

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL011321\
 Data File : VL036223.D
 Acq On : 13 Jan 2021 13:14
 Operator : SY/AP
 Sample : M1066-04 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 0121-SS4DL

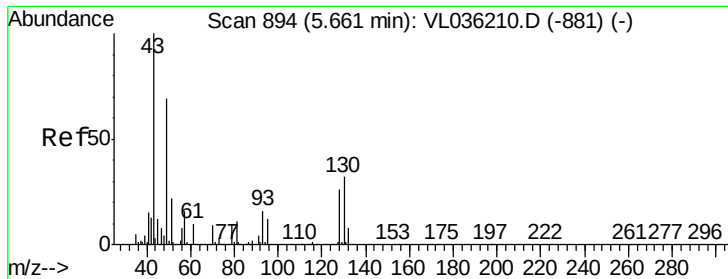
Quant Time: Jan 13 22:06:53 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL011321AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jan 13 07:53:51 2021
 QLast Update : Wed Jan 13 07:53:51 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1527846	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3299837	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3022479	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2473582	9.89	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.90%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	7940	0.038	ppbv 94
3) Chlorodifluoromethane	2.99	51	10834	0.057	ppbv # 88
4) Chloromethane	3.14	50	4458	0.048	ppbv # 40
9) Propene	3.01	41	244288	2.704	ppbv 89
13) Ethanol	3.61	45	42720	2.252	ppbv # 29
15) Acetone	3.85	43	512359	2.824	ppbv 94
16) 1,3-Butadiene	3.30	39	143930	1.664	ppbv # 19
17) tert-Butyl alcohol	4.31	59	39731	0.267	ppbv # 85
20) Methylene Chloride	4.34	84	86673	1.560	ppbv # 85
25) Ethyl Acetate	5.69	43	88865	0.240	ppbv # 80
26) Hexane	5.69	57	109424	0.708	ppbv # 40
27) Carbon Disulfide	4.55	76	12206	0.098	ppbv # 15
29) Chloroform	5.75	83	62292	0.275	ppbv 92
34) 2-Butanone	5.26	43	38292	0.182	ppbv # 64
36) Benzene	6.89	78	9564	0.032	ppbv # 82
38) Trichloroethene	7.84	130	3927	0.035	ppbv # 26
39) 1,2-Dichloropropane	7.18	63	980152	7.984	ppbv # 21
53) Toluene	9.81	91	15989	0.048	ppbv # 27

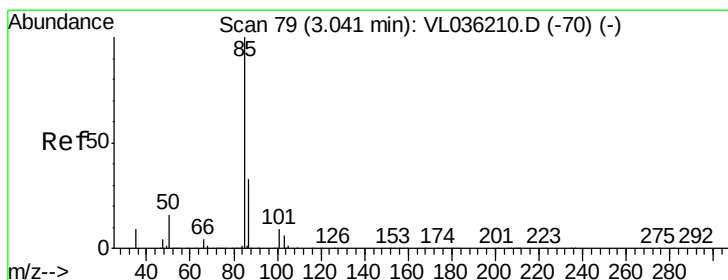
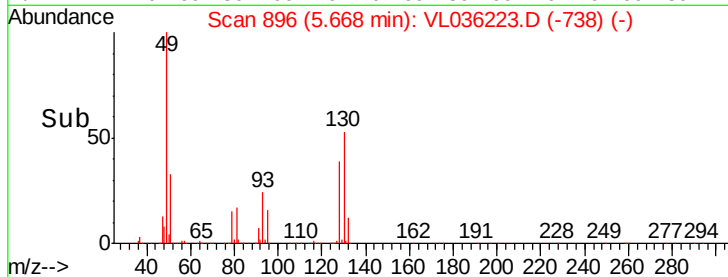
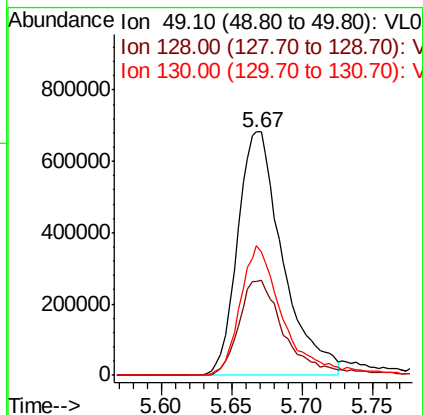
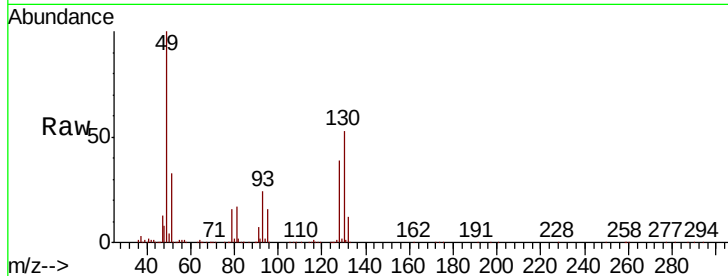
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.67 min Scan# 896
 Delta R.T. 0.01 min
 Lab File: VL036223.D
 Acq: 13 Jan 2021 13:14

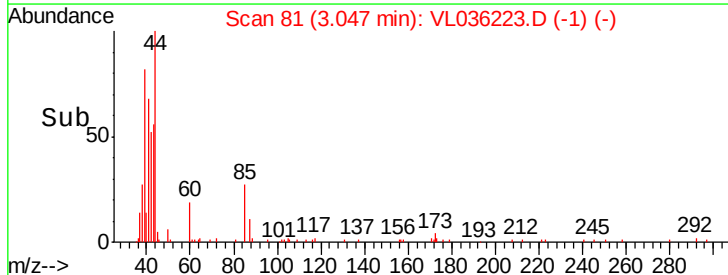
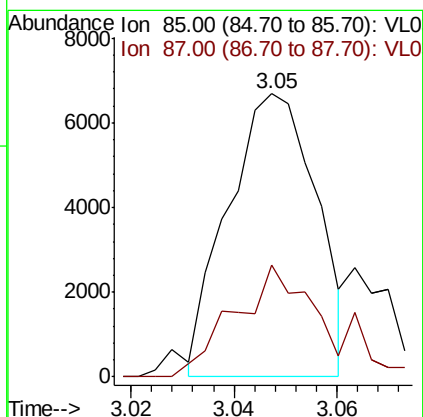
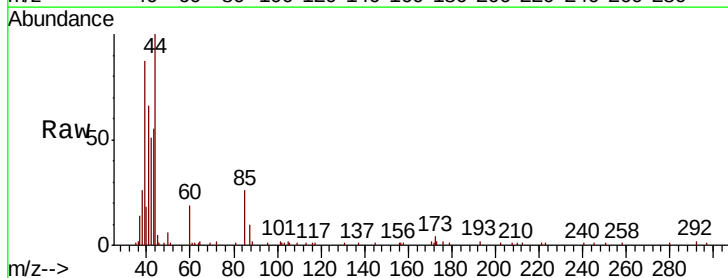
Instrument :
 MSVOA_L
 ClientSampleId :
 0121-SS4DL

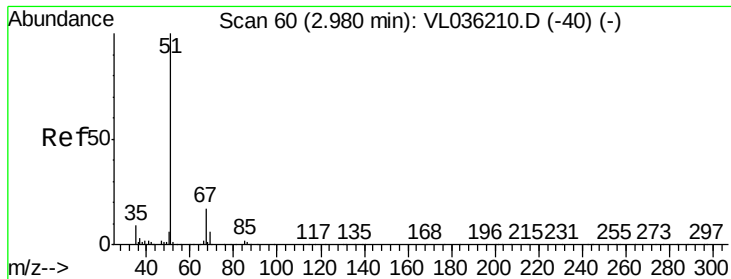
Tot Ion: 49 Resp: 1527846
 Ion Ratio Lower Upper
 49 100
 128 40.8 20.1 60.2
 130 52.8 25.3 75.9



#2
 Dichlorodifluoromethane
 Concen: 0.038 ppbv
 RT: 3.05 min Scan# 81
 Delta R.T. 0.01 min
 Lab File: VL036223.D
 Acq: 13 Jan 2021 13:14

