

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022123\
 Data File : VL040196.D
 Acq On : 21 Feb 2023 15:50
 Operator : SY/MD
 Sample : 01626-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-11

Quant Time: Feb 22 03:23:33 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL021523AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Feb 22 03:17:31 2023
 Response via : Initial Calibration

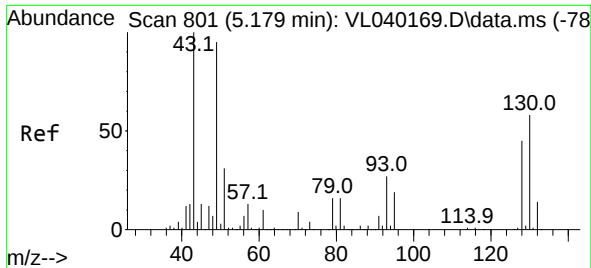
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.205	49	869772	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.671	114	2205721	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.491	117	1941026	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.806	95	1599167	10.019	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	= 100.200%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.732	85	56586	0.349	ppbv	92
3) Chlorodifluoromethane	2.655	51	404984	3.898	ppbv #	69
4) Chloromethane	2.816	50	30379	0.465	ppbv	95
9) Propene	2.703	41	108476	2.561	ppbv	85
10) Heptane	7.594	43	23715	0.235	ppbv	92
11) Trichlorofluoromethane	3.568	101	29723	0.204	ppbv	90
12) 1,1,2-Trichlorotrifluo...	4.079	101	8132	0.076	ppbv	90
13) Ethanol	3.240	45	1536215	394.000	ppbv	94
15) Acetone	3.475	43	945191	9.026	ppbv	96
16) 1,3-Butadiene	2.970	39	32036	0.670	ppbv #	61
17) tert-Butyl alcohol	3.893	59	4569	0.048	ppbv #	72
19) Isopropyl Alcohol	3.584	45	2044615	41.075	ppbv #	95
20) Methylene Chloride	3.941	84	121628	2.231	ppbv	97
21) Allyl Chloride	3.944	41	2353	0.037	ppbv #	1
23) Vinyl Acetate	4.626	43	38656	1.216	ppbv #	25
25) Ethyl Acetate	5.224	43	139643	0.717	ppbv #	94
26) Hexane	5.227	57	115456	1.382	ppbv #	57
30) Cyclohexane	6.623	84	9538	0.145	ppbv #	67
34) 2-Butanone	4.803	43	35970	0.331	ppbv	92
36) Benzene	6.388	78	166743	0.971	ppbv	95
37) 1,2-Dichloroethane	5.822	62	3862	0.036	ppbv #	82
39) 1,2-Dichloropropane	6.668	63	543908	8.145	ppbv #	26
44) 2,2,4-Trimethylpentane	7.349	57	107312	0.375	ppbv #	87
53) Toluene	9.243	91	426310	2.319	ppbv	99
58) Ethyl Benzene	12.114	91	73953	0.314	ppbv	93
59) m/p-Xylene	12.372	91	125143	0.599	ppbv #	60
60) o-Xylene	13.089	91	72966	0.363	ppbv	100
69) p-Isopropyltoluene	17.031	119	23652	0.083	ppbv #	86
73) 1,3,5-Trimethylbenzene	15.381	105	15712	0.076	ppbv	96
74) 1,2,4-Trimethylbenzene	16.130	105	36019	0.159	ppbv #	67

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

Quant Time: Feb 22 03:23:33 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL021523AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 22 03:17:31 2023
Response via : Initial Calibration

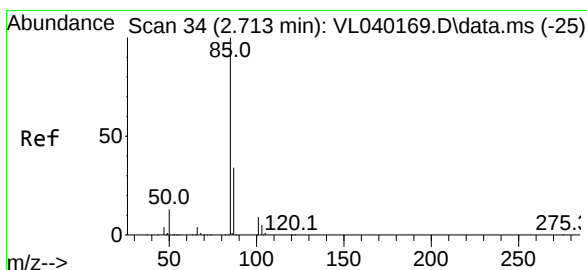
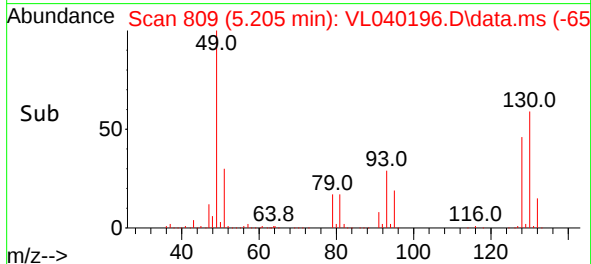
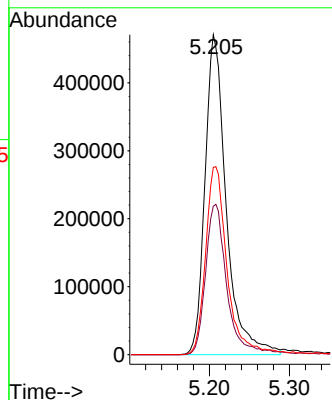
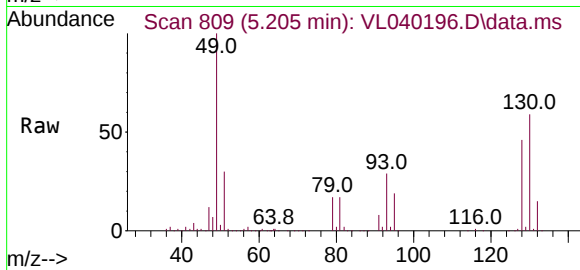




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.205 min Scan# 80
 Delta R.T. -0.000 min
 Lab File: VL040196.D
 Acq: 21 Feb 2023 15:50

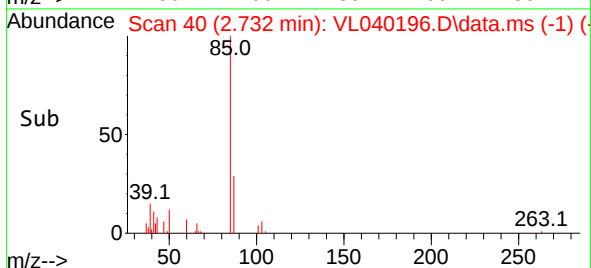
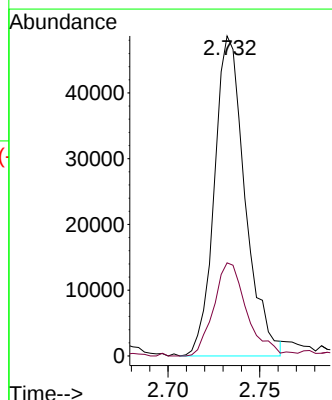
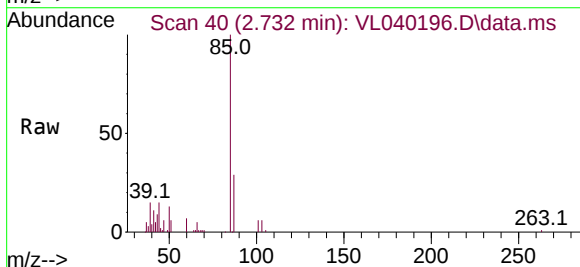
Instrument :
 MSVOA_1
 ClientSampleId :
 IA-11

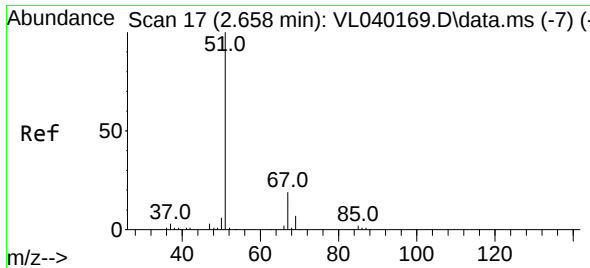
Tgt Ion: 49 Resp: 869772
 Ion Ratio Lower Upper
 49 100
 128 48.2 24.1 72.3
 130 61.2 30.9 92.8



#2
 Dichlorodifluoromethane
 Concen: 0.349 ppbv
 RT: 2.732 min Scan# 40
 Delta R.T. 0.003 min
 Lab File: VL040196.D
 Acq: 21 Feb 2023 15:50

Tgt Ion: 85 Resp: 56586
 Ion Ratio Lower Upper
 85 100
 87 29.1 27.0 40.6

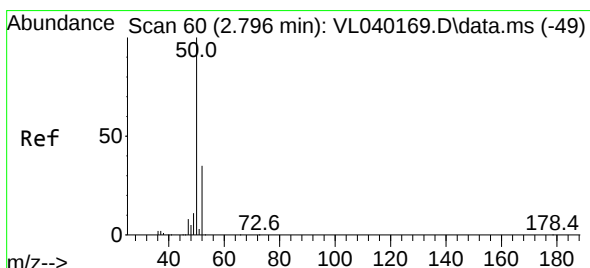
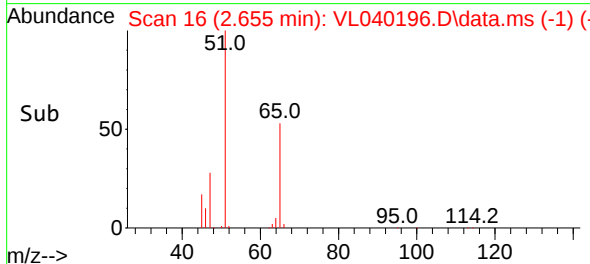
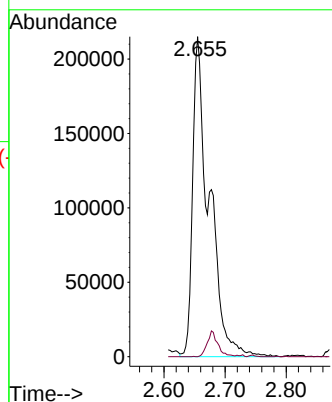
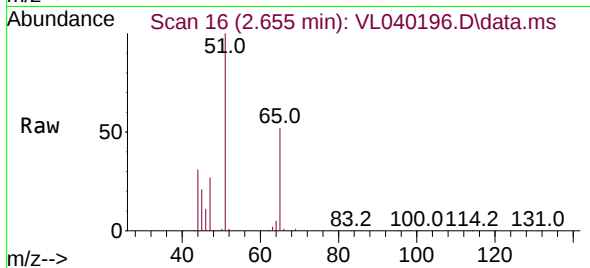




