

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL050119\  
 Data File : VL033617.D  
 Acq On : 1 May 2019 13:52  
 Operator : SY/AP  
 Sample : VSTDIC0.5  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

Quant Time: May 02 04:08:10 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL050119AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu May 02 04:03:11 2019  
 QLast Update : Thu May 02 04:03:11 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.75  | 49   | 1092951  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.28  | 114  | 2594003  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.23 | 117  | 2658119  | 10.00 | ppbv  | 0.00     |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.56  | 95    | 2174958  | 10.67    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 106.70% |

## Target Compounds

|                                | R.T. | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.07 | 85   | 117725   | 0.715 | ppbv   | 94     |
| 3) Chlorodifluoromethane       | 3.01 | 51   | 80500    | 0.575 | ppbv   | 95     |
| 4) Chloromethane               | 3.17 | 50   | 40195    | 0.565 | ppbv # | 86     |
| 5) Vinyl Chloride              | 3.28 | 62   | 37459    | 0.502 | ppbv # | 86     |
| 6) Bromomethane                | 3.51 | 94   | 13809    | 0.314 | ppbv   | 89     |
| 7) Chloroethane                | 3.60 | 64   | 13267    | 0.533 | ppbv # | 84     |
| 8) Dichlorotetrafluoroethane   | 3.21 | 85   | 98818    | 0.551 | ppbv   | 97     |
| 9) Propene                     | 3.03 | 41   | 28526    | 0.762 | ppbv # | 80     |
| 10) Heptane                    | 8.24 | 43   | 61776    | 0.446 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.00 | 101  | 114514   | 0.585 | ppbv   | 91     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55 | 101  | 77100    | 0.574 | ppbv   | 97     |
| 13) Ethanol                    | 3.64 | 45   | 4513     | 0.266 | ppbv # | 38     |
| 14) Bromoethene                | 3.78 | 108  | 29786    | 0.540 | ppbv # | 95     |
| 15) Acetone                    | 3.90 | 43   | 80706    | 0.607 | ppbv   | 98     |
| 16) 1,3-Butadiene              | 3.35 | 39   | 30919    | 0.516 | ppbv   | 97     |
| 17) tert-Butyl alcohol         | 4.35 | 59   | 40843    | 0.356 | ppbv # | 78     |
| 18) 1,1-Dichloroethene         | 4.35 | 96   | 33618    | 0.576 | ppbv # | 82     |
| 19) Isopropyl Alcohol          | 4.02 | 45   | 52529    | 0.575 | ppbv # | 92     |
| 20) Methylene Chloride         | 4.40 | 84   | 31325    | 0.604 | ppbv # | 92     |
| 21) Allyl Chloride             | 4.47 | 41   | 44593    | 0.533 | ppbv   | 96     |
| 22) trans-1,2-Dichloroethene   | 4.96 | 96   | 13239    | 0.232 | ppbv   | 95     |
| 23) Vinyl Acetate              | 5.14 | 43   | 96000    | 0.485 | ppbv # | 94     |
| 24) 1,1-Dichloroethane         | 5.08 | 63   | 79726    | 0.541 | ppbv   | 97     |
| 25) Ethyl Acetate              | 5.76 | 43   | 128127   | 0.507 | ppbv   | 99     |
| 26) Hexane                     | 5.77 | 57   | 51721    | 0.486 | ppbv   | 89     |
| 27) Carbon Disulfide           | 4.62 | 76   | 60881    | 0.473 | ppbv # | 84     |
| 28) Methyl tert-Butyl Ether    | 5.11 | 73   | 85908    | 0.479 | ppbv   | 99     |
| 29) Chloroform                 | 5.83 | 83   | 103890   | 0.533 | ppbv   | 94     |
| 30) Cyclohexane                | 7.24 | 84   | 19242    | 0.209 | ppbv # | 1      |
| 31) cis-1,2-Dichloroethene     | 5.63 | 61   | 22742    | 0.212 | ppbv   | 93     |
| 32) 1,1,1-Trichloroethane      | 6.61 | 97   | 103166   | 0.505 | ppbv   | 98     |
| 34) 2-Butanone                 | 5.33 | 43   | 77727    | 0.488 | ppbv   | 98     |
| 35) Carbon Tetrachloride       | 7.12 | 117  | 99911    | 0.486 | ppbv   | 93     |
| 36) Benzene                    | 6.99 | 78   | 107491   | 0.486 | ppbv # | 94     |
| 37) 1,2-Dichloroethane         | 6.40 | 62   | 78278    | 0.533 | ppbv   | 99     |
| 38) Trichloroethene            | 7.95 | 130  | 44596    | 0.504 | ppbv   | 88     |
| 39) 1,2-Dichloropropane        | 7.72 | 63   | 38038    | 0.456 | ppbv   | 95     |
| 40) 1,4-Dioxane                | 7.94 | 88   | 346      | 0.010 | ppbv # | 1      |
| 41) Tetrahydrofuran            | 6.16 | 42   | 36688    | 0.431 | ppbv   | 95     |
| 42) Bromodichloromethane       | 7.90 | 83   | 99104    | 0.499 | ppbv   | 90     |
| 43) Methyl Methacrylate        | 8.13 | 69   | 35848    | 0.428 | ppbv   | 99     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL050119\  
 Data File : VL033617.D  
 Acq On : 1 May 2019 13:52  
 Operator : SY/AP  
 Sample : VSTDIC0.5  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

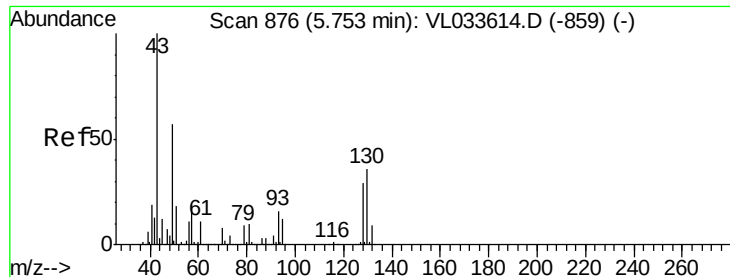
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

Quant Time: May 02 04:08:10 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL050119AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu May 02 04:03:11 2019  
 QLast Update : Thu May 02 04:03:11 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.98  | 57   | 189633   | 0.492 | ppbv   | 94       |
| 45) t-1,3-Dichloropropene     | 9.40  | 75   | 22636    | 0.204 | ppbv   | 89       |
| 46) cis-1,3-Dichloropropene   | 8.83  | 75   | 47224    | 0.377 | ppbv   | 93       |
| 47) 1,1,2-Trichloroethane     | 9.60  | 97   | 49328    | 0.454 | ppbv   | 91       |
| 48) Dibromochloromethane      | 10.44 | 129  | 74203    | 0.403 | ppbv   | 99       |
| 49) Bromoform                 | 13.18 | 173  | 40031    | 0.284 | ppbv # | 27       |
| 50) 4-Methyl-2-Pentanone      | 8.87  | 43   | 106850   | 0.428 | ppbv   | 95       |
| 51) 2-Hexanone                | 10.27 | 43   | 80105    | 0.366 | ppbv # | 91       |
| 52) Tetrachloroethene         | 11.36 | 164  | 41201    | 0.485 | ppbv   | 92       |
| 53) Toluene                   | 9.94  | 91   | 100405   | 0.360 | ppbv   | 97       |
| 54) 1,2-Dibromoethane         | 10.75 | 107  | 69433    | 0.465 | ppbv   | 90       |
| 56) 1,1,1,2-Tetrachloroethane | 12.27 | 131  | 61636    | 0.531 | ppbv # | 1        |
| 57) Chlorobenzene             | 12.29 | 112  | 110499   | 0.534 | ppbv   | 96       |
| 58) Ethyl Benzene             | 12.86 | 91   | 145152   | 0.469 | ppbv   | 98       |
| 59) m/p-Xylene                | 13.13 | 91   | 41779    | 0.156 | ppbv # | 100      |
| 60) o-Xylene                  | 13.84 | 91   | 132248   | 0.492 | ppbv   | 95       |
| 61) Styrene                   | 13.67 | 104  | 76549    | 0.416 | ppbv   | 94       |
| 62) Isopropylbenzene          | 14.82 | 105  | 177983   | 0.495 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.82 | 83   | 114739   | 0.545 | ppbv   | 98       |
| 64) n-propylbenzene           | 15.72 | 120  | 44537    | 0.478 | ppbv   | 88       |
| 65) tert-Butylbenzene         | 16.90 | 119  | 93774    | 0.279 | ppbv # | 20       |
| 66) Benzyl Chloride           | 17.15 | 91   | 61736    | 0.405 | ppbv   | 97       |
| 67) sec-Butylbenzene          | 17.45 | 105  | 226240   | 0.480 | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 17.81 | 119  | 178269   | 0.454 | ppbv   | 95       |
| 70) n-Butylbenzene            | 18.70 | 91   | 202860   | 0.475 | ppbv   | 96       |
| 71) 2-Chlorotoluene           | 15.61 | 91   | 127457   | 0.474 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.99 | 105  | 134336   | 0.439 | ppbv # | 95       |
| 73) 1,3,5-Trimethylbenzene    | 16.15 | 105  | 143908   | 0.478 | ppbv   | 90       |
| 74) 1,2,4-Trimethylbenzene    | 16.91 | 105  | 172370   | 0.514 | ppbv # | 89       |
| 75) 1,3-Dichlorobenzene       | 17.15 | 146  | 115424   | 0.553 | ppbv   | 96       |
| 76) 1,4-Dichlorobenzene       | 17.30 | 146  | 103411   | 0.519 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.98 | 146  | 76083    | 0.391 | ppbv   | 73       |
| 78) Hexachloro-1,3-Butadiene  | 23.53 | 225  | 86075    | 0.580 | ppbv   | 98       |
| 79) Naphthalene               | 22.41 | 128  | 65160    | 0.210 | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 25.11 | 142  | 42860    | 0.319 | ppbv   | 97       |
| 81) 1,2,4-Trichlorobenzene    | 22.12 | 180  | 16395    | 0.091 | ppbv # | 12       |

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

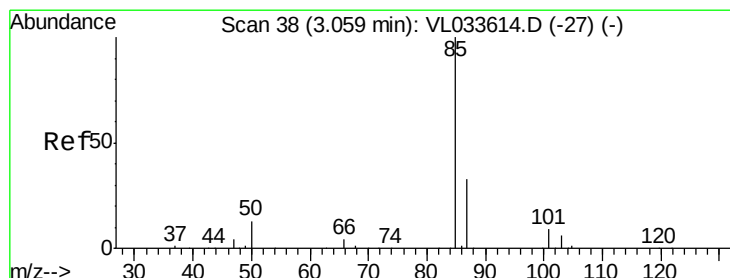
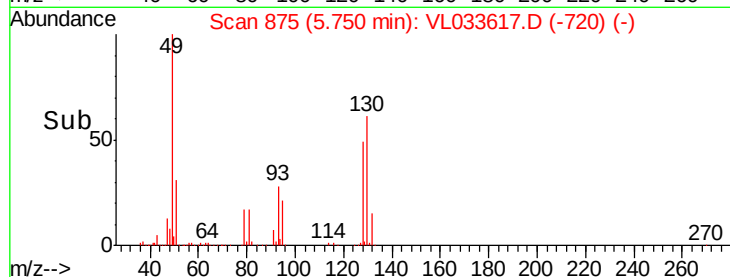
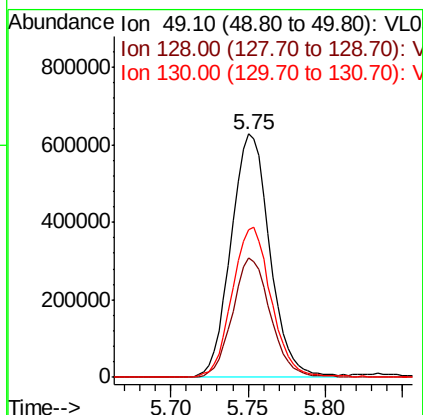
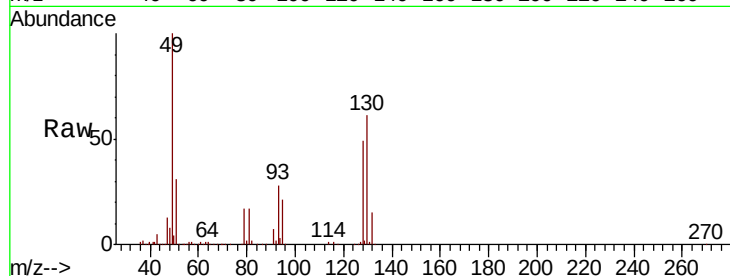




#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.75 min Scan# 875  
 Delta R.T. -0.00 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

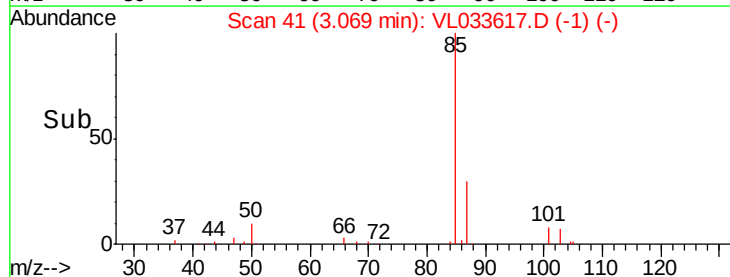
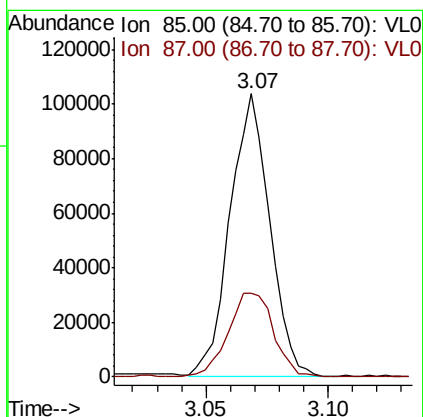
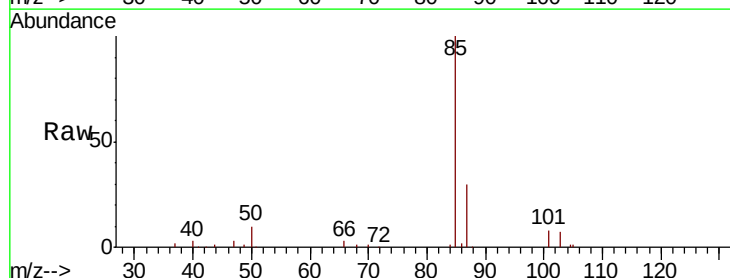
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

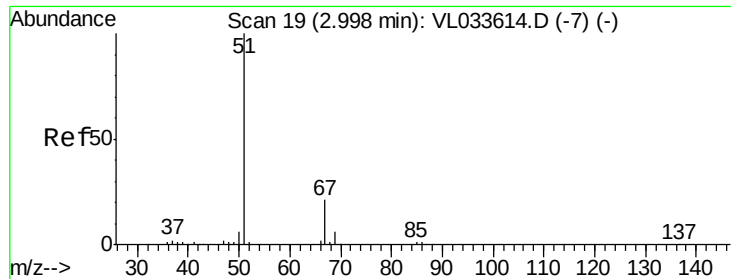
Tgt Ion: 49 Resp: 1092951  
 Ion Ratio Lower Upper  
 49 100  
 128 48.2 25.0 75.0  
 130 62.6 31.9 95.9



#2  
 Dichlorodifluoromethane  
 Concen: 0.715 ppbv  
 RT: 3.07 min Scan# 41  
 Delta R.T. 0.01 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Tgt Ion: 85 Resp: 117725  
 Ion Ratio Lower Upper  
 85 100  
 87 30.0 26.8 40.2

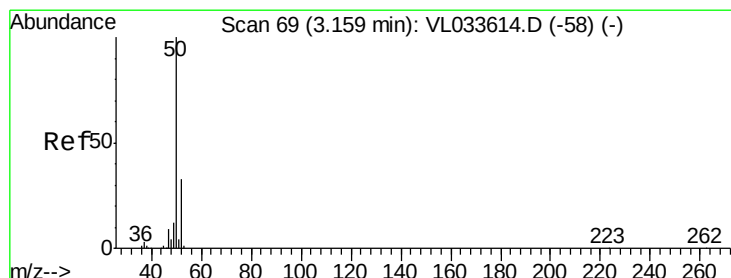
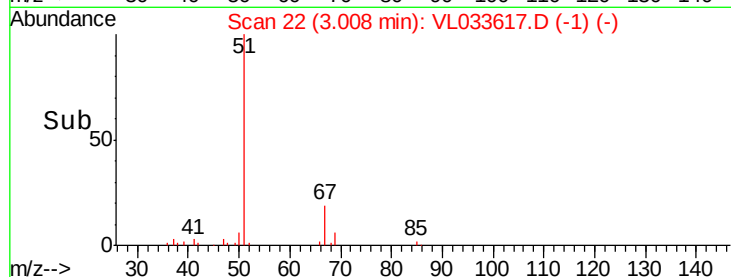
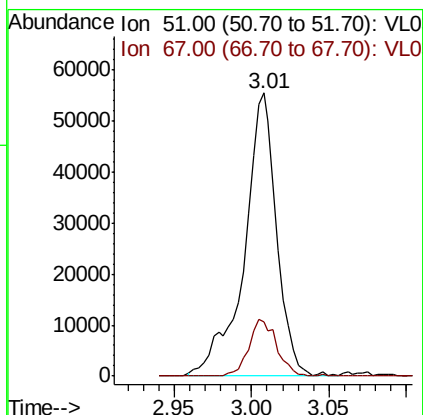
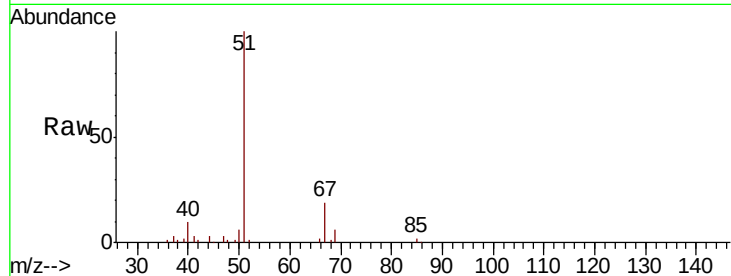




#3  
 Chlorodifluoromethane  
 Concen: 0.575 ppbv  
 RT: 3.01 min Scan# 22  
 Delta R.T. 0.01 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

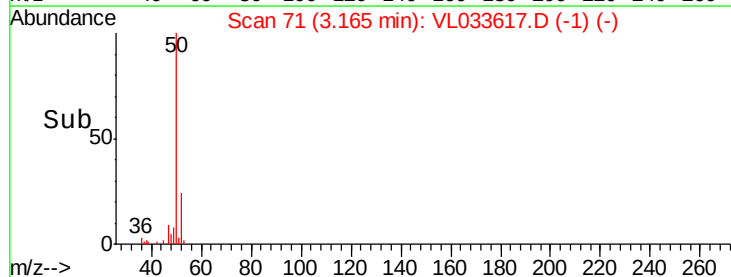
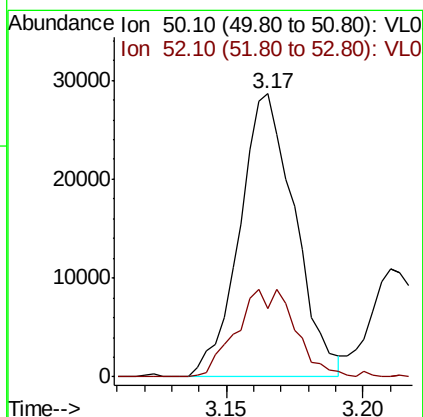
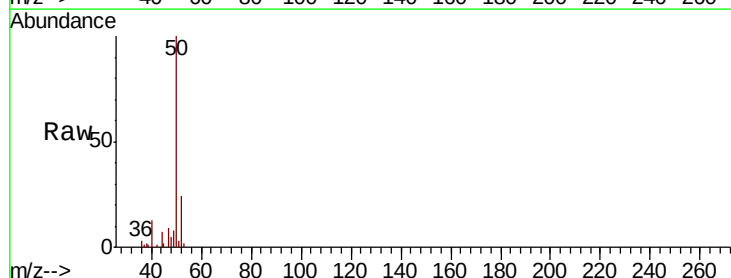
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

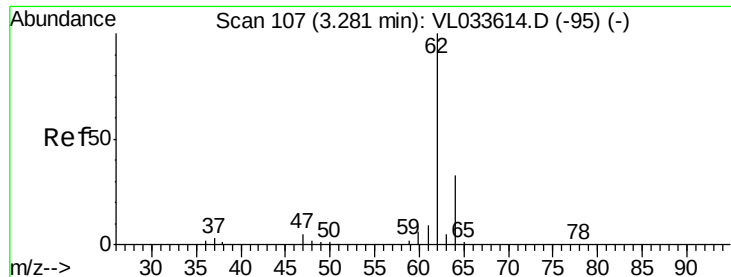
Tgt Ion: 51 Resp: 80500  
 Ion Ratio Lower Upper  
 51 100  
 67 17.4 15.6 23.4



#4  
 Chloromethane  
 Concen: 0.565 ppbv  
 RT: 3.17 min Scan# 71  
 Delta R.T. 0.01 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Tgt Ion: 50 Resp: 40195  
 Ion Ratio Lower Upper  
 50 100  
 52 24.4 26.0 39.0#





#5

Vinyl Chloride

Concen: 0.502 ppbv

RT: 3.28 min Scan# 108

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

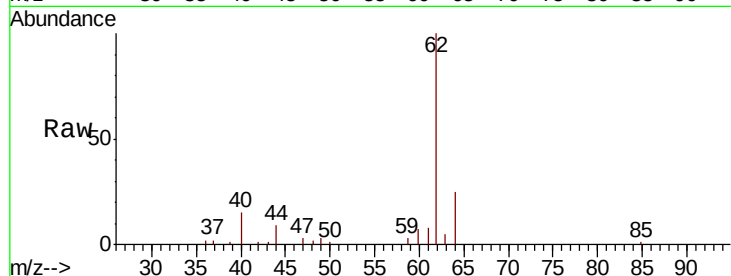
VSTDIC0.5

Tgt Ion: 62 Resp: 37459

Ion Ratio Lower Upper

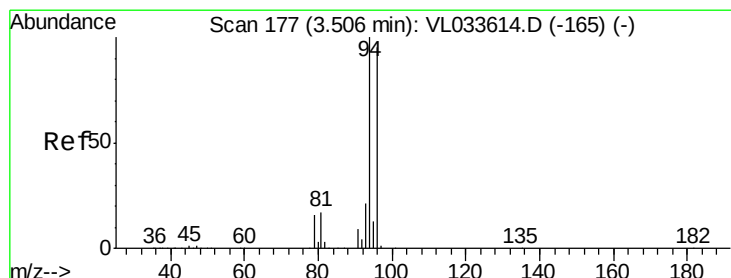
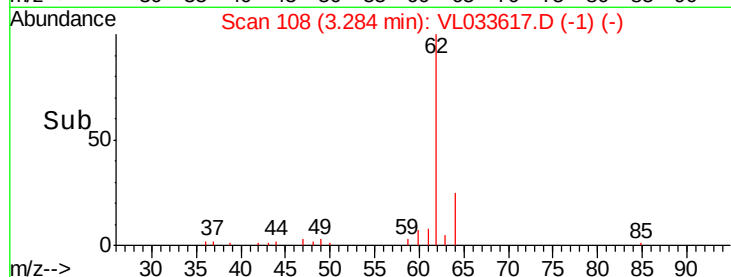
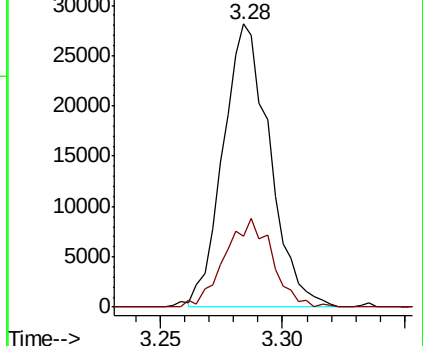
62 100

64 24.9 26.2 39.4#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.314 ppbv

RT: 3.51 min Scan# 177

Delta R.T. 0.00 min

Lab File: VL033617.D

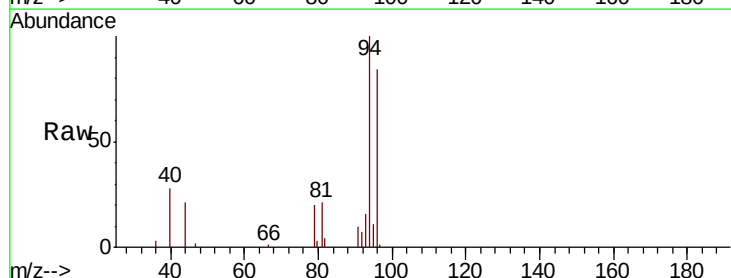
Acq: 1 May 2019 13:52

Tgt Ion: 94 Resp: 13809

Ion Ratio Lower Upper

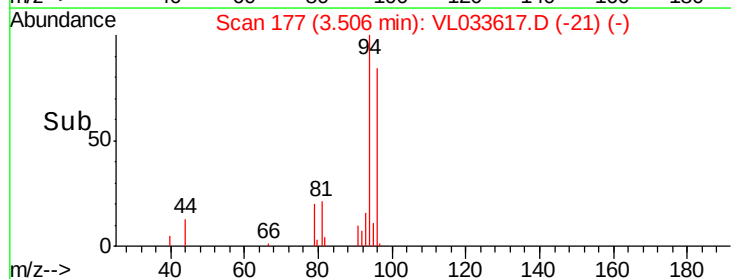
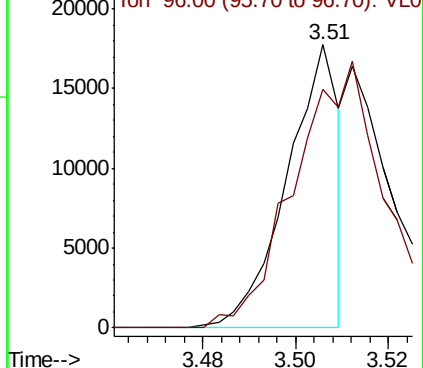
94 100

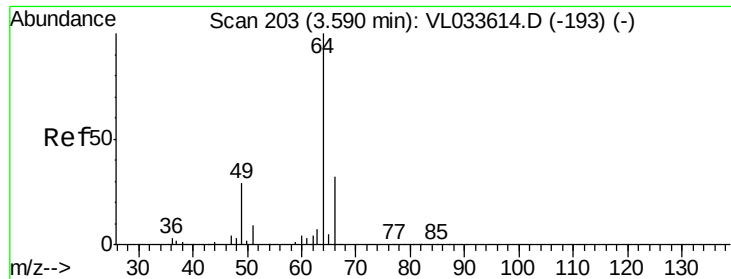
96 84.1 75.7 113.5



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 0.533 ppbv

RT: 3.60 min Scan# 205

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

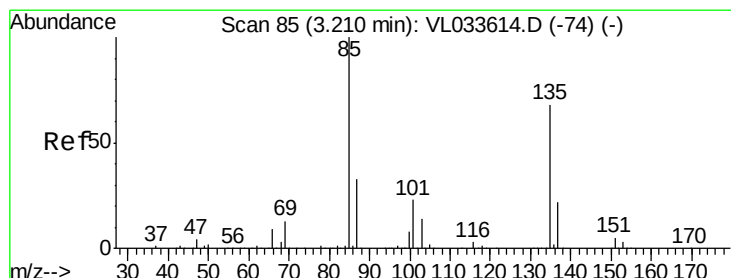
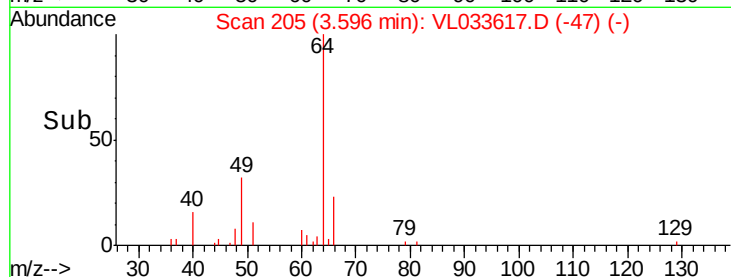
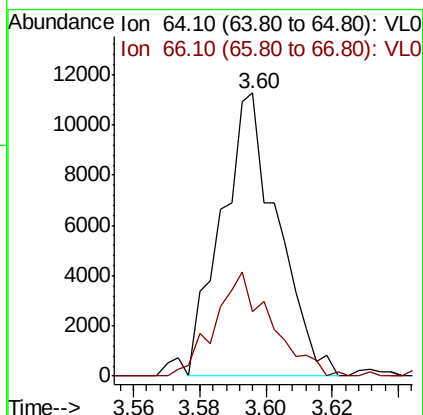
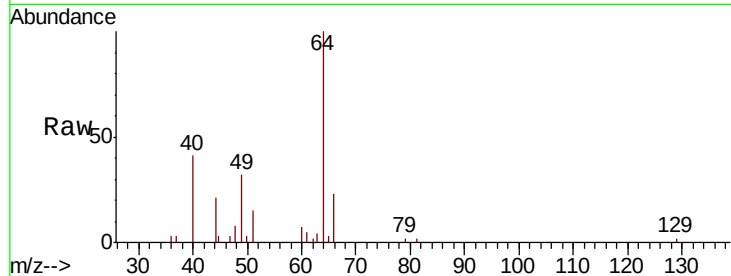
VSTDIC0.5

