

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL102418\  
 Data File : VL032688.D  
 Acq On : 24 Oct 2018 15:31  
 Operator : SY/AP  
 Sample : VL1024ABS01  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VL1024ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 10/26/2018 3:39:42 PM

Quant Time: Oct 25 05:34:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL101818AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 25 05:34:33 2018  
 QLast Update : Thu Oct 25 05:15:43 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.78  | 49   | 1575206  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.31  | 114  | 3787133  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.26 | 117  | 3887338m | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.60  | 95    | 2862827  | 9.89     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 98.90% |

| Target Compounds               | R.T. | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.09 | 85   | 1908595  | 11.892 | ppbv   | 100    |
| 3) Chlorodifluoromethane       | 3.02 | 51   | 1120184  | 9.093  | ppbv   | 99     |
| 4) Chloromethane               | 3.18 | 50   | 651348   | 9.461  | ppbv   | 100    |
| 5) Vinyl Chloride              | 3.30 | 62   | 656801   | 8.808  | ppbv   | 99     |
| 6) Bromomethane                | 3.53 | 94   | 420278   | 9.040  | ppbv   | 93     |
| 7) Chloroethane                | 3.61 | 64   | 258636   | 9.419  | ppbv   | 99     |
| 8) Dichlorotetrafluoroethane   | 3.23 | 85   | 1529669  | 9.043  | ppbv   | 92     |
| 9) Propene                     | 3.05 | 41   | 510483   | 10.070 | ppbv   | 100    |
| 10) Heptane                    | 8.26 | 43   | 1984337  | 10.157 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.02 | 101  | 1745434  | 8.326  | ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 4.57 | 101  | 1572170  | 9.018  | ppbv   | 93     |
| 13) Ethanol                    | 3.66 | 45   | 129921   | 8.967  | ppbv   | 98     |
| 14) Bromoethene                | 3.80 | 108  | 537493   | 9.123  | ppbv   | 99     |
| 15) Acetone                    | 3.91 | 43   | 1145149  | 7.873  | ppbv   | 100    |
| 16) 1,3-Butadiene              | 3.37 | 39   | 537034   | 10.036 | ppbv   | 83     |
| 17) tert-Butyl alcohol         | 4.37 | 59   | 477476   | 11.161 | ppbv # | 100    |
| 18) 1,1-Dichloroethene         | 4.36 | 96   | 782464   | 10.217 | ppbv   | 98     |
| 19) Isopropyl Alcohol          | 4.04 | 45   | 869436   | 8.393  | ppbv # | 97     |
| 20) Methylene Chloride         | 4.42 | 84   | 666318   | 9.024  | ppbv   | 97     |
| 21) Allyl Chloride             | 4.49 | 41   | 1296352  | 10.855 | ppbv   | 99     |
| 22) trans-1,2-Dichloroethene   | 4.98 | 96   | 749173   | 9.537  | ppbv   | 89     |
| 23) Vinyl Acetate              | 5.17 | 43   | 2643483  | 10.256 | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.10 | 63   | 1877065  | 9.277  | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.79 | 43   | 3300827  | 9.859  | ppbv   | 99     |
| 26) Hexane                     | 5.80 | 57   | 1550641  | 9.788  | ppbv   | 99     |
| 27) Carbon Disulfide           | 4.63 | 76   | 1708497  | 8.890  | ppbv   | 100    |
| 28) Methyl tert-Butyl Ether    | 5.13 | 73   | 2309891  | 10.145 | ppbv   | 99     |
| 29) Chloroform                 | 5.87 | 83   | 2411390  | 9.529  | ppbv   | 98     |
| 30) Cyclohexane                | 7.26 | 84   | 1341870  | 10.701 | ppbv   | 97     |
| 31) cis-1,2-Dichloroethene     | 5.66 | 61   | 1466199  | 9.982  | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 6.64 | 97   | 2361156  | 9.182  | ppbv   | 99     |
| 34) 2-Butanone                 | 5.35 | 43   | 2125601  | 10.470 | ppbv   | 100    |
| 35) Carbon Tetrachloride       | 7.15 | 117  | 2571648  | 9.568  | ppbv   | 96     |
| 36) Benzene                    | 7.03 | 78   | 3160028  | 10.275 | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.43 | 62   | 1823264  | 9.666  | ppbv   | 98     |
| 38) Trichloroethene            | 7.98 | 130  | 1211951  | 10.646 | ppbv   | 97     |
| 39) 1,2-Dichloropropane        | 7.75 | 63   | 1216473  | 10.243 | ppbv   | 98     |
| 40) 1,4-Dioxane                | 7.98 | 88   | 426572   | 10.517 | ppbv # | 98     |
| 41) Tetrahydrofuran            | 6.17 | 42   | 1280068  | 11.315 | ppbv   | 98     |
| 42) Bromodichloromethane       | 7.94 | 83   | 2597808  | 9.830  | ppbv   | 98     |
| 43) Methyl Methacrylate        | 8.15 | 69   | 1272115  | 11.286 | ppbv   | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL102418\  
 Data File : VL032688.D  
 Acq On : 24 Oct 2018 15:31  
 Operator : SY/AP  
 Sample : VL1024ABS01  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

Manual Integrations  
 APPROVED

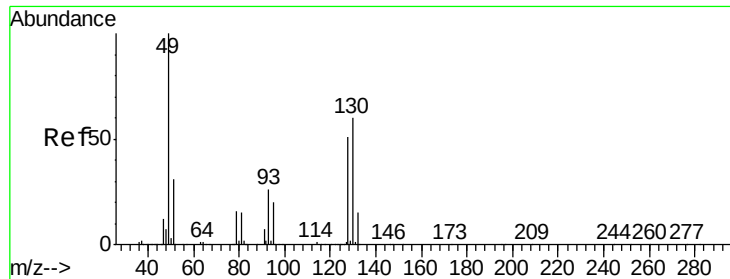
MMDadoda  
 10/26/2018 3:39:42 PM

Quant Time: Oct 25 05:34:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL101818AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 25 05:34:33 2018  
 QLast Update : Thu Oct 25 05:15:43 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 8.01  | 57   | 5320975  | 10.135 | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.44  | 75   | 1847443  | 12.245 | ppbv   | 100      |
| 46) cis-1,3-Dichloropropene   | 8.86  | 75   | 2017062  | 11.702 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 9.63  | 97   | 1408047  | 10.034 | ppbv   | 99       |
| 48) Dibromochloromethane      | 10.47 | 129  | 2215252  | 9.471  | ppbv   | 100      |
| 49) Bromoform                 | 13.22 | 173  | 1885354  | 10.258 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.89  | 43   | 3354840  | 11.154 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.29 | 43   | 2358747  | 10.550 | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.39 | 164  | 1129312  | 10.533 | ppbv   | 96       |
| 53) Toluene                   | 9.97  | 91   | 3996506  | 11.337 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.78 | 107  | 1997847  | 10.475 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 12.30 | 131  | 1594803  | 9.382  | ppbv   | 98       |
| 57) Chlorobenzene             | 12.32 | 112  | 2765324  | 9.673  | ppbv   | 95       |
| 58) Ethyl Benzene             | 12.88 | 91   | 4926976  | 10.910 | ppbv   | 100      |
| 59) m/p-Xylene                | 13.14 | 91   | 8144241m | 20.252 | ppbv   |          |
| 60) o-Xylene                  | 13.87 | 91   | 3870573  | 9.978  | ppbv   | 99       |
| 61) Styrene                   | 13.70 | 104  | 3000283  | 11.535 | ppbv   | 97       |
| 62) Isopropylbenzene          | 14.85 | 105  | 5479315  | 9.980  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.86 | 83   | 2650444  | 8.720  | ppbv   | 99       |
| 64) n-propylbenzene           | 15.74 | 120  | 1400861  | 10.267 | ppbv   | 94       |
| 65) tert-Butylbenzene         | 16.93 | 119  | 4634078  | 9.911  | ppbv   | 95       |
| 66) Benzyl Chloride           | 17.18 | 91   | 2677409  | 11.090 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.48 | 105  | 6462053  | 9.717  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.83 | 119  | 5261786  | 9.985  | ppbv   | 99       |
| 70) n-Butylbenzene            | 18.73 | 91   | 5299520  | 9.768  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.64 | 91   | 4050642  | 10.381 | ppbv   | 98       |
| 72) 4-Ethyltoluene            | 16.02 | 105  | 4395810  | 10.639 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.18 | 105  | 4125322  | 10.251 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.95 | 105  | 4188457  | 9.746  | ppbv   | 94       |
| 75) 1,3-Dichlorobenzene       | 17.19 | 146  | 2322168  | 9.397  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.33 | 146  | 2266511  | 9.938  | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 18.01 | 146  | 2182509  | 9.322  | ppbv   | 98       |
| 78) Hexachloro-1,3-Butadiene  | 23.56 | 225  | 1196789  | 10.818 | ppbv   | 100      |
| 79) Naphthalene               | 22.43 | 128  | 3480289  | 13.029 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 25.13 | 142  | 1227277  | 18.894 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 22.15 | 180  | 1647631  | 11.910 | ppbv   | 99       |

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





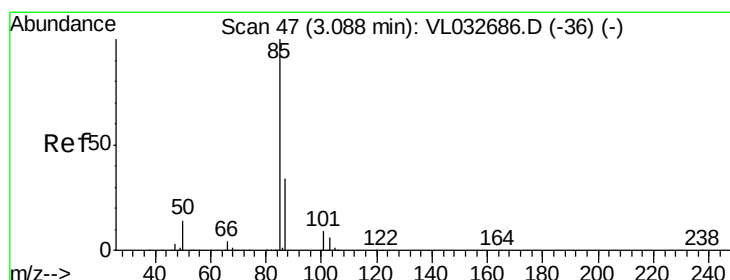
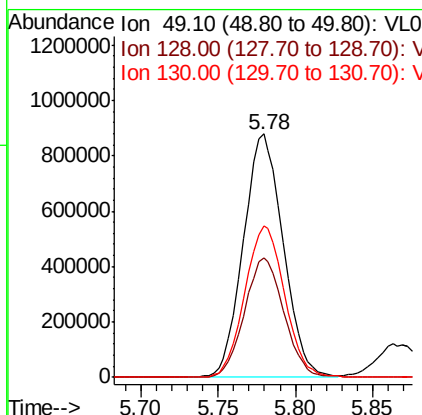
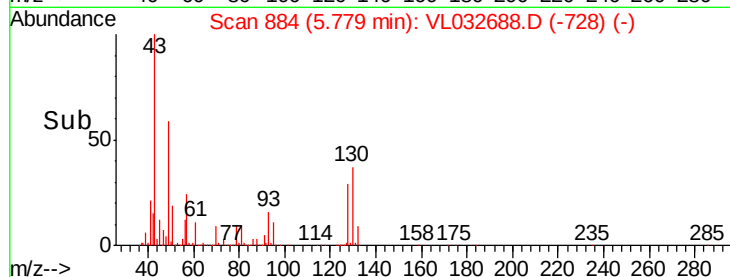
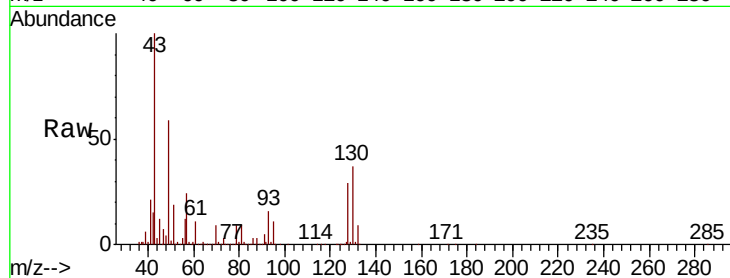
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 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.78 min Scan# 884  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 49    | Resp: | 1575206 |
| Ion      | Ratio | Lower | Upper   |
| 49       | 100   |       |         |
| 128      | 48.6  | 22.3  | 66.8    |
| 130      | 62.4  | 28.4  | 85.3    |

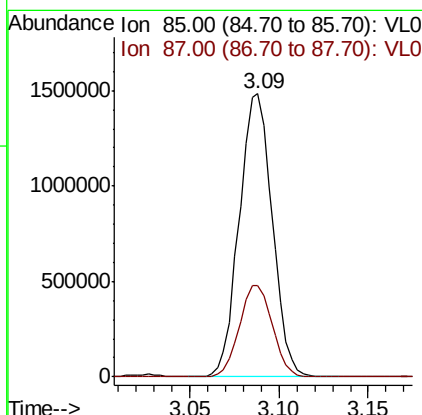
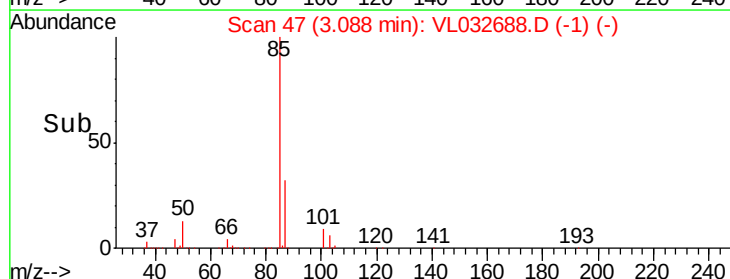
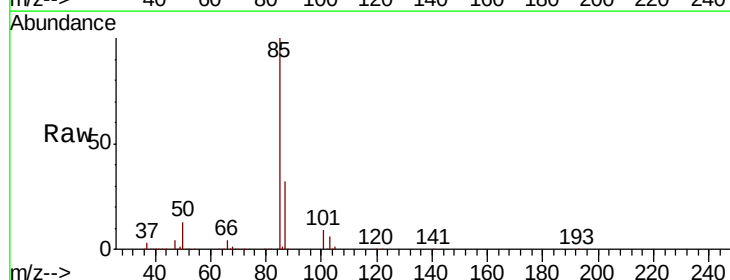
Manual Integrations  
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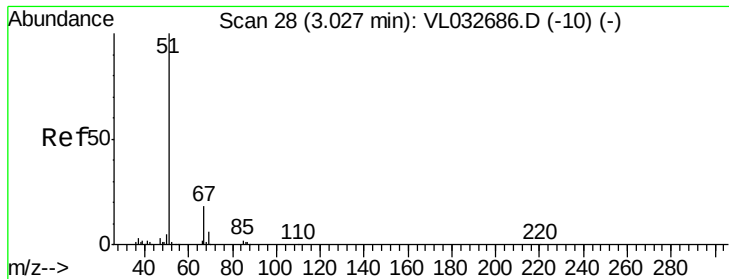
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 10/26/2018 3:39:42 PM



#2  
 Dichlorodifluoromethane  
 Concen: 11.892 ppbv  
 RT: 3.09 min Scan# 47  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 85    | Resp: | 1908595 |
| Ion      | Ratio | Lower | Upper   |
| 85       | 100   |       |         |
| 87       | 32.5  | 26.2  | 39.2    |





#3

Chlorodifluoromethane

Concen: 9.093 ppbv

RT: 3.02 min Scan# 27

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 51 Resp: 1120184

Ion Ratio Lower Upper

51 100

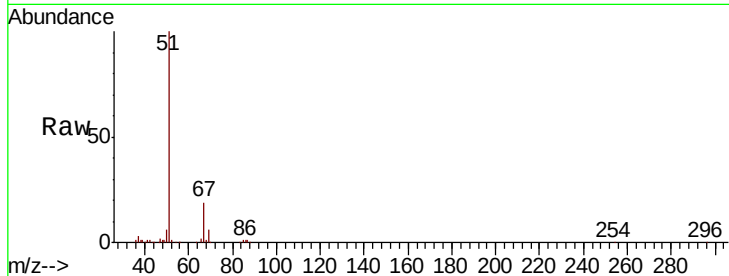
67 18.7 15.2 22.8

Manual Integrations

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10/26/2018 3:39:42 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

1000000

800000

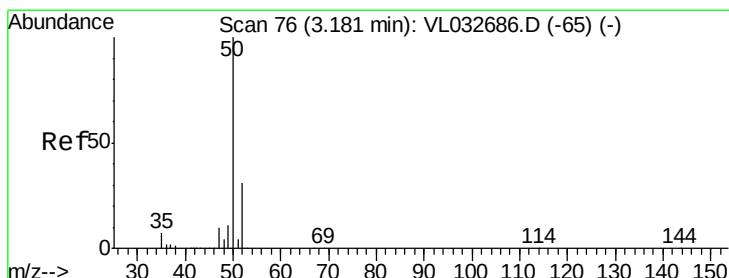
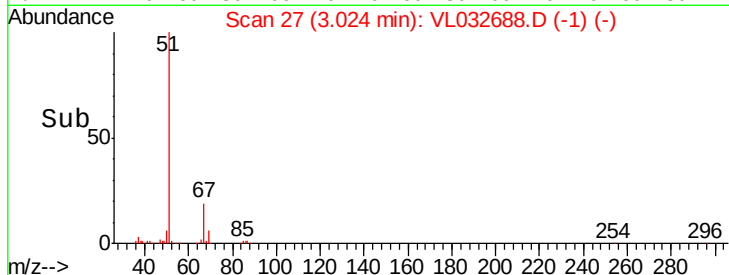
600000

400000

200000

0

Time-->



#4

Chloromethane

Concen: 9.461 ppbv

RT: 3.18 min Scan# 76

Delta R.T. 0.00 min

Lab File: VL032688.D

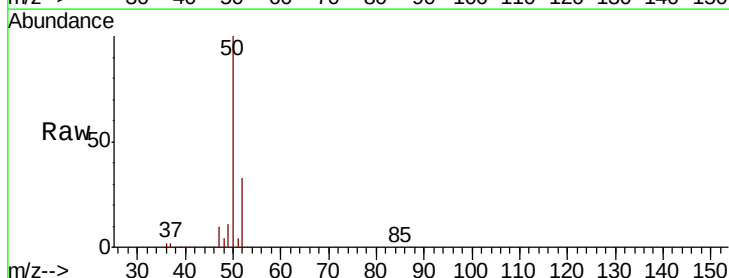
Acq: 24 Oct 2018 15:31

Tgt Ion: 50 Resp: 651348

Ion Ratio Lower Upper

50 100

52 32.6 25.9 38.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

500000

400000

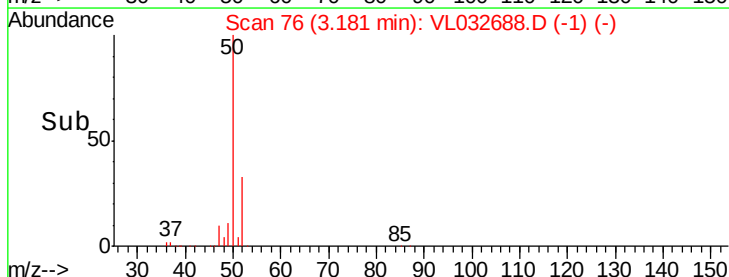
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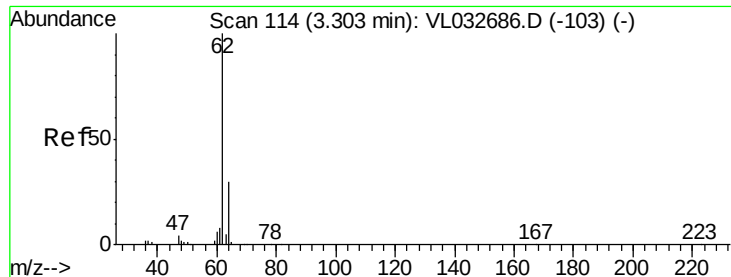
200000

100000

0

Time-->





#5

Vinyl Chloride

Concen: 8.808 ppbv

RT: 3.30 min Scan# 114

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 62 Resp: 656801

Ion Ratio Lower Upper

62 100

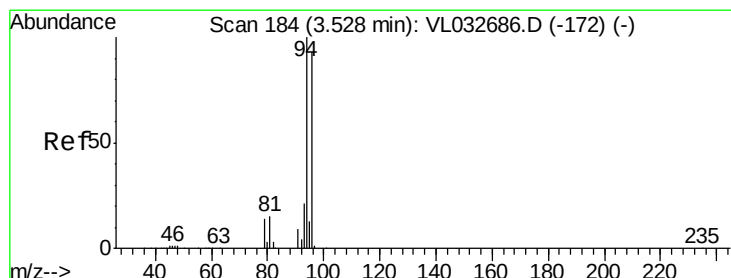
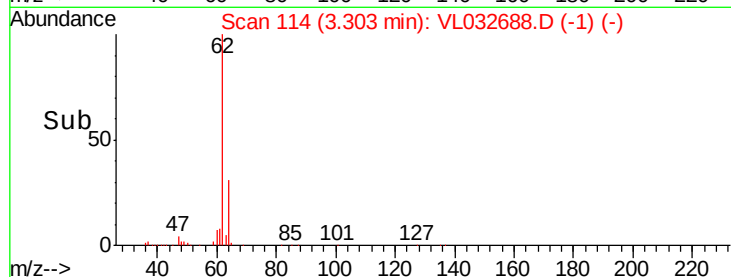
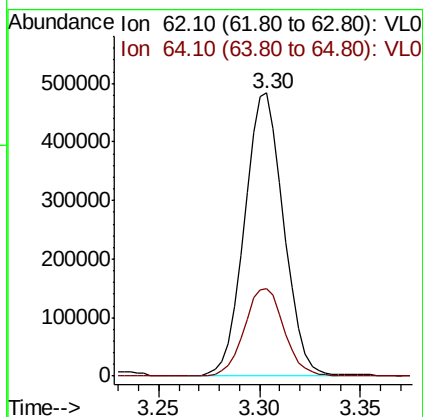
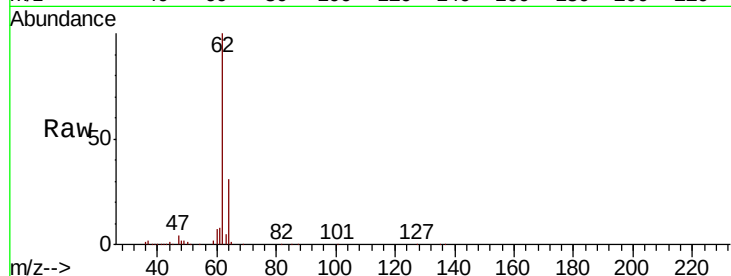
64 31.1 25.5 38.3

Manual Integrations

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#6

Bromomethane

Concen: 9.040 ppbv

RT: 3.53 min Scan# 183

Delta R.T. 0.00 min

Lab File: VL032688.D

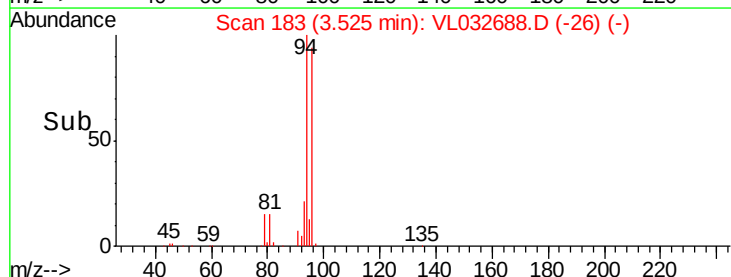
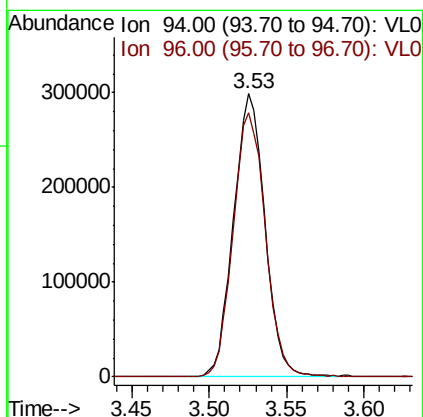
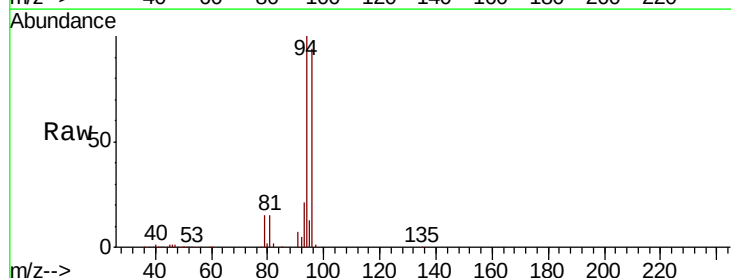
Acq: 24 Oct 2018 15:31

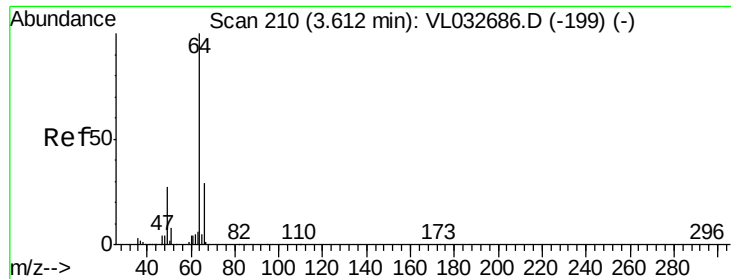
Tgt Ion: 94 Resp: 420278

Ion Ratio Lower Upper

94 100

96 93.5 69.8 104.8





#7

Chloroethane

Concen: 9.419 ppbv

RT: 3.61 min Scan# 210

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 64 Resp: 258636

Ion Ratio Lower Upper

64 100

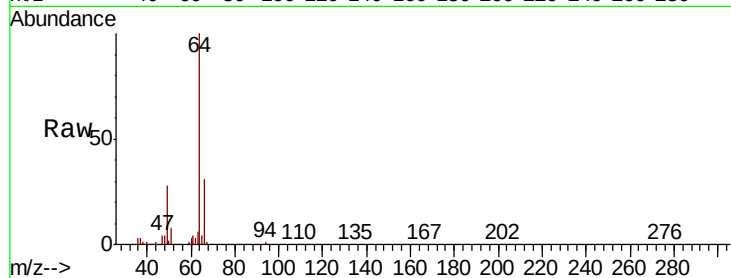
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Manual Integrations

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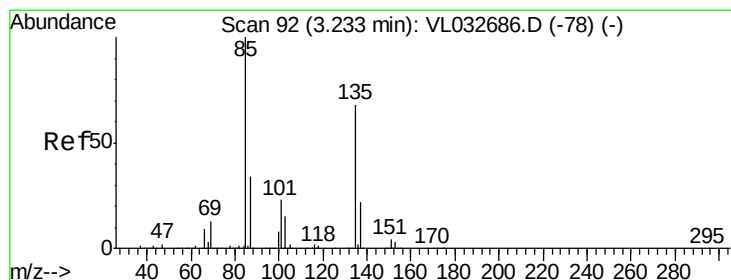
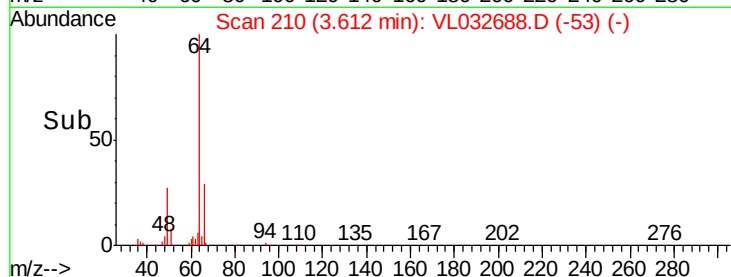
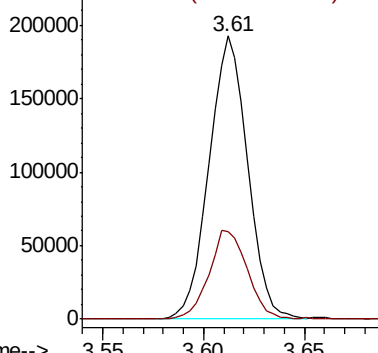
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10/26/2018 3:39:42 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 9.043 ppbv

RT: 3.23 min Scan# 91

Delta R.T. 0.00 min

Lab File: VL032688.D

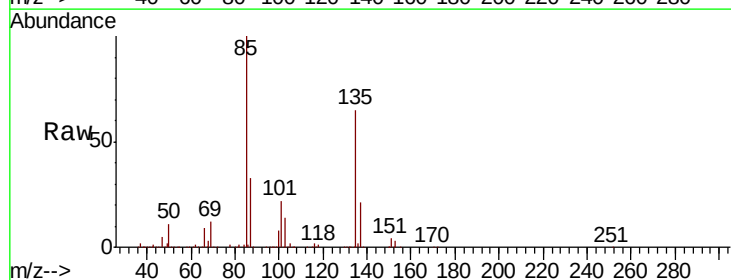
Acq: 24 Oct 2018 15:31

Tgt Ion: 85 Resp: 1529669

Ion Ratio Lower Upper

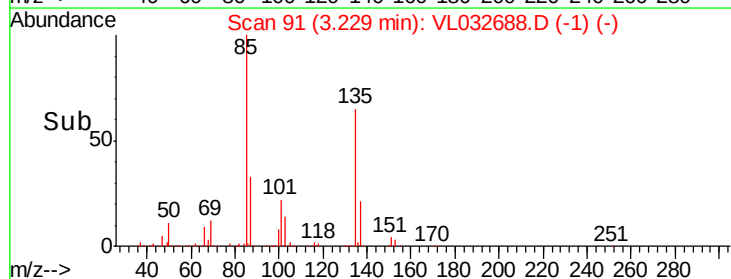
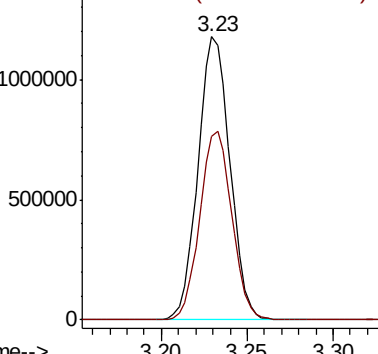
85 100

