

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL072920\
 Data File : VL035251.D
 Acq On : 29 Jul 2020 18:09
 Operator : SY/AP
 Sample : L3474-03DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jul 30 02:50:57 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL072920AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 29 07:14:29 2020
 QLast Update : Wed Jul 29 07:14:29 2020
 Response via : Initial Calibration

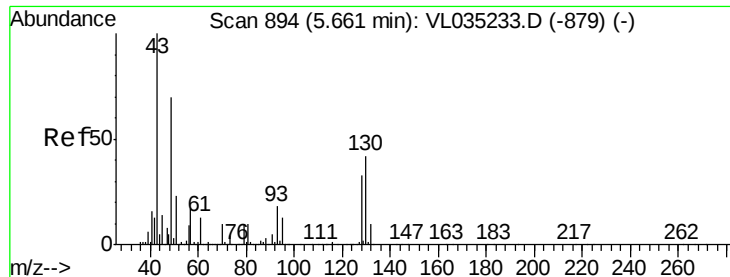
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1386803	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	3183201	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2904910	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	2381179	10.26	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.60%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.01	85	9588	0.058 ppbv #	87
3) Chlorodifluoromethane	2.92	51	758881	4.943 ppbv #	56
4) Chloromethane	3.10	50	5247	0.061 ppbv #	67
8) Dichlorotetrafluoroethane	3.01	85	9588	0.046 ppbv #	19
9) Propene	3.17	41	89511	1.673 ppbv	99
11) Trichlorofluoromethane	3.92	101	7175	0.032 ppbv	88
12) 1,1,2-Trichlorotrifluoroet	4.46	101	6702	0.042 ppbv #	14
13) Ethanol	3.58	45	2331578	107.056 ppbv	95
15) Acetone	3.82	43	12358546	66.810 ppbv #	68
17) tert-Butyl alcohol	3.95	59	872871	4.889 ppbv	95
19) Isopropyl Alcohol	3.96	45	15622661	128.055 ppbv #	97
20) Methylene Chloride	4.33	84	415951	4.940 ppbv	99
21) Allyl Chloride	3.95	41	2168572	20.585 ppbv #	77
25) Ethyl Acetate	5.68	43	1520744	5.264 ppbv #	76
26) Hexane	5.68	57	2203108	16.906 ppbv #	42
28) Methyl tert-Butyl Ether	5.02	73	352745	1.893 ppbv	99
29) Chloroform	5.75	83	747241	3.419 ppbv	99
34) 2-Butanone	5.02	43	51821	0.320 ppbv #	67
39) 1,2-Dichloropropane	7.18	63	865782	9.809 ppbv #	23
41) Tetrahydrofuran	5.68	42	809754	10.201 ppbv #	46
53) Toluene	9.83	91	56885	0.242 ppbv	94
58) Ethyl Benzene	13.01	91	25988	0.084 ppbv	93
59) m/p-Xylene	13.03	91	9725	0.034 ppbv #	30
60) o-Xylene	13.73	91	10762	0.038 ppbv #	63

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. 0.00 min

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MSVOA_L
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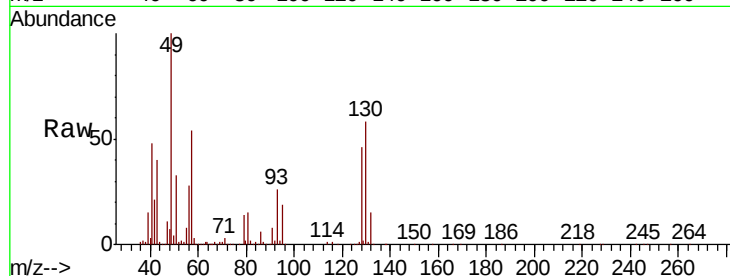
Tot Ion: 49 Resp: 1386803

Ion Ratio Lower Upper

49 100

128 48.2 24.0 72.0

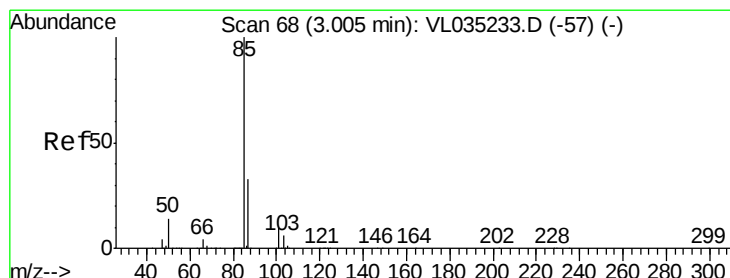
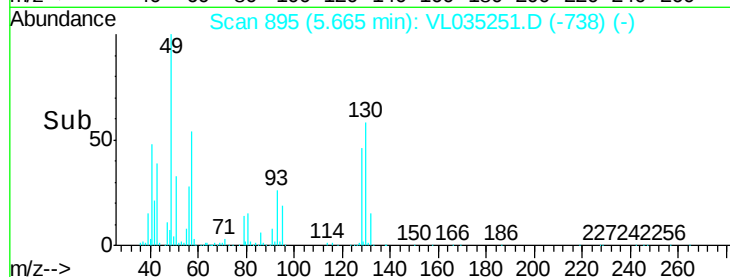
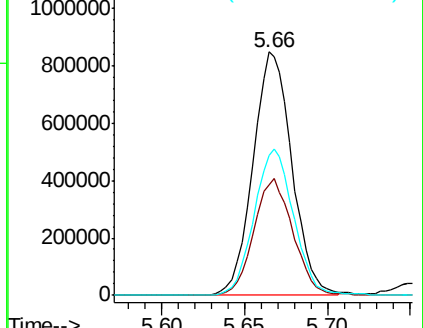
130 61.3 30.7 92.1



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: 0.058 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VL035251.D

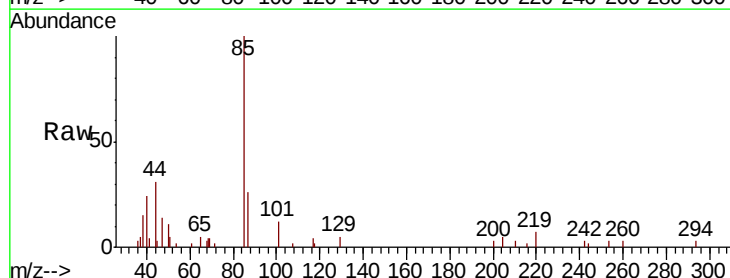
Acq: 29 Jul 2020 18:09

Tgt Ion: 85 Resp: 9588

Ion Ratio Lower Upper

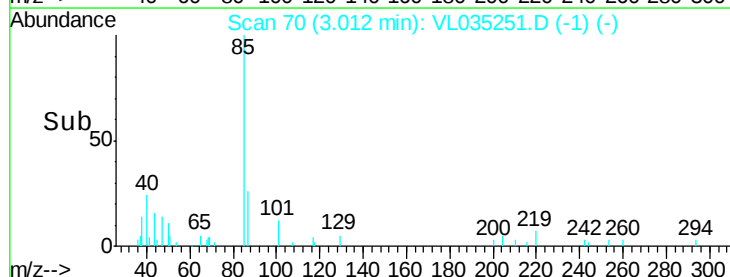
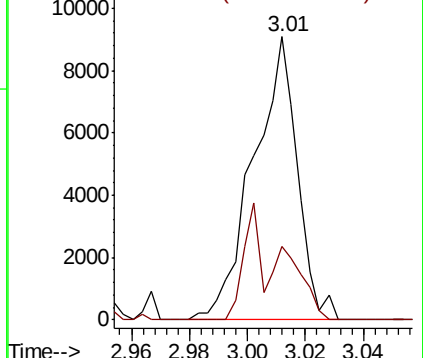
85 100

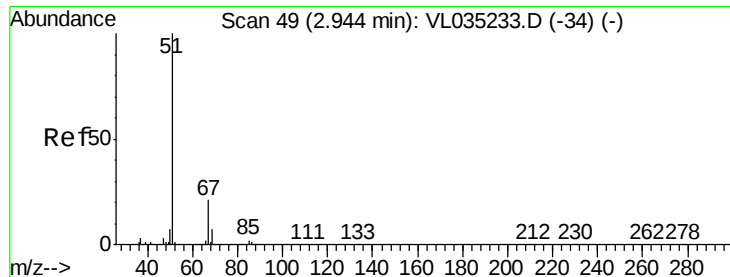
87 25.8 26.7 40.1#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 4.943 ppbv

RT: 2.92 min Scan# 42

Delta R.T. -0.02 min

Lab File: VL035251.D

Acq: 29 Jul 2020 18:09

Instrument :

MSVOA_L

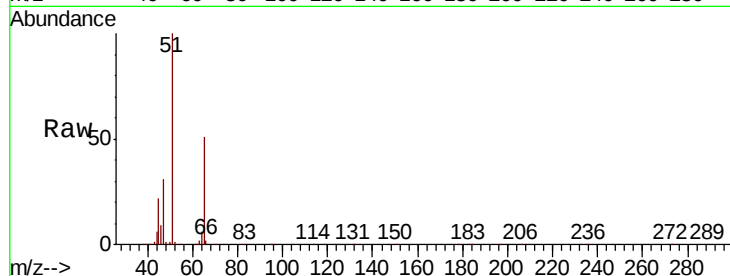
ClientSampleId :

