

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL030320\
 Data File : VL034763.D
 Acq On : 3 Mar 2020 14:29
 Operator : SY/AP
 Sample : L1704-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-3-4

Quant Time: Mar 04 05:46:30 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL022620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 28 01:15:02 2020
 QLast Update : Fri Feb 28 01:15:02 2020
 Response via : Initial Calibration

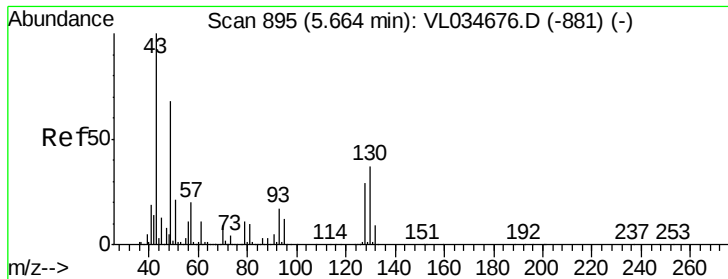
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	930575	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.21	114	1934272	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.14	117	1801540	10.00	ppbv	0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.48	95	1576460	10.67	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	64672	0.441	ppbv #	84
3) Chlorodifluoromethane	2.93	51	234720	2.337	ppbv #	67
4) Chloromethane	3.11	50	46731	0.831	ppbv	91
7) Chloroethane	3.54	64	598	0.029	ppbv #	41
9) Propene	3.19	41	330796	7.880	ppbv	99
11) Trichlorofluoromethane	3.94	101	34914	0.272	ppbv	96
13) Ethanol	3.60	45	394742	29.766	ppbv	95
15) Acetone	3.84	43	9752793	91.973	ppbv #	69
16) 1,3-Butadiene	3.29	39	46061	0.938	ppbv #	18
17) tert-Butyl alcohol	4.31	59	2404	0.030	ppbv #	1
19) Isopropyl Alcohol	3.97	45	11744	0.186	ppbv #	94
20) Methylene Chloride	4.35	84	61706	1.565	ppbv #	93
23) Vinyl Acetate	5.09	43	110721	0.768	ppbv #	95
26) Hexane	5.70	57	3748	0.043	ppbv #	3
34) 2-Butanone	5.26	43	7878	0.065	ppbv #	53
39) 1,2-Dichloropropane	7.21	63	565597	8.510	ppbv #	23
53) Toluene	9.85	91	9085	0.051	ppbv #	20

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.03 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

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MSVOA_L

ClientSampleId :

IA-3-4

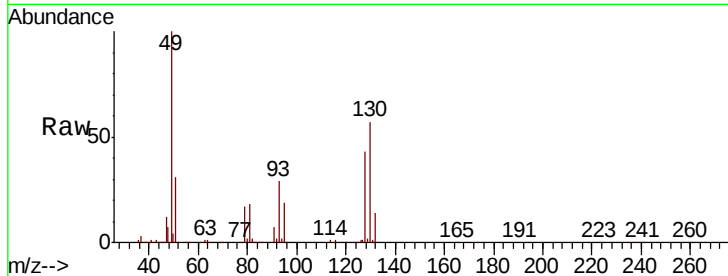
Tot Ion: 49 Resp: 930575

Ion Ratio Lower Upper

49 100

128 43.3 21.6 65.0

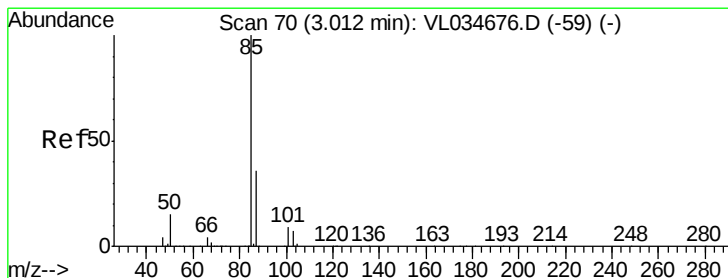
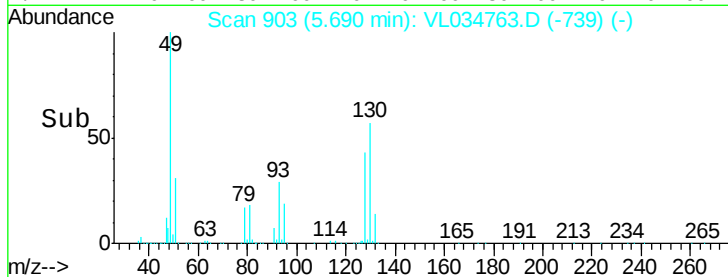
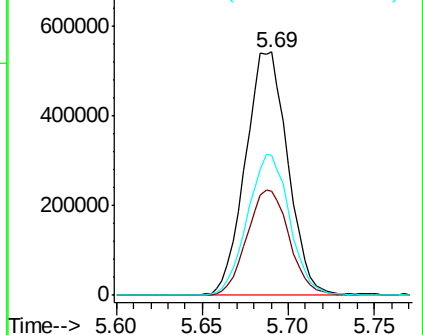
130 57.8 27.7 83.1



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.441 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.01 min

Lab File: VL034763.D

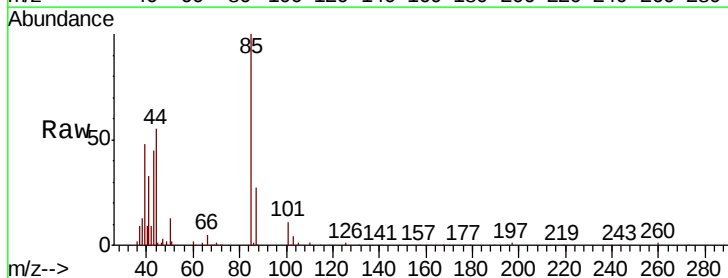
Acq: 3 Mar 2020 14:29

Tgt Ion: 85 Resp: 64672

Ion Ratio Lower Upper

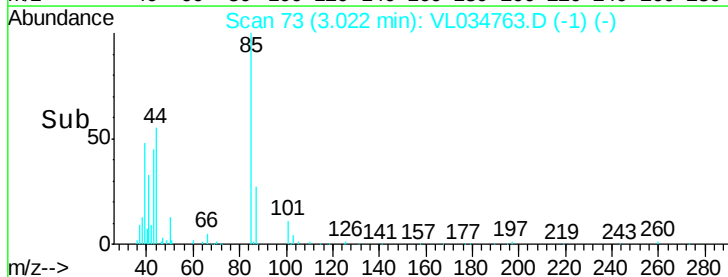
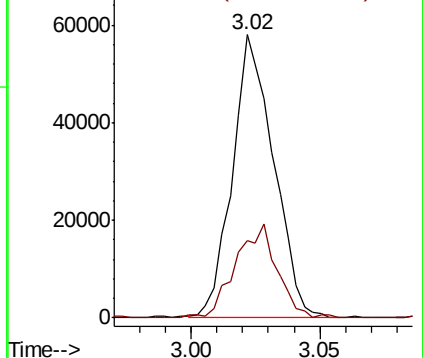
85 100

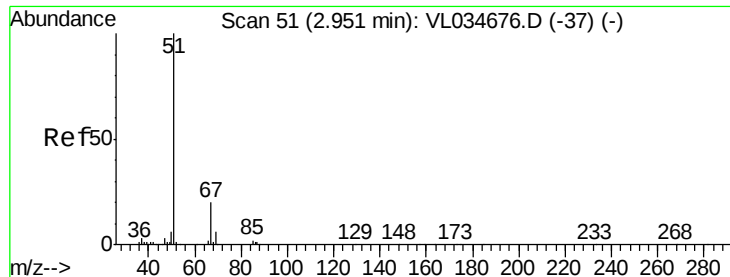
87 27.2 29.2 43.8#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

