

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL011619\  
 Data File : VL033108.D  
 Acq On : 17 Jan 2019 1:55  
 Operator : SY/AP  
 Sample : IDOC-1  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IDOC-1

Manual Integrations  
 APPROVED

sam  
 1/21/2019 8:50:59 AM

Quant Time: Jan 17 04:06:28 2019

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL010419AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jan 0

QLast Update : Fri Jan 04 16:09:05 2019

Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 1075996  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 2605678  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 2666694  | 10.00 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1931023  | 9.45     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 94.50% |

#### Target Compounds

|                                |      |     |         |        |        | Qvalue |
|--------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.08 | 85  | 2254018 | 11.256 | ppbv   | 99     |
| 3) Chlorodifluoromethane       | 3.01 | 51  | 1184742 | 9.727  | ppbv   | 97     |
| 4) Chloromethane               | 3.17 | 50  | 642935  | 9.216  | ppbv   | 97     |
| 5) Vinyl Chloride              | 3.29 | 62  | 674546  | 9.574  | ppbv   | 97     |
| 6) Bromomethane                | 3.51 | 94  | 453571  | 9.476  | ppbv   | 94     |
| 7) Chloroethane                | 3.60 | 64  | 256059  | 9.294  | ppbv   | 95     |
| 8) Dichlorotetrafluoroethane   | 3.22 | 85  | 1733423 | 10.050 | ppbv   | 99     |
| 9) Propene                     | 3.04 | 41  | 453682  | 9.971  | ppbv   | 100    |
| 10) Heptane                    | 8.25 | 43  | 1306047 | 10.081 | ppbv   | 100    |
| 11) Trichlorofluoromethane     | 4.00 | 101 | 1925658 | 8.703  | ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55 | 101 | 1332573 | 9.524  | ppbv   | 98     |
| 13) Ethanol                    | 3.65 | 45  | 89024   | 4.906  | ppbv   | 94     |
| 14) Bromoethene                | 3.79 | 108 | 573612  | 9.282  | ppbv   | 100    |
| 15) Acetone                    | 3.90 | 43  | 1374765 | 9.231  | ppbv   | 99     |
| 16) 1,3-Butadiene              | 3.36 | 39  | 574704  | 10.233 | ppbv   | 98     |
| 17) tert-Butyl alcohol         | 4.35 | 59  | 275032  | 8.718  | ppbv   | 98     |
| 18) 1,1-Dichloroethene         | 4.35 | 96  | 605321  | 9.392  | ppbv   | 97     |
| 19) Isopropyl Alcohol          | 4.02 | 45  | 653043  | 6.369  | ppbv # | 98     |
| 20) Methylene Chloride         | 4.41 | 84  | 508133  | 8.184  | ppbv   | 96     |
| 21) Allyl Chloride             | 4.48 | 41  | 924023  | 10.012 | ppbv   | 98     |
| 22) trans-1,2-Dichloroethene   | 4.96 | 96  | 611854  | 9.578  | ppbv   | 96     |
| 23) Vinyl Acetate              | 5.15 | 43  | 1856527 | 9.799  | ppbv   | 98     |
| 24) 1,1-Dichloroethane         | 5.09 | 63  | 1473192 | 9.158  | ppbv   | 98     |
| 25) Ethyl Acetate              | 5.77 | 43  | 2261460 | 8.983  | ppbv   | 100    |
| 26) Hexane                     | 5.78 | 57  | 1060551 | 8.947  | ppbv   | 99     |
| 27) Carbon Disulfide           | 4.62 | 76  | 1520063 | 10.398 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.11 | 73  | 1760879 | 9.517  | ppbv   | 99     |
| 29) Chloroform                 | 5.85 | 83  | 1810325 | 8.962  | ppbv   | 99     |
| 30) Cyclohexane                | 7.25 | 84  | 892659  | 10.100 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene     | 5.64 | 61  | 1089569 | 9.899  | ppbv   | 100    |
| 32) 1,1,1-Trichloroethane      | 6.62 | 97  | 1887646 | 9.207  | ppbv   | 98     |
| 34) 2-Butanone                 | 5.33 | 43  | 1464275 | 9.672  | ppbv   | 98     |
| 35) Carbon Tetrachloride       | 7.14 | 117 | 2118032 | 9.463  | ppbv   | 99     |
| 36) Benzene                    | 7.00 | 78  | 2121563 | 9.940  | ppbv   | 100    |
| 37) 1,2-Dichloroethane         | 6.41 | 62  | 1411642 | 9.472  | ppbv   | 99     |
| 38) Trichloroethene            | 7.96 | 130 | 889448  | 10.130 | ppbv   | 94     |
| 39) 1,2-Dichloropropane        | 7.74 | 63  | 765265  | 9.544  | ppbv   | 96     |
| 40) 1,4-Dioxane                | 7.95 | 88  | 273963  | 9.001  | ppbv # | 1      |
| 41) Tetrahydrofuran            | 6.15 | 42  | 790255  | 10.255 | ppbv   | 99     |
| 42) Bromodichloromethane       | 7.92 | 83  | 1952999 | 9.540  | ppbv   | 100    |
| 43) Methyl Methacrylate        | 8.14 | 69  | 858230  | 10.716 | ppbv   | 98     |

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 Data File : VL033108.D  
 Acq On : 17 Jan 2019 1:55  
 Operator : SY/AP  
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 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IDOC-1

Manual Integrations  
 APPROVED

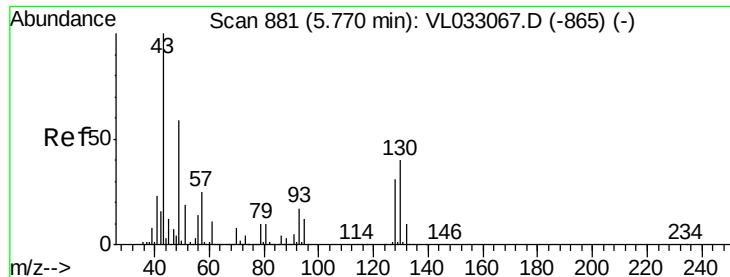
sam  
 1/21/2019 8:50:59 AM

Quant Time: Jan 17 04:06:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL010419AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jan 0  
 QLast Update : Fri Jan 04 16:09:05 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|-------|------|----------|--------|-------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.99  | 57   | 3597231  | 9.952  | ppbv  | 99       |
| 45) t-1,3-Dichloropropene     | 9.42  | 75   | 1128684  | 11.321 | ppbv  | 97       |
| 46) cis-1,3-Dichloropropene   | 8.84  | 75   | 1310588  | 11.518 | ppbv  | 97       |
| 47) 1,1,2-Trichloroethane     | 9.62  | 97   | 893292   | 9.536  | ppbv  | 98       |
| 48) Dibromochloromethane      | 10.45 | 129  | 1648080  | 9.957  | ppbv  | 99       |
| 49) Bromoform                 | 13.20 | 173  | 1358051  | 9.391  | ppbv  | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.87  | 43   | 2076426  | 10.824 | ppbv  | 99       |
| 51) 2-Hexanone                | 10.27 | 43   | 1531156  | 11.031 | ppbv  | 100      |
| 52) Tetrachloroethene         | 11.37 | 164  | 752112   | 9.969  | ppbv  | 98       |
| 53) Toluene                   | 9.95  | 91   | 2474930  | 10.820 | ppbv  | 99       |
| 54) 1,2-Dibromoethane         | 10.76 | 107  | 1350943  | 10.009 | ppbv  | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.28 | 131  | 1173620  | 8.518  | ppbv  | 97       |
| 57) Chlorobenzene             | 12.30 | 112  | 1907126  | 8.568  | ppbv  | 99       |
| 58) Ethyl Benzene             | 12.86 | 91   | 3298235  | 9.796  | ppbv  | 98       |
| 59) m/p-Xylene                | 13.15 | 91   | 5668113m | 18.198 | ppbv  |          |
| 60) o-Xylene                  | 13.85 | 91   | 2771399  | 9.089  | ppbv  | 99       |
| 61) Styrene                   | 13.69 | 104  | 1982044  | 10.187 | ppbv  | 99       |
| 62) Isopropylbenzene          | 14.83 | 105  | 3791538  | 8.738  | ppbv  | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.84 | 83   | 1853819  | 8.185  | ppbv  | 100      |
| 64) n-propylbenzene           | 15.72 | 120  | 966507   | 8.768  | ppbv  | 98       |
| 65) tert-Butylbenzene         | 16.91 | 119  | 3380688  | 8.795  | ppbv  | 99       |
| 66) Benzyl Chloride           | 17.16 | 91   | 1945862  | 8.882  | ppbv  | 99       |
| 67) sec-Butylbenzene          | 17.46 | 105  | 4773004  | 8.677  | ppbv  | 100      |
| 69) p-Isopropyltoluene        | 17.82 | 119  | 4023214  | 9.012  | ppbv  | 99       |
| 70) n-Butylbenzene            | 18.72 | 91   | 4233080  | 9.432  | ppbv  | 100      |
| 71) 2-Chlorotoluene           | 15.62 | 91   | 2851438  | 9.266  | ppbv  | 98       |
| 72) 4-Ethyltoluene            | 16.00 | 105  | 3122876  | 9.320  | ppbv  | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.16 | 105  | 2988061  | 9.038  | ppbv  | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.93 | 105  | 3126917  | 8.540  | ppbv  | 95       |
| 75) 1,3-Dichlorobenzene       | 17.16 | 146  | 1781221  | 8.264  | ppbv  | 99       |
| 76) 1,4-Dichlorobenzene       | 17.31 | 146  | 1733991  | 8.832  | ppbv  | 99       |
| 77) 1,2-Dichlorobenzene       | 17.99 | 146  | 1770701  | 9.122  | ppbv  | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.54 | 225  | 1232915  | 8.270  | ppbv  | 99       |
| 79) Naphthalene               | 22.42 | 128  | 3664650  | 11.882 | ppbv  | 98       |
| 80) Naphthalene,2-methyl-     | 25.12 | 142  | 809412   | 8.648  | ppbv  | 100      |
| 81) 1,2,4-Trichlorobenzene    | 22.14 | 180  | 1695695  | 11.380 | ppbv  | 99       |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampled :

IDOC-1

Tgt Ion: 49 Resp: 1075996

Ion Ratio Lower Upper

49 100

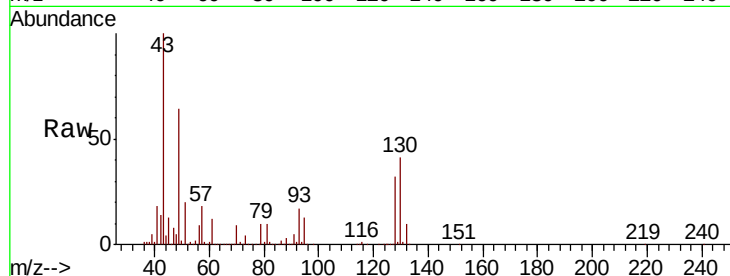
128 51.1 26.2 78.5

130 65.6 33.6 100.6

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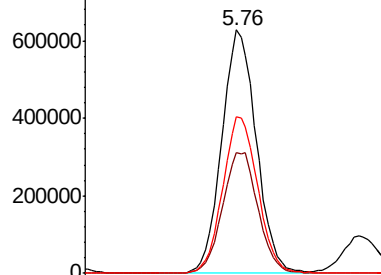
1/21/2019 8:50:59 AM



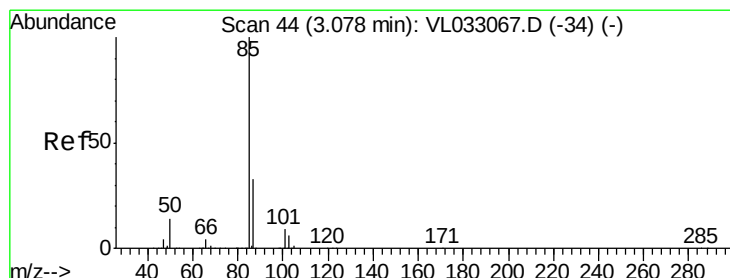
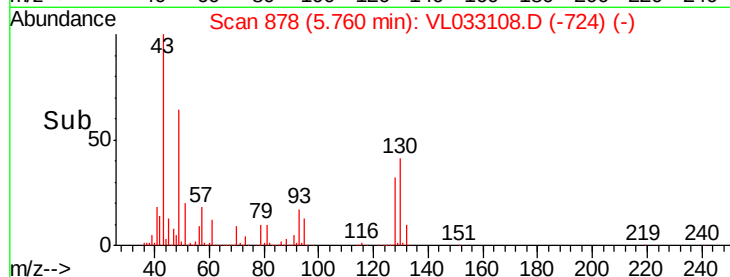
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



Time-->



#2

Dichlorodifluoromethane

Concen: 11.256 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033108.D

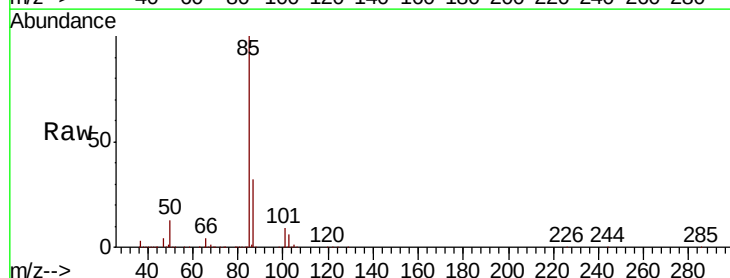
Acq: 17 Jan 2019 1:55

Tgt Ion: 85 Resp: 2254018

Ion Ratio Lower Upper

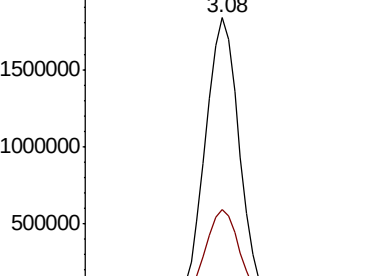
85 100

87 32.5 26.3 39.5

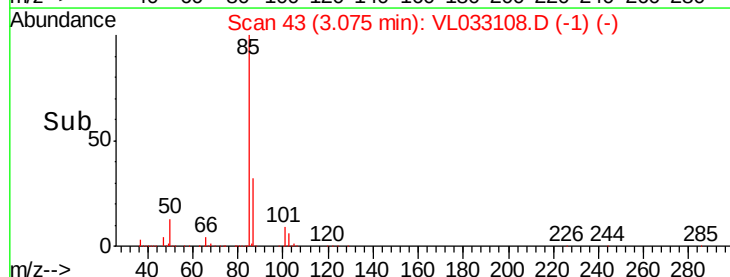


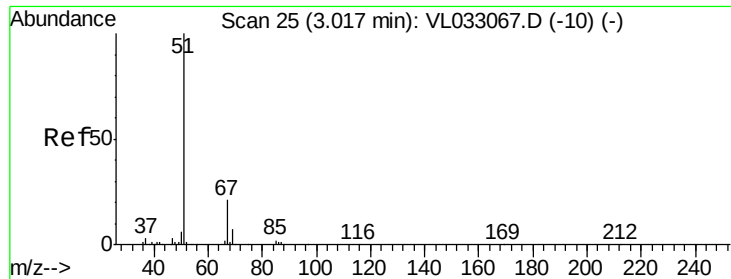
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0



Time-->





#3

Chlorodifluoromethane

Concen: 9.727 ppbv

RT: 3.01 min Scan# 23

Delta R.T. -0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion: 51 Resp: 1184742

Ion Ratio Lower Upper

51 100

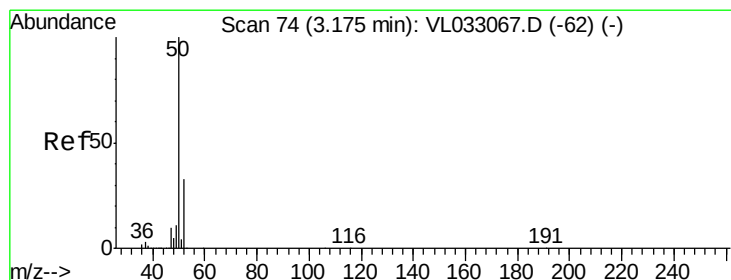
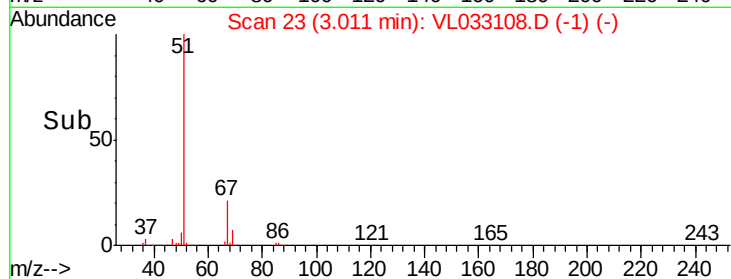
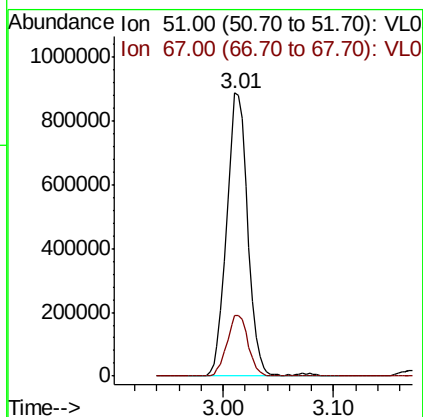
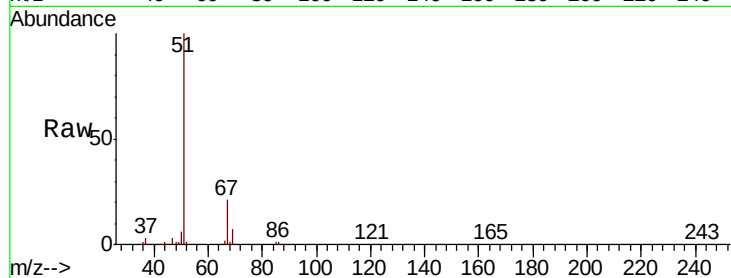
67 21.6 16.3 24.5

Manual Integrations

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#4

Chloromethane

Concen: 9.216 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL033108.D

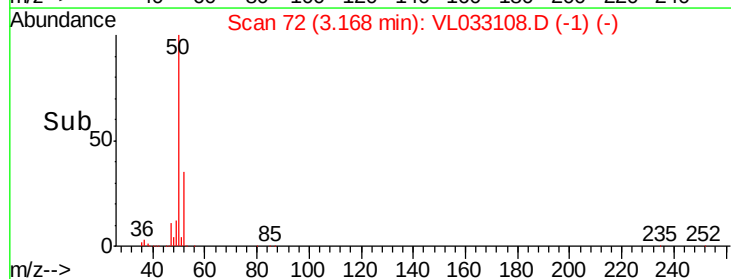
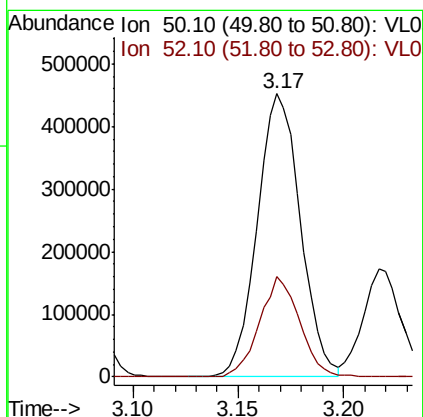
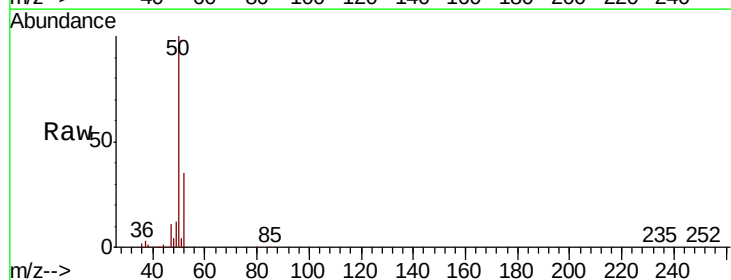
Acq: 17 Jan 2019 1:55

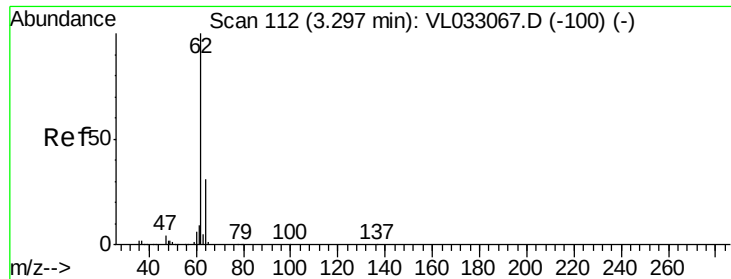
Tgt Ion: 50 Resp: 642935

Ion Ratio Lower Upper

50 100

52 35.4 26.9 40.3





#5

Vinyl Chloride

Concen: 9.574 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampled :

IDOC-1

Tgt Ion: 62 Resp: 674546

Ion Ratio Lower Upper

62 100

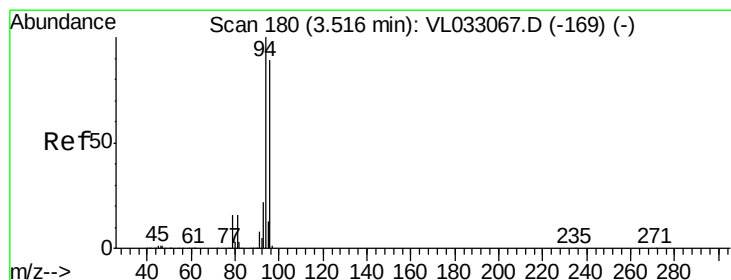
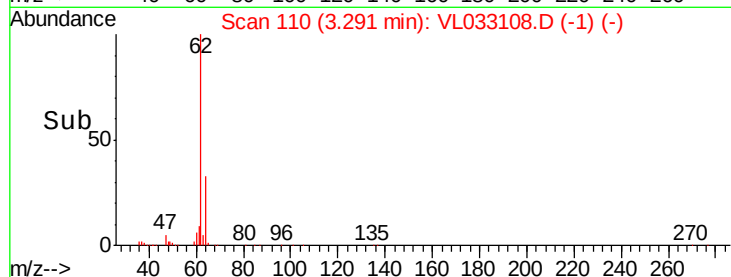
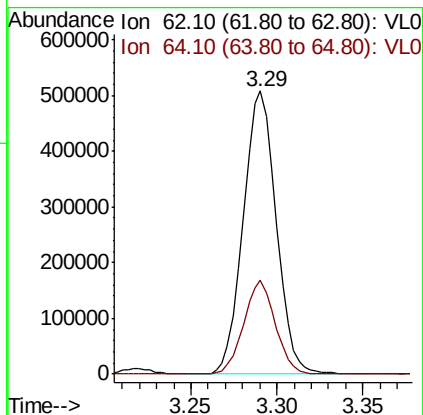
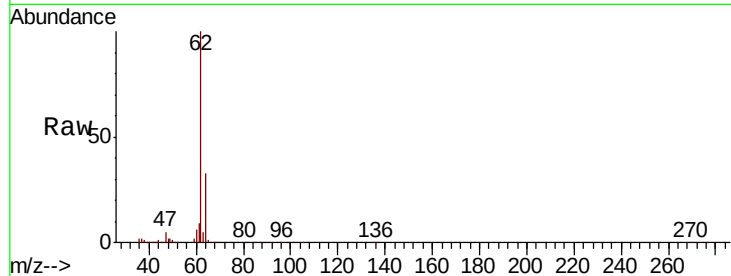
64 33.2 25.3 37.9

Manual Integrations

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#6

Bromomethane

Concen: 9.476 ppbv

RT: 3.51 min Scan# 179

Delta R.T. -0.00 min

Lab File: VL033108.D

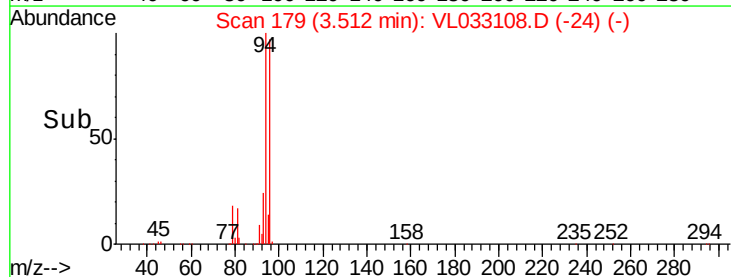
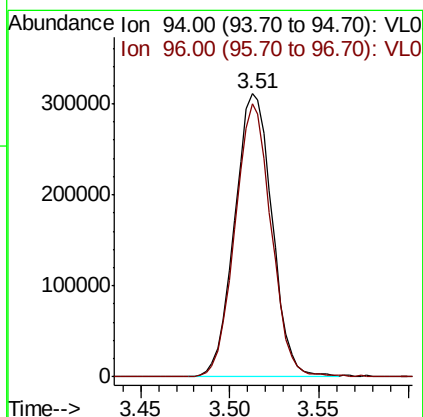
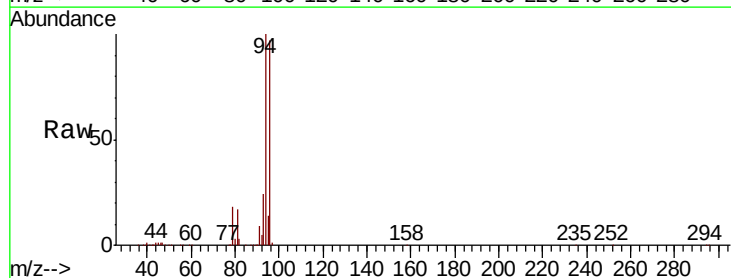
Acq: 17 Jan 2019 1:55

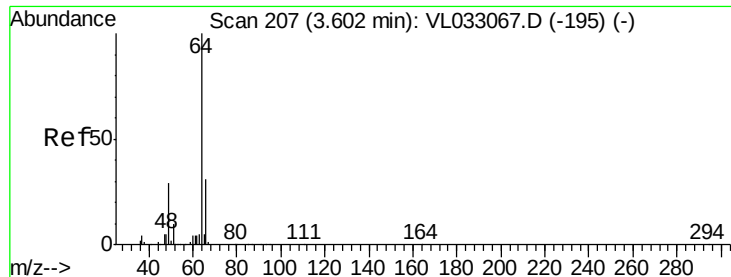
Tgt Ion: 94 Resp: 453571

Ion Ratio Lower Upper

94 100

96 96.4 72.8 109.2





#7

Chloroethane

Concen: 9.294 ppbv

RT: 3.60 min Scan# 206

Delta R.T. 0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion: 64 Resp: 256059

Ion Ratio Lower Upper

64 100

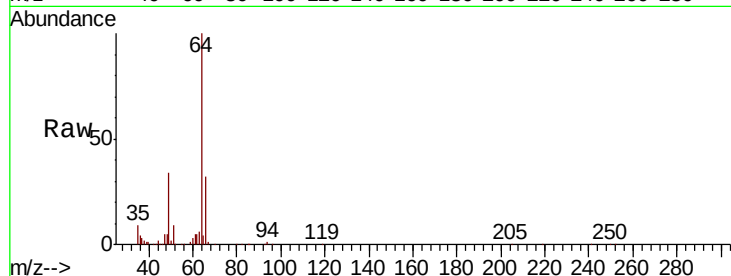
66 32.2 23.7 35.5

Manual Integrations

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Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.60

200000

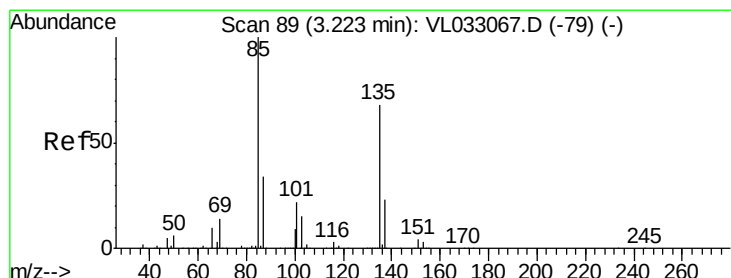
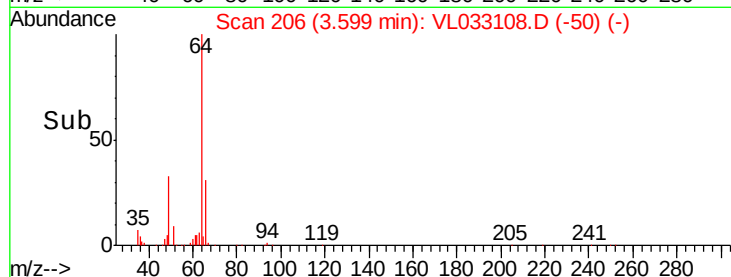
150000

