

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062918\  
 Data File : VL032152.D  
 Acq On : 29 Jun 2018 23:11  
 Operator : SY/AP  
 Sample : VSTDICV010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

Manual Integrations  
 APPROVED

MMDadoda  
 7/3/2018 5:16:30 PM

Quant Time: Jul 03 14:27:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL062918AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jun 29 2018  
 QLast Update : Fri Jun 29 22:27:58 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.85  | 49   | 1575766  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.39  | 114  | 4296003  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.35 | 117  | 3697320m | 10.00 | ppbv  | -0.01    |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.68  | 95    | 3060160  | 10.83    | ppbv | -0.02   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 108.30% |

| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.14 | 85   | 1880701  | 9.06  | ppbv   | 100    |
| 3) Chlorodifluoromethane       | 3.07 | 51   | 2000817  | 10.39 | ppbv   | 96     |
| 4) Chloromethane               | 3.23 | 50   | 1038685  | 10.11 | ppbv   | 100    |
| 5) Vinyl Chloride              | 3.35 | 62   | 1015114  | 9.78  | ppbv   | 100    |
| 6) Bromomethane                | 3.58 | 94   | 603553   | 10.21 | ppbv   | 97     |
| 7) Chloroethane                | 3.67 | 64   | 366318   | 9.98  | ppbv   | 97     |
| 8) Dichlorotetrafluoroethane   | 3.28 | 85   | 2213561  | 9.56  | ppbv   | 95     |
| 9) Propene                     | 3.09 | 41   | 847929   | 9.45  | ppbv   | 99     |
| 10) Heptane                    | 8.34 | 43   | 2498342  | 9.55  | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.07 | 101  | 2117438  | 9.43  | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.63 | 101  | 1401080  | 9.37  | ppbv   | 95     |
| 13) Ethanol                    | 3.72 | 45   | 163893   | 6.02  | ppbv   | 99     |
| 14) Bromoethene                | 3.86 | 108  | 703100   | 9.88  | ppbv   | 99     |
| 15) Acetone                    | 3.97 | 43   | 1745249  | 9.47  | ppbv   | 100    |
| 16) 1,3-Butadiene              | 3.42 | 39   | 866040   | 9.85  | ppbv   | 96     |
| 17) tert-Butyl alcohol         | 4.43 | 59   | 480098   | 4.09  | ppbv   | 100    |
| 18) 1,1-Dichloroethene         | 4.43 | 96   | 686978   | 9.61  | ppbv   | 98     |
| 19) Isopropyl Alcohol          | 4.09 | 45   | 1183406  | 7.73  | ppbv # | 40     |
| 20) Methylene Chloride         | 4.48 | 84   | 615162   | 9.14  | ppbv   | 95     |
| 21) Allyl Chloride             | 4.55 | 41   | 1221127  | 9.71  | ppbv   | 97     |
| 22) trans-1,2-Dichloroethene   | 5.04 | 96   | 736995   | 9.86  | ppbv   | 98     |
| 23) Vinyl Acetate              | 5.24 | 43   | 3129080  | 9.36  | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.17 | 63   | 2055222  | 9.60  | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.86 | 43   | 3450043  | 9.05  | ppbv   | 99     |
| 26) Hexane                     | 5.87 | 57   | 1596149  | 9.09  | ppbv   | 97     |
| 27) Carbon Disulfide           | 4.70 | 76   | 1708640  | 9.79  | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.20 | 73   | 2737594  | 8.82  | ppbv   | 99     |
| 29) Chloroform                 | 5.94 | 83   | 2410765  | 9.43  | ppbv   | 100    |
| 30) Cyclohexane                | 7.34 | 84   | 1618884  | 9.78  | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene     | 5.72 | 61   | 1717444  | 9.79  | ppbv   | 95     |
| 32) 1,1,1-Trichloroethane      | 6.71 | 97   | 2642882  | 9.87  | ppbv   | 99     |
| 34) 2-Butanone                 | 5.41 | 43   | 2429735  | 8.91  | ppbv   | 100    |
| 35) Carbon Tetrachloride       | 7.23 | 117  | 2721455  | 9.25  | ppbv   | 97     |
| 36) Benzene                    | 7.10 | 78   | 3947885  | 9.49  | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.50 | 62   | 2044513  | 9.87  | ppbv   | 98     |
| 38) Trichloroethene            | 8.06 | 130  | 1332871  | 8.21  | ppbv   | 95     |
| 39) 1,2-Dichloropropane        | 7.84 | 63   | 1486131  | 9.06  | ppbv   | 97     |
| 40) 1,4-Dioxane                | 8.05 | 88   | 497392   | 7.73  | ppbv # | 1      |
| 41) Tetrahydrofuran            | 6.23 | 42   | 1375371  | 8.41  | ppbv   | 98     |
| 42) Bromodichloromethane       | 8.02 | 83   | 2992764  | 9.22  | ppbv   | 98     |
| 43) Methyl Methacrylate        | 8.23 | 69   | 1577896  | 9.16  | ppbv   | 99     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062918\  
 Data File : VL032152.D  
 Acq On : 29 Jun 2018 23:11  
 Operator : SY/AP  
 Sample : VSTDICV010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICSVVL062918

