

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112519\
 Data File : VL034413.D
 Acq On : 25 Nov 2019 19:40
 Operator : SY/AP
 Sample : K5971-07
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Nov 26 00:44:59 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov 19 14:15:35 2019
 QLast Update : Tue Nov 19 14:15:35 2019
 Response via : Initial Calibration

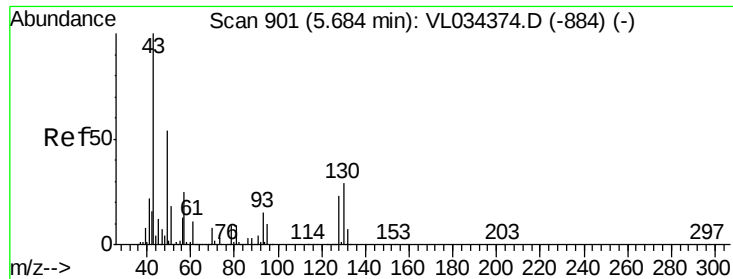
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	904105	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.20	114	1829443	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1775073	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.47	95	1524856	10.21	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.10%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.02	85	92772	0.567 ppbv	98
3) Chlorodifluoromethane	2.96	51	61999	0.550 ppbv #	82
4) Chloromethane	3.11	50	15819	0.238 ppbv	93
9) Propene	2.99	41	24004	0.479 ppbv	85
10) Heptane	8.14	43	5702	0.044 ppbv #	27
11) Trichlorofluoromethane	3.94	101	35061	0.215 ppbv	89
12) 1,1,2-Trichlorotrifluoroet	4.48	101	5039	0.047 ppbv #	75
13) Ethanol	3.59	45	736124	52.766 ppbv	96
15) Acetone	3.84	43	648653	5.010 ppbv	98
16) 1,3-Butadiene	3.29	39	2505	0.044 ppbv	96
17) tert-Butyl alcohol	4.30	59	5403	0.050 ppbv #	71
19) Isopropyl Alcohol	3.96	45	854328	10.295 ppbv #	99
20) Methylene Chloride	4.34	84	81518	1.776 ppbv	96
23) Vinyl Acetate	5.07	43	21342	0.126 ppbv #	86
25) Ethyl Acetate	5.69	43	86403	0.374 ppbv #	87
26) Hexane	5.70	57	93594	0.943 ppbv #	47
29) Chloroform	5.76	83	15556	0.097 ppbv	91
34) 2-Butanone	5.25	43	54212	0.360 ppbv	98
36) Benzene	6.91	78	37152	0.203 ppbv #	92
39) 1,2-Dichloropropane	7.20	63	542399	7.699 ppbv #	24
44) 2,2,4-Trimethylpentane	7.89	57	24765	0.074 ppbv #	51
53) Toluene	9.84	91	357735	1.722 ppbv	98

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.01 min

Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

Instrument :
MSVOA_L
ClientSampleId :

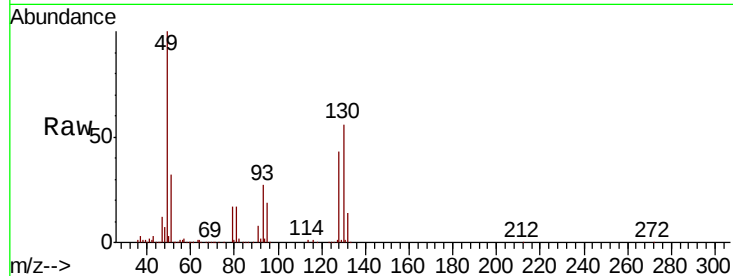
Tot Ion: 49 Resp: 904105

Ion Ratio Lower Upper

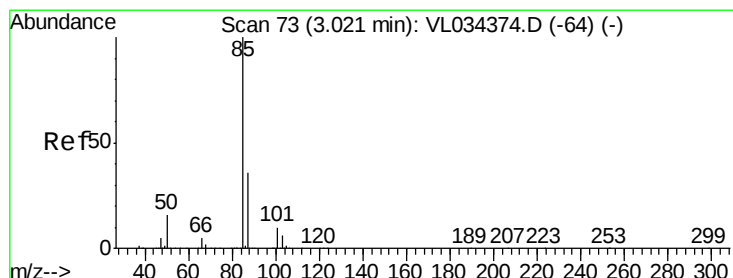
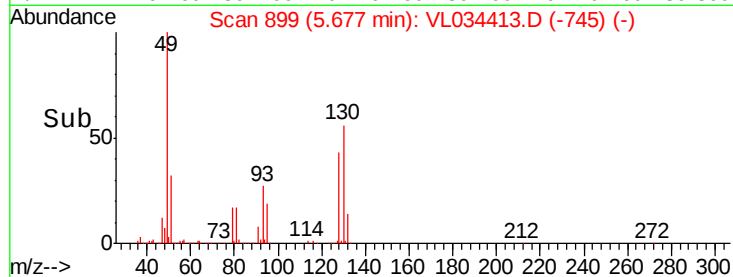
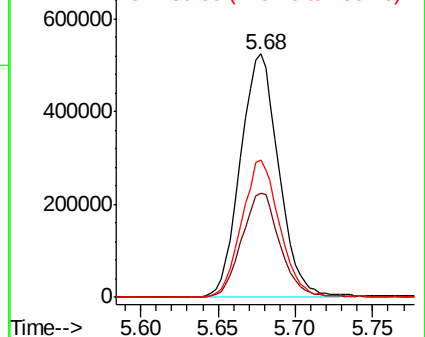
49 100

128 43.3 21.8 65.3

130 56.0 28.0 84.0



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: 0.567 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL034413.D

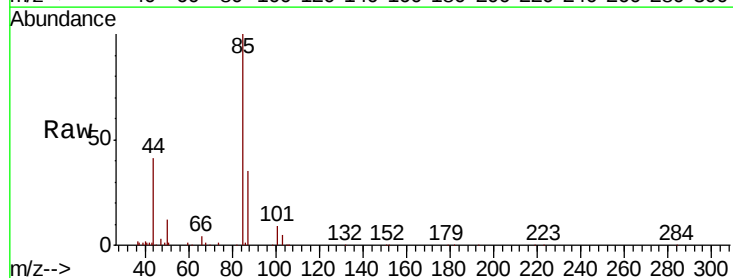
Acq: 25 Nov 2019 19:40

Tgt Ion: 85 Resp: 92772

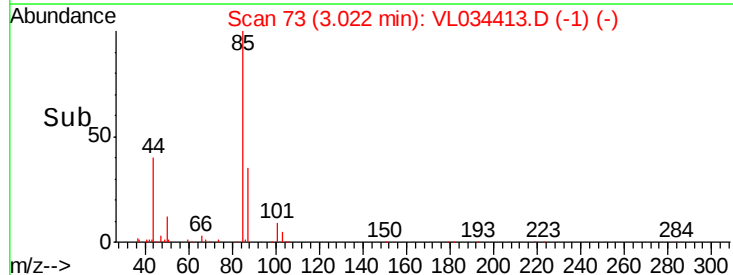
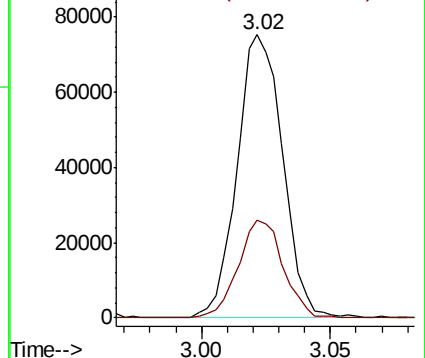
Ion Ratio Lower Upper

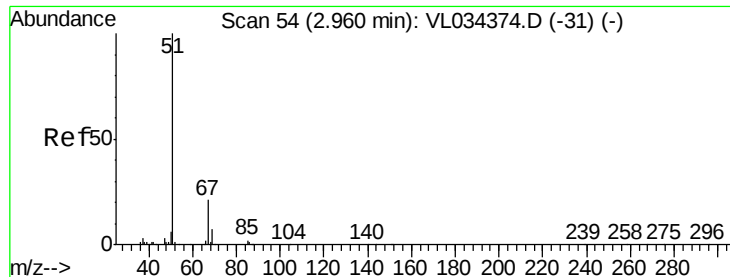
85 100

87 34.7 28.5 42.7



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.550 ppbv

RT: 2.96 min Scan# 55

Delta R.T. 0.00 min

Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

Instrument :

MSVOA_L

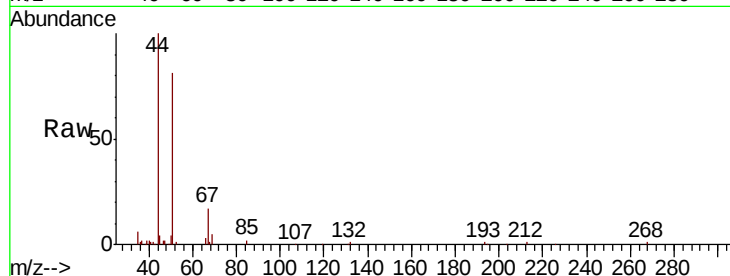
ClientSampleId :