100000

50000

0

Time-->



#8

Dichlorotetrafluoroethane

Concen: 10.050 ppbv

RT: 3.22 min Scan# 88

Delta R.T. 0.00 min

Lab File: VL033108.D

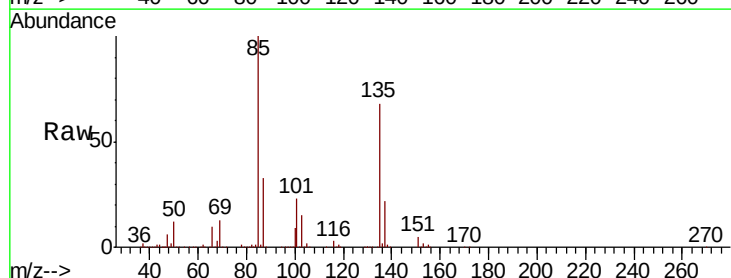
Acq: 17 Jan 2019 1:55

Tgt Ion: 85 Resp: 1733423

Ion Ratio Lower Upper

85 100

135 67.6 54.9 82.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

3.22

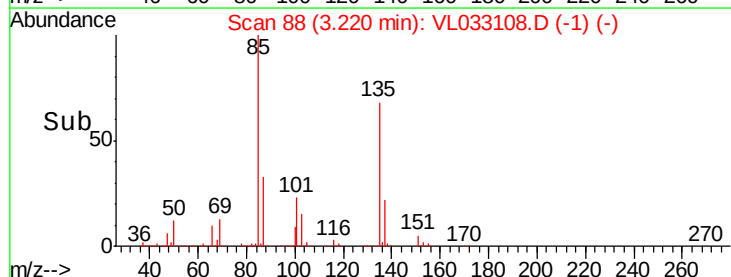
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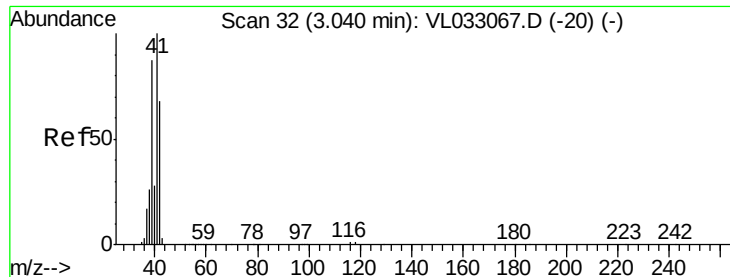
500000

0

Time-->







#9

Propene

Concen: 9.971 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion: 41 Resp: 453682

Ion Ratio Lower Upper

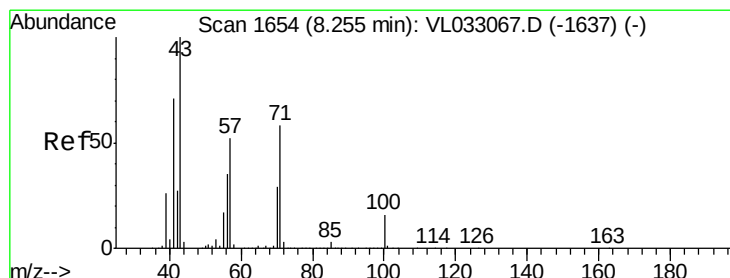
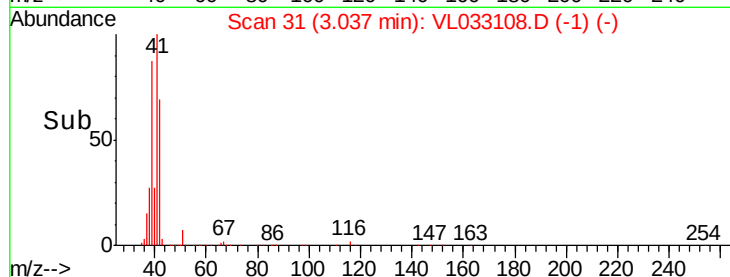
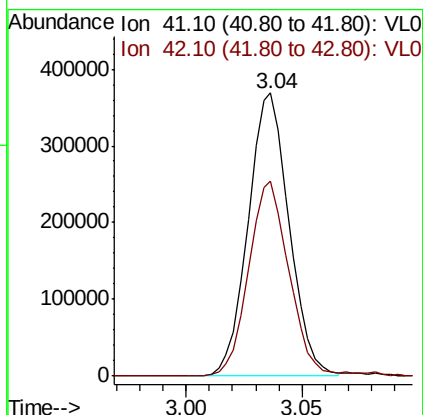
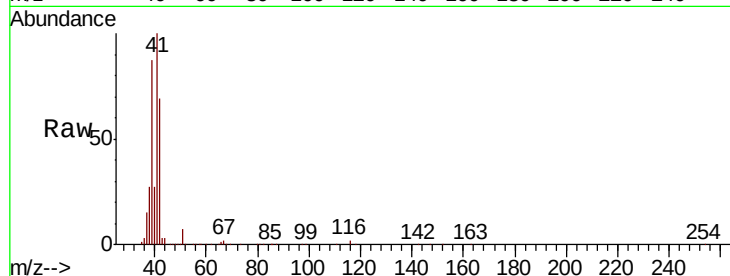
41 100

42 68.7 55.3 82.9

Manual Integrations  
APPROVED

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#10

Heptane

Concen: 10.081 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. -0.00 min

Lab File: VL033108.D

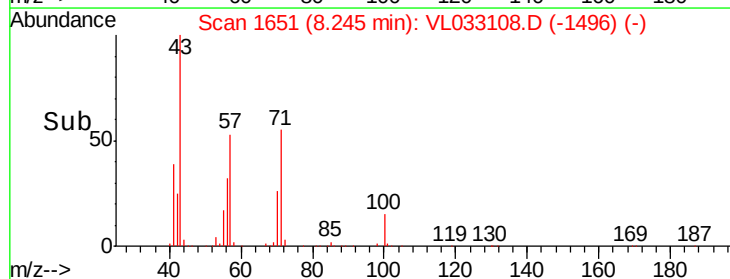
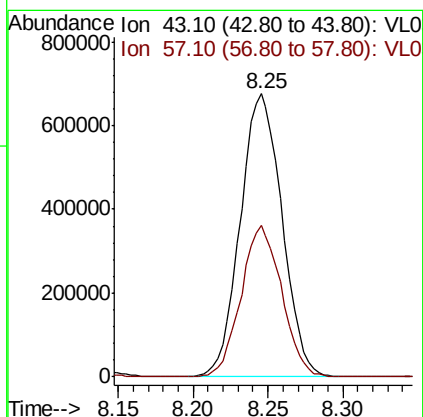
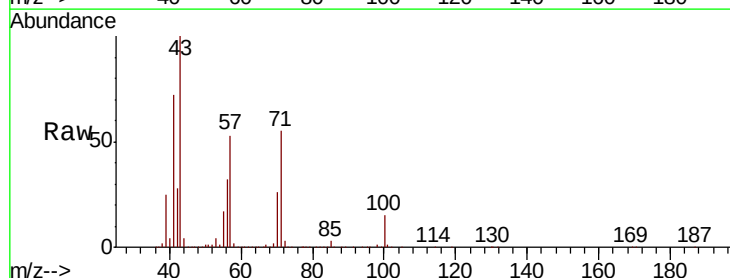
Acq: 17 Jan 2019 1:55

Tgt Ion: 43 Resp: 1306047

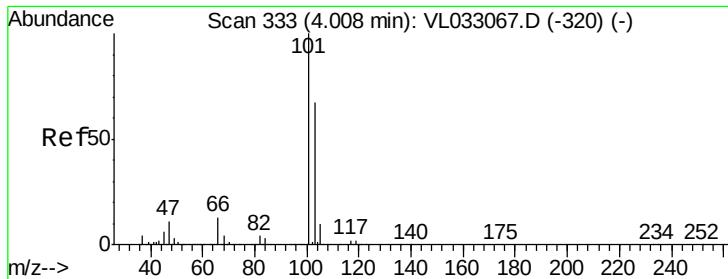
Ion Ratio Lower Upper

43 100

57 52.4 41.9 62.9







#11

Trichlorofluoromethane

Concen: 8.703 ppbv

RT: 4.00 min Scan# 331

Delta R.T. -0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampled :

IDOC-1

Tgt Ion:101 Resp: 1925658

Ion Ratio Lower Upper

101 100

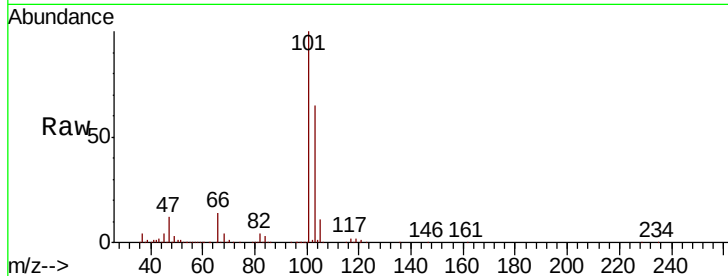
103 64.7 51.7 77.5

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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

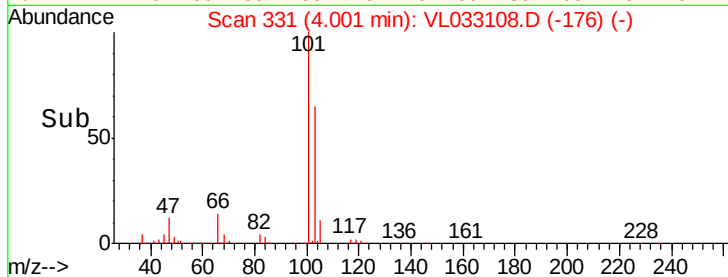
1500000

1000000

500000

0

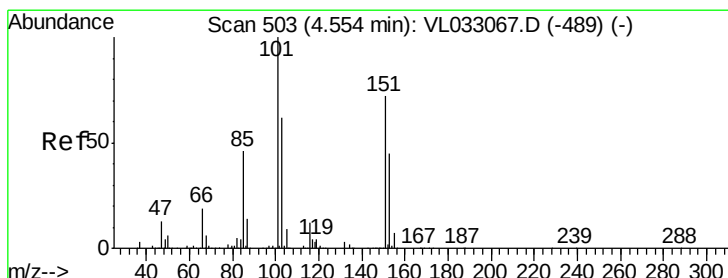
Time-->



4.00

3.95

4.05



#12

1,1,2-Trichlorotrifluoroethane

Concen: 9.524 ppbv

RT: 4.55 min Scan# 502

Delta R.T. -0.00 min

Lab File: VL033108.D

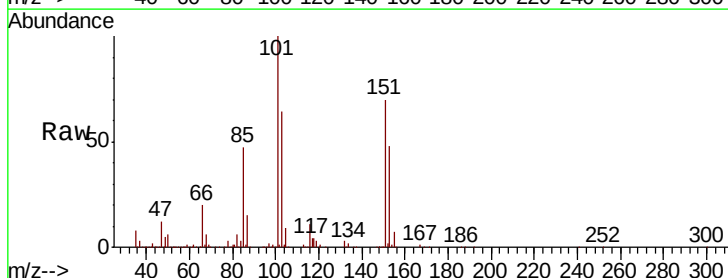
Acq: 17 Jan 2019 1:55

Tgt Ion:101 Resp: 1332573

Ion Ratio Lower Upper

101 100

151 71.5 58.3 87.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

800000

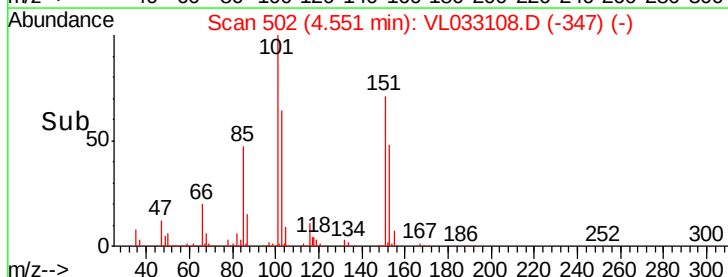
600000

400000

200000

0

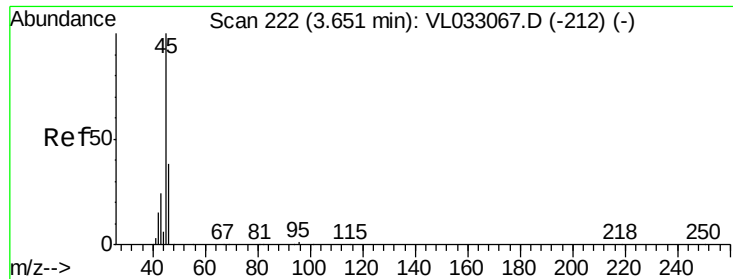
Time-->



4.55

4.50

4.60



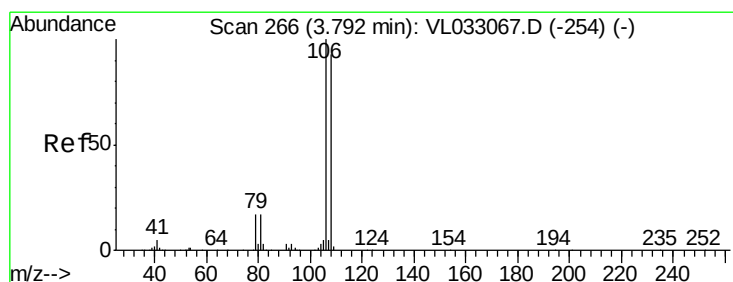
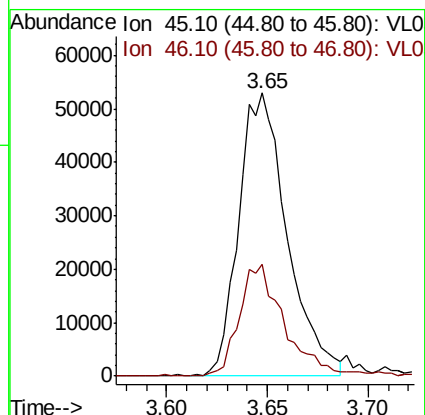
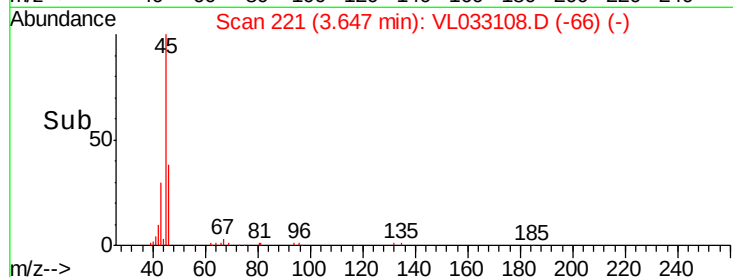
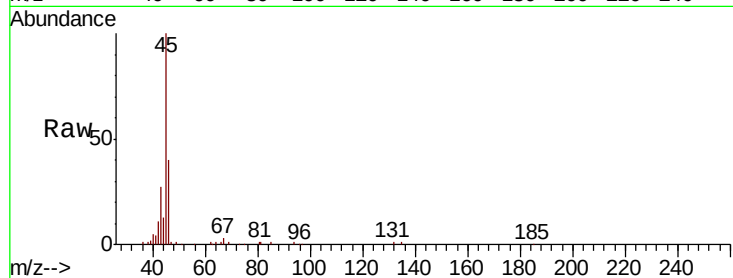
#13  
Ethanol  
Concen: 4.906 ppbv  
RT: 3.65 min Scan# 221  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampleId :  
IDOC-1

Tgt Ion: 45 Resp: 89024  
Ion Ratio Lower Upper  
45 100  
46 38.0 13.8 55.2

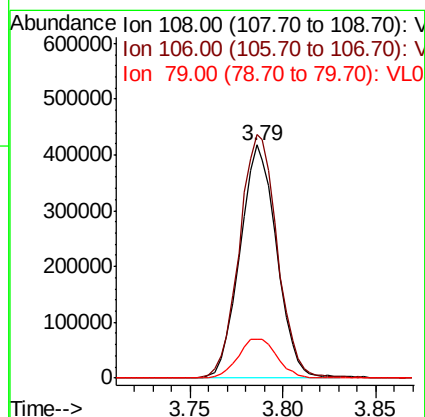
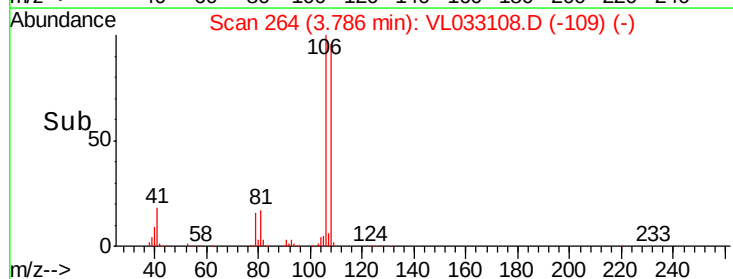
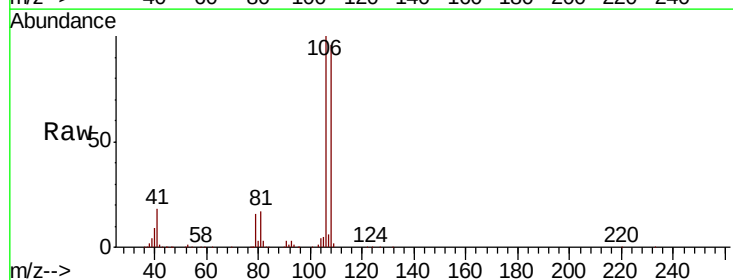
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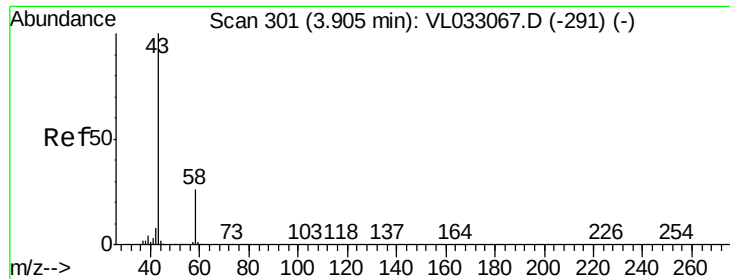
sam  
1/21/2019 8:50:59 AM



#14  
Bromoethene  
Concen: 9.282 ppbv  
RT: 3.79 min Scan# 264  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 108 Resp: 573612  
Ion Ratio Lower Upper  
108 100  
106 108.0 86.4 129.6  
79 18.5 14.3 21.5





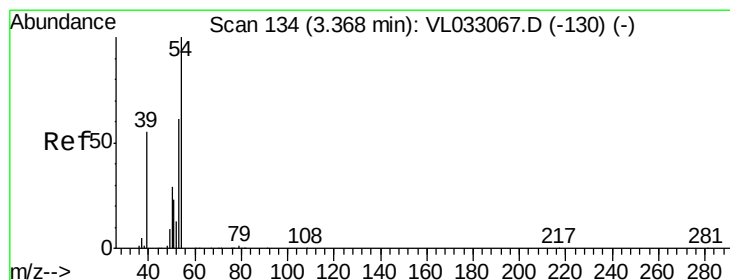
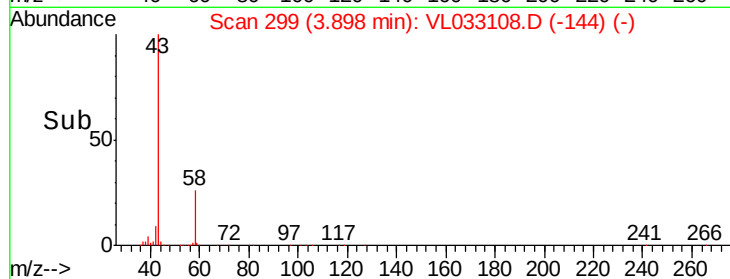
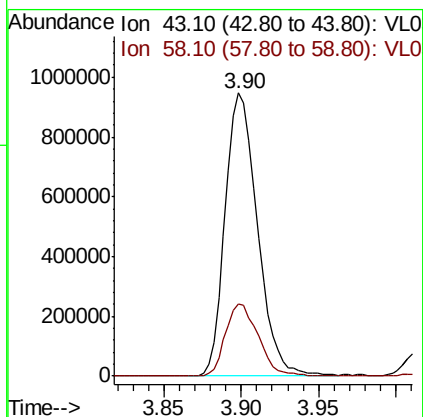
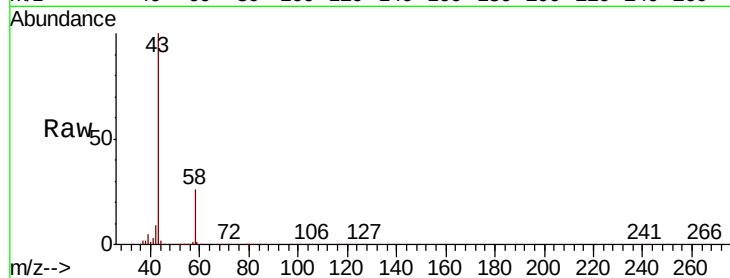
#15  
Acetone  
Concen: 9.231 ppbv  
RT: 3.90 min Scan# 299  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampled :  
IDOC-1

Tgt Ion: 43 Resp: 1374765  
Ion Ratio Lower Upper  
43 100  
58 25.9 21.1 31.7

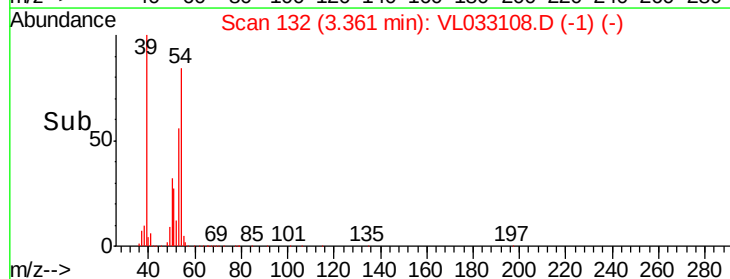
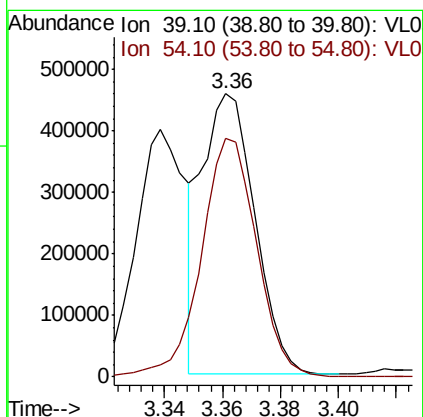
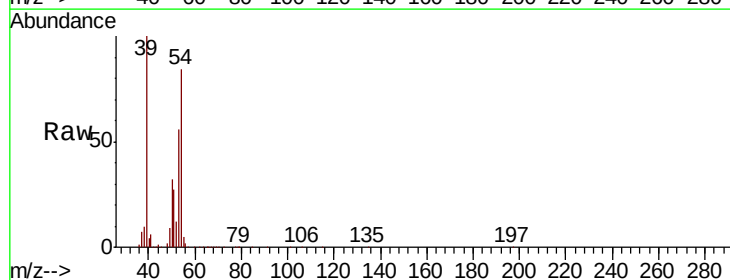
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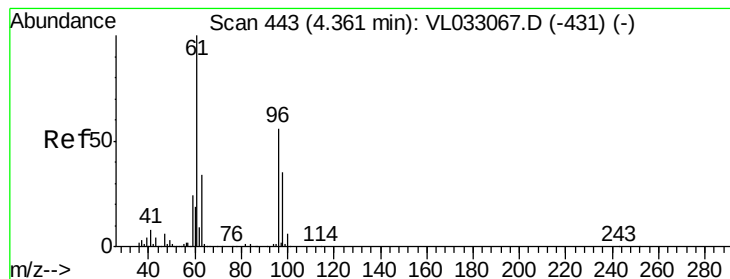
sam  
1/21/2019 8:50:59 AM



#16  
1,3-Butadiene  
Concen: 10.233 ppbv  
RT: 3.36 min Scan# 132  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 39 Resp: 574704  
Ion Ratio Lower Upper  
39 100  
54 90.4 73.7 110.5





#17

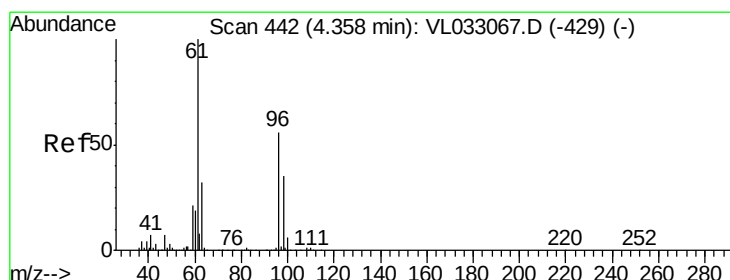
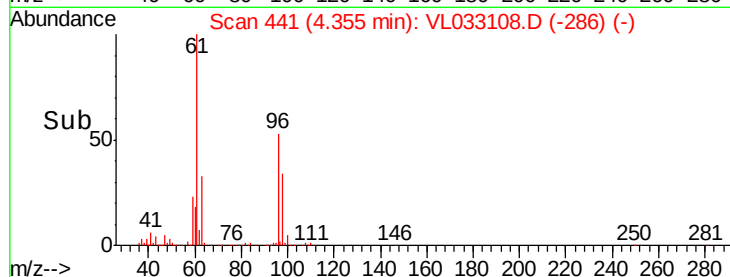
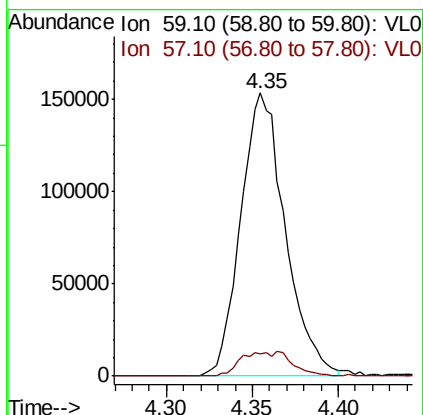
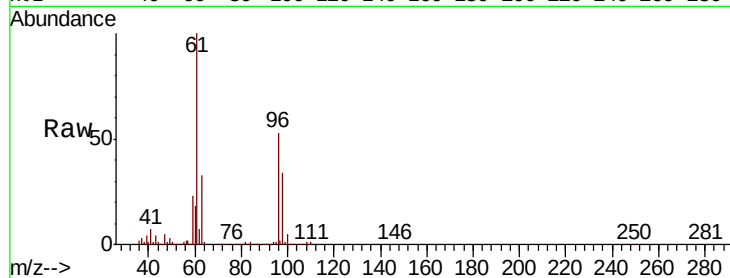
tert-Butyl alcohol  
Concen: 8.718 ppbv  
RT: 4.35 min Scan# 441  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampleId :  
IDOC-1

Tgt Ion: 59 Resp: 275032  
Ion Ratio Lower Upper  
59 100  
57 10.2 7.7 11.5

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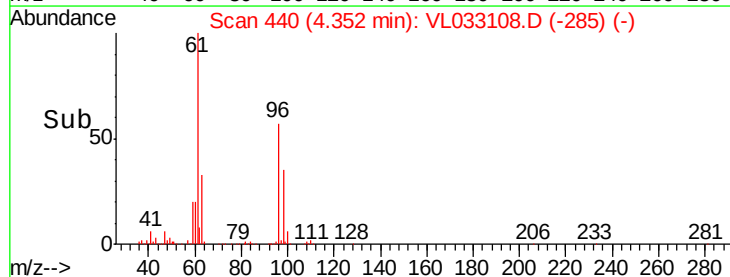
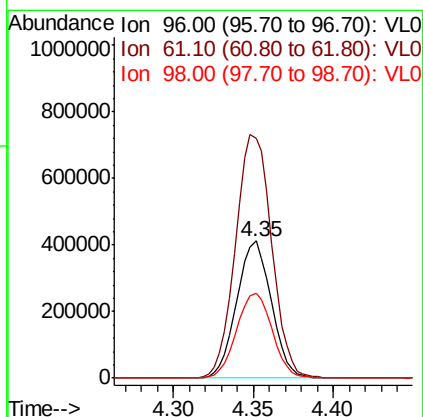
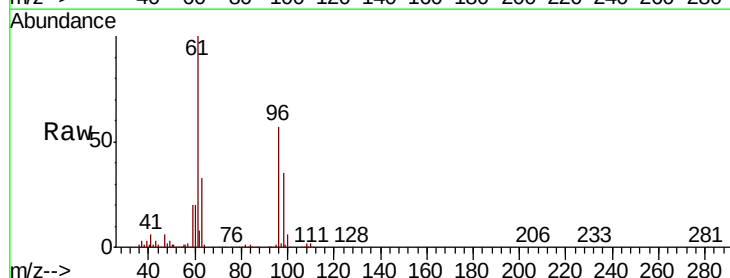
sam  
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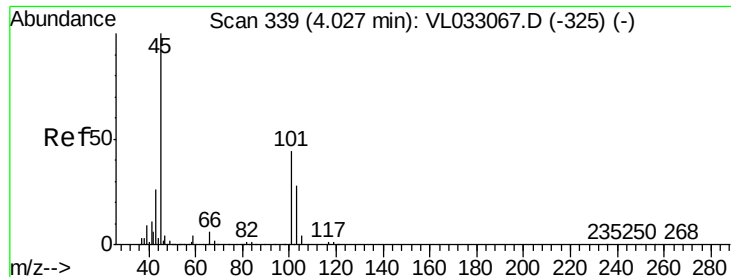


#18

1,1-Dichloroethene  
Concen: 9.392 ppbv  
RT: 4.35 min Scan# 440  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 96 Resp: 605321  
Ion Ratio Lower Upper  
96 100  
61 175.5 143.7 215.5  
98 62.1 52.1 78.1





