

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL041719\  
 Data File : VL033609.D  
 Acq On : 17 Apr 2019 19:27  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Quant Time: Apr 18 07:00:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Mar 26 16:00:50 2019  
 QLast Update : Tue Mar 26 16:00:50 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 798705   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 1920219  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 2235815m | 10.00 | ppbv  | 0.00     |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1781352  | 10.16    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.60% |

## Target Compounds

|                                |      |     |         |             | Ovalue |
|--------------------------------|------|-----|---------|-------------|--------|
| 2) Dichlorodifluoromethane     | 3.08 | 85  | 845331  | 7.257 ppbv  | 94     |
| 3) Chlorodifluoromethane       | 3.01 | 51  | 808314  | 8.791 ppbv  | 100    |
| 4) Chloromethane               | 3.17 | 50  | 429452  | 8.826 ppbv  | 98     |
| 5) Vinyl Chloride              | 3.29 | 62  | 440986  | 9.224 ppbv  | 100    |
| 6) Bromomethane                | 3.51 | 94  | 279699  | 9.104 ppbv  | 99     |
| 7) Chloroethane                | 3.60 | 64  | 160792  | 9.037 ppbv  | 93     |
| 8) Dichlorotetrafluoroethane   | 3.22 | 85  | 1106493 | 8.914 ppbv  | 100    |
| 9) Propene                     | 3.04 | 41  | 339888  | 8.802 ppbv  | 98     |
| 10) Heptane                    | 8.25 | 43  | 1034730 | 10.024 ppbv | 99     |
| 11) Trichlorofluoromethane     | 4.00 | 101 | 1313693 | 9.151 ppbv  | 99     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55 | 101 | 898103  | 9.314 ppbv  | 99     |
| 13) Ethanol                    | 3.65 | 45  | 103362  | 10.344 ppbv | 64     |
| 14) Bromoethene                | 3.79 | 108 | 349335  | 9.083 ppbv  | 99     |
| 15) Acetone                    | 3.90 | 43  | 830580  | 8.649 ppbv  | 99     |
| 16) 1,3-Butadiene              | 3.36 | 39  | 356572  | 9.361 ppbv  | 87     |
| 17) tert-Butyl alcohol         | 4.35 | 59  | 167019  | 9.459 ppbv  | 100    |
| 18) 1,1-Dichloroethene         | 4.35 | 96  | 381848  | 9.219 ppbv  | 97     |
| 19) Isopropyl Alcohol          | 4.02 | 45  | 600379  | 9.884 ppbv  | # 98   |
| 20) Methylene Chloride         | 4.41 | 84  | 355048  | 8.709 ppbv  | 96     |
| 21) Allyl Chloride             | 4.48 | 41  | 573522  | 9.447 ppbv  | 99     |
| 22) trans-1,2-Dichloroethene   | 4.96 | 96  | 410339  | 9.496 ppbv  | 95     |
| 23) Vinyl Acetate              | 5.16 | 43  | 1279096 | 9.358 ppbv  | 99     |
| 24) 1,1-Dichloroethane         | 5.09 | 63  | 909836  | 8.763 ppbv  | 98     |
| 25) Ethyl Acetate              | 5.77 | 43  | 1561901 | 8.766 ppbv  | 100    |
| 26) Hexane                     | 5.78 | 57  | 704900  | 8.897 ppbv  | 98     |
| 27) Carbon Disulfide           | 4.62 | 76  | 991373  | 10.523 ppbv | 99     |
| 28) Methyl tert-Butyl Ether    | 5.11 | 73  | 1024209 | 8.976 ppbv  | 99     |
| 29) Chloroform                 | 5.85 | 83  | 1198958 | 8.828 ppbv  | 99     |
| 30) Cyclohexane                | 7.25 | 84  | 594137  | 9.480 ppbv  | 100    |
| 31) cis-1,2-Dichloroethene     | 5.64 | 61  | 716855  | 9.101 ppbv  | 98     |
| 32) 1,1,1-Trichloroethane      | 6.62 | 97  | 1201670 | 9.292 ppbv  | 100    |
| 34) 2-Butanone                 | 5.33 | 43  | 1018385 | 8.827 ppbv  | 100    |
| 35) Carbon Tetrachloride       | 7.14 | 117 | 1313971 | 9.661 ppbv  | 98     |
| 36) Benzene                    | 7.01 | 78  | 1458099 | 9.050 ppbv  | 98     |
| 37) 1,2-Dichloroethane         | 6.42 | 62  | 921241  | 8.530 ppbv  | 100    |
| 38) Trichloroethene            | 7.96 | 130 | 651857  | 10.750 ppbv | 97     |
| 39) 1,2-Dichloropropane        | 7.74 | 63  | 533343  | 8.450 ppbv  | 99     |
| 40) 1,4-Dioxane                | 7.96 | 88  | 238387  | 10.590 ppbv | # 1    |
| 41) Tetrahydrofuran            | 6.15 | 42  | 570462  | 8.990 ppbv  | 98     |
| 42) Bromodichloromethane       | 7.92 | 83  | 1452779 | 9.877 ppbv  | 100    |
| 43) Methyl Methacrylate        | 8.14 | 69  | 651637  | 9.961 ppbv  | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL041719\  
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 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

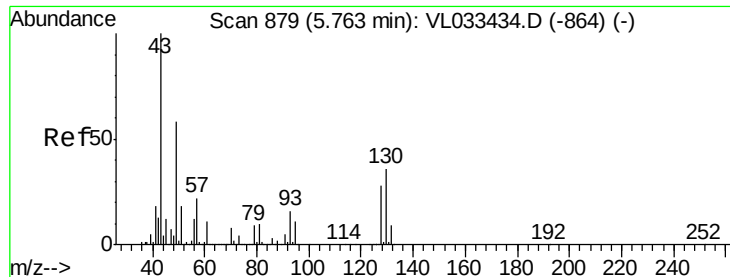
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Quant Time: Apr 18 07:00:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Mar 26 16:00:50 2019  
 QLast Update : Tue Mar 26 16:00:50 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|-------|------|----------|--------|-------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.99  | 57   | 2735711  | 9.717  | ppbv  | 100      |
| 45) t-1,3-Dichloropropene     | 9.42  | 75   | 908120   | 11.306 | ppbv  | 97       |
| 46) cis-1,3-Dichloropropene   | 8.84  | 75   | 1022687  | 10.903 | ppbv  | 96       |
| 47) 1,1,2-Trichloroethane     | 9.62  | 97   | 696991   | 9.725  | ppbv  | 98       |
| 48) Dibromochloromethane      | 10.45 | 129  | 1285300  | 10.632 | ppbv  | 100      |
| 49) Bromoform                 | 13.20 | 173  | 1189033  | 10.296 | ppbv  | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.87  | 43   | 1681216  | 9.952  | ppbv  | 99       |
| 51) 2-Hexanone                | 10.27 | 43   | 1318996  | 10.467 | ppbv  | 99       |
| 52) Tetrachloroethene         | 11.37 | 164  | 634667   | 10.440 | ppbv  | 94       |
| 53) Toluene                   | 9.95  | 91   | 1950965  | 10.420 | ppbv  | 100      |
| 54) 1,2-Dibromoethane         | 10.76 | 107  | 1117020  | 9.965  | ppbv  | 97       |
| 56) 1,1,1,2-Tetrachloroethane | 12.28 | 131  | 909290   | 8.874  | ppbv  | 99       |
| 57) Chlorobenzene             | 12.30 | 112  | 1524376  | 8.781  | ppbv  | 97       |
| 58) Ethyl Benzene             | 12.86 | 91   | 2781028  | 9.314  | ppbv  | 99       |
| 59) m/p-Xylene                | 13.15 | 91   | 4772036m | 17.894 | ppbv  |          |
| 60) o-Xylene                  | 13.85 | 91   | 2370719  | 9.193  | ppbv  | 99       |
| 61) Styrene                   | 13.69 | 104  | 1729501  | 9.771  | ppbv  | 100      |
| 62) Isopropylbenzene          | 14.83 | 105  | 3317046  | 9.083  | ppbv  | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.84 | 83   | 1663218  | 8.759  | ppbv  | 99       |
| 64) n-propylbenzene           | 15.72 | 120  | 858147   | 9.261  | ppbv  | 98       |
| 65) tert-Butylbenzene         | 16.91 | 119  | 3038325  | 9.441  | ppbv  | 99       |
| 66) Benzyl Chloride           | 17.16 | 91   | 1698358  | 11.350 | ppbv  | 99       |
| 67) sec-Butylbenzene          | 17.46 | 105  | 4300656  | 9.397  | ppbv  | 100      |
| 69) p-Isopropyltoluene        | 17.81 | 119  | 3565433  | 9.568  | ppbv  | 100      |
| 70) n-Butylbenzene            | 18.71 | 91   | 3754936  | 9.511  | ppbv  | 100      |
| 71) 2-Chlorotoluene           | 15.62 | 91   | 2560318  | 9.220  | ppbv  | 99       |
| 72) 4-Ethyltoluene            | 16.00 | 105  | 2766114  | 9.542  | ppbv  | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.15 | 105  | 2671829  | 9.631  | ppbv  | 100      |
| 74) 1,2,4-Trimethylbenzene    | 16.93 | 105  | 2786481  | 9.372  | ppbv  | 97       |
| 75) 1,3-Dichlorobenzene       | 17.17 | 146  | 1669102  | 9.082  | ppbv  | 99       |
| 76) 1,4-Dichlorobenzene       | 17.31 | 146  | 1659296  | 9.267  | ppbv  | 100      |
| 77) 1,2-Dichlorobenzene       | 17.99 | 146  | 1605434  | 9.207  | ppbv  | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.54 | 225  | 1215134  | 10.528 | ppbv  | 99       |
| 79) Naphthalene               | 22.41 | 128  | 2695597  | 10.591 | ppbv  | 100      |
| 80) Naphthalene, 2-methyl-    | 25.11 | 142  | 1248226  | 14.613 | ppbv  | 99       |
| 81) 1,2,4-Trichlorobenzene    | 22.14 | 180  | 1411684  | 9.999  | ppbv  | 100      |

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

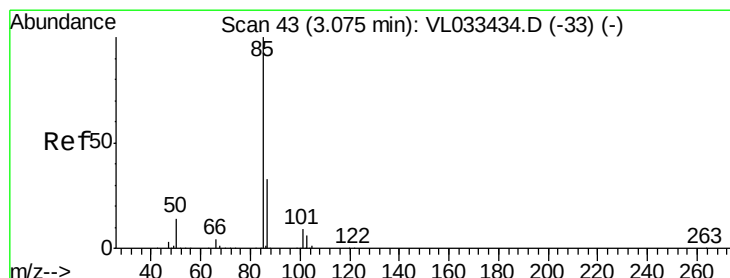
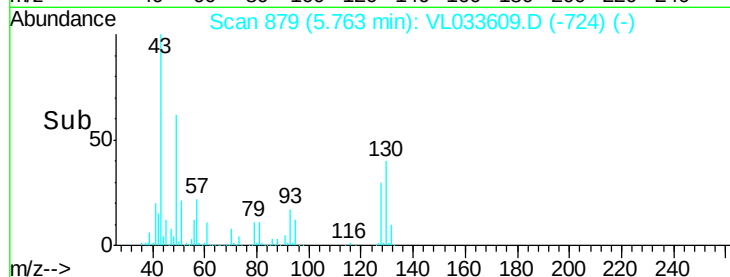
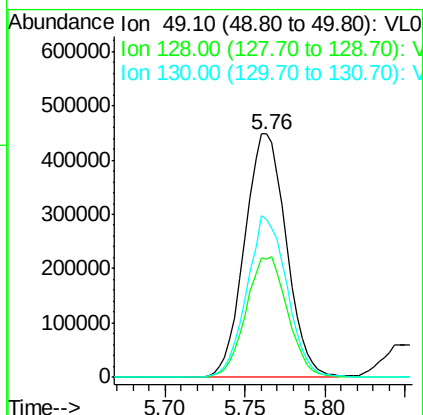
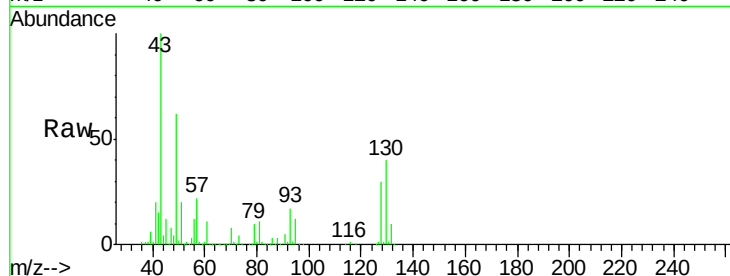




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.76 min Scan# 879  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

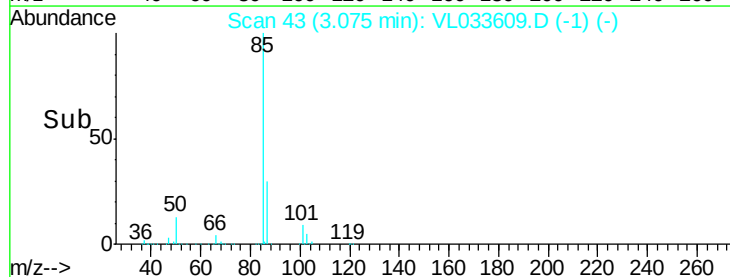
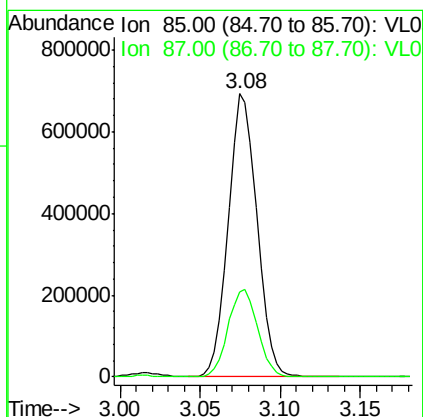
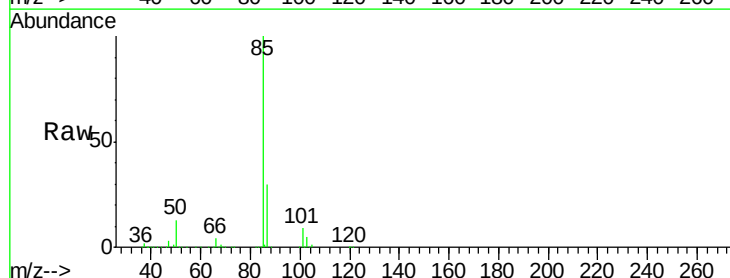
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

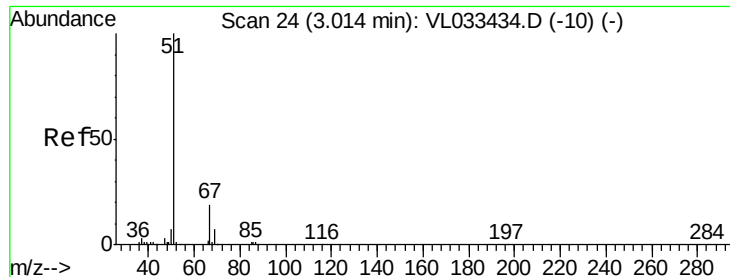
Tot Ion: 49 Resp: 798705  
Ion Ratio Lower Upper  
49 100  
128 49.5 24.0 72.0  
130 64.1 31.2 93.6



#2  
Dichlorodifluoromethane  
Concen: 7.257 ppbv  
RT: 3.08 min Scan# 43  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 85 Resp: 845331  
Ion Ratio Lower Upper  
85 100  
87 30.2 26.7 40.1





#3

Chlorodifluoromethane

Concen: 8.791 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

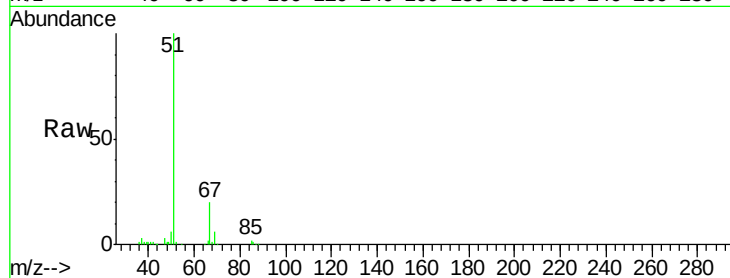
VSTDCCC010EC

Tot Ion: 51 Resp: 808314

Ion Ratio Lower Upper

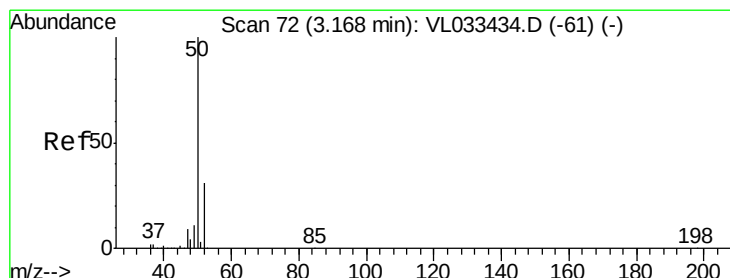
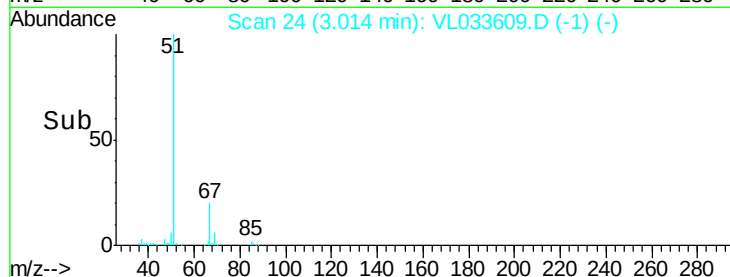
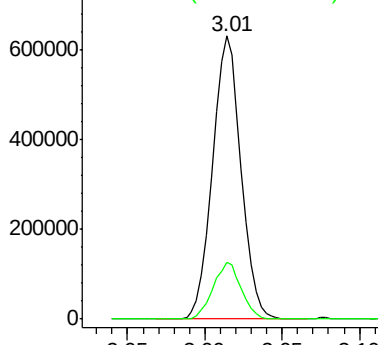
51 100

67 19.8 15.7 23.5



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 8.826 ppbv

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033609.D

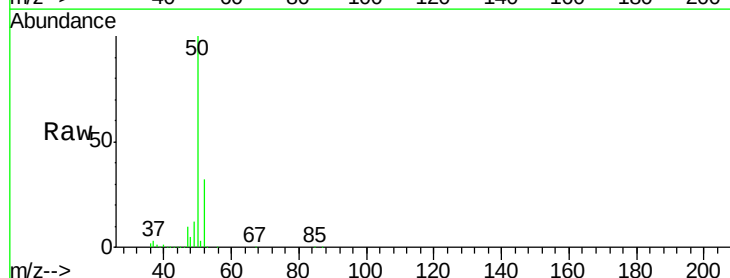
Acq: 17 Apr 2019 19:27

Tgt Ion: 50 Resp: 429452

Ion Ratio Lower Upper

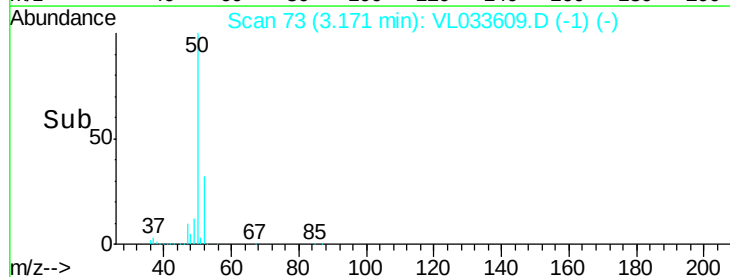
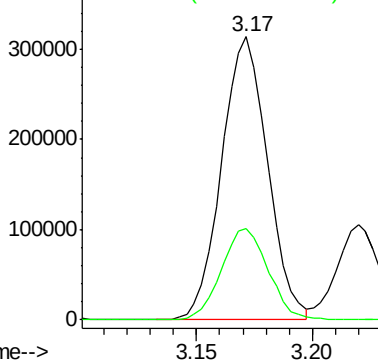
50 100

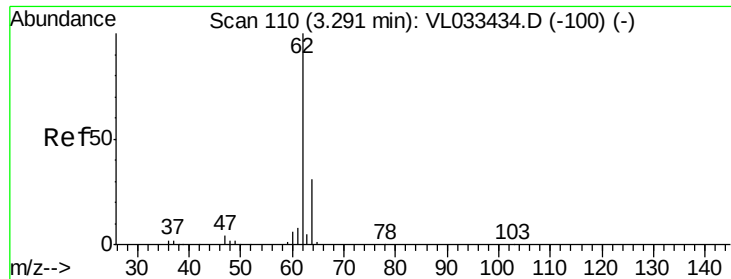
52 32.4 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 9.224 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

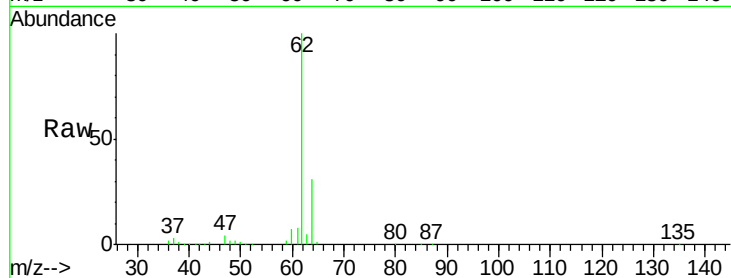
VSTDCCC010EC

Tot Ion: 62 Resp: 440986

Ion Ratio Lower Upper

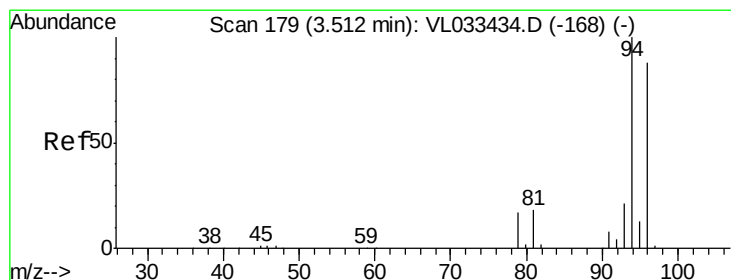
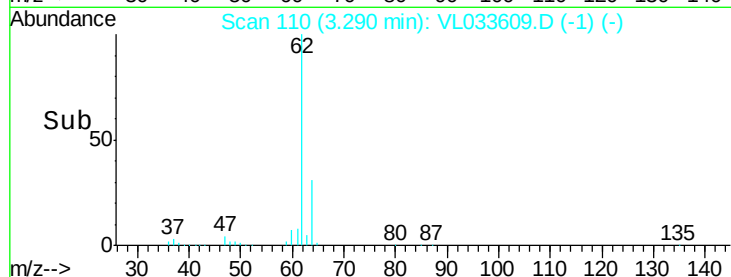
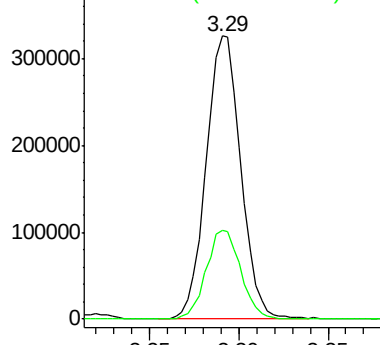
62 100

64 31.4 24.9 37.3



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 9.104 ppbv

RT: 3.51 min Scan# 179

Delta R.T. -0.00 min

Lab File: VL033609.D

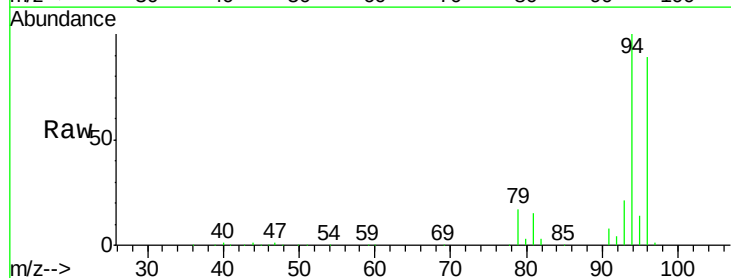
Acq: 17 Apr 2019 19:27

Tgt Ion: 94 Resp: 279699

Ion Ratio Lower Upper

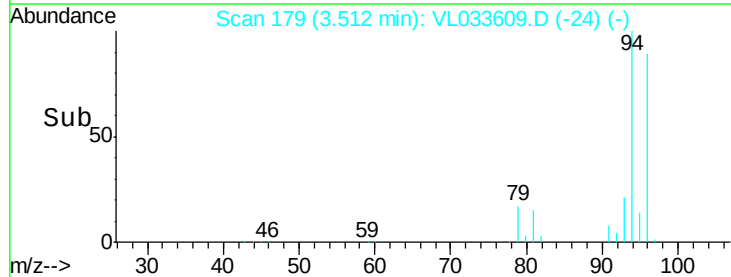
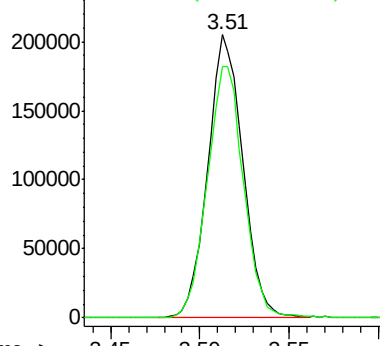
94 100

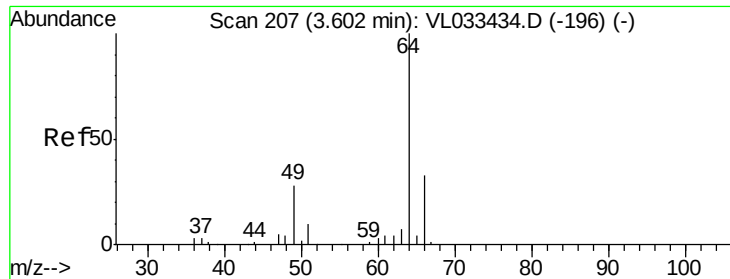
96 88.7 70.2 105.2



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 9.037 ppbv

RT: 3.60 min Scan# 207

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

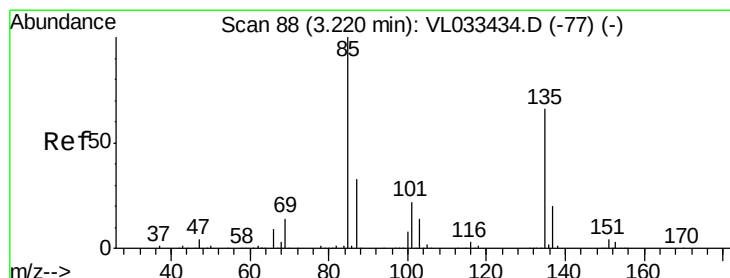
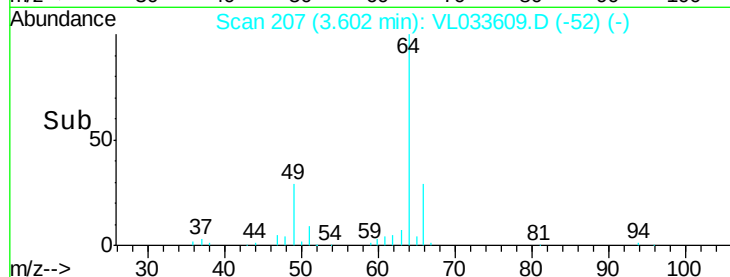
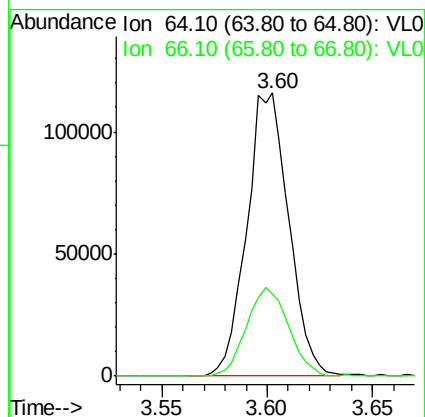
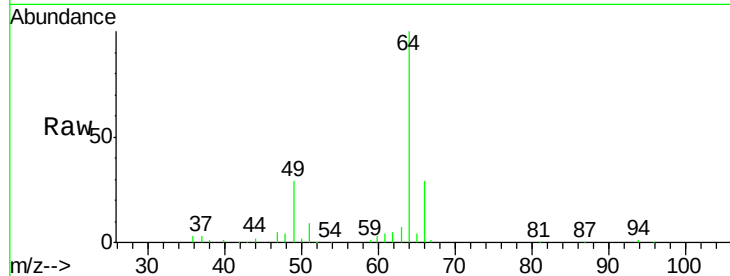
VSTDCCC010EC

