

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051920\
 Data File : VL035054.D
 Acq On : 19 May 2020 21:37
 Operator : SY/AP
 Sample : L2683-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

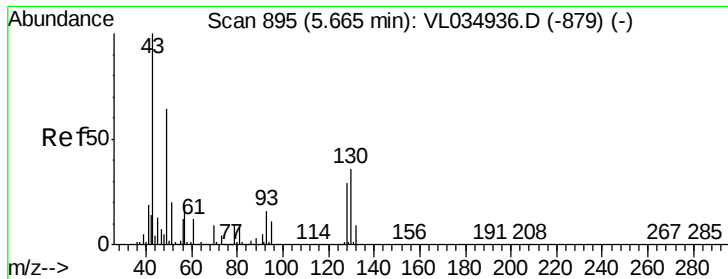
Quant Time: May 20 04:47:39 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 06 14:49:39 2020
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1134929	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	2577494	10.00	ppbv	-0.03
55) Chlorobenzene-d5	12.10	117	2437318	10.00	ppbv	-0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.43	95	2109154	10.69	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.00	85	47323	0.294	ppbv	95
3) Chlorodifluoromethane	2.94	51	121434	0.937	ppbv #	87
4) Chloromethane	3.09	50	38963	0.525	ppbv	96
9) Propene	3.15	41	95653	1.701	ppbv	88
11) Trichlorofluoromethane	3.91	101	44753	0.269	ppbv	89
13) Ethanol	3.56	45	3231622	174.173	ppbv	97
15) Acetone	3.81	43	1340000	8.931	ppbv	99
16) 1,3-Butadiene	3.27	39	3068	0.048	ppbv #	8
19) Isopropyl Alcohol	3.94	45	164367	1.643	ppbv #	1
20) Methylene Chloride	4.31	84	26146	0.526	ppbv	92
23) Vinyl Acetate	5.04	43	10235	0.054	ppbv #	48
25) Ethyl Acetate	5.65	43	36639	0.145	ppbv #	75
26) Hexane	5.66	57	80523	0.737	ppbv #	51
29) Chloroform	5.73	83	43475	0.243	ppbv	85
34) 2-Butanone	5.22	43	48242	0.301	ppbv	96
35) Carbon Tetrachloride	7.01	117	6537	0.040	ppbv #	62
36) Benzene	6.88	78	9724	0.046	ppbv #	79
39) 1,2-Dichloropropane	7.16	63	705832	8.286	ppbv #	25
52) Tetrachloroethene	11.23	164	39029	0.517	ppbv	99
53) Toluene	9.80	91	303798	1.349	ppbv	98

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 888

Delta R.T. -0.02 min

Lab File: VL035054.D

Acq: 19 May 2020 21:37

Instrument :

MSVOA_L

ClientSampled :

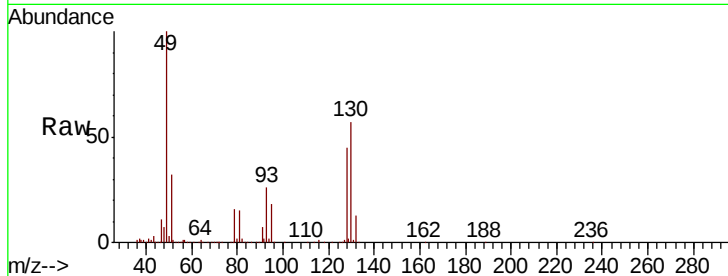
Tot Ion: 49 Resp: 1134929

Ion Ratio Lower Upper

49 100

128 45.5 22.1 66.5

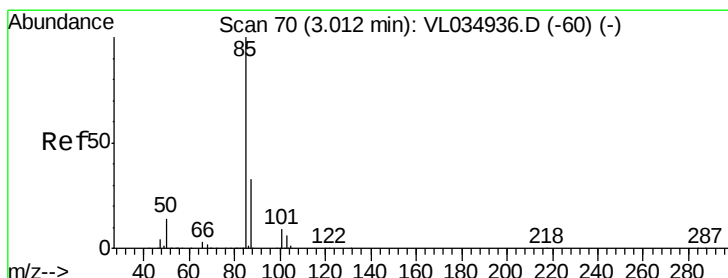
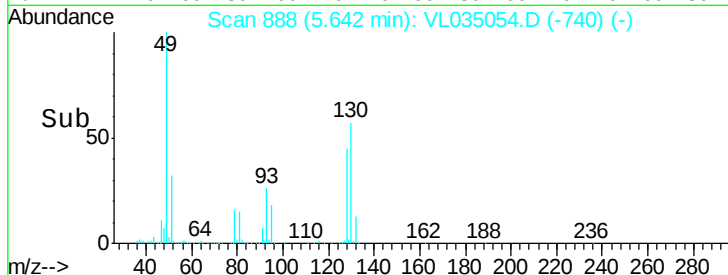
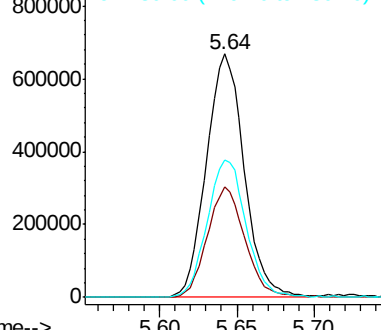
130 58.5 29.1 87.3



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: 0.294 ppbv

RT: 3.00 min Scan# 66

Delta R.T. -0.01 min

Lab File: VL035054.D

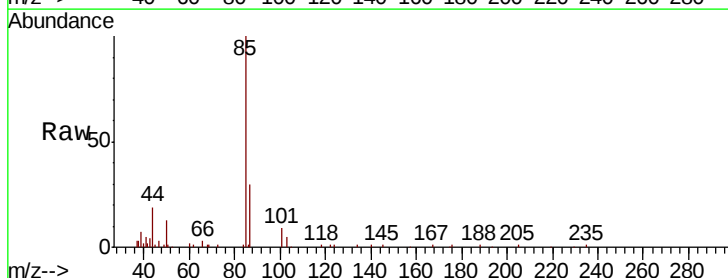
Acq: 19 May 2020 21:37

Tgt Ion: 85 Resp: 47323

Ion Ratio Lower Upper

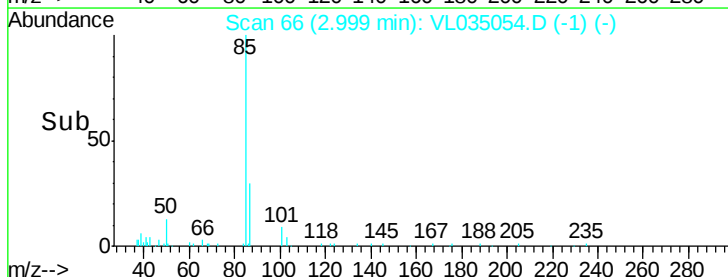
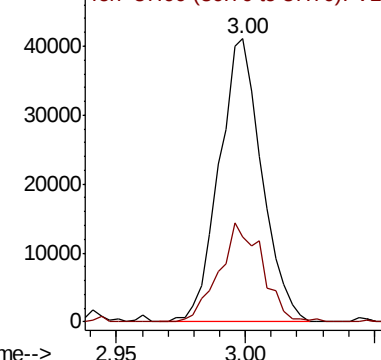
85 100

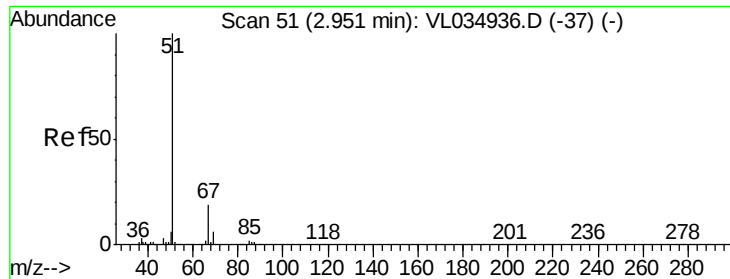
87 30.0 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.937 ppbv

RT: 2.94 min Scan# 47

Delta R.T. -0.01 min

Lab File: VL035054.D

Acq: 19 May 2020 21:37

Instrument :

MSVOA_L

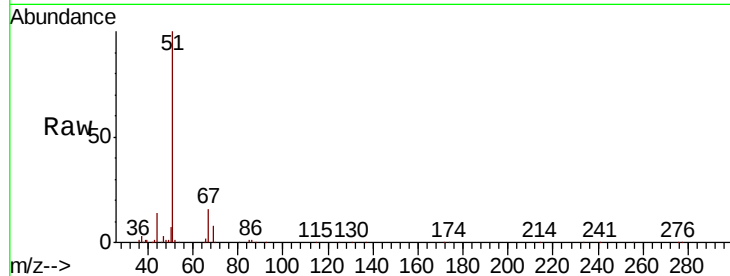
ClientSampleId :