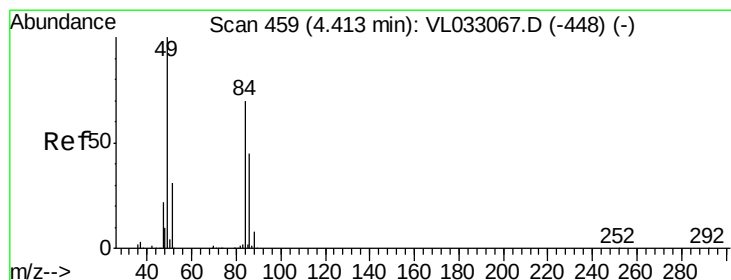
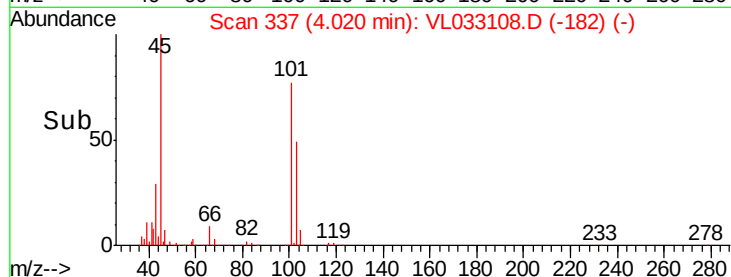
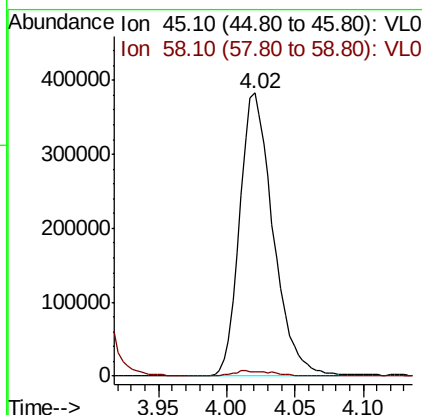
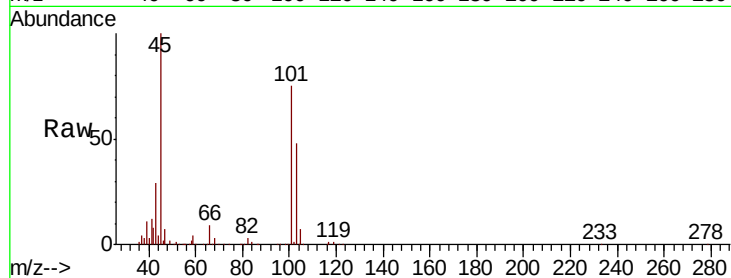
#19  
Isopropyl Alcohol  
Concen: 6.369 ppbv  
RT: 4.02 min Scan# 337  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampleId :  
IDOC-1

Tgt Ion: 45 Resp: 653043  
Ion Ratio Lower Upper  
45 100  
58 2.7 1.4 2.2#

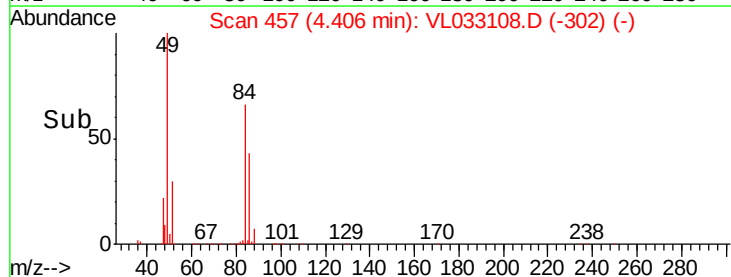
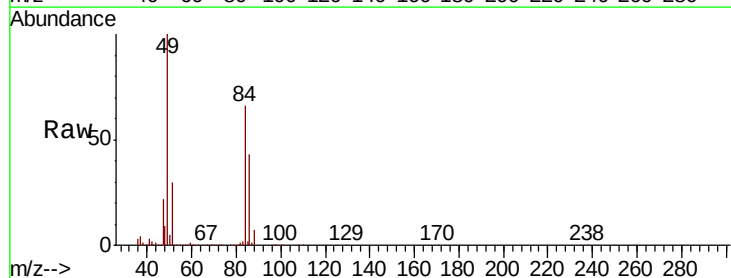
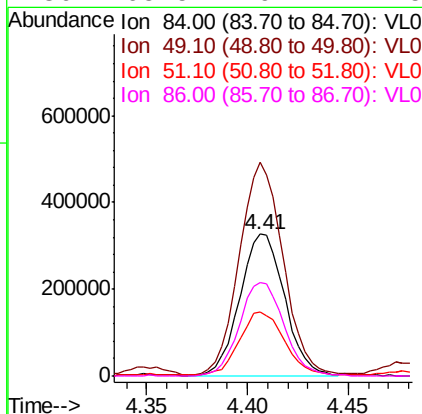
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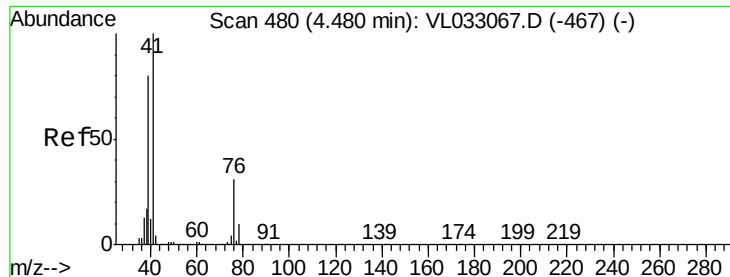
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#20  
Methylene Chloride  
Concen: 8.184 ppbv  
RT: 4.41 min Scan# 457  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 84 Resp: 508133  
Ion Ratio Lower Upper  
84 100  
49 149.8 115.8 173.6  
51 44.9 35.7 53.5  
86 65.5 49.7 74.5





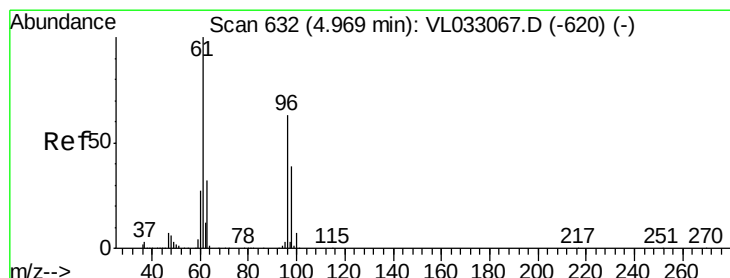
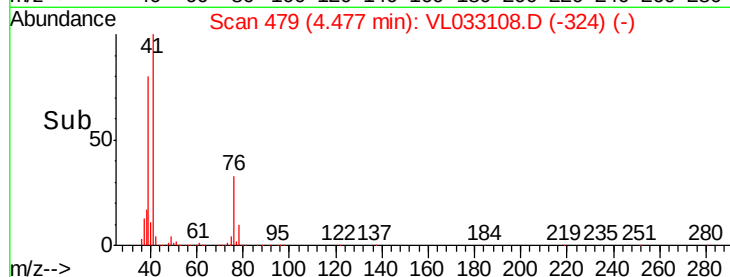
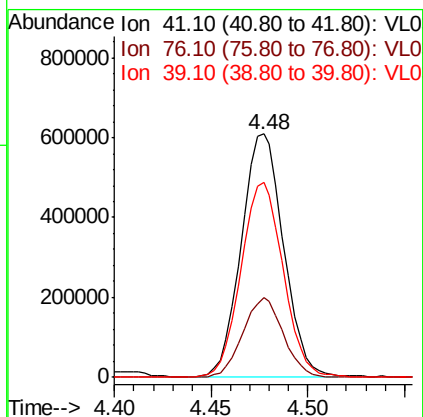
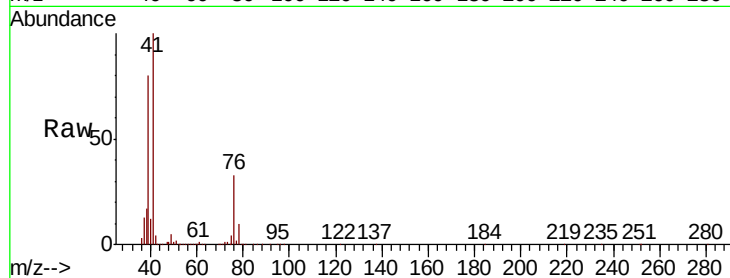
#21  
 Allyl Chloride  
 Concen: 10.012 ppbv  
 RT: 4.48 min Scan# 479  
 Delta R.T. -0.00 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IDOC-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 31.5  | 24.6  | 36.8  |
| 39      | 80.5  | 62.8  | 94.2  |

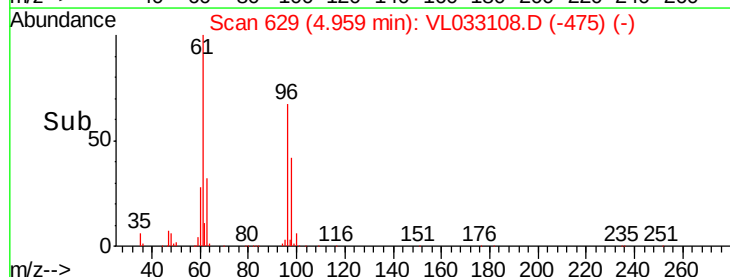
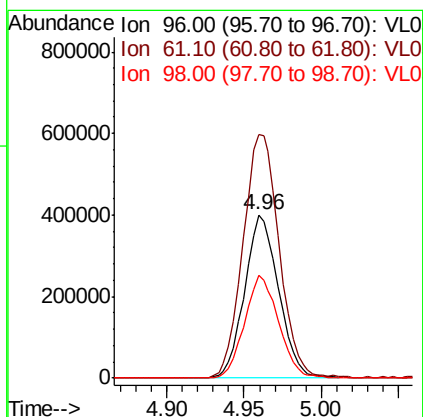
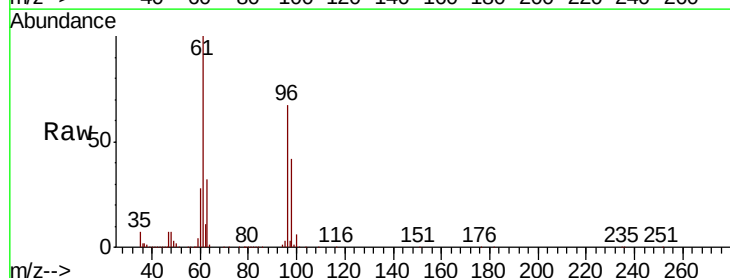
Manual Integrations  
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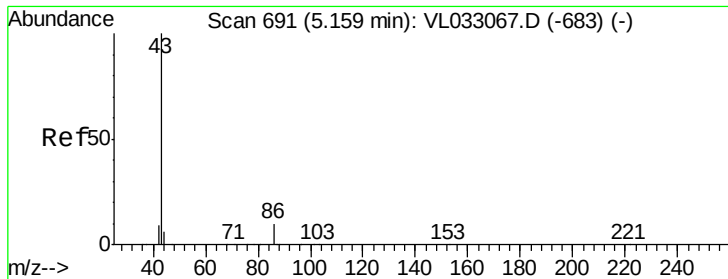
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#22  
 trans-1,2-Dichloroethene  
 Concen: 9.578 ppbv  
 RT: 4.96 min Scan# 629  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 149.4 | 125.2 | 187.8 |
| 98      | 63.0  | 50.9  | 76.3  |





#23

Vinyl Acetate

Concen: 9.799 ppbv

RT: 5.15 min Scan# 689

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion: 43 Resp: 1856527

Ion Ratio Lower Upper

43 100

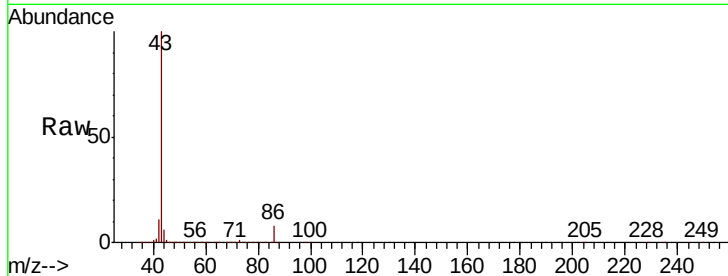
86 8.3 6.2 9.4

42 11.0 8.1 12.1

44 5.5 4.3 6.5

Manual Integrations  
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1/21/2019 8:50:59 AM

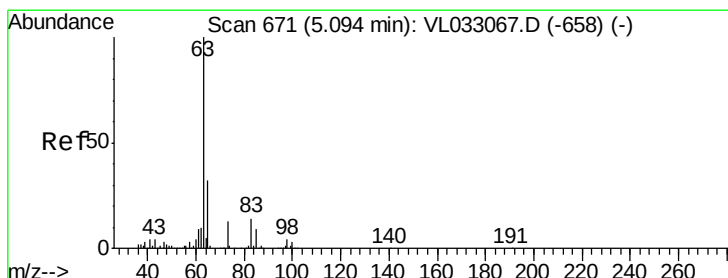
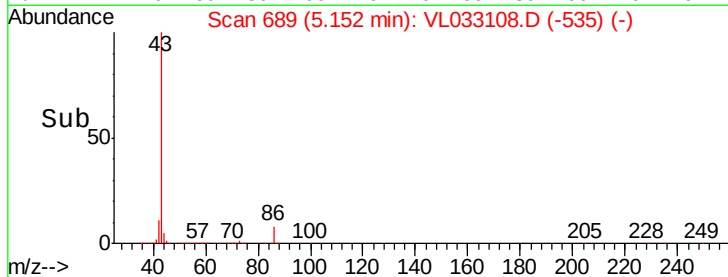
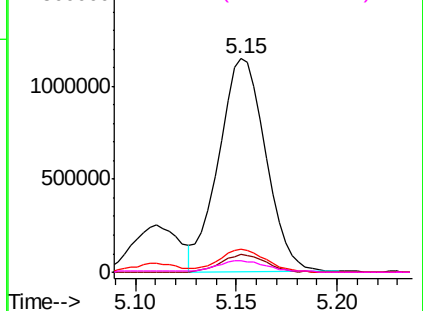


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 9.158 ppbv

RT: 5.09 min Scan# 670

Delta R.T. -0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

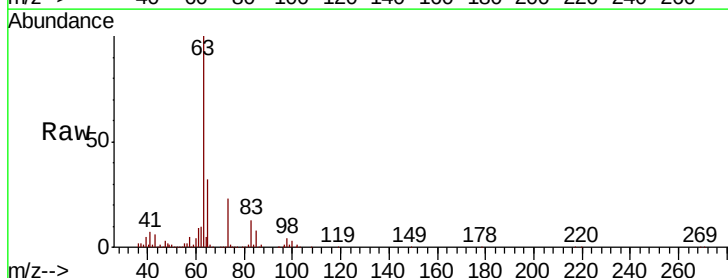
Tgt Ion: 63 Resp: 1473192

Ion Ratio Lower Upper

63 100

98 4.1 2.4 7.2

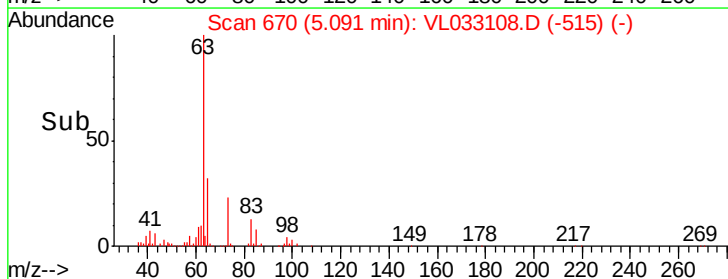
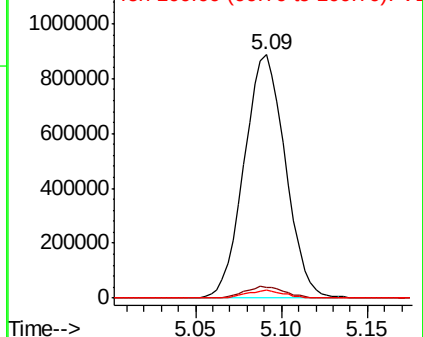
100 3.2 1.4 4.0



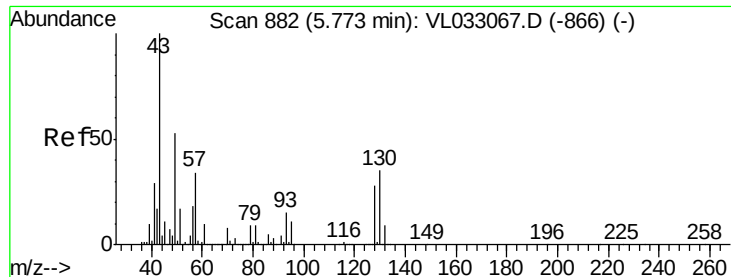
Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0







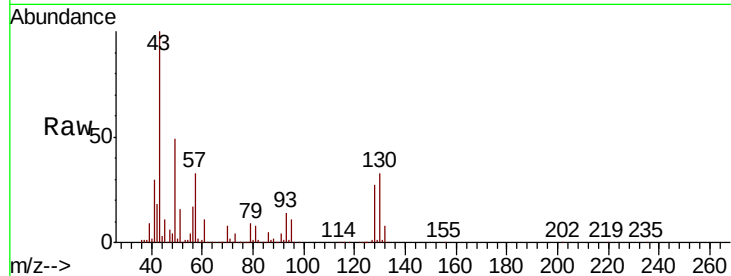
#25  
Ethyl Acetate  
Concen: 8.983 ppbv  
RT: 5.77 min Scan# 880  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampleId :  
IDOC-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 10.0  | 7.9   | 11.9  |
| 61      | 9.7   | 7.8   | 11.8  |
| 70      | 7.2   | 6.0   | 9.0   |

Manual Integrations  
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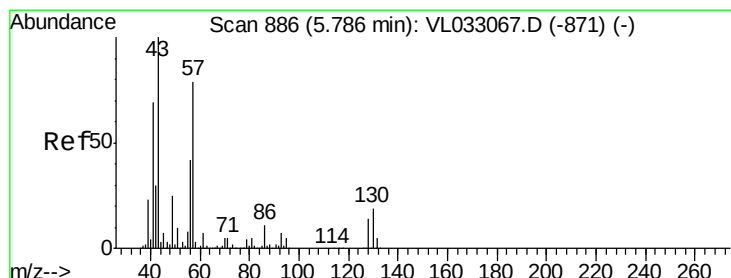
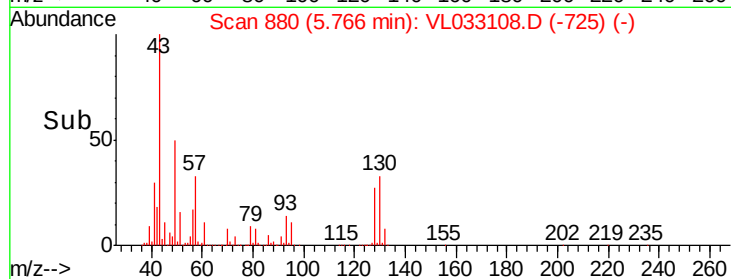
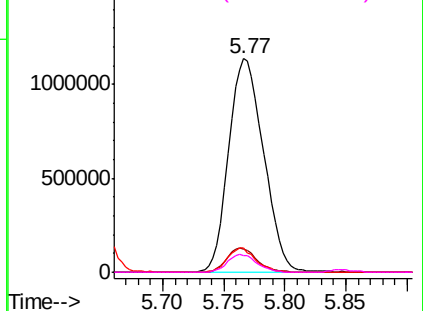
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26  
Hexane  
Concen: 8.947 ppbv  
RT: 5.78 min Scan# 884  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 89.5  | 70.8  | 106.2 |
| 43      | 214.5 | 171.8 | 257.6 |
| 56      | 53.2  | 41.9  | 62.9  |

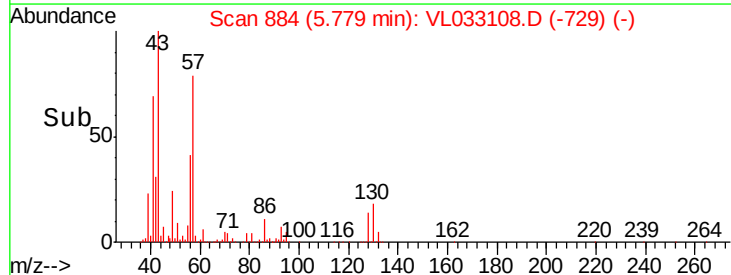
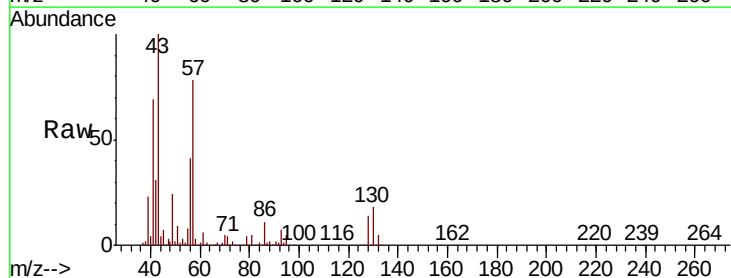
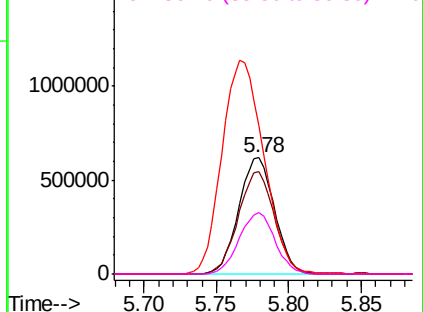
Abundance

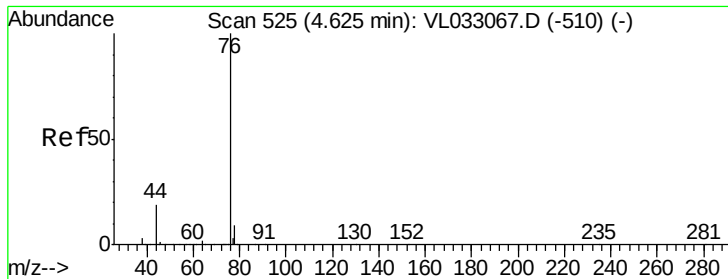
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#27

Carbon Disulfide

Concen: 10.398 ppbv

RT: 4.62 min Scan# 523

Delta R.T. -0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion: 76 Resp: 1520063

Ion Ratio Lower Upper

76 100

44 18.2 13.9 20.9

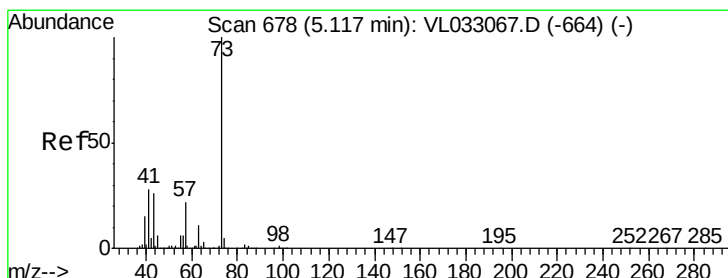
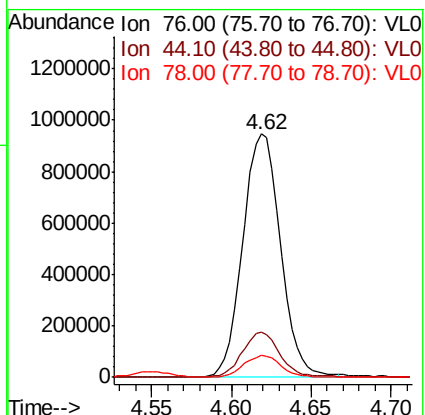
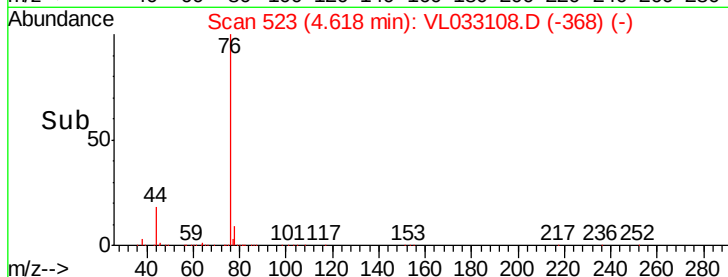
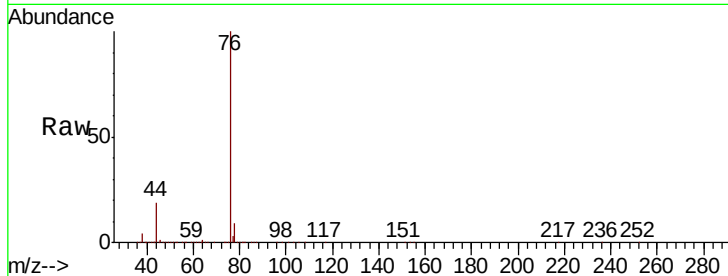
78 9.0 7.3 10.9

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#28

Methyl tert-Butyl Ether

Concen: 9.517 ppbv

RT: 5.11 min Scan# 676

Delta R.T. -0.00 min

Lab File: VL033108.D

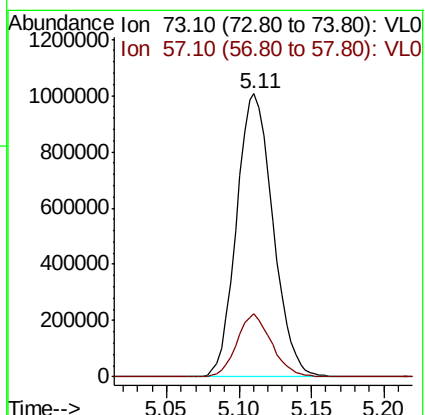
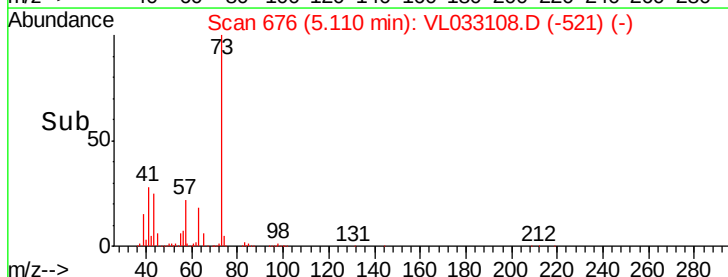
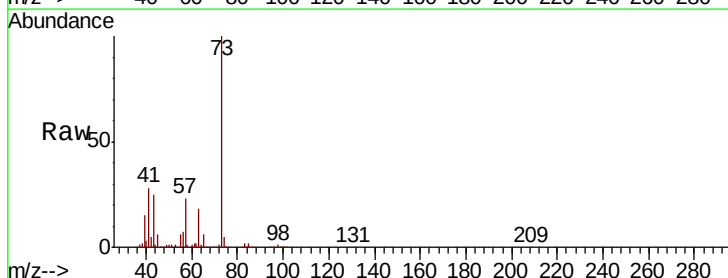
Acq: 17 Jan 2019 1:55

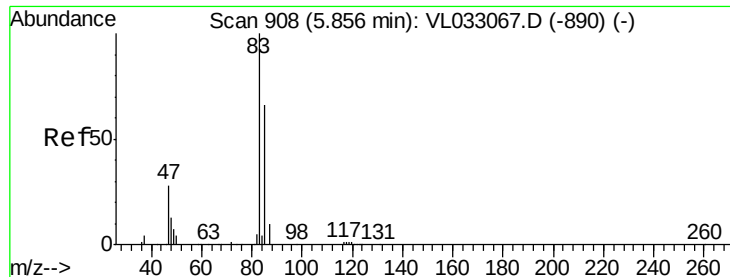
Tgt Ion: 73 Resp: 1760879

Ion Ratio Lower Upper

73 100

57 21.5 17.5 26.3





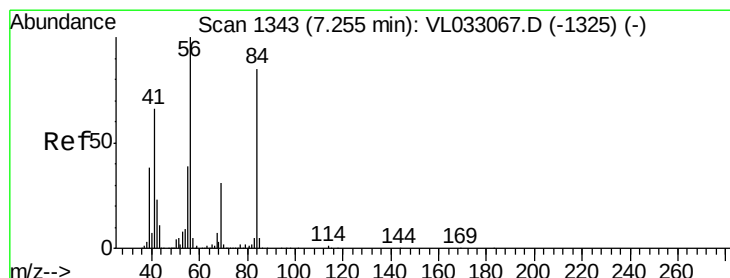
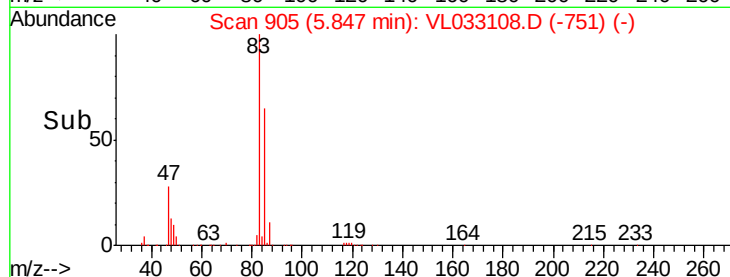
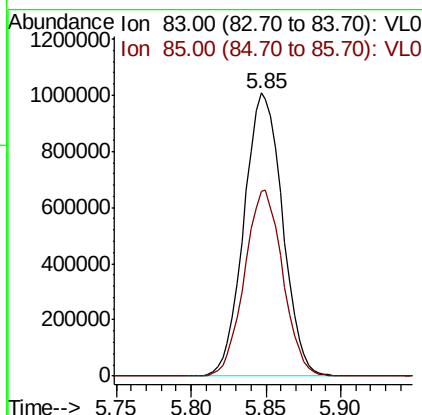
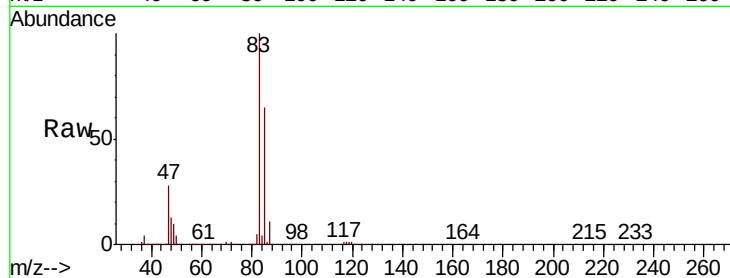
#29  
Chloroform  
Concen: 8.962 ppbv  
RT: 5.85 min Scan# 905  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampled :  
IDOC-1