#3
Chlorodifluoromethane
Concen: 3.898 ppbv
RT: 2.655 min Scan# 11
Delta R.T. -0.019 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

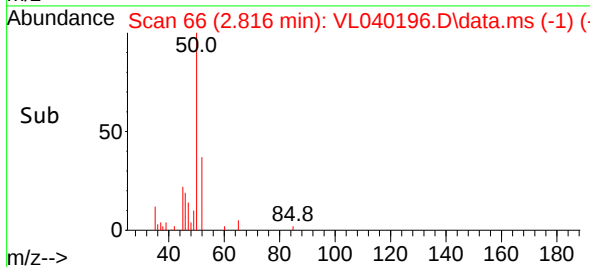
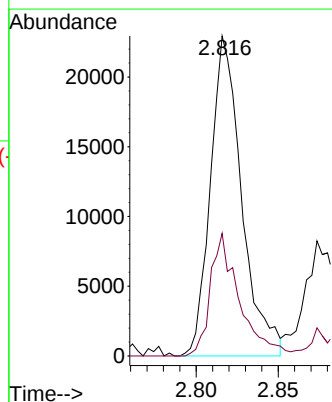
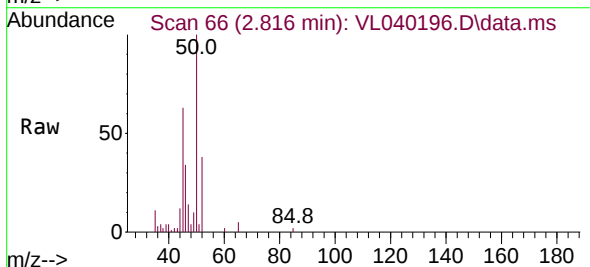
Instrument :
MSVOA_L
ClientSampleId :
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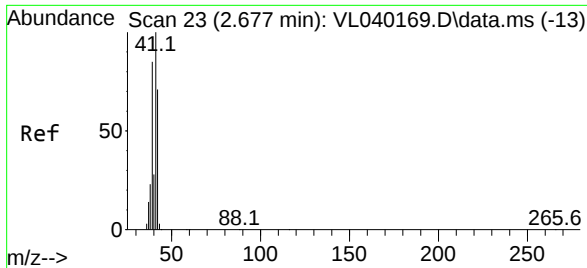
Tgt Ion: 51 Resp: 404984
Ion Ratio Lower Upper
51 100
67 5.3 15.4 23.2#



#4
Chloromethane
Concen: 0.465 ppbv
RT: 2.816 min Scan# 66
Delta R.T. 0.003 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Tgt Ion: 50 Resp: 30379
Ion Ratio Lower Upper
50 100
52 38.3 28.3 42.5





#9

Propene

Concen: 2.561 ppbv

RT: 2.703 min Scan# 31

Delta R.T. 0.010 min

Lab File: VL040196.D

Acq: 21 Feb 2023 15:50

Instrument :

MSVOA_1

ClientSampleId :

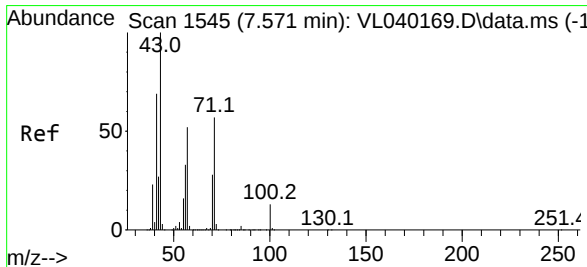
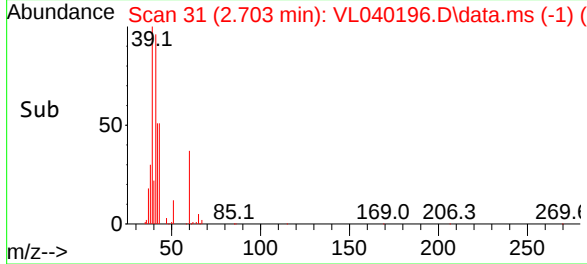
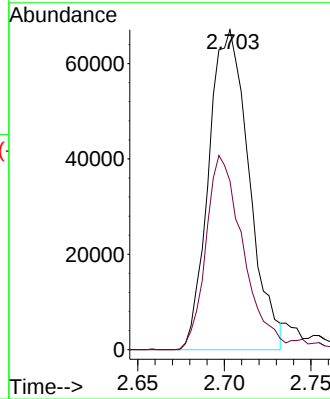
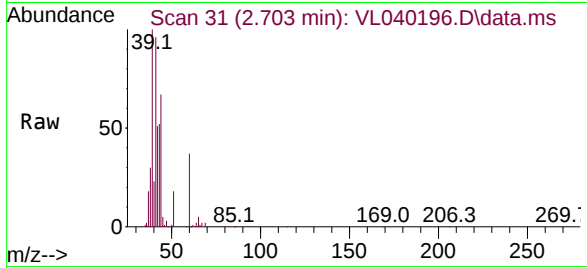
IA-11

Tgt Ion: 41 Resp: 108476

Ion Ratio Lower Upper

41 100

42 58.7 56.9 85.3



#10

Heptane

Concen: 0.235 ppbv

RT: 7.594 min Scan# 1552

Delta R.T. -0.010 min

Lab File: VL040196.D

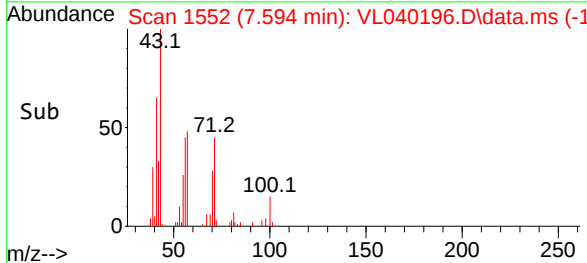
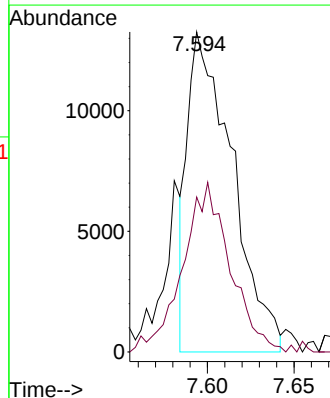
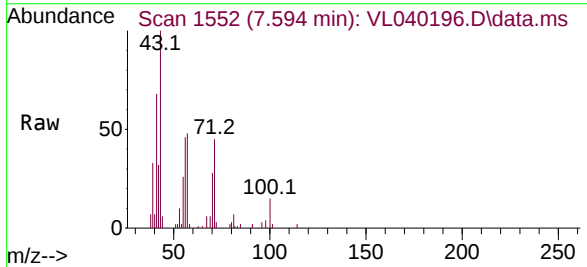
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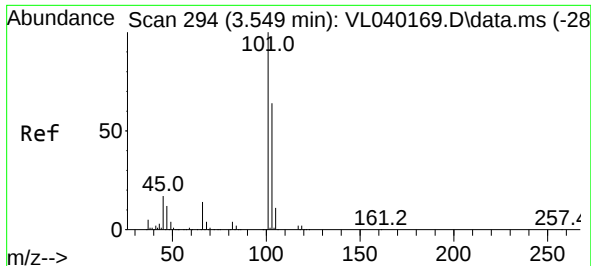
Tgt Ion: 43 Resp: 23715

Ion Ratio Lower Upper

43 100

57 57.3 41.4 62.2

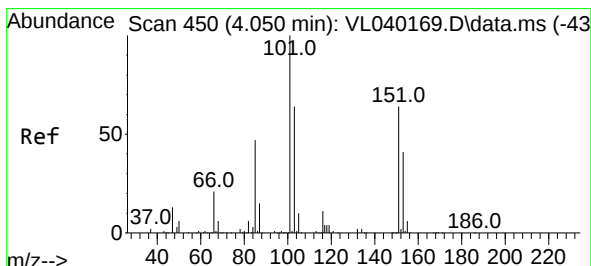
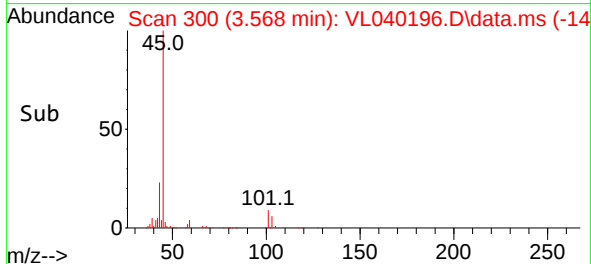
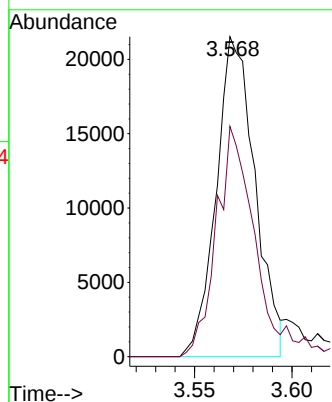
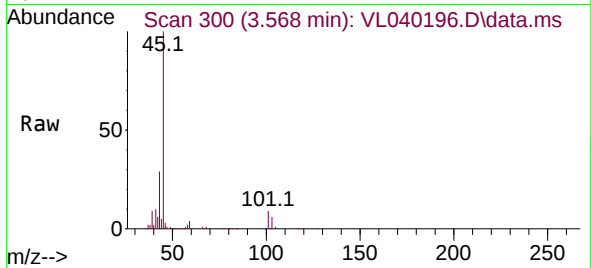




#11
 Trichlorofluoromethane
 Concen: 0.204 ppbv
 RT: 3.568 min Scan# 300
 Delta R.T. 0.000 min
 Lab File: VL040196.D
 Acq: 21 Feb 2023 15:50

