

Data File : VL032760.D
Acq On : 14 Nov 2018 15:49
Operator : SY/AP
Sample : J5896-01 4X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV1

Quant Time: Nov 15 04:56:00 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 14 07:00:23 2018
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1402932	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3409091	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3207703	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.58 95 2510976 10.47 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 104.70%

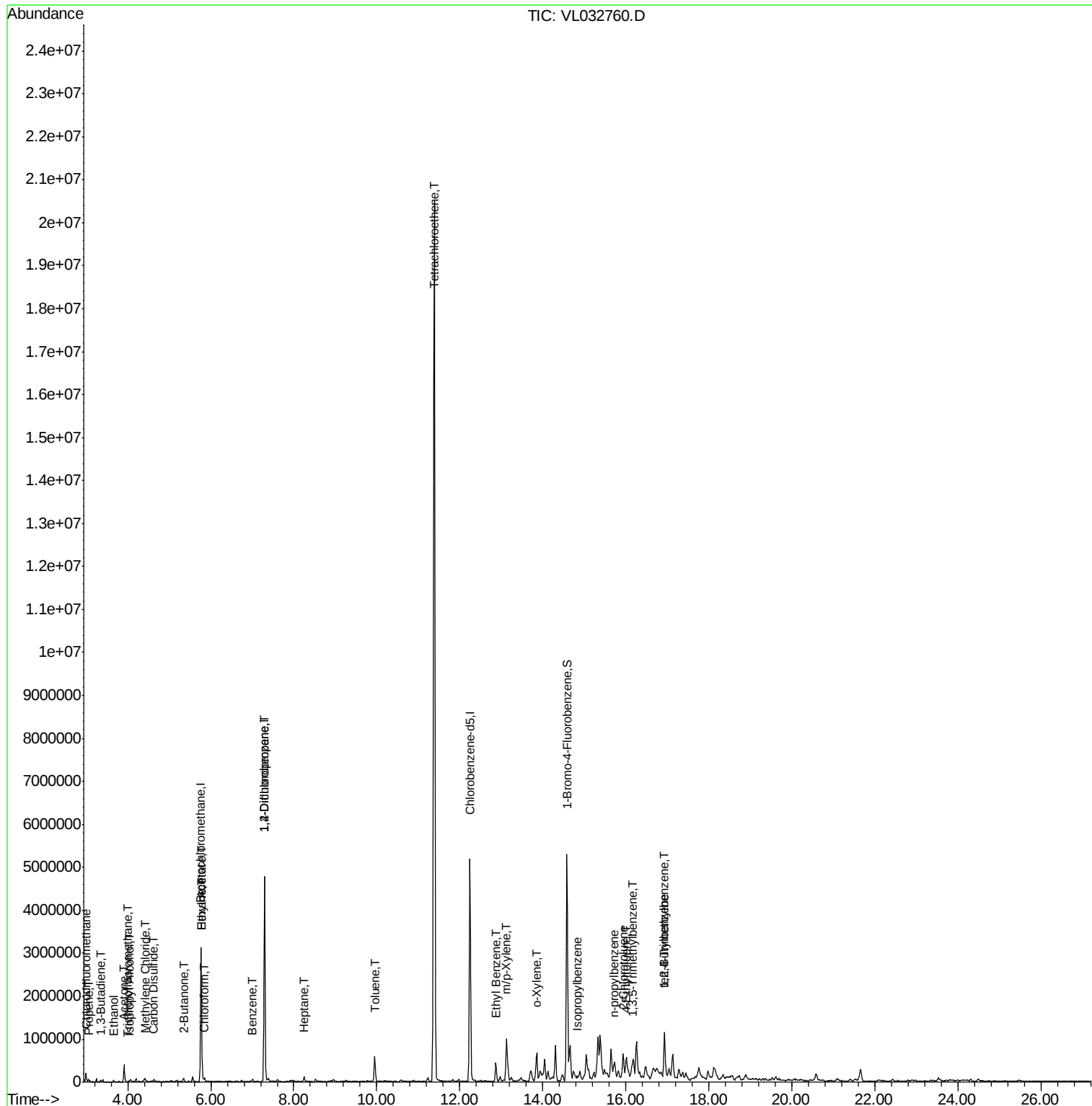
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.99	51	121470	1.092	ppbv #	60
9) Propene	3.05	41	11006	0.247	ppbv	90
10) Heptane	8.25	43	12341	0.073	ppbv #	1
11) Trichlorofluoromethane	4.01	101	6896	0.036	ppbv	86
13) Ethanol	3.66	45	19449	1.334	ppbv #	39
15) Acetone	3.91	43	410187	3.202	ppbv	99
16) 1,3-Butadiene	3.35	39	7919	0.160	ppbv #	42
19) Isopropyl Alcohol	4.04	45	13626	0.160	ppbv #	95
20) Methylene Chloride	4.41	84	26545	0.400	ppbv	91
25) Ethyl Acetate	5.78	43	70740	0.237	ppbv #	84
26) Hexane	5.78	57	54933	0.413	ppbv #	42
27) Carbon Disulfide	4.63	76	64494	0.383	ppbv #	90
29) Chloroform	5.85	83	52737	0.223	ppbv	89
34) 2-Butanone	5.35	43	96712	0.547	ppbv	99
36) Benzene	7.01	78	23001	0.085	ppbv #	89
39) 1,2-Dichloropropane	7.29	63	883991	8.547	ppbv #	23
52) Tetrachloroethene	11.38	164	5684155	60.191	ppbv	99
53) Toluene	9.95	91	440221	1.554	ppbv	99
58) Ethyl Benzene	12.87	91	343672	0.890	ppbv	99
59) m/p-Xylene	13.12	91	953872	2.776	ppbv	100
60) o-Xylene	13.85	91	485201	1.404	ppbv	99
62) Isopropylbenzene	14.83	105	41043	0.088	ppbv #	79
64) n-propylbenzene	15.73	120	36232	0.295	ppbv	72
65) tert-Butylbenzene	16.92	119	41607	0.099	ppbv #	18
71) 2-Chlorotoluene	15.94	91	26003	0.075	ppbv	78
72) 4-Ethyltoluene	16.01	105	168703	0.445	ppbv #	96
73) 1,3,5-Trimethylbenzene	16.16	105	115266	0.311	ppbv	90
74) 1,2,4-Trimethylbenzene	16.93	105	617134	1.557	ppbv #	68

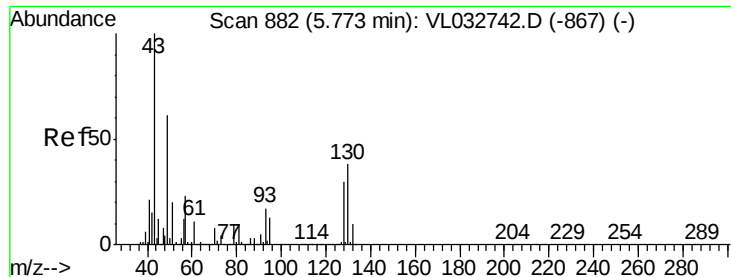
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. -0.01 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

SV1

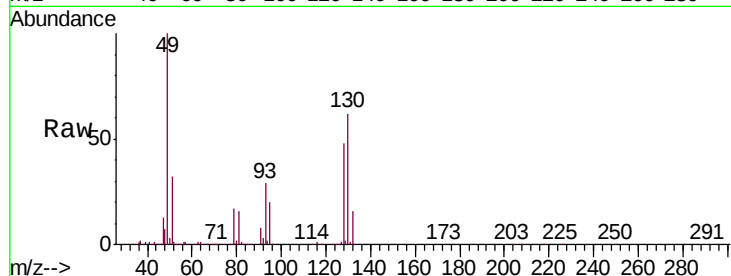
Tgt Ion: 49 Resp: 1402932

Ion Ratio Lower Upper

49 100

128 49.9 24.9 74.6

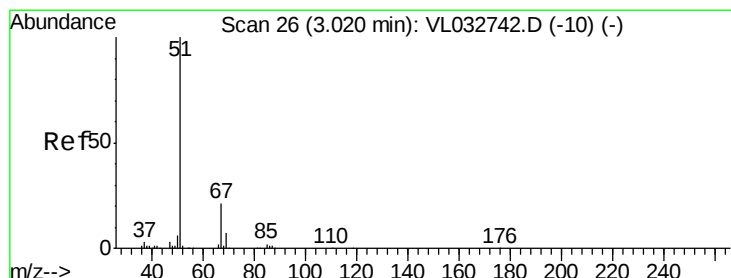
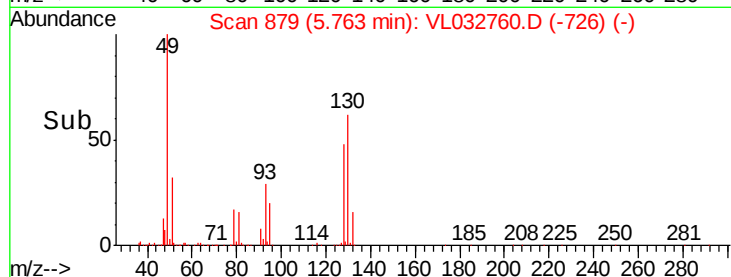
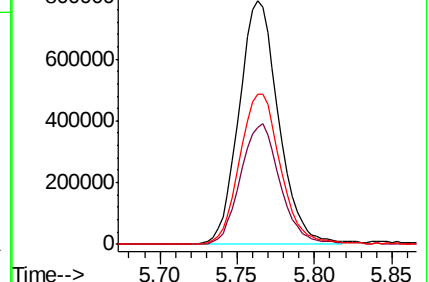
130 64.3 31.4 94.2



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



#3

Chlorodifluoromethane

Concen: 1.092 ppbv

RT: 2.99 min Scan# 18

Delta R.T. -0.03 min

Lab File: VL032760.D

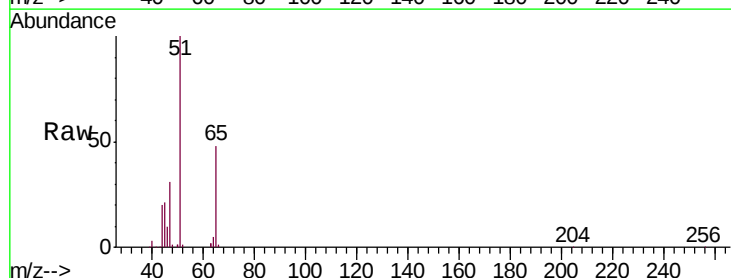
Acq: 14 Nov 2018 15:49

Tgt Ion: 51 Resp: 121470

Ion Ratio Lower Upper

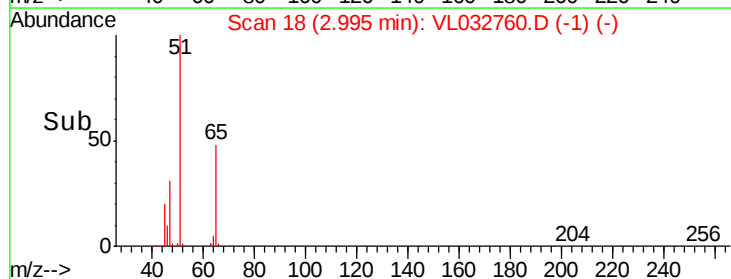
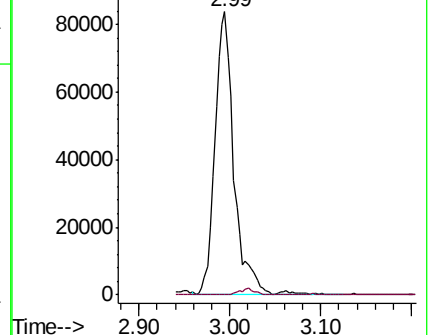
51 100

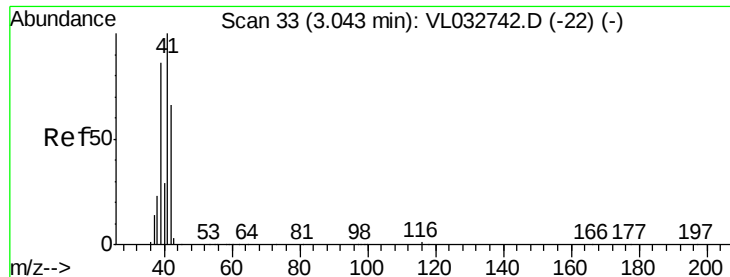
67 1.7 16.1 24.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#9