Tot Ion: 51 Resp: 758881

Ion Ratio Lower Upper

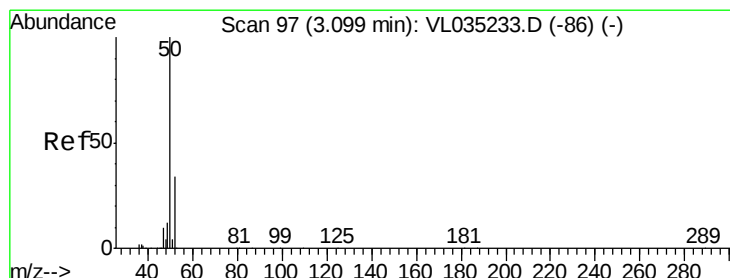
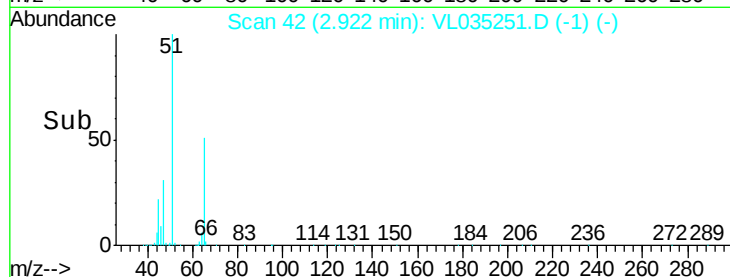
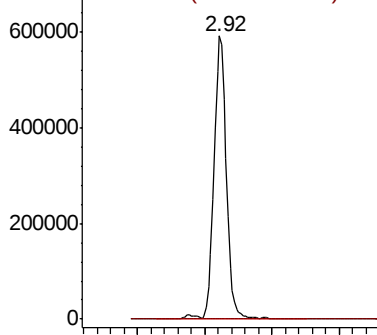
51 100

67 0.3 16.6 25.0#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.061 ppbv

RT: 3.10 min Scan# 98

Delta R.T. 0.00 min

Lab File: VL035251.D

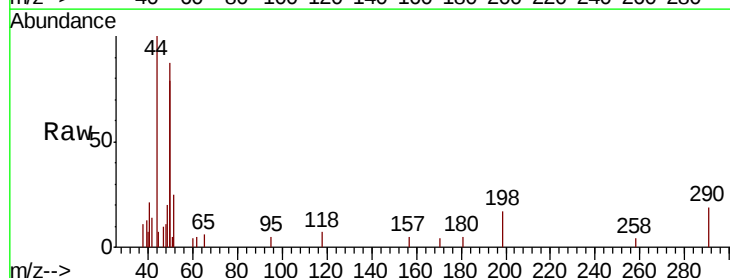
Acq: 29 Jul 2020 18:09

Tgt Ion: 50 Resp: 5247

Ion Ratio Lower Upper

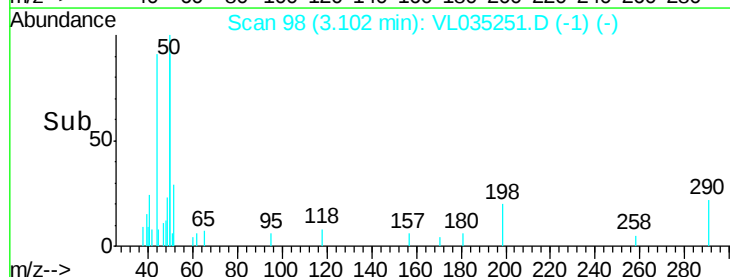
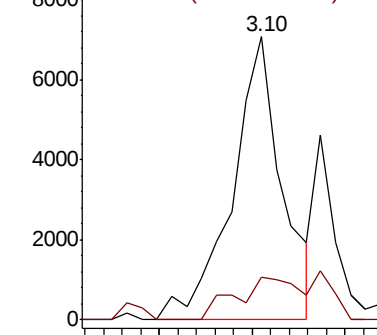
50 100

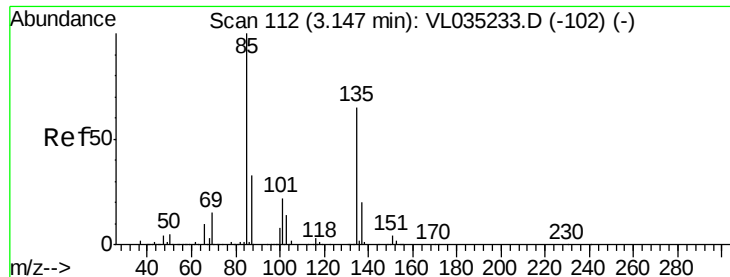
52 15.1 27.1 40.7#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.046 ppbv

RT: 3.01 min Scan# 70

Delta R.T. -0.13 min

Lab File: VL035251.D

Acq: 29 Jul 2020 18:09

Instrument :

MSVOA_L

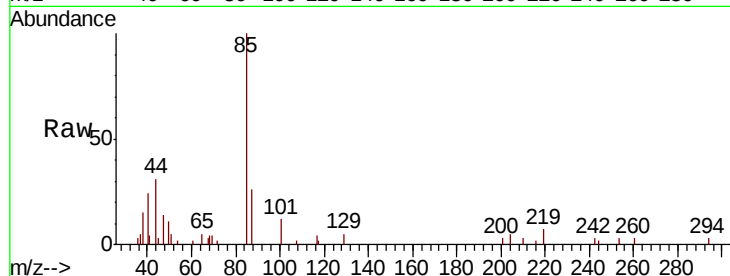
ClientSampleId :

Tot Ion: 85 Resp: 9588

Ion Ratio Lower Upper

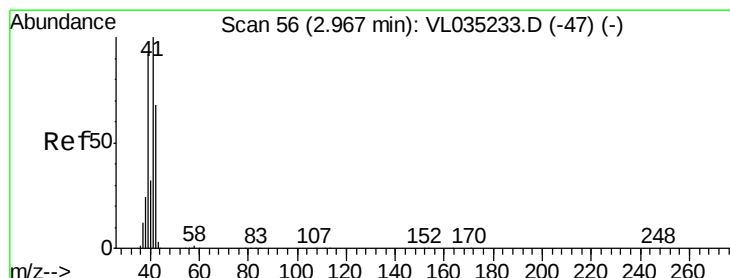
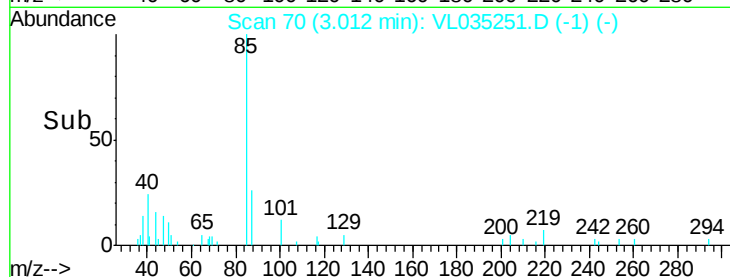
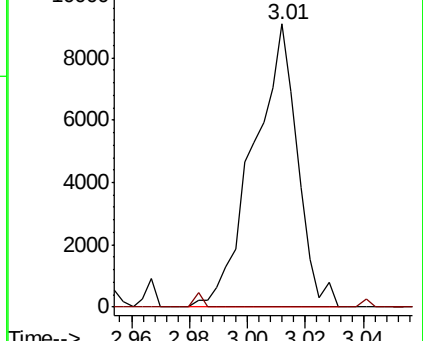
85 100

135 0.5 51.4 77.0#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



#9

Propene

Concen: 1.673 ppbv

RT: 3.17 min Scan# 118

Delta R.T. 0.20 min

Lab File: VL035251.D

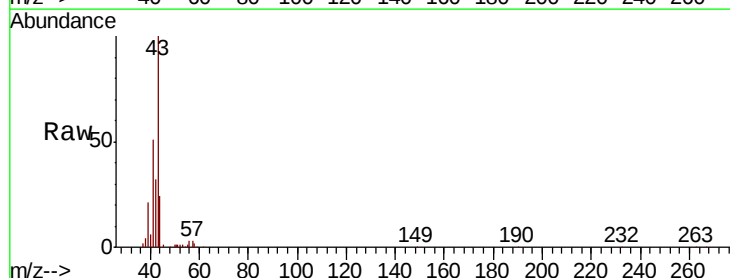
Acq: 29 Jul 2020 18:09

Tgt Ion: 41 Resp: 89511

Ion Ratio Lower Upper

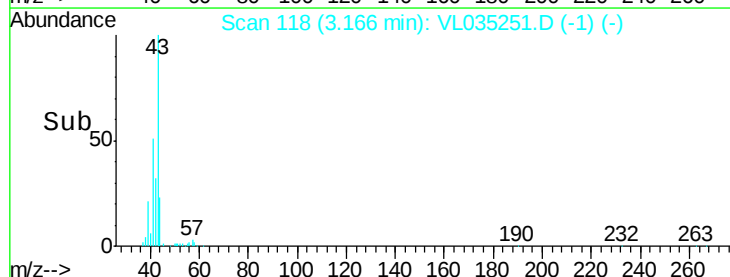
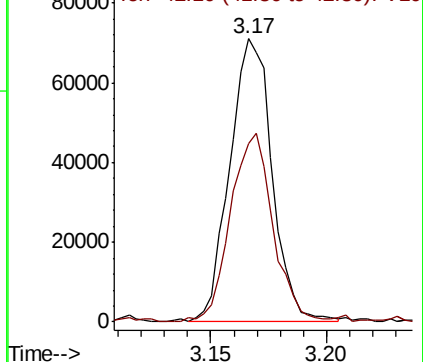
41 100

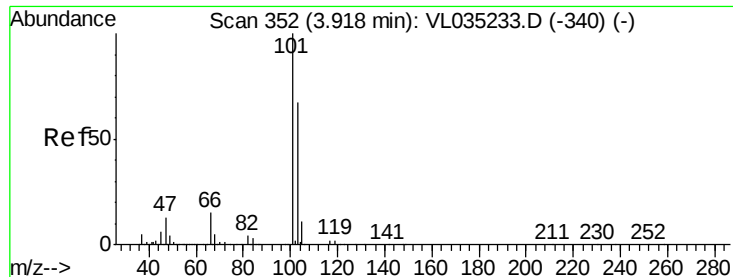
42 70.0 55.0 82.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

