

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL033121\
 Data File : VL036606.D
 Acq On : 31 Mar 2021 17:49
 Operator : SY/AP
 Sample : M1840-05DL 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

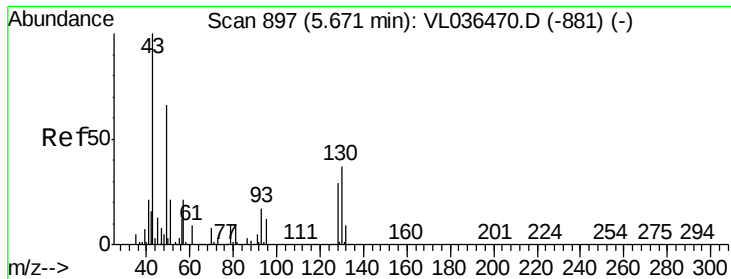
Quant Time: Apr 01 04:28:24 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 09:42:40 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1641956	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3944002	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3451236	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.43	95	2750978	10.00	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.00%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	6317	0.024 ppbv	97
3) Chlorodifluoromethane	2.97	51	27397	0.089 ppbv #	70
4) Chloromethane	3.14	50	2898	0.027 ppbv #	82
9) Propene	3.02	41	10218	0.104 ppbv #	71
13) Ethanol	3.61	45	69587	5.975 ppbv #	31
15) Acetone	3.85	43	693960	4.294 ppbv #	86
16) 1,3-Butadiene	3.31	39	11986	0.107 ppbv #	25
19) Isopropyl Alcohol	3.99	45	119011	1.339 ppbv #	90
20) Methylene Chloride	4.35	84	339751	4.490 ppbv	86
23) Vinyl Acetate	5.08	43	77584	0.281 ppbv	99
25) Ethyl Acetate	5.69	43	298579	0.777 ppbv #	78
26) Hexane	5.69	57	380995	2.137 ppbv #	47
34) 2-Butanone	5.26	43	100172	0.520 ppbv #	84
36) Benzene	6.90	78	45866	0.126 ppbv #	92
39) 1,2-Dichloropropane	7.24	63	13387	0.091 ppbv #	32
41) Tetrahydrofuran	5.75	42	4293	0.048 ppbv #	48
52) Tetrachloroethene	11.23	164	3032	0.023 ppbv #	38
53) Toluene	9.82	91	43457	0.112 ppbv	93

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.00 min

Lab File: VL036606.D

Acq: 31 Mar 2021 17:49

Instrument :

MSVOA_L

ClientSampleId :

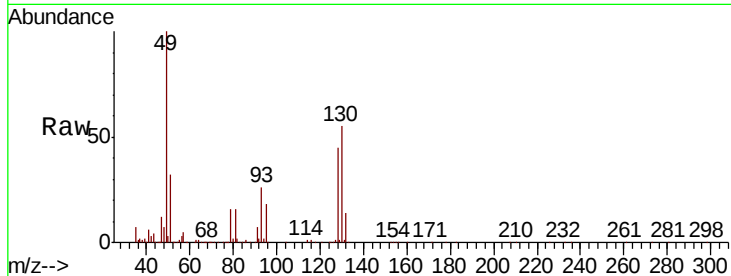
Tot Ion: 49 Resp: 1641956

Ion Ratio Lower Upper

49 100

128 45.3 23.5 70.6

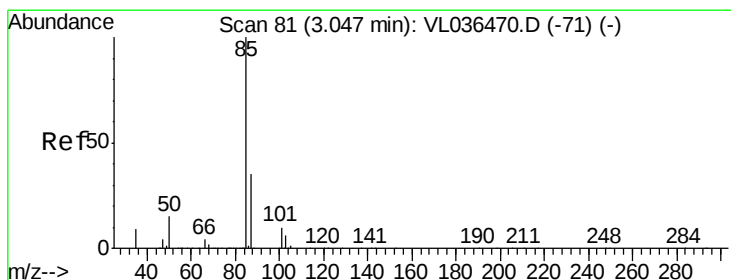
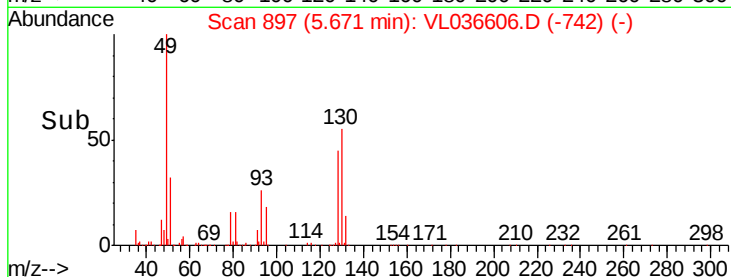
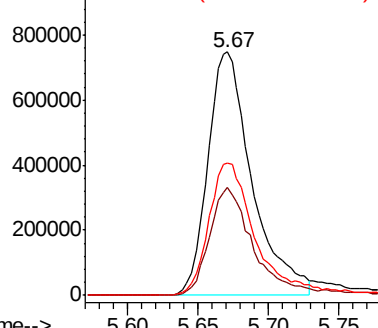
130 58.2 29.1 87.4



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.024 ppbv

RT: 3.05 min Scan# 82

Delta R.T. 0.00 min

Lab File: VL036606.D

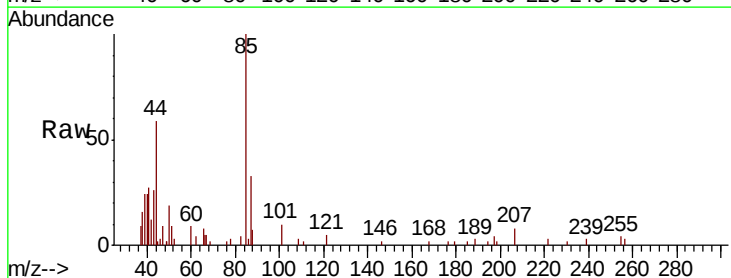
Acq: 31 Mar 2021 17:49

Tgt Ion: 85 Resp: 6317

Ion Ratio Lower Upper

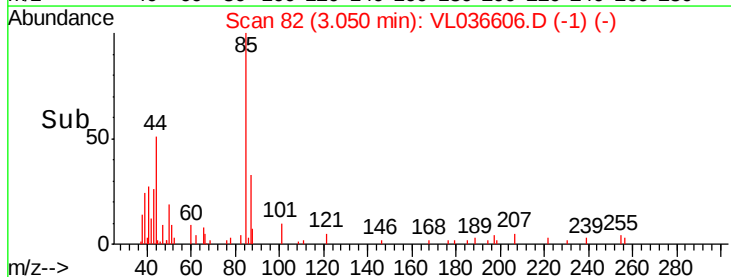
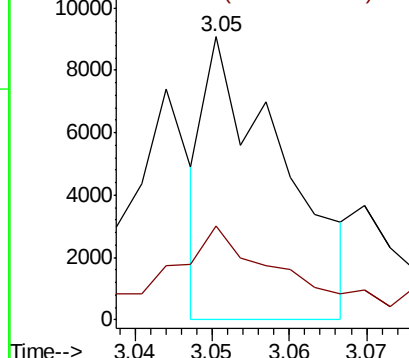
85 100

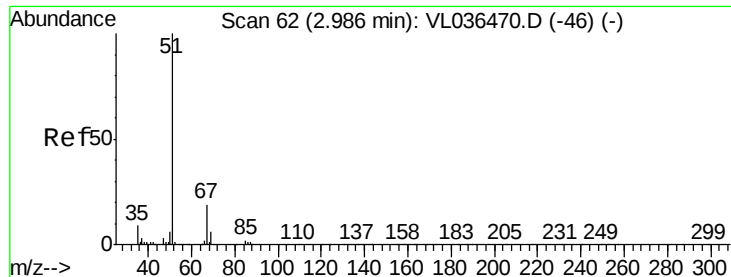
87 36.5 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.089 ppbv

RT: 2.97 min Scan# 57

Delta R.T. -0.02 min

Lab File: VL036606.D

Acq: 31 Mar 2021 17:49

Instrument :

