

Data File : VL034611.D
Acq On : 6 Feb 2020 22:58
Operator : SY/AP
Sample : L1435-07
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-7

Quant Time: Feb 07 07:39:31 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 30 17:16:44 2020
QLast Update : Thu Jan 30 17:16:44 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	927571	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.21	114	1914087	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.15	117	1865960	10.00	ppbv	0.04

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.49 95 1645311 10.43 ppbv 0.04
Spiked Amount 10.000 Range 65 - 135 Recovery = 104.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	101107	0.495	ppbv	93
3) Chlorodifluoromethane	2.94	51	84523	0.754	ppbv #	72
4) Chloromethane	3.12	50	35332	0.515	ppbv	97
9) Propene	3.19	41	69392	1.590	ppbv	89
10) Heptane	8.17	43	3914	0.036	ppbv #	1
11) Trichlorofluoromethane	3.95	101	44834	0.242	ppbv #	81
12) 1,1,2-Trichlorotrifluoroet	4.48	101	3776	0.031	ppbv #	14
13) Ethanol	3.61	45	5851219	500.569	ppbv	94
15) Acetone	3.84	43	1401347	10.279	ppbv	99
16) 1,3-Butadiene	3.30	39	8175	0.151	ppbv #	8
19) Isopropyl Alcohol	3.99	45	576809	7.250	ppbv #	96
20) Methylene Chloride	4.35	84	125604	2.420	ppbv	96
21) Allyl Chloride	4.38	41	3253	0.038	ppbv #	1
23) Vinyl Acetate	5.07	43	47032	0.302	ppbv #	52
25) Ethyl Acetate	5.70	43	96627	0.438	ppbv #	80
26) Hexane	5.71	57	94666	1.024	ppbv	80
30) Cyclohexane	7.17	84	3982	0.058	ppbv #	1
34) 2-Butanone	5.27	43	38214	0.275	ppbv	96
35) Carbon Tetrachloride	7.05	117	6635	0.036	ppbv #	70
36) Benzene	6.92	78	86843	0.510	ppbv	96
39) 1,2-Dichloropropane	7.21	63	554877	7.863	ppbv #	19
44) 2,2,4-Trimethylpentane	7.91	57	10192	0.033	ppbv #	41
52) Tetrachloroethene	11.29	164	8607	0.126	ppbv #	73
53) Toluene	9.86	91	313246	1.675	ppbv	100
58) Ethyl Benzene	12.79	91	15282	0.061	ppbv #	77
59) m/p-Xylene	13.06	91	30214	0.137	ppbv #	32
60) o-Xylene	13.77	91	12486	0.056	ppbv #	33
74) 1,2,4-Trimethylbenzene	16.84	105	13232	0.050	ppbv #	42

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

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IA-7

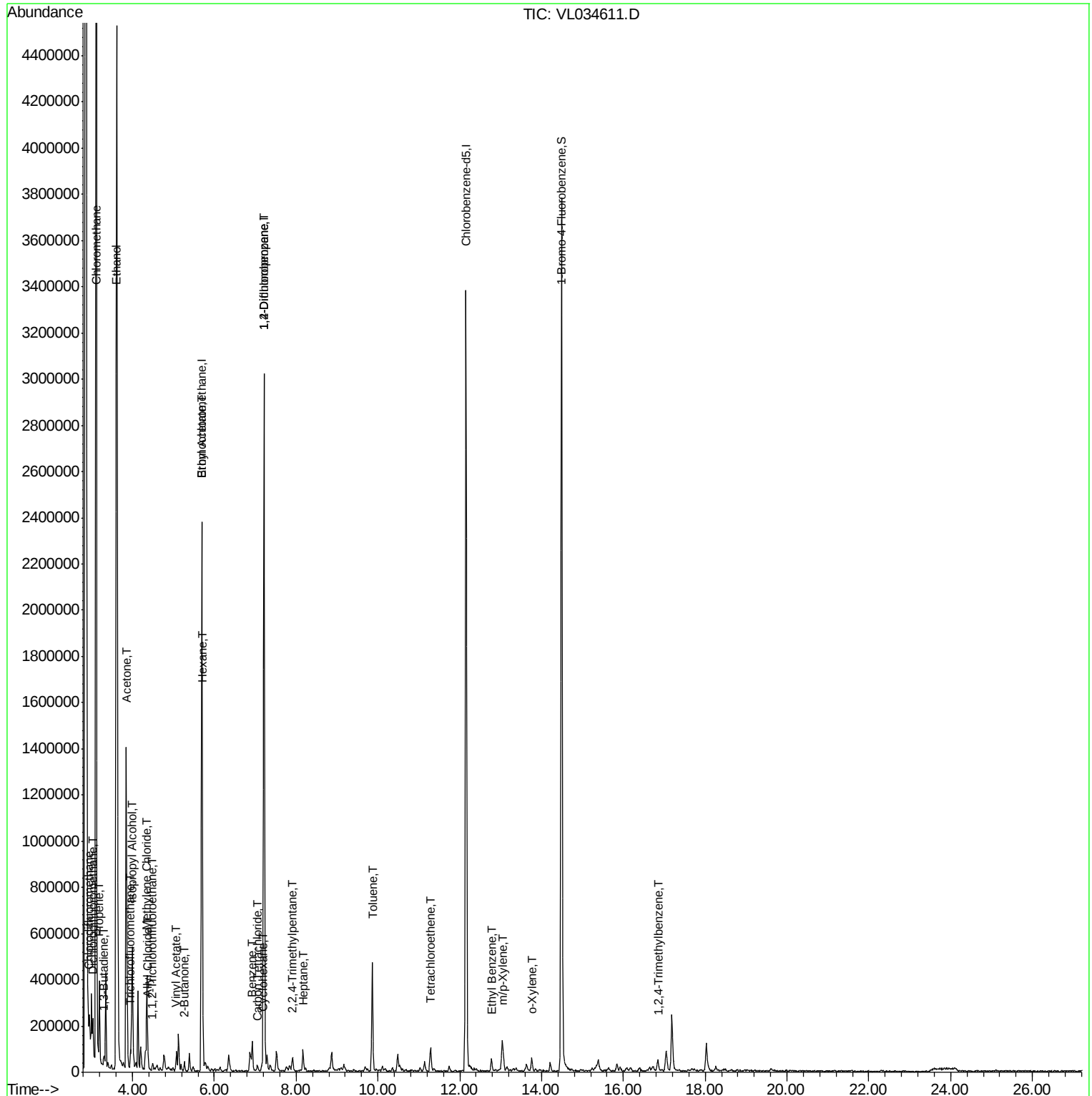
Quant Time: Feb 07 07:39:31 2020

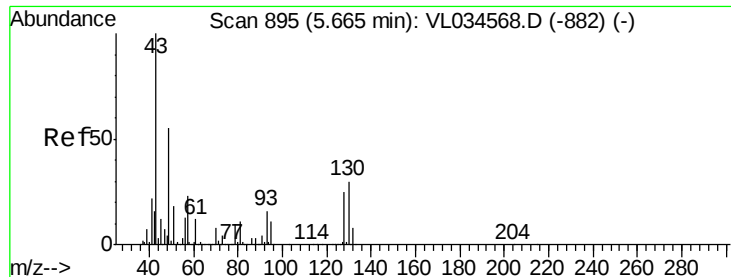
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL013020AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Thu Jan 30 17:16:44 2020

QLast Update : Thu Jan 30 17:16:44 2020

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.03 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampleId :

IA-7

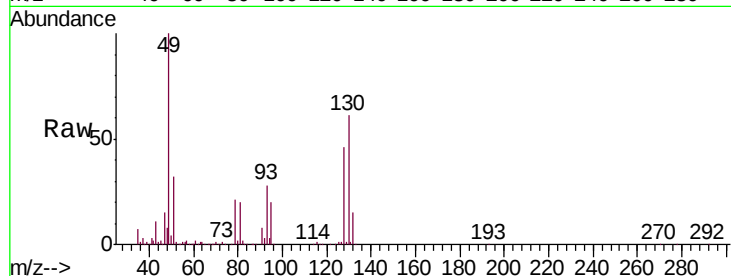
Tgt Ion: 49 Resp: 927571

Ion Ratio Lower Upper

49 100

128 46.0 22.7 68.1

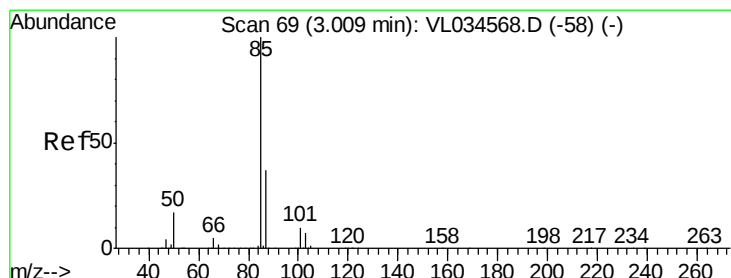
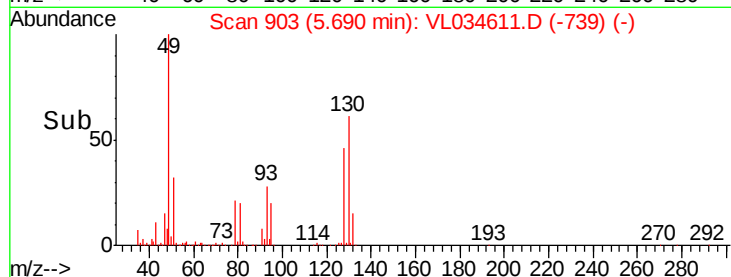
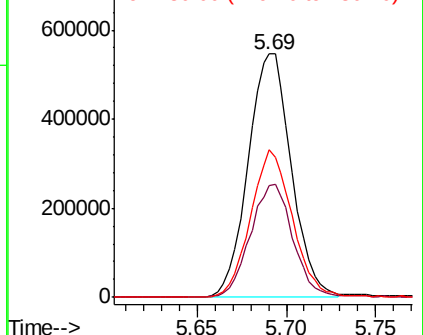
130 58.9 28.6 85.8



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: 0.495 ppbv

RT: 3.03 min Scan# 76

Delta R.T. 0.02 min

Lab File: VL034611.D

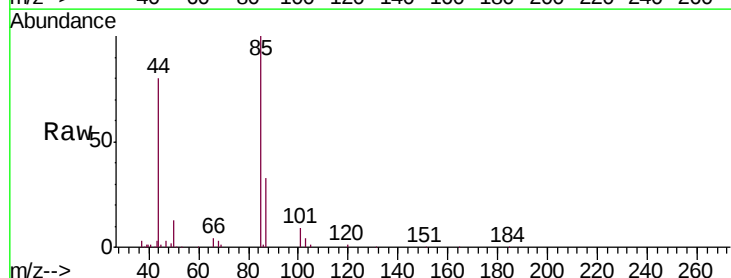
Acq: 6 Feb 2020 22:58

Tgt Ion: 85 Resp: 101107

Ion Ratio Lower Upper

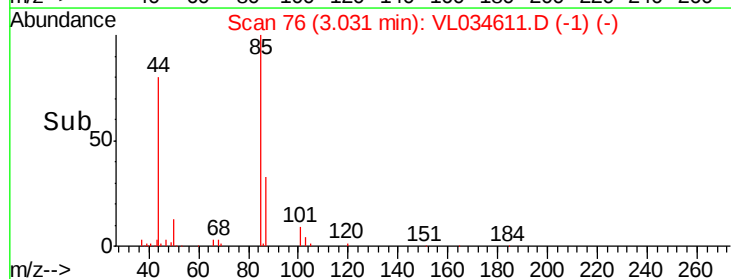
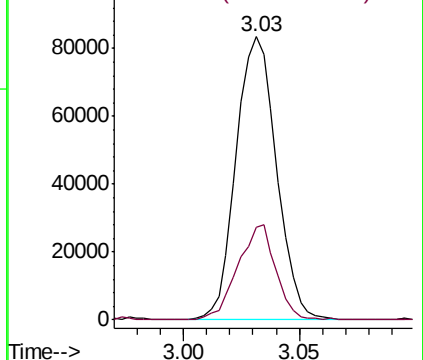
85 100