Manual Integrations  
 APPROVED

MMDadoda  
 7/3/2018 5:16:30 PM

Quant Time: Jul 03 14:27:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL062918AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jun 29 2018  
 QLast Update : Fri Jun 29 22:27:58 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 8.09  | 57   | 6430377  | 8.84  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.52  | 75   | 2117577  | 9.92  | ppbv   | 100      |
| 46) cis-1,3-Dichloropropene   | 8.94  | 75   | 2466920  | 9.67  | ppbv   | 100      |
| 47) 1,1,2-Trichloroethane     | 9.72  | 97   | 1522443  | 8.93  | ppbv   | 98       |
| 48) Dibromochloromethane      | 10.56 | 129  | 2365488  | 8.96  | ppbv   | 100      |
| 49) Bromoform                 | 13.31 | 173  | 1791459  | 8.11  | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.97  | 43   | 4010582  | 8.98  | ppbv   | 100      |
| 51) 2-Hexanone                | 10.38 | 43   | 3151591  | 8.51  | ppbv # | 100      |
| 52) Tetrachloroethene         | 11.48 | 164  | 1175403  | 7.77  | ppbv   | 96       |
| 53) Toluene                   | 10.05 | 91   | 4395986  | 8.75  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.87 | 107  | 2235828  | 8.73  | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 12.39 | 131  | 1570776  | 9.52  | ppbv   | 99       |
| 57) Chlorobenzene             | 12.41 | 112  | 3031180  | 9.47  | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.97 | 91   | 5724526  | 9.61  | ppbv   | 96       |
| 59) m/p-Xylene                | 13.26 | 91   | 8918166m | 18.67 | ppbv   |          |
| 60) o-Xylene                  | 13.96 | 91   | 4414208  | 9.27  | ppbv   | 97       |
| 61) Styrene                   | 13.79 | 104  | 3566189  | 9.13  | ppbv   | 96       |
| 62) Isopropylbenzene          | 14.93 | 105  | 6257366  | 8.54  | ppbv   | 98       |
| 63) 1,1,2,2-Tetrachloroethane | 13.94 | 83   | 2897737  | 7.86  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.83 | 120  | 1619054  | 8.54  | ppbv   | 90       |
| 65) tert-Butylbenzene         | 17.02 | 119  | 5022046  | 7.80  | ppbv   | 95       |
| 66) Benzyl Chloride           | 17.26 | 91   | 3237908  | 8.15  | ppbv   | 96       |
| 67) sec-Butylbenzene          | 17.57 | 105  | 7279650  | 7.72  | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 17.92 | 119  | 5767926  | 7.63  | ppbv   | 97       |
| 70) n-Butylbenzene            | 18.82 | 91   | 5932031  | 7.51  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.72 | 91   | 4814944  | 8.54  | ppbv   | 95       |
| 72) 4-Ethyltoluene            | 16.11 | 105  | 5250806  | 8.53  | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 16.26 | 105  | 4913988  | 8.48  | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 17.03 | 105  | 4656778  | 7.96  | ppbv   | 94       |
| 75) 1,3-Dichlorobenzene       | 17.27 | 146  | 2543006  | 7.64  | ppbv   | 97       |
| 76) 1,4-Dichlorobenzene       | 17.41 | 146  | 2557315  | 7.58  | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 18.10 | 146  | 2413540  | 7.26  | ppbv   | 97       |
| 78) Hexachloro-1,3-Butadiene  | 23.64 | 225  | 607519   | 5.25  | ppbv   | 99       |
| 79) Naphthalene               | 22.53 | 128  | 3525924  | 6.63  | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.19 | 142  | 2299861  | 11.98 | ppbv   | 97       |
| 81) 1,2,4-Trichlorobenzene    | 22.26 | 180  | 1684181  | 7.02  | ppbv   | 99       |

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

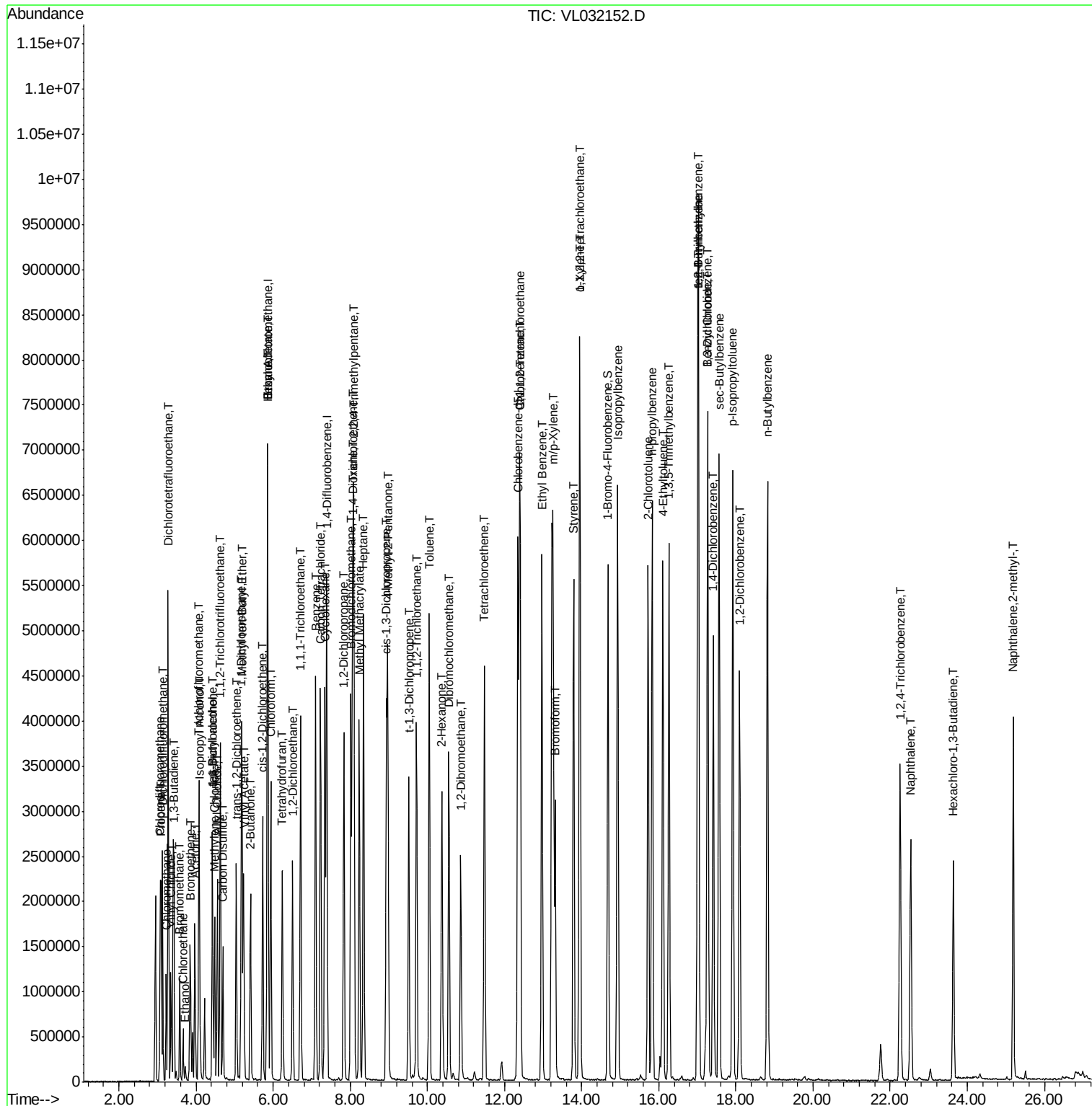
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL062918\  
Data File : VL032152.D  
Acq On : 29 Jun 2018 23:11  
Operator : SY/AP  
Sample : VSTDICV010  
Misc : 400ml/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

