

Data File : VL033198.D

Acq On : 13 Feb 2019 22:20

Operator : SY/AP

Sample : VSTDCCC010

Misc : 400ml/MSVOA\_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Quant Time: Feb 14 04:29:22 2019

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL020519AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Feb 06 09:13:11 2019

QLast Update : Wed Feb 06 09:13:11 2019

Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.77  | 49   | 929520   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.30  | 114  | 2142721  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 2825221  | 10.00 | ppbv  | 0.00     |

## System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1741404  | 8.00     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 80.00% |

## Target Compounds

|                                | R.T. | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 3.08 | 85   | 1386401  | 7.801  | ppbv  | 97     |
| 3) Chlorodifluoromethane       | 3.01 | 51   | 950235   | 8.490  | ppbv  | 98     |
| 4) Chloromethane               | 3.17 | 50   | 617616   | 10.451 | ppbv  | 95     |
| 5) Vinyl Chloride              | 3.29 | 62   | 598663   | 9.694  | ppbv  | 98     |
| 6) Bromomethane                | 3.52 | 94   | 351557   | 10.365 | ppbv  | 97     |
| 7) Chloroethane                | 3.60 | 64   | 215705   | 10.692 | ppbv  | 99     |
| 8) Dichlorotetrafluoroethane   | 3.22 | 85   | 1425144  | 10.254 | ppbv  | 98     |
| 9) Propene                     | 3.04 | 41   | 433709   | 8.022  | ppbv  | 100    |
| 10) Heptane                    | 8.25 | 43   | 1319625  | 8.068  | ppbv  | 99     |
| 11) Trichlorofluoromethane     | 4.00 | 101  | 1549499  | 10.770 | ppbv  | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55 | 101  | 989872   | 9.927  | ppbv  | 98     |
| 13) Ethanol                    | 3.65 | 45   | 124568   | 6.909  | ppbv  | 95     |
| 14) Bromoethene                | 3.79 | 108  | 444818   | 10.346 | ppbv  | 99     |
| 15) Acetone                    | 3.90 | 43   | 995597   | 9.507  | ppbv  | 99     |
| 16) 1,3-Butadiene              | 3.36 | 39   | 503257   | 10.124 | ppbv  | 96     |
| 17) tert-Butyl alcohol         | 4.35 | 59   | 195860   | 9.810  | ppbv  | 99     |
| 18) 1,1-Dichloroethene         | 4.35 | 96   | 442395   | 9.912  | ppbv  | 97     |
| 19) Isopropyl Alcohol          | 4.02 | 45   | 692335   | 9.748  | ppbv  | 100    |
| 20) Methylene Chloride         | 4.41 | 84   | 381806   | 9.166  | ppbv  | 93     |
| 21) Allyl Chloride             | 4.48 | 41   | 706529   | 10.218 | ppbv  | 99     |
| 22) trans-1,2-Dichloroethene   | 4.97 | 96   | 437227   | 10.087 | ppbv  | 99     |
| 23) Vinyl Acetate              | 5.16 | 43   | 1819104  | 10.023 | ppbv  | 98     |
| 24) 1,1-Dichloroethane         | 5.09 | 63   | 1247939  | 9.721  | ppbv  | 99     |
| 25) Ethyl Acetate              | 5.77 | 43   | 2201068  | 9.348  | ppbv  | 99     |
| 26) Hexane                     | 5.78 | 57   | 975120   | 8.822  | ppbv  | 97     |
| 27) Carbon Disulfide           | 4.62 | 76   | 1085584  | 10.720 | ppbv  | 99     |
| 28) Methyl tert-Butyl Ether    | 5.11 | 73   | 1431476  | 9.477  | ppbv  | 99     |
| 29) Chloroform                 | 5.85 | 83   | 1586538  | 9.366  | ppbv  | 97     |
| 30) Cyclohexane                | 7.25 | 84   | 840808   | 8.198  | ppbv  | 98     |
| 31) cis-1,2-Dichloroethene     | 5.64 | 61   | 1039856  | 9.399  | ppbv  | 98     |
| 32) 1,1,1-Trichloroethane      | 6.62 | 97   | 1533837  | 8.223  | ppbv  | 98     |
| 34) 2-Butanone                 | 5.33 | 43   | 1500467  | 11.040 | ppbv  | 99     |
| 35) Carbon Tetrachloride       | 7.14 | 117  | 1607997  | 9.826  | ppbv  | 99     |
| 36) Benzene                    | 7.01 | 78   | 2043719  | 9.411  | ppbv  | 98     |
| 37) 1,2-Dichloroethane         | 6.42 | 62   | 1275353  | 10.597 | ppbv  | 98     |
| 38) Trichloroethene            | 7.96 | 130  | 444956   | 4.785  | ppbv  | 93     |
| 39) 1,2-Dichloropropane        | 7.74 | 63   | 787981   | 9.188  | ppbv  | 96     |
| 40) 1,4-Dioxane                | 7.96 | 88   | 271140   | 8.699  | ppbv  | 96     |
| 41) Tetrahydrofuran            | 6.15 | 42   | 857703   | 10.195 | ppbv  | 99     |
| 42) Bromodichloromethane       | 7.92 | 83   | 1762048  | 10.103 | ppbv  | 96     |
| 43) Methyl Methacrylate        | 8.14 | 69   | 858746   | 9.850  | ppbv  | 98     |

Data File : VL033198.D  
Acq On : 13 Feb 2019 22:20  
Operator : SY/AP  
Sample : VSTDCCC010  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Quant Time: Feb 14 04:29:22 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL020519AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Feb 06 09:13:11 2019  
QLast Update : Wed Feb 06 09:13:11 2019  
Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.99  | 57   | 3411365  | 9.270  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.42  | 75   | 1129425  | 11.661 | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 8.84  | 75   | 1300881  | 10.545 | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 9.62  | 97   | 845912   | 9.504  | ppbv   | 97       |
| 48) Dibromochloromethane      | 10.46 | 129  | 1479835  | 10.561 | ppbv   | 100      |
| 49) Bromoform                 | 13.21 | 173  | 1326415  | 11.003 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.87  | 43   | 2178142  | 9.994  | ppbv   | 99       |
| 51) 2-Hexanone                | 10.27 | 43   | 1700304  | 9.895  | ppbv   | 100      |
| 52) Tetrachloroethene         | 11.38 | 164  | 754456   | 9.043  | ppbv   | 96       |
| 53) Toluene                   | 9.95  | 91   | 2451055  | 9.532  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.76 | 107  | 1355343  | 9.711  | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 12.28 | 131  | 1023782  | 7.895  | ppbv # | 60       |
| 57) Chlorobenzene             | 12.31 | 112  | 1773620  | 7.191  | ppbv   | 97       |
| 58) Ethyl Benzene             | 12.87 | 91   | 3446410  | 7.537  | ppbv   | 98       |
| 59) m/p-Xylene                | 13.15 | 91   | 2172641  | 5.694  | ppbv # | 100      |
| 60) o-Xylene                  | 13.85 | 91   | 2728251  | 7.352  | ppbv   | 99       |
| 61) Styrene                   | 13.69 | 104  | 2083923  | 7.445  | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.83 | 105  | 3809489  | 7.278  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.84 | 83   | 1867148  | 6.405  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.73 | 120  | 971760   | 7.305  | ppbv   | 98       |
| 65) tert-Butylbenzene         | 16.91 | 119  | 3299658  | 7.239  | ppbv   | 98       |
| 66) Benzyl Chloride           | 17.16 | 91   | 1738631  | 10.744 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.46 | 105  | 4859185  | 7.343  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.82 | 119  | 3934267  | 7.138  | ppbv   | 99       |
| 70) n-Butylbenzene            | 18.72 | 91   | 4296106  | 7.224  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.62 | 91   | 2984593  | 7.257  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 16.01 | 105  | 3154704  | 7.376  | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.16 | 105  | 3040294  | 7.432  | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.93 | 105  | 3086963  | 7.271  | ppbv   | 95       |
| 75) 1,3-Dichlorobenzene       | 17.17 | 146  | 1790200  | 7.313  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.31 | 146  | 1790221  | 7.384  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 18.00 | 146  | 1733915  | 7.168  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.55 | 225  | 1404459  | 11.664 | ppbv   | 100      |
| 79) Naphthalene               | 22.42 | 128  | 3383484  | 7.418  | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 25.12 | 142  | 1596690  | 6.913  | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 22.14 | 180  | 1648663  | 7.114  | ppbv   | 100      |