Tgt Ion: 64 Resp: 13267

Ion Ratio Lower Upper

64 100

66 22.7 25.4 38.2#



#8

Dichlorotetrafluoroethane

Concen: 0.551 ppbv

RT: 3.21 min Scan# 86

Delta R.T. 0.00 min

Lab File: VL033617.D

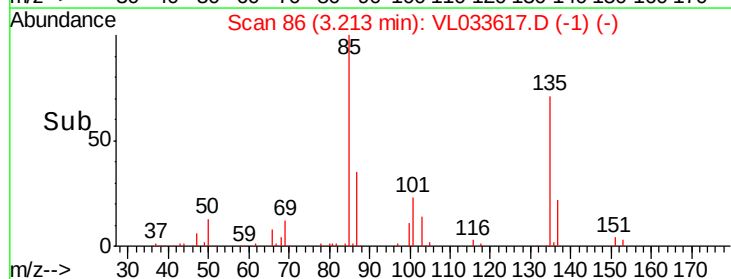
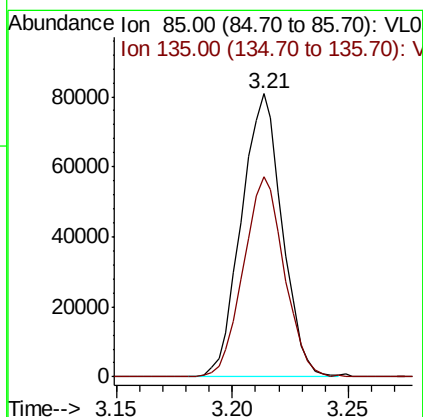
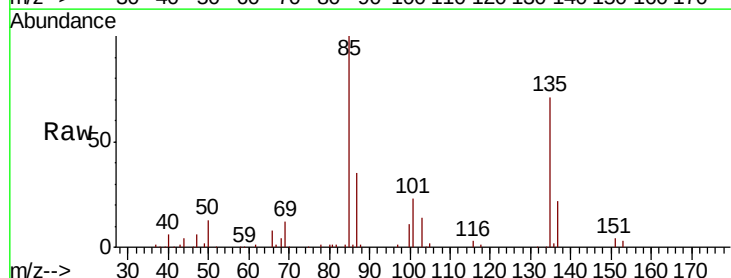
Acq: 1 May 2019 13:52

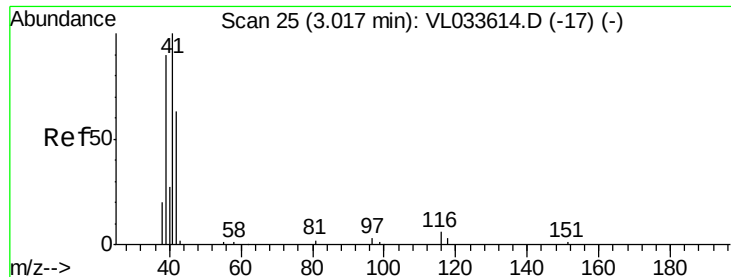
Tgt Ion: 85 Resp: 98818

Ion Ratio Lower Upper

85 100

135 71.1 55.0 82.6





#9

Propene

Concen: 0.762 ppbv

RT: 3.03 min Scan# 28

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

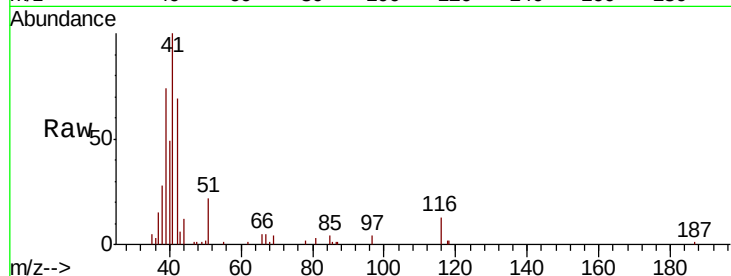
VSTDIC0.5

Tgt Ion: 41 Resp: 28526

Ion Ratio Lower Upper

41 100

42 64.3 66.0 99.0#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

25000

20000

15000

10000

5000

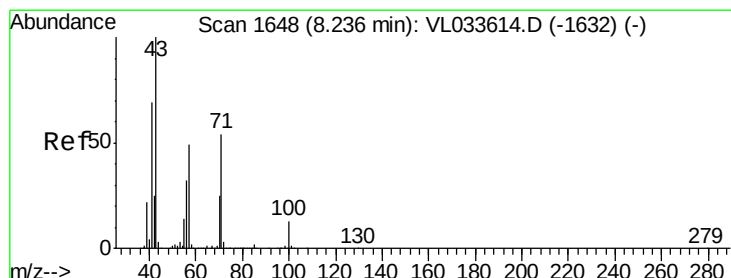
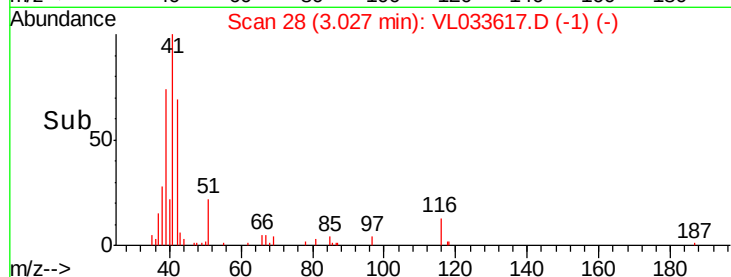
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Time-->

3.00

3.03

3.05



#10

Heptane

Concen: 0.446 ppbv

RT: 8.24 min Scan# 1649

Delta R.T. 0.00 min

Lab File: VL033617.D

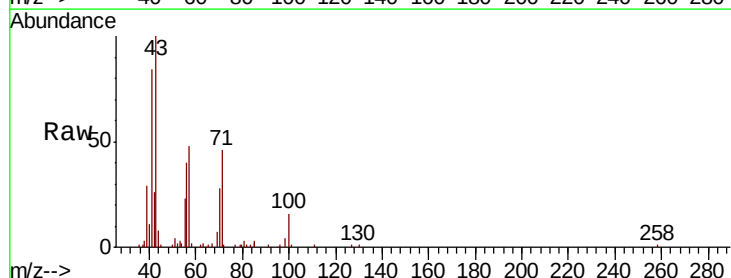
Acq: 1 May 2019 13:52

Tgt Ion: 43 Resp: 61776

Ion Ratio Lower Upper

43 100

57 51.4 40.3 60.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

40000

30000

20000

10000

0

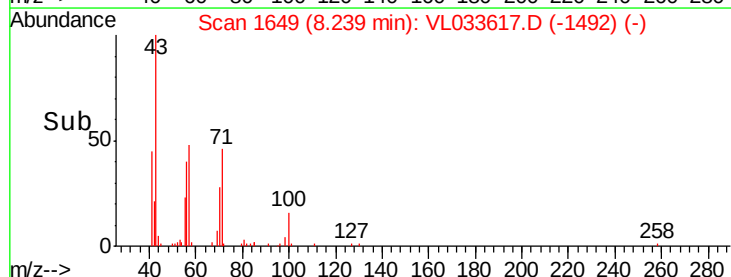
Time-->

8.15

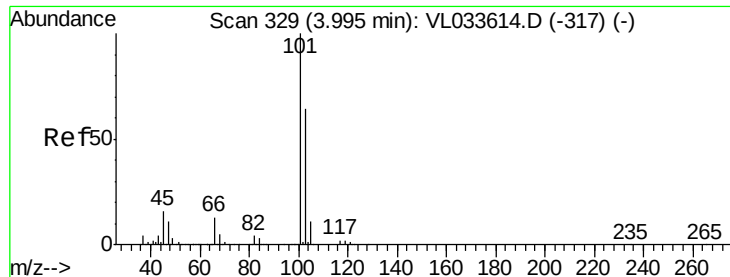
8.20

8.24

8.30







#11

Trichlorofluoromethane

Concen: 0.585 ppbv

RT: 4.00 min Scan# 330

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

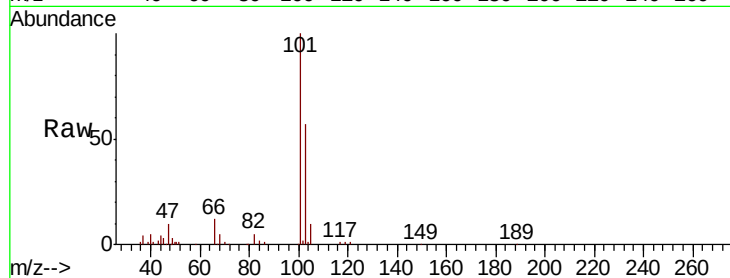
VSTDIC0.5

Tgt Ion:101 Resp: 114514

Ion Ratio Lower Upper

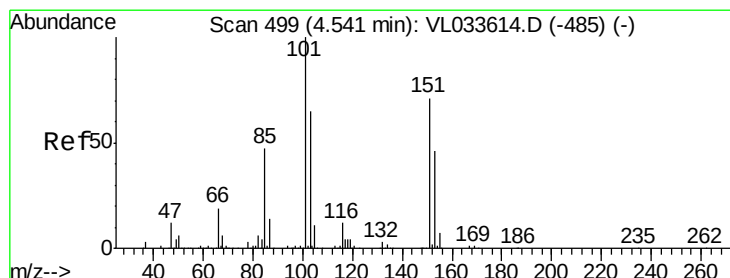
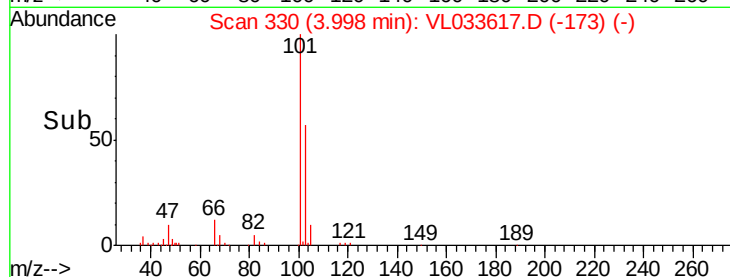
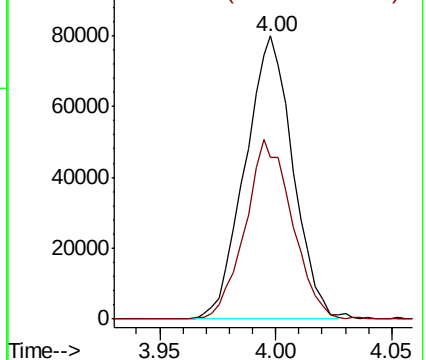
101 100

103 56.8 51.2 76.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.574 ppbv

RT: 4.55 min Scan# 501

Delta R.T. 0.01 min

Lab File: VL033617.D

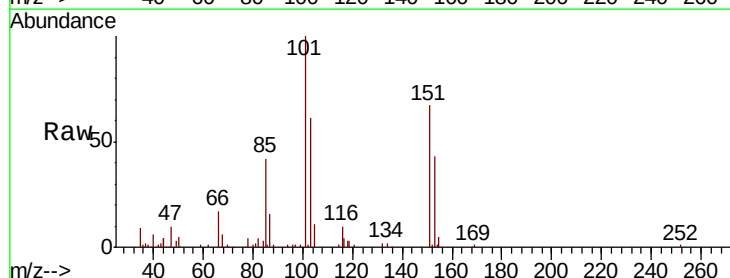
Acq: 1 May 2019 13:52

Tgt Ion:101 Resp: 77100

Ion Ratio Lower Upper

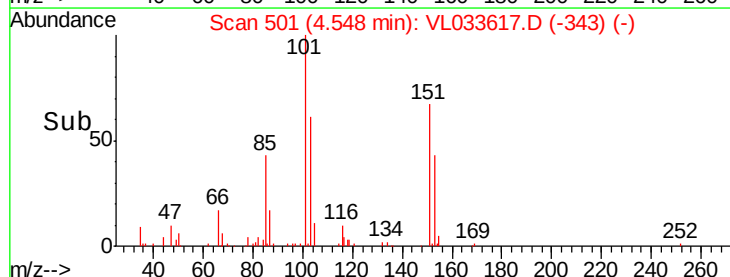
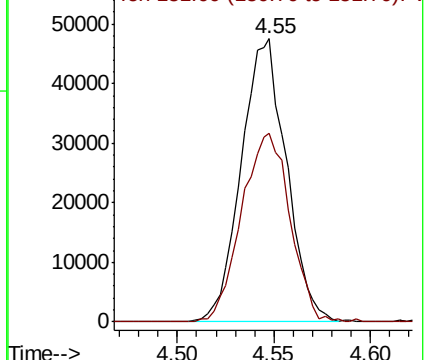
101 100

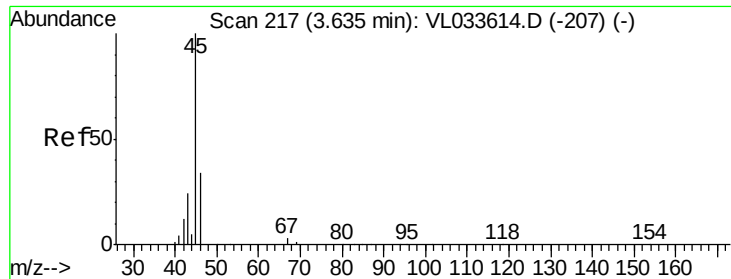
151 71.4 59.2 88.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 0.266 ppbv

RT: 3.64 min Scan# 219

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

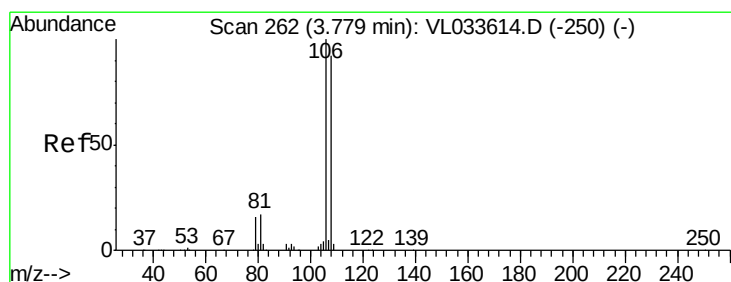
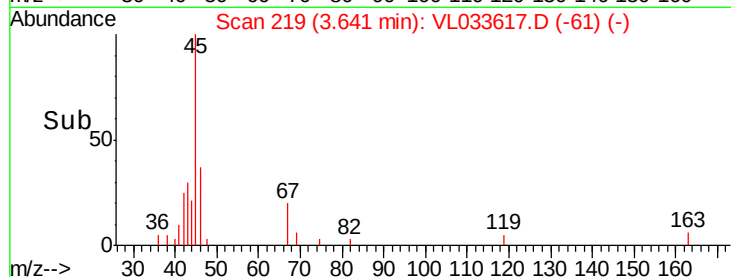
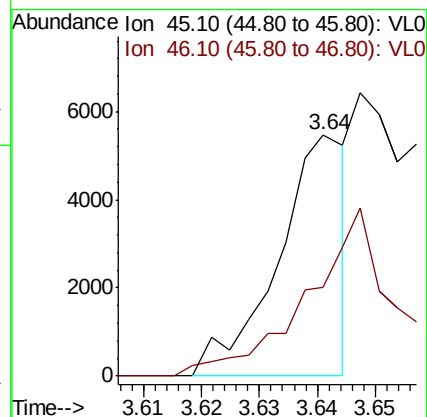
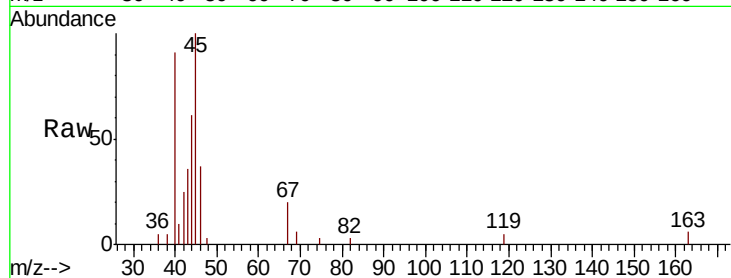
VSTDIC0.5

Tgt Ion: 45 Resp: 4513

Ion Ratio Lower Upper

45 100

46 0.0 14.6 58.2#



#14

Bromoethene

Concen: 0.540 ppbv

RT: 3.78 min Scan# 263

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

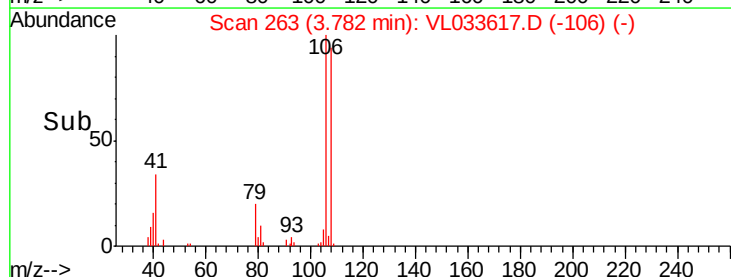
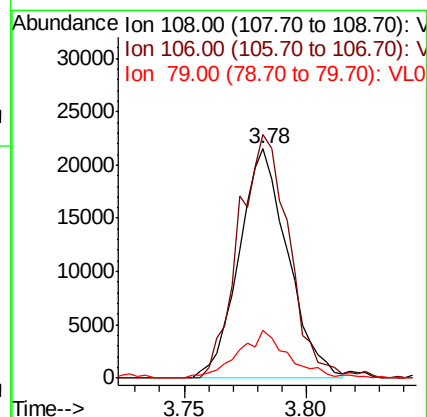
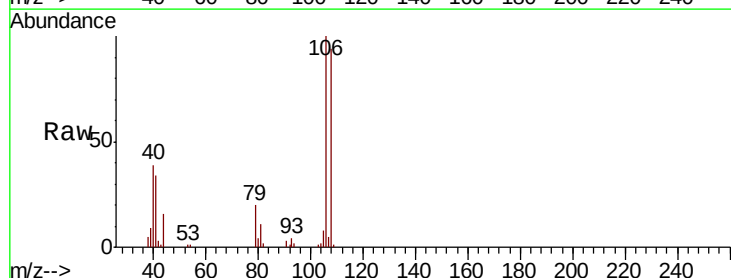
Tgt Ion: 108 Resp: 29786

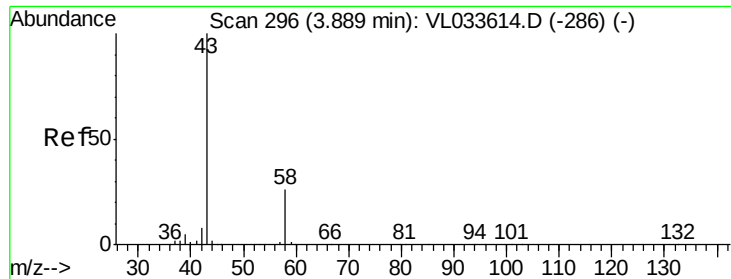
Ion Ratio Lower Upper

108 100

106 110.8 84.6 127.0

79 22.1 14.4 21.6#





#15

Acetone

Concen: 0.607 ppbv

RT: 3.90 min Scan# 300

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

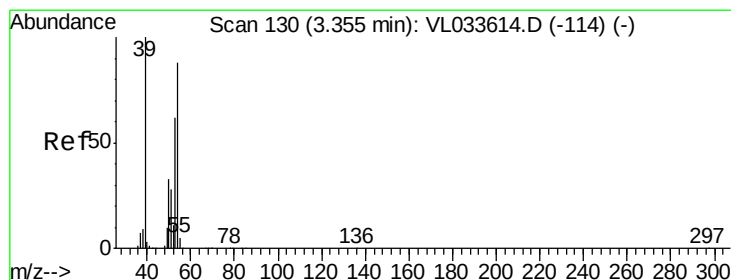
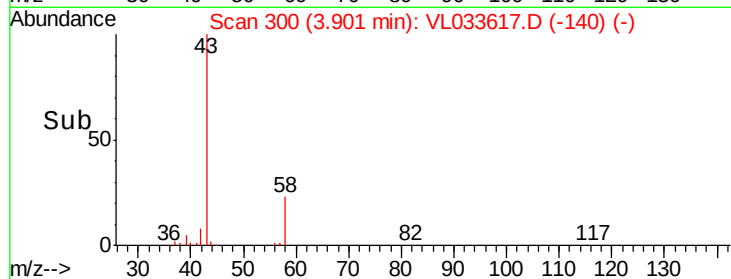
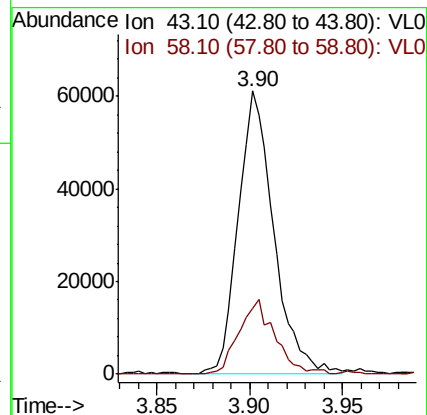
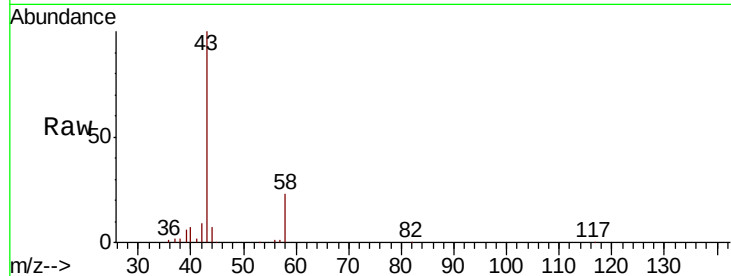
VSTDIC0.5

Tgt Ion: 43 Resp: 80706

Ion Ratio Lower Upper

43 100

58 27.6 21.2 31.8



#16

1,3-Butadiene

Concen: 0.516 ppbv

RT: 3.35 min Scan# 130

Delta R.T. 0.00 min

Lab File: VL033617.D

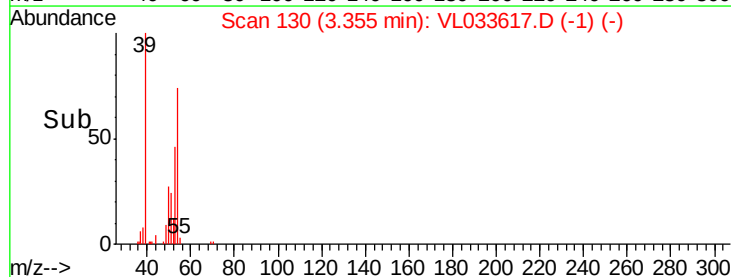
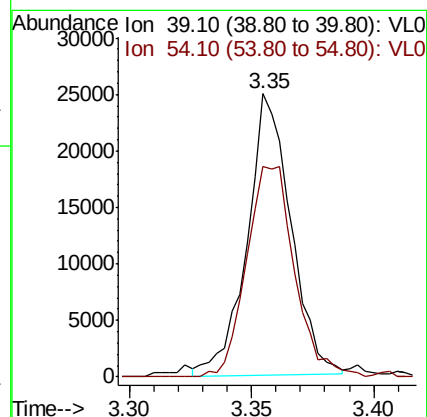
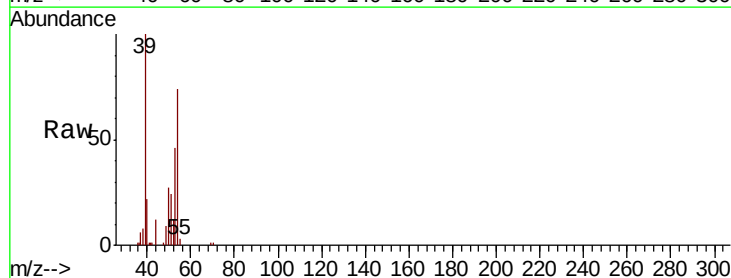
Acq: 1 May 2019 13:52

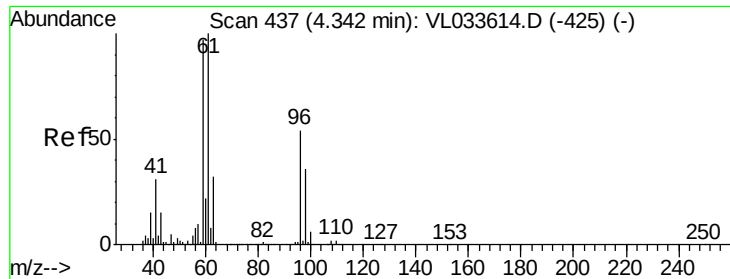
Tgt Ion: 39 Resp: 30919

Ion Ratio Lower Upper

39 100

54 82.9 68.4 102.6

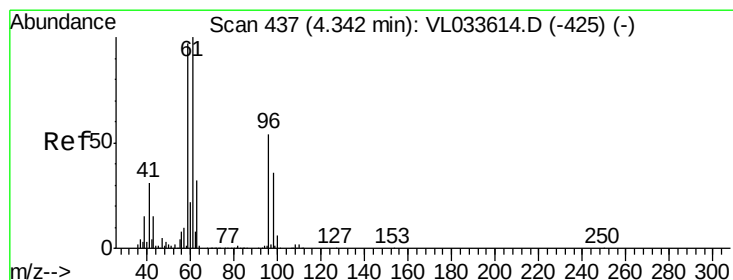
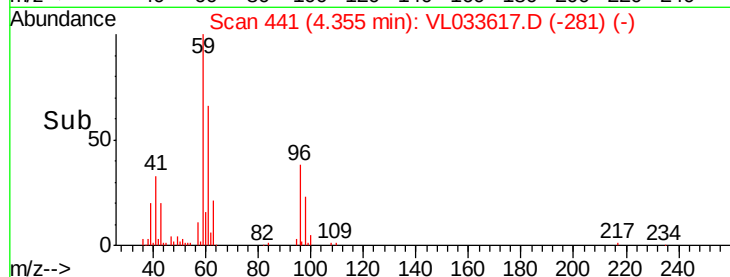
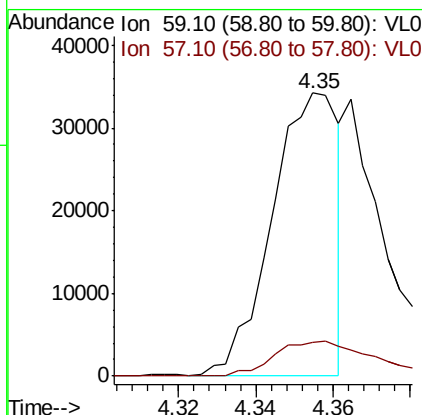
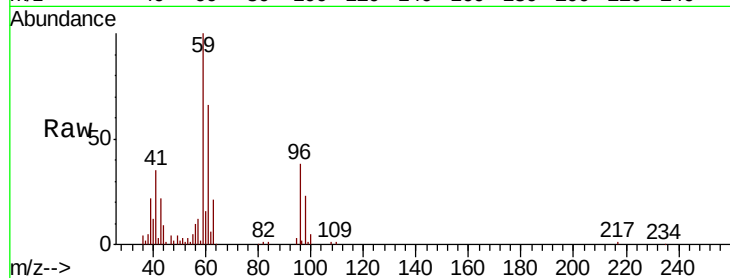




#17  
 tert-Butyl alcohol  
 Concen: 0.356 ppbv  
 RT: 4.35 min Scan# 441  
 Delta R.T. 0.01 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

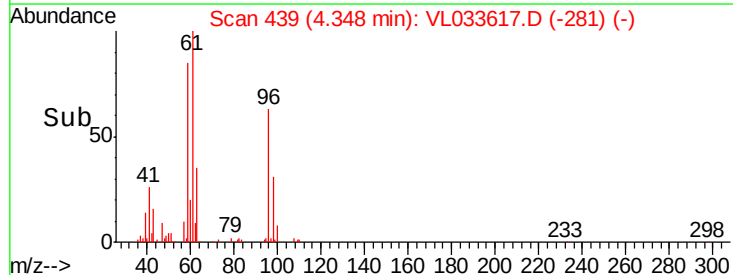
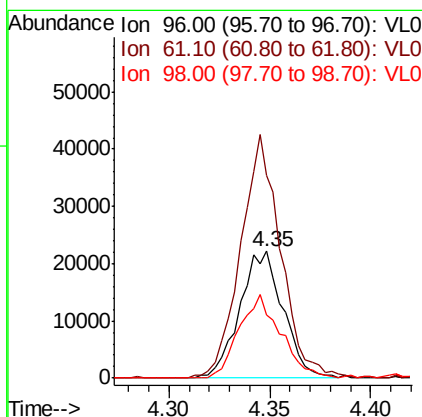
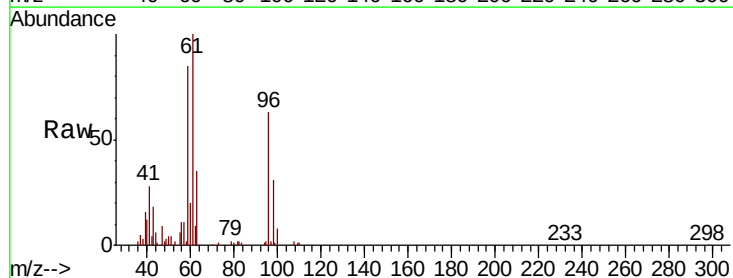
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

