

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040419\  
 Data File : VL033561.D  
 Acq On : 5 Apr 2019 11:01  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

MMDadoda  
 4/8/2019 3:22:39 AM

Quant Time: Apr 06 04:19:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Mar 2  
 QLast Update : Tue Mar 26 16:00:50 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 1172249  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 3139740  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 3308661m | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.57  | 95    | 2361382  | 9.10     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 91.00% |

| Target Compounds               | R.T. | QIon | Response | Conc   | Units  | Ovalue |
|--------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.08 | 85   | 1814894  | 10.615 | ppbv   | 99     |
| 3) Chlorodifluoromethane       | 3.01 | 51   | 1054492  | 7.814  | ppbv   | 96     |
| 4) Chloromethane               | 3.17 | 50   | 604824   | 8.469  | ppbv   | 99     |
| 5) Vinyl Chloride              | 3.29 | 62   | 605121   | 8.624  | ppbv   | 98     |
| 6) Bromomethane                | 3.51 | 94   | 392667   | 8.708  | ppbv   | 91     |
| 7) Chloroethane                | 3.60 | 64   | 218513   | 8.368  | ppbv   | 96     |
| 8) Dichlorotetrafluoroethane   | 3.22 | 85   | 1441214  | 7.911  | ppbv   | 95     |
| 9) Propene                     | 3.04 | 41   | 500881   | 8.838  | ppbv   | 97     |
| 10) Heptane                    | 8.24 | 43   | 1279300  | 8.444  | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.00 | 101  | 1565862  | 7.431  | ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55 | 101  | 1090096  | 7.702  | ppbv   | 96     |
| 13) Ethanol                    | 3.65 | 45   | 164129   | 11.191 | ppbv   | 64     |
| 14) Bromoethene                | 3.79 | 108  | 489989   | 8.681  | ppbv   | 97     |
| 15) Acetone                    | 3.90 | 43   | 1029506  | 7.304  | ppbv   | 97     |
| 16) 1,3-Butadiene              | 3.36 | 39   | 505699   | 9.045  | ppbv   | 93     |
| 17) tert-Butyl alcohol         | 4.35 | 59   | 228547   | 8.819  | ppbv   | 98     |
| 18) 1,1-Dichloroethene         | 4.35 | 96   | 504509   | 8.299  | ppbv   | 95     |
| 19) Isopropyl Alcohol          | 4.02 | 45   | 859919   | 9.645  | ppbv   | 99     |
| 20) Methylene Chloride         | 4.41 | 84   | 434928   | 7.269  | ppbv   | 94     |
| 21) Allyl Chloride             | 4.47 | 41   | 747384   | 8.388  | ppbv   | 97     |
| 22) trans-1,2-Dichloroethene   | 4.96 | 96   | 540647   | 8.524  | ppbv   | 96     |
| 23) Vinyl Acetate              | 5.15 | 43   | 1751993  | 8.733  | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.09 | 63   | 1225299  | 8.040  | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.77 | 43   | 2104166  | 8.046  | ppbv   | 99     |
| 26) Hexane                     | 5.78 | 57   | 970356   | 8.345  | ppbv   | 95     |
| 27) Carbon Disulfide           | 4.62 | 76   | 1185716  | 8.575  | ppbv   | 98     |
| 28) Methyl tert-Butyl Ether    | 5.11 | 73   | 1502755  | 8.973  | ppbv   | 100    |
| 29) Chloroform                 | 5.85 | 83   | 1596755  | 8.011  | ppbv   | 99     |
| 30) Cyclohexane                | 7.24 | 84   | 888335   | 9.657  | ppbv   | 92     |
| 31) cis-1,2-Dichloroethene     | 5.64 | 61   | 1005959  | 8.702  | ppbv   | 93     |
| 32) 1,1,1-Trichloroethane      | 6.62 | 97   | 1557077  | 8.204  | ppbv   | 99     |
| 34) 2-Butanone                 | 5.33 | 43   | 1434294  | 7.603  | ppbv   | 97     |
| 35) Carbon Tetrachloride       | 7.13 | 117  | 1629926  | 7.329  | ppbv   | 98     |
| 36) Benzene                    | 7.00 | 78   | 2152815  | 8.172  | ppbv   | 96     |
| 37) 1,2-Dichloroethane         | 6.41 | 62   | 1145680  | 6.488  | ppbv # | 96     |
| 38) Trichloroethene            | 7.96 | 130  | 841519   | 8.488  | ppbv   | 98     |
| 39) 1,2-Dichloropropane        | 7.73 | 63   | 792665   | 7.681  | ppbv   | 94     |
| 40) 1,4-Dioxane                | 7.95 | 88   | 359134   | 9.757  | ppbv # | 53     |
| 41) Tetrahydrofuran            | 6.14 | 42   | 830613   | 8.005  | ppbv   | 96     |
| 42) Bromodichloromethane       | 7.91 | 83   | 1709234  | 7.107  | ppbv   | 99     |
| 43) Methyl Methacrylate        | 8.13 | 69   | 857079   | 8.012  | ppbv   | 95     |

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 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

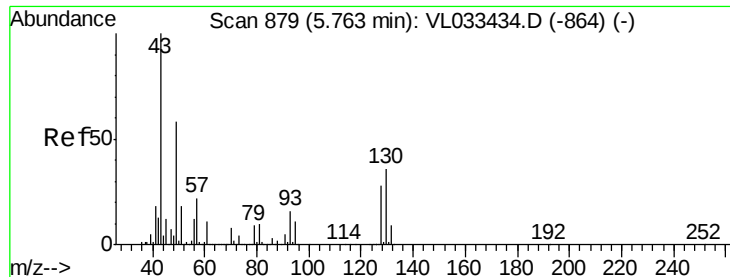
MMDadoda  
 4/8/2019 3:22:39 AM

Quant Time: Apr 06 04:19:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Mar 2  
 QLast Update : Tue Mar 26 16:00:50 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.99  | 57   | 3396004  | 7.377  | ppbv   | 98       |
| 45) t-1,3-Dichloropropene     | 9.41  | 75   | 1138920  | 8.672  | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 8.83  | 75   | 1294906  | 8.443  | ppbv   | 93       |
| 47) 1,1,2-Trichloroethane     | 9.61  | 97   | 887522   | 7.574  | ppbv   | 99       |
| 48) Dibromochloromethane      | 10.45 | 129  | 1522331  | 7.702  | ppbv   | 100      |
| 49) Bromoform                 | 13.20 | 173  | 1422569  | 7.534  | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.87  | 43   | 2037673  | 7.377  | ppbv   | 97       |
| 51) 2-Hexanone                | 10.26 | 43   | 1626933  | 7.896  | ppbv # | 97       |
| 52) Tetrachloroethene         | 11.37 | 164  | 837014   | 8.421  | ppbv   | 97       |
| 53) Toluene                   | 9.94  | 91   | 2562988  | 8.372  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.76 | 107  | 1420121  | 7.748  | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.28 | 131  | 1105995  | 7.294  | ppbv # | 49       |
| 57) Chlorobenzene             | 12.30 | 112  | 1971241  | 7.673  | ppbv   | 94       |
| 58) Ethyl Benzene             | 12.86 | 91   | 3530526  | 7.990  | ppbv   | 97       |
| 59) m/p-Xylene                | 13.12 | 91   | 5798095m | 14.691 | ppbv   |          |
| 60) o-Xylene                  | 13.85 | 91   | 2817954  | 7.384  | ppbv   | 97       |
| 61) Styrene                   | 13.68 | 104  | 2226334  | 8.500  | ppbv   | 97       |
| 62) Isopropylbenzene          | 14.82 | 105  | 4082234  | 7.554  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.83 | 83   | 1936215  | 6.890  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.72 | 120  | 1059236  | 7.724  | ppbv   | 92       |
| 65) tert-Butylbenzene         | 16.90 | 119  | 3586081  | 7.530  | ppbv   | 95       |
| 66) Benzyl Chloride           | 17.16 | 91   | 1951750  | 8.814  | ppbv   | 97       |
| 67) sec-Butylbenzene          | 17.46 | 105  | 5111391  | 7.547  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.81 | 119  | 4251766  | 7.711  | ppbv   | 98       |
| 70) n-Butylbenzene            | 18.71 | 91   | 4389414  | 7.513  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.61 | 91   | 3084882  | 7.507  | ppbv   | 96       |
| 72) 4-Ethyltoluene            | 16.00 | 105  | 3355733  | 7.823  | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 16.16 | 105  | 3187913  | 7.766  | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.92 | 105  | 3261264  | 7.412  | ppbv   | 98       |
| 75) 1,3-Dichlorobenzene       | 17.16 | 146  | 1970861  | 7.247  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.31 | 146  | 1987596  | 7.501  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.98 | 146  | 1950474  | 7.559  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.54 | 225  | 1247374  | 7.303  | ppbv   | 99       |
| 79) Naphthalene               | 22.41 | 128  | 3173900  | 8.426  | ppbv   | 98       |
| 80) Naphthalene, 2-methyl-    | 25.11 | 142  | 632835   | 5.006  | ppbv   | 97       |
| 81) 1,2,4-Trichlorobenzene    | 22.13 | 180  | 1667911  | 7.983  | ppbv   | 100      |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 49 Resp: 1172249

Ion Ratio Lower Upper

49 100

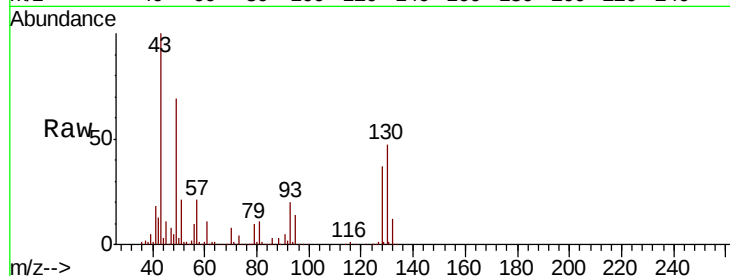
128 52.3 24.0 72.0

130 67.4 31.2 93.6

Manual Integrations  
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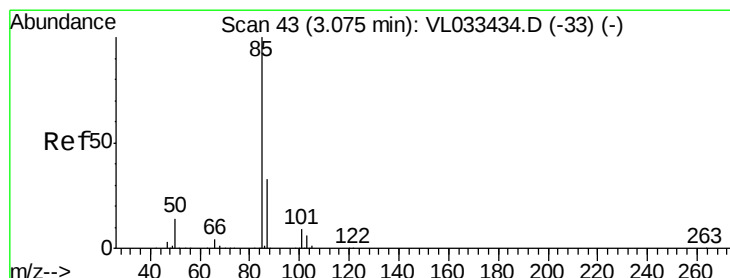
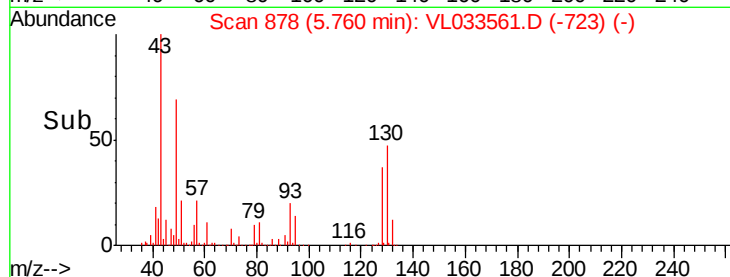
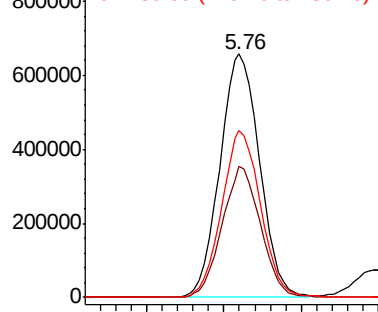
4/8/2019 3:22:39 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 10.615 ppbv

RT: 3.08 min Scan# 43

Delta R.T. 0.00 min

Lab File: VL033561.D

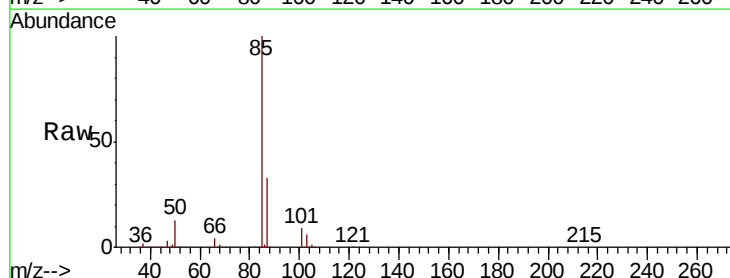
Acq: 5 Apr 2019 11:01

Tgt Ion: 85 Resp: 1814894

Ion Ratio Lower Upper

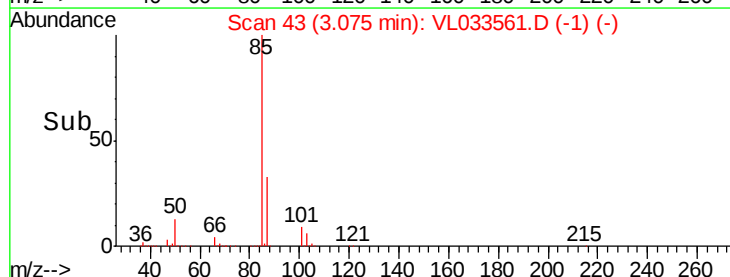
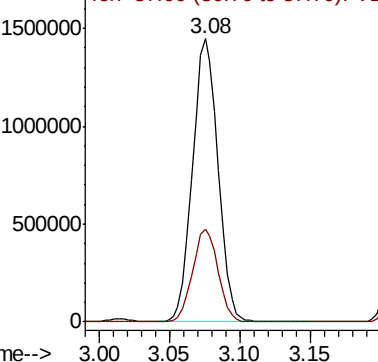
85 100

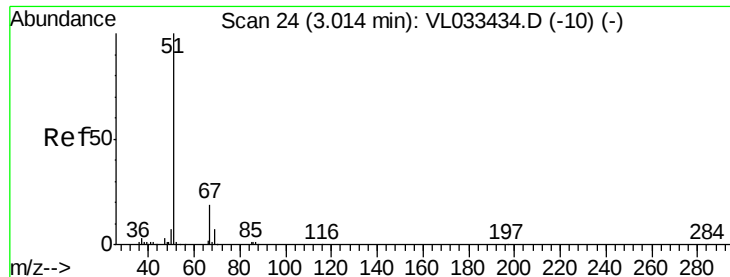
87 32.7 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 7.814 ppbv

RT: 3.01 min Scan# 24

Delta R.T. 0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 51 Resp: 1054492

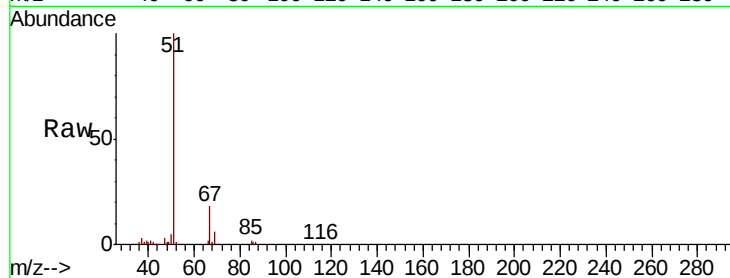
Ion Ratio Lower Upper

51 100

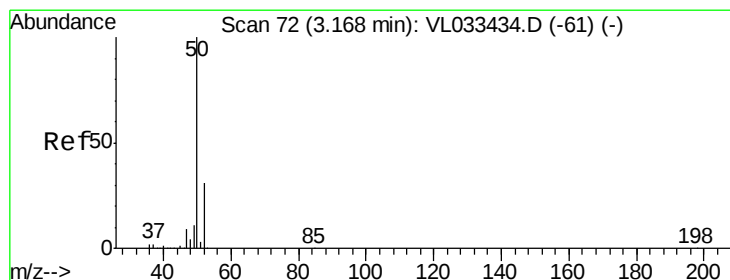
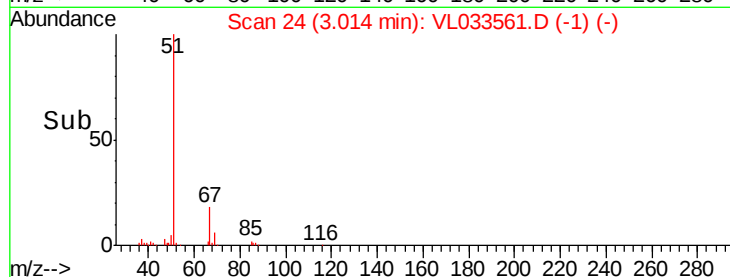
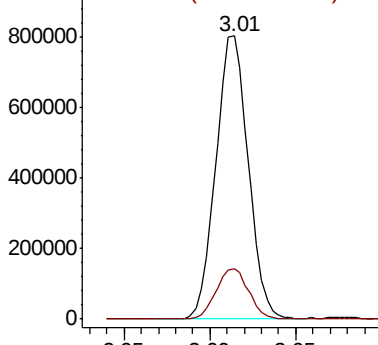
67 17.8 15.7 23.5

Manual Integrations  
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4/8/2019 3:22:39 AM



Abundance Ion 51.00 (50.70 to 51.70): VL0  
Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 8.469 ppbv

RT: 3.17 min Scan# 72

Delta R.T. 0.00 min

Lab File: VL033561.D

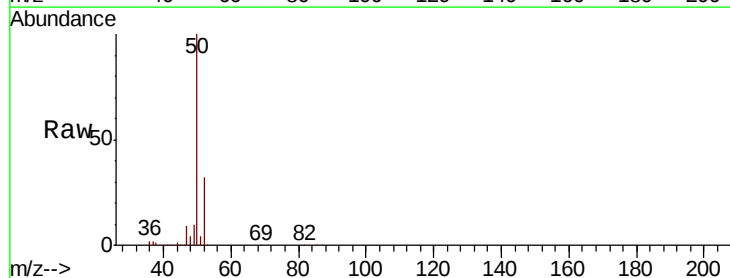
Acq: 5 Apr 2019 11:01

Tgt Ion: 50 Resp: 604824

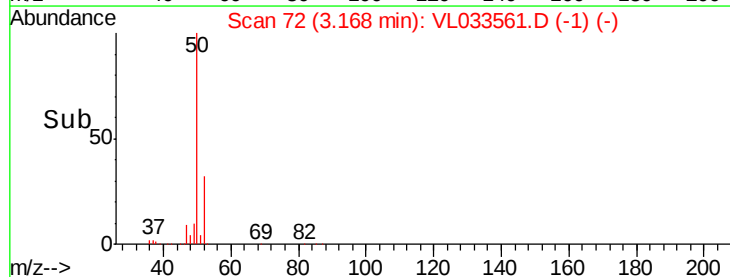
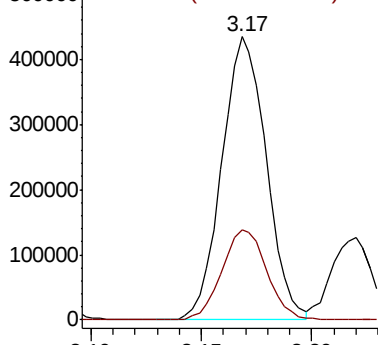
Ion Ratio Lower Upper

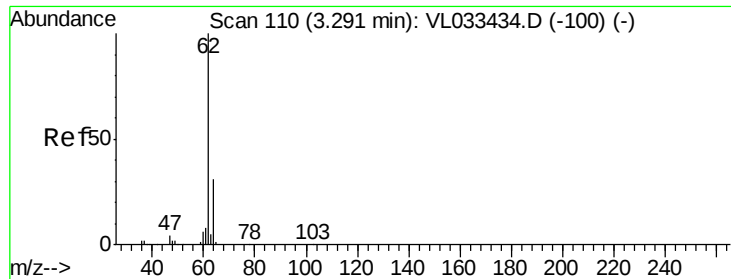
50 100

52 32.0 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0  
Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 8.624 ppbv

RT: 3.29 min Scan# 110

Delta R.T. 0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 605121

Ion Ratio Lower Upper

62 100

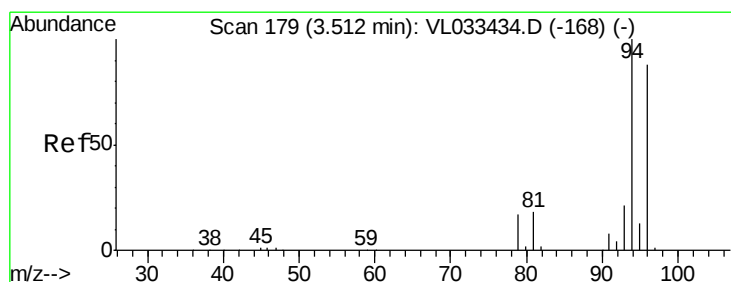
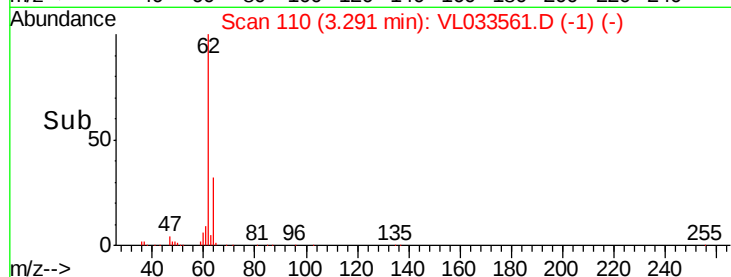
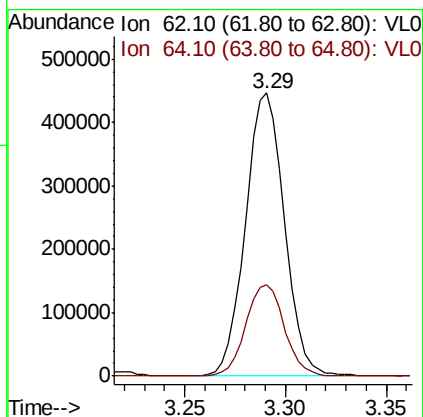
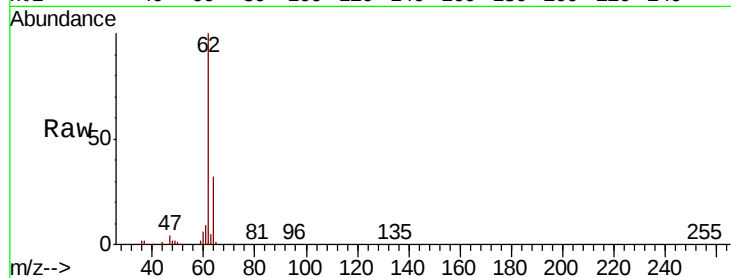
64 32.2 24.9 37.3

Manual Integrations

APPROVED

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4/8/2019 3:22:39 AM



#6

Bromomethane

Concen: 8.708 ppbv

RT: 3.51 min Scan# 179

Delta R.T. 0.00 min

Lab File: VL033561.D

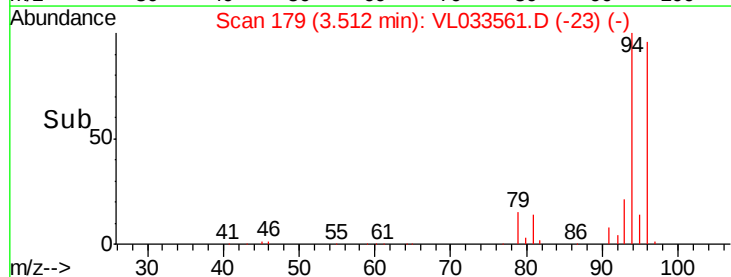
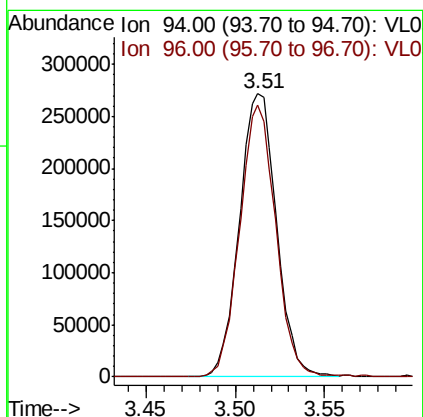
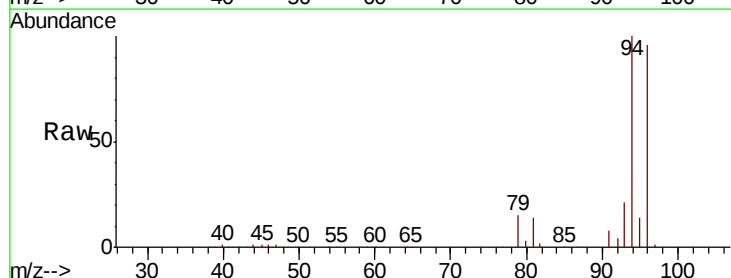
Acq: 5 Apr 2019 11:01

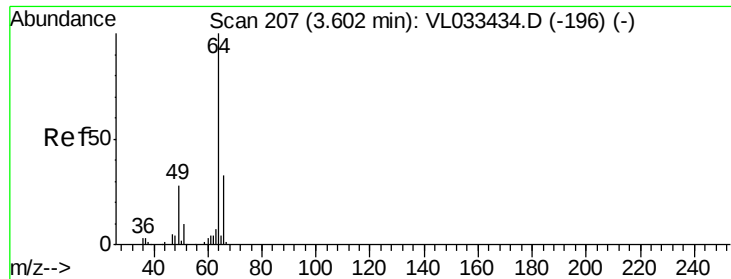
Tgt Ion: 94 Resp: 392667

Ion Ratio Lower Upper

94 100

96 96.2 70.2 105.2





#7

Chloroethane

Concen: 8.368 ppbv

RT: 3.60 min Scan# 206

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 64 Resp: 218513

Ion Ratio Lower Upper

64 100

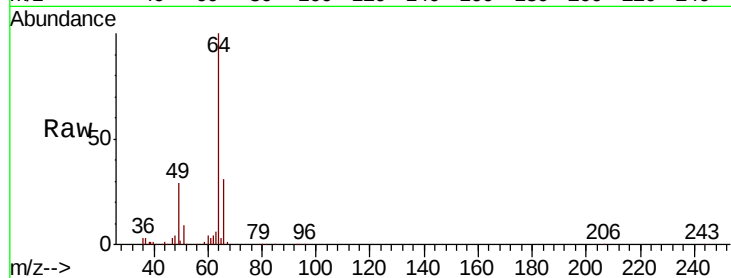
66 31.2 26.7 40.1

Manual Integrations

APPROVED

MMDadoda

4/8/2019 3:22:39 AM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.60

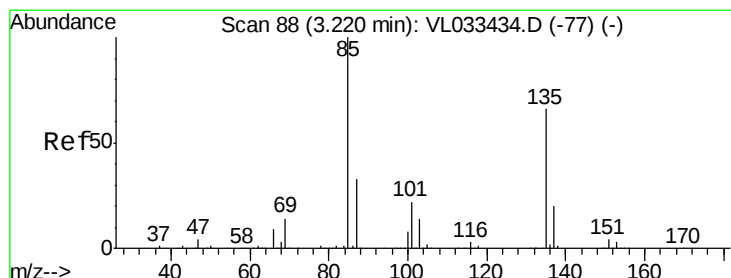
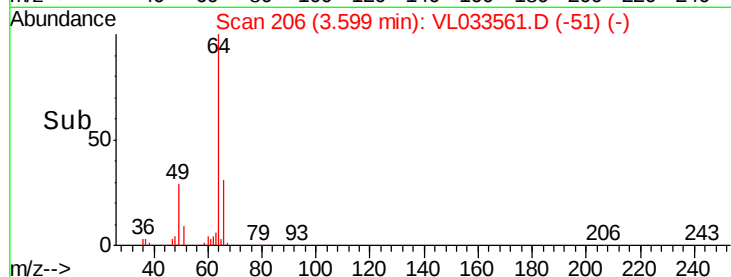
150000

100000

50000

0

Time-->



#8

Dichlorotetrafluoroethane

Concen: 7.911 ppbv

RT: 3.22 min Scan# 88

Delta R.T. 0.00 min

Lab File: VL033561.D

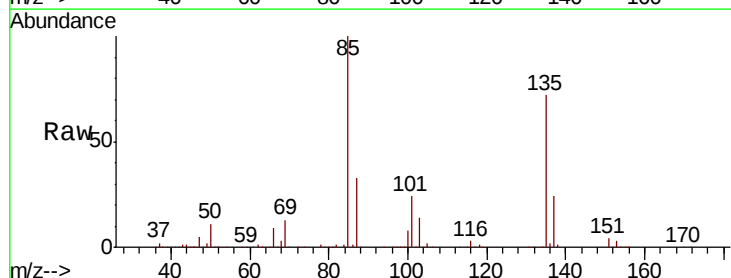
Acq: 5 Apr 2019 11:01

Tgt Ion: 85 Resp: 1441214

Ion Ratio Lower Upper

85 100

135 71.3 54.0 81.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

3.22

1200000

1000000

800000

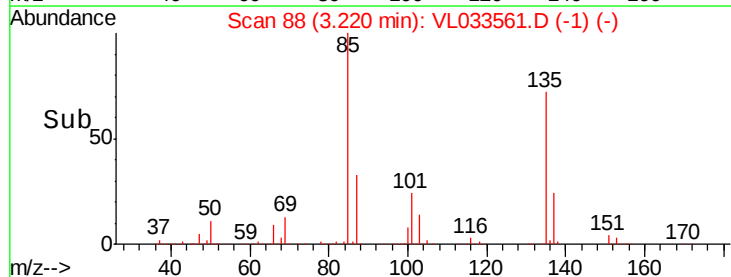
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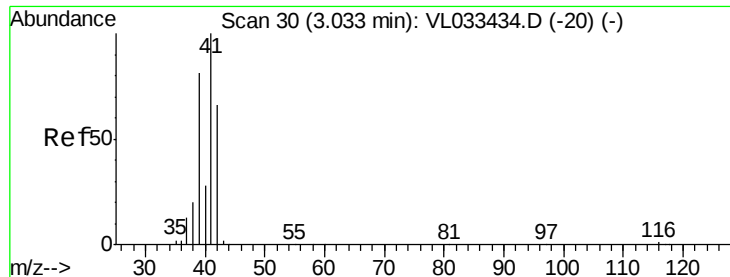
400000

