

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL072920\  
 Data File : VL035240.D  
 Acq On : 29 Jul 2020 9:14  
 Operator : SY/AP  
 Sample : VSTDICV010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

Manual Integrations  
 APPROVED

MMDadoda  
 7/30/2020 6:10:36 PM

Quant Time: Jul 30 02:58:36 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL072920AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Jul 29 2020  
 QLast Update : Wed Jul 29 07:14:29 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 1471729  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.18  | 114  | 3518186  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.12 | 117  | 3377607m | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.46  | 95    | 2667583  | 9.88     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 98.80% |

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 3.01 | 85   | 1475320  | 8.393  | ppbv  | 100    |
| 3) Chlorodifluoromethane       | 2.94 | 51   | 1426015  | 8.753  | ppbv  | 98     |
| 4) Chloromethane               | 3.10 | 50   | 822320   | 8.970  | ppbv  | 99     |
| 5) Vinyl Chloride              | 3.21 | 62   | 847057   | 8.870  | ppbv  | 98     |
| 6) Bromomethane                | 3.43 | 94   | 514459   | 8.722  | ppbv  | 98     |
| 7) Chloroethane                | 3.52 | 64   | 317331   | 9.206  | ppbv  | 94     |
| 8) Dichlorotetrafluoroethane   | 3.14 | 85   | 1896612  | 8.504  | ppbv  | 99     |
| 9) Propene                     | 2.96 | 41   | 569858   | 10.035 | ppbv  | 99     |
| 10) Heptane                    | 8.13 | 43   | 1645147  | 10.703 | ppbv  | 99     |
| 11) Trichlorofluoromethane     | 3.92 | 101  | 2026432  | 8.571  | ppbv  | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.46 | 101  | 1422432  | 8.483  | ppbv  | 98     |
| 13) Ethanol                    | 3.57 | 45   | 140806   | 6.092  | ppbv  | 91     |
| 14) Bromoethene                | 3.70 | 108  | 636795   | 9.306  | ppbv  | 99     |
| 15) Acetone                    | 3.82 | 43   | 1539060  | 7.840  | ppbv  | 99     |
| 16) 1,3-Butadiene              | 3.29 | 39   | 754877   | 9.858  | ppbv  | 96     |
| 17) tert-Butyl alcohol         | 4.26 | 59   | 1769270  | 9.338  | ppbv  | 99     |
| 18) 1,1-Dichloroethene         | 4.26 | 96   | 672267   | 9.030  | ppbv  | 93     |
| 19) Isopropyl Alcohol          | 3.93 | 45   | 1153983  | 8.913  | ppbv  | 99     |
| 20) Methylene Chloride         | 4.32 | 84   | 632522   | 7.078  | ppbv  | 97     |
| 21) Allyl Chloride             | 4.38 | 41   | 1074952  | 9.615  | ppbv  | 99     |
| 22) trans-1,2-Dichloroethene   | 4.86 | 96   | 660501   | 9.233  | ppbv  | 98     |
| 23) Vinyl Acetate              | 5.05 | 43   | 2035969  | 10.322 | ppbv  | 98     |
| 24) 1,1-Dichloroethane         | 5.00 | 63   | 1693269  | 9.205  | ppbv  | 100    |
| 25) Ethyl Acetate              | 5.66 | 43   | 2907079  | 9.483  | ppbv  | 99     |
| 26) Hexane                     | 5.67 | 57   | 1324482  | 9.577  | ppbv  | 98     |
| 27) Carbon Disulfide           | 4.53 | 76   | 1751150  | 9.372  | ppbv  | 99     |
| 28) Methyl tert-Butyl Ether    | 5.01 | 73   | 2040119  | 10.319 | ppbv  | 100    |
| 29) Chloroform                 | 5.74 | 83   | 2058584  | 8.875  | ppbv  | 97     |
| 30) Cyclohexane                | 7.13 | 84   | 1083796  | 10.964 | ppbv  | 98     |
| 31) cis-1,2-Dichloroethene     | 5.54 | 61   | 1270381  | 10.538 | ppbv  | 97     |
| 32) 1,1,1-Trichloroethane      | 6.51 | 97   | 2053585  | 8.650  | ppbv  | 99     |
| 34) 2-Butanone                 | 5.23 | 43   | 1765536  | 9.863  | ppbv  | 100    |
| 35) Carbon Tetrachloride       | 7.02 | 117  | 2103442  | 8.929  | ppbv  | 100    |
| 36) Benzene                    | 6.90 | 78   | 2535793  | 10.371 | ppbv  | 100    |
| 37) 1,2-Dichloroethane         | 6.30 | 62   | 1604511  | 9.387  | ppbv  | 99     |
| 38) Trichloroethene            | 7.85 | 130  | 1040755  | 10.270 | ppbv  | 92     |
| 39) 1,2-Dichloropropane        | 7.62 | 63   | 994776   | 10.197 | ppbv  | 99     |
| 40) 1,4-Dioxane                | 7.84 | 88   | 392994   | 10.230 | ppbv  | 90     |
| 41) Tetrahydrofuran            | 6.04 | 42   | 974456   | 11.107 | ppbv  | 99     |
| 42) Bromodichloromethane       | 7.81 | 83   | 2205914  | 9.669  | ppbv  | 98     |
| 43) Methyl Methacrylate        | 8.02 | 69   | 1157830  | 10.929 | ppbv  | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL072920\  
 Data File : VL035240.D  
 Acq On : 29 Jul 2020 9:14  
 Operator : SY/AP  
 Sample : VSTDICV010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVVL072920

Manual Integrations  
 APPROVED

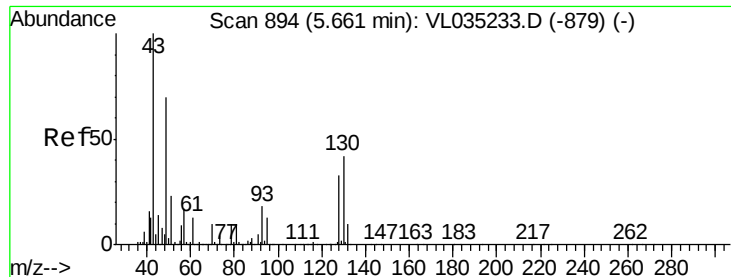
MMDadoda  
 7/30/2020 6:10:36 PM

Quant Time: Jul 30 02:58:36 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL072920AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Jul 29 2020  
 QLast Update : Wed Jul 29 07:14:29 2020  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.88  | 57   | 4378173  | 10.163 | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 9.30  | 75   | 1283145  | 12.021 | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 8.72  | 75   | 1538471  | 11.831 | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 9.50  | 97   | 1097188  | 9.521  | ppbv   | 98       |
| 48) Dibromochloromethane      | 10.33 | 129  | 1852528  | 10.207 | ppbv   | 99       |
| 49) Bromoform                 | 13.08 | 173  | 1665081  | 10.205 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.75  | 43   | 2736863  | 10.550 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.15 | 43   | 2211924  | 11.244 | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.26 | 164  | 944665   | 10.126 | ppbv   | 95       |
| 53) Toluene                   | 9.83  | 91   | 2988463  | 11.500 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.64 | 107  | 1678779m | 10.075 | ppbv   |          |
| 56) 1,1,1,2-Tetrachloroethane | 12.16 | 131  | 1439102  | 9.266  | ppbv   | 99       |
| 57) Chlorobenzene             | 12.18 | 112  | 2384139  | 9.381  | ppbv   | 95       |
| 58) Ethyl Benzene             | 12.74 | 91   | 4063448  | 11.359 | ppbv   | 100      |
| 59) m/p-Xylene                | 13.03 | 91   | 6813078m | 20.458 | ppbv   |          |
| 60) o-Xylene                  | 13.73 | 91   | 3430610  | 10.325 | ppbv   | 100      |
| 61) Styrene                   | 13.56 | 104  | 2427722  | 12.037 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.70 | 105  | 5006740  | 10.124 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.72 | 83   | 2476196  | 8.661  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.61 | 120  | 1369219m | 10.413 | ppbv   |          |
| 65) tert-Butylbenzene         | 16.79 | 119  | 4538553  | 10.130 | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.04 | 91   | 1768167  | 10.076 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.34 | 105  | 6404370  | 9.783  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.70 | 119  | 5376765  | 10.069 | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.60 | 91   | 5650885  | 9.781  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.49 | 91   | 3945868  | 10.581 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.88 | 105  | 4070916  | 10.885 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.04 | 105  | 3815824  | 10.462 | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.81 | 105  | 4011563  | 9.448  | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 17.05 | 146  | 2376363  | 8.668  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.19 | 146  | 2378567  | 9.592  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.87 | 146  | 2269449  | 9.243  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.43 | 225  | 1643023  | 8.175  | ppbv   | 99       |
| 79) Naphthalene               | 22.27 | 128  | 3306870  | 9.795  | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.01 | 142  | 1080906  | 9.892  | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.99 | 180  | 1871570  | 9.107  | ppbv   | 100      |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 49 Resp: 1471729

Ion Ratio Lower Upper

49 100

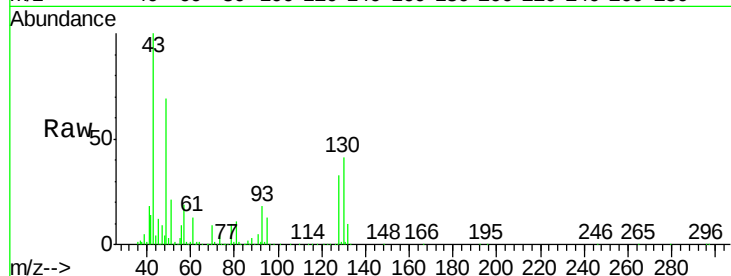
128 47.8 24.0 72.0

130 61.5 30.7 92.1

Manual Integrations  
APPROVED

MMDadoda

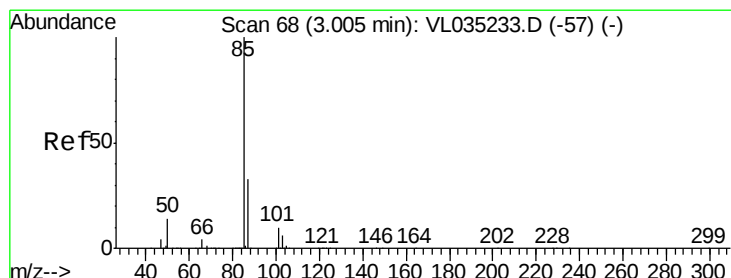
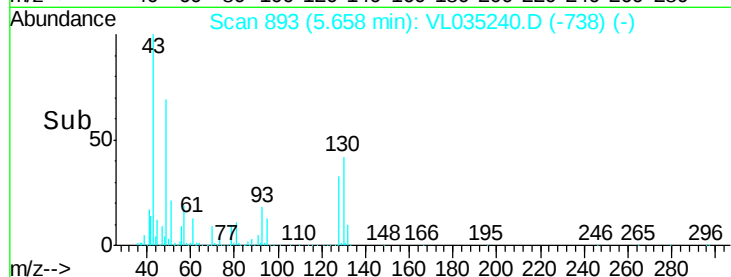
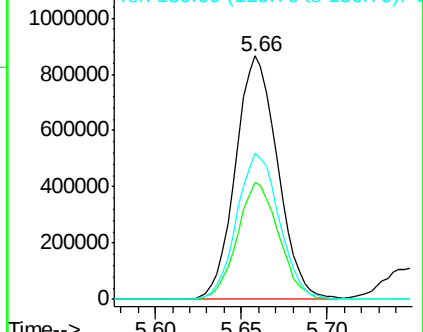
7/30/2020 6:10:36 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 8.393 ppbv

RT: 3.01 min Scan# 68

Delta R.T. 0.00 min

Lab File: VL035240.D

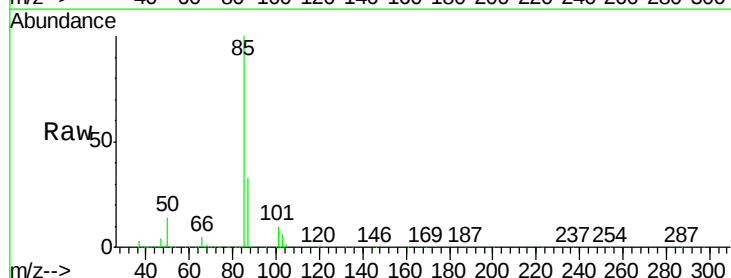
Acq: 29 Jul 2020 9:14

Tgt Ion: 85 Resp: 1475320

Ion Ratio Lower Upper

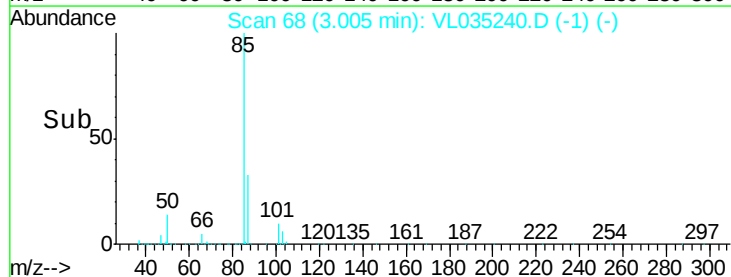
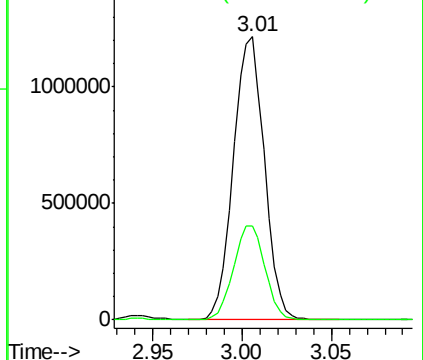
85 100

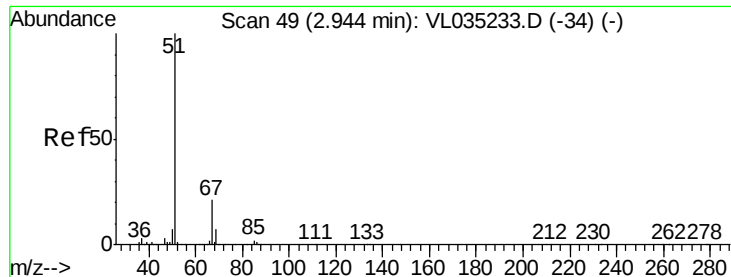
87 33.3 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 8.753 ppbv

RT: 2.94 min Scan# 48

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 51 Resp: 1426015

Ion Ratio Lower Upper

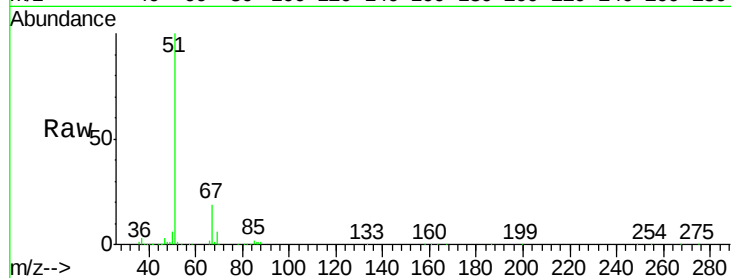
51 100

67 19.8 16.6 25.0

Manual Integrations  
APPROVED

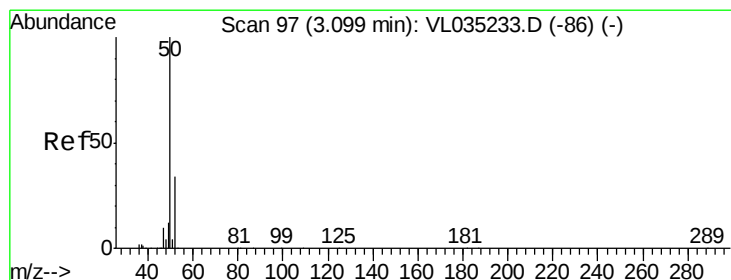
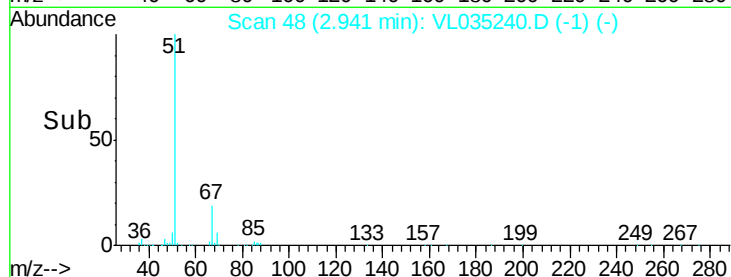
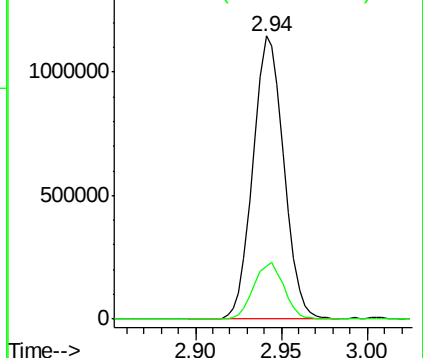
MMDadoda

7/30/2020 6:10:36 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 8.970 ppbv

RT: 3.10 min Scan# 96

Delta R.T. -0.00 min

Lab File: VL035240.D

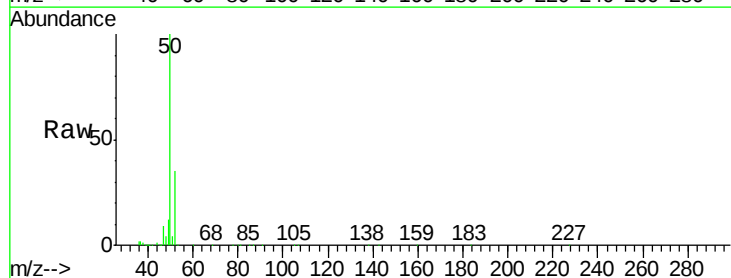
Acq: 29 Jul 2020 9:14

Tgt Ion: 50 Resp: 822320

Ion Ratio Lower Upper

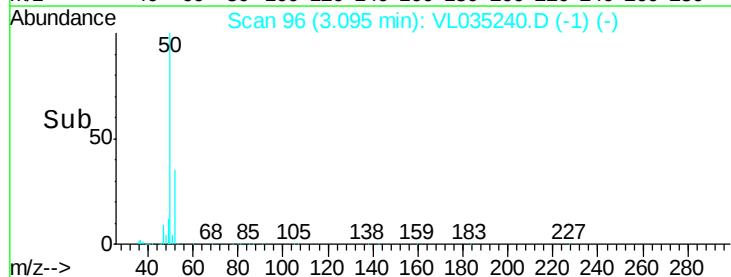
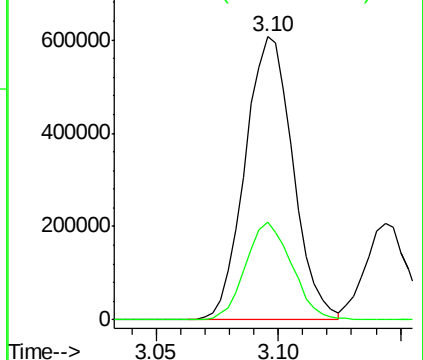
50 100

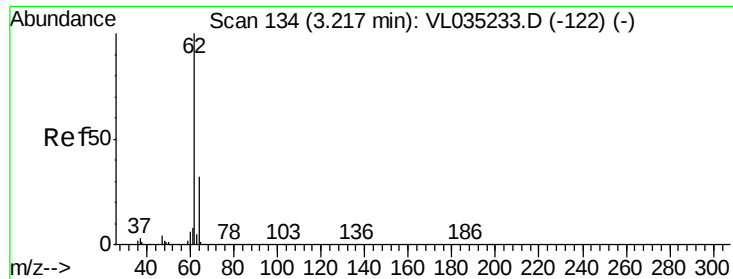
52 34.7 27.1 40.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 8.870 ppbv

RT: 3.21 min Scan# 133

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 62 Resp: 847057

Ion Ratio Lower Upper

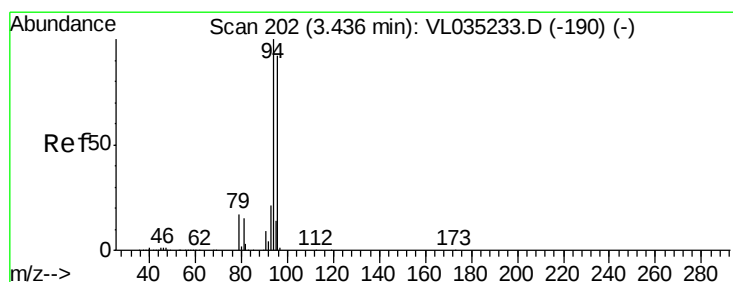
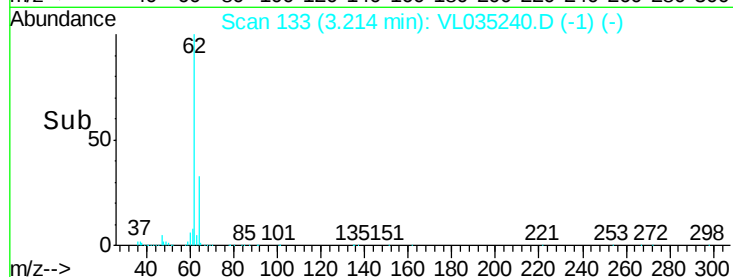
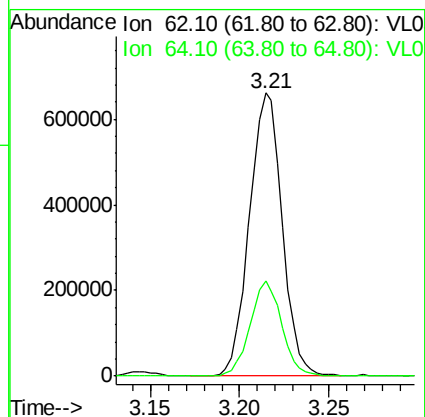
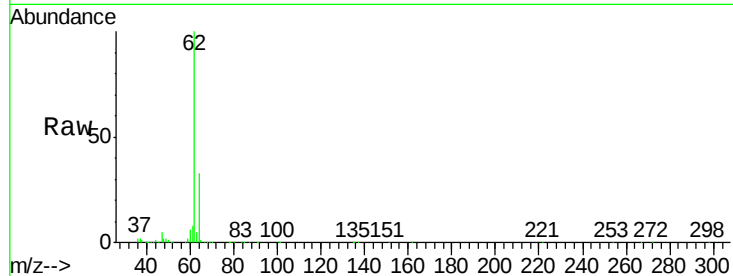
62 100

64 33.4 25.8 38.6

Manual Integrations  
APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#6

Bromomethane

Concen: 8.722 ppbv

RT: 3.43 min Scan# 201

Delta R.T. -0.00 min

Lab File: VL035240.D

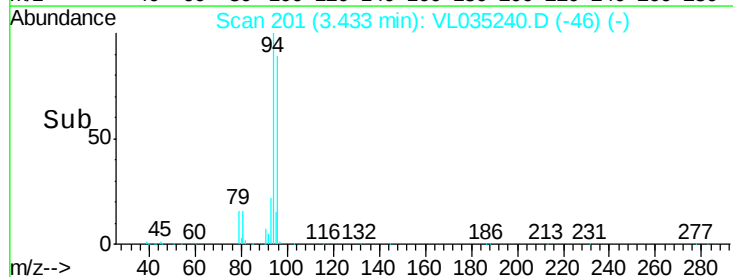
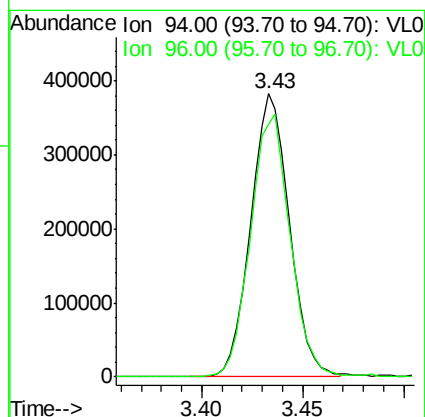
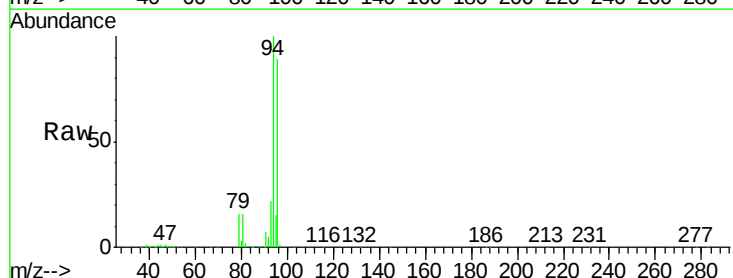
Acq: 29 Jul 2020 9:14

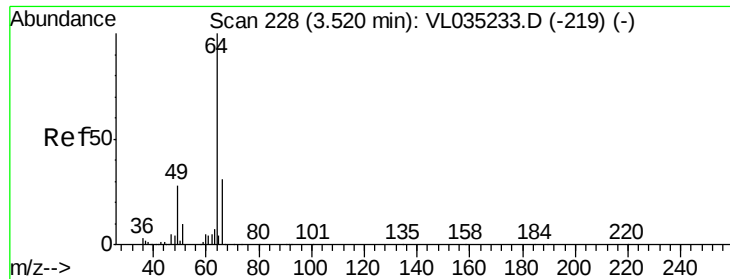
Tgt Ion: 94 Resp: 514459

Ion Ratio Lower Upper

94 100

96 89.2 73.2 109.8





#7

Chloroethane

Concen: 9.206 ppbv

RT: 3.52 min Scan# 228

Delta R.T. 0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 64 Resp: 317331

Ion Ratio Lower Upper

64 100

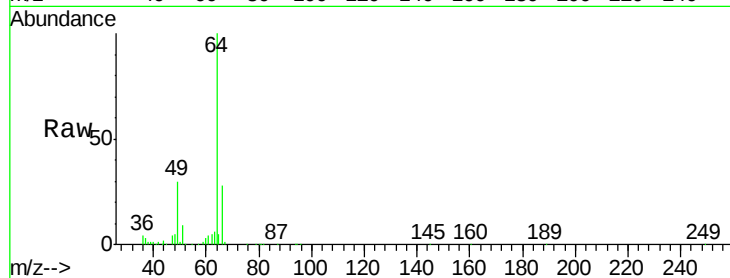
66 28.4 25.6 38.4

Manual Integrations

APPROVED

MMDadoda

7/30/2020 6:10:36 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.52

250000

200000

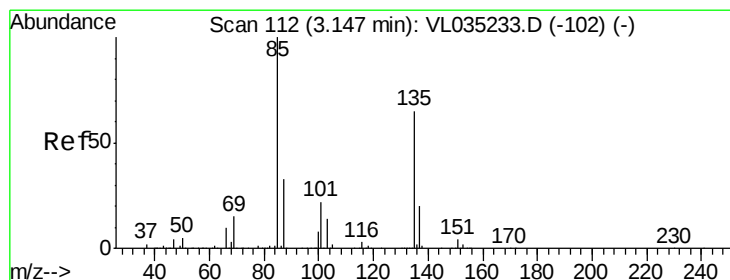
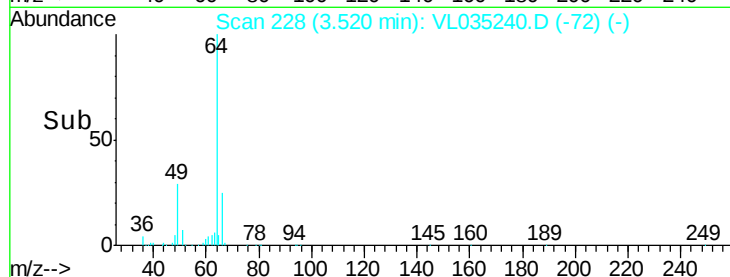
150000