Tot Ion: 51 Resp: 61999

Ion Ratio Lower Upper

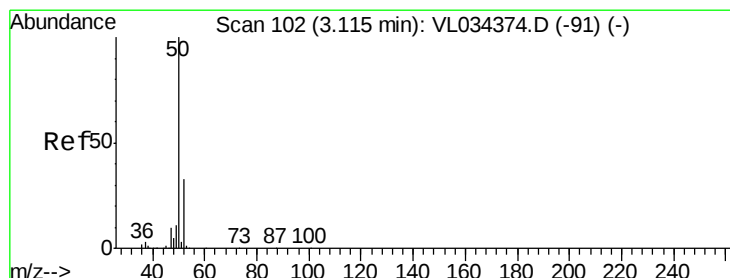
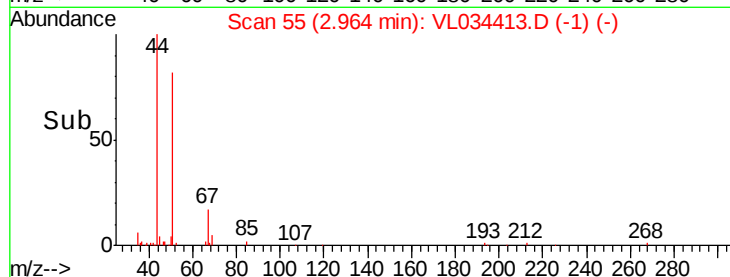
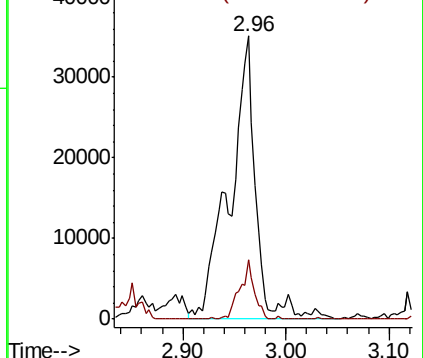
51 100

67 11.7 16.2 24.2#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.238 ppbv

RT: 3.11 min Scan# 101

Delta R.T. -0.00 min

Lab File: VL034413.D

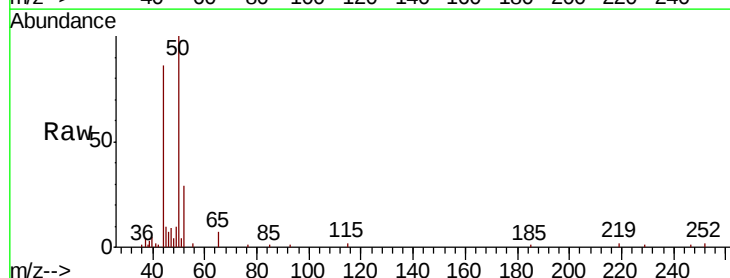
Acq: 25 Nov 2019 19:40

Tgt Ion: 50 Resp: 15819

Ion Ratio Lower Upper

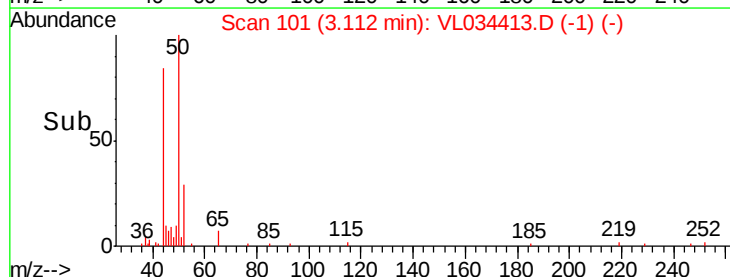
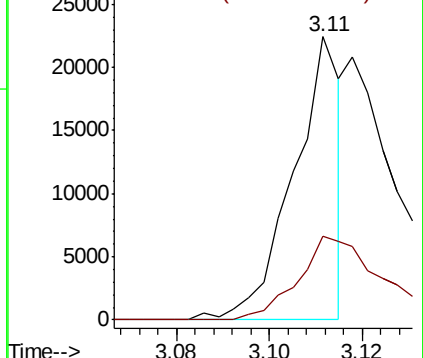
50 100

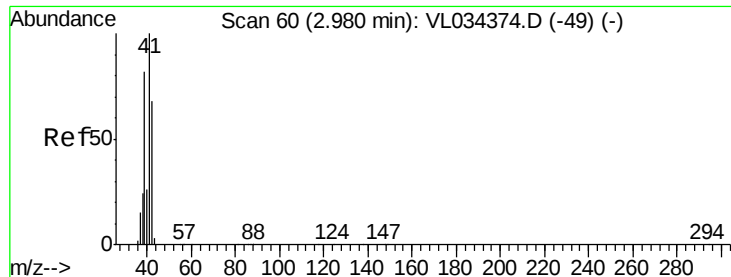
52 29.4 26.8 40.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.479 ppbv

RT: 2.99 min Scan# 63

Delta R.T. 0.01 min

Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

Instrument :

MSVOA_L

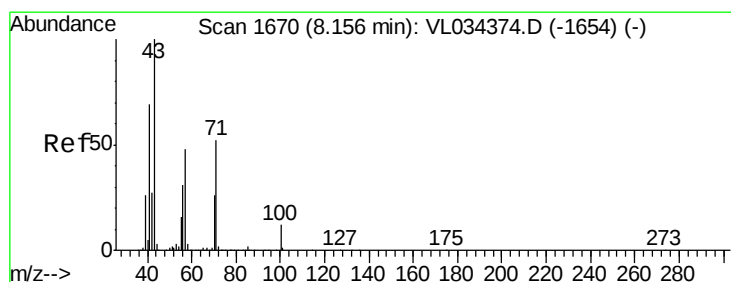
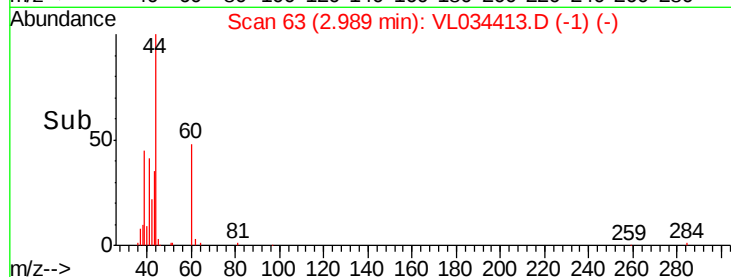
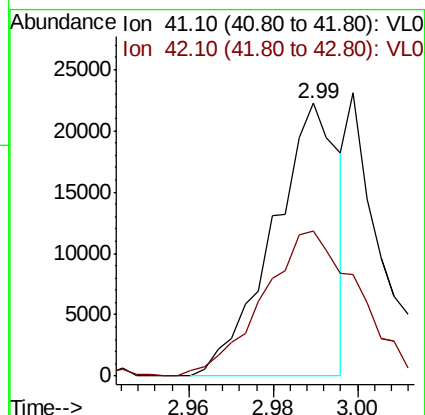
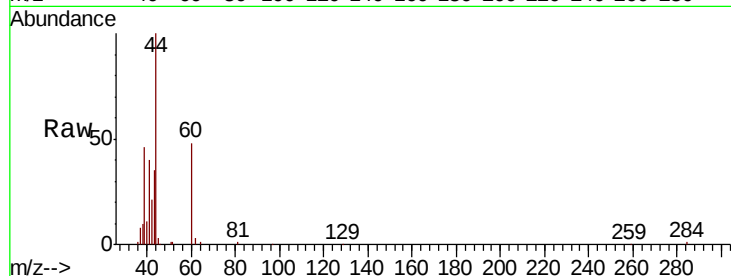
ClientSampleId :

Tot Ion: 41 Resp: 24004

Ion Ratio Lower Upper

41 100

42 80.6 54.6 82.0



#10

Heptane

Concen: 0.044 ppbv

RT: 8.14 min Scan# 1666

Delta R.T. -0.01 min

Lab File: VL034413.D

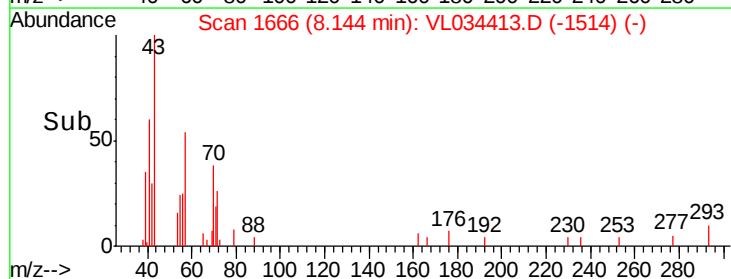
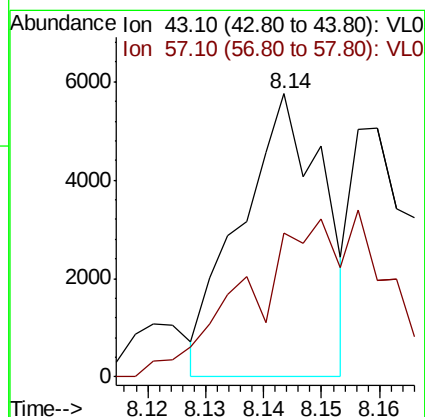
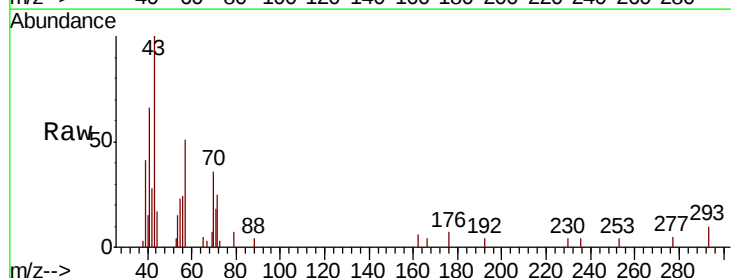
Acq: 25 Nov 2019 19:40