Tgt Ion: 83 Resp: 1810325  
Ion Ratio Lower Upper  
83 100  
85 65.0 52.5 78.7

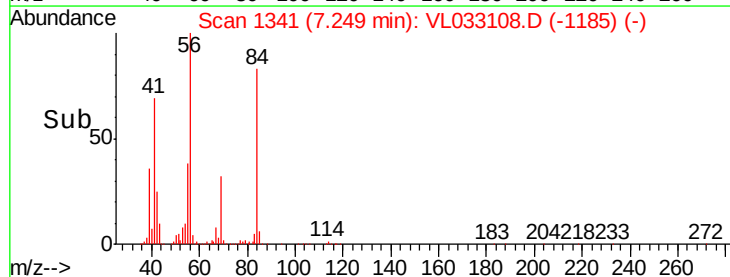
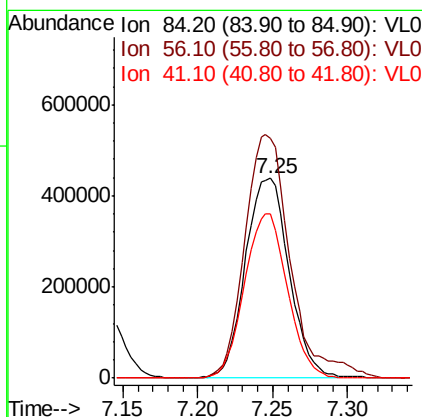
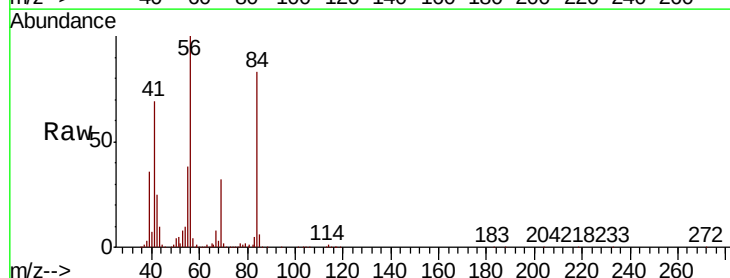
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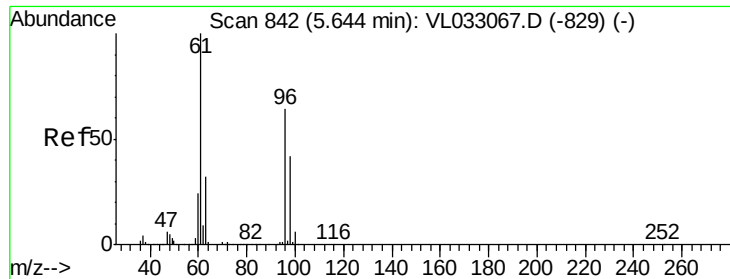
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#30  
Cyclohexane  
Concen: 10.100 ppbv  
RT: 7.25 min Scan# 1341  
Delta R.T. 0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 84 Resp: 892659  
Ion Ratio Lower Upper  
84 100  
56 127.6 101.8 152.6  
41 81.1 63.2 94.8





#31

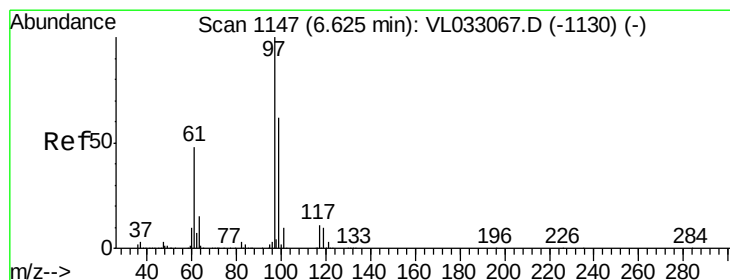
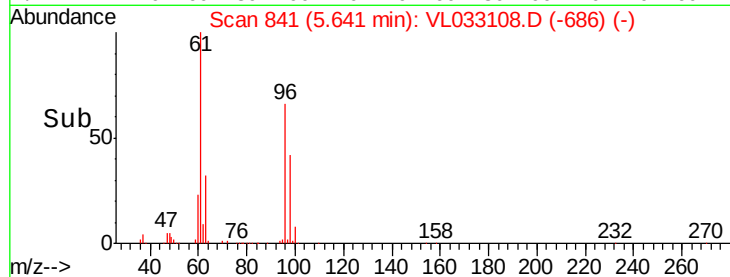
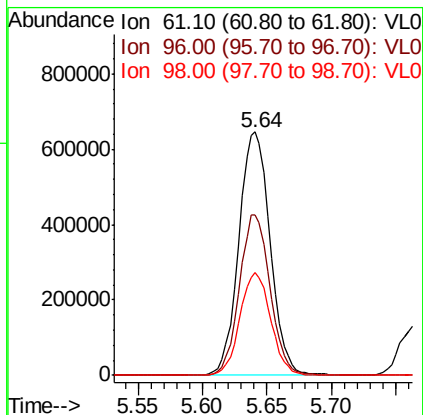
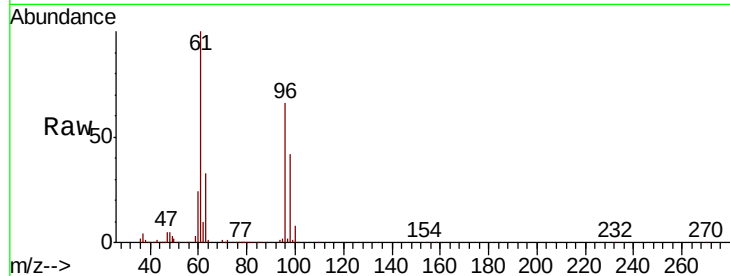
cis-1,2-Dichloroethene  
 Concen: 9.899 ppbv  
 RT: 5.64 min Scan# 841  
 Delta R.T. -0.00 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampled :  
 IDOC-1

Tgt Ion: 61 Resp: 1089569  
 Ion Ratio Lower Upper  
 61 100  
 96 65.7 52.8 79.2  
 98 42.3 33.8 50.6

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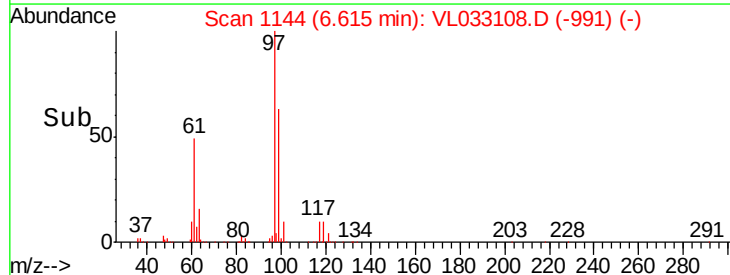
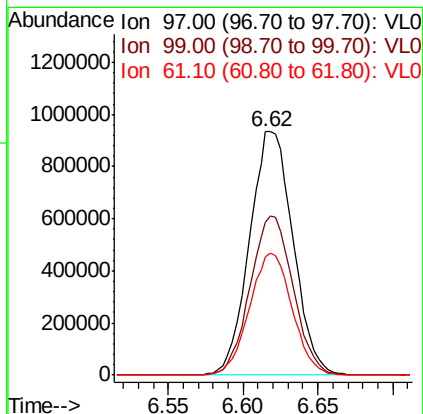
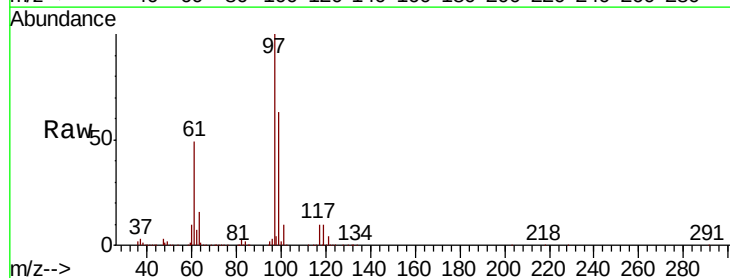
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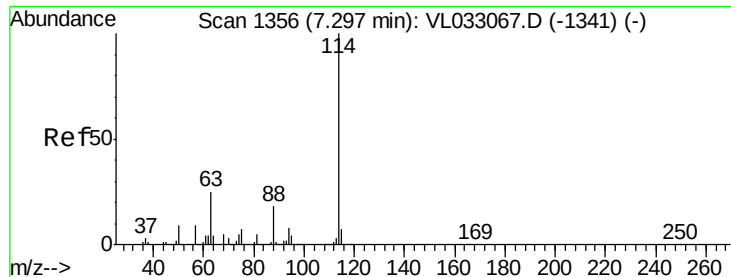


#32

1,1,1-Trichloroethane  
 Concen: 9.207 ppbv  
 RT: 6.62 min Scan# 1144  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Tgt Ion: 97 Resp: 1887646  
 Ion Ratio Lower Upper  
 97 100  
 99 64.7 51.1 76.7  
 61 49.4 38.3 57.5





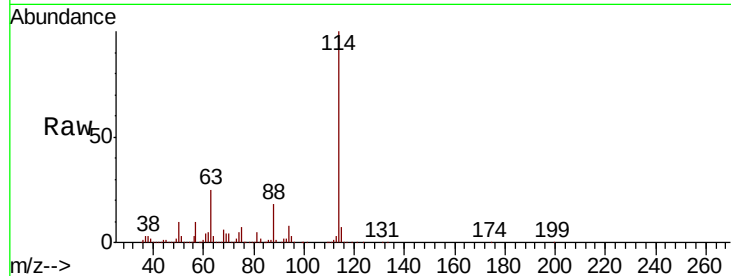
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.29 min Scan# 1355  
 Delta R.T. -0.00 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IDOC-1

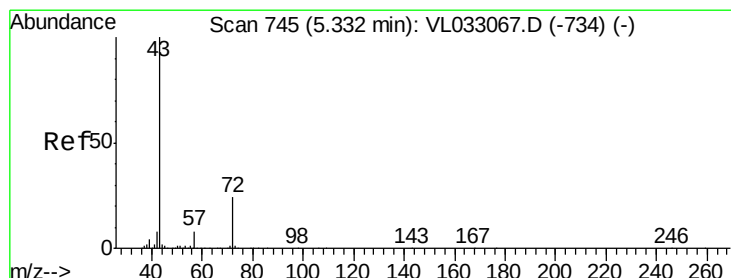
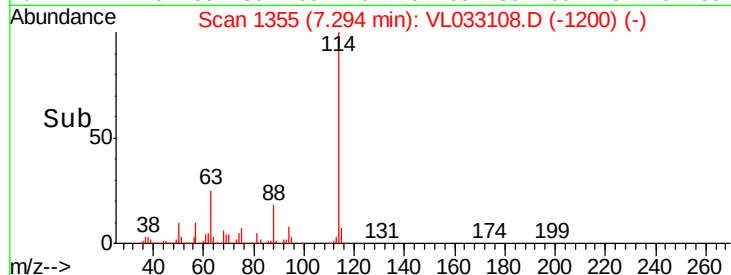
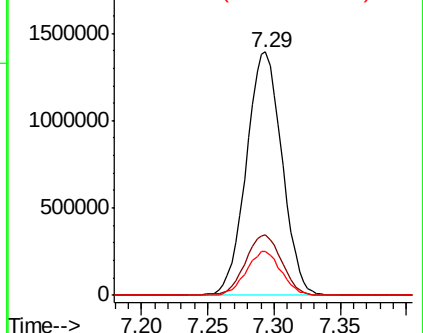
Tgt Ion: 114 Resp: 2605678  
 Ion Ratio Lower Upper  
 114 100  
 63 25.6 20.1 30.1  
 88 17.7 14.0 21.0

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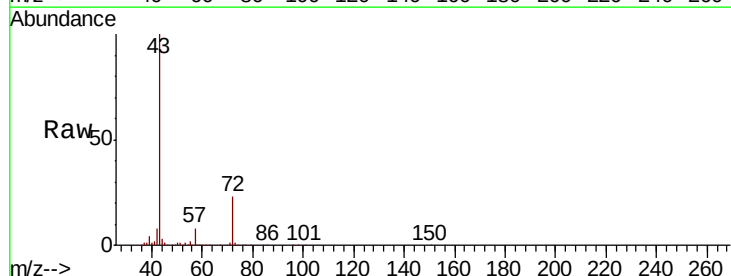


Abundance Ion 114.10 (113.80 to 114.80): VL0  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

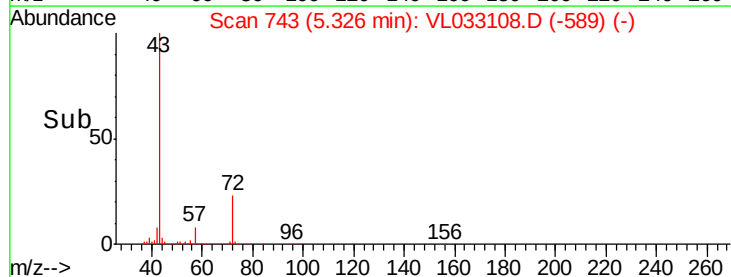
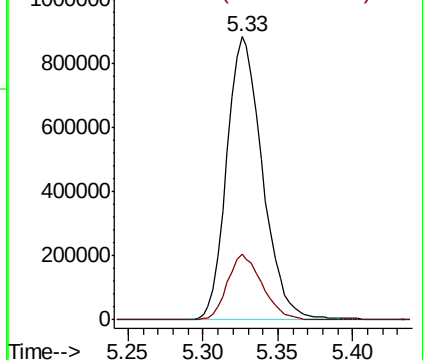


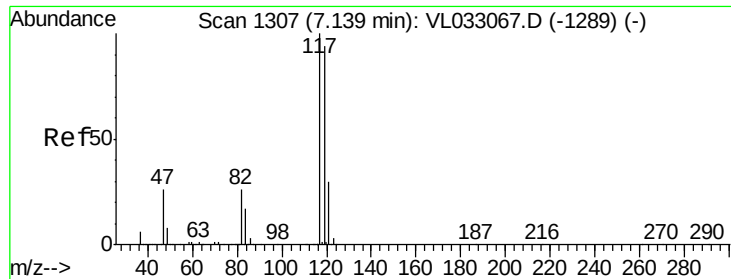
#34  
 2-Butanone  
 Concen: 9.672 ppbv  
 RT: 5.33 min Scan# 743  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Tgt Ion: 43 Resp: 1464275  
 Ion Ratio Lower Upper  
 43 100  
 72 22.8 18.9 28.3



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





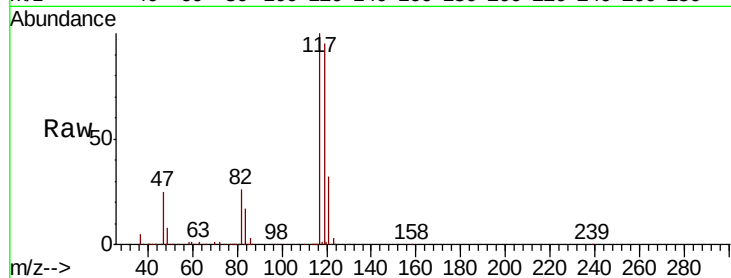
#35  
Carbon Tetrachloride  
Concen: 9.463 ppbv  
RT: 7.14 min Scan# 1306  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampled :  
IDOC-1

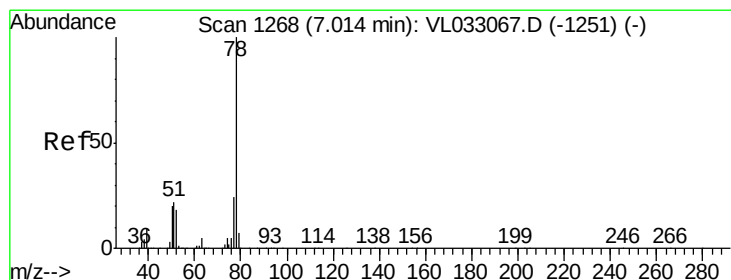
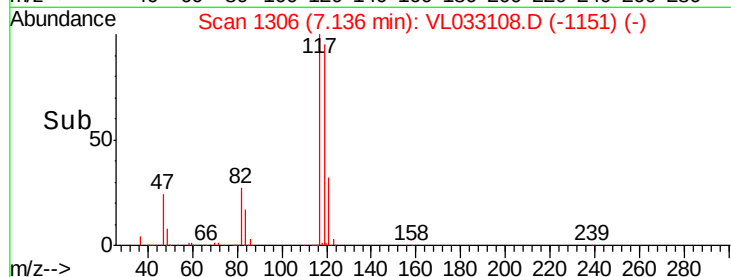
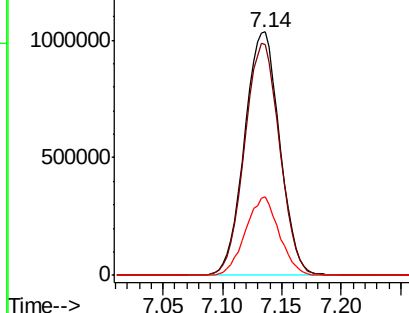
Tgt Ion: 117 Resp: 2118032  
Ion Ratio Lower Upper  
117 100  
119 94.7 76.5 114.7  
121 32.2 25.2 37.8

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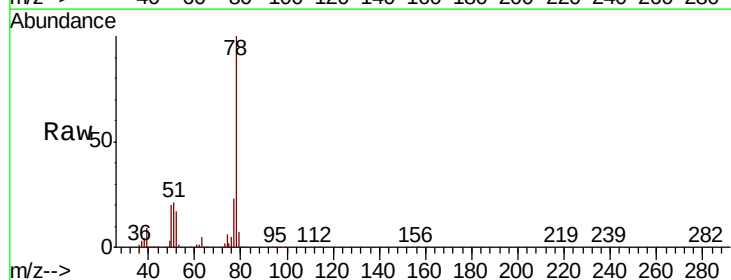


Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 119.00 (118.70 to 119.70): V  
Ion 121.00 (120.70 to 121.70): V

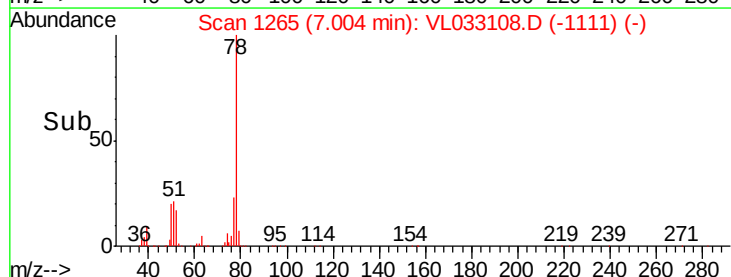
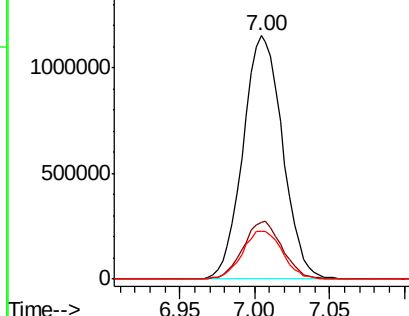


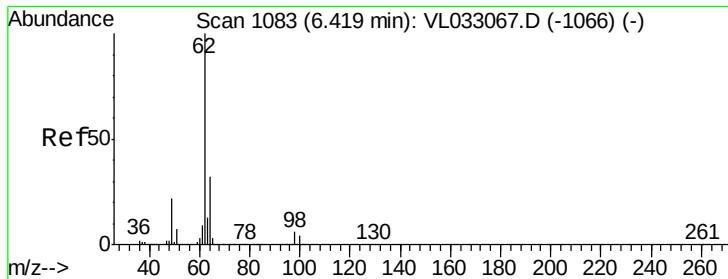
#36  
Benzene  
Concen: 9.940 ppbv  
RT: 7.00 min Scan# 1265  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 78 Resp: 2121563  
Ion Ratio Lower Upper  
78 100  
77 23.3 18.5 27.7  
50 19.6 15.7 23.5



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





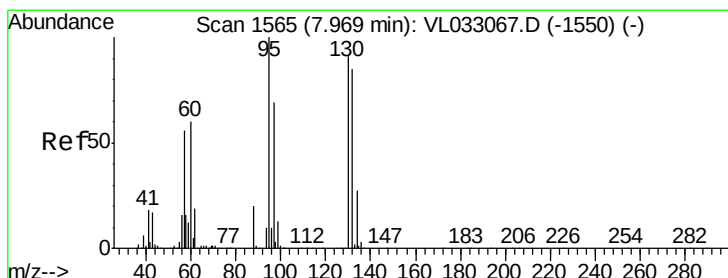
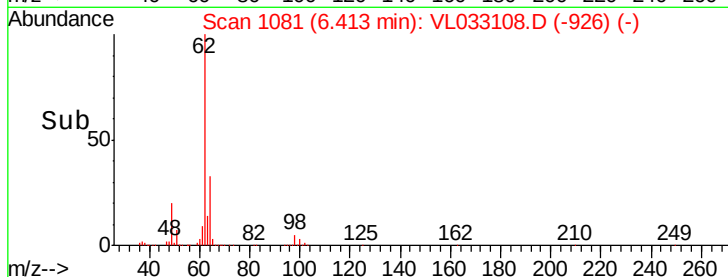
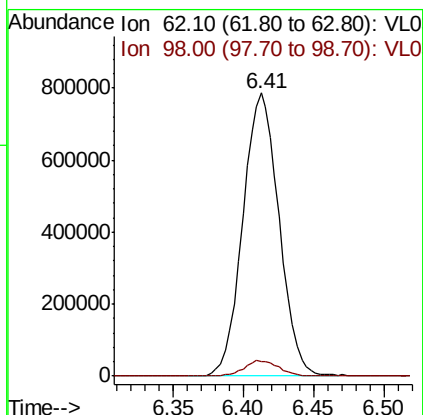
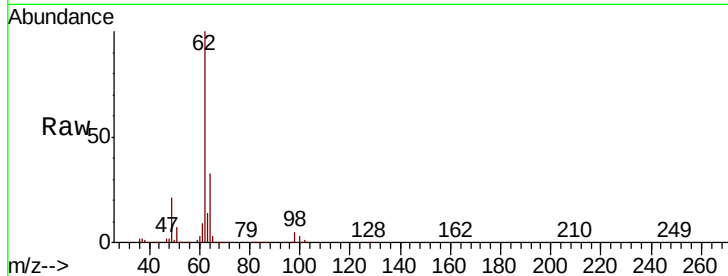
#37  
1,2-Dichloroethane  
Concen: 9.472 ppbv  
RT: 6.41 min Scan# 1081  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampleId :  
IDOC-1

Tgt Ion: 62 Resp: 1411642  
Ion Ratio Lower Upper  
62 100  
98 5.4 4.6 7.0

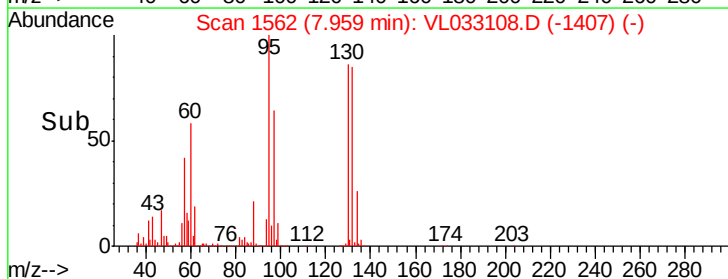
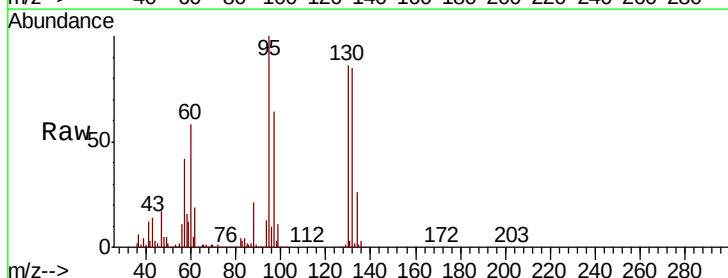
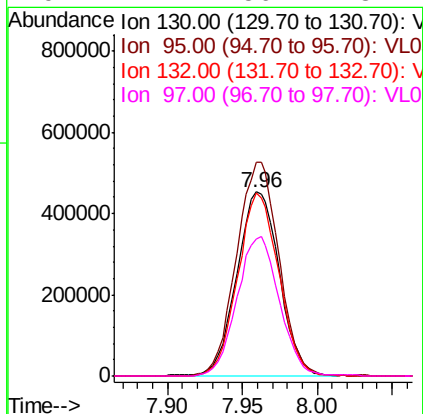
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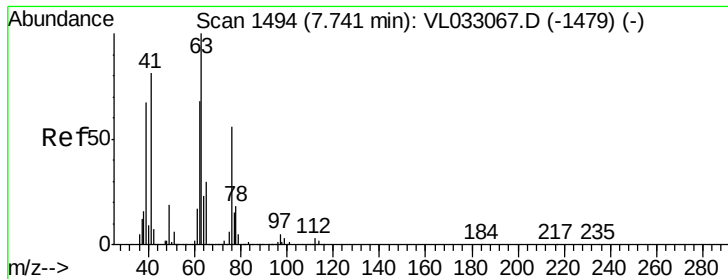
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#38  
Trichloroethene  
Concen: 10.130 ppbv  
RT: 7.96 min Scan# 1562  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 130 Resp: 889448  
Ion Ratio Lower Upper  
130 100  
95 115.9 88.6 132.8  
132 99.2 74.2 111.2  
97 74.7 56.2 84.2





#39

1,2-Dichloropropane

Concen: 9.544 ppbv

RT: 7.74 min Scan# 1493

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

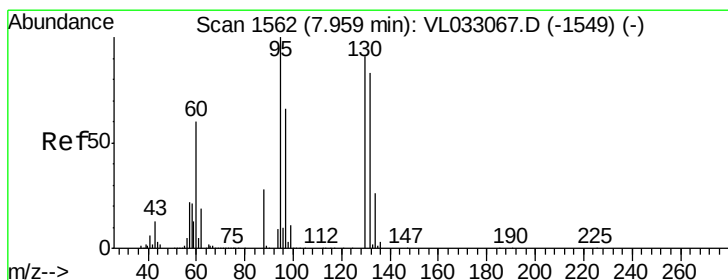
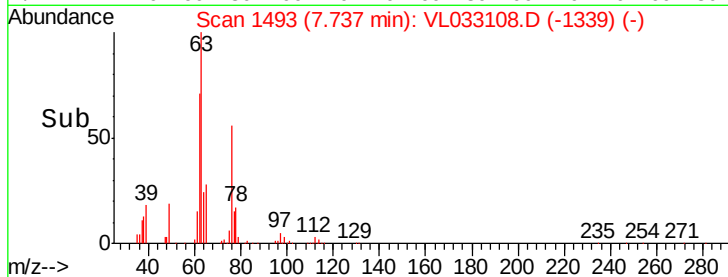
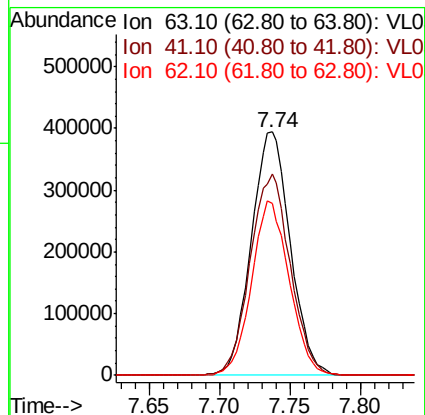
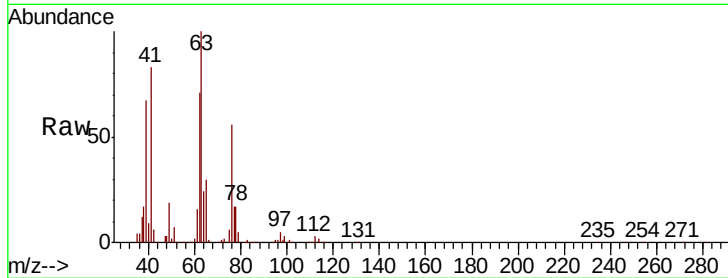
ClientSampleId :