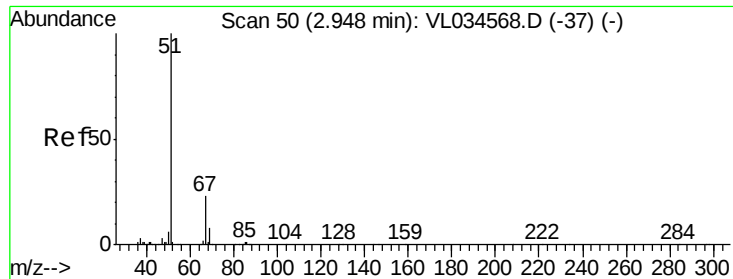
87 32.8 29.5 44.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.754 ppbv

RT: 2.94 min Scan# 49

Delta R.T. -0.00 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampled :

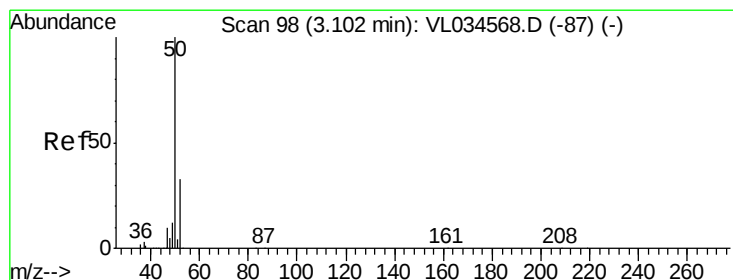
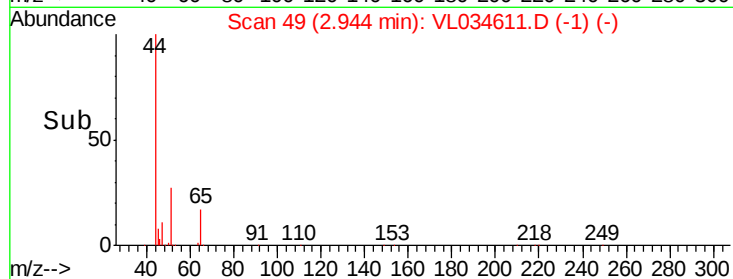
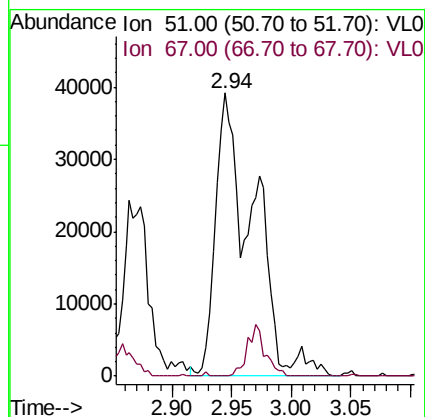
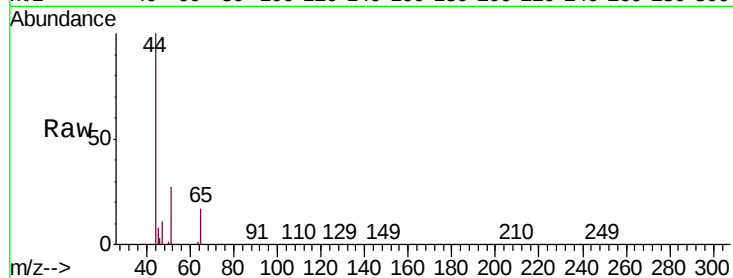
IA-7

Tgt Ion: 51 Resp: 84523

Ion Ratio Lower Upper

51 100

67 8.7 17.8 26.8#



#4

Chloromethane

Concen: 0.515 ppbv

RT: 3.12 min Scan# 105

Delta R.T. 0.02 min

Lab File: VL034611.D

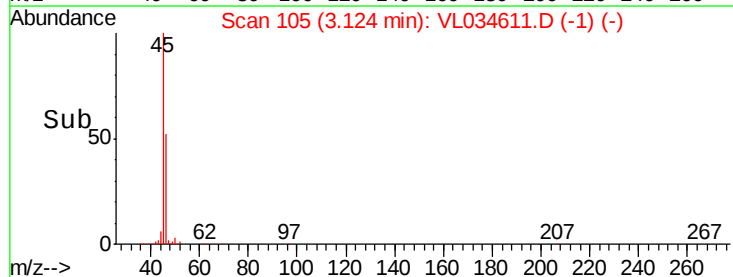
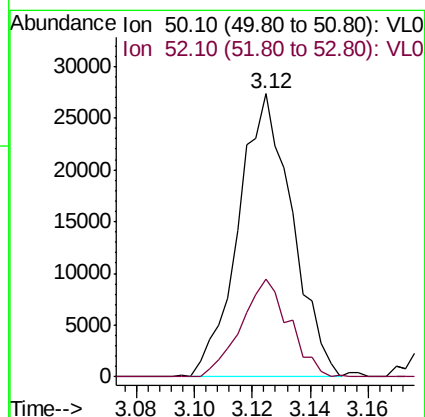
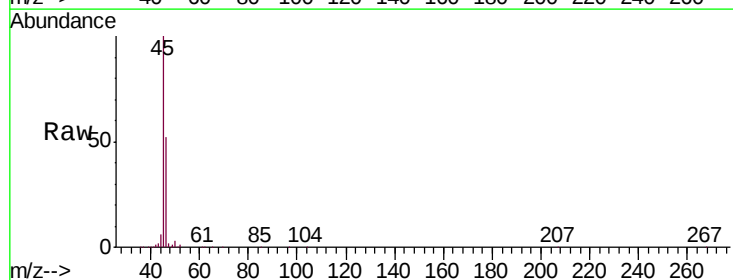
Acq: 6 Feb 2020 22:58

Tgt Ion: 50 Resp: 35332

Ion Ratio Lower Upper

50 100

52 34.8 26.6 39.8





#9

Propene

Concen: 1.590 ppbv

RT: 3.19 min Scan# 126

Delta R.T. 0.22 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampleId :

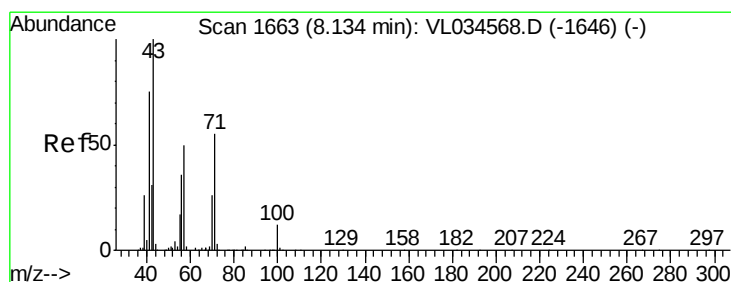
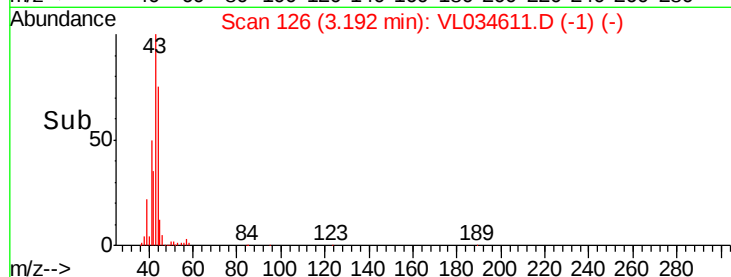
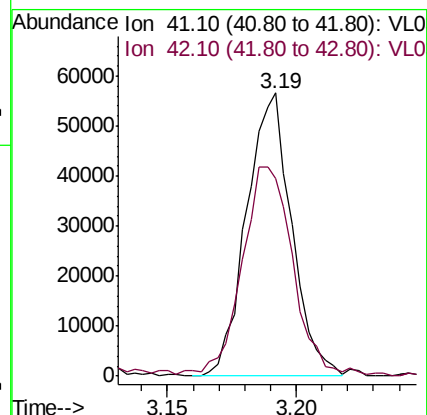
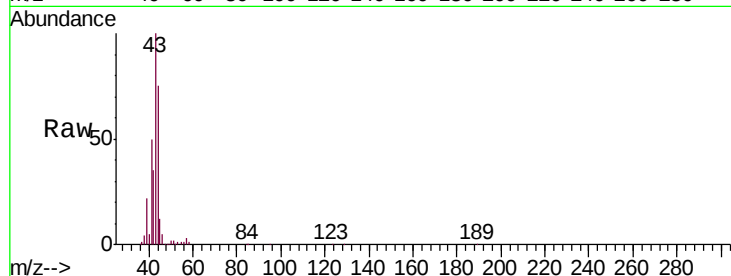
IA-7

Tgt Ion: 41 Resp: 69392

Ion Ratio Lower Upper

41 100

42 80.6 57.0 85.4



#10

Heptane

Concen: 0.036 ppbv

RT: 8.17 min Scan# 1674

Delta R.T. 0.04 min

Lab File: VL034611.D

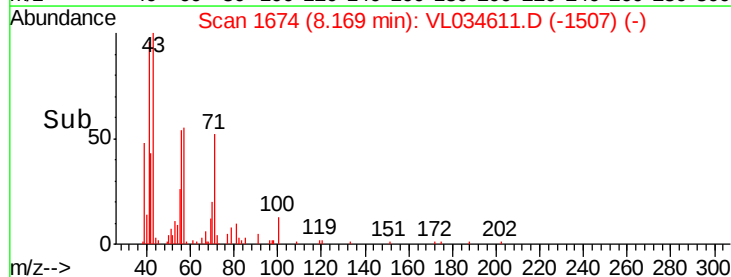
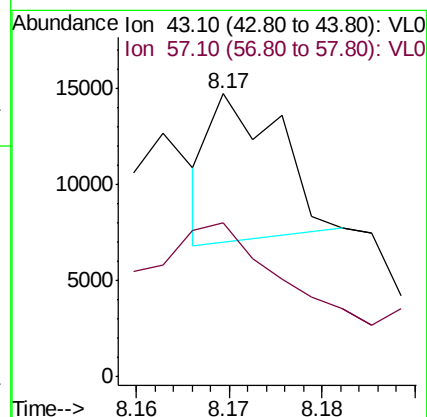
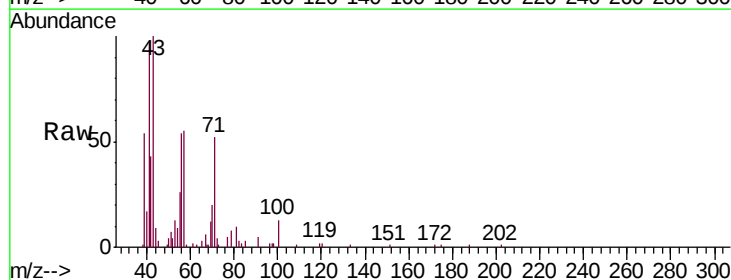
Acq: 6 Feb 2020 22:58