200000

0

Time-->





#9

Propene

Concen: 8.838 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 41 Resp: 500881

Ion Ratio Lower Upper

41 100

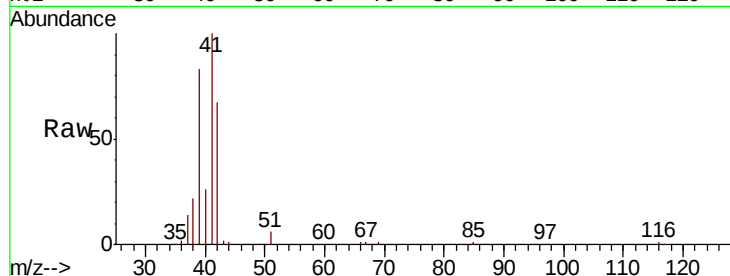
42 69.8 53.9 80.9

Manual Integrations

APPROVED

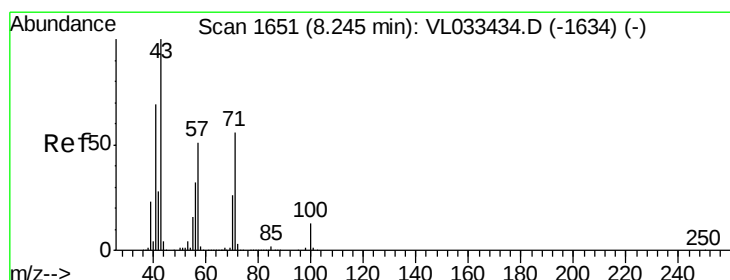
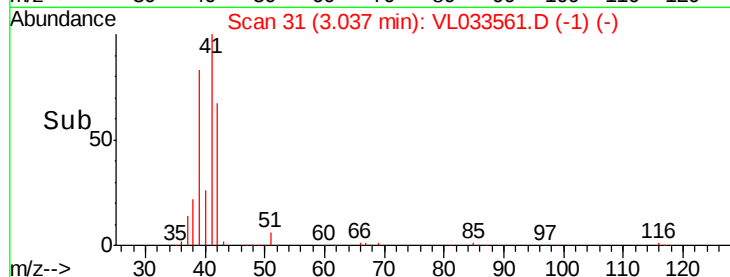
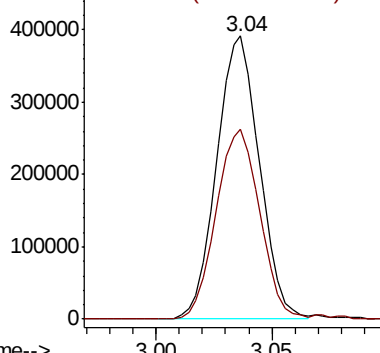
MMDadoda

4/8/2019 3:22:39 AM



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 8.444 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. -0.00 min

Lab File: VL033561.D

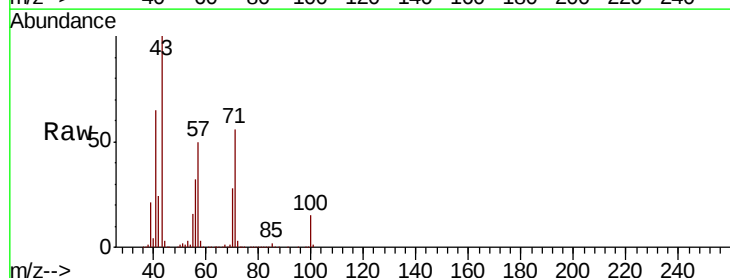
Acq: 5 Apr 2019 11:01

Tgt Ion: 43 Resp: 1279300

Ion Ratio Lower Upper

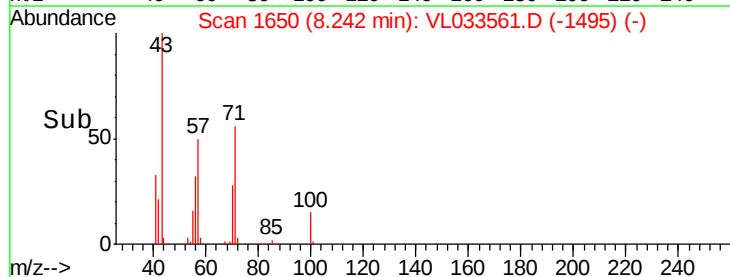
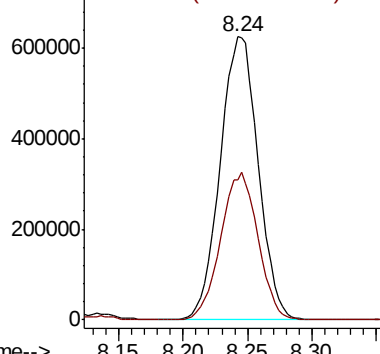
43 100

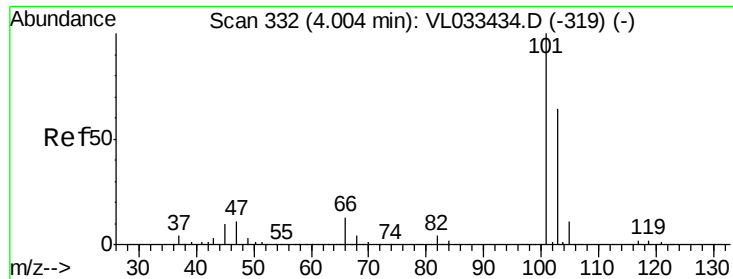
57 51.2 40.6 60.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





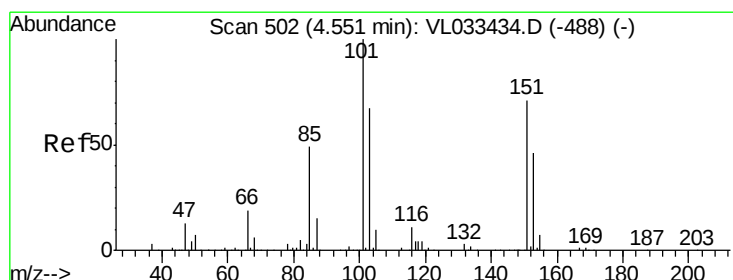
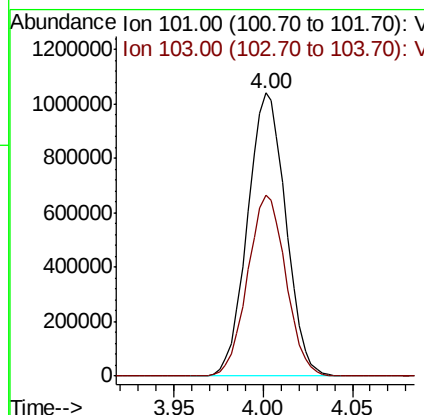
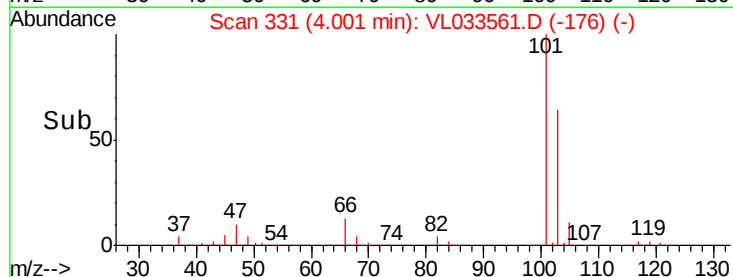
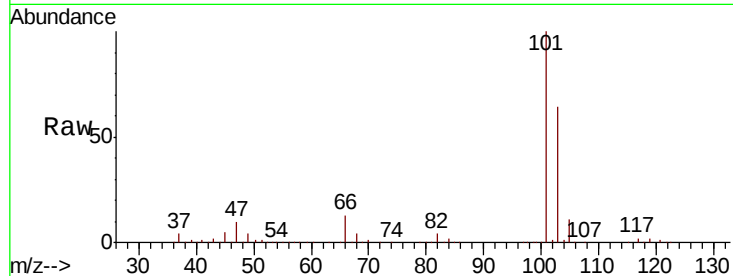
#11  
 Trichlorofluoromethane  
 Concen: 7.431 ppbv  
 RT: 4.00 min Scan# 331  
 Delta R.T. -0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion:101 Resp: 1565862  
 Ion Ratio Lower Upper  
 101 100  
 103 63.8 51.3 76.9

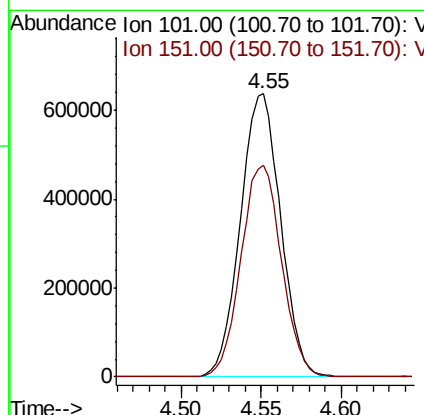
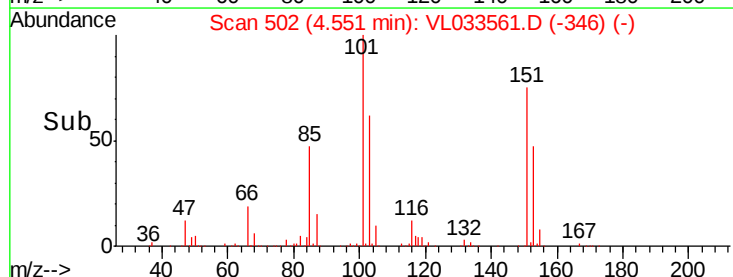
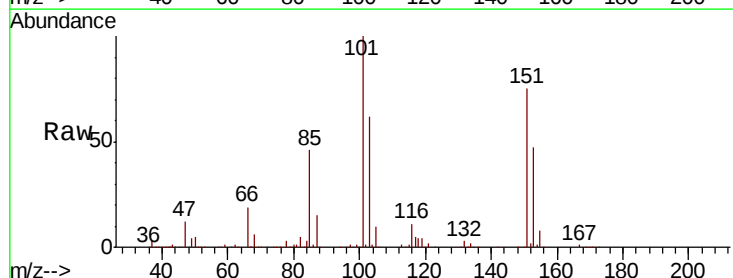
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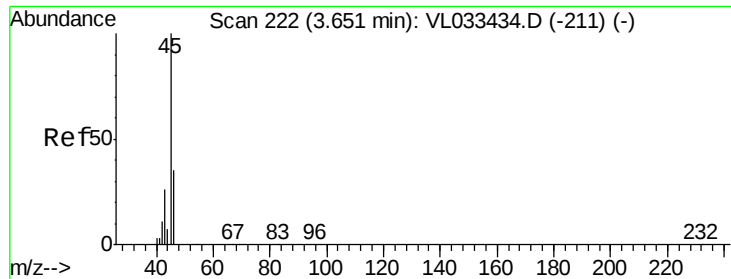
MMDadoda  
 4/8/2019 3:22:39 AM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 7.702 ppbv  
 RT: 4.55 min Scan# 502  
 Delta R.T. 0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Tgt Ion:101 Resp: 1090096  
 Ion Ratio Lower Upper  
 101 100  
 151 75.6 57.7 86.5





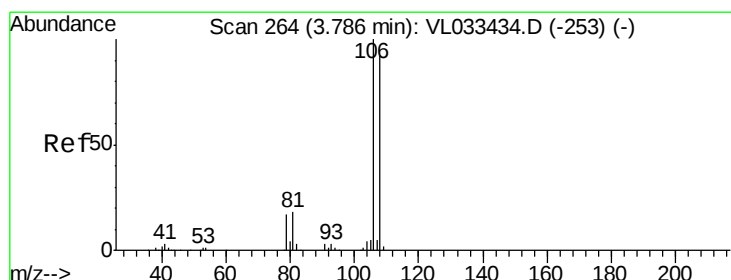
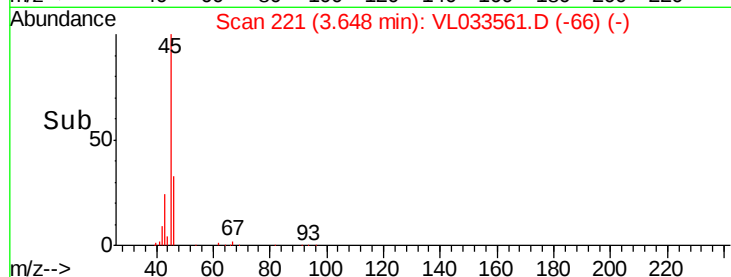
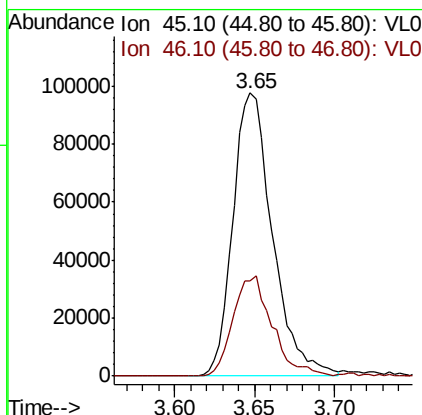
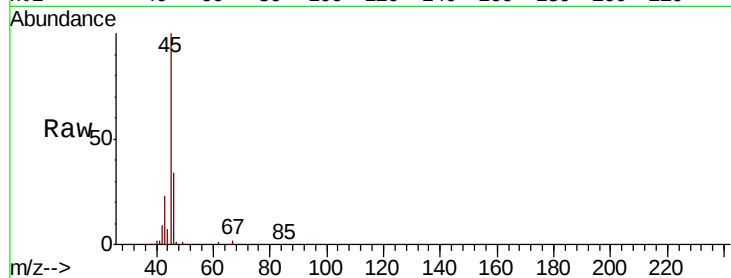
#13  
Ethanol  
Concen: 11.191 ppbv  
RT: 3.65 min Scan# 221  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion   | 45   | Resp  | 164129 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 45        | 100  |       |        |
| 46        | 35.6 | 25.4  | 101.8  |

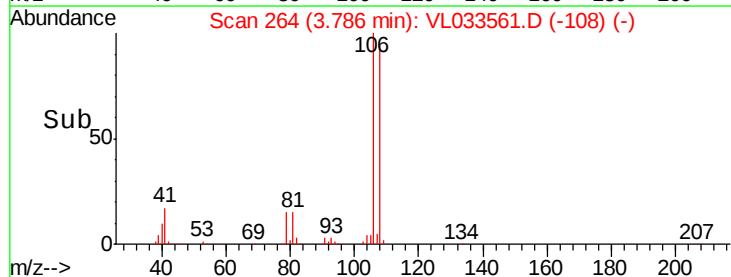
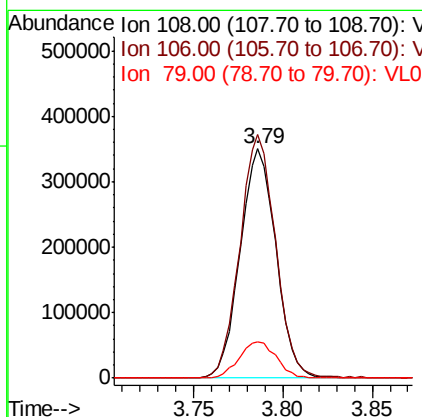
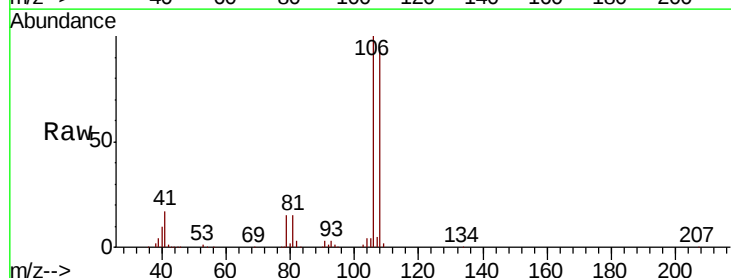
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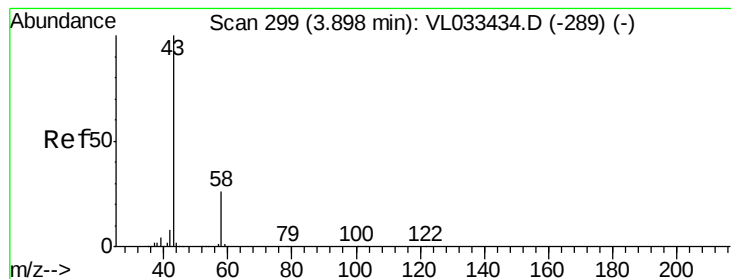
MMDadoda  
4/8/2019 3:22:39 AM



#14  
Bromoethene  
Concen: 8.681 ppbv  
RT: 3.79 min Scan# 264  
Delta R.T. 0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

| Tgt Ion   | 108   | Resp  | 489989 |
|-----------|-------|-------|--------|
| Ion Ratio | 100   | Lower | Upper  |
| 108       | 100   |       |        |
| 106       | 106.0 | 86.4  | 129.6  |
| 79        | 16.7  | 15.8  | 23.8   |





#15

Acetone

Concen: 7.304 ppbv

RT: 3.90 min Scan# 299

Delta R.T. 0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1029506

Ion Ratio Lower Upper

43 100

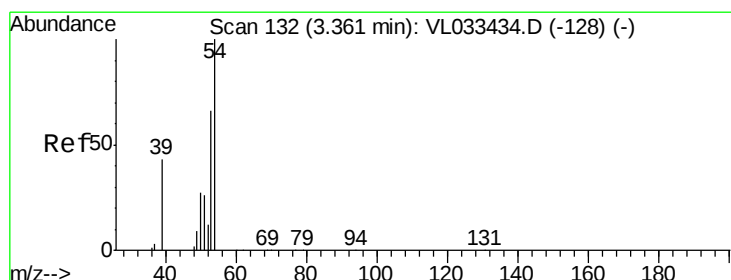
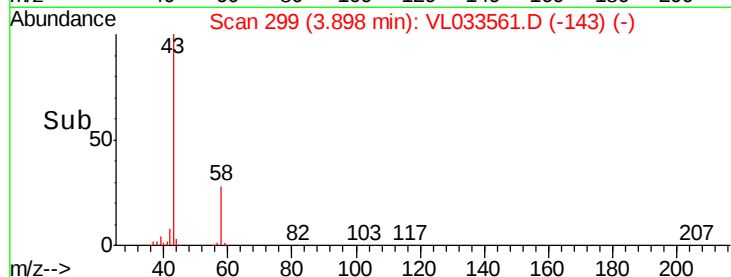
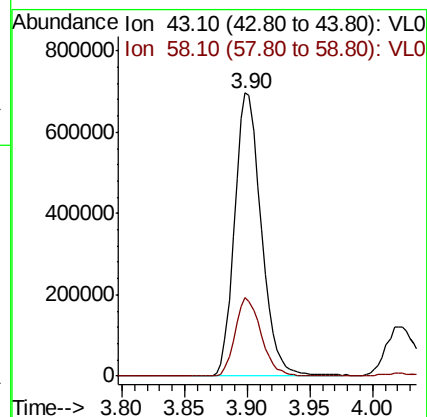
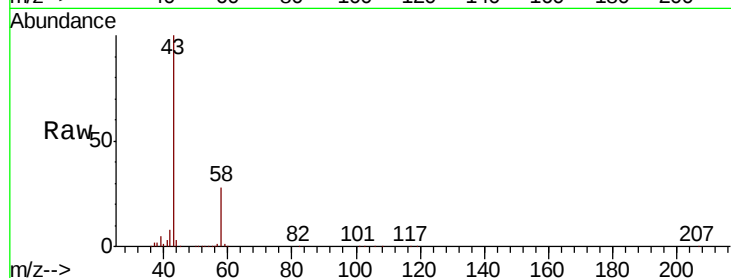
58 27.2 20.5 30.7

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4/8/2019 3:22:39 AM



#16

1,3-Butadiene

Concen: 9.045 ppbv

RT: 3.36 min Scan# 132

Delta R.T. 0.00 min

Lab File: VL033561.D

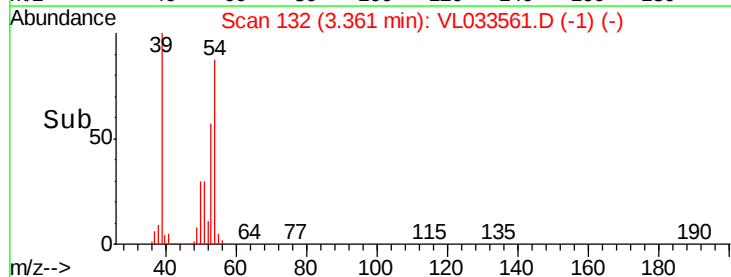
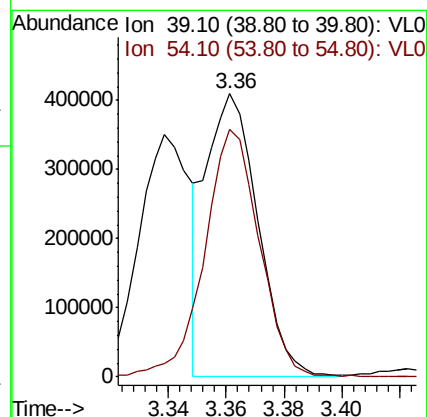
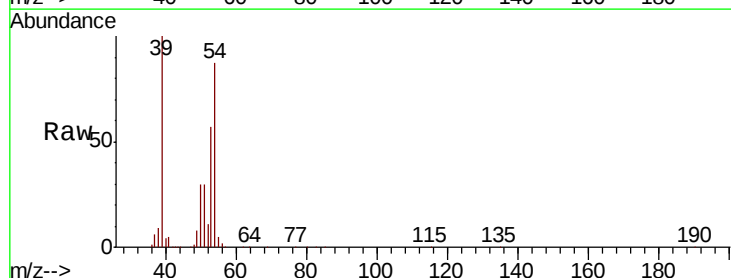
Acq: 5 Apr 2019 11:01

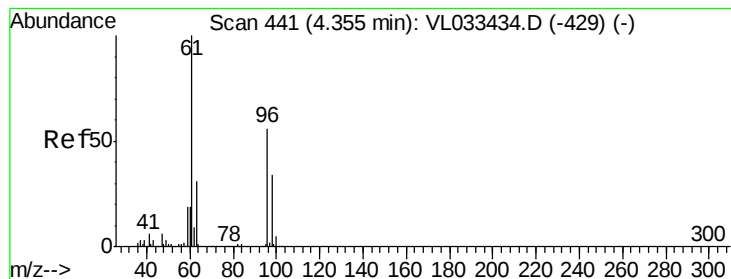
Tgt Ion: 39 Resp: 505699

Ion Ratio Lower Upper

39 100

54 93.7 69.4 104.2





#17

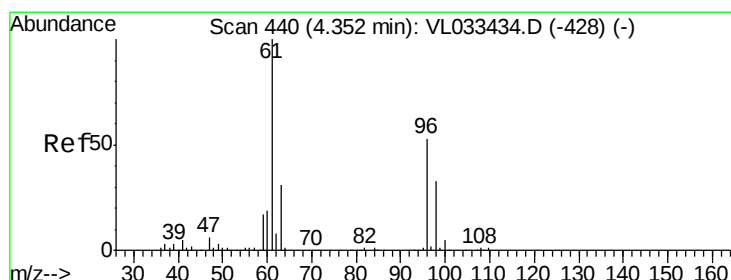
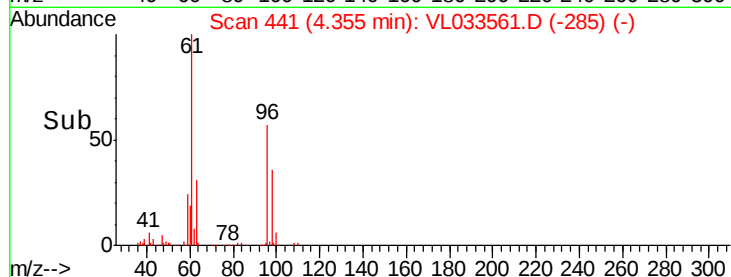
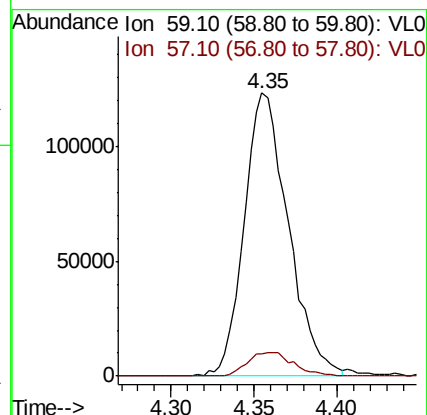
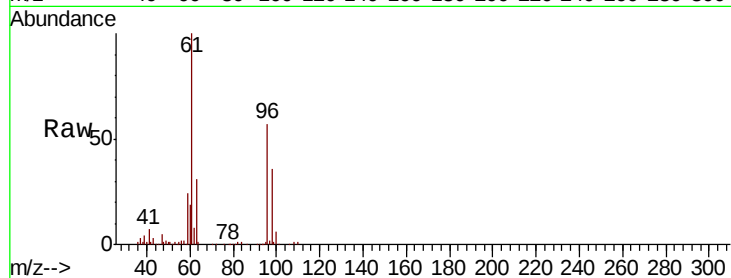
tert-Butyl alcohol  
Concen: 8.819 ppbv  
RT: 4.35 min Scan# 441  
Delta R.T. 0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 9.1   | 7.8   | 11.8  |

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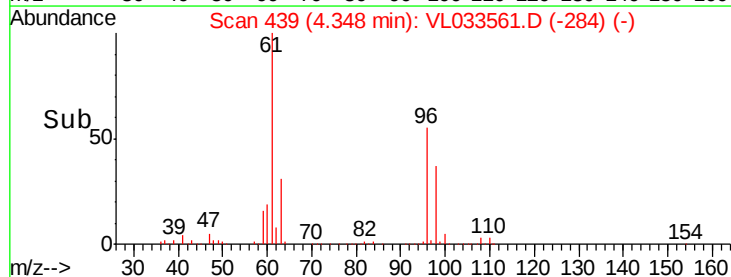
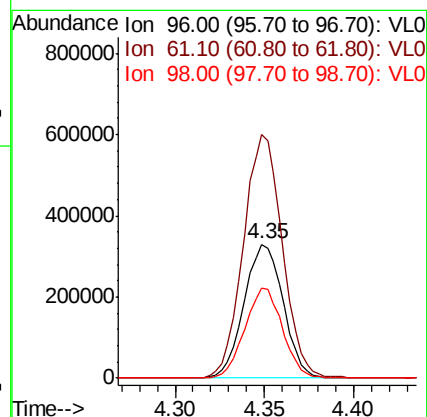
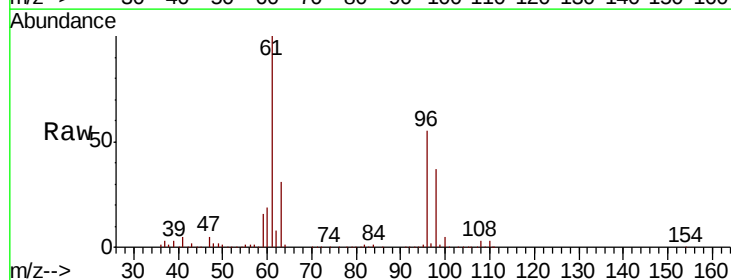
MMDadoda  
4/8/2019 3:22:39 AM

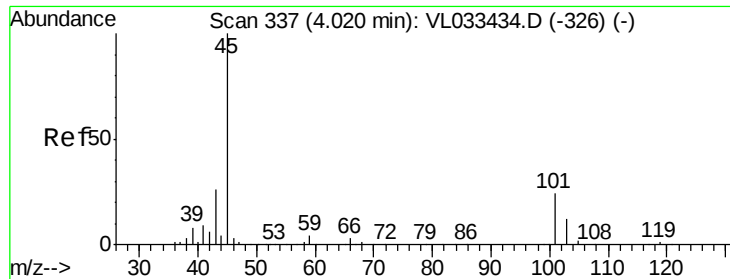


#18

1,1-Dichloroethene  
Concen: 8.299 ppbv  
RT: 4.35 min Scan# 439  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 182.2 | 149.8 | 224.6 |
| 98      | 67.2  | 48.7  | 73.1  |