IDOC-1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 63    | Resp: | 765265 |
| Ion Ratio | Lower | Upper |        |
| 63        | 100   |       |        |
| 41        | 82.7  | 61.9  | 92.9   |
| 62        | 70.5  | 55.8  | 83.6   |

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#40

1,4-Dioxane

Concen: 9.001 ppbv

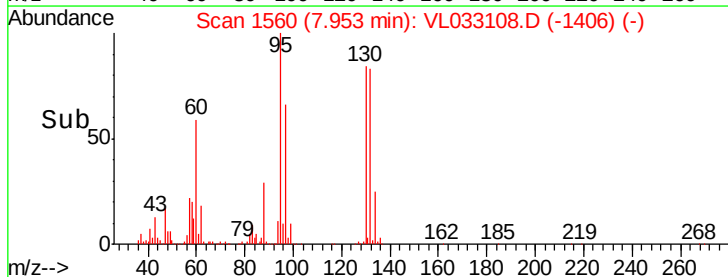
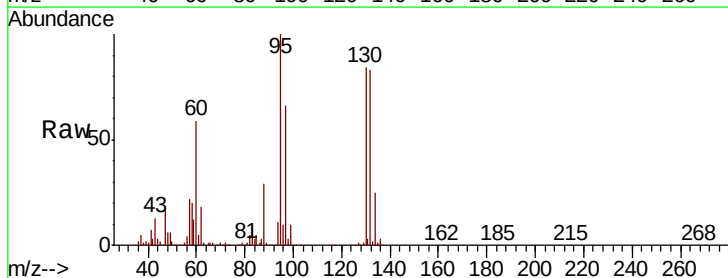
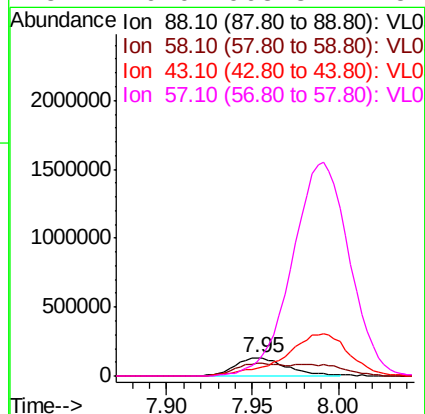
RT: 7.95 min Scan# 1560

Delta R.T. -0.01 min

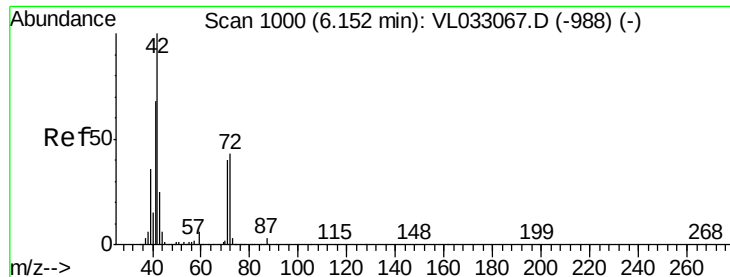
Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 88    | Resp: | 273963  |
| Ion Ratio | Lower | Upper |         |
| 88        | 100   |       |         |
| 58        | 131.3 | 101.9 | 152.9   |
| 43        | 0.0   | 212.6 | 319.0#  |
| 57        | 0.0   | 963.8 | 1445.6# |







#41

Tetrahydrofuran

Concen: 10.255 ppbv

RT: 6.15 min Scan# 998

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

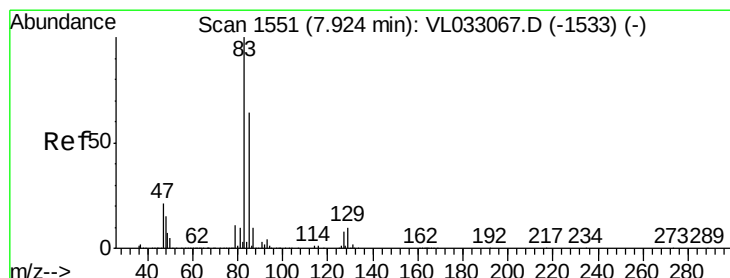
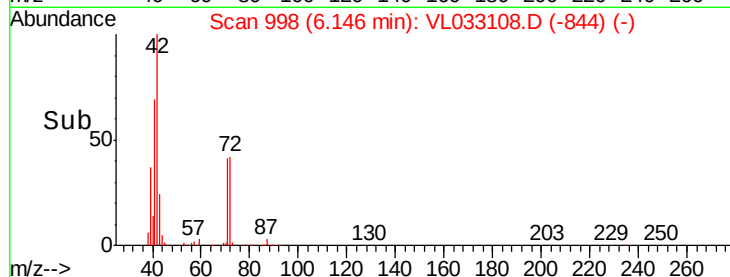
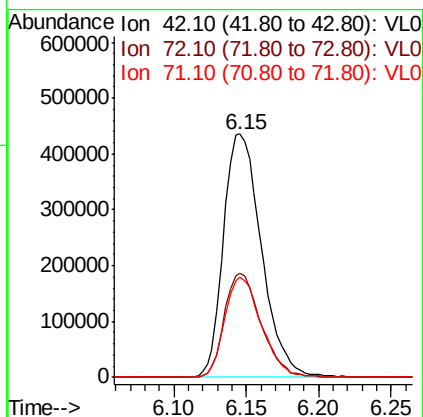
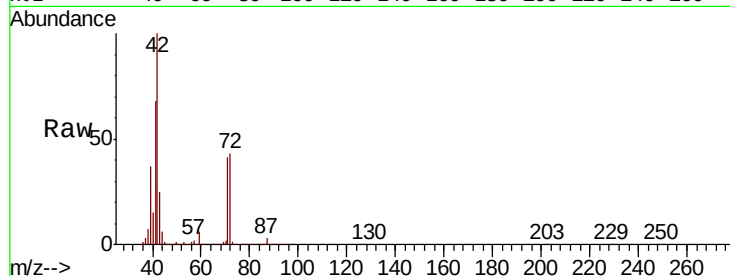
ClientSampled :

IDOC-1

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 42   | Resp: | 790255 |
| Ion Ratio |      | Lower | Upper  |
| 42        | 100  |       |        |
| 72        | 41.5 | 32.9  | 49.3   |
| 71        | 40.2 | 31.8  | 47.6   |

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#42

Bromodichloromethane

Concen: 9.540 ppbv

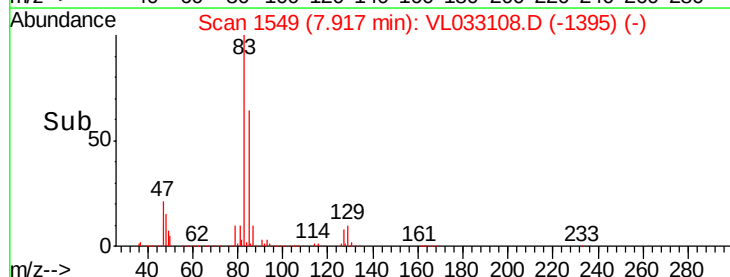
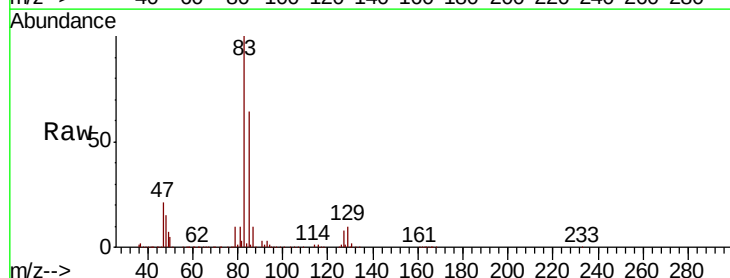
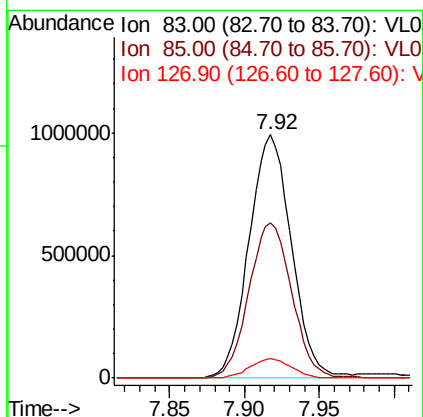
RT: 7.92 min Scan# 1549

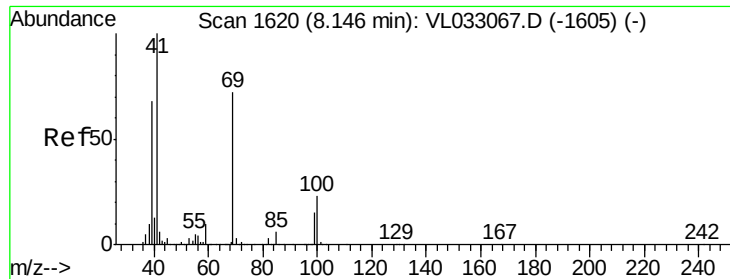
Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

|           |      |       |         |
|-----------|------|-------|---------|
| Tgt Ion:  | 83   | Resp: | 1952999 |
| Ion Ratio |      | Lower | Upper   |
| 83        | 100  |       |         |
| 85        | 63.7 | 51.0  | 76.4    |
| 127       | 8.1  | 6.5   | 9.7     |





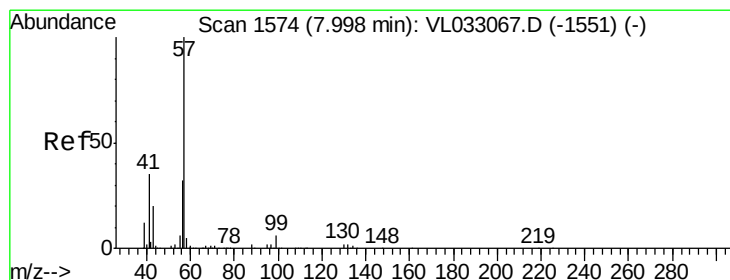
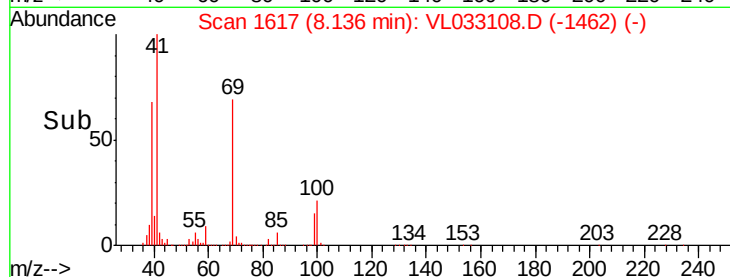
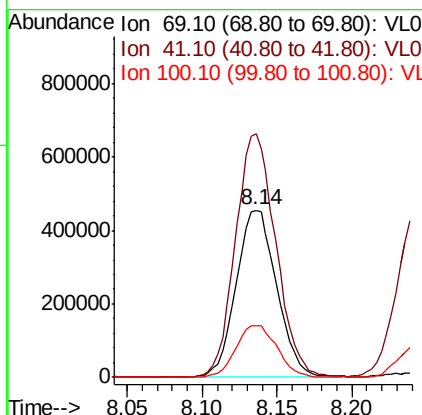
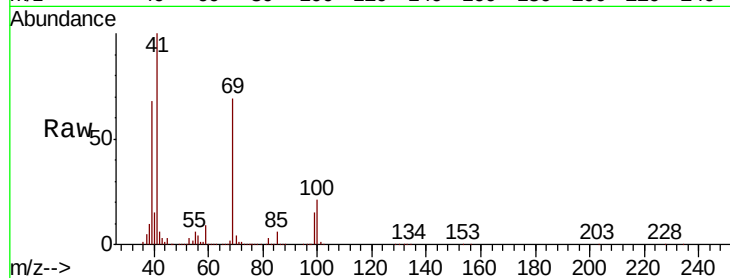
#43  
Methyl Methacrylate  
Concen: 10.716 ppbv  
RT: 8.14 min Scan# 1617  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampled :  
IDOC-1

Tgt Ion: 69 Resp: 858230  
Ion Ratio Lower Upper  
69 100  
41 145.2 114.0 171.0  
100 31.7 26.3 39.5

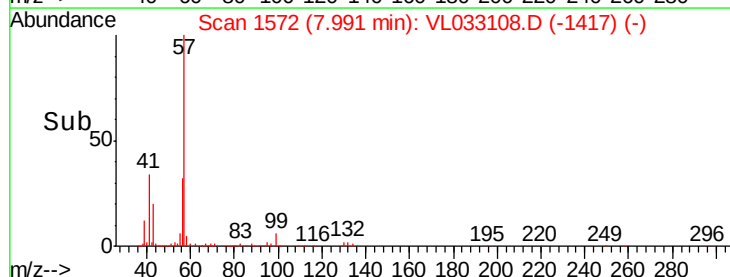
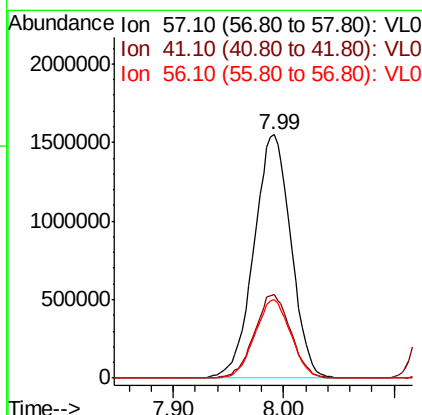
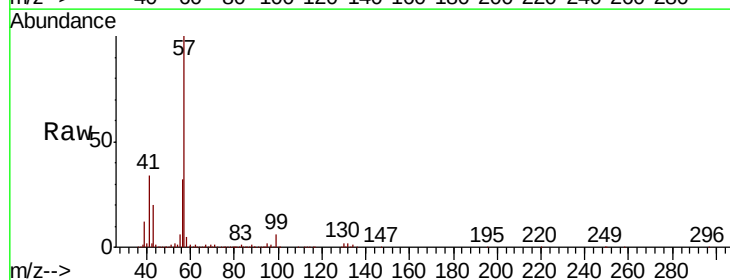
Manual Integrations  
APPROVED

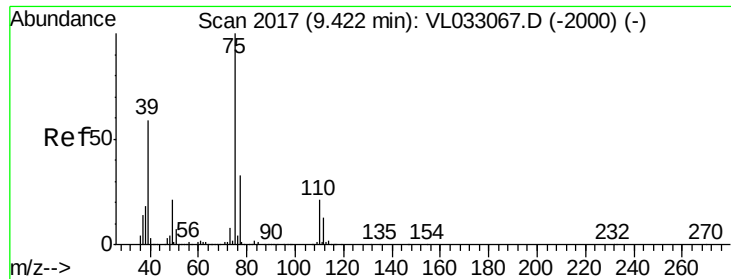
sam  
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#44  
2,2,4-Trimethylpentane  
Concen: 9.952 ppbv  
RT: 7.99 min Scan# 1572  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 57 Resp: 3597231  
Ion Ratio Lower Upper  
57 100  
41 33.6 26.2 39.2  
56 31.2 24.9 37.3





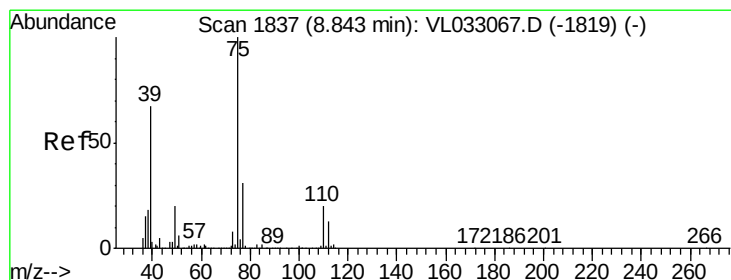
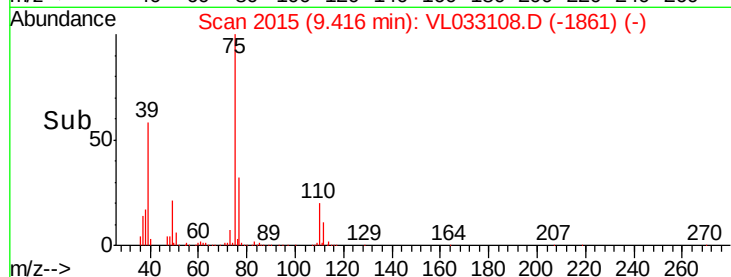
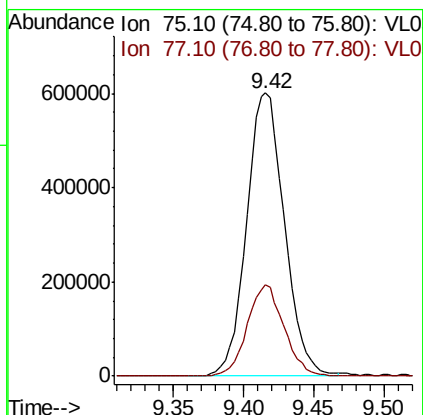
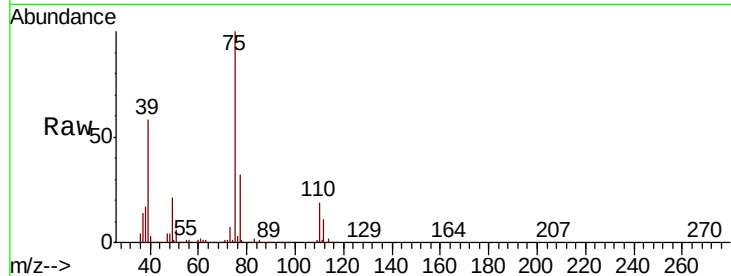
#45  
 t-1,3-Dichloropropene  
 Concen: 11.321 ppbv  
 RT: 9.42 min Scan# 2015  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampled :  
 IDOC-1

Tgt Ion: 75 Resp: 1128684  
 Ion Ratio Lower Upper  
 75 100  
 77 32.4 24.8 37.2

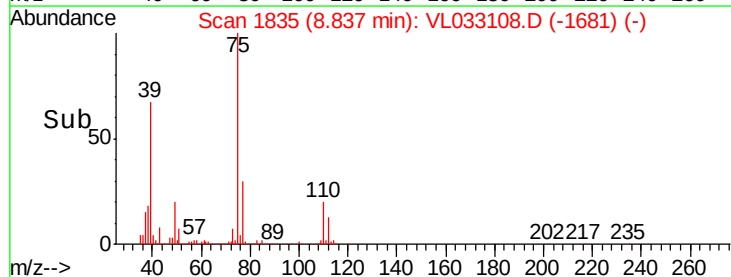
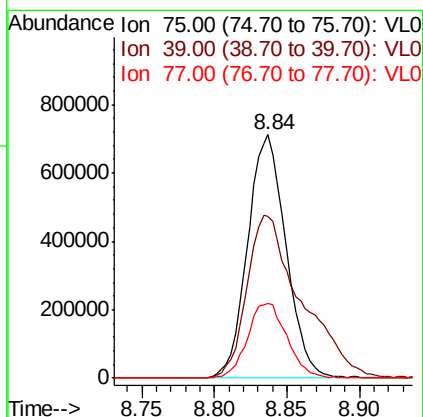
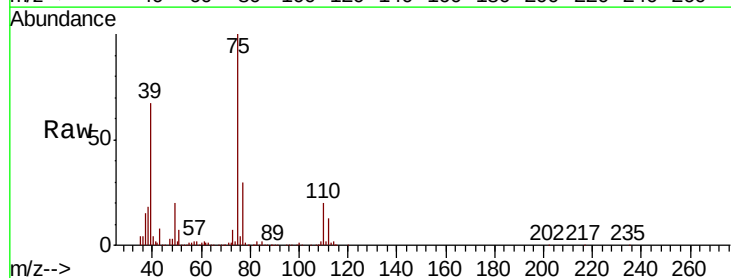
Manual Integrations  
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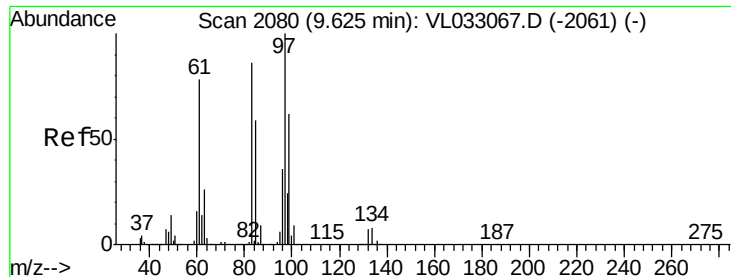
sam  
 1/21/2019 8:50:59 AM



#46  
 cis-1,3-Dichloropropene  
 Concen: 11.518 ppbv  
 RT: 8.84 min Scan# 1835  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Tgt Ion: 75 Resp: 1310588  
 Ion Ratio Lower Upper  
 75 100  
 39 66.5 51.3 76.9  
 77 30.5 25.5 38.3





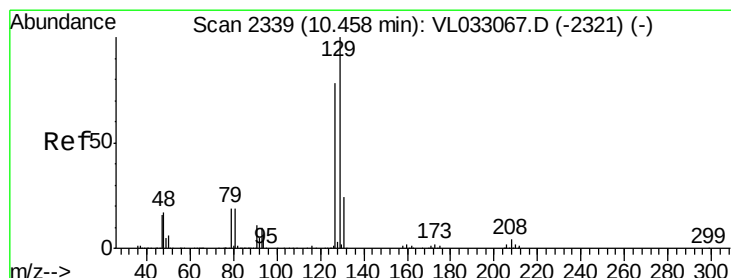
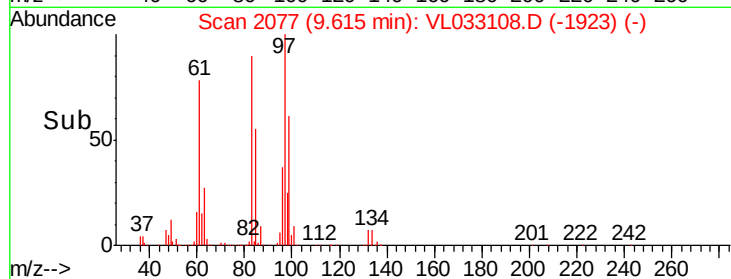
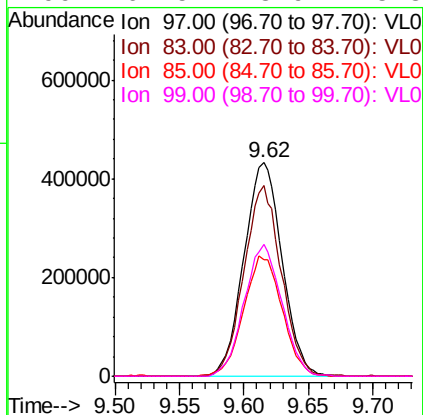
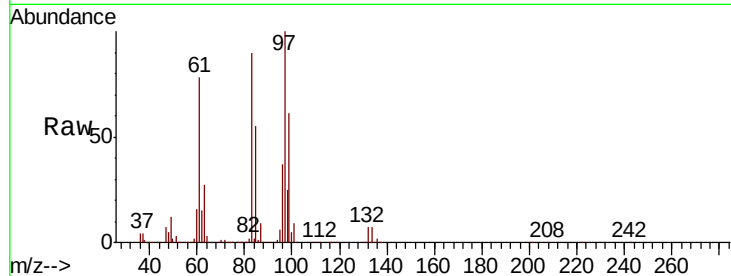
#47  
 1,1,2-Trichloroethane  
 Concen: 9.536 ppbv  
 RT: 9.62 min Scan# 2077  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IDOC-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 83      | 89.5  | 69.4  | 104.2 |
| 85      | 54.7  | 44.2  | 66.2  |
| 99      | 61.5  | 48.9  | 73.3  |

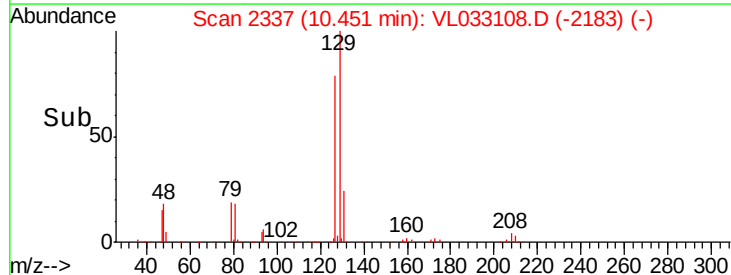
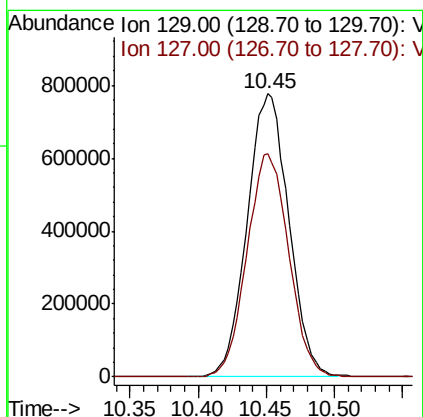
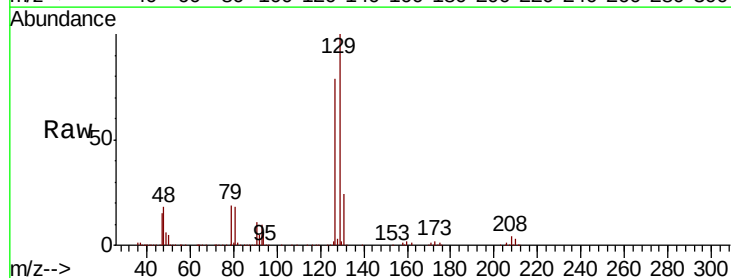
Manual Integrations  
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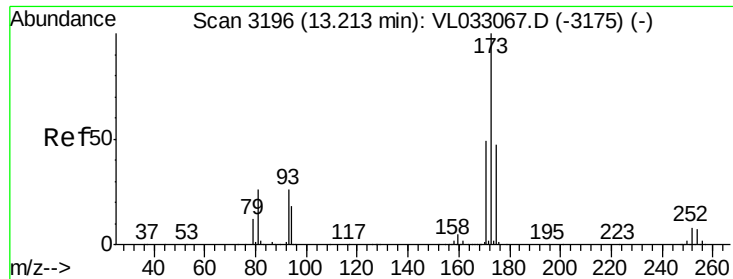
sam  
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#48  
 Dibromochloromethane  
 Concen: 9.957 ppbv  
 RT: 10.45 min Scan# 2337  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 79.2  | 39.1  | 117.3 |





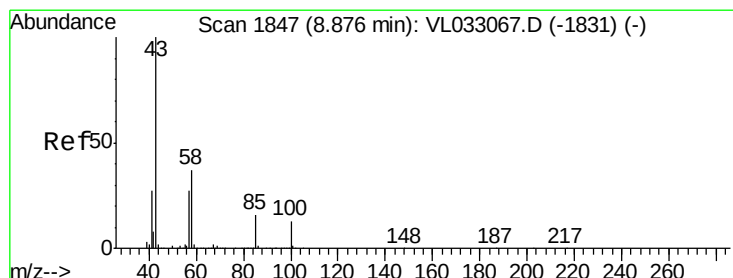
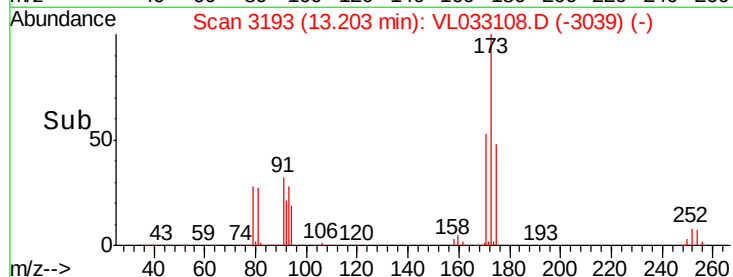
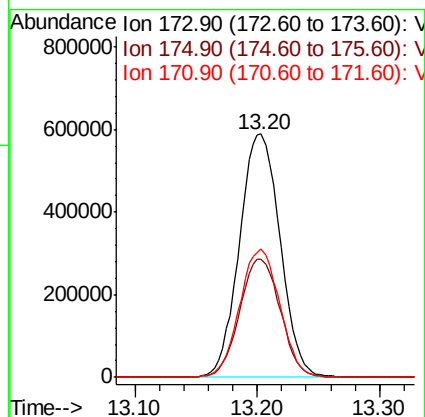
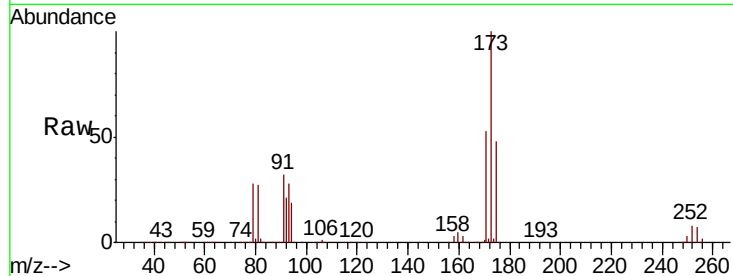
#49  
Bromoform  
Concen: 9.391 ppbv  
RT: 13.20 min Scan# 3193  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampled :  
IDOC-1

