

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052220\
 Data File : VL035089.D
 Acq On : 22 May 2020 18:03
 Operator : SY/AP
 Sample : L2739-03DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

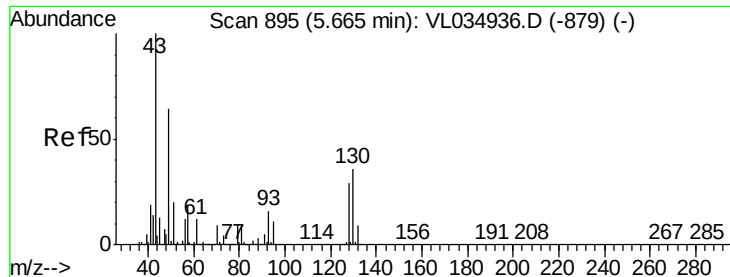
Quant Time: May 22 23:17:04 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 06 14:49:39 2020
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1000156	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.17	114	2358050	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.10	117	2214222	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.44	95	1897370	10.59	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.90%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.00	85	9528	0.067 ppbv	99
4) Chloromethane	3.10	50	3853	0.059 ppbv	92
9) Propene	2.98	41	10010	0.202 ppbv	88
13) Ethanol	3.56	45	432745	26.466 ppbv	99
15) Acetone	3.83	43	1428355	10.802 ppbv #	60
16) 1,3-Butadiene	3.27	39	2146	0.038 ppbv #	63
19) Isopropyl Alcohol	3.93	45	733252	8.316 ppbv	99
20) Methylene Chloride	4.32	84	43737	0.999 ppbv #	79
21) Allyl Chloride	4.10	41	1337711	17.911 ppbv #	51
23) Vinyl Acetate	5.06	43	5085	0.030 ppbv #	78
25) Ethyl Acetate	5.66	43	113763	0.512 ppbv #	97
26) Hexane	5.67	57	46253	0.480 ppbv	86
27) Carbon Disulfide	4.51	76	4083	0.036 ppbv #	34
29) Chloroform	5.73	83	7126	0.045 ppbv	86
34) 2-Butanone	5.23	43	33128	0.226 ppbv #	89
37) 1,2-Dichloroethane	6.29	62	4280	0.036 ppbv #	82
39) 1,2-Dichloropropane	7.17	63	645263	8.279 ppbv #	24
44) 2,2,4-Trimethylpentane	7.87	57	58590	0.170 ppbv #	79
53) Toluene	9.81	91	482997	2.344 ppbv	100
58) Ethyl Benzene	12.73	91	39579	0.145 ppbv	90
59) m/p-Xylene	13.01	91	34193	0.142 ppbv #	8
60) o-Xylene	13.71	91	30705	0.129 ppbv #	32
61) Styrene	13.55	104	33326	0.222 ppbv	94

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.02 min

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MSVOA_L

ClientSampleId :

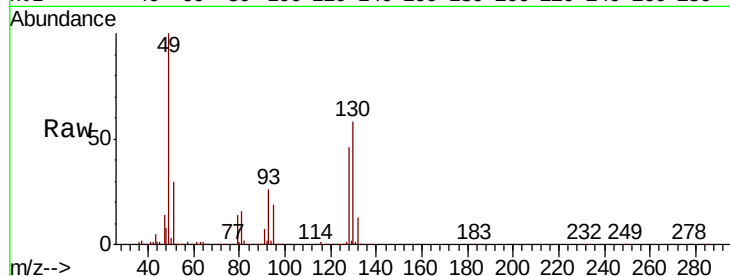
Tot Ion: 49 Resp: 1000156

Ion Ratio Lower Upper

49 100

128 47.6 22.1 66.5

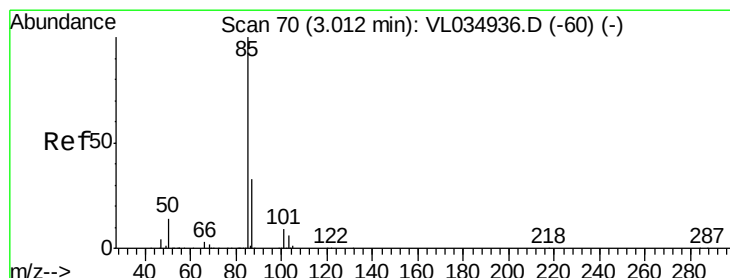
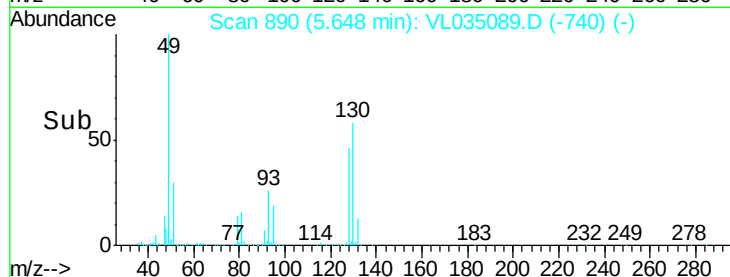
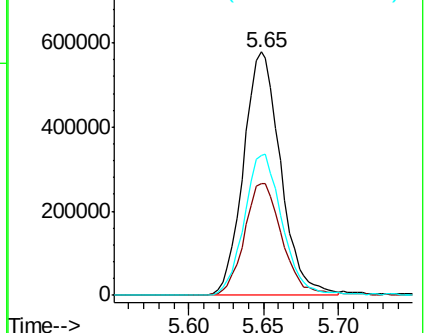
130 59.9 29.1 87.3



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: 0.067 ppbv

RT: 3.00 min Scan# 67

Delta R.T. -0.01 min

Lab File: VL035089.D

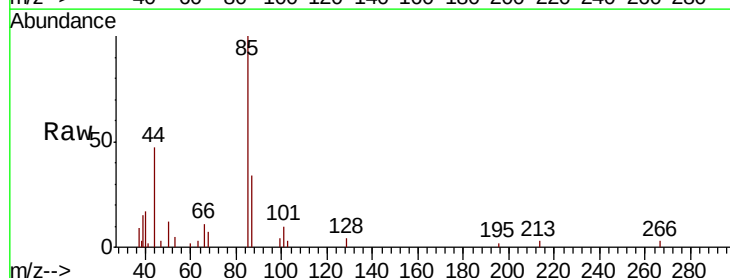
Acq: 22 May 2020 18:03

Tgt Ion: 85 Resp: 9528

Ion Ratio Lower Upper

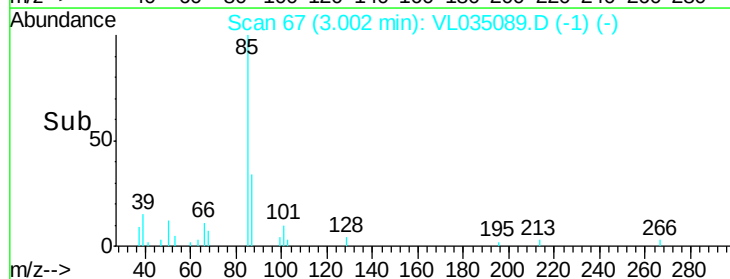
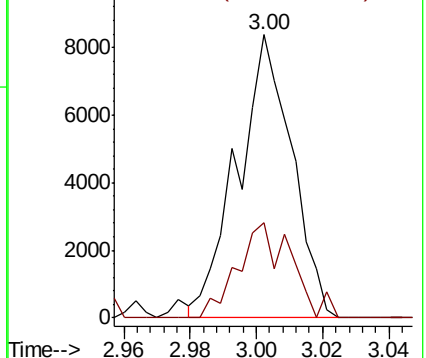
85 100

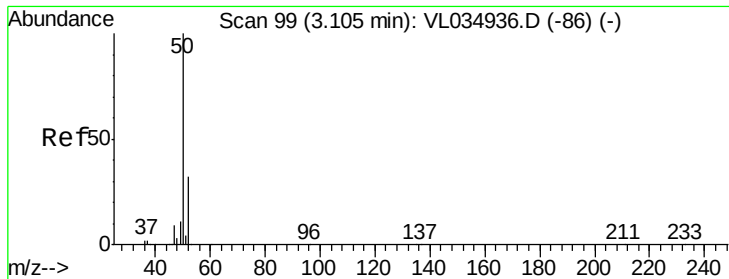
87 33.5 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.059 ppbv

RT: 3.10 min Scan# 97

Delta R.T. -0.01 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

Instrument :

MSVOA_L

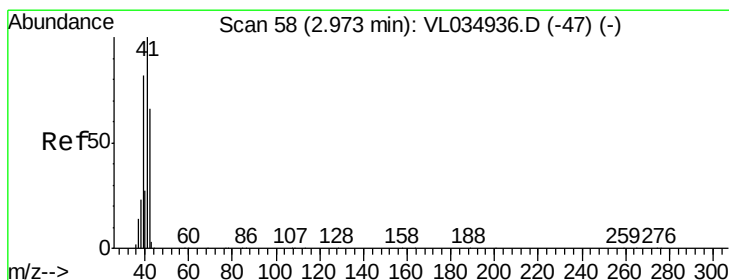
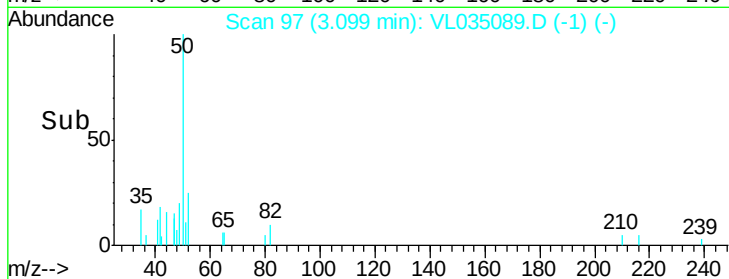
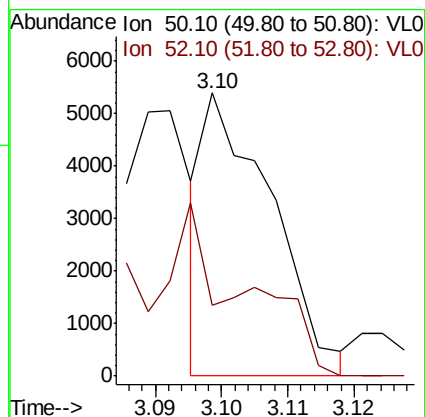
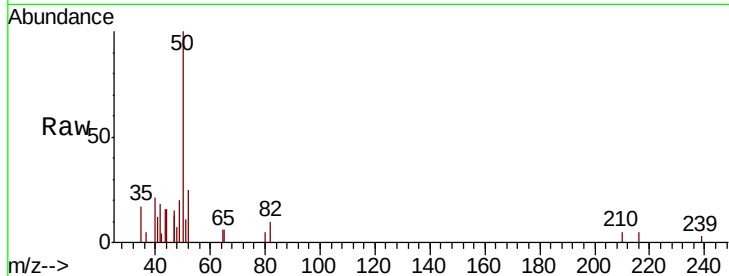
ClientSampleId :

