35.4 15.2 61.0





#15

Acetone

Concen: 8.718 ppbv

RT: 3.491 min Scan# 21

Delta R.T. 0.019 min

Lab File: VL040700.D

Acq: 18 Sep 2023 15:43

Instrument :

MSVOA_L

ClientSampleId :

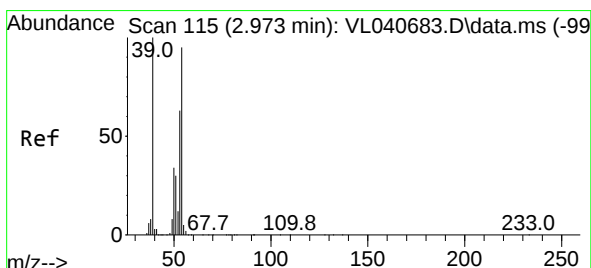
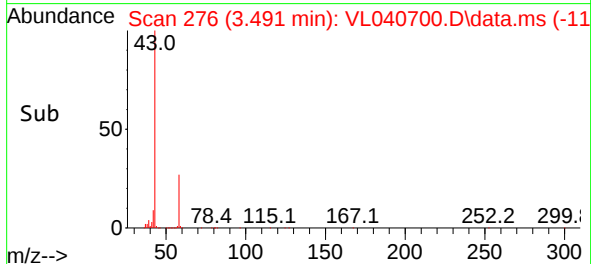
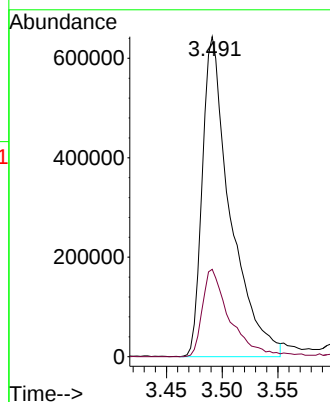
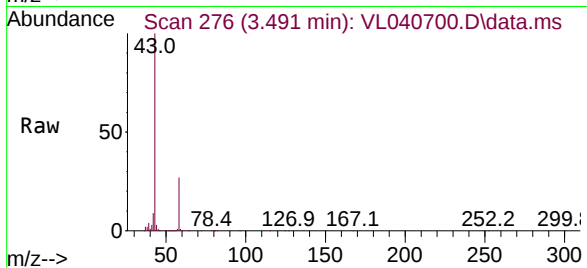
ST-1DUP

Tgt Ion: 43 Resp: 1126162

Ion Ratio Lower Upper

43 100

58 27.1 22.6 34.0



#16

1,3-Butadiene

Concen: 0.032 ppbv

RT: 3.009 min Scan# 126

Delta R.T. 0.019 min

Lab File: VL040700.D

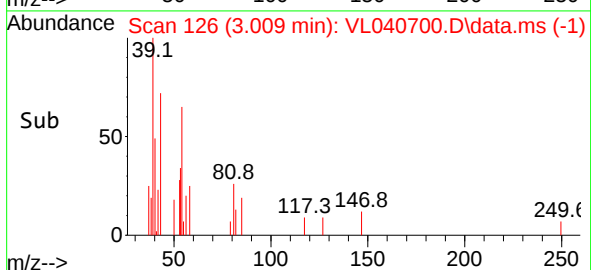
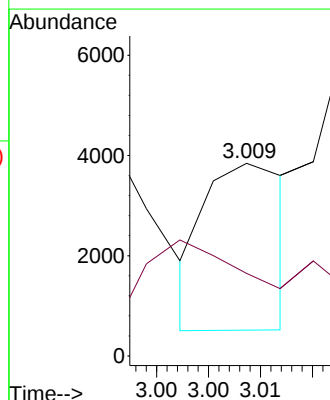
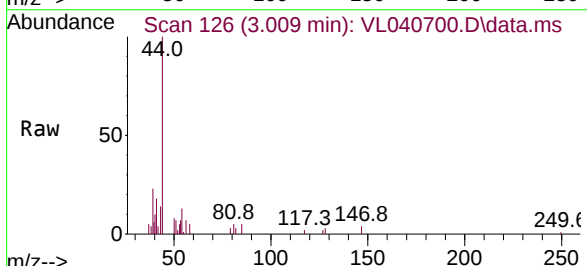
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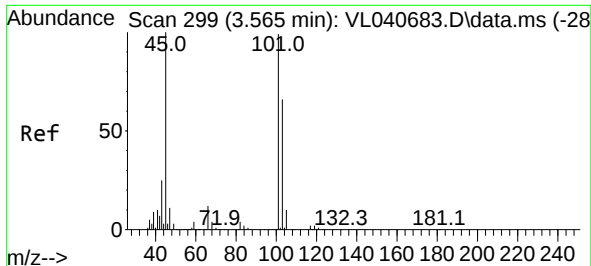
Tgt Ion: 39 Resp: 1815

Ion Ratio Lower Upper

39 100

54 163.1 64.8 97.2#





#19

Isopropyl Alcohol

Concen: 1.706 ppbv

RT: 3.607 min Scan# 312

Delta R.T. 0.029 min

Lab File: VL040700.D

Acq: 18 Sep 2023 15:43

Instrument :

MSVOA_L

ClientSampleId :