Propene

Concen: 0.247 ppbv

RT: 3.05 min Scan# 34

Delta R.T. 0.00 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

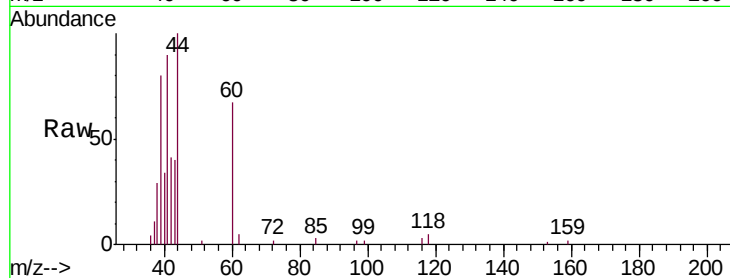
SV1

Tgt Ion: 41 Resp: 11006

Ion Ratio Lower Upper

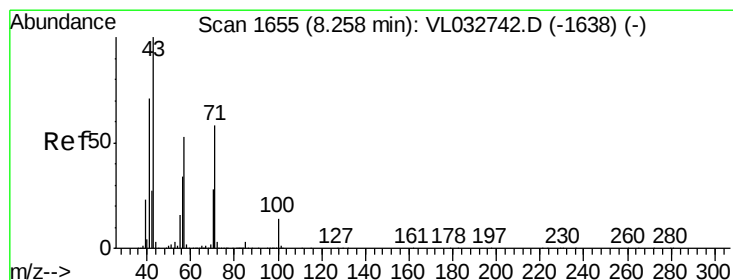
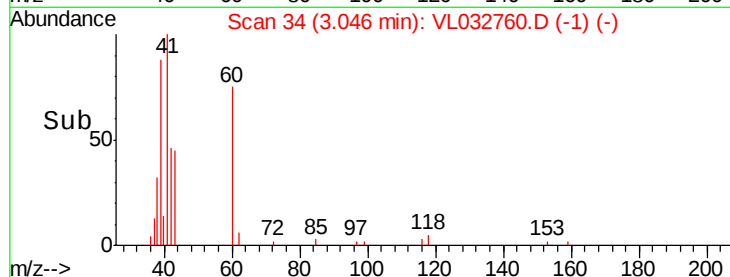
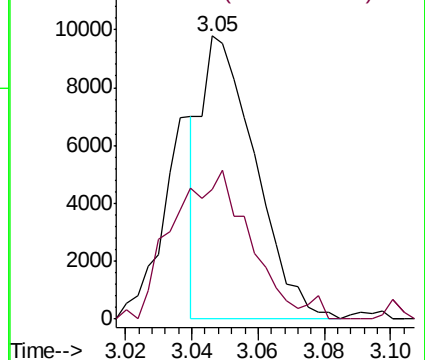
41 100

42 76.7 55.0 82.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.073 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. -0.01 min

Lab File: VL032760.D

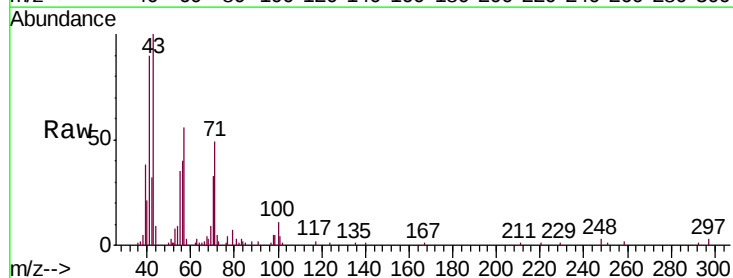
Acq: 14 Nov 2018 15:49

Tgt Ion: 43 Resp: 12341

Ion Ratio Lower Upper

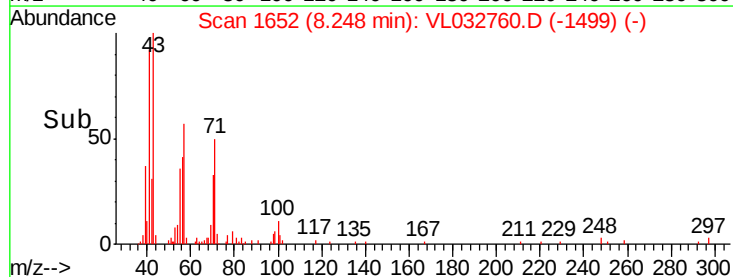
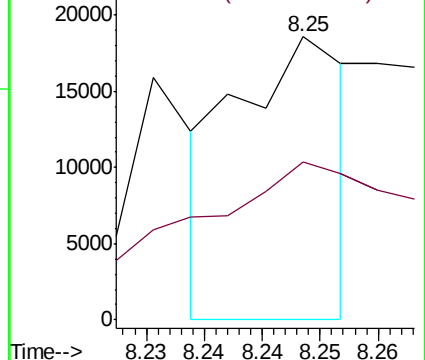
43 100

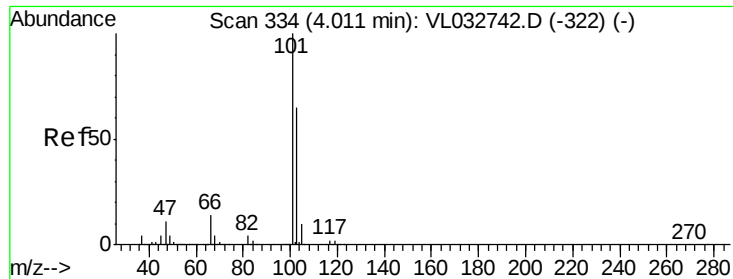
57 164.8 41.8 62.8#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

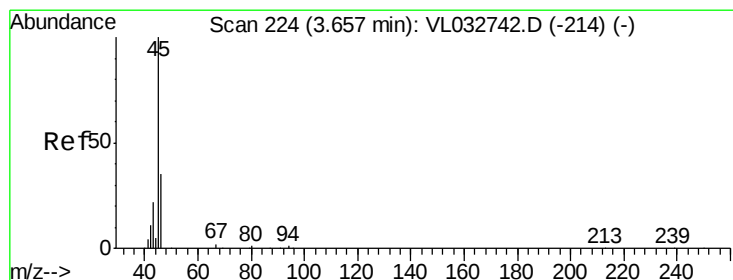
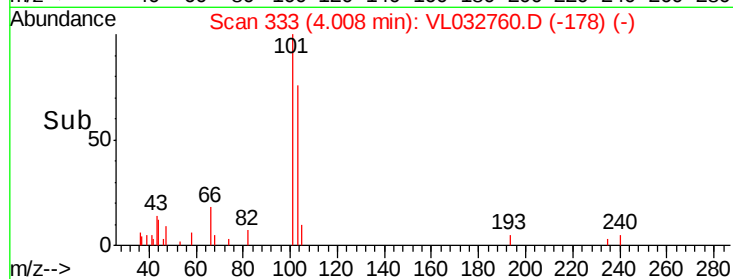
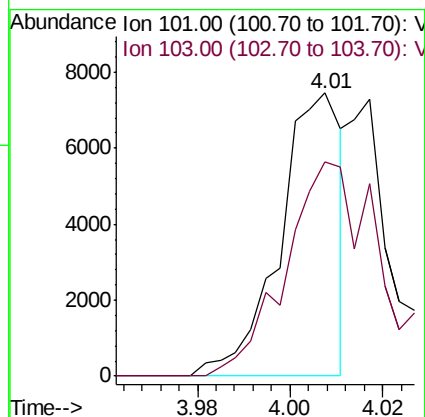
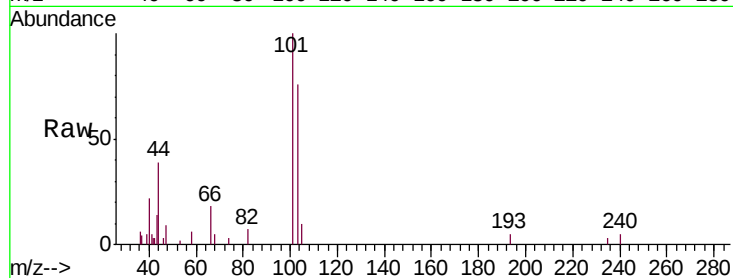




#11
 Trichlorofluoromethane
 Concen: 0.036 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. -0.00 min
 Lab File: VL032760.D
 Acq: 14 Nov 2018 15:49

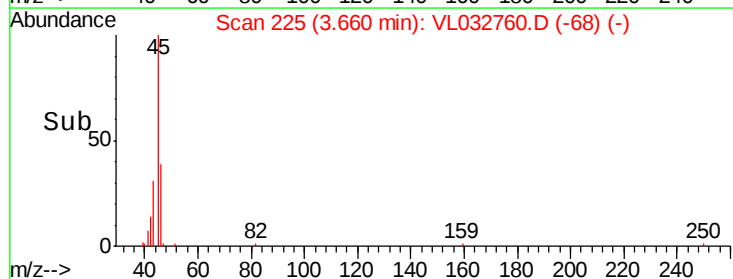
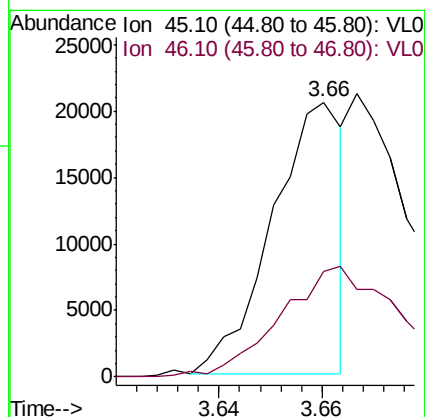
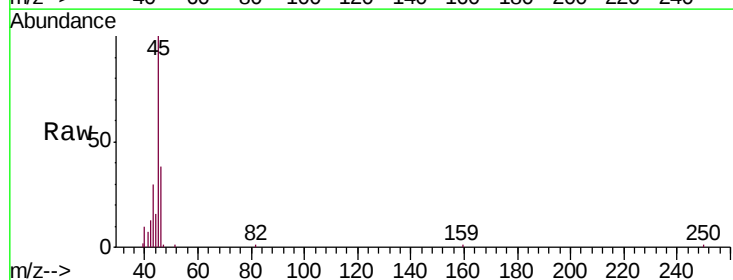
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

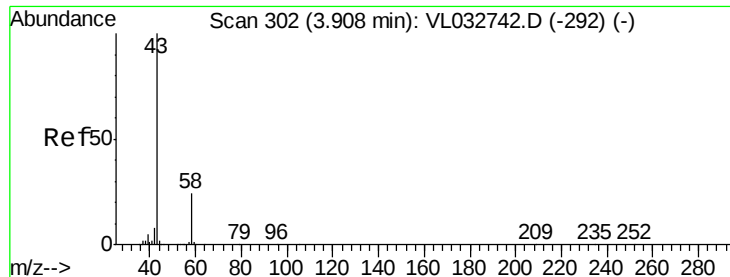
Tgt Ion:101 Resp: 6896
 Ion Ratio Lower Upper
 101 100
 103 75.6 51.6 77.4



#13
 Ethanol
 Concen: 1.334 ppbv
 RT: 3.66 min Scan# 225
 Delta R.T. 0.00 min
 Lab File: VL032760.D
 Acq: 14 Nov 2018 15:49

