

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL102015\  
 Data File : VL026206.D  
 Acq On : 20 Oct 2015 9:29  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA L  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

MMDadoda  
 10/22/2015 4:30:44 PM

Quant Time: Oct 20 12:43:08 2015  
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL102015AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Oct 20 12:43:08 2015  
 QLast Update : Tue Oct 20 12:22:24 2015  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 6.63  | 49   | 560942   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 8.31  | 114  | 1792345  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 13.72 | 117  | 2158370m | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 16.26  | 95    | 1653304  | 9.98     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.80% |

| Target Compounds               |      |     |         |       |      | Ovalue |
|--------------------------------|------|-----|---------|-------|------|--------|
| 2) Dichlorodifluoromethane     | 3.62 | 85  | 1142782 | 10.87 | ppbv | 100    |
| 3) Chlorodifluoromethane       | 3.55 | 51  | 648896  | 9.90  | ppbv | 100    |
| 4) Chloromethane               | 3.73 | 50  | 363325  | 9.83  | ppbv | 100    |
| 5) Vinyl Chloride              | 3.87 | 62  | 393961  | 10.58 | ppbv | 100    |
| 6) Bromomethane                | 4.12 | 94  | 288758  | 10.77 | ppbv | 100    |
| 7) Chloroethane                | 4.22 | 64  | 171556  | 10.61 | ppbv | 100    |
| 8) Dichlorotetrafluoroethane   | 3.79 | 85  | 965690  | 10.52 | ppbv | 100    |
| 9) Propene                     | 3.58 | 41  | 306228  | 10.18 | ppbv | 100    |
| 10) Heptane                    | 9.33 | 43  | 1096376 | 10.49 | ppbv | 100    |
| 11) Trichlorofluoromethane     | 4.67 | 101 | 1124973 | 10.90 | ppbv | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 5.28 | 101 | 780770  | 11.17 | ppbv | 100    |
| 13) Ethanol                    | 4.31 | 45  | 49016   | 11.08 | ppbv | 100    |
| 14) Bromoethene                | 4.43 | 108 | 330975  | 11.49 | ppbv | 100    |
| 15) Acetone                    | 4.58 | 43  | 730874  | 10.08 | ppbv | 100    |
| 16) 1,3-Butadiene              | 3.95 | 39  | 353669  | 10.55 | ppbv | 100    |
| 17) tert-Butyl alcohol         | 5.10 | 59  | 621213  | 14.22 | ppbv | 100    |
| 18) 1,1-Dichloroethene         | 5.06 | 96  | 367139  | 11.60 | ppbv | 100    |
| 19) Isopropyl Alcohol          | 4.73 | 45  | 360990  | 12.78 | ppbv | 100    |
| 20) Methylene Chloride         | 5.13 | 84  | 331191  | 10.73 | ppbv | 100    |
| 21) Allyl Chloride             | 5.20 | 41  | 560814  | 11.85 | ppbv | 100    |
| 22) trans-1,2-Dichloroethene   | 5.74 | 96  | 451607  | 11.14 | ppbv | 100    |
| 23) Vinyl Acetate              | 5.96 | 43  | 1600654 | 12.47 | ppbv | 100    |
| 24) 1,1-Dichloroethane         | 5.89 | 63  | 926191  | 10.59 | ppbv | 100    |
| 25) Ethyl Acetate              | 6.65 | 43  | 1490213 | 10.63 | ppbv | 100    |
| 26) Hexane                     | 6.63 | 57  | 767980  | 11.31 | ppbv | 100    |
| 27) Carbon Disulfide           | 5.37 | 76  | 1036084 | 12.74 | ppbv | 100    |
| 28) Methyl tert-Butyl Ether    | 5.93 | 73  | 1372708 | 12.54 | ppbv | 100    |
| 29) Chloroform                 | 6.73 | 83  | 1091435 | 10.84 | ppbv | 100    |
| 30) Cyclohexane                | 8.26 | 84  | 763775  | 11.81 | ppbv | 100    |
| 31) cis-1,2-Dichloroethene     | 6.49 | 61  | 686871  | 11.09 | ppbv | 100    |
| 32) 1,1,1-Trichloroethane      | 7.57 | 97  | 1181477 | 12.29 | ppbv | 100    |
| 34) 2-Butanone                 | 6.18 | 43  | 926713  | 9.29  | ppbv | 100    |
| 35) Carbon Tetrachloride       | 8.13 | 117 | 1229167 | 10.82 | ppbv | 100    |
| 36) Benzene                    | 7.99 | 78  | 1692404 | 9.87  | ppbv | 100    |
| 37) 1,2-Dichloroethane         | 7.35 | 62  | 883023  | 9.62  | ppbv | 100    |
| 38) Trichloroethene            | 9.04 | 130 | 701204  | 8.91  | ppbv | 100    |
| 39) 1,2-Dichloropropane        | 8.80 | 63  | 591733  | 9.29  | ppbv | 100    |
| 40) 1,4-Dioxane                | 9.09 | 88  | 149934  | 14.30 | ppbv | 100    |
| 41) Tetrahydrofuran            | 7.09 | 42  | 549833  | 9.79  | ppbv | 100    |
| 42) Bromodichloromethane       | 9.00 | 83  | 1275829 | 10.56 | ppbv | 100    |
| 43) Methyl Methacrylate        | 9.24 | 69  | 639815  | 10.60 | ppbv | 99     |

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Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

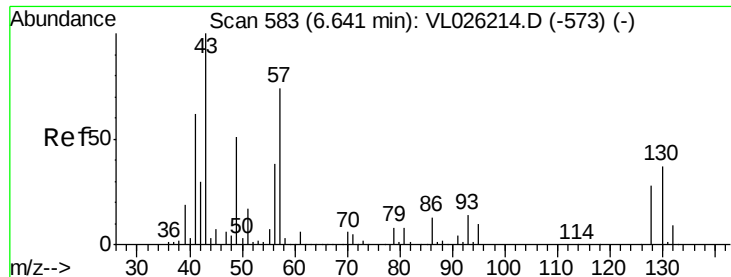
MMDadoda  
 10/22/2015 4:30:44 PM

Quant Time: Oct 20 12:43:08 2015  
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL102015AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Oct 20 2015  
 QLast Update : Tue Oct 20 12:22:24 2015  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 9.06  | 57   | 2622256  | 9.20  | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 10.62 | 75   | 1014981  | 12.21 | ppbv   | 100      |
| 46) cis-1,3-Dichloropropene   | 9.99  | 75   | 1166487  | 11.43 | ppbv   | 100      |
| 47) 1,1,2-Trichloroethane     | 10.85 | 97   | 748269   | 9.80  | ppbv   | 100      |
| 48) Dibromochloromethane      | 11.77 | 129  | 1243454  | 11.48 | ppbv   | 100      |
| 49) Bromoform                 | 14.79 | 173  | 1063040  | 13.04 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 10.06 | 43   | 1311444  | 9.94  | ppbv   | 100      |
| 51) 2-Hexanone                | 11.59 | 43   | 1213898  | 10.23 | ppbv # | 100      |
| 52) Tetrachloroethene         | 12.76 | 164  | 758445   | 8.96  | ppbv   | 100      |
| 53) Toluene                   | 11.21 | 91   | 2244148  | 10.16 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 12.12 | 107  | 1152556  | 10.07 | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 13.76 | 131  | 887583   | 10.26 | ppbv   | 100      |
| 57) Chlorobenzene             | 13.79 | 112  | 1846109  | 9.48  | ppbv   | 100      |
| 58) Ethyl Benzene             | 14.38 | 91   | 3181596  | 10.15 | ppbv   | 100      |
| 59) m/p-Xylene                | 14.69 | 91   | 4935536m | 19.62 | ppbv   |          |
| 60) o-Xylene                  | 15.46 | 91   | 2516913  | 9.55  | ppbv   | 100      |
| 61) Styrene                   | 15.28 | 104  | 1268574  | 11.76 | ppbv   | 100      |
| 62) Isopropylbenzene          | 16.52 | 105  | 3591367  | 10.33 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 15.46 | 83   | 1612024  | 8.23  | ppbv   | 100      |
| 64) n-propylbenzene           | 17.49 | 120  | 997099   | 10.66 | ppbv   | 96       |
| 65) tert-Butylbenzene         | 18.78 | 119  | 3156804  | 10.30 | ppbv   | 100      |
| 66) Benzyl Chloride           | 19.07 | 91   | 1461441  | 16.04 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 19.38 | 105  | 4492280  | 10.51 | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 19.76 | 119  | 3766701  | 11.01 | ppbv   | 100      |
| 70) n-Butylbenzene            | 20.73 | 91   | 3459112  | 10.55 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 17.40 | 91   | 2680469  | 10.56 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 17.79 | 105  | 3074428  | 10.93 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 17.96 | 105  | 2867785  | 10.85 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 18.80 | 105  | 2808761  | 10.13 | ppbv   | 100      |
| 75) 1,3-Dichlorobenzene       | 19.09 | 146  | 1871636  | 10.55 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 19.24 | 146  | 1974978  | 11.04 | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 20.00 | 146  | 1892788  | 10.92 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 24.64 | 225  | 366855   | 5.27  | ppbv   | 100      |
| 79) Naphthalene               | 23.90 | 128  | 1107650  | 6.37  | ppbv   | 100      |
| 80) Naphthalene, 2-methyl-    | 26.01 | 142  | 852151   | 21.81 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 23.70 | 180  | 561938   | 6.52  | ppbv   | 100      |

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





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.63 min Scan# 581

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 49 Resp: 560942

Ion Ratio Lower Upper

49 100

128 56.2 28.1 84.3

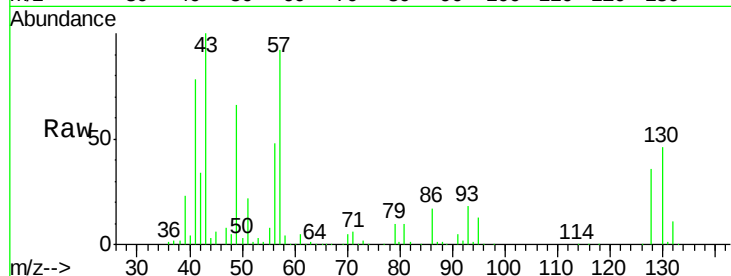
130 72.4 36.2 108.6

Manual Integrations

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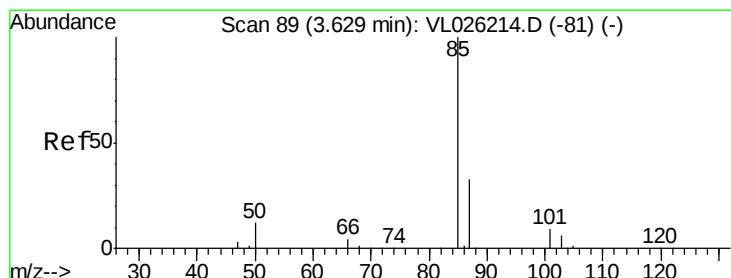
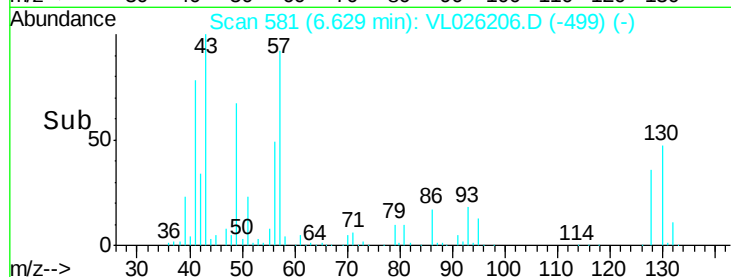
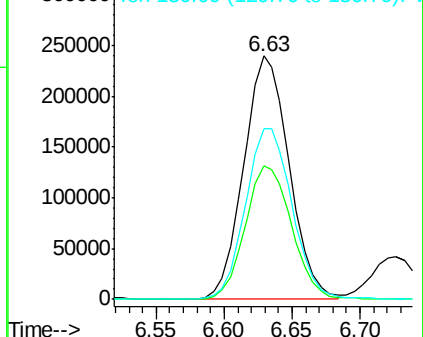
10/22/2015 4:30:44 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 10.87 ppbv

RT: 3.62 min Scan# 88

Delta R.T. 0.00 min

Lab File: VL026206.D

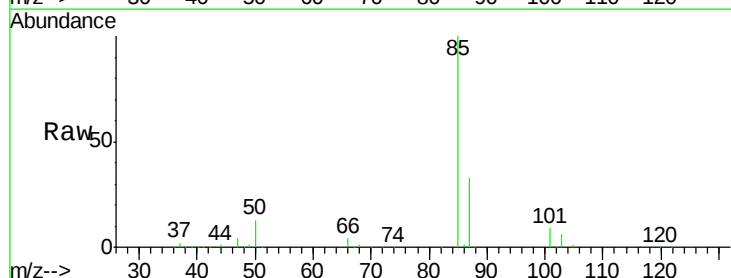
Acq: 20 Oct 2015 9:29

Tgt Ion: 85 Resp: 1142782

Ion Ratio Lower Upper

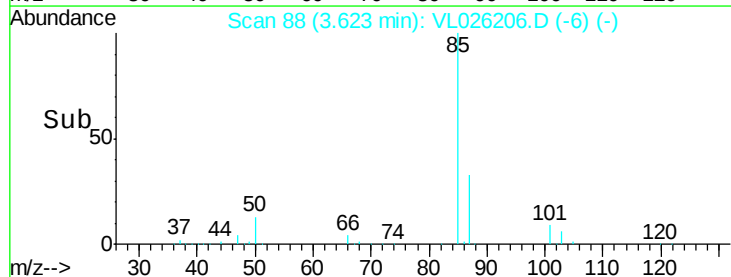
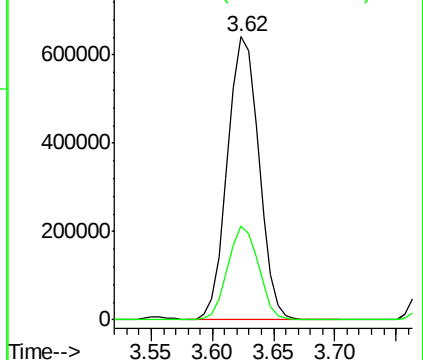
85 100

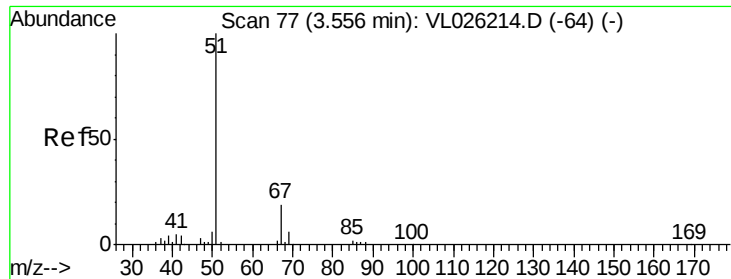
87 33.1 26.5 39.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 9.90 ppbv

RT: 3.55 min Scan# 76

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 51 Resp: 648896

Ion Ratio Lower Upper

51 100

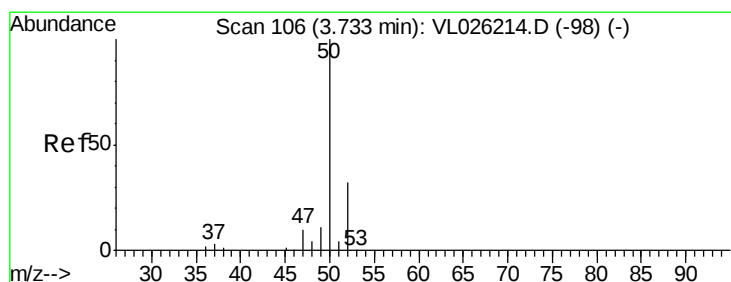
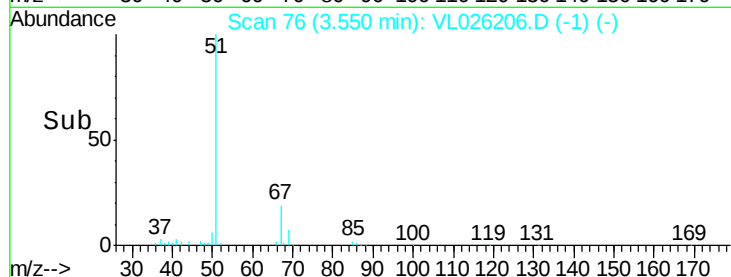
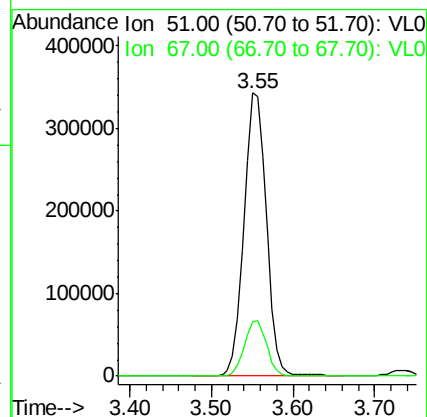
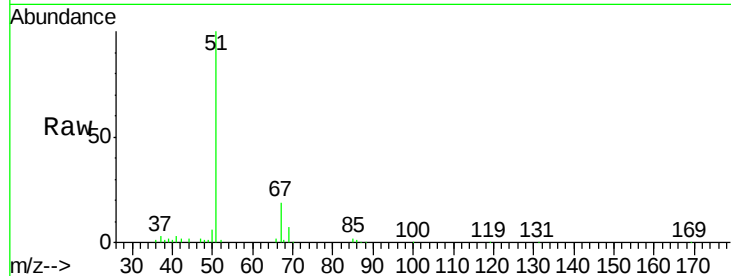
67 19.5 15.6 23.4

Manual Integrations

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#4

Chloromethane

Concen: 9.83 ppbv

RT: 3.73 min Scan# 106

Delta R.T. 0.00 min

Lab File: VL026206.D

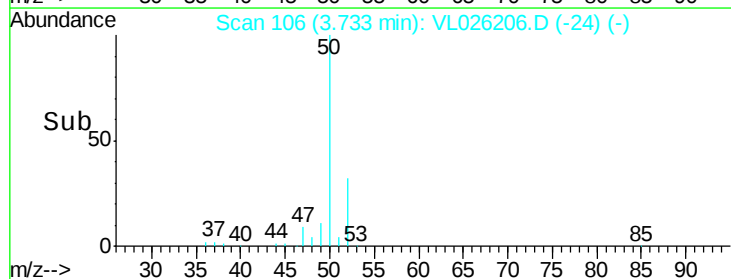
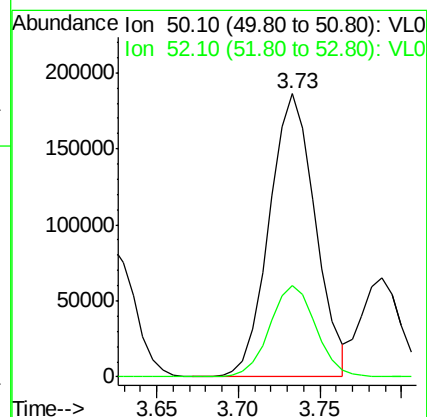
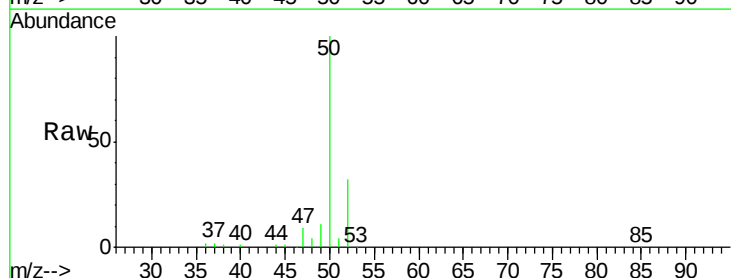
Acq: 20 Oct 2015 9:29

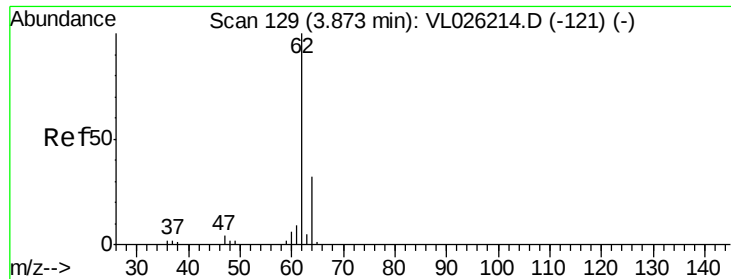
Tgt Ion: 50 Resp: 363325

Ion Ratio Lower Upper

50 100

52 32.2 25.8 38.6





#5

Vinyl Chloride

Concen: 10.58 ppbv

RT: 3.87 min Scan# 128

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 62 Resp: 393961

Ion Ratio Lower Upper

62 100

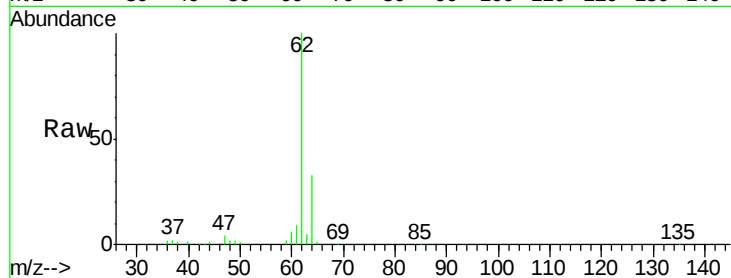
64 32.9 26.3 39.5

Manual Integrations

APPROVED

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10/22/2015 4:30:44 PM



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

3.87

200000

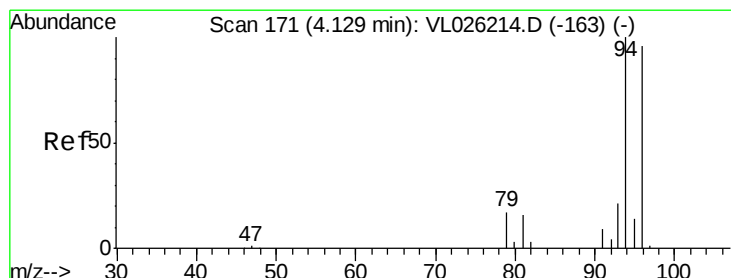
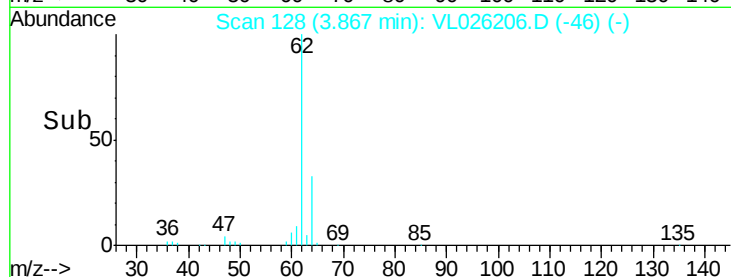
150000

100000

50000

0

Time-->



#6

Bromomethane

Concen: 10.77 ppbv

RT: 4.12 min Scan# 170

Delta R.T. 0.00 min

Lab File: VL026206.D

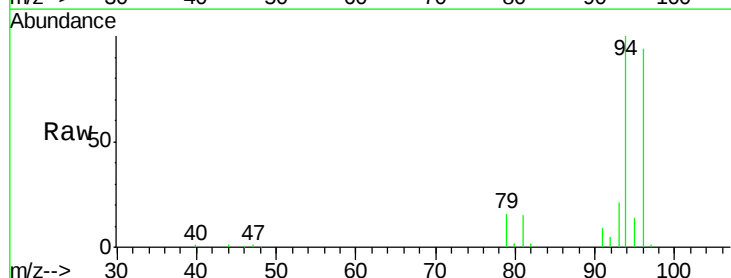
Acq: 20 Oct 2015 9:29

Tgt Ion: 94 Resp: 288758

Ion Ratio Lower Upper

94 100

96 94.4 75.5 113.3



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0

4.12

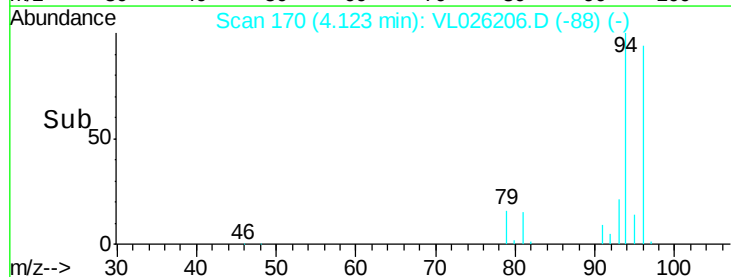
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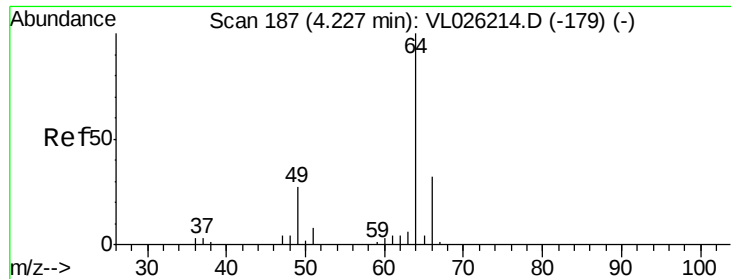
100000

50000

0

Time-->





#7

Chloroethane

Concen: 10.61 ppbv

RT: 4.22 min Scan# 186

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 64 Resp: 171556

Ion Ratio Lower Upper

64 100

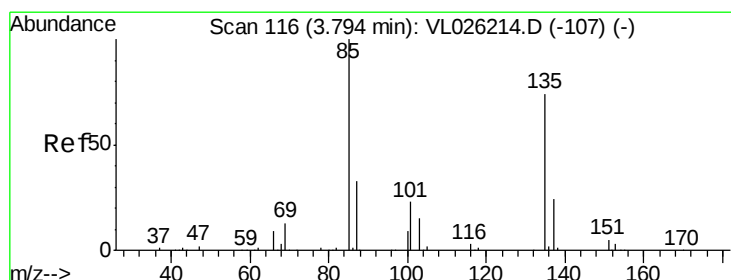
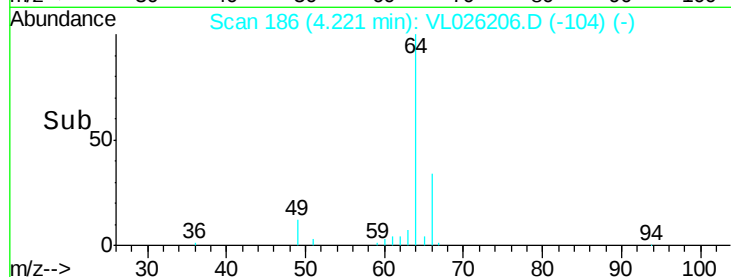
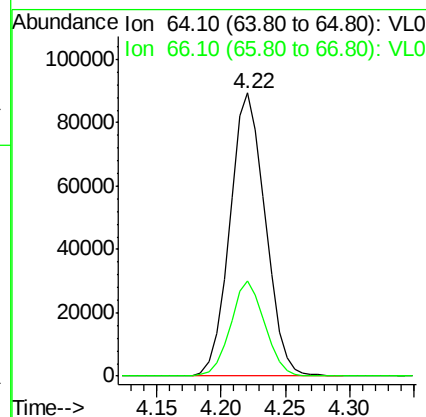
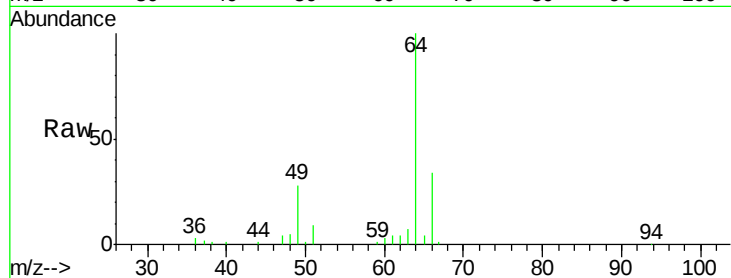
66 33.8 27.0 40.6

Manual Integrations

APPROVED

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10/22/2015 4:30:44 PM



#8

Dichlorotetrafluoroethane

Concen: 10.52 ppbv

RT: 3.79 min Scan# 115

Delta R.T. 0.00 min

Lab File: VL026206.D

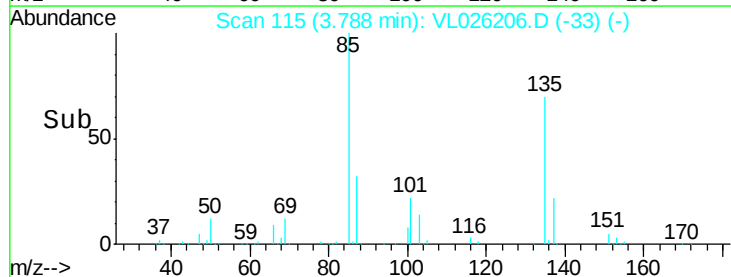
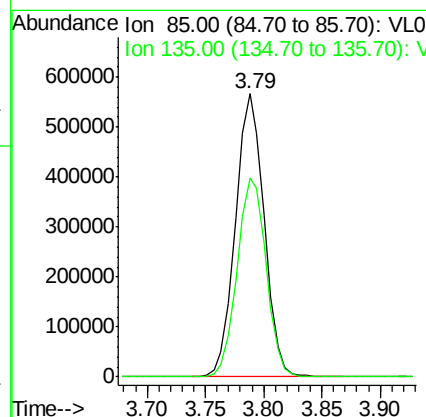
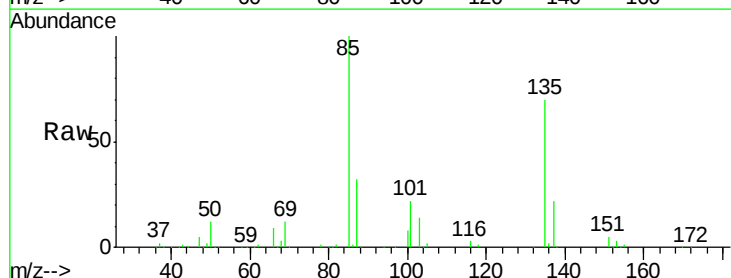
Acq: 20 Oct 2015 9:29

