

Data File : VL034754.D
Acq On : 29 Feb 2020 2:27
Operator : SY/AP
Sample : L1698-01DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS-8-4DL

Quant Time: Mar 02 04:40:17 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 28 01:15:02 2020
QLast Update : Fri Feb 28 01:15:02 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1019523	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2138966	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2155859	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.45 95 1777688 10.06 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 100.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.01	85	6251	0.039	ppbv	91
3) Chlorodifluoromethane	2.93	51	16105	0.146	ppbv #	70
4) Chloromethane	3.11	50	2276	0.037	ppbv #	77
9) Propene	2.98	41	21373	0.465	ppbv	88
10) Heptane	8.14	43	17694	0.149	ppbv	97
13) Ethanol	3.59	45	69852	4.808	ppbv	95
15) Acetone	3.84	43	159078	1.369	ppbv #	76
16) 1,3-Butadiene	3.28	39	11115	0.207	ppbv #	17
19) Isopropyl Alcohol	3.96	45	91885	1.328	ppbv #	94
20) Methylene Chloride	4.32	84	8430	0.195	ppbv #	66
23) Vinyl Acetate	5.06	43	19037	0.121	ppbv #	85
25) Ethyl Acetate	5.68	43	26323	0.128	ppbv #	86
26) Hexane	5.68	57	29554	0.312	ppbv #	44
34) 2-Butanone	5.25	43	53712	0.399	ppbv	98
36) Benzene	6.88	78	3719	0.020	ppbv	92
38) Trichloroethene	7.84	130	2507	0.035	ppbv #	62
39) 1,2-Dichloropropane	7.18	63	598402	8.142	ppbv #	22
52) Tetrachloroethene	11.25	164	132440	1.956	ppbv	90
53) Toluene	9.83	91	103445	0.526	ppbv	94
58) Ethyl Benzene	13.01	91	13684	0.052	ppbv	90
59) m/p-Xylene	13.02	91	18716	0.082	ppbv #	32
60) o-Xylene	13.73	91	14081	0.062	ppbv #	58
72) 4-Ethyltoluene	15.88	105	5148	0.020	ppbv #	58
74) 1,2,4-Trimethylbenzene	16.81	105	10537	0.039	ppbv #	43

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

Data File : VL034754.D

Acq On : 29 Feb 2020 2:27

Operator : SY/AP

Sample : L1698-01DL 10X

Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

SS-8-4DL

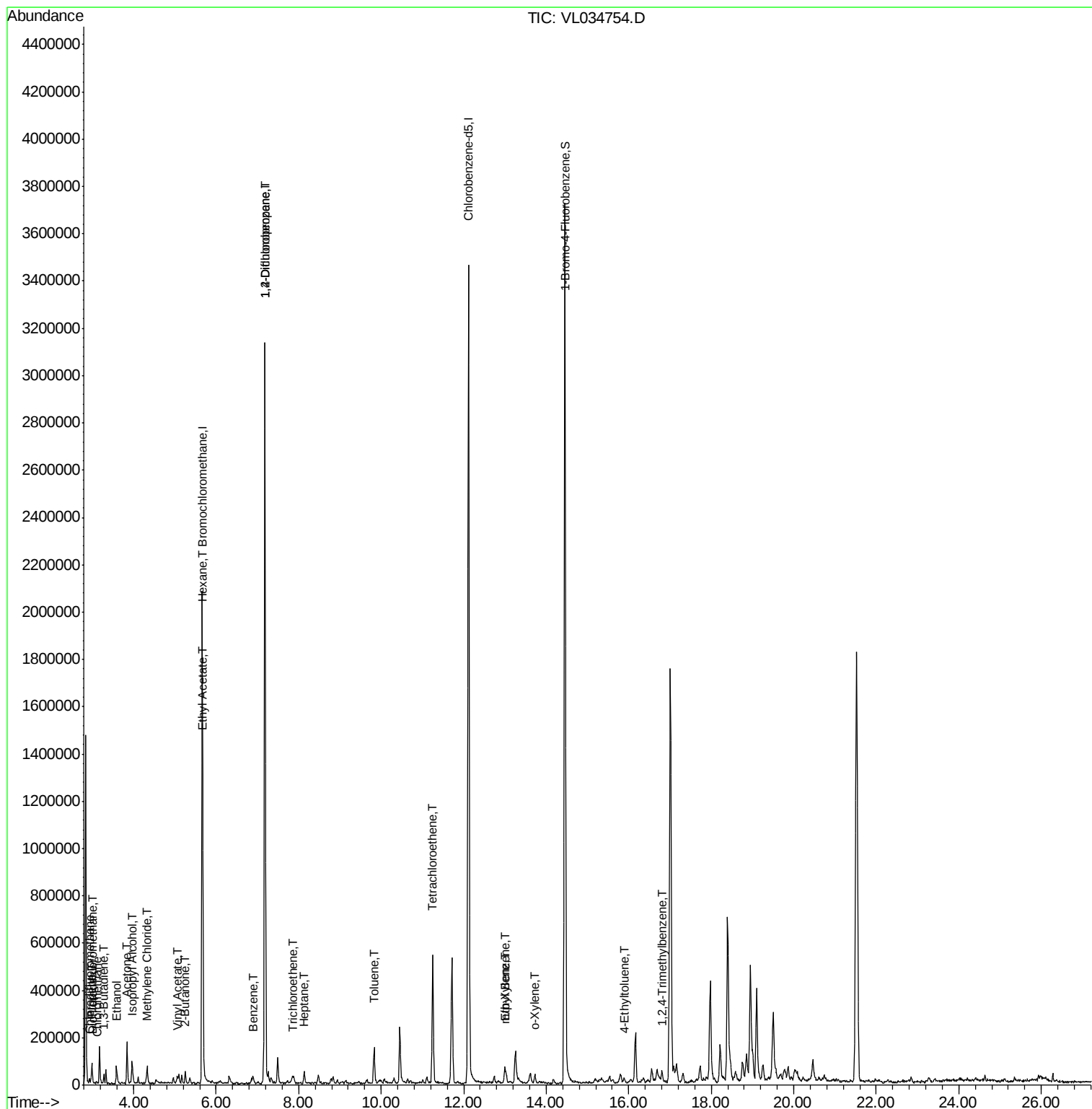
Quant Time: Mar 02 04:40:17 2020

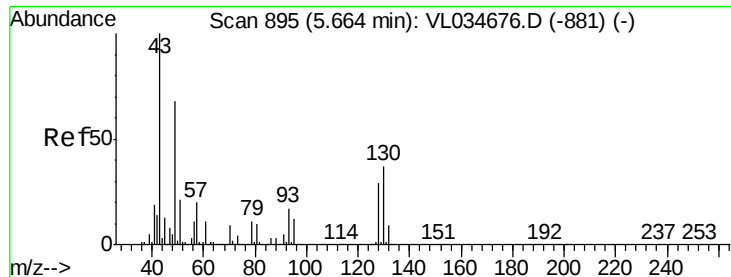
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 28 01:15:02 2020

QLast Update : Fri Feb 28 01:15:02 2020

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. -0.00 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

SS-8-4DL

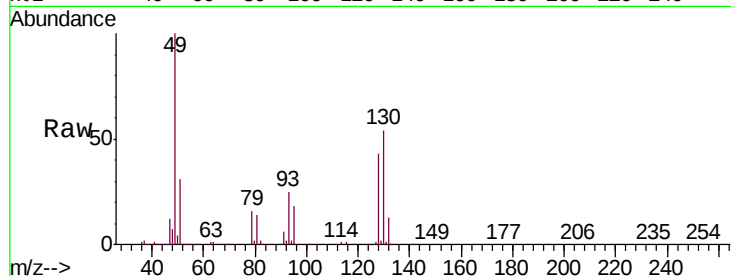
Tgt Ion: 49 Resp: 1019523

Ion Ratio Lower Upper

49 100

128 43.1 21.6 65.0

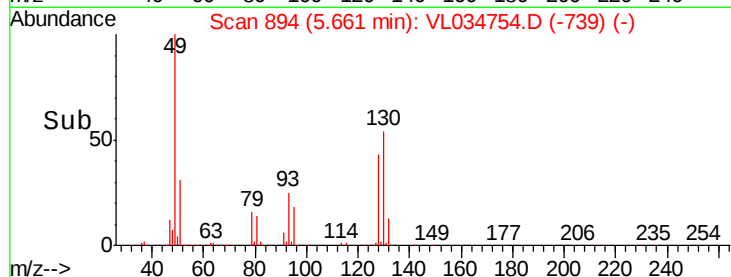
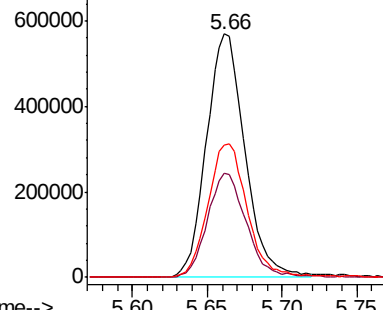
130 56.5 27.7 83.1



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: 0.039 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL034754.D

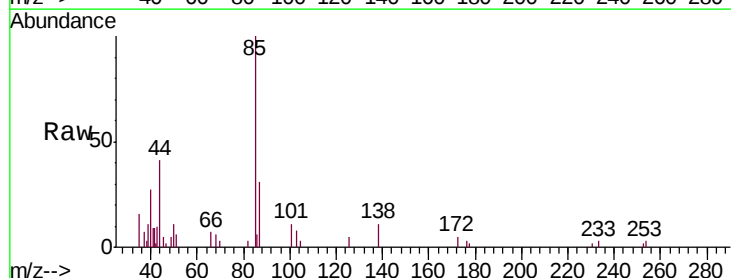
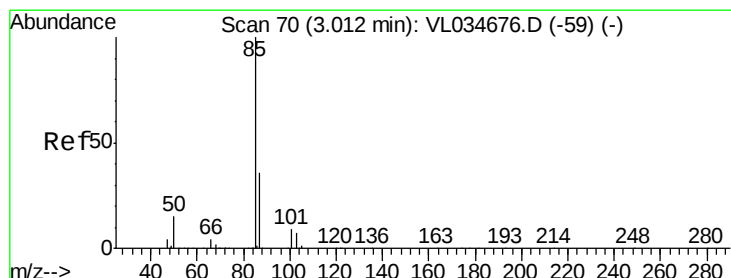
Acq: 29 Feb 2020 2:27