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

Data File : VL033198.D

Acq On : 13 Feb 2019 22:20

Operator : SY/AP

Sample : VSTDCCC010

Misc : 400ml/MSVOA L

```
ALS Vial      : 1      Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VSTDCCC010EC

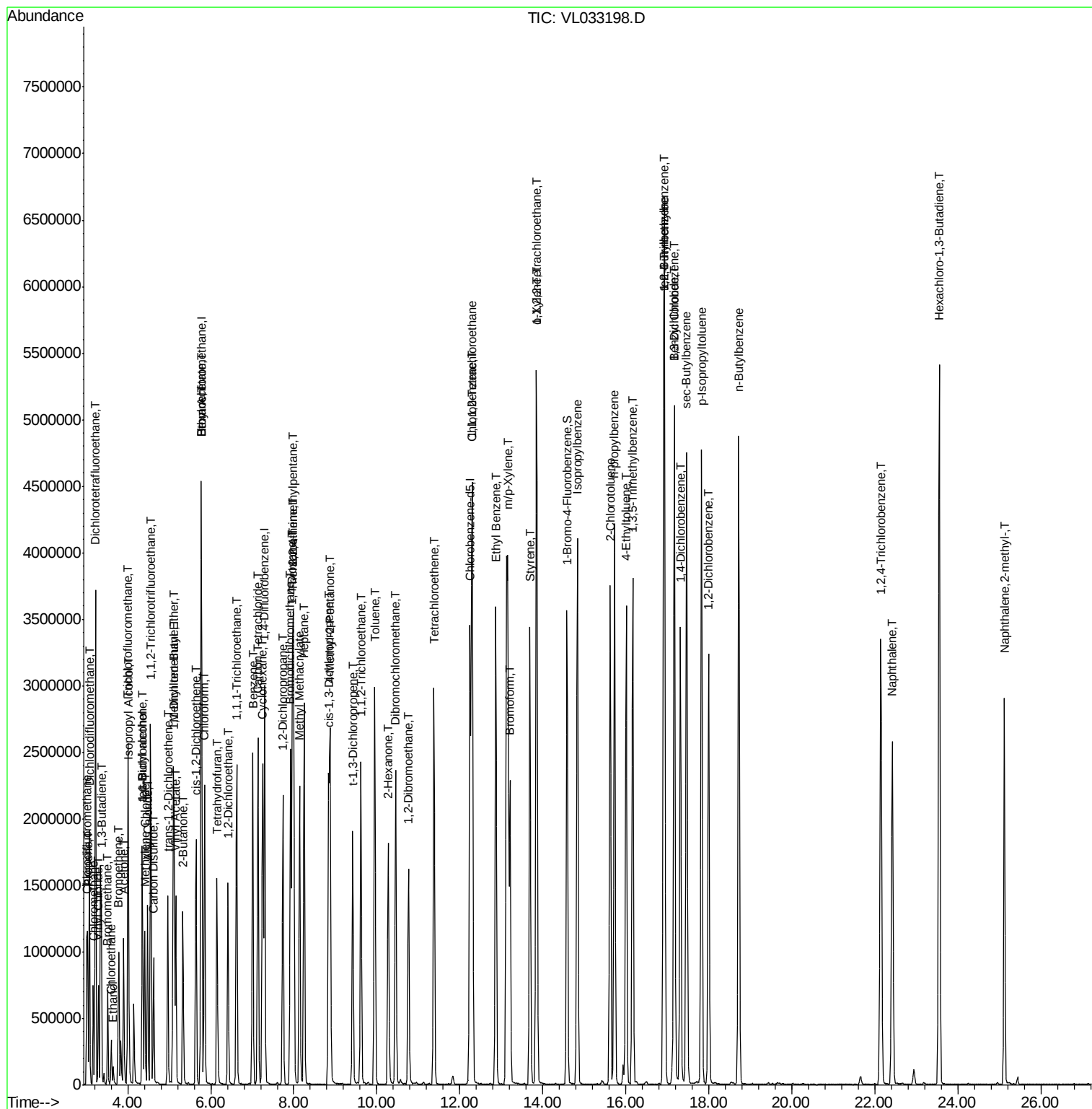
Quant Time: Feb 14 04:29:22 2019

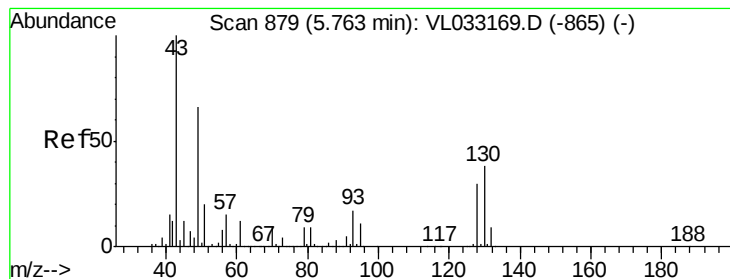
Quant Method : Z:\VOASRV\HPCHEM1\MSV0A\_L\METHODS\VL020519AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_LWed Feb 06 09:13:11 2019

QLast Update : Wed Feb 06 09:13:11 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 880

Delta R.T. 0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

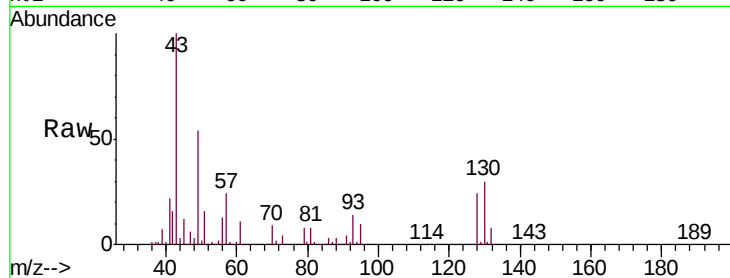
Tgt Ion: 49 Resp: 929520

Ion Ratio Lower Upper

49 100

128 44.8 23.6 71.0

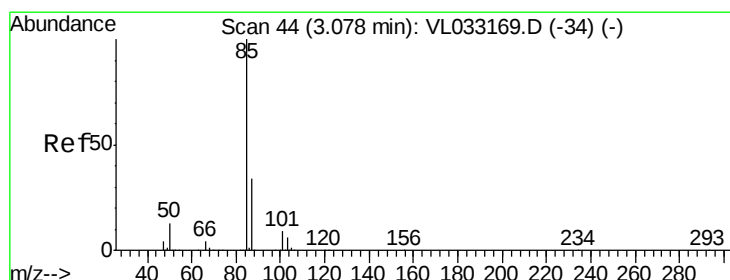
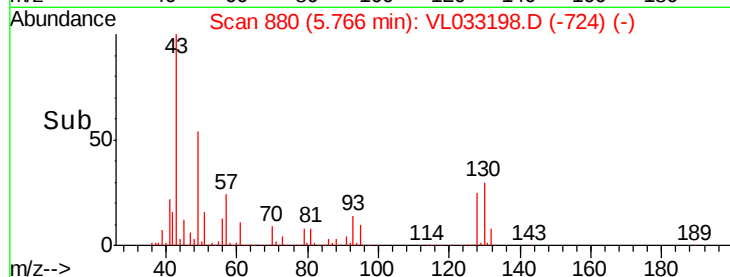
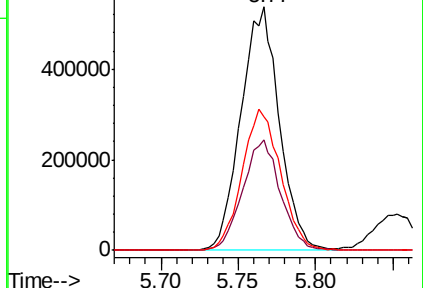
130 58.5 30.3 91.0



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 7.801 ppbv

RT: 3.08 min Scan# 44

Delta R.T. -0.00 min

Lab File: VL033198.D

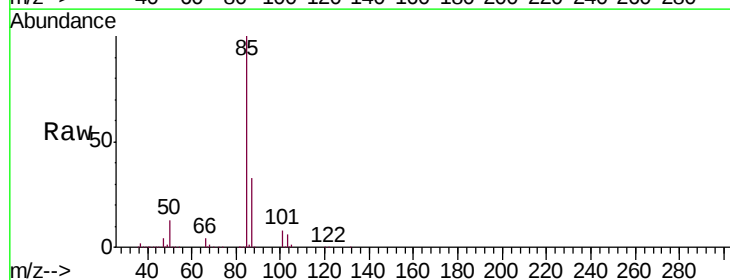
Acq: 13 Feb 2019 22:20

Tgt Ion: 85 Resp: 1386401

Ion Ratio Lower Upper

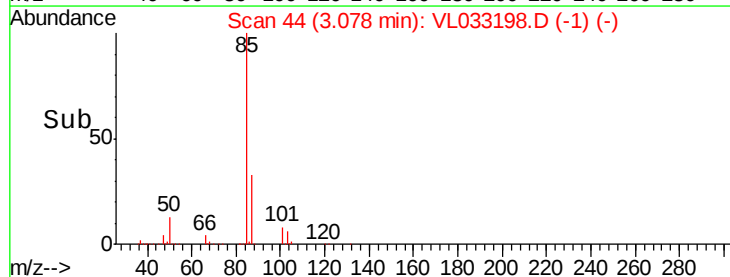
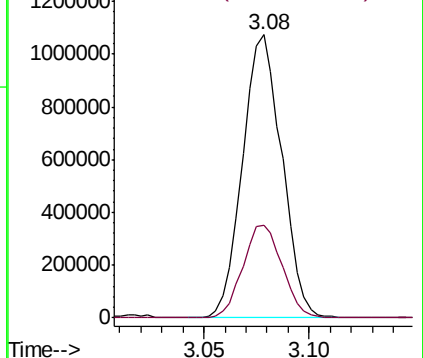
85 100

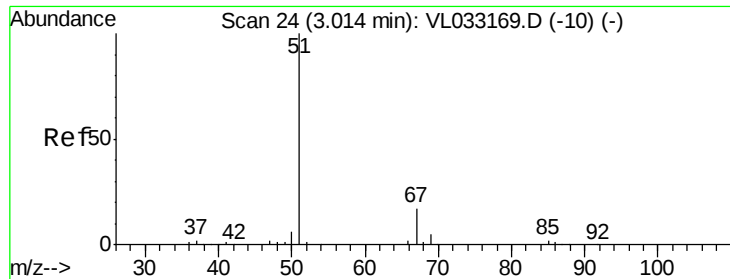
87 32.6 27.4 41.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 8.490 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

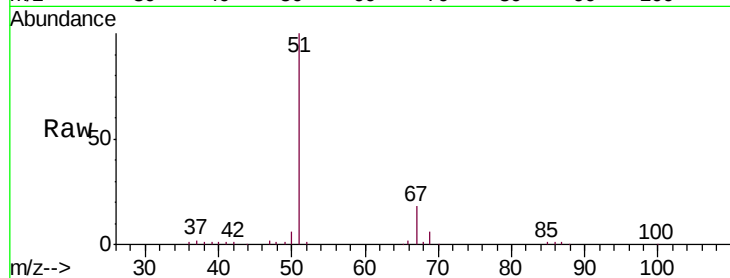
VSTDCCC010EC

Tgt Ion: 51 Resp: 950235

Ion Ratio Lower Upper

51 100

67 18.3 14.0 21.0



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.01

800000

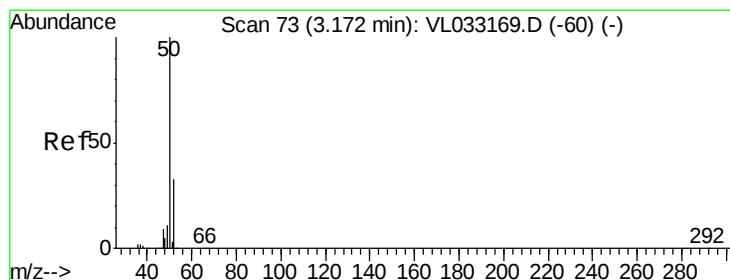
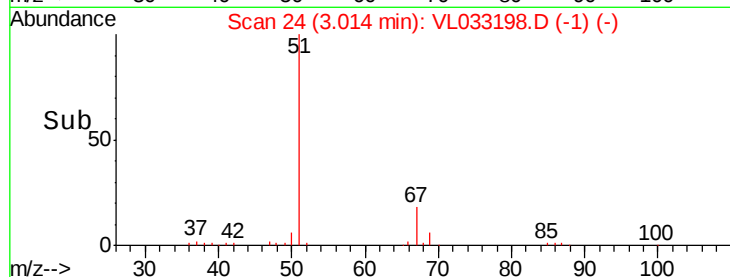
600000

400000

200000

0

Time-->



#4

Chloromethane

Concen: 10.451 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033198.D

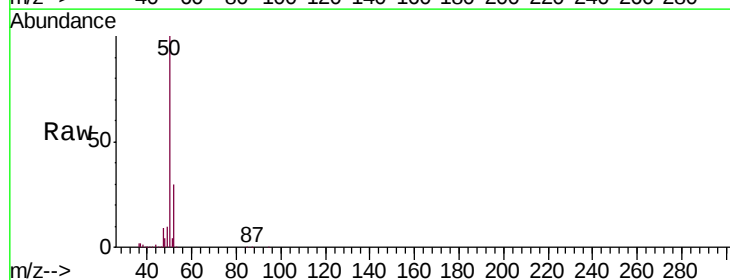
Acq: 13 Feb 2019 22:20

Tgt Ion: 50 Resp: 617616

Ion Ratio Lower Upper

50 100

52 30.4 26.5 39.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.17

500000

400000

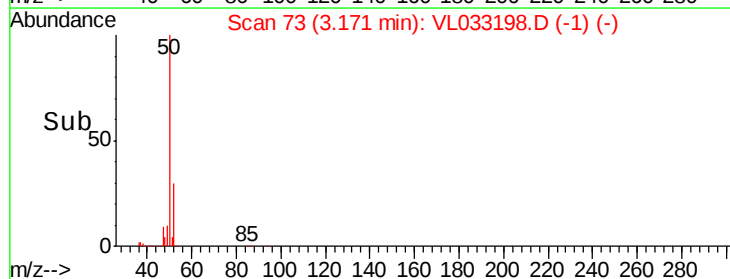
300000

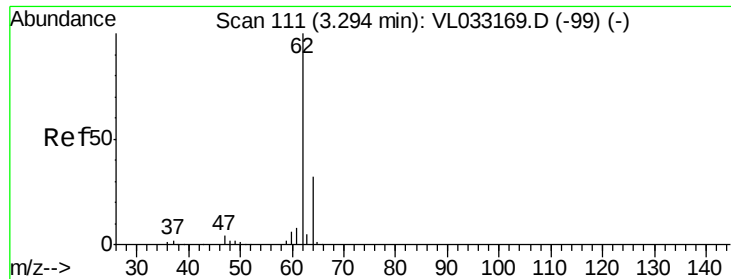
200000

100000

0

Time-->





#5

Vinyl Chloride

Concen: 9.694 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

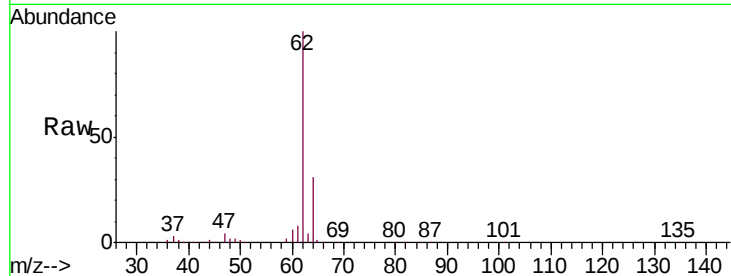
VSTDCCC010EC

Tgt Ion: 62 Resp: 598663

Ion Ratio Lower Upper

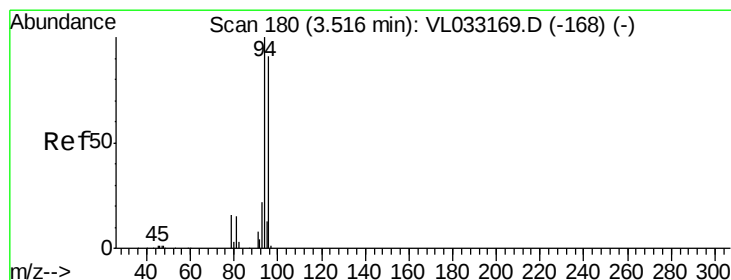
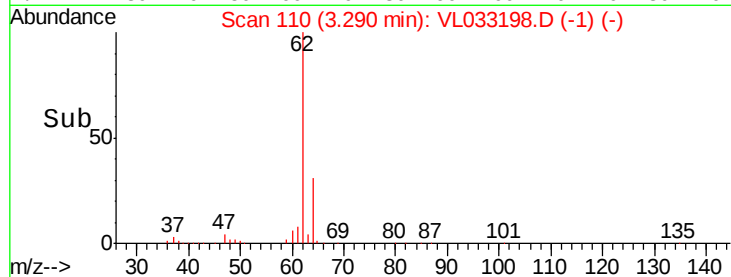
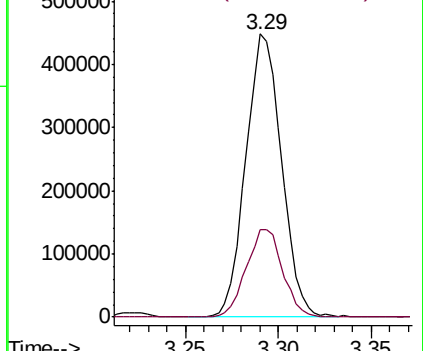
62 100

64 31.0 25.6 38.4



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 10.365 ppbv

RT: 3.52 min Scan# 180

Delta R.T. -0.00 min

Lab File: VL033198.D

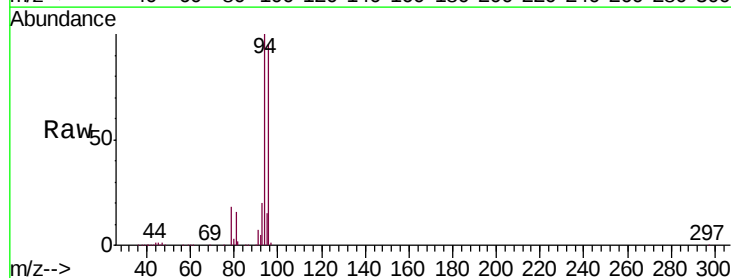
Acq: 13 Feb 2019 22:20

Tgt Ion: 94 Resp: 351557

Ion Ratio Lower Upper

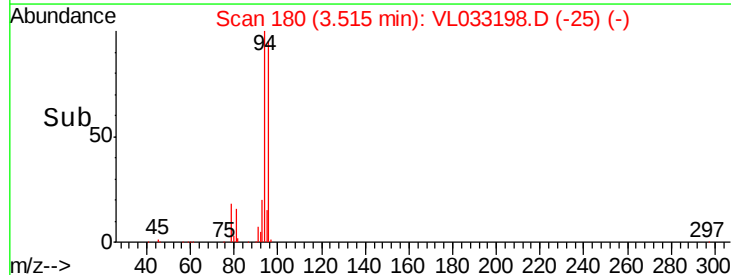
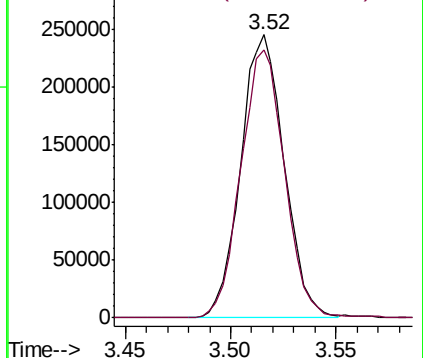
94 100

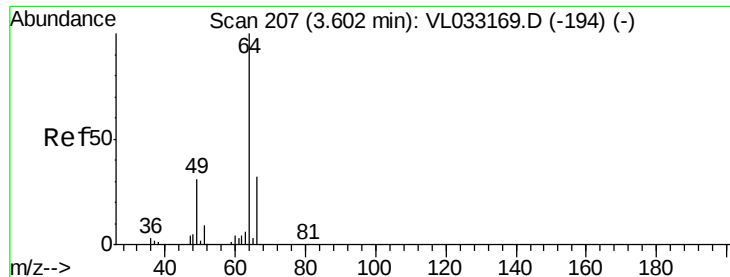
96 94.6 73.2 109.8



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 10.692 ppbv

RT: 3.60 min Scan# 207

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

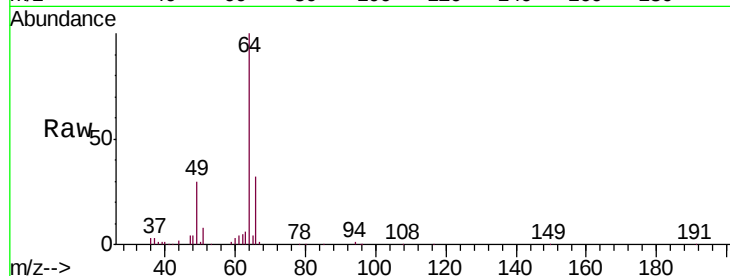
VSTDCCC010EC

Tgt Ion: 64 Resp: 215705

Ion Ratio Lower Upper

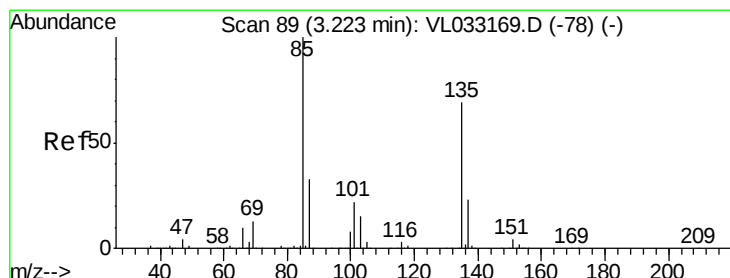
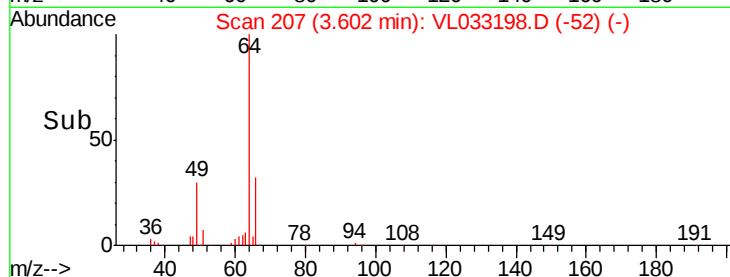
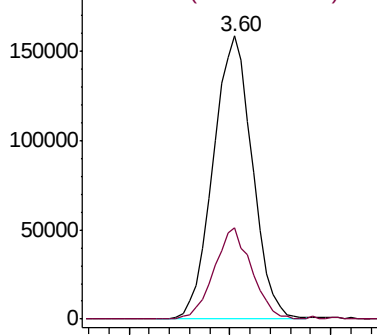
64 100

66 32.2 26.0 39.0



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 10.254 ppbv

RT: 3.22 min Scan# 88

Delta R.T. -0.00 min

Lab File: VL033198.D

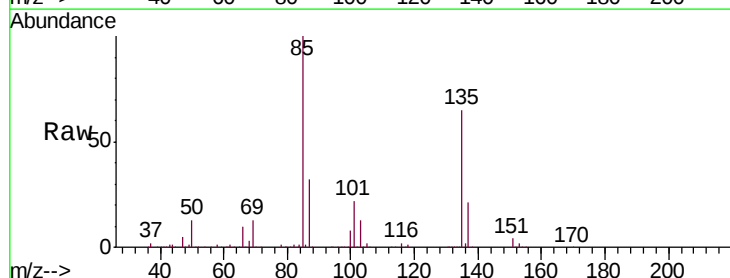
Acq: 13 Feb 2019 22:20

Tgt Ion: 85 Resp: 1425144

Ion Ratio Lower Upper

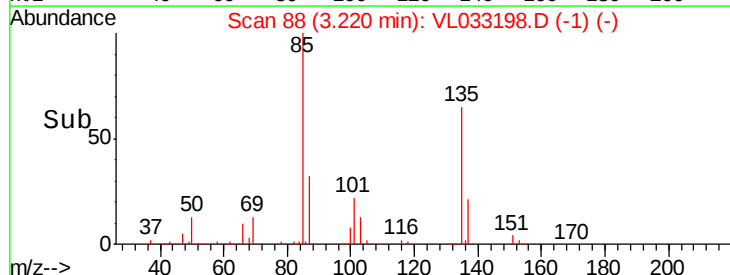
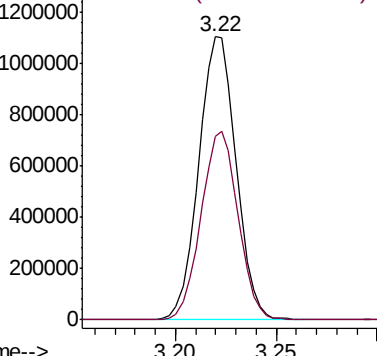
85 100

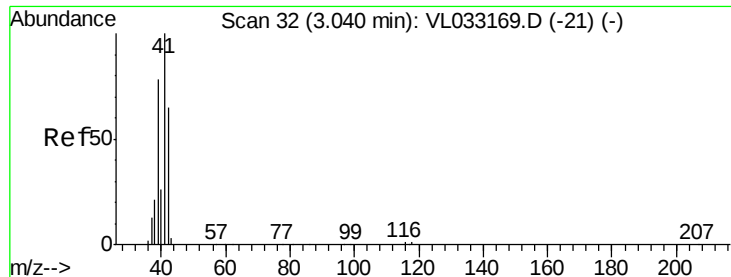
135 66.5 54.3 81.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 8.022 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

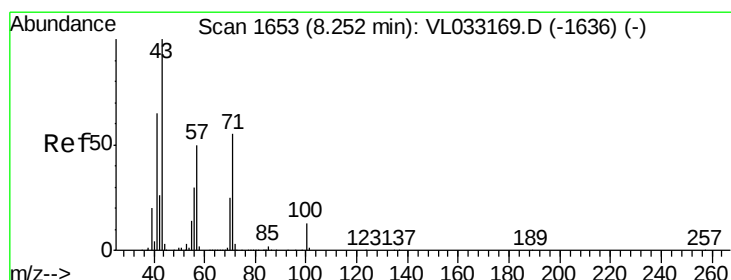
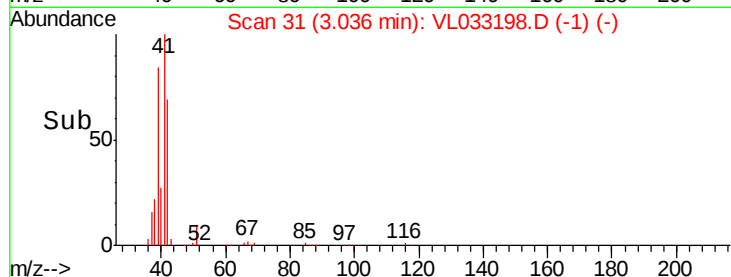
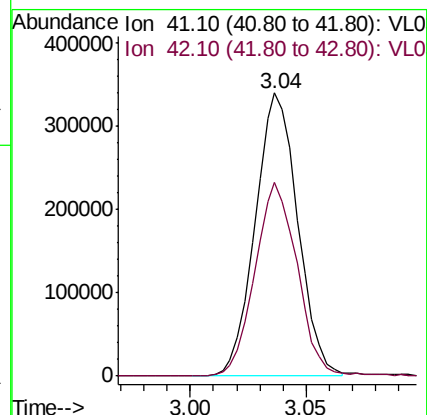
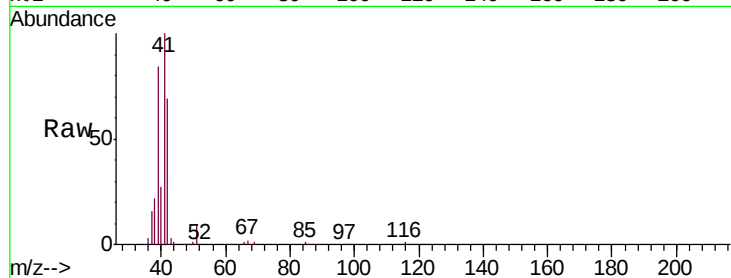
VSTDCCC010EC

Tgt Ion: 41 Resp: 433709

Ion Ratio Lower Upper

41 100

42 68.6 55.0 82.6



#10

Heptane

Concen: 8.068 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. -0.00 min

Lab File: VL033198.D

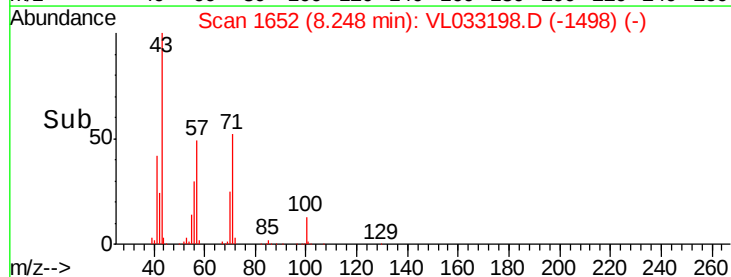
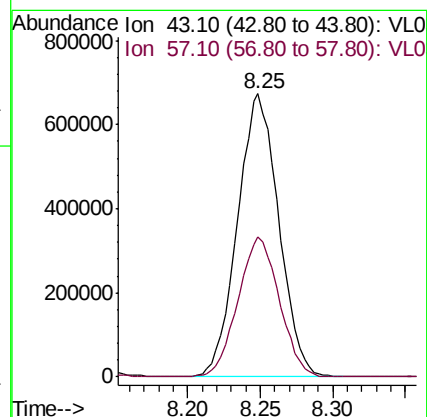
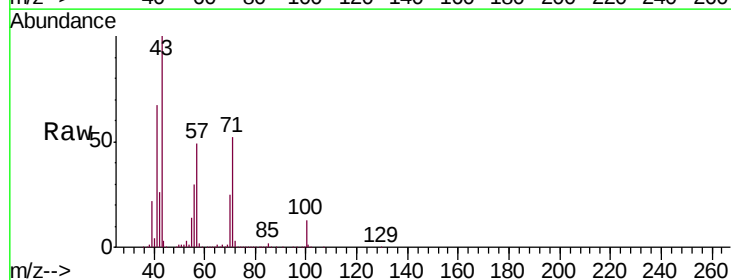
Acq: 13 Feb 2019 22:20

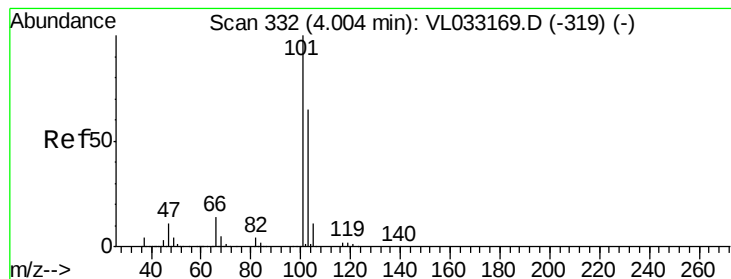
Tgt Ion: 43 Resp: 1319625

Ion Ratio Lower Upper

43 100

57 49.9 39.5 59.3





#11

Trichlorofluoromethane

Concen: 10.770 ppbv

RT: 4.00 min Scan# 332

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

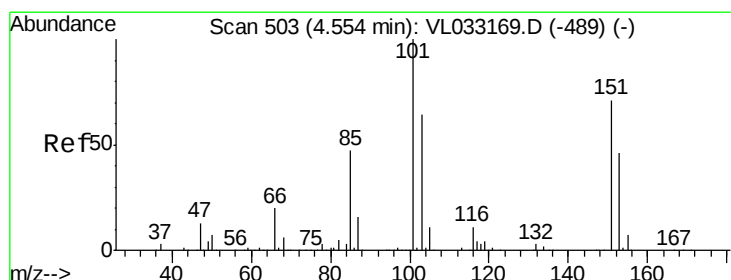
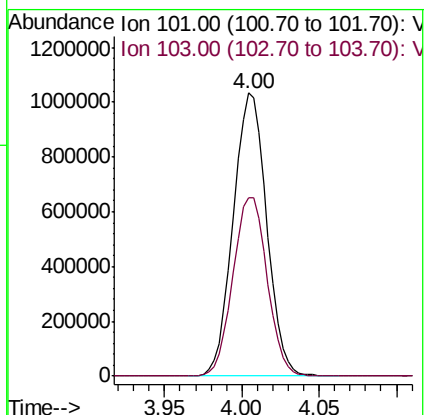
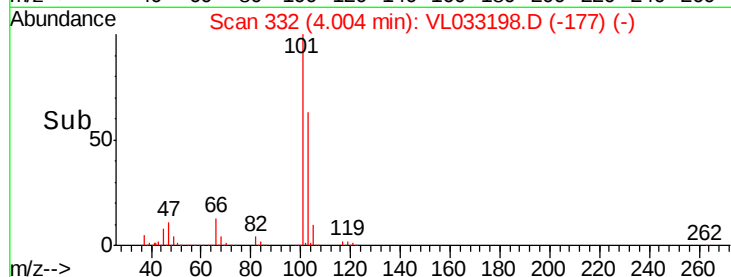
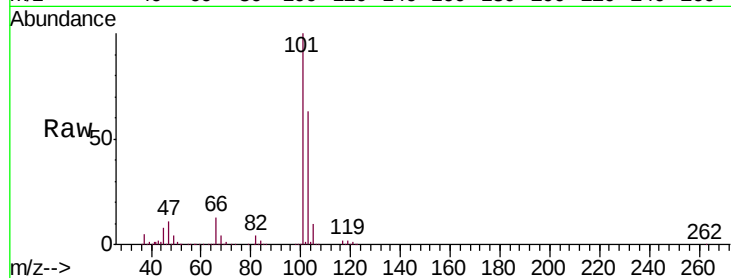
VSTDCCC010EC

Tgt Ion:101 Resp: 1549499

Ion Ratio Lower Upper

101 100

103 63.2 51.7 77.5



#12

1,1,2-Trichlorotrifluoroethane