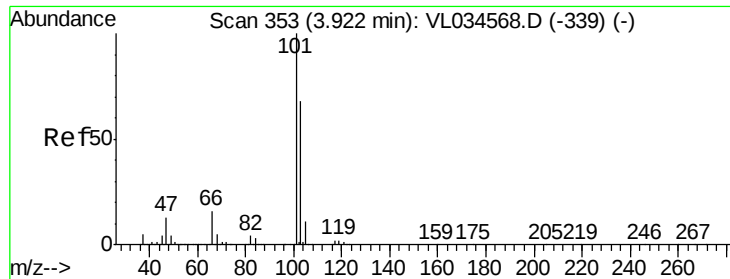
Tgt Ion: 43 Resp: 3914

Ion Ratio Lower Upper

43 100

57 356.0 41.2 61.8#

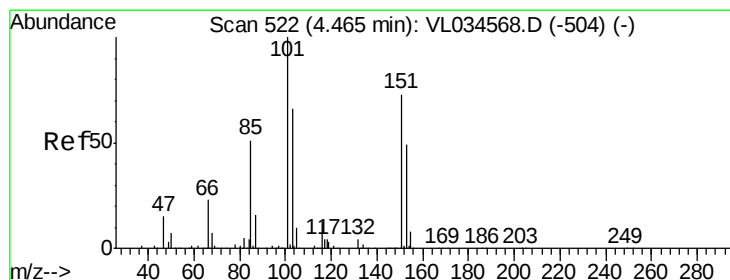
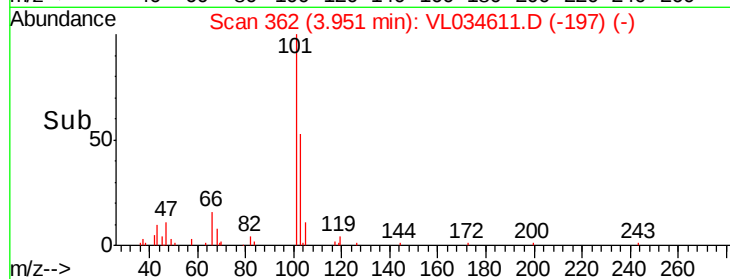
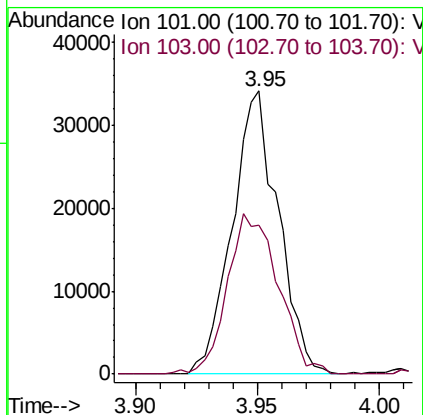
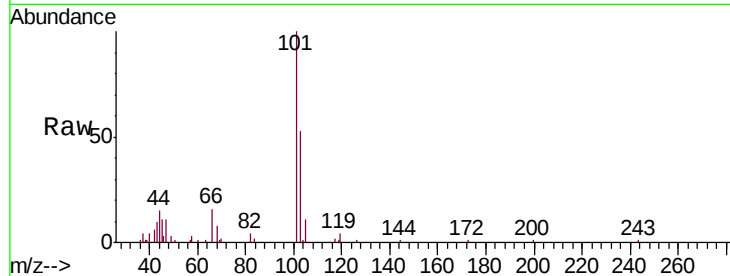




#11
 Trichlorofluoromethane
 Concen: 0.242 ppbv
 RT: 3.95 min Scan# 362
 Delta R.T. 0.03 min
 Lab File: VL034611.D
 Acq: 6 Feb 2020 22:58

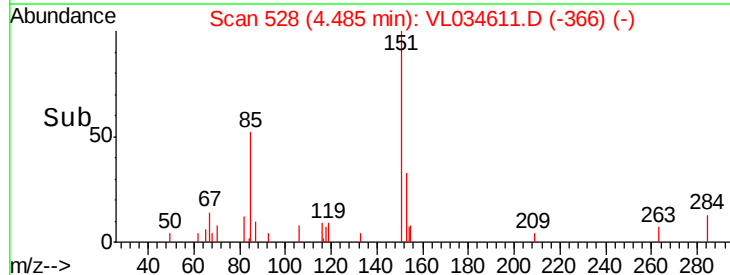
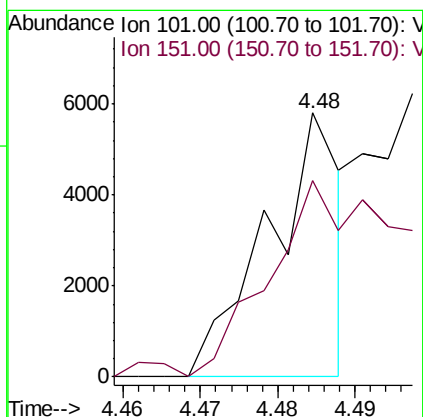
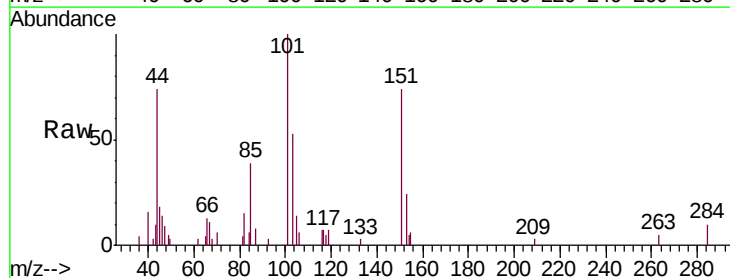
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-7

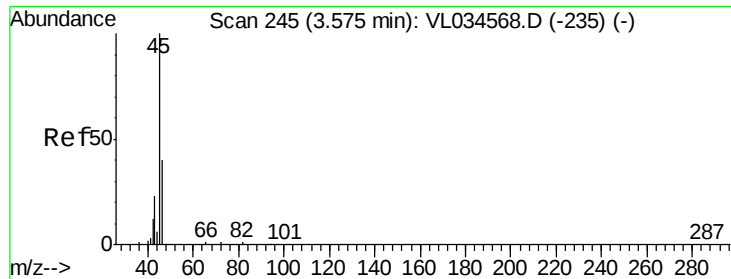
Tgt Ion:101 Resp: 44834
 Ion Ratio Lower Upper
 101 100
 103 52.8 54.4 81.6#



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.031 ppbv
 RT: 4.48 min Scan# 528
 Delta R.T. 0.02 min
 Lab File: VL034611.D
 Acq: 6 Feb 2020 22:58

Tgt Ion:101 Resp: 3776
 Ion Ratio Lower Upper
 101 100
 151 0.0 57.0 85.6#





#13

Ethanol

Concen: 500.569 ppbv

RT: 3.61 min Scan# 257

Delta R.T. 0.04 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampleId :

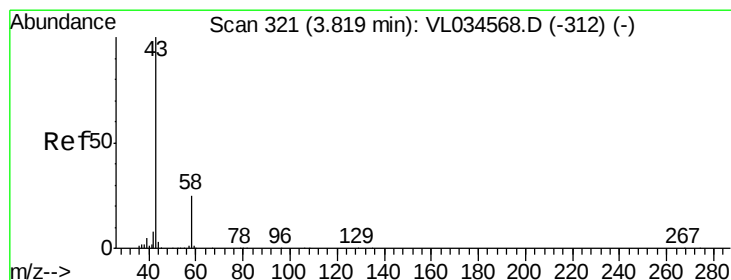
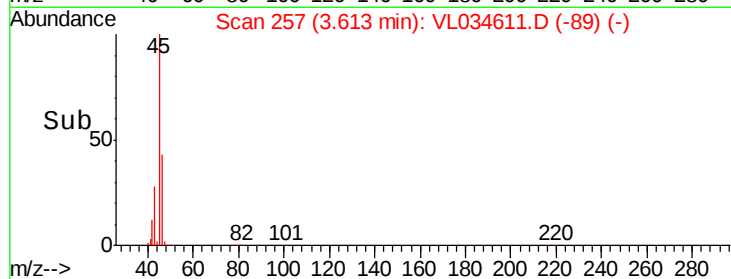
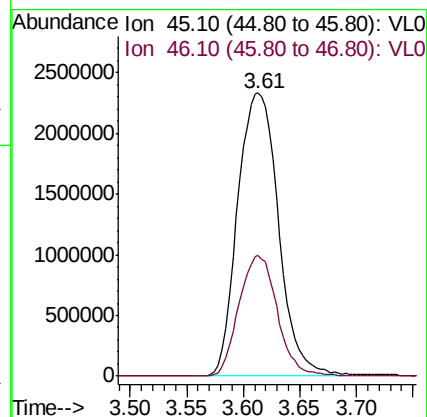
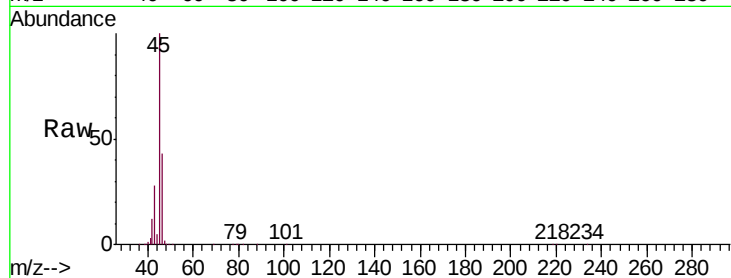
IA-7

Tgt Ion: 45 Resp: 5851219

Ion Ratio Lower Upper

45 100

46 40.4 14.8 59.2



#15

Acetone

Concen: 10.279 ppbv

RT: 3.84 min Scan# 329

Delta R.T. 0.03 min

Lab File: VL034611.D

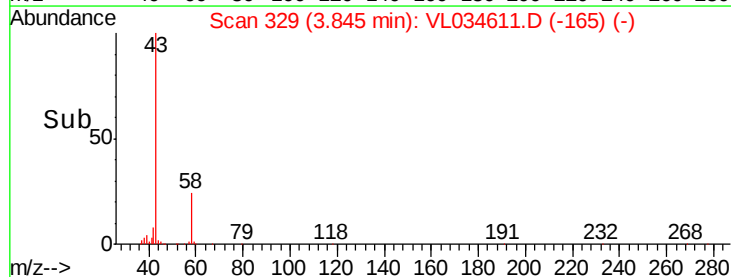
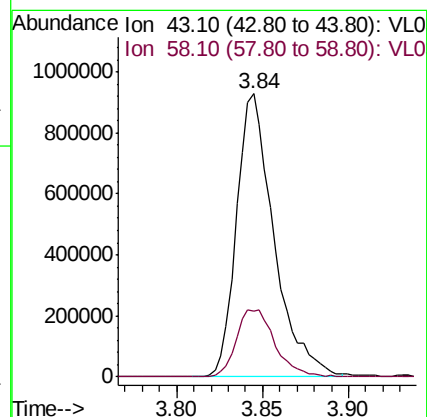
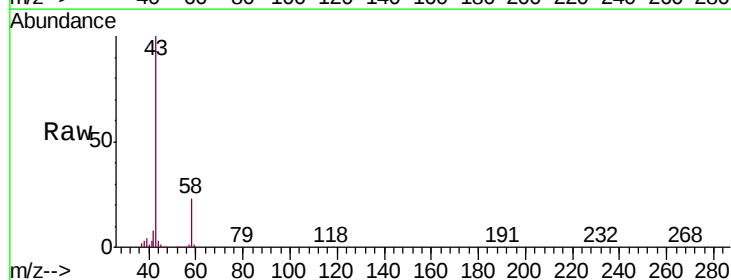
Acq: 6 Feb 2020 22:58

