

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL092718\  
 Data File : VL032580.D  
 Acq On : 28 Sep 2018 12:31  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

MMDadoda  
 10/1/2018 11:58:05 AM

Quant Time: Sep 29 00:06:19 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL092418AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Sep 2  
 QLast Update : Tue Sep 25 05:17:15 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.79  | 49   | 1349639  | 10.00 | ppbv  | -0.02    |
| 33) 1,4-Difluorobenzene | 7.33  | 114  | 3124931  | 10.00 | ppbv  | -0.02    |
| 55) Chlorobenzene-d5    | 12.27 | 117  | 3398546  | 10.00 | ppbv  | -0.02    |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.61  | 95    | 2413880  | 9.42     | ppbv | -0.02  |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 94.20% |

| Target Compounds               |      |     |         |               | Ovalue |
|--------------------------------|------|-----|---------|---------------|--------|
| 2) Dichlorodifluoromethane     | 3.09 | 85  | 1075693 | 8.617 ppbv    | 99     |
| 3) Chlorodifluoromethane       | 3.03 | 51  | 1077103 | 9.597 ppbv    | 99     |
| 4) Chloromethane               | 3.19 | 50  | 597573  | 9.131 ppbv    | 100    |
| 5) Vinyl Chloride              | 3.31 | 62  | 597138  | 9.030 ppbv    | 97     |
| 6) Bromomethane                | 3.53 | 94  | 353872  | 9.785 ppbv    | 99     |
| 7) Chloroethane                | 3.62 | 64  | 221027  | 9.381 ppbv    | 100    |
| 8) Dichlorotetrafluoroethane   | 3.24 | 85  | 1360806 | 9.977 ppbv    | 99     |
| 9) Propene                     | 3.05 | 41  | 527524  | 10.833 ppbv   | 99     |
| 10) Heptane                    | 8.28 | 43  | 1783640 | 9.986 ppbv    | 96     |
| 11) Trichlorofluoromethane     | 4.03 | 101 | 1474512 | 9.936 ppbv    | 97     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.58 | 101 | 1391347 | 11.470 ppbv   | 97     |
| 13) Ethanol                    | 3.67 | 45  | 141947  | 9.698 ppbv    | 98     |
| 14) Bromoethene                | 3.81 | 108 | 442585  | 10.282 ppbv   | 99     |
| 15) Acetone                    | 3.92 | 43  | 1217878 | 10.280 ppbv   | 100    |
| 16) 1,3-Butadiene              | 3.38 | 39  | 459639  | 9.567 ppbv    | 98     |
| 17) tert-Butyl alcohol         | 4.38 | 59  | 205642  | 13.814 ppbv # | 100    |
| 18) 1,1-Dichloroethene         | 4.38 | 96  | 661758  | 11.649 ppbv   | 97     |
| 19) Isopropyl Alcohol          | 4.04 | 45  | 820401  | 9.942 ppbv    | 99     |
| 20) Methylene Chloride         | 4.43 | 84  | 595962  | 10.388 ppbv   | 97     |
| 21) Allyl Chloride             | 4.50 | 41  | 1137972 | 11.753 ppbv   | 98     |
| 22) trans-1,2-Dichloroethene   | 4.99 | 96  | 588865  | 10.998 ppbv   | 96     |
| 23) Vinyl Acetate              | 5.18 | 43  | 1989839 | 9.505 ppbv    | 98     |
| 24) 1,1-Dichloroethane         | 5.12 | 63  | 1547832 | 8.879 ppbv    | 99     |
| 25) Ethyl Acetate              | 5.80 | 43  | 2751696 | 9.572 ppbv    | 100    |
| 26) Hexane                     | 5.81 | 57  | 1300230 | 10.014 ppbv   | 99     |
| 27) Carbon Disulfide           | 4.64 | 76  | 1593152 | 11.413 ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.14 | 73  | 1660386 | 10.265 ppbv   | 98     |
| 29) Chloroform                 | 5.88 | 83  | 1992711 | 10.002 ppbv   | 99     |
| 30) Cyclohexane                | 7.28 | 84  | 1119426 | 10.588 ppbv   | 97     |
| 31) cis-1,2-Dichloroethene     | 5.67 | 61  | 1281545 | 10.363 ppbv   | 99     |
| 32) 1,1,1-Trichloroethane      | 6.65 | 97  | 2059458 | 9.700 ppbv    | 99     |
| 34) 2-Butanone                 | 5.35 | 43  | 1849266 | 9.938 ppbv    | 99     |
| 35) Carbon Tetrachloride       | 7.17 | 117 | 2129859 | 9.809 ppbv    | 97     |
| 36) Benzene                    | 7.04 | 78  | 2621859 | 10.382 ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.44 | 62  | 1602792 | 10.531 ppbv   | 98     |
| 38) Trichloroethene            | 7.99 | 130 | 1019004 | 10.542 ppbv   | 99     |
| 39) 1,2-Dichloropropane        | 7.77 | 63  | 1100755 | 9.672 ppbv    | 97     |
| 40) 1,4-Dioxane                | 7.99 | 88  | 344772  | 9.880 ppbv #  | 1      |
| 41) Tetrahydrofuran            | 6.18 | 42  | 1059739 | 10.482 ppbv   | 96     |
| 42) Bromodichloromethane       | 7.95 | 83  | 2317200 | 10.162 ppbv   | 99     |
| 43) Methyl Methacrylate        | 8.17 | 69  | 1129636 | 10.708 ppbv   | 97     |

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Instrument :  
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 ClientSampleId :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

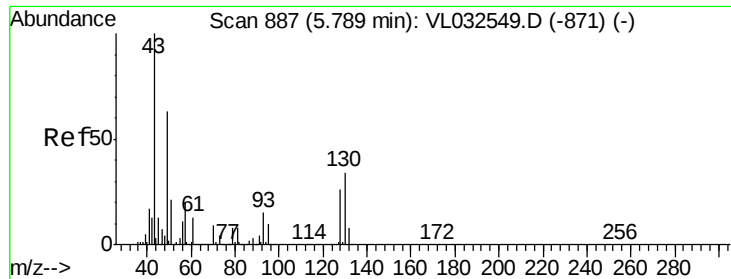
MMDadoda  
 10/1/2018 11:58:05 AM

Quant Time: Sep 29 00:06:19 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL092418AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Sep 2  
 QLast Update : Tue Sep 25 05:17:15 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 8.03  | 57   | 4868793  | 9.865  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.45  | 75   | 1543490  | 11.762 | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 8.87  | 75   | 1610038  | 10.460 | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 9.65  | 97   | 1222343  | 9.670  | ppbv   | 99       |
| 48) Dibromochloromethane      | 10.49 | 129  | 2053982  | 10.334 | ppbv   | 100      |
| 49) Bromoform                 | 13.24 | 173  | 1575734  | 10.375 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.90  | 43   | 2767526  | 9.461  | ppbv   | 99       |
| 51) 2-Hexanone                | 10.31 | 43   | 2512507  | 10.386 | ppbv   | 100      |
| 52) Tetrachloroethene         | 11.41 | 164  | 859228   | 9.772  | ppbv   | 99       |
| 53) Toluene                   | 9.98  | 91   | 3385663  | 11.001 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.80 | 107  | 1848171  | 10.280 | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.32 | 131  | 1374750  | 8.999  | ppbv # | 61       |
| 57) Chlorobenzene             | 12.34 | 112  | 2374803  | 8.674  | ppbv   | 97       |
| 58) Ethyl Benzene             | 12.90 | 91   | 4228551  | 10.257 | ppbv   | 99       |
| 59) m/p-Xylene                | 13.18 | 91   | 7063292m | 19.257 | ppbv   |          |
| 60) o-Xylene                  | 13.89 | 91   | 3468612  | 9.713  | ppbv   | 100      |
| 61) Styrene                   | 13.72 | 104  | 2502030  | 10.711 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.86 | 105  | 4822305  | 9.549  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.87 | 83   | 2572504  | 8.109  | ppbv   | 99       |
| 64) n-propylbenzene           | 15.76 | 120  | 1240147  | 9.558  | ppbv   | 96       |
| 65) tert-Butylbenzene         | 16.95 | 119  | 4073597  | 9.411  | ppbv   | 98       |
| 66) Benzyl Chloride           | 17.19 | 91   | 2456890  | 9.848  | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.49 | 105  | 6012423  | 9.342  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.85 | 119  | 4774336m | 9.605  | ppbv   |          |
| 70) n-Butylbenzene            | 18.75 | 91   | 5168562  | 9.519  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.65 | 91   | 3777739  | 9.821  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 16.04 | 105  | 3929336  | 10.137 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.19 | 105  | 3736199  | 9.919  | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.96 | 105  | 3782155  | 9.325  | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 17.20 | 146  | 2075534  | 8.293  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.34 | 146  | 2040672  | 8.905  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 18.03 | 146  | 2049587  | 8.708  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.58 | 225  | 1186768  | 13.435 | ppbv   | 99       |
| 79) Naphthalene               | 22.45 | 128  | 3033376  | 10.370 | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.14 | 142  | 916710   | 13.348 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 22.18 | 180  | 1446674  | 9.649  | ppbv   | 100      |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.79 min Scan# 888

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 49 Resp: 1349639

Ion Ratio Lower Upper

49 100

128 44.0 20.7 62.1

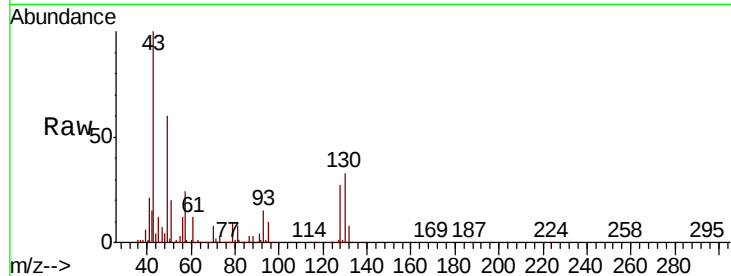
130 55.3 26.6 79.7

Manual Integrations

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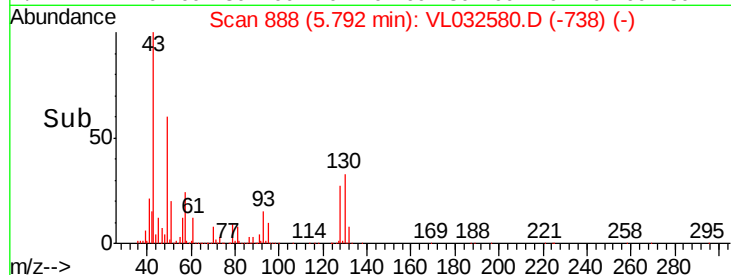


Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

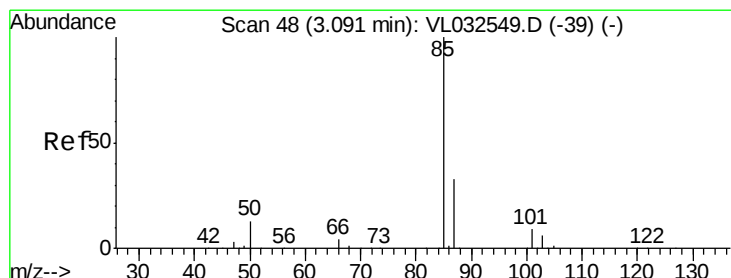
Ion 130.00 (129.70 to 130.70): V

Time-->



5.79

Time-->



#2

Dichlorodifluoromethane

Concen: 8.617 ppbv

RT: 3.09 min Scan# 49

Delta R.T. -0.01 min

Lab File: VL032580.D

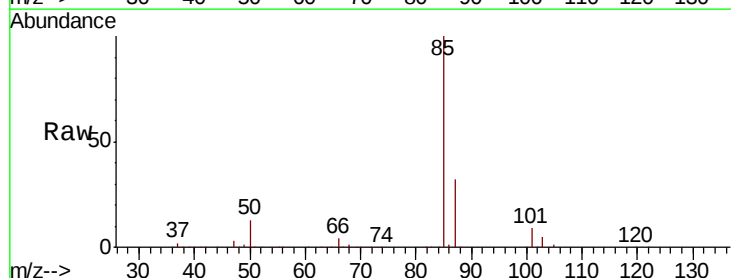
Acq: 28 Sep 2018 12:31

Tgt Ion: 85 Resp: 1075693

Ion Ratio Lower Upper

85 100

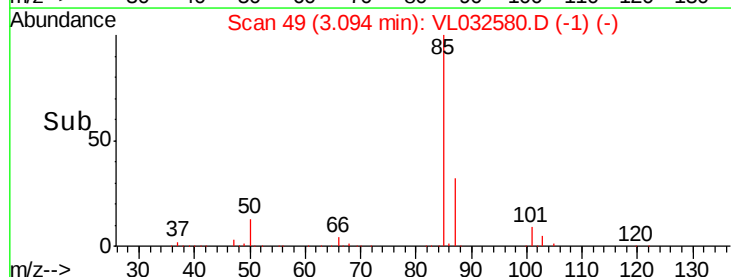
87 32.2 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

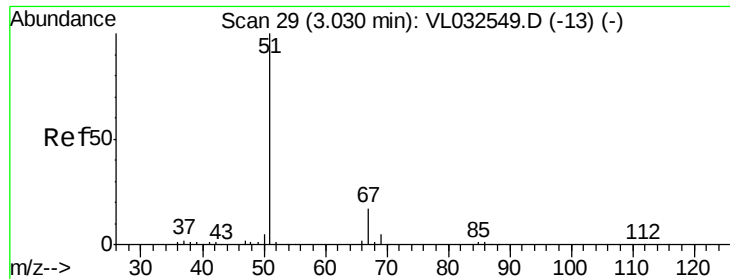
Ion 87.00 (86.70 to 87.70): VL0

Time-->



3.09

Time-->



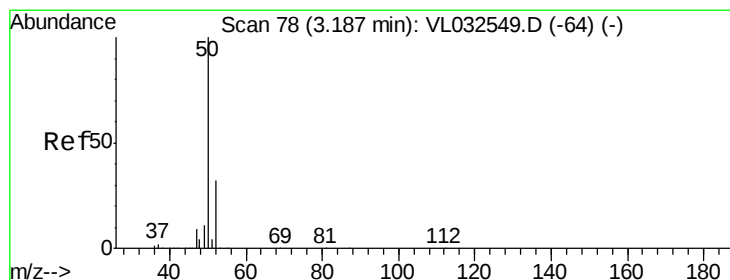
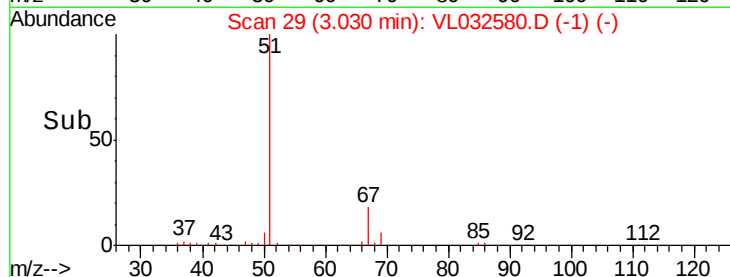
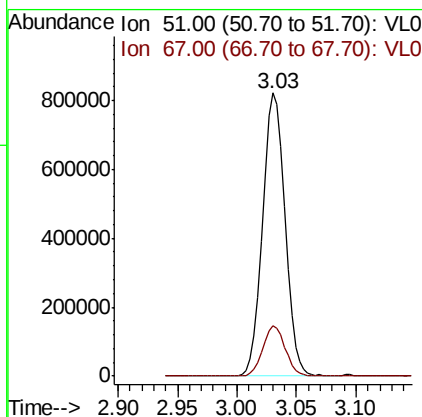
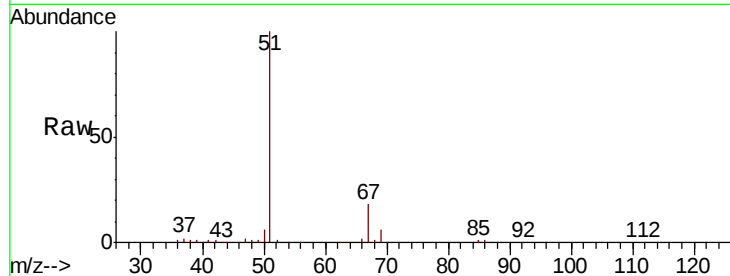
#3  
Chlorodifluoromethane  
Concen: 9.597 ppbv  
RT: 3.03 min Scan# 29  
Delta R.T. -0.01 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 51 Resp: 1077103  
Ion Ratio Lower Upper  
51 100  
67 17.9 13.8 20.8

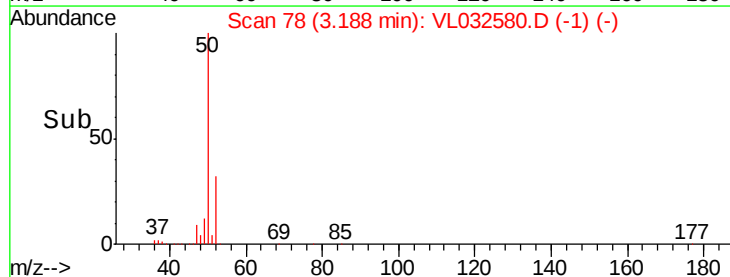
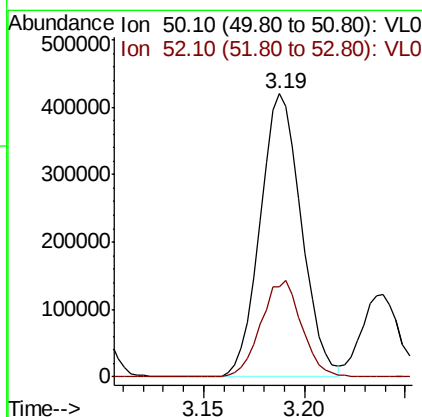
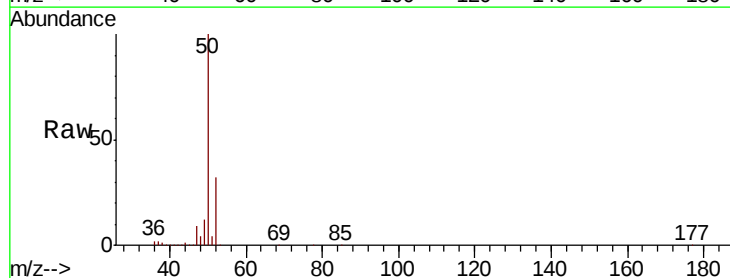
Manual Integrations  
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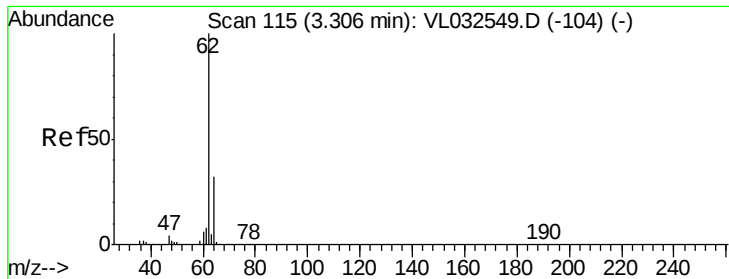
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10/1/2018 11:58:05 AM



#4  
Chloromethane  
Concen: 9.131 ppbv  
RT: 3.19 min Scan# 78  
Delta R.T. -0.01 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Tgt Ion: 50 Resp: 597573  
Ion Ratio Lower Upper  
50 100  
52 31.9 25.6 38.4





#5

Vinyl Chloride

Concen: 9.030 ppbv

RT: 3.31 min Scan# 116

Delta R.T. -0.01 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 597138

Ion Ratio Lower Upper

62 100

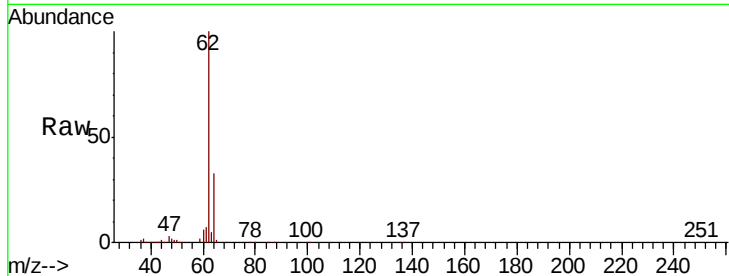
64 32.7 25.0 37.6

Manual Integrations

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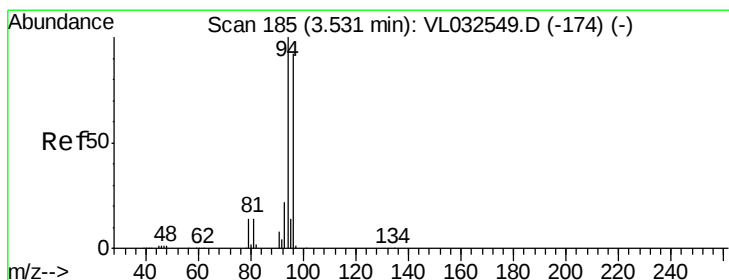
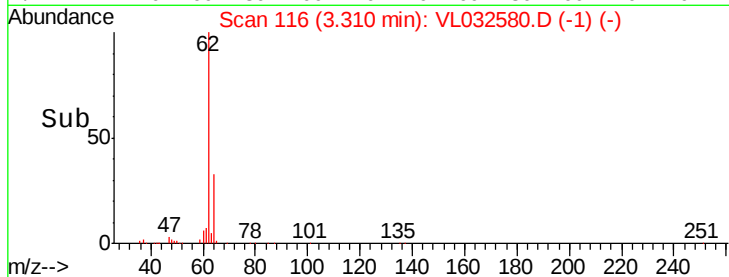
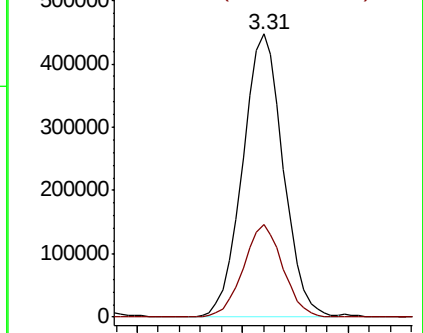
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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 9.785 ppbv

RT: 3.53 min Scan# 185

Delta R.T. -0.02 min

Lab File: VL032580.D

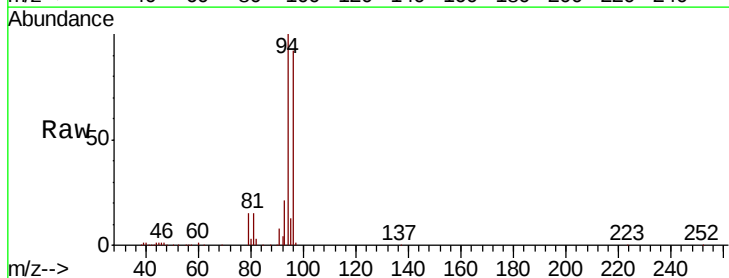
Acq: 28 Sep 2018 12:31

Tgt Ion: 94 Resp: 353872

Ion Ratio Lower Upper

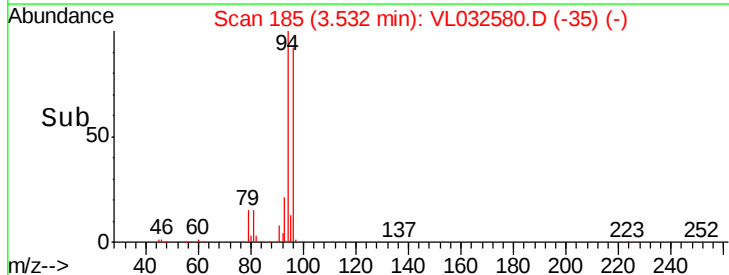
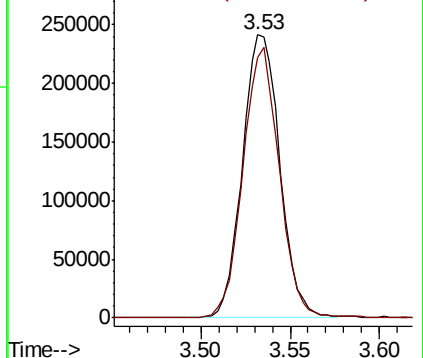
94 100

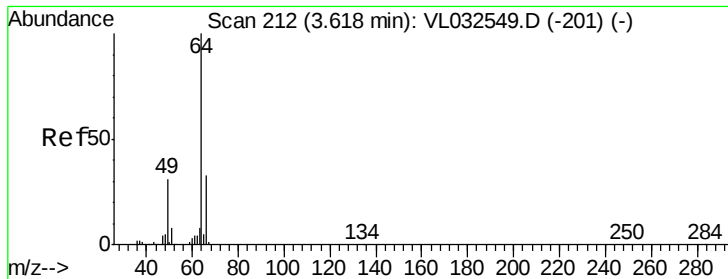
96 91.9 72.8 109.2



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 9.381 ppbv

RT: 3.62 min Scan# 212

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 64 Resp: 221027

Ion Ratio Lower Upper

64 100

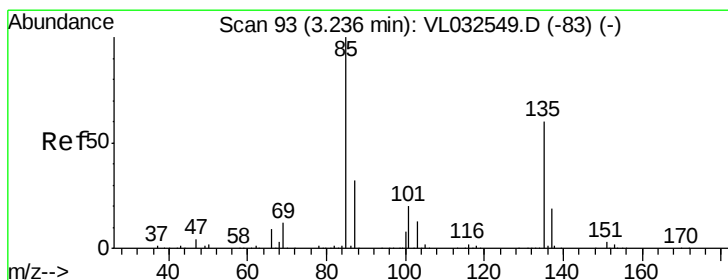
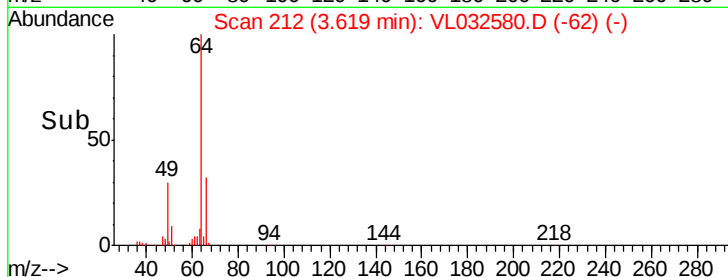
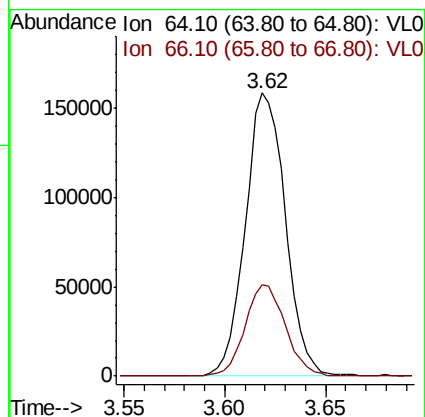
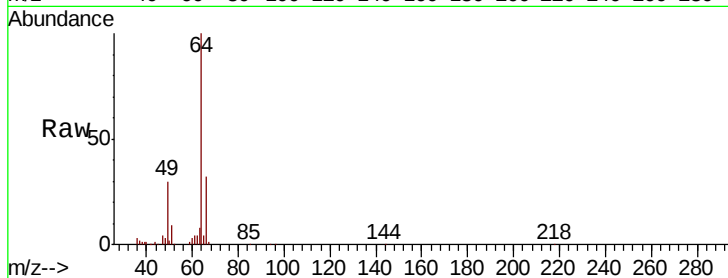
66 32.2 25.8 38.6

Manual Integrations

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#8

Dichlorotetrafluoroethane

Concen: 9.977 ppbv

RT: 3.24 min Scan# 94

Delta R.T. -0.01 min

Lab File: VL032580.D

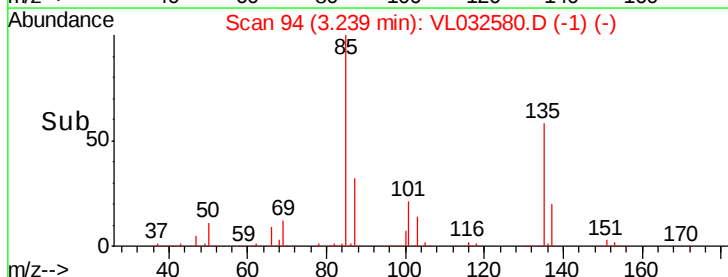
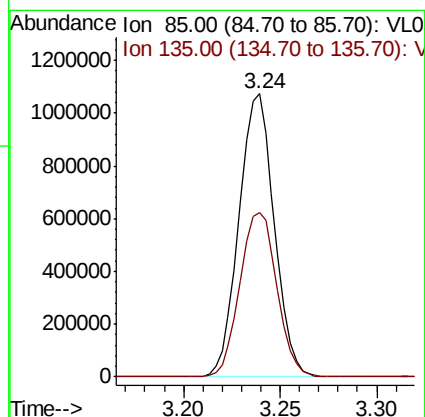
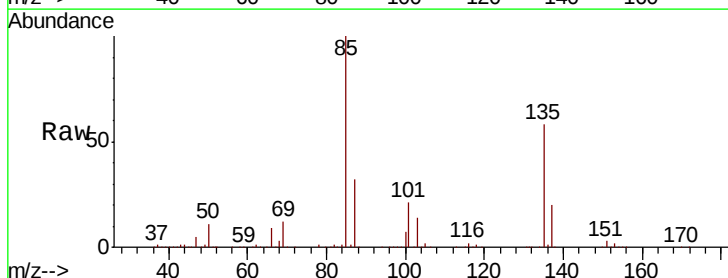
Acq: 28 Sep 2018 12:31