Tot Ion: 50 Resp: 3853

Ion Ratio Lower Upper

50 100

52 27.4 25.4 38.2



#9

Propene

Concen: 0.202 ppbv

RT: 2.98 min Scan# 59

Delta R.T. 0.00 min

Lab File: VL035089.D

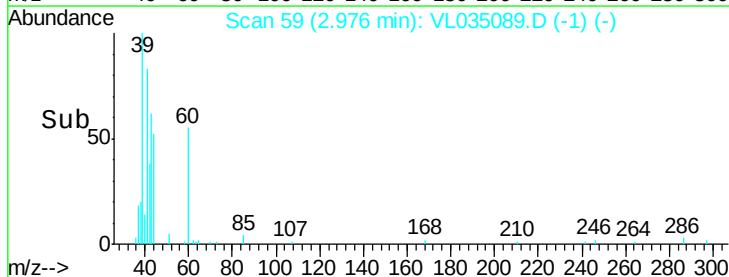
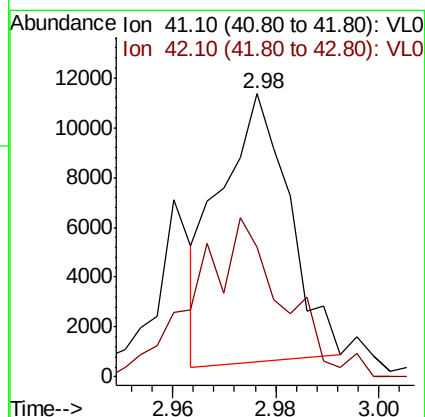
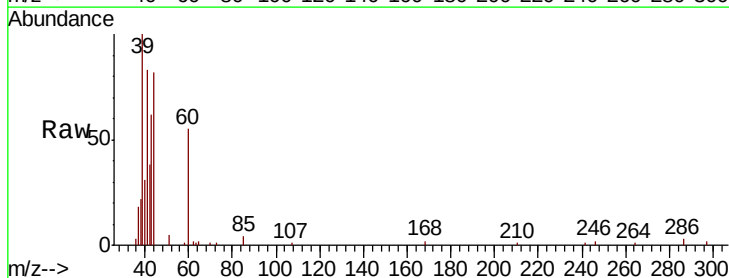
Acq: 22 May 2020 18:03

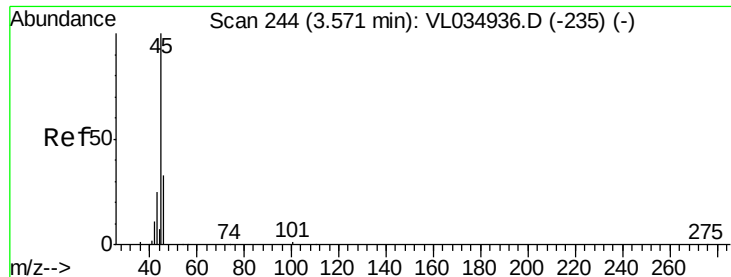
Tgt Ion: 41 Resp: 10010

Ion Ratio Lower Upper

41 100

42 78.0 54.5 81.7

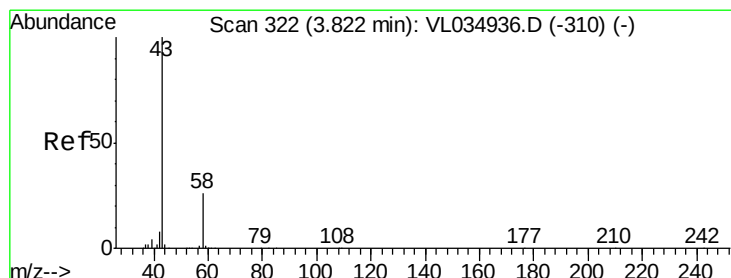
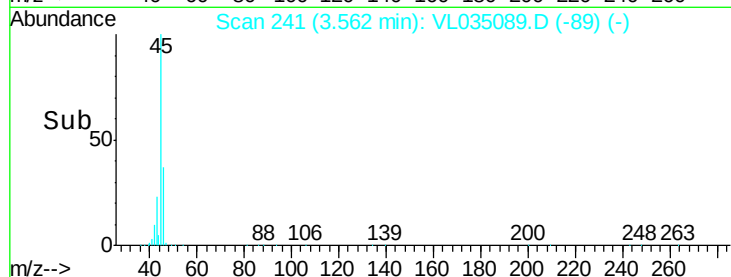
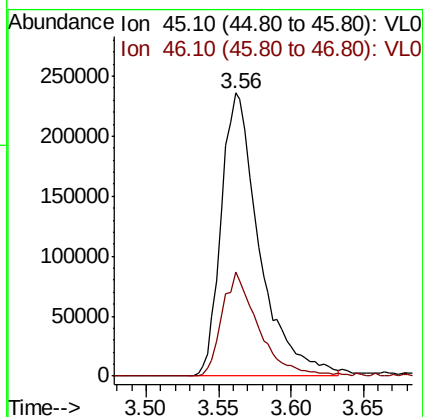
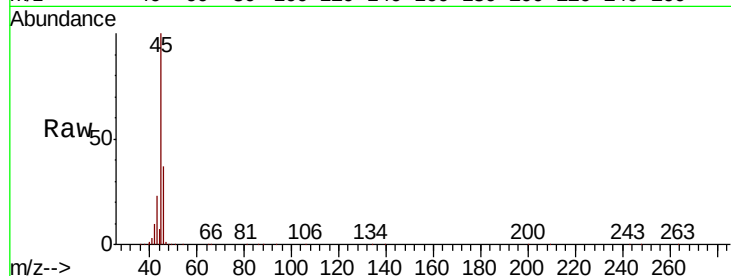




#13
Ethanol
Concen: 26.466 ppbv
RT: 3.56 min Scan# 241
Delta R.T. -0.01 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

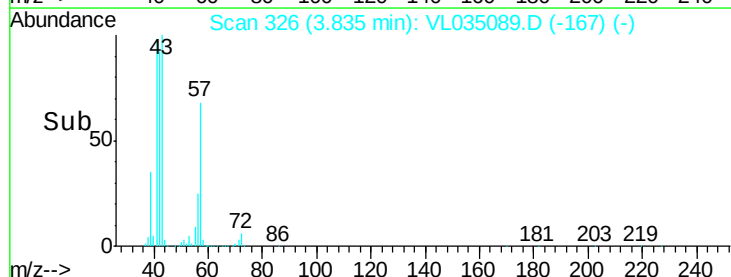
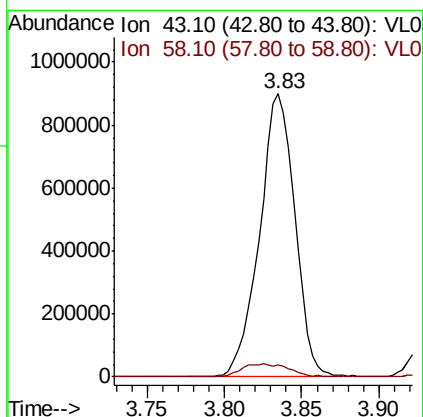
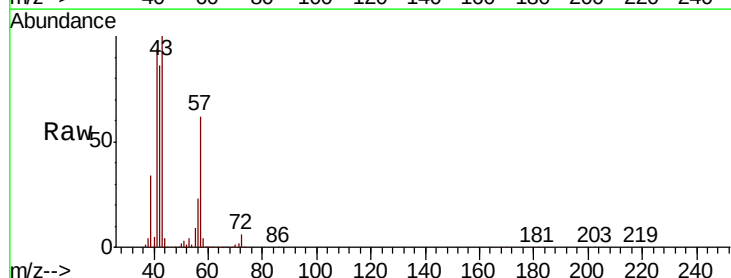
Instrument :
MSVOA_L
ClientSampleId :

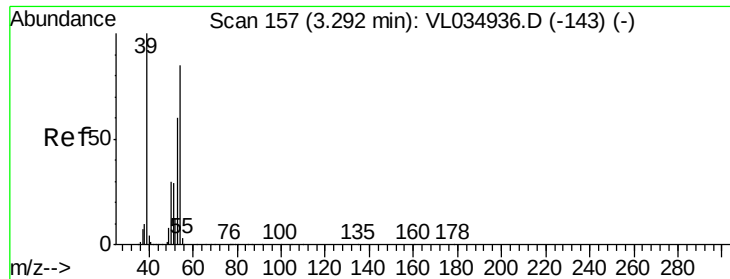
Tot Ion: 45 Resp: 432745
Ion Ratio Lower Upper
45 100
46 35.3 14.3 57.3