Tgt Ion: 173 Resp: 1358051  
Ion Ratio Lower Upper  
173 100  
175 48.7 39.4 59.2  
171 52.1 42.1 63.1

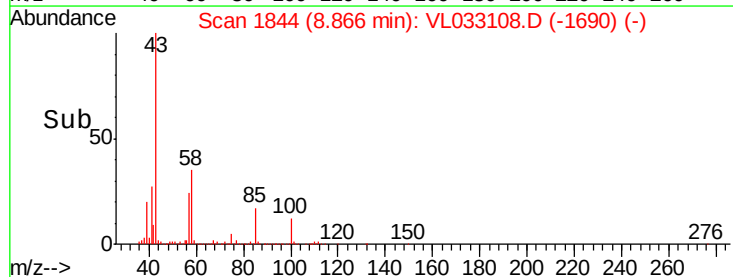
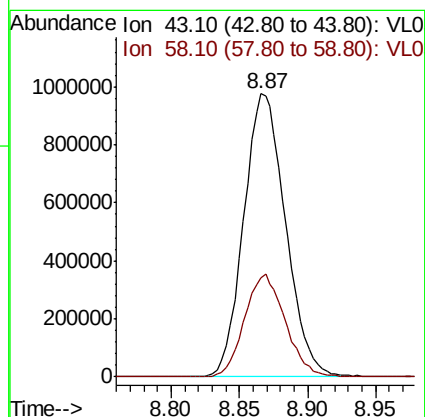
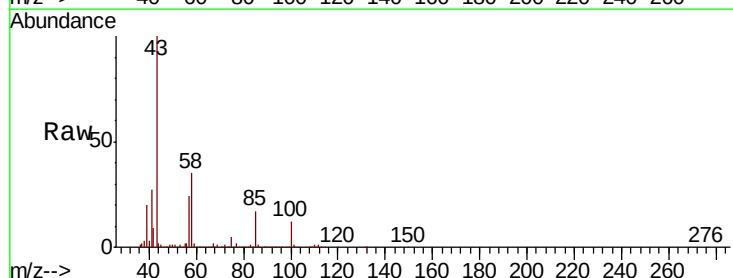
Manual Integrations  
APPROVED

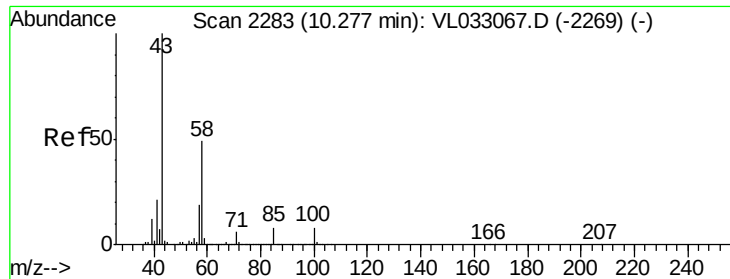
sam  
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#50  
4-Methyl-2-Pentanone  
Concen: 10.824 ppbv  
RT: 8.87 min Scan# 1844  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 43 Resp: 2076426  
Ion Ratio Lower Upper  
43 100  
58 35.4 28.9 43.3





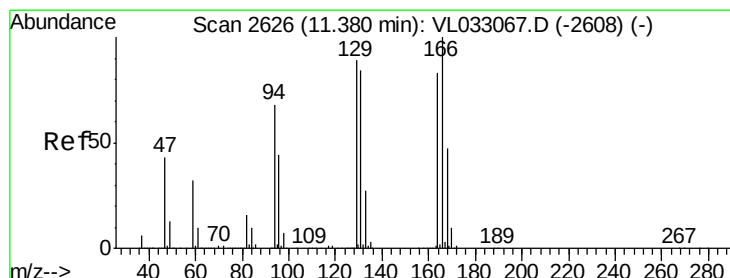
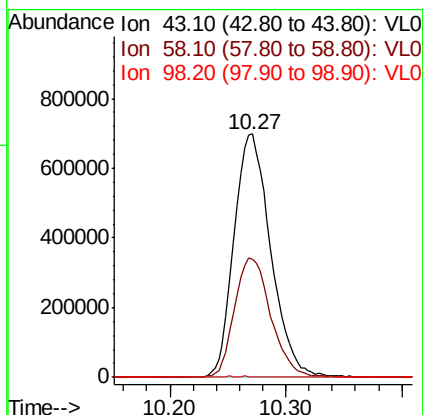
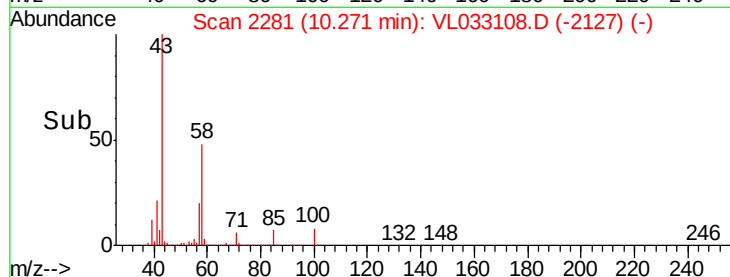
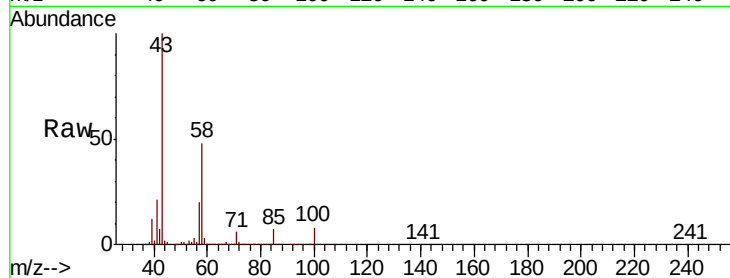
#51  
2-Hexanone  
Concen: 11.031 ppbv  
RT: 10.27 min Scan# 2281  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampleId :  
IDOC-1

Tgt Ion: 43 Resp: 1531156  
Ion Ratio Lower Upper  
43 100  
58 48.6 39.0 58.6  
98 0.5 0.4 0.6

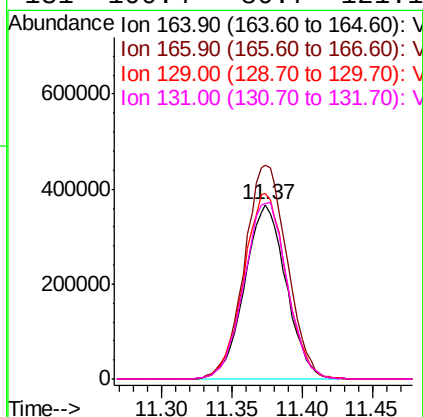
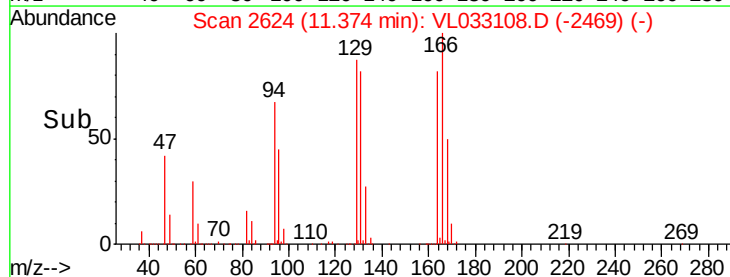
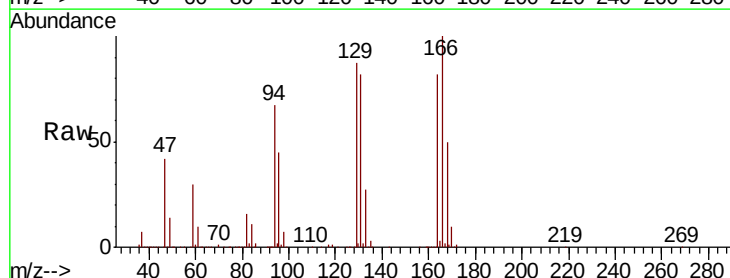
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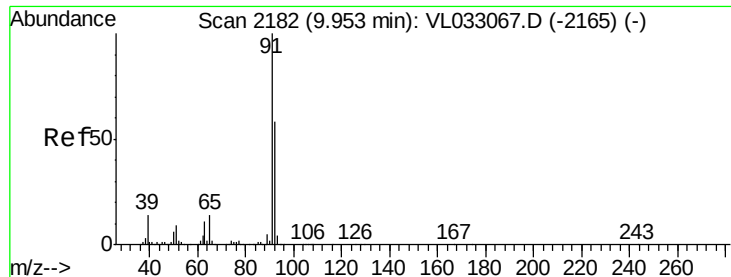
sam  
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#52  
Tetrachloroethene  
Concen: 9.969 ppbv  
RT: 11.37 min Scan# 2624  
Delta R.T. -0.00 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 164 Resp: 752112  
Ion Ratio Lower Upper  
164 100  
166 122.4 100.8 151.2  
129 106.3 84.6 126.8  
131 100.4 80.7 121.1





#53

Toluene

Concen: 10.820 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion: 91 Resp: 2474930

Ion Ratio Lower Upper

91 100

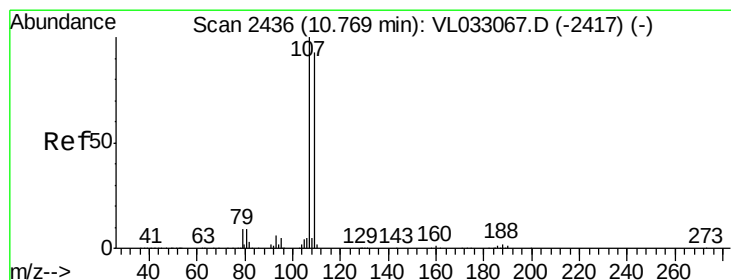
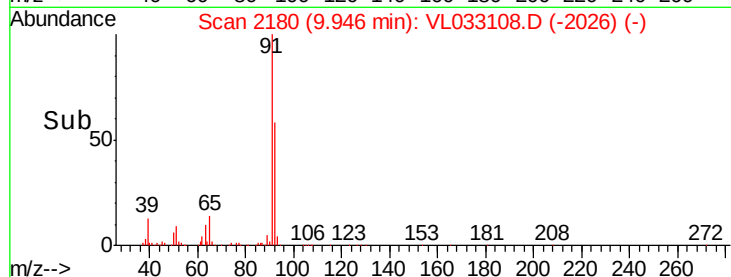
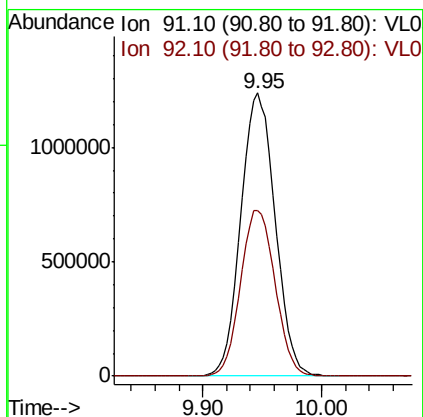
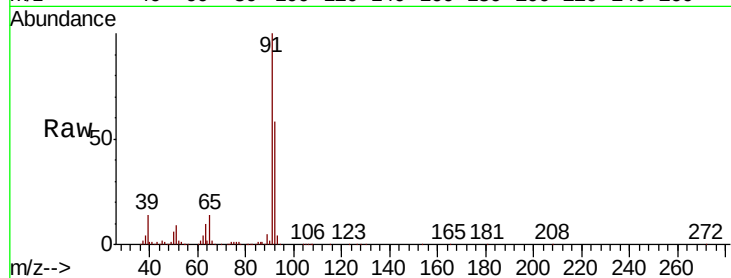
92 58.9 47.7 71.5

Manual Integrations

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sam

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#54

1,2-Dibromoethane

Concen: 10.009 ppbv

RT: 10.76 min Scan# 2433

Delta R.T. -0.01 min

Lab File: VL033108.D

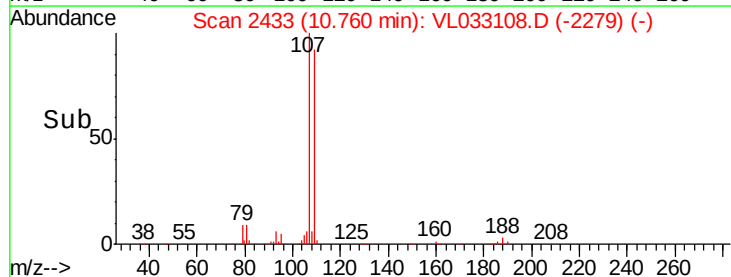
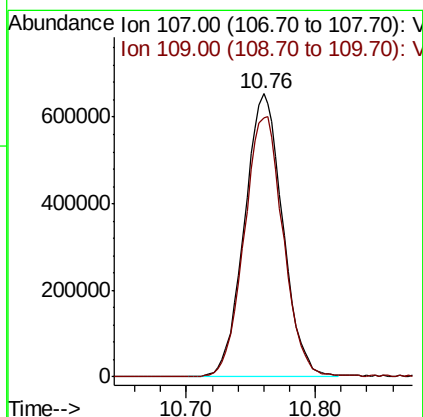
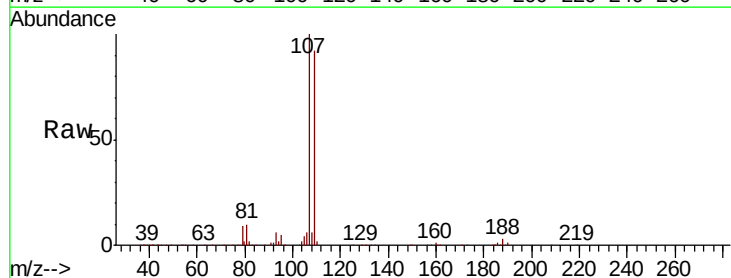
Acq: 17 Jan 2019 1:55

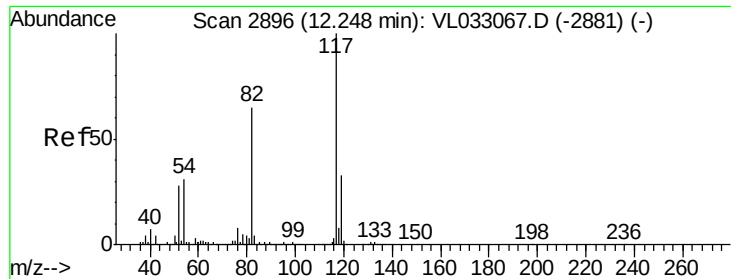
Tgt Ion: 107 Resp: 1350943

Ion Ratio Lower Upper

107 100

109 91.7 74.9 112.3





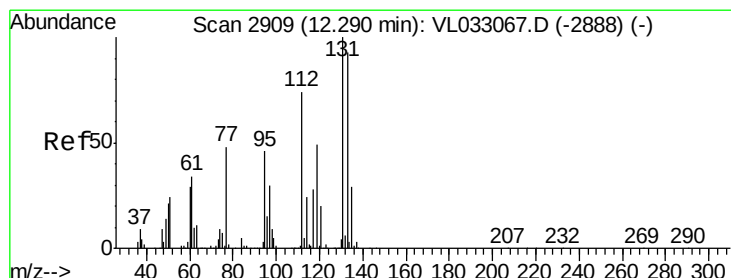
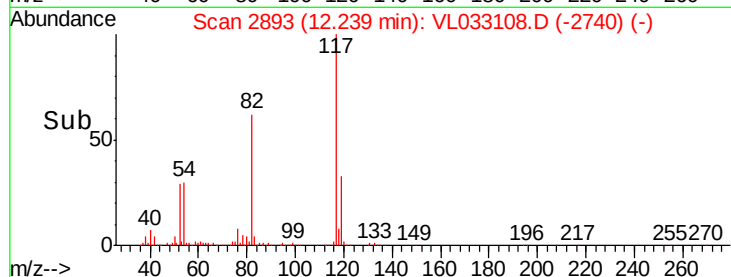
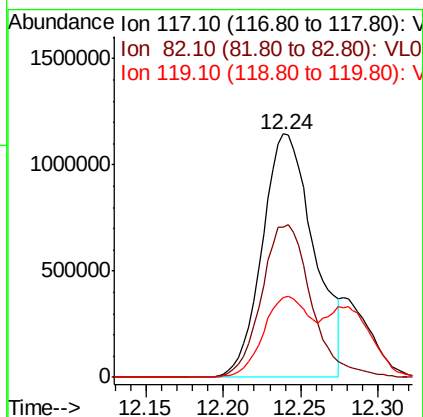
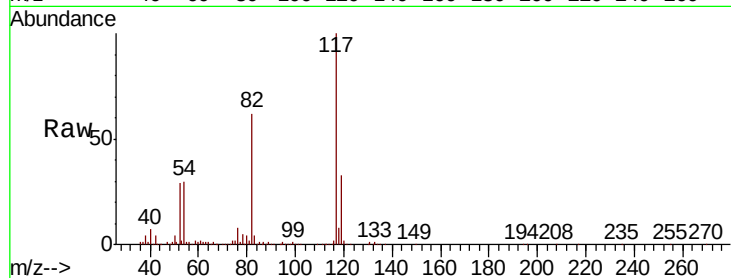
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.24 min Scan# 2893  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampleId :  
IDOC-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 60.8  | 48.9  | 73.3  |
| 119     | 32.6  | 24.6  | 37.0  |

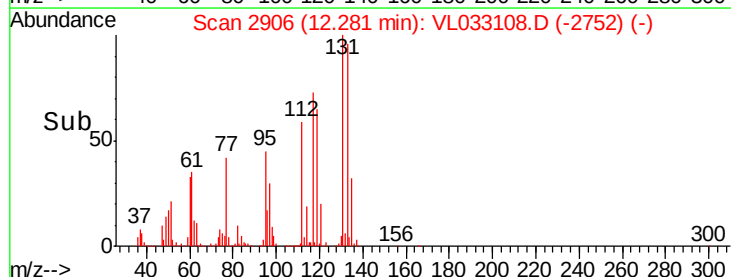
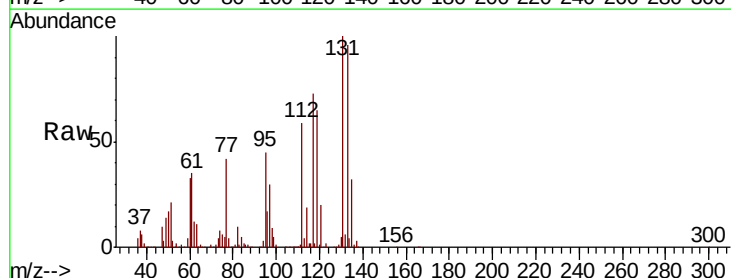
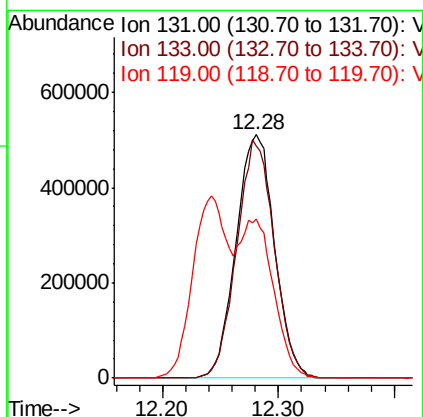
Manual Integrations  
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sam  
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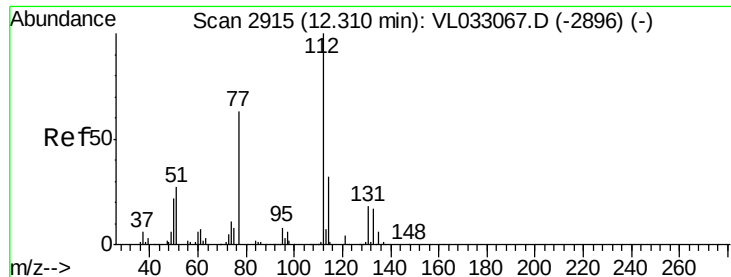


#56  
1,1,1,2-Tetrachloroethane  
Concen: 8.518 ppbv  
RT: 12.28 min Scan# 2906  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 131     | 100   |       |       |
| 133     | 96.0  | 76.0  | 114.0 |
| 119     | 59.1  | 44.2  | 66.2  |







#57

Chlorobenzene

Concen: 8.568 ppbv

RT: 12.30 min Scan# 2913

Delta R.T. -0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampled :

IDOC-1

Tgt Ion: 112 Resp: 1907126

Ion Ratio Lower Upper

112 100

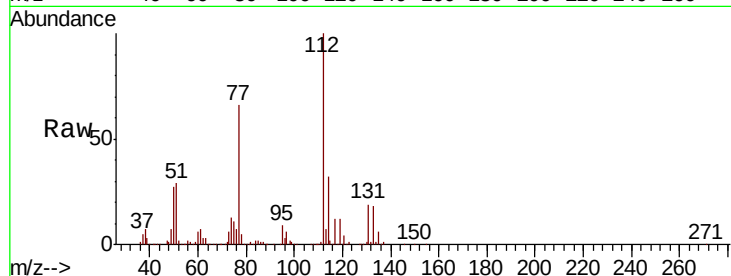
77 66.3 53.4 80.0

114 32.1 30.0 36.6

Manual Integrations  
APPROVED

sam

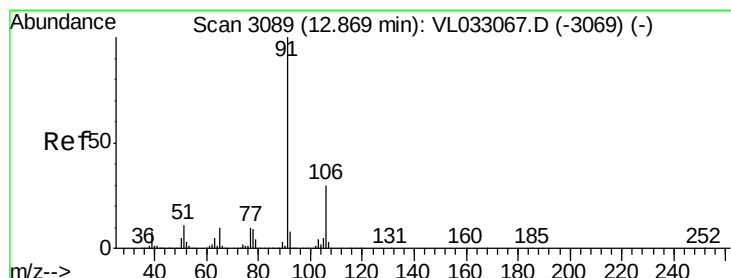
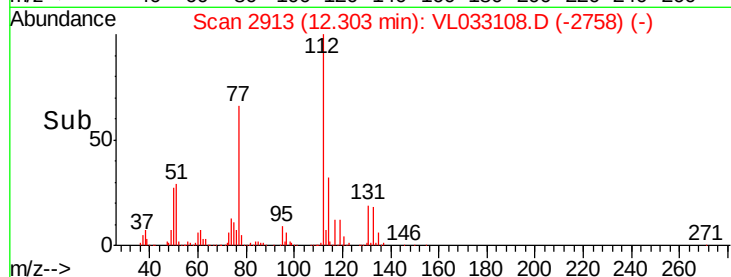
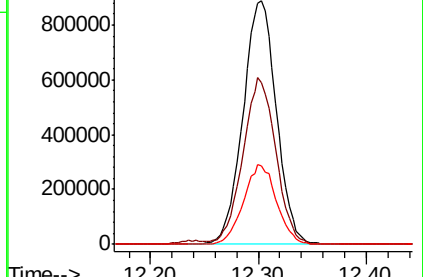
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Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 9.796 ppbv

RT: 12.86 min Scan# 3087

Delta R.T. -0.01 min

Lab File: VL033108.D

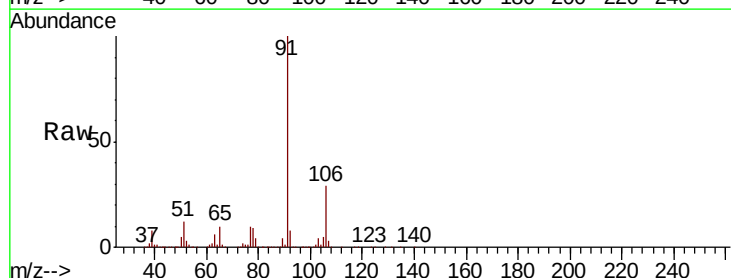
Acq: 17 Jan 2019 1:55

Tgt Ion: 91 Resp: 3298235

Ion Ratio Lower Upper

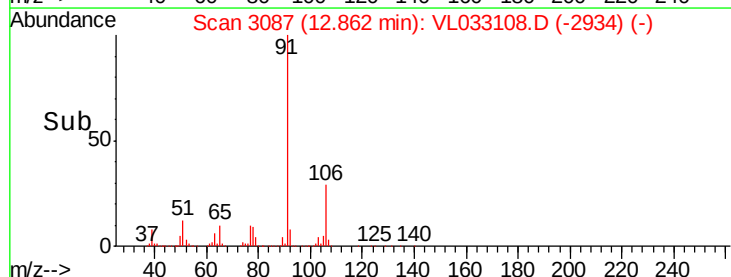
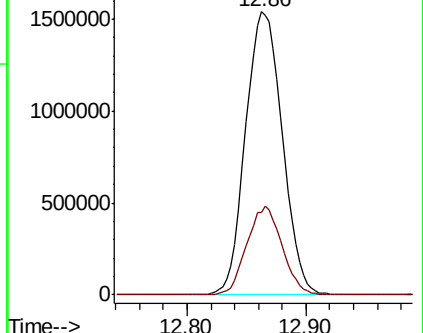
91 100

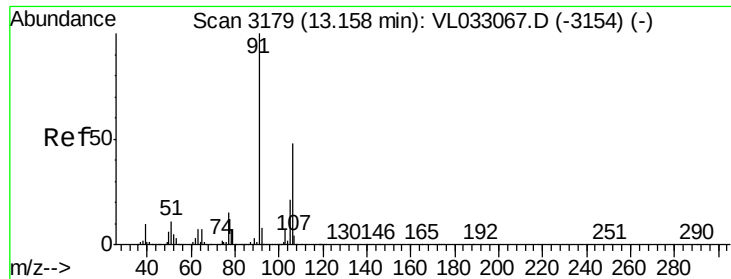
106 29.3 24.3 36.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





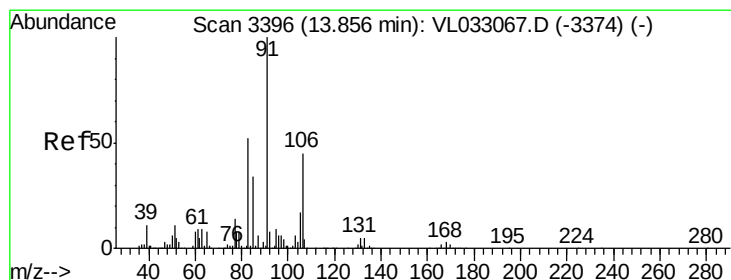
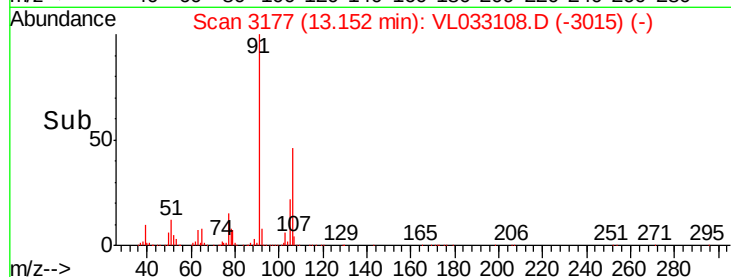
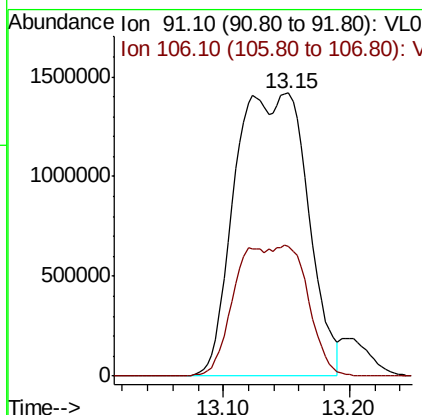
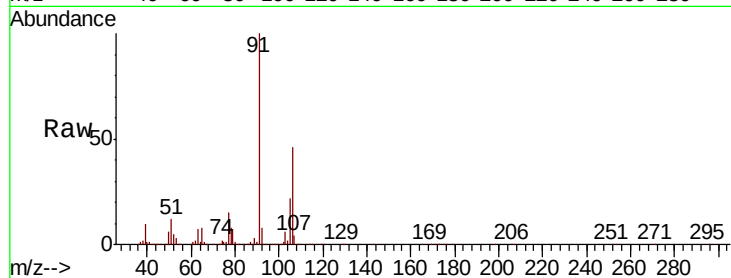
#59  
m/p-Xylene  
Concen: 18.198 ppbv m  
RT: 13.15 min Scan# 3177  
Delta R.T. 0.02 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampled :  
IDOC-1