Tgt Ion: 45 Resp: 19449
 Ion Ratio Lower Upper
 45 100
 46 0.0 14.5 57.9#





#15

Acetone

Concen: 3.202 ppbv

RT: 3.91 min Scan# 302

Delta R.T. -0.00 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

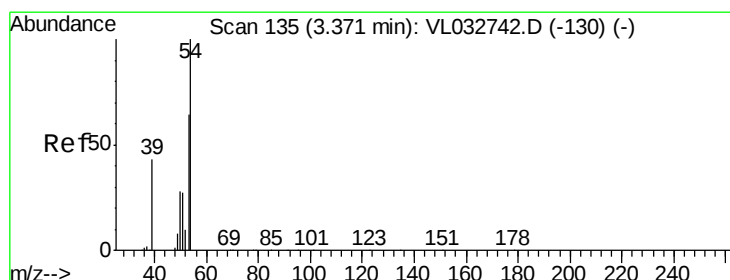
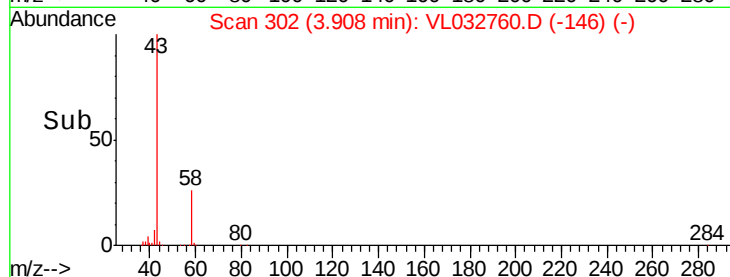
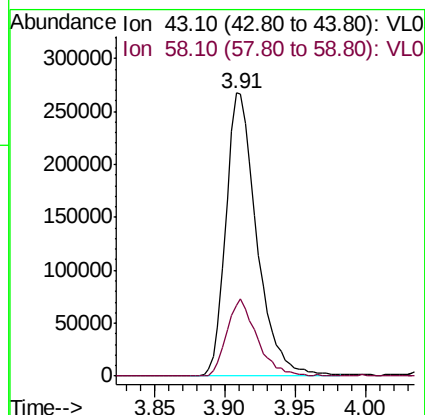
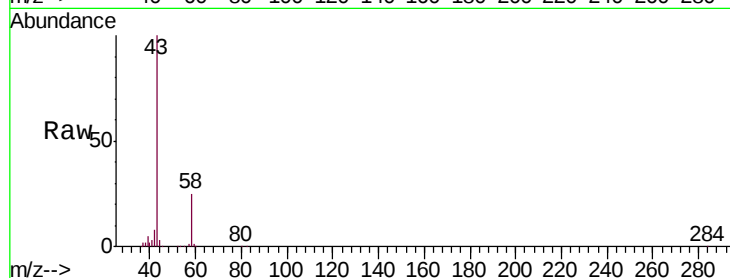
SV1

Tgt Ion: 43 Resp: 410187

Ion Ratio Lower Upper

43 100

58 26.8 21.1 31.7



#16

1,3-Butadiene

Concen: 0.160 ppbv

RT: 3.35 min Scan# 128

Delta R.T. -0.02 min

Lab File: VL032760.D

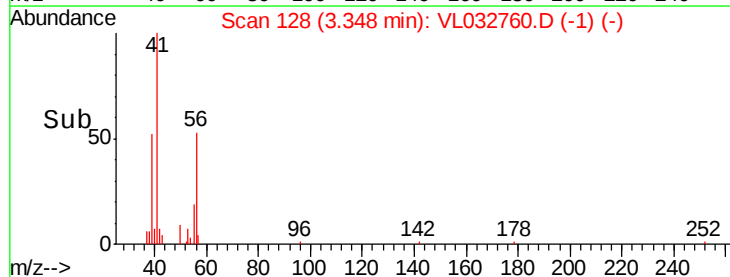
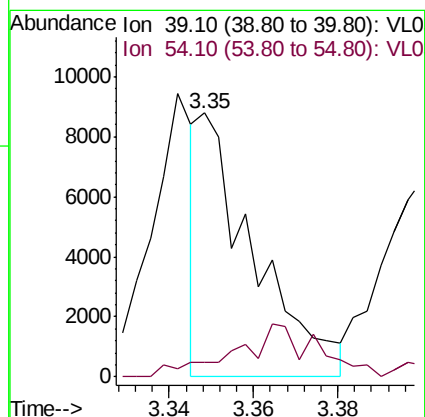
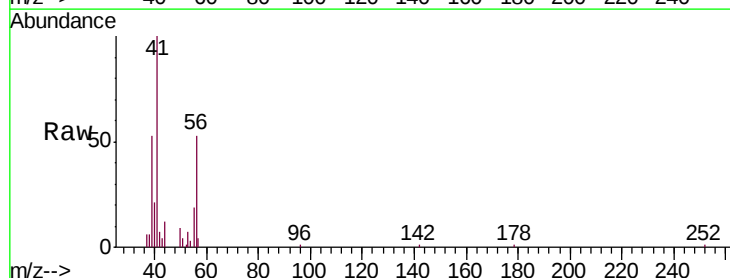
Acq: 14 Nov 2018 15:49

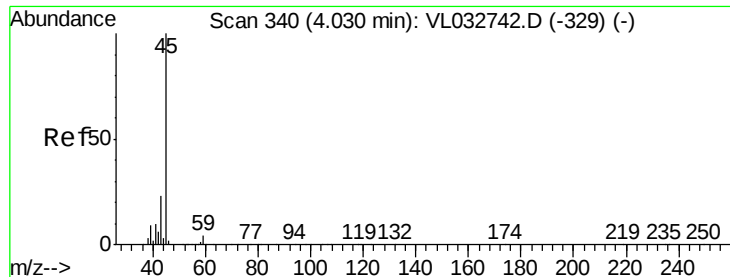
Tgt Ion: 39 Resp: 7919

Ion Ratio Lower Upper

39 100

54 32.5 68.9 103.3#





#19

Isopropyl Alcohol

Concen: 0.160 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.01 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

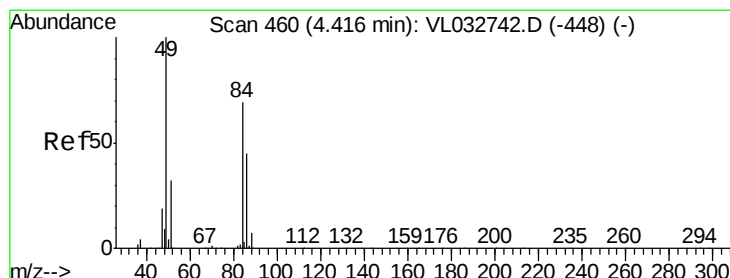
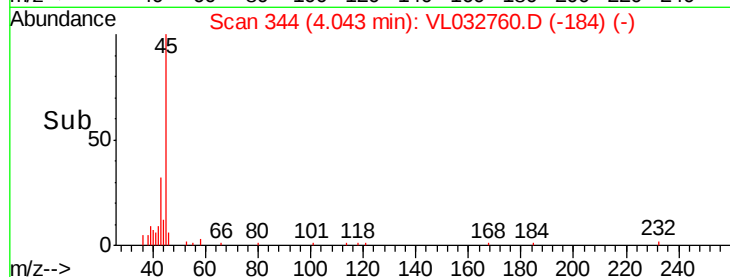
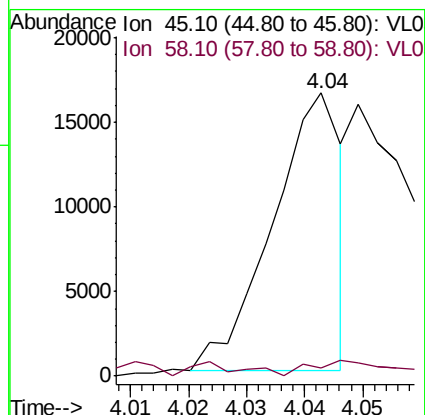
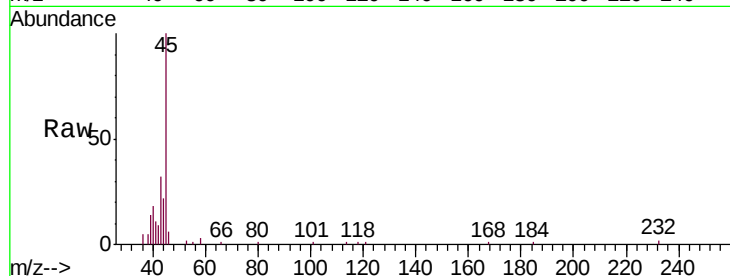
SV1

Tgt Ion: 45 Resp: 13626

Ion Ratio Lower Upper

45 100

58 0.0 1.4 2.0#



#20

Methylene Chloride

Concen: 0.400 ppbv

RT: 4.41 min Scan# 459

Delta R.T. -0.00 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Tgt Ion: 84 Resp: 26545

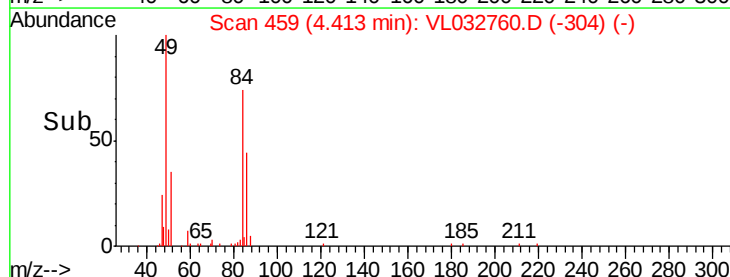
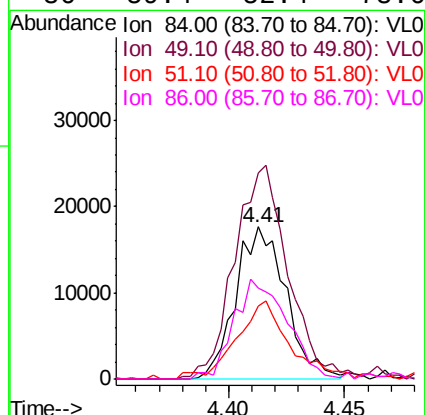
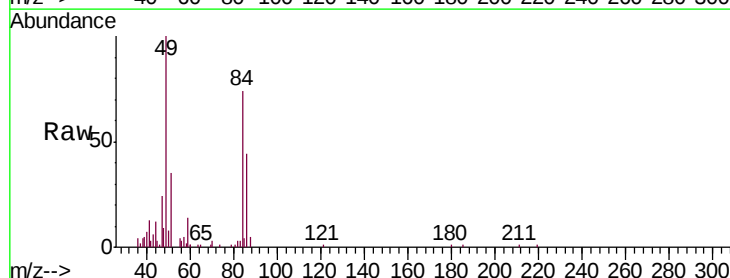
Ion Ratio Lower Upper

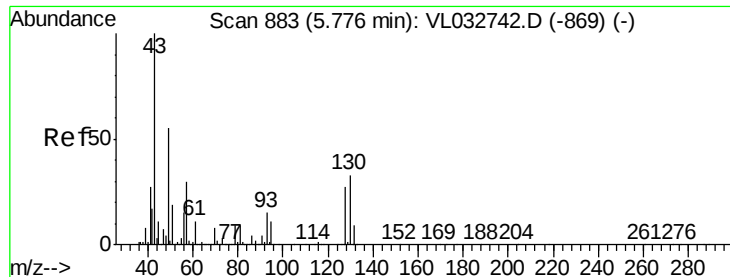
84 100

49 131.8 115.8 173.6

51 43.3 36.9 55.3

86 59.4 52.4 78.6

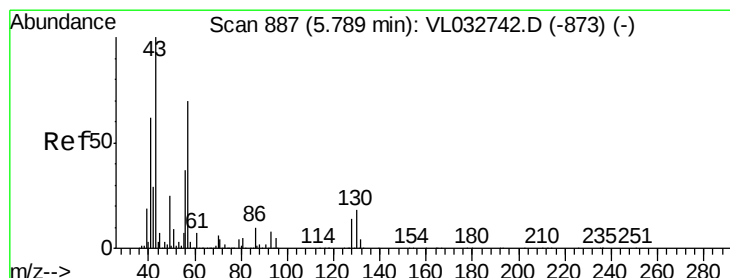
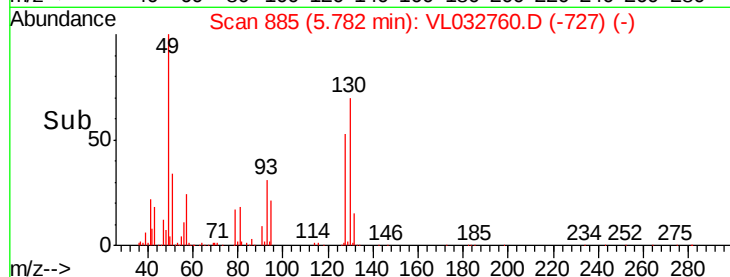
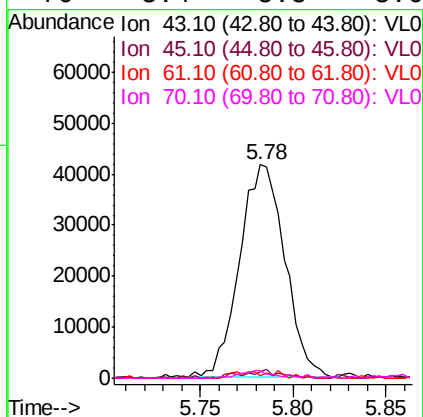
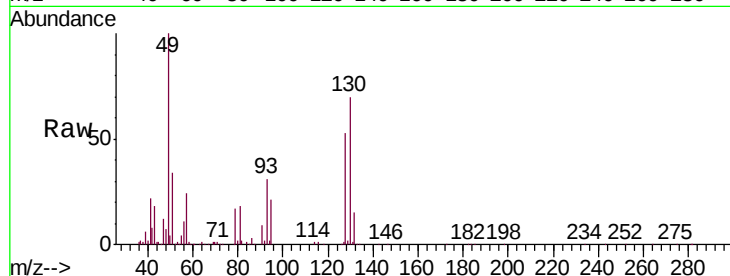