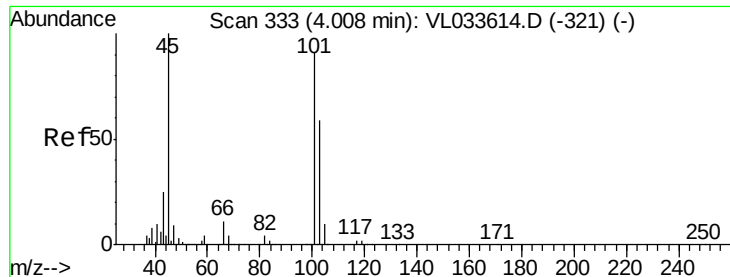
Tgt Ion: 59 Resp: 40843  
 Ion Ratio Lower Upper  
 59 100  
 57 18.7 8.4 12.6#



#18  
 1,1-Dichloroethene  
 Concen: 0.576 ppbv  
 RT: 4.35 min Scan# 439  
 Delta R.T. 0.01 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Tgt Ion: 96 Resp: 33618  
 Ion Ratio Lower Upper  
 96 100  
 61 159.9 147.3 220.9  
 98 50.2 53.6 80.4#





#19

Isopropyl Alcohol

Concen: 0.575 ppbv

RT: 4.02 min Scan# 336

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

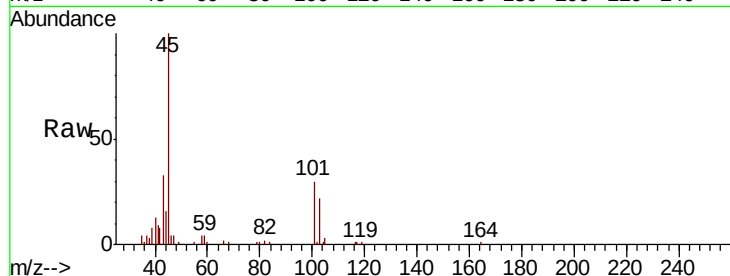
VSTDIC0.5

Tgt Ion: 45 Resp: 52529

Ion Ratio Lower Upper

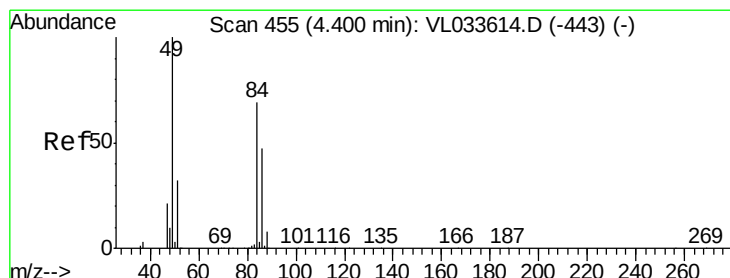
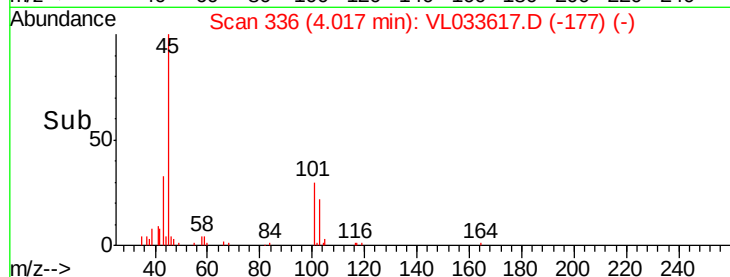
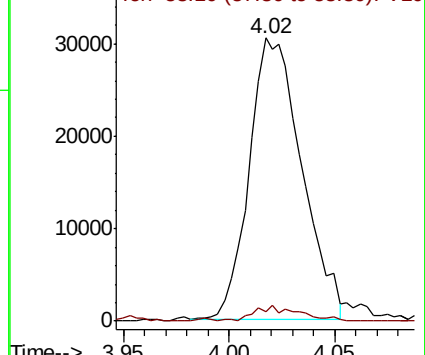
45 100

58 5.1 1.8 2.6#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 0.604 ppbv

RT: 4.40 min Scan# 456

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Tgt Ion: 84 Resp: 31325

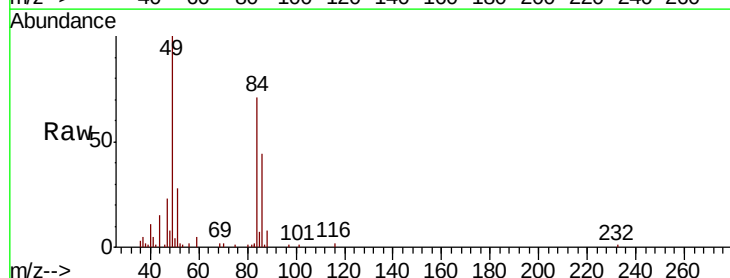
Ion Ratio Lower Upper

84 100

49 138.5 116.2 174.2

51 36.9 37.0 55.6#

86 61.4 54.0 81.0

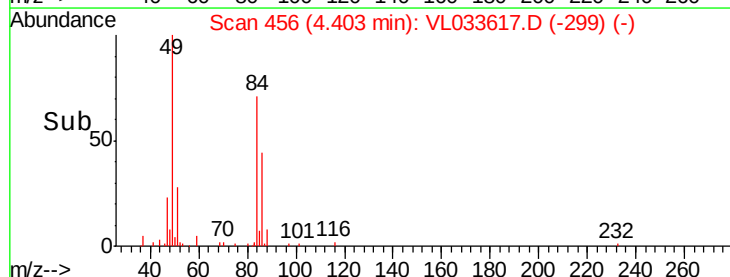
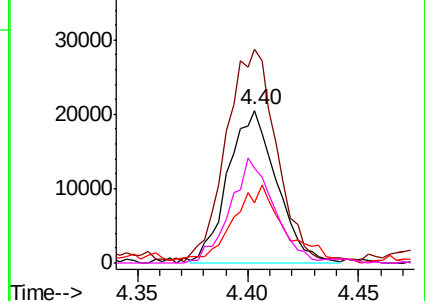


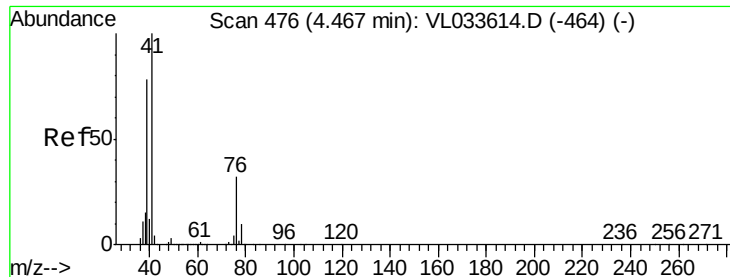
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

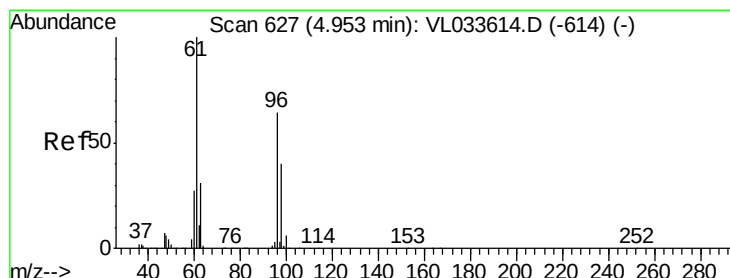
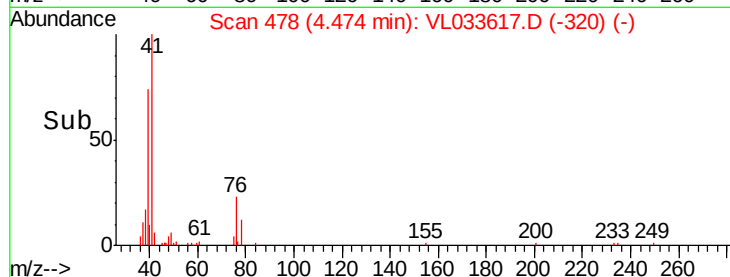
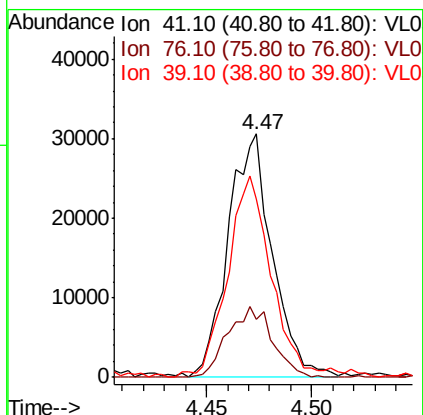
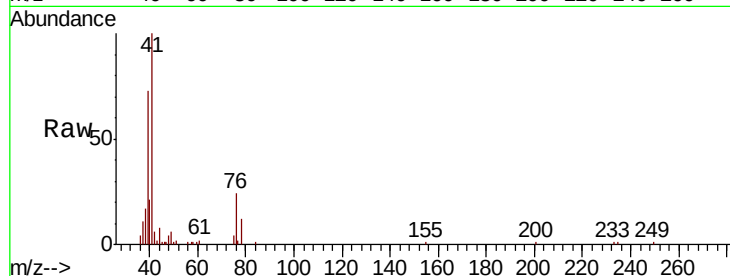




#21  
 Allyl Chloride  
 Concen: 0.533 ppbv  
 RT: 4.47 min Scan# 478  
 Delta R.T. 0.01 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

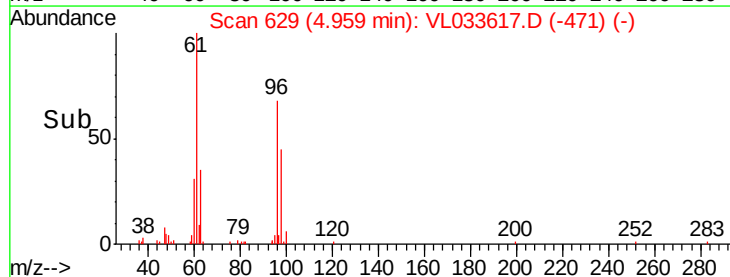
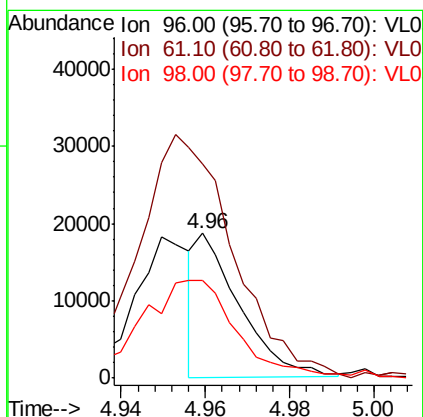
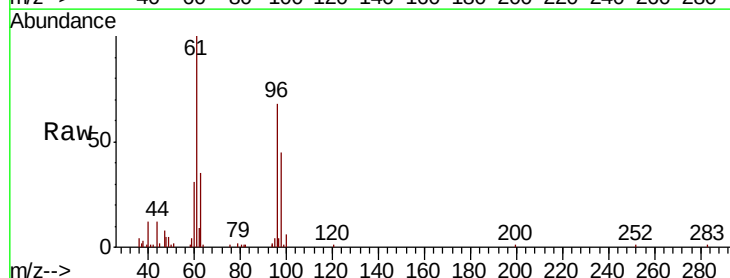
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

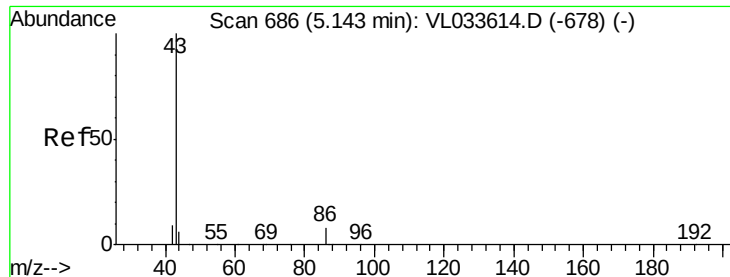
Tgt Ion: 41 Resp: 44593  
 Ion Ratio Lower Upper  
 41 100  
 76 29.3 25.0 37.6  
 39 84.1 64.6 96.8



#22  
 trans-1,2-Dichloroethene  
 Concen: 0.232 ppbv  
 RT: 4.96 min Scan# 629  
 Delta R.T. 0.01 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Tgt Ion: 96 Resp: 13239  
 Ion Ratio Lower Upper  
 96 100  
 61 149.7 124.9 187.3  
 98 66.0 50.5 75.7





#23

Vinyl Acetate

Concen: 0.485 ppbv

RT: 5.14 min Scan# 686

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

Tgt Ion: 43 Resp: 96000

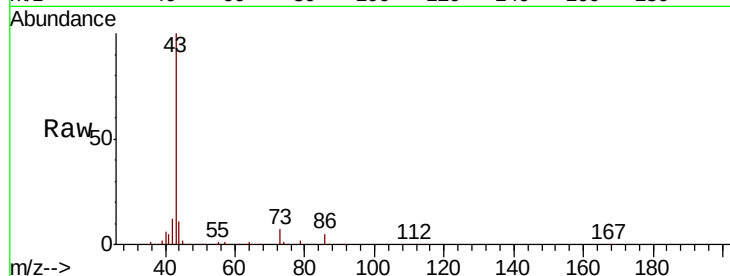
Ion Ratio Lower Upper

43 100

86 5.3 5.8 8.8#

42 12.2 7.8 11.8#

44 8.0 4.6 7.0#

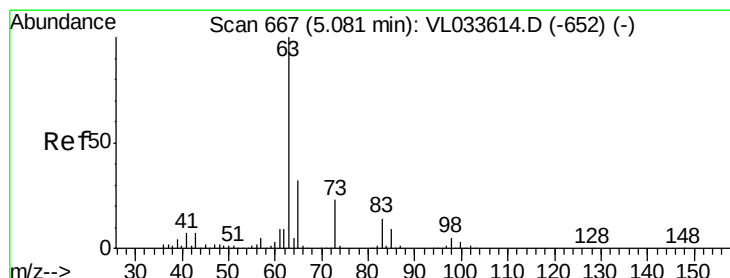
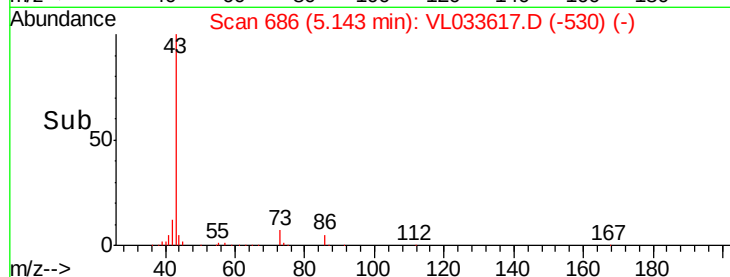
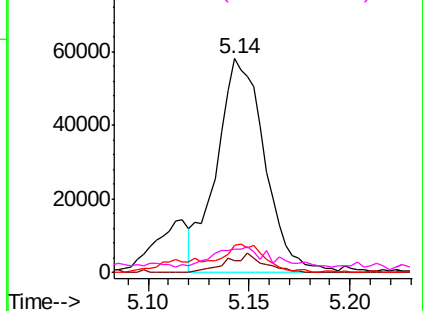


Abundance Ion 43.10 (42.80 to 43.80): VL0

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



#24

1,1-Dichloroethane

Concen: 0.541 ppbv

RT: 5.08 min Scan# 667

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

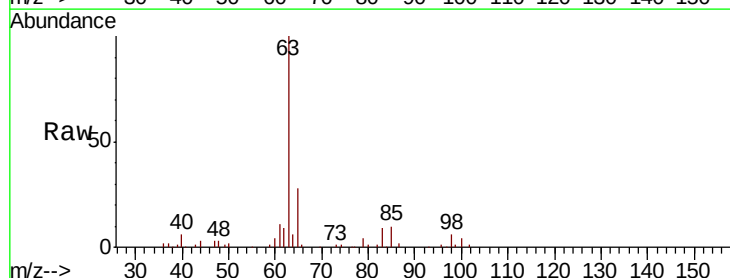
Tgt Ion: 63 Resp: 79726

Ion Ratio Lower Upper

63 100

98 5.6 2.4 7.2

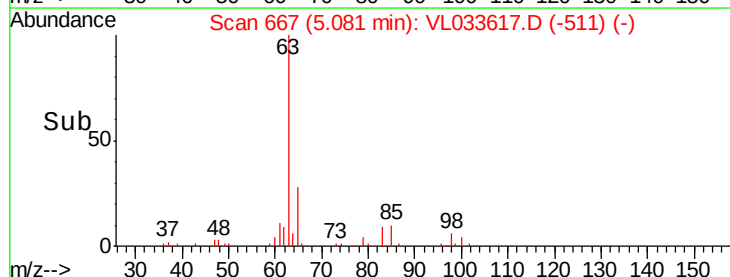
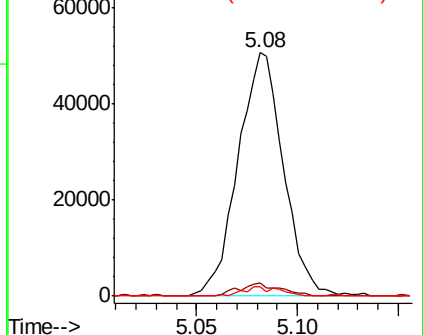
100 3.9 1.4 4.0

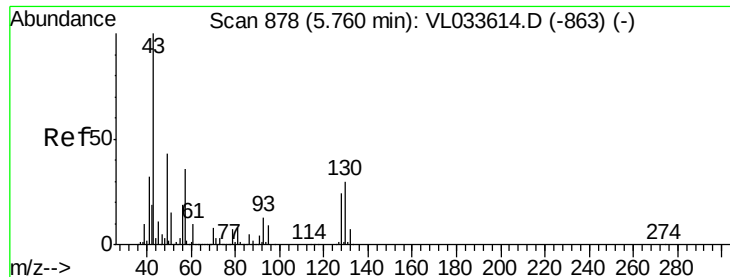


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0

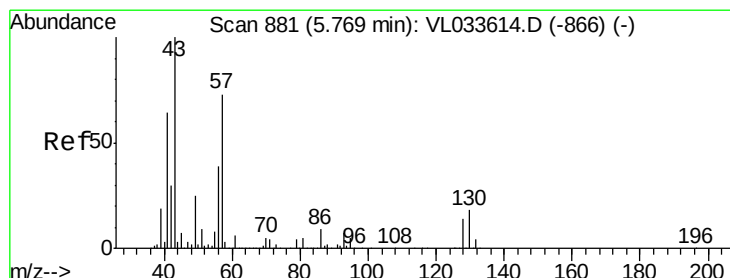
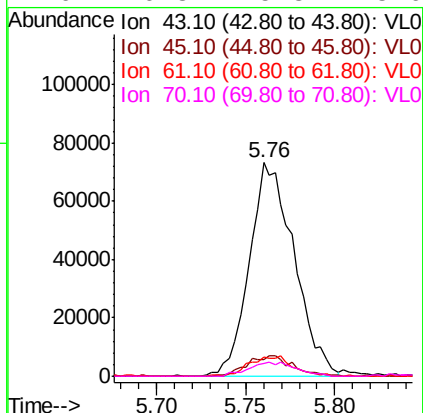
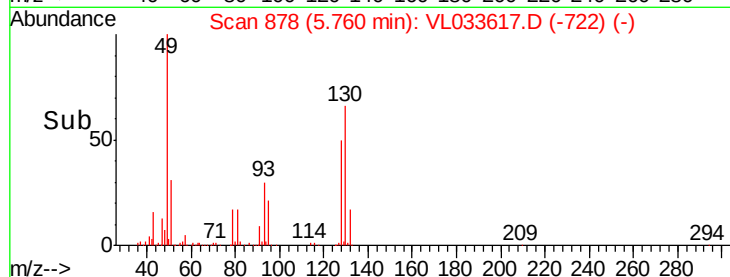
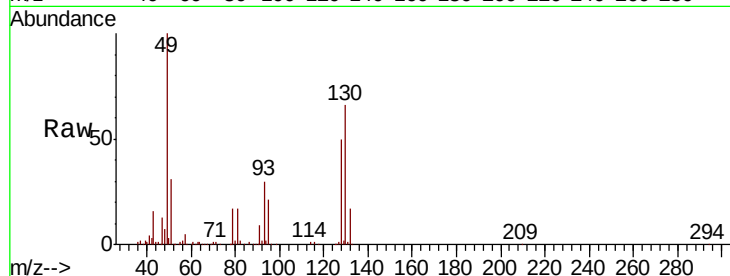




#25  
Ethyl Acetate  
Concen: 0.507 ppbv  
RT: 5.76 min Scan# 878  
Delta R.T. 0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

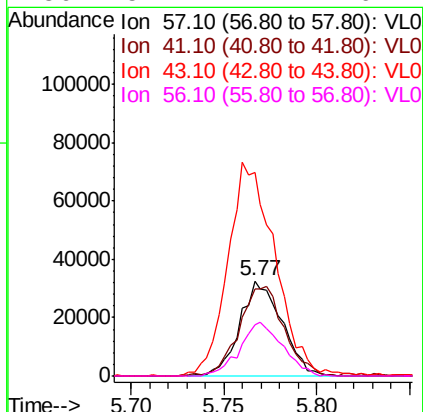
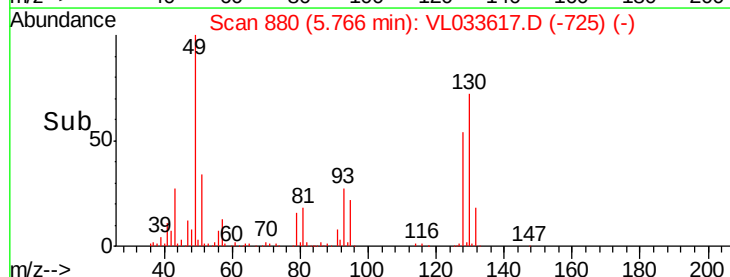
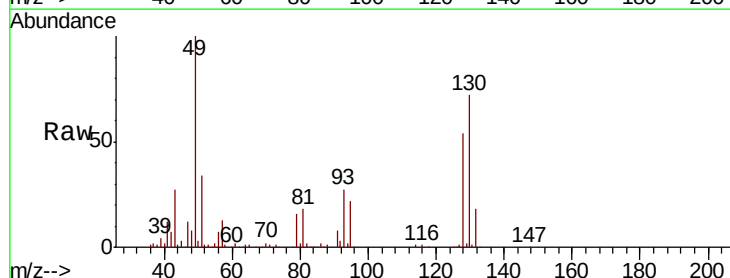
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 128127 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 45       | 10.0  | 8.1   | 12.1   |
| 61       | 9.3   | 7.5   | 11.3   |
| 70       | 6.8   | 5.8   | 8.6    |

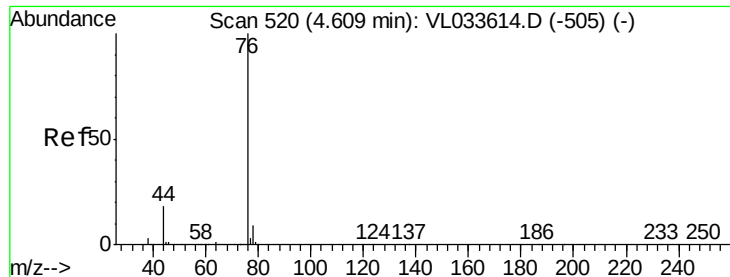


#26  
Hexane  
Concen: 0.486 ppbv  
RT: 5.77 min Scan# 880  
Delta R.T. -0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 57    | Resp: | 51721 |
| Ion      | Ratio | Lower | Upper |
| 57       | 100   |       |       |
| 41       | 101.4 | 70.6  | 106.0 |
| 43       | 251.5 | 186.0 | 279.0 |
| 56       | 57.4  | 42.7  | 64.1  |







#27

Carbon Disulfide

Concen: 0.473 ppbv

RT: 4.62 min Scan# 523

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

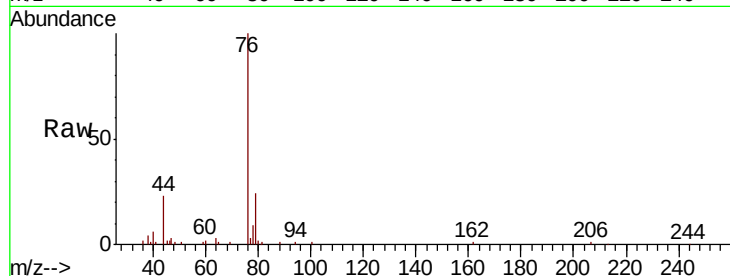
Tgt Ion: 76 Resp: 60881

Ion Ratio Lower Upper

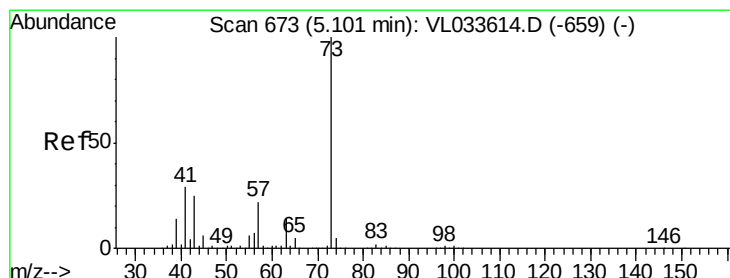
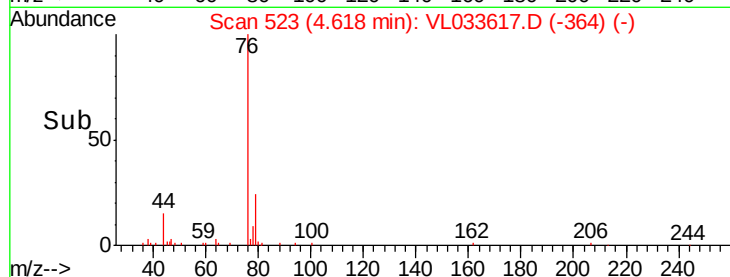
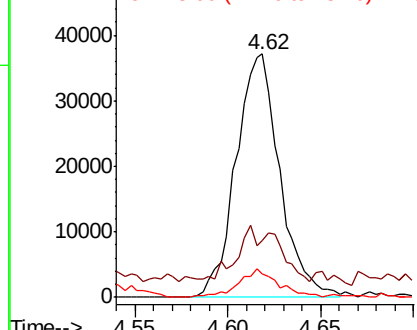
76 100

44 27.4 14.3 21.5#

78 11.2 7.5 11.3



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



#28

Methyl tert-Butyl Ether

Concen: 0.479 ppbv

RT: 5.11 min Scan# 677

Delta R.T. 0.01 min

Lab File: VL033617.D

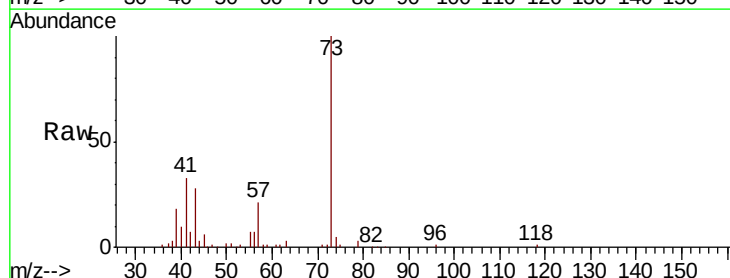
Acq: 1 May 2019 13:52

Tgt Ion: 73 Resp: 85908

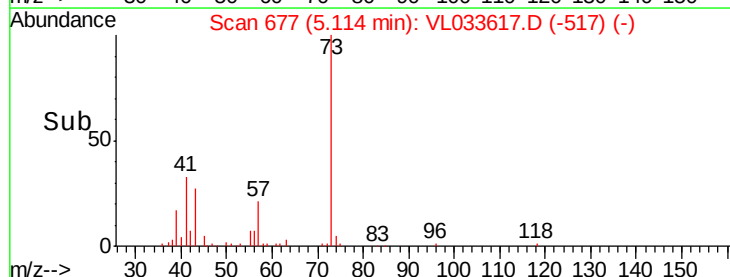
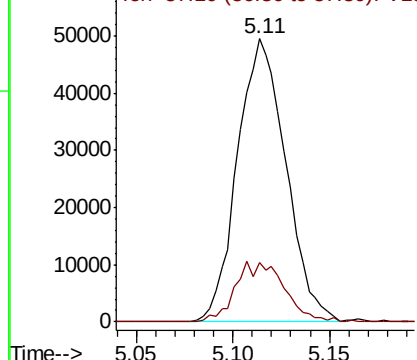
Ion Ratio Lower Upper