Tgt Ion: 85 Resp: 6251

Ion Ratio Lower Upper

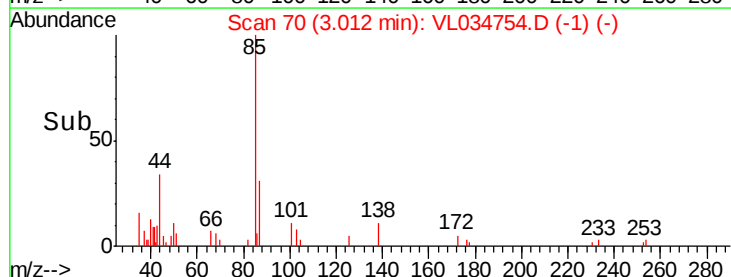
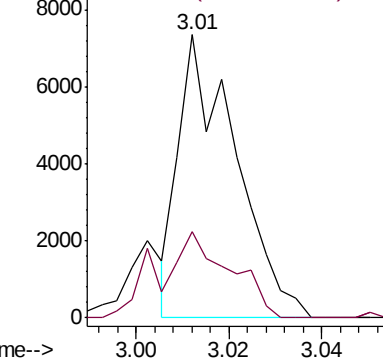
85 100

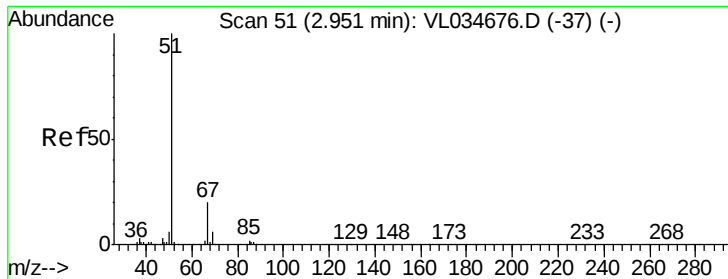
87 31.3 29.2 43.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.146 ppbv

RT: 2.93 min Scan# 46

Delta R.T. -0.02 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

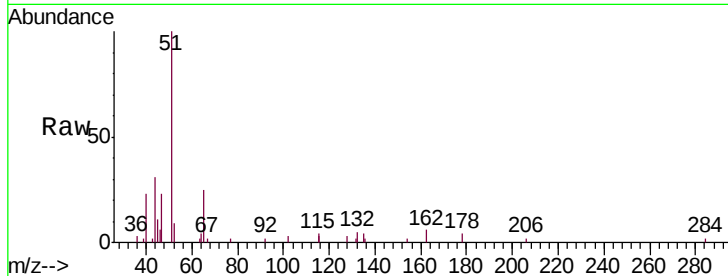
SS-8-4DL

Tgt Ion: 51 Resp: 16105

Ion Ratio Lower Upper

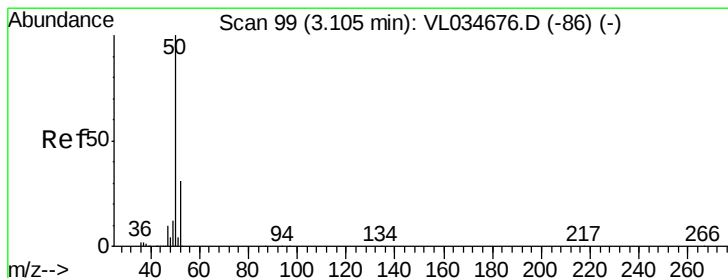
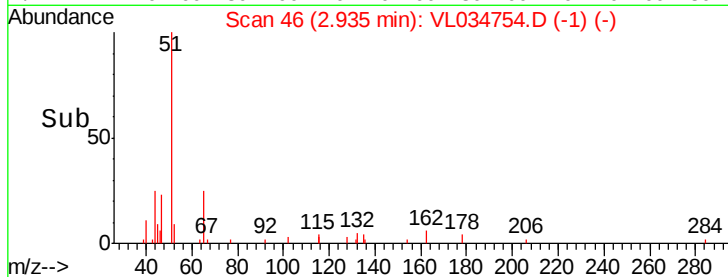
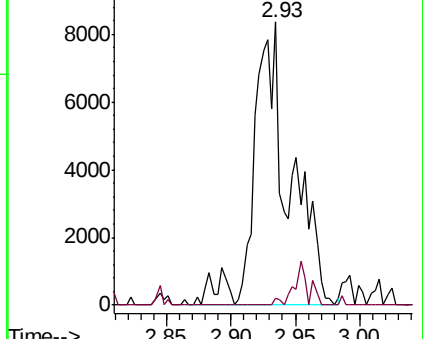
51 100

67 5.8 15.5 23.3#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.037 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.00 min

Lab File: VL034754.D

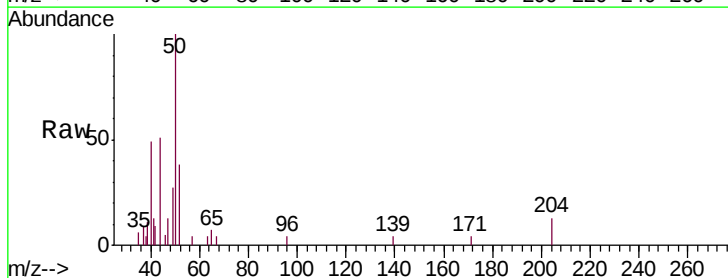
Acq: 29 Feb 2020 2:27

Tgt Ion: 50 Resp: 2276

Ion Ratio Lower Upper

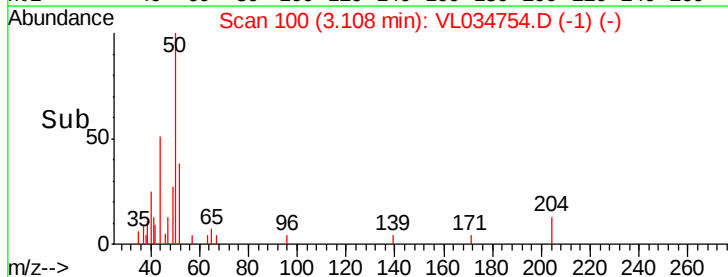
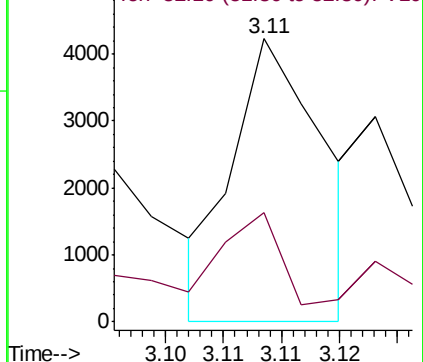
50 100

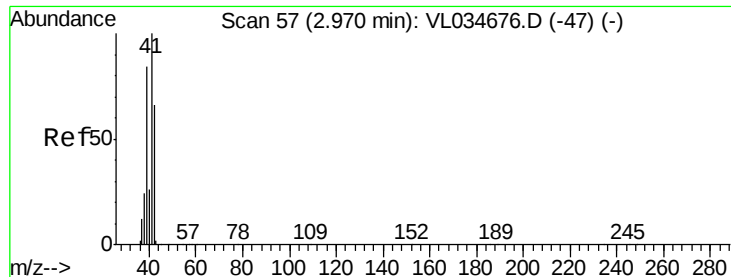
52 43.8 25.0 37.4#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.465 ppbv

RT: 2.98 min Scan# 61

Delta R.T. 0.01 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

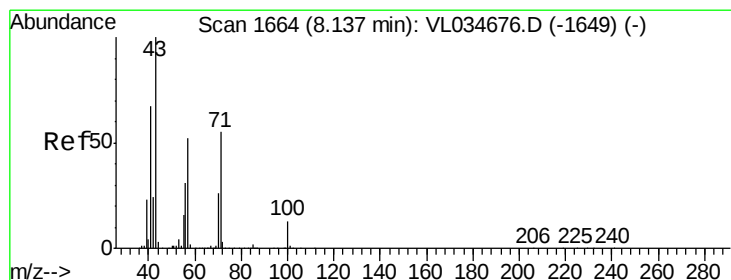
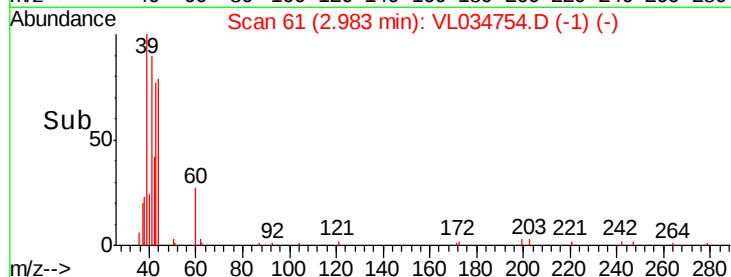
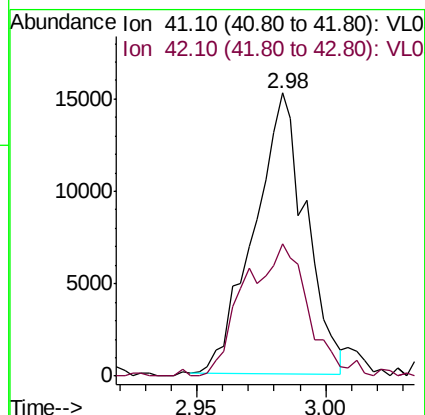
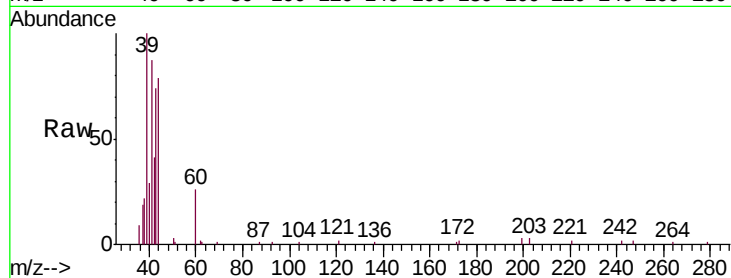
SS-8-4DL