100000

50000

0

Time-->



#8

Dichlorotetrafluoroethane

Concen: 8.504 ppbv

RT: 3.14 min Scan# 111

Delta R.T. -0.00 min

Lab File: VL035240.D

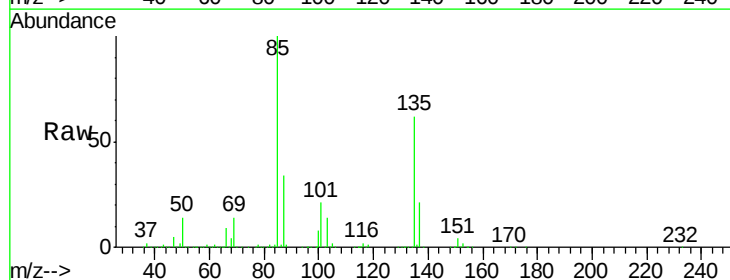
Acq: 29 Jul 2020 9:14

Tgt Ion: 85 Resp: 1896612

Ion Ratio Lower Upper

85 100

135 64.8 51.4 77.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

3.14

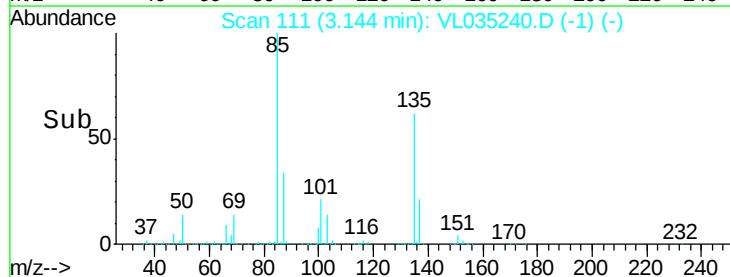
1500000

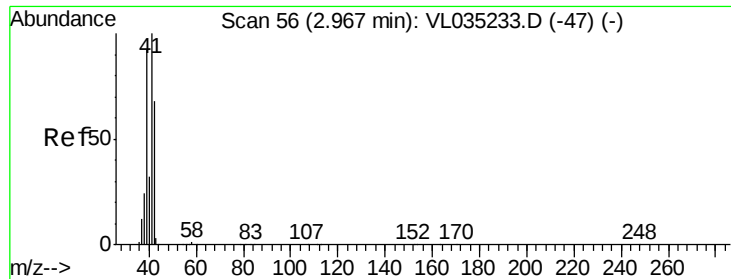
1000000

500000

0

Time-->





#9

Propene

Concen: 10.035 ppbv

RT: 2.96 min Scan# 55

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 41 Resp: 569858

Ion Ratio Lower Upper

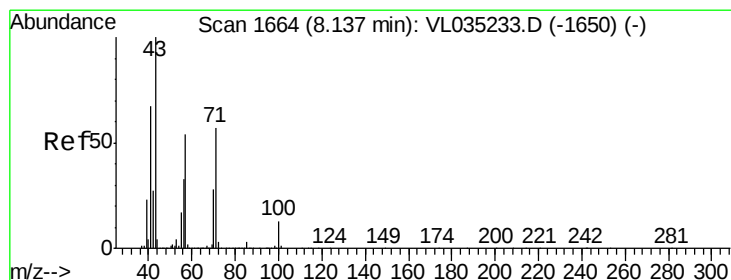
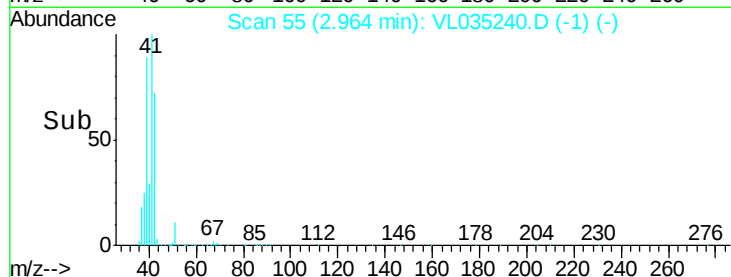
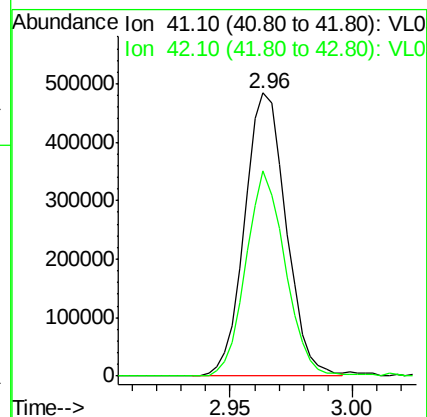
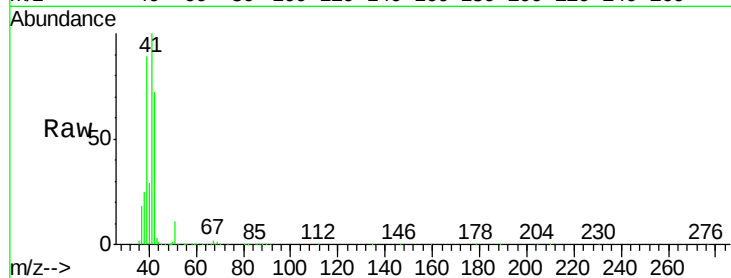
41 100

42 69.7 55.0 82.6

Manual Integrations  
APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#10

Heptane

Concen: 10.703 ppbv

RT: 8.13 min Scan# 1663

Delta R.T. -0.00 min

Lab File: VL035240.D

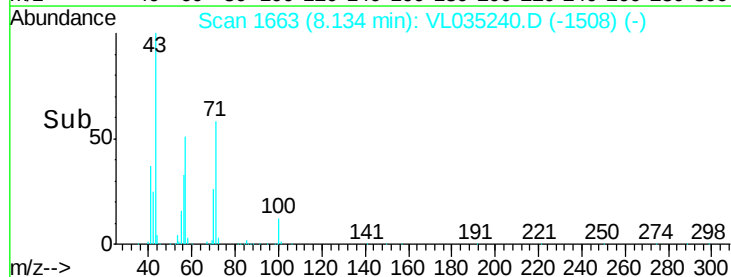
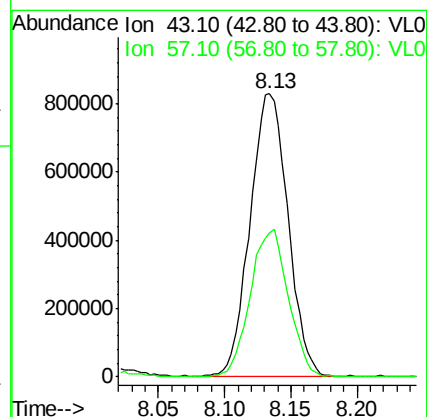
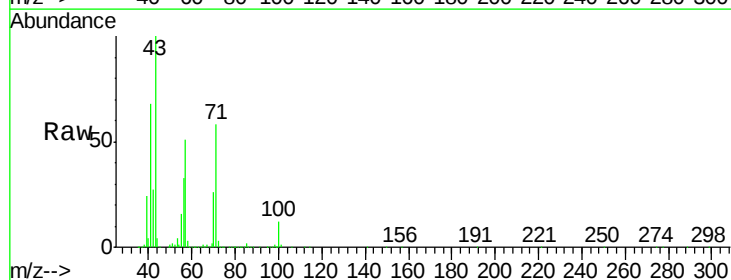
Acq: 29 Jul 2020 9:14

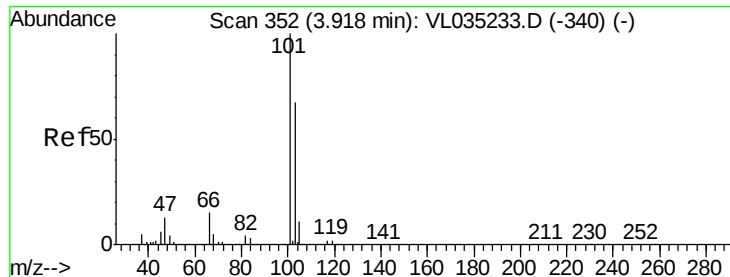
Tgt Ion: 43 Resp: 1645147

Ion Ratio Lower Upper

43 100

57 52.7 43.0 64.4





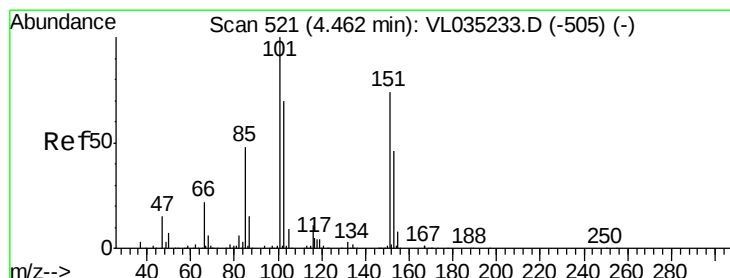
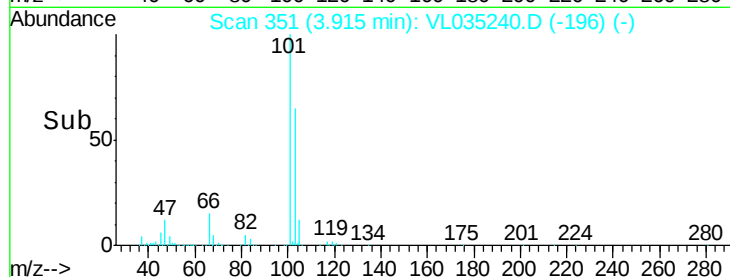
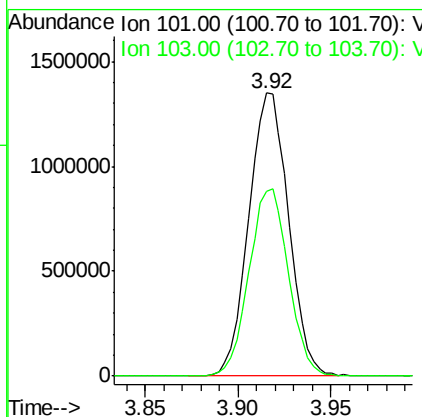
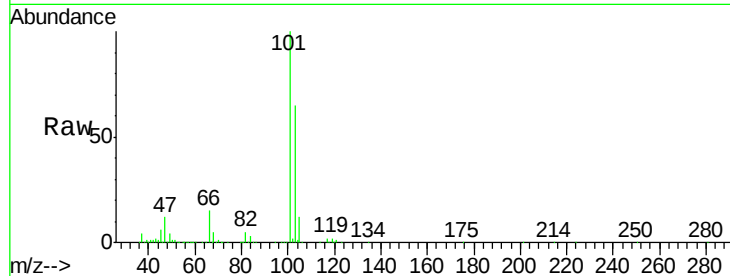
#11  
 Trichlorofluoromethane  
 Concen: 8.571 ppbv  
 RT: 3.92 min Scan# 351  
 Delta R.T. -0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

Tot Ion:101 Resp: 2026432  
 Ion Ratio Lower Upper  
 101 100  
 103 65.2 53.4 80.0

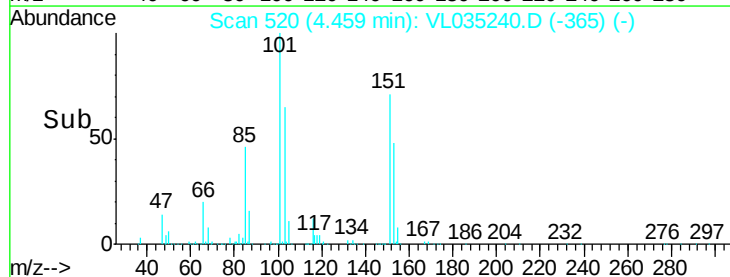
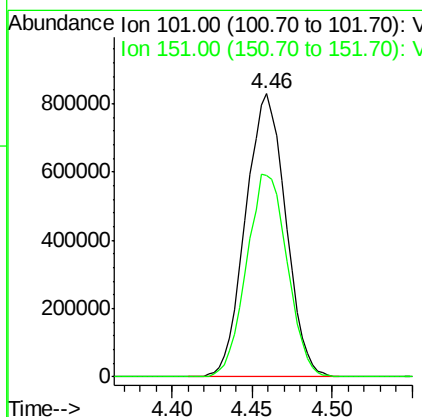
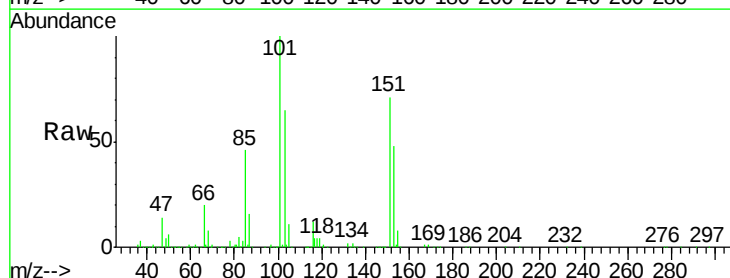
Manual Integrations  
 APPROVED

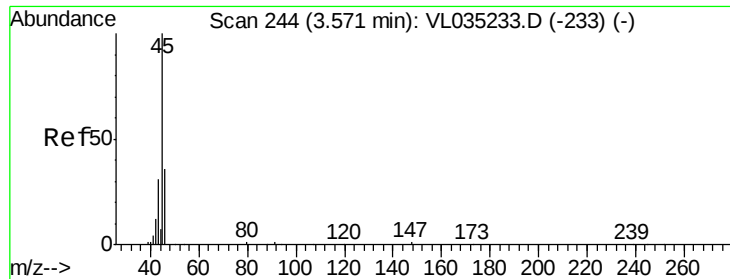
MMDadoda  
 7/30/2020 6:10:36 PM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 8.483 ppbv  
 RT: 4.46 min Scan# 520  
 Delta R.T. -0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Tgt Ion:101 Resp: 1422432  
 Ion Ratio Lower Upper  
 101 100  
 151 72.9 56.6 85.0





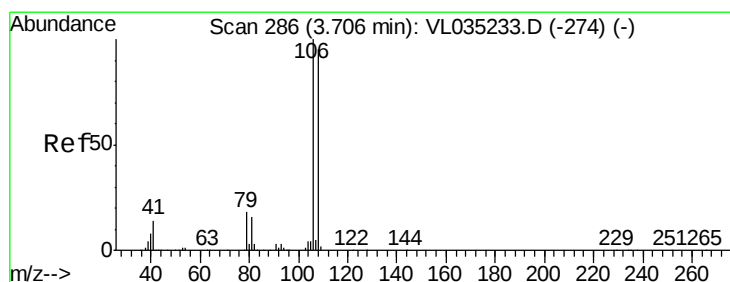
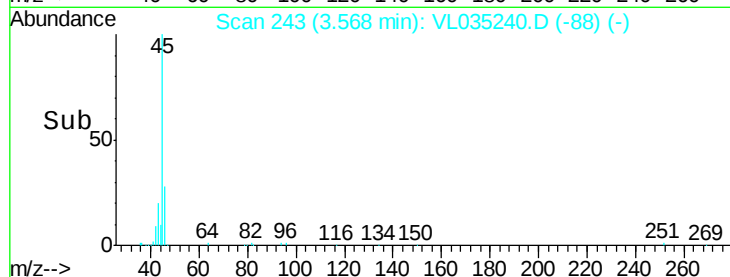
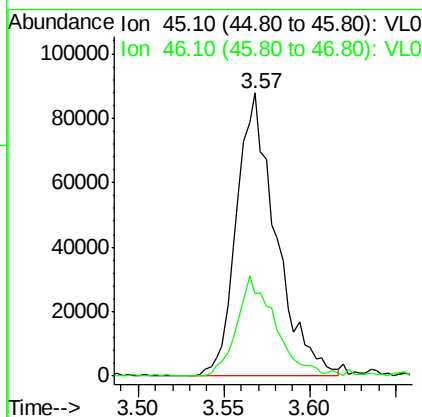
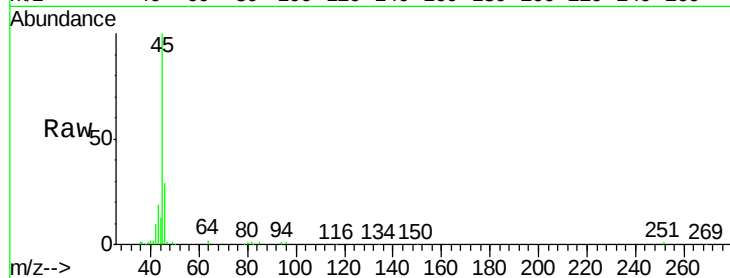
#13  
Ethanol  
Concen: 6.092 ppbv  
RT: 3.57 min Scan# 243  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072920

| Tot Ion | 45  | 46   | Ratio | 100 | 34.3 | Resp   | Lower | Upper |
|---------|-----|------|-------|-----|------|--------|-------|-------|
| 45      | 100 |      |       |     |      | 140806 |       |       |
| 46      |     | 34.3 |       |     |      | 15.8   | 63.4  |       |

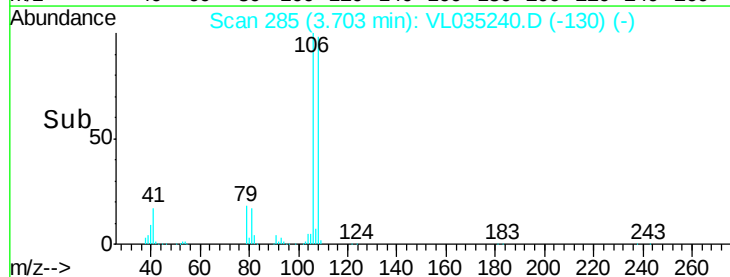
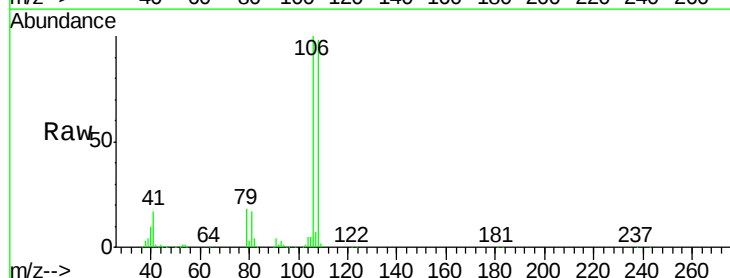
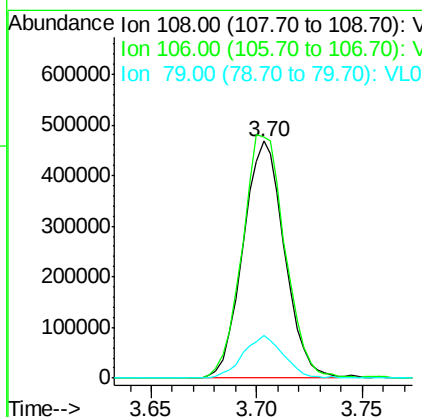
Manual Integrations  
APPROVED

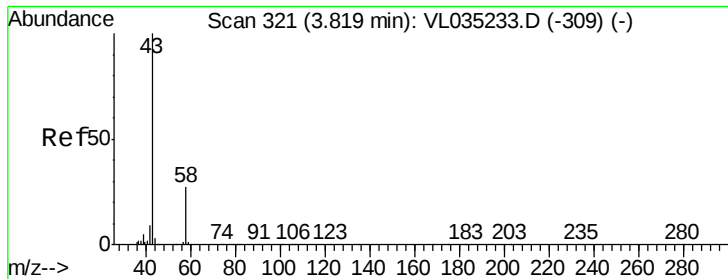
MMDadoda  
7/30/2020 6:10:36 PM



#14  
Bromoethene  
Concen: 9.306 ppbv  
RT: 3.70 min Scan# 285  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

| Tgt Ion | 108 | 106   | 79   | Ratio | 100 | 107.3 | 17.8  | Resp   | Lower | Upper |
|---------|-----|-------|------|-------|-----|-------|-------|--------|-------|-------|
| 108     | 100 |       |      |       |     |       |       | 636795 |       |       |
| 106     |     | 107.3 |      |       |     | 85.0  | 127.6 |        |       |       |
| 79      |     |       | 17.8 |       |     | 15.4  | 23.2  |        |       |       |





#15

Acetone

Concen: 7.840 ppbv

RT: 3.82 min Scan# 320

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 43 Resp: 1539060

Ion Ratio Lower Upper

43 100

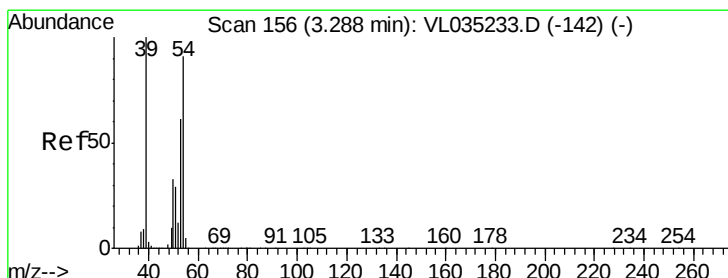
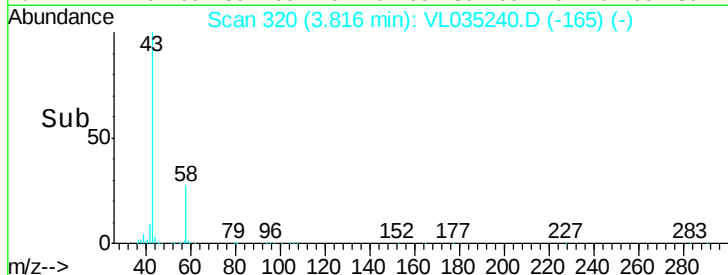
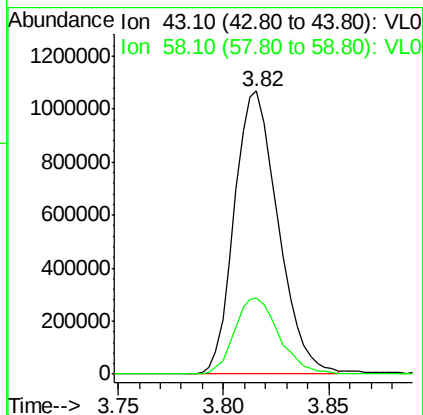
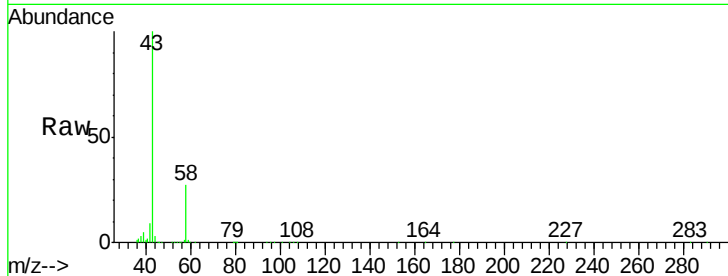
58 27.6 21.8 32.6

Manual Integrations

APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#16

1,3-Butadiene

Concen: 9.858 ppbv

RT: 3.29 min Scan# 155

Delta R.T. -0.00 min

Lab File: VL035240.D

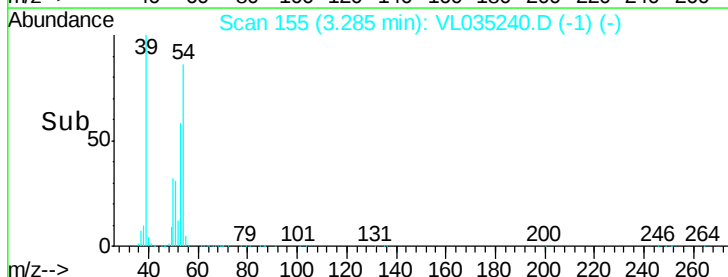
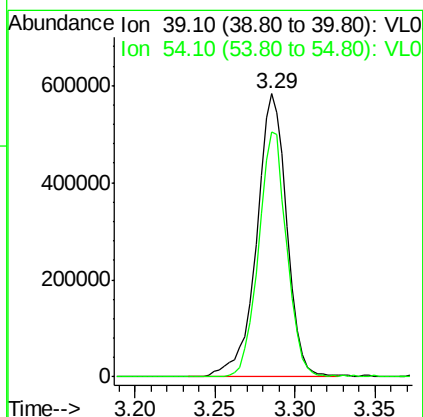
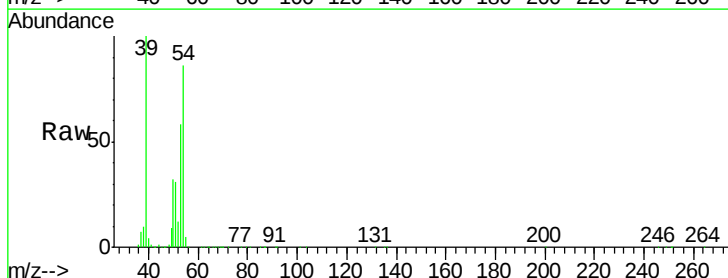
Acq: 29 Jul 2020 9:14

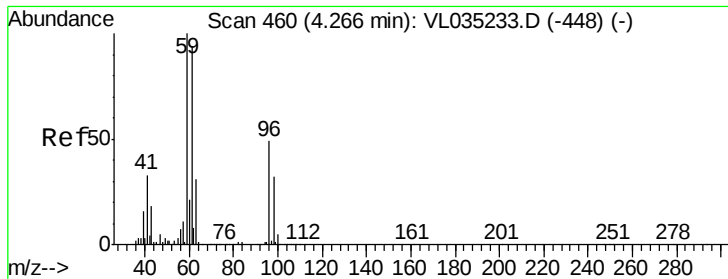
Tgt Ion: 39 Resp: 754877

Ion Ratio Lower Upper

39 100

54 81.5 68.2 102.2





#17

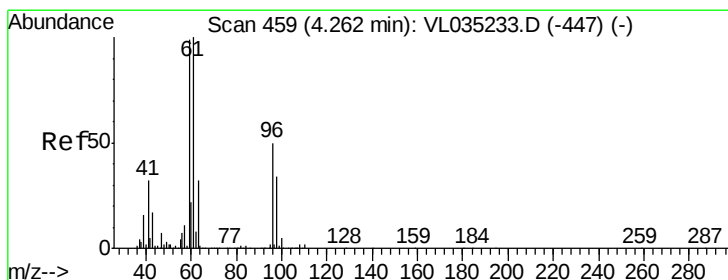
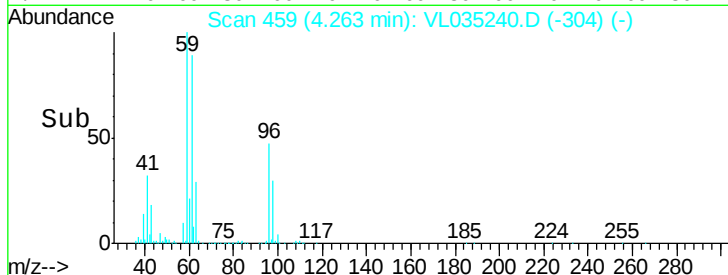
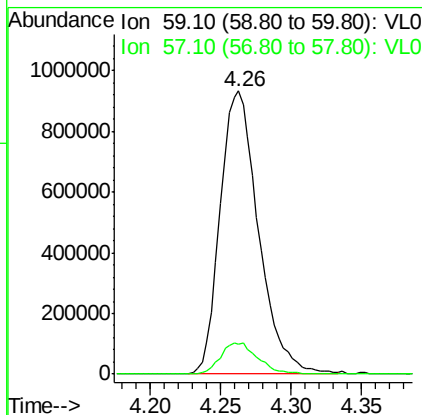
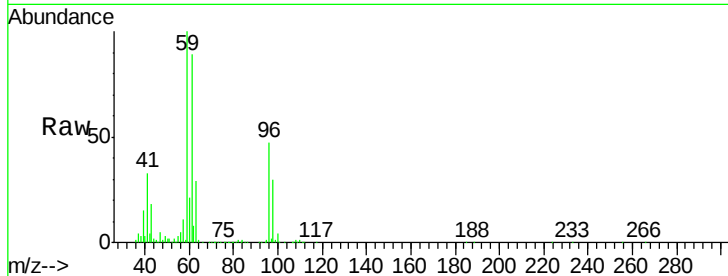
tert-Butyl alcohol  
Concen: 9.338 ppbv  
RT: 4.26 min Scan# 459  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072920

Tot Ion: 59 Resp: 1769270  
Ion Ratio Lower Upper  
59 100  
57 10.9 8.6 12.8

Manual Integrations  
APPROVED

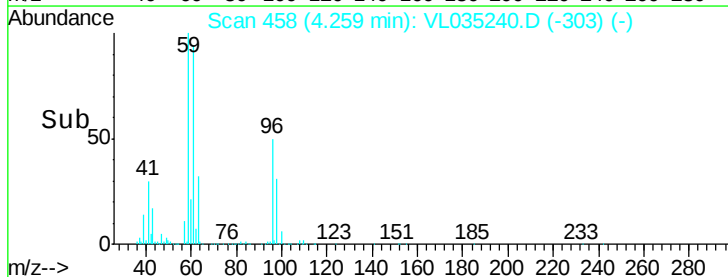
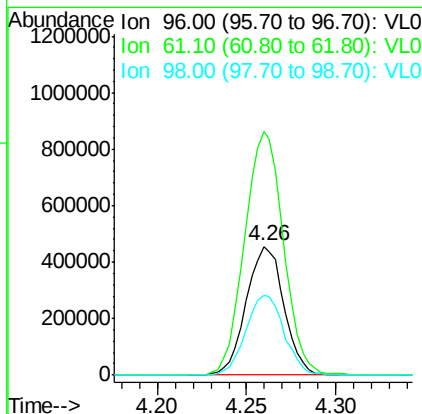
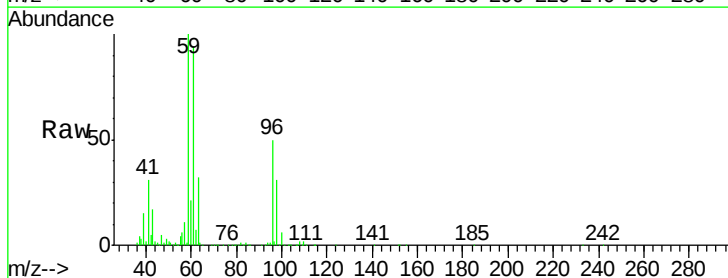
MMDadoda  
7/30/2020 6:10:36 PM

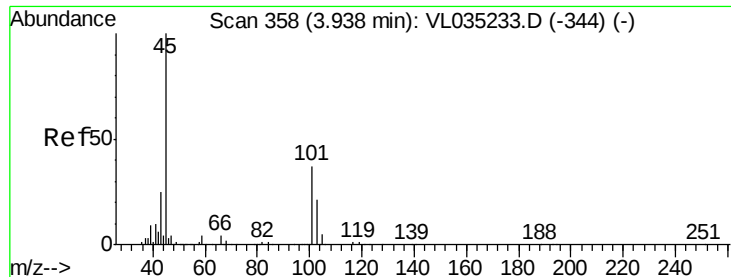


#18

1,1-Dichloroethene  
Concen: 9.030 ppbv  
RT: 4.26 min Scan# 458  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Tgt Ion: 96 Resp: 672267  
Ion Ratio Lower Upper  
96 100  
61 188.8 159.4 239.2  
98 62.1 53.9 80.9





#19

Isopropyl Alcohol

Concen: 8.913 ppbv

RT: 3.93 min Scan# 356

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Tot Ion: 45 Resp: 1153983

Ion Ratio Lower Upper

45 100

58 2.2 1.9 2.9

Instrument :