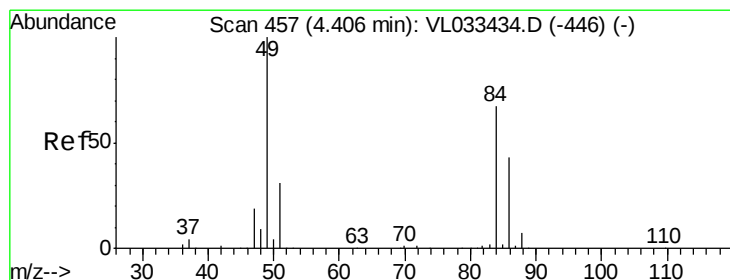
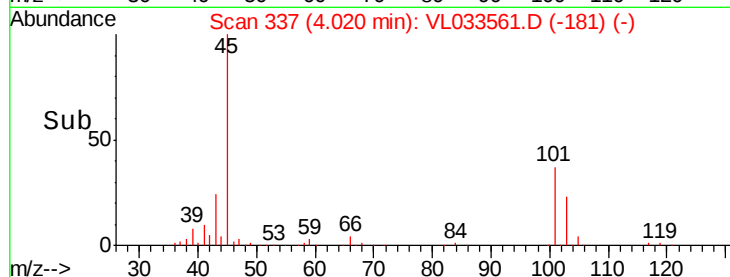
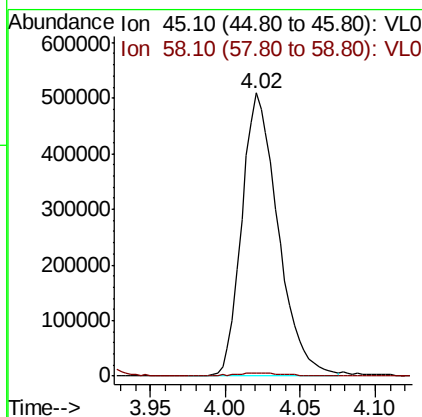
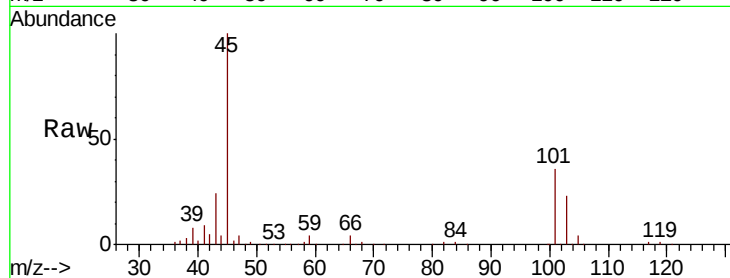
#19  
Isopropyl Alcohol  
Concen: 9.645 ppbv  
RT: 4.02 min Scan# 337  
Delta R.T. 0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 45 Resp: 859919  
Ion Ratio Lower Upper  
45 100  
58 1.5 1.4 2.2

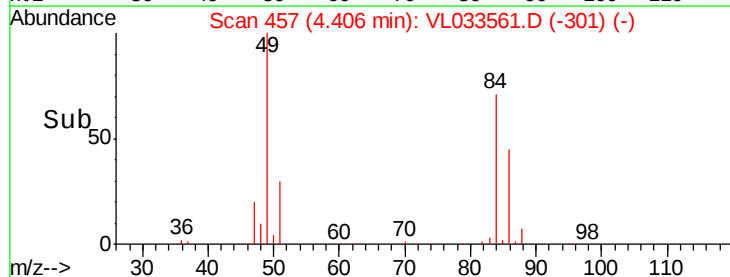
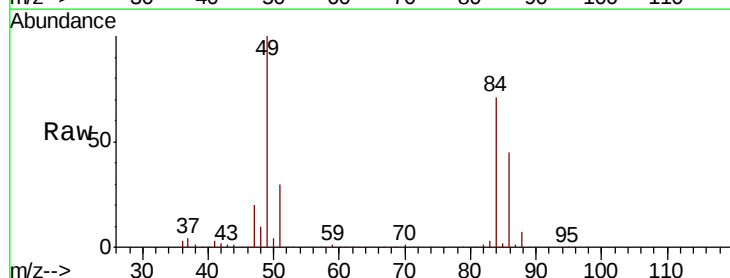
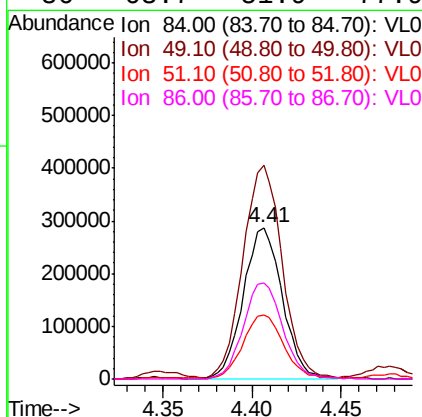
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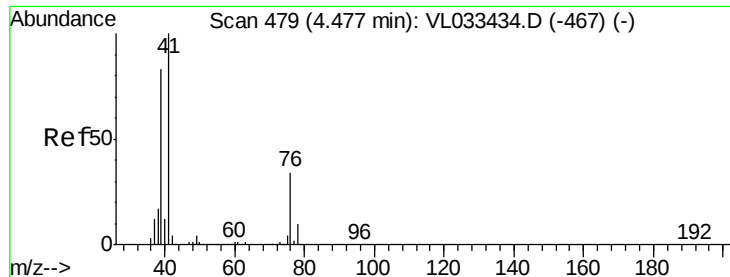
MMDadoda  
4/8/2019 3:22:39 AM



#20  
Methylene Chloride  
Concen: 7.269 ppbv  
RT: 4.41 min Scan# 457  
Delta R.T. 0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Tgt Ion: 84 Resp: 434928  
Ion Ratio Lower Upper  
84 100  
49 140.2 120.0 180.0  
51 41.7 36.7 55.1  
86 63.7 51.9 77.9





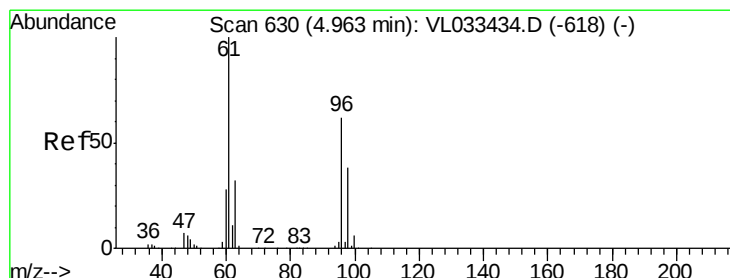
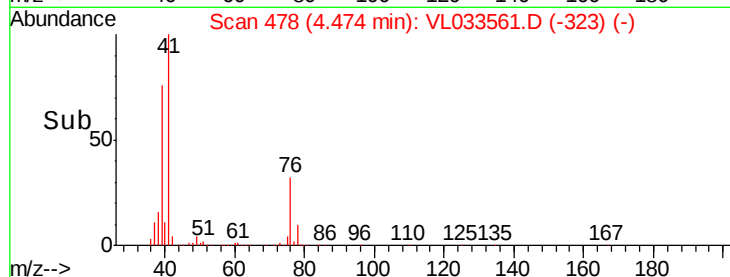
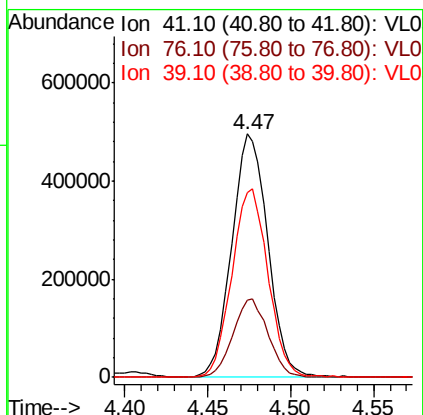
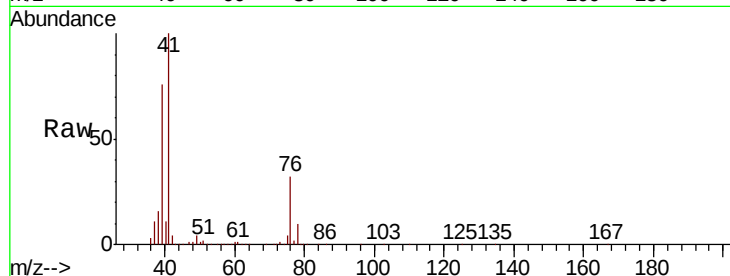
#21  
Allvl Chloride  
Concen: 8.388 ppbv  
RT: 4.47 min Scan# 478  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 31.6  | 25.4  | 38.2  |
| 39      | 78.1  | 65.3  | 97.9  |

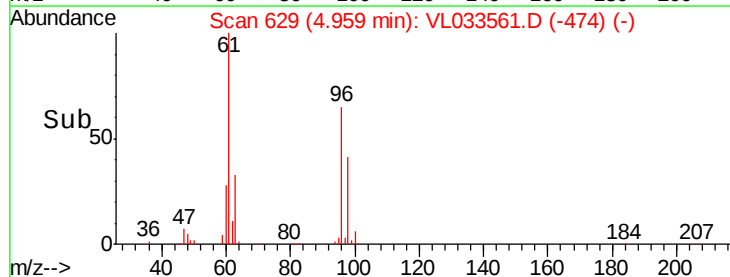
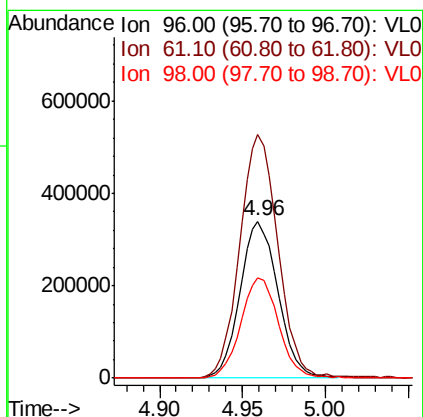
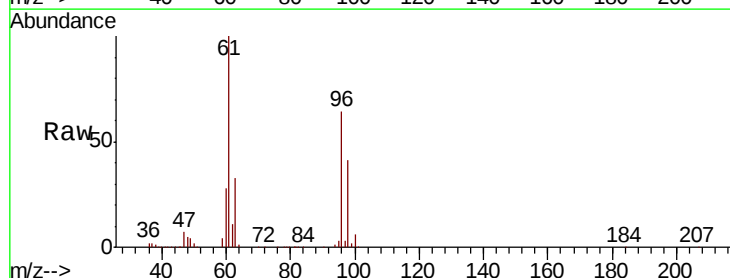
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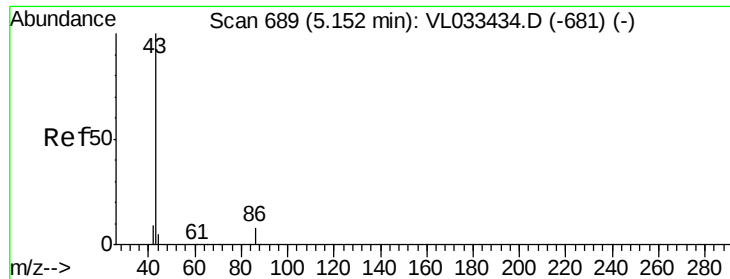
MMDadoda  
4/8/2019 3:22:39 AM



#22  
trans-1,2-Dichloroethene  
Concen: 8.524 ppbv  
RT: 4.96 min Scan# 629  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 155.4 | 128.9 | 193.3 |
| 98      | 63.6  | 49.5  | 74.3  |





#23

Vinyl Acetate

Concen: 8.733 ppbv

RT: 5.15 min Scan# 689

Delta R.T. 0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1751993

Ion Ratio Lower Upper

43 100

86 8.0 5.6 8.4

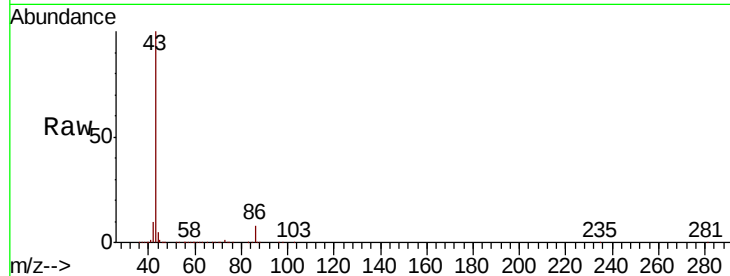
42 9.6 8.0 12.0

44 4.9 3.9 5.9

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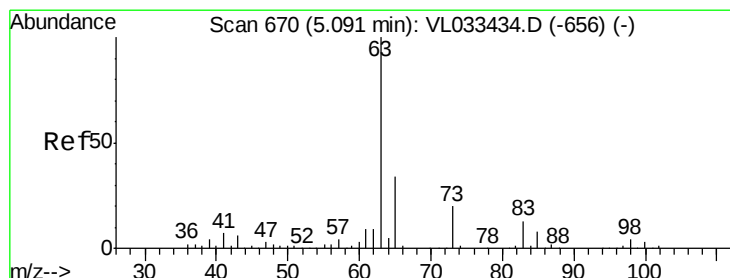
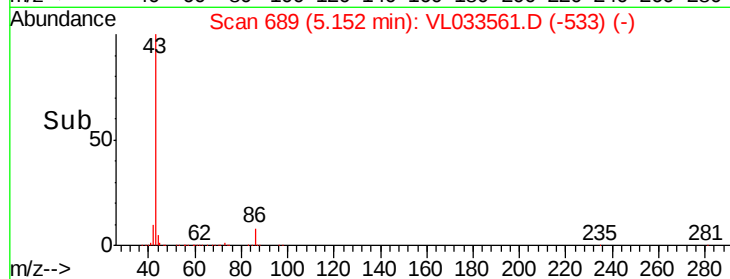
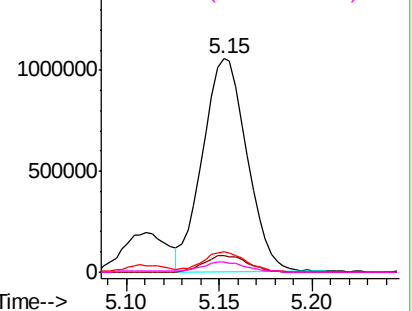


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 8.040 ppbv

RT: 5.09 min Scan# 669

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

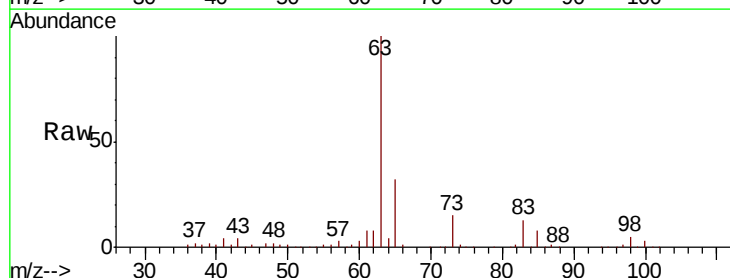
Tgt Ion: 63 Resp: 1225299

Ion Ratio Lower Upper

63 100

98 4.7 2.2 6.6

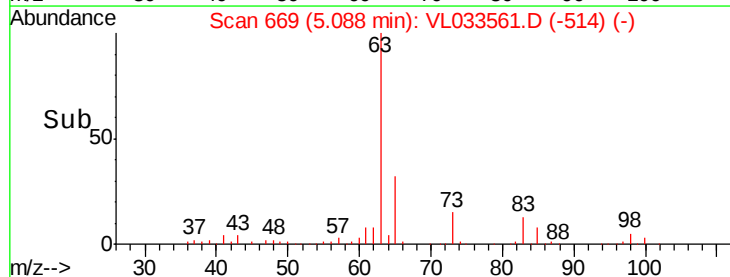
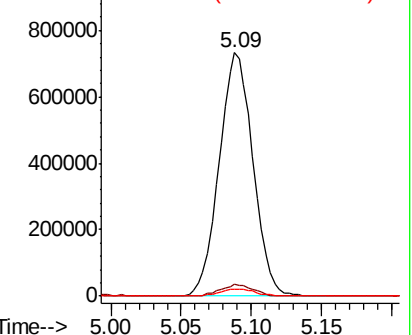
100 2.8 1.5 4.4

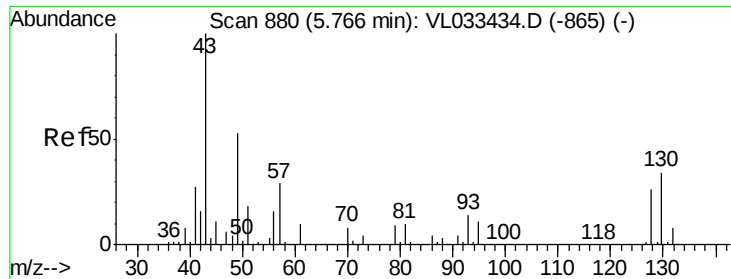


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





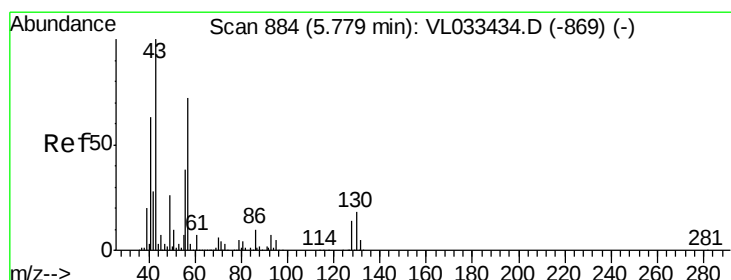
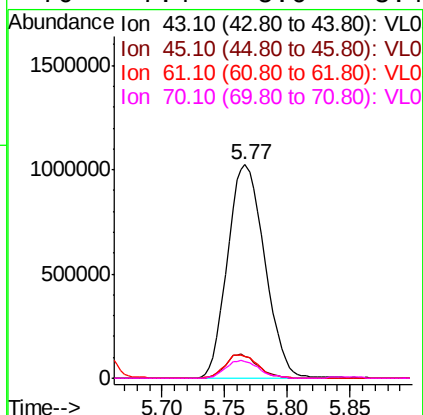
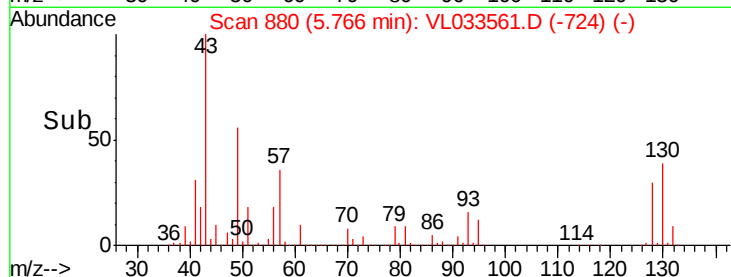
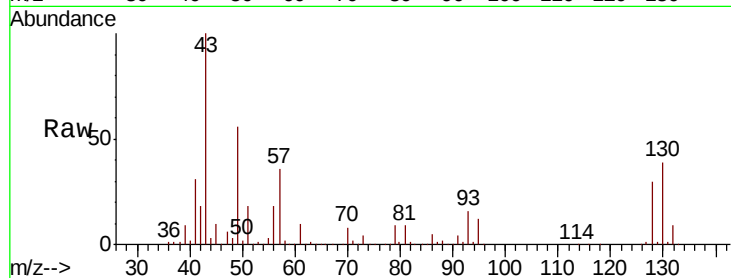
#25  
Ethyl Acetate  
Concen: 8.046 ppbv  
RT: 5.77 min Scan# 880  
Delta R.T. 0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 43      | 100 |       |       |       |
| 45      | 9.7 | 7.8   | 11.6  |       |
| 61      | 9.7 | 7.3   | 10.9  |       |
| 70      | 7.4 | 5.6   | 8.4   |       |

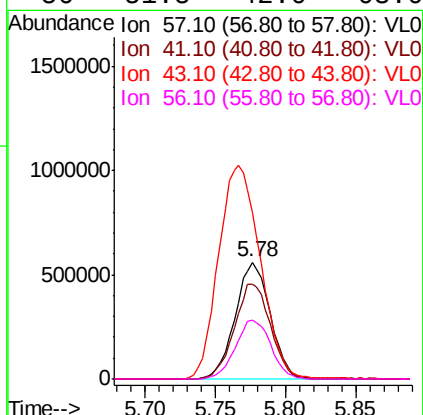
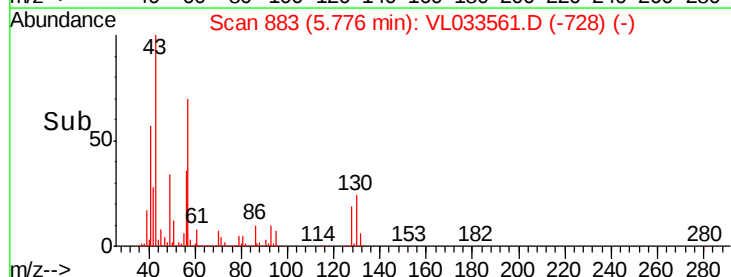
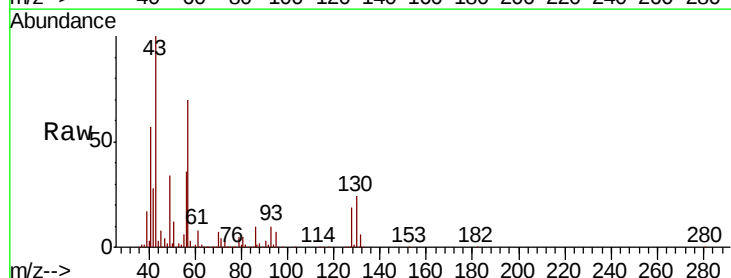
Manual Integrations  
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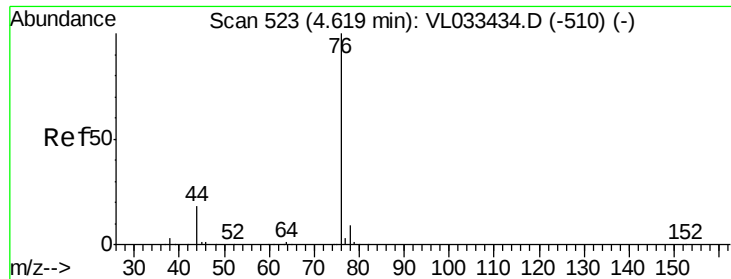
MMDadoda  
4/8/2019 3:22:39 AM



#26  
Hexane  
Concen: 8.345 ppbv  
RT: 5.78 min Scan# 883  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

| Tgt Ion | Ion   | Ratio | Lower | Upper |
|---------|-------|-------|-------|-------|
| 57      | 100   |       |       |       |
| 41      | 84.3  | 70.7  | 106.1 |       |
| 43      | 217.5 | 182.6 | 274.0 |       |
| 56      | 51.5  | 42.0  | 63.0  |       |





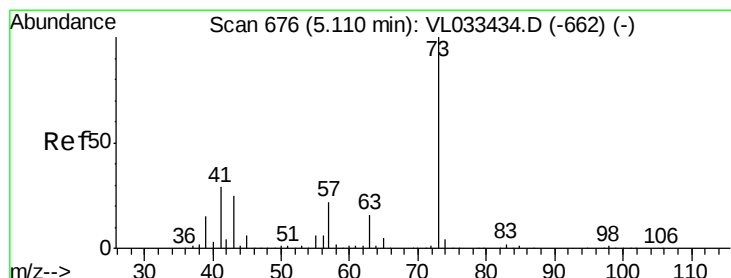
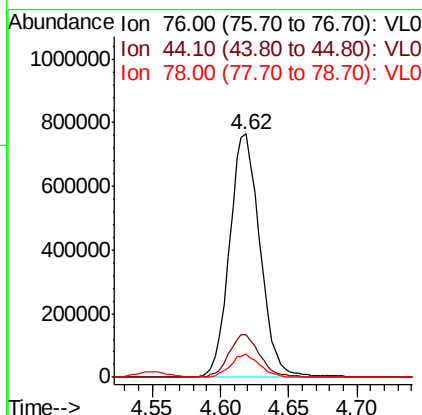
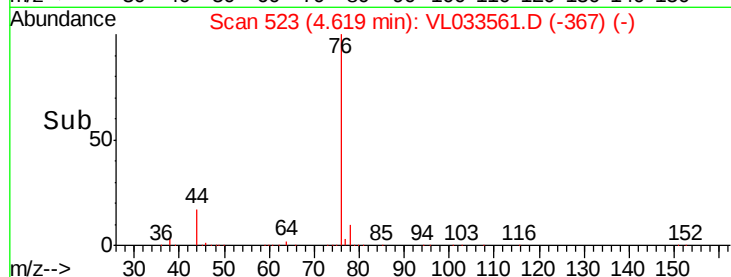
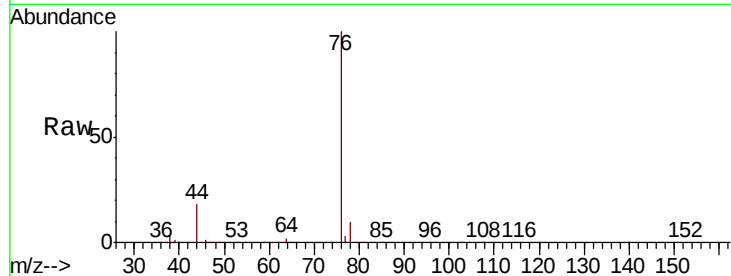
#27  
Carbon Disulfide  
Concen: 8.575 ppbv  
RT: 4.62 min Scan# 523  
Delta R.T. 0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 76 Resp: 1185716  
Ion Ratio Lower Upper  
76 100  
44 17.4 14.8 22.2  
78 9.1 7.6 11.4

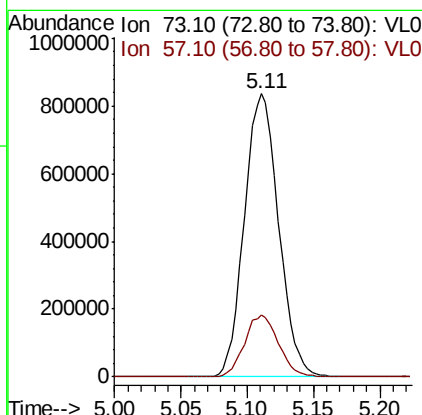
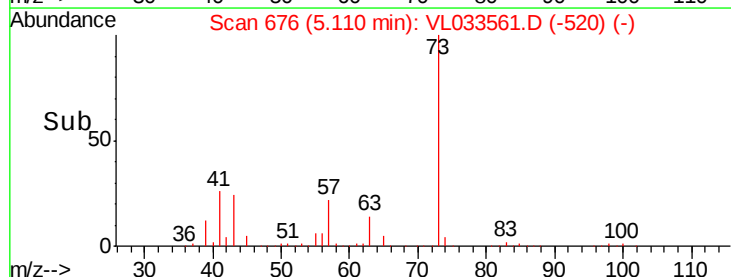
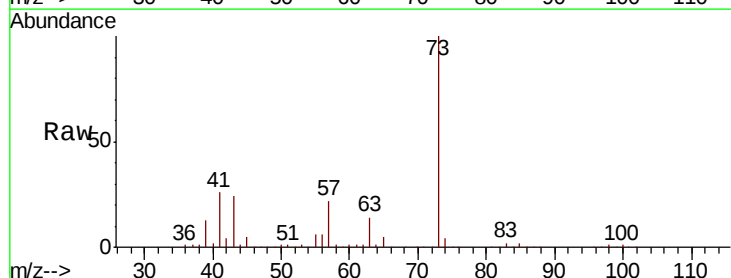
Manual Integrations  
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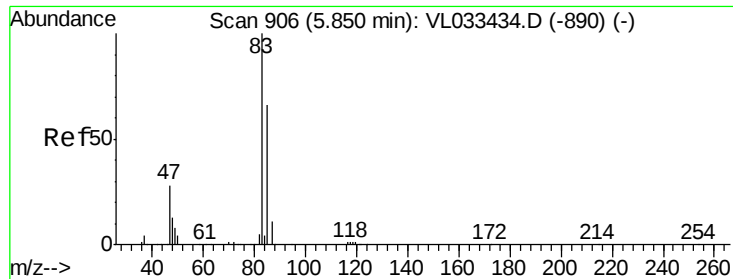
MMDadoda  
4/8/2019 3:22:39 AM



#28  
Methyl tert-Butyl Ether  
Concen: 8.973 ppbv  
RT: 5.11 min Scan# 676  
Delta R.T. 0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Tgt Ion: 73 Resp: 1502755  
Ion Ratio Lower Upper  
73 100  
57 21.8 17.4 26.2