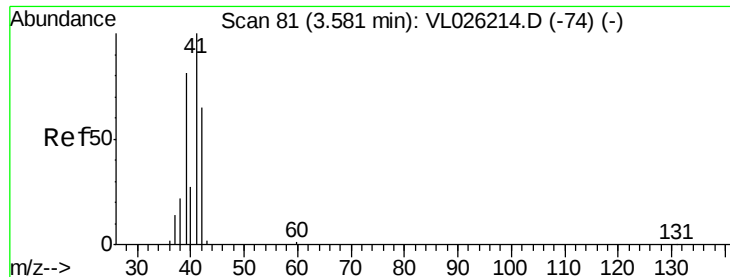
Tgt Ion: 85 Resp: 965690

Ion Ratio Lower Upper

85 100

135 71.9 57.5 86.3





#9

Propene

Concen: 10.18 ppbv

RT: 3.58 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 41 Resp: 306228

Ion Ratio Lower Upper

41 100

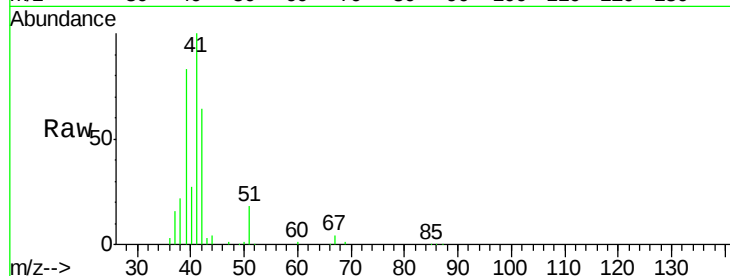
42 66.4 53.1 79.7

Manual Integrations

APPROVED

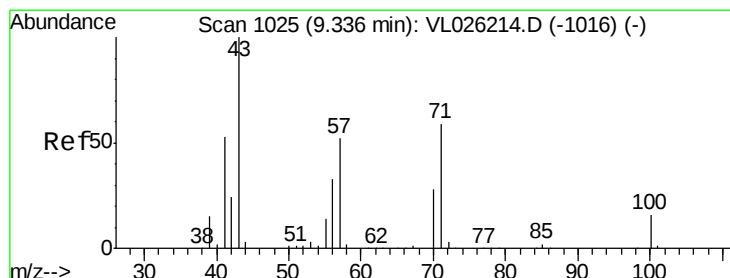
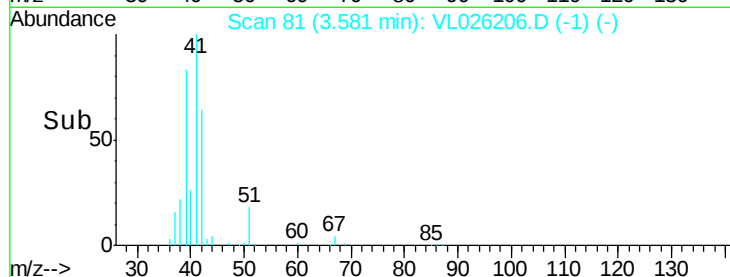
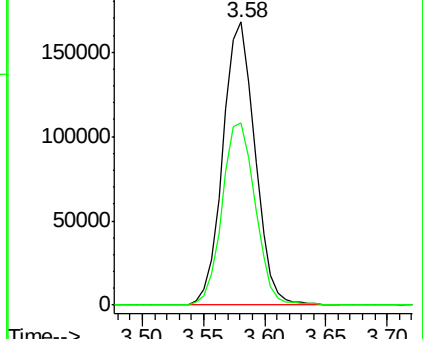
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 10.49 ppbv

RT: 9.33 min Scan# 1024

Delta R.T. 0.00 min

Lab File: VL026206.D

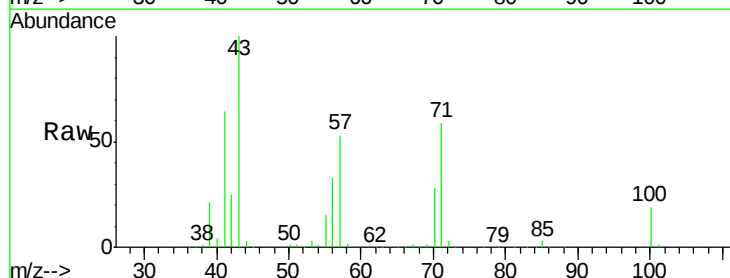
Acq: 20 Oct 2015 9:29

Tgt Ion: 43 Resp: 1096376

Ion Ratio Lower Upper

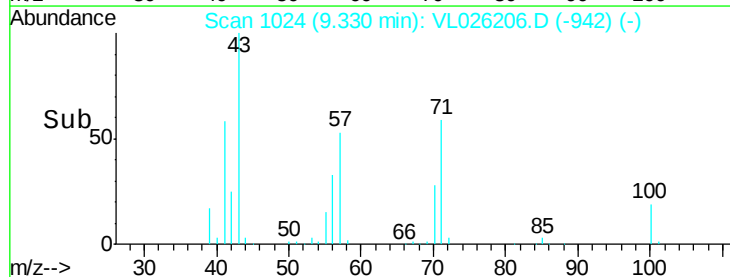
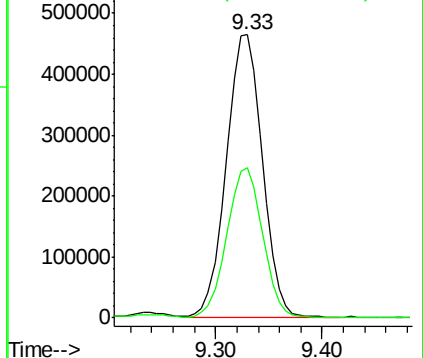
43 100

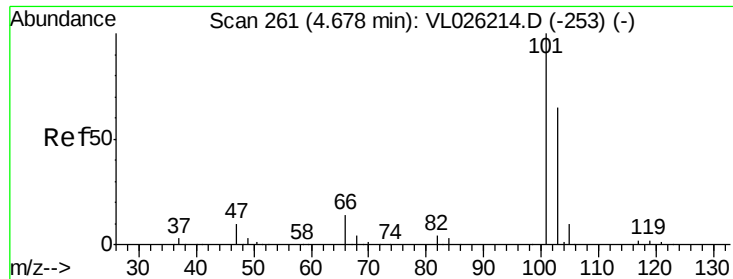
57 54.4 43.4 65.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





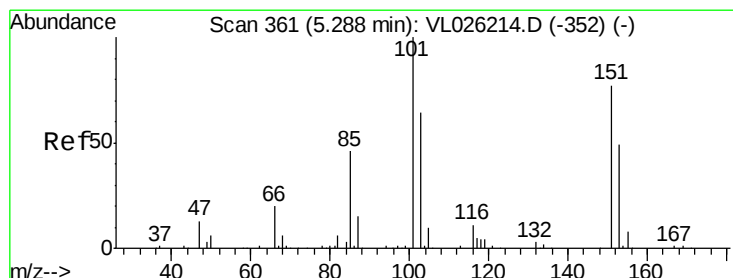
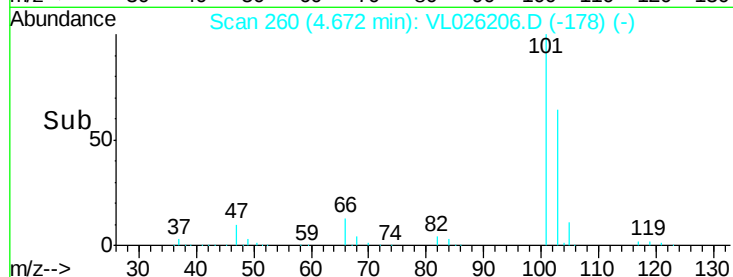
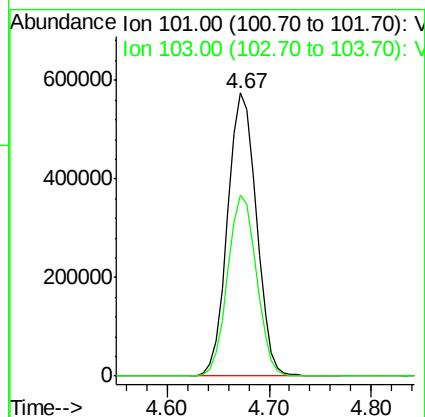
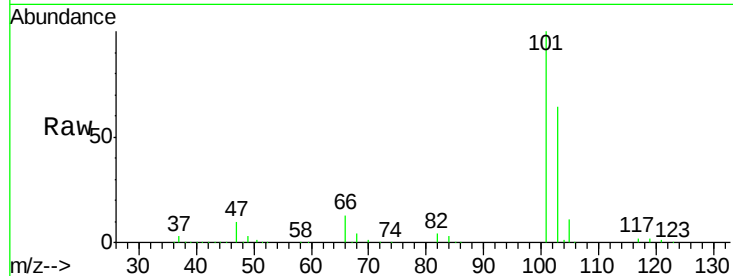
#11  
 Trichlorofluoromethane  
 Concen: 10.90 ppbv  
 RT: 4.67 min Scan# 260  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tot Ion:101 Resp: 1124973  
 Ion Ratio Lower Upper  
 101 100  
 103 64.0 51.2 76.8

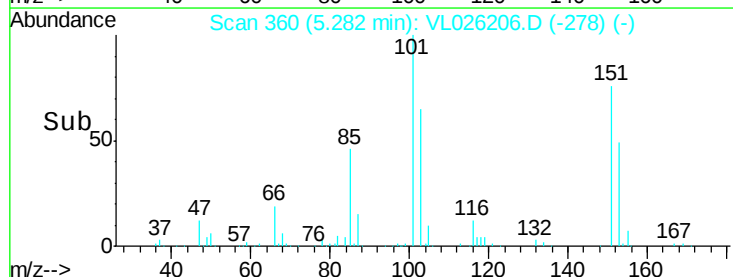
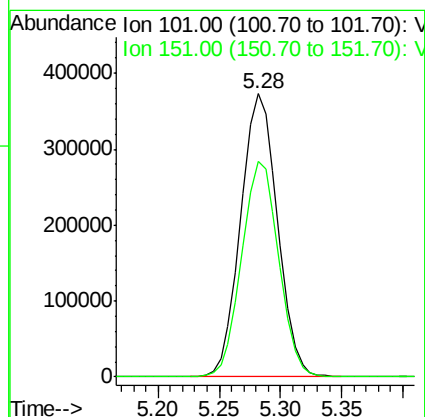
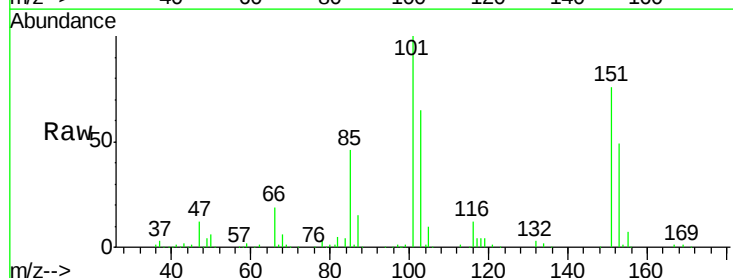
Manual Integrations  
 APPROVED

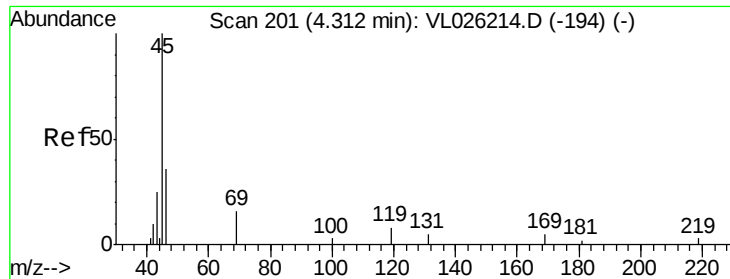
MMDadoda  
 10/22/2015 4:30:44 PM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 11.17 ppbv  
 RT: 5.28 min Scan# 360  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Tgt Ion:101 Resp: 780770  
 Ion Ratio Lower Upper  
 101 100  
 151 76.7 61.4 92.0





#13

Ethanol

Concen: 11.08 ppbv

RT: 4.31 min Scan# 200

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 45 Resp: 49016

Ion Ratio Lower Upper

45 100

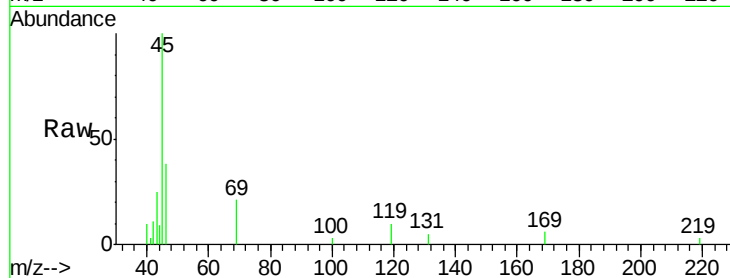
46 40.2 16.1 64.3

Manual Integrations

APPROVED

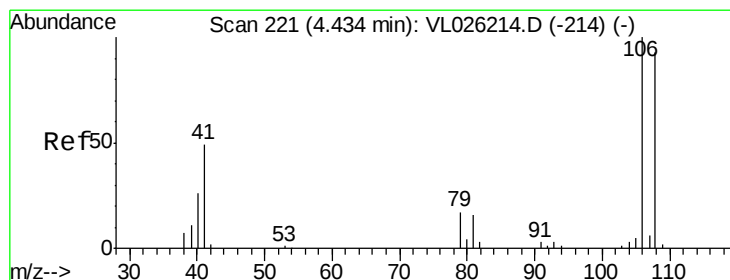
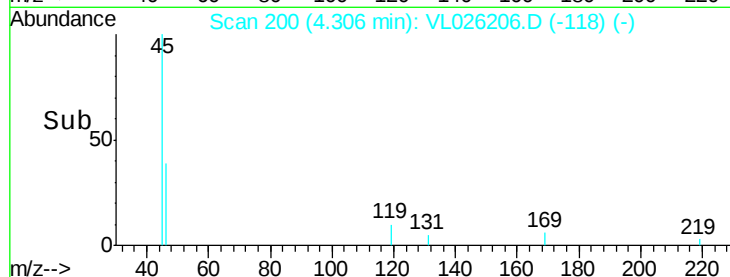
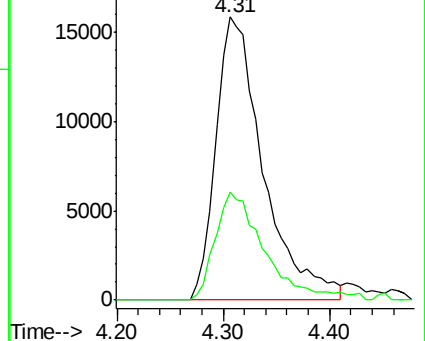
MMDadoda

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0



#14

Bromoethene

Concen: 11.49 ppbv

RT: 4.43 min Scan# 221

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

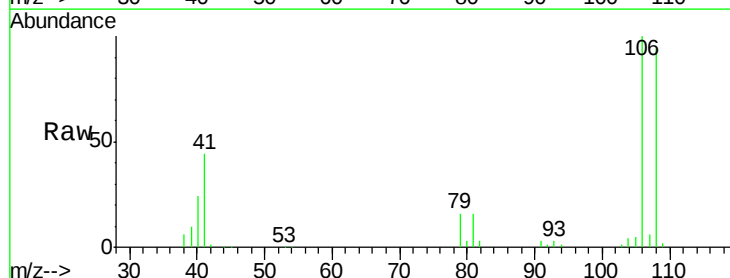
Tgt Ion: 108 Resp: 330975

Ion Ratio Lower Upper

108 100

106 106.6 85.3 127.9

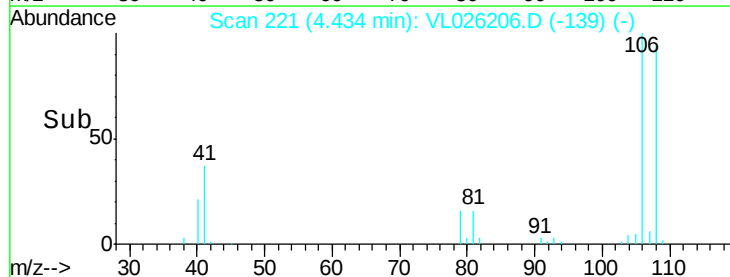
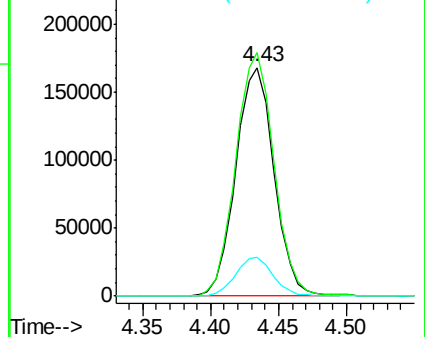
79 16.7 13.4 20.0

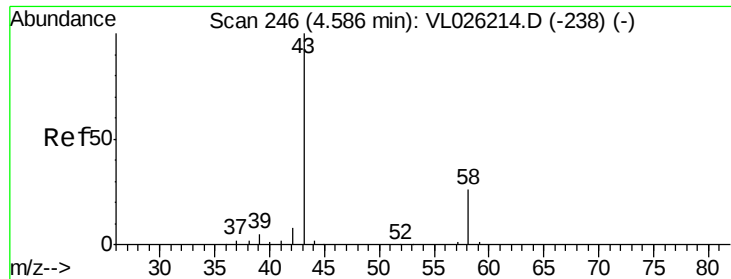


Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0





#15

Acetone

Concen: 10.08 ppbv

RT: 4.58 min Scan# 245

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Tot Ion: 43 Resp: 730874

Ion Ratio Lower Upper

43 100

58 26.2 21.0 31.4

Instrument :

MSVOA\_L

ClientSampleId :

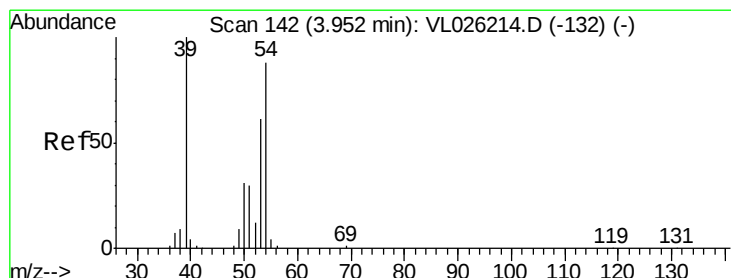
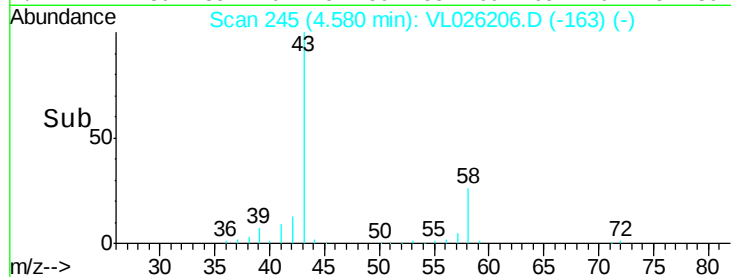
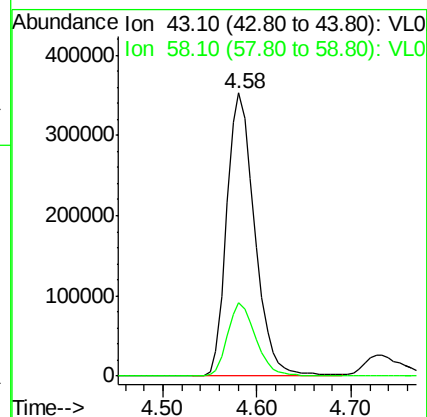
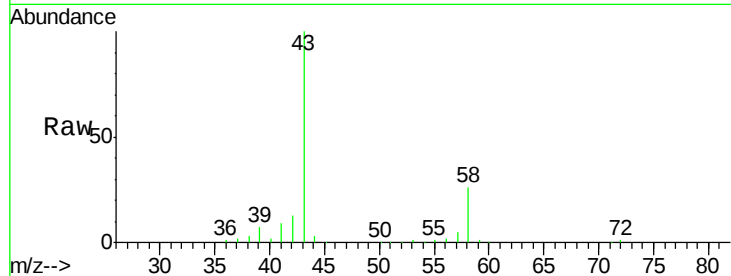
VSTDCCC010

Manual Integrations

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#16

1,3-Butadiene

Concen: 10.55 ppbv

RT: 3.95 min Scan# 142

Delta R.T. 0.00 min

Lab File: VL026206.D

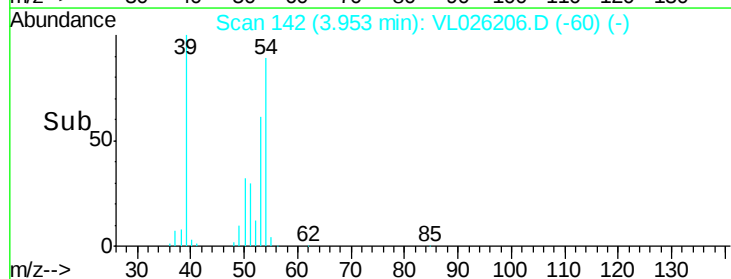
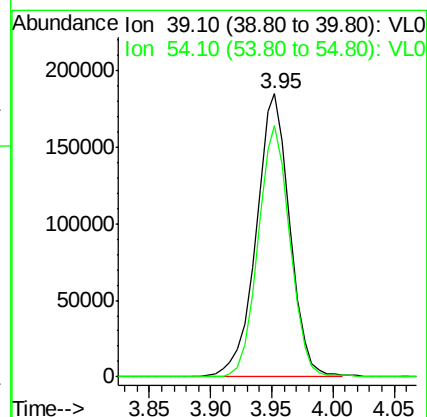
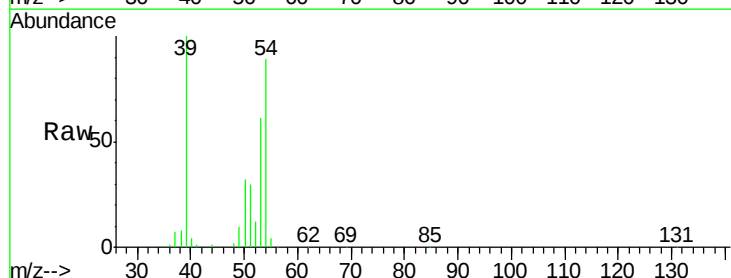
Acq: 20 Oct 2015 9:29

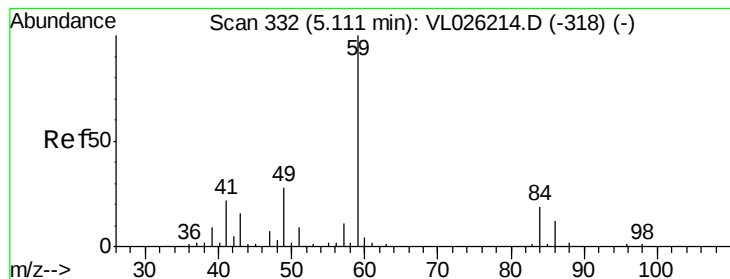
Tgt Ion: 39 Resp: 353669

Ion Ratio Lower Upper

39 100

54 84.1 67.3 100.9





#17

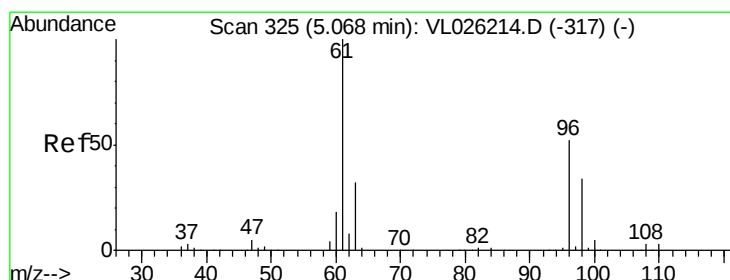
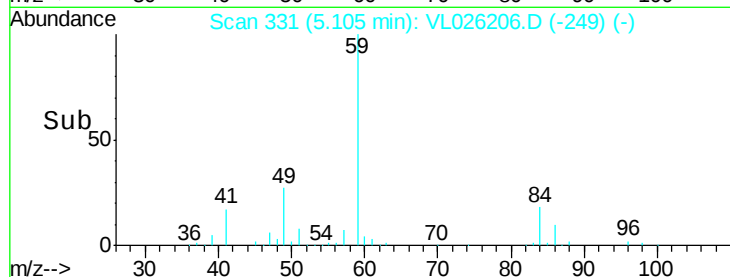
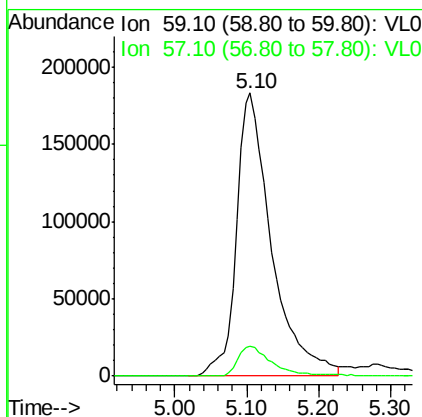
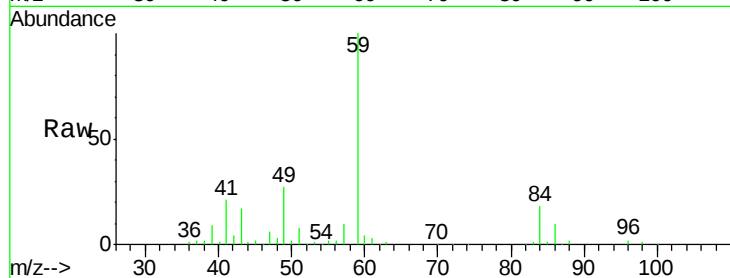
tert-Butyl alcohol  
Concen: 14.22 ppbv  
RT: 5.10 min Scan# 331  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 10.7  | 8.6   | 12.8  |

Manual Integrations  
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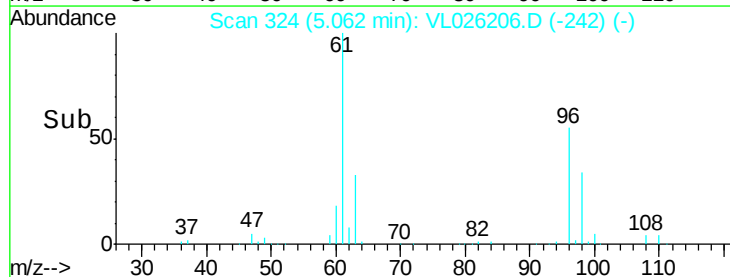
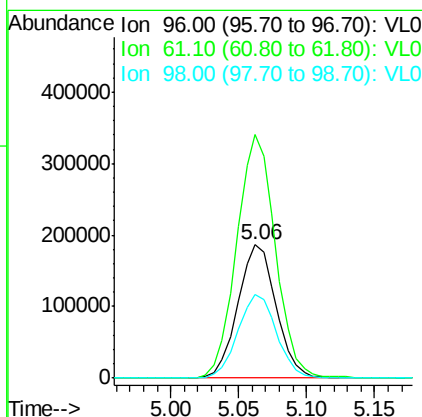
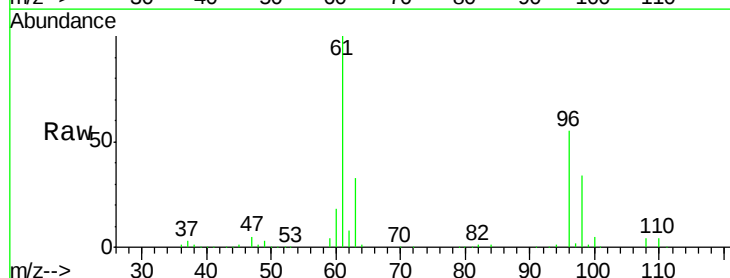
MMDadoda  
10/22/2015 4:30:44 PM

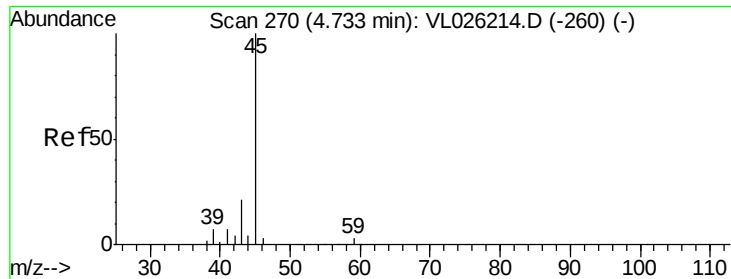


#18

1,1-Dichloroethene  
Concen: 11.60 ppbv  
RT: 5.06 min Scan# 324  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 183.2 | 146.6 | 219.8 |
| 98      | 63.1  | 50.5  | 75.7  |





#19

Isopropyl Alcohol

Concen: 12.78 ppbv

RT: 4.73 min Scan# 269

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleID :