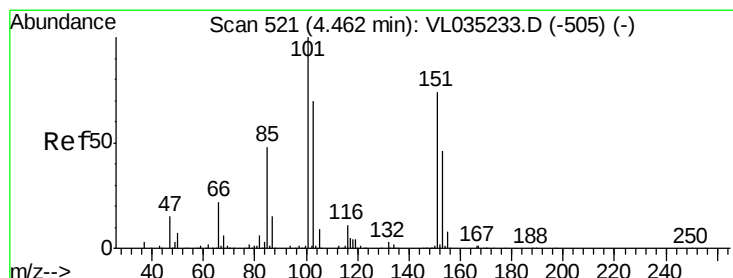
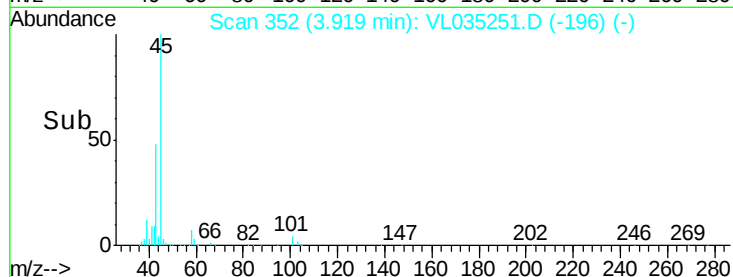
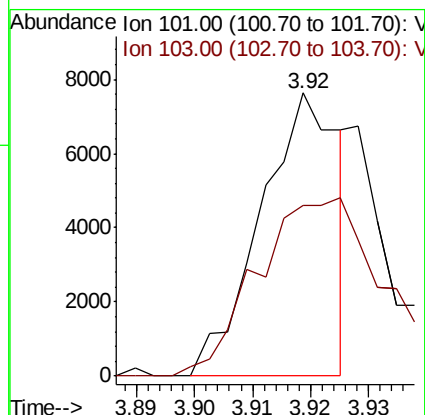
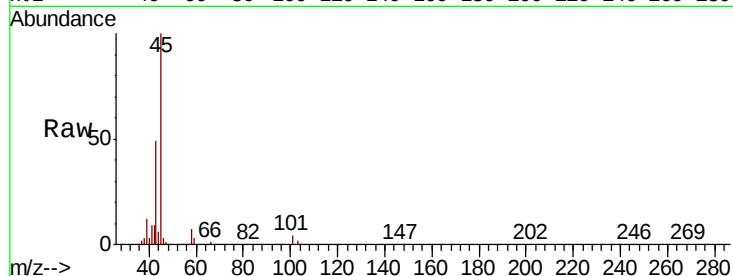




#11
 Trichlorofluoromethane
 Concen: 0.032 ppbv
 RT: 3.92 min Scan# 352
 Delta R.T. 0.00 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

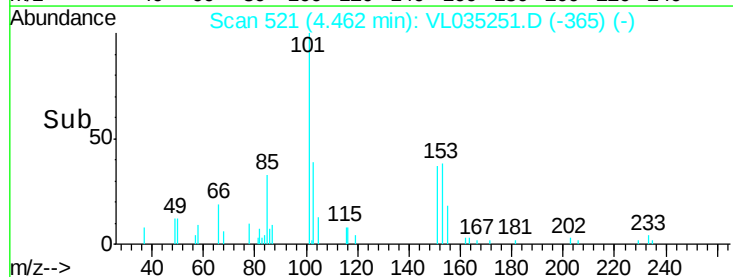
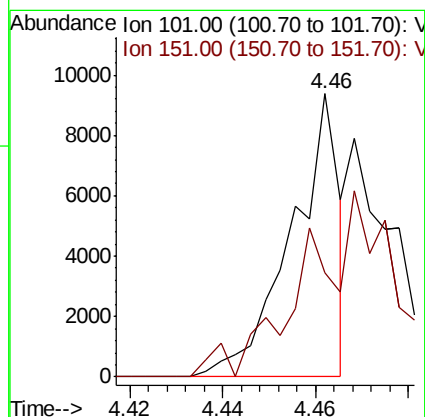
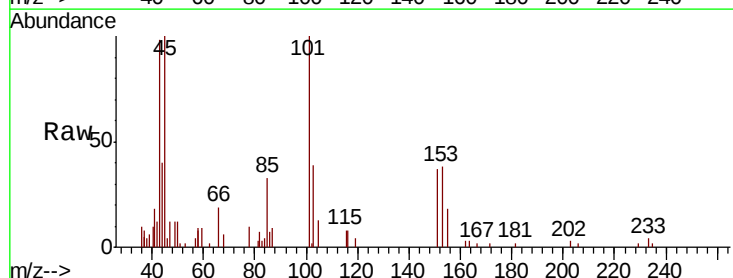
Instrument :
 MSVOA_L
 ClientSampleId :

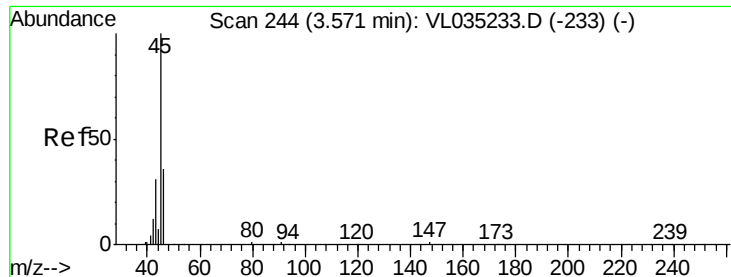
Tot Ion:101 Resp: 7175
 Ion Ratio Lower Upper
 101 100
 103 57.0 53.4 80.0



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.042 ppbv
 RT: 4.46 min Scan# 521
 Delta R.T. 0.00 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

Tgt Ion:101 Resp: 6702
 Ion Ratio Lower Upper
 101 100
 151 0.0 56.6 85.0#

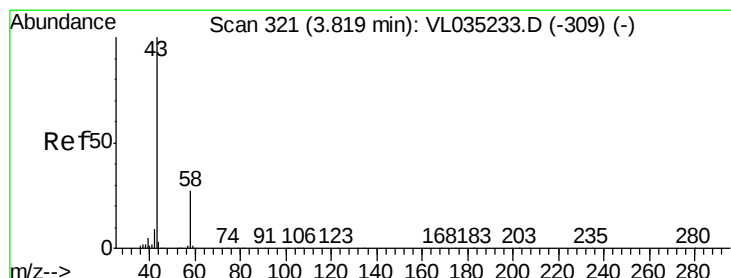
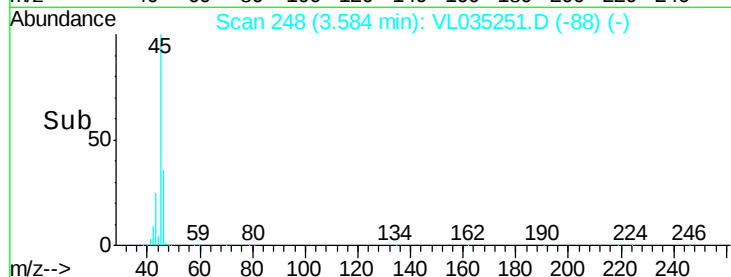
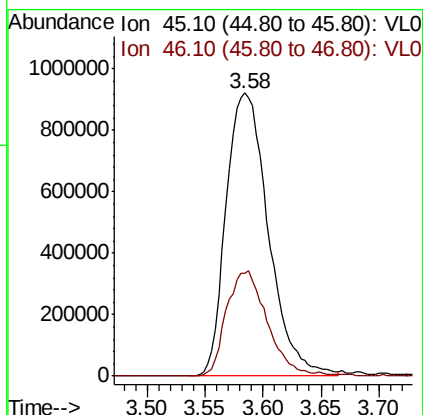
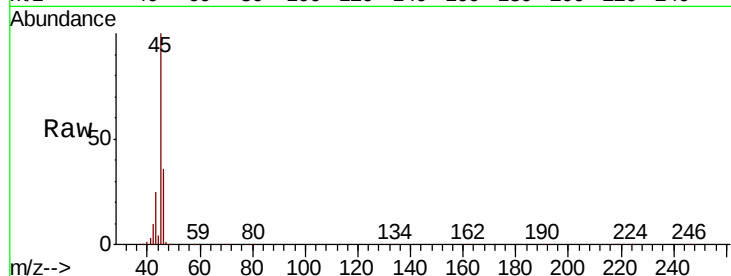




#13
Ethanol
Concen: 107.056 ppbv
RT: 3.58 min Scan# 248
Delta R.T. 0.01 min
Lab File: VL035251.D
Acq: 29 Jul 2020 18:09

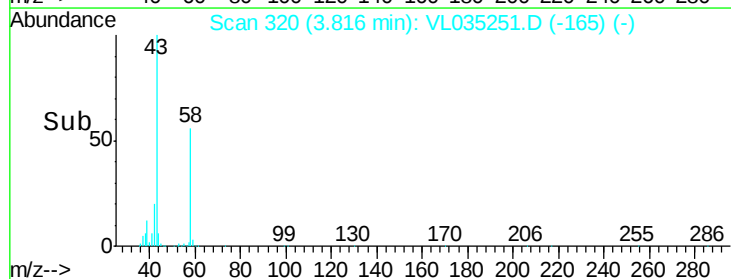
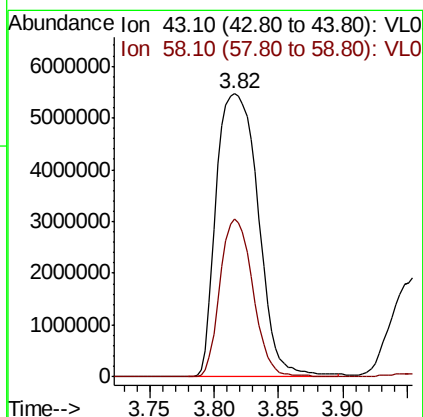
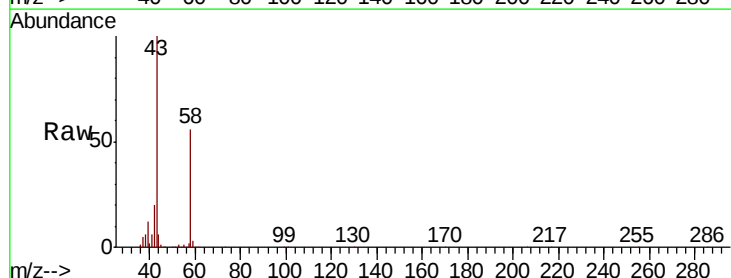
Instrument :
MSVOA_L
ClientSampleId :