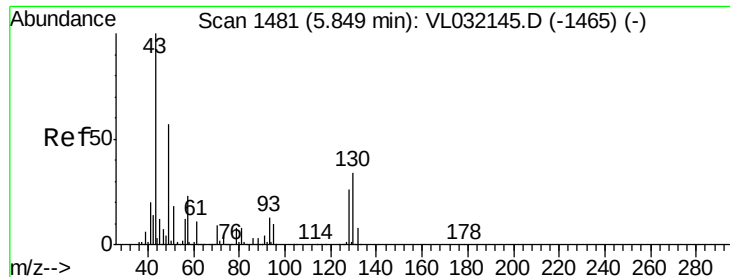
Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Manual Integrations  
APPROVED

MMDadoda  
7/3/2018 5:16:30 PM

Quant Time: Jul 03 14:27:33 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL062918AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jun  
QLast Update : Fri Jun 29 22:27:58 2018  
Response via : Initial Calibration





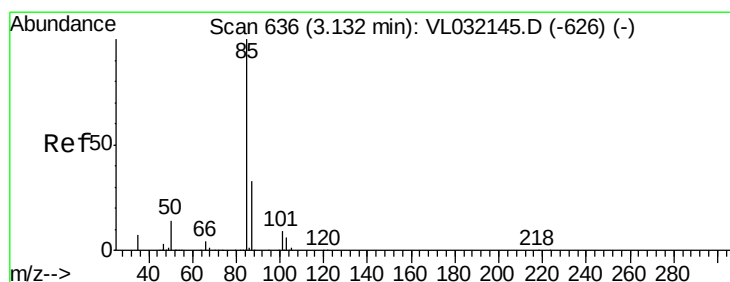
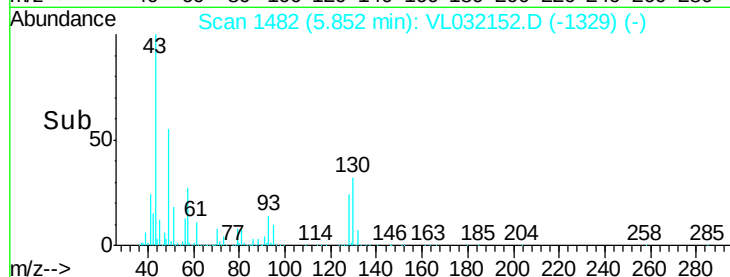
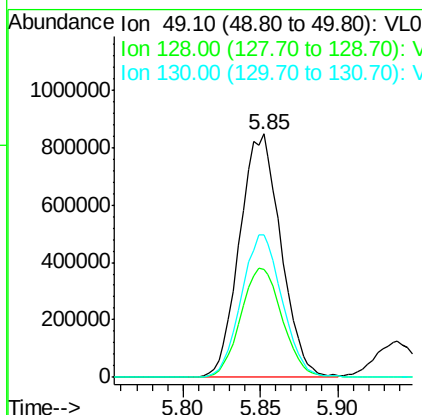
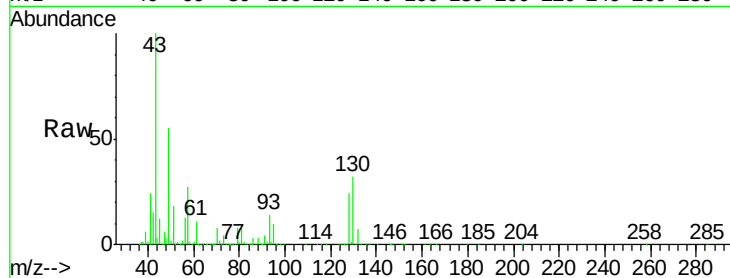
#1  
 Bromochloromethane  
 Concen: 10.00 ppbv  
 RT: 5.85 min Scan# 1482  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

Tot Ion: 49 Resp: 1575766  
 Ion Ratio Lower Upper  
 49 100  
 128 45.3 23.4 70.0  
 130 58.2 30.3 90.9

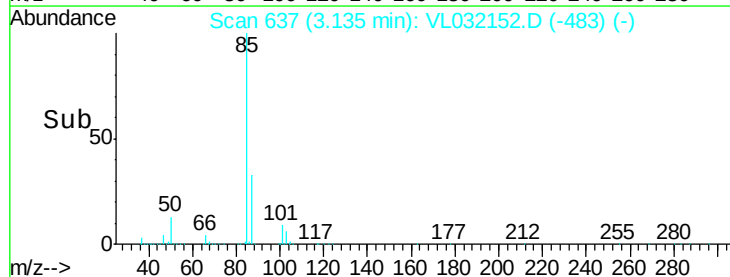
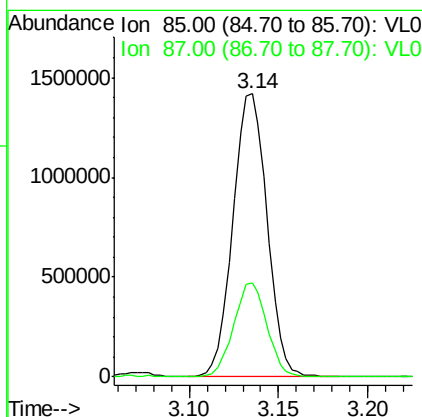
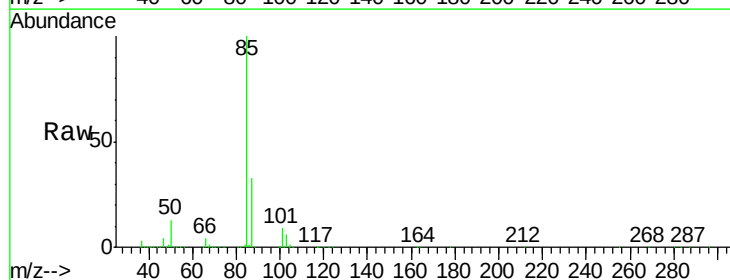
Manual Integrations  
 APPROVED

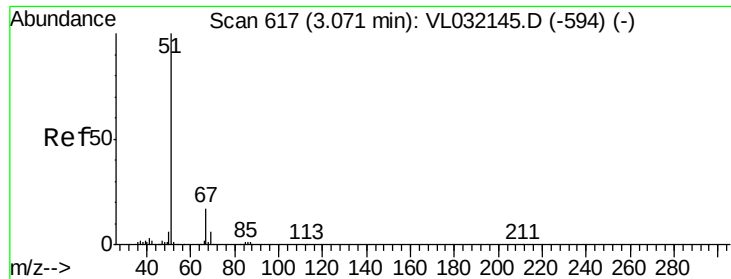
MMDadoda  
 7/3/2018 5:16:30 PM



#2  
 Dichlorodifluoromethane  
 Concen: 9.06 ppbv  
 RT: 3.14 min Scan# 637  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Tgt Ion: 85 Resp: 1880701  
 Ion Ratio Lower Upper  
 85 100  
 87 33.2 26.7 40.1