Tgt Ion: 85 Resp: 7940
 Ion Ratio Lower Upper
 85 100
 87 36.6 26.4 39.6





#3

Chlorodifluoromethane

Concen: 0.057 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.01 min

Lab File: VL036223.D

Acq: 13 Jan 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

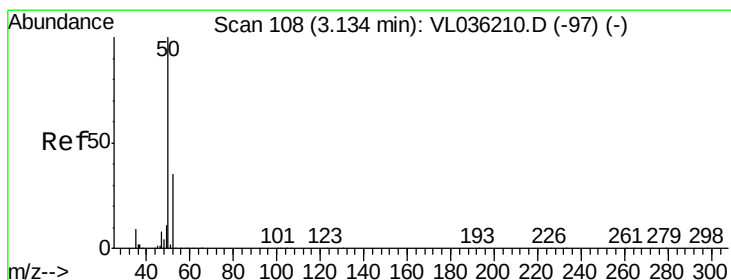
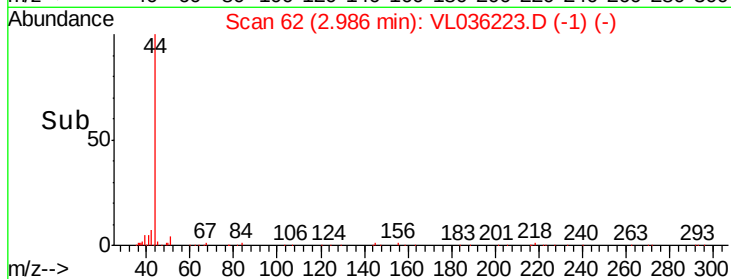
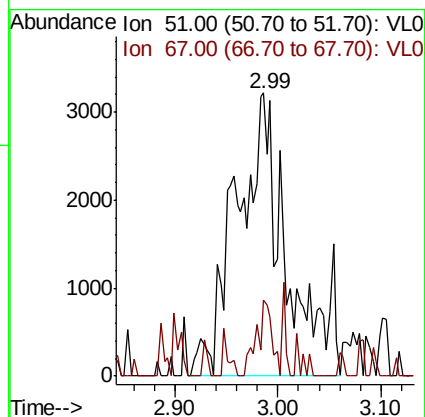
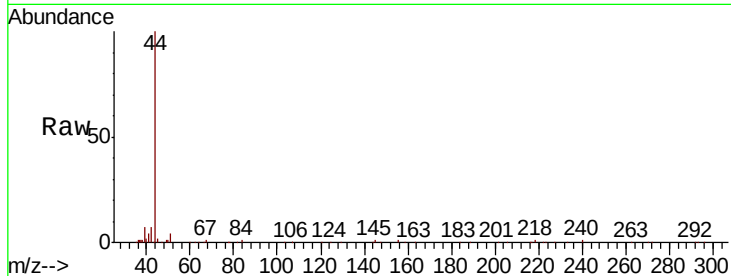
0121-SS4DL

Tot Ion: 51 Resp: 10834

Ion Ratio Lower Upper

51 100

67 12.3 14.0 21.0#



#4

Chloromethane

Concen: 0.048 ppbv

RT: 3.14 min Scan# 111

Delta R.T. 0.01 min

Lab File: VL036223.D

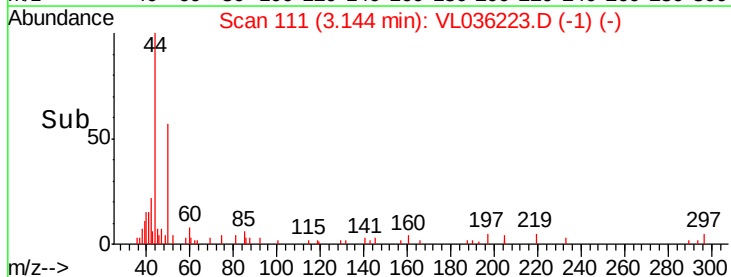
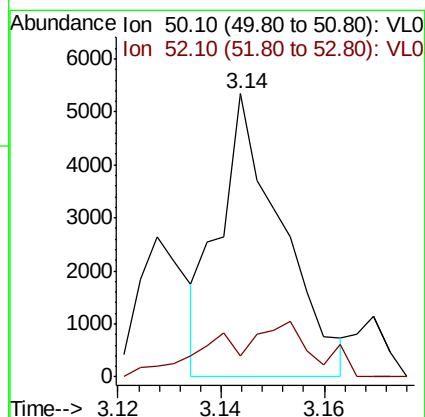
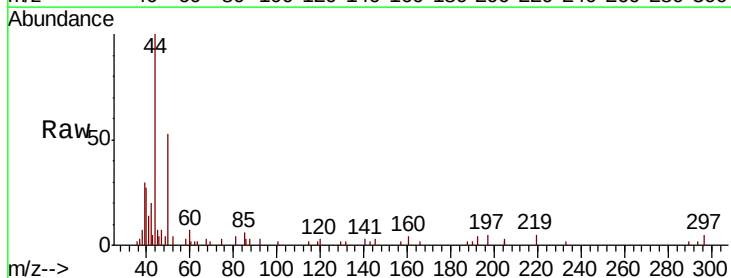
Acq: 13 Jan 2021 13:14

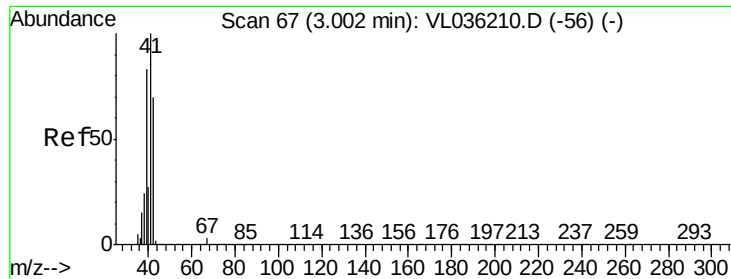
Tgt Ion: 50 Resp: 4458

Ion Ratio Lower Upper

50 100

52 0.0 27.8 41.8#





#9

Propene

Concen: 2.704 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VL036223.D

Acq: 13 Jan 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

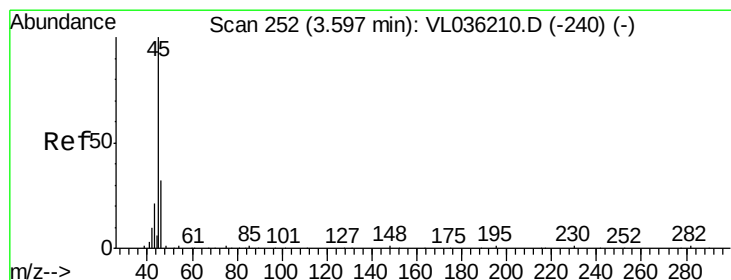
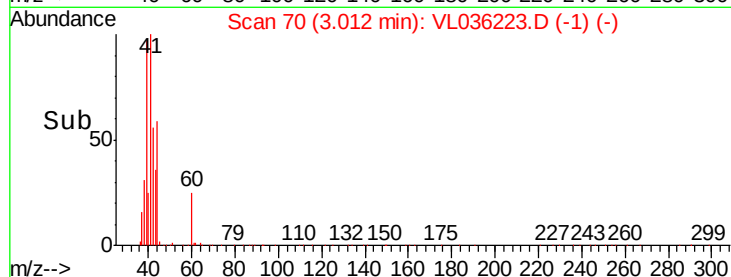
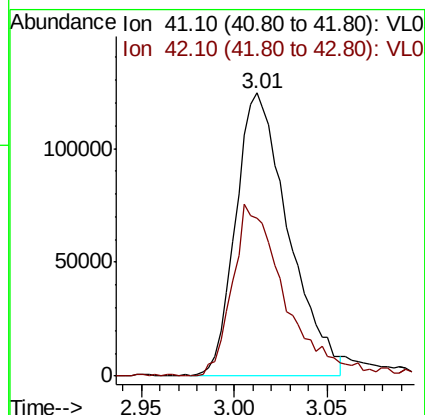
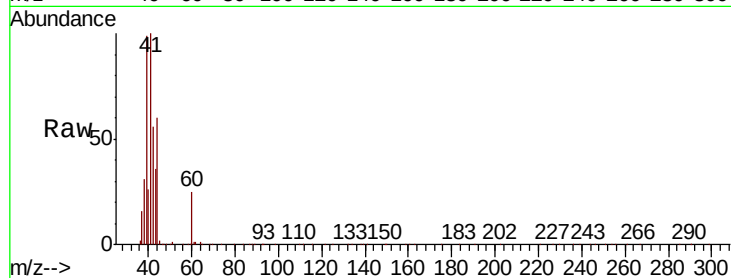
0121-SS4DL

