

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091823\
 Data File : VL040697.D
 Acq On : 18 Sep 2023 13:32
 Operator : SY/MD
 Sample : 04471-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Quant Time: Sep 19 05:17:54 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	5.201	49	1174183	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.664	114	3034075	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.478	117	2717515	10.000	ppbv	0.00

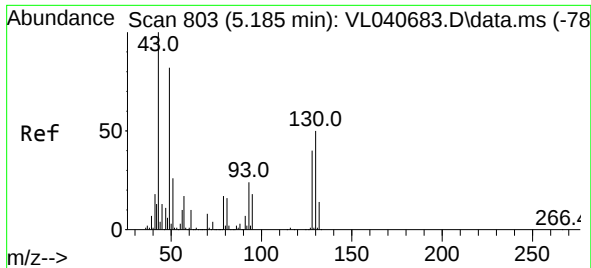
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.786	95	2179024	10.378	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.800%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.735	85	26674	0.103	ppbv #	86
4) Chloromethane	2.825	50	4802	0.066	ppbv #	87
7) Chloroethane	3.205	64	982	0.033	ppbv #	64
9) Propene	2.706	41	28641	0.520	ppbv	98
10) Heptane	7.597	43	8813	0.071	ppbv #	1
13) Ethanol	3.253	45	46595	2.857	ppbv	96
15) Acetone	3.478	43	985638	6.364	ppbv	93
16) 1,3-Butadiene	2.973	39	25901	0.384	ppbv #	24
17) tert-Butyl alcohol	3.902	59	20437	0.129	ppbv #	90
19) Isopropyl Alcohol	3.590	45	6496	0.070	ppbv #	93
20) Methylene Chloride	3.941	84	194076	2.328	ppbv	96
23) Vinyl Acetate	4.639	43	221630	1.384	ppbv	98
25) Ethyl Acetate	5.224	43	341317	1.366	ppbv #	77
26) Hexane	5.224	57	497418	4.211	ppbv #	36
27) Carbon Disulfide	4.137	76	6471	0.039	ppbv #	1
28) Methyl tert-Butyl Ether	4.603	73	13451	0.132	ppbv #	88
34) 2-Butanone	4.803	43	174760	1.145	ppbv	92
39) 1,2-Dichloropropane	6.664	63	764695	8.842	ppbv #	23
41) Tetrahydrofuran	5.221	42	203512	2.601	ppbv #	46
51) 2-Hexanone	9.568	43	22529	0.158	ppbv #	31
52) Tetrachloroethene	10.629	164	76806	1.048	ppbv	89
53) Toluene	9.236	91	34630	0.146	ppbv	96
58) Ethyl Benzene	12.101	91	12487	0.040	ppbv	90
74) 1,2,4-Trimethylbenzene	16.114	105	12272	0.036	ppbv #	47

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

Quant Time: Sep 19 05:17:54 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091423AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 19 05:12:43 2023
Response via : Initial Calibration

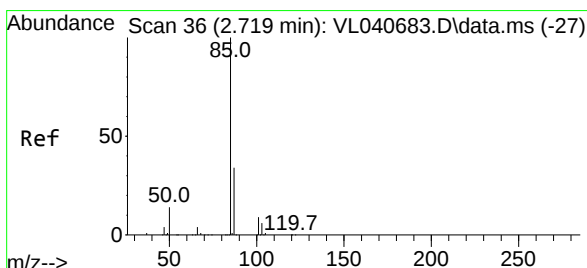
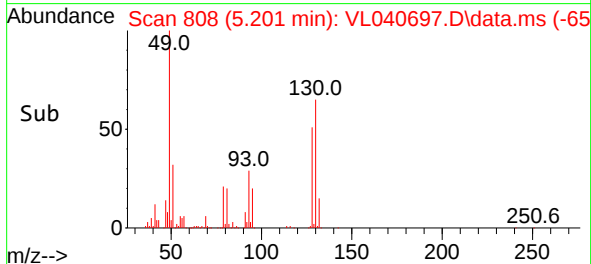
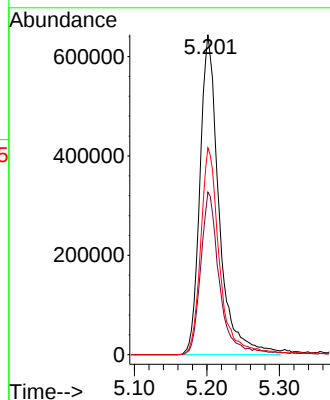
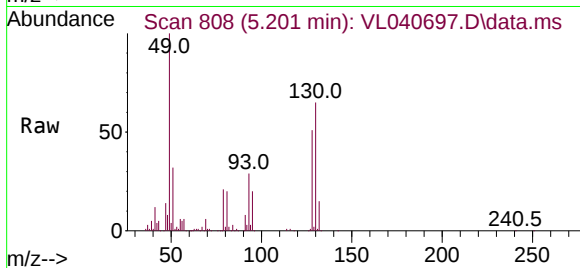




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.201 min Scan# 80
Delta R.T. 0.003 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

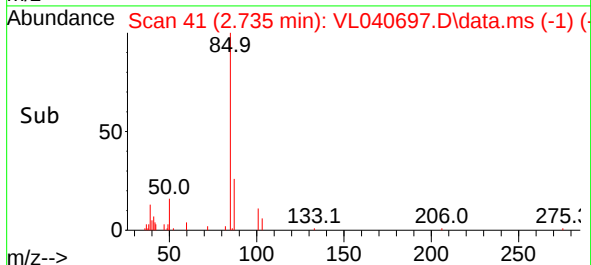
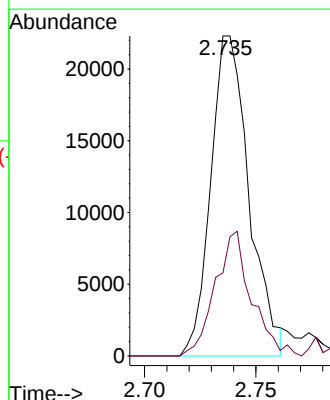
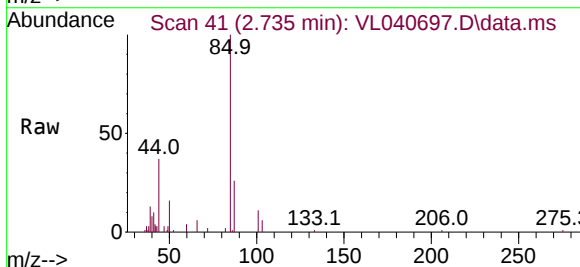
Instrument :
MSVOA_L
ClientSampleId :
SV1

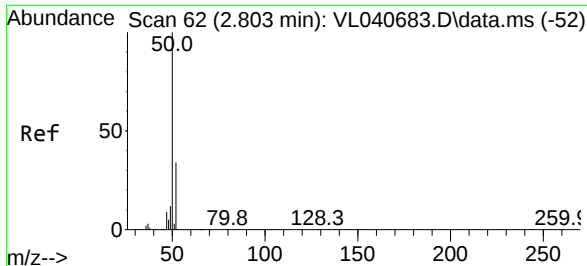
Tgt Ion: 49 Resp: 1174183
Ion Ratio Lower Upper
49 100
128 50.3 25.4 76.0
130 64.7 32.3 96.8



#2
Dichlorodifluoromethane
Concen: 0.103 ppbv
RT: 2.735 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

Tgt Ion: 85 Resp: 26674
Ion Ratio Lower Upper
85 100
87 26.0 27.2 40.8#

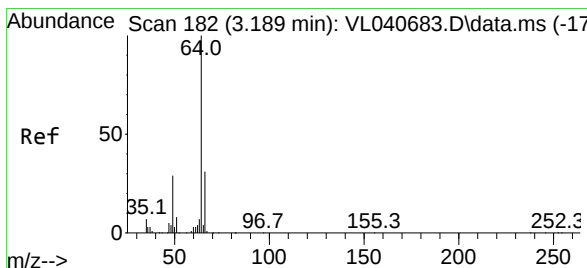
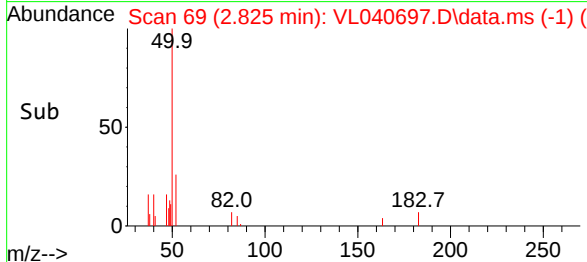
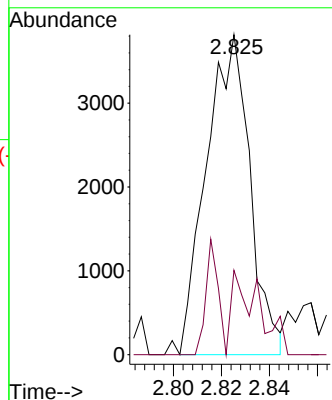
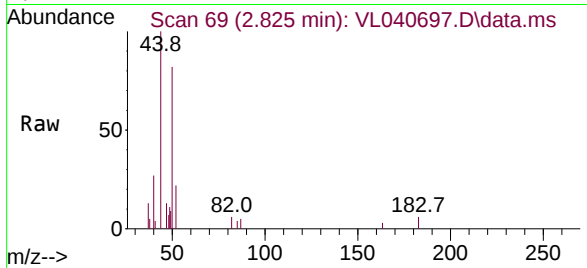