135 67.0 49.0 73.4

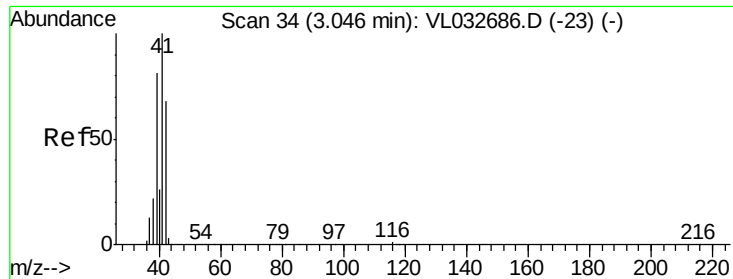


Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V







#9

Propene

Concen: 10.070 ppbv

RT: 3.05 min Scan# 34

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 41 Resp: 510483

Ion Ratio Lower Upper

41 100

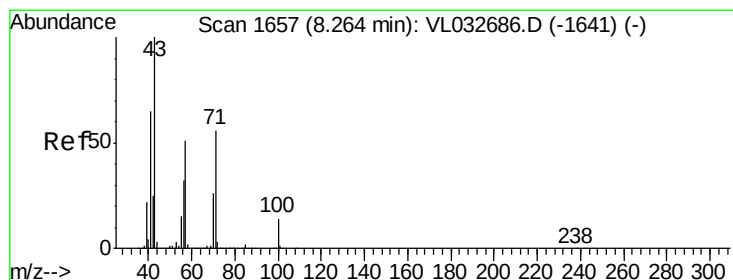
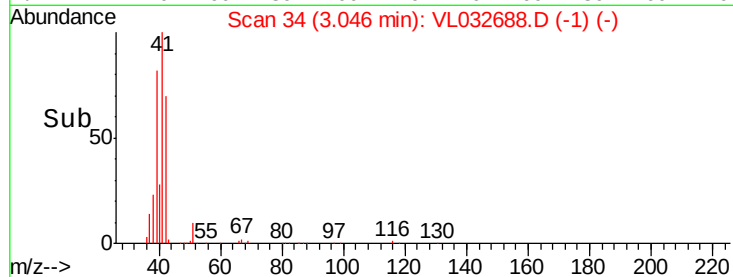
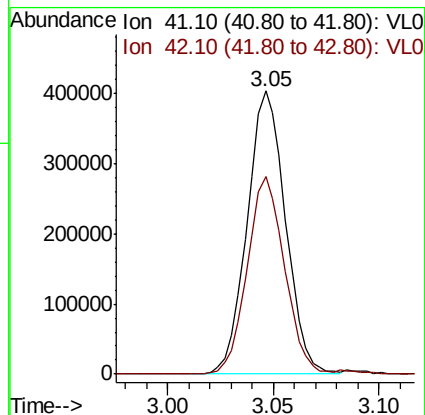
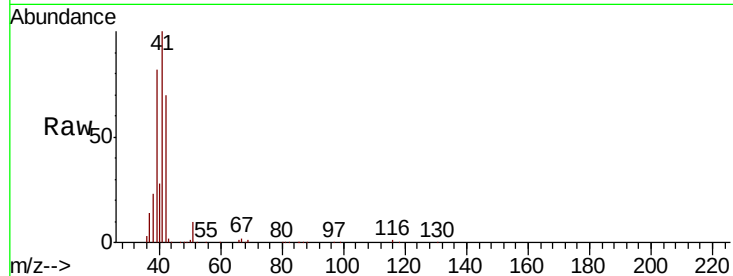
42 69.1 55.4 83.0

Manual Integrations

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#10

Heptane

Concen: 10.157 ppbv

RT: 8.26 min Scan# 1657

Delta R.T. 0.00 min

Lab File: VL032688.D

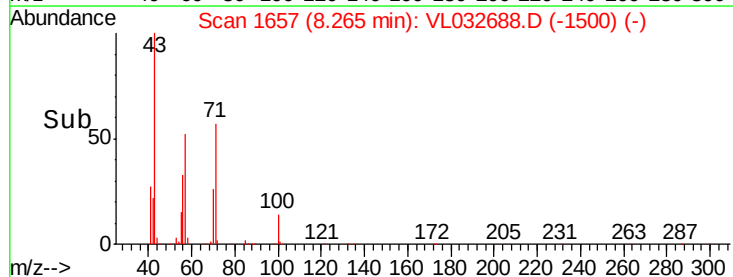
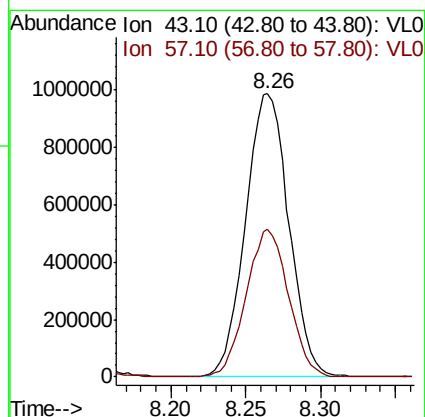
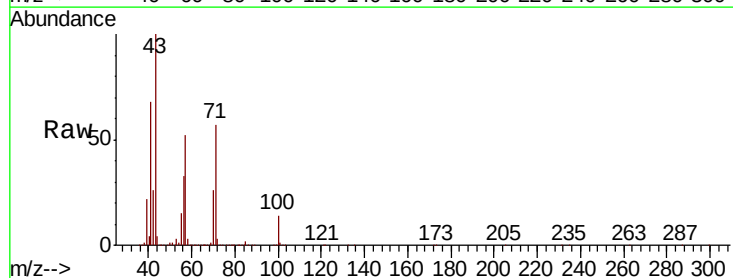
Acq: 24 Oct 2018 15:31

Tgt Ion: 43 Resp: 1984337

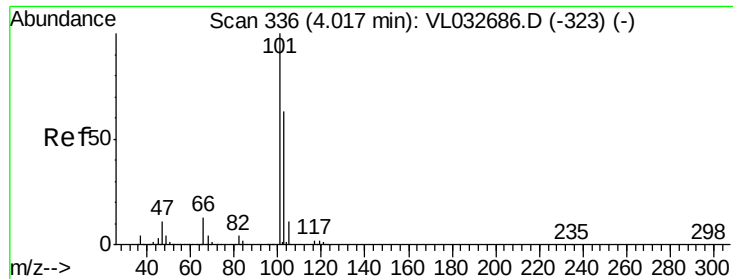
Ion Ratio Lower Upper

43 100

57 51.1 41.5 62.3







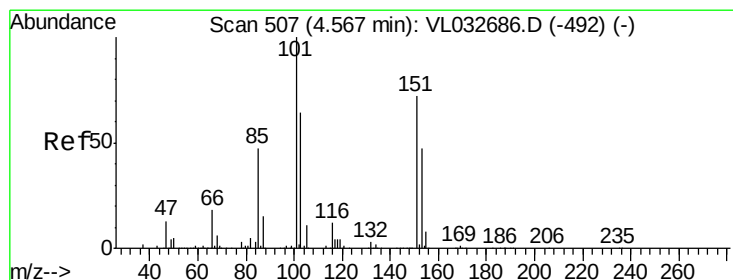
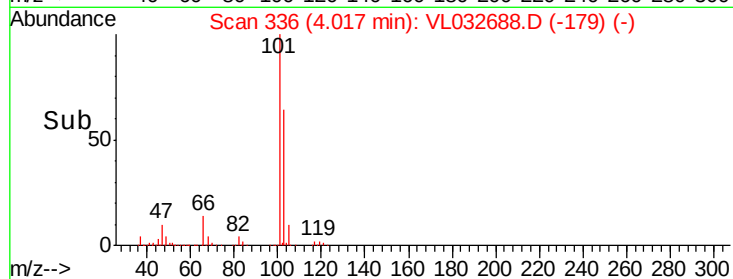
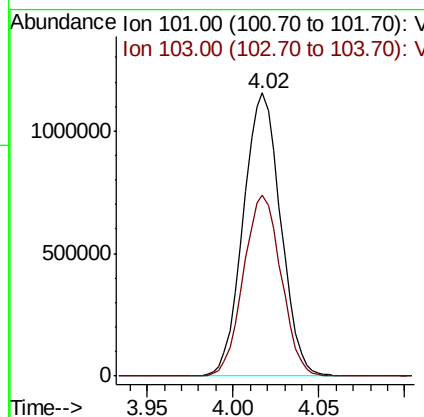
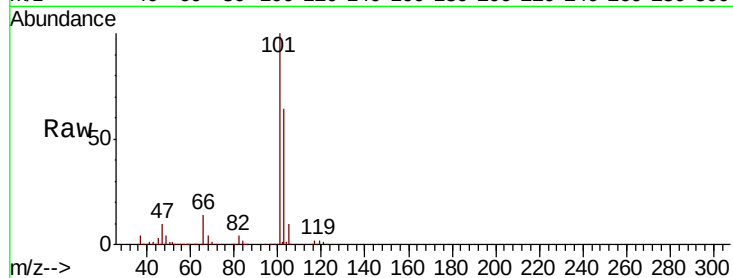
#11  
 Trichlorofluoromethane  
 Concen: 8.326 ppbv  
 RT: 4.02 min Scan# 336  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

Tgt Ion:101 Resp: 1745434  
 Ion Ratio Lower Upper  
 101 100  
 103 64.1 51.4 77.2

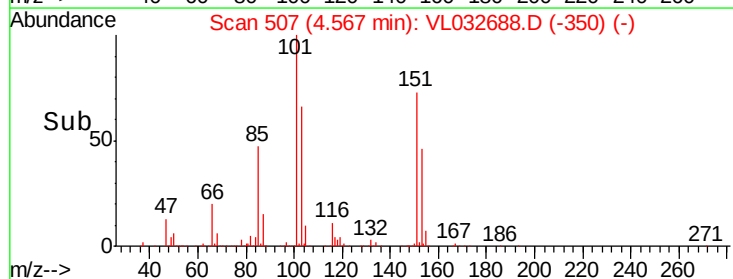
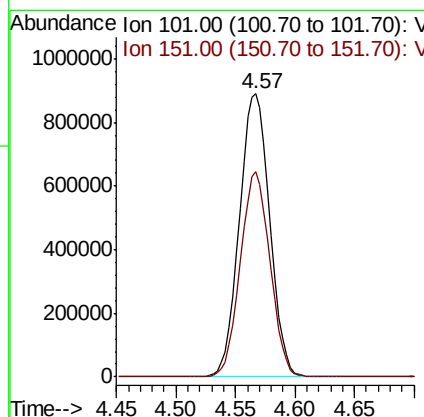
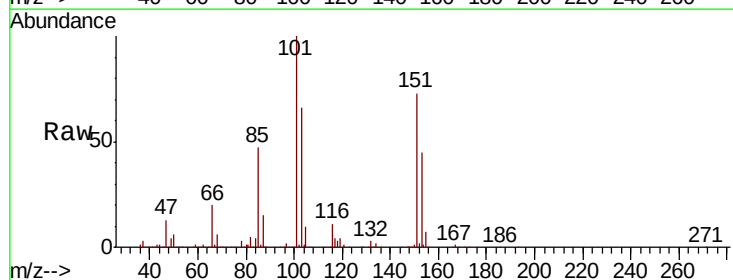
Manual Integrations  
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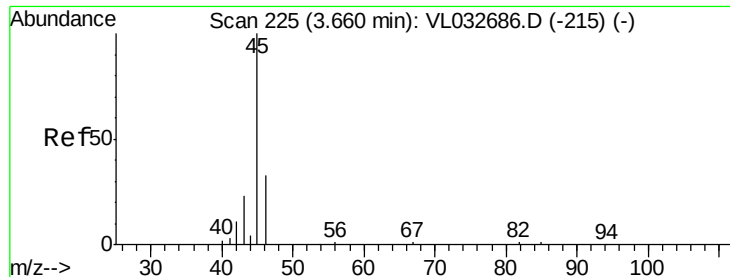
MMDadoda  
 10/26/2018 3:39:42 PM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 9.018 ppbv  
 RT: 4.57 min Scan# 507  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Tgt Ion:101 Resp: 1572170  
 Ion Ratio Lower Upper  
 101 100  
 151 71.2 52.3 78.5





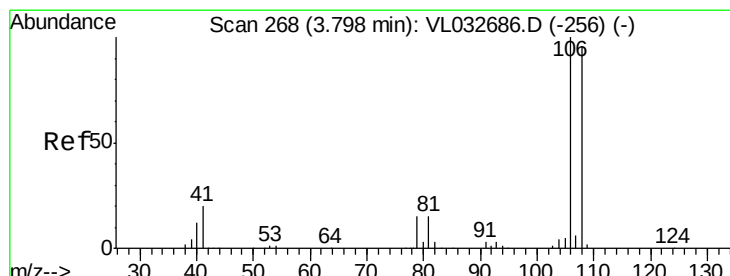
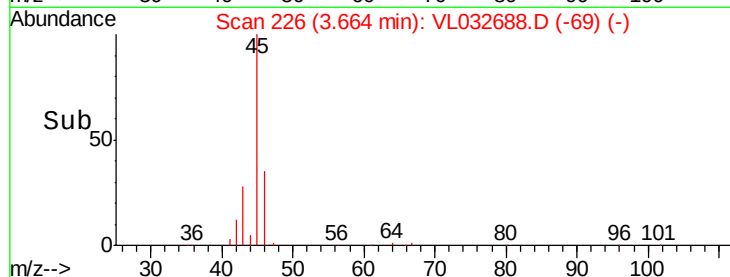
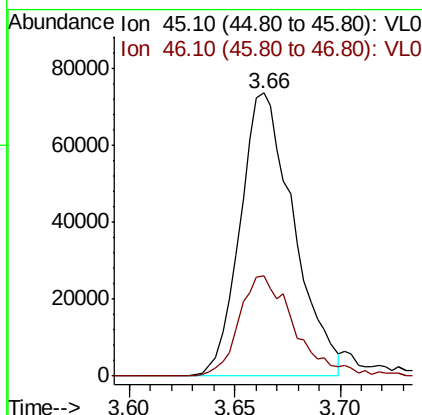
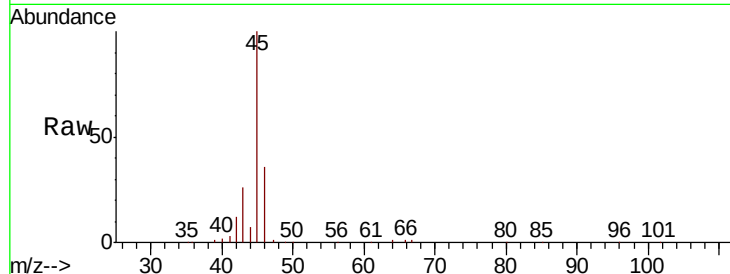
#13  
Ethanol  
Concen: 8.967 ppbv  
RT: 3.66 min Scan# 226  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion: 45 Resp: 129921  
Ion Ratio Lower Upper  
45 100  
46 37.6 15.4 61.8

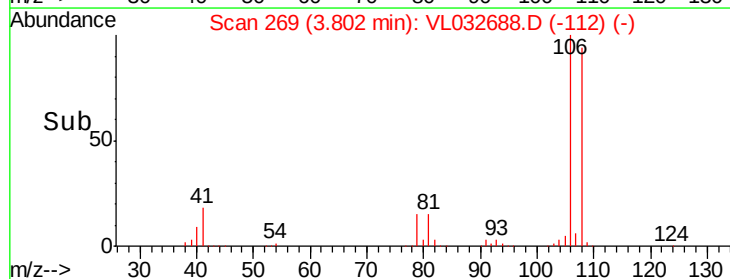
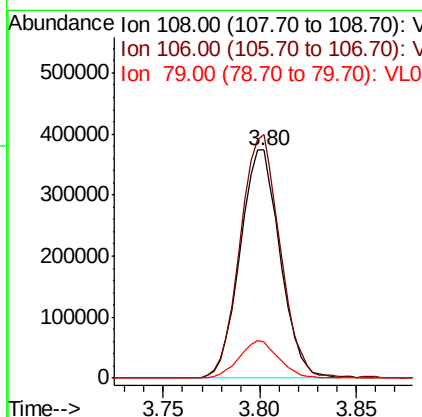
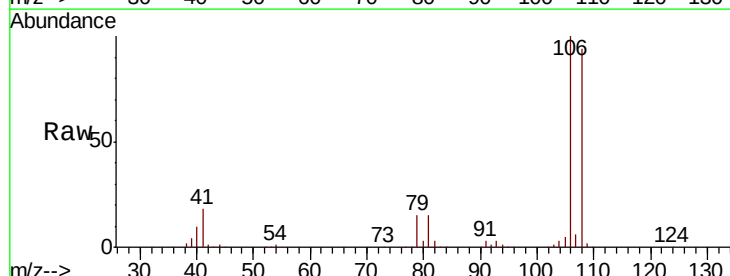
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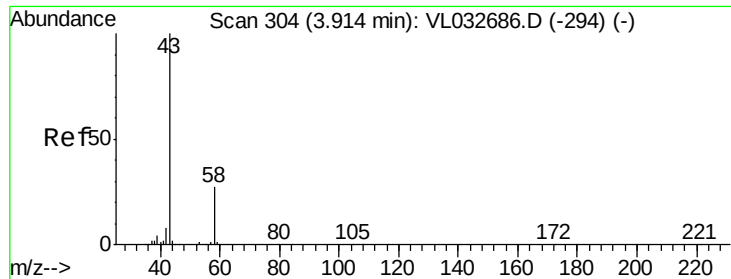
MMDadoda  
10/26/2018 3:39:42 PM



#14  
Bromoethene  
Concen: 9.123 ppbv  
RT: 3.80 min Scan# 269  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion: 108 Resp: 537493  
Ion Ratio Lower Upper  
108 100  
106 107.5 85.0 127.4  
79 16.4 13.7 20.5





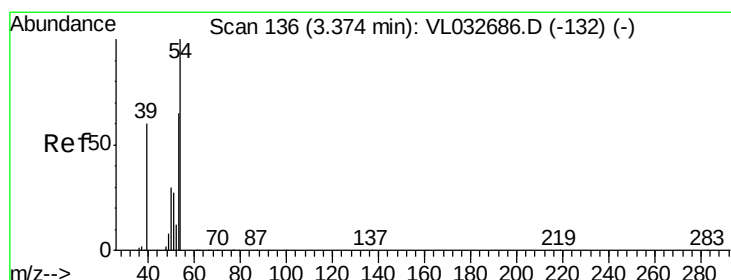
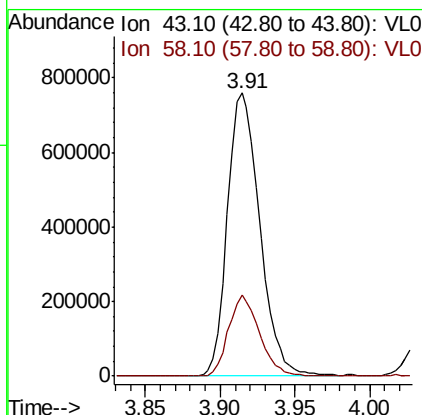
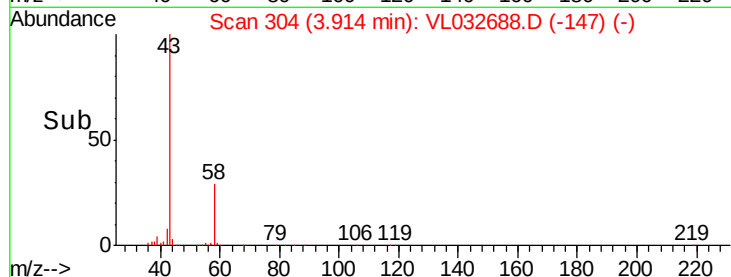
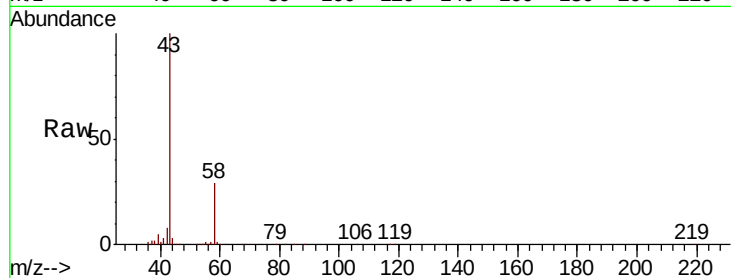
#15  
Acetone  
Concen: 7.873 ppbv  
RT: 3.91 min Scan# 304  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion: 43 Resp: 1145149  
Ion Ratio Lower Upper  
43 100  
58 27.6 22.1 33.1

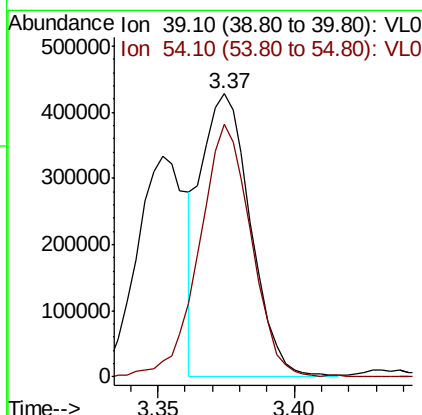
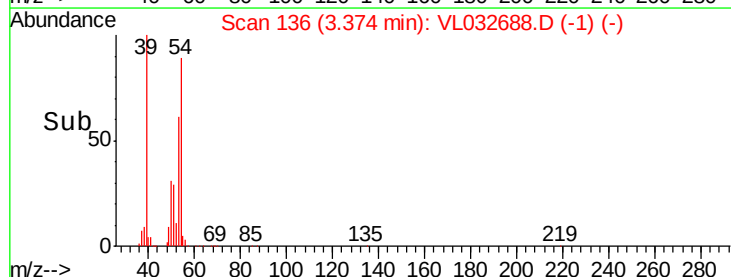
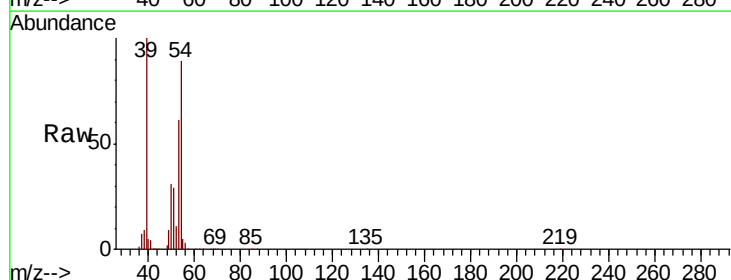
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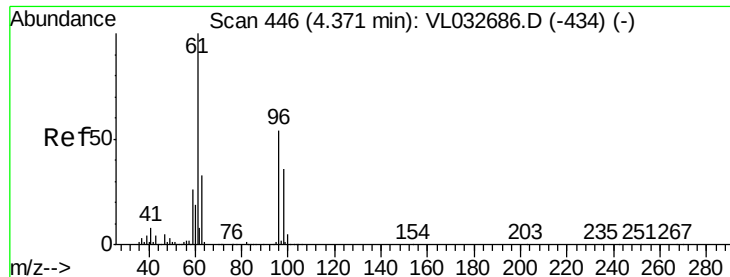
MMDadoda  
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#16  
1,3-Butadiene  
Concen: 10.036 ppbv  
RT: 3.37 min Scan# 136  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion: 39 Resp: 537034  
Ion Ratio Lower Upper  
39 100  
54 94.6 90.4 135.6





#17

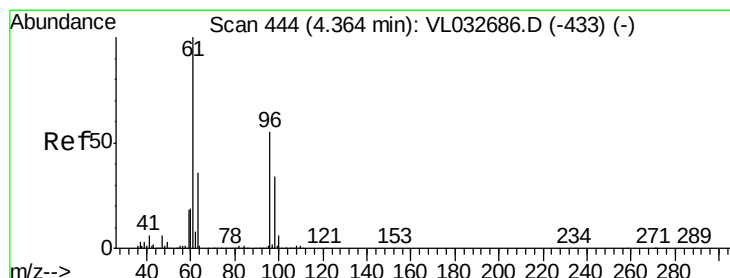
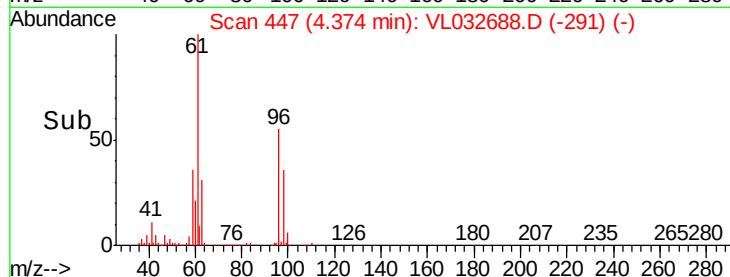
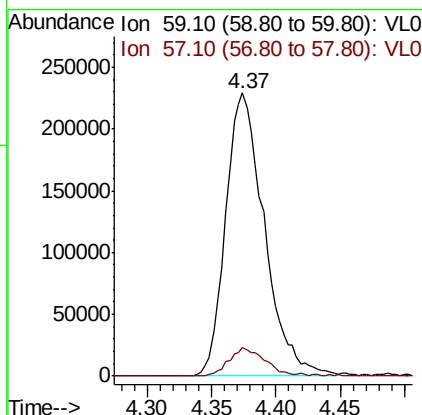
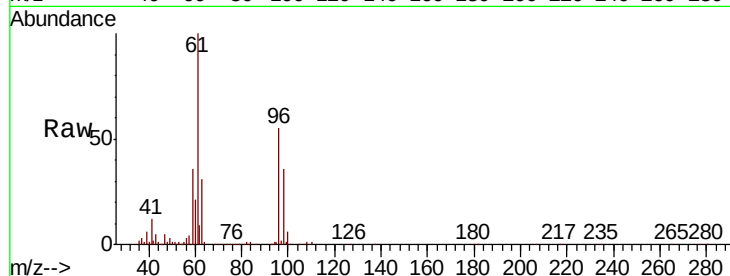
tert-Butyl alcohol  
Concen: 11.161 ppbv  
RT: 4.37 min Scan# 447  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampled :  
VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 9.8   | 0.0   | 0.0#  |

Manual Integrations  
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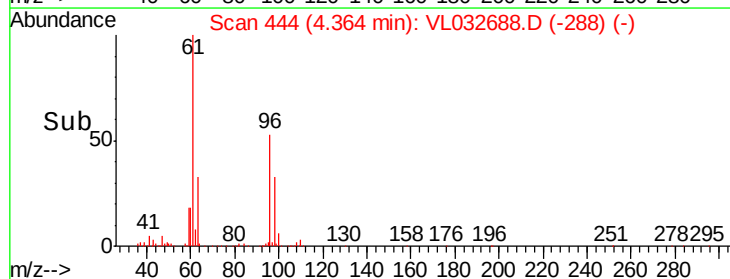
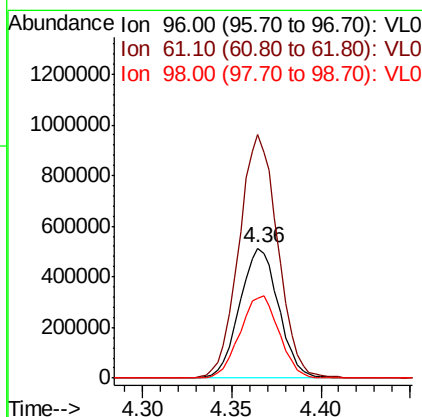
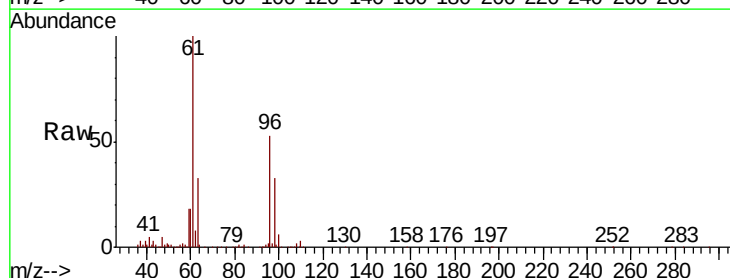
MMDadoda  
10/26/2018 3:39:42 PM

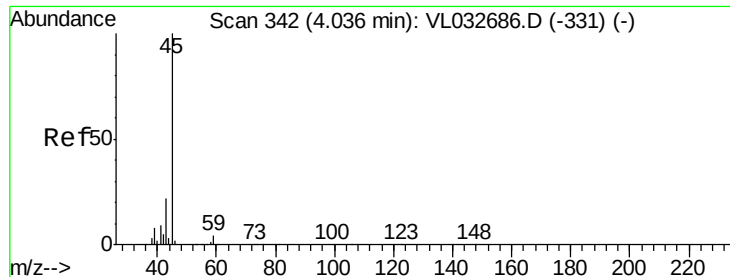


#18

1,1-Dichloroethene  
Concen: 10.217 ppbv  
RT: 4.36 min Scan# 444  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 186.9 | 151.6 | 227.4 |
| 98      | 61.8  | 50.6  | 75.8  |