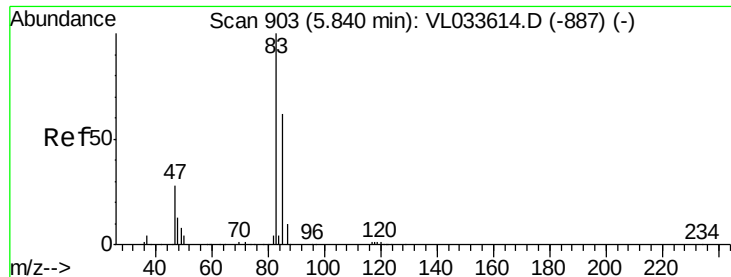
73 100

57 21.7 17.8 26.8



Abundance Ion 73.10 (72.80 to 73.80): VL0  
Ion 57.10 (56.80 to 57.80): VL0

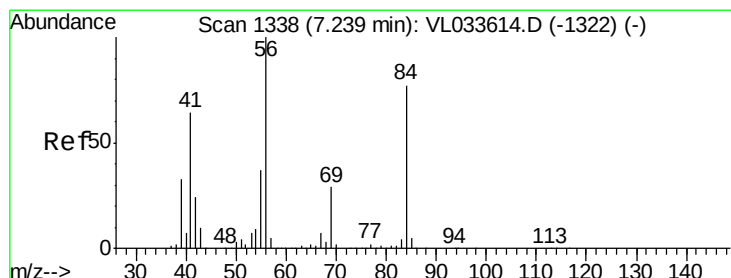
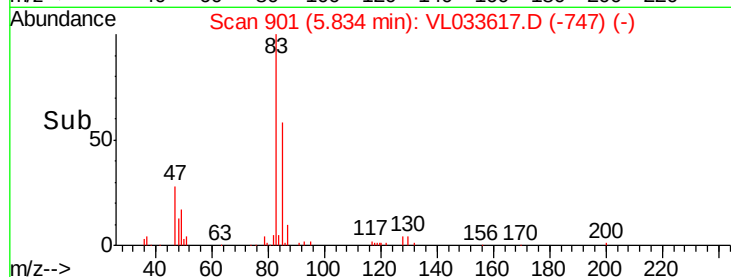
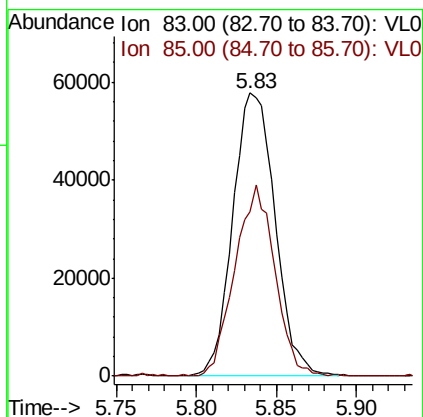
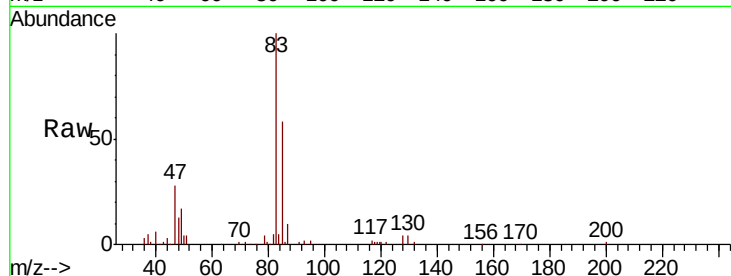




#29  
Chloroform  
Concen: 0.533 ppbv  
RT: 5.83 min Scan# 901  
Delta R.T. -0.01 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

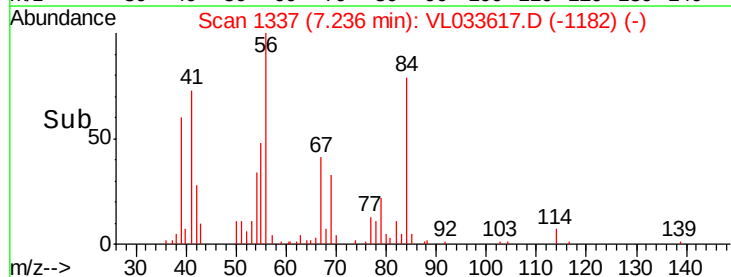
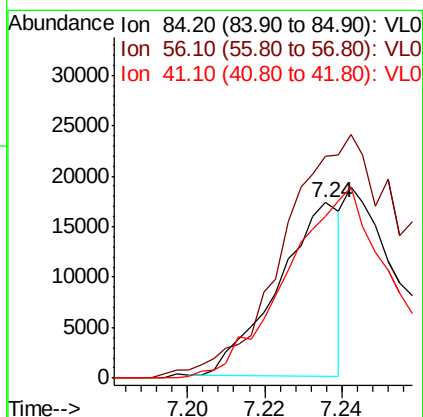
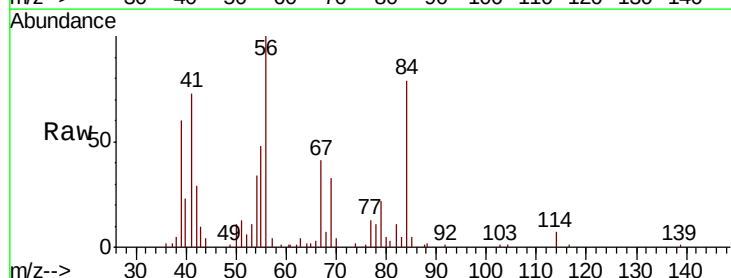
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

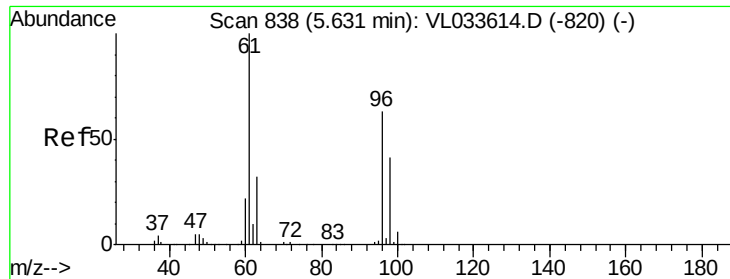
Tgt Ion: 83 Resp: 103890  
Ion Ratio Lower Upper  
83 100  
85 57.9 49.9 74.9



#30  
Cyclohexane  
Concen: 0.209 ppbv  
RT: 7.24 min Scan# 1337  
Delta R.T. -0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

Tgt Ion: 84 Resp: 19242  
Ion Ratio Lower Upper  
84 100  
56 0.0 108.4 162.6#  
41 0.0 67.0 100.4#



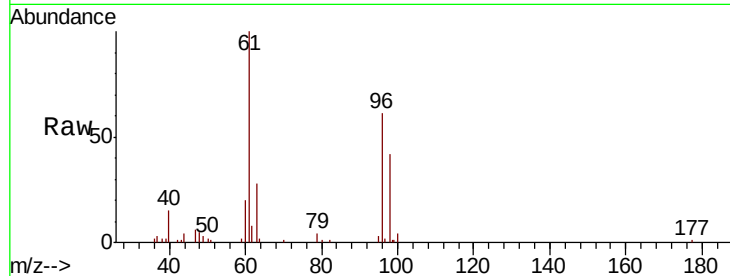


#31

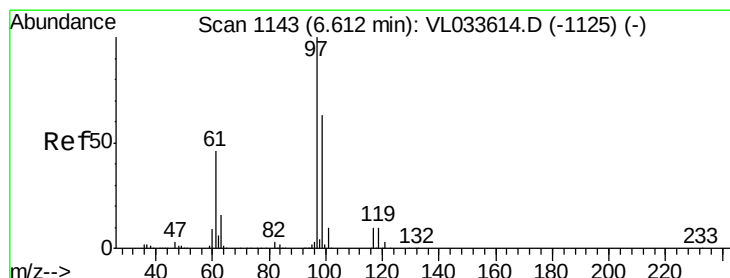
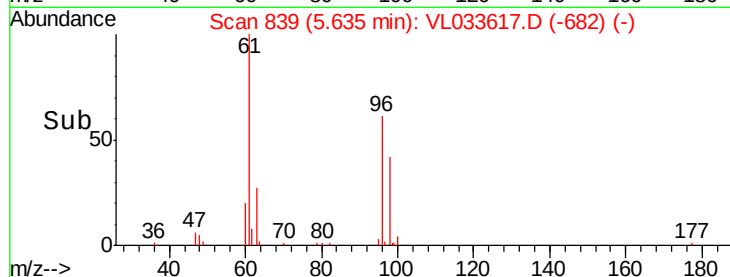
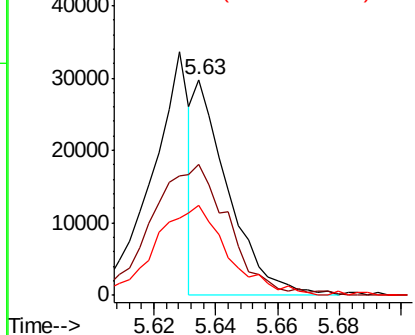
cis-1,2-Dichloroethene  
 Concen: 0.212 ppbv  
 RT: 5.63 min Scan# 839  
 Delta R.T. 0.00 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

Tgt Ion: 61 Resp: 22742  
 Ion Ratio Lower Upper  
 61 100  
 96 57.5 50.6 76.0  
 98 37.4 32.8 49.2



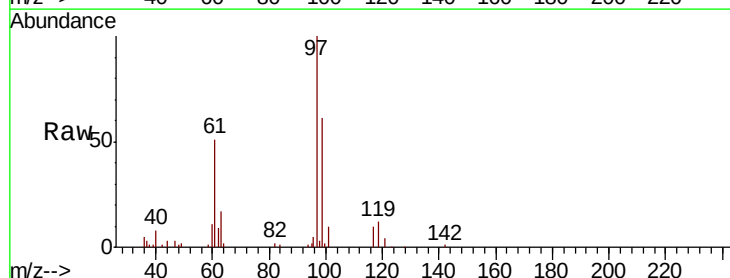
Abundance Ion 61.10 (60.80 to 61.80): VL0  
 Ion 96.00 (95.70 to 96.70): VL0  
 Ion 98.00 (97.70 to 98.70): VL0



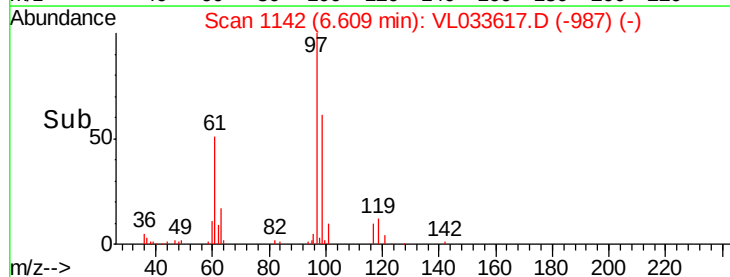
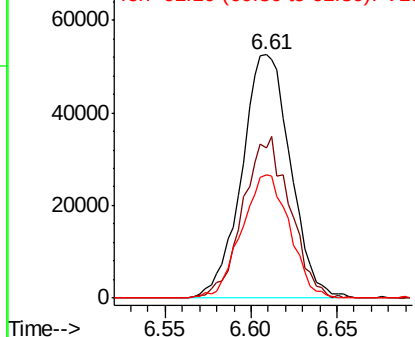
#32

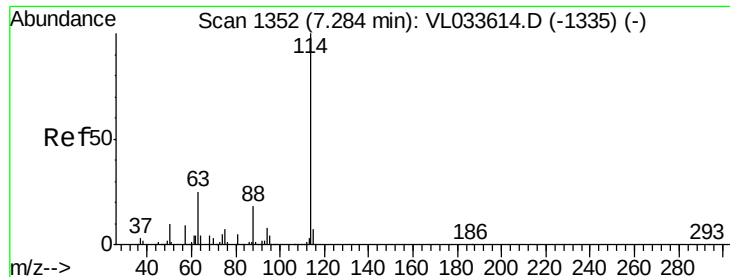
1,1,1-Trichloroethane  
 Concen: 0.505 ppbv  
 RT: 6.61 min Scan# 1142  
 Delta R.T. -0.00 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Tgt Ion: 97 Resp: 103166  
 Ion Ratio Lower Upper  
 97 100  
 99 63.8 51.9 77.9  
 61 49.9 38.2 57.2



Abundance Ion 97.00 (96.70 to 97.70): VL0  
 Ion 99.00 (98.70 to 99.70): VL0  
 Ion 61.10 (60.80 to 61.80): VL0

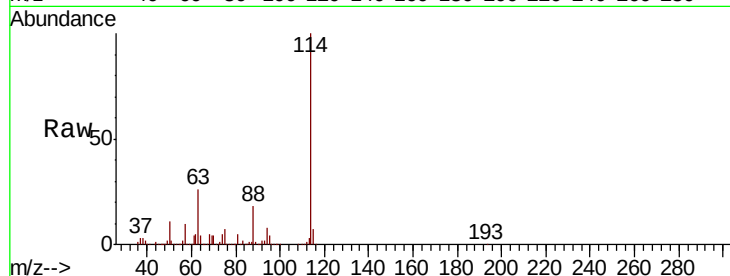




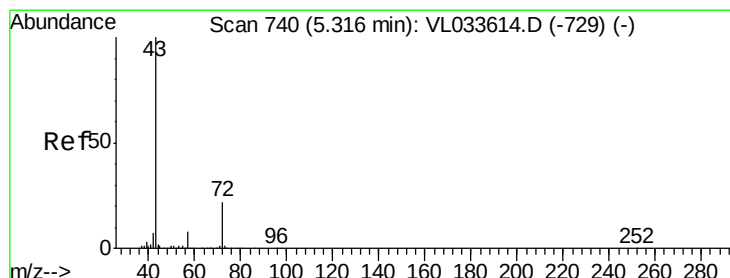
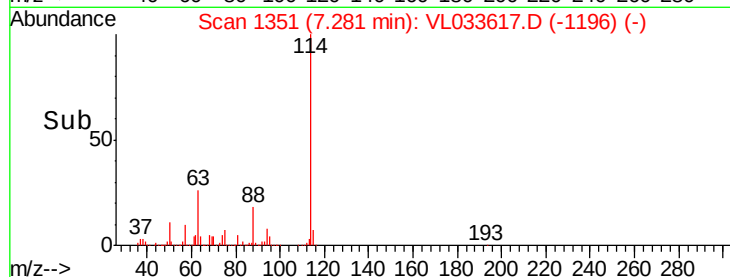
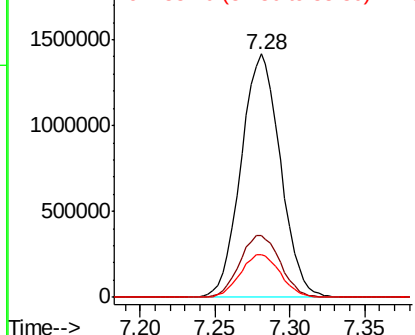
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.28 min Scan# 1351  
 Delta R.T. -0.00 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

Tgt Ion:114 Resp: 2594003  
 Ion Ratio Lower Upper  
 114 100  
 63 26.3 21.1 31.7  
 88 18.0 14.2 21.4

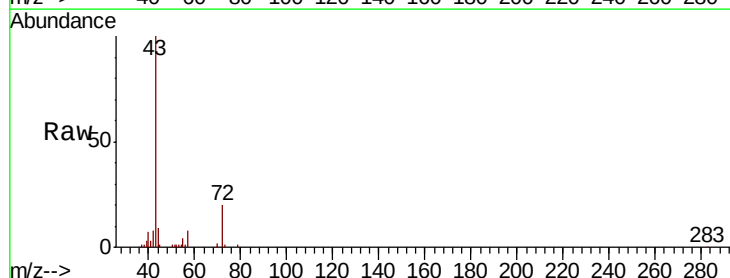


Abundance Ion 114.10 (113.80 to 114.80): VL0  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

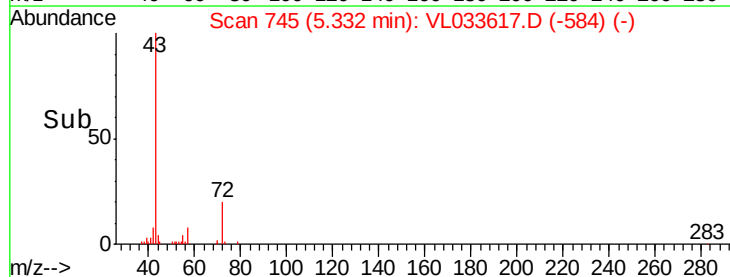
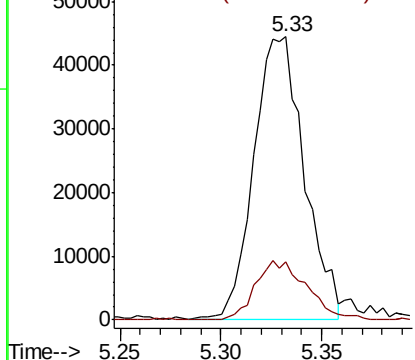


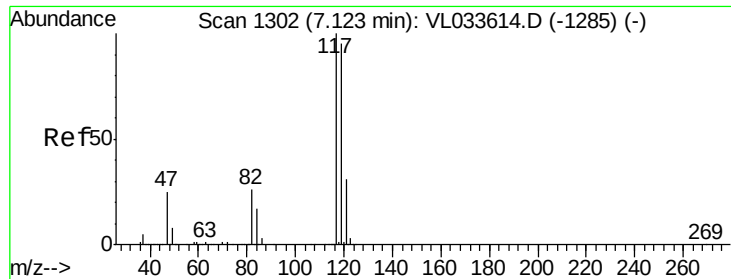
#34  
 2-Butanone  
 Concen: 0.488 ppbv  
 RT: 5.33 min Scan# 745  
 Delta R.T. 0.02 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Tgt Ion: 43 Resp: 77727  
 Ion Ratio Lower Upper  
 43 100  
 72 21.1 17.8 26.8



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





#35

Carbon Tetrachloride

Concen: 0.486 ppbv

RT: 7.12 min Scan# 1302

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

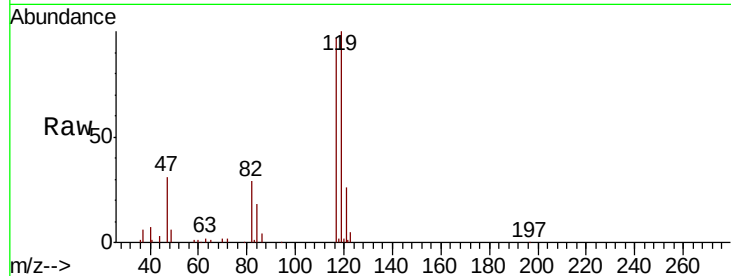
Tgt Ion: 117 Resp: 99911

Ion Ratio Lower Upper

117 100

119 101.8 76.2 114.4

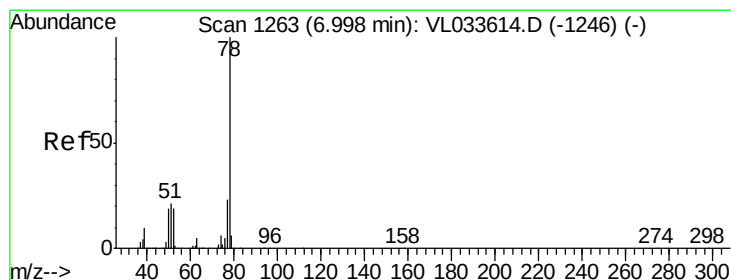
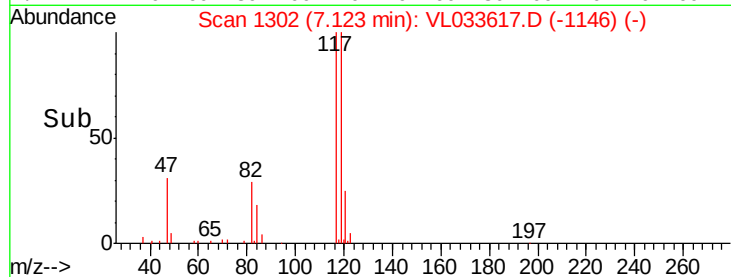
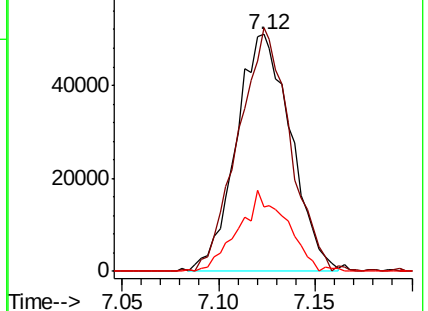
121 27.2 24.9 37.3



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.486 ppbv

RT: 6.99 min Scan# 1262

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

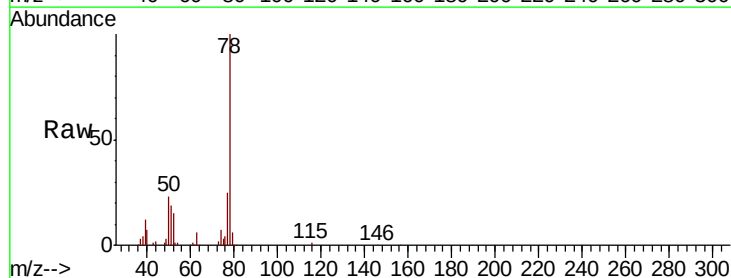
Tgt Ion: 78 Resp: 107491

Ion Ratio Lower Upper

78 100

77 24.7 18.1 27.1

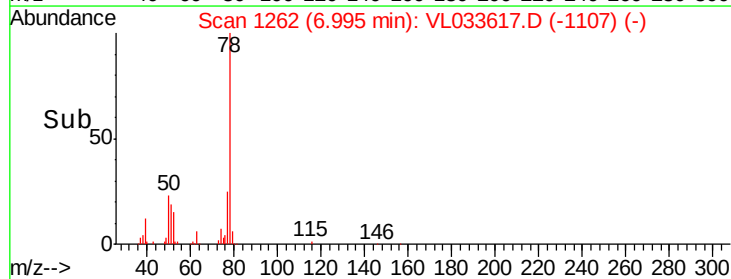
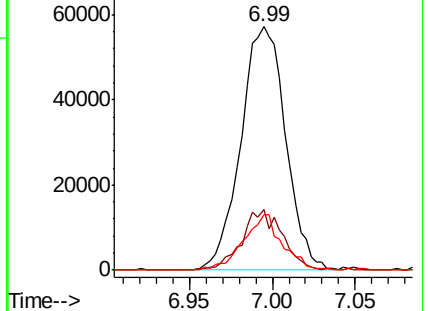
50 22.9 15.1 22.7#

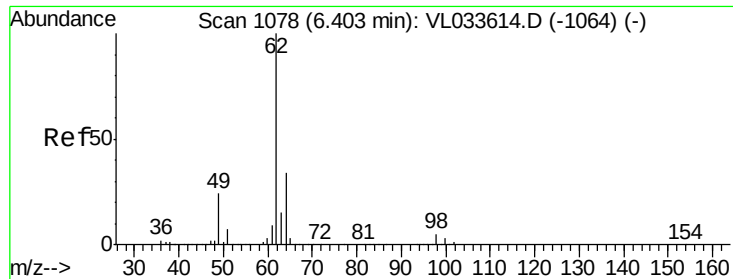


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

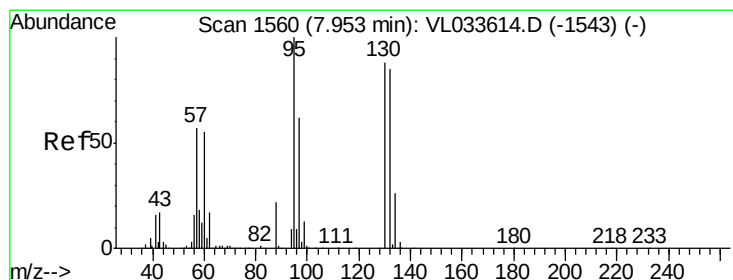
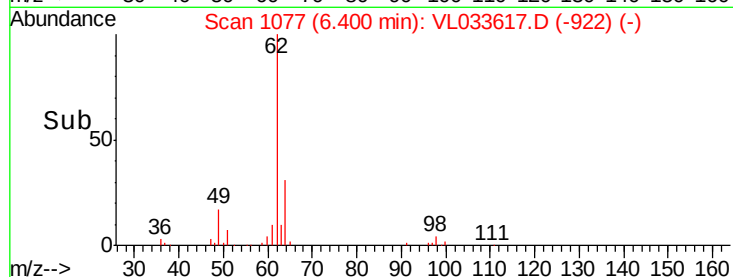
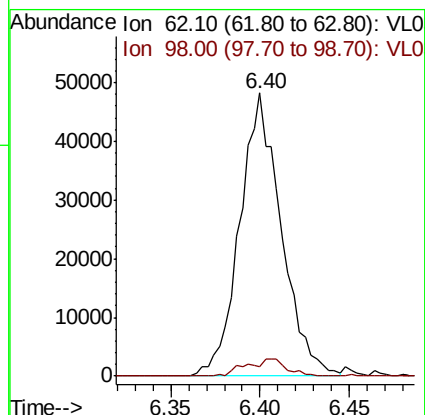
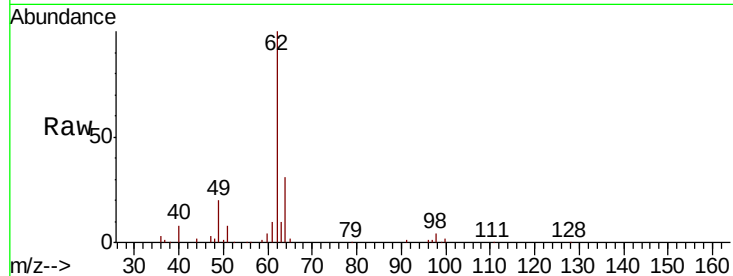




#37  
 1,2-Dichloroethane  
 Concen: 0.533 ppbv  
 RT: 6.40 min Scan# 1077  
 Delta R.T. -0.00 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

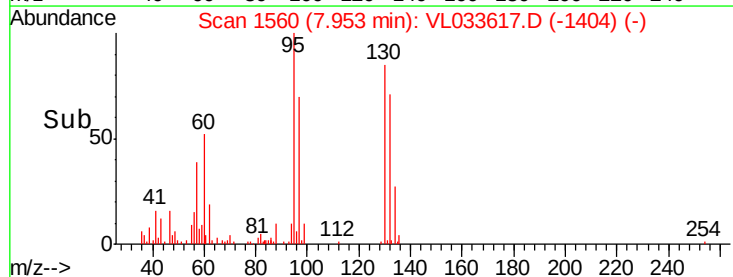
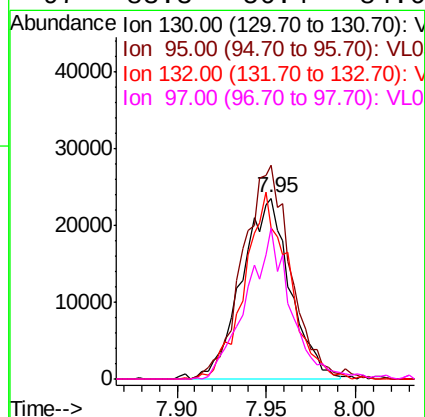
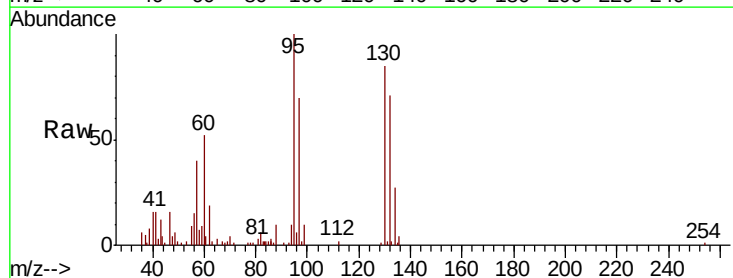
Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDIC0.5

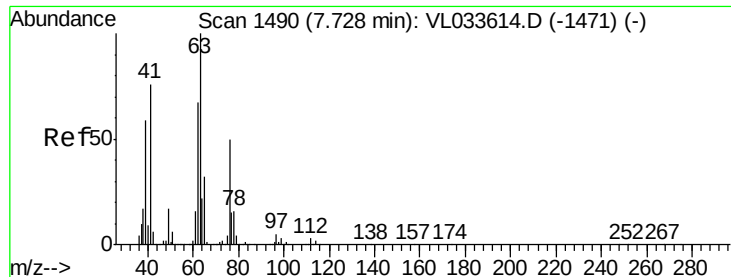
Tgt Ion: 62 Resp: 78278  
 Ion Ratio Lower Upper  
 62 100  
 98 5.8 4.4 6.6



#38  
 Trichloroethene  
 Concen: 0.504 ppbv  
 RT: 7.95 min Scan# 1560  
 Delta R.T. 0.00 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Tgt Ion: 130 Resp: 44596  
 Ion Ratio Lower Upper  
 130 100  
 95 125.2 91.2 136.8  
 132 85.6 77.8 116.8  
 97 83.3 56.4 84.6





