

Data File : VL032709.D

Acq On : 30 Oct 2018 21:58

Operator : SY/AP

Sample : J5693-01DUP

Misc : 400ml/MSVOA\_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SS-1DUP

Quant Time: Oct 31 05:12:25 2018

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL101818AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 25 05:15:43 2018

QLast Update : Thu Oct 25 05:15:43 2018

Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.78  | 49   | 1307163  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.31  | 114  | 3448553  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.25 | 117  | 3367770  | 10.00 | ppbv  | 0.00     |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.59  | 95    | 2621610  | 10.45    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 104.50% |

## Target Compounds

|                                |       |     |         |        |        | Qvalue |
|--------------------------------|-------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.08  | 85  | 94672   | 0.711  | ppbv   | 95     |
| 3) Chlorodifluoromethane       | 3.02  | 51  | 30823   | 0.302  | ppbv   | 97     |
| 4) Chloromethane               | 3.18  | 50  | 8788    | 0.154  | ppbv # | 82     |
| 8) Dichlorotetrafluoroethane   | 3.23  | 85  | 6671    | 0.048  | ppbv   | 100    |
| 9) Propene                     | 3.25  | 41  | 186885  | 4.442  | ppbv   | 94     |
| 10) Heptane                    | 8.26  | 43  | 511212  | 3.153  | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.02  | 101 | 38283   | 0.220  | ppbv   | 93     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.56  | 101 | 7634    | 0.053  | ppbv # | 17     |
| 13) Ethanol                    | 3.66  | 45  | 441309  | 36.702 | ppbv   | 98     |
| 15) Acetone                    | 3.91  | 43  | 3097141 | 25.658 | ppbv   | 94     |
| 16) 1,3-Butadiene              | 3.35  | 39  | 95678   | 2.155  | ppbv # | 10     |
| 17) tert-Butyl alcohol         | 4.38  | 59  | 298078  | 8.396  | ppbv # | 100    |
| 19) Isopropyl Alcohol          | 4.04  | 45  | 52637   | 0.612  | ppbv # | 93     |
| 20) Methylene Chloride         | 4.43  | 84  | 65843   | 1.075  | ppbv   | 95     |
| 21) Allyl Chloride             | 4.44  | 41  | 24362   | 0.246  | ppbv # | 39     |
| 23) Vinyl Acetate              | 5.15  | 43  | 186361  | 0.871  | ppbv # | 1      |
| 25) Ethyl Acetate              | 5.80  | 43  | 369189  | 1.329  | ppbv # | 78     |
| 26) Hexane                     | 5.80  | 57  | 520458  | 3.959  | ppbv # | 42     |
| 27) Carbon Disulfide           | 4.63  | 76  | 927539  | 5.816  | ppbv   | 96     |
| 28) Methyl tert-Butyl Ether    | 5.14  | 73  | 79013   | 0.418  | ppbv   | 97     |
| 29) Chloroform                 | 5.86  | 83  | 52342   | 0.249  | ppbv   | 89     |
| 30) Cyclohexane                | 7.26  | 84  | 276493  | 2.657  | ppbv   | 91     |
| 32) 1,1,1-Trichloroethane      | 6.63  | 97  | 58994   | 0.276  | ppbv   | 96     |
| 34) 2-Butanone                 | 5.35  | 43  | 209105  | 1.131  | ppbv   | 99     |
| 35) Carbon Tetrachloride       | 7.15  | 117 | 13202   | 0.054  | ppbv   | 90     |
| 36) Benzene                    | 7.02  | 78  | 1306446 | 4.665  | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.42  | 62  | 11489   | 0.067  | ppbv # | 84     |
| 38) Trichloroethene            | 7.98  | 130 | 79085   | 0.763  | ppbv   | 88     |
| 39) 1,2-Dichloropropane        | 7.31  | 63  | 849102  | 7.852  | ppbv # | 26     |
| 41) Tetrahydrofuran            | 6.18  | 42  | 41013   | 0.398  | ppbv   | 98     |
| 42) Bromodichloromethane       | 7.93  | 83  | 8709    | 0.036  | ppbv # | 27     |
| 44) 2,2,4-Trimethylpentane     | 8.00  | 57  | 1324519 | 2.771  | ppbv # | 85     |
| 51) 2-Hexanone                 | 10.26 | 43  | 97429   | 0.479  | ppbv # | 28     |
| 52) Tetrachloroethene          | 11.39 | 164 | 729083  | 7.468  | ppbv   | 96     |
| 53) Toluene                    | 9.96  | 91  | 7259361 | 22.614 | ppbv   | 99     |
| 58) Ethyl Benzene              | 12.88 | 91  | 1244605 | 3.181  | ppbv   | 99     |
| 59) m/p-Xylene                 | 13.14 | 91  | 4088009 | 11.734 | ppbv   | 98     |
| 60) o-Xylene                   | 13.86 | 91  | 1379718 | 4.105  | ppbv   | 100    |
| 61) Styrene                    | 13.70 | 104 | 31650   | 0.140  | ppbv # | 19     |
| 64) n-propylbenzene            | 15.74 | 120 | 39658   | 0.335  | ppbv   | 82     |
| 65) tert-Butylbenzene          | 16.94 | 119 | 41074   | 0.101  | ppbv # | 1      |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL103018\  
Quantitation Report (Not Reviewed)

Data File : VL032709.D  
Acq On : 30 Oct 2018 21:58  
Operator : SY/AP  
Sample : J5693-01DUP  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SS-1DUP

Quant Time: Oct 31 05:12:25 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL101818AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Thu Oct 25 05:15:43 2018  
QLast Update : Thu Oct 25 05:15:43 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|----------------------------|-------|------|----------|-------|--------|----------|
| 72) 4-Ethyltoluene         | 16.01 | 105  | 237109   | 0.662 | ppbv   | 97       |
| 73) 1,3,5-Trimethylbenzene | 16.17 | 105  | 177268   | 0.508 | ppbv   | 94       |
| 74) 1,2,4-Trimethylbenzene | 16.94 | 105  | 627204   | 1.685 | ppbv # | 76       |
| 79) Naphthalene            | 22.43 | 128  | 182082   | 0.787 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-  | 25.44 | 142  | 32431    | 0.576 | ppbv   | 94       |

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

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Acq On : 30 Oct 2018 21:58

Operator : SY/AP

Sample : J5693-01DUP

Misc : 400ml/MSVOA L

ALS Vial : 1 Sample Multiplier: 1

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
SS-1DUP

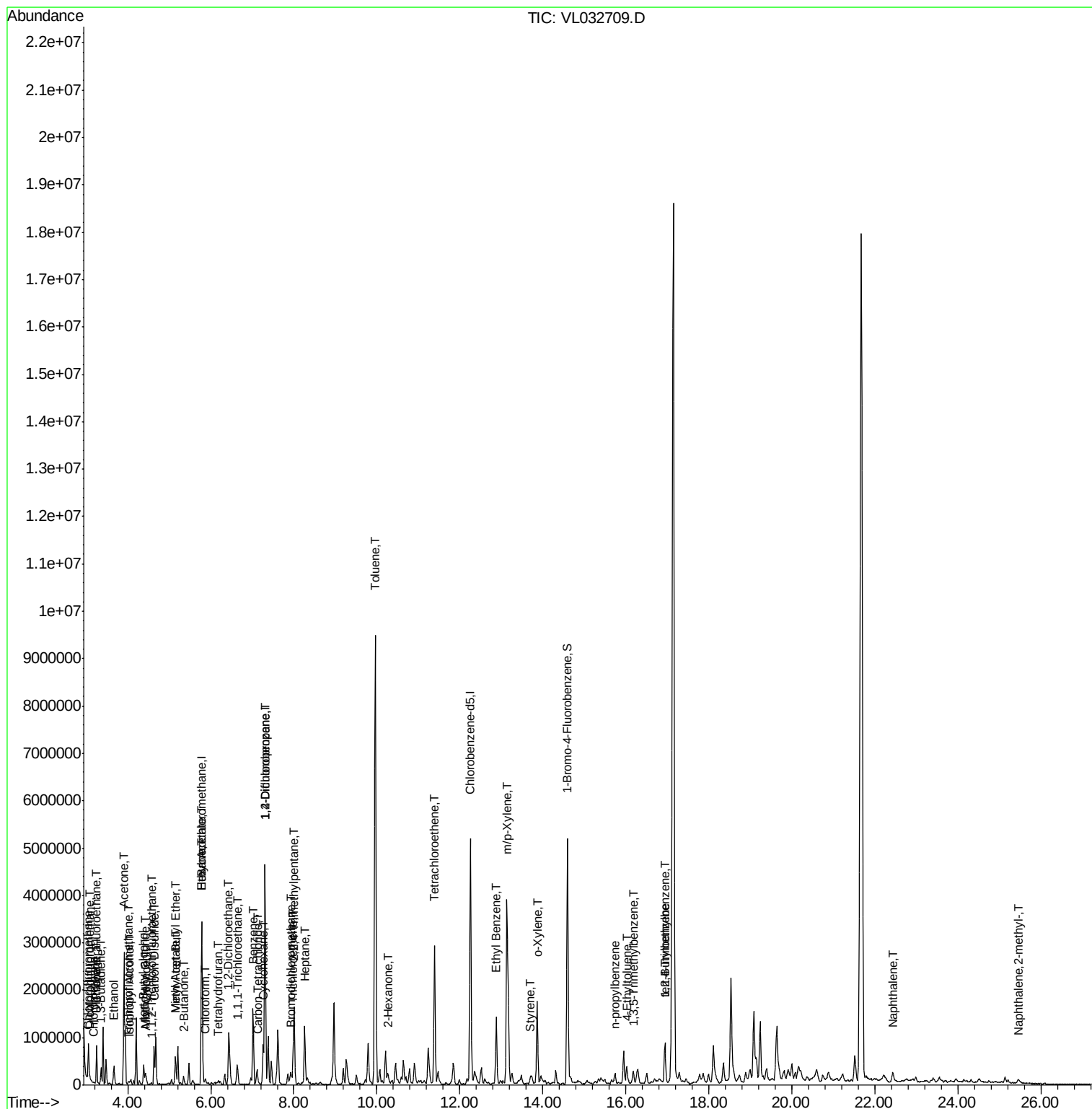
Quant Time: Oct 31 05:12:25 2018

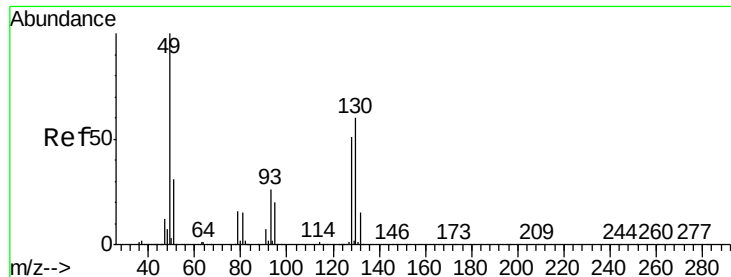
Quant Method : Z:\VOASRV\HPCHEM1\MSV0A\_L\METHODS\VL101818AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Thu Oct 25 05:15:43 2018

QLast Update : Thu Oct 25 05:15:43 2018

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.78 min Scan# 883

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

SS-1DUP

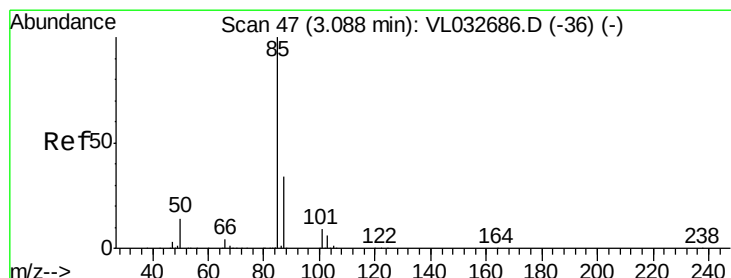
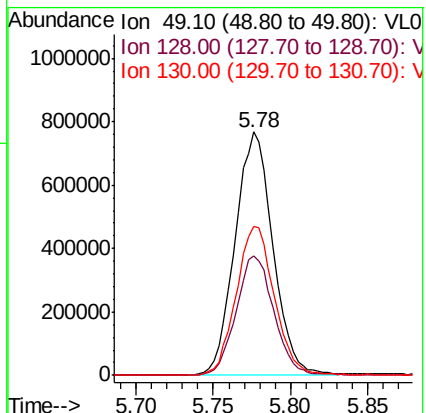
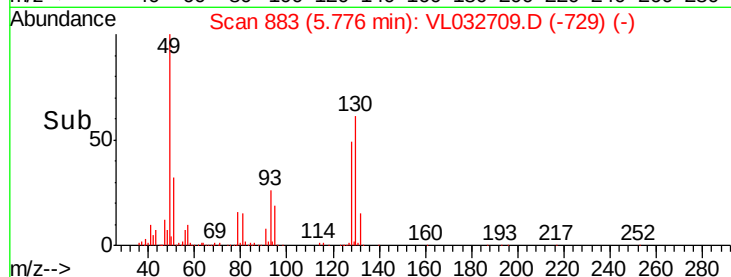
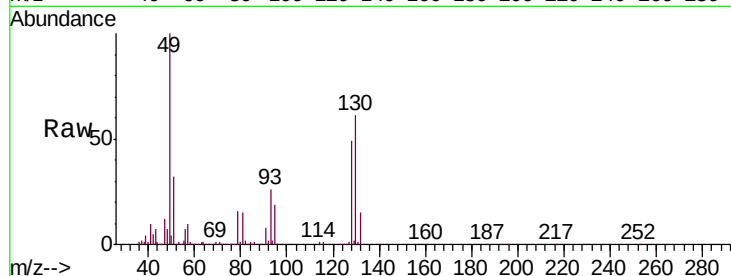
Tgt Ion: 49 Resp: 1307163

Ion Ratio Lower Upper

49 100

128 49.2 22.3 66.8

130 62.1 28.4 85.3



#2

Dichlorodifluoromethane

Concen: 0.711 ppbv

RT: 3.08 min Scan# 46

Delta R.T. -0.00 min

Lab File: VL032709.D

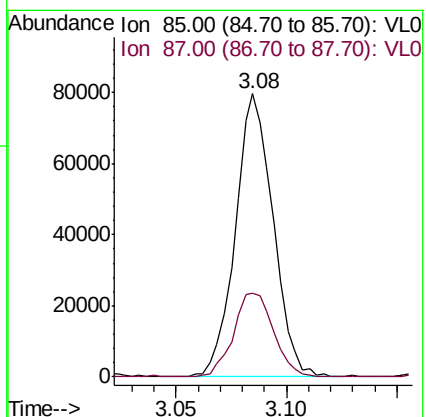
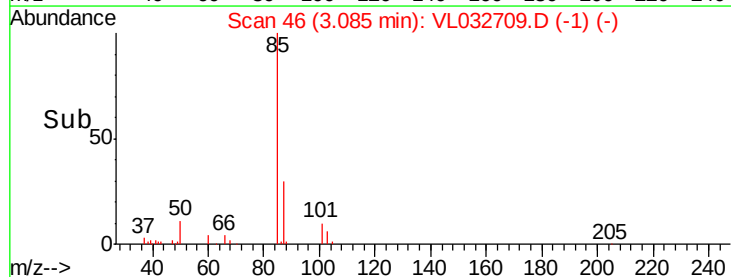
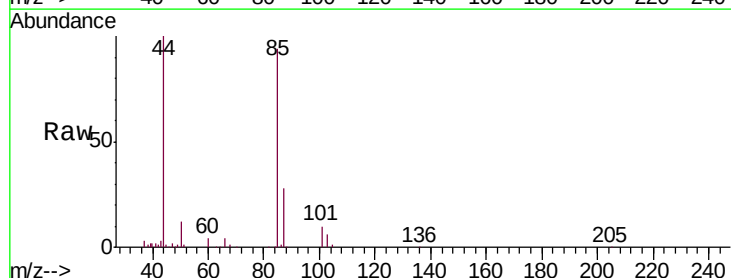
Acq: 30 Oct 2018 21:58

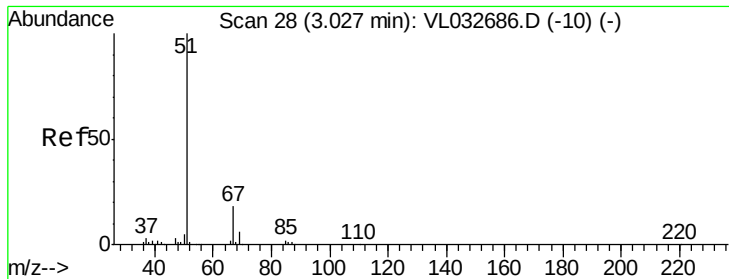
Tgt Ion: 85 Resp: 94672

Ion Ratio Lower Upper

85 100

87 29.6 26.2 39.2





#3

Chlorodifluoromethane

Concen: 0.302 ppbv

RT: 3.02 min Scan# 27

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

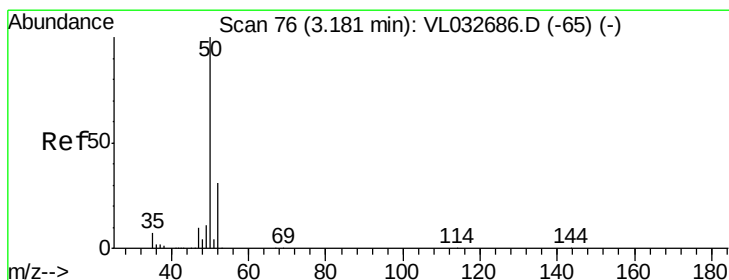
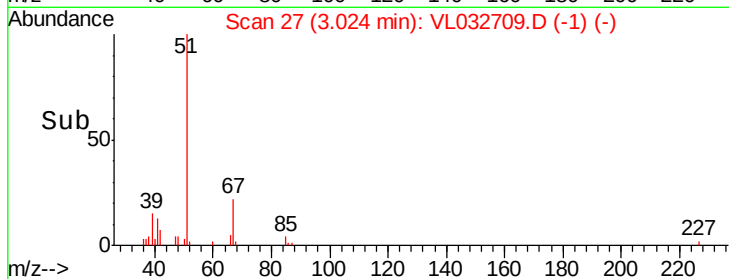
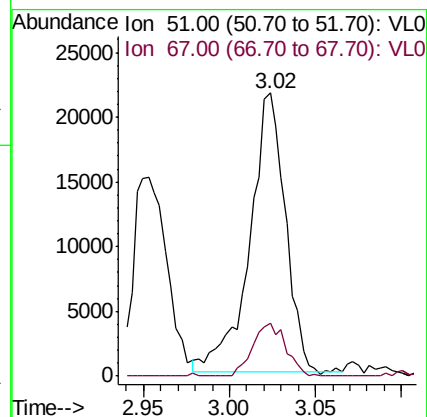
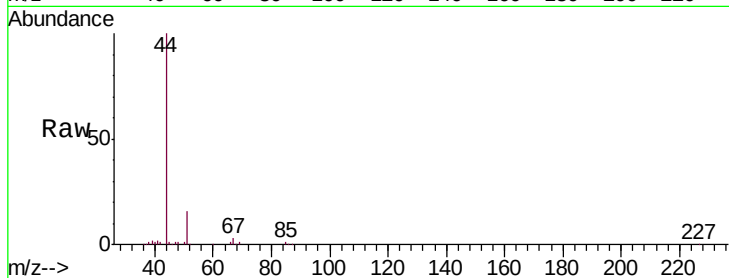
SS-1DUP