MSVOA\_L

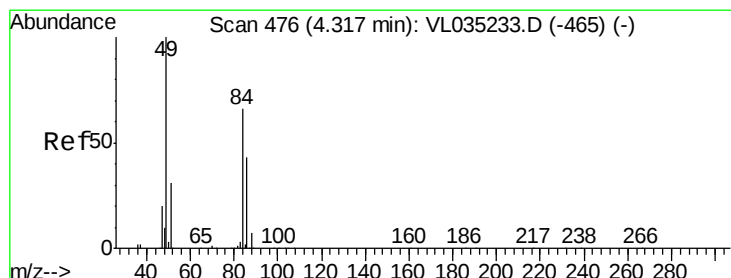
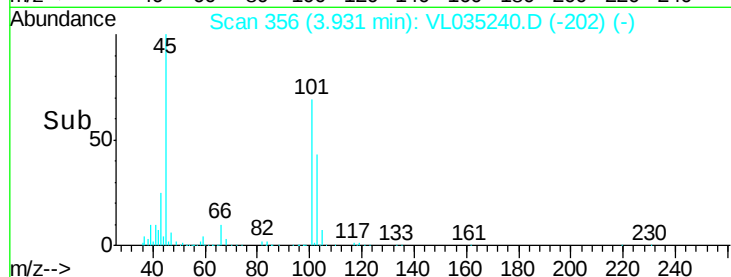
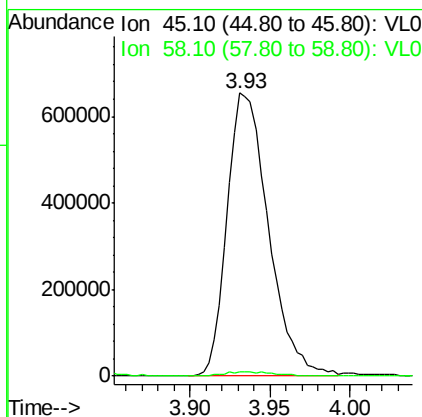
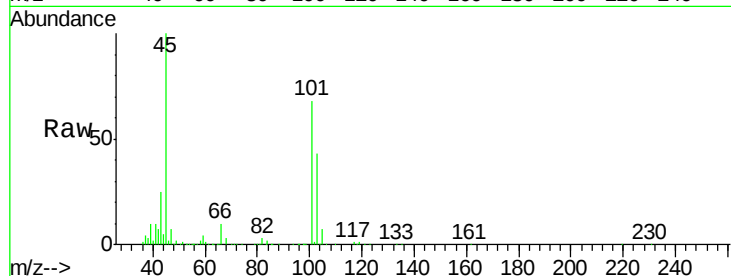
ClientSampleId :

ICVVL072920

Manual Integrations  
APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#20

Methylene Chloride

Concen: 7.078 ppbv

RT: 4.32 min Scan# 476

Delta R.T. 0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Tgt Ion: 84 Resp: 632522

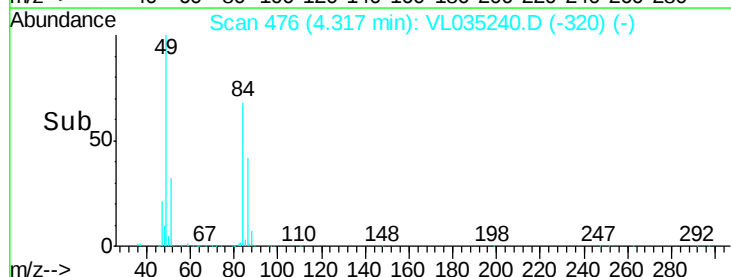
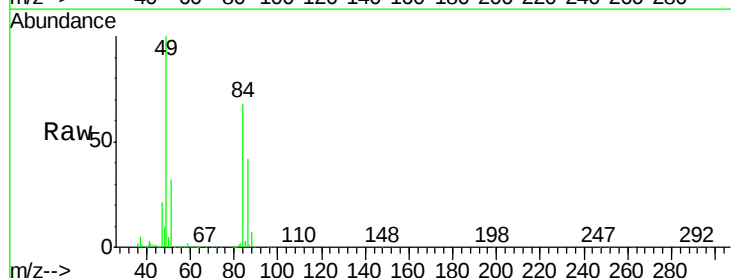
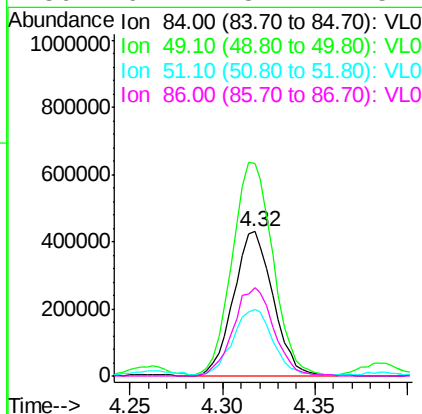
Ion Ratio Lower Upper

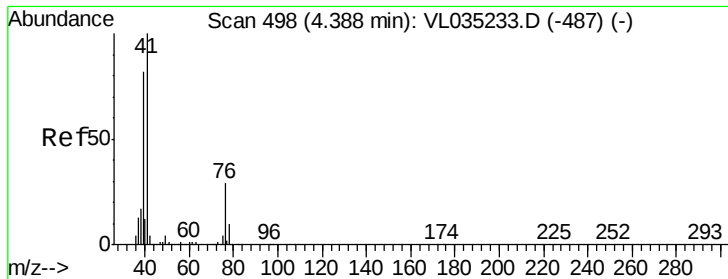
84 100

49 146.7 121.0 181.4

51 45.9 37.7 56.5

86 61.7 52.2 78.4





#21

Allvl Chloride

Concen: 9.615 ppbv

RT: 4.38 min Scan# 497

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

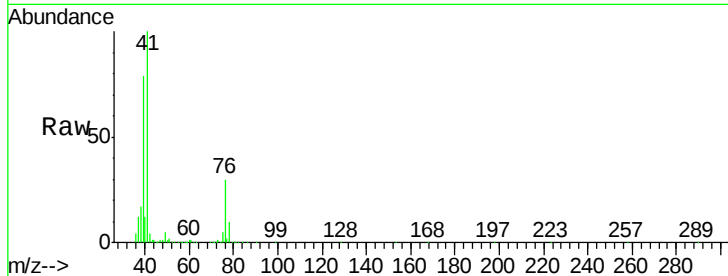
ClientSampleId :

ICVVL072920

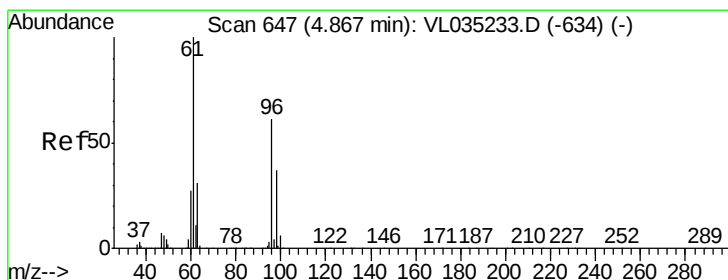
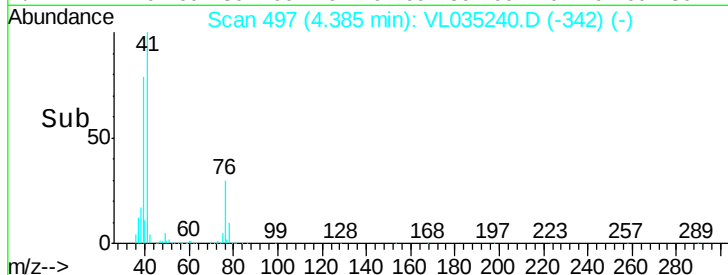
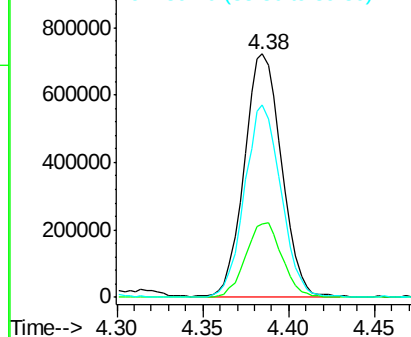
|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 41    | Resp: | 1074952 |
| Ion      | Ratio | Lower | Upper   |
| 41       | 100   |       |         |
| 76       | 30.3  | 24.4  | 36.6    |
| 39       | 78.1  | 63.8  | 95.8    |

Manual Integrations  
APPROVED

MMDadoda  
7/30/2020 6:10:36 PM



Abundance Ion 41.10 (40.80 to 41.80): VL0  
Ion 76.10 (75.80 to 76.80): VL0  
Ion 39.10 (38.80 to 39.80): VL0



#22

trans-1,2-Dichloroethene

Concen: 9.233 ppbv

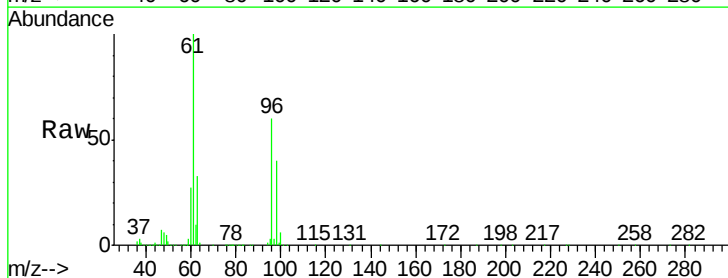
RT: 4.86 min Scan# 646

Delta R.T. -0.00 min

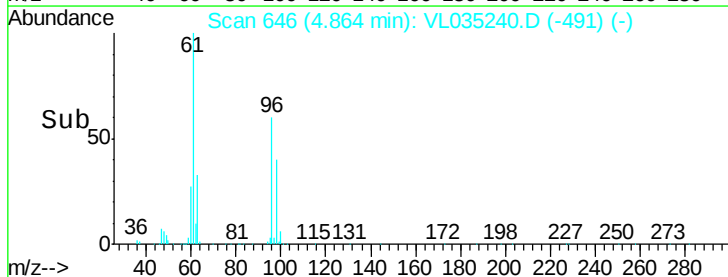
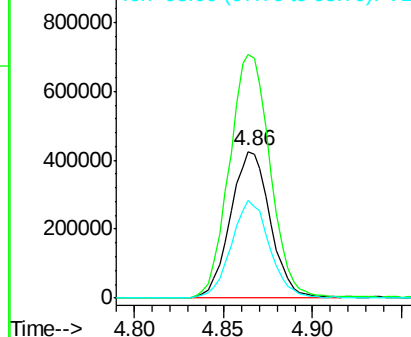
Lab File: VL035240.D

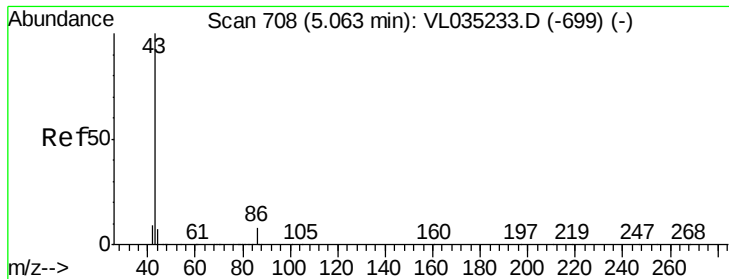
Acq: 29 Jul 2020 9:14

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 96    | Resp: | 660501 |
| Ion      | Ratio | Lower | Upper  |
| 96       | 100   |       |        |
| 61       | 165.8 | 131.6 | 197.4  |
| 98       | 66.2  | 49.0  | 73.4   |



Abundance Ion 96.00 (95.70 to 96.70): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 98.00 (97.70 to 98.70): VL0





#23

Vinyl Acetate

Concen: 10.322 ppbv

RT: 5.05 min Scan# 705

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 43 Resp: 2035969

Ion Ratio Lower Upper

43 100

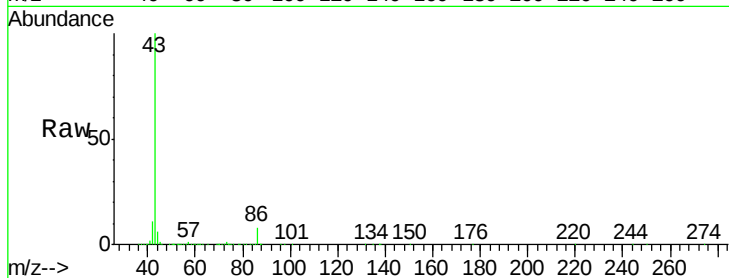
86 7.7 6.2 9.2

42 10.9 8.0 12.0

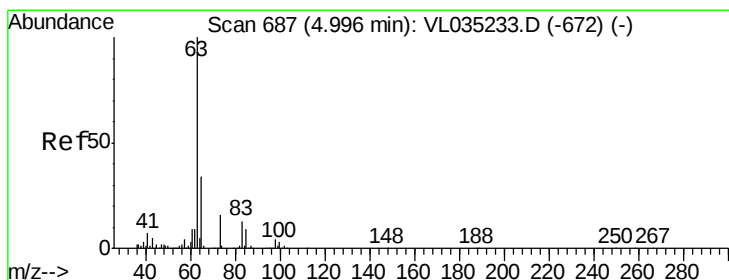
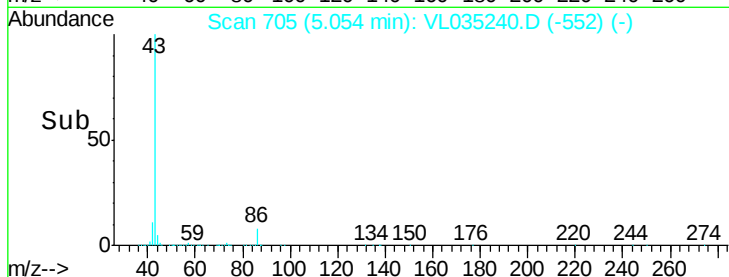
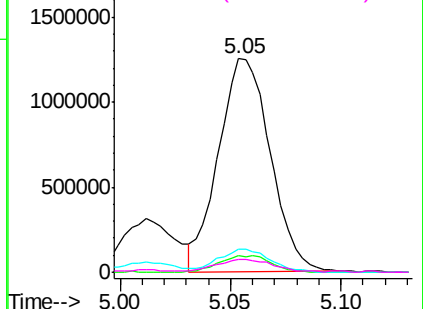
44 5.4 5.2 7.8

Manual Integrations  
APPROVED

MMDadoda  
7/30/2020 6:10:36 PM



Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 86.10 (85.80 to 86.80): VL0  
Ion 42.10 (41.80 to 42.80): VL0  
Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 9.205 ppbv

RT: 5.00 min Scan# 687

Delta R.T. 0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

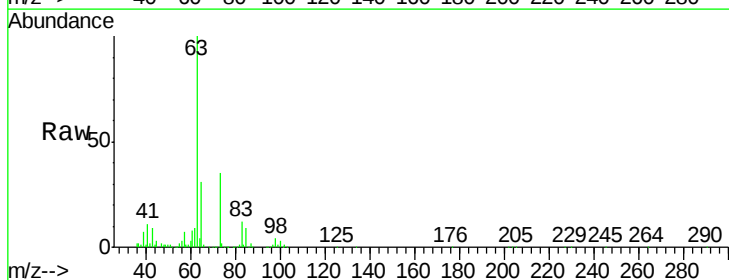
Tgt Ion: 63 Resp: 1693269

Ion Ratio Lower Upper

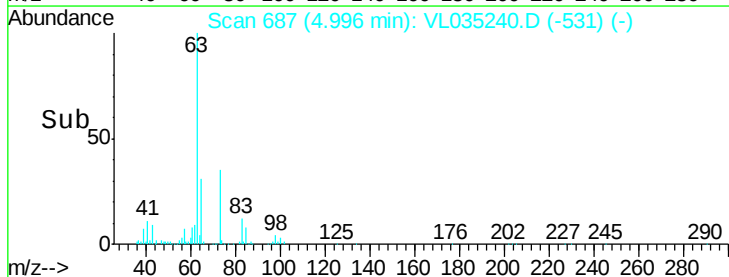
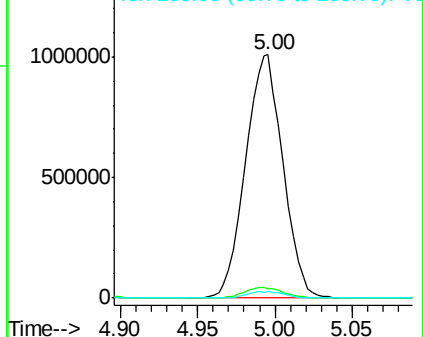
63 100

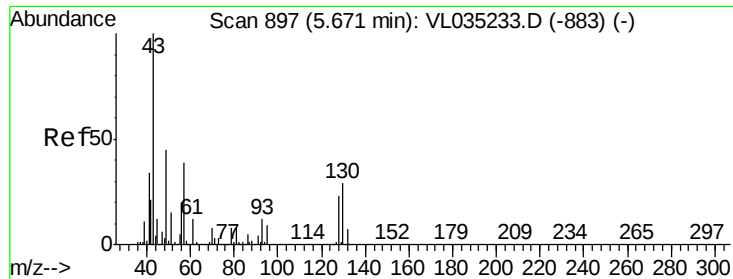
98 4.0 1.9 5.7

100 2.9 1.4 4.2



Abundance Ion 63.10 (62.80 to 63.80): VL0  
Ion 98.00 (97.70 to 98.70): VL0  
Ion 100.00 (99.70 to 100.70): VL0





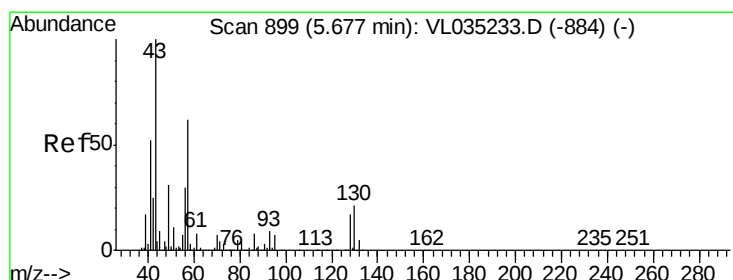
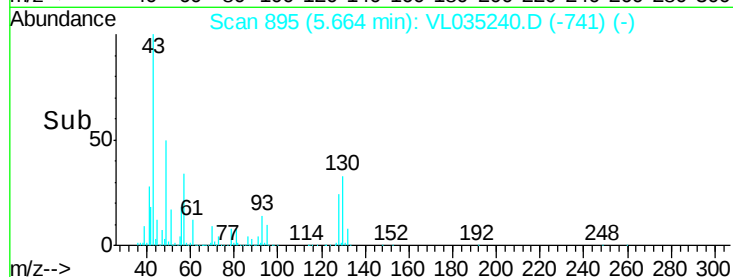
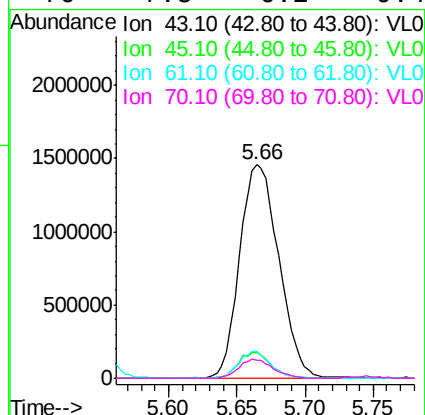
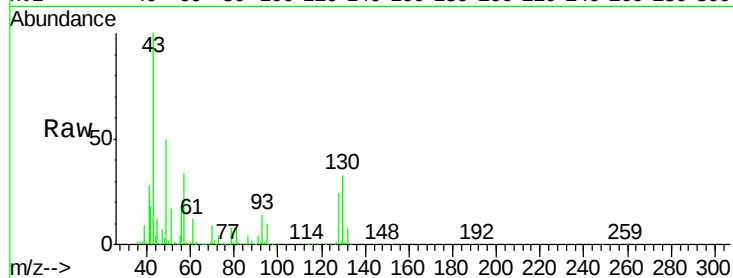
#25  
Ethyl Acetate  
Concen: 9.483 ppbv  
RT: 5.66 min Scan# 895  
Delta R.T. -0.01 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072920

| Tot Ion | 43    | Resp  | 2907079 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 43      | 100   |       |         |
| 45      | 10.4  | 8.5   | 12.7    |
| 61      | 10.4  | 8.1   | 12.1    |
| 70      | 7.8   | 6.2   | 9.4     |

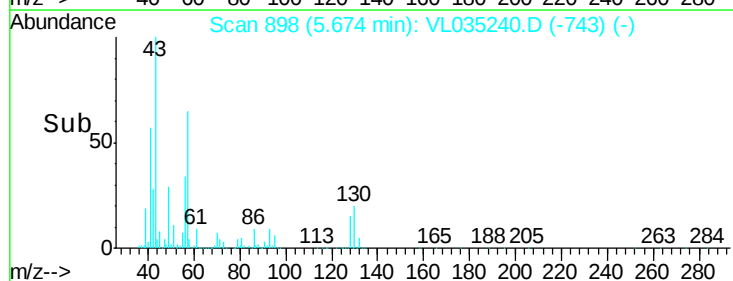
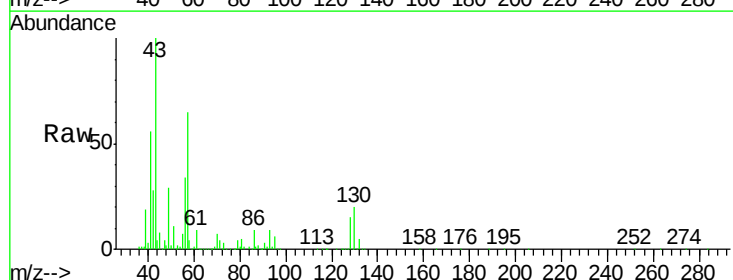
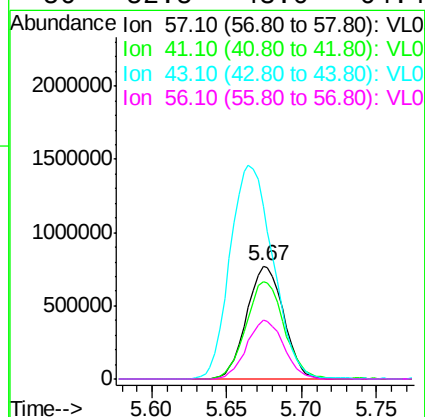
Manual Integrations  
APPROVED

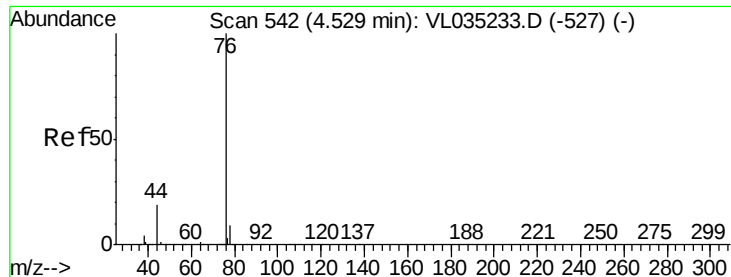
MMDadoda  
7/30/2020 6:10:36 PM



#26  
Hexane  
Concen: 9.577 ppbv  
RT: 5.67 min Scan# 898  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

| Tgt Ion | 57    | Resp  | 1324482 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 57      | 100   |       |         |
| 41      | 90.3  | 73.9  | 110.9   |
| 43      | 219.9 | 177.6 | 266.4   |
| 56      | 52.5  | 43.0  | 64.4    |





#27

Carbon Disulfide

Concen: 9.372 ppbv

RT: 4.53 min Scan# 541

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 76 Resp: 1751150

Ion Ratio Lower Upper

76 100

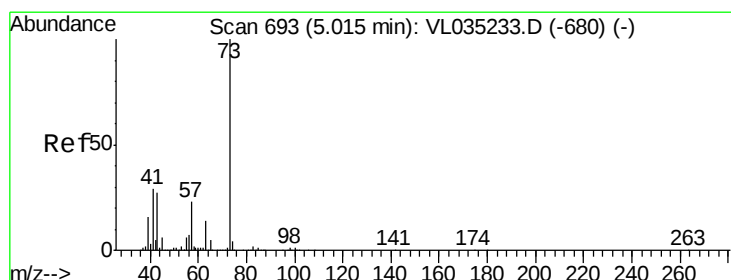
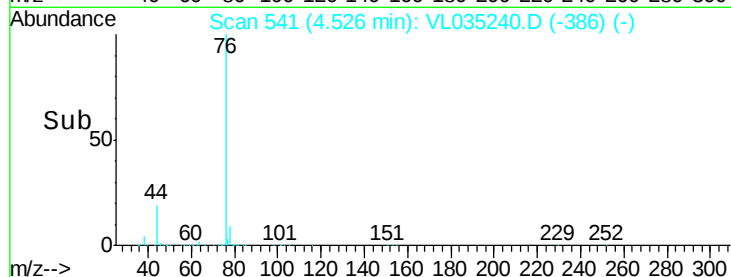
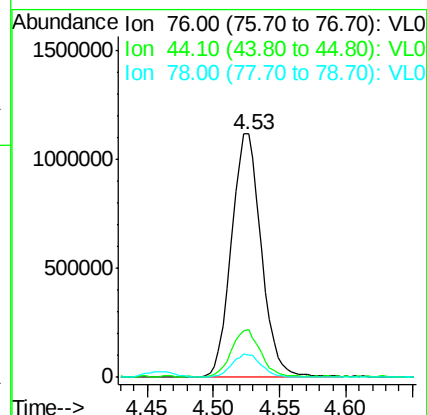
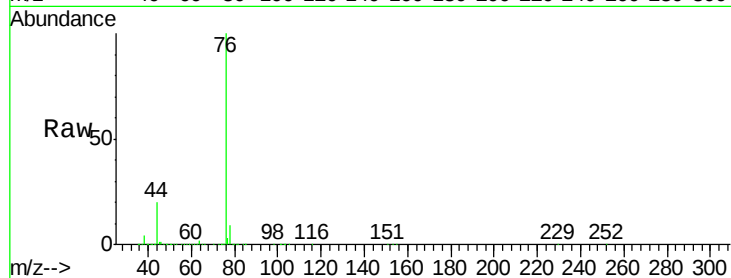
44 18.9 14.7 22.1

78 9.5 7.6 11.4

Manual Integrations  
APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#28

Methyl tert-Butyl Ether

Concen: 10.319 ppbv

RT: 5.01 min Scan# 693

Delta R.T. 0.00 min

Lab File: VL035240.D

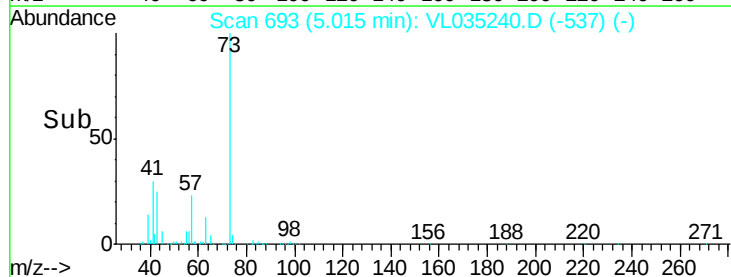
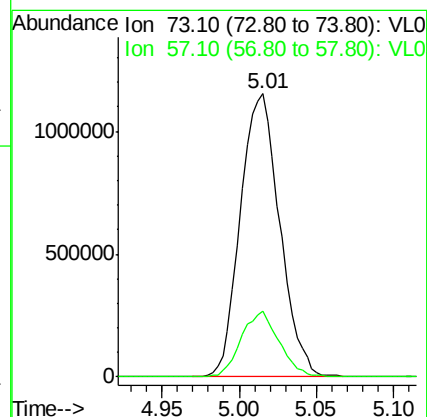
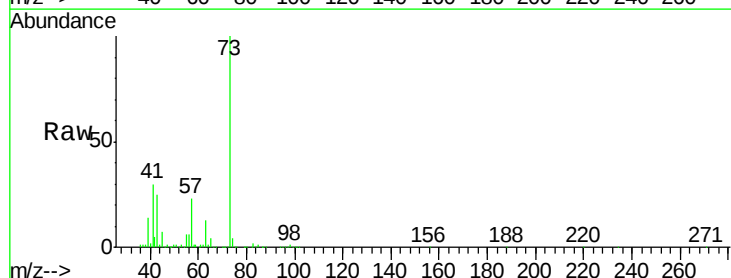
Acq: 29 Jul 2020 9:14

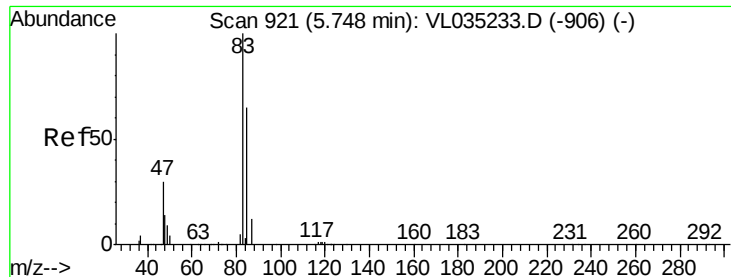
Tgt Ion: 73 Resp: 2040119

Ion Ratio Lower Upper

73 100

57 22.6 18.2 27.4





#29

Chloroform

Concen: 8.875 ppbv

RT: 5.74 min Scan# 920

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Tot Ion: 83 Resp: 2058584

Ion Ratio Lower Upper

83 100

85 67.1 51.7 77.5

Instrument :

MSVOA\_L

ClientSampleId :