#4
Chloromethane
Concen: 0.066 ppbv
RT: 2.825 min Scan# 61
Delta R.T. 0.010 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

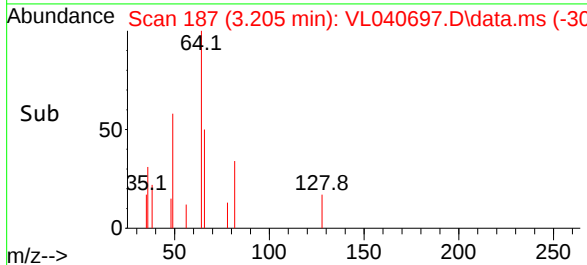
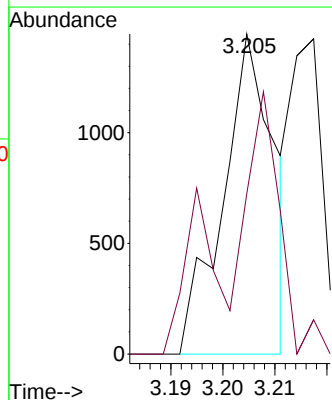
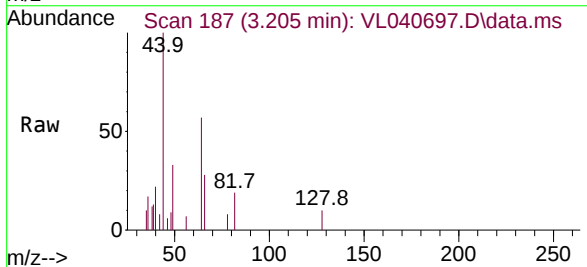
Instrument :
MSVOA_L
ClientSampleId :
SV1

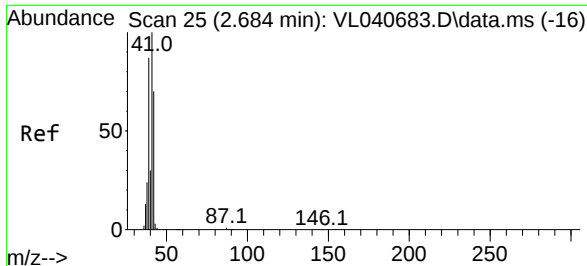
Tgt Ion: 50 Resp: 4802
Ion Ratio Lower Upper
50 100
52 26.3 27.1 40.7#



#7
Chloroethane
Concen: 0.033 ppbv
RT: 3.205 min Scan# 187
Delta R.T. 0.006 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

Tgt Ion: 64 Resp: 982
Ion Ratio Lower Upper
64 100
66 50.1 24.5 36.7#





#9

Propene

Concen: 0.520 ppbv

RT: 2.706 min Scan# 31

Delta R.T. 0.010 min

Lab File: VL040697.D

Acq: 18 Sep 2023 13:32

Instrument :

MSVOA_L

ClientSampleId :

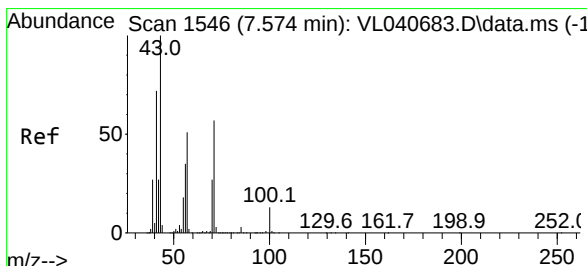
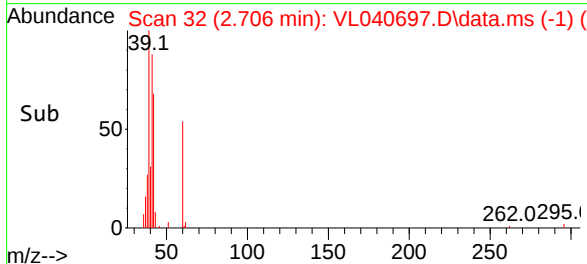
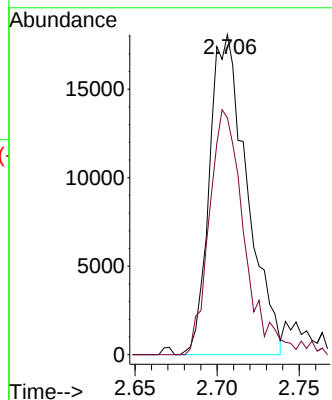
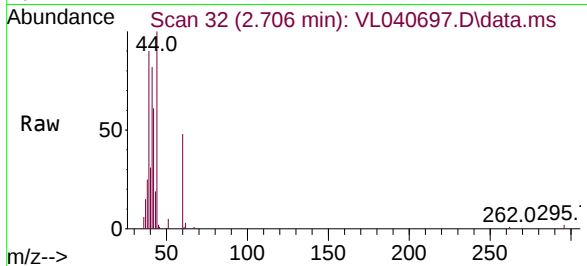
SV1

Tgt Ion: 41 Resp: 28641

Ion Ratio Lower Upper

41 100

42 72.6 56.7 85.1



#10

Heptane

Concen: 0.071 ppbv

RT: 7.597 min Scan# 1553

Delta R.T. 0.010 min

Lab File: VL040697.D

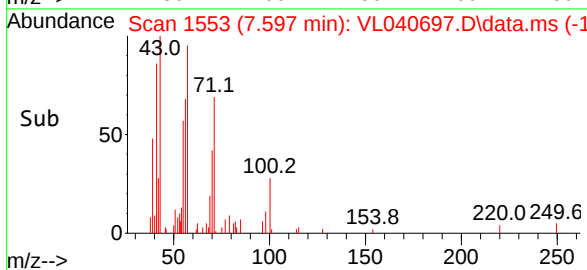
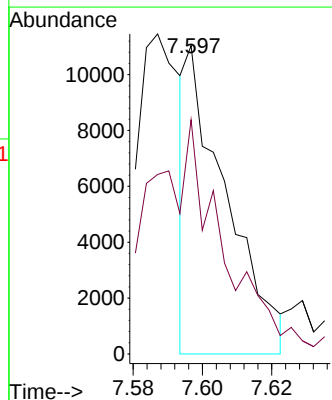
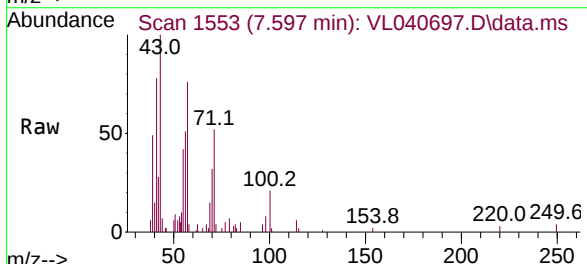
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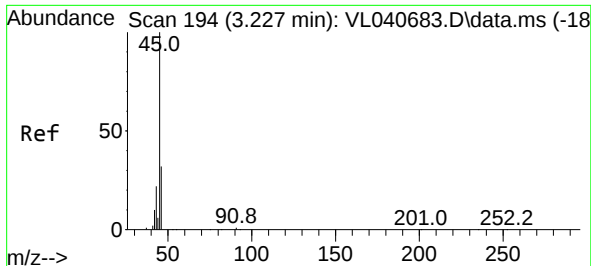
Tgt Ion: 43 Resp: 8813