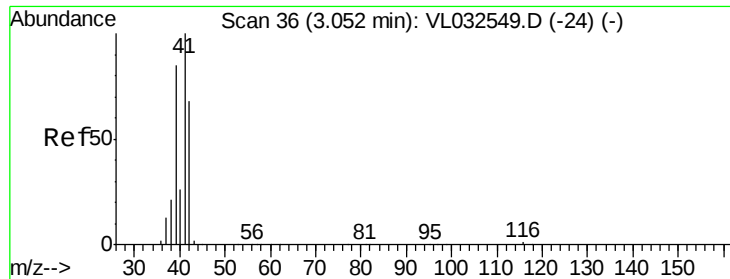
Tgt Ion: 85 Resp: 1360806

Ion Ratio Lower Upper

85 100

135 61.3 48.6 72.8





#9

Propene

Concen: 10.833 ppbv

RT: 3.05 min Scan# 36

Delta R.T. -0.01 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 41 Resp: 527524

Ion Ratio Lower Upper

41 100

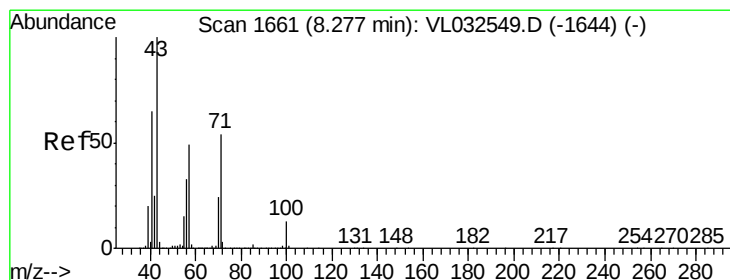
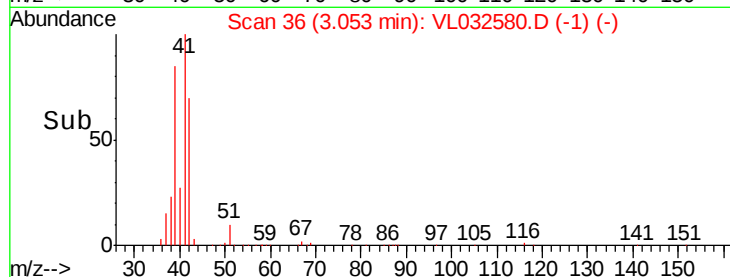
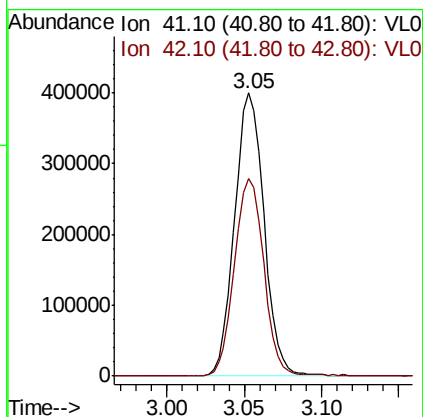
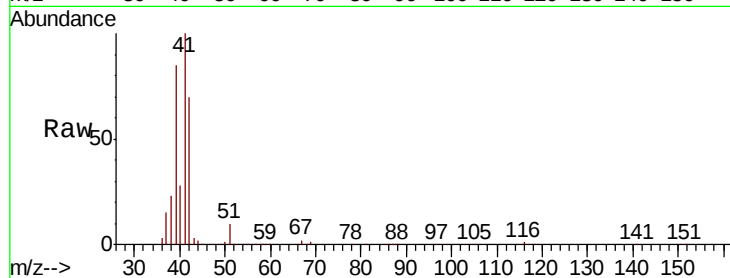
42 70.3 56.6 84.8

Manual Integrations

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10/1/2018 11:58:05 AM



#10

Heptane

Concen: 9.986 ppbv

RT: 8.28 min Scan# 1661

Delta R.T. -0.02 min

Lab File: VL032580.D

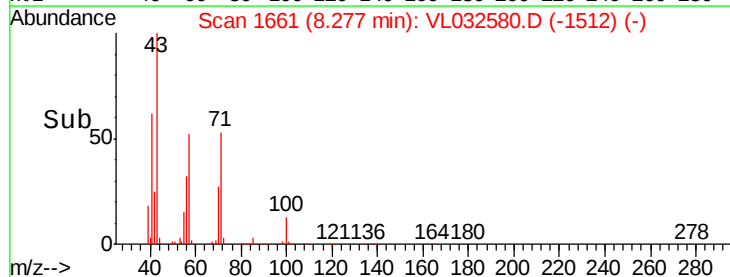
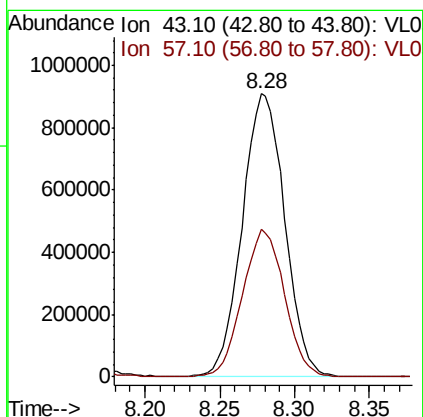
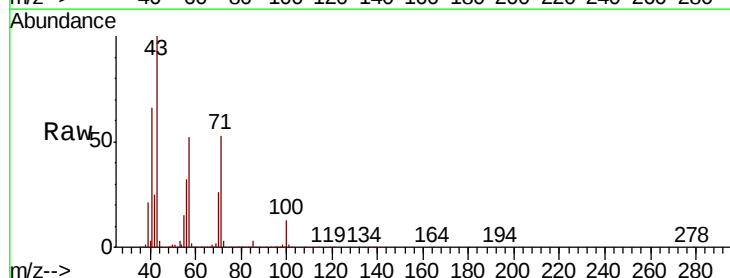
Acq: 28 Sep 2018 12:31

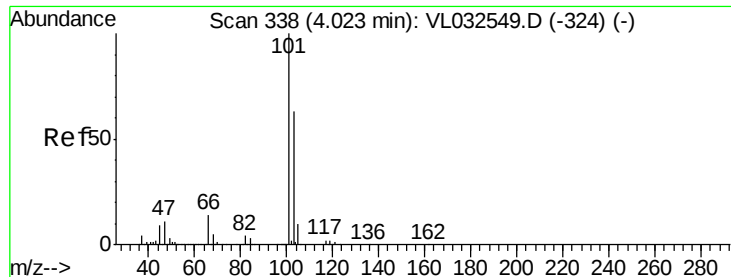
Tgt Ion: 43 Resp: 1783640

Ion Ratio Lower Upper

43 100

57 51.9 39.6 59.4





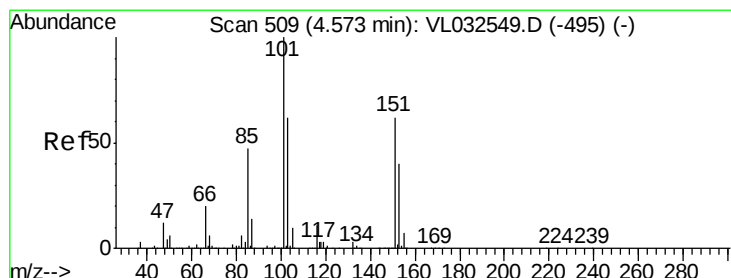
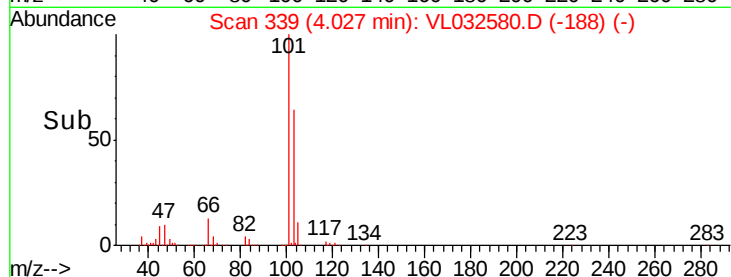
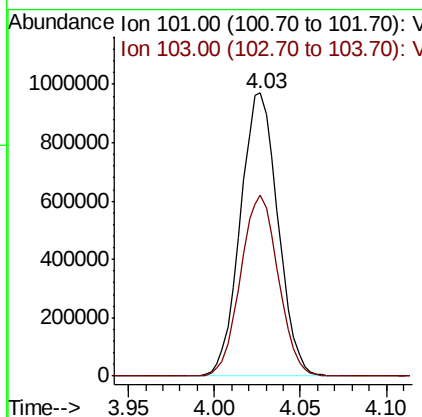
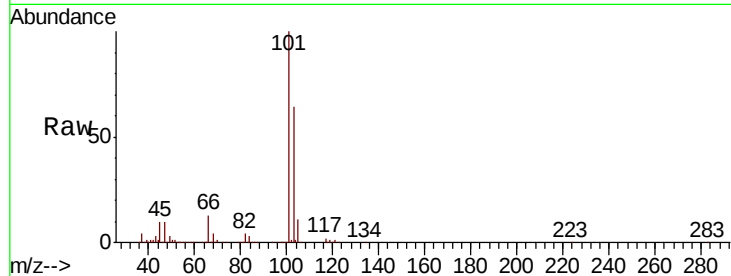
#11  
 Trichlorofluoromethane  
 Concen: 9.936 ppbv  
 RT: 4.03 min Scan# 339  
 Delta R.T. -0.01 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion:101 Resp: 1474512  
 Ion Ratio Lower Upper  
 101 100  
 103 63.7 52.8 79.2

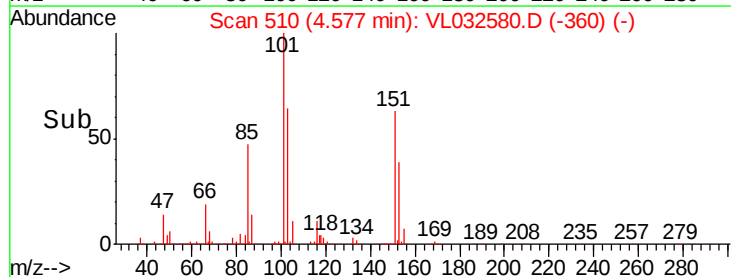
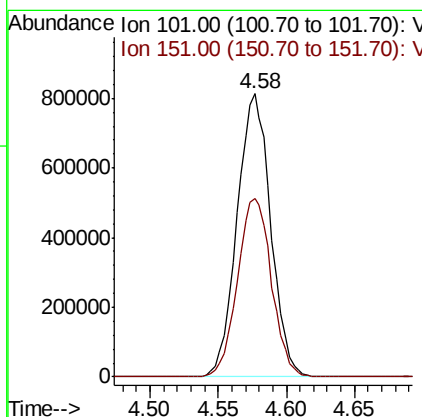
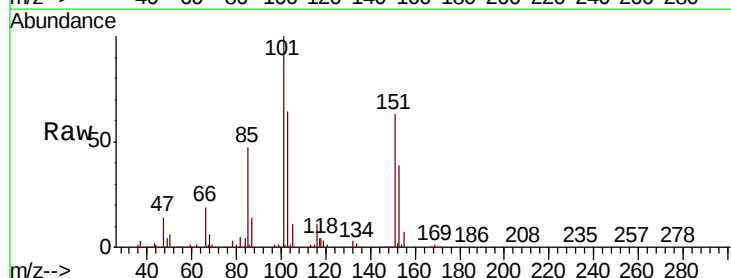
Manual Integrations  
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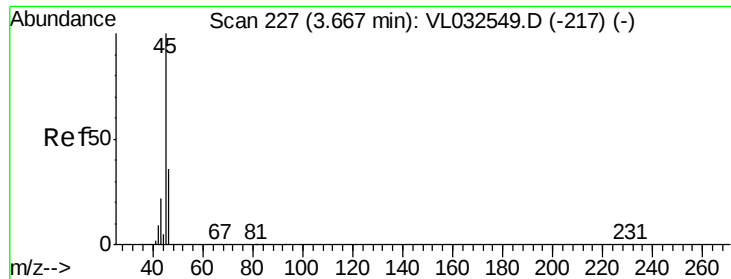
MMDadoda  
 10/1/2018 11:58:05 AM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 11.470 ppbv  
 RT: 4.58 min Scan# 510  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Tgt Ion:101 Resp: 1391347  
 Ion Ratio Lower Upper  
 101 100  
 151 63.6 52.6 78.8





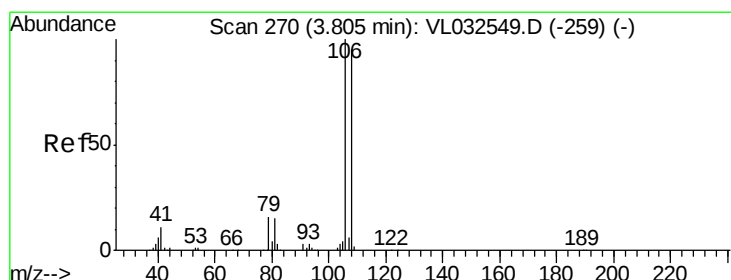
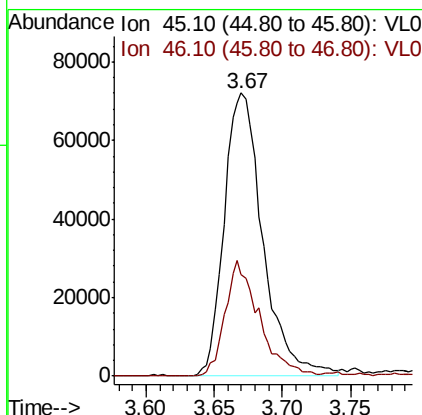
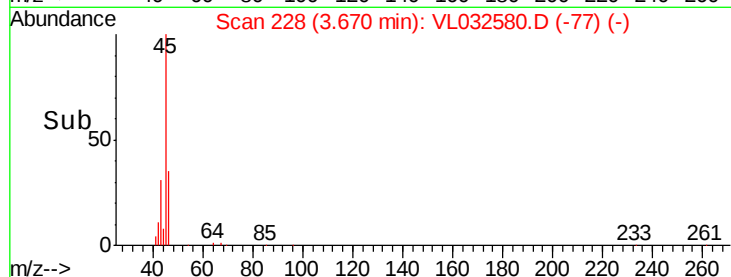
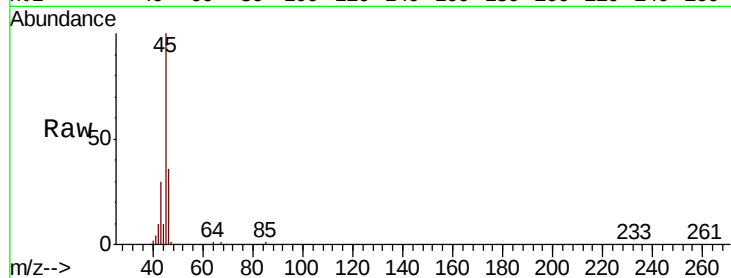
#13  
Ethanol  
Concen: 9.698 ppbv  
RT: 3.67 min Scan# 228  
Delta R.T. -0.01 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 45 Resp: 141947  
Ion Ratio Lower Upper  
45 100  
46 36.8 14.2 56.8

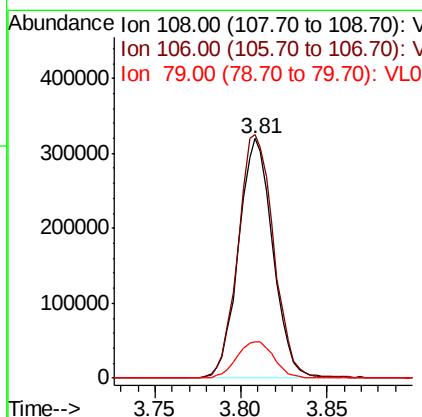
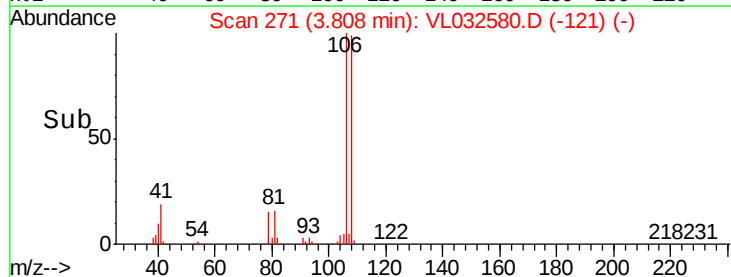
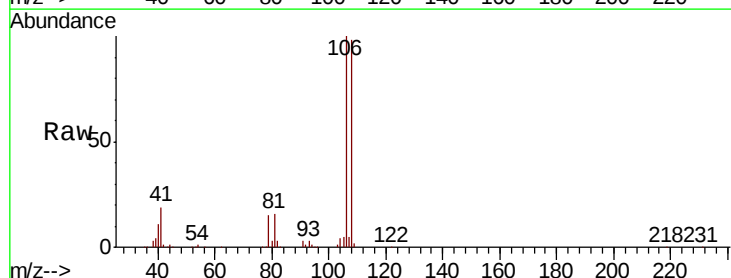
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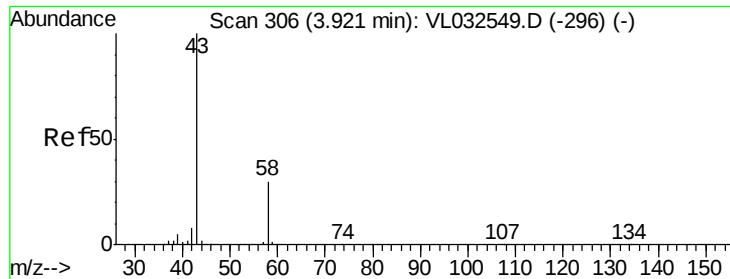
MMDadoda  
10/1/2018 11:58:05 AM



#14  
Bromoethene  
Concen: 10.282 ppbv  
RT: 3.81 min Scan# 271  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Tgt Ion: 108 Resp: 442585  
Ion Ratio Lower Upper  
108 100  
106 106.1 85.5 128.3  
79 16.6 13.0 19.6





#15

Acetone

Concen: 10.280 ppbv

RT: 3.92 min Scan# 306

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Tot Ion: 43 Resp: 1217878

Ion Ratio Lower Upper

43 100

58 28.1 22.6 33.8

Instrument :

MSVOA\_L

ClientSampleId :

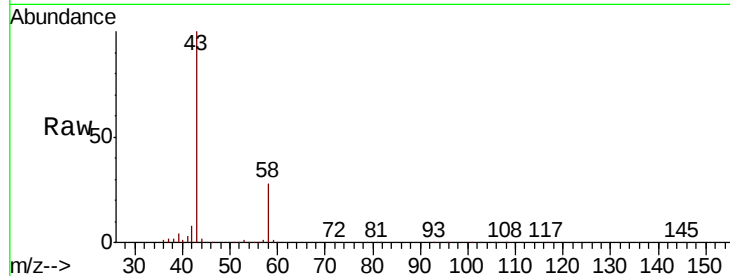
VSTDCCC010EC

Manual Integrations

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.92

800000

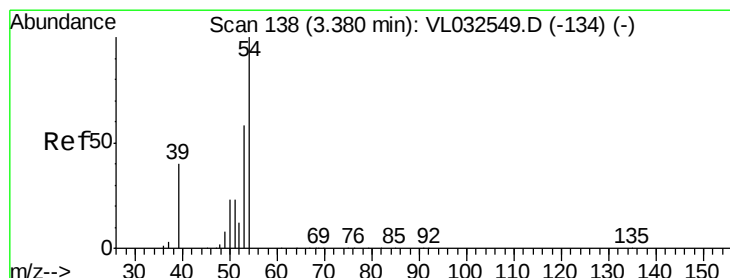
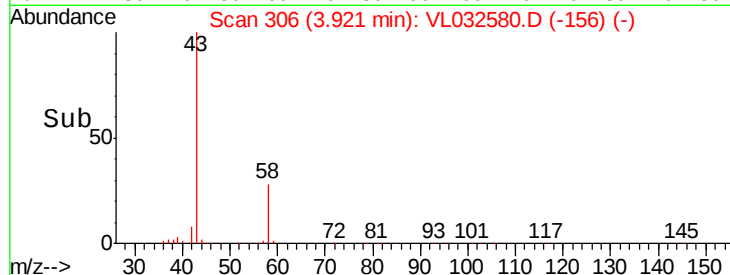
600000

400000

200000

0

Time-->



#16

1,3-Butadiene

Concen: 9.567 ppbv

RT: 3.38 min Scan# 138

Delta R.T. -0.02 min

Lab File: VL032580.D

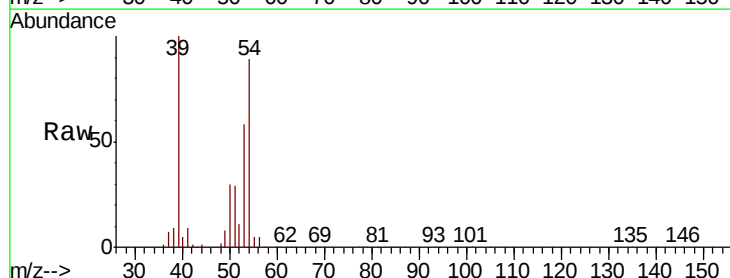
Acq: 28 Sep 2018 12:31

Tgt Ion: 39 Resp: 459639

Ion Ratio Lower Upper

39 100

54 102.9 80.8 121.2



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

3.38

400000

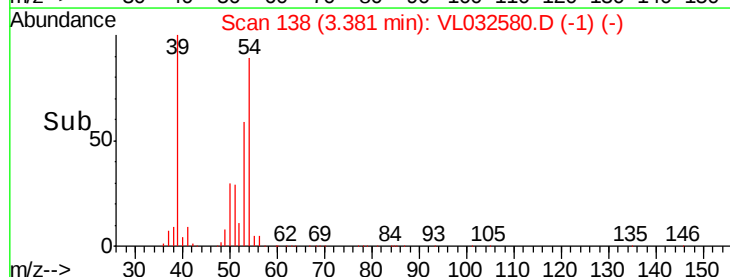
300000

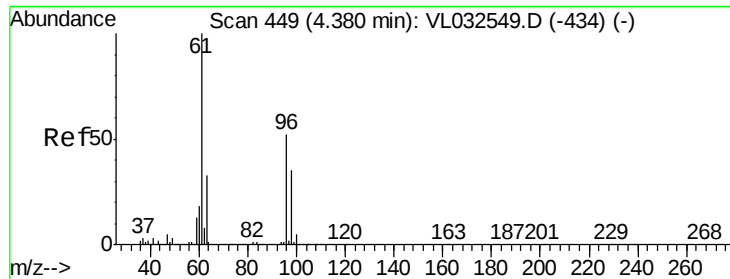
200000

100000

0

Time-->





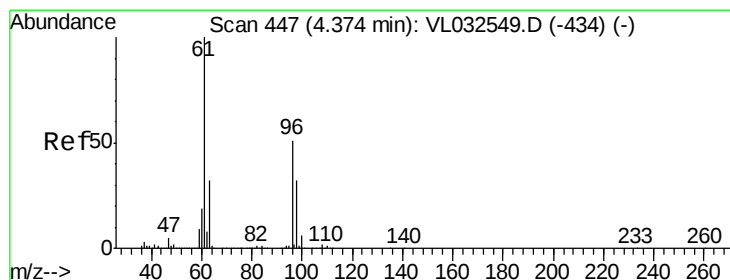
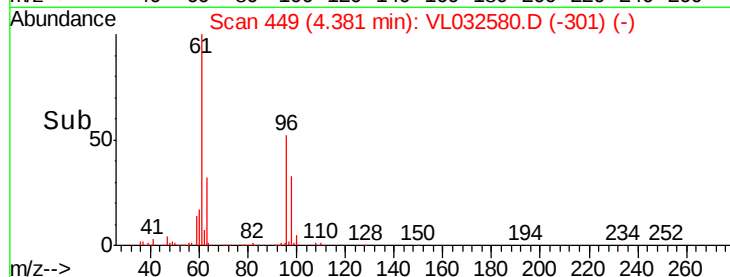
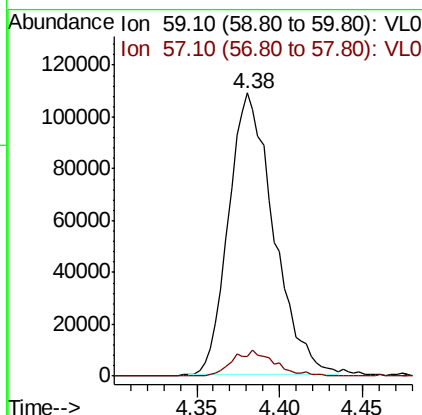
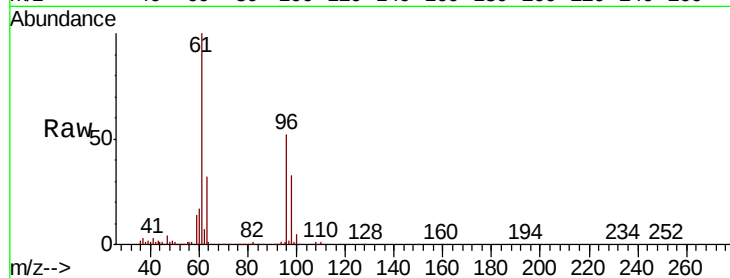
#17  
tert-Butyl alcohol  
Concen: 13.814 ppbv  
RT: 4.38 min Scan# 449  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 59 Resp: 205642  
Ion Ratio Lower Upper  
59 100  
57 8.8 0.0 0.0#

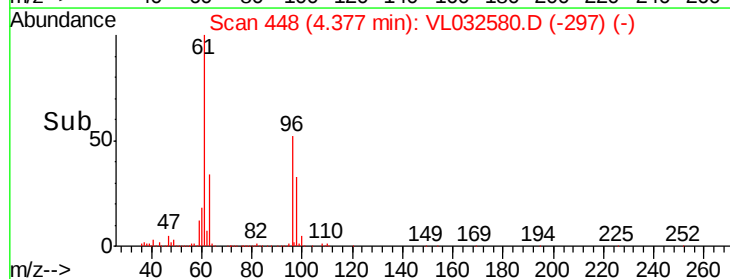
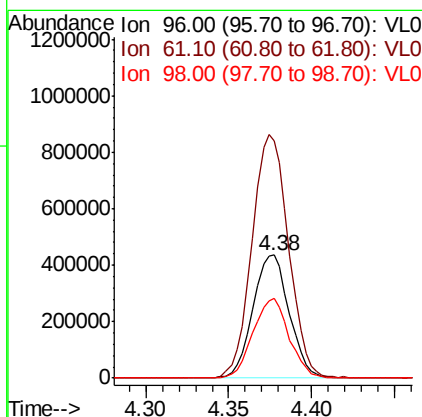
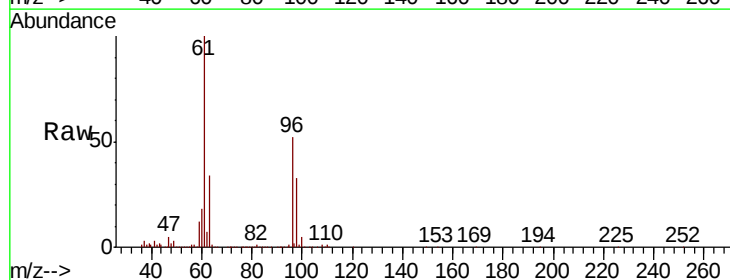
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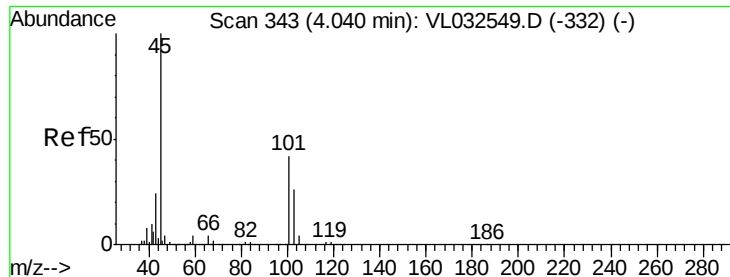
MMDadoda  
10/1/2018 11:58:05 AM



#18  
1,1-Dichloroethene  
Concen: 11.649 ppbv  
RT: 4.38 min Scan# 448  
Delta R.T. -0.01 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Tgt Ion: 96 Resp: 661758  
Ion Ratio Lower Upper  
96 100  
61 193.0 159.2 238.8  
98 64.5 51.0 76.4