Tot Ion: 64 Resp: 160792

Ion Ratio Lower Upper

64 100

66 29.2 26.7 40.1



#8

Dichlorotetrafluoroethane

Concen: 8.914 ppbv

RT: 3.22 min Scan# 88

Delta R.T. -0.00 min

Lab File: VL033609.D

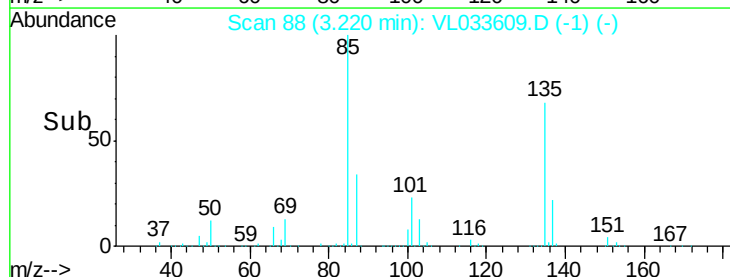
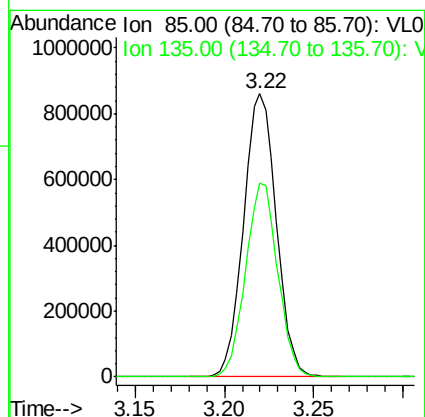
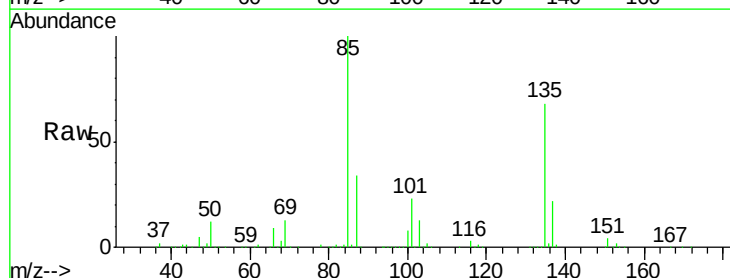
Acq: 17 Apr 2019 19:27

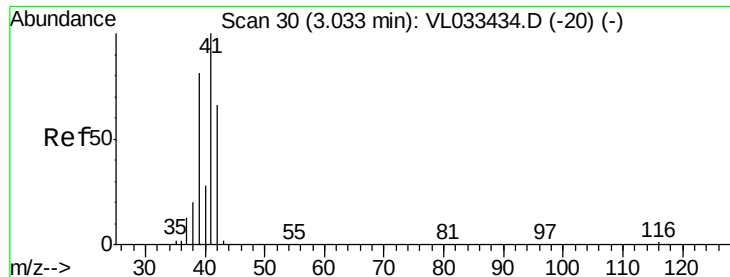
Tgt Ion: 85 Resp: 1106493

Ion Ratio Lower Upper

85 100

135 67.6 54.0 81.0





#9

Propene

Concen: 8.802 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

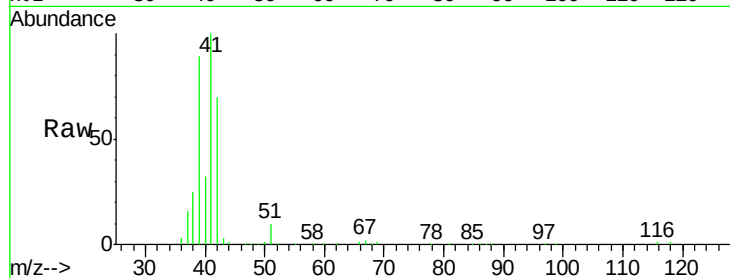
VSTDCCC010EC

Tot Ion: 41 Resp: 339888

Ion Ratio Lower Upper

41 100

42 69.1 53.9 80.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.04

250000

200000

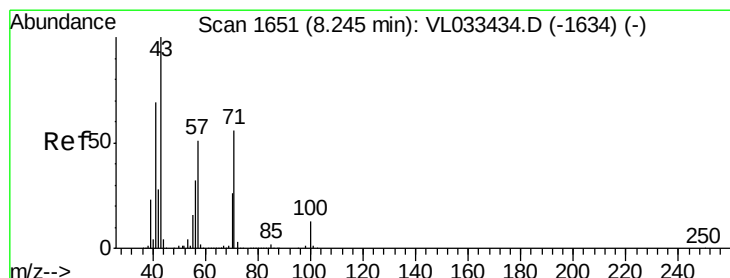
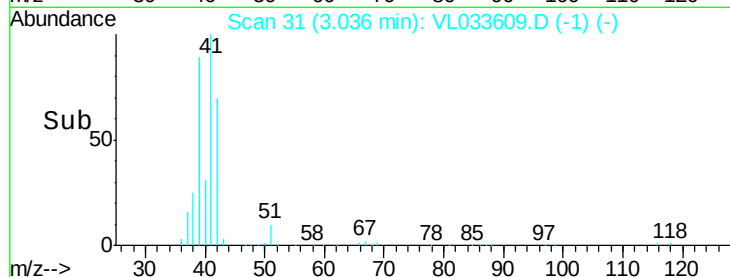
150000

100000

50000

0

Time-->



#10

Heptane

Concen: 10.024 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. 0.00 min

Lab File: VL033609.D

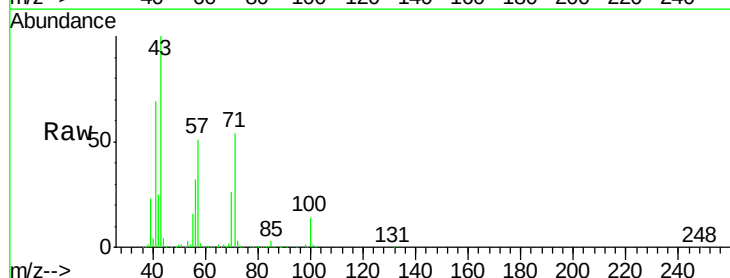
Acq: 17 Apr 2019 19:27

Tgt Ion: 43 Resp: 1034730

Ion Ratio Lower Upper

43 100

57 51.3 40.6 60.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.25

600000

500000

400000

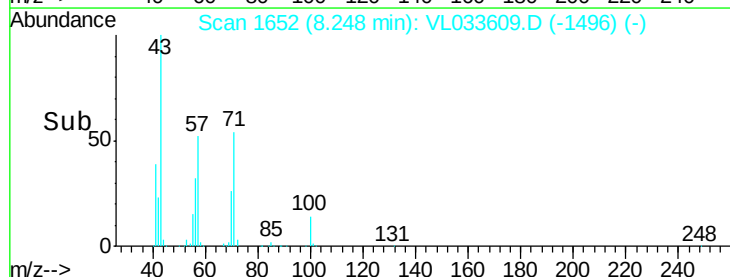
300000

200000

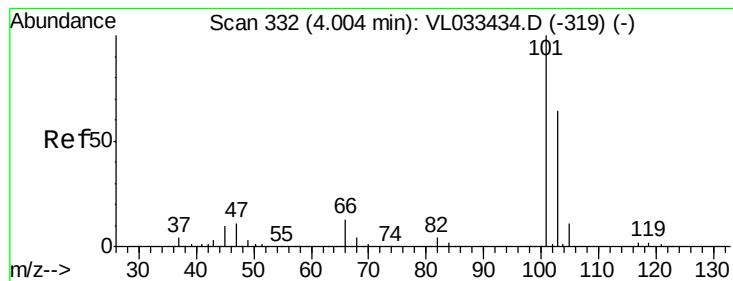
100000

0

Time-->







#11

Trichlorofluoromethane

Concen: 9.151 ppbv

RT: 4.00 min Scan# 332

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

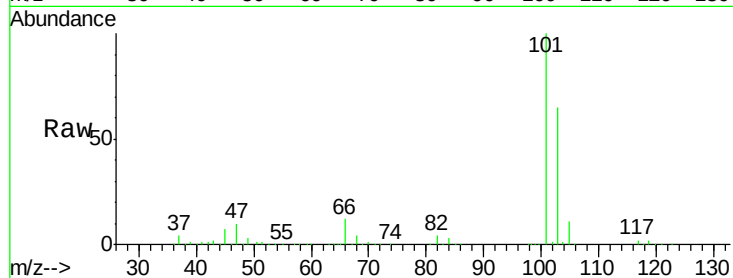
VSTDCCC010EC

Tot Ion:101 Resp: 1313693

Ion Ratio Lower Upper

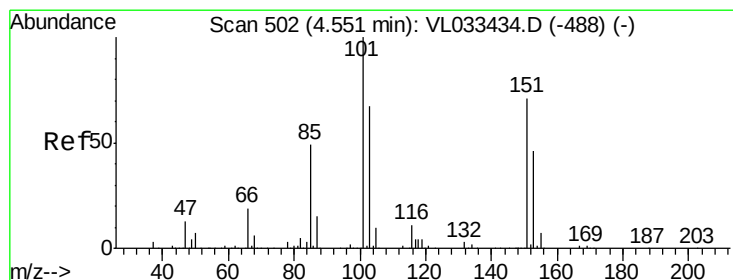
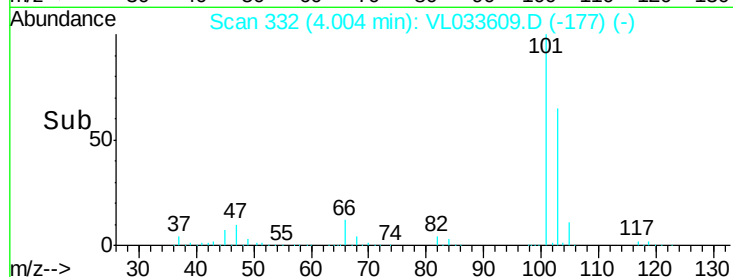
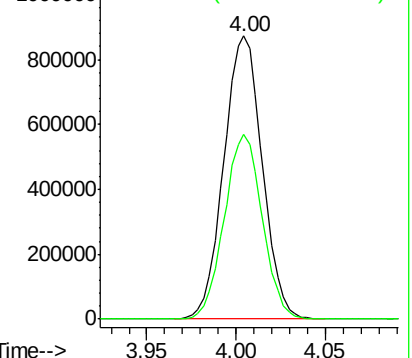
101 100

103 65.3 51.3 76.9



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: 9.314 ppbv

RT: 4.55 min Scan# 502

Delta R.T. -0.00 min

Lab File: VL033609.D

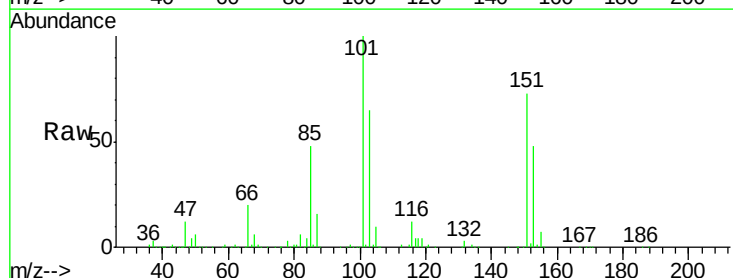
Acq: 17 Apr 2019 19:27

Tgt Ion:101 Resp: 898103

Ion Ratio Lower Upper

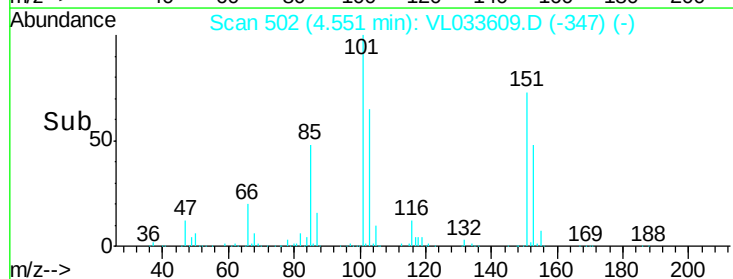
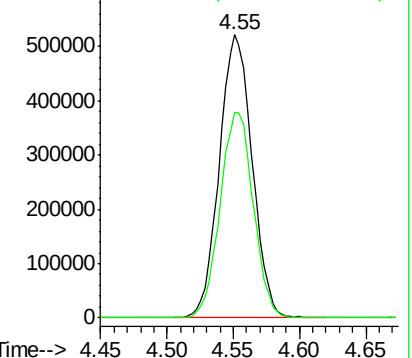
101 100

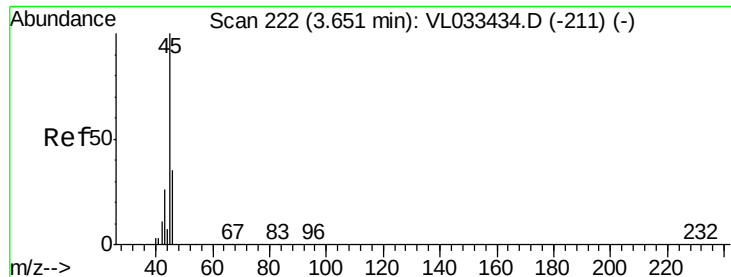
151 73.3 57.7 86.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

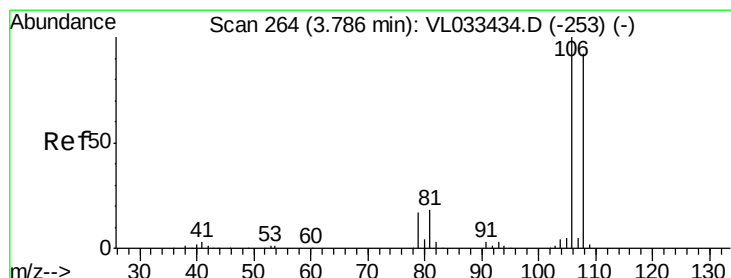
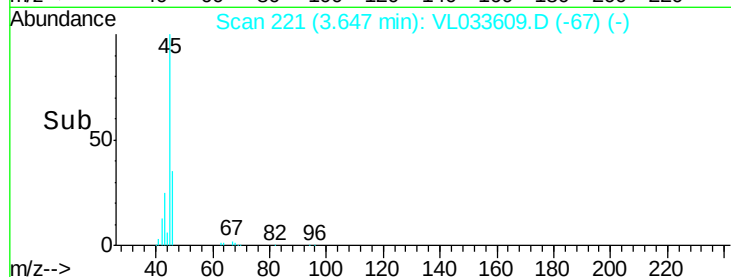
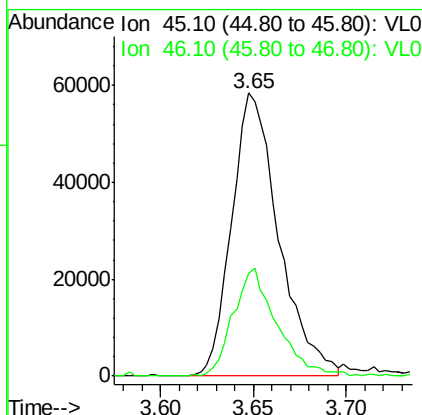
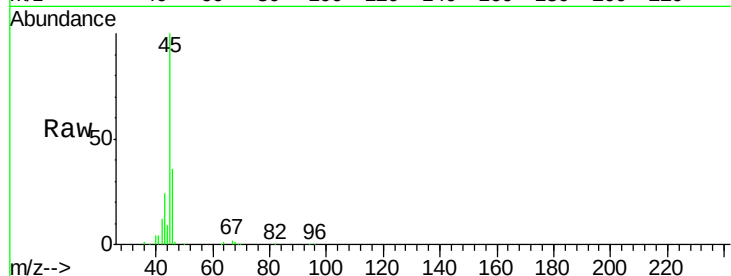




#13  
 Ethanol  
 Concen: 10.344 ppbv  
 RT: 3.65 min Scan# 221  
 Delta R.T. -0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

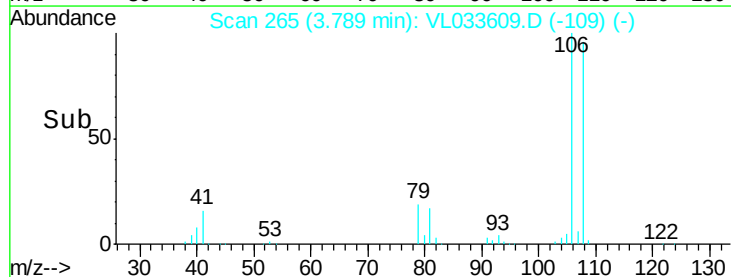
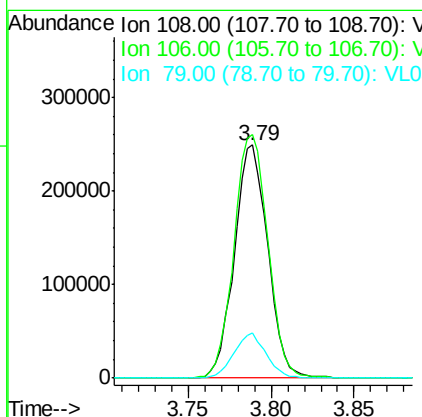
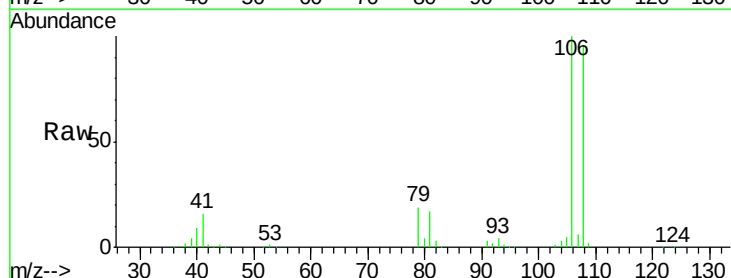
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

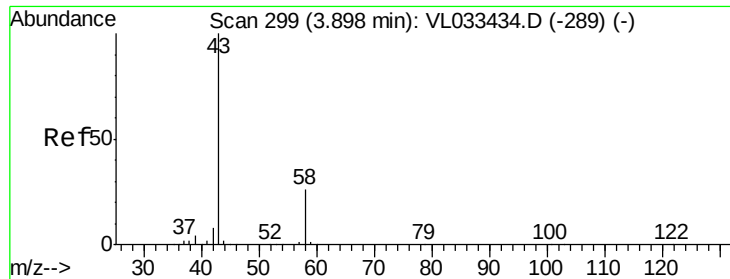
Tot Ion: 45 Resp: 103362  
 Ion Ratio Lower Upper  
 45 100  
 46 35.7 25.4 101.8



#14  
 Bromoethene  
 Concen: 9.083 ppbv  
 RT: 3.79 min Scan# 265  
 Delta R.T. 0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

Tgt Ion: 108 Resp: 349335  
 Ion Ratio Lower Upper  
 108 100  
 106 106.7 86.4 129.6  
 79 18.8 15.8 23.8





#15

Acetone

Concen: 8.649 ppbv

RT: 3.90 min Scan# 300

Delta R.T. 0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

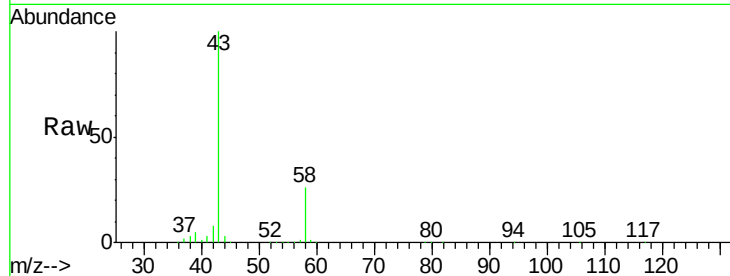
VSTDCCC010EC

Tot Ion: 43 Resp: 830580

Ion Ratio Lower Upper

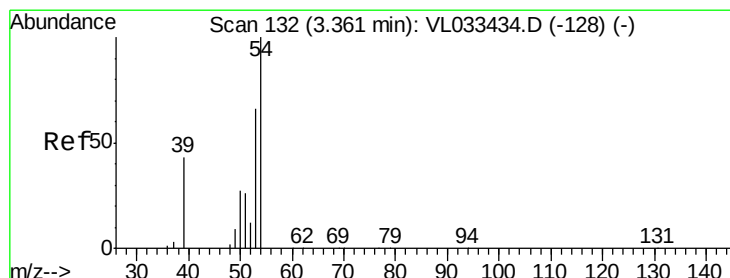
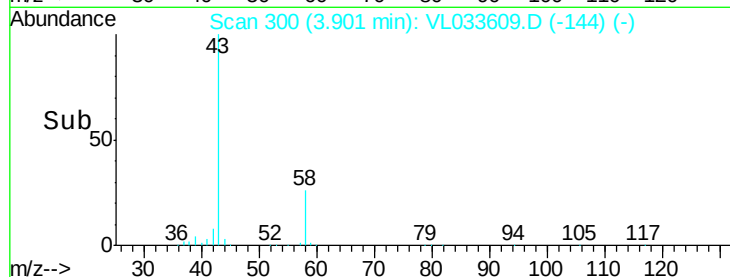
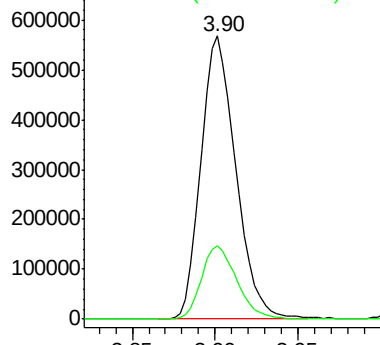
43 100

58 26.3 20.5 30.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 9.361 ppbv

RT: 3.36 min Scan# 132

Delta R.T. -0.00 min

Lab File: VL033609.D

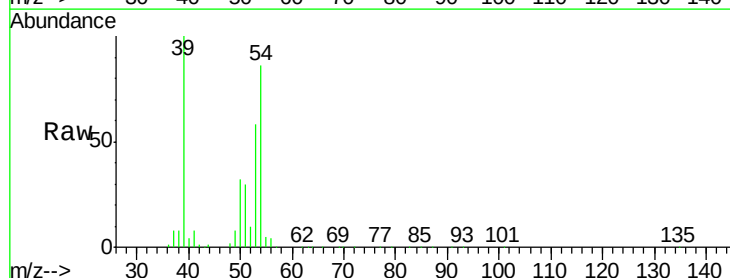
Acq: 17 Apr 2019 19:27

Tgt Ion: 39 Resp: 356572

Ion Ratio Lower Upper

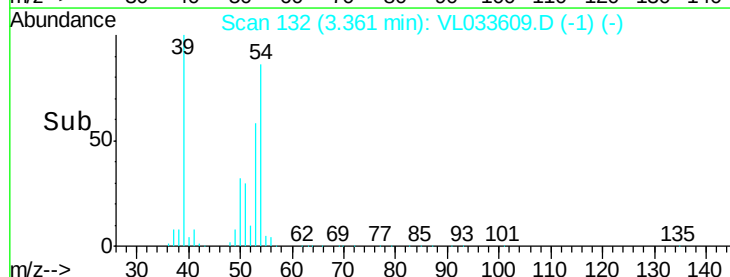
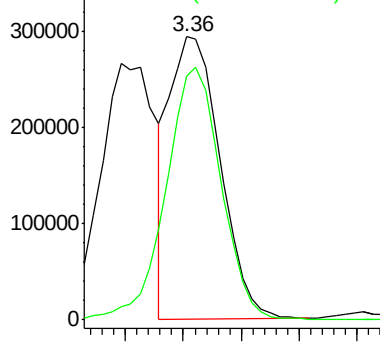
39 100

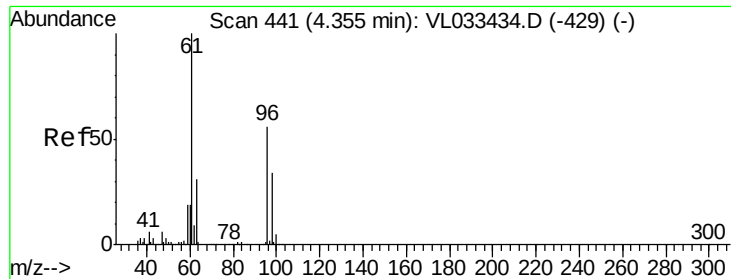
54 98.5 69.4 104.2



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0



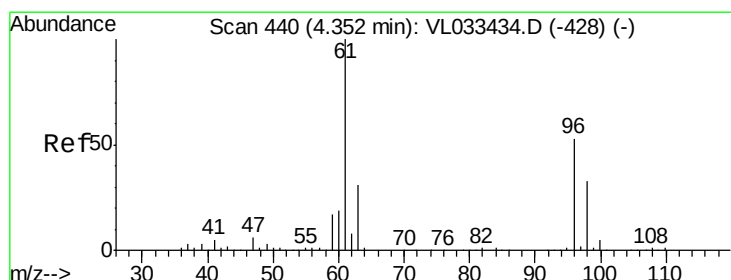
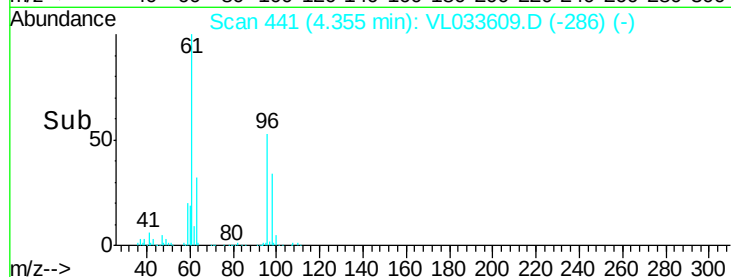
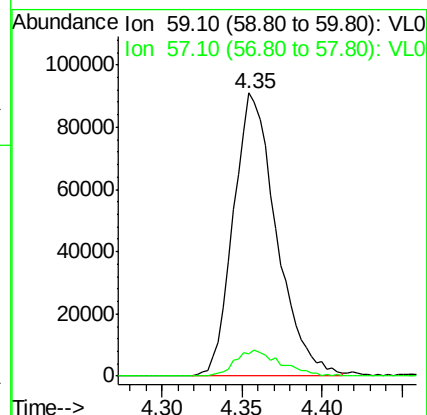
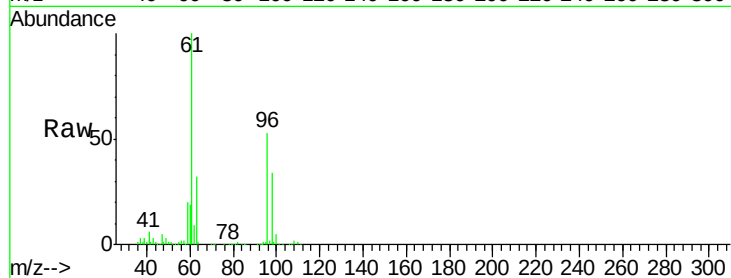


#17

tert-Butyl alcohol  
Concen: 9.459 ppbv  
RT: 4.35 min Scan# 441  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

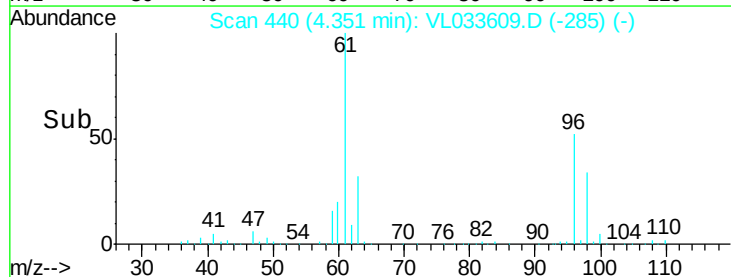
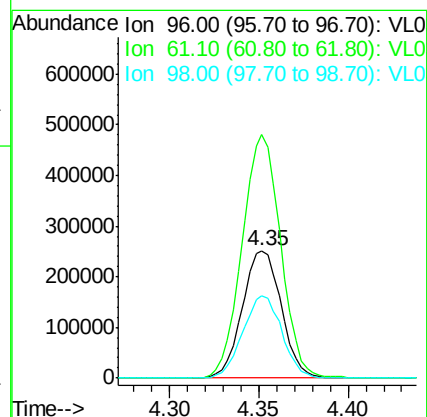
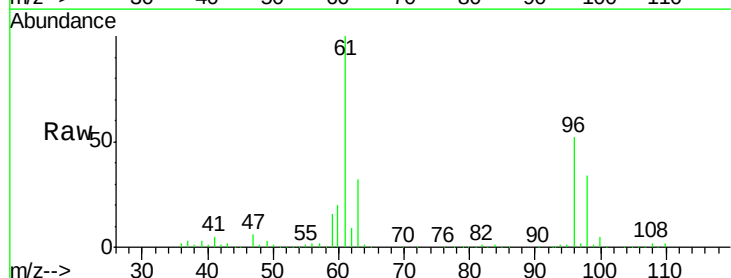
Tot Ion: 59 Resp: 167019  
Ion Ratio Lower Upper  
59 100  
57 9.7 7.8 11.8

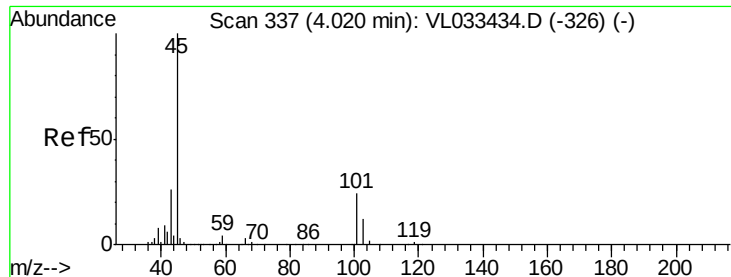


#18

1,1-Dichloroethene  
Concen: 9.219 ppbv  
RT: 4.35 min Scan# 440  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 96 Resp: 381848  
Ion Ratio Lower Upper  
96 100  
61 191.2 149.8 224.6  
98 64.6 48.7 73.1





