

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020321\
 Data File : VL036305.D
 Acq On : 3 Feb 2021 22:35
 Operator : SY/AP
 Sample : M1295-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

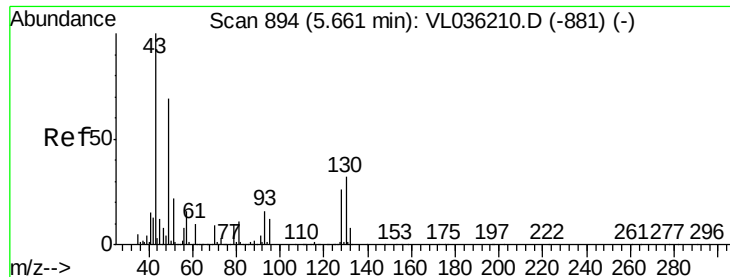
Quant Time: Feb 04 01:48:56 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL011321AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 14 16:13:38 2021
 QLast Update : Thu Jan 14 16:13:38 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1535768	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.19	114	3238479	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.11	117	2903099	10.00	ppbv	0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.44	95	2392980	9.96	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	92530	0.449	ppbv	97
3) Chlorodifluoromethane	3.00	51	86752	0.460	ppbv #	90
4) Chloromethane	3.15	50	29420	0.316	ppbv	90
9) Propene	3.02	41	14833	0.165	ppbv #	14
10) Heptane	8.14	43	13930	0.062	ppbv #	73
11) Trichlorofluoromethane	3.96	101	53846	0.257	ppbv	91
13) Ethanol	3.62	45	420758	29.834	ppbv	87
15) Acetone	3.87	43	613608	3.262	ppbv	98
19) Isopropyl Alcohol	4.00	45	27374	0.241	ppbv #	93
20) Methylene Chloride	4.36	84	74904	1.248	ppbv	93
22) trans-1,2-Dichloroethene	4.90	96	2316	0.043	ppbv #	59
23) Vinyl Acetate	5.09	43	23241	0.102	ppbv #	72
25) Ethyl Acetate	5.70	43	144705	0.383	ppbv #	97
26) Hexane	5.71	57	103147	0.656	ppbv #	60
29) Chloroform	5.77	83	20178	0.090	ppbv	86
31) cis-1,2-Dichloroethene	5.57	61	232006	1.544	ppbv	96
32) 1,1,1-Trichloroethane	6.53	97	55642	0.256	ppbv #	84
34) 2-Butanone	5.28	43	129273	0.542	ppbv	96
35) Carbon Tetrachloride	7.04	117	7444	0.036	ppbv #	86
36) Benzene	6.91	78	61341	0.207	ppbv	98
38) Trichloroethene	7.86	130	187023	1.702	ppbv	95
39) 1,2-Dichloropropane	7.20	63	944484	7.839	ppbv #	20
52) Tetrachloroethene	11.25	164	2485482	22.730	ppbv	98
53) Toluene	9.83	91	1112514	3.352	ppbv	99

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 901

Delta R.T. 0.02 min

Lab File: VL036305.D

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Instrument :

MSVOA_L

ClientSampled :

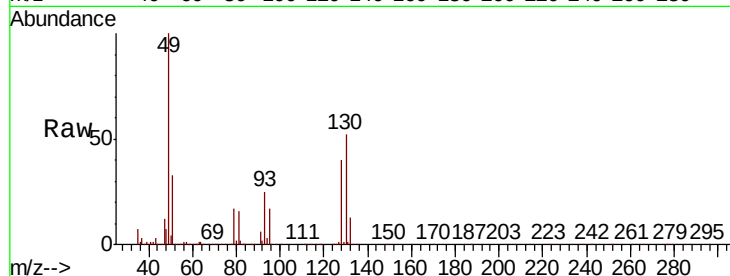
Tot Ion: 49 Resp: 1535768

Ion	Ratio	Lower	Upper
49	100		
128	40.5	20.1	60.2
130	52.3	25.3	75.9

49 100

128 40.5 20.1 60.2

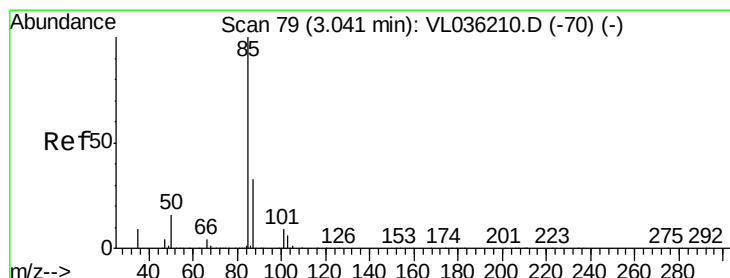
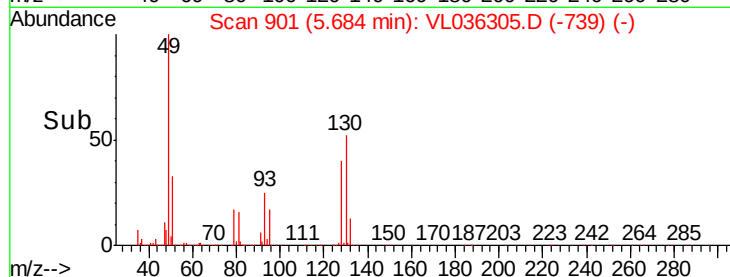
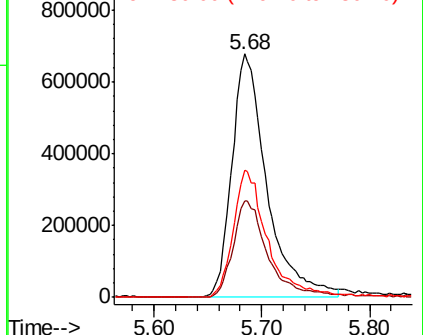
130 52.3 25.3 75.9



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: 0.449 ppbv

RT: 3.06 min Scan# 86

Delta R.T. 0.02 min

Lab File: VL036305.D

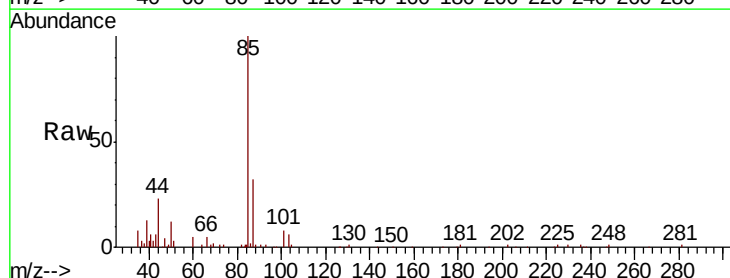
Acq: 3 Feb 2021 22:35

Tgt Ion: 85 Resp: 92530

Ion	Ratio	Lower	Upper
85	100		
87	31.2	26.4	39.6

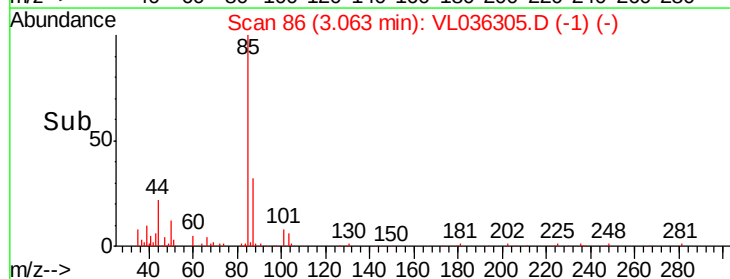
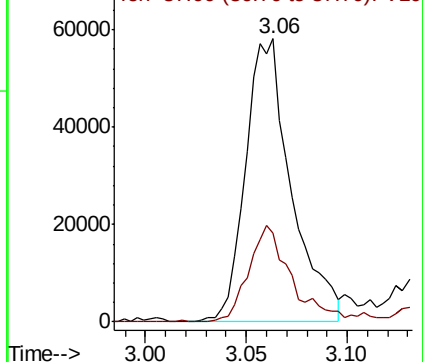
85 100

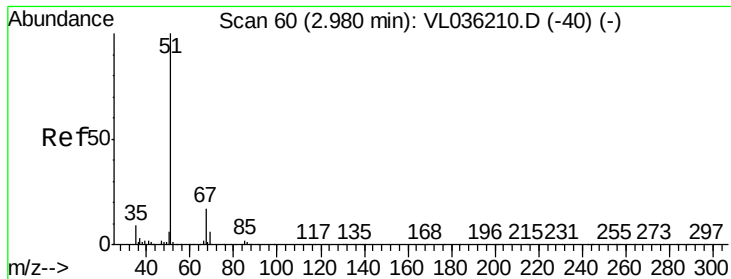
87 31.2 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

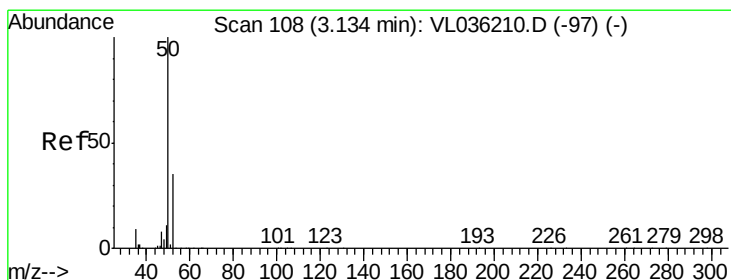
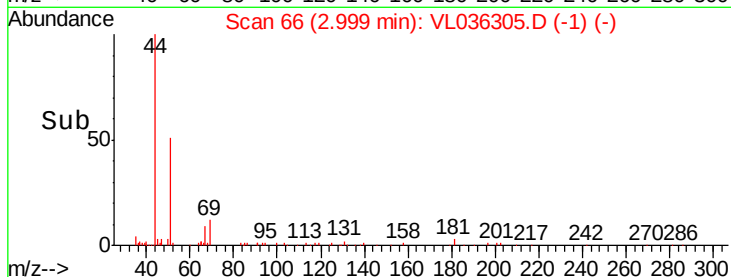
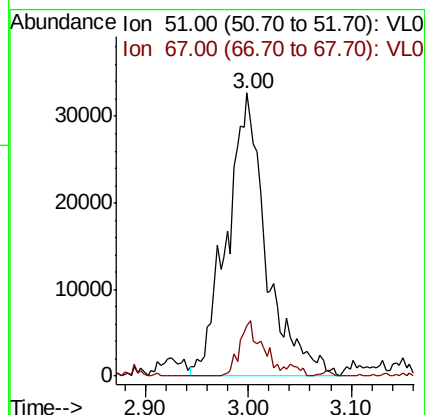
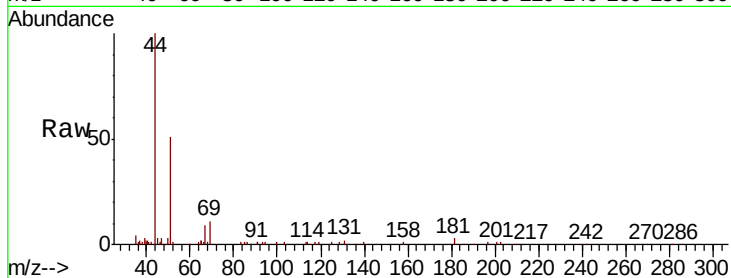