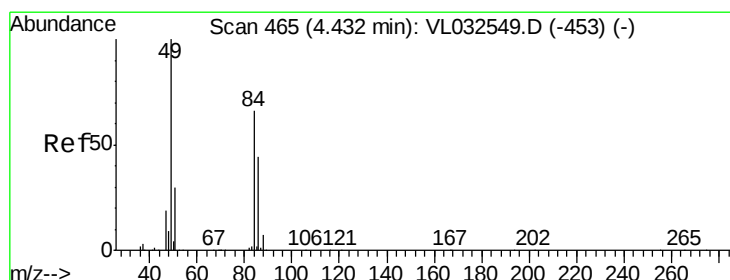
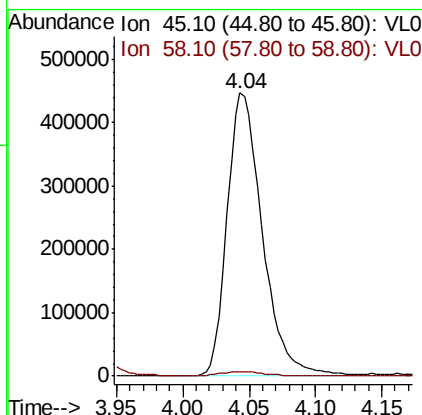
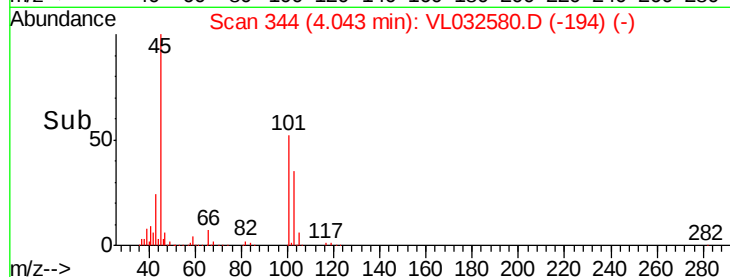
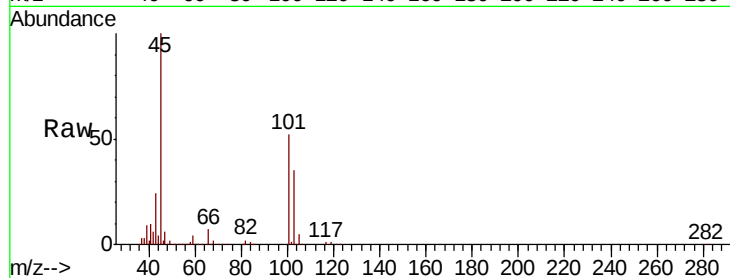
#19  
Isopropyl Alcohol  
Concen: 9.942 ppbv  
RT: 4.04 min Scan# 344  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 45 Resp: 820401  
Ion Ratio Lower Upper  
45 100  
58 2.3 2.0 3.0

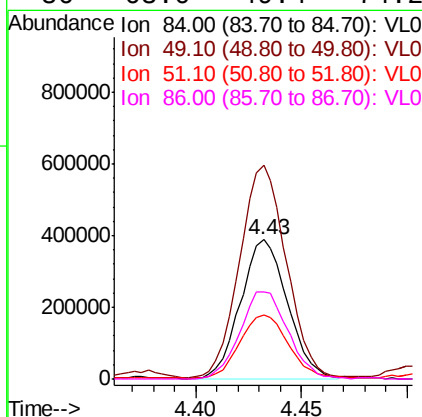
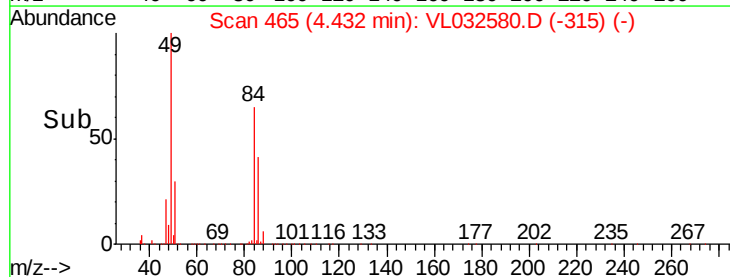
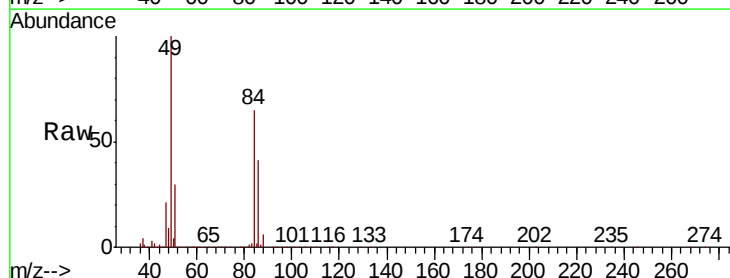
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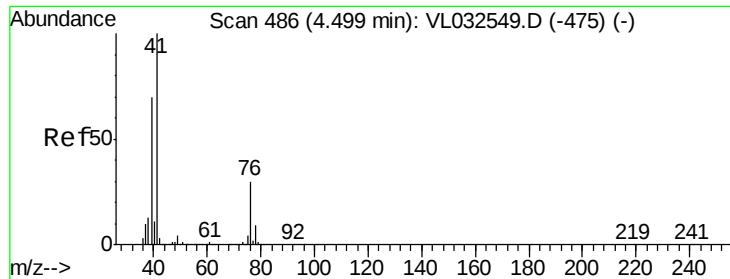
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#20  
Methylene Chloride  
Concen: 10.388 ppbv  
RT: 4.43 min Scan# 465  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Tgt Ion: 84 Resp: 595962  
Ion Ratio Lower Upper  
84 100  
49 153.0 119.1 178.7  
51 45.8 35.2 52.8  
86 63.0 49.4 74.2





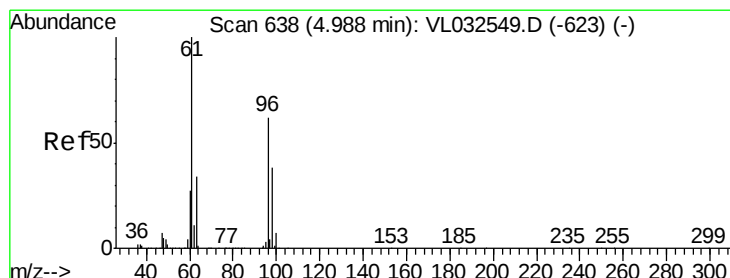
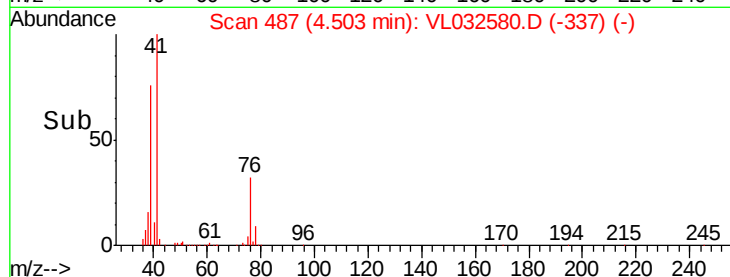
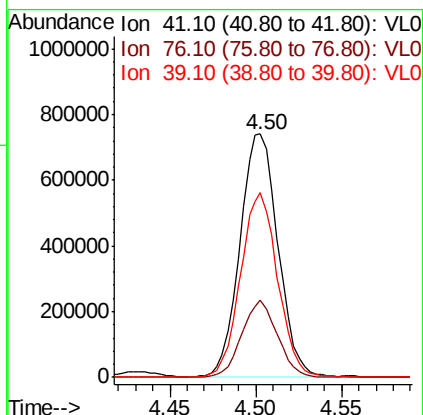
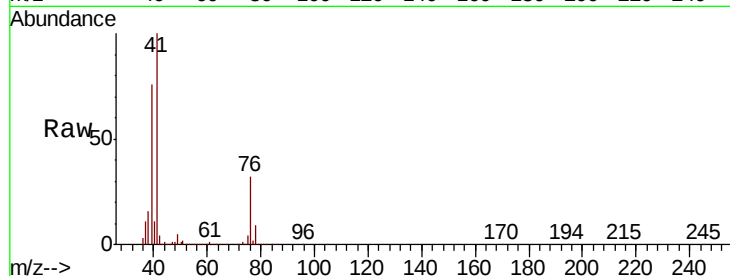
#21  
Allvl Chloride  
Concen: 11.753 ppbv  
RT: 4.50 min Scan# 487  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 41 Resp: 1137972  
Ion Ratio Lower Upper  
41 100  
76 29.7 23.6 35.4  
39 74.1 57.7 86.5

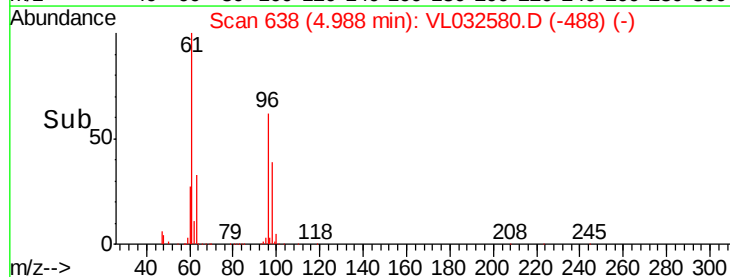
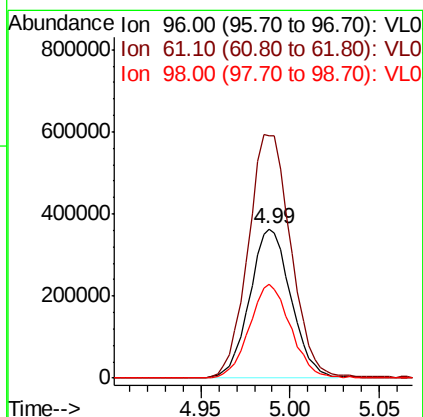
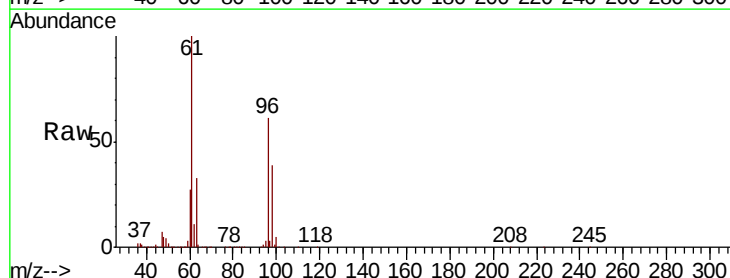
Manual Integrations  
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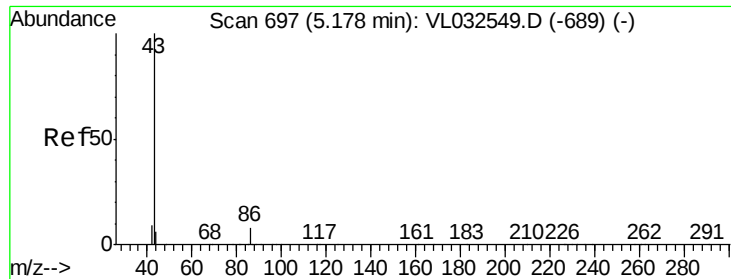
MMDadoda  
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#22  
trans-1,2-Dichloroethene  
Concen: 10.998 ppbv  
RT: 4.99 min Scan# 638  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Tgt Ion: 96 Resp: 588865  
Ion Ratio Lower Upper  
96 100  
61 162.7 136.2 204.4  
98 63.1 50.4 75.6





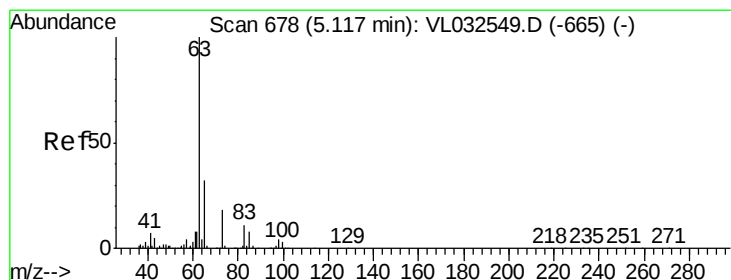
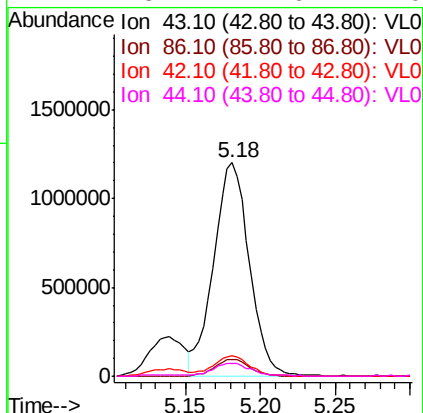
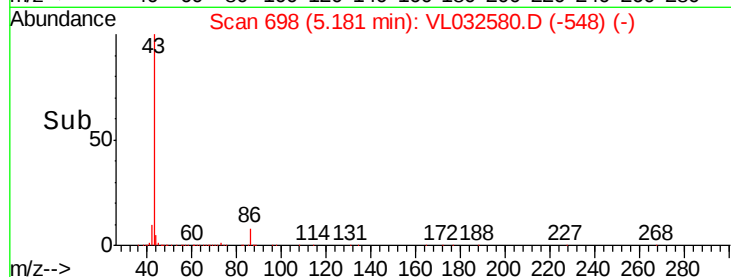
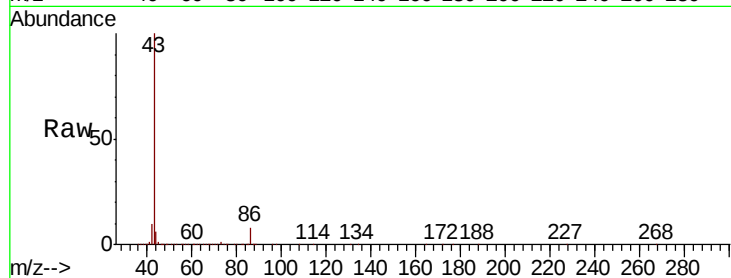
#23  
 Vinyl Acetate  
 Concen: 9.505 ppbv  
 RT: 5.18 min Scan# 698  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | 43    | Resp  | 1989839 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 43      | 100   |       |         |
| 86      | 7.7   | 5.9   | 8.9     |
| 42      | 9.6   | 6.9   | 10.3    |
| 44      | 5.4   | 4.6   | 7.0     |

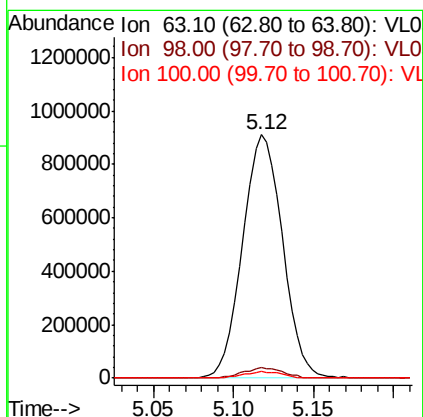
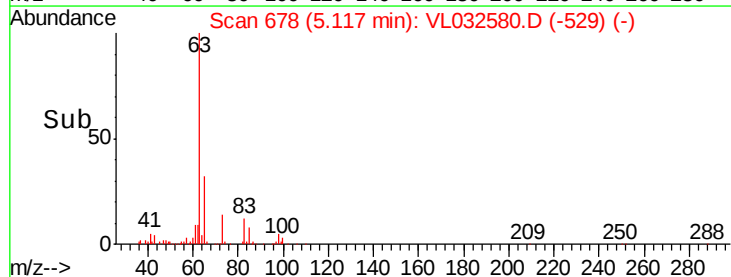
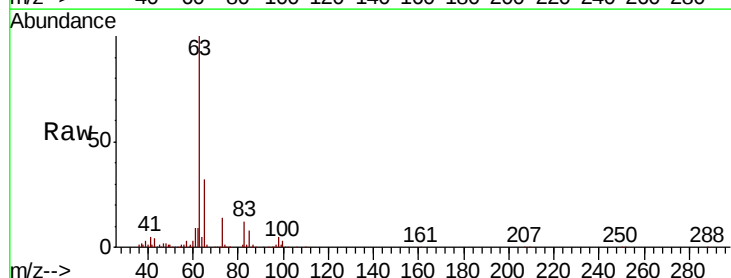
Manual Integrations  
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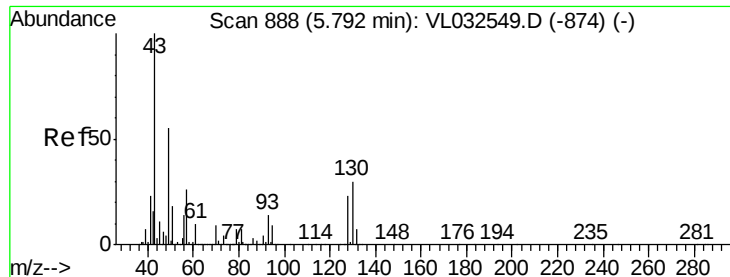
MMDadoda  
 10/1/2018 11:58:05 AM



#24  
 1,1-Dichloroethane  
 Concen: 8.879 ppbv  
 RT: 5.12 min Scan# 678  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

| Tgt Ion | 63    | Resp  | 1547832 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 63      | 100   |       |         |
| 98      | 4.5   | 2.1   | 6.5     |
| 100     | 2.6   | 1.5   | 4.4     |





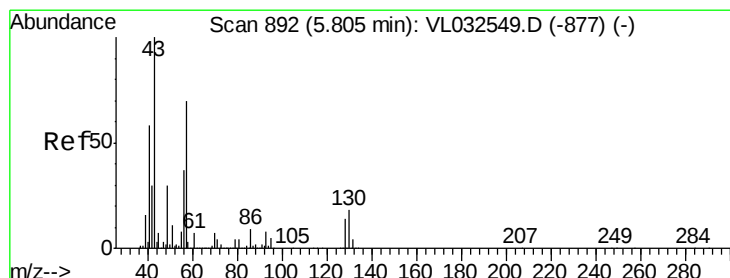
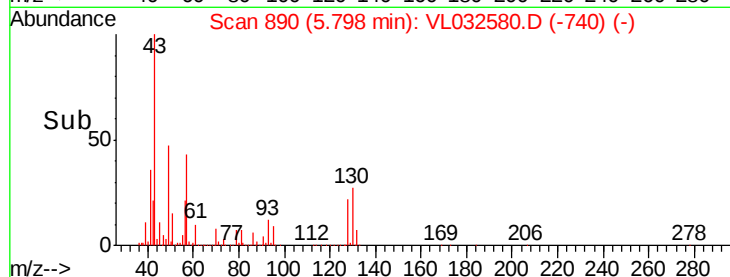
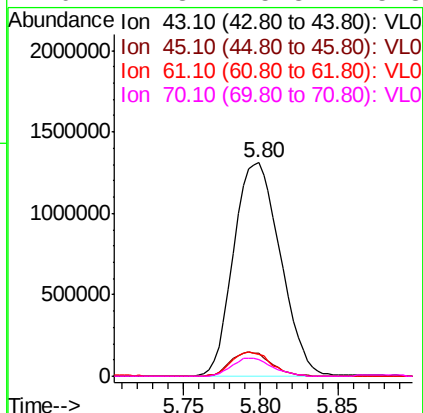
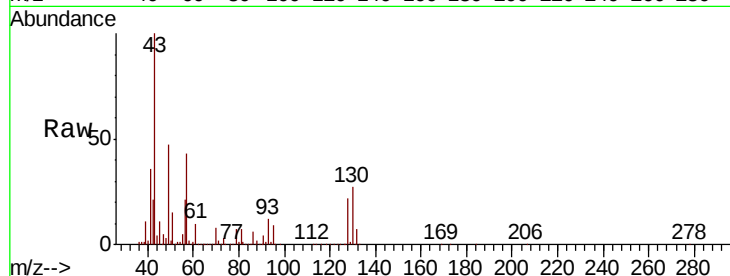
#25  
Ethyl Acetate  
Concen: 9.572 ppbv  
RT: 5.80 min Scan# 890  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 10.0  | 8.0   | 12.0  |
| 61      | 9.9   | 7.6   | 11.4  |
| 70      | 7.3   | 5.8   | 8.8   |

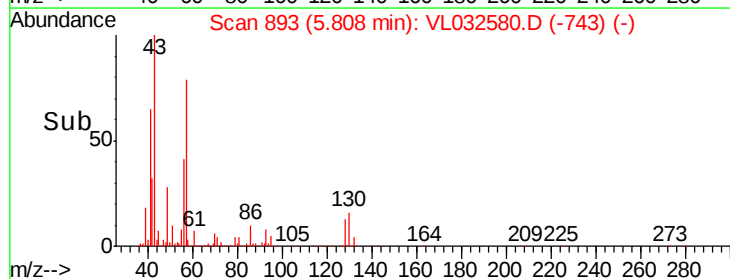
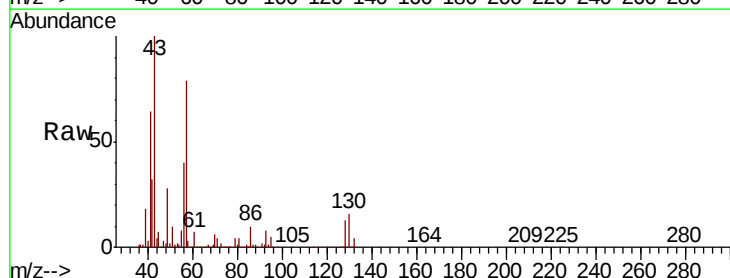
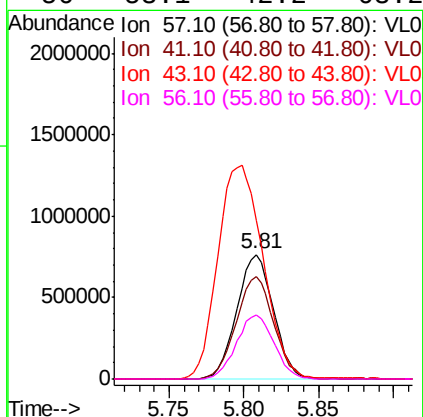
Manual Integrations  
APPROVED

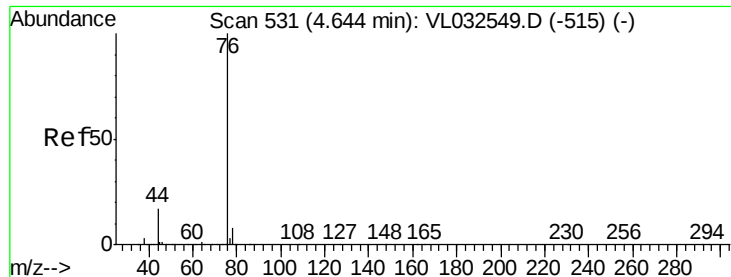
MMDadoda  
10/1/2018 11:58:05 AM



#26  
Hexane  
Concen: 10.014 ppbv  
RT: 5.81 min Scan# 893  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 85.4  | 69.0  | 103.4 |
| 43      | 212.6 | 172.1 | 258.1 |
| 56      | 53.1  | 42.2  | 63.2  |





#27

Carbon Disulfide

Concen: 11.413 ppbv

RT: 4.64 min Scan# 531

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 76 Resp: 1593152

Ion Ratio Lower Upper

76 100

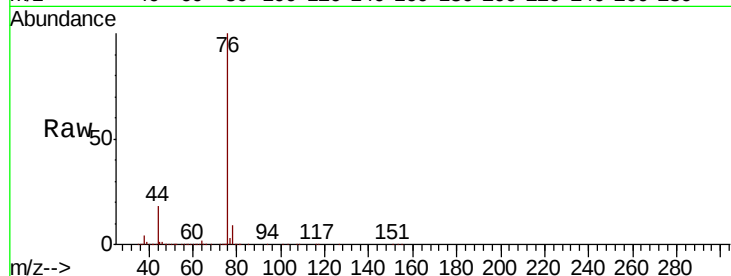
44 17.2 14.0 21.0

78 8.9 7.5 11.3

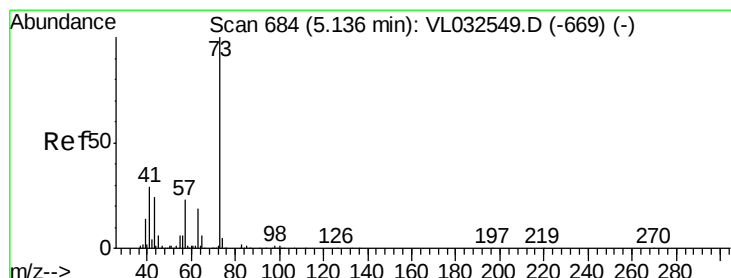
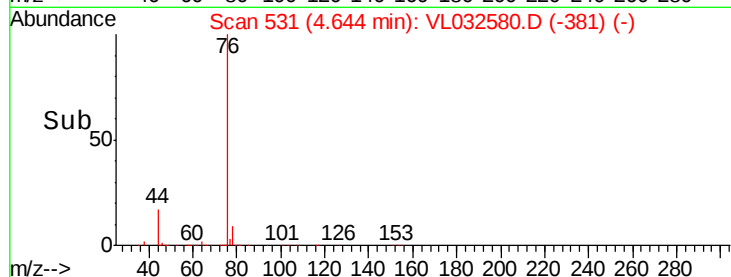
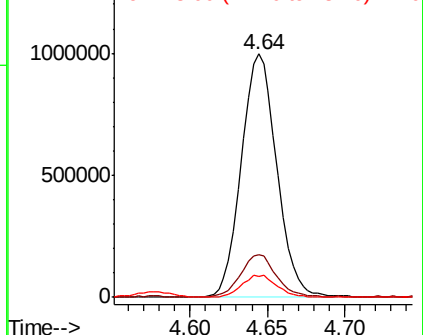
Manual Integrations  
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Abundance Ion 76.00 (75.70 to 76.70): VL0  
Ion 44.10 (43.80 to 44.80): VL0  
Ion 78.00 (77.70 to 78.70): VL0



#28

Methyl tert-Butyl Ether

Concen: 10.265 ppbv

RT: 5.14 min Scan# 685

Delta R.T. -0.02 min

Lab File: VL032580.D

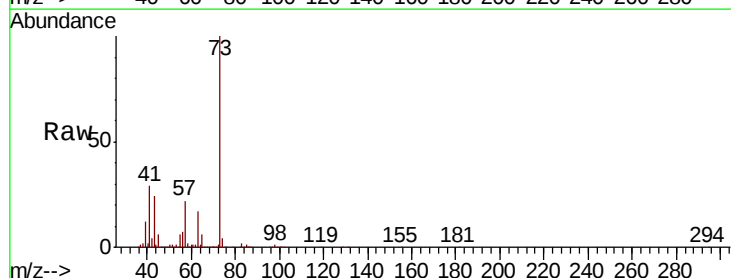
Acq: 28 Sep 2018 12:31

Tgt Ion: 73 Resp: 1660386

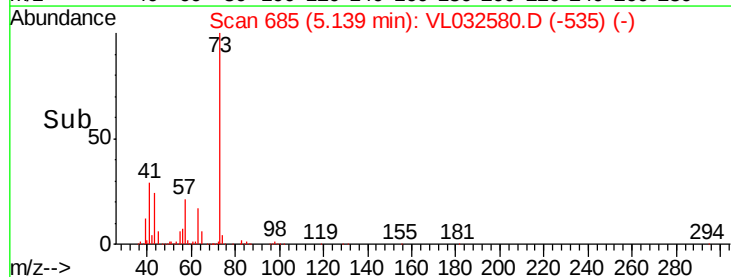
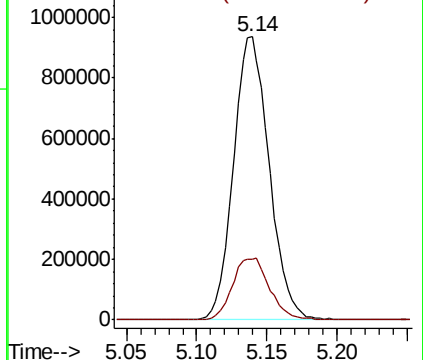
Ion Ratio Lower Upper