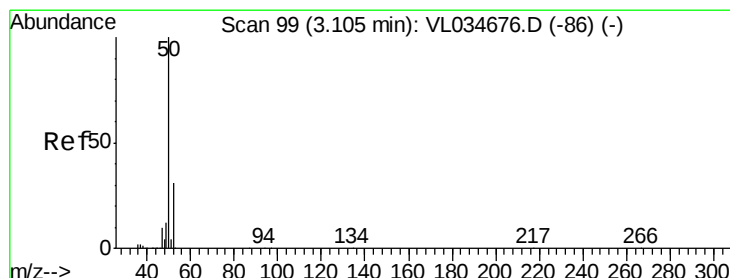
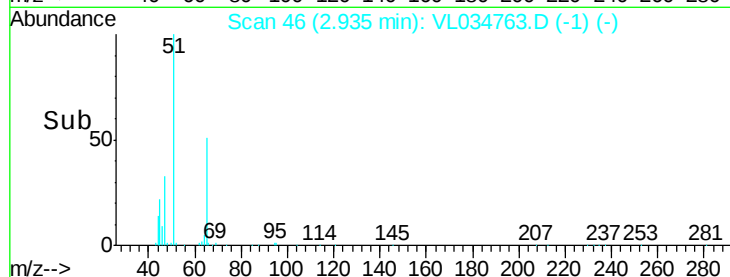
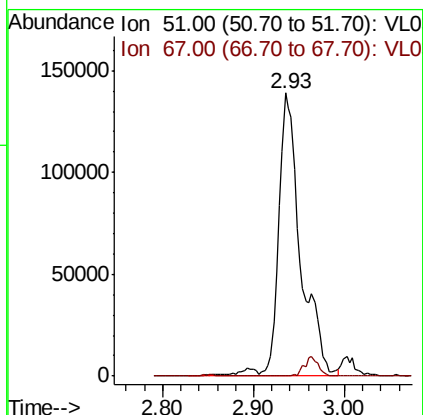
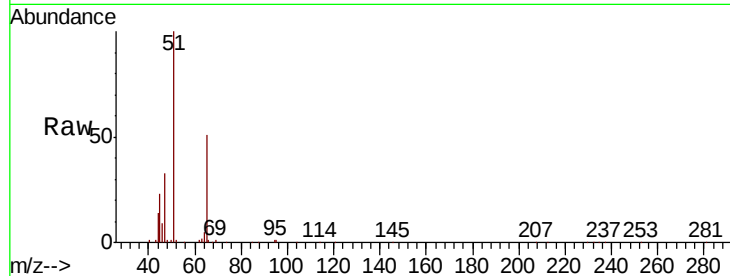




#3
Chlorodifluoromethane
Concen: 2.337 ppbv
RT: 2.93 min Scan# 46
Delta R.T. -0.02 min
Lab File: VL034763.D
Acq: 3 Mar 2020 14:29

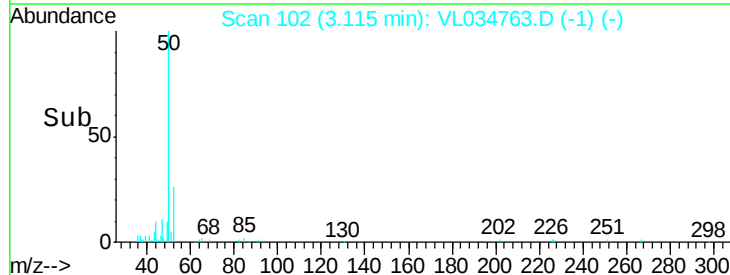
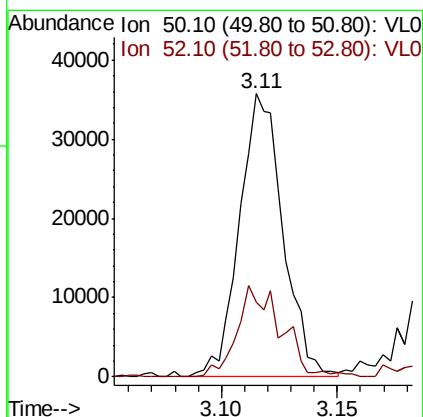
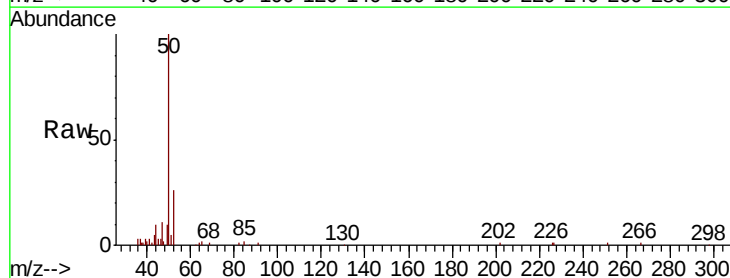
Instrument :
MSVOA_L
ClientSampleId :
IA-3-4

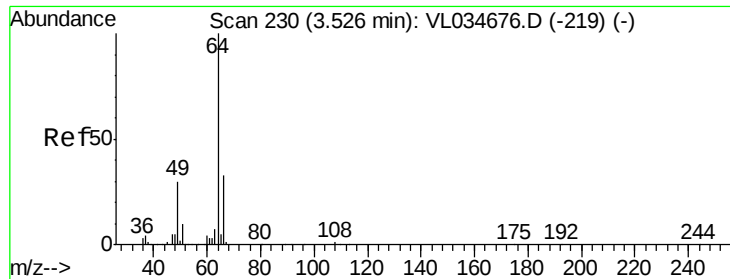
Tot Ion: 51 Resp: 234720
Ion Ratio Lower Upper
51 100
67 4.5 15.5 23.3#



#4
Chloromethane
Concen: 0.831 ppbv
RT: 3.11 min Scan# 102
Delta R.T. 0.01 min
Lab File: VL034763.D
Acq: 3 Mar 2020 14:29

Tgt Ion: 50 Resp: 46731
Ion Ratio Lower Upper
50 100
52 26.2 25.0 37.4





#7

Chloroethane

Concen: 0.029 ppbv

RT: 3.54 min Scan# 234

Delta R.T. 0.01 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

Instrument :

MSVOA_L

ClientSampled :

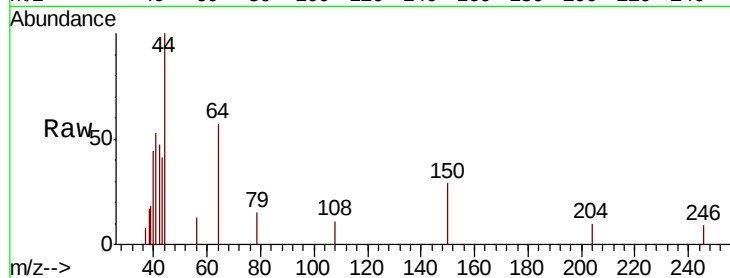
IA-3-4

Tot Ion: 64 Resp: 598

Ion Ratio Lower Upper

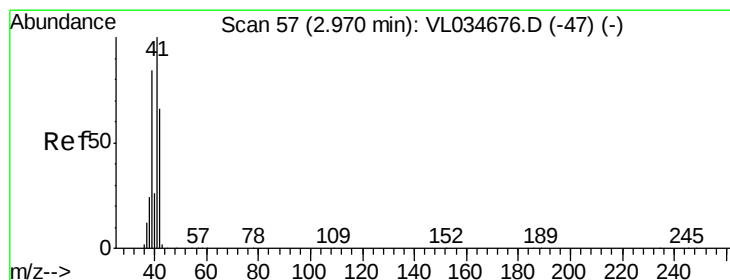
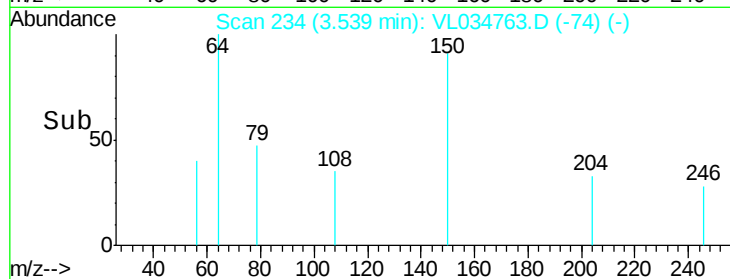
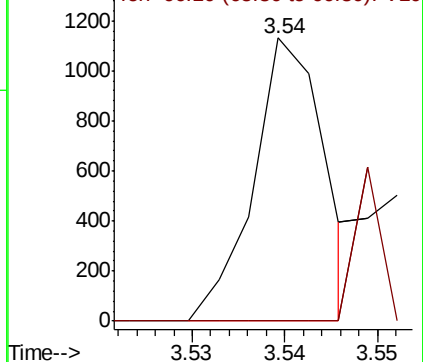
64 100