Concen: 9.927 ppbv

RT: 4.55 min Scan# 503

Delta R.T. -0.00 min

Lab File: VL033198.D

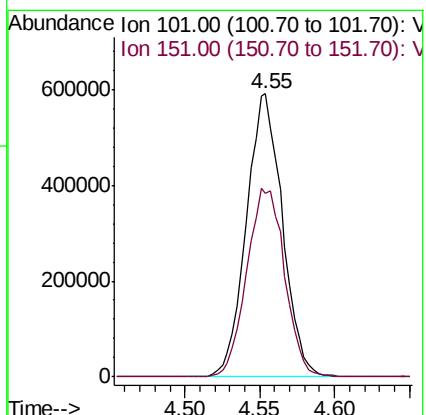
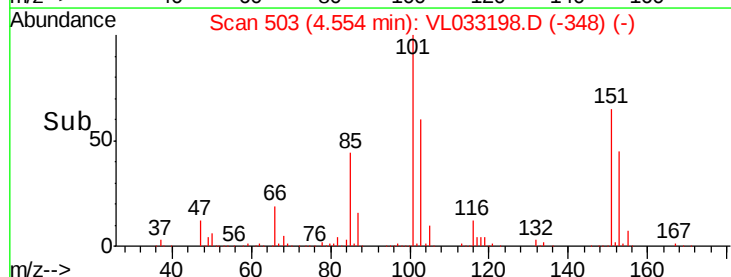
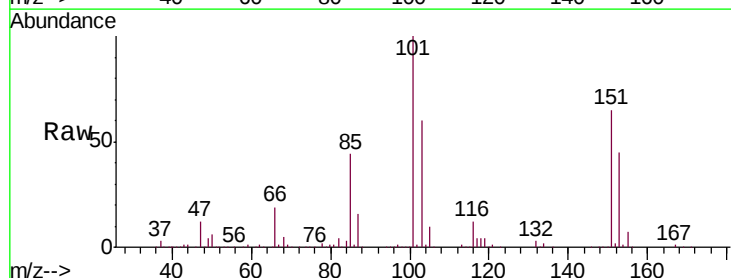
Acq: 13 Feb 2019 22:20

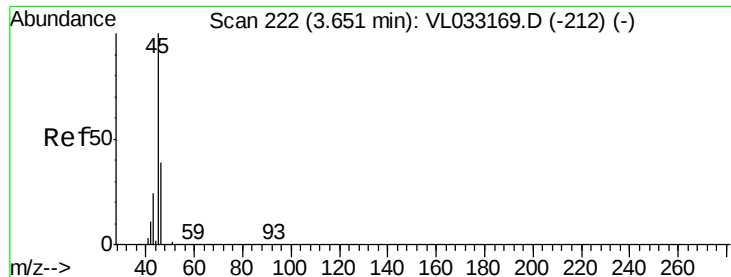
Tgt Ion:101 Resp: 989872

Ion Ratio Lower Upper

101 100

151 70.1 57.4 86.0

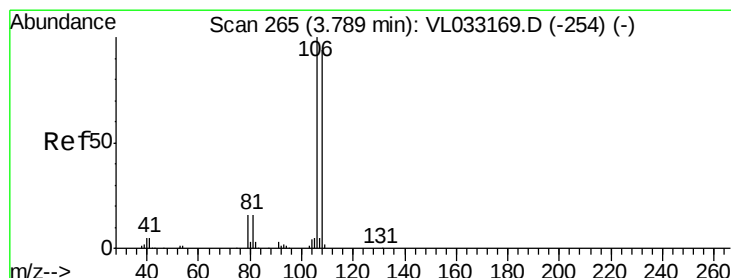
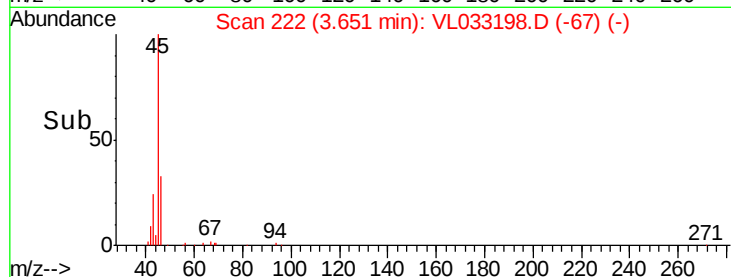
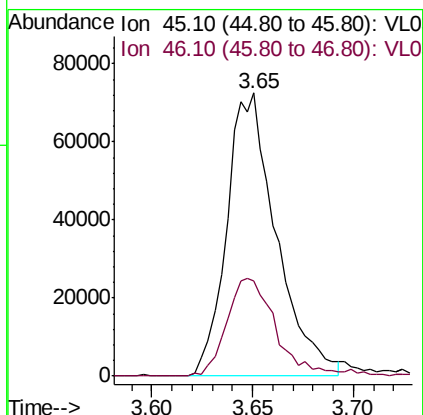
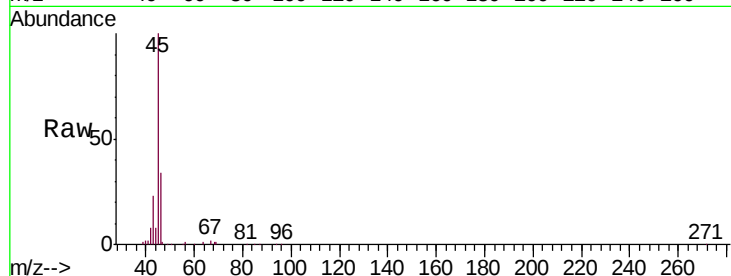




#13  
 Ethanol  
 Concen: 6.909 ppbv  
 RT: 3.65 min Scan# 222  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

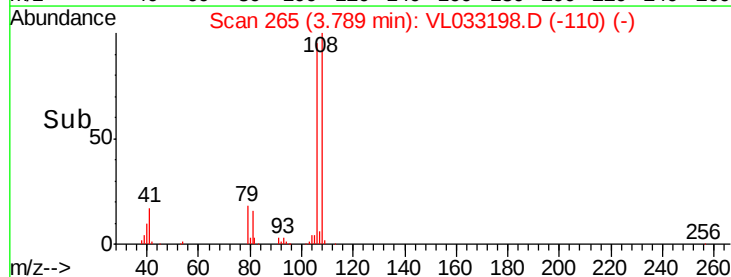
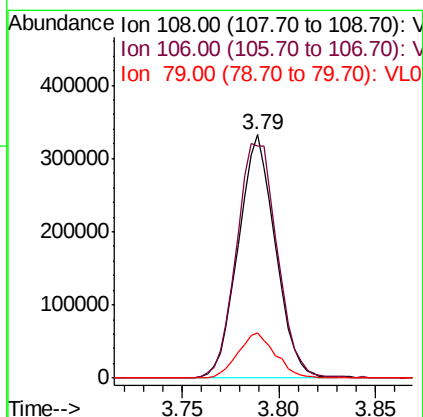
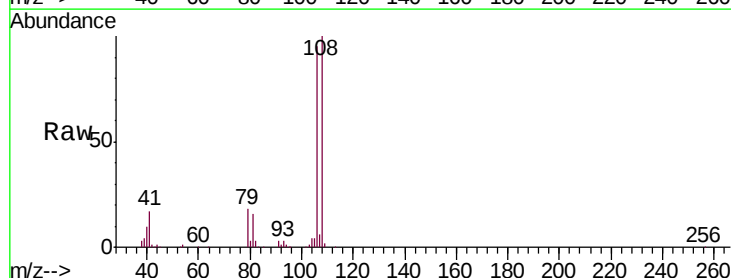
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

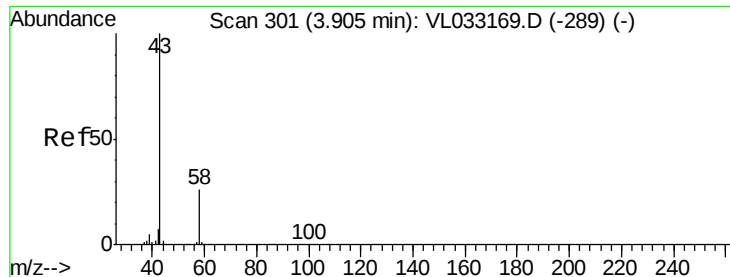
Tgt Ion: 45 Resp: 124568  
 Ion Ratio Lower Upper  
 45 100  
 46 34.6 15.0 60.2



#14  
 Bromoethene  
 Concen: 10.346 ppbv  
 RT: 3.79 min Scan# 265  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 108 Resp: 444818  
 Ion Ratio Lower Upper  
 108 100  
 106 106.7 86.0 129.0  
 79 19.0 14.5 21.7





#15

Acetone

Concen: 9.507 ppbv

RT: 3.90 min Scan# 300

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

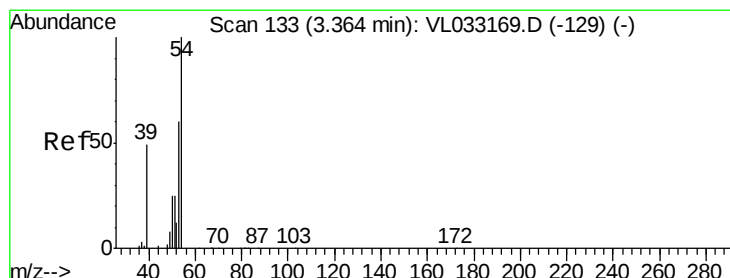
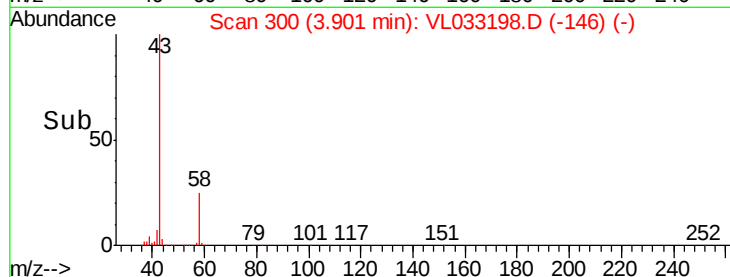
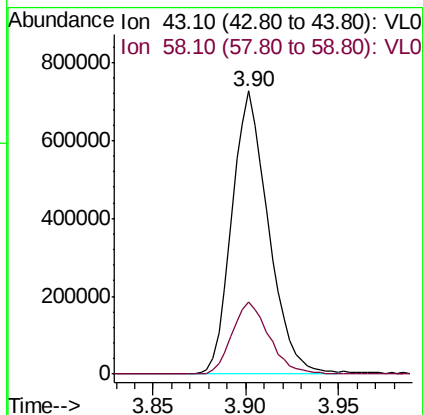
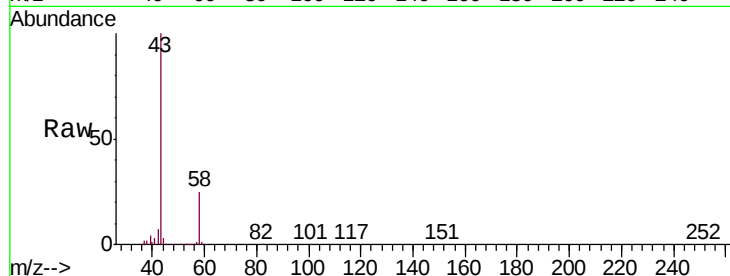
VSTDCCC010EC

Tgt Ion: 43 Resp: 995597

Ion Ratio Lower Upper

43 100

58 25.9 21.1 31.7



#16

1,3-Butadiene

Concen: 10.124 ppbv

RT: 3.36 min Scan# 133

Delta R.T. -0.00 min

Lab File: VL033198.D

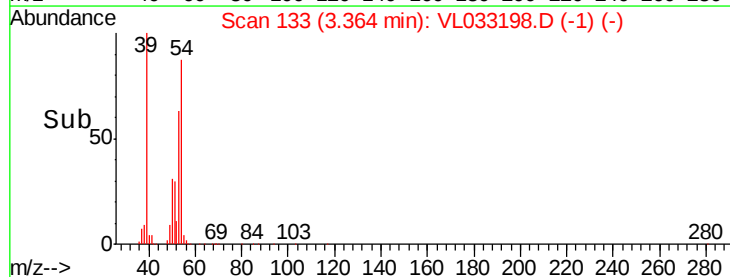
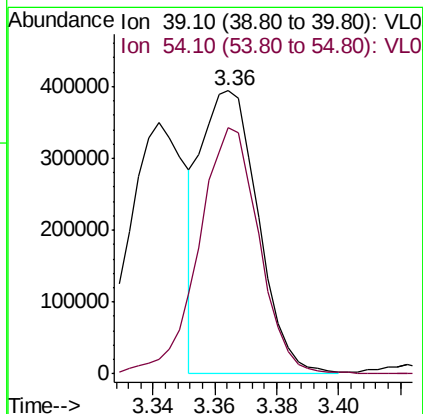
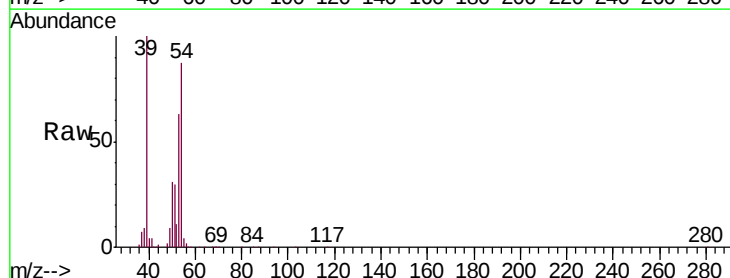
Acq: 13 Feb 2019 22:20

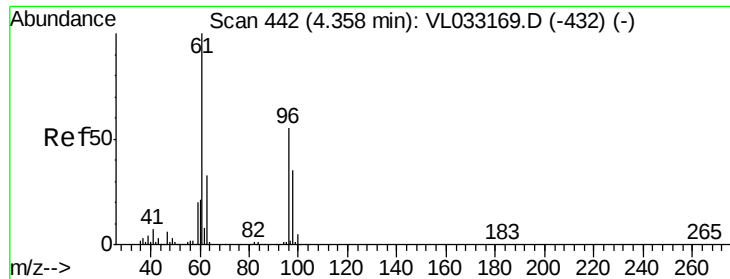
Tgt Ion: 39 Resp: 503257

Ion Ratio Lower Upper

39 100

54 92.8 71.3 106.9



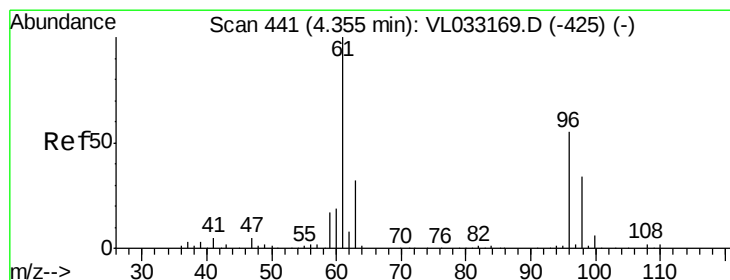
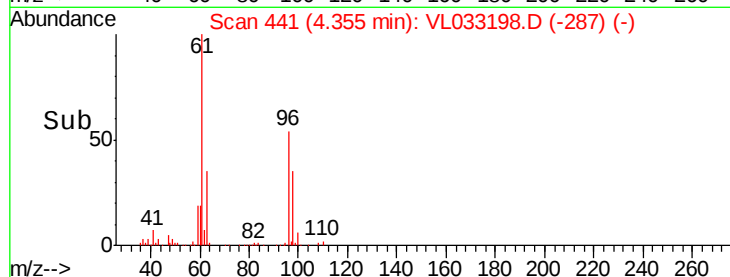
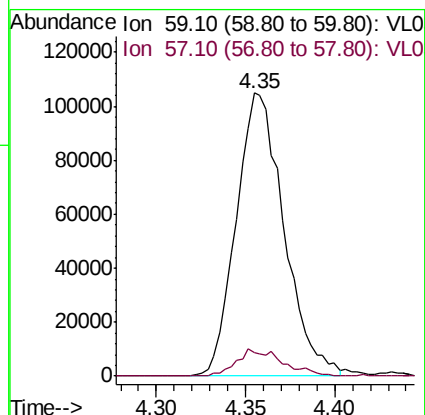
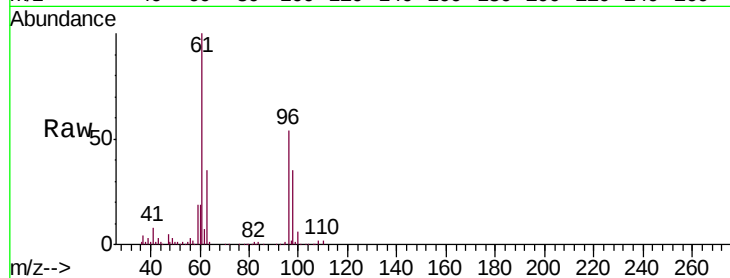


#17

tert-Butyl alcohol  
Concen: 9.810 ppbv  
RT: 4.35 min Scan# 441  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

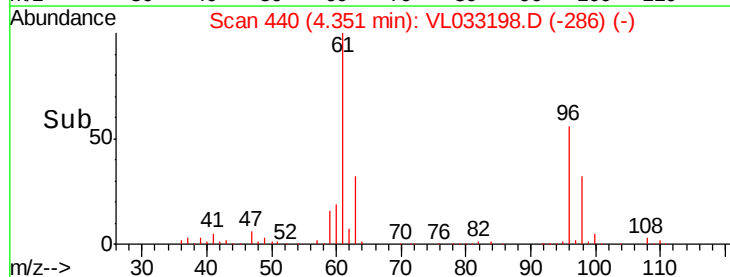
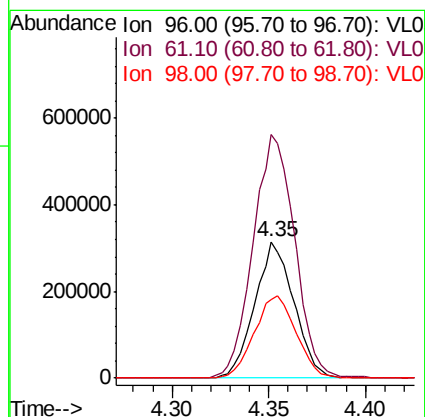
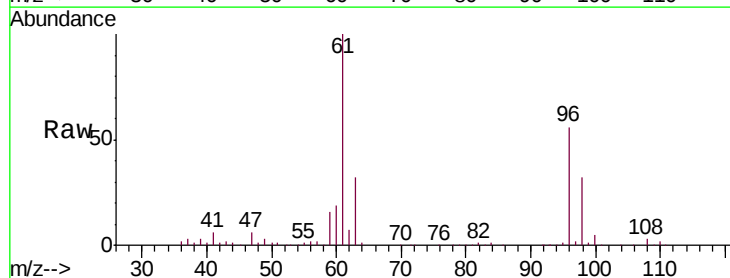
Tgt Ion: 59 Resp: 195860  
Ion Ratio Lower Upper  
59 100  
57 9.3 7.6 11.4

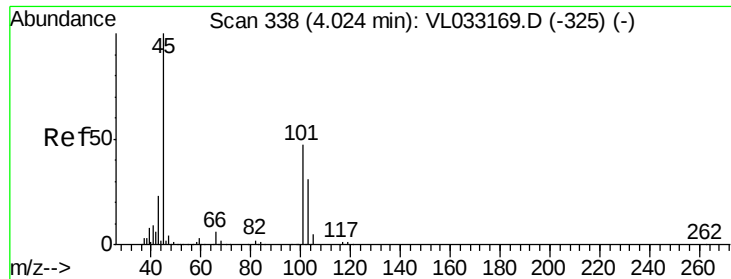


#18

1,1-Dichloroethene  
Concen: 9.912 ppbv  
RT: 4.35 min Scan# 440  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion: 96 Resp: 442395  
Ion Ratio Lower Upper  
96 100  
61 178.9 145.0 217.6  
98 57.9 50.0 75.0





#19

Isopropyl Alcohol

Concen: 9.748 ppbv

RT: 4.02 min Scan# 338

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

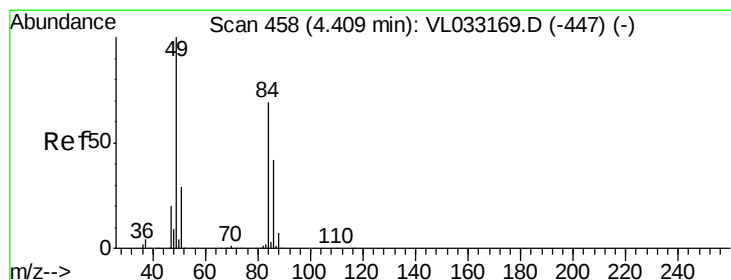
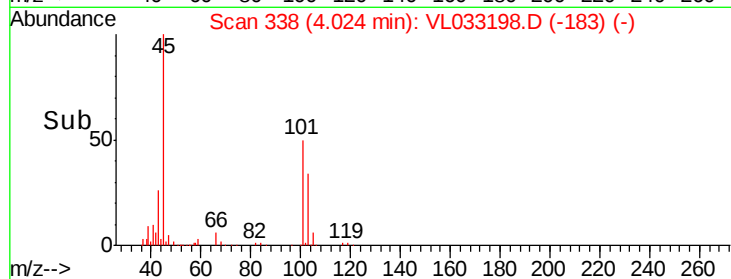
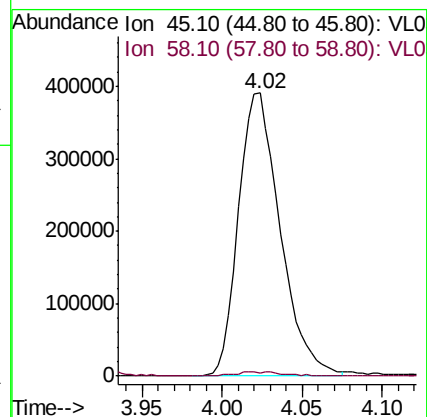
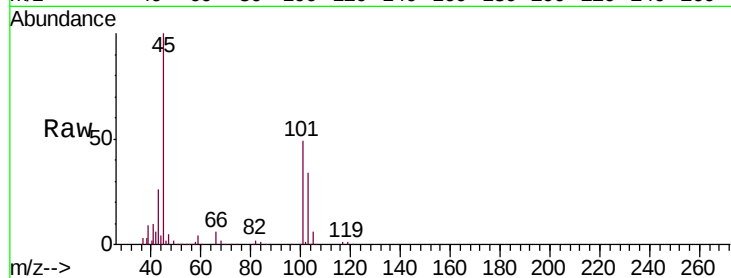
VSTDCCC010EC

Tgt Ion: 45 Resp: 692335

Ion Ratio Lower Upper

45 100

58 1.8 1.5 2.3



#20

Methylene Chloride

Concen: 9.166 ppbv

RT: 4.41 min Scan# 458

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Tgt Ion: 84 Resp: 381806

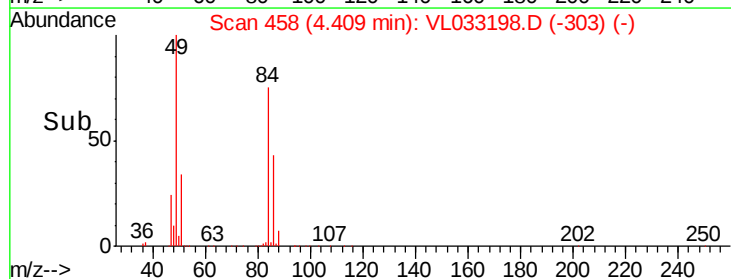
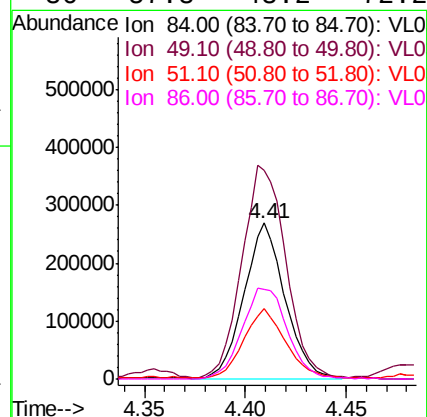
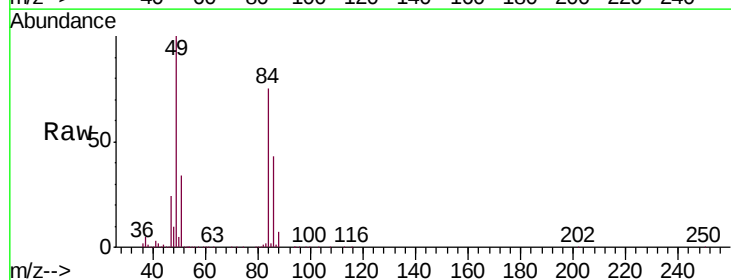
Ion Ratio Lower Upper

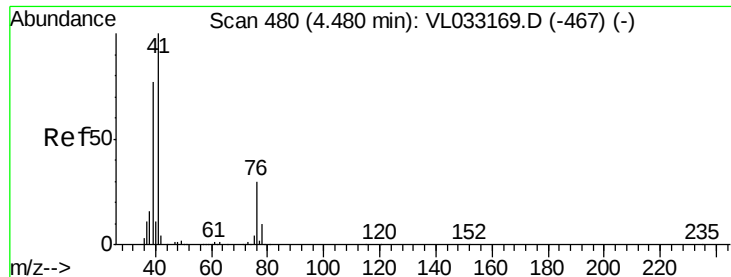
84 100

49 133.3 115.8 173.8

51 44.3 33.0 49.6

86 57.8 48.2 72.2

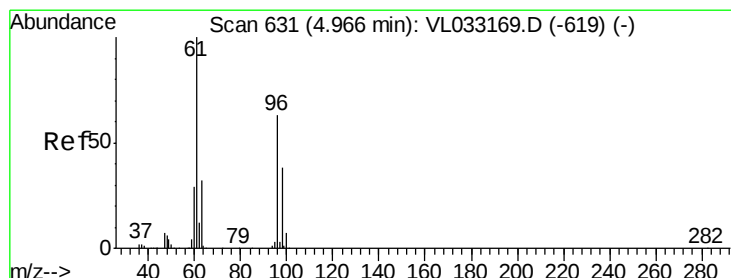
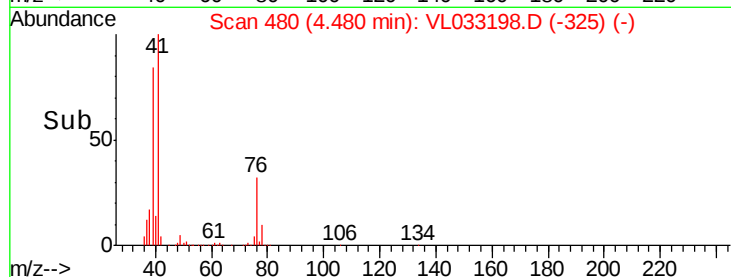
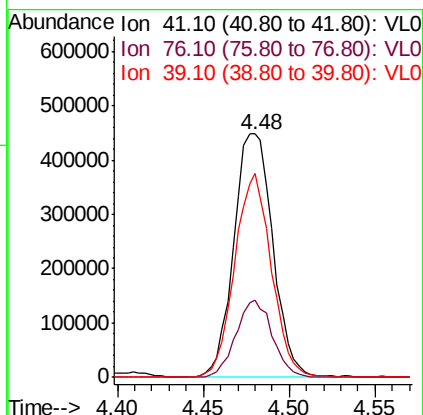
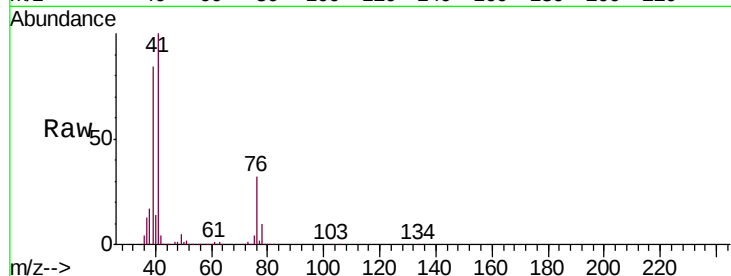




#21  
 Allyl Chloride  
 Concen: 10.218 ppbv  
 RT: 4.48 min Scan# 480  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

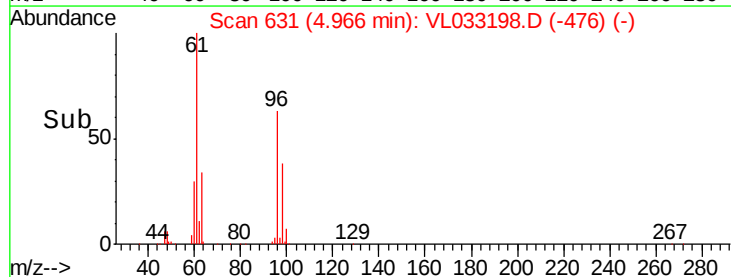
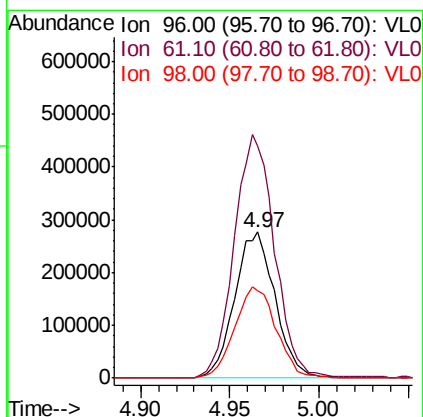
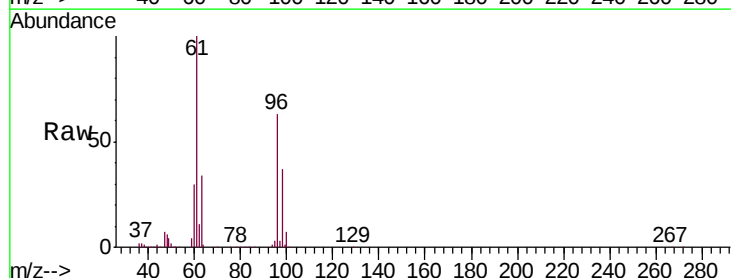
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

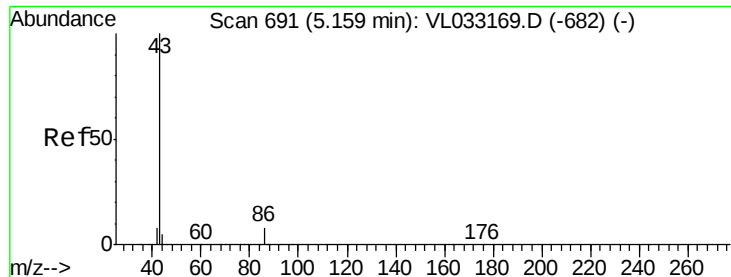
Tgt Ion: 41 Resp: 706529  
 Ion Ratio Lower Upper  
 41 100  
 76 29.8 24.5 36.7  
 39 79.7 64.1 96.1



#22  
 trans-1,2-Dichloroethene  
 Concen: 10.087 ppbv  
 RT: 4.97 min Scan# 631  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 96 Resp: 437227  
 Ion Ratio Lower Upper  
 96 100  
 61 159.1 126.4 189.6  
 98 59.6 48.4 72.6





#23

Vinyl Acetate

Concen: 10.023 ppbv

RT: 5.16 min Scan# 690

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tgt Ion: 43 Resp: 1819104

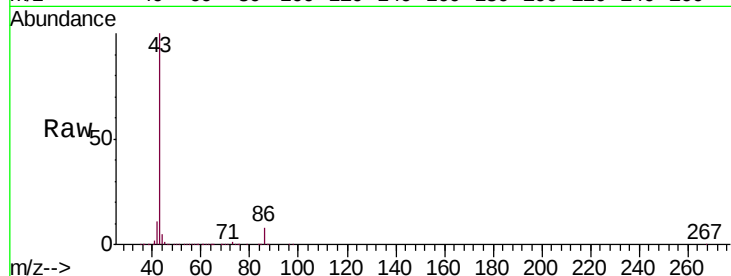
Ion Ratio Lower Upper

43 100

86 7.8 5.8 8.8

42 10.6 7.4 11.0

44 4.9 3.7 5.5

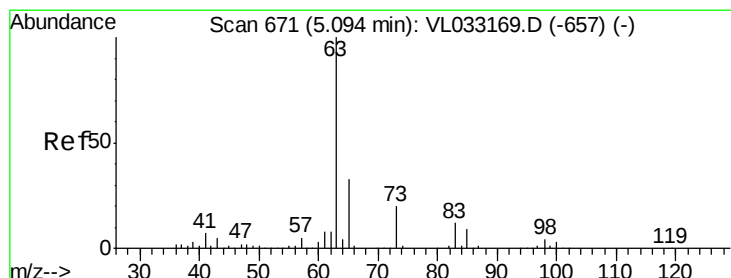
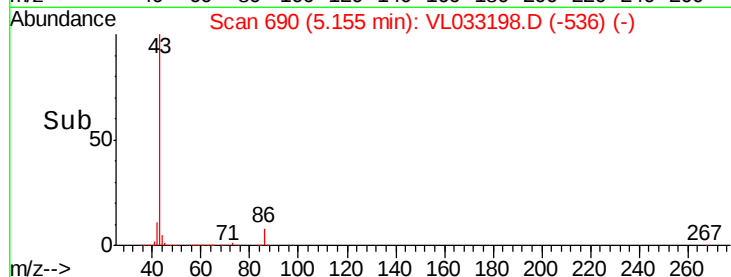
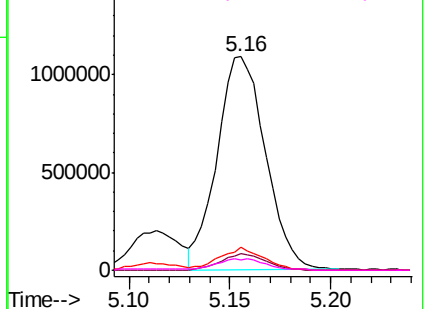


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 9.721 ppbv

RT: 5.09 min Scan# 670

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

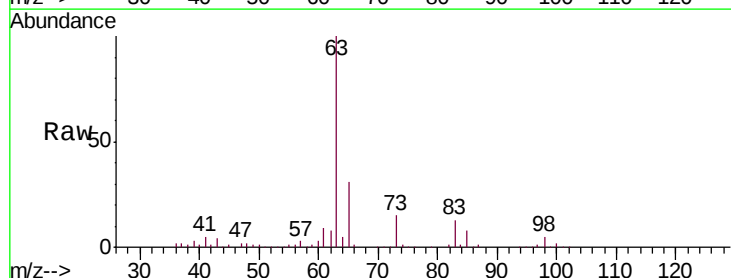
Tgt Ion: 63 Resp: 1247939