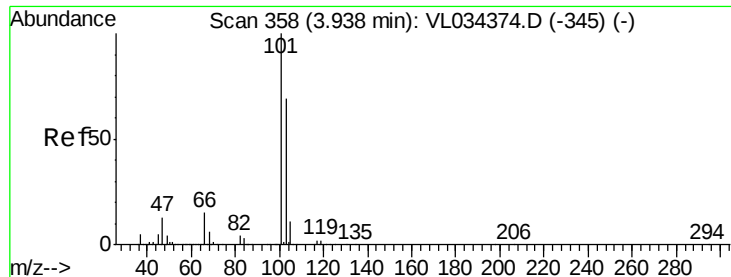
Tgt Ion: 43 Resp: 5702

Ion Ratio Lower Upper

43 100

57 0.0 40.2 60.2#

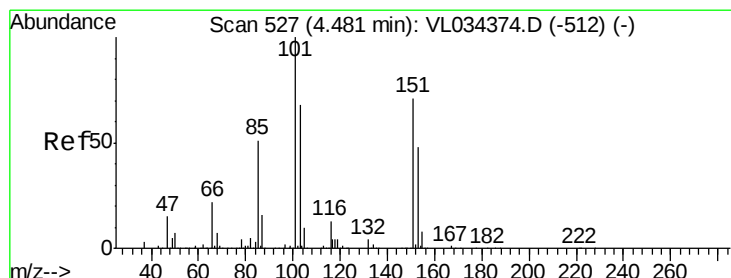
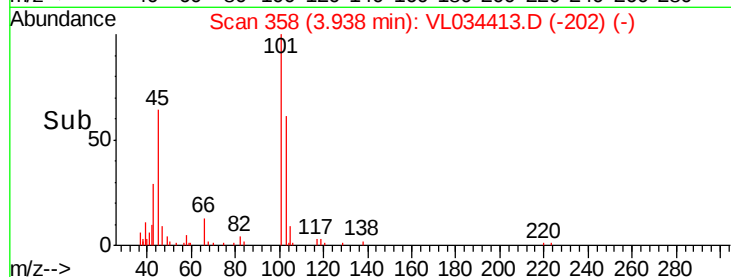
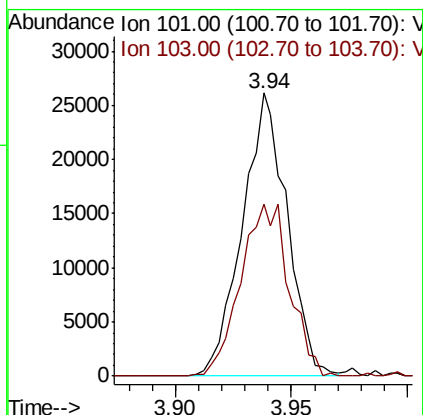
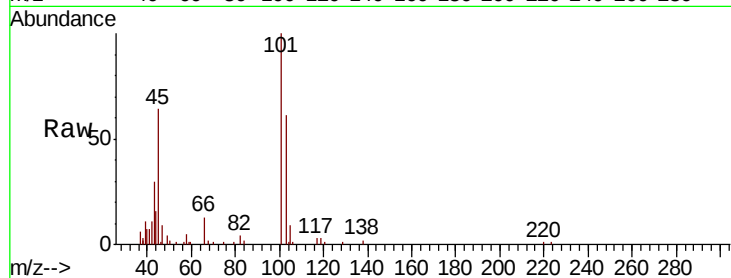




#11
 Trichlorofluoromethane
 Concen: 0.215 ppbv
 RT: 3.94 min Scan# 358
 Delta R.T. 0.00 min
 Lab File: VL034413.D
 Acq: 25 Nov 2019 19:40

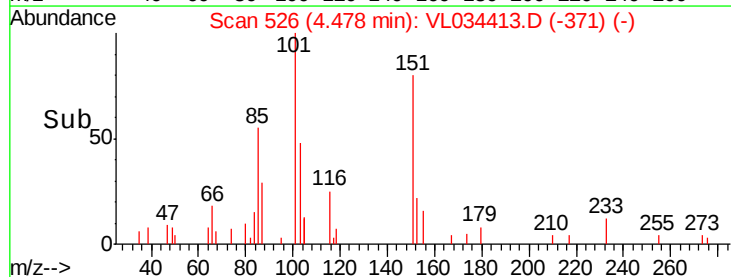
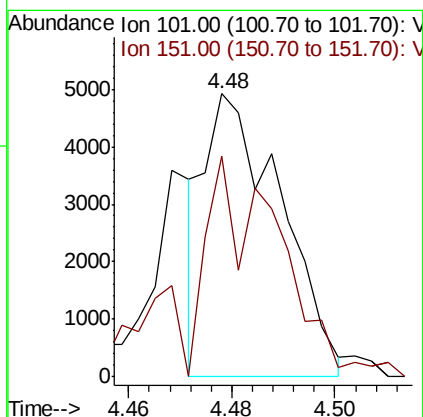
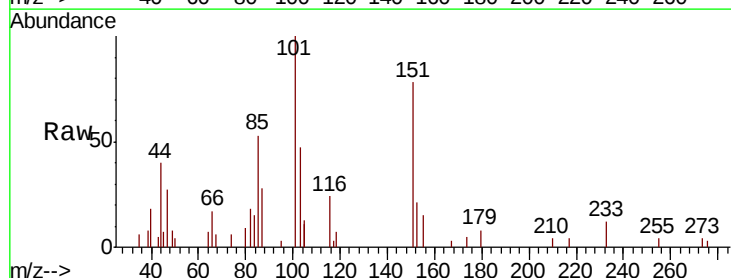
Instrument :
 MSVOA_L
 ClientSampleId :

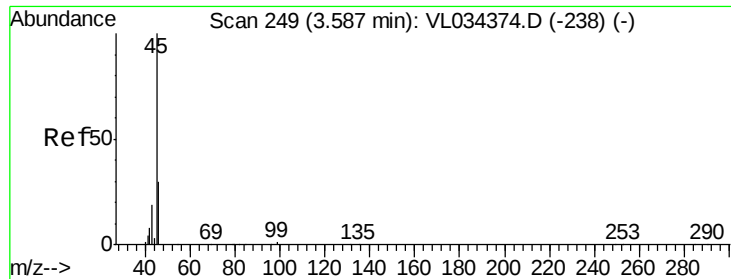
Tot Ion:101 Resp: 35061
 Ion Ratio Lower Upper
 101 100
 103 60.6 55.4 83.0



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.047 ppbv
 RT: 4.48 min Scan# 526
 Delta R.T. -0.00 min
 Lab File: VL034413.D
 Acq: 25 Nov 2019 19:40

Tgt Ion:101 Resp: 5039
 Ion Ratio Lower Upper
 101 100
 151 92.8 57.4 86.2#





#13

Ethanol

Concen: 52.766 ppbv

RT: 3.59 min Scan# 250

Delta R.T. 0.00 min

Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

Instrument :

MSVOA_L

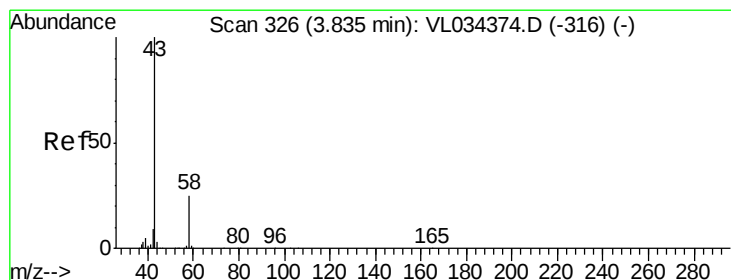
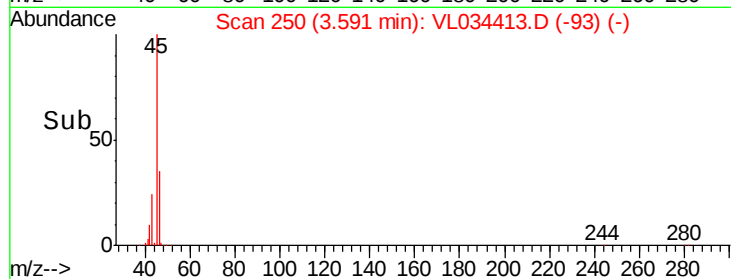
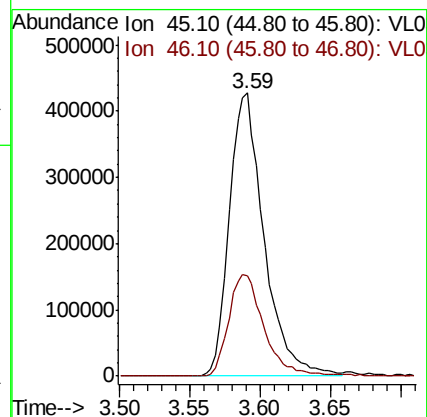
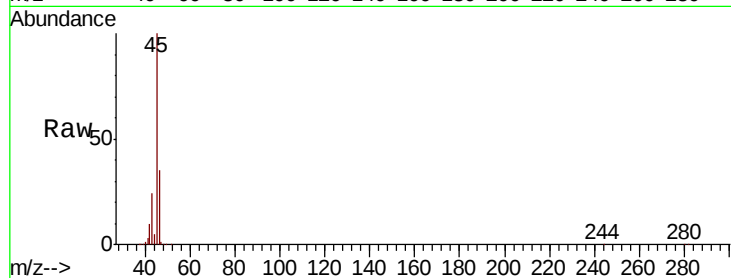
ClientSampleId :