Tgt Ion: 51 Resp: 30823

Ion Ratio Lower Upper

51 100

67 17.7 15.2 22.8



#4

Chloromethane

Concen: 0.154 ppbv

RT: 3.18 min Scan# 75

Delta R.T. -0.00 min

Lab File: VL032709.D

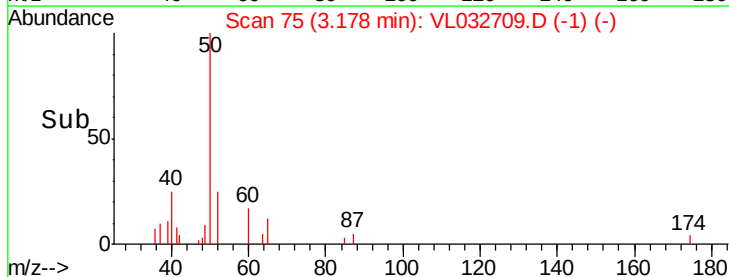
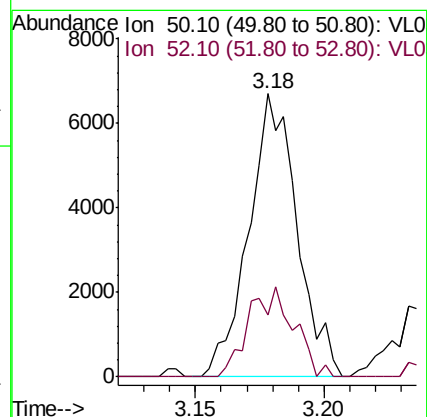
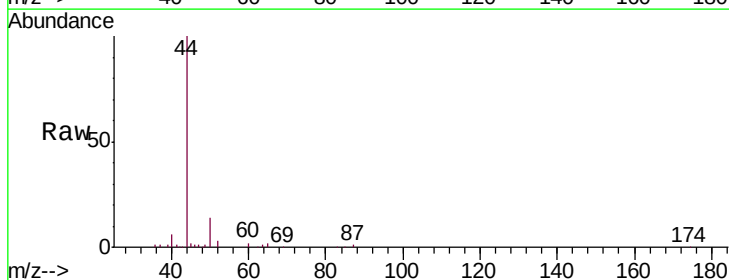
Acq: 30 Oct 2018 21:58

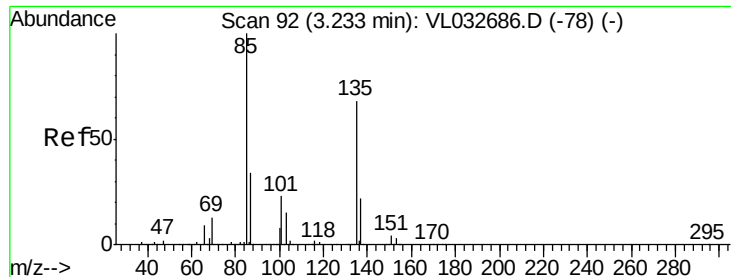
Tgt Ion: 50 Resp: 8788

Ion Ratio Lower Upper

50 100

52 22.1 25.9 38.9#





#8

Dichlorotetrafluoroethane

Concen: 0.048 ppbv

RT: 3.23 min Scan# 91

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

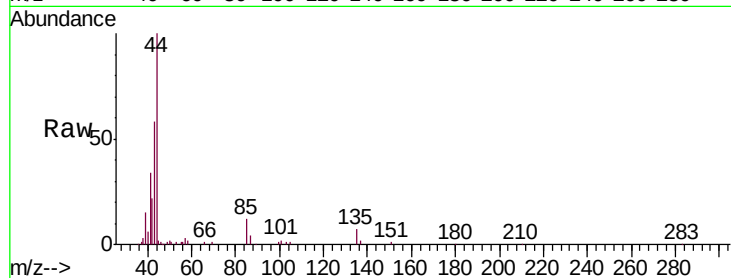
SS-1DUP

Tgt Ion: 85 Resp: 6671

Ion Ratio Lower Upper

85 100

135 61.2 49.0 73.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

6000

5000

4000

3000

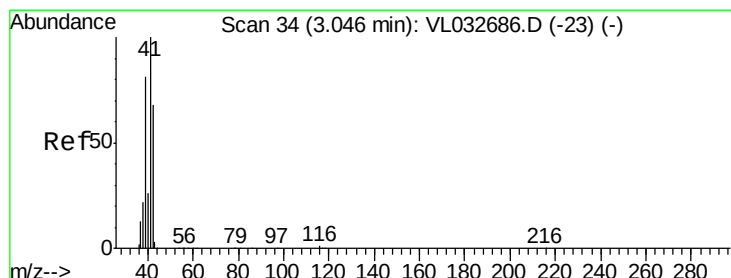
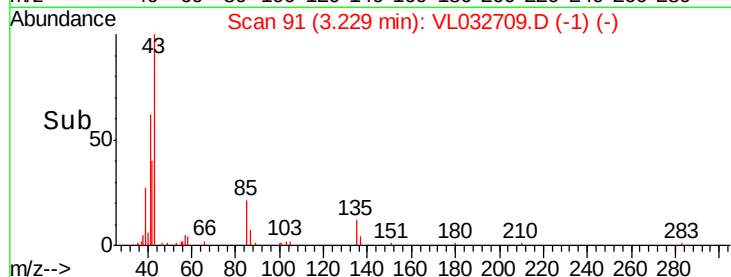
2000

1000

0

3.20 3.22 3.24 3.26

Time-->



#9

Propene

Concen: 4.442 ppbv

RT: 3.25 min Scan# 96

Delta R.T. 0.20 min

Lab File: VL032709.D

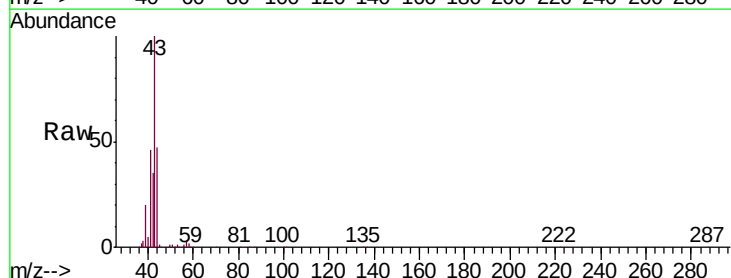
Acq: 30 Oct 2018 21:58

Tgt Ion: 41 Resp: 186885

Ion Ratio Lower Upper

41 100

42 74.0 55.4 83.0



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

150000

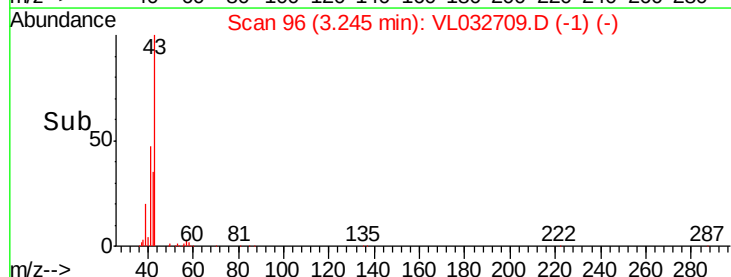
100000

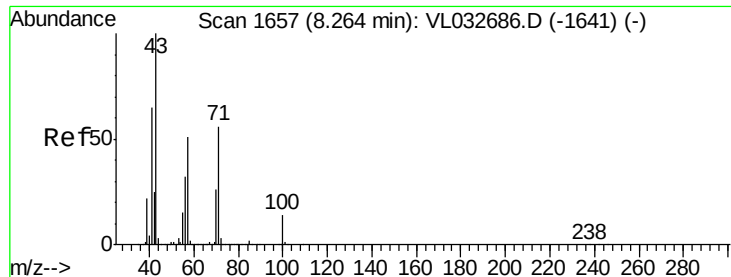
50000

0

3.20 3.25 3.30

Time-->





#10

Heptane

Concen: 3.153 ppbv

RT: 8.26 min Scan# 1657

Delta R.T. 0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

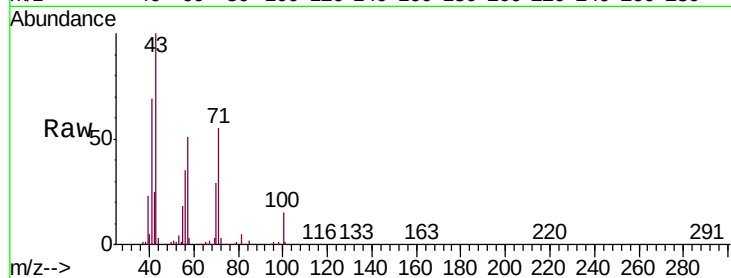
SS-1DUP

Tgt Ion: 43 Resp: 511212

Ion Ratio Lower Upper

43 100

57 51.0 41.5 62.3



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.26

250000

200000

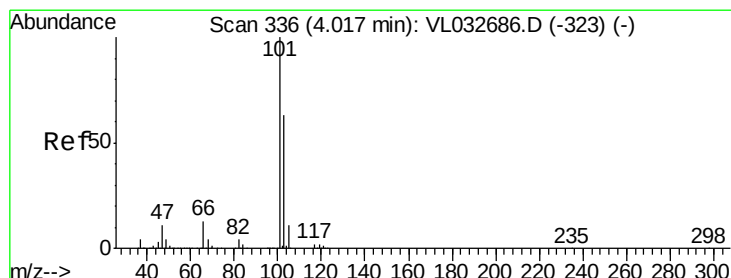
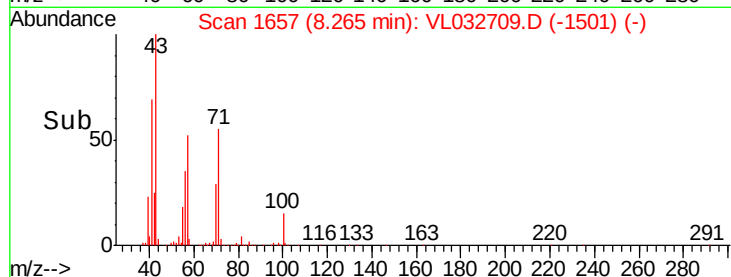
150000

100000

50000

0

Time-->



#11

Trichlorofluoromethane

Concen: 0.220 ppbv

RT: 4.02 min Scan# 336

Delta R.T. 0.00 min

Lab File: VL032709.D

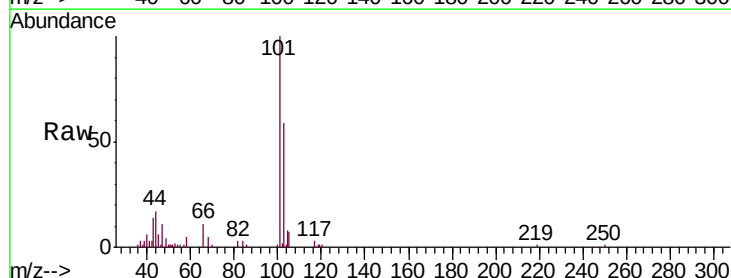
Acq: 30 Oct 2018 21:58

Tgt Ion: 101 Resp: 38283

Ion Ratio Lower Upper

101 100

103 59.1 51.4 77.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

4.02

30000

25000

20000

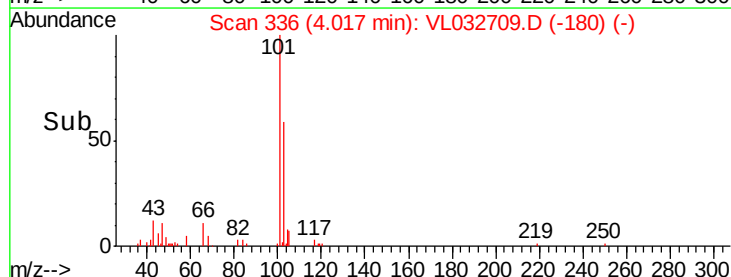
15000

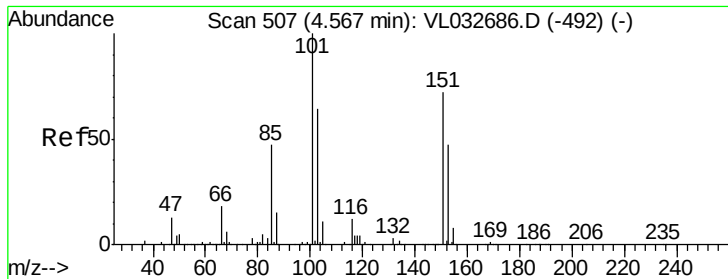
10000

5000

0

Time-->





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.053 ppbv

RT: 4.56 min Scan# 505

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

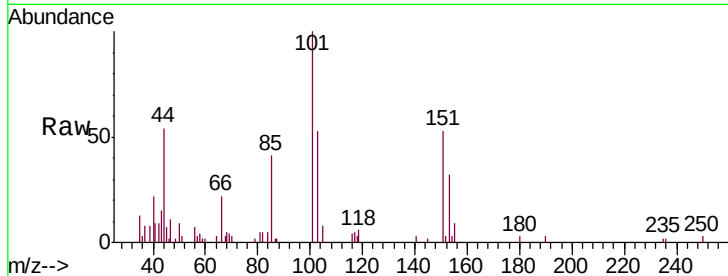
SS-1DUP

Tgt Ion: 101 Resp: 7634

Ion Ratio Lower Upper

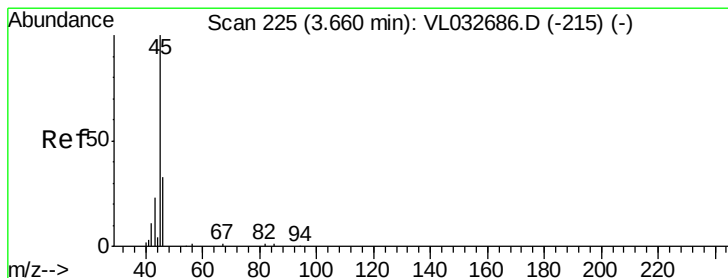
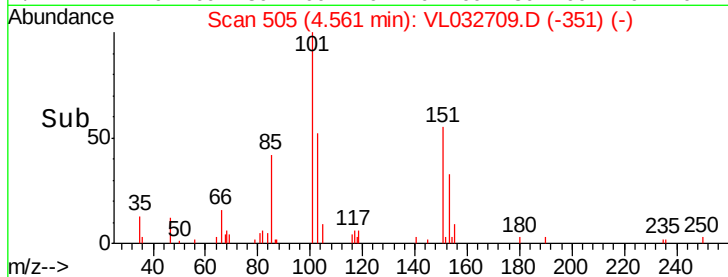
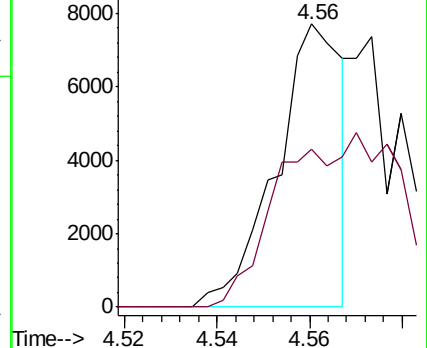
101 100

151 0.0 52.3 78.5#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 36.702 ppbv

RT: 3.66 min Scan# 226

Delta R.T. 0.00 min

Lab File: VL032709.D

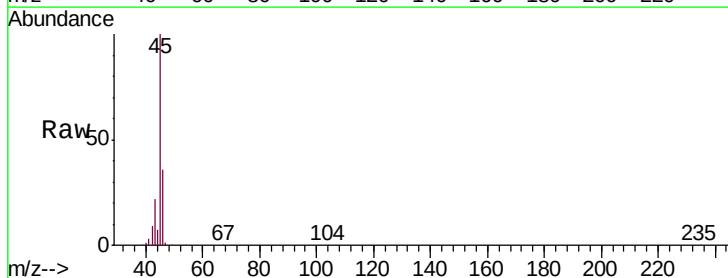
Acq: 30 Oct 2018 21:58

Tgt Ion: 45 Resp: 441309

Ion Ratio Lower Upper

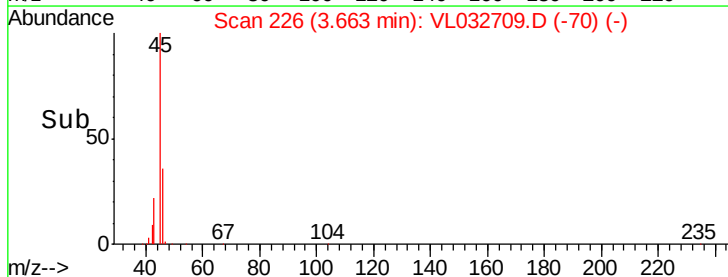
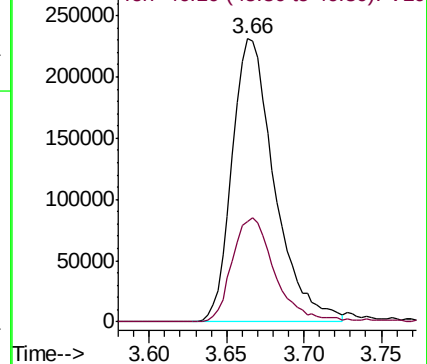
45 100