#3

Chlorodifluoromethane

Concen: 10.39 ppbv

RT: 3.07 min Scan# 617

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Tot Ion: 51 Resp: 2000817

Ion Ratio Lower Upper

51 100

67 18.0 13.2 19.8

Instrument :

MSVOA\_L

ClientSampleId :

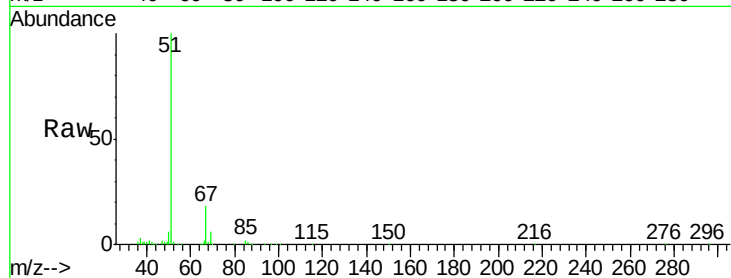
ICVVL062918

Manual Integrations

APPROVED

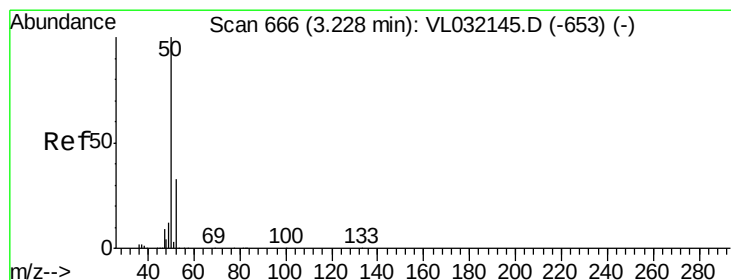
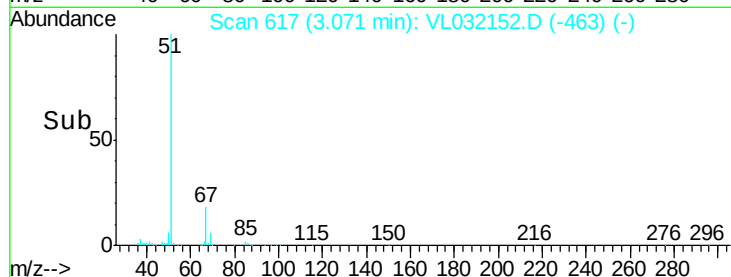
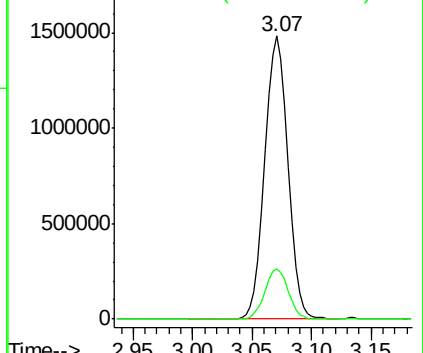
MMDadoda

7/3/2018 5:16:30 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 10.11 ppbv

RT: 3.23 min Scan# 666

Delta R.T. -0.01 min

Lab File: VL032152.D

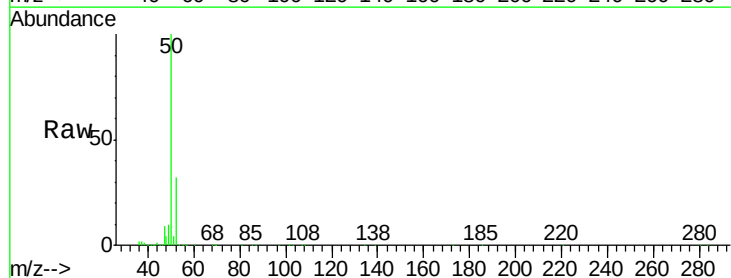
Acq: 29 Jun 2018 23:11

Tgt Ion: 50 Resp: 1038685

Ion Ratio Lower Upper

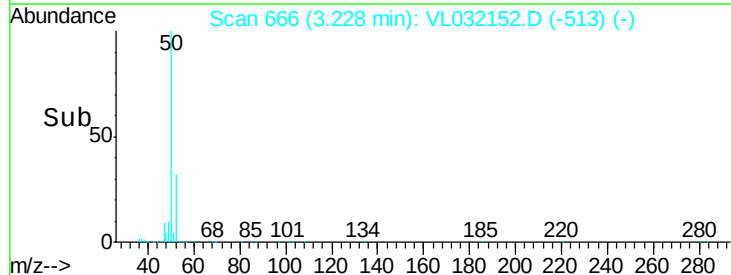
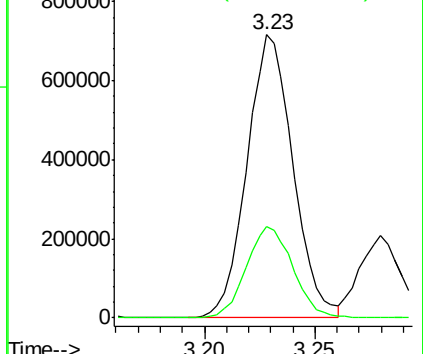
50 100