MSVOA_L

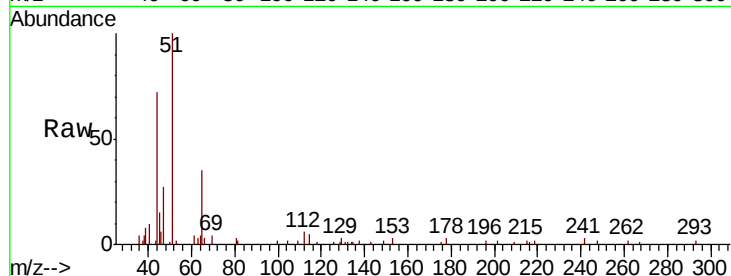
ClientSampleId :

Tot Ion: 51 Resp: 27397

Ion Ratio Lower Upper

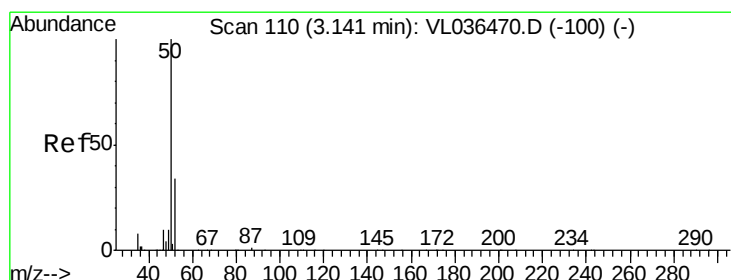
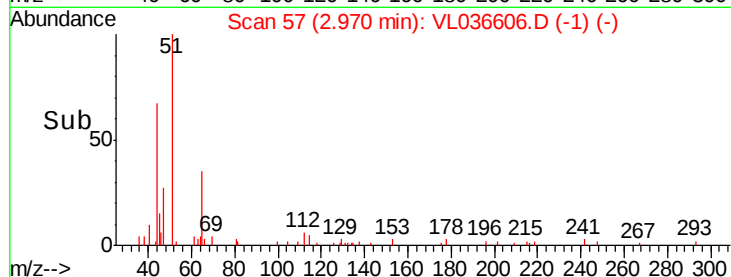
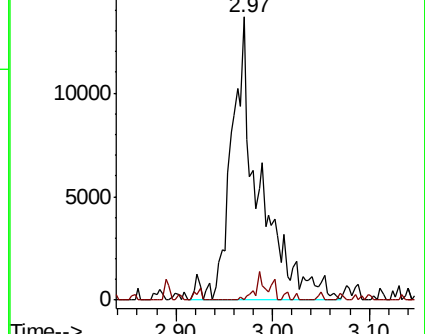
51 100

67 5.0 14.7 22.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.027 ppbv

RT: 3.14 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL036606.D

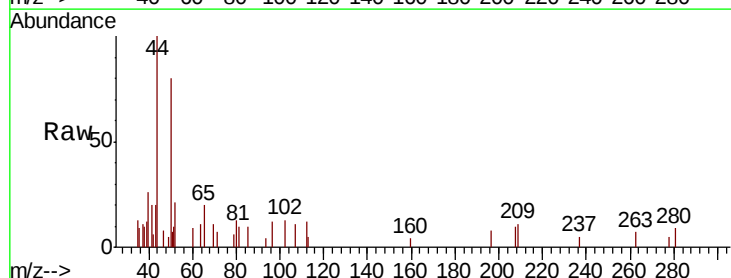
Acq: 31 Mar 2021 17:49

Tgt Ion: 50 Resp: 2898

Ion Ratio Lower Upper

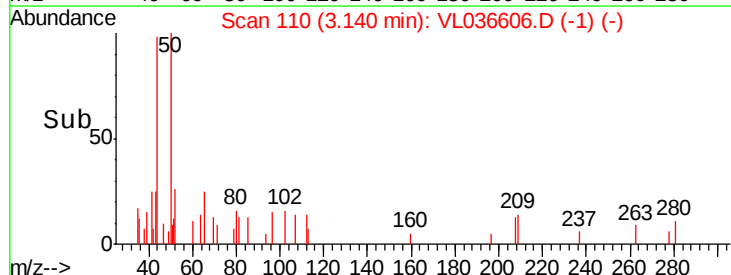
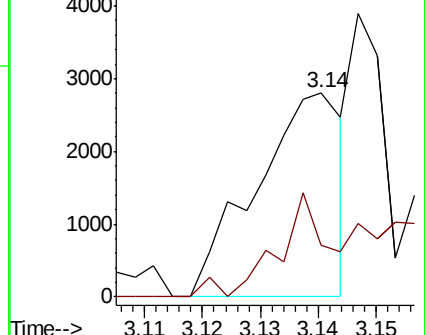
50 100

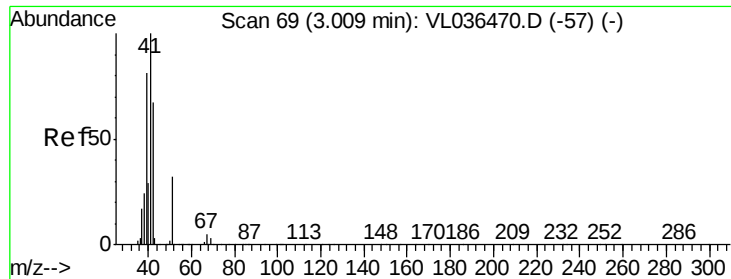
52 23.5 27.0 40.6#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.104 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL036606.D

Acq: 31 Mar 2021 17:49

Instrument :

MSVOA_L

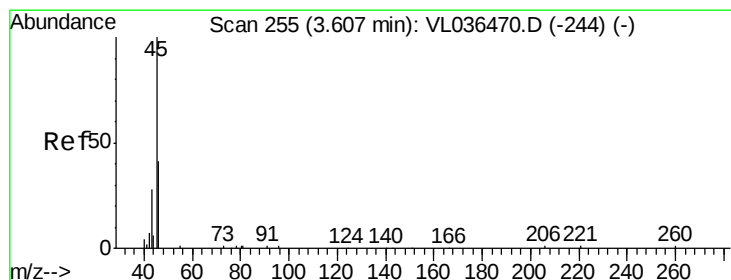
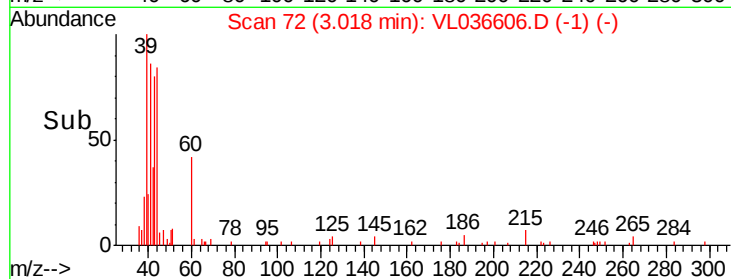
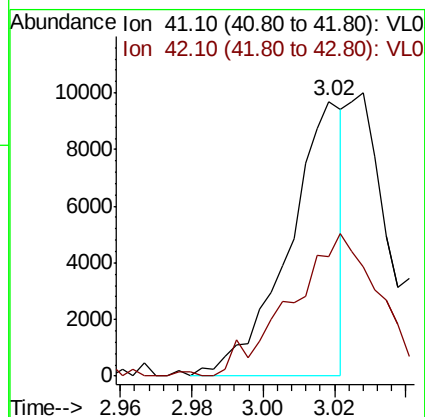
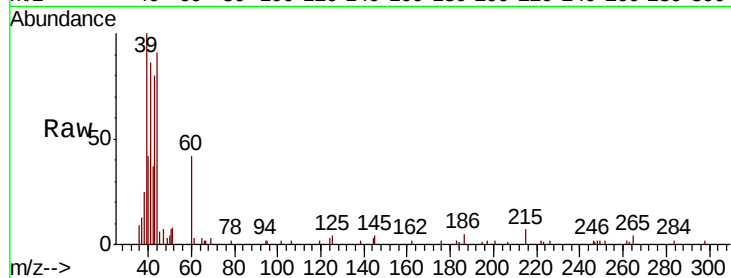
ClientSampled :