#19

Isopropyl Alcohol

Concen: 8.393 ppbv

RT: 4.04 min Scan# 343

Delta R.T. 0.01 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 45 Resp: 869436

Ion Ratio Lower Upper

45 100

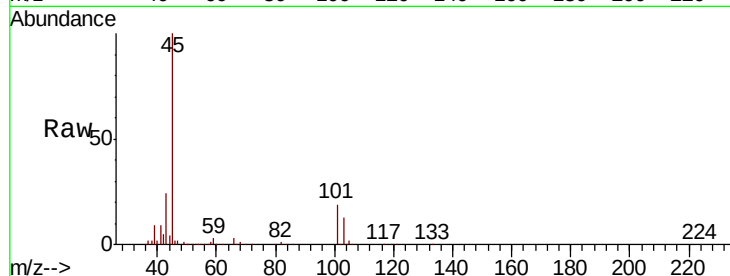
58 1.6 2.0 3.0#

Manual Integrations

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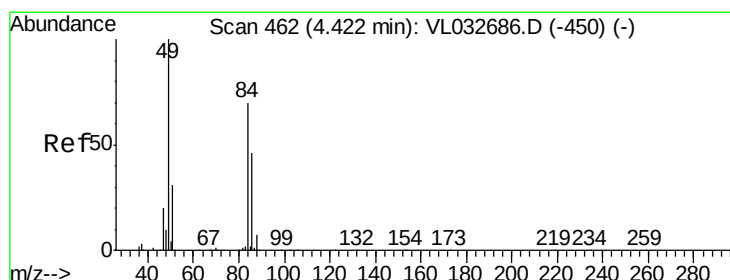
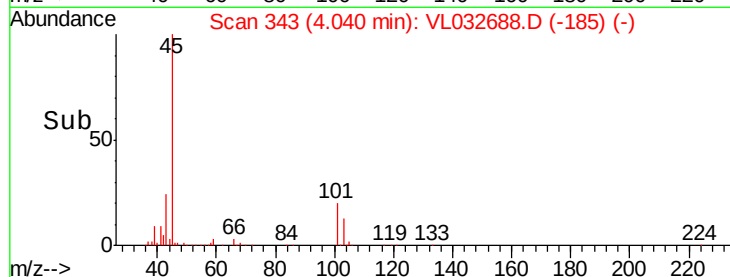
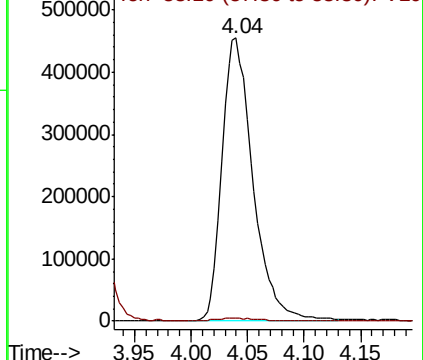
MMDadoda

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 9.024 ppbv

RT: 4.42 min Scan# 462

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Tgt Ion: 84 Resp: 666318

Ion Ratio Lower Upper

84 100

49 145.4 113.5 170.3

51 44.4 34.8 52.2

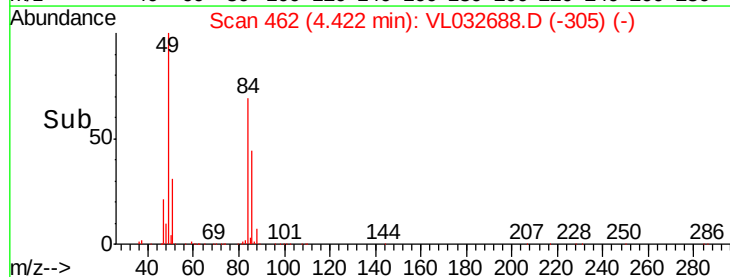
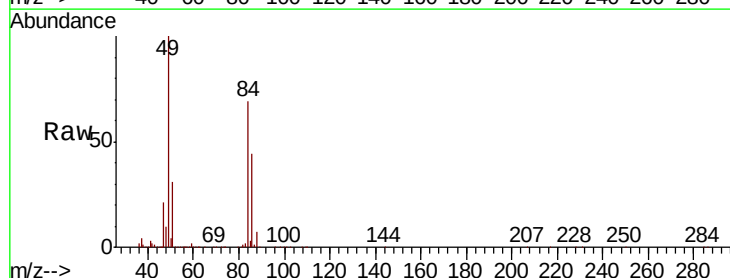
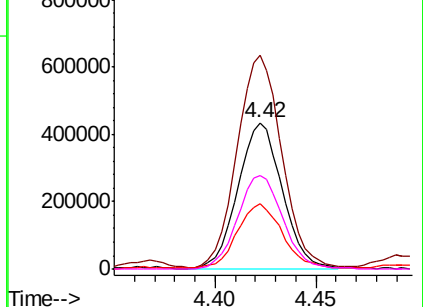
86 63.8 47.9 71.9

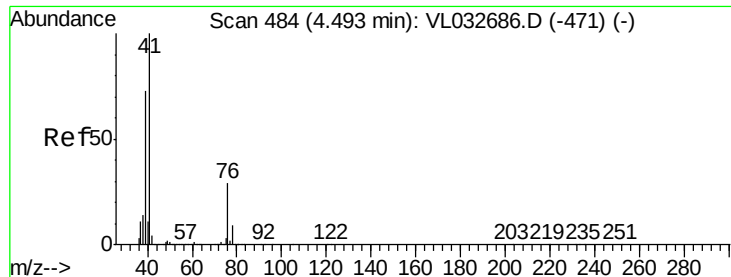
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





#21

Allyl Chloride

Concen: 10.855 ppbv

RT: 4.49 min Scan# 484

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

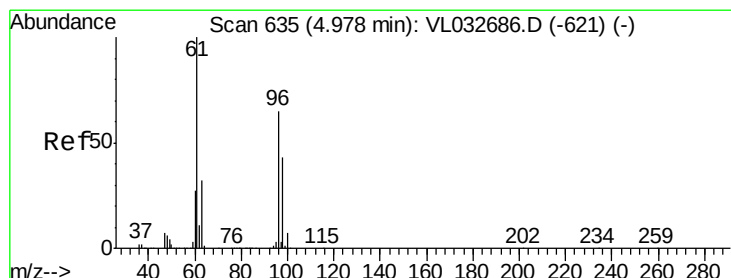
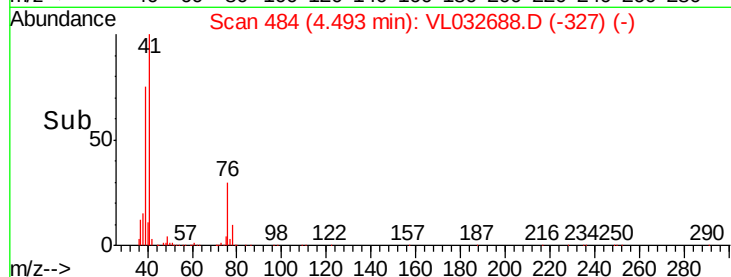
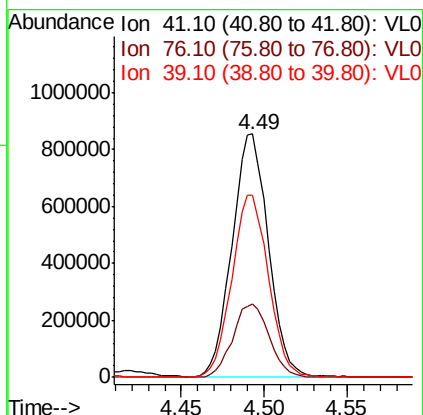
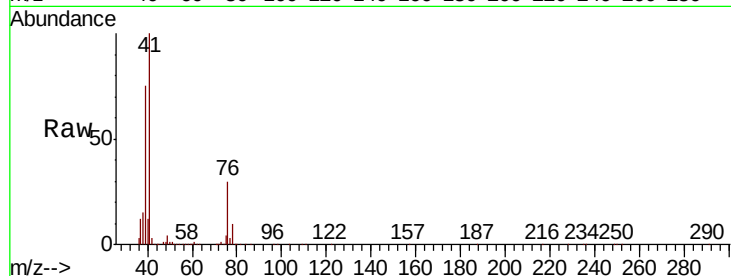
ClientSampleId :

VL1024ABS01

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 41    | Resp: | 1296352 |
| Ion      | Ratio | Lower | Upper   |
| 41       | 100   |       |         |
| 76       | 30.5  | 24.3  | 36.5    |
| 39       | 76.0  | 60.3  | 90.5    |

Manual Integrations  
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10/26/2018 3:39:42 PM



#22

trans-1,2-Dichloroethene

Concen: 9.537 ppbv

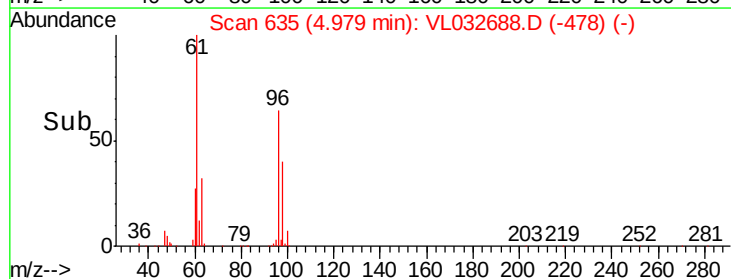
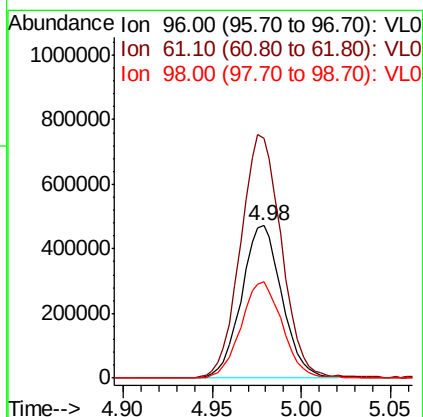
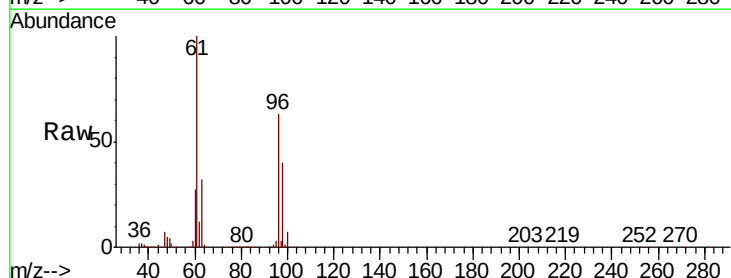
RT: 4.98 min Scan# 635

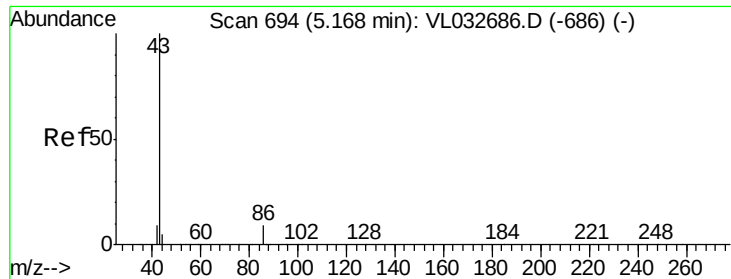
Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 96    | Resp: | 749173 |
| Ion      | Ratio | Lower | Upper  |
| 96       | 100   |       |        |
| 61       | 157.6 | 140.4 | 210.6  |
| 98       | 63.5  | 55.0  | 82.6   |





#23

Vinyl Acetate

Concen: 10.256 ppbv

RT: 5.17 min Scan# 695

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 43 Resp: 2643483

Ion Ratio Lower Upper

43 100

86 8.3 6.1 9.1

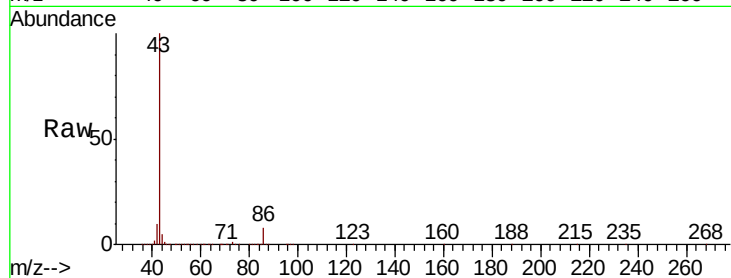
42 9.7 7.4 11.2

44 5.2 4.2 6.2

Manual Integrations  
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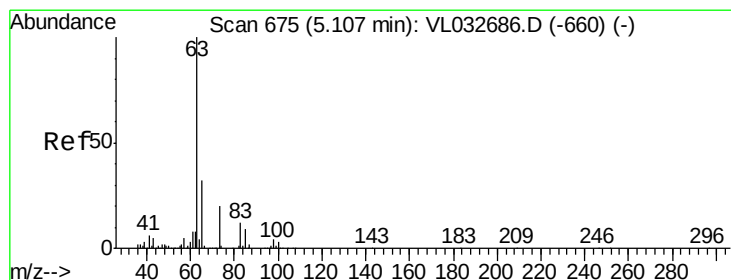
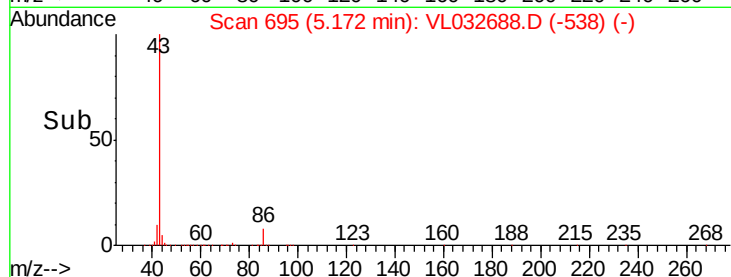
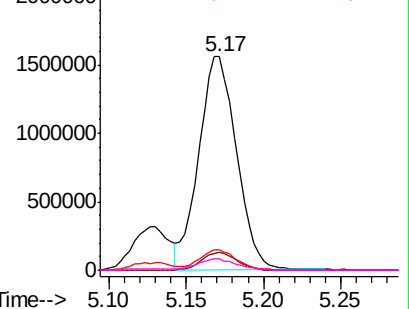


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 9.277 ppbv

RT: 5.10 min Scan# 674

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

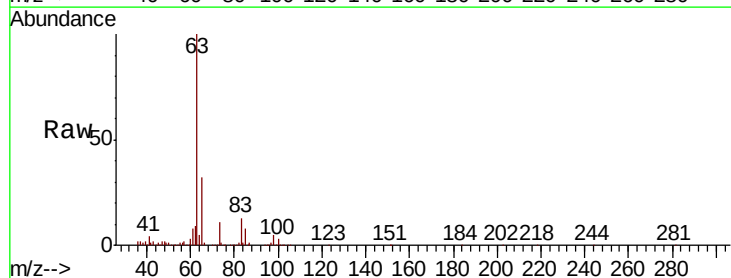
Tgt Ion: 63 Resp: 1877065

Ion Ratio Lower Upper

63 100

98 4.6 2.1 6.3

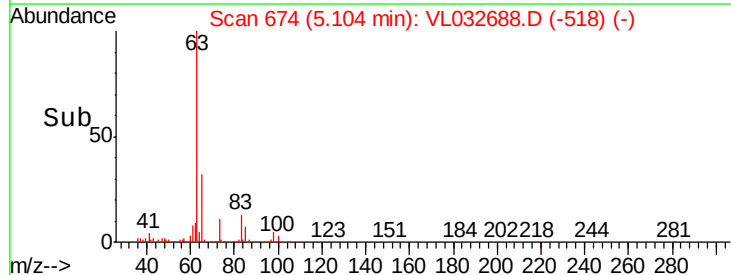
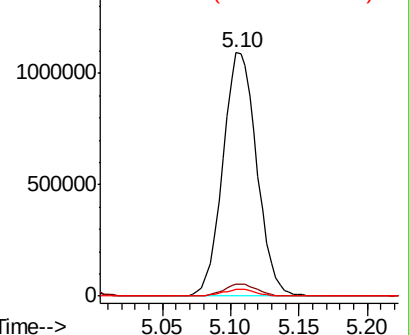
100 2.9 1.2 3.6



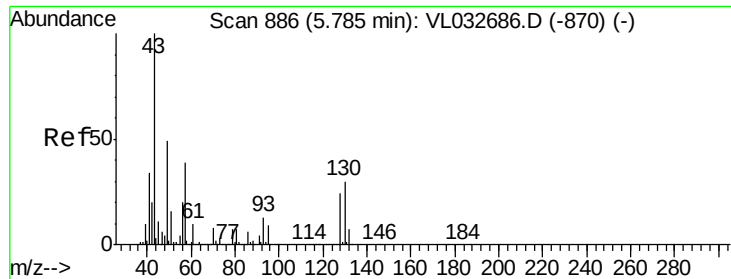
Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0







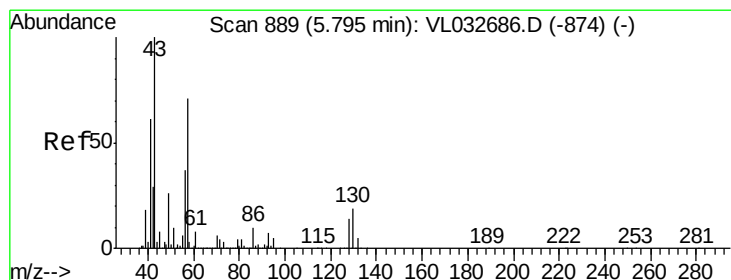
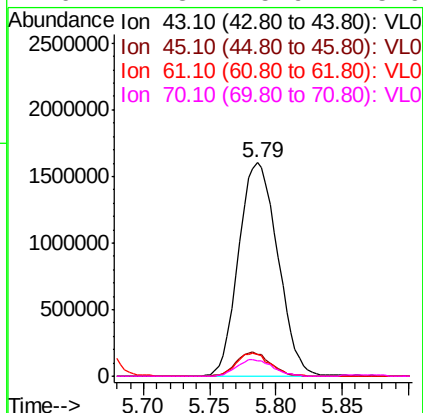
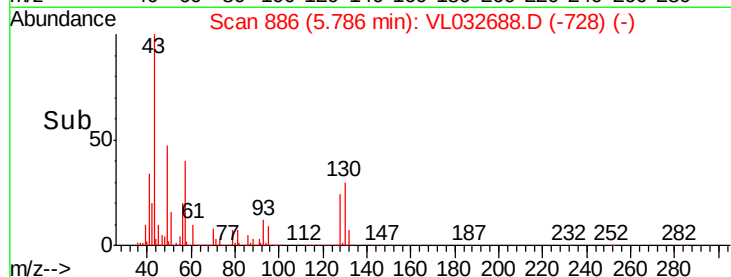
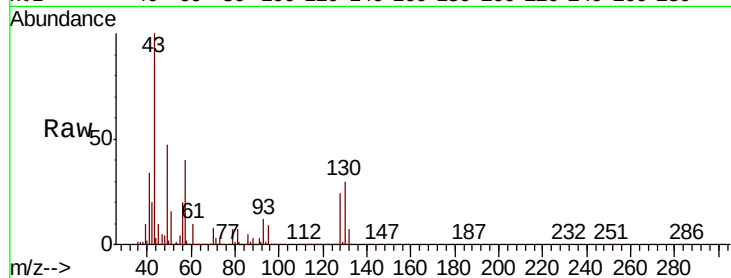
#25  
Ethyl Acetate  
Concen: 9.859 ppbv  
RT: 5.79 min Scan# 886  
Delta R.T. 0.01 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 10.2  | 8.0   | 12.0  |
| 61      | 9.5   | 8.0   | 12.0  |
| 70      | 7.3   | 5.9   | 8.9   |

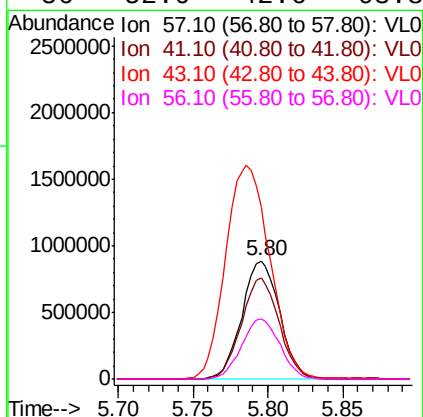
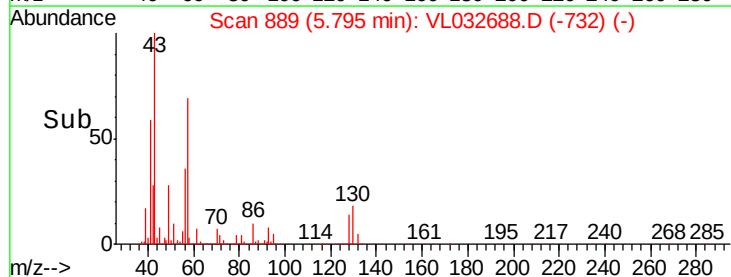
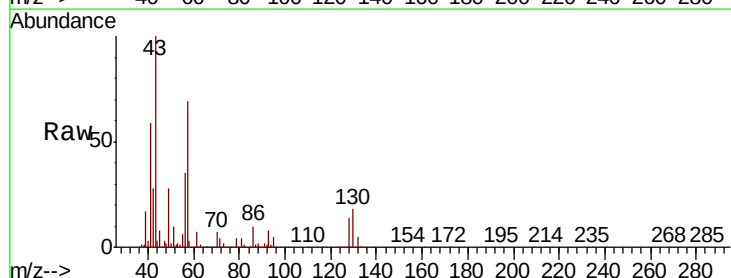
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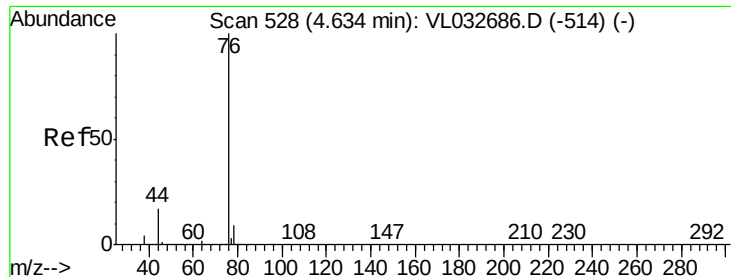
MMDadoda  
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#26  
Hexane  
Concen: 9.788 ppbv  
RT: 5.80 min Scan# 889  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 85.5  | 67.4  | 101.0 |
| 43      | 213.8 | 171.9 | 257.9 |
| 56      | 52.0  | 42.6  | 63.8  |





#27

Carbon Disulfide

Concen: 8.890 ppbv

RT: 4.63 min Scan# 528

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 76 Resp: 1708497

Ion Ratio Lower Upper

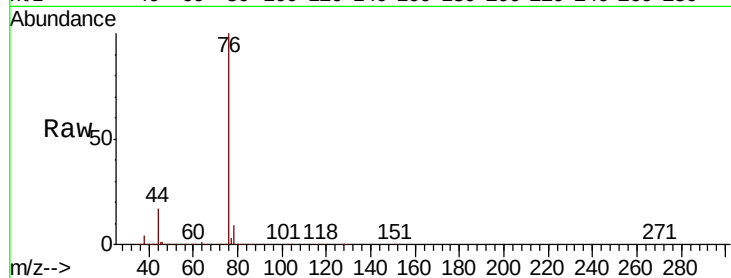
76 100

44 17.1 13.7 20.5

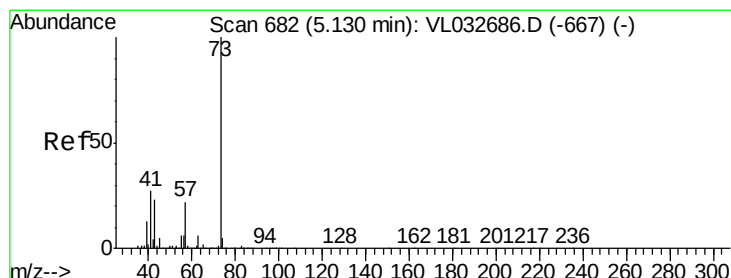
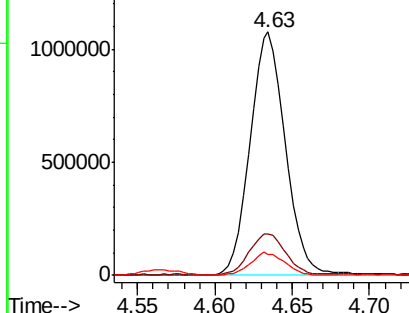
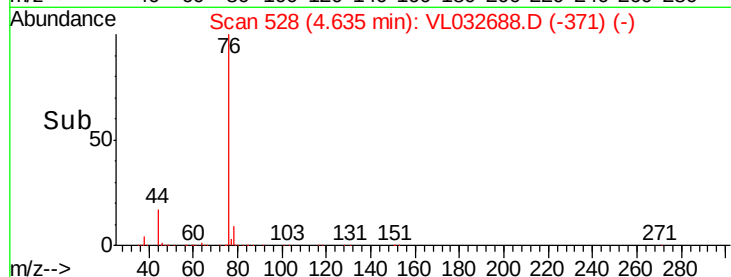
78 9.4 7.4 11.2

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



#28

Methyl tert-Butyl Ether

Concen: 10.145 ppbv

RT: 5.13 min Scan# 682

Delta R.T. 0.00 min

Lab File: VL032688.D

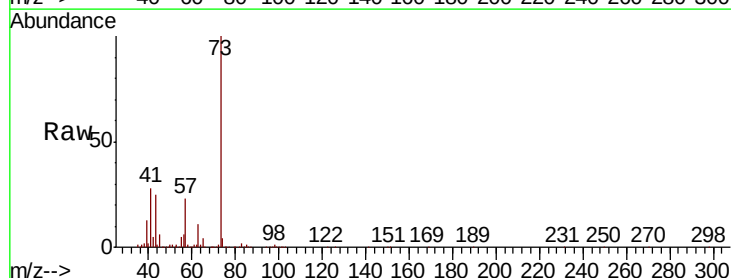
Acq: 24 Oct 2018 15:31

Tgt Ion: 73 Resp: 2309891

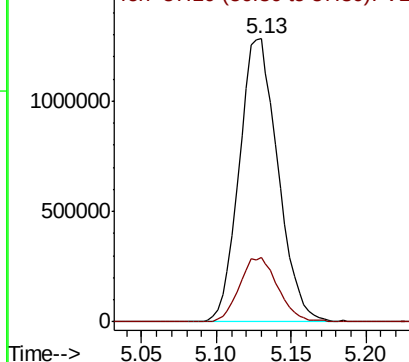
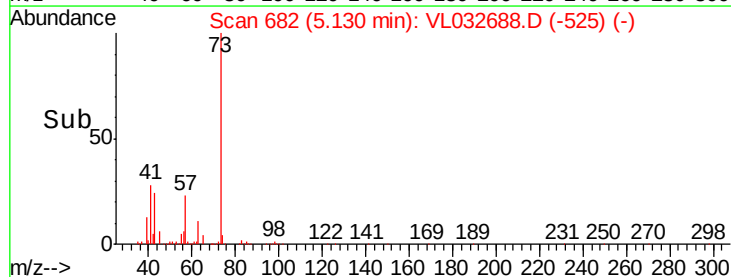
Ion Ratio Lower Upper

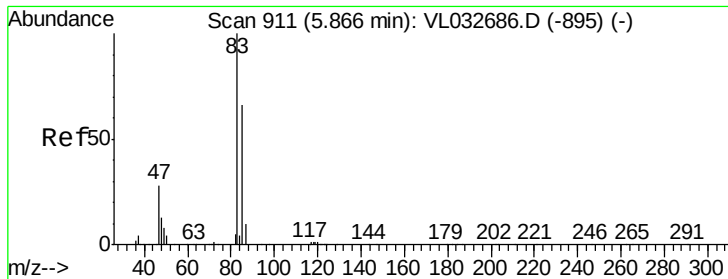
73 100

57 22.8 18.0 27.0



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





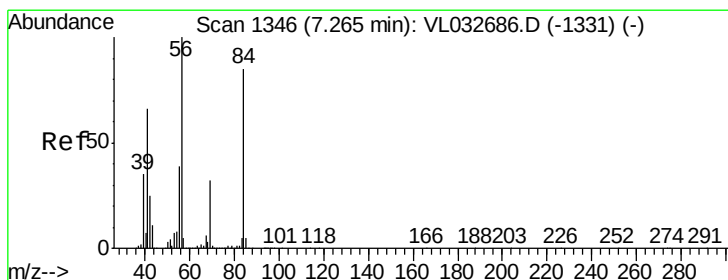
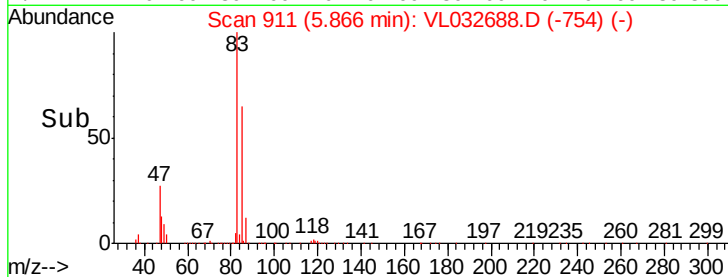
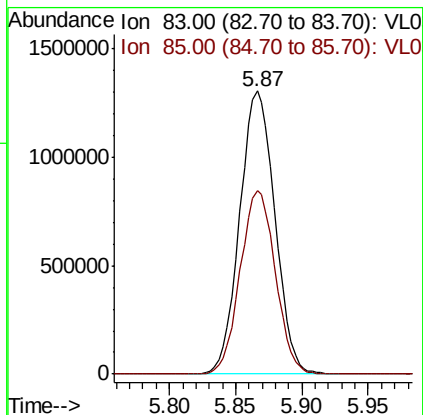
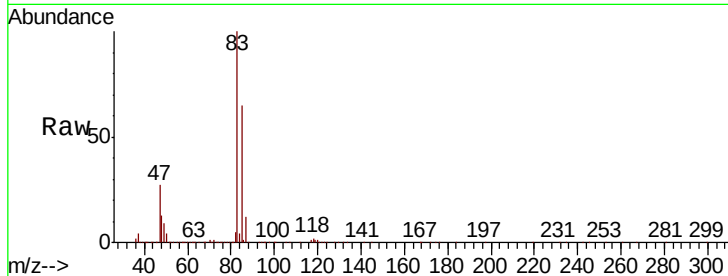
#29  
Chloroform  
Concen: 9.529 ppbv  
RT: 5.87 min Scan# 911  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion: 83 Resp: 2411390  
Ion Ratio Lower Upper  
83 100  
85 64.8 53.0 79.6