#3
Chlorodifluoromethane
Concen: 0.460 ppbv
RT: 3.00 min Scan# 66
Delta R.T. 0.02 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

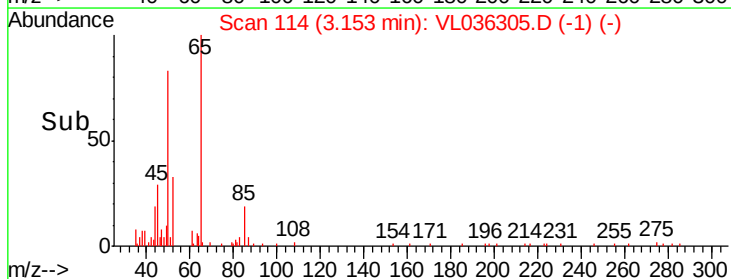
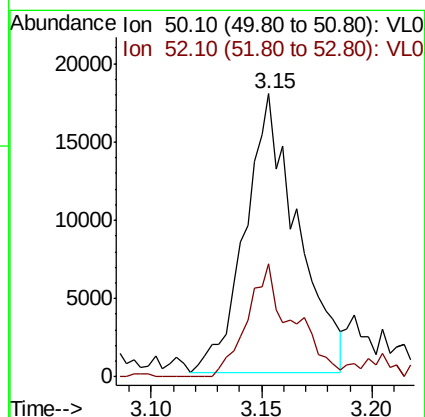
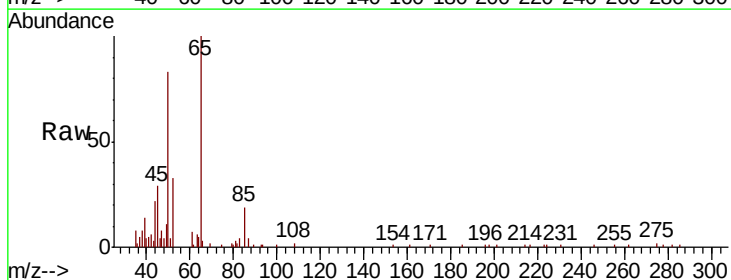
Instrument :
MSVOA_L
ClientSampleId :

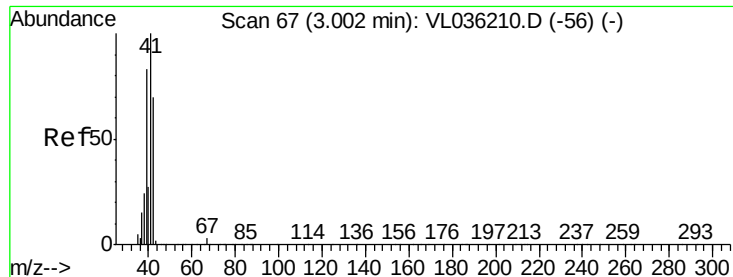
Tot Ion: 51 Resp: 86752
Ion Ratio Lower Upper
51 100
67 12.9 14.0 21.0#



#4
Chloromethane
Concen: 0.316 ppbv
RT: 3.15 min Scan# 114
Delta R.T. 0.02 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

Tgt Ion: 50 Resp: 29420
Ion Ratio Lower Upper
50 100
52 40.8 27.8 41.8

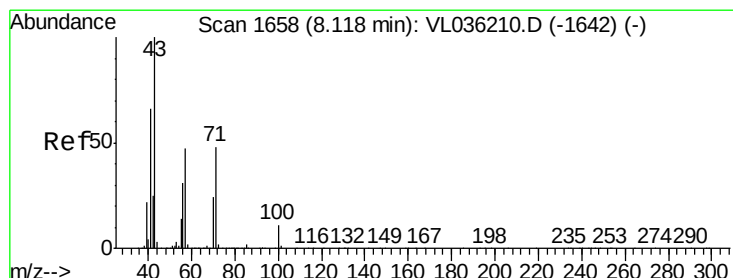
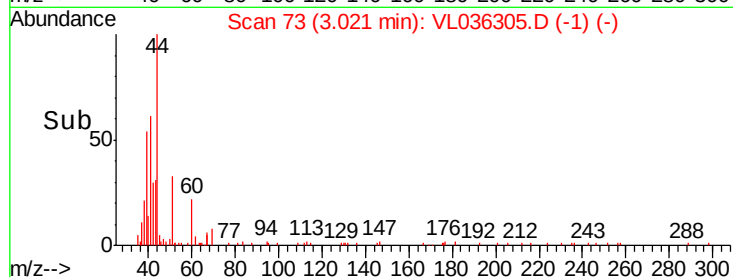
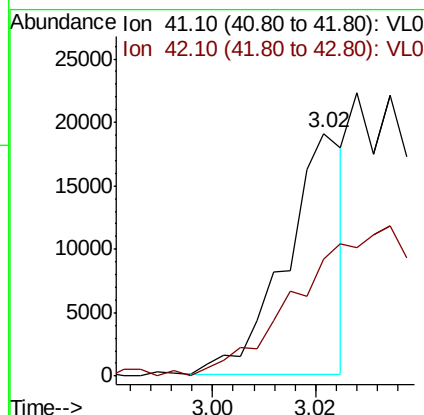
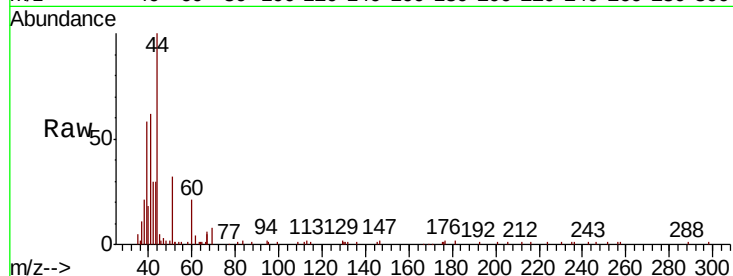




#9
 Propene
 Concen: 0.165 ppbv
 RT: 3.02 min Scan# 73
 Delta R.T. 0.02 min
 Lab File: VL036305.D
 Acq: 3 Feb 2021 22:35

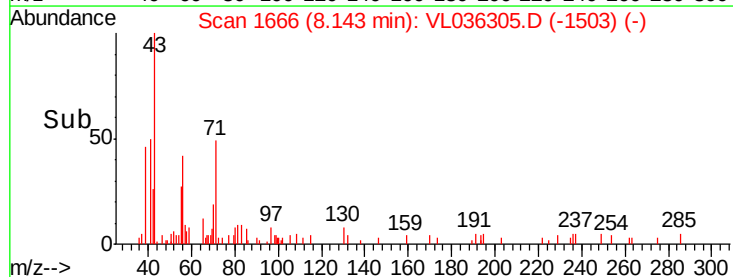
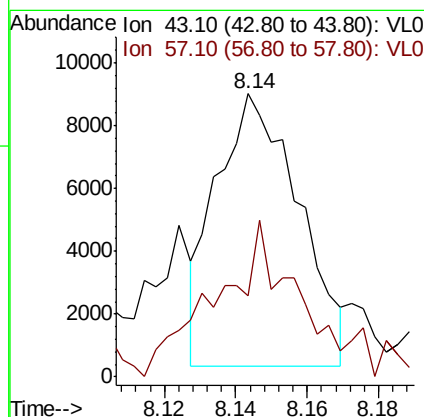
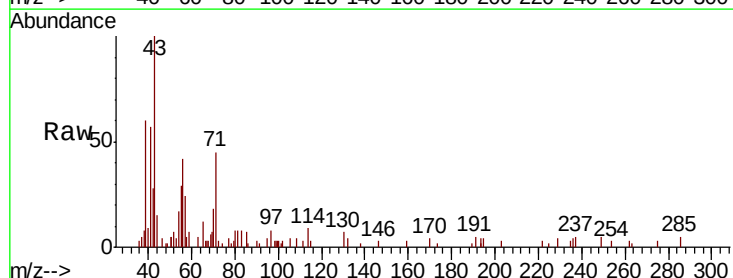
Instrument :
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 ClientSampleId :

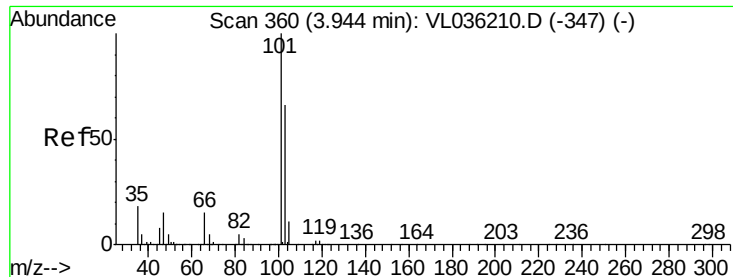
Tot Ion: 41 Resp: 14833
 Ion Ratio Lower Upper
 41 100
 42 0.0 57.1 85.7#



#10
 Heptane
 Concen: 0.062 ppbv
 RT: 8.14 min Scan# 1666
 Delta R.T. 0.03 min
 Lab File: VL036305.D
 Acq: 3 Feb 2021 22:35