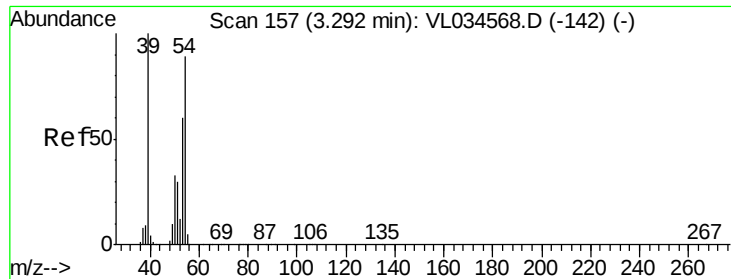
Tgt Ion: 43 Resp: 1401347

Ion Ratio Lower Upper

43 100

58 24.9 20.3 30.5

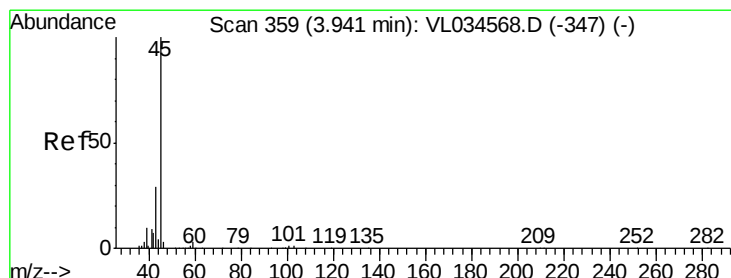
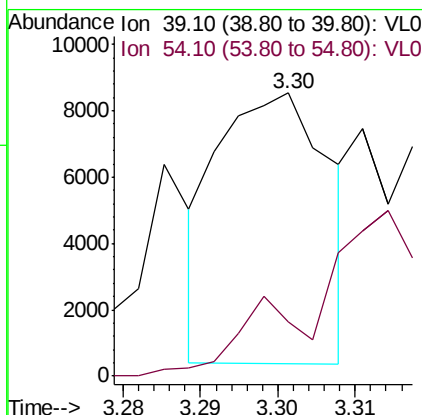
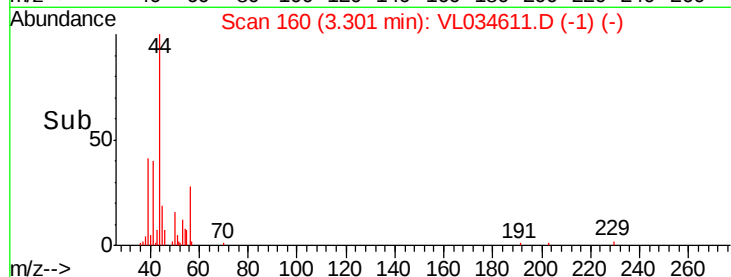
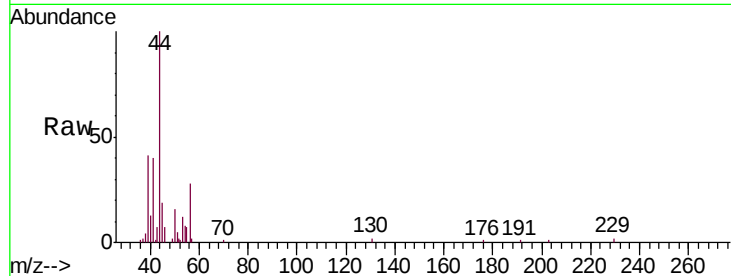




#16
 1,3-Butadiene
 Concen: 0.151 ppbv
 RT: 3.30 min Scan# 160
 Delta R.T. 0.01 min
 Lab File: VL034611.D
 Acq: 6 Feb 2020 22:58

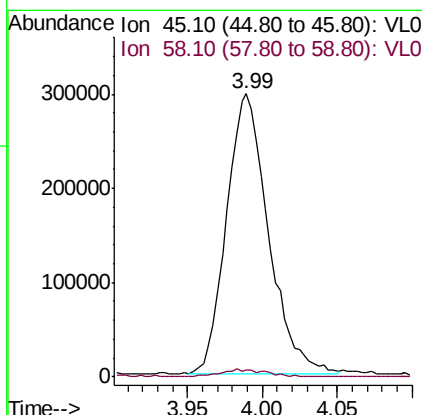
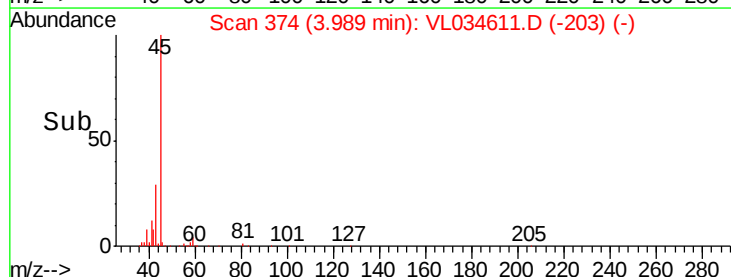
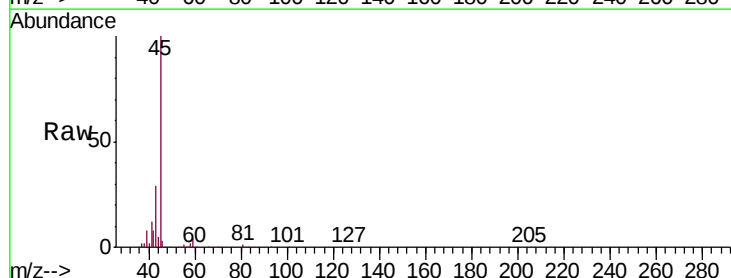
Instrument :
 MSVOA_L
 ClientSampleID :
 IA-7

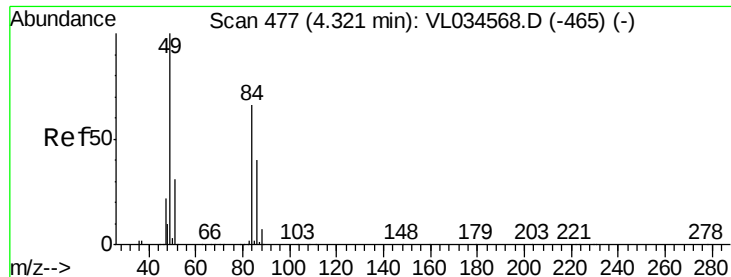
Tgt Ion: 39 Resp: 8175
 Ion Ratio Lower Upper
 39 100
 54 0.0 66.7 100.1#



#19
 Isopropyl Alcohol
 Concen: 7.250 ppbv
 RT: 3.99 min Scan# 374
 Delta R.T. 0.05 min
 Lab File: VL034611.D
 Acq: 6 Feb 2020 22:58

Tgt Ion: 45 Resp: 576809
 Ion Ratio Lower Upper
 45 100
 58 3.4 1.7 2.5#





#20

Methylene Chloride

Concen: 2.420 ppbv

RT: 4.35 min Scan# 486

Delta R.T. 0.03 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampleId :

IA-7

Tgt Ion: 84 Resp: 125604

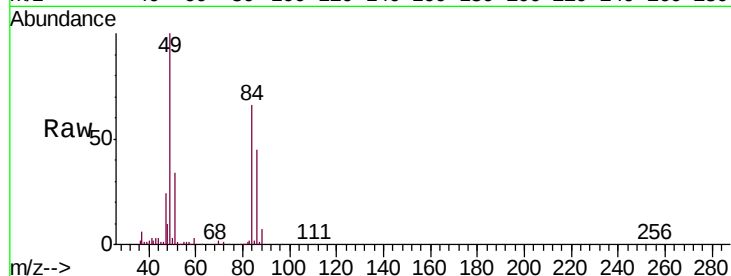
Ion Ratio Lower Upper

84 100

49 149.9 122.4 183.6

51 50.1 38.6 57.8

86 68.0 49.0 73.6

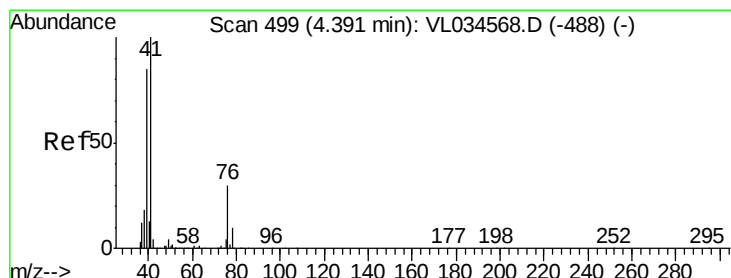
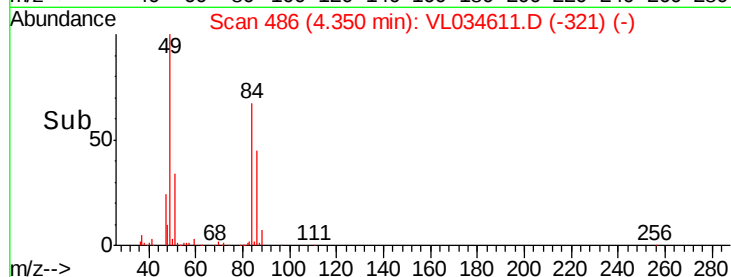
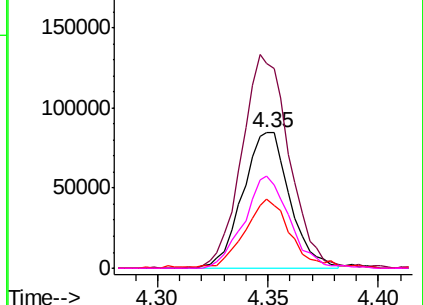


Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#21

Allyl Chloride

Concen: 0.038 ppbv

RT: 4.38 min Scan# 496

Delta R.T. -0.01 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

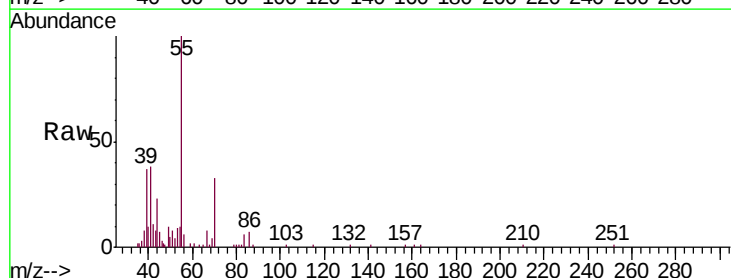
Tgt Ion: 41 Resp: 3253

Ion Ratio Lower Upper

41 100

76 0.0 24.2 36.2#

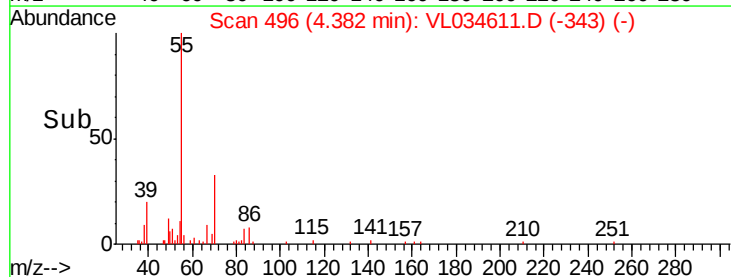
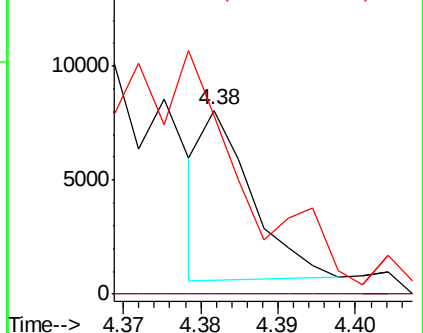
39 539.8 68.3 102.5#

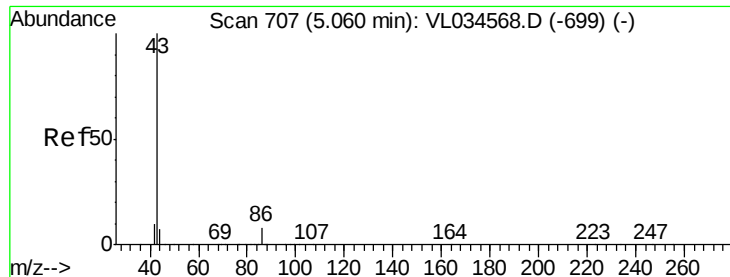


Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0





#23

Vinyl Acetate

Concen: 0.302 ppbv

RT: 5.07 min Scan# 711

Delta R.T. 0.01 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampleId :

IA-7

Tgt Ion: 43 Resp: 47032

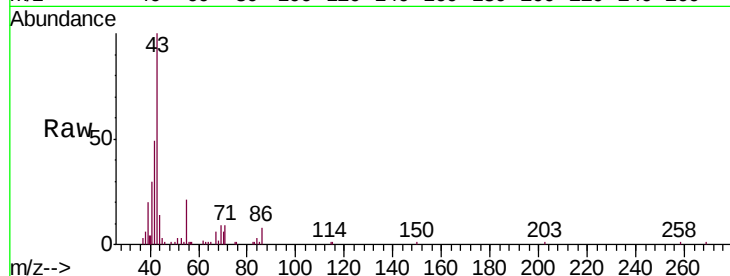
Ion Ratio Lower Upper

43 100

86 8.1 5.9 8.9

42 48.9 8.8 13.2#

44 9.7 5.0 7.6#

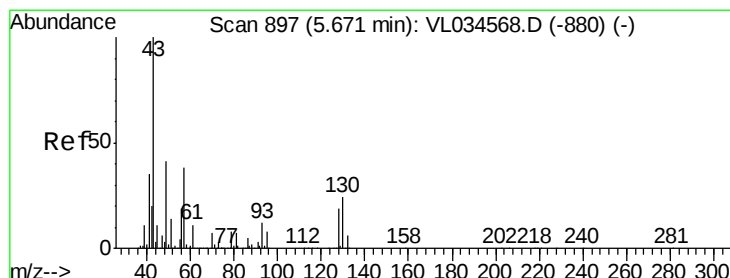
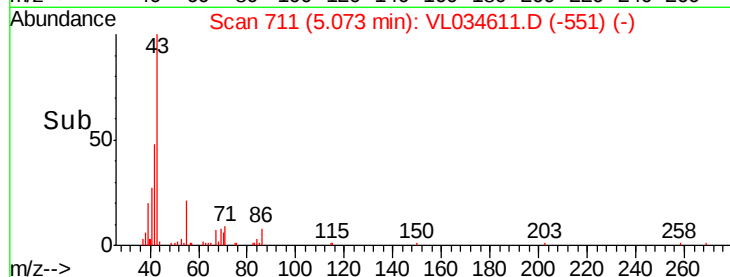
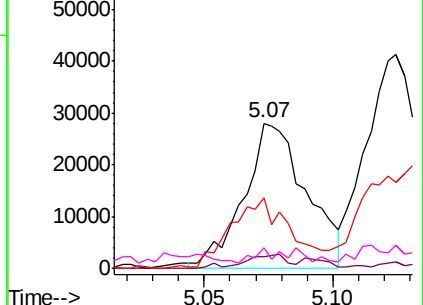


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.438 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.03 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Tgt Ion: 43 Resp: 96627

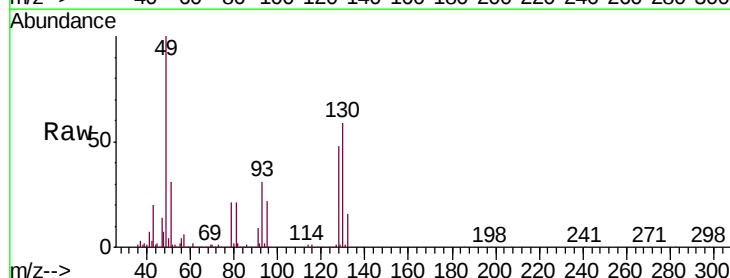
Ion Ratio Lower Upper

43 100

45 19.8 8.5 12.7#

61 16.1 7.8 11.6#

70 12.7 5.8 8.8#

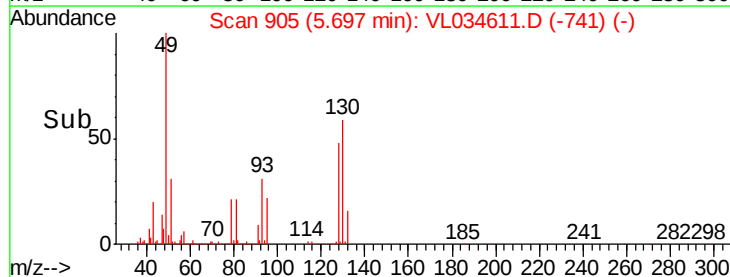
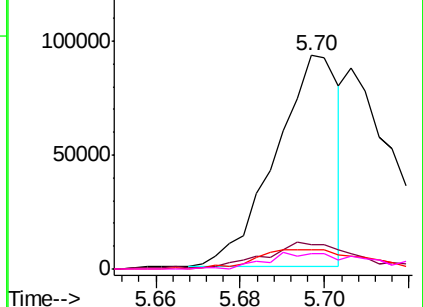


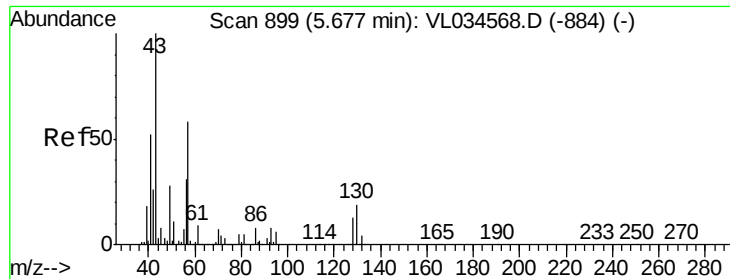
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0

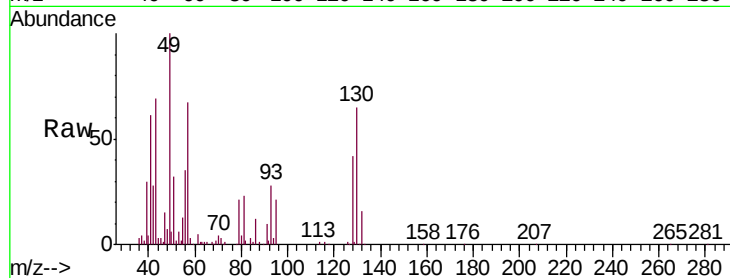




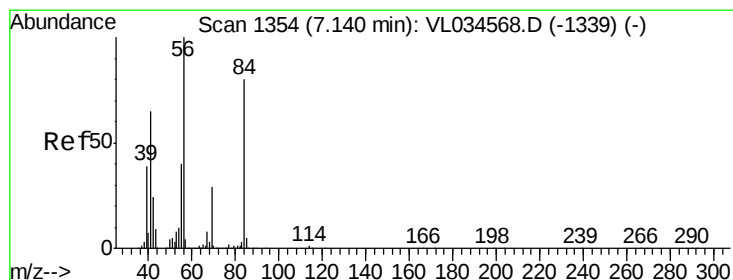
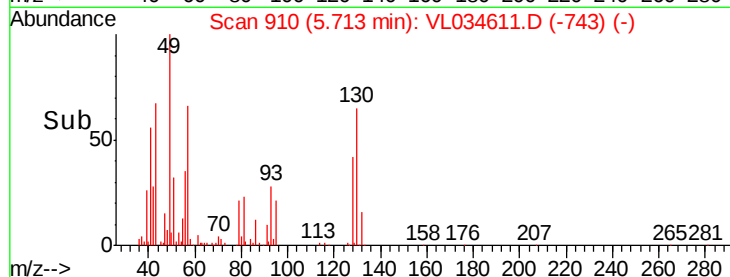
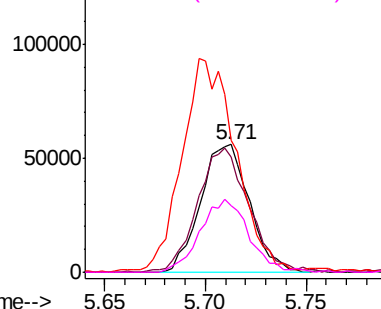
#26
Hexane
Concen: 1.024 ppbv
RT: 5.71 min Scan# 910
Delta R.T. 0.04 min
Lab File: VL034611.D
Acq: 6 Feb 2020 22:58

Instrument :
MSVOA_L
ClientSampled :
IA-7

Tgt Ion:	57	Resp:	94666
Ion	Ratio	Lower	Upper
57	100		
41	103.2	76.2	114.2
43	189.9	189.9	284.9
56	57.2	43.6	65.4

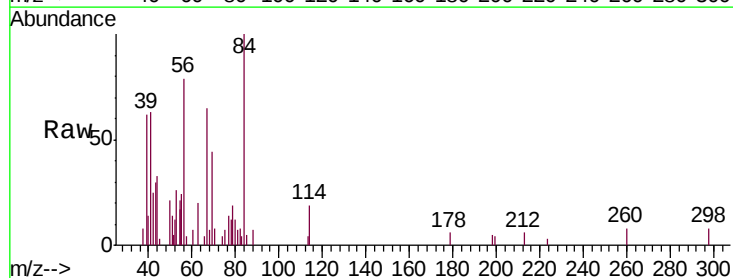


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

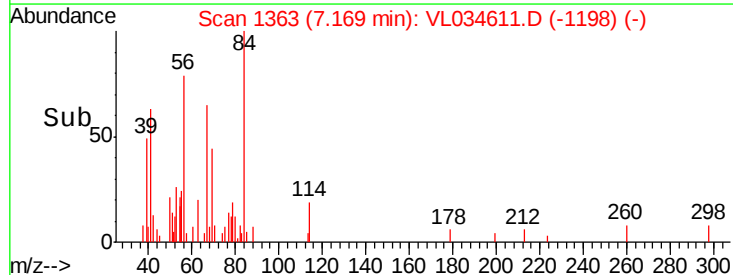
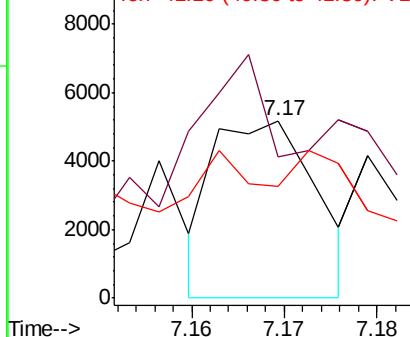


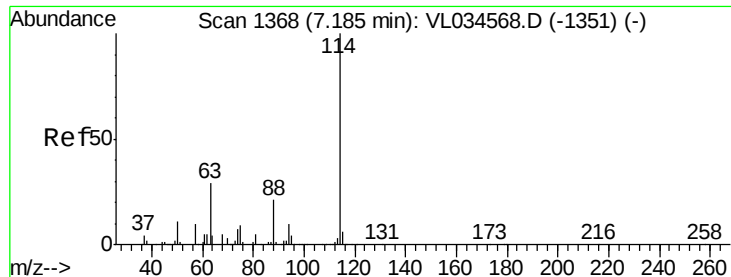
#30
Cyclohexane
Concen: 0.058 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. 0.03 min
Lab File: VL034611.D
Acq: 6 Feb 2020 22:58

Tgt Ion:	84	Resp:	3982
Ion	Ratio	Lower	Upper
84	100		
56	261.3	110.5	165.7#
41	270.2	71.9	107.9#



Abundance Ion 84.20 (83.90 to 84.90): VL0
Ion 56.10 (55.80 to 56.80): VL0
Ion 41.10 (40.80 to 41.80): VL0

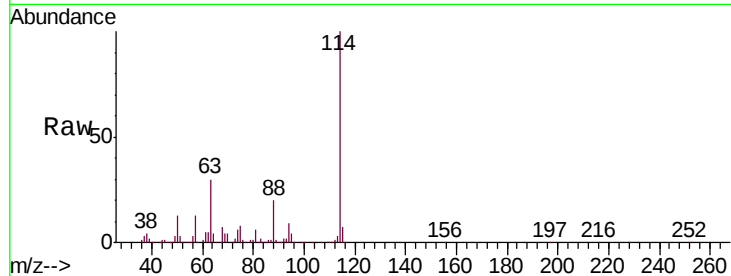




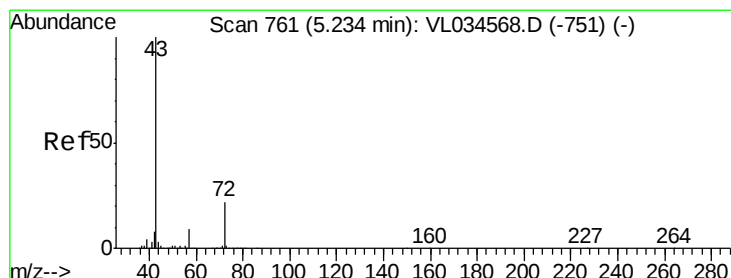
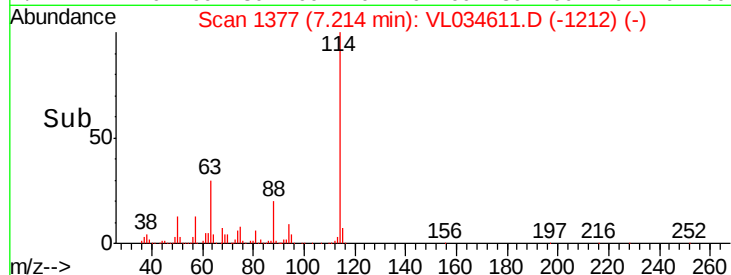
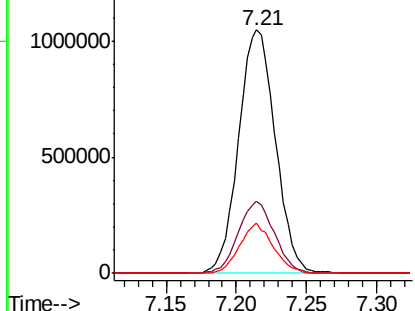
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.21 min Scan# 1377
 Delta R.T. 0.03 min
 Lab File: VL034611.D
 Acq: 6 Feb 2020 22:58