Tot Ion: 41 Resp: 244288

Ion Ratio Lower Upper

41 100

42 62.5 57.1 85.7



#13

Ethanol

Concen: 2.252 ppbv

RT: 3.61 min Scan# 255

Delta R.T. 0.01 min

Lab File: VL036223.D

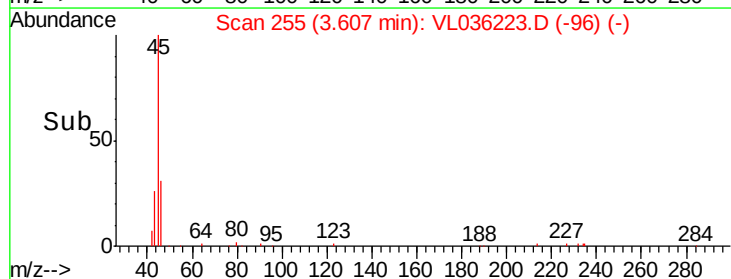
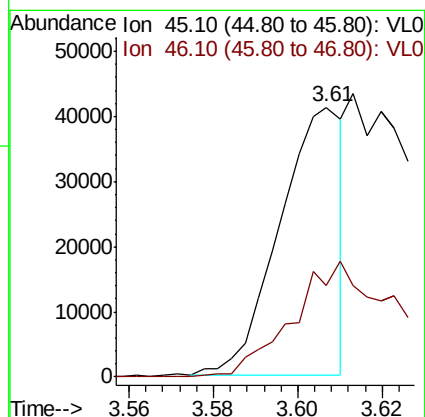
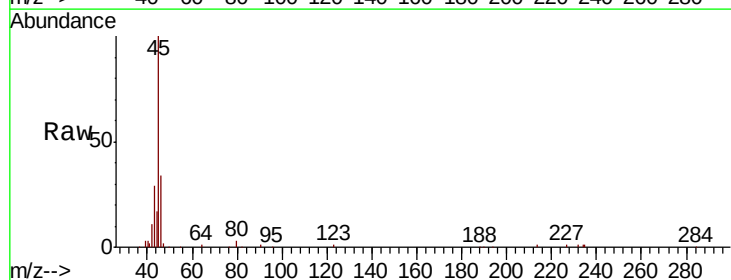
Acq: 13 Jan 2021 13:14

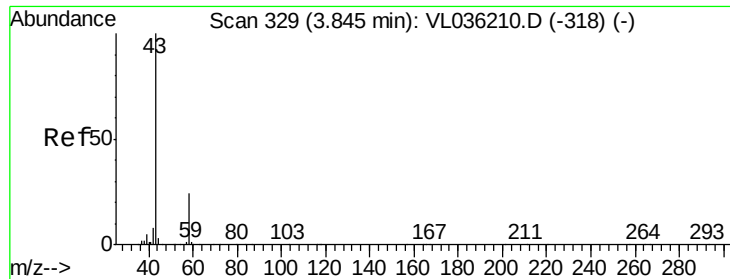
Tgt Ion: 45 Resp: 42720

Ion Ratio Lower Upper

45 100

46 0.0 19.2 77.0#

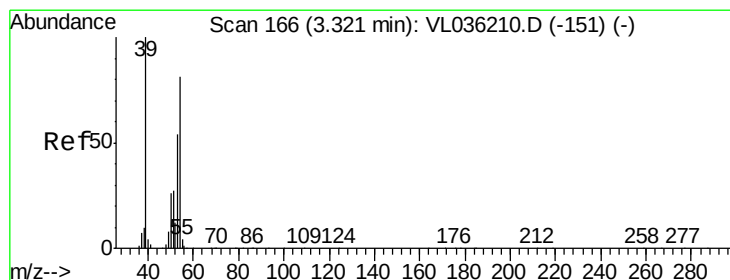
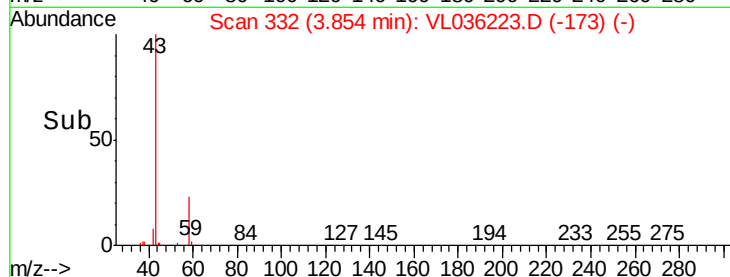
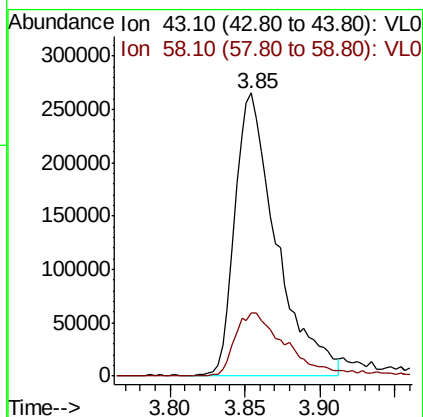
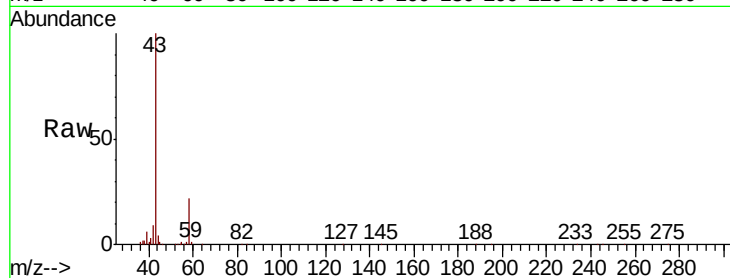




#15
Acetone
Concen: 2.824 ppbv
RT: 3.85 min Scan# 332
Delta R.T. 0.01 min
Lab File: VL036223.D
Acq: 13 Jan 2021 13:14

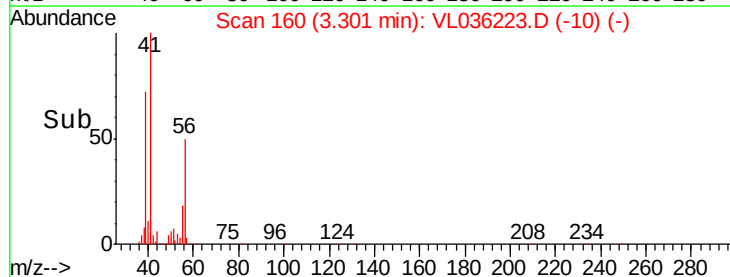
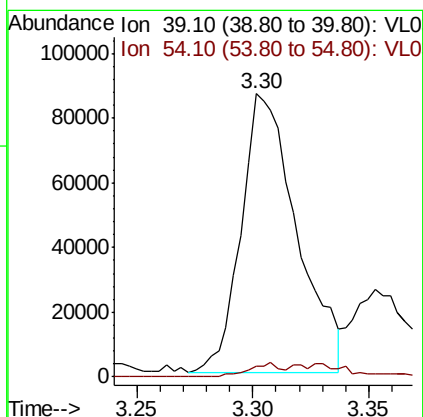
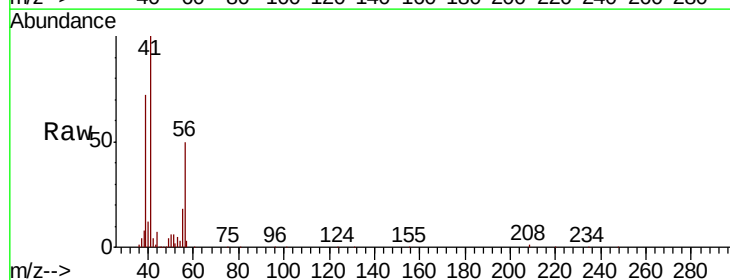
Instrument :
MSVOA_L
ClientSampleId :
0121-SS4DL