Ion Ratio Lower Upper

43 100

57 175.4 41.8 62.6

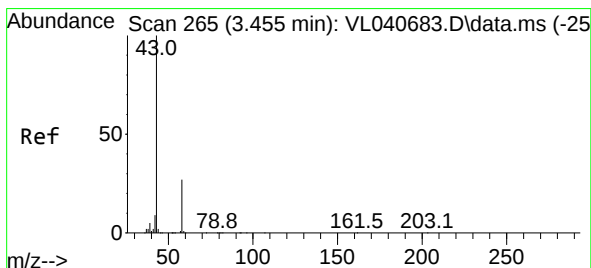
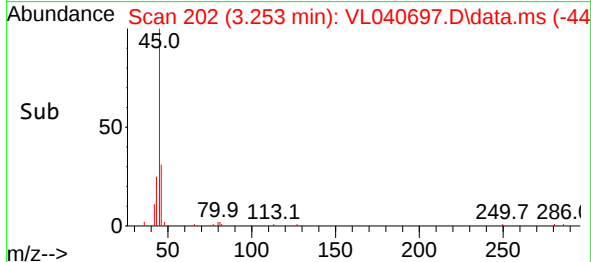
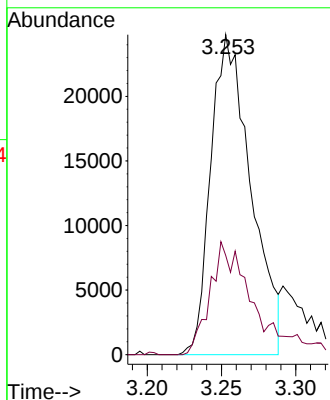
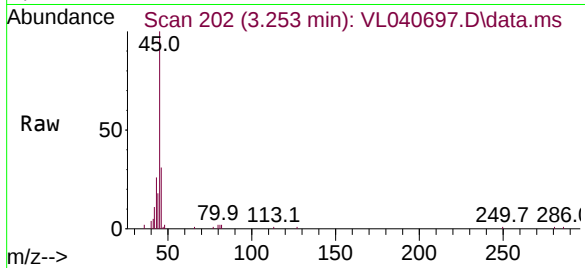




#13
Ethanol
Concen: 2.857 ppbv
RT: 3.253 min Scan# 202
Delta R.T. 0.010 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

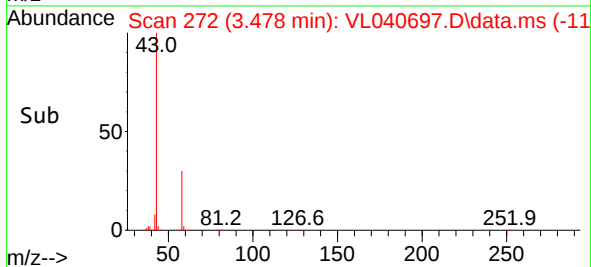
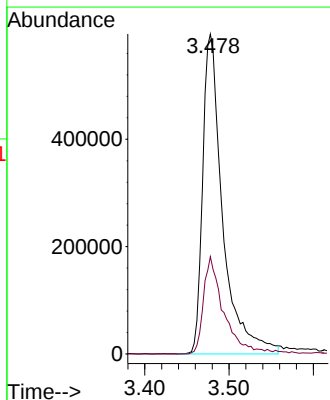
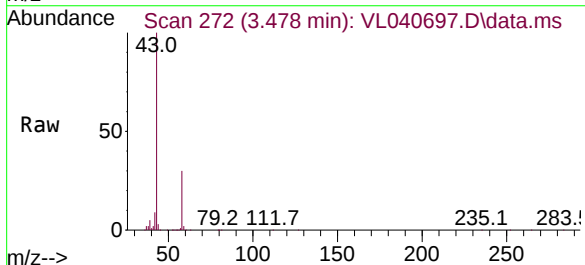
Instrument :
MSVOA_L
ClientSampleId :
SV1

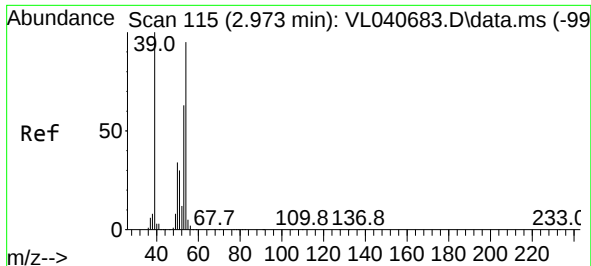
Tgt Ion: 45 Resp: 46595
Ion Ratio Lower Upper
45 100
46 40.2 15.2 61.0



#15
Acetone
Concen: 6.364 ppbv
RT: 3.478 min Scan# 272
Delta R.T. 0.006 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

Tgt Ion: 43 Resp: 985638
Ion Ratio Lower Upper
43 100
58 32.0 22.6 34.0

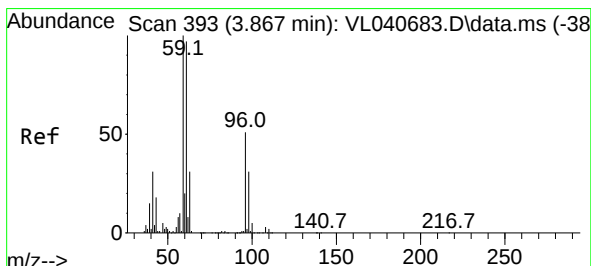
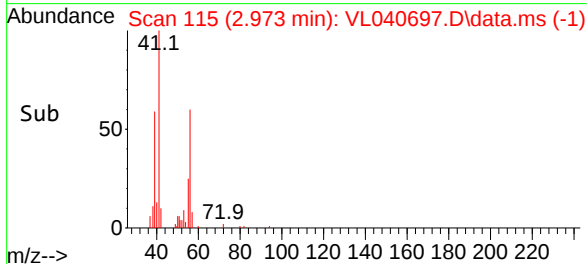
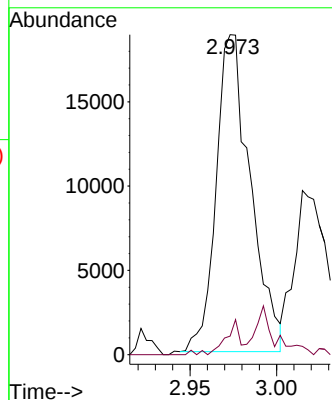
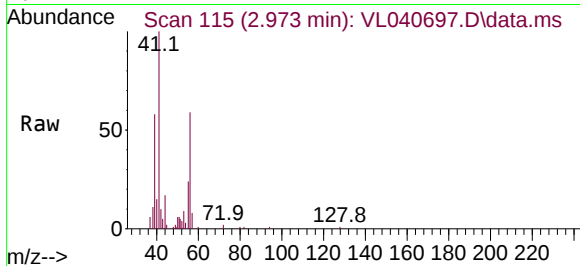




#16
1,3-Butadiene
Concen: 0.384 ppbv
RT: 2.973 min Scan# 115
Delta R.T. -0.016 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

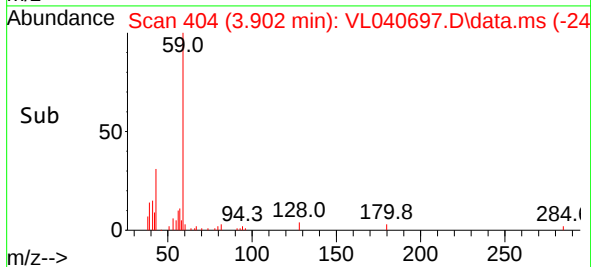
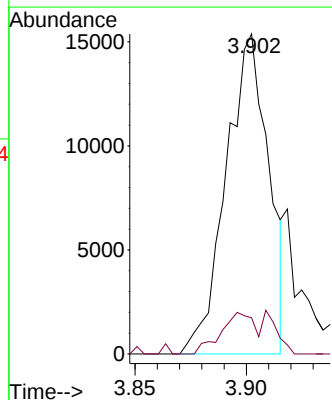
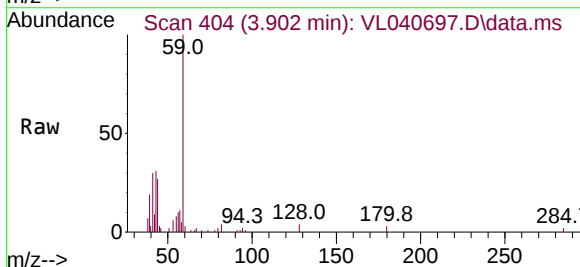
Instrument :
MSVOA_L
ClientSampleId :
SV1