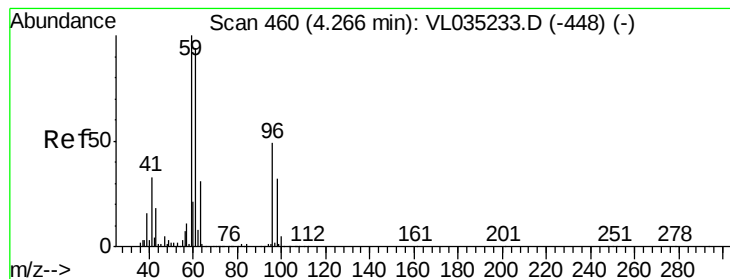
Tot Ion: 45 Resp: 2331578
Ion Ratio Lower Upper
45 100
46 36.3 15.8 63.4



#15
Acetone
Concen: 66.810 ppbv
RT: 3.82 min Scan# 320
Delta R.T. -0.00 min
Lab File: VL035251.D
Acq: 29 Jul 2020 18:09

Tgt Ion: 43 Resp: 12358546
Ion Ratio Lower Upper
43 100
58 43.9 21.8 32.6#



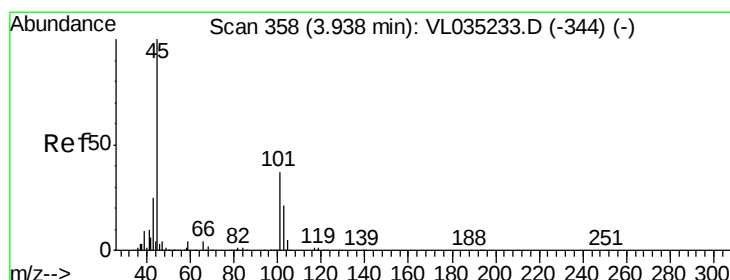
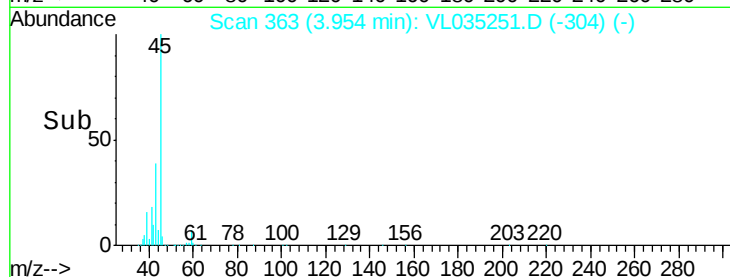
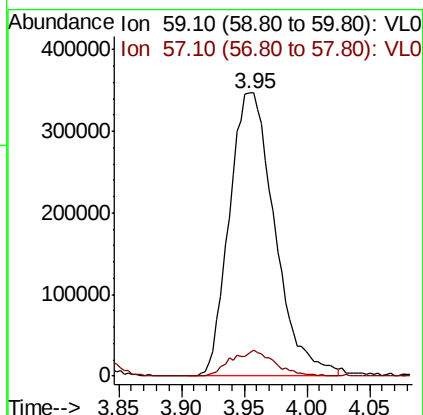
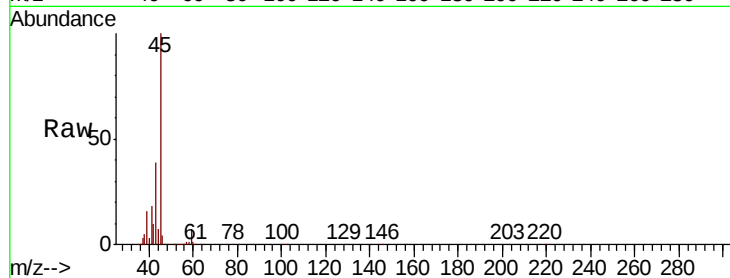


#17

tert-Butyl alcohol
 Concen: 4.889 ppbv
 RT: 3.95 min Scan# 363
 Delta R.T. -0.31 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

Instrument :
 MSVOA_L
 ClientSampleId :

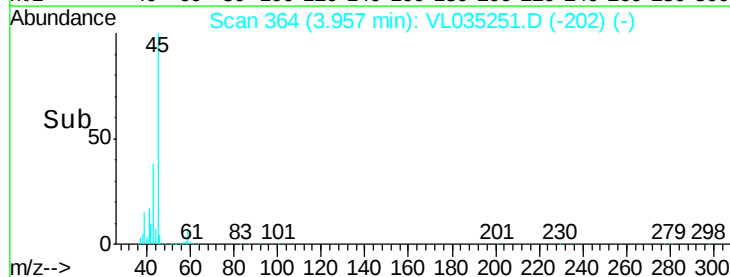
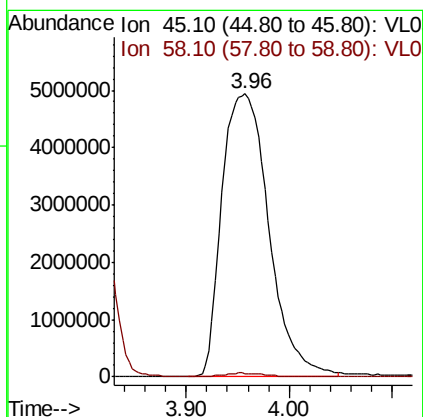
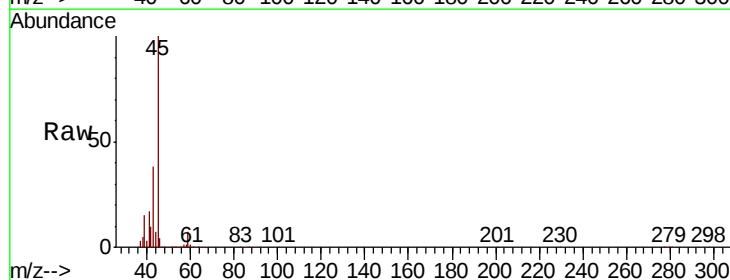
Tot Ion: 59 Resp: 872871
 Ion Ratio Lower Upper
 59 100
 57 9.0 8.6 12.8

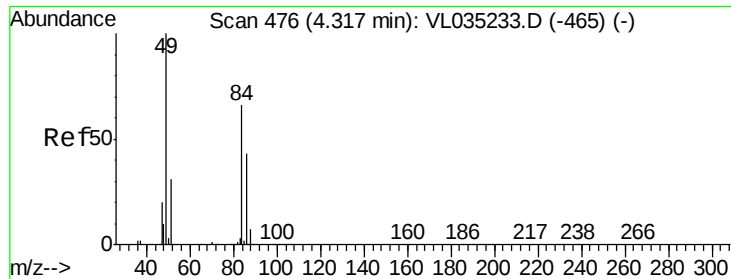


#19

Isopropyl Alcohol
 Concen: 128.055 ppbv
 RT: 3.96 min Scan# 364
 Delta R.T. 0.02 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

Tgt Ion: 45 Resp: 15622661
 Ion Ratio Lower Upper
 45 100
 58 1.4 1.9 2.9#

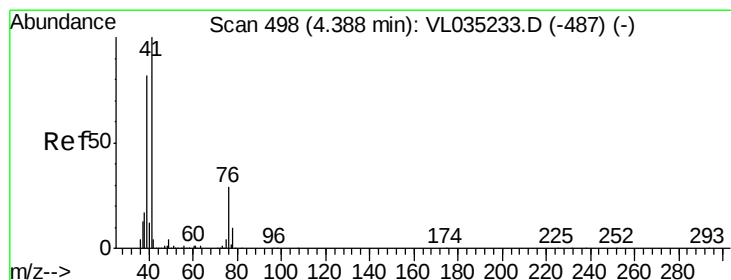
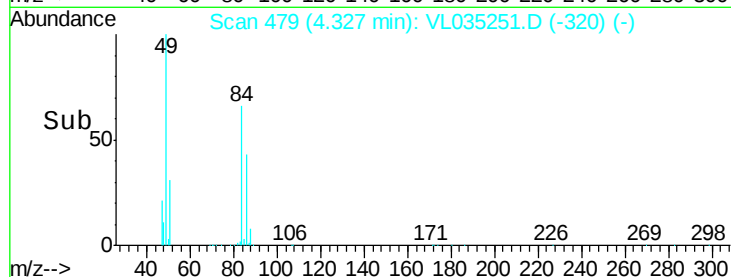
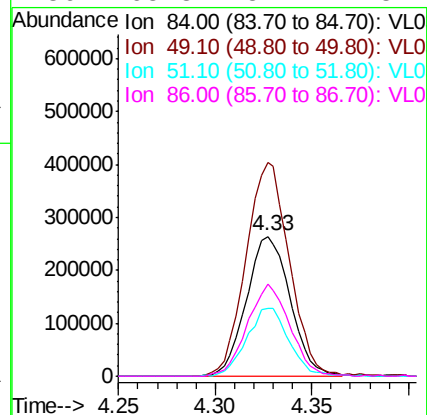
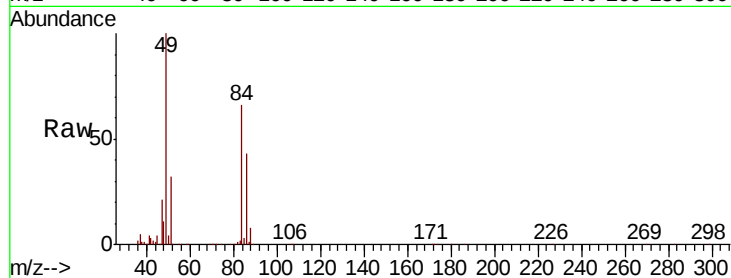




#20
Methylene Chloride
Concen: 4.940 ppbv
RT: 4.33 min Scan# 479
Delta R.T. 0.01 min
Lab File: VL035251.D
Acq: 29 Jul 2020 18:09