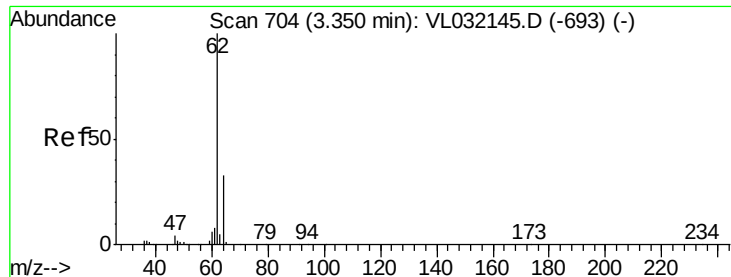
52 32.2 26.0 39.0



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 9.78 ppbv

RT: 3.35 min Scan# 704

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 62 Resp: 1015114

Ion Ratio Lower Upper

62 100

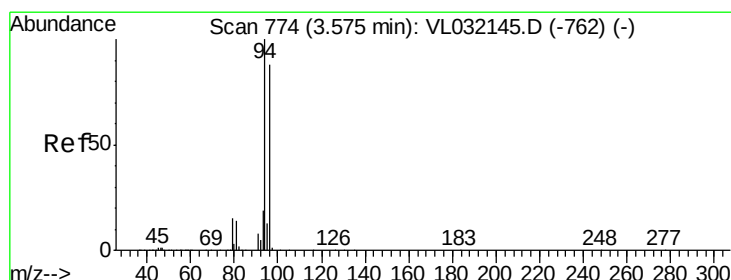
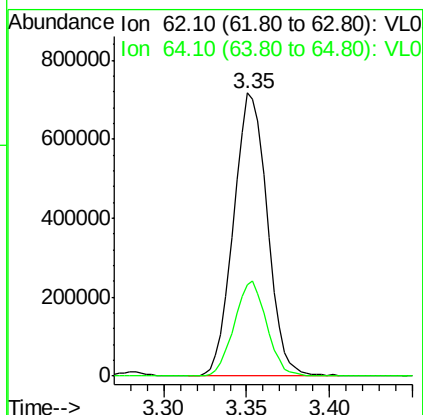
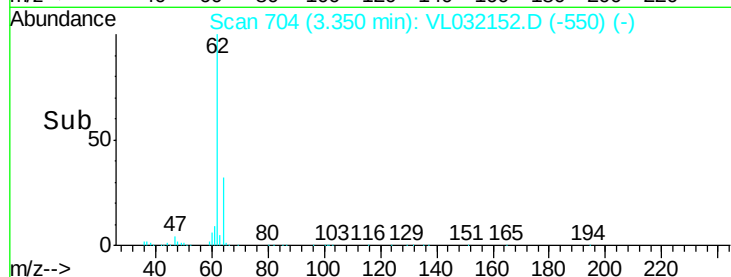
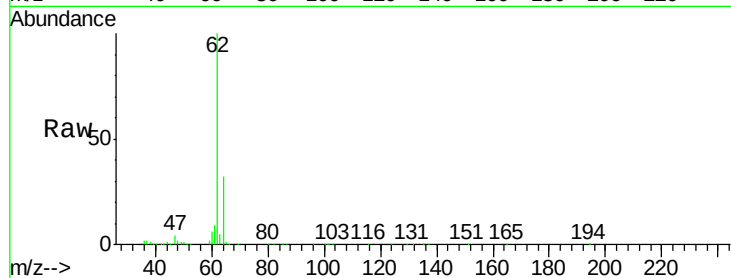
64 32.4 26.1 39.1

Manual Integrations

APPROVED

MMDadoda

7/3/2018 5:16:30 PM



#6

Bromomethane

Concen: 10.21 ppbv

RT: 3.58 min Scan# 775

Delta R.T. -0.01 min

Lab File: VL032152.D

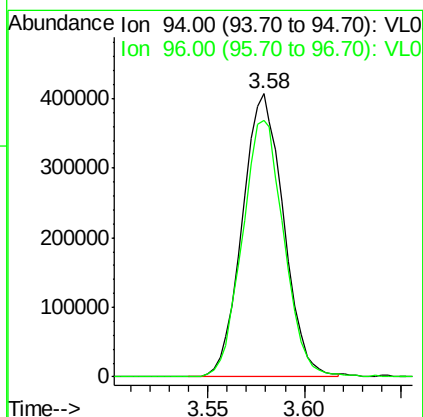
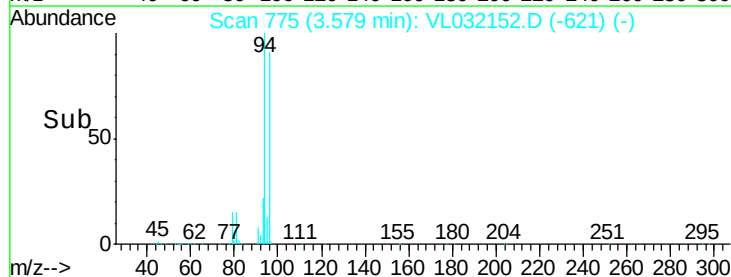
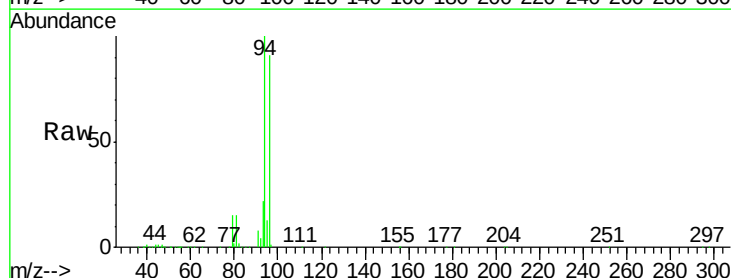
Acq: 29 Jun 2018 23:11