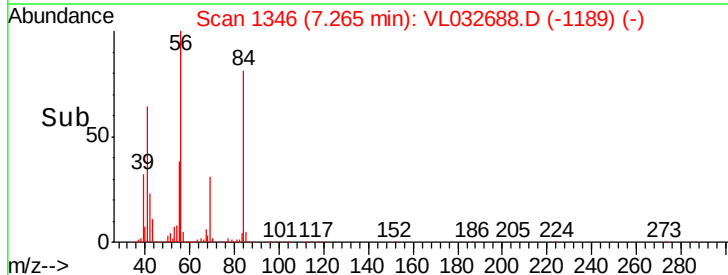
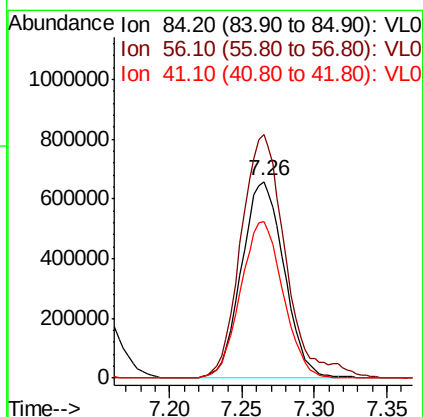
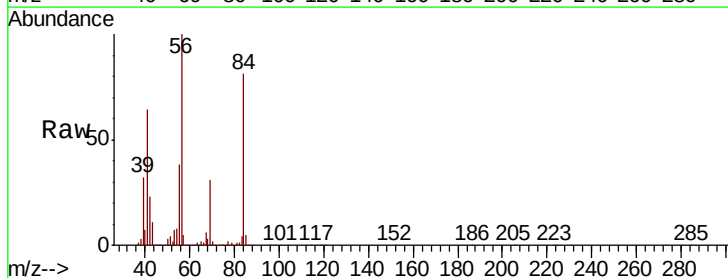
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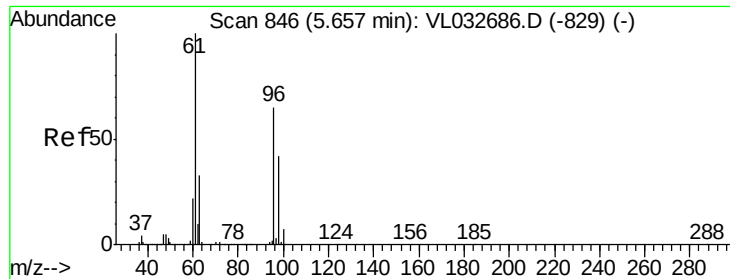
MMDadoda  
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#30  
Cyclohexane  
Concen: 10.701 ppbv  
RT: 7.26 min Scan# 1346  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion: 84 Resp: 1341870  
Ion Ratio Lower Upper  
84 100  
56 130.1 108.3 162.5  
41 79.3 64.8 97.2





#31

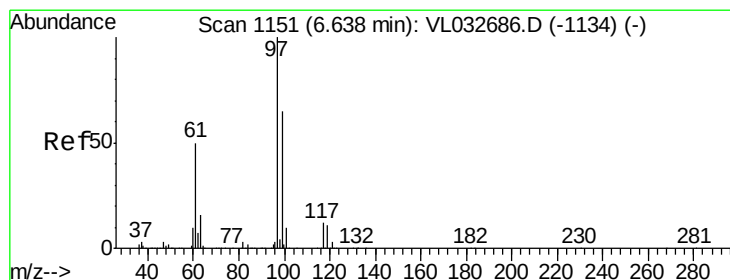
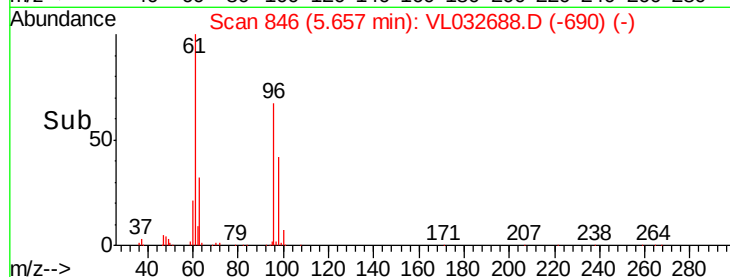
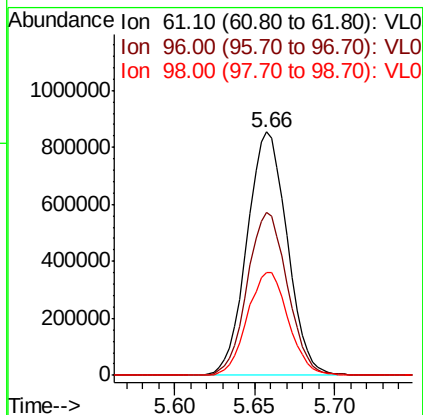
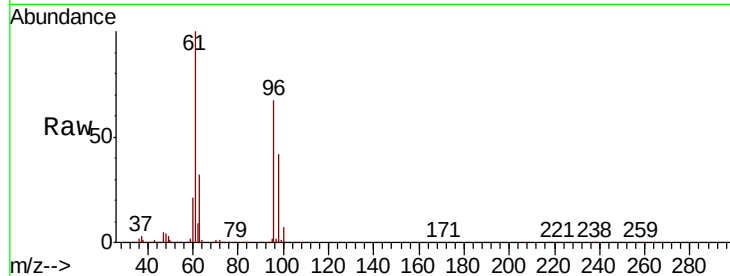
cis-1,2-Dichloroethene  
 Concen: 9.982 ppbv  
 RT: 5.66 min Scan# 846  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 66.9  | 51.8  | 77.6  |
| 98      | 42.2  | 33.8  | 50.6  |

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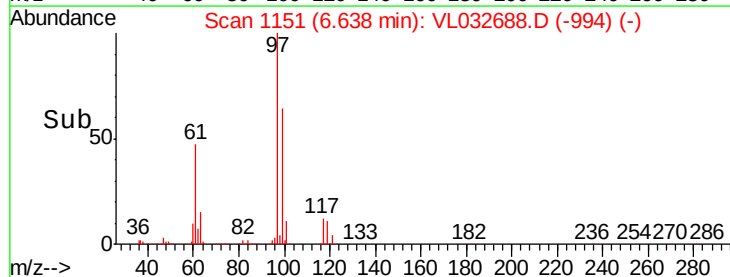
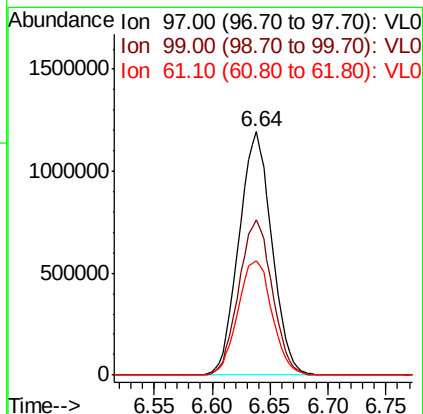
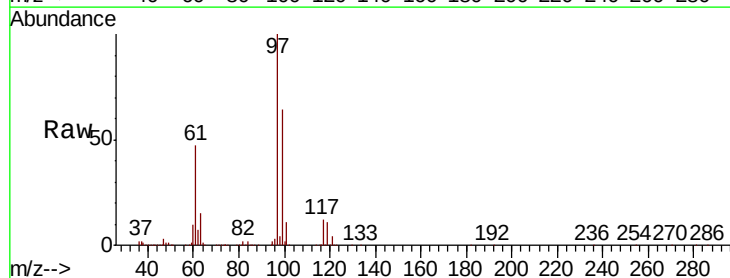
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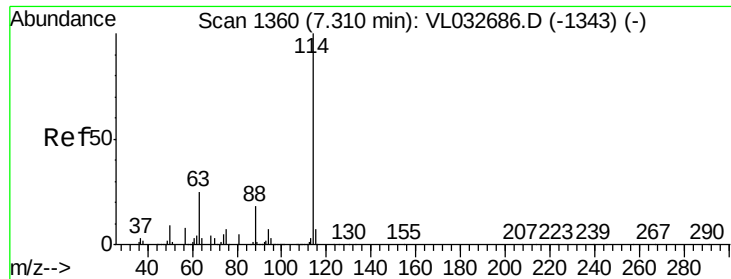


#32

1,1,1-Trichloroethane  
 Concen: 9.182 ppbv  
 RT: 6.64 min Scan# 1151  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.8  | 52.0  | 78.0  |
| 61      | 49.2  | 40.7  | 61.1  |





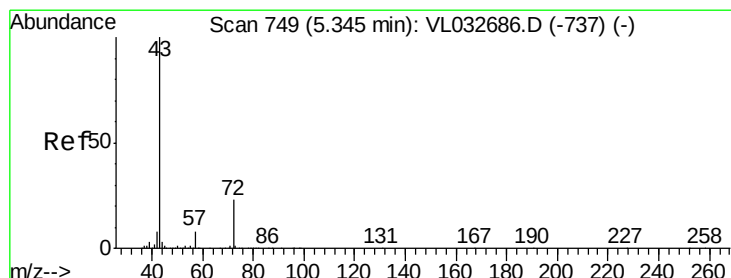
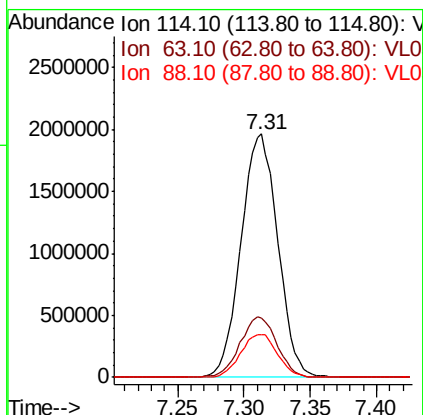
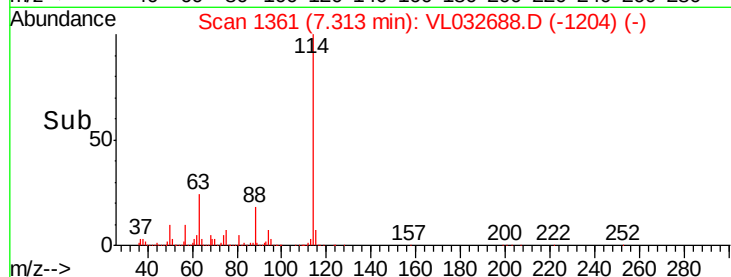
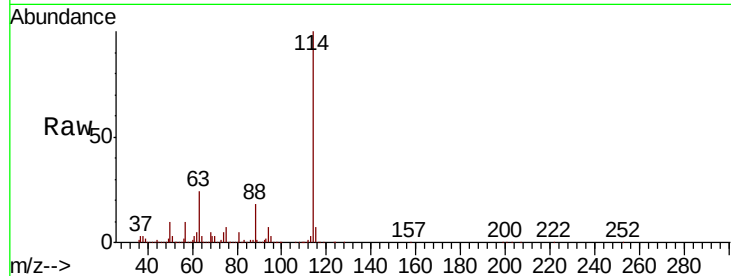
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.31 min Scan# 1361  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

Tgt Ion: 114 Resp: 3787133  
 Ion Ratio Lower Upper  
 114 100  
 63 25.2 21.7 32.5  
 88 17.8 14.9 22.3

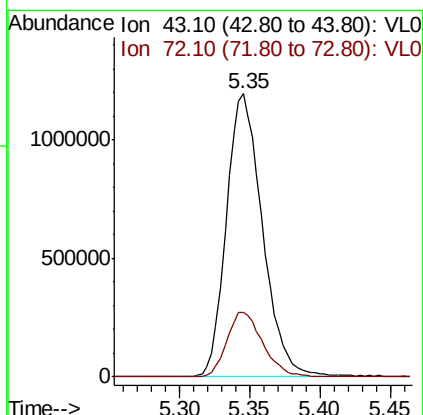
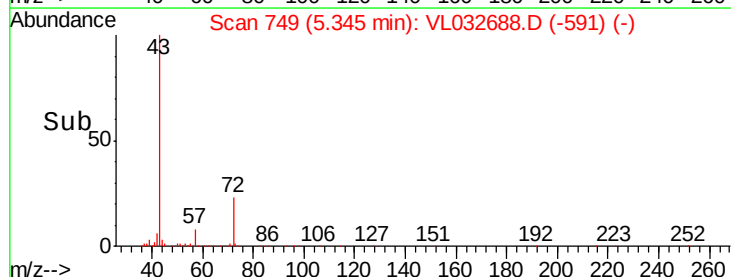
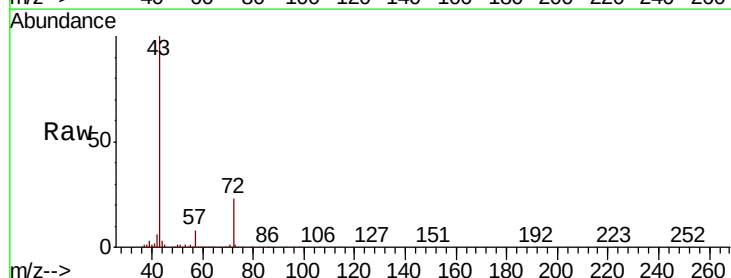
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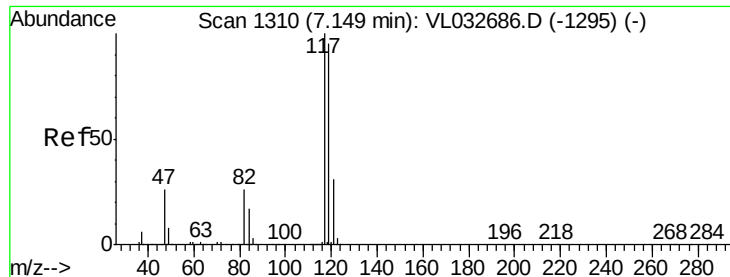
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#34  
 2-Butanone  
 Concen: 10.470 ppbv  
 RT: 5.35 min Scan# 749  
 Delta R.T. 0.01 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Tgt Ion: 43 Resp: 2125601  
 Ion Ratio Lower Upper  
 43 100  
 72 23.0 18.6 27.8





#35

Carbon Tetrachloride

Concen: 9.568 ppbv

RT: 7.15 min Scan# 1311

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 117 Resp: 2571648

Ion Ratio Lower Upper

117 100

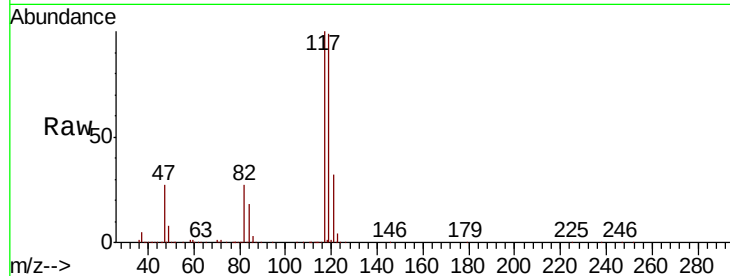
119 98.9 75.7 113.5

121 32.3 24.7 37.1

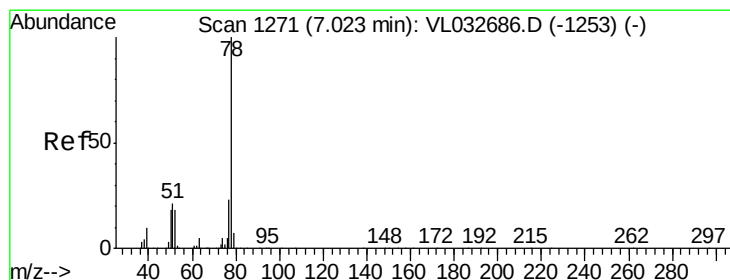
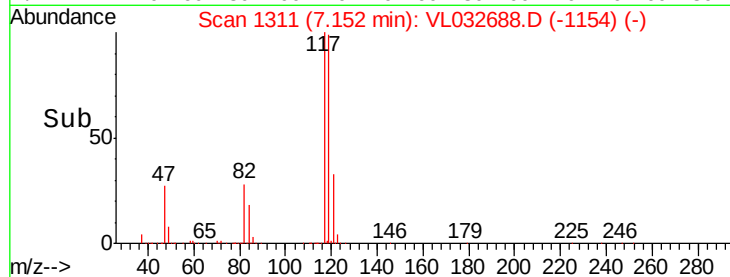
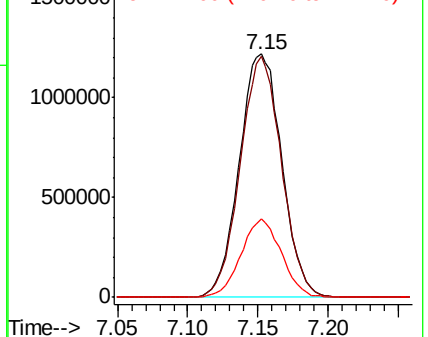
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Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 119.00 (118.70 to 119.70): V  
Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 10.275 ppbv

RT: 7.03 min Scan# 1272

Delta R.T. 0.01 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

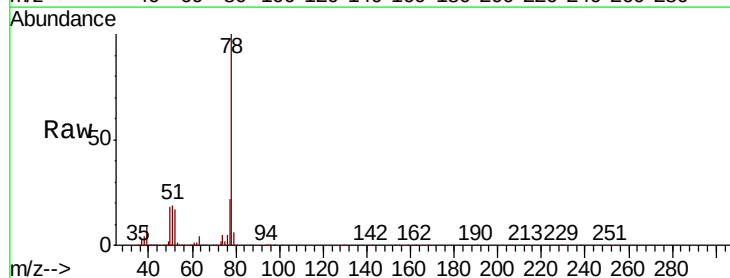
Tgt Ion: 78 Resp: 3160028

Ion Ratio Lower Upper

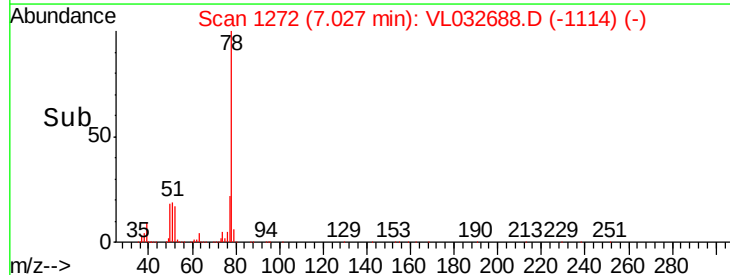
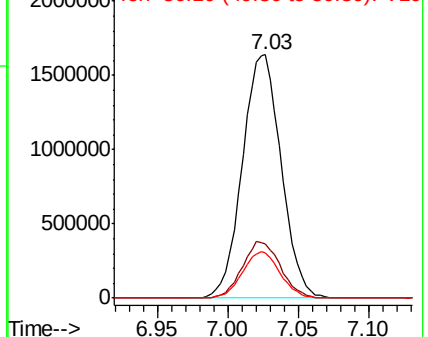
78 100

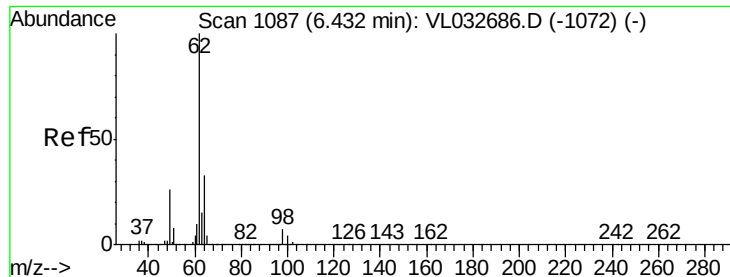
77 22.5 18.1 27.1

50 18.4 15.1 22.7



Abundance Ion 78.10 (77.80 to 78.80): VL0  
Ion 77.10 (76.80 to 77.80): VL0  
Ion 50.10 (49.80 to 50.80): VL0





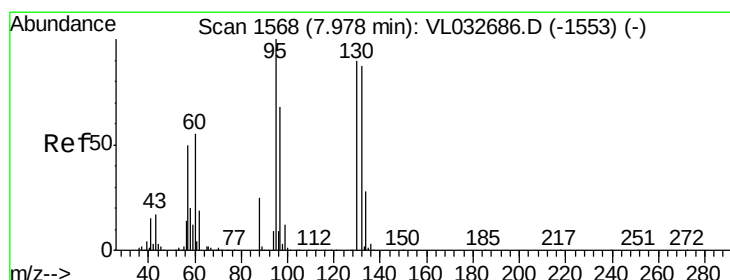
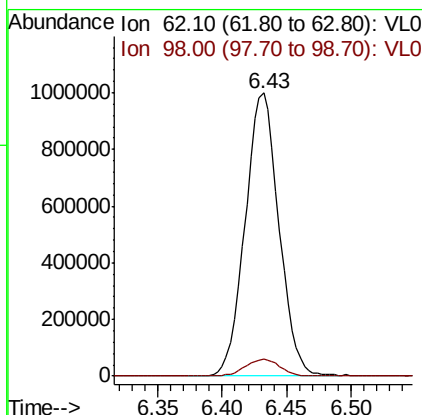
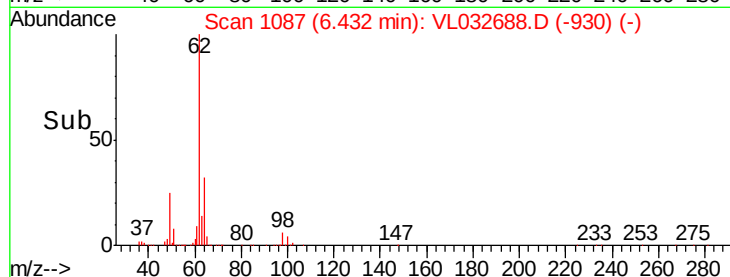
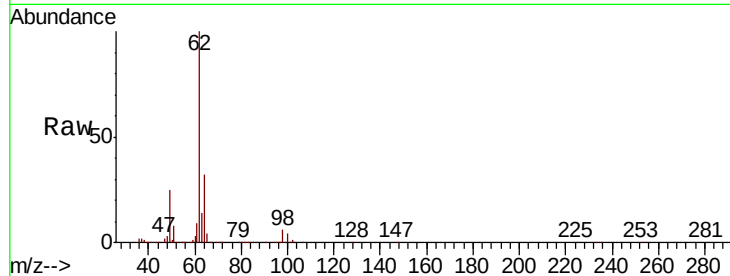
#37  
 1,2-Dichloroethane  
 Concen: 9.666 ppbv  
 RT: 6.43 min Scan# 1087  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

Tgt Ion: 62 Resp: 1823264  
 Ion Ratio Lower Upper  
 62 100  
 98 6.2 4.4 6.6

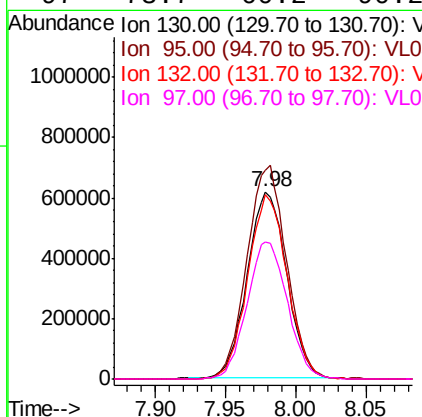
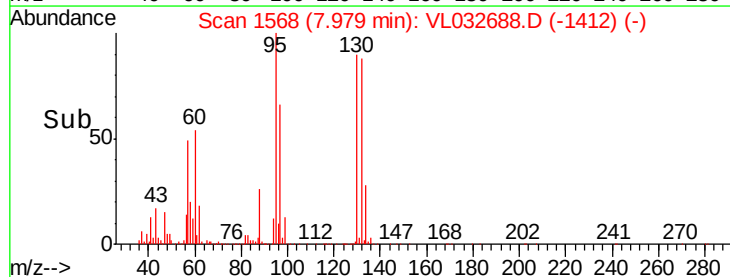
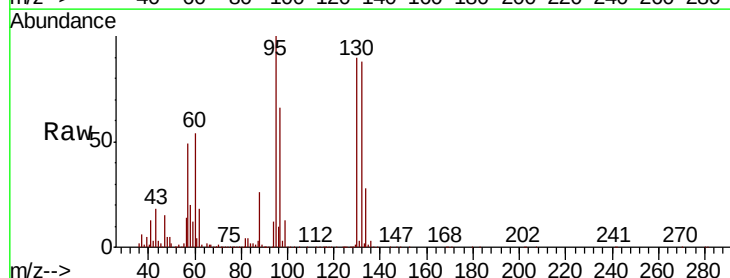
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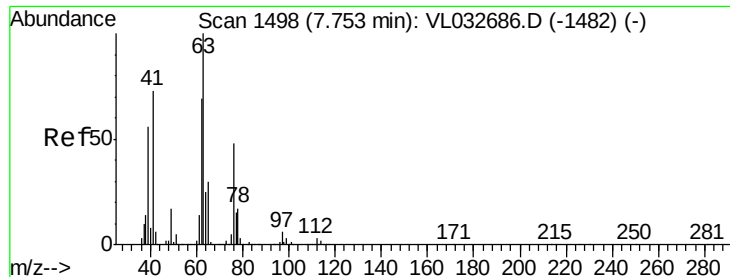
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#38  
 Trichloroethene  
 Concen: 10.646 ppbv  
 RT: 7.98 min Scan# 1568  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Tgt Ion: 130 Resp: 1211951  
 Ion Ratio Lower Upper  
 130 100  
 95 112.0 93.4 140.0  
 132 98.8 76.5 114.7  
 97 73.7 60.2 90.2





#39

1,2-Dichloropropane

Concen: 10.243 ppbv

RT: 7.75 min Scan# 1498

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 63 Resp: 1216473

Ion Ratio Lower Upper

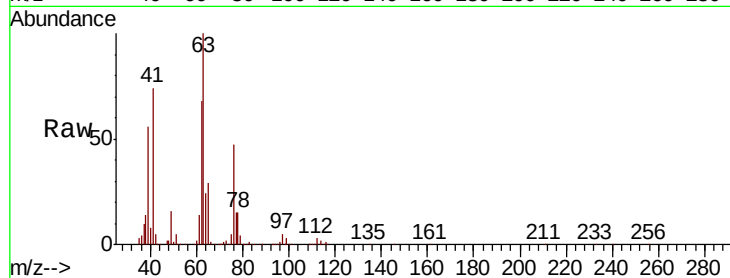
63 100

41 73.5 56.2 84.4

62 68.3 54.4 81.6

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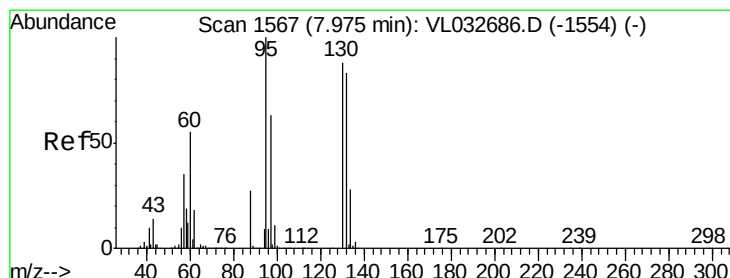
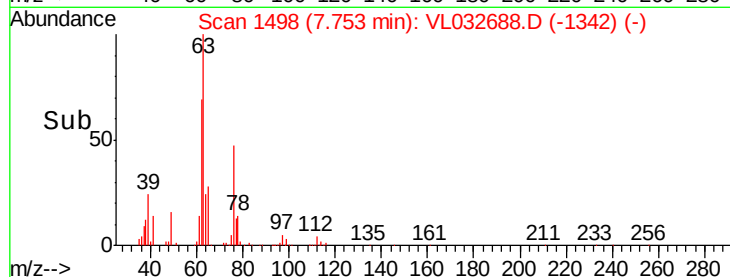
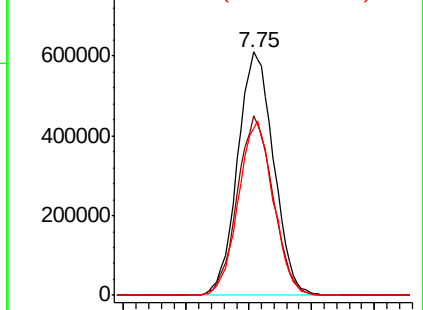