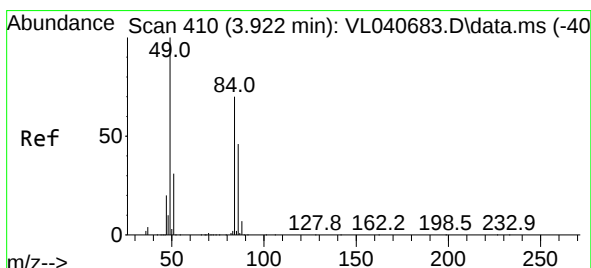
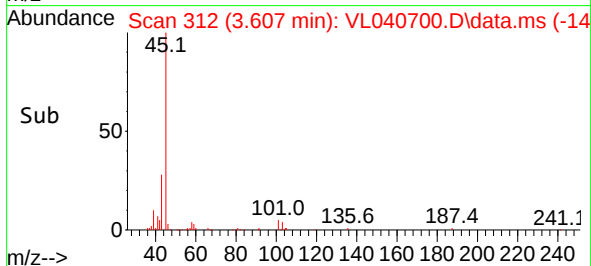
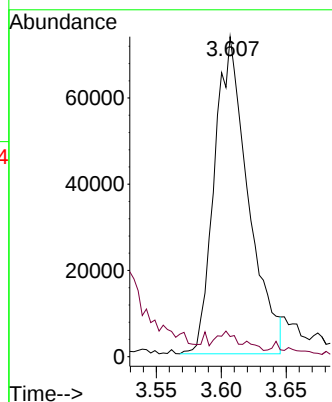
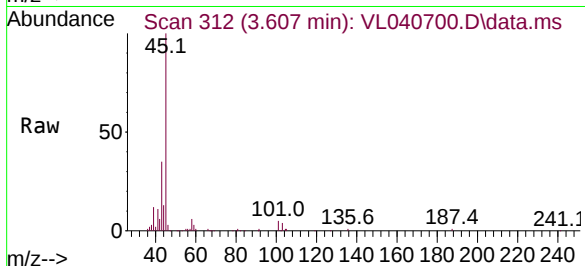
ST-1DUP

Tgt Ion: 45 Resp: 132768

Ion Ratio Lower Upper

45 100

58 10.3 1.9 2.9#



#20

Methylene Chloride

Concen: 5.524 ppbv

RT: 3.954 min Scan# 420

Delta R.T. 0.016 min

Lab File: VL040700.D

Acq: 18 Sep 2023 15:43

Tgt Ion: 84 Resp: 384089

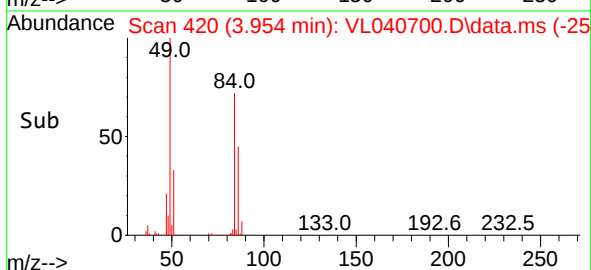
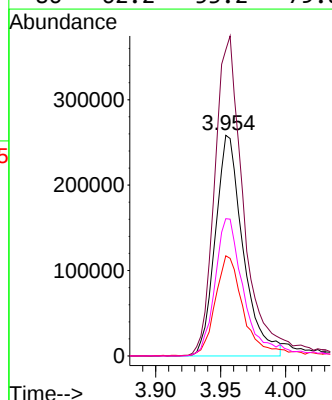
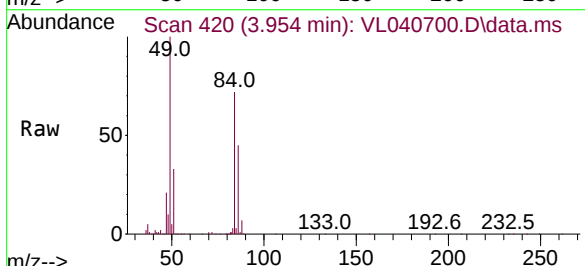
Ion Ratio Lower Upper

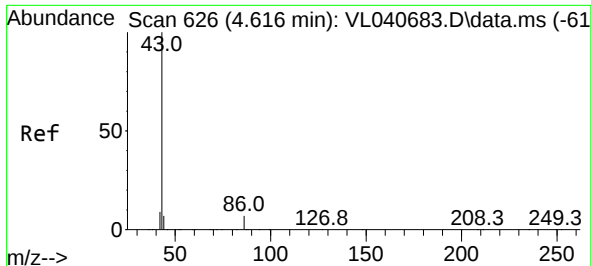
84 100

49 138.5 114.4 171.6

51 45.2 35.5 53.3

86 62.2 53.2 79.8

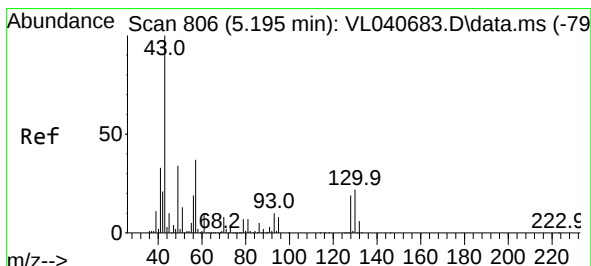
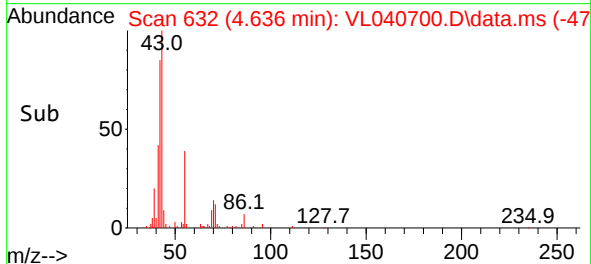
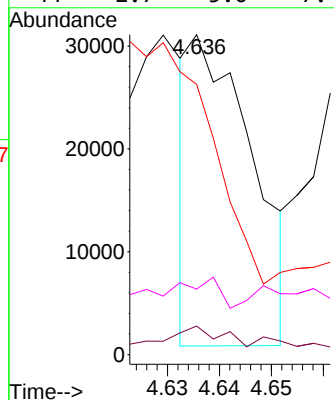
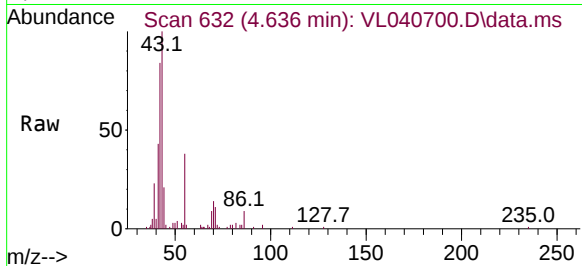