Tgt Ion: 43 Resp: 13930
 Ion Ratio Lower Upper
 43 100
 57 65.9 38.1 57.1#

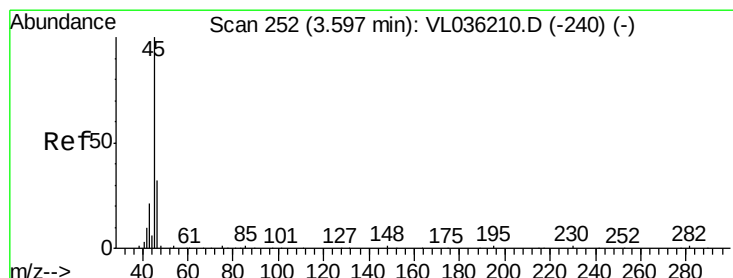
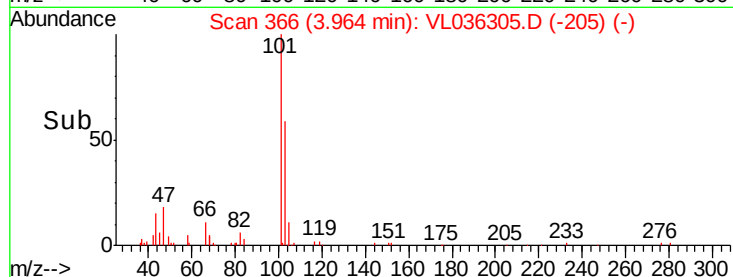
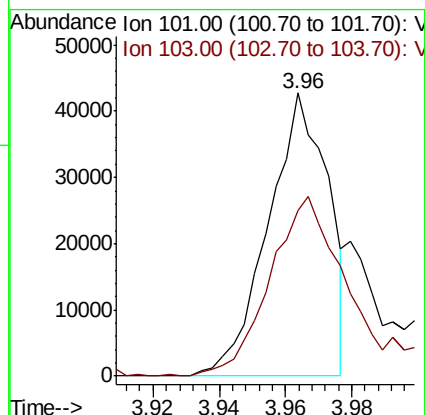
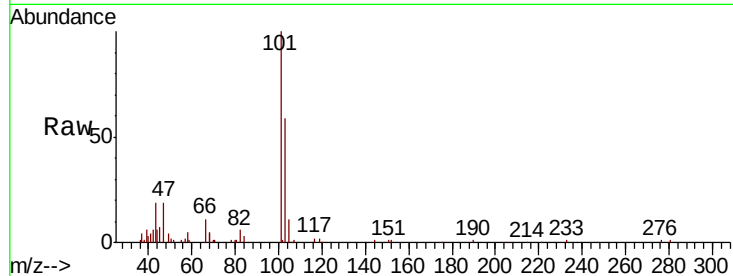




#11
 Trichlorofluoromethane
 Concen: 0.257 ppbv
 RT: 3.96 min Scan# 366
 Delta R.T. 0.02 min
 Lab File: VL036305.D
 Acq: 3 Feb 2021 22:35

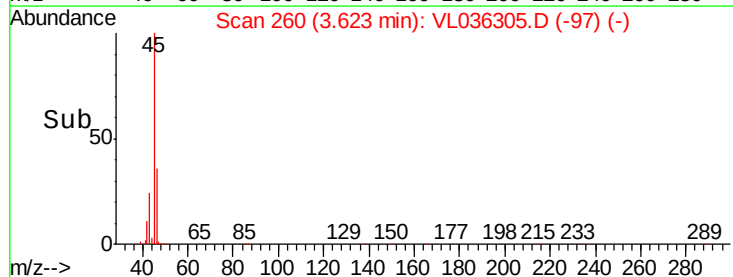
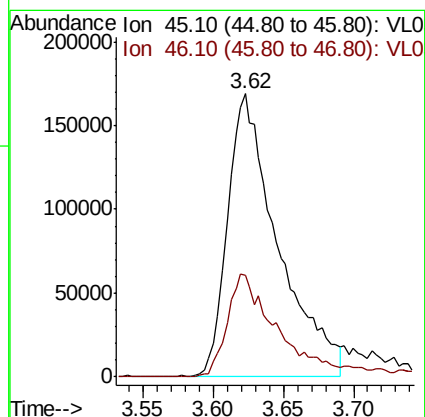
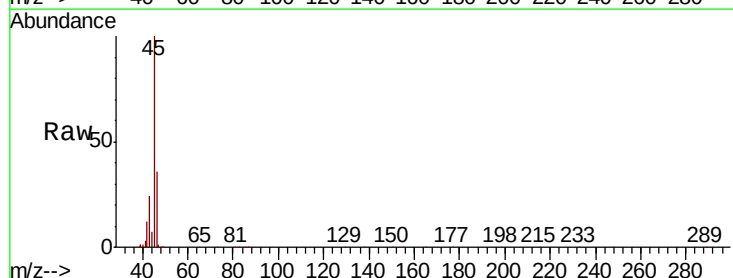
Instrument :
 MSVOA_L
 ClientSampleId :

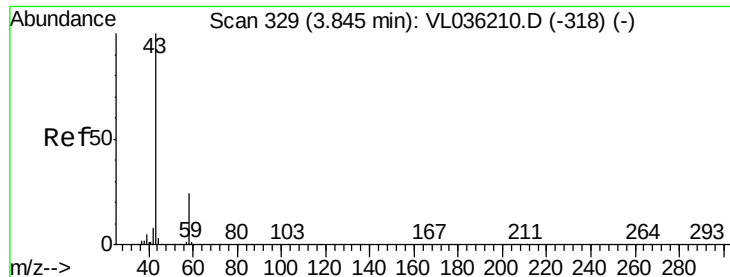
Tot Ion:101 Resp: 53846
 Ion Ratio Lower Upper
 101 100
 103 58.6 52.6 78.8



#13
 Ethanol
 Concen: 29.834 ppbv
 RT: 3.62 min Scan# 260
 Delta R.T. 0.03 min
 Lab File: VL036305.D
 Acq: 3 Feb 2021 22:35

Tgt Ion: 45 Resp: 420758
 Ion Ratio Lower Upper
 45 100
 46 39.2 19.2 77.0

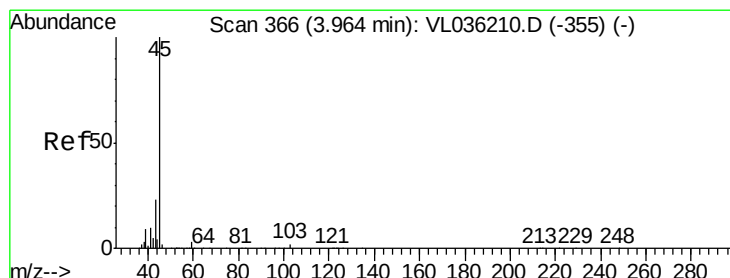
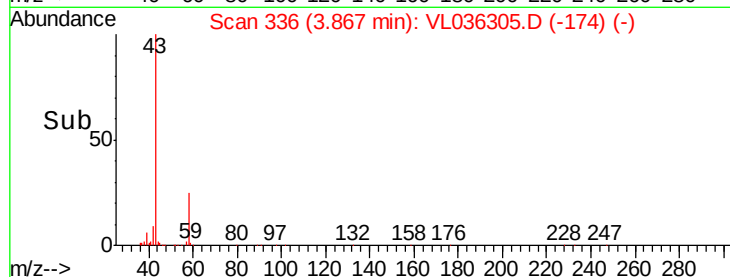
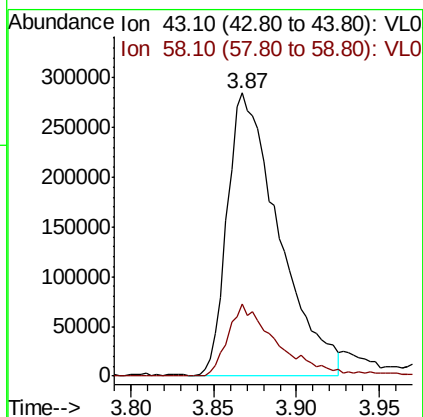
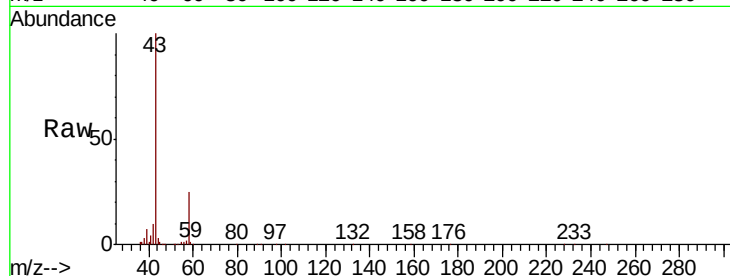




#15
Acetone
Concen: 3.262 ppbv
RT: 3.87 min Scan# 336
Delta R.T. 0.02 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

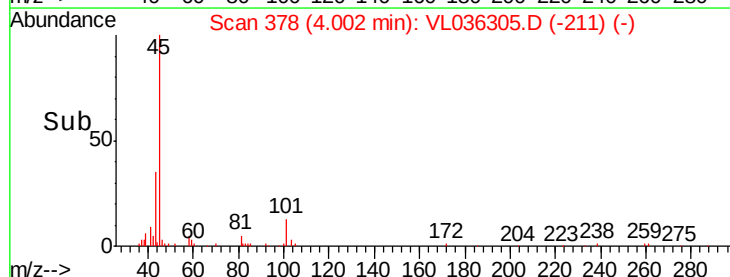
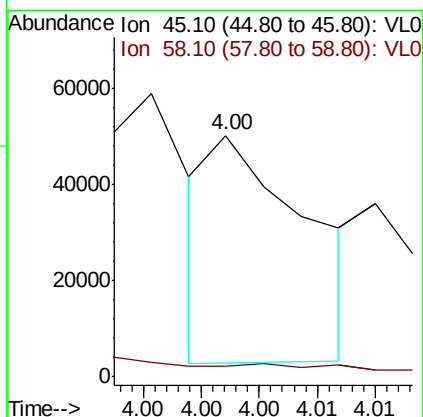
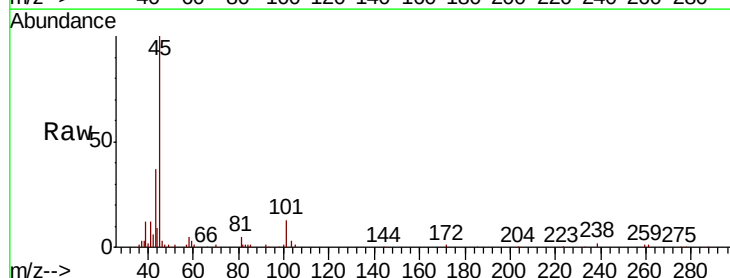
Instrument :
MSVOA_L
ClientSampleId :