Abundance

Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#40

1,4-Dioxane

Concen: 10.517 ppbv

RT: 7.98 min Scan# 1567

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Tgt Ion: 88 Resp: 426572

Ion Ratio Lower Upper

88 100

58 132.3 104.0 156.0

43 276.0 0.0 0.0#

57 1249.0 0.0 0.0#

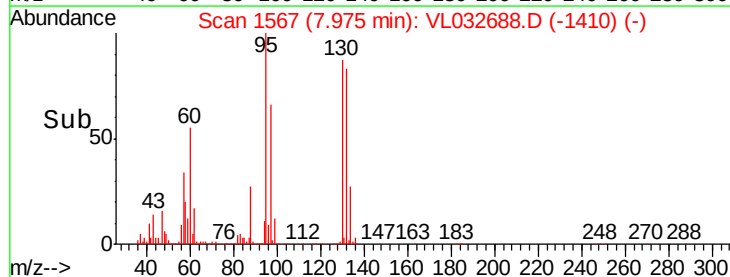
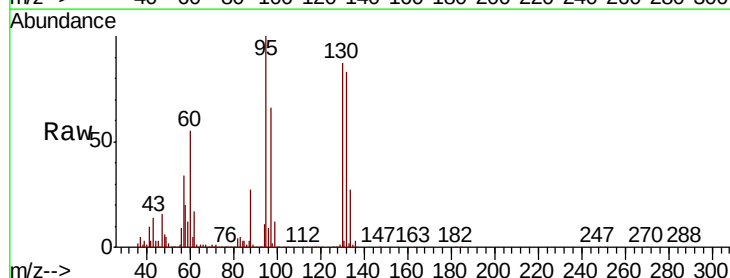
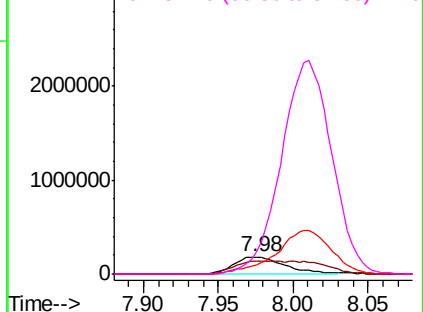
Abundance

Ion 88.10 (87.80 to 88.80): VL0

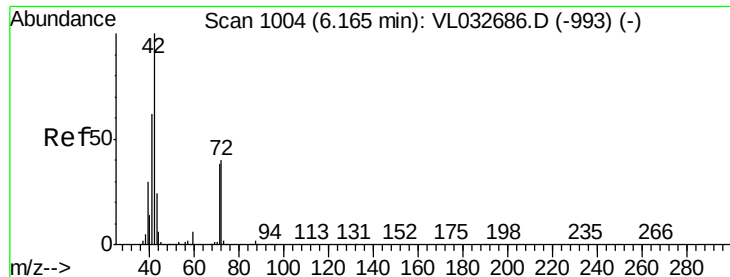
Ion 58.10 (57.80 to 58.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0







#41

Tetrahydrofuran

Concen: 11.315 ppbv

RT: 6.17 min Scan# 1004

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 42 Resp: 1280068

Ion Ratio Lower Upper

42 100

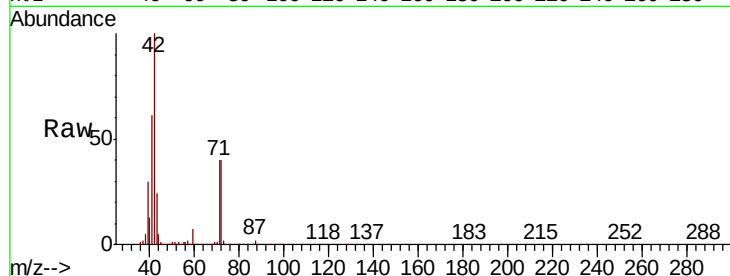
72 39.5 32.4 48.6

71 37.7 31.3 46.9

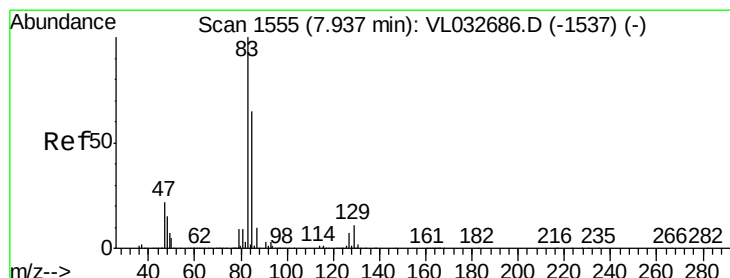
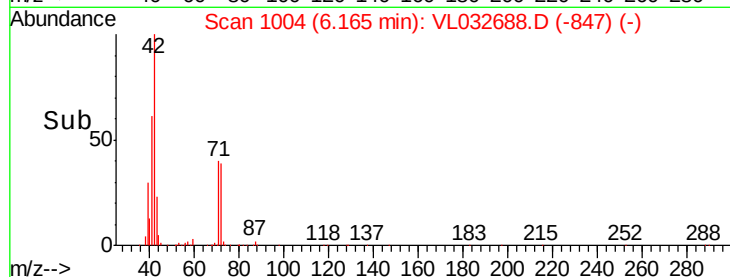
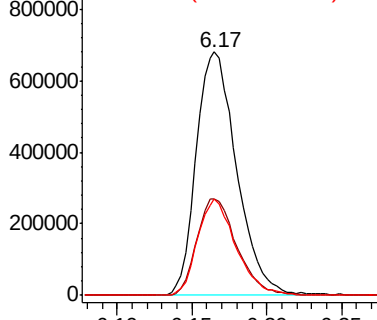
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Abundance Ion 42.10 (41.80 to 42.80): VL0  
Ion 72.10 (71.80 to 72.80): VL0  
Ion 71.10 (70.80 to 71.80): VL0



#42

Bromodichloromethane

Concen: 9.830 ppbv

RT: 7.94 min Scan# 1555

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

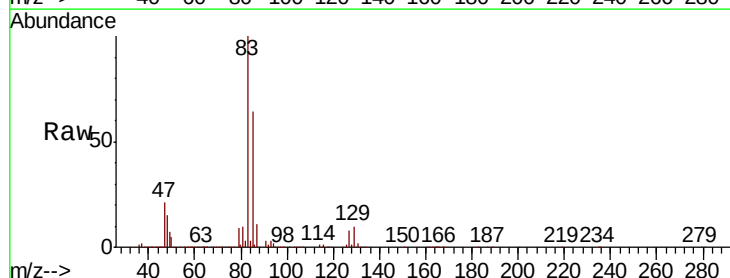
Tgt Ion: 83 Resp: 2597808

Ion Ratio Lower Upper

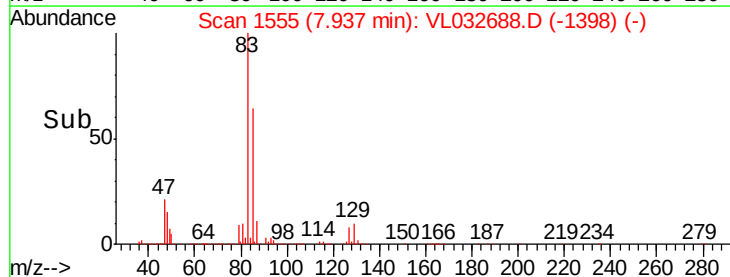
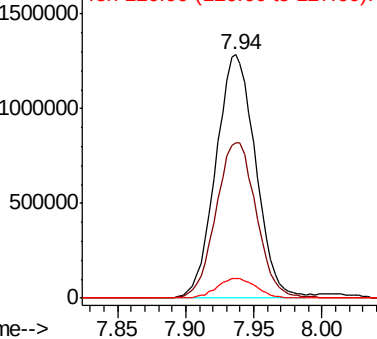
83 100

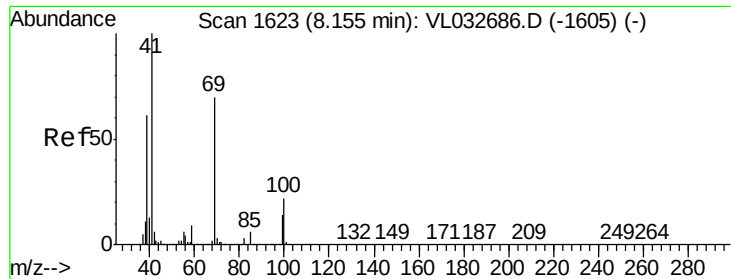
85 64.0 52.4 78.6

127 8.1 6.1 9.1



Abundance Ion 83.00 (82.70 to 83.70): VL0  
Ion 85.00 (84.70 to 85.70): VL0  
Ion 126.90 (126.60 to 127.60): V





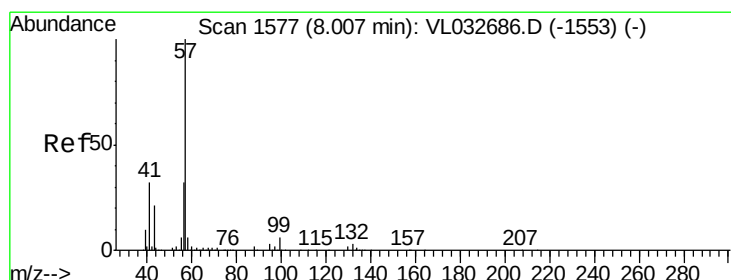
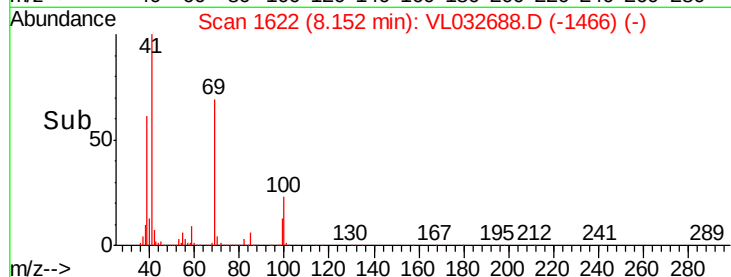
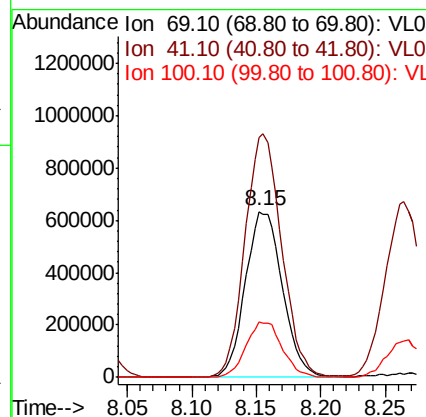
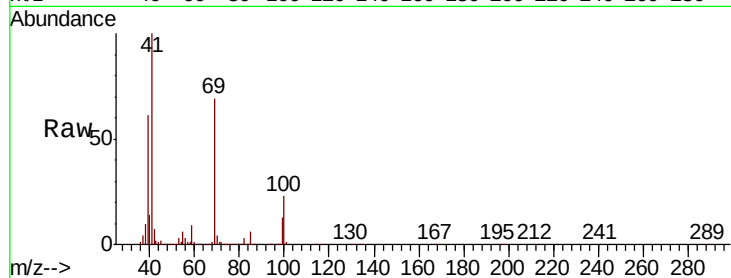
#43  
Methyl Methacrylate  
Concen: 11.286 ppbv  
RT: 8.15 min Scan# 1622  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion: 69 Resp: 1272115  
Ion Ratio Lower Upper  
69 100  
41 144.5 113.2 169.8  
100 32.4 24.4 36.6

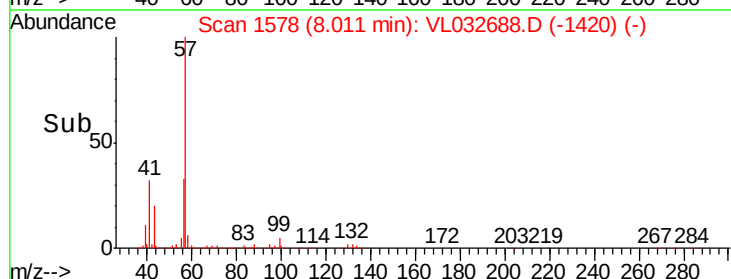
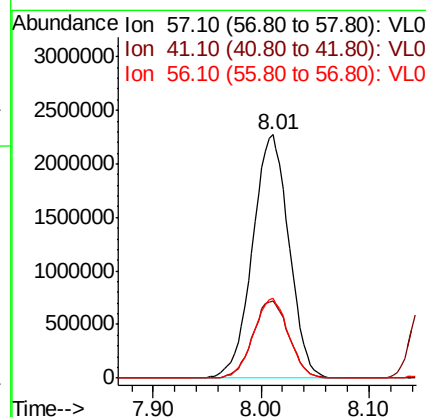
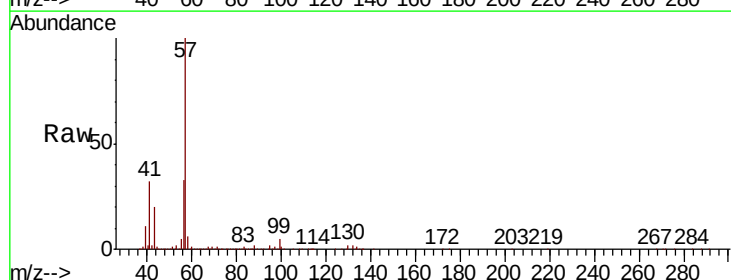
Manual Integrations  
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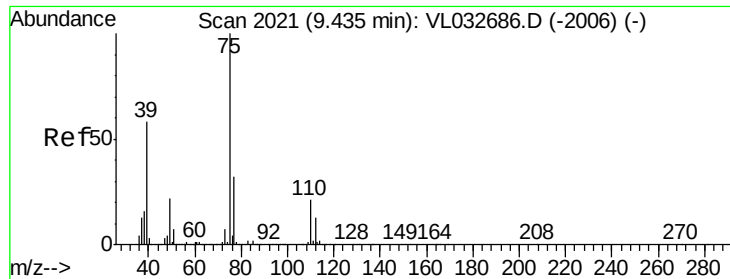
MMDadoda  
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#44  
2,2,4-Trimethylpentane  
Concen: 10.135 ppbv  
RT: 8.01 min Scan# 1578  
Delta R.T. 0.01 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion: 57 Resp: 5320975  
Ion Ratio Lower Upper  
57 100  
41 31.5 24.7 37.1  
56 31.5 25.0 37.4





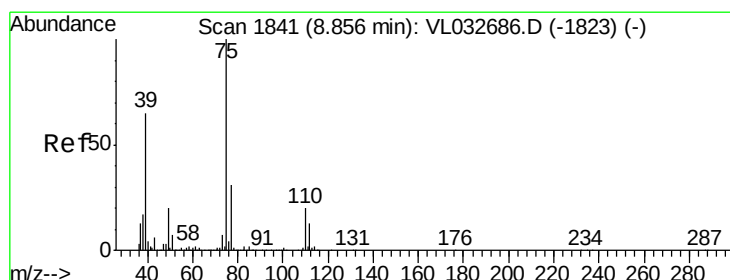
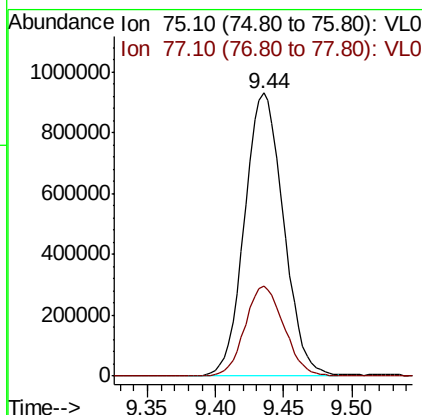
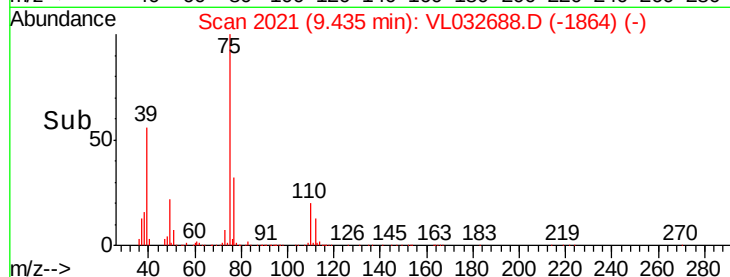
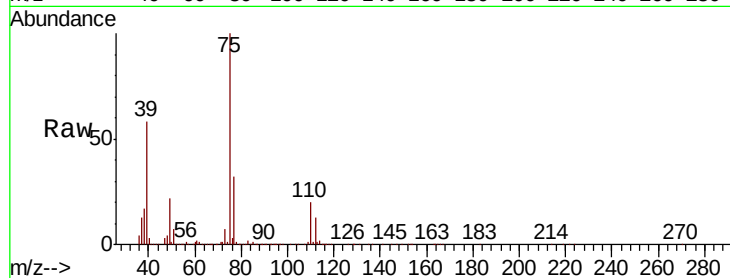
#45  
t-1,3-Dichloropropene  
Concen: 12.245 ppbv  
RT: 9.44 min Scan# 2021  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion: 75 Resp: 1847443  
Ion Ratio Lower Upper  
75 100  
77 31.9 25.3 37.9

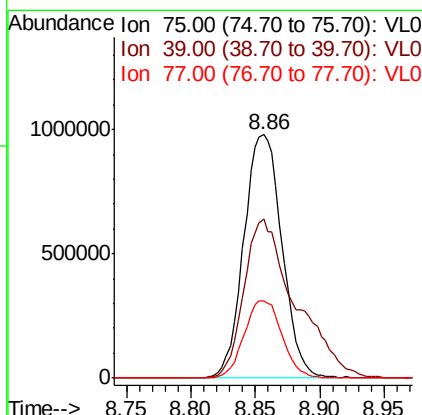
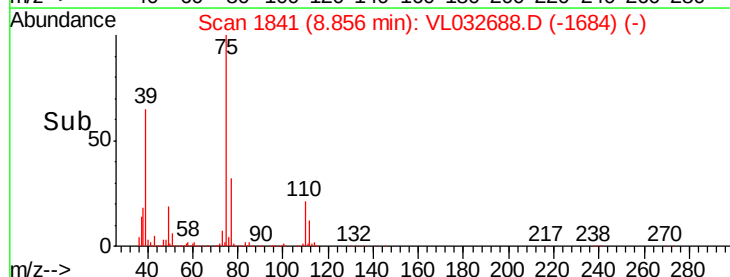
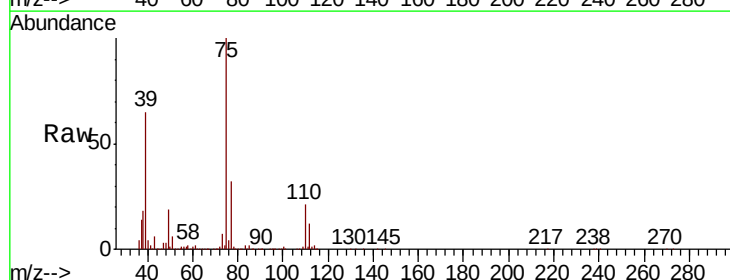
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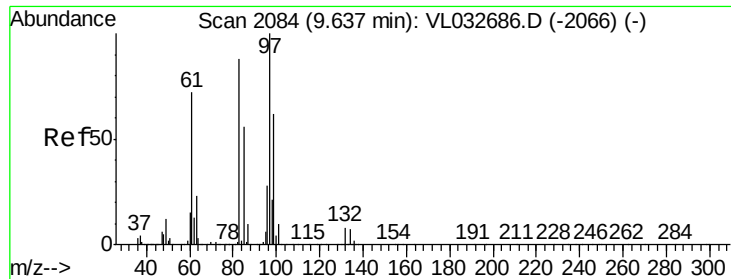
MMDadoda  
10/26/2018 3:39:42 PM



#46  
cis-1,3-Dichloropropene  
Concen: 11.702 ppbv  
RT: 8.86 min Scan# 1841  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion: 75 Resp: 2017062  
Ion Ratio Lower Upper  
75 100  
39 65.2 50.9 76.3  
77 31.6 25.8 38.6





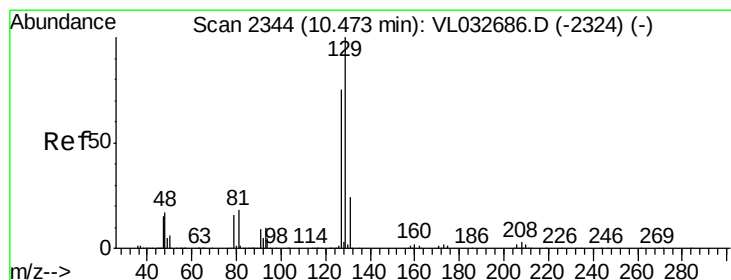
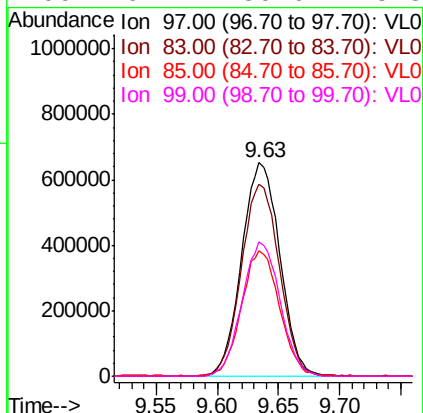
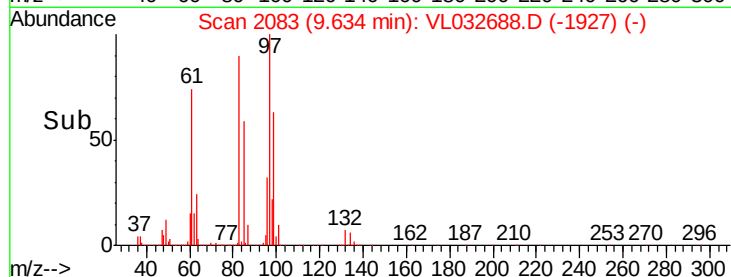
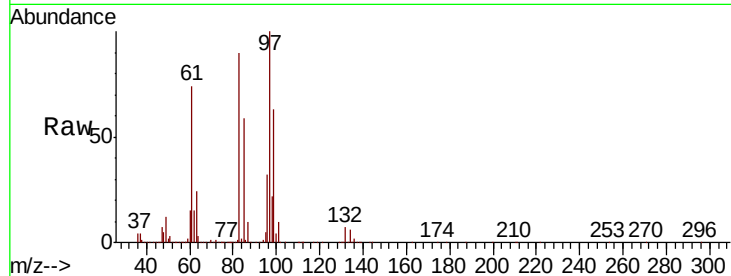
#47  
1,1,2-Trichloroethane  
Concen: 10.034 ppbv  
RT: 9.63 min Scan# 2083  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 83      | 90.1  | 73.5  | 110.3 |
| 85      | 58.5  | 45.8  | 68.6  |
| 99      | 62.7  | 50.6  | 75.8  |

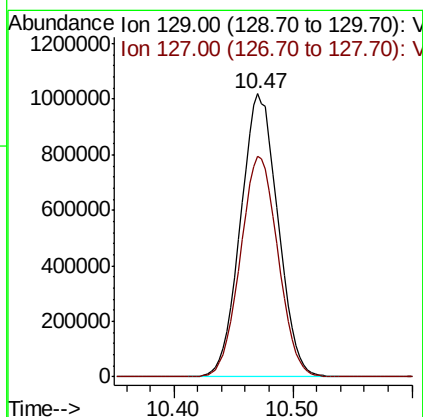
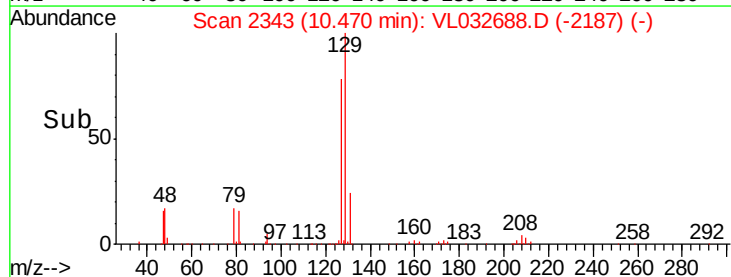
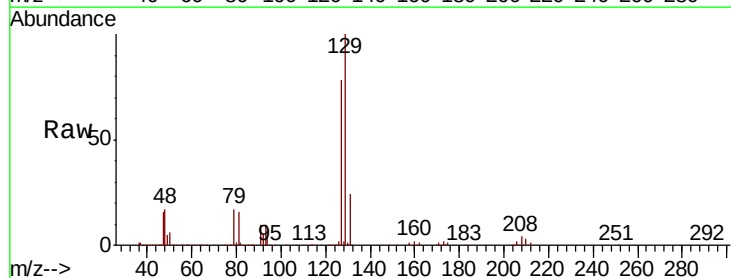
Manual Integrations  
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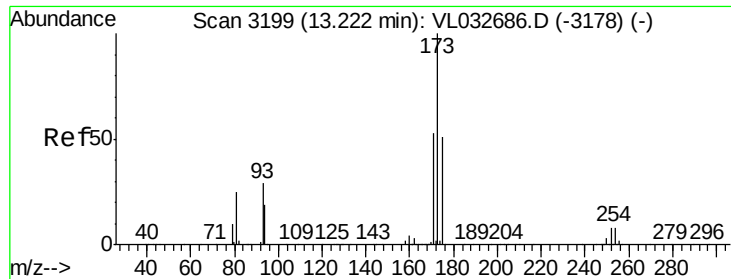
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#48  
Dibromochloromethane  
Concen: 9.471 ppbv  
RT: 10.47 min Scan# 2343  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 78.5  | 39.1  | 117.5 |





#49

Bromoform

Concen: 10.258 ppbv

RT: 13.22 min Scan# 3199

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion:173 Resp: 1885354

Ion Ratio Lower Upper

173 100

175 49.0 39.0 58.4

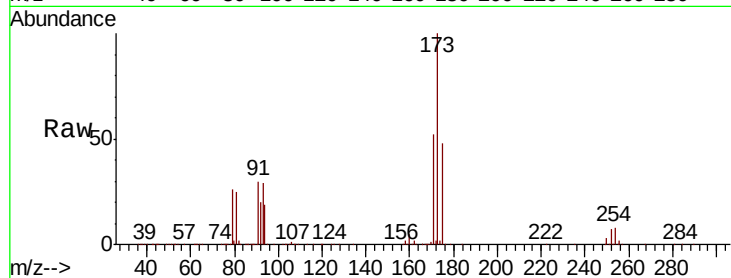
171 51.8 42.2 63.2

Manual Integrations

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MMDadoda

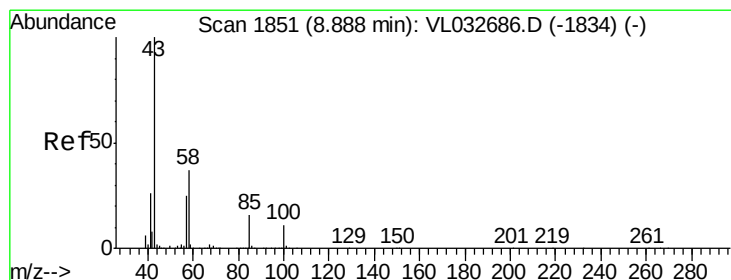
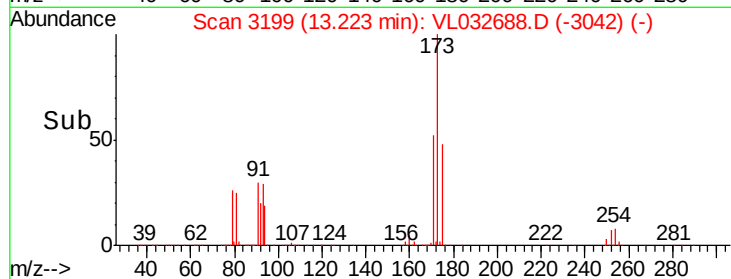
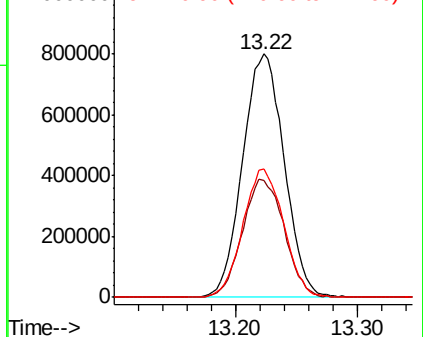
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Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 11.154 ppbv