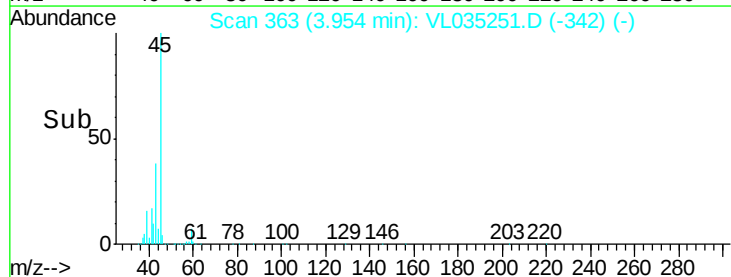
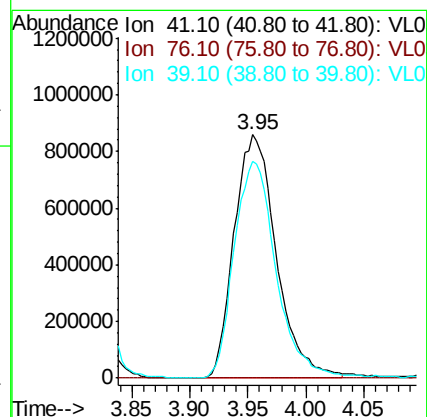
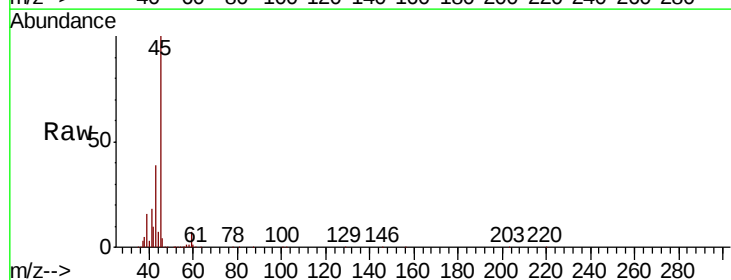
Instrument :
MSVOA_L
ClientSampled :

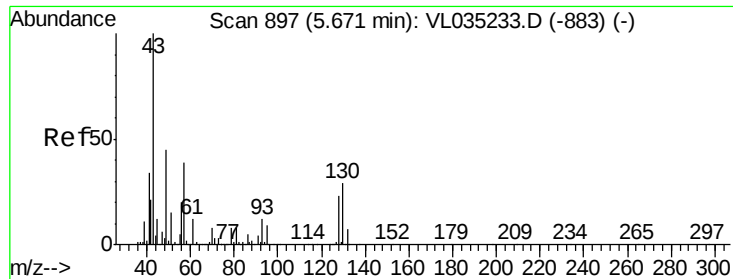
Tot Ion: 84 Resp: 415951
Ion Ratio Lower Upper
84 100
49 152.5 121.0 181.4
51 48.1 37.7 56.5
86 65.8 52.2 78.4



#21
Allyl Chloride
Concen: 20.585 ppbv
RT: 3.95 min Scan# 363
Delta R.T. -0.43 min
Lab File: VL035251.D
Acq: 29 Jul 2020 18:09

Tgt Ion: 41 Resp: 2168572
Ion Ratio Lower Upper
41 100
76 0.0 24.4 36.6#
39 88.7 63.8 95.8

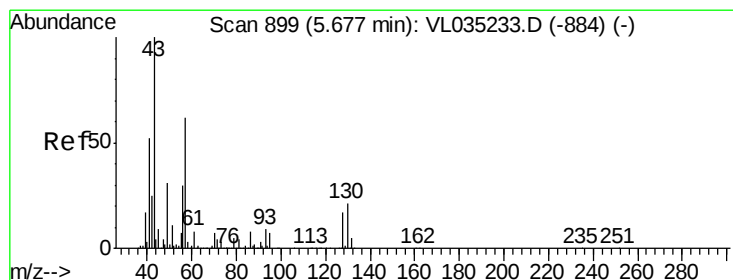
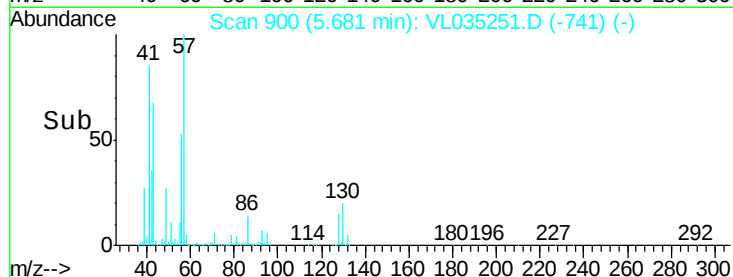
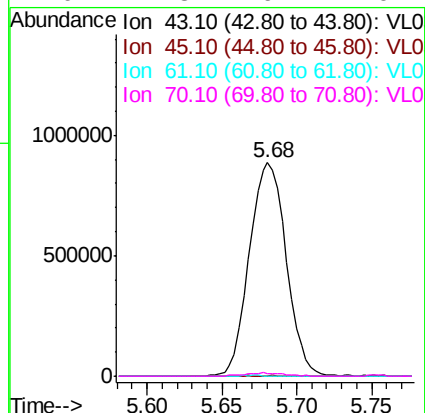
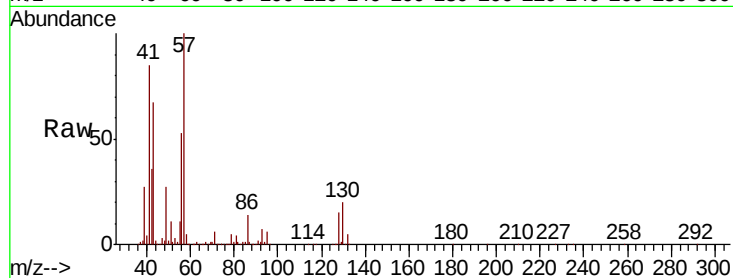




#25
Ethyl Acetate
Concen: 5.264 ppbv
RT: 5.68 min Scan# 900
Delta R.T. 0.01 min
Lab File: VL035251.D
Acq: 29 Jul 2020 18:09

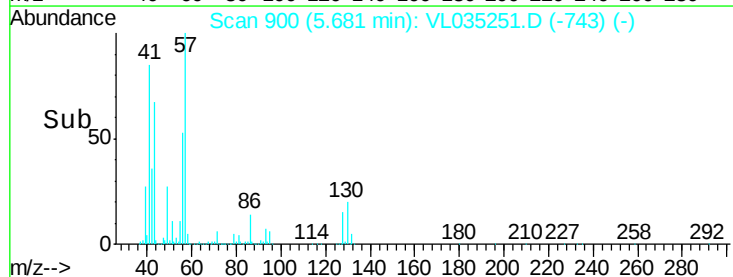
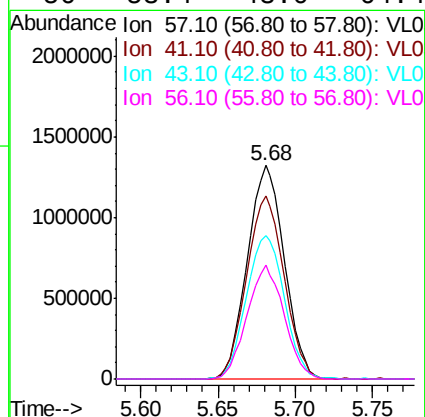
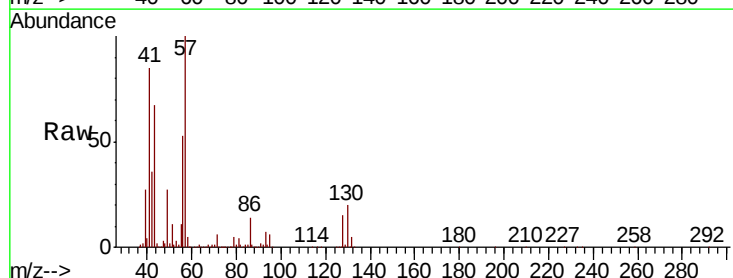
Instrument :
MSVOA_L
ClientSampled :

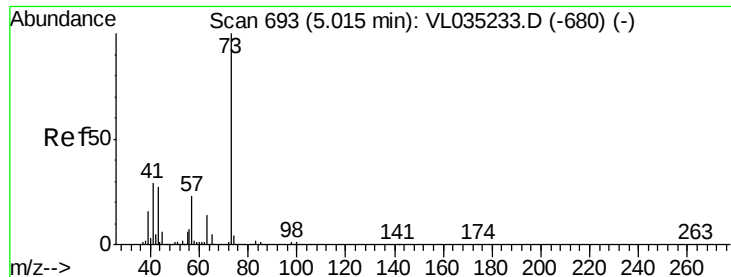
Tot Ion: 43 Resp: 1520744
Ion Ratio Lower Upper
43 100
45 0.4 8.5 12.7#
61 0.4 8.1 12.1#
70 1.8 6.2 9.4#



#26
Hexane
Concen: 16.906 ppbv
RT: 5.68 min Scan# 900
Delta R.T. 0.00 min
Lab File: VL035251.D
Acq: 29 Jul 2020 18:09

Tgt Ion: 57 Resp: 2203108
Ion Ratio Lower Upper
57 100
41 87.2 73.9 110.9
43 69.6 177.6 266.4#
56 53.4 43.0 64.4



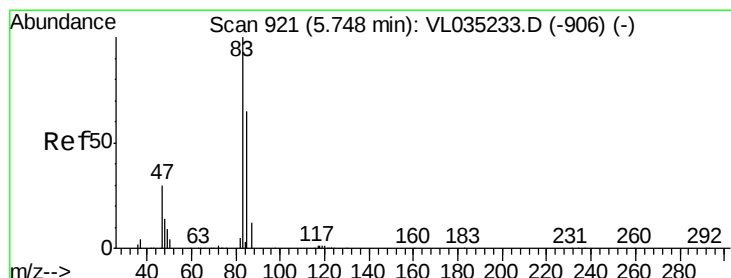
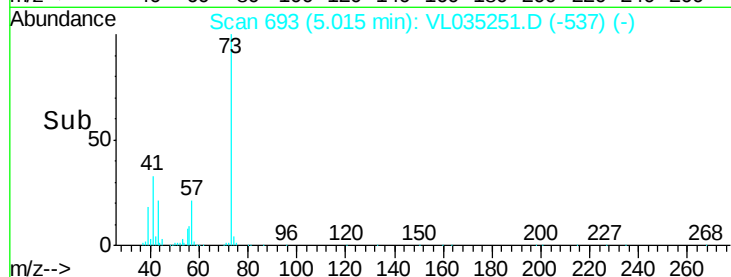
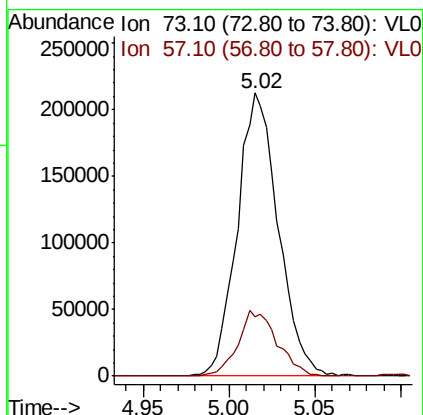
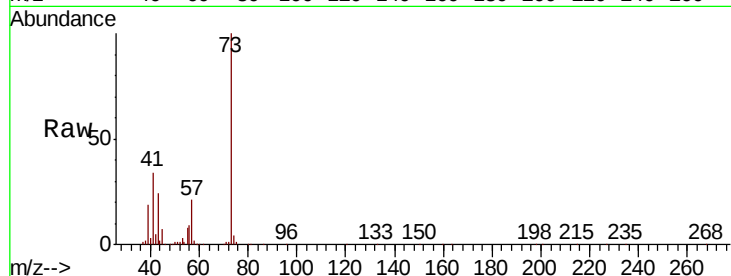