#19

Isopropyl Alcohol

Concen: 9.884 ppbv

RT: 4.02 min Scan# 337

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

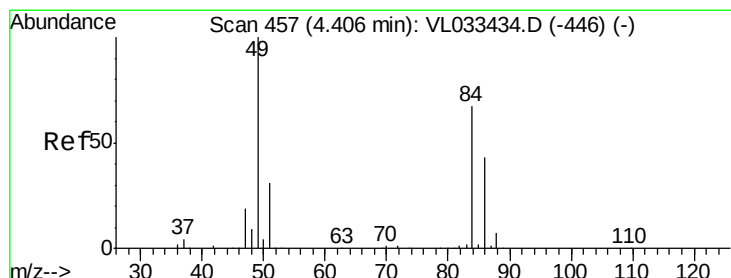
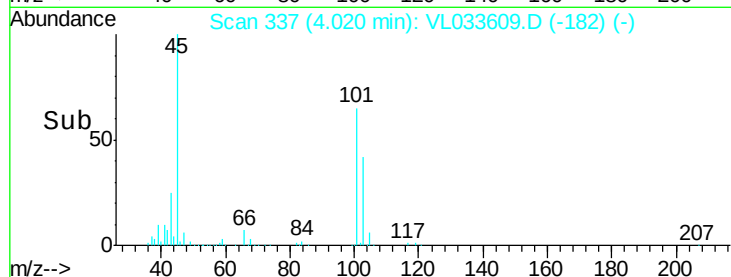
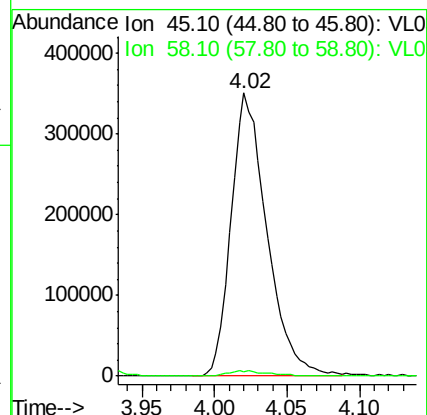
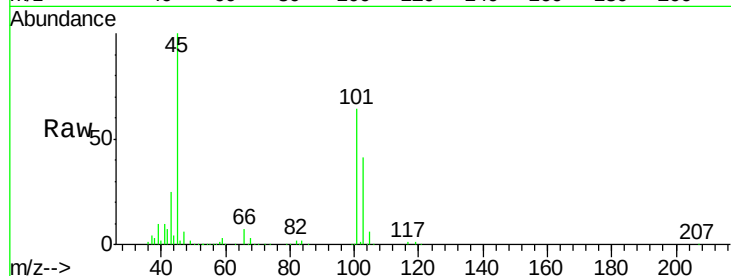
VSTDCCC010EC

Tot Ion: 45 Resp: 600379

Ion Ratio Lower Upper

45 100

58 2.7 1.4 2.2#



#20

Methylene Chloride

Concen: 8.709 ppbv

RT: 4.41 min Scan# 458

Delta R.T. 0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Tgt Ion: 84 Resp: 355048

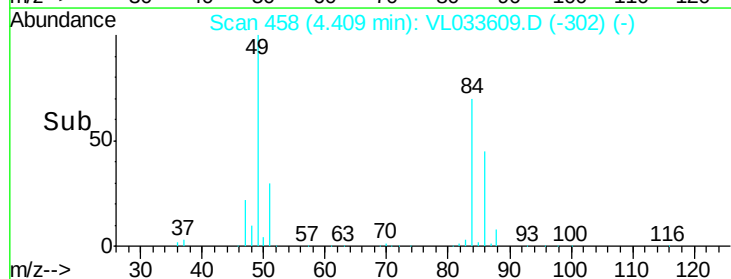
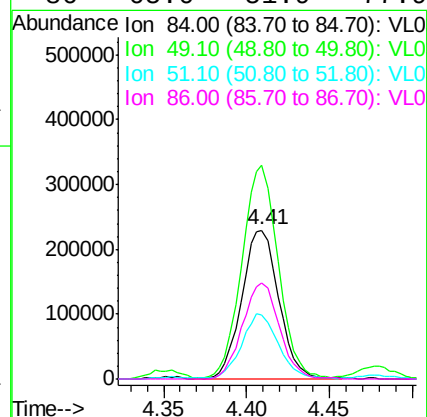
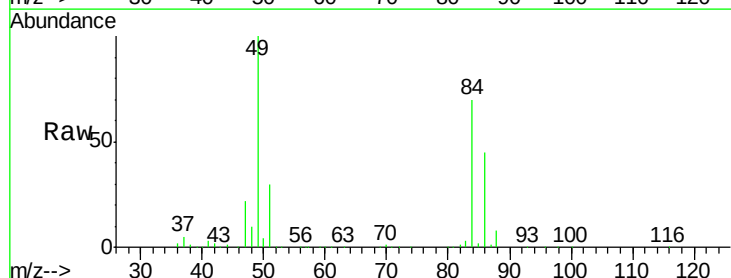
Ion Ratio Lower Upper

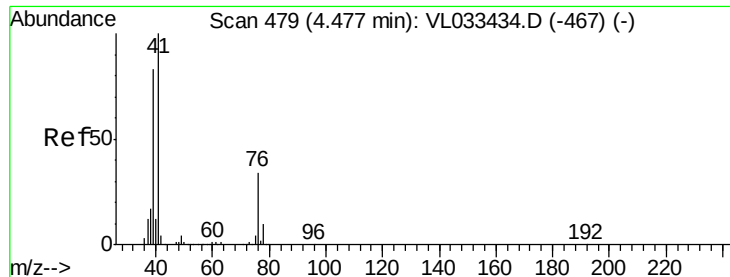
84 100

49 142.5 120.0 180.0

51 42.5 36.7 55.1

86 65.0 51.9 77.9





#21

Allvl Chloride

Concen: 9.447 ppbv

RT: 4.48 min Scan# 479

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

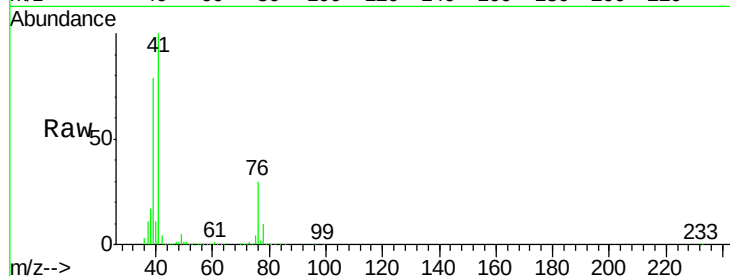
Tot Ion: 41 Resp: 573522

Ion Ratio Lower Upper

41 100

76 32.2 25.4 38.2

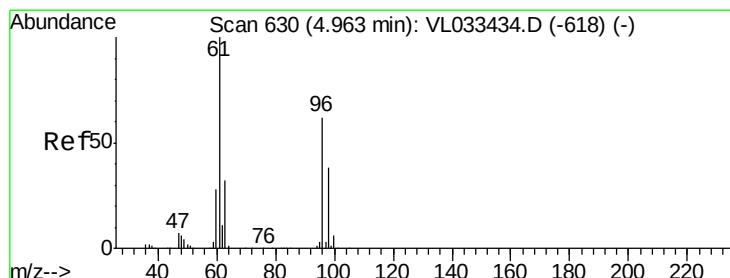
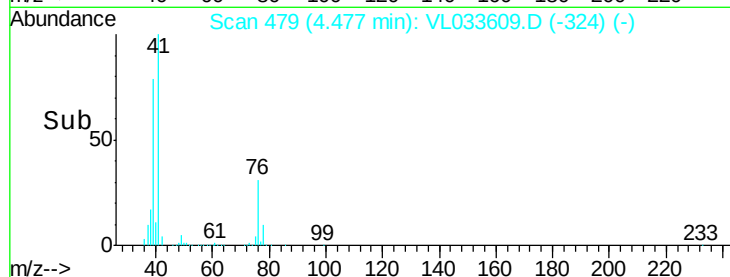
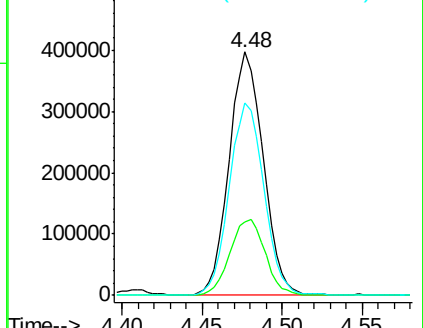
39 81.2 65.3 97.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0



#22

trans-1,2-Dichloroethene

Concen: 9.496 ppbv

RT: 4.96 min Scan# 630

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

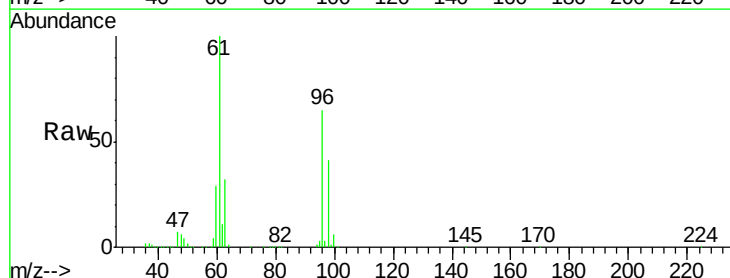
Tgt Ion: 96 Resp: 410339

Ion Ratio Lower Upper

96 100

61 153.1 128.9 193.3

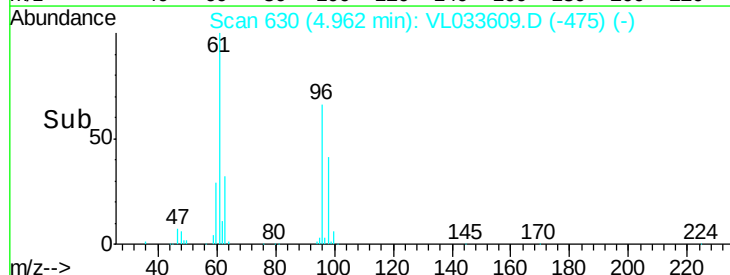
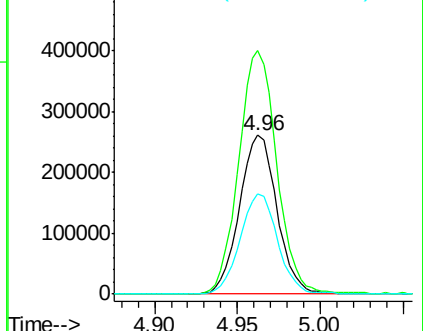
98 63.2 49.5 74.3

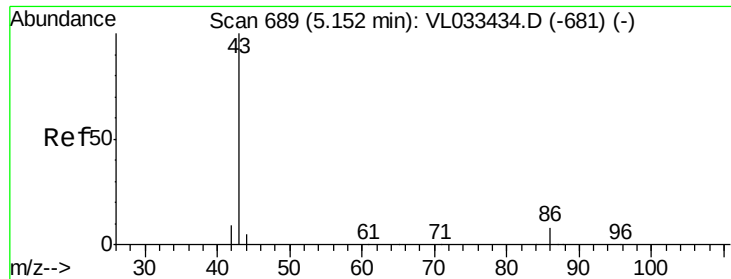


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#23

Vinyl Acetate

Concen: 9.358 ppbv

RT: 5.16 min Scan# 690

Delta R.T. 0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1279096

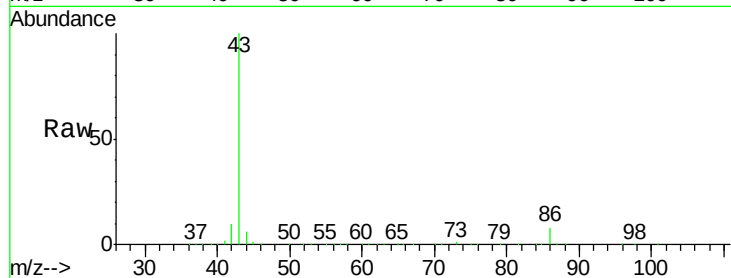
Ion Ratio Lower Upper

43 100

86 7.6 5.6 8.4

42 10.0 8.0 12.0

44 5.7 3.9 5.9

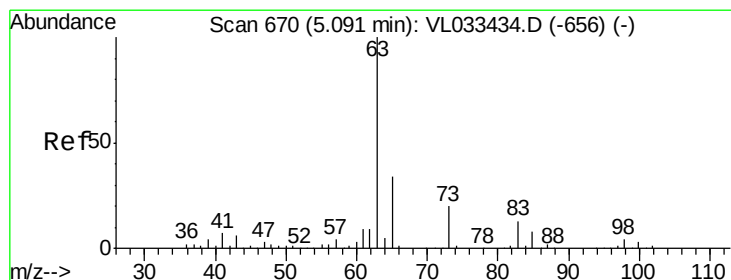
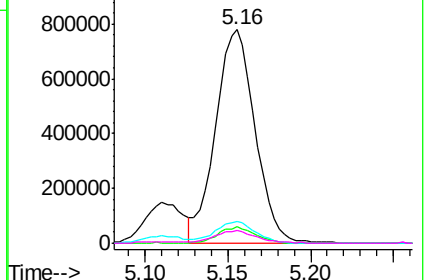
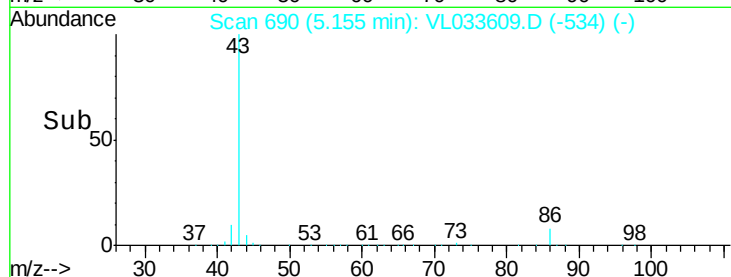


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 8.763 ppbv

RT: 5.09 min Scan# 670

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

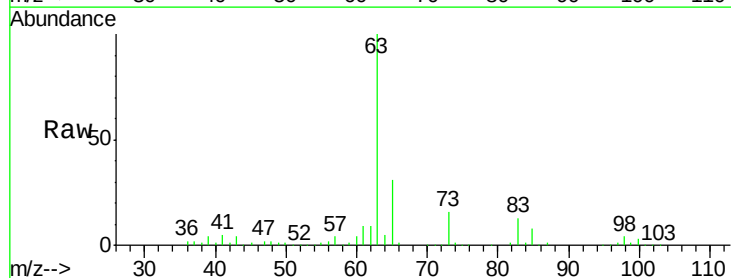
Tgt Ion: 63 Resp: 909836

Ion Ratio Lower Upper

63 100

98 3.6 2.2 6.6

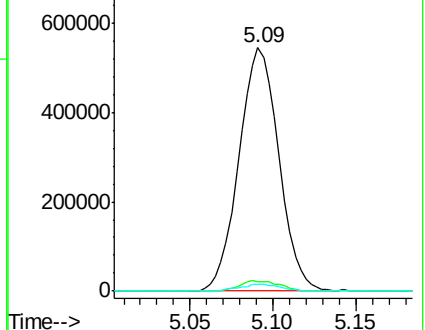
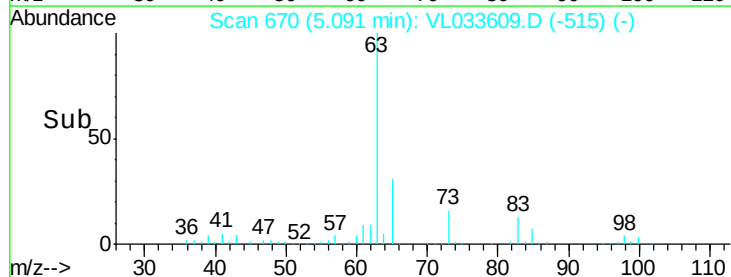
100 2.8 1.5 4.4

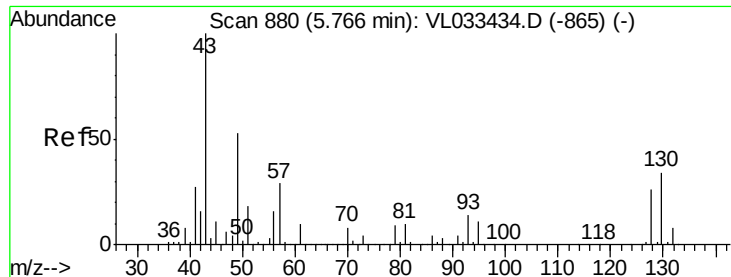


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0



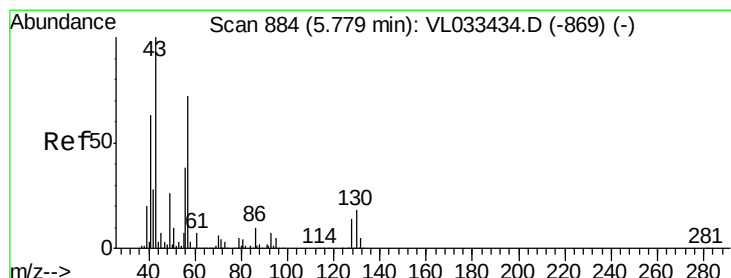
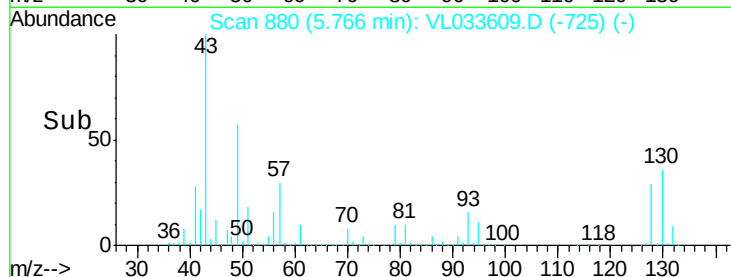
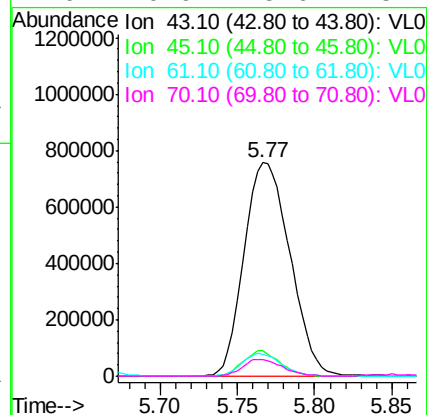
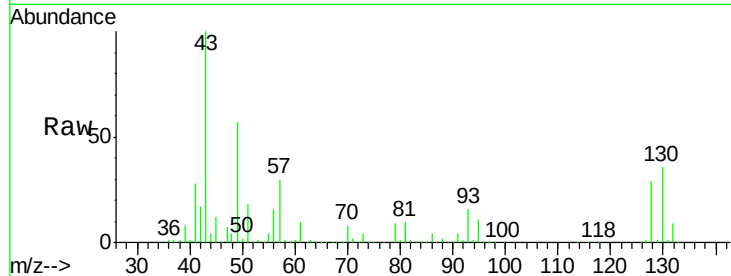


#25  
Ethyl Acetate  
Concen: 8.766 ppbv  
RT: 5.77 min Scan# 880  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 43 Resp: 1561901

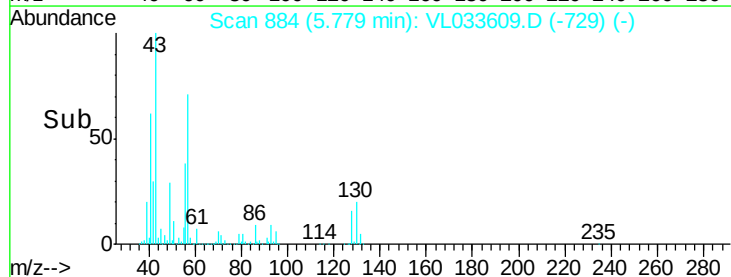
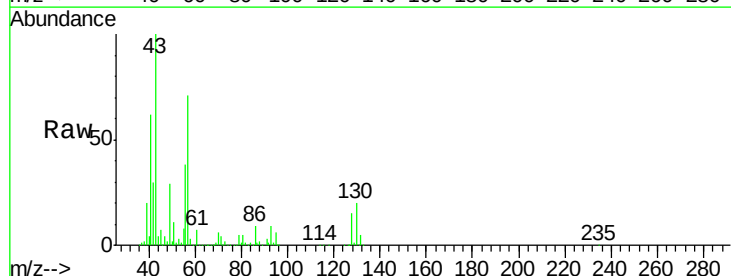
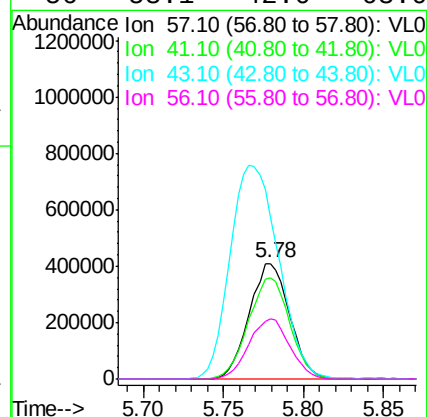
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 45  | 9.8   | 7.8   | 11.6  |
| 61  | 9.1   | 7.3   | 10.9  |
| 70  | 6.9   | 5.6   | 8.4   |



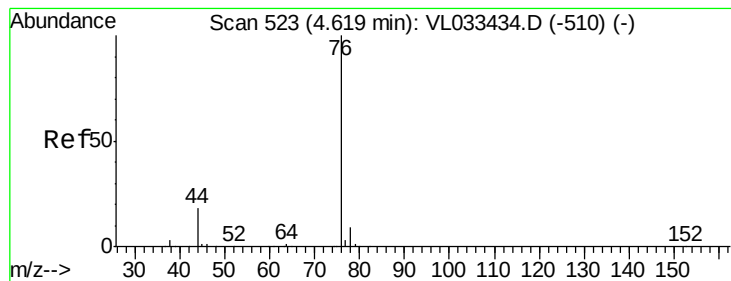
#26  
Hexane  
Concen: 8.897 ppbv  
RT: 5.78 min Scan# 884  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 57 Resp: 704900

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 57  | 100   |       |       |
| 41  | 89.9  | 70.7  | 106.1 |
| 43  | 223.5 | 182.6 | 274.0 |
| 56  | 53.1  | 42.0  | 63.0  |







#27

Carbon Disulfide

Concen: 10.523 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

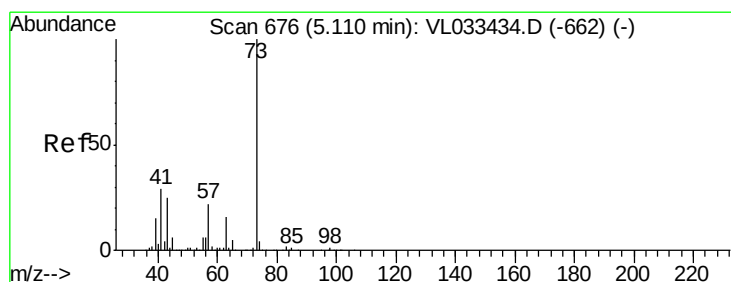
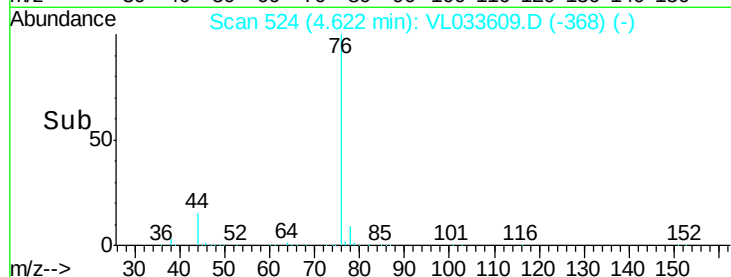
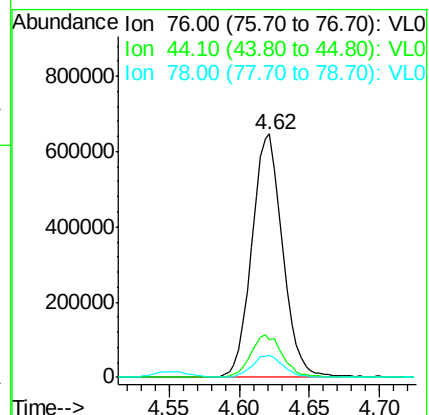
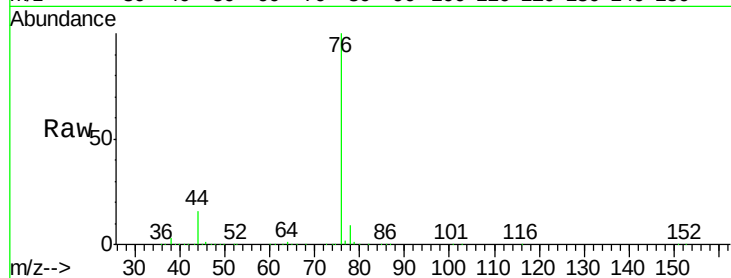
Tot Ion: 76 Resp: 991373

Ion Ratio Lower Upper

76 100

44 17.9 14.8 22.2

78 9.2 7.6 11.4



#28

Methyl tert-Butyl Ether

Concen: 8.976 ppbv

RT: 5.11 min Scan# 676

Delta R.T. -0.00 min

Lab File: VL033609.D

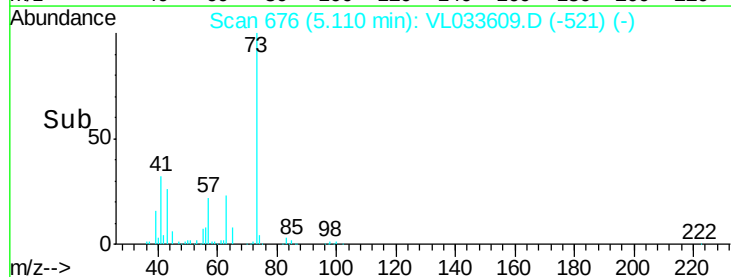
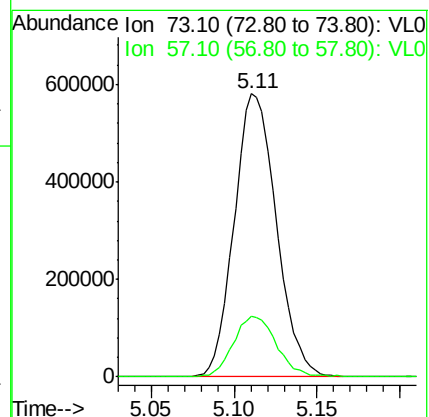
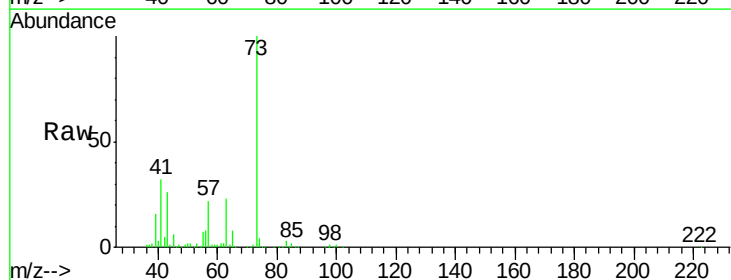
Acq: 17 Apr 2019 19:27

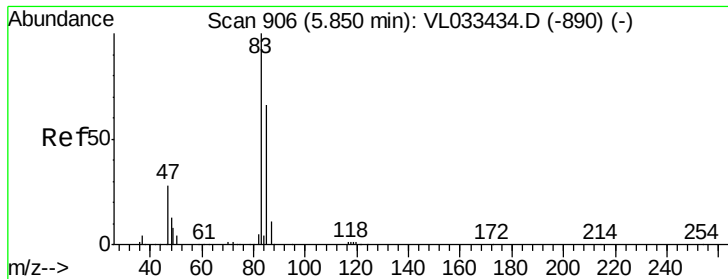
Tgt Ion: 73 Resp: 1024209

Ion Ratio Lower Upper

73 100

57 22.1 17.4 26.2

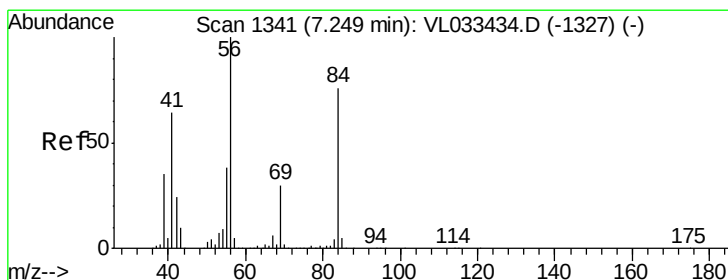
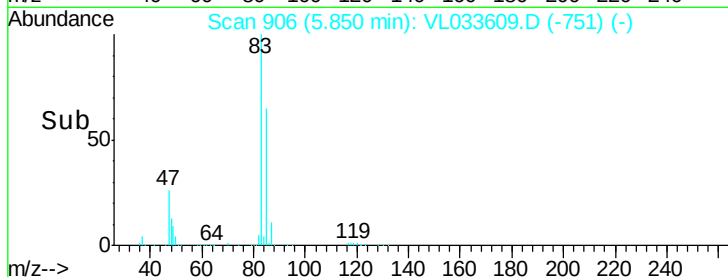
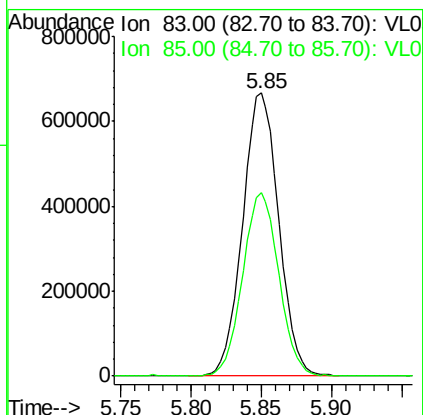
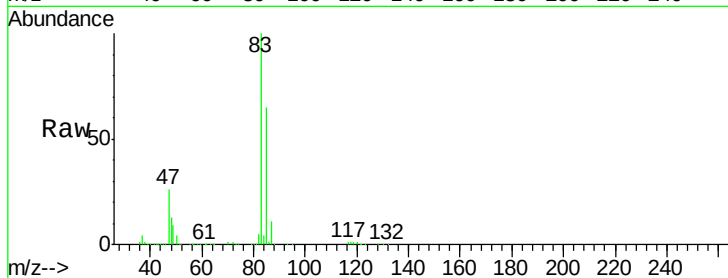