Ion Ratio Lower Upper

63 100

98 4.8 2.1 6.5

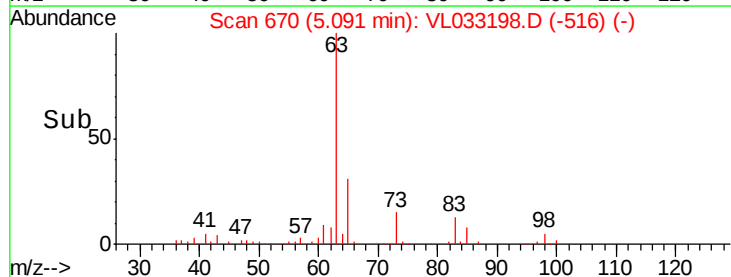
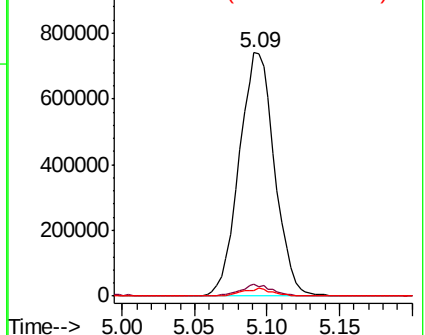
100 2.4 1.4 4.2

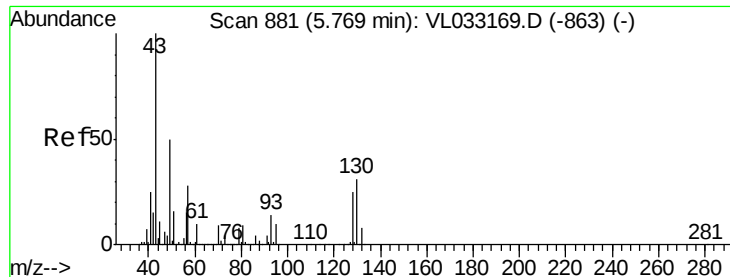


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0



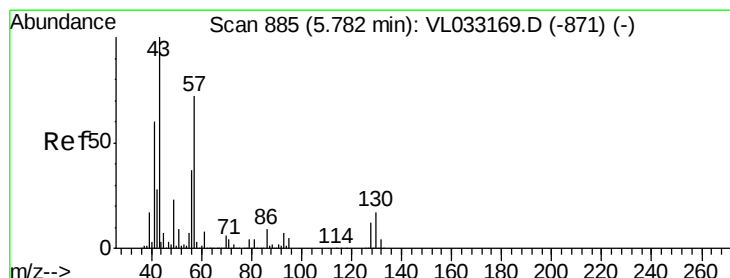
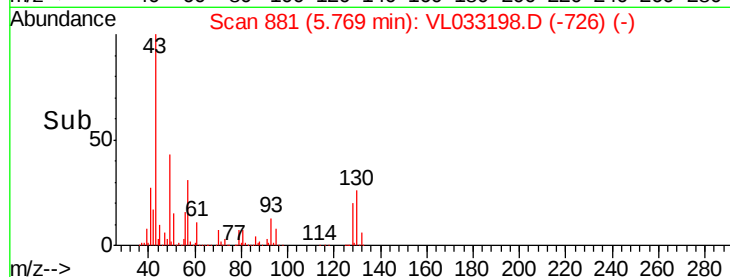
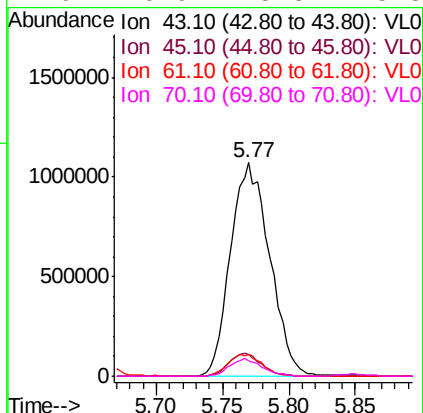
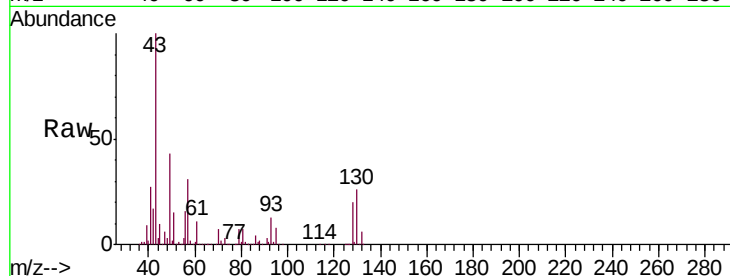


#25  
Ethyl Acetate  
Concen: 9.348 ppbv  
RT: 5.77 min Scan# 881  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tgt Ion: 43 Resp: 2201068

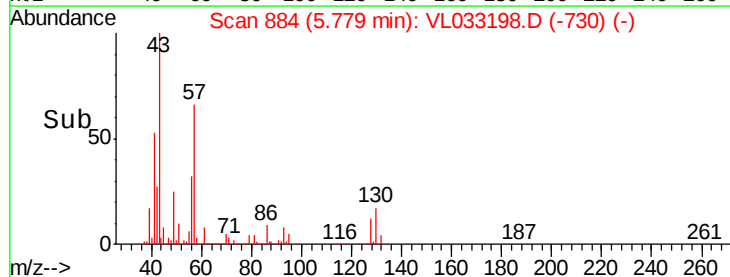
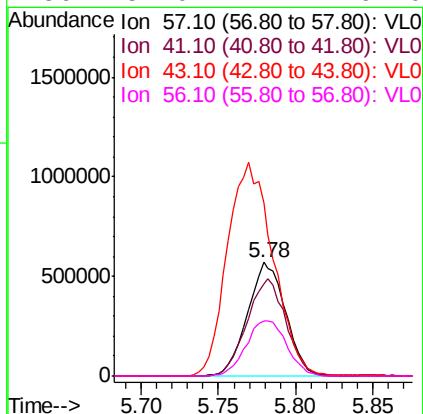
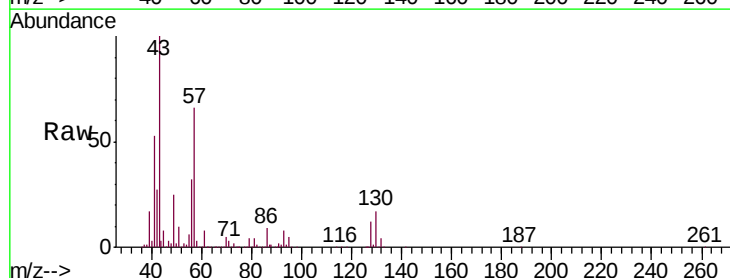
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 45  | 9.4   | 7.9   | 11.9  |
| 61  | 9.0   | 7.5   | 11.3  |
| 70  | 6.9   | 5.8   | 8.8   |

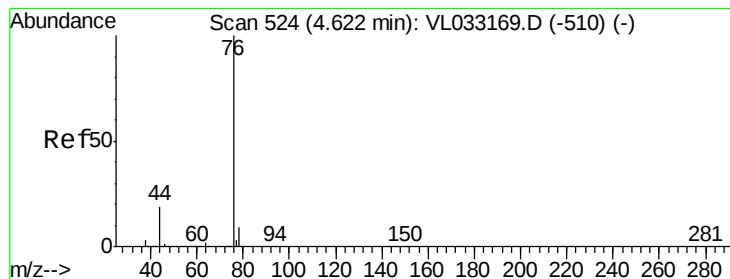


#26  
Hexane  
Concen: 8.822 ppbv  
RT: 5.78 min Scan# 884  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion: 57 Resp: 975120

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 57  | 100   |       |       |
| 41  | 88.0  | 69.4  | 104.2 |
| 43  | 226.8 | 176.7 | 265.1 |
| 56  | 52.0  | 41.4  | 62.0  |





#27

Carbon Disulfide

Concen: 10.720 ppbv

RT: 4.62 min Scan# 525

Delta R.T. 0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

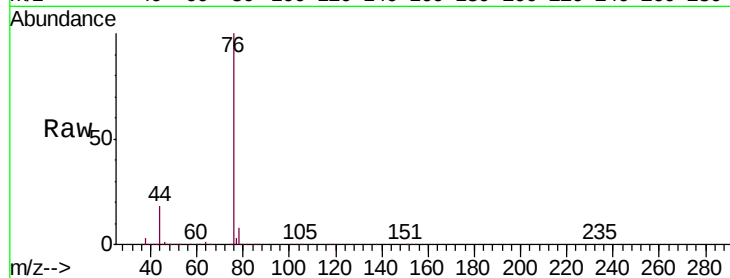
Tgt Ion: 76 Resp: 1085584

Ion Ratio Lower Upper

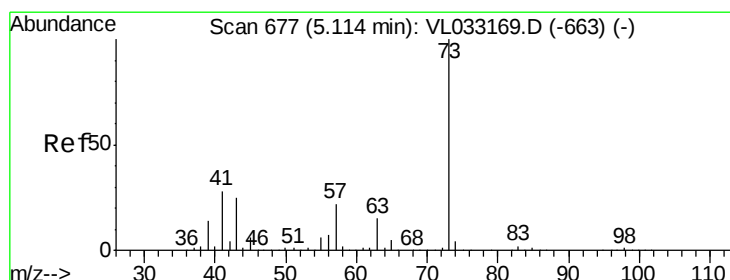
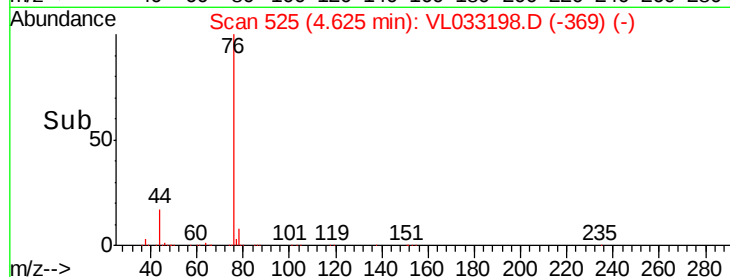
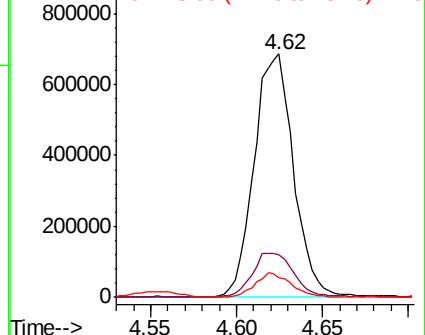
76 100

44 19.1 15.0 22.4

78 9.3 7.4 11.0



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: 9.477 ppbv

RT: 5.11 min Scan# 677

Delta R.T. -0.00 min

Lab File: VL033198.D

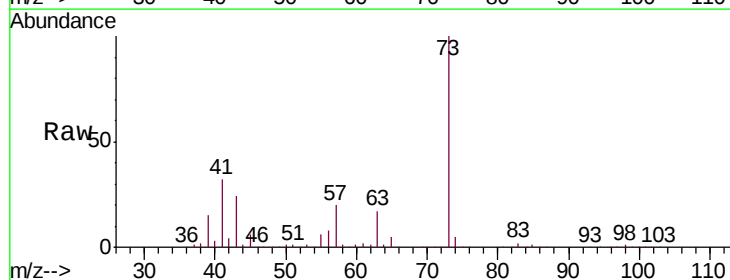
Acq: 13 Feb 2019 22:20

Tgt Ion: 73 Resp: 1431476

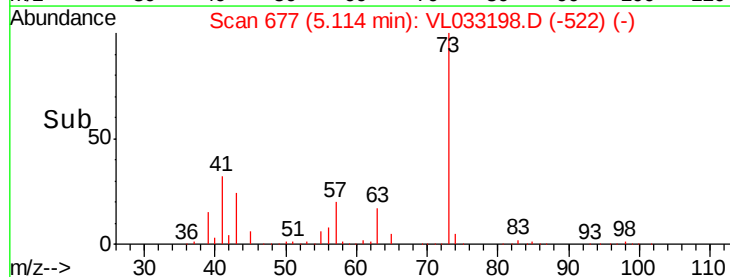
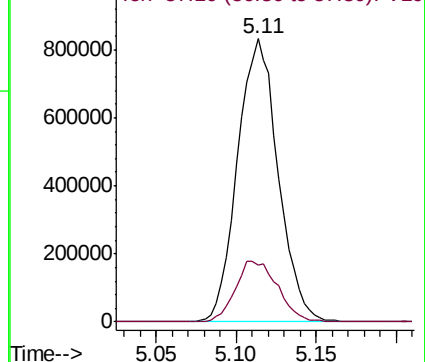
Ion Ratio Lower Upper

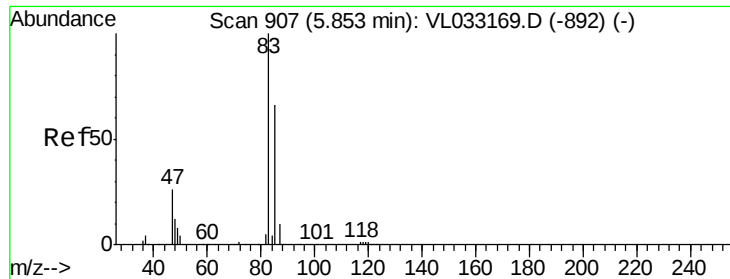
73 100

57 22.7 17.9 26.9



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

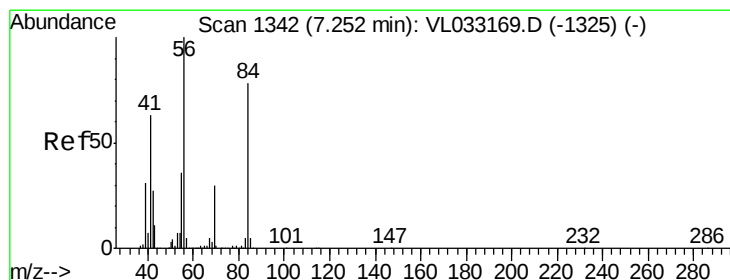
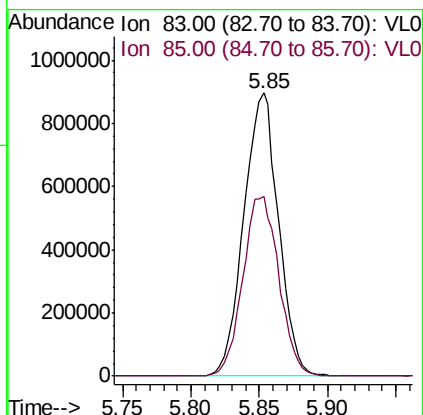
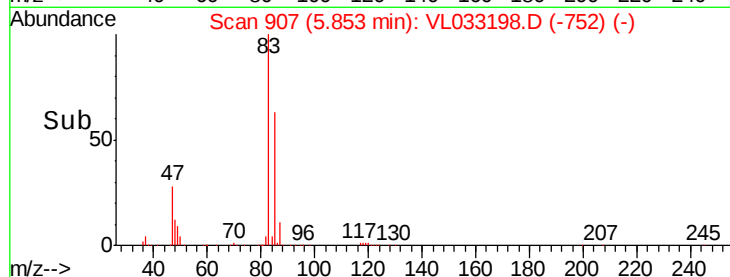
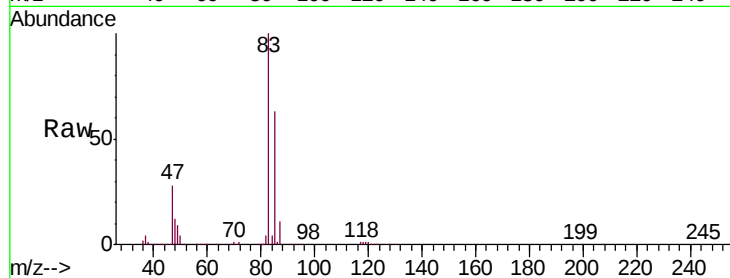




#29  
Chloroform  
Concen: 9.366 ppbv  
RT: 5.85 min Scan# 907  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

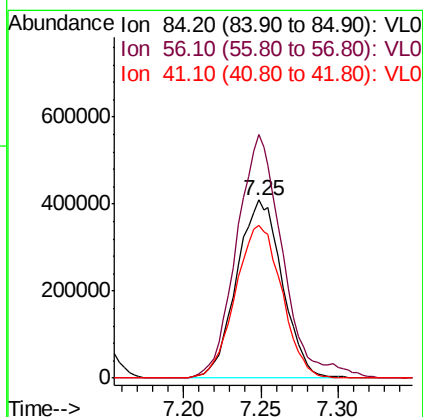
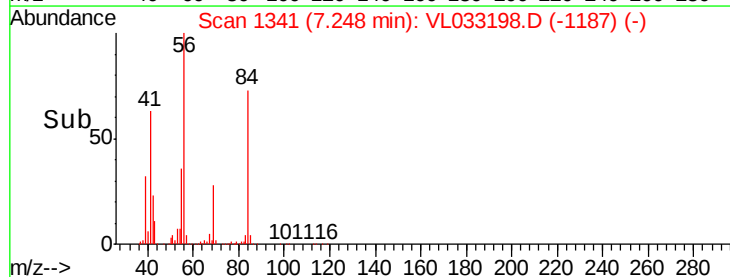
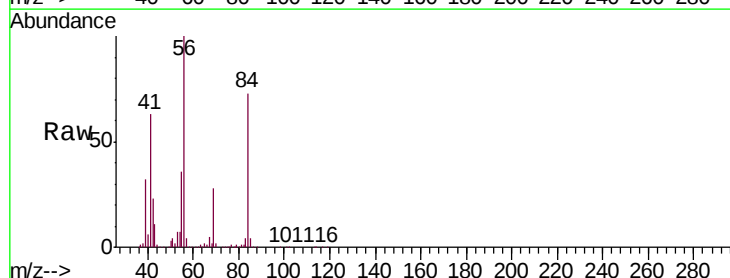
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

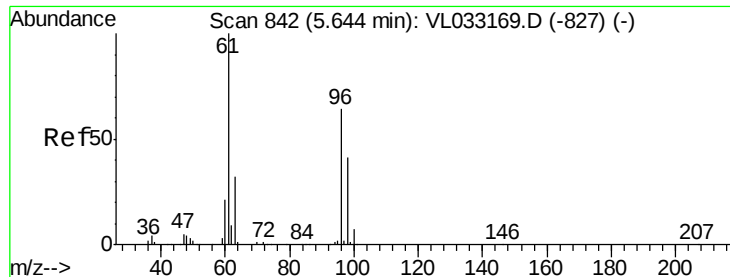
Tgt Ion: 83 Resp: 1586538  
Ion Ratio Lower Upper  
83 100  
85 63.3 52.6 78.8



#30  
Cyclohexane  
Concen: 8.198 ppbv  
RT: 7.25 min Scan# 1341  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion: 84 Resp: 840808  
Ion Ratio Lower Upper  
84 100  
56 138.0 109.5 164.3  
41 87.3 66.6 100.0



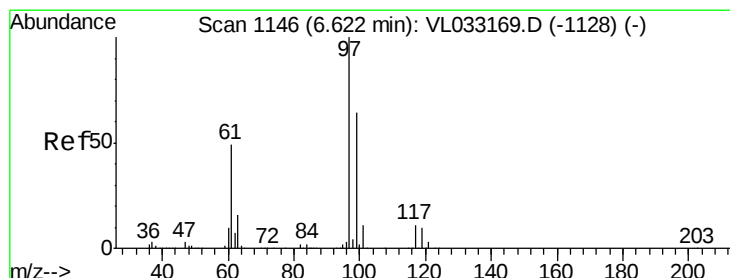
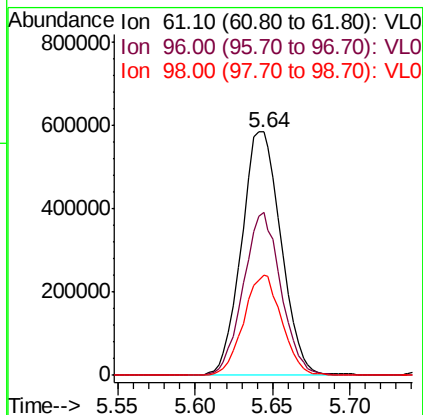
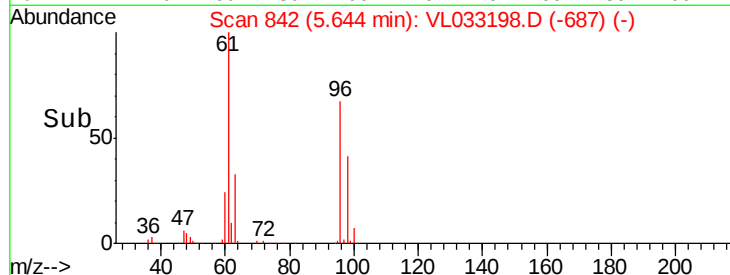
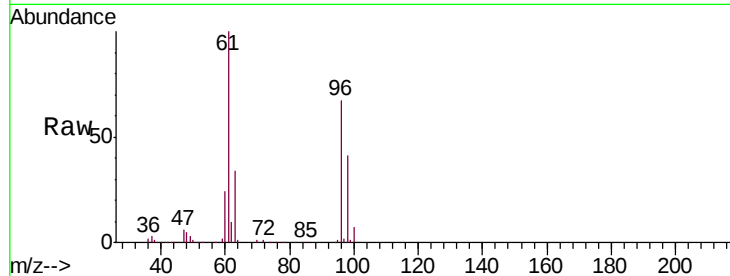


#31

cis-1,2-Dichloroethene  
 Concen: 9.399 ppbv  
 RT: 5.64 min Scan# 842  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

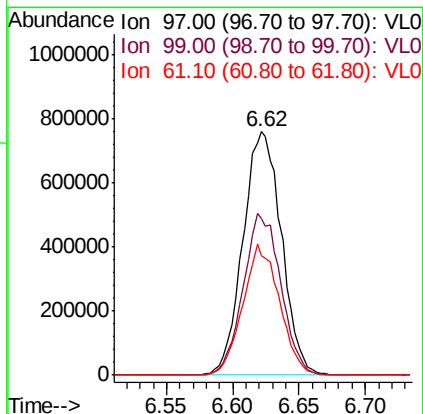
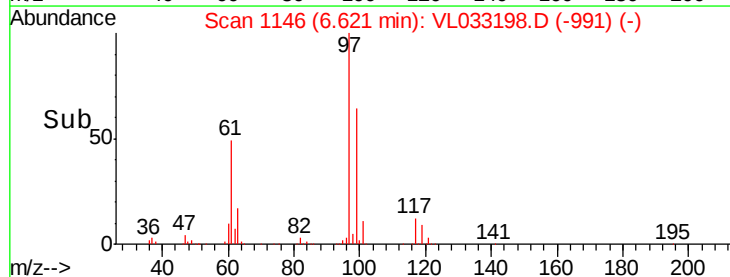
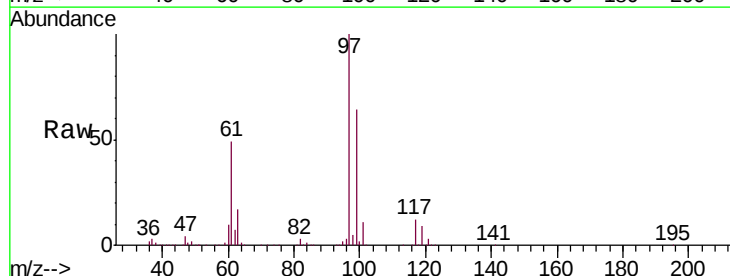
Tgt Ion: 61 Resp: 1039856  
 Ion Ratio Lower Upper  
 61 100  
 96 67.1 51.2 76.8  
 98 41.0 32.8 49.2

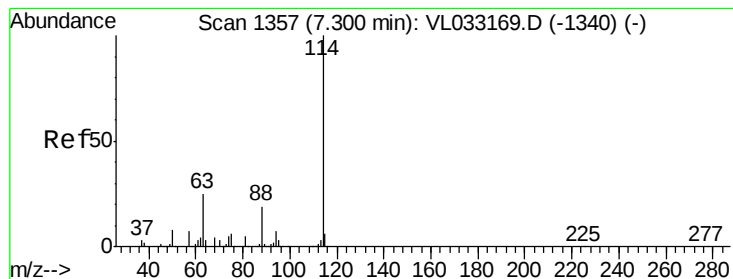


#32

1,1,1-Trichloroethane  
 Concen: 8.223 ppbv  
 RT: 6.62 min Scan# 1146  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 97 Resp: 1533837  
 Ion Ratio Lower Upper  
 97 100  
 99 65.0 51.4 77.2  
 61 51.0 38.9 58.3





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1356

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

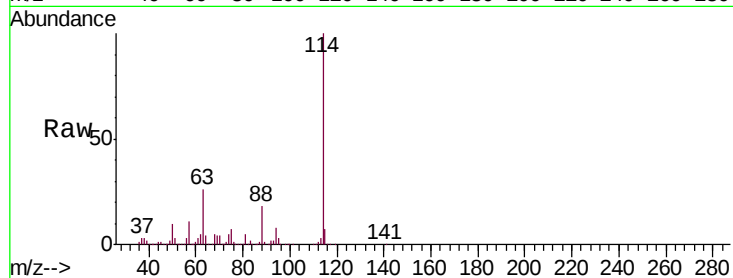
Tgt Ion:114 Resp: 2142721

Ion Ratio Lower Upper

114 100

63 27.5 20.8 31.2

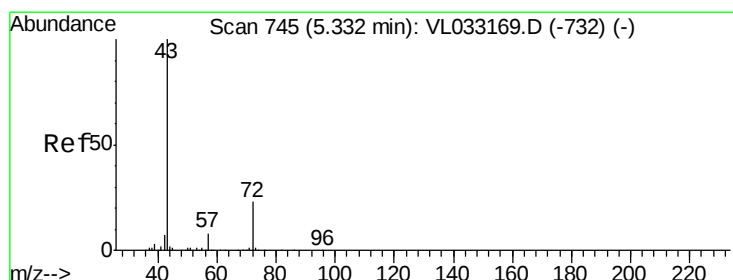
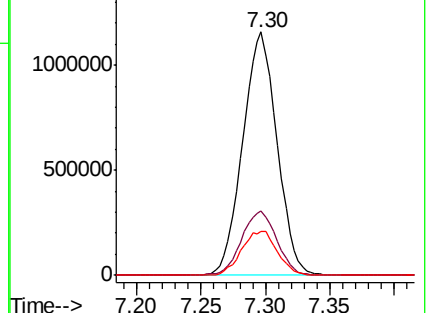
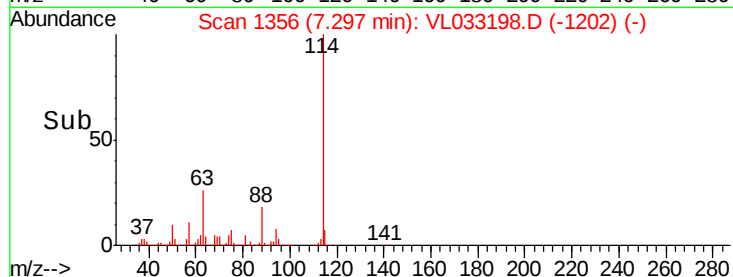
88 18.9 14.6 22.0



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: 11.040 ppbv

RT: 5.33 min Scan# 743

Delta R.T. -0.01 min

Lab File: VL033198.D

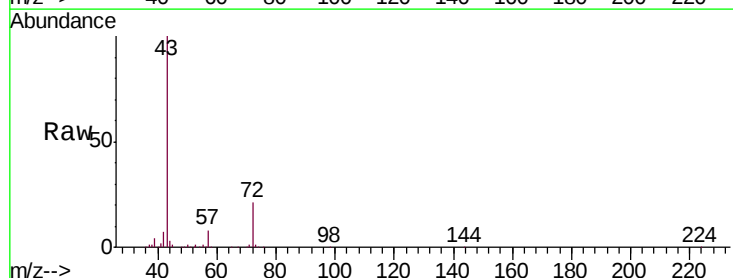
Acq: 13 Feb 2019 22:20

Tgt Ion: 43 Resp: 1500467

Ion Ratio Lower Upper

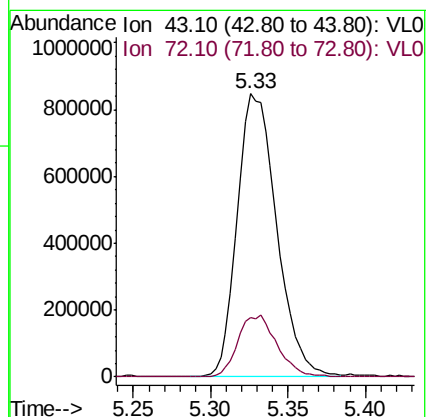
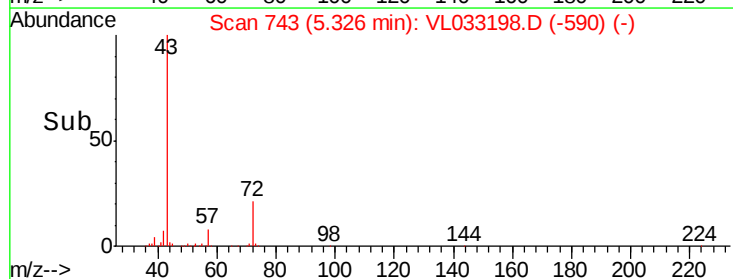
43 100

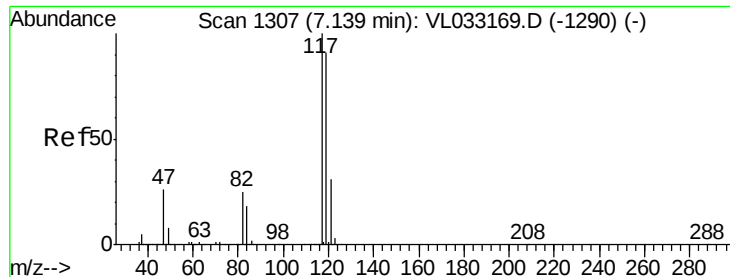
72 21.6 17.8 26.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

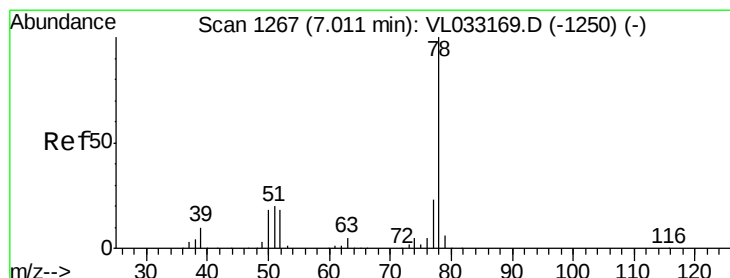
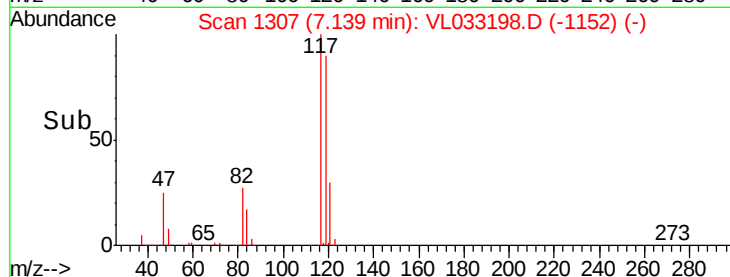
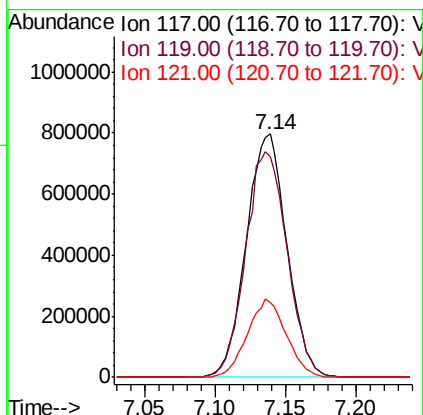
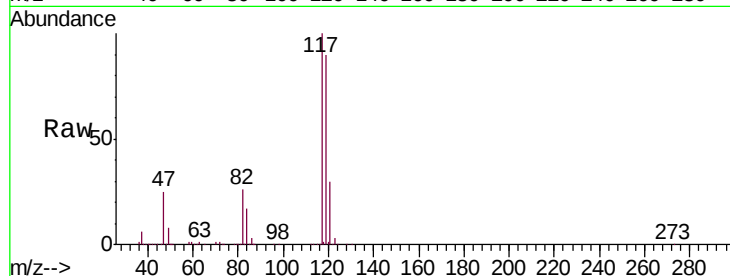




#35  
Carbon Tetrachloride  
Concen: 9.826 ppbv  
RT: 7.14 min Scan# 1307  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

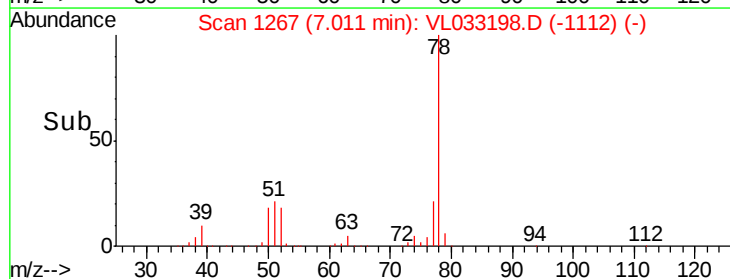
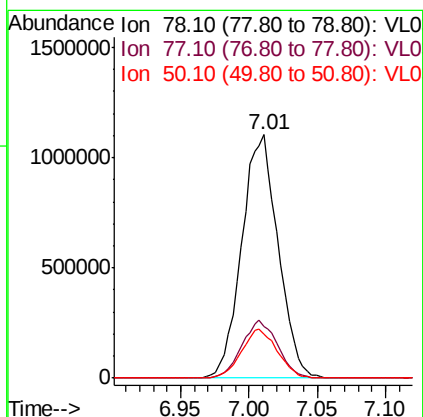
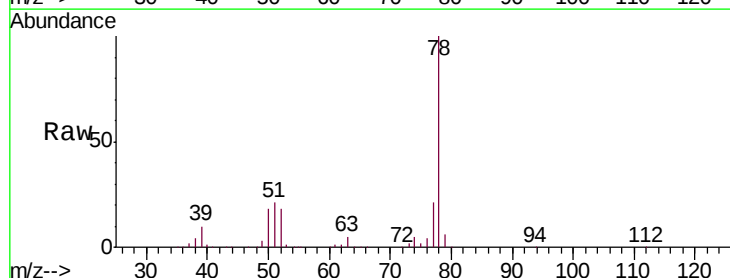