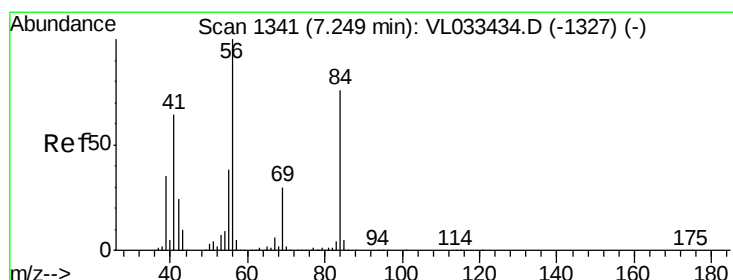
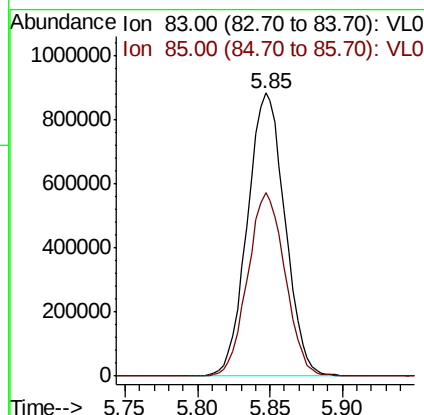
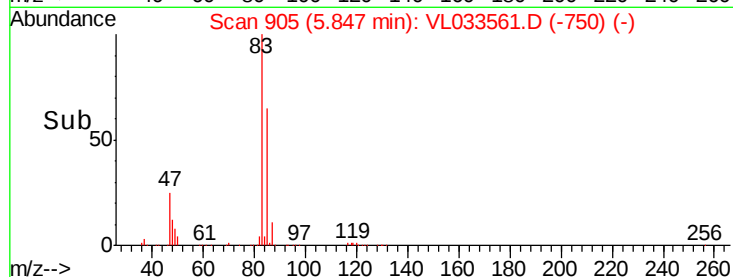
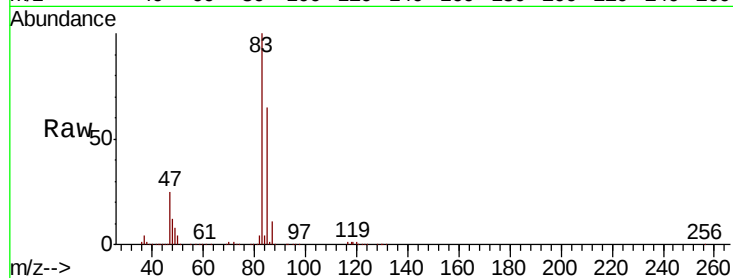
#29  
Chloroform  
Concen: 8.011 ppbv  
RT: 5.85 min Scan# 905  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 83 Resp: 1596755  
Ion Ratio Lower Upper  
83 100  
85 64.8 52.6 79.0

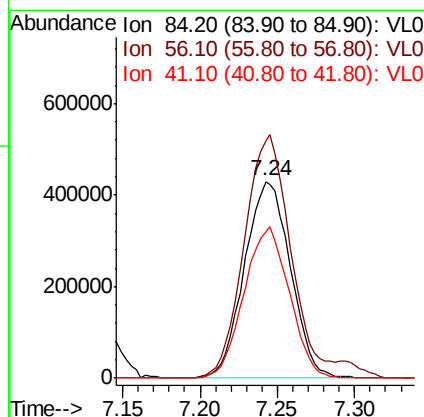
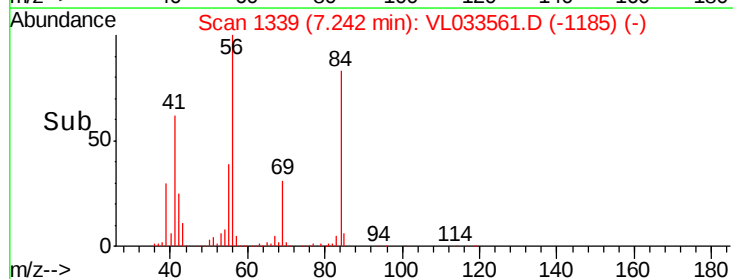
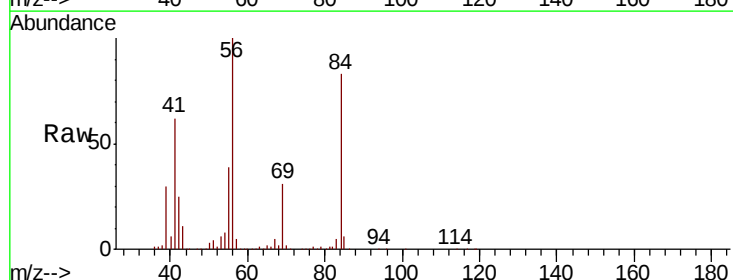
Manual Integrations  
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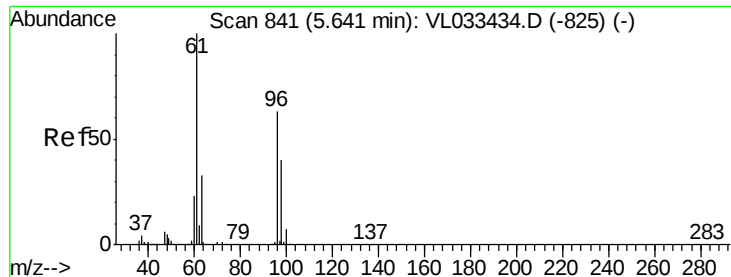
MMDadoda  
4/8/2019 3:22:39 AM



#30  
Cyclohexane  
Concen: 9.657 ppbv  
RT: 7.24 min Scan# 1339  
Delta R.T. -0.01 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Tgt Ion: 84 Resp: 888335  
Ion Ratio Lower Upper  
84 100  
56 129.8 109.7 164.5  
41 75.7 68.2 102.2





#31

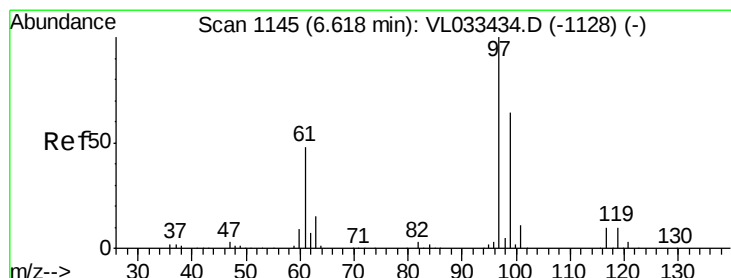
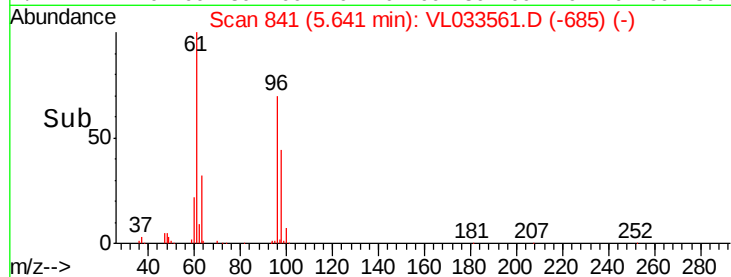
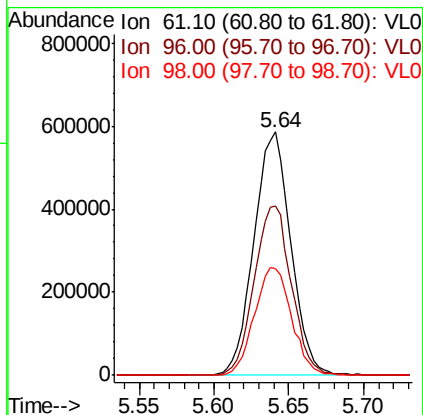
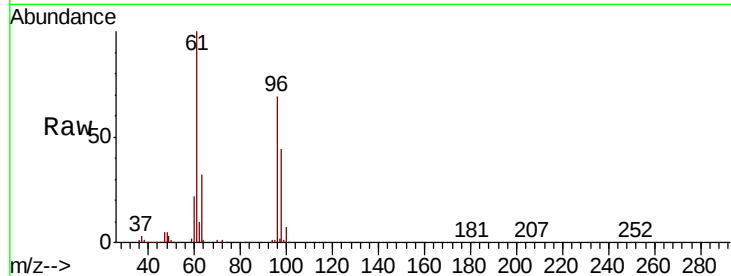
cis-1,2-Dichloroethene  
 Concen: 8.702 ppbv  
 RT: 5.64 min Scan# 841  
 Delta R.T. 0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 69.4  | 50.6  | 76.0  |
| 98      | 43.5  | 32.2  | 48.2  |

Manual Integrations  
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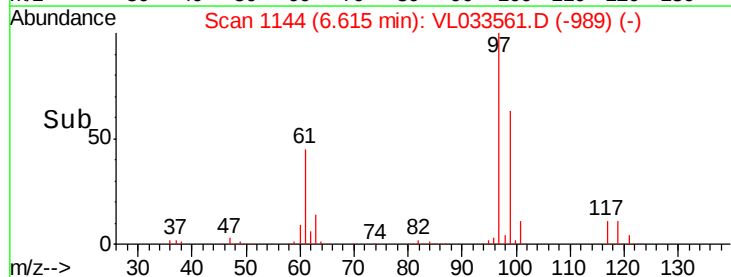
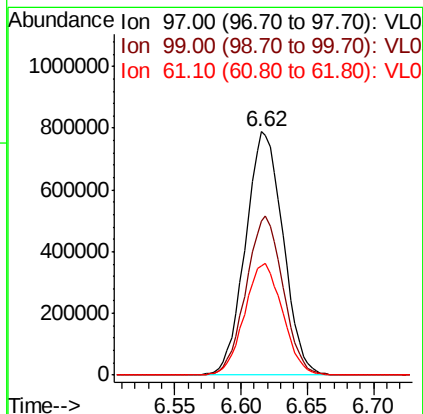
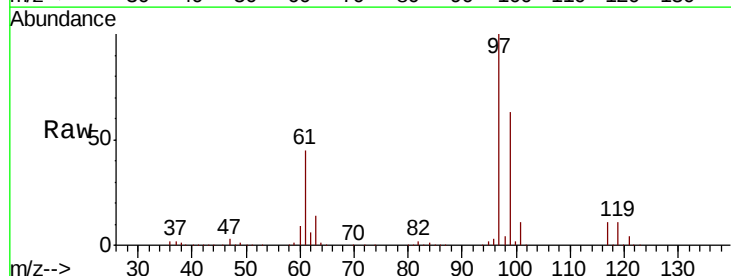
MMDadoda  
 4/8/2019 3:22:39 AM

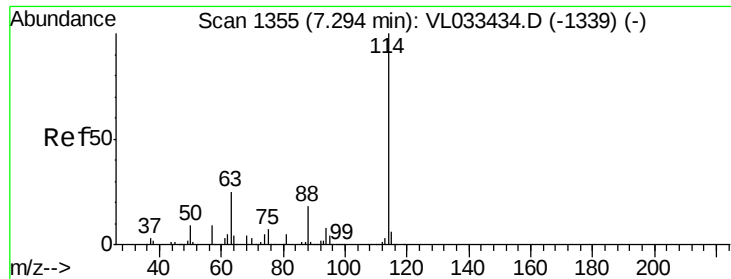


#32

1,1,1-Trichloroethane  
 Concen: 8.204 ppbv  
 RT: 6.62 min Scan# 1144  
 Delta R.T. -0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.4  | 51.5  | 77.3  |
| 61      | 46.6  | 38.8  | 58.2  |





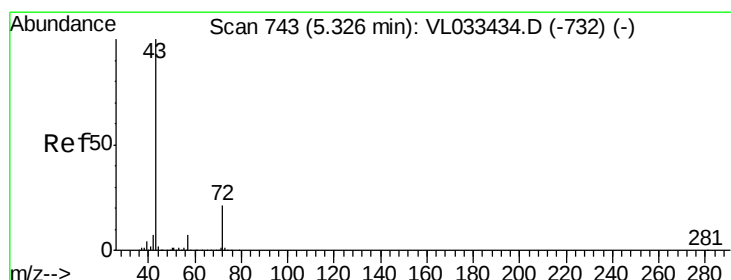
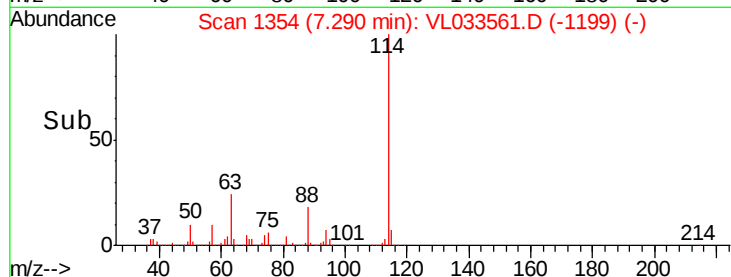
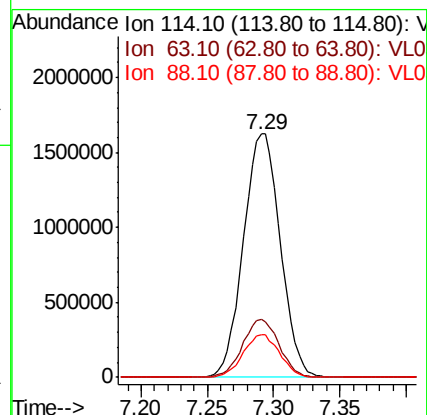
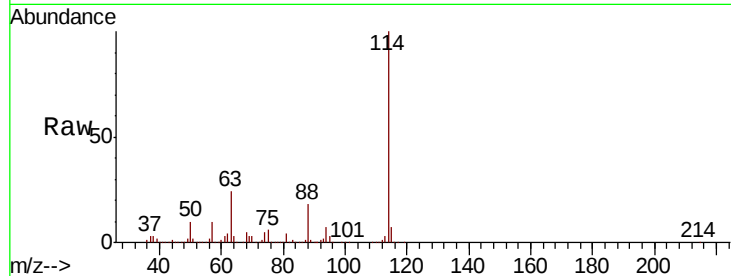
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.29 min Scan# 1354  
 Delta R.T. -0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 23.7  | 21.5  | 32.3  |
| 88      | 17.3  | 14.5  | 21.7  |

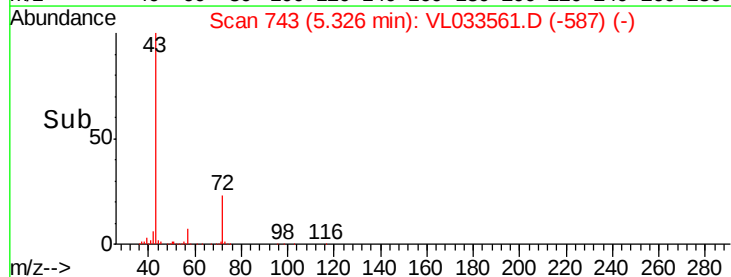
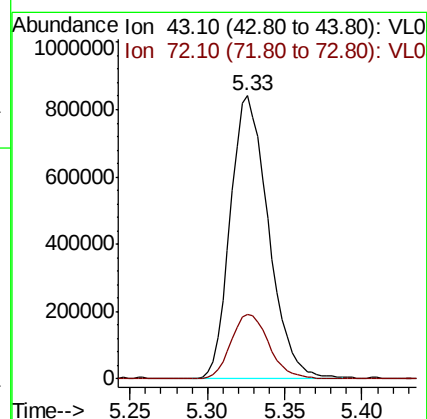
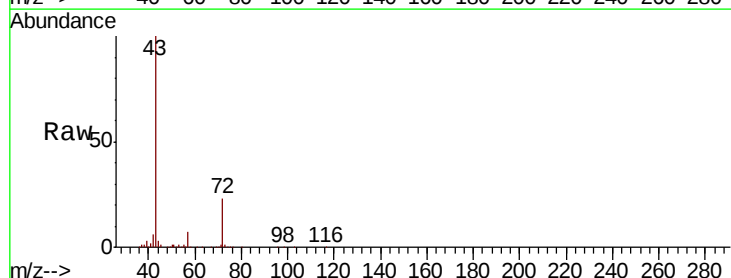
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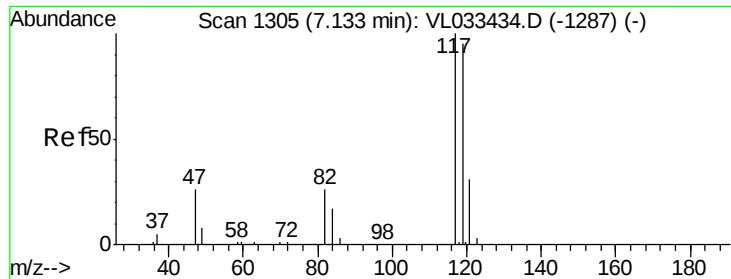
MMDadoda  
 4/8/2019 3:22:39 AM



#34  
 2-Butanone  
 Concen: 7.603 ppbv  
 RT: 5.33 min Scan# 743  
 Delta R.T. 0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 23.1  | 17.4  | 26.2  |





#35

Carbon Tetrachloride

Concen: 7.329 ppbv

RT: 7.13 min Scan# 1305

Delta R.T. 0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:117 Resp: 1629926

Ion Ratio Lower Upper

117 100

119 97.4 75.8 113.8

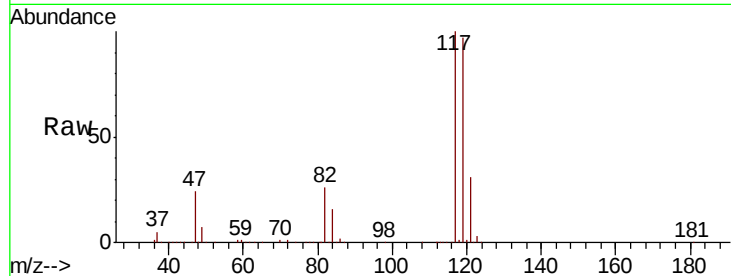
121 31.1 24.7 37.1

Manual Integrations

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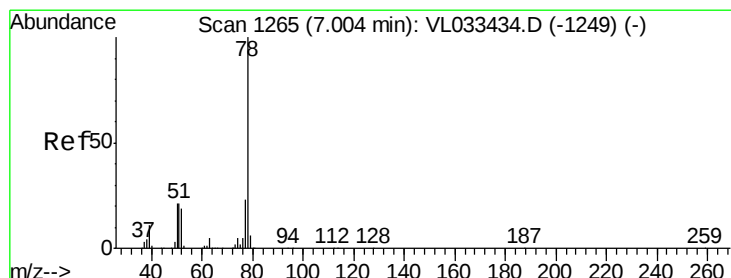
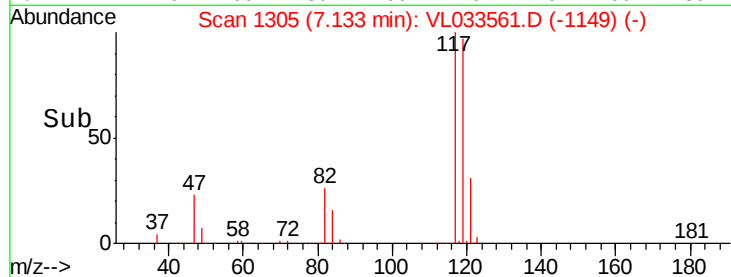
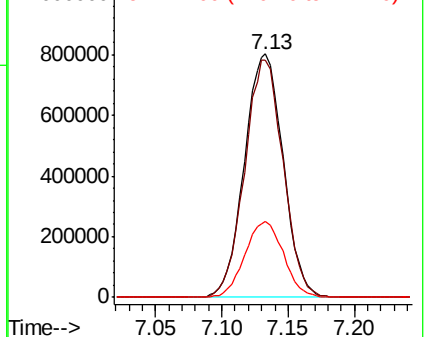
4/8/2019 3:22:39 AM



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: 8.172 ppbv

RT: 7.00 min Scan# 1265

Delta R.T. 0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

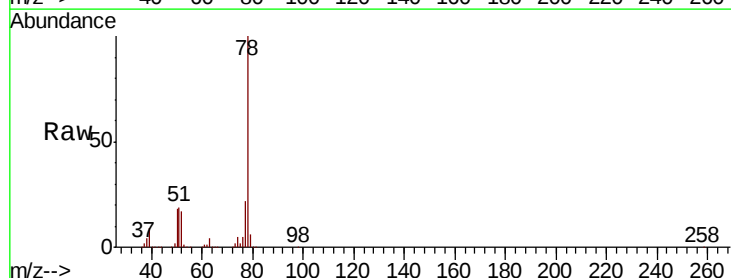
Tgt Ion: 78 Resp: 2152815

Ion Ratio Lower Upper

78 100

77 22.0 18.1 27.1

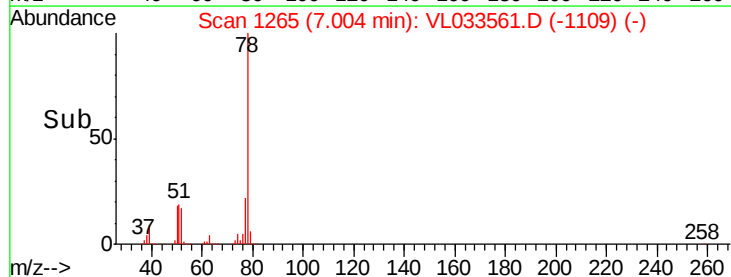
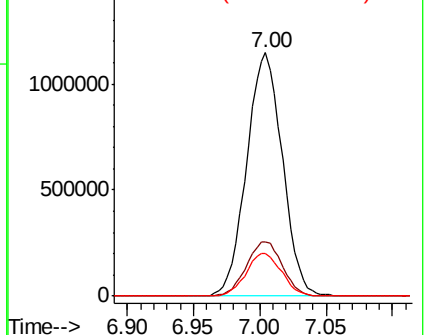
50 17.6 16.7 25.1

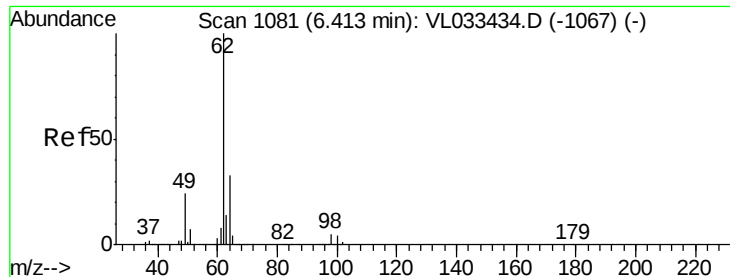


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#37

1,2-Dichloroethane

Concen: 6.488 ppbv

RT: 6.41 min Scan# 1080

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 1145680

Ion Ratio Lower Upper

62 100

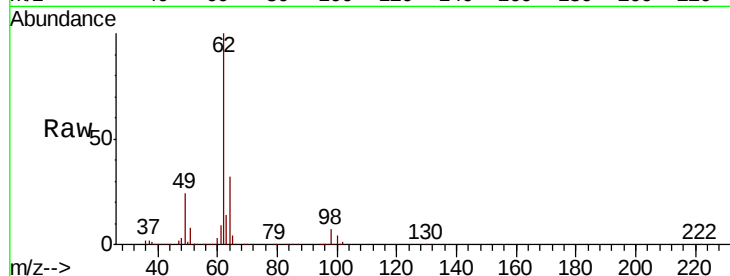
98 6.7 4.4 6.6#

Manual Integrations

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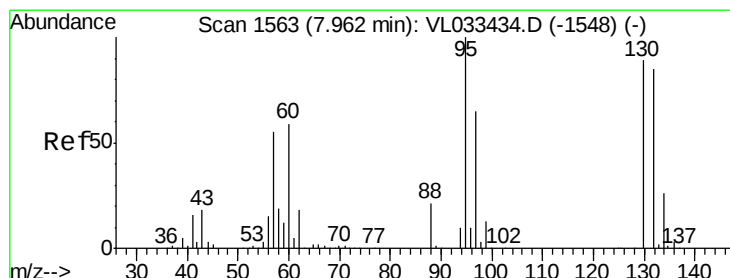
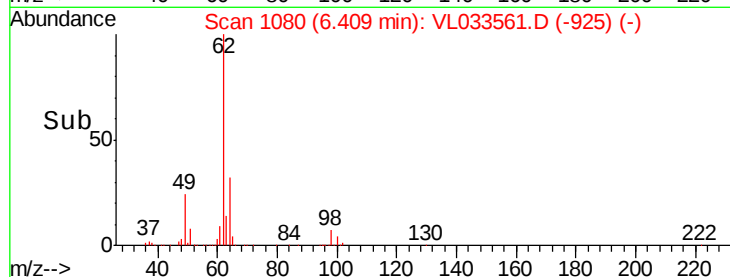
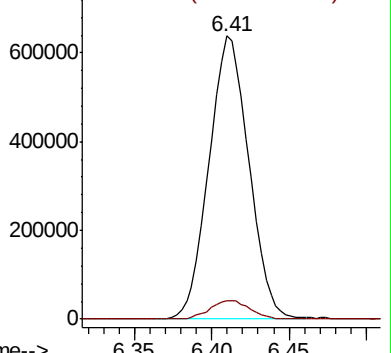
MMDadoda

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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#38

Trichloroethene

Concen: 8.488 ppbv

RT: 7.96 min Scan# 1562

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Tgt Ion:130 Resp: 841519

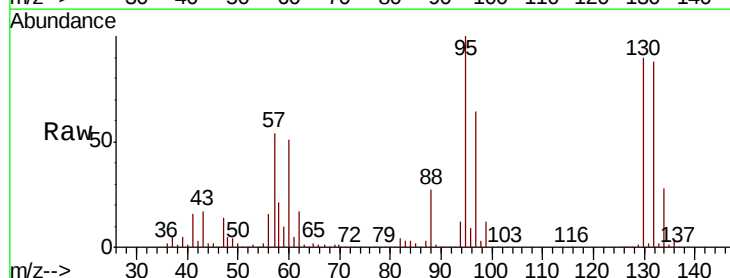
Ion Ratio Lower Upper

130 100

95 110.8 89.8 134.8

132 97.2 76.6 115.0

97 71.1 58.6 88.0

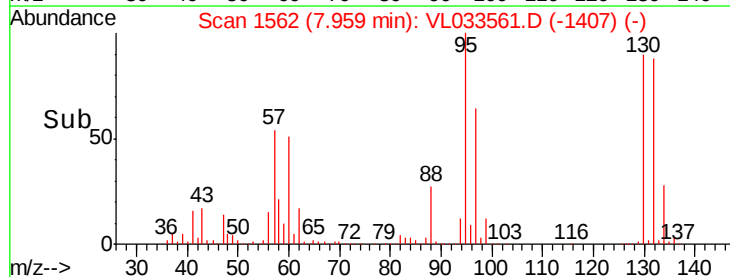
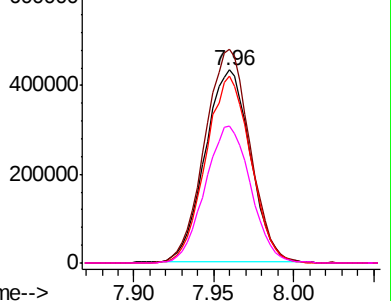


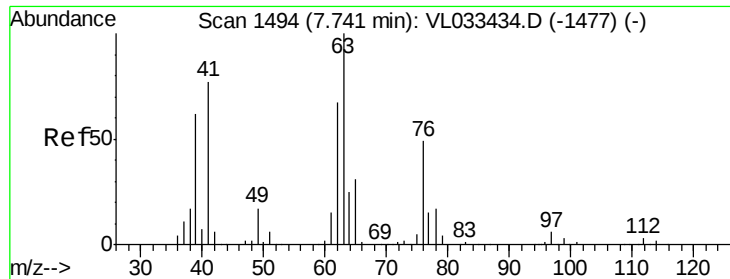
Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0





#39

1,2-Dichloropropane

Concen: 7.681 ppbv

RT: 7.73 min Scan# 1492

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

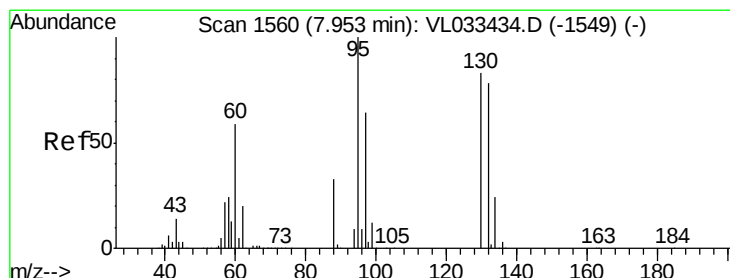
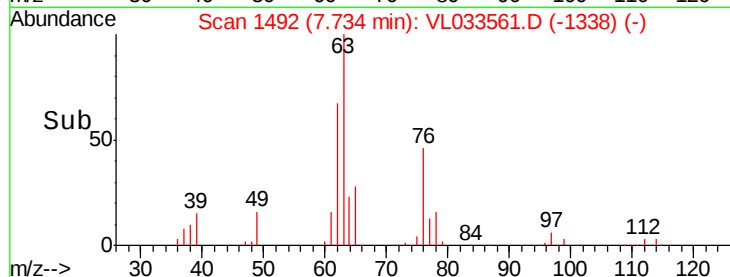
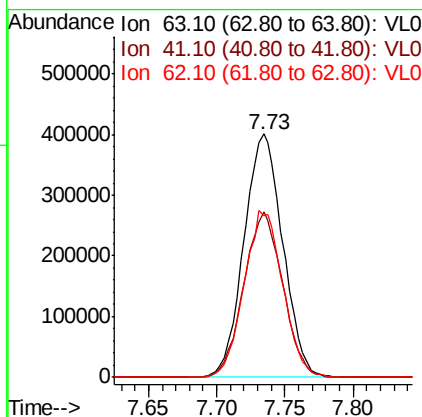
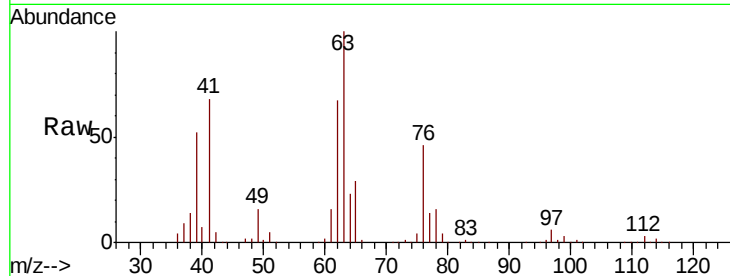
ClientSampleID :