#23
 Vinyl Acetate
 Concen: 0.189 ppbv
 RT: 4.636 min Scan# 61
 Delta R.T. 0.003 min
 Lab File: VL040700.D
 Acq: 18 Sep 2023 15:43

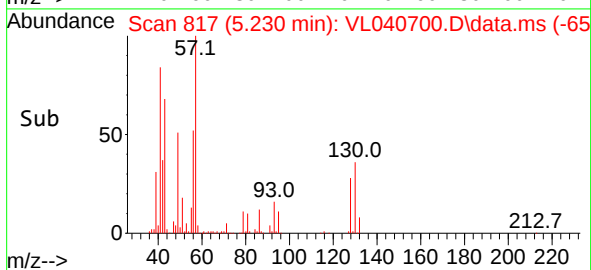
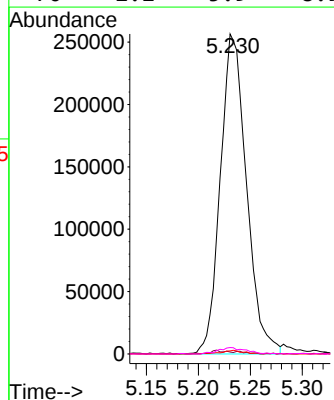
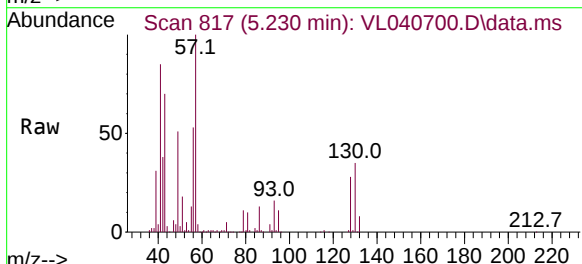
Instrument :
 MSVOA_L
 ClientSampleId :
 ST-1DUP

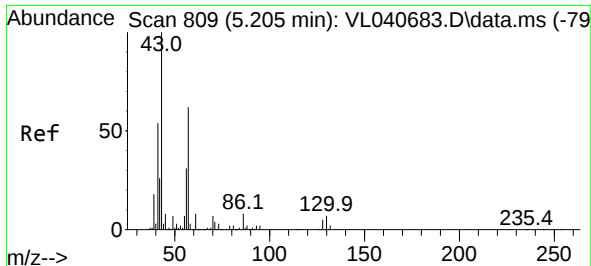
Tgt Ion:	43	Resp:	25188
Ion	Ratio	Lower	Upper
43	100		
86	8.5	5.6	8.4#
42	106.6	7.6	11.4#
44	2.7	5.0	7.4#



#25
 Ethyl Acetate
 Concen: 2.156 ppbv
 RT: 5.230 min Scan# 817
 Delta R.T. 0.019 min
 Lab File: VL040700.D
 Acq: 18 Sep 2023 15:43

Tgt Ion:	43	Resp:	449131
Ion	Ratio	Lower	Upper
43	100		
45	1.2	8.2	12.4#
61	1.0	8.2	12.4#
70	2.2	5.9	8.9#

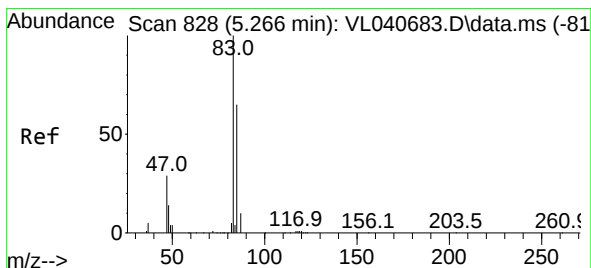
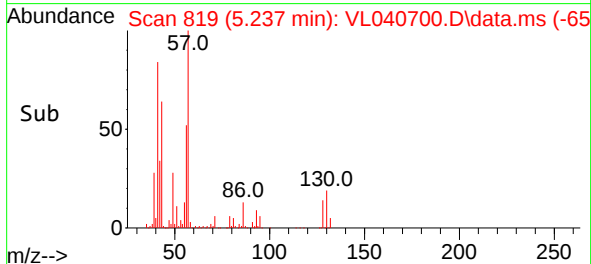
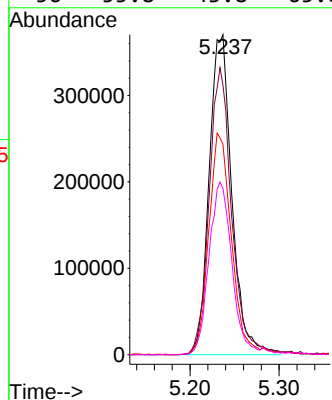
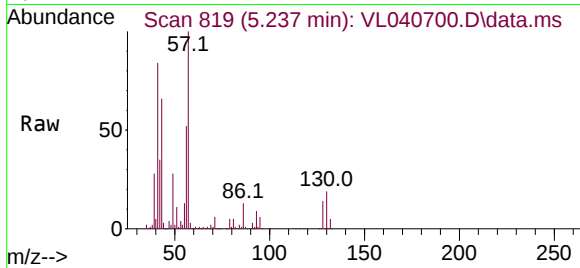




#26
Hexane
Concen: 6.648 ppbv
RT: 5.237 min Scan# 819
Delta R.T. 0.016 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