Tot Ion: 51 Resp: 121434

Ion Ratio Lower Upper

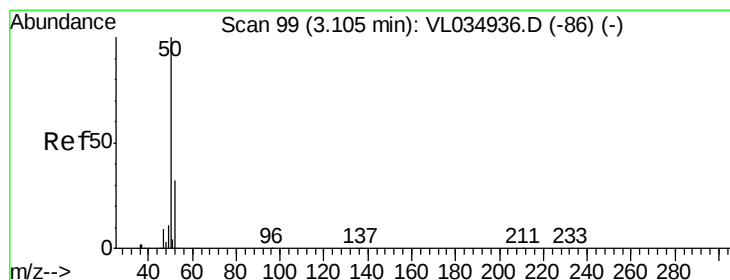
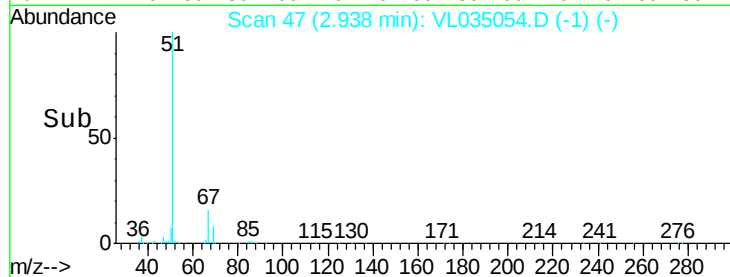
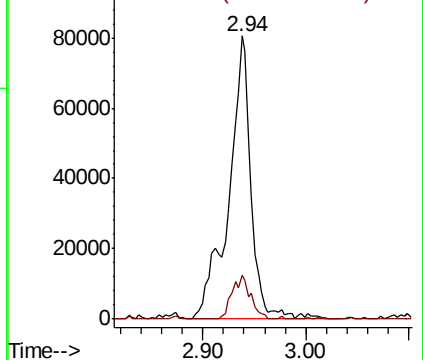
51 100

67 12.9 15.0 22.6#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.525 ppbv

RT: 3.09 min Scan# 95

Delta R.T. -0.01 min

Lab File: VL035054.D

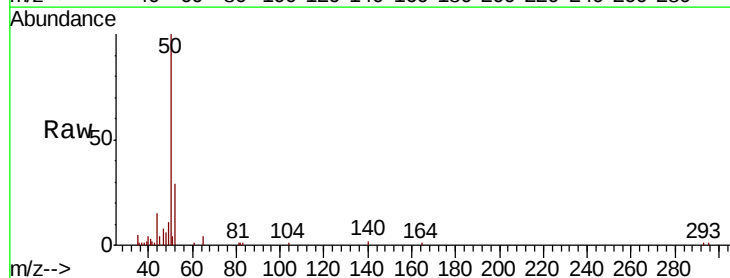
Acq: 19 May 2020 21:37

Tgt Ion: 50 Resp: 38963

Ion Ratio Lower Upper

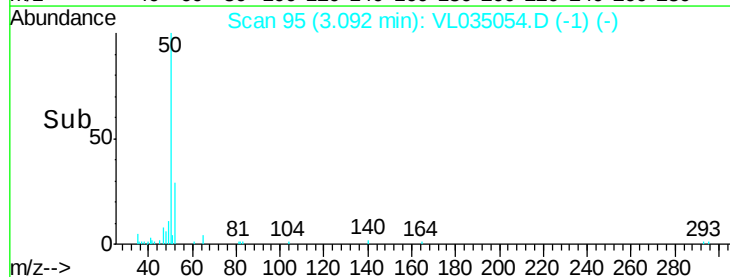
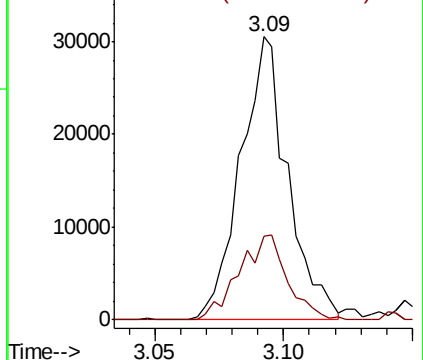
50 100

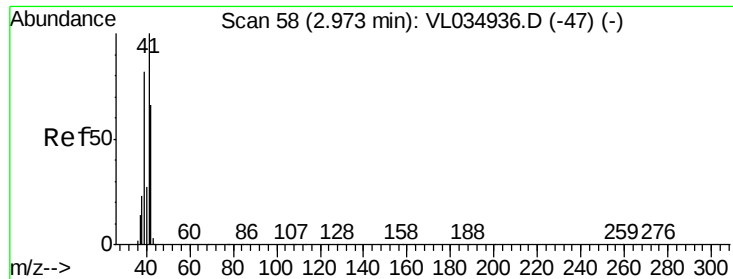
52 29.4 25.4 38.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.701 ppbv

RT: 3.15 min Scan# 114

Delta R.T. 0.18 min

Lab File: VL035054.D

Acq: 19 May 2020 21:37

Instrument :

MSVOA_L

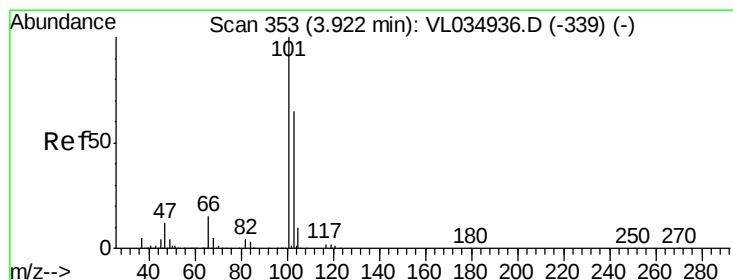
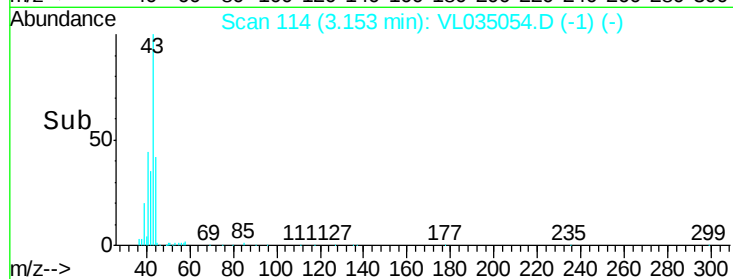
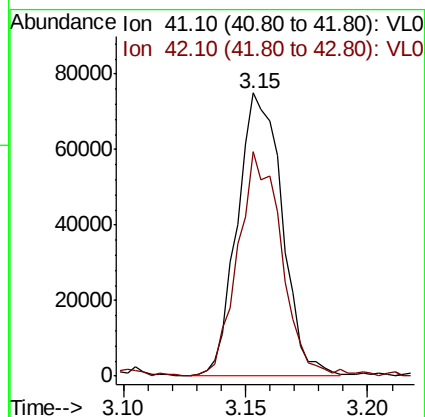
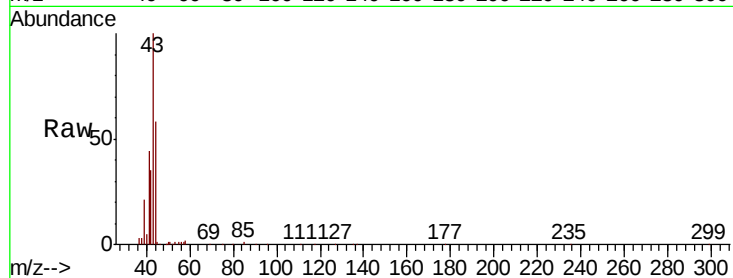
ClientSampleId :