VSTDCCC010EC

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 63    | Resp: | 792665 |
| Ion Ratio | Lower | Upper |        |
| 63        | 100   |       |        |
| 41        | 67.9  | 61.2  | 91.8   |
| 62        | 66.6  | 54.0  | 81.0   |

Manual Integrations  
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#40

1,4-Dioxane

Concen: 9.757 ppbv

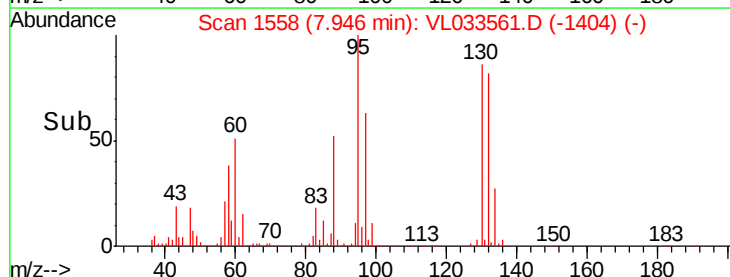
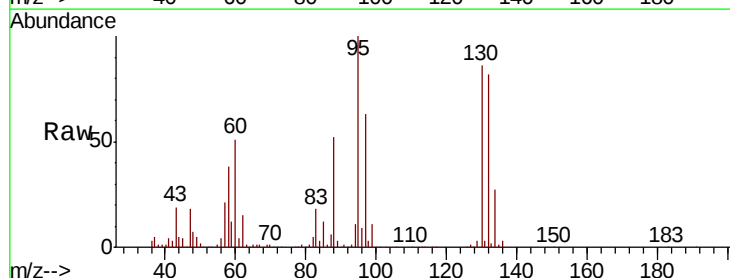
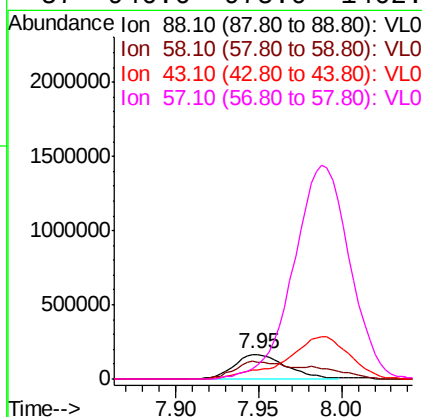
RT: 7.95 min Scan# 1558

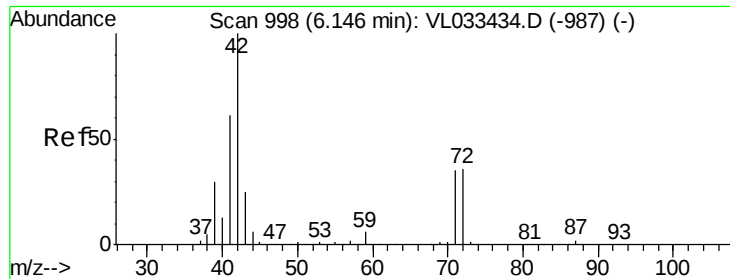
Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 88    | Resp: | 359134  |
| Ion Ratio | Lower | Upper |         |
| 88        | 100   |       |         |
| 58        | 113.6 | 105.6 | 158.4   |
| 43        | 210.8 | 216.7 | 325.1#  |
| 57        | 946.6 | 975.0 | 1462.4# |





#41

Tetrahydrofuran

Concen: 8.005 ppbv

RT: 6.14 min Scan# 997

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

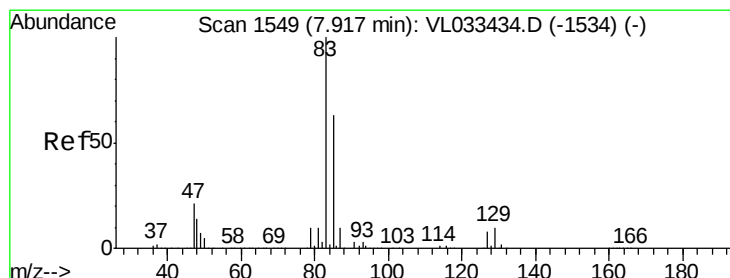
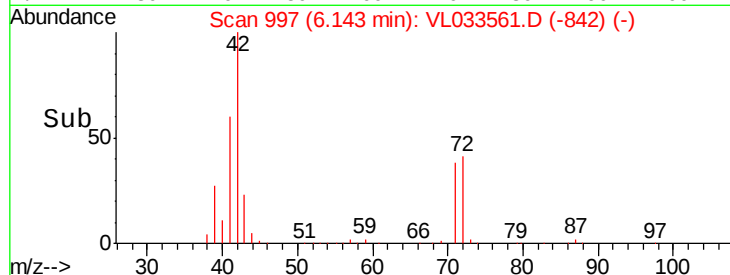
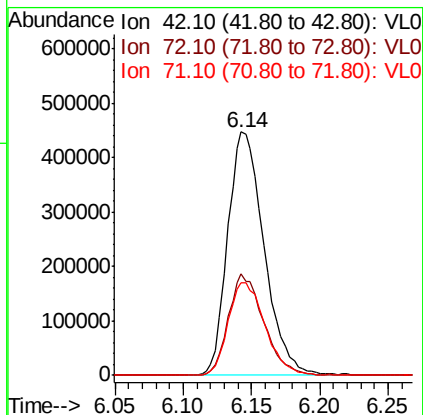
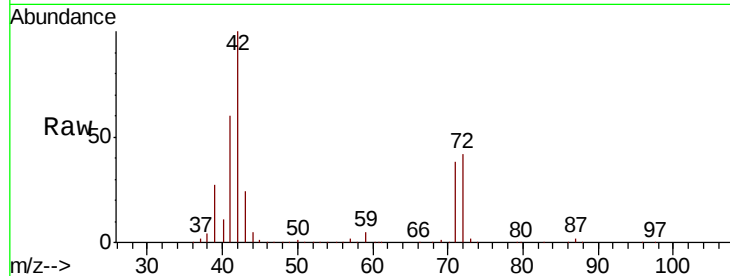
ClientSampleId :

VSTDCCC010EC

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 42    | Resp: | 830613 |
| Ion      | Ratio | Lower | Upper  |
| 42       | 100   |       |        |
| 72       | 40.2  | 30.2  | 45.2   |
| 71       | 38.7  | 29.4  | 44.2   |

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#42

Bromodichloromethane

Concen: 7.107 ppbv

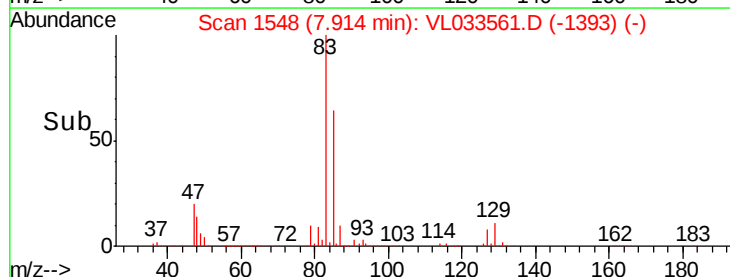
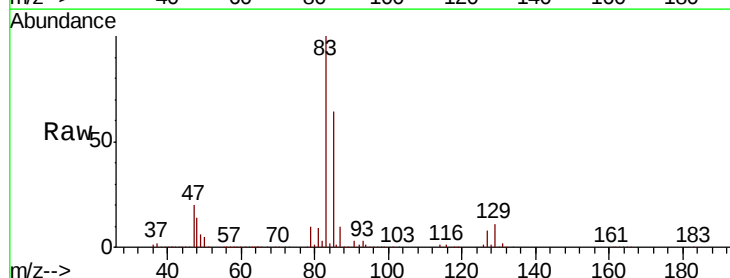
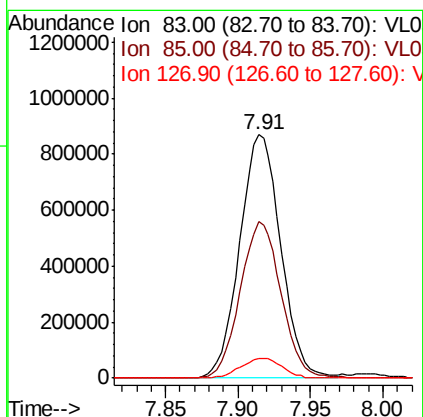
RT: 7.91 min Scan# 1548

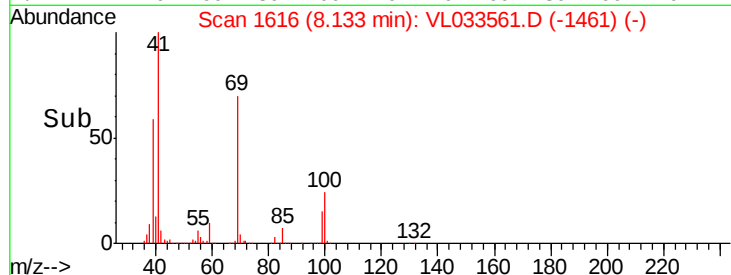
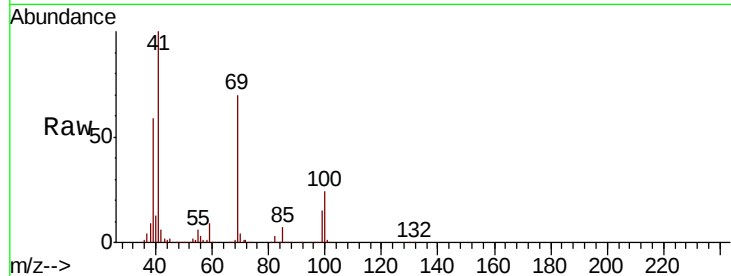
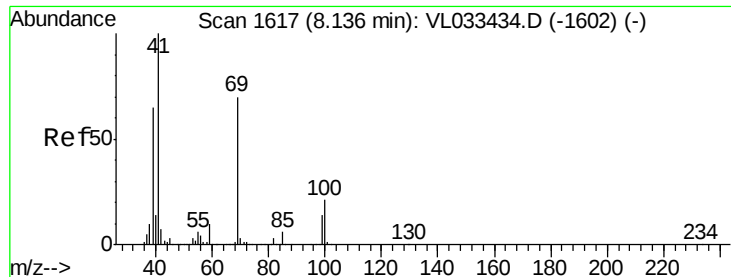
Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 83    | Resp: | 1709234 |
| Ion      | Ratio | Lower | Upper   |
| 83       | 100   |       |         |
| 85       | 64.4  | 50.7  | 76.1    |
| 127      | 8.2   | 6.6   | 9.8     |





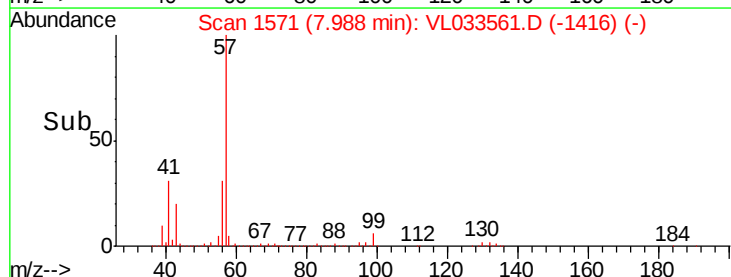
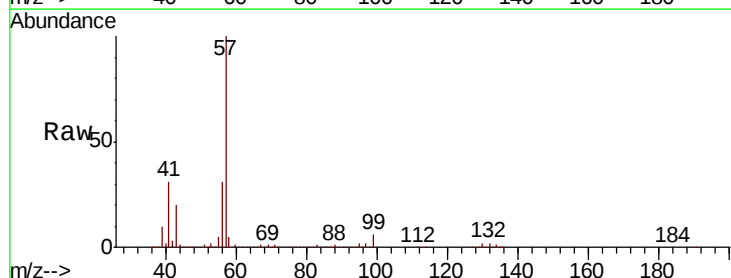
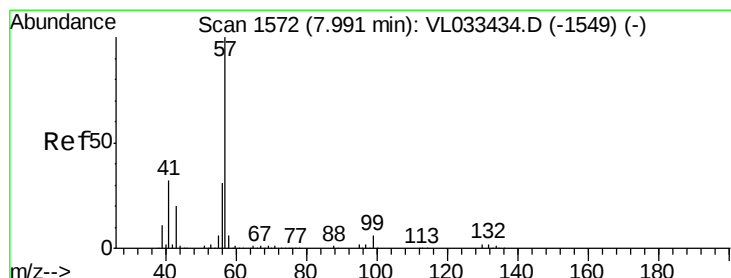
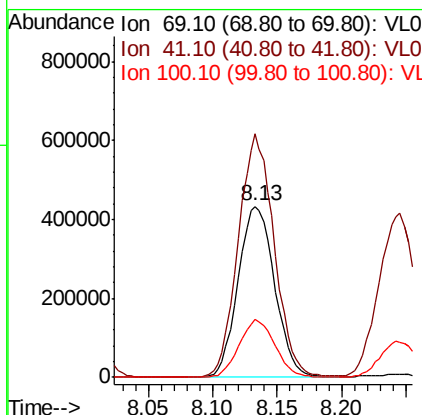
#43  
Methvl Methacrylate  
Concen: 8.012 ppbv  
RT: 8.13 min Scan# 1616  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 69      | 100   |       |       |
| 41      | 139.0 | 116.6 | 174.8 |
| 100     | 33.1  | 24.4  | 36.6  |

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

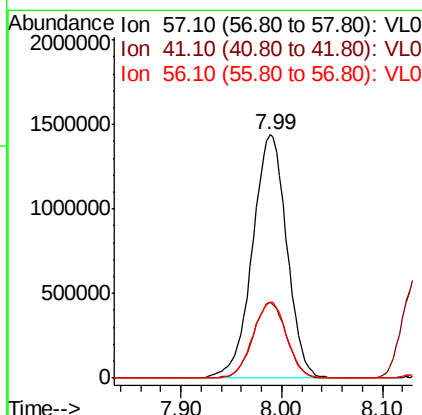
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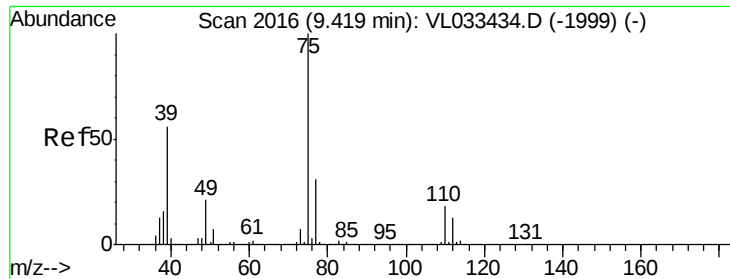
MMDadoda  
4/8/2019 3:22:39 AM



#44  
2,2,4-Trimethylpentane  
Concen: 7.377 ppbv  
RT: 7.99 min Scan# 1571  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 30.4  | 26.0  | 39.0  |
| 56      | 30.8  | 24.6  | 37.0  |





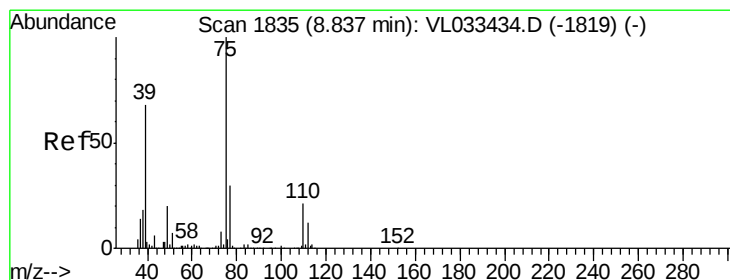
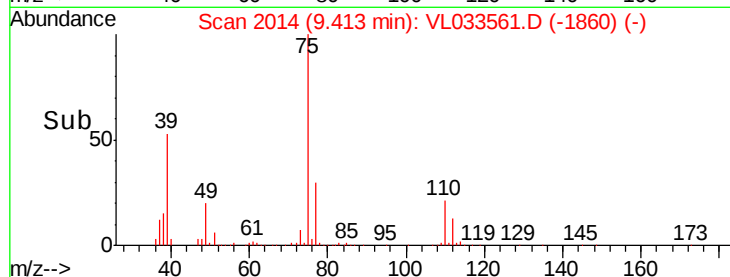
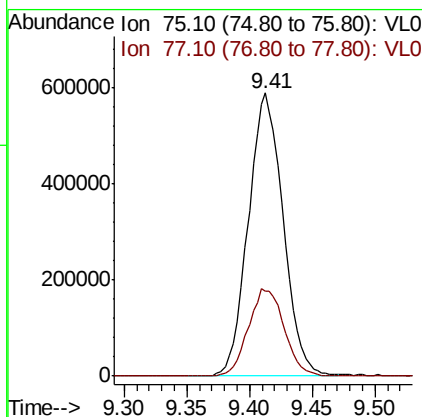
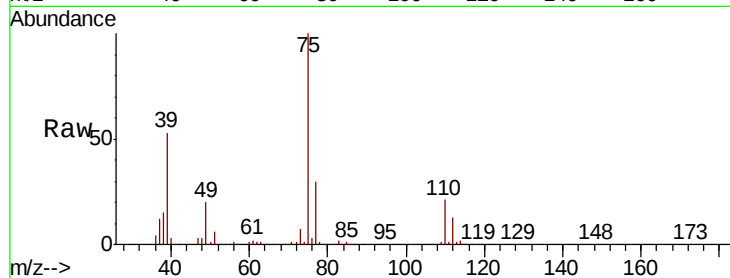
#45  
 t-1,3-Dichloropropene  
 Concen: 8.672 ppbv  
 RT: 9.41 min Scan# 2014  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion: 75 Resp: 1138920  
 Ion Ratio Lower Upper  
 75 100  
 77 30.2 24.5 36.7

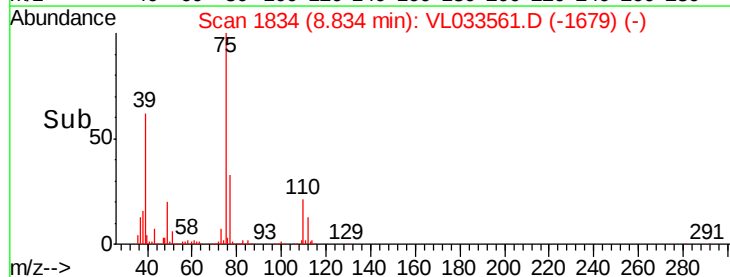
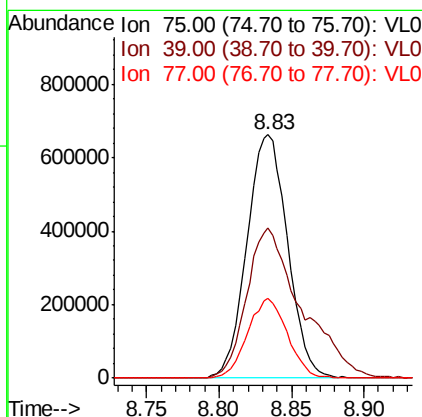
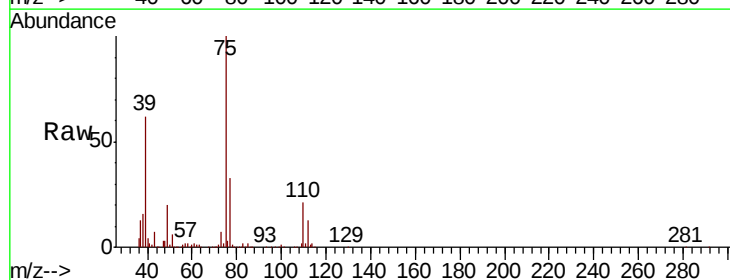
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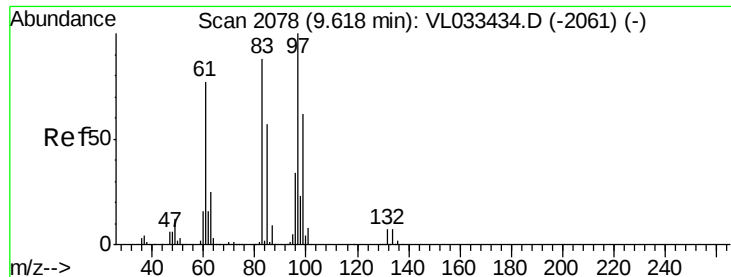
MMDadoda  
 4/8/2019 3:22:39 AM



#46  
 cis-1,3-Dichloropropene  
 Concen: 8.443 ppbv  
 RT: 8.83 min Scan# 1834  
 Delta R.T. -0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Tgt Ion: 75 Resp: 1294906  
 Ion Ratio Lower Upper  
 75 100  
 39 61.6 54.1 81.1  
 77 32.7 23.9 35.9





#47

1,1,2-Trichloroethane

Concen: 7.574 ppbv

RT: 9.61 min Scan# 2076

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 97 Resp: 887522

Ion Ratio Lower Upper

97 100

83 90.1 70.5 105.7

85 56.8 45.6 68.4

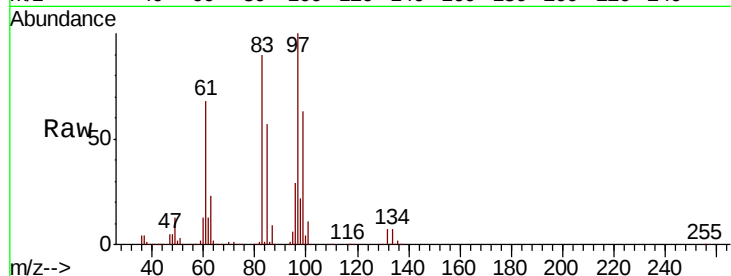
99 62.6 49.4 74.0

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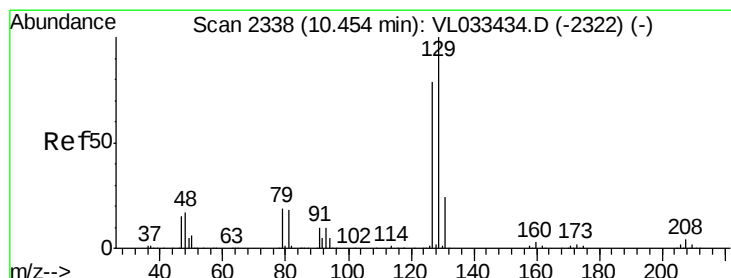
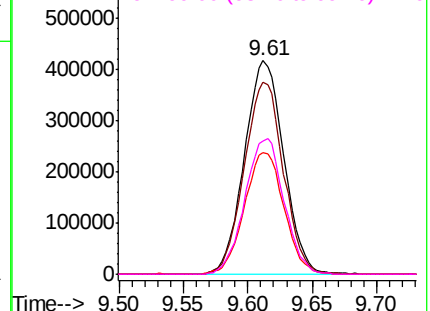
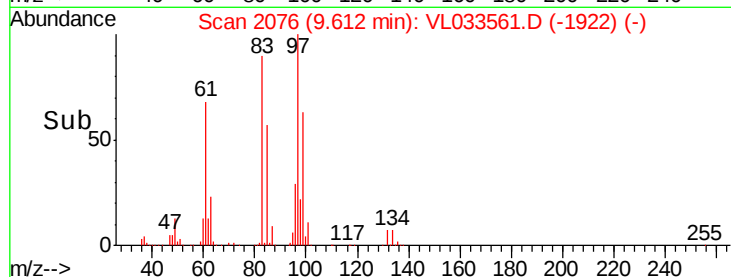
Abundance

Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48

Dibromochloromethane

Concen: 7.702 ppbv

RT: 10.45 min Scan# 2336

Delta R.T. -0.01 min

Lab File: VL033561.D

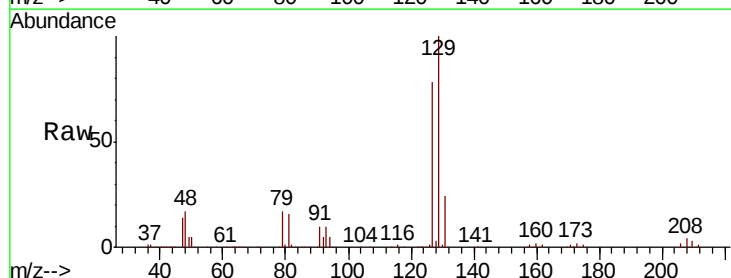
Acq: 5 Apr 2019 11:01

Tgt Ion: 129 Resp: 1522331

Ion Ratio Lower Upper

129 100

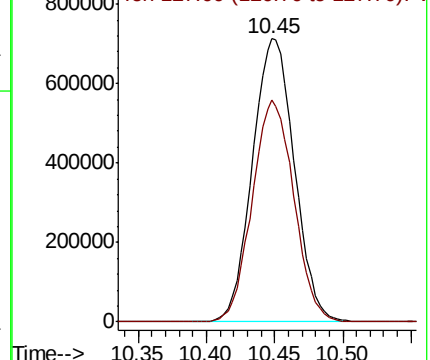
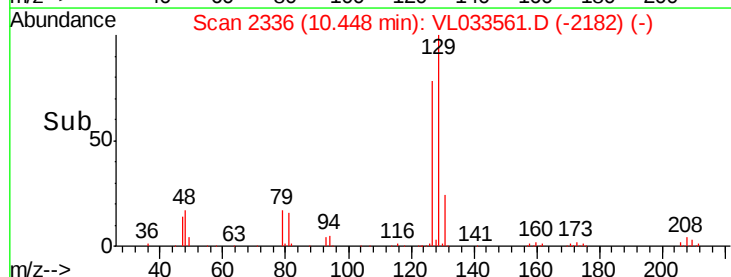
127 77.8 39.1 117.2

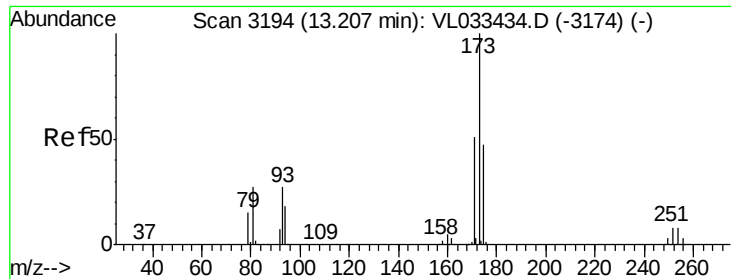


Abundance

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 7.534 ppbv

RT: 13.20 min Scan# 3192

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:173 Resp: 1422569

Ion Ratio Lower Upper

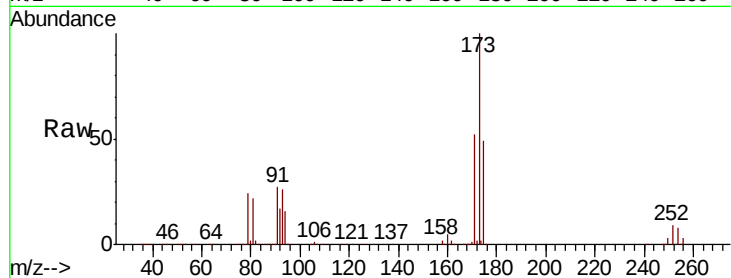
173 100

175 49.0 39.3 58.9

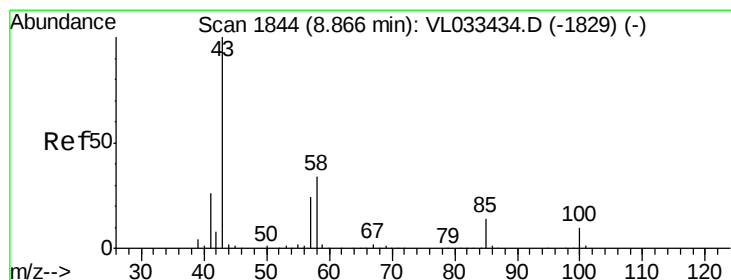
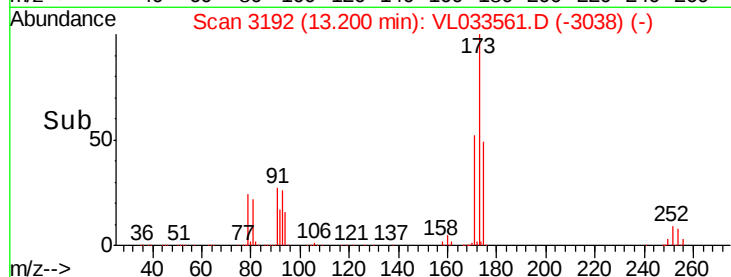
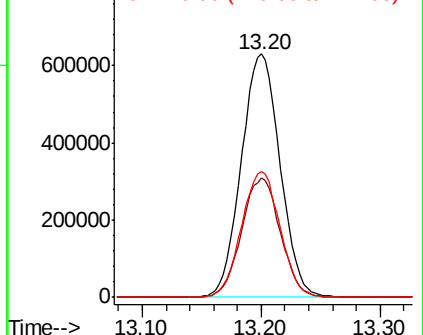
171 51.6 41.2 61.8