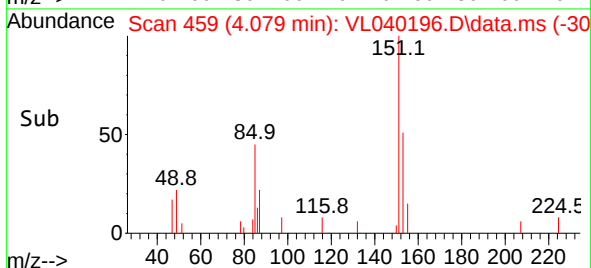
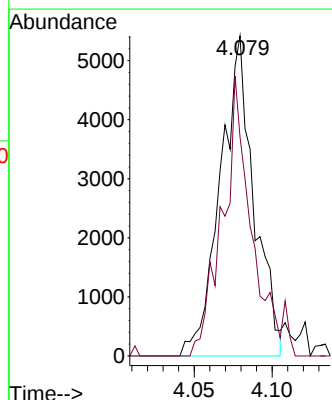
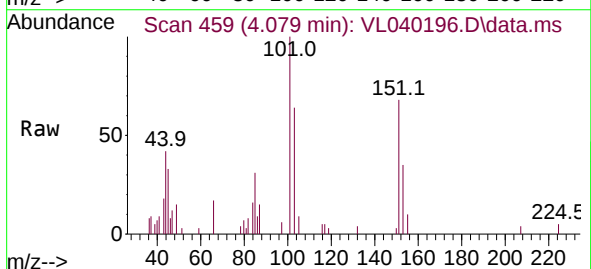
Instrument :
 MSVOA_L
 ClientSampleId :
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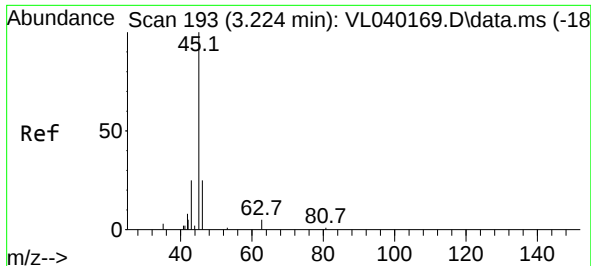
Tgt Ion:101 Resp: 29723
 Ion Ratio Lower Upper
 101 100
 103 72.0 51.0 76.6



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.076 ppbv
 RT: 4.079 min Scan# 459
 Delta R.T. 0.006 min
 Lab File: VL040196.D
 Acq: 21 Feb 2023 15:50

Tgt Ion:101 Resp: 8132
 Ion Ratio Lower Upper
 101 100
 151 76.5 54.7 82.1

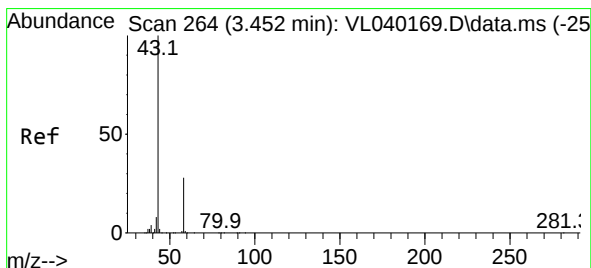
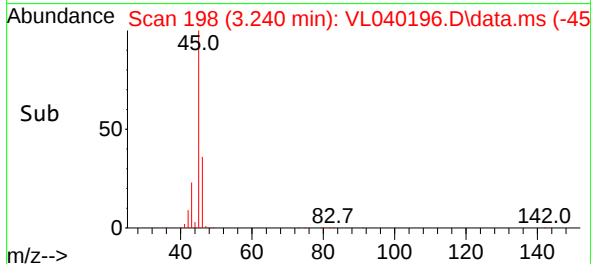
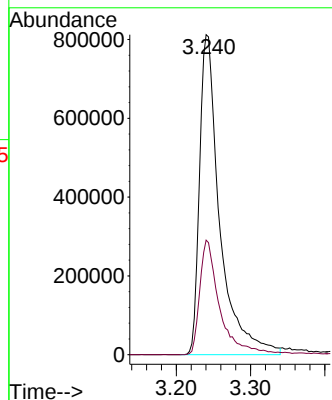
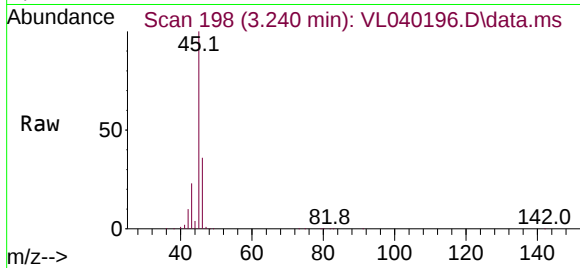




#13
Ethanol
Concen: 394.000 ppbv
RT: 3.240 min Scan# 193
Delta R.T. -0.010 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

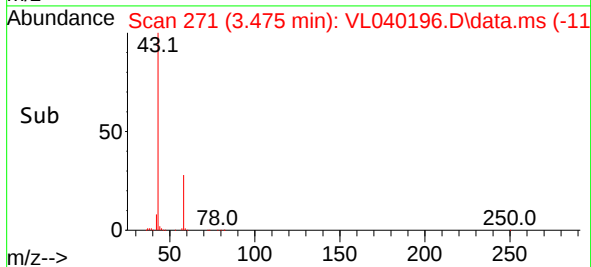
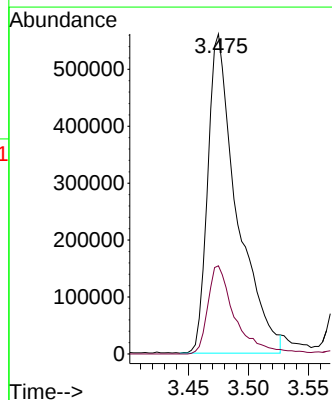
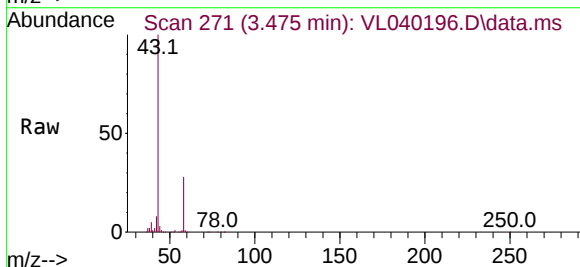
Instrument :
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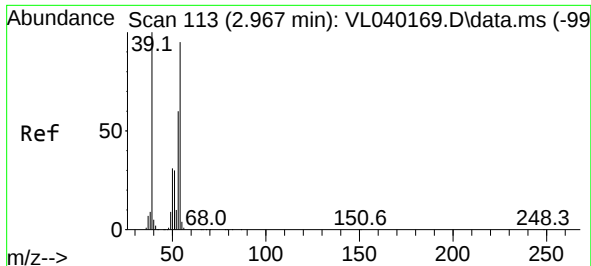
Tgt Ion: 45 Resp: 1536215
Ion Ratio Lower Upper
45 100
46 36.6 13.3 53.1



#15
Acetone
Concen: 9.026 ppbv
RT: 3.475 min Scan# 271
Delta R.T. 0.003 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Tgt Ion: 43 Resp: 945191
Ion Ratio Lower Upper
43 100
58 25.8 22.4 33.6

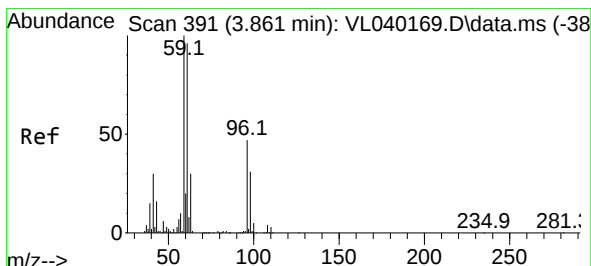
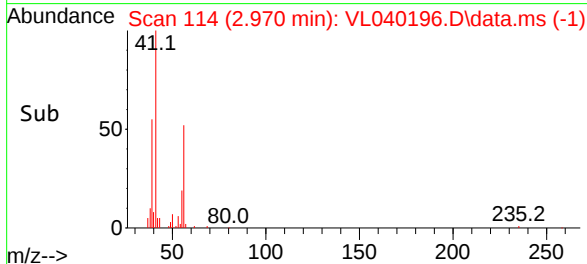
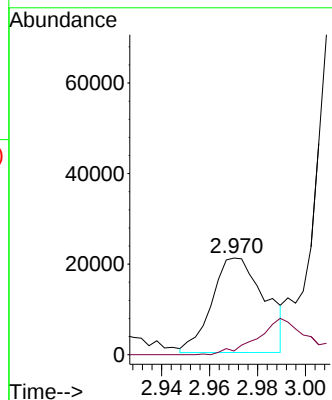
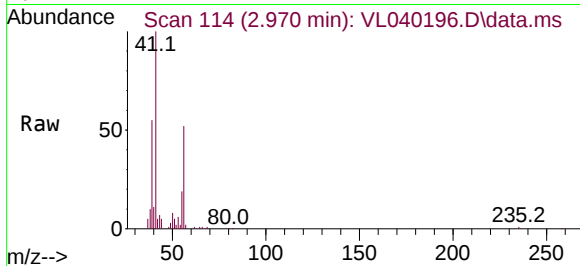




#16
1,3-Butadiene
Concen: 0.670 ppbv
RT: 2.970 min Scan# 113
Delta R.T. -0.016 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

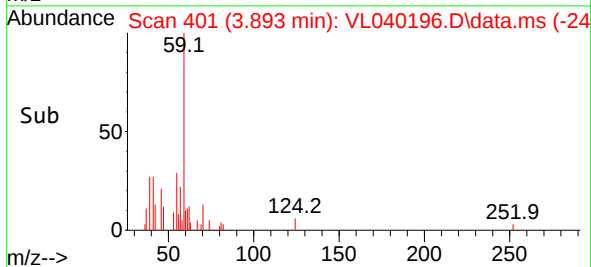
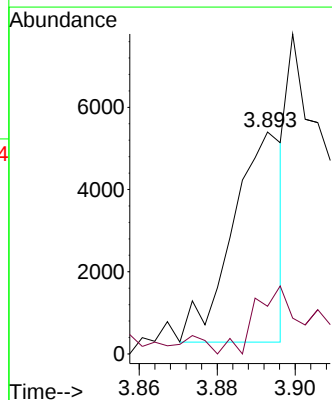
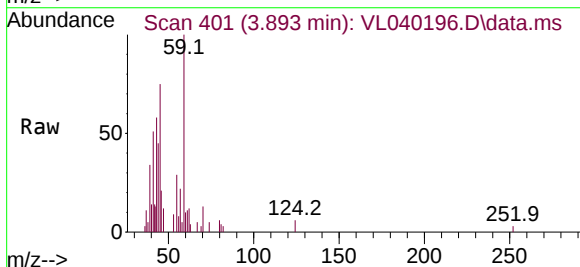
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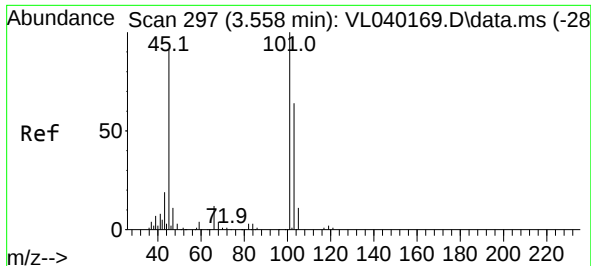
Tgt Ion: 39 Resp: 32036
Ion Ratio Lower Upper
39 100
54 47.8 66.7 100.1#