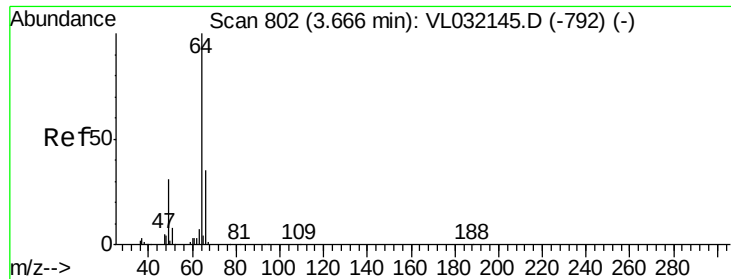
Tgt Ion: 94 Resp: 603553

Ion Ratio Lower Upper

94 100

96 90.8 74.7 112.1





#7

Chloroethane

Concen: 9.98 ppbv

RT: 3.67 min Scan# 802

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 64 Resp: 366318

Ion Ratio Lower Upper

64 100

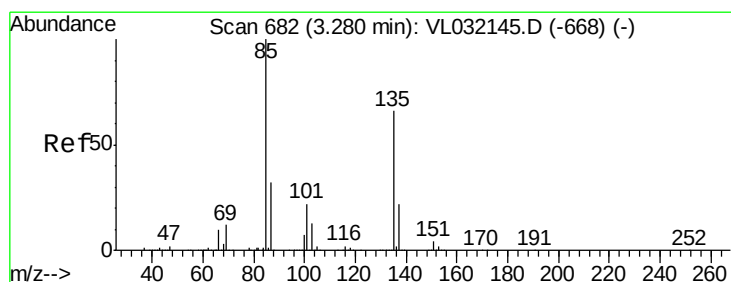
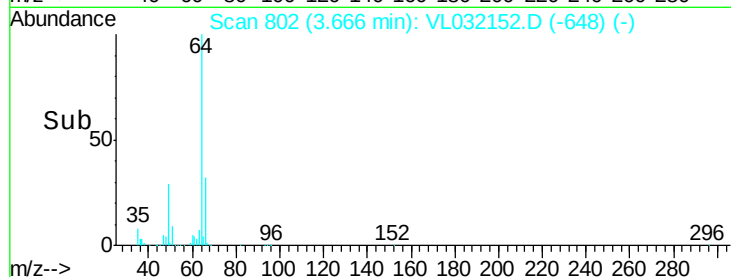
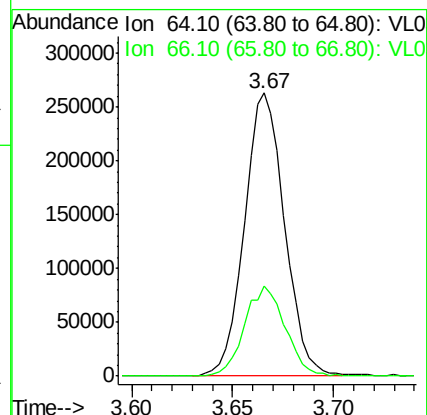
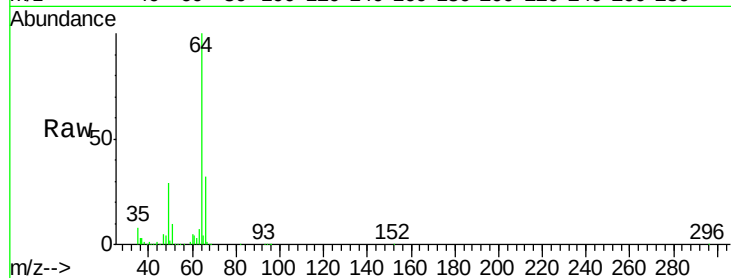
66 31.9 26.9 40.3

Manual Integrations

APPROVED

MMDadoda

7/3/2018 5:16:30 PM



#8

Dichlorotetrafluoroethane

Concen: 9.56 ppbv

RT: 3.28 min Scan# 682

Delta R.T. -0.01 min

Lab File: VL032152.D

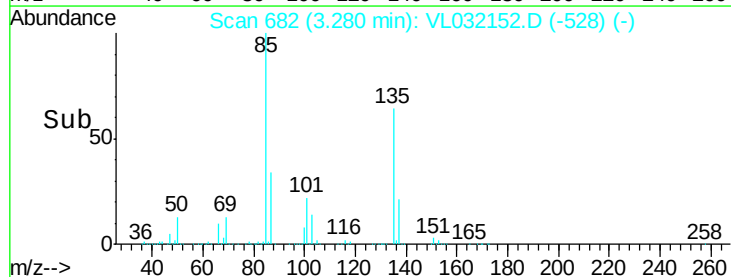
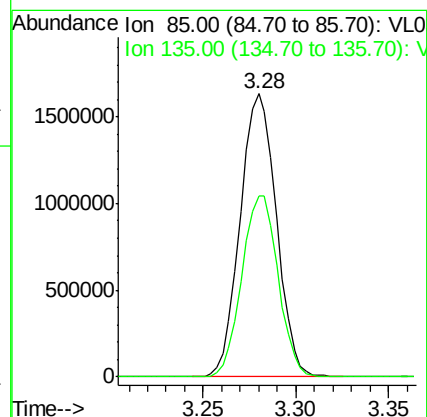
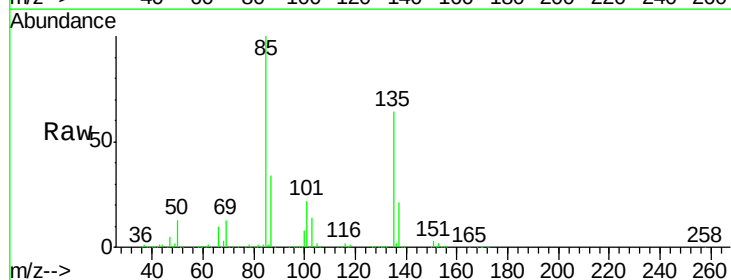
Acq: 29 Jun 2018 23:11

Tgt Ion: 85 Resp: 2213561

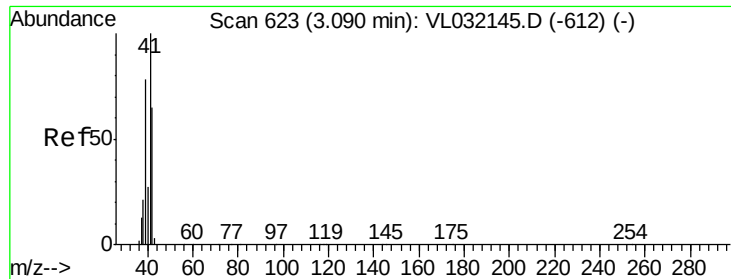
Ion Ratio Lower Upper

85 100

135 64.3 54.6 82.0







#9

Propene

Concen: 9.45 ppbv

RT: 3.09 min Scan# 623

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 41 Resp: 847929

Ion Ratio Lower Upper

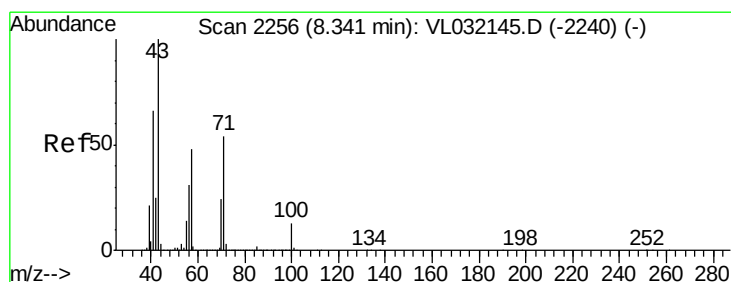
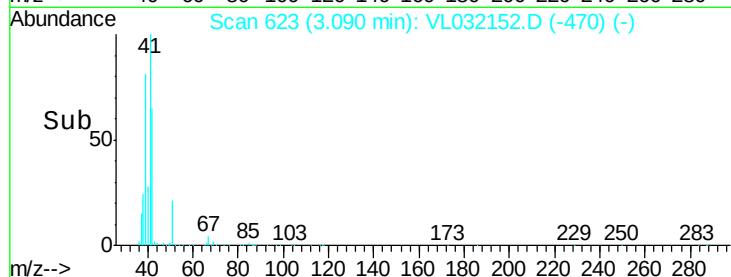
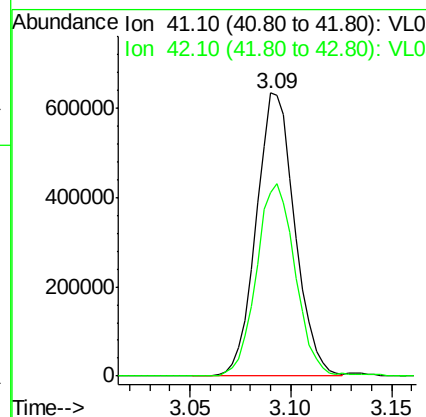
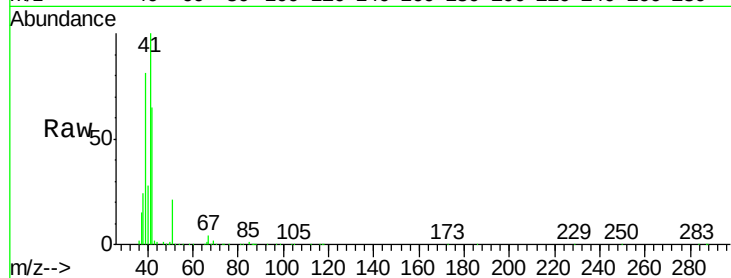
41 100