66 0.0 26.7 40.1#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#9

Propene

Concen: 7.880 ppbv

RT: 3.19 min Scan# 124

Delta R.T. 0.22 min

Lab File: VL034763.D

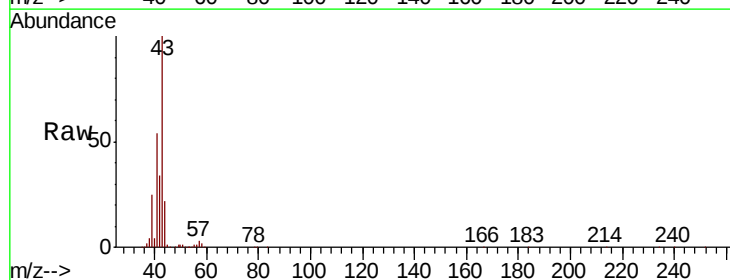
Acq: 3 Mar 2020 14:29

Tgt Ion: 41 Resp: 330796

Ion Ratio Lower Upper

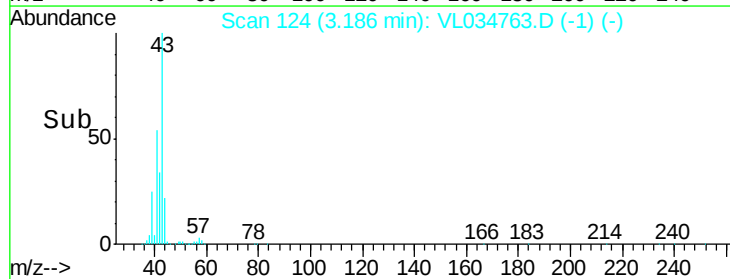
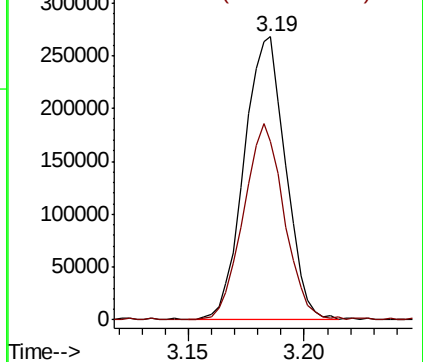
41 100

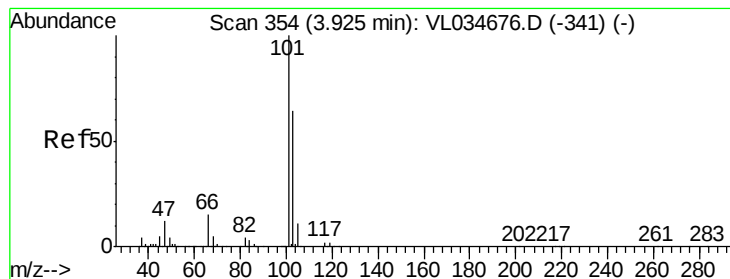
42 69.1 54.9 82.3



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#11

Trichlorofluoromethane

Concen: 0.272 ppbv

RT: 3.94 min Scan# 359

Delta R.T. 0.02 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

Instrument :

MSVOA_L

ClientSampleId :

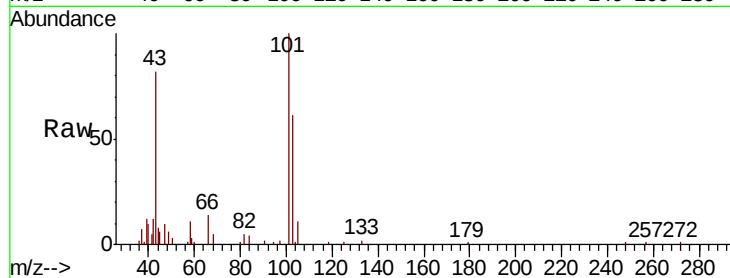
IA-3-4

Tot Ion:101 Resp: 34914

Ion Ratio Lower Upper

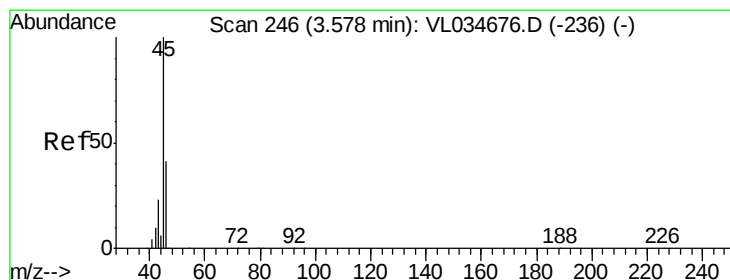
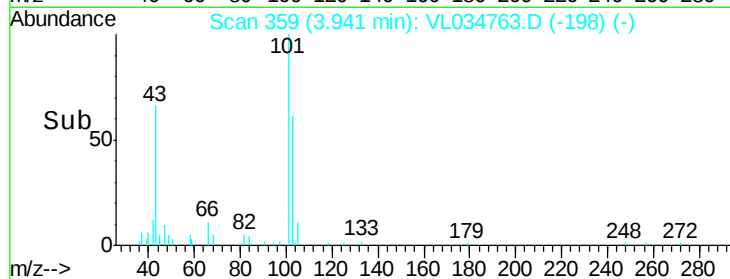
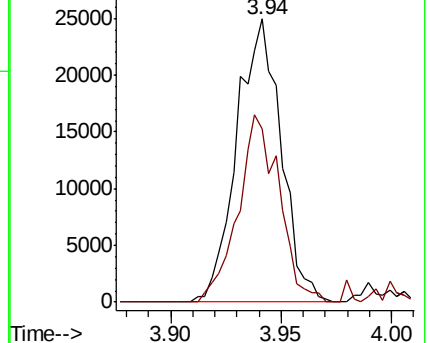
101 100