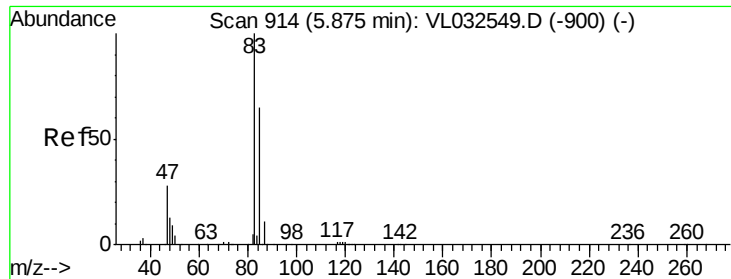
73 100

57 22.9 19.3 28.9



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





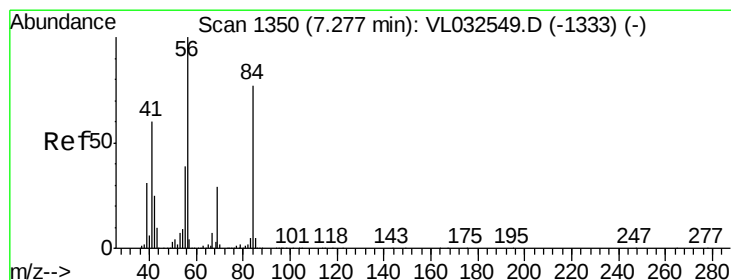
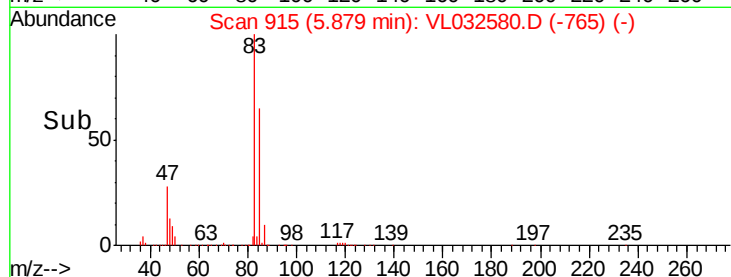
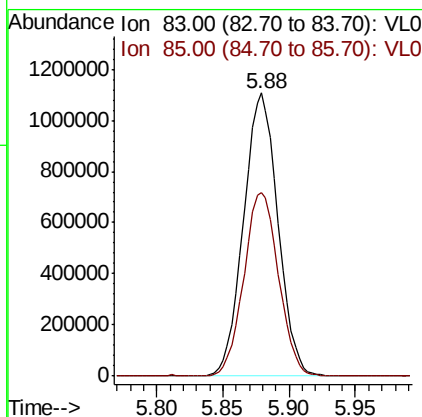
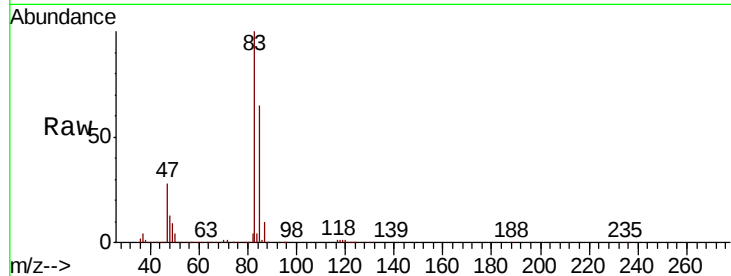
#29  
Chloroform  
Concen: 10.002 ppbv  
RT: 5.88 min Scan# 915  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 83 Resp: 1992711  
Ion Ratio Lower Upper  
83 100  
85 64.8 52.5 78.7

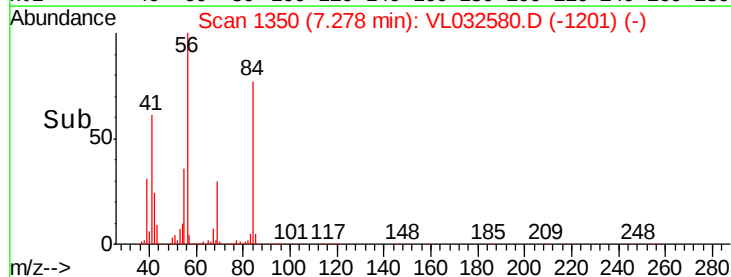
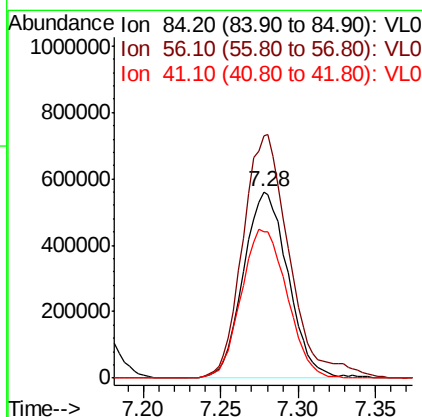
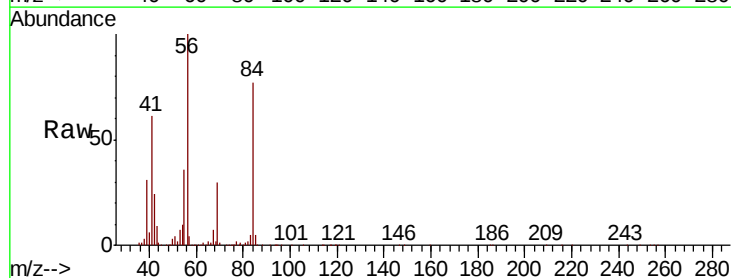
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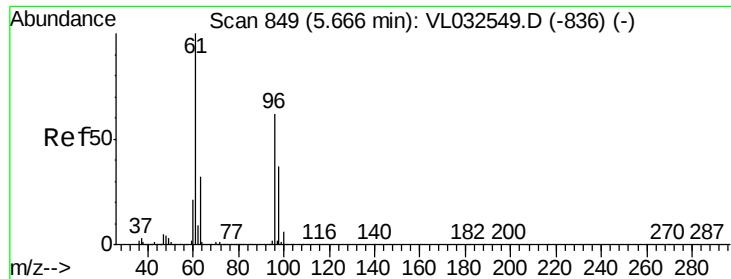
MMDadoda  
10/1/2018 11:58:05 AM



#30  
Cyclohexane  
Concen: 10.588 ppbv  
RT: 7.28 min Scan# 1350  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Tgt Ion: 84 Resp: 1119426  
Ion Ratio Lower Upper  
84 100  
56 137.4 113.5 170.3  
41 82.4 68.1 102.1





#31

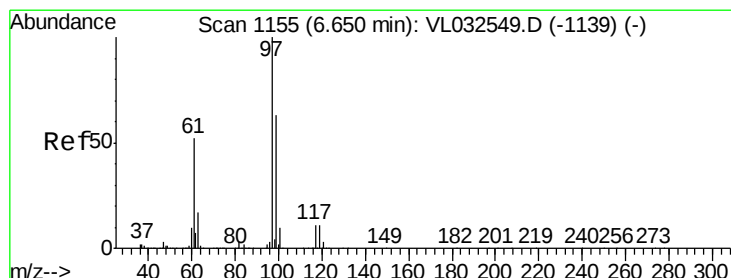
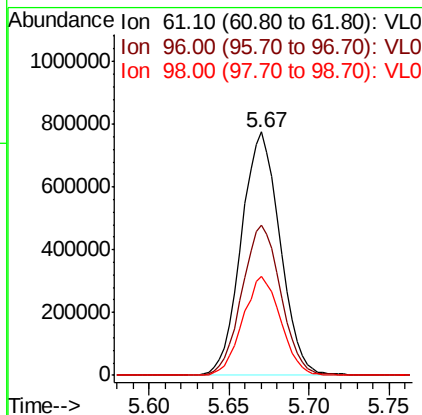
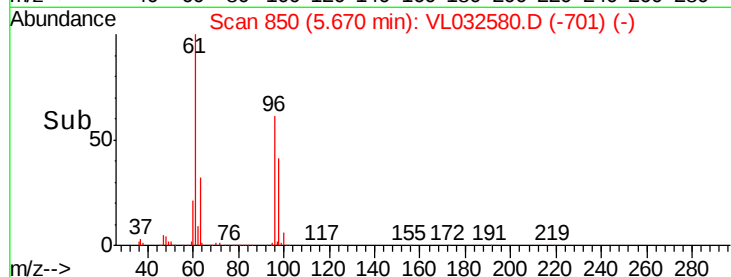
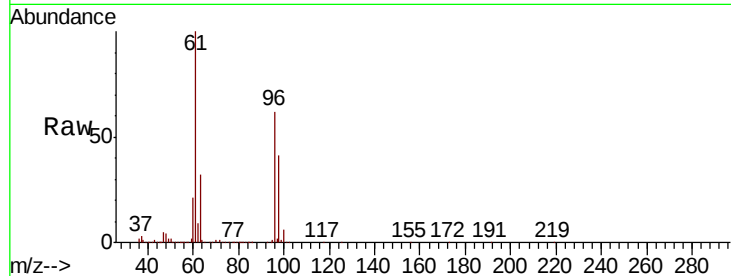
cis-1,2-Dichloroethene  
 Concen: 10.363 ppbv  
 RT: 5.67 min Scan# 850  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 61.5  | 49.2  | 73.8  |
| 98      | 40.6  | 30.7  | 46.1  |

Manual Integrations  
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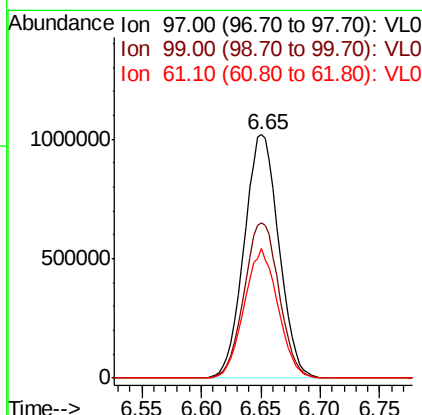
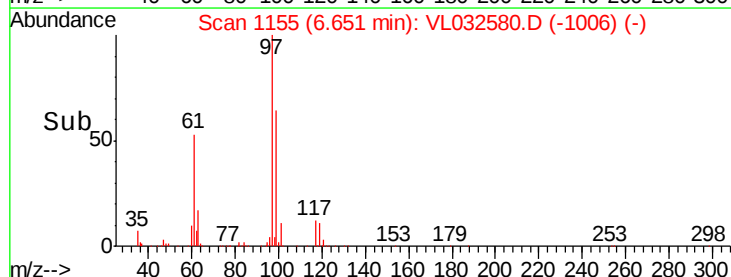
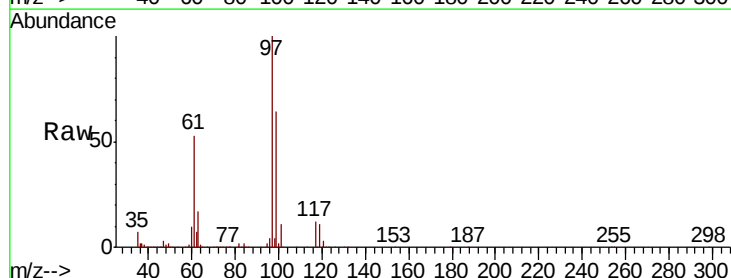
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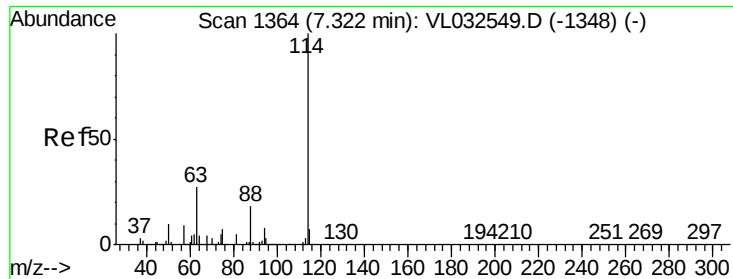


#32

1,1,1-Trichloroethane  
 Concen: 9.700 ppbv  
 RT: 6.65 min Scan# 1155  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.5  | 52.1  | 78.1  |
| 61      | 51.6  | 42.5  | 63.7  |





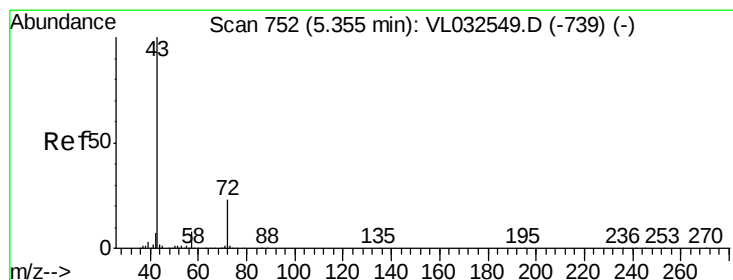
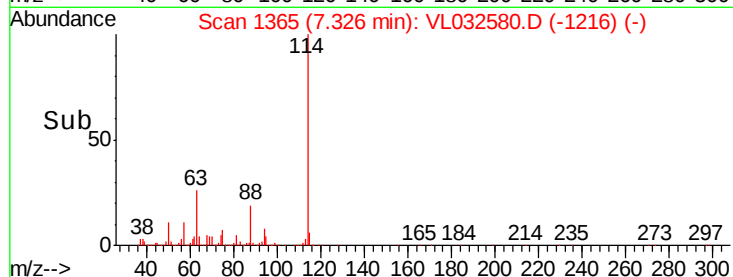
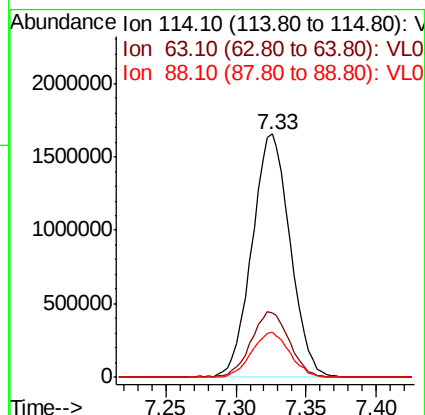
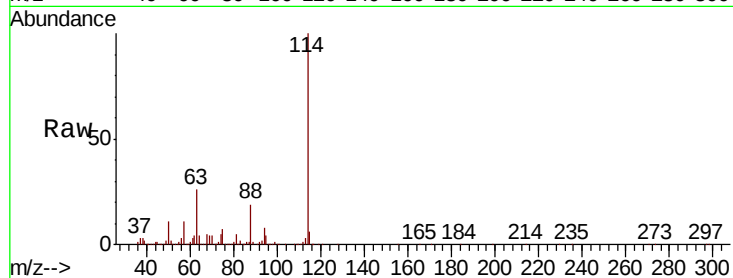
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.33 min Scan# 1365  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion:114 Resp: 3124931  
 Ion Ratio Lower Upper  
 114 100  
 63 27.4 22.2 33.4  
 88 18.5 15.0 22.4

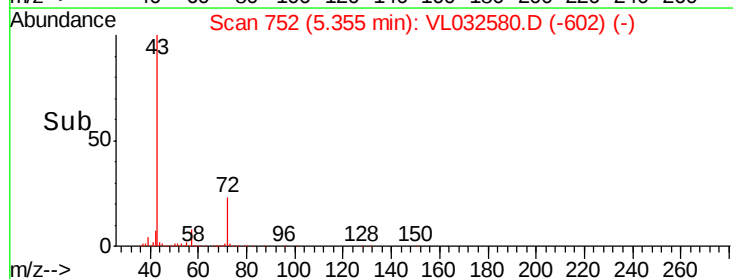
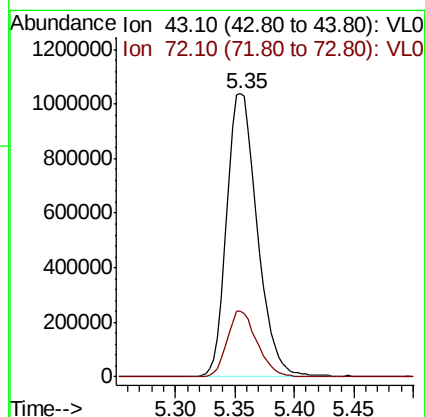
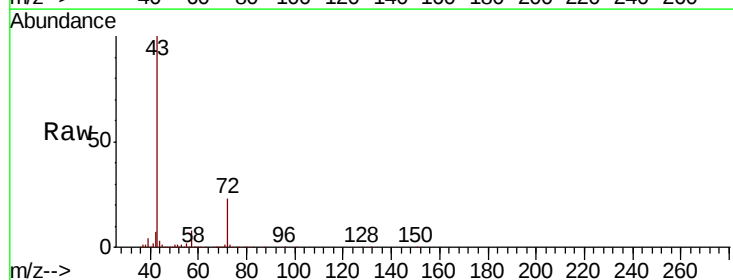
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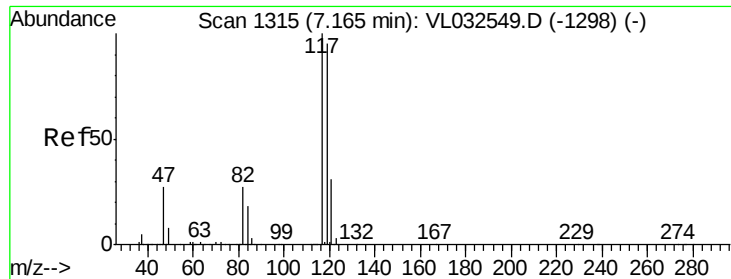
MMDadoda  
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#34  
 2-Butanone  
 Concen: 9.938 ppbv  
 RT: 5.35 min Scan# 752  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Tgt Ion: 43 Resp: 1849266  
 Ion Ratio Lower Upper  
 43 100  
 72 22.8 17.8 26.6





#35

Carbon Tetrachloride

Concen: 9.809 ppbv

RT: 7.17 min Scan# 1315

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:117 Resp: 2129859

Ion Ratio Lower Upper

117 100

119 92.5 76.6 115.0

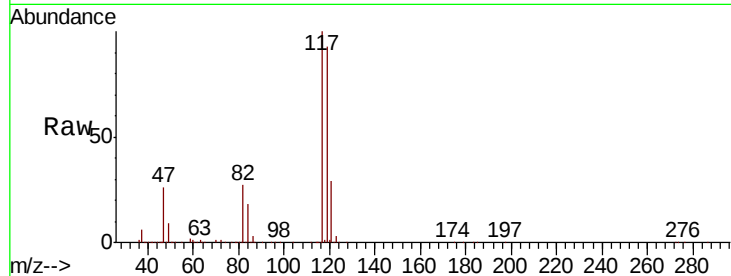
121 29.4 24.6 36.8

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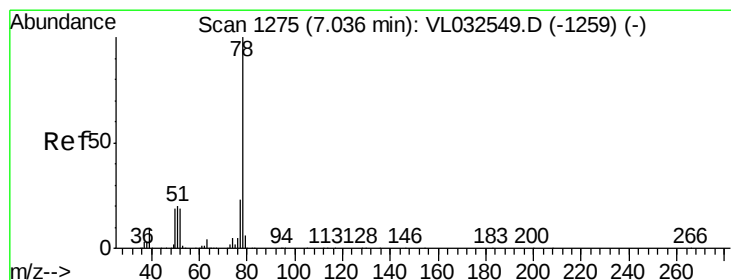
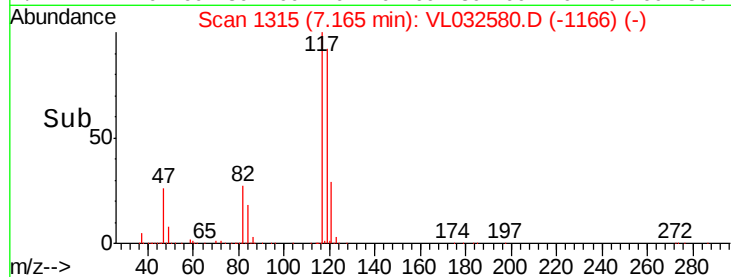
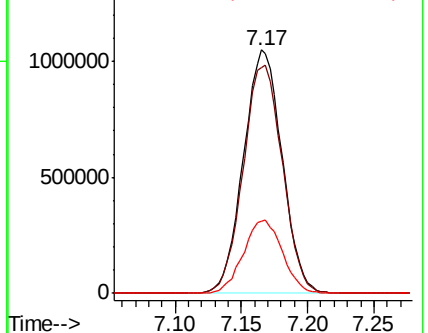
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Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 10.382 ppbv

RT: 7.04 min Scan# 1276

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

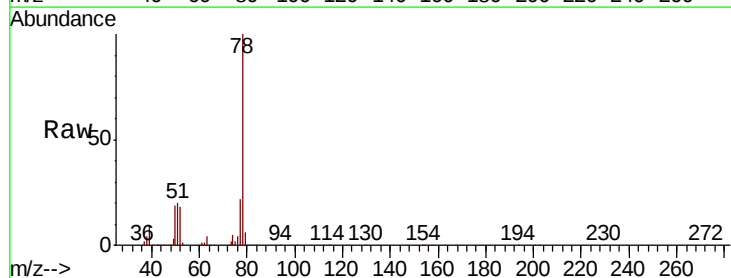
Tgt Ion: 78 Resp: 2621859

Ion Ratio Lower Upper

78 100

77 22.3 18.4 27.6

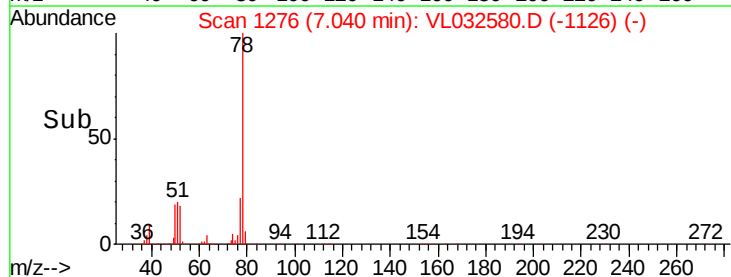
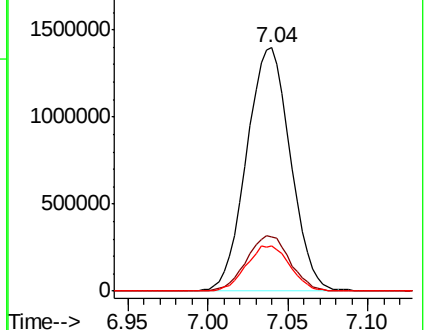
50 18.6 14.4 21.6

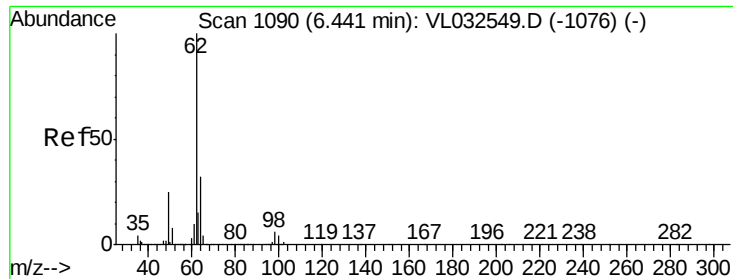


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#37

1,2-Dichloroethane

Concen: 10.531 ppbv

RT: 6.44 min Scan# 1091

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 1602792

Ion Ratio Lower Upper

62 100

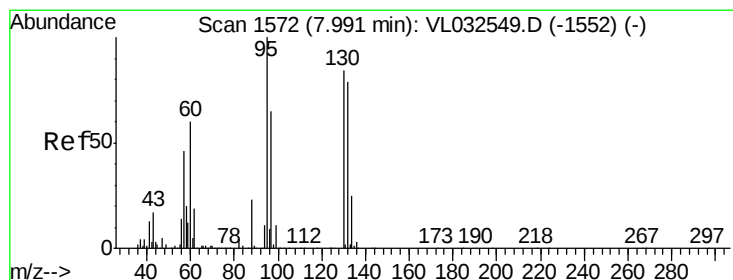
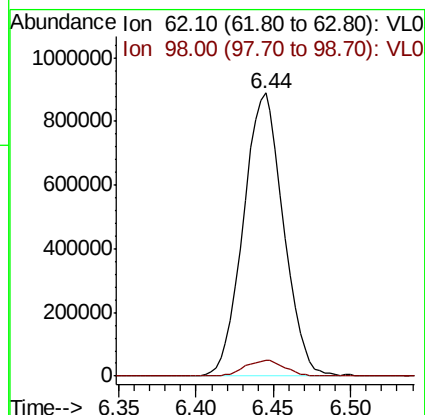
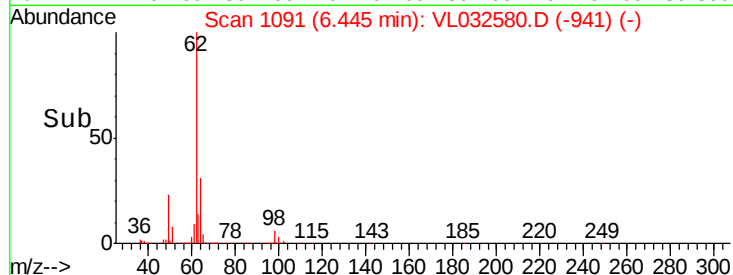
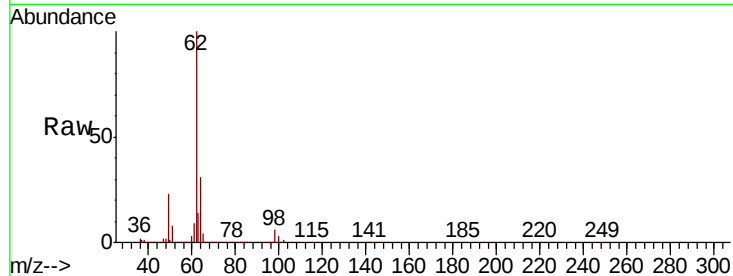
98 5.6 5.0 7.6

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#38

Trichloroethene

Concen: 10.542 ppbv

RT: 7.99 min Scan# 1573

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Tgt Ion: 130 Resp: 1019004

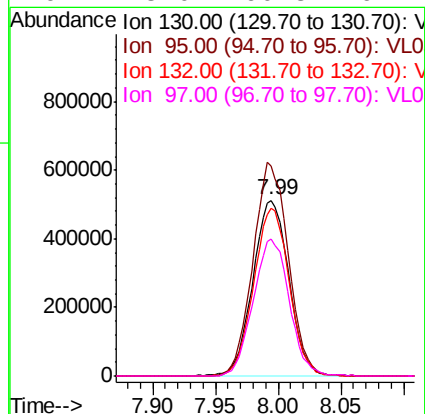
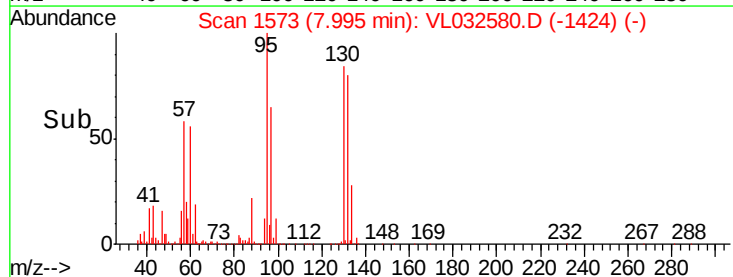
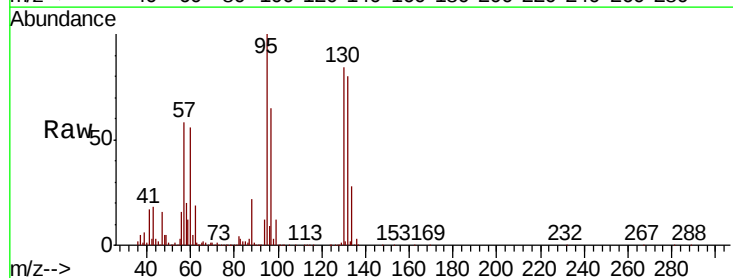
Ion Ratio Lower Upper

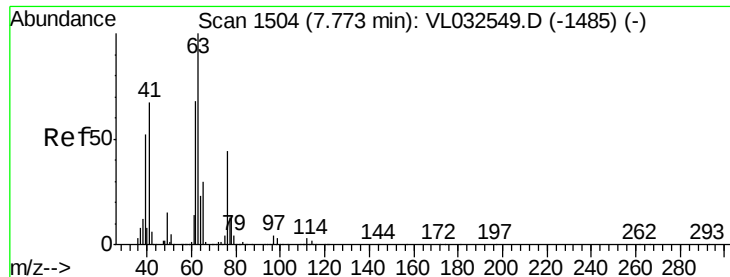
130 100

95 119.7 94.2 141.4

132 95.4 76.2 114.4

97 78.0 60.8 91.2





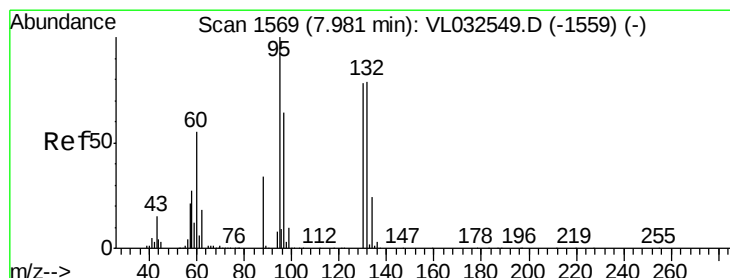
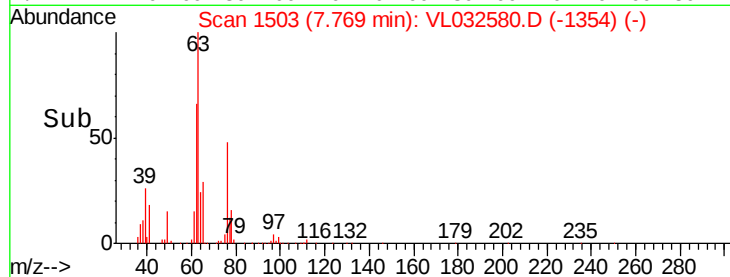
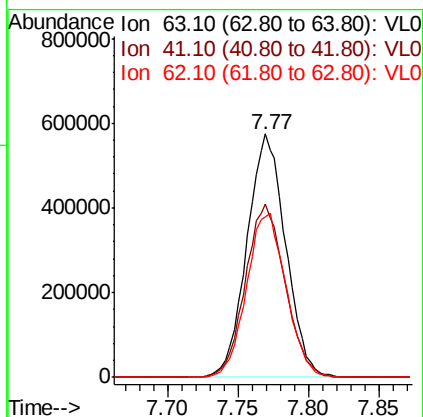
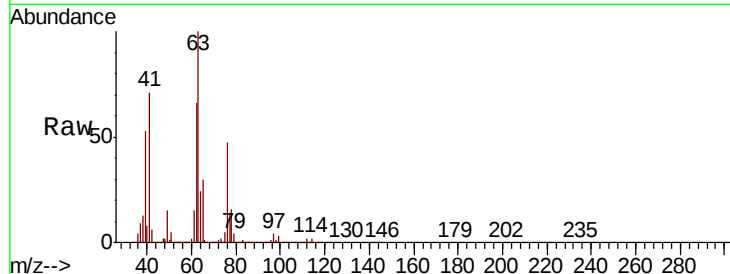
#39  
 1,2-Dichloropropane  
 Concen: 9.672 ppbv  
 RT: 7.77 min Scan# 1503  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 70.8  | 55.4  | 83.0  |
| 62      | 65.6  | 55.4  | 83.0  |