#15
Acetone
Concen: 10.802 ppbv
RT: 3.83 min Scan# 326
Delta R.T. 0.01 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

Tgt Ion: 43 Resp: 1428355
Ion Ratio Lower Upper
43 100
58 6.3 21.7 32.5#

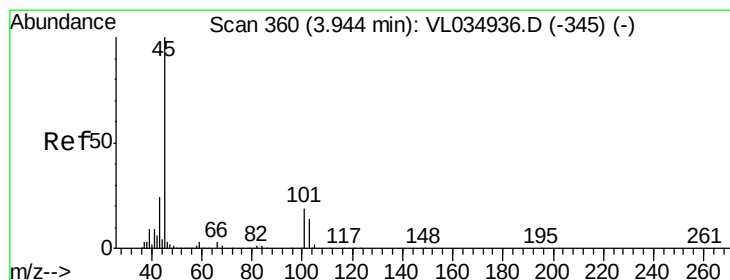
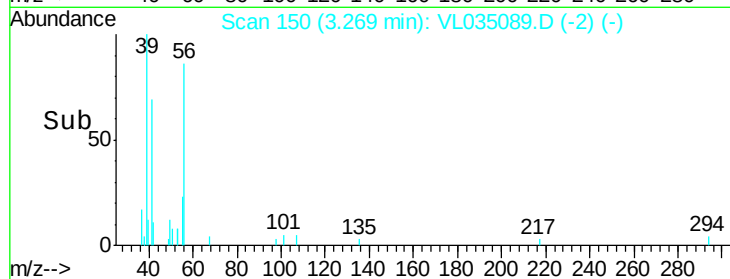
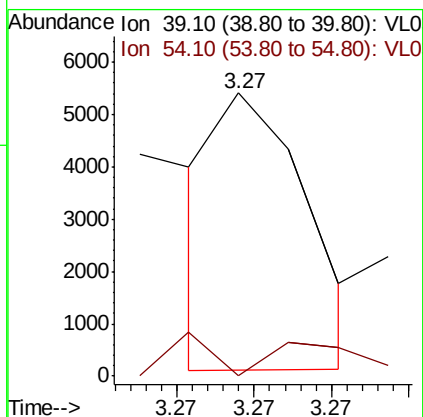
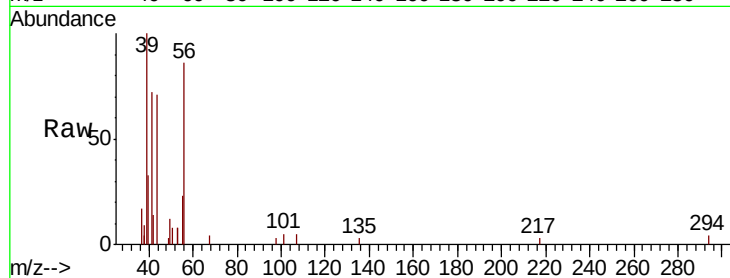




#16
1,3-Butadiene
Concen: 0.038 ppbv
RT: 3.27 min Scan# 150
Delta R.T. -0.02 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

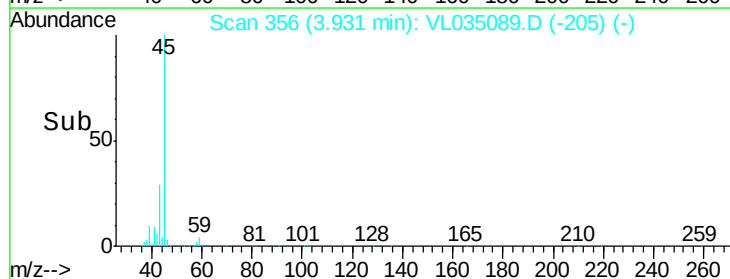
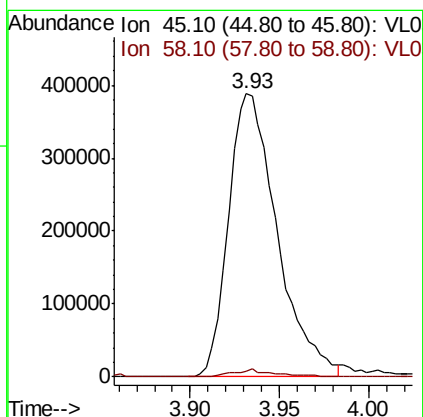
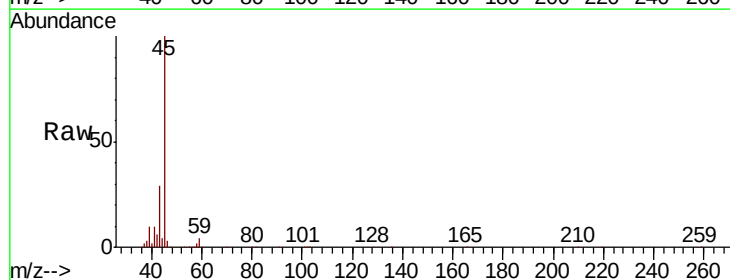
Instrument :
MSVOA_L
ClientSampleId :

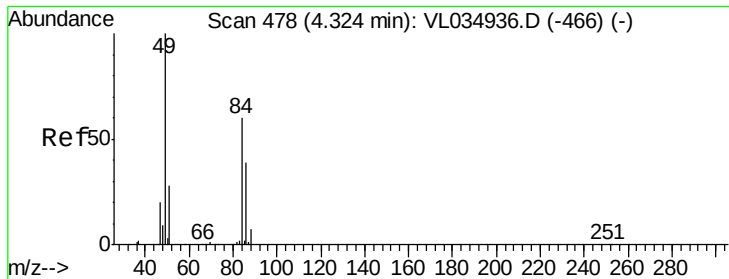
Tot Ion: 39 Resp: 2146
Ion Ratio Lower Upper
39 100
54 49.5 66.6 100.0#



#19
Isopropyl Alcohol
Concen: 8.316 ppbv
RT: 3.93 min Scan# 356
Delta R.T. -0.01 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

Tgt Ion: 45 Resp: 733252
Ion Ratio Lower Upper
45 100
58 2.5 1.7 2.5

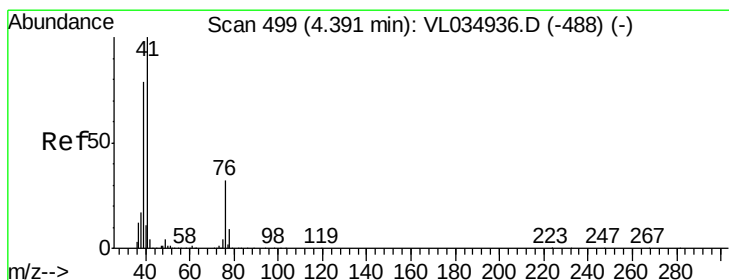
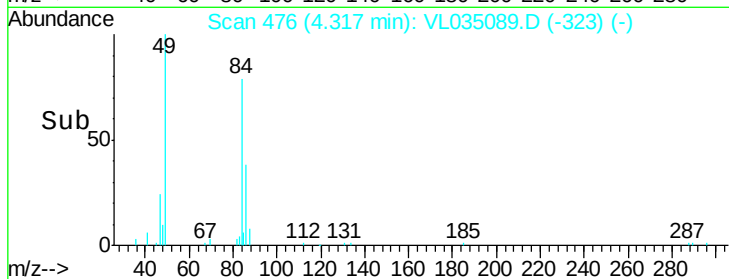
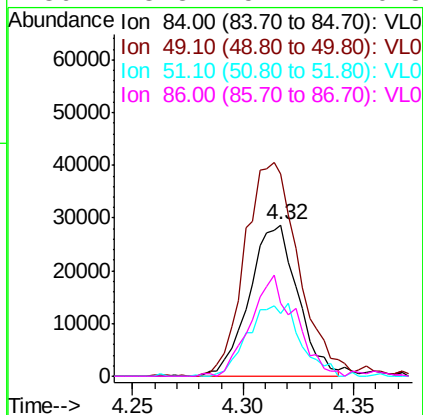
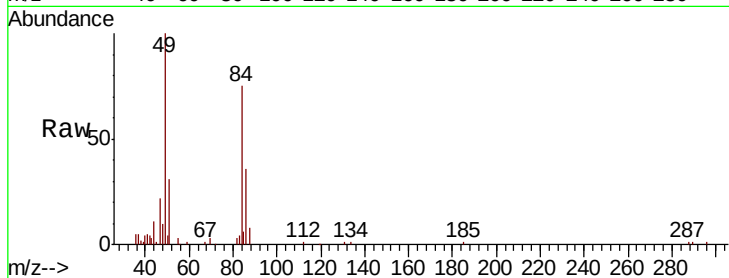




#20
Methylene Chloride
Concen: 0.999 ppbv
RT: 4.32 min Scan# 476
Delta R.T. -0.01 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