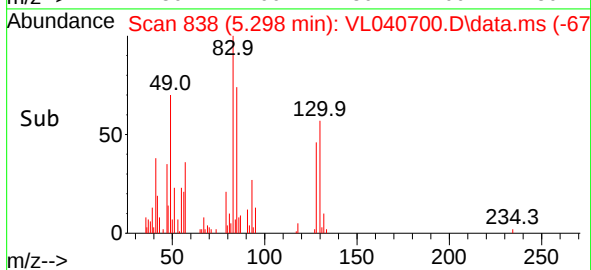
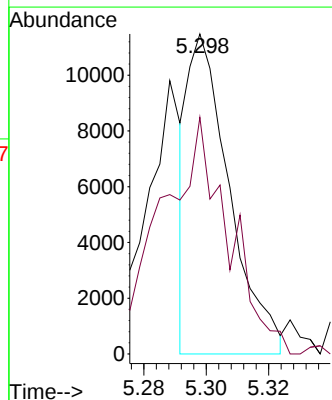
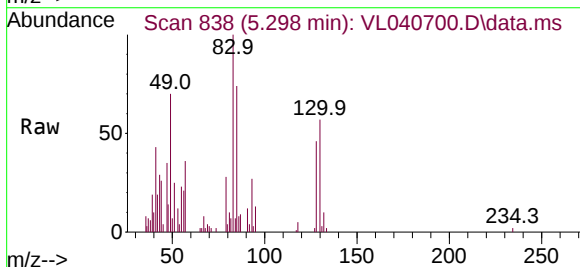
Instrument :
MSVOA_L
ClientSampleId :
ST-1DUP

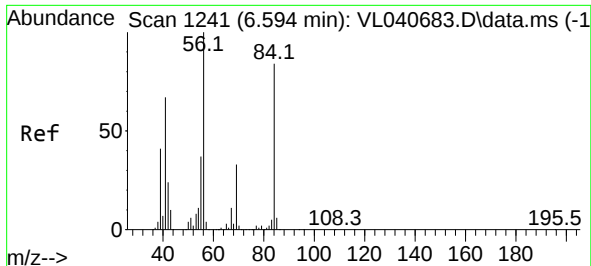
Tgt Ion: 57 Resp: 654915
Ion Ratio Lower Upper
57 100
41 90.3 75.2 112.8
43 69.9 185.6 278.4#
56 55.8 43.8 65.8



#29
Chloroform
Concen: 0.063 ppbv
RT: 5.298 min Scan# 838
Delta R.T. 0.016 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Tgt Ion: 83 Resp: 10696
Ion Ratio Lower Upper
83 100
85 70.9 51.8 77.8

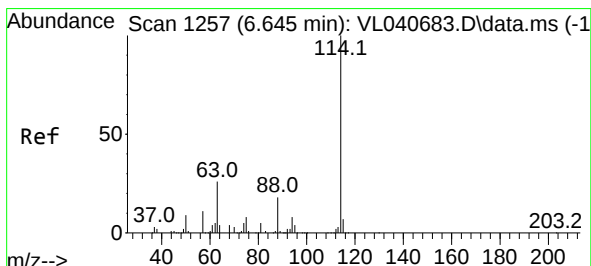
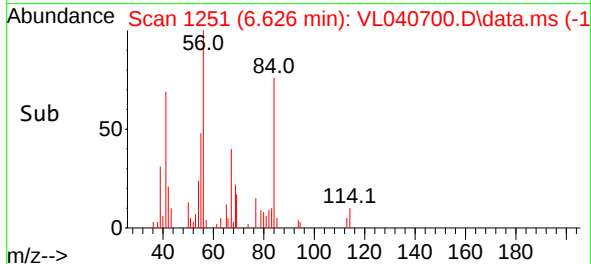
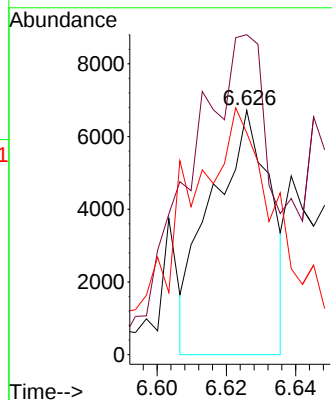
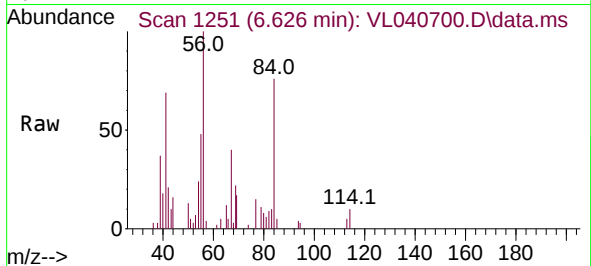




#30
Cyclohexane
Concen: 0.107 ppbv
RT: 6.626 min Scan# 1251
Delta R.T. 0.016 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

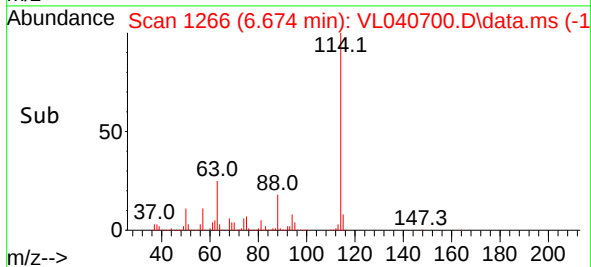
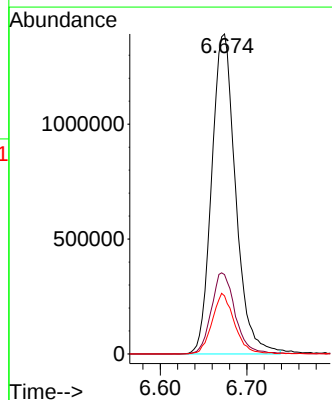
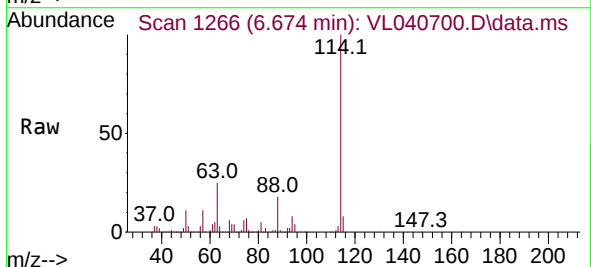
Instrument :
MSVOA_L
ClientSampleId :
ST-1DUP