RT: 8.89 min Scan# 1851

Delta R.T. 0.00 min

Lab File: VL032688.D

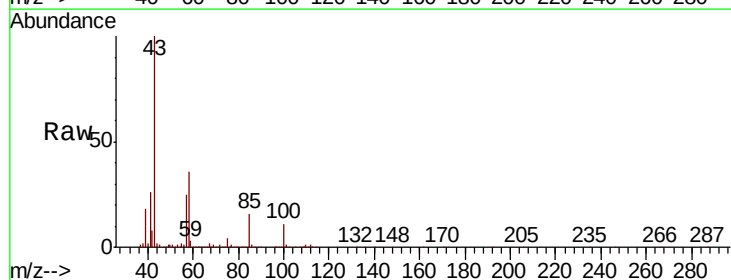
Acq: 24 Oct 2018 15:31

Tgt Ion: 43 Resp: 3354840

Ion Ratio Lower Upper

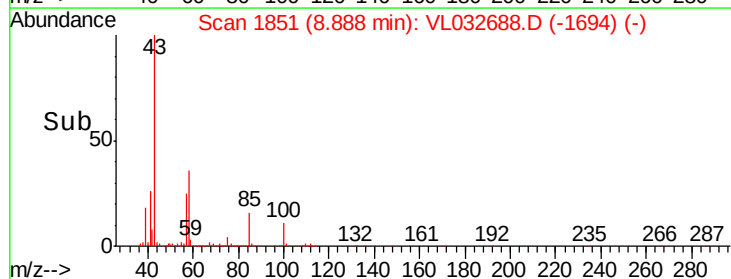
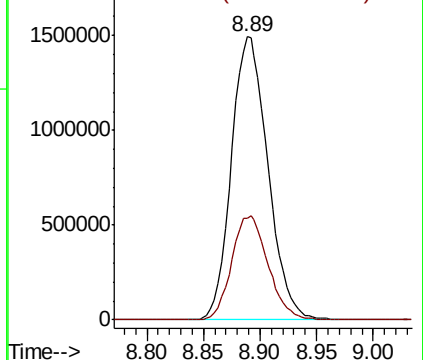
43 100

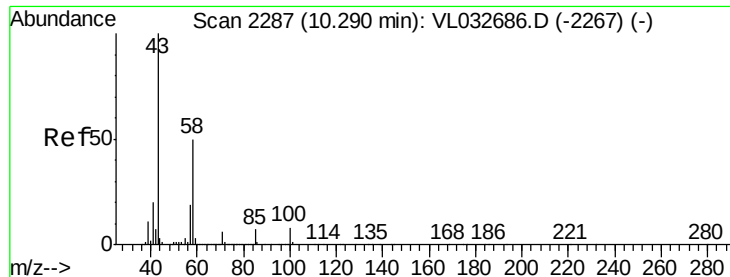
58 36.7 29.7 44.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





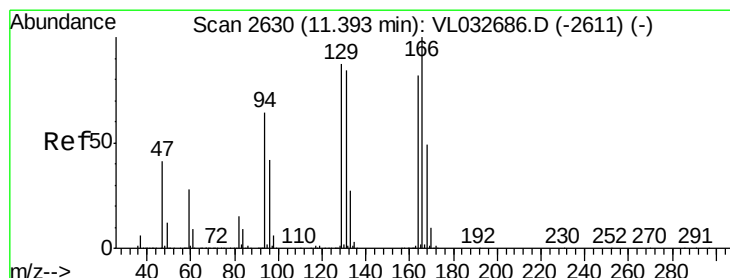
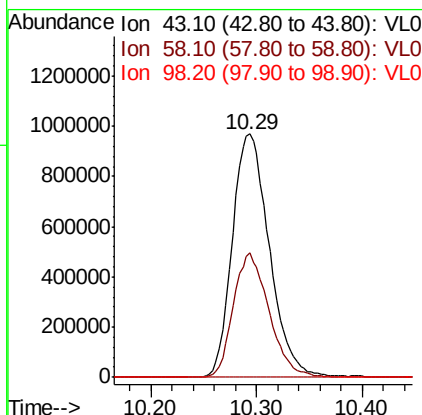
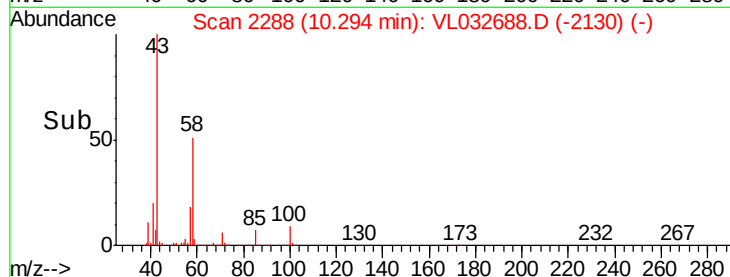
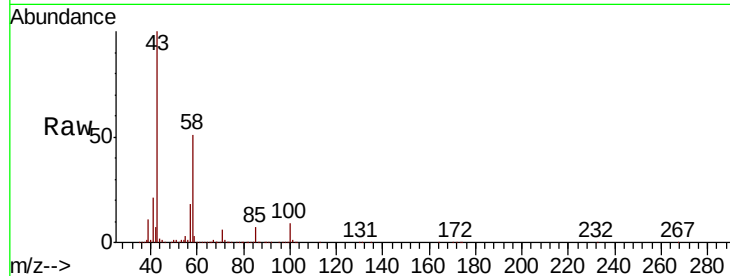
#51  
2-Hexanone  
Concen: 10.550 ppbv  
RT: 10.29 min Scan# 2288  
Delta R.T. 0.01 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion: 43 Resp: 2358747  
Ion Ratio Lower Upper  
43 100  
58 49.5 40.4 60.6  
98 0.4 0.4 0.6#

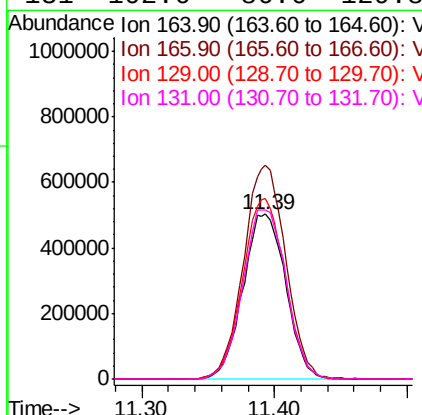
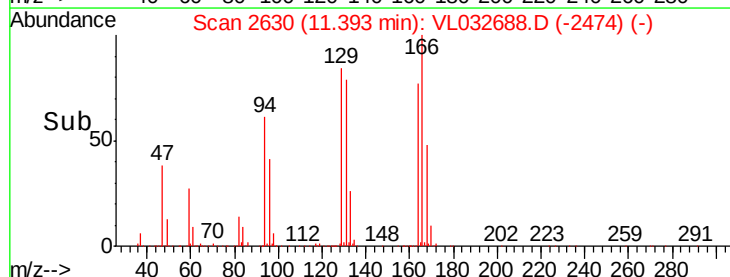
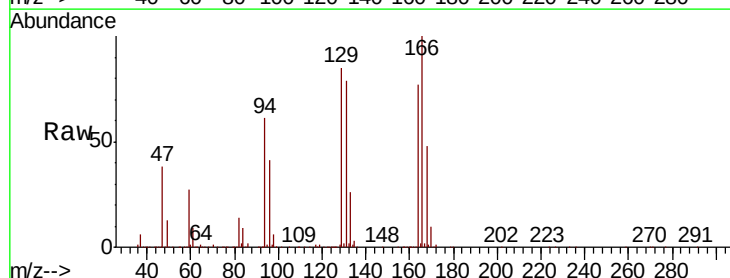
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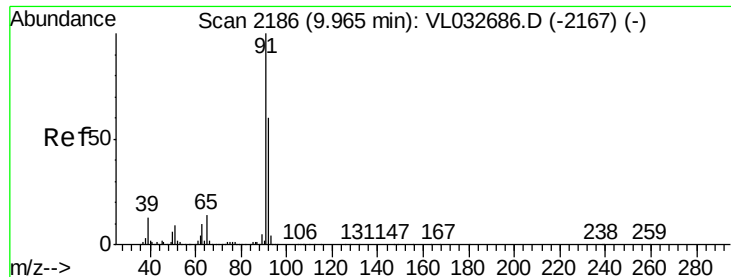
MMDadoda  
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#52  
Tetrachloroethene  
Concen: 10.533 ppbv  
RT: 11.39 min Scan# 2630  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion: 164 Resp: 1129312  
Ion Ratio Lower Upper  
164 100  
166 129.7 100.5 150.7  
129 109.5 90.0 135.0  
131 102.6 86.6 129.8





#53

Toluene

Concen: 11.337 ppbv

RT: 9.97 min Scan# 2186

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 91 Resp: 3996506

Ion Ratio Lower Upper

91 100

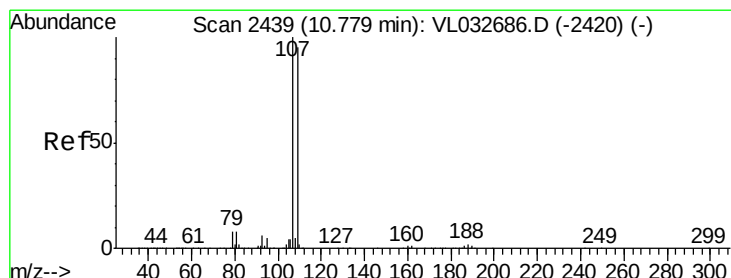
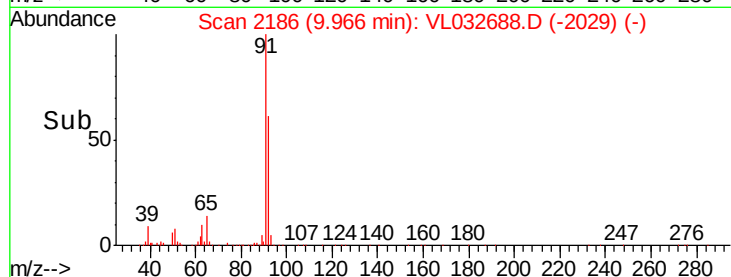
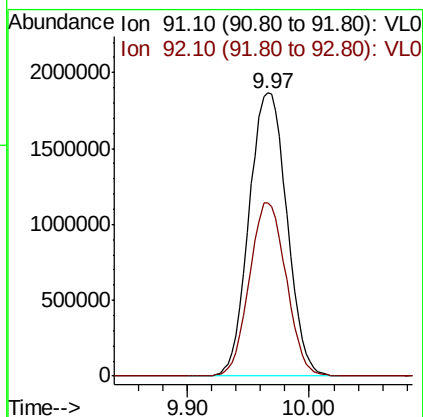
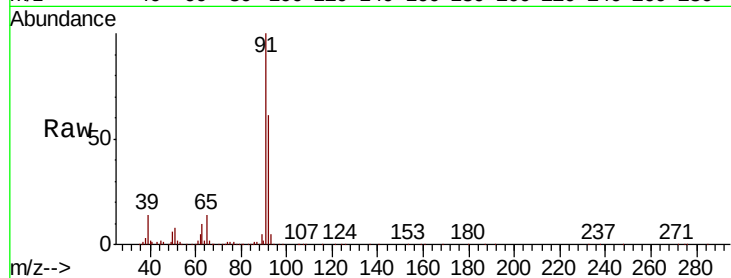
92 59.7 48.4 72.6

Manual Integrations

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#54

1,2-Dibromoethane

Concen: 10.475 ppbv

RT: 10.78 min Scan# 2439

Delta R.T. 0.00 min

Lab File: VL032688.D

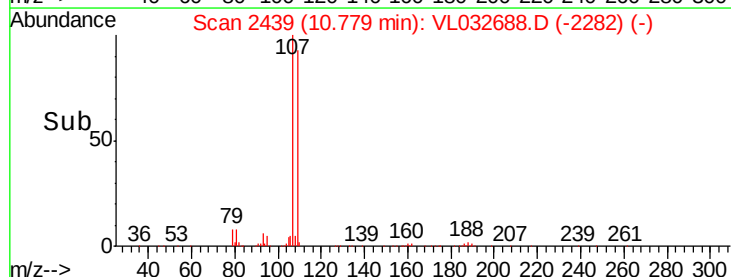
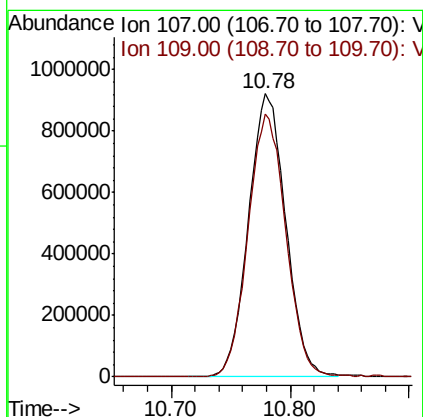
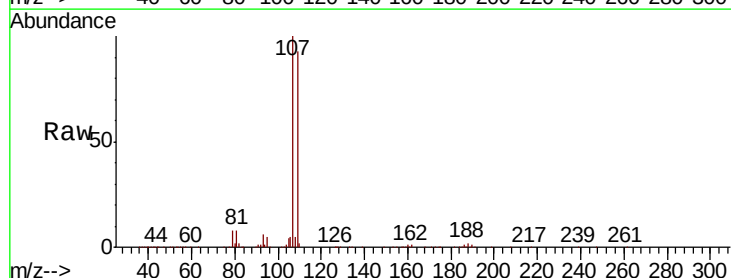
Acq: 24 Oct 2018 15:31

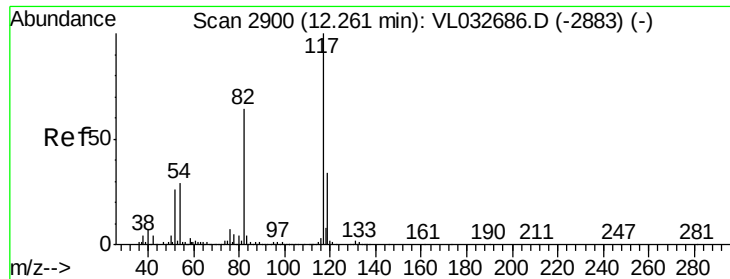
Tgt Ion: 107 Resp: 1997847

Ion Ratio Lower Upper

107 100

109 93.0 75.3 112.9





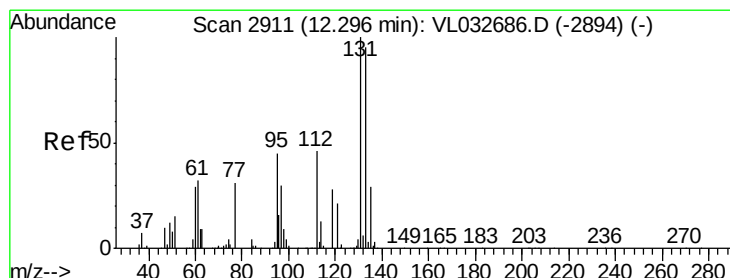
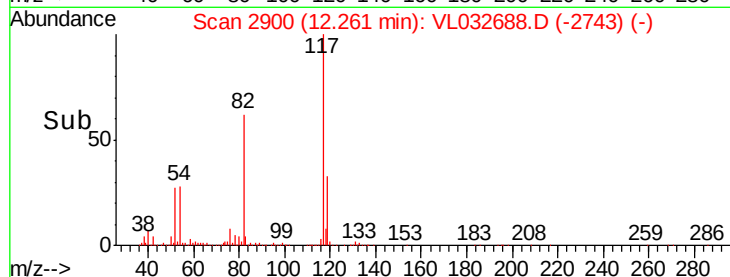
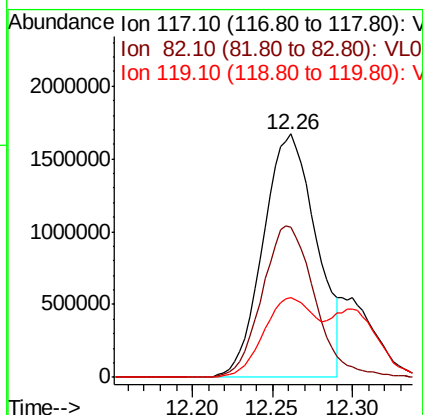
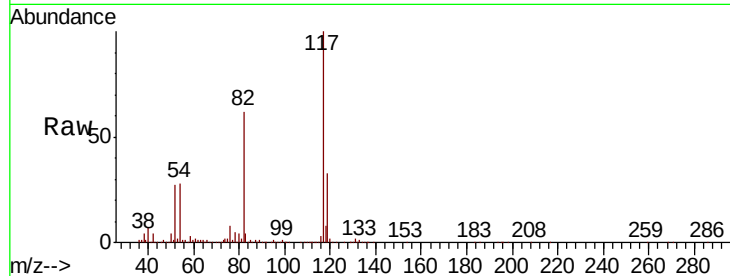
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv m  
RT: 12.26 min Scan# 2900  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion:117 Resp: 3887338  
Ion Ratio Lower Upper  
117 100  
82 62.0 52.7 79.1  
119 33.3 26.7 40.1

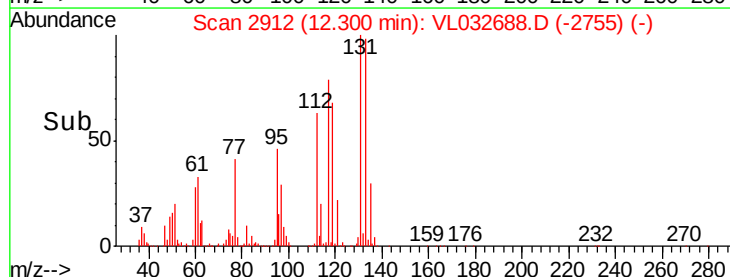
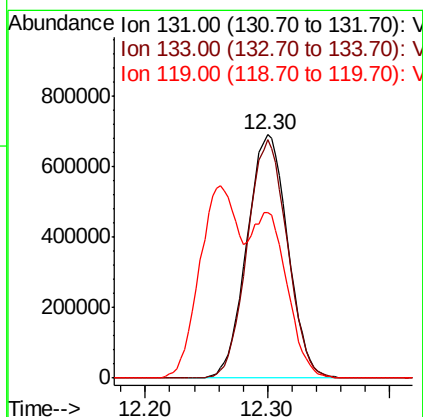
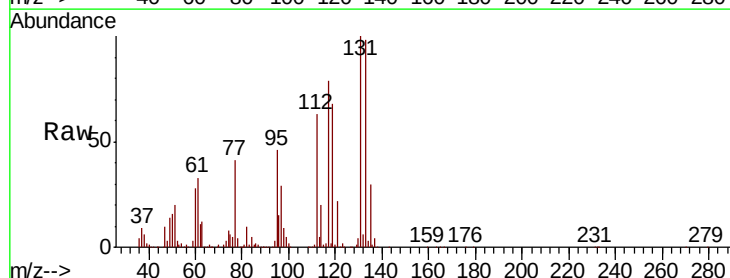
Manual Integrations  
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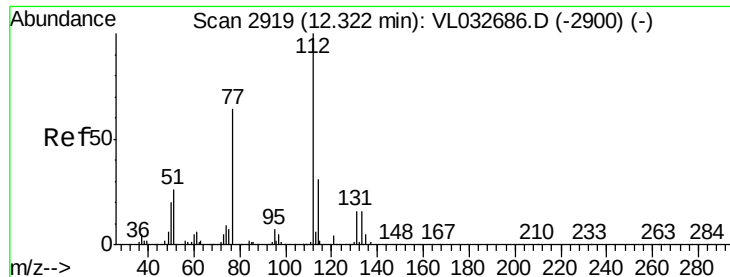


#56  
1,1,1,2-Tetrachloroethane  
Concen: 9.382 ppbv  
RT: 12.30 min Scan# 2912  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion:131 Resp: 1594803  
Ion Ratio Lower Upper  
131 100  
133 96.1 75.4 113.2  
119 62.3 49.1 73.7







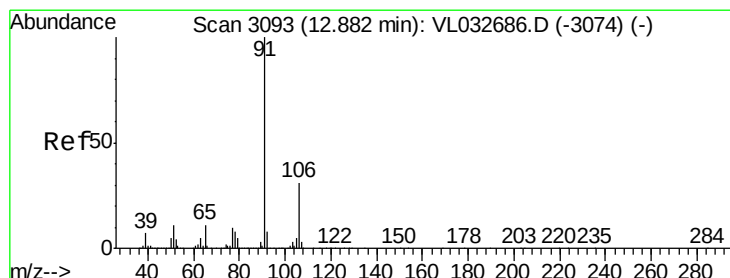
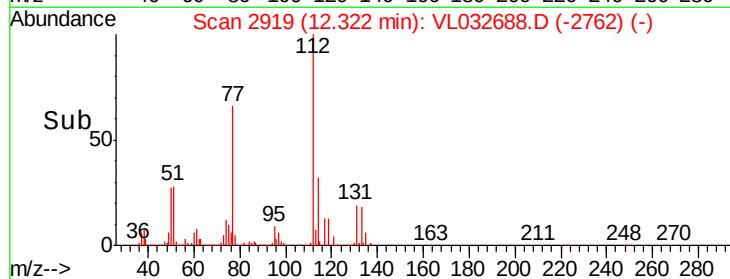
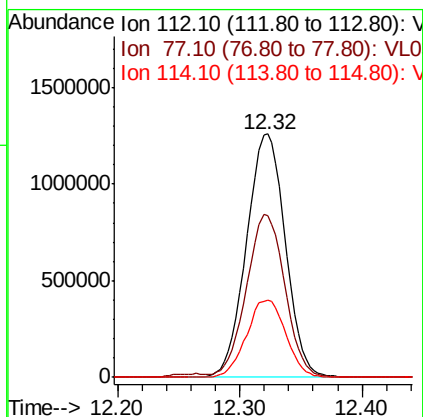
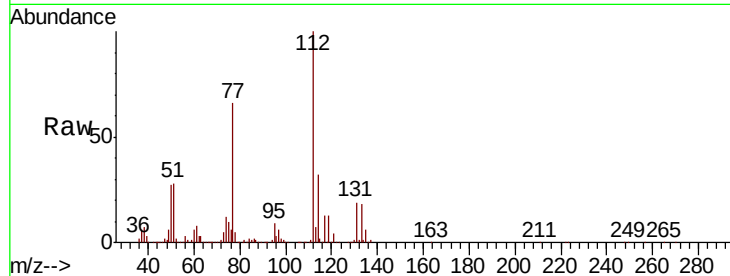
#57  
Chlorobenzene  
Concen: 9.673 ppbv  
RT: 12.32 min Scan# 2919  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 66.0  | 56.8  | 85.2  |
| 114     | 31.6  | 30.3  | 37.1  |

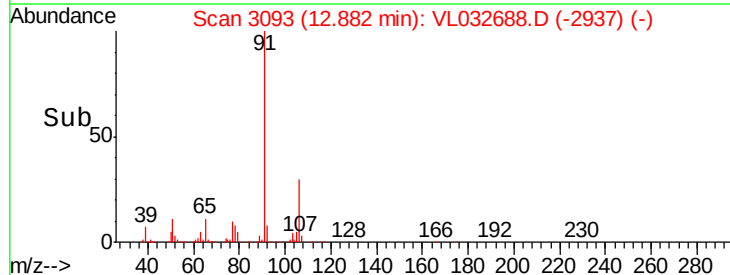
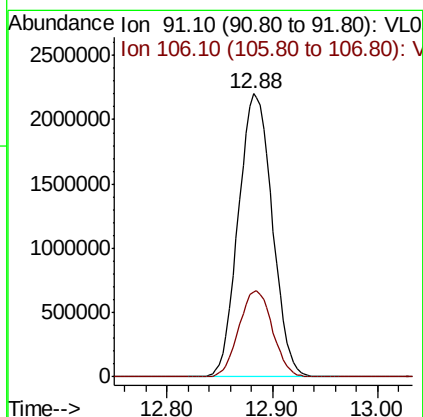
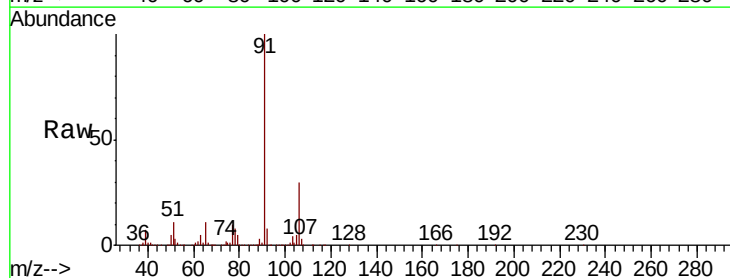
Manual Integrations  
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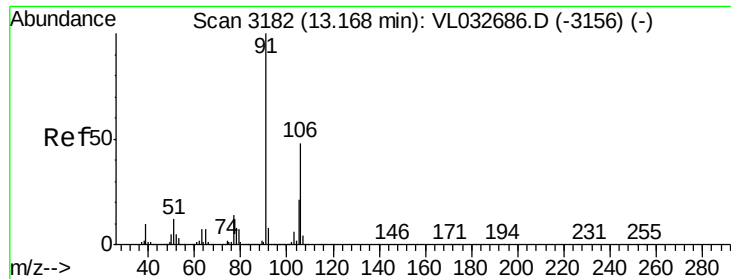
MMDadoda  
10/26/2018 3:39:42 PM



#58  
Ethyl Benzene  
Concen: 10.910 ppbv  
RT: 12.88 min Scan# 3093  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 30.1  | 24.2  | 36.2  |





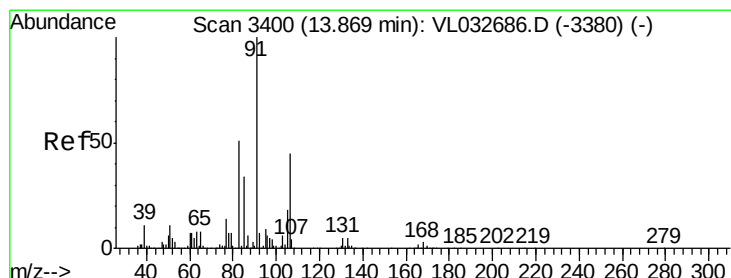
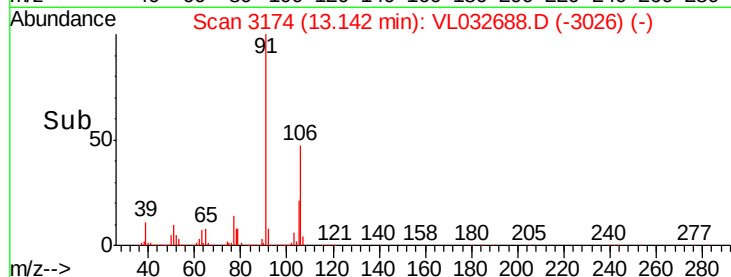
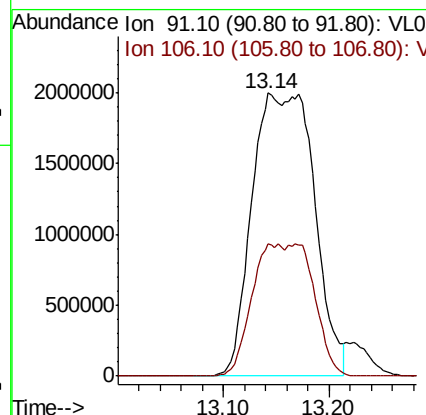
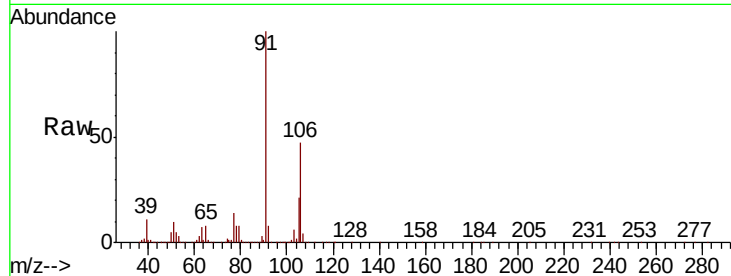
#59  
m/p-Xylene  
Concen: 20.252 ppbv m  
RT: 13.14 min Scan# 3174  
Delta R.T. -0.03 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion: 91 Resp: 8144241  
Ion Ratio Lower Upper  
91 100  
106 46.1 35.9 53.9