103 61.1 51.2 76.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#13

Ethanol

Concen: 29.766 ppbv

RT: 3.60 min Scan# 252

Delta R.T. 0.02 min

Lab File: VL034763.D

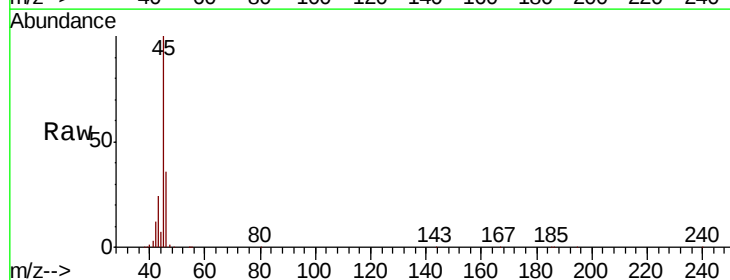
Acq: 3 Mar 2020 14:29

Tgt Ion: 45 Resp: 394742

Ion Ratio Lower Upper

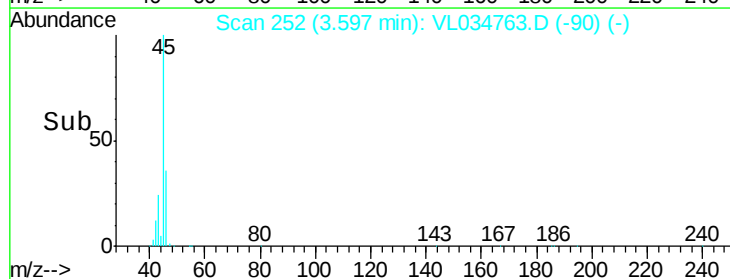
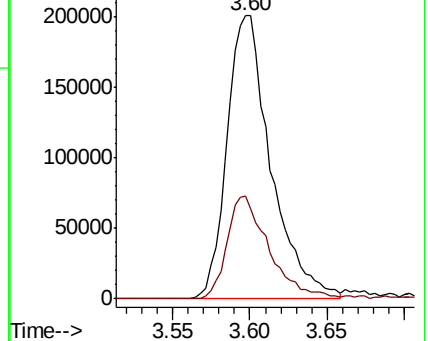
45 100

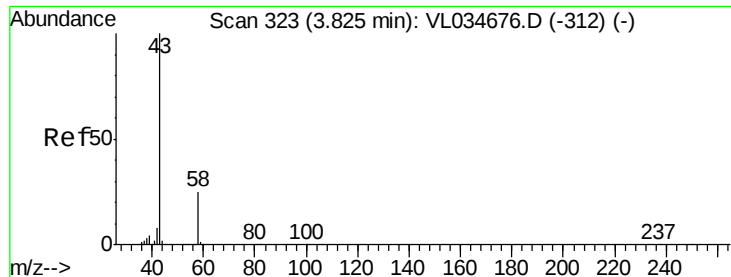
46 35.4 15.4 61.4



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 91.973 ppbv

RT: 3.84 min Scan# 326

Delta R.T. 0.01 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

Instrument :

MSVOA_L

ClientSampleId :

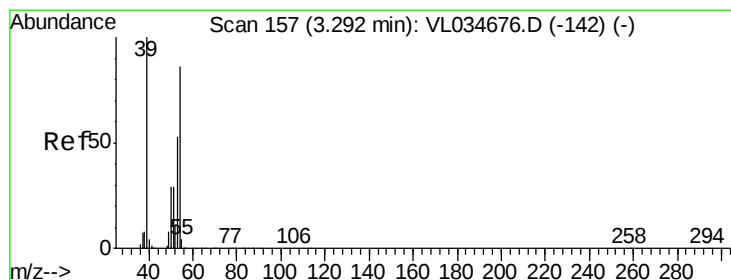
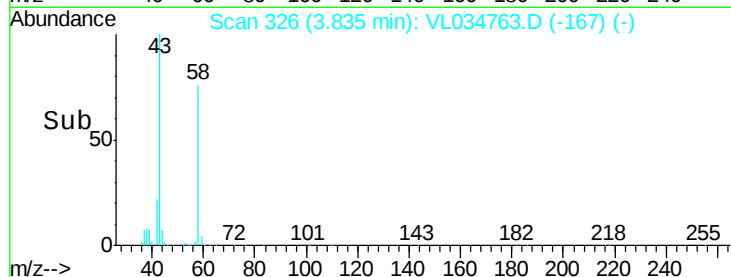
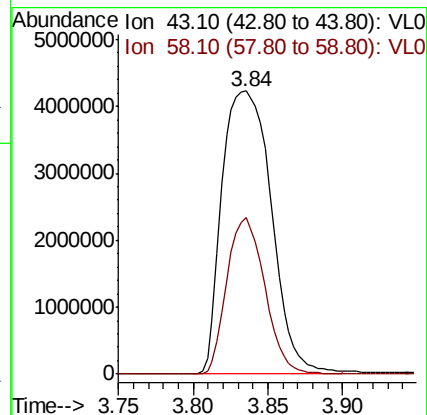
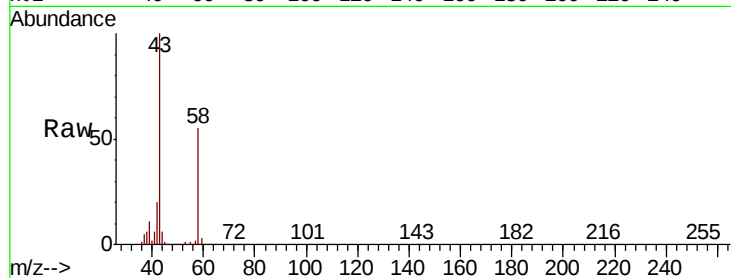
IA-3-4

Tot Ion: 43 Resp: 9752793

Ion Ratio Lower Upper

43 100

58 42.7 21.4 32.0#



#16

1,3-Butadiene

Concen: 0.938 ppbv

RT: 3.29 min Scan# 155

Delta R.T. -0.01 min

Lab File: VL034763.D

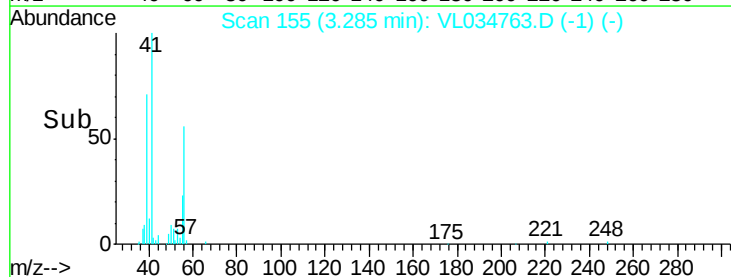
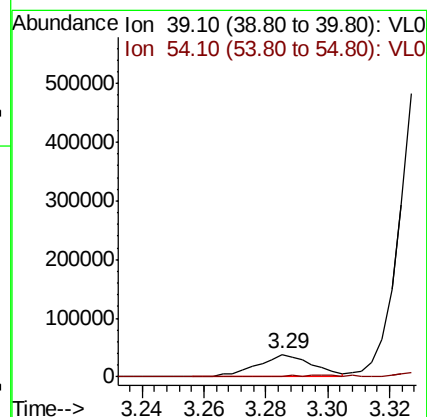
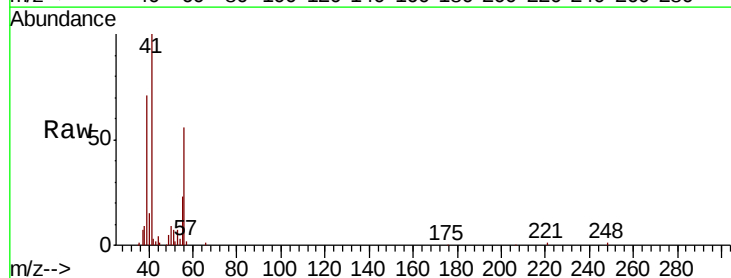
Acq: 3 Mar 2020 14:29