Tot Ion: 41 Resp: 95653

Ion Ratio Lower Upper

41 100

42 77.4 54.5 81.7



#11

Trichlorofluoromethane

Concen: 0.269 ppbv

RT: 3.91 min Scan# 349

Delta R.T. -0.01 min

Lab File: VL035054.D

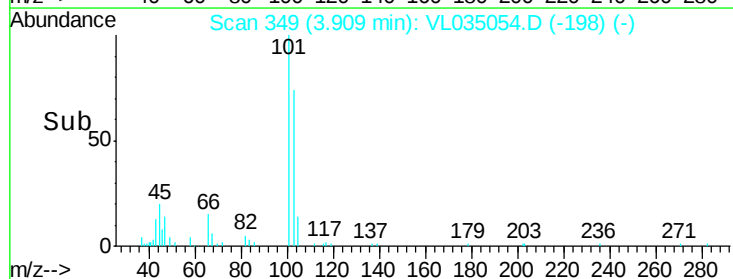
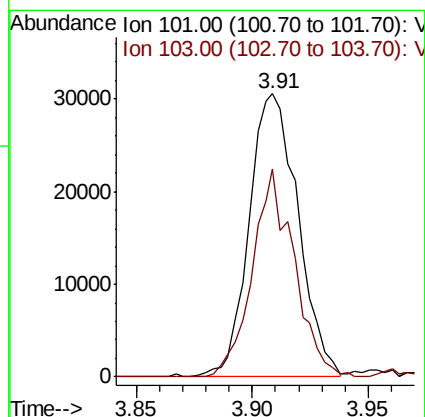
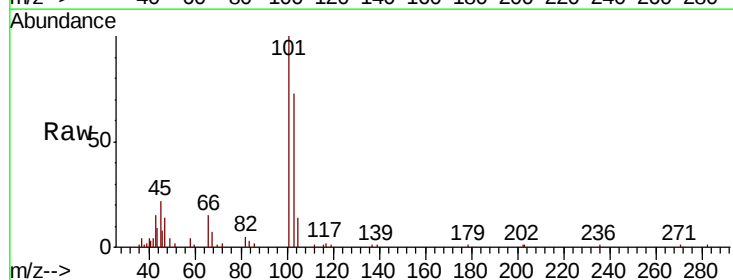
Acq: 19 May 2020 21:37

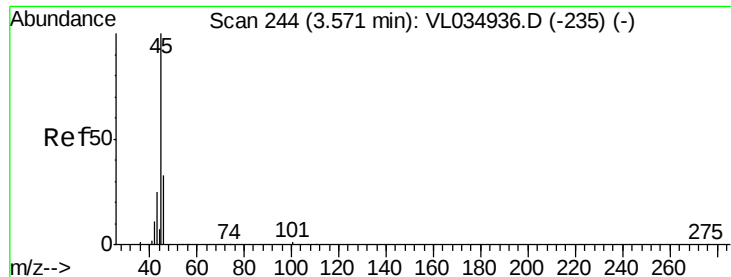
Tgt Ion: 101 Resp: 44753

Ion Ratio Lower Upper

101 100

103 73.3 51.9 77.9

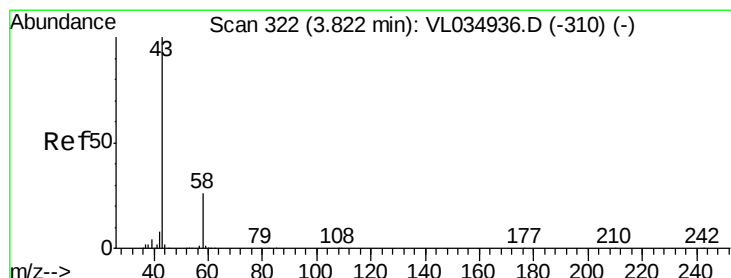
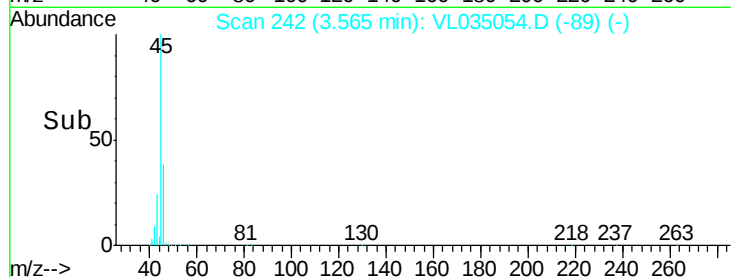
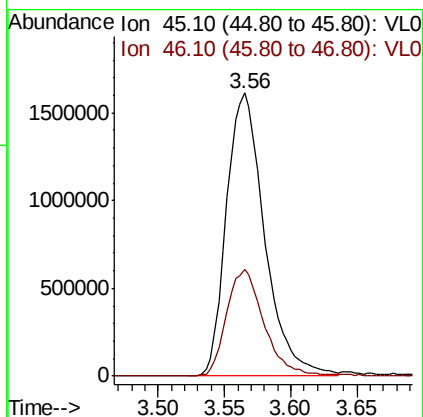
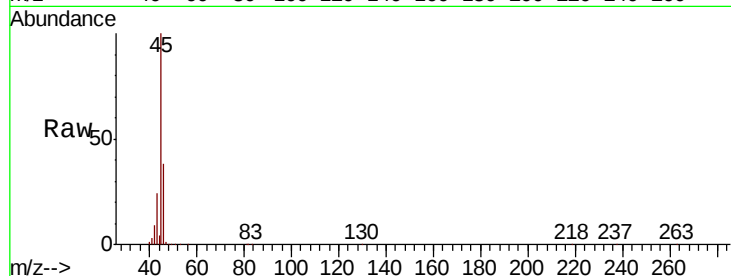




#13
Ethanol
Concen: 174.173 ppbv
RT: 3.56 min Scan# 242
Delta R.T. -0.01 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

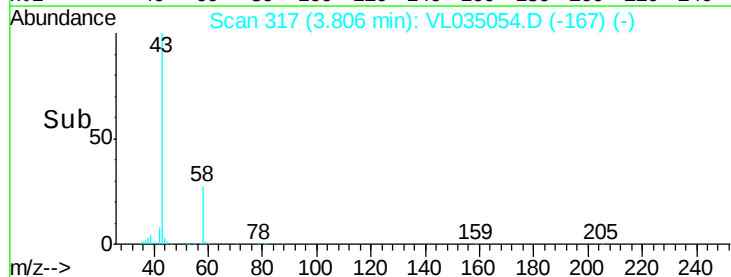
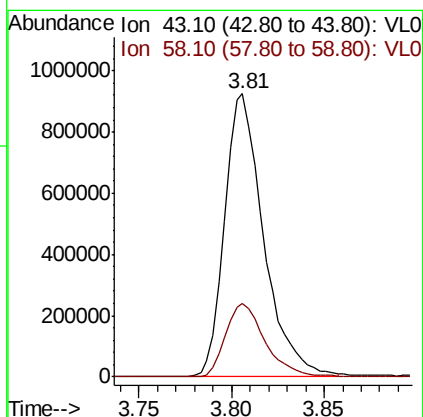
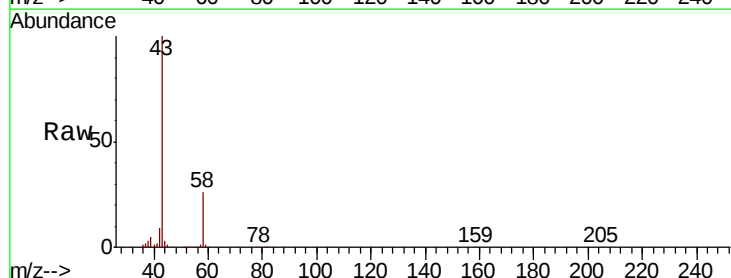
Instrument :
MSVOA_L
ClientSampleId :

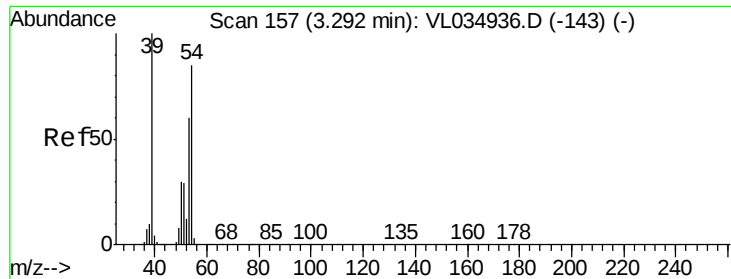
Tot Ion: 45 Resp: 3231622
Ion Ratio Lower Upper
45 100
46 37.4 14.3 57.3



#15
Acetone
Concen: 8.931 ppbv
RT: 3.81 min Scan# 317
Delta R.T. -0.02 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