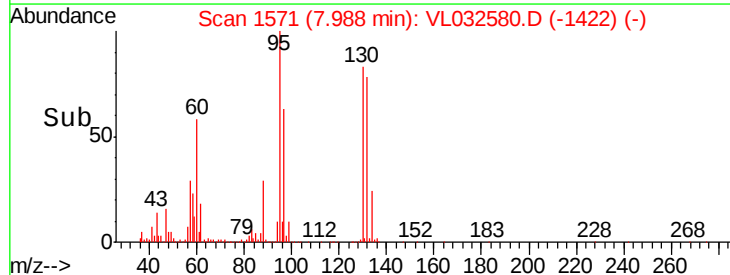
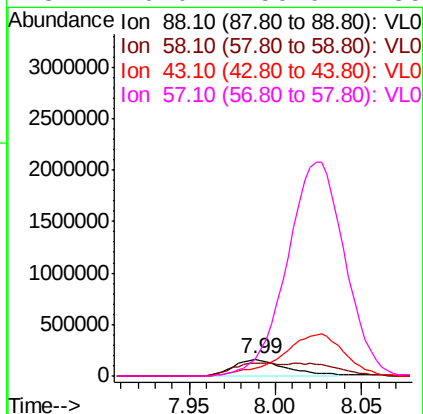
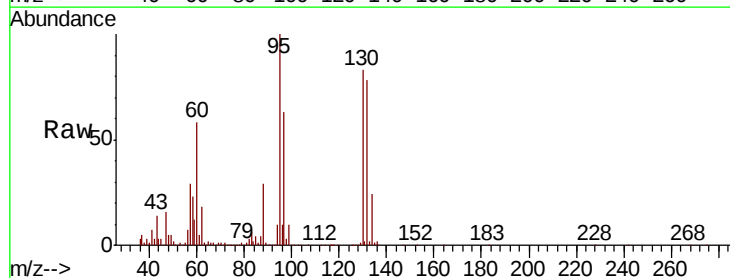
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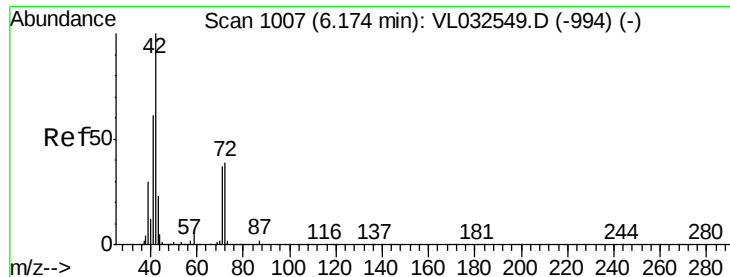
MMDadoda  
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#40  
 1,4-Dioxane  
 Concen: 9.880 ppbv  
 RT: 7.99 min Scan# 1571  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

| Tgt Ion | Ratio | Lower  | Upper   |
|---------|-------|--------|---------|
| 88      | 100   |        |         |
| 58      | 148.1 | 119.7  | 179.5   |
| 43      | 0.0   | 253.0  | 379.4#  |
| 57      | 0.0   | 1156.9 | 1735.3# |





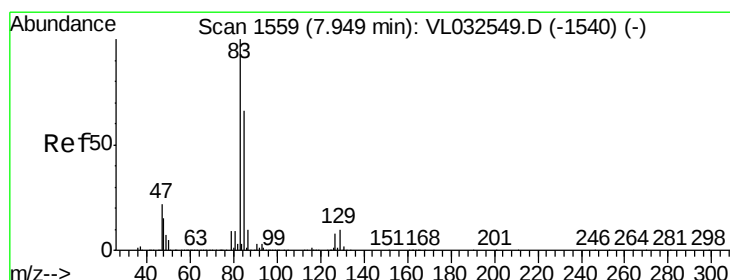
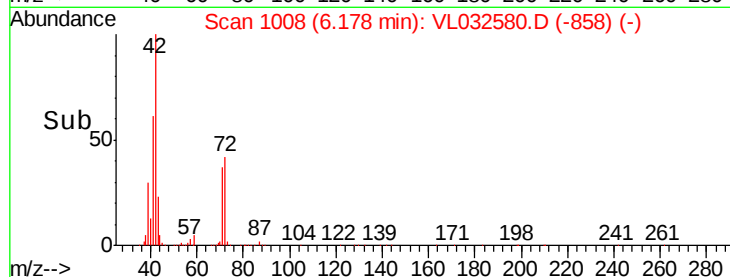
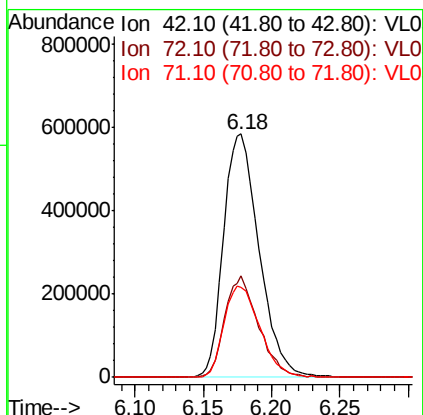
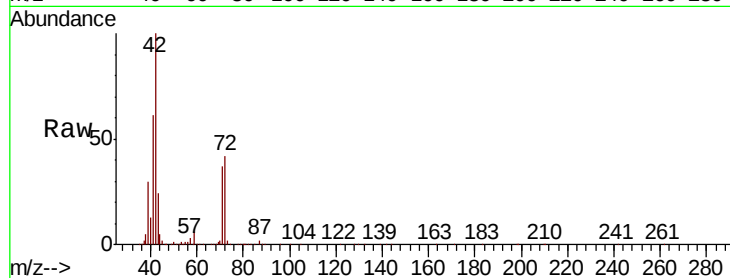
#41  
Tetrahydrofuran  
Concen: 10.482 ppbv  
RT: 6.18 min Scan# 1008  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 39.5  | 29.5  | 44.3  |
| 71      | 38.0  | 28.3  | 42.5  |

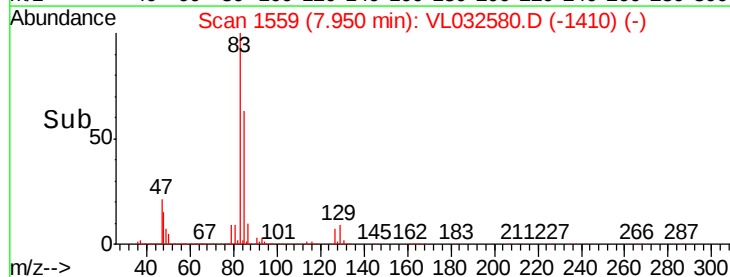
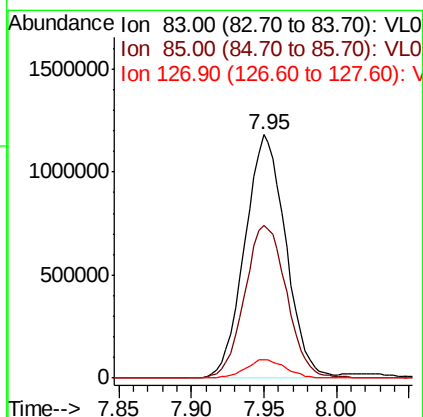
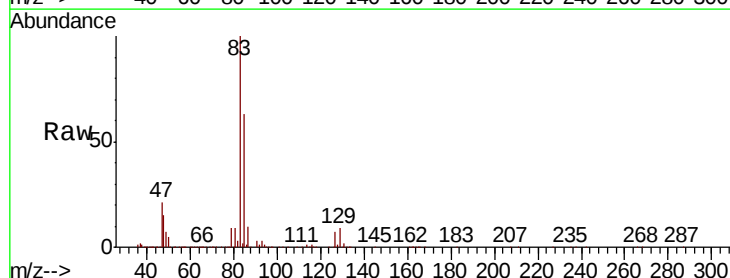
Manual Integrations  
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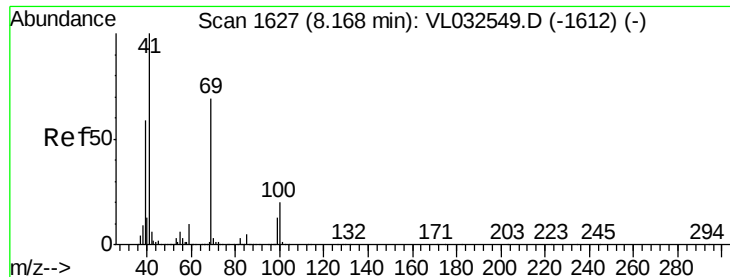
MMDadoda  
10/1/2018 11:58:05 AM



#42  
Bromodichloromethane  
Concen: 10.162 ppbv  
RT: 7.95 min Scan# 1559  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 62.7  | 51.1  | 76.7  |
| 127     | 7.4   | 5.8   | 8.8   |





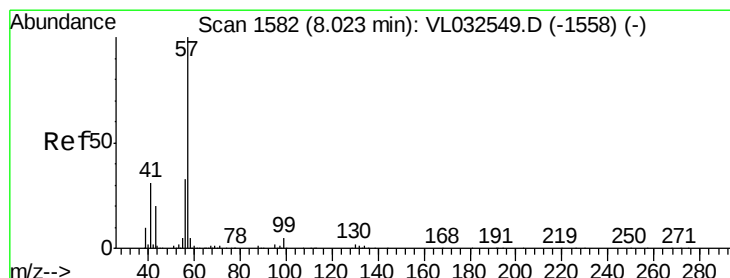
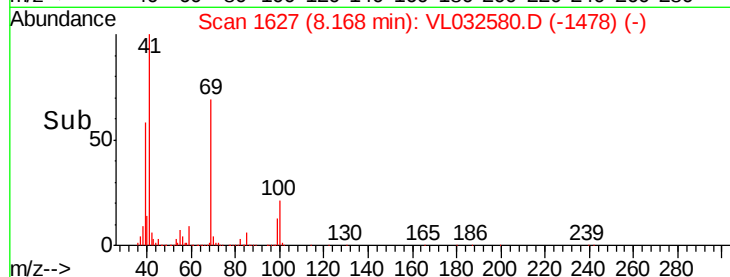
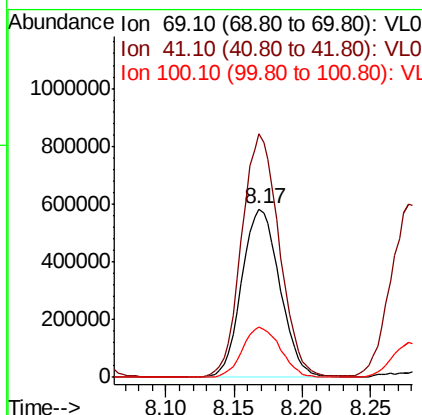
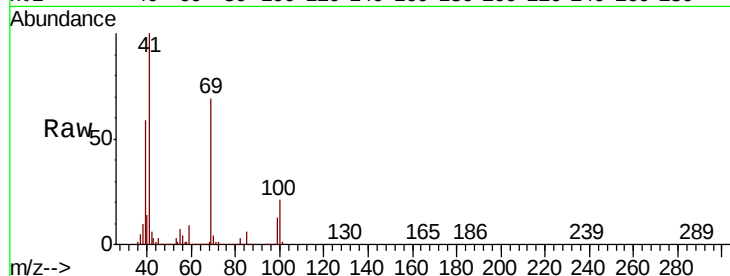
#43  
Methvl Methacrvlate  
Concen: 10.708 ppbv  
RT: 8.17 min Scan# 1627  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 69 Resp: 1129636  
Ion Ratio Lower Upper  
69 100  
41 142.8 117.1 175.7  
100 29.8 23.4 35.2

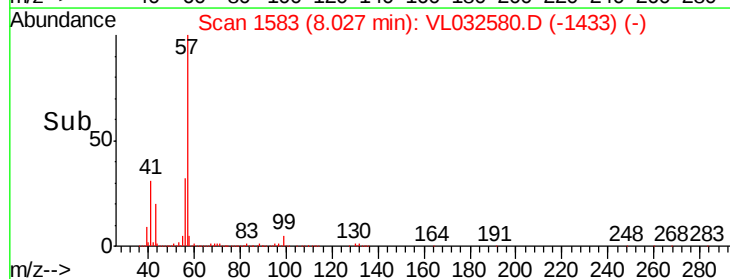
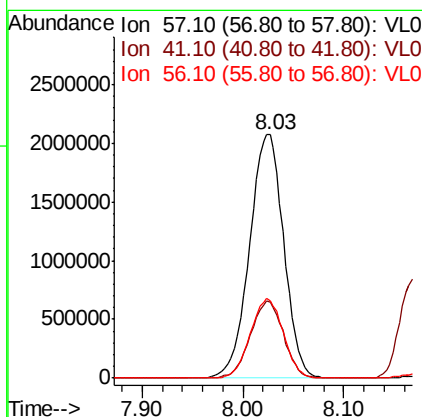
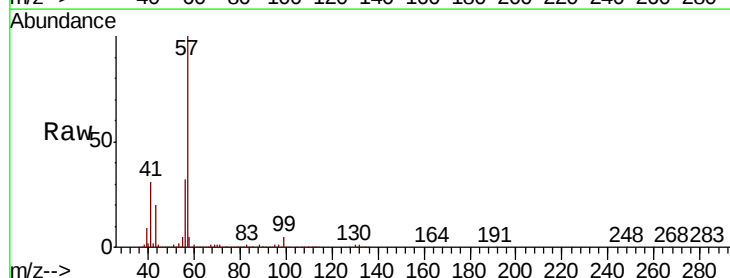
Manual Integrations  
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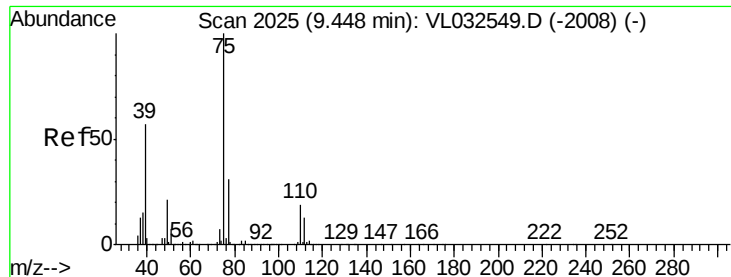
MMDadoda  
10/1/2018 11:58:05 AM



#44  
2,2,4-Trimethylpentane  
Concen: 9.865 ppbv  
RT: 8.03 min Scan# 1583  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Tgt Ion: 57 Resp: 4868793  
Ion Ratio Lower Upper  
57 100  
41 30.8 24.4 36.6  
56 31.6 25.7 38.5





#45

t-1,3-Dichloropropene

Concen: 11.762 ppbv

RT: 9.45 min Scan# 2026

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 75 Resp: 1543490

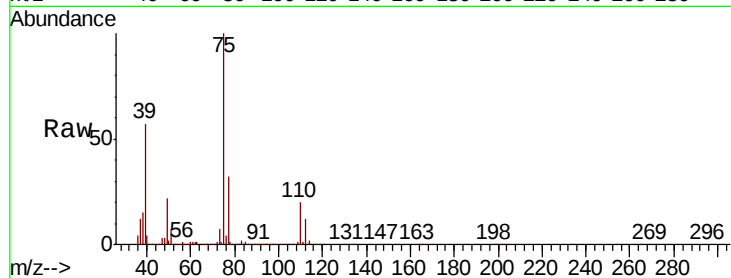
Ion Ratio Lower Upper

75 100

77 32.2 26.2 39.2

Manual Integrations  
APPROVED

MMDadoda  
10/1/2018 11:58:05 AM



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

800000

600000

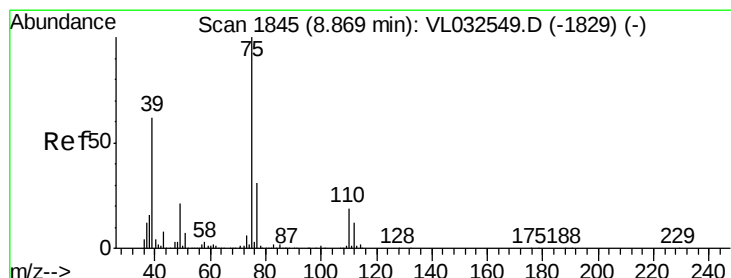
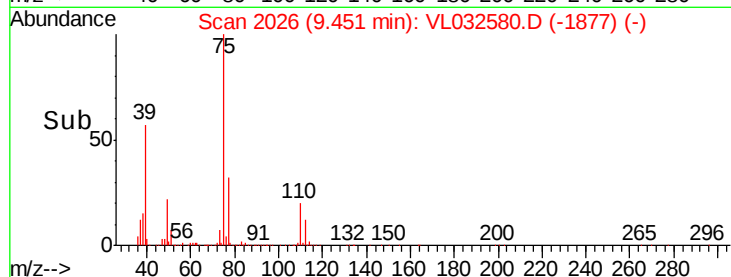
400000

200000

0

9.35 9.40 9.45 9.50

Time-->



#46

cis-1,3-Dichloropropene

Concen: 10.460 ppbv

RT: 8.87 min Scan# 1846

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

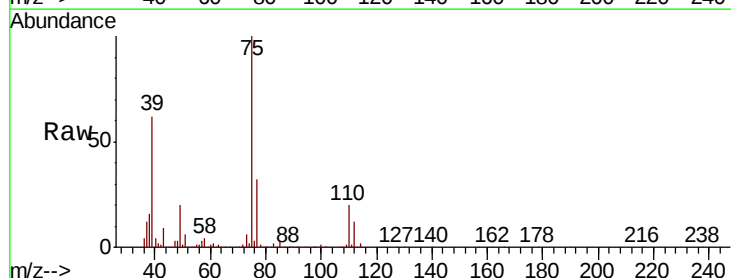
Tgt Ion: 75 Resp: 1610038

Ion Ratio Lower Upper

75 100

39 62.4 48.9 73.3

77 31.9 25.4 38.0



Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0

1000000

800000

600000

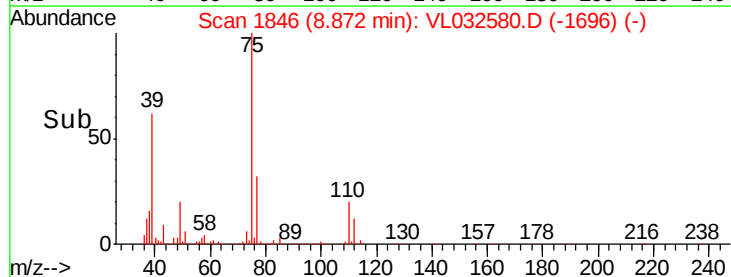
400000

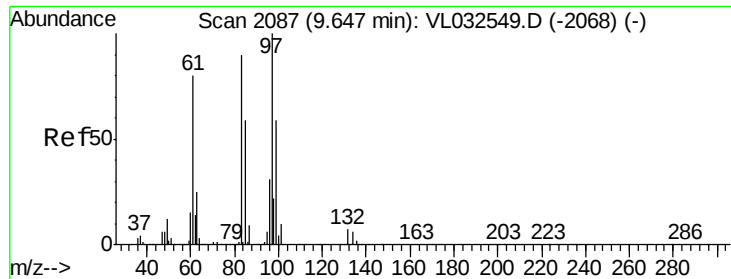
200000

0

8.80 8.85 8.90 8.95

Time-->





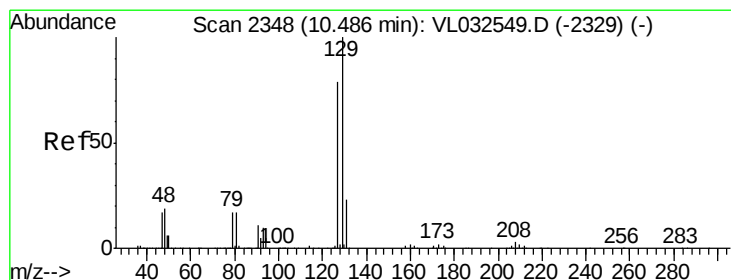
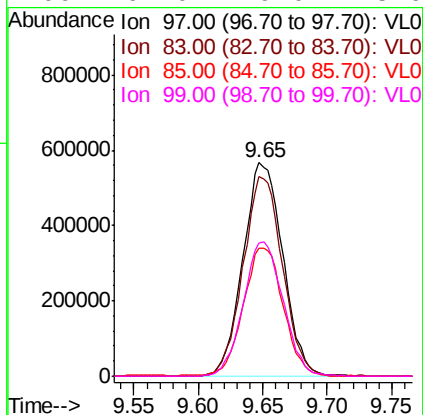
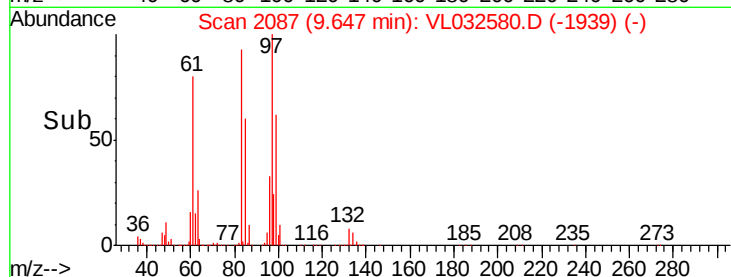
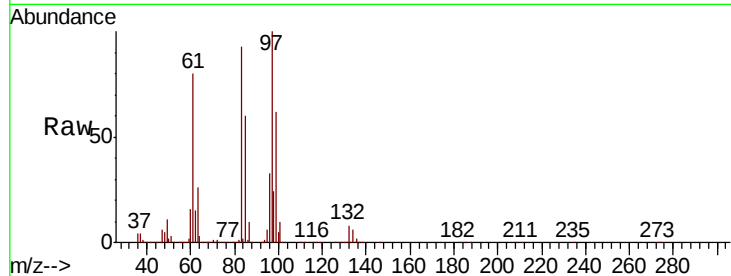
#47  
 1,1,2-Trichloroethane  
 Concen: 9.670 ppbv  
 RT: 9.65 min Scan# 2087  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 97      | 100  |       |       |       |
| 83      | 93.2 | 75.0  | 112.4 |       |
| 85      | 59.6 | 47.5  | 71.3  |       |
| 99      | 62.0 | 49.0  | 73.6  |       |

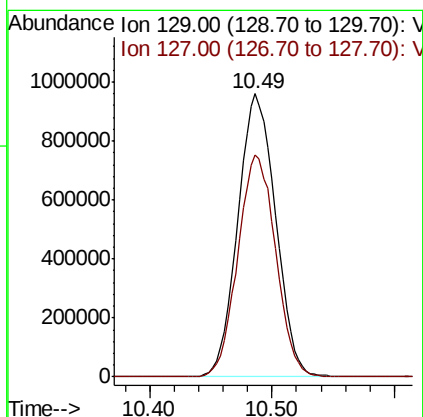
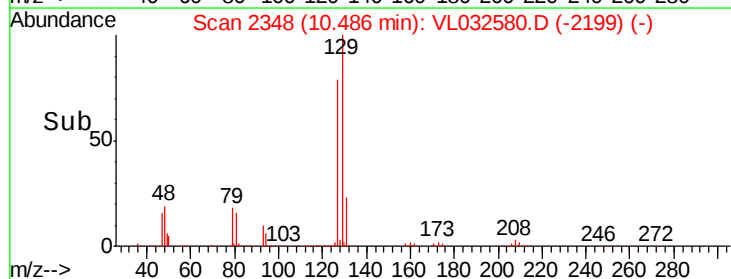
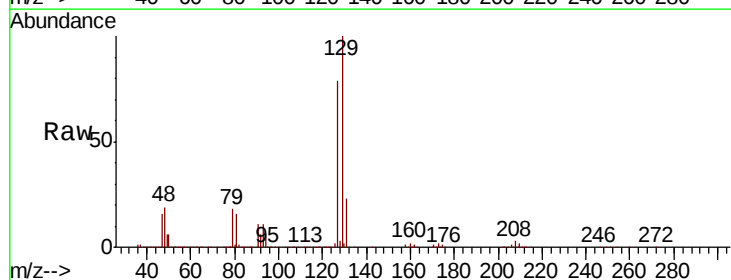
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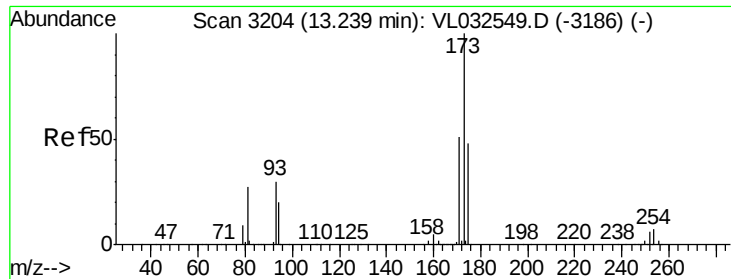
MMDadoda  
 10/1/2018 11:58:05 AM



#48  
 Dibromochloromethane  
 Concen: 10.334 ppbv  
 RT: 10.49 min Scan# 2348  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

| Tgt Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 129     | 100  |       |       |       |
| 127     | 78.7 | 39.5  | 118.3 |       |





#49

Bromoform

Concen: 10.375 ppbv

RT: 13.24 min Scan# 3204

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:173 Resp: 1575734

Ion Ratio Lower Upper

173 100

175 48.1 38.9 58.3

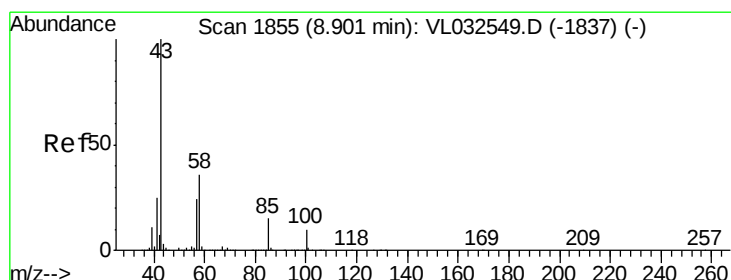
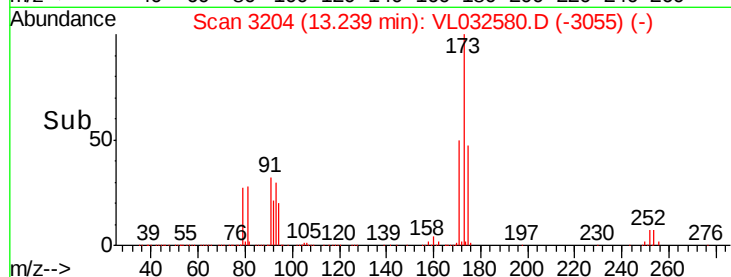
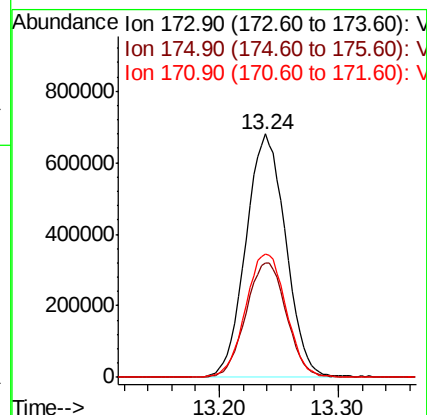
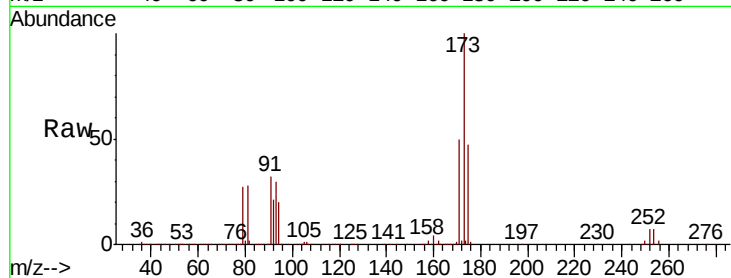
171 51.7 41.6 62.4