Tot Ion: 41 Resp: 10218

Ion Ratio Lower Upper

41 100

42 95.0 57.0 85.4#



#13

Ethanol

Concen: 5.975 ppbv

RT: 3.61 min Scan# 257

Delta R.T. 0.01 min

Lab File: VL036606.D

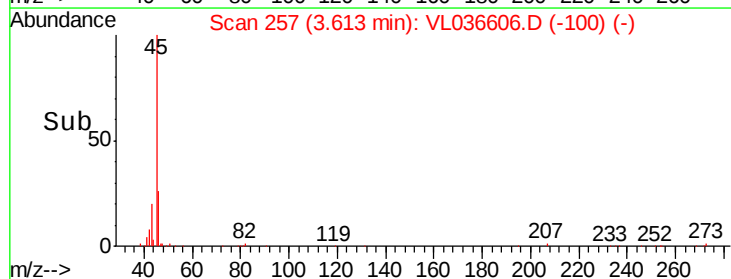
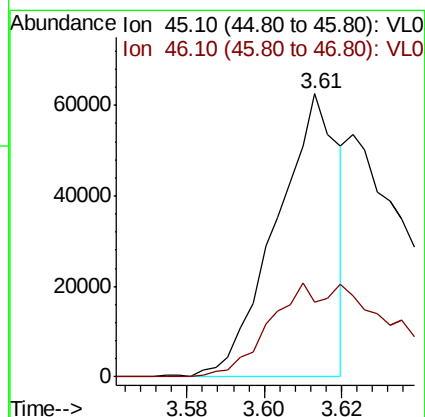
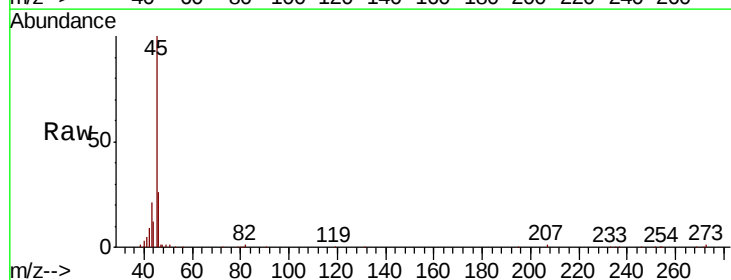
Acq: 31 Mar 2021 17:49

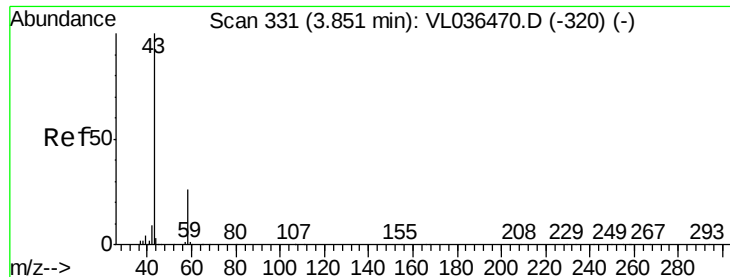
Tgt Ion: 45 Resp: 69587

Ion Ratio Lower Upper

45 100

46 84.4 16.6 66.2#





#15

Acetone

Concen: 4.294 ppbv

RT: 3.85 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL036606.D

Acq: 31 Mar 2021 17:49

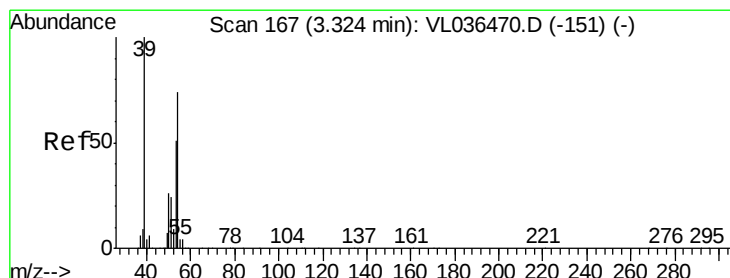
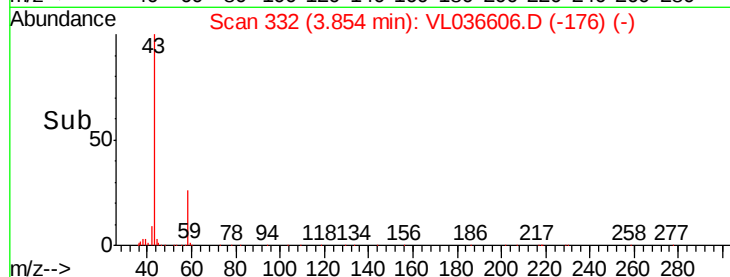
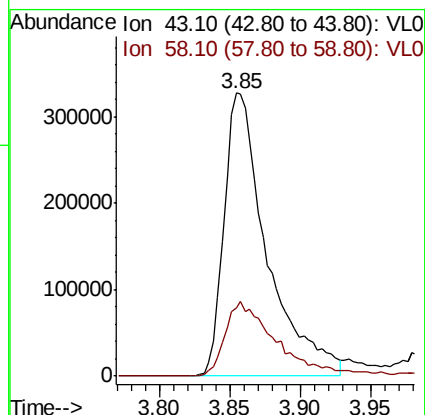
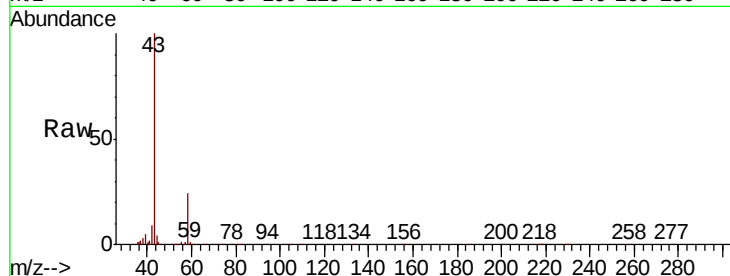
Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 43 Resp: 693960

Ion Ratio Lower Upper

43 100

58 33.5 21.2 31.8#



#16

1,3-Butadiene

Concen: 0.107 ppbv

RT: 3.31 min Scan# 164

Delta R.T. -0.01 min

Lab File: VL036606.D

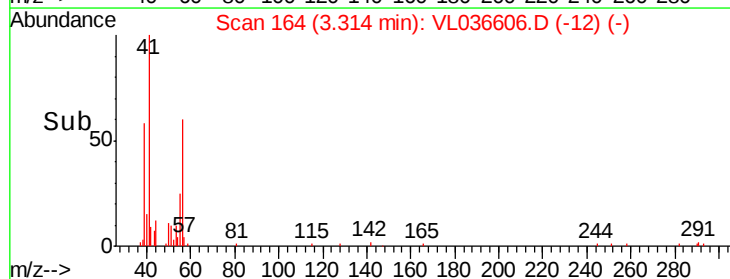
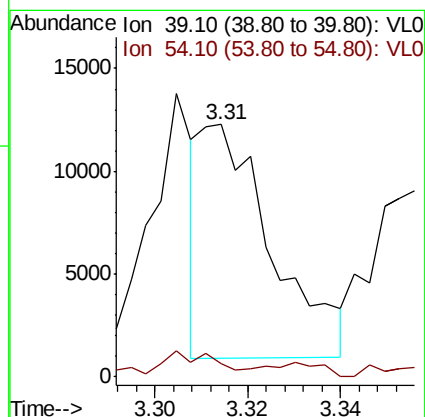
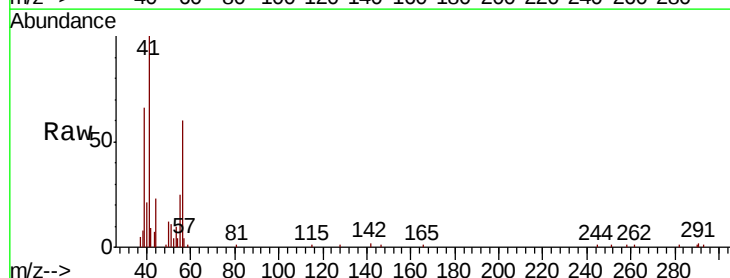
Acq: 31 Mar 2021 17:49