46 37.6 15.4 61.8

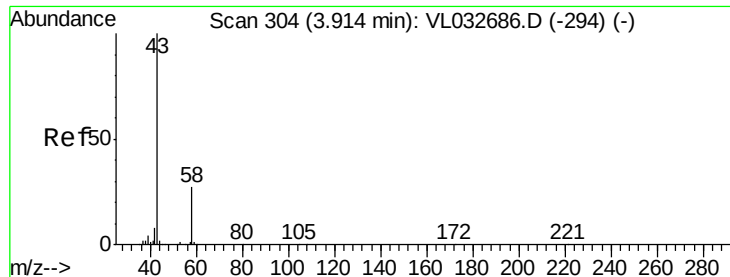


Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0







#15

Acetone

Concen: 25.658 ppbv

RT: 3.91 min Scan# 302

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

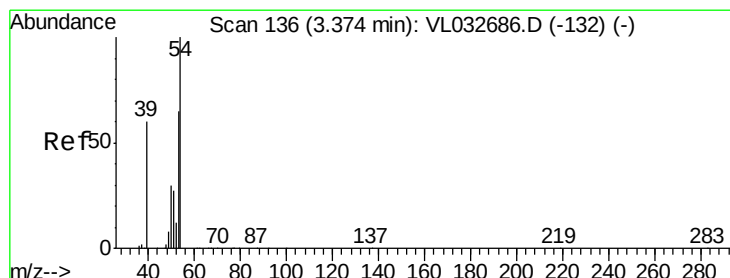
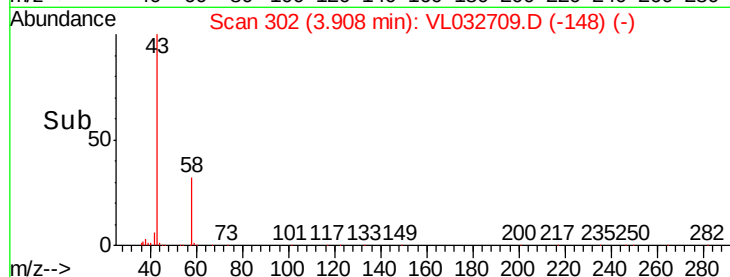
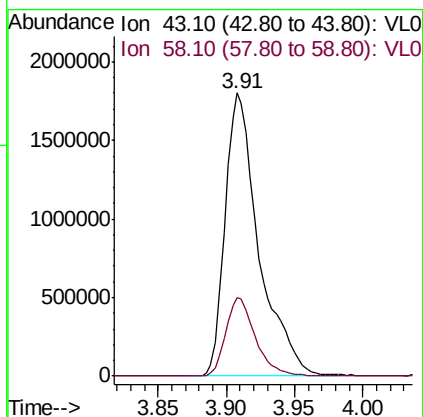
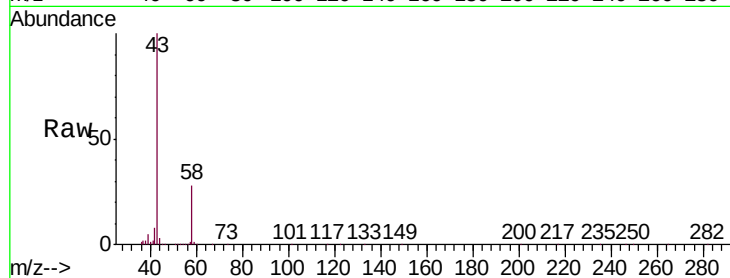
SS-1DUP

Tgt Ion: 43 Resp: 3097141

Ion Ratio Lower Upper

43 100

58 24.6 22.1 33.1



#16

1,3-Butadiene

Concen: 2.155 ppbv

RT: 3.35 min Scan# 129

Delta R.T. -0.02 min

Lab File: VL032709.D

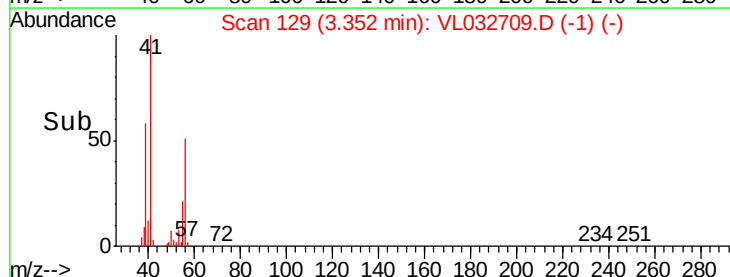
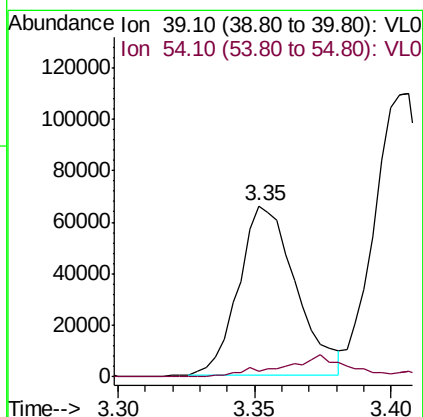
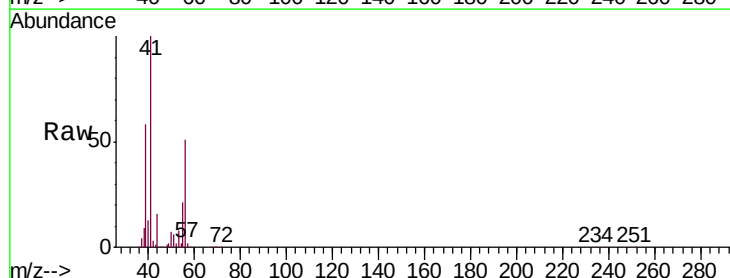
Acq: 30 Oct 2018 21:58

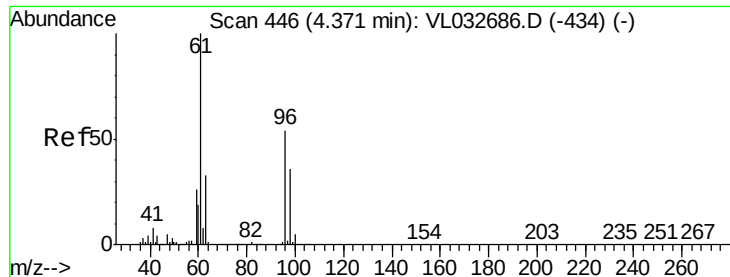
Tgt Ion: 39 Resp: 95678

Ion Ratio Lower Upper

39 100

54 16.4 90.4 135.6#





#17

tert-Butyl alcohol

Concen: 8.396 ppbv

RT: 4.38 min Scan# 450

Delta R.T. 0.01 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

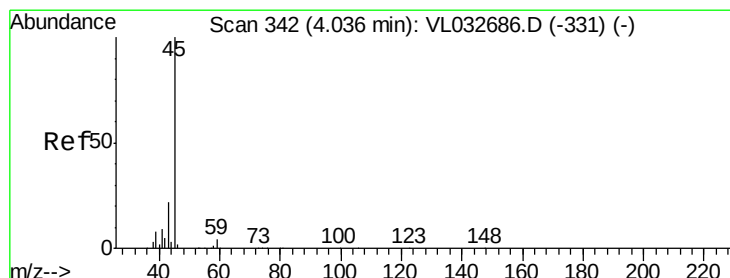
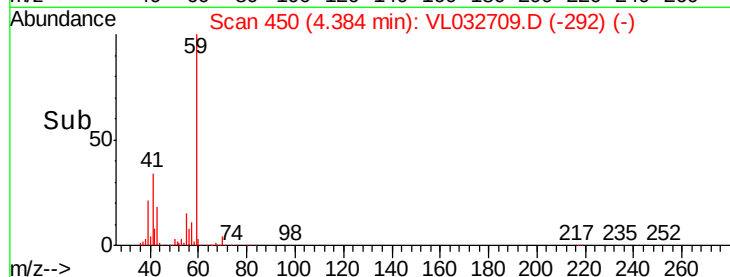
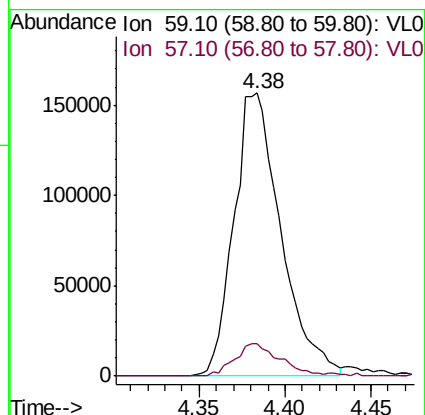
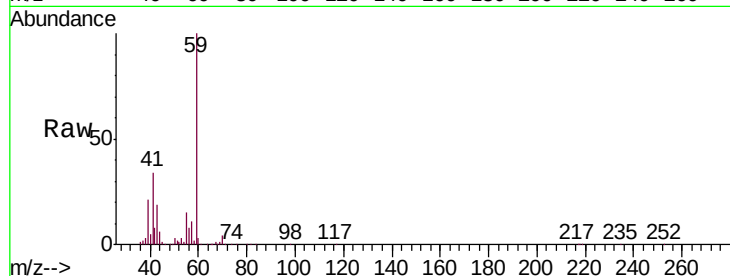
SS-1DUP

Tgt Ion: 59 Resp: 298078

Ion Ratio Lower Upper

59 100

57 11.8 0.0 0.0#



#19

Isopropyl Alcohol

Concen: 0.612 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.01 min

Lab File: VL032709.D

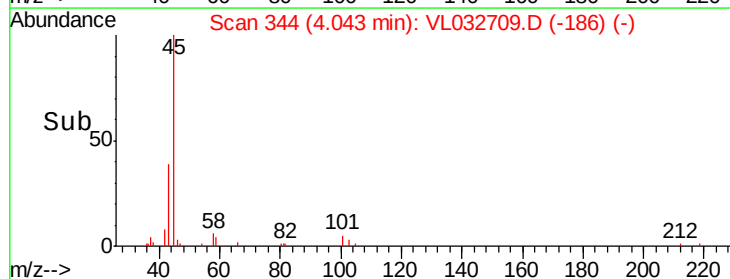
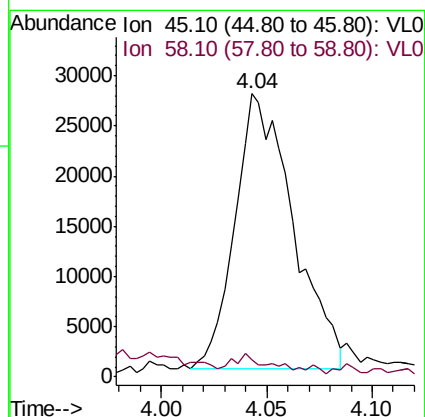
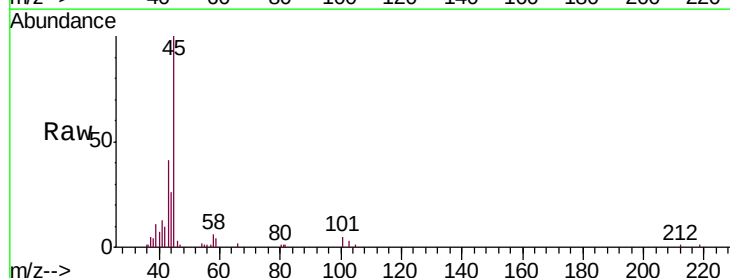
Acq: 30 Oct 2018 21:58

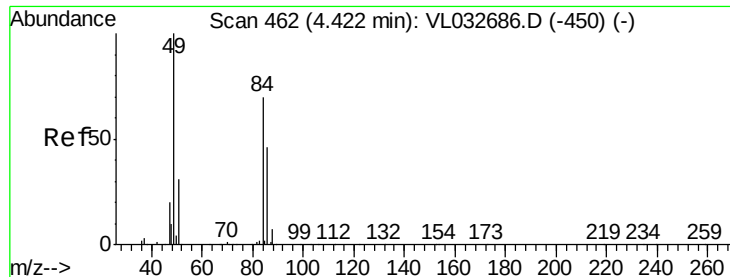
Tgt Ion: 45 Resp: 52637

Ion Ratio Lower Upper

45 100

58 0.0 2.0 3.0#

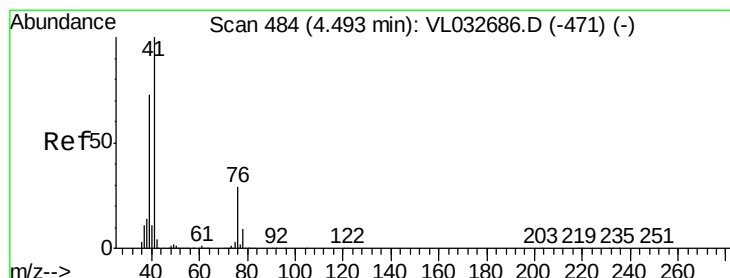
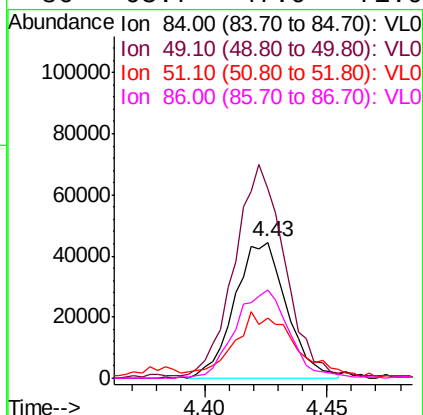
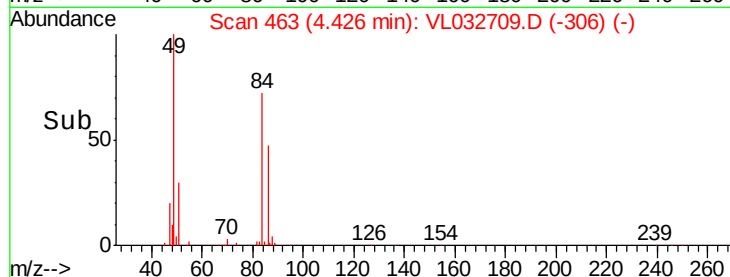
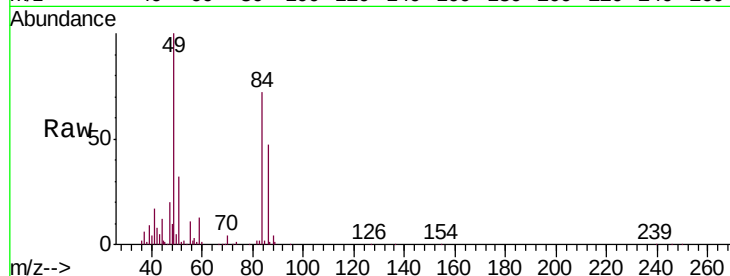




#20  
Methylene Chloride  
Concen: 1.075 ppbv  
RT: 4.43 min Scan# 463  
Delta R.T. 0.01 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

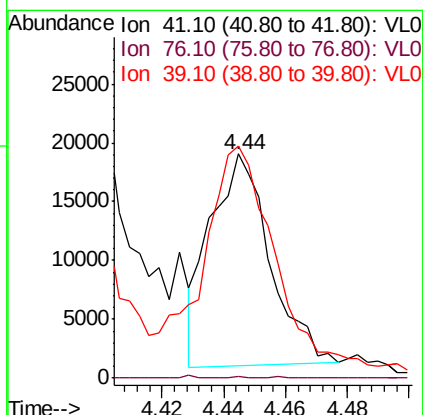
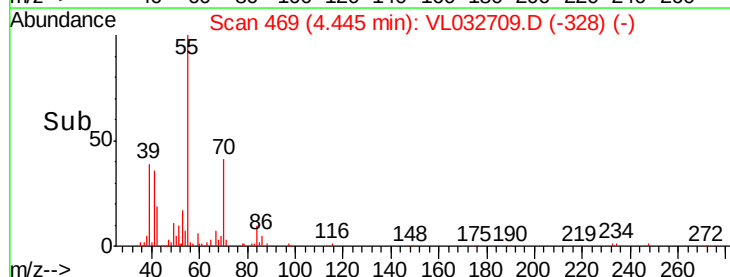
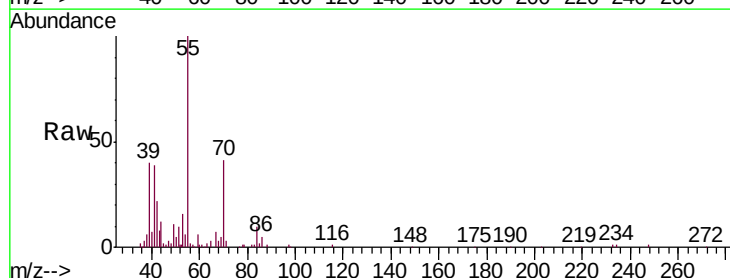
Instrument :  
MSVOA\_L  
ClientSampleId :  
SS-1DUP

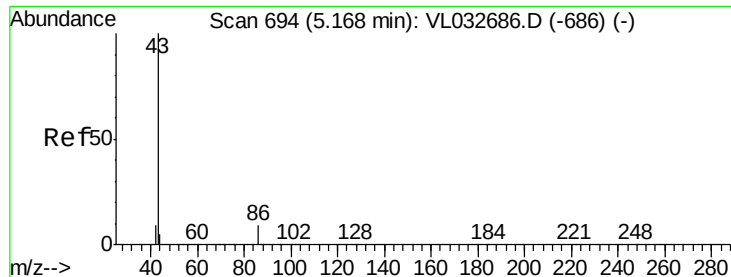
Tgt Ion: 84 Resp: 65843  
Ion Ratio Lower Upper  
84 100  
49 135.9 113.5 170.3  
51 39.6 34.8 52.2  
86 63.7 47.9 71.9



#21  
Allyl Chloride  
Concen: 0.246 ppbv  
RT: 4.44 min Scan# 469  
Delta R.T. -0.05 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

Tgt Ion: 41 Resp: 24362  
Ion Ratio Lower Upper  
41 100  
76 0.0 24.3 36.5#  
39 129.9 60.3 90.5#