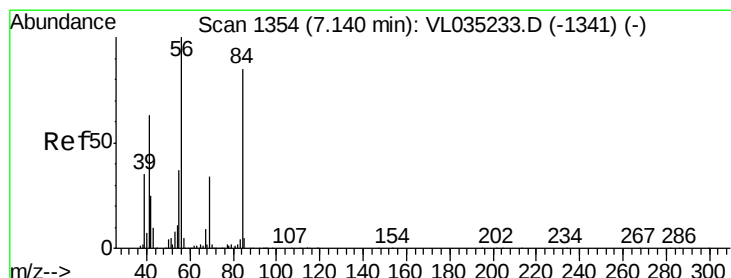
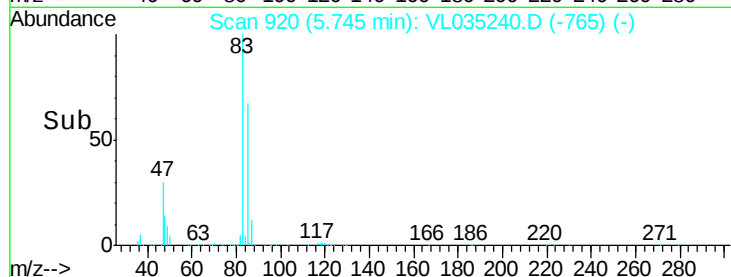
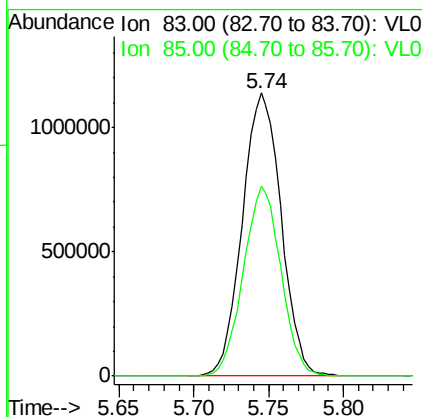
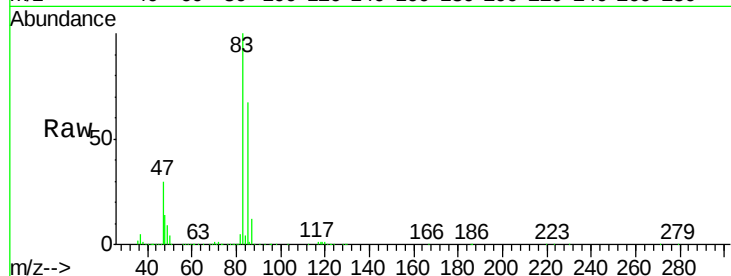
ICVVL072920

Manual Integrations

APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#30

Cyclohexane

Concen: 10.964 ppbv

RT: 7.13 min Scan# 1352

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

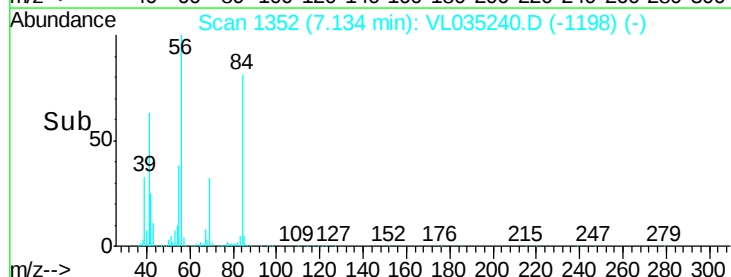
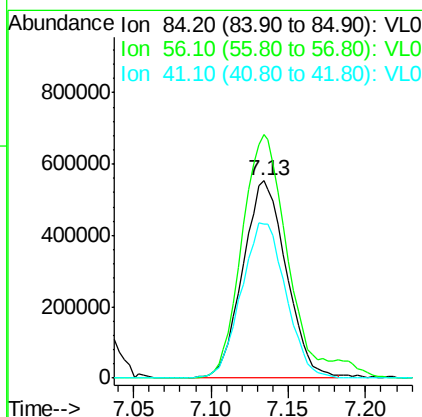
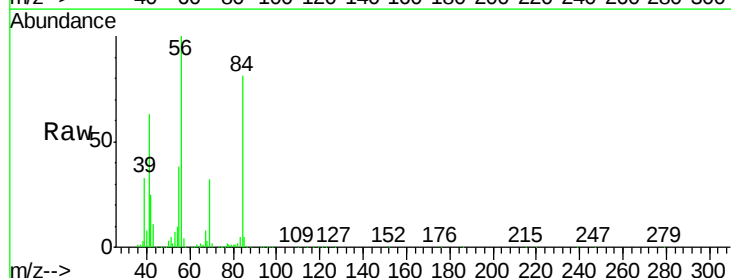
Tgt Ion: 84 Resp: 1083796

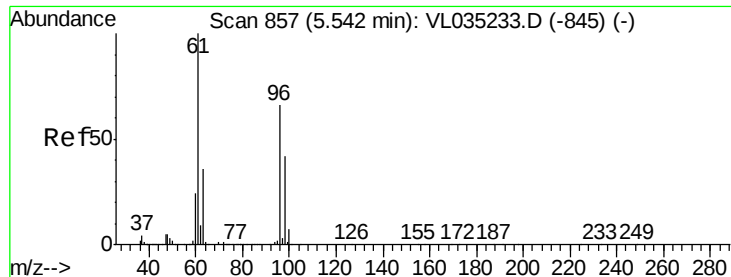
Ion Ratio Lower Upper

84 100

56 132.6 104.2 156.2

41 80.5 63.7 95.5





#31

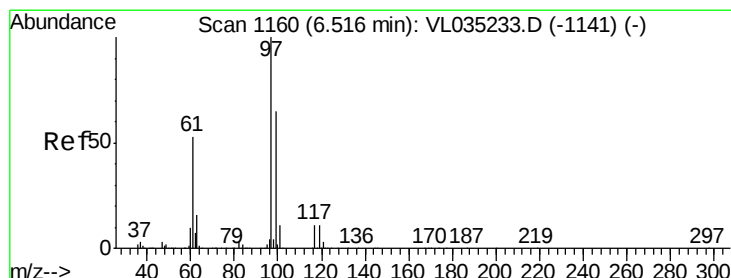
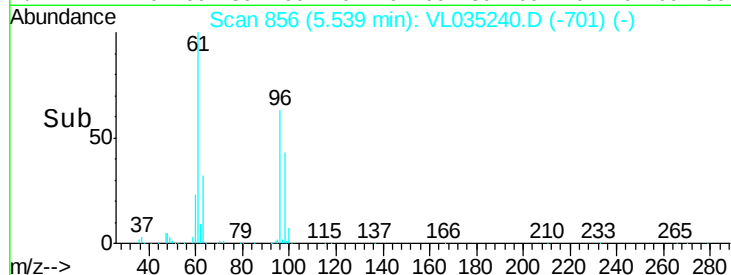
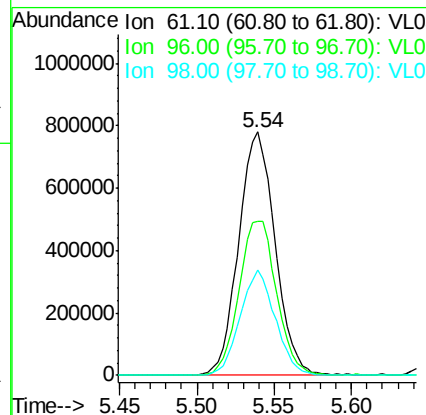
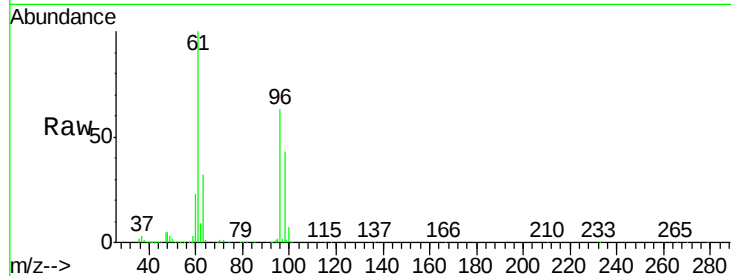
cis-1,2-Dichloroethene  
 Concen: 10.538 ppbv  
 RT: 5.54 min Scan# 856  
 Delta R.T. -0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 63.2  | 52.6  | 78.8  |
| 98      | 43.2  | 33.7  | 50.5  |

Manual Integrations  
 APPROVED

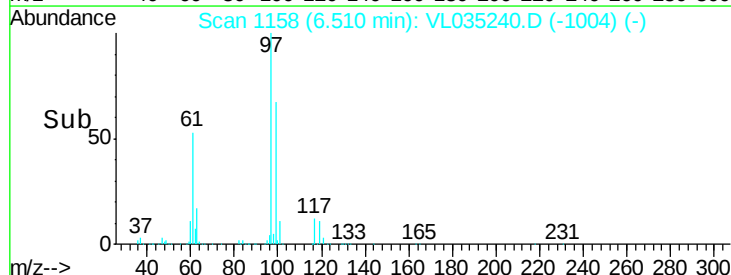
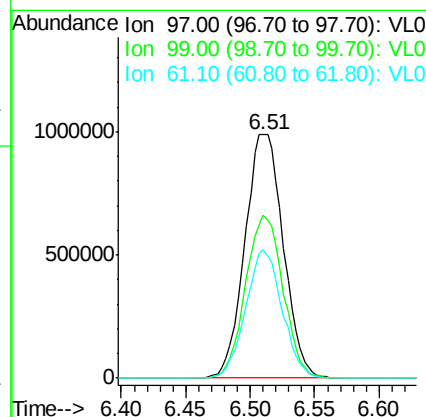
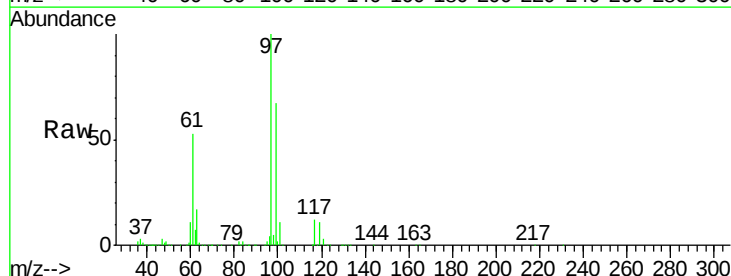
MMDadoda  
 7/30/2020 6:10:36 PM

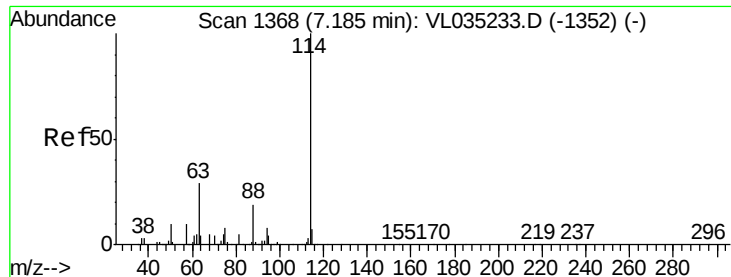


#32

1,1,1-Trichloroethane  
 Concen: 8.650 ppbv  
 RT: 6.51 min Scan# 1158  
 Delta R.T. -0.01 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 65.3  | 51.4  | 77.0  |
| 61      | 49.9  | 40.4  | 60.6  |





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1367

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

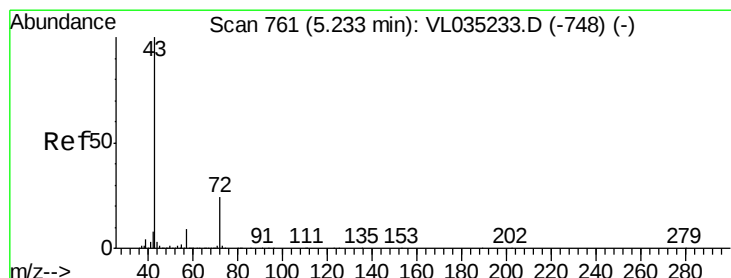
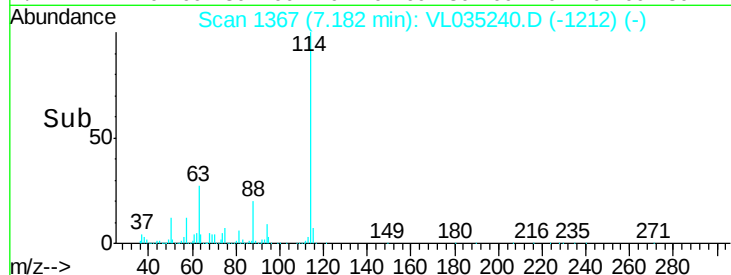
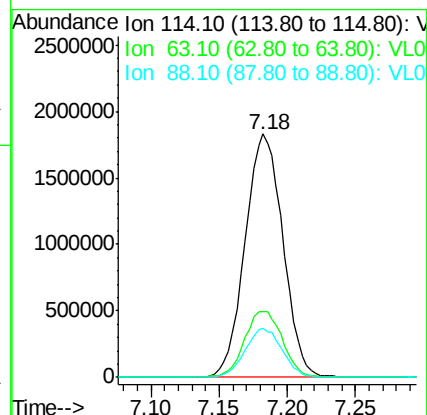
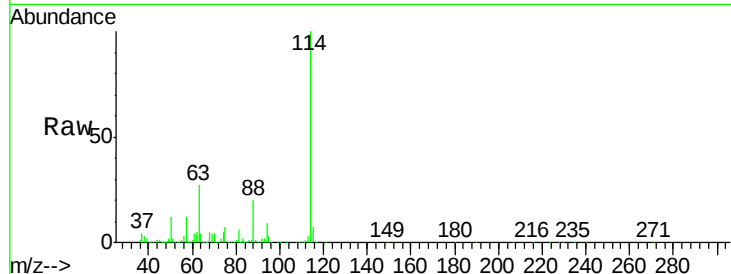
ClientSampleId :

ICVVL072920

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 114   | Resp: | 3518186 |
| Ion      | Ratio | Lower | Upper   |
| 114      | 100   |       |         |
| 63       | 27.7  | 22.2  | 33.2    |
| 88       | 19.6  | 15.4  | 23.0    |

Manual Integrations  
APPROVED

MMDadoda  
7/30/2020 6:10:36 PM



#34

2-Butanone

Concen: 9.863 ppbv

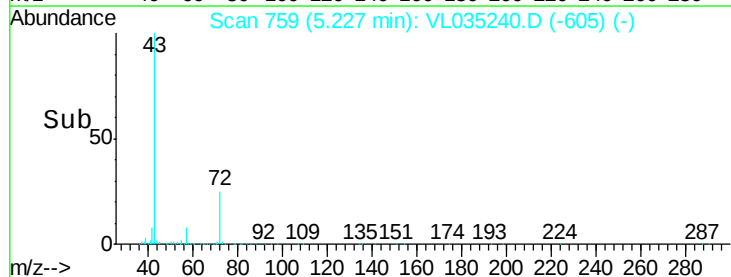
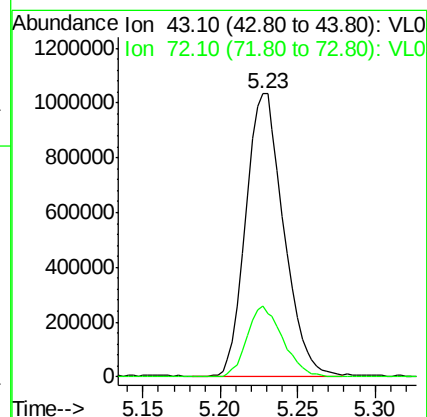
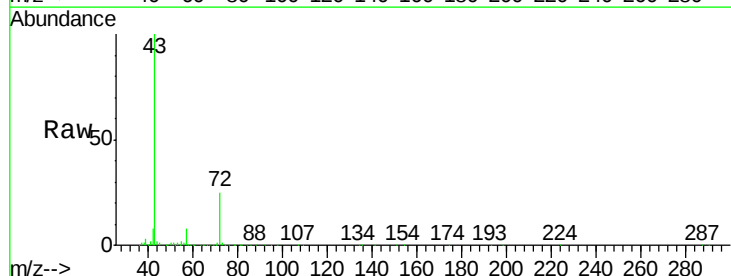
RT: 5.23 min Scan# 759

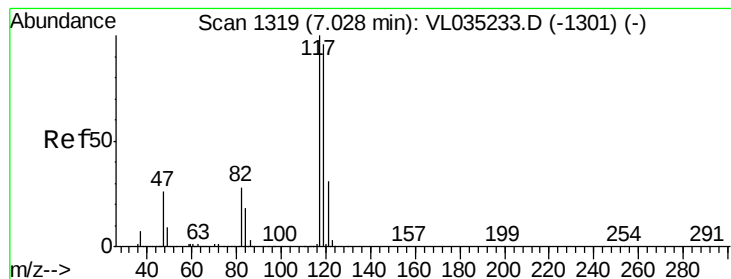
Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 43    | Resp: | 1765536 |
| Ion      | Ratio | Lower | Upper   |
| 43       | 100   |       |         |
| 72       | 23.9  | 19.2  | 28.8    |





#35

Carbon Tetrachloride

Concen: 8.929 ppbv

RT: 7.02 min Scan# 1317

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

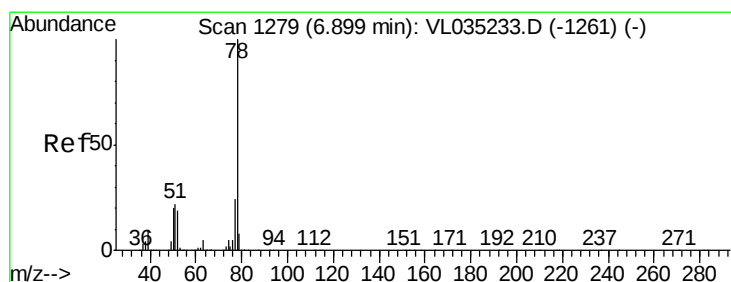
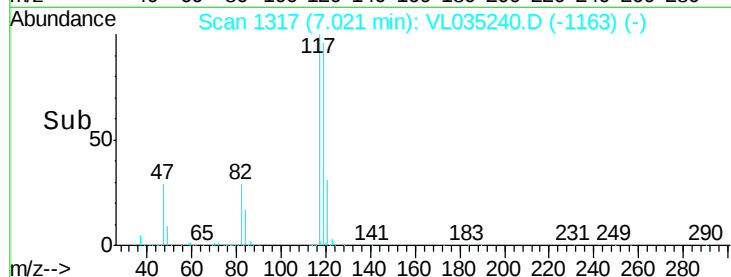
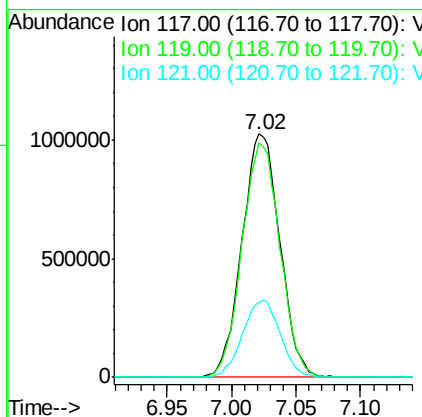
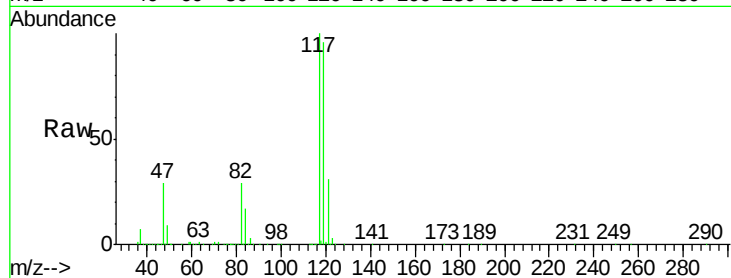
ClientSampleId :

ICVVL072920

| Tot Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 2103442 | 117 | 100   |       |       |
|         | 119 | 96.2  | 76.8  | 115.2 |
|         | 121 | 30.9  | 24.5  | 36.7  |

Manual Integrations  
APPROVED

MMDadoda  
7/30/2020 6:10:36 PM



#36

Benzene

Concen: 10.371 ppbv

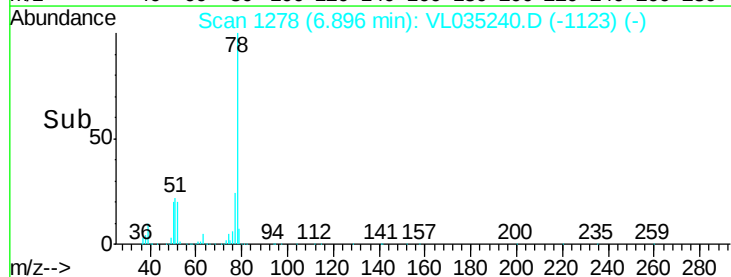
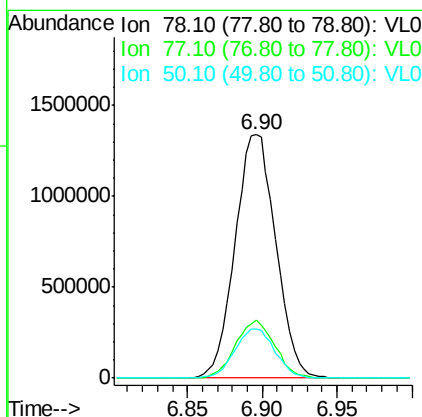
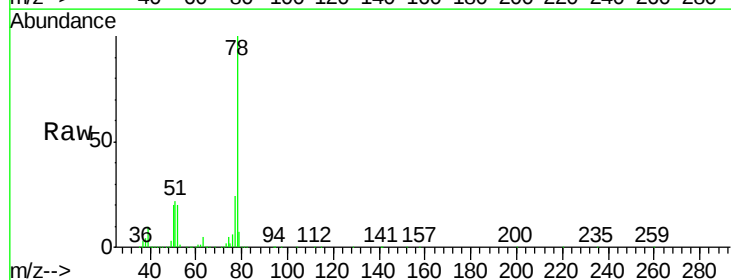
RT: 6.90 min Scan# 1278

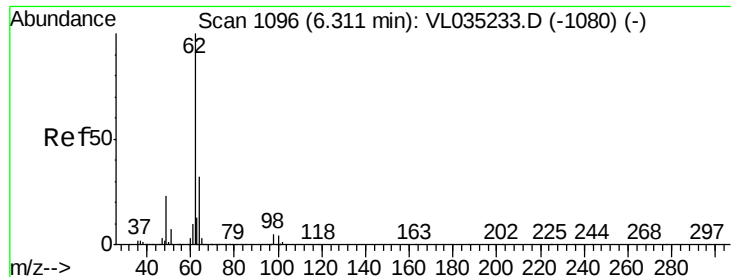
Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

| Tgt Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 2535793 | 78  | 100   |       |       |
|         | 77  | 23.6  | 18.9  | 28.3  |
|         | 50  | 20.1  | 16.1  | 24.1  |





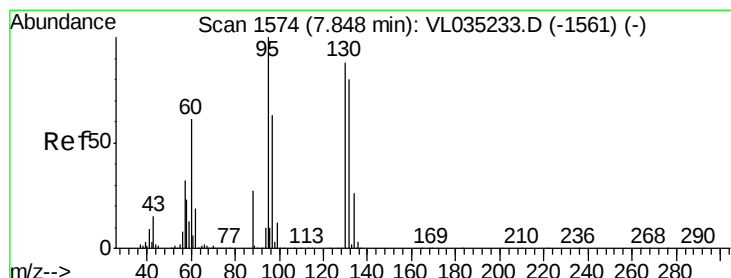
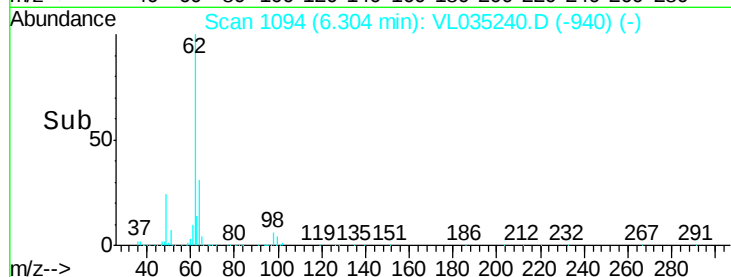
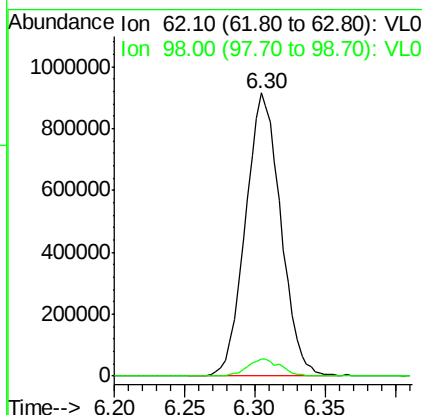
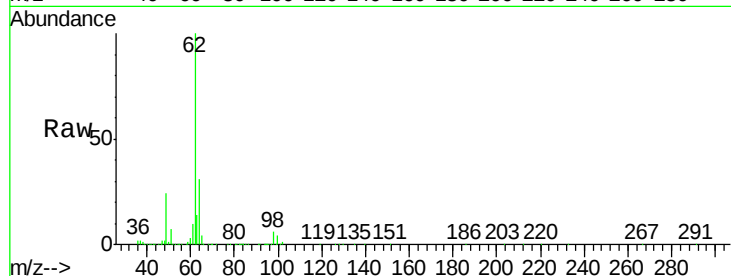
#37  
 1,2-Dichloroethane  
 Concen: 9.387 ppbv  
 RT: 6.30 min Scan# 1094  
 Delta R.T. -0.01 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

Tot Ion: 62 Resp: 1604511  
 Ion Ratio Lower Upper  
 62 100  
 98 5.8 4.5 6.7

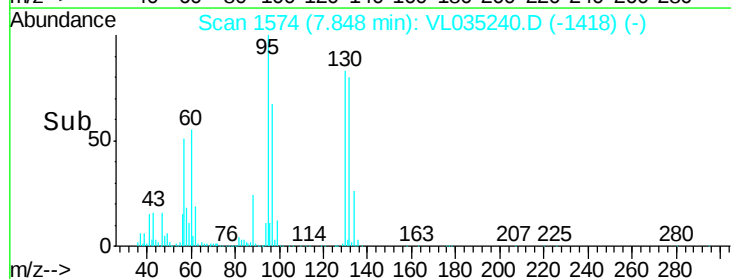
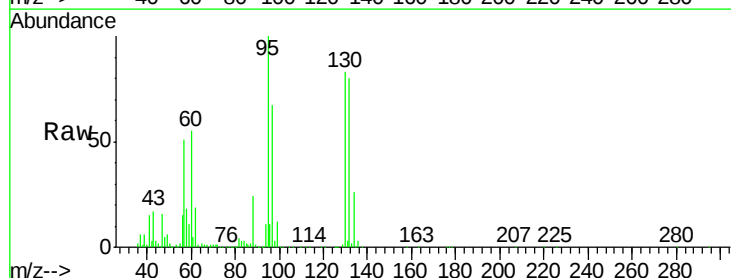
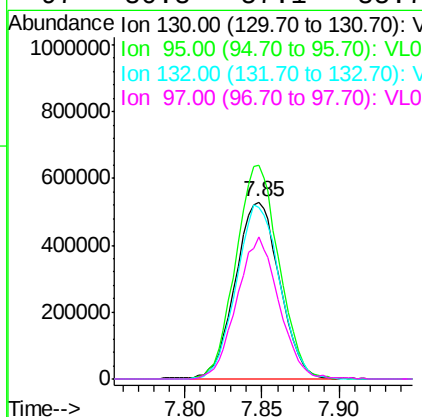
Manual Integrations  
 APPROVED

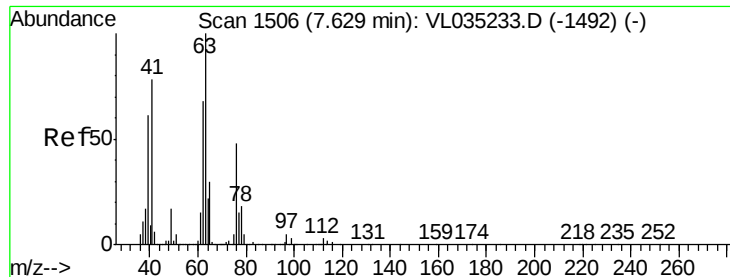
MMDadoda  
 7/30/2020 6:10:36 PM



#38  
 Trichloroethene  
 Concen: 10.270 ppbv  
 RT: 7.85 min Scan# 1574  
 Delta R.T. 0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Tgt Ion: 130 Resp: 1040755  
 Ion Ratio Lower Upper  
 130 100  
 95 120.9 90.7 136.1  
 132 96.9 72.9 109.3  
 97 80.8 57.1 85.7





#39

1,2-Dichloropropane

Concen: 10.197 ppbv

RT: 7.62 min Scan# 1504

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

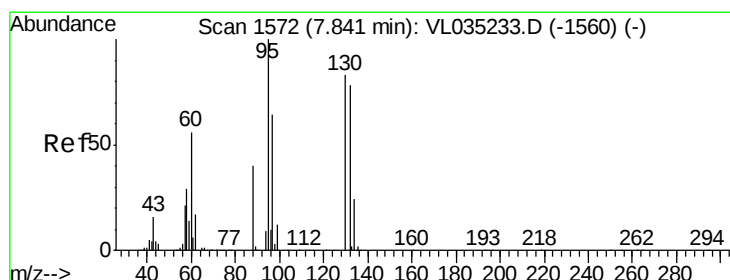
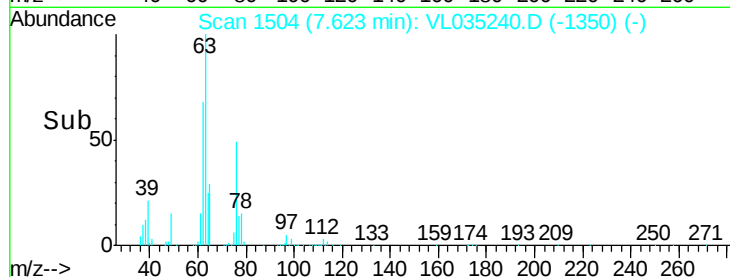
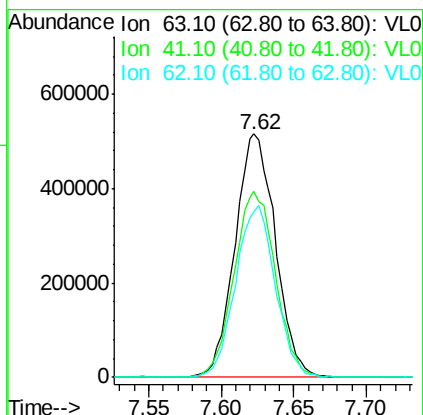
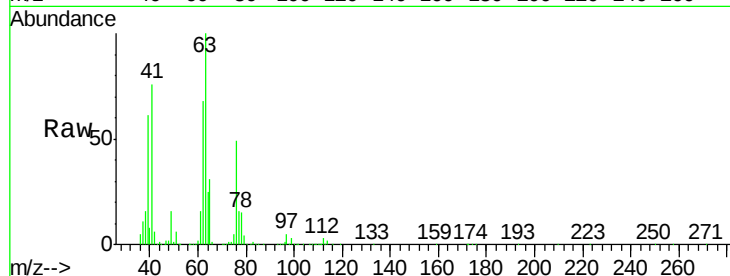
ClientSampleId :