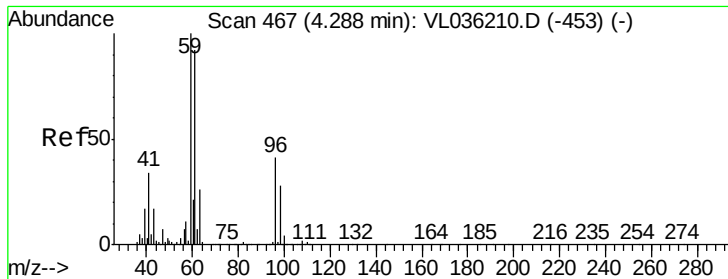
Tot Ion: 43 Resp: 512359
Ion Ratio Lower Upper
43 100
58 29.0 20.9 31.3



#16
1,3-Butadiene
Concen: 1.664 ppbv
RT: 3.30 min Scan# 160
Delta R.T. -0.02 min
Lab File: VL036223.D
Acq: 13 Jan 2021 13:14

Tgt Ion: 39 Resp: 143930
Ion Ratio Lower Upper
39 100
54 7.6 62.5 93.7#



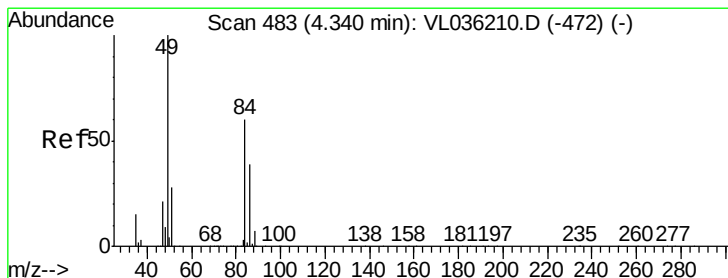
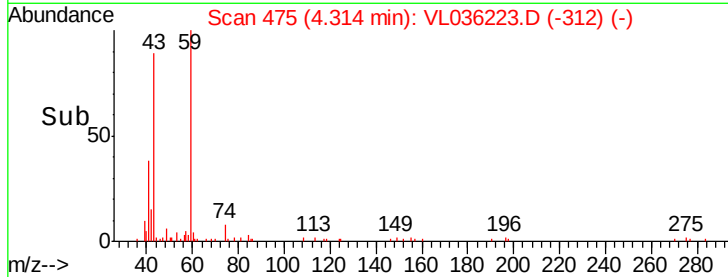
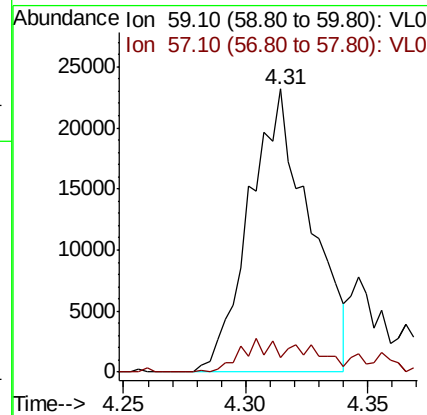
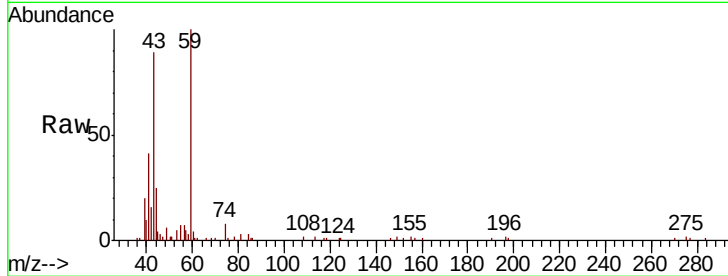


#17

tert-Butyl alcohol
 Concen: 0.267 ppbv
 RT: 4.31 min Scan# 475
 Delta R.T. 0.03 min
 Lab File: VL036223.D
 Acq: 13 Jan 2021 13:14

Instrument :
 MSVOA_L
 ClientSampleId :
 0121-SS4DL

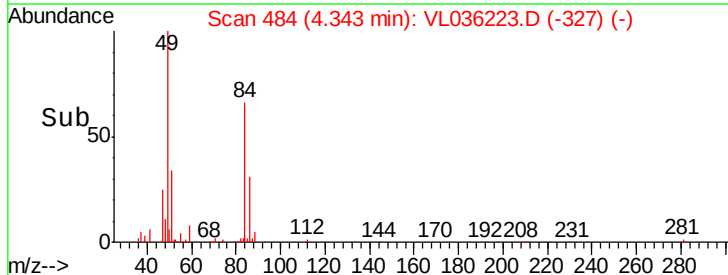
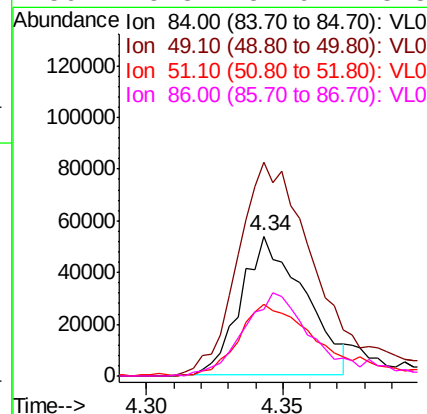
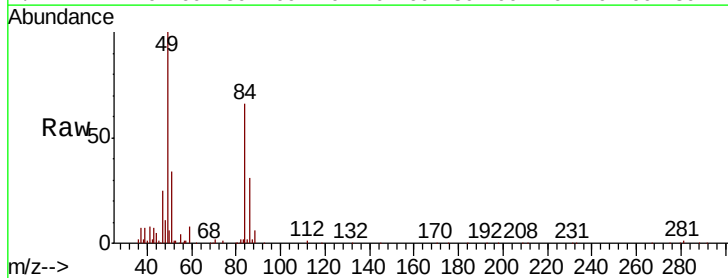
Tot Ion: 59 Resp: 39731
 Ion Ratio Lower Upper
 59 100
 57 17.2 9.2 13.8#

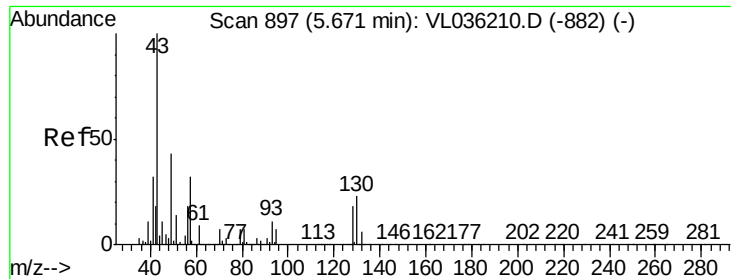


#20

Methylene Chloride
 Concen: 1.560 ppbv
 RT: 4.34 min Scan# 484
 Delta R.T. 0.00 min
 Lab File: VL036223.D
 Acq: 13 Jan 2021 13:14

Tgt Ion: 84 Resp: 86673
 Ion Ratio Lower Upper
 84 100
 49 148.5 134.1 201.1
 51 50.6 37.4 56.0
 86 45.3 52.6 78.8#