Tgt Ion: 43 Resp: 1340000
Ion Ratio Lower Upper
43 100
58 26.8 21.7 32.5

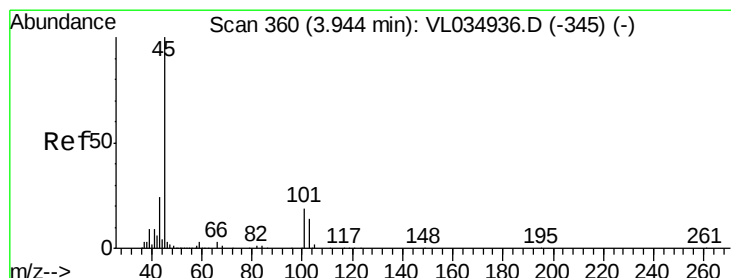
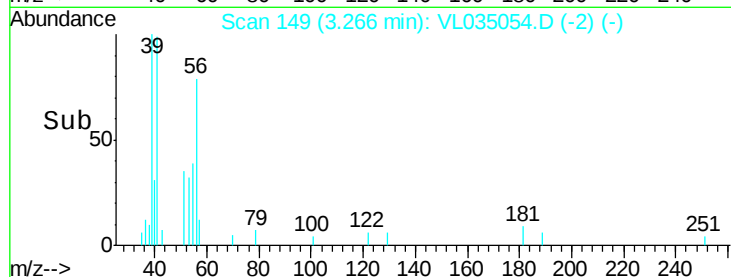
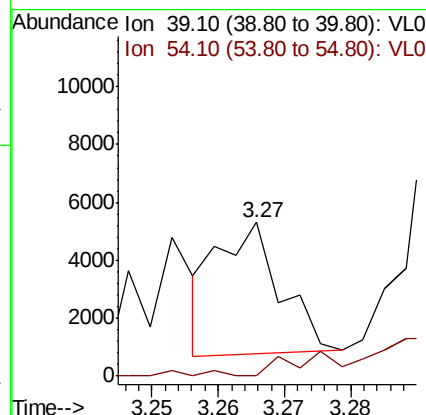
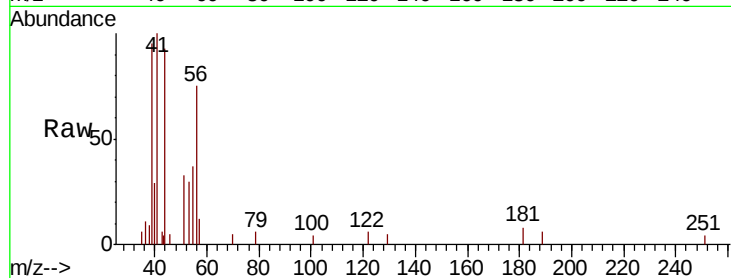




#16
 1,3-Butadiene
 Concen: 0.048 ppbv
 RT: 3.27 min Scan# 149
 Delta R.T. -0.03 min
 Lab File: VL035054.D
 Acq: 19 May 2020 21:37

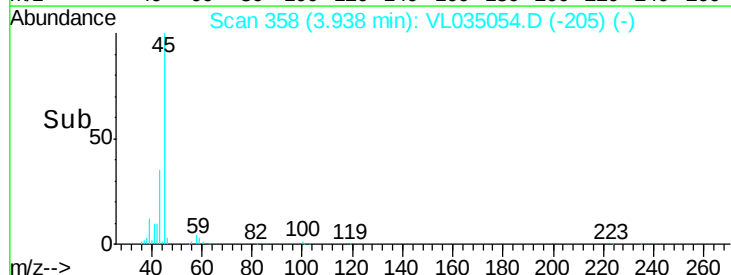
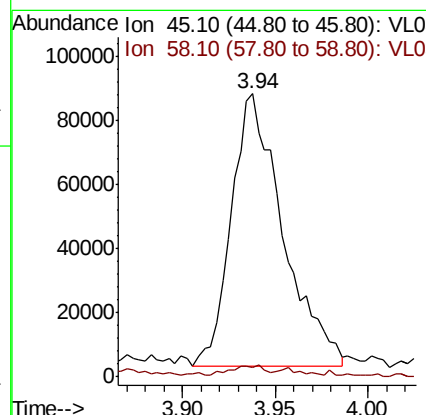
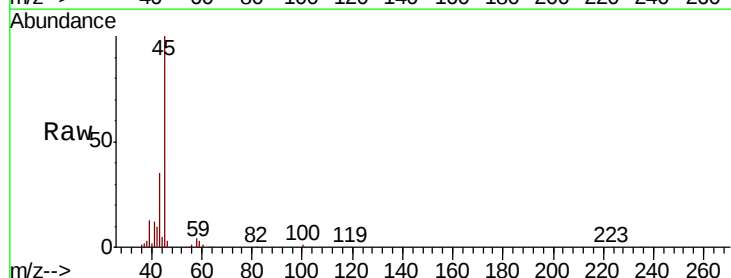
Instrument :
 MSVOA_L
 ClientSampleId :

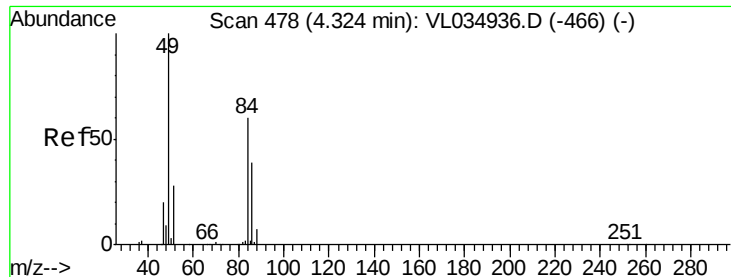
Tot Ion: 39 Resp: 3068
 Ion Ratio Lower Upper
 39 100
 54 0.0 66.6 100.0#



#19
 Isopropyl Alcohol
 Concen: 1.643 ppbv
 RT: 3.94 min Scan# 358
 Delta R.T. -0.01 min
 Lab File: VL035054.D
 Acq: 19 May 2020 21:37

Tgt Ion: 45 Resp: 164367
 Ion Ratio Lower Upper
 45 100
 58 218.5 1.7 2.5#

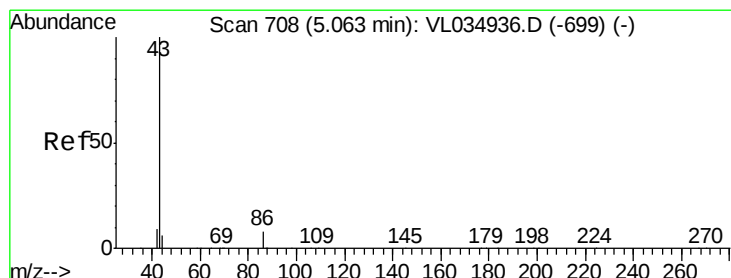
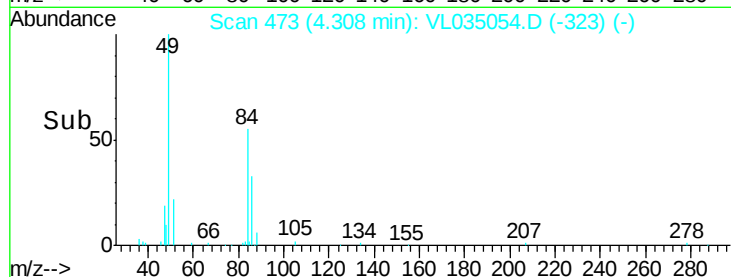
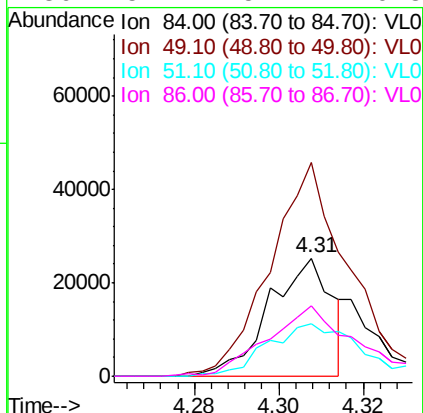
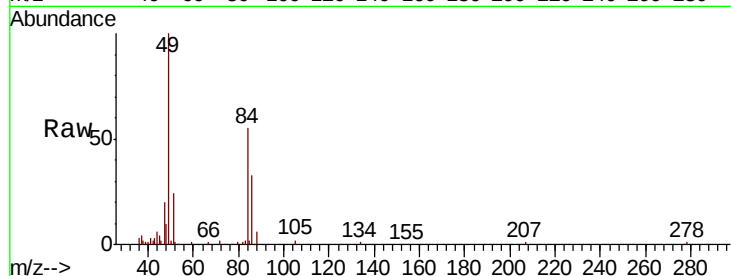




#20
Methvlene Chloride
Concen: 0.526 ppbv
RT: 4.31 min Scan# 473
Delta R.T. -0.02 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

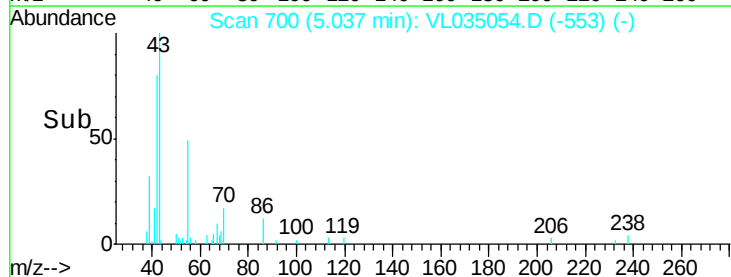
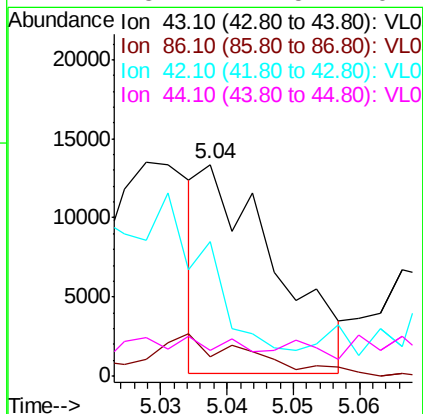
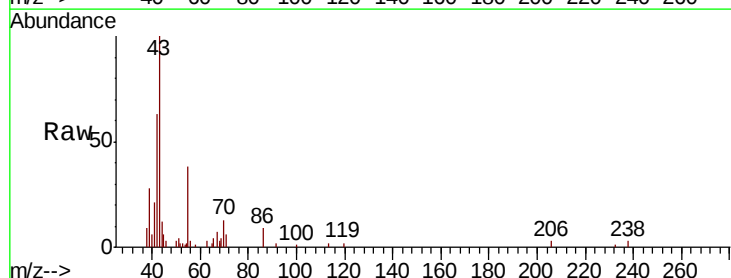
Instrument :
MSVOA_L
ClientSampleId :