Tgt Ion: 41 Resp: 21373

Ion Ratio Lower Upper

41 100

42 59.0 54.9 82.3



#10

Heptane

Concen: 0.149 ppbv

RT: 8.14 min Scan# 1664

Delta R.T. 0.00 min

Lab File: VL034754.D

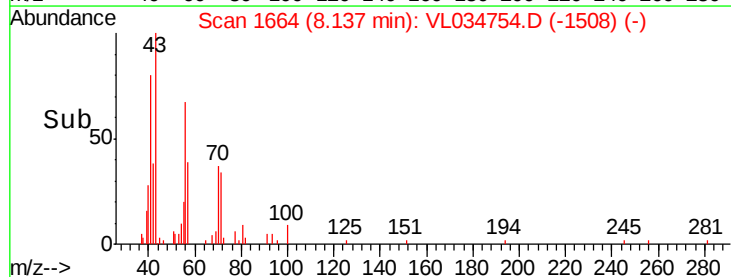
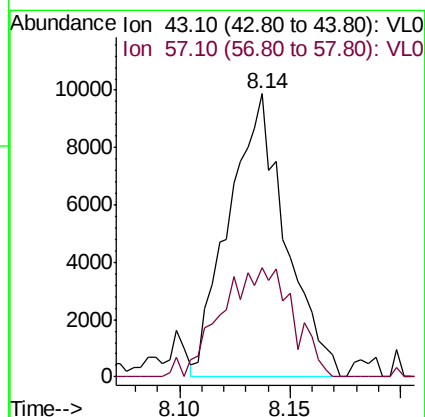
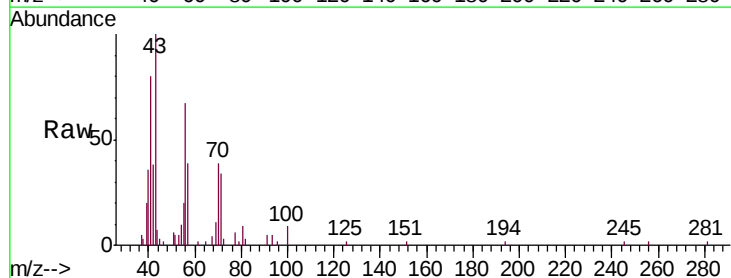
Acq: 29 Feb 2020 2:27

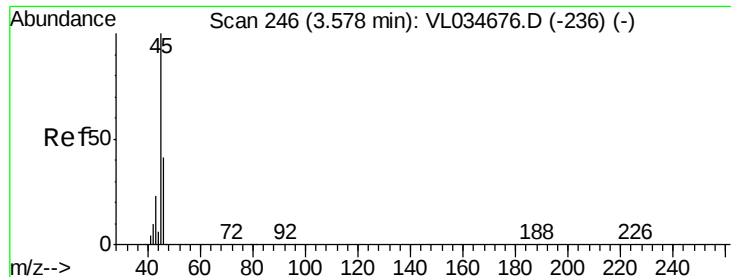
Tgt Ion: 43 Resp: 17694

Ion Ratio Lower Upper

43 100

57 48.9 41.0 61.6





#13

Ethanol

Concen: 4.808 ppbv

RT: 3.59 min Scan# 250

Delta R.T. 0.01 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

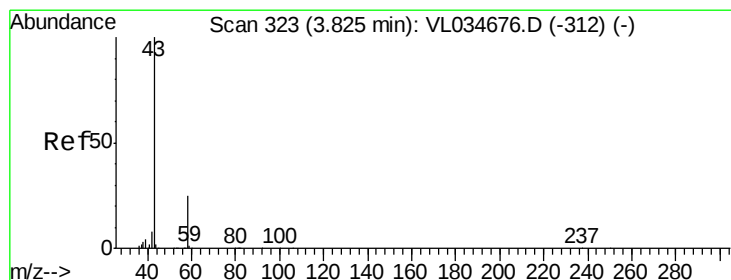
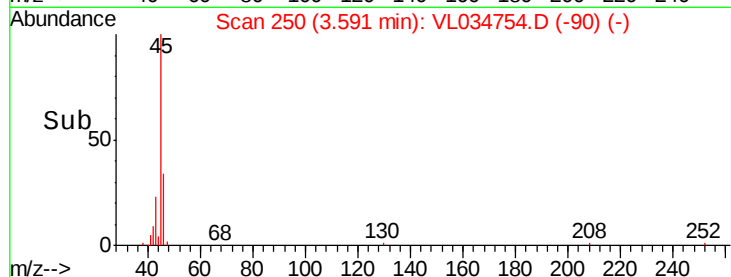
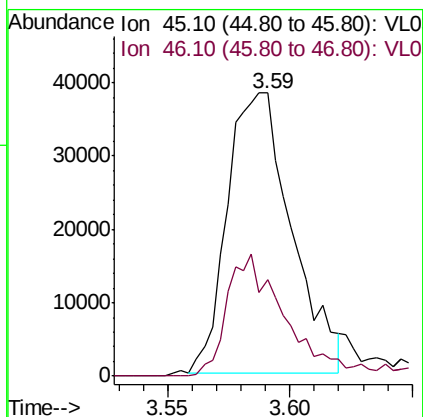
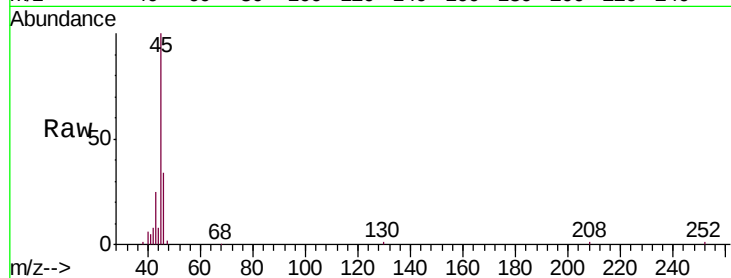
SS-8-4DL

Tgt Ion: 45 Resp: 69852

Ion Ratio Lower Upper

45 100

46 41.5 15.4 61.4



#15

Acetone

Concen: 1.369 ppbv

RT: 3.84 min Scan# 326

Delta R.T. 0.01 min

Lab File: VL034754.D

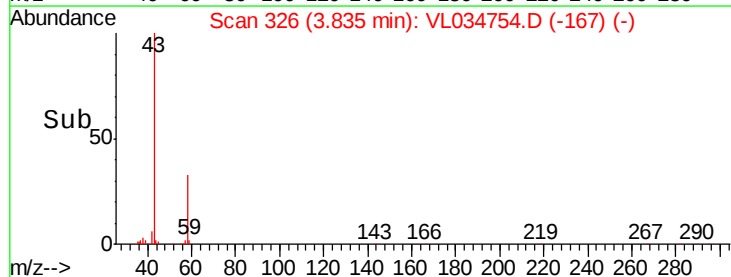
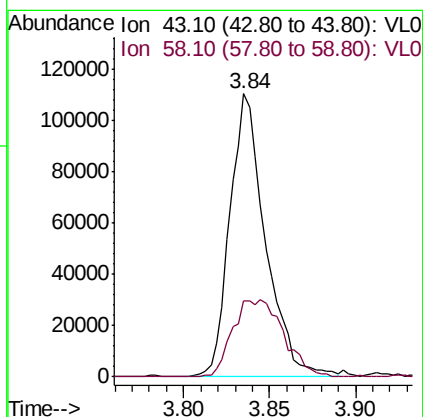
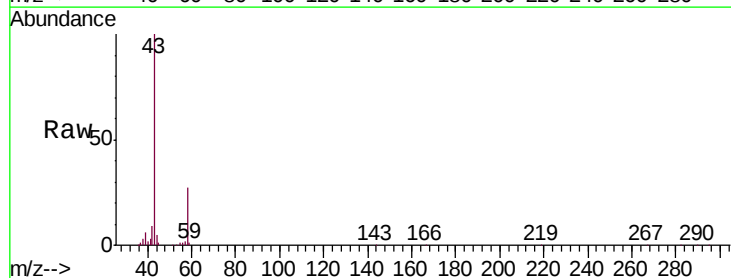
Acq: 29 Feb 2020 2:27

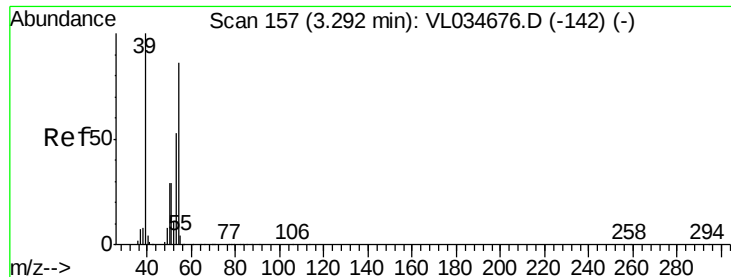
Tgt Ion: 43 Resp: 159078

Ion Ratio Lower Upper

43 100

58 39.1 21.4 32.0#

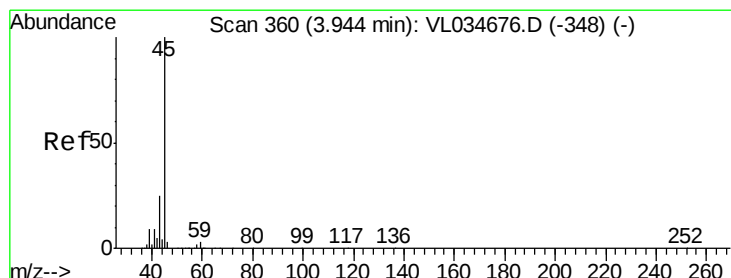
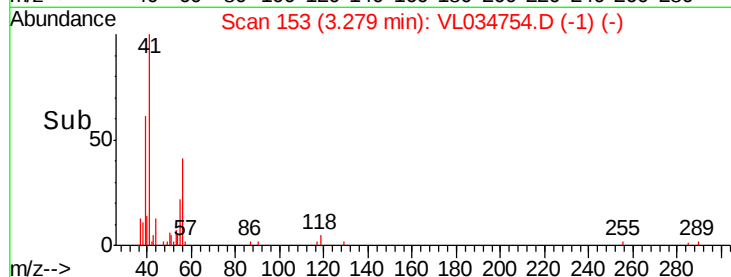
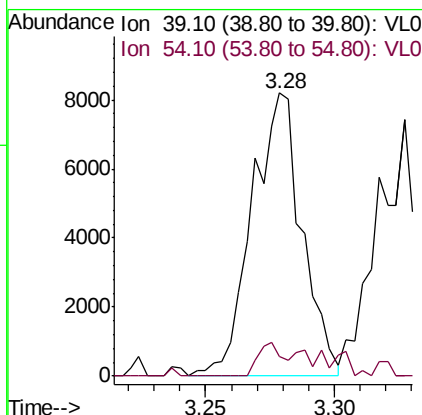
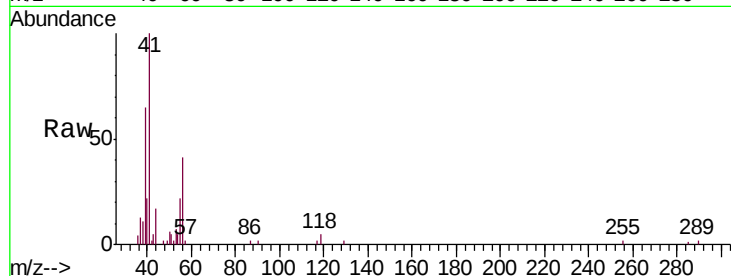




#16
 1,3-Butadiene
 Concen: 0.207 ppbv
 RT: 3.28 min Scan# 153
 Delta R.T. -0.01 min
 Lab File: VL034754.D
 Acq: 29 Feb 2020 2:27