ICVVL072920

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 63    | Resp: | 994776 |
| Ion      | Ratio | Lower | Upper  |
| 63       | 100   |       |        |
| 41       | 76.1  | 62.2  | 93.4   |
| 62       | 67.8  | 54.2  | 81.2   |

Manual Integrations  
APPROVED

MMDadoda  
7/30/2020 6:10:36 PM



#40

1,4-Dioxane

Concen: 10.230 ppbv

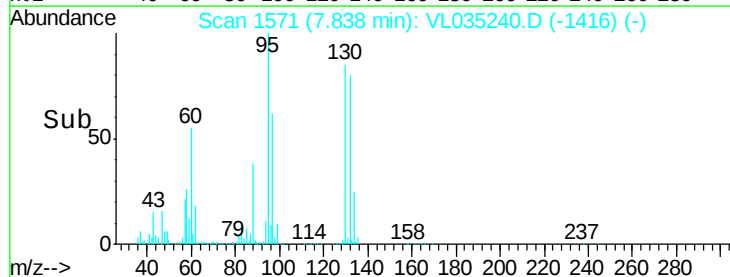
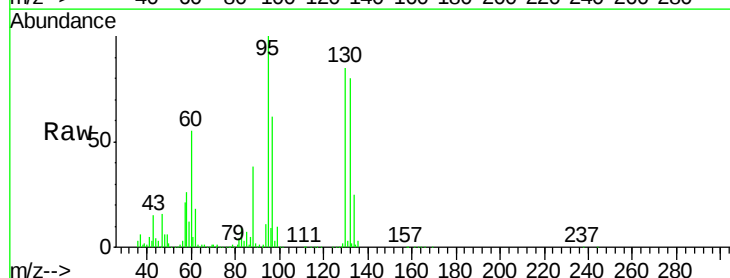
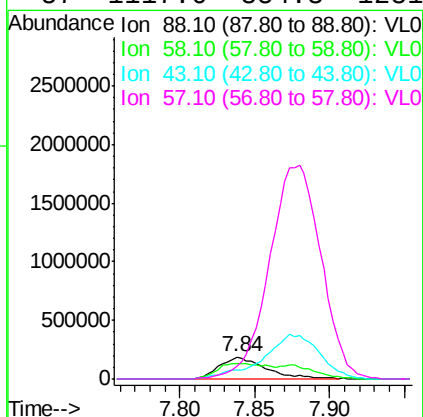
RT: 7.84 min Scan# 1571

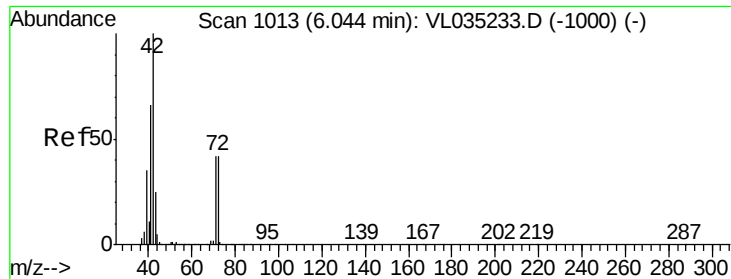
Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

|          |        |       |        |
|----------|--------|-------|--------|
| Tgt Ion: | 88     | Resp: | 392994 |
| Ion      | Ratio  | Lower | Upper  |
| 88       | 100    |       |        |
| 58       | 132.3  | 99.3  | 148.9  |
| 43       | 255.5  | 195.6 | 293.4  |
| 57       | 1117.6 | 854.3 | 1281.5 |





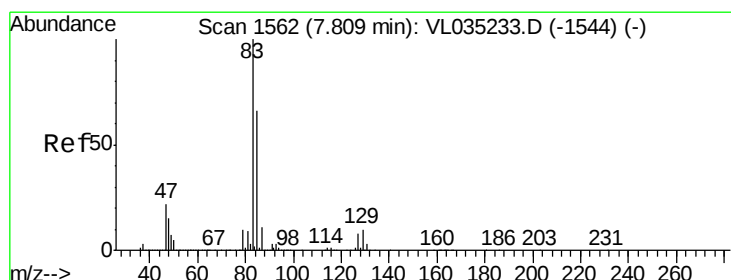
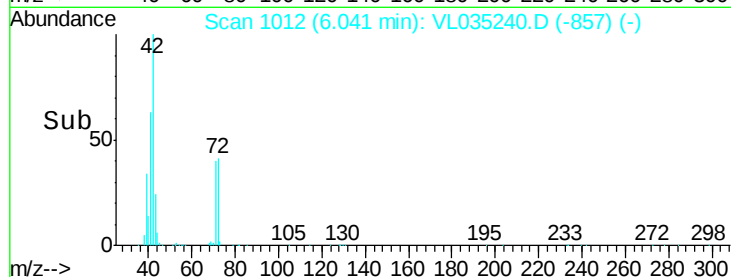
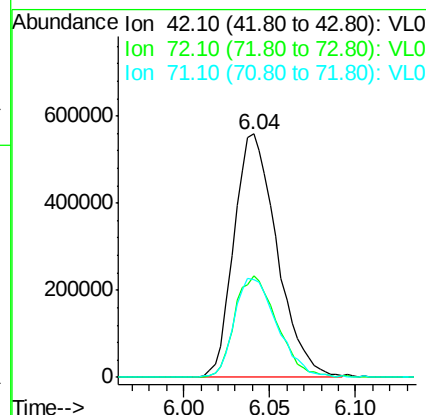
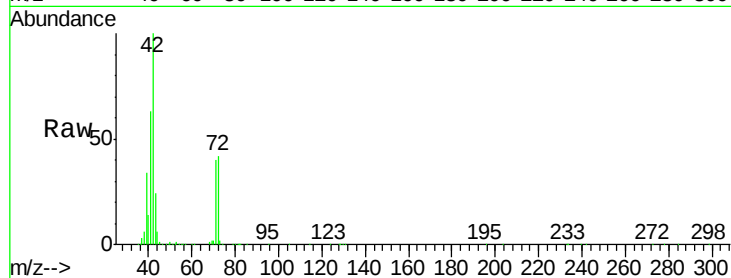
#41  
Tetrahydrofuran  
Concen: 11.107 ppbv  
RT: 6.04 min Scan# 1012  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072920

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 41.8  | 34.2  | 51.2  |
| 71      | 41.0  | 33.2  | 49.8  |

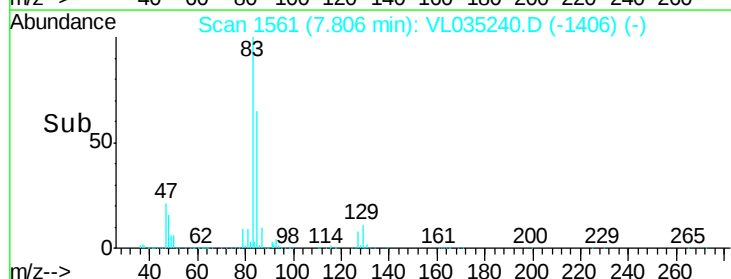
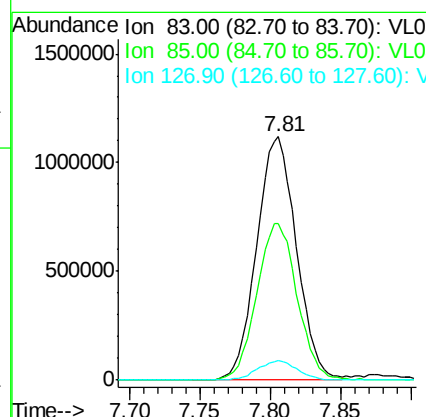
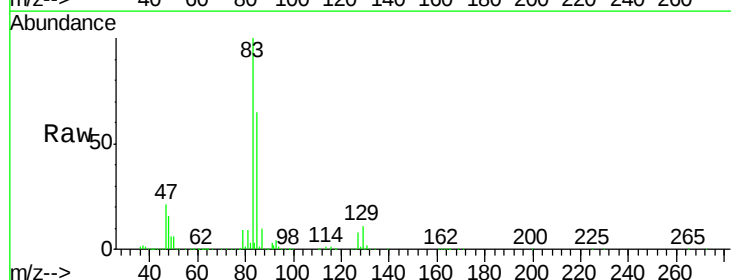
Manual Integrations  
APPROVED

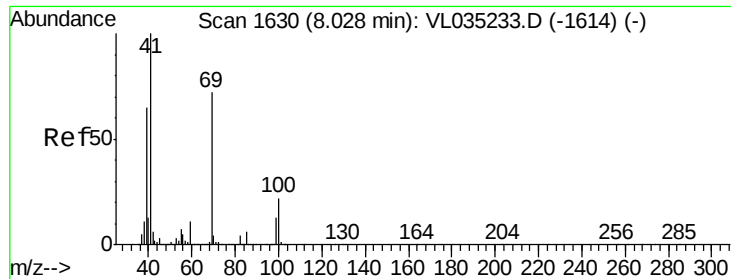
MMDadoda  
7/30/2020 6:10:36 PM



#42  
Bromodichloromethane  
Concen: 9.669 ppbv  
RT: 7.81 min Scan# 1561  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 64.5  | 52.9  | 79.3  |
| 127     | 7.9   | 6.5   | 9.7   |





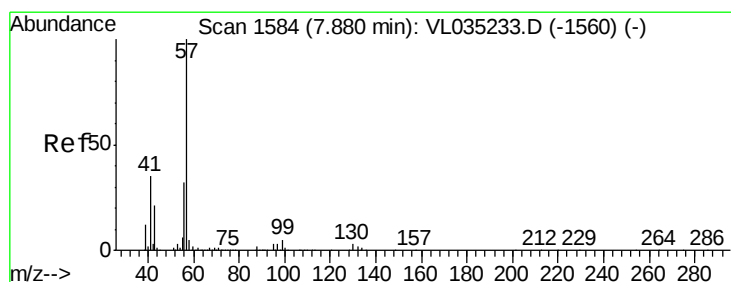
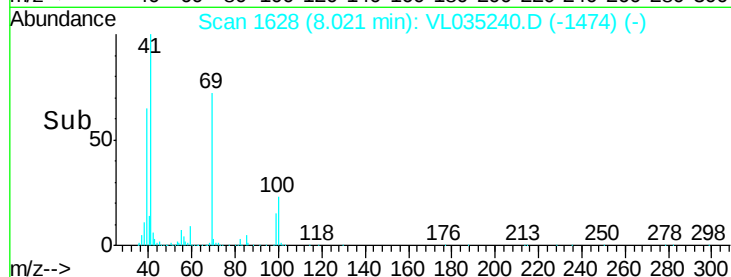
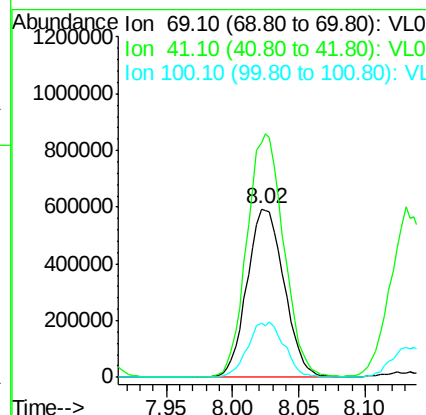
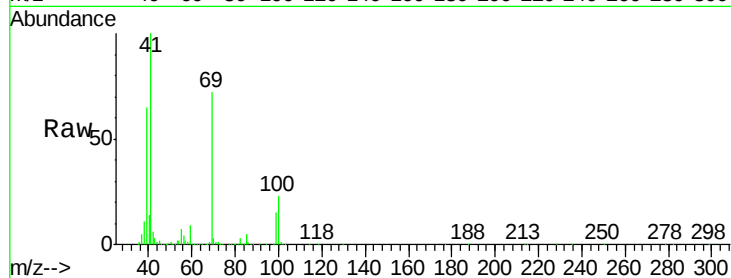
#43  
Methvl Methacrvlate  
Concen: 10.929 ppbv  
RT: 8.02 min Scan# 1628  
Delta R.T. -0.01 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072920

Tot Ion: 69 Resp: 1157830  
Ion Ratio Lower Upper  
69 100  
41 143.5 113.0 169.4  
100 32.3 25.3 37.9

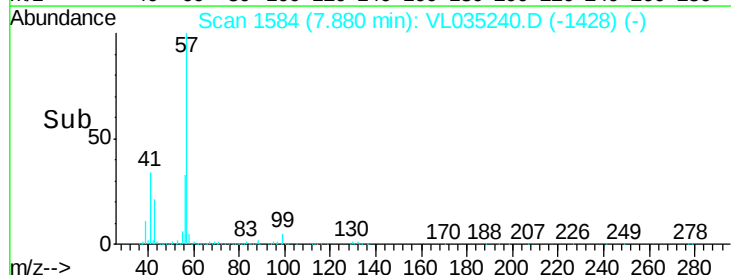
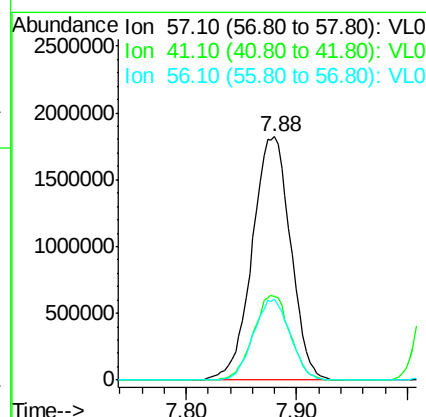
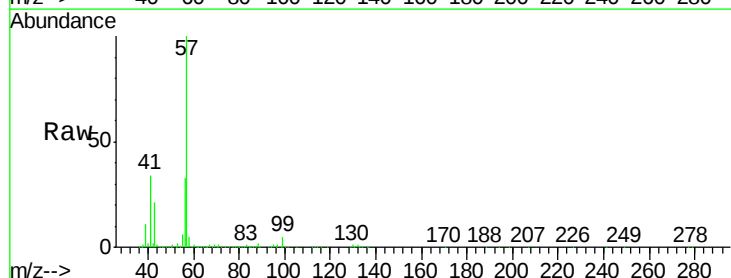
Manual Integrations  
APPROVED

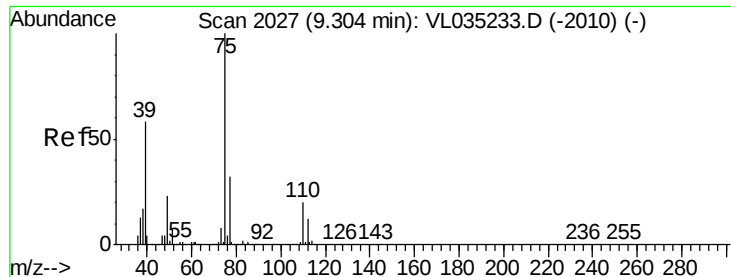
MMDadoda  
7/30/2020 6:10:36 PM



#44  
2,2,4-Trimethylpentane  
Concen: 10.163 ppbv  
RT: 7.88 min Scan# 1584  
Delta R.T. 0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Tgt Ion: 57 Resp: 4378173  
Ion Ratio Lower Upper  
57 100  
41 33.6 27.0 40.4  
56 31.9 25.6 38.4





#45

t-1,3-Dichloropropene

Concen: 12.021 ppbv

RT: 9.30 min Scan# 2025

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 75 Resp: 1283145

Ion Ratio Lower Upper

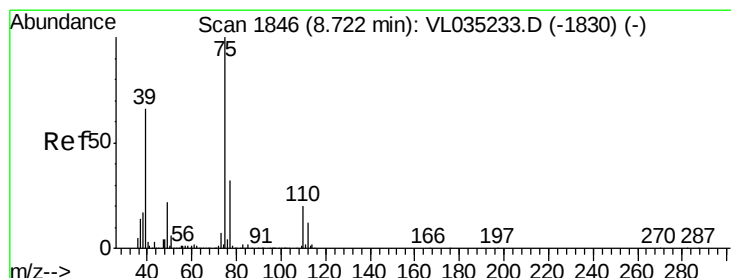
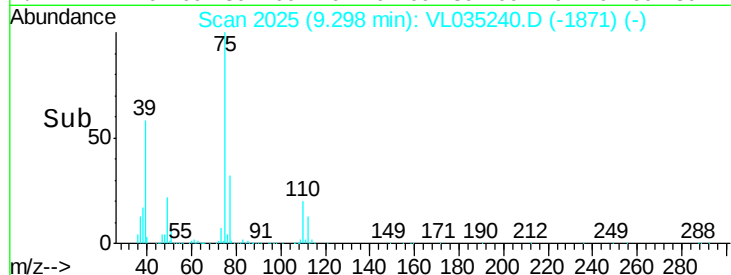
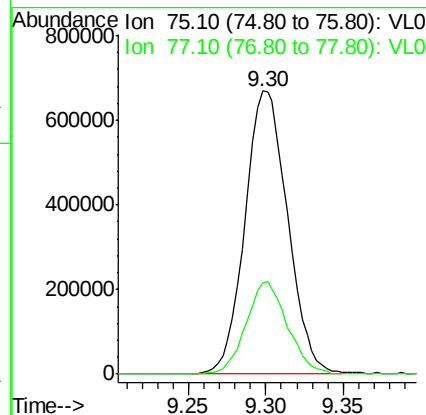
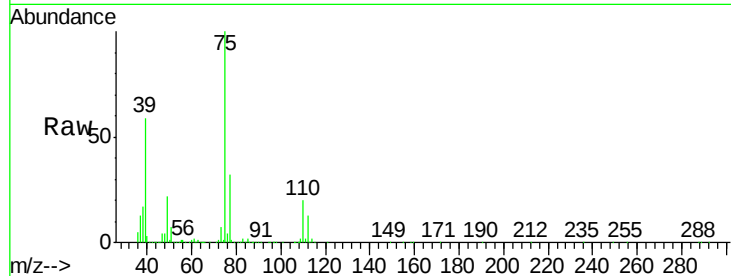
75 100

77 32.4 25.6 38.4

Manual Integrations  
APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#46

cis-1,3-Dichloropropene

Concen: 11.831 ppbv

RT: 8.72 min Scan# 1846

Delta R.T. 0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

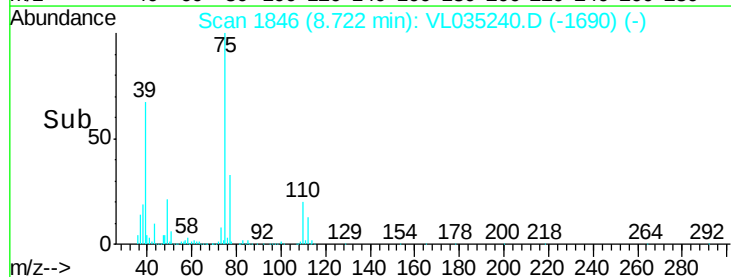
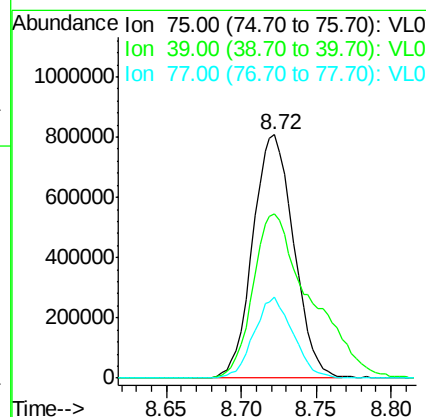
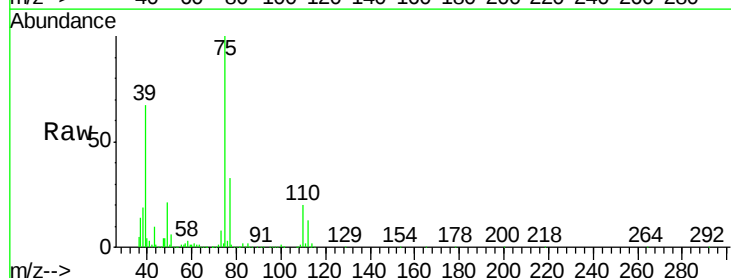
Tgt Ion: 75 Resp: 1538471

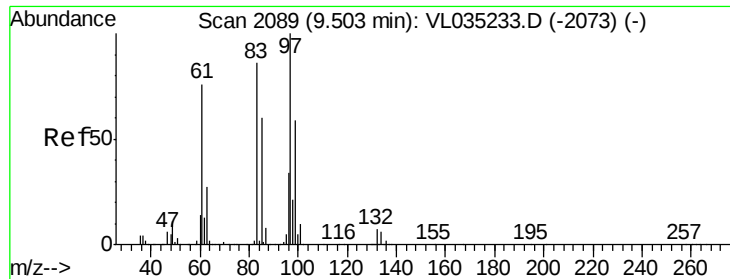
Ion Ratio Lower Upper

75 100

39 67.3 53.0 79.4

77 33.1 25.8 38.8





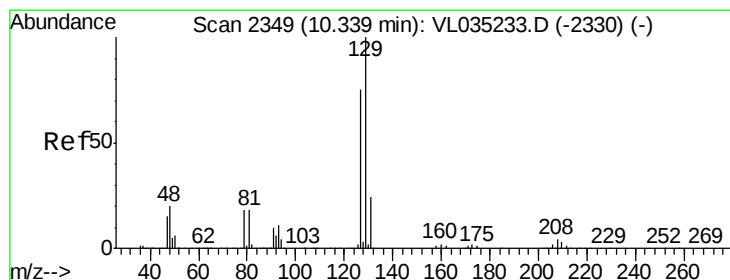
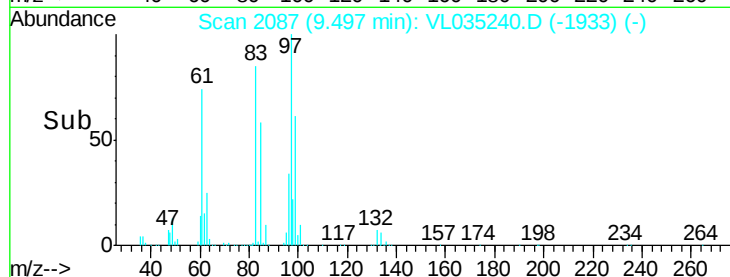
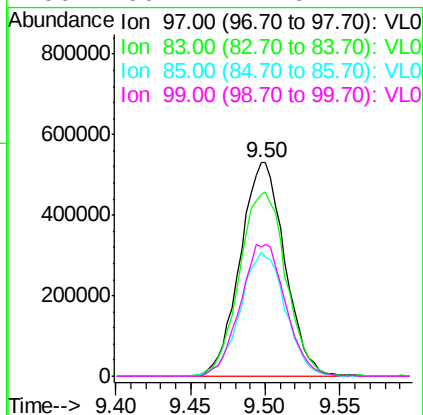
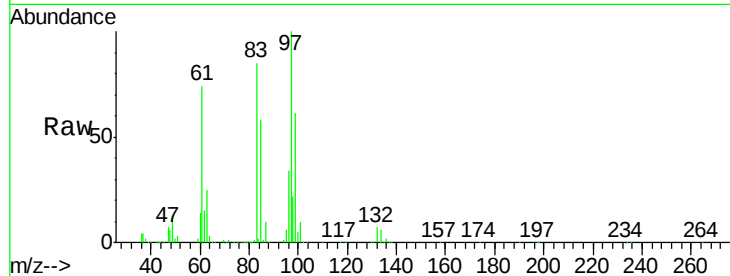
#47  
 1,1,2-Trichloroethane  
 Concen: 9.521 ppbv  
 RT: 9.50 min Scan# 2087  
 Delta R.T. -0.01 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 83      | 85.0  | 69.0  | 103.4 |
| 85      | 57.9  | 47.8  | 71.8  |
| 99      | 60.7  | 47.6  | 71.4  |

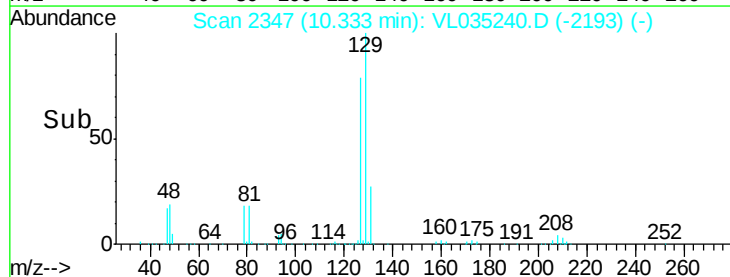
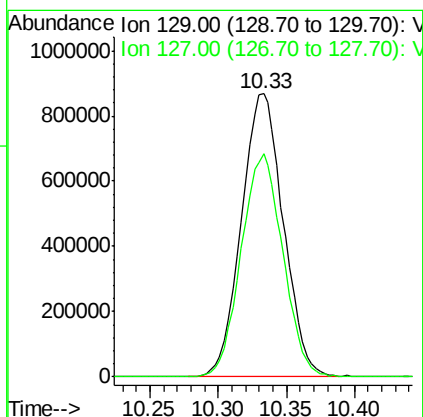
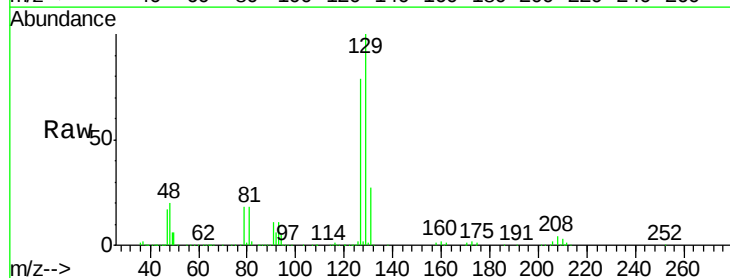
Manual Integrations  
 APPROVED

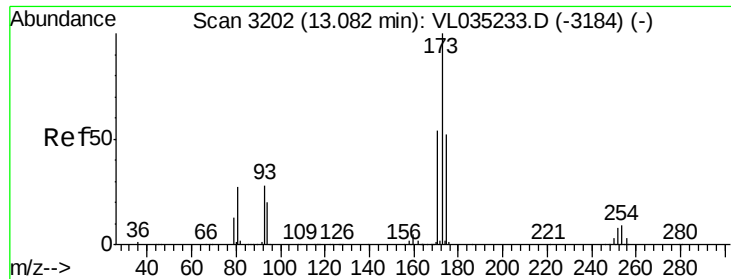
MMDadoda  
 7/30/2020 6:10:36 PM



#48  
 Dibromochloromethane  
 Concen: 10.207 ppbv  
 RT: 10.33 min Scan# 2347  
 Delta R.T. -0.01 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 78.3  | 39.6  | 119.0 |





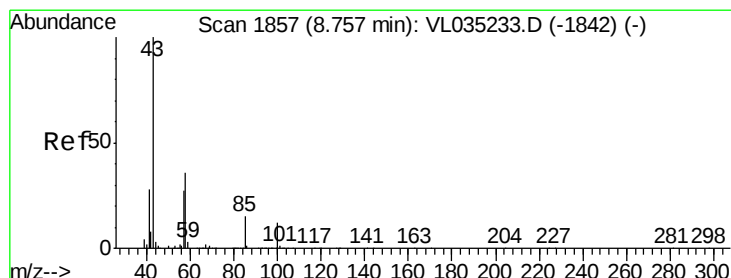
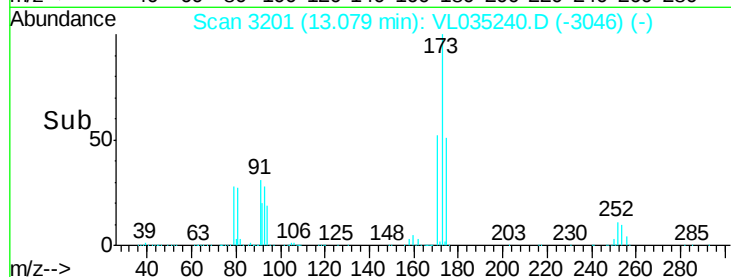
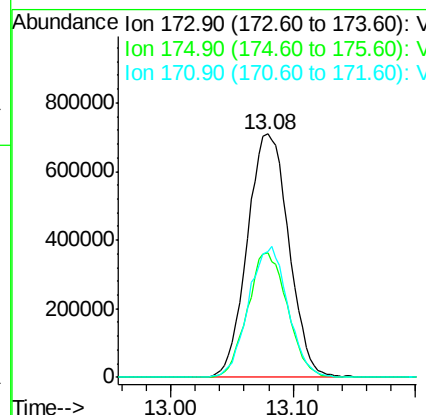
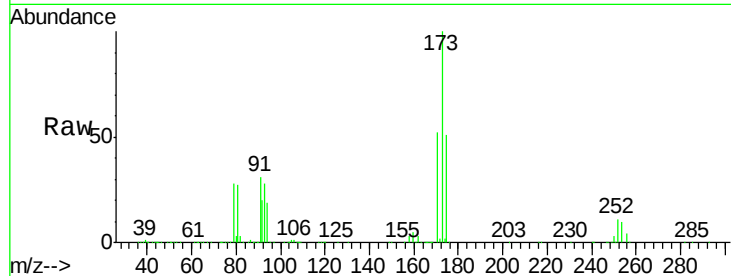
#49  
Bromoform  
Concen: 10.205 ppbv  
RT: 13.08 min Scan# 3201  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072920