#17
tert-Butyl alcohol
Concen: 0.048 ppbv
RT: 3.893 min Scan# 401
Delta R.T. 0.006 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Tgt Ion: 59 Resp: 4569
Ion Ratio Lower Upper
59 100
57 0.0 8.5 12.7#





#19

Isopropyl Alcohol

Concen: 41.075 ppbv

RT: 3.584 min Scan# 305

Delta R.T. 0.003 min

Lab File: VL040196.D

Acq: 21 Feb 2023 15:50

Instrument :

MSVOA_L

ClientSampleId :

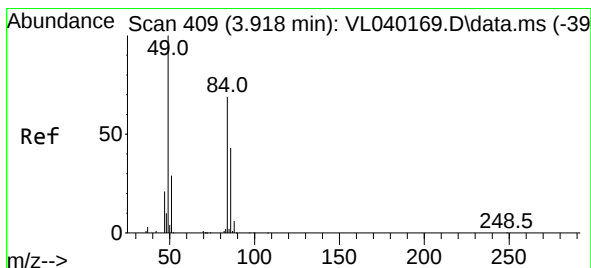
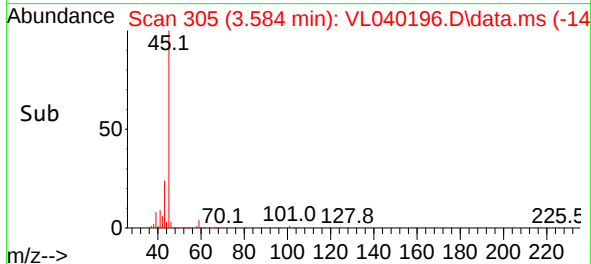
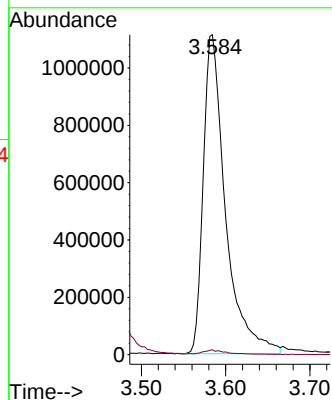
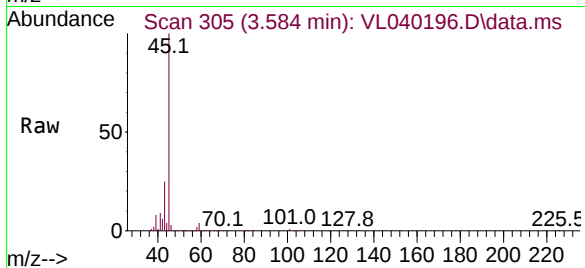
IA-11

Tgt Ion: 45 Resp: 2044615

Ion Ratio Lower Upper

45 100

58 1.6 2.6 3.8#



#20

Methylene Chloride

Concen: 2.231 ppbv

RT: 3.941 min Scan# 416

Delta R.T. 0.003 min

Lab File: VL040196.D

Acq: 21 Feb 2023 15:50

Tgt Ion: 84 Resp: 121628

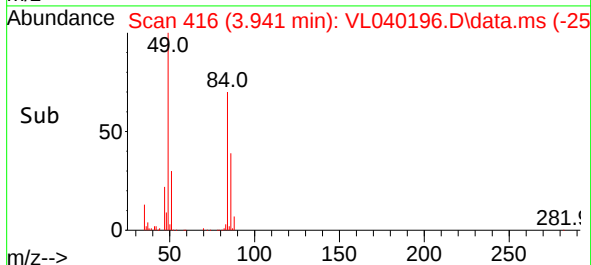
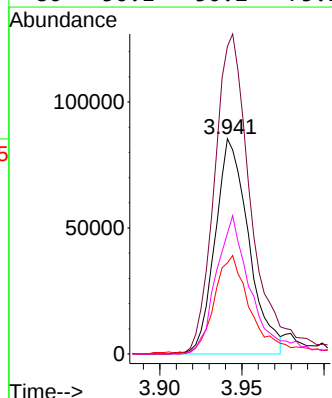
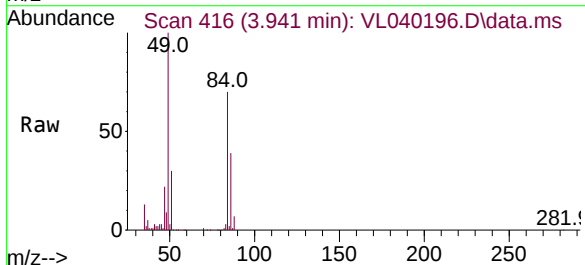
Ion Ratio Lower Upper

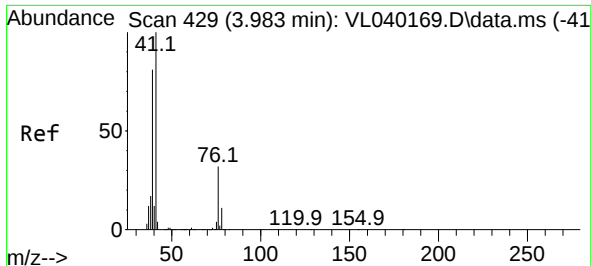
84 100

49 142.4 115.5 173.3

51 41.4 33.1 49.7

86 56.1 50.2 75.2





#21

Allyl Chloride

Concen: 0.037 ppbv

RT: 3.944 min Scan# 41

Delta R.T. -0.058 min

Lab File: VL040196.D

Acq: 21 Feb 2023 15:50

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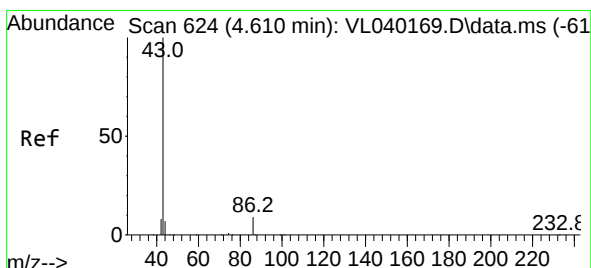
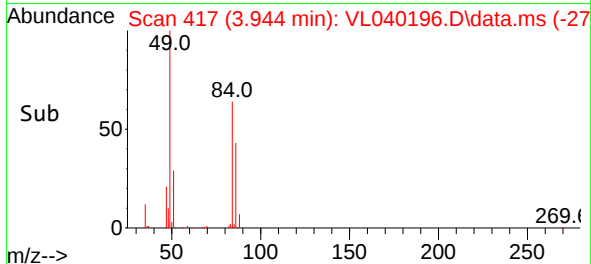
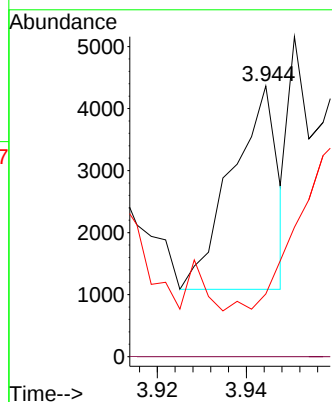
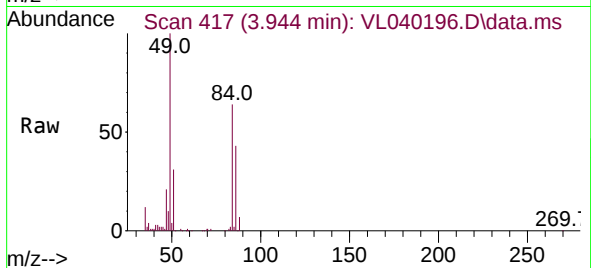
Tgt Ion: 41 Resp: 2353

Ion Ratio Lower Upper

41 100

76 0.0 25.5 38.3#

39 436.1 64.5 96.7#



#23

Vinyl Acetate

Concen: 1.216 ppbv

RT: 4.626 min Scan# 629

Delta R.T. -0.013 min

Lab File: VL040196.D

Acq: 21 Feb 2023 15:50

Tgt Ion: 43 Resp: 38656

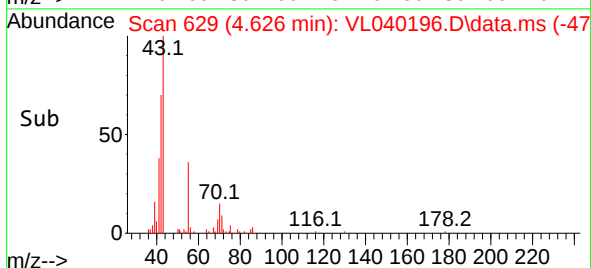
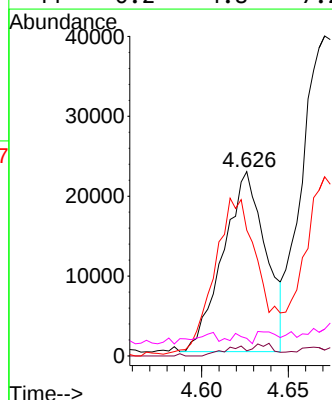
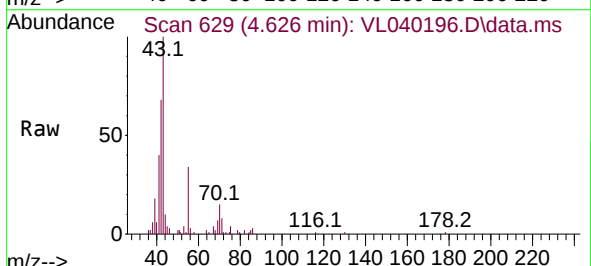
Ion Ratio Lower Upper