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Abundance Ion 172.90 (172.60 to 173.60): V  
Ion 174.90 (174.60 to 175.60): V  
Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 7.377 ppbv

RT: 8.87 min Scan# 1844

Delta R.T. 0.00 min

Lab File: VL033561.D

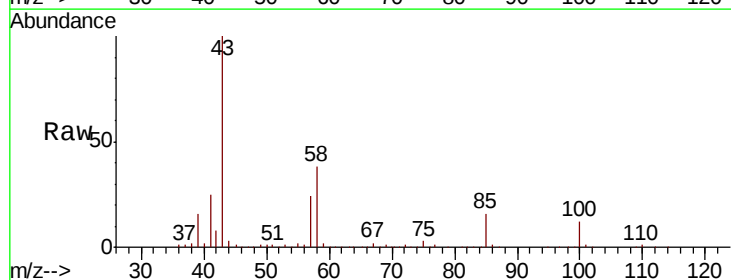
Acq: 5 Apr 2019 11:01

Tgt Ion: 43 Resp: 2037673

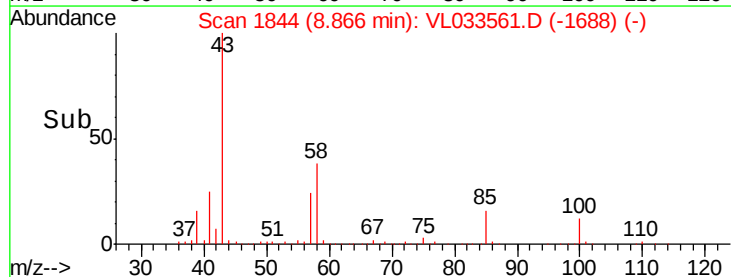
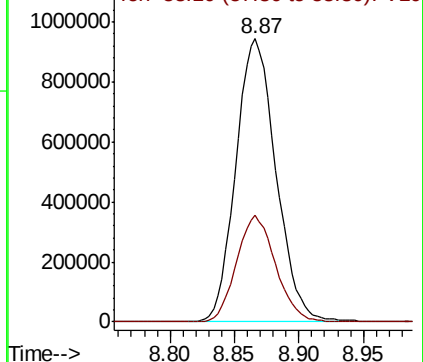
Ion Ratio Lower Upper

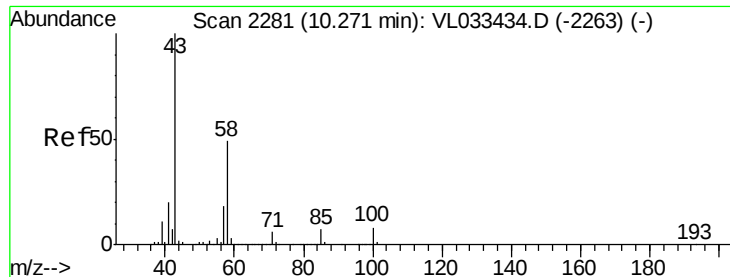
43 100

58 36.8 28.0 42.0



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





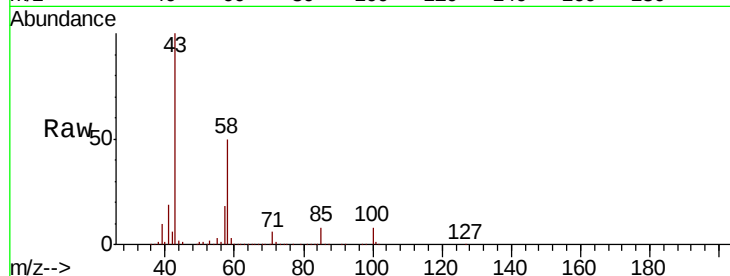
#51  
2-Hexanone  
Concen: 7.896 ppbv  
RT: 10.26 min Scan# 2279  
Delta R.T. -0.01 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

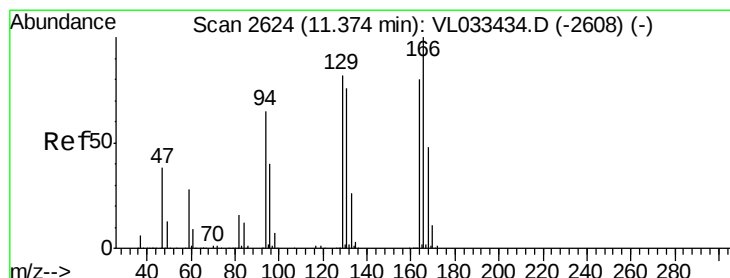
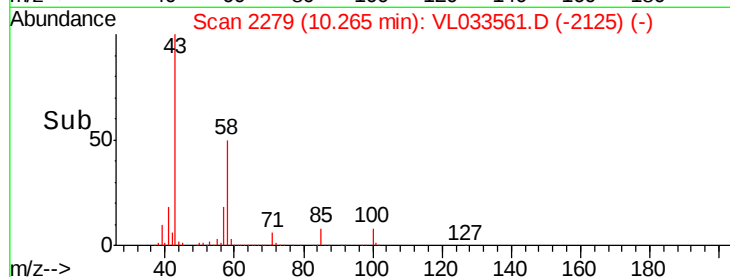
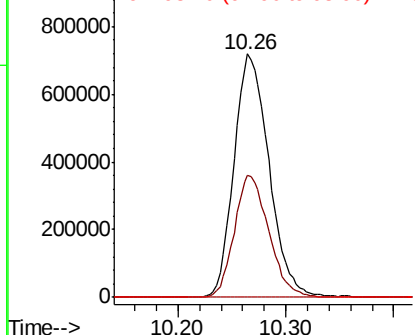
Tot Ion: 43 Resp: 1626933  
Ion Ratio Lower Upper  
43 100  
58 49.6 38.2 57.2  
98 0.1 0.2 0.2#

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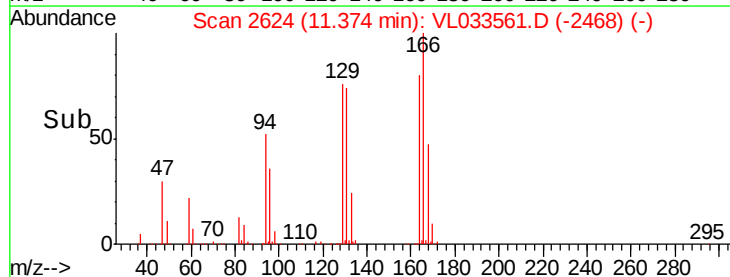
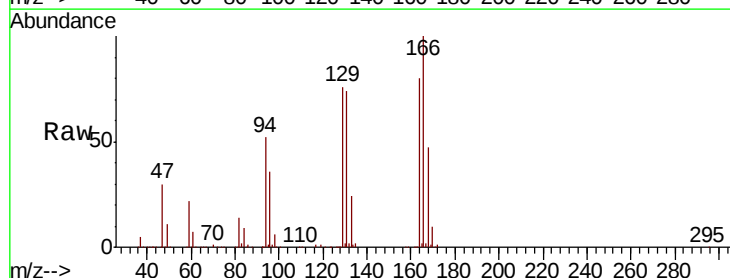
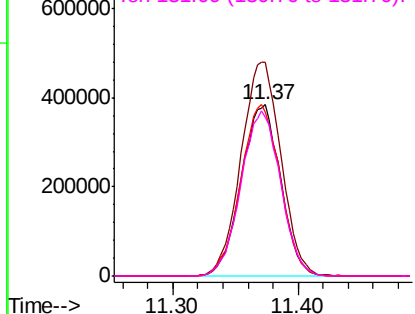
Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 58.10 (57.80 to 58.80): VL0  
Ion 98.20 (97.90 to 98.90): VL0

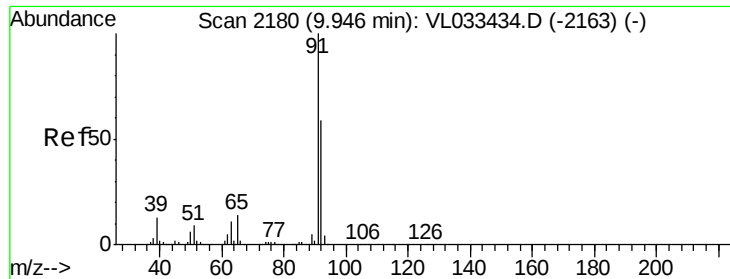


#52  
Tetrachloroethene  
Concen: 8.421 ppbv  
RT: 11.37 min Scan# 2624  
Delta R.T. 0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Tgt Ion:164 Resp: 837014  
Ion Ratio Lower Upper  
164 100  
166 124.8 99.5 149.3  
129 95.5 81.4 122.2  
131 92.9 75.6 113.4

Abundance Ion 163.90 (163.60 to 164.60): V  
Ion 165.90 (165.60 to 166.60): V  
Ion 129.00 (128.70 to 129.70): V  
Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 8.372 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Tot Ion: 91 Resp: 2562988

Ion Ratio Lower Upper

91 100

92 60.1 47.4 71.0

Instrument :

MSVOA\_L

ClientSampleId :

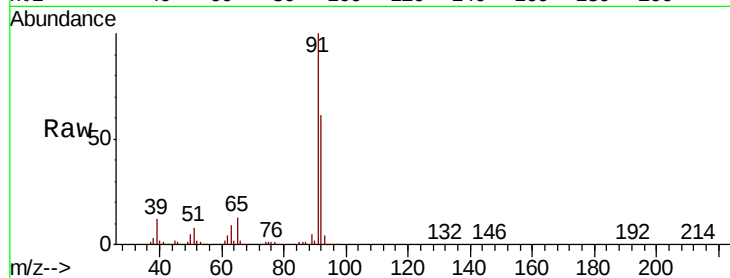
VSTDCCC010EC

Manual Integrations

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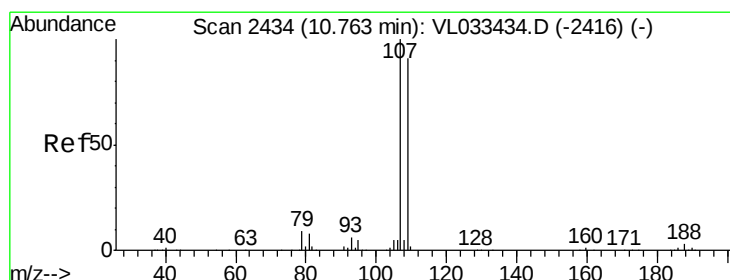
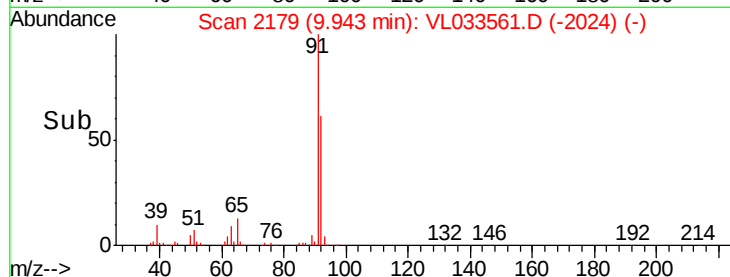
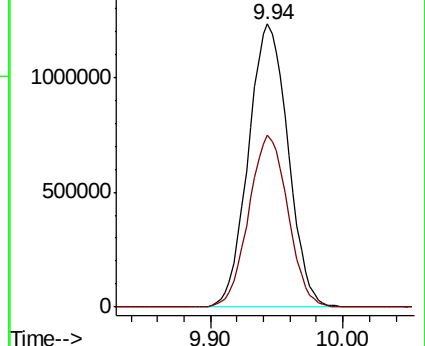
MMDadoda

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#54

1,2-Dibromoethane

Concen: 7.748 ppbv

RT: 10.76 min Scan# 2432

Delta R.T. -0.01 min

Lab File: VL033561.D

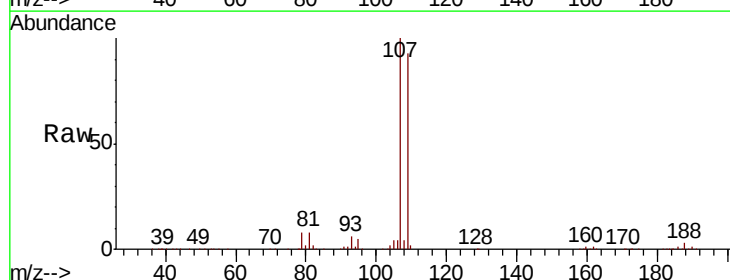
Acq: 5 Apr 2019 11:01

Tgt Ion:107 Resp: 1420121

Ion Ratio Lower Upper

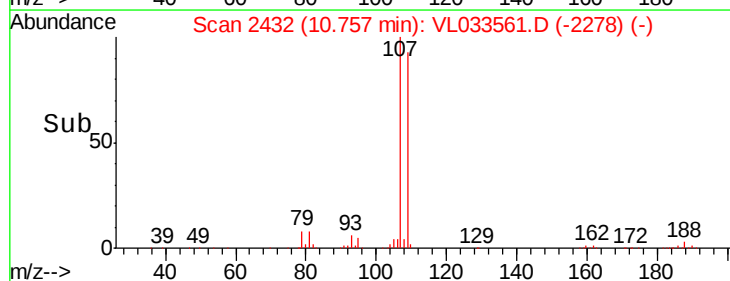
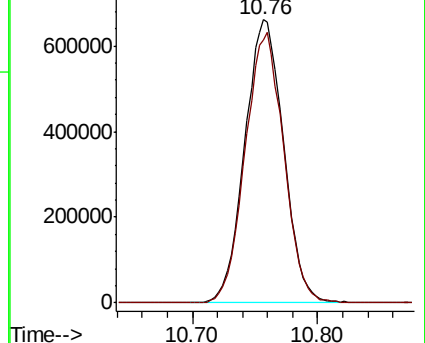
107 100

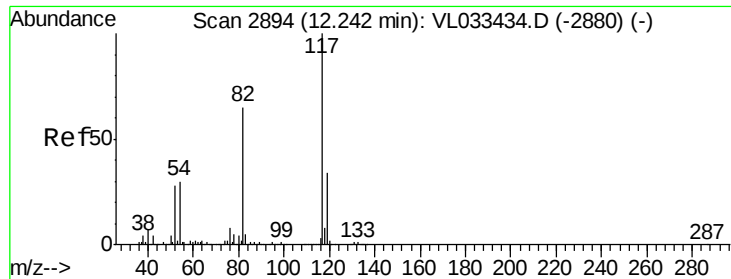
109 92.9 72.7 109.1



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V





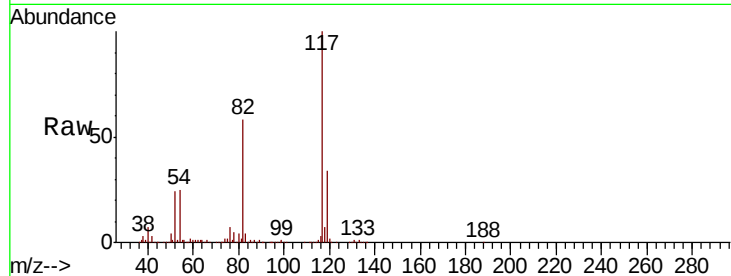
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv m  
RT: 12.24 min Scan# 2893  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

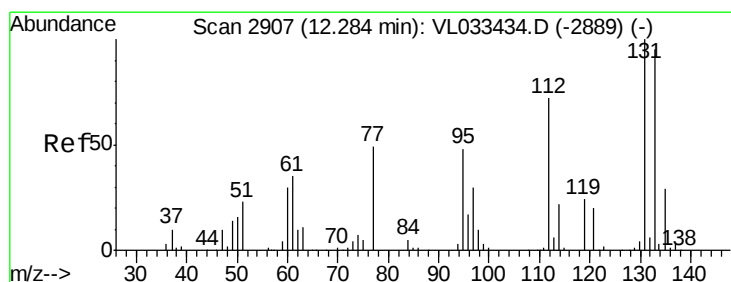
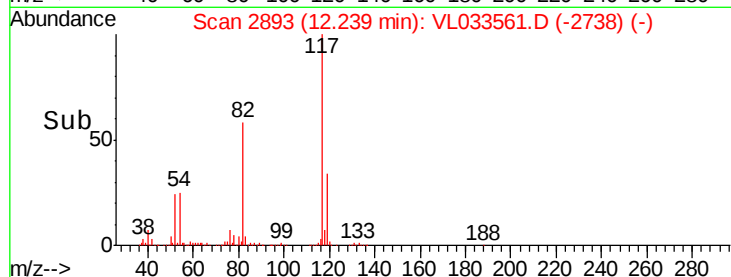
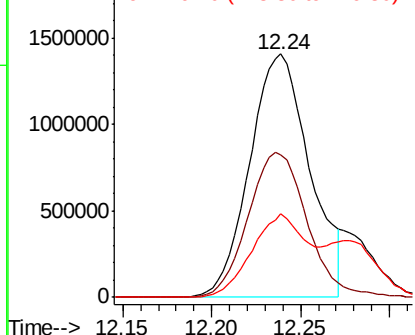
Tot Ion:117 Resp: 3308661  
Ion Ratio Lower Upper  
117 100  
82 58.8 51.5 77.3  
119 51.7 25.5 38.3#

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MMDadoda  
4/8/2019 3:22:39 AM

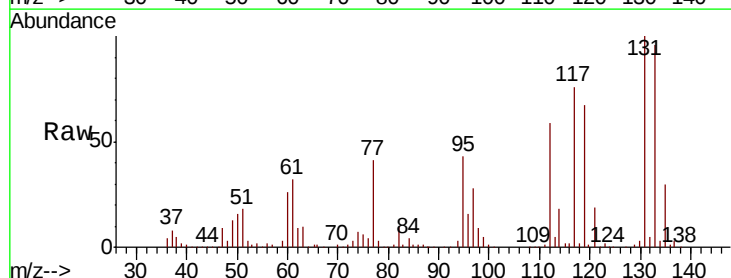


Abundance Ion 117.10 (116.80 to 117.80): V  
Ion 82.10 (81.80 to 82.80): VL0  
Ion 119.10 (118.80 to 119.80): V

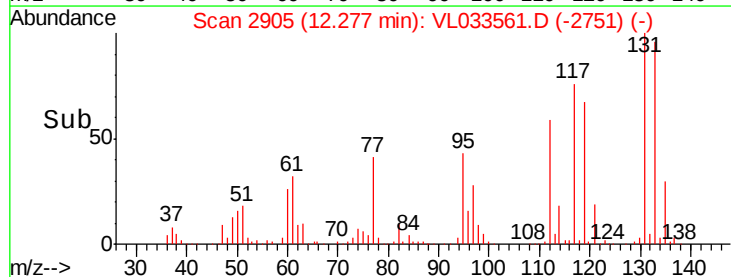
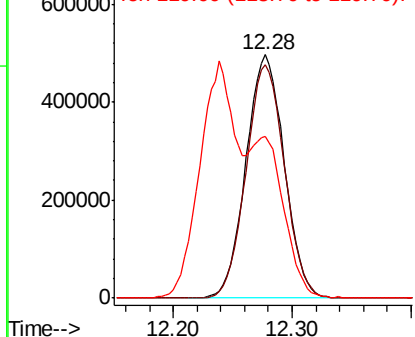


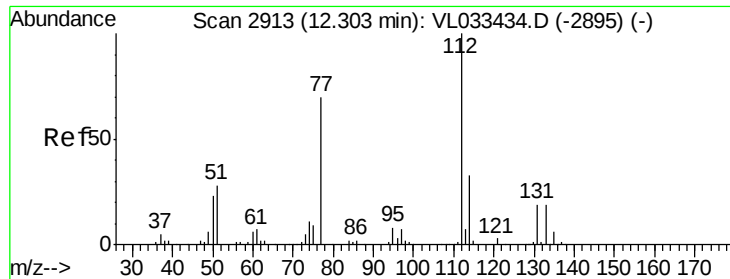
#56  
1,1,1,2-Tetrachloroethane  
Concen: 7.294 ppbv  
RT: 12.28 min Scan# 2905  
Delta R.T. -0.01 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Tgt Ion:131 Resp: 1105995  
Ion Ratio Lower Upper  
131 100  
133 96.4 76.2 114.4  
119 154.7 45.0 67.6#



Abundance Ion 131.00 (130.70 to 131.70): V  
Ion 133.00 (132.70 to 133.70): V  
Ion 119.00 (118.70 to 119.70): V





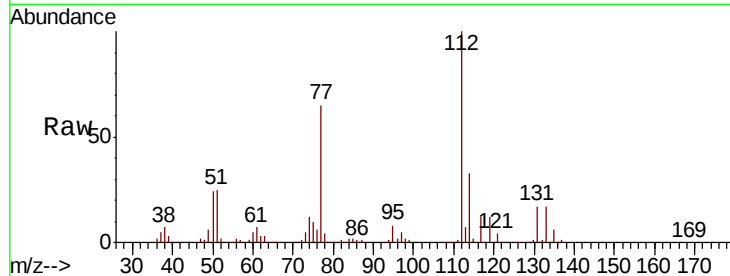
#57  
Chlorobenzene  
Concen: 7.673 ppbv  
RT: 12.30 min Scan# 2912  
Delta R.T. -0.00 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

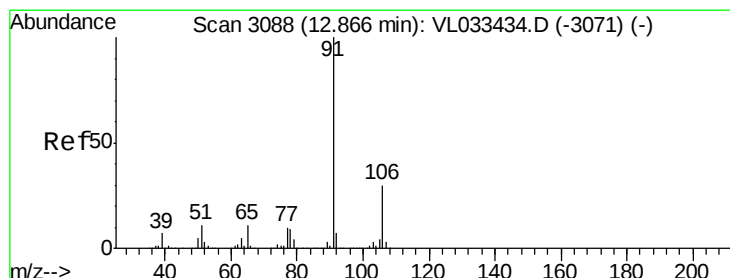
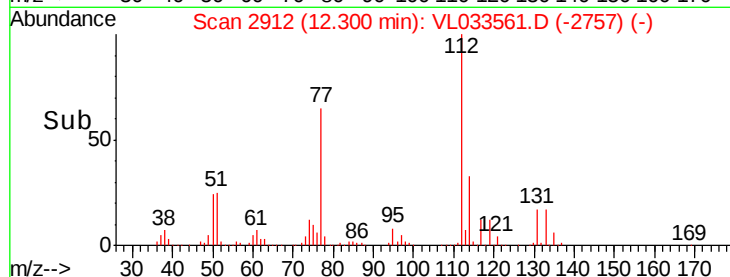
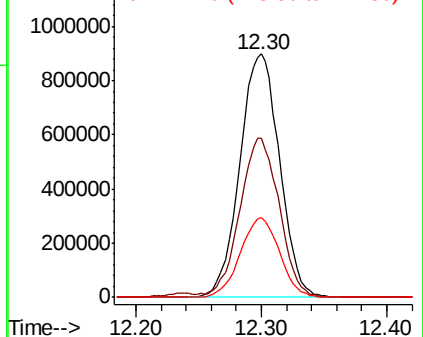
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 65.2  | 57.3  | 85.9  |
| 114     | 32.7  | 29.8  | 36.4  |

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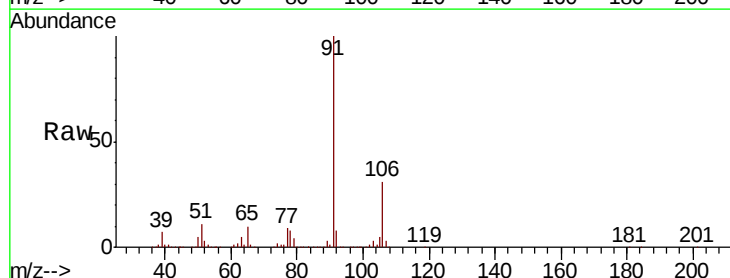


Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 77.10 (76.80 to 77.80): VL0  
Ion 114.10 (113.80 to 114.80): V

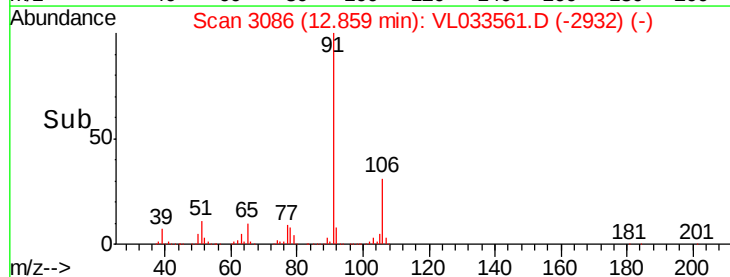
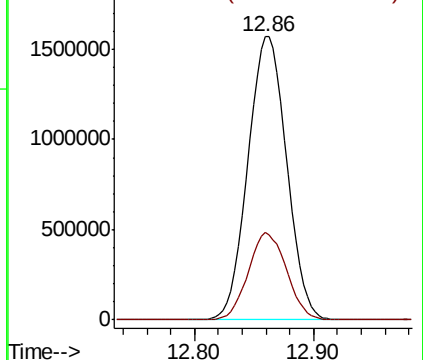


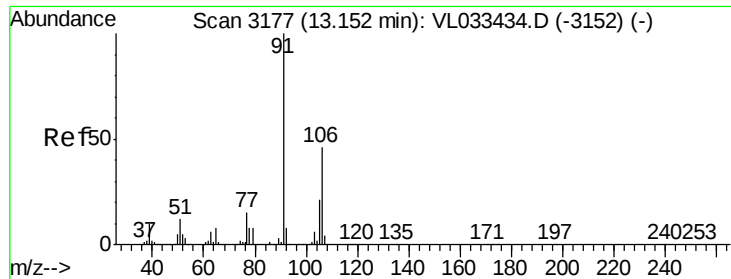
#58  
Ethyl Benzene  
Concen: 7.990 ppbv  
RT: 12.86 min Scan# 3086  
Delta R.T. -0.01 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 31.1  | 23.8  | 35.6  |



Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 106.10 (105.80 to 106.80): V





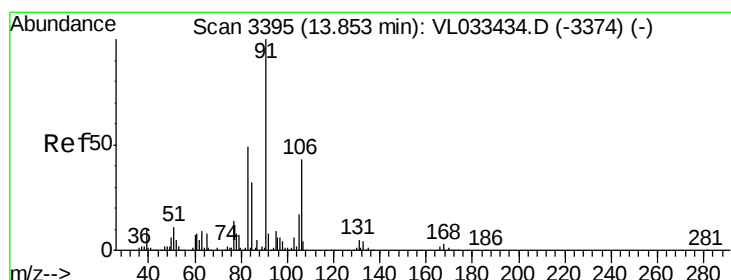
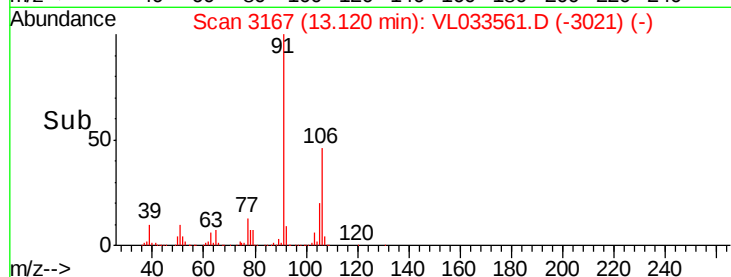
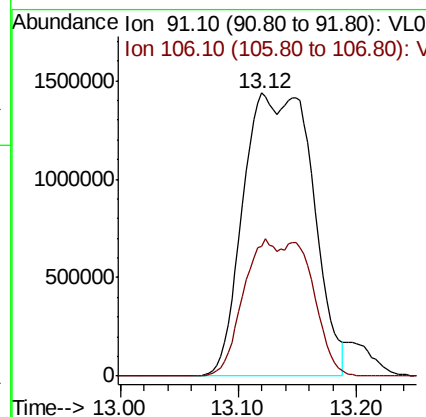
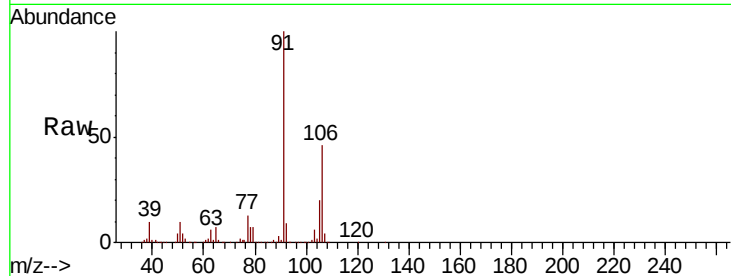
#59  
m/p-Xylene  
Concen: 14.691 ppbv m  
RT: 13.12 min Scan# 3167  
Delta R.T. -0.03 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 91 Resp: 5798095  
Ion Ratio Lower Upper  
91 100  
106 0.0 0.0 0.0