#39

1,2-Dichloropropane

Concen: 0.456 ppbv

RT: 7.72 min Scan# 1488

Delta R.T. -0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

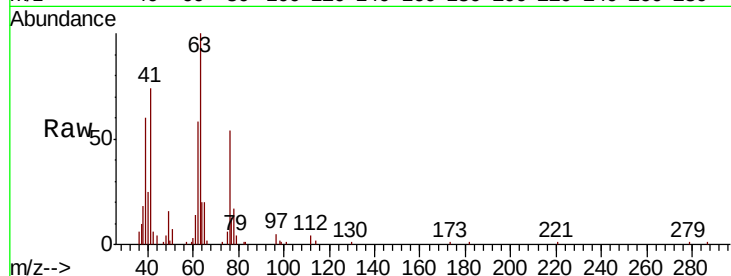
Tgt Ion: 63 Resp: 38038

Ion Ratio Lower Upper

63 100

41 74.5 60.9 91.3

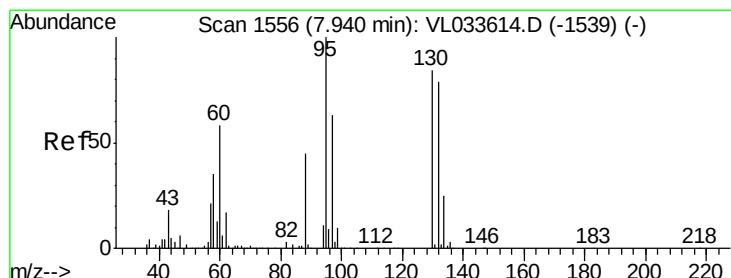
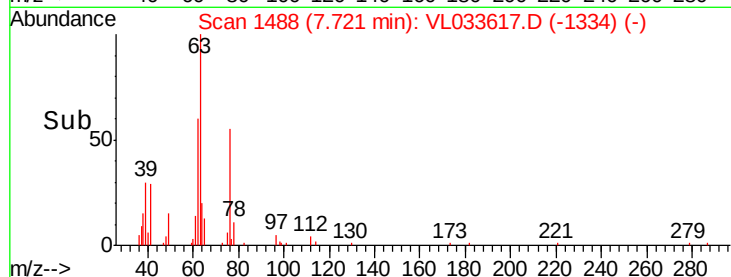
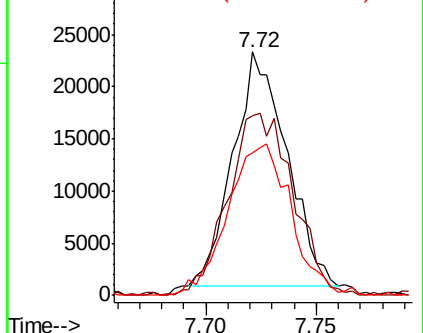
62 59.2 53.3 79.9



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



#40

1,4-Dioxane

Concen: 0.010 ppbv

RT: 7.94 min Scan# 1557

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Tgt Ion: 88 Resp: 346

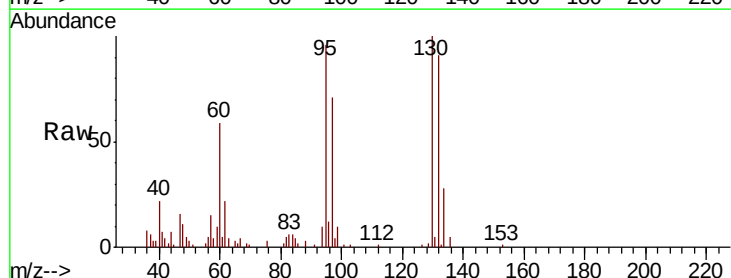
Ion Ratio Lower Upper

88 100

58 0.0 98.4 147.6#

43 0.0 190.7 286.1#

57 0.0 844.5 1266.7#

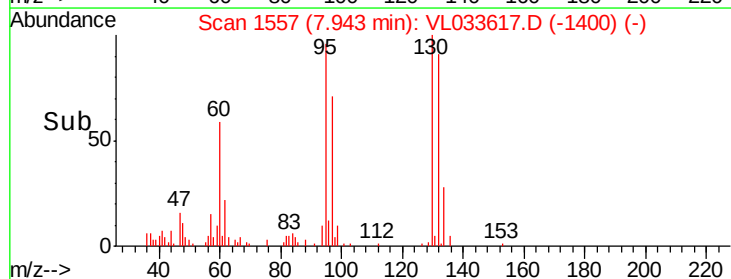
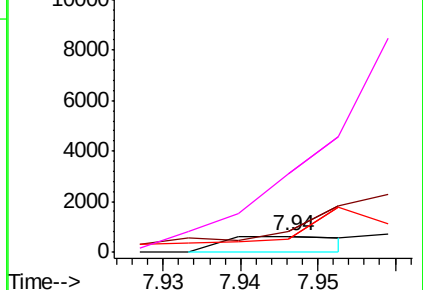


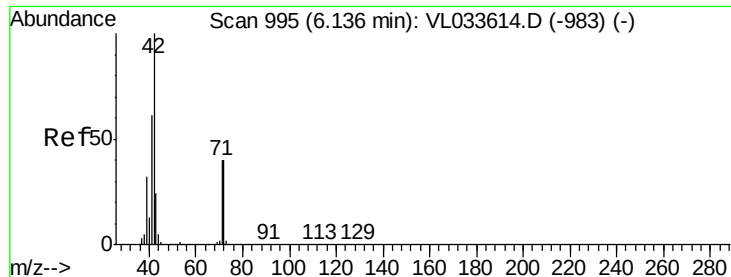
Abundance Ion 88.10 (87.80 to 88.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

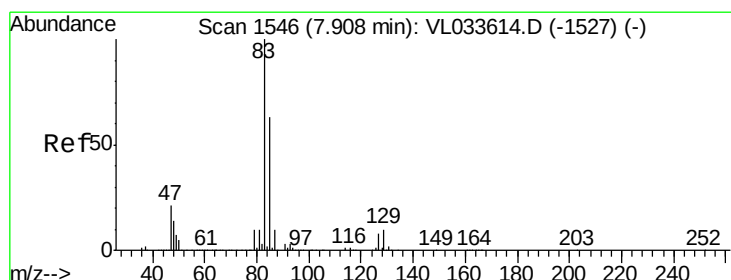
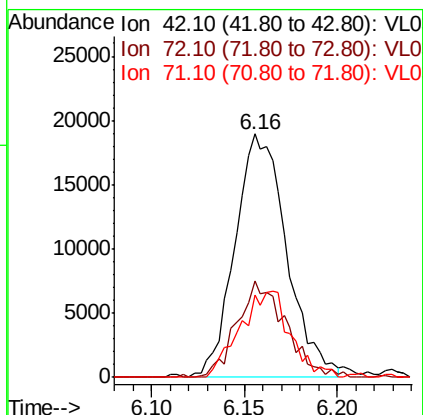
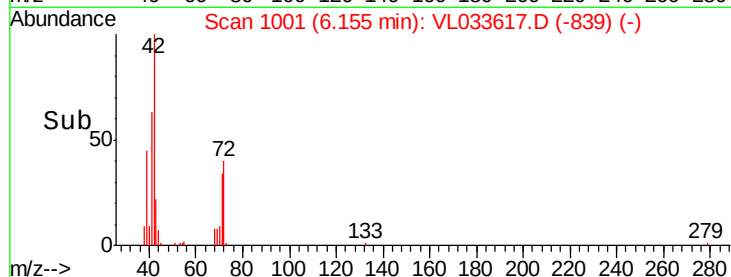
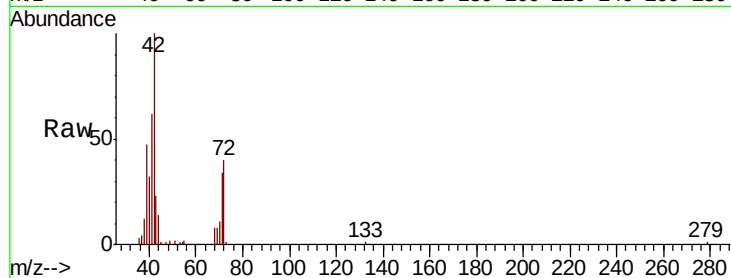




#41  
Tetrahydrofuran  
Concen: 0.431 ppbv  
RT: 6.16 min Scan# 1001  
Delta R.T. 0.02 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

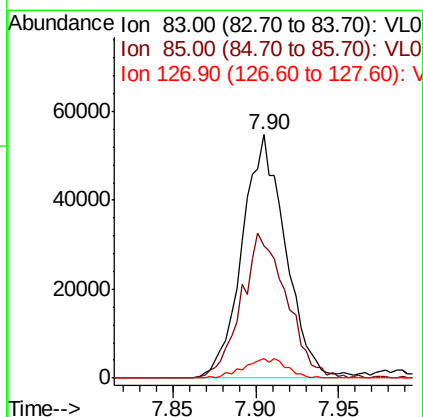
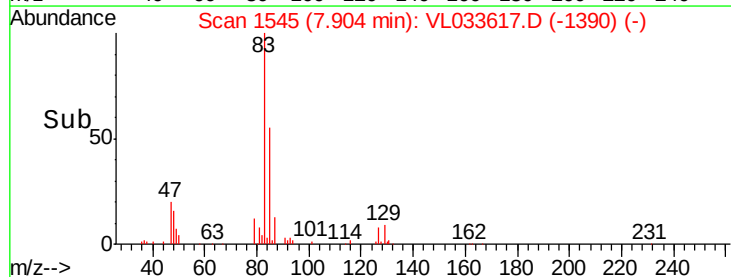
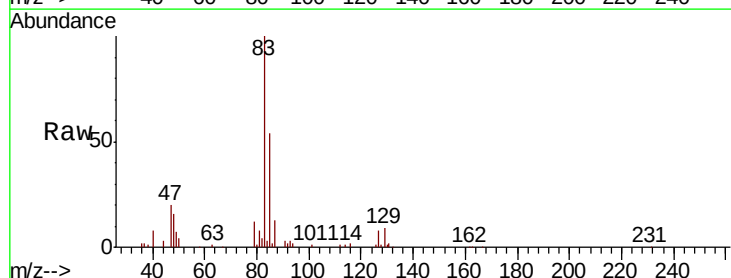
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 42 Resp: 36688  
Ion Ratio Lower Upper  
42 100  
72 37.6 31.8 47.6  
71 35.3 31.0 46.4

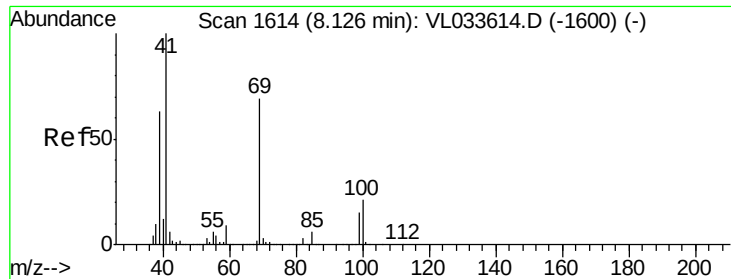


#42  
Bromodichloromethane  
Concen: 0.499 ppbv  
RT: 7.90 min Scan# 1545  
Delta R.T. -0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

Tgt Ion: 83 Resp: 99104  
Ion Ratio Lower Upper  
83 100  
85 54.3 50.2 75.4  
127 8.3 6.5 9.7







#43

Methyl Methacrylate

Concen: 0.428 ppbv

RT: 8.13 min Scan# 1616

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

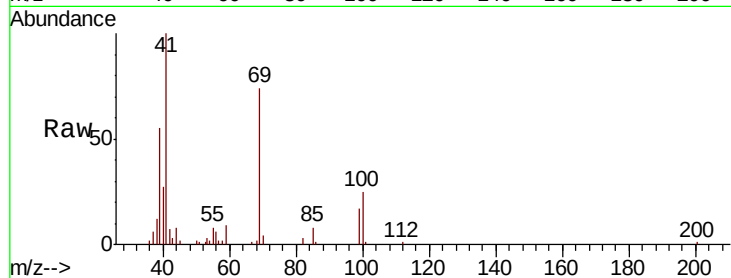
Tgt Ion: 69 Resp: 35848

Ion Ratio Lower Upper

69 100

41 144.7 115.0 172.4

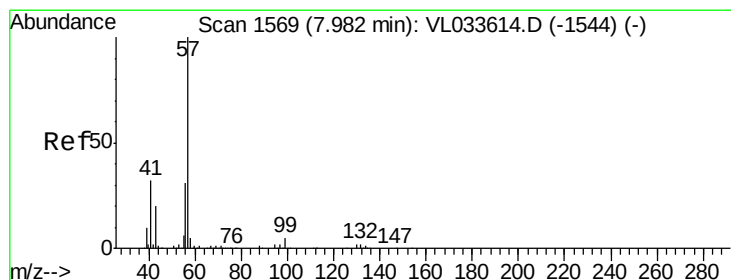
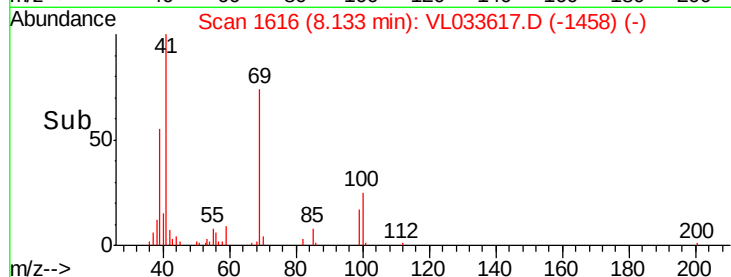
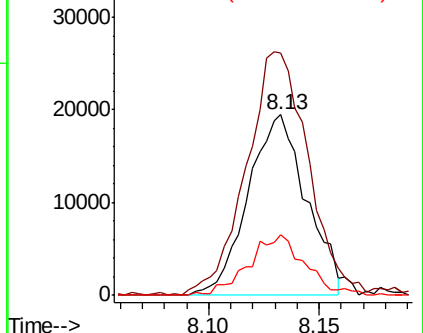
100 32.4 24.7 37.1



Abundance Ion 69.10 (68.80 to 69.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 100.10 (99.80 to 100.80): VL0



#44

2,2,4-Trimethylpentane

Concen: 0.492 ppbv

RT: 7.98 min Scan# 1568

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

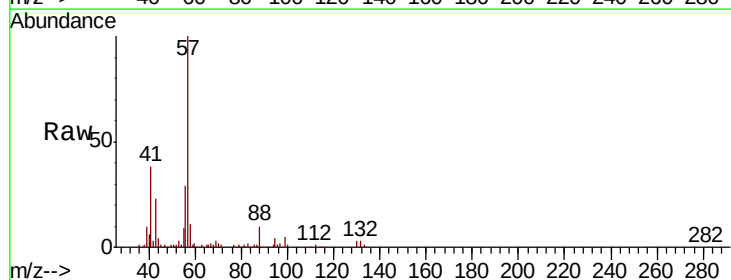
Tgt Ion: 57 Resp: 189633

Ion Ratio Lower Upper

57 100

41 36.7 25.4 38.2

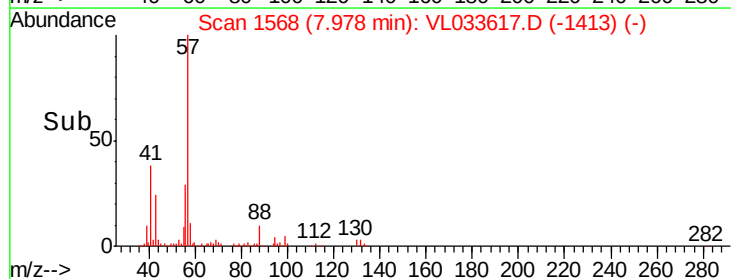
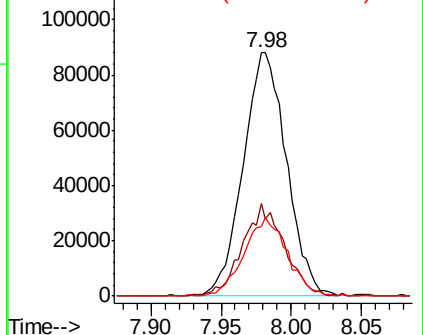
56 32.0 24.6 37.0

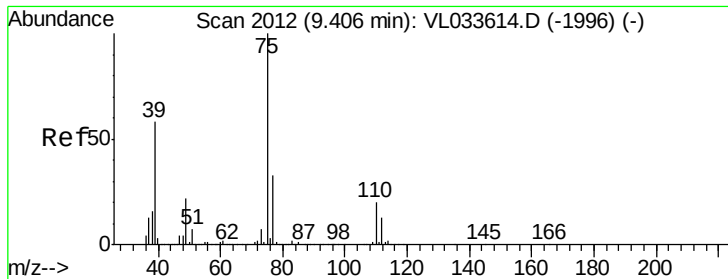


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0

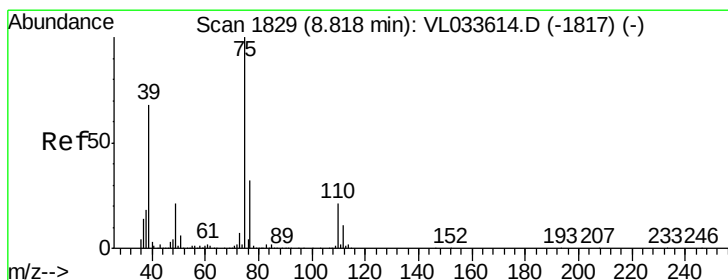
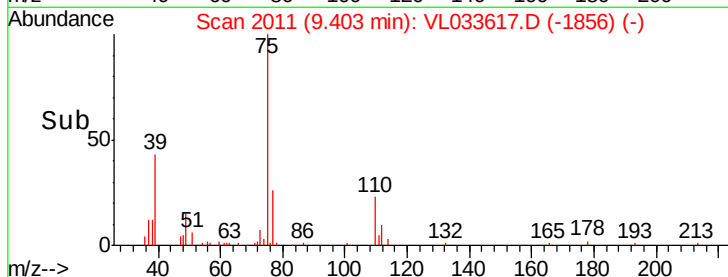
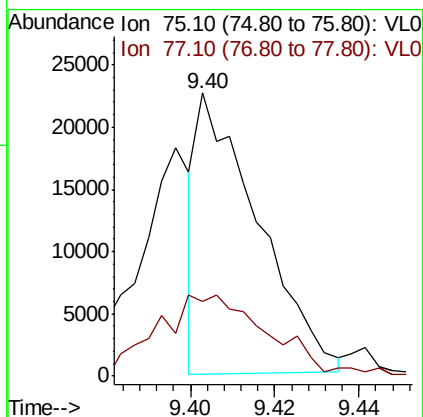
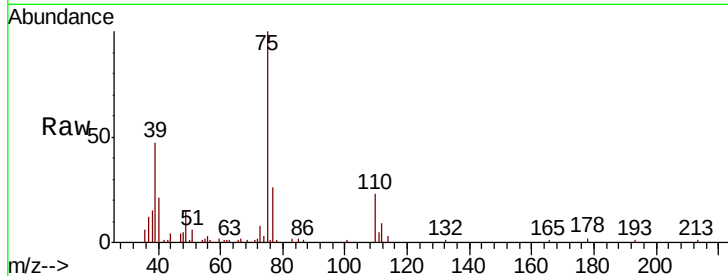




#45  
t-1,3-Dichloropropene  
Concen: 0.204 ppbv  
RT: 9.40 min Scan# 2011  
Delta R.T. -0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

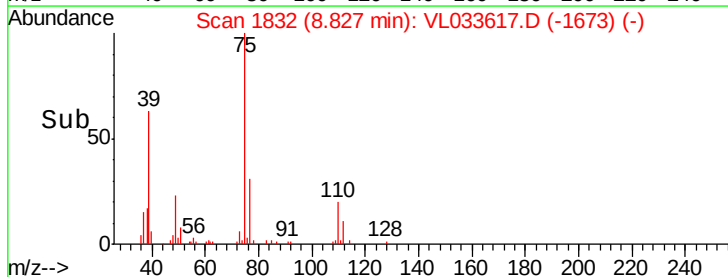
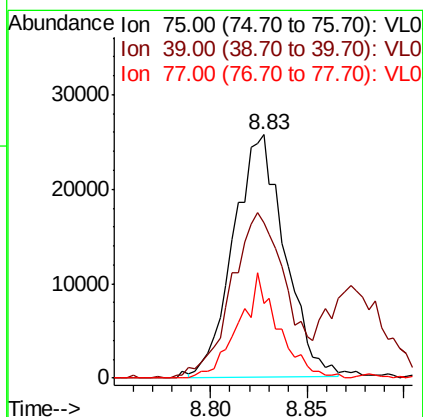
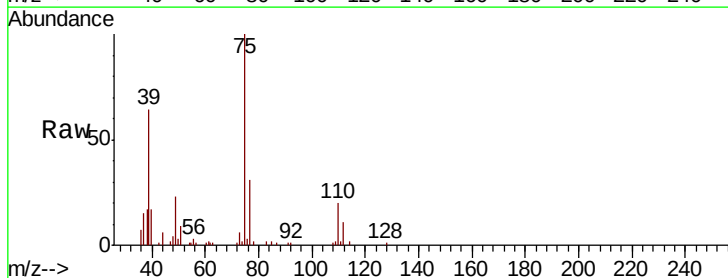
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

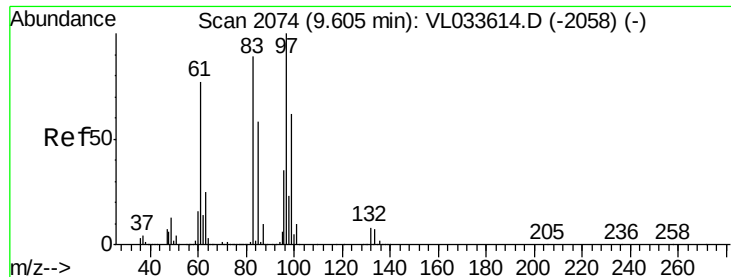
Tgt Ion: 75 Resp: 22636  
Ion Ratio Lower Upper  
75 100  
77 26.5 26.0 39.0



#46  
cis-1,3-Dichloropropene  
Concen: 0.377 ppbv  
RT: 8.83 min Scan# 1832  
Delta R.T. 0.01 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

Tgt Ion: 75 Resp: 47224  
Ion Ratio Lower Upper  
75 100  
39 60.7 54.6 82.0  
77 31.3 25.7 38.5





#47

1,1,2-Trichloroethane

Concen: 0.454 ppbv

RT: 9.60 min Scan# 2073

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

Tgt Ion: 97 Resp: 49328

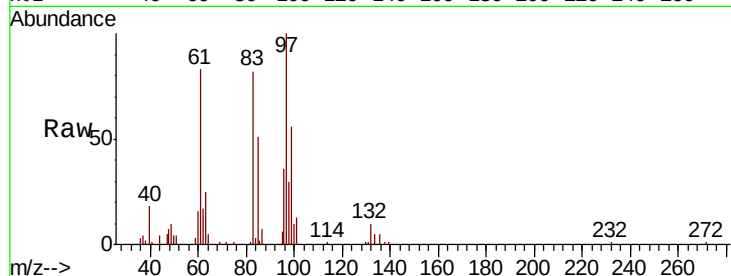
Ion Ratio Lower Upper

97 100

83 80.0 71.4 107.0

85 51.4 46.0 69.0

99 55.5 49.6 74.4



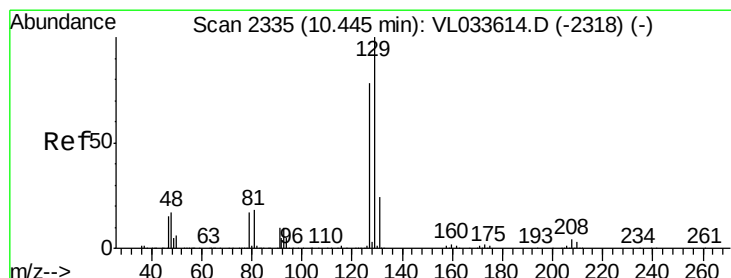
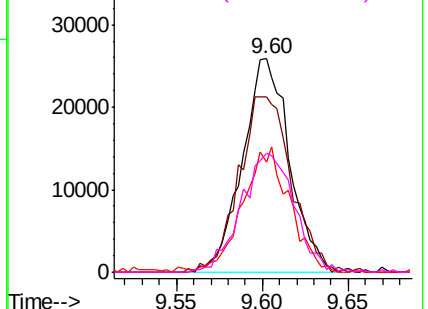
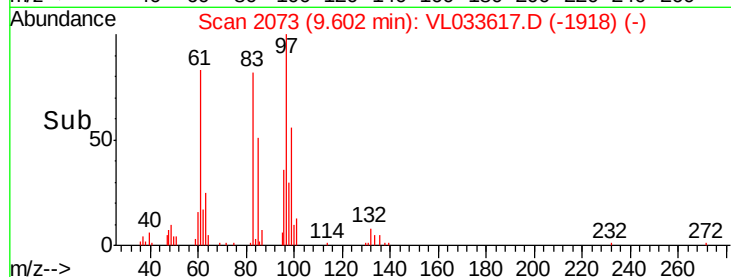
Abundance

Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48

Dibromochloromethane

Concen: 0.403 ppbv

RT: 10.44 min Scan# 2333

Delta R.T. -0.01 min

Lab File: VL033617.D

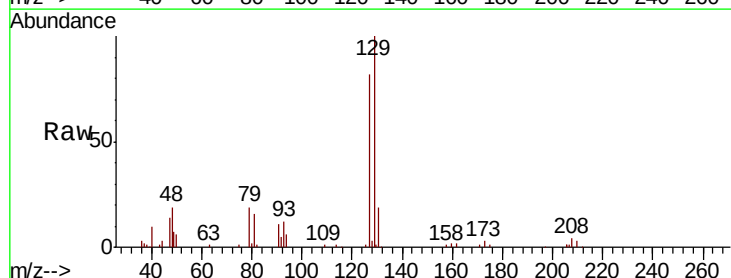
Acq: 1 May 2019 13:52

Tgt Ion: 129 Resp: 74203

Ion Ratio Lower Upper

129 100

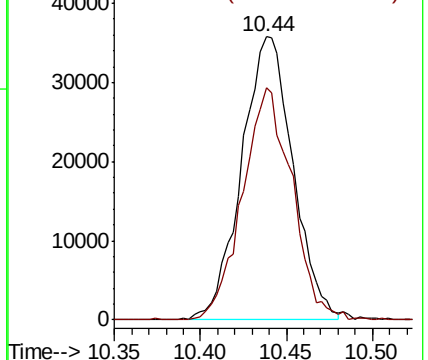
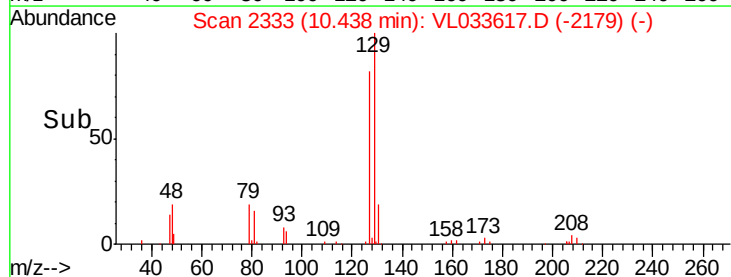
127 79.3 39.2 117.6

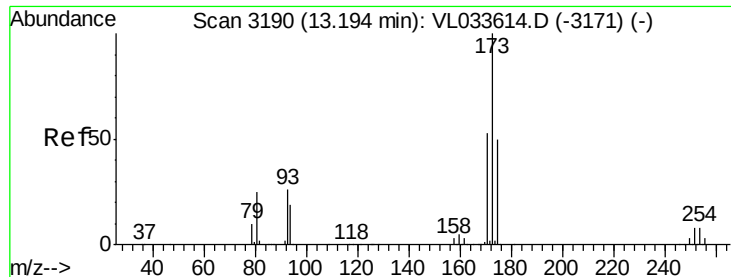


Abundance

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 0.284 ppbv

RT: 13.18 min Scan# 3187

Delta R.T. -0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

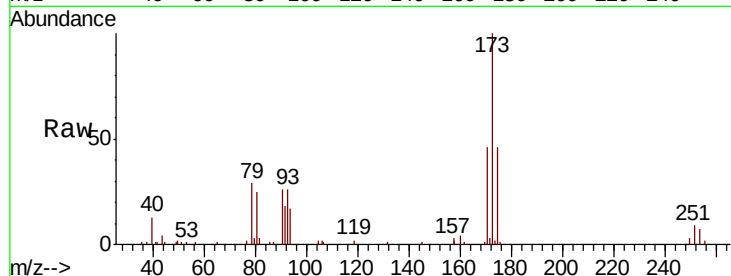
Tgt Ion: 173 Resp: 40031

Ion Ratio Lower Upper

173 100

175 0.0 39.0 58.6#

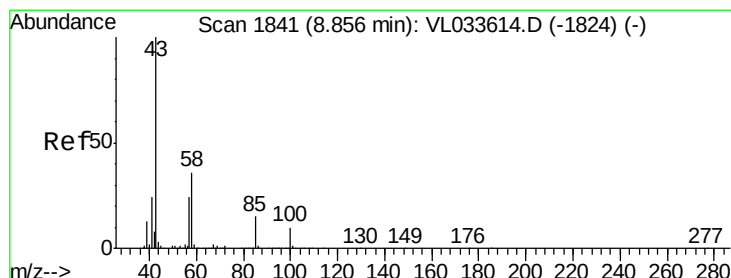
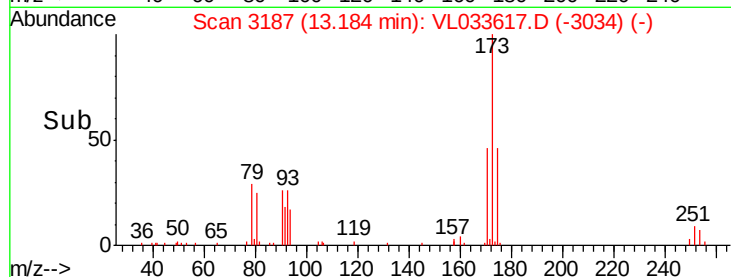
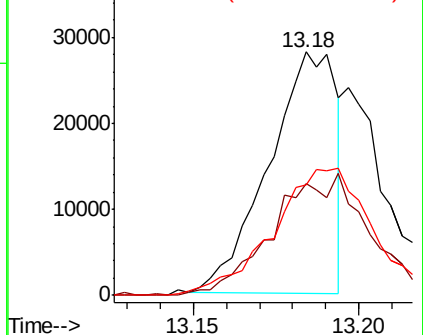
171 0.0 41.6 62.4#



Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 0.428 ppbv

RT: 8.87 min Scan# 1846

Delta R.T. 0.02 min

Lab File: VL033617.D

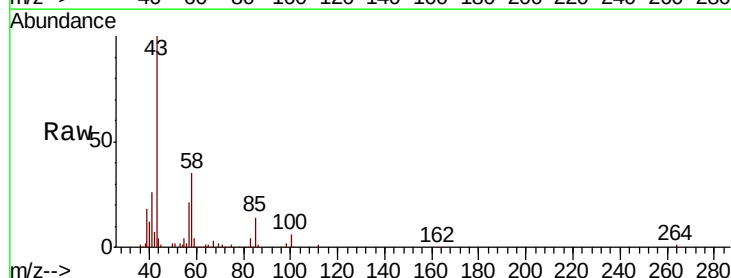
Acq: 1 May 2019 13:52

Tgt Ion: 43 Resp: 106850

Ion Ratio Lower Upper

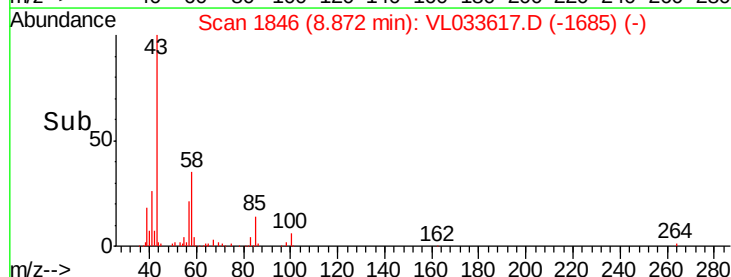
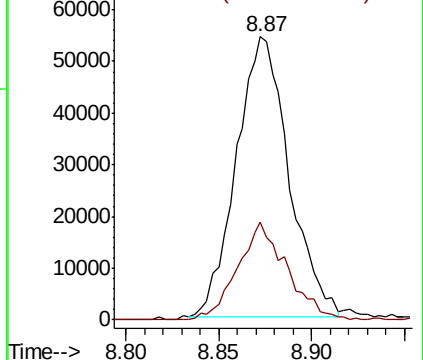
43 100

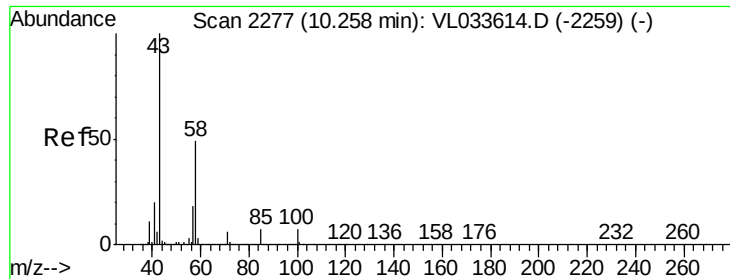
58 32.8 28.6 42.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 0.366 ppbv

RT: 10.27 min Scan# 2282

Delta R.T. 0.02 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

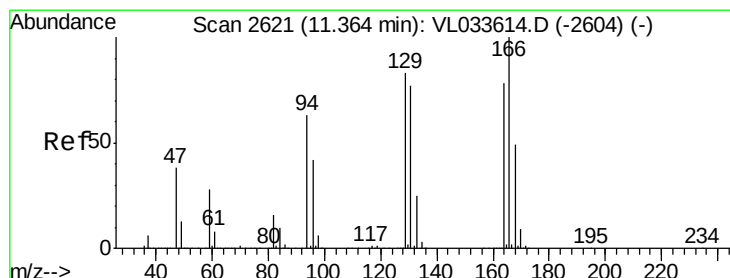
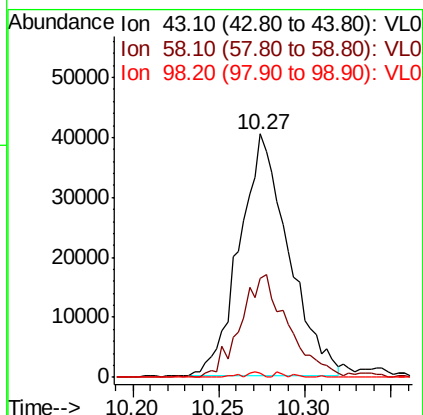
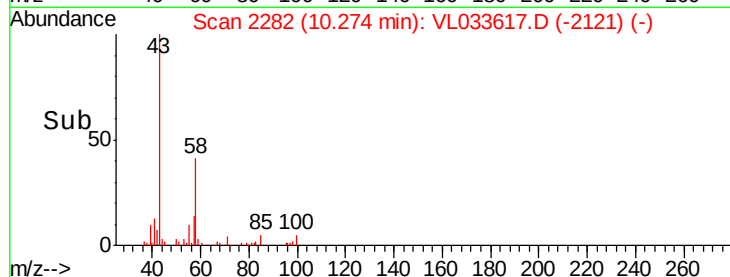
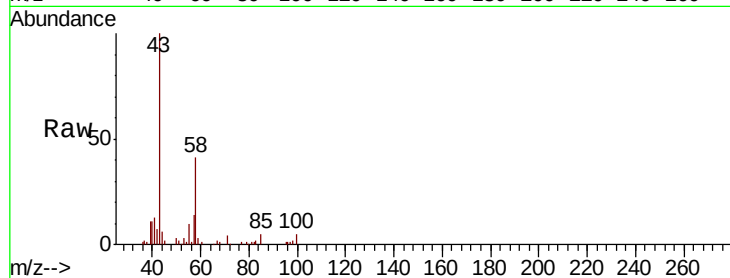
Tgt Ion: 43 Resp: 80105

Ion Ratio Lower Upper

43 100

58 42.2 38.5 57.7

98 1.5 0.3 0.5#



#52

Tetrachloroethene

Concen: 0.485 ppbv

RT: 11.36 min Scan# 2621

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Tgt Ion: 164 Resp: 41201

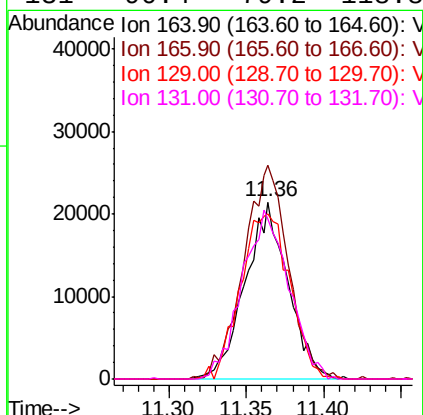
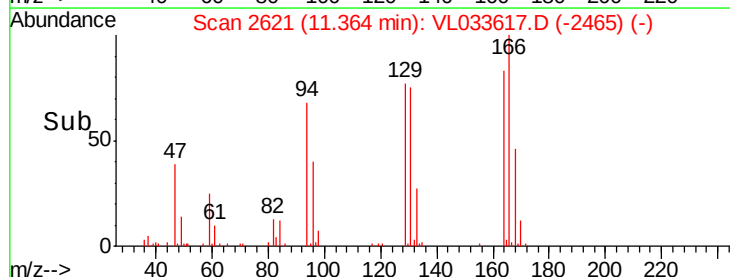
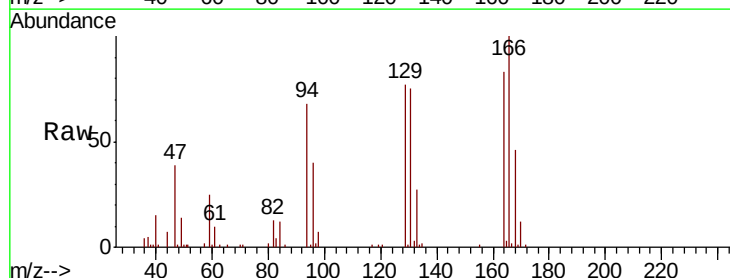
Ion Ratio Lower Upper

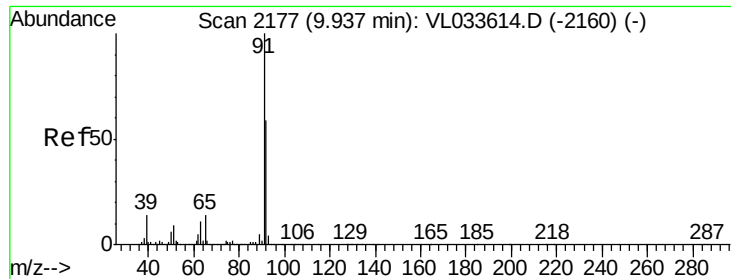
164 100

166 122.8 102.2 153.4

129 94.6 84.4 126.6

131 90.4 79.2 118.8





#53

Toluene

Concen: 0.360 ppbv

RT: 9.94 min Scan# 2177

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

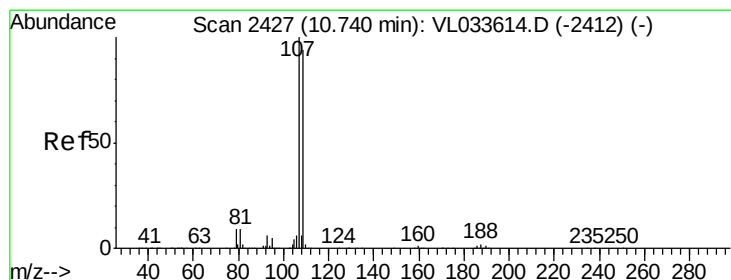
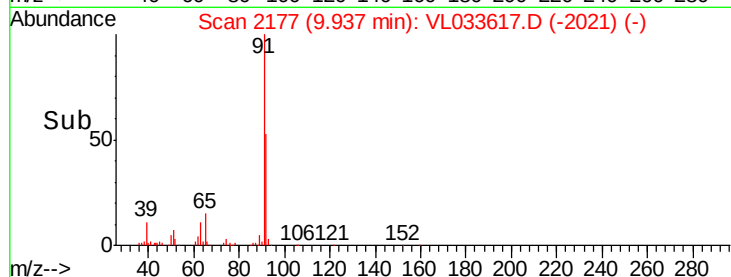
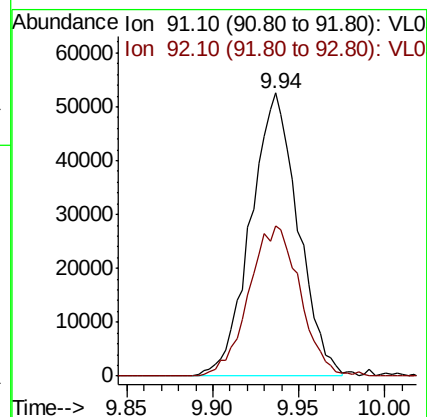
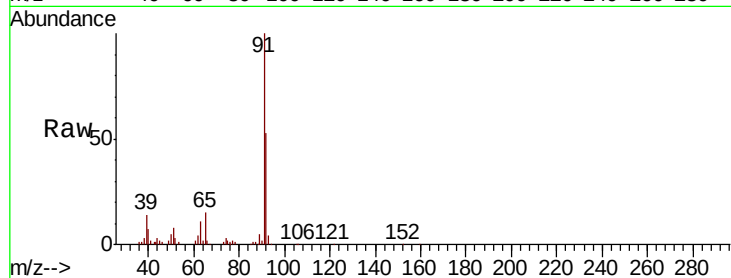
VSTDIC0.5

Tgt Ion: 91 Resp: 100405

Ion Ratio Lower Upper

91 100

92 57.1 47.8 71.6



#54

1,2-Dibromoethane

Concen: 0.465 ppbv

RT: 10.75 min Scan# 2429

Delta R.T. 0.01 min

Lab File: VL033617.D

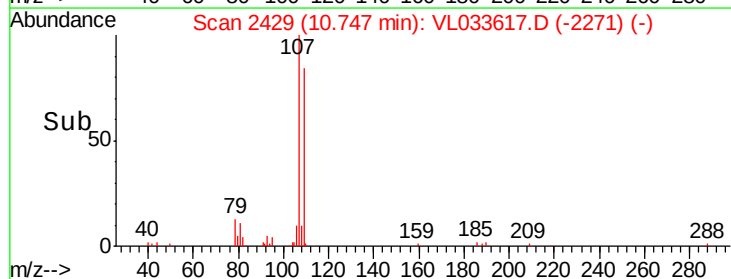
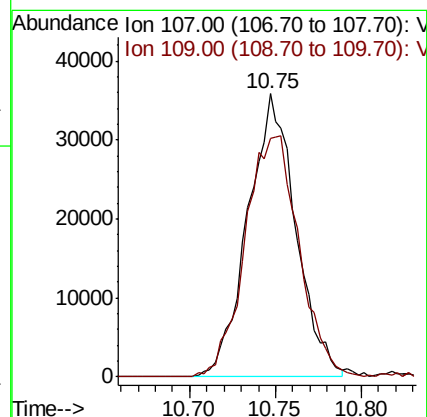
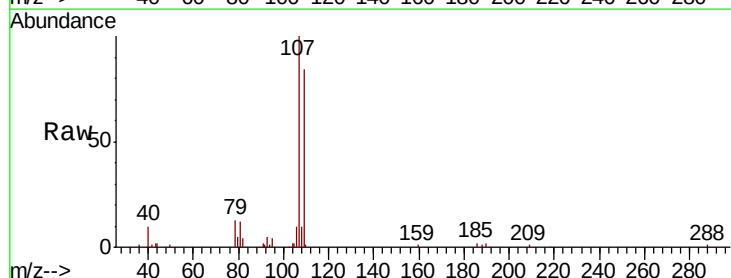
Acq: 1 May 2019 13:52

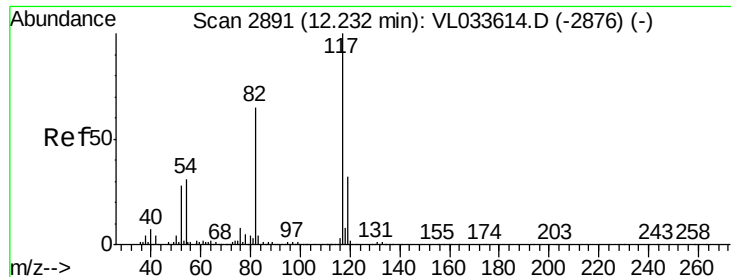
Tgt Ion: 107 Resp: 69433

Ion Ratio Lower Upper

107 100

109 84.1 75.1 112.7

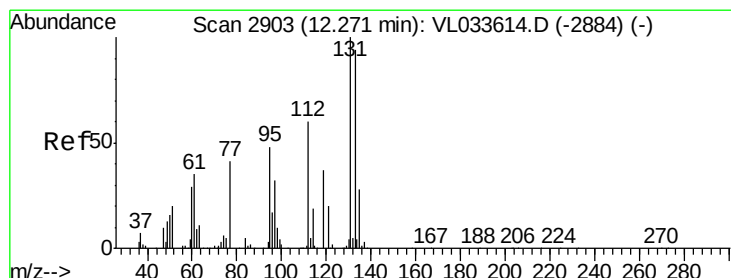
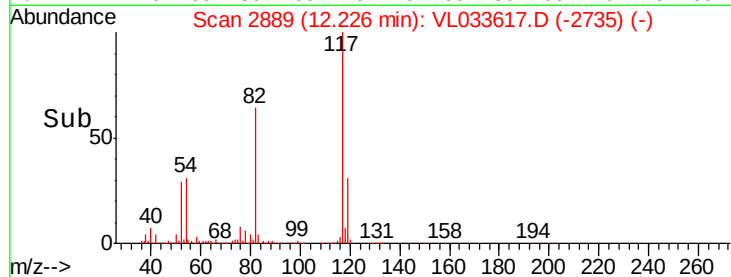
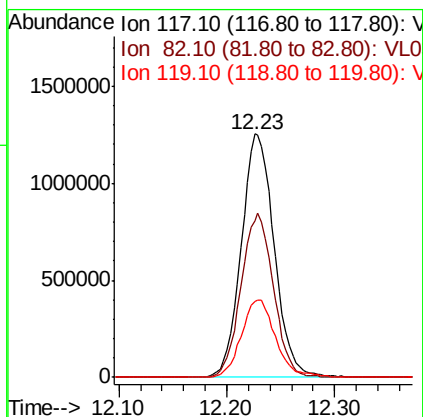
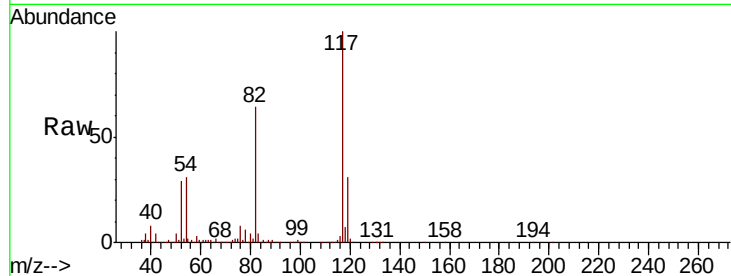




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.23 min Scan# 2889  
Delta R.T. -0.01 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

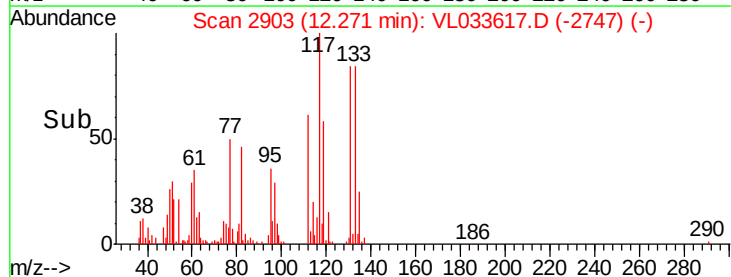
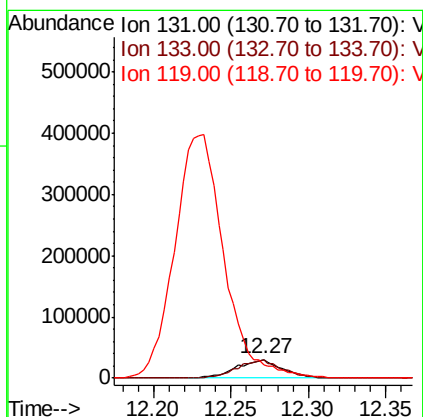
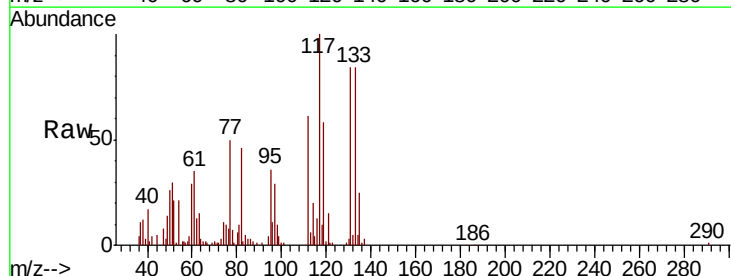
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

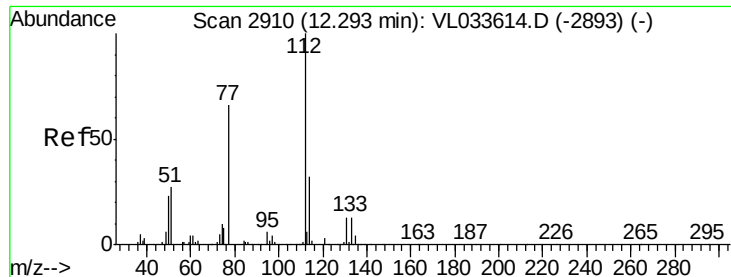
Tgt Ion:117 Resp: 2658119  
Ion Ratio Lower Upper  
117 100  
82 66.5 52.6 78.8  
119 33.3 28.3 42.5



#56  
1,1,1,2-Tetrachloroethane  
Concen: 0.531 ppbv  
RT: 12.27 min Scan# 2903  
Delta R.T. 0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

Tgt Ion:131 Resp: 61636  
Ion Ratio Lower Upper  
131 100  
133 97.0 76.4 114.6  
119 1436.5 40.9 61.3#

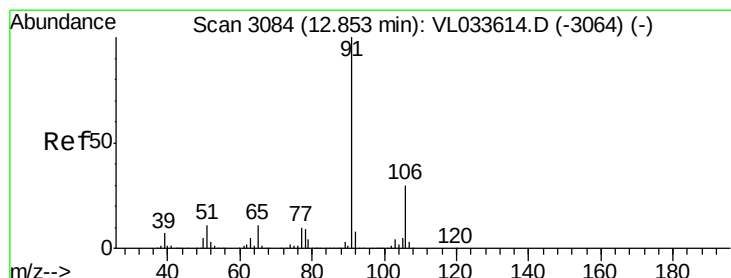
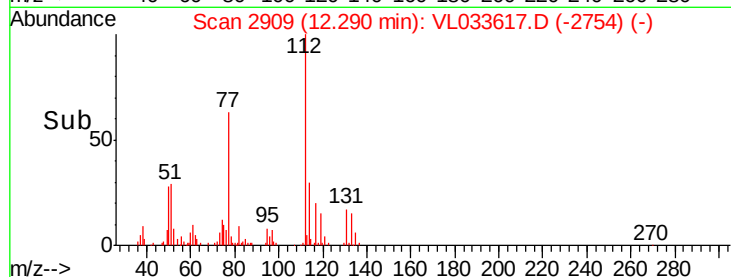
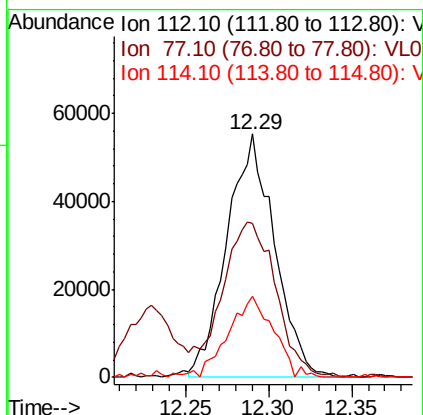
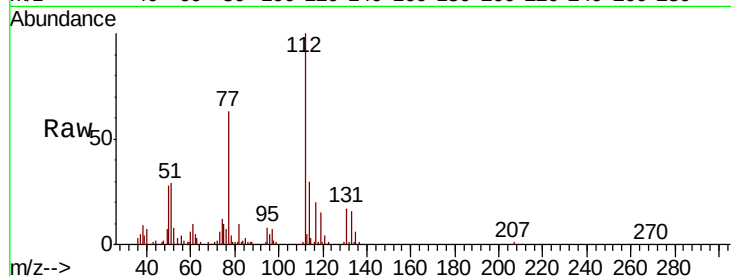




#57  
Chlorobenzene  
Concen: 0.534 ppbv  
RT: 12.29 min Scan# 2909  
Delta R.T. -0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

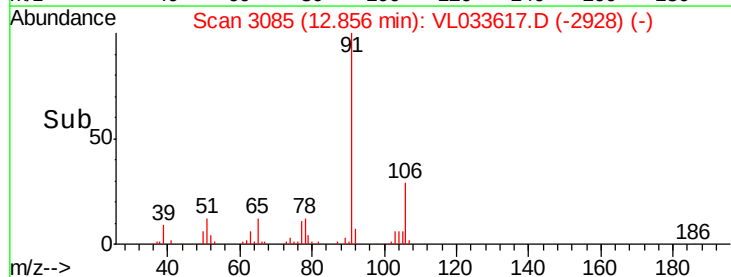
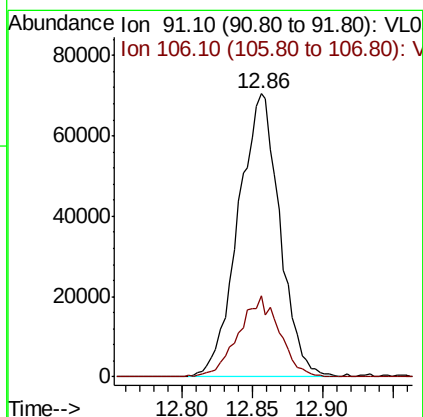
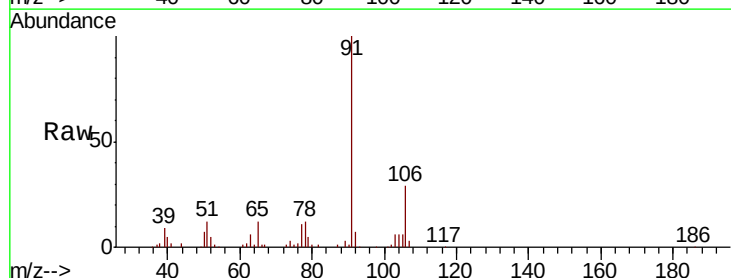
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

Tgt Ion: 112 Resp: 110499  
Ion Ratio Lower Upper  
112 100  
77 62.4 53.6 80.4  
114 33.1 29.1 35.5

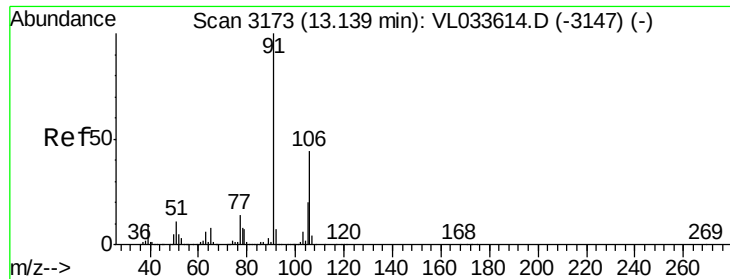


#58  
Ethyl Benzene  
Concen: 0.469 ppbv  
RT: 12.86 min Scan# 3085  
Delta R.T. 0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

Tgt Ion: 91 Resp: 145152  
Ion Ratio Lower Upper  
91 100  
106 28.6 23.6 35.4



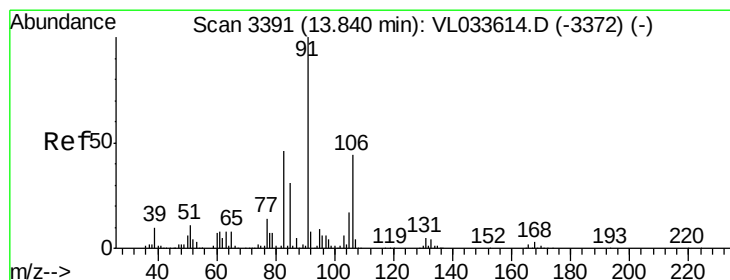
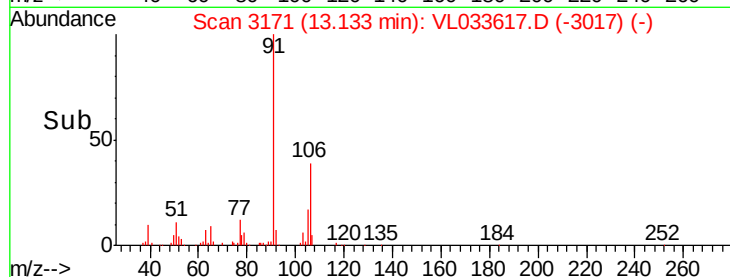
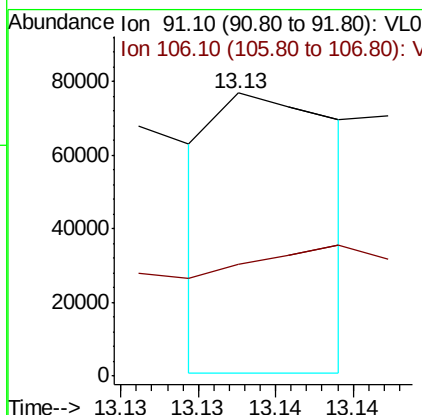
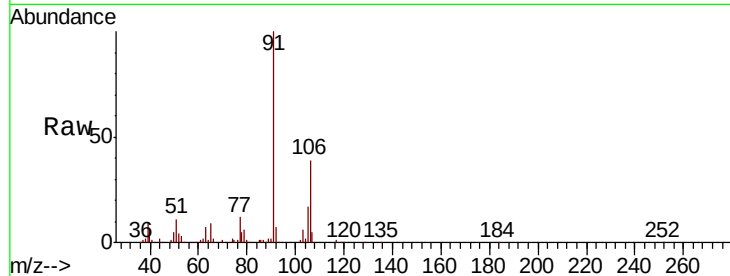