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

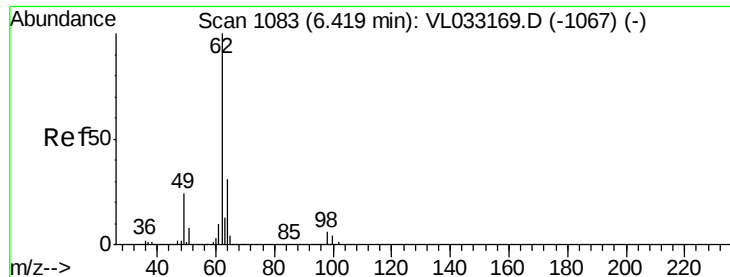
Tgt Ion: 117 Resp: 1607997  
Ion Ratio Lower Upper  
117 100  
119 90.4 73.0 109.6  
121 30.5 25.1 37.7



#36  
Benzene  
Concen: 9.411 ppbv  
RT: 7.01 min Scan# 1267  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion: 78 Resp: 2043719  
Ion Ratio Lower Upper  
78 100  
77 21.3 18.0 27.0  
50 17.9 14.2 21.2

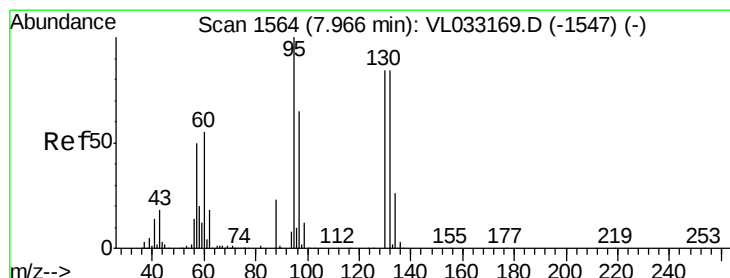
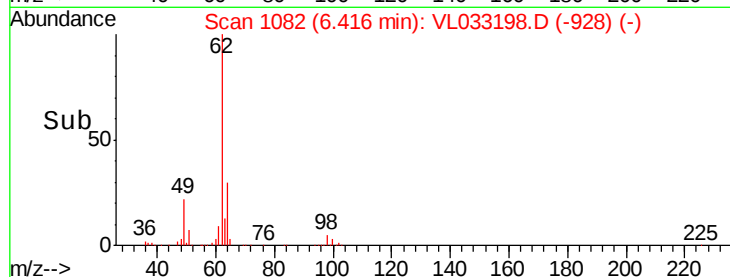
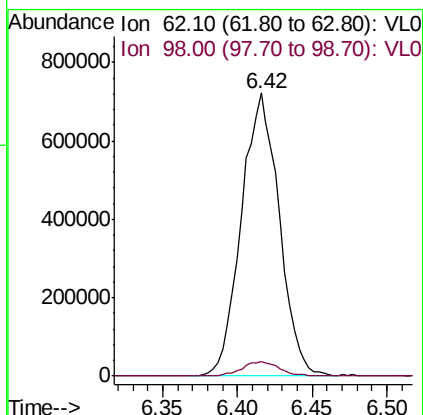
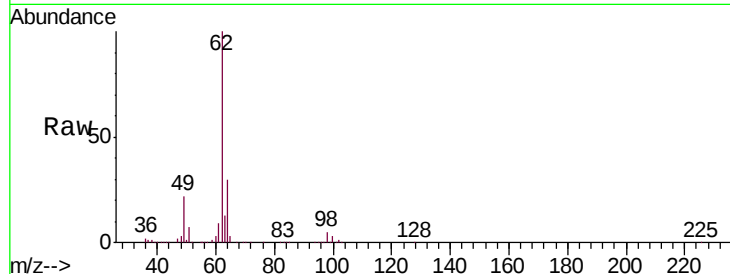




#37  
 1,2-Dichloroethane  
 Concen: 10.597 ppbv  
 RT: 6.42 min Scan# 1082  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

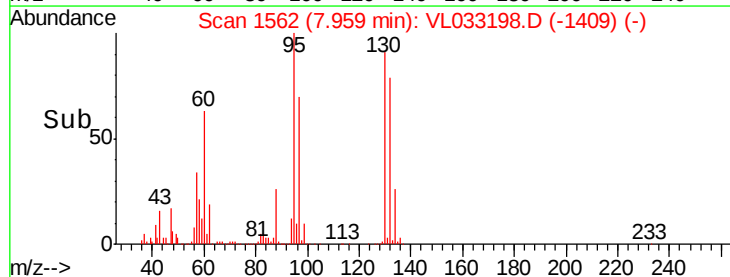
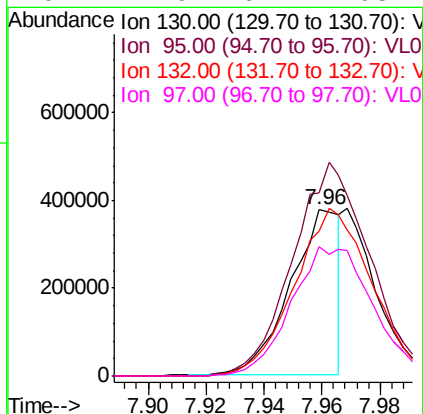
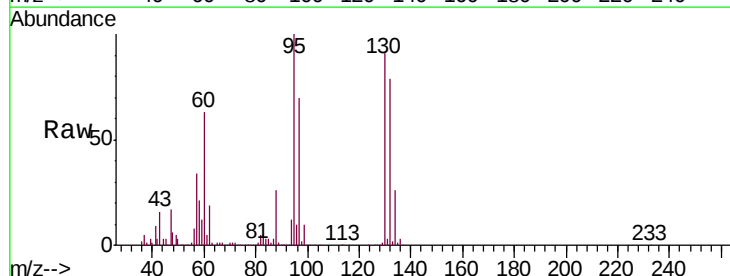
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

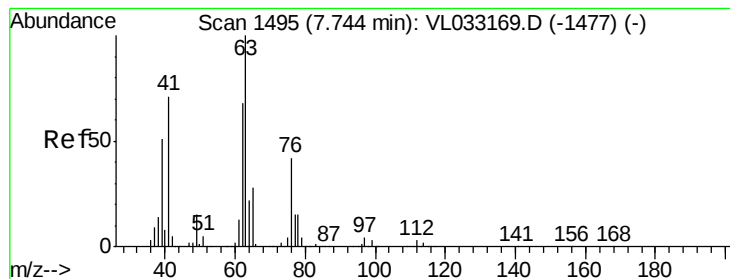
Tgt Ion: 62 Resp: 1275353  
 Ion Ratio Lower Upper  
 62 100  
 98 5.2 4.7 7.1



#38  
 Trichloroethene  
 Concen: 4.785 ppbv  
 RT: 7.96 min Scan# 1562  
 Delta R.T. -0.01 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 130 Resp: 444956  
 Ion Ratio Lower Upper  
 130 100  
 95 110.6 95.5 143.3  
 132 87.7 80.0 120.0  
 97 77.9 62.2 93.2

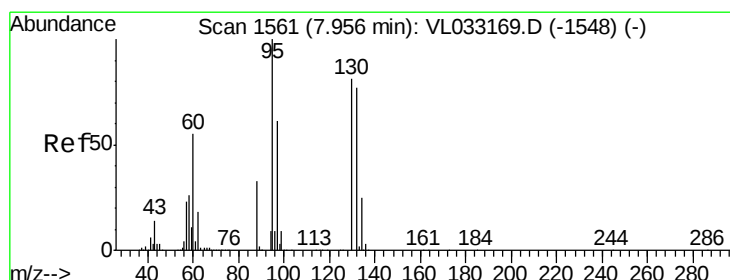
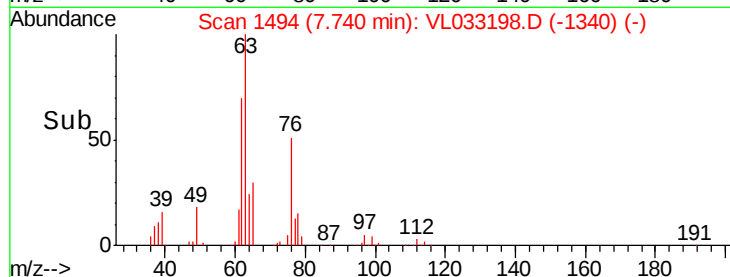
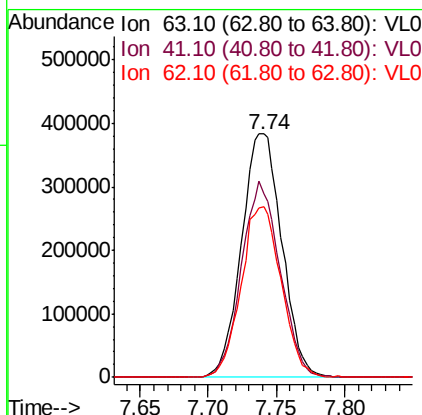
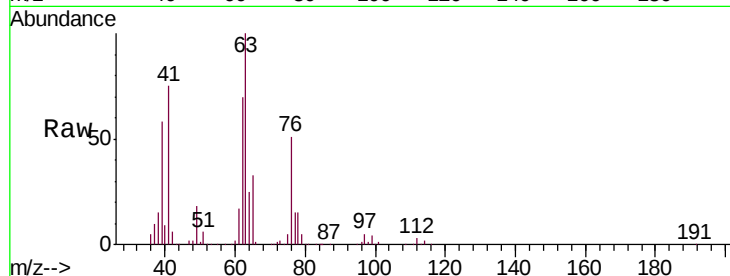




#39  
 1,2-Dichloropropane  
 Concen: 9.188 ppbv  
 RT: 7.74 min Scan# 1494  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

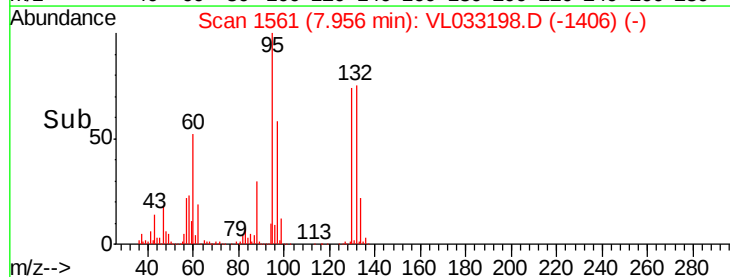
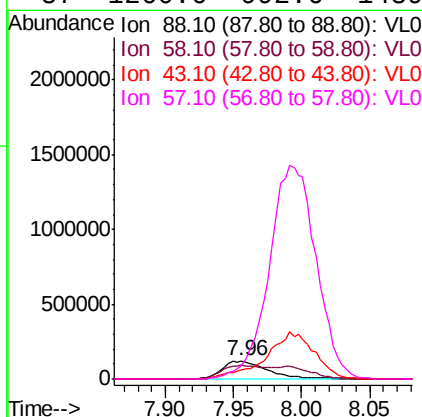
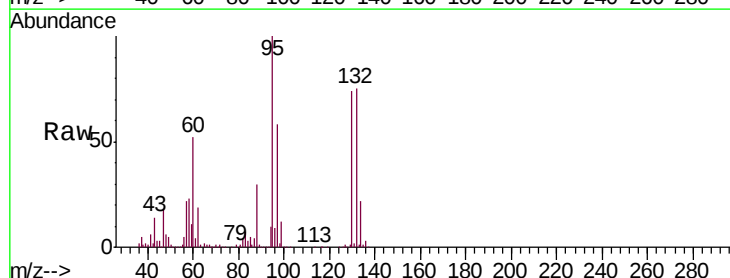
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

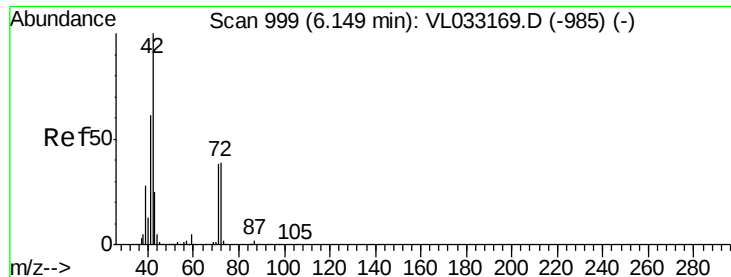
Tgt Ion: 63 Resp: 787981  
 Ion Ratio Lower Upper  
 63 100  
 41 75.4 56.4 84.6  
 62 69.8 54.2 81.4



#40  
 1,4-Dioxane  
 Concen: 8.699 ppbv  
 RT: 7.96 min Scan# 1561  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 88 Resp: 271140  
 Ion Ratio Lower Upper  
 88 100  
 58 135.4 106.6 160.0  
 43 284.6 220.2 330.2  
 57 1260.6 992.6 1489.0





#41

Tetrahydrofuran

Concen: 10.195 ppbv

RT: 6.15 min Scan# 999

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

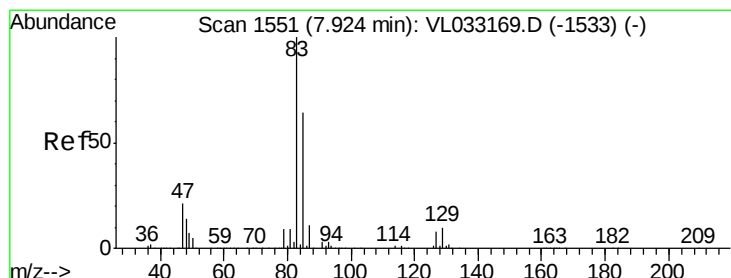
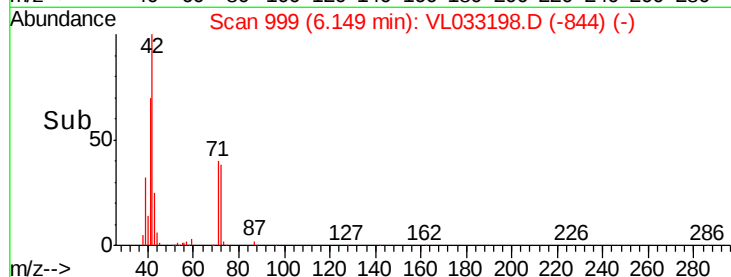
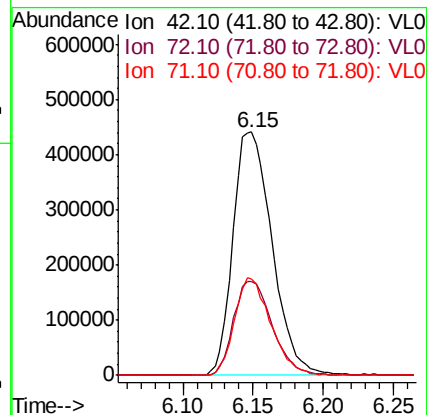
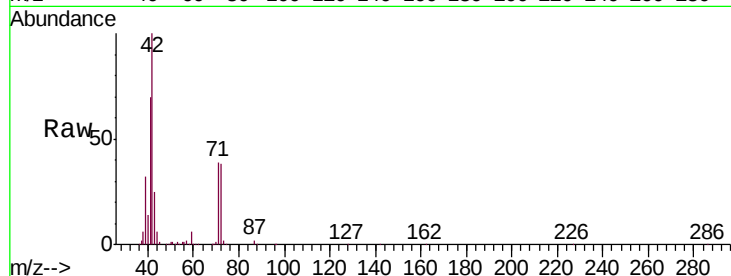
Tgt Ion: 42 Resp: 857703

Ion Ratio Lower Upper

42 100

72 38.5 31.6 47.4

71 37.6 30.3 45.5



#42

Bromodichloromethane

Concen: 10.103 ppbv

RT: 7.92 min Scan# 1549

Delta R.T. -0.01 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

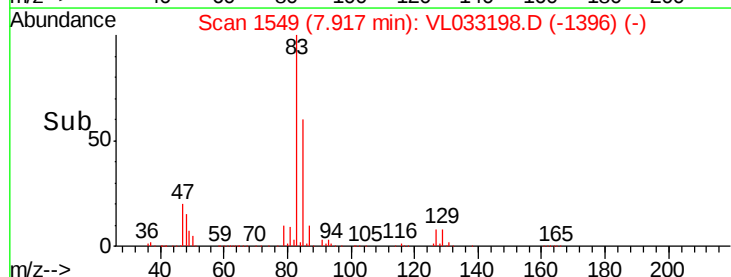
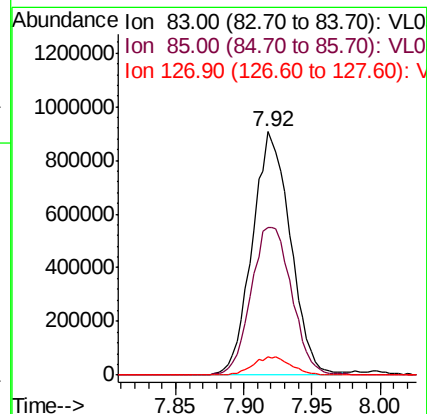
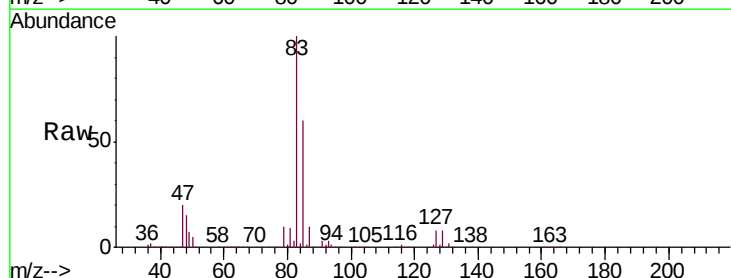
Tgt Ion: 83 Resp: 1762048

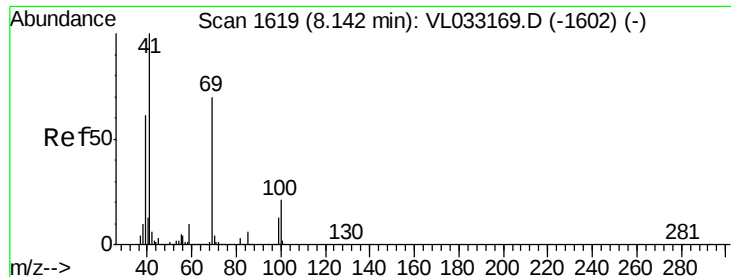
Ion Ratio Lower Upper

83 100

85 60.4 51.1 76.7

127 7.7 6.4 9.6

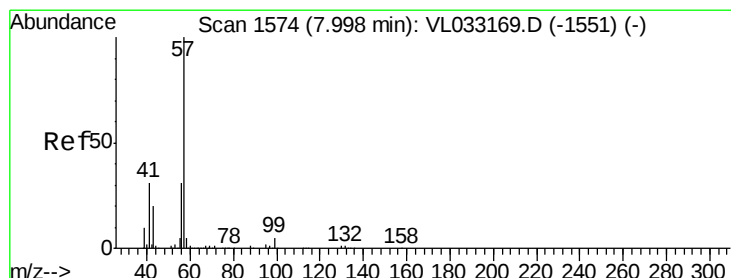
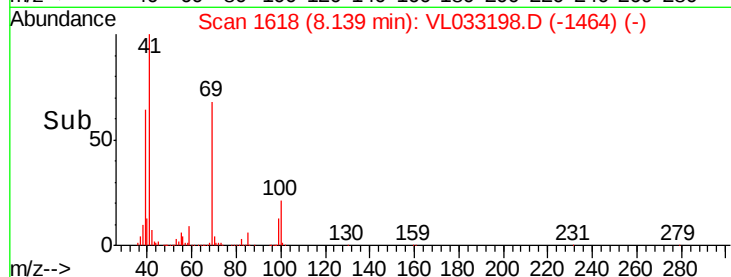
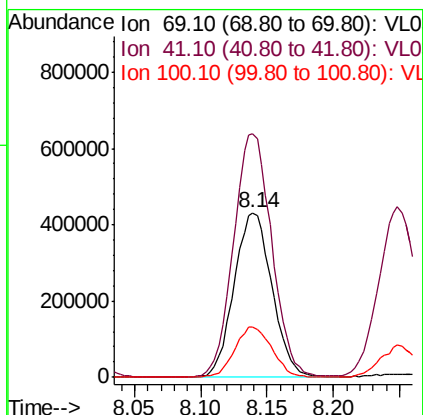
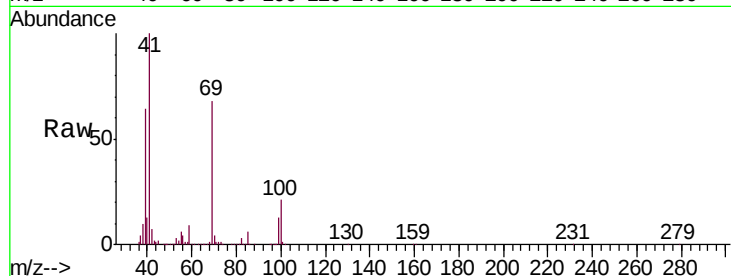




#43  
Methyl Methacrylate  
Concen: 9.850 ppbv  
RT: 8.14 min Scan# 1618  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

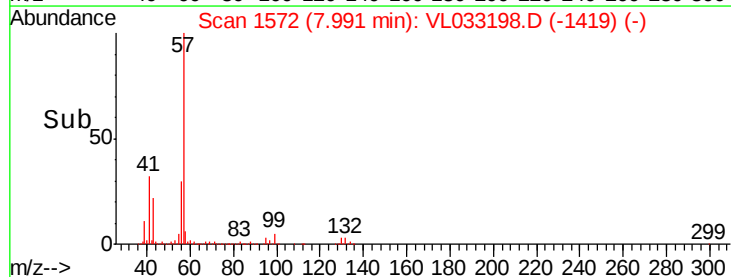
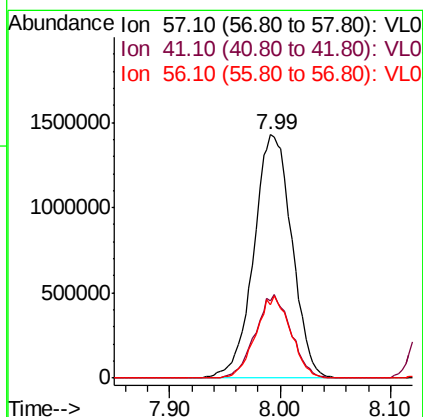
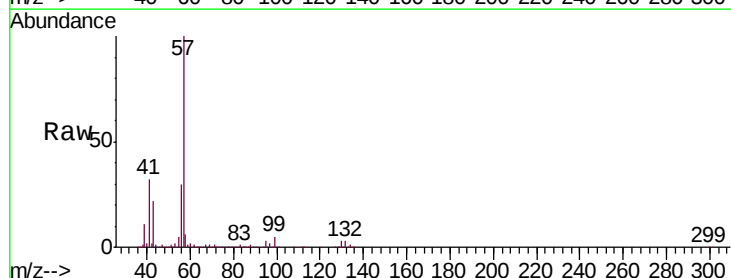
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

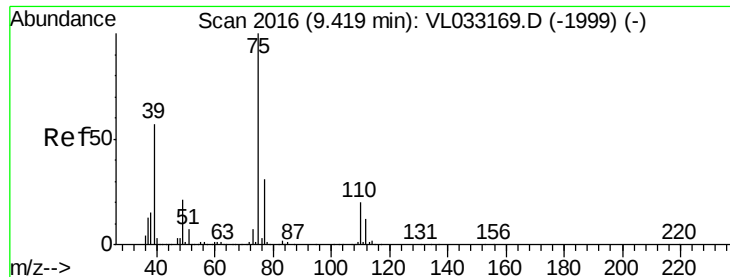
Tgt Ion: 69 Resp: 858746  
Ion Ratio Lower Upper  
69 100  
41 148.7 117.1 175.7  
100 30.1 25.0 37.6



#44  
2,2,4-Trimethylpentane  
Concen: 9.270 ppbv  
RT: 7.99 min Scan# 1572  
Delta R.T. -0.01 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion: 57 Resp: 3411365  
Ion Ratio Lower Upper  
57 100  
41 32.3 25.1 37.7  
56 30.8 24.5 36.7

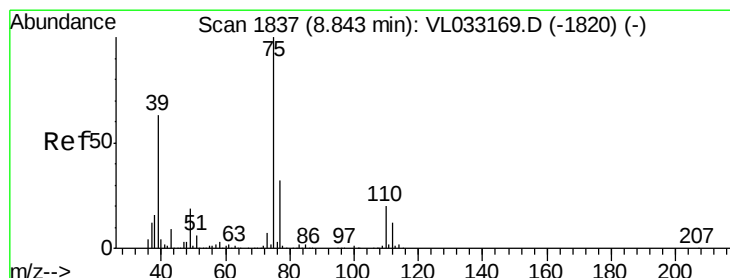
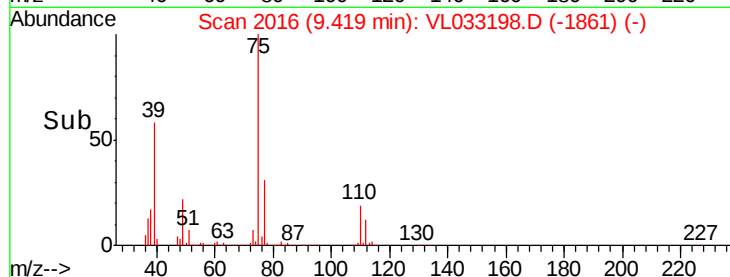
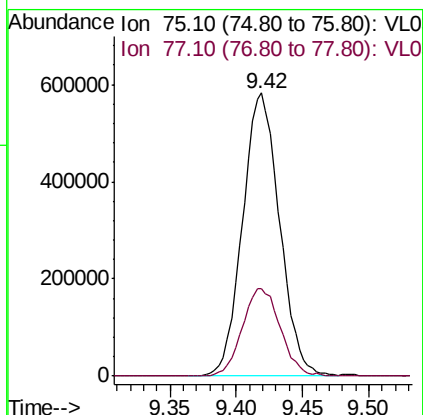
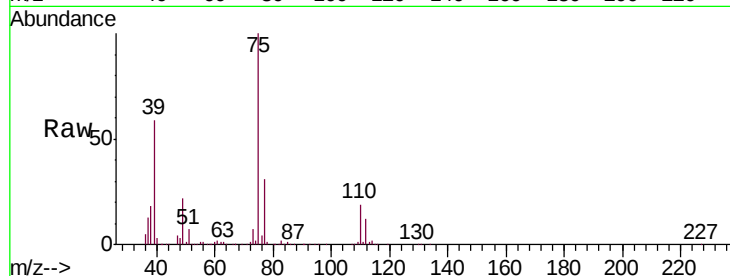




#45  
 t-1,3-Dichloropropene  
 Concen: 11.661 ppbv  
 RT: 9.42 min Scan# 2016  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

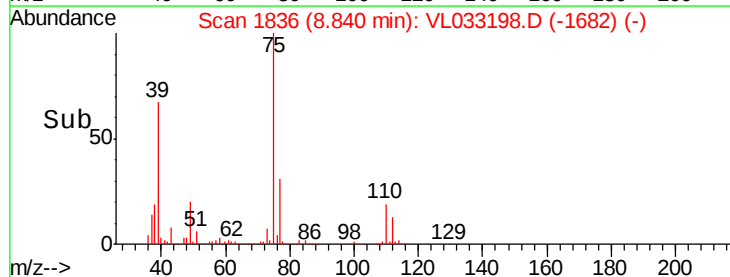
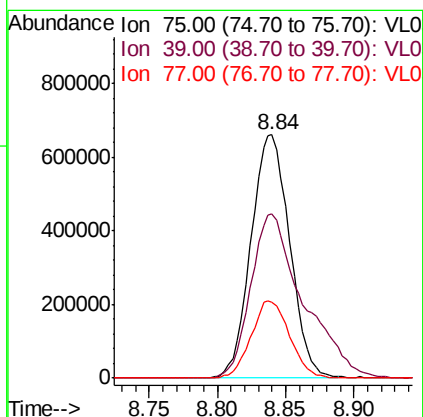
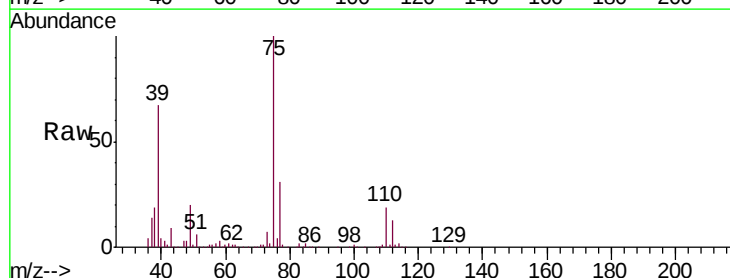
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

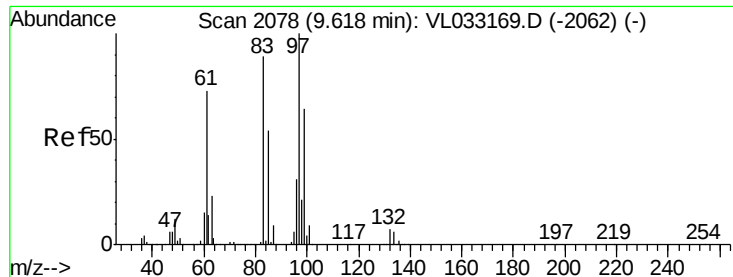
Tgt Ion: 75 Resp: 1129425  
 Ion Ratio Lower Upper  
 75 100  
 77 30.8 25.0 37.4



#46  
 cis-1,3-Dichloropropene  
 Concen: 10.545 ppbv  
 RT: 8.84 min Scan# 1836  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 75 Resp: 1300881  
 Ion Ratio Lower Upper  
 75 100  
 39 67.3 50.1 75.1  
 77 31.4 25.4 38.2





#47

1,1,2-Trichloroethane

Concen: 9.504 ppbv

RT: 9.62 min Scan# 2078

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tgt Ion: 97 Resp: 845912

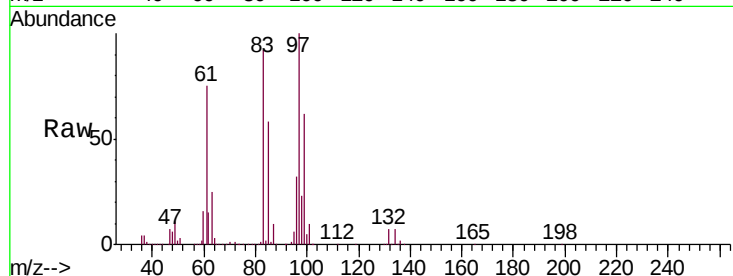
Ion Ratio Lower Upper

97 100

83 92.0 71.4 107.2

85 57.9 43.5 65.3

99 61.8 51.4 77.0