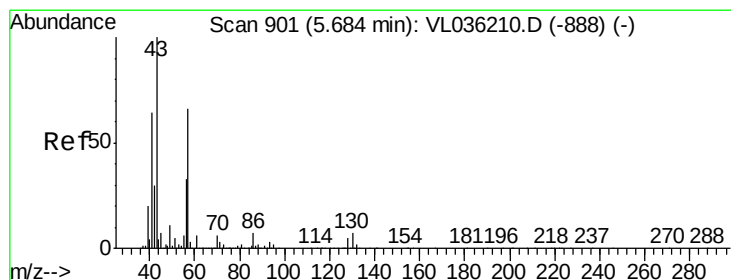
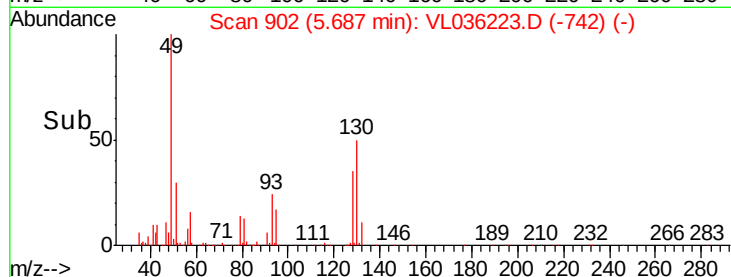
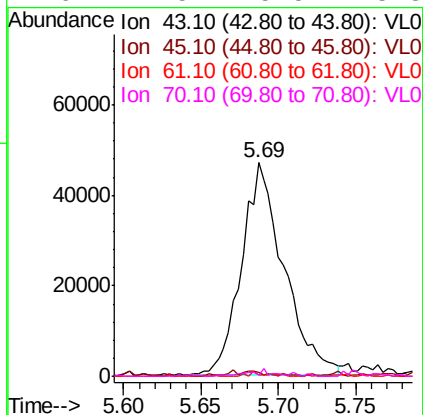
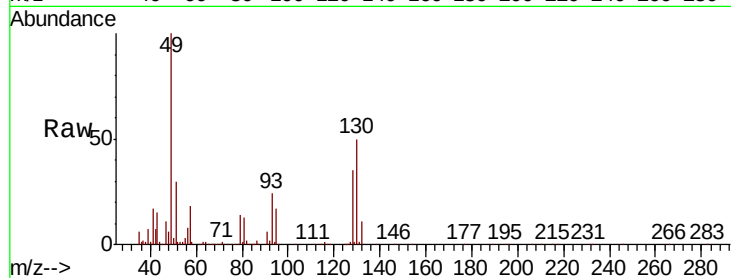




#25
Ethyl Acetate
Concen: 0.240 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.02 min
Lab File: VL036223.D
Acq: 13 Jan 2021 13:14

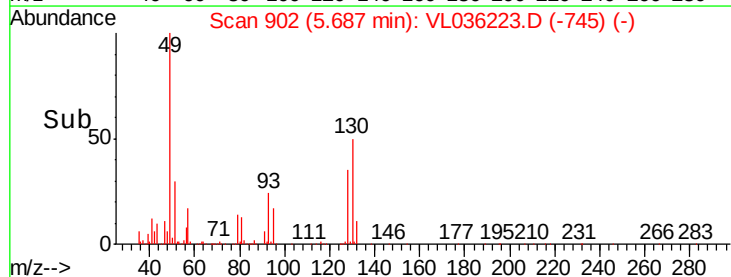
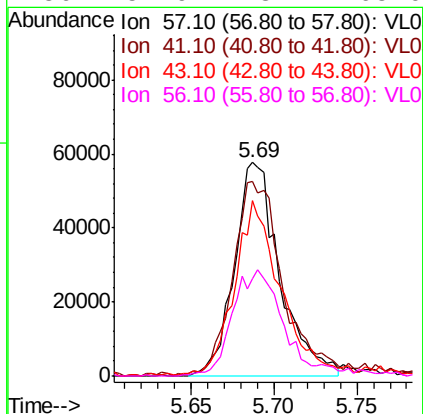
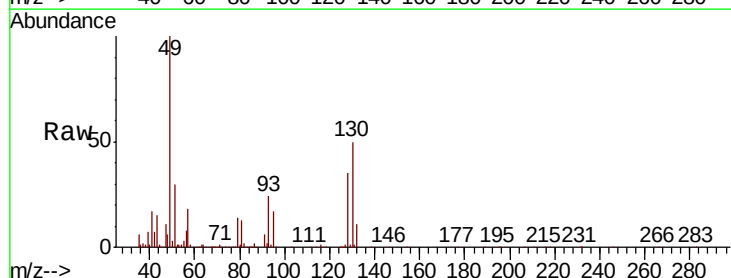
Instrument :
MSVOA_L
ClientSampleId :
0121-SS4DL

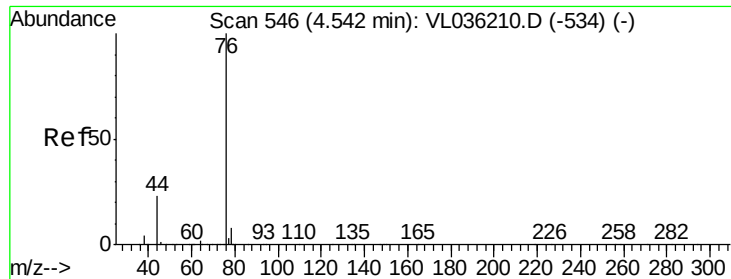
Tot Ion:	43	Resp:	88865
Ion	Ratio	Lower	Upper
43	100		
45	2.2	8.3	12.5#
61	0.9	7.4	11.2#
70	2.5	5.5	8.3#



#26
Hexane
Concen: 0.708 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.00 min
Lab File: VL036223.D
Acq: 13 Jan 2021 13:14

Tgt Ion:	57	Resp:	109424
Ion	Ratio	Lower	Upper
57	100		
41	101.9	83.0	124.6
43	84.9	202.4	303.6#
56	57.9	43.4	65.0





#27

Carbon Disulfide

Concen: 0.098 ppbv

RT: 4.55 min Scan# 548

Delta R.T. 0.01 min

Lab File: VL036223.D

Acq: 13 Jan 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

0121-SS4DL

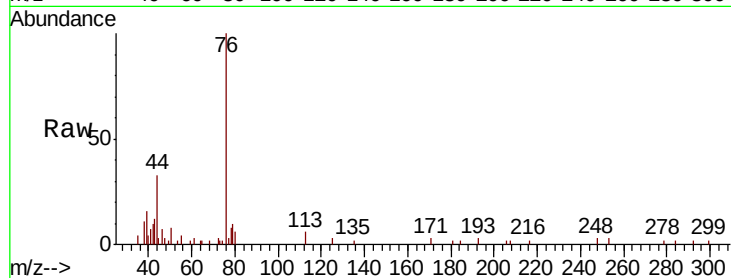
Tot Ion: 76 Resp: 12206

Ion Ratio Lower Upper

76 100

44 78.0 19.0 28.6#

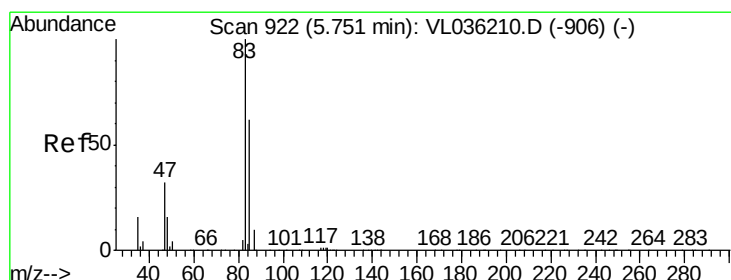
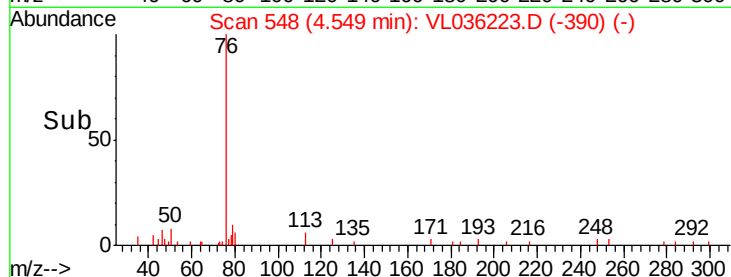
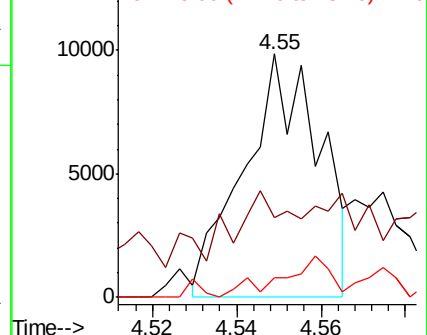
78 19.6 8.0 12.0#