#29  
Chloroform  
Concen: 8.828 ppbv  
RT: 5.85 min Scan# 906  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

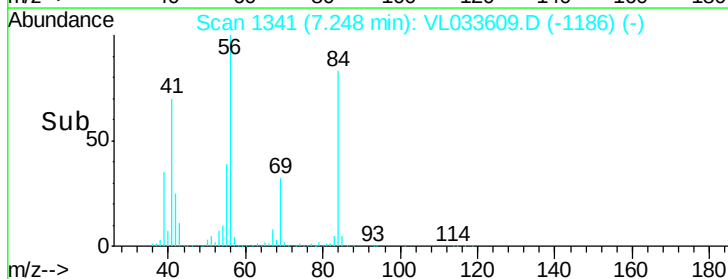
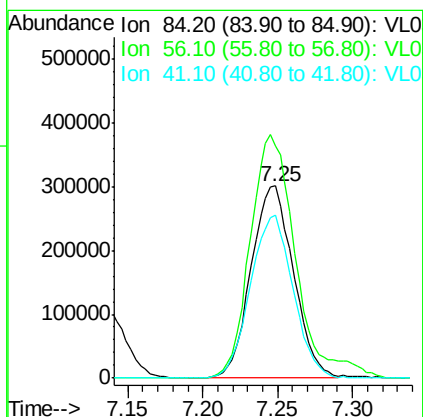
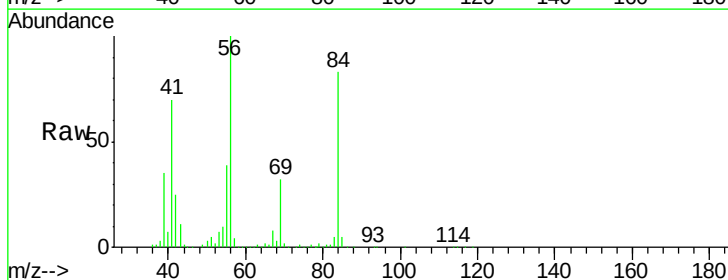
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

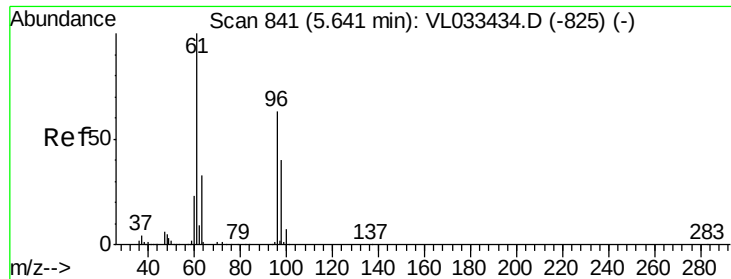
Tot Ion: 83 Resp: 1198958  
Ion Ratio Lower Upper  
83 100  
85 64.8 52.6 79.0



#30  
Cyclohexane  
Concen: 9.480 ppbv  
RT: 7.25 min Scan# 1341  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 84 Resp: 594137  
Ion Ratio Lower Upper  
84 100  
56 136.4 109.7 164.5  
41 85.5 68.2 102.2

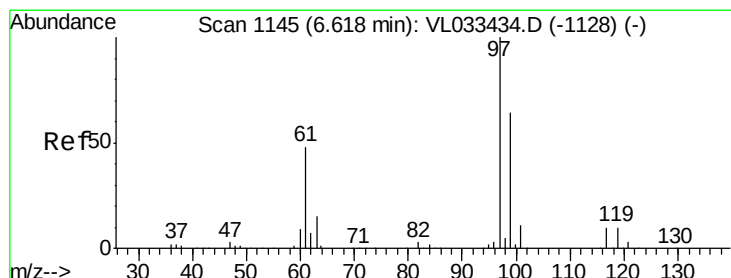
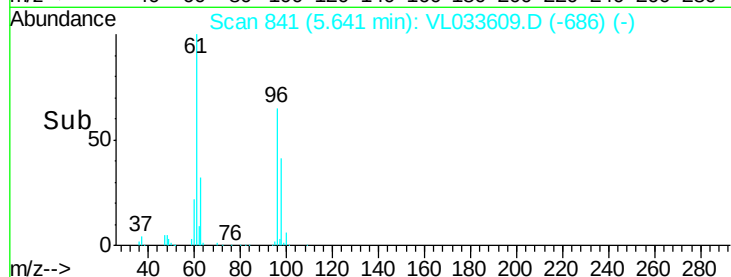
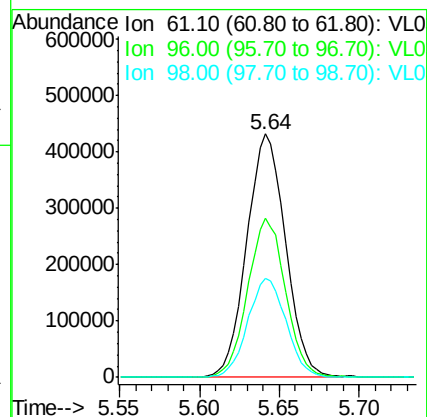
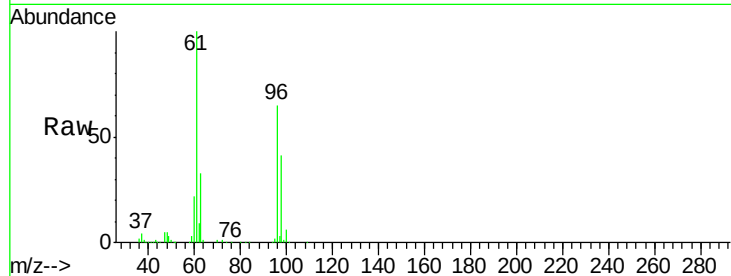




#31  
 cis-1,2-Dichloroethene  
 Concen: 9.101 ppbv  
 RT: 5.64 min Scan# 841  
 Delta R.T. -0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

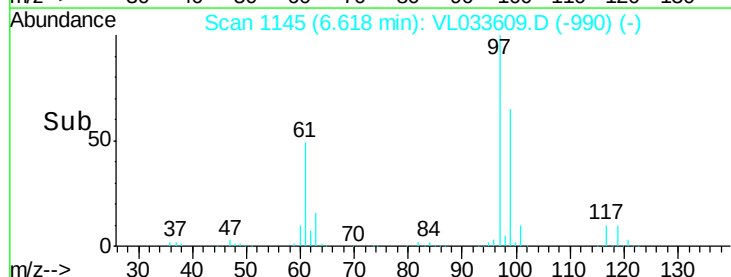
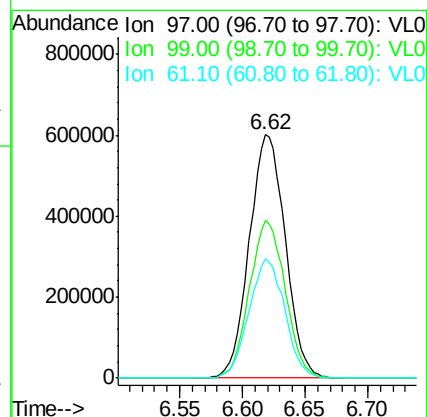
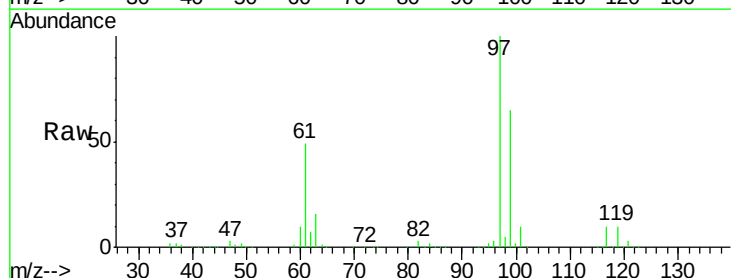
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

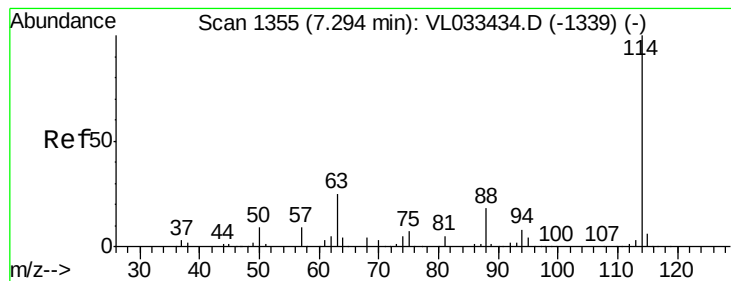
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 61    | Resp: | 716855 |
| Ion      | Ratio | Lower | Upper  |
| 61       | 100   |       |        |
| 96       | 65.2  | 50.6  | 76.0   |
| 98       | 40.9  | 32.2  | 48.2   |



#32  
 1,1,1-Trichloroethane  
 Concen: 9.292 ppbv  
 RT: 6.62 min Scan# 1145  
 Delta R.T. -0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 97    | Resp: | 1201670 |
| Ion      | Ratio | Lower | Upper   |
| 97       | 100   |       |         |
| 99       | 64.3  | 51.5  | 77.3    |
| 61       | 48.8  | 38.8  | 58.2    |





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1355

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

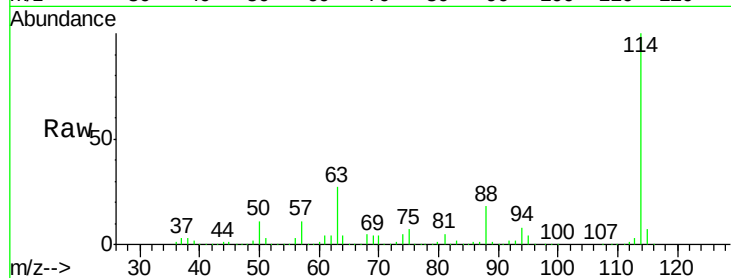
Tot Ion:114 Resp: 1920219

Ion Ratio Lower Upper

114 100

63 26.7 21.5 32.3

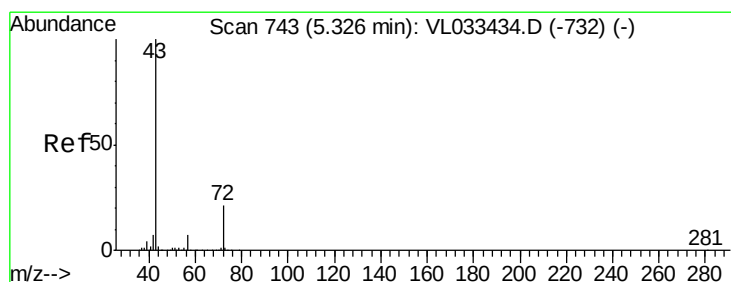
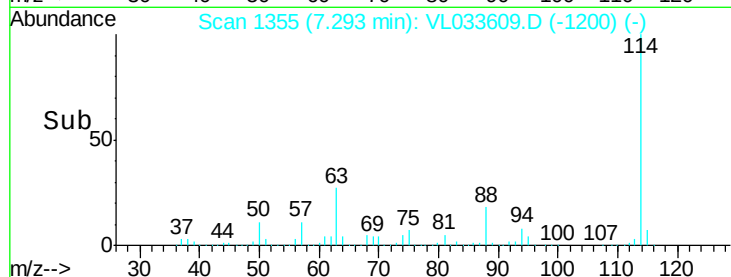
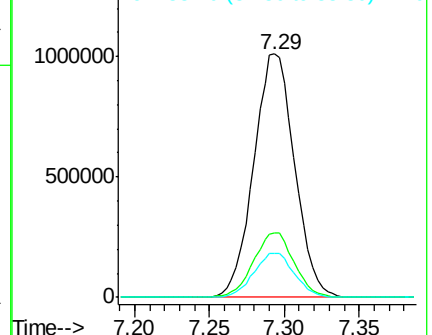
88 17.9 14.5 21.7



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 8.827 ppbv

RT: 5.33 min Scan# 744

Delta R.T. 0.00 min

Lab File: VL033609.D

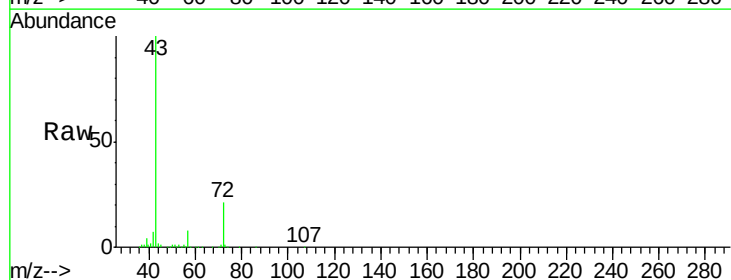
Acq: 17 Apr 2019 19:27

Tgt Ion: 43 Resp: 1018385

Ion Ratio Lower Upper

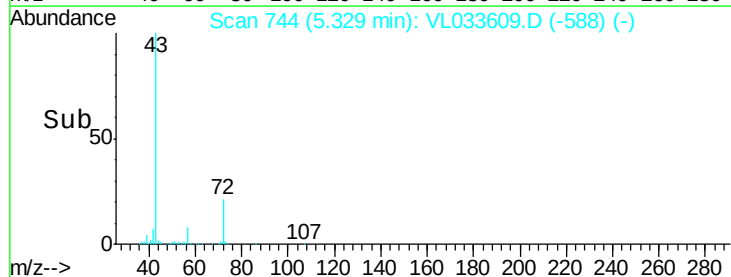
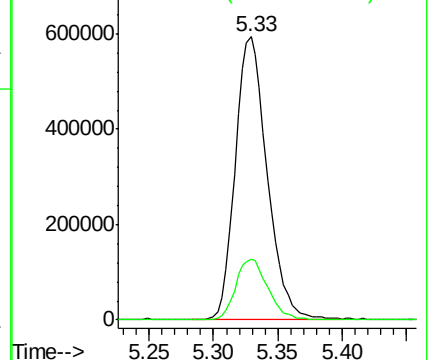
43 100

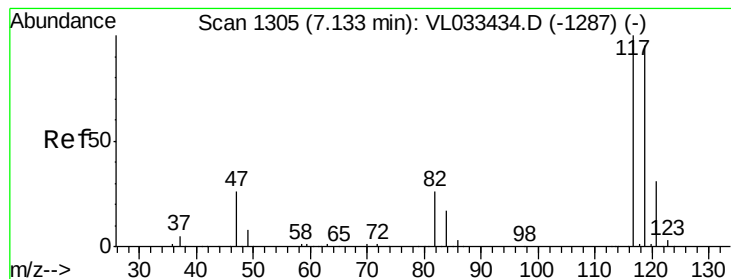
72 21.7 17.4 26.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 9.661 ppbv

RT: 7.14 min Scan# 1306

Delta R.T. 0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

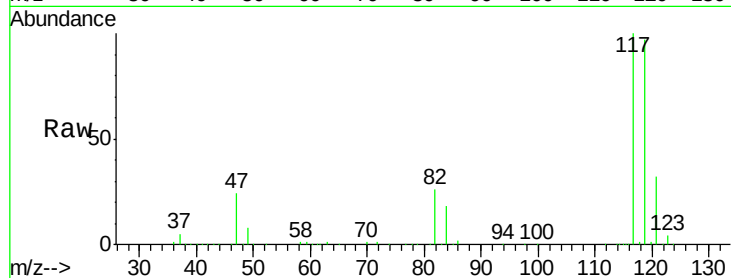
Tot Ion:117 Resp: 1313971

Ion Ratio Lower Upper

117 100

119 97.3 75.8 113.8

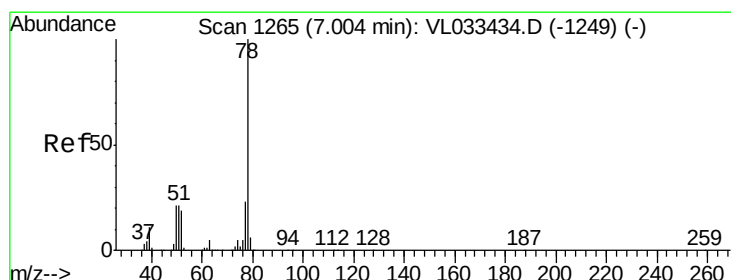
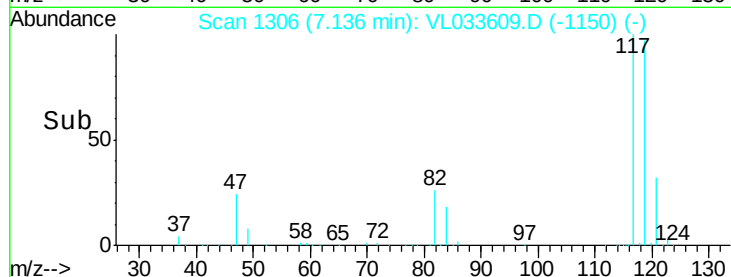
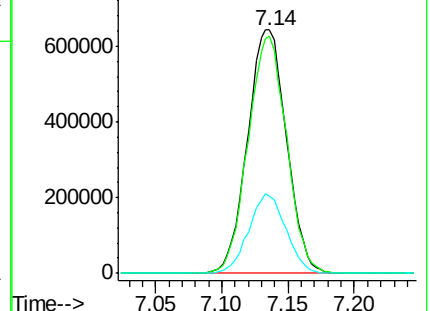
121 31.7 24.7 37.1



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: 9.050 ppbv

RT: 7.01 min Scan# 1266

Delta R.T. 0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

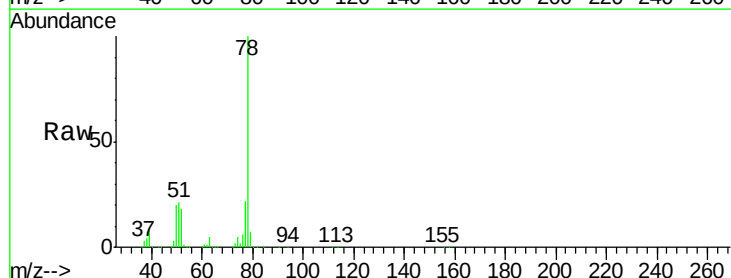
Tgt Ion: 78 Resp: 1458099

Ion Ratio Lower Upper

78 100

77 22.3 18.1 27.1

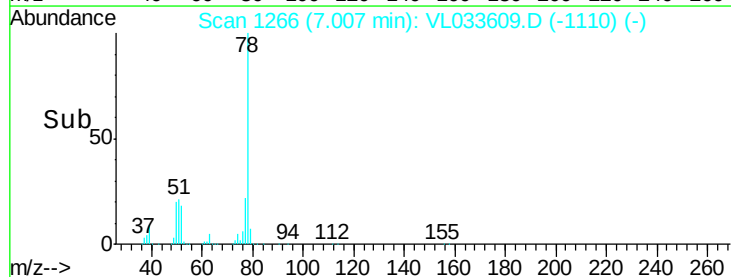
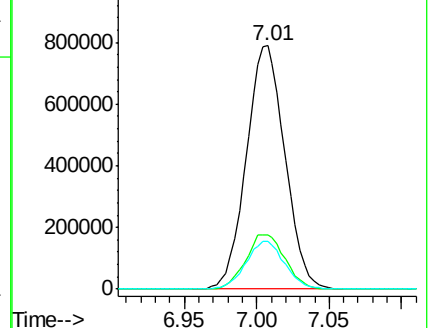
50 19.5 16.7 25.1

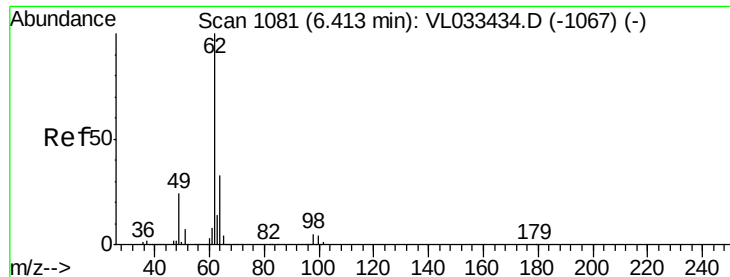


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

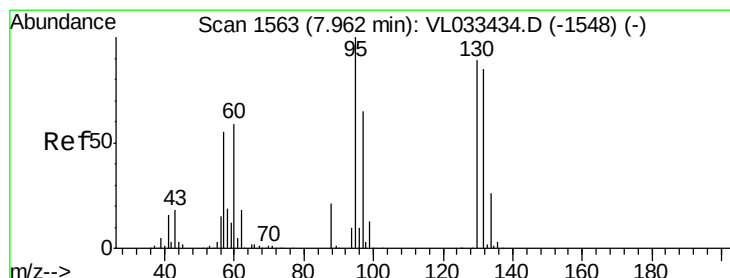
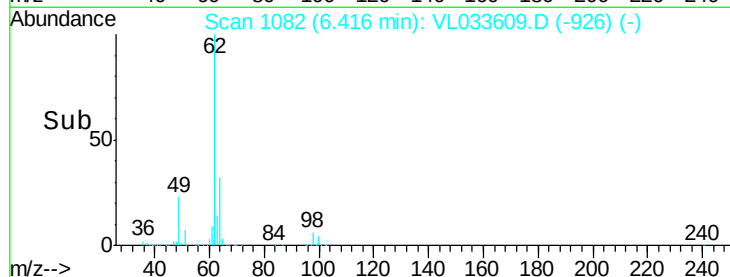
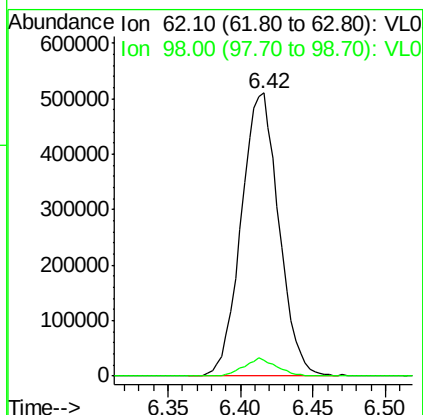
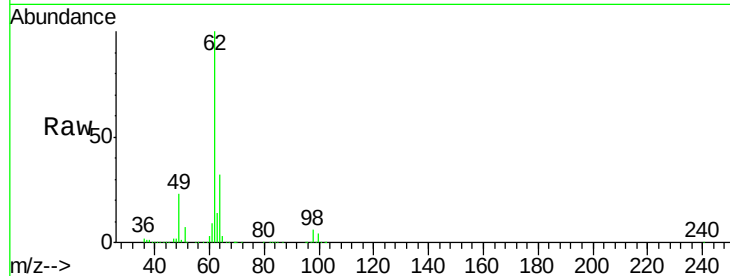




#37  
 1,2-Dichloroethane  
 Concen: 8.530 ppbv  
 RT: 6.42 min Scan# 1082  
 Delta R.T. 0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

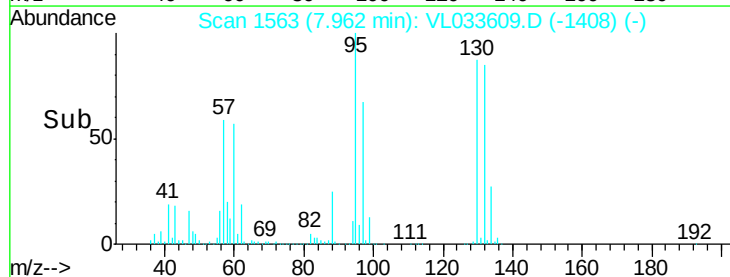
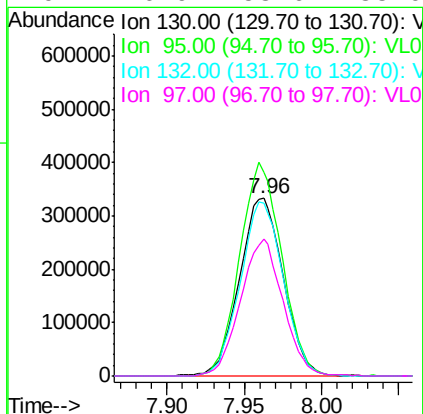
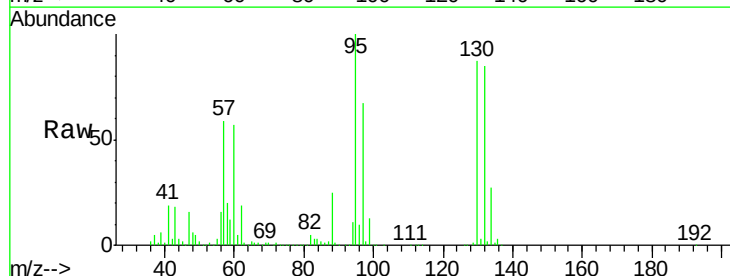
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

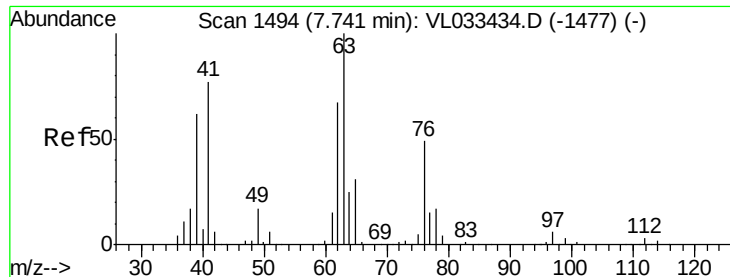
Tot Ion: 62 Resp: 921241  
 Ion Ratio Lower Upper  
 62 100  
 98 5.6 4.4 6.6



#38  
 Trichloroethene  
 Concen: 10.750 ppbv  
 RT: 7.96 min Scan# 1563  
 Delta R.T. -0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

Tgt Ion: 130 Resp: 651857  
 Ion Ratio Lower Upper  
 130 100  
 95 114.9 89.8 134.8  
 132 97.6 76.6 115.0  
 97 76.9 58.6 88.0





#39

1,2-Dichloropropane

Concen: 8.450 ppbv

RT: 7.74 min Scan# 1493

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

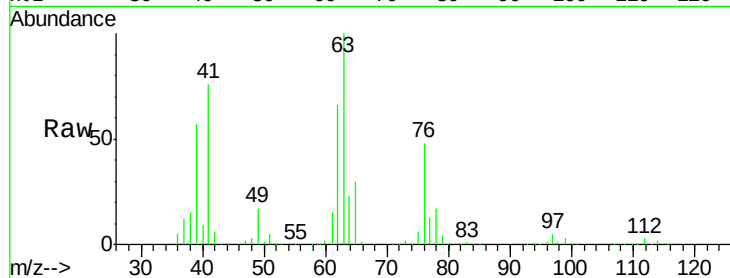
Tot Ion: 63 Resp: 533343

Ion Ratio Lower Upper

63 100

41 75.6 61.2 91.8

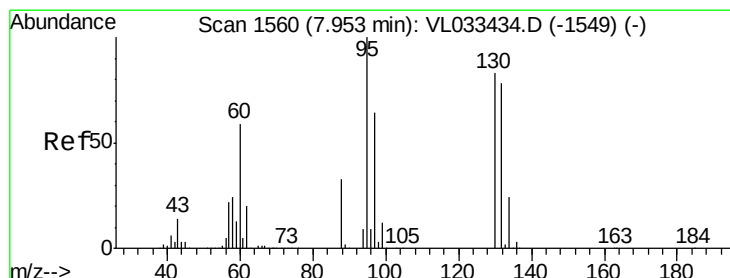
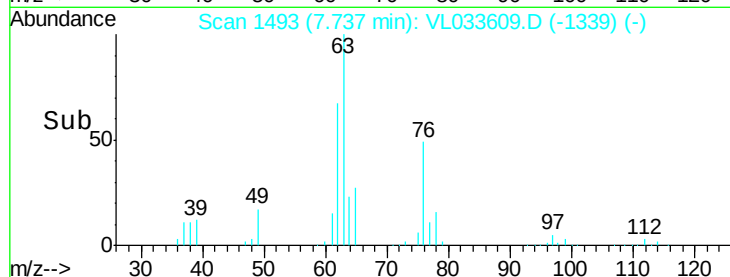
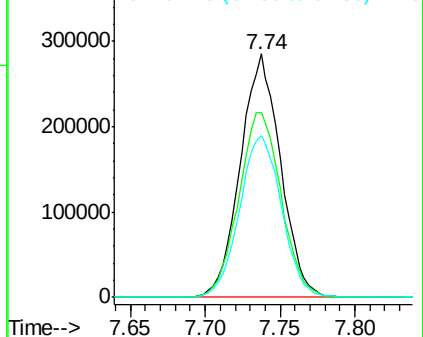
62 66.4 54.0 81.0