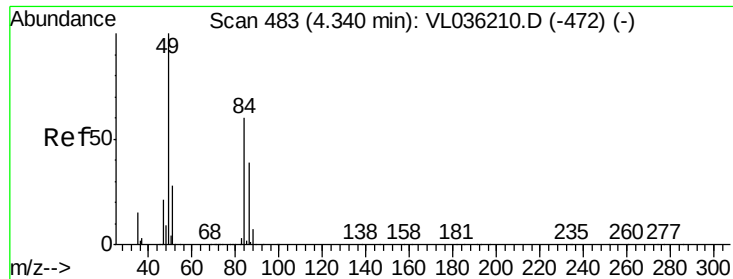
Tot Ion: 43 Resp: 613608
Ion Ratio Lower Upper
43 100
58 25.0 20.9 31.3



#19
Isopropyl Alcohol
Concen: 0.241 ppbv
RT: 4.00 min Scan# 378
Delta R.T. 0.04 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

Tgt Ion: 45 Resp: 27374
Ion Ratio Lower Upper
45 100
58 0.0 1.9 2.9#

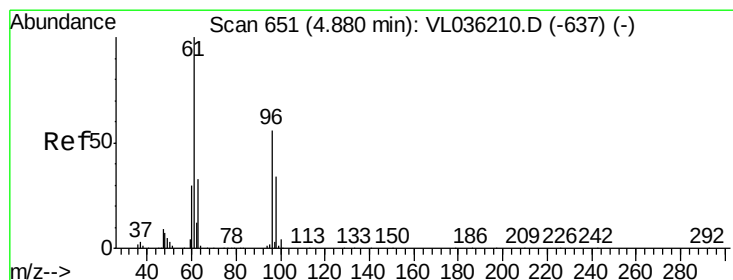
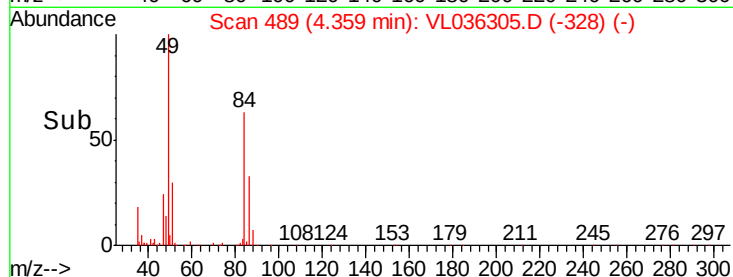
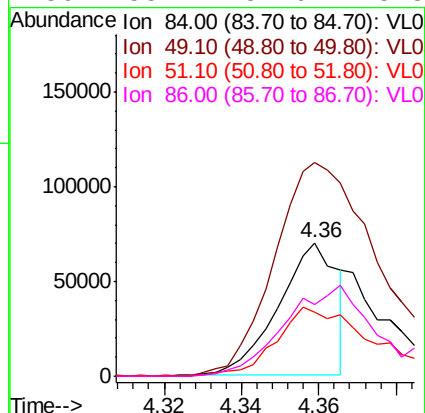
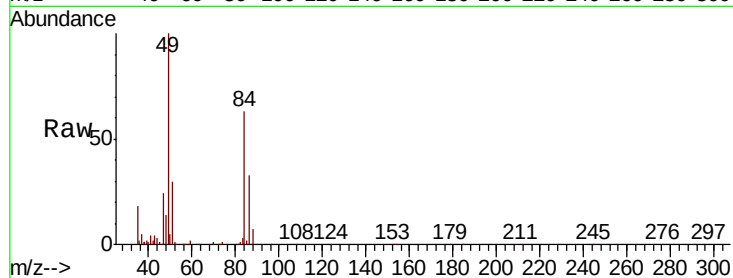




#20
Methylene Chloride
Concen: 1.248 ppbv
RT: 4.36 min Scan# 489
Delta R.T. 0.02 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

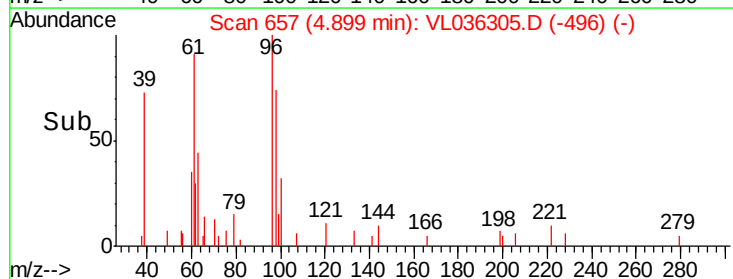
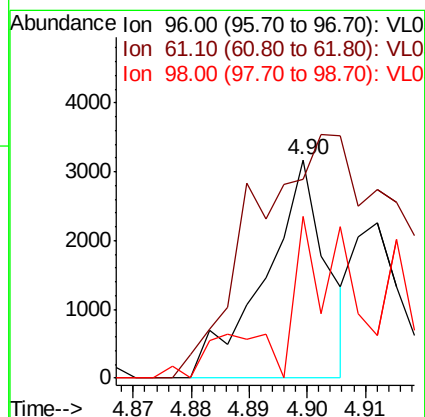
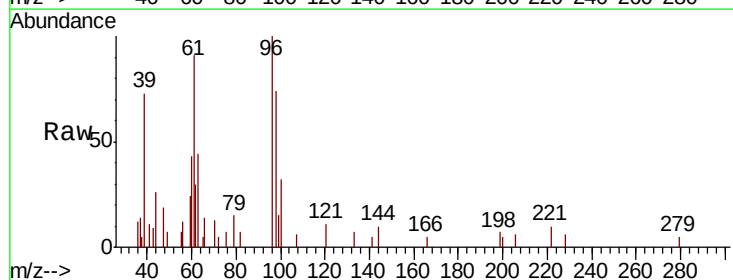
Instrument :
MSVOA_L
ClientSampled :

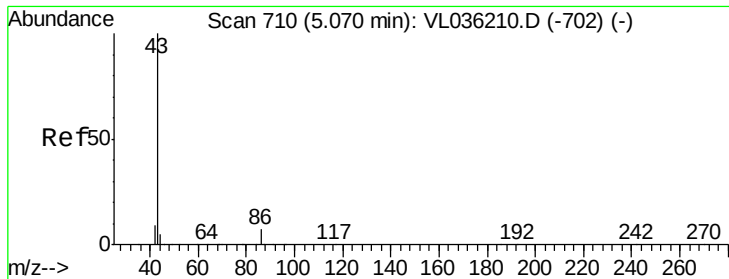
Tot Ion:	84	Resp:	74904
Ion	Ratio	Lower	Upper
84	100		
49	160.3	134.1	201.1
51	46.5	37.4	56.0
86	53.4	52.6	78.8



#22
trans-1,2-Dichloroethene
Concen: 0.043 ppbv
RT: 4.90 min Scan# 657
Delta R.T. 0.02 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

Tgt Ion:	96	Resp:	2316
Ion	Ratio	Lower	Upper
96	100		
61	110.0	142.7	214.1#
98	74.0	48.7	73.1#

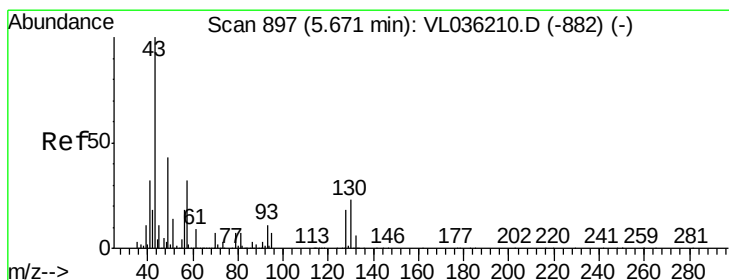
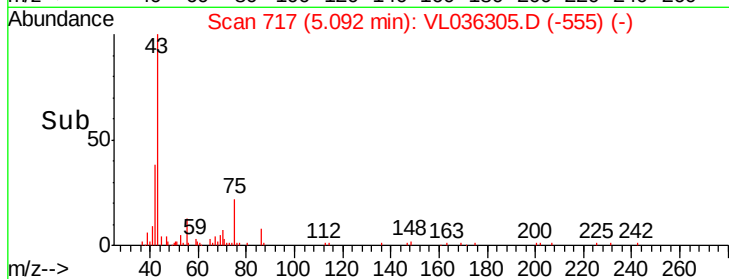
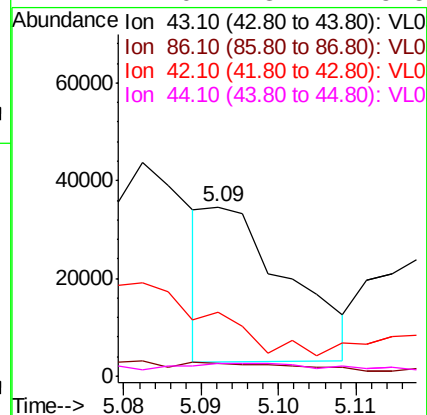
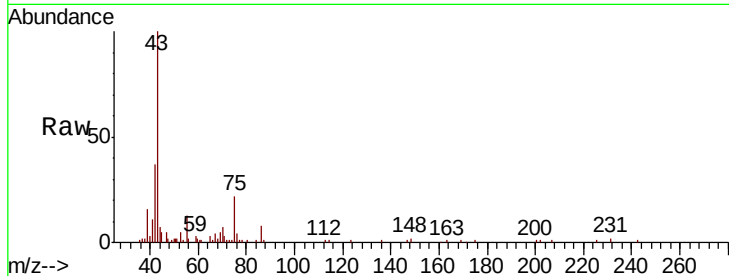




#23
 Vinyl Acetate
 Concen: 0.102 ppbv
 RT: 5.09 min Scan# 717
 Delta R.T. 0.02 min
 Lab File: VL036305.D
 Acq: 3 Feb 2021 22:35