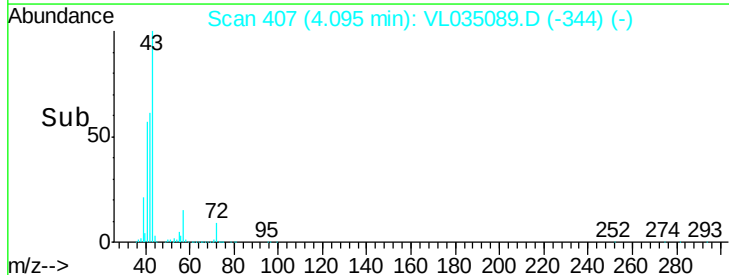
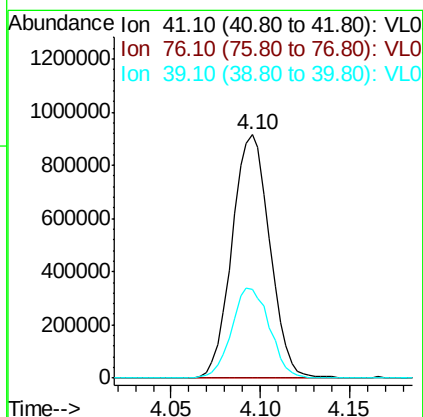
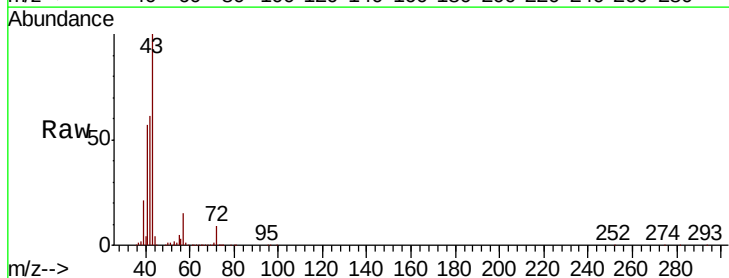
Instrument :
MSVOA_L
ClientSampleId :

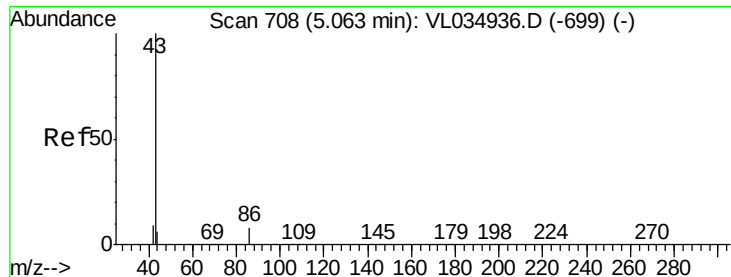
Tot Ion	84	Resp	43737
Ion	Ratio	Lower	Upper
84	100		
49	133.5	132.5	198.7
51	41.3	38.4	57.6
86	48.3	51.2	76.8#



#21
Allyl Chloride
Concen: 17.911 ppbv
RT: 4.10 min Scan# 407
Delta R.T. -0.30 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

Tgt Ion	41	Resp	1337711
Ion	Ratio	Lower	Upper
41	100		
76	0.0	23.6	35.4#
39	37.4	61.9	92.9#





#23

Vinyl Acetate

Concen: 0.030 ppbv

RT: 5.06 min Scan# 708

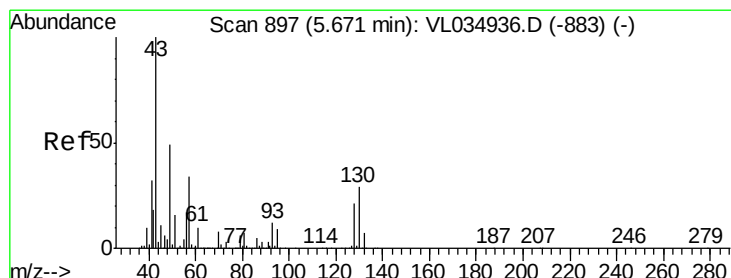
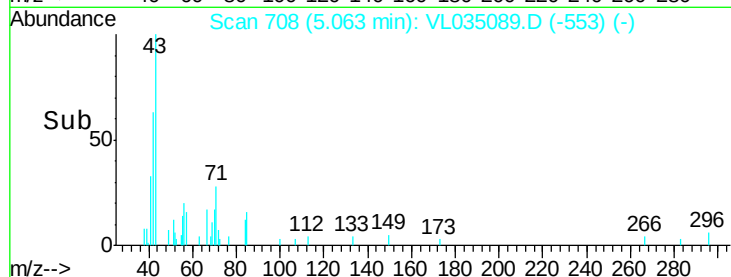
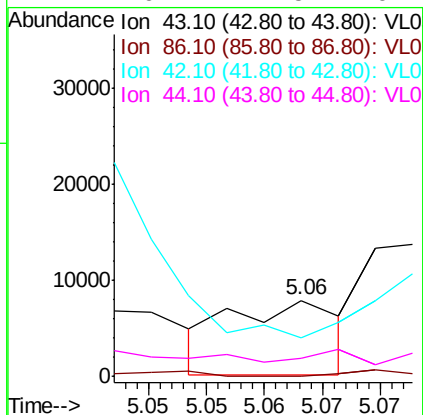
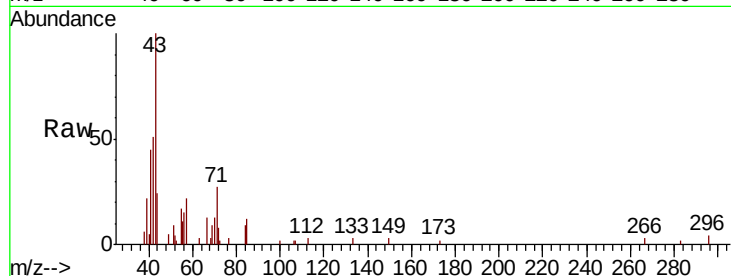
Delta R.T. -0.00 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:	43	Resp:	5085
Ion	Ratio	Lower	Upper
43	100		
86	0.0	5.5	8.3#
42	0.0	8.0	12.0#
44	0.2	4.5	6.7#



#25

Ethyl Acetate

Concen: 0.512 ppbv

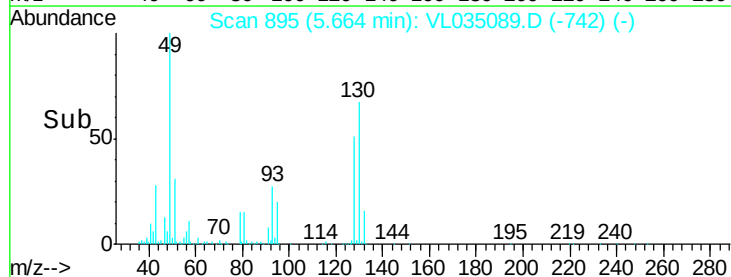
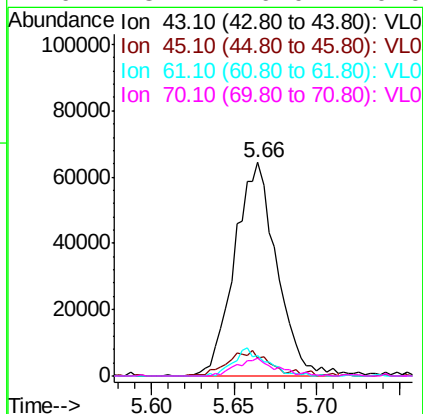
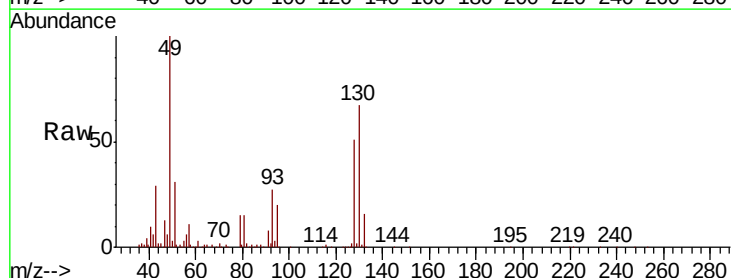
RT: 5.66 min Scan# 895

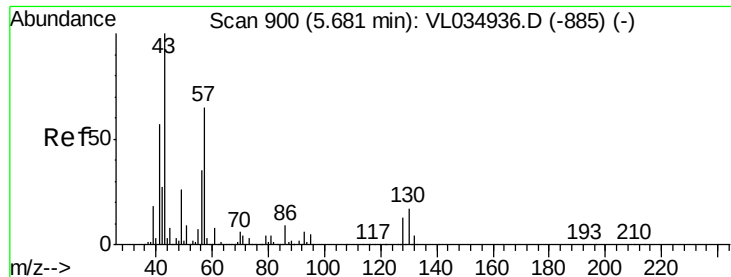
Delta R.T. -0.01 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

Tgt Ion:	43	Resp:	113763
Ion	Ratio	Lower	Upper
43	100		
45	12.4	8.1	12.1#
61	10.2	7.8	11.8
70	8.2	6.0	9.0

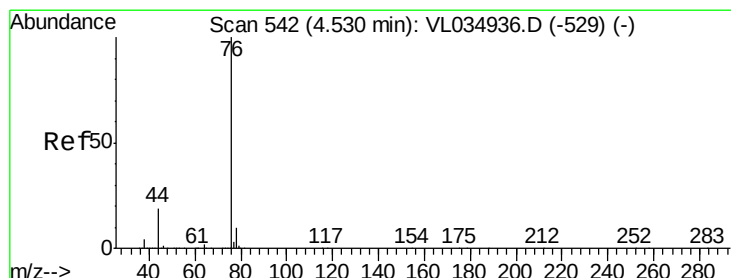
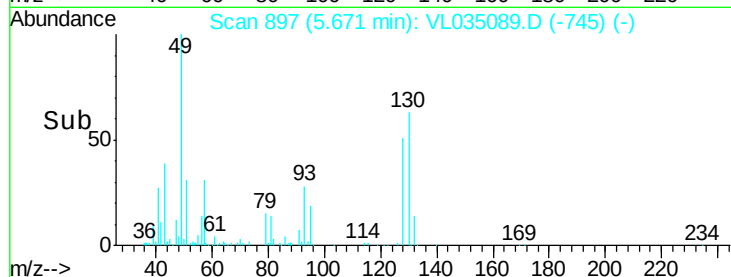
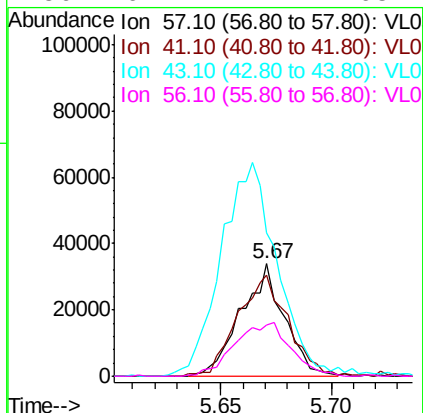
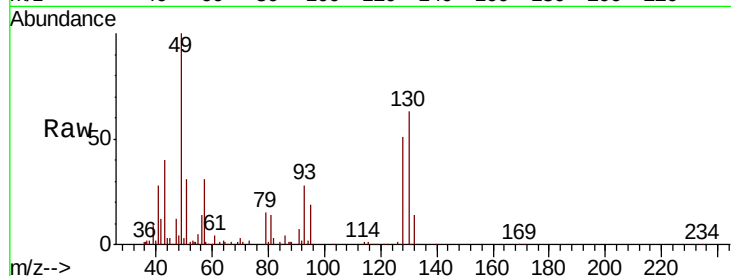