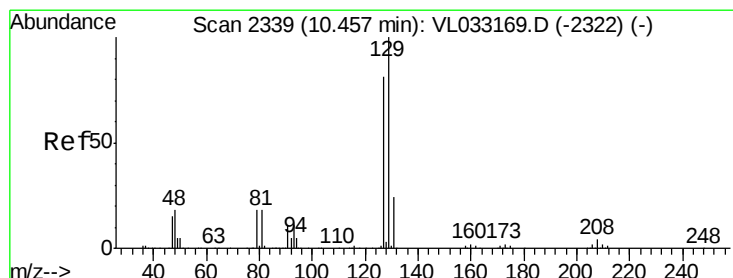
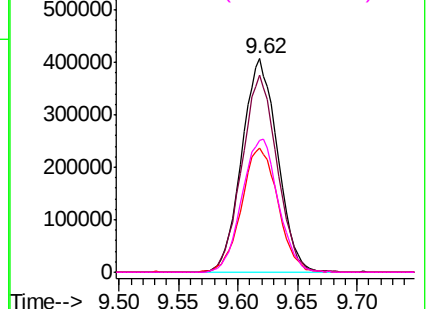
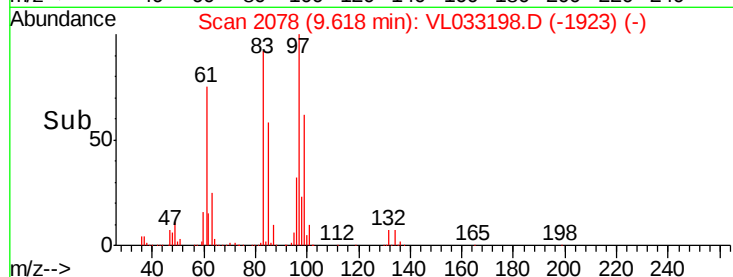
Abundance

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: 10.561 ppbv

RT: 10.46 min Scan# 2339

Delta R.T. -0.00 min

Lab File: VL033198.D

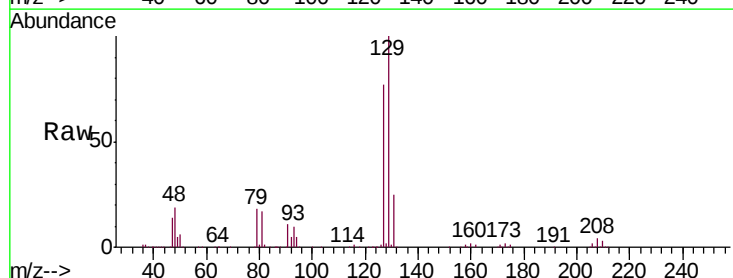
Acq: 13 Feb 2019 22:20

Tgt Ion: 129 Resp: 1479835

Ion Ratio Lower Upper

129 100

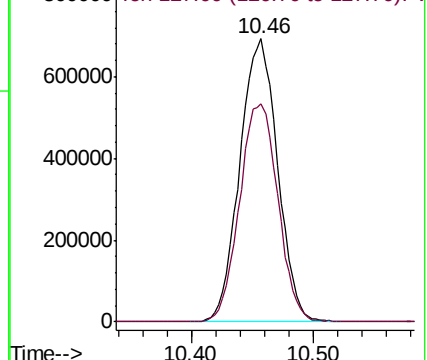
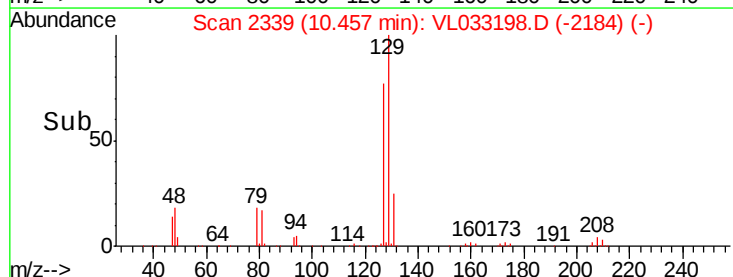
127 78.5 39.1 117.3

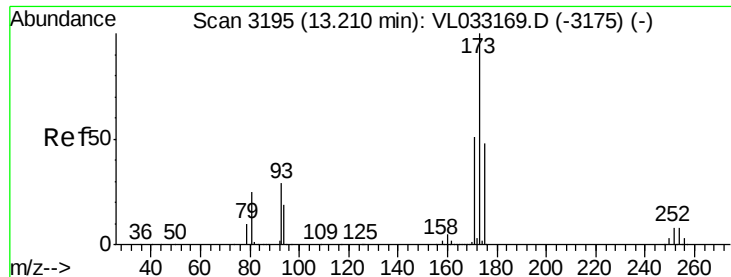


Abundance

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 11.003 ppbv

RT: 13.21 min Scan# 3194

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

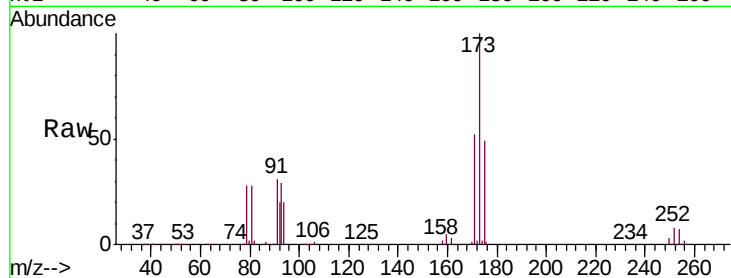
Tgt Ion:173 Resp: 1326415

Ion Ratio Lower Upper

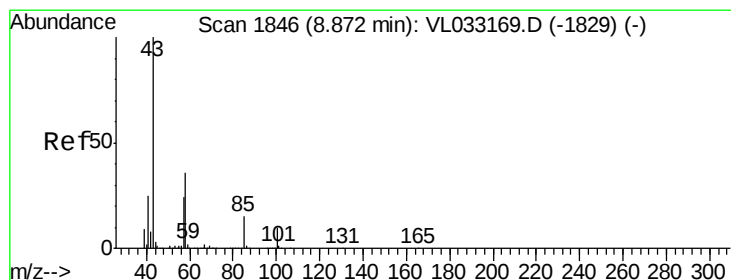
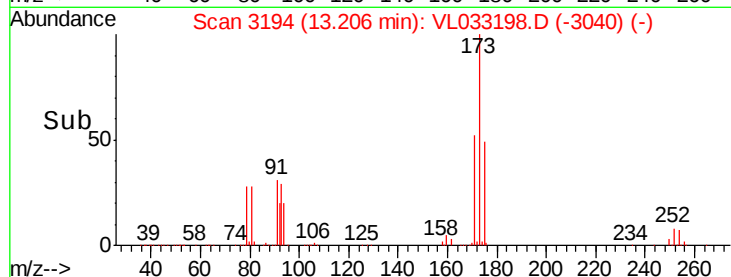
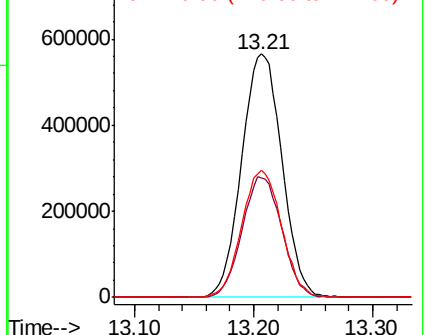
173 100

175 48.9 38.6 58.0

171 51.4 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: 9.994 ppbv

RT: 8.87 min Scan# 1846

Delta R.T. -0.00 min

Lab File: VL033198.D

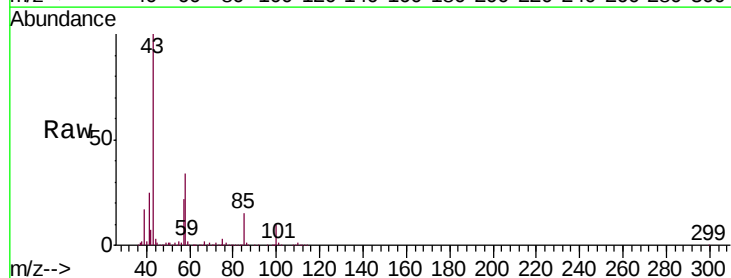
Acq: 13 Feb 2019 22:20

Tgt Ion: 43 Resp: 2178142

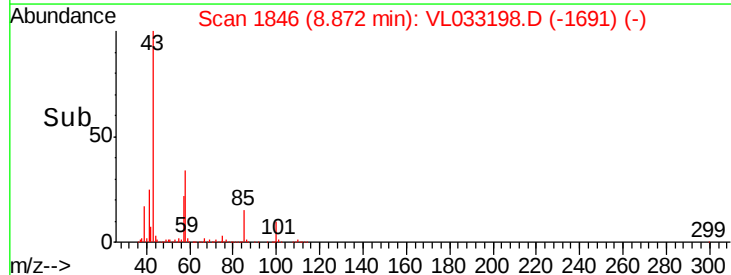
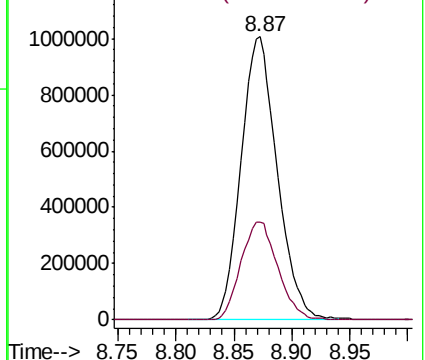
Ion Ratio Lower Upper

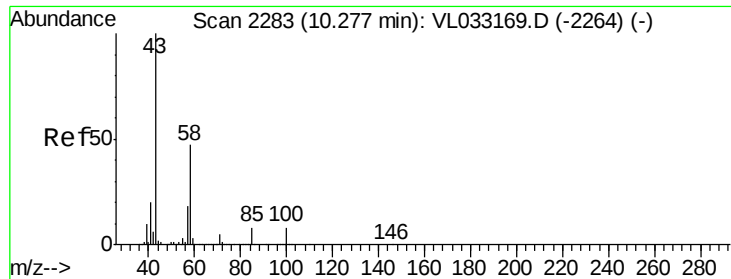
43 100

58 35.5 29.0 43.6



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

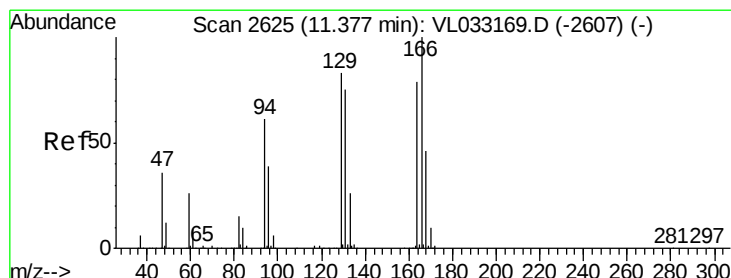
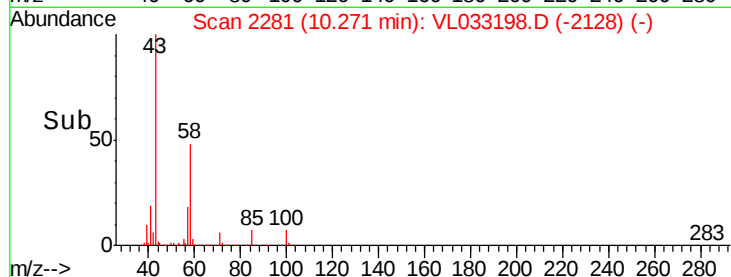
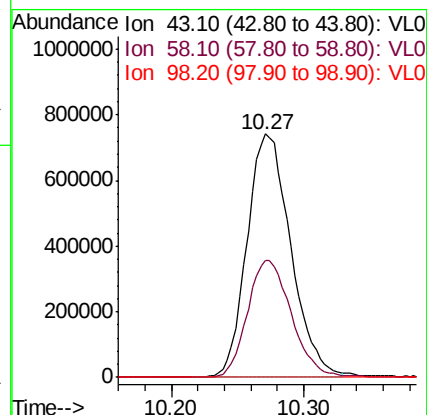
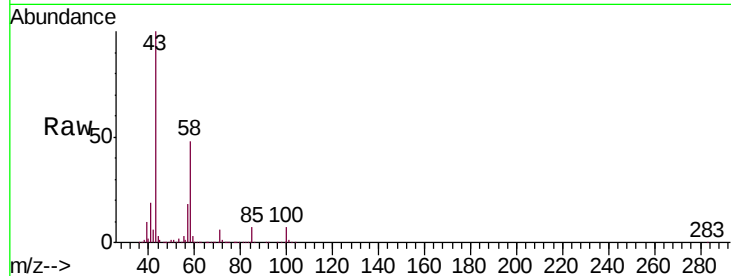




#51  
2-Hexanone  
Concen: 9.895 ppbv  
RT: 10.27 min Scan# 2281  
Delta R.T. -0.01 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

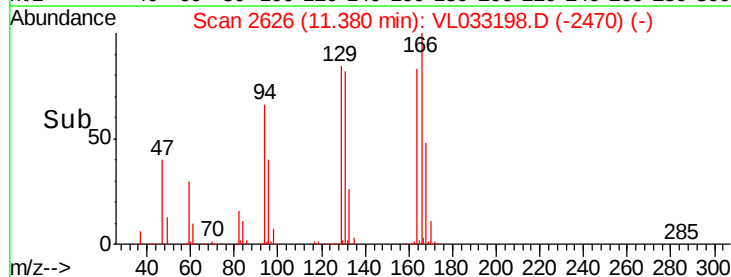
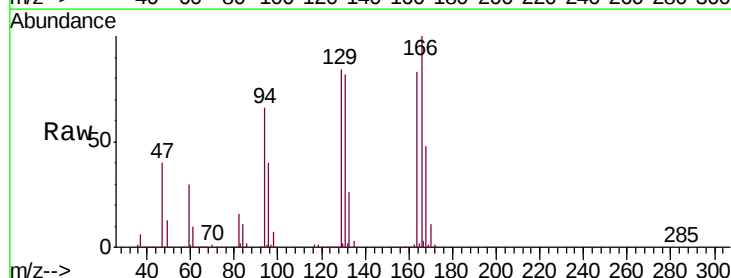
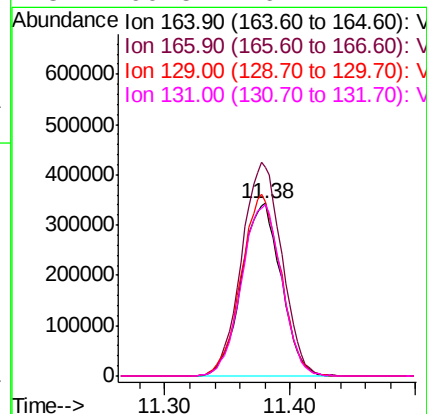
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

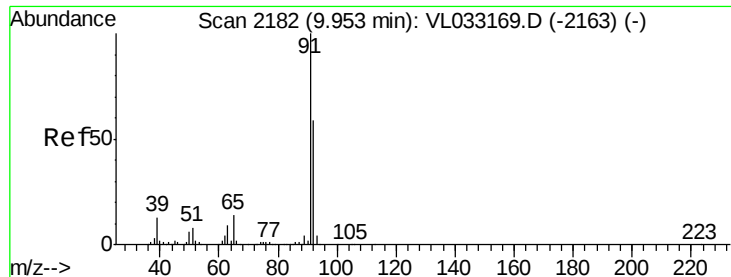
Tgt Ion: 43 Resp: 1700304  
Ion Ratio Lower Upper  
43 100  
58 48.6 39.1 58.7  
98 0.2 0.2 0.2



#52  
Tetrachloroethene  
Concen: 9.043 ppbv  
RT: 11.38 min Scan# 2626  
Delta R.T. 0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion: 164 Resp: 754456  
Ion Ratio Lower Upper  
164 100  
166 120.5 100.9 151.3  
129 100.7 83.9 125.9  
131 99.5 76.2 114.2





#53

Toluene

Concen: 9.532 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

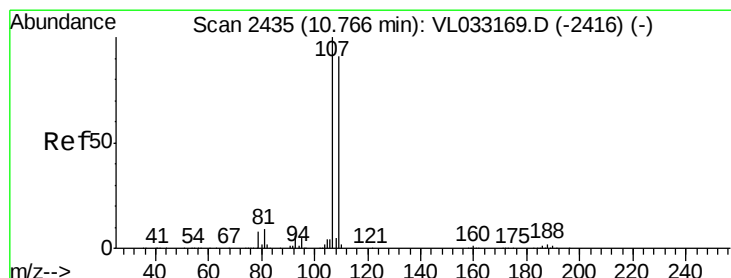
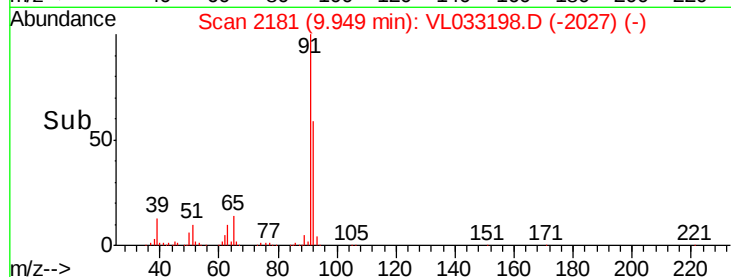
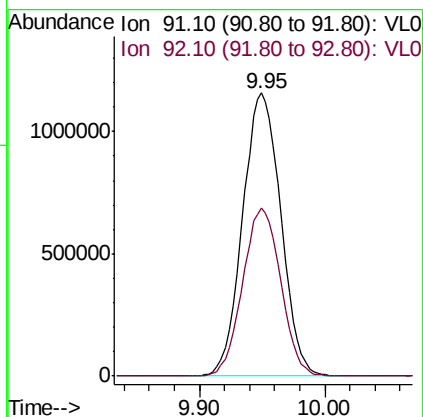
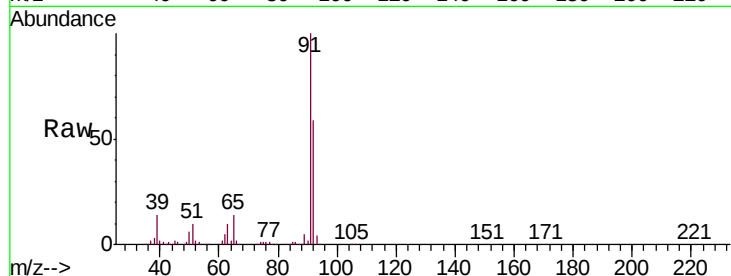
VSTDCCC010EC

Tgt Ion: 91 Resp: 2451055

Ion Ratio Lower Upper

91 100

92 59.1 48.0 72.0



#54

1,2-Dibromoethane

Concen: 9.711 ppbv

RT: 10.76 min Scan# 2434

Delta R.T. -0.00 min

Lab File: VL033198.D

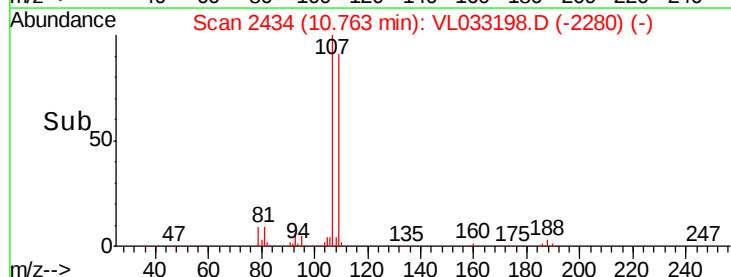
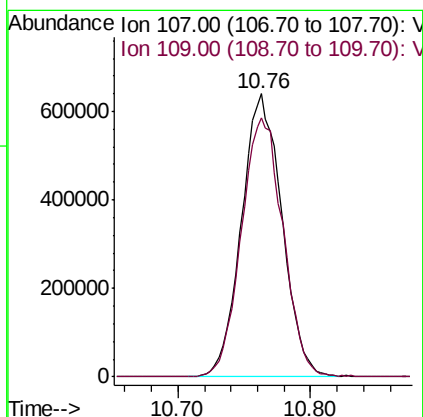
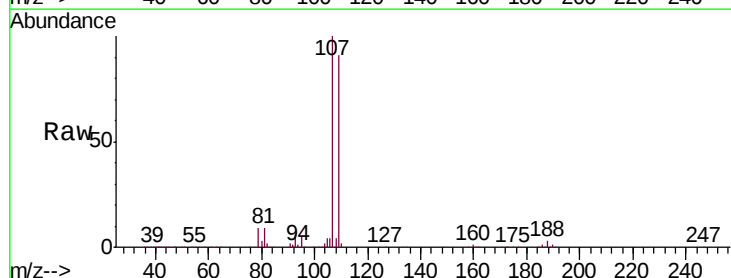
Acq: 13 Feb 2019 22:20

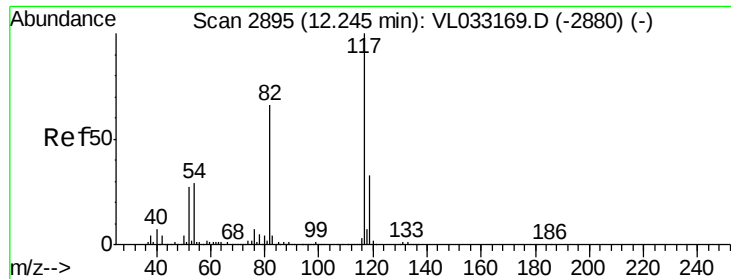
Tgt Ion: 107 Resp: 1355343

Ion Ratio Lower Upper

107 100

109 91.3 73.2 109.8

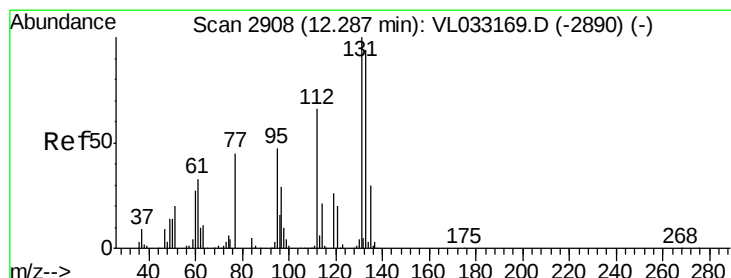
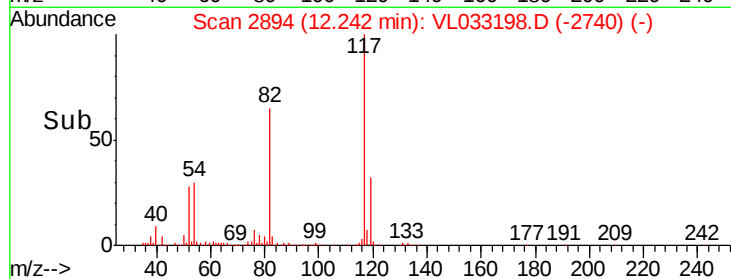
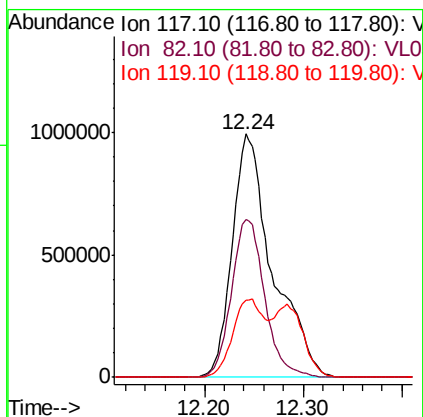
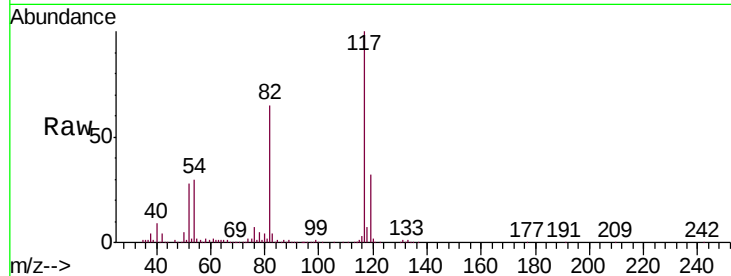




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.24 min Scan# 2894  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

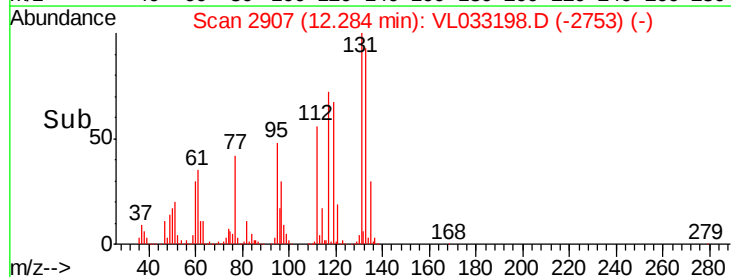
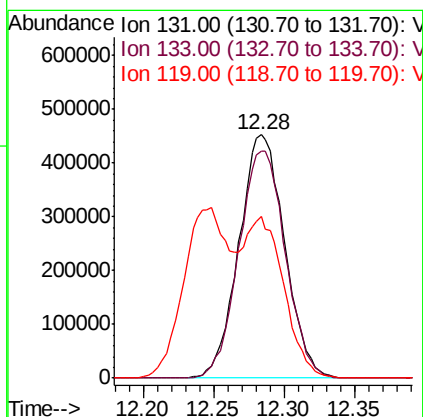
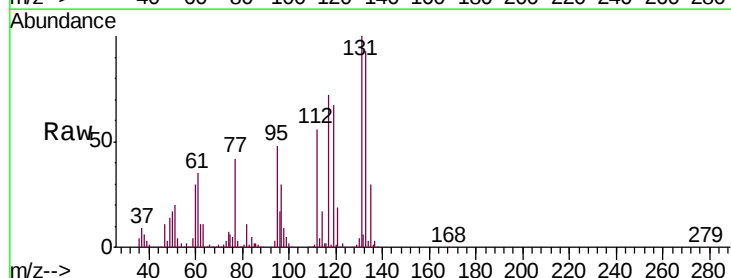
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

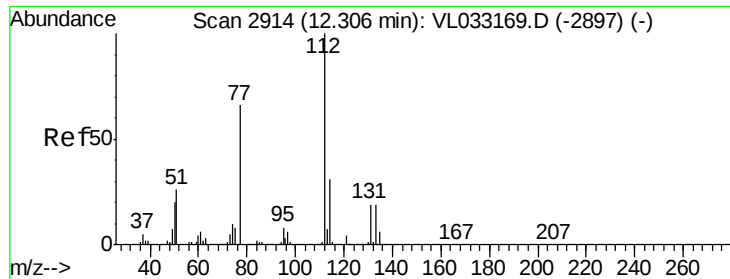
Tgt Ion:117 Resp: 2825221  
Ion Ratio Lower Upper  
117 100  
82 53.6 49.5 74.3  
119 23.4 24.4 36.6#



#56  
1,1,1,2-Tetrachloroethane  
Concen: 7.895 ppbv  
RT: 12.28 min Scan# 2907  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion:131 Resp: 1023782  
Ion Ratio Lower Upper  
131 100  
133 95.5 75.8 113.6  
119 57.0 110.9 166.3#





#57

Chlorobenzene

Concen: 7.191 ppbv

RT: 12.31 min Scan# 2914

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

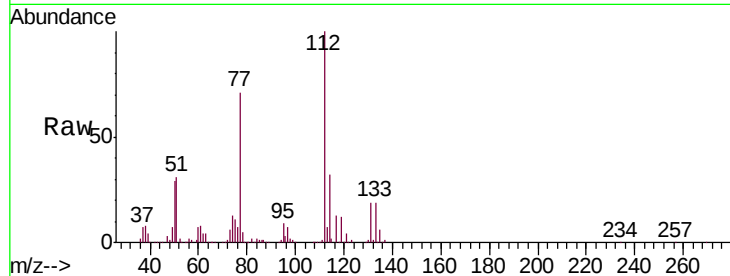
Tgt Ion: 112 Resp: 1773620

Ion Ratio Lower Upper

112 100

77 70.6 54.0 81.0

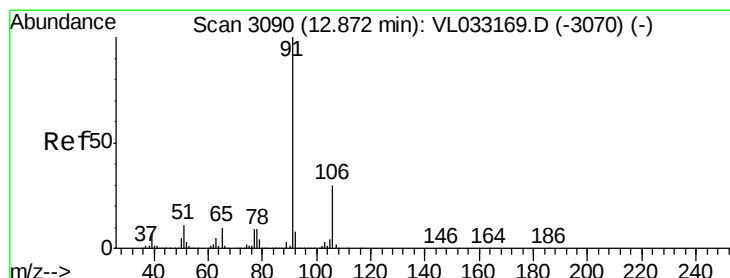
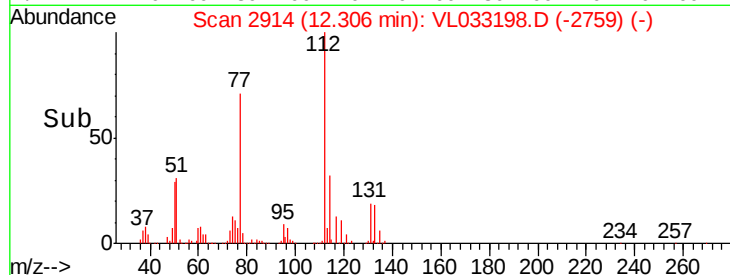
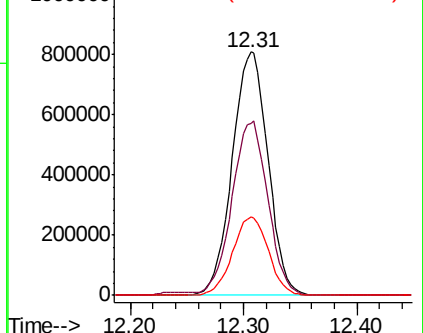
114 32.2 27.9 34.1



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 7.537 ppbv

RT: 12.87 min Scan# 3088

Delta R.T. -0.01 min

Lab File: VL033198.D

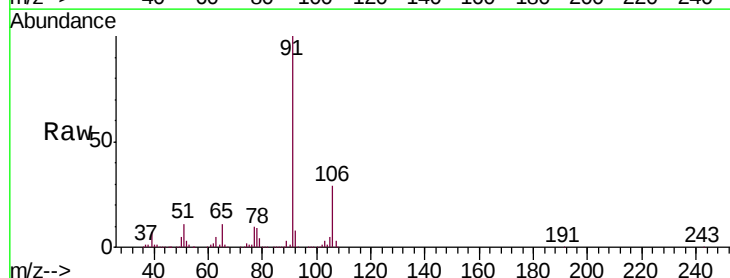
Acq: 13 Feb 2019 22:20

Tgt Ion: 91 Resp: 3446410

Ion Ratio Lower Upper

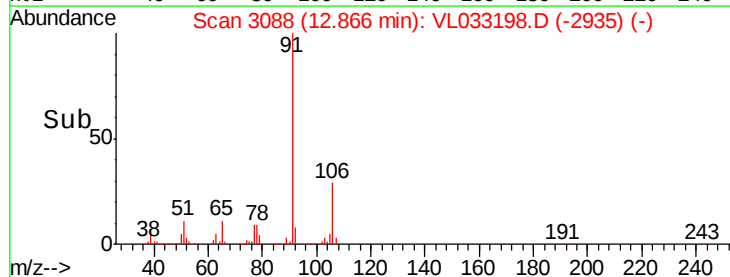
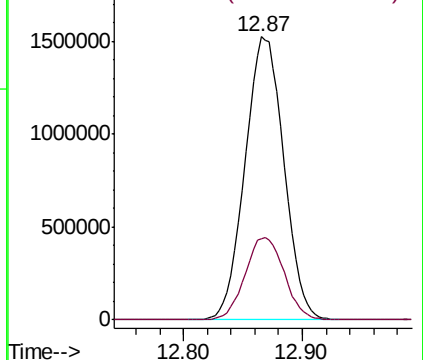
91 100

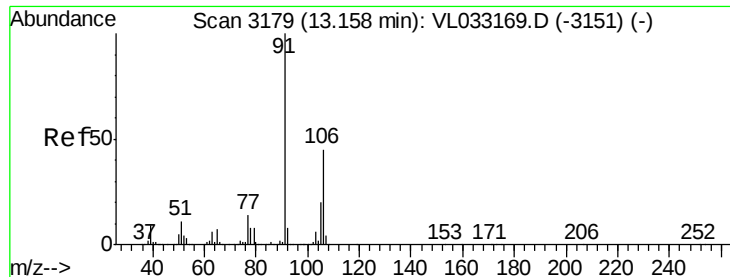
106 28.7 23.8 35.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

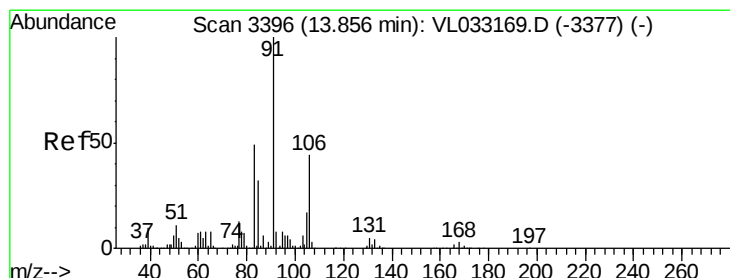
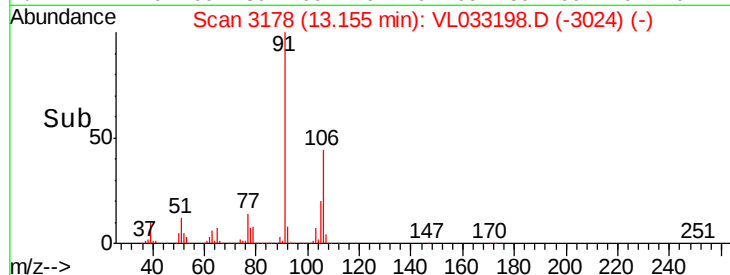
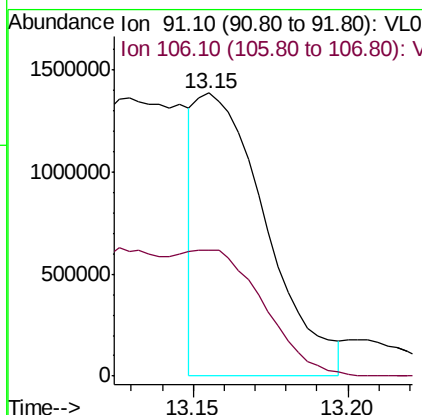
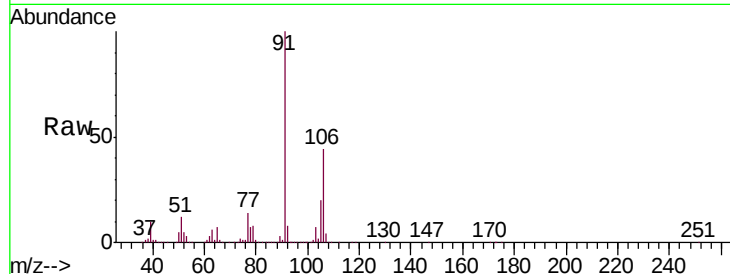




#59  
m/p-Xylene  