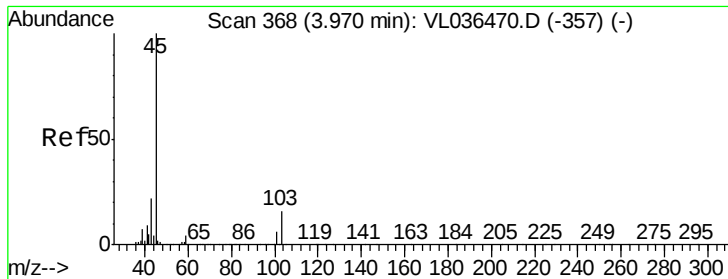
Tgt Ion: 39 Resp: 11986

Ion Ratio Lower Upper

39 100

54 10.2 58.8 88.2#



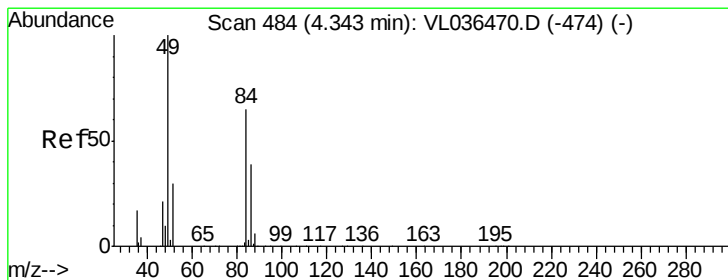
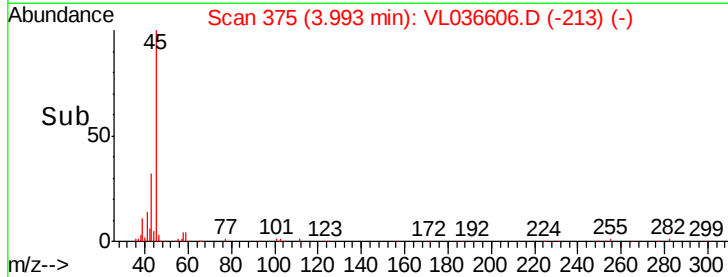
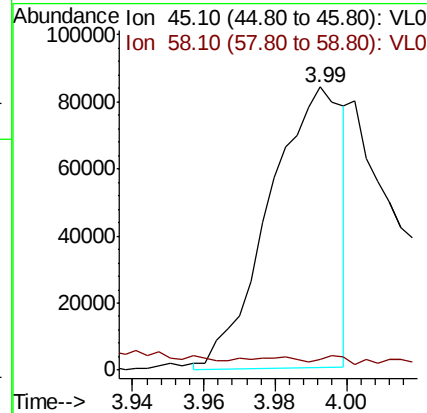
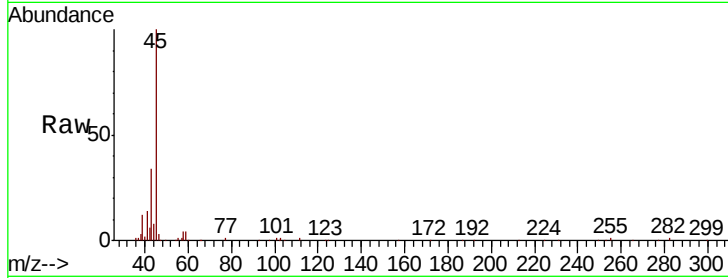


#19

Isopropyl Alcohol
 Concen: 1.339 ppbv
 RT: 3.99 min Scan# 375
 Delta R.T. 0.02 min
 Lab File: VL036606.D
 Acq: 31 Mar 2021 17:49

Instrument :
 MSVOA_L
 ClientSampleId :

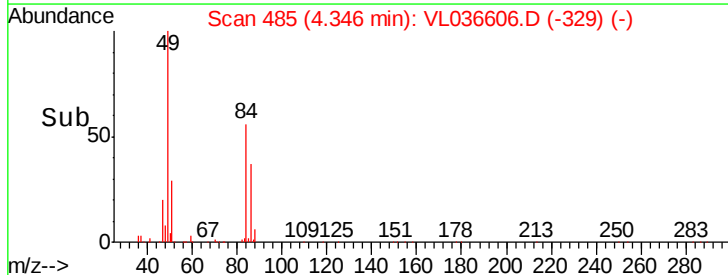
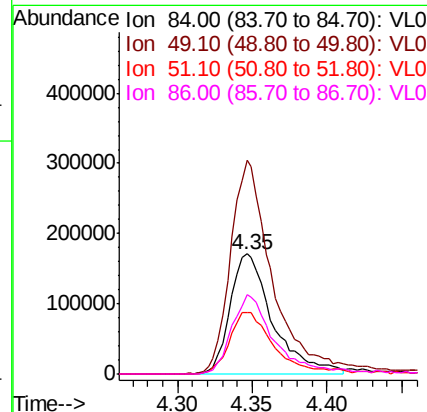
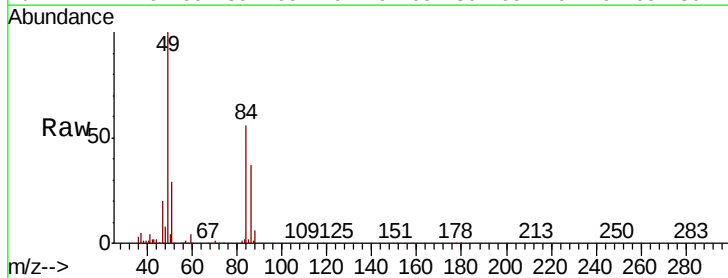
Tot Ion: 45 Resp: 119011
 Ion Ratio Lower Upper
 45 100
 58 7.0 2.9 4.3#

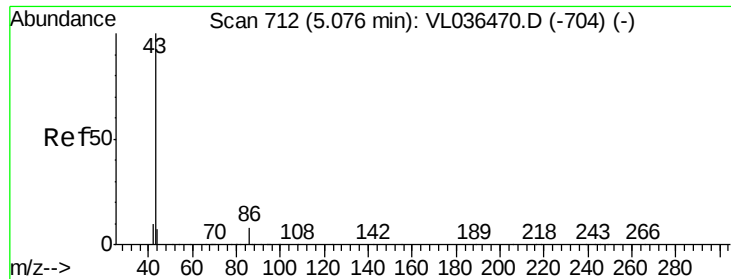


#20

Methylene Chloride
 Concen: 4.490 ppbv
 RT: 4.35 min Scan# 485
 Delta R.T. 0.00 min
 Lab File: VL036606.D
 Acq: 31 Mar 2021 17:49

Tgt Ion: 84 Resp: 339751
 Ion Ratio Lower Upper
 84 100
 49 177.5 122.9 184.3
 51 51.2 36.9 55.3
 86 65.7 48.2 72.4





#23

Vinyl Acetate

Concen: 0.281 ppbv

RT: 5.08 min Scan# 712

Delta R.T. -0.00 min

Lab File: VL036606.D

Acq: 31 Mar 2021 17:49

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 43 Resp: 77584

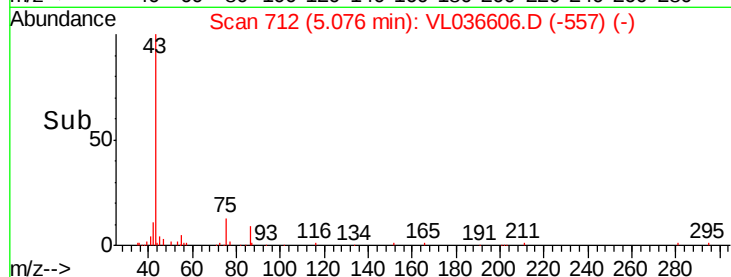
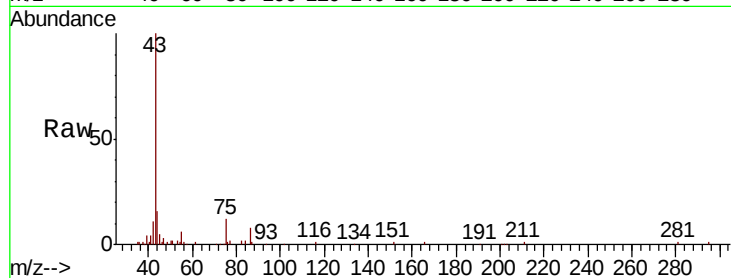
Ion Ratio Lower Upper