Tot Ion: 45 Resp: 736124

Ion Ratio Lower Upper

45 100

46 36.9 13.8 55.4



#15

Acetone

Concen: 5.010 ppbv

RT: 3.84 min Scan# 326

Delta R.T. 0.00 min

Lab File: VL034413.D

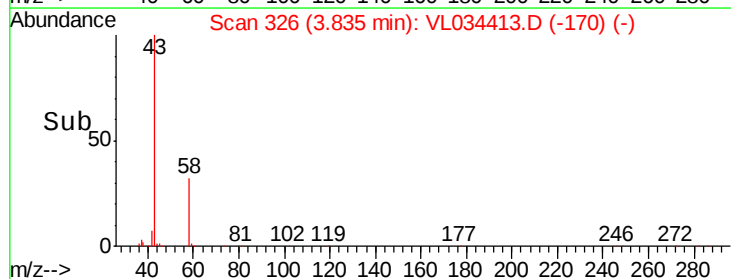
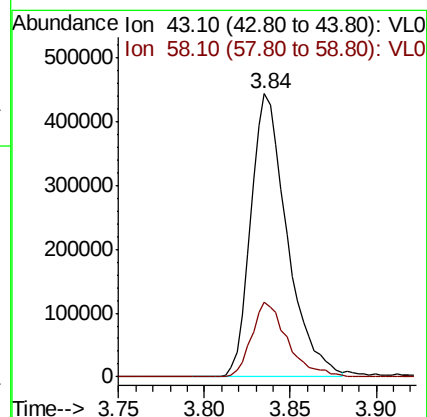
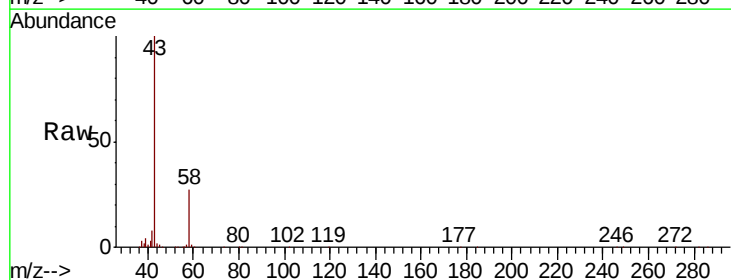
Acq: 25 Nov 2019 19:40

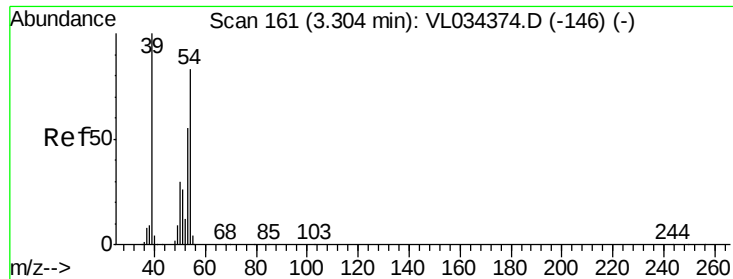
Tgt Ion: 43 Resp: 648653

Ion Ratio Lower Upper

43 100

58 26.3 20.2 30.4

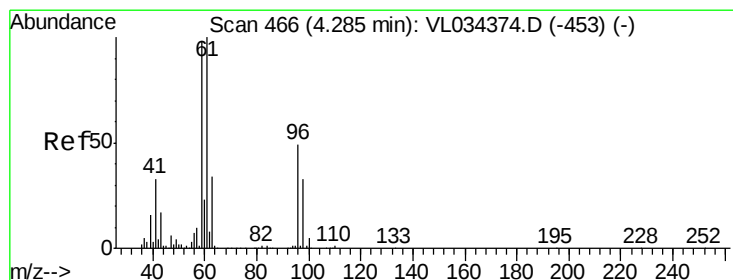
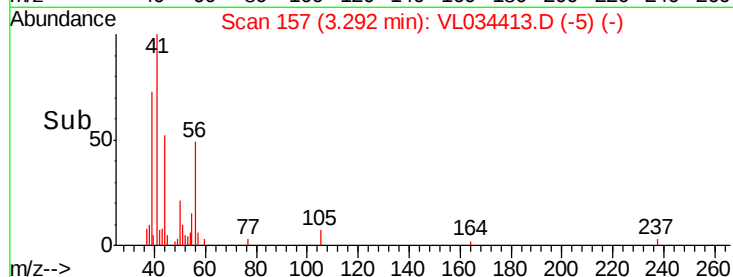
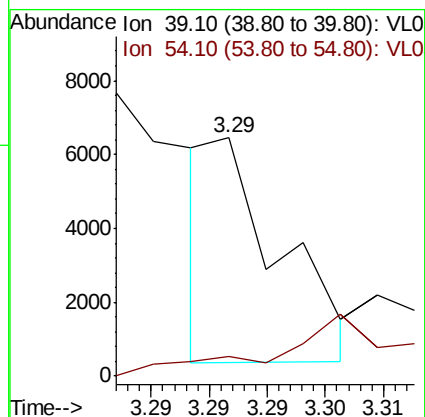
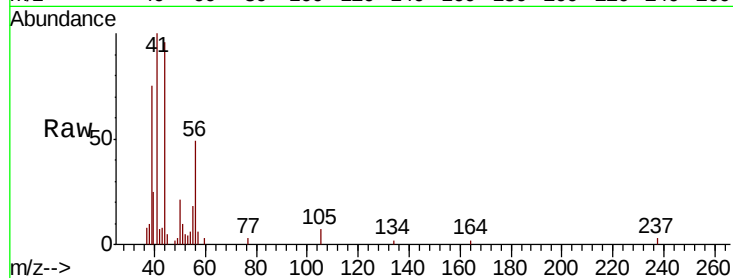




#16
1,3-Butadiene
Concen: 0.044 ppbv
RT: 3.29 min Scan# 157
Delta R.T. -0.01 min
Lab File: VL034413.D
Acq: 25 Nov 2019 19:40

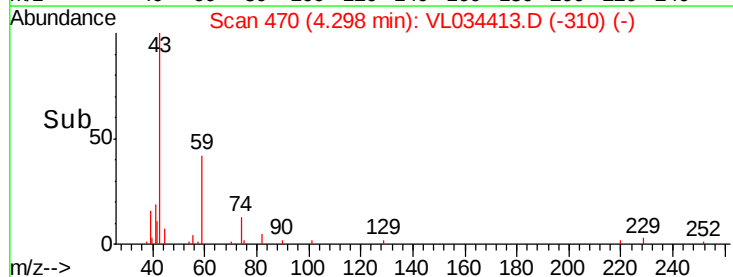
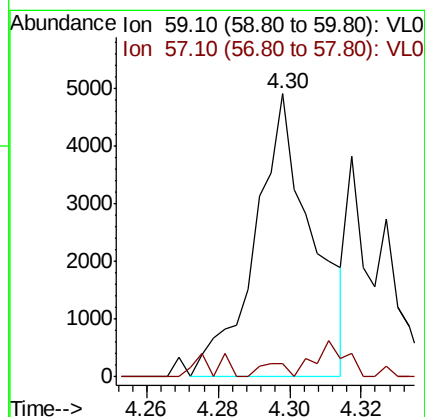
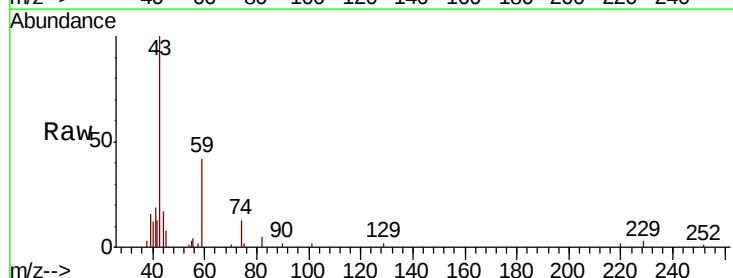
Instrument :
MSVOA_L
ClientSampled :

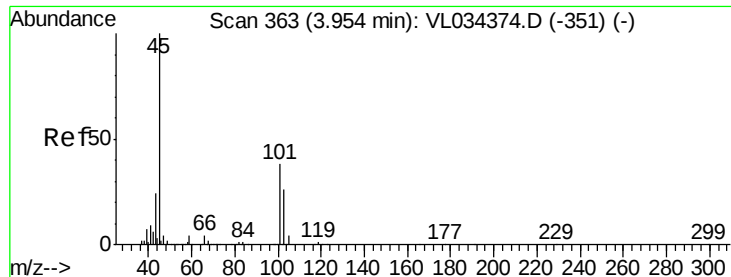
Tot Ion: 39 Resp: 2505
Ion Ratio Lower Upper
39 100
54 84.5 64.7 97.1



#17
tert-Butyl alcohol
Concen: 0.050 ppbv
RT: 4.30 min Scan# 470
Delta R.T. 0.01 min
Lab File: VL034413.D
Acq: 25 Nov 2019 19:40