#23

Vinyl Acetate

Concen: 0.871 ppbv

RT: 5.15 min Scan# 688

Delta R.T. -0.02 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

SS-1DUP

Tgt Ion: 43 Resp: 186361

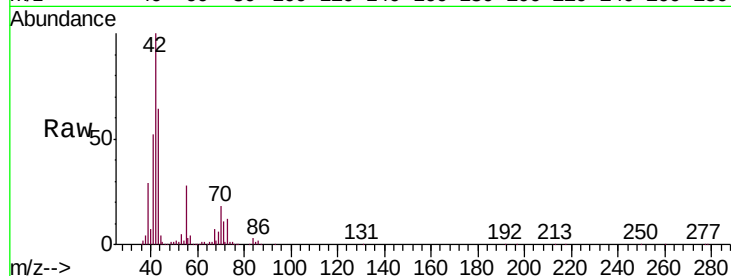
Ion Ratio Lower Upper

43 100

86 3.0 6.1 9.1#

42 158.1 7.4 11.2#

44 3.3 4.2 6.2#

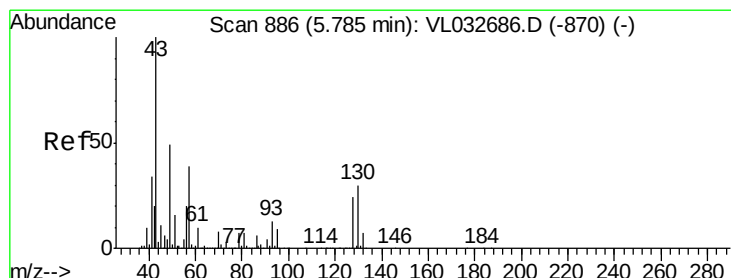
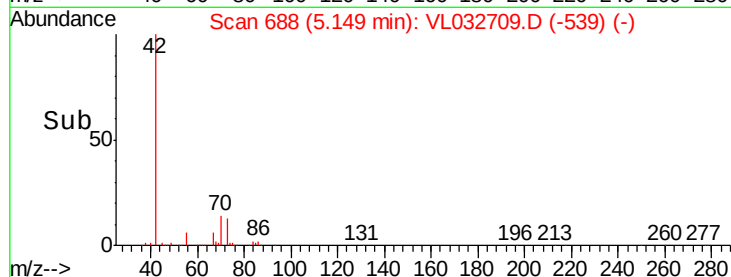
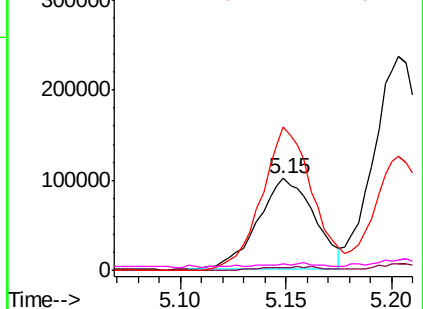


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 1.329 ppbv

RT: 5.80 min Scan# 889

Delta R.T. 0.02 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Tgt Ion: 43 Resp: 369189

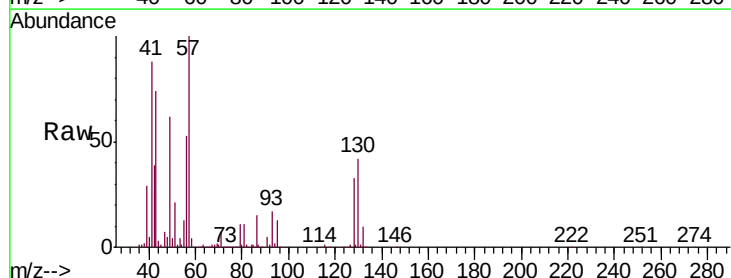
Ion Ratio Lower Upper

43 100

45 1.1 8.0 12.0#

61 0.7 8.0 12.0#

70 2.1 5.9 8.9#

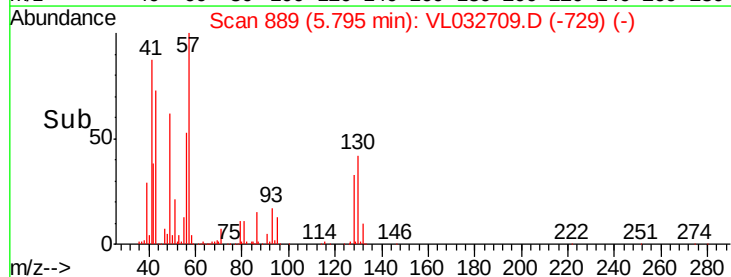
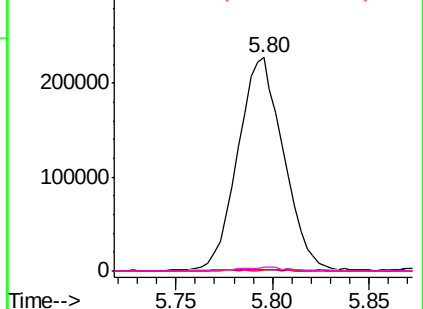


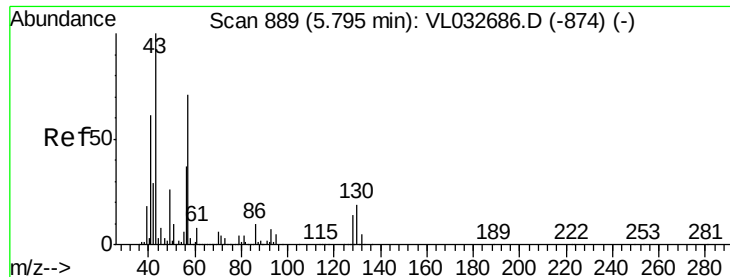
Abundance Ion 43.10 (42.80 to 43.80): VL0

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

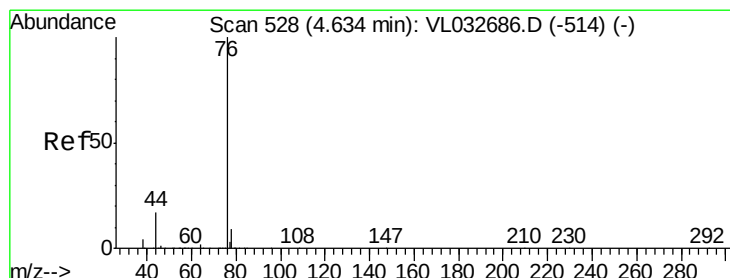
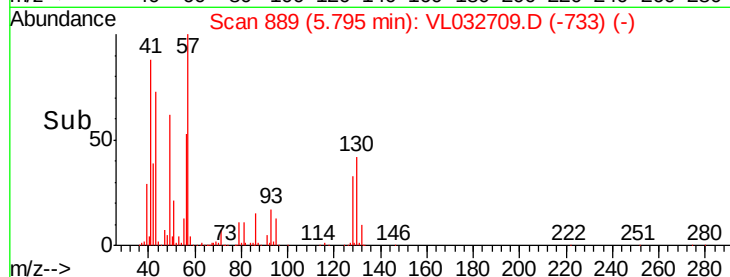
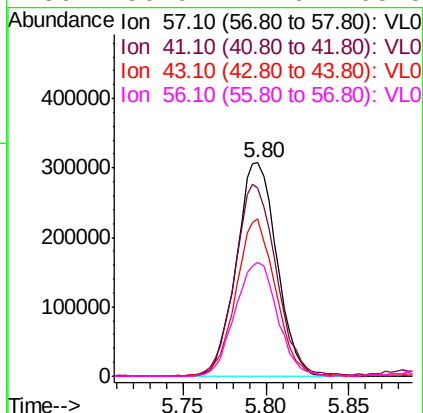
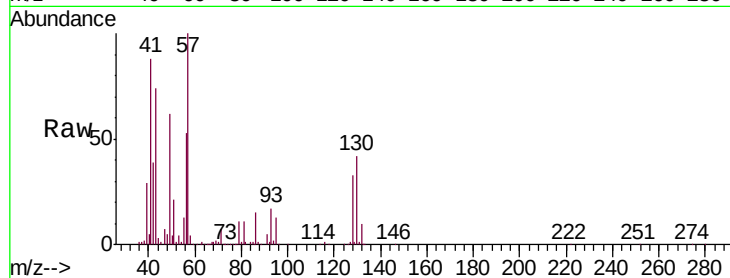




#26  
Hexane  
Concen: 3.959 ppbv  
RT: 5.80 min Scan# 889  
Delta R.T. 0.00 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

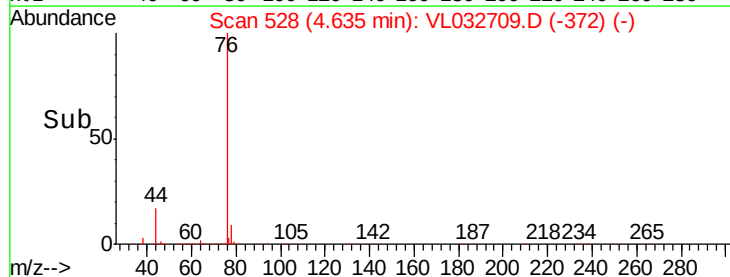
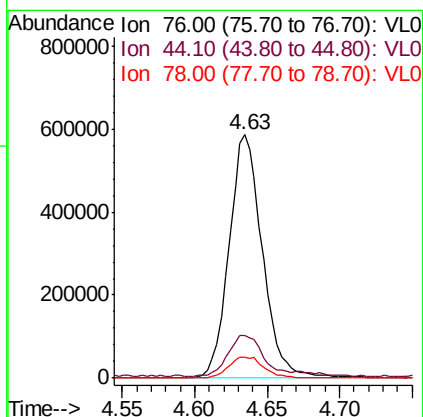
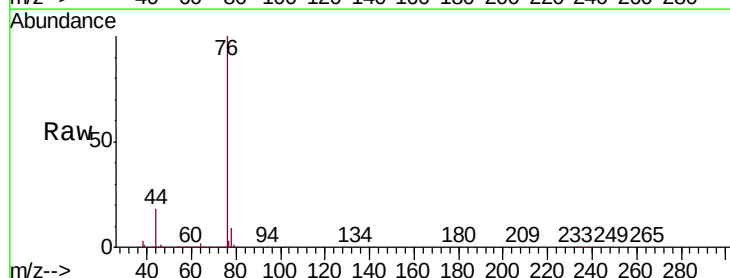
Instrument :  
MSVOA\_L  
ClientSampleId :  
SS-1DUP

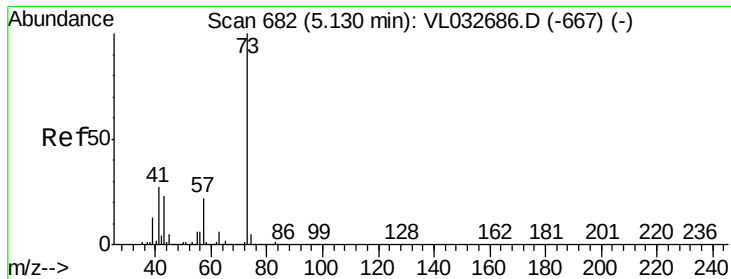
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 520458 |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 92.6  | 67.4  | 101.0  |
| 43       | 71.9  | 171.9 | 257.9# |
| 56       | 56.0  | 42.6  | 63.8   |



#27  
Carbon Disulfide  
Concen: 5.816 ppbv  
RT: 4.63 min Scan# 528  
Delta R.T. 0.00 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 76    | Resp: | 927539 |
| Ion      | Ratio | Lower | Upper  |
| 76       | 100   |       |        |
| 44       | 19.6  | 13.7  | 20.5   |
| 78       | 9.5   | 7.4   | 11.2   |

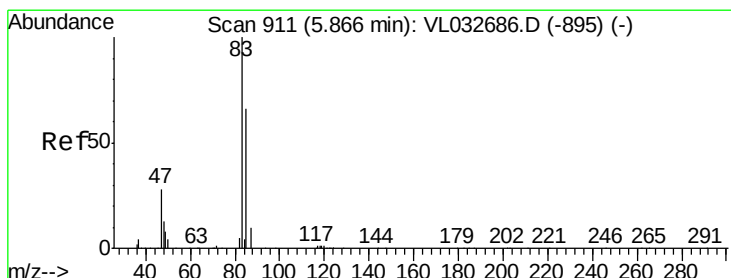
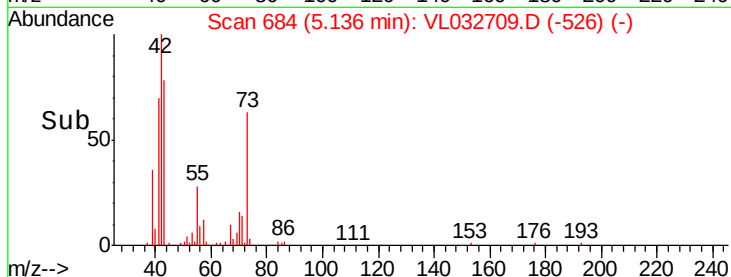
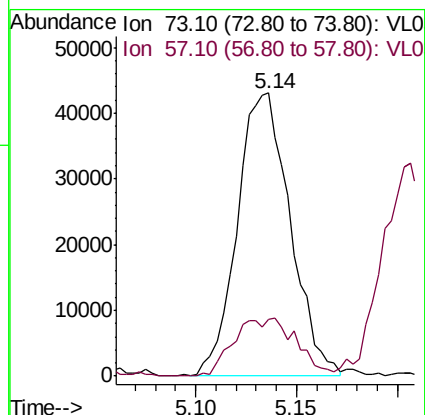
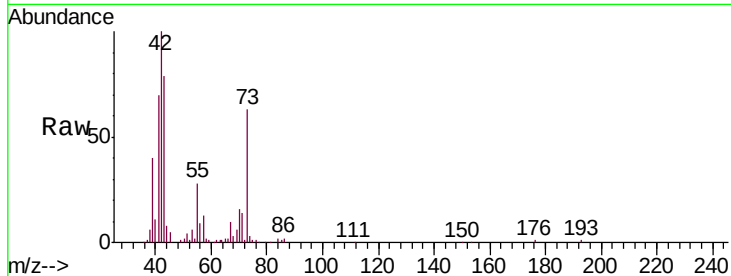




#28  
Methyl tert-Butyl Ether  
Concen: 0.418 ppbv  
RT: 5.14 min Scan# 684  
Delta R.T. 0.01 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

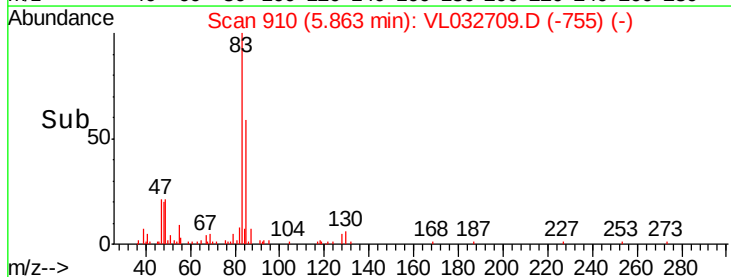
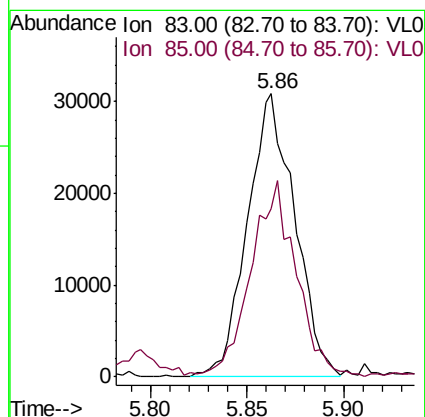
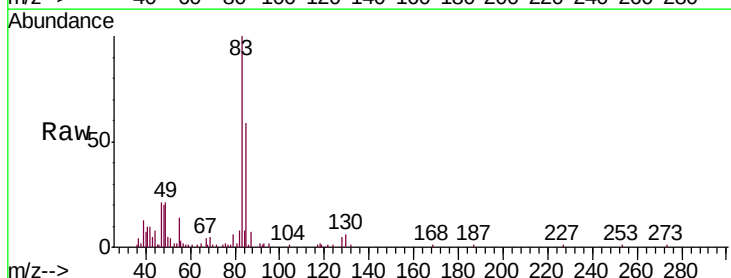
Instrument :  
MSVOA\_L  
ClientSampleId :  
SS-1DUP

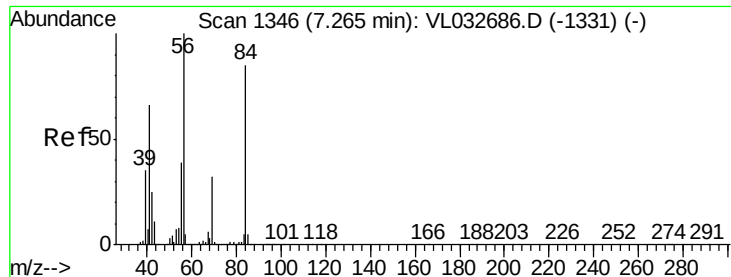
Tgt Ion: 73 Resp: 79013  
Ion Ratio Lower Upper  
73 100  
57 24.1 18.0 27.0



#29  
Chloroform  
Concen: 0.249 ppbv  
RT: 5.86 min Scan# 910  
Delta R.T. -0.00 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

Tgt Ion: 83 Resp: 52342  
Ion Ratio Lower Upper  
83 100  
85 57.9 53.0 79.6

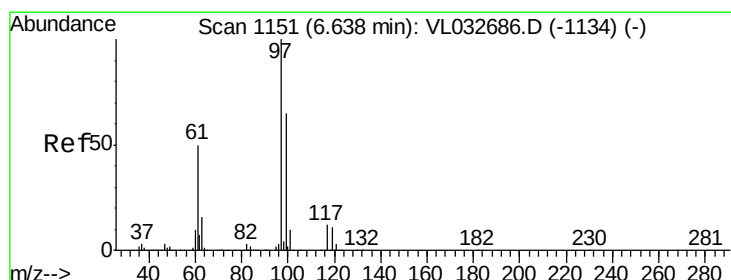
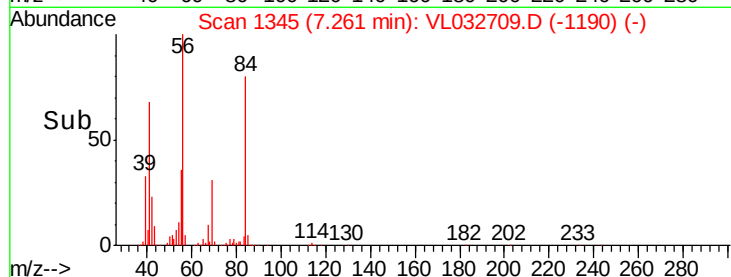
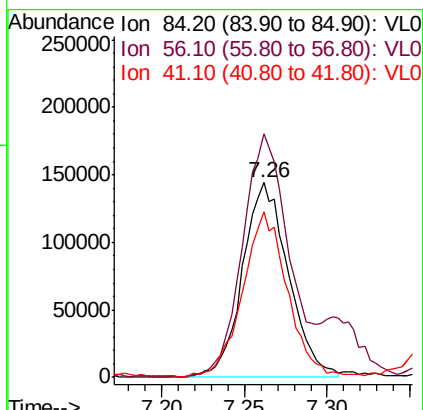
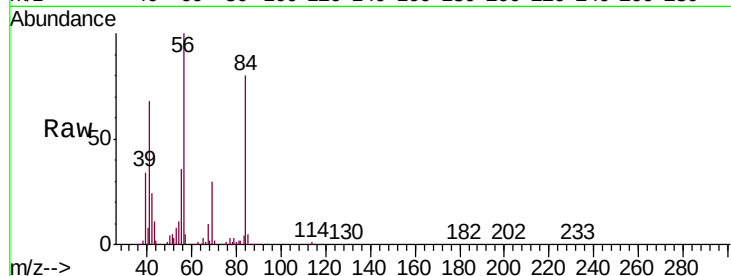