43 100

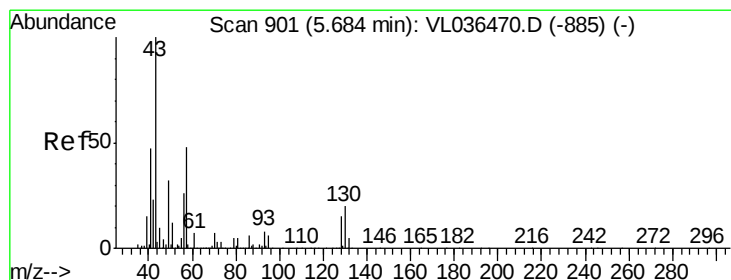
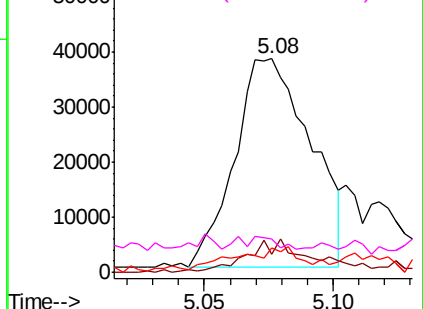
86 7.3 5.4 8.0

42 10.5 8.5 12.7

44 5.3 4.6 7.0



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 86.10 (85.80 to 86.80): VL0
Ion 42.10 (41.80 to 42.80): VL0
Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.777 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL036606.D

Acq: 31 Mar 2021 17:49

Tgt Ion: 43 Resp: 298579

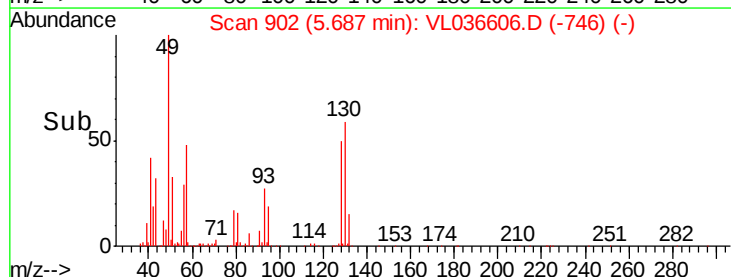
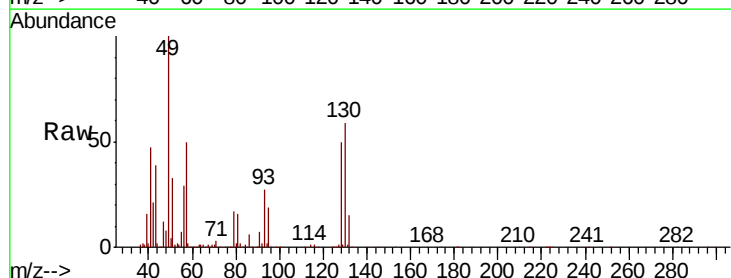
Ion Ratio Lower Upper

43 100

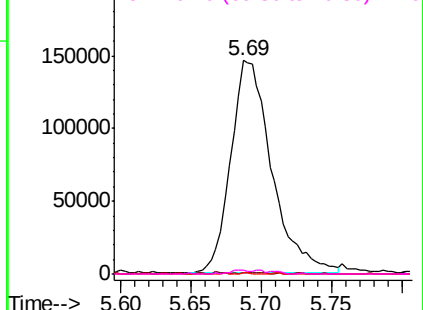
45 1.0 7.9 11.9#

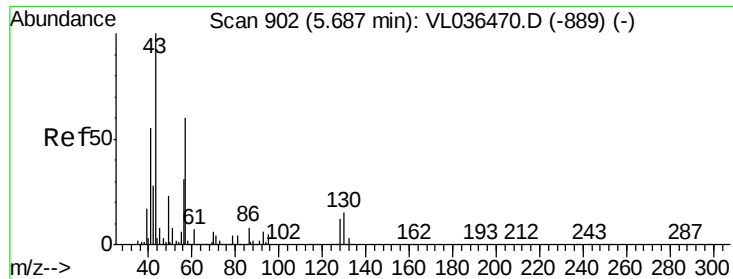
61 0.1 7.4 11.2#

70 1.9 5.1 7.7#



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0

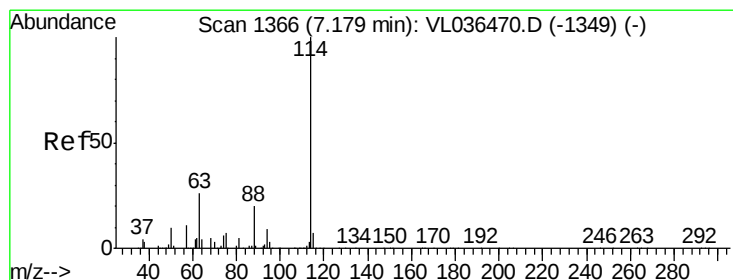
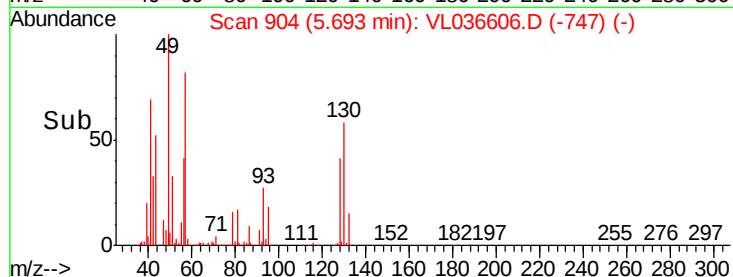
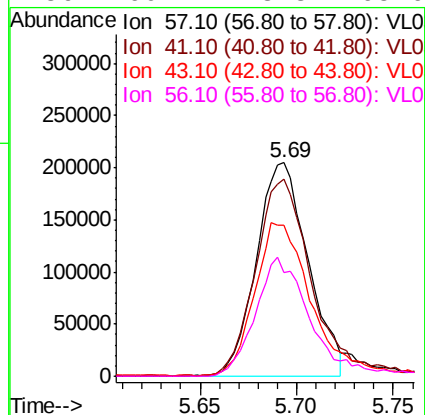
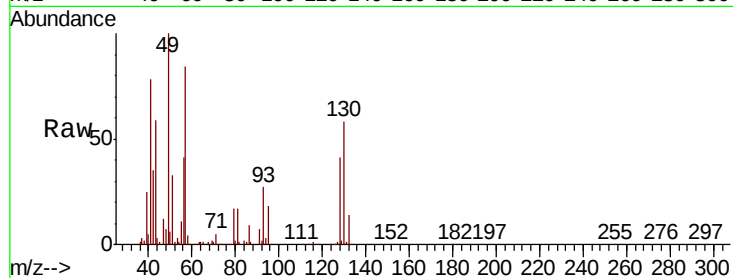




#26
Hexane
Concen: 2.137 ppbv
RT: 5.69 min Scan# 904
Delta R.T. 0.01 min
Lab File: VL036606.D
Acq: 31 Mar 2021 17:49