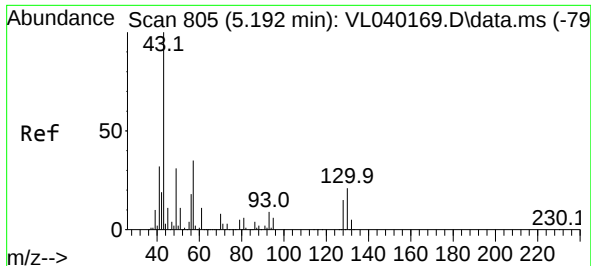
43 100

86 1.6 5.6 8.4#

42 66.6 7.6 11.4#

44 0.2 4.8 7.2#



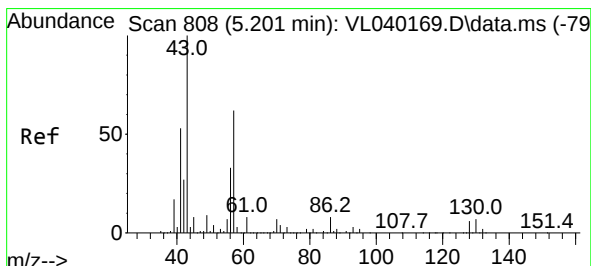
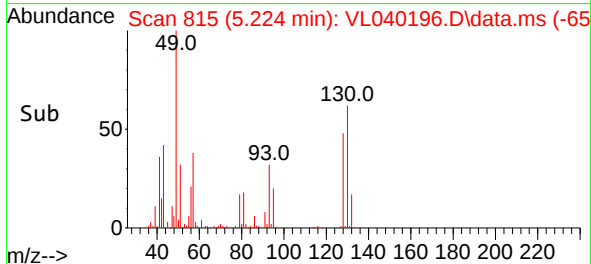
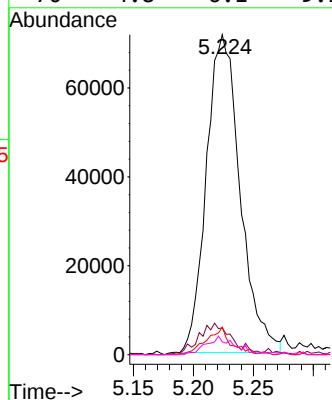
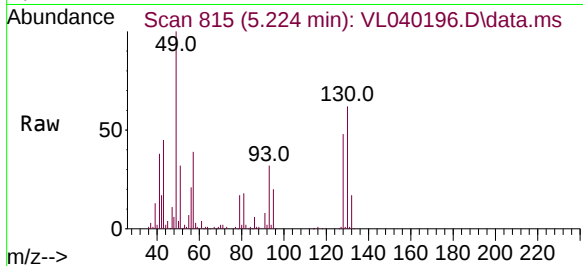


#25
Ethyl Acetate
Concen: 0.717 ppbv
RT: 5.224 min Scan# 815
Delta R.T. 0.006 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-11

Tgt Ion: 43 Resp: 139643

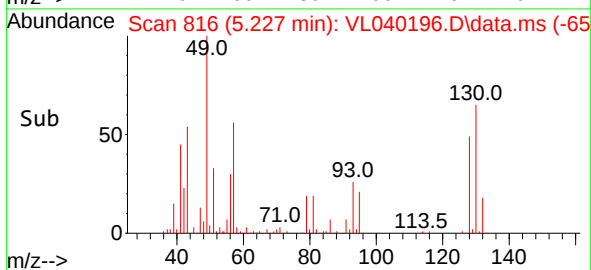
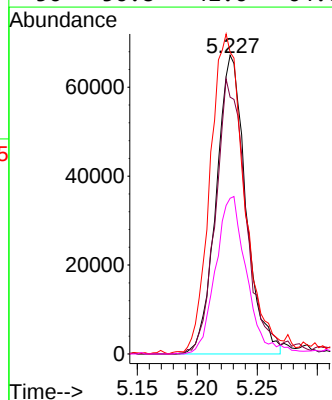
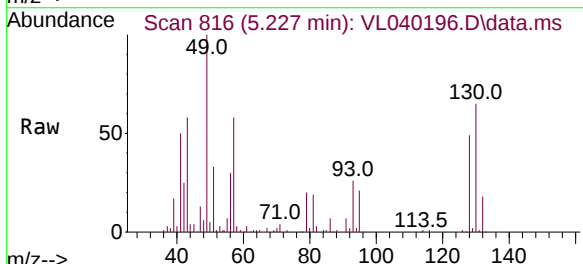
Ion	Ratio	Lower	Upper
43	100		
45	10.3	8.3	12.5
61	6.5	8.4	12.6#
70	4.8	6.1	9.1#

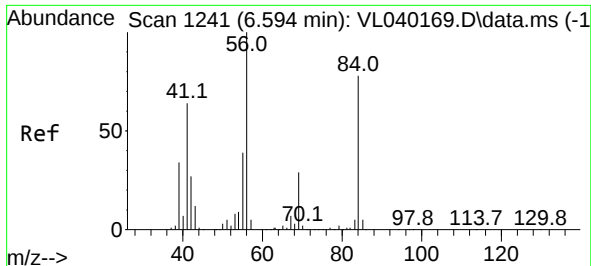


#26
Hexane
Concen: 1.382 ppbv
RT: 5.227 min Scan# 816
Delta R.T. 0.003 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Tgt Ion: 57 Resp: 115456

Ion	Ratio	Lower	Upper
57	100		
41	98.4	74.3	111.5
43	128.0	193.0	289.4#
56	56.8	42.6	64.0

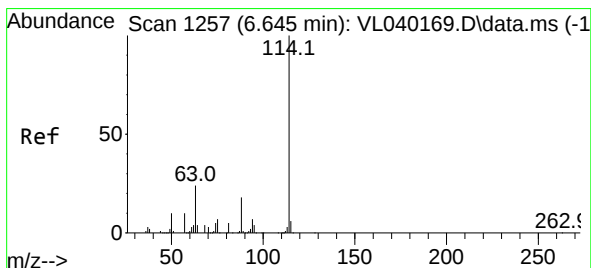
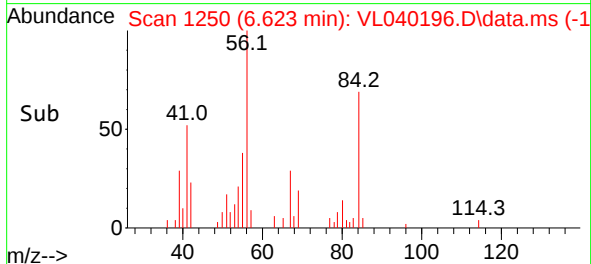
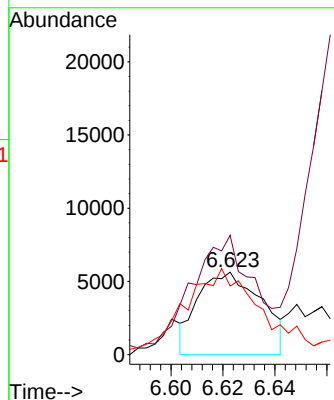
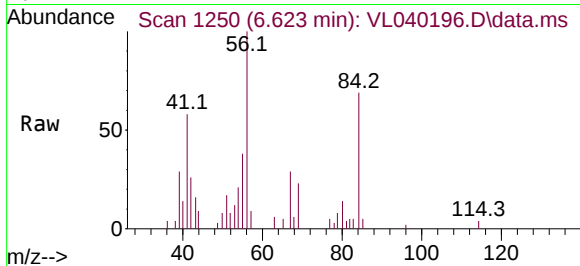




#30
Cyclohexane
Concen: 0.145 ppbv
RT: 6.623 min Scan# 1250
Delta R.T. 0.000 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

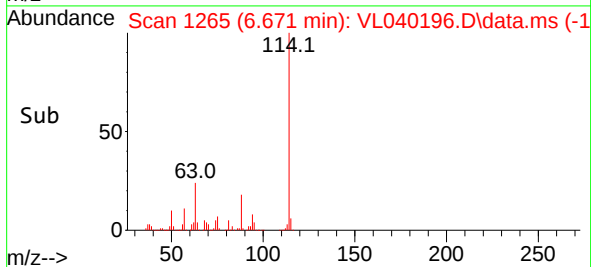
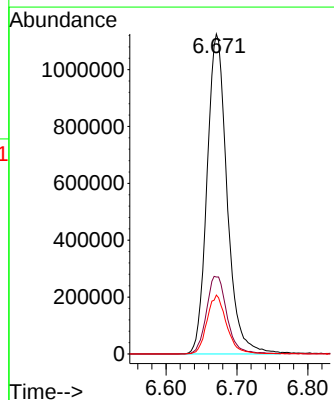
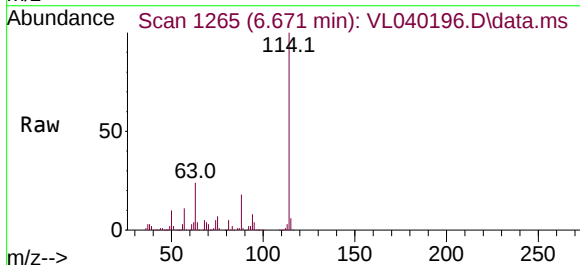
Instrument :
MSVOA_L
ClientSampleId :
IA-11

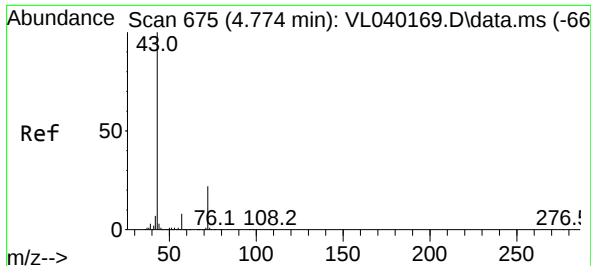
Tgt Ion: 84 Resp: 9538
Ion Ratio Lower Upper
84 100
56 154.3 109.9 164.9
41 143.7 67.8 101.6#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.671 min Scan# 1265
Delta R.T. -0.003 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Tgt Ion: 114 Resp: 2205721
Ion Ratio Lower Upper
114 100
63 25.0 20.4 30.6
88 18.2 14.3 21.5