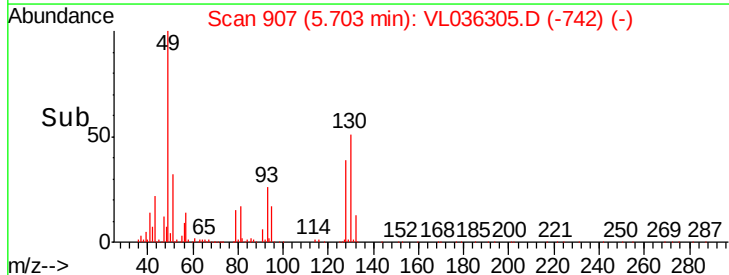
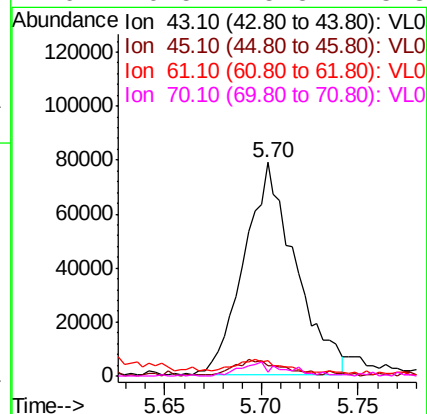
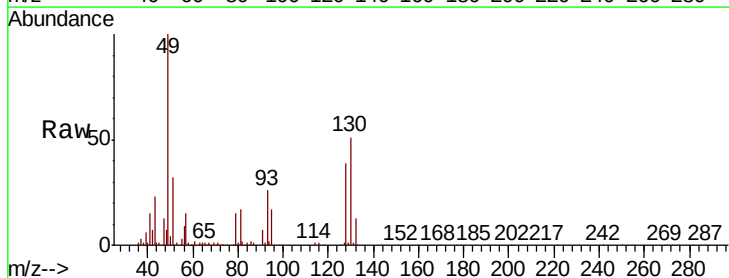
Instrument :
 MSVOA_L
 ClientSampleId :

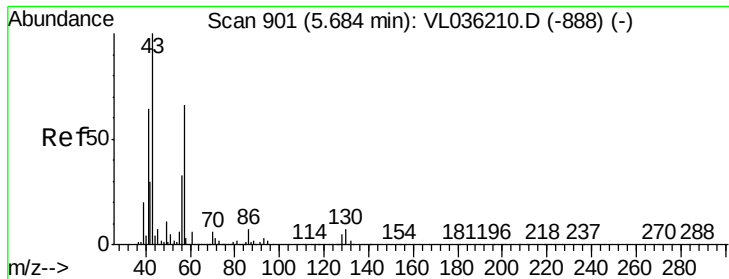
Tot Ion:	43	Resp:	23241
Ion	Ratio	Lower	Upper
43	100		
86	3.4	4.9	7.3#
42	28.0	7.8	11.6#
44	2.0	3.7	5.5#



#25
 Ethyl Acetate
 Concen: 0.383 ppbv
 RT: 5.70 min Scan# 907
 Delta R.T. 0.03 min
 Lab File: VL036305.D
 Acq: 3 Feb 2021 22:35

Tgt Ion:	43	Resp:	144705
Ion	Ratio	Lower	Upper
43	100		
45	7.7	8.3	12.5#
61	8.9	7.4	11.2
70	6.5	5.5	8.3

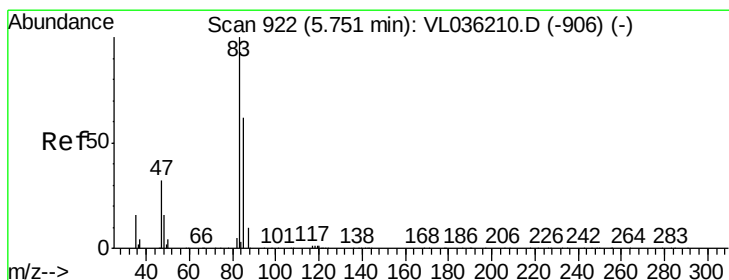
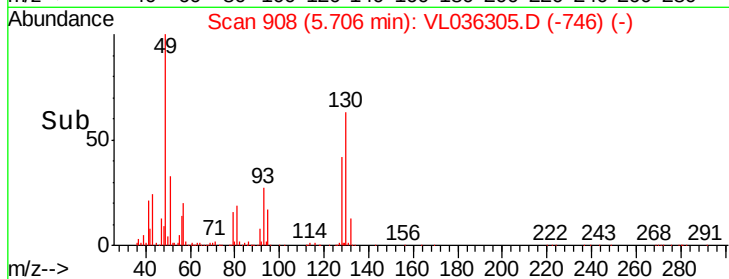
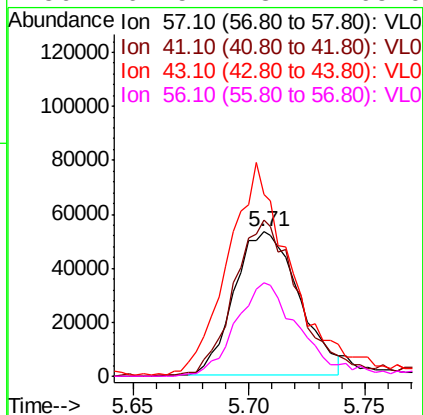
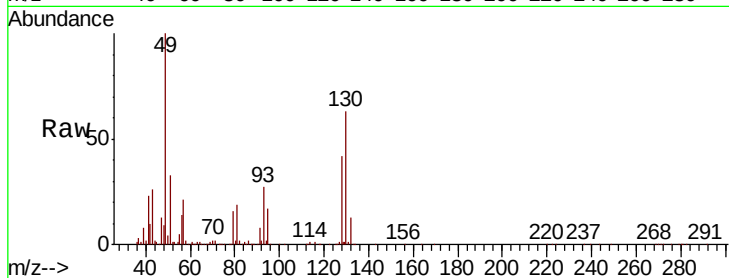




#26
Hexane
Concen: 0.656 ppbv
RT: 5.71 min Scan# 908
Delta R.T. 0.02 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

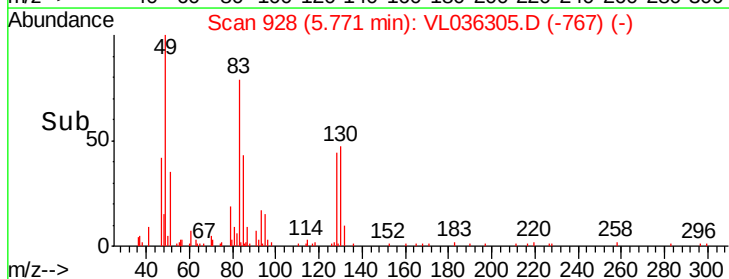
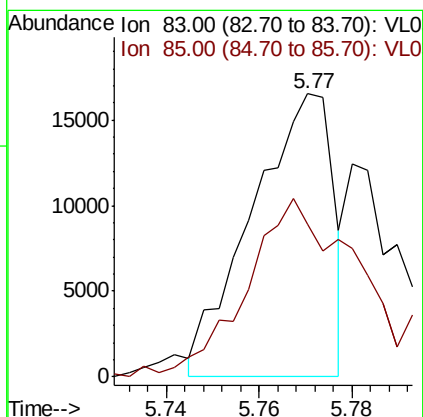
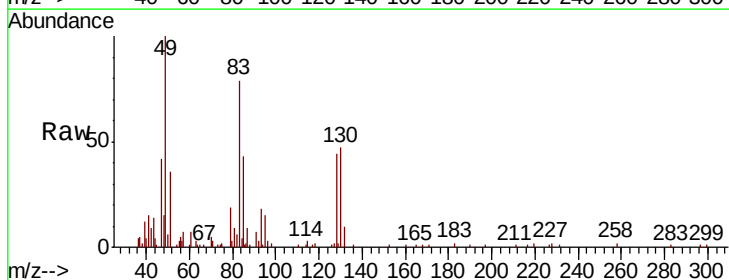
Instrument :
MSVOA_L
ClientSampled :

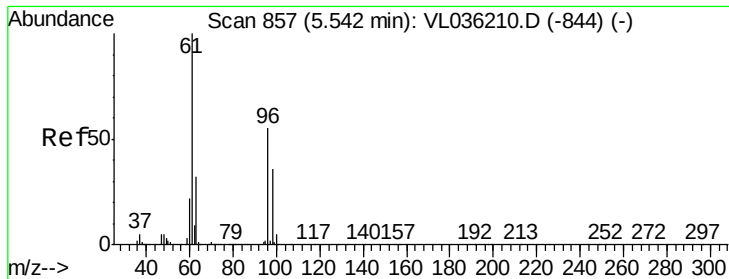
Tot Ion: 57 Resp: 103147
Ion Ratio Lower Upper
57 100
41 114.4 83.0 124.6
43 152.7 202.4 303.6#
56 67.5 43.4 65.0#



#29
Chloroform
Concen: 0.090 ppbv
RT: 5.77 min Scan# 928
Delta R.T. 0.02 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

Tgt Ion: 83 Resp: 20178
Ion Ratio Lower Upper
83 100
85 51.0 49.3 73.9



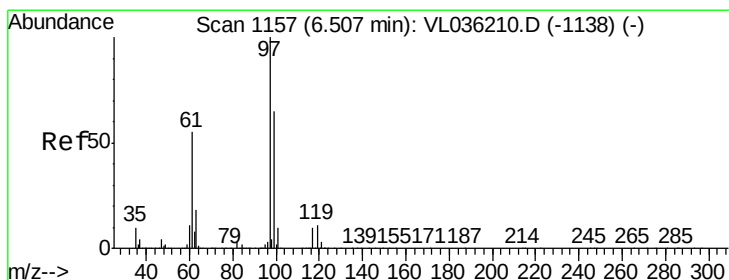
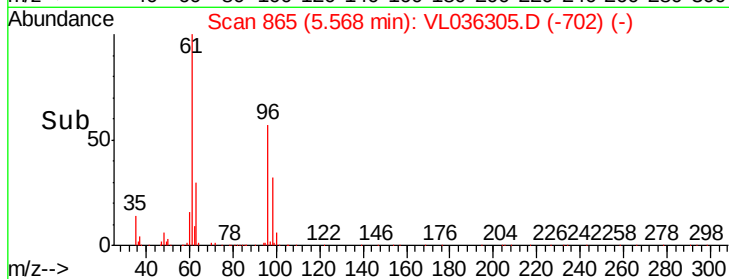
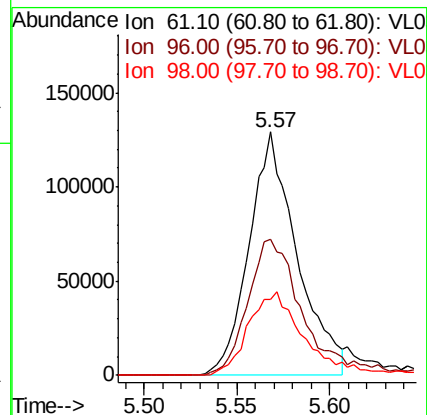
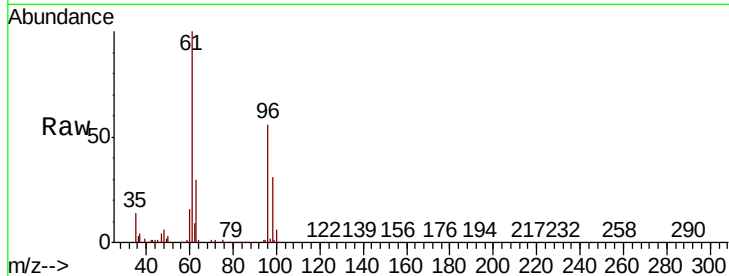