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#50

4-Methyl-2-Pentanone

Concen: 9.461 ppbv

RT: 8.90 min Scan# 1856

Delta R.T. -0.02 min

Lab File: VL032580.D

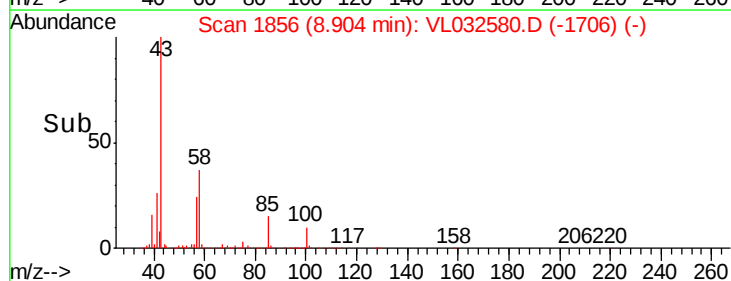
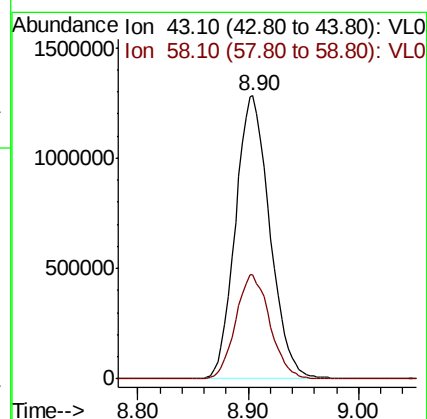
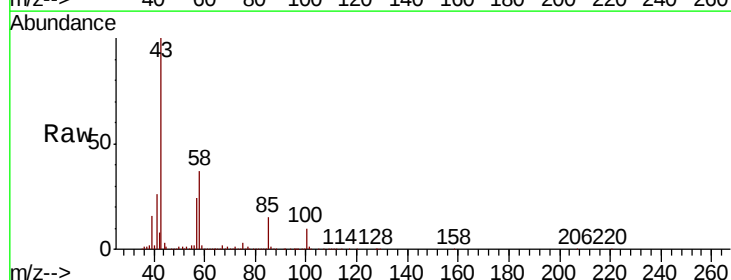
Acq: 28 Sep 2018 12:31

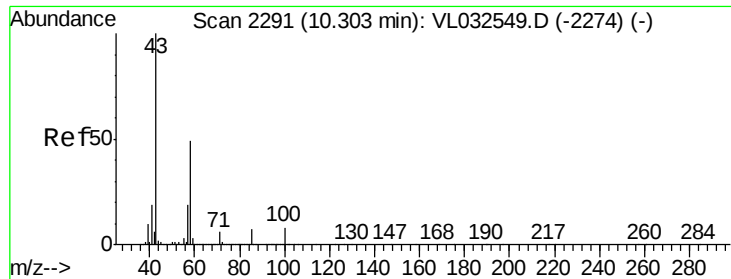
Tgt Ion: 43 Resp: 2767526

Ion Ratio Lower Upper

43 100

58 36.8 29.0 43.4





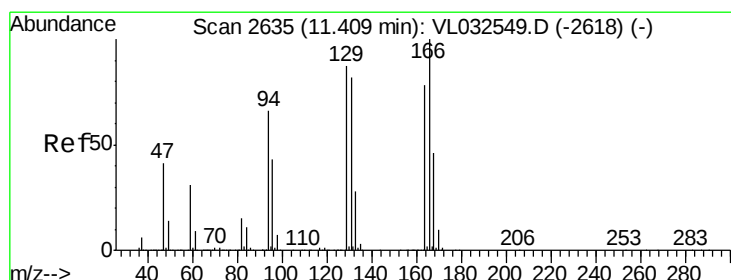
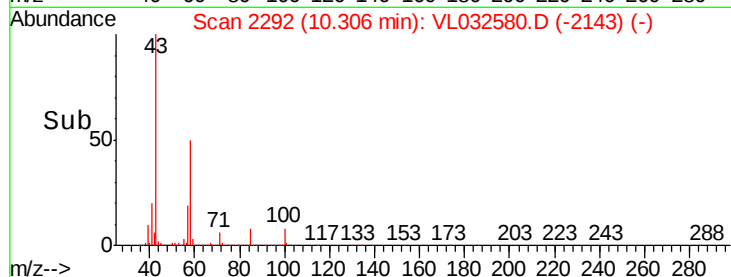
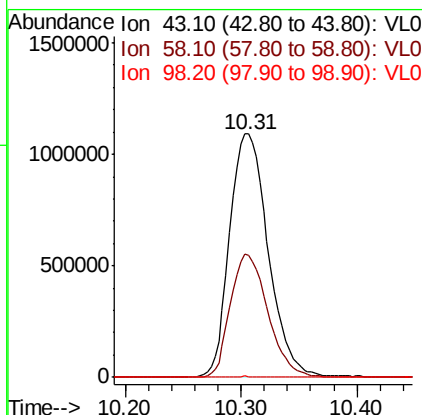
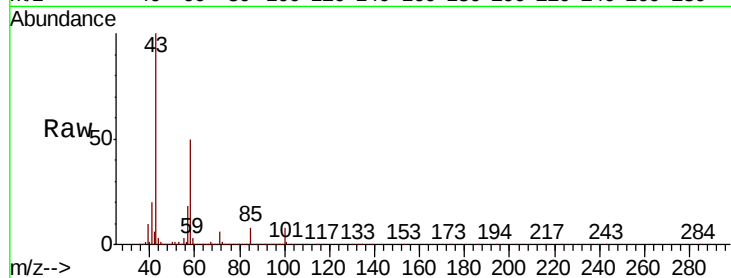
#51  
2-Hexanone  
Concen: 10.386 ppbv  
RT: 10.31 min Scan# 2292  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 49.3  | 39.2  | 58.8  |
| 98      | 0.6   | 0.4   | 0.6   |

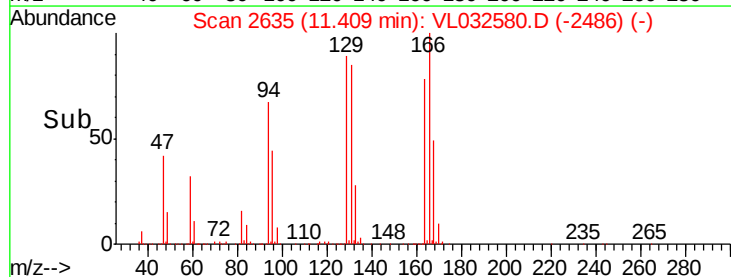
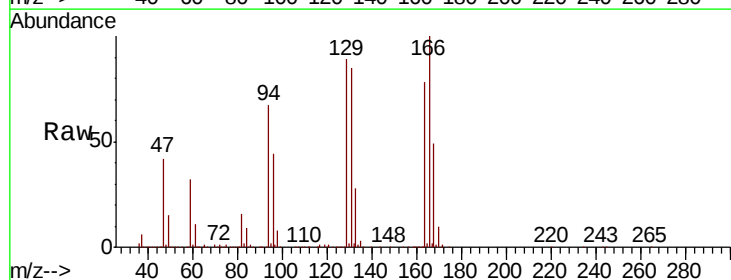
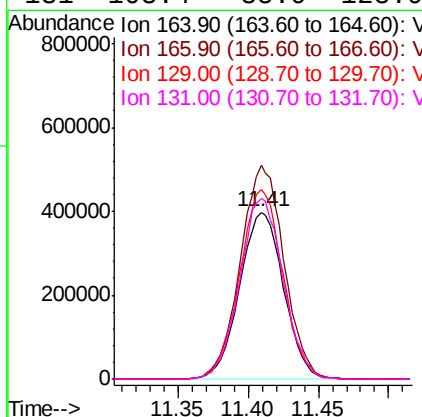
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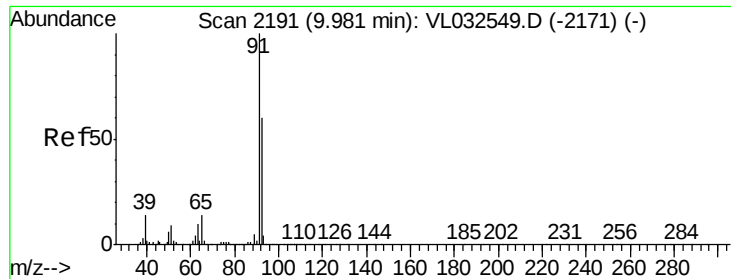
MMDadoda  
10/1/2018 11:58:05 AM



#52  
Tetrachloroethene  
Concen: 9.772 ppbv  
RT: 11.41 min Scan# 2635  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 166     | 128.0 | 100.6 | 150.8 |
| 129     | 113.9 | 89.9  | 134.9 |
| 131     | 108.4 | 85.9  | 128.9 |





#53

Toluene

Concen: 11.001 ppbv

RT: 9.98 min Scan# 2191

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 3385663

Ion Ratio Lower Upper

91 100

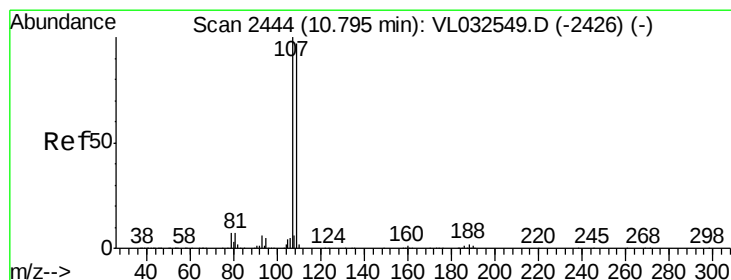
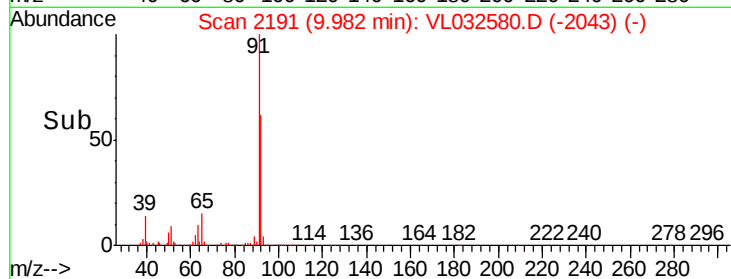
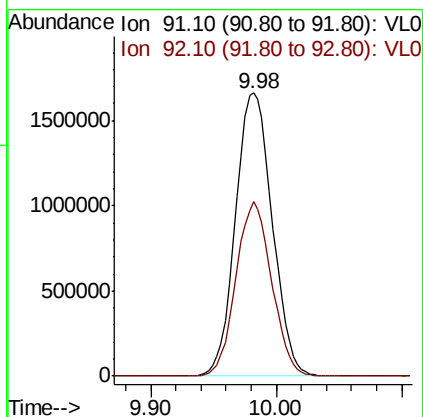
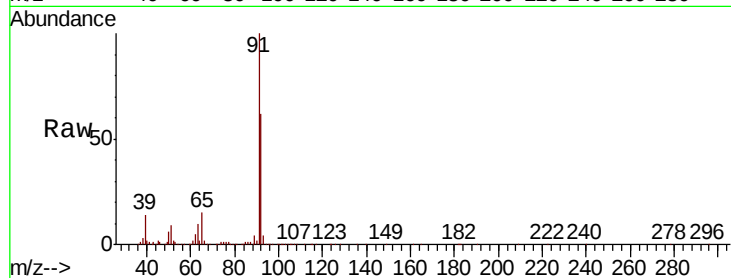
92 60.1 48.1 72.1

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#54

1,2-Dibromoethane

Concen: 10.280 ppbv

RT: 10.80 min Scan# 2444

Delta R.T. -0.02 min

Lab File: VL032580.D

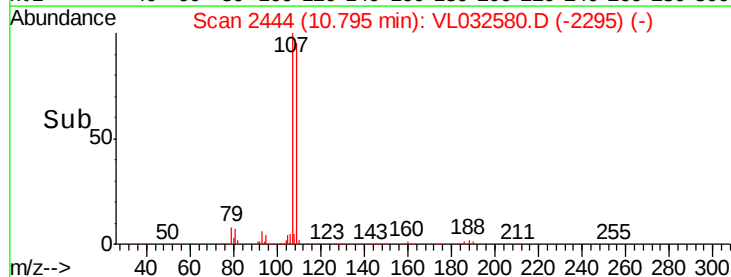
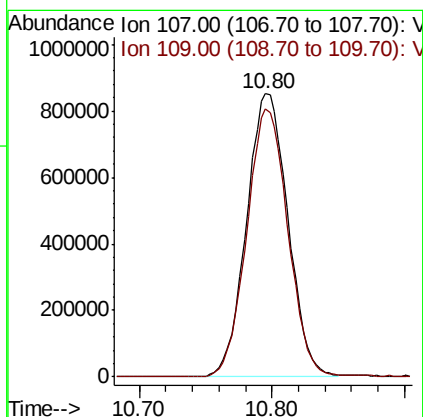
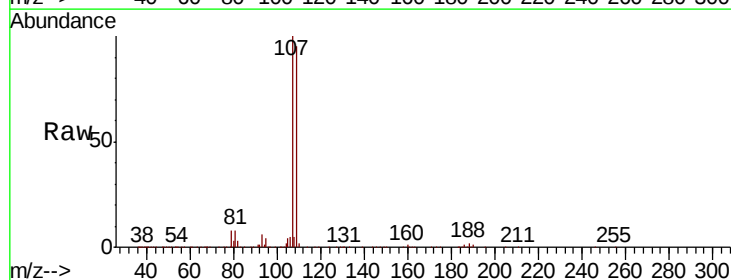
Acq: 28 Sep 2018 12:31

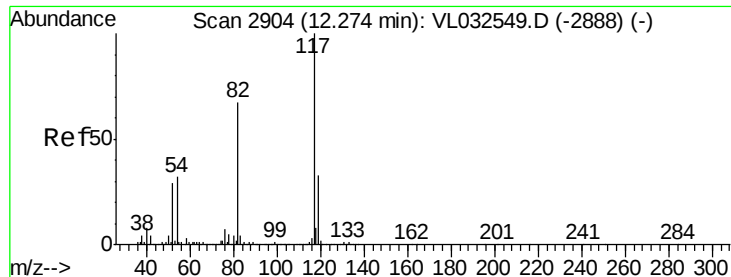
Tgt Ion: 107 Resp: 1848171

Ion Ratio Lower Upper

107 100

109 94.7 73.9 110.9





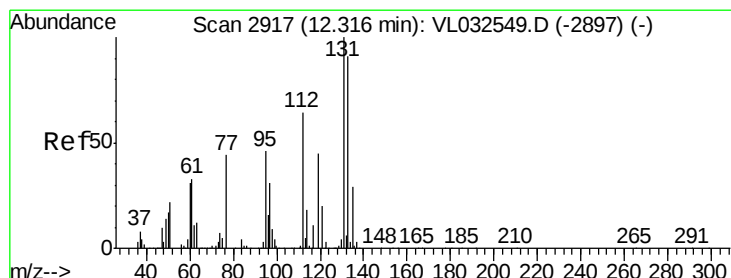
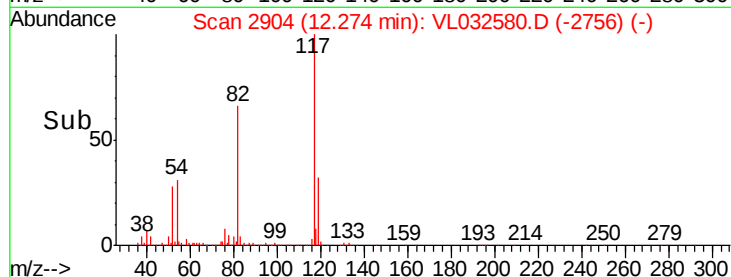
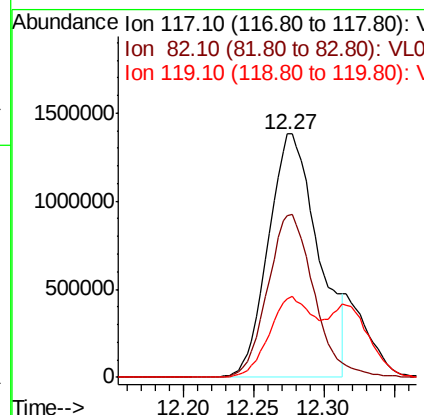
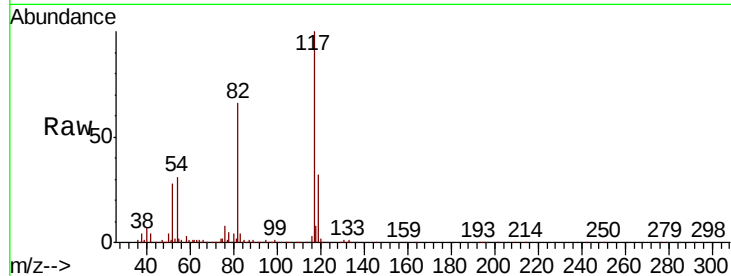
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.27 min Scan# 2904  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 62.4  | 53.0  | 79.6  |
| 119     | 33.0  | 45.9  | 68.9# |

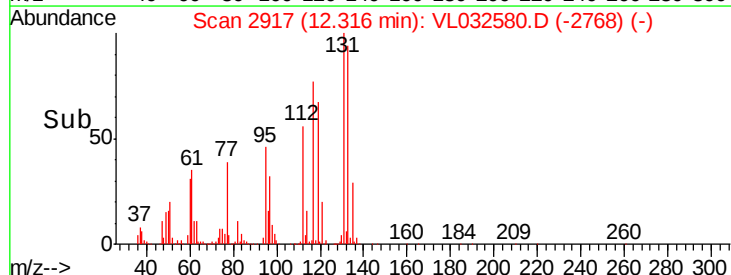
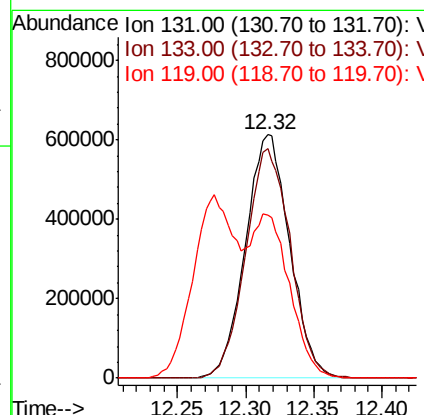
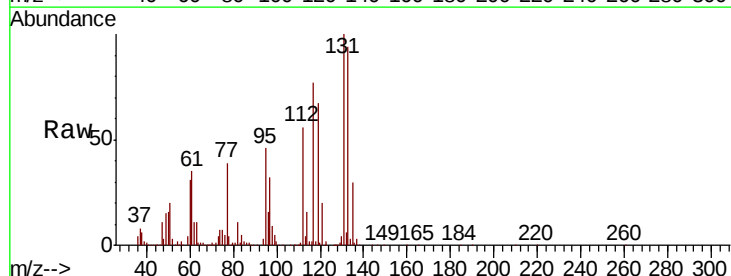
Manual Integrations  
APPROVED

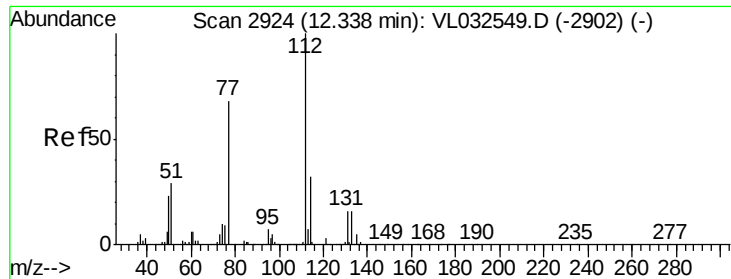
MMDadoda  
10/1/2018 11:58:05 AM



#56  
1,1,1,2-Tetrachloroethane  
Concen: 8.999 ppbv  
RT: 12.32 min Scan# 2917  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 131     | 100   |       |        |
| 133     | 95.6  | 77.0  | 115.4  |
| 119     | 63.0  | 114.2 | 171.2# |





#57

Chlorobenzene

Concen: 8.674 ppbv

RT: 12.34 min Scan# 2924

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:112 Resp: 2374803

Ion Ratio Lower Upper

112 100

77 73.0 56.1 84.1

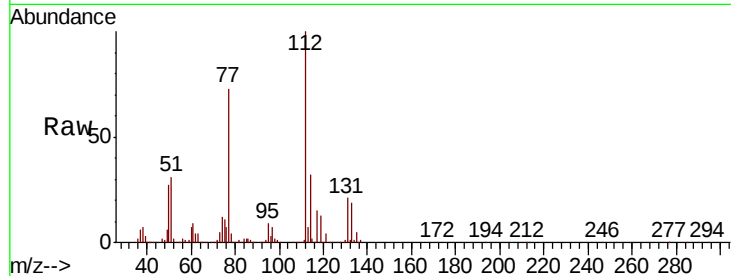
114 31.5 27.8 34.0

Manual Integrations

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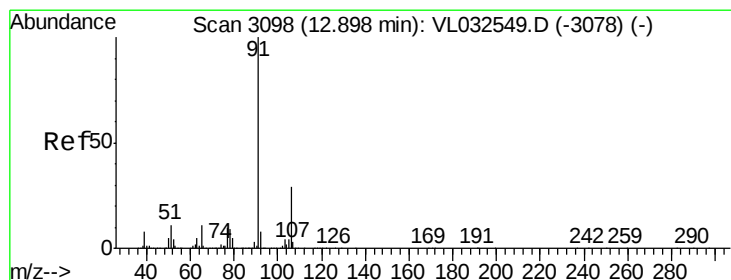
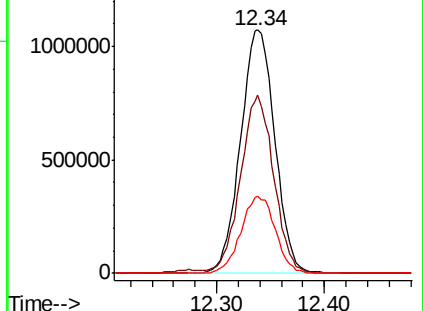
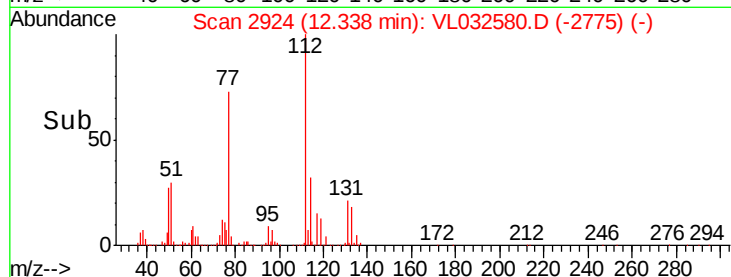
10/1/2018 11:58:05 AM



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: 10.257 ppbv

RT: 12.90 min Scan# 3099

Delta R.T. -0.02 min

Lab File: VL032580.D

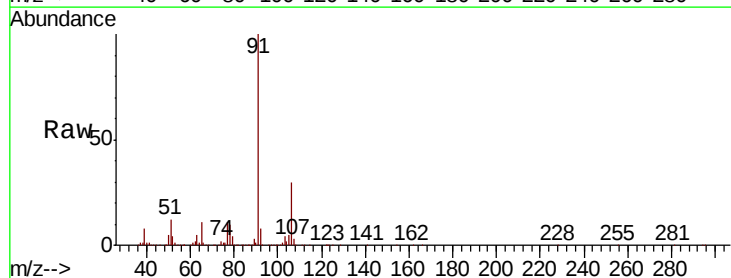
Acq: 28 Sep 2018 12:31

Tgt Ion: 91 Resp: 4228551

Ion Ratio Lower Upper

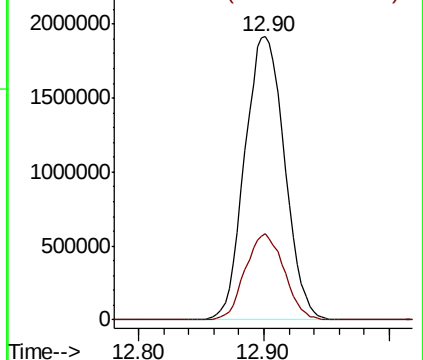
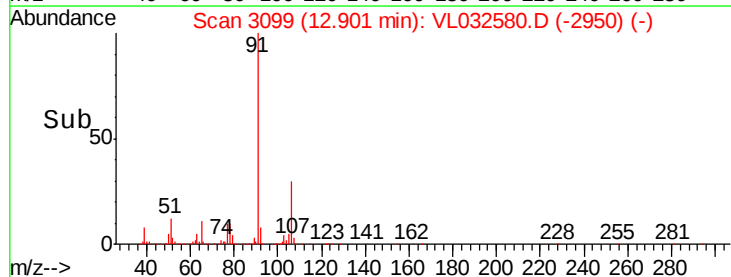
91 100

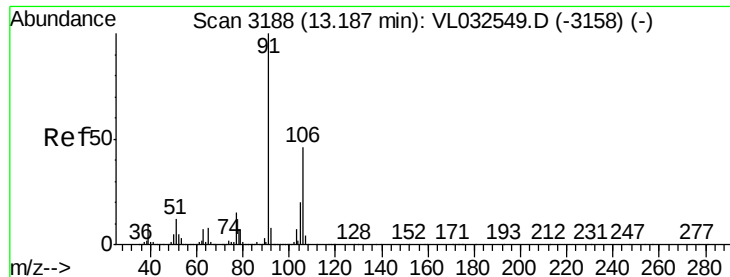
106 30.5 24.8 37.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





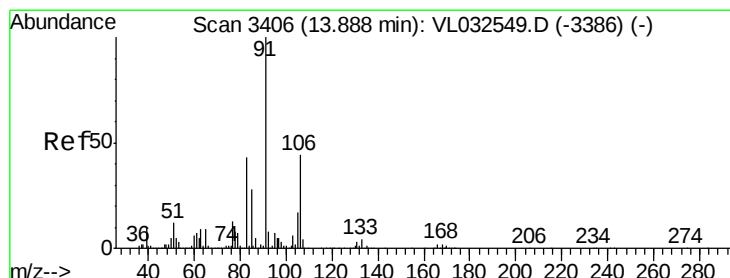
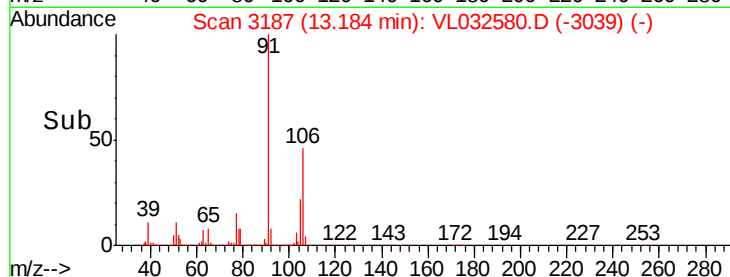
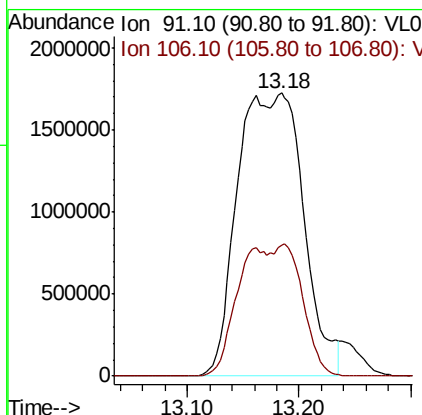
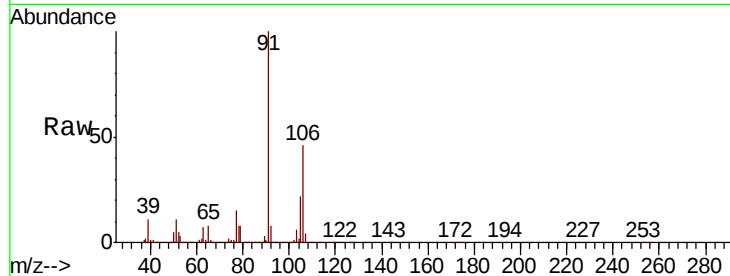
#59  
m/p-Xylene  
Concen: 19.257 ppbv m  
RT: 13.18 min Scan# 3187  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 91 Resp: 7063292  
Ion Ratio Lower Upper  
91 100  
106 44.2 36.6 55.0

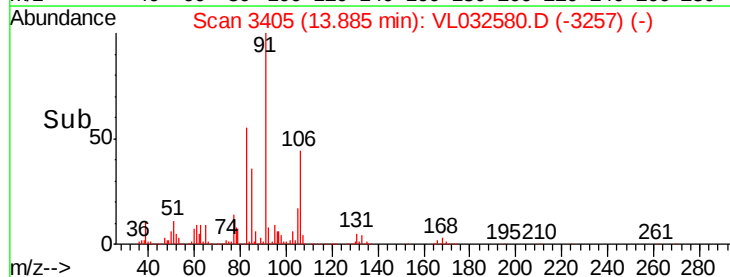
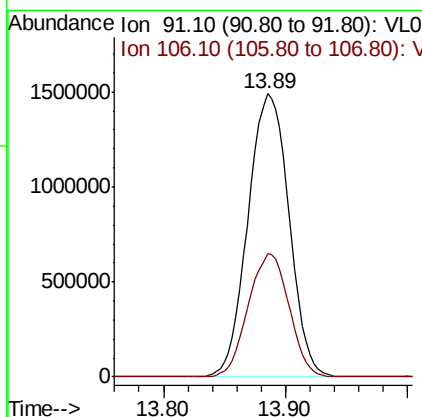
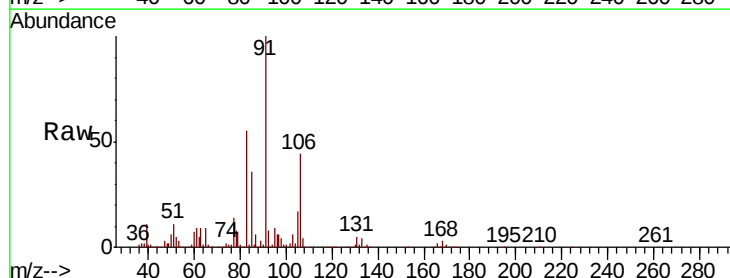
Manual Integrations  
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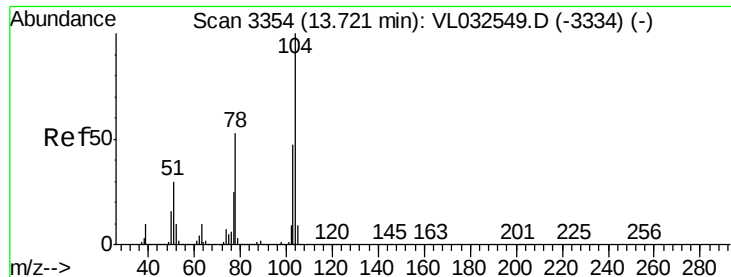
MMDadoda  
10/1/2018 11:58:05 AM