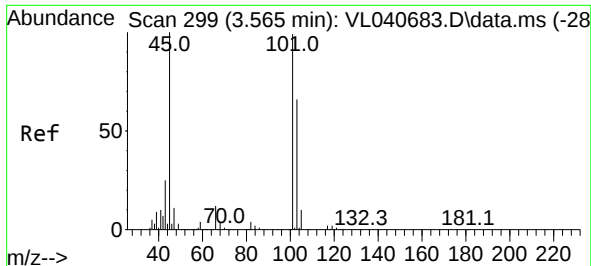
Tgt Ion: 39 Resp: 25901
Ion Ratio Lower Upper
39 100
54 13.3 64.8 97.2#



#17
tert-Butyl alcohol
Concen: 0.129 ppbv
RT: 3.902 min Scan# 404
Delta R.T. 0.019 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

Tgt Ion: 59 Resp: 20437
Ion Ratio Lower Upper
59 100
57 14.8 8.7 13.1#





#19

Isopropyl Alcohol

Concen: 0.070 ppbv

RT: 3.590 min Scan# 307

Delta R.T. 0.013 min

Lab File: VL040697.D

Acq: 18 Sep 2023 13:32

Instrument :

MSVOA_L

ClientSampleId :

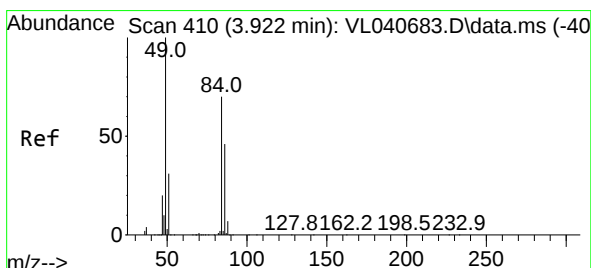
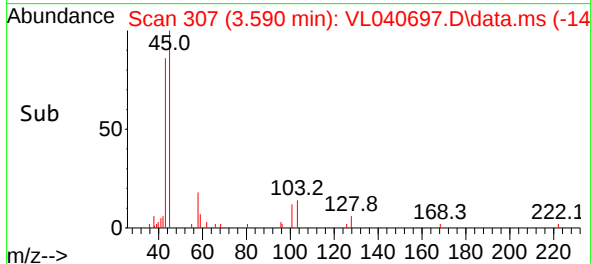
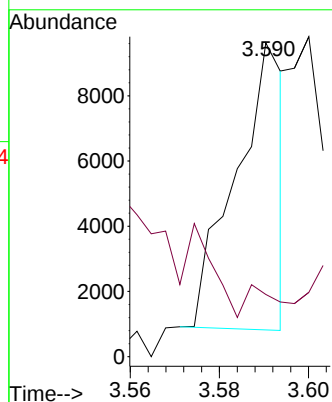
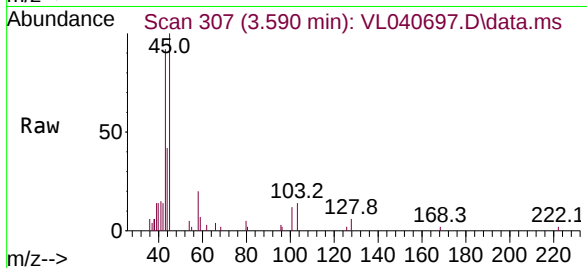
SV1

Tgt Ion: 45 Resp: 6496

Ion Ratio Lower Upper

45 100

58 0.0 1.9 2.9#



#20

Methylene Chloride

Concen: 2.328 ppbv

RT: 3.941 min Scan# 416

Delta R.T. 0.003 min

Lab File: VL040697.D

Acq: 18 Sep 2023 13:32

Tgt Ion: 84 Resp: 194076

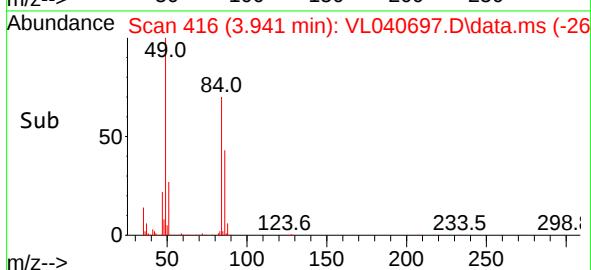
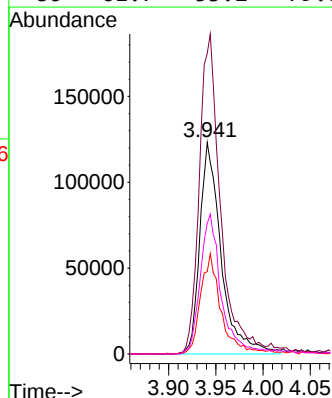
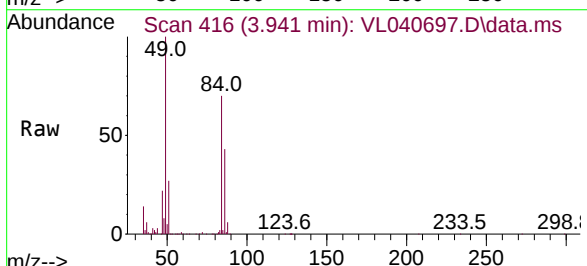
Ion Ratio Lower Upper

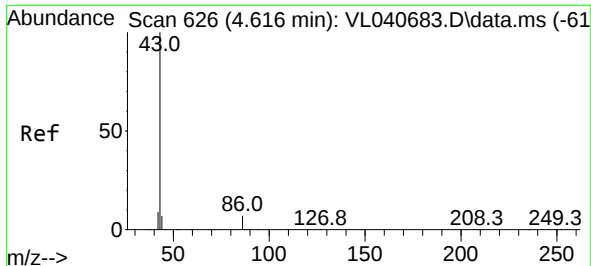
84 100

49 141.4 114.4 171.6

51 38.5 35.5 53.3

86 61.7 53.2 79.8



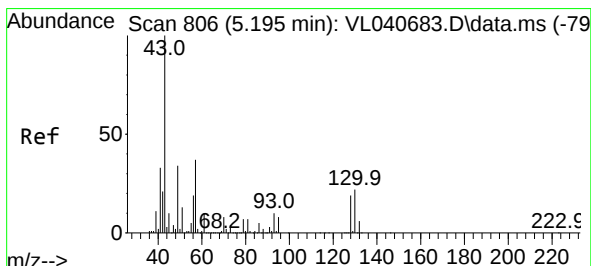
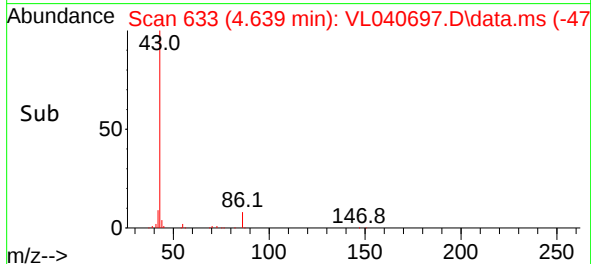
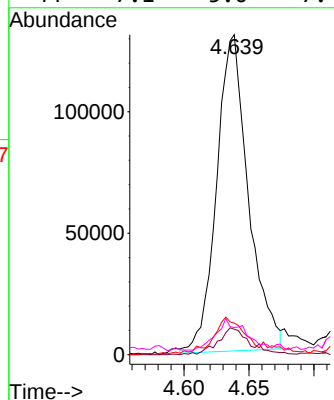
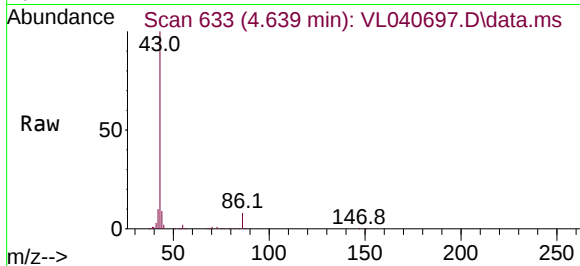


#23
 Vinyl Acetate
 Concen: 1.384 ppbv
 RT: 4.639 min Scan# 611
 Delta R.T. 0.006 min
 Lab File: VL040697.D
 Acq: 18 Sep 2023 13:32