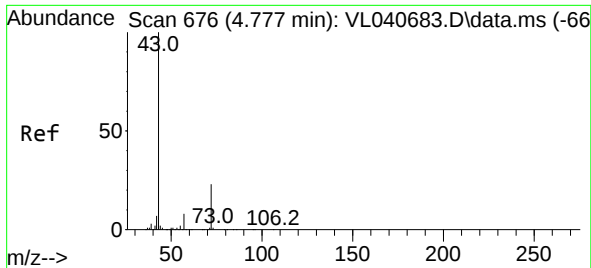
Tgt Ion: 84 Resp: 7952
Ion Ratio Lower Upper
84 100
56 0.0 103.2 154.8#
41 199.9 65.5 98.3#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.674 min Scan# 1266
Delta R.T. 0.013 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Tgt Ion: 114 Resp: 2672092
Ion Ratio Lower Upper
114 100
63 25.5 21.1 31.7
88 17.9 14.5 21.7

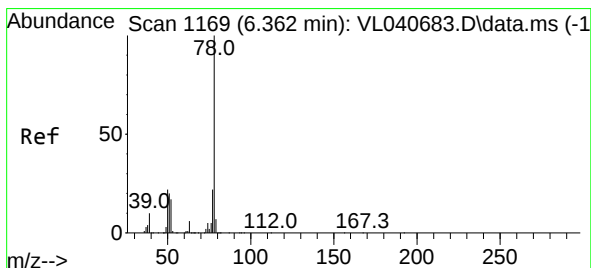
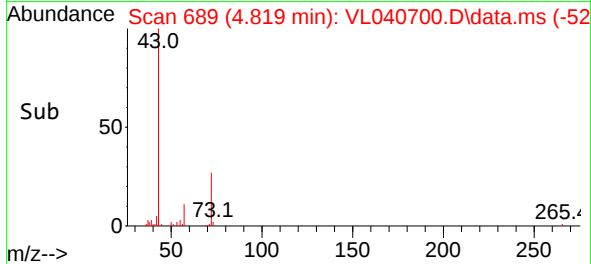
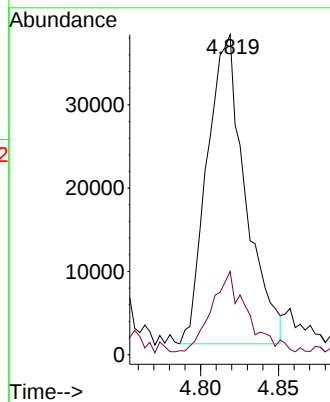
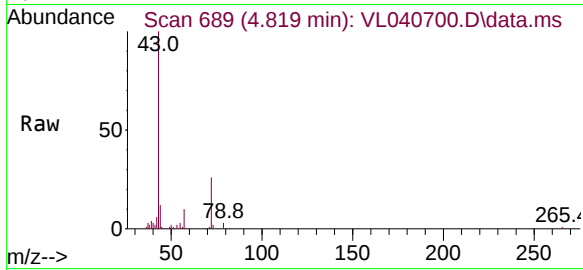




#34
2-Butanone
Concen: 0.472 ppbv
RT: 4.819 min Scan# 61
Delta R.T. 0.029 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

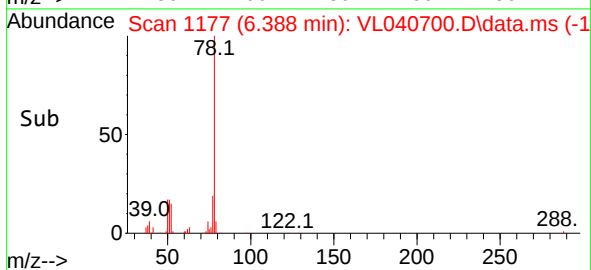
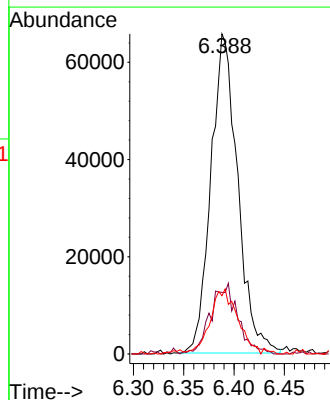
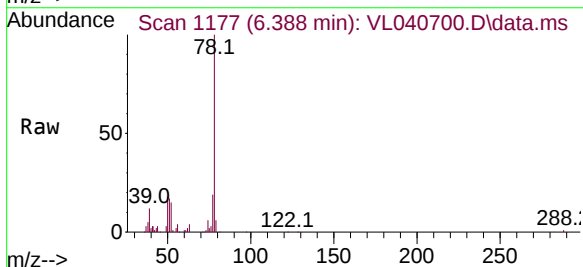
Instrument :
MSVOA_1
ClientSampleId :
ST-1DUP

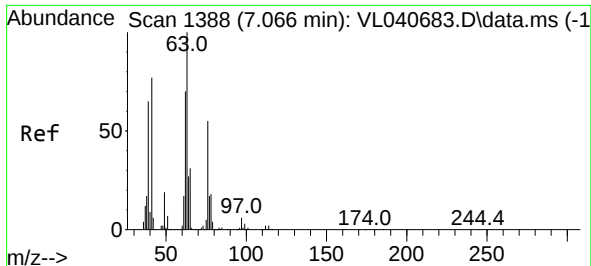
Tgt Ion: 43 Resp: 63401
Ion Ratio Lower Upper
43 100
72 27.1 18.6 27.8



#36
Benzene
Concen: 0.614 ppbv
RT: 6.388 min Scan# 1177
Delta R.T. 0.007 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Tgt Ion: 78 Resp: 121541
Ion Ratio Lower Upper
78 100
77 19.3 17.9 26.9
50 18.3 17.3 25.9