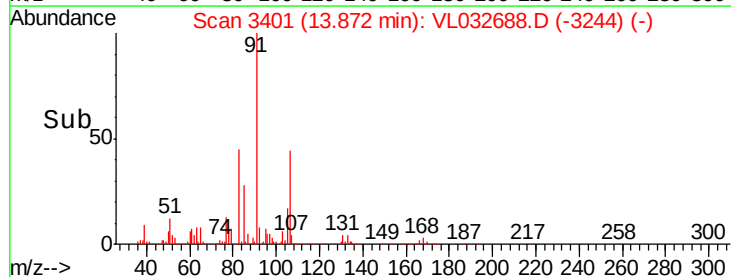
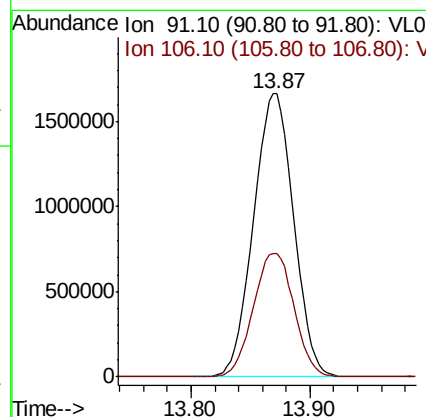
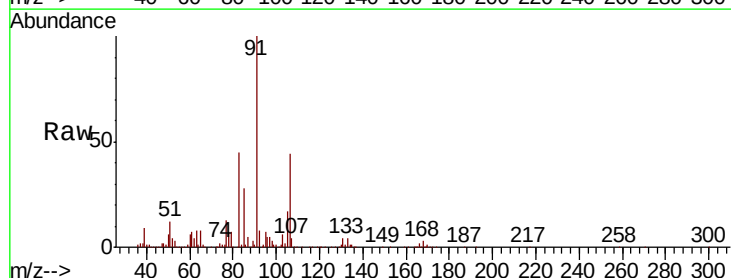
Manual Integrations  
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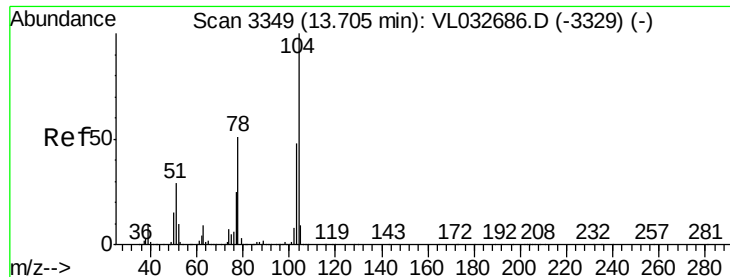
MMDadoda  
10/26/2018 3:39:42 PM



#60  
o-Xylene  
Concen: 9.978 ppbv  
RT: 13.87 min Scan# 3401  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion: 91 Resp: 3870573  
Ion Ratio Lower Upper  
91 100  
106 44.5 22.1 66.1





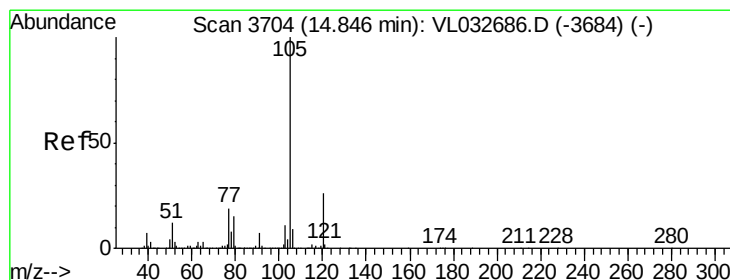
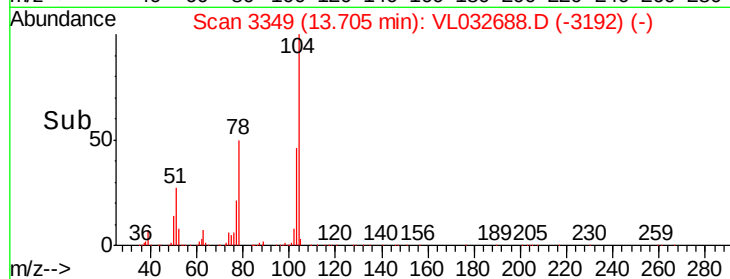
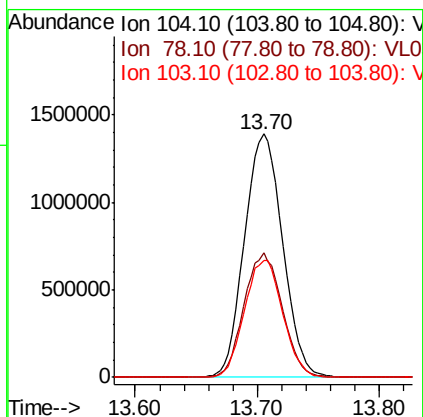
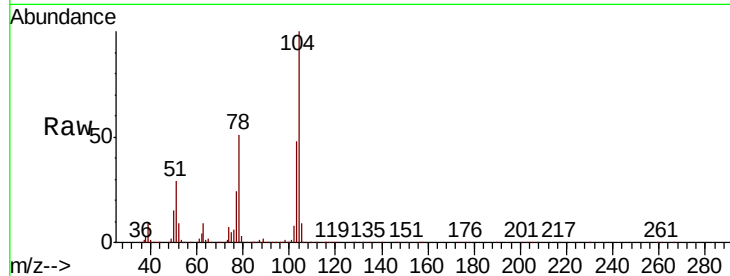
#61  
Styrene  
Concen: 11.535 ppbv  
RT: 13.70 min Scan# 3349  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion:104 Resp: 3000283  
Ion Ratio Lower Upper  
104 100  
78 51.3 42.8 64.2  
103 48.3 37.4 56.0

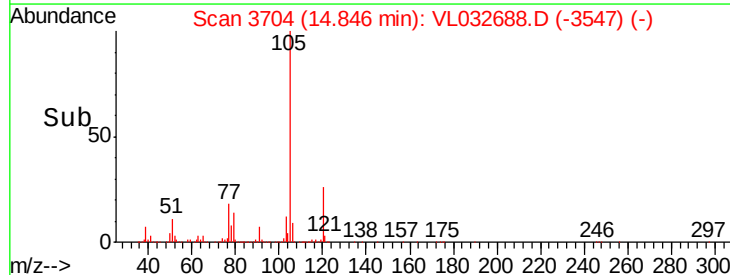
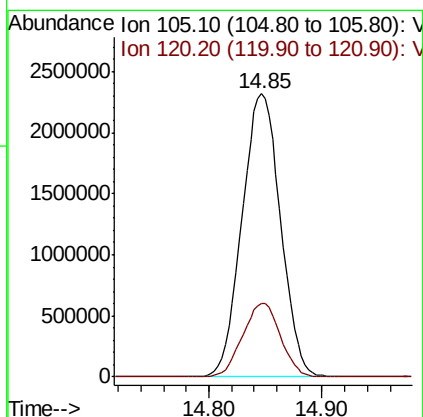
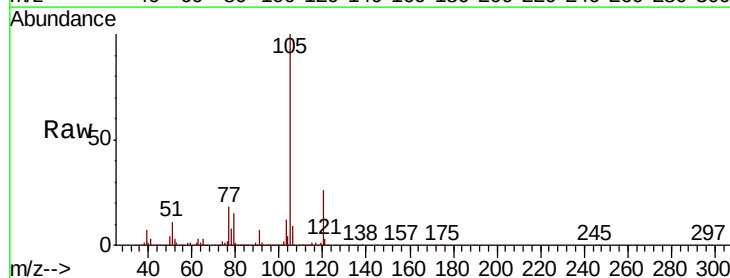
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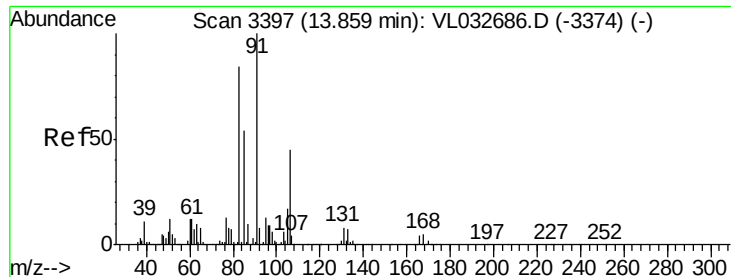
MMDadoda  
10/26/2018 3:39:42 PM



#62  
Isopropylbenzene  
Concen: 9.980 ppbv  
RT: 14.85 min Scan# 3704  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion:105 Resp: 5479315  
Ion Ratio Lower Upper  
105 100  
120 25.6 20.5 30.7





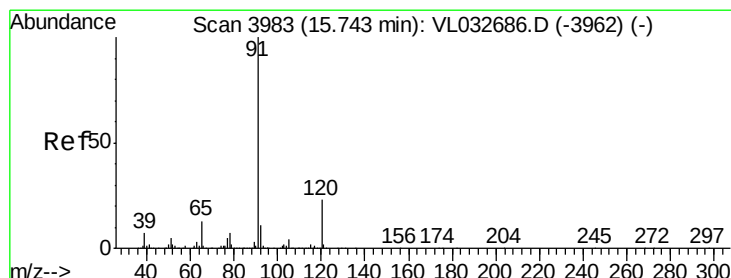
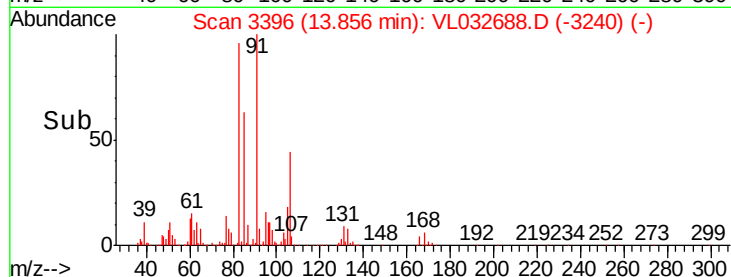
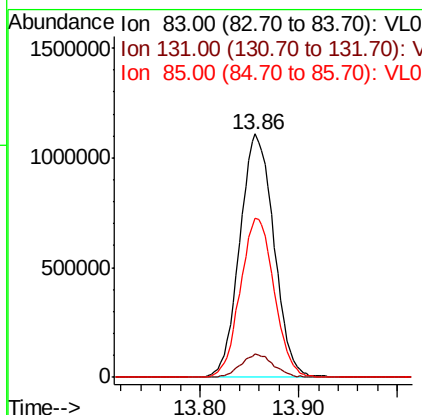
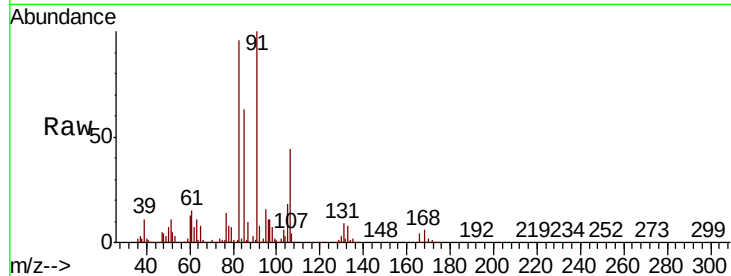
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 8.720 ppbv  
 RT: 13.86 min Scan# 3396  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 131     | 9.2   | 4.3   | 12.9  |
| 85      | 65.0  | 32.3  | 96.9  |

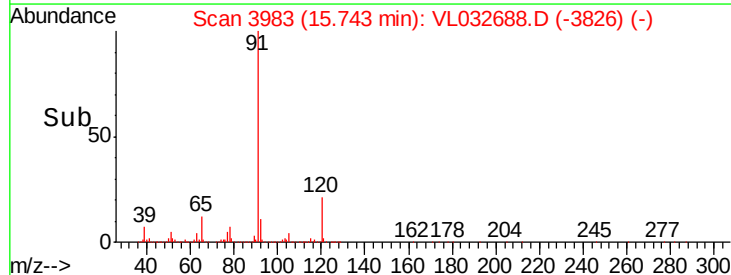
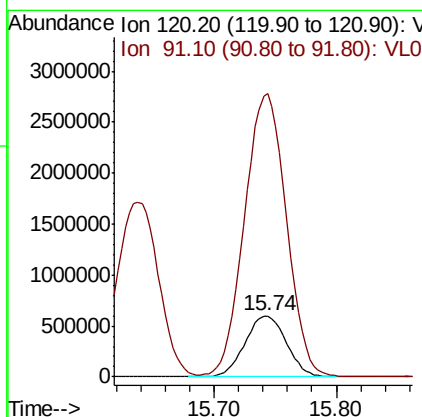
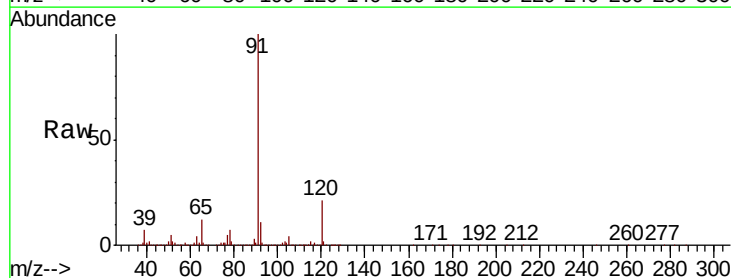
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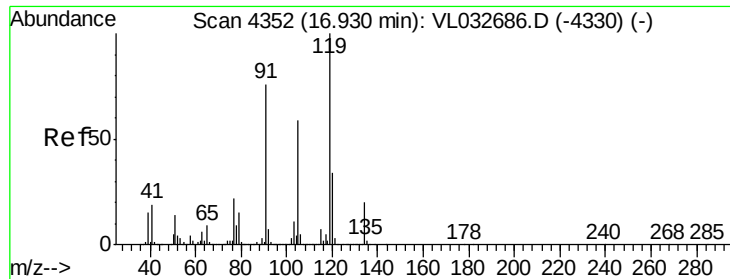
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 10/26/2018 3:39:42 PM



#64  
 n-propylbenzene  
 Concen: 10.267 ppbv  
 RT: 15.74 min Scan# 3983  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 120     | 100   |       |       |
| 91      | 472.0 | 390.2 | 585.2 |





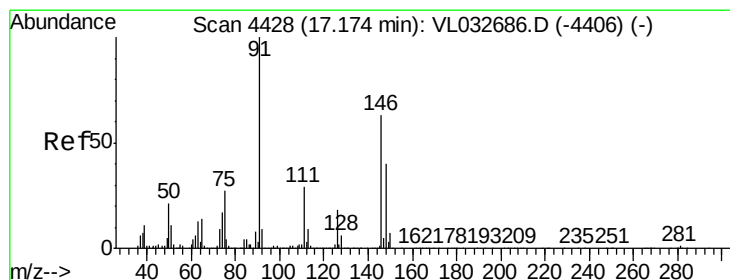
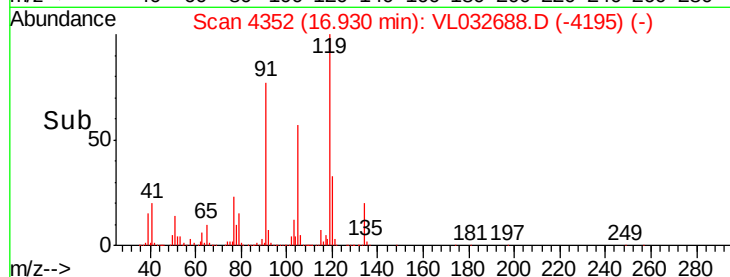
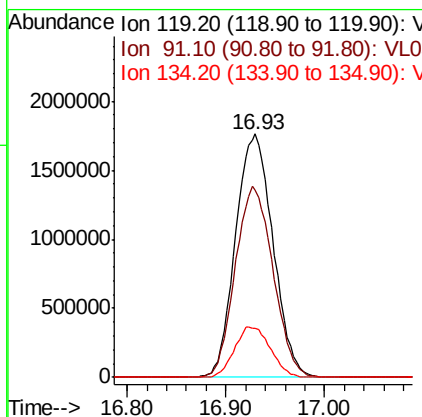
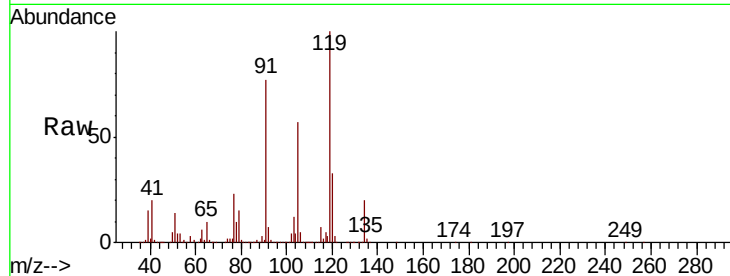
#65  
 tert-Butylbenzene  
 Concen: 9.911 ppbv  
 RT: 16.93 min Scan# 4352  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

Tgt Ion: 119 Resp: 4634078  
 Ion Ratio Lower Upper  
 119 100  
 91 79.4 67.8 101.8  
 134 20.0 15.8 23.8

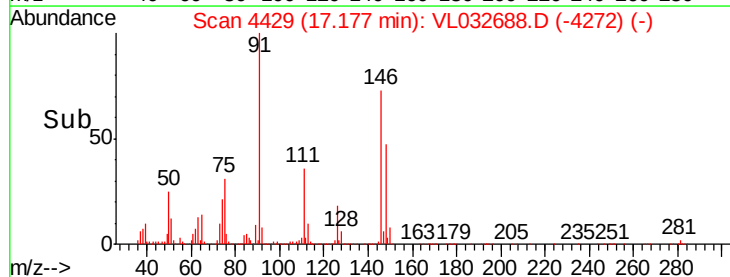
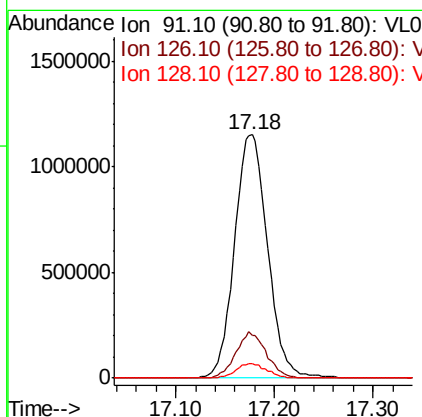
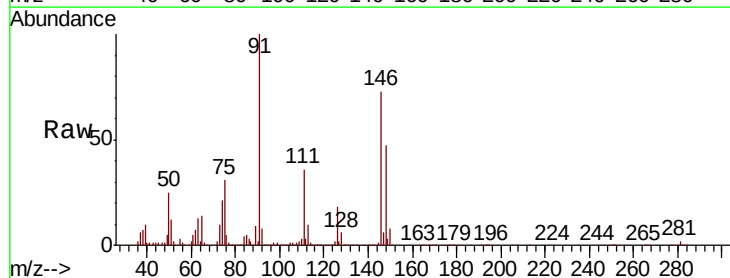
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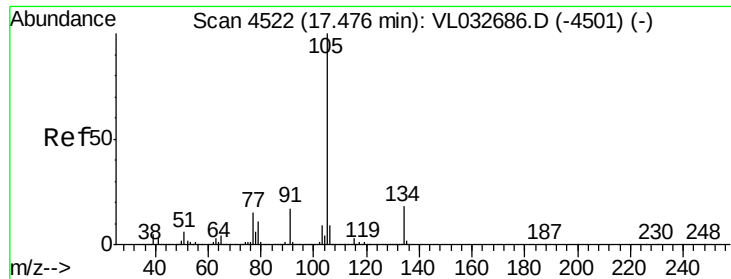
MMDadoda  
 10/26/2018 3:39:42 PM



#66  
 Benzyl Chloride  
 Concen: 11.090 ppbv  
 RT: 17.18 min Scan# 4429  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Tgt Ion: 91 Resp: 2677409  
 Ion Ratio Lower Upper  
 91 100  
 126 17.7 13.9 20.9  
 128 5.8 4.3 6.5





#67

sec-Butylbenzene

Concen: 9.717 ppbv

RT: 17.48 min Scan# 4522

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion: 105 Resp: 6462053

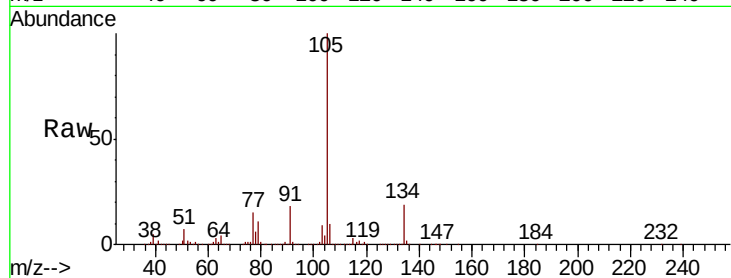
Ion Ratio Lower Upper

105 100

134 18.3 14.2 21.2

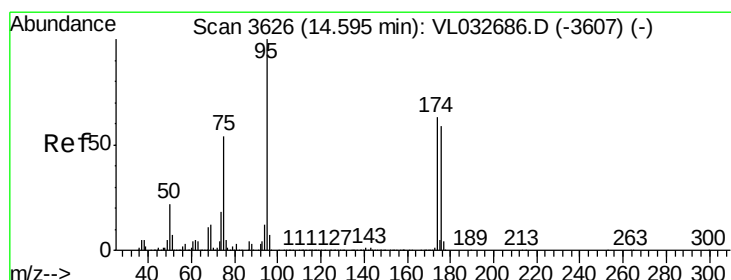
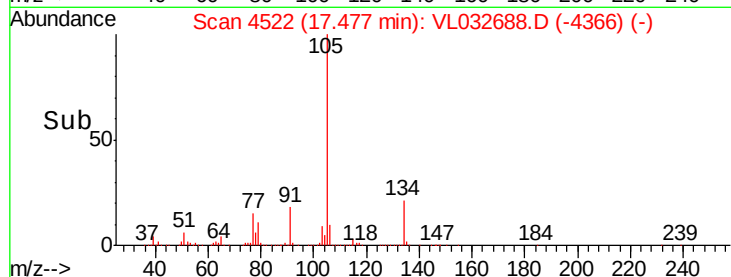
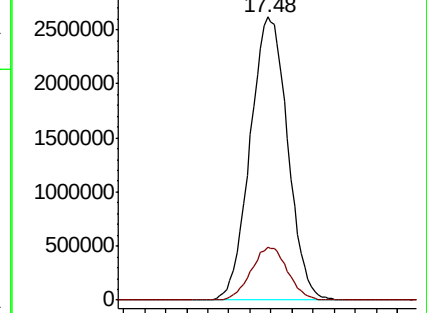
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.891 ppbv

RT: 14.60 min Scan# 3627

Delta R.T. 0.01 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

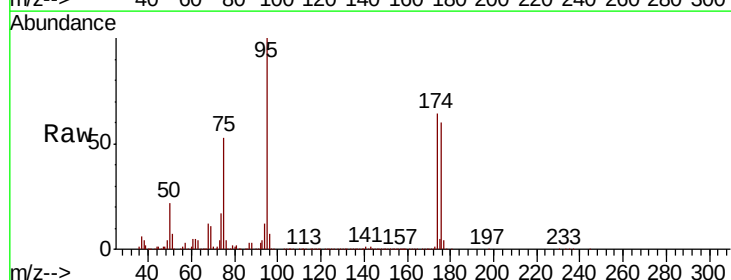
Tgt Ion: 95 Resp: 2862827

Ion Ratio Lower Upper

95 100

174 63.0 46.0 69.0

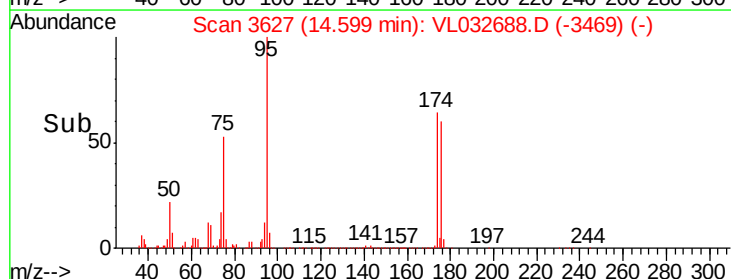
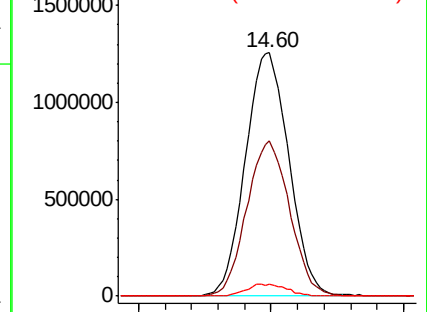
175 4.8 3.4 5.0

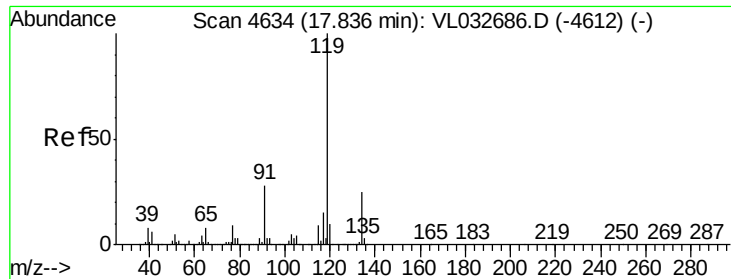


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





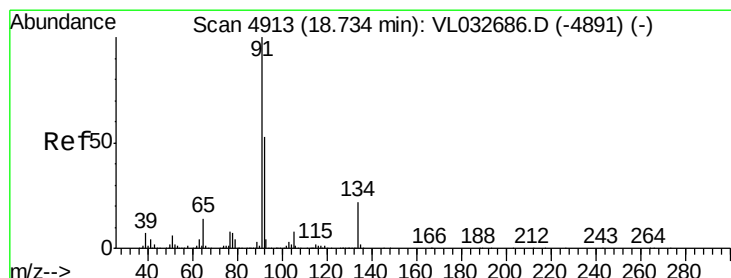
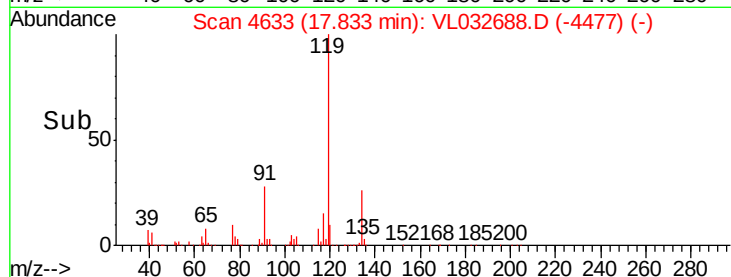
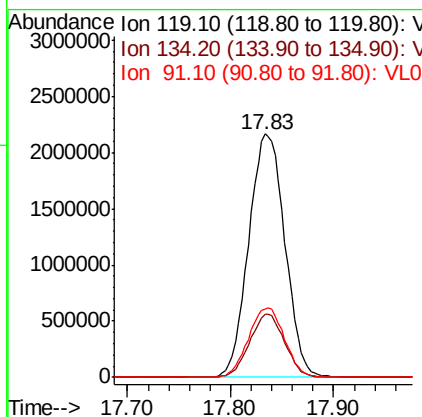
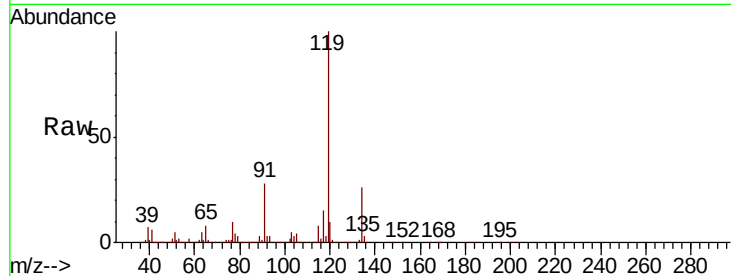
#69  
 p-Isopropyltoluene  
 Concen: 9.985 ppbv  
 RT: 17.83 min Scan# 4633  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 25.2  | 20.2  | 30.2  |
| 91      | 28.6  | 24.0  | 36.0  |

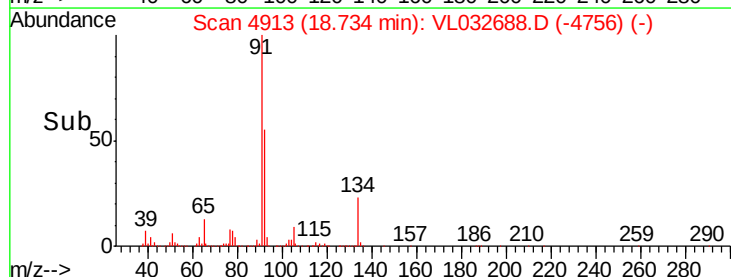
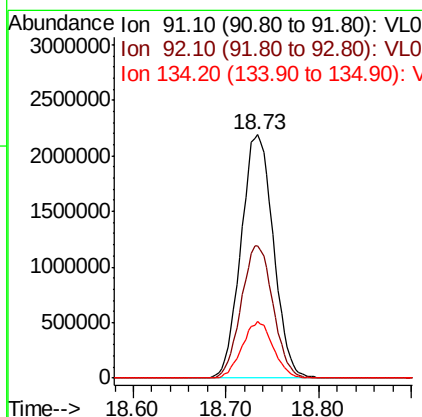
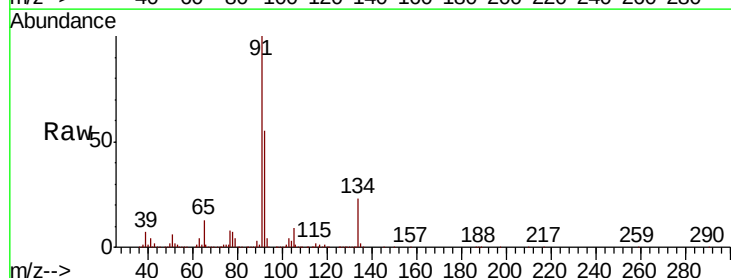
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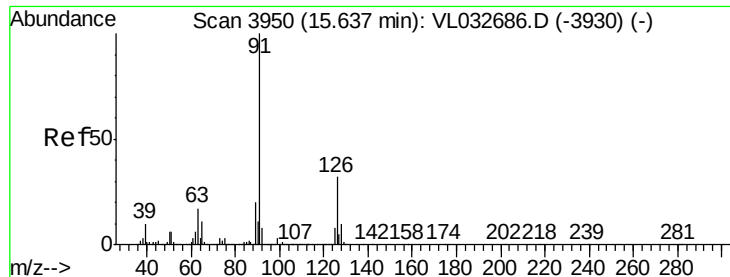
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 10/26/2018 3:39:42 PM