#59  
m/p-Xylene  
Concen: 0.156 ppbv  
RT: 13.13 min Scan# 3171  
Delta R.T. -0.01 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

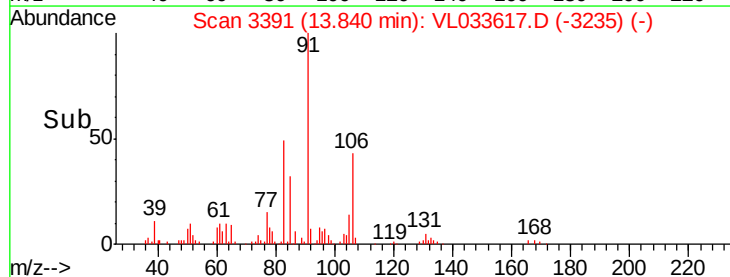
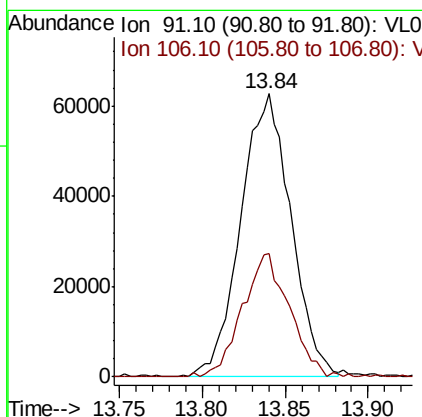
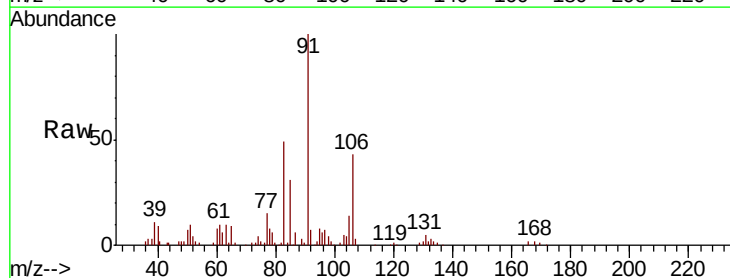
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.5

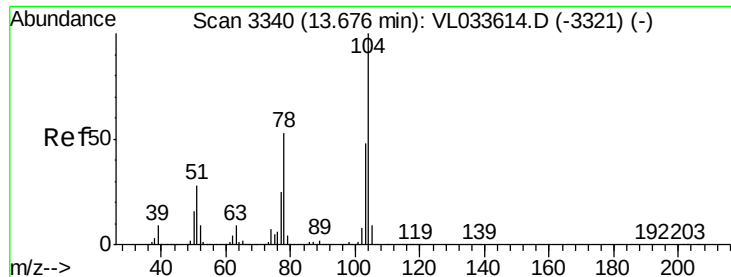
Tgt Ion: 91 Resp: 41779  
Ion Ratio Lower Upper  
91 100  
106 0.0 0.0 0.0



#60  
o-Xylene  
Concen: 0.492 ppbv  
RT: 13.84 min Scan# 3391  
Delta R.T. 0.00 min  
Lab File: VL033617.D  
Acq: 1 May 2019 13:52

Tgt Ion: 91 Resp: 132248  
Ion Ratio Lower Upper  
91 100  
106 40.6 21.8 65.4





#61

Styrene

Concen: 0.416 ppbv

RT: 13.67 min Scan# 3339

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

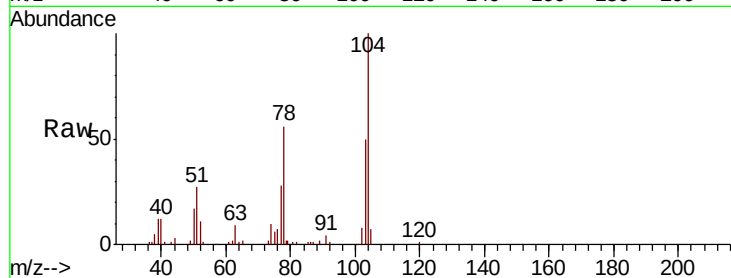
Tgt Ion:104 Resp: 76549

Ion Ratio Lower Upper

104 100

78 58.0 42.7 64.1

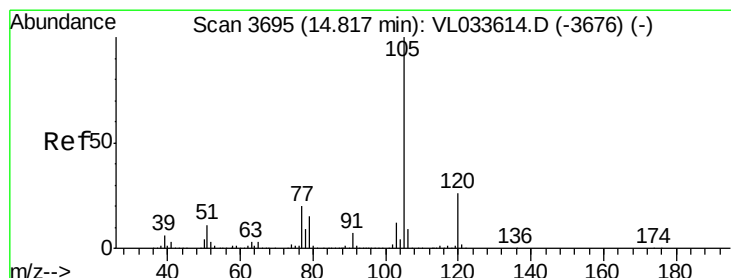
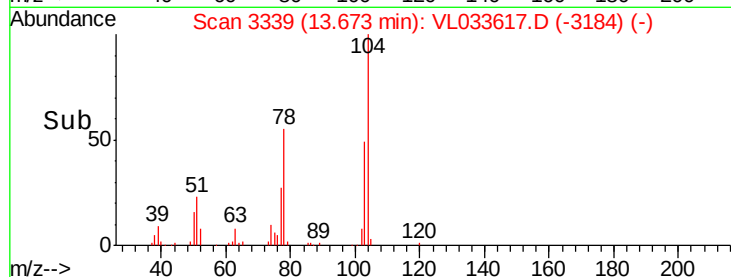
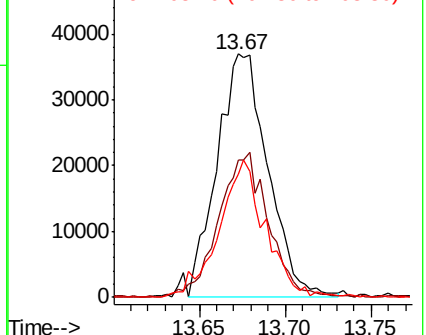
103 51.1 37.8 56.6



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 0.495 ppbv

RT: 14.82 min Scan# 3695

Delta R.T. 0.00 min

Lab File: VL033617.D

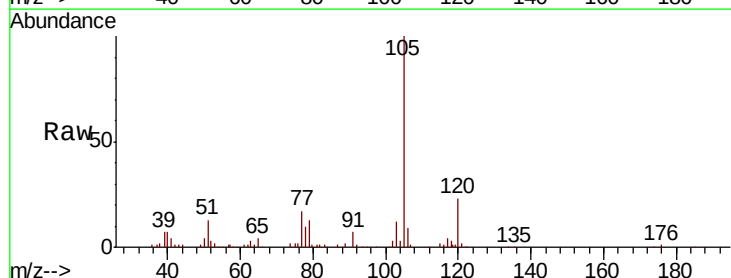
Acq: 1 May 2019 13:52

Tgt Ion:105 Resp: 177983

Ion Ratio Lower Upper

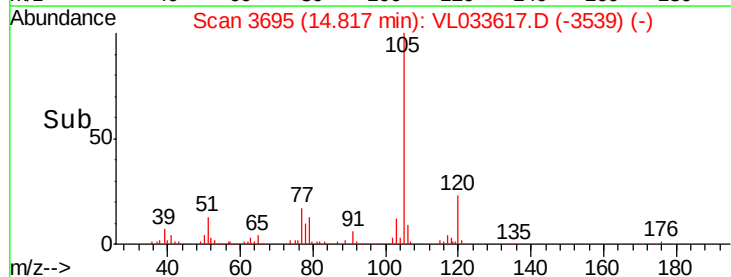
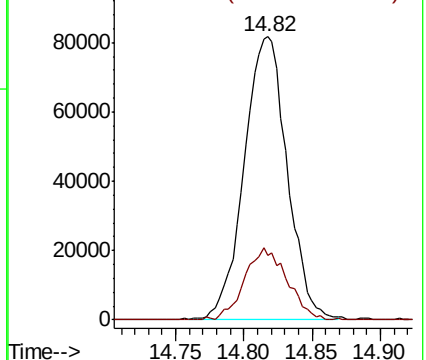
105 100

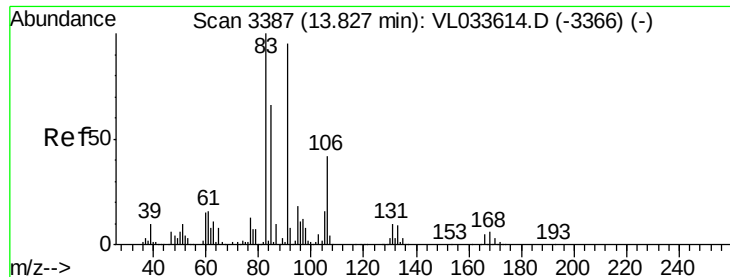
120 25.2 20.3 30.5



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 0.545 ppbv

RT: 13.82 min Scan# 3386

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

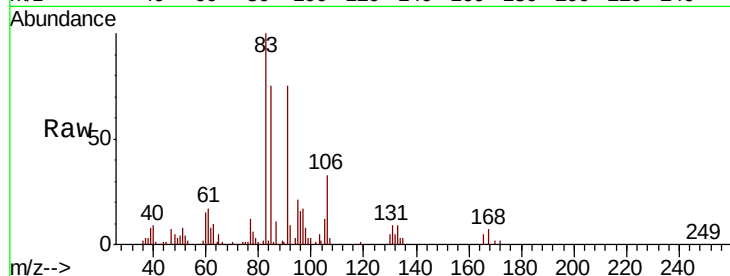
Tgt Ion: 83 Resp: 114739

Ion Ratio Lower Upper

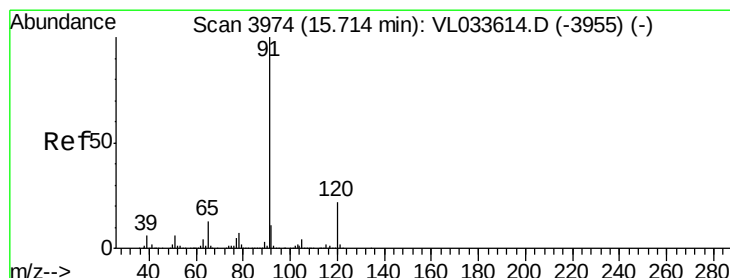
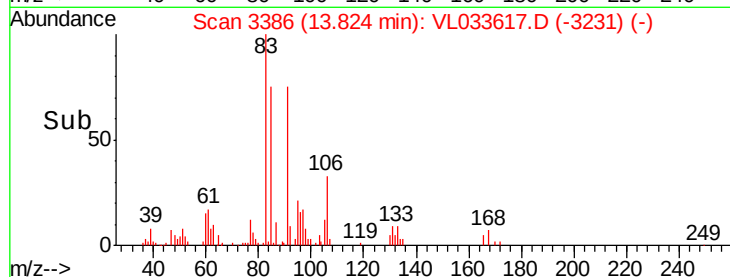
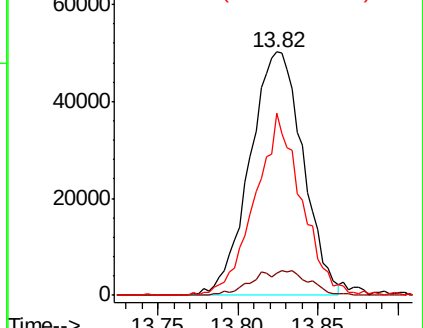
83 100

131 10.9 4.8 14.4

85 66.1 32.3 96.8



Abundance Ion 83.00 (82.70 to 83.70): VL0  
Ion 131.00 (130.70 to 131.70): V  
Ion 85.00 (84.70 to 85.70): VL0



#64

n-propylbenzene

Concen: 0.478 ppbv

RT: 15.72 min Scan# 3975

Delta R.T. 0.00 min

Lab File: VL033617.D

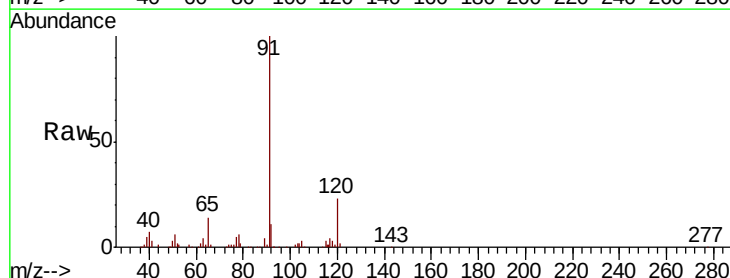
Acq: 1 May 2019 13:52

Tgt Ion: 120 Resp: 44537

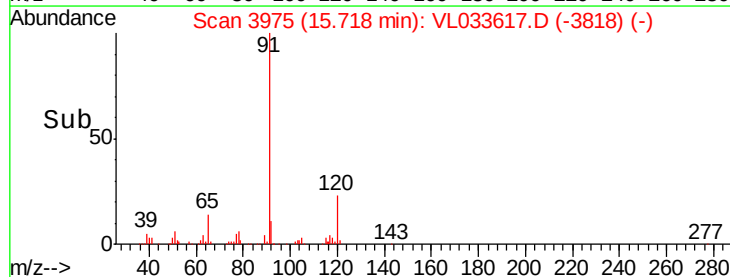
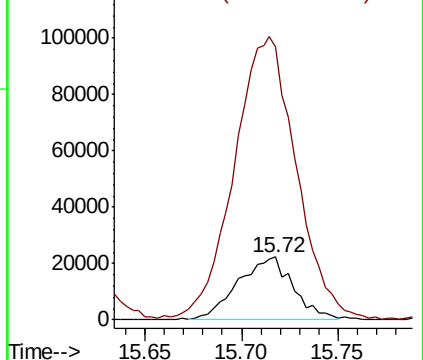
Ion Ratio Lower Upper

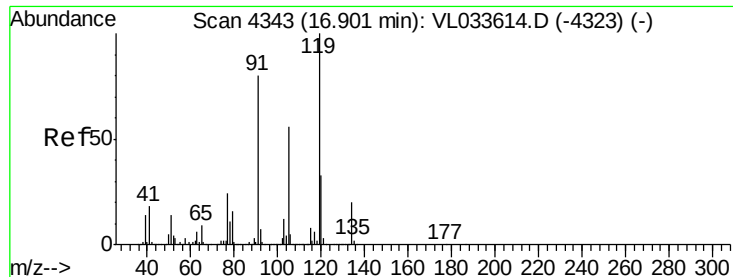
120 100

91 506.9 380.2 570.2



Abundance Ion 120.20 (119.90 to 120.90): V  
Ion 91.10 (90.80 to 91.80): VL0





#65

tert-Butylbenzene

Concen: 0.279 ppbv

RT: 16.90 min Scan# 4342

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

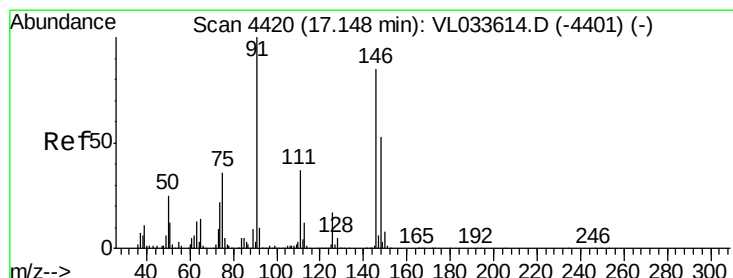
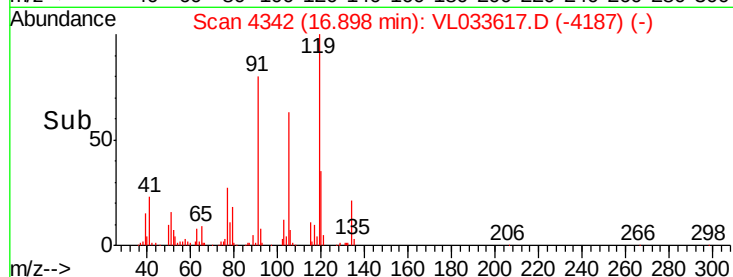
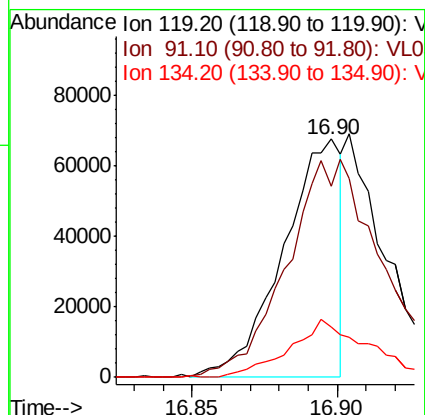
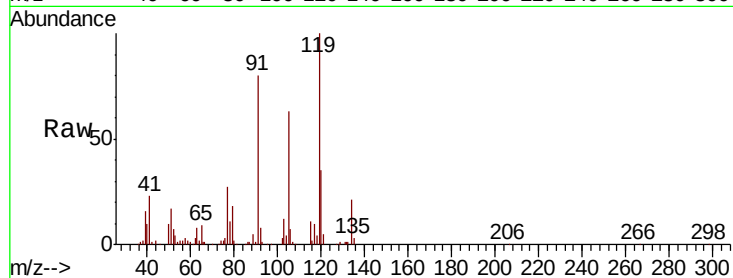
Tgt Ion:119 Resp: 93774

Ion Ratio Lower Upper

119 100

91 0.0 66.1 99.1#

134 33.3 15.6 23.4#



#66

Benzyl Chloride

Concen: 0.405 ppbv

RT: 17.15 min Scan# 4420

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

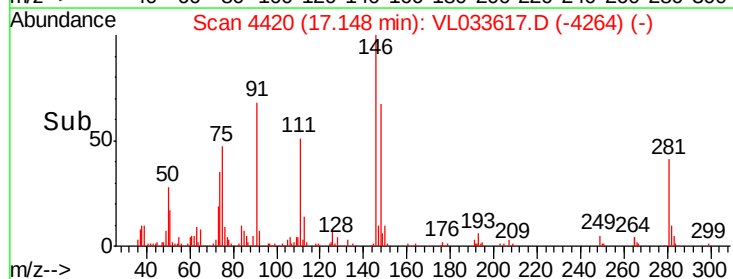
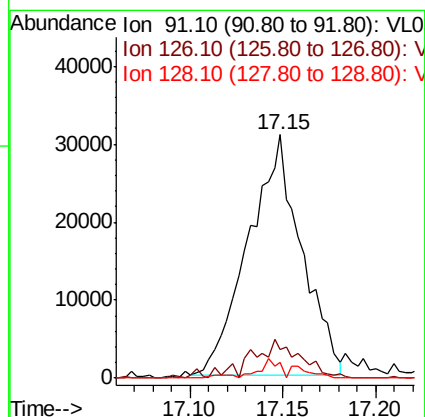
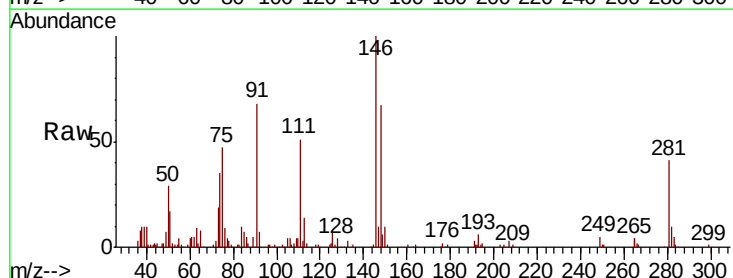
Tgt Ion: 91 Resp: 61736

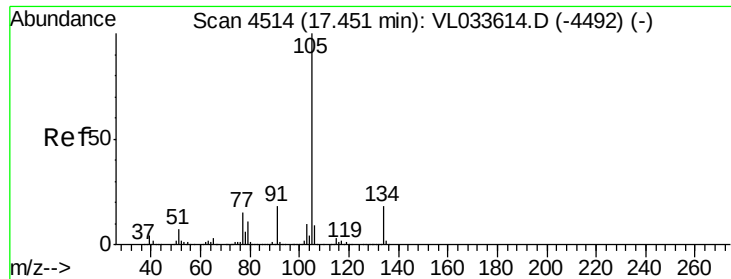
Ion Ratio Lower Upper

91 100

126 15.2 13.4 20.2

128 5.2 4.3 6.5





#67

sec-Butylbenzene

Concen: 0.480 ppbv

RT: 17.45 min Scan# 4513

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

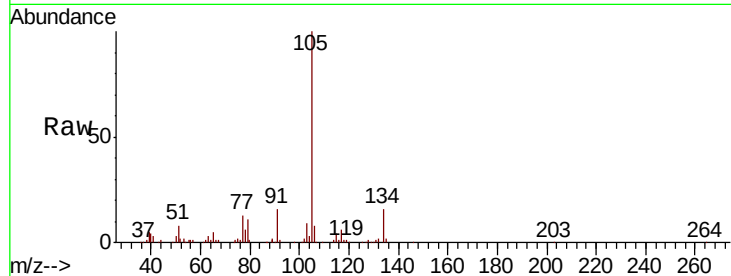
VSTDIC0.5

Tgt Ion:105 Resp: 226240

Ion Ratio Lower Upper

105 100

134 17.4 14.6 21.8



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.45

120000

100000

80000

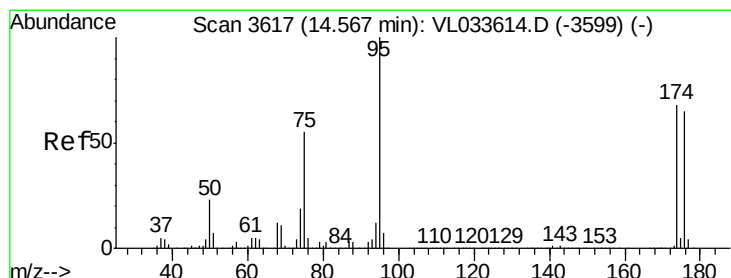
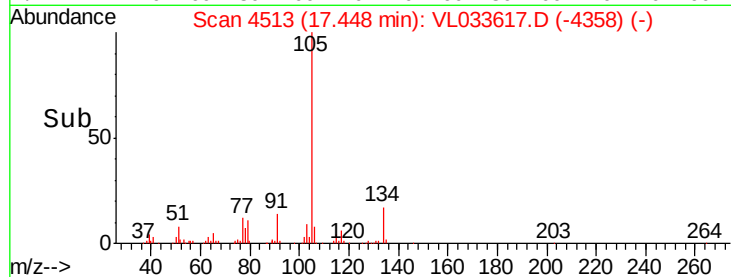
60000

40000

20000

0

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 10.669 ppbv

RT: 14.56 min Scan# 3616

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

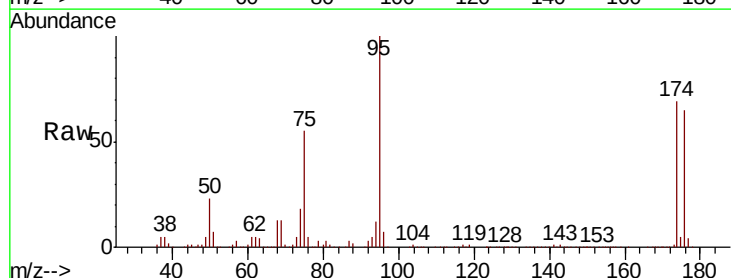
Tgt Ion: 95 Resp: 2174958

Ion Ratio Lower Upper

95 100

174 67.0 53.9 80.9

175 4.8 4.0 6.0



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

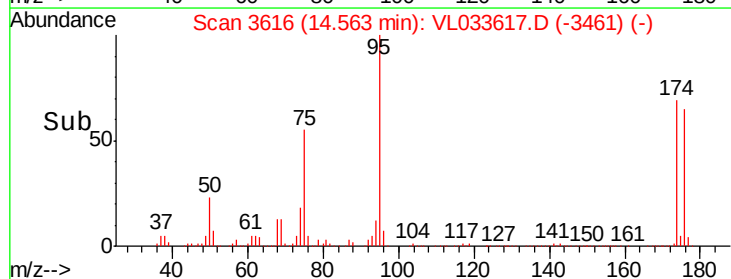
14.56

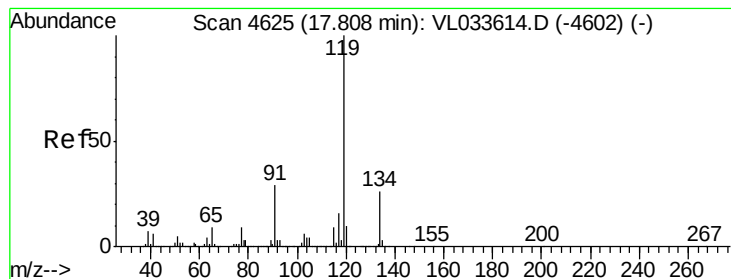
1000000

500000

0

Time-->





#69

p-Isopropyltoluene

Concen: 0.454 ppbv

RT: 17.81 min Scan# 4626

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

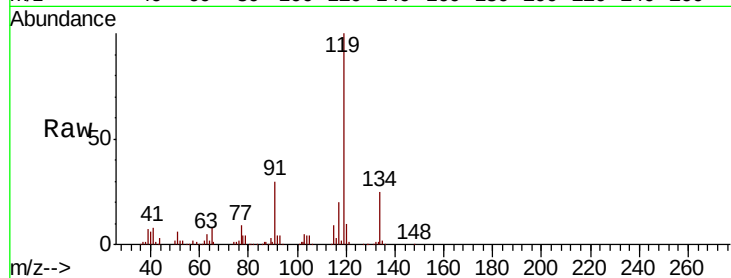
Tgt Ion: 119 Resp: 178269

Ion Ratio Lower Upper

119 100

134 25.8 20.2 30.2

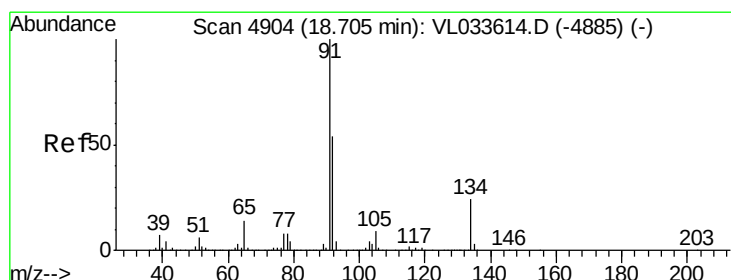
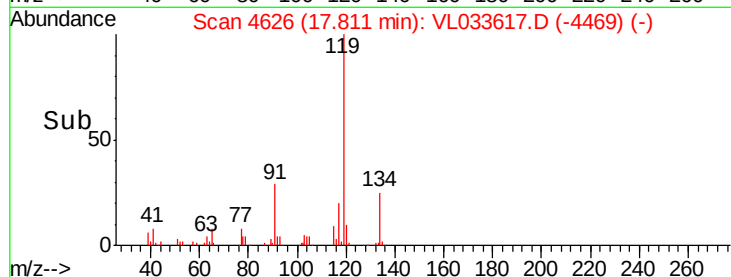
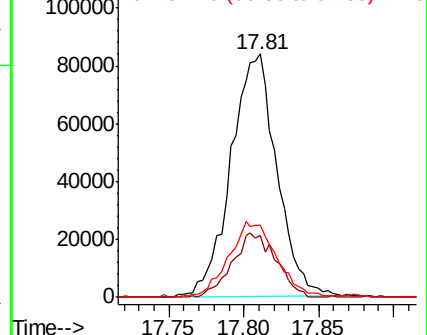
91 33.3 23.3 34.9



Abundance Ion 119.10 (118.80 to 119.80): V

Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): V



#70

n-Butylbenzene

Concen: 0.475 ppbv

RT: 18.70 min Scan# 4904

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

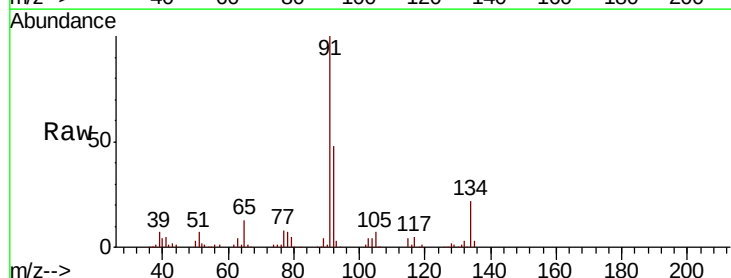
Tgt Ion: 91 Resp: 202860

Ion Ratio Lower Upper

91 100

92 50.0 42.6 64.0

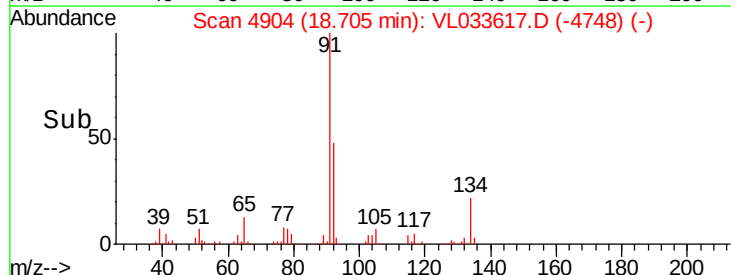
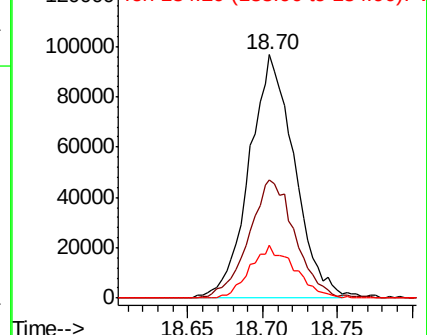
134 21.3 18.0 27.0