VSTDCCC010

Tot Ion: 45 Resp: 360990

Ion Ratio Lower Upper

45 100

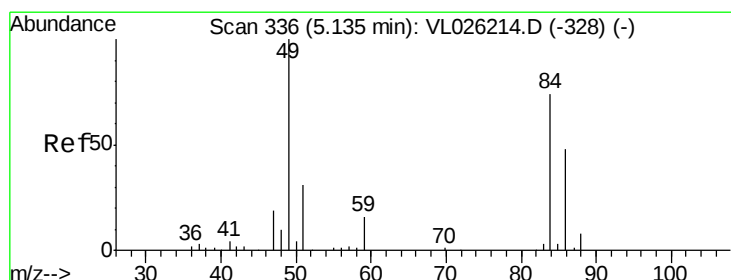
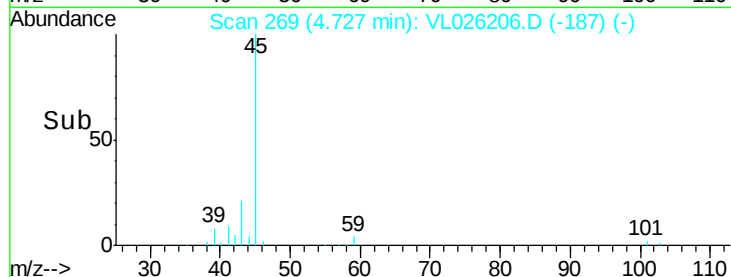
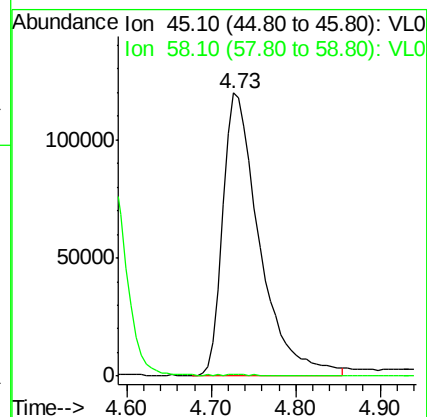
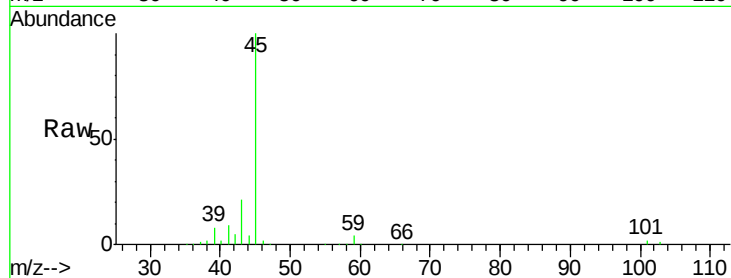
58 53.0 42.4 63.6

Manual Integrations

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#20

Methylene Chloride

Concen: 10.73 ppbv

RT: 5.13 min Scan# 335

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Tgt Ion: 84 Resp: 331191

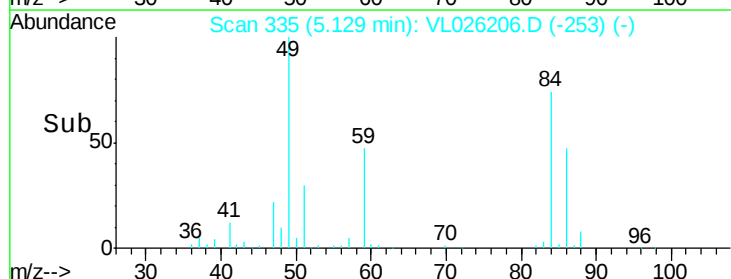
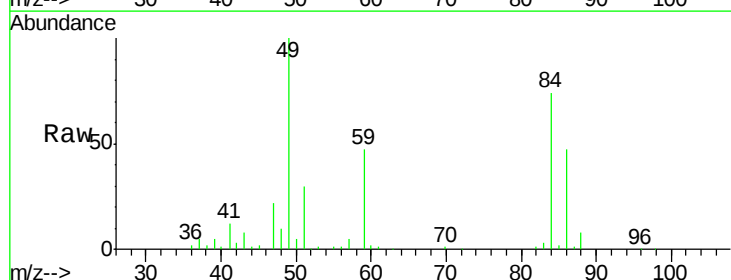
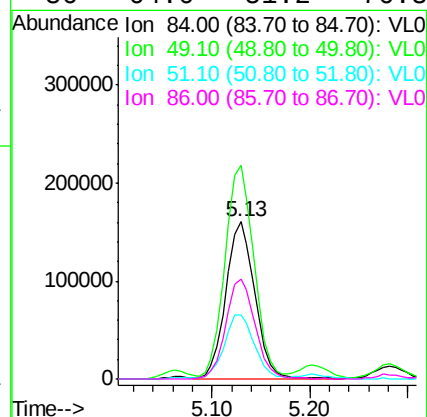
Ion Ratio Lower Upper

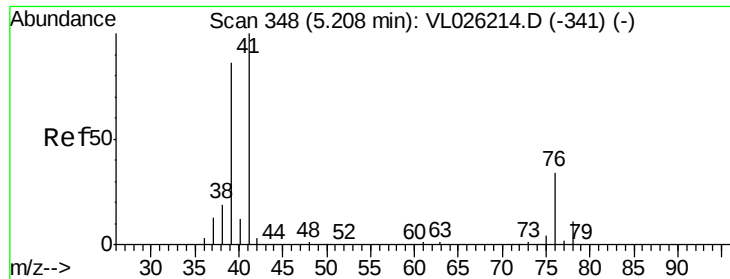
84 100

49 134.9 107.9 161.9

51 40.5 32.4 48.6

86 64.0 51.2 76.8





#21

Allvl Chloride

Concen: 11.85 ppbv

RT: 5.20 min Scan# 347

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

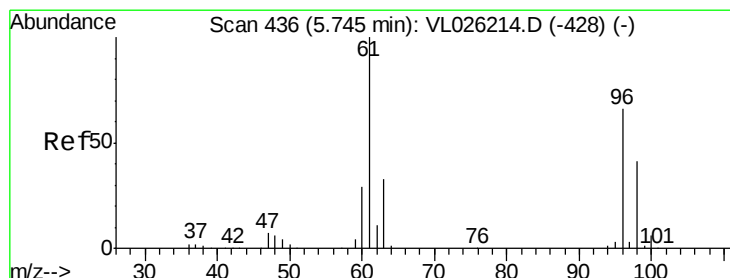
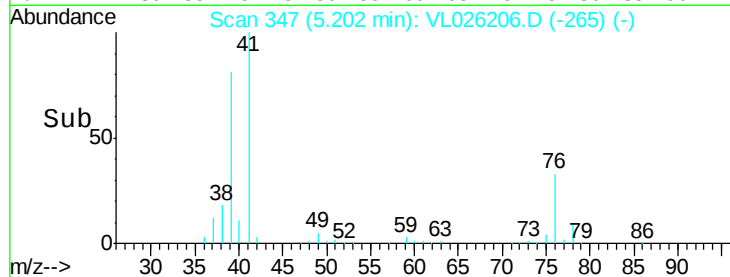
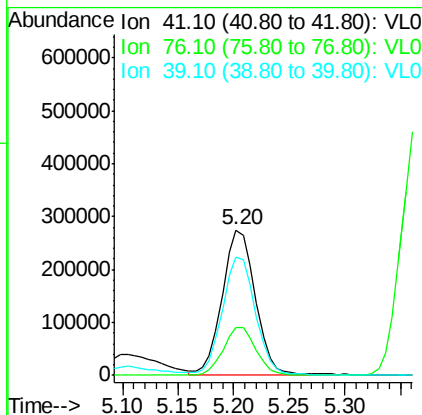
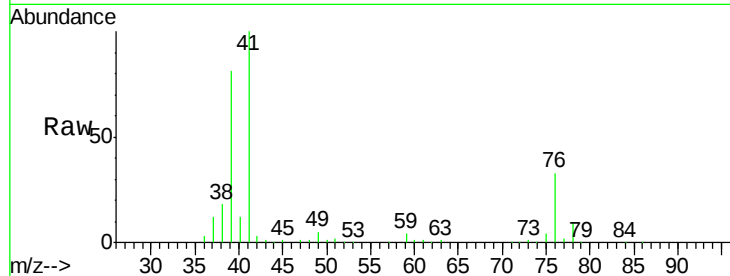
ClientSampleId :

VSTDCCC010

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 41    | Resp: | 560814 |
| Ion      | Ratio | Lower | Upper  |
| 41       | 100   |       |        |
| 76       | 32.8  | 26.2  | 39.4   |
| 39       | 82.0  | 65.6  | 98.4   |

Manual Integrations  
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#22

trans-1,2-Dichloroethene

Concen: 11.14 ppbv

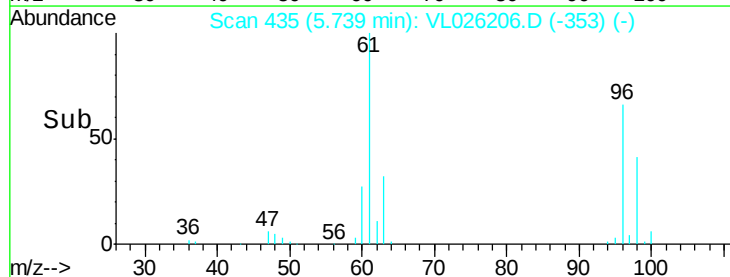
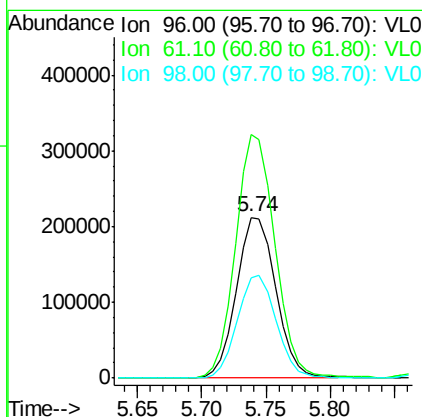
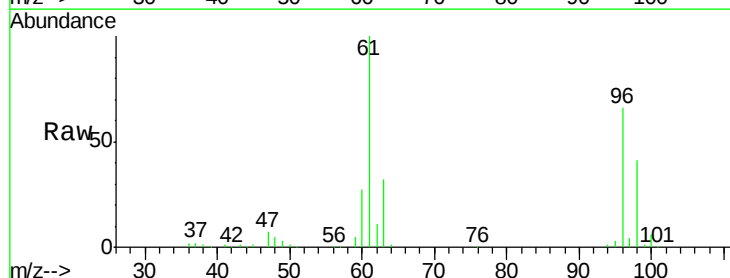
RT: 5.74 min Scan# 435

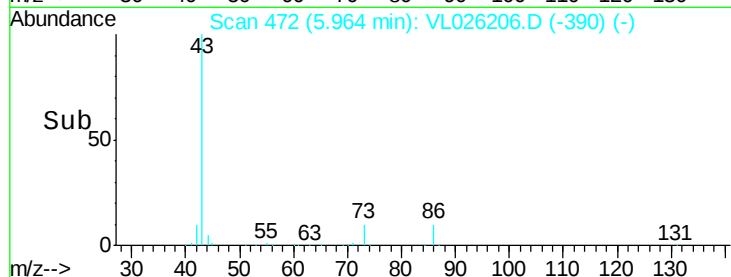
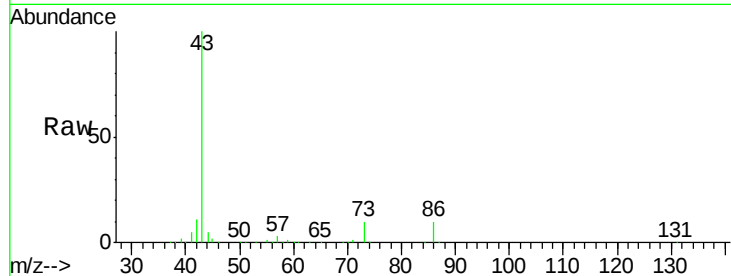
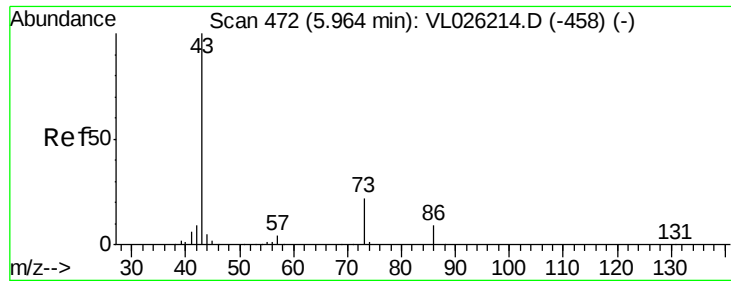
Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 96    | Resp: | 451607 |
| Ion      | Ratio | Lower | Upper  |
| 96       | 100   |       |        |
| 61       | 151.6 | 121.3 | 181.9  |
| 98       | 62.3  | 49.8  | 74.8   |





#23

Vinyl Acetate

Concen: 12.47 ppbv

RT: 5.96 min Scan# 472

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Tot Ion: 43 Resp: 1600654

Ion Ratio Lower Upper

43 100

86 9.7 7.8 11.6

42 10.5 8.4 12.6

44 4.6 3.7 5.5

Instrument :

MSVOA\_L

ClientSampleId :

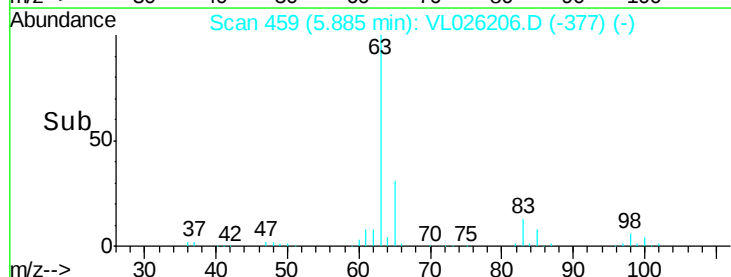
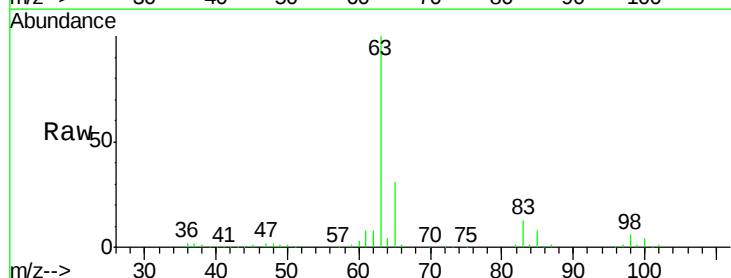
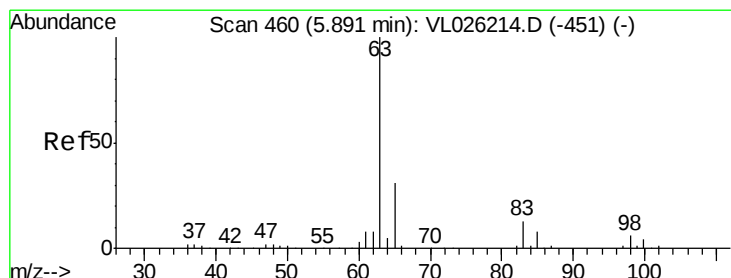
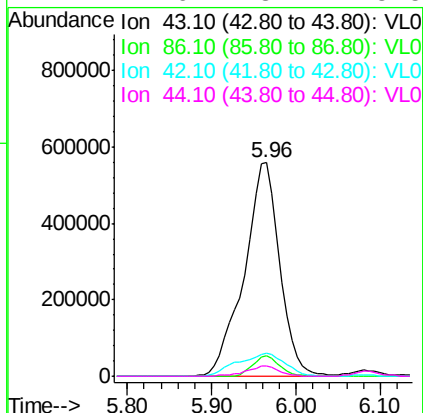
VSTDCCC010

Manual Integrations

APPROVED

MMDadoda

10/22/2015 4:30:44 PM



#24

1,1-Dichloroethane

Concen: 10.59 ppbv

RT: 5.89 min Scan# 459

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

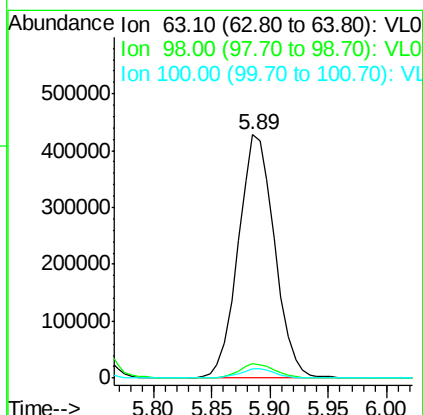
Tgt Ion: 63 Resp: 926191

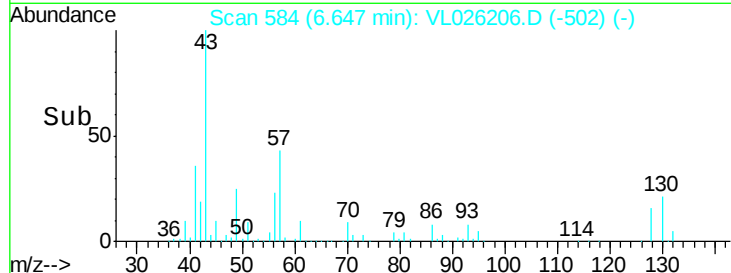
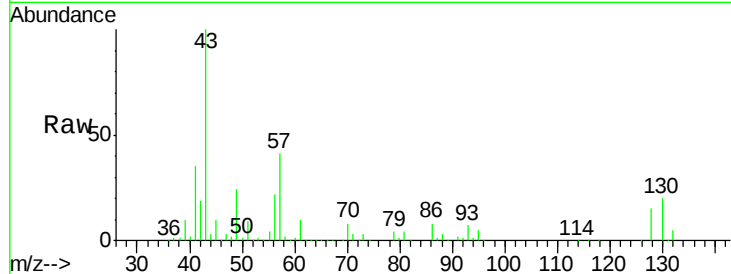
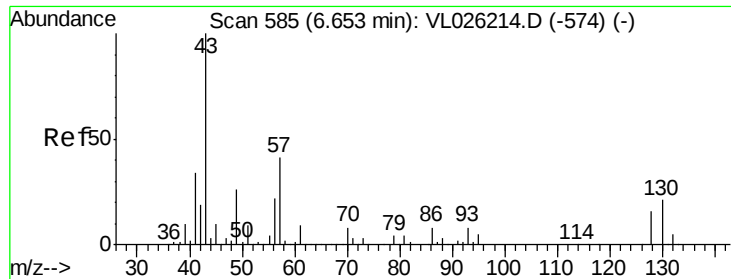
Ion Ratio Lower Upper

63 100

98 5.8 2.9 8.7

100 3.7 1.8 5.5





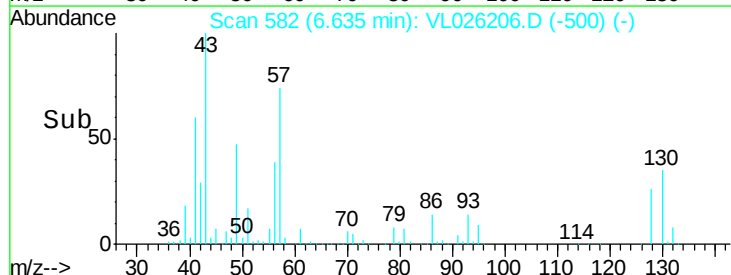
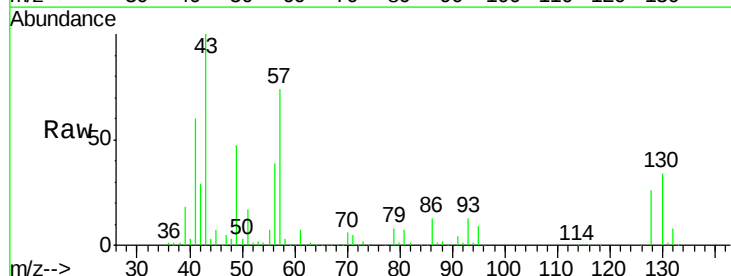
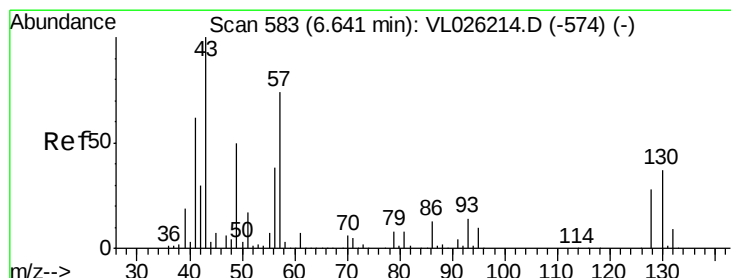
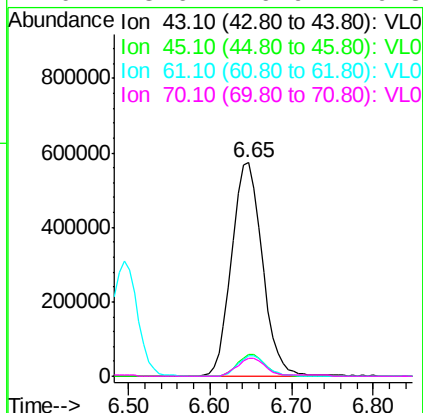
#25  
Ethyl Acetate  
Concen: 10.63 ppbv  
RT: 6.65 min Scan# 584  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

| Tot Ion | 43.10 | Resp  | 1490213 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 43      | 100   |       |         |
| 45      | 9.4   | 7.5   | 11.3    |
| 61      | 9.4   | 7.4   | 11.2    |
| 70      | 8.6   | 6.9   | 10.3    |

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

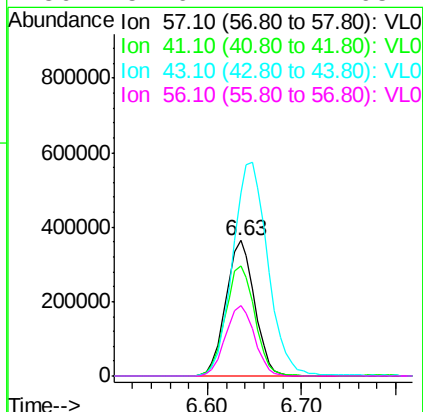
Manual Integrations  
APPROVED

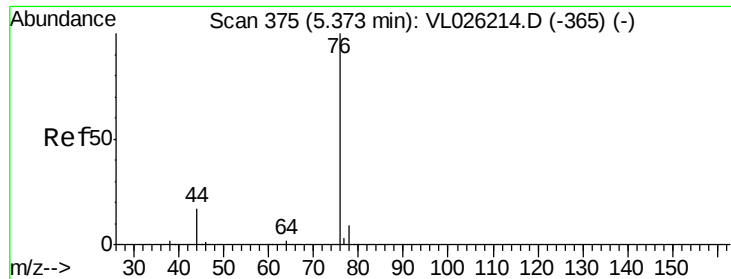
MMDadoda  
10/22/2015 4:30:44 PM



#26  
Hexane  
Concen: 11.31 ppbv  
RT: 6.63 min Scan# 582  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

| Tgt Ion | 57.10 | Resp  | 767980 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 57      | 100   |       |        |
| 41      | 83.8  | 67.0  | 100.6  |
| 43      | 195.0 | 156.0 | 234.0  |
| 56      | 52.6  | 42.1  | 63.1   |





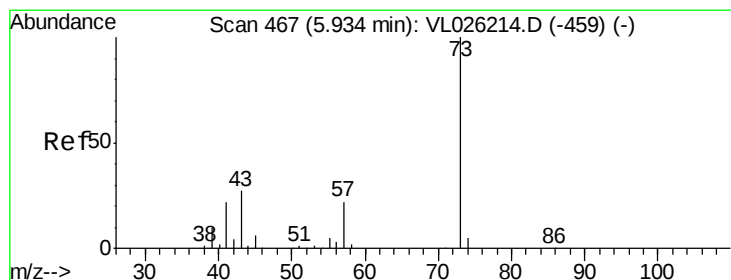
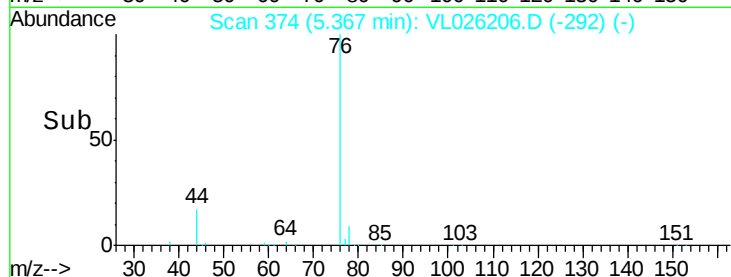
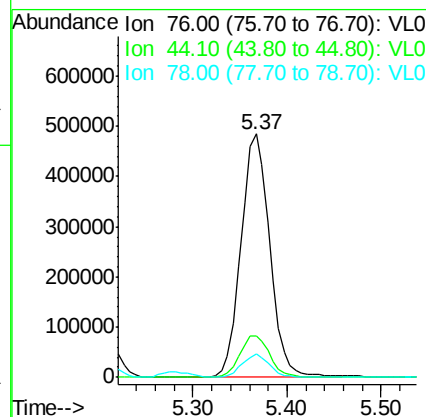
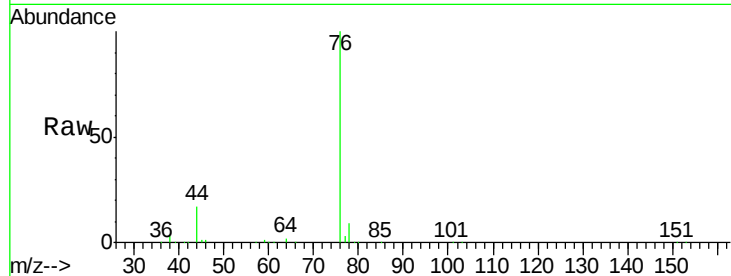
#27  
Carbon Disulfide  
Concen: 12.74 ppbv  
RT: 5.37 min Scan# 374  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 76 Resp: 1036084  
Ion Ratio Lower Upper  
76 100  
44 17.2 13.8 20.6  
78 9.3 7.4 11.2

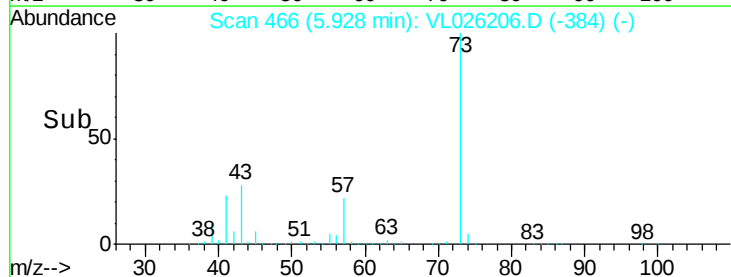
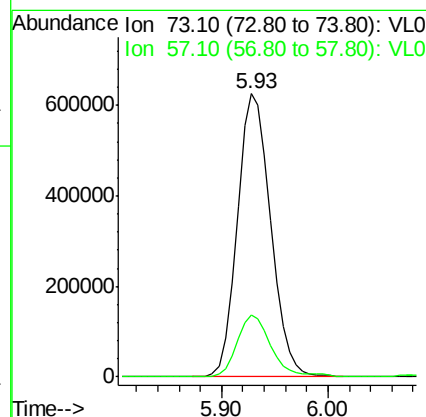
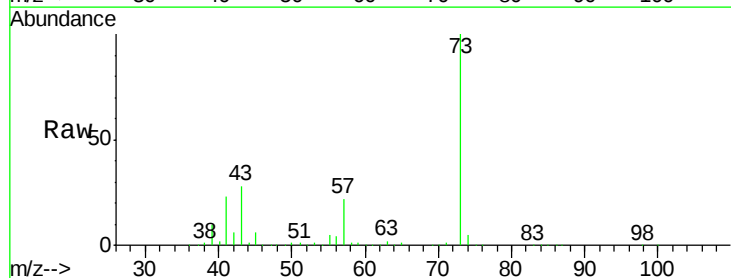
Manual Integrations  
APPROVED

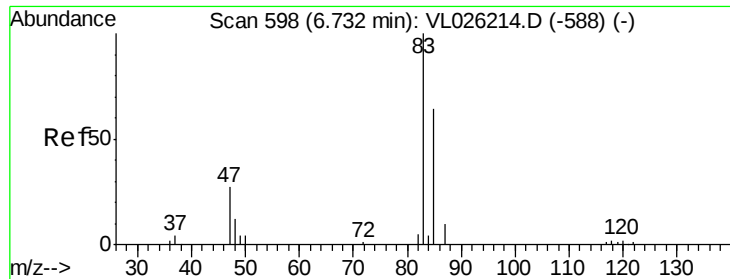
MMDadoda  
10/22/2015 4:30:44 PM



#28  
Methyl tert-Butyl Ether  
Concen: 12.54 ppbv  
RT: 5.93 min Scan# 466  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Tgt Ion: 73 Resp: 1372708  
Ion Ratio Lower Upper  
73 100  
57 22.4 17.9 26.9