#70  
 n-Butylbenzene  
 Concen: 9.768 ppbv  
 RT: 18.73 min Scan# 4913  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 53.6  | 43.0  | 64.4  |
| 134     | 22.3  | 17.0  | 25.6  |





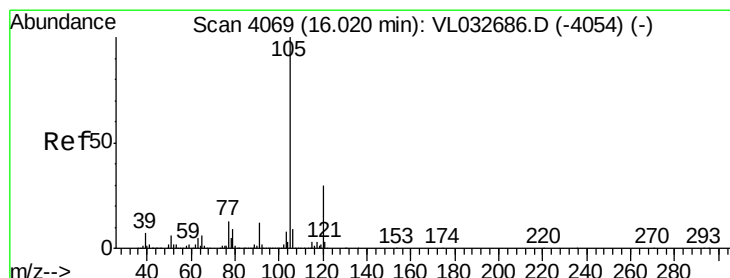
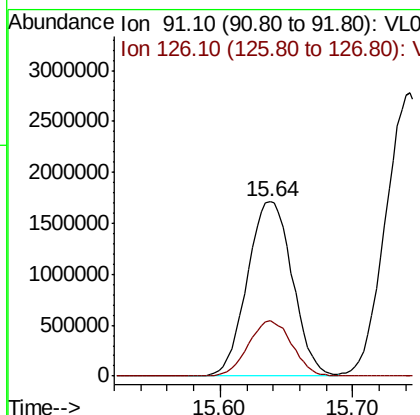
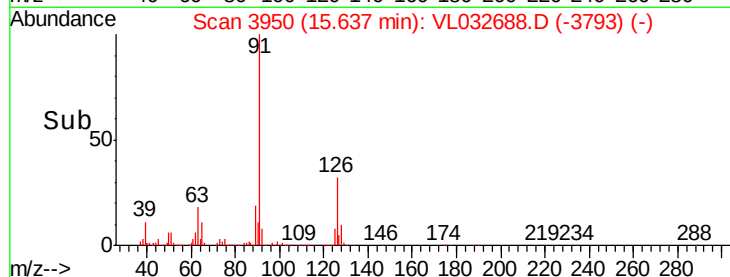
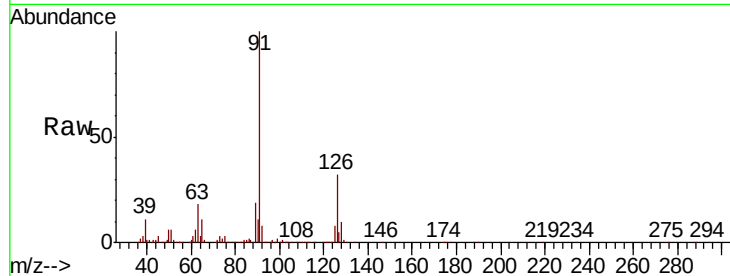
#71  
 2-Chlorotoluene  
 Concen: 10.381 ppbv  
 RT: 15.64 min Scan# 3950  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

Tgt Ion: 91 Resp: 4050642  
 Ion Ratio Lower Upper  
 91 100  
 126 30.9 11.8 47.4

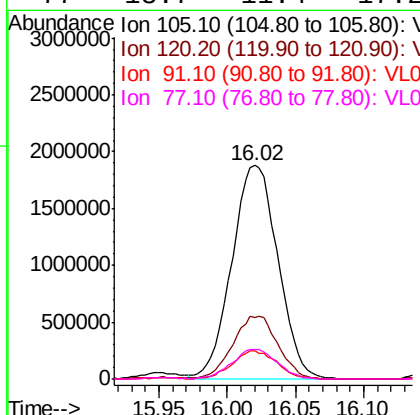
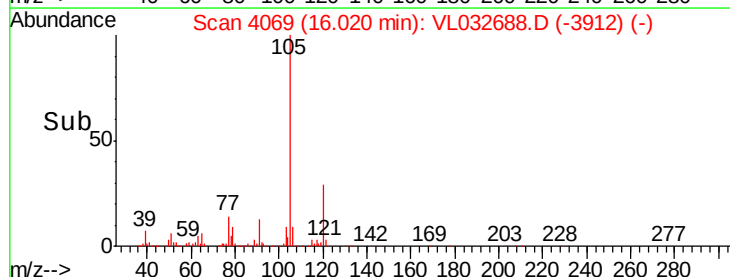
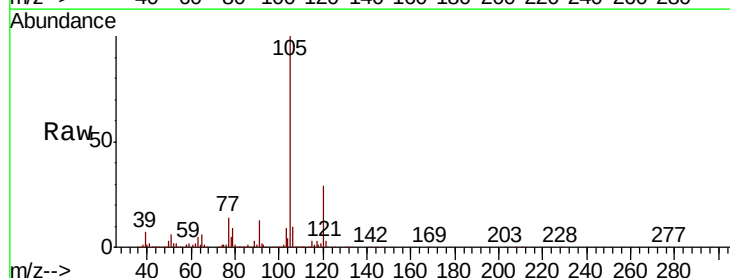
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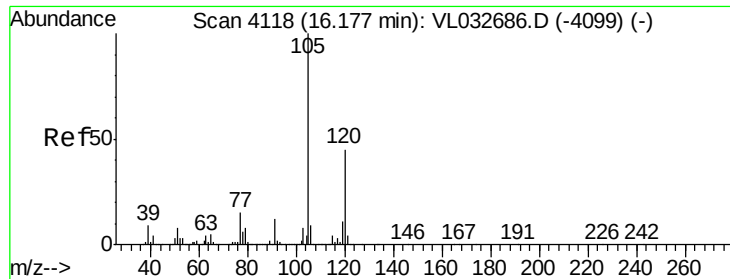


#72  
 4-Ethyltoluene  
 Concen: 10.639 ppbv  
 RT: 16.02 min Scan# 4069  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Tgt Ion: 105 Resp: 4395810  
 Ion Ratio Lower Upper  
 105 100  
 120 28.9 23.7 35.5  
 91 12.8 10.4 15.6  
 77 13.7 11.4 17.2







#73

1,3,5-Trimethylbenzene

Concen: 10.251 ppbv

RT: 16.18 min Scan# 4118

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion:105 Resp: 4125322

Ion Ratio Lower Upper

105 100

120 46.5

35.4

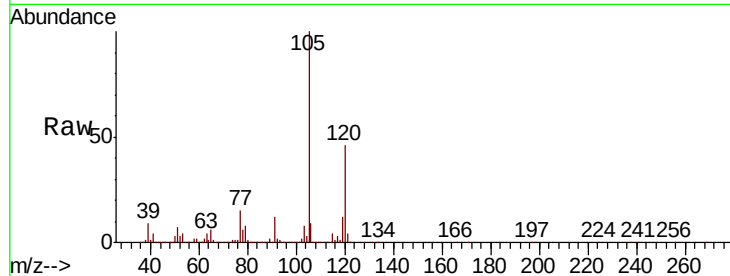
53.2

Manual Integrations

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

2000000

1500000

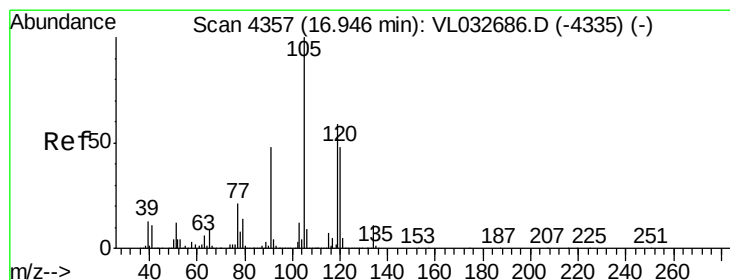
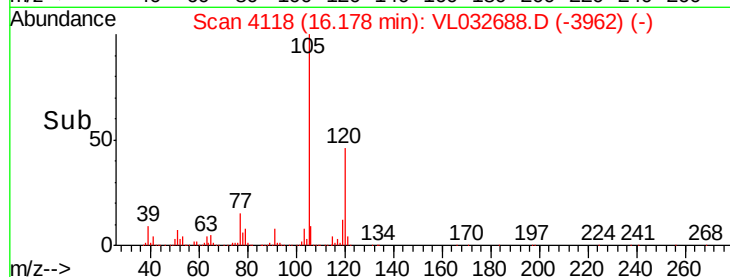
1000000

500000

0

16.10 16.20

Time-->



#74

1,2,4-Trimethylbenzene

Concen: 9.746 ppbv

RT: 16.95 min Scan# 4357

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Tgt Ion:105 Resp: 4188457

Ion Ratio Lower Upper

105 100

120 47.2

35.8

53.8

91 47.5

33.2

49.8

77 21.0

16.2

24.4

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

2500000

2000000

1500000

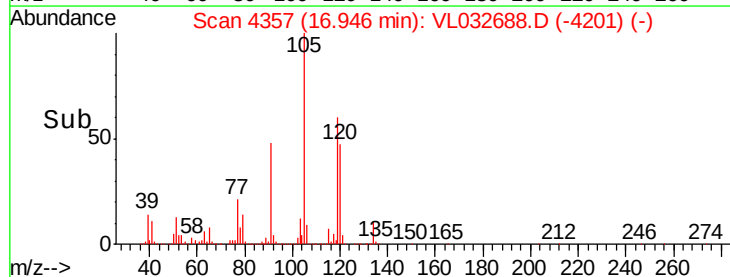
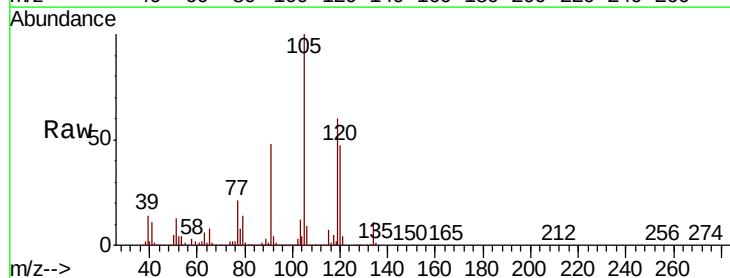
1000000

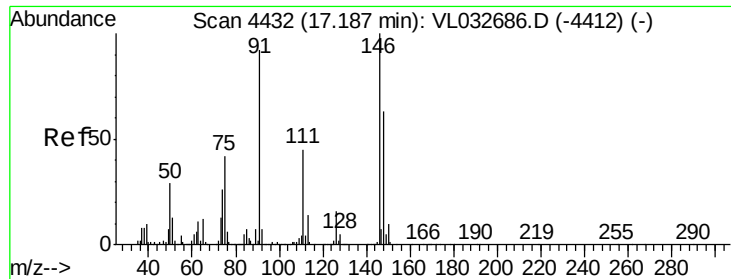
500000

0

16.90 17.00

Time-->





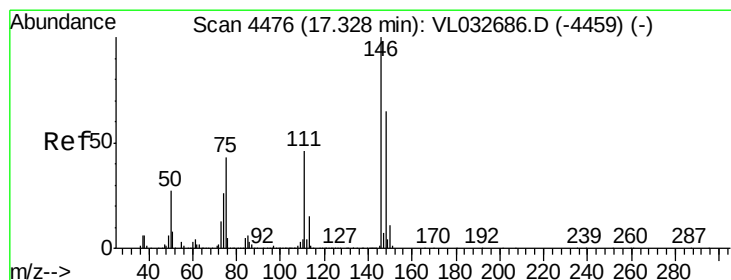
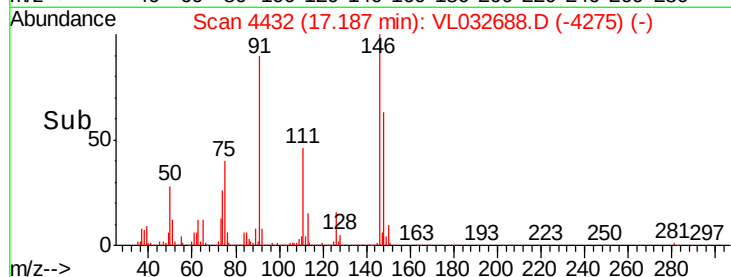
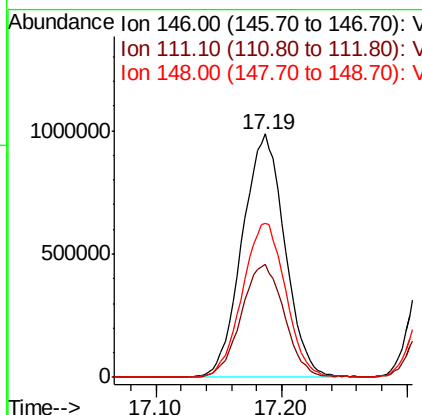
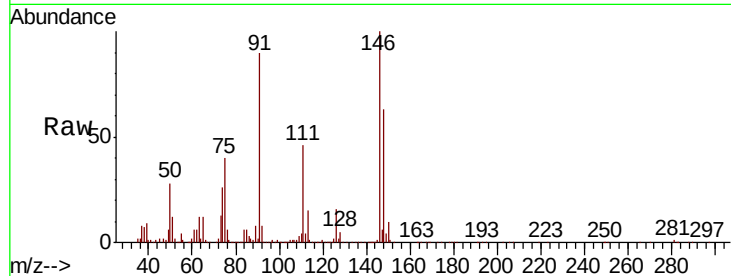
#75  
 1,3-Dichlorobenzene  
 Concen: 9.397 ppbv  
 RT: 17.19 min Scan# 4432  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 47.2  | 24.4  | 73.2  |
| 148     | 64.6  | 31.9  | 95.9  |

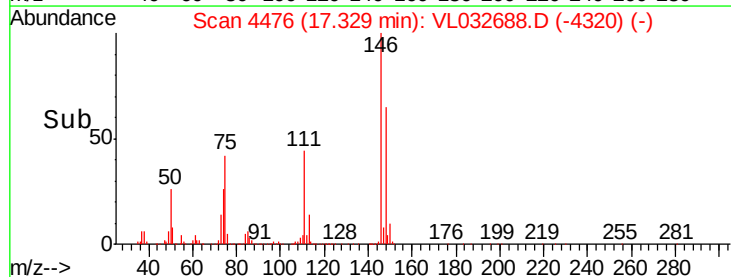
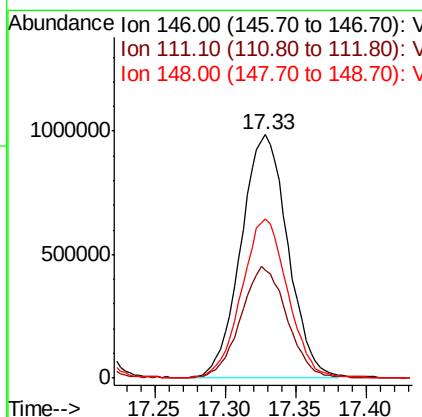
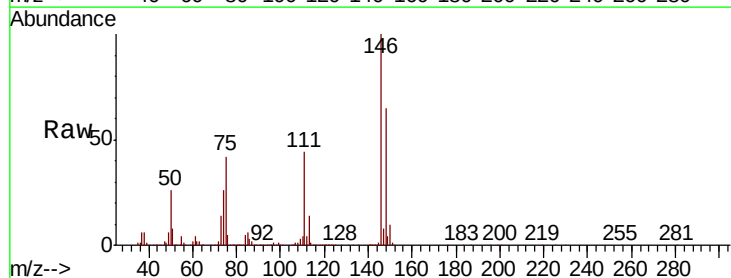
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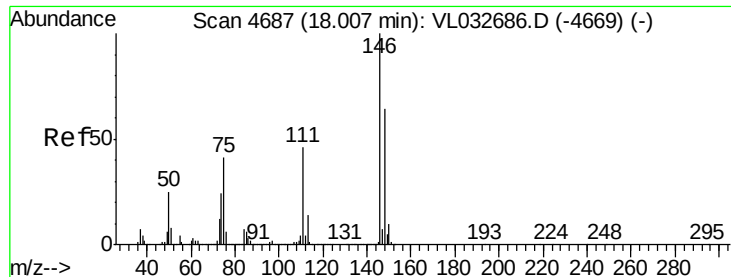
MMDadoda  
 10/26/2018 3:39:42 PM



#76  
 1,4-Dichlorobenzene  
 Concen: 9.938 ppbv  
 RT: 17.33 min Scan# 4476  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 45.9  | 23.7  | 71.1  |
| 148     | 65.3  | 32.1  | 96.3  |





#77

1,2-Dichlorobenzene

Concen: 9.322 ppbv

RT: 18.01 min Scan# 4687

Delta R.T. 0.00 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

Instrument :

MSVOA\_L

ClientSampleId :

VL1024ABS01

Tgt Ion:146 Resp: 2182509

Ion Ratio Lower Upper

146 100

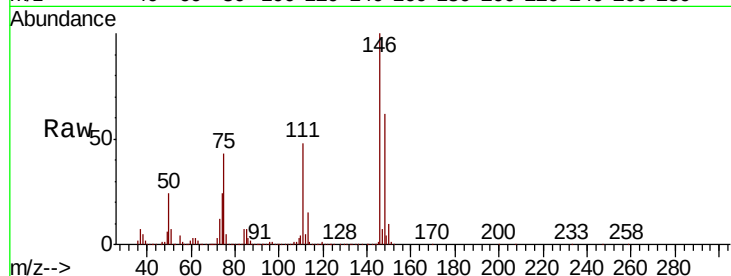
111 48.5 25.3 75.8

148 64.5 31.9 95.9

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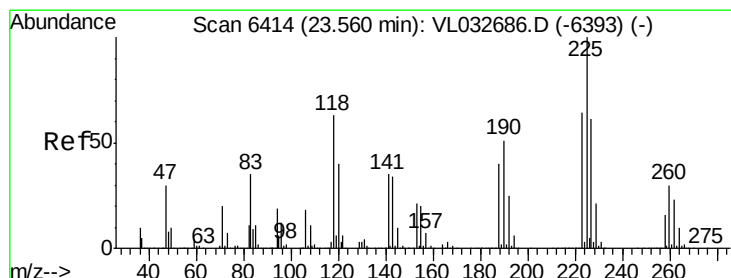
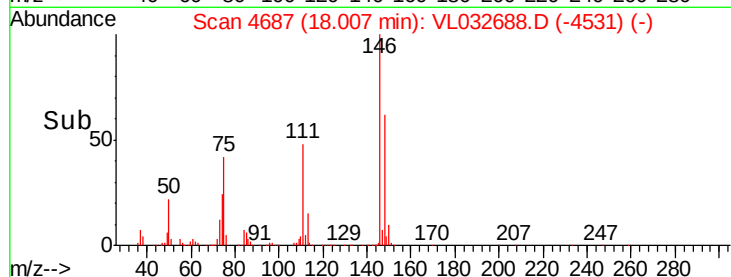
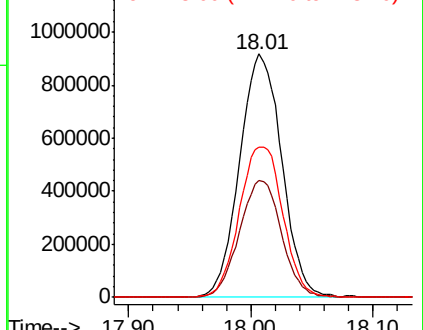


Abundance

Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 10.818 ppbv

RT: 23.56 min Scan# 6414

Delta R.T. 0.01 min

Lab File: VL032688.D

Acq: 24 Oct 2018 15:31

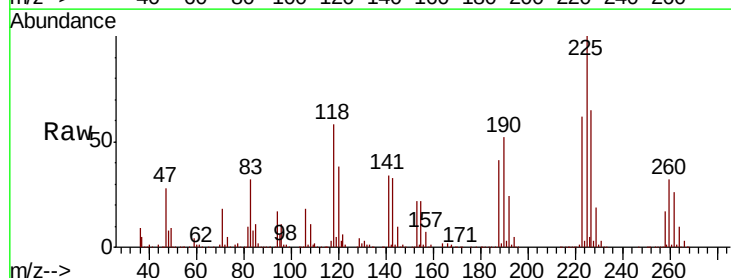
Tgt Ion:225 Resp: 1196789

Ion Ratio Lower Upper

225 100

223 63.6 50.7 76.1

227 63.2 50.7 76.1

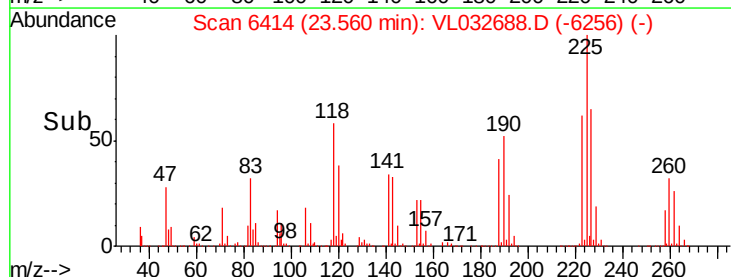
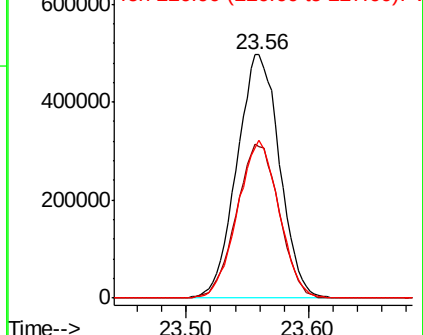


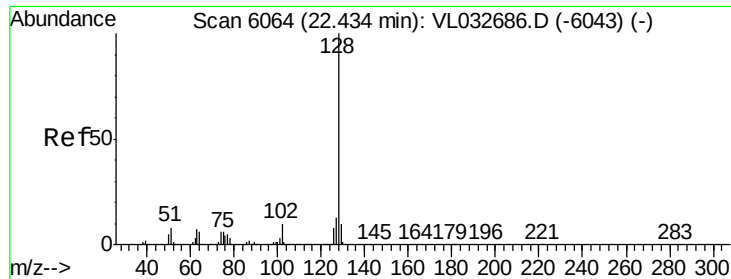
Abundance

Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V





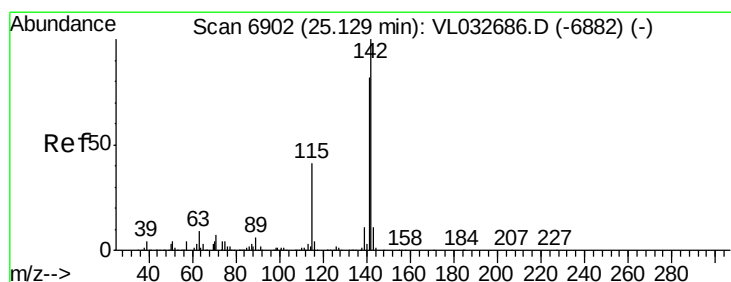
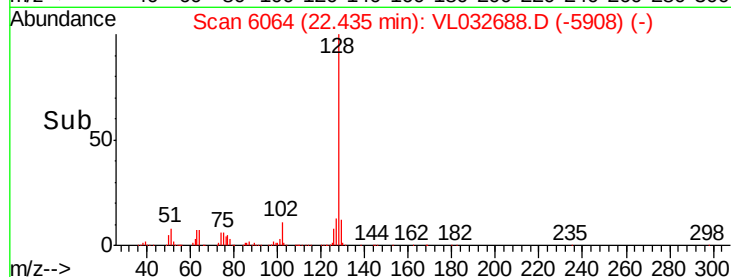
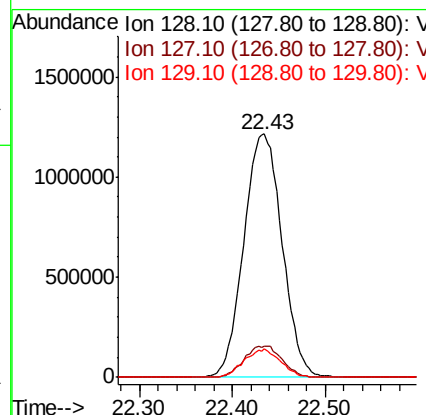
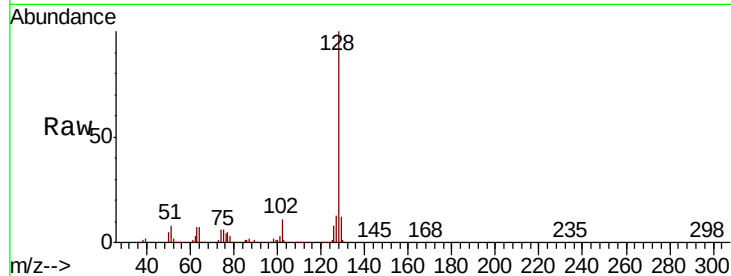
#79  
Naphthalene  
Concen: 13.029 ppbv  
RT: 22.43 min Scan# 6064  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1024ABS01

Tgt Ion:128 Resp: 3480289  
Ion Ratio Lower Upper  
128 100  
127 12.8 10.3 15.5  
129 11.6 8.6 13.0

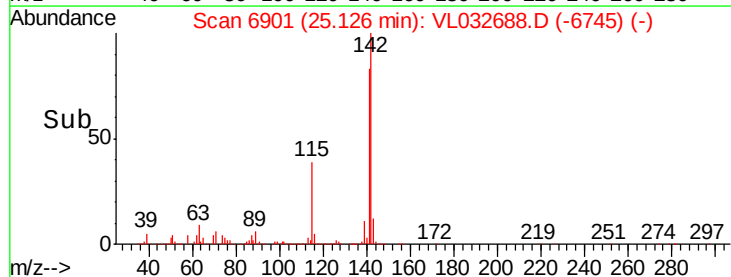
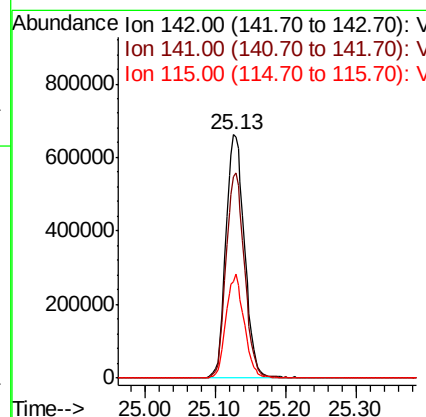
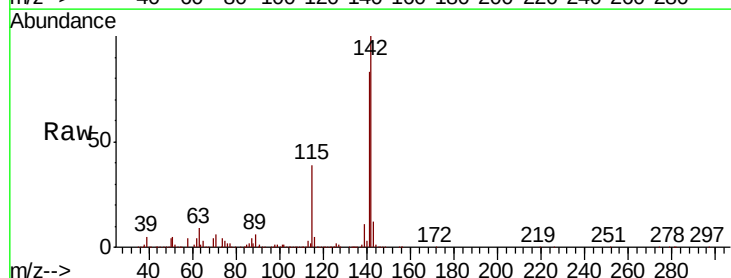
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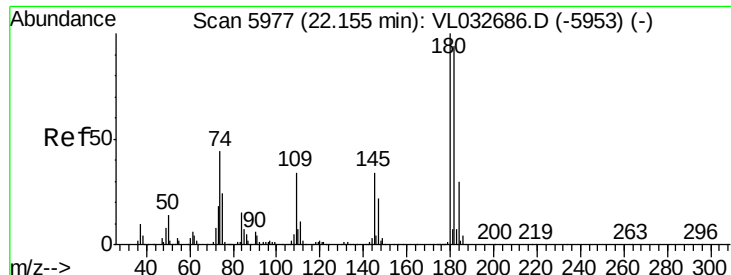
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#80  
Naphthalene, 2-methyl-  
Concen: 18.894 ppbv  
RT: 25.13 min Scan# 6901  
Delta R.T. 0.00 min  
Lab File: VL032688.D  
Acq: 24 Oct 2018 15:31

Tgt Ion:142 Resp: 1227277  
Ion Ratio Lower Upper  
142 100  
141 83.3 67.5 101.3  
115 41.6 33.5 50.3





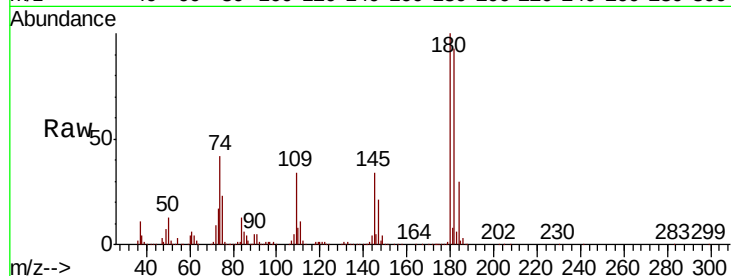
#81  
 1,2,4-Trichlorobenzene  
 Concen: 11.910 ppbv  
 RT: 22.15 min Scan# 5977  
 Delta R.T. 0.00 min  
 Lab File: VL032688.D  
 Acq: 24 Oct 2018 15:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1024ABS01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.3  | 76.5  | 114.7 |
| 184     | 30.0  | 24.7  | 37.1  |

Manual Integrations  
 APPROVED

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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