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 173     | 100   |       |       |
| 175     | 49.1  | 40.0  | 60.0  |
| 171     | 51.1  | 41.8  | 62.8  |

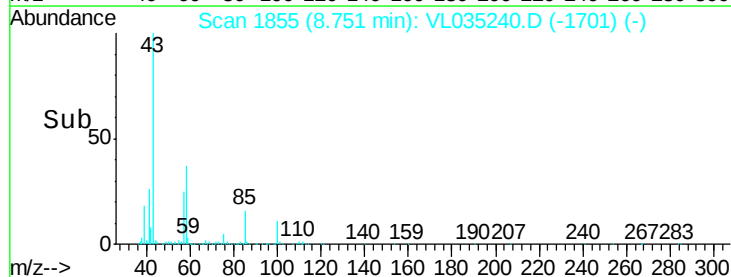
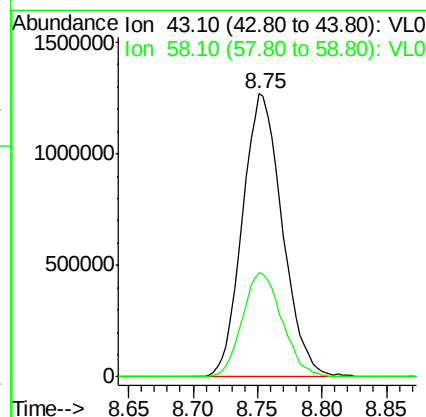
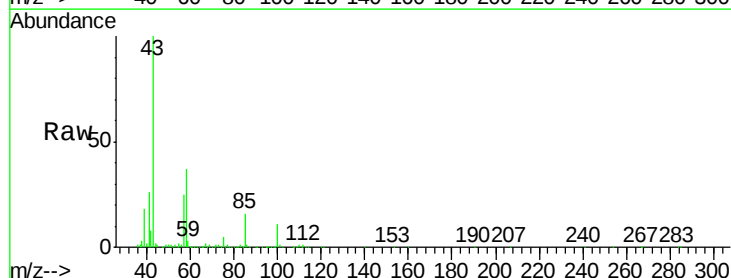
Manual Integrations  
APPROVED

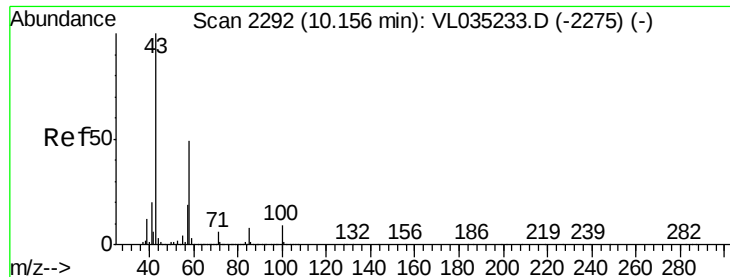
MMDadoda  
7/30/2020 6:10:36 PM



#50  
4-Methyl-2-Pentanone  
Concen: 10.550 ppbv  
RT: 8.75 min Scan# 1855  
Delta R.T. -0.01 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 36.9  | 30.0  | 45.0  |





#51

2-Hexanone

Concen: 11.244 ppbv

RT: 10.15 min Scan# 2291

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 43 Resp: 2211924

Ion Ratio Lower Upper

43 100

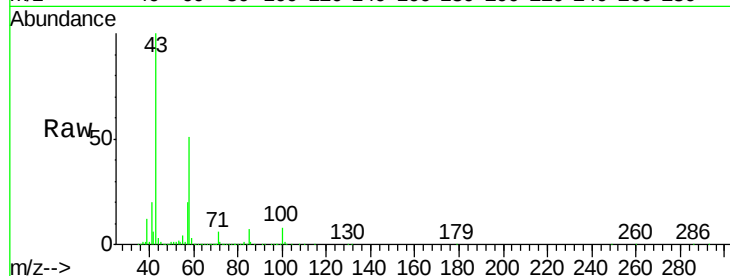
58 49.2 38.8 58.2

98 0.4 0.6 0.8#

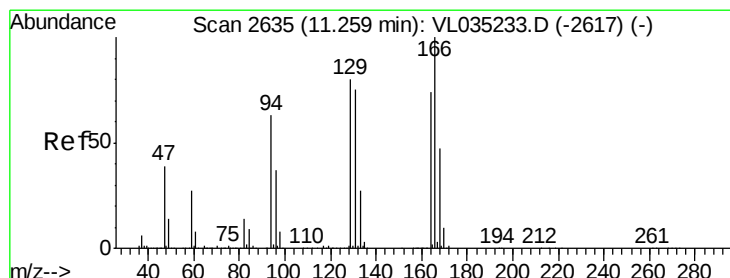
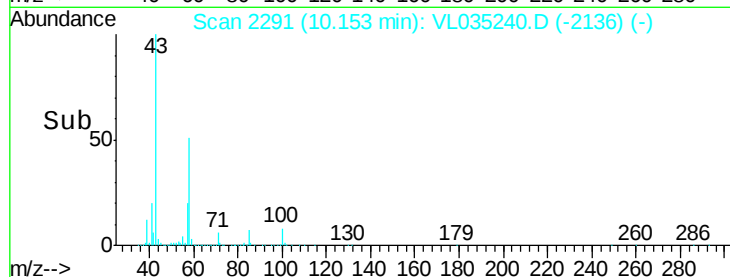
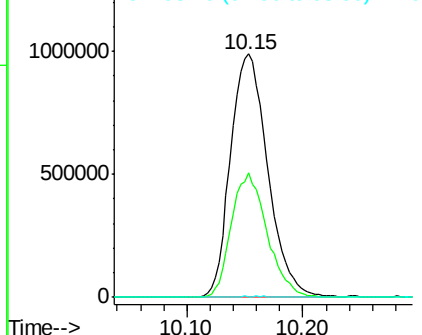
Manual Integrations  
APPROVED

MMDadoda

7/30/2020 6:10:36 PM



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



#52

Tetrachloroethene

Concen: 10.126 ppbv

RT: 11.26 min Scan# 2634

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Tgt Ion: 164 Resp: 944665

Ion Ratio Lower Upper

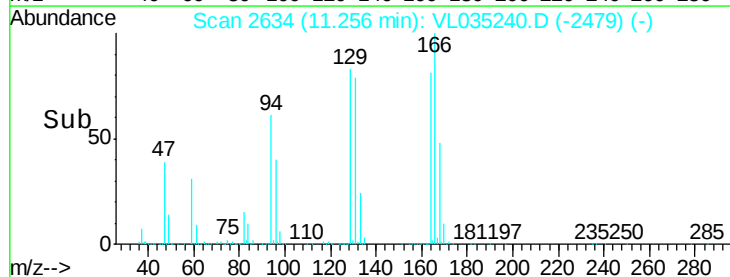
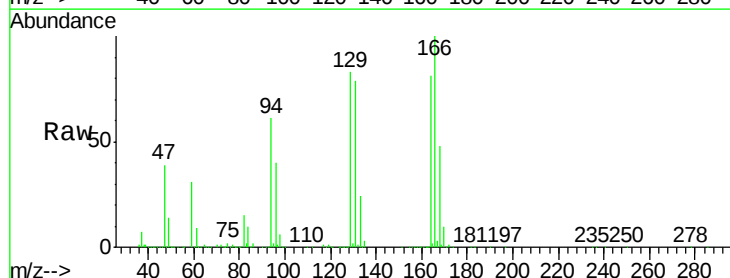
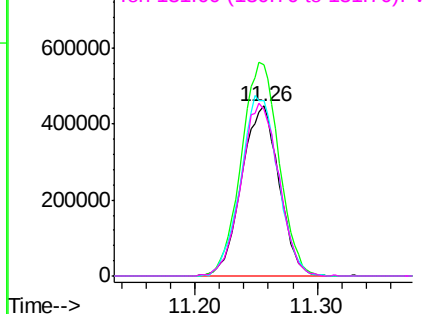
164 100

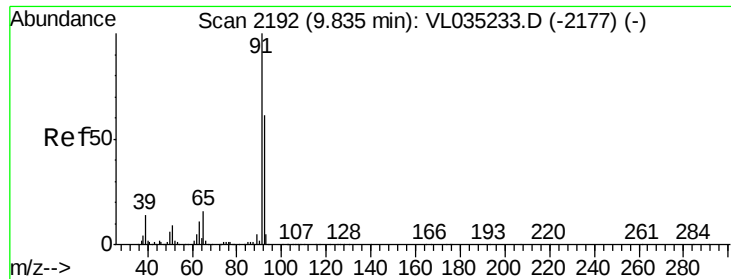
166 124.1 107.5 161.3

129 103.2 86.0 129.0

131 97.9 80.3 120.5

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





#53

Toluene

Concen: 11.500 ppbv

RT: 9.83 min Scan# 2190

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 91 Resp: 2988463

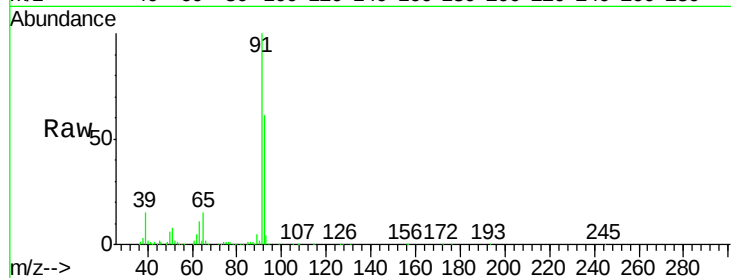
Ion Ratio Lower Upper

91 100

92 60.6 48.5 72.7

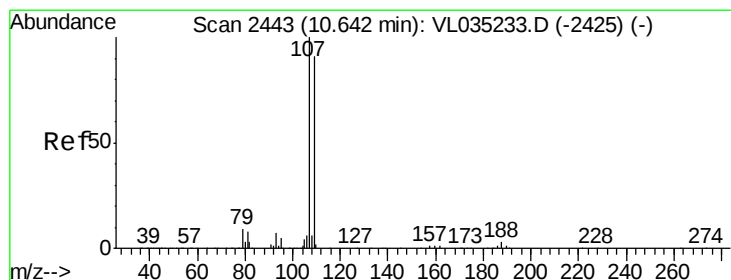
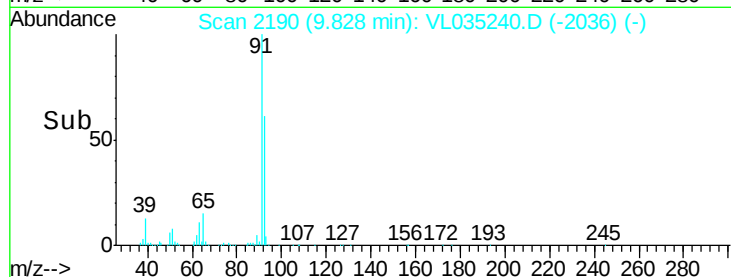
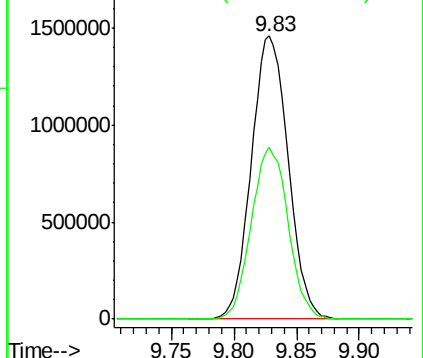
Manual Integrations  
APPROVED

MMDadoda  
7/30/2020 6:10:36 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#54

1,2-Dibromoethane

Concen: 10.075 ppbv m

RT: 10.64 min Scan# 2442

Delta R.T. -0.00 min

Lab File: VL035240.D

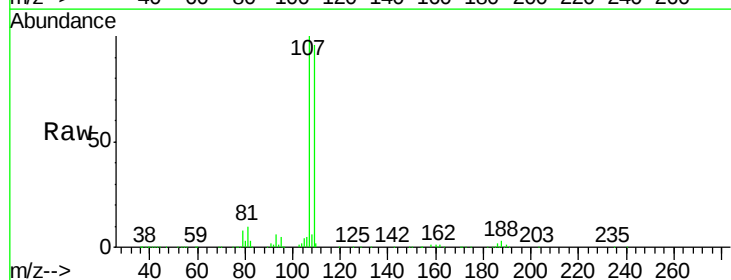
Acq: 29 Jul 2020 9:14

Tgt Ion: 107 Resp: 1678779

Ion Ratio Lower Upper

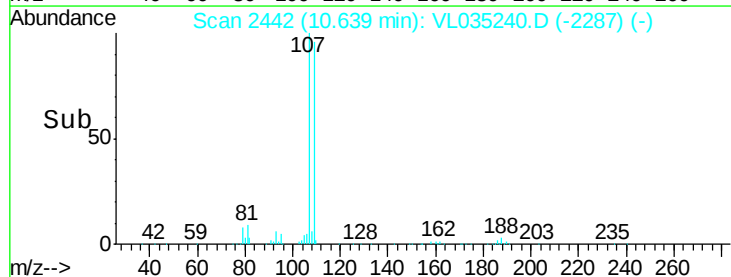
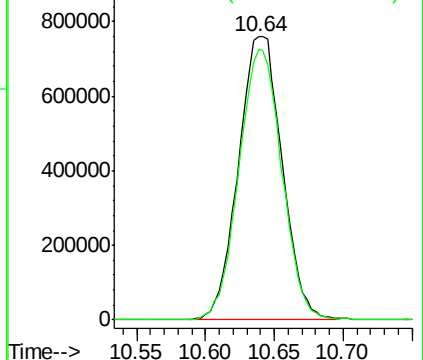
107 100

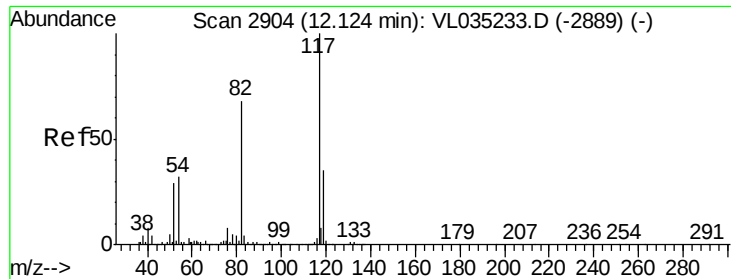
109 95.6 73.0 109.6



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V





#55

Chlorobenzene-d5

Concen: 10.000 ppbv m

RT: 12.12 min Scan# 2902

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion:117 Resp: 3377607

Ion Ratio Lower Upper

117 100

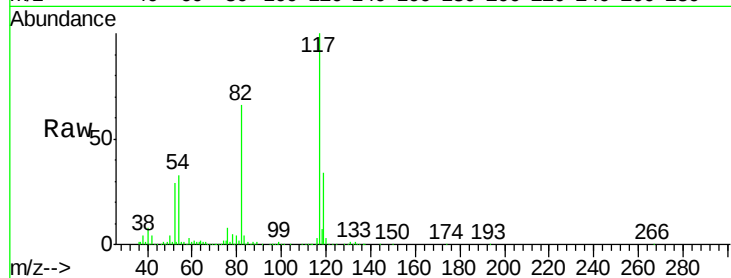
82 65.7 52.4 78.6

119 32.1 24.6 36.8

Manual Integrations  
APPROVED

MMDadoda

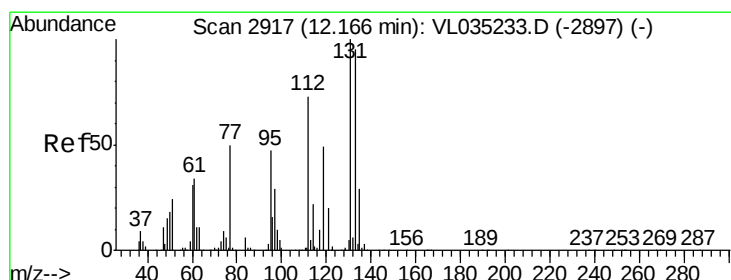
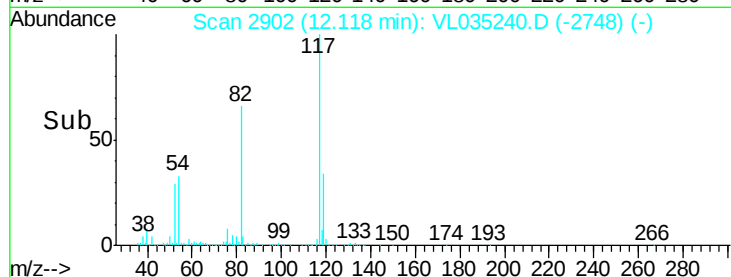
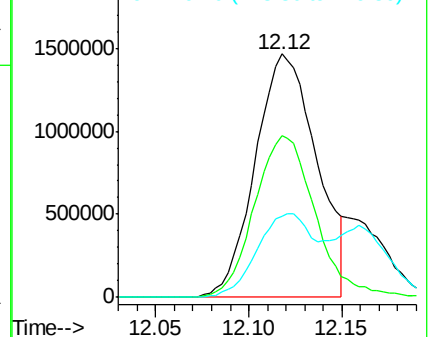
7/30/2020 6:10:36 PM



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 9.266 ppbv

RT: 12.16 min Scan# 2915

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

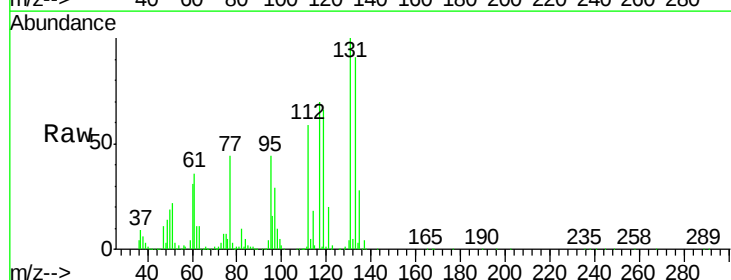
Tgt Ion:131 Resp: 1439102

Ion Ratio Lower Upper

131 100

133 95.8 76.1 114.1

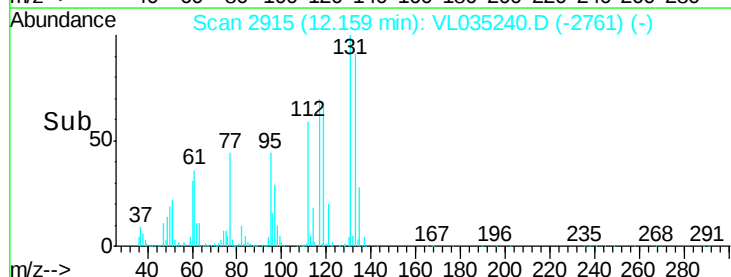
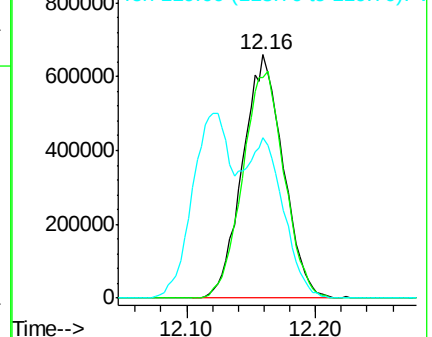
119 57.0 44.3 66.5

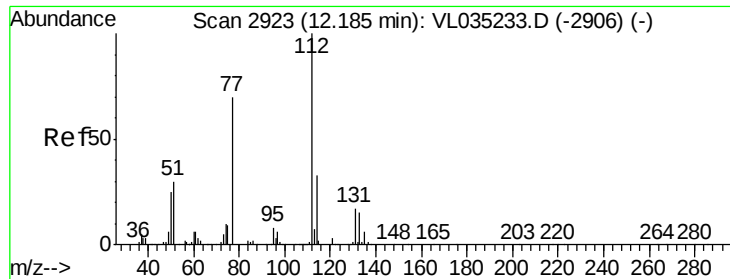


Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V





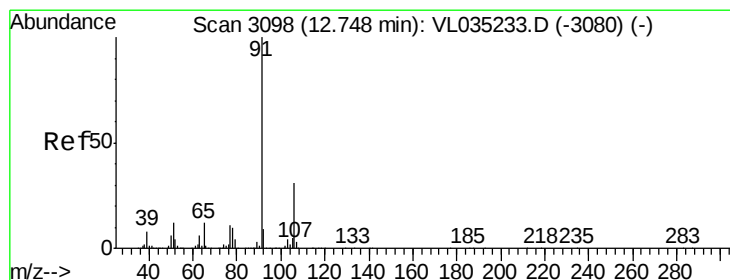
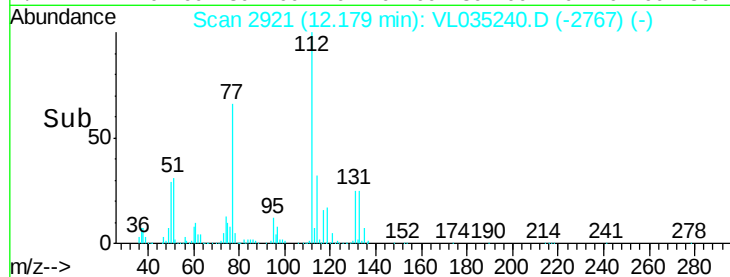
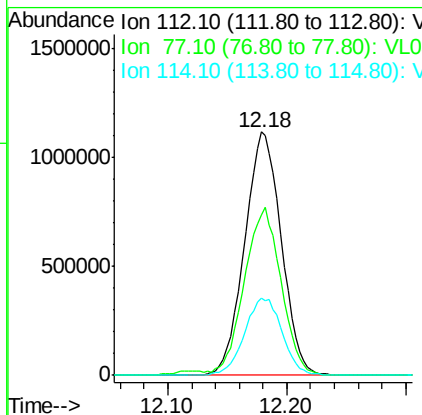
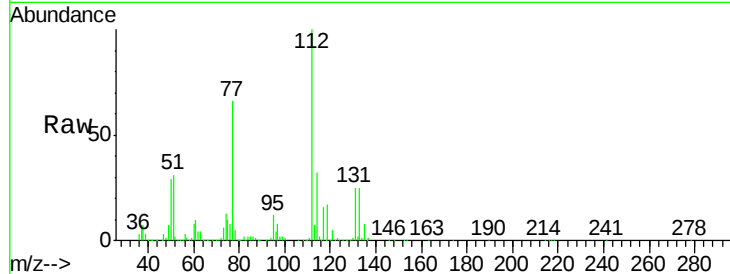
#57  
Chlorobenzene  
Concen: 9.381 ppbv  
RT: 12.18 min Scan# 2921  
Delta R.T. -0.01 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072920

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 65.7  | 57.3  | 85.9  |
| 114     | 31.9  | 29.3  | 35.8  |

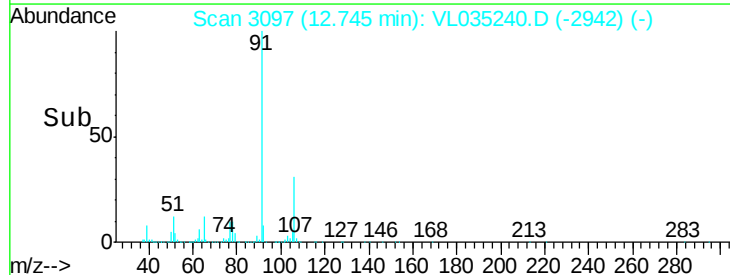
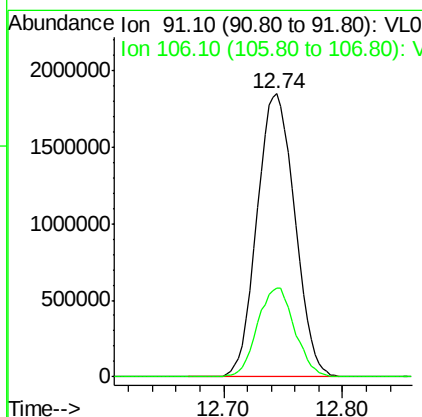
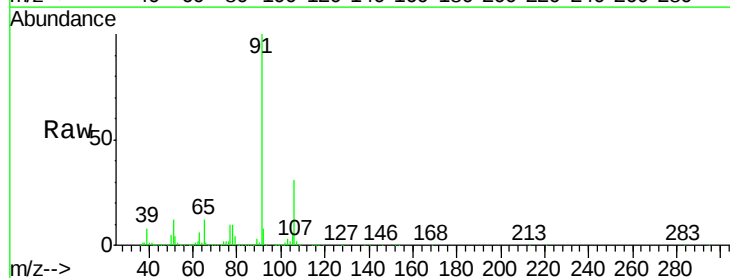
Manual Integrations  
APPROVED

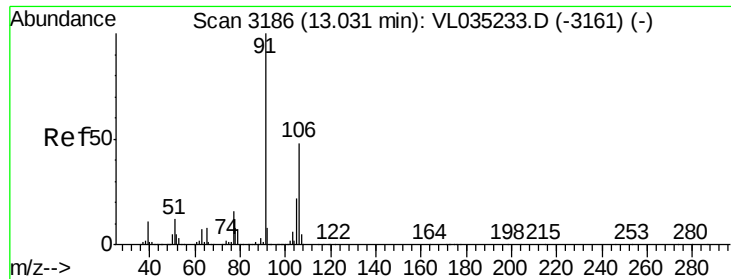
MMDadoda  
7/30/2020 6:10:36 PM



#58  
Ethyl Benzene  
Concen: 11.359 ppbv  
RT: 12.74 min Scan# 3097  
Delta R.T. -0.00 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 31.2  | 25.0  | 37.6  |





#59

m/p-Xylene

Concen: 20.458 ppbv m

RT: 13.03 min Scan# 3186

Delta R.T. 0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 91 Resp: 6813078

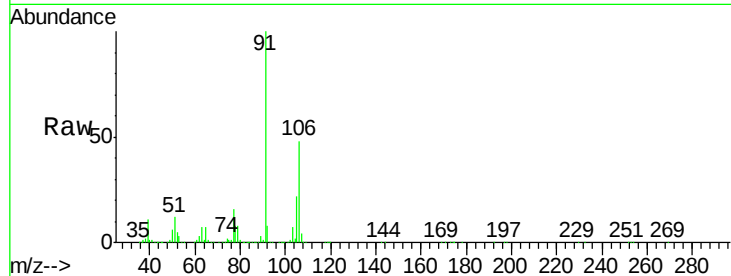
Ion Ratio Lower Upper

91 100

106 46.5 37.2 55.8

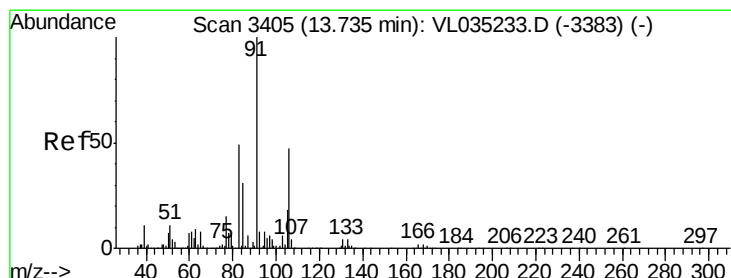
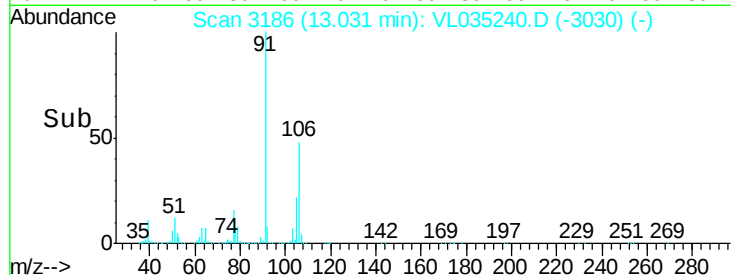
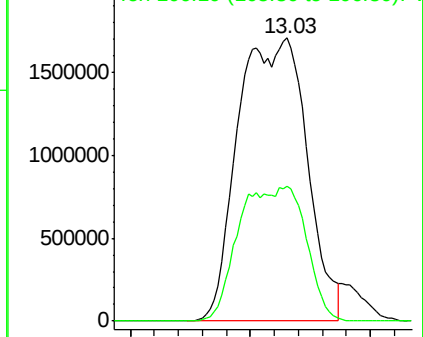
Manual Integrations  
APPROVED

MMDadoda  
7/30/2020 6:10:36 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 10.325 ppbv

RT: 13.73 min Scan# 3404

Delta R.T. -0.00 min

Lab File: VL035240.D

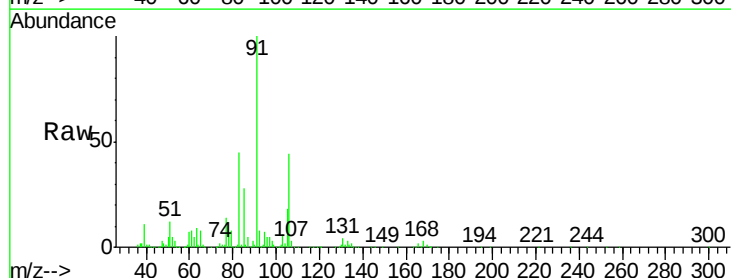
Acq: 29 Jul 2020 9:14

Tgt Ion: 91 Resp: 3430610

Ion Ratio Lower Upper

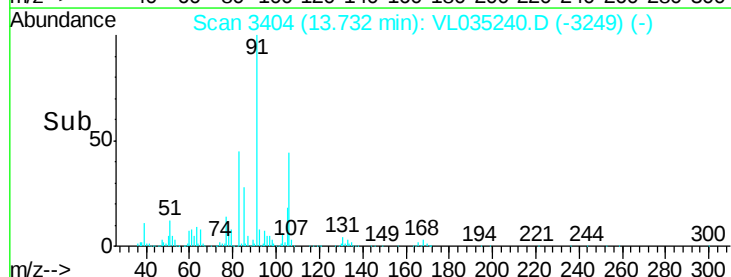
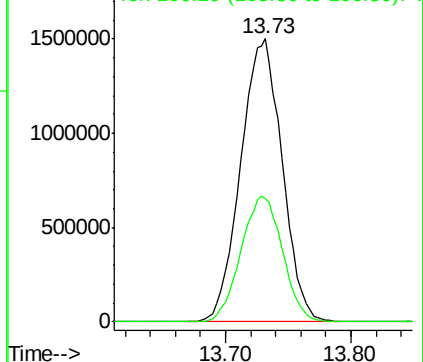
91 100