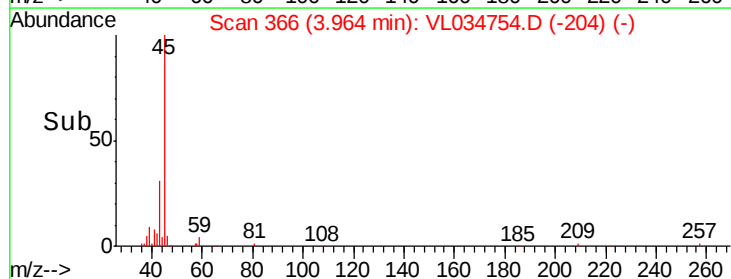
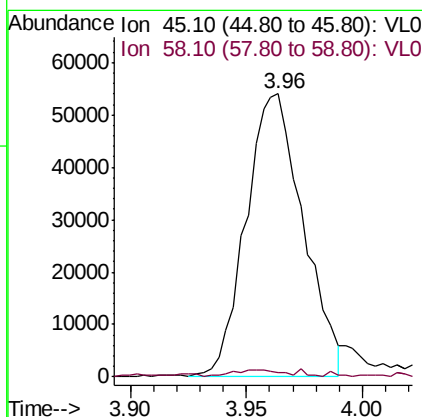
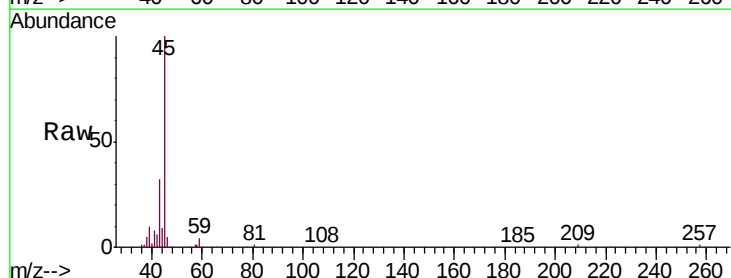
Instrument :
 MSVOA_L
 ClientSampleId :
 SS-8-4DL

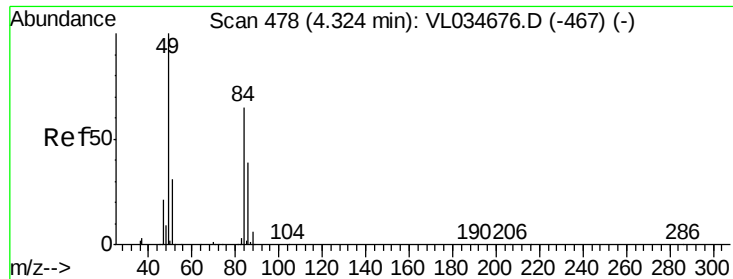
Tgt Ion: 39 Resp: 11115
 Ion Ratio Lower Upper
 39 100
 54 8.8 67.0 100.6#



#19
 Isopropyl Alcohol
 Concen: 1.328 ppbv
 RT: 3.96 min Scan# 366
 Delta R.T. 0.02 min
 Lab File: VL034754.D
 Acq: 29 Feb 2020 2:27

Tgt Ion: 45 Resp: 91885
 Ion Ratio Lower Upper
 45 100
 58 4.4 1.8 2.6#

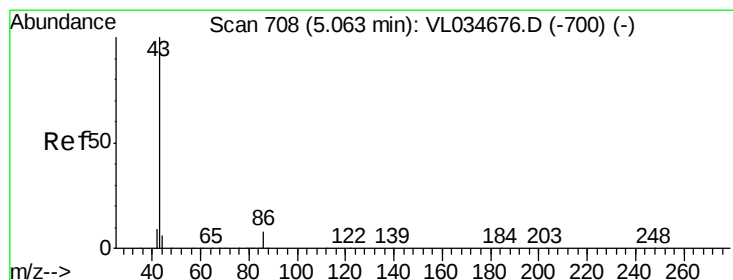
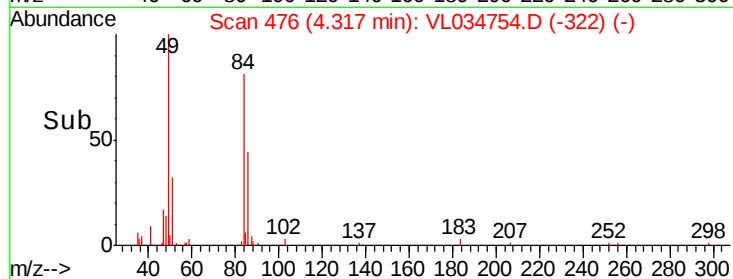
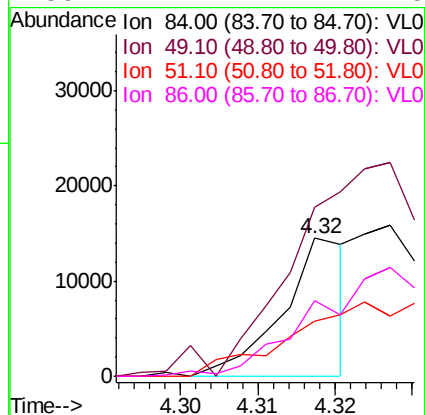
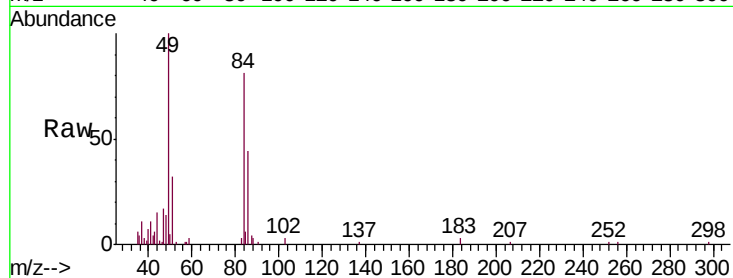




#20
Methylene Chloride
Concen: 0.195 ppbv
RT: 4.32 min Scan# 476
Delta R.T. -0.01 min
Lab File: VL034754.D
Acq: 29 Feb 2020 2:27

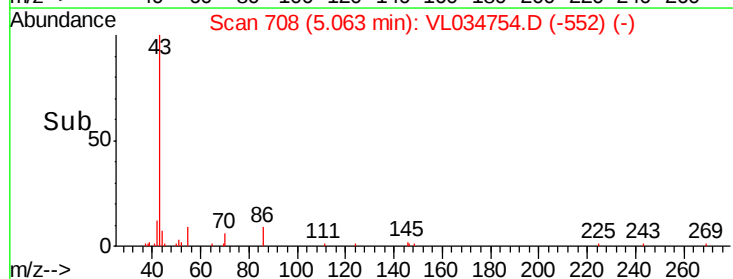
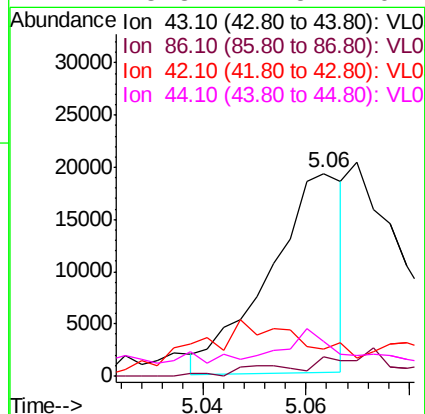
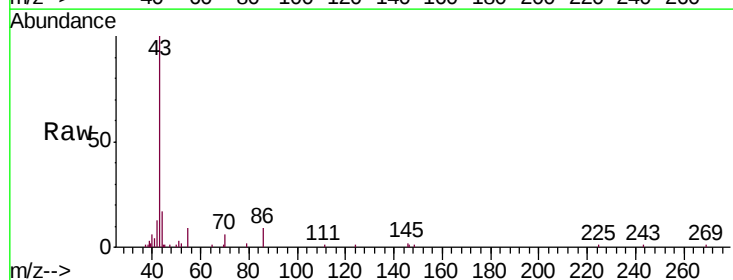
Instrument :
MSVOA_L
ClientSampleId :
SS-8-4DL

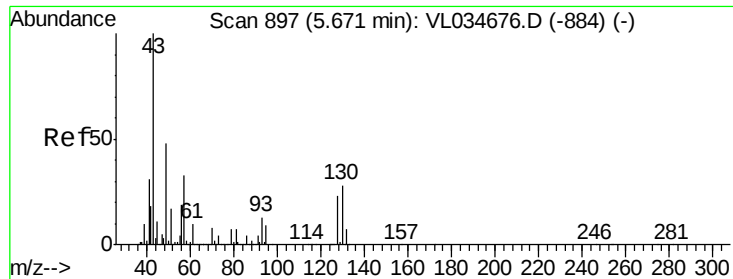
Tgt Ion: 84 Resp: 8430
Ion Ratio Lower Upper
84 100
49 93.7 122.8 184.2#
51 37.0 38.6 58.0#
86 47.4 47.7 71.5#



#23
Vinyl Acetate
Concen: 0.121 ppbv
RT: 5.06 min Scan# 708
Delta R.T. 0.00 min
Lab File: VL034754.D
Acq: 29 Feb 2020 2:27

Tgt Ion: 43 Resp: 19037
Ion Ratio Lower Upper
43 100
86 8.9 6.0 9.0
42 0.0 8.0 12.0#
44 8.3 4.5 6.7#

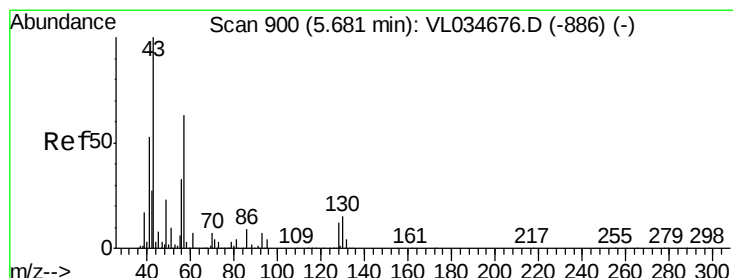
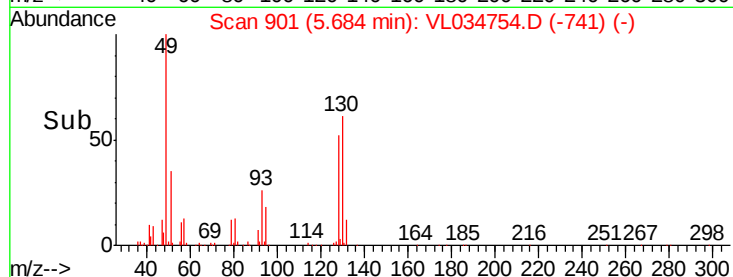
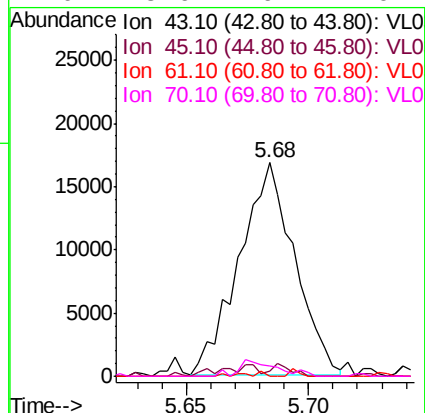
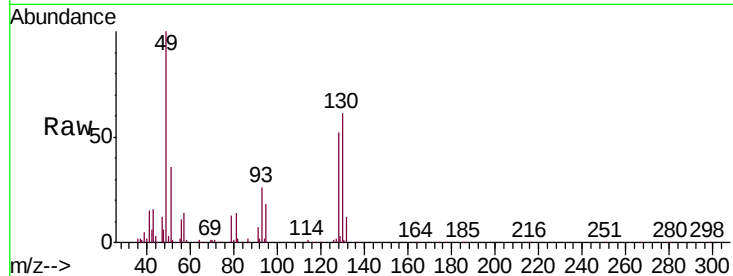