#25
Ethyl Acetate
Concen: 0.237 ppbv
RT: 5.78 min Scan# 885
Delta R.T. 0.01 min
Lab File: VL032760.D
Acq: 14 Nov 2018 15:49

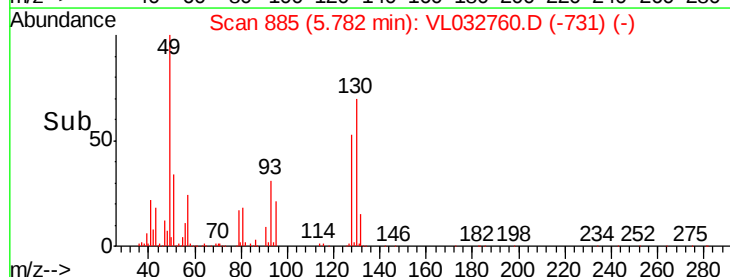
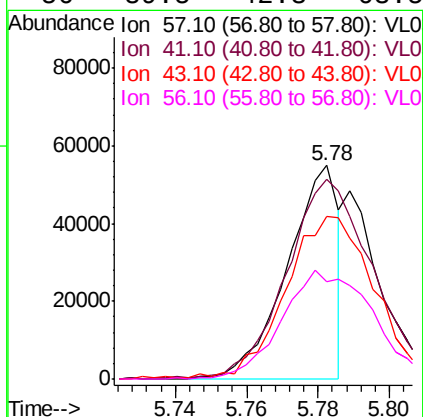
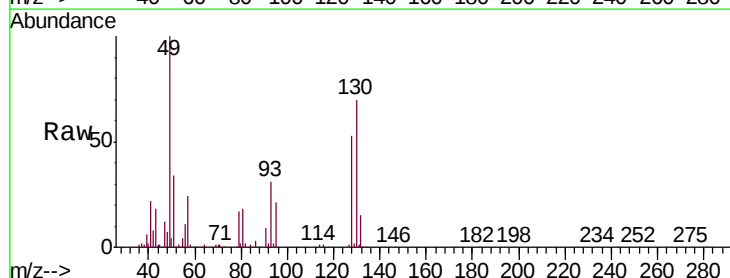
Instrument :
MSVOA_L
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SV1

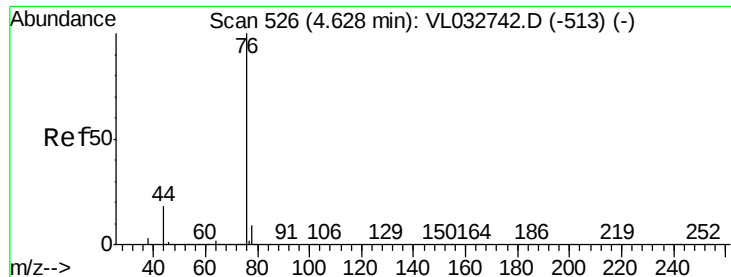
Tgt Ion:	43	Resp:	70740
Ion	Ratio	Lower	Upper
43	100		
45	3.2	7.9	11.9#
61	3.1	7.8	11.6#
70	3.4	5.8	8.6#



#26
Hexane
Concen: 0.413 ppbv
RT: 5.78 min Scan# 885
Delta R.T. -0.01 min
Lab File: VL032760.D
Acq: 14 Nov 2018 15:49

Tgt Ion:	57	Resp:	54933
Ion	Ratio	Lower	Upper
57	100		
41	157.6	70.3	105.5#
43	133.5	174.0	261.0#
56	89.5	42.3	63.5#





#27

Carbon Disulfide

Concen: 0.383 ppbv

RT: 4.63 min Scan# 527

Delta R.T. 0.00 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

SV1

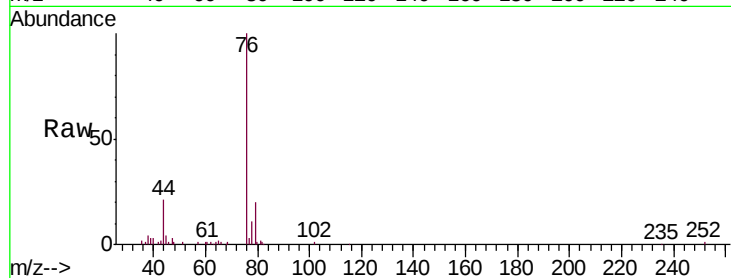
Tgt Ion: 76 Resp: 64494

Ion Ratio Lower Upper

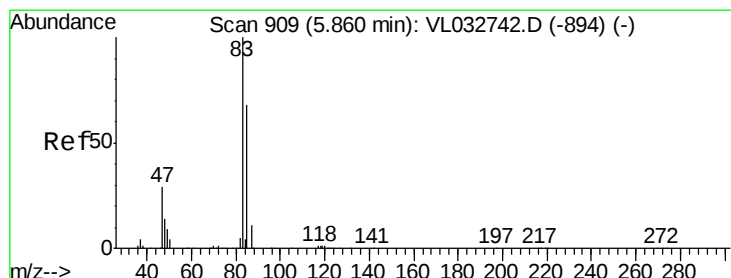
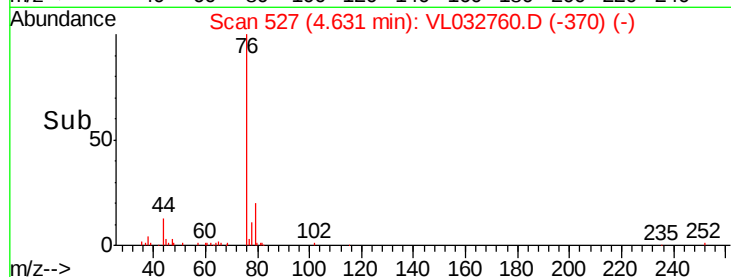
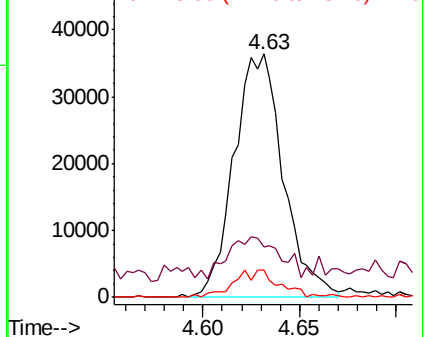
76 100

44 24.4 14.4 21.6#

78 10.7 7.7 11.5



Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0



#29

Chloroform

Concen: 0.223 ppbv

RT: 5.85 min Scan# 905

Delta R.T. -0.01 min

Lab File: VL032760.D

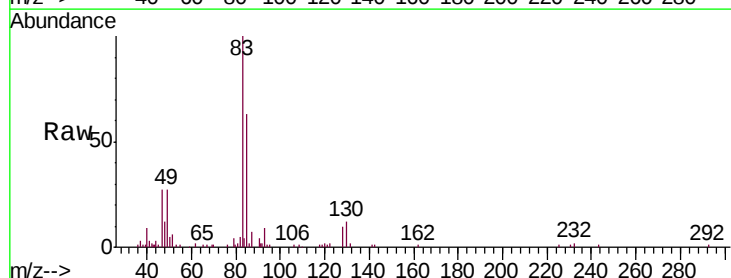
Acq: 14 Nov 2018 15:49

Tgt Ion: 83 Resp: 52737

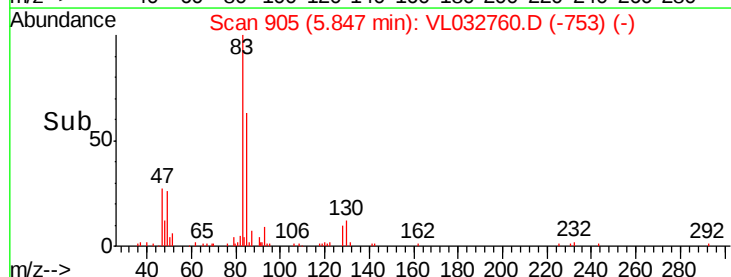
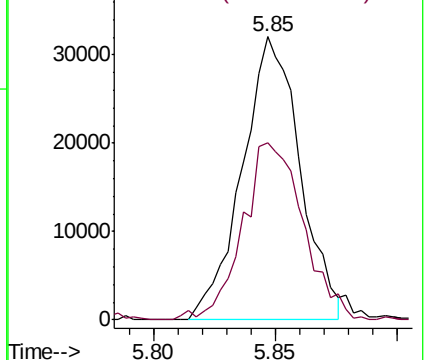
Ion Ratio Lower Upper

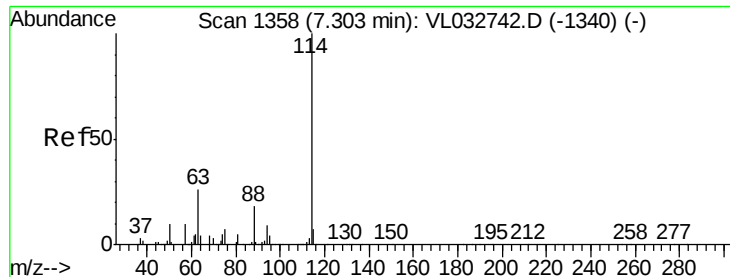
83 100

85 59.3 54.2 81.4



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

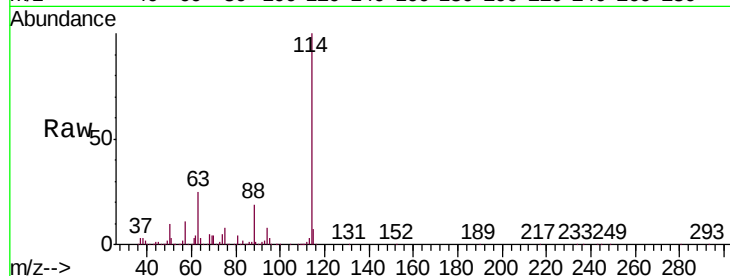




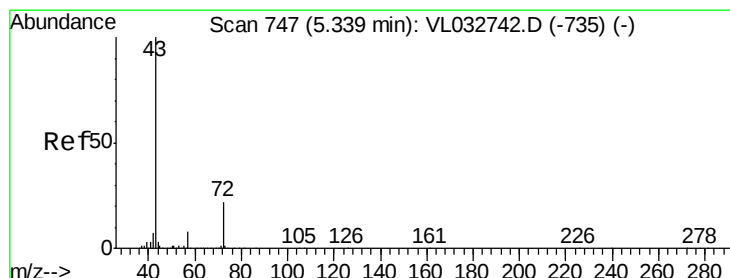
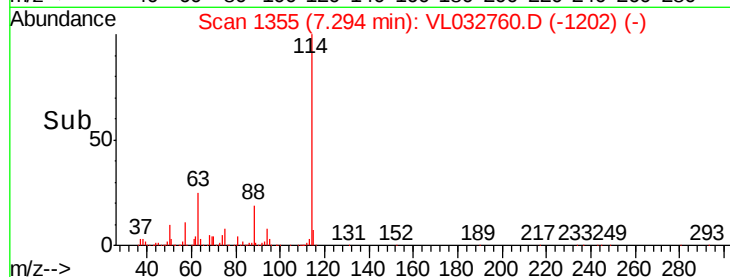
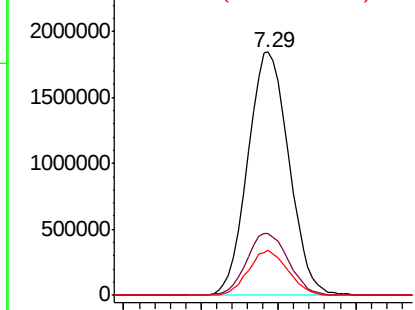
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1355
 Delta R.T. -0.01 min
 Lab File: VL032760.D
 Acq: 14 Nov 2018 15:49