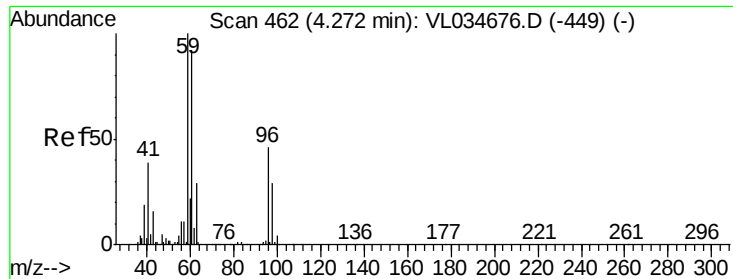
Tgt Ion: 39 Resp: 46061

Ion Ratio Lower Upper

39 100

54 9.3 67.0 100.6#



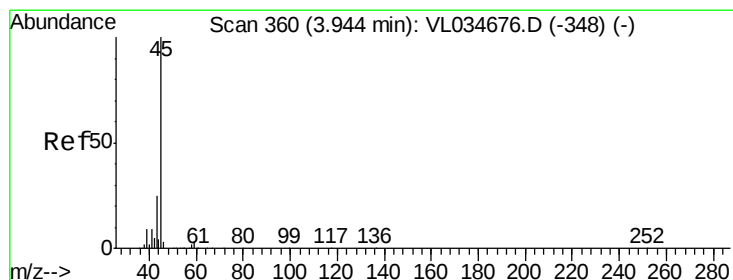
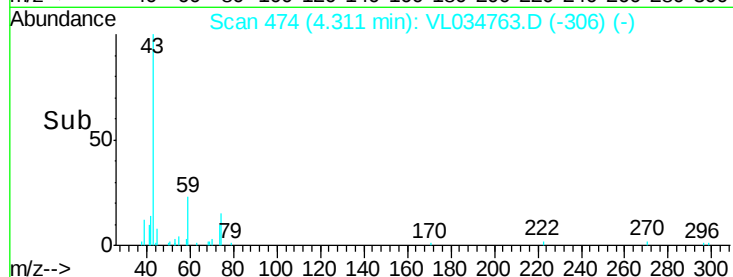
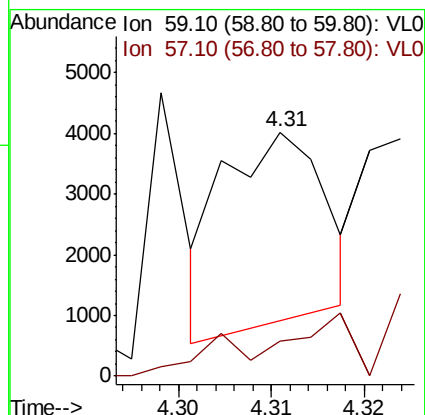
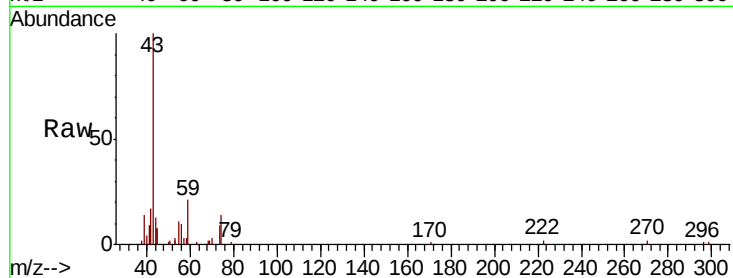


#17

tert-Butyl alcohol
Concen: 0.030 ppbv
RT: 4.31 min Scan# 474
Delta R.T. 0.04 min
Lab File: VL034763.D
Acq: 3 Mar 2020 14:29

Instrument :
MSVOA_L
ClientSampleId :
IA-3-4

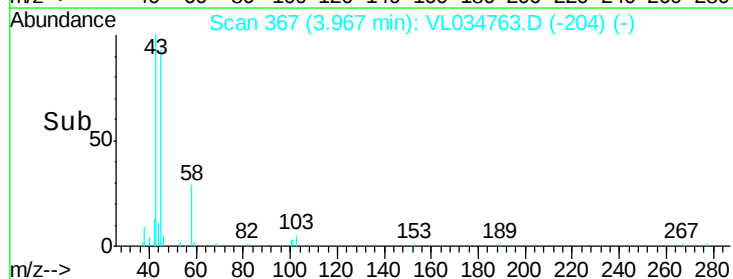
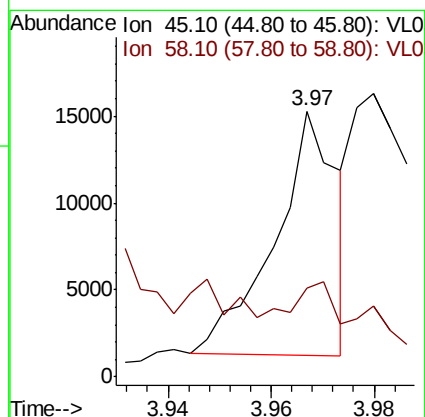
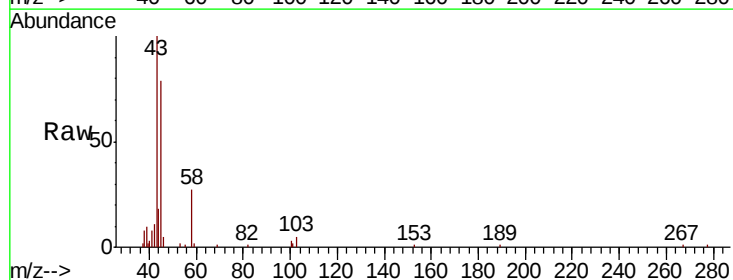
Tot Ion: 59 Resp: 2404
Ion Ratio Lower Upper
59 100
57 367.5 8.8 13.2#

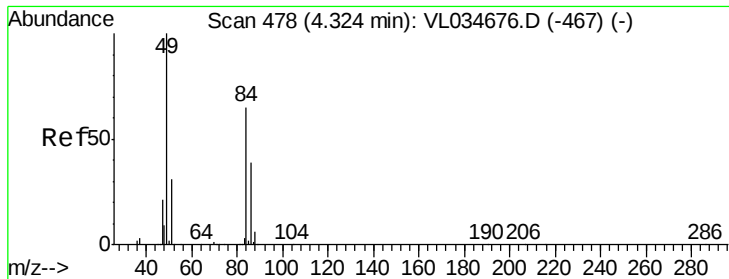


#19

Isopropyl Alcohol
Concen: 0.186 ppbv
RT: 3.97 min Scan# 367
Delta R.T. 0.02 min
Lab File: VL034763.D
Acq: 3 Mar 2020 14:29

Tgt Ion: 45 Resp: 11744
Ion Ratio Lower Upper
45 100
58 0.0 1.8 2.6#

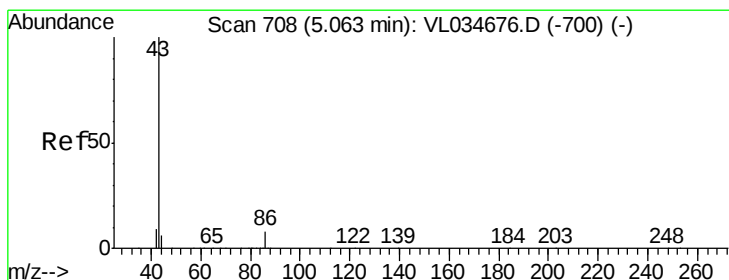
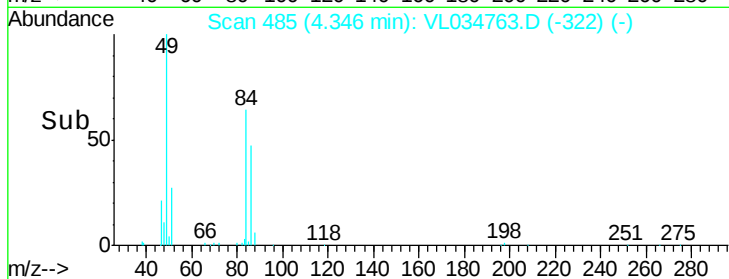
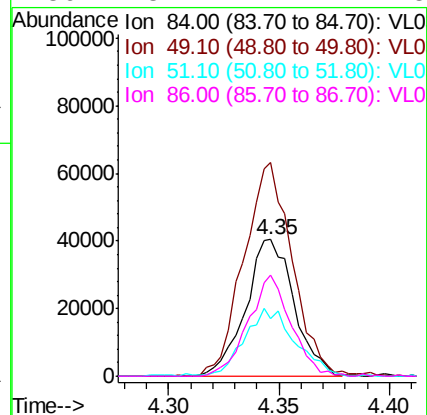
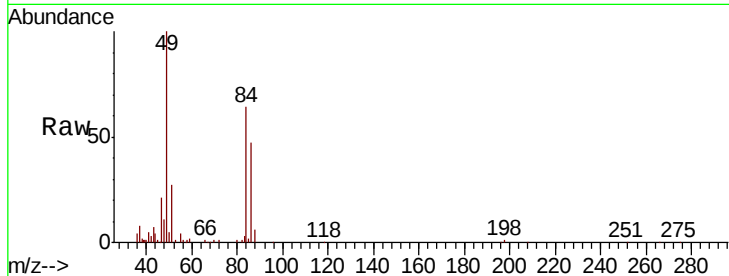