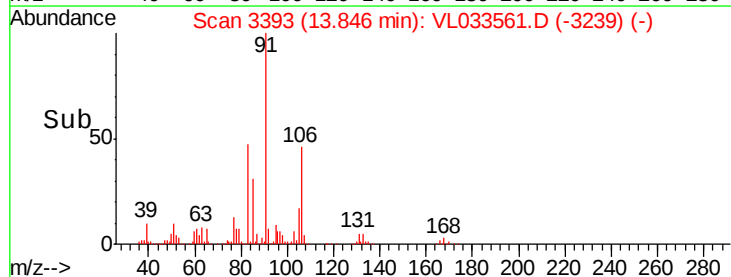
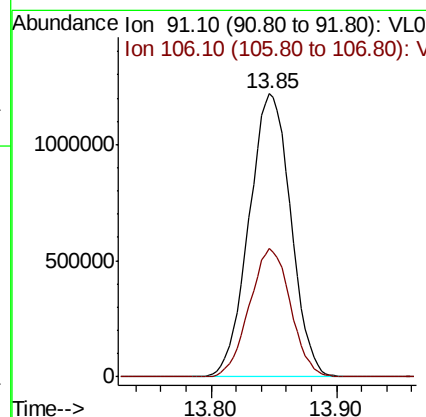
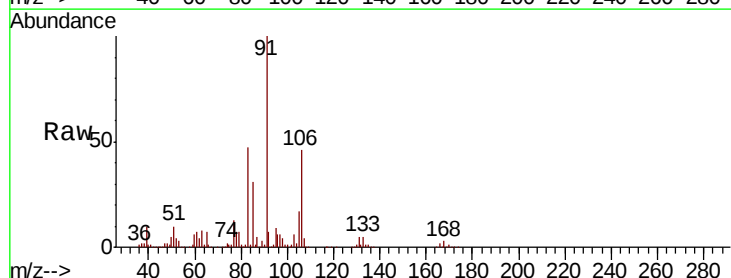
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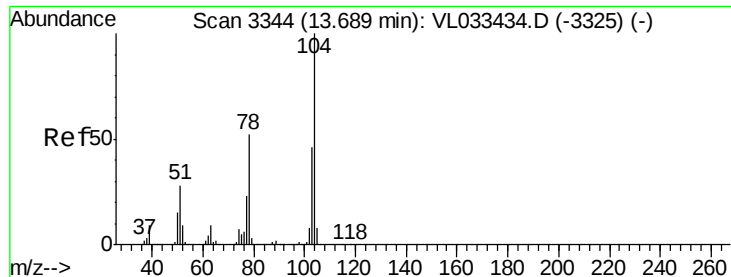
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#60  
o-Xylene  
Concen: 7.384 ppbv  
RT: 13.85 min Scan# 3393  
Delta R.T. -0.01 min  
Lab File: VL033561.D  
Acq: 5 Apr 2019 11:01

Tgt Ion: 91 Resp: 2817954  
Ion Ratio Lower Upper  
91 100  
106 44.7 21.4 64.3





#61

Stvrene

Concen: 8.500 ppbv

RT: 13.68 min Scan# 3342

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:104 Resp: 2226334

Ion Ratio Lower Upper

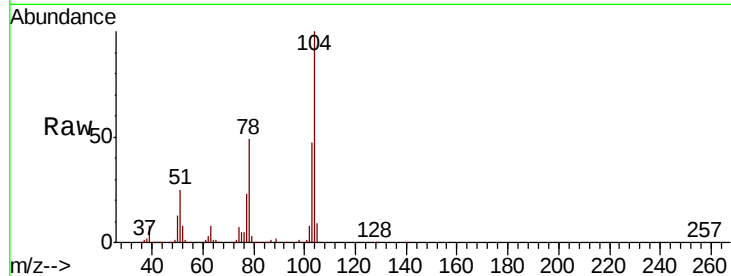
104 100

78 49.7 43.2 64.8

103 47.6 37.8 56.8

Manual Integrations  
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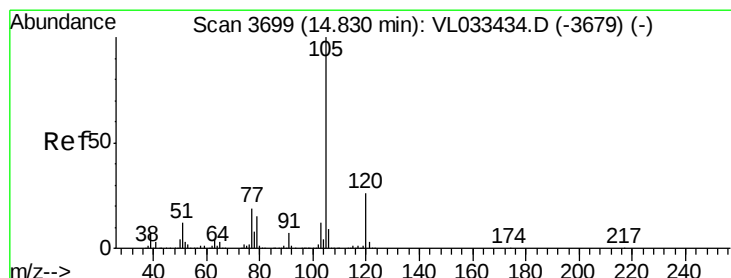
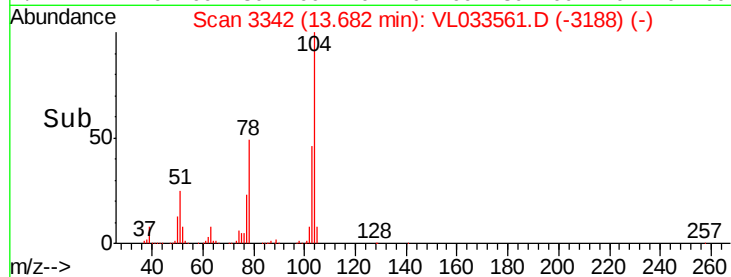
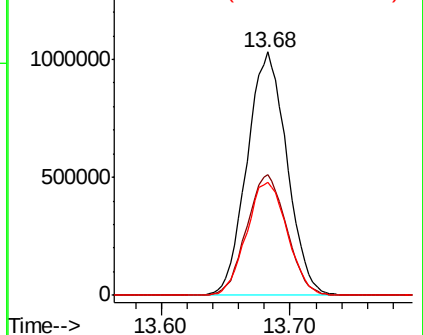
MMDadoda  
4/8/2019 3:22:39 AM



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 7.554 ppbv

RT: 14.82 min Scan# 3697

Delta R.T. -0.01 min

Lab File: VL033561.D

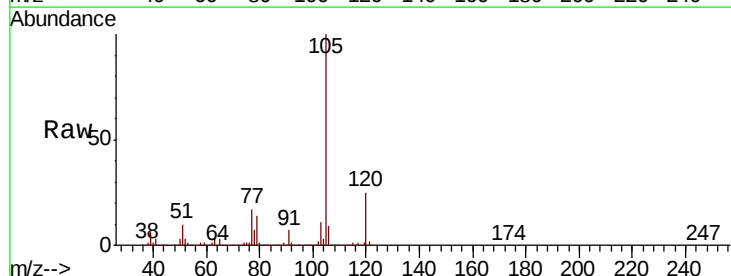
Acq: 5 Apr 2019 11:01

Tgt Ion:105 Resp: 4082234

Ion Ratio Lower Upper

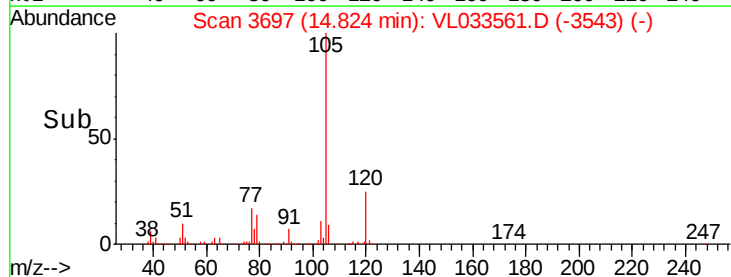
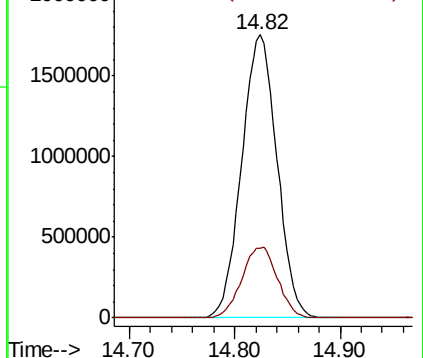
105 100

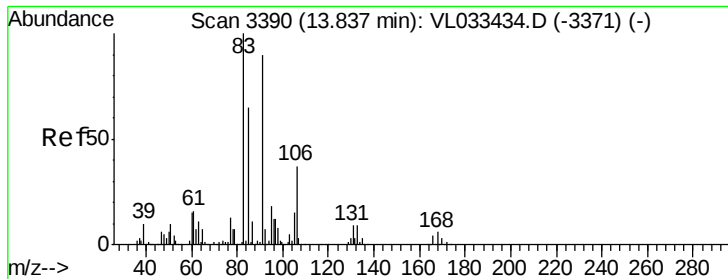
120 25.4 20.2 30.2



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





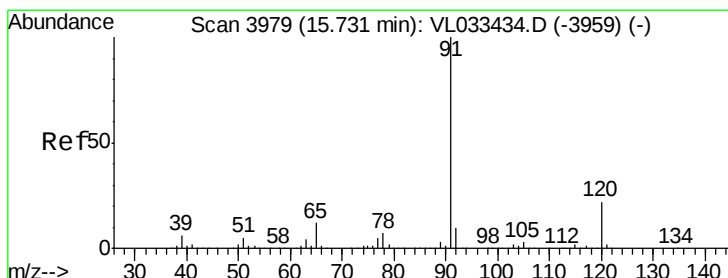
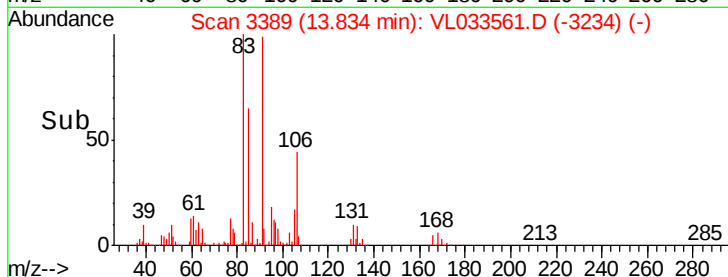
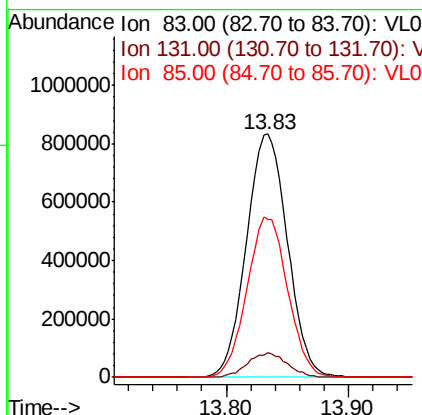
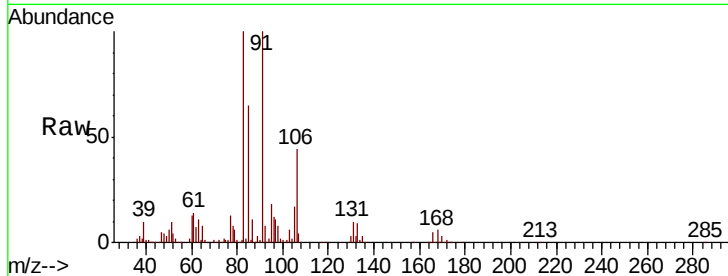
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 6.890 ppbv  
 RT: 13.83 min Scan# 3389  
 Delta R.T. -0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion: 83 Resp: 1936215  
 Ion Ratio Lower Upper  
 83 100  
 131 9.8 4.7 14.0  
 85 65.6 32.7 98.1

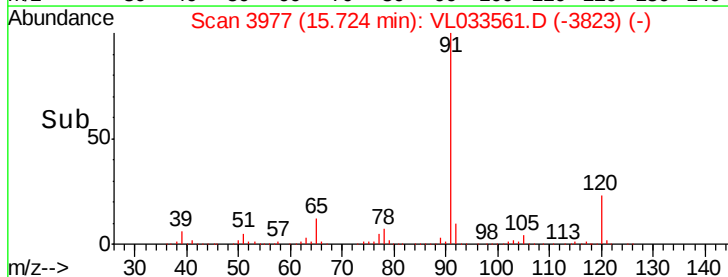
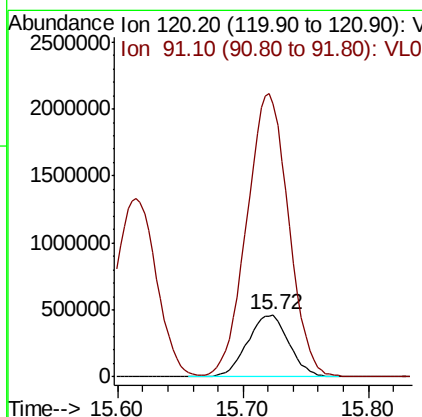
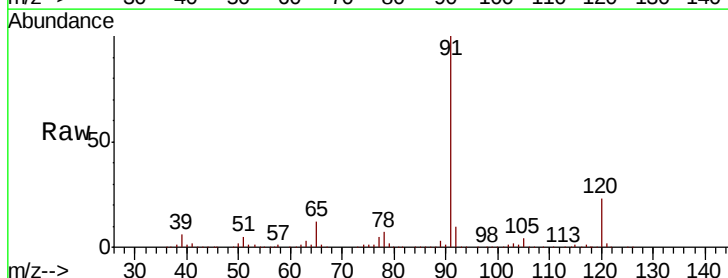
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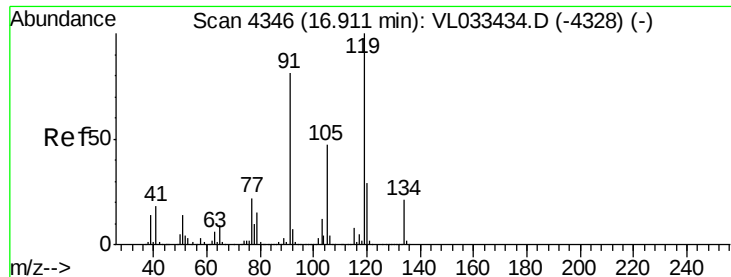
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#64  
 n-propylbenzene  
 Concen: 7.724 ppbv  
 RT: 15.72 min Scan# 3977  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Tgt Ion:120 Resp: 1059236  
 Ion Ratio Lower Upper  
 120 100  
 91 463.7 387.4 581.2





#65

tert-Butylbenzene

Concen: 7.530 ppbv

RT: 16.90 min Scan# 4344

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:119 Resp: 3586081

Ion Ratio Lower Upper

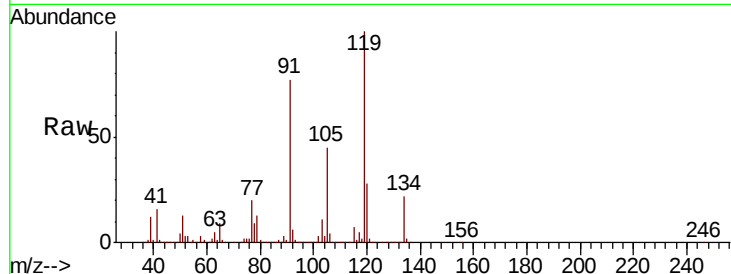
119 100

91 78.0 66.4 99.6

134 20.2 15.5 23.3

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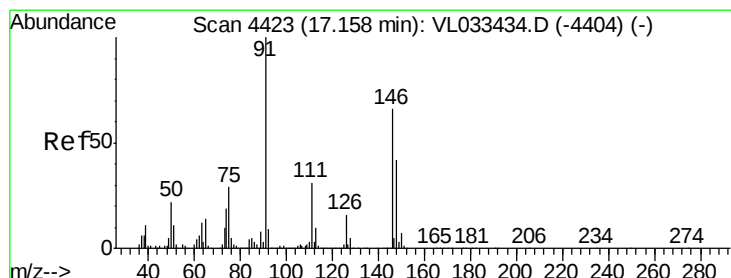
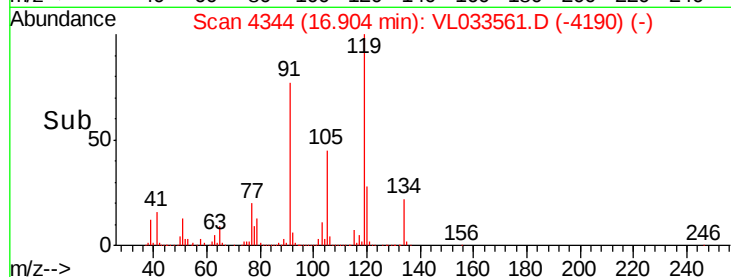
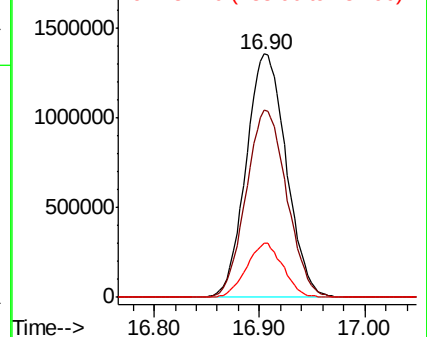
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Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 8.814 ppbv

RT: 17.16 min Scan# 4422

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

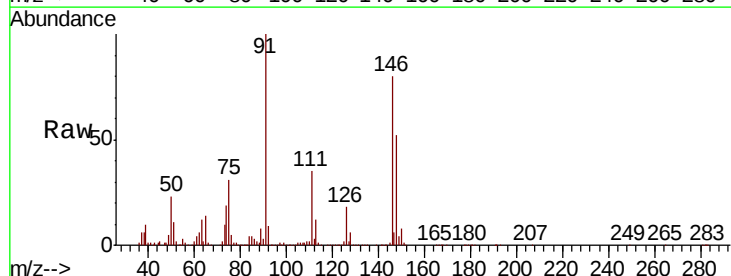
Tgt Ion: 91 Resp: 1951750

Ion Ratio Lower Upper

91 100

126 17.9 13.0 19.6

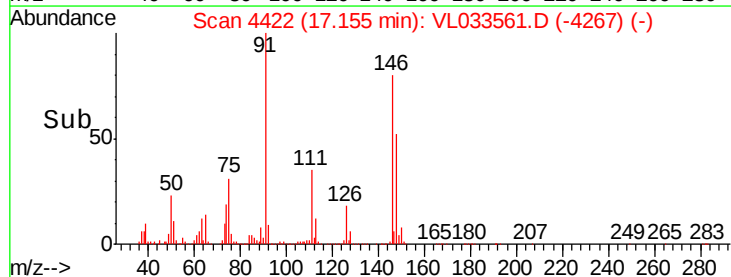
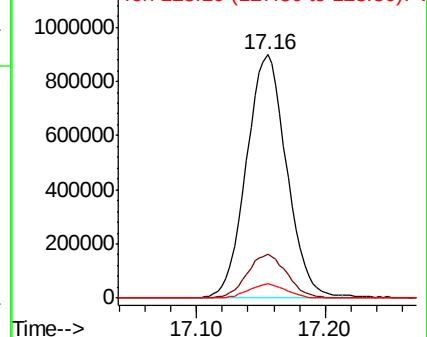
128 5.7 4.2 6.2

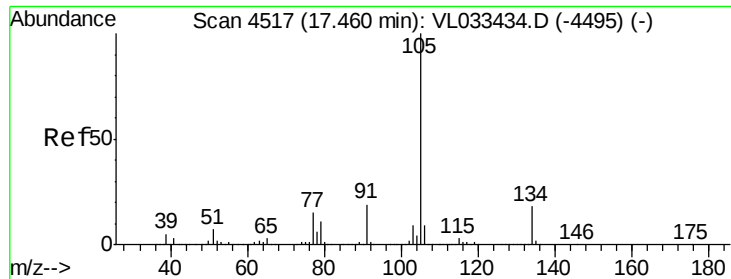


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 7.547 ppbv

RT: 17.46 min Scan# 4516

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 105 Resp: 5111391

Ion Ratio Lower Upper

105 100

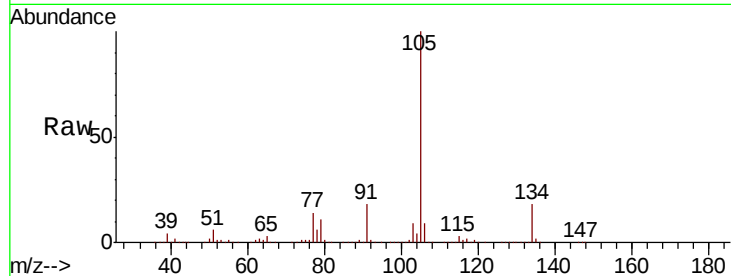
134 18.5 14.6 21.8

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.46

2000000

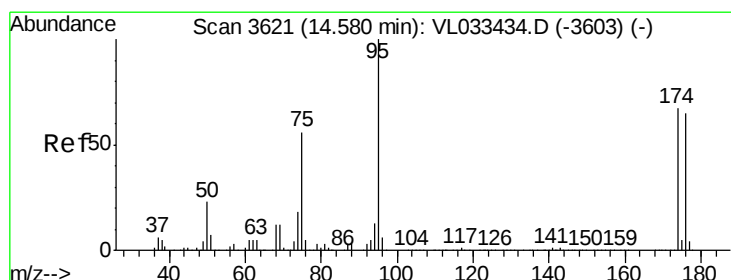
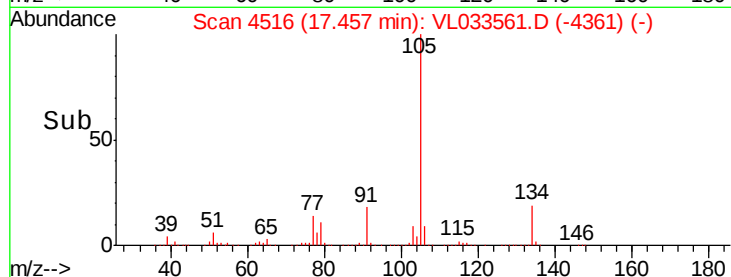
1500000

1000000

500000

0

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 9.104 ppbv

RT: 14.57 min Scan# 3619

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

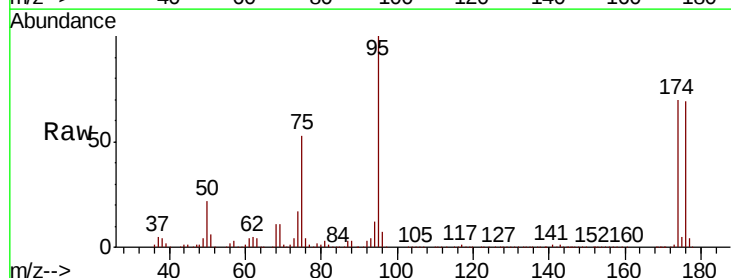
Tgt Ion: 95 Resp: 2361382

Ion Ratio Lower Upper

95 100

174 71.0 52.9 79.3

175 5.0 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

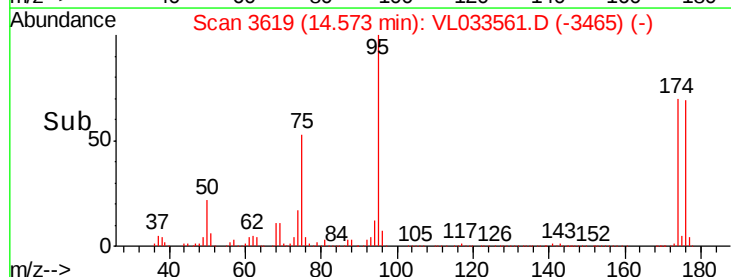
14.57

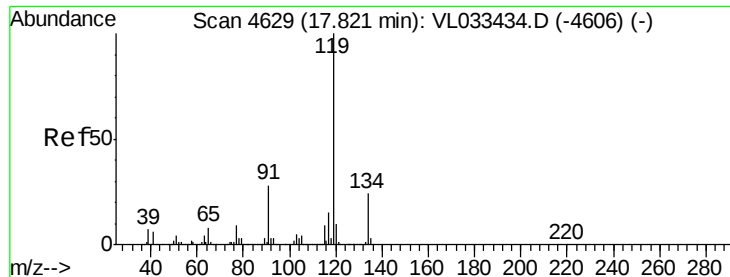
1000000

500000

0

Time-->





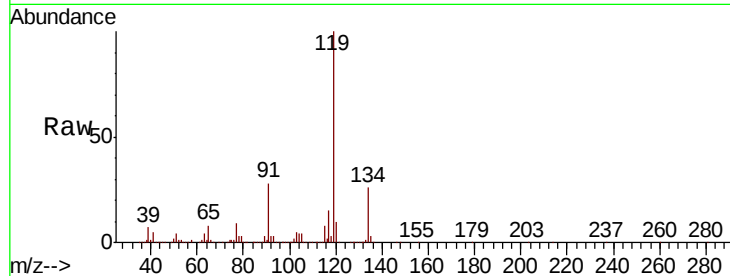
#69  
 p-Isopropyltoluene  
 Concen: 7.711 ppbv  
 RT: 17.81 min Scan# 4627  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 25.7  | 19.9  | 29.9  |
| 91      | 27.6  | 23.4  | 35.0  |

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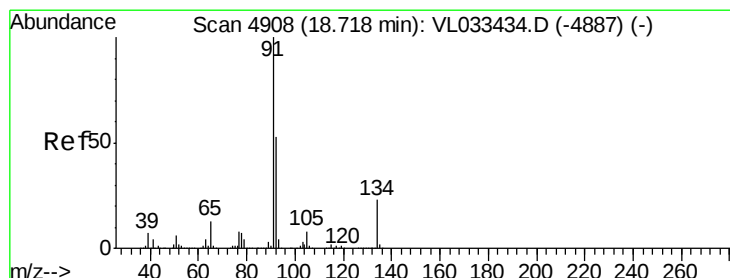
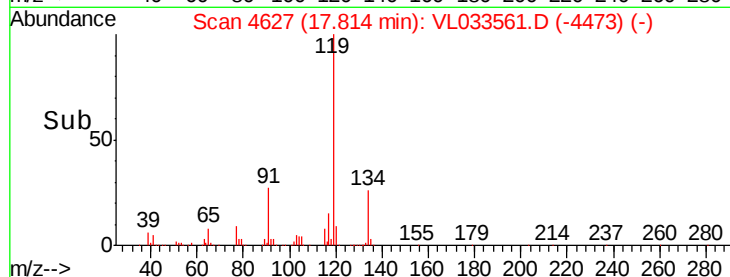
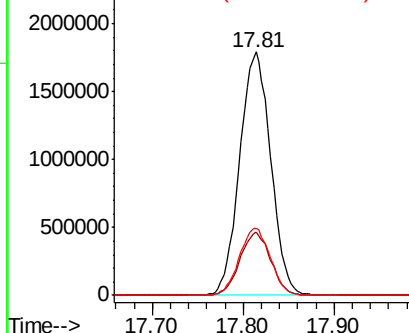


Abundance

Ion 119.10 (118.80 to 119.80): V

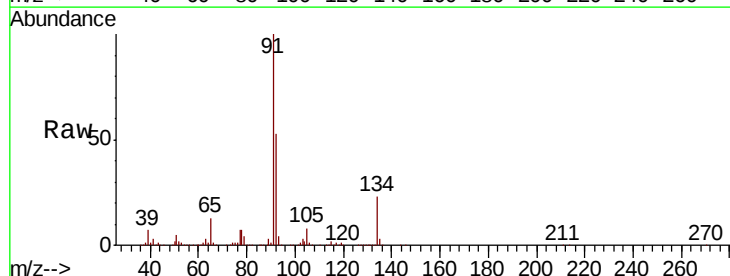
Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): V



#70  
 n-Butylbenzene  
 Concen: 7.513 ppbv  
 RT: 18.71 min Scan# 4907  
 Delta R.T. -0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 53.5  | 42.6  | 64.0  |
| 134     | 23.2  | 17.5  | 26.3  |

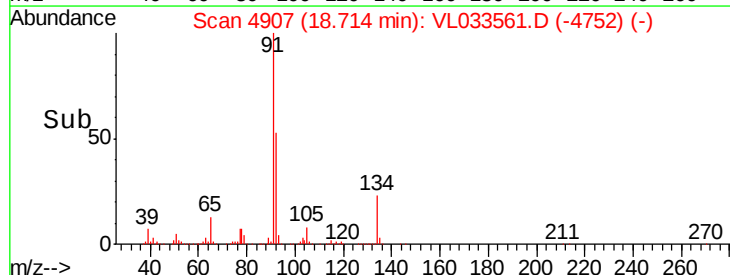
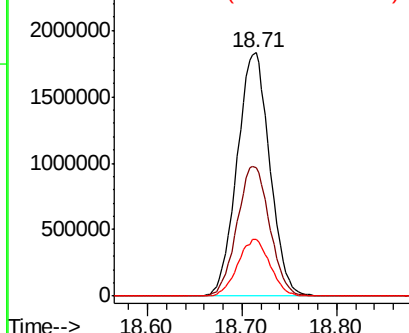


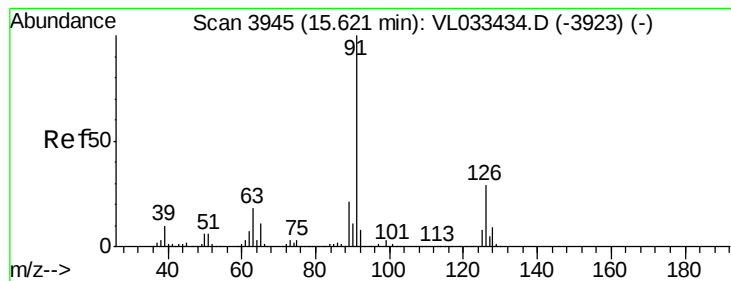
Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