Tgt Ion: 59 Resp: 5403
Ion Ratio Lower Upper
59 100
57 0.0 8.8 13.2#



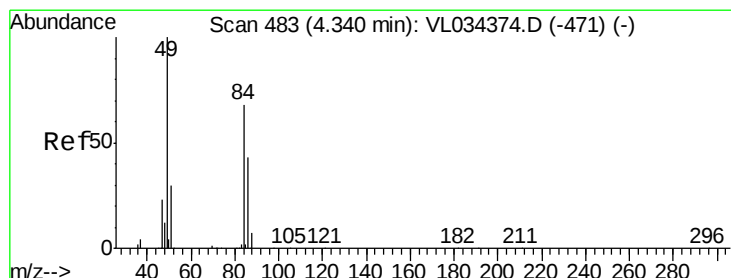
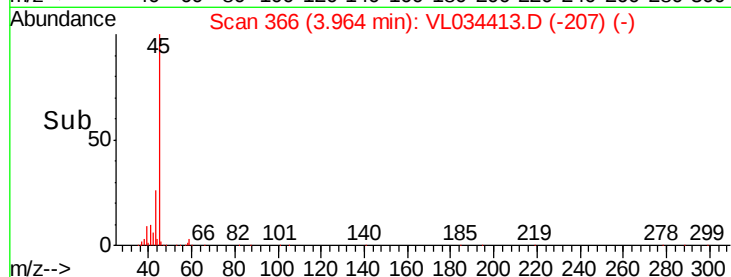
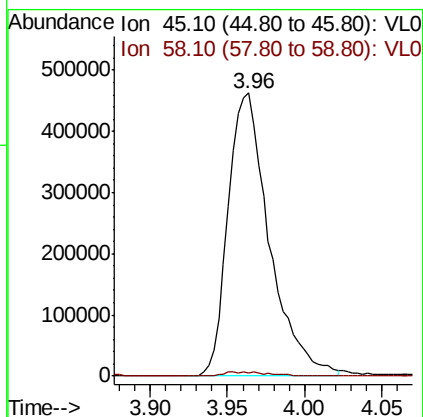
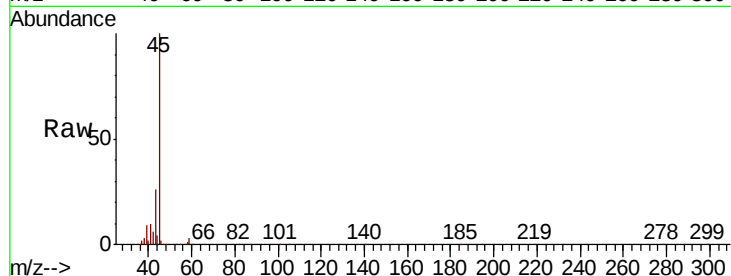


#19

Isopropyl Alcohol
 Concen: 10.295 ppbv
 RT: 3.96 min Scan# 366
 Delta R.T. 0.01 min
 Lab File: VL034413.D
 Acq: 25 Nov 2019 19:40

Instrument :
 MSVOA_L
 ClientSampled :

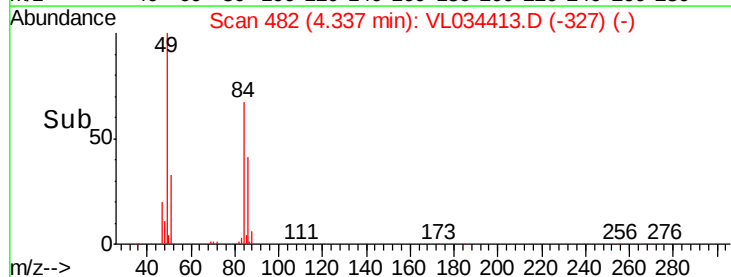
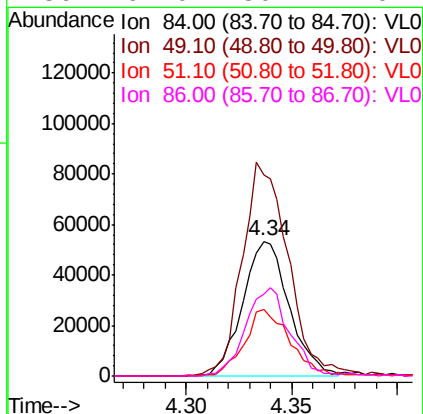
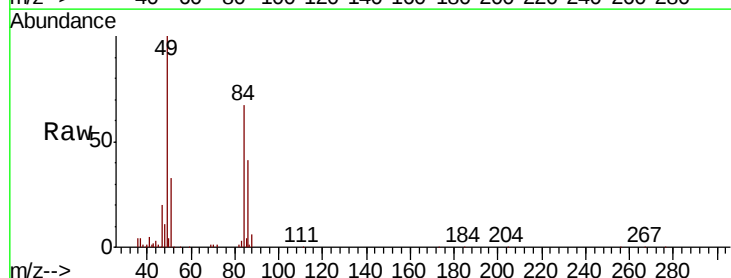
Tot Ion: 45 Resp: 854328
 Ion Ratio Lower Upper
 45 100
 58 1.9 1.3 1.9#

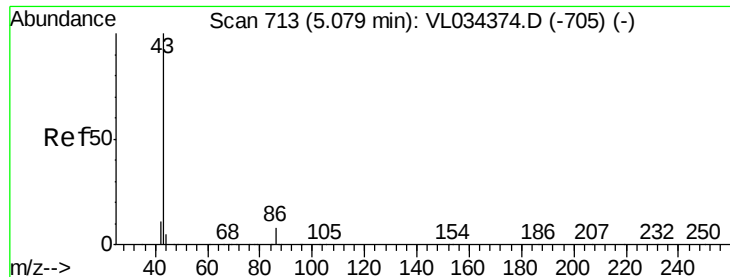


#20

Methylene Chloride
 Concen: 1.776 ppbv
 RT: 4.34 min Scan# 482
 Delta R.T. -0.00 min
 Lab File: VL034413.D
 Acq: 25 Nov 2019 19:40

Tgt Ion: 84 Resp: 81518
 Ion Ratio Lower Upper
 84 100
 49 149.7 116.8 175.2
 51 48.8 35.6 53.4
 86 61.0 50.7 76.1





#23

Vinyl Acetate

Concen: 0.126 ppbv

RT: 5.07 min Scan# 710

Delta R.T. -0.01 min

Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 43 Resp: 21342

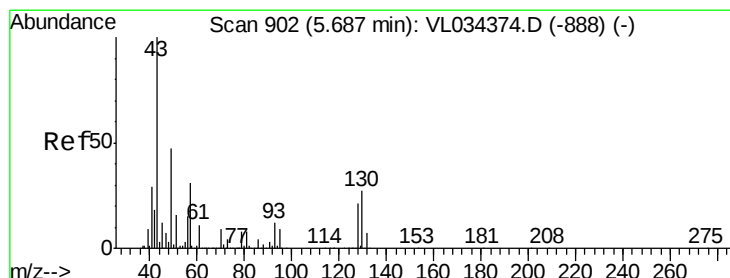
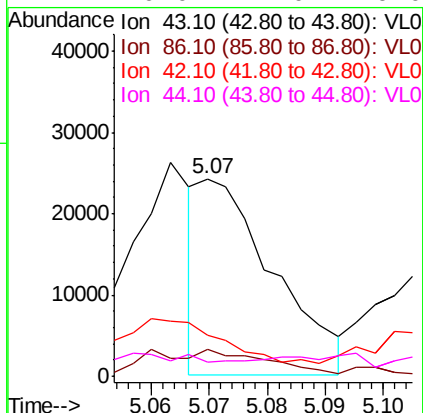
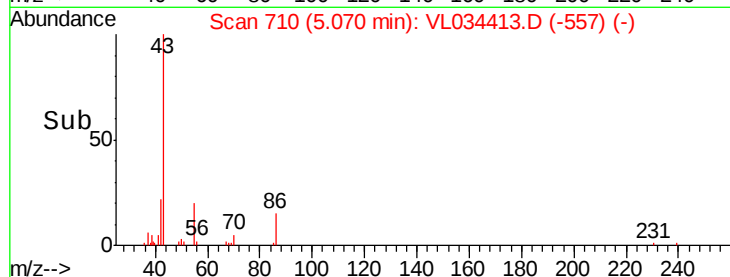
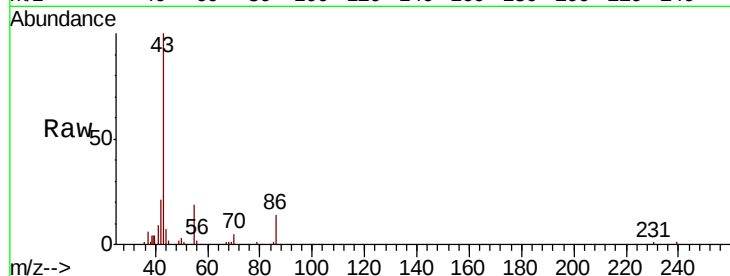
Ion Ratio Lower Upper