#20
Methylene Chloride
Concen: 1.565 ppbv
RT: 4.35 min Scan# 485
Delta R.T. 0.02 min
Lab File: VL034763.D
Acq: 3 Mar 2020 14:29

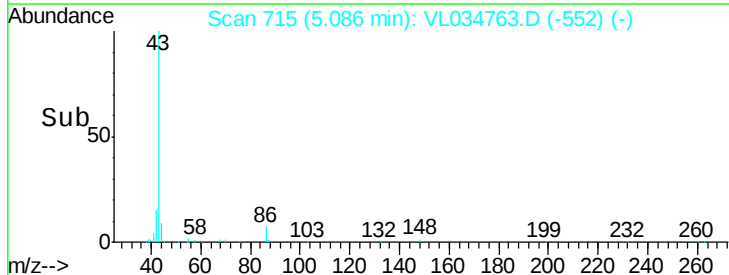
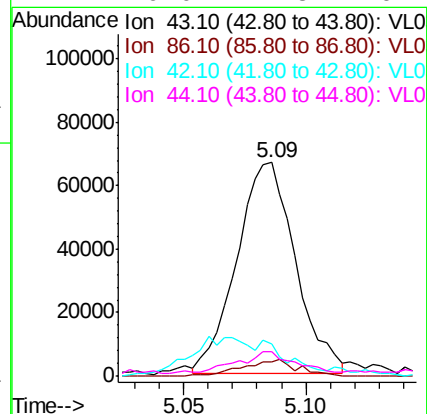
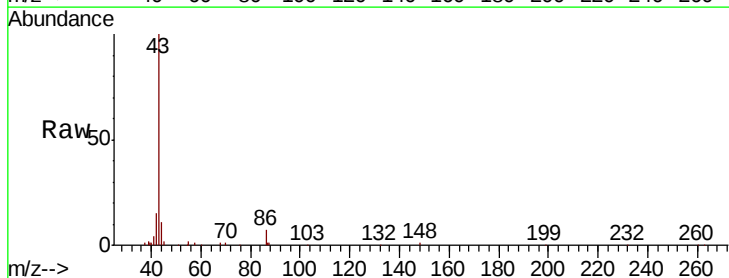
Instrument :
MSVOA_L
ClientSampled :
IA-3-4

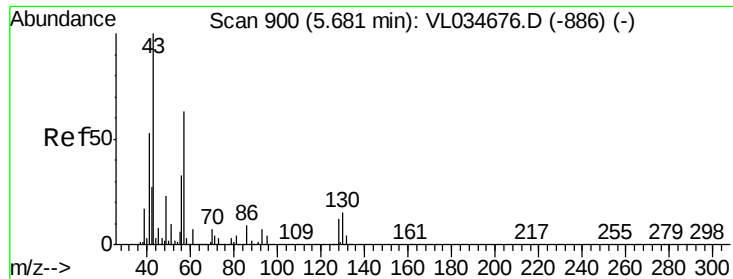
Tot Ion: 84 Resp: 61706
Ion Ratio Lower Upper
84 100
49 156.0 122.8 184.2
51 41.3 38.6 58.0
86 73.7 47.7 71.5#



#23
Vinyl Acetate
Concen: 0.768 ppbv
RT: 5.09 min Scan# 715
Delta R.T. 0.02 min
Lab File: VL034763.D
Acq: 3 Mar 2020 14:29

Tgt Ion: 43 Resp: 110721
Ion Ratio Lower Upper
43 100
86 7.4 6.0 9.0
42 11.7 8.0 12.0
44 10.0 4.5 6.7#

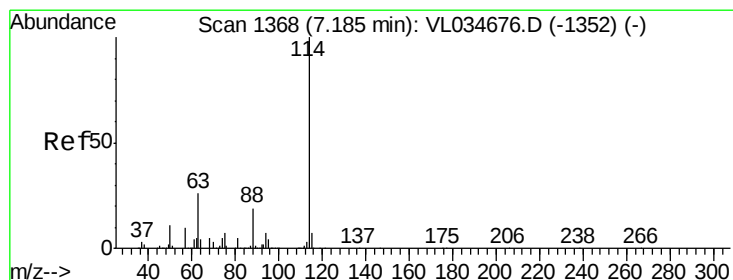
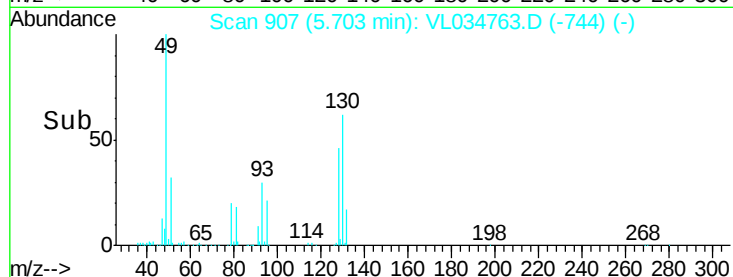
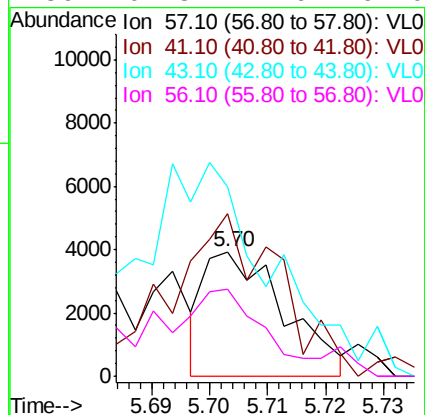
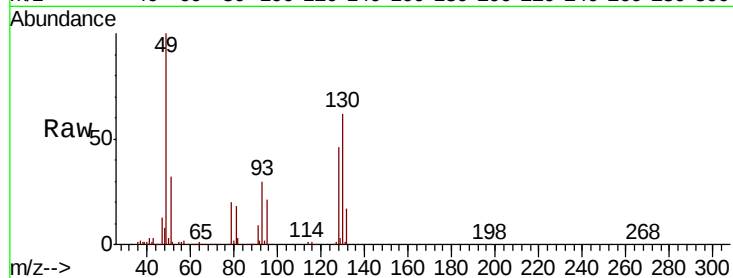




#26
Hexane
Concen: 0.043 ppbv
RT: 5.70 min Scan# 907
Delta R.T. 0.02 min
Lab File: VL034763.D
Acq: 3 Mar 2020 14:29