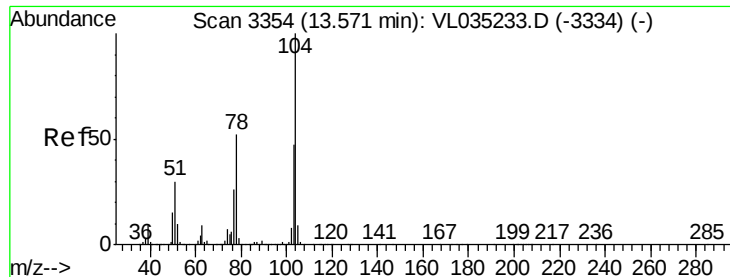
106 44.6 22.4 67.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





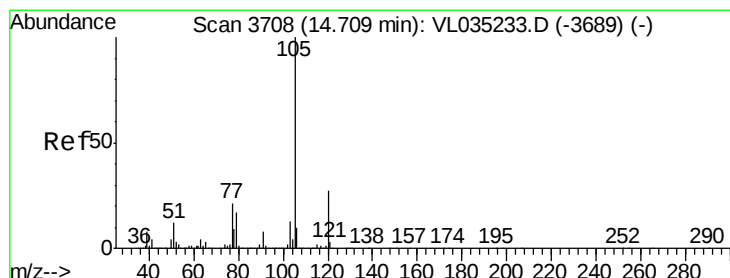
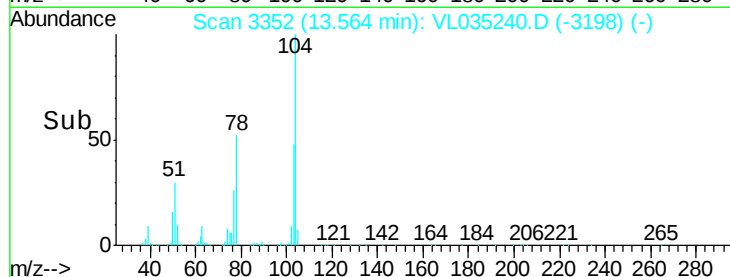
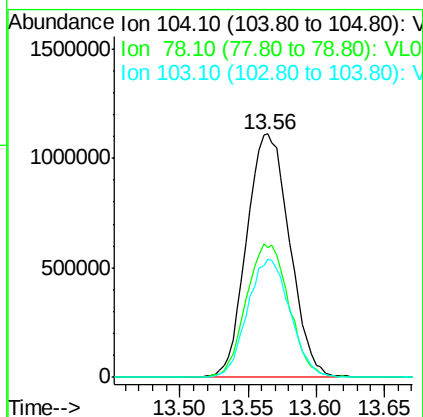
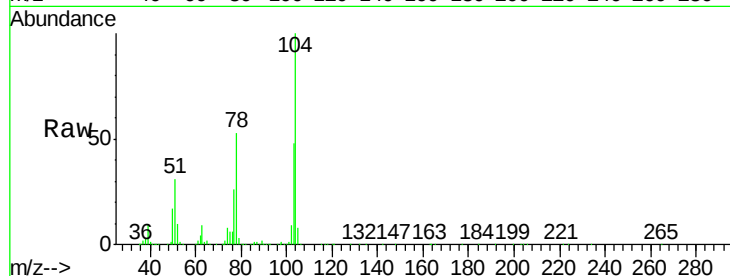
#61  
Stvrene  
Concen: 12.037 ppbv  
RT: 13.56 min Scan# 3352  
Delta R.T. -0.01 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL072920

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 104     | 100   |       |       |
| 78      | 54.7  | 43.3  | 64.9  |
| 103     | 48.1  | 38.2  | 57.2  |

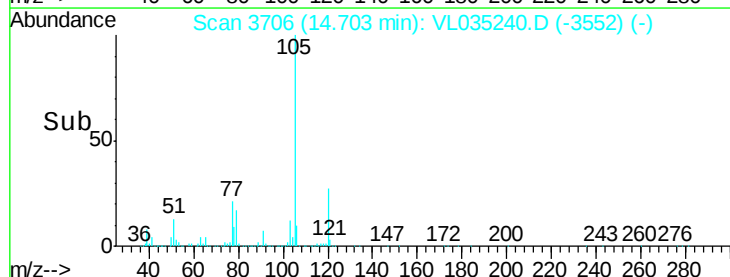
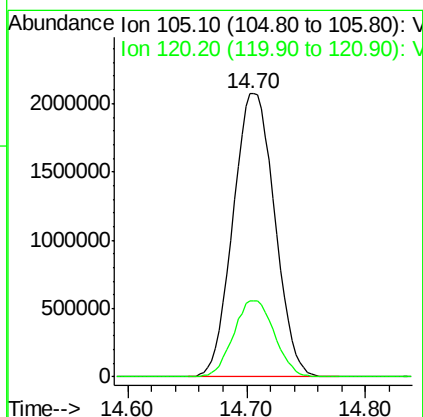
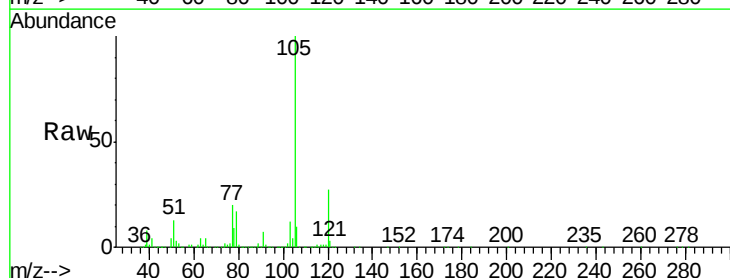
Manual Integrations  
APPROVED

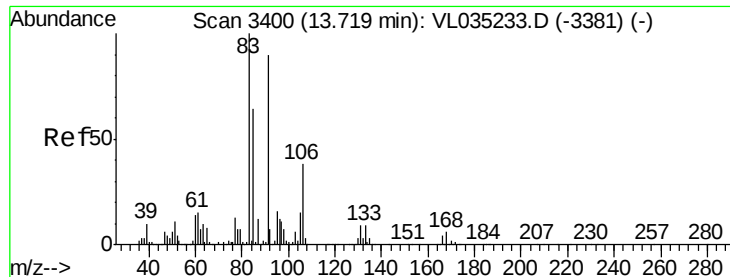
MMDadoda  
7/30/2020 6:10:36 PM



#62  
Isopropylbenzene  
Concen: 10.124 ppbv  
RT: 14.70 min Scan# 3706  
Delta R.T. -0.01 min  
Lab File: VL035240.D  
Acq: 29 Jul 2020 9:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 26.5  | 20.8  | 31.2  |





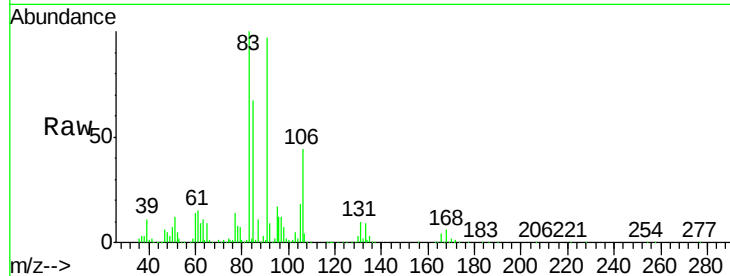
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 8.661 ppbv  
 RT: 13.72 min Scan# 3399  
 Delta R.T. -0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

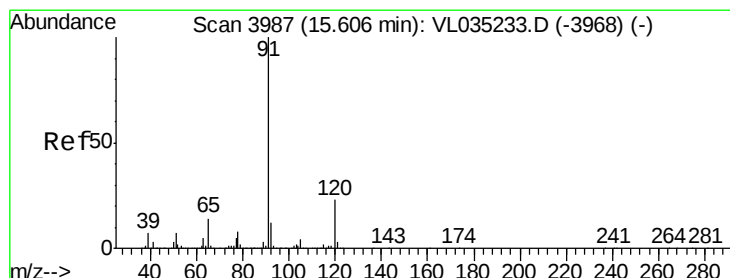
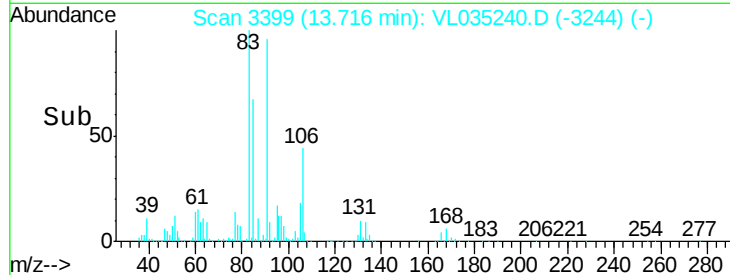
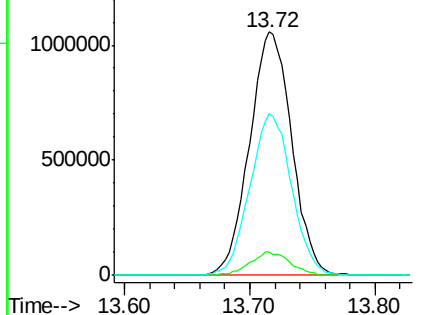
| Tot Ion   | 83   | Resp  | 2476196 |
|-----------|------|-------|---------|
| Ion Ratio | 100  | Lower | Upper   |
| 83        | 100  |       |         |
| 131       | 9.2  | 4.6   | 13.8    |
| 85        | 65.7 | 32.7  | 98.1    |

Manual Integrations  
 APPROVED

MMDadoda  
 7/30/2020 6:10:36 PM

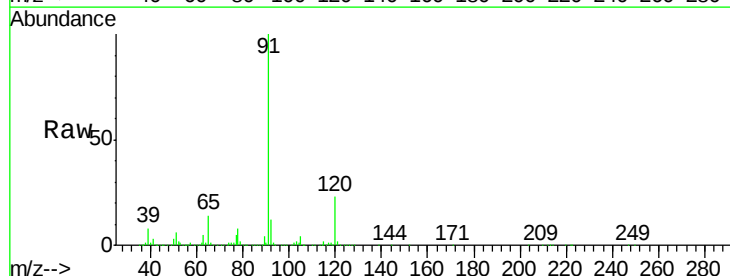


Abundance Ion 83.00 (82.70 to 83.70): VL0  
 Ion 131.00 (130.70 to 131.70): VL0  
 Ion 85.00 (84.70 to 85.70): VL0

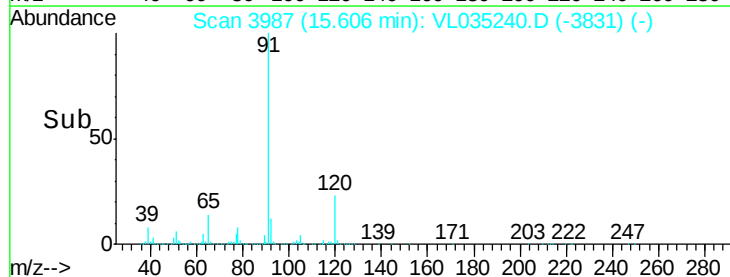
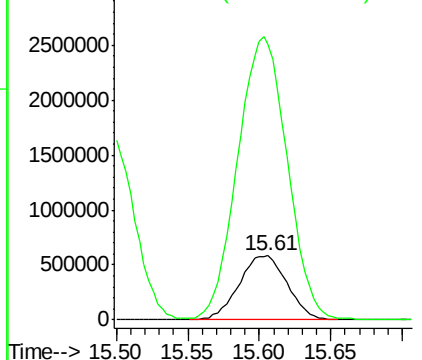


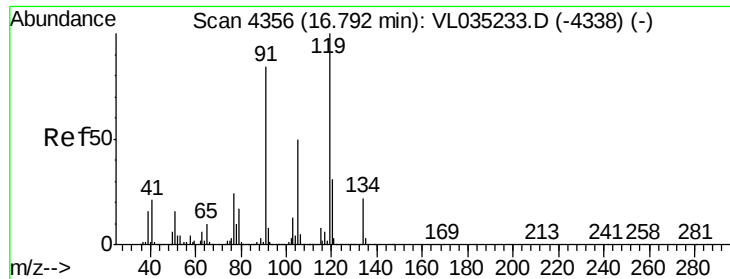
#64  
 n-propylbenzene  
 Concen: 10.413 ppbv m  
 RT: 15.61 min Scan# 3987  
 Delta R.T. 0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

| Tgt Ion   | 120   | Resp  | 1369219 |
|-----------|-------|-------|---------|
| Ion Ratio | 100   | Lower | Upper   |
| 120       | 100   |       |         |
| 91        | 455.0 | 367.5 | 551.3   |



Abundance Ion 120.20 (119.90 to 120.90): V  
 Ion 91.10 (90.80 to 91.80): VL0





#65

tert-Butylbenzene

Concen: 10.130 ppbv

RT: 16.79 min Scan# 4354

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion:119 Resp: 4538553

Ion Ratio Lower Upper

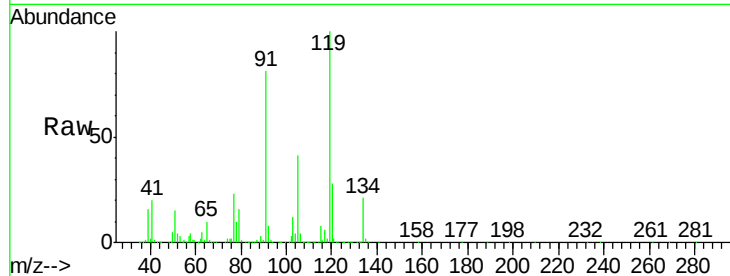
119 100

91 84.1 68.0 102.0

134 20.2 16.3 24.5

Manual Integrations  
APPROVED

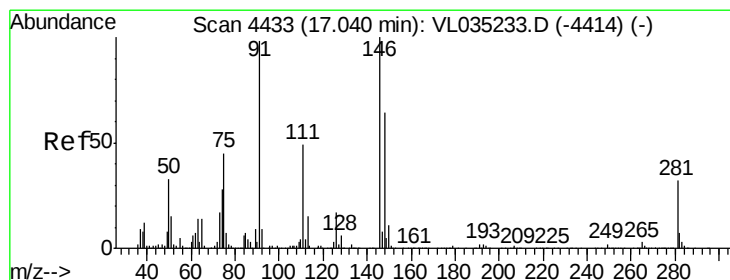
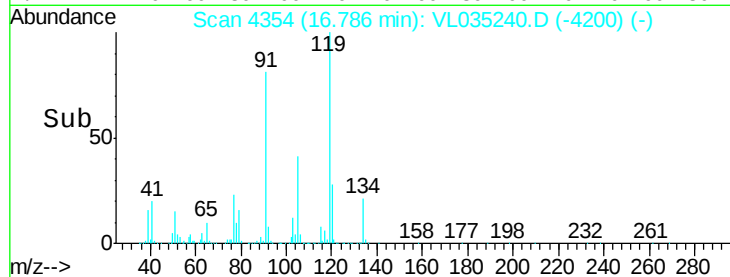
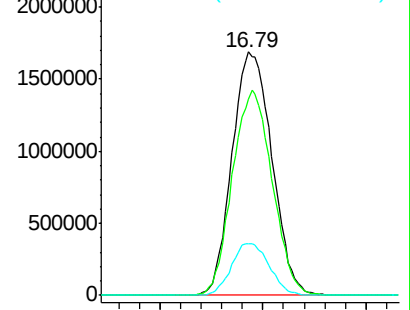
MMDadoda  
7/30/2020 6:10:36 PM



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 10.076 ppbv

RT: 17.04 min Scan# 4432

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

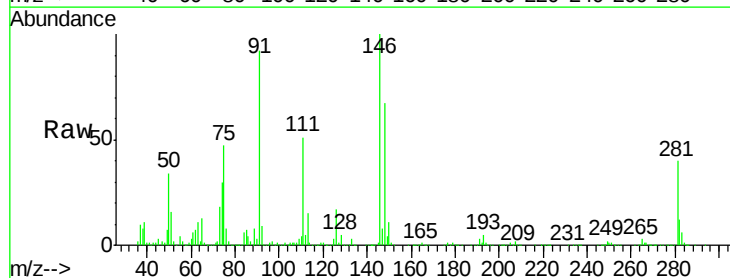
Tgt Ion: 91 Resp: 1768167

Ion Ratio Lower Upper

91 100

126 17.7 14.1 21.1

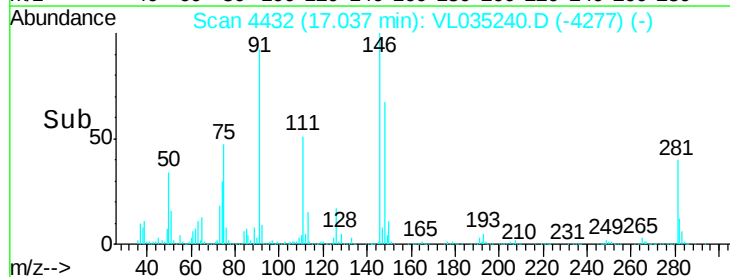
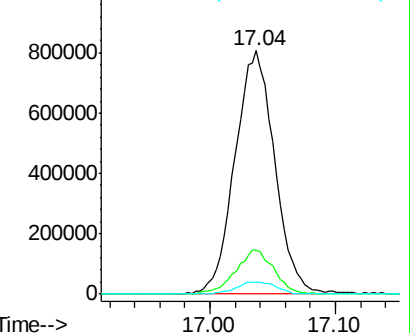
128 5.3 4.4 6.6

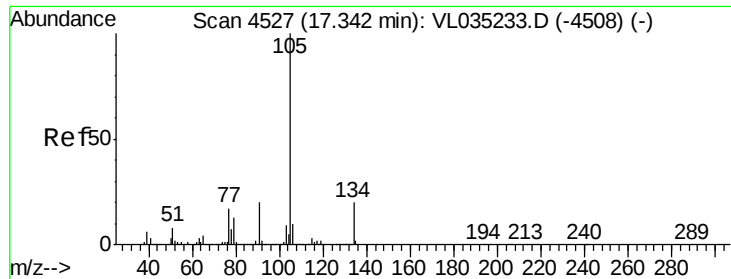


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 9.783 ppbv

RT: 17.34 min Scan# 4526

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampled :

ICVVL072920

Tot Ion: 105 Resp: 6404370

Ion Ratio Lower Upper

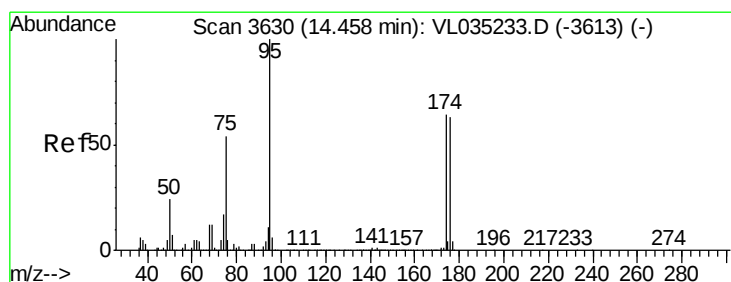
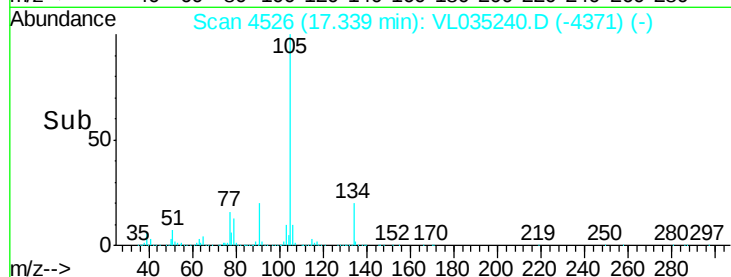
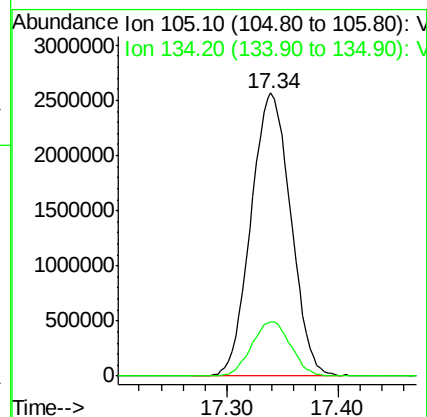
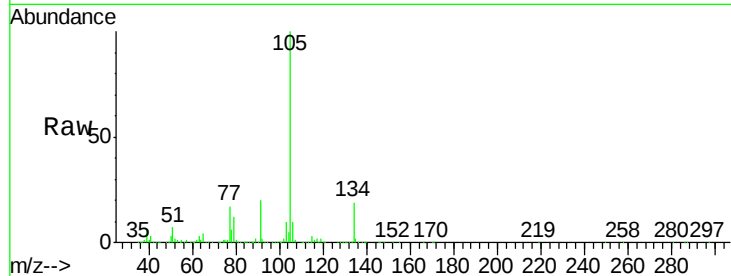
105 100

134 18.8 15.0 22.4

Manual Integrations  
APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#68

1-Bromo-4-Fluorobenzene

Concen: 9.884 ppbv

RT: 14.46 min Scan# 3629

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

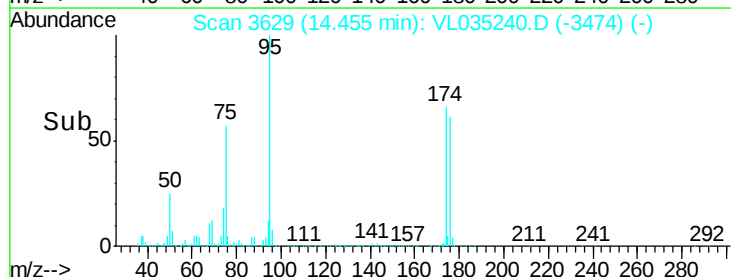
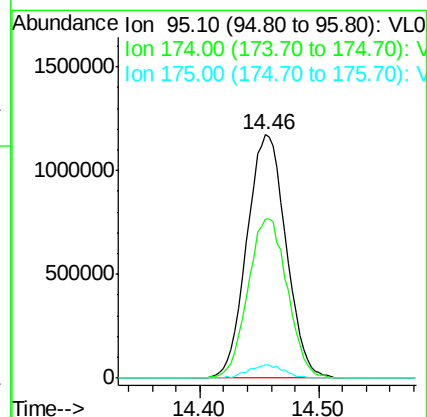
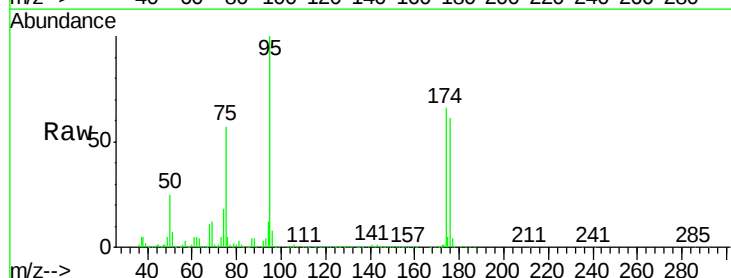
Tgt Ion: 95 Resp: 2667583

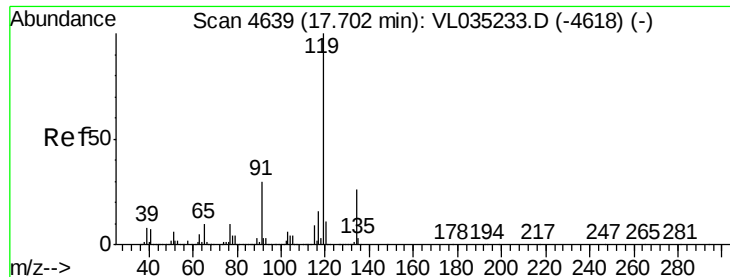
Ion Ratio Lower Upper

95 100

174 66.2 52.7 79.1

175 5.1 3.9 5.9





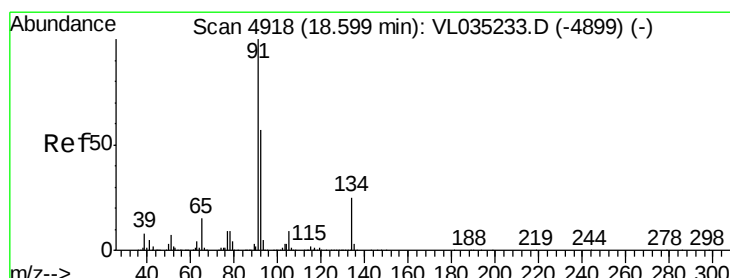
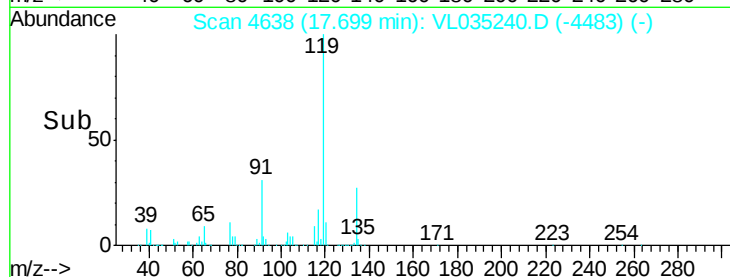
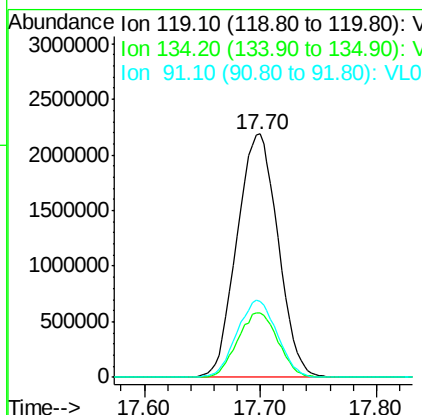
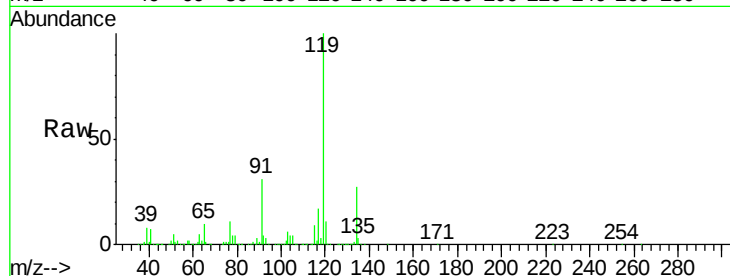
#69  
 p-Isopropyltoluene  
 Concen: 10.069 ppbv  
 RT: 17.70 min Scan# 4638  
 Delta R.T. -0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 26.2  | 20.8  | 31.2  |
| 91      | 31.1  | 24.7  | 37.1  |

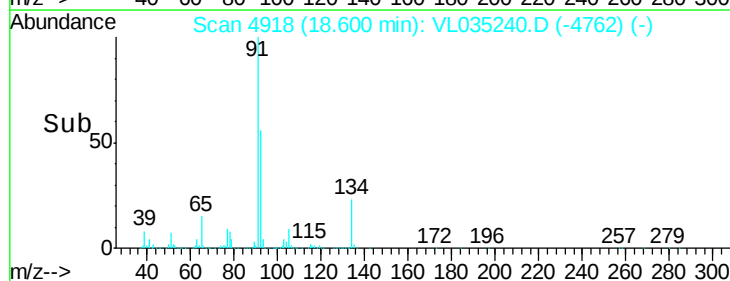
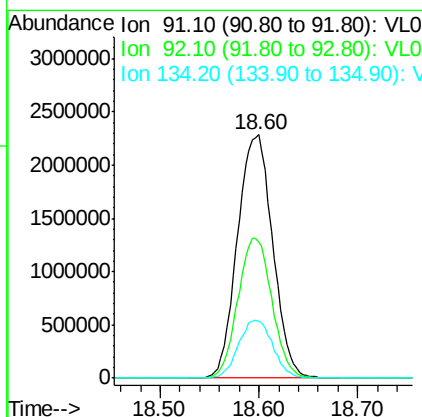
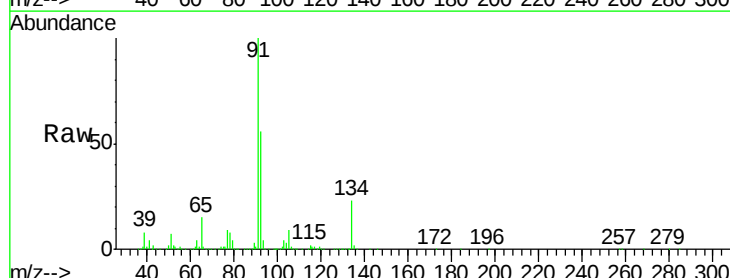
Manual Integrations  
 APPROVED