43 100

86 15.5 5.8 8.6#

42 13.5 8.9 13.3#

44 0.0 4.0 6.0#



#25

Ethyl Acetate

Concen: 0.374 ppbv

RT: 5.69 min Scan# 904

Delta R.T. 0.01 min

Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

Tgt Ion: 43 Resp: 86403

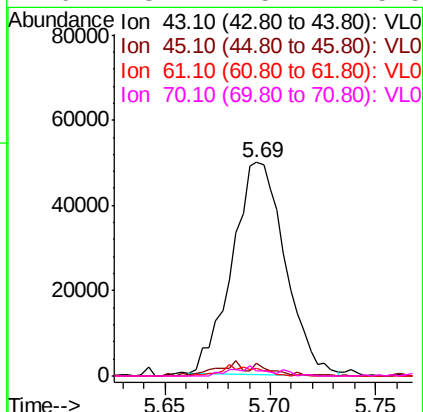
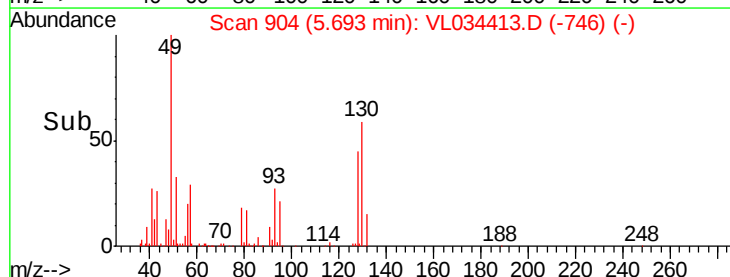
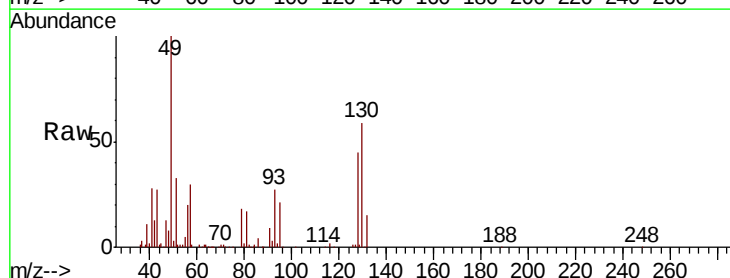
Ion Ratio Lower Upper

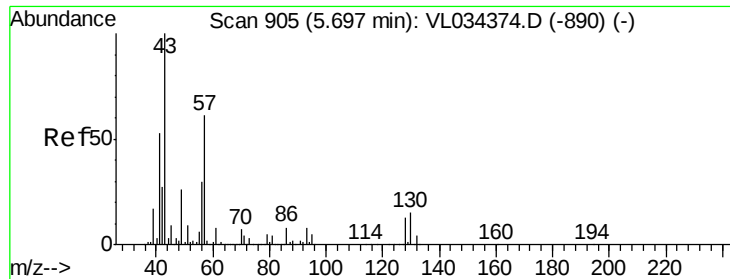
43 100

45 5.9 8.2 12.4#

61 3.6 7.5 11.3#

70 3.4 5.7 8.5#





#26

Hexane

Concen: 0.943 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.00 min

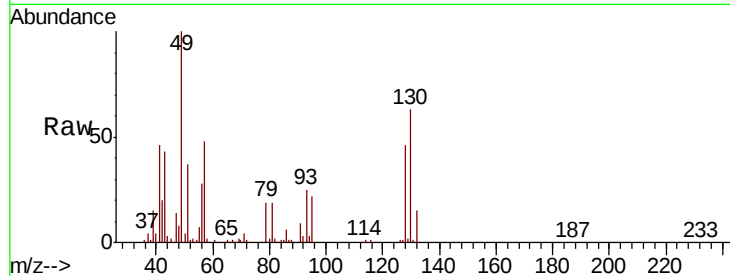
Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

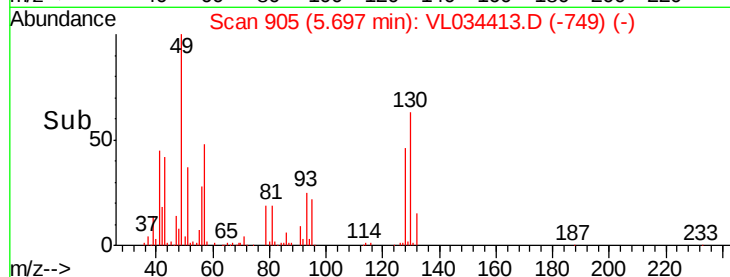
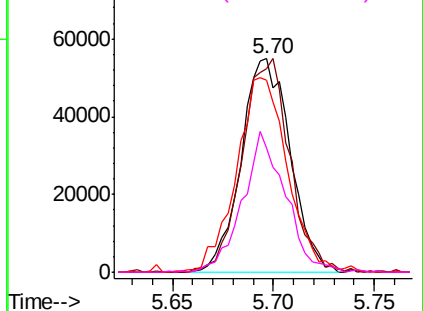
Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 57 Resp: 93594

Ion	Ratio	Lower	Upper
57	100		
41	97.1	75.0	112.4
43	95.9	186.6	279.8#
56	57.8	41.5	62.3



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



#29

Chloroform

Concen: 0.097 ppbv

RT: 5.76 min Scan# 925

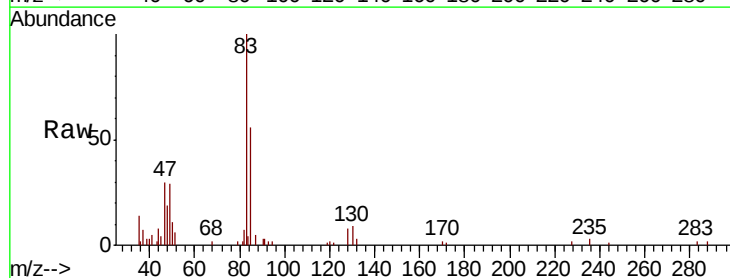
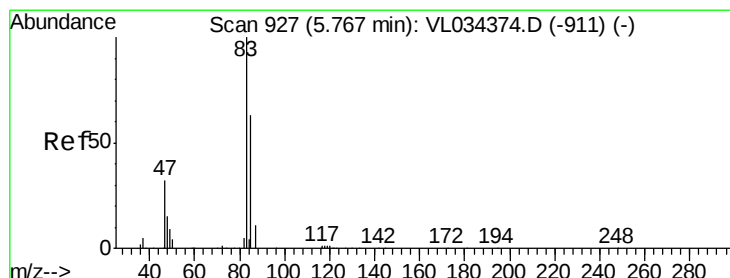
Delta R.T. -0.01 min

Lab File: VL034413.D

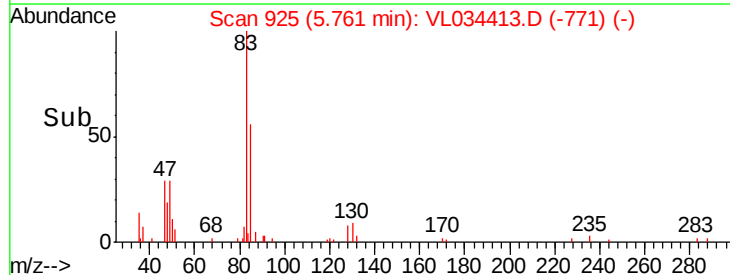
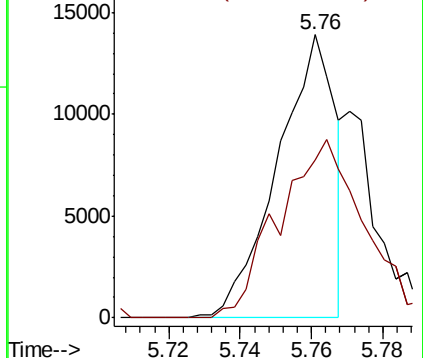
Acq: 25 Nov 2019 19:40

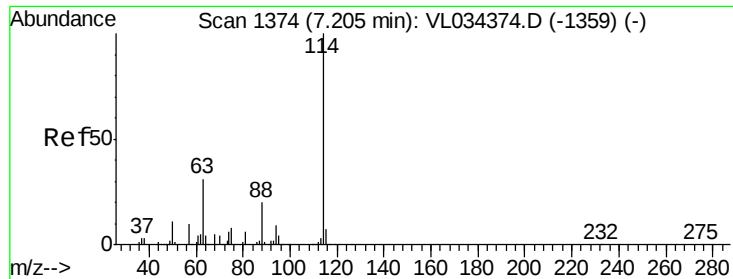
Tgt Ion: 83 Resp: 15556

Ion	Ratio	Lower	Upper
83	100		
85	55.8	50.4	75.6



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0

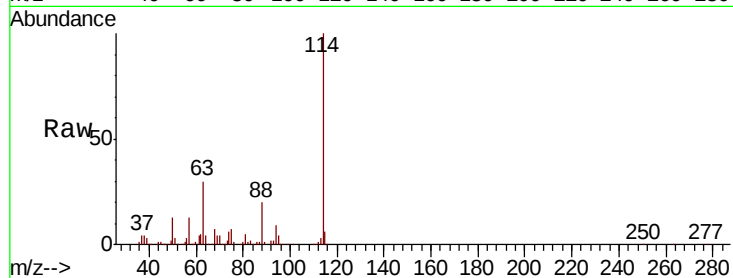




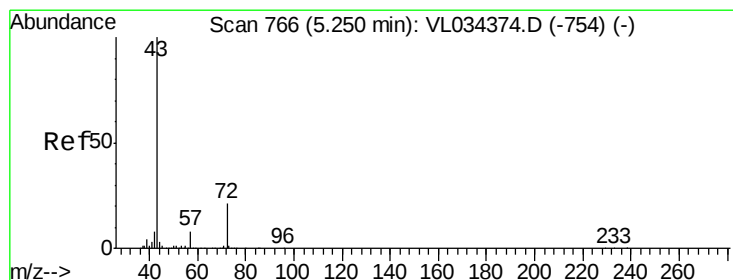
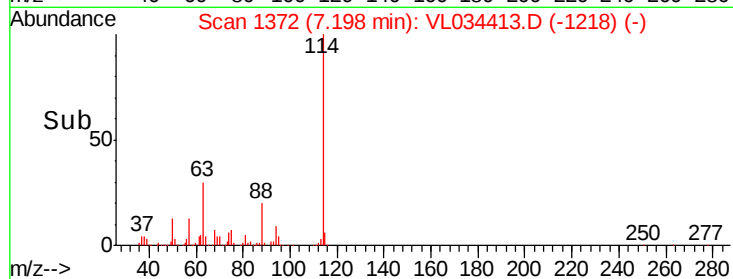
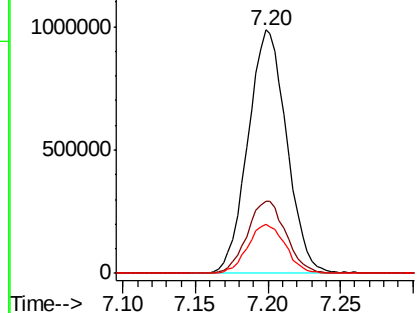
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.20 min Scan# 1372
 Delta R.T. -0.01 min
 Lab File: VL034413.D
 Acq: 25 Nov 2019 19:40