#39

1,2-Dichloropropane

Concen: 8.833 ppbv

RT: 6.671 min Scan# 11

Delta R.T. -0.411 min

Lab File: VL040700.D

Acq: 18 Sep 2023 15:43

Instrument :

MSVOA_L

ClientSampleId :

ST-1DUP

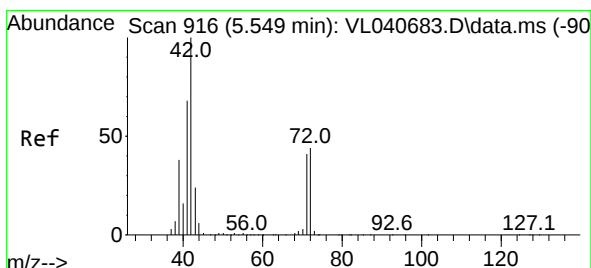
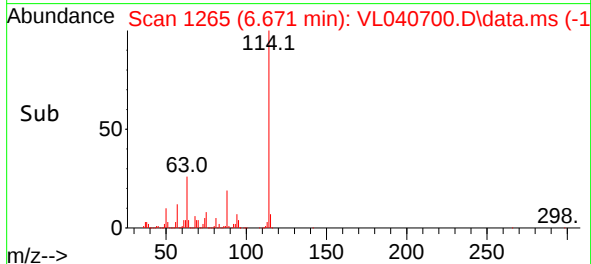
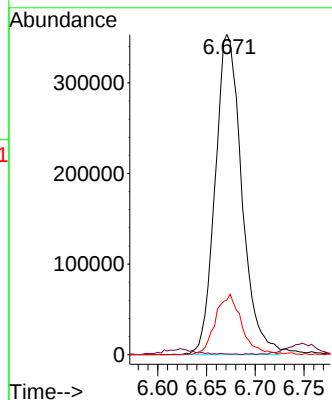
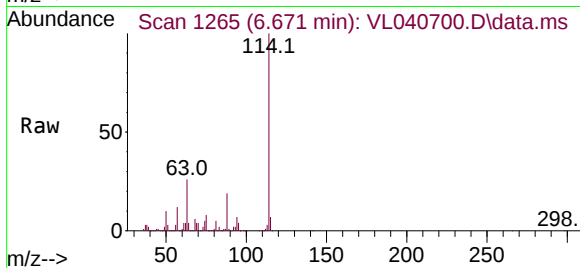
Tgt Ion: 63 Resp: 672713

Ion Ratio Lower Upper

63 100

41 0.0 61.6 92.4#

62 17.0 55.8 83.8#



#41

Tetrahydrofuran

Concen: 0.046 ppbv

RT: 5.825 min Scan# 1002

Delta R.T. 0.264 min

Lab File: VL040700.D

Acq: 18 Sep 2023 15:43

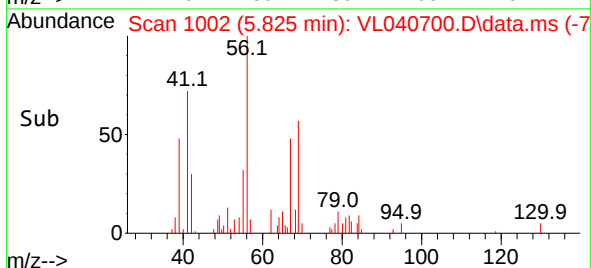
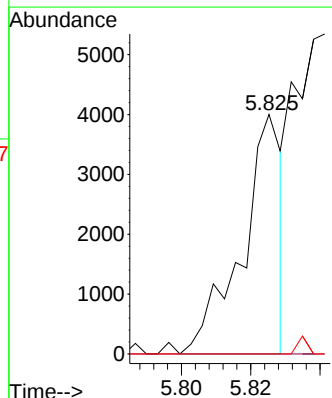
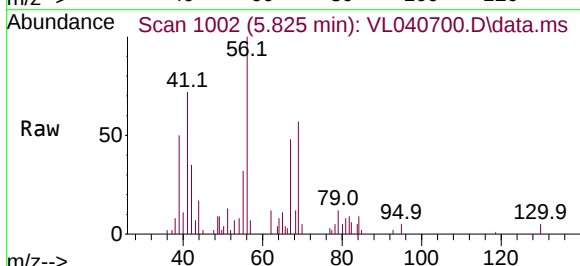
Tgt Ion: 42 Resp: 3191

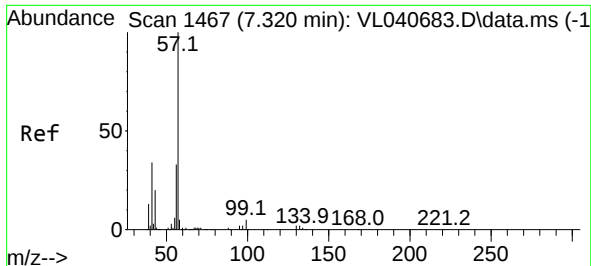
Ion Ratio Lower Upper

42 100

72 0.0 34.9 52.3#

71 0.0 33.8 50.8#





#44

2,2,4-Trimethylpentane

Concen: 0.865 ppbv

RT: 7.346 min Scan# 1467

Delta R.T. 0.010 min

Lab File: VL040700.D

Acq: 18 Sep 2023 15:43

Instrument :

MSVOA_L

ClientSampleId :