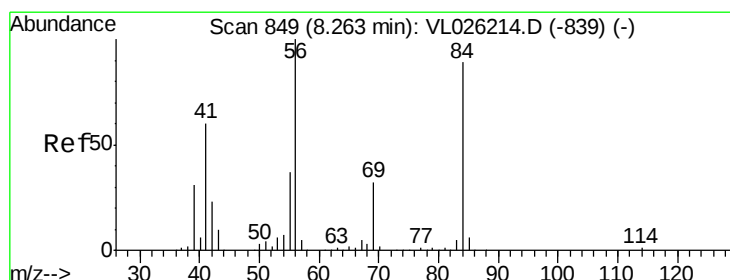
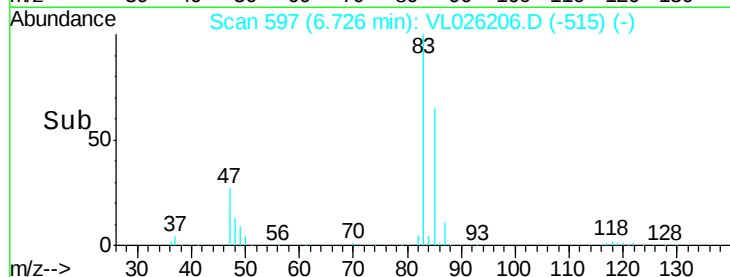
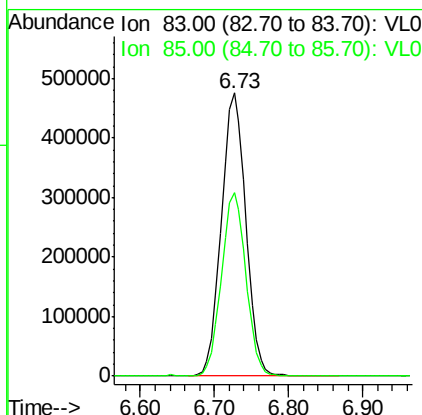
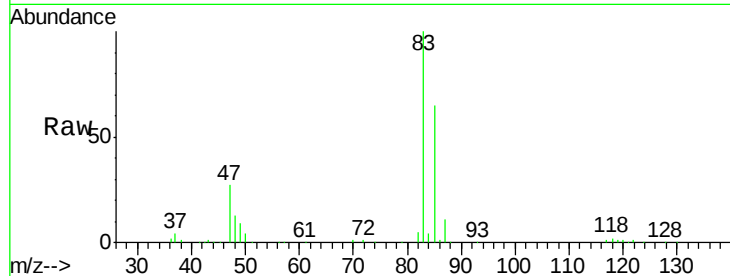
#29  
Chloroform  
Concen: 10.84 ppbv  
RT: 6.73 min Scan# 597  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 83 Resp: 1091435  
Ion Ratio Lower Upper  
83 100  
85 64.7 51.8 77.6

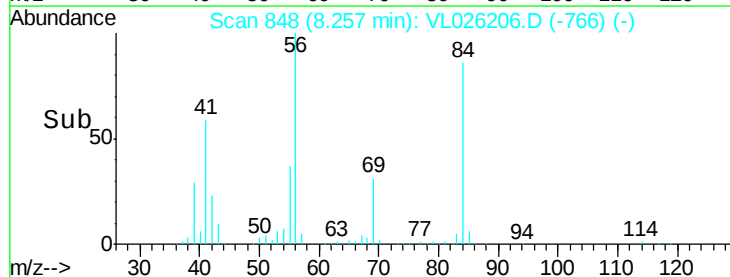
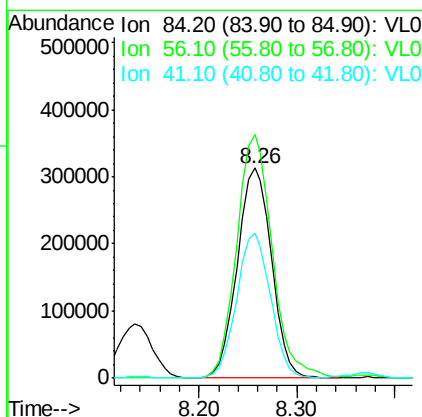
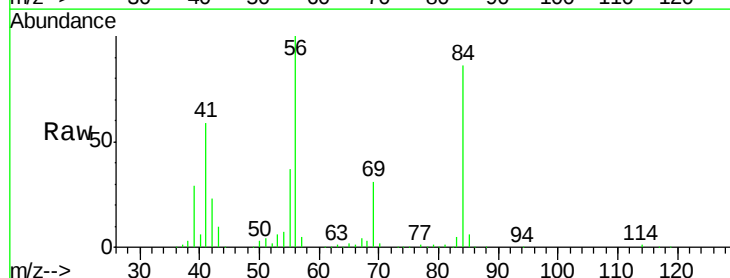
Manual Integrations  
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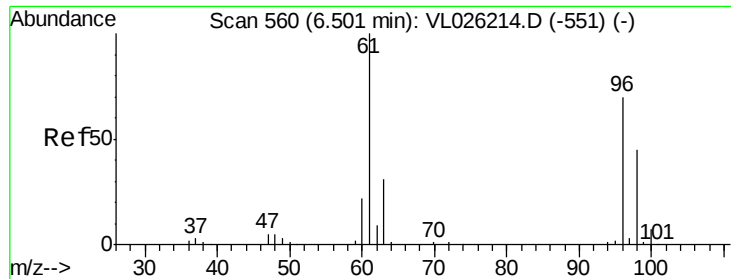
MMDadoda  
10/22/2015 4:30:44 PM



#30  
Cyclohexane  
Concen: 11.81 ppbv  
RT: 8.26 min Scan# 848  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Tgt Ion: 84 Resp: 763775  
Ion Ratio Lower Upper  
84 100  
56 121.9 97.5 146.3  
41 68.2 54.6 81.8





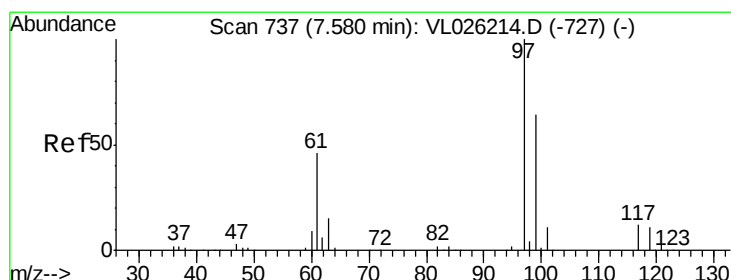
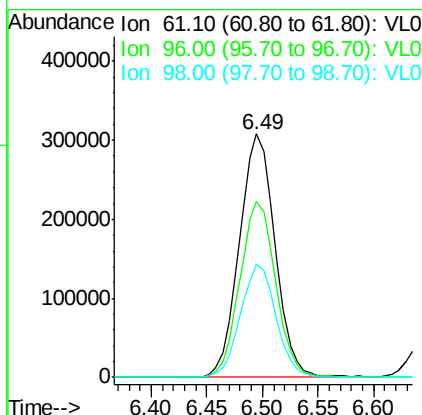
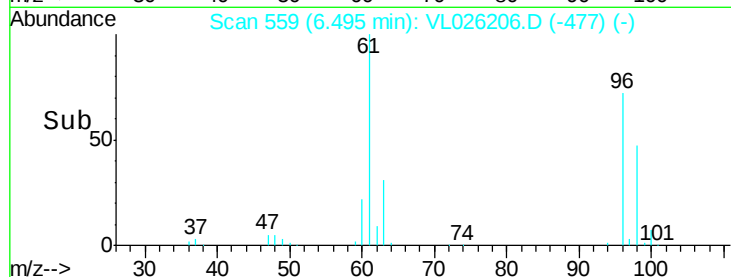
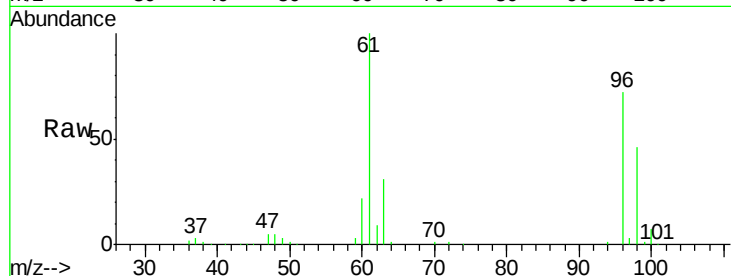
#31  
 cis-1,2-Dichloroethene  
 Concen: 11.09 ppbv  
 RT: 6.49 min Scan# 559  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 61      | 100   | 686871 |       |       |
| 96      | 72.4  |        | 57.9  | 86.9  |
| 98      | 46.5  |        | 37.2  | 55.8  |

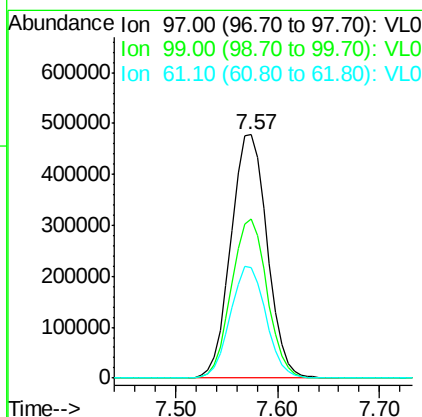
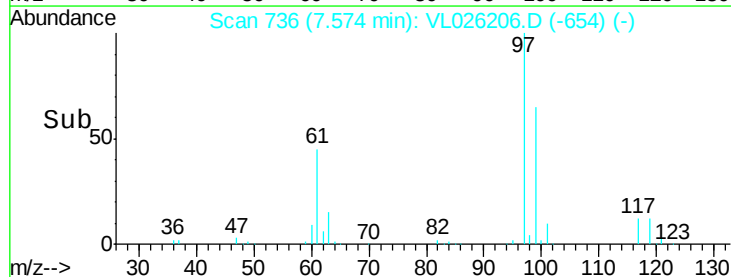
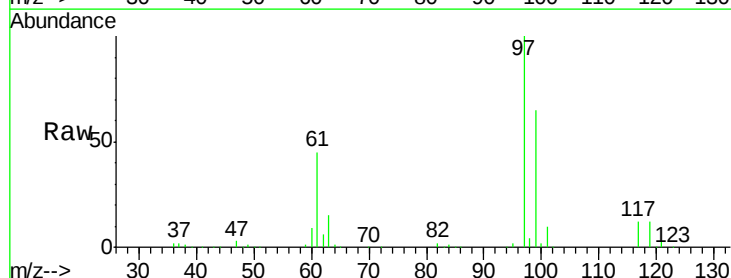
Manual Integrations  
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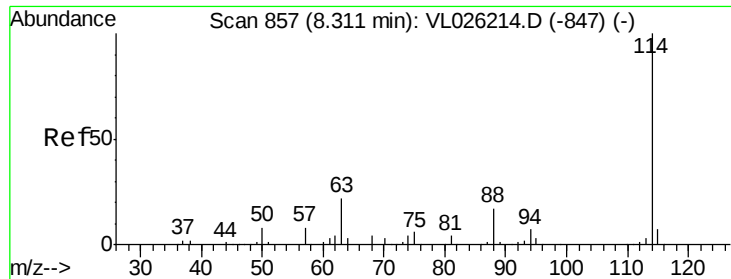
MMDadoda  
 10/22/2015 4:30:44 PM



#32  
 1,1,1-Trichloroethane  
 Concen: 12.29 ppbv  
 RT: 7.57 min Scan# 736  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 97      | 100   | 1181477 |       |       |
| 99      | 64.3  |         | 51.4  | 77.2  |
| 61      | 45.0  |         | 36.0  | 54.0  |





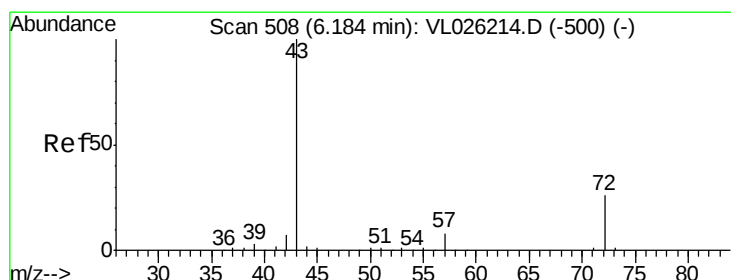
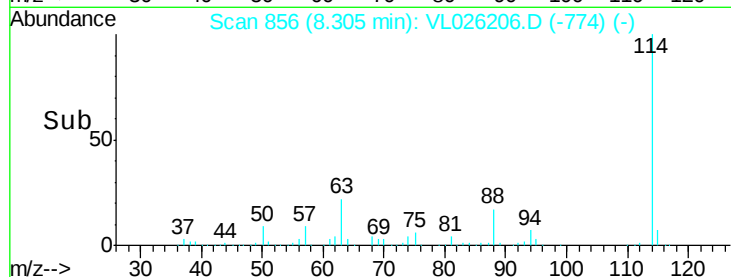
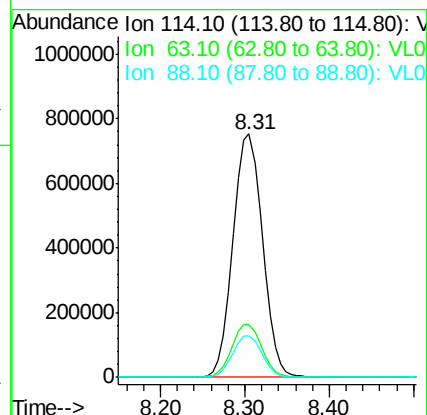
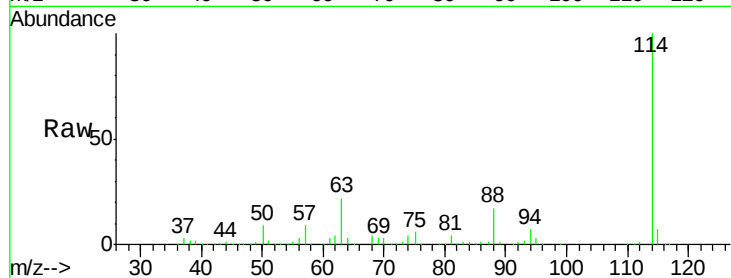
#33  
 1,4-Difluorobenzene  
 Concen: 10.00 ppbv  
 RT: 8.31 min Scan# 856  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tot Ion:114 Resp: 1792345  
 Ion Ratio Lower Upper  
 114 100  
 63 22.4 17.9 26.9  
 88 17.0 13.6 20.4

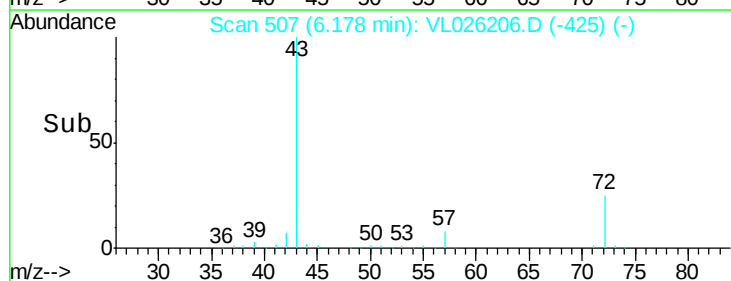
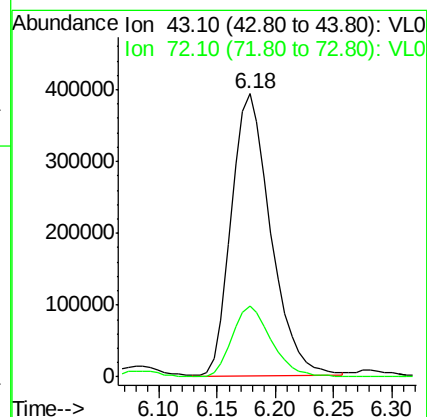
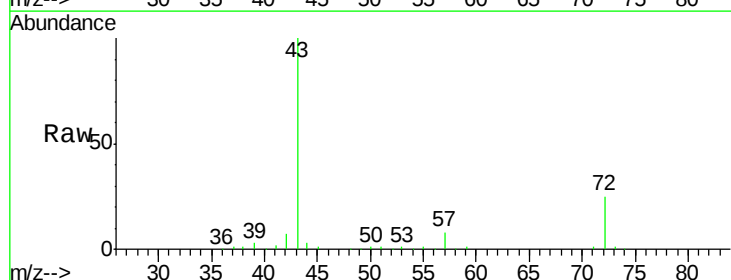
Manual Integrations  
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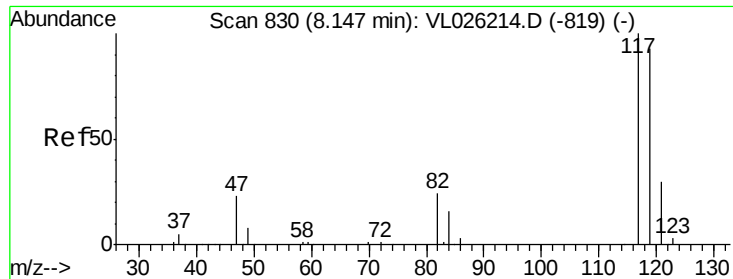
MMDadoda  
 10/22/2015 4:30:44 PM



#34  
 2-Butanone  
 Concen: 9.29 ppbv  
 RT: 6.18 min Scan# 507  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Tgt Ion: 43 Resp: 926713  
 Ion Ratio Lower Upper  
 43 100  
 72 25.3 20.3 30.5





#35

Carbon Tetrachloride

Concen: 10.82 ppbv

RT: 8.13 min Scan# 828

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

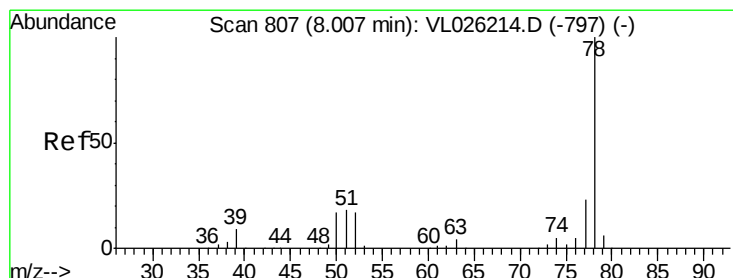
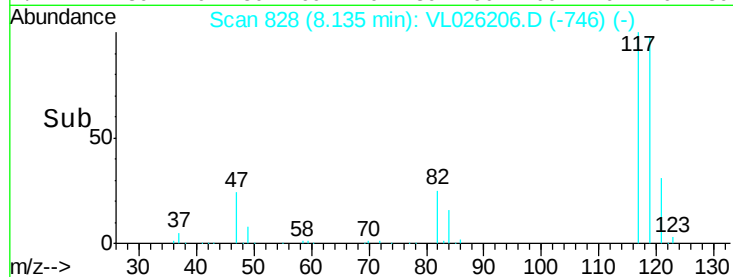
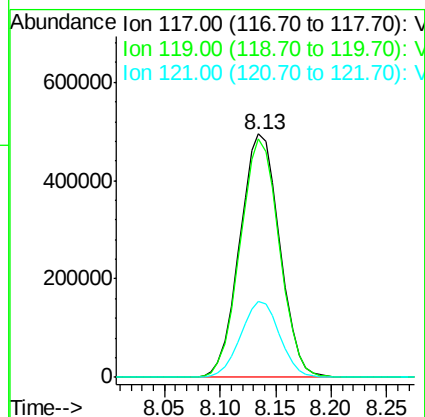
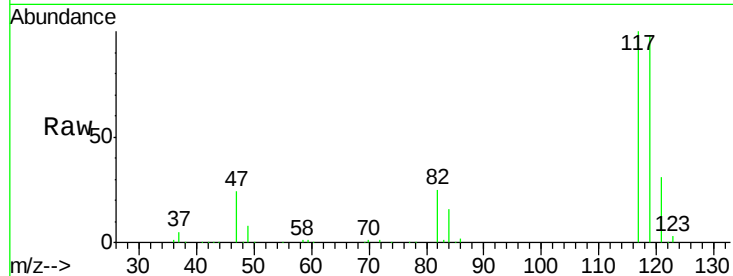
VSTDCCC010

Tot Ion:117 Resp: 1229167

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 119 | 97.9  | 78.3  | 117.5 |
| 121 | 31.3  | 25.0  | 37.6  |

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#36

Benzene

Concen: 9.87 ppbv

RT: 7.99 min Scan# 805

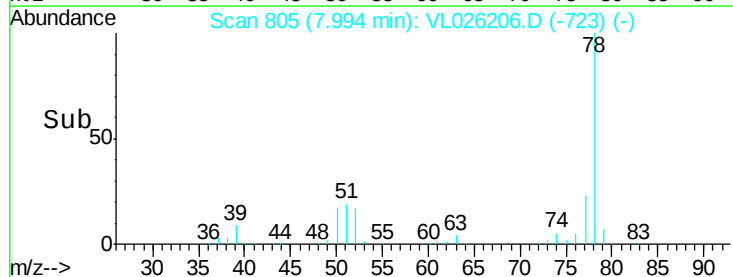
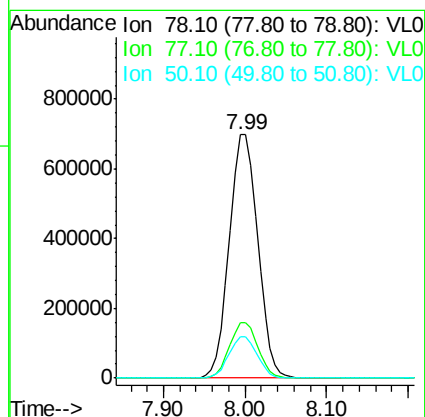
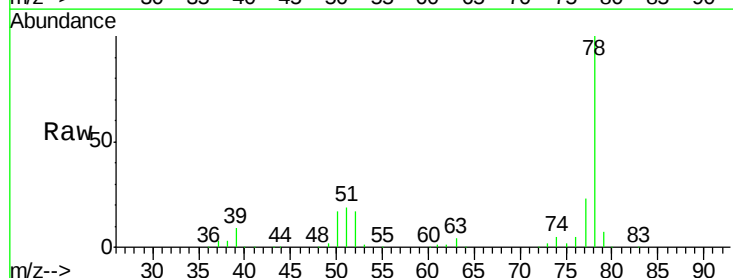
Delta R.T. 0.00 min

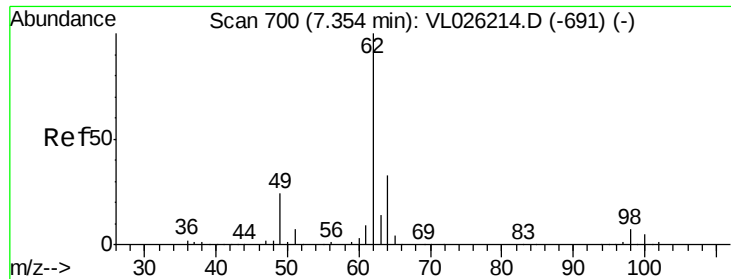
Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Tgt Ion: 78 Resp: 1692404

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 78  | 100   |       |       |
| 77  | 22.6  | 18.1  | 27.1  |
| 50  | 16.7  | 13.4  | 20.0  |





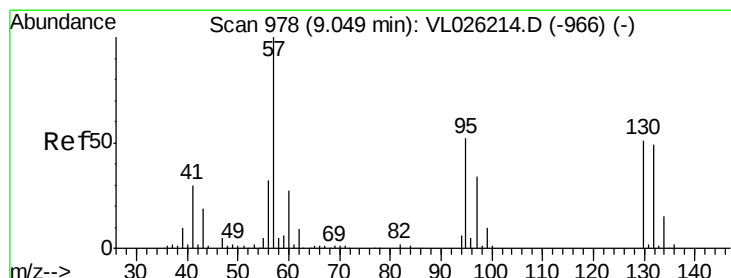
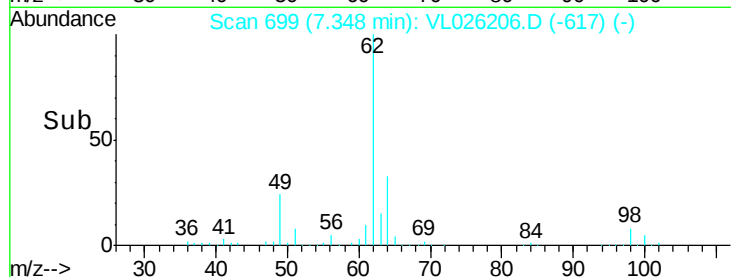
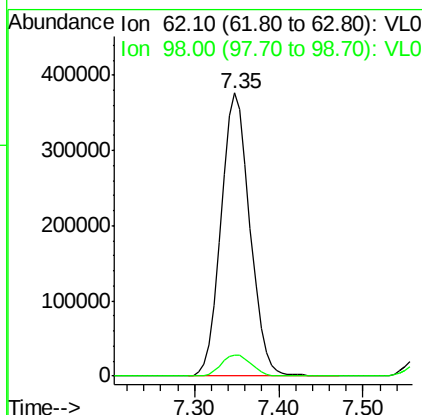
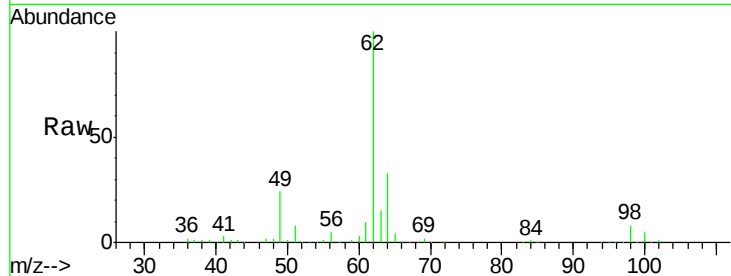
#37  
 1,2-Dichloroethane  
 Concen: 9.62 ppbv  
 RT: 7.35 min Scan# 699  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 62      | 100   | 883023 |       |       |
| 98      | 7.8   | 6.2    | 9.4   |       |

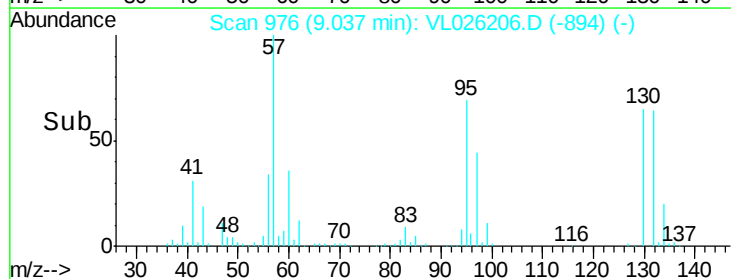
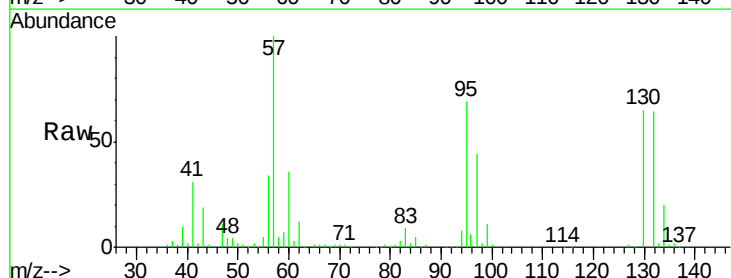
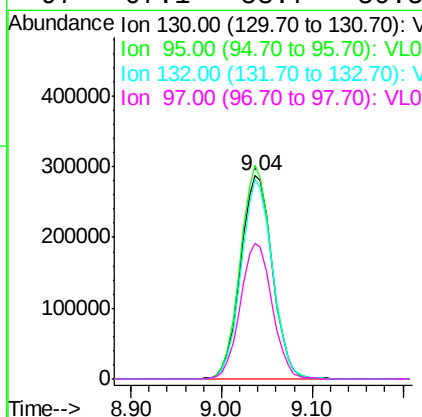
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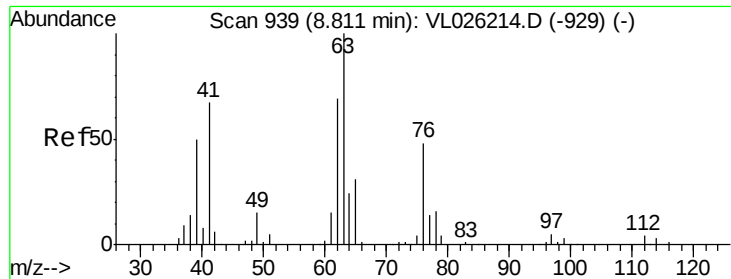
MMDadoda  
 10/22/2015 4:30:44 PM



#38  
 Trichloroethene  
 Concen: 8.91 ppbv  
 RT: 9.04 min Scan# 976  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 130     | 100   | 701204 |       |       |
| 95      | 105.2 | 84.2   | 126.2 |       |
| 132     | 98.1  | 78.5   | 117.7 |       |
| 97      | 67.1  | 53.7   | 80.5  |       |





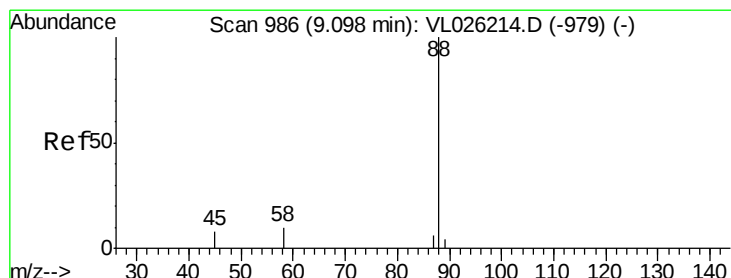
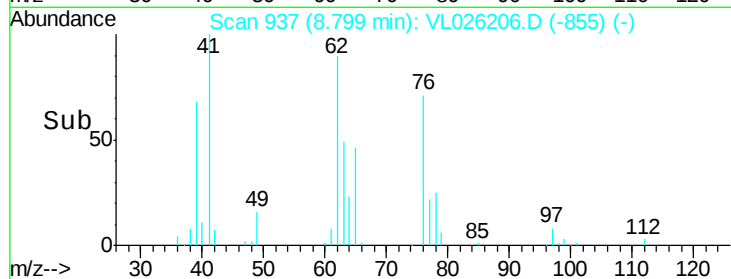
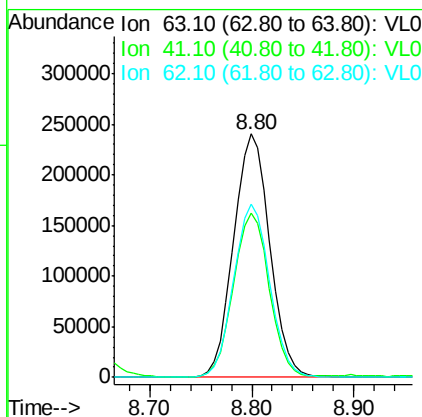
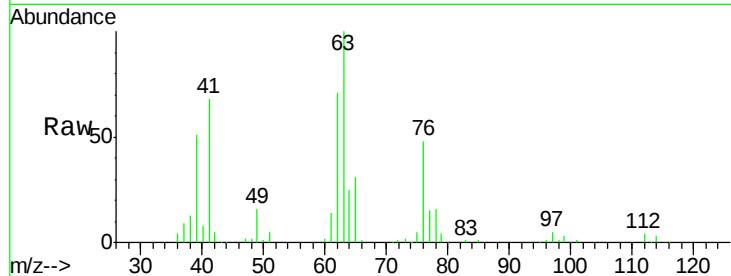
#39  
 1,2-Dichloropropane  
 Concen: 9.29 ppbv  
 RT: 8.80 min Scan# 937  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 67.5  | 54.0  | 81.0  |
| 62      | 70.9  | 56.7  | 85.1  |