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#29

Chloroform

Concen: 0.275 ppbv

RT: 5.75 min Scan# 923

Delta R.T. 0.00 min

Lab File: VL036223.D

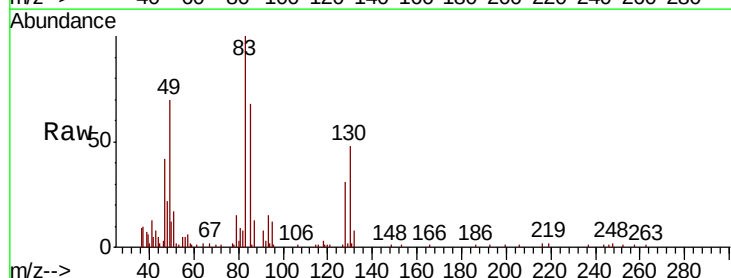
Acq: 13 Jan 2021 13:14

Tgt Ion: 83 Resp: 62292

Ion Ratio Lower Upper

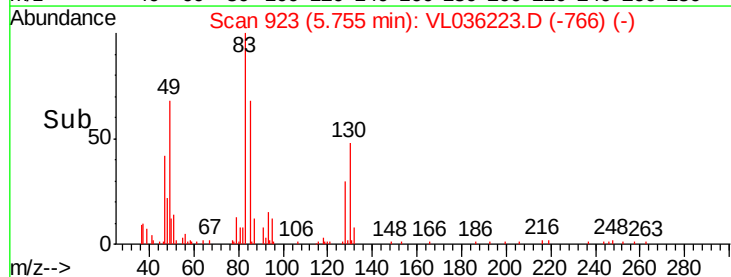
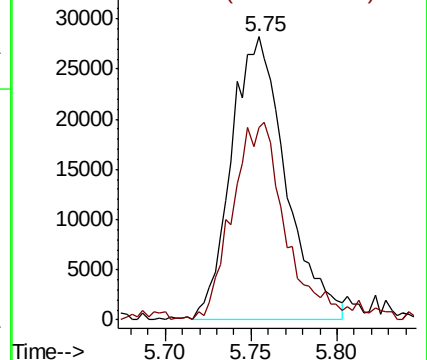
83 100

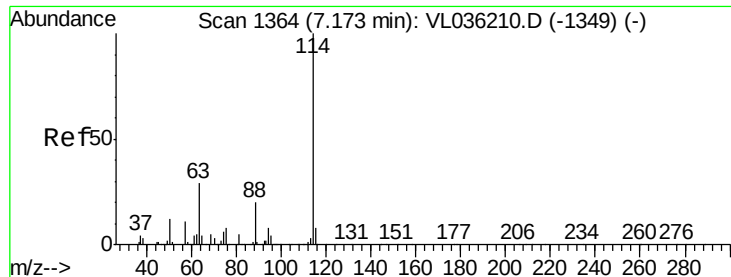
85 68.1 49.3 73.9



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. 0.01 min

Lab File: VL036223.D

Acq: 13 Jan 2021 13:14

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0121-SS4DL

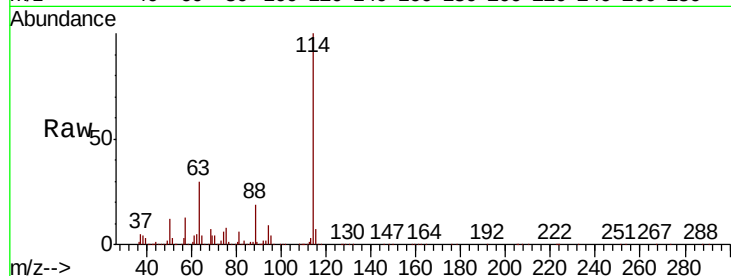
Tot Ion:114 Resp: 3299837

Ion Ratio Lower Upper

114 100

63 30.8 24.7 37.1

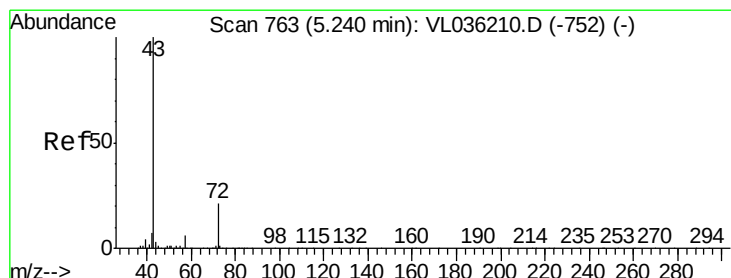
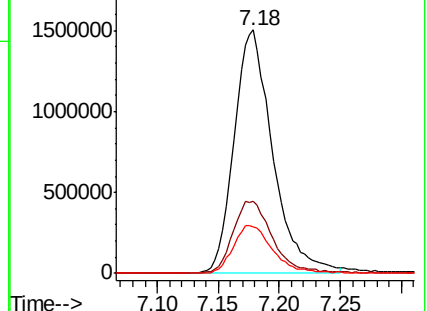
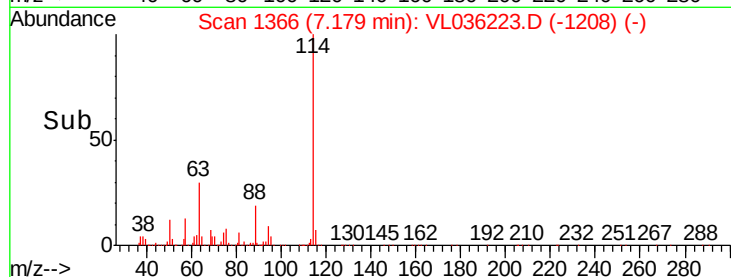
88 20.4 16.6 24.8



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: 0.182 ppbv

RT: 5.26 min Scan# 768

Delta R.T. 0.02 min

Lab File: VL036223.D

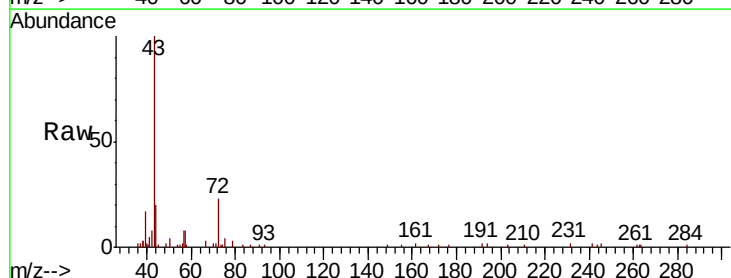
Acq: 13 Jan 2021 13:14

Tgt Ion: 43 Resp: 38292

Ion Ratio Lower Upper

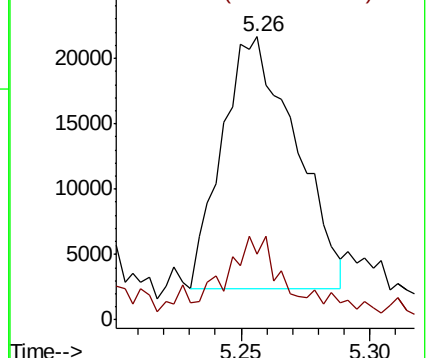
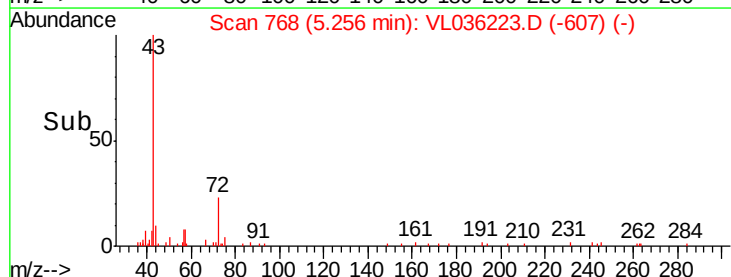
43 100