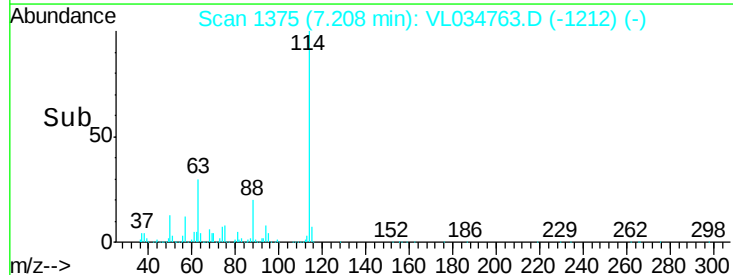
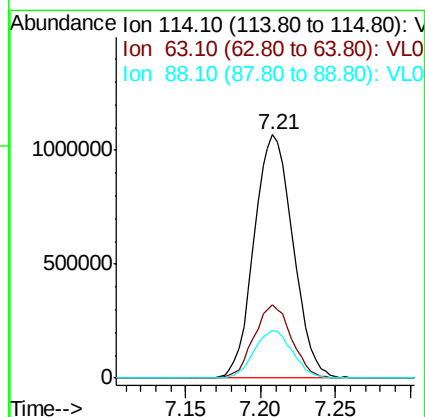
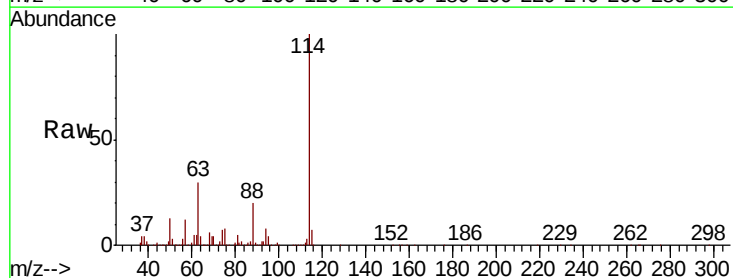
Instrument :
MSVOA_L
ClientSampleId :
IA-3-4

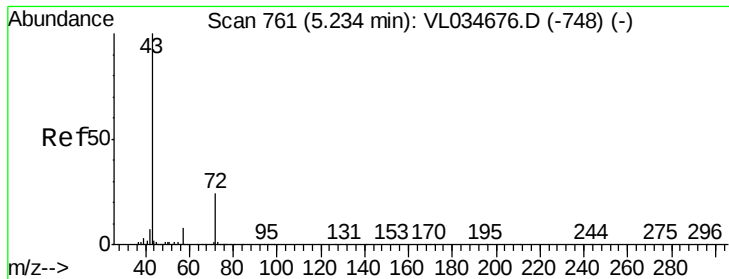
Tot Ion: 57 Resp: 3748
Ion Ratio Lower Upper
57 100
41 214.1 70.3 105.5#
43 360.1 177.0 265.4#
56 107.8 42.6 64.0#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.21 min Scan# 1375
Delta R.T. 0.02 min
Lab File: VL034763.D
Acq: 3 Mar 2020 14:29

Tgt Ion: 114 Resp: 1934272
Ion Ratio Lower Upper
114 100
63 29.4 22.9 34.3
88 19.3 15.8 23.6





#34

2-Butanone

Concen: 0.065 ppbv

RT: 5.26 min Scan# 768

Delta R.T. 0.02 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

Instrument :

MSVOA_L

ClientSampleId :

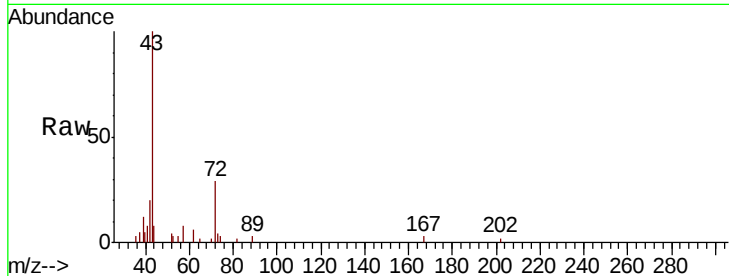
IA-3-4

Tot Ion: 43 Resp: 7878

Ion Ratio Lower Upper

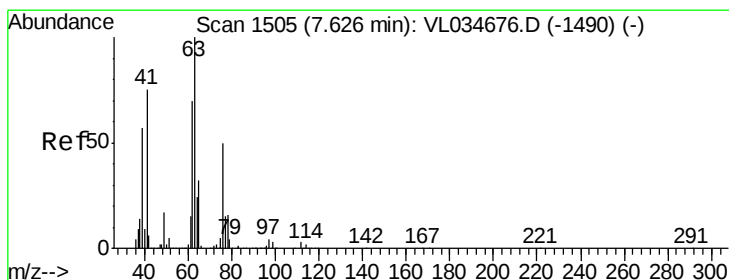
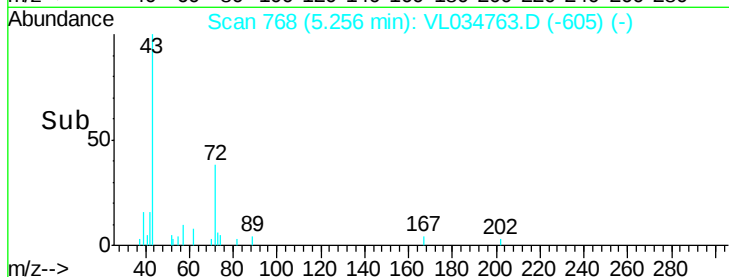
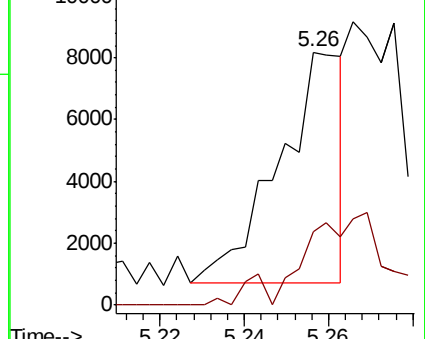
43 100

72 0.0 18.2 27.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#39

1,2-Dichloropropane

Concen: 8.510 ppbv

RT: 7.21 min Scan# 1375

Delta R.T. -0.42 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

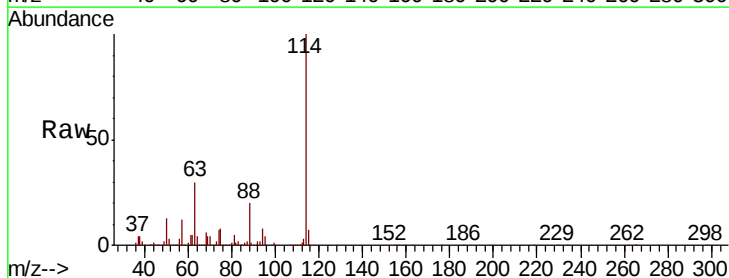
Tgt Ion: 63 Resp: 565597

Ion Ratio Lower Upper

63 100

41 0.0 60.2 90.4#

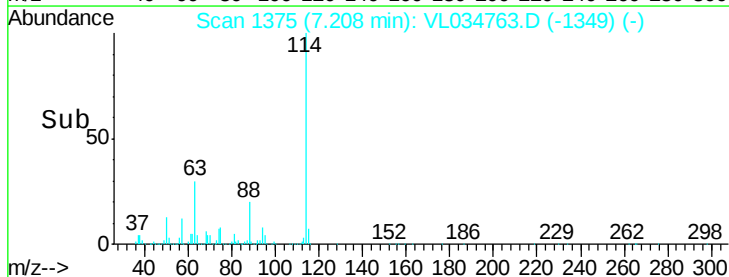
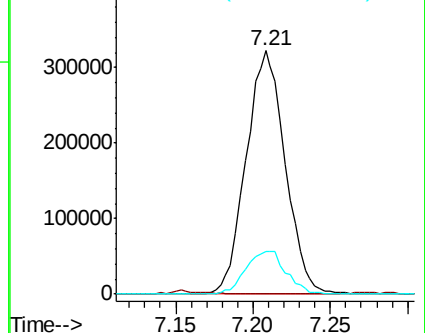
62 17.6 56.3 84.5#