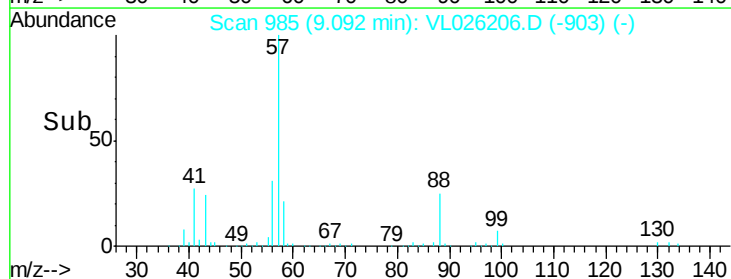
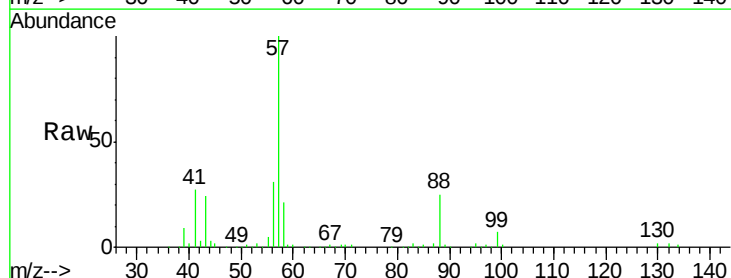
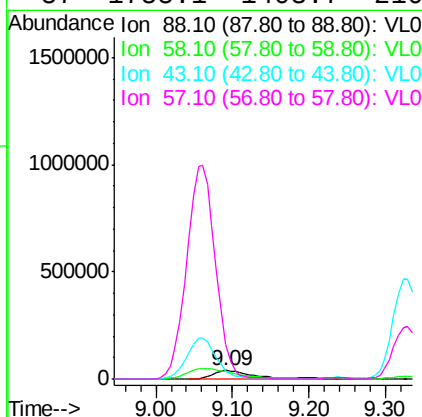
Manual Integrations  
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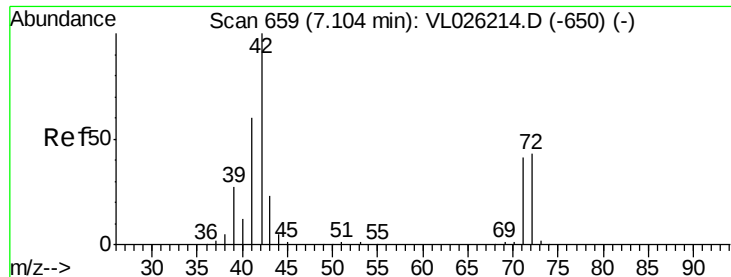
MMDadoda  
 10/22/2015 4:30:44 PM



#40  
 1,4-Dioxane  
 Concen: 14.30 ppbv  
 RT: 9.09 min Scan# 985  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

| Tgt Ion | Ratio  | Lower  | Upper  |
|---------|--------|--------|--------|
| 88      | 100    |        |        |
| 58      | 144.9  | 117.0  | 175.4  |
| 43      | 349.2  | 278.7  | 418.1  |
| 57      | 1755.1 | 1403.7 | 2105.5 |





#41

Tetrahydrofuran

Concen: 9.79 ppbv

RT: 7.09 min Scan# 657

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

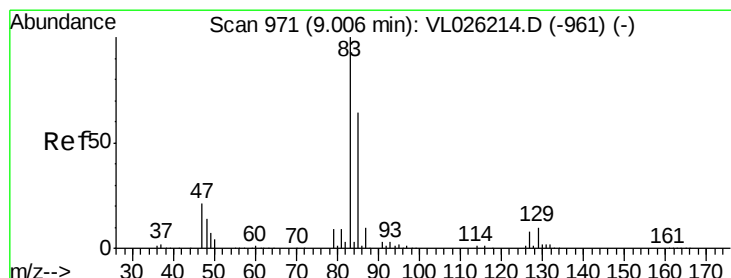
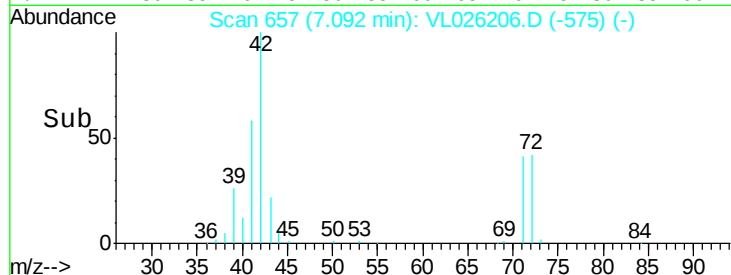
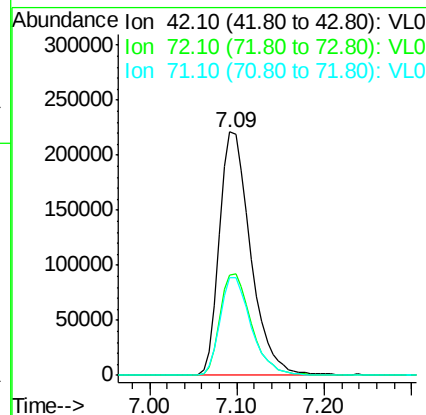
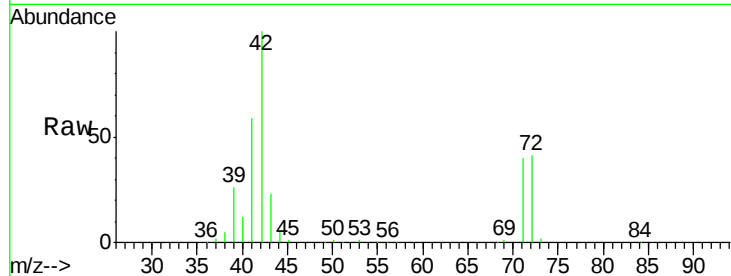
ClientSampleId :

VSTDCCC010

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 42   | Resp: | 549833 |
| Ion Ratio |      | Lower | Upper  |
| 42        | 100  |       |        |
| 72        | 42.2 | 33.8  | 50.6   |
| 71        | 40.4 | 32.3  | 48.5   |

Manual Integrations  
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10/22/2015 4:30:44 PM



#42

Bromodichloromethane

Concen: 10.56 ppbv

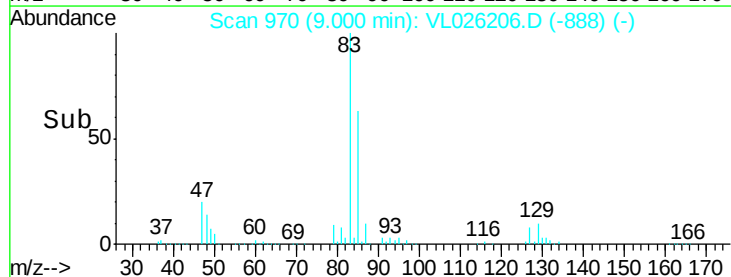
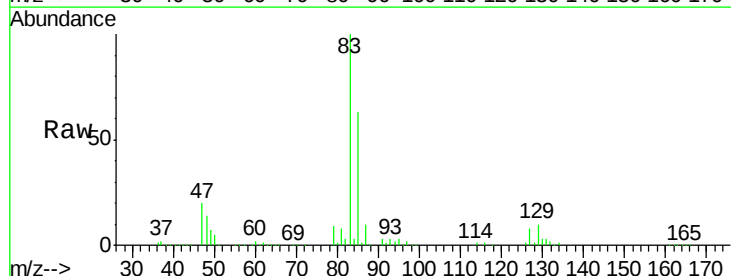
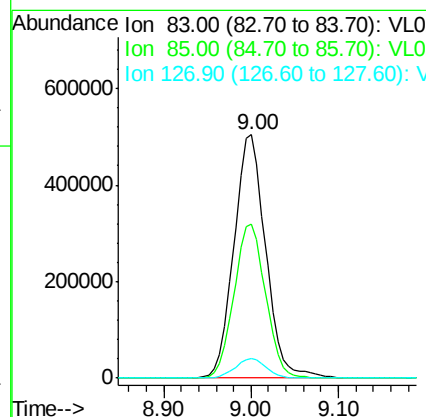
RT: 9.00 min Scan# 970

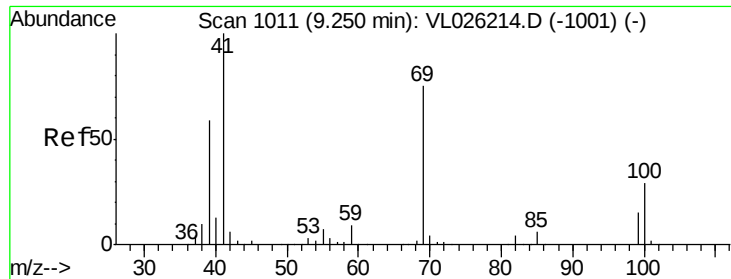
Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

|           |      |       |         |
|-----------|------|-------|---------|
| Tgt Ion:  | 83   | Resp: | 1275829 |
| Ion Ratio |      | Lower | Upper   |
| 83        | 100  |       |         |
| 85        | 63.2 | 50.6  | 75.8    |
| 127       | 8.1  | 6.5   | 9.7     |





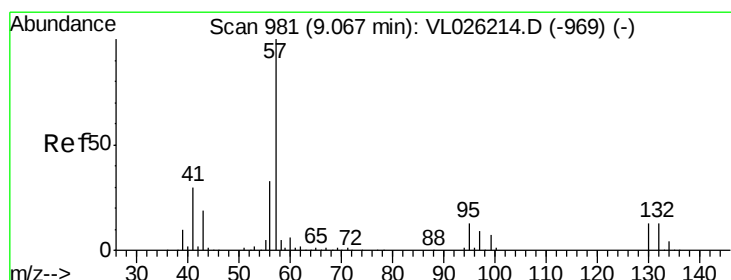
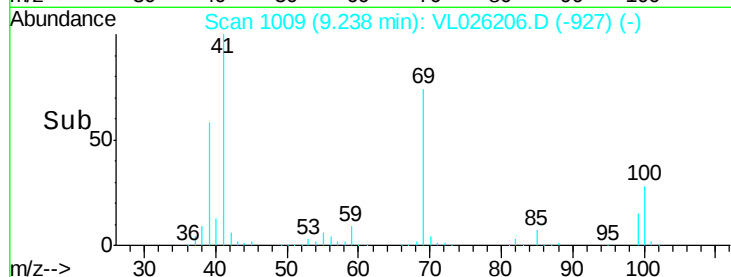
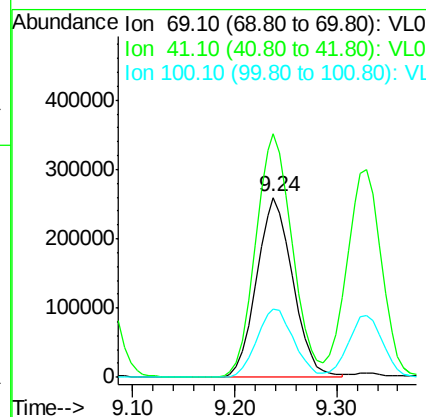
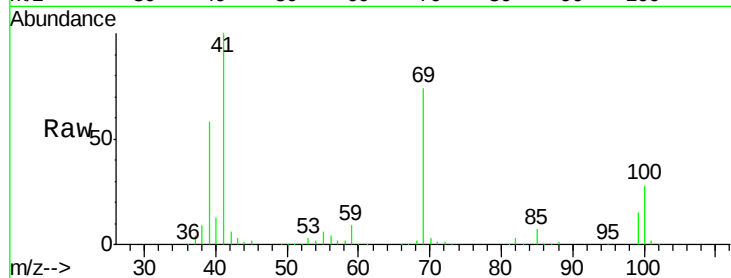
#43  
Methvl Methacrylate  
Concen: 10.60 ppbv  
RT: 9.24 min Scan# 1009  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 69      | 100   |       |       |
| 41      | 136.2 | 110.3 | 165.5 |
| 100     | 38.8  | 31.4  | 47.2  |

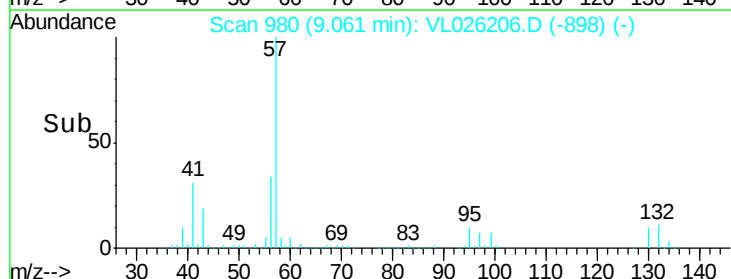
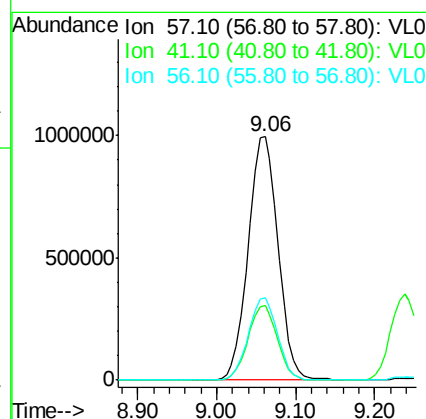
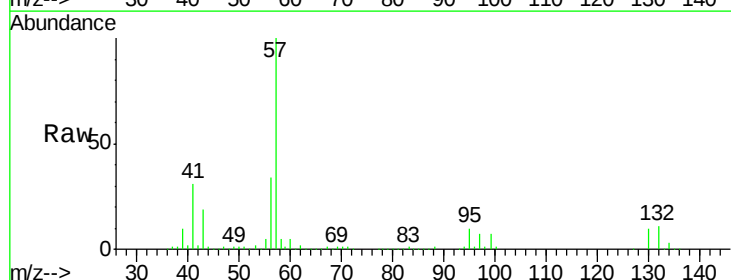
Manual Integrations  
APPROVED

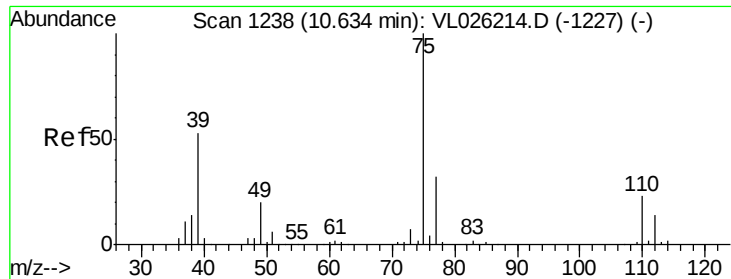
MMDadoda  
10/22/2015 4:30:44 PM



#44  
2,2,4-Trimethylpentane  
Concen: 9.20 ppbv  
RT: 9.06 min Scan# 980  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 30.0  | 24.0  | 36.0  |
| 56      | 33.2  | 26.5  | 39.7  |





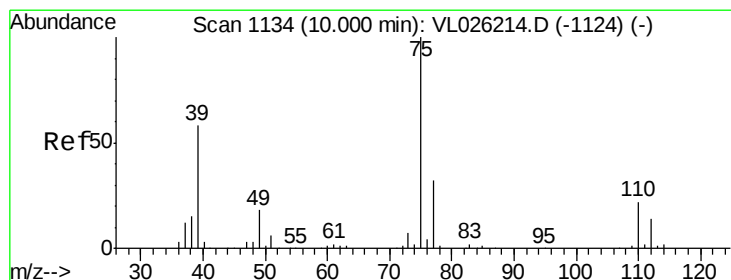
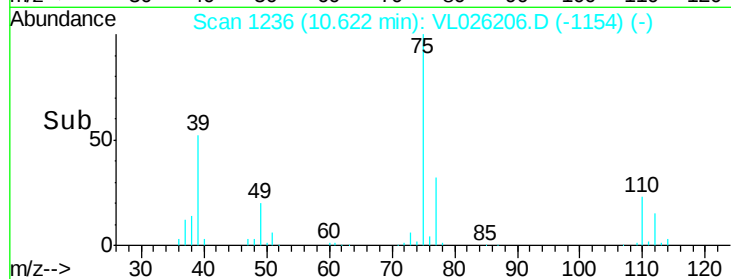
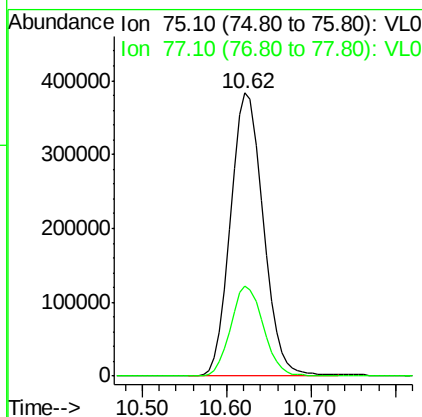
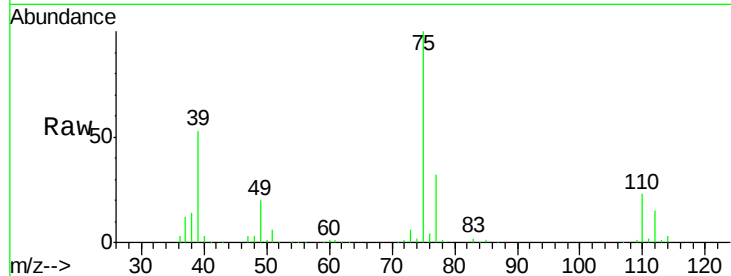
#45  
t-1,3-Dichloropropene  
Concen: 12.21 ppbv  
RT: 10.62 min Scan# 1236  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 75 Resp: 1014981  
Ion Ratio Lower Upper  
75 100  
77 31.9 25.5 38.3

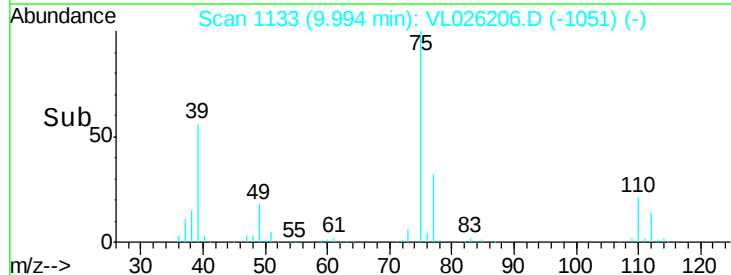
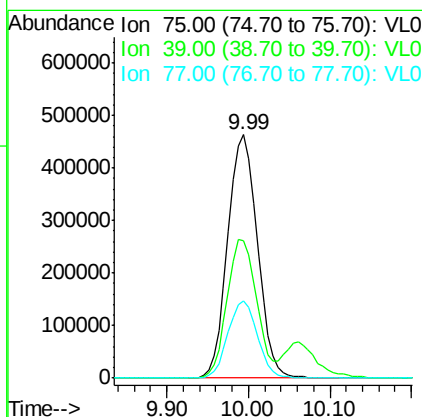
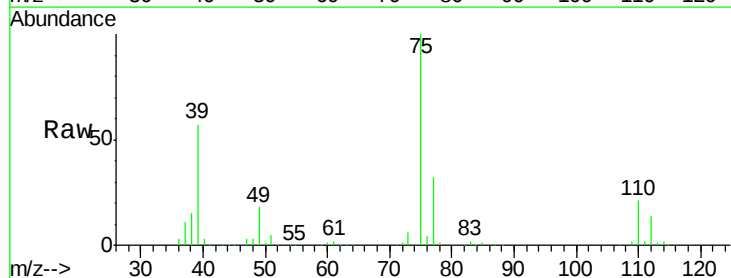
Manual Integrations  
APPROVED

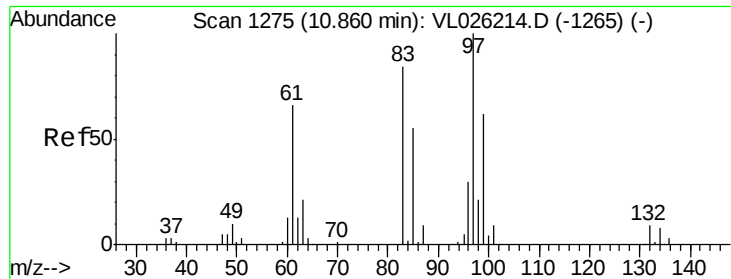
MMDadoda  
10/22/2015 4:30:44 PM



#46  
cis-1,3-Dichloropropene  
Concen: 11.43 ppbv  
RT: 9.99 min Scan# 1133  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Tgt Ion: 75 Resp: 1166487  
Ion Ratio Lower Upper  
75 100  
39 56.6 45.3 67.9  
77 31.6 25.3 37.9





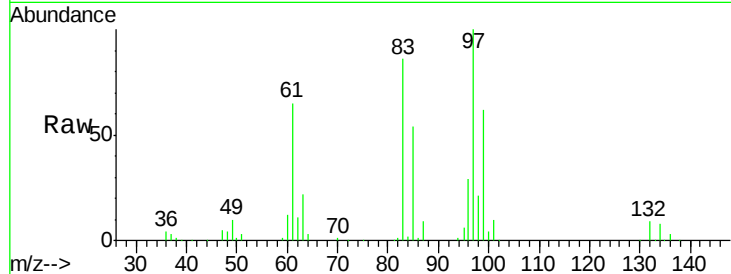
#47  
 1,1,2-Trichloroethane  
 Concen: 9.80 ppbv  
 RT: 10.85 min Scan# 1274  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 97      | 100  |       | 748269 |       |       |
| 83      | 85.8 | 68.6  | 103.0  |       |       |
| 85      | 54.4 | 43.5  | 65.3   |       |       |
| 99      | 61.8 | 49.4  | 74.2   |       |       |

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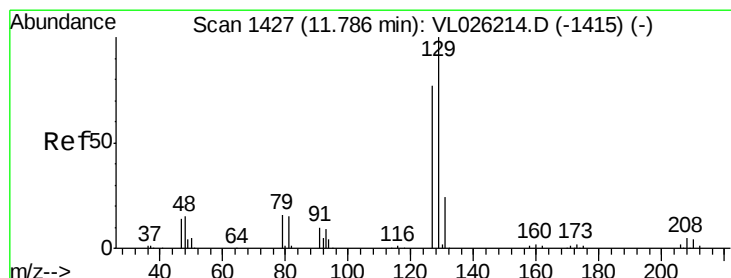
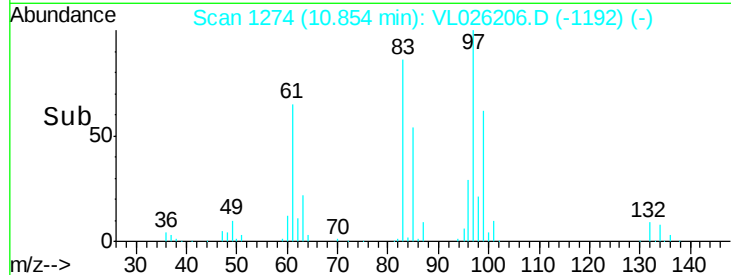
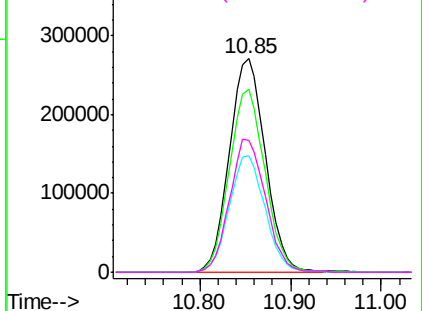
Abundance

Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

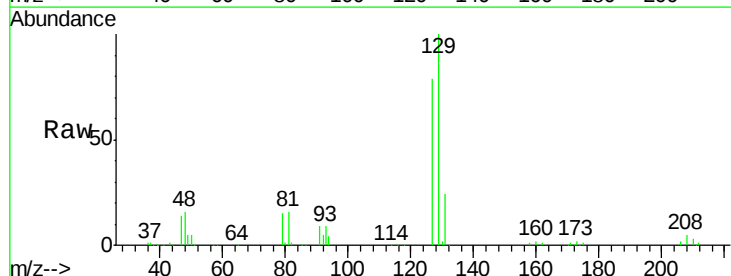
Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48  
 Dibromochloromethane  
 Concen: 11.48 ppbv  
 RT: 11.77 min Scan# 1425  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

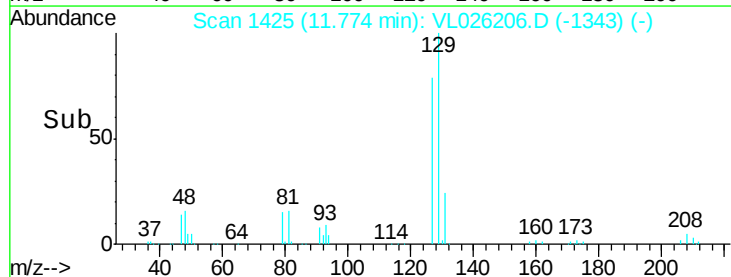
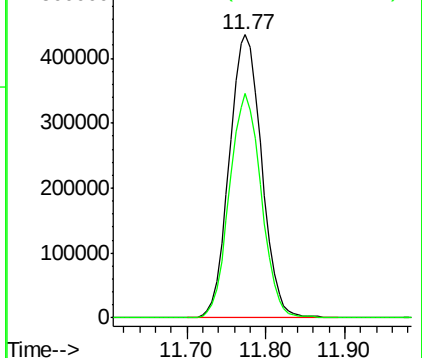
| Tgt Ion | Ion  | Ratio | Resp    | Lower | Upper |
|---------|------|-------|---------|-------|-------|
| 129     | 100  |       | 1243454 |       |       |
| 127     | 78.4 | 39.2  | 117.6   |       |       |

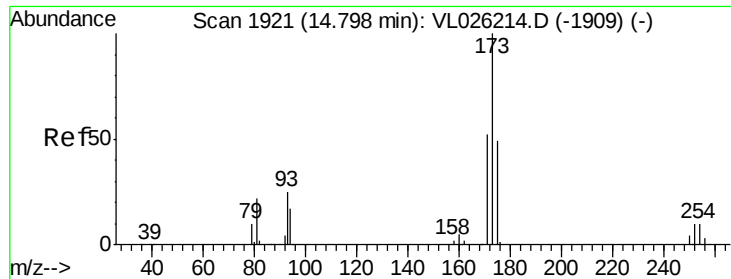


Abundance

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





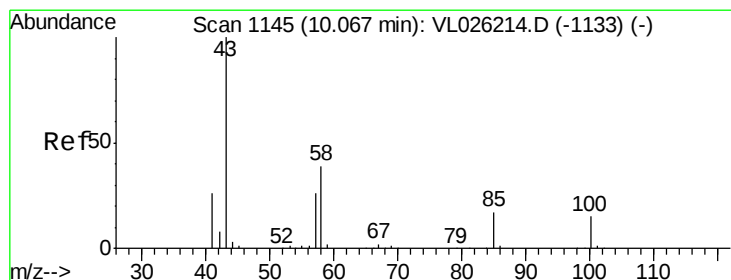
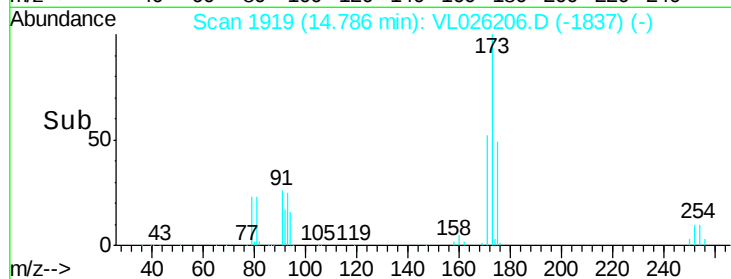
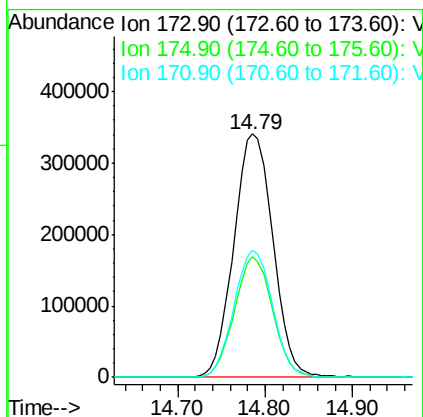
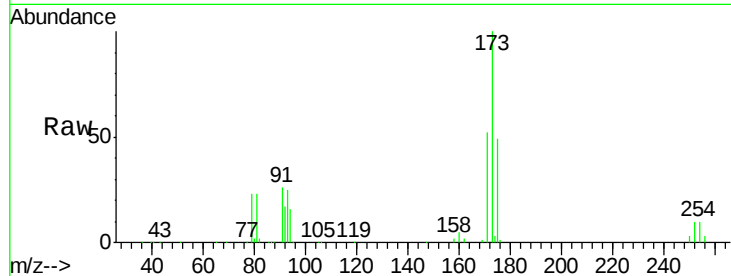
#49  
Bromoform  
Concen: 13.04 ppbv  
RT: 14.79 min Scan# 1919  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion:173 Resp: 1063040  
Ion Ratio Lower Upper  
173 100  
175 48.4 38.7 58.1  
171 51.7 41.4 62.0