#28

Methvl tert-Butvl Ether
 Concen: 1.893 ppbv
 RT: 5.02 min Scan# 693
 Delta R.T. 0.00 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

Instrument :
 MSVOA_L
 ClientSampleId :

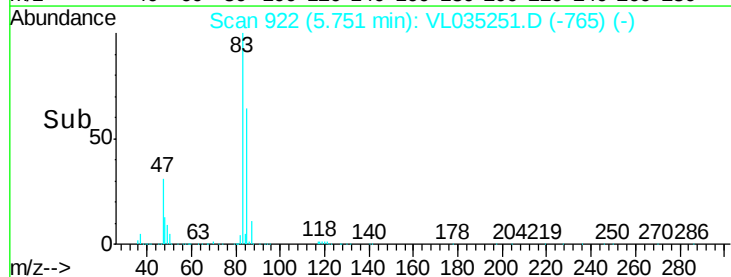
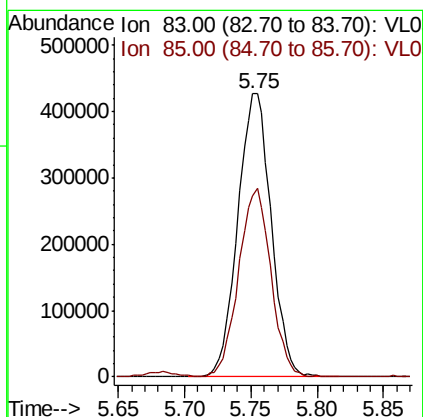
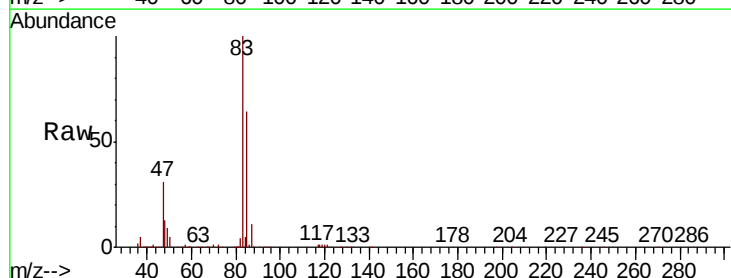
Tot Ion: 73 Resp: 352745
 Ion Ratio Lower Upper
 73 100
 57 22.1 18.2 27.4

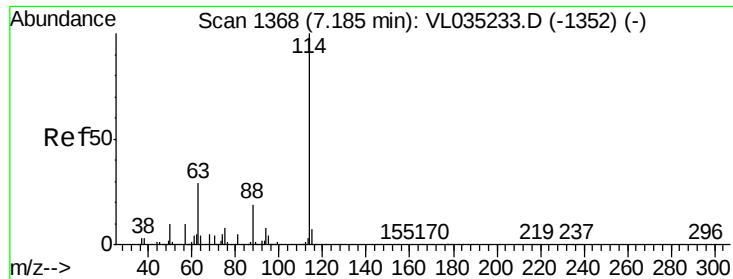


#29

Chloroform
 Concen: 3.419 ppbv
 RT: 5.75 min Scan# 922
 Delta R.T. 0.00 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

Tgt Ion: 83 Resp: 747241
 Ion Ratio Lower Upper
 83 100
 85 63.8 51.7 77.5

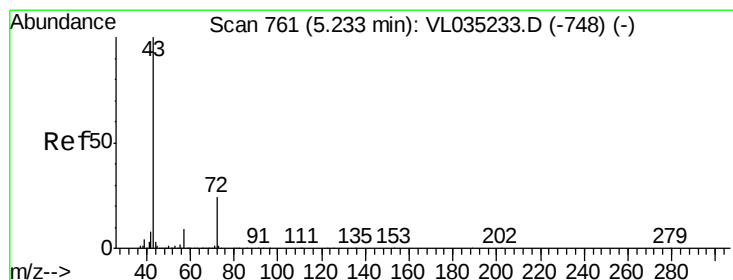
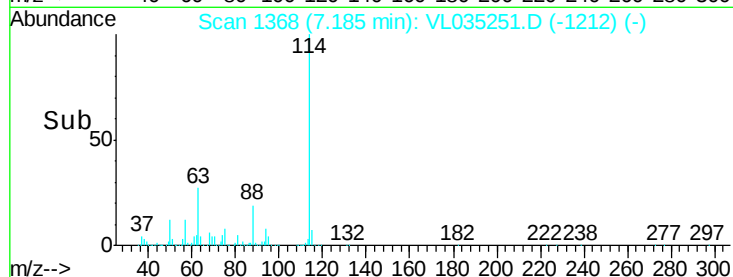
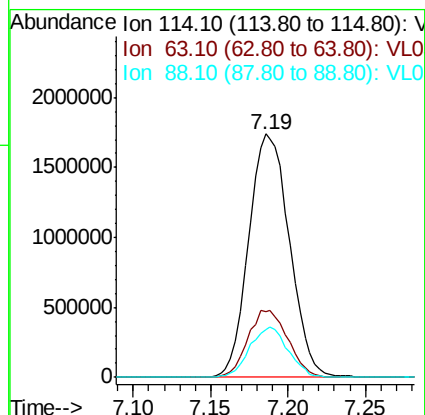
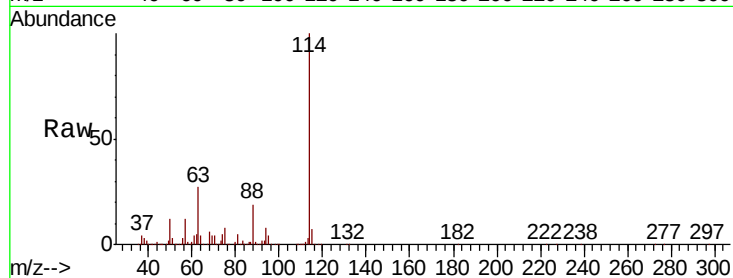




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1368
 Delta R.T. 0.00 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

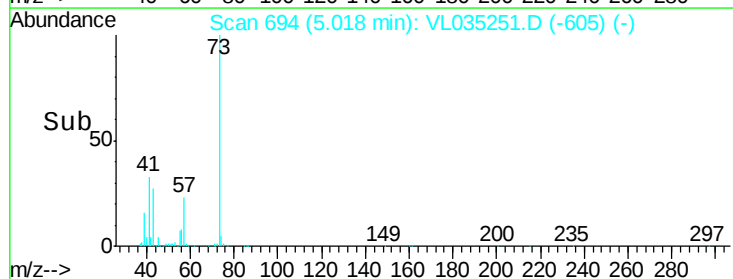
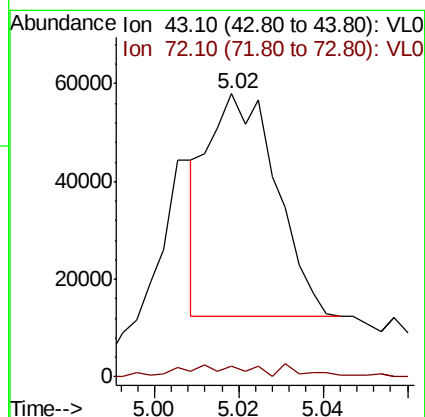
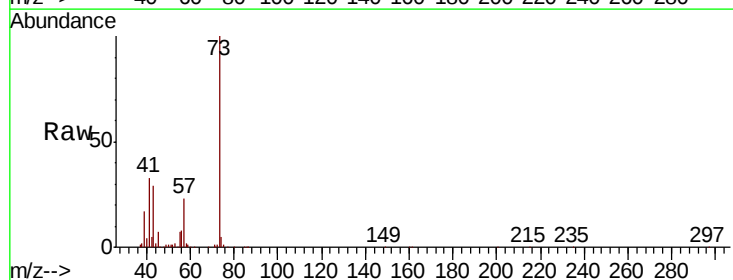
Instrument :
 MSVOA_L
 ClientSampleId :

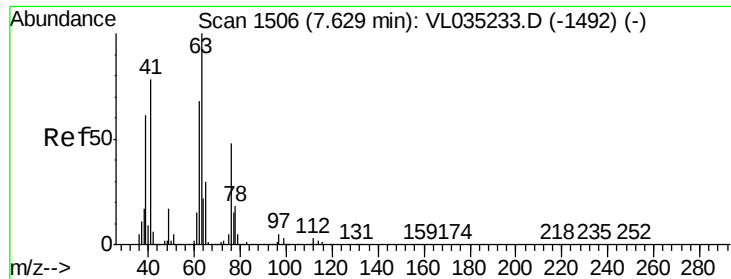
Tot Ion:114 Resp: 3183201
 Ion Ratio Lower Upper
 114 100
 63 27.2 22.2 33.2
 88 19.7 15.4 23.0



#34
 2-Butanone
 Concen: 0.320 ppbv
 RT: 5.02 min Scan# 694
 Delta R.T. -0.22 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