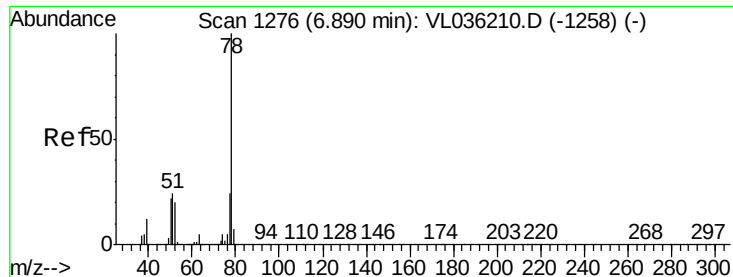
72 36.7 16.1 24.1#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.032 ppbv

RT: 6.89 min Scan# 1277

Delta R.T. 0.00 min

Lab File: VL036223.D

Acq: 13 Jan 2021 13:14

Instrument :

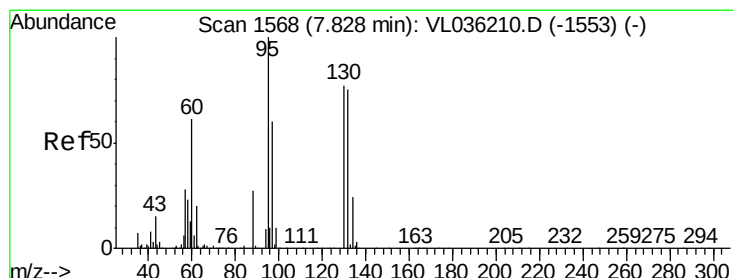
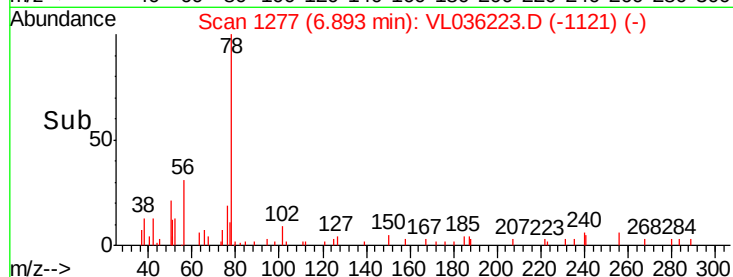
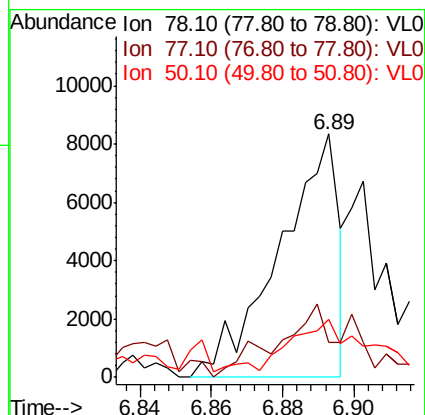
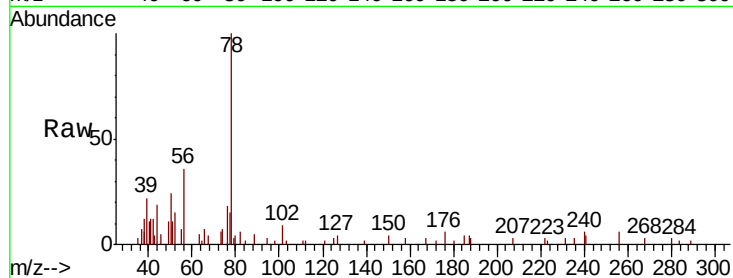
MSVOA_L

ClientSampleId :

0121-SS4DL

Tot Ion: 78 Resp: 9564

Ion	Ratio	Lower	Upper
78	100		
77	7.8	19.4	29.0#
50	21.9	17.4	26.2



#38

Trichloroethene

Concen: 0.035 ppbv

RT: 7.84 min Scan# 1572

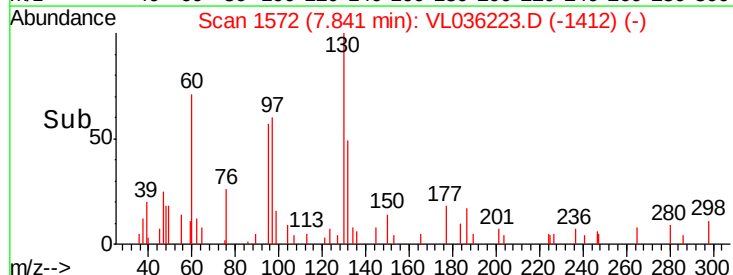
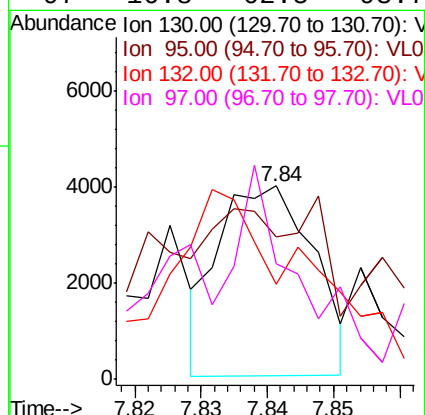
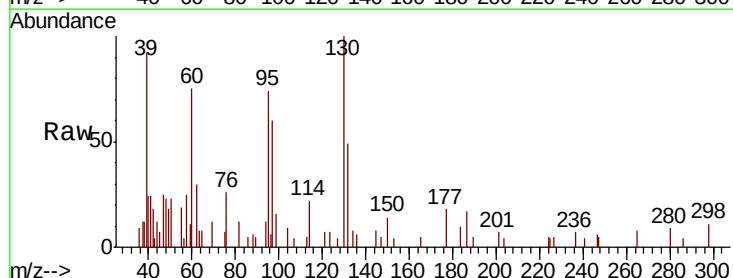
Delta R.T. 0.01 min

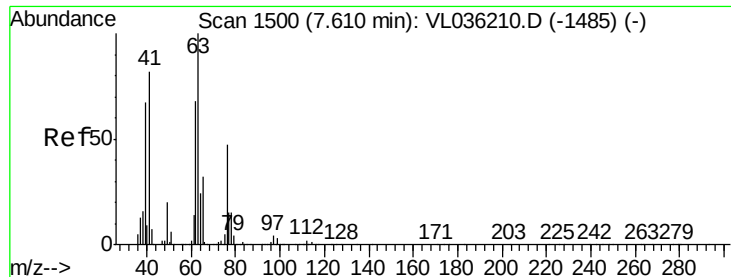
Lab File: VL036223.D

Acq: 13 Jan 2021 13:14

Tgt Ion: 130 Resp: 3927

Ion	Ratio	Lower	Upper
130	100		
95	58.1	103.9	155.9#
132	4.9	77.4	116.2#
97	16.8	62.5	93.7#