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:114 Resp: 1829443
 Ion Ratio Lower Upper
 114 100
 63 29.8 24.2 36.4
 88 19.7 15.9 23.9

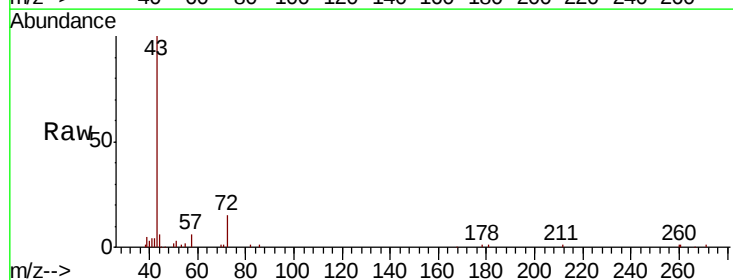


Abundance Ion 114.10 (113.80 to 114.80): V
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

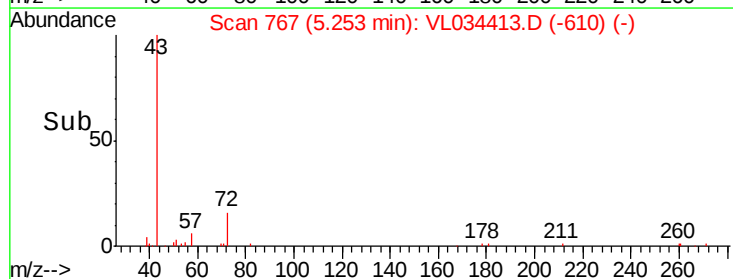
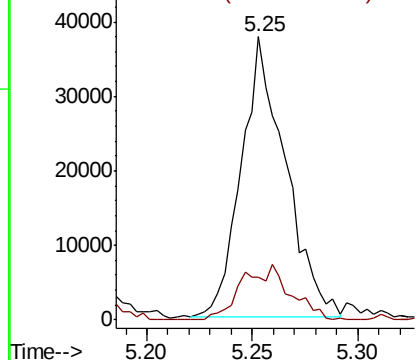


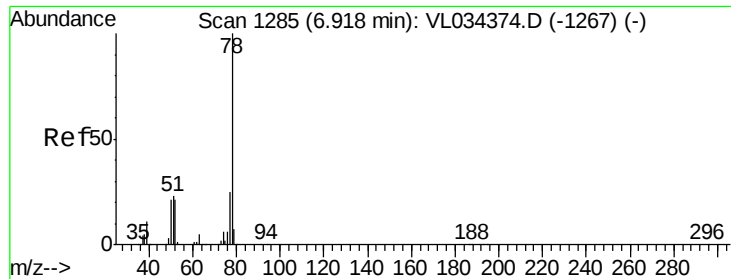
#34
 2-Butanone
 Concen: 0.360 ppbv
 RT: 5.25 min Scan# 767
 Delta R.T. 0.00 min
 Lab File: VL034413.D
 Acq: 25 Nov 2019 19:40

Tgt Ion: 43 Resp: 54212
 Ion Ratio Lower Upper
 43 100
 72 22.0 17.0 25.6



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.203 ppbv

RT: 6.91 min Scan# 1283

Delta R.T. -0.01 min

Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

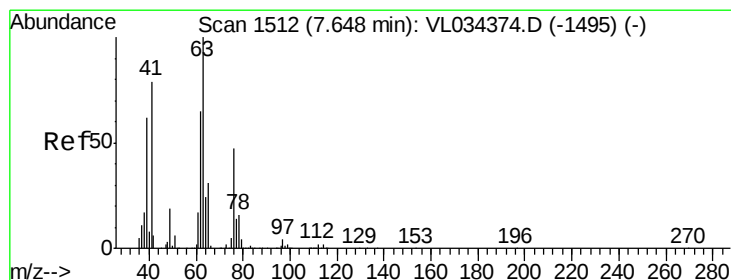
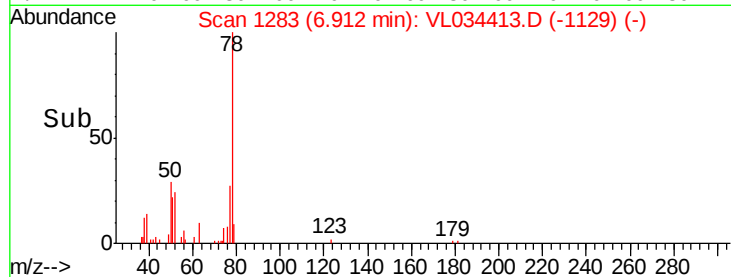
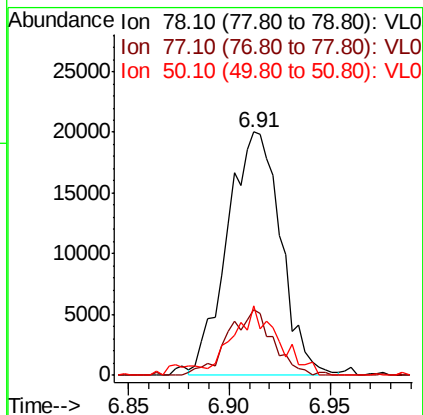
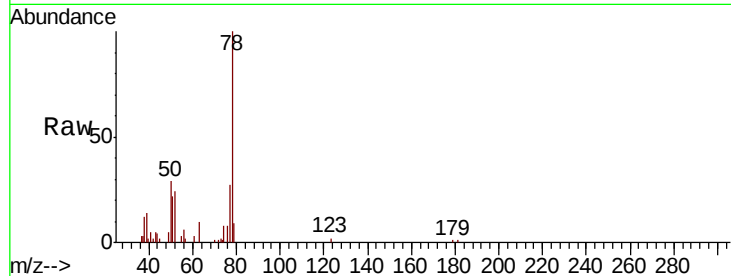
Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 78 Resp: 37152

Ion	Ratio	Lower	Upper
78	100		
77	26.0	20.2	30.4
50	28.9	17.1	25.7#



#39

1,2-Dichloropropane

Concen: 7.699 ppbv

RT: 7.20 min Scan# 1372

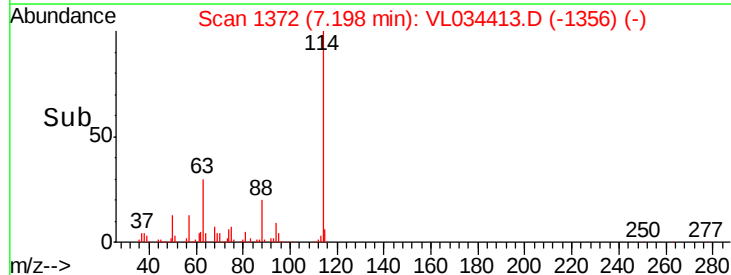
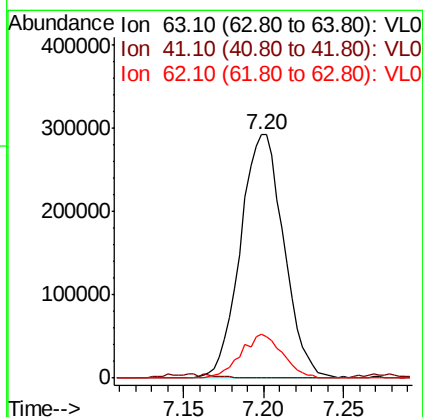
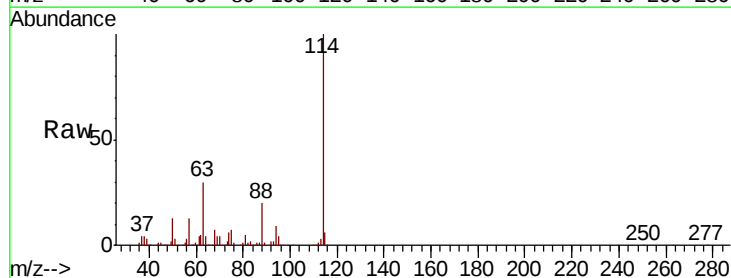
Delta R.T. -0.45 min