Instrument :
 MSVOA_1
 ClientSampleId :
 SV1

Tgt Ion: 43 Resp: 221630

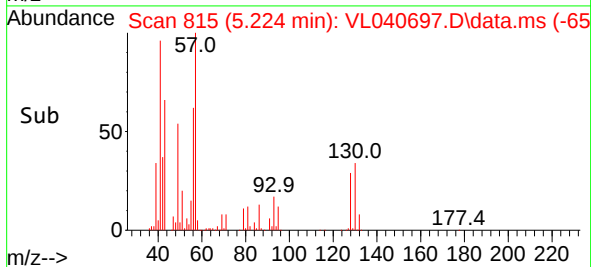
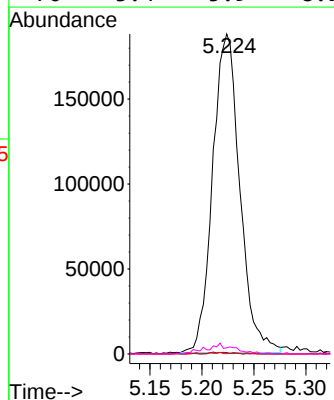
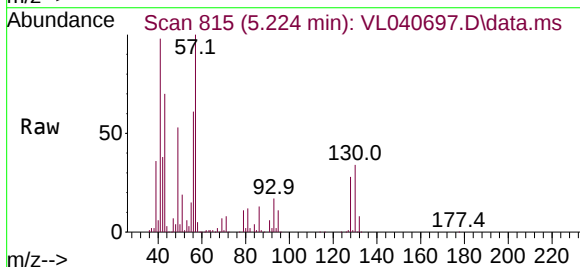
Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.6	8.4
42	9.6	7.6	11.4
44	7.1	5.0	7.4

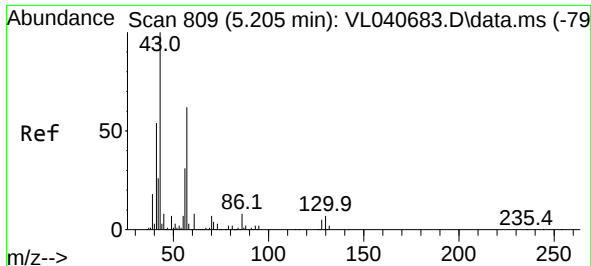


#25
 Ethyl Acetate
 Concen: 1.366 ppbv
 RT: 5.224 min Scan# 815
 Delta R.T. 0.013 min
 Lab File: VL040697.D
 Acq: 18 Sep 2023 13:32

Tgt Ion: 43 Resp: 341317

Ion	Ratio	Lower	Upper
43	100		
45	0.5	8.2	12.4#
61	0.3	8.2	12.4#
70	3.4	5.9	8.9#

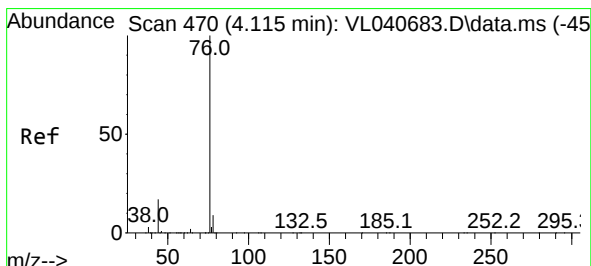
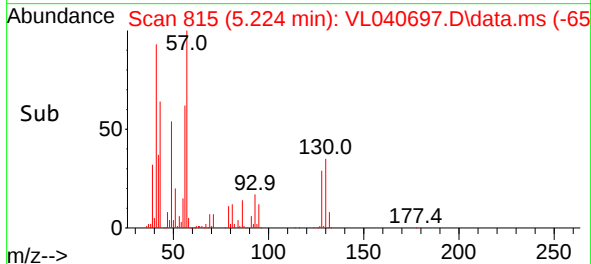
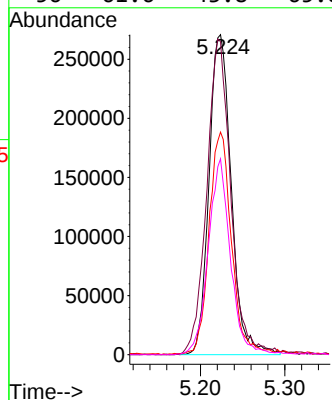
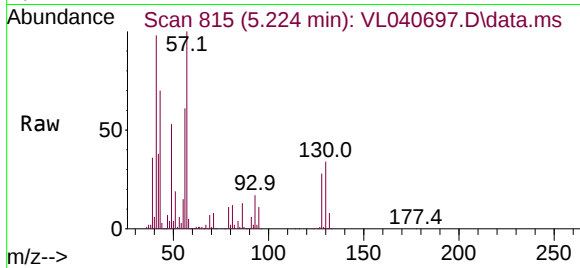




#26
Hexane
Concen: 4.211 ppbv
RT: 5.224 min Scan# 815
Delta R.T. 0.003 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

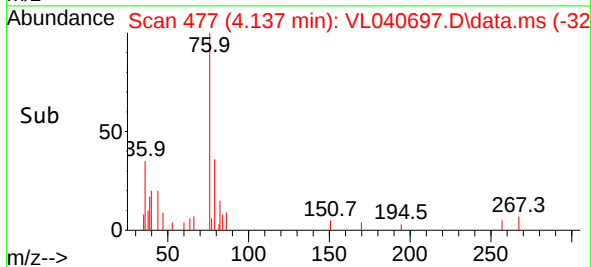
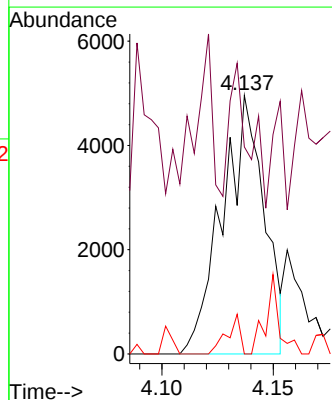
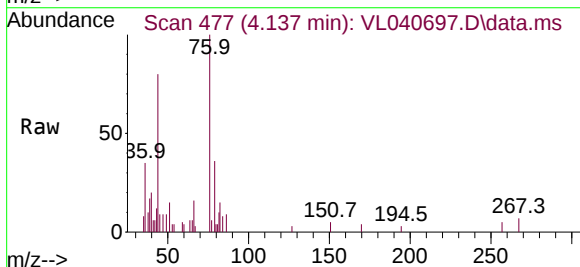
Instrument :
MSVOA_L
ClientSampleId :
SV1

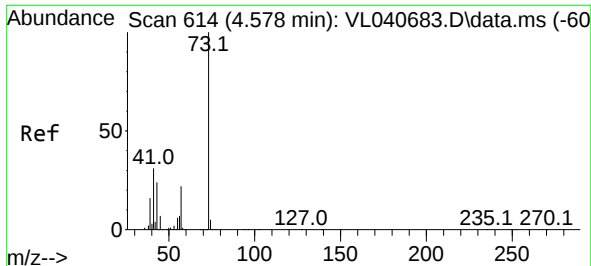
Tgt Ion: 57 Resp: 497418
Ion Ratio Lower Upper
57 100
41 108.1 75.2 112.8
43 70.1 185.6 278.4#
56 61.6 43.8 65.8



#27
Carbon Disulfide
Concen: 0.039 ppbv
RT: 4.137 min Scan# 477
Delta R.T. 0.006 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

Tgt Ion: 76 Resp: 6471
Ion Ratio Lower Upper
76 100
44 85.8 14.5 21.7#
78 0.0 7.7 11.5#





#28

Methyl tert-Butyl Ether

Concen: 0.132 ppbv

RT: 4.603 min Scan# 61

Delta R.T. 0.013 min

Lab File: VL040697.D

Acq: 18 Sep 2023 13:32

Instrument :

MSVOA_L

ClientSampleId :

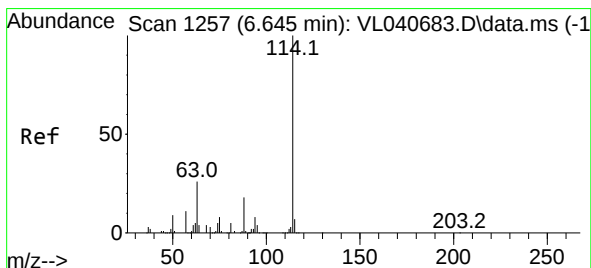
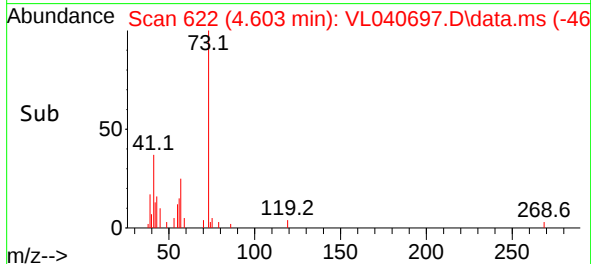
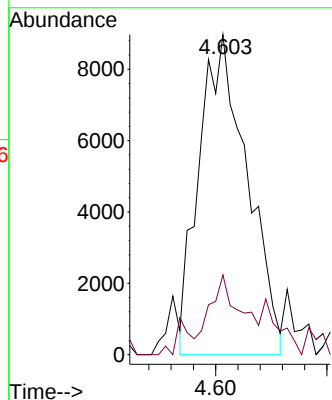
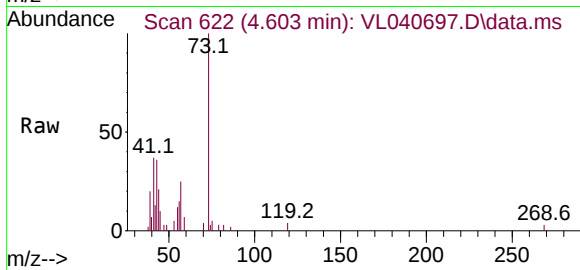
SV1