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: 10.590 ppbv

RT: 7.96 min Scan# 1561

Delta R.T. 0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Tgt Ion: 88 Resp: 238387

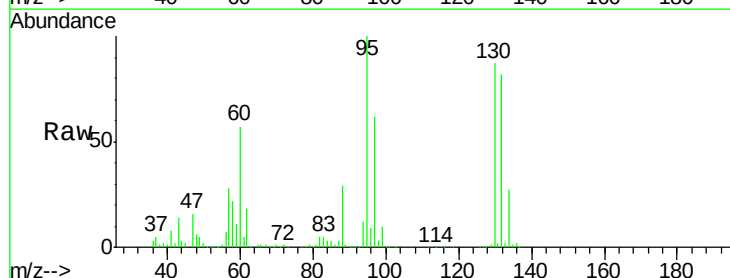
Ion Ratio Lower Upper

88 100

58 129.5 105.6 158.4

43 0.0 216.7 325.1#

57 0.0 975.0 1462.4#

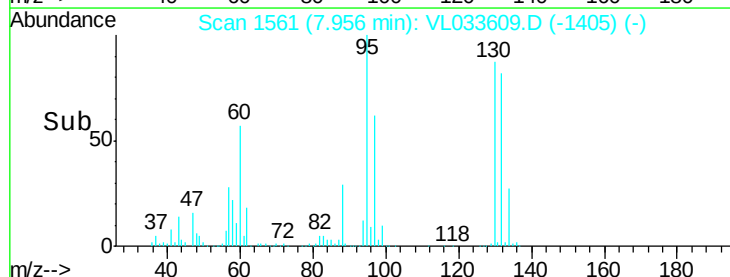
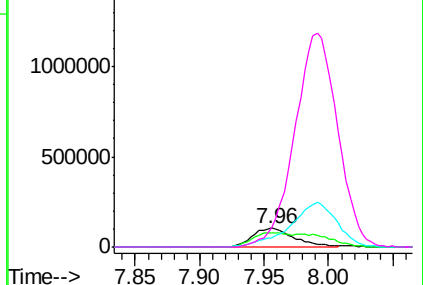


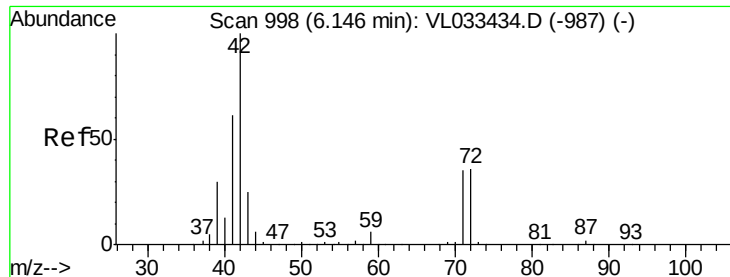
Abundance Ion 88.10 (87.80 to 88.80): VL0

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: 8.990 ppbv

RT: 6.15 min Scan# 998

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

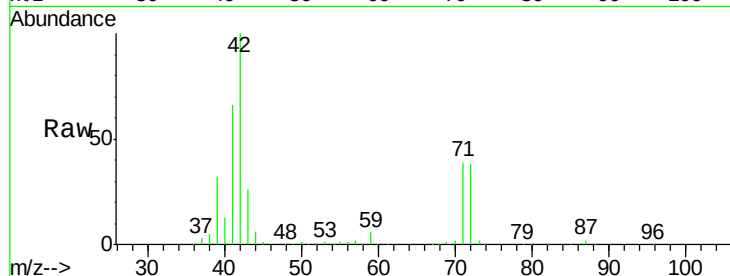
Tot Ion: 42 Resp: 570462

Ion Ratio Lower Upper

42 100

72 39.0 30.2 45.2

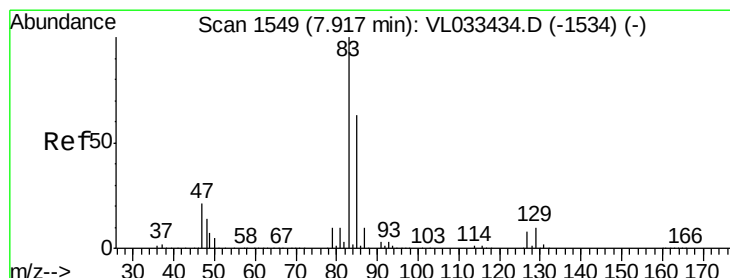
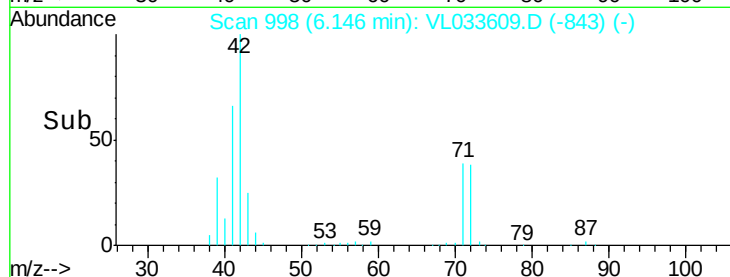
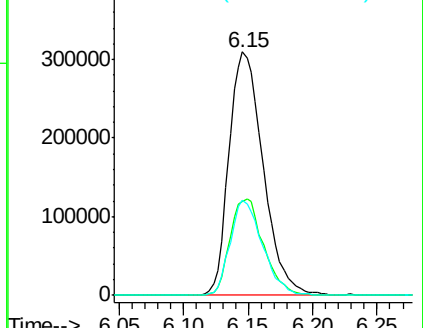
71 37.3 29.4 44.2



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: 9.877 ppbv

RT: 7.92 min Scan# 1549

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

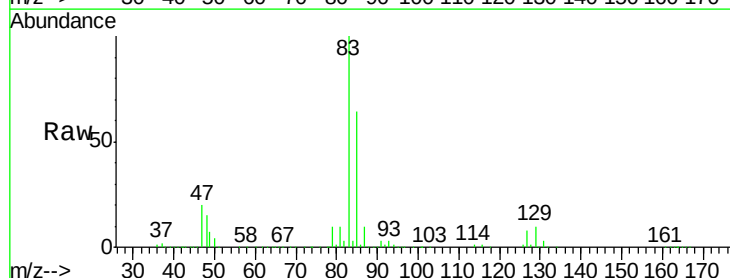
Tgt Ion: 83 Resp: 1452779

Ion Ratio Lower Upper

83 100

85 63.7 50.7 76.1

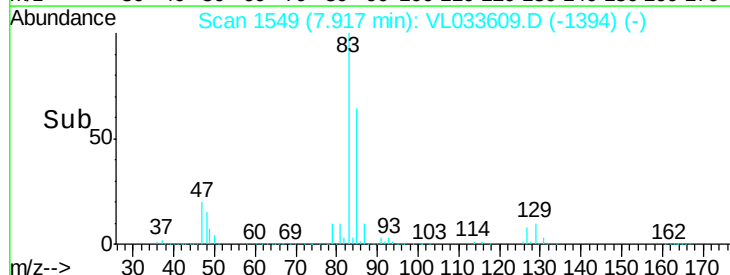
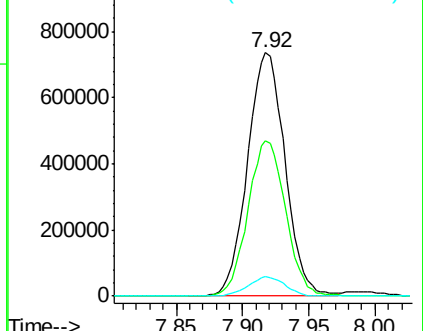
127 7.8 6.6 9.8



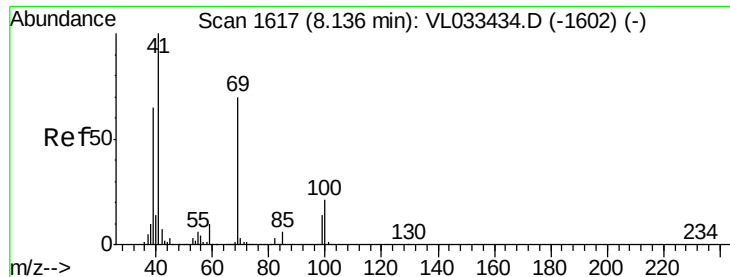
Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V



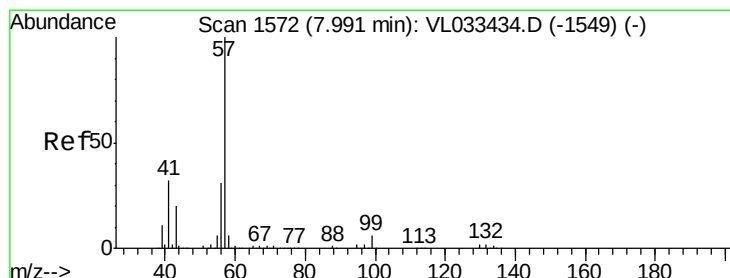
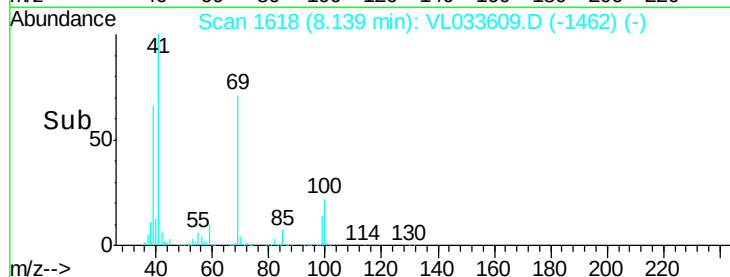
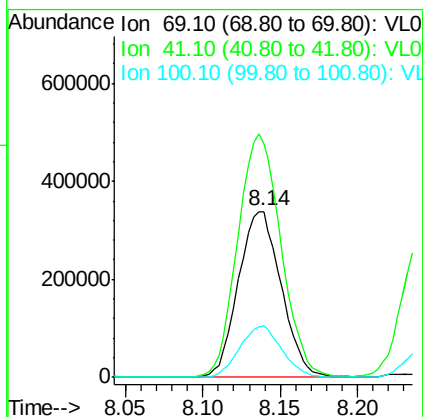
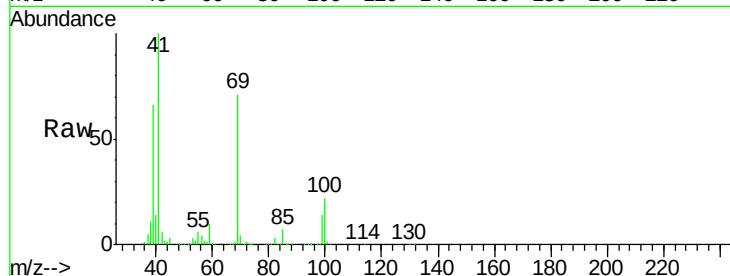




#43  
Methyl Methacrylate  
Concen: 9.961 ppbv  
RT: 8.14 min Scan# 1618  
Delta R.T. 0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

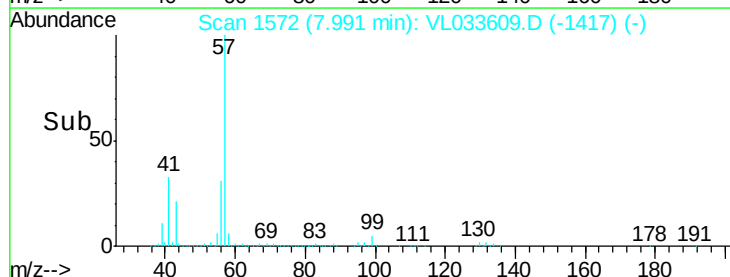
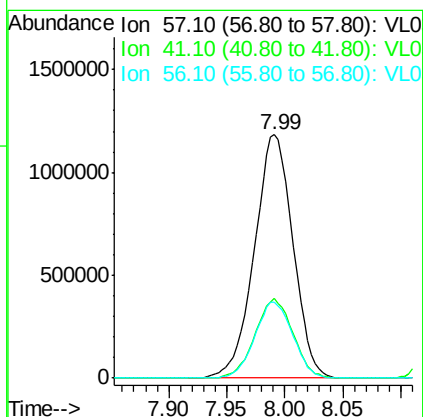
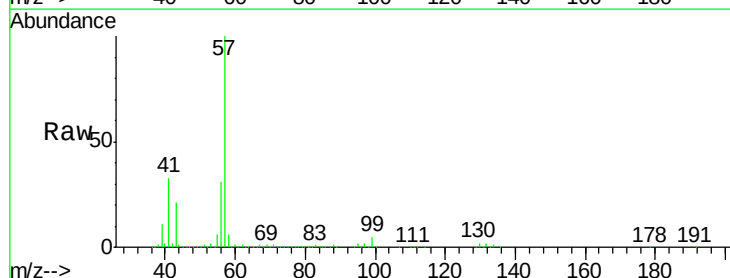
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

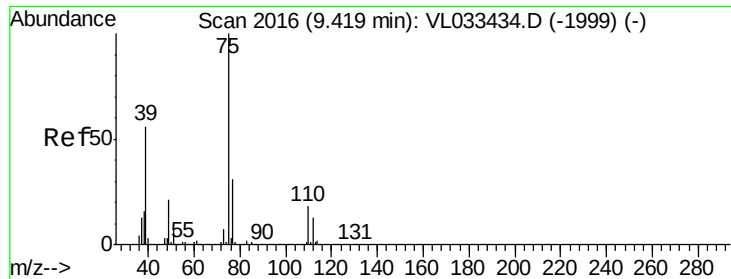
Tot Ion: 69 Resp: 651637  
Ion Ratio Lower Upper  
69 100  
41 148.0 116.6 174.8  
100 30.7 24.4 36.6



#44  
2,2,4-Trimethylpentane  
Concen: 9.717 ppbv  
RT: 7.99 min Scan# 1572  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 57 Resp: 2735711  
Ion Ratio Lower Upper  
57 100  
41 32.1 26.0 39.0  
56 30.8 24.6 37.0





#45

t-1,3-Dichloropropene

Concen: 11.306 ppbv

RT: 9.42 min Scan# 2015

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

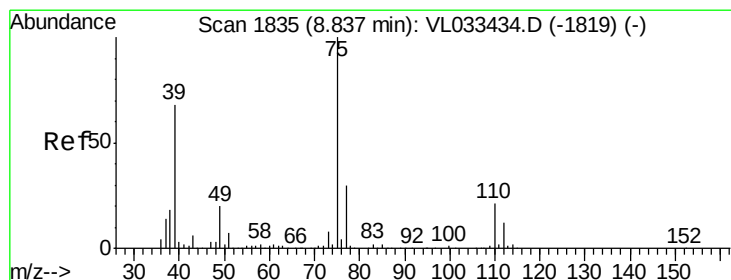
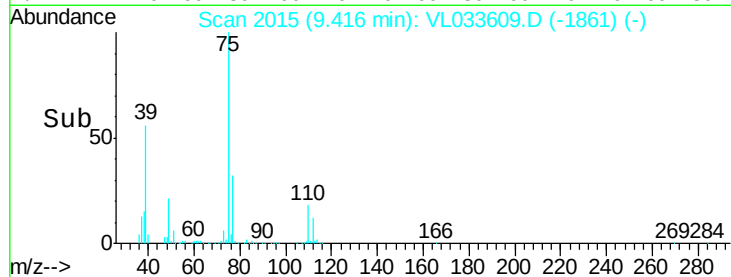
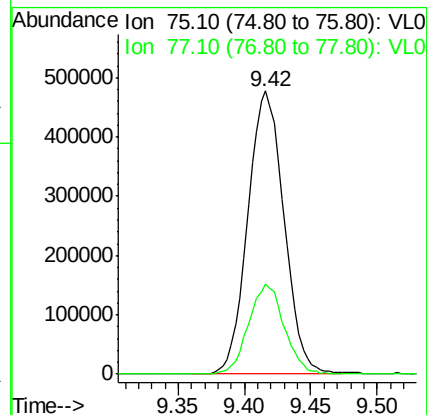
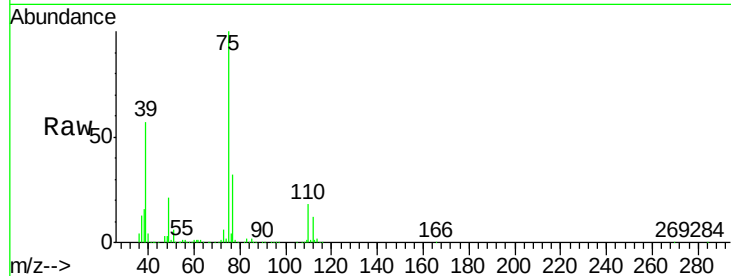
VSTDCCC010EC

Tot Ion: 75 Resp: 908120

Ion Ratio Lower Upper

75 100

77 32.0 24.5 36.7



#46

cis-1,3-Dichloropropene

Concen: 10.903 ppbv

RT: 8.84 min Scan# 1835

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

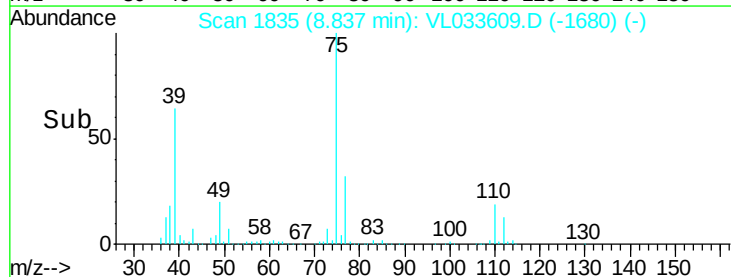
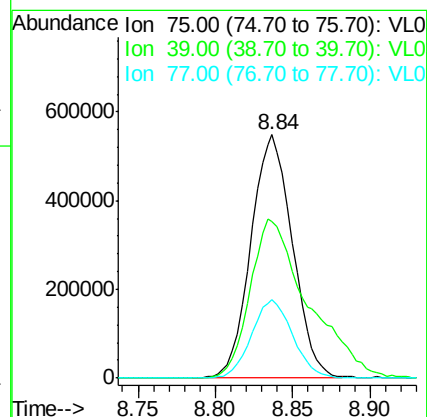
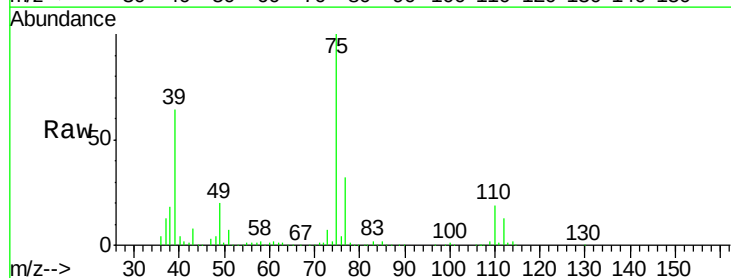
Tgt Ion: 75 Resp: 1022687

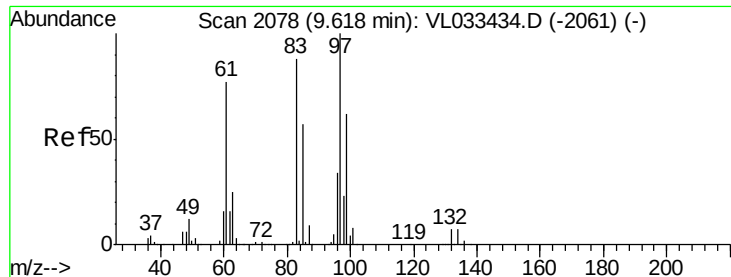
Ion Ratio Lower Upper

75 100

39 64.4 54.1 81.1

77 32.0 23.9 35.9

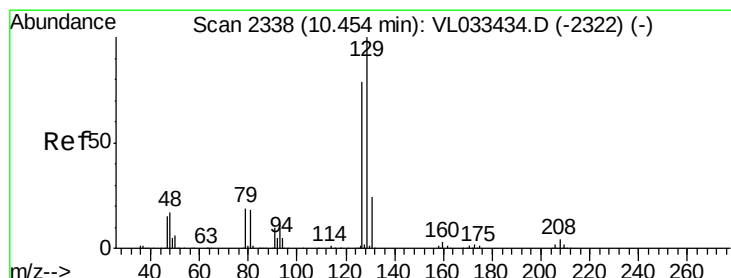
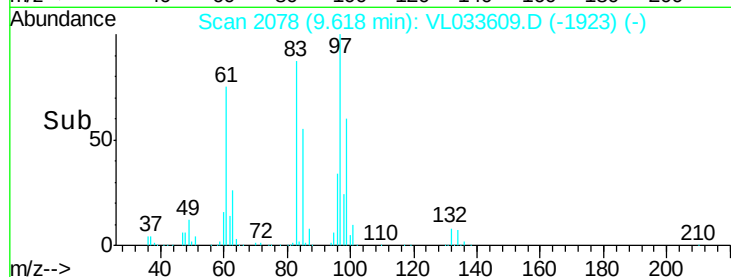
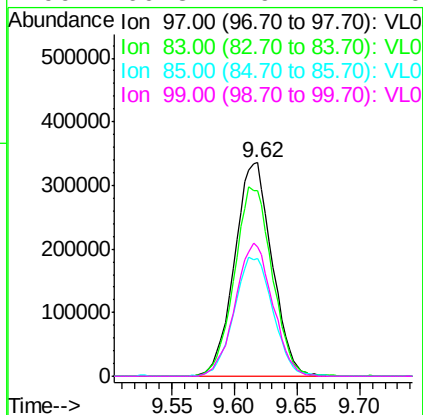
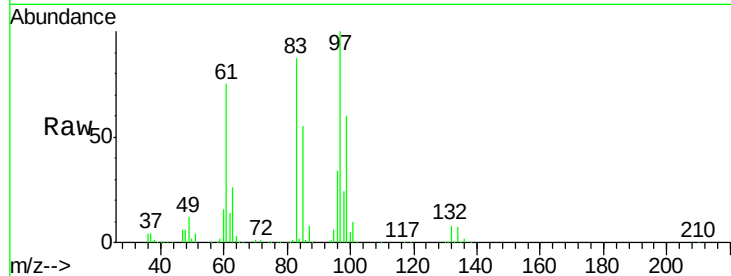




#47  
 1,1,2-Trichloroethane  
 Concen: 9.725 ppbv  
 RT: 9.62 min Scan# 2078  
 Delta R.T. -0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

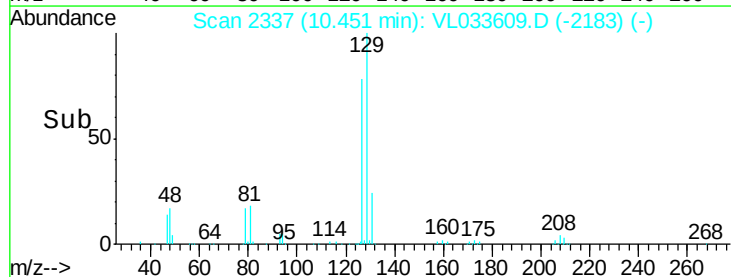
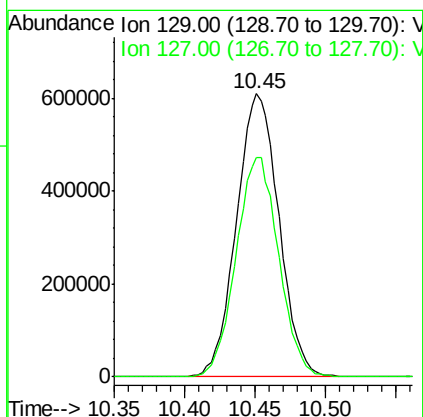
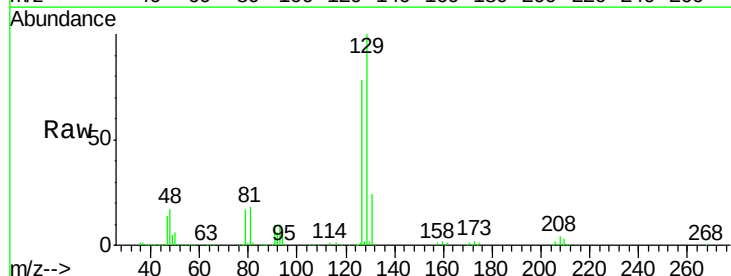
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

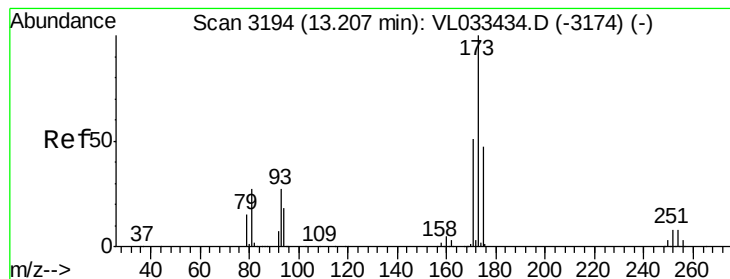
Tot Ion: 97 Resp: 696991  
 Ion Ratio Lower Upper  
 97 100  
 83 86.9 70.5 105.7  
 85 54.9 45.6 68.4  
 99 60.3 49.4 74.0



#48  
 Dibromochloromethane  
 Concen: 10.632 ppbv  
 RT: 10.45 min Scan# 2337  
 Delta R.T. -0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

Tgt Ion: 129 Resp: 1285300  
 Ion Ratio Lower Upper  
 129 100  
 127 78.1 39.1 117.2





#49

Bromoform

Concen: 10.296 ppbv

RT: 13.20 min Scan# 3192

Delta R.T. -0.01 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

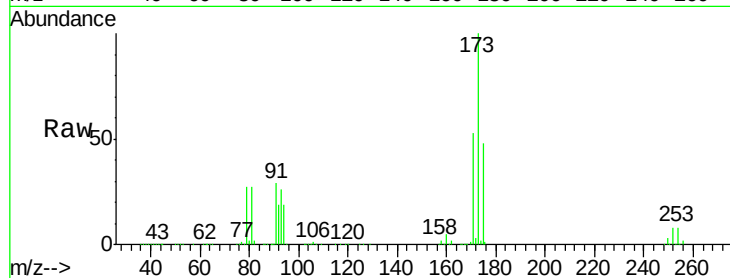
Tot Ion:173 Resp: 1189033

Ion Ratio Lower Upper

173 100

175 49.2 39.3 58.9

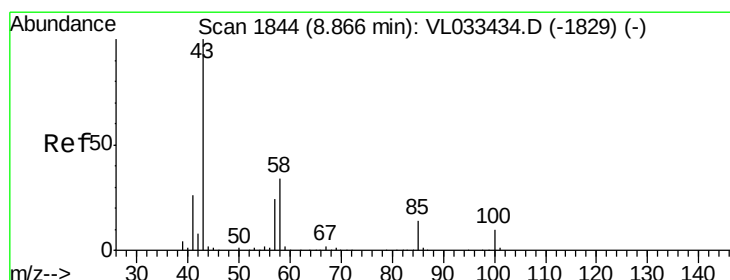
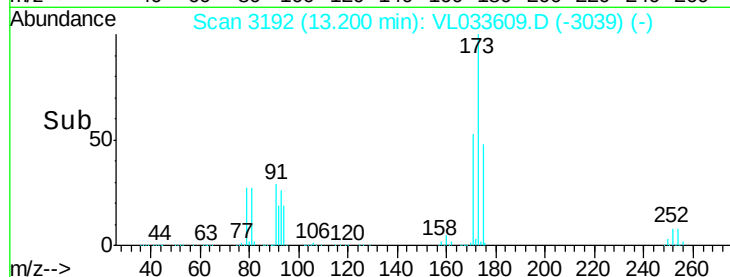
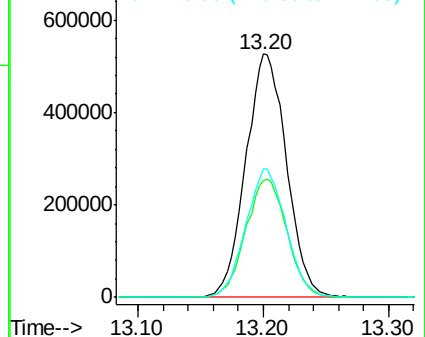
171 52.3 41.2 61.8