Tgt Ion: 43 Resp: 51821
 Ion Ratio Lower Upper
 43 100
 72 7.6 19.2 28.8#

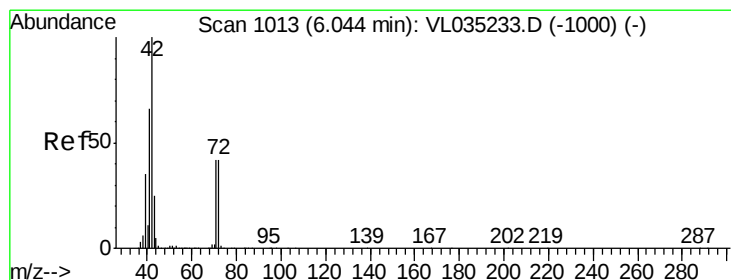
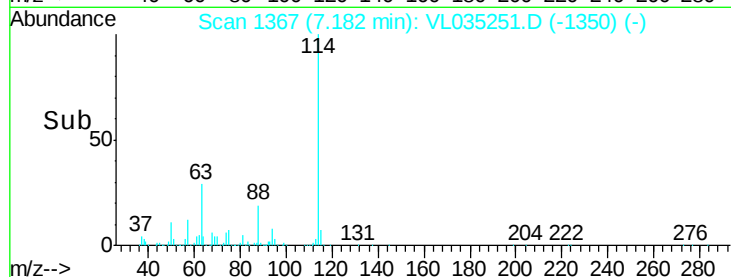
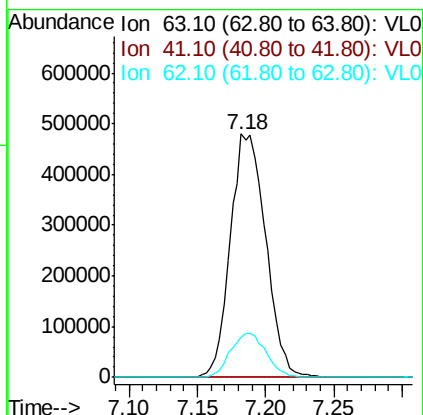
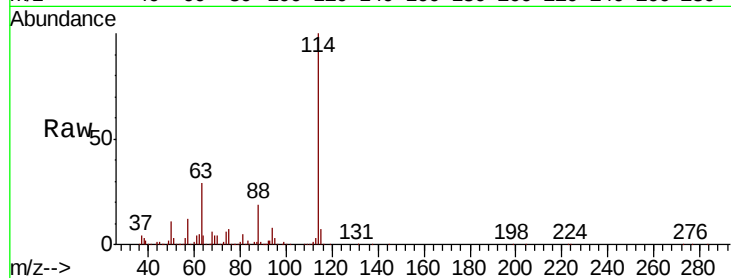




#39
 1,2-Dichloropropane
 Concen: 9.809 ppbv
 RT: 7.18 min Scan# 1367
 Delta R.T. -0.45 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

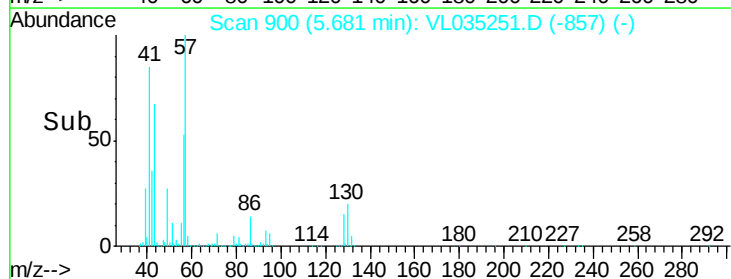
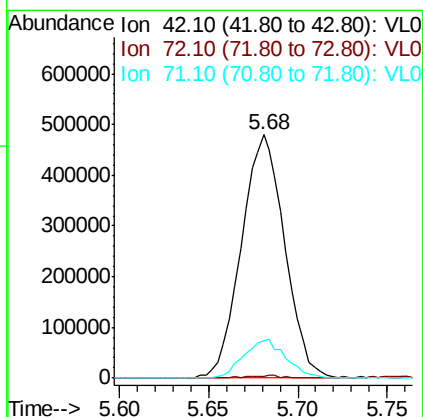
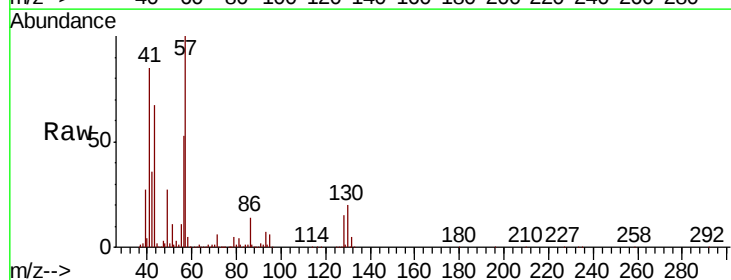
Instrument :
 MSVOA_L
 ClientSampleId :

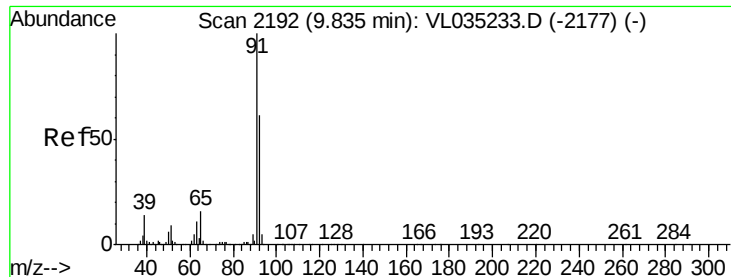
Tot Ion	Ratio	Lower	Upper
63	100		
41	0.0	62.2	93.4#
62	16.5	54.2	81.2#



#41
 Tetrahydrofuran
 Concen: 10.201 ppbv
 RT: 5.68 min Scan# 900
 Delta R.T. -0.36 min
 Lab File: VL035251.D
 Acq: 29 Jul 2020 18:09

Tgt Ion	Ratio	Lower	Upper
42	100		
72	0.9	34.2	51.2#
71	15.5	33.2	49.8#





#53

Toluene

Concen: 0.242 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.00 min

Lab File: VL035251.D

Acq: 29 Jul 2020 18:09

Instrument :

MSVOA_L

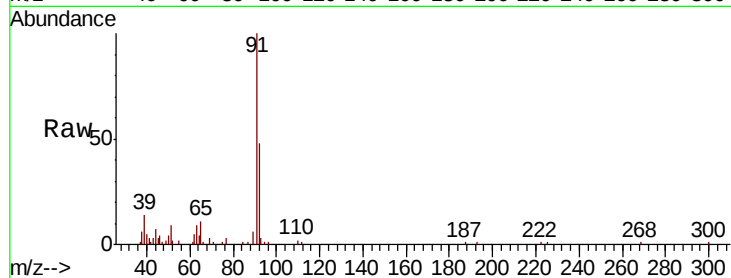
ClientSampleId :

Tot Ion: 91 Resp: 56885

Ion Ratio Lower Upper

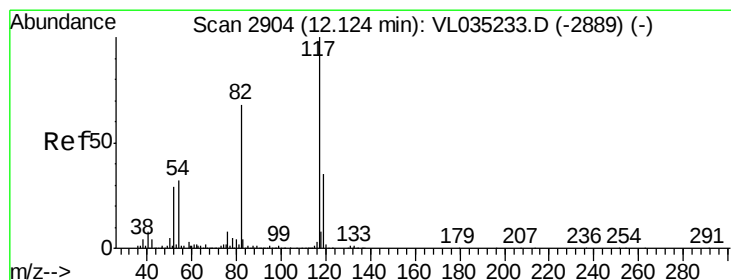
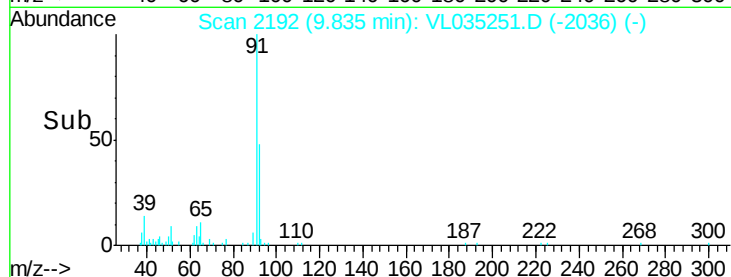
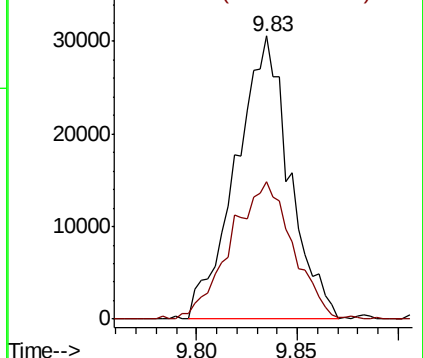
91 100

92 55.8 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: 12.12 min Scan# 2904

Delta R.T. 0.00 min

Lab File: VL035251.D

Acq: 29 Jul 2020 18:09

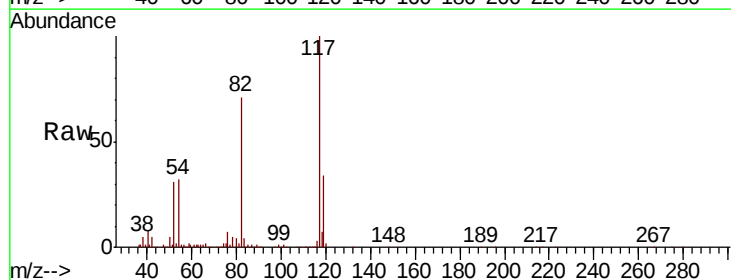
Tgt Ion: 117 Resp: 2904910

Ion Ratio Lower Upper

117 100

82 68.8 52.4 78.6

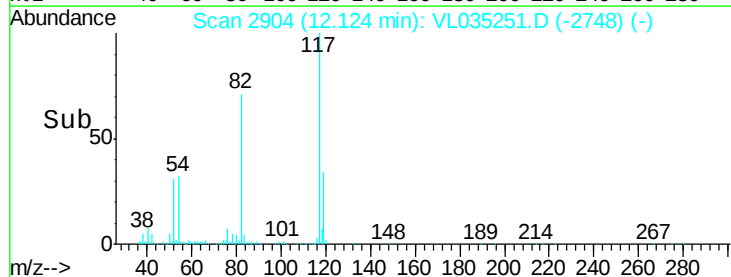
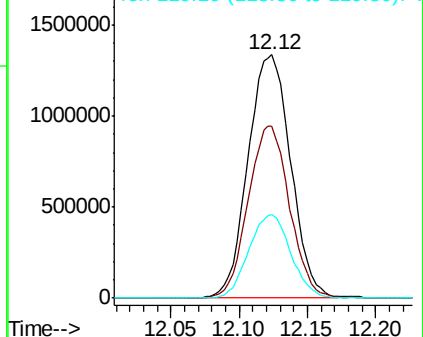
119 33.9 24.6 36.8