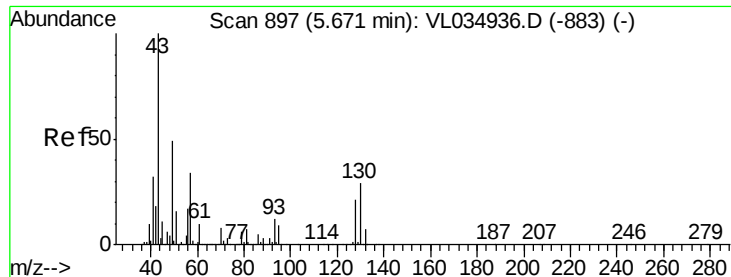
Tot Ion:	84	Resp:	26146
Ion	Ratio	Lower	Upper
84	100		
49	177.5	132.5	198.7
51	44.9	38.4	57.6
86	57.2	51.2	76.8



#23
Vinyl Acetate
Concen: 0.054 ppbv
RT: 5.04 min Scan# 700
Delta R.T. -0.03 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

Tgt Ion:	43	Resp:	10235
Ion	Ratio	Lower	Upper
43	100		
86	6.7	5.5	8.3
42	53.2	8.0	12.0#
44	5.2	4.5	6.7





#25

Ethyl Acetate

Concen: 0.145 ppbv

RT: 5.65 min Scan# 891

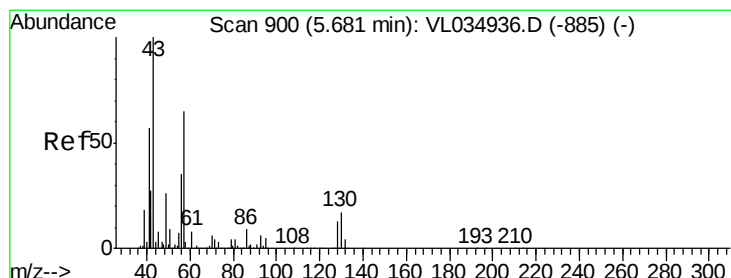
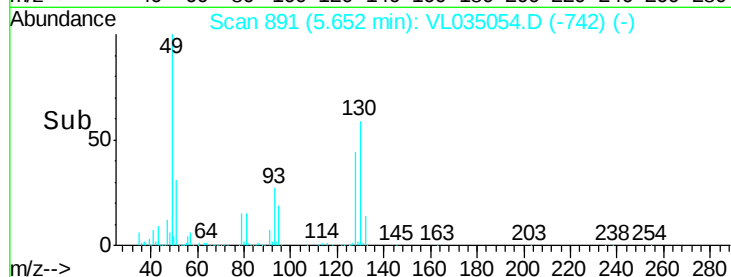
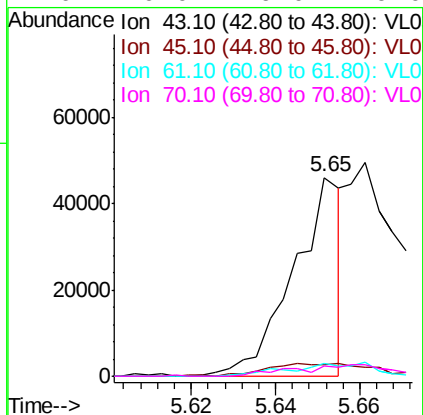
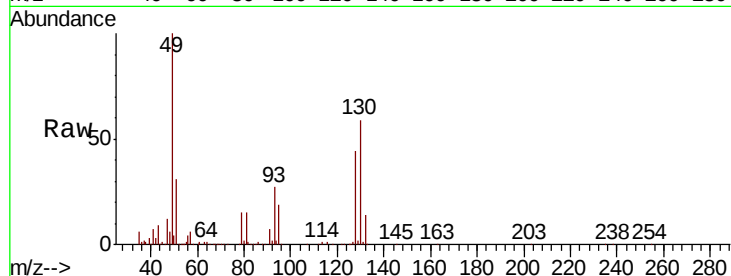
Delta R.T. -0.02 min

Lab File: VL035054.D

Acq: 19 May 2020 21:37

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:	43	Resp:	36639
Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.1	12.1#
61	0.0	7.8	11.8#
70	0.0	6.0	9.0#



#26

Hexane

Concen: 0.737 ppbv

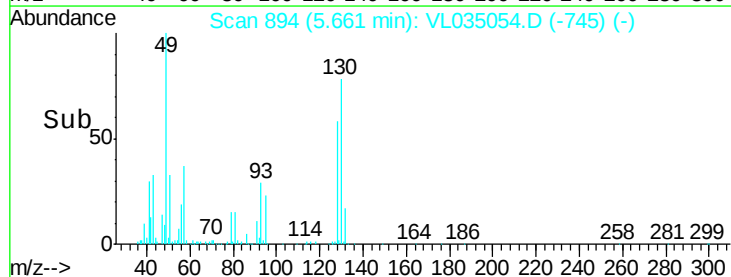
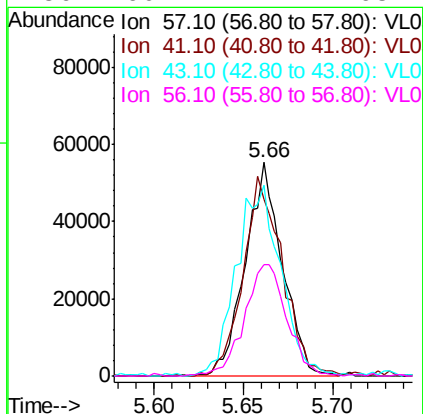
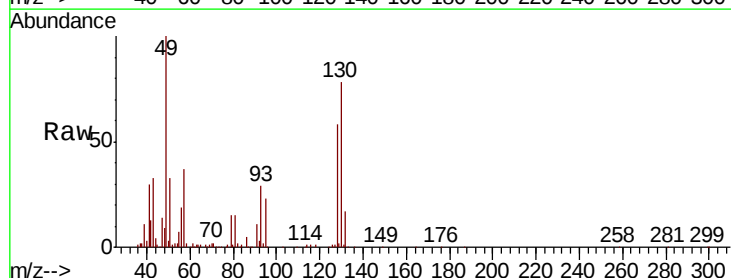
RT: 5.66 min Scan# 894

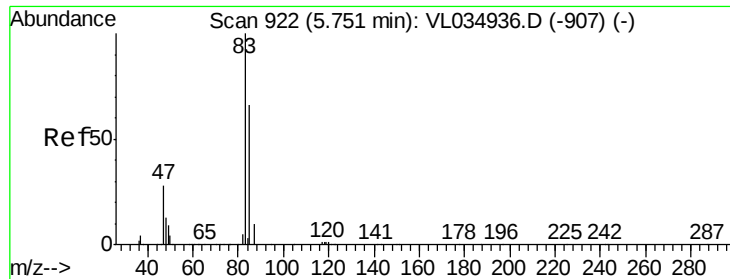
Delta R.T. -0.02 min

Lab File: VL035054.D

Acq: 19 May 2020 21:37

Tgt Ion:	57	Resp:	80523
Ion	Ratio	Lower	Upper
57	100		
41	100.6	72.7	109.1
43	107.2	182.1	273.1#
56	60.4	42.2	63.2





#29

Chloroform

Concen: 0.243 ppbv

RT: 5.73 min Scan# 915

Delta R.T. -0.02 min

Lab File: VL035054.D

Acq: 19 May 2020 21:37

Instrument :

MSVOA_L

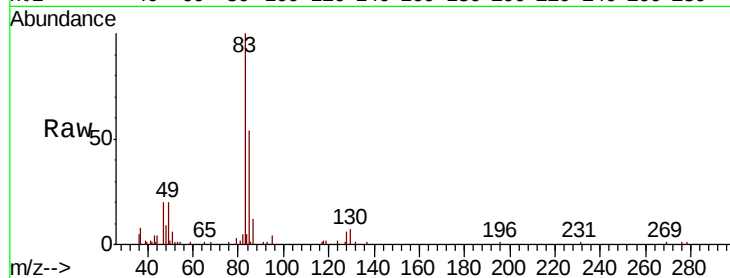
ClientSampleId :