#26
Hexane
Concen: 0.480 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.01 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

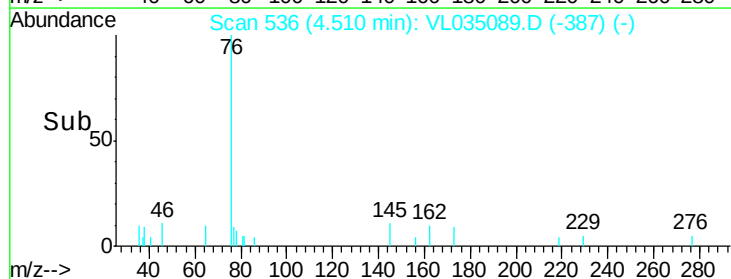
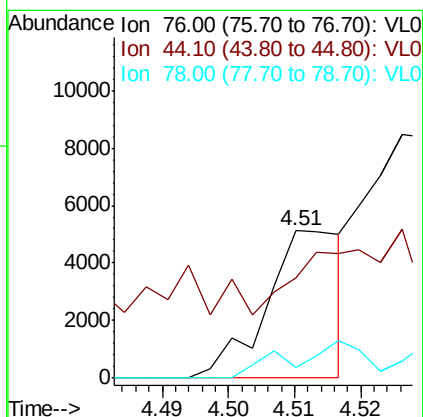
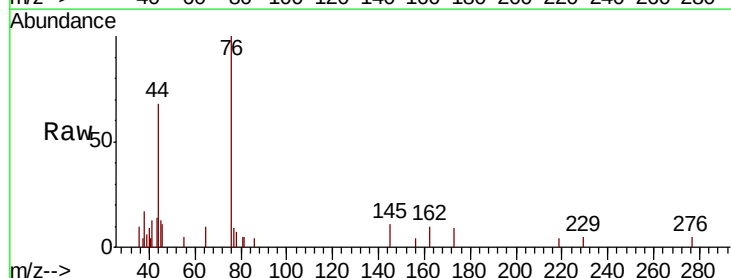
Instrument :
MSVOA_L
ClientSampled :

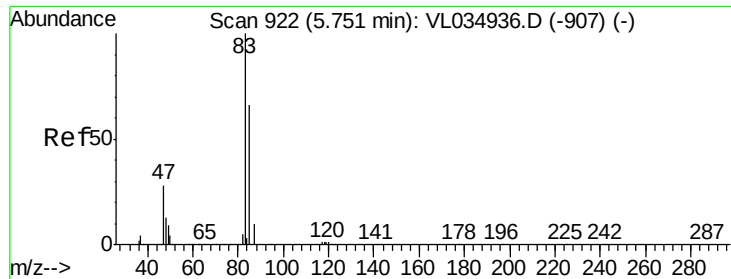
Tot Ion:	57	Resp:	46253
Ion	Ratio	Lower	Upper
57	100		
41	107.0	72.7	109.1
43	249.5	182.1	273.1
56	62.2	42.2	63.2



#27
Carbon Disulfide
Concen: 0.036 ppbv
RT: 4.51 min Scan# 536
Delta R.T. -0.02 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

Tgt Ion:	76	Resp:	4083
Ion	Ratio	Lower	Upper
76	100		
44	0.0	15.2	22.8#
78	51.0	7.7	11.5#

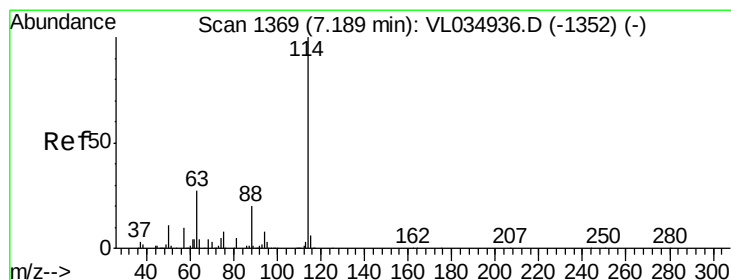
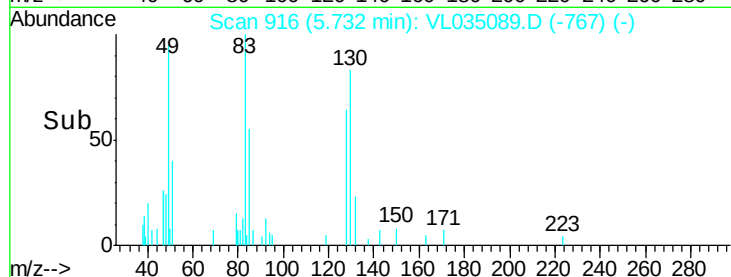
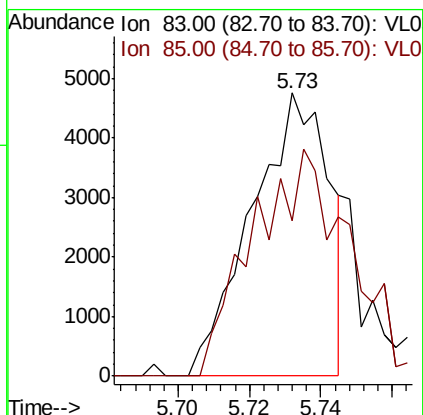
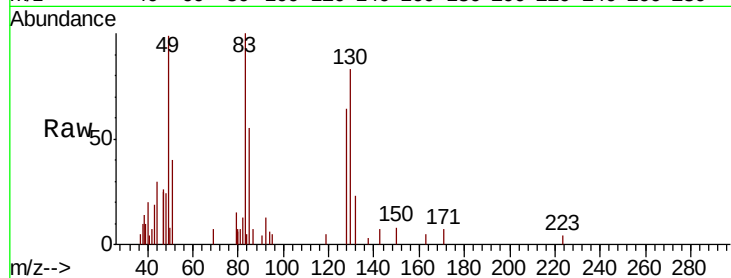




#29
Chloroform
Concen: 0.045 ppbv
RT: 5.73 min Scan# 916
Delta R.T. -0.02 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

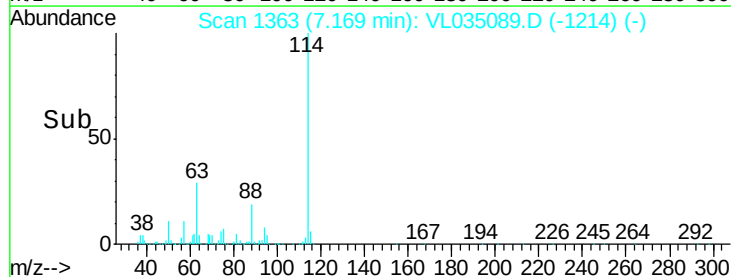
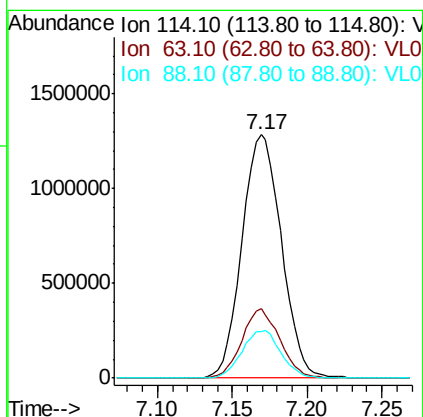
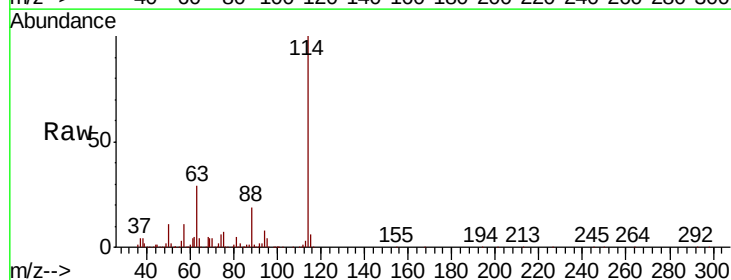
Instrument :
MSVOA_L
ClientSampleId :

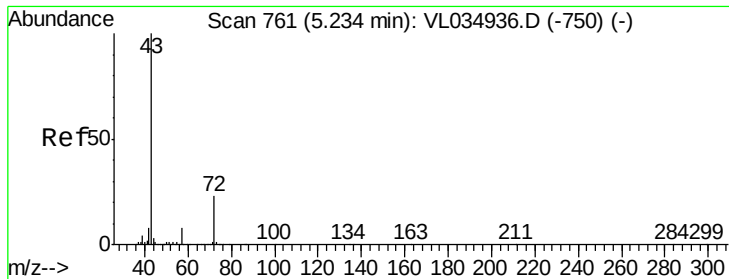
Tot Ion: 83 Resp: 7126
Ion Ratio Lower Upper
83 100
85 55.0 53.0 79.6