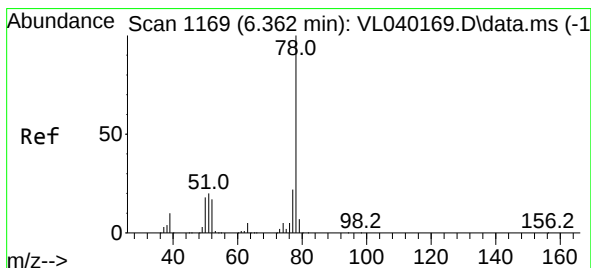
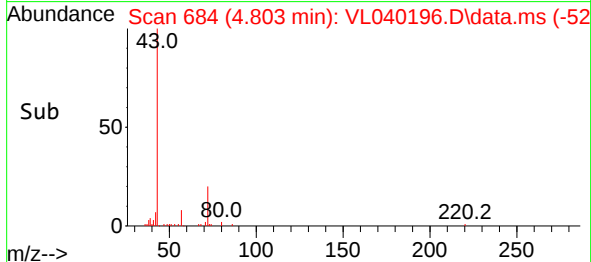
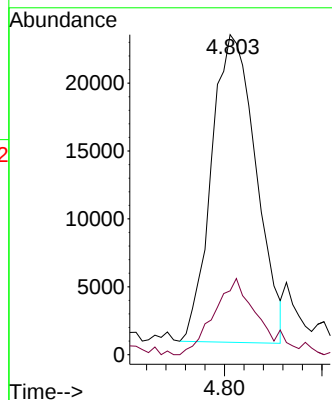
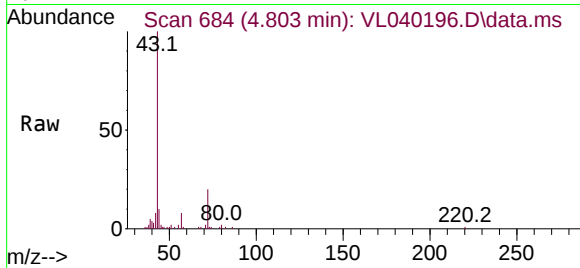




#34
2-Butanone
Concen: 0.331 ppbv
RT: 4.803 min Scan# 61
Delta R.T. 0.007 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

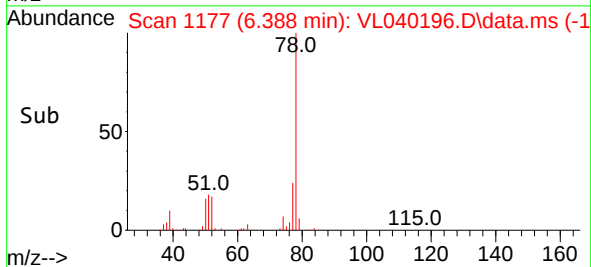
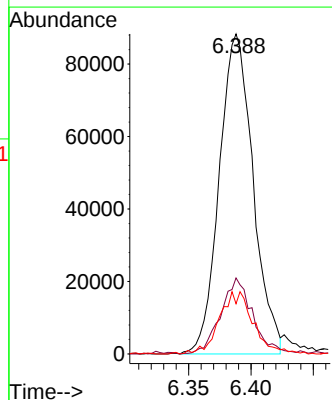
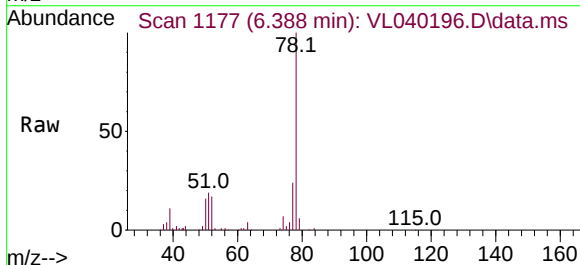
Instrument :
MSVOA_L
ClientSampleId :
IA-11

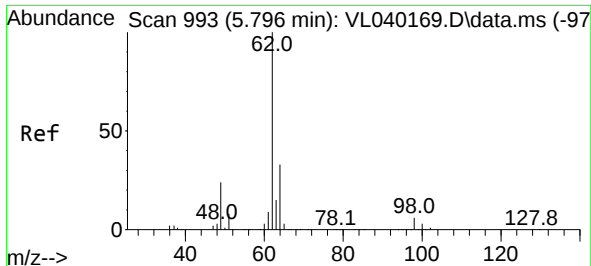
Tgt Ion: 43 Resp: 35970
Ion Ratio Lower Upper
43 100
72 26.3 17.8 26.8



#36
Benzene
Concen: 0.971 ppbv
RT: 6.388 min Scan# 1177
Delta R.T. 0.000 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Tgt Ion: 78 Resp: 166743
Ion Ratio Lower Upper
78 100
77 23.7 17.5 26.3
50 15.7 14.6 22.0





#37

1,2-Dichloroethane

Concen: 0.036 ppbv

RT: 5.822 min Scan# 1

Delta R.T. 0.000 min

Lab File: VL040196.D

Acq: 21 Feb 2023 15:50

Instrument :

MSVOA_1

ClientSampleId :

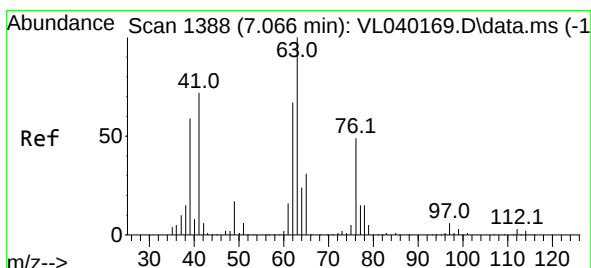
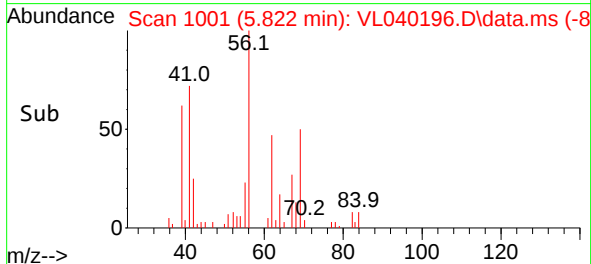
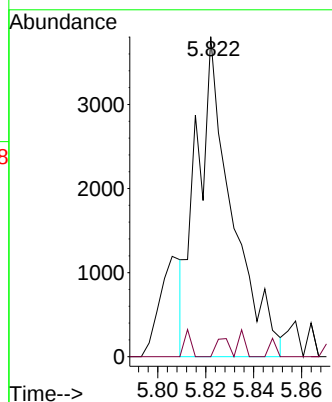
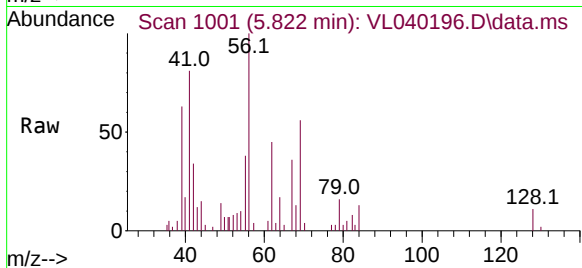
IA-11

Tgt Ion: 62 Resp: 3862

Ion Ratio Lower Upper

62 100

98 0.0 4.7 7.1#



#39

1,2-Dichloropropane

Concen: 8.145 ppbv

RT: 6.668 min Scan# 1264

Delta R.T. -0.428 min

Lab File: VL040196.D

Acq: 21 Feb 2023 15:50

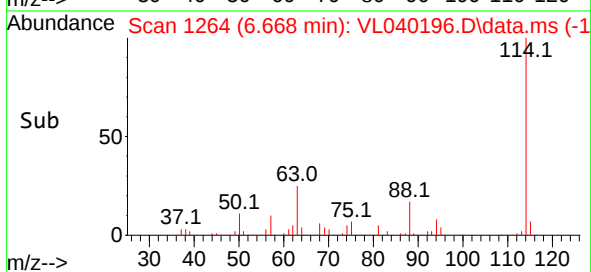
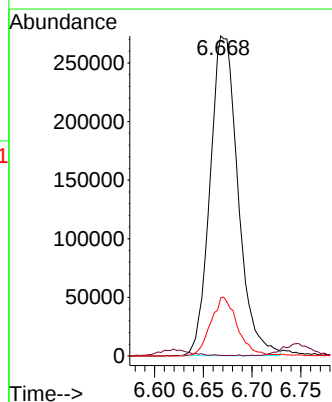
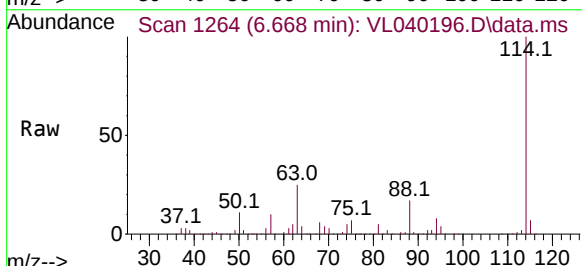
Tgt Ion: 63 Resp: 543908

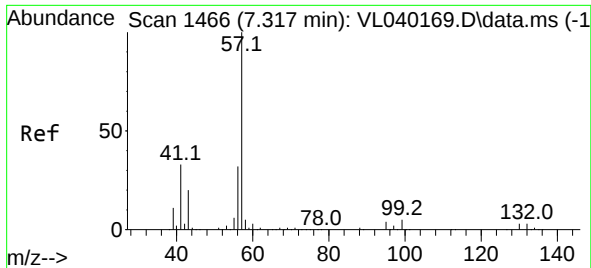
Ion Ratio Lower Upper

63 100

41 0.0 57.6 86.4#

62 18.1 54.0 81.0#

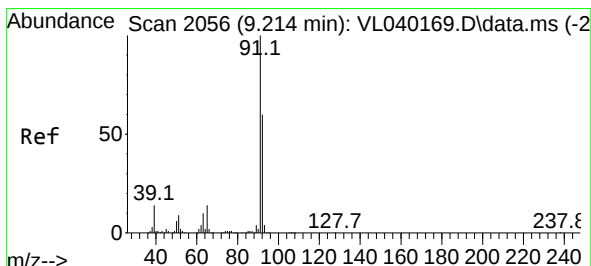
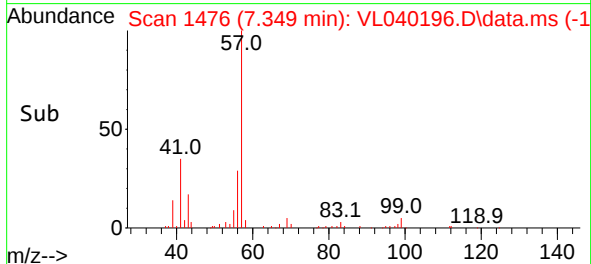
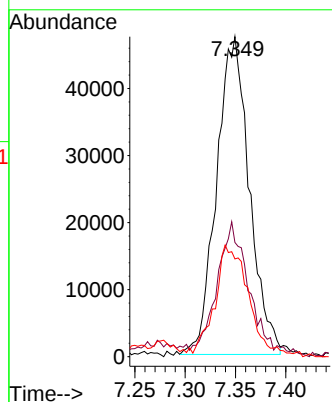
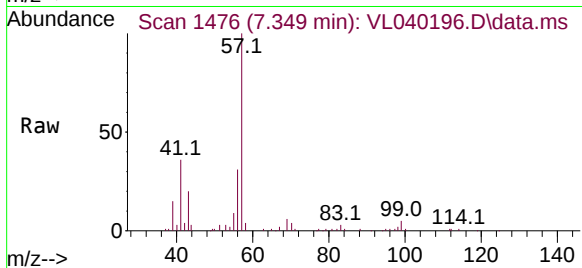