#25
Ethyl Acetate
Concen: 0.128 ppbv
RT: 5.68 min Scan# 901
Delta R.T. 0.01 min
Lab File: VL034754.D
Acq: 29 Feb 2020 2:27

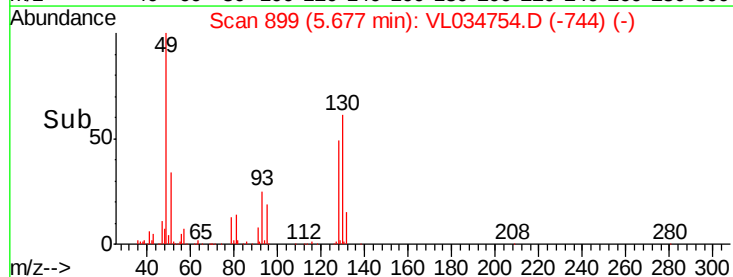
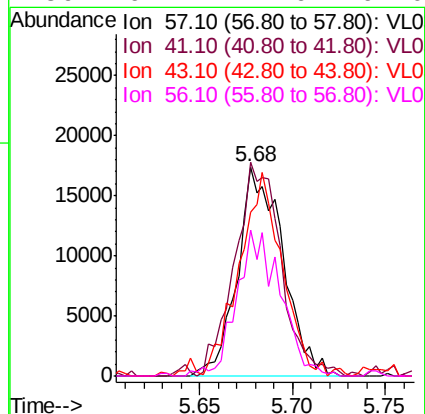
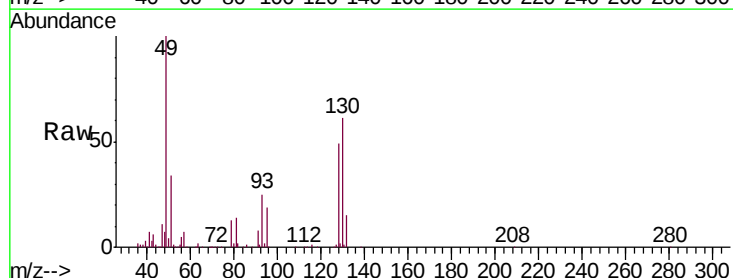
Instrument :
MSVOA_L
ClientSampleId :
SS-8-4DL

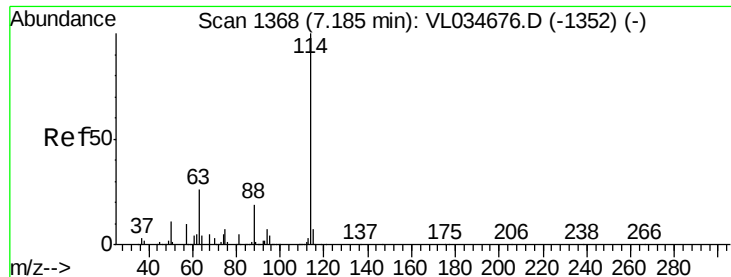
Tgt Ion:	43	Resp:	26323
Ion	Ratio	Lower	Upper
43	100		
45	5.9	8.2	12.4#
61	1.3	7.8	11.6#
70	5.6	6.1	9.1#



#26
Hexane
Concen: 0.312 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.00 min
Lab File: VL034754.D
Acq: 29 Feb 2020 2:27

Tgt Ion:	57	Resp:	29554
Ion	Ratio	Lower	Upper
57	100		
41	105.8	70.3	105.5#
43	93.6	177.0	265.4#
56	67.2	42.6	64.0#

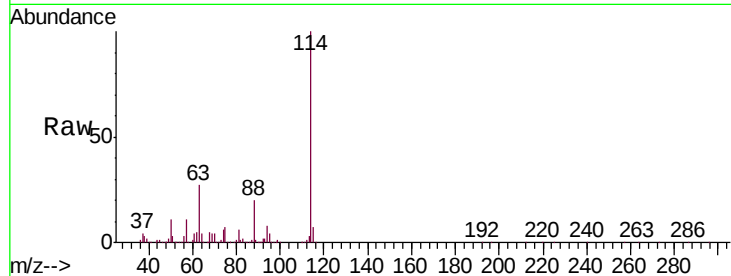




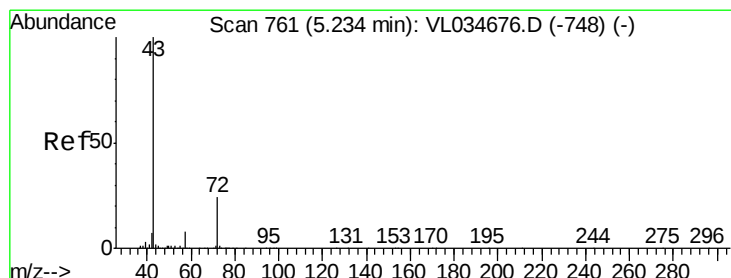
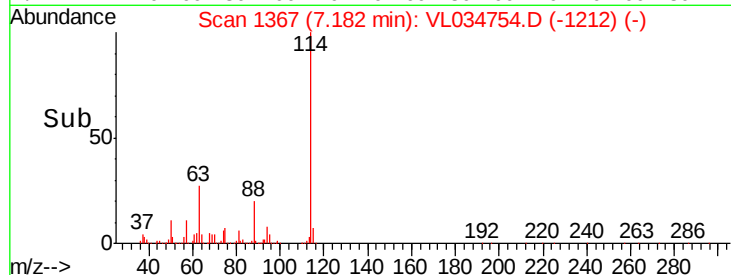
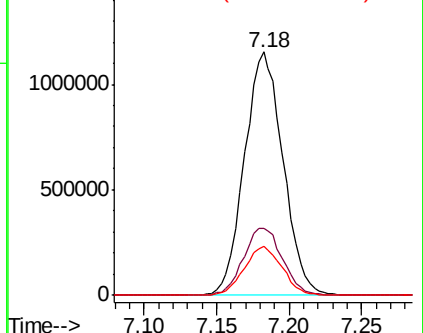
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1367
 Delta R.T. -0.00 min
 Lab File: VL034754.D
 Acq: 29 Feb 2020 2:27

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-8-4DL

Tgt Ion: 114 Resp: 2138966
 Ion Ratio Lower Upper
 114 100
 63 28.2 22.9 34.3
 88 19.8 15.8 23.6

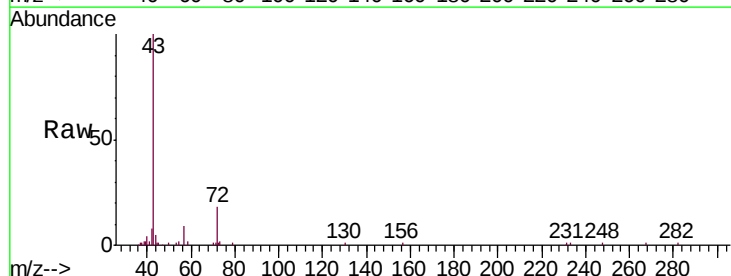


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

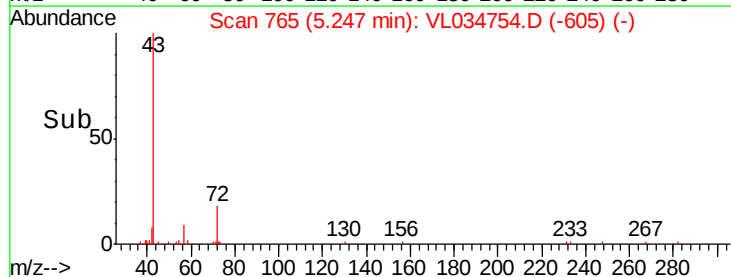
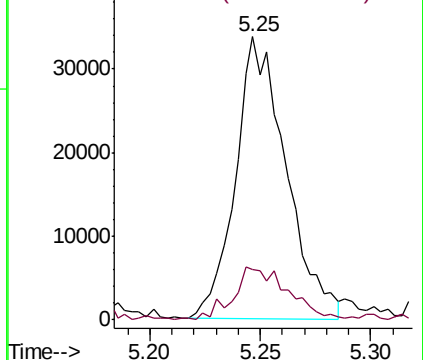


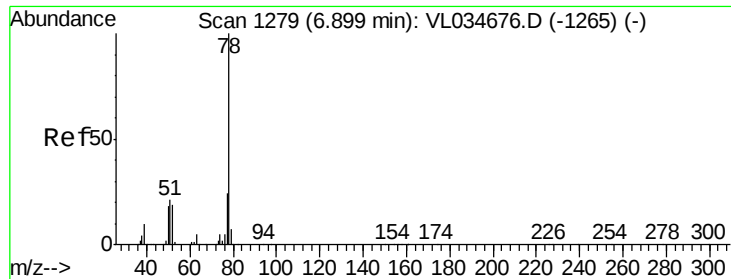
#34
 2-Butanone
 Concen: 0.399 ppbv
 RT: 5.25 min Scan# 765
 Delta R.T. 0.01 min
 Lab File: VL034754.D
 Acq: 29 Feb 2020 2:27