Ion 134.20 (133.90 to 134.90): V





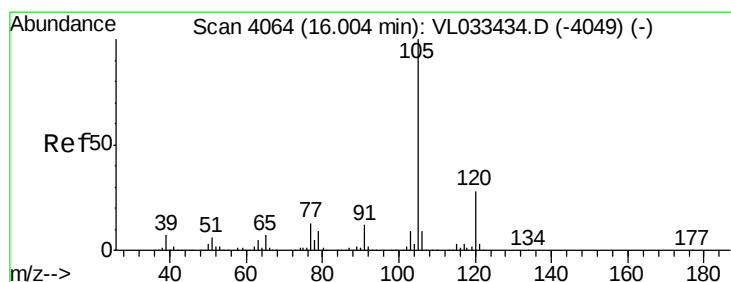
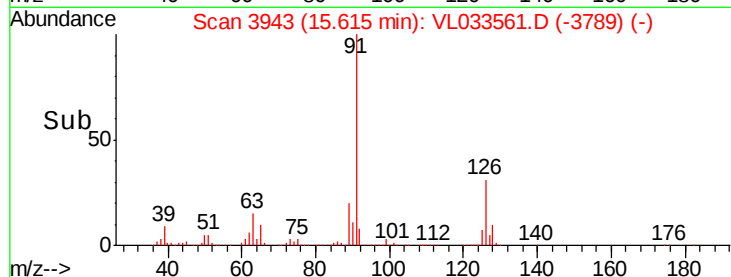
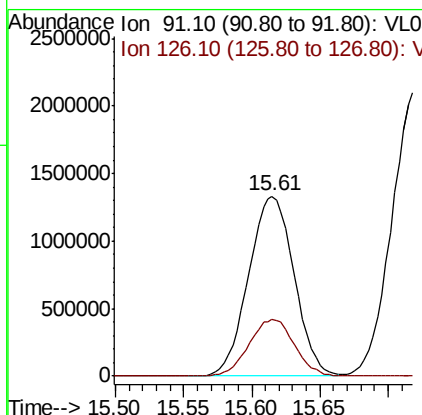
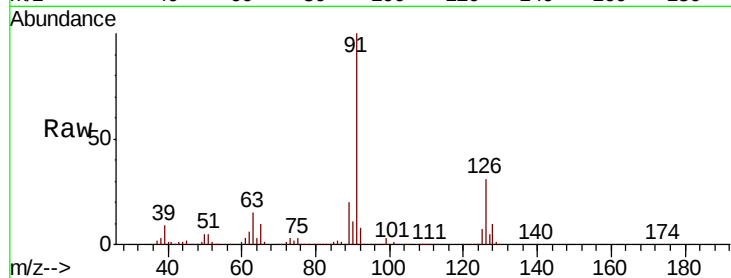
#71  
 2-Chlorotoluene  
 Concen: 7.507 ppbv  
 RT: 15.61 min Scan# 3943  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion: 91 Resp: 3084882  
 Ion Ratio Lower Upper  
 91 100  
 126 31.4 11.7 46.9

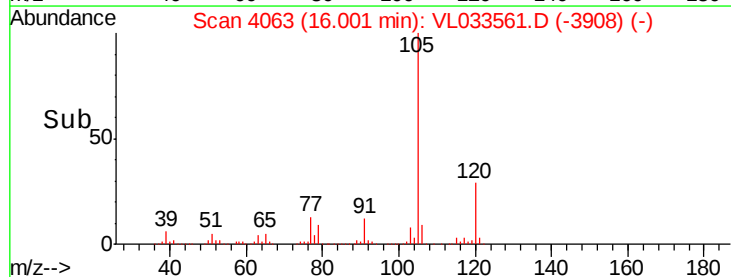
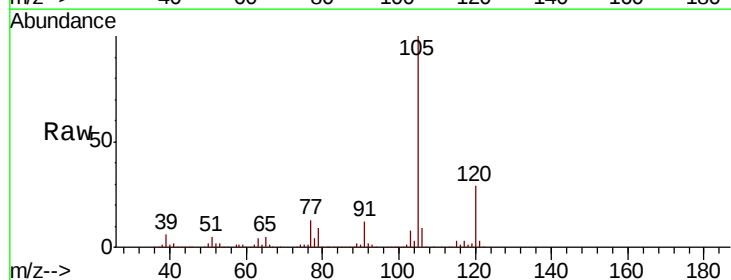
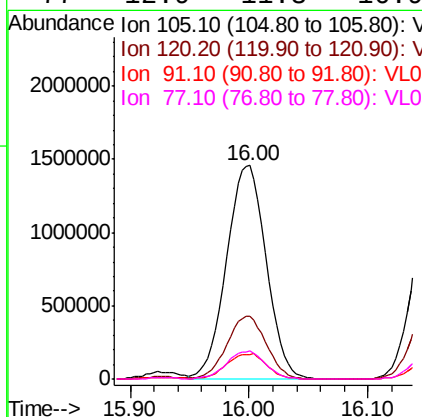
Manual Integrations  
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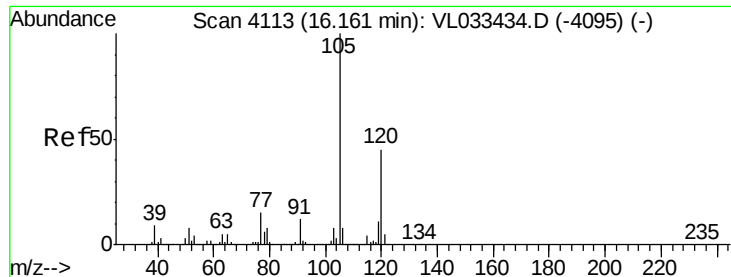
MMDadoda  
 4/8/2019 3:22:39 AM



#72  
 4-Ethyltoluene  
 Concen: 7.823 ppbv  
 RT: 16.00 min Scan# 4063  
 Delta R.T. -0.00 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Tgt Ion: 105 Resp: 3355733  
 Ion Ratio Lower Upper  
 105 100  
 120 29.4 23.2 34.8  
 91 11.8 10.4 15.6  
 77 12.9 11.3 16.9





#73

1,3,5-Trimethylbenzene

Concen: 7.766 ppbv

RT: 16.16 min Scan# 4111

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:105 Resp: 3187913

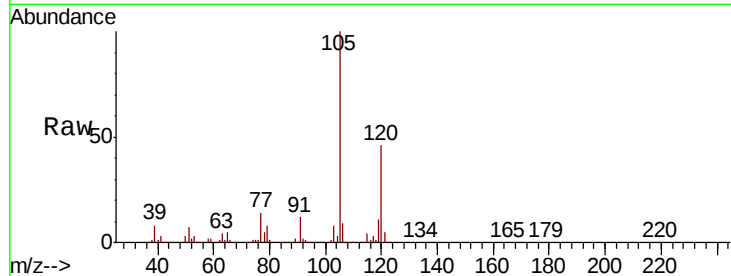
Ion Ratio Lower Upper

105 100

120 46.3 35.7 53.5

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.16

1500000

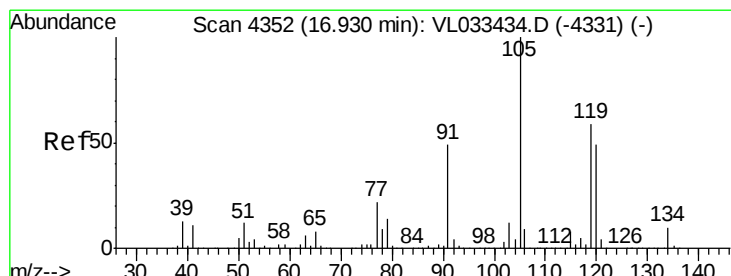
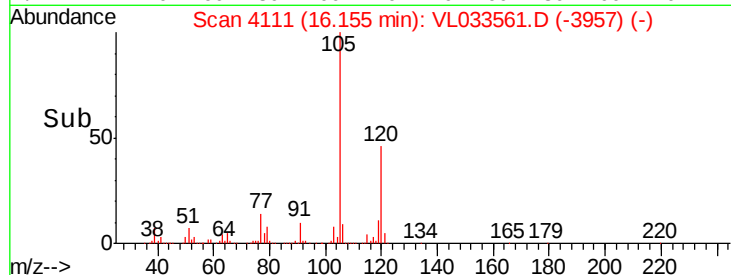
1000000

500000

0

16.10 16.20

Time-->



#74

1,2,4-Trimethylbenzene

Concen: 7.412 ppbv

RT: 16.92 min Scan# 4350

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Tgt Ion:105 Resp: 3261264

Ion Ratio Lower Upper

105 100

120 48.9 39.0 58.6

91 47.3 40.0 60.0

77 20.1 17.5 26.3

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

2000000

1500000

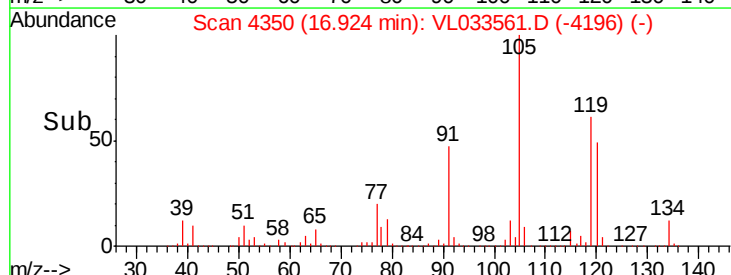
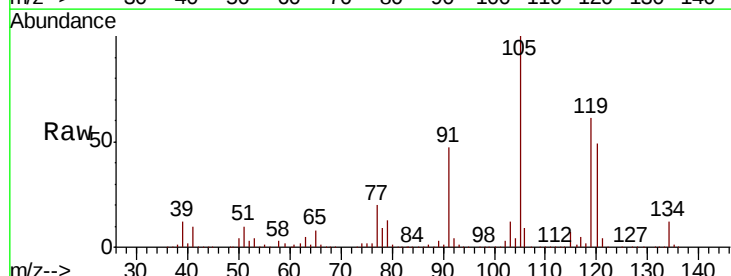
1000000

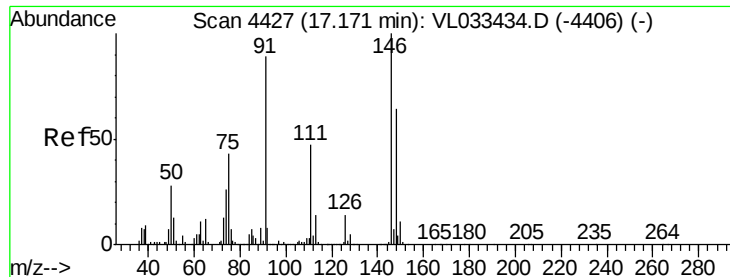
500000

0

16.80 16.90 17.00

Time-->





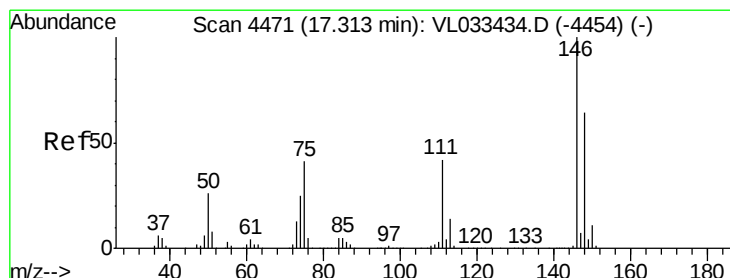
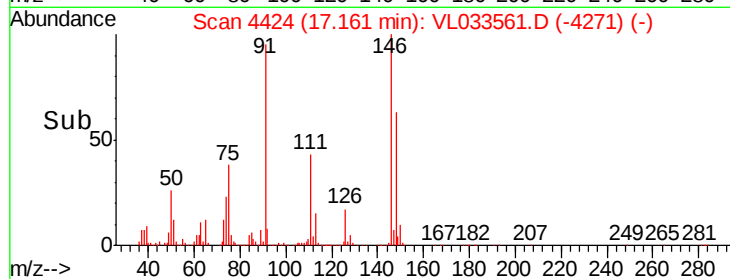
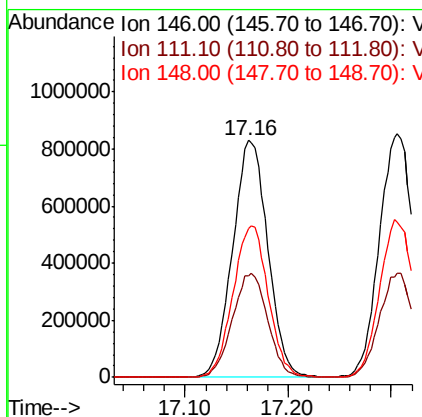
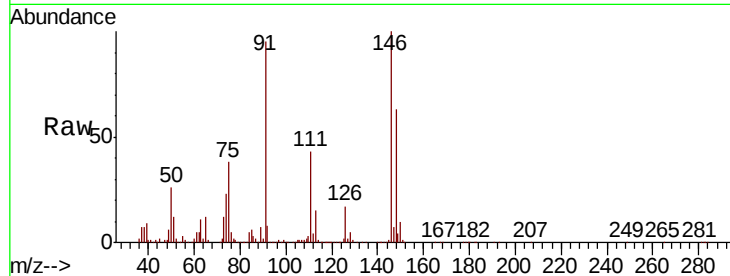
#75  
 1,3-Dichlorobenzene  
 Concen: 7.247 ppbv  
 RT: 17.16 min Scan# 4424  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 44.1  | 22.9  | 68.8  |
| 148     | 64.1  | 32.0  | 96.2  |

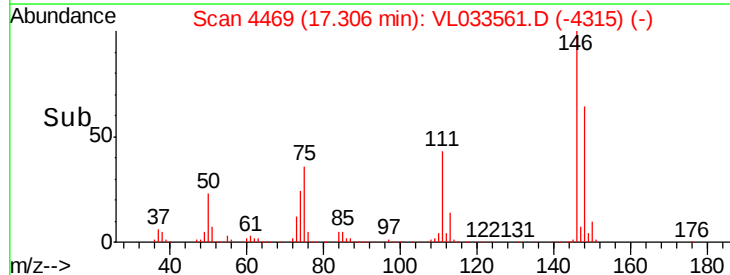
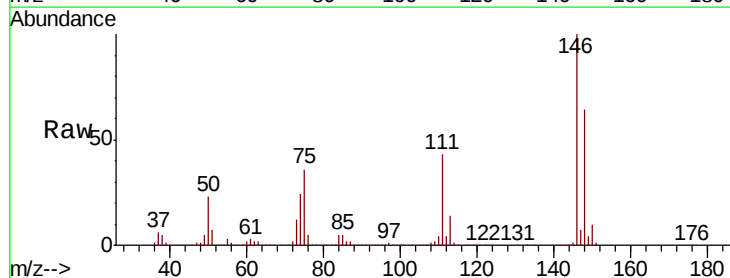
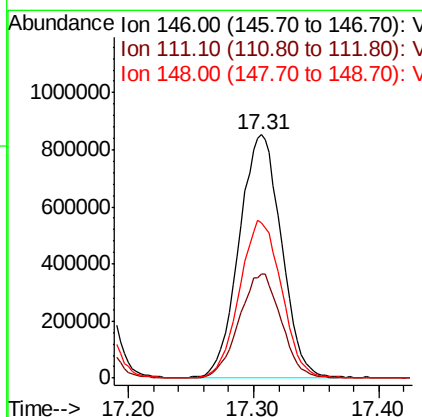
Manual Integrations  
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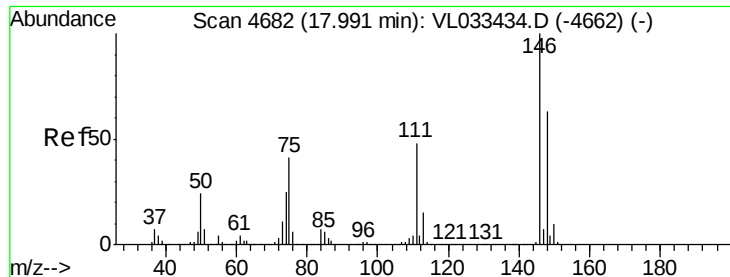
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 4/8/2019 3:22:39 AM



#76  
 1,4-Dichlorobenzene  
 Concen: 7.501 ppbv  
 RT: 17.31 min Scan# 4469  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 43.0  | 21.7  | 65.1  |
| 148     | 64.9  | 32.0  | 96.2  |





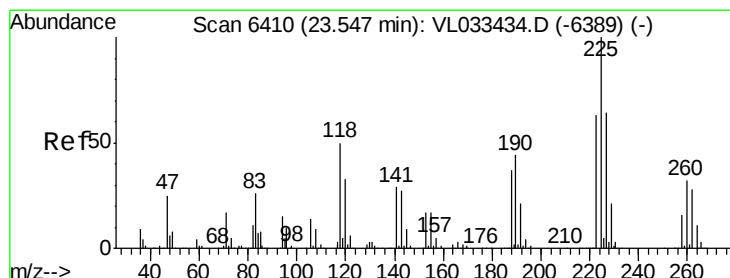
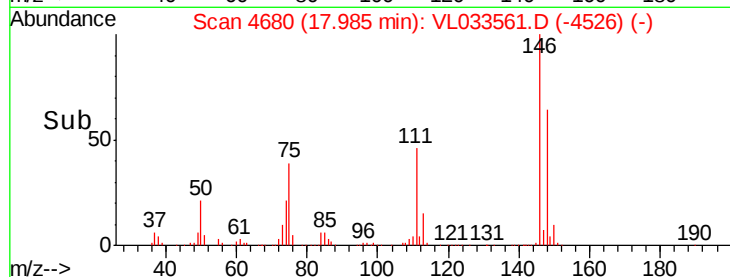
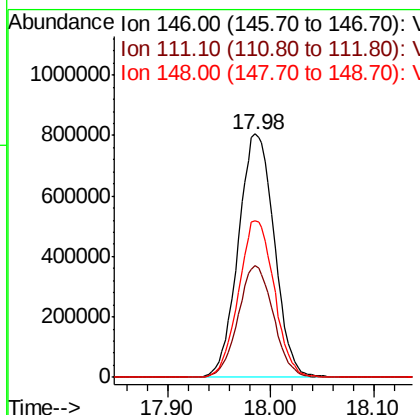
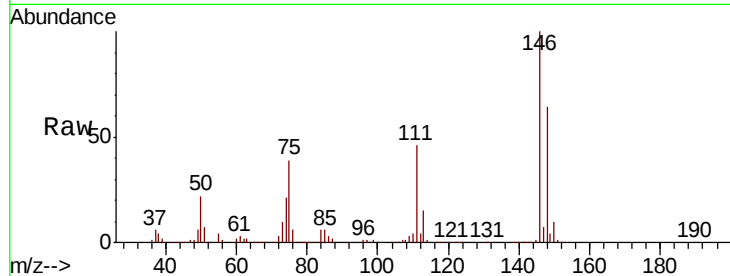
#77  
 1,2-Dichlorobenzene  
 Concen: 7.559 ppbv  
 RT: 17.98 min Scan# 4680  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Tot Ion:146 Resp: 1950474  
 Ion Ratio Lower Upper  
 146 100  
 111 45.0 23.5 70.5  
 148 64.0 32.0 96.0

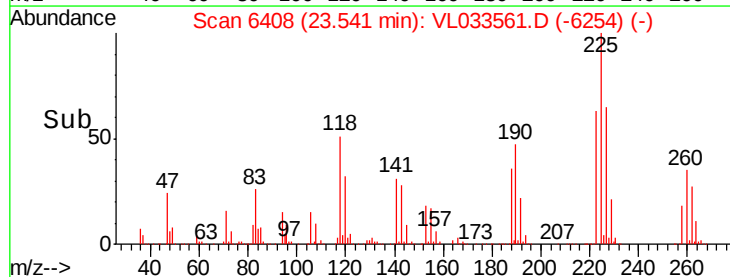
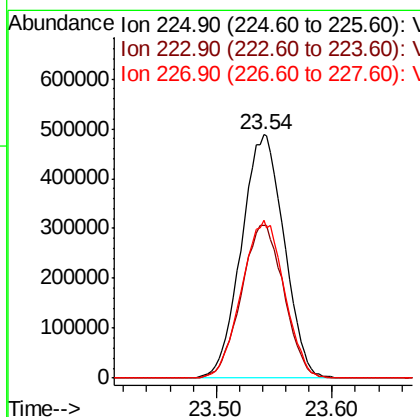
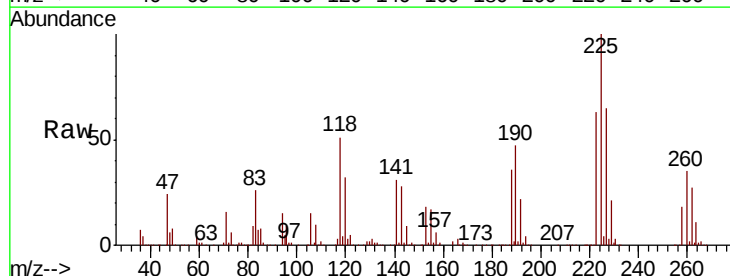
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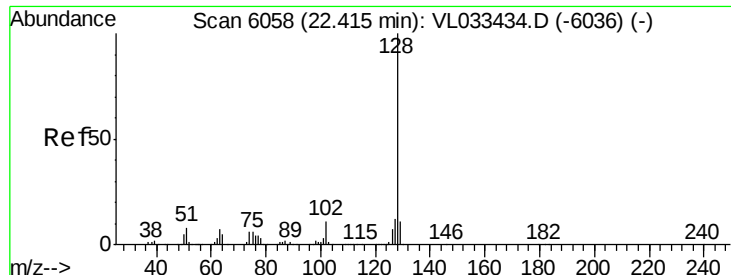
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 4/8/2019 3:22:39 AM



#78  
 Hexachloro-1,3-Butadiene  
 Concen: 7.303 ppbv  
 RT: 23.54 min Scan# 6408  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Tgt Ion:225 Resp: 1247374  
 Ion Ratio Lower Upper  
 225 100  
 223 62.9 50.0 75.0  
 227 64.9 51.1 76.7





#79

Naphthalene

Concen: 8.426 ppbv

RT: 22.41 min Scan# 6055

Delta R.T. -0.01 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:128 Resp: 3173900

Ion Ratio Lower Upper

128 100

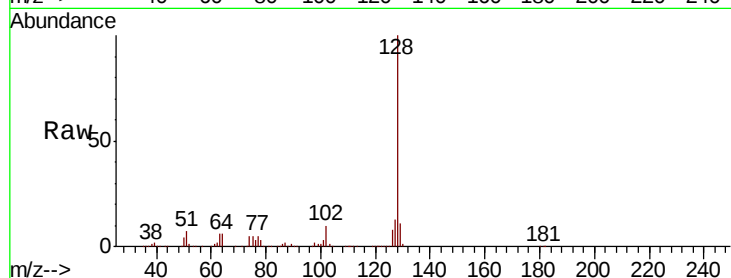
127 12.8 9.8 14.8

129 11.4 8.6 12.8

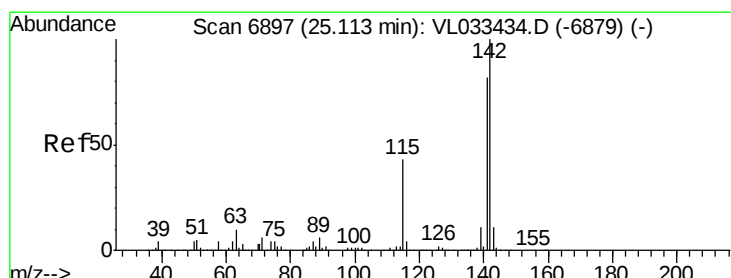
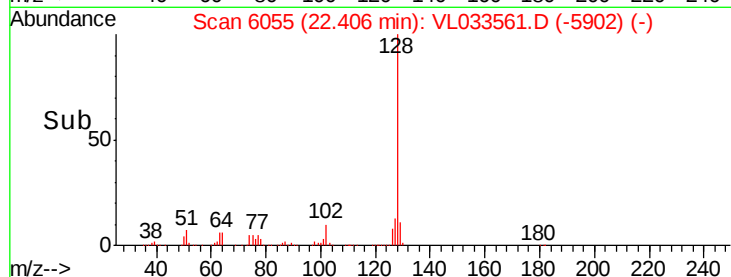
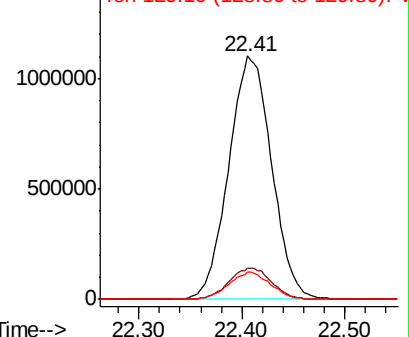
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Abundance Ion 128.10 (127.80 to 128.80): V  
Ion 127.10 (126.80 to 127.80): V  
Ion 129.10 (128.80 to 129.80): V



#80

Naphthalene, 2-methyl-

Concen: 5.006 ppbv

RT: 25.11 min Scan# 6896

Delta R.T. -0.00 min

Lab File: VL033561.D

Acq: 5 Apr 2019 11:01

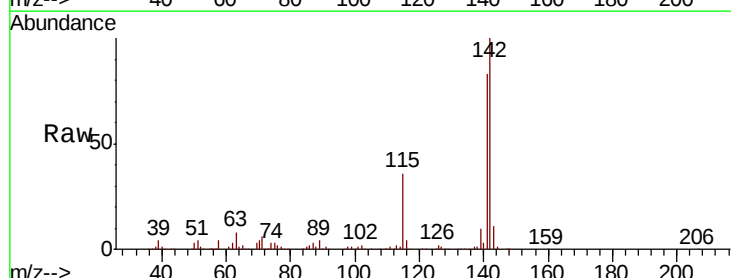
Tgt Ion:142 Resp: 632835

Ion Ratio Lower Upper

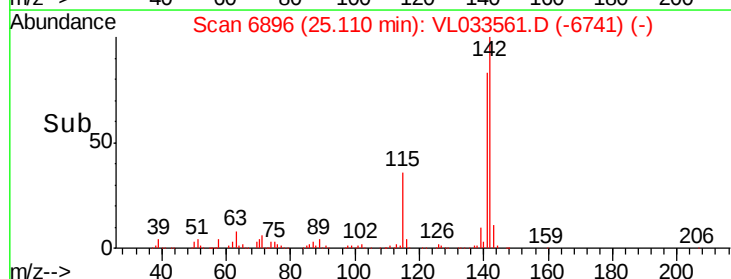
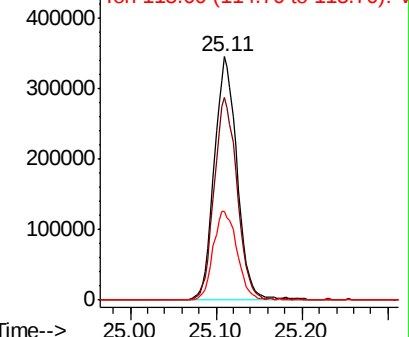
142 100

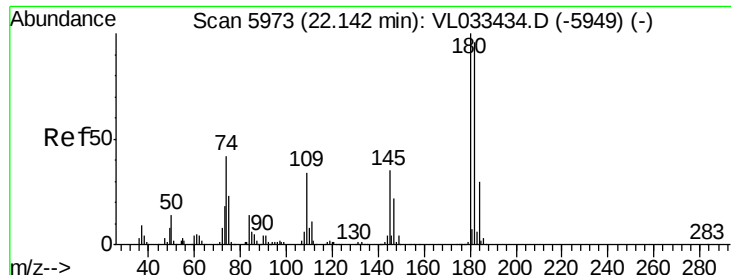
141 84.5 66.6 99.8

115 38.6 34.4 51.6



Abundance Ion 142.00 (141.70 to 142.70): V  
Ion 141.00 (140.70 to 141.70): V  
Ion 115.00 (114.70 to 115.70): V





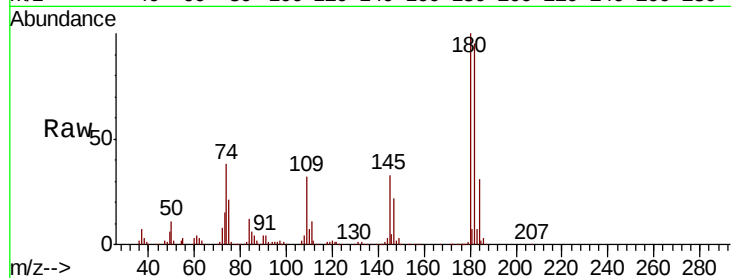
#81  
 1,2,4-Trichlorobenzene  
 Concen: 7.983 ppbv  
 RT: 22.13 min Scan# 5970  
 Delta R.T. -0.01 min  
 Lab File: VL033561.D  
 Acq: 5 Apr 2019 11:01

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.0  | 77.0  | 115.4 |
| 184     | 30.5  | 24.6  | 36.8  |

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Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