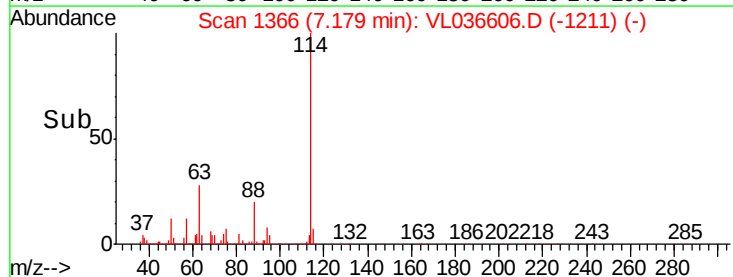
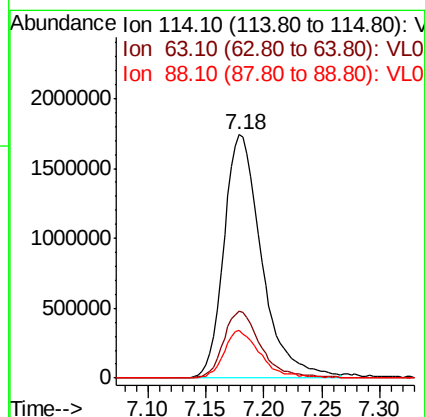
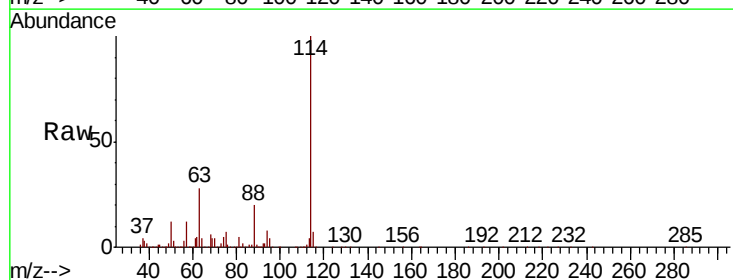
Instrument :
MSVOA_L
ClientSampleId :

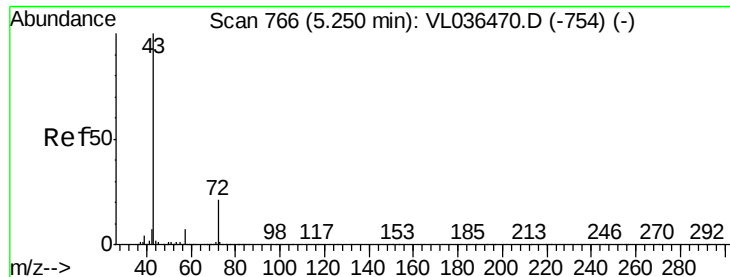
Tot Ion: 57 Resp: 380995
Ion Ratio Lower Upper
57 100
41 102.7 77.2 115.8
43 80.4 173.8 260.6#
56 60.1 43.8 65.6



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1366
Delta R.T. -0.00 min
Lab File: VL036606.D
Acq: 31 Mar 2021 17:49

Tgt Ion: 114 Resp: 3944002
Ion Ratio Lower Upper
114 100
63 27.7 22.4 33.6
88 19.2 15.4 23.0

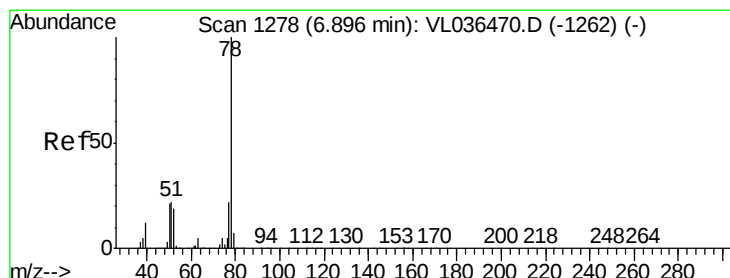
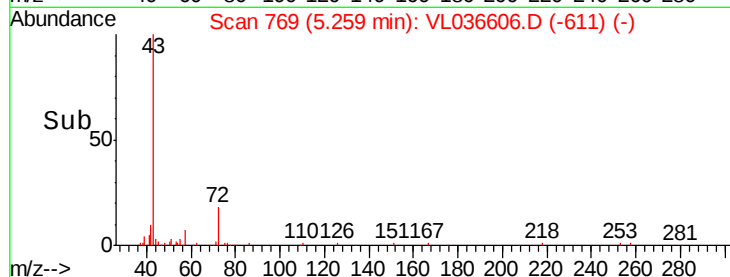
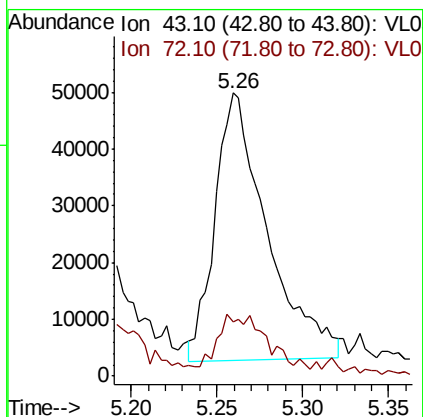
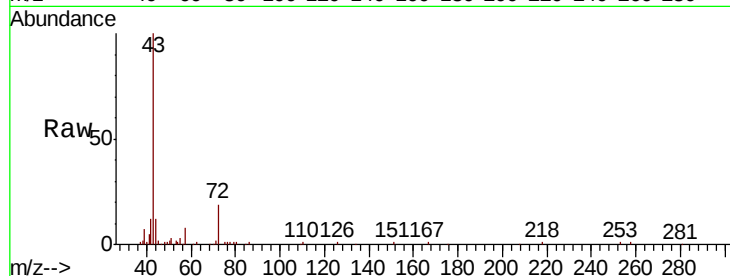




#34
2-Butanone
Concen: 0.520 ppbv
RT: 5.26 min Scan# 769
Delta R.T. 0.01 min
Lab File: VL036606.D
Acq: 31 Mar 2021 17:49

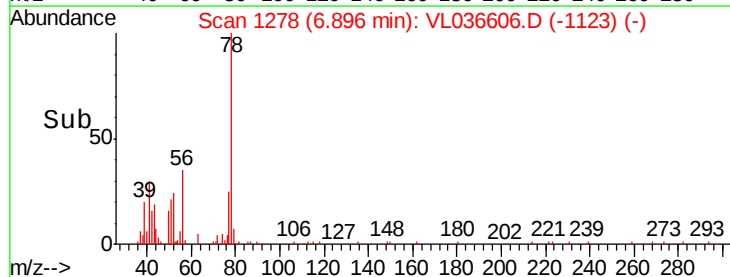
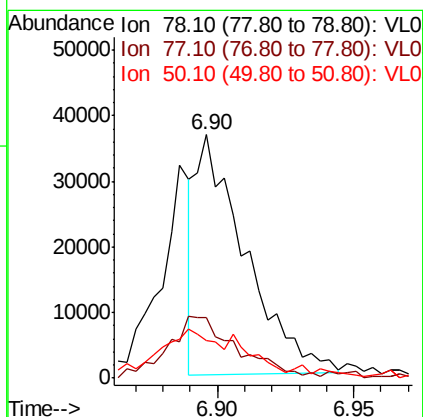
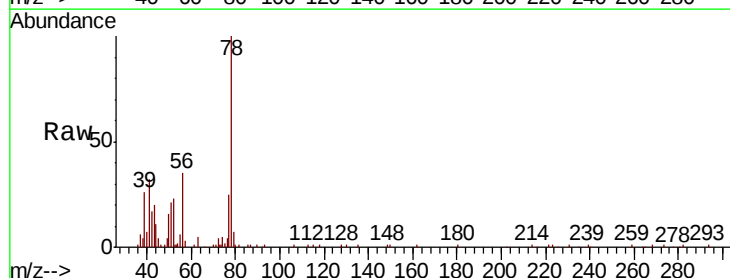
Instrument :
MSVOA_L
ClientSampleId :

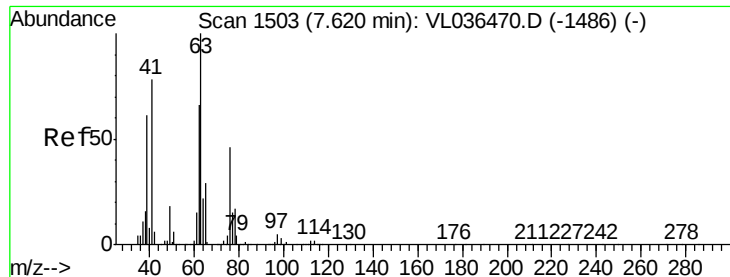
Tot Ion: 43 Resp: 100172
Ion Ratio Lower Upper
43 100
72 28.8 17.0 25.6#