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: 9.952 ppbv

RT: 8.87 min Scan# 1845

Delta R.T. 0.00 min

Lab File: VL033609.D

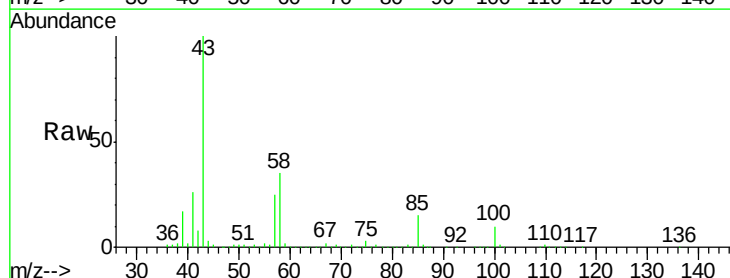
Acq: 17 Apr 2019 19:27

Tgt Ion: 43 Resp: 1681216

Ion Ratio Lower Upper

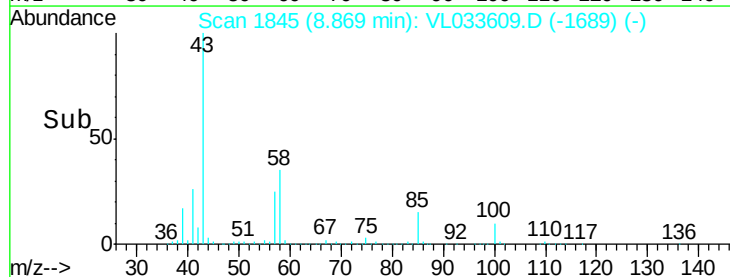
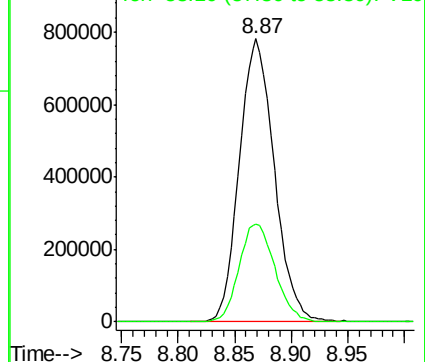
43 100

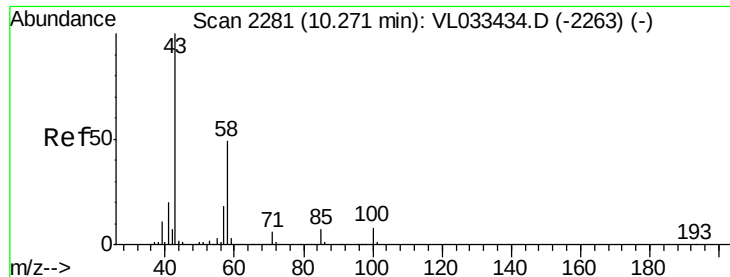
58 35.7 28.0 42.0



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

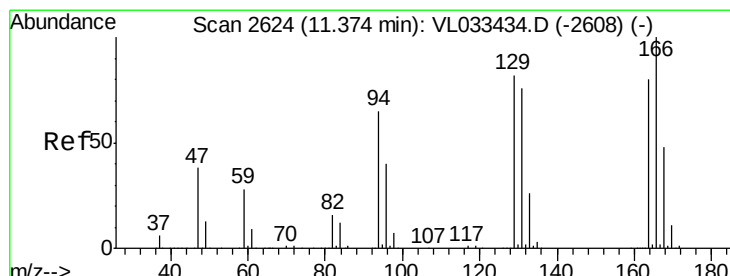
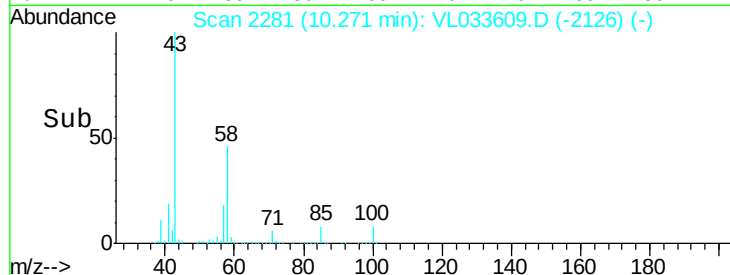
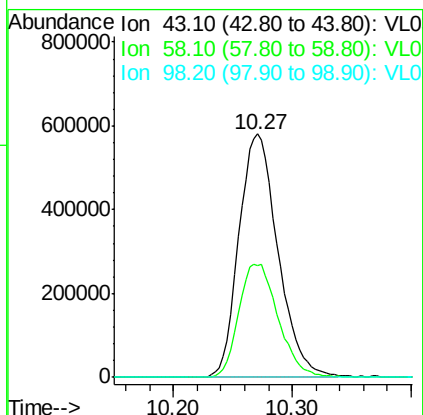
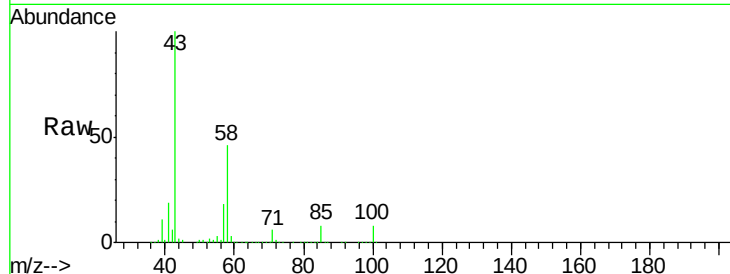




#51  
2-Hexanone  
Concen: 10.467 ppbv  
RT: 10.27 min Scan# 2281  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

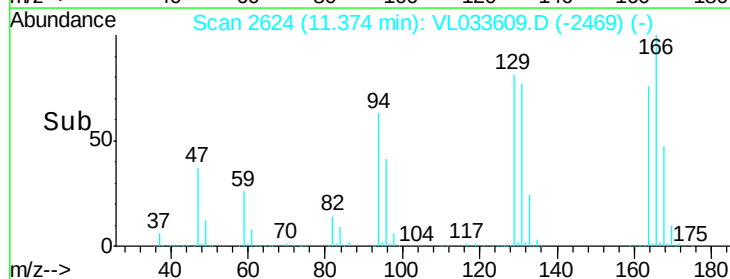
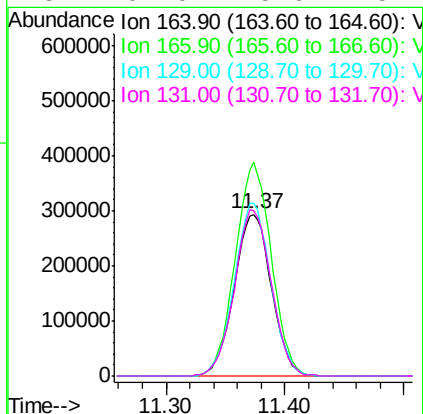
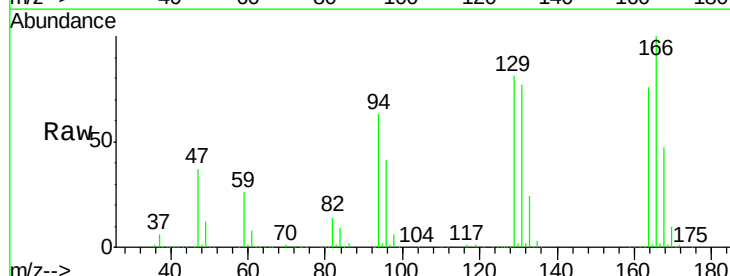
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

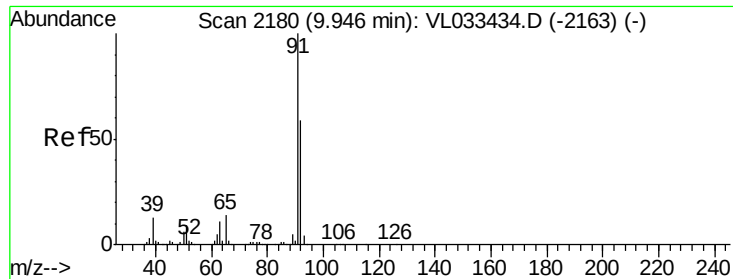
Tot Ion: 43 Resp: 1318996  
Ion Ratio Lower Upper  
43 100  
58 47.1 38.2 57.2  
98 0.2 0.2 0.2



#52  
Tetrachloroethene  
Concen: 10.440 ppbv  
RT: 11.37 min Scan# 2624  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 164 Resp: 634667  
Ion Ratio Lower Upper  
164 100  
166 132.0 99.5 149.3  
129 106.7 81.4 122.2  
131 102.0 75.6 113.4





#53

Toluene

Concen: 10.420 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

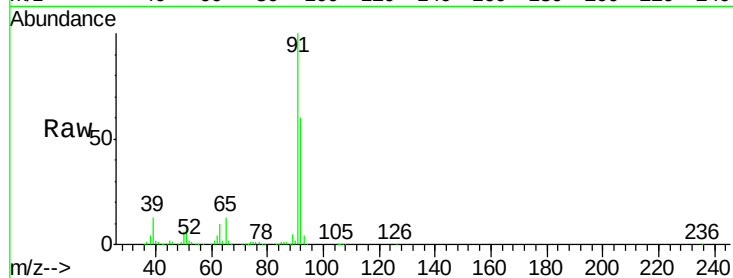
VSTDCCC010EC

Tot Ion: 91 Resp: 1950965

Ion Ratio Lower Upper

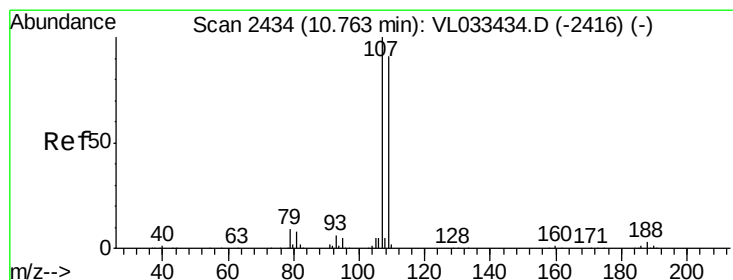
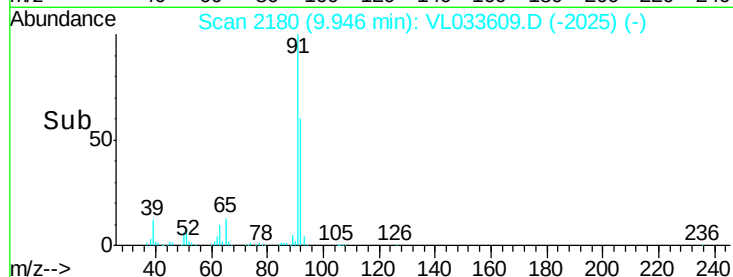
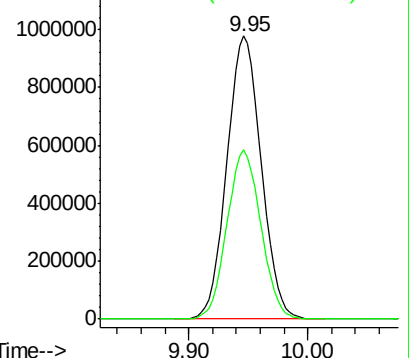
91 100

92 59.2 47.4 71.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#54

1,2-Dibromoethane

Concen: 9.965 ppbv

RT: 10.76 min Scan# 2434

Delta R.T. -0.00 min

Lab File: VL033609.D

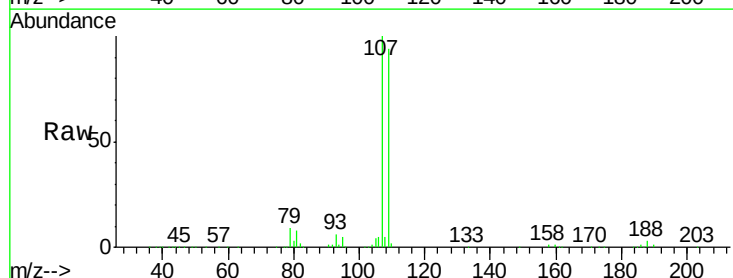
Acq: 17 Apr 2019 19:27

Tgt Ion:107 Resp: 1117020

Ion Ratio Lower Upper

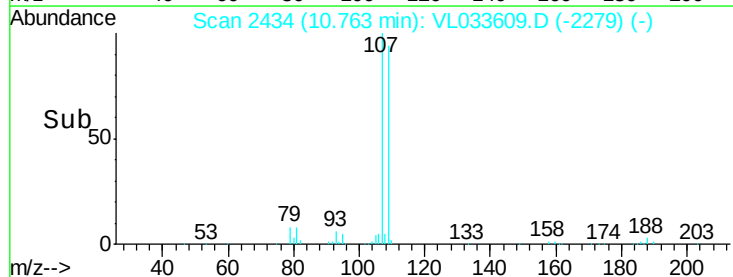
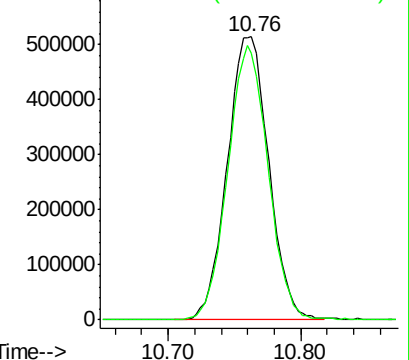
107 100

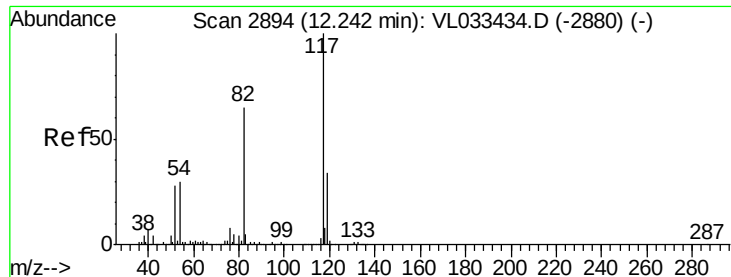
109 94.2 72.7 109.1



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V





#55

Chlorobenzene-d5

Concen: 10.000 ppbv m

RT: 12.24 min Scan# 2893

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

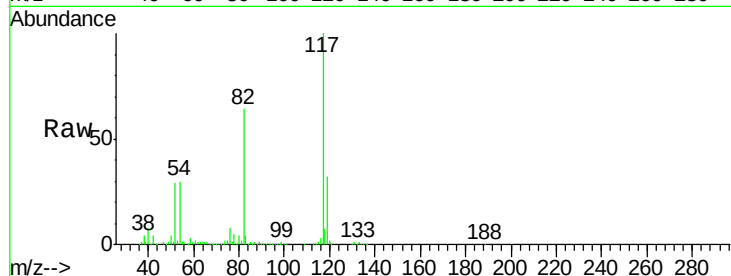
Tot Ion:117 Resp: 2235815

Ion Ratio Lower Upper

117 100

82 65.2 51.5 77.3

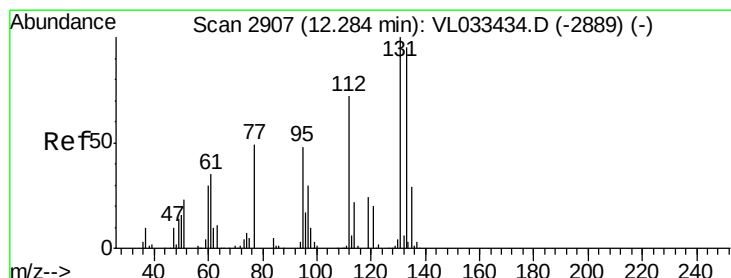
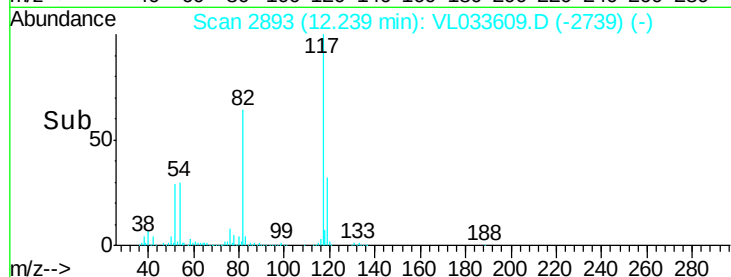
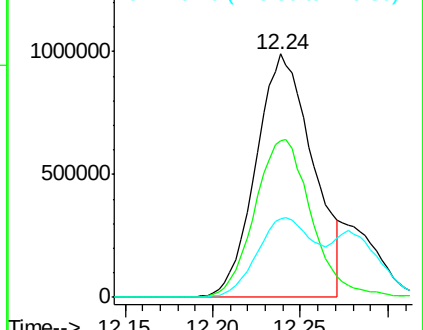
119 55.6 25.5 38.3#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 8.874 ppbv

RT: 12.28 min Scan# 2906

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

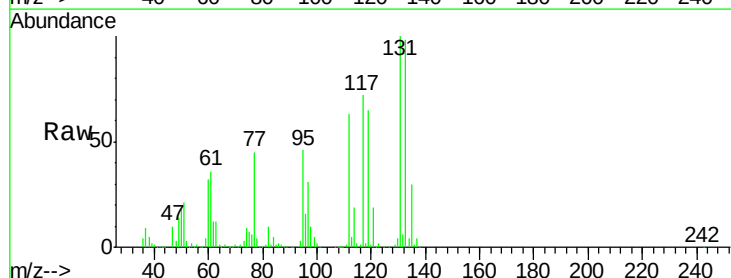
Tgt Ion:131 Resp: 909290

Ion Ratio Lower Upper

131 100

133 96.1 76.2 114.4

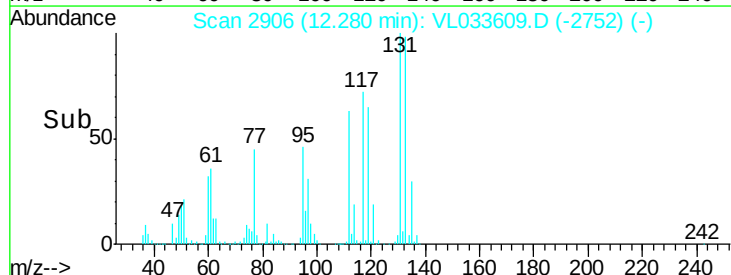
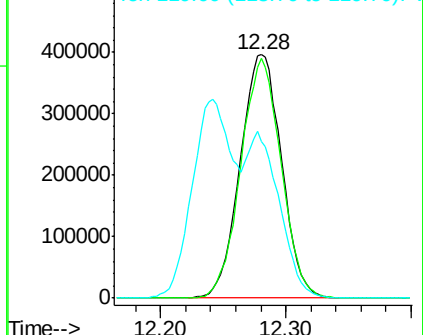
119 54.6 45.0 67.6

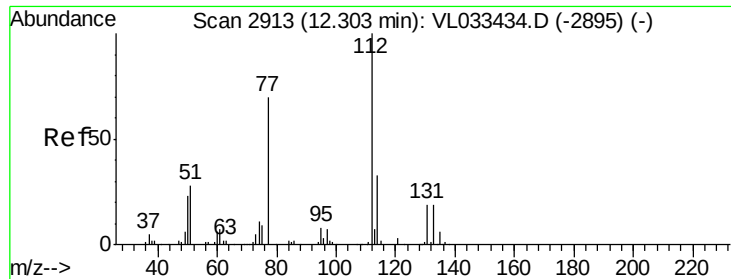


Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V

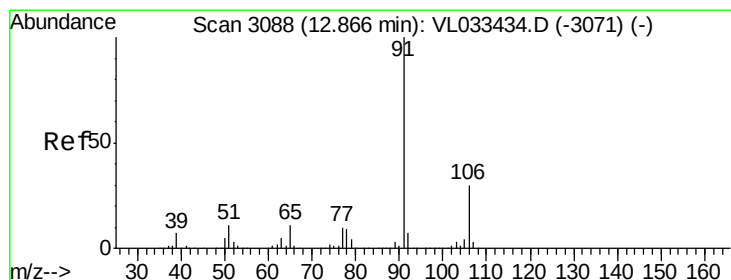
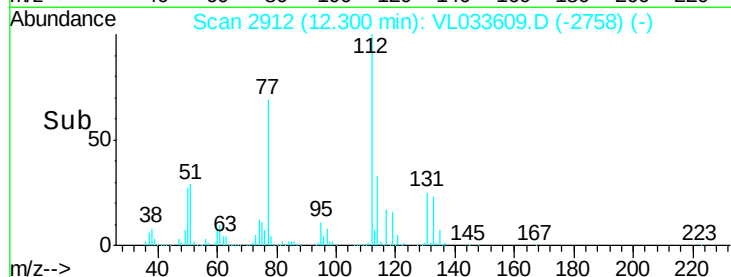
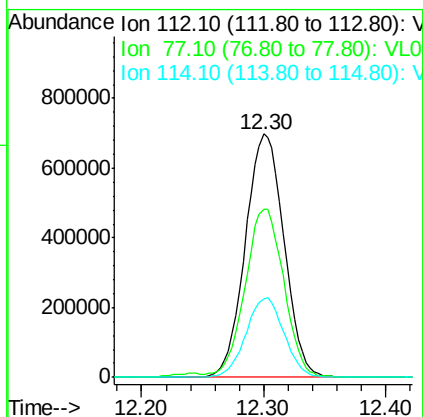
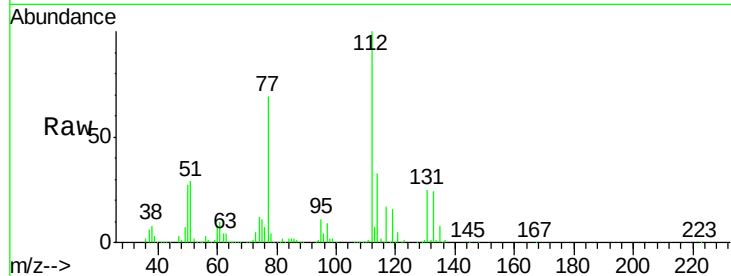




#57  
Chlorobenzene  
Concen: 8.781 ppbv  
RT: 12.30 min Scan# 2912  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

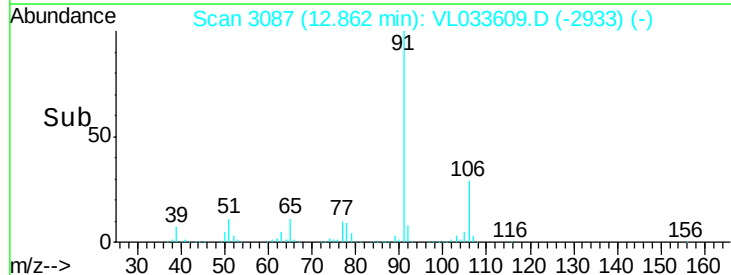
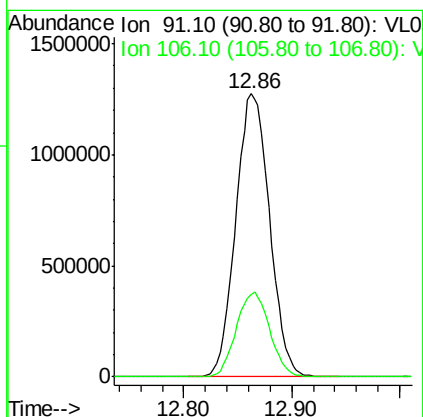
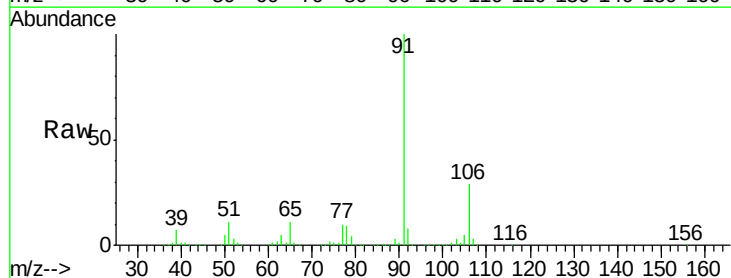
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion:112 Resp: 1524376  
Ion Ratio Lower Upper  
112 100  
77 68.9 57.3 85.9  
114 32.4 29.8 36.4

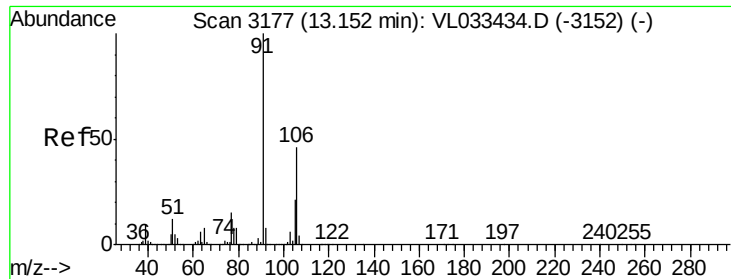


#58  
Ethyl Benzene  
Concen: 9.314 ppbv  
RT: 12.86 min Scan# 3087  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 91 Resp: 2781028  
Ion Ratio Lower Upper  
91 100  
106 29.2 23.8 35.6



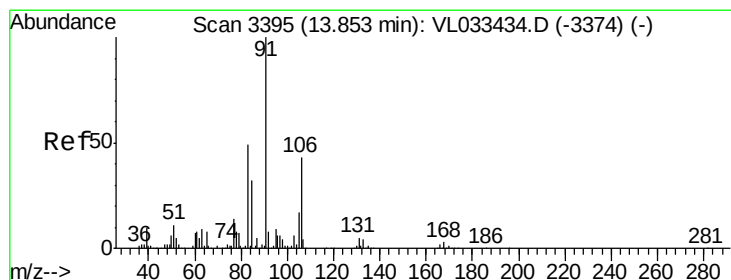
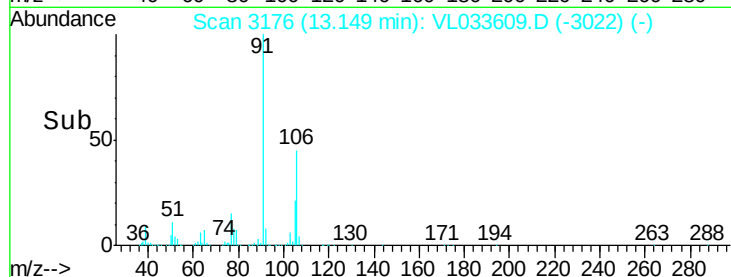
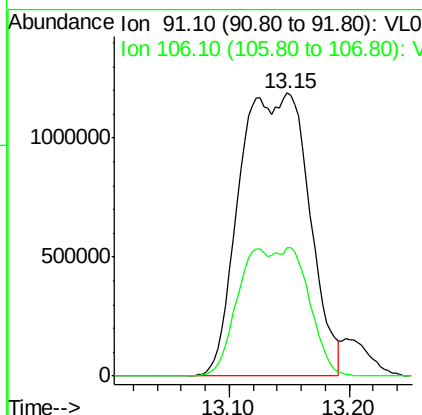
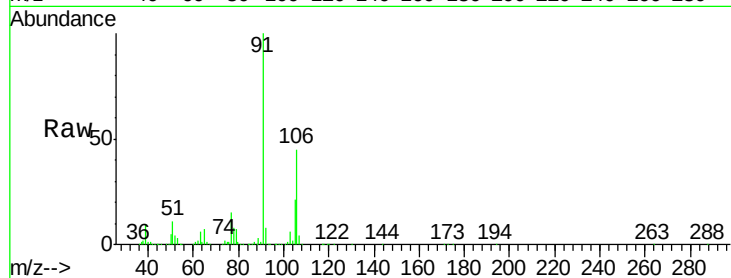




#59  
m/p-Xylene  
Concen: 17.894 ppbv m  
RT: 13.15 min Scan# 3176  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

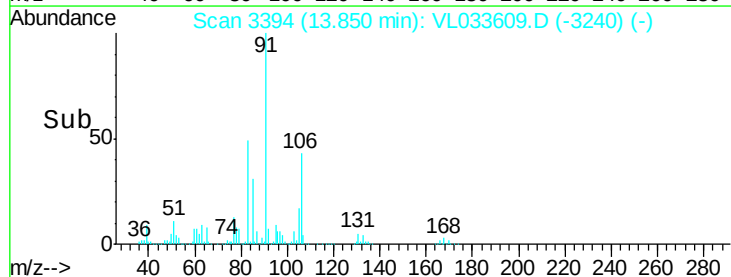
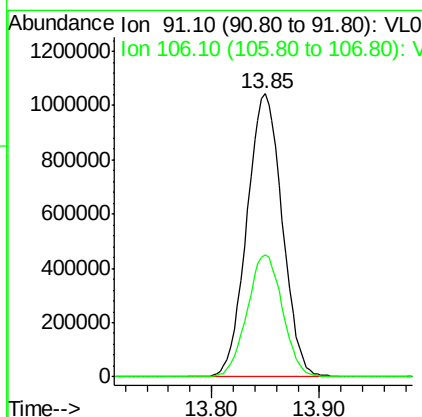
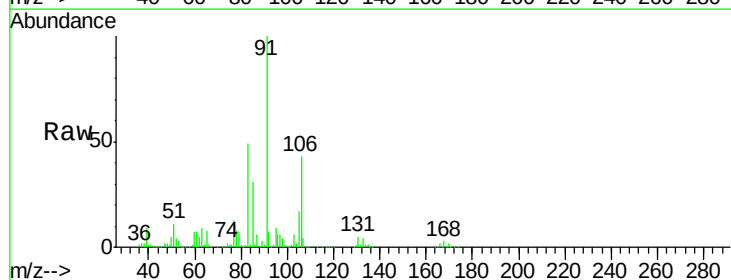
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