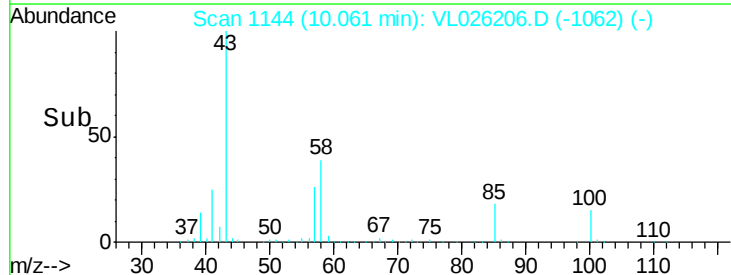
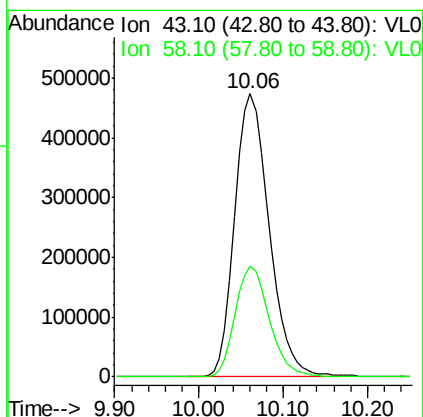
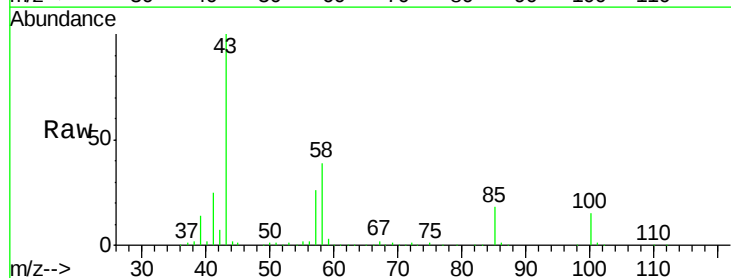
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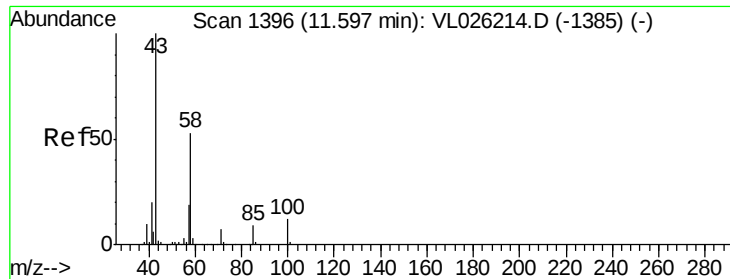
MMDadoda  
10/22/2015 4:30:44 PM



#50  
4-Methyl-2-Pentanone  
Concen: 9.94 ppbv  
RT: 10.06 min Scan# 1144  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Tgt Ion: 43 Resp: 1311444  
Ion Ratio Lower Upper  
43 100  
58 39.1 31.3 46.9





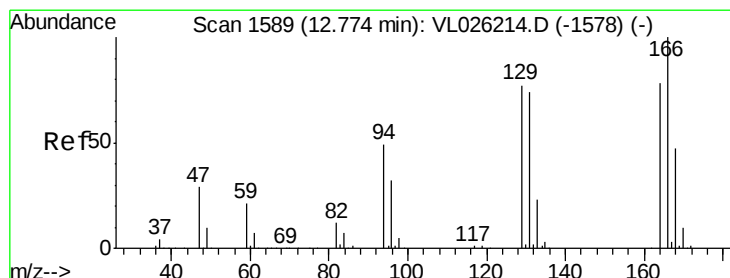
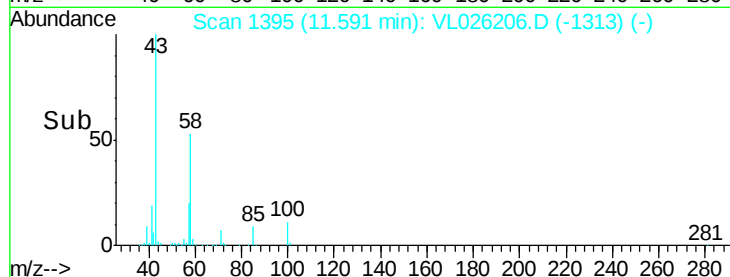
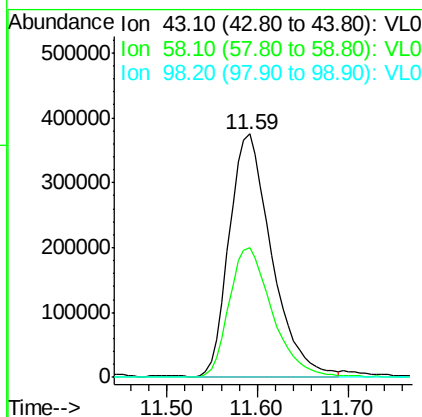
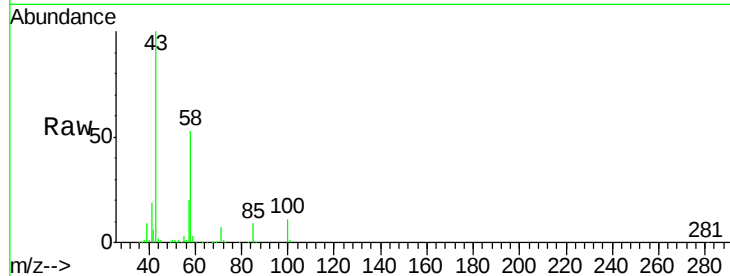
#51  
2-Hexanone  
Concen: 10.23 ppbv  
RT: 11.59 min Scan# 1395  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 43 Resp: 1213898  
Ion Ratio Lower Upper  
43 100  
58 54.9 43.8 65.8  
98 0.1 0.1 0.1#

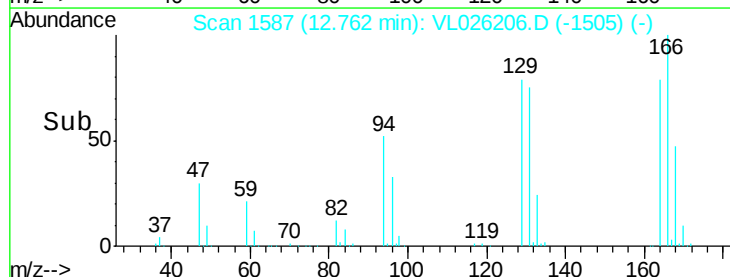
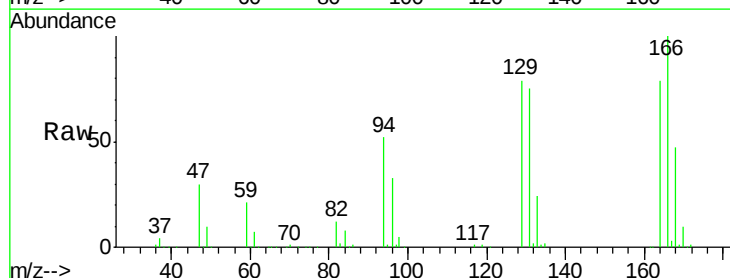
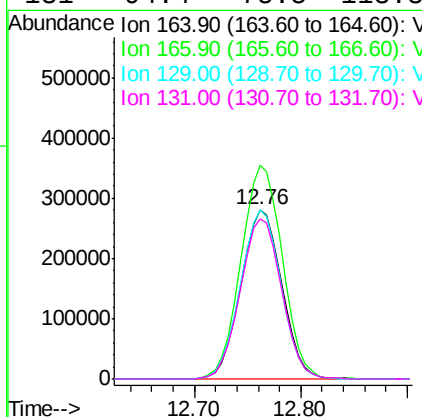
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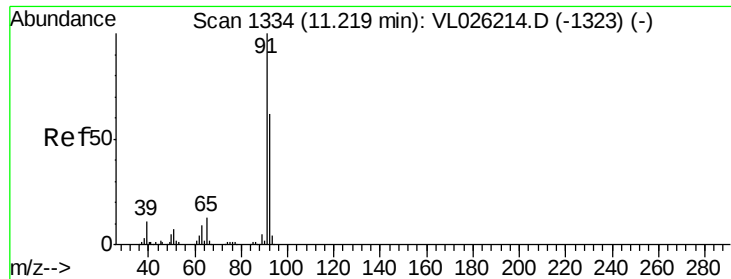
MMDadoda  
10/22/2015 4:30:44 PM



#52  
Tetrachloroethene  
Concen: 8.96 ppbv  
RT: 12.76 min Scan# 1587  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Tgt Ion: 164 Resp: 758445  
Ion Ratio Lower Upper  
164 100  
166 126.1 100.9 151.3  
129 99.6 79.7 119.5  
131 94.4 75.5 113.3





#53

Toluene

Concen: 10.16 ppbv

RT: 11.21 min Scan# 1332

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 91 Resp: 2244148

Ion Ratio Lower Upper

91 100

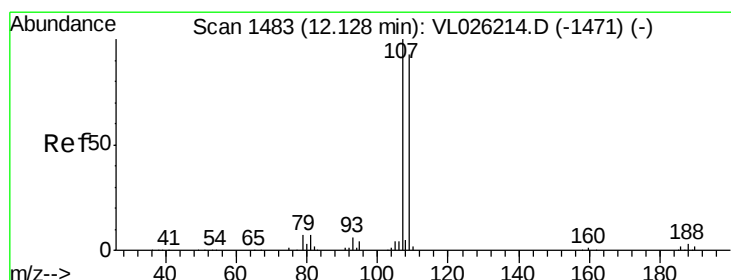
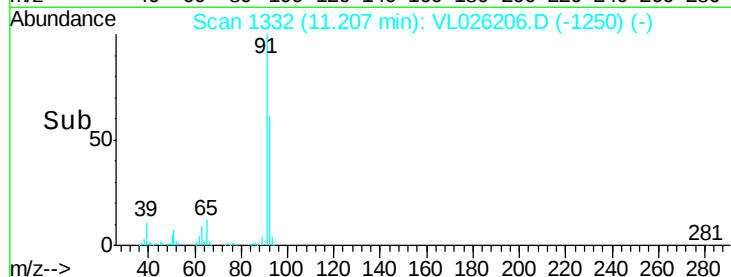
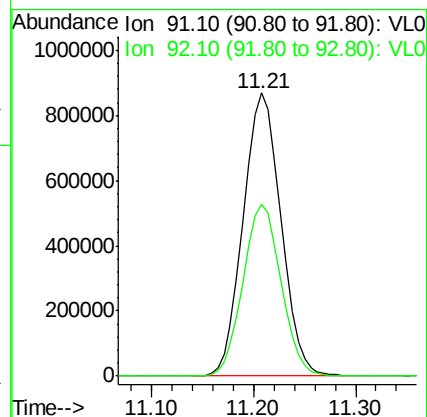
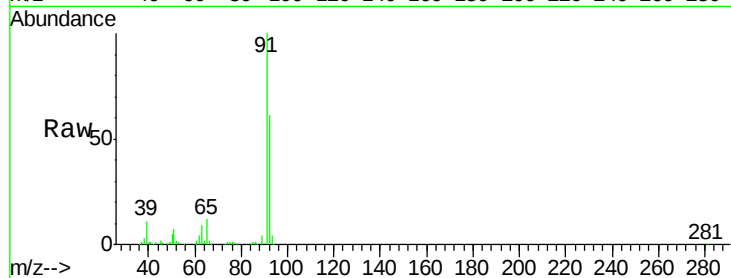
92 61.3 49.0 73.6

Manual Integrations

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#54

1,2-Dibromoethane

Concen: 10.07 ppbv

RT: 12.12 min Scan# 1481

Delta R.T. 0.00 min

Lab File: VL026206.D

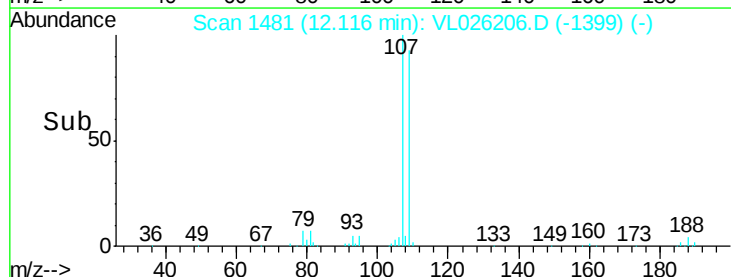
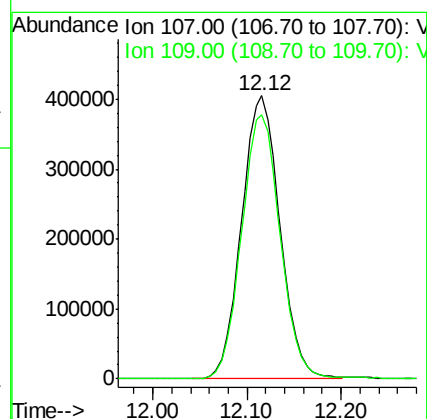
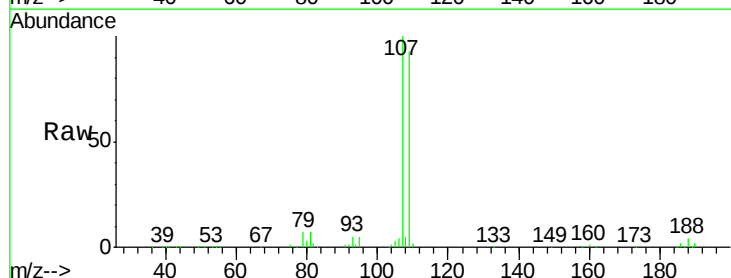
Acq: 20 Oct 2015 9:29

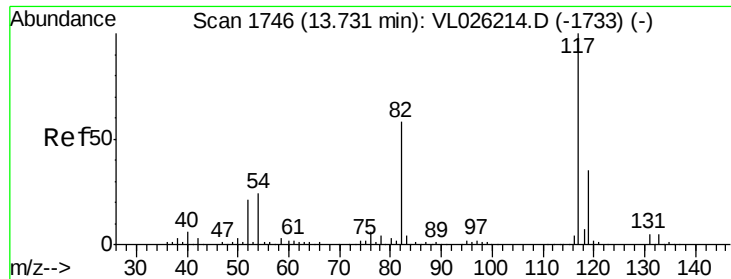
Tgt Ion: 107 Resp: 1152556

Ion Ratio Lower Upper

107 100

109 93.3 74.6 112.0





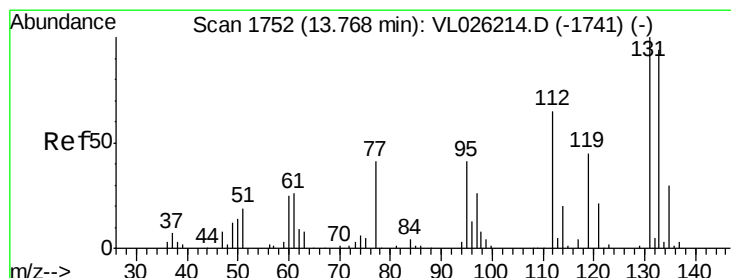
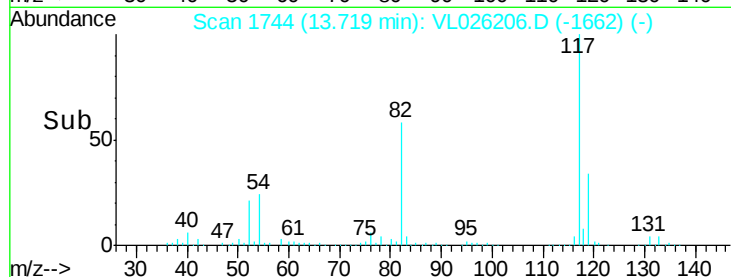
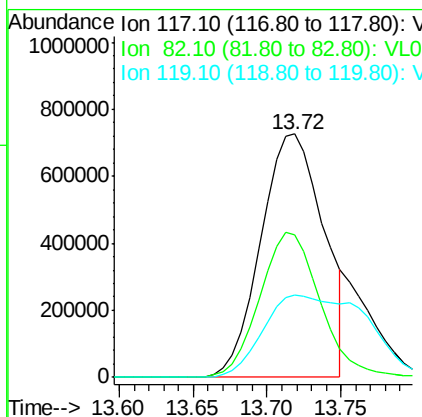
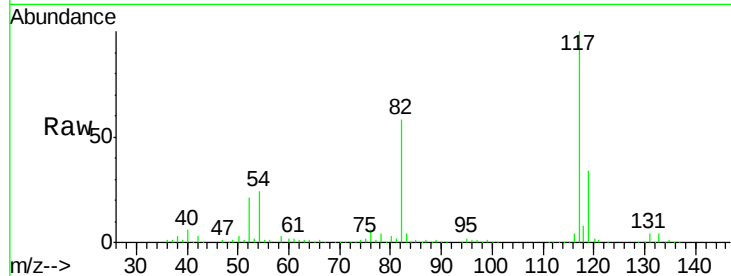
#55  
Chlorobenzene-d5  
Concen: 10.00 ppbv m  
RT: 13.72 min Scan# 1744  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion:117 Resp: 2158370  
Ion Ratio Lower Upper  
117 100  
82 57.9 46.3 69.5  
119 56.2 45.0 67.4

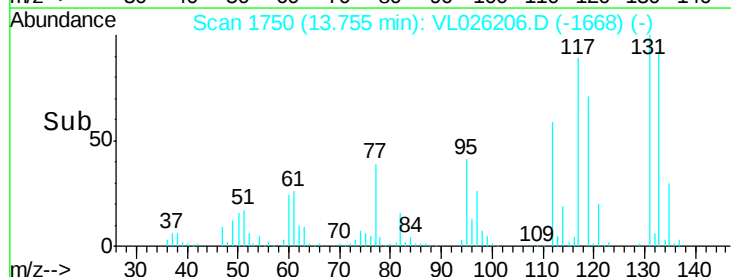
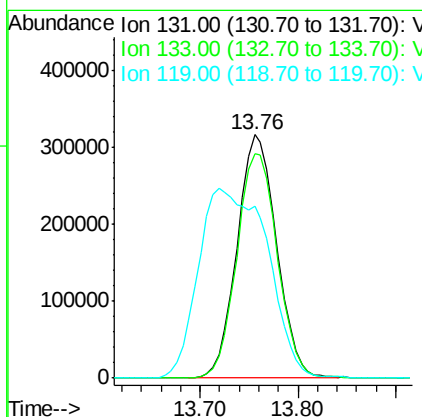
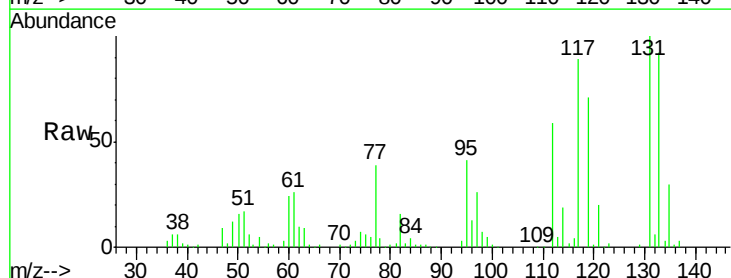
Manual Integrations  
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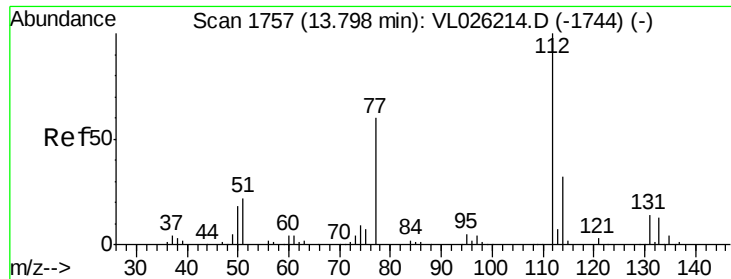
MMDadoda  
10/22/2015 4:30:44 PM



#56  
1,1,1,2-Tetrachloroethane  
Concen: 10.26 ppbv  
RT: 13.76 min Scan# 1750  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Tgt Ion:131 Resp: 887583  
Ion Ratio Lower Upper  
131 100  
133 95.1 76.1 114.1  
119 136.8 109.4 164.2





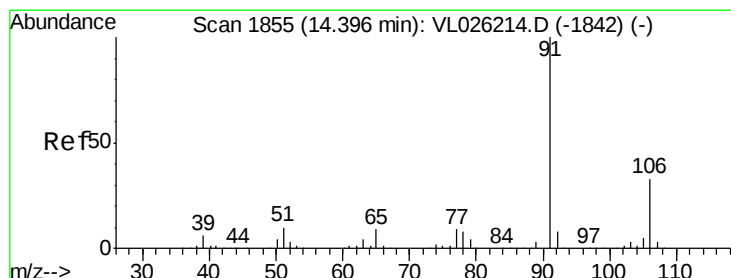
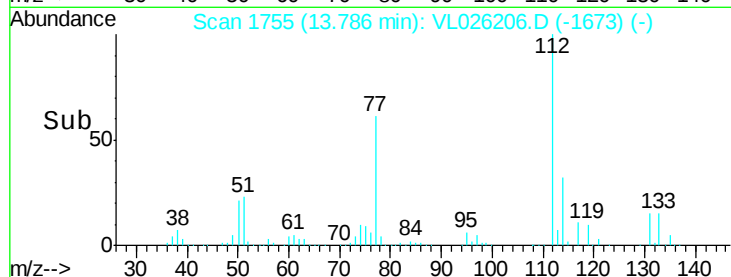
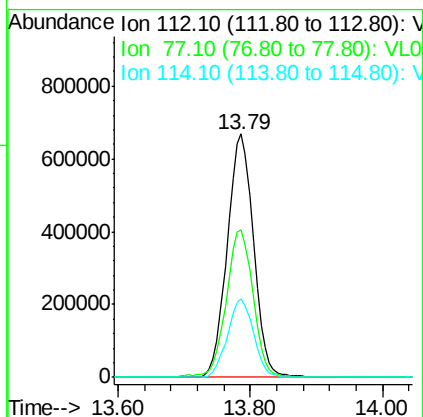
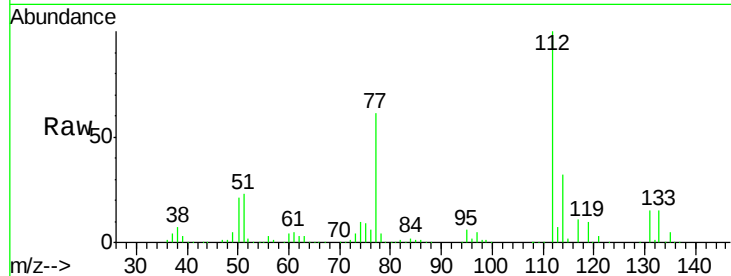
#57  
Chlorobenzene  
Concen: 9.48 ppbv  
RT: 13.79 min Scan# 1755  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 112 Resp: 1846109  
Ion Ratio Lower Upper  
112 100  
77 60.3 48.2 72.4  
114 32.2 29.0 35.4

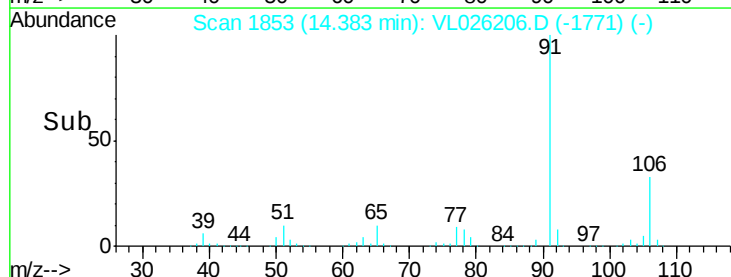
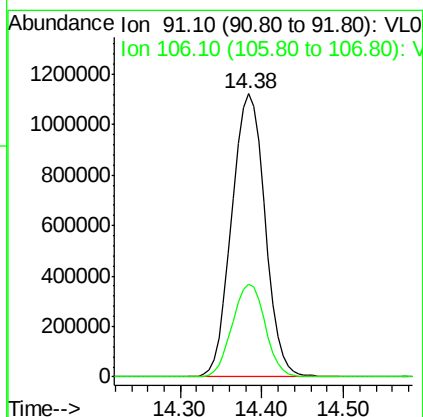
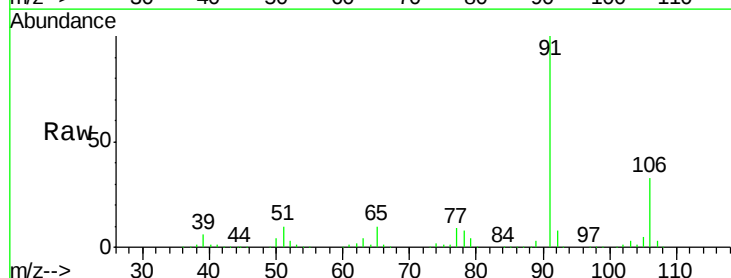
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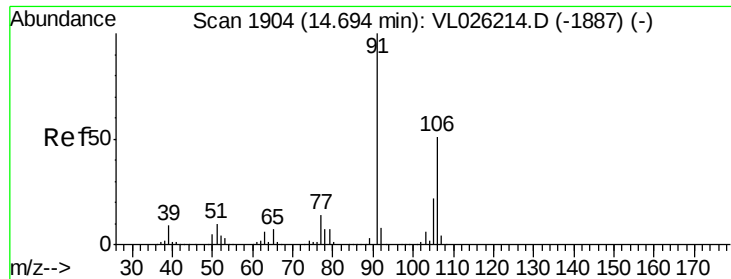
MMDadoda  
10/22/2015 4:30:44 PM



#58  
Ethyl Benzene  
Concen: 10.15 ppbv  
RT: 14.38 min Scan# 1853  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Tgt Ion: 91 Resp: 3181596  
Ion Ratio Lower Upper  
91 100  
106 32.7 26.2 39.2





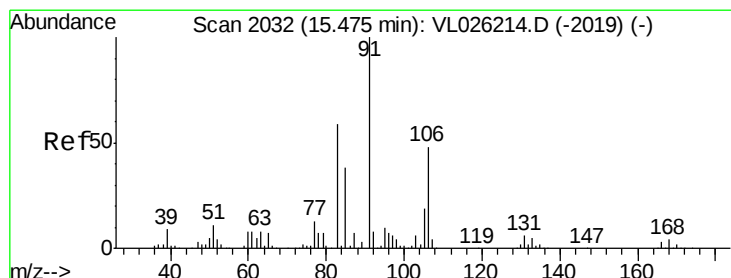
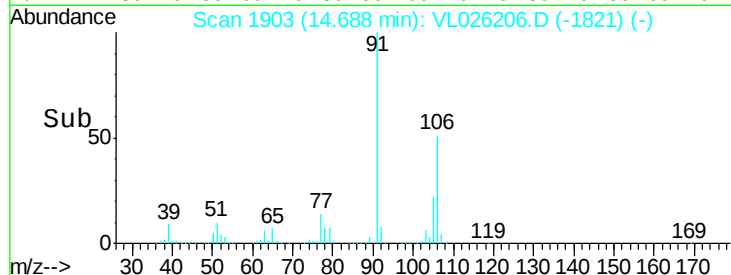
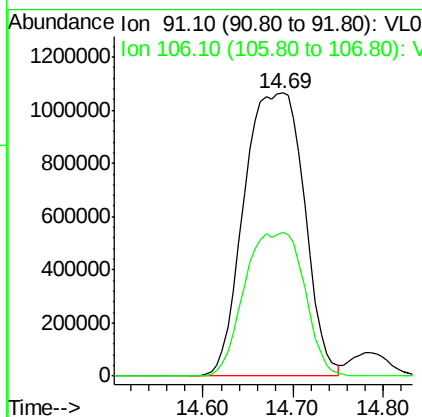
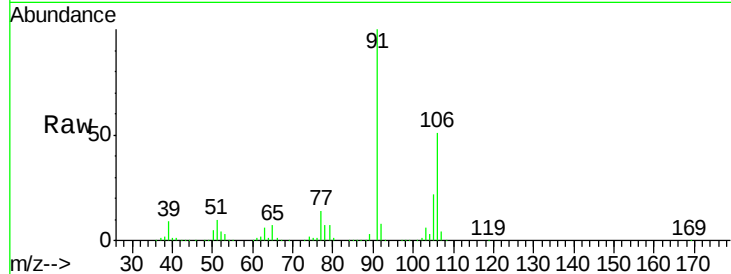
#59  
m/p-Xylene  
Concen: 19.62 ppbv m  
RT: 14.69 min Scan# 1903  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 91 Resp: 493536  
Ion Ratio Lower Upper  
91 100  
106 50.7 40.6 60.8