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-7

Tgt Ion:114 Resp: 1914087
 Ion Ratio Lower Upper
 114 100
 63 29.4 24.1 36.1
 88 18.9 15.9 23.9

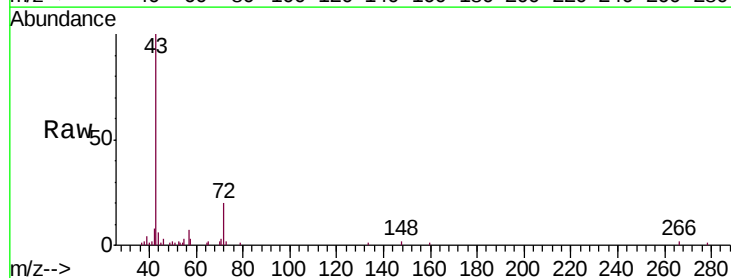


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

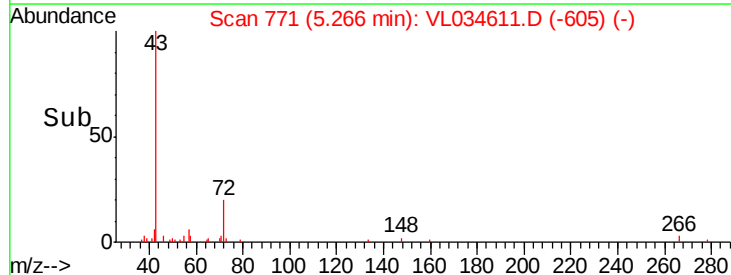
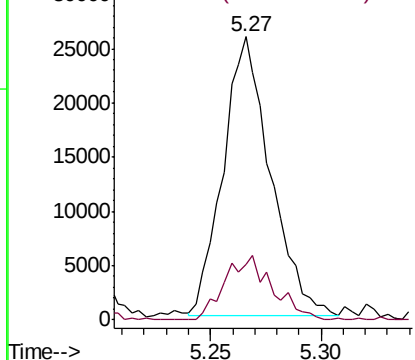


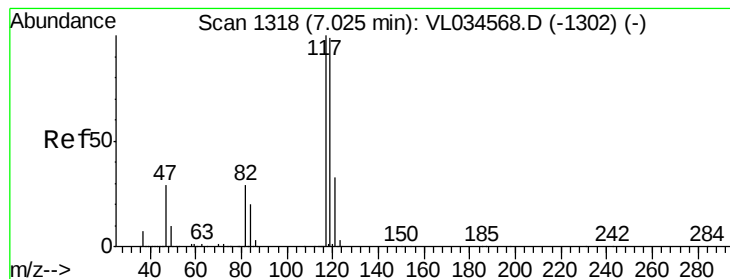
#34
 2-Butanone
 Concen: 0.275 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T. 0.03 min
 Lab File: VL034611.D
 Acq: 6 Feb 2020 22:58

Tgt Ion: 43 Resp: 38214
 Ion Ratio Lower Upper
 43 100
 72 23.2 17.2 25.8



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





#35

Carbon Tetrachloride

Concen: 0.036 ppbv

RT: 7.05 min Scan# 1326

Delta R.T. 0.03 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampleId :

IA-7

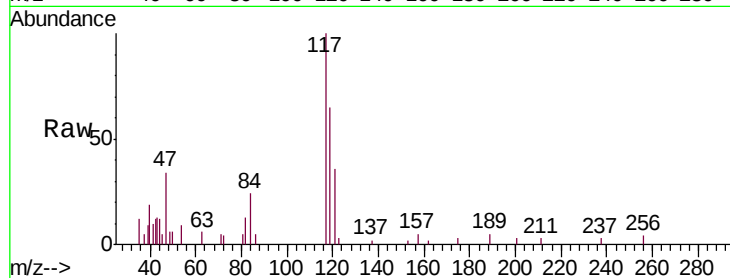
Tgt Ion: 117 Resp: 6635

Ion Ratio Lower Upper

117 100

119 62.6 79.5 119.3#

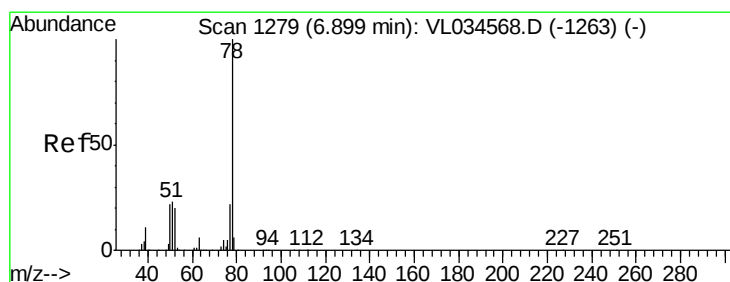
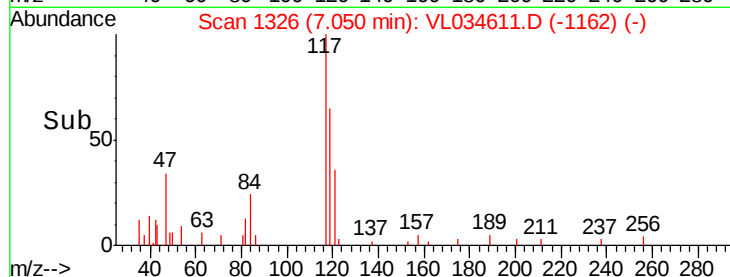
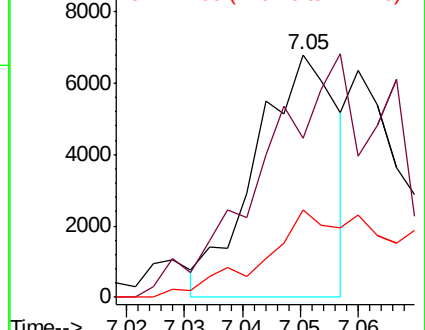
121 37.6 26.2 39.2



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.510 ppbv

RT: 6.92 min Scan# 1287

Delta R.T. 0.03 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

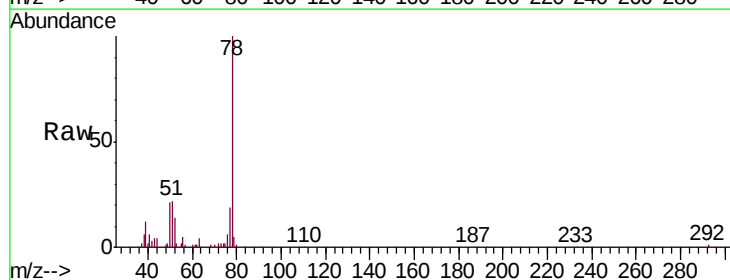
Tgt Ion: 78 Resp: 86843

Ion Ratio Lower Upper

78 100

77 18.7 17.3 25.9

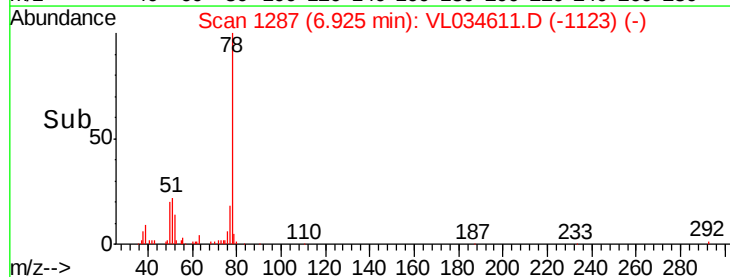
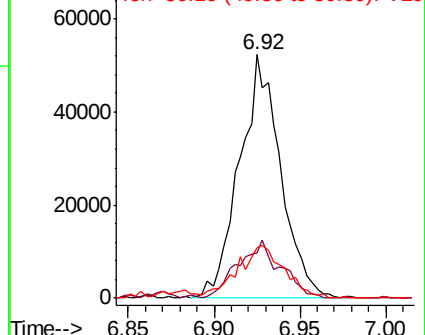
50 20.9 17.4 26.2

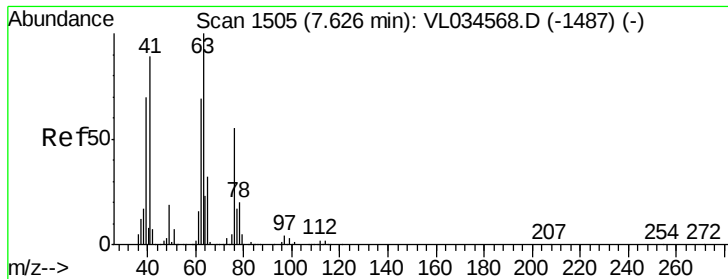


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

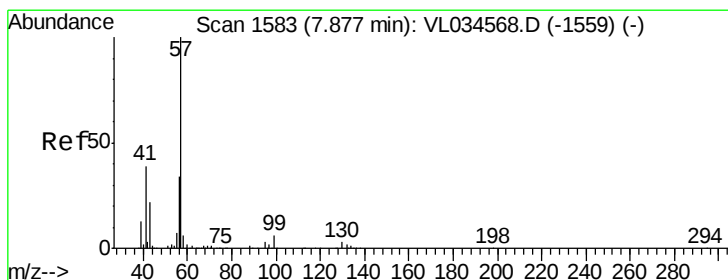
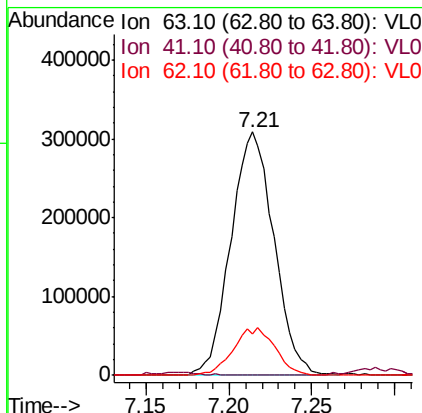
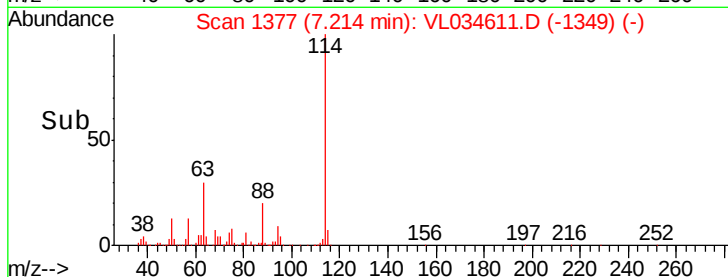
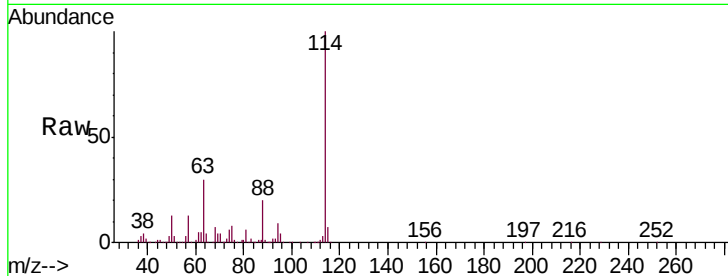




#39
 1,2-Dichloropropane
 Concen: 7.863 ppbv
 RT: 7.21 min Scan# 1377
 Delta R.T. -0.41 min
 Lab File: VL034611.D
 Acq: 6 Feb 2020 22:58