#30  
Cyclohexane  
Concen: 2.657 ppbv  
RT: 7.26 min Scan# 1345  
Delta R.T. -0.00 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

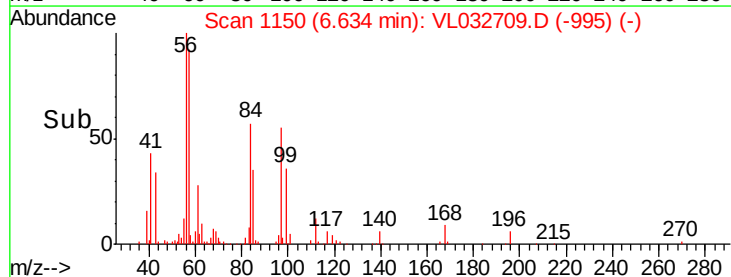
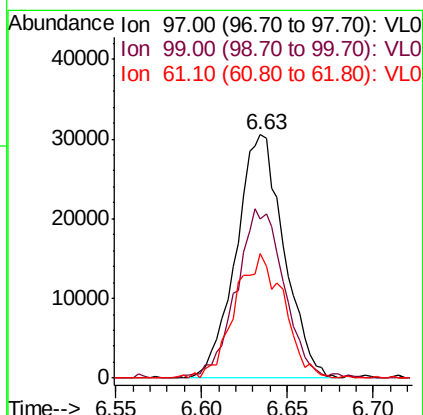
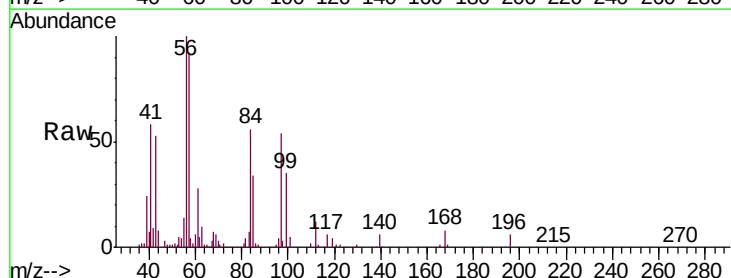
Instrument :  
MSVOA\_L  
ClientSampleId :  
SS-1DUP

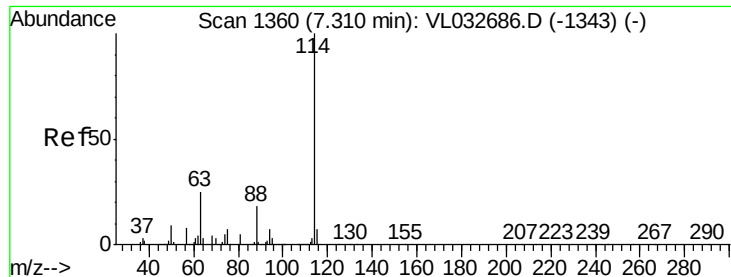
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 56      | 152.9 | 108.3 | 162.5 |
| 41      | 81.3  | 64.8  | 97.2  |



#32  
1,1,1-Trichloroethane  
Concen: 0.276 ppbv  
RT: 6.63 min Scan# 1150  
Delta R.T. -0.00 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 69.7  | 52.0  | 78.0  |
| 61      | 52.4  | 40.7  | 61.1  |

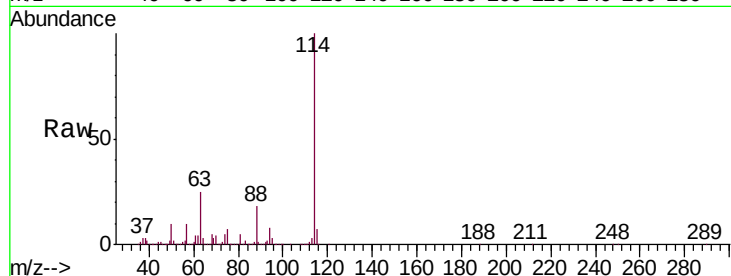




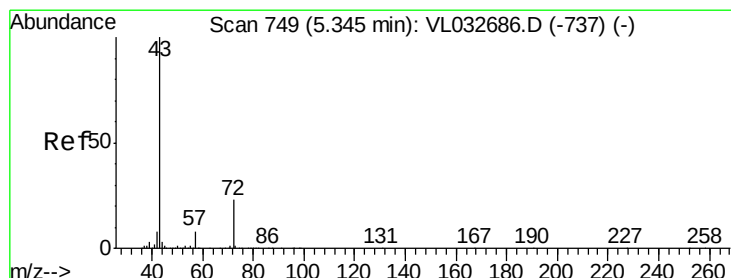
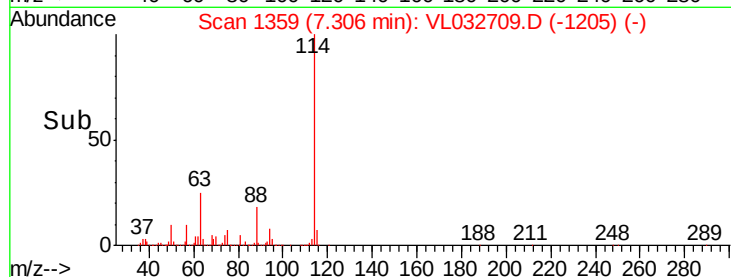
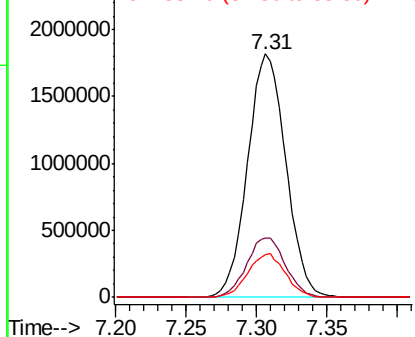
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.31 min Scan# 1359  
 Delta R.T. -0.00 min  
 Lab File: VL032709.D  
 Acq: 30 Oct 2018 21:58

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SS-1DUP

Tgt Ion: 114 Resp: 3448553  
 Ion Ratio Lower Upper  
 114 100  
 63 25.0 21.7 32.5  
 88 17.6 14.9 22.3

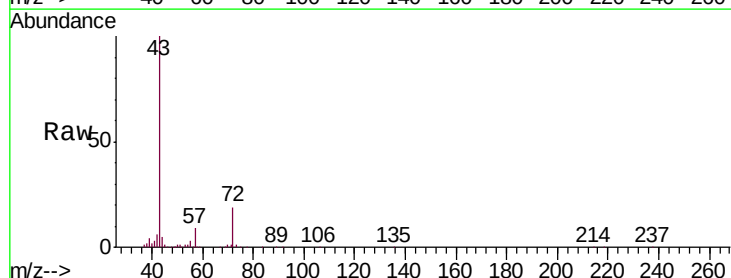


Abundance Ion 114.10 (113.80 to 114.80): VL0  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

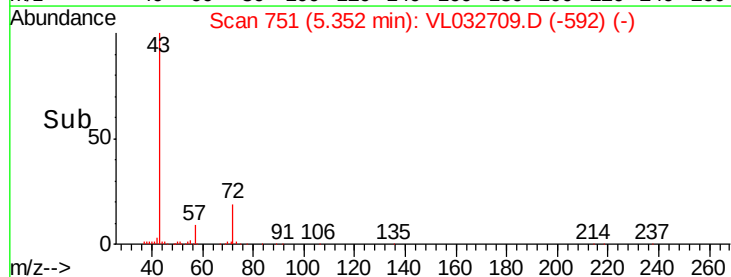
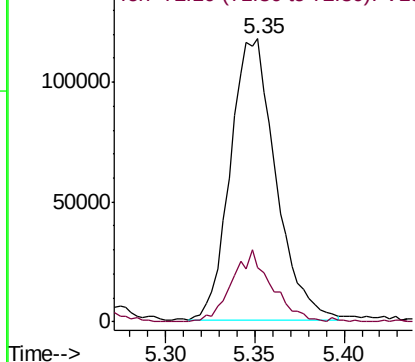


#34  
 2-Butanone  
 Concen: 1.131 ppbv  
 RT: 5.35 min Scan# 751  
 Delta R.T. 0.01 min  
 Lab File: VL032709.D  
 Acq: 30 Oct 2018 21:58

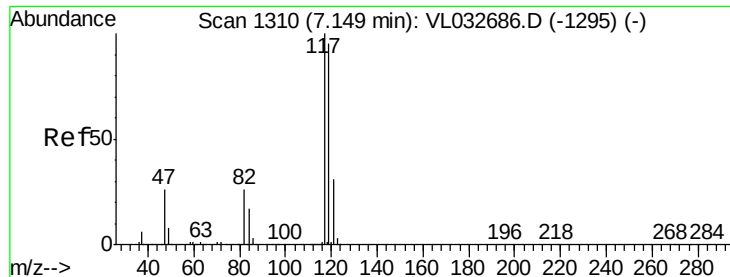
Tgt Ion: 43 Resp: 209105  
 Ion Ratio Lower Upper  
 43 100  
 72 22.8 18.6 27.8



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







#35

Carbon Tetrachloride

Concen: 0.054 ppbv

RT: 7.15 min Scan# 1309

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

SS-1DUP

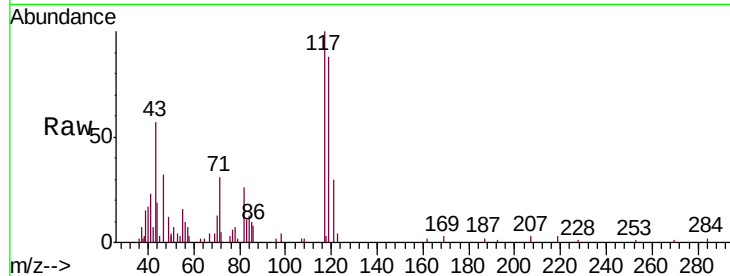
Tgt Ion:117 Resp: 13202

Ion Ratio Lower Upper

117 100

119 83.0 75.7 113.5

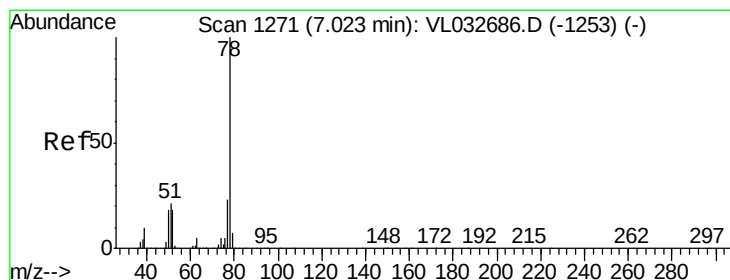
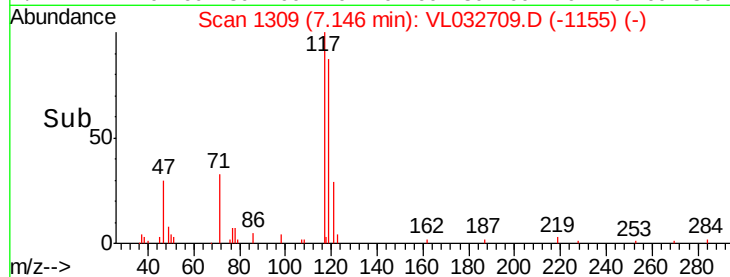
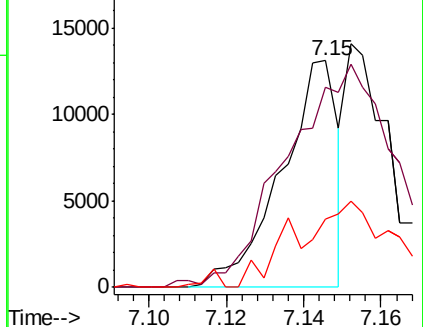
121 28.2 24.7 37.1



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: 4.665 ppbv

RT: 7.02 min Scan# 1269

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

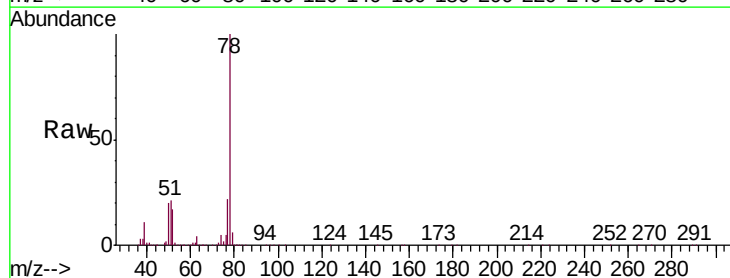
Tgt Ion: 78 Resp: 1306446

Ion Ratio Lower Upper

78 100

77 22.0 18.1 27.1

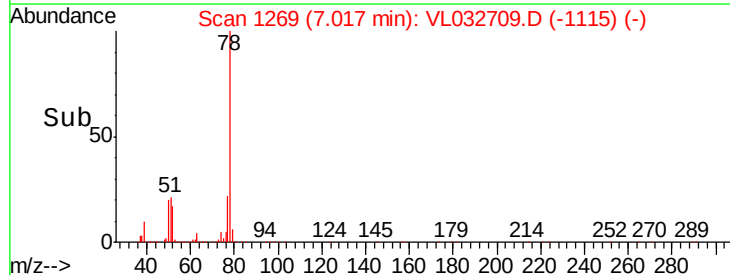
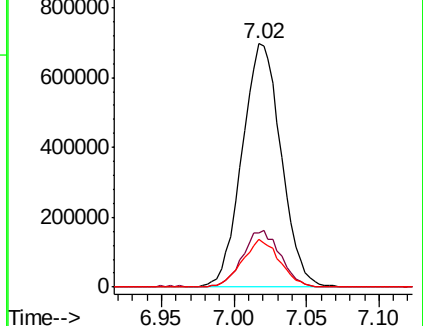
50 19.7 15.1 22.7

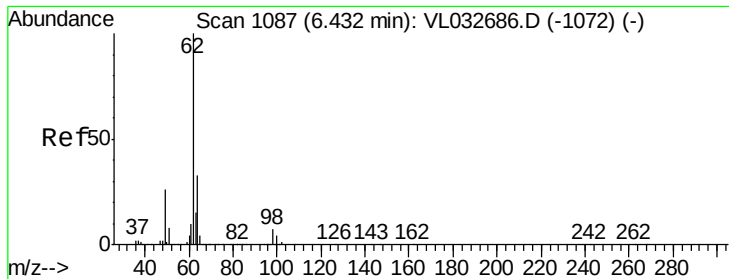


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

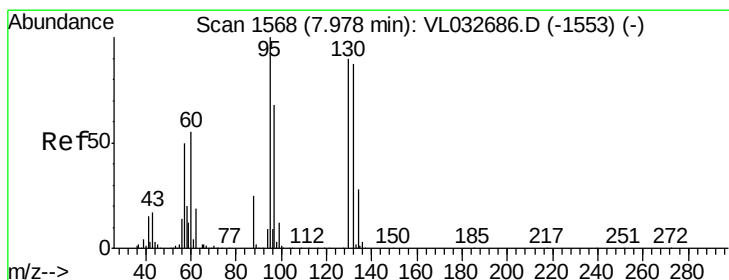
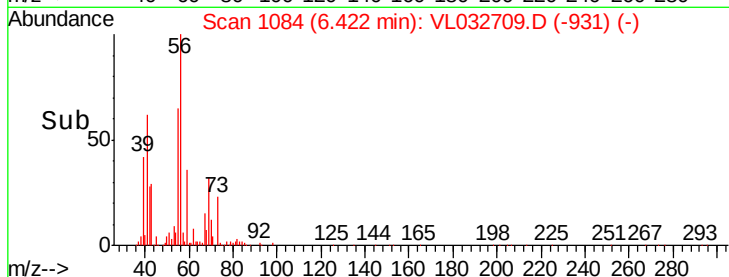
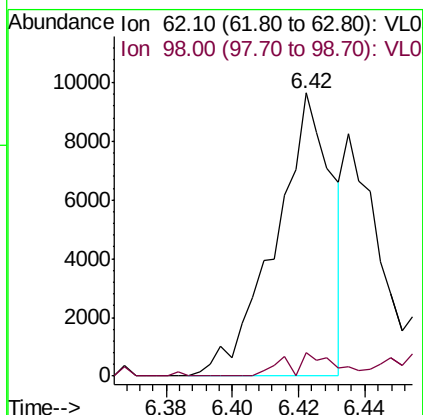
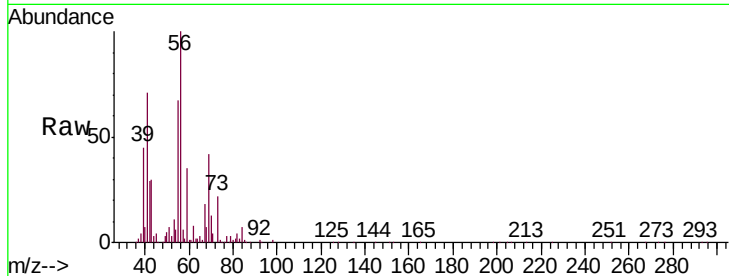




#37  
 1,2-Dichloroethane  
 Concen: 0.067 ppbv  
 RT: 6.42 min Scan# 1084  
 Delta R.T. -0.01 min  
 Lab File: VL032709.D  
 Acq: 30 Oct 2018 21:58

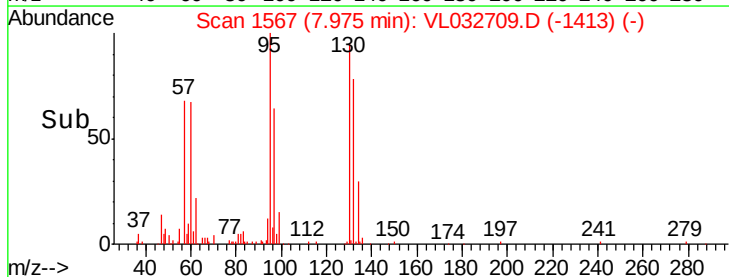
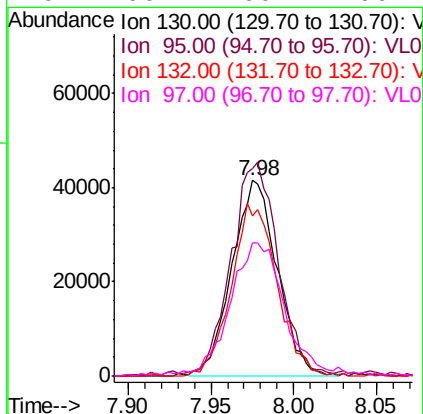
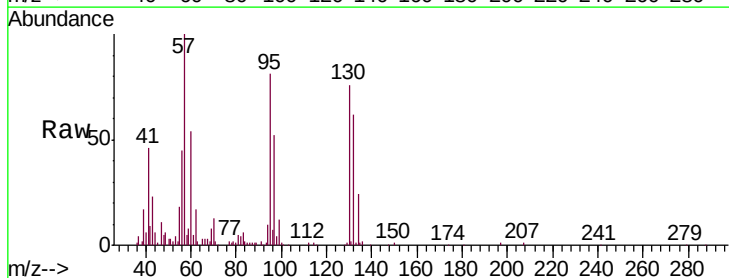
Instrument :  
 MSVOA\_L  
 ClientSampled :  
 SS-1DUP