#31

cis-1,2-Dichloroethene
 Concen: 1.544 ppbv
 RT: 5.57 min Scan# 865
 Delta R.T. 0.03 min
 Lab File: VL036305.D
 Acq: 3 Feb 2021 22:35

Instrument :
 MSVOA_L
 ClientSampleID :

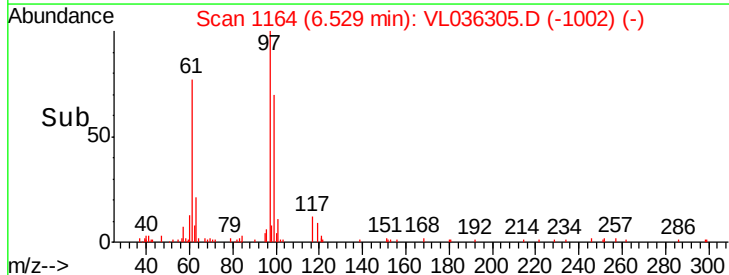
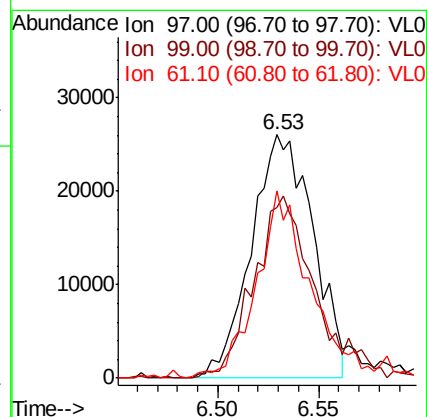
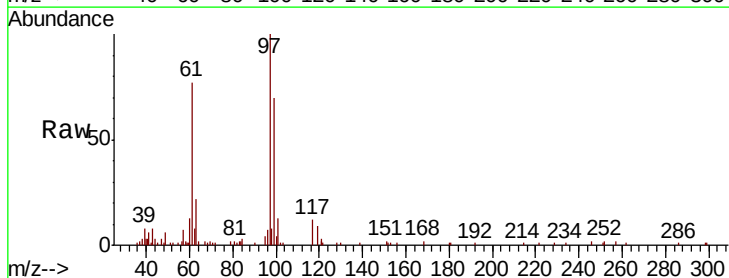
Tot Ion	Ratio	Lower	Upper
61	100		
96	56.2	44.1	66.1
98	31.4	28.6	42.8

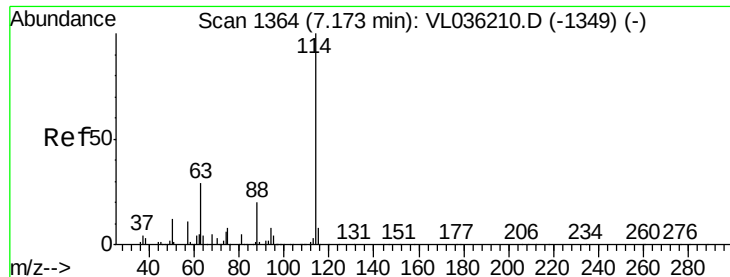


#32

1,1,1-Trichloroethane
 Concen: 0.256 ppbv
 RT: 6.53 min Scan# 1164
 Delta R.T. 0.02 min
 Lab File: VL036305.D
 Acq: 3 Feb 2021 22:35

Tgt Ion	Ratio	Lower	Upper
97	100		
99	74.4	52.0	78.0
61	69.9	43.6	65.4





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1371

Delta R.T. 0.02 min

Lab File: VL036305.D

Acq: 3 Feb 2021 22:35

Instrument :

MSVOA_L

ClientSampleId :

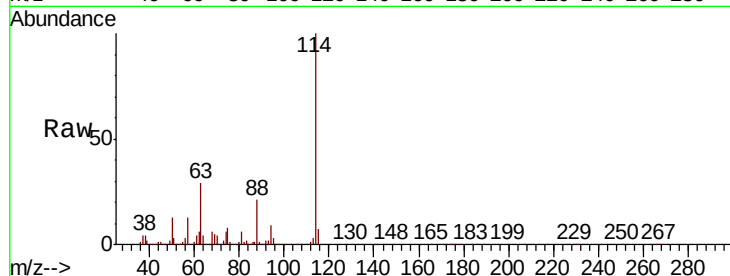
Tot Ion:114 Resp: 3238479

Ion Ratio Lower Upper

114 100

63 30.1 24.7 37.1

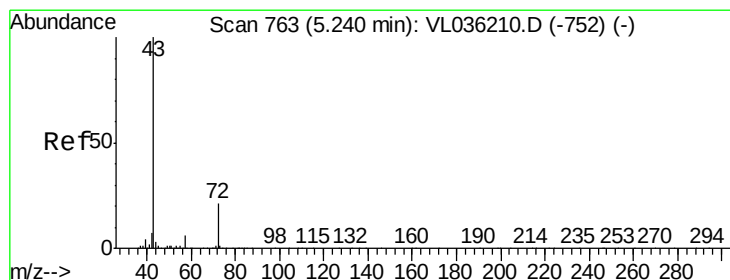
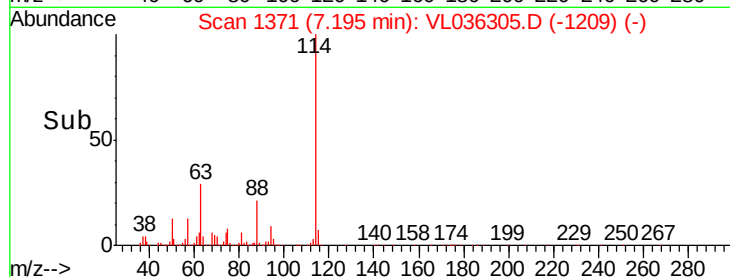
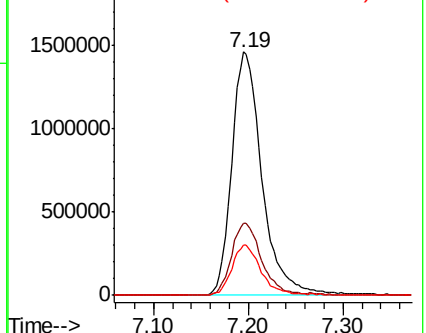
88 20.6 16.6 24.8



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.542 ppbv

RT: 5.28 min Scan# 774

Delta R.T. 0.04 min

Lab File: VL036305.D

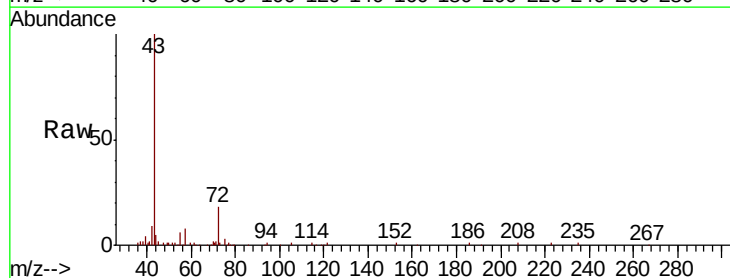
Acq: 3 Feb 2021 22:35

Tgt Ion: 43 Resp: 129273

Ion Ratio Lower Upper

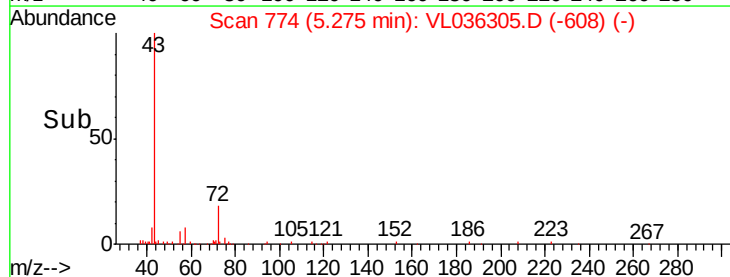
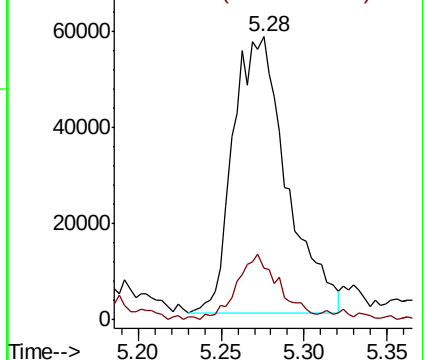
43 100

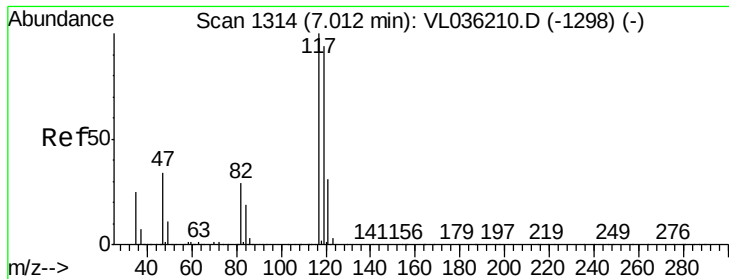
72 22.0 16.1 24.1



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.036 ppbv

RT: 7.04 min Scan# 1322

Delta R.T. 0.03 min

Lab File: VL036305.D

Acq: 3 Feb 2021 22:35

Instrument :