42 69.1 56.2 84.4

Manual Integrations  
APPROVED

MMDadoda

7/3/2018 5:16:30 PM



#10

Heptane

Concen: 9.55 ppbv

RT: 8.34 min Scan# 2257

Delta R.T. -0.01 min

Lab File: VL032152.D

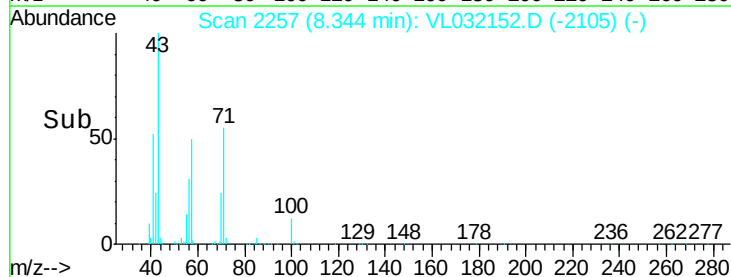
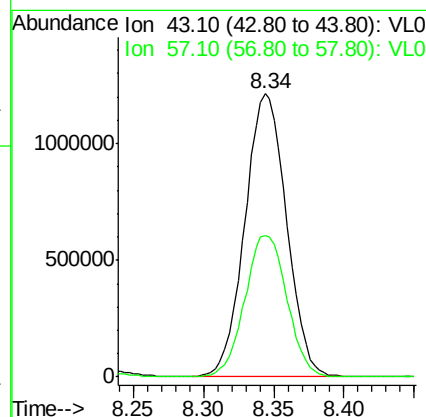
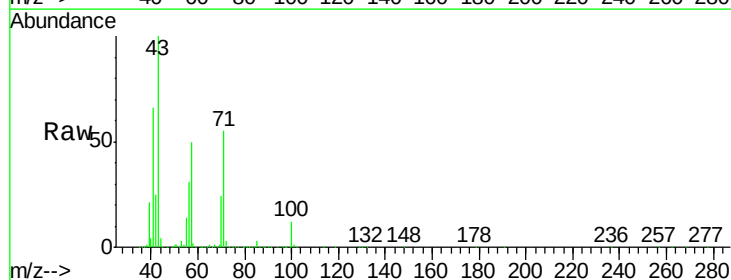
Acq: 29 Jun 2018 23:11

Tgt Ion: 43 Resp: 2498342

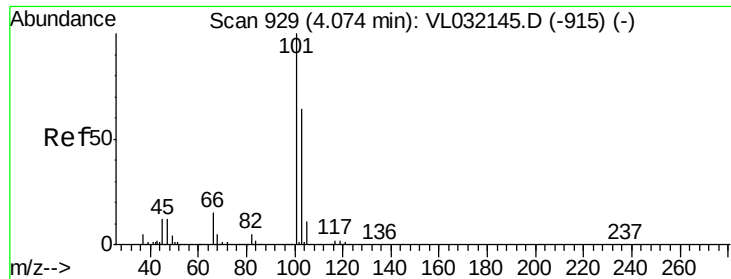
Ion Ratio Lower Upper

43 100

57 50.6 39.8 59.8







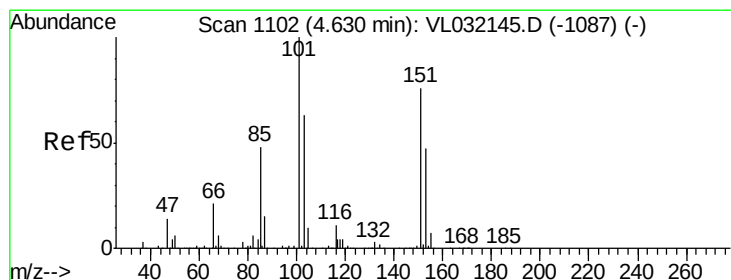
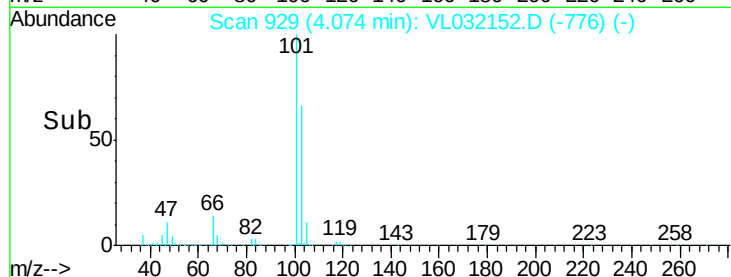
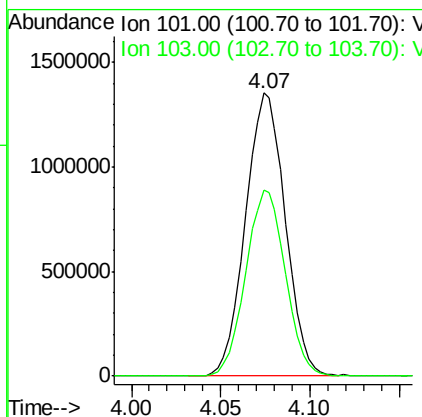
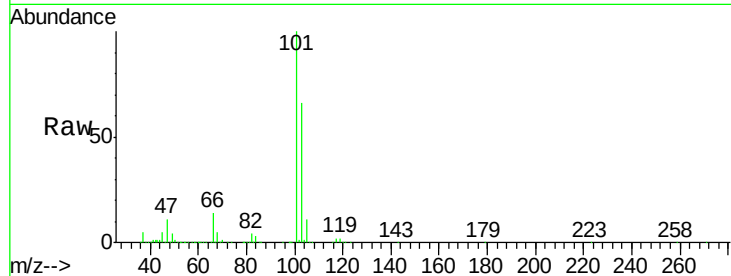
#11  
 Trichlorofluoromethane  
 Concen: 9.43 ppbv  
 RT: 4.07 min Scan# 929  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