Tgt Ion: 43 Resp: 53712
 Ion Ratio Lower Upper
 43 100
 72 21.5 18.2 27.2



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





#36

Benzene

Concen: 0.020 ppbv

RT: 6.88 min Scan# 1273

Delta R.T. -0.02 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

SS-8-4DL

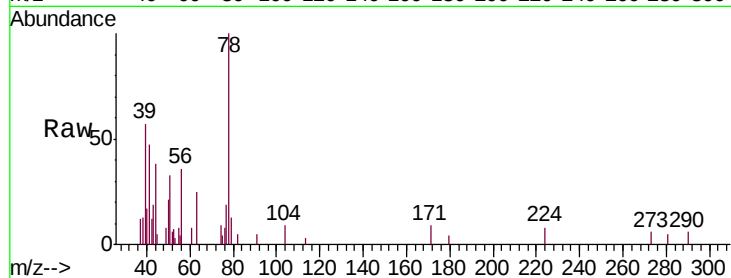
Tgt Ion: 78 Resp: 3719

Ion Ratio Lower Upper

78 100

77 20.3 19.5 29.3

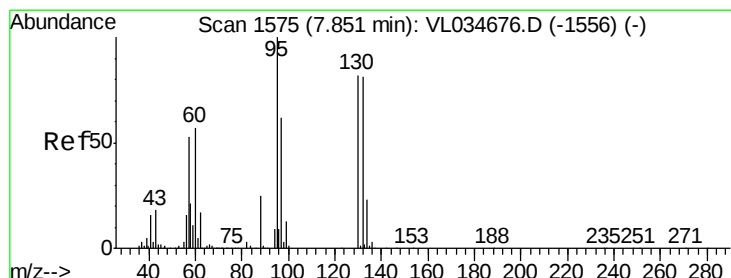
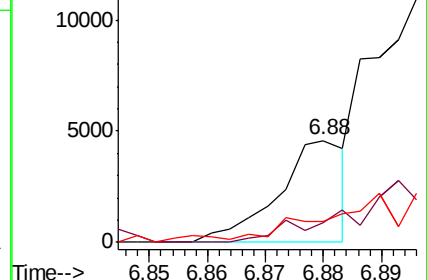
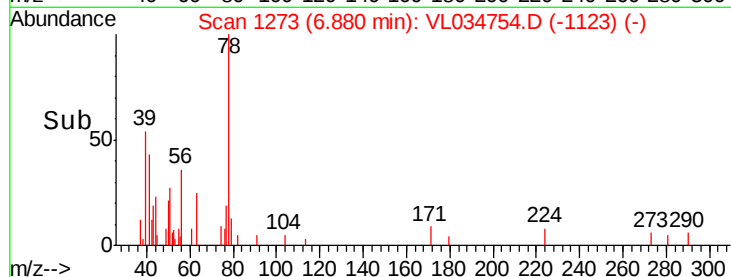
50 14.7 14.6 21.8



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



#38

Trichloroethene

Concen: 0.035 ppbv

RT: 7.84 min Scan# 1573

Delta R.T. -0.01 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Tgt Ion: 130 Resp: 2507

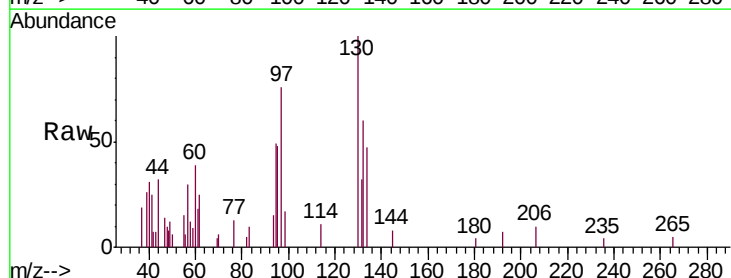
Ion Ratio Lower Upper

130 100

95 136.9 97.1 145.7

132 28.4 78.3 117.5#

97 106.1 60.1 90.1#

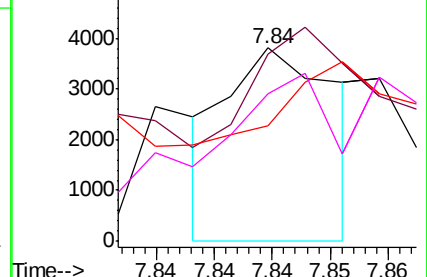
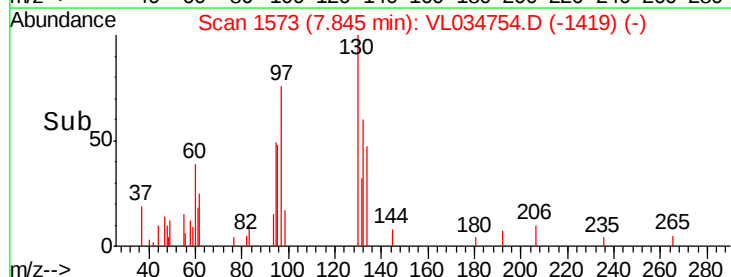


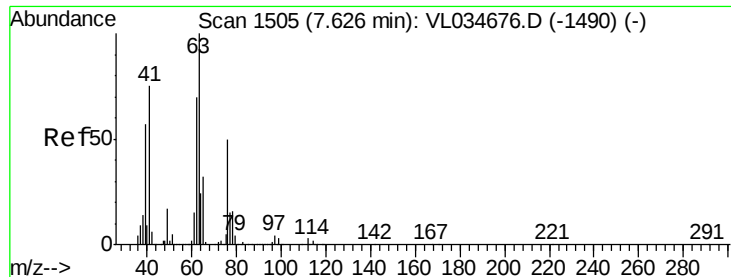
Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0





#39

1,2-Dichloropropane

Concen: 8.142 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.45 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

SS-8-4DL

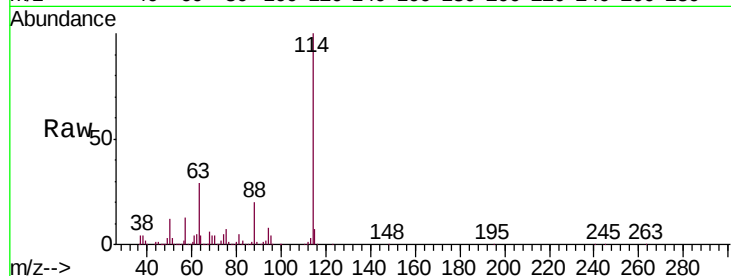
Tgt Ion: 63 Resp: 598402

Ion Ratio Lower Upper

63 100

41 0.0 60.2 90.4#

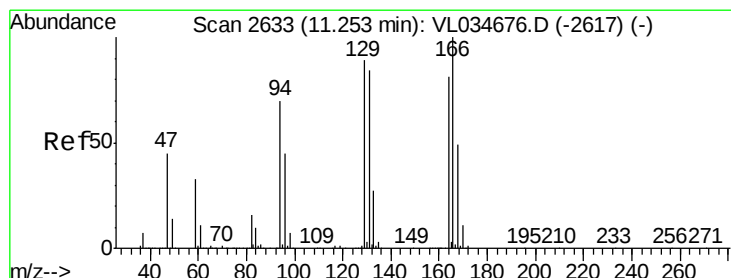
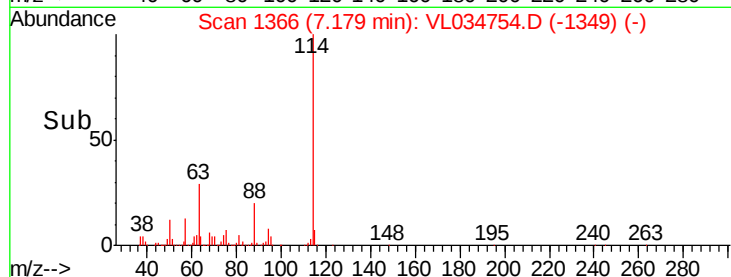
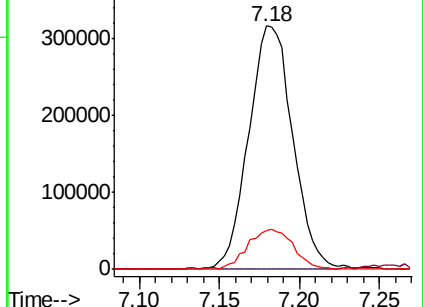
62 15.9 56.3 84.5#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#52

Tetrachloroethene

Concen: 1.956 ppbv

RT: 11.25 min Scan# 2633

Delta R.T. 0.00 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Tgt Ion: 164 Resp: 132440

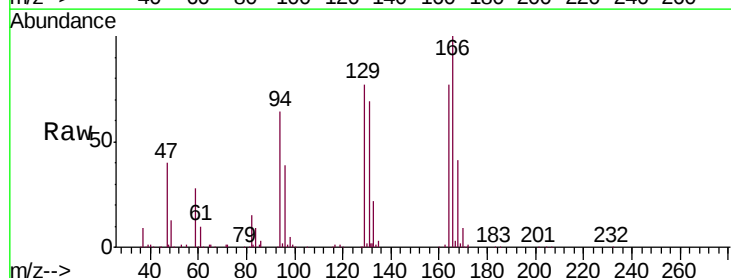
Ion Ratio Lower Upper

164 100

166 130.8 99.2 148.8

129 100.0 88.0 132.0

131 90.5 83.7 125.5

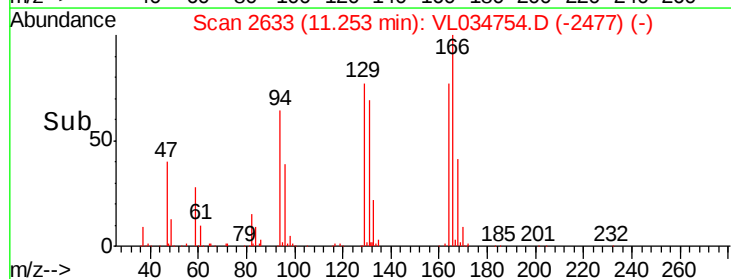
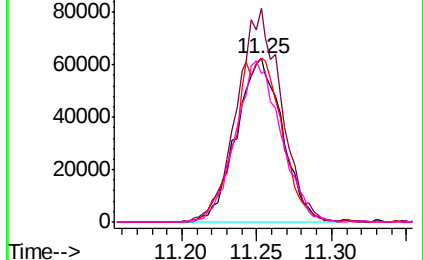


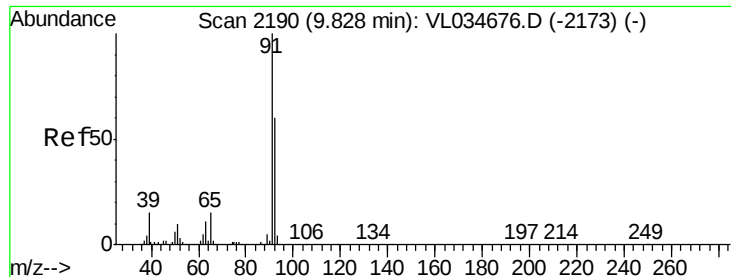
Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.526 ppbv