Instrument :
 MSVOA_L
 ClientSampled :
 SV1

Tgt Ion: 114 Resp: 3409091
 Ion Ratio Lower Upper
 114 100
 63 26.1 20.9 31.3
 88 18.0 14.4 21.6

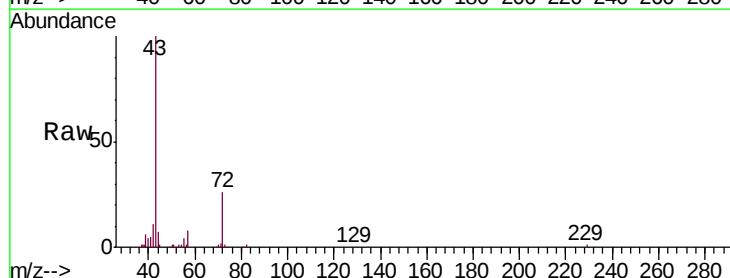


Abundance Ion 114.10 (113.80 to 114.80): VL0
 2500000 Ion 63.10 (62.80 to 63.80): VL0
 2000000 Ion 88.10 (87.80 to 88.80): VL0

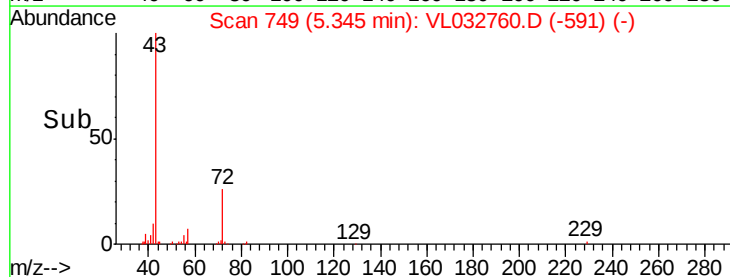
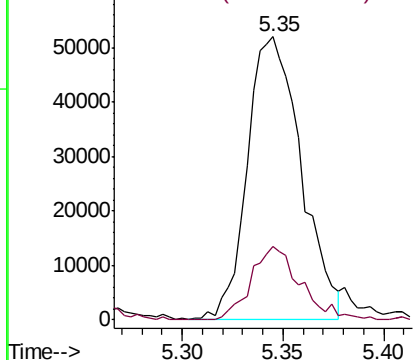


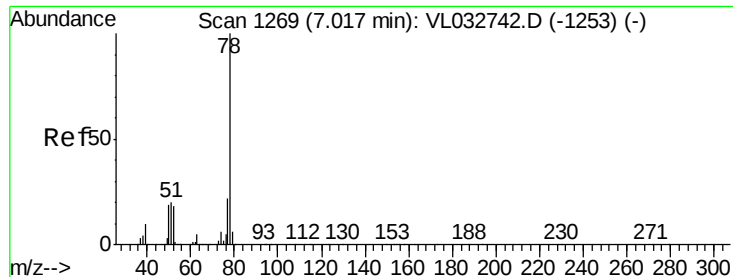
#34
 2-Butanone
 Concen: 0.547 ppbv
 RT: 5.35 min Scan# 749
 Delta R.T. 0.01 min
 Lab File: VL032760.D
 Acq: 14 Nov 2018 15:49

Tgt Ion: 43 Resp: 96712
 Ion Ratio Lower Upper
 43 100
 72 23.7 18.4 27.6



Abundance Ion 43.10 (42.80 to 43.80): VL0
 60000 Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.085 ppbv

RT: 7.01 min Scan# 1266

Delta R.T. -0.01 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

SV1

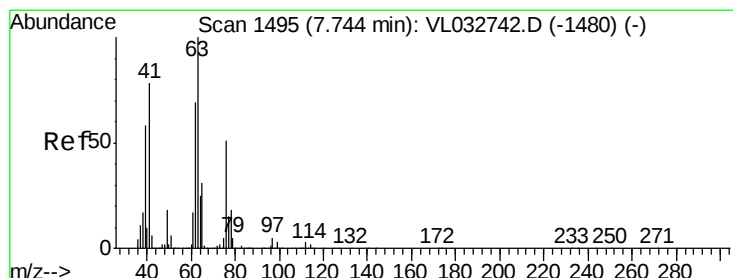
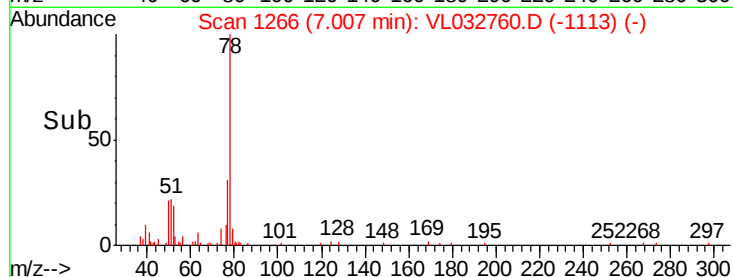
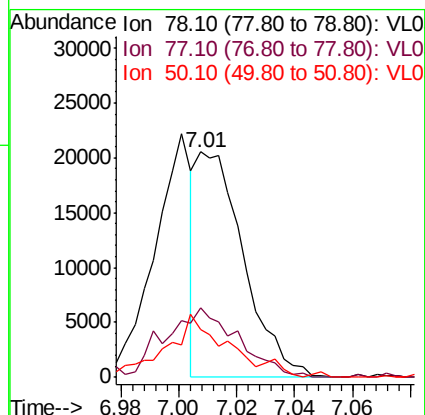
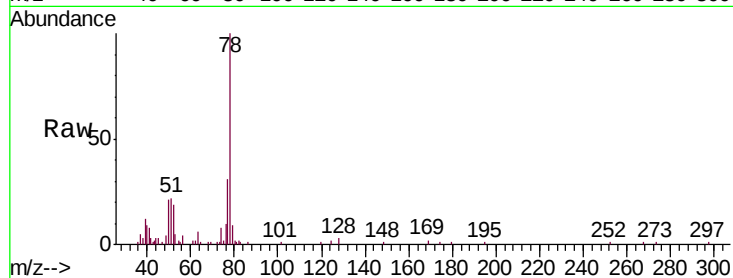
Tgt Ion: 78 Resp: 23001

Ion Ratio Lower Upper

78 100

77 30.7 17.8 26.8#

50 21.2 15.4 23.0



#39

1,2-Dichloropropane

Concen: 8.547 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.45 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

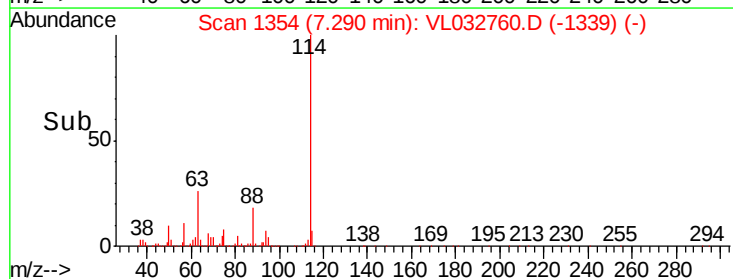
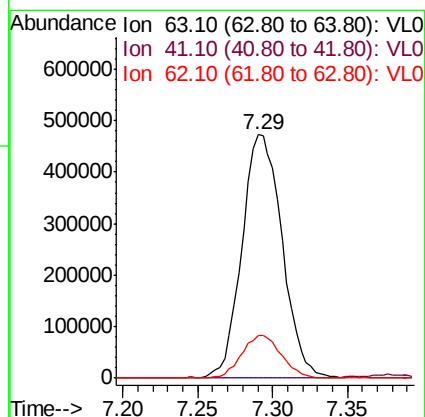
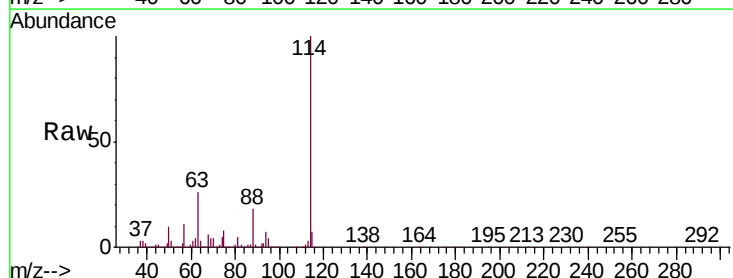
Tgt Ion: 63 Resp: 883991

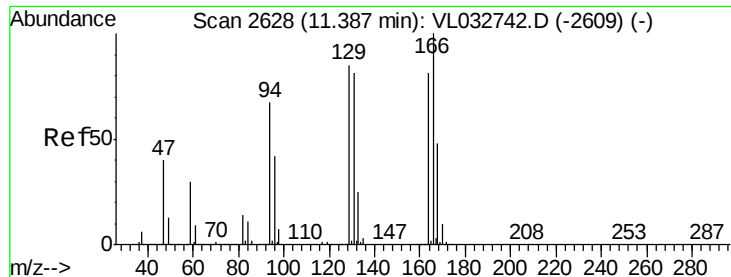
Ion Ratio Lower Upper

63 100

41 0.0 62.0 93.0#

62 17.3 55.4 83.2#





#52

Tetrachloroethene

Concen: 60.191 ppbv

RT: 11.38 min Scan# 2627

Delta R.T. -0.00 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion:164 Resp: 5684155

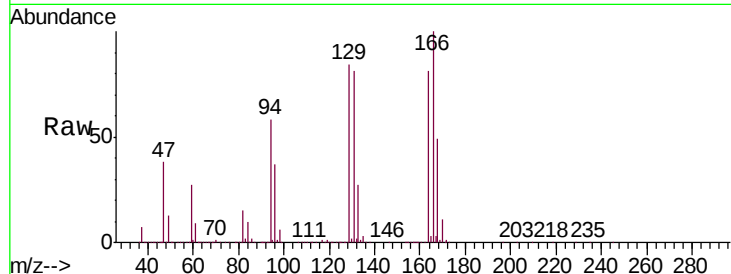
Ion Ratio Lower Upper

164 100

166 123.4 99.3 148.9

129 103.8 83.9 125.9

131 100.2 80.8 121.2

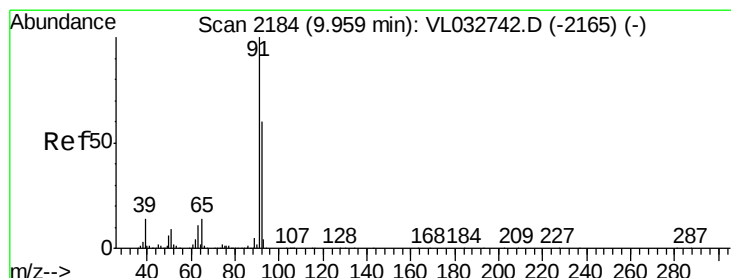
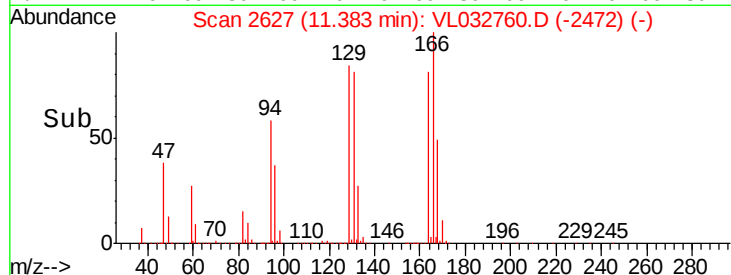
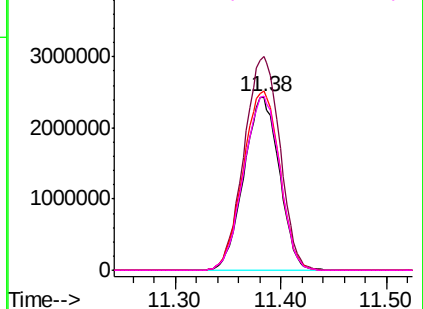