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.02 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

Tgt Ion: 114 Resp: 2358050
Ion Ratio Lower Upper
114 100
63 27.6 22.2 33.4
88 19.5 15.5 23.3





#34

2-Butanone

Concen: 0.226 ppbv

RT: 5.23 min Scan# 759

Delta R.T. -0.01 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

Instrument :

MSVOA_L

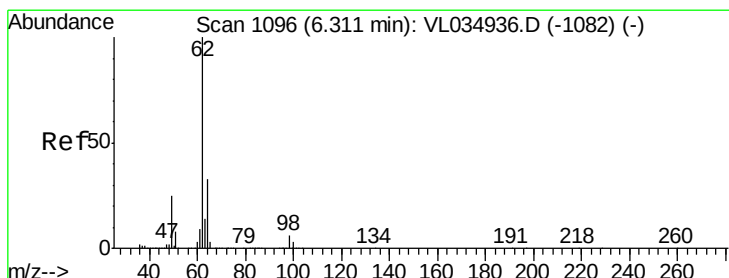
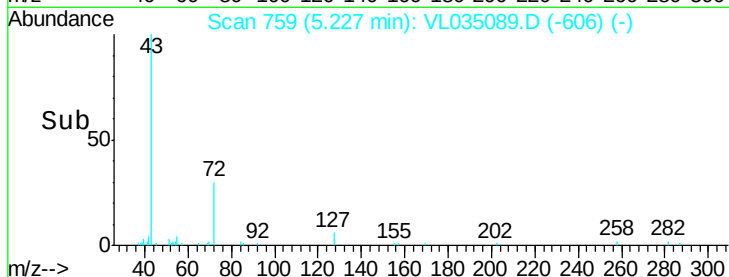
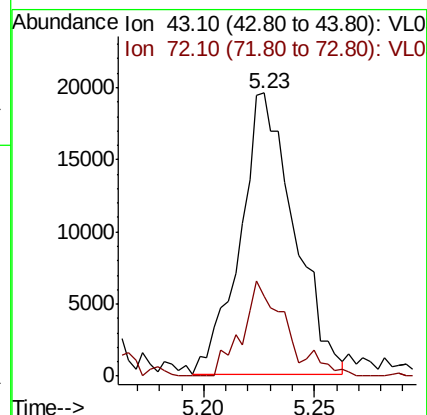
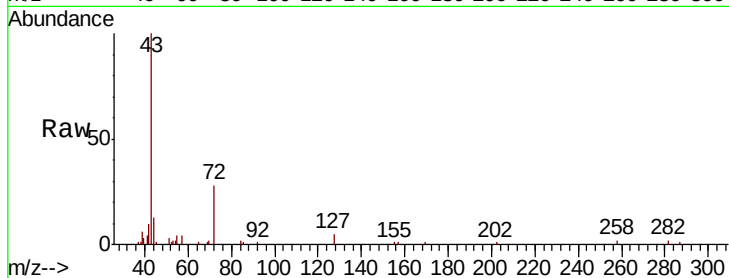
ClientSampleId :

Tot Ion: 43 Resp: 33128

Ion Ratio Lower Upper

43 100

72 27.9 18.0 27.0#



#37

1,2-Dichloroethane

Concen: 0.036 ppbv

RT: 6.29 min Scan# 1089

Delta R.T. -0.02 min

Lab File: VL035089.D

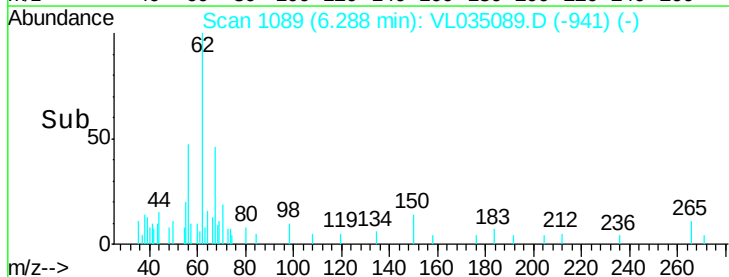
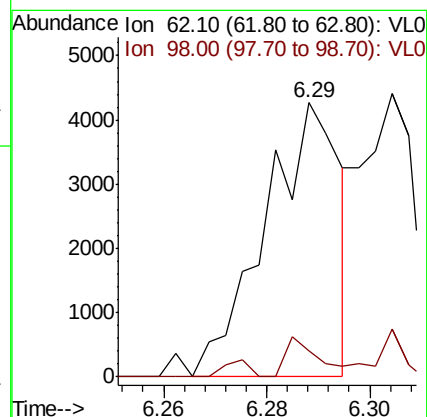
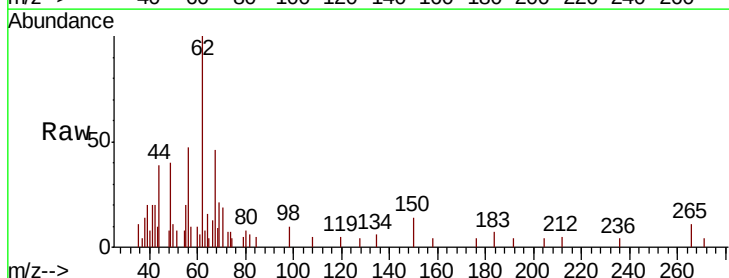
Acq: 22 May 2020 18:03

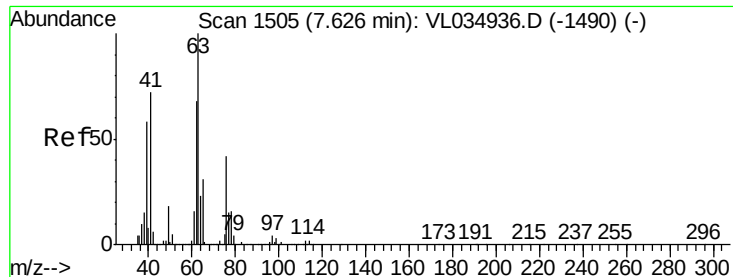
Tgt Ion: 62 Resp: 4280

Ion Ratio Lower Upper

62 100

98 0.0 4.8 7.2#





#39

1,2-Dichloropropane

Concen: 8.279 ppbv

RT: 7.17 min Scan# 1363

Delta R.T. -0.46 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

Instrument :

MSVOA_L

ClientSampleId :

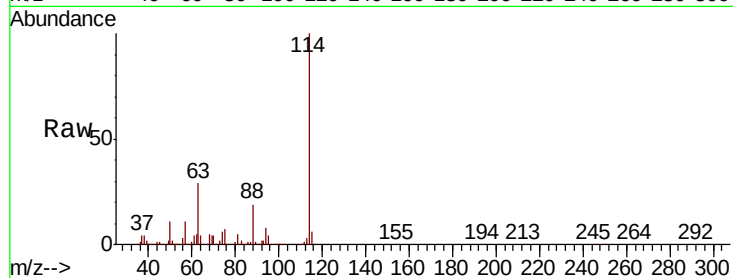
Tot Ion: 63 Resp: 645263

Ion Ratio Lower Upper

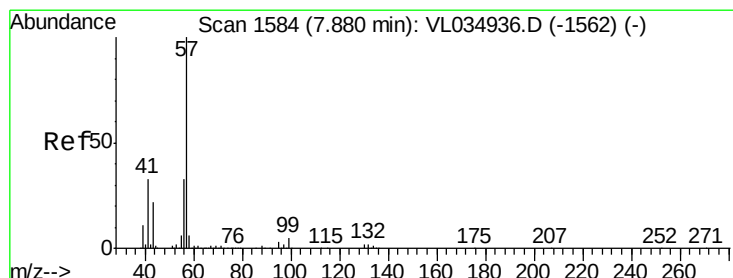
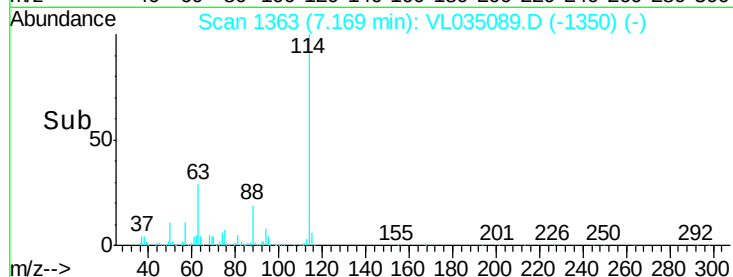
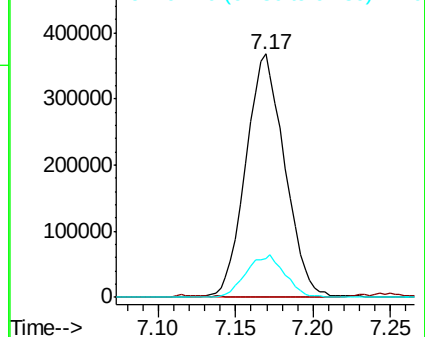
63 100