Concen: 5.694 ppbv  
RT: 13.15 min Scan# 3178  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

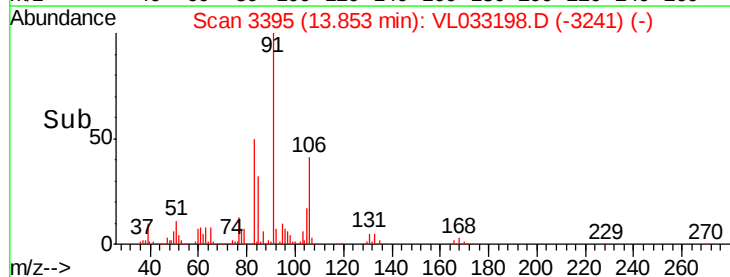
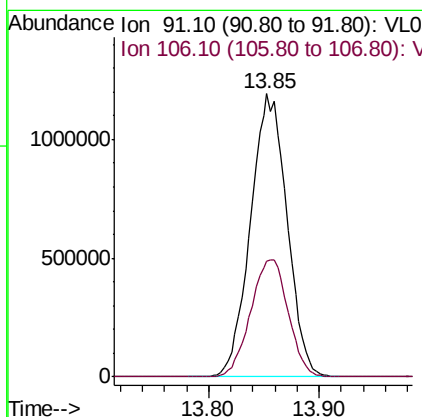
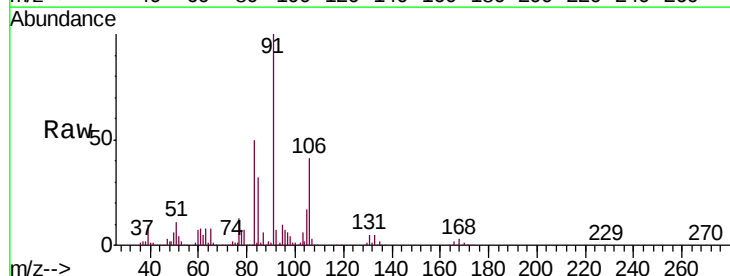
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

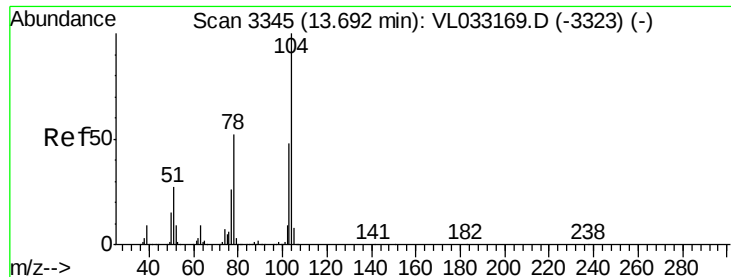
Tgt Ion: 91 Resp: 2172641  
Ion Ratio Lower Upper  
91 100  
106 0.0 0.0 0.0



#60  
o-Xylene  
Concen: 7.352 ppbv  
RT: 13.85 min Scan# 3395  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion: 91 Resp: 2728251  
Ion Ratio Lower Upper  
91 100  
106 42.6 21.8 65.3





#61

Styrene

Concen: 7.445 ppbv

RT: 13.69 min Scan# 3344

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

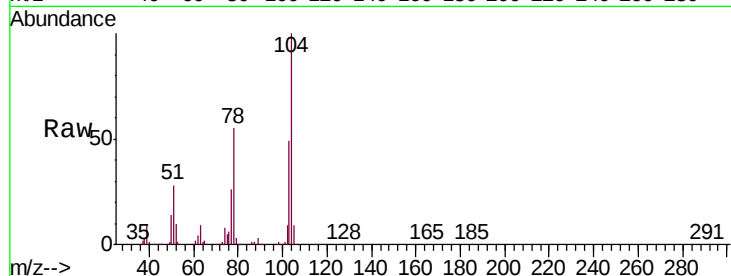
Tgt Ion:104 Resp: 2083923

Ion Ratio Lower Upper

104 100

78 52.9 41.9 62.9

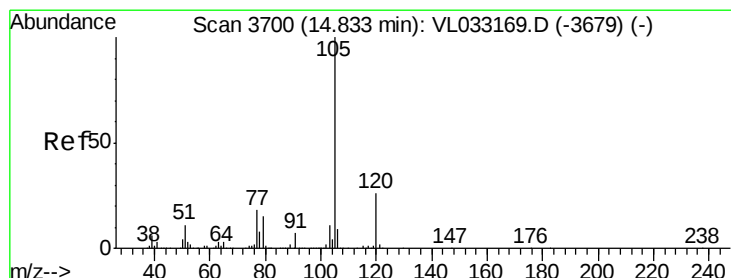
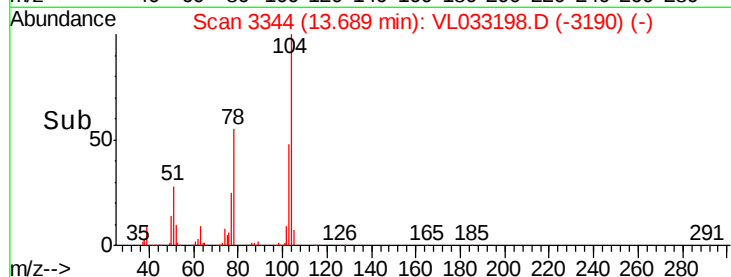
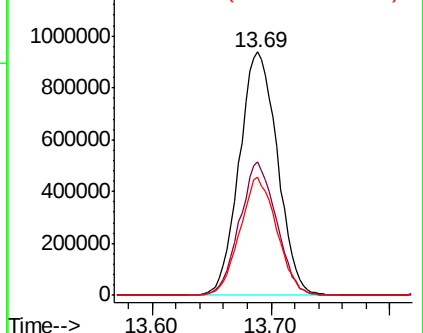
103 47.1 37.9 56.9



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: 7.278 ppbv

RT: 14.83 min Scan# 3700

Delta R.T. -0.00 min

Lab File: VL033198.D

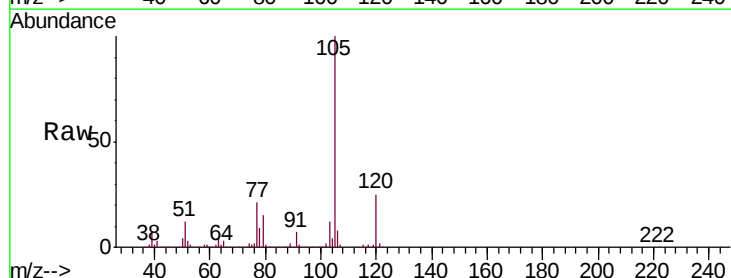
Acq: 13 Feb 2019 22:20

Tgt Ion:105 Resp: 3809489

Ion Ratio Lower Upper

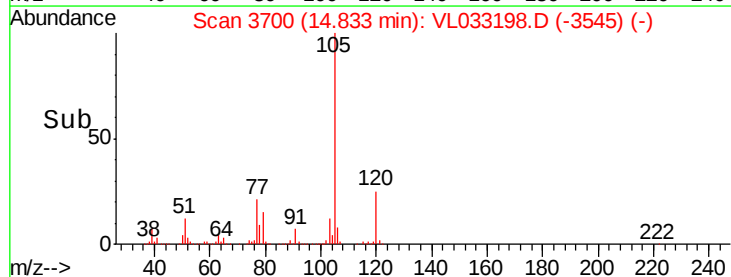
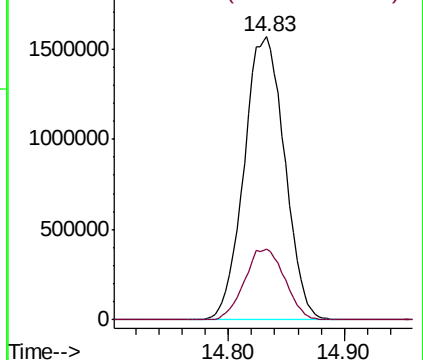
105 100

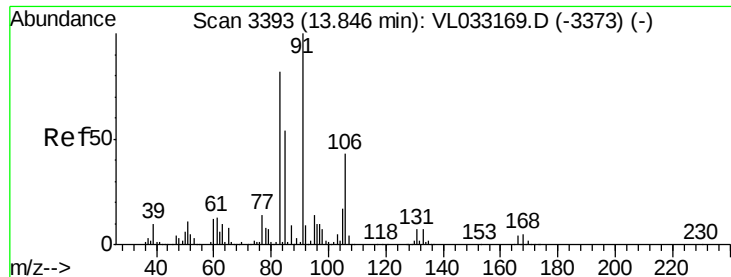
120 25.0 20.3 30.5



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

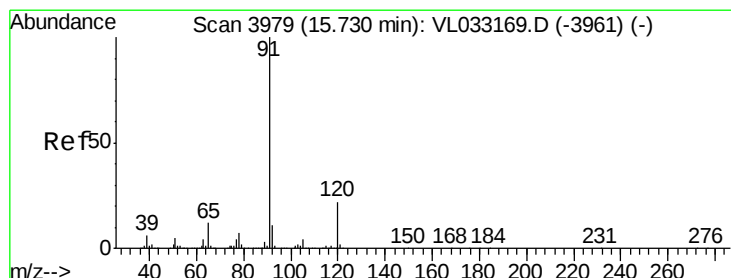
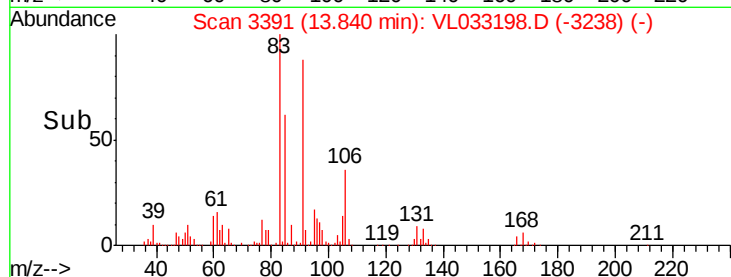
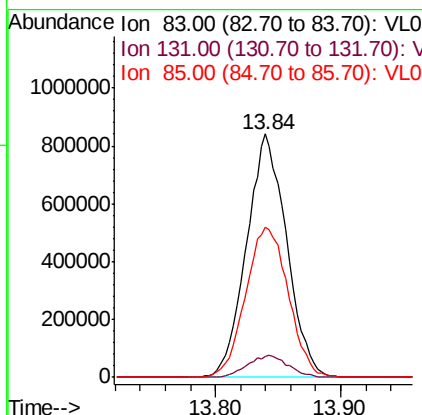
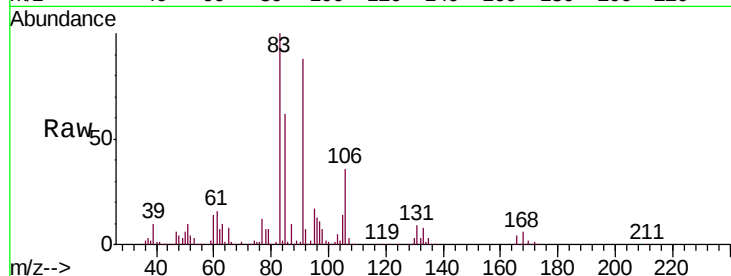




#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 6.405 ppbv  
 RT: 13.84 min Scan# 3391  
 Delta R.T. -0.01 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

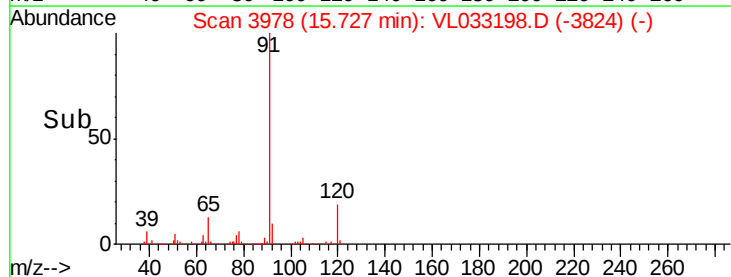
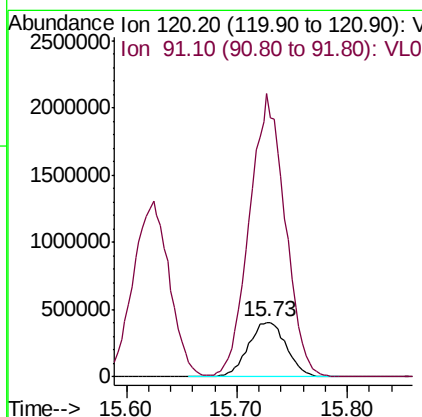
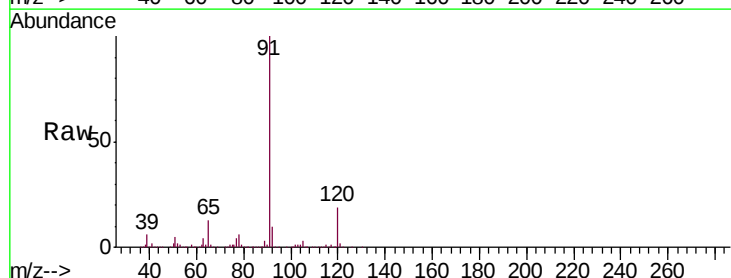
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

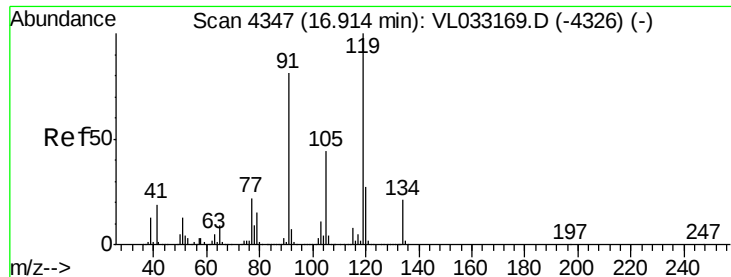
Tgt Ion: 83 Resp: 1867148  
 Ion Ratio Lower Upper  
 83 100  
 131 9.3 4.8 14.3  
 85 65.8 32.8 98.3



#64  
 n-propylbenzene  
 Concen: 7.305 ppbv  
 RT: 15.73 min Scan# 3978  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 120 Resp: 971760  
 Ion Ratio Lower Upper  
 120 100  
 91 486.4 383.9 575.9

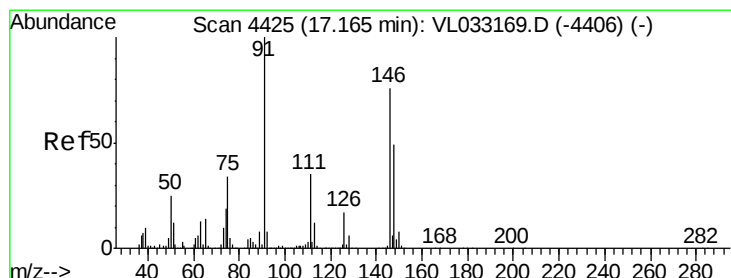
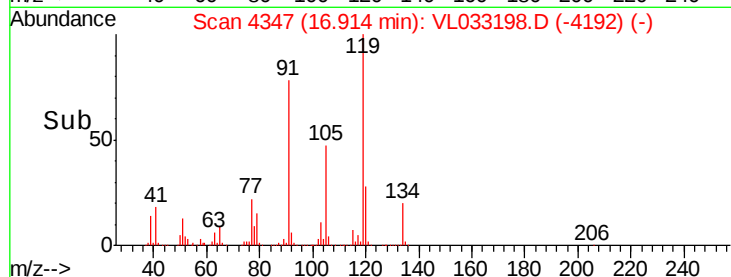
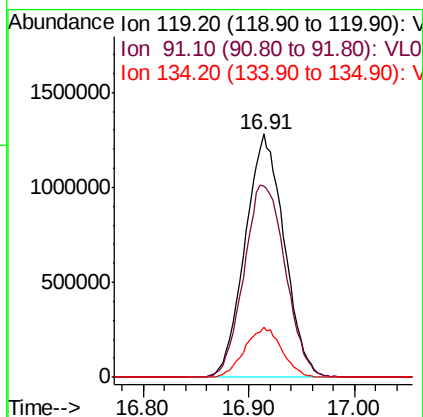
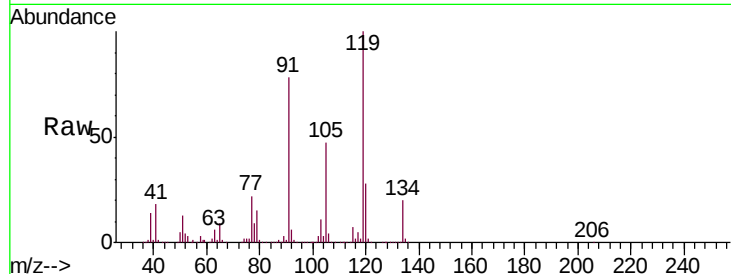




#65  
 tert-Butylbenzene  
 Concen: 7.239 ppbv  
 RT: 16.91 min Scan# 4347  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

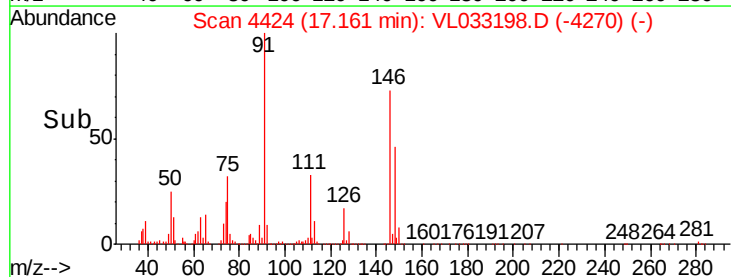
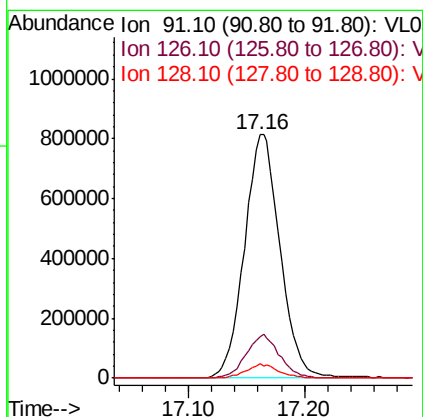
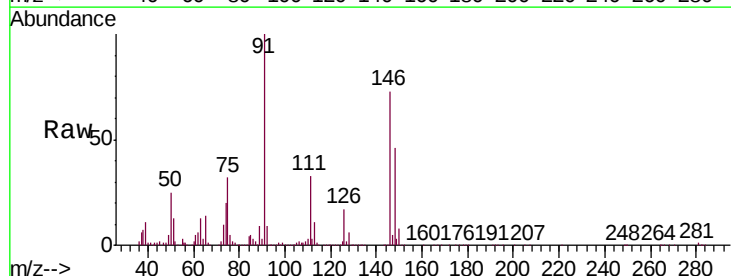
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

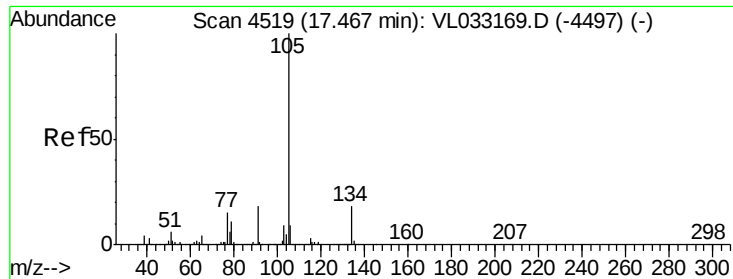
Tgt Ion: 119 Resp: 3299658  
 Ion Ratio Lower Upper  
 119 100  
 91 84.2 65.7 98.5  
 134 19.6 15.8 23.6



#66  
 Benzyl Chloride  
 Concen: 10.744 ppbv  
 RT: 17.16 min Scan# 4424  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 91 Resp: 1738631  
 Ion Ratio Lower Upper  
 91 100  
 126 16.8 13.8 20.6  
 128 5.2 4.5 6.7

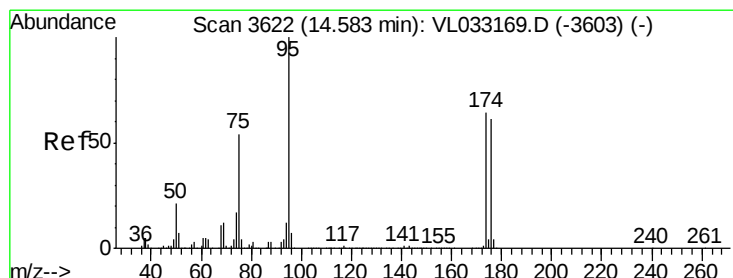
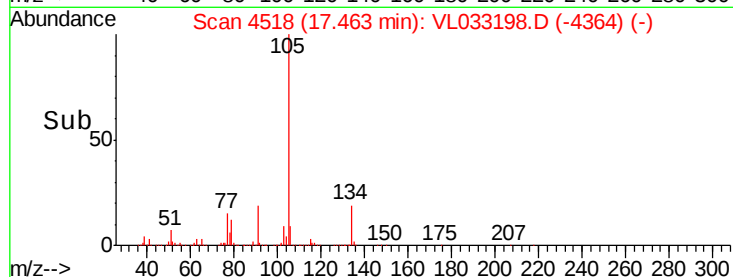
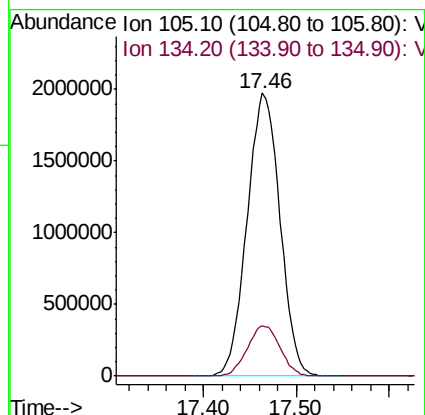
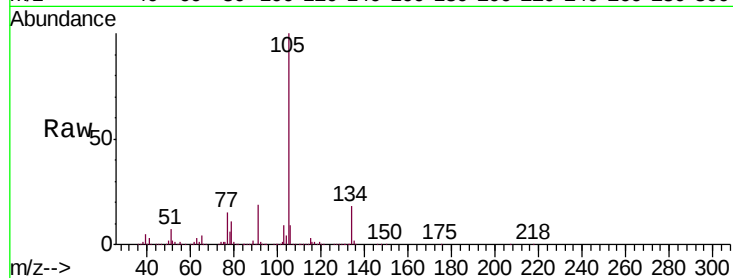




#67  
 sec-Butylbenzene  
 Concen: 7.343 ppbv  
 RT: 17.46 min Scan# 4518  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

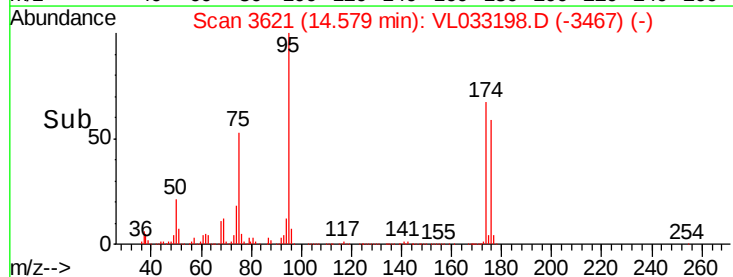
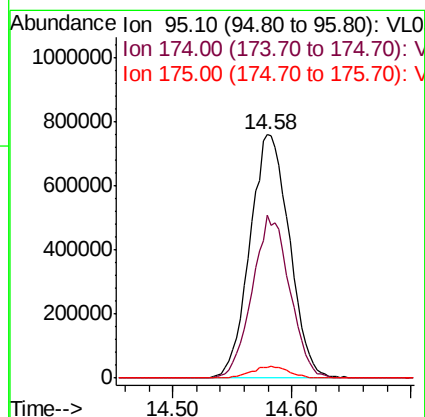
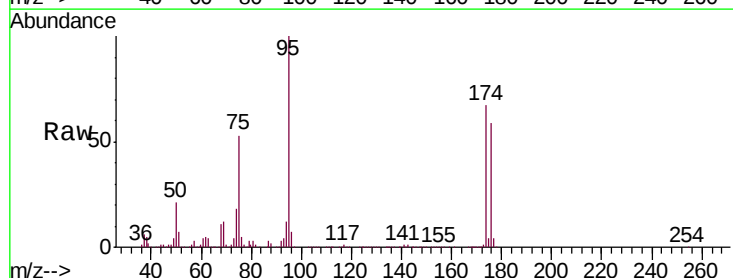
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

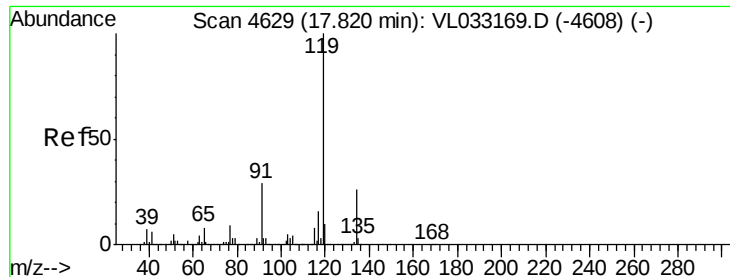
Tgt Ion: 105 Resp: 4859185  
 Ion Ratio Lower Upper  
 105 100  
 134 17.8 14.6 22.0



#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 8.003 ppbv  
 RT: 14.58 min Scan# 3621  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion: 95 Resp: 1741404  
 Ion Ratio Lower Upper  
 95 100  
 174 63.8 51.2 76.8  
 175 4.6 3.8 5.6

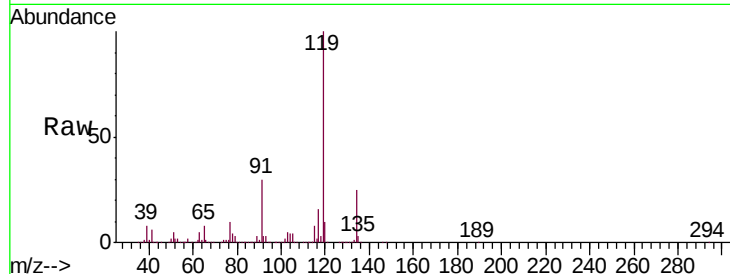




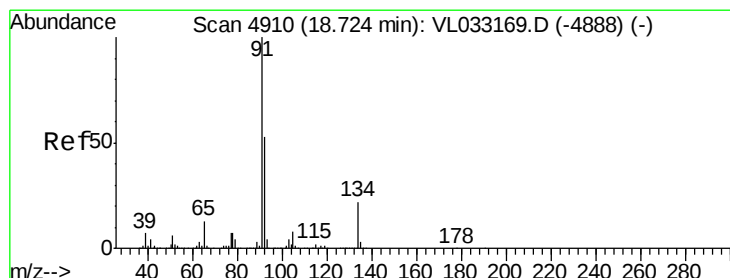
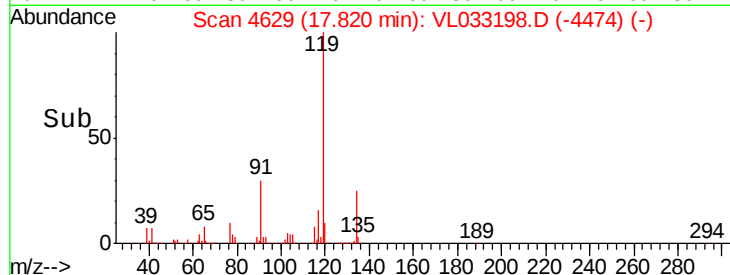
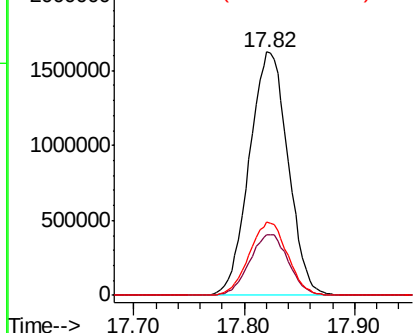
#69  
p-Isopropyltoluene  
Concen: 7.138 ppbv  
RT: 17.82 min Scan# 4629  
Delta R.T. -0.00 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tgt Ion: 119 Resp: 3934267  
Ion Ratio Lower Upper  
119 100  
134 25.1 20.4 30.6  
91 29.9 23.4 35.2

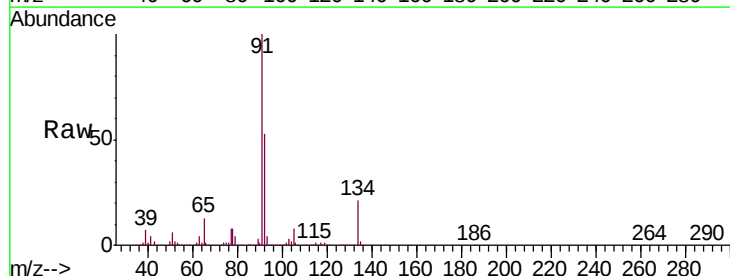


Abundance Ion 119.10 (118.80 to 119.80): V  
Ion 134.20 (133.90 to 134.90): V  
Ion 91.10 (90.80 to 91.80): V

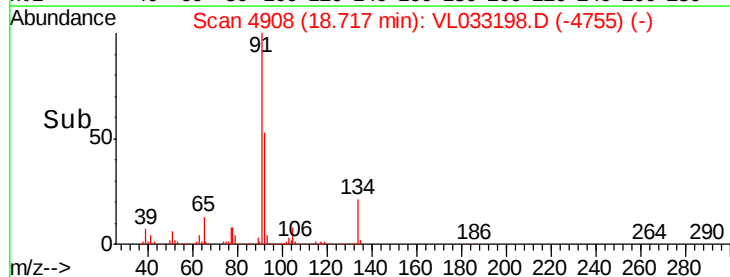
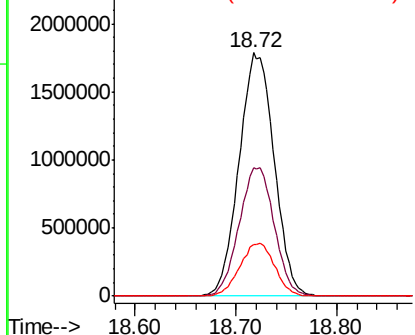


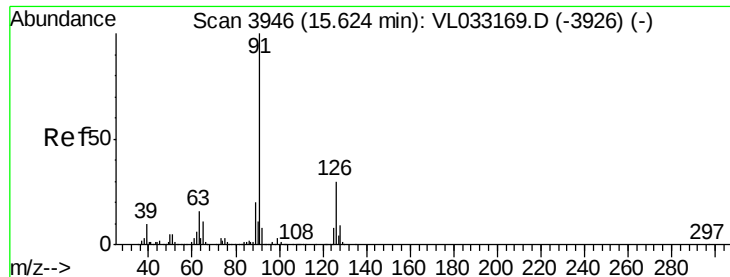
#70  
n-Butylbenzene  
Concen: 7.224 ppbv  
RT: 18.72 min Scan# 4908  
Delta R.T. -0.01 min  
Lab File: VL033198.D  
Acq: 13 Feb 2019 22:20

Tgt Ion: 91 Resp: 4296106  
Ion Ratio Lower Upper  
91 100  
92 53.1 43.0 64.4  