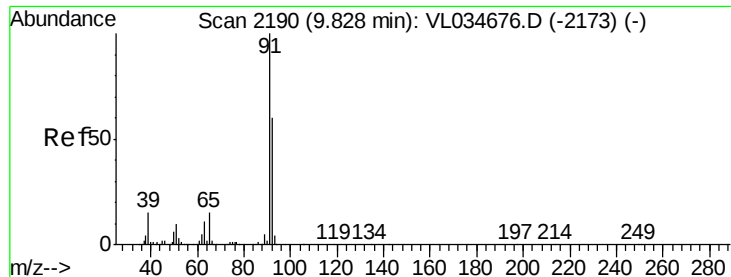


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#53

Toluene

Concen: 0.051 ppbv

RT: 9.85 min Scan# 2198

Delta R.T. 0.03 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

Instrument :

MSVOA_L

ClientSampled :

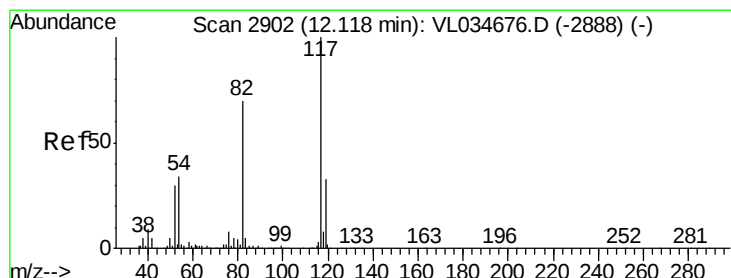
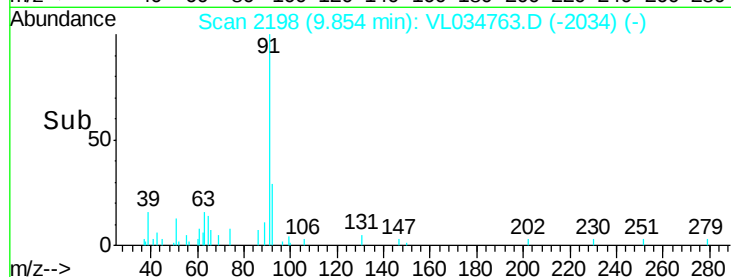
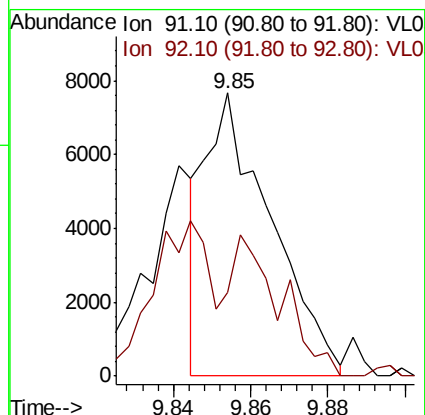
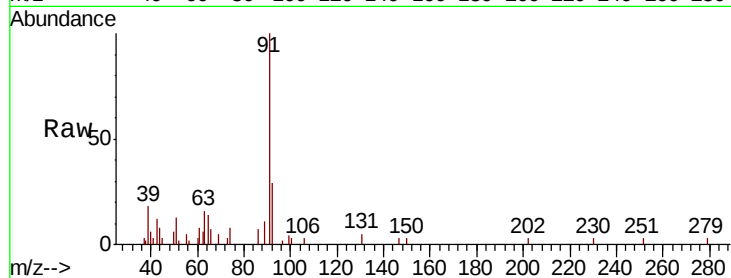
IA-3-4

Tot Ion: 91 Resp: 9085

Ion Ratio Lower Upper

91 100

92 0.0 48.5 72.7#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.14 min Scan# 2910

Delta R.T. 0.03 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

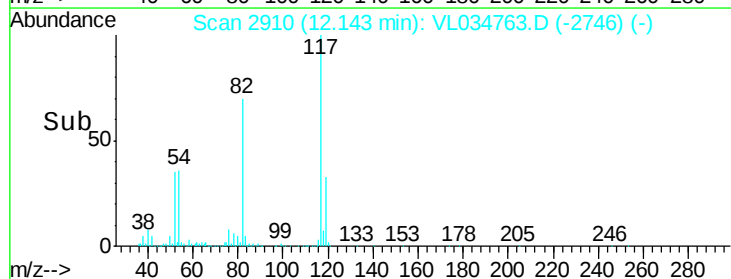
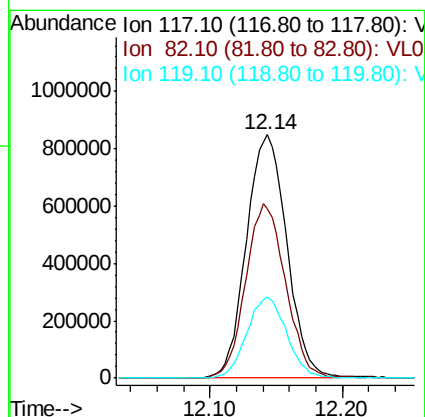
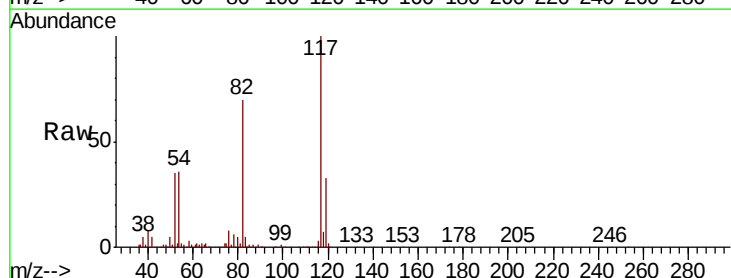
Tgt Ion: 117 Resp: 1801540

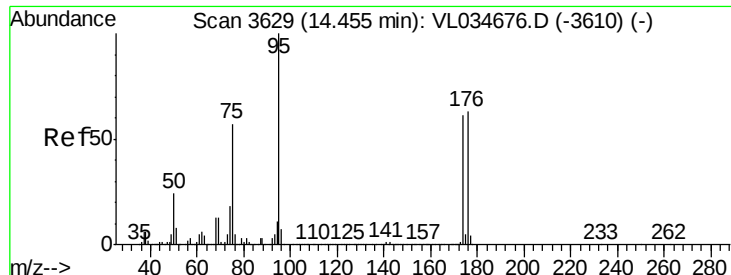
Ion Ratio Lower Upper

117 100

82 71.2 54.1 81.1

119 33.0 27.6 41.4





#68

1-Bromo-4-Fluorobenzene

Concen: 10.672 ppbv

RT: 14.48 min Scan# 3636

Delta R.T. 0.02 min

Lab File: VL034763.D

Acq: 3 Mar 2020 14:29

Instrument :

MSVOA_L

ClientSampleId :

IA-3-4

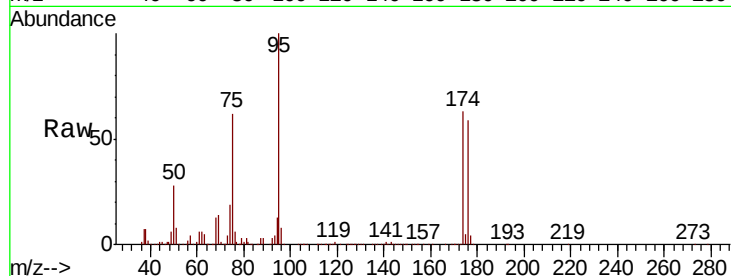
Tot Ion: 95 Resp: 1576460

Ion Ratio Lower Upper

95 100

174 63.0 50.7 76.1

175 4.5 3.9 5.9



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