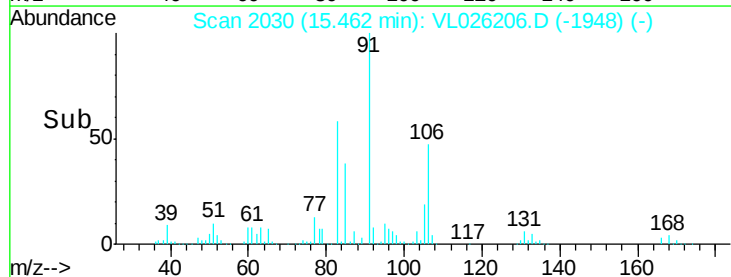
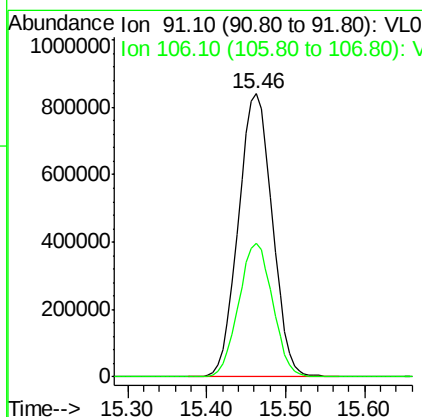
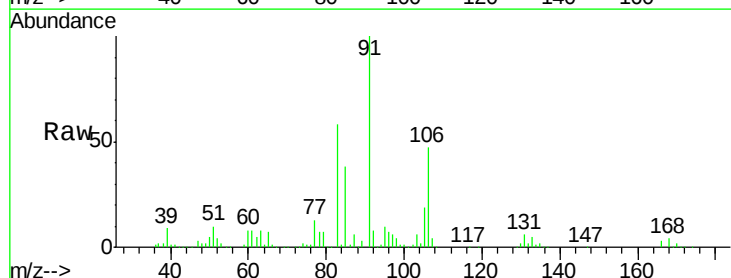
Manual Integrations  
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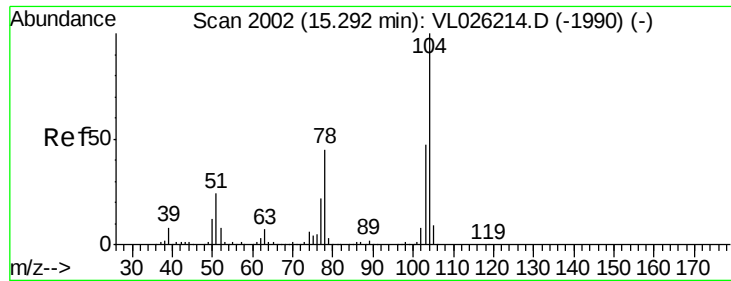
MMDadoda  
10/22/2015 4:30:44 PM



#60  
o-Xylene  
Concen: 9.55 ppbv  
RT: 15.46 min Scan# 2030  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Tgt Ion: 91 Resp: 2516913  
Ion Ratio Lower Upper  
91 100  
106 47.3 23.6 71.0





#61

Stvrene

Concen: 11.76 ppbv

RT: 15.28 min Scan# 2000

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:104 Resp: 1268574

Ion Ratio Lower Upper

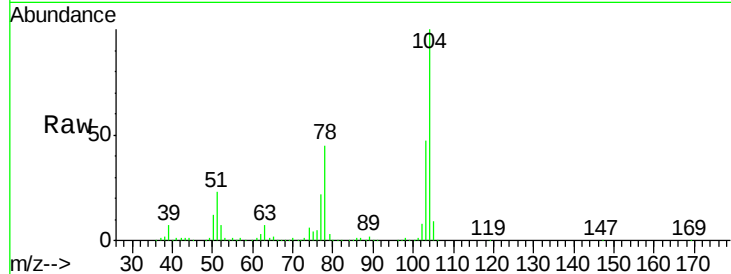
104 100

78 44.5 35.7 53.5

103 46.4 37.2 55.8

Manual Integrations  
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MMDadoda  
10/22/2015 4:30:44 PM

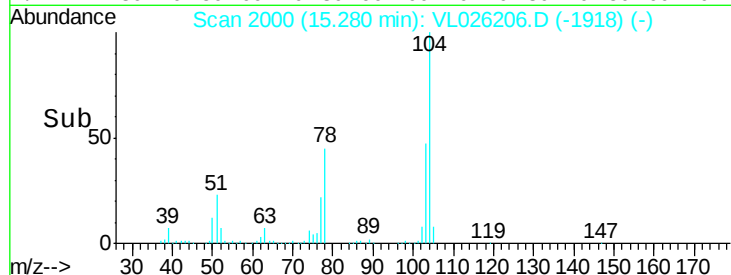


Abundance Ion 104.10 (103.80 to 104.80): V

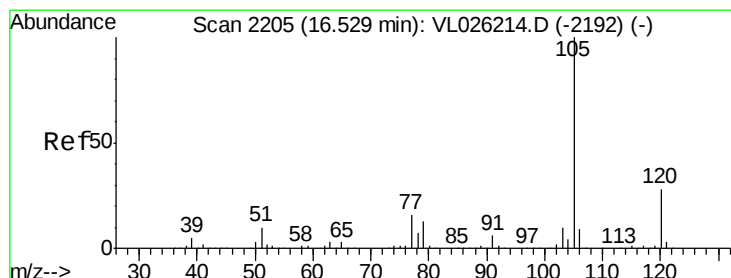
Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V

15.28



Time-->



#62

Isopropylbenzene

Concen: 10.33 ppbv

RT: 16.52 min Scan# 2203

Delta R.T. 0.00 min

Lab File: VL026206.D

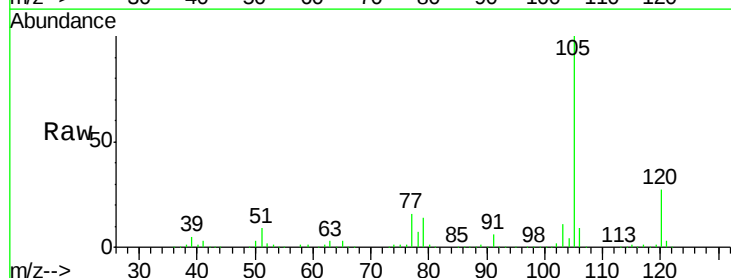
Acq: 20 Oct 2015 9:29

Tgt Ion:105 Resp: 3591367

Ion Ratio Lower Upper

105 100

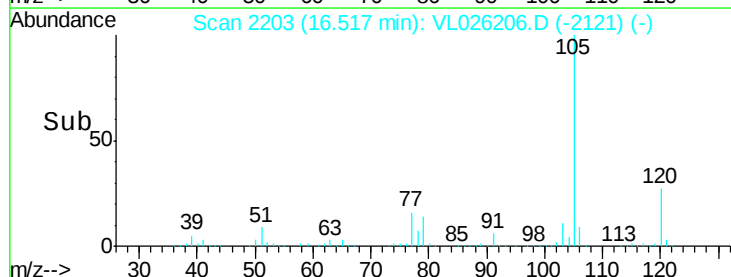
120 27.2 21.8 32.6



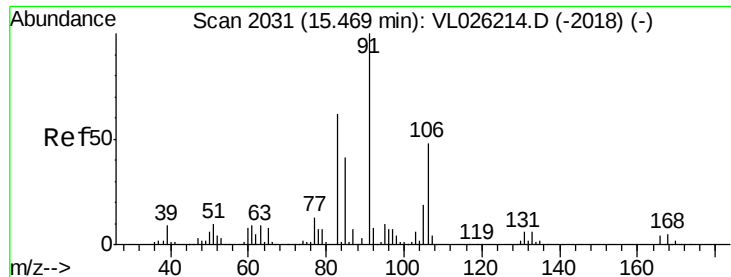
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.52



Time-->



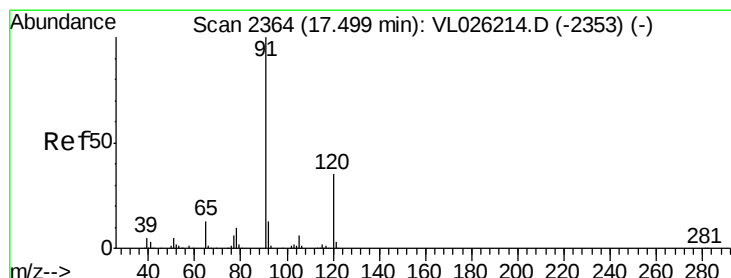
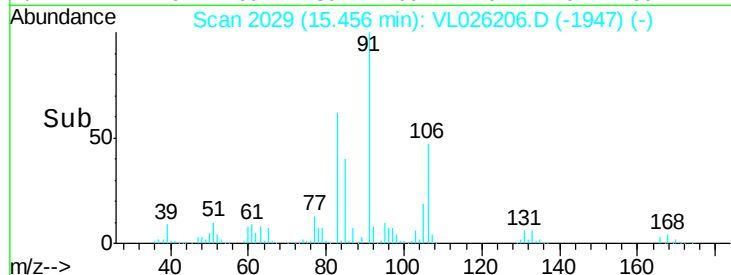
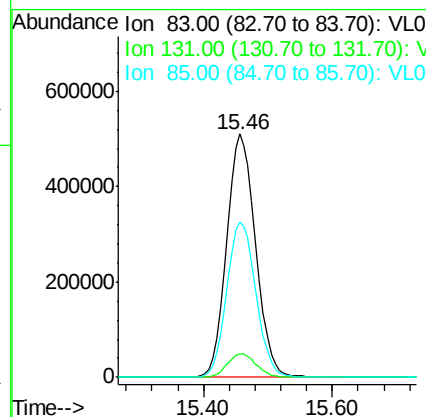
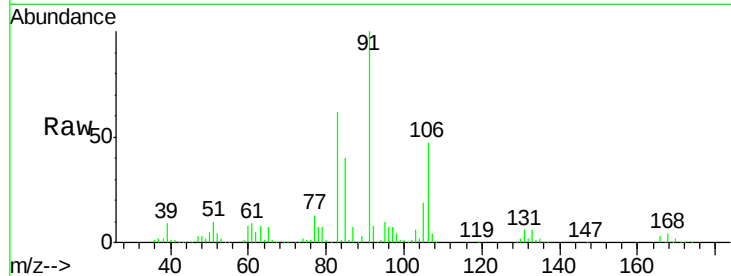
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 8.23 ppbv  
 RT: 15.46 min Scan# 2029  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tot Ion: 83 Resp: 1612024  
 Ion Ratio Lower Upper  
 83 100  
 131 9.8 4.9 14.6  
 85 64.5 32.3 96.8

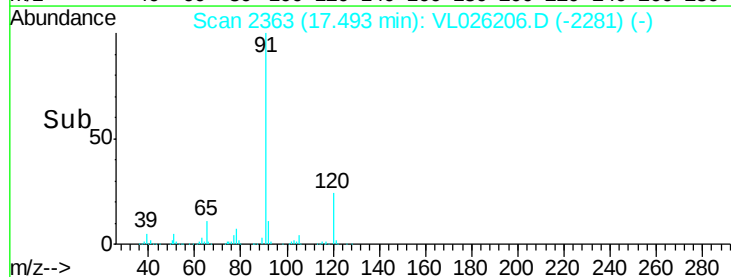
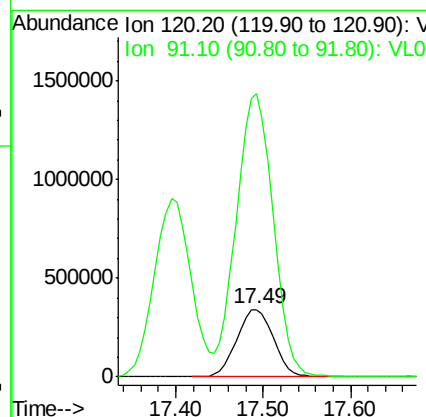
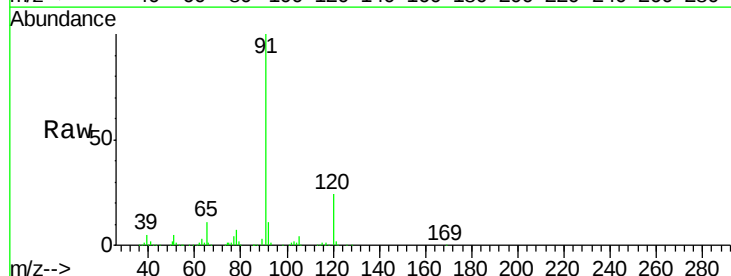
Manual Integrations  
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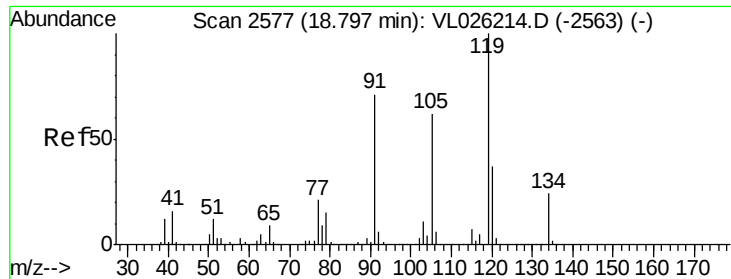
MMDadoda  
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#64  
 n-propylbenzene  
 Concen: 10.66 ppbv  
 RT: 17.49 min Scan# 2363  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Tgt Ion: 120 Resp: 997099  
 Ion Ratio Lower Upper  
 120 100  
 91 415.1 340.5 510.7





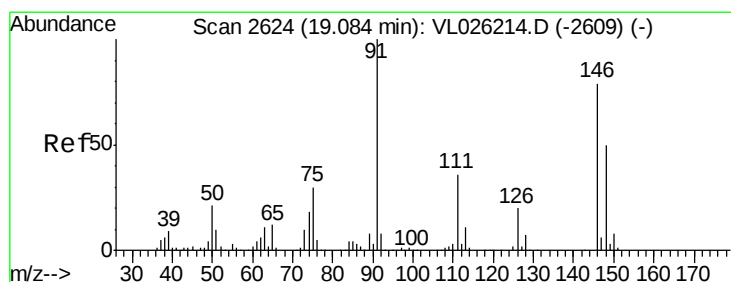
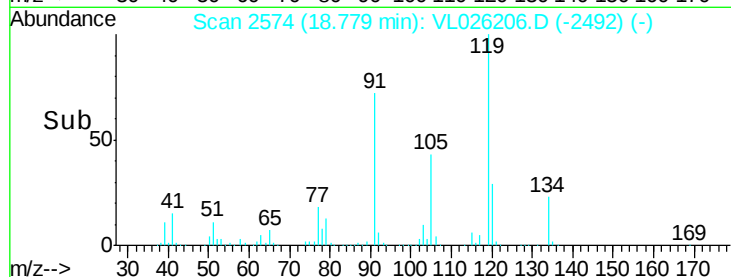
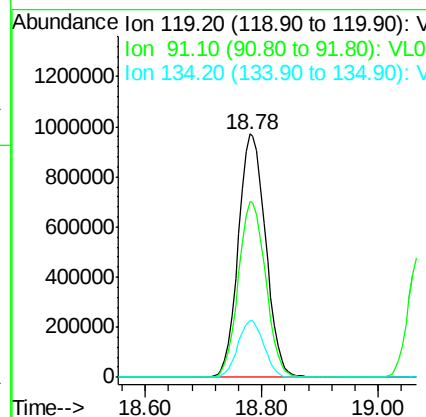
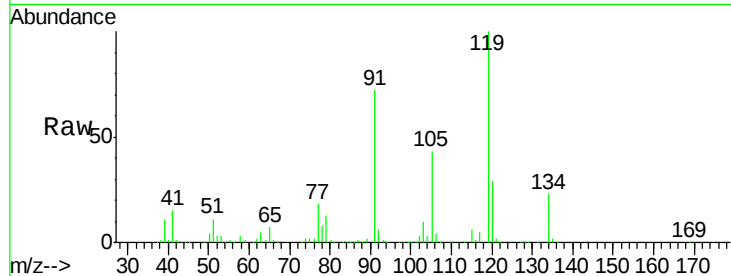
#65  
 tert-Butylbenzene  
 Concen: 10.30 ppbv  
 RT: 18.78 min Scan# 2574  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tot Ion: 119 Resp: 3156804  
 Ion Ratio Lower Upper  
 119 100  
 91 72.0 57.6 86.4  
 134 22.2 17.8 26.6

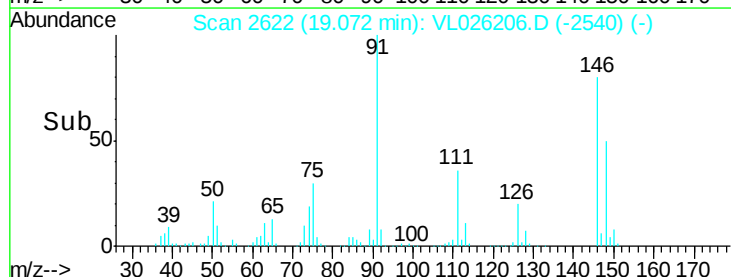
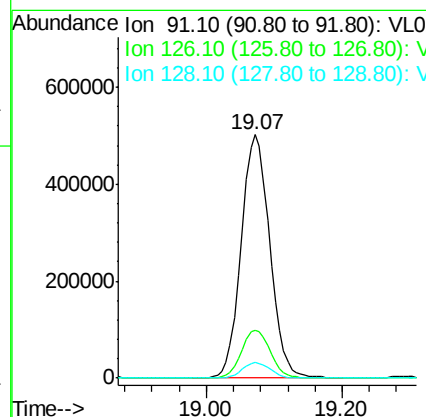
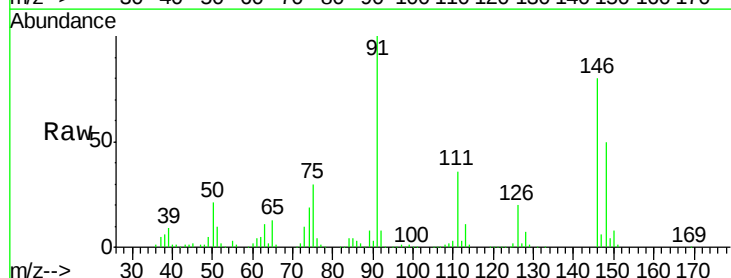
Manual Integrations  
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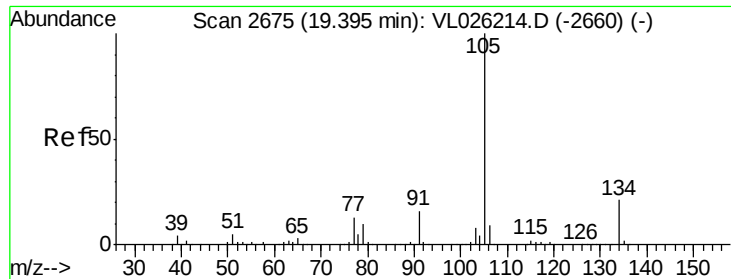
MMDadoda  
 10/22/2015 4:30:44 PM



#66  
 Benzyl Chloride  
 Concen: 16.04 ppbv  
 RT: 19.07 min Scan# 2622  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Tgt Ion: 91 Resp: 1461441  
 Ion Ratio Lower Upper  
 91 100  
 126 20.1 16.1 24.1  
 128 6.4 5.1 7.7





#67

sec-Butylbenzene

Concen: 10.51 ppbv

RT: 19.38 min Scan# 2673

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:105 Resp: 4492280

Ion Ratio Lower Upper

105 100

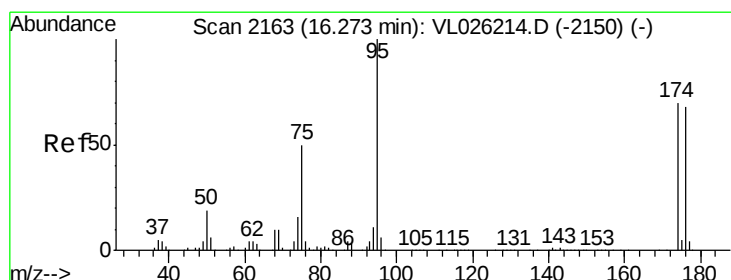
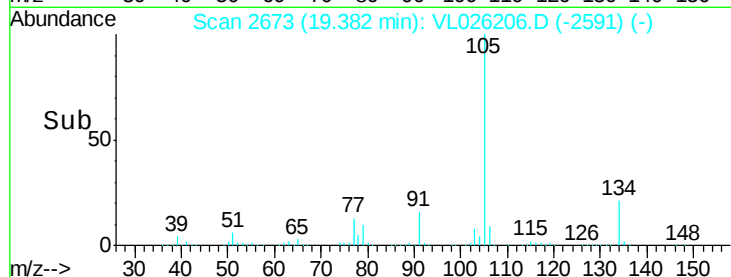
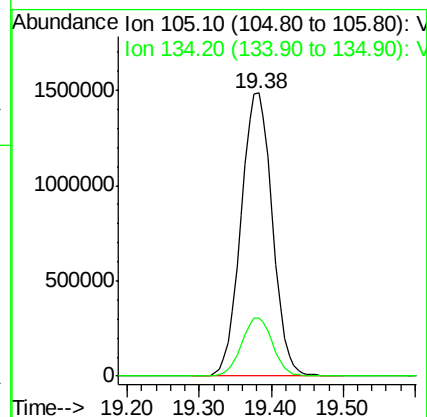
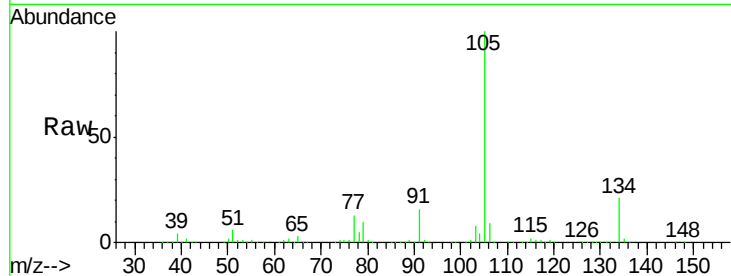
134 20.4

16.3 24.5

Manual Integrations  
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#68

1-Bromo-4-Fluorobenzene

Concen: 9.98 ppbv

RT: 16.26 min Scan# 2161

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Tgt Ion: 95 Resp: 1653304

Ion Ratio Lower Upper

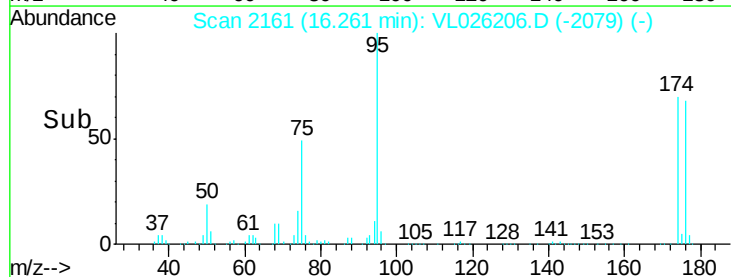
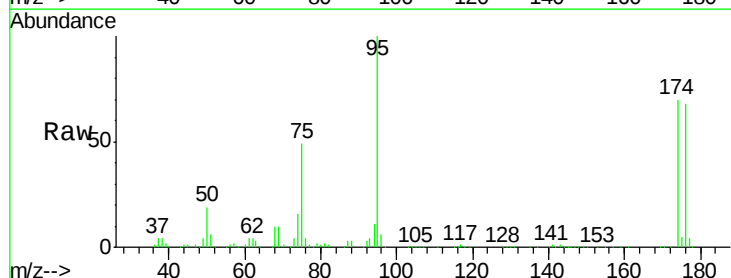
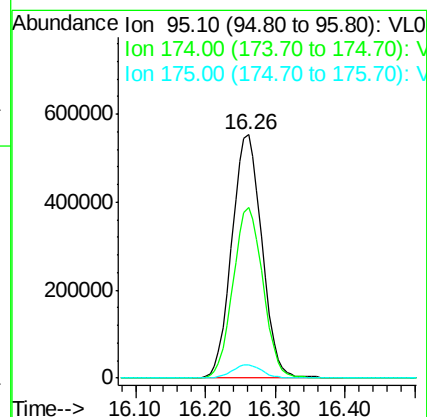
95 100

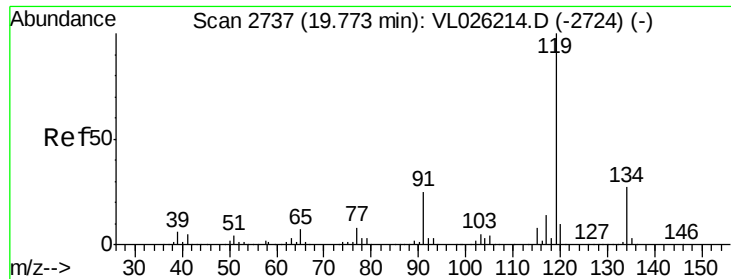
174 70.2

175 5.4

56.2 84.2

4.3 6.5





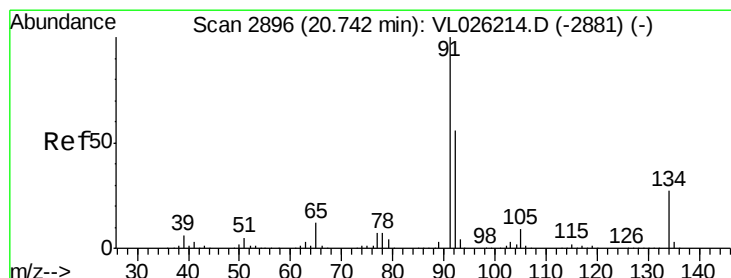
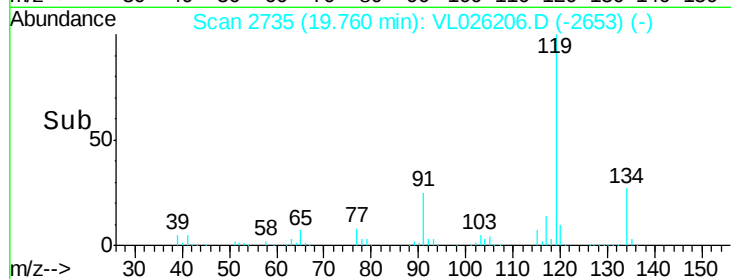
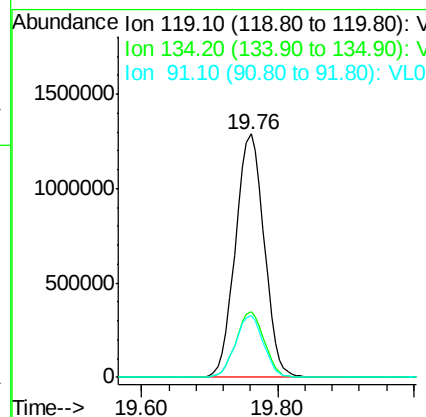
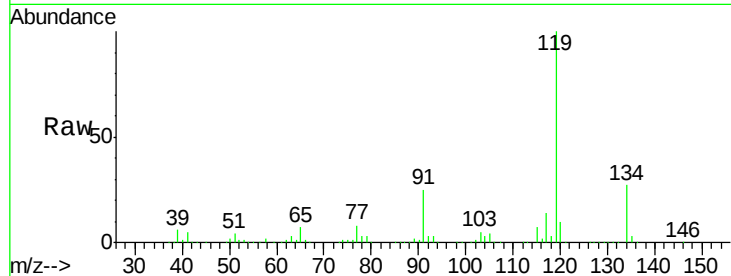
#69  
 p-Isopropyltoluene  
 Concen: 11.01 ppbv  
 RT: 19.76 min Scan# 2735  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 26.7  | 21.4  | 32.0  |
| 91      | 24.8  | 19.8  | 29.8  |

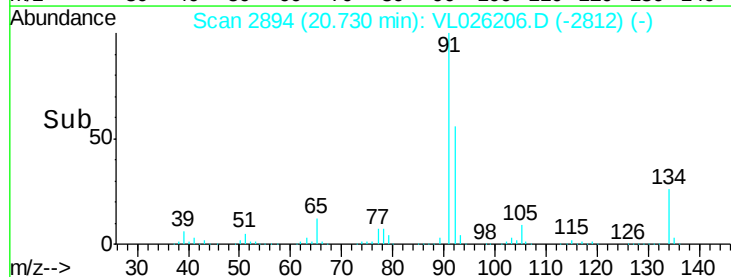
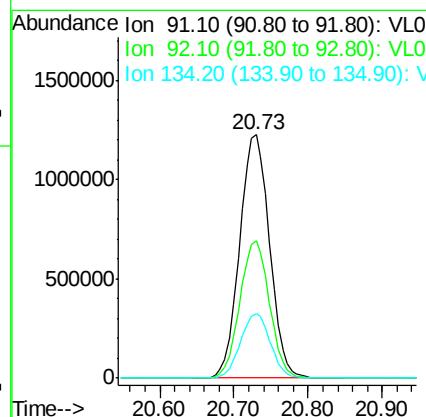
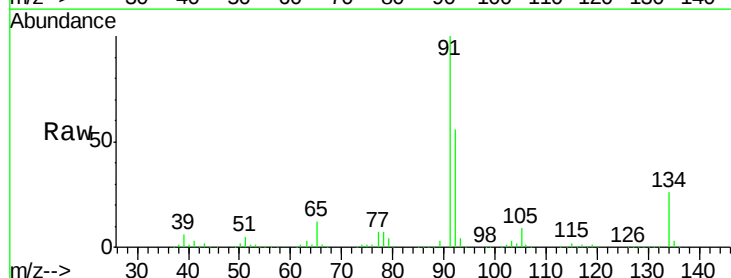
Manual Integrations  
 APPROVED