MSVOA_L

ClientSampleId :

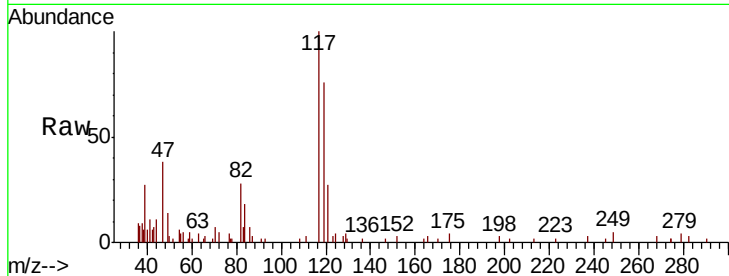
Tot Ion:117 Resp: 7444

Ion Ratio Lower Upper

117 100

119 79.4 74.9 112.3

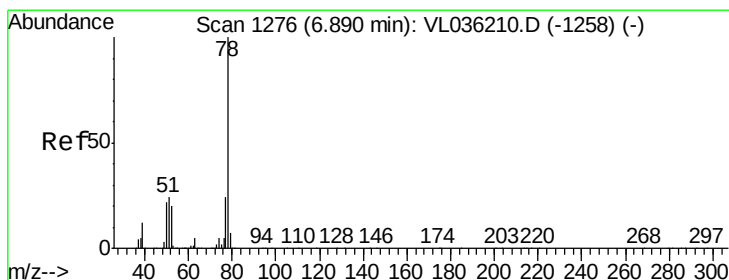
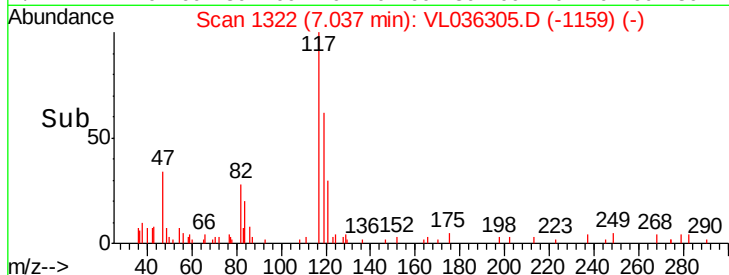
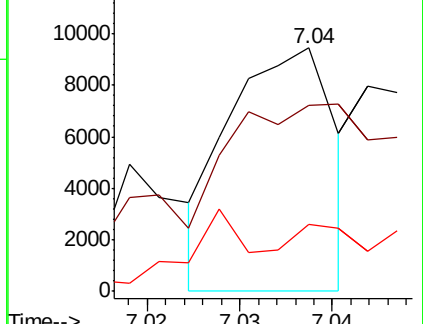
121 24.6 25.0 37.6#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.207 ppbv

RT: 6.91 min Scan# 1282

Delta R.T. 0.02 min

Lab File: VL036305.D

Acq: 3 Feb 2021 22:35

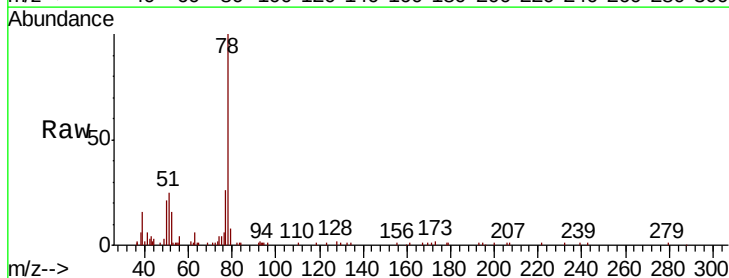
Tgt Ion: 78 Resp: 61341

Ion Ratio Lower Upper

78 100

77 25.0 19.4 29.0

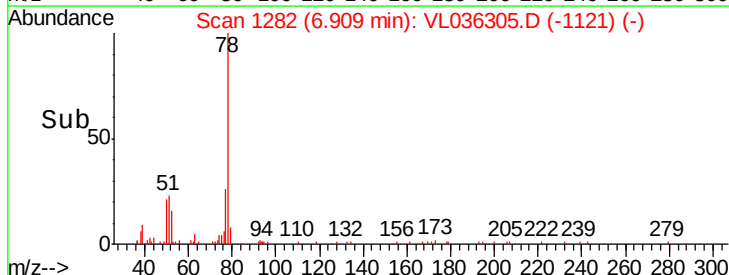
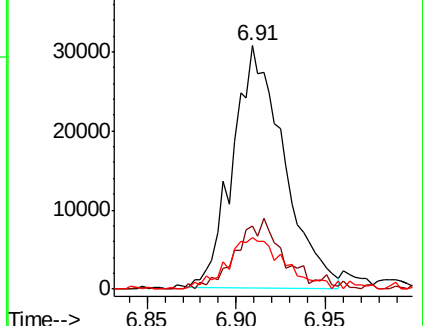
50 20.8 17.4 26.2

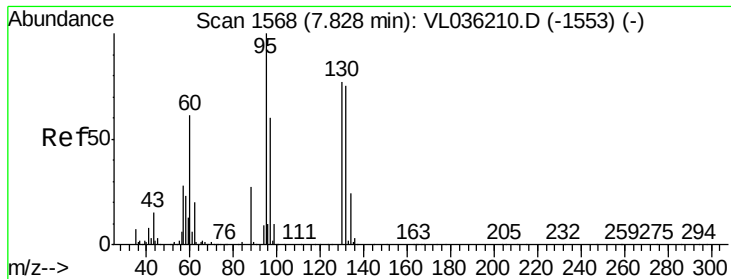


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#38

Trichloroethene

Concen: 1.702 ppbv

RT: 7.86 min Scan# 1578

Delta R.T. 0.03 min

Lab File: VL036305.D

Acq: 3 Feb 2021 22:35

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:130 Resp: 187023

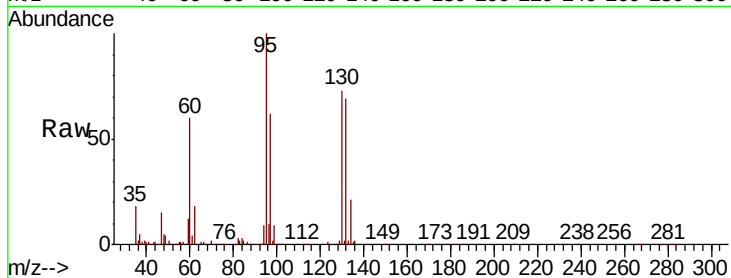
Ion Ratio Lower Upper

130 100

95 137.5 103.9 155.9

132 95.3 77.4 116.2

97 84.6 62.5 93.7

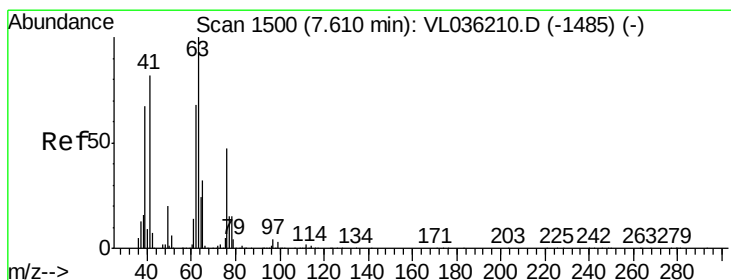
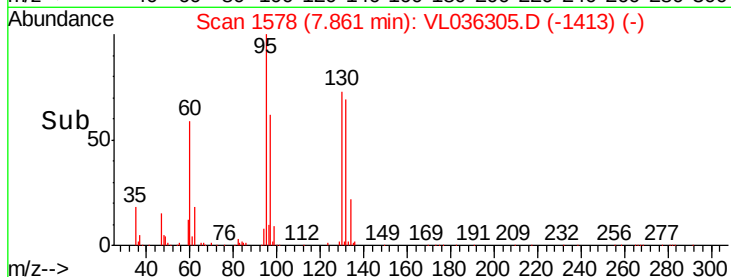
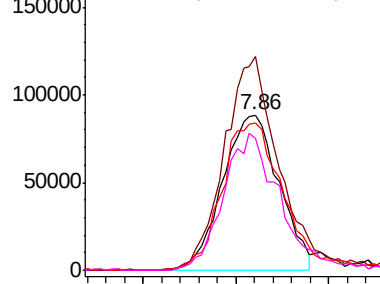


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 7.839 ppbv

RT: 7.20 min Scan# 1372

Delta R.T. -0.41 min

Lab File: VL036305.D

Acq: 3 Feb 2021 22:35

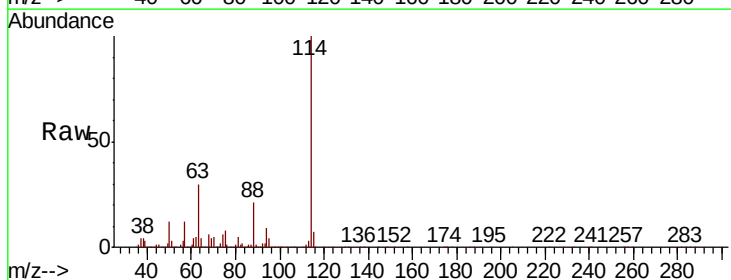
Tgt Ion: 63 Resp: 944484

Ion Ratio Lower Upper

63 100

41 0.0 66.1 99.1#

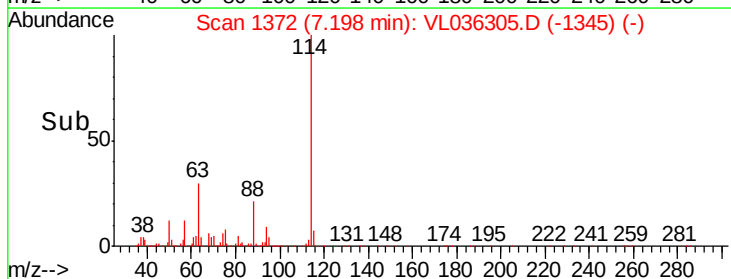
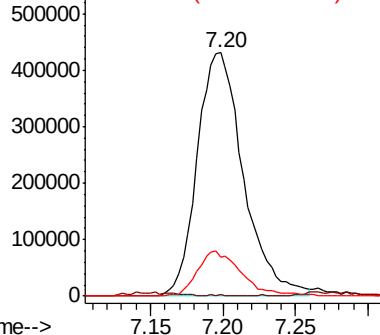
62 16.1 54.8 82.2#