#60  
o-Xylene  
Concen: 9.713 ppbv  
RT: 13.89 min Scan# 3405  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Tgt Ion: 91 Resp: 3468612  
Ion Ratio Lower Upper  
91 100  
106 43.5 21.9 65.7





#61

Stvrene

Concen: 10.711 ppbv

RT: 13.72 min Scan# 3355

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:104 Resp: 2502030

Ion Ratio Lower Upper

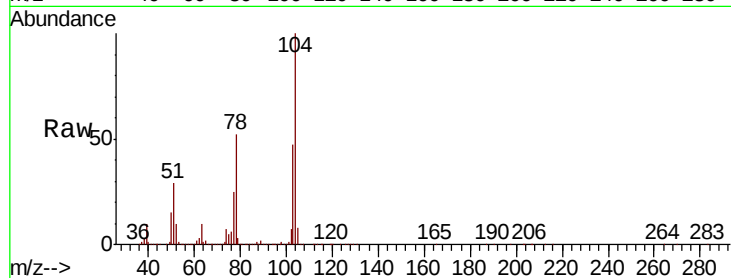
104 100

78 53.4 41.8 62.8

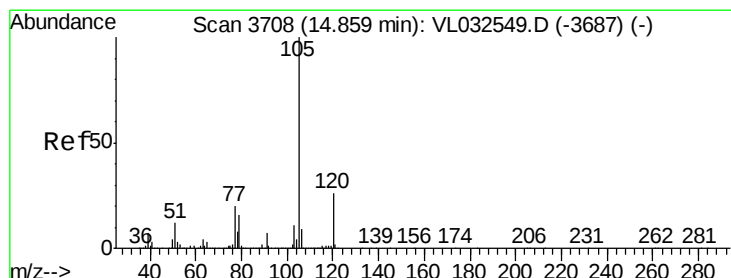
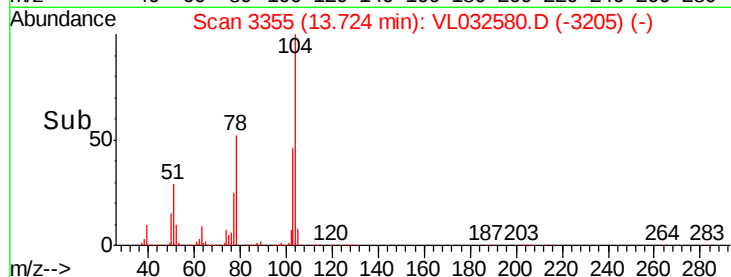
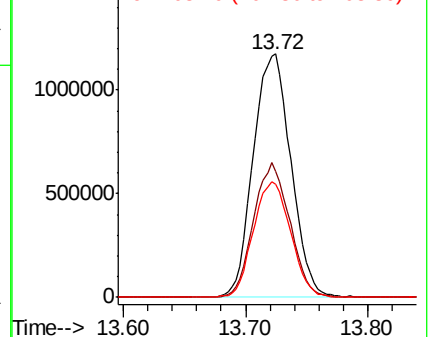
103 47.3 38.0 57.0

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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: 9.549 ppbv

RT: 14.86 min Scan# 3709

Delta R.T. -0.02 min

Lab File: VL032580.D

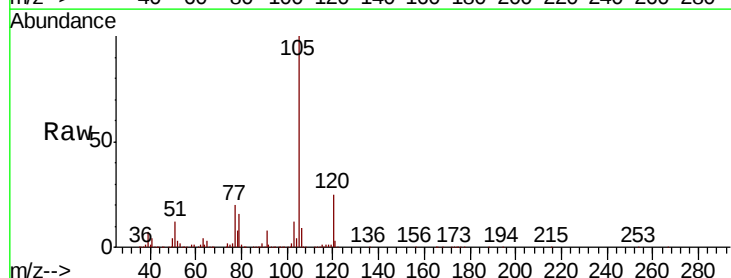
Acq: 28 Sep 2018 12:31

Tgt Ion:105 Resp: 4822305

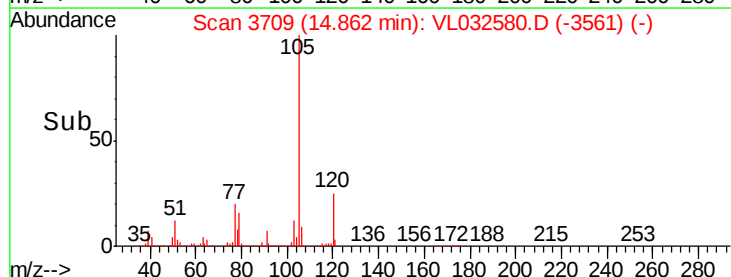
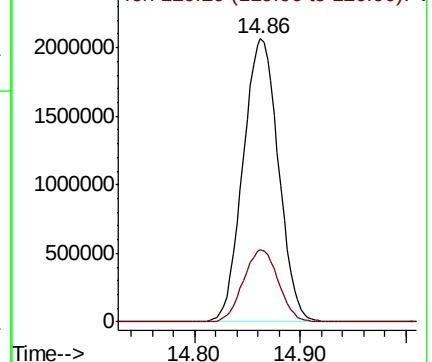
Ion Ratio Lower Upper

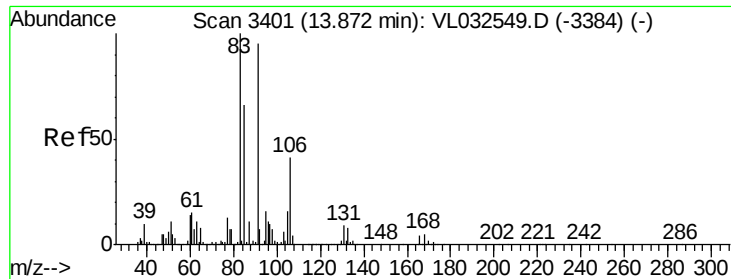
105 100

120 25.3 20.6 31.0



Abundance Ion 105.10 (104.80 to 105.80): V  
Ion 120.20 (119.90 to 120.90): V





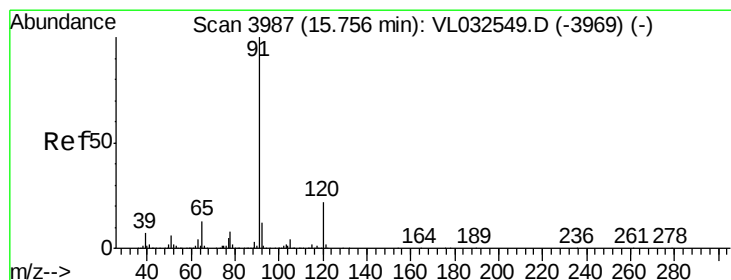
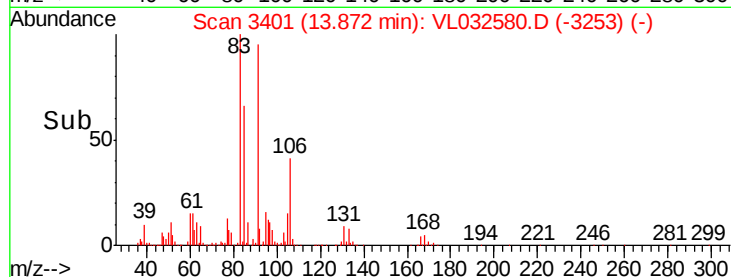
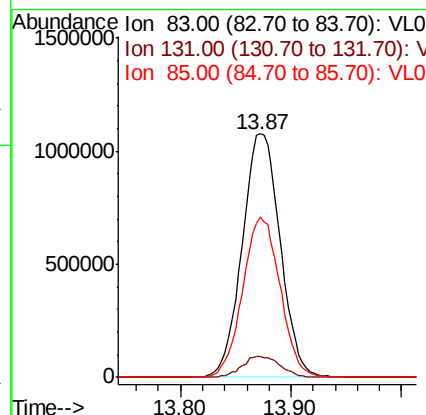
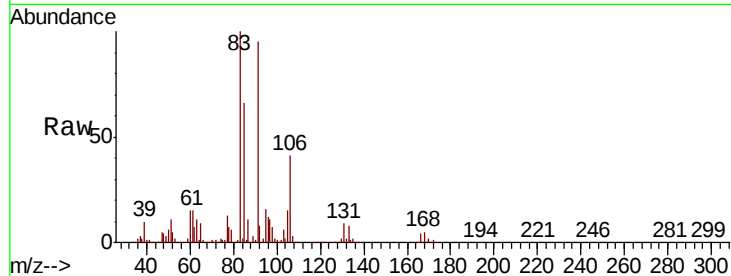
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 8.109 ppbv  
 RT: 13.87 min Scan# 3401  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion   | 83   | Resp  | 2572504 |
|-----------|------|-------|---------|
| Ion Ratio | 100  | Lower | Upper   |
| 83        | 100  |       |         |
| 131       | 8.7  | 4.3   | 12.8    |
| 85        | 65.2 | 32.3  | 96.8    |

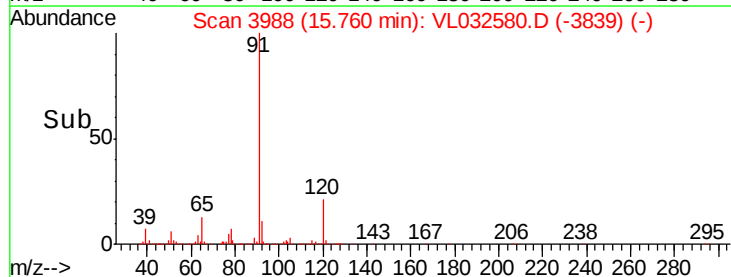
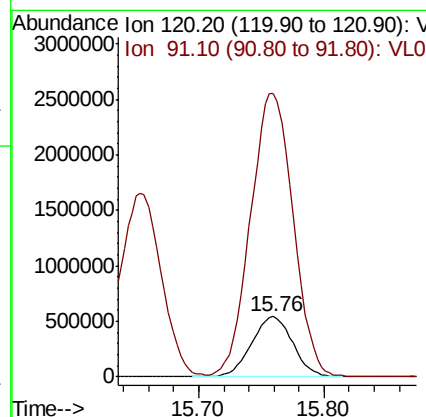
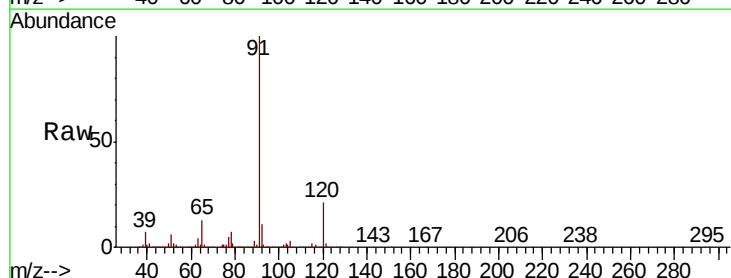
Manual Integrations  
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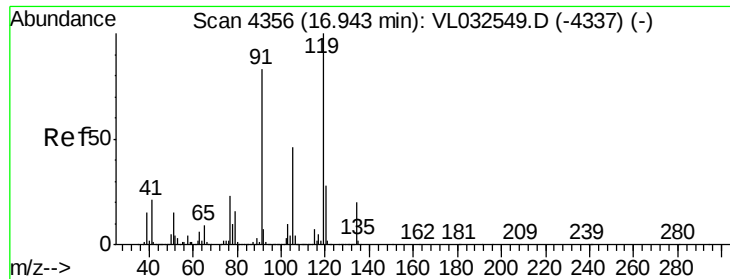
MMDadoda  
 10/1/2018 11:58:05 AM



#64  
 n-propylbenzene  
 Concen: 9.558 ppbv  
 RT: 15.76 min Scan# 3988  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

| Tgt Ion   | 120   | Resp  | 1240147 |
|-----------|-------|-------|---------|
| Ion Ratio | 100   | Lower | Upper   |
| 120       | 100   |       |         |
| 91        | 488.4 | 381.8 | 572.6   |





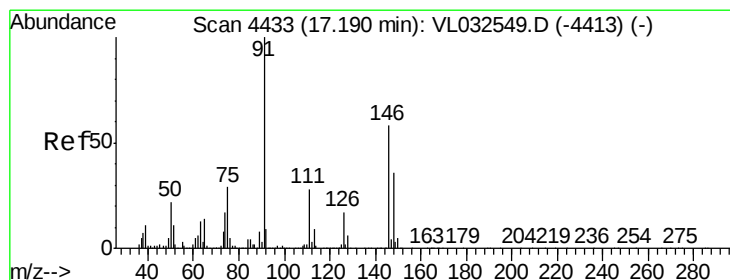
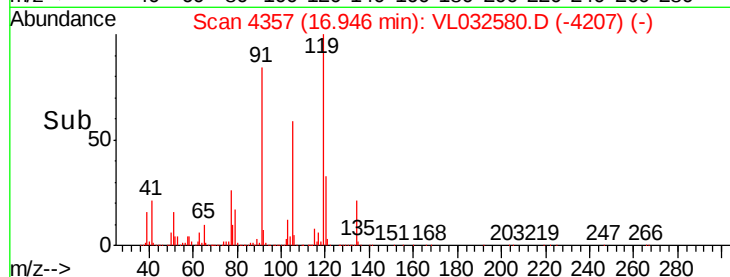
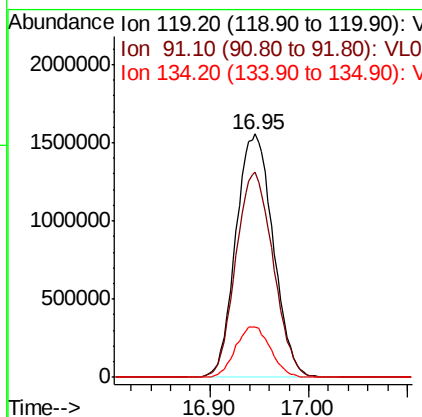
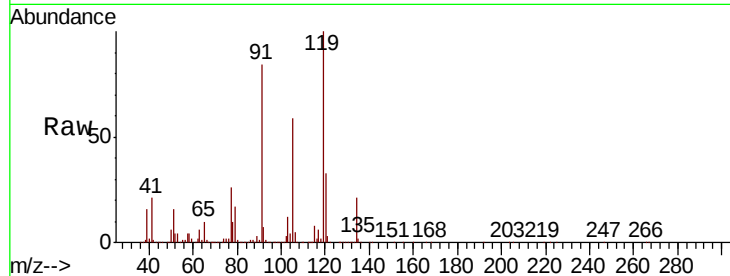
#65  
tert-Butylbenzene  
Concen: 9.411 ppbv  
RT: 16.95 min Scan# 4357  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 91      | 84.7  | 66.5  | 99.7  |
| 134     | 19.6  | 16.0  | 24.0  |

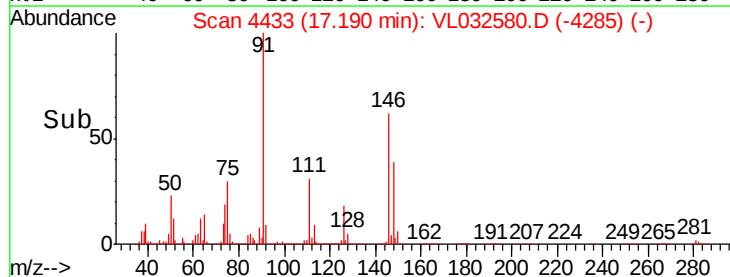
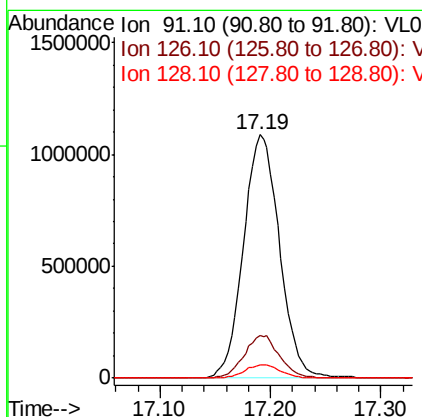
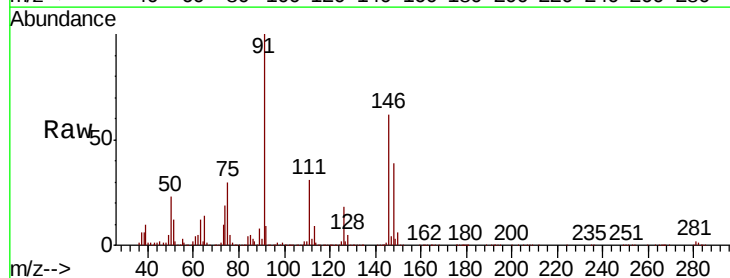
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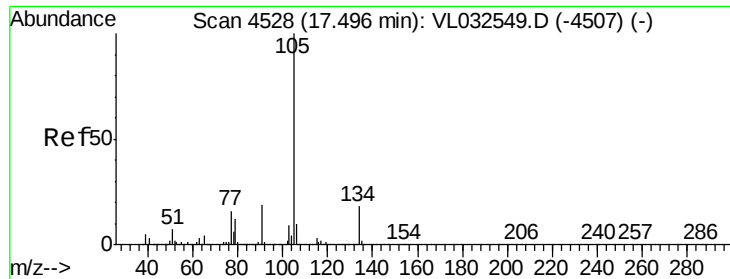
MMDadoda  
10/1/2018 11:58:05 AM



#66  
Benzyl Chloride  
Concen: 9.848 ppbv  
RT: 17.19 min Scan# 4433  
Delta R.T. -0.02 min  
Lab File: VL032580.D  
Acq: 28 Sep 2018 12:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 126     | 17.3  | 13.8  | 20.8  |
| 128     | 5.5   | 4.4   | 6.6   |





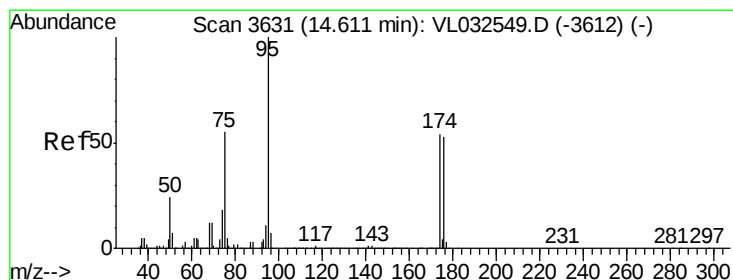
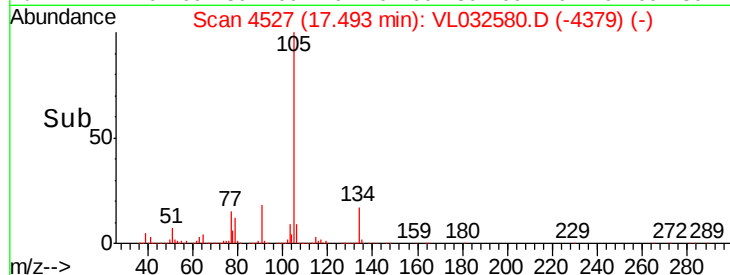
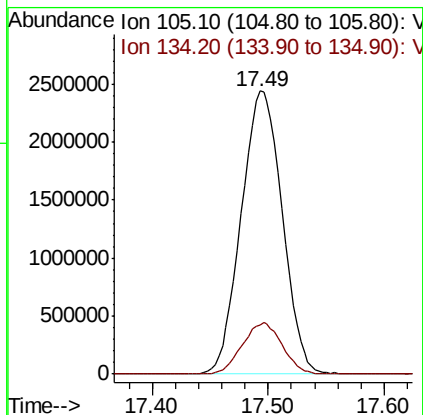
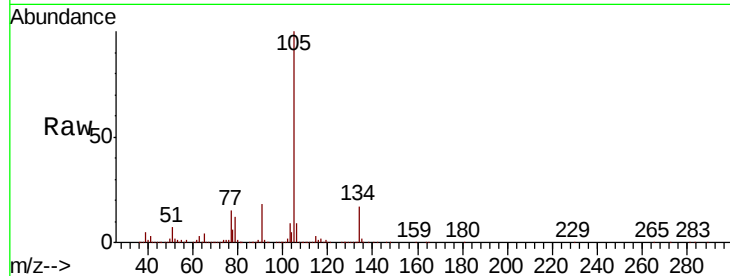
#67  
 sec-Butylbenzene  
 Concen: 9.342 ppbv  
 RT: 17.49 min Scan# 4527  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion: 105 Resp: 6012423  
 Ion Ratio Lower Upper  
 105 100  
 134 17.7 14.4 21.6

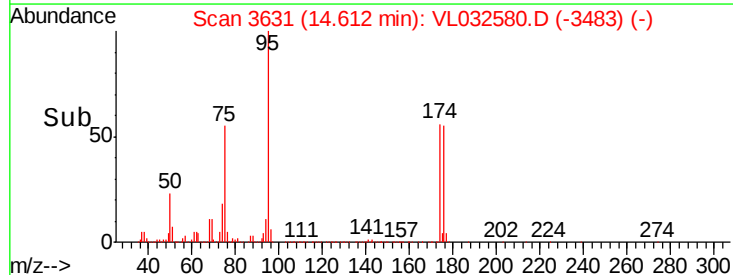
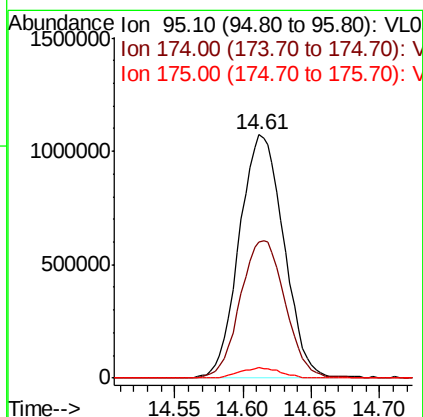
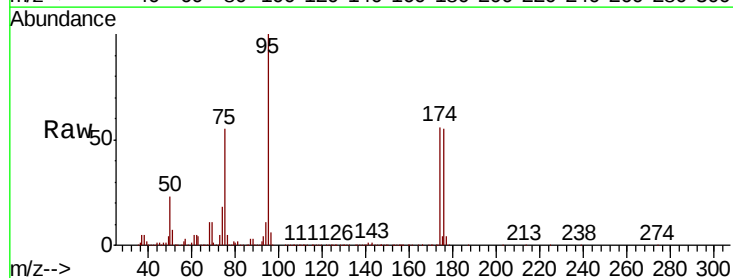
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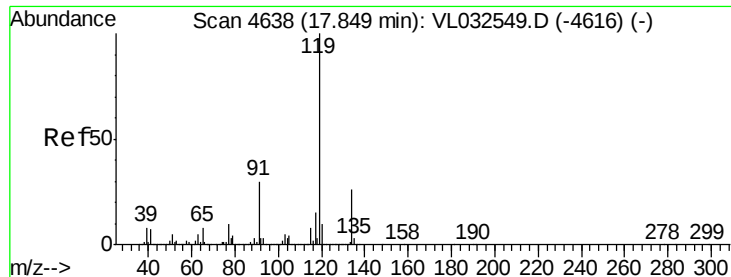
MMDadoda  
 10/1/2018 11:58:05 AM



#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 9.419 ppbv  
 RT: 14.61 min Scan# 3631  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Tgt Ion: 95 Resp: 2413880  
 Ion Ratio Lower Upper  
 95 100  
 174 57.8 46.3 69.5  
 175 4.1 3.4 5.0





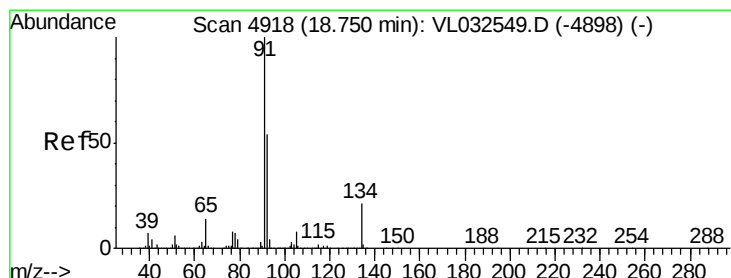
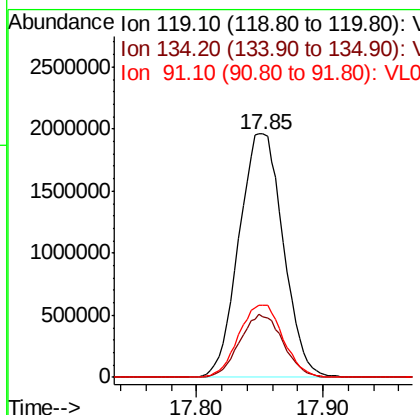
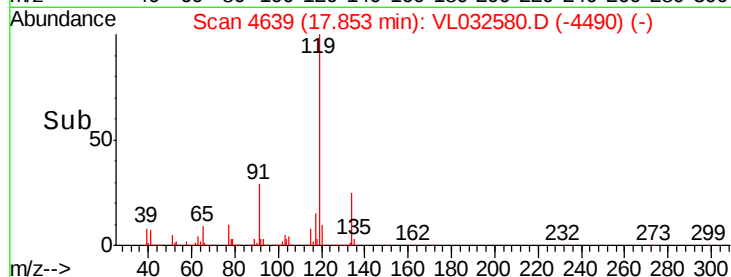
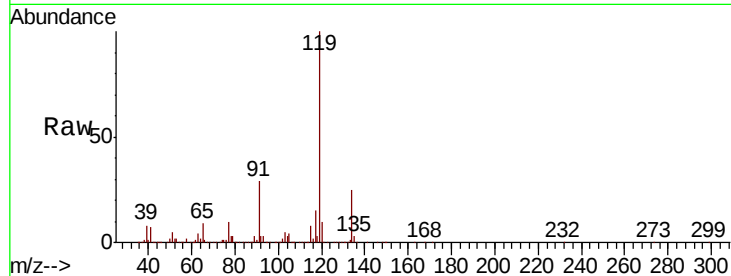
#69  
 p-Isopropyltoluene  
 Concen: 9.605 ppbv m  
 RT: 17.85 min Scan# 4639  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion: 119 Resp: 4774336  
 Ion Ratio Lower Upper  
 119 100  
 134 25.2 20.4 30.6  
 91 29.7 23.4 35.2

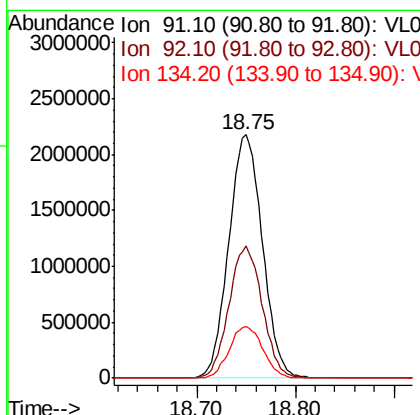
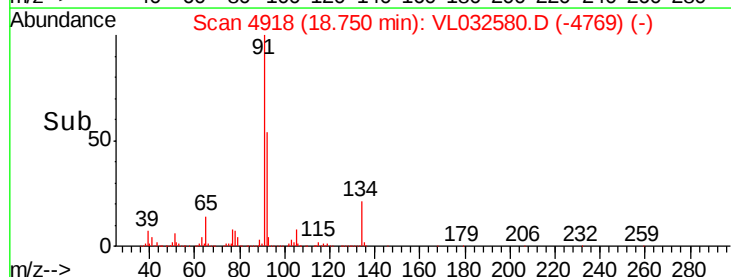
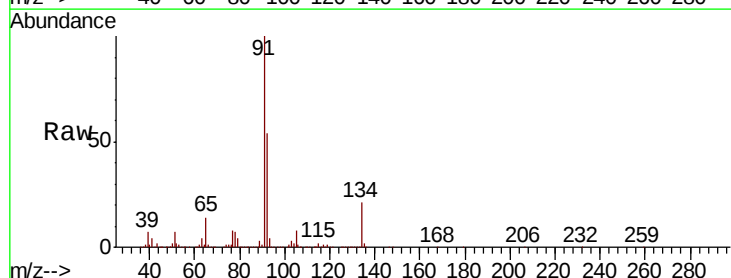
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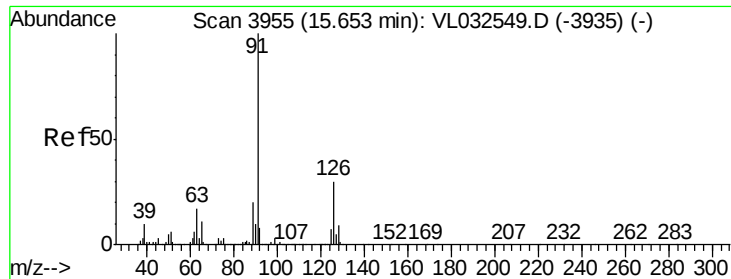
MMDadoda  
 10/1/2018 11:58:05 AM