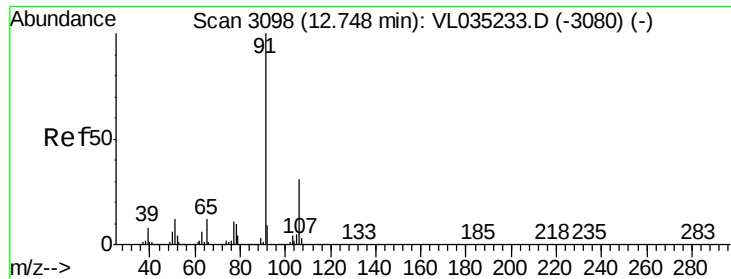


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





#58

Ethyl Benzene

Concen: 0.084 ppbv

RT: 13.01 min Scan# 3179

Delta R.T. 0.26 min

Lab File: VL035251.D

Acq: 29 Jul 2020 18:09

Instrument :

MSVOA_L

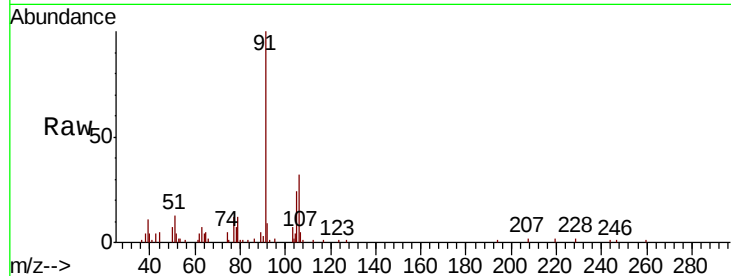
ClientSampled :

Tot Ion: 91 Resp: 25988

Ion Ratio Lower Upper

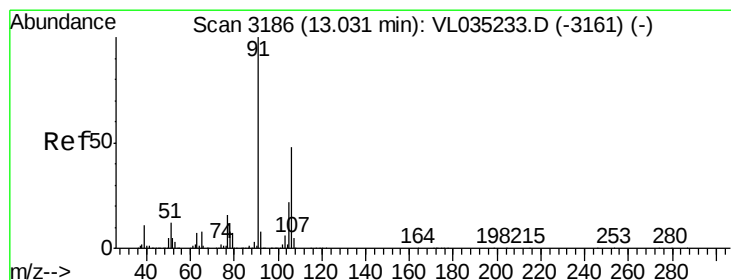
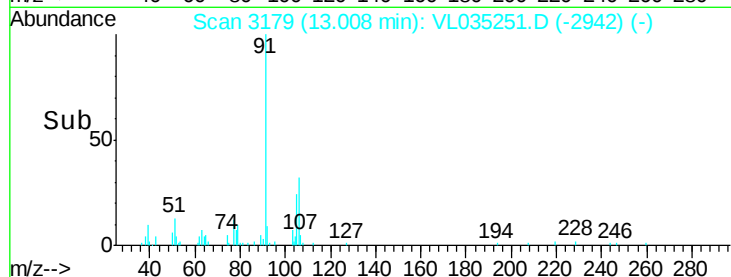
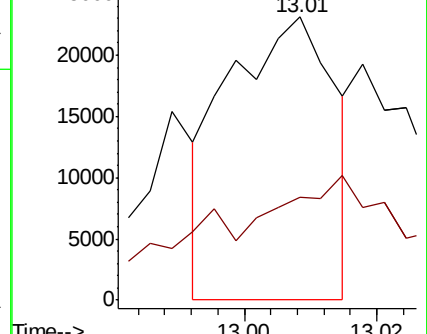
91 100

106 27.5 25.0 37.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.034 ppbv

RT: 13.03 min Scan# 3186

Delta R.T. 0.00 min

Lab File: VL035251.D

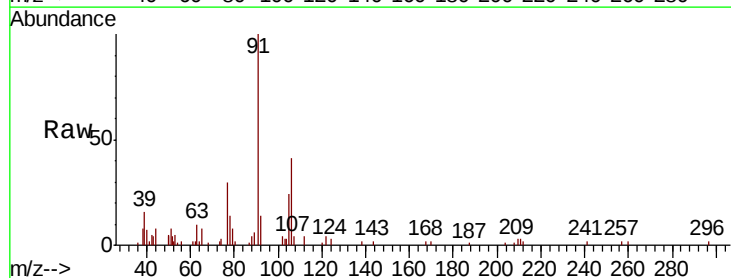
Acq: 29 Jul 2020 18:09

Tgt Ion: 91 Resp: 9725

Ion Ratio Lower Upper

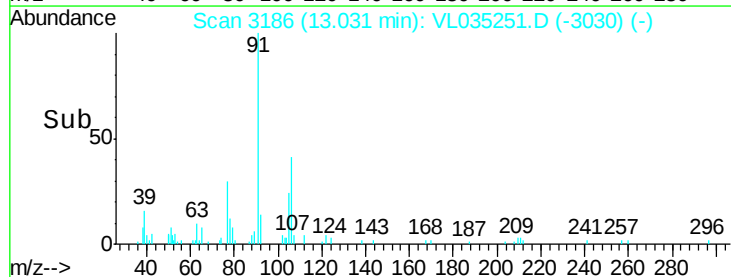
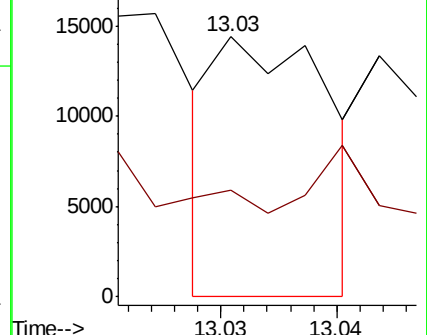
91 100

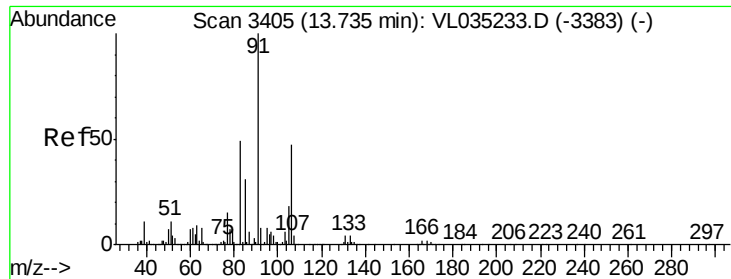
106 0.0 37.2 55.8#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

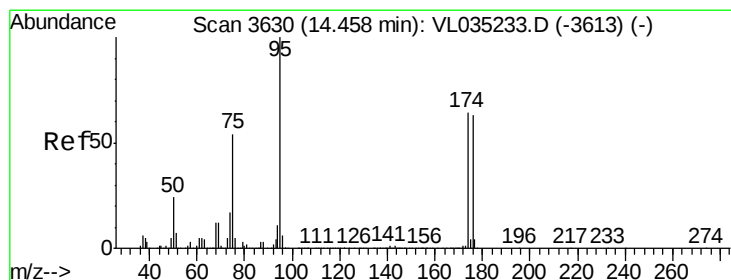
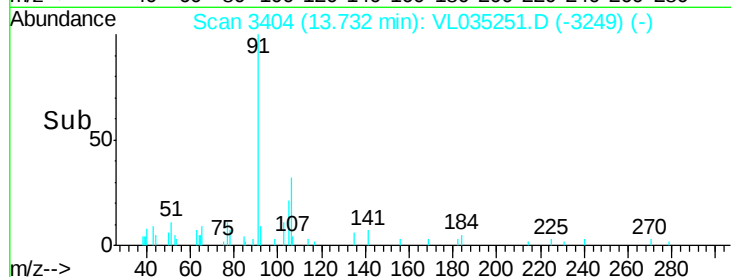
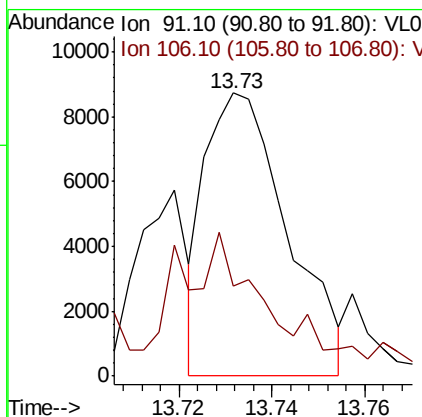
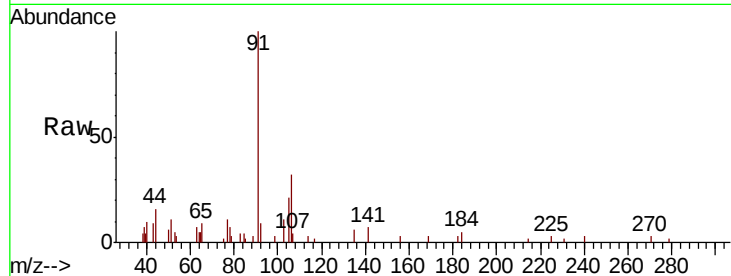




#60
o-Xylene
Concen: 0.038 ppbv
RT: 13.73 min Scan# 3404
Delta R.T. -0.00 min
Lab File: VL035251.D
Acq: 29 Jul 2020 18:09

Instrument :
MSVOA_L
ClientSampled :

Tot Ion: 91 Resp: 10762
Ion Ratio Lower Upper
91 100
106 68.5 22.4 67.0#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.258 ppbv
RT: 14.46 min Scan# 3631
Delta R.T. 0.00 min
Lab File: VL035251.D
Acq: 29 Jul 2020 18:09

Tgt Ion: 95 Resp: 2381179
Ion Ratio Lower Upper
95 100
174 66.2 52.7 79.1
175 4.7 3.9 5.9