Tgt Ion: 91 Resp: 5668113  
Ion Ratio Lower Upper  
91 100  
106 0.0 0.0 0.0

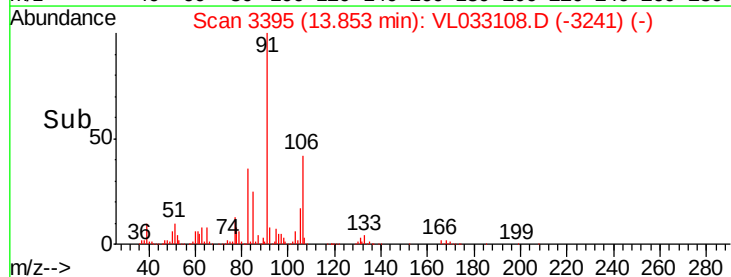
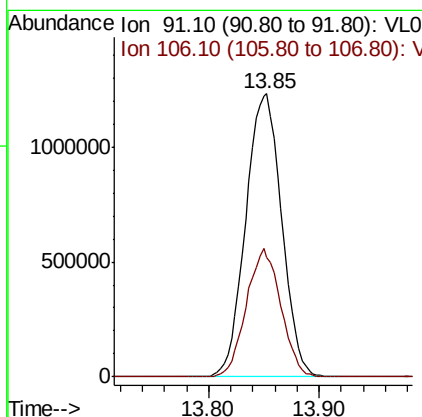
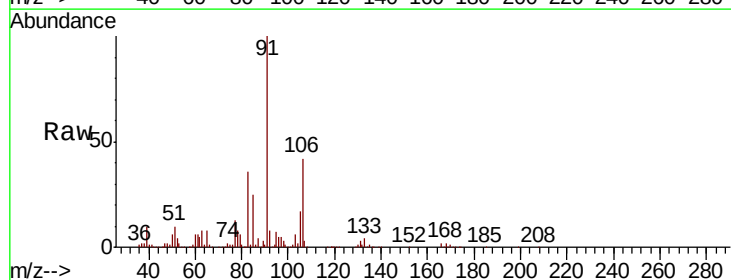
Manual Integrations  
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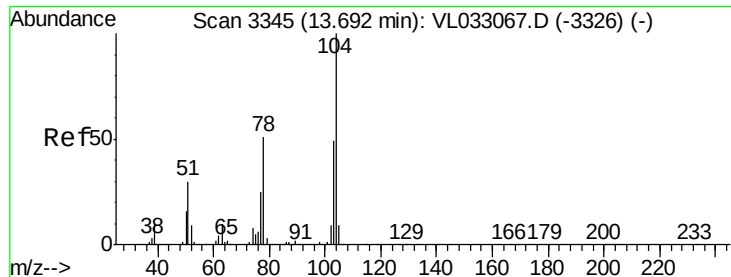
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#60  
o-Xylene  
Concen: 9.089 ppbv  
RT: 13.85 min Scan# 3395  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 91 Resp: 2771399  
Ion Ratio Lower Upper  
91 100  
106 43.5 22.1 66.5





#61

Styrene

Concen: 10.187 ppbv

RT: 13.69 min Scan# 3343

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampled :

IDOC-1

Tgt Ion:104 Resp: 1982044

Ion Ratio Lower Upper

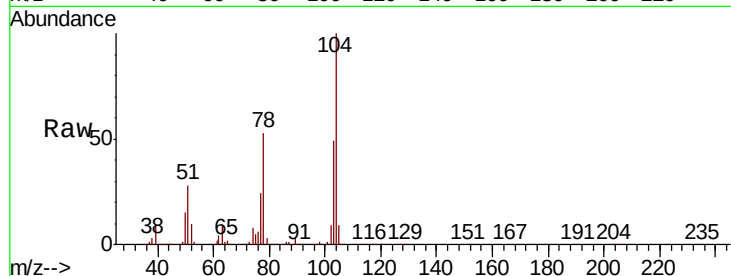
104 100

78 53.2 41.6 62.4

103 47.5 38.1 57.1

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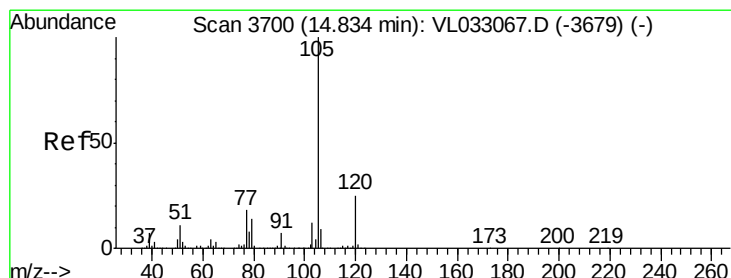
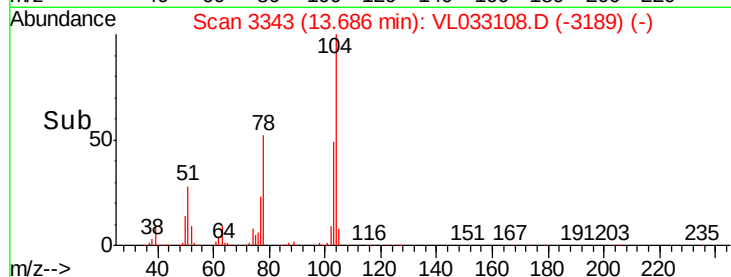
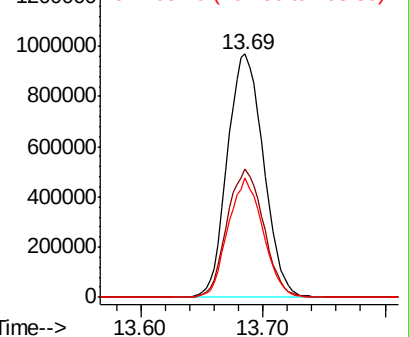
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Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 8.738 ppbv

RT: 14.83 min Scan# 3698

Delta R.T. -0.01 min

Lab File: VL033108.D

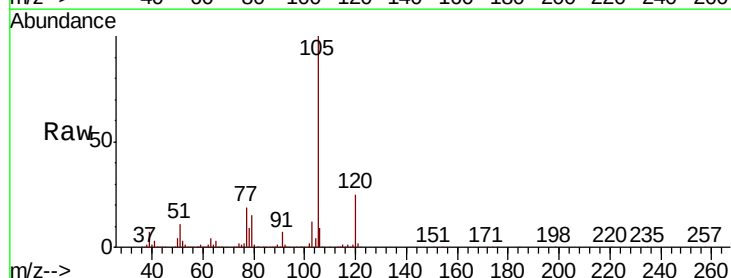
Acq: 17 Jan 2019 1:55

Tgt Ion:105 Resp: 3791538

Ion Ratio Lower Upper

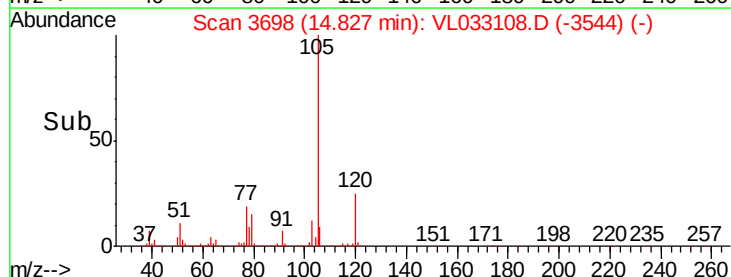
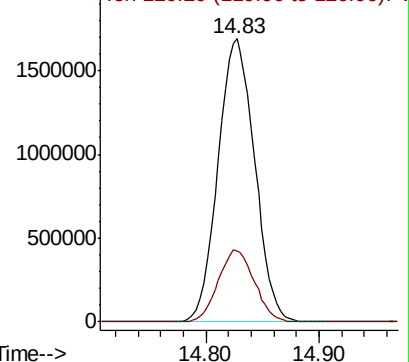
105 100

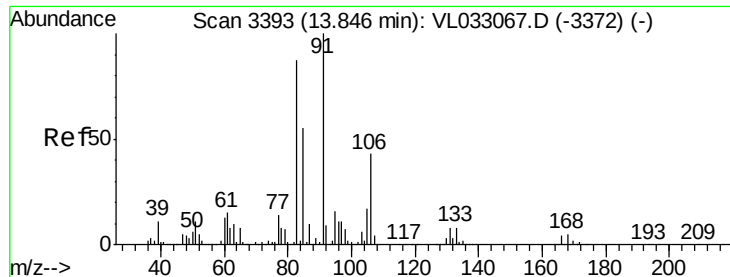
120 25.2 20.4 30.6



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





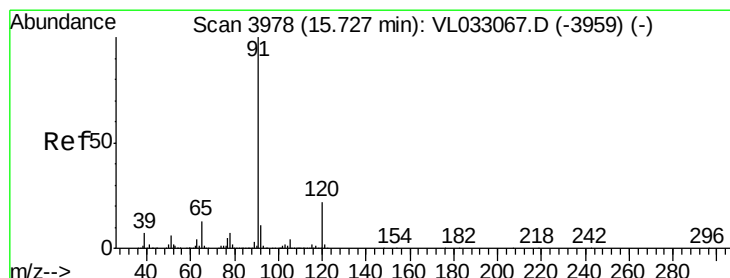
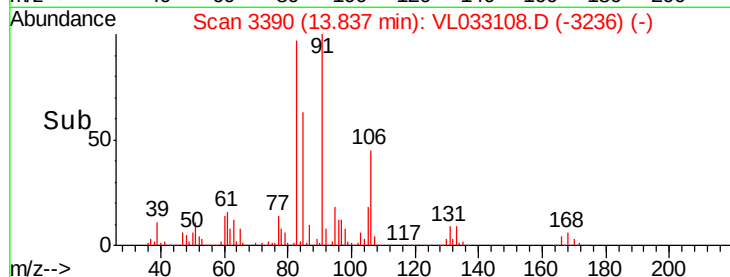
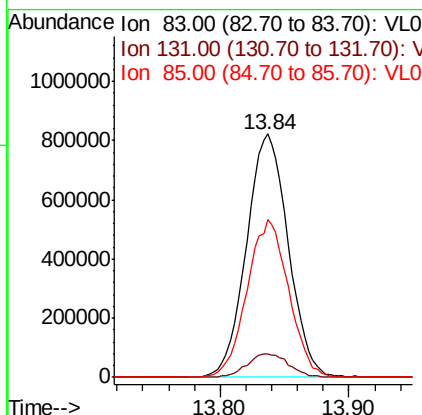
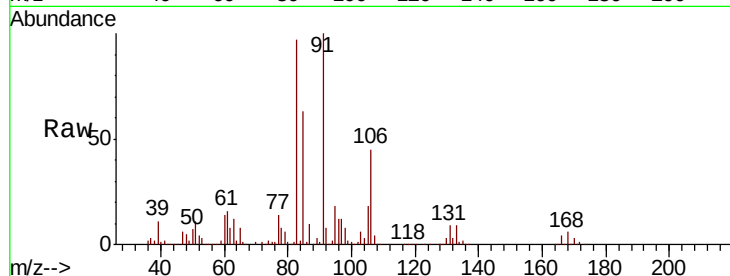
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 8.185 ppbv  
 RT: 13.84 min Scan# 3390  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampled :  
 IDOC-1

Tgt Ion: 83 Resp: 1853819  
 Ion Ratio Lower Upper  
 83 100  
 131 9.8 4.8 14.4  
 85 64.8 32.6 97.8

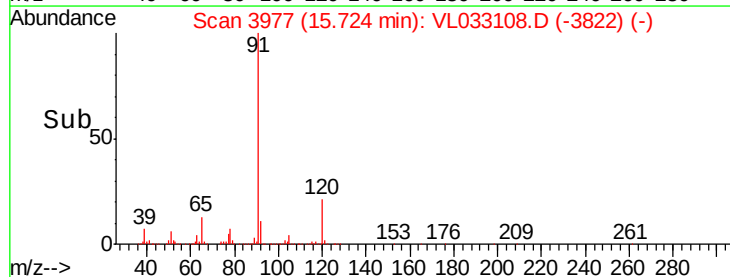
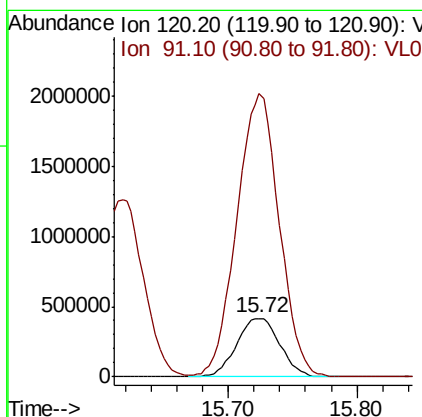
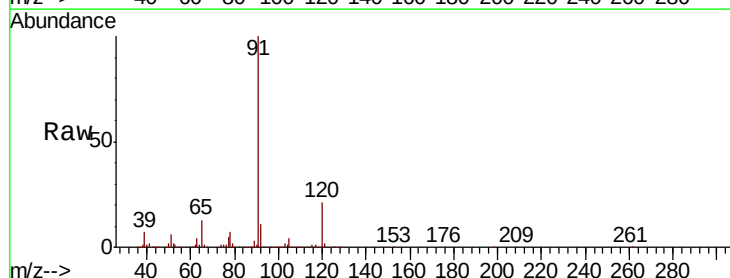
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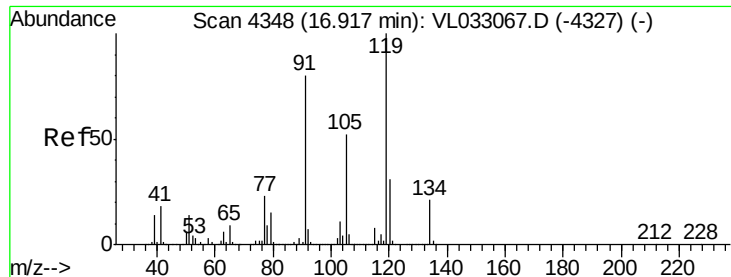
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#64  
 n-propylbenzene  
 Concen: 8.768 ppbv  
 RT: 15.72 min Scan# 3977  
 Delta R.T. -0.00 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Tgt Ion: 120 Resp: 966507  
 Ion Ratio Lower Upper  
 120 100  
 91 478.3 378.7 568.1





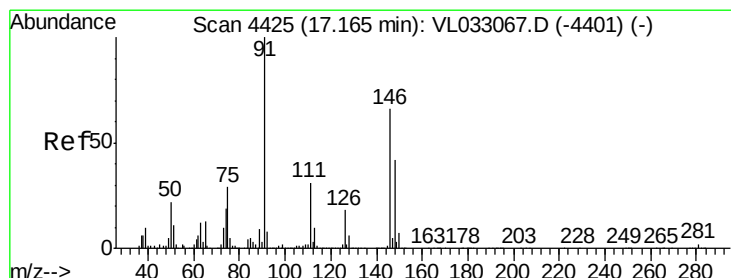
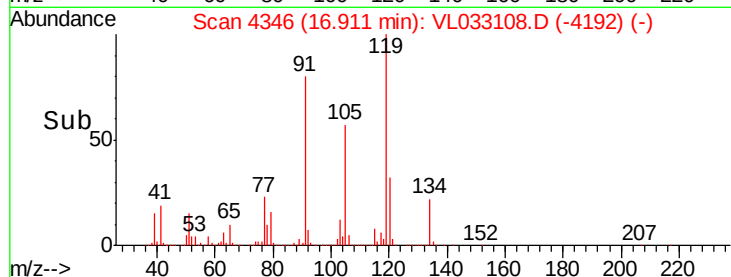
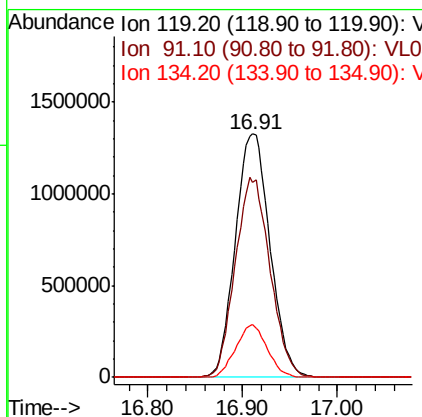
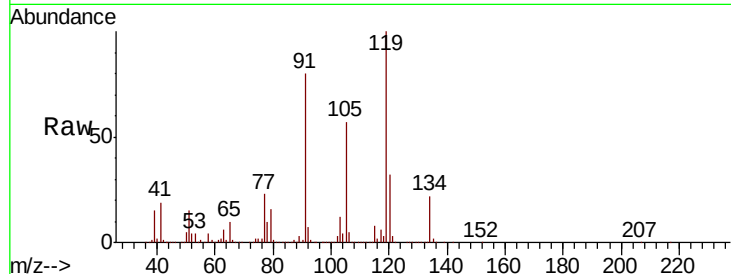
#65  
tert-Butylbenzene  
Concen: 8.795 ppbv  
RT: 16.91 min Scan# 4346  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Instrument :  
MSVOA\_L  
ClientSampled :  
IDOC-1

Tgt Ion: 119 Resp: 3380688  
Ion Ratio Lower Upper  
119 100  
91 82.2 64.6 97.0  
134 19.6 15.8 23.8

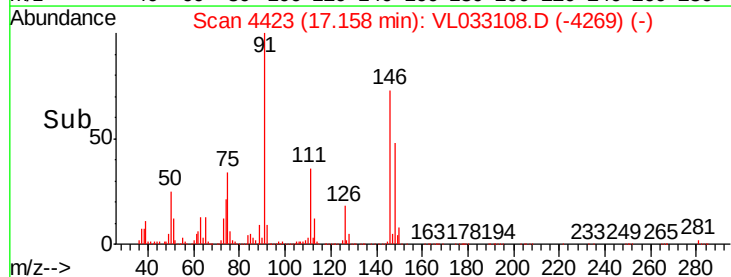
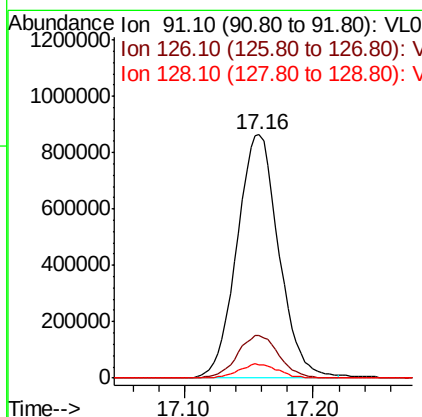
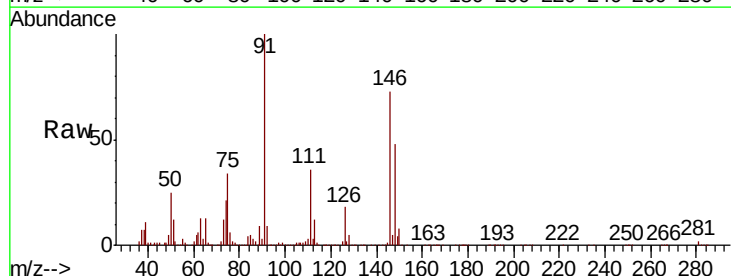
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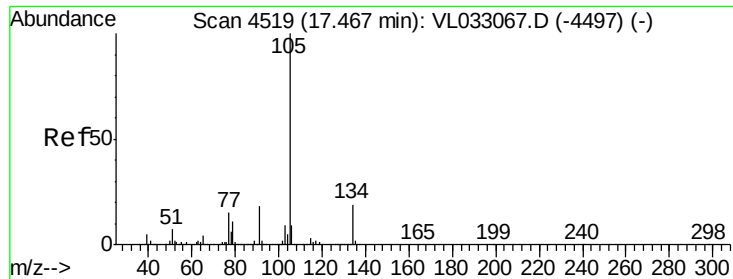
sam  
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#66  
Benzyl Chloride  
Concen: 8.882 ppbv  
RT: 17.16 min Scan# 4423  
Delta R.T. -0.01 min  
Lab File: VL033108.D  
Acq: 17 Jan 2019 1:55

Tgt Ion: 91 Resp: 1945862  
Ion Ratio Lower Upper  
91 100  
126 17.7 14.4 21.6  
128 5.5 4.5 6.7





#67

sec-Butylbenzene

Concen: 8.677 ppbv

RT: 17.46 min Scan# 4517

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion: 105 Resp: 4773004

Ion Ratio Lower Upper

105 100

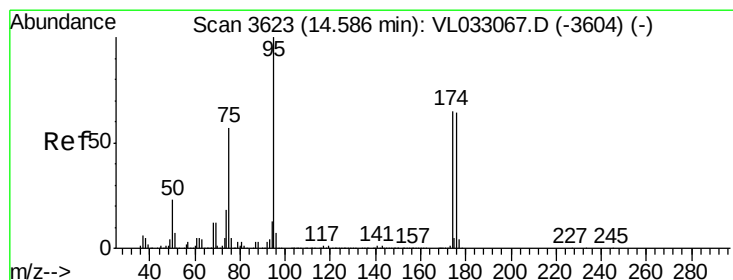
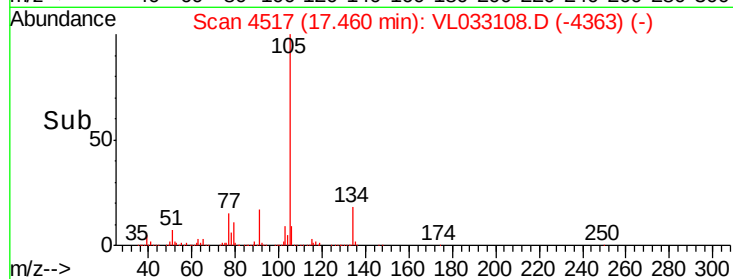
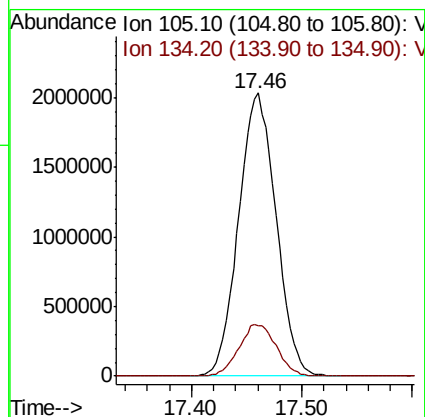
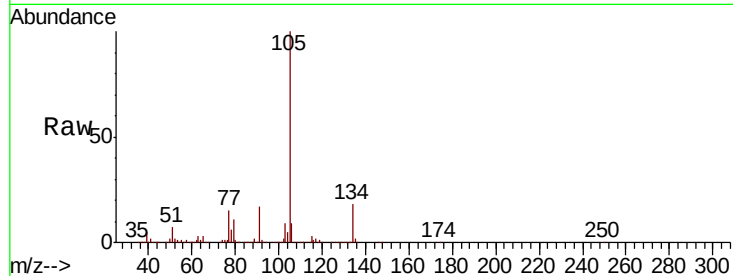
134 18.3 14.6 21.8

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#68

1-Bromo-4-Fluorobenzene

Concen: 9.447 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

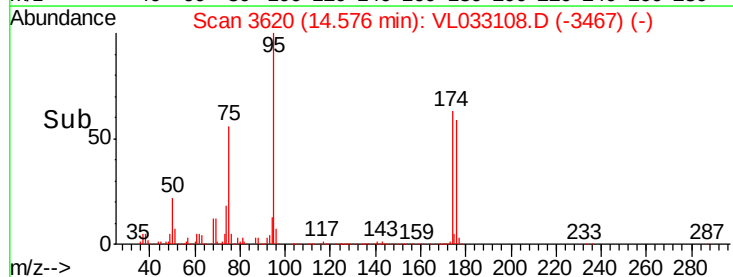
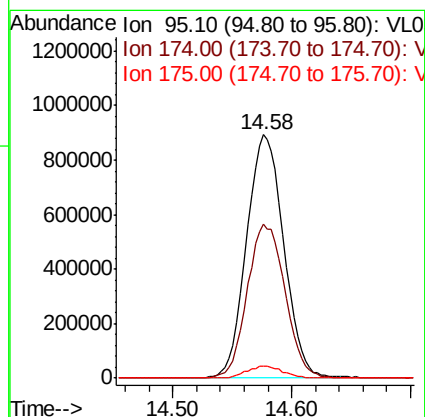
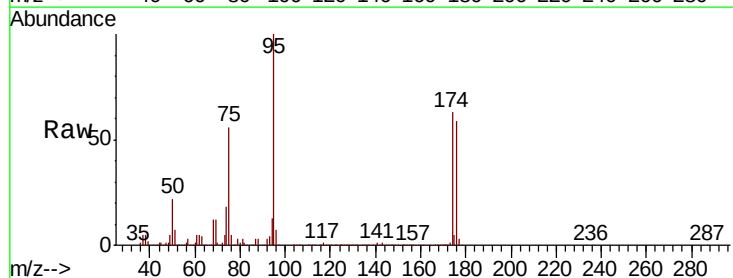
Tgt Ion: 95 Resp: 1931023

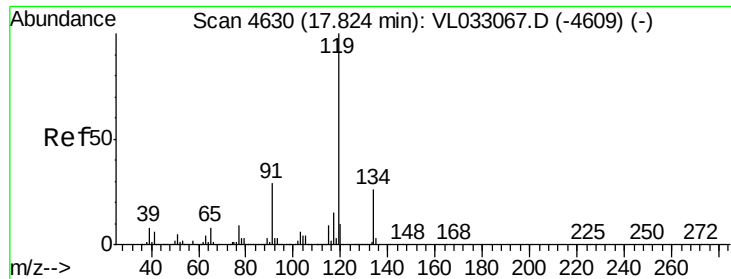
Ion Ratio Lower Upper

95 100

174 64.6 51.9 77.9

175 4.8 3.9 5.9





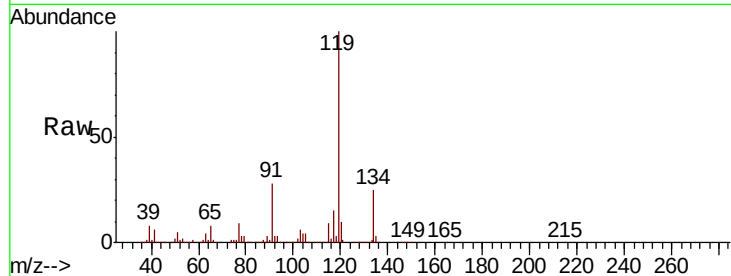
#69  
 p-Isopropyltoluene  
 Concen: 9.012 ppbv  
 RT: 17.82 min Scan# 4629  
 Delta R.T. -0.00 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampled :  
 IDOC-1

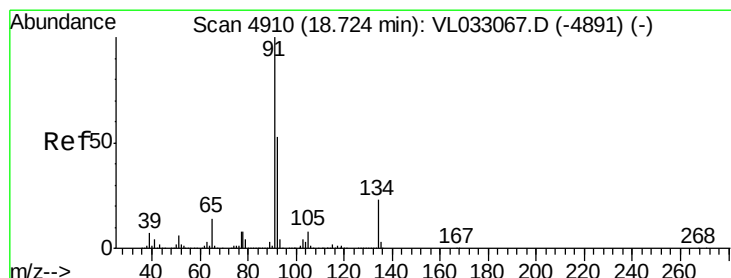
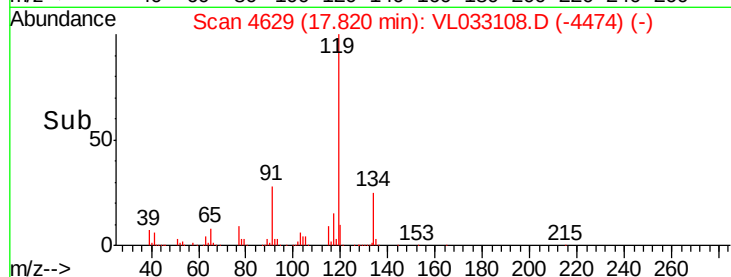
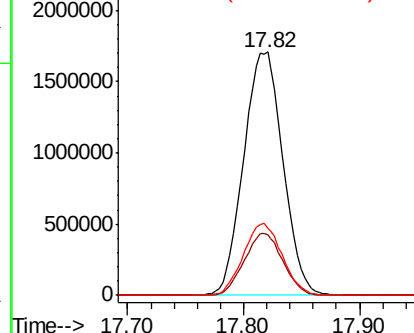
Tgt Ion: 119 Resp: 4023214  
 Ion Ratio Lower Upper  
 119 100  
 134 25.0 20.1 30.1  
 91 29.1 23.0 34.4

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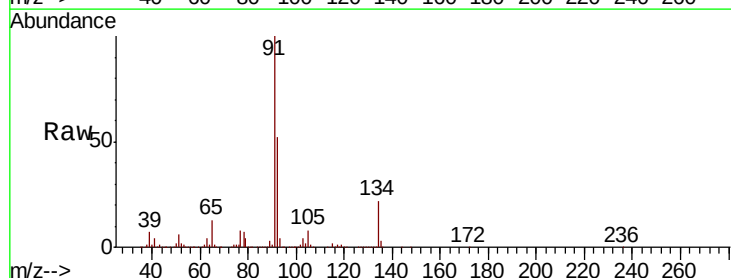


Abundance Ion 119.10 (118.80 to 119.80): V  
 Ion 134.20 (133.90 to 134.90): V  
 Ion 91.10 (90.80 to 91.80): V