Tgt Ion: 73 Resp: 13451

Ion Ratio Lower Upper

73 100

57 29.3 18.8 28.2#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.664 min Scan# 1263

Delta R.T. 0.003 min

Lab File: VL040697.D

Acq: 18 Sep 2023 13:32

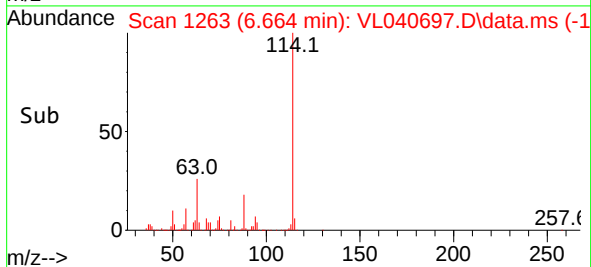
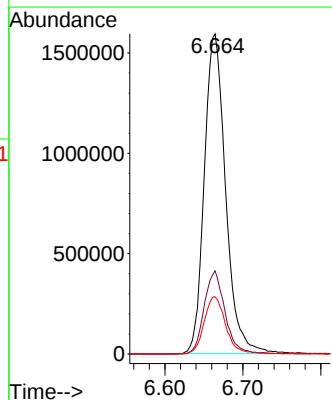
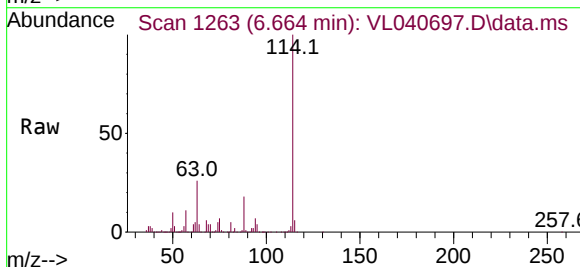
Tgt Ion:114 Resp: 3034075

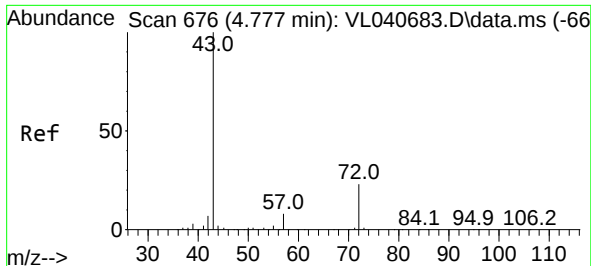
Ion Ratio Lower Upper

114 100

63 25.6 21.1 31.7

88 18.2 14.5 21.7

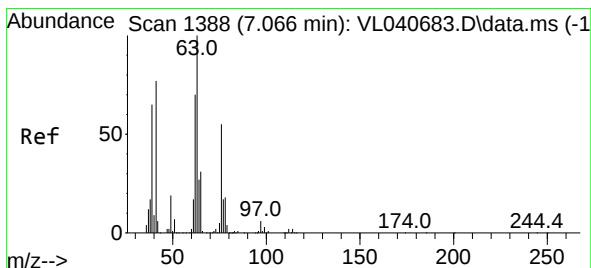
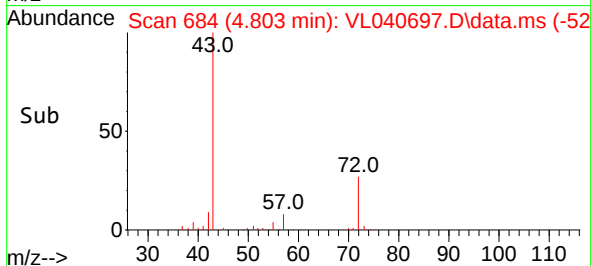
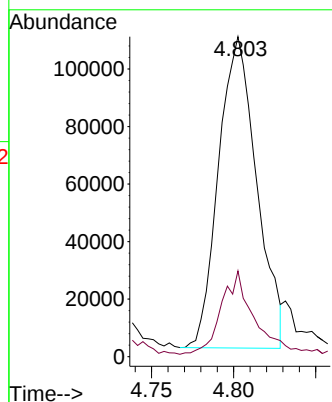
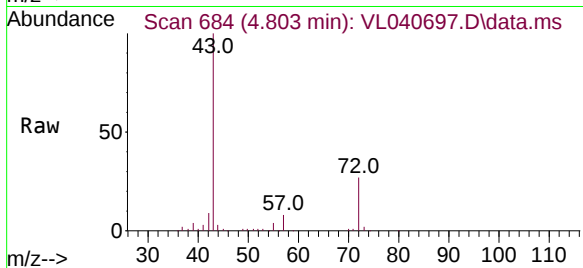




#34
2-Butanone
Concen: 1.145 ppbv
RT: 4.803 min Scan# 61
Delta R.T. 0.013 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

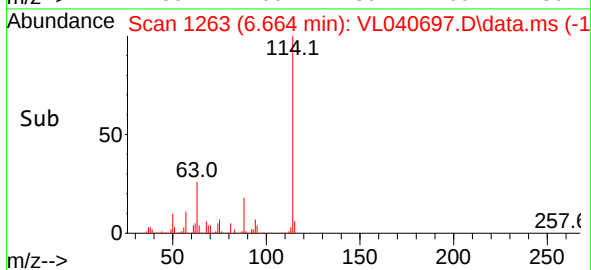
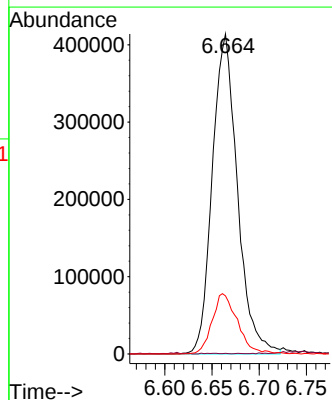
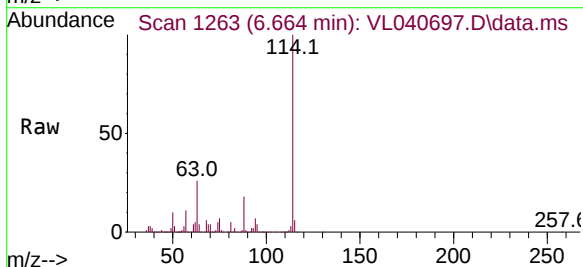
Instrument :
MSVOA_L
ClientSampleId :
SV1

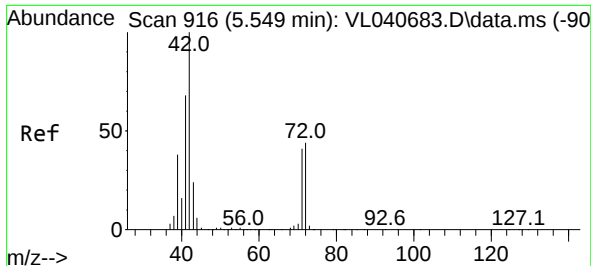
Tgt Ion: 43 Resp: 174760
Ion Ratio Lower Upper
43 100
72 27.0 18.6 27.8



#39
1,2-Dichloropropane
Concen: 8.842 ppbv
RT: 6.664 min Scan# 1263
Delta R.T. -0.418 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

Tgt Ion: 63 Resp: 764695
Ion Ratio Lower Upper
63 100
41 0.0 61.6 92.4#
62 18.2 55.8 83.8#





#41

Tetrahydrofuran

Concen: 2.601 ppbv

RT: 5.221 min Scan# 81

Delta R.T. -0.341 min

Lab File: VL040697.D

Acq: 18 Sep 2023 13:32

Instrument :

MSVOA_L

ClientSampleId :