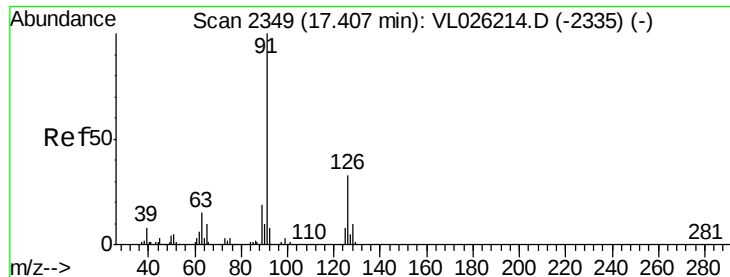
MMDadoda  
 10/22/2015 4:30:44 PM



#70  
 n-Butylbenzene  
 Concen: 10.55 ppbv  
 RT: 20.73 min Scan# 2894  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 55.9  | 44.7  | 67.1  |
| 134     | 26.4  | 21.1  | 31.7  |





#71

2-Chlorotoluene

Concen: 10.56 ppbv

RT: 17.40 min Scan# 2347

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 91 Resp: 2680469

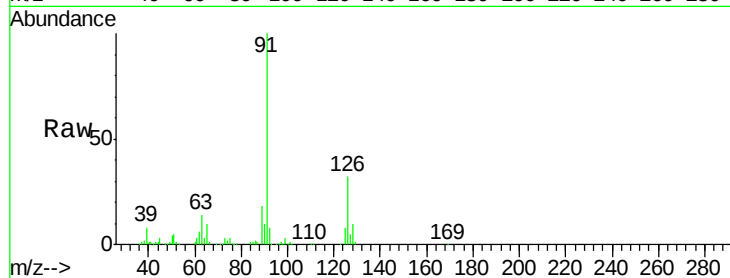
Ion Ratio Lower Upper

91 100

126 32.3 13.0 51.8

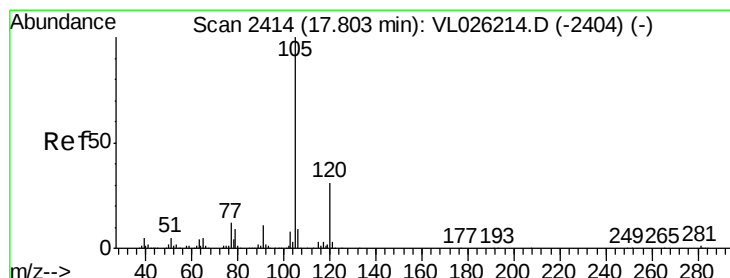
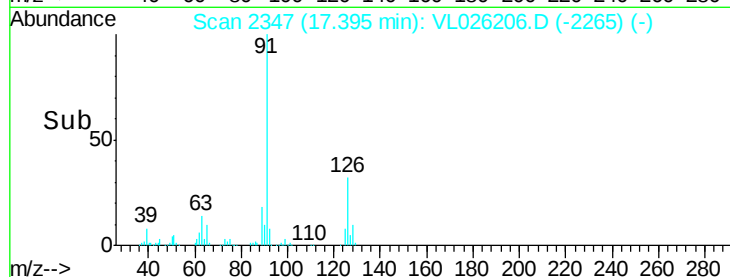
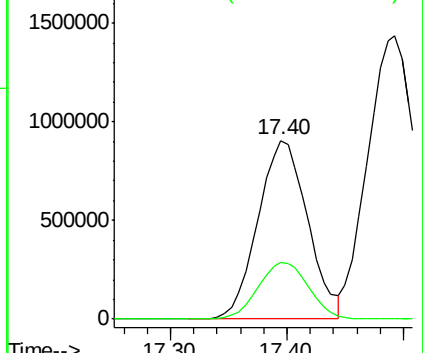
Manual Integrations  
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 10.93 ppbv

RT: 17.79 min Scan# 2412

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Tgt Ion: 105 Resp: 3074428

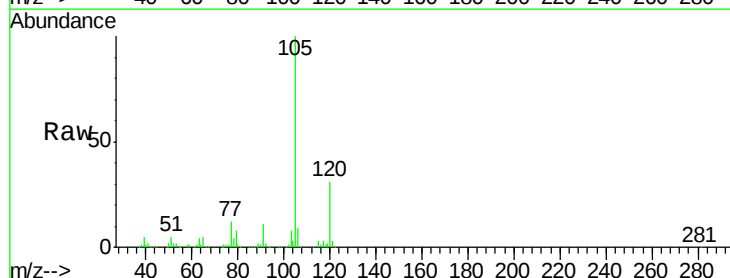
Ion Ratio Lower Upper

105 100

120 31.5 25.2 37.8

91 11.5 9.4 14.0

77 11.9 9.5 14.3

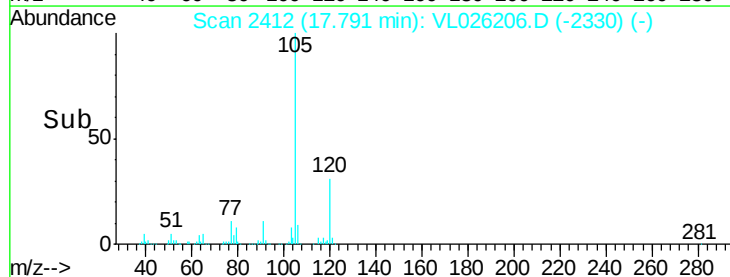
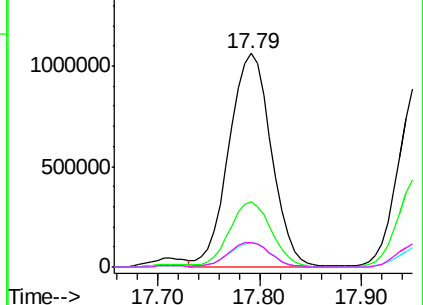


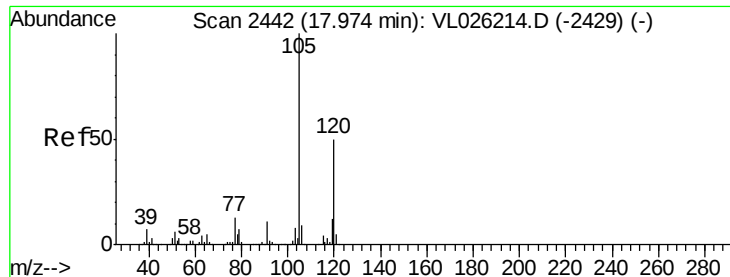
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#73

1,3,5-Trimethylbenzene

Concen: 10.85 ppbv

RT: 17.96 min Scan# 2439

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:105 Resp: 2867785

Ion Ratio Lower Upper

105 100

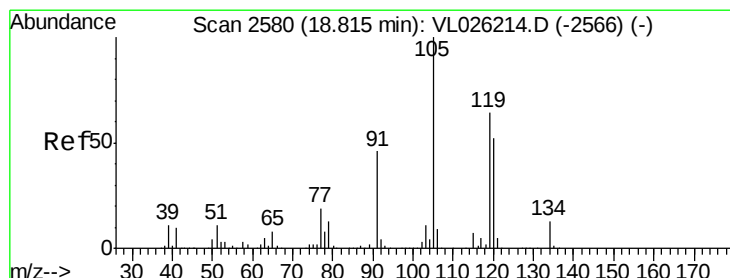
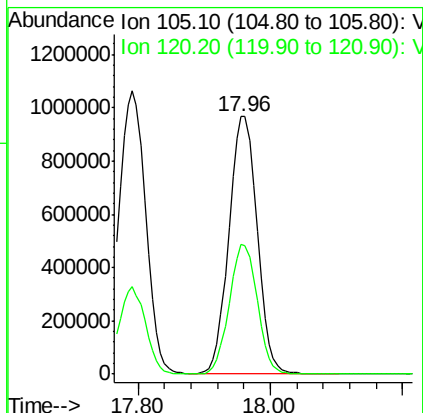
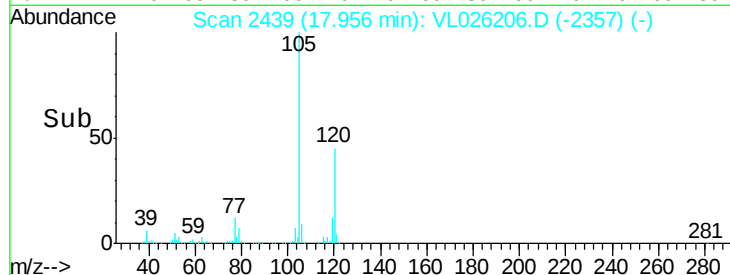
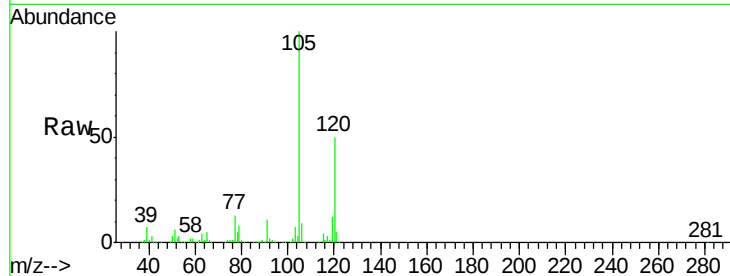
120 50.4 40.3 60.5

Manual Integrations

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#74

1,2,4-Trimethylbenzene

Concen: 10.13 ppbv

RT: 18.80 min Scan# 2578

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Tgt Ion:105 Resp: 2808761

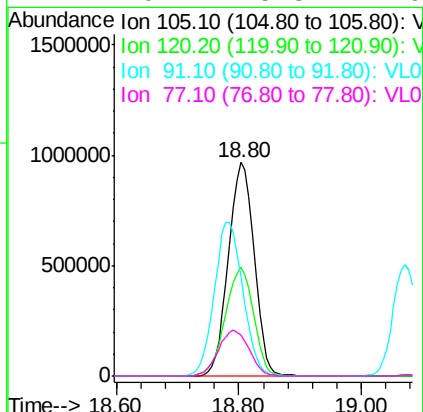
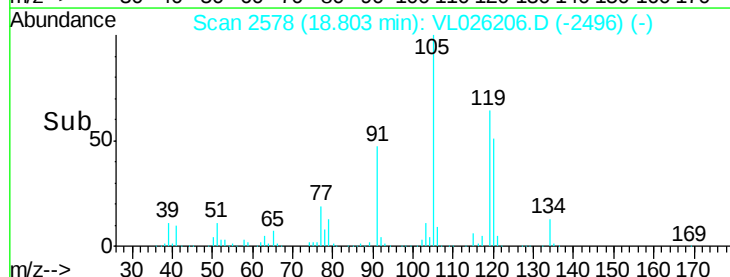
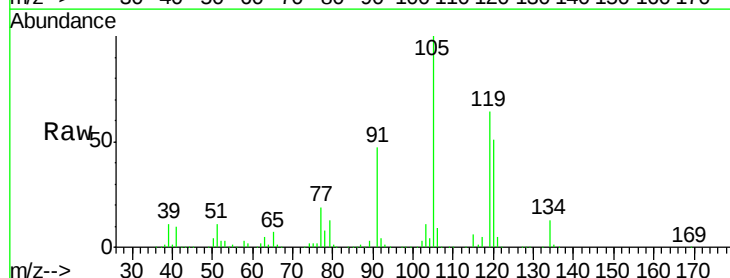
Ion Ratio Lower Upper

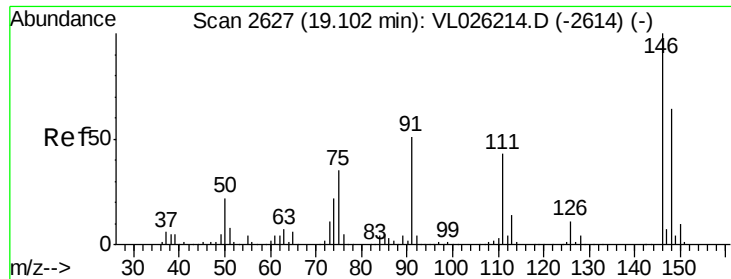
105 100

120 50.6 40.5 60.7

91 46.7 37.4 56.0

77 19.1 15.3 22.9





#75

1,3-Dichlorobenzene

Concen: 10.55 ppbv

RT: 19.09 min Scan# 2625

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:146 Resp: 1871636

Ion Ratio Lower Upper

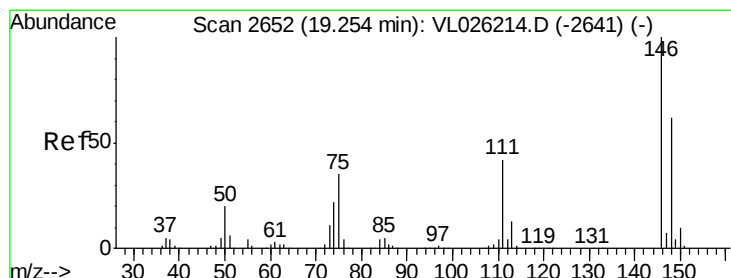
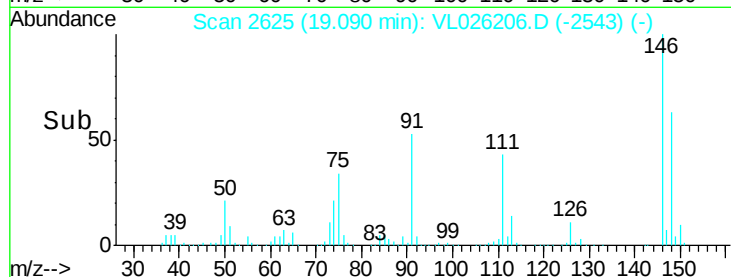
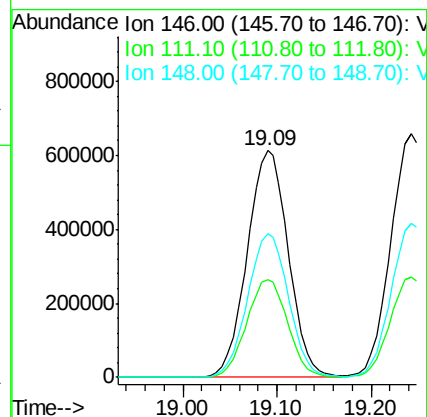
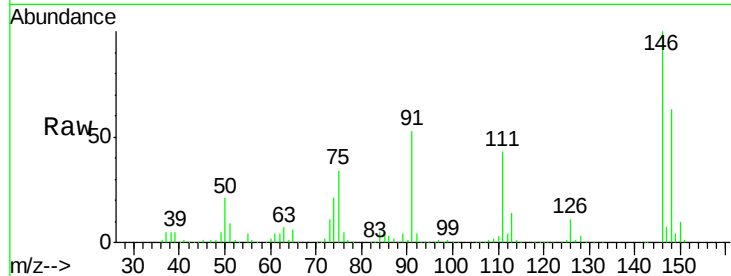
146 100

111 43.3 21.6 64.8

148 63.4 31.6 95.0

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#76

1,4-Dichlorobenzene

Concen: 11.04 ppbv

RT: 19.24 min Scan# 2650

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

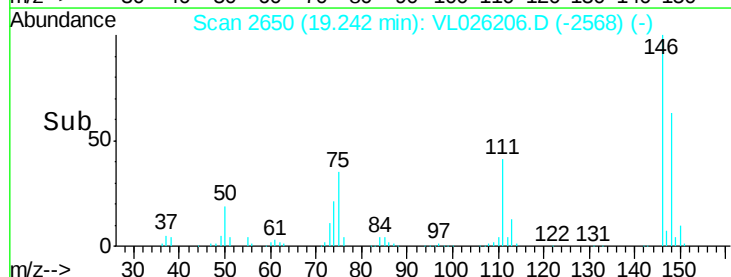
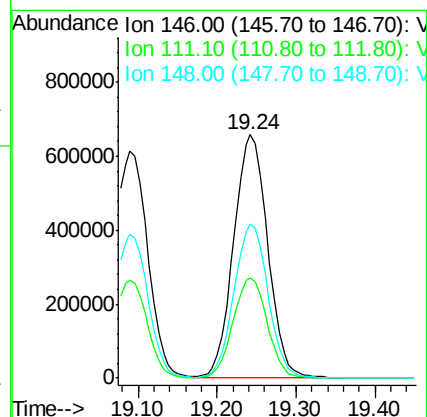
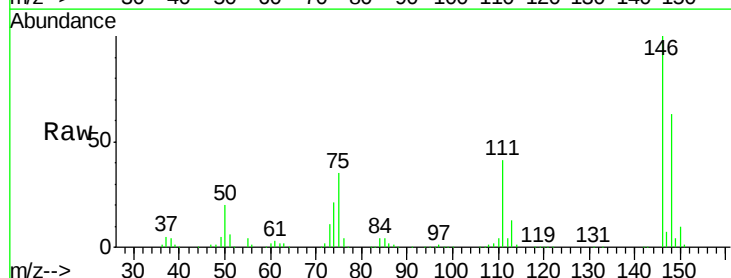
Tgt Ion:146 Resp: 1974978

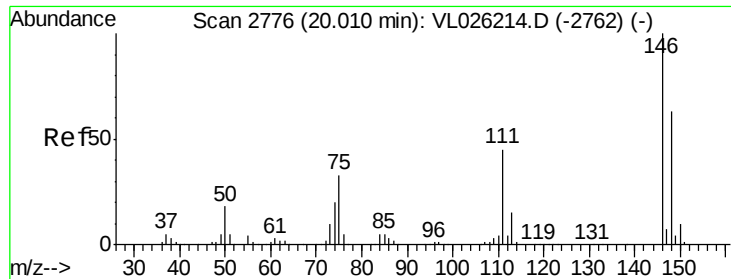
Ion Ratio Lower Upper

146 100

111 41.9 20.9 62.8

148 64.1 32.0 96.2





#77

1,2-Dichlorobenzene

Concen: 10.92 ppbv

RT: 20.00 min Scan# 2774

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:146 Resp: 1892788

Ion Ratio Lower Upper

146 100

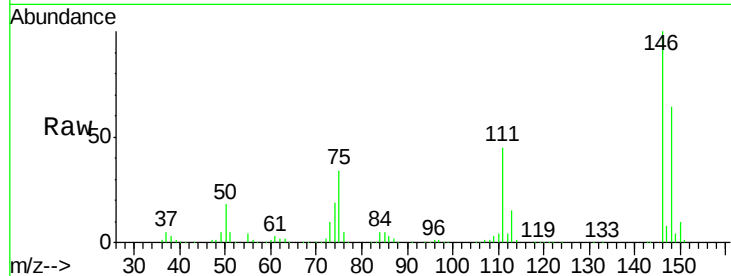
111 45.2 22.6 67.8

148 64.1 32.0 96.2

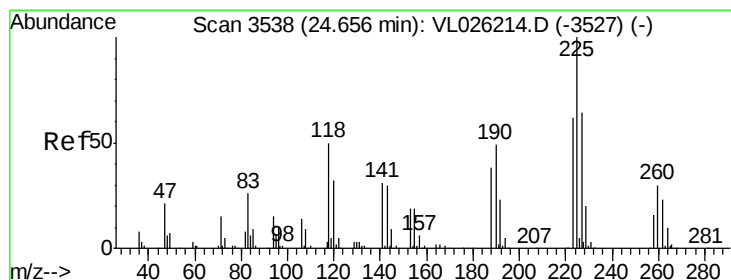
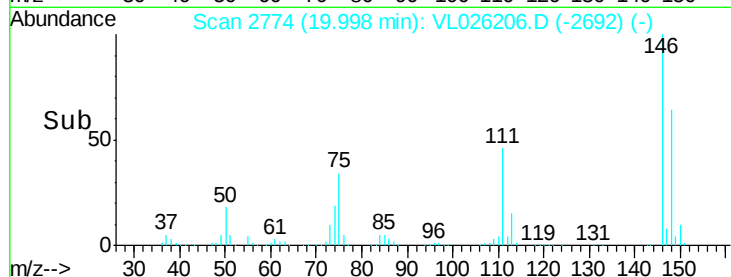
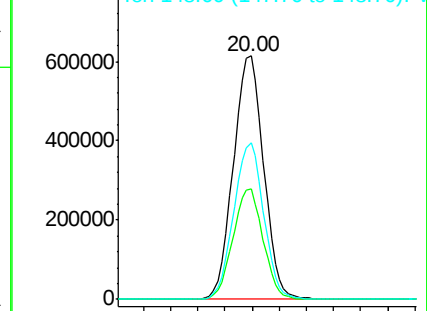
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Abundance Ion 146.00 (145.70 to 146.70): V  
Ion 111.10 (110.80 to 111.80): V  
Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 5.27 ppbv

RT: 24.64 min Scan# 3535

Delta R.T. 0.00 min

Lab File: VL026206.D

Acq: 20 Oct 2015 9:29

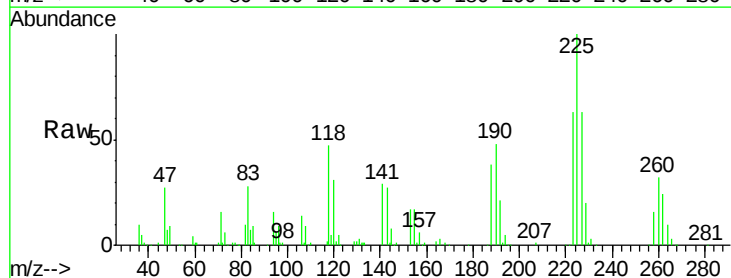
Tgt Ion:225 Resp: 366855

Ion Ratio Lower Upper

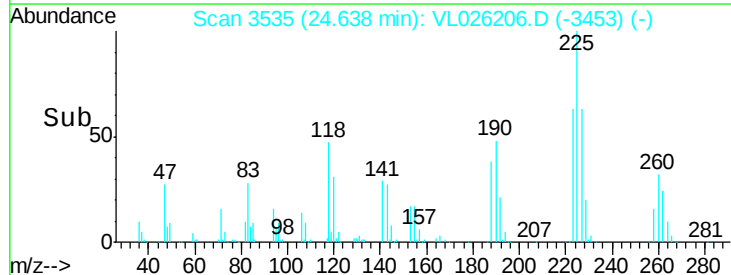
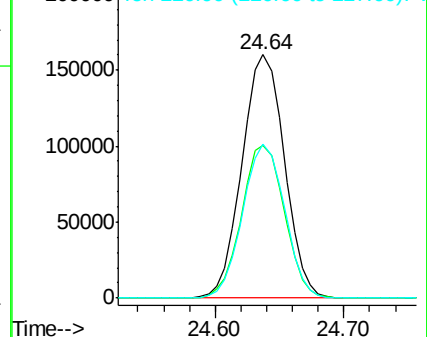
225 100

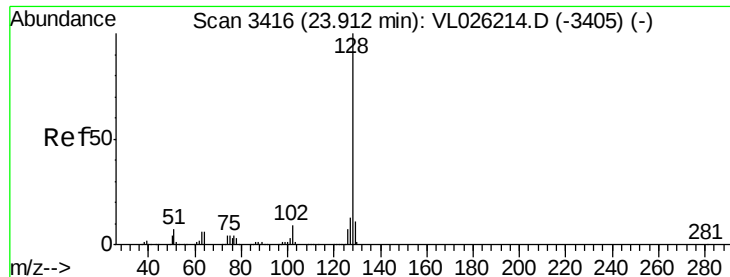
223 63.4 50.7 76.1

227 62.7 50.2 75.2



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





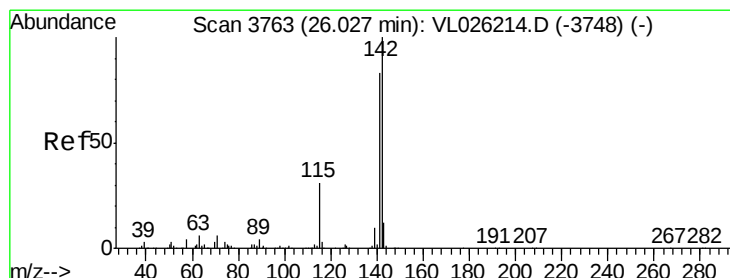
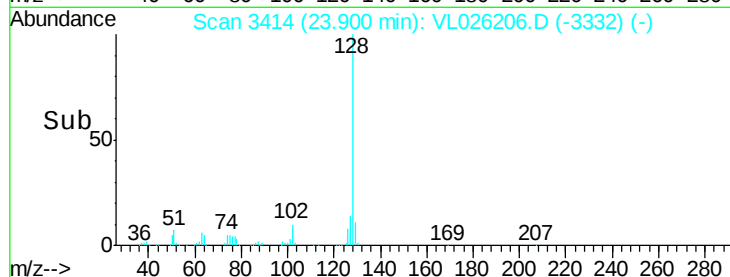
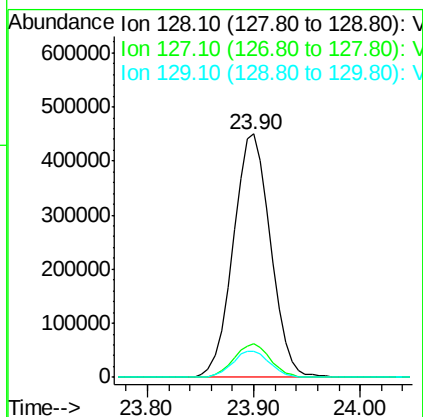
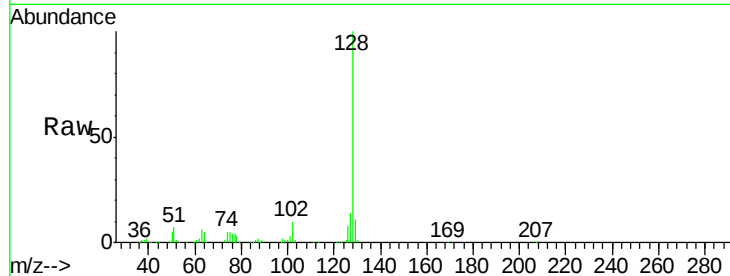
#79  
Naphthalene  
Concen: 6.37 ppbv  
RT: 23.90 min Scan# 3414  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 13.8  | 11.0  | 16.6  |
| 129     | 10.9  | 8.7   | 13.1  |

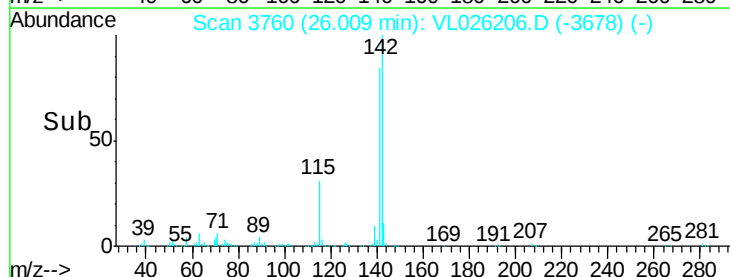
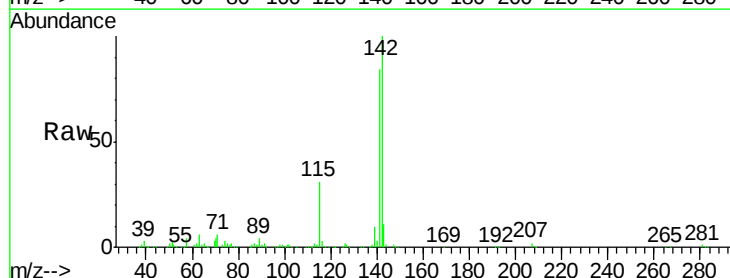
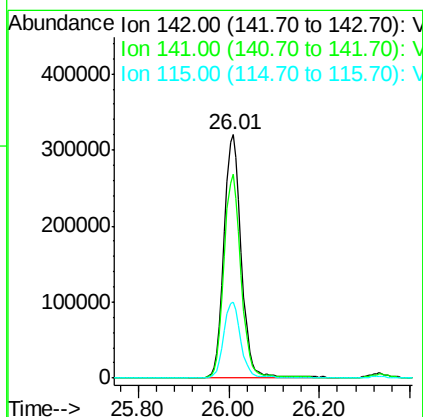
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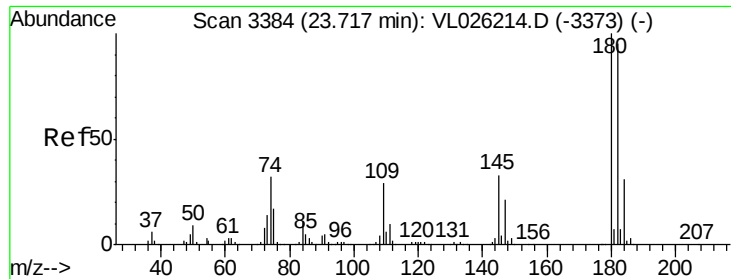
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#80  
Naphthalene, 2-methyl-  
Concen: 21.81 ppbv  
RT: 26.01 min Scan# 3760  
Delta R.T. 0.00 min  
Lab File: VL026206.D  
Acq: 20 Oct 2015 9:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 83.4  | 66.7  | 100.1 |
| 115     | 31.2  | 25.0  | 37.4  |





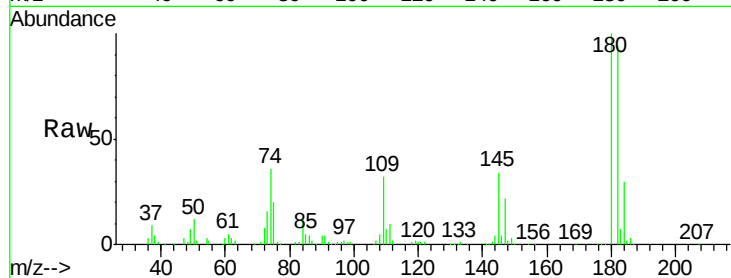
#81  
 1,2,4-Trichlorobenzene  
 Concen: 6.52 ppbv  
 RT: 23.70 min Scan# 3381  
 Delta R.T. 0.00 min  
 Lab File: VL026206.D  
 Acq: 20 Oct 2015 9:29

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.5  | 76.4  | 114.6 |
| 184     | 30.5  | 24.4  | 36.6  |

Manual Integrations  
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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