#44
 2,2,4-Trimethylpentane
 Concen: 0.375 ppbv
 RT: 7.349 min Scan# 1466
 Delta R.T. 0.003 min
 Lab File: VL040196.D
 Acq: 21 Feb 2023 15:50

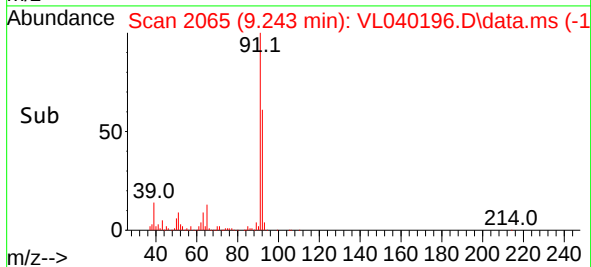
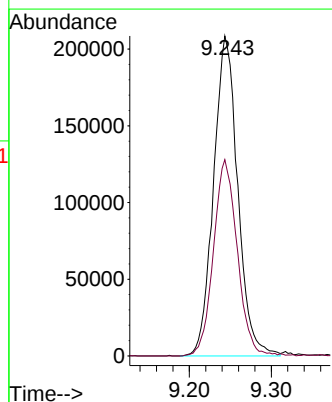
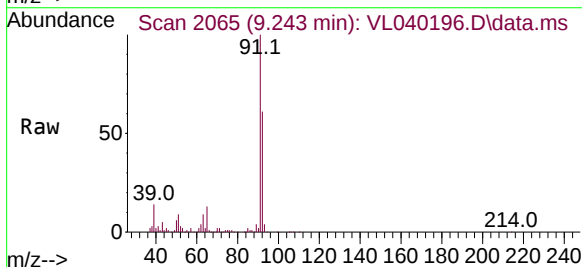
Instrument :
 MSVOA_1
 ClientSampleId :
 IA-11

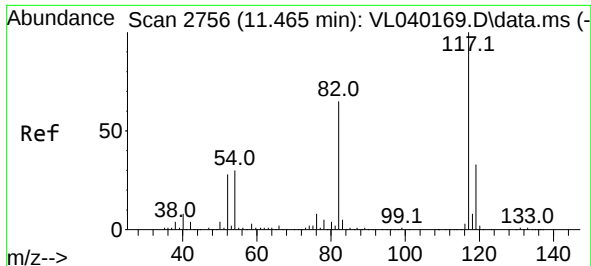
Tgt Ion: 57 Resp: 107312
 Ion Ratio Lower Upper
 57 100
 41 41.6 26.2 39.4#
 56 37.2 24.9 37.3



#53
 Toluene
 Concen: 2.319 ppbv
 RT: 9.243 min Scan# 2065
 Delta R.T. -0.003 min
 Lab File: VL040196.D
 Acq: 21 Feb 2023 15:50

Tgt Ion: 91 Resp: 426310
 Ion Ratio Lower Upper
 91 100
 92 60.6 48.9 73.3

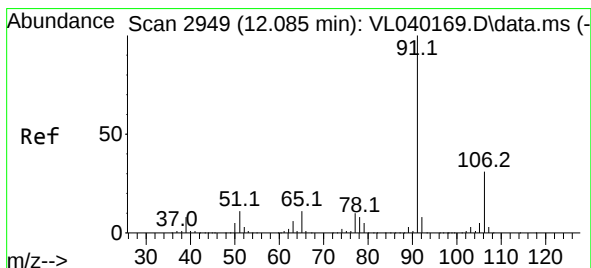
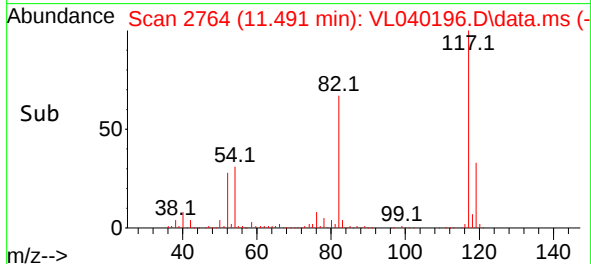
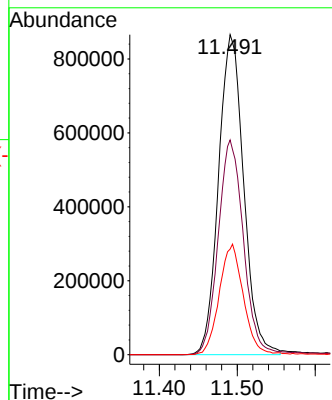
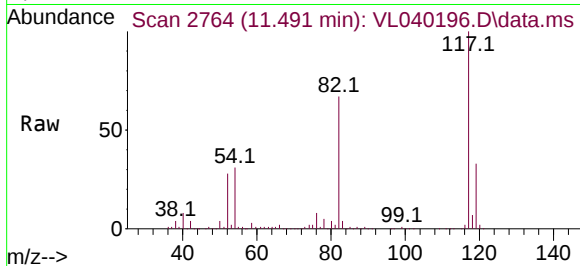




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.491 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

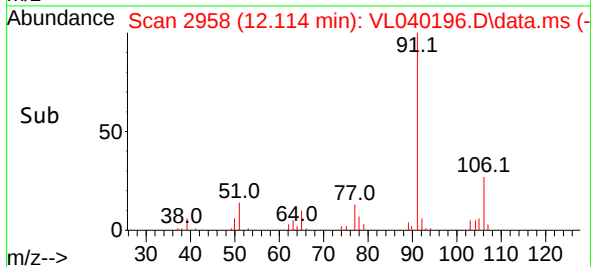
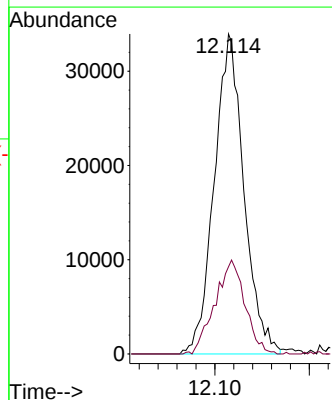
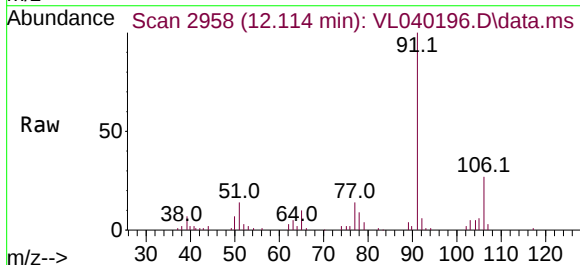
Instrument :
MSVOA_L
ClientSampleId :
IA-11

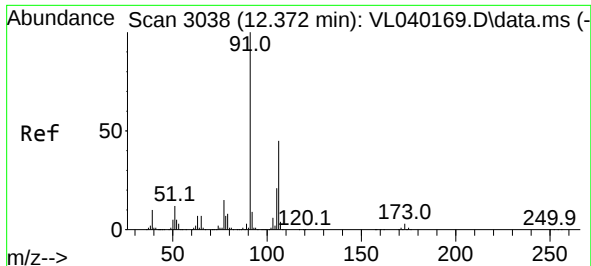
Tgt Ion:117 Resp: 1941026
Ion Ratio Lower Upper
117 100
82 68.2 53.3 79.9
119 33.5 24.6 37.0



#58
Ethyl Benzene
Concen: 0.314 ppbv
RT: 12.114 min Scan# 2958
Delta R.T. -0.003 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Tgt Ion: 91 Resp: 73953
Ion Ratio Lower Upper
91 100
106 27.3 24.9 37.3





#59

m/p-Xylene

Concen: 0.599 ppbv

RT: 12.372 min Scan# 3038

Delta R.T. -0.026 min

Lab File: VL040196.D

Acq: 21 Feb 2023 15:50

Instrument :

MSVOA_1

ClientSampleId :

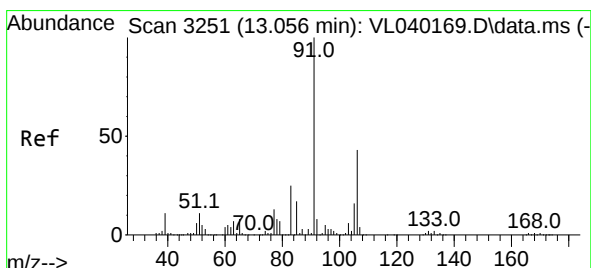
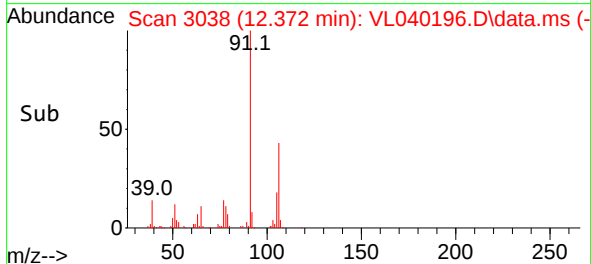
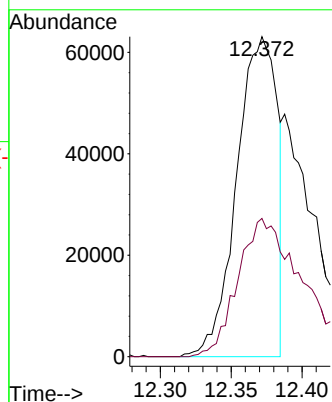
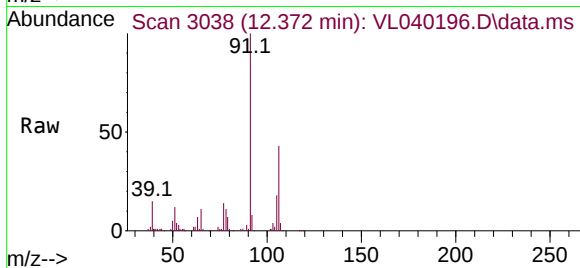
IA-11