ST-1DUP

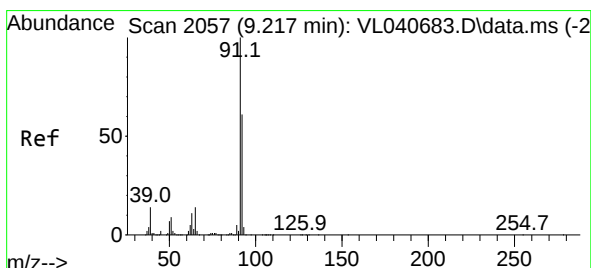
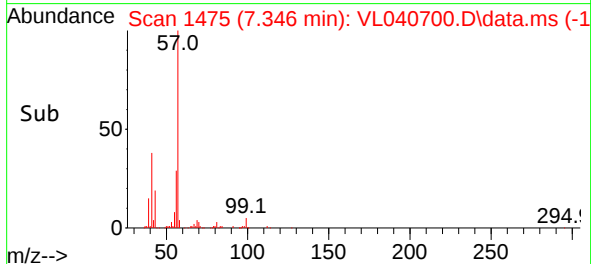
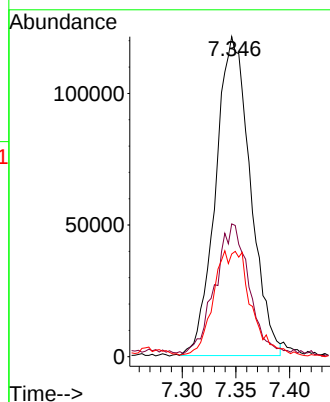
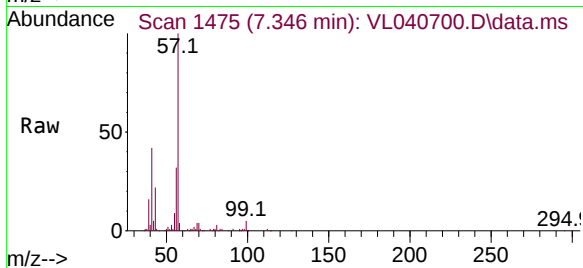
Tgt Ion: 57 Resp: 272454

Ion Ratio Lower Upper

57 100

41 43.2 28.5 42.7#

56 36.5 25.4 38.2



#53

Toluene

Concen: 2.855 ppbv

RT: 9.240 min Scan# 2064

Delta R.T. 0.010 min

Lab File: VL040700.D

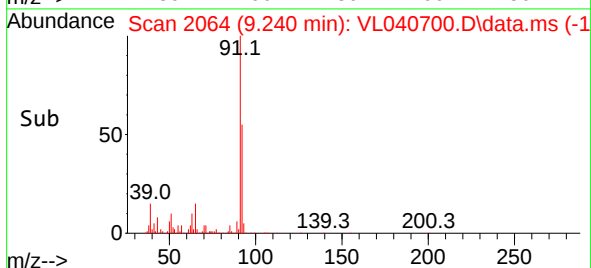
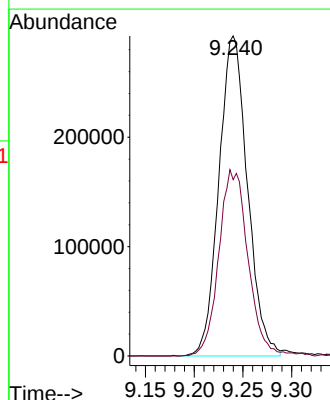
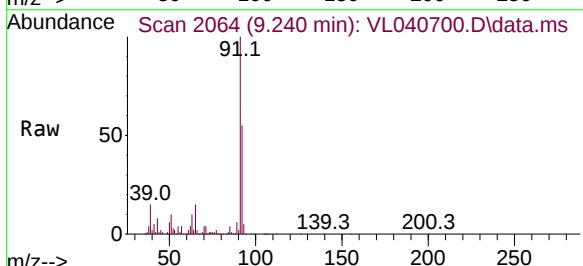
Acq: 18 Sep 2023 15:43

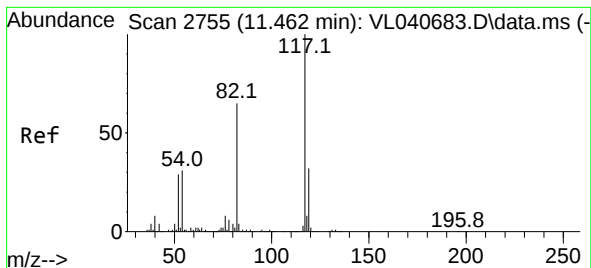
Tgt Ion: 91 Resp: 596369

Ion Ratio Lower Upper

91 100

92 60.0 48.5 72.7

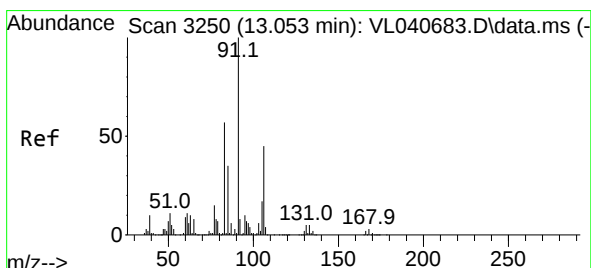
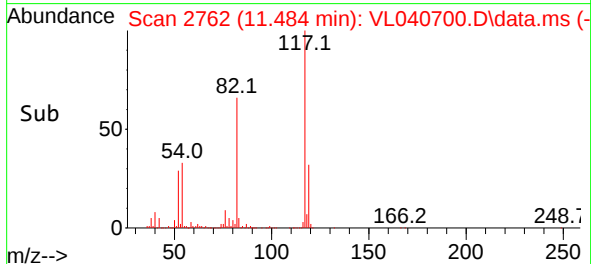
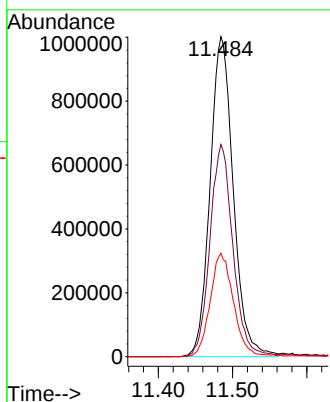
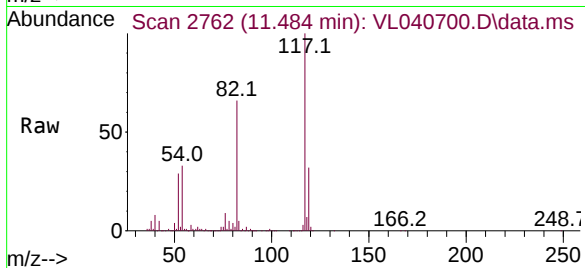