SV1

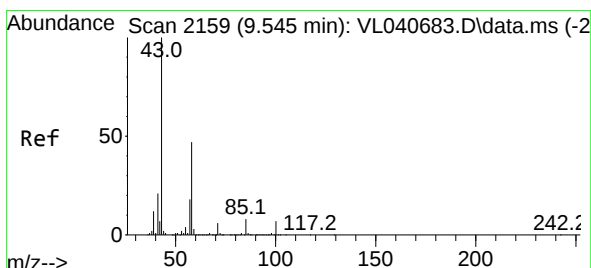
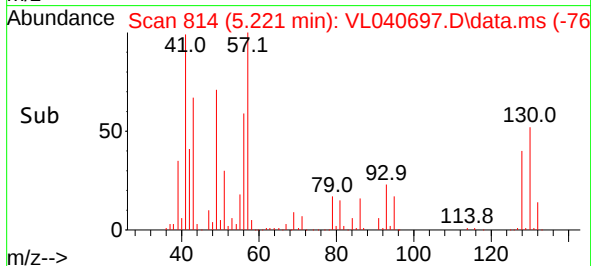
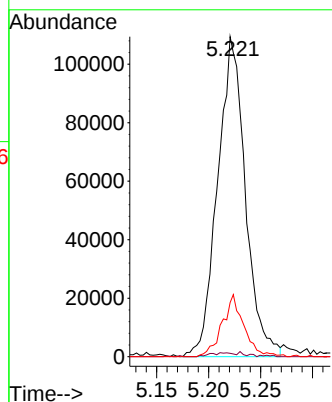
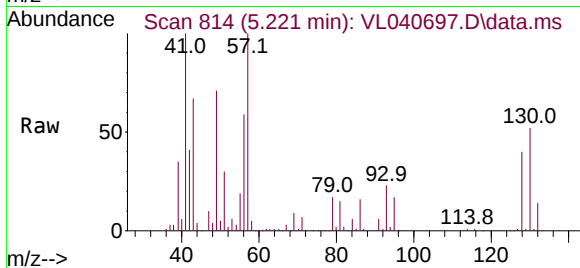
Tgt Ion: 42 Resp: 203512

Ion Ratio Lower Upper

42 100

72 1.4 34.9 52.3#

71 15.3 33.8 50.8#



#51

2-Hexanone

Concen: 0.158 ppbv

RT: 9.568 min Scan# 2166

Delta R.T. 0.013 min

Lab File: VL040697.D

Acq: 18 Sep 2023 13:32

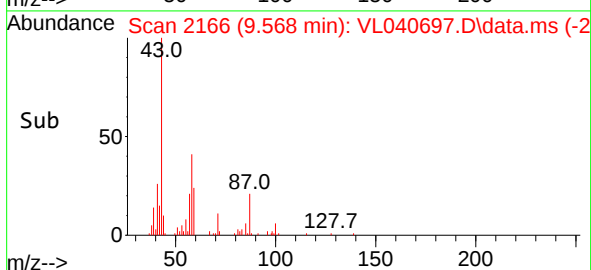
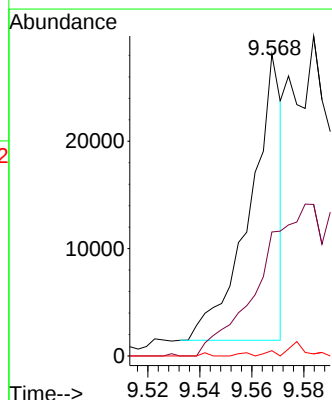
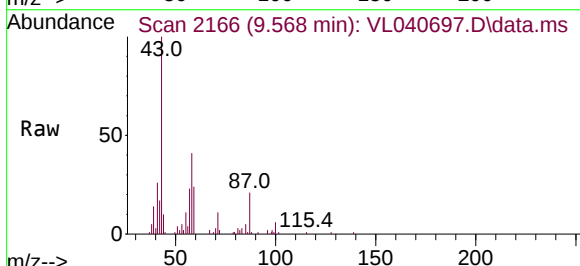
Tgt Ion: 43 Resp: 22529

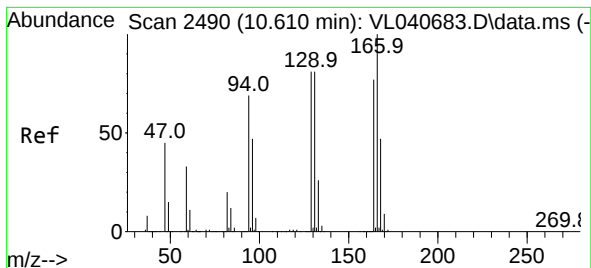
Ion Ratio Lower Upper

43 100

58 0.0 37.6 56.4#

98 0.7 0.6 1.0





#52

Tetrachloroethene

Concen: 1.048 ppbv

RT: 10.629 min Scan# 2496

Delta R.T. 0.003 min

Lab File: VL040697.D

Acq: 18 Sep 2023 13:32

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion:164 Resp: 76806

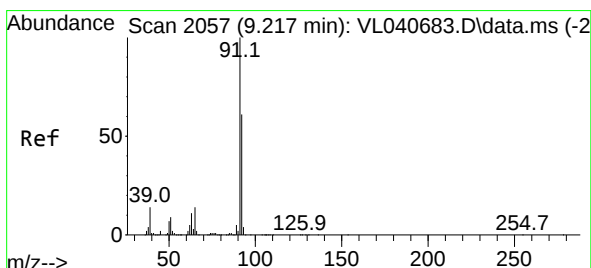
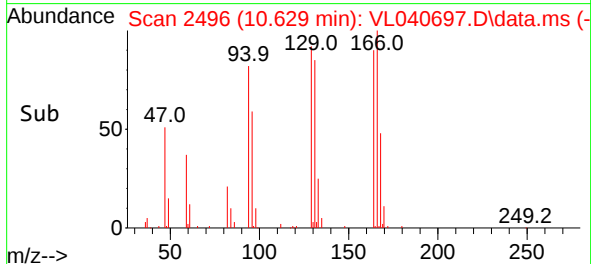
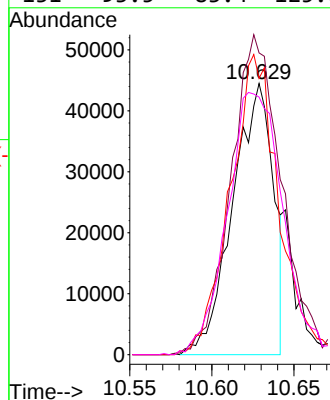
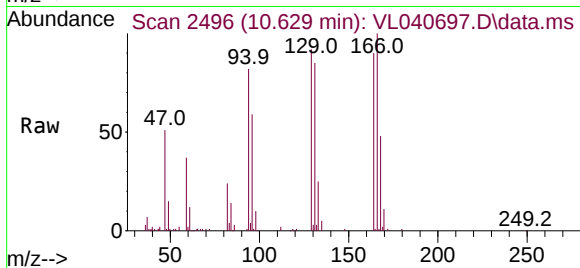
Ion Ratio Lower Upper

164 100

166 110.6 103.4 155.2

129 100.5 83.5 125.3

131 93.5 83.4 125.0



#53

Toluene

Concen: 0.146 ppbv

RT: 9.236 min Scan# 2063

Delta R.T. 0.006 min

Lab File: VL040697.D

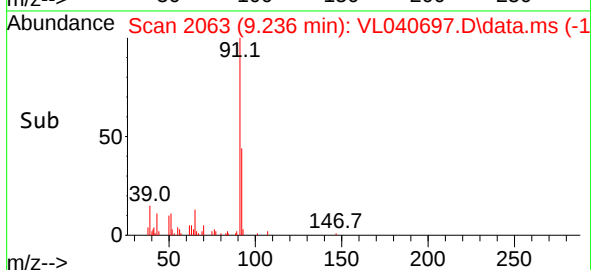
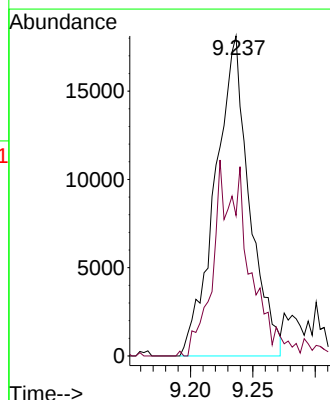
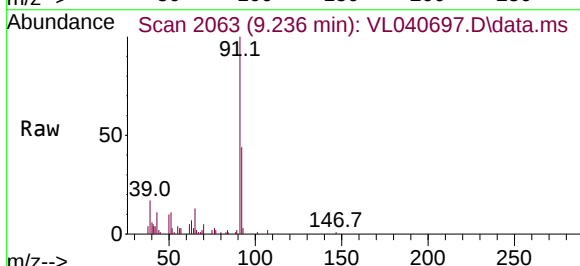
Acq: 18 Sep 2023 13:32