#39

1,2-Dichloropropane

Concen: 7.984 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.43 min

Lab File: VL036223.D

Acq: 13 Jan 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

0121-SS4DL

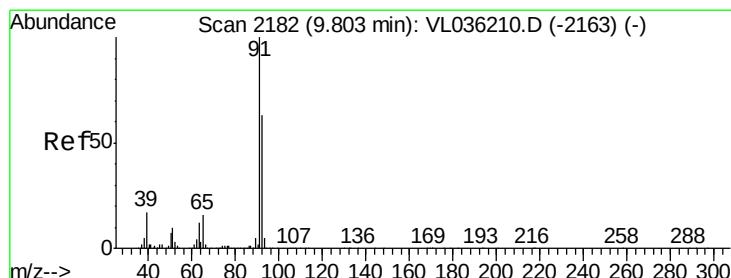
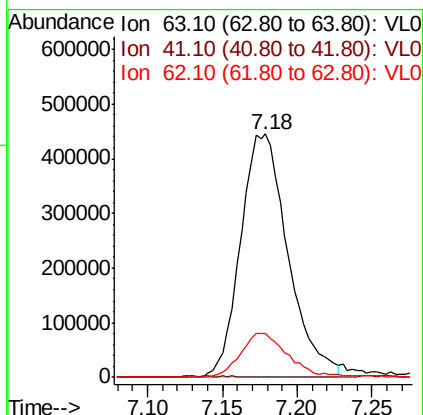
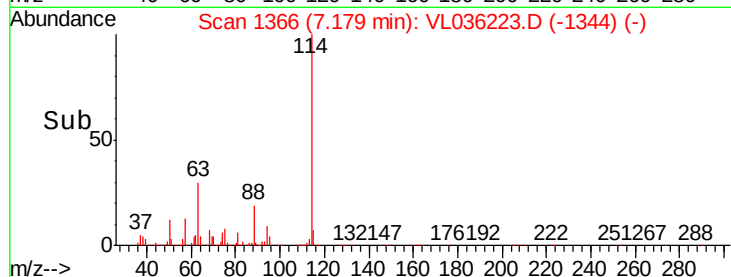
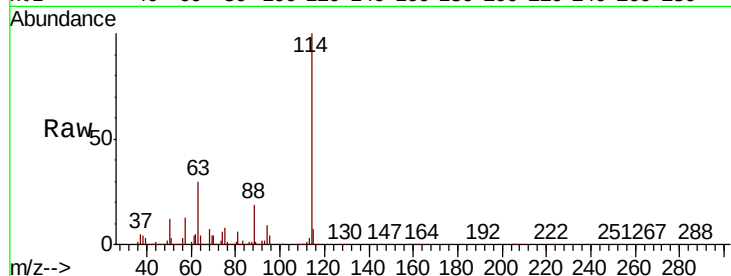
Tot Ion: 63 Resp: 980152

Ion Ratio Lower Upper

63 100

41 0.0 66.1 99.1#

62 17.9 54.8 82.2#



#53

Toluene

Concen: 0.048 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. 0.01 min

Lab File: VL036223.D

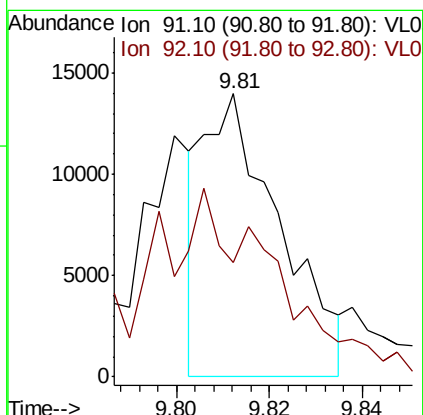
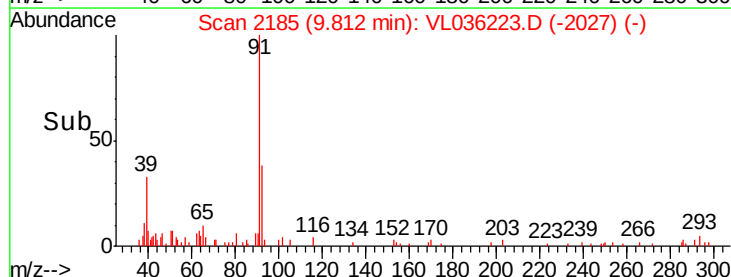
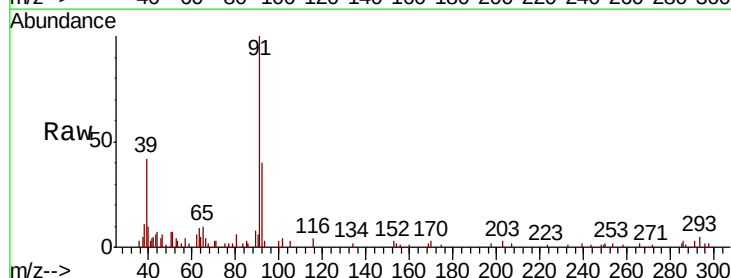
Acq: 13 Jan 2021 13:14

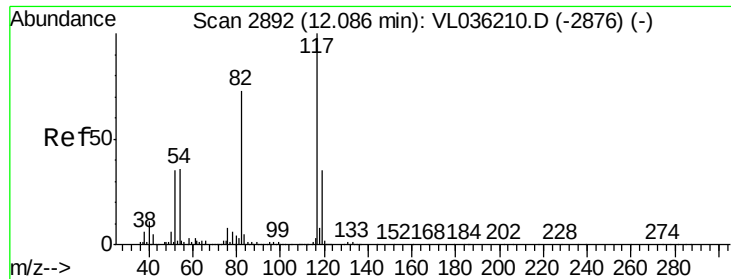
Tgt Ion: 91 Resp: 15989

Ion Ratio Lower Upper

91 100

92 116.4 48.5 72.7#

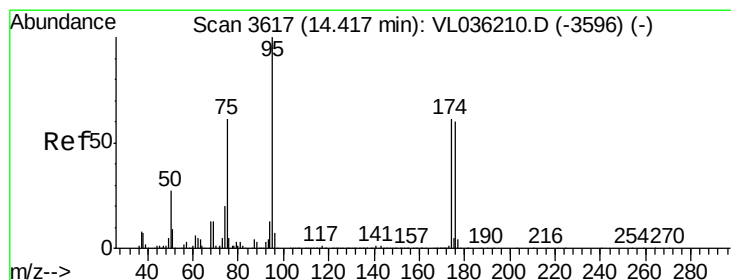
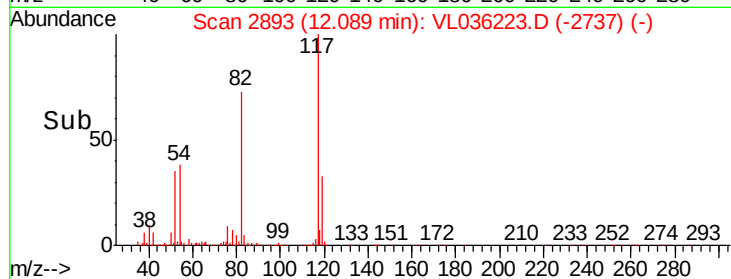
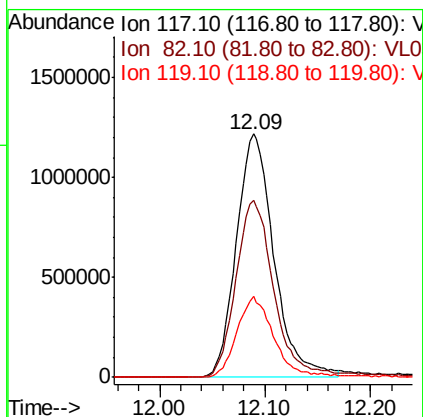
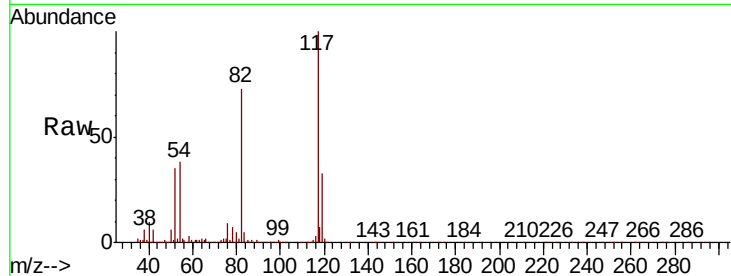




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2893
Delta R.T. 0.00 min
Lab File: VL036223.D
Acq: 13 Jan 2021 13:14

Instrument :
MSVOA_L
ClientSampleId :
0121-SS4DL

Tot Ion:117 Resp: 3022479
Ion Ratio Lower Upper
117 100
82 76.6 59.7 89.5
119 33.3 28.6 43.0



#68
1-Bromo-4-Fluorobenzene
Concen: 9.887 ppbv
RT: 14.42 min Scan# 3617
Delta R.T. -0.00 min
Lab File: VL036223.D
Acq: 13 Jan 2021 13:14

Tgt Ion: 95 Resp: 2473582
Ion Ratio Lower Upper
95 100
174 63.3 49.4 74.0
175 4.6 3.8 5.8