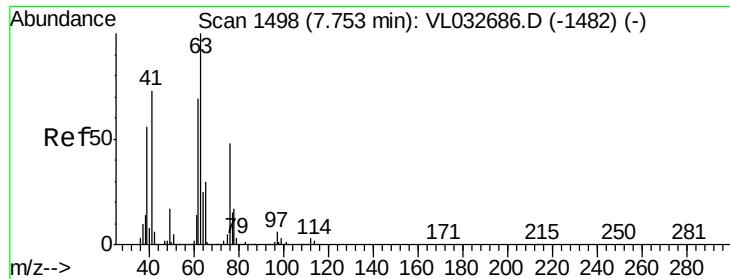
Tgt Ion: 62 Resp: 11489  
 Ion Ratio Lower Upper  
 62 100  
 98 0.0 4.4 6.6#



#38  
 Trichloroethene  
 Concen: 0.763 ppbv  
 RT: 7.98 min Scan# 1567  
 Delta R.T. -0.00 min  
 Lab File: VL032709.D  
 Acq: 30 Oct 2018 21:58

Tgt Ion: 130 Resp: 79085  
 Ion Ratio Lower Upper  
 130 100  
 95 104.4 93.4 140.0  
 132 81.2 76.5 114.7  
 97 66.1 60.2 90.2





#39

1,2-Dichloropropane

Concen: 7.852 ppbv

RT: 7.31 min Scan# 1359

Delta R.T. -0.45 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

SS-1DUP

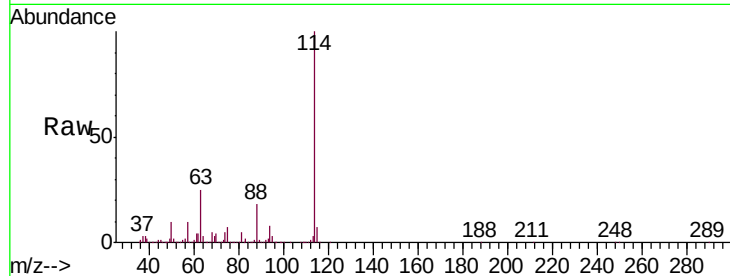
Tgt Ion: 63 Resp: 849102

Ion Ratio Lower Upper

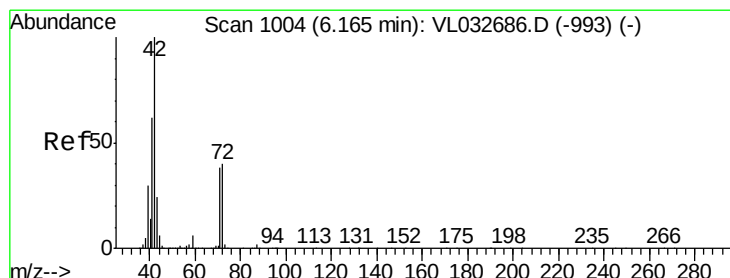
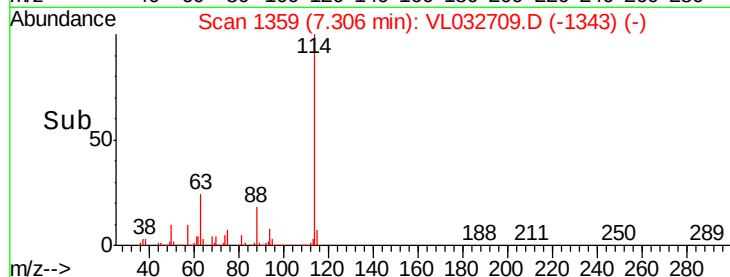
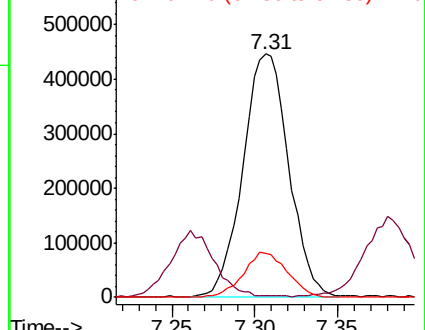
63 100

41 0.0 56.2 84.4#

62 17.7 54.4 81.6#



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



#41

Tetrahydrofuran

Concen: 0.398 ppbv

RT: 6.18 min Scan# 1008

Delta R.T. 0.02 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

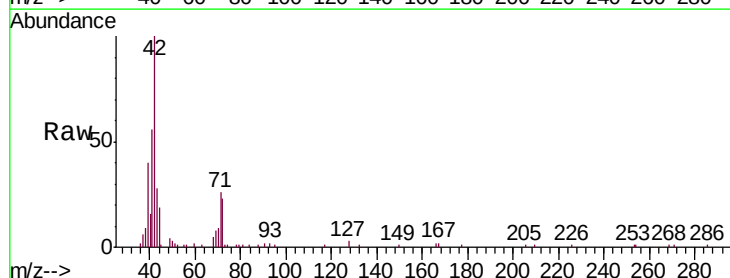
Tgt Ion: 42 Resp: 41013

Ion Ratio Lower Upper

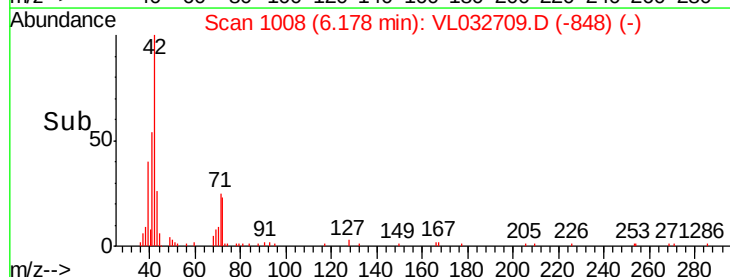
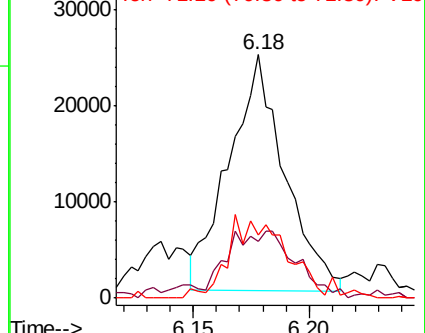
42 100

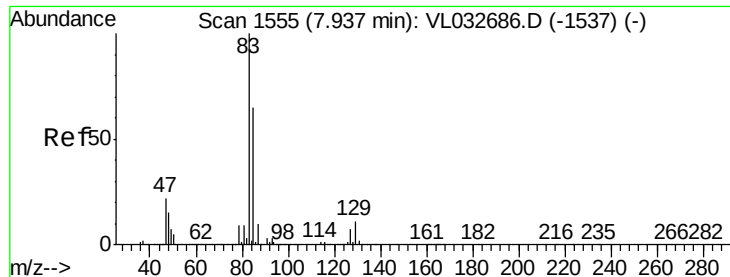
72 39.6 32.4 48.6

71 37.7 31.3 46.9



Abundance Ion 42.10 (41.80 to 42.80): VL0  
Ion 72.10 (71.80 to 72.80): VL0  
Ion 71.10 (70.80 to 71.80): VL0





#42

Bromodichloromethane

Concen: 0.036 ppbv

RT: 7.93 min Scan# 1553

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

SS-1DUP

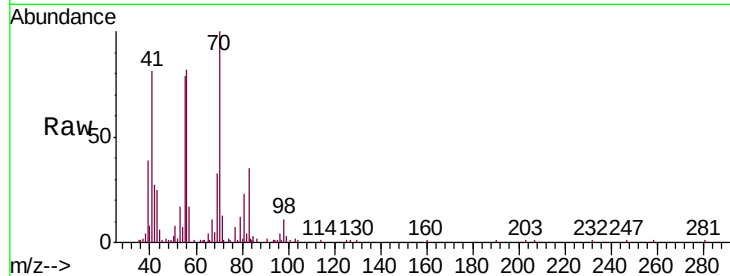
Tgt Ion: 83 Resp: 8709

Ion Ratio Lower Upper

83 100

85 2.4 52.4 78.6#

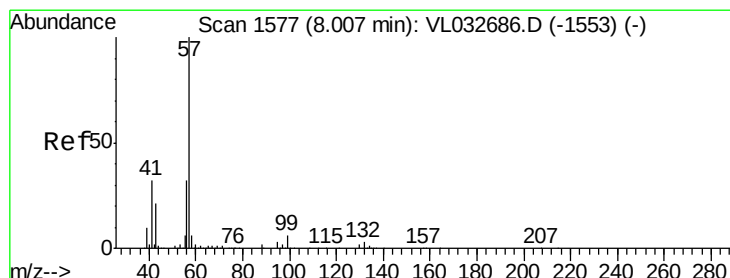
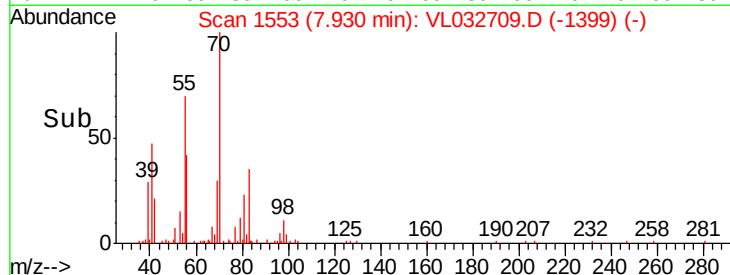
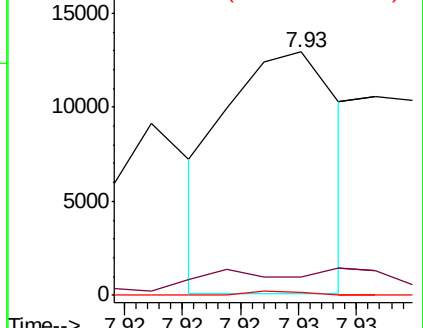
127 3.3 6.1 9.1#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): VL0



#44

2,2,4-Trimethylpentane

Concen: 2.771 ppbv

RT: 8.00 min Scan# 1576

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

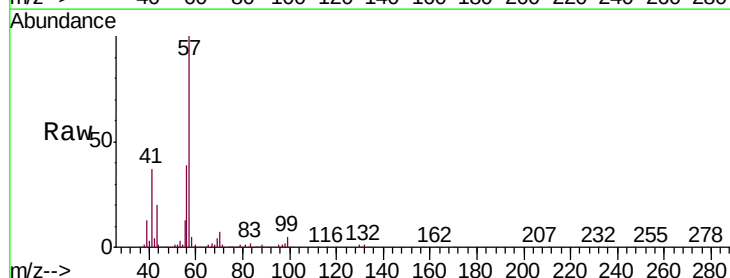
Tgt Ion: 57 Resp: 1324519

Ion Ratio Lower Upper

57 100

41 38.7 24.7 37.1#

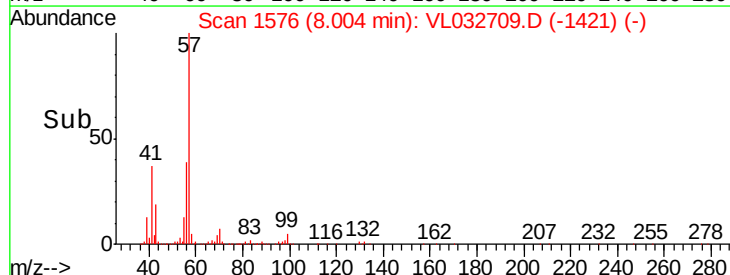
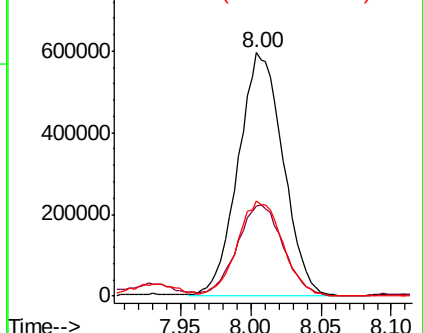
56 39.5 25.0 37.4#

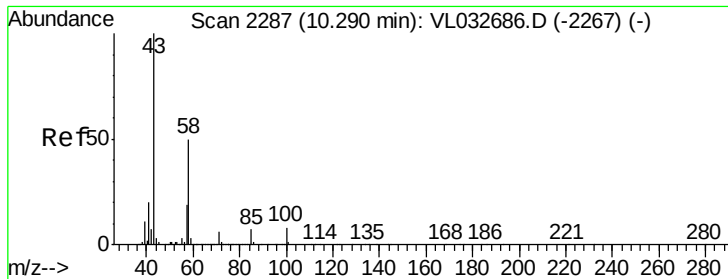


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#51

2-Hexanone

Concen: 0.479 ppbv

RT: 10.26 min Scan# 2278

Delta R.T. -0.03 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

SS-1DUP

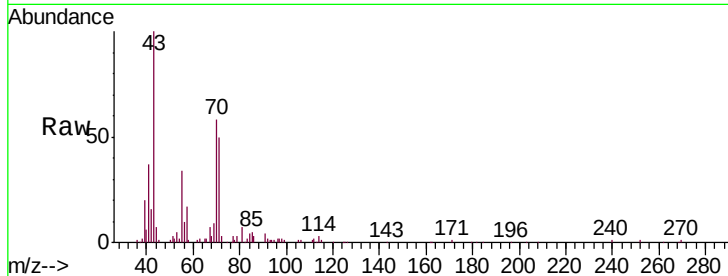
Tgt Ion: 43 Resp: 97429

Ion Ratio Lower Upper

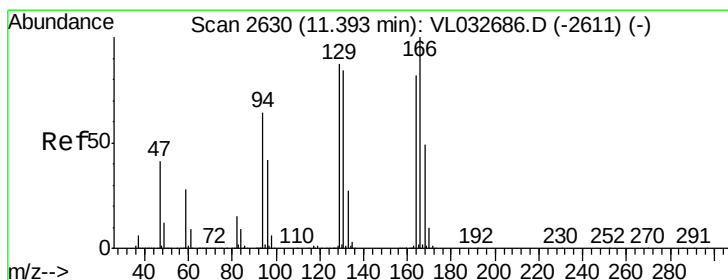
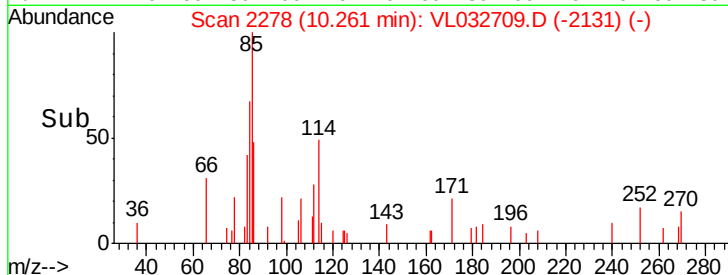
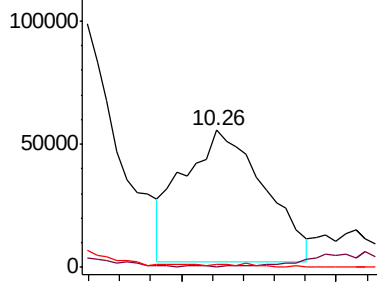
43 100

58 0.0 40.4 60.6#

98 0.0 0.4 0.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 58.10 (57.80 to 58.80): VL0  
Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 7.468 ppbv

RT: 11.39 min Scan# 2629

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Tgt Ion: 164 Resp: 729083

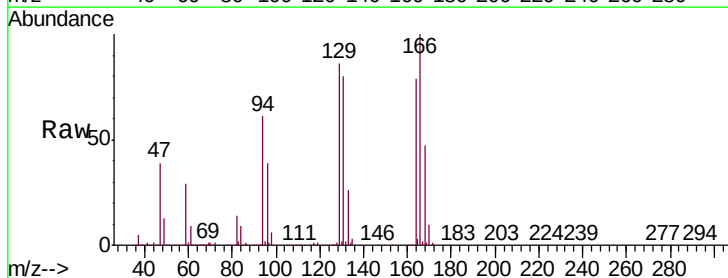
Ion Ratio Lower Upper

164 100

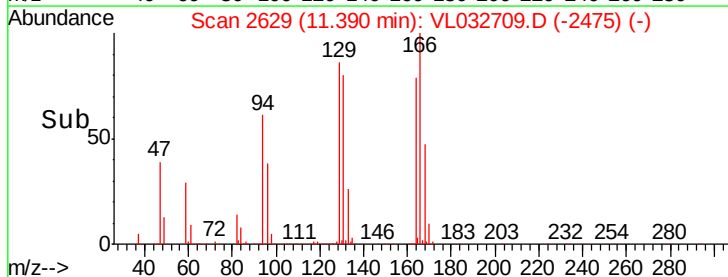
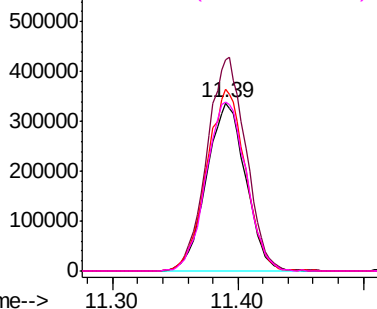
166 125.9 100.5 150.7