134 21.8 17.5 26.3



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: 7.257 ppbv

RT: 15.62 min Scan# 3946

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

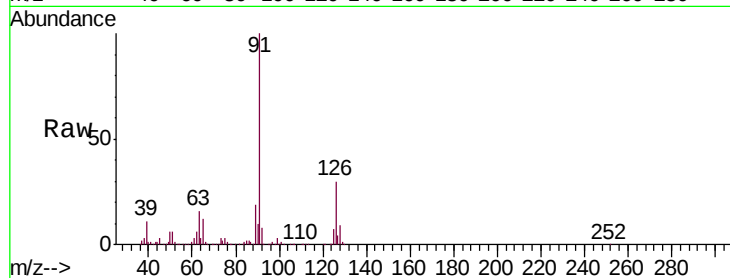
VSTDCCC010EC

Tgt Ion: 91 Resp: 2984593

Ion Ratio Lower Upper

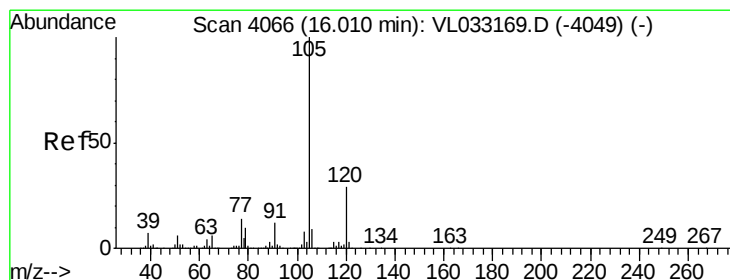
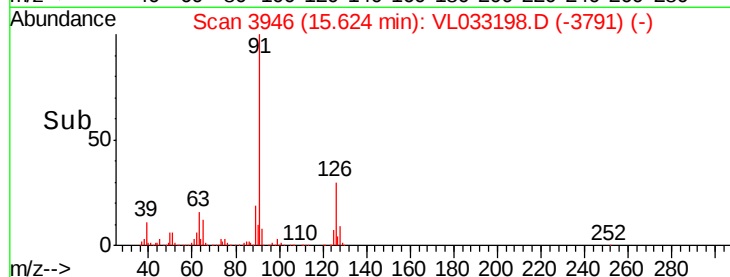
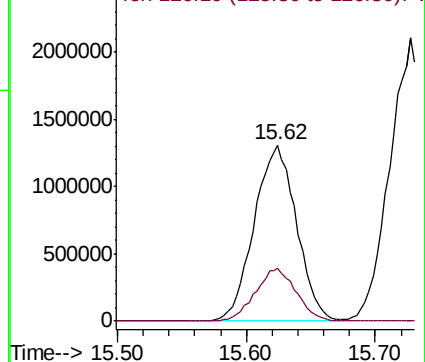
91 100

126 28.9 11.8 47.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 7.376 ppbv

RT: 16.01 min Scan# 4065

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Tgt Ion: 105 Resp: 3154704

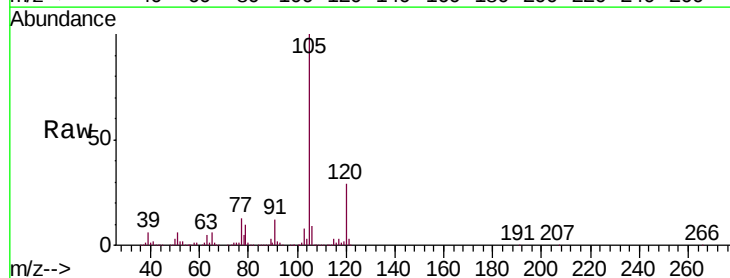
Ion Ratio Lower Upper

105 100

120 28.5 23.1 34.7

91 13.0 9.8 14.6

77 14.1 10.9 16.3

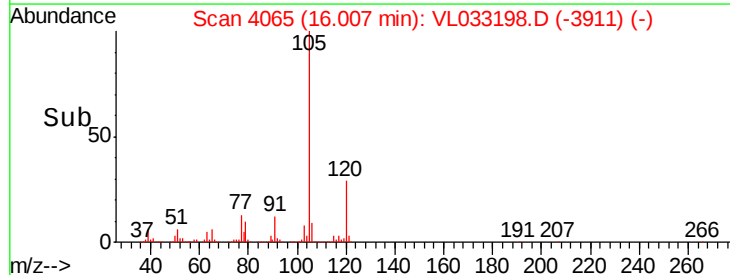
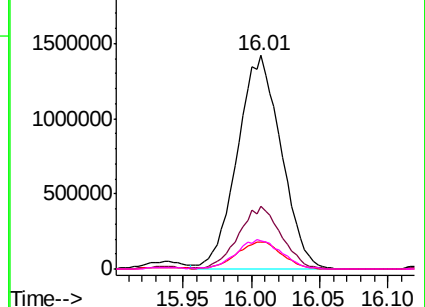


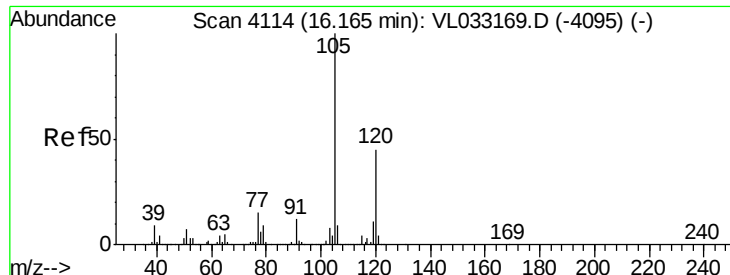
Abundance Ion 105.10 (104.80 to 105.80): V

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

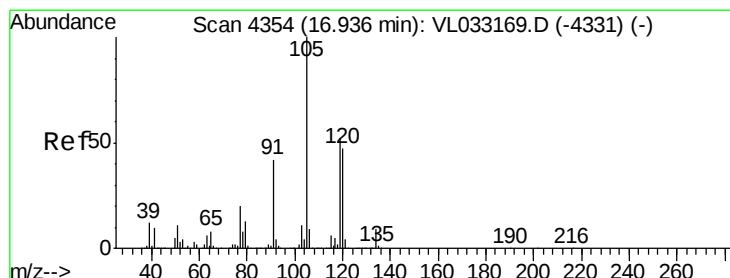
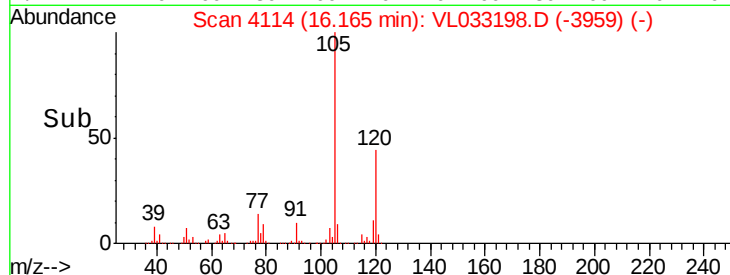
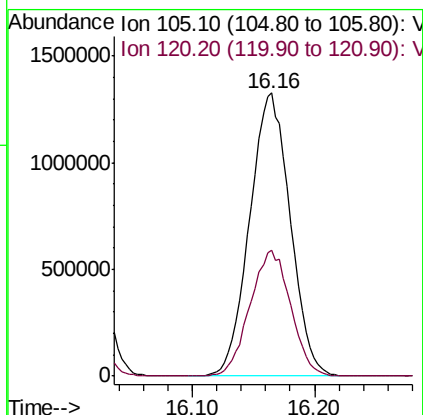
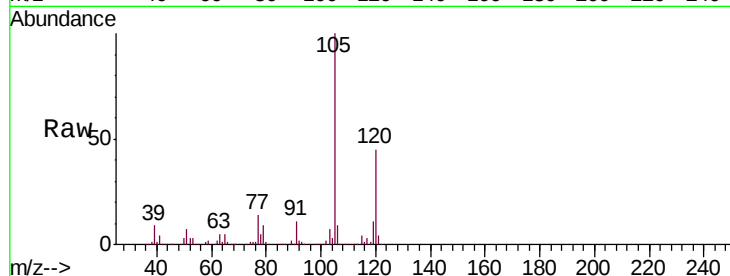




#73  
 1,3,5-Trimethylbenzene  
 Concen: 7.432 ppbv  
 RT: 16.16 min Scan# 4114  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

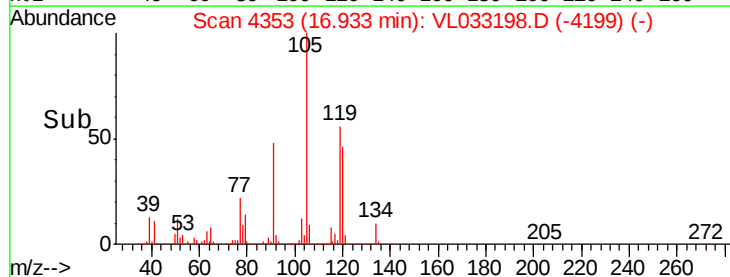
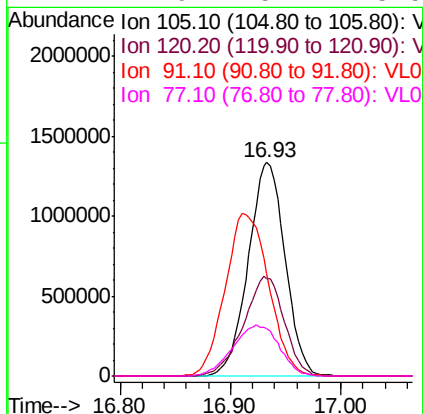
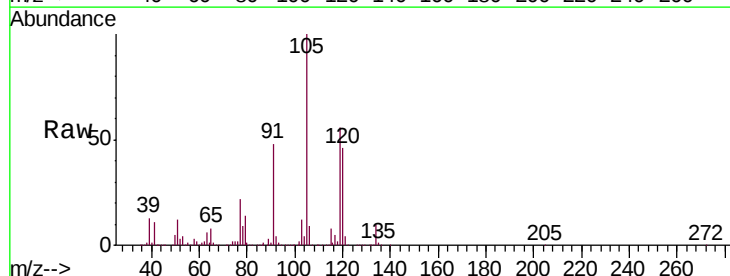
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

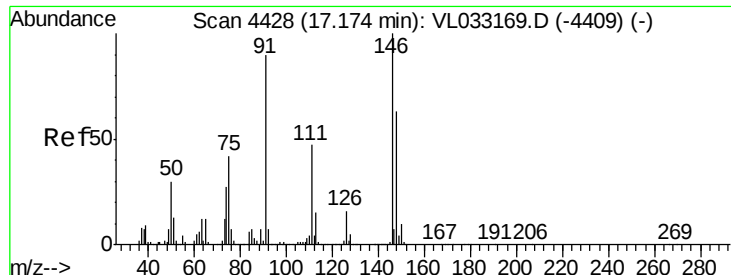
Tgt Ion:105 Resp: 3040294  
 Ion Ratio Lower Upper  
 105 100  
 120 44.5 36.2 54.4



#74  
 1,2,4-Trimethylbenzene  
 Concen: 7.271 ppbv  
 RT: 16.93 min Scan# 4353  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Tgt Ion:105 Resp: 3086963  
 Ion Ratio Lower Upper  
 105 100  
 120 45.8 37.9 56.9  
 91 47.9 34.0 51.0  
 77 21.9 15.7 23.5





#75

1,3-Dichlorobenzene

Concen: 7.313 ppbv

RT: 17.17 min Scan# 4427

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

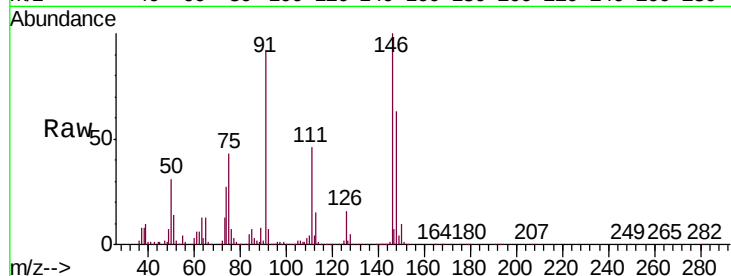
Tgt Ion:146 Resp: 1790200

Ion Ratio Lower Upper

146 100

111 46.4 23.2 69.6

148 63.7 31.8 95.4

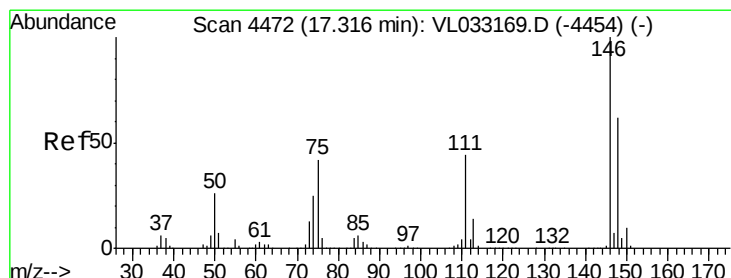
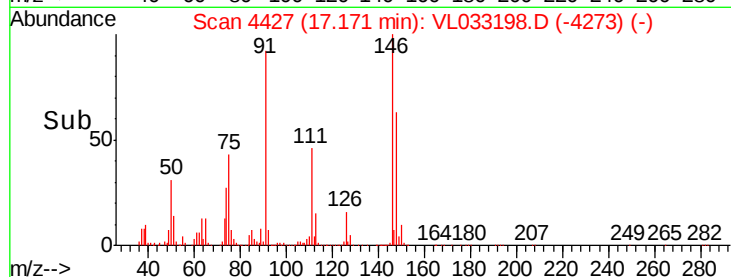
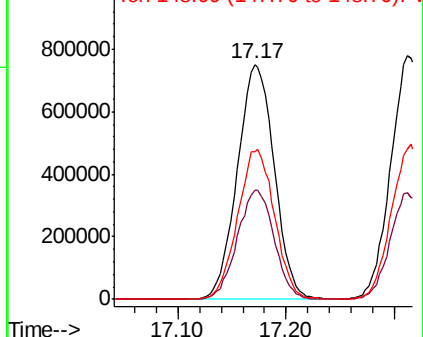


Abundance

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: 7.384 ppbv

RT: 17.31 min Scan# 4471

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

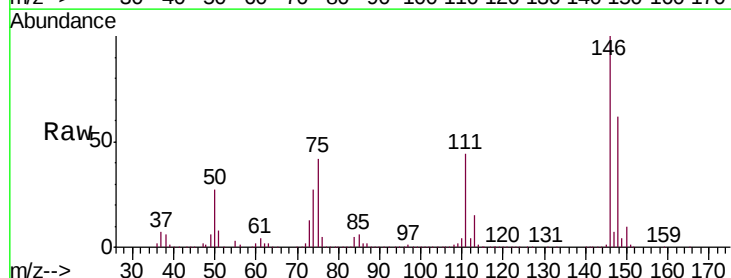
Tgt Ion:146 Resp: 1790221

Ion Ratio Lower Upper

146 100

111 44.4 22.4 67.0

148 64.0 31.9 95.9

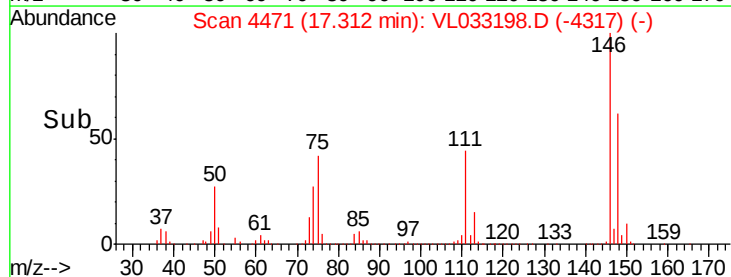
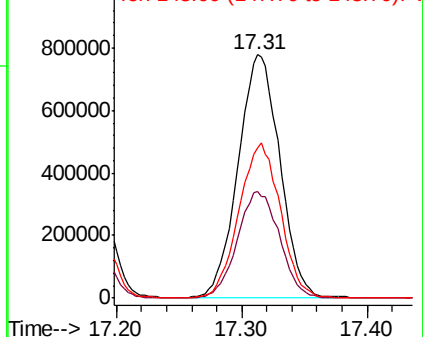


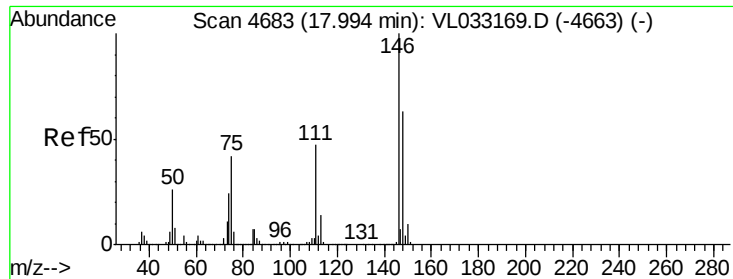
Abundance

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: 7.168 ppbv

RT: 18.00 min Scan# 4684

Delta R.T. 0.00 min

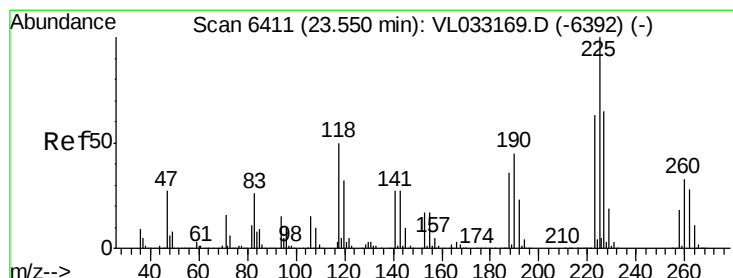
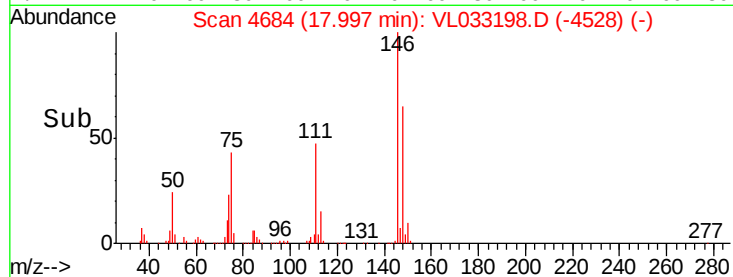
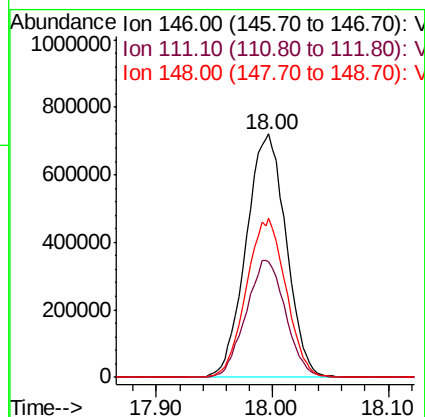
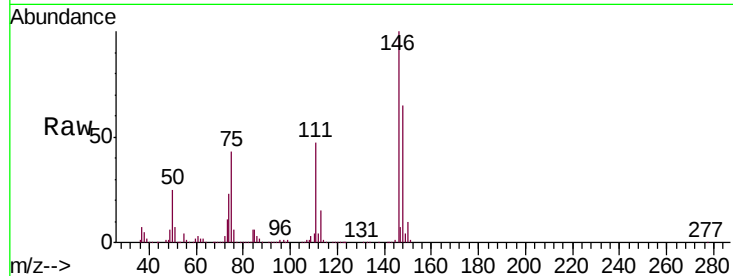
Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tgt Ion:146 Resp: 1733915

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 47.5  | 23.5  | 70.6  |
| 148 | 64.5  | 31.9  | 95.7  |



#78

Hexachloro-1,3-Butadiene

Concen: 11.664 ppbv

RT: 23.55 min Scan# 6411

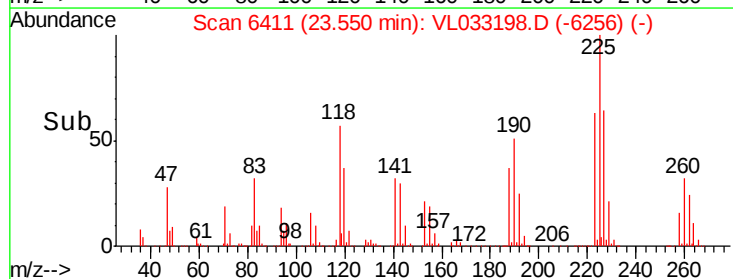
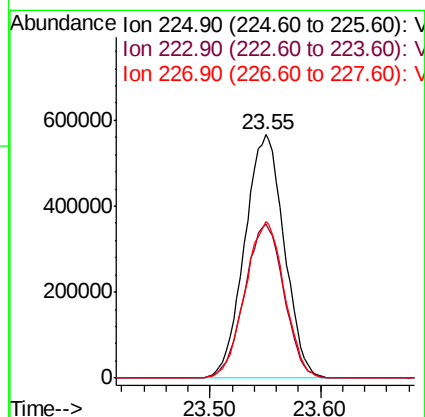
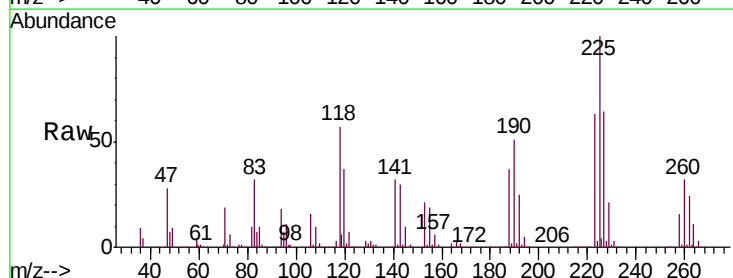
Delta R.T. -0.00 min

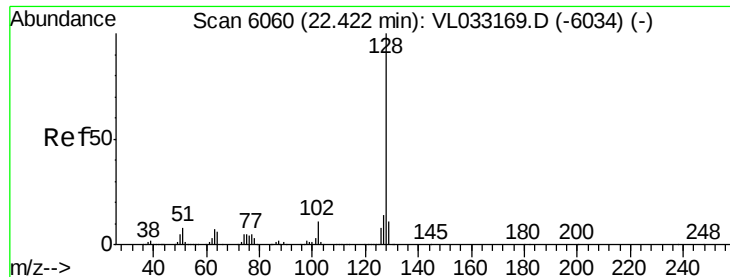
Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Tgt Ion:225 Resp: 1404459

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 225 | 100   |       |       |
| 223 | 63.2  | 50.6  | 75.8  |
| 227 | 64.0  | 51.4  | 77.2  |





#79

Naphthalene

Concen: 7.418 ppbv

RT: 22.42 min Scan# 6059

Delta R.T. -0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

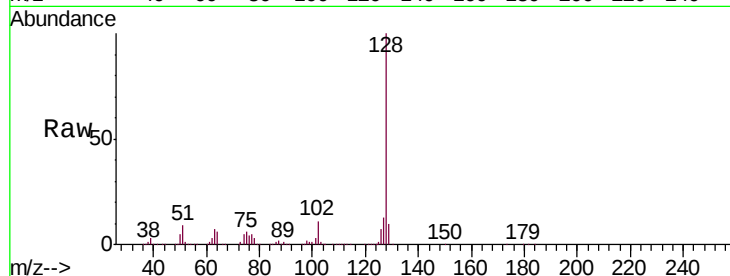
Tgt Ion:128 Resp: 3383484

Ion Ratio Lower Upper

128 100

127 12.9 11.0 16.4

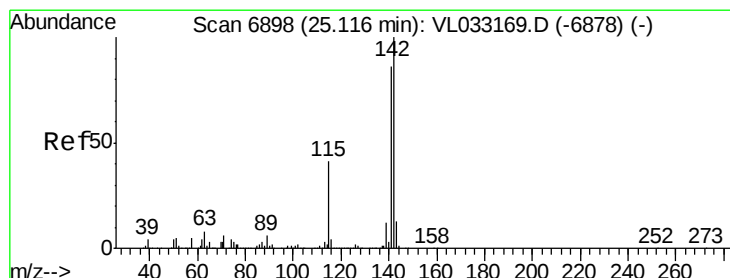
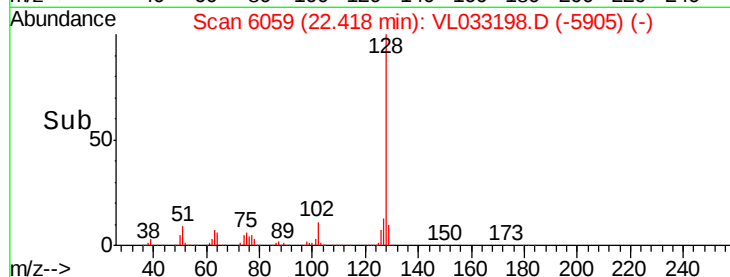
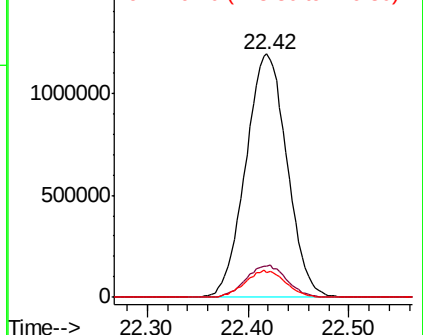
129 10.4 8.6 12.8



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: 6.913 ppbv

RT: 25.12 min Scan# 6899

Delta R.T. 0.00 min

Lab File: VL033198.D

Acq: 13 Feb 2019 22:20

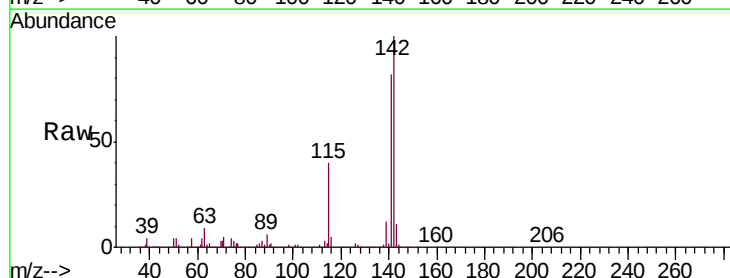
Tgt Ion:142 Resp: 1596690

Ion Ratio Lower Upper

142 100

141 84.3 67.7 101.5

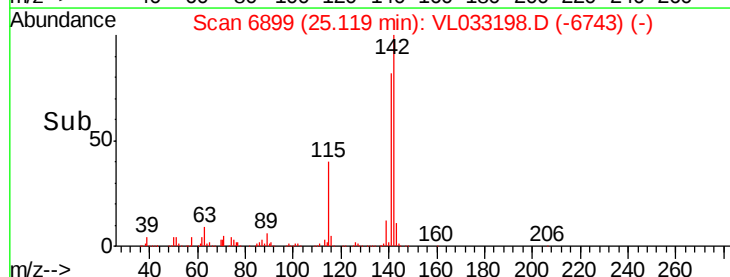
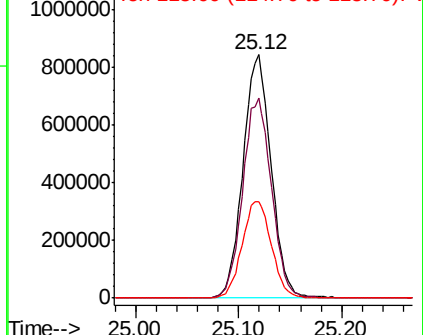
115 41.3 32.7 49.1

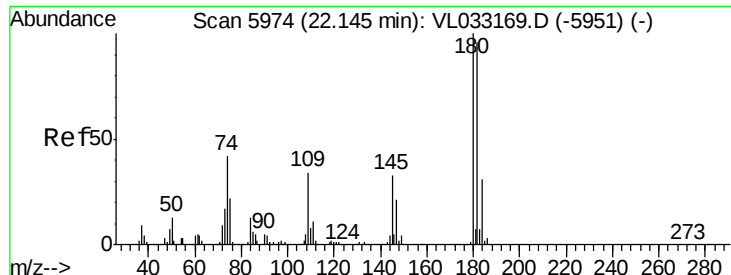


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

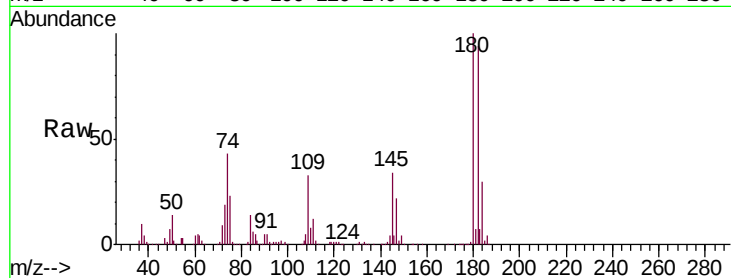




#81  
 1,2,4-Trichlorobenzene  
 Concen: 7.114 ppbv  
 RT: 22.14 min Scan# 5973  
 Delta R.T. -0.00 min  
 Lab File: VL033198.D  
 Acq: 13 Feb 2019 22:20

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tgt Ion:180 Resp: 1648663  
 Ion Ratio Lower Upper  
 180 100  
 182 94.8 75.8 113.8  
 184 30.6 24.3 36.5



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