#36
Benzene
Concen: 0.126 ppbv
RT: 6.90 min Scan# 1278
Delta R.T. -0.00 min
Lab File: VL036606.D
Acq: 31 Mar 2021 17:49

Tgt Ion: 78 Resp: 45866
Ion Ratio Lower Upper
78 100
77 23.8 18.0 27.0
50 13.7 16.5 24.7#

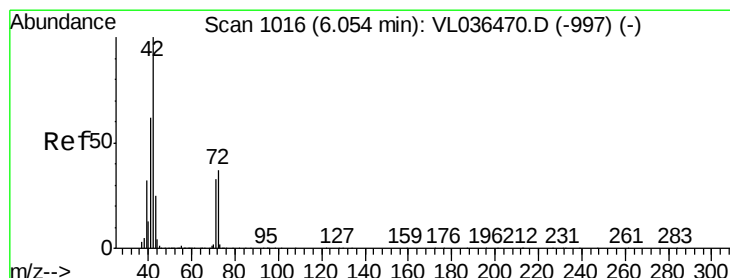
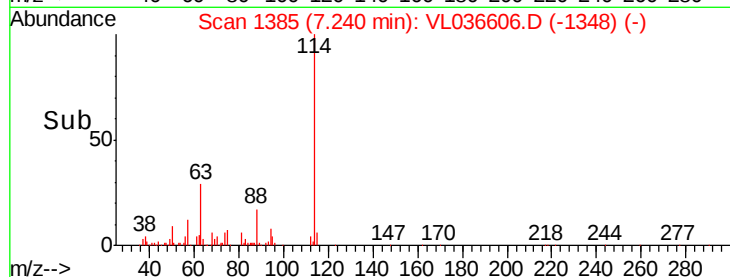
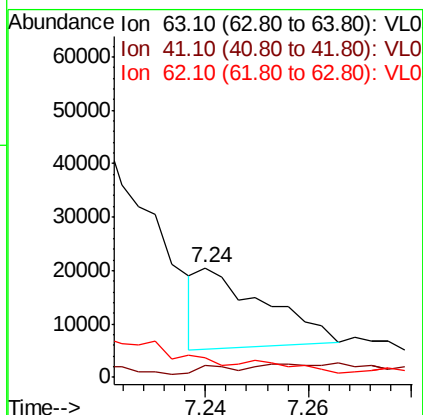
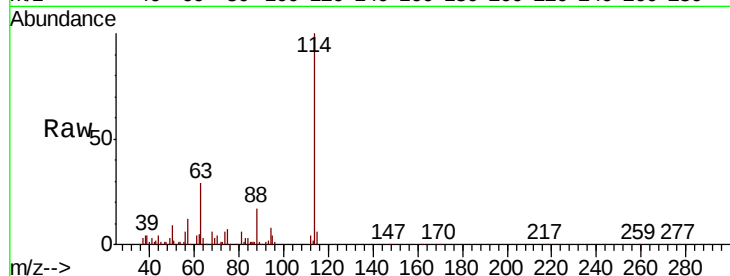




#39
 1,2-Dichloropropane
 Concen: 0.091 ppbv
 RT: 7.24 min Scan# 1385
 Delta R.T. -0.38 min
 Lab File: VL036606.D
 Acq: 31 Mar 2021 17:49

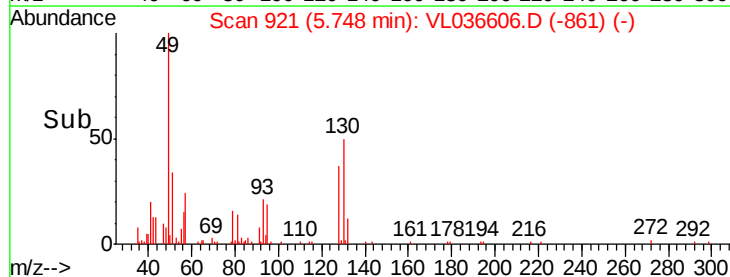
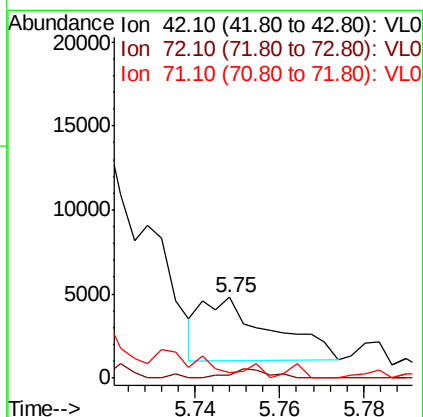
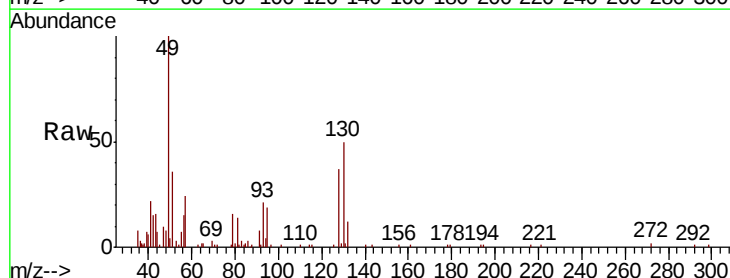
Instrument :
 MSVOA_L
 ClientSampleId :

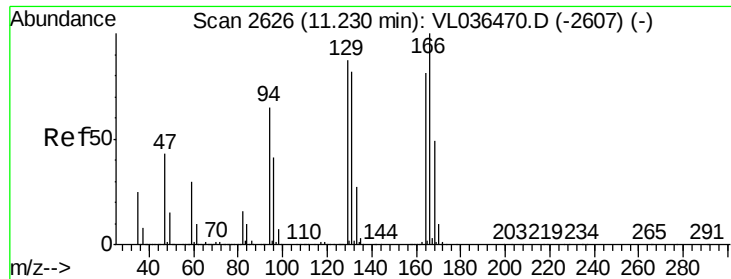
Tot Ion	63	Resp	13387
Ion Ratio	Lower	Upper	
63	100		
41	9.4	62.4	93.6#
62	21.2	52.8	79.2#



#41
 Tetrahydrofuran
 Concen: 0.048 ppbv
 RT: 5.75 min Scan# 921
 Delta R.T. -0.31 min
 Lab File: VL036606.D
 Acq: 31 Mar 2021 17:49

Tgt Ion	42	Resp	4293
Ion Ratio	Lower	Upper	
42	100		
72	8.5	27.6	41.4#
71	0.0	27.0	40.4#