Abundance Ion 163.90 (163.60 to 164.60): V

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: 1.554 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. -0.01 min

Lab File: VL032760.D

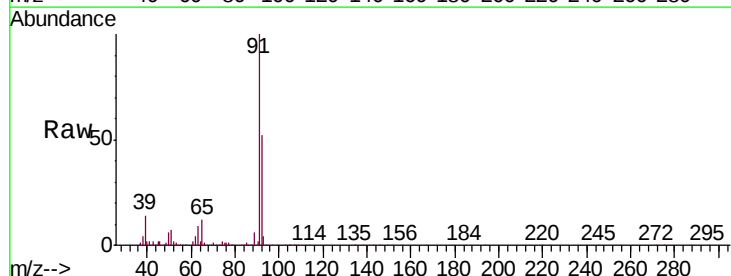
Acq: 14 Nov 2018 15:49

Tgt Ion: 91 Resp: 440221

Ion Ratio Lower Upper

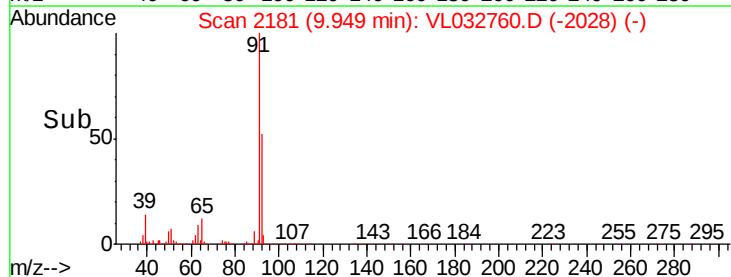
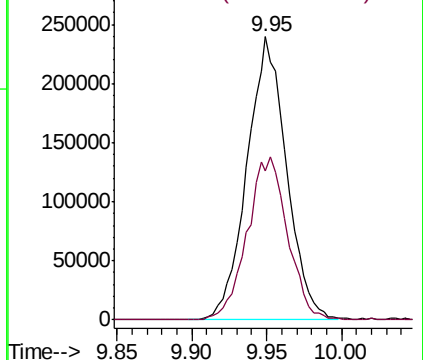
91 100

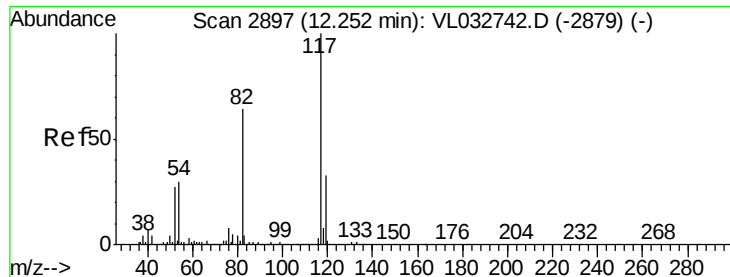
92 59.0 47.9 71.9



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: 12.25 min Scan# 2895

Delta R.T. -0.01 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

SV1

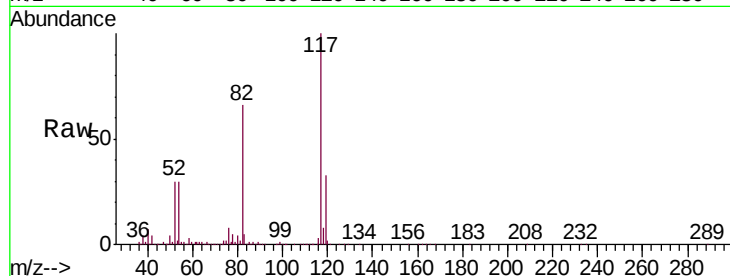
Tgt Ion: 117 Resp: 3207703

Ion Ratio Lower Upper

117 100

82 65.1 51.0 76.6

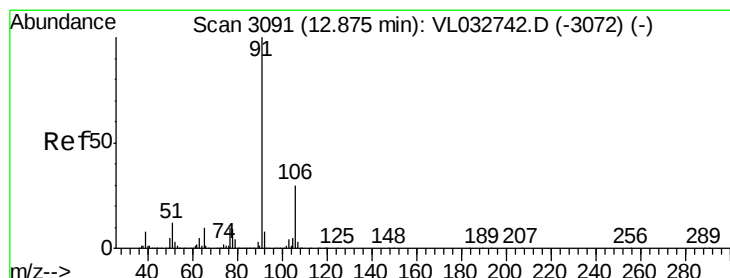
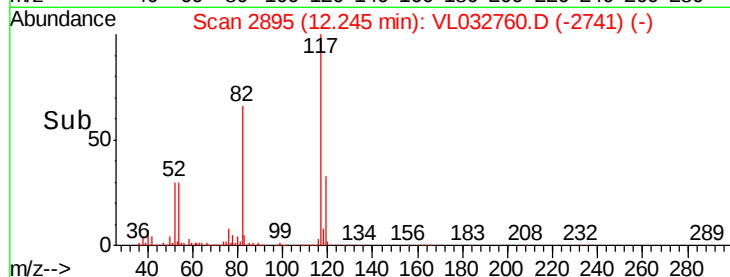
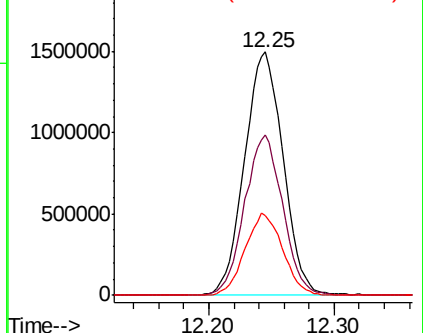
119 33.0 28.0 42.0



Abundance Ion 117.10 (116.80 to 117.80): V

2000000 Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.890 ppbv

RT: 12.87 min Scan# 3088

Delta R.T. -0.01 min

Lab File: VL032760.D

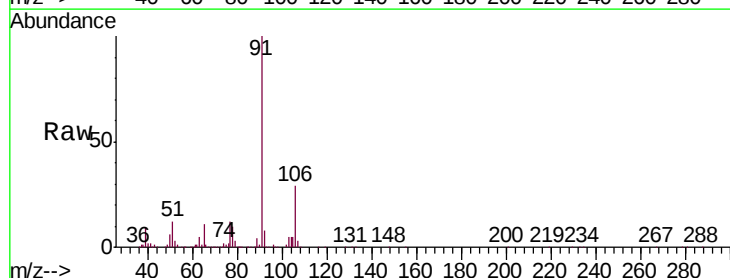
Acq: 14 Nov 2018 15:49

Tgt Ion: 91 Resp: 343672

Ion Ratio Lower Upper

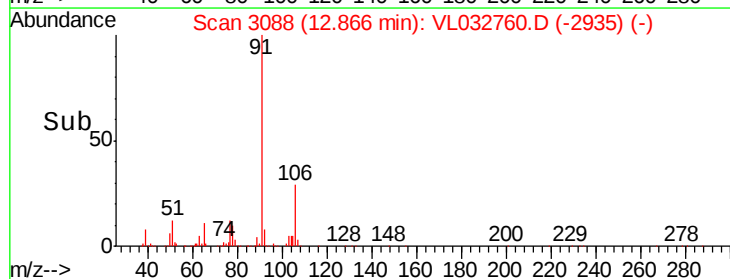
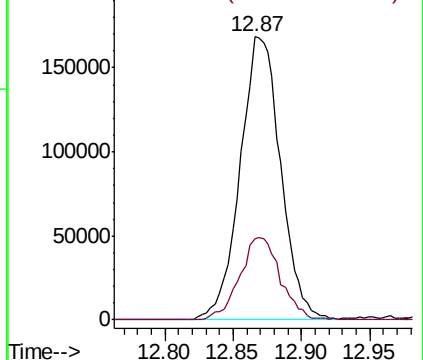
91 100

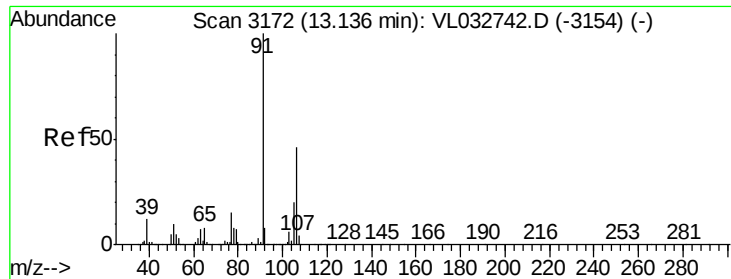
106 28.9 23.6 35.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

200000 Ion 106.10 (105.80 to 106.80): V

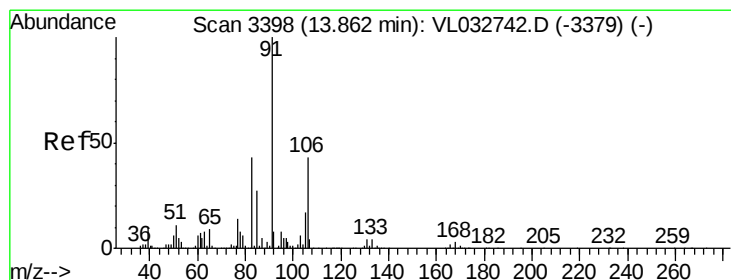
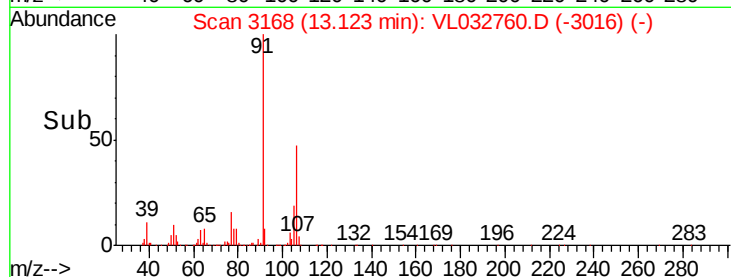
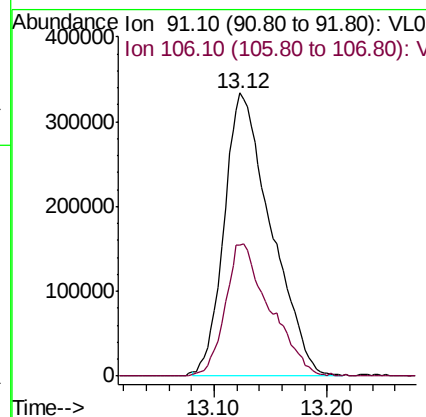
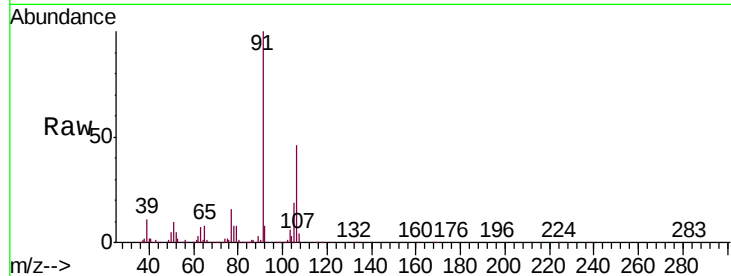




#59
m/p-Xylene
Concen: 2.776 ppbv
RT: 13.12 min Scan# 3168
Delta R.T. -0.01 min
Lab File: VL032760.D
Acq: 14 Nov 2018 15:49