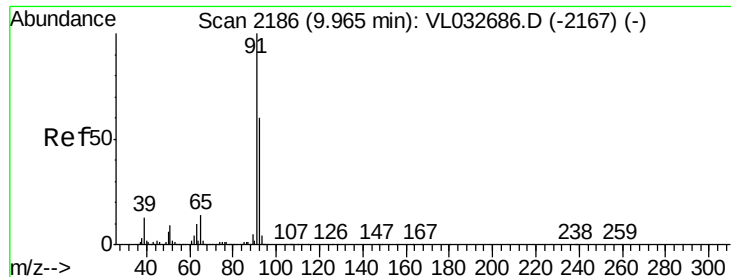
129 108.5 90.0 135.0

131 100.6 86.6 129.8



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: 22.614 ppbv

RT: 9.96 min Scan# 2185

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

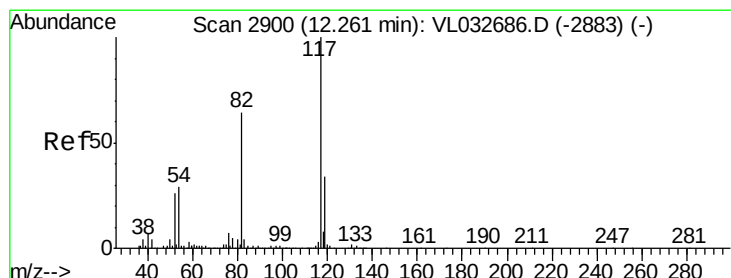
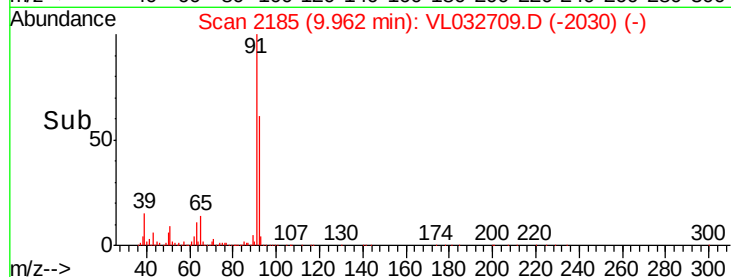
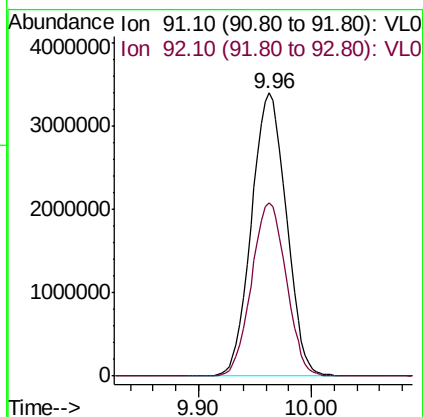
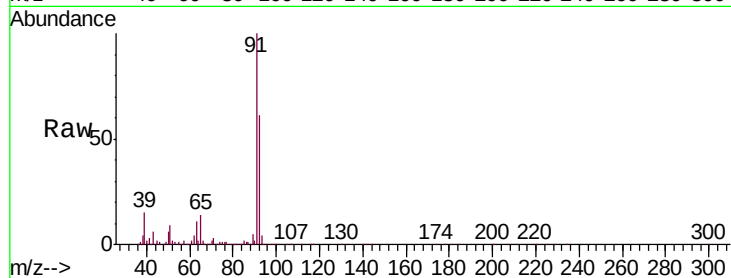
SS-1DUP

Tgt Ion: 91 Resp: 7259361

Ion Ratio Lower Upper

91 100

92 61.3 48.4 72.6



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2898

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

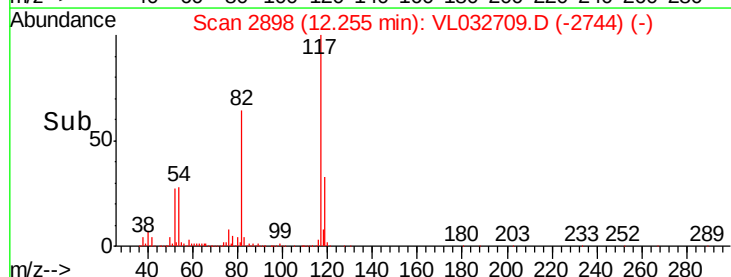
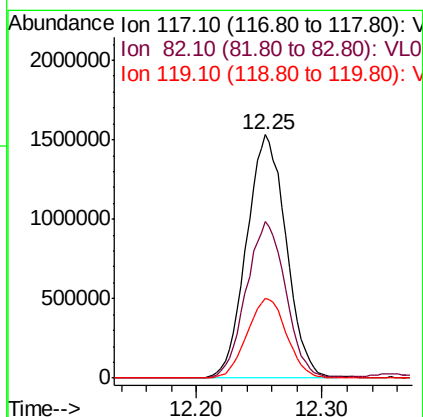
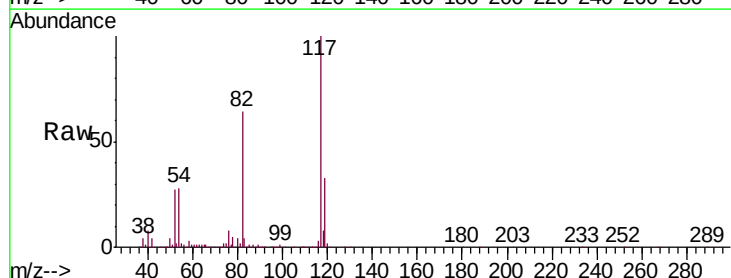
Tgt Ion: 117 Resp: 3367770

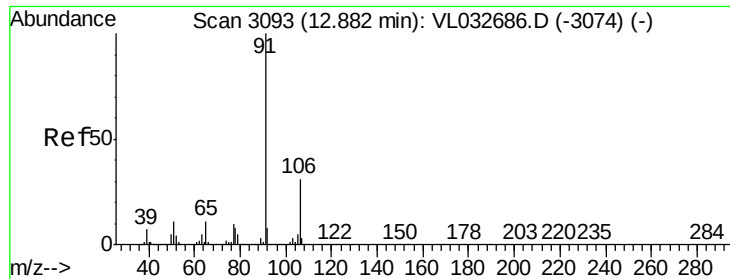
Ion Ratio Lower Upper

117 100

82 64.1 52.7 79.1

119 32.8 26.7 40.1





#58

Ethyl Benzene

Concen: 3.181 ppbv

RT: 12.88 min Scan# 3093

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

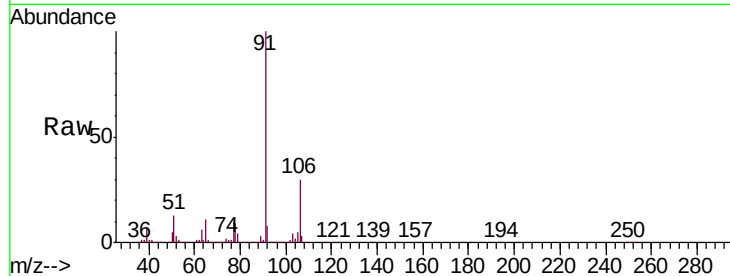
SS-1DUP

Tgt Ion: 91 Resp: 1244605

Ion Ratio Lower Upper

91 100

106 29.6 24.2 36.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

12.88

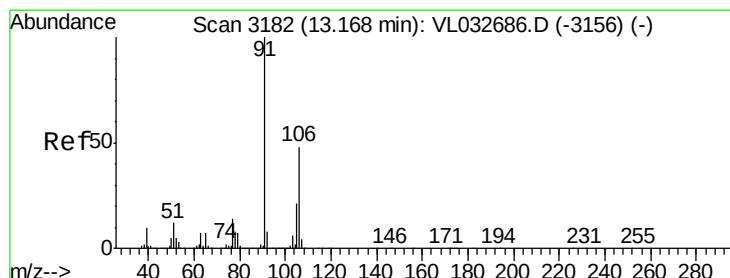
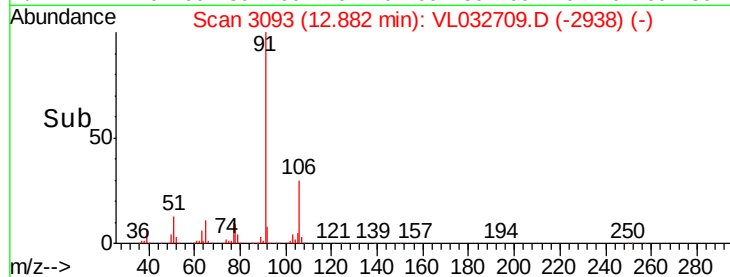
600000

400000

200000

0

Time-->



#59

m/p-Xylene

Concen: 11.734 ppbv

RT: 13.14 min Scan# 3172

Delta R.T. -0.03 min

Lab File: VL032709.D

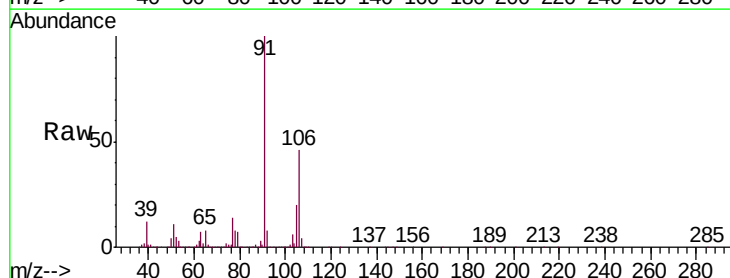
Acq: 30 Oct 2018 21:58

Tgt Ion: 91 Resp: 4088009

Ion Ratio Lower Upper

91 100

106 46.1 35.9 53.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.14

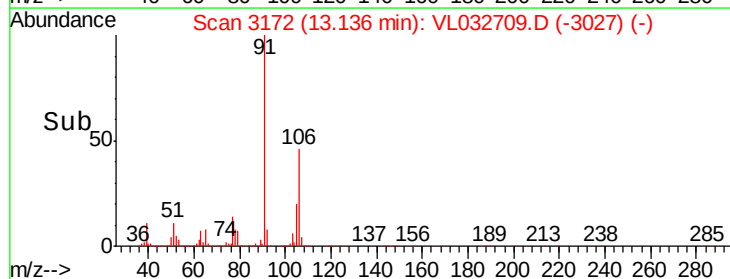
1500000

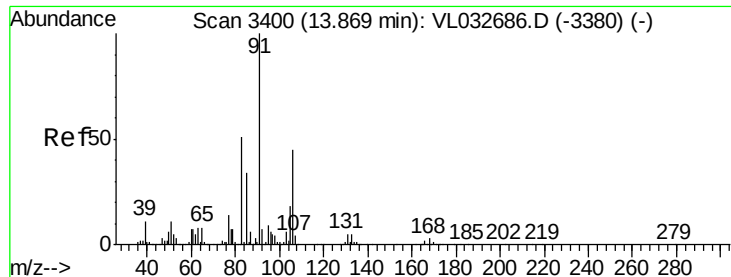
1000000

500000

0

Time-->

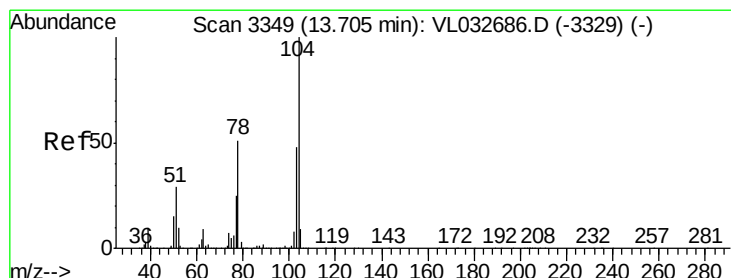
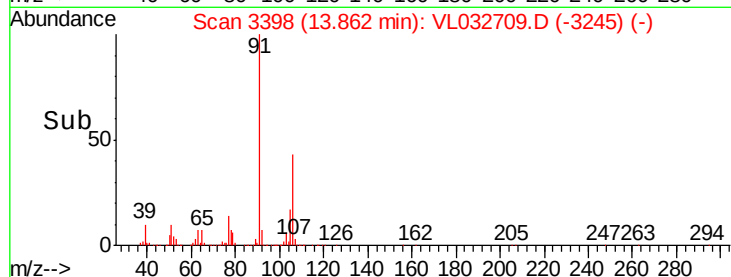
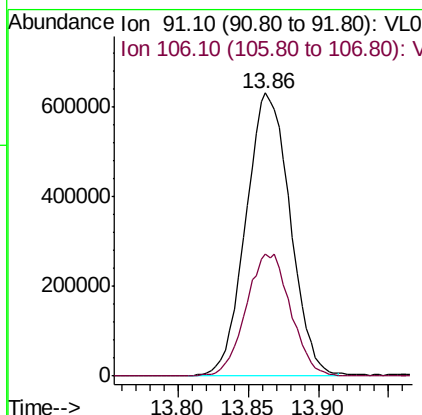
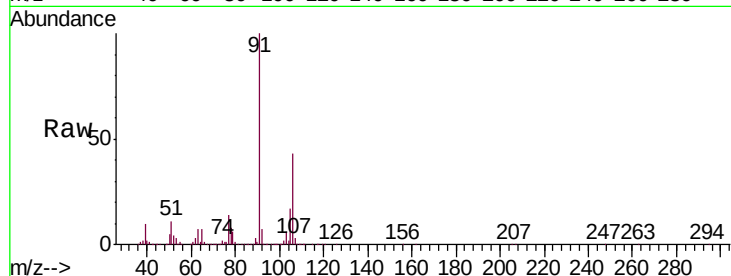




#60  
o-Xylene  
Concen: 4.105 ppbv  
RT: 13.86 min Scan# 3398  
Delta R.T. -0.01 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

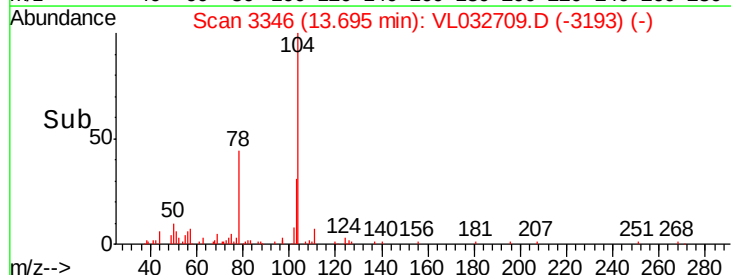
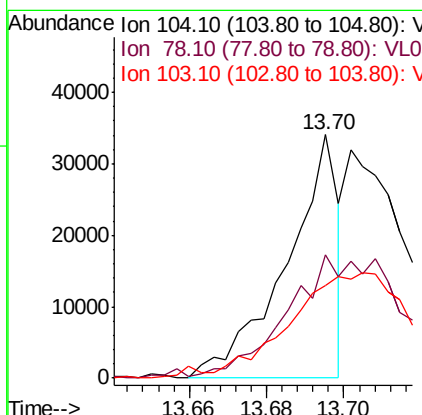
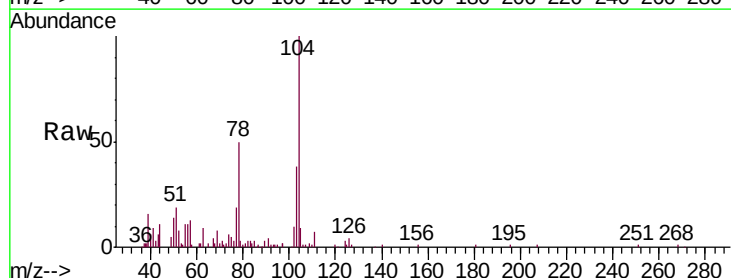
Instrument :  
MSVOA\_L  
ClientSampleId :  
SS-1DUP

Tgt Ion: 91 Resp: 1379718  
Ion Ratio Lower Upper  
91 100  
106 43.8 22.1 66.1

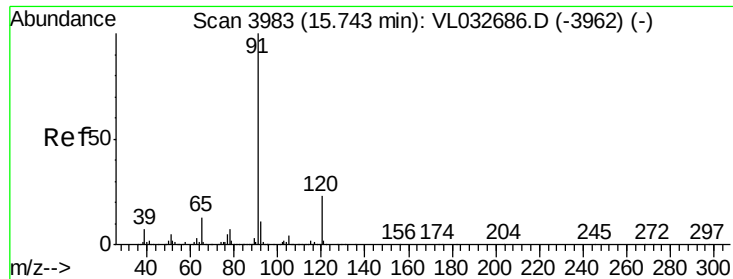


#61  
Styrene  
Concen: 0.140 ppbv  
RT: 13.70 min Scan# 3346  
Delta R.T. -0.01 min  
Lab File: VL032709.D  
Acq: 30 Oct 2018 21:58

Tgt Ion: 104 Resp: 31650  
Ion Ratio Lower Upper  
104 100  
78 117.5 42.8 64.2#  
103 0.0 37.4 56.0#







#64

n-propylbenzene

Concen: 0.335 ppbv

RT: 15.74 min Scan# 3982

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampled :

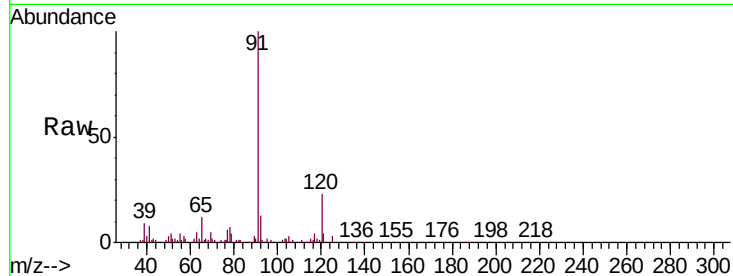
SS-1DUP

Tgt Ion:120 Resp: 39658

Ion Ratio Lower Upper

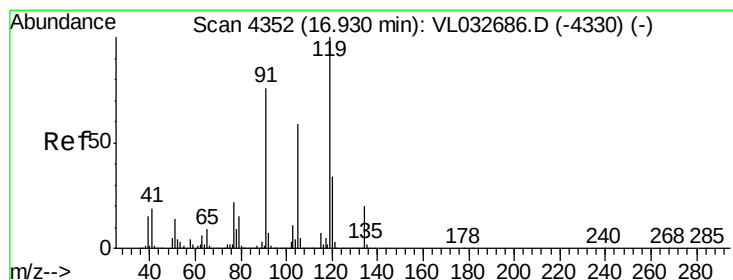
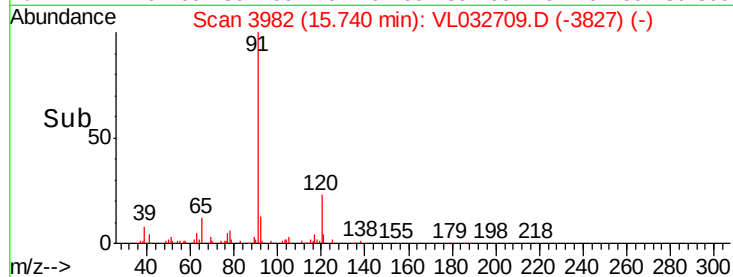
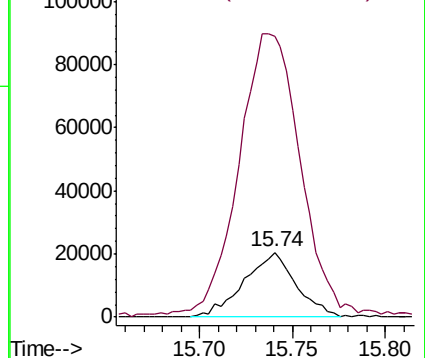
120 100