Tot Ion: 83 Resp: 43475

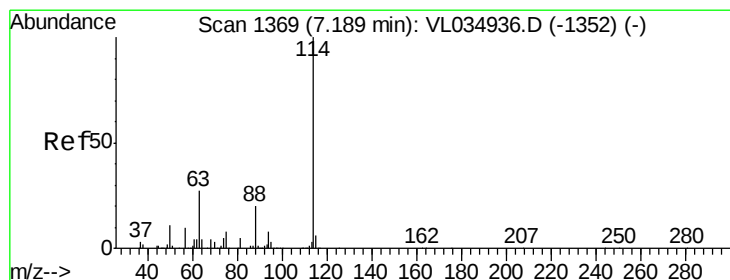
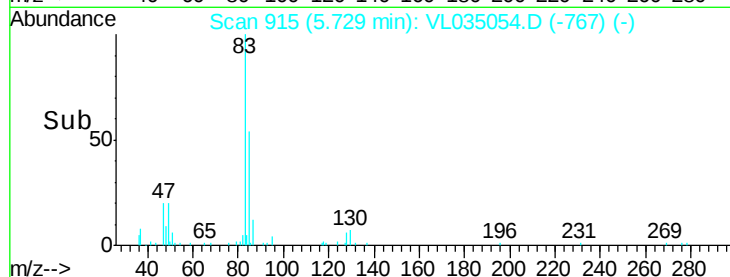
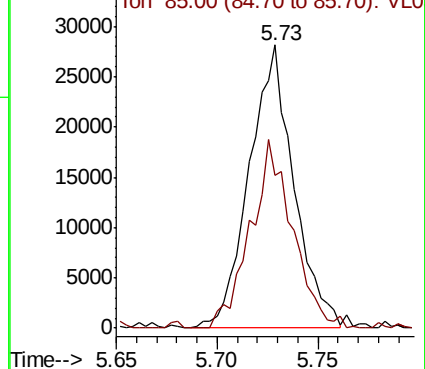
Ion Ratio Lower Upper

83 100

85 54.1 53.0 79.6



Abundance Ion 83.00 (82.70 to 83.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 min Scan# 1361

Delta R.T. -0.03 min

Lab File: VL035054.D

Acq: 19 May 2020 21:37

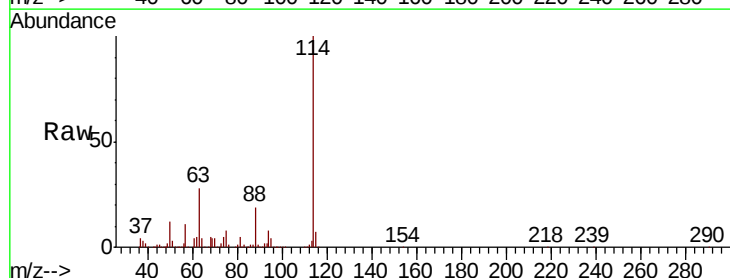
Tgt Ion: 114 Resp: 2577494

Ion Ratio Lower Upper

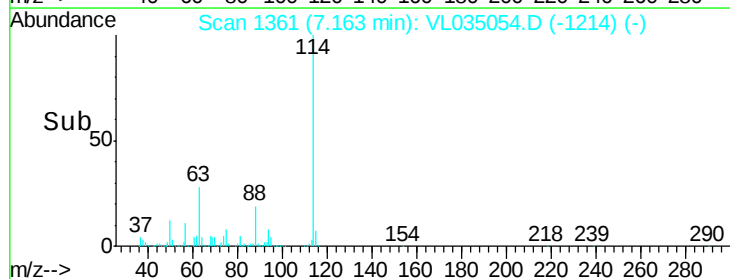
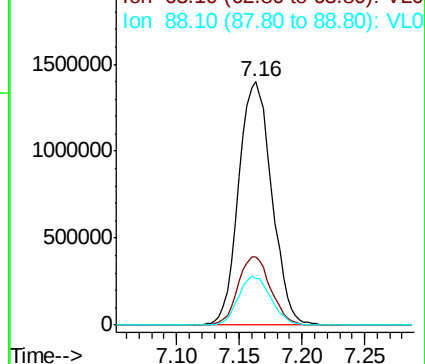
114 100

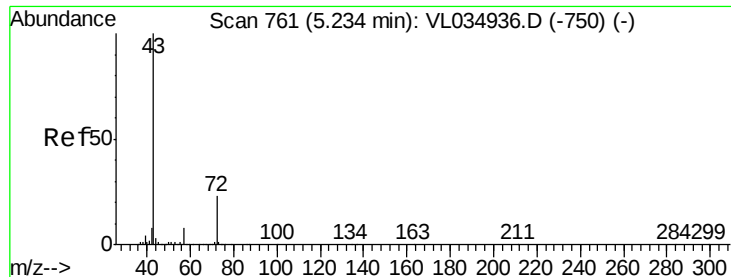
63 27.8 22.2 33.4

88 19.7 15.5 23.3



Abundance Ion 114.10 (113.80 to 114.80): V

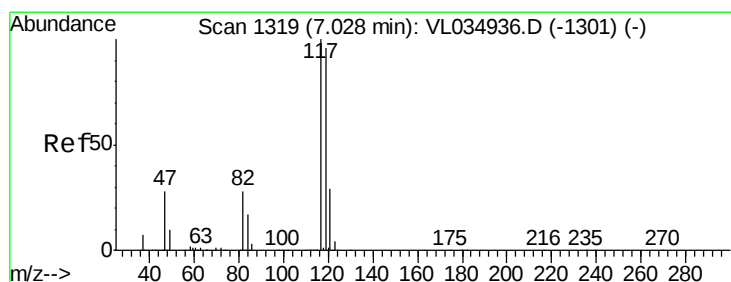
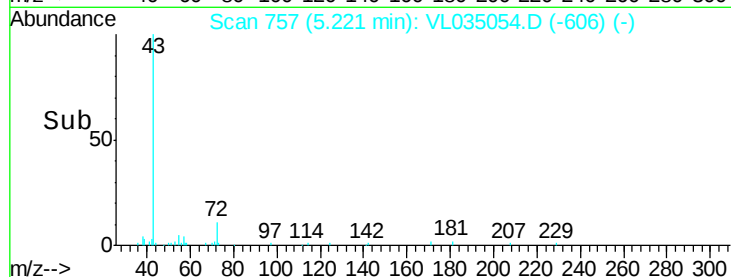
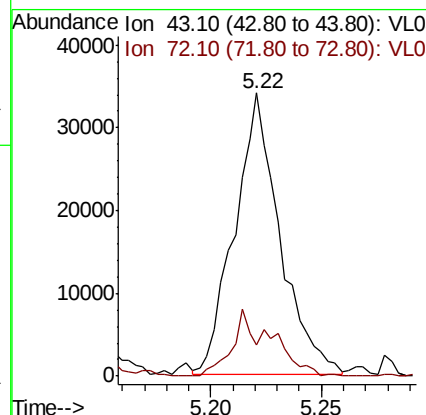
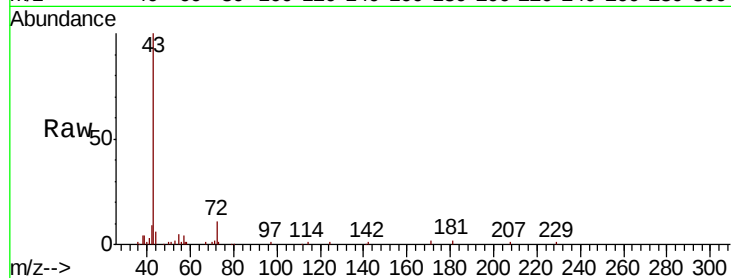




#34
2-Butanone
Concen: 0.301 ppbv
RT: 5.22 min Scan# 757
Delta R.T. -0.01 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