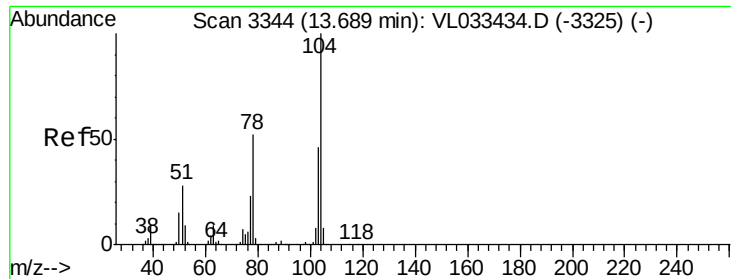
Tot Ion: 91 Resp: 4772036  
Ion Ratio Lower Upper  
91 100  
106 44.9 0.0 0.0#



#60  
o-Xylene  
Concen: 9.193 ppbv  
RT: 13.85 min Scan# 3394  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 91 Resp: 2370719  
Ion Ratio Lower Upper  
91 100  
106 43.2 21.4 64.3

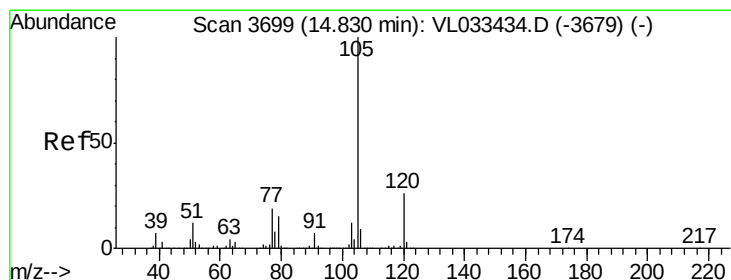
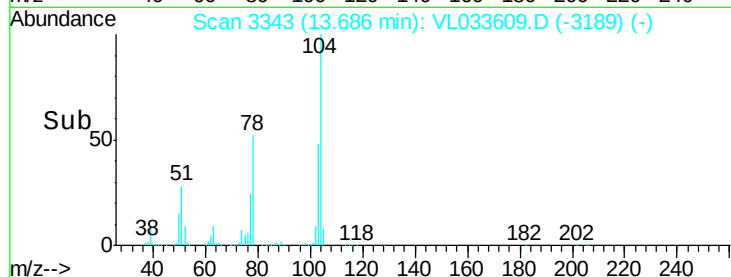
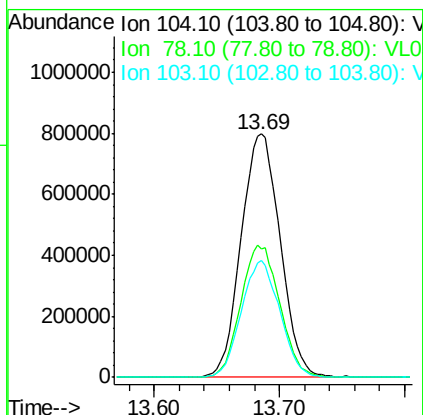
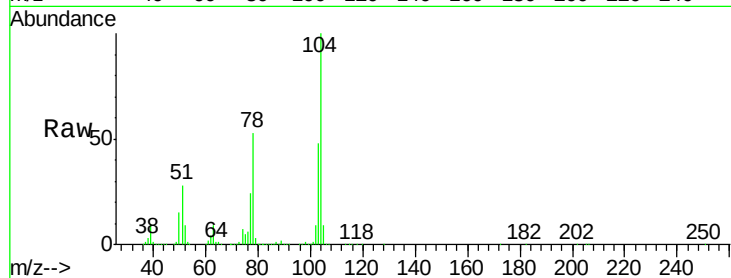




#61  
Stvrene  
Concen: 9.771 ppbv  
RT: 13.69 min Scan# 3343  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

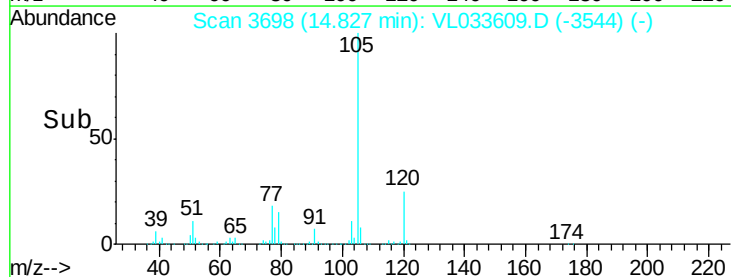
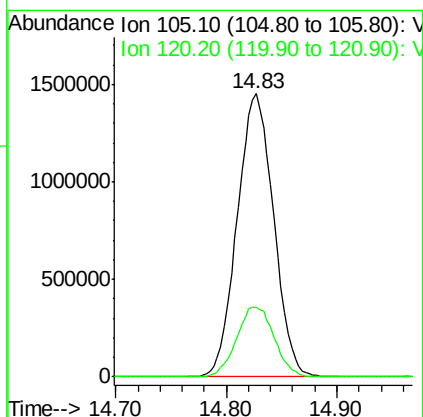
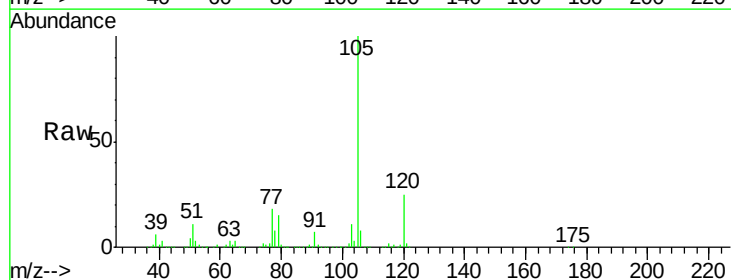
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

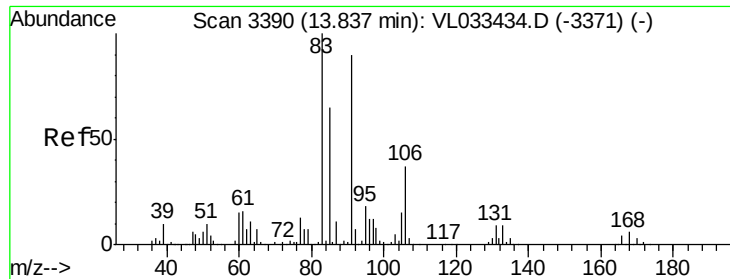
Tot Ion:104 Resp: 1729501  
Ion Ratio Lower Upper  
104 100  
78 54.3 43.2 64.8  
103 47.4 37.8 56.8



#62  
Isopropylbenzene  
Concen: 9.083 ppbv  
RT: 14.83 min Scan# 3698  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion:105 Resp: 3317046  
Ion Ratio Lower Upper  
105 100  
120 25.4 20.2 30.2

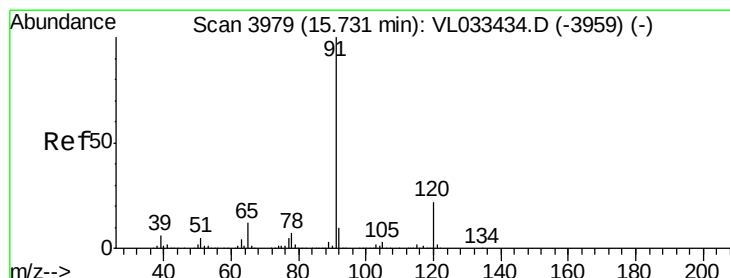
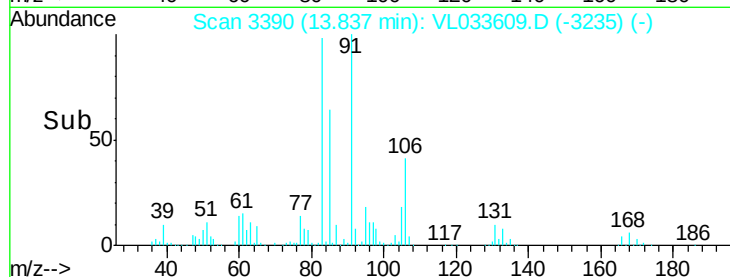
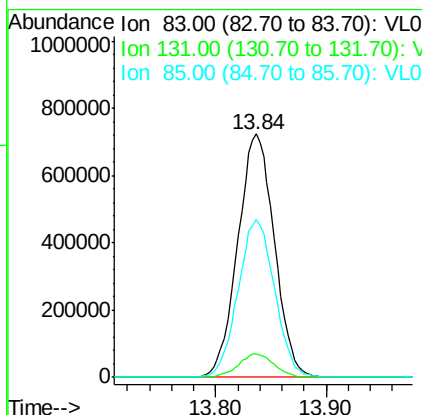
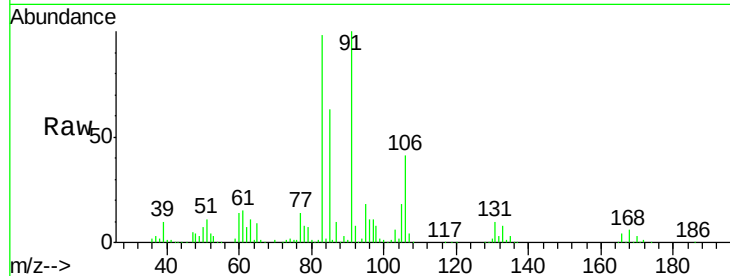




#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 8.759 ppbv  
 RT: 13.84 min Scan# 3390  
 Delta R.T. -0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

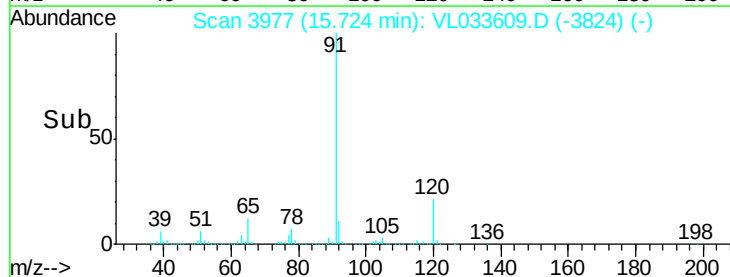
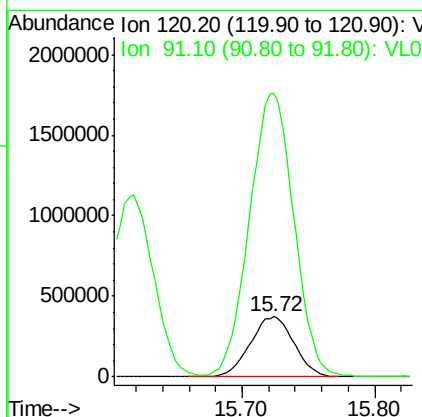
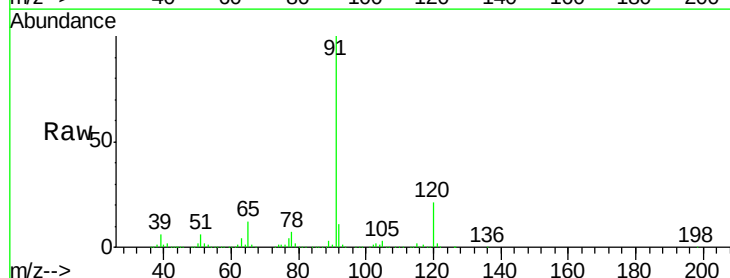
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

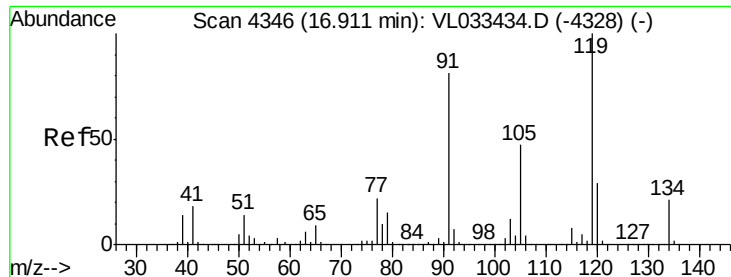
Tot Ion: 83 Resp: 1663218  
 Ion Ratio Lower Upper  
 83 100  
 131 9.5 4.7 14.0  
 85 64.9 32.7 98.1



#64  
 n-propylbenzene  
 Concen: 9.261 ppbv  
 RT: 15.72 min Scan# 3977  
 Delta R.T. -0.01 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

Tgt Ion:120 Resp: 858147  
 Ion Ratio Lower Upper  
 120 100  
 91 478.5 387.4 581.2

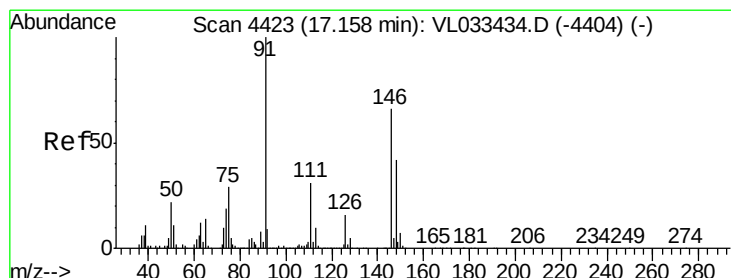
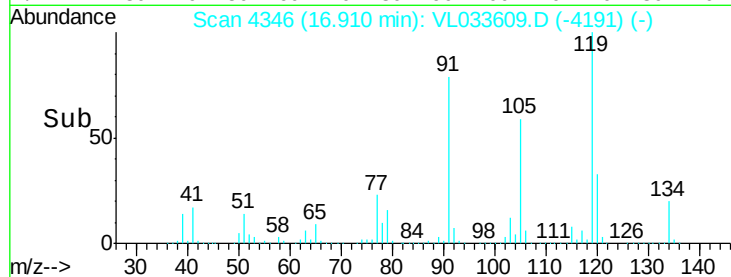
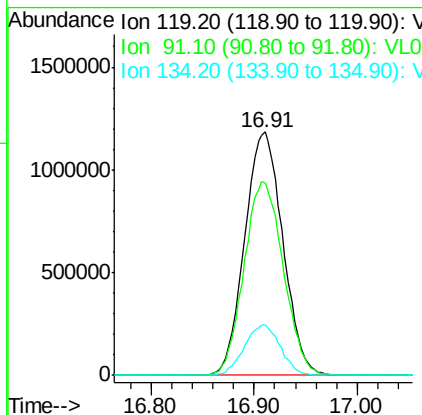
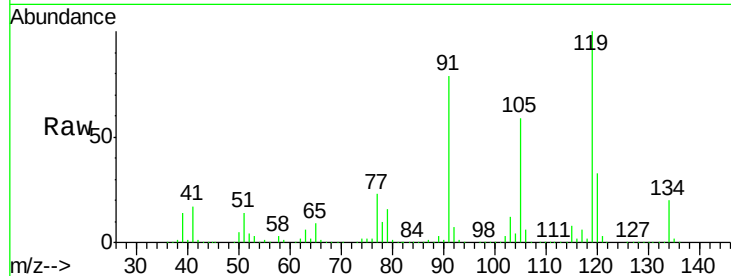




#65  
tert-Butylbenzene  
Concen: 9.441 ppbv  
RT: 16.91 min Scan# 4346  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

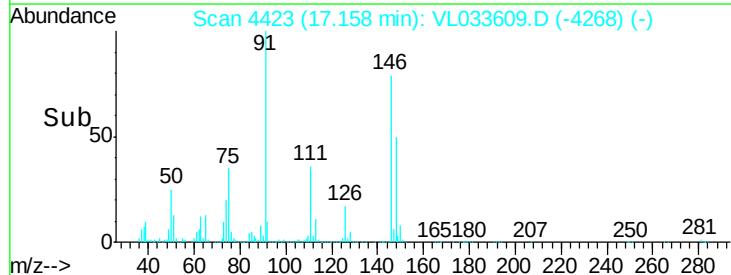
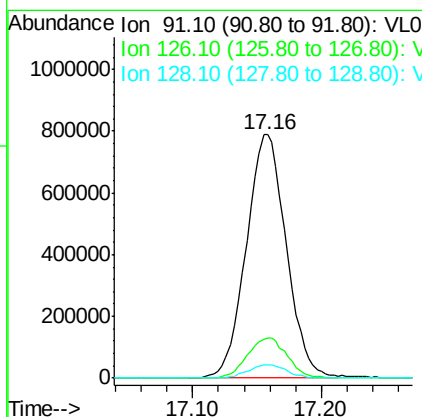
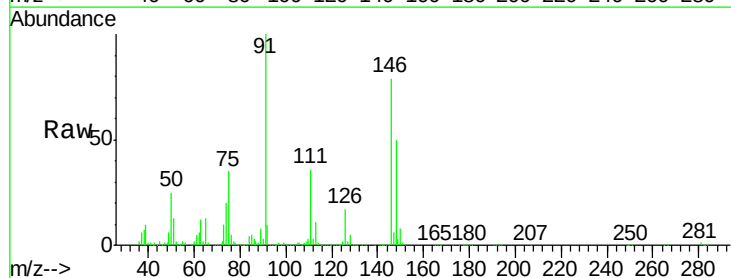
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

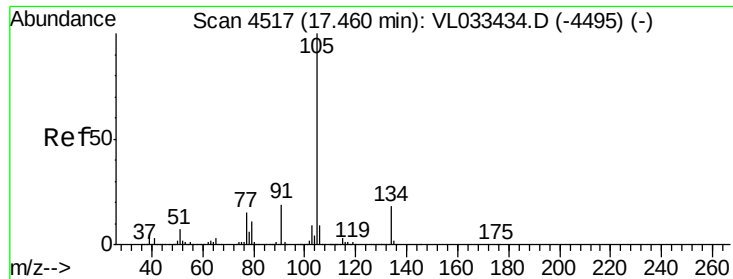
Tot Ion: 119 Resp: 3038325  
Ion Ratio Lower Upper  
119 100  
91 82.1 66.4 99.6  
134 19.7 15.5 23.3



#66  
Benzyl Chloride  
Concen: 11.350 ppbv  
RT: 17.16 min Scan# 4423  
Delta R.T. -0.00 min  
Lab File: VL033609.D  
Acq: 17 Apr 2019 19:27

Tgt Ion: 91 Resp: 1698358  
Ion Ratio Lower Upper  
91 100  
126 16.6 13.0 19.6  
128 5.4 4.2 6.2





#67

sec-Butylbenzene

Concen: 9.397 ppbv

RT: 17.46 min Scan# 4517

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

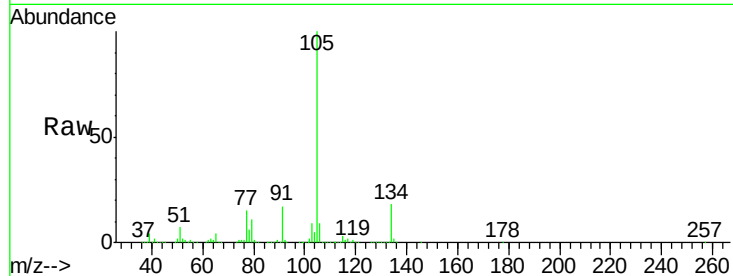
VSTDCCC010EC

Tot Ion:105 Resp: 4300656

Ion Ratio Lower Upper

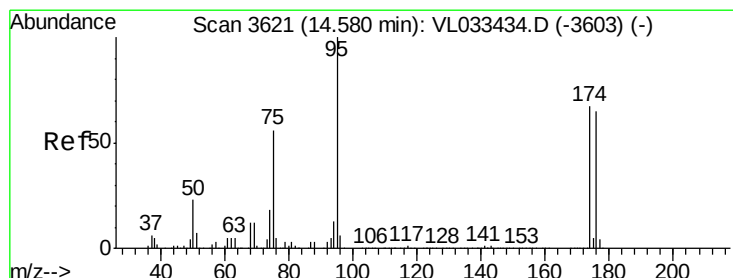
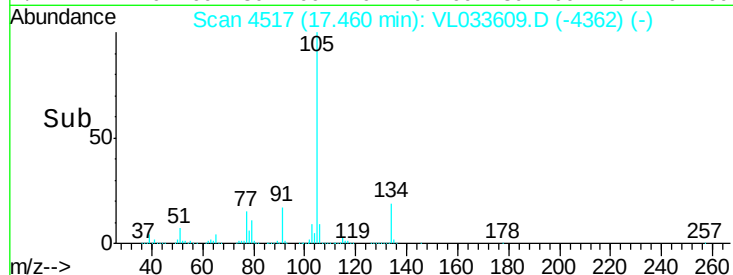
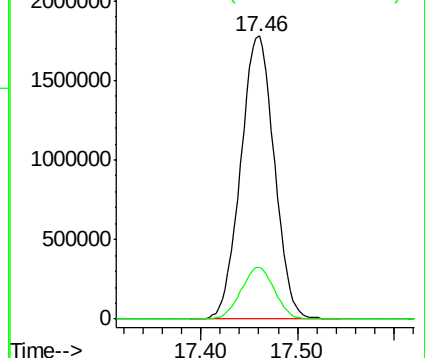
105 100

134 18.2 14.6 21.8



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.163 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

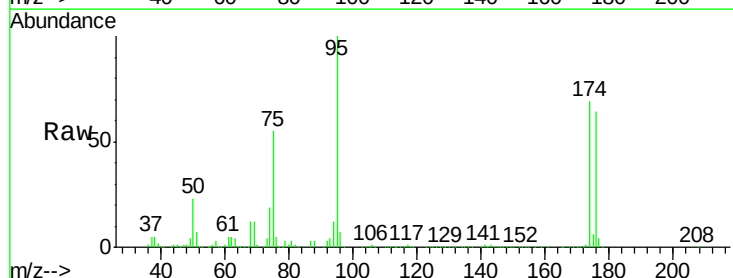
Tgt Ion: 95 Resp: 1781352

Ion Ratio Lower Upper

95 100

174 67.2 52.9 79.3

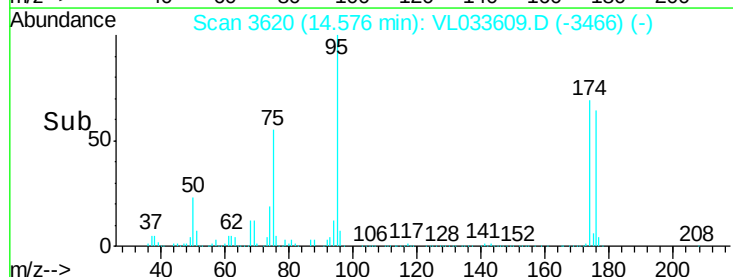
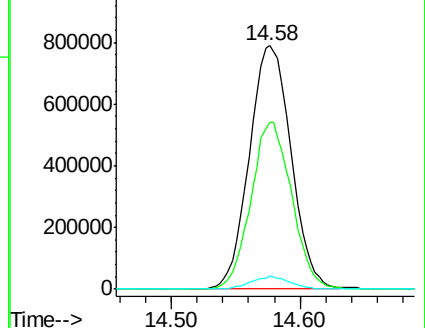
175 4.8 3.8 5.6

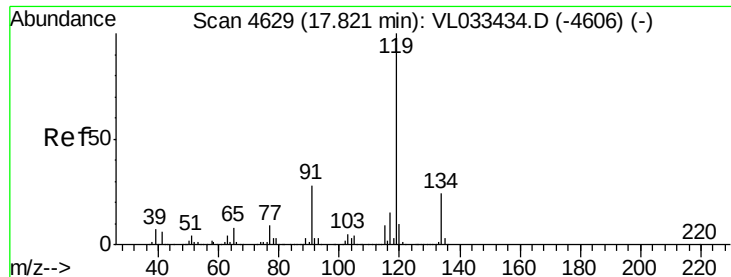


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

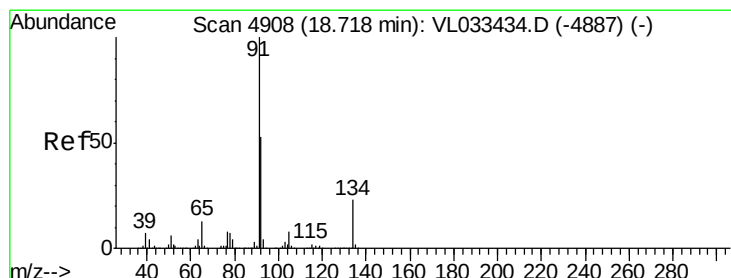
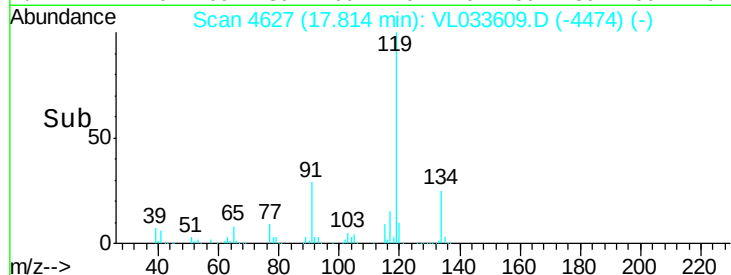
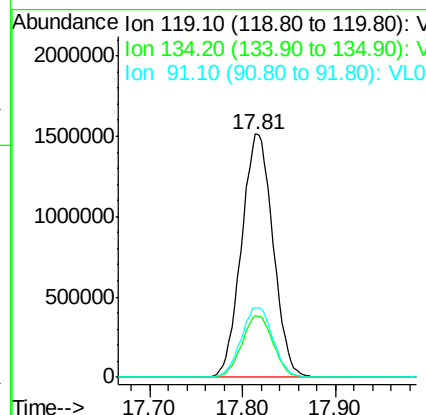
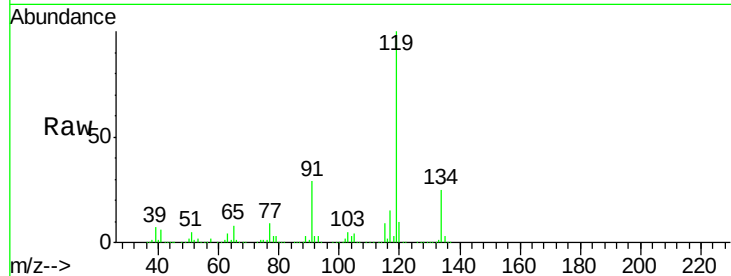




#69  
 p-Isopropyltoluene  
 Concen: 9.568 ppbv  
 RT: 17.81 min Scan# 4627  
 Delta R.T. -0.01 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

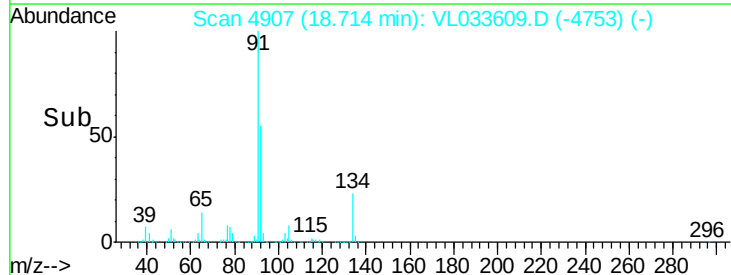
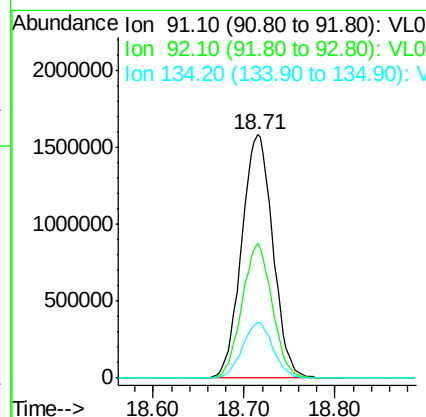
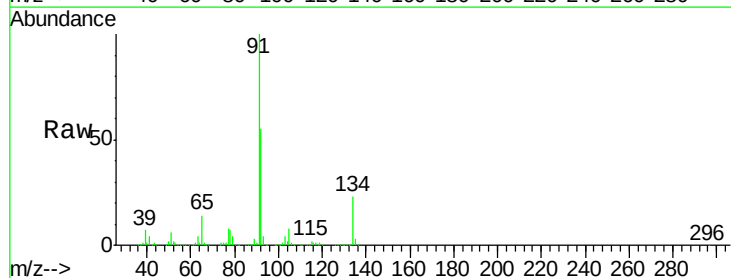
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

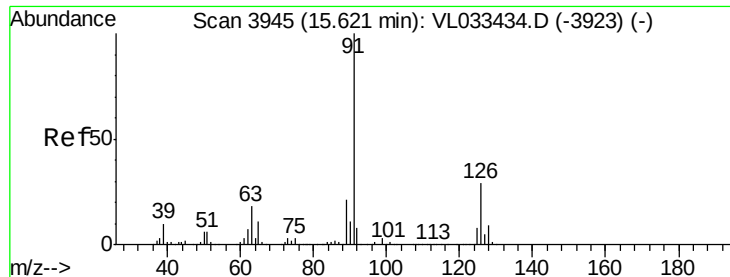
Tot Ion:119 Resp: 3565433  
 Ion Ratio Lower Upper  
 119 100  
 134 25.1 19.9 29.9  
 91 29.1 23.4 35.0