91 536.3 390.2 585.2



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#65

tert-Butylbenzene

Concen: 0.101 ppbv

RT: 16.94 min Scan# 4355

Delta R.T. 0.01 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

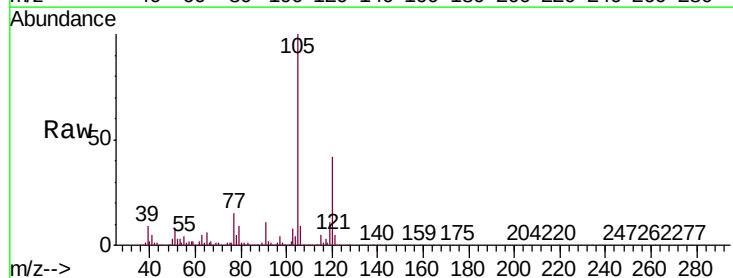
Tgt Ion:119 Resp: 41074

Ion Ratio Lower Upper

119 100

91 194.8 67.8 101.8#

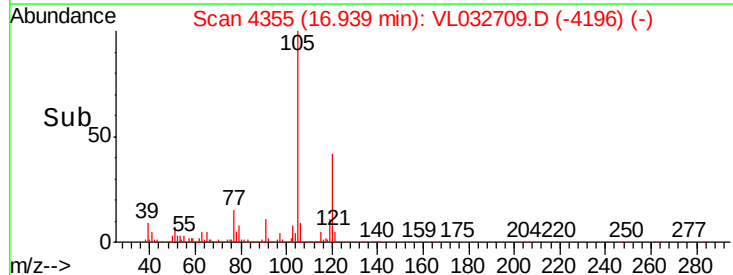
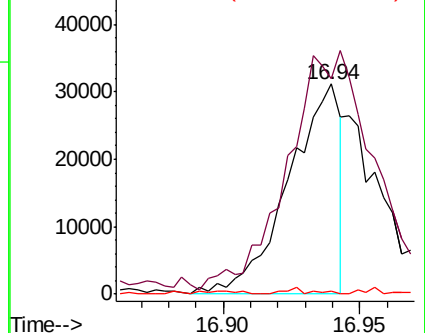
134 0.0 15.8 23.8#

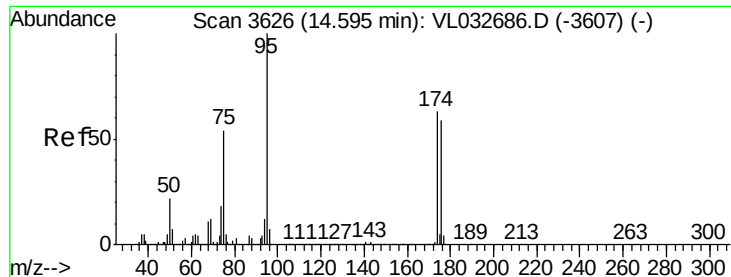


Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V

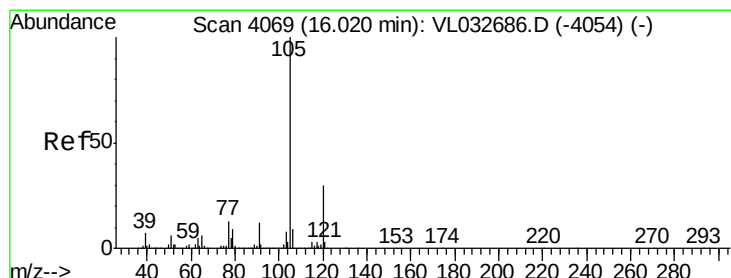
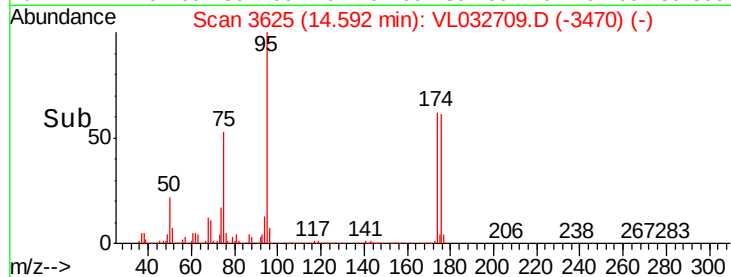
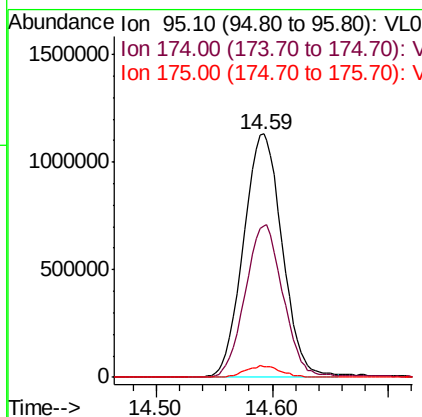
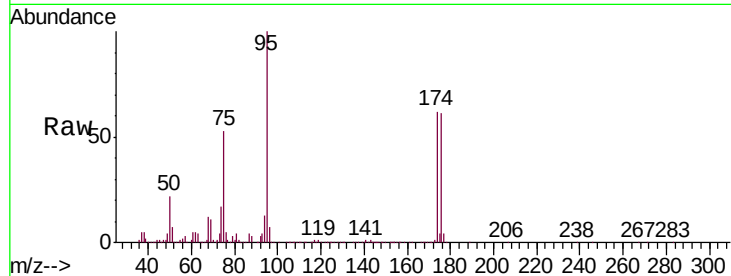




#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.455 ppbv  
 RT: 14.59 min Scan# 3625  
 Delta R.T. -0.00 min  
 Lab File: VL032709.D  
 Acq: 30 Oct 2018 21:58

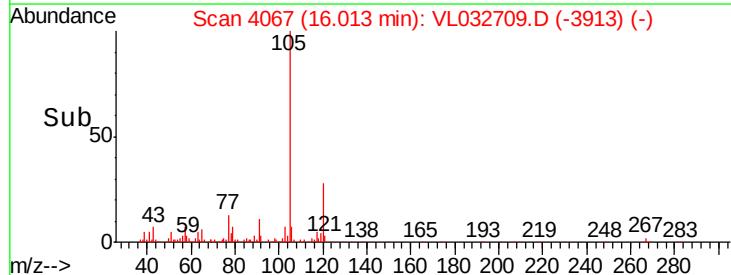
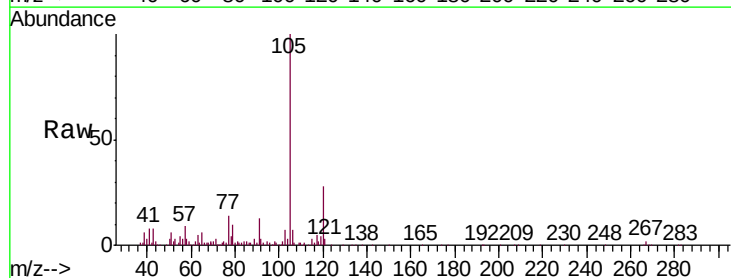
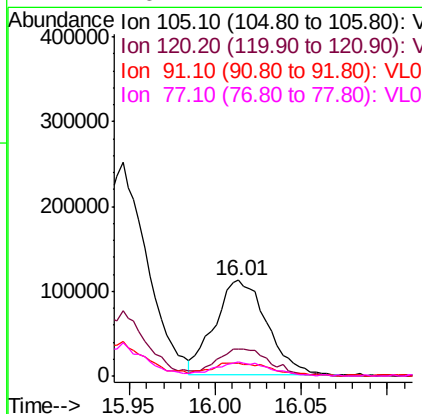
Instrument :  
 MSVOA\_L  
 ClientSampled :  
 SS-1DUP

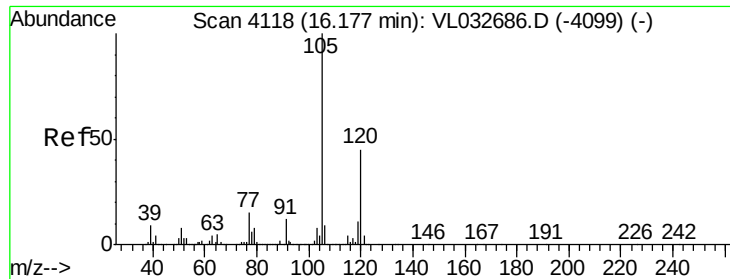
Tgt Ion: 95 Resp: 2621610  
 Ion Ratio Lower Upper  
 95 100  
 174 62.4 46.0 69.0  
 175 4.6 3.4 5.0



#72  
 4-Ethyltoluene  
 Concen: 0.662 ppbv  
 RT: 16.01 min Scan# 4067  
 Delta R.T. -0.00 min  
 Lab File: VL032709.D  
 Acq: 30 Oct 2018 21:58

Tgt Ion: 105 Resp: 237109  
 Ion Ratio Lower Upper  
 105 100  
 120 29.9 23.7 35.5  
 91 15.4 10.4 15.6  
 77 16.1 11.4 17.2





#73

1,3,5-Trimethylbenzene

Concen: 0.508 ppbv

RT: 16.17 min Scan# 4116

Delta R.T. -0.01 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

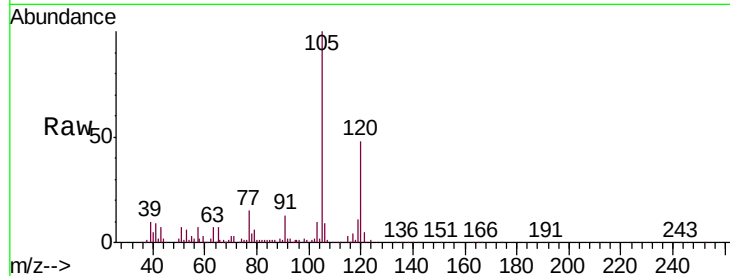
SS-1DUP

Tgt Ion:105 Resp: 177268

Ion Ratio Lower Upper

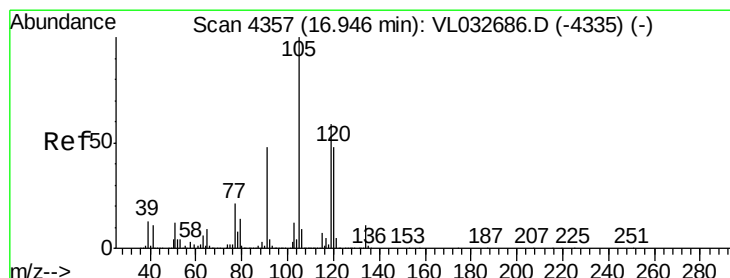
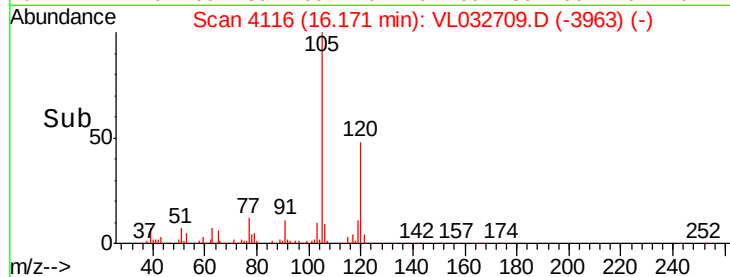
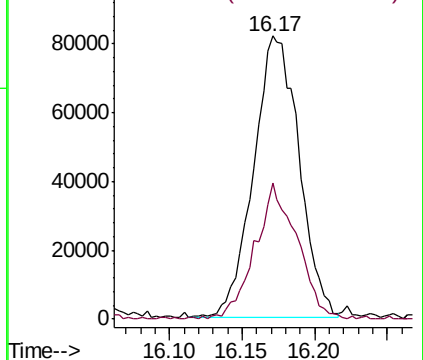
105 100

120 48.3 35.4 53.2



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: 1.685 ppbv

RT: 16.94 min Scan# 4355

Delta R.T. -0.01 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Tgt Ion:105 Resp: 627204

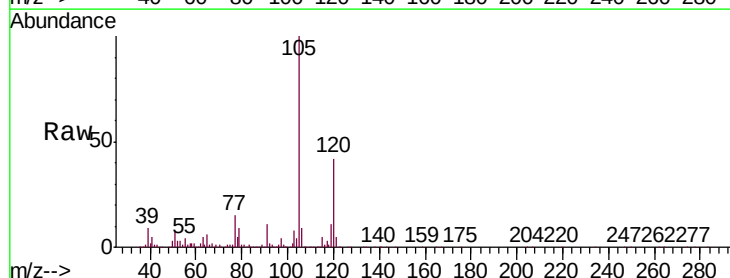
Ion Ratio Lower Upper

105 100

120 41.4 35.8 53.8

91 10.7 33.2 49.8#

77 14.6 16.2 24.4#

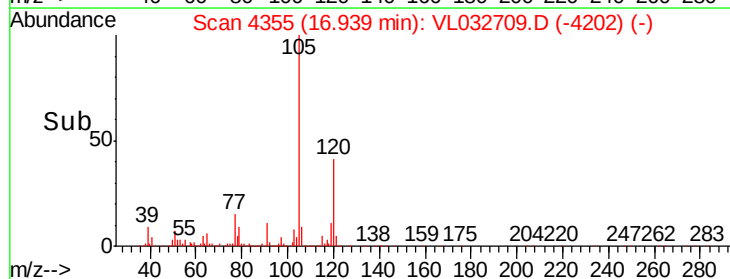
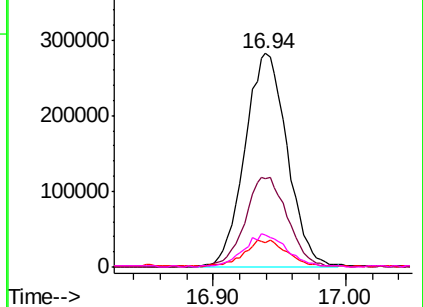


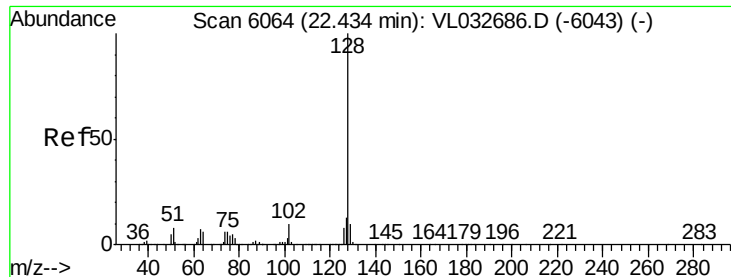
Abundance Ion 105.10 (104.80 to 105.80): V

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





#79

Naphthalene

Concen: 0.787 ppbv

RT: 22.43 min Scan# 6063

Delta R.T. -0.00 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

Instrument :

MSVOA\_L

ClientSampleId :

SS-1DUP

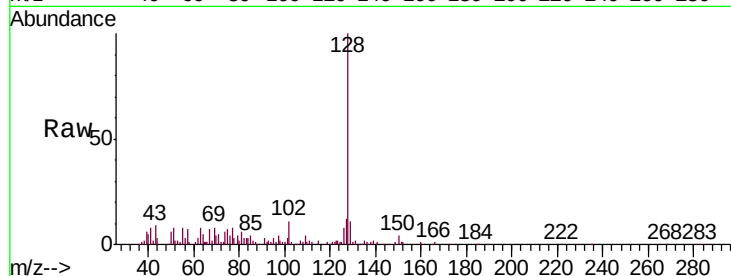
Tgt Ion:128 Resp: 182082

Ion Ratio Lower Upper

128 100

127 12.1 10.3 15.5

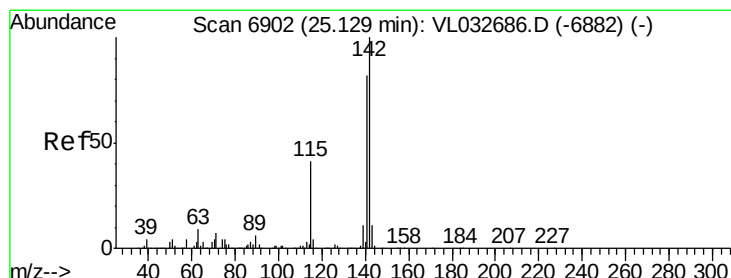
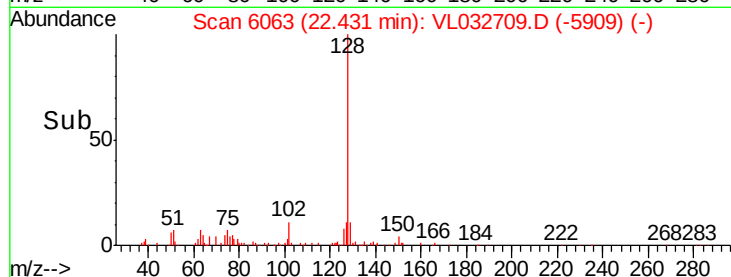
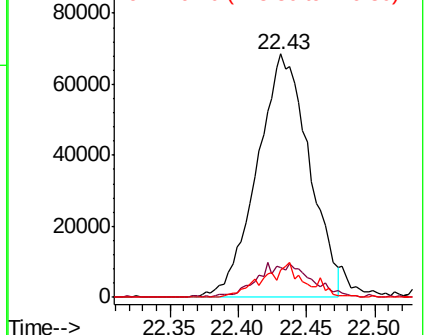
129 10.6 8.6 13.0



Abundance Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V



#80

Naphthalene, 2-methyl-

Concen: 0.576 ppbv

RT: 25.44 min Scan# 7000

Delta R.T. 0.32 min

Lab File: VL032709.D

Acq: 30 Oct 2018 21:58

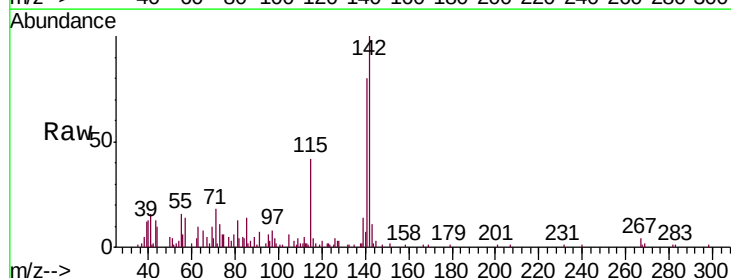
Tgt Ion:142 Resp: 32431

Ion Ratio Lower Upper

142 100

141 91.5 67.5 101.3

115 44.2 33.5 50.3



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