41 0.0 57.8 86.8#

62 16.1 54.2 81.2#



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



#44

2,2,4-Trimethylpentane

Concen: 0.170 ppbv

RT: 7.87 min Scan# 1581

Delta R.T. -0.01 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

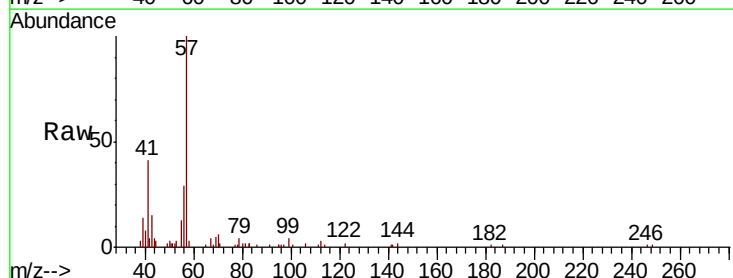
Tgt Ion: 57 Resp: 58590

Ion Ratio Lower Upper

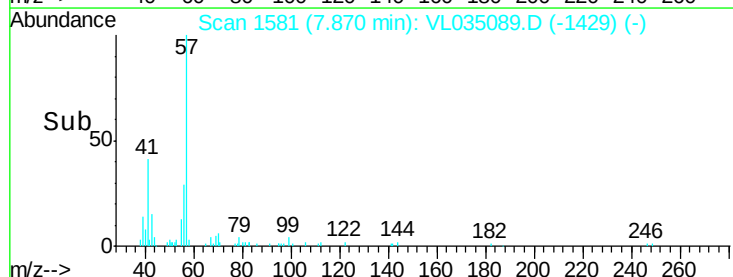
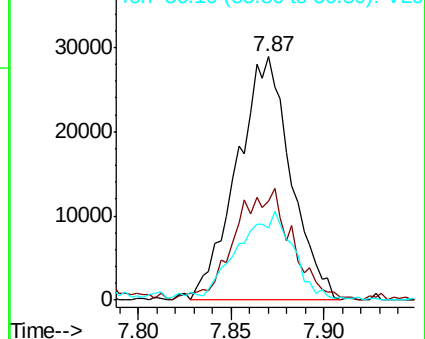
57 100

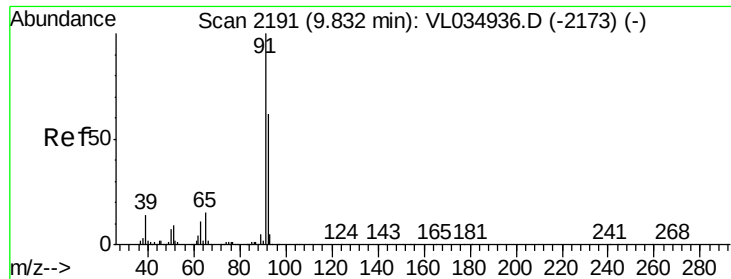
41 49.0 26.4 39.6#

56 39.2 25.5 38.3#



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





#53

Toluene

Concen: 2.344 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.02 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

Instrument :

MSVOA_L

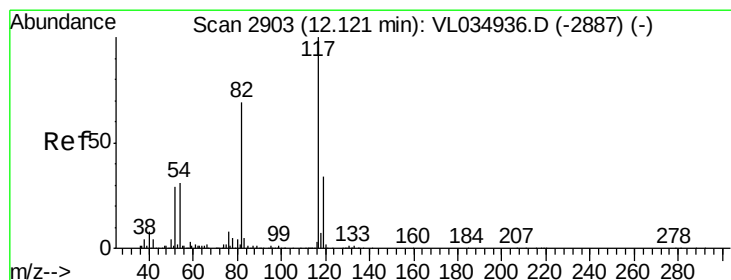
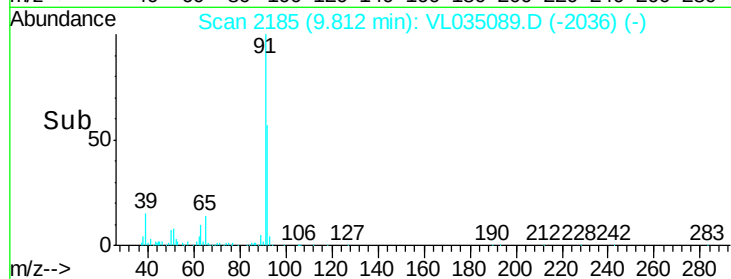
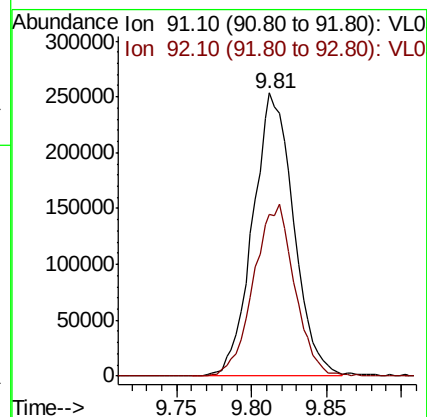
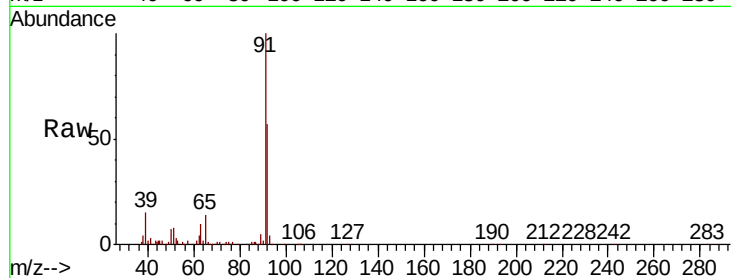
ClientSampleId :

Tot Ion: 91 Resp: 482997

Ion Ratio Lower Upper

91 100

92 60.9 48.6 73.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2898

Delta R.T. -0.02 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

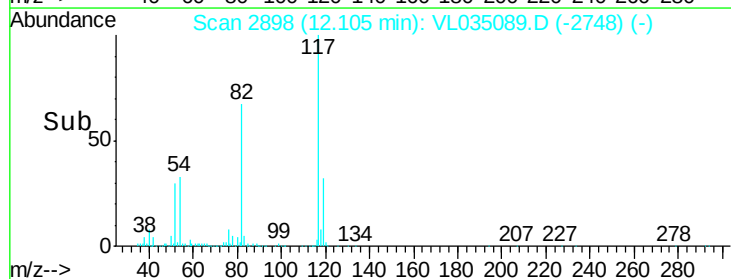
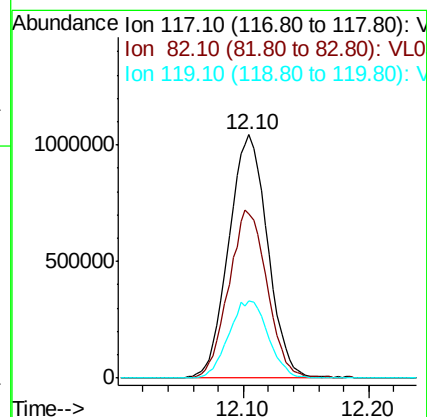
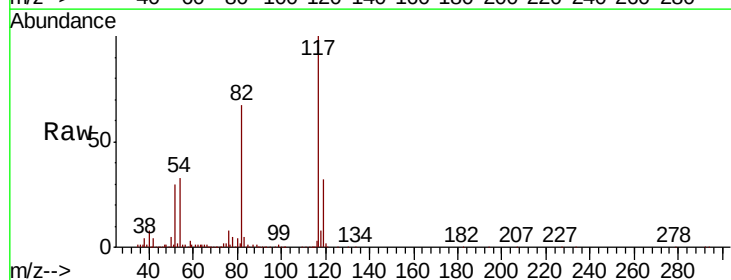
Tgt Ion: 117 Resp: 2214222

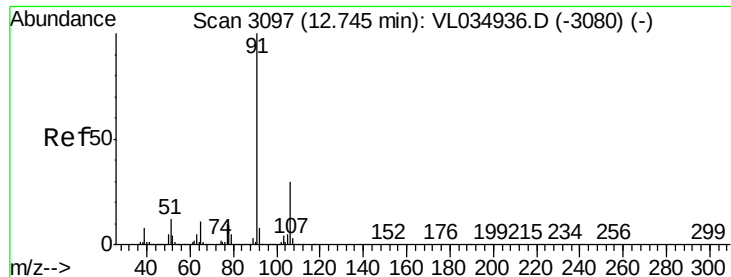
Ion Ratio Lower Upper

117 100

82 69.4 53.1 79.7

119 33.0 26.7 40.1





#58

Ethyl Benzene

Concen: 0.145 ppbv

RT: 12.73 min Scan# 3093

Delta R.T. -0.01 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

Instrument :

MSVOA_L

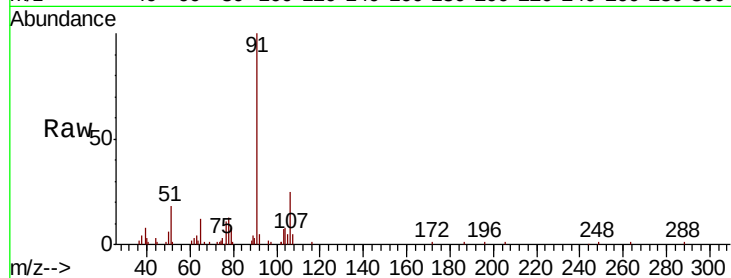
ClientSampleId :

Tot Ion: 91 Resp: 39579

Ion Ratio Lower Upper

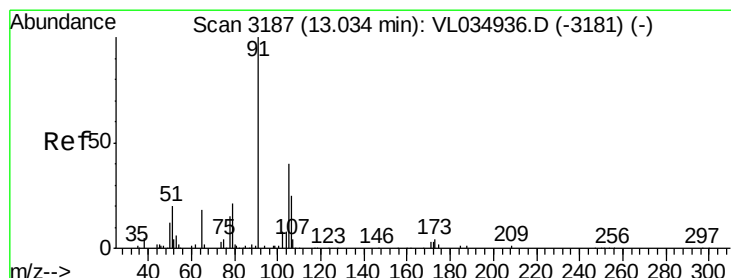
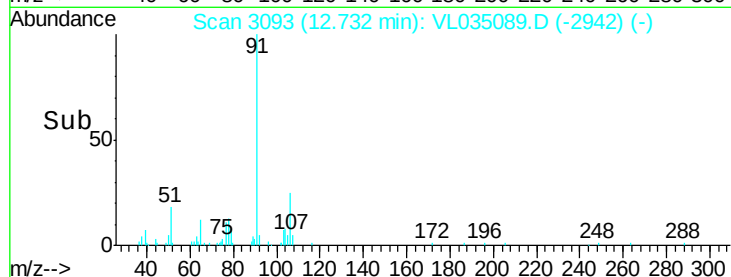
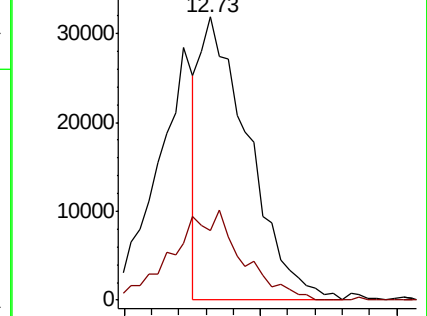
91 100