Tgt Ion: 91 Resp: 125143

Ion Ratio Lower Upper

91 100

106 68.6 34.6 51.8#



#60

o-Xylene

Concen: 0.363 ppbv

RT: 13.089 min Scan# 3261

Delta R.T. 0.003 min

Lab File: VL040196.D

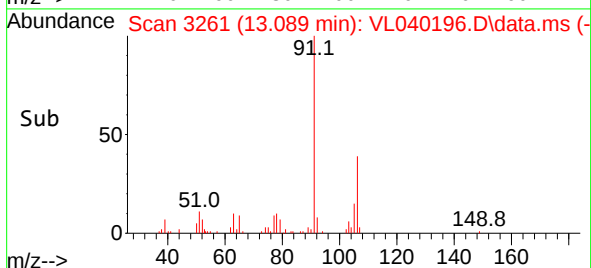
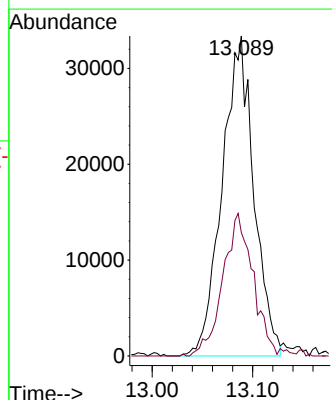
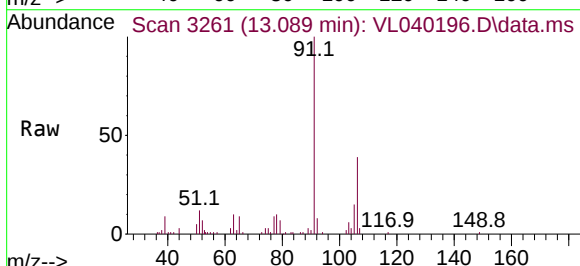
Acq: 21 Feb 2023 15:50

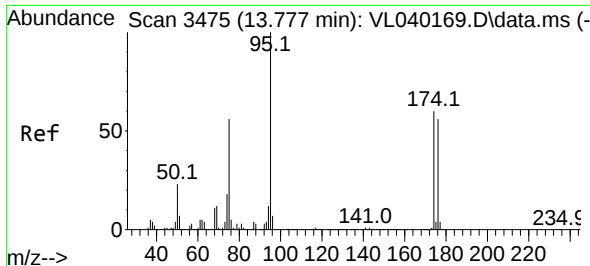
Tgt Ion: 91 Resp: 72966

Ion Ratio Lower Upper

91 100

106 43.4 21.6 65.0

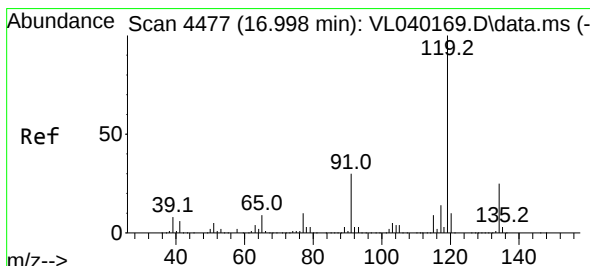
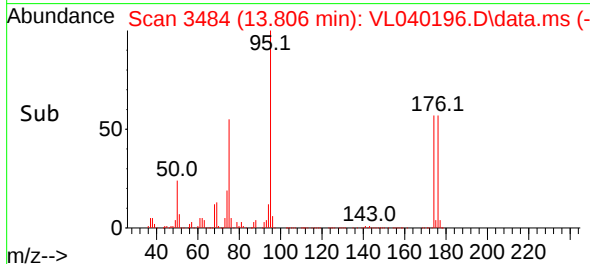
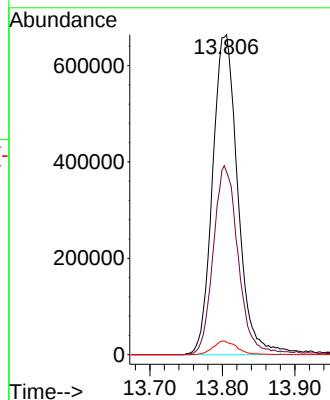
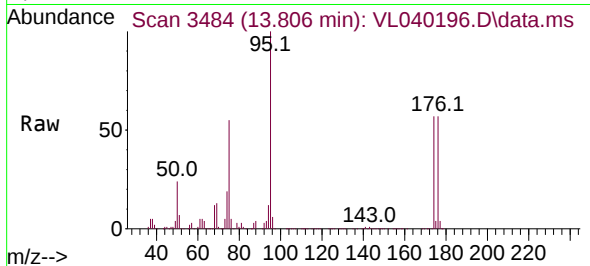




#68
1-Bromo-4-Fluorobenzene
Concen: 10.019 ppbv
RT: 13.806 min Scan# 3475
Delta R.T. 0.000 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

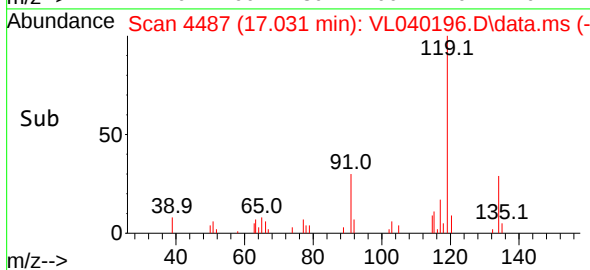
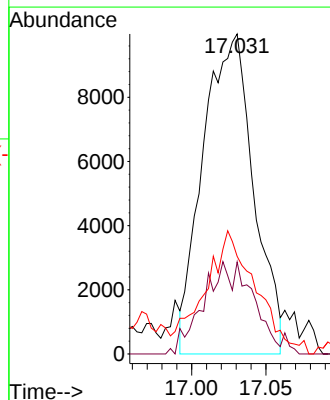
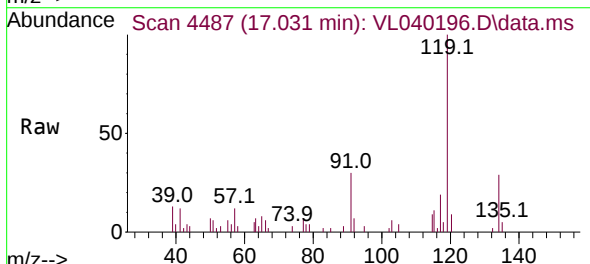
Instrument :
MSVOA_L
ClientSampleId :
IA-11

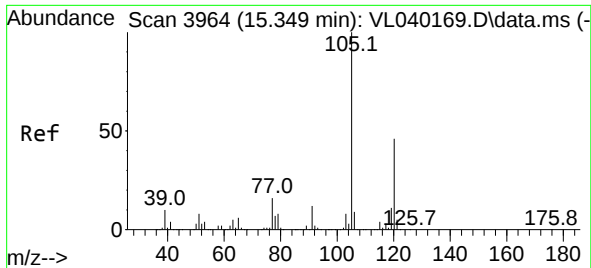
Tgt Ion: 95 Resp: 1599167
Ion Ratio Lower Upper
95 100
174 59.6 48.2 72.2
175 4.2 3.4 5.2



#69
p-Isopropyltoluene
Concen: 0.083 ppbv
RT: 17.031 min Scan# 4487
Delta R.T. 0.007 min
Lab File: VL040196.D
Acq: 21 Feb 2023 15:50

Tgt Ion: 119 Resp: 23652
Ion Ratio Lower Upper
119 100
134 28.8 20.2 30.2
91 41.7 24.7 37.1#

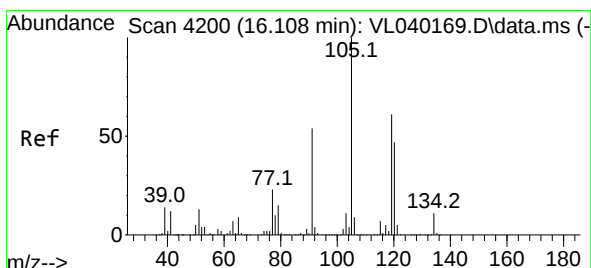
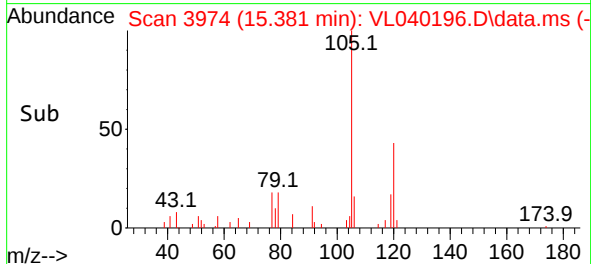
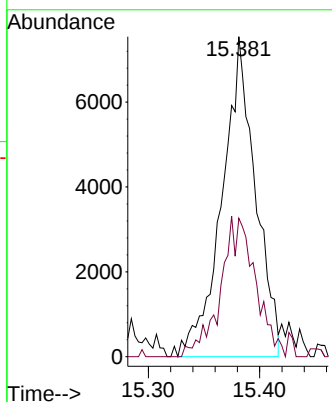
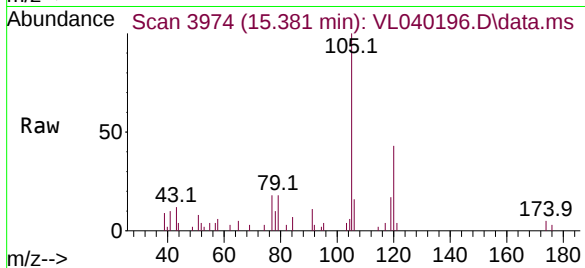




#73
 1,3,5-Trimethylbenzene
 Concen: 0.076 ppbv
 RT: 15.381 min Scan# 3964
 Delta R.T. 0.000 min
 Lab File: VL040196.D
 Acq: 21 Feb 2023 15:50

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-11

Tgt Ion:105 Resp: 15712
 Ion Ratio Lower Upper
 105 100
 120 43.2 36.8 55.2



#74
 1,2,4-Trimethylbenzene
 Concen: 0.159 ppbv
 RT: 16.130 min Scan# 4207
 Delta R.T. -0.006 min
 Lab File: VL040196.D
 Acq: 21 Feb 2023 15:50

Tgt Ion:105 Resp: 36019
 Ion Ratio Lower Upper
 105 100
 120 34.8 37.9 56.9#
 91 15.0 43.7 65.5#
 77 17.6 18.3 27.5#