RT: 9.83 min Scan# 2190

Delta R.T. 0.00 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

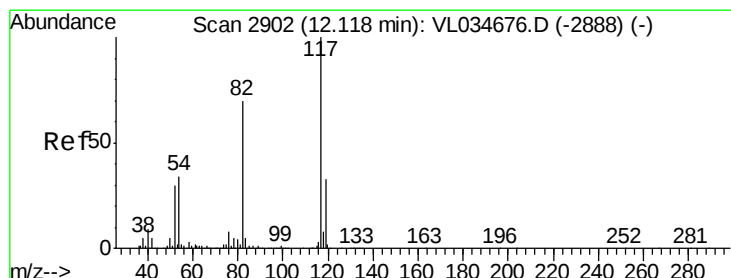
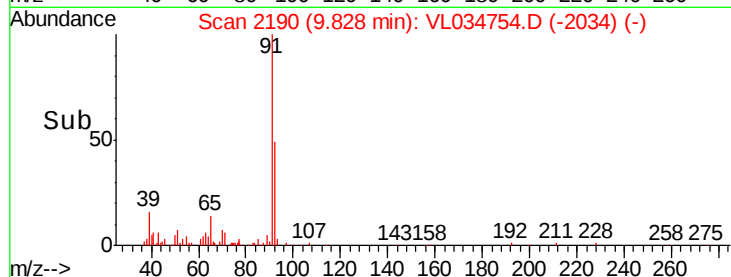
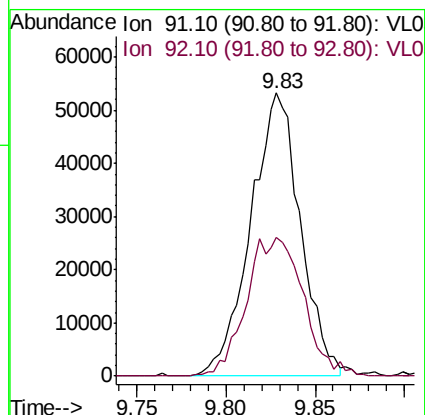
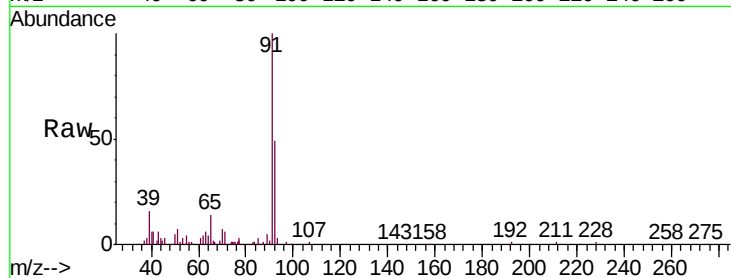
SS-8-4DL

Tgt Ion: 91 Resp: 103445

Ion Ratio Lower Upper

91 100

92 56.1 48.5 72.7



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2902

Delta R.T. 0.00 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

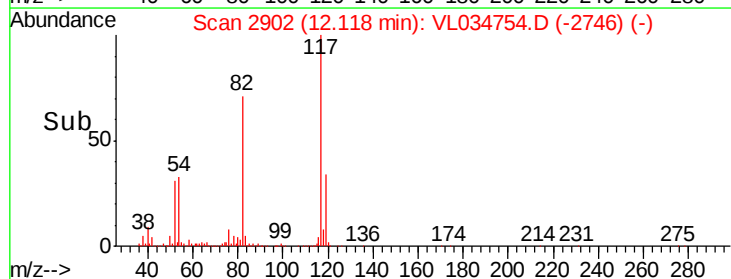
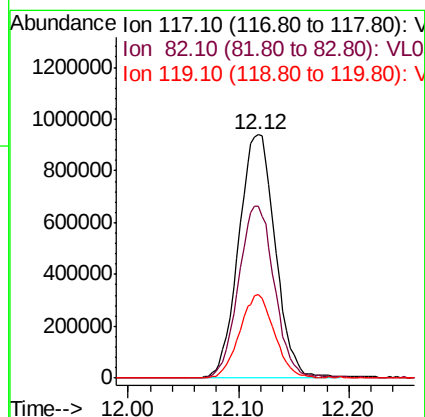
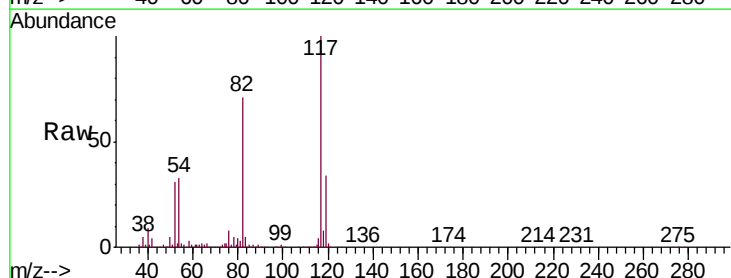
Tgt Ion: 117 Resp: 2155859

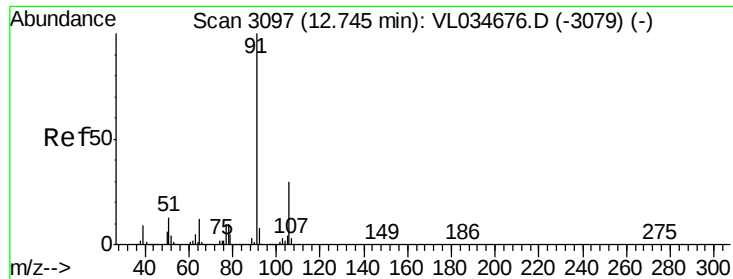
Ion Ratio Lower Upper

117 100

82 70.0 54.1 81.1

119 32.8 27.6 41.4





#58

Ethyl Benzene

Concen: 0.052 ppbv

RT: 13.01 min Scan# 3179

Delta R.T. 0.26 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

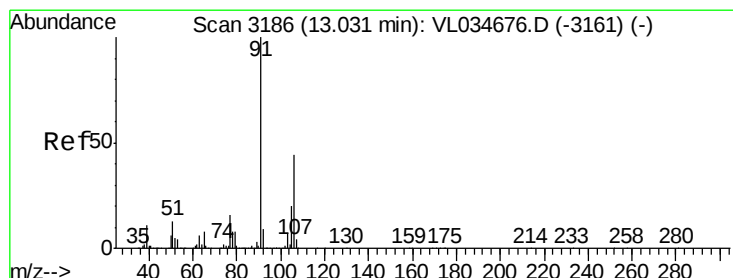
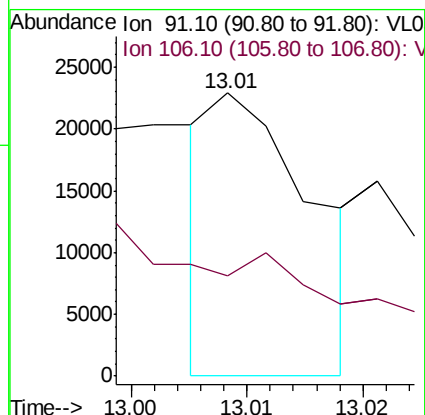
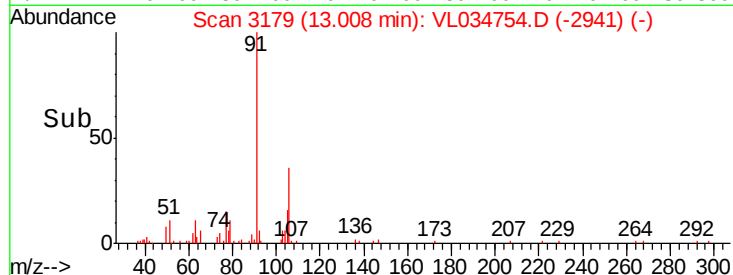
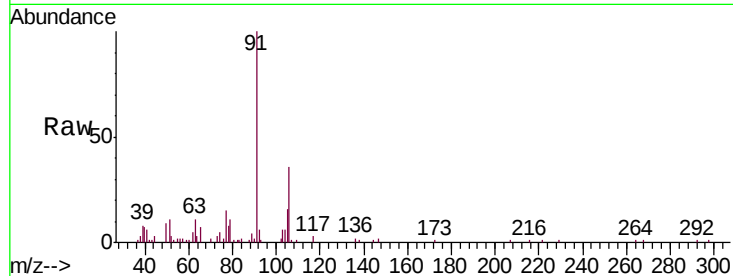
SS-8-4DL

Tgt Ion: 91 Resp: 13684

Ion Ratio Lower Upper

91 100

106 24.7 24.0 36.0



#59

m/p-Xylene

Concen: 0.082 ppbv

RT: 13.02 min Scan# 3183

Delta R.T. -0.01 min

Lab File: VL034754.D

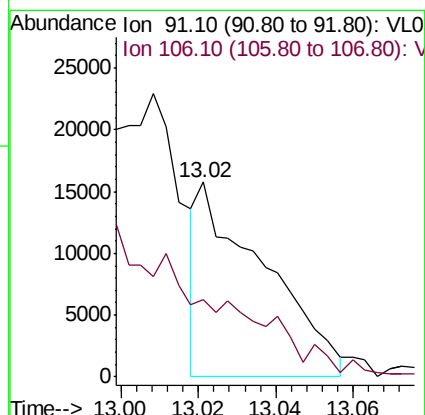
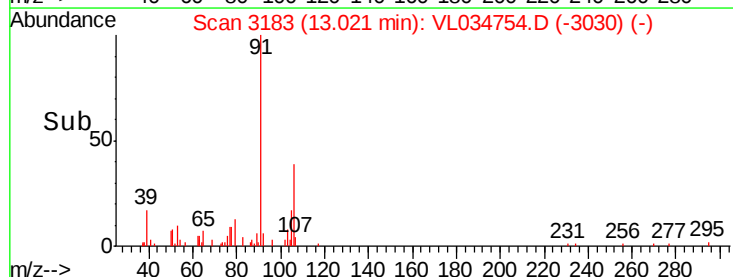
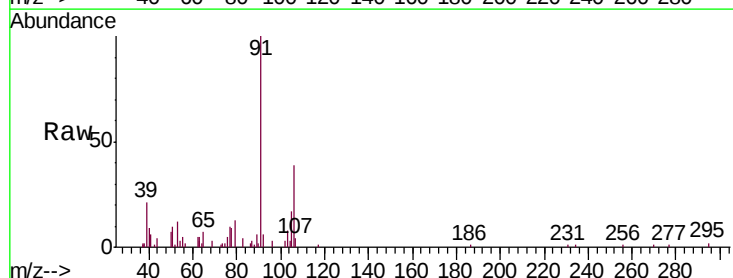
Acq: 29 Feb 2020 2:27