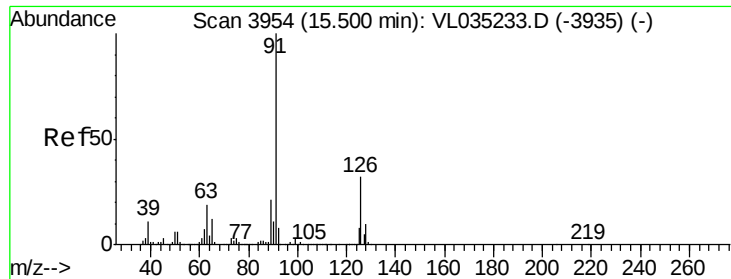
MMDadoda  
 7/30/2020 6:10:36 PM



#70  
 n-Butylbenzene  
 Concen: 9.781 ppbv  
 RT: 18.60 min Scan# 4918  
 Delta R.T. 0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 55.6  | 44.9  | 67.3  |
| 134     | 23.1  | 18.6  | 28.0  |





#71

2-Chlorotoluene

Concen: 10.581 ppbv

RT: 15.49 min Scan# 3952

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion: 91 Resp: 3945868

Ion Ratio Lower Upper

91 100

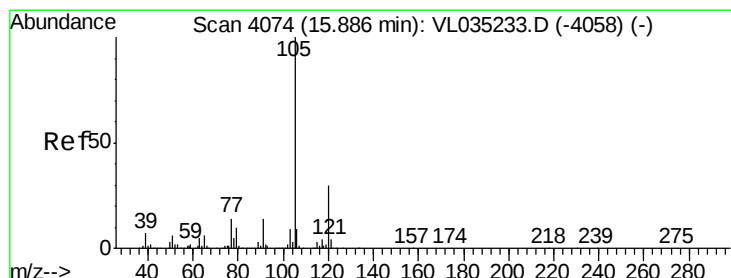
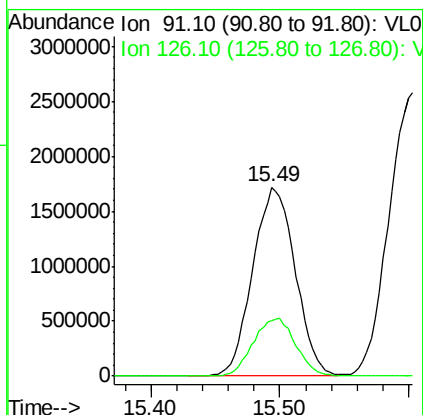
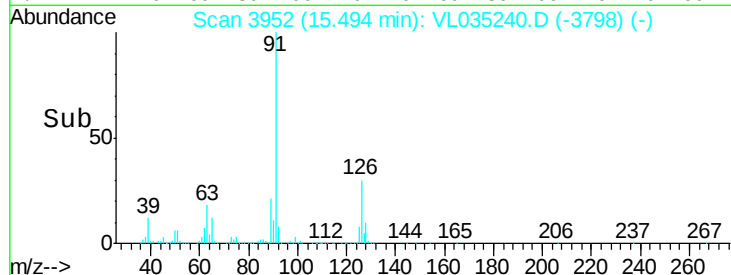
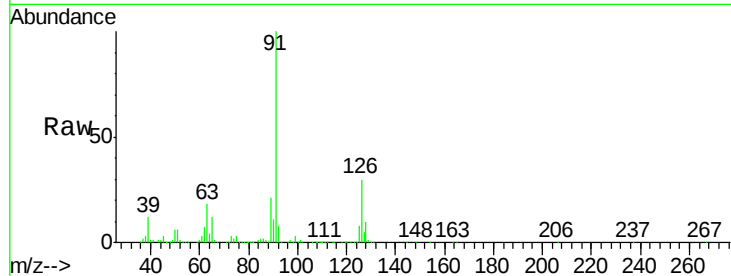
126 30.6 12.3 49.1

Manual Integrations

APPROVED

MMDadoda

7/30/2020 6:10:36 PM



#72

4-Ethyltoluene

Concen: 10.885 ppbv

RT: 15.88 min Scan# 4072

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Tgt Ion:105 Resp: 4070916

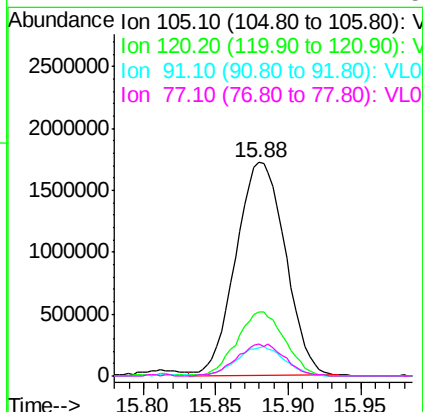
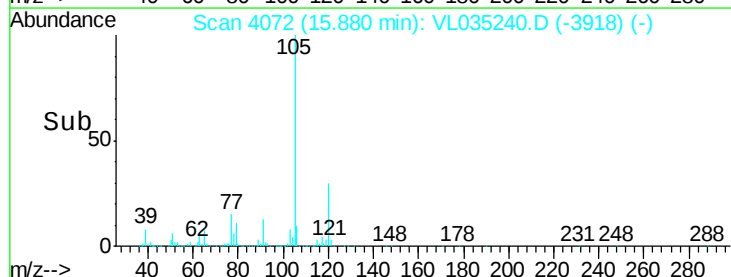
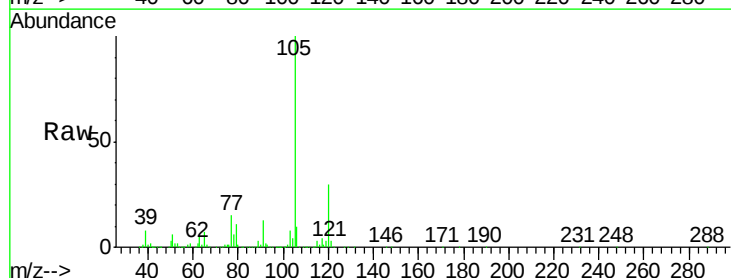
Ion Ratio Lower Upper

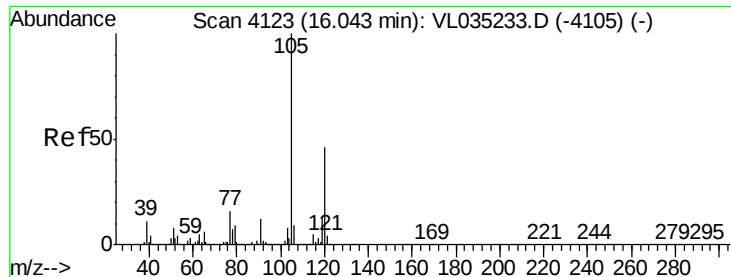
105 100

120 29.3 23.6 35.4

91 13.4 11.0 16.6

77 14.7 11.7 17.5





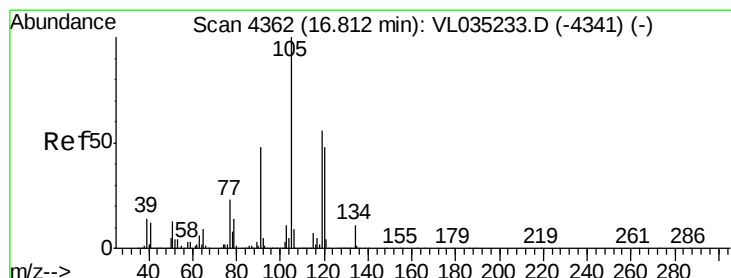
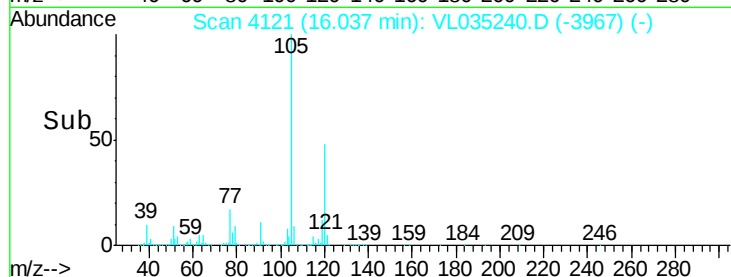
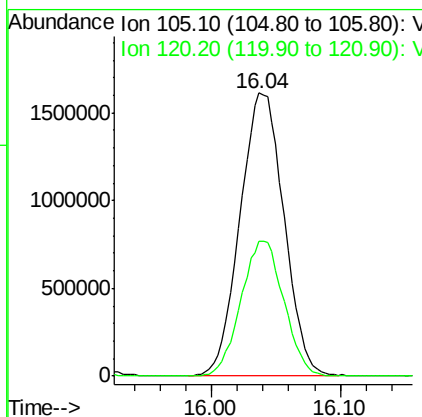
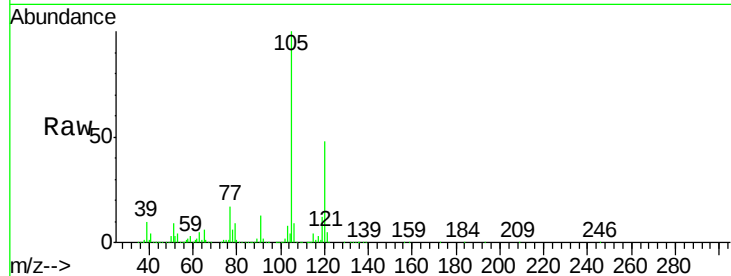
#73  
 1,3,5-Trimethylbenzene  
 Concen: 10.462 ppbv  
 RT: 16.04 min Scan# 4121  
 Delta R.T. -0.01 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

Tot Ion:105 Resp: 3815824  
 Ion Ratio Lower Upper  
 105 100  
 120 47.6 36.8 55.2

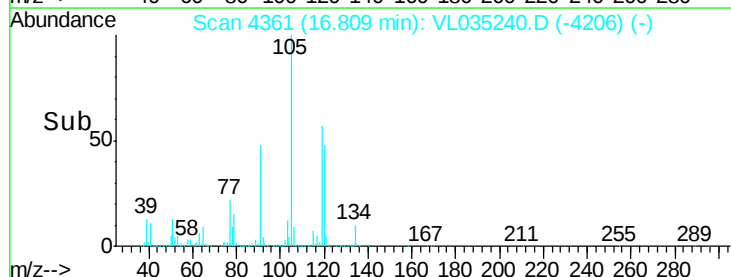
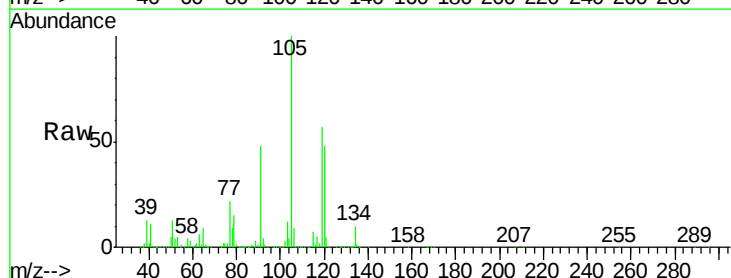
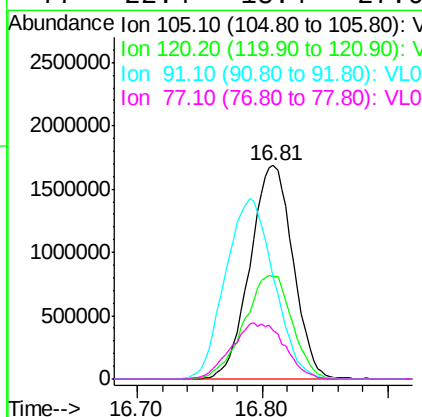
Manual Integrations  
 APPROVED

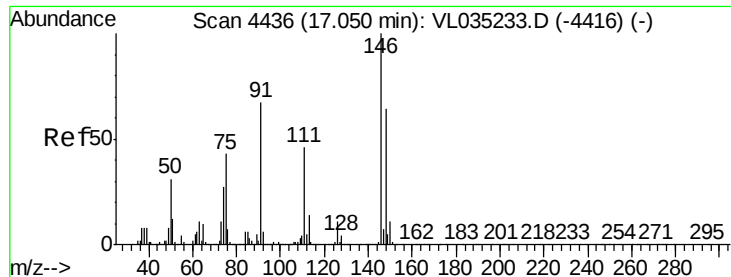
MMDadoda  
 7/30/2020 6:10:36 PM



#74  
 1,2,4-Trimethylbenzene  
 Concen: 9.448 ppbv  
 RT: 16.81 min Scan# 4361  
 Delta R.T. -0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Tgt Ion:105 Resp: 4011563  
 Ion Ratio Lower Upper  
 105 100  
 120 47.7 38.8 58.2  
 91 47.6 38.9 58.3  
 77 22.4 18.4 27.6





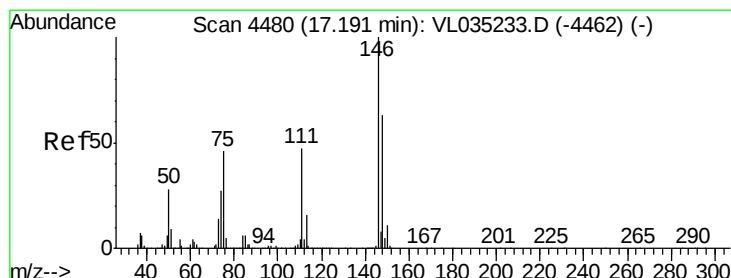
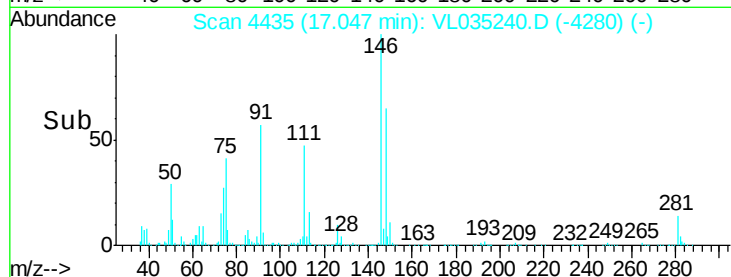
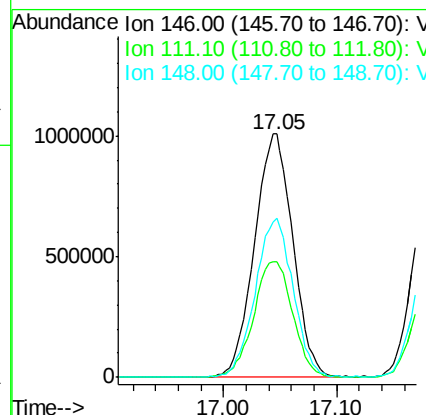
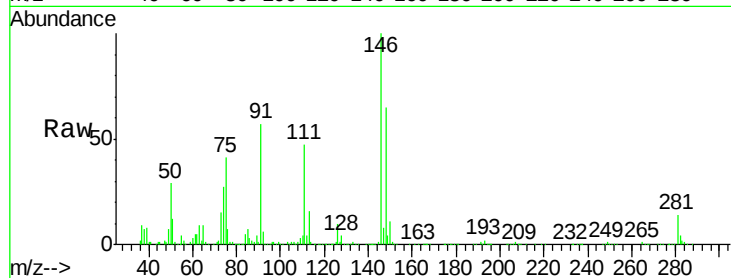
#75  
 1,3-Dichlorobenzene  
 Concen: 8.668 ppbv  
 RT: 17.05 min Scan# 4435  
 Delta R.T. -0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072920

Tot Ion:146 Resp: 2376363  
 Ion Ratio Lower Upper  
 146 100  
 111 48.6 24.4 73.4  
 148 64.5 32.1 96.5

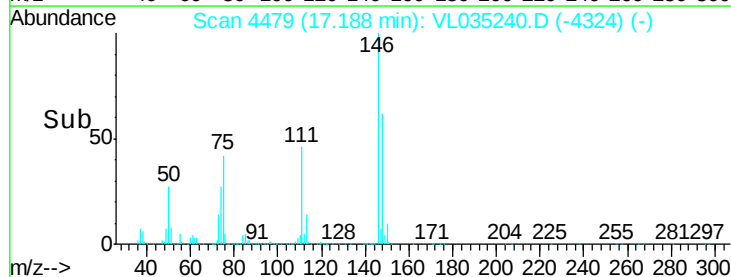
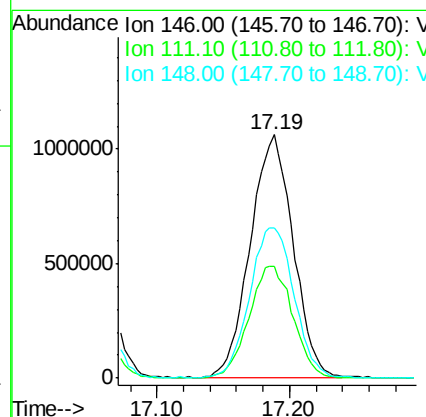
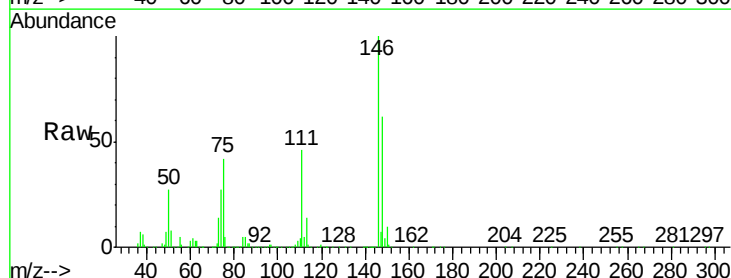
Manual Integrations  
 APPROVED

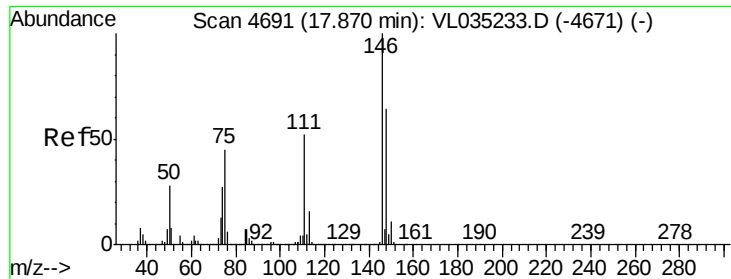
MMDadoda  
 7/30/2020 6:10:36 PM



#76  
 1,4-Dichlorobenzene  
 Concen: 9.592 ppbv  
 RT: 17.19 min Scan# 4479  
 Delta R.T. -0.00 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Tgt Ion:146 Resp: 2378567  
 Ion Ratio Lower Upper  
 146 100  
 111 47.7 23.4 70.2  
 148 65.0 32.2 96.6





#77

1,2-Dichlorobenzene

Concen: 9.243 ppbv

RT: 17.87 min Scan# 4690

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion:146 Resp: 2269449

Ion Ratio Lower Upper

146 100

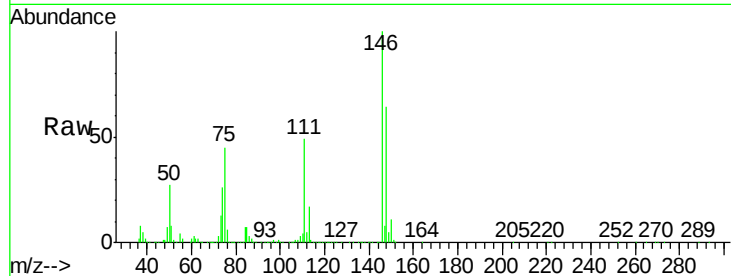
111 48.9 24.6 73.8

148 64.5 32.0 96.0

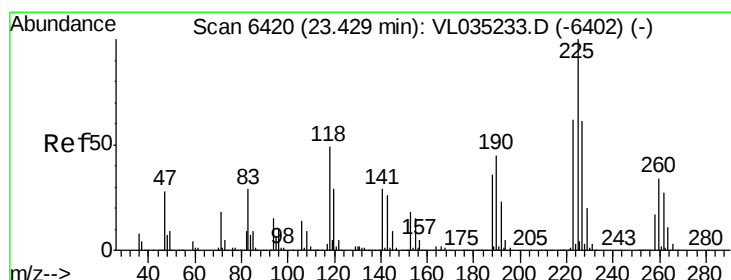
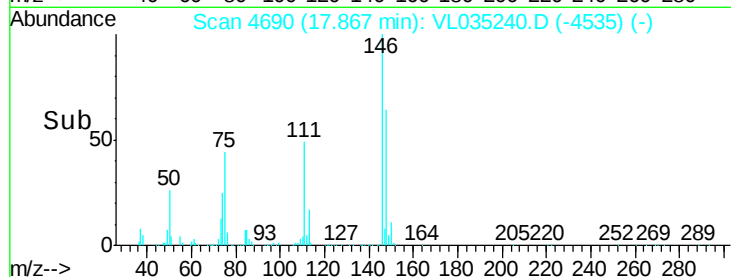
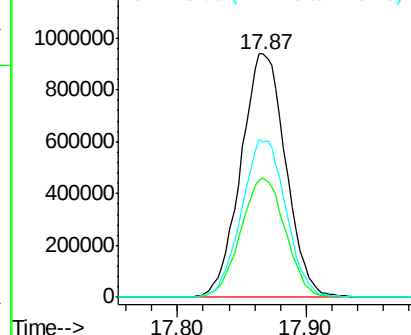
Manual Integrations  
APPROVED

MMDadoda

7/30/2020 6:10:36 PM



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: 8.175 ppbv

RT: 23.43 min Scan# 6420

Delta R.T. 0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

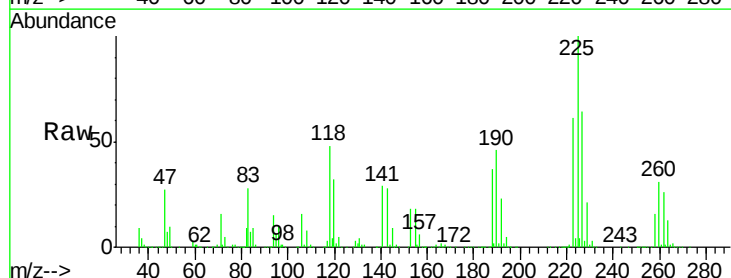
Tgt Ion:225 Resp: 1643023

Ion Ratio Lower Upper

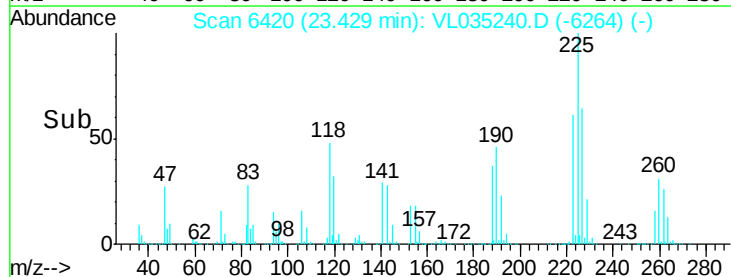
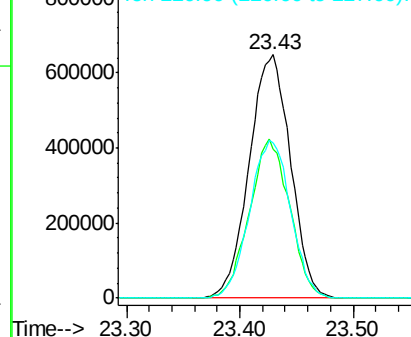
225 100

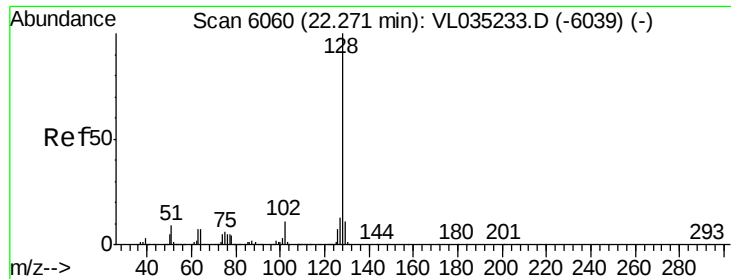
223 63.7 51.3 76.9

227 64.7 51.4 77.2



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: 9.795 ppbv

RT: 22.27 min Scan# 6058

Delta R.T. -0.01 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL072920

Tot Ion:128 Resp: 3306870

Ion Ratio Lower Upper

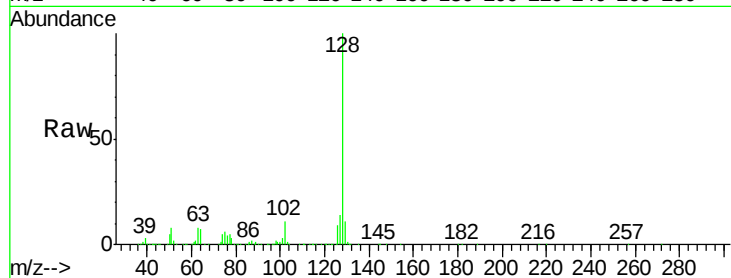
128 100

127 14.0 10.4 15.6

129 10.7 8.5 12.7

Manual Integrations  
APPROVED

MMDadoda  
7/30/2020 6:10:36 PM

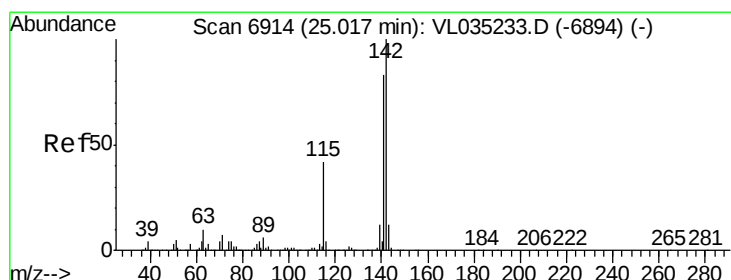
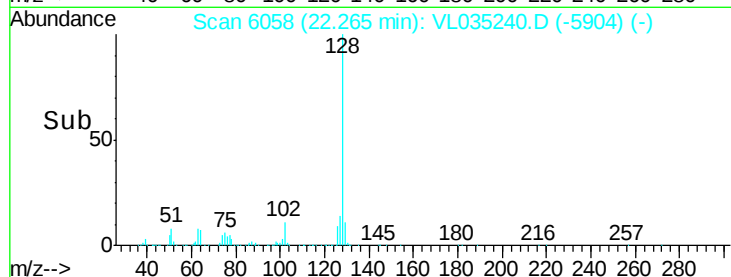
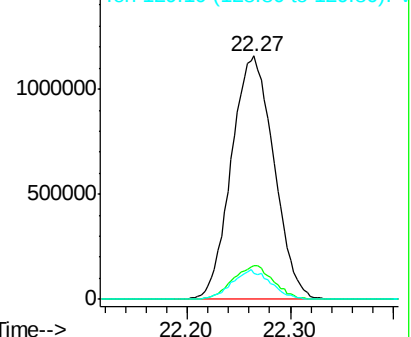


Abundance

Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V



#80

Naphthalene, 2-methyl-

Concen: 9.892 ppbv

RT: 25.01 min Scan# 6913

Delta R.T. -0.00 min

Lab File: VL035240.D

Acq: 29 Jul 2020 9:14

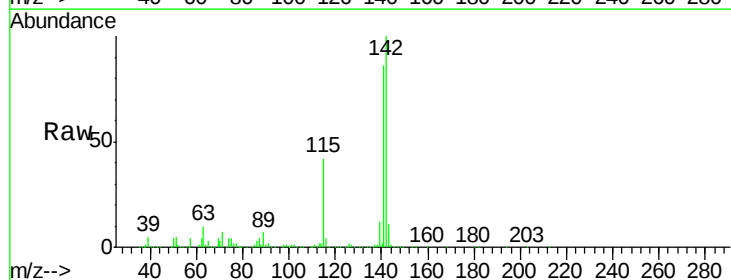
Tgt Ion:142 Resp: 1080906

Ion Ratio Lower Upper

142 100

141 86.0 68.6 103.0

115 42.4 34.5 51.7

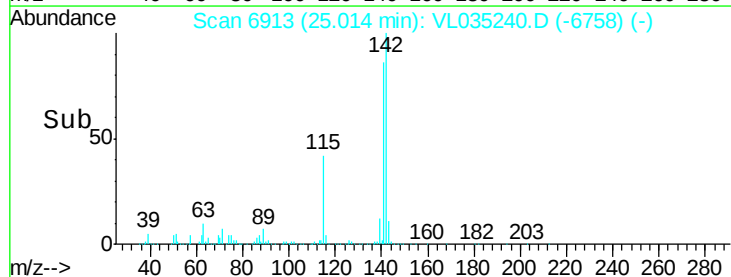
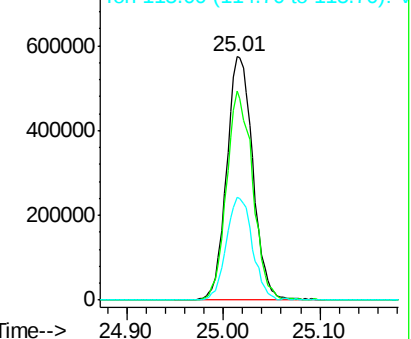


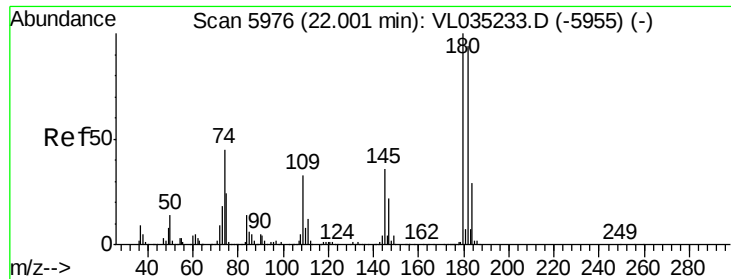
Abundance

Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V





#81  
 1,2,4-Trichlorobenzene  
 Concen: 9.107 ppbv  
 RT: 21.99 min Scan# 5972  
 Delta R.T. -0.01 min  
 Lab File: VL035240.D  
 Acq: 29 Jul 2020 9:14

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVV072920

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.1  | 76.7  | 115.1 |
| 184     | 30.9  | 24.7  | 37.1  |

Manual Integrations  
 APPROVED

MMDadoda  
 7/30/2020 6:10:36 PM