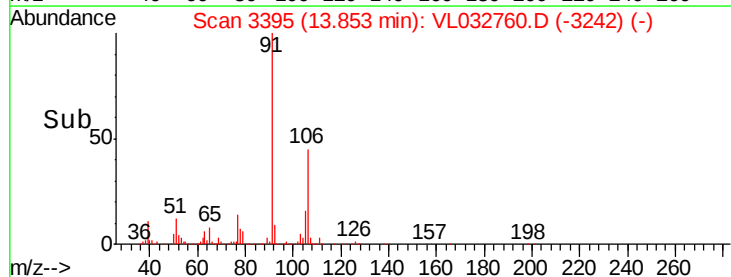
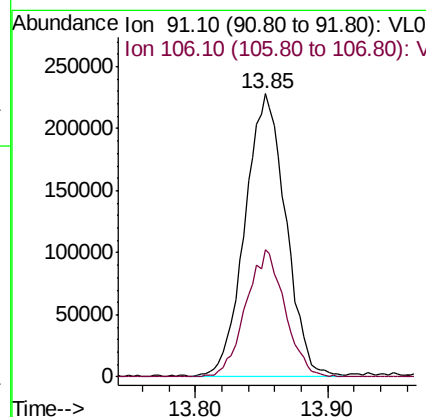
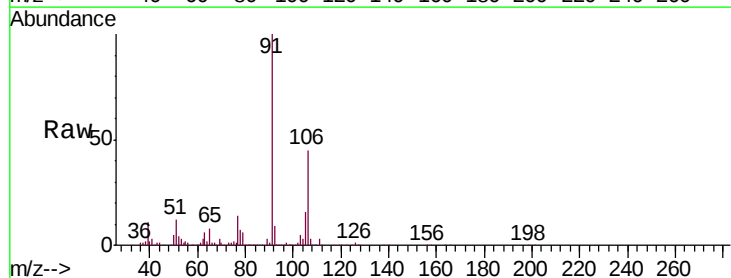
Instrument :
MSVOA_L
ClientSampled :
SV1

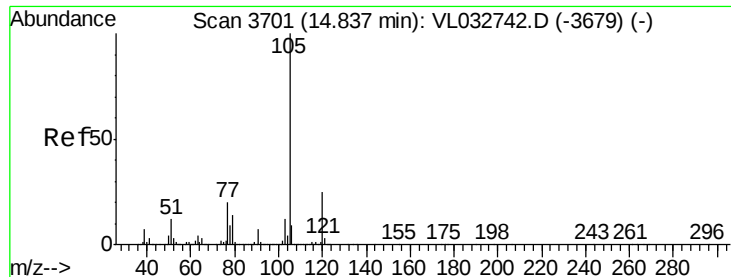
Tgt Ion: 91 Resp: 953872
Ion Ratio Lower Upper
91 100
106 45.2 36.1 54.1



#60
o-Xylene
Concen: 1.404 ppbv
RT: 13.85 min Scan# 3395
Delta R.T. -0.01 min
Lab File: VL032760.D
Acq: 14 Nov 2018 15:49

Tgt Ion: 91 Resp: 485201
Ion Ratio Lower Upper
91 100
106 43.1 21.9 65.7





#62

Isopropylbenzene

Concen: 0.088 ppbv

RT: 14.83 min Scan# 3698

Delta R.T. -0.01 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

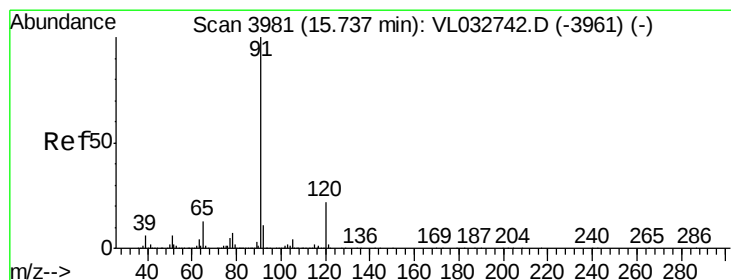
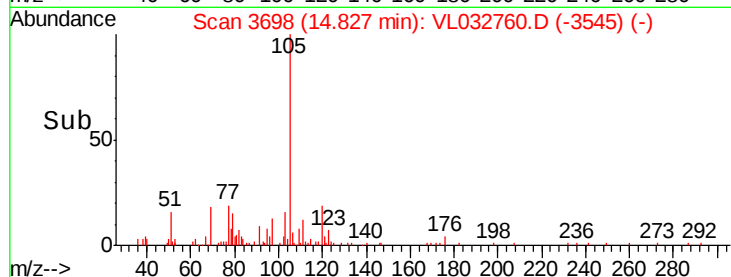
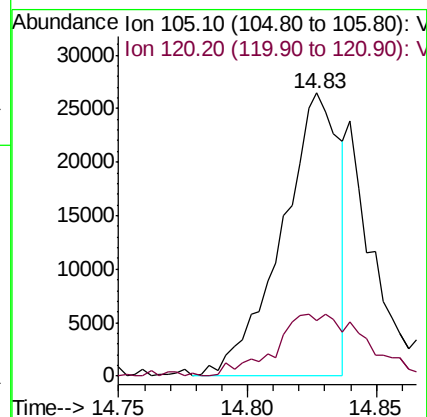
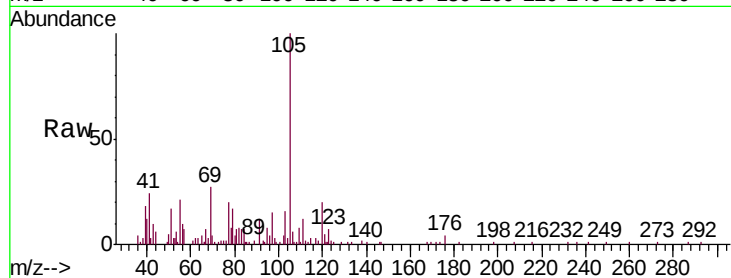
SV1

Tgt Ion:105 Resp: 41043

Ion Ratio Lower Upper

105 100

120 35.5 20.1 30.1#



#64

n-propylbenzene

Concen: 0.295 ppbv

RT: 15.73 min Scan# 3979

Delta R.T. -0.01 min

Lab File: VL032760.D

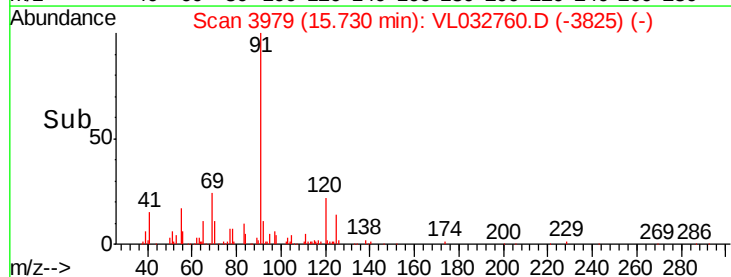
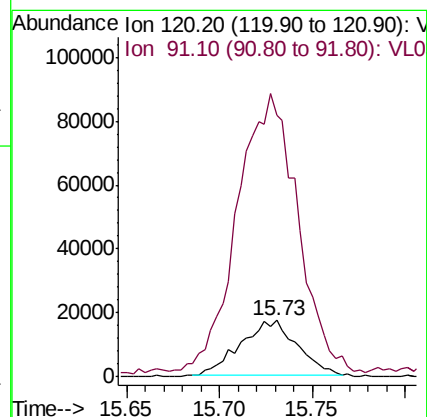
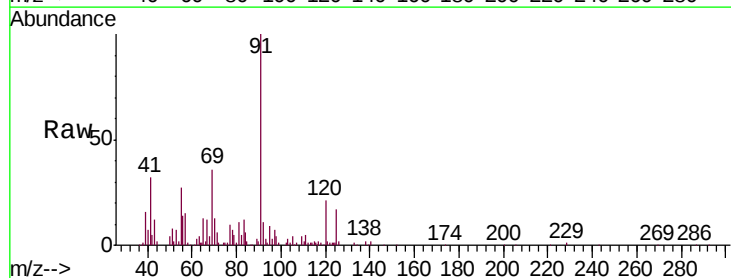
Acq: 14 Nov 2018 15:49

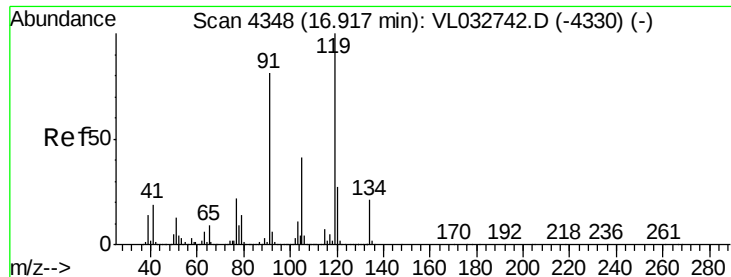
Tgt Ion:120 Resp: 36232

Ion Ratio Lower Upper

120 100

91 552.7 381.7 572.5

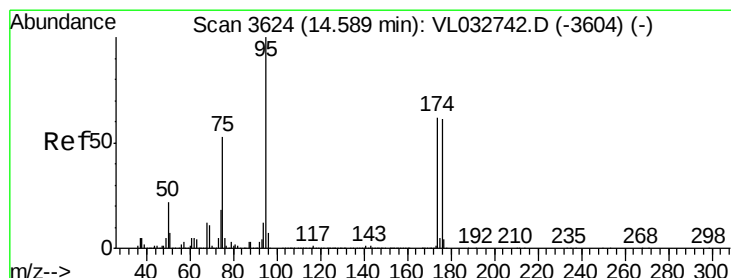
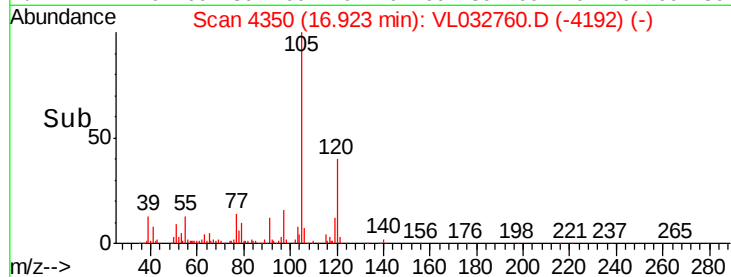
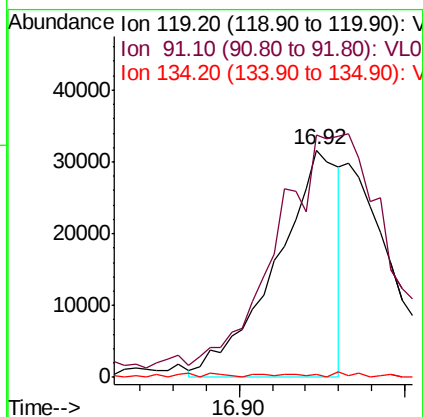
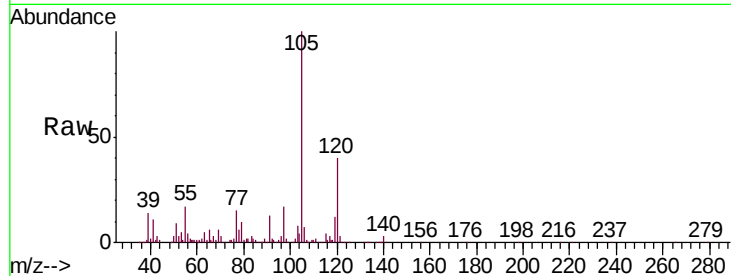




#65
 tert-Butylbenzene
 Concen: 0.099 ppbv
 RT: 16.92 min Scan# 4350
 Delta R.T. 0.01 min
 Lab File: VL032760.D
 Acq: 14 Nov 2018 15:49