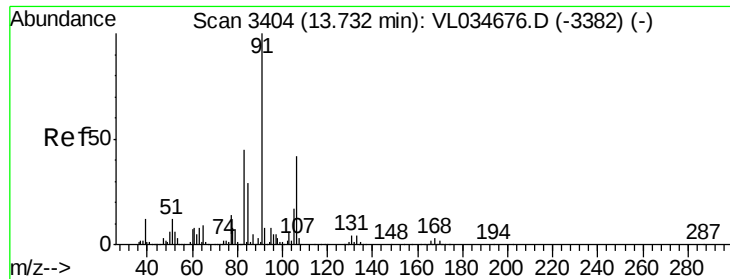
Tgt Ion: 91 Resp: 18716

Ion Ratio Lower Upper

91 100

106 0.0 35.6 53.4#

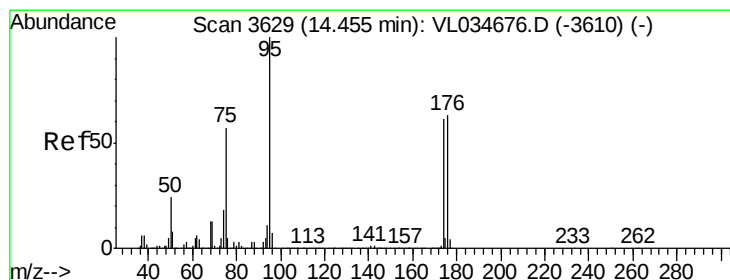
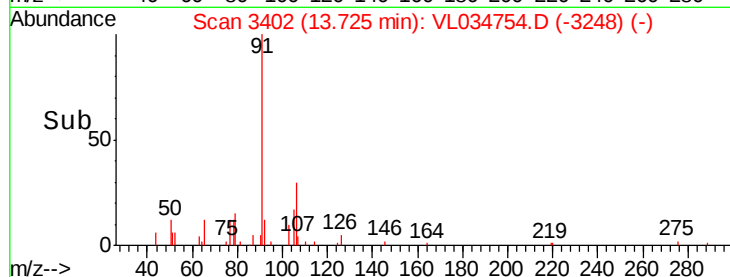
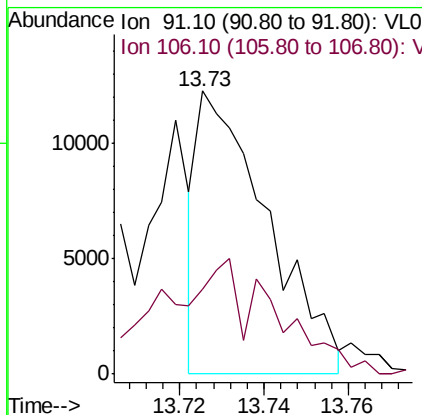
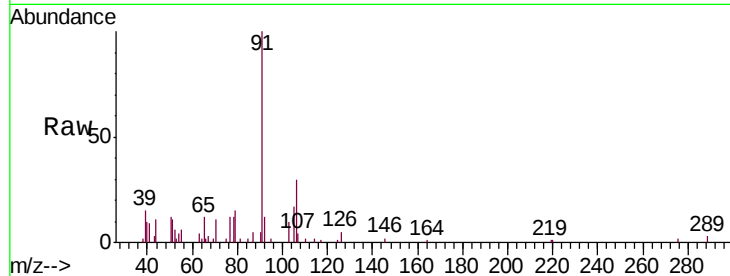




#60
o-Xylene
Concen: 0.062 ppbv
RT: 13.73 min Scan# 3402
Delta R.T. -0.01 min
Lab File: VL034754.D
Acq: 29 Feb 2020 2:27

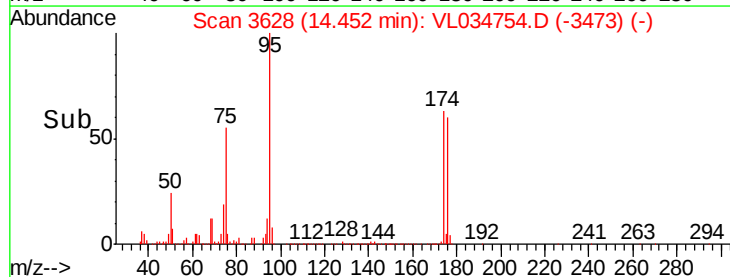
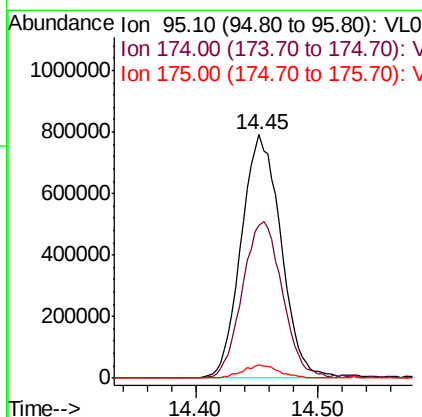
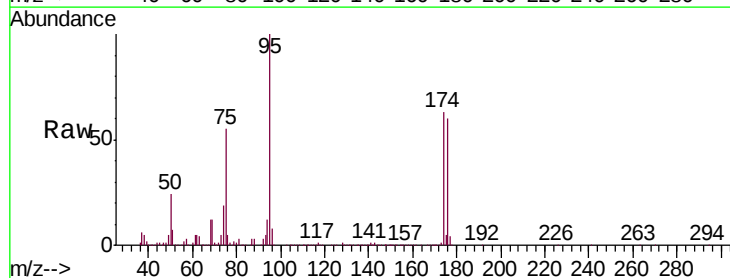
Instrument :
MSVOA_L
ClientSampled :
SS-8-4DL

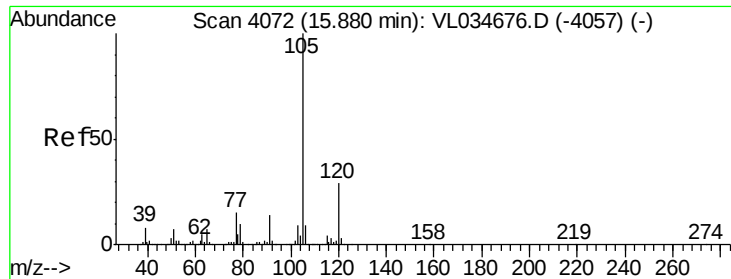
Tgt Ion: 91 Resp: 14081
Ion Ratio Lower Upper
91 100
106 71.0 21.9 65.5#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.056 ppbv
RT: 14.45 min Scan# 3628
Delta R.T. -0.00 min
Lab File: VL034754.D
Acq: 29 Feb 2020 2:27

Tgt Ion: 95 Resp: 1777688
Ion Ratio Lower Upper
95 100
174 65.7 50.7 76.1
175 5.0 3.9 5.9





#72

4-Ethyltoluene

Concen: 0.020 ppbv

RT: 15.88 min Scan# 4072

Delta R.T. 0.00 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Instrument :

MSVOA_L

ClientSampleId :

SS-8-4DL

Tgt Ion:105 Resp: 5148

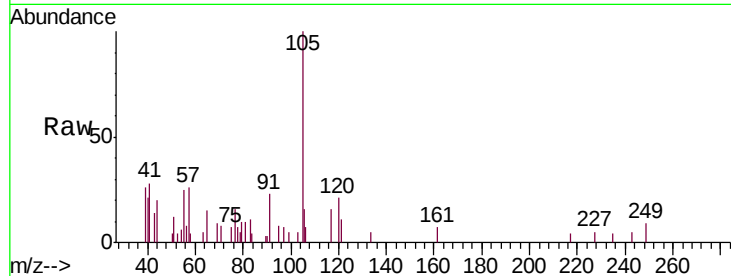
Ion Ratio Lower Upper

105 100

120 0.0 23.7 35.5#

91 0.0 10.9 16.3#

77 25.0 12.2 18.2#

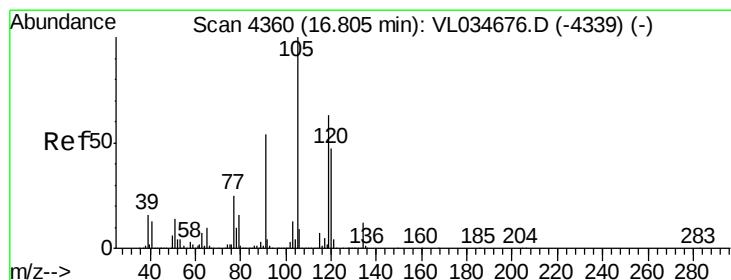
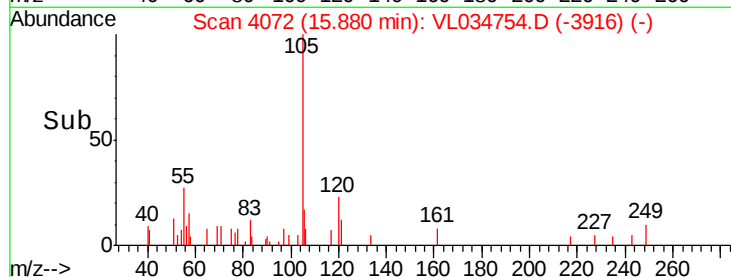
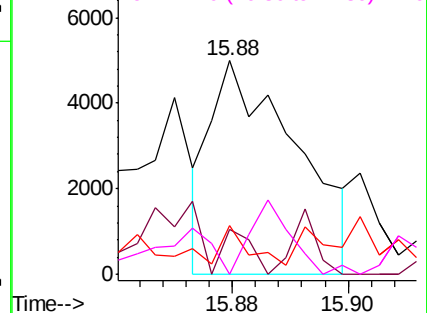


Abundance Ion 105.10 (104.80 to 105.80): V

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



#74

1,2,4-Trimethylbenzene

Concen: 0.039 ppbv

RT: 16.81 min Scan# 4361

Delta R.T. 0.00 min

Lab File: VL034754.D

Acq: 29 Feb 2020 2:27

Tgt Ion:105 Resp: 10537

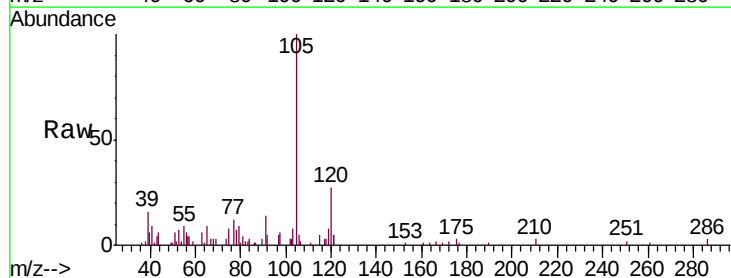
Ion Ratio Lower Upper

105 100

120 9.0 37.9 56.9#

91 12.4 43.9 65.9#

77 0.0 20.3 30.5#



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