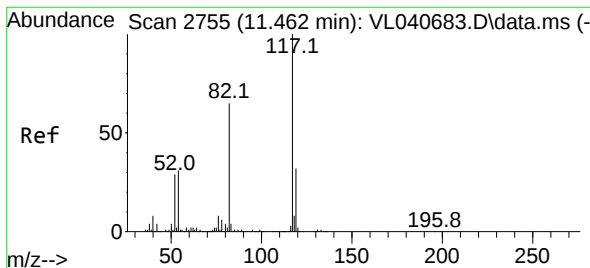
Tgt Ion: 91 Resp: 34630

Ion Ratio Lower Upper

91 100

92 63.7 48.5 72.7

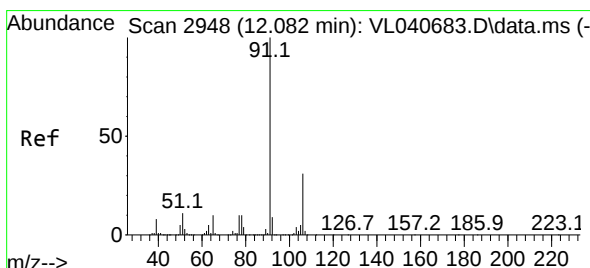
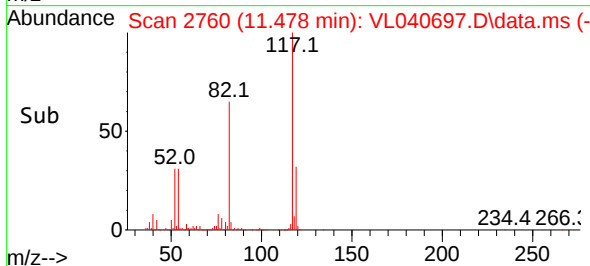
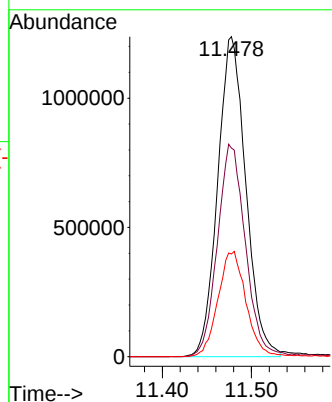
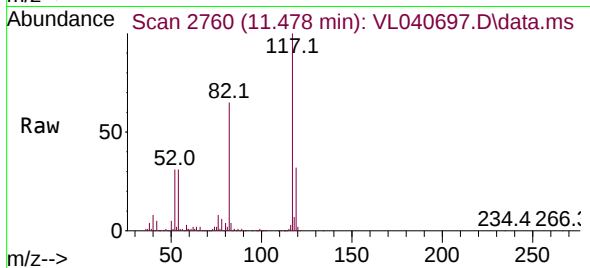




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.478 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

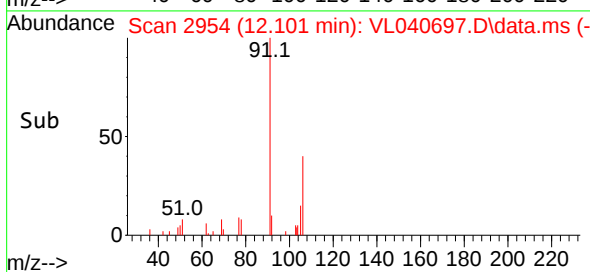
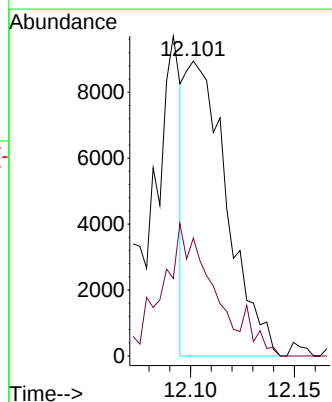
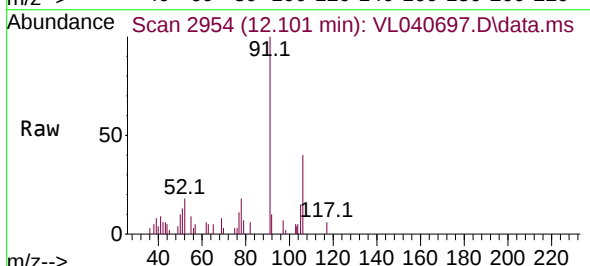
Instrument :
MSVOA_1
ClientSampleId :
SV1

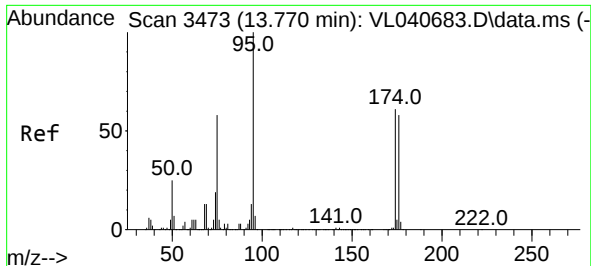
Tgt Ion:117 Resp: 2717515
Ion Ratio Lower Upper
117 100
82 66.8 51.4 77.0
119 33.1 24.7 37.1



#58
Ethyl Benzene
Concen: 0.040 ppbv
RT: 12.101 min Scan# 2954
Delta R.T. -0.000 min
Lab File: VL040697.D
Acq: 18 Sep 2023 13:32

Tgt Ion: 91 Resp: 12487
Ion Ratio Lower Upper
91 100
106 36.2 24.7 37.1

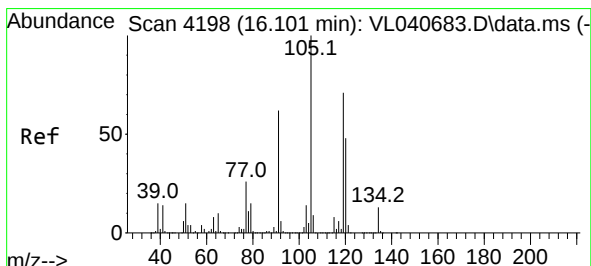
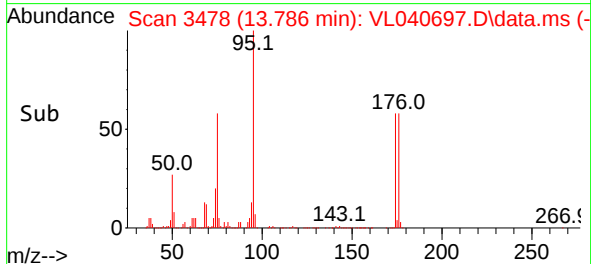
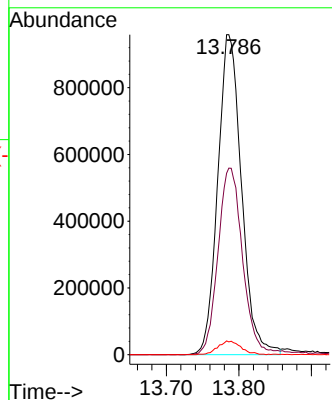
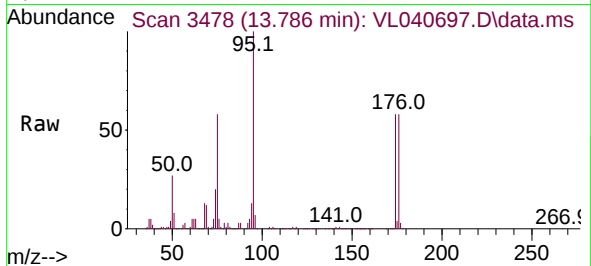




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.378 ppbv
 RT: 13.786 min Scan# 3473
 Delta R.T. -0.000 min
 Lab File: VL040697.D
 Acq: 18 Sep 2023 13:32

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Tgt Ion: 95 Resp: 2179024
 Ion Ratio Lower Upper
 95 100
 174 61.9 48.9 73.3
 175 4.3 3.5 5.3



#74
 1,2,4-Trimethylbenzene
 Concen: 0.036 ppbv
 RT: 16.114 min Scan# 4202
 Delta R.T. -0.003 min
 Lab File: VL040697.D
 Acq: 18 Sep 2023 13:32

Tgt Ion: 105 Resp: 12272
 Ion Ratio Lower Upper
 105 100
 120 5.8 38.6 57.8#
 91 20.0 50.0 75.0#
 77 11.7 20.6 31.0#