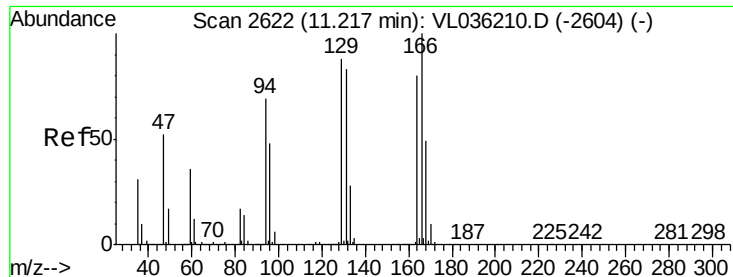


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#52

Tetrachloroethene

Concen: 22.730 ppbv

RT: 11.25 min Scan# 2632

Delta R.T. 0.03 min

Lab File: VL036305.D

Acq: 3 Feb 2021 22:35

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:164 Resp: 2485482

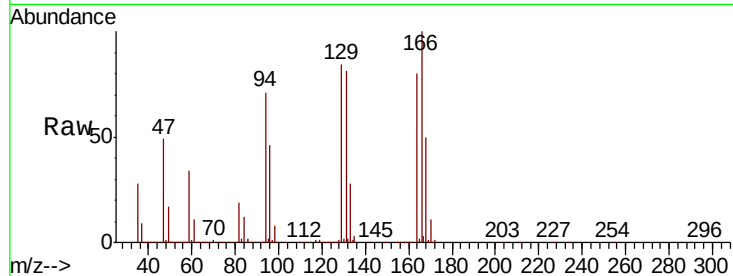
Ion Ratio Lower Upper

164 100

166 125.5 99.9 149.9

129 105.7 88.2 132.4

131 101.4 83.0 124.6

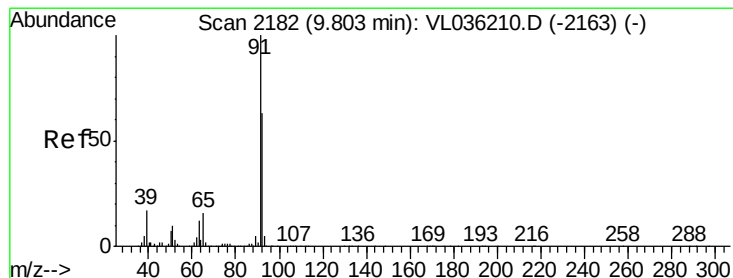
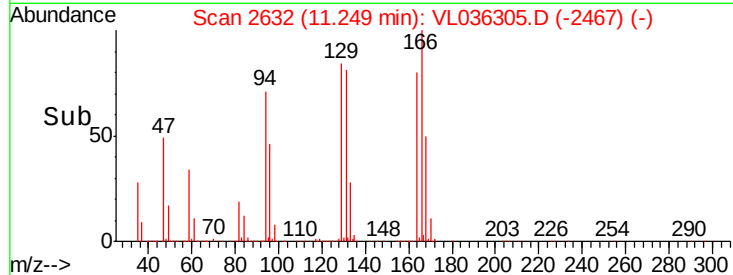
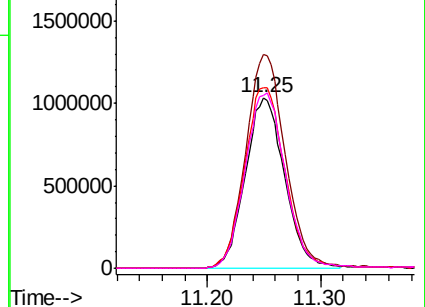


Abundance Ion 163.90 (163.60 to 164.60): V

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: 3.352 ppbv

RT: 9.83 min Scan# 2190

Delta R.T. 0.03 min

Lab File: VL036305.D

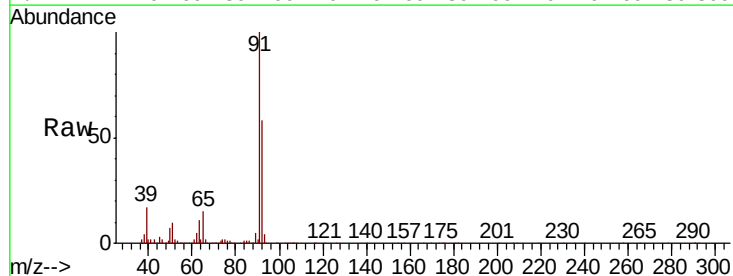
Acq: 3 Feb 2021 22:35

Tgt Ion: 91 Resp: 1112514

Ion Ratio Lower Upper

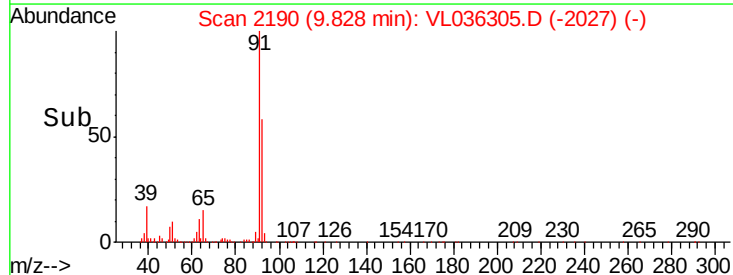
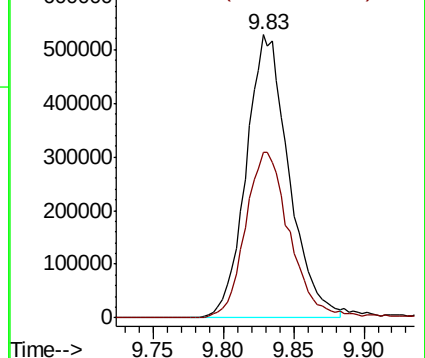
91 100

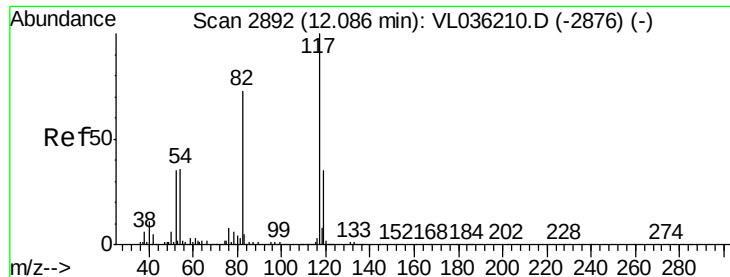
92 61.5 48.5 72.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

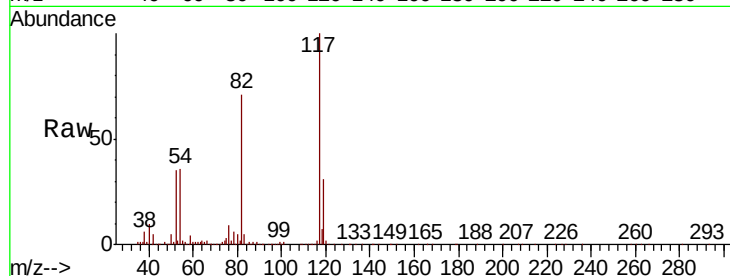




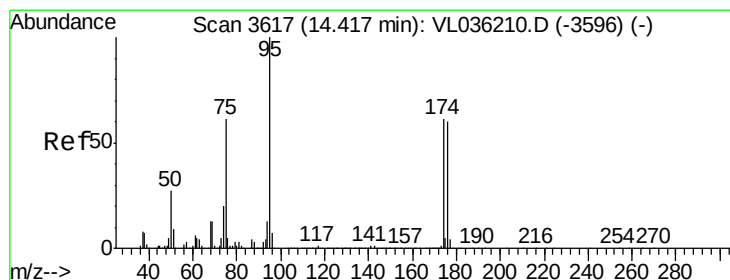
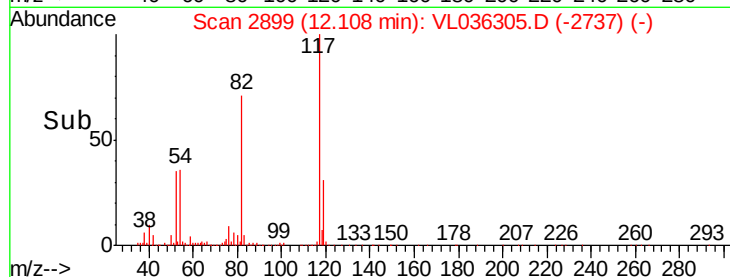
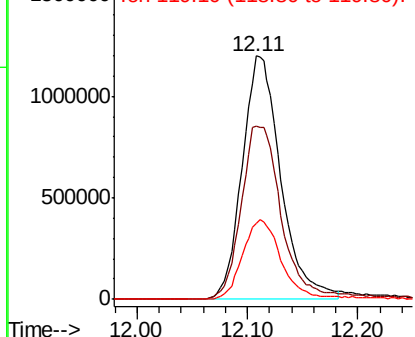
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2899
Delta R.T. 0.02 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 2903099
Ion Ratio Lower Upper
117 100
82 76.3 59.7 89.5
119 34.1 28.6 43.0

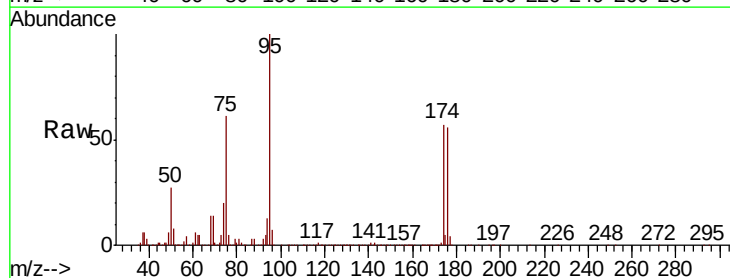


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 9.959 ppbv
RT: 14.44 min Scan# 3625
Delta R.T. 0.03 min
Lab File: VL036305.D
Acq: 3 Feb 2021 22:35

Tgt Ion: 95 Resp: 2392980
Ion Ratio Lower Upper
95 100
174 63.8 49.4 74.0
175 4.5 3.8 5.8



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