106 24.6 24.2 36.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.142 ppbv

RT: 13.01 min Scan# 3179

Delta R.T. -0.03 min

Lab File: VL035089.D

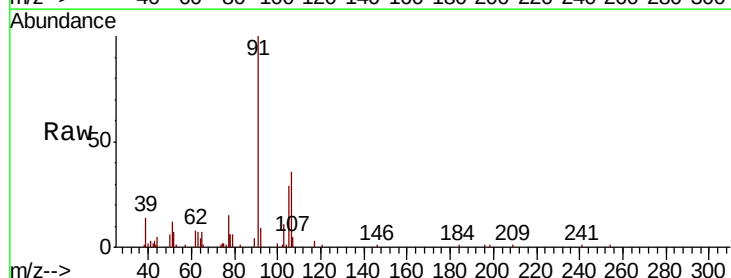
Acq: 22 May 2020 18:03

Tgt Ion: 91 Resp: 34193

Ion Ratio Lower Upper

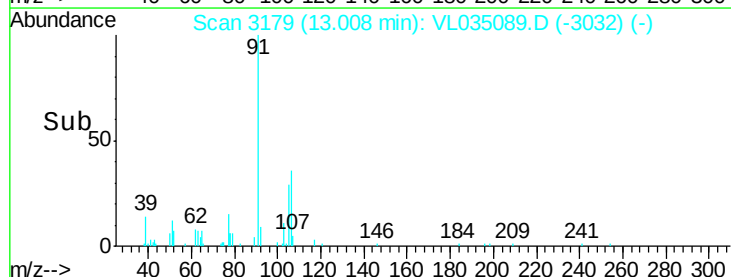
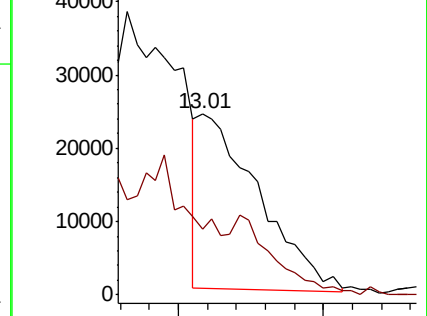
91 100

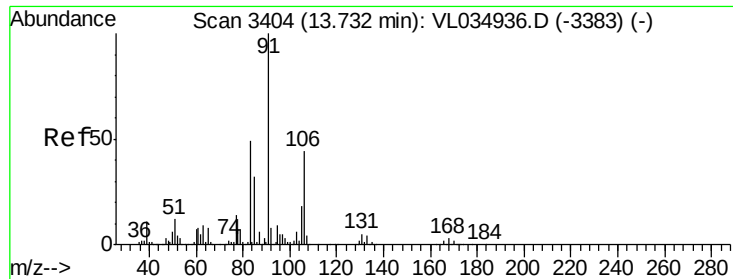
106 0.0 66.0 99.0#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

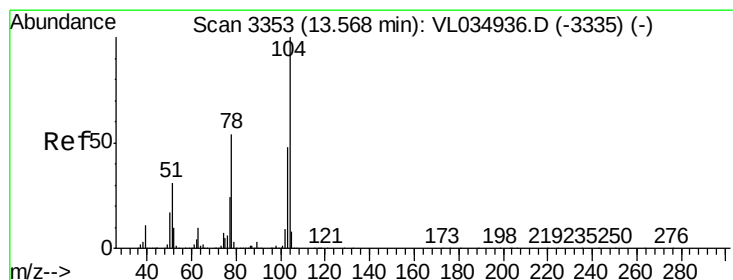
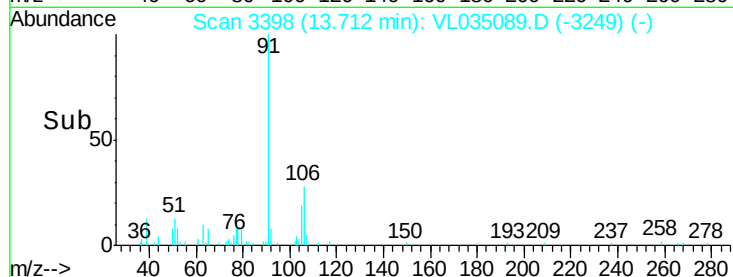
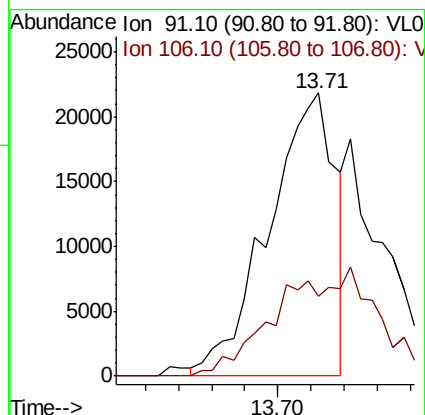
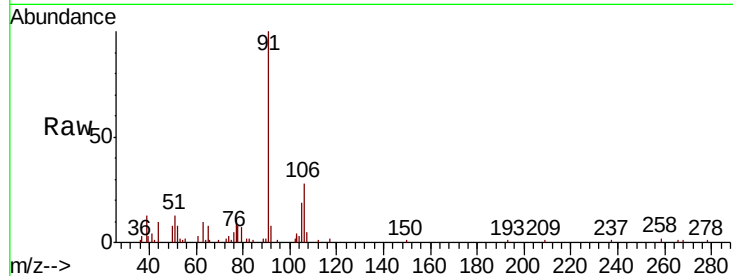




#60
o-Xylene
Concen: 0.129 ppbv
RT: 13.71 min Scan# 3398
Delta R.T. -0.02 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

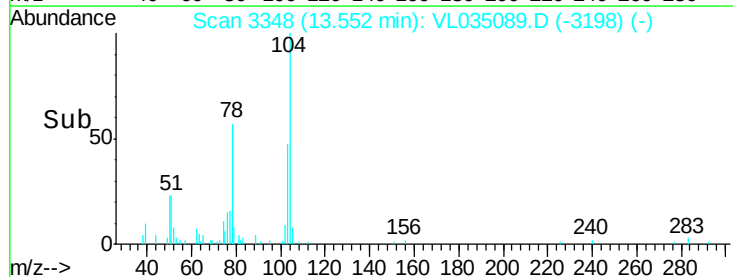
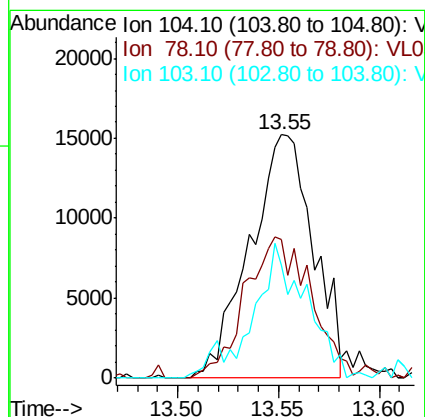
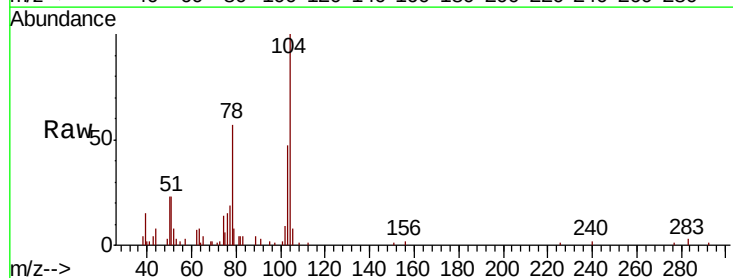
Instrument :
MSVOA_L
ClientSampleId :

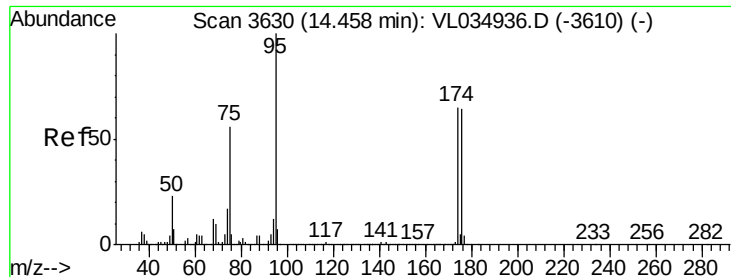
Tot Ion: 91 Resp: 30705
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.5#



#61
Styrene
Concen: 0.222 ppbv
RT: 13.55 min Scan# 3348
Delta R.T. -0.02 min
Lab File: VL035089.D
Acq: 22 May 2020 18:03

Tgt Ion: 104 Resp: 33326
Ion Ratio Lower Upper
104 100
78 61.6 43.7 65.5
103 46.8 38.8 58.2





#68

1-Bromo-4-Fluorobenzene

Concen: 10.586 ppbv

RT: 14.44 min Scan# 3625

Delta R.T. -0.02 min

Lab File: VL035089.D

Acq: 22 May 2020 18:03

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 95 Resp: 1897370

Ion Ratio Lower Upper

95 100

174 63.6 51.5 77.3

175 4.7 3.8 5.8