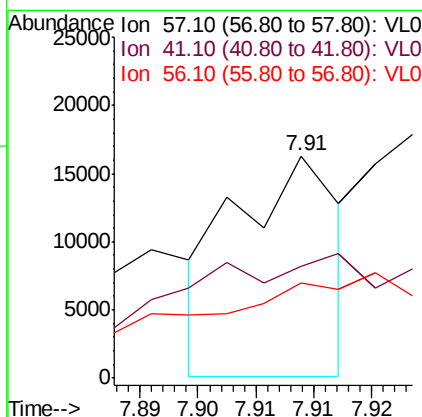
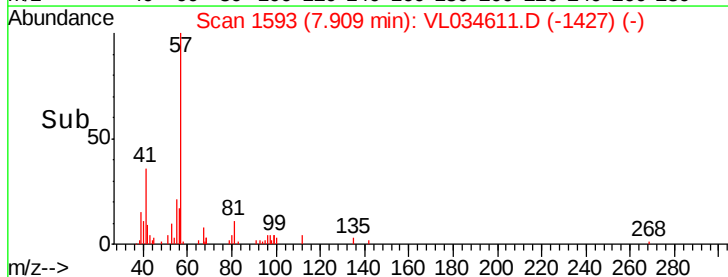
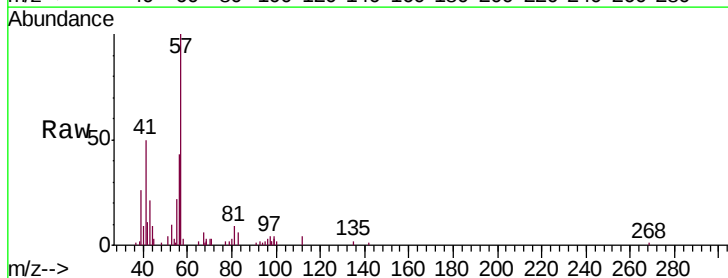
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-7

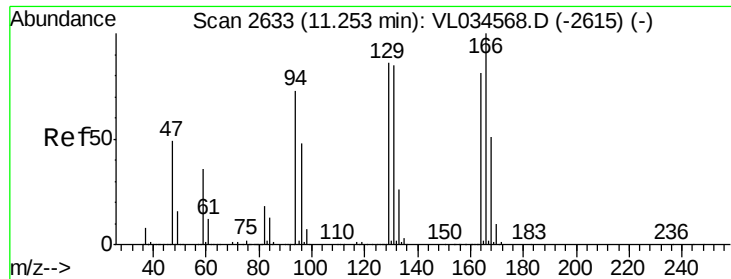
Tgt Ion: 63 Resp: 554877
 Ion Ratio Lower Upper
 63 100
 41 0.0 71.0 106.4#
 62 17.0 55.4 83.0#



#44
 2,2,4-Trimethylpentane
 Concen: 0.033 ppbv
 RT: 7.91 min Scan# 1593
 Delta R.T. 0.03 min
 Lab File: VL034611.D
 Acq: 6 Feb 2020 22:58

Tgt Ion: 57 Resp: 10192
 Ion Ratio Lower Upper
 57 100
 41 0.0 28.9 43.3#
 56 0.0 25.5 38.3#





#52

Tetrachloroethene

Concen: 0.126 ppbv

RT: 11.29 min Scan# 2646

Delta R.T. 0.04 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampleId :

IA-7

Tgt Ion:164 Resp: 8607

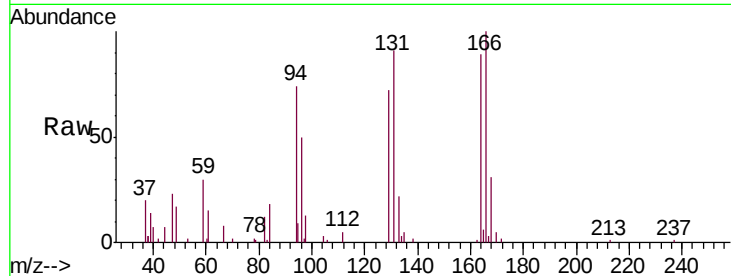
Ion Ratio Lower Upper

164 100

166 100.9 99.0 148.4

129 66.7 85.3 127.9#

131 80.4 84.2 126.2#

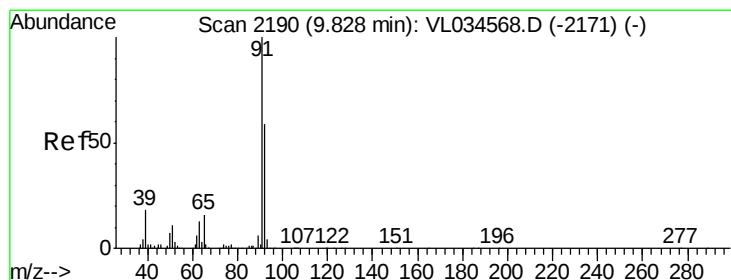
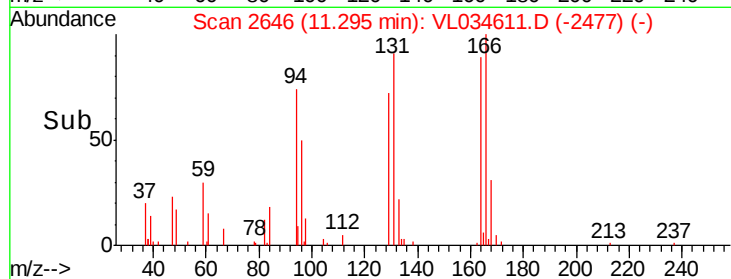
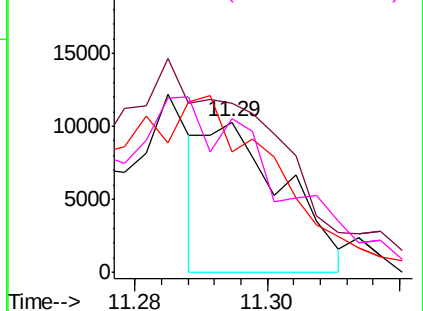


Abundance Ion 163.90 (163.60 to 164.60): V

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: 1.675 ppbv

RT: 9.86 min Scan# 2201

Delta R.T. 0.04 min

Lab File: VL034611.D

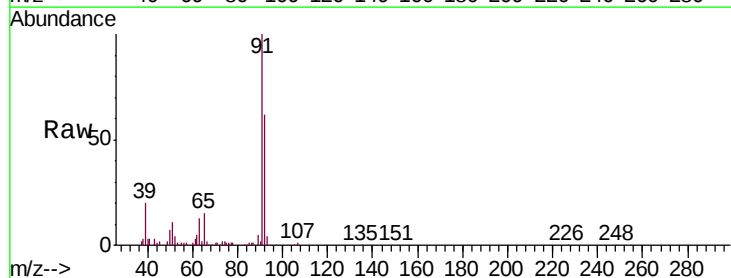
Acq: 6 Feb 2020 22:58

Tgt Ion: 91 Resp: 313246

Ion Ratio Lower Upper

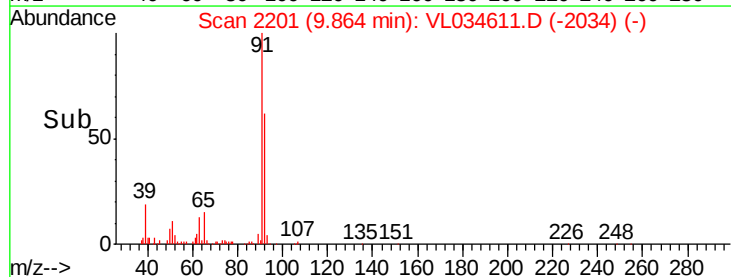
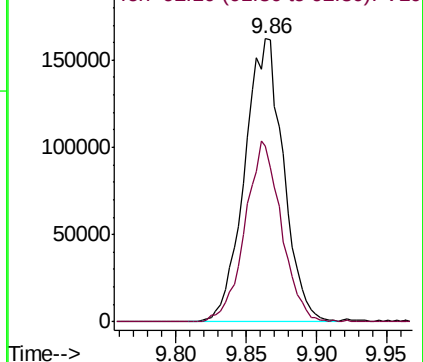
91 100

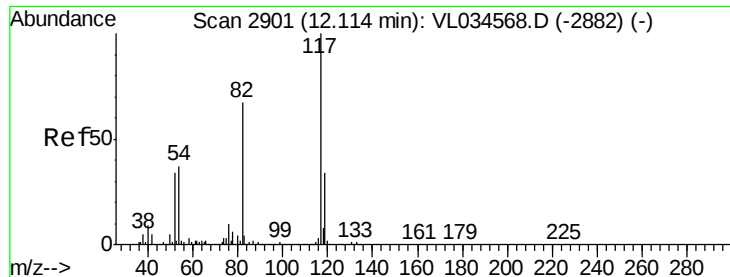
92 60.0 48.2 72.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

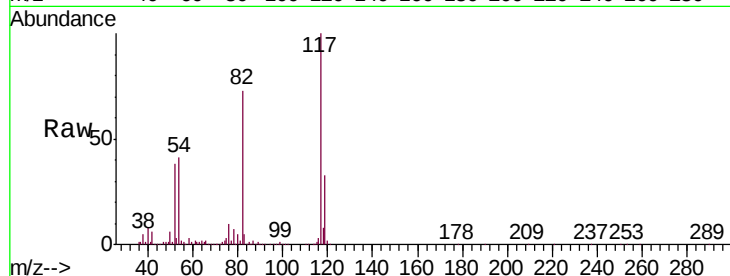




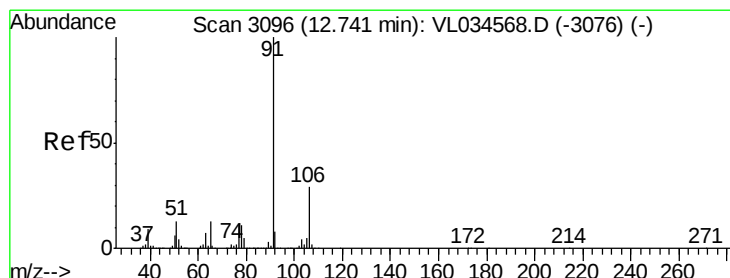
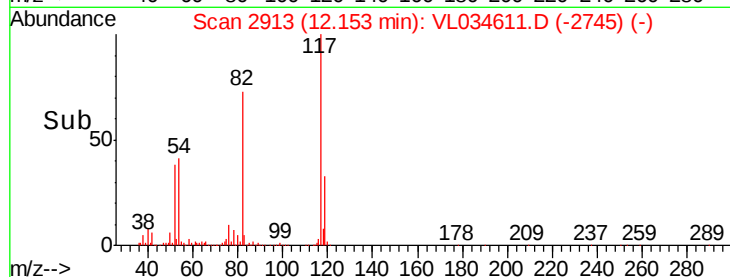
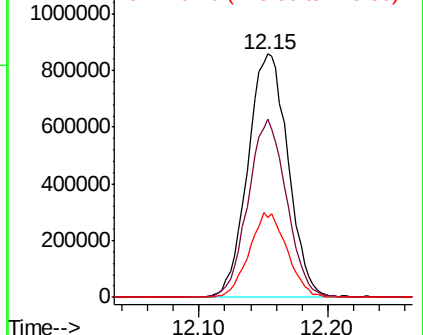
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.15 min Scan# 2913
Delta R.T. 0.04 min
Lab File: VL034611.D
Acq: 6 Feb 2020 22:58

Instrument :
MSVOA_L
ClientSampleId :
IA-7

Tgt Ion:117 Resp: 1865960
Ion Ratio Lower Upper
117 100
82 70.4 54.2 81.4
119 33.1 26.1 39.1