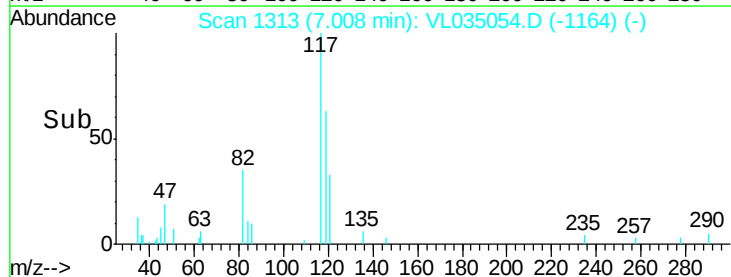
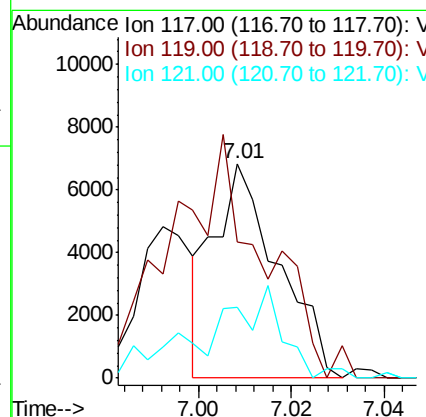
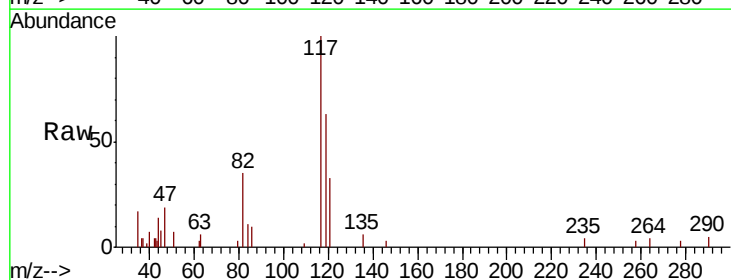
Instrument :
MSVOA_L
ClientSampleId :

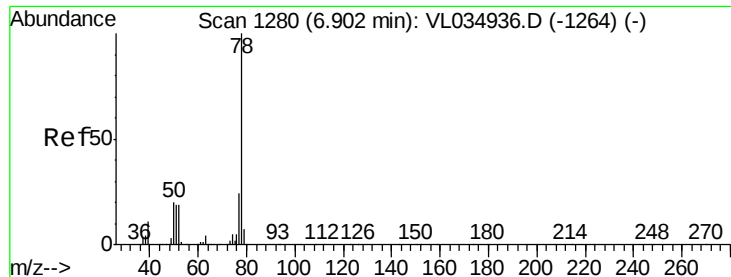
Tot Ion: 43 Resp: 48242
Ion Ratio Lower Upper
43 100
72 20.7 18.0 27.0



#35
Carbon Tetrachloride
Concen: 0.040 ppbv
RT: 7.01 min Scan# 1313
Delta R.T. -0.02 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

Tgt Ion: 117 Resp: 6537
Ion Ratio Lower Upper
117 100
119 48.4 77.0 115.6#
121 28.7 23.0 34.6

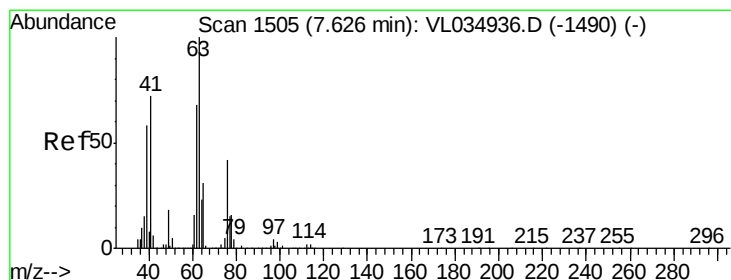
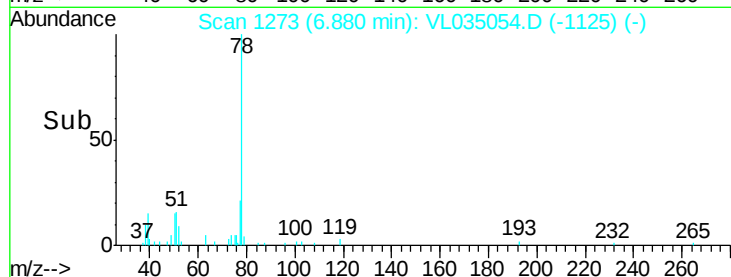
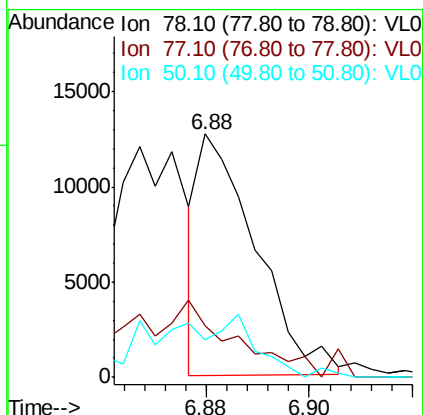
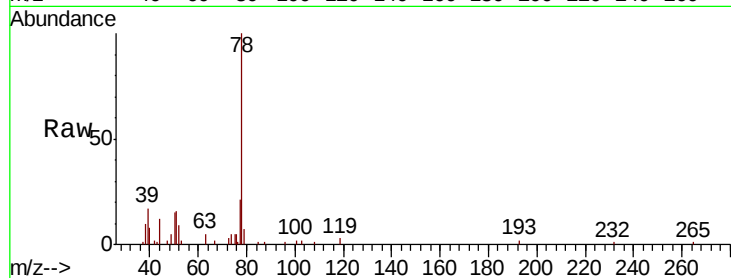




#36
Benzene
Concen: 0.046 ppbv
RT: 6.88 min Scan# 1273
Delta R.T. -0.02 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

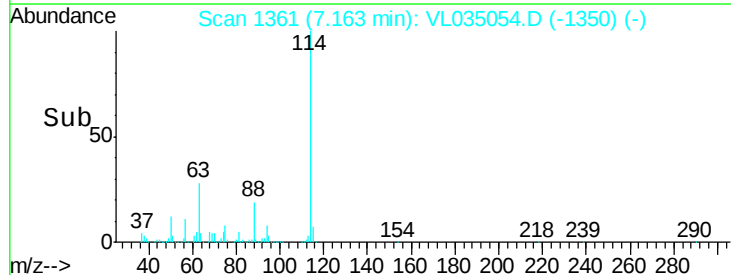
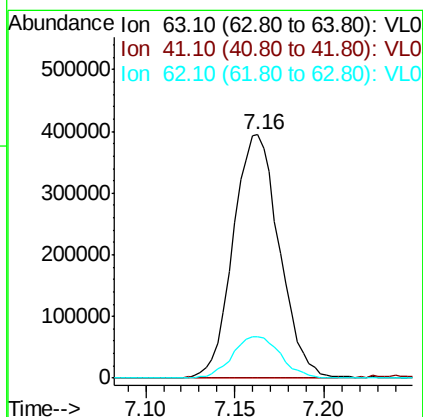
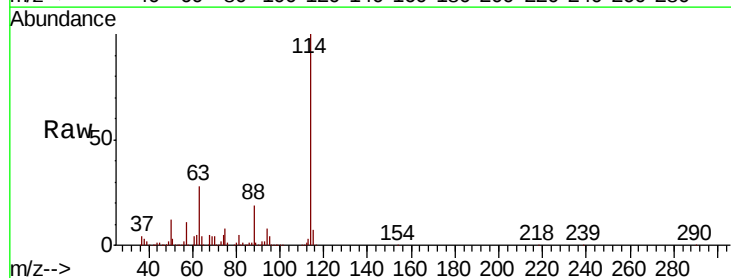
Instrument :
MSVOA_L
ClientSampleId :

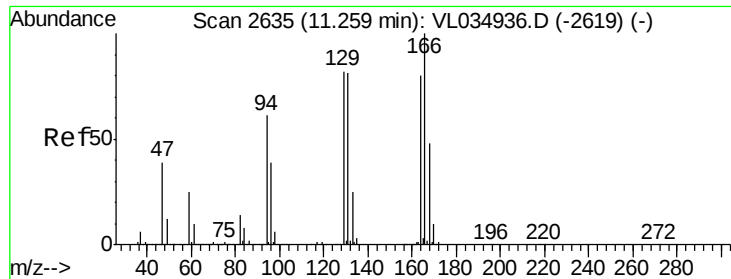
Tot Ion: 78 Resp: 9724
Ion Ratio Lower Upper
78 100
77 9.7 19.0 28.6#
50 14.3 15.8 23.8#



#39
1,2-Dichloropropane
Concen: 8.286 ppbv
RT: 7.16 min Scan# 1361
Delta R.T. -0.46 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

Tgt Ion: 63 Resp: 705832
Ion Ratio Lower Upper
63 100
41 0.0 57.8 86.8#
62 17.2 54.2 81.2#