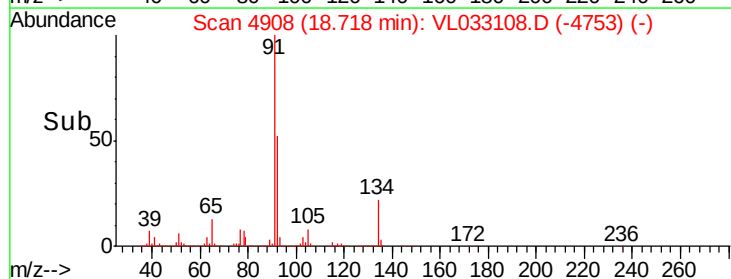
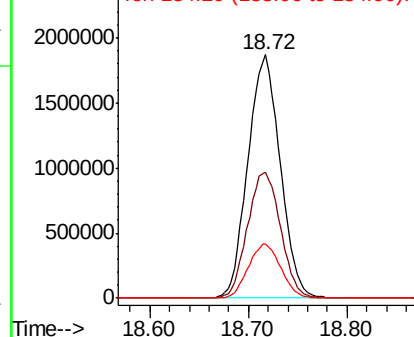


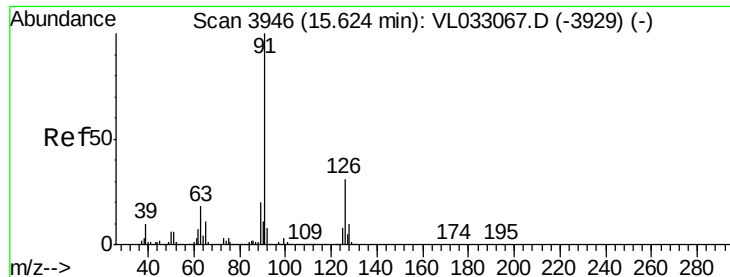
#70  
 n-Butylbenzene  
 Concen: 9.432 ppbv  
 RT: 18.72 min Scan# 4908  
 Delta R.T. -0.00 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Tgt Ion: 91 Resp: 4233080  
 Ion Ratio Lower Upper  
 91 100  
 92 52.9 42.4 63.6  
 134 22.4 18.0 27.0



Abundance Ion 91.10 (90.80 to 91.80): VL0  
 Ion 92.10 (91.80 to 92.80): VL0  
 Ion 134.20 (133.90 to 134.90): V





#71

2-Chlorotoluene

Concen: 9.266 ppbv

RT: 15.62 min Scan# 3944

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion: 91 Resp: 2851438

Ion Ratio Lower Upper

91 100

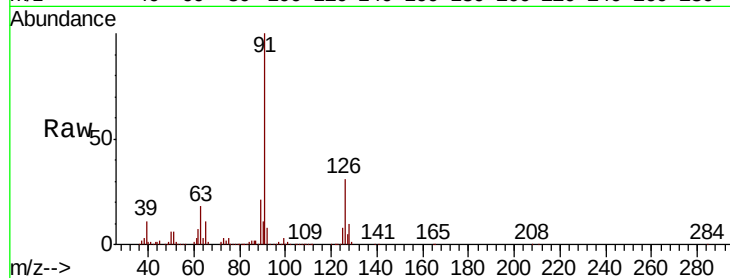
126 29.8 12.4 49.6

Manual Integrations

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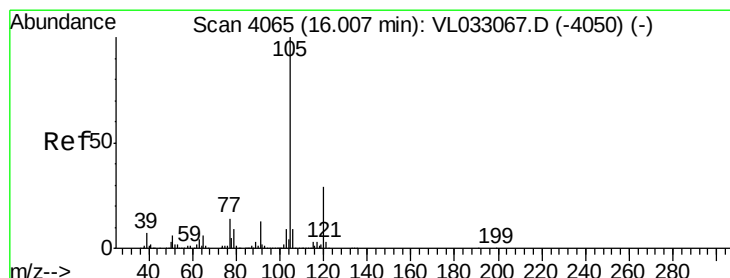
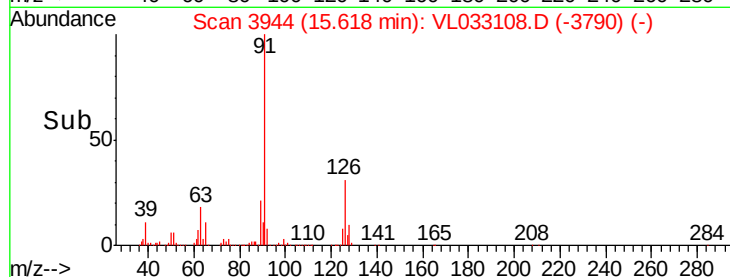
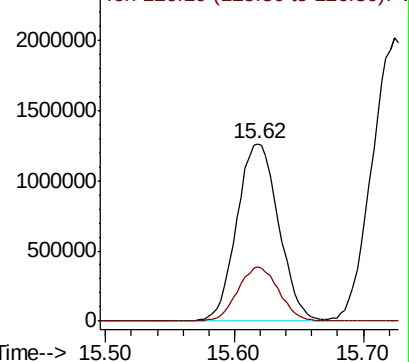
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 9.320 ppbv

RT: 16.00 min Scan# 4063

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Tgt Ion: 105 Resp: 3122876

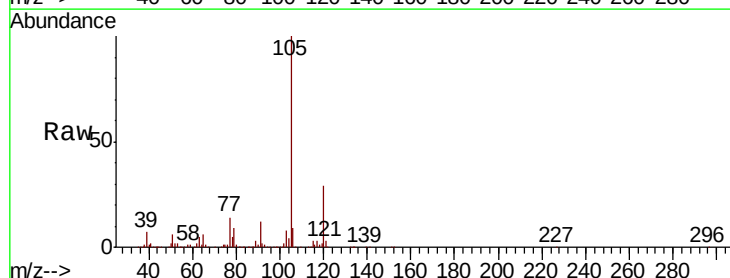
Ion Ratio Lower Upper

105 100

120 28.8 23.0 34.6

91 13.1 10.3 15.5

77 14.1 11.1 16.7

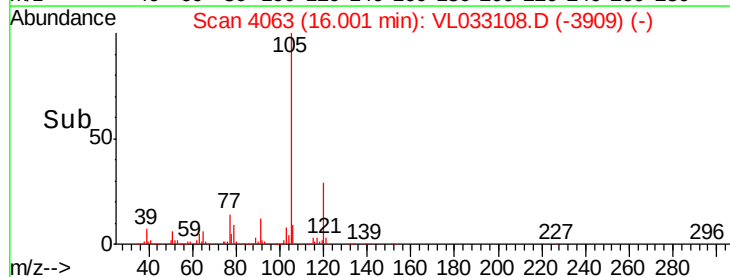
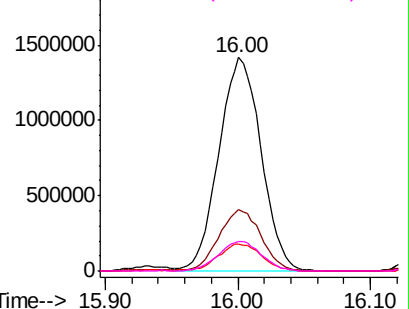


Abundance Ion 105.10 (104.80 to 105.80): V

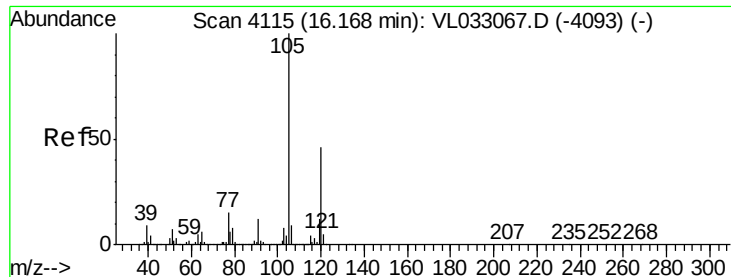
Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0







#73

1,3,5-Trimethylbenzene

Concen: 9.038 ppbv

RT: 16.16 min Scan# 4113

Delta R.T. -0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampled :

IDOC-1

Tgt Ion:105 Resp: 2988061

Ion Ratio Lower Upper

105 100

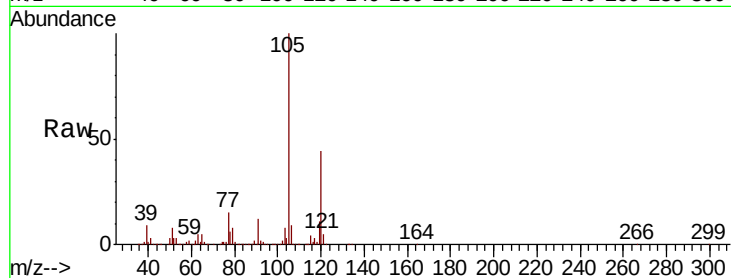
120 44.4 36.1 54.1

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.16

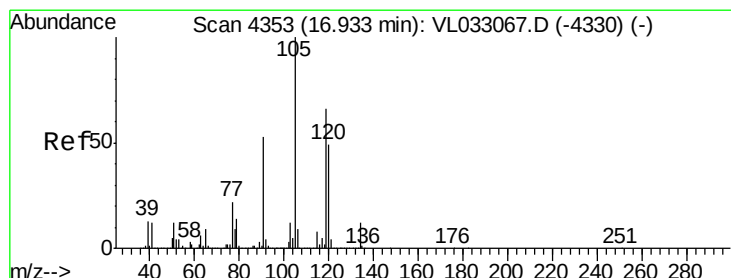
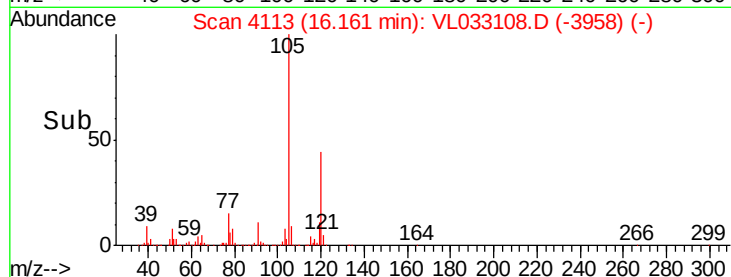
1500000

1000000

500000

0

Time-->



#74

1,2,4-Trimethylbenzene

Concen: 8.540 ppbv

RT: 16.93 min Scan# 4351

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Tgt Ion:105 Resp: 3126917

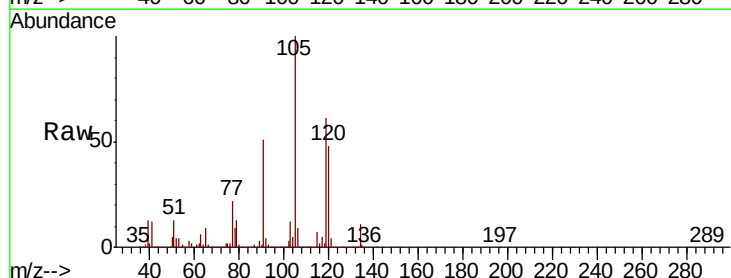
Ion Ratio Lower Upper

105 100

120 48.3 37.0 55.4

91 50.3 35.4 53.0

77 22.1 17.1 25.7



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

2000000

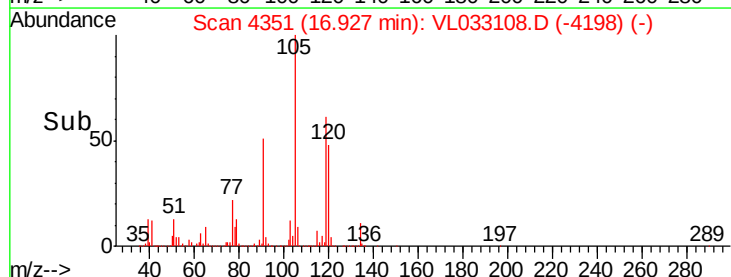
1500000

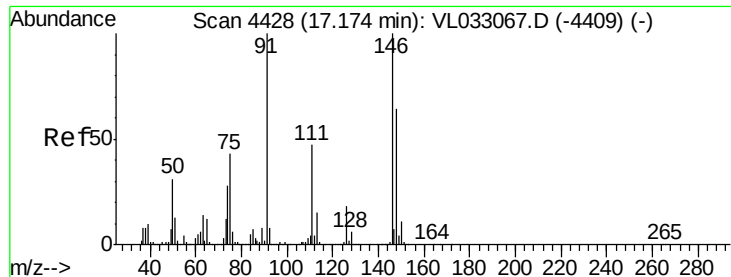
1000000

500000

0

Time-->





#75

1,3-Dichlorobenzene

Concen: 8.264 ppbv

RT: 17.16 min Scan# 4425

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampled :

IDOC-1

Tgt Ion:146 Resp: 1781221

Ion Ratio Lower Upper

146 100

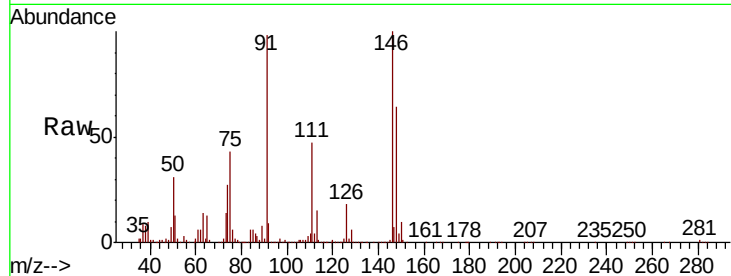
111 47.2 23.4 70.2

148 65.0 32.1 96.3

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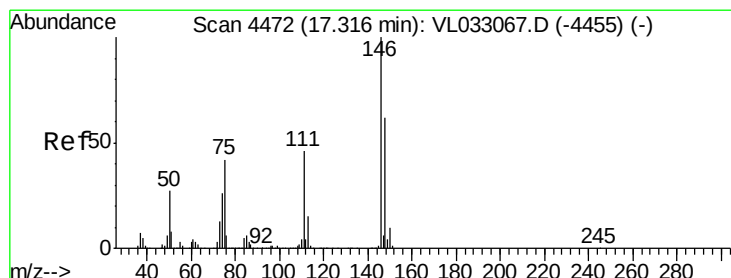
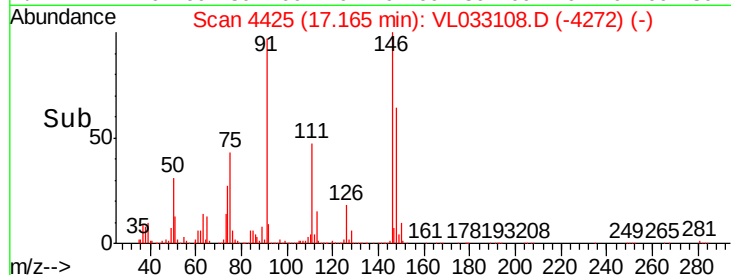
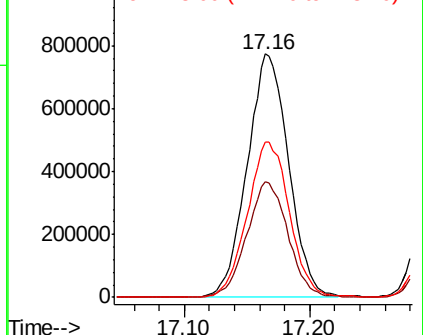


Abundance

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: 8.832 ppbv

RT: 17.31 min Scan# 4470

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

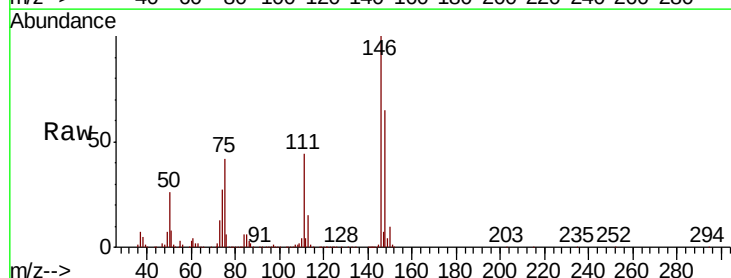
Tgt Ion:146 Resp: 1733991

Ion Ratio Lower Upper

146 100

111 46.0 22.7 68.1

148 65.3 32.4 97.2

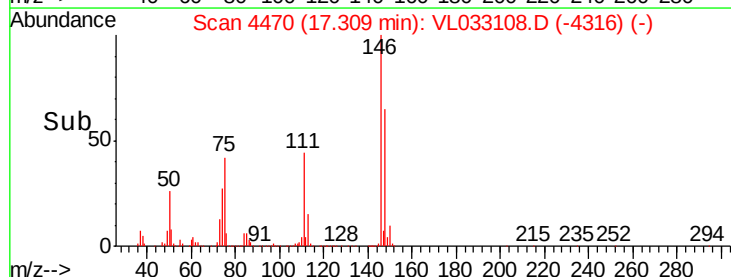
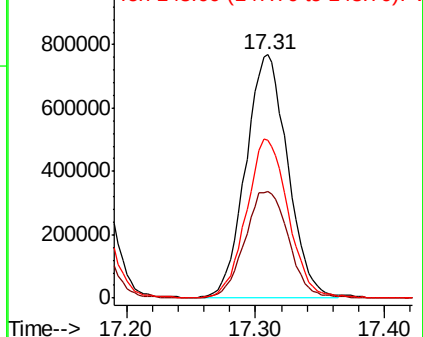


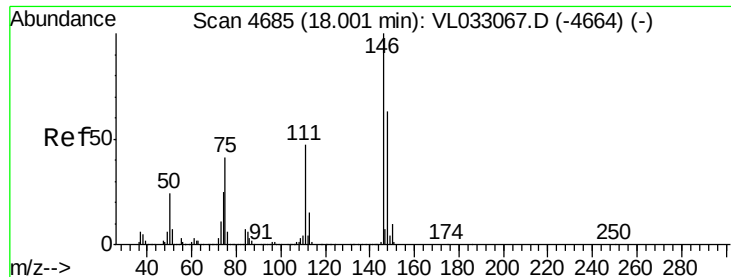
Abundance

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





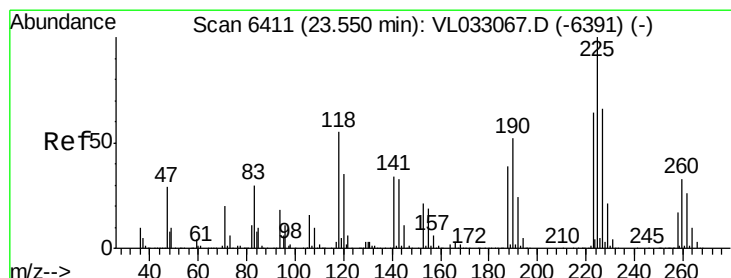
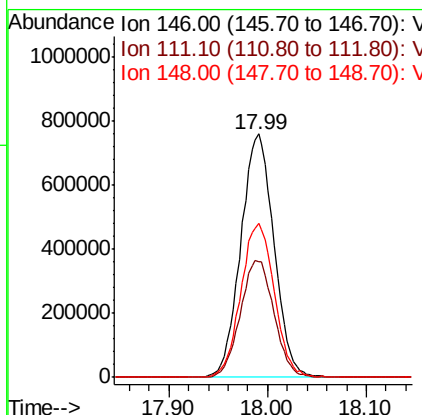
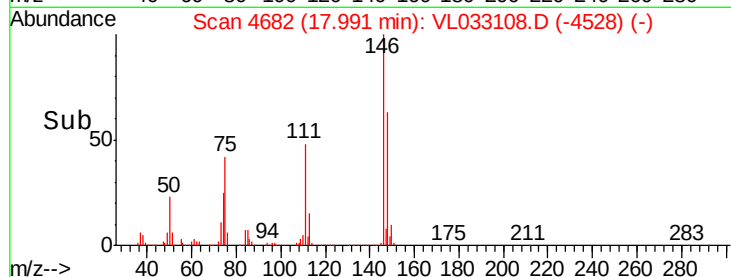
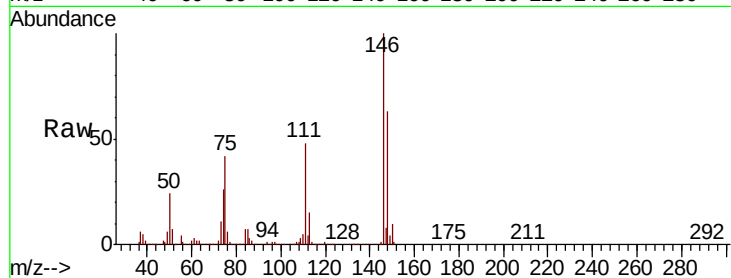
#77  
 1,2-Dichlorobenzene  
 Concen: 9.122 ppbv  
 RT: 17.99 min Scan# 4682  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampled :  
 IDOC-1

Tgt Ion:146 Resp: 1770701  
 Ion Ratio Lower Upper  
 146 100  
 111 48.7 24.4 73.2  
 148 63.7 32.3 96.9

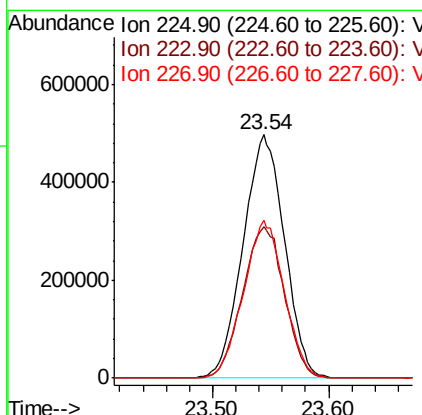
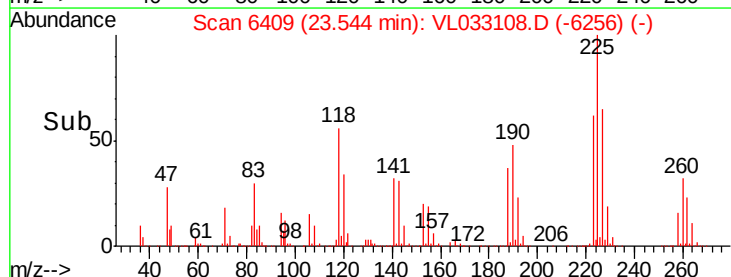
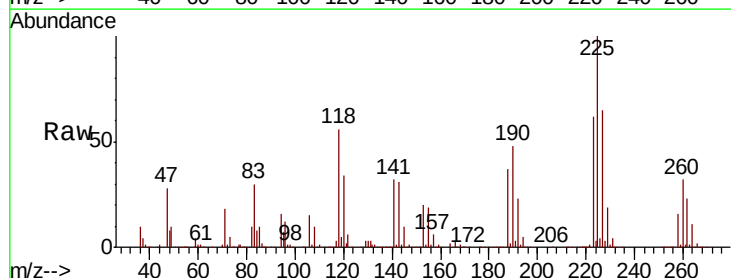
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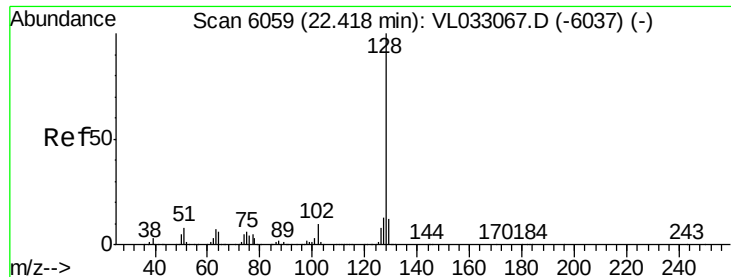
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 8.270 ppbv  
 RT: 23.54 min Scan# 6409  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Tgt Ion:225 Resp: 1232915  
 Ion Ratio Lower Upper  
 225 100  
 223 62.9 51.0 76.6  
 227 63.8 51.0 76.4





#79

Naphthalene

Concen: 11.882 ppbv

RT: 22.42 min Scan# 6058

Delta R.T. -0.01 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

Instrument :

MSVOA\_L

ClientSampleId :

IDOC-1

Tgt Ion:128 Resp: 3664650

Ion Ratio Lower Upper

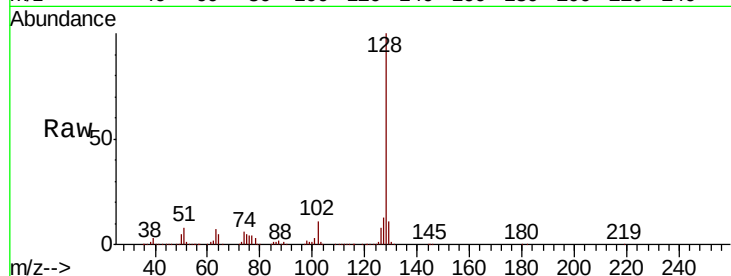
128 100

127 13.4 11.0 16.6

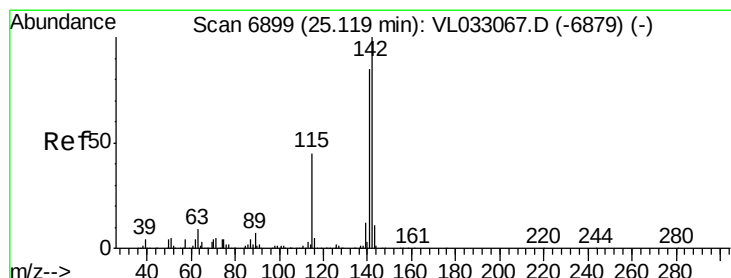
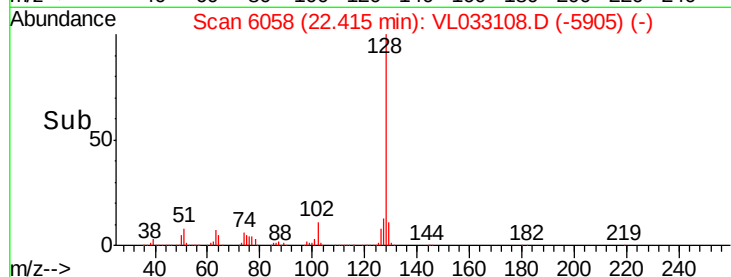
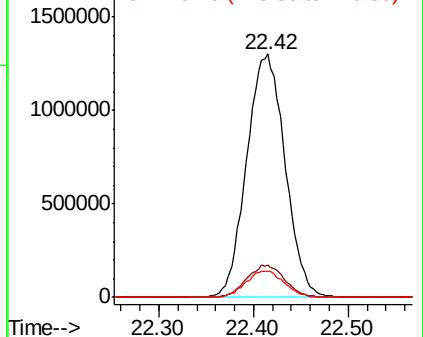
129 10.8 9.4 14.0

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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: 8.648 ppbv

RT: 25.12 min Scan# 6898

Delta R.T. -0.00 min

Lab File: VL033108.D

Acq: 17 Jan 2019 1:55

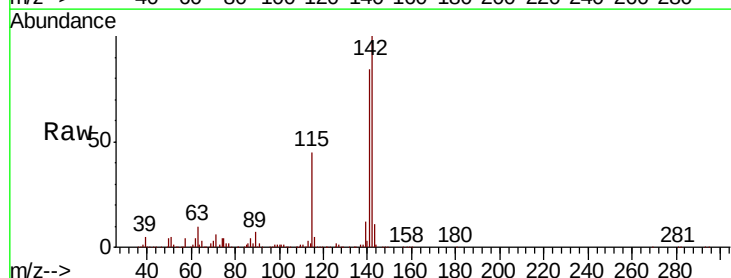
Tgt Ion:142 Resp: 809412

Ion Ratio Lower Upper

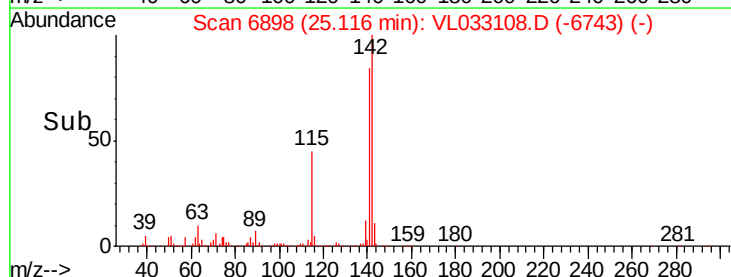
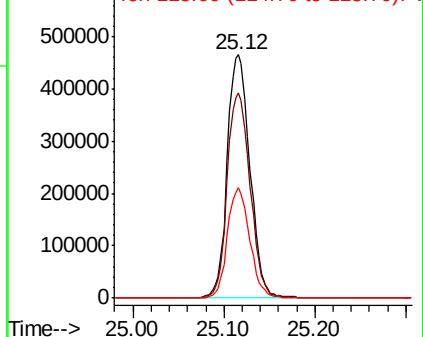
142 100

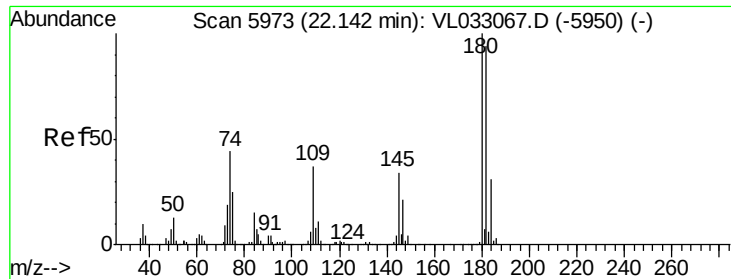
141 85.4 68.6 103.0

115 44.8 35.6 53.4



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: 11.380 ppbv  
 RT: 22.14 min Scan# 5971  
 Delta R.T. -0.01 min  
 Lab File: VL033108.D  
 Acq: 17 Jan 2019 1:55

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IDOC-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.8  | 76.1  | 114.1 |
| 184     | 30.3  | 24.6  | 37.0  |

Manual Integrations  
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