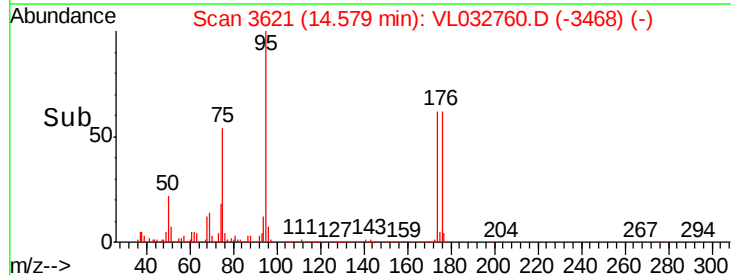
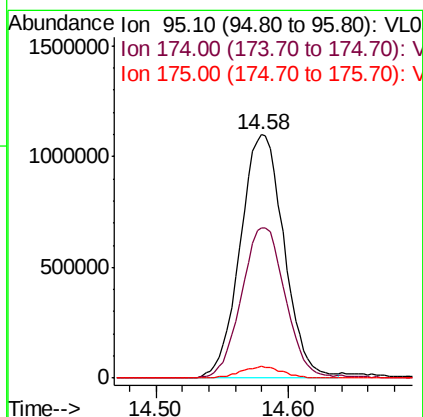
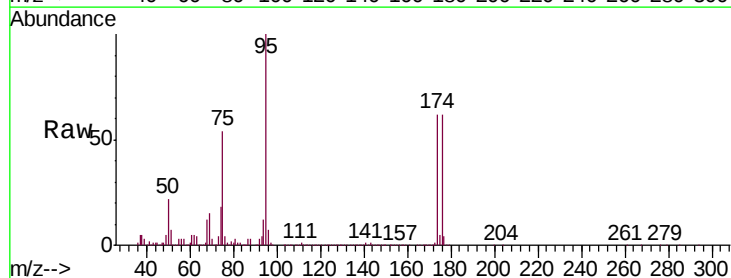
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

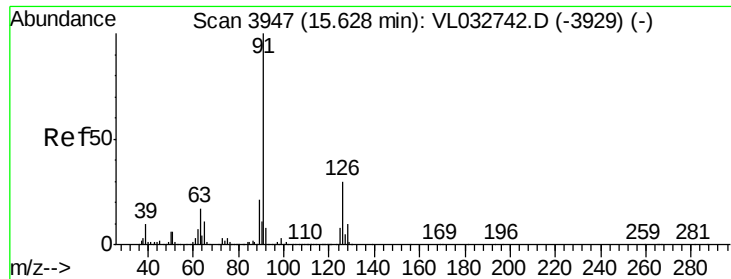
Tgt Ion: 119 Resp: 41607
 Ion Ratio Lower Upper
 119 100
 91 0.0 65.6 98.4#
 134 0.0 15.9 23.9#



#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.466 ppbv
 RT: 14.58 min Scan# 3621
 Delta R.T. -0.01 min
 Lab File: VL032760.D
 Acq: 14 Nov 2018 15:49

Tgt Ion: 95 Resp: 2510976
 Ion Ratio Lower Upper
 95 100
 174 62.5 50.7 76.1
 175 4.6 3.8 5.6

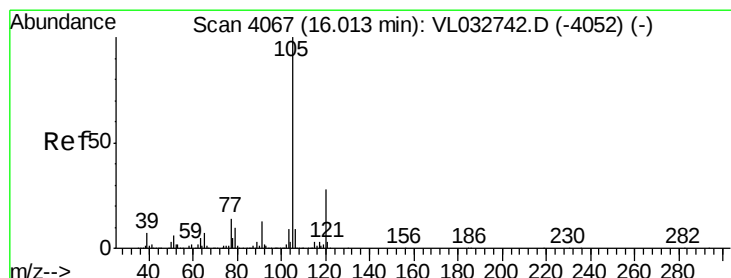
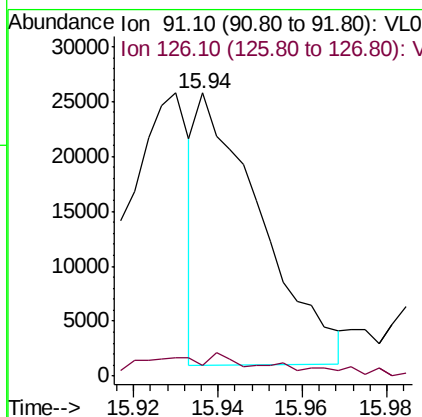
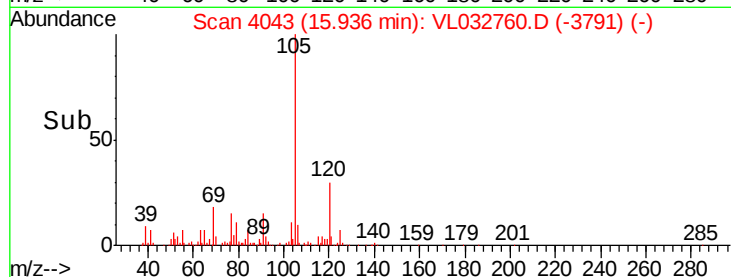
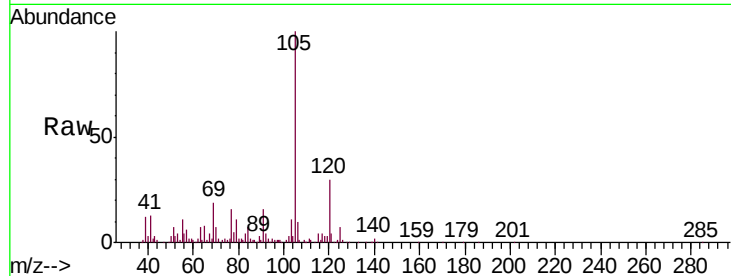




#71
2-Chlorotoluene
Concen: 0.075 ppbv
RT: 15.94 min Scan# 4043
Delta R.T. 0.31 min
Lab File: VL032760.D
Acq: 14 Nov 2018 15:49

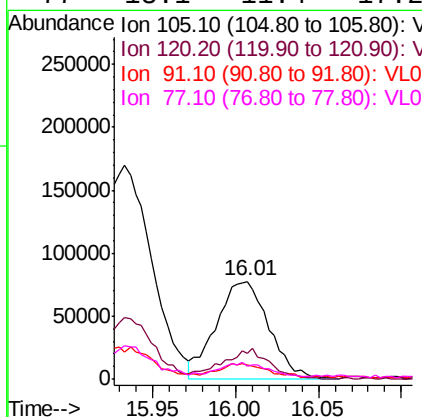
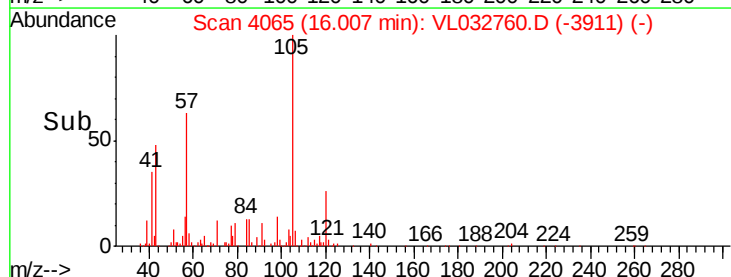
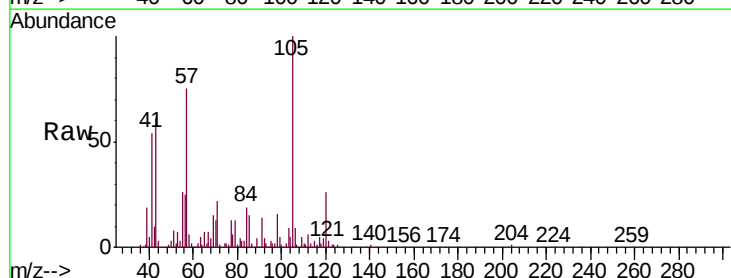
Instrument :
MSVOA_L
ClientSampleId :
SV1

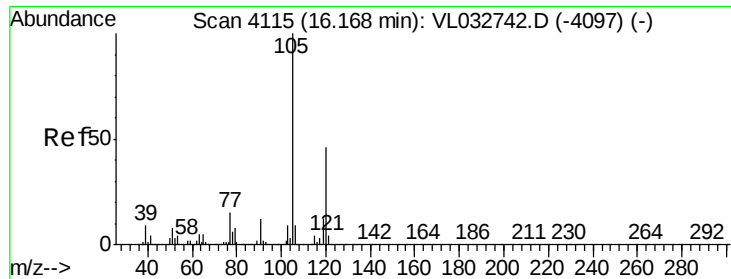
Tgt Ion: 91 Resp: 26003
Ion Ratio Lower Upper
91 100
126 18.3 12.1 48.5



#72
4-Ethyltoluene
Concen: 0.445 ppbv
RT: 16.01 min Scan# 4065
Delta R.T. -0.01 min
Lab File: VL032760.D
Acq: 14 Nov 2018 15:49

Tgt Ion: 105 Resp: 168703
Ion Ratio Lower Upper
105 100
120 29.5 22.9 34.3
91 16.4 10.6 15.8#
77 13.1 11.4 17.2





#73

1,3,5-Trimethylbenzene

Concen: 0.311 ppbv

RT: 16.16 min Scan# 4112

Delta R.T. -0.01 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Instrument :

MSVOA_L

ClientSampleId :

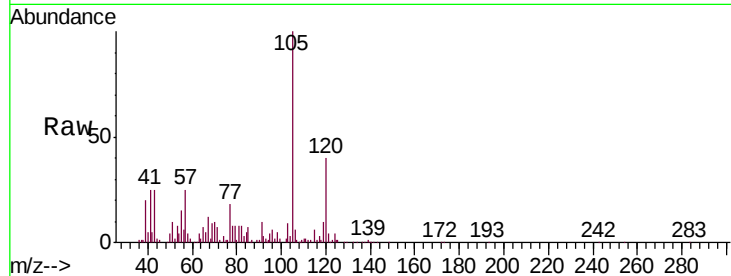
SV1

Tgt Ion:105 Resp: 115266

Ion Ratio Lower Upper

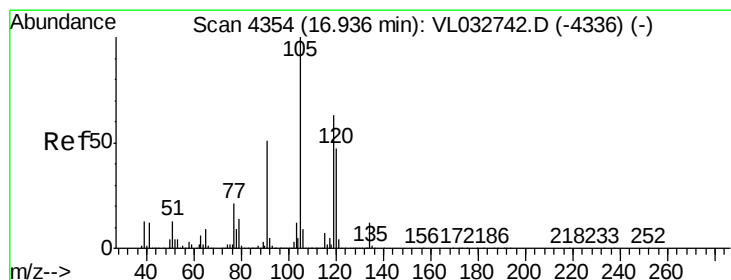
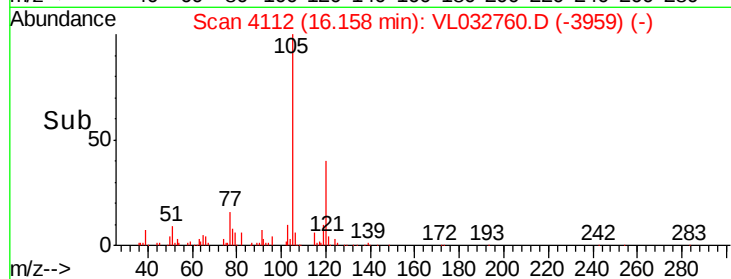
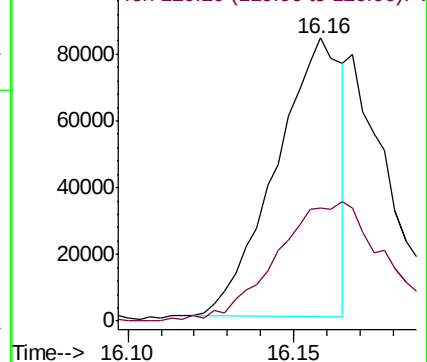
105 100

120 39.1 36.6 55.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 1.557 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. -0.01 min

Lab File: VL032760.D

Acq: 14 Nov 2018 15:49

Tgt Ion:105 Resp: 617134

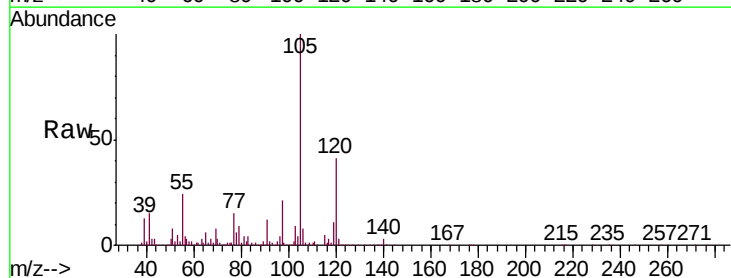
Ion Ratio Lower Upper

105 100

120 40.4 37.6 56.4

91 11.5 42.5 63.7#

77 14.2 17.4 26.2#



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