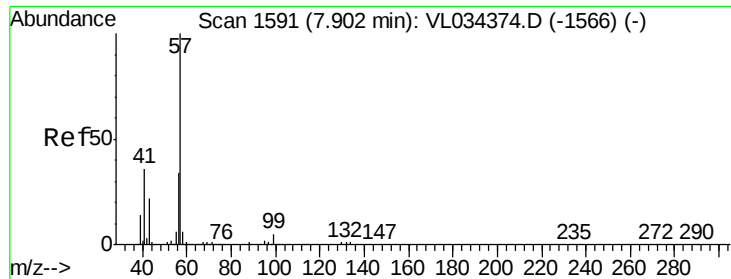
Lab File: VL034413.D

Acq: 25 Nov 2019 19:40

Tgt Ion: 63 Resp: 542399

Ion	Ratio	Lower	Upper
63	100		
41	0.0	63.1	94.7#
62	17.9	52.3	78.5#

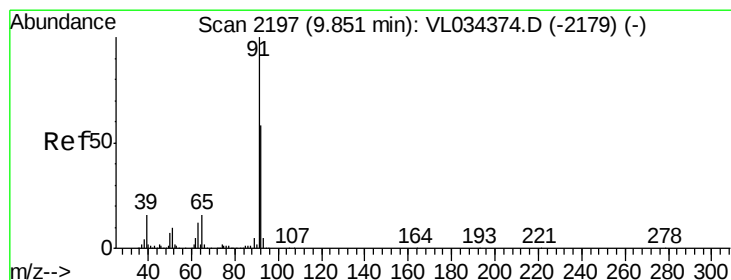
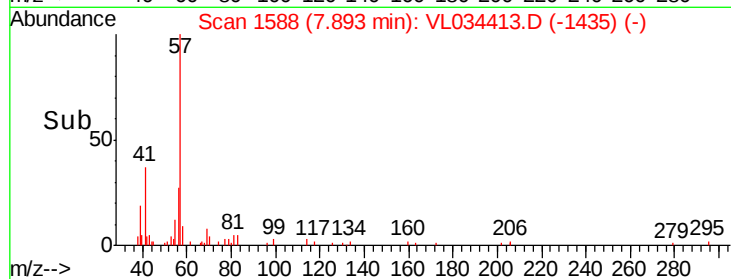
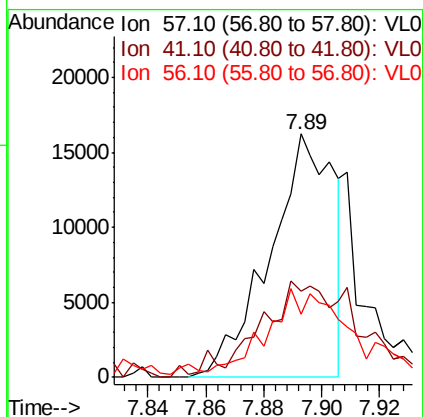
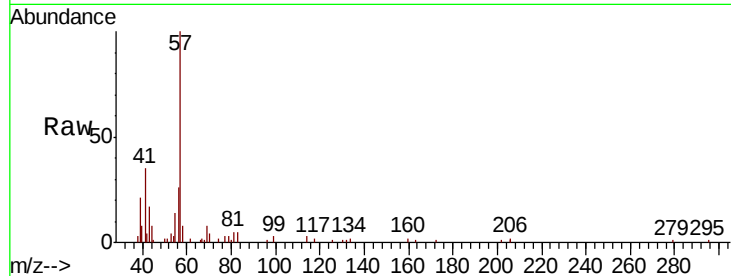




#44
 2,2,4-Trimethylpentane
 Concen: 0.074 ppbv
 RT: 7.89 min Scan# 1588
 Delta R.T. -0.01 min
 Lab File: VL034413.D
 Acq: 25 Nov 2019 19:40

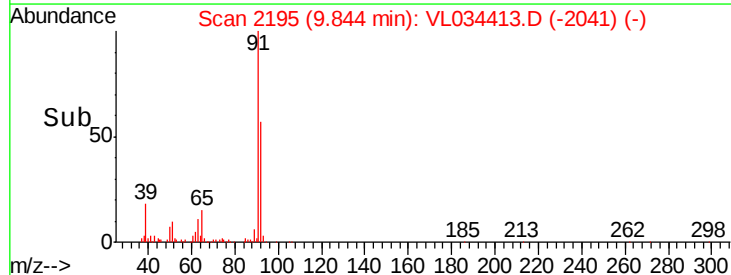
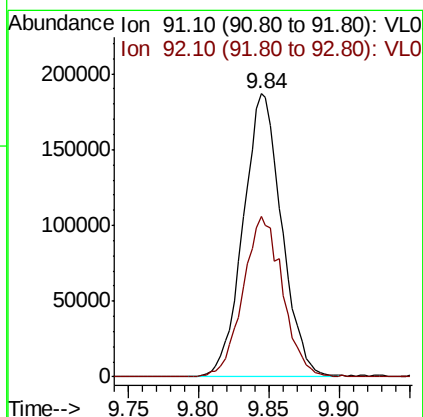
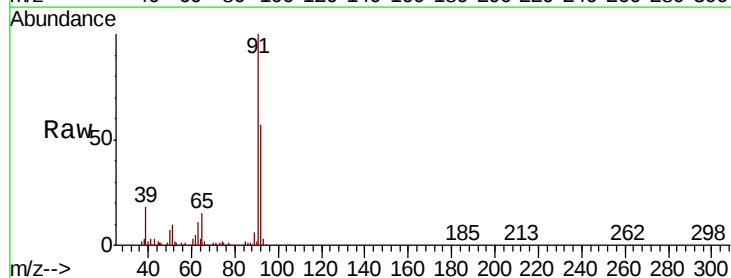
Instrument :
 MSVOA_L
 ClientSampleId :

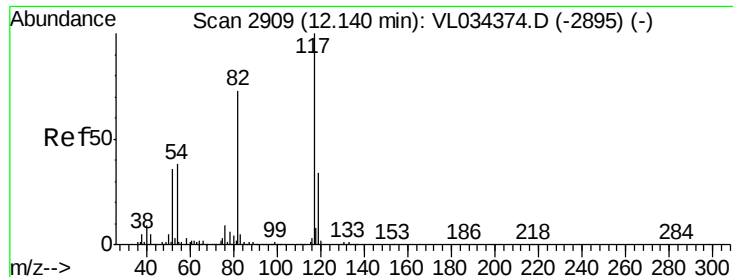
Tot Ion: 57 Resp: 24765
 Ion Ratio Lower Upper
 57 100
 41 69.1 28.6 42.8#
 56 53.5 25.3 37.9#



#53
 Toluene
 Concen: 1.722 ppbv
 RT: 9.84 min Scan# 2195
 Delta R.T. -0.01 min
 Lab File: VL034413.D
 Acq: 25 Nov 2019 19:40

Tgt Ion: 91 Resp: 357735
 Ion Ratio Lower Upper
 91 100
 92 58.1 47.9 71.9

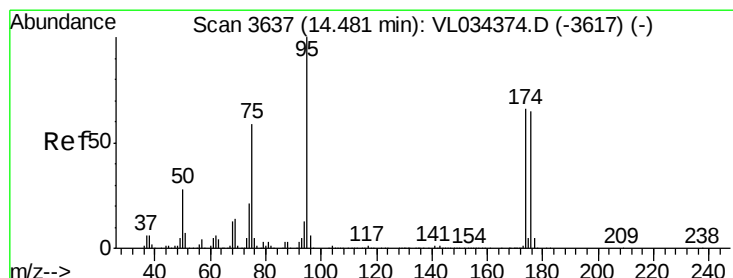
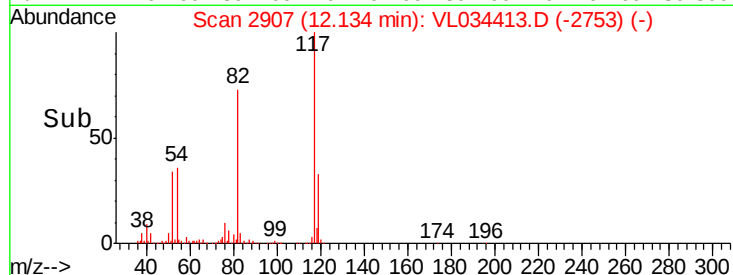
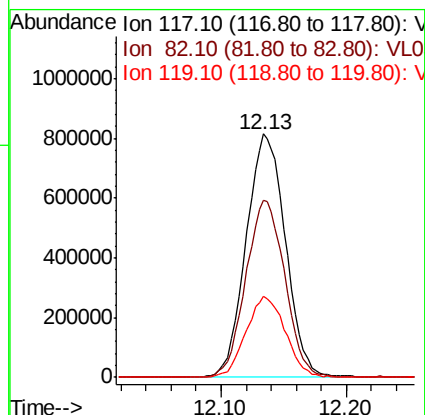
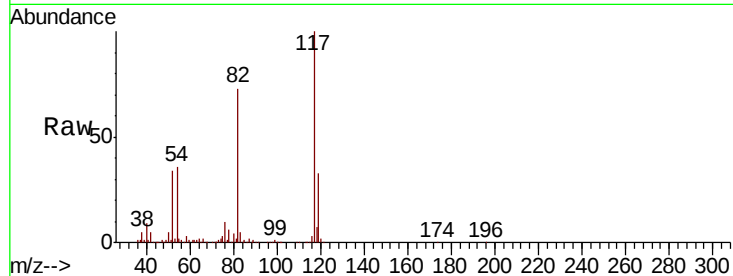




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.13 min Scan# 2907
Delta R.T. -0.01 min
Lab File: VL034413.D
Acq: 25 Nov 2019 19:40

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 1775073
Ion Ratio Lower Upper
117 100
82 72.4 57.5 86.3
119 33.4 25.4 38.2



#68
1-Bromo-4-Fluorobenzene
Concen: 10.211 ppbv
RT: 14.47 min Scan# 3634
Delta R.T. -0.01 min
Lab File: VL034413.D
Acq: 25 Nov 2019 19:40

Tgt Ion: 95 Resp: 1524856
Ion Ratio Lower Upper
95 100
174 65.5 52.2 78.2
175 4.7 3.8 5.8