#52

Tetrachloroethene

Concen: 0.023 ppbv

RT: 11.23 min Scan# 2626

Delta R.T. -0.00 min

Lab File: VL036606.D

Acq: 31 Mar 2021 17:49

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:164 Resp: 3032

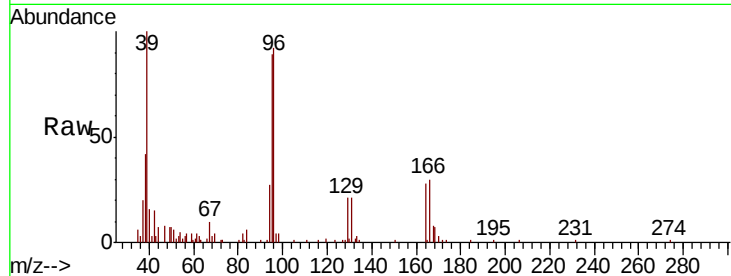
Ion Ratio Lower Upper

164 100

166 81.7 98.3 147.5#

129 28.5 85.8 128.8#

131 22.4 80.9 121.3#

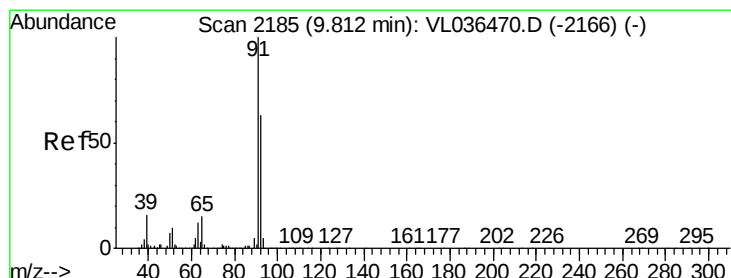
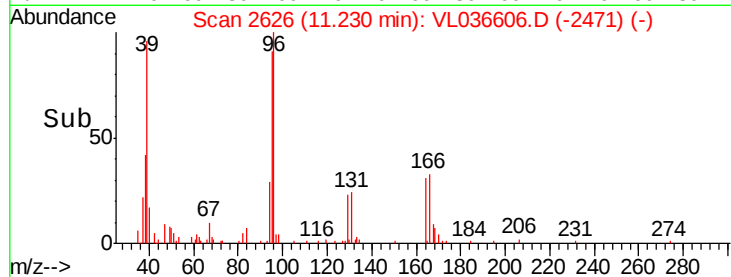
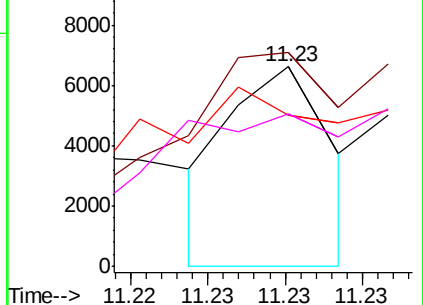


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.112 ppbv

RT: 9.82 min Scan# 2186

Delta R.T. 0.00 min

Lab File: VL036606.D

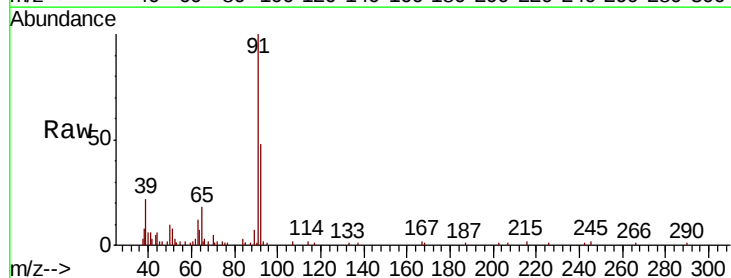
Acq: 31 Mar 2021 17:49

Tgt Ion: 91 Resp: 43457

Ion Ratio Lower Upper

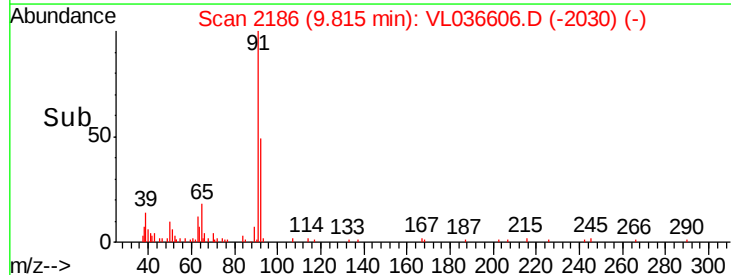
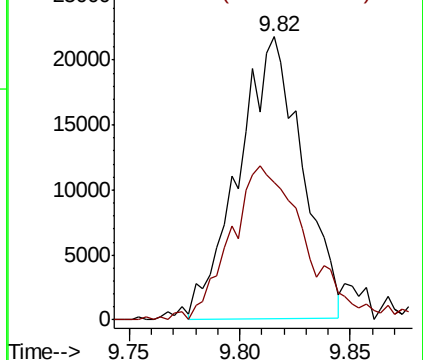
91 100

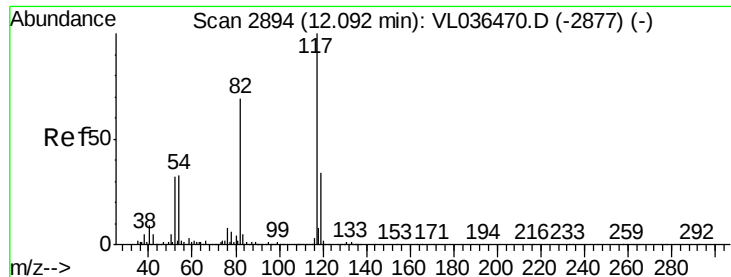
92 66.6 48.8 73.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

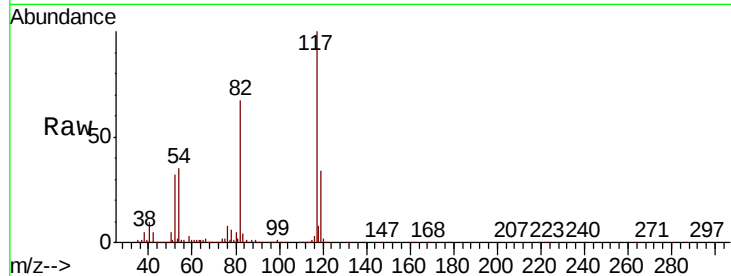




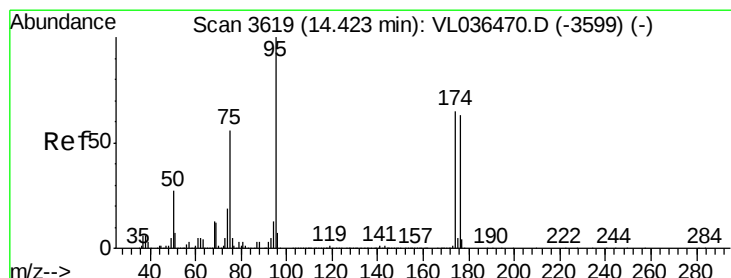
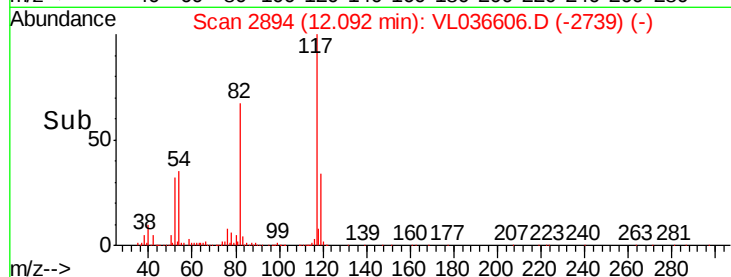
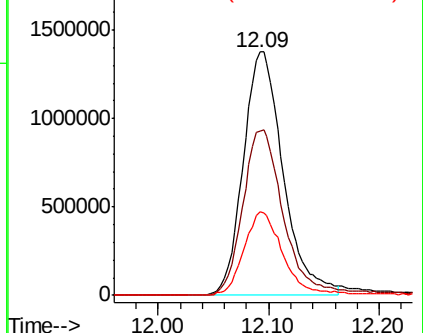
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2894
Delta R.T. -0.00 min
Lab File: VL036606.D
Acq: 31 Mar 2021 17:49

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 3451236
Ion Ratio Lower Upper
117 100
82 71.3 57.4 86.0
119 34.4 47.4 71.0#

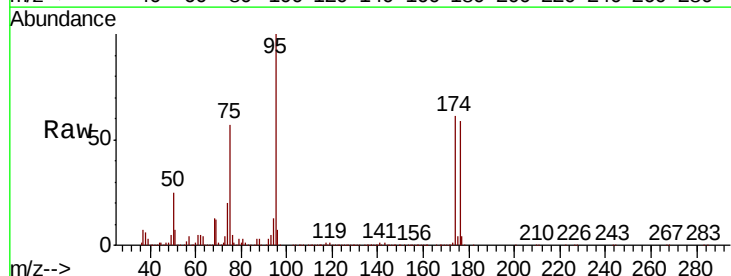


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 10.001 ppbv
RT: 14.43 min Scan# 3620
Delta R.T. 0.00 min
Lab File: VL036606.D
Acq: 31 Mar 2021 17:49

Tgt Ion: 95 Resp: 2750978
Ion Ratio Lower Upper
95 100
174 64.9 51.0 76.6
175 5.2 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