#70  
 n-Butylbenzene  
 Concen: 9.511 ppbv  
 RT: 18.71 min Scan# 4907  
 Delta R.T. -0.00 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

Tgt Ion: 91 Resp: 3754936  
 Ion Ratio Lower Upper  
 91 100  
 92 53.4 42.6 64.0  
 134 22.4 17.5 26.3





#71

2-Chlorotoluene

Concen: 9.220 ppbv

RT: 15.62 min Scan# 3944

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

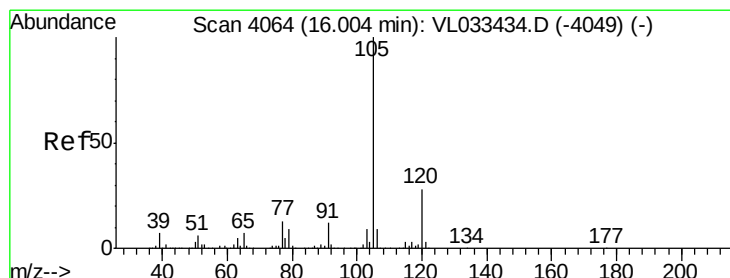
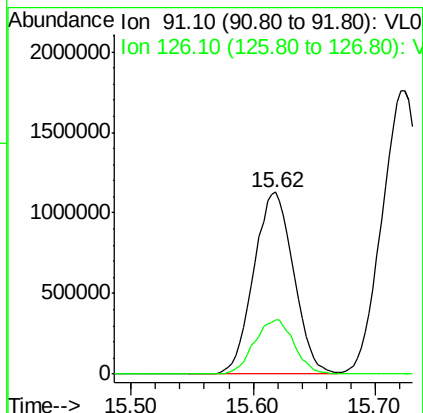
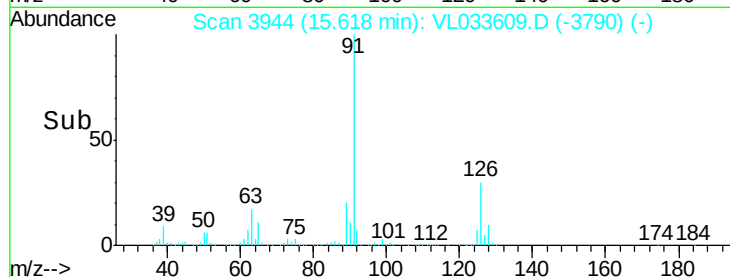
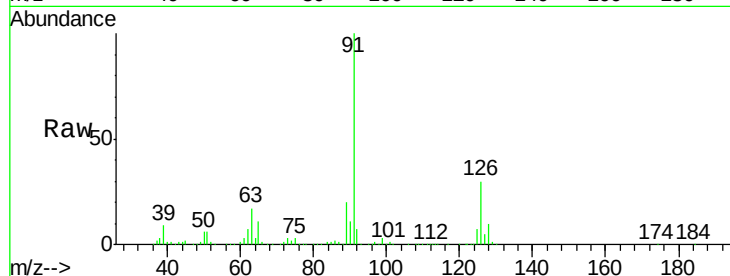
VSTDCCC010EC

Tot Ion: 91 Resp: 2560318

Ion Ratio Lower Upper

91 100

126 29.8 11.7 46.9



#72

4-Ethyltoluene

Concen: 9.542 ppbv

RT: 16.00 min Scan# 4063

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Tgt Ion:105 Resp: 2766114

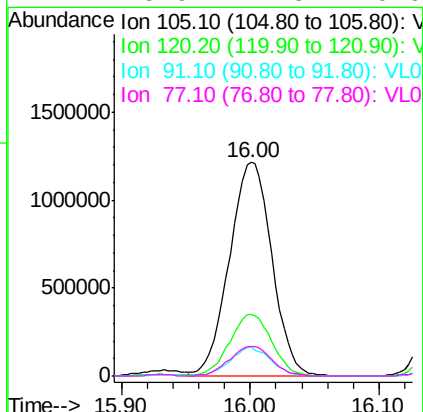
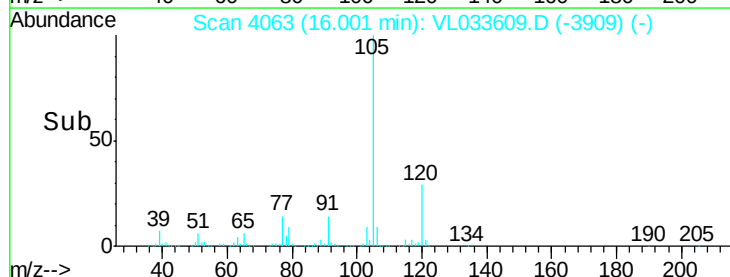
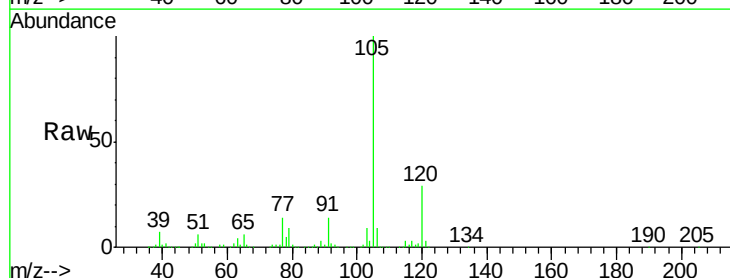
Ion Ratio Lower Upper

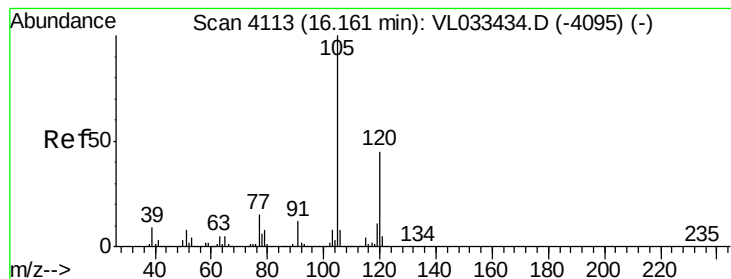
105 100

120 28.8 23.2 34.8

91 13.0 10.4 15.6

77 13.9 11.3 16.9





#73

1,3,5-Trimethylbenzene

Concen: 9.631 ppbv

RT: 16.15 min Scan# 4111

Delta R.T. -0.01 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

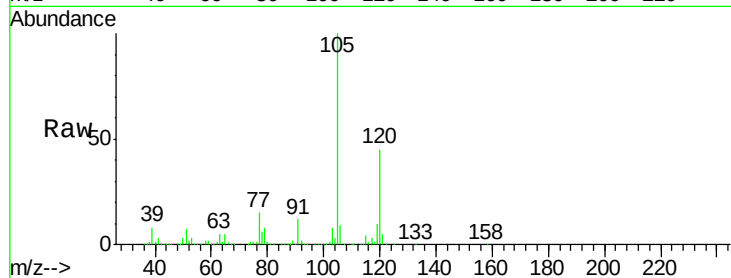
VSTDCCC010EC

Tot Ion:105 Resp: 2671829

Ion Ratio Lower Upper

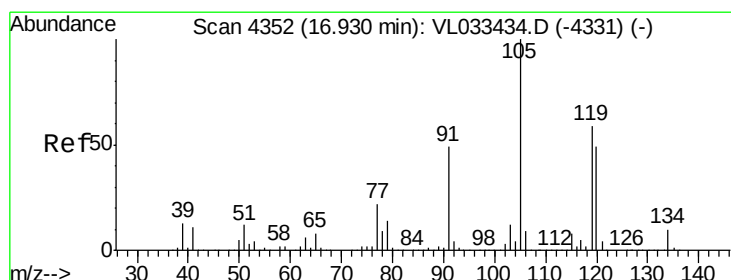
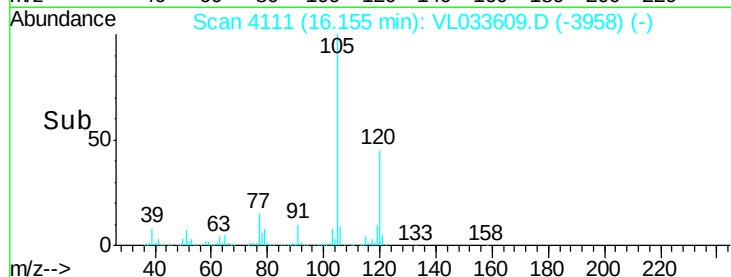
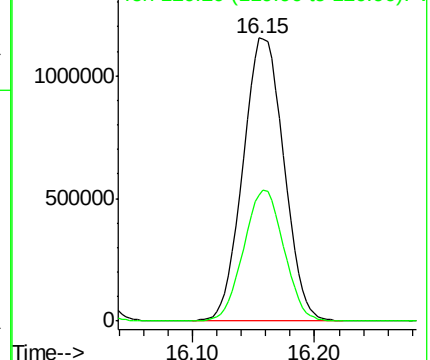
105 100

120 44.7 35.7 53.5



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: 9.372 ppbv

RT: 16.93 min Scan# 4351

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Tgt Ion:105 Resp: 2786481

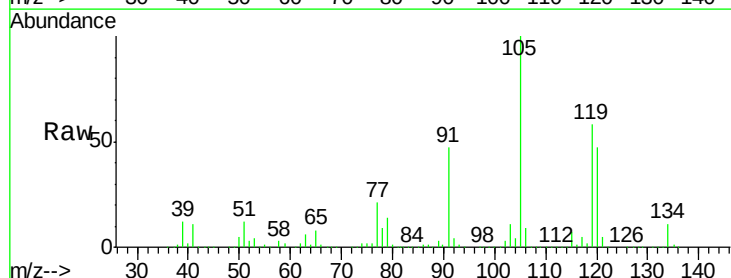
Ion Ratio Lower Upper

105 100

120 46.6 39.0 58.6

91 47.1 40.0 60.0

77 20.8 17.5 26.3

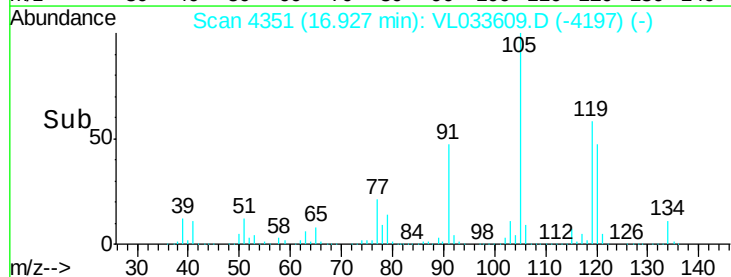
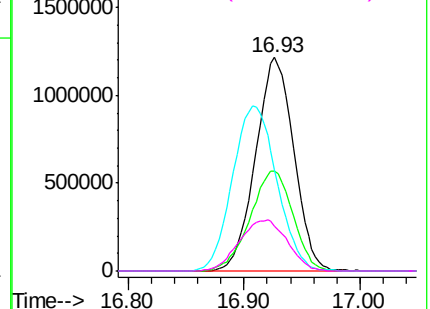


Abundance Ion 105.10 (104.80 to 105.80): V

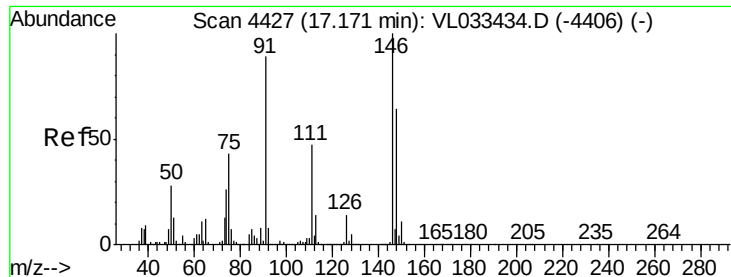
Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0







#75

1,3-Dichlorobenzene

Concen: 9.082 ppbv

RT: 17.17 min Scan# 4426

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

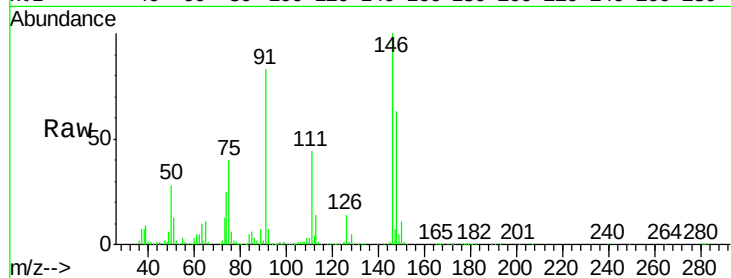
Tot Ion:146 Resp: 1669102

Ion Ratio Lower Upper

146 100

111 45.4 22.9 68.8

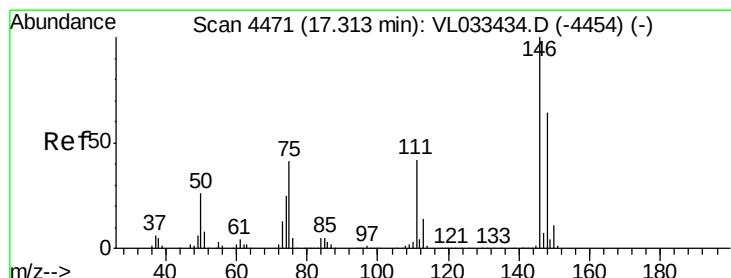
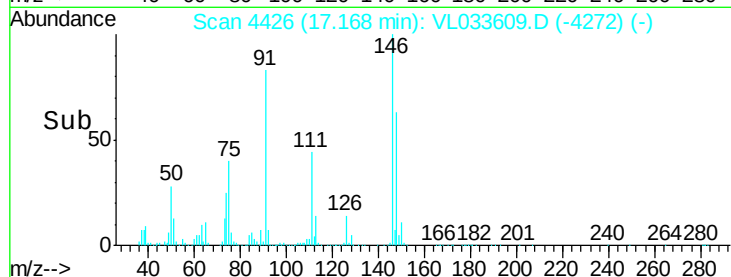
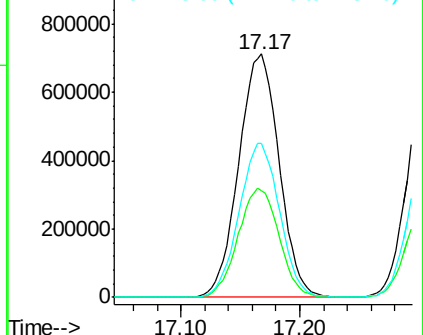
148 63.5 32.0 96.2



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: 9.267 ppbv

RT: 17.31 min Scan# 4469

Delta R.T. -0.01 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

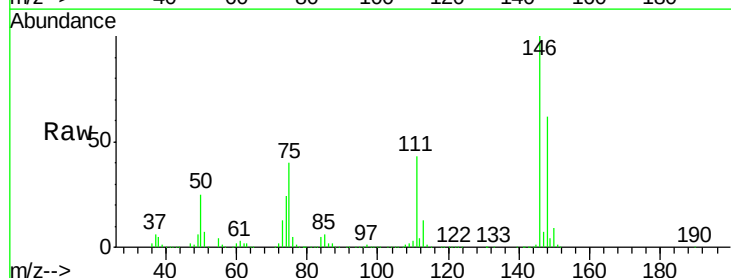
Tgt Ion:146 Resp: 1659296

Ion Ratio Lower Upper

146 100

111 44.2 21.7 65.1

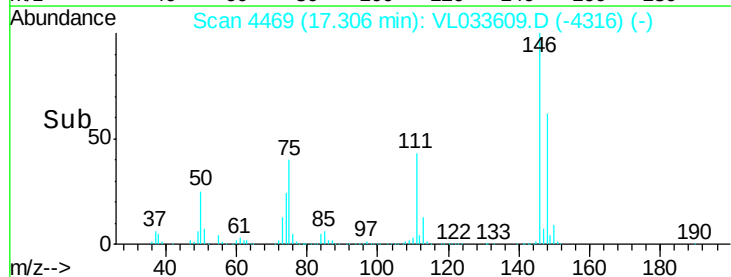
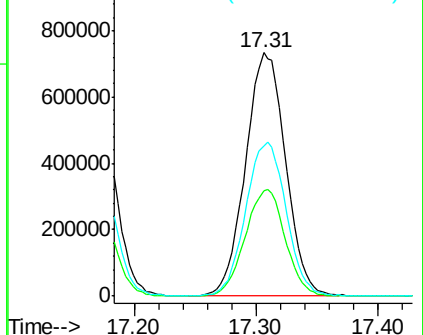
148 64.1 32.0 96.2

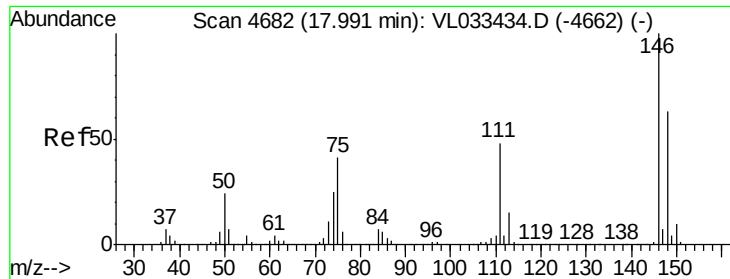


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#77

1,2-Dichlorobenzene

Concen: 9.207 ppbv

RT: 17.99 min Scan# 4682

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

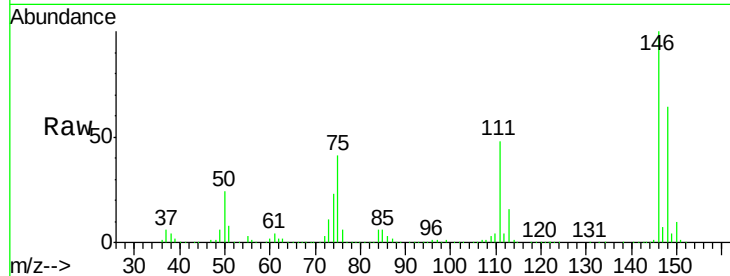
Tot Ion:146 Resp: 1605434

Ion Ratio Lower Upper

146 100

111 46.5 23.5 70.5

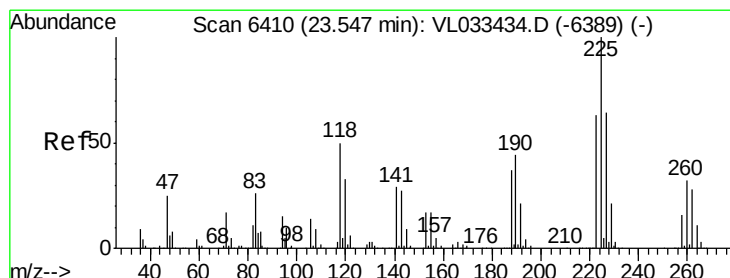
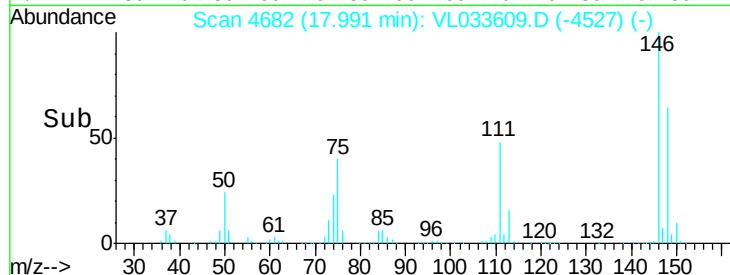
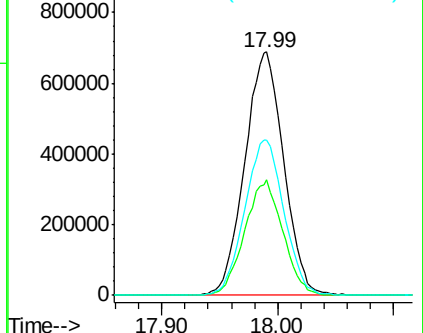
148 64.7 32.0 96.0



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



#78

Hexachloro-1,3-Butadiene

Concen: 10.528 ppbv

RT: 23.54 min Scan# 6409

Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

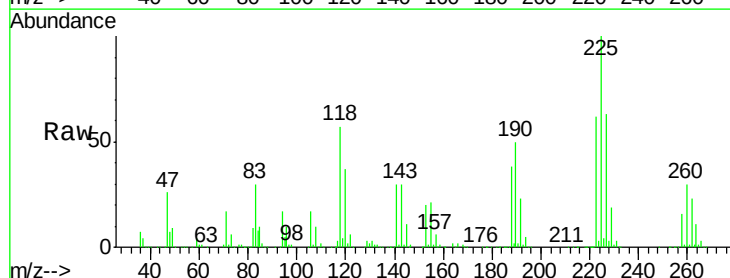
Tgt Ion:225 Resp: 1215134

Ion Ratio Lower Upper

225 100

223 63.6 50.0 75.0

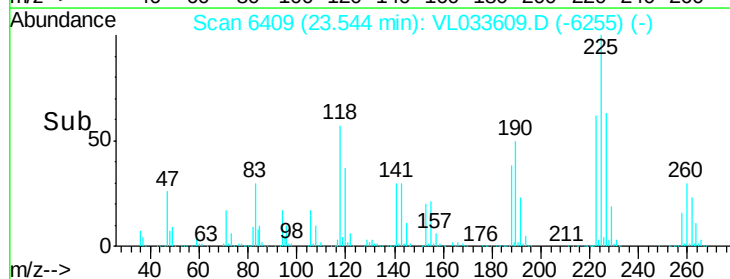
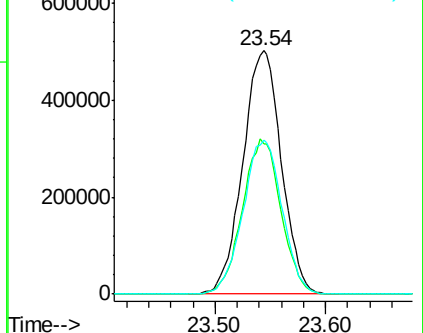
227 64.2 51.1 76.7

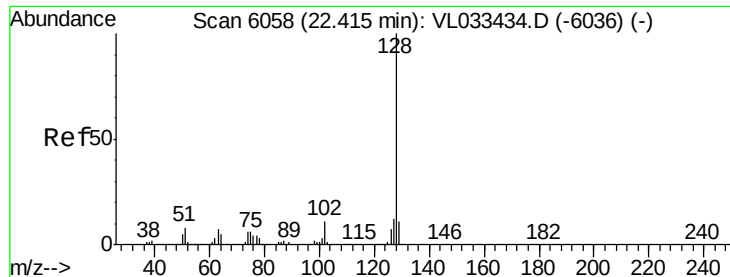


Abundance Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V





#79

Naphthalene

Concen: 10.591 ppbv

RT: 22.41 min Scan# 6056

Delta R.T. -0.01 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Instrument :

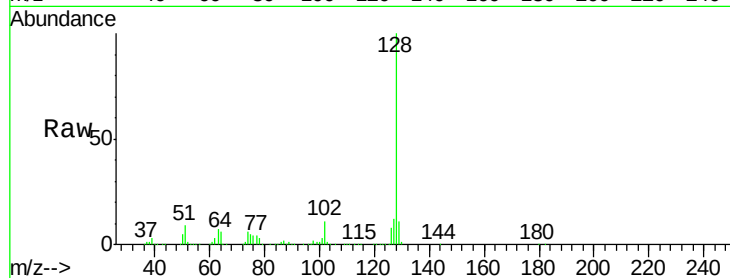
MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:128 Resp: 2695597

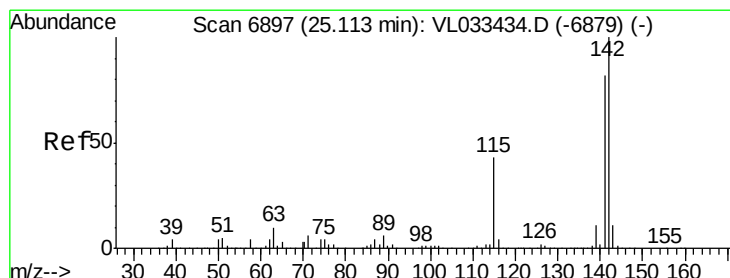
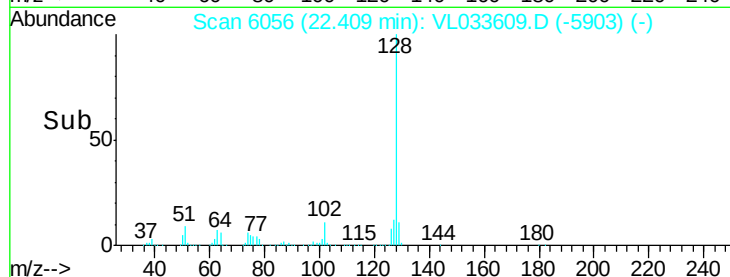
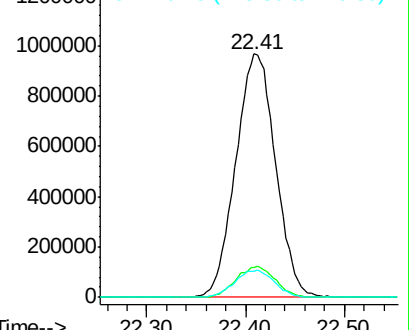
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 128 | 100   |       |       |
| 127 | 12.5  | 9.8   | 14.8  |
| 129 | 10.9  | 8.6   | 12.8  |



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: 14.613 ppbv

RT: 25.11 min Scan# 6897

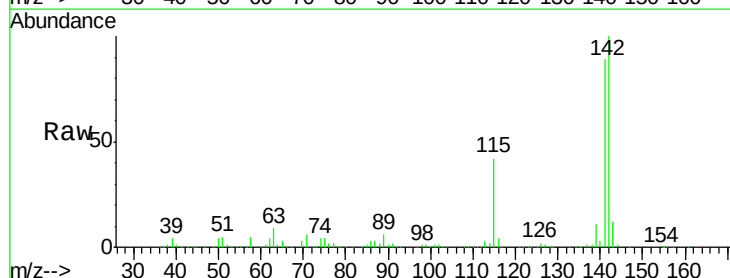
Delta R.T. -0.00 min

Lab File: VL033609.D

Acq: 17 Apr 2019 19:27

Tgt Ion:142 Resp: 1248226

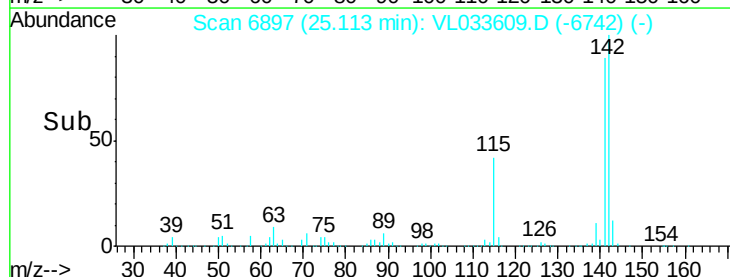
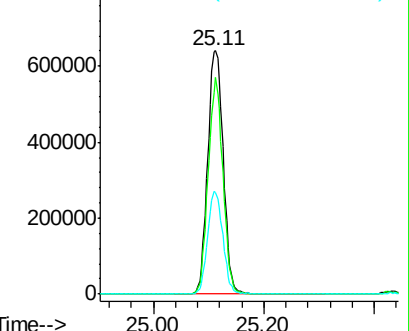
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 142 | 100   |       |       |
| 141 | 83.7  | 66.6  | 99.8  |
| 115 | 41.3  | 34.4  | 51.6  |

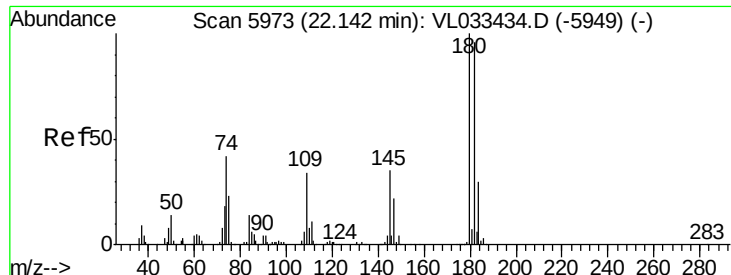


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

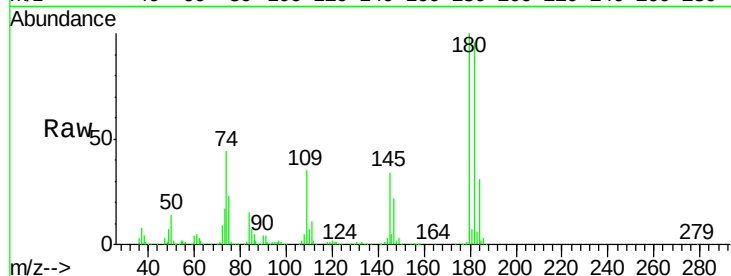




#81  
 1,2,4-Trichlorobenzene  
 Concen: 9.999 ppbv  
 RT: 22.14 min Scan# 5971  
 Delta R.T. -0.01 min  
 Lab File: VL033609.D  
 Acq: 17 Apr 2019 19:27

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion:180 Resp: 1411684  
 Ion Ratio Lower Upper  
 180 100  
 182 95.6 77.0 115.4  
 184 30.8 24.6 36.8



Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V