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.484 min Scan# 21
Delta R.T. 0.007 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

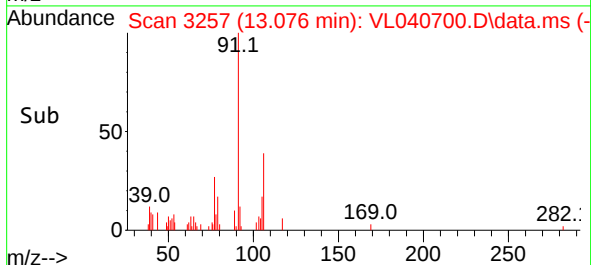
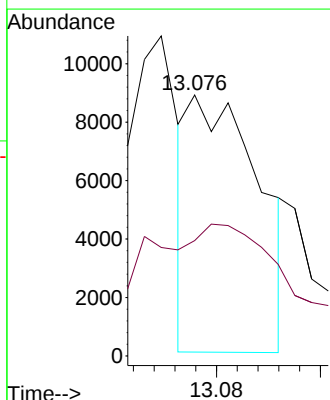
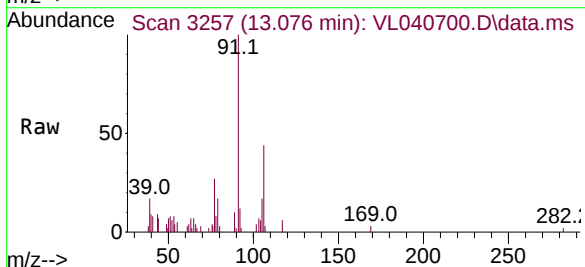
Instrument :
MSVOA_L
ClientSampleId :
ST-1DUP

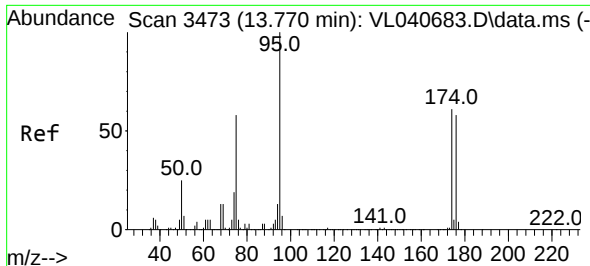
Tgt Ion:117 Resp: 2173865
Ion Ratio Lower Upper
117 100
82 65.9 51.4 77.0
119 32.6 24.7 37.1



#60
o-Xylene
Concen: 0.037 ppbv
RT: 13.076 min Scan# 3257
Delta R.T. 0.007 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Tgt Ion: 91 Resp: 8235
Ion Ratio Lower Upper
91 100
106 131.9 22.3 66.9#

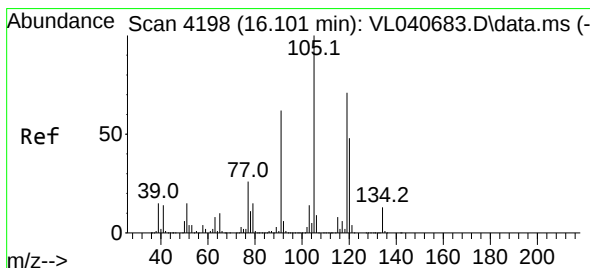
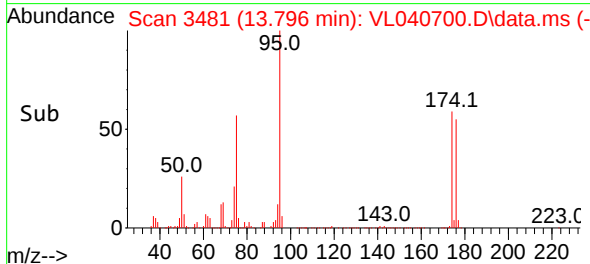
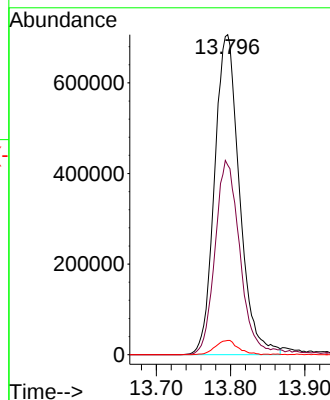
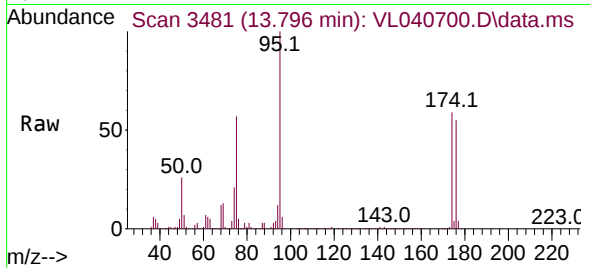




#68
1-Bromo-4-Fluorobenzene
Concen: 9.817 ppbv
RT: 13.796 min Scan# 3473
Delta R.T. 0.010 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Instrument :
MSVOA_L
ClientSampleId :
ST-1DUP

Tgt Ion: 95 Resp: 1648860
Ion Ratio Lower Upper
95 100
174 62.5 48.9 73.3
175 4.2 3.5 5.3



#74
1,2,4-Trimethylbenzene
Concen: 0.091 ppbv
RT: 16.127 min Scan# 4206
Delta R.T. 0.010 min
Lab File: VL040700.D
Acq: 18 Sep 2023 15:43

Tgt Ion: 105 Resp: 24906
Ion Ratio Lower Upper
105 100
120 25.8 38.6 57.8#
91 8.4 50.0 75.0#
77 17.6 20.6 31.0#