#52

Tetrachloroethene

Concen: 0.517 ppbv

RT: 11.23 min Scan# 2627

Delta R.T. -0.03 min

Lab File: VL035054.D

Acq: 19 May 2020 21:37

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:164 Resp: 39029

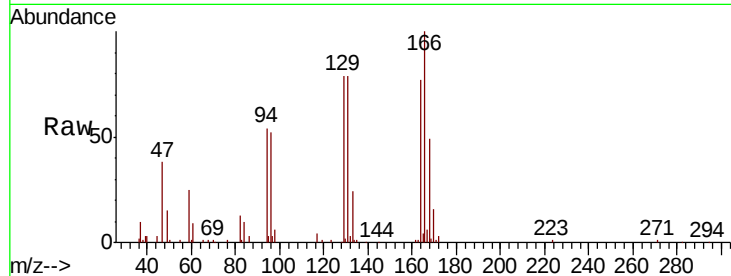
Ion Ratio Lower Upper

164 100

166 129.3 100.7 151.1

129 103.9 83.0 124.4

131 100.7 81.0 121.4

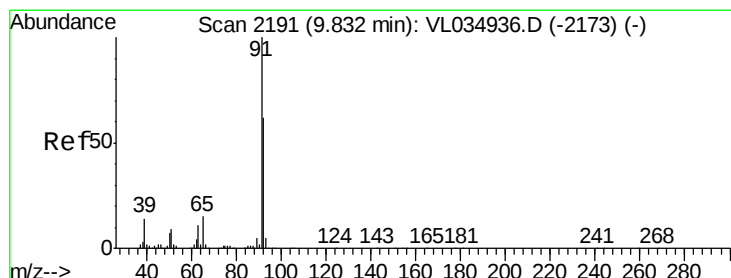
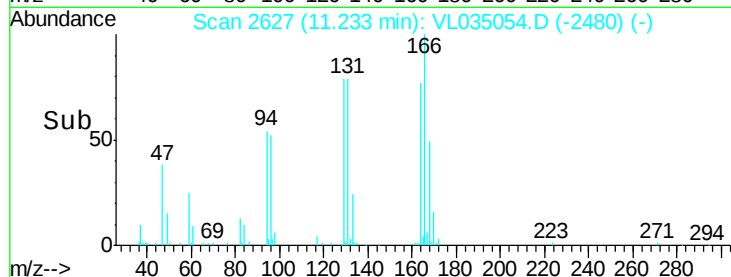
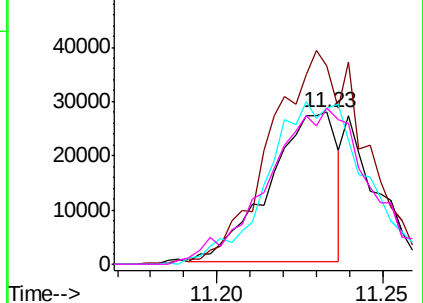


Abundance Ion 163.90 (163.60 to 164.60): V

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: 1.349 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. -0.03 min

Lab File: VL035054.D

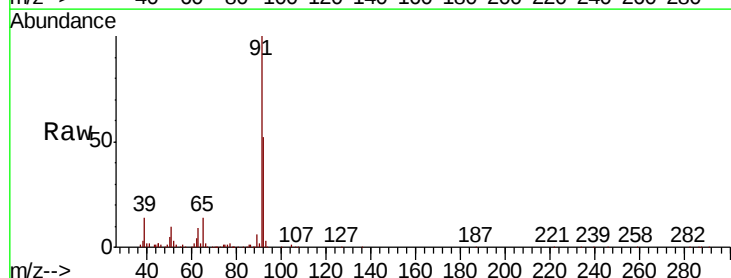
Acq: 19 May 2020 21:37

Tgt Ion: 91 Resp: 303798

Ion Ratio Lower Upper

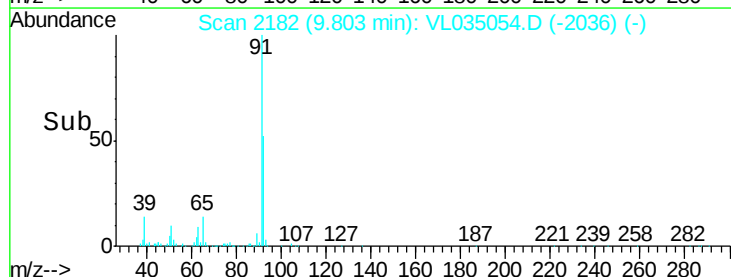
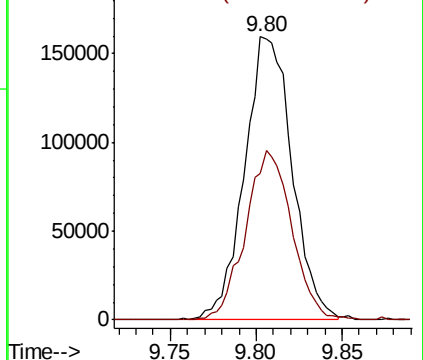
91 100

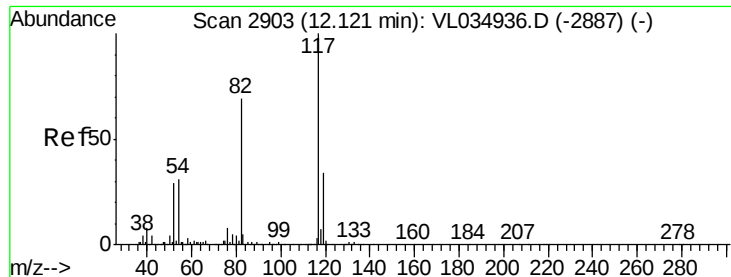
92 59.0 48.6 73.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

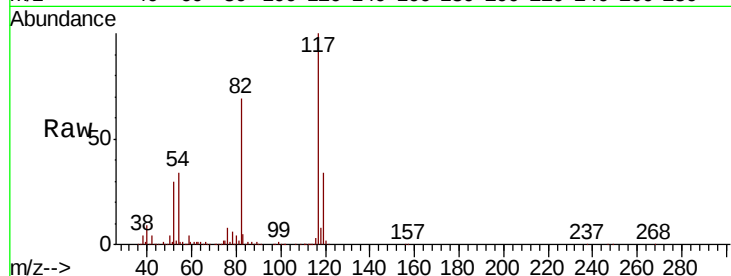




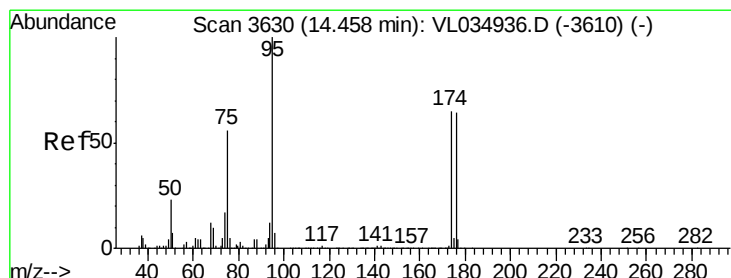
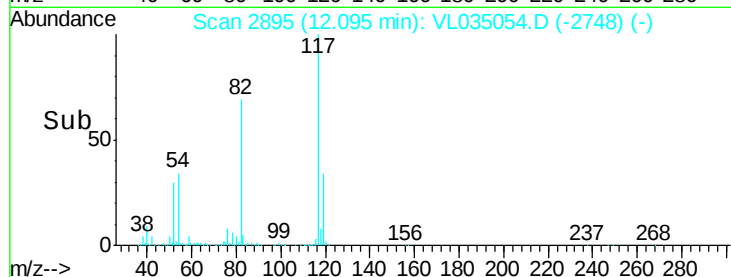
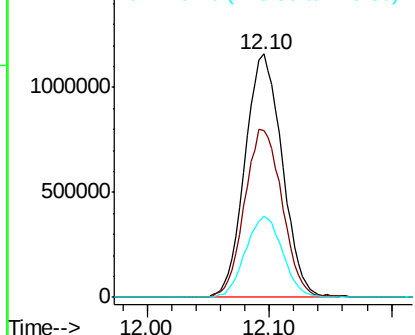
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2895
Delta R.T. -0.03 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 2437318
Ion Ratio Lower Upper
117 100
82 70.1 53.1 79.7
119 33.4 26.7 40.1

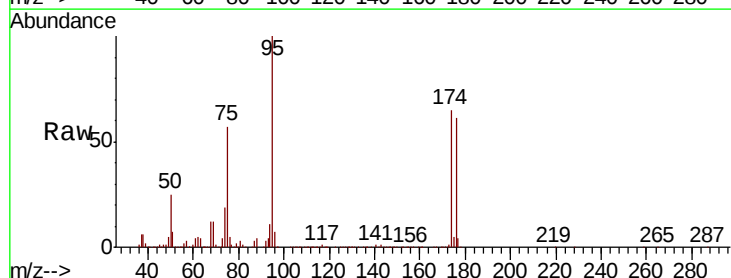


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 10.691 ppbv
RT: 14.43 min Scan# 3621
Delta R.T. -0.03 min
Lab File: VL035054.D
Acq: 19 May 2020 21:37

Tgt Ion: 95 Resp: 2109154
Ion Ratio Lower Upper
95 100
174 63.9 51.5 77.3
175 4.9 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