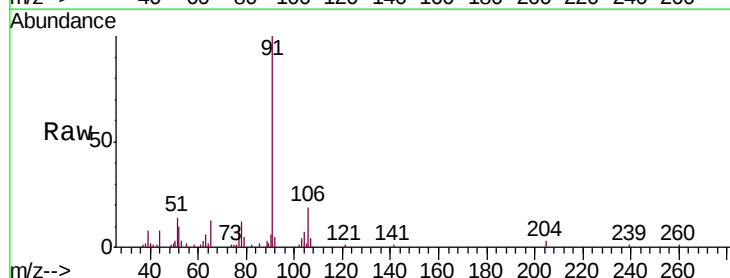


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

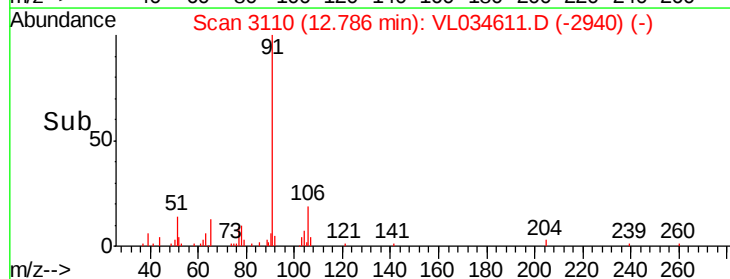
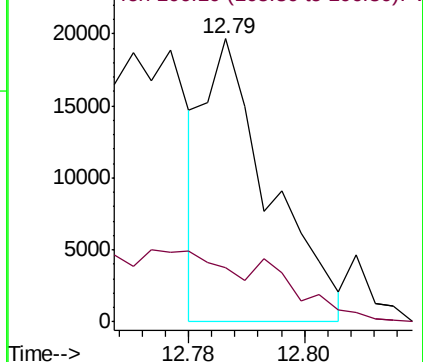


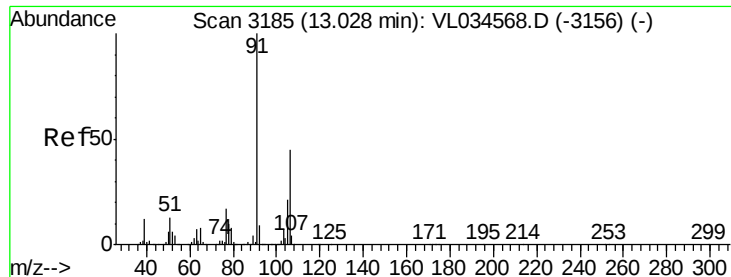
#58
Ethyl Benzene
Concen: 0.061 ppbv
RT: 12.79 min Scan# 3110
Delta R.T. 0.04 min
Lab File: VL034611.D
Acq: 6 Feb 2020 22:58

Tgt Ion: 91 Resp: 15282
Ion Ratio Lower Upper
91 100
106 16.8 23.3 34.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V

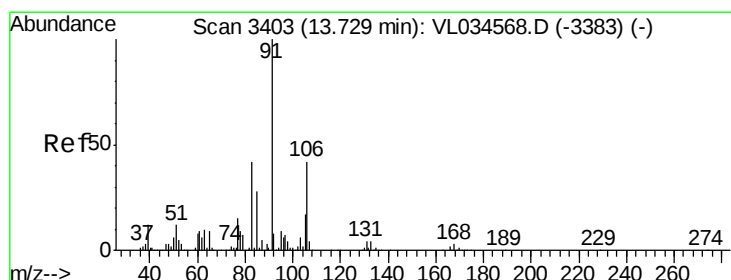
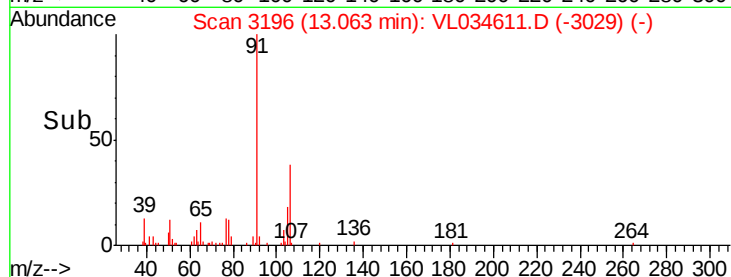
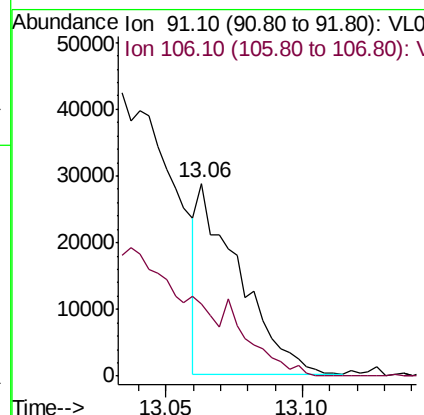
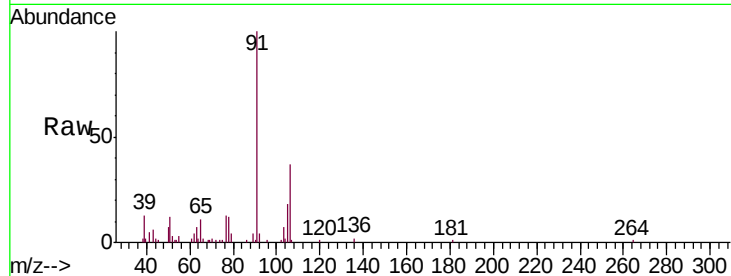




#59
m/p-Xylene
Concen: 0.137 ppbv
RT: 13.06 min Scan# 3196
Delta R.T. 0.04 min
Lab File: VL034611.D
Acq: 6 Feb 2020 22:58

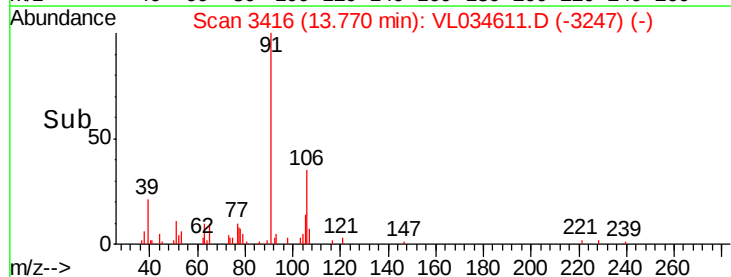
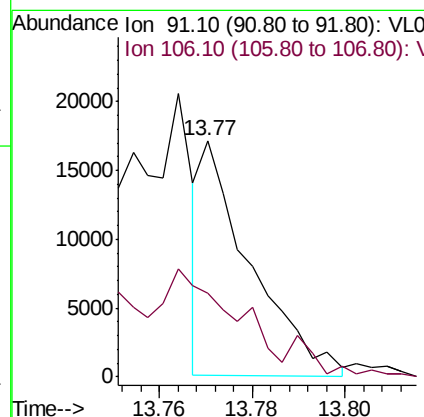
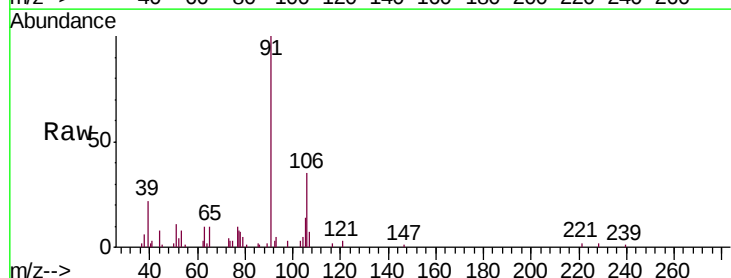
Instrument :
MSVOA_L
ClientSampleId :
IA-7

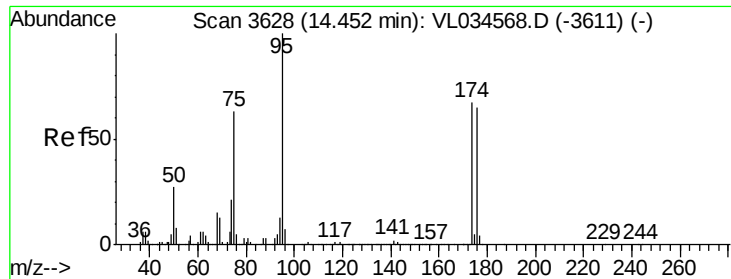
Tgt Ion: 91 Resp: 30214
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#



#60
o-Xylene
Concen: 0.056 ppbv
RT: 13.77 min Scan# 3416
Delta R.T. 0.04 min
Lab File: VL034611.D
Acq: 6 Feb 2020 22:58

Tgt Ion: 91 Resp: 12486
Ion Ratio Lower Upper
91 100
106 0.0 21.6 65.0#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.433 ppbv

RT: 14.49 min Scan# 3640

Delta R.T. 0.04 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Instrument :

MSVOA_L

ClientSampled :

IA-7

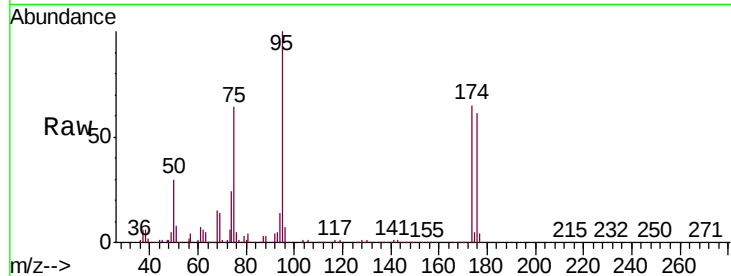
Tgt Ion: 95 Resp: 1645311

Ion Ratio Lower Upper

95 100

174 63.9 52.3 78.5

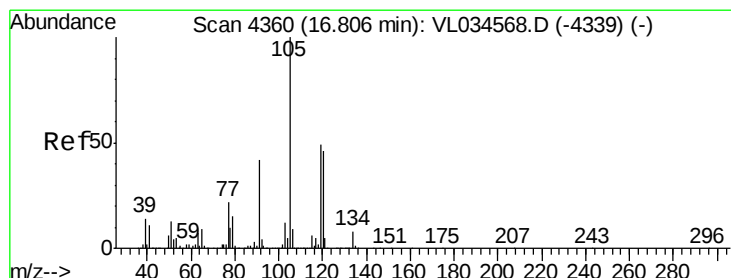
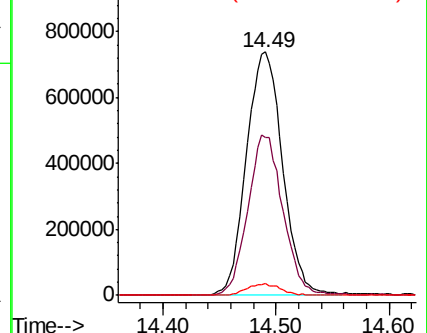
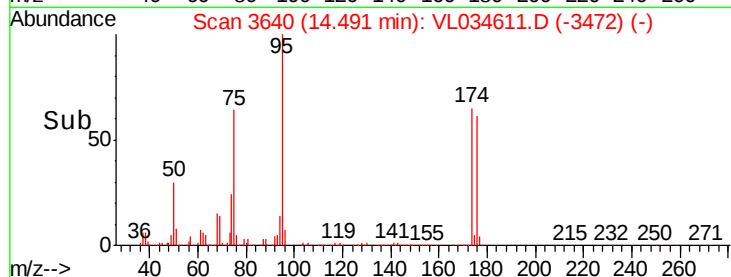
175 4.5 3.8 5.6



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



#74

1,2,4-Trimethylbenzene

Concen: 0.050 ppbv

RT: 16.84 min Scan# 4372

Delta R.T. 0.04 min

Lab File: VL034611.D

Acq: 6 Feb 2020 22:58

Tgt Ion: 105 Resp: 13232

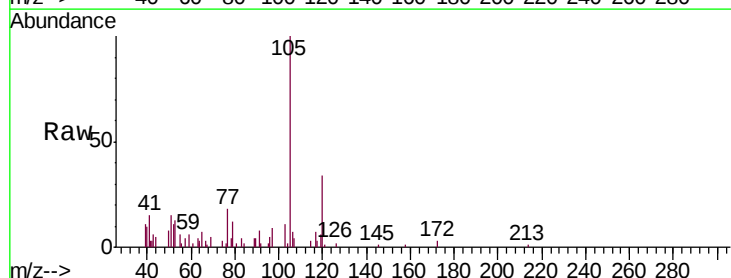
Ion Ratio Lower Upper

105 100

120 0.0 37.1 55.7#

91 2.6 34.3 51.5#

77 10.8 17.5 26.3#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