#70  
 n-Butylbenzene  
 Concen: 9.519 ppbv  
 RT: 18.75 min Scan# 4918  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Tgt Ion: 91 Resp: 5168562  
 Ion Ratio Lower Upper  
 91 100  
 92 53.8 43.8 65.8  
 134 21.3 17.4 26.0





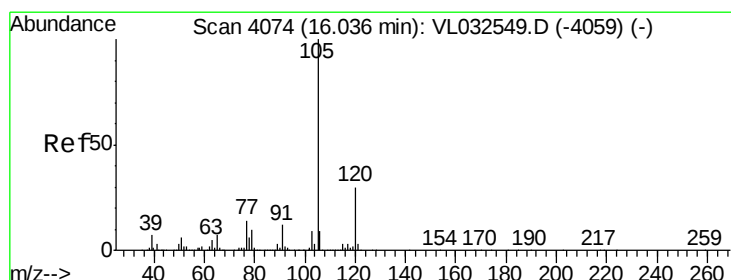
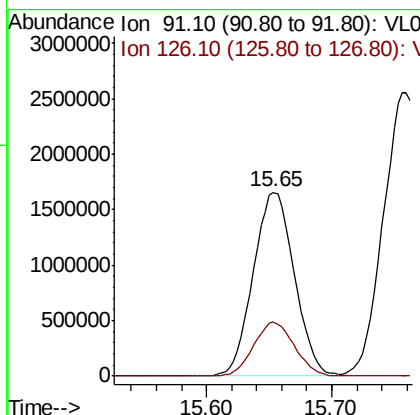
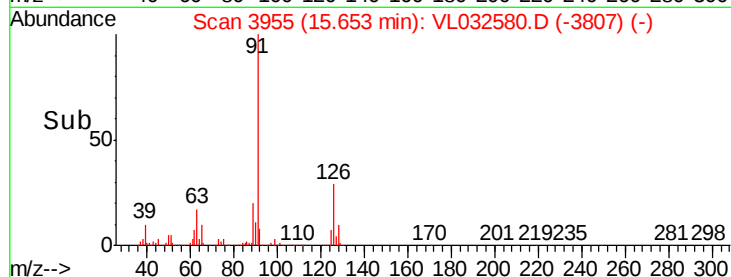
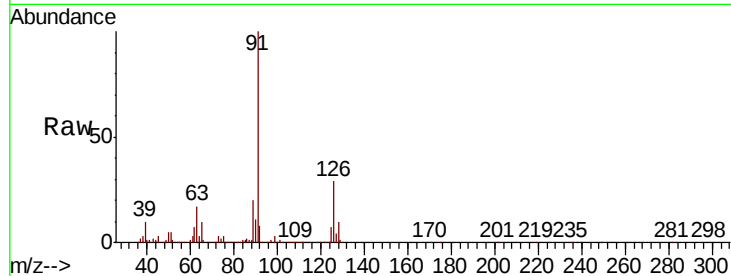
#71  
 2-Chlorotoluene  
 Concen: 9.821 ppbv  
 RT: 15.65 min Scan# 3955  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion: 91 Resp: 3777739  
 Ion Ratio Lower Upper  
 91 100  
 126 29.3 11.9 47.7

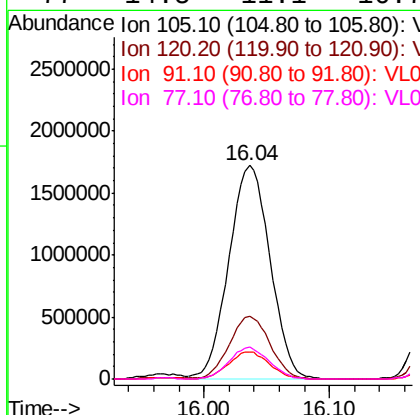
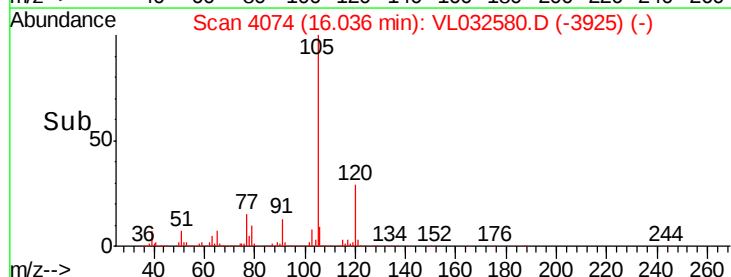
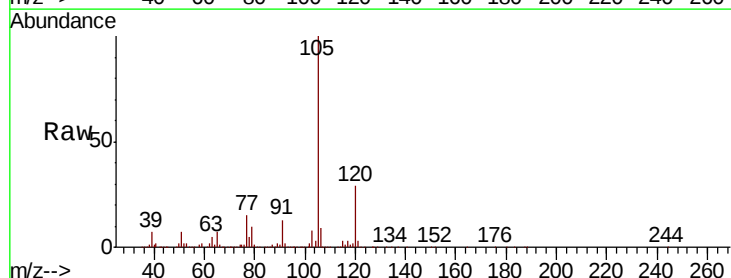
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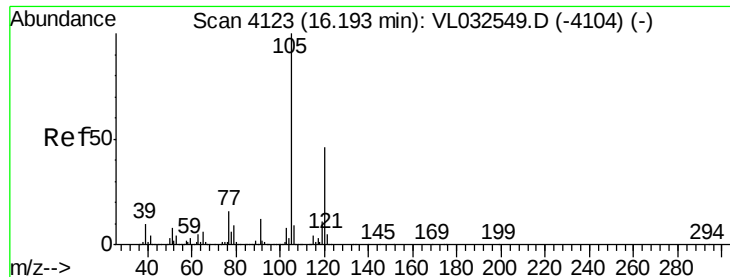
MMDadoda  
 10/1/2018 11:58:05 AM



#72  
 4-Ethyltoluene  
 Concen: 10.137 ppbv  
 RT: 16.04 min Scan# 4074  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Tgt Ion: 105 Resp: 3929336  
 Ion Ratio Lower Upper  
 105 100  
 120 29.0 23.5 35.3  
 91 12.7 10.2 15.2  
 77 14.5 11.1 16.7





#73

1,3,5-Trimethylbenzene

Concen: 9.919 ppbv

RT: 16.19 min Scan# 4123

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:105 Resp: 3736199

Ion Ratio Lower Upper

105 100

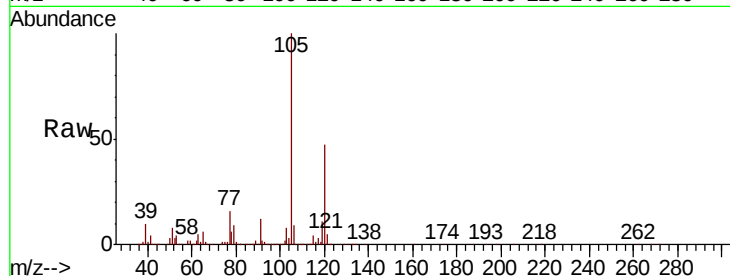
120 46.8 37.9 56.9

Manual Integrations

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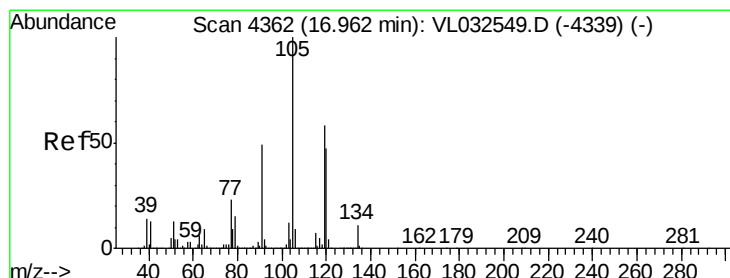
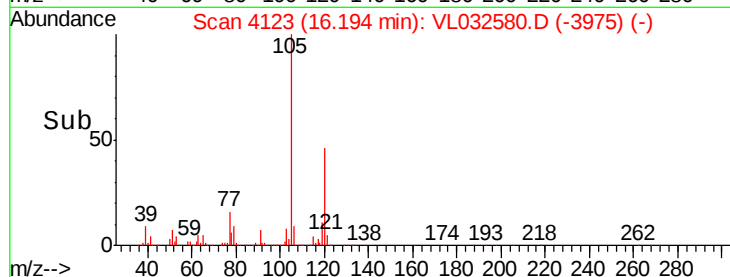
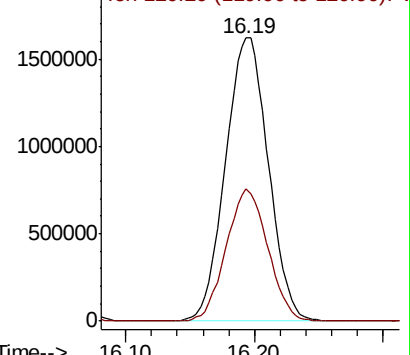
MMDadoda

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 9.325 ppbv

RT: 16.96 min Scan# 4362

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Tgt Ion:105 Resp: 3782155

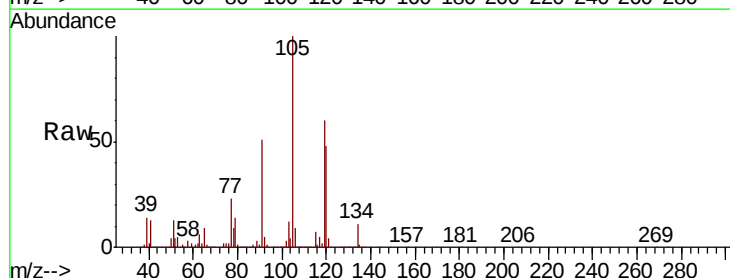
Ion Ratio Lower Upper

105 100

120 48.0 37.8 56.8

91 51.2 41.4 62.0

77 22.5 18.6 28.0

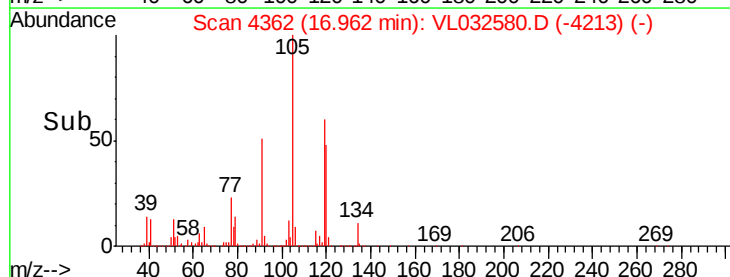
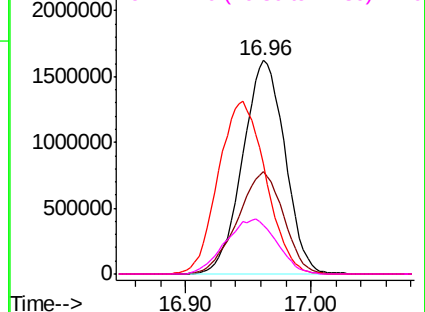


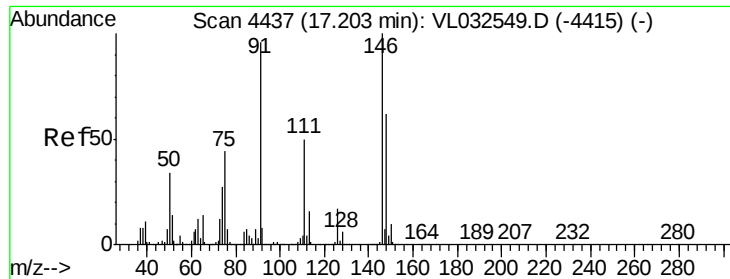
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#75

1,3-Dichlorobenzene

Concen: 8.293 ppbv

RT: 17.20 min Scan# 4437

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:146 Resp: 2075534

Ion Ratio Lower Upper

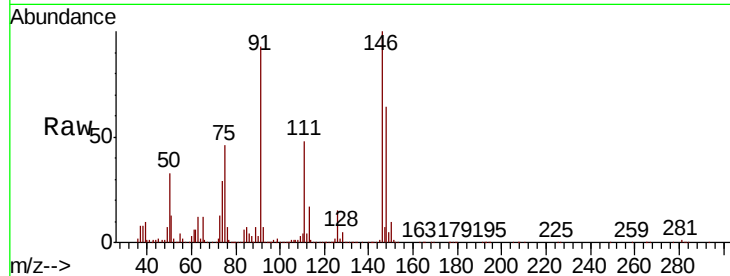
146 100

111 49.0 24.5 73.5

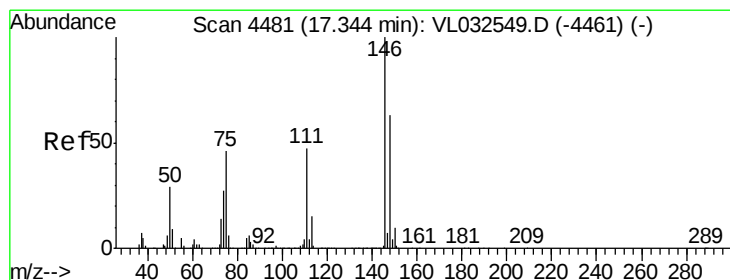
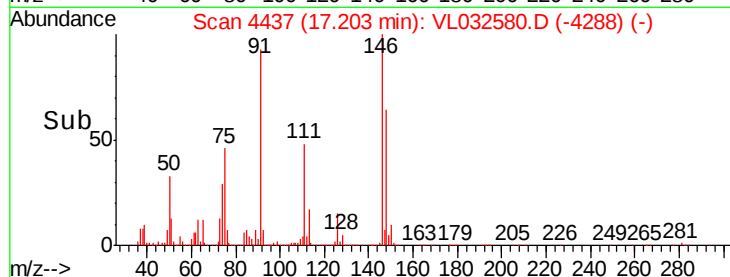
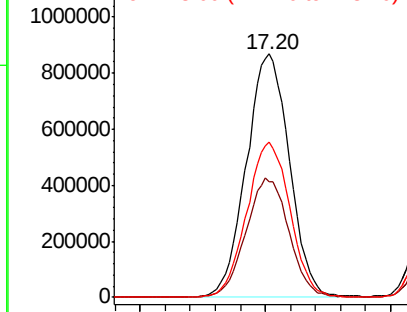
148 64.1 32.0 96.2

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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: 8.905 ppbv

RT: 17.34 min Scan# 4480

Delta R.T. -0.02 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

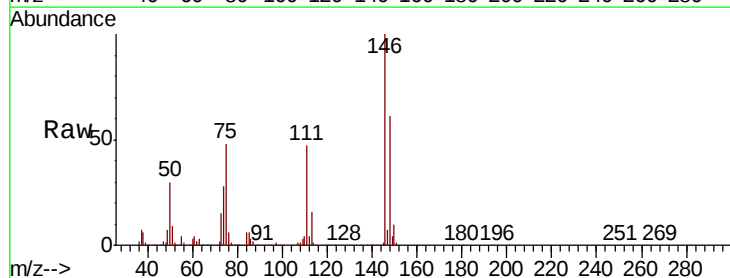
Tgt Ion:146 Resp: 2040672

Ion Ratio Lower Upper

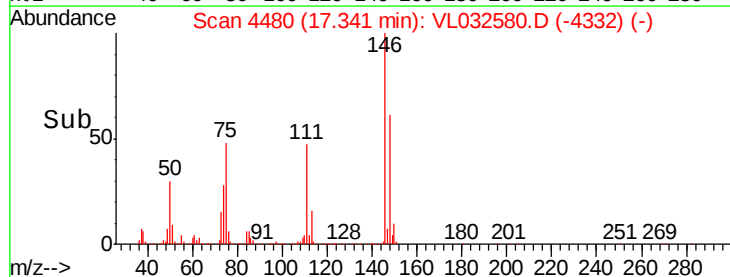
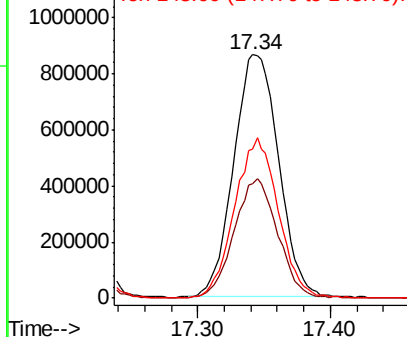
146 100

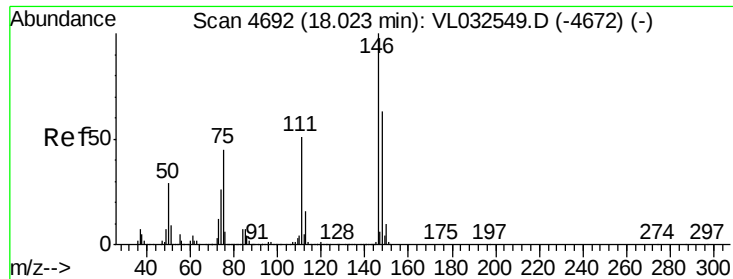
111 47.9 23.4 70.2

148 64.2 32.0 96.2



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





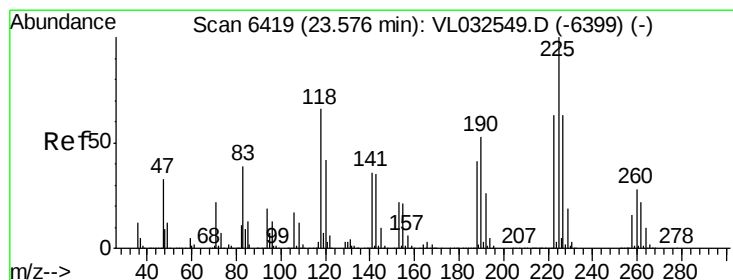
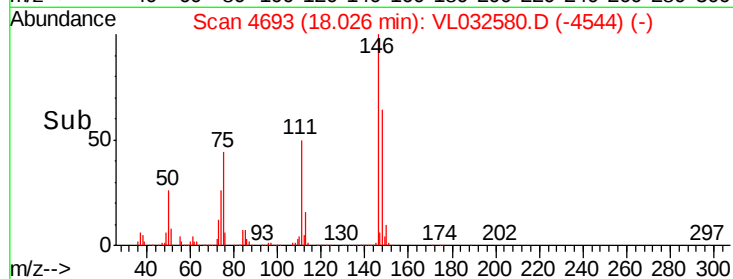
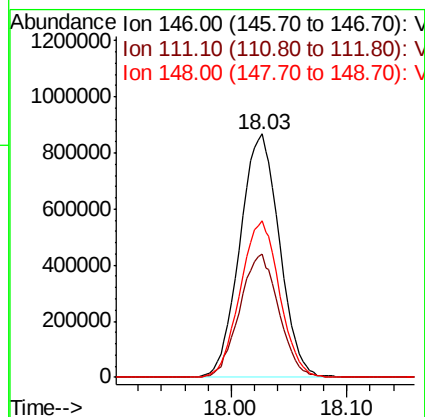
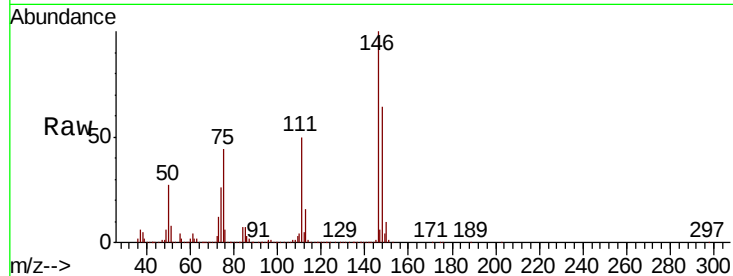
#77  
 1,2-Dichlorobenzene  
 Concen: 8.708 ppbv  
 RT: 18.03 min Scan# 4693  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 50.3  | 24.9  | 74.8  |
| 148     | 64.2  | 32.0  | 96.0  |

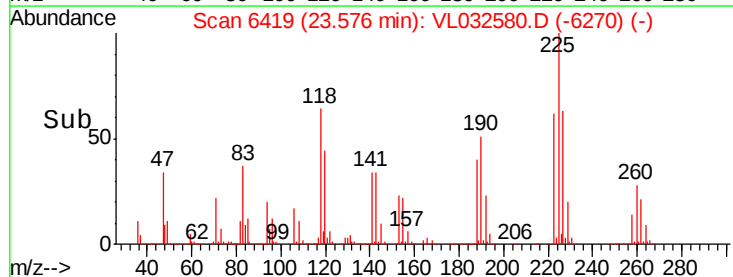
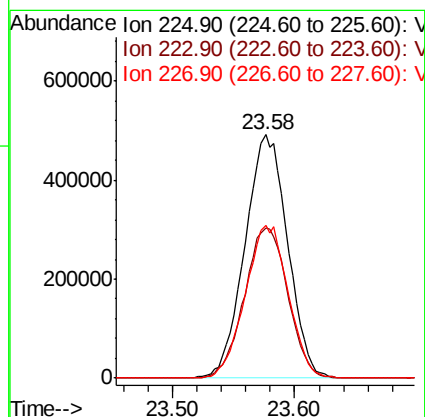
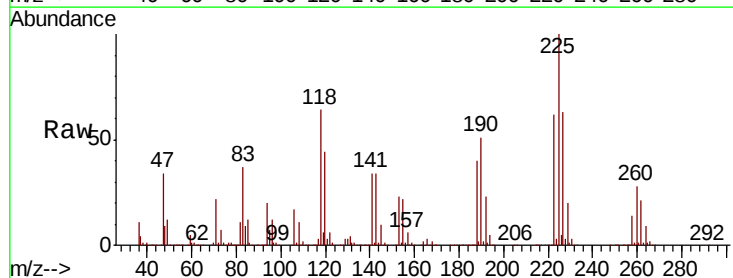
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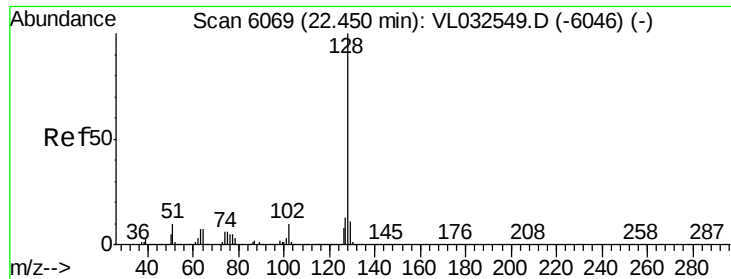
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 13.435 ppbv  
 RT: 23.58 min Scan# 6419  
 Delta R.T. -0.02 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 63.1  | 50.6  | 76.0  |
| 227     | 63.3  | 51.2  | 76.8  |





#79

Naphthalene

Concen: 10.370 ppbv

RT: 22.45 min Scan# 6069

Delta R.T. -0.03 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

Instrument :

MSVOA\_L

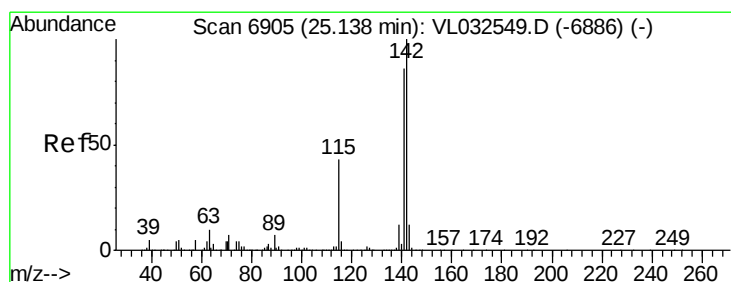
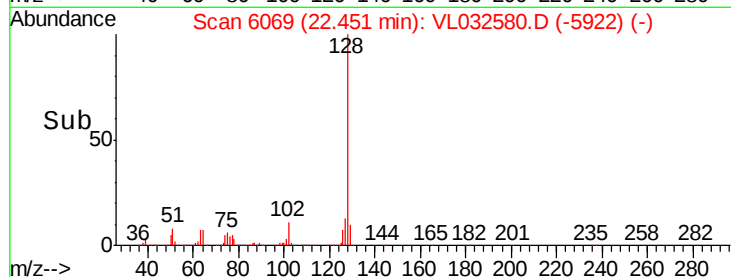
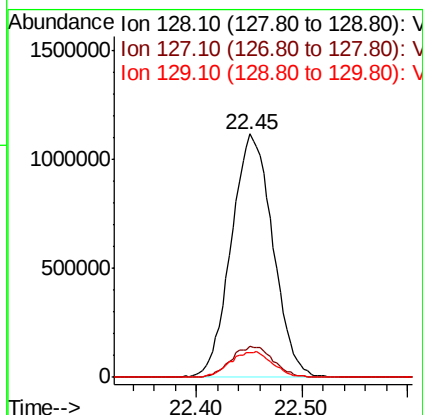
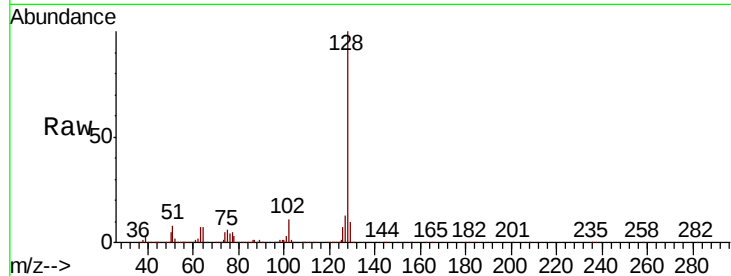
ClientSampleId :

VSTDCCC010EC

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 128   | Resp: | 3033376 |
| Ion      | Ratio | Lower | Upper   |
| 128      | 100   |       |         |
| 127      | 12.6  | 10.2  | 15.2    |
| 129      | 10.1  | 8.5   | 12.7    |

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#80

Naphthalene, 2-methyl-

Concen: 13.348 ppbv

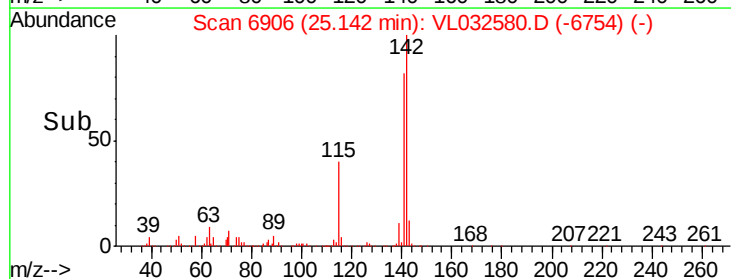
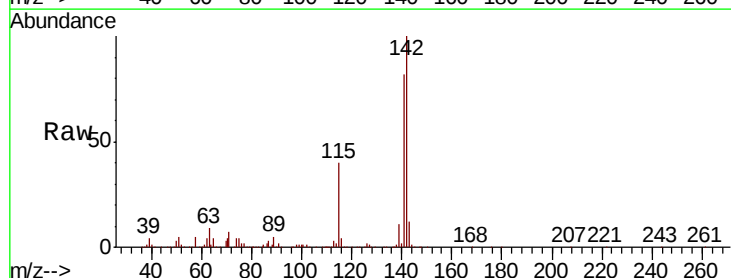
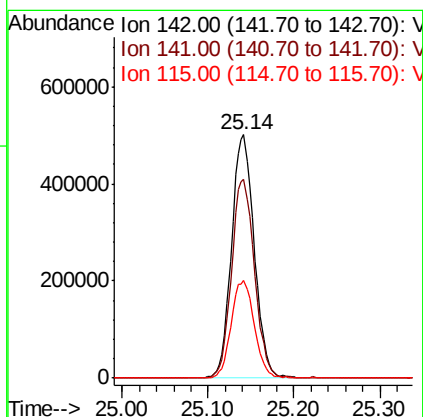
RT: 25.14 min Scan# 6906

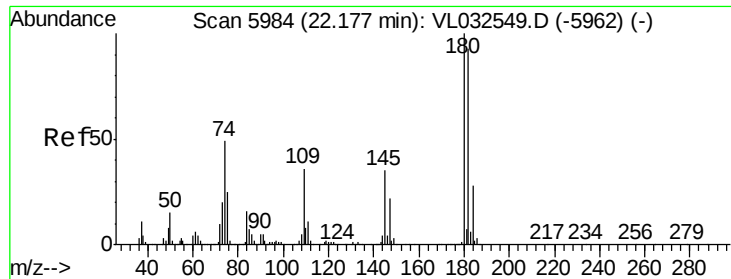
Delta R.T. -0.01 min

Lab File: VL032580.D

Acq: 28 Sep 2018 12:31

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 142   | Resp: | 916710 |
| Ion      | Ratio | Lower | Upper  |
| 142      | 100   |       |        |
| 141      | 82.6  | 67.0  | 100.6  |
| 115      | 41.0  | 31.3  | 46.9   |





#81  
 1,2,4-Trichlorobenzene  
 Concen: 9.649 ppbv  
 RT: 22.18 min Scan# 5984  
 Delta R.T. -0.03 min  
 Lab File: VL032580.D  
 Acq: 28 Sep 2018 12:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.2  | 76.1  | 114.1 |
| 184     | 30.2  | 23.8  | 35.8  |

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