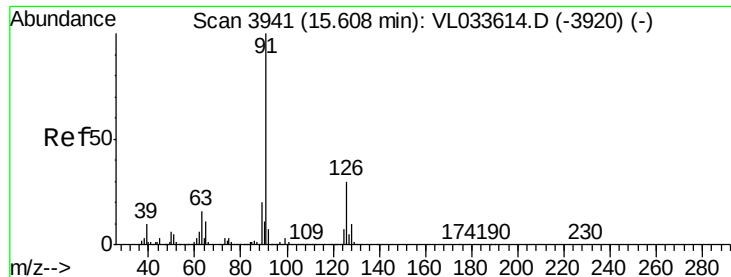


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

Ion 134.20 (133.90 to 134.90): V





#71

2-Chlorotoluene

Concen: 0.474 ppbv

RT: 15.61 min Scan# 3941

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

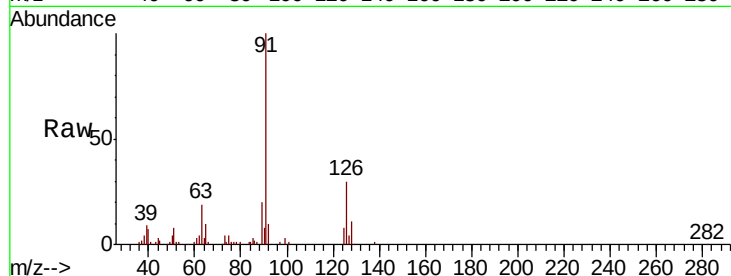
VSTDIC0.5

Tgt Ion: 91 Resp: 127457

Ion Ratio Lower Upper

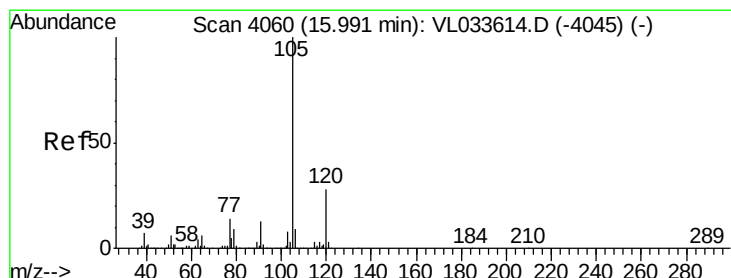
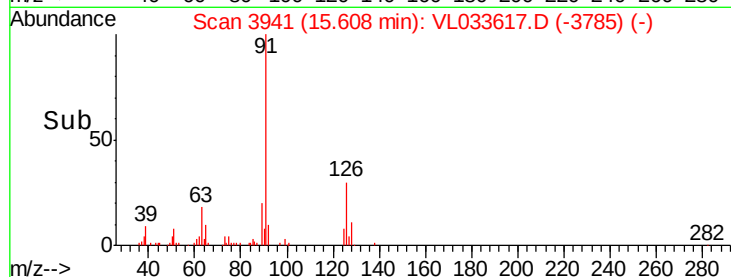
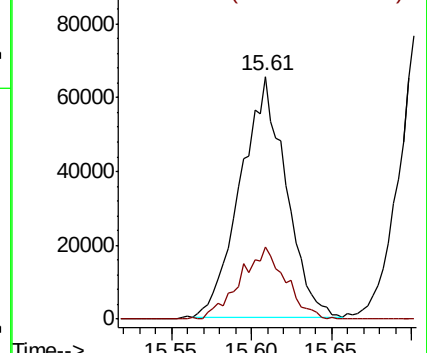
91 100

126 29.9 11.9 47.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 0.439 ppbv

RT: 15.99 min Scan# 4059

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Tgt Ion: 105 Resp: 134336

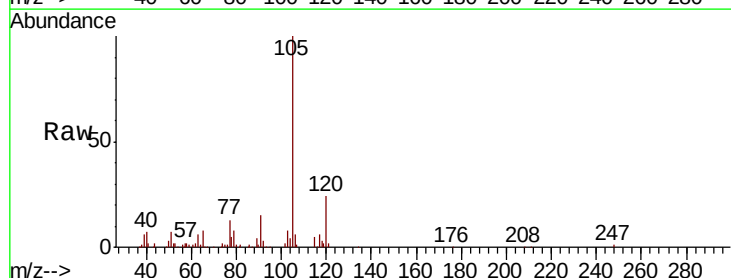
Ion Ratio Lower Upper

105 100

120 29.5 23.2 34.8

91 17.4 10.3 15.5#

77 16.5 11.0 16.6

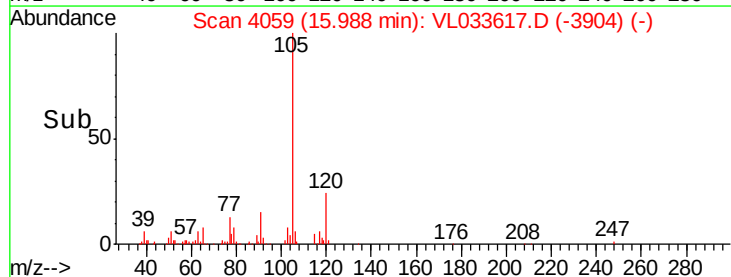
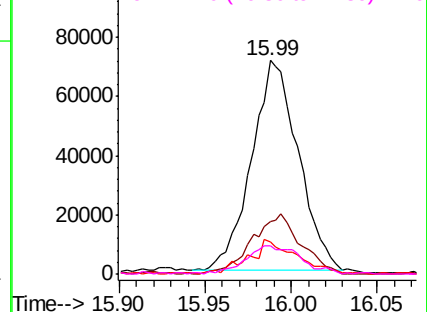


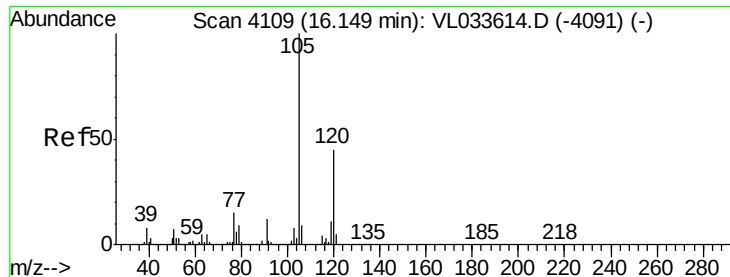
Abundance Ion 105.10 (104.80 to 105.80): V

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





#73

1,3,5-Trimethylbenzene

Concen: 0.478 ppbv

RT: 16.15 min Scan# 4110

Delta R.T. 0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

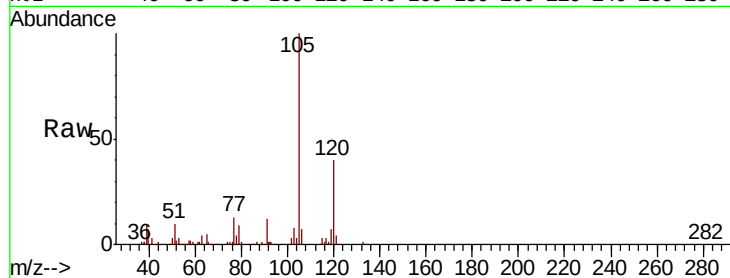
VSTDIC0.5

Tgt Ion:105 Resp: 143908

Ion Ratio Lower Upper

105 100

120 39.0 36.2 54.2



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.15

80000

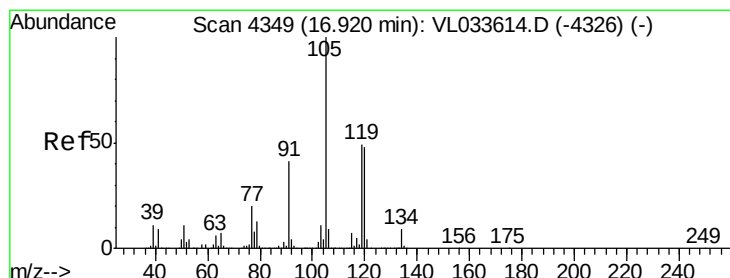
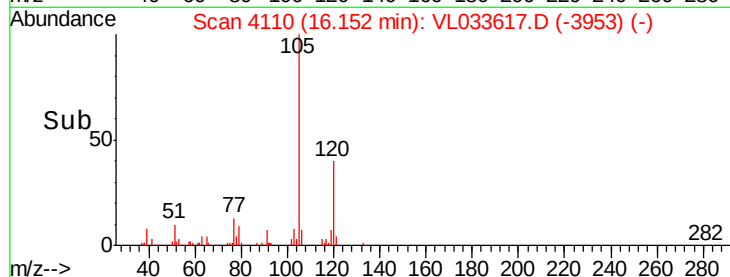
60000

40000

20000

0

Time--> 16.05 16.10 16.15 16.20



#74

1,2,4-Trimethylbenzene

Concen: 0.514 ppbv

RT: 16.91 min Scan# 4347

Delta R.T. -0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Tgt Ion:105 Resp: 172370

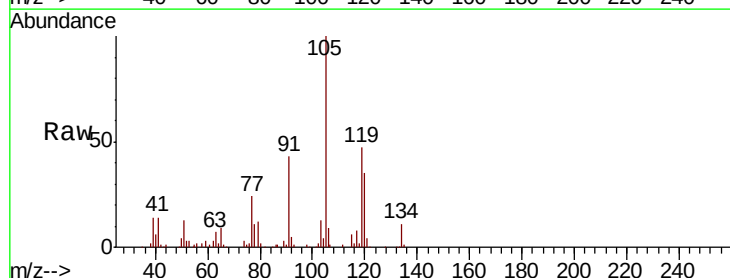
Ion Ratio Lower Upper

105 100

120 34.6 38.4 57.6#

91 42.8 33.0 49.4

77 23.9 16.2 24.2



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

120000

100000

80000

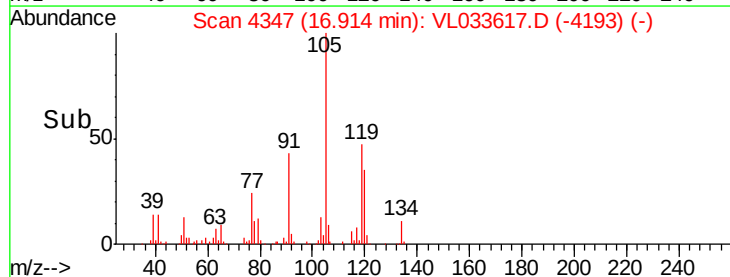
60000

40000

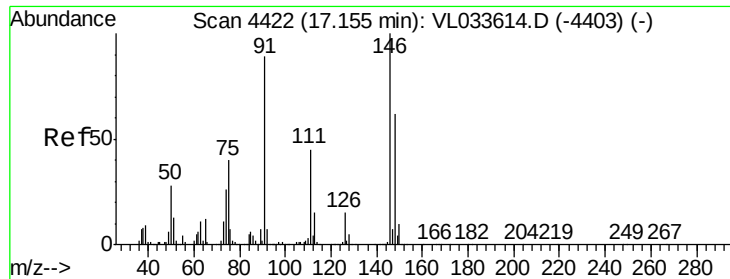
20000

0

Time--> 16.85 16.90 16.95



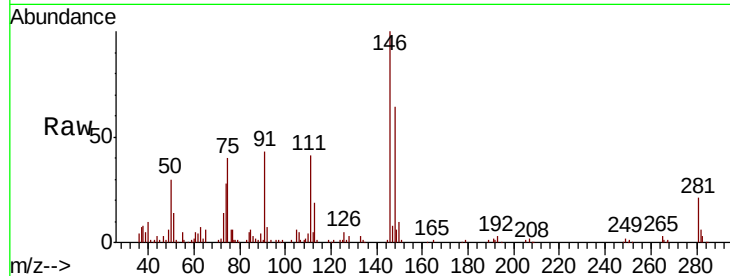




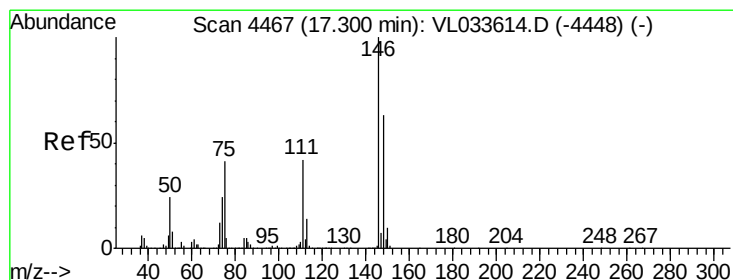
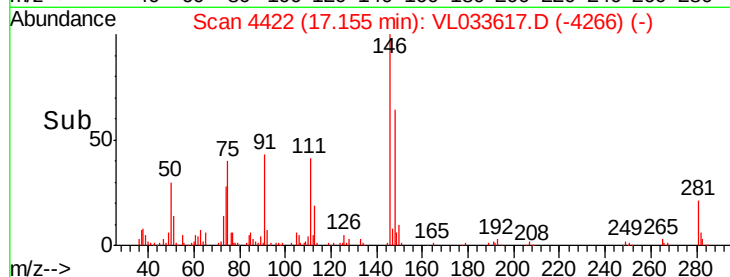
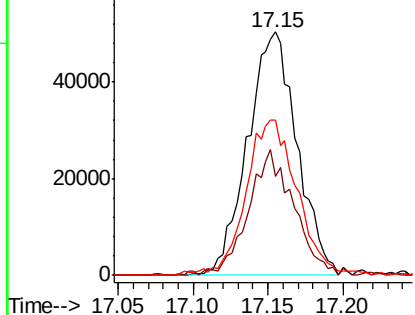
#75  
 1,3-Dichlorobenzene  
 Concen: 0.553 ppbv  
 RT: 17.15 min Scan# 4422  
 Delta R.T. 0.00 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

Tgt Ion:146 Resp: 115424  
 Ion Ratio Lower Upper  
 146 100  
 111 48.0 22.4 67.2  
 148 66.5 32.0 96.0

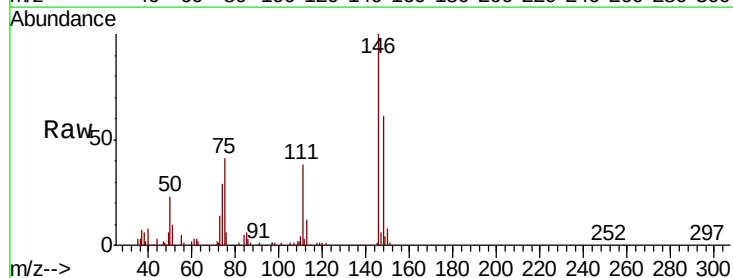


Abundance Ion 146.00 (145.70 to 146.70): V  
 Ion 111.10 (110.80 to 111.80): V  
 Ion 148.00 (147.70 to 148.70): V

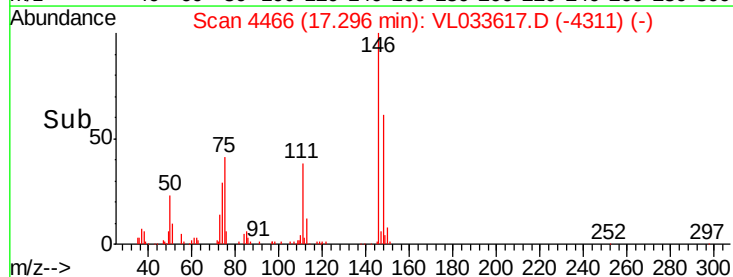
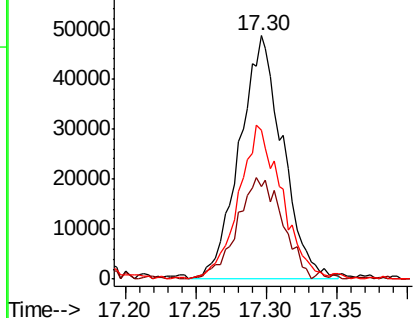


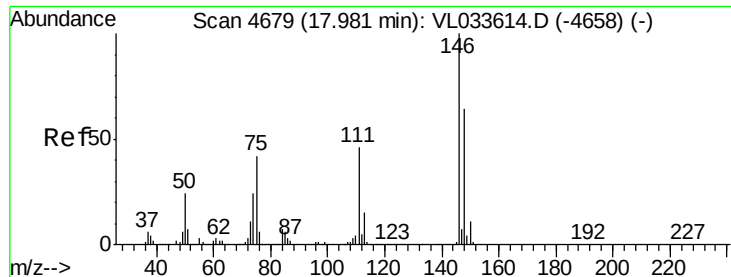
#76  
 1,4-Dichlorobenzene  
 Concen: 0.519 ppbv  
 RT: 17.30 min Scan# 4466  
 Delta R.T. -0.00 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Tgt Ion:146 Resp: 103411  
 Ion Ratio Lower Upper  
 146 100  
 111 44.3 21.6 65.0  
 148 64.6 32.3 96.9



Abundance Ion 146.00 (145.70 to 146.70): V  
 Ion 111.10 (110.80 to 111.80): V  
 Ion 148.00 (147.70 to 148.70): V





#77

1,2-Dichlorobenzene

Concen: 0.391 ppbv

RT: 17.98 min Scan# 4678

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

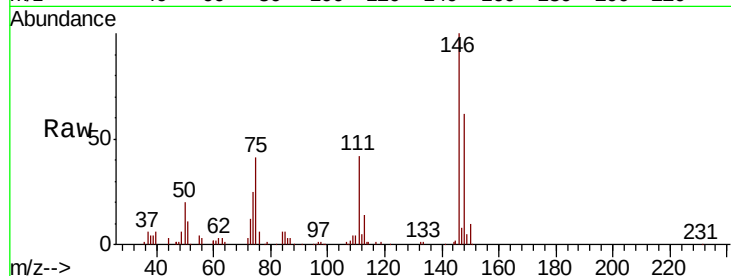
Tgt Ion:146 Resp: 76083

Ion Ratio Lower Upper

146 100

111 64.2 23.3 69.9

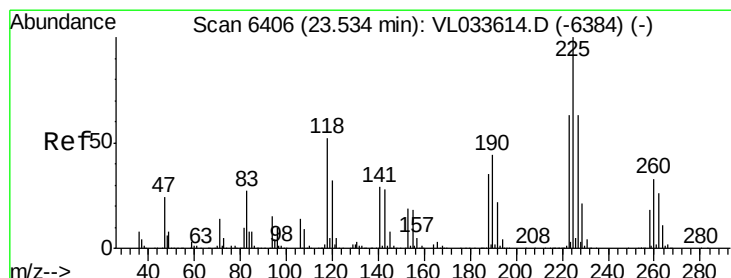
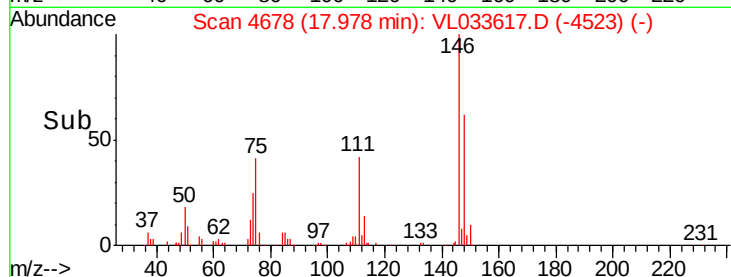
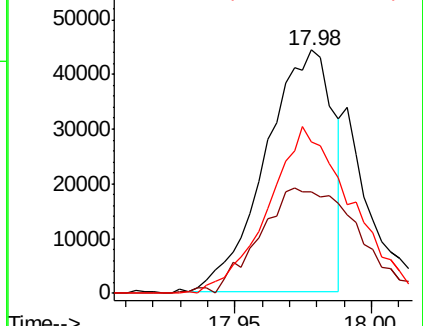
148 86.2 32.2 96.6



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 0.580 ppbv

RT: 23.53 min Scan# 6405

Delta R.T. -0.00 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

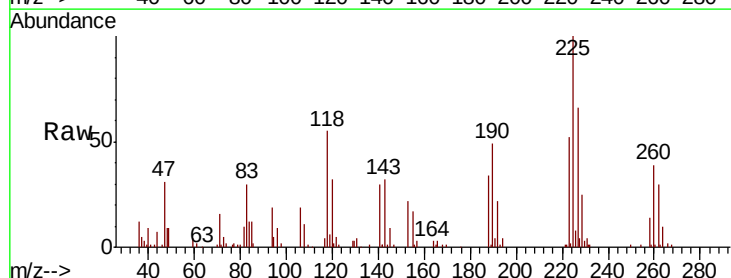
Tgt Ion:225 Resp: 86075

Ion Ratio Lower Upper

225 100

223 63.3 50.4 75.6

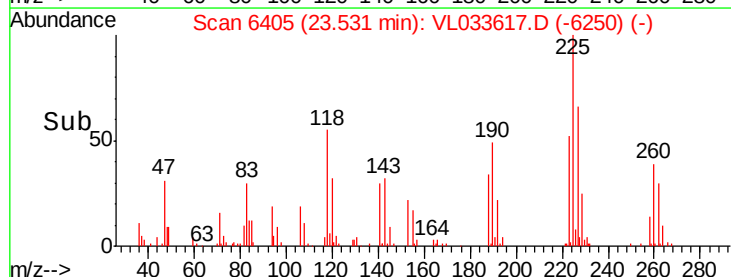
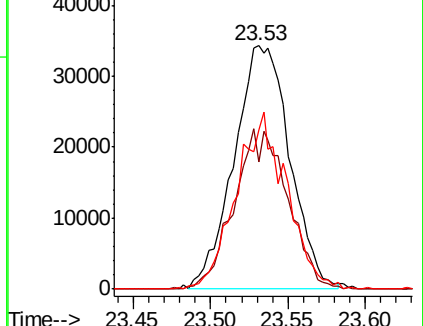
227 65.8 50.7 76.1

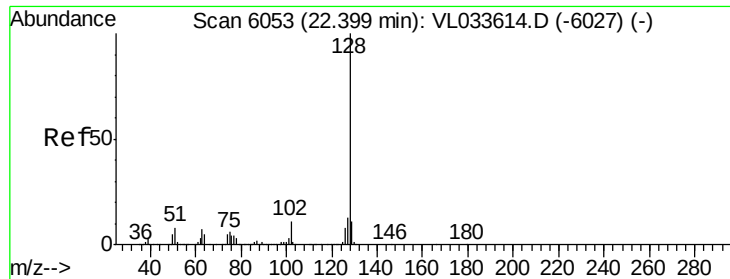


Abundance Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V





#79

Naphthalene

Concen: 0.210 ppbv

RT: 22.41 min Scan# 6055

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.5

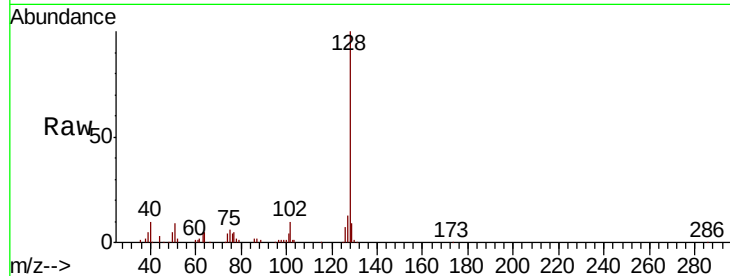
Tgt Ion:128 Resp: 65160

Ion Ratio Lower Upper

128 100

127 12.7 10.6 16.0

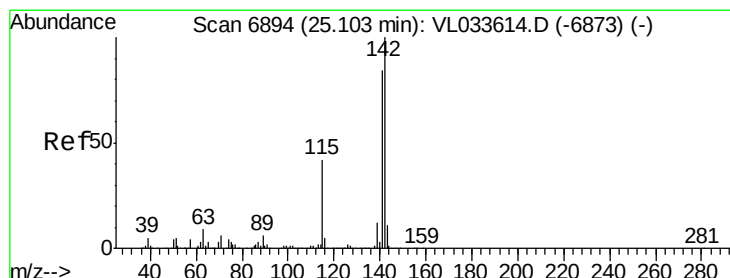
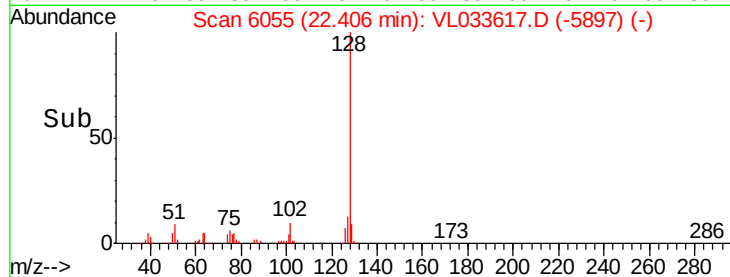
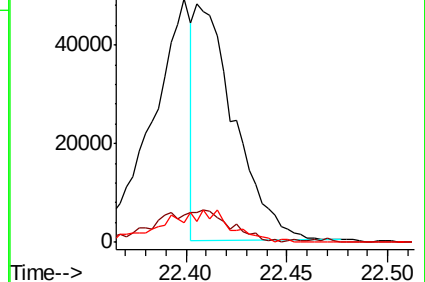
129 9.7 8.6 13.0



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: 0.319 ppbv

RT: 25.11 min Scan# 6896

Delta R.T. 0.01 min

Lab File: VL033617.D

Acq: 1 May 2019 13:52

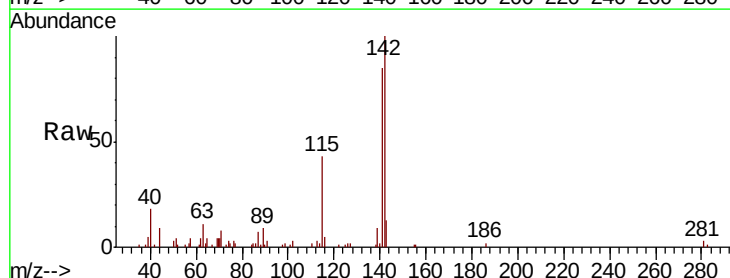
Tgt Ion:142 Resp: 42860

Ion Ratio Lower Upper

142 100

141 84.1 67.3 100.9

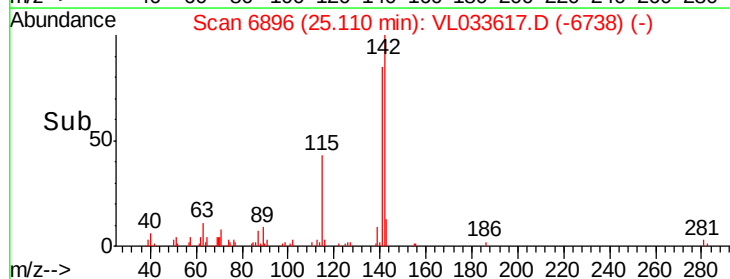
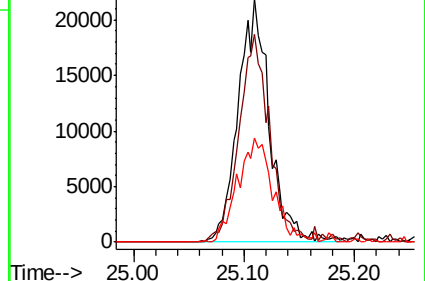
115 48.6 33.8 50.8

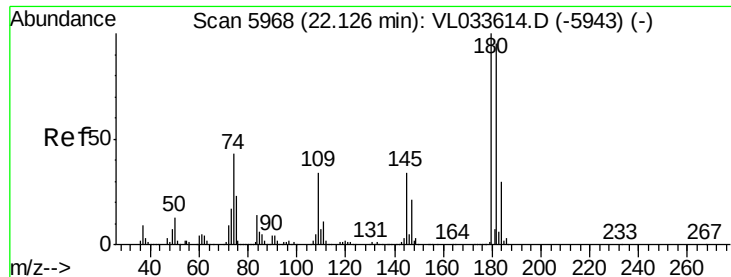


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V





#81  
 1,2,4-Trichlorobenzene  
 Concen: 0.091 ppbv  
 RT: 22.12 min Scan# 5965  
 Delta R.T. -0.01 min  
 Lab File: VL033617.D  
 Acq: 1 May 2019 13:52

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.5

Tgt Ion:180 Resp: 16395  
 Ion Ratio Lower Upper  
 180 100  
 182 0.0 76.2 114.2#  
 184 0.0 24.5 36.7#