Tot Ion:101 Resp: 2117438  
 Ion Ratio Lower Upper  
 101 100  
 103 65.8 51.4 77.0

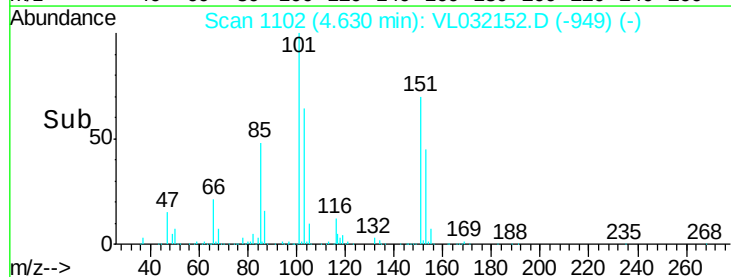
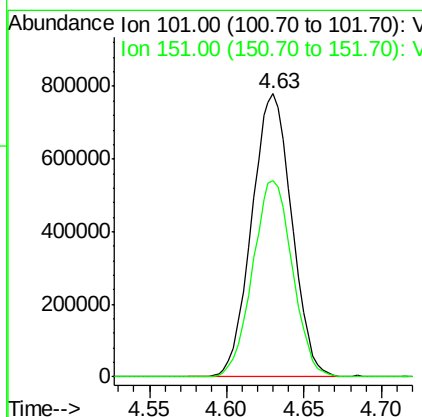
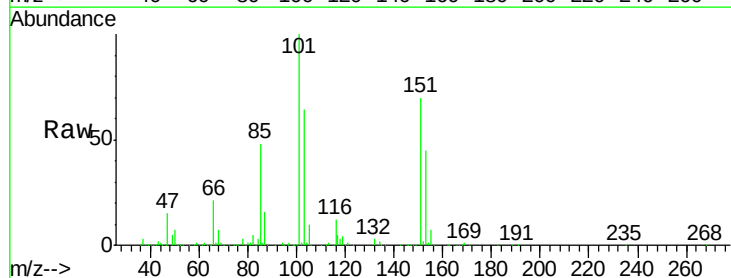
Manual Integrations  
 APPROVED

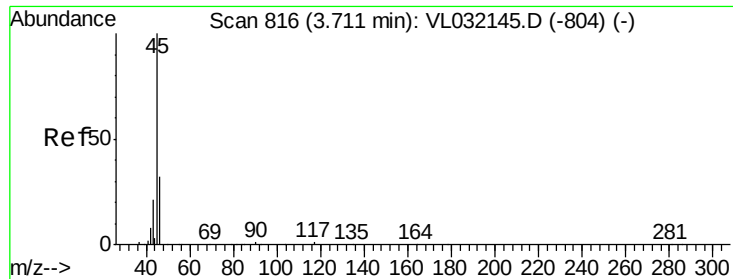
MMDadoda  
 7/3/2018 5:16:30 PM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 9.37 ppbv  
 RT: 4.63 min Scan# 1102  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Tgt Ion:101 Resp: 1401080  
 Ion Ratio Lower Upper  
 101 100  
 151 69.2 58.8 88.2





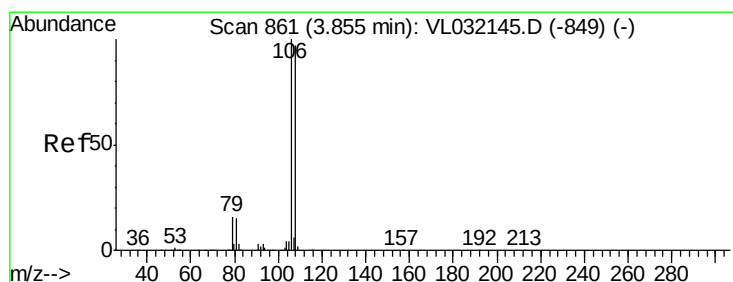
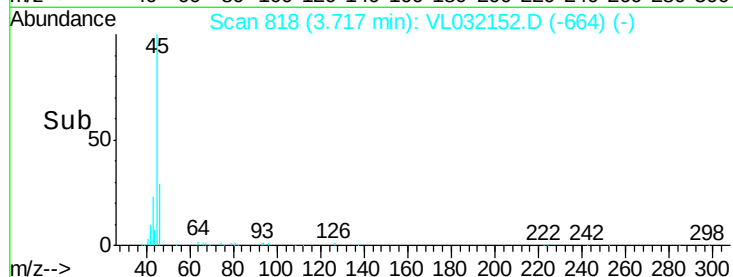
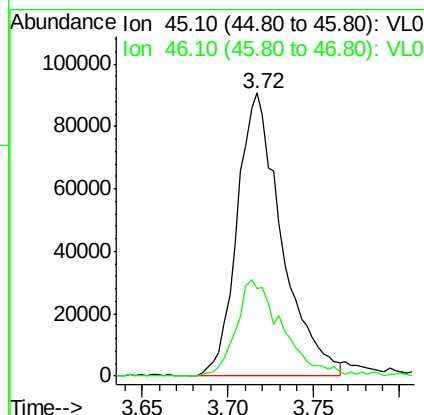
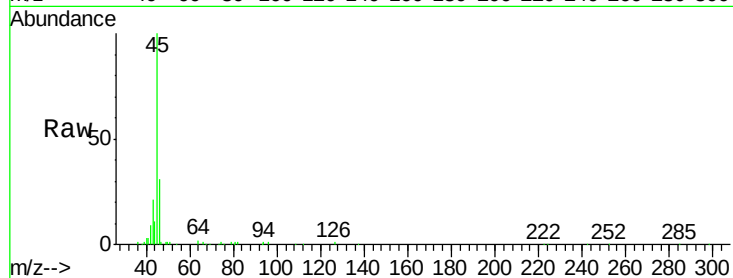
#13  
Ethanol  
Concen: 6.02 ppbv  
RT: 3.72 min Scan# 818  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

| Tot Ion | 45  | 46   | Ratio | Lower | Upper |
|---------|-----|------|-------|-------|-------|
| 163893  | 100 | 36.0 |       | 14.6  | 58.4  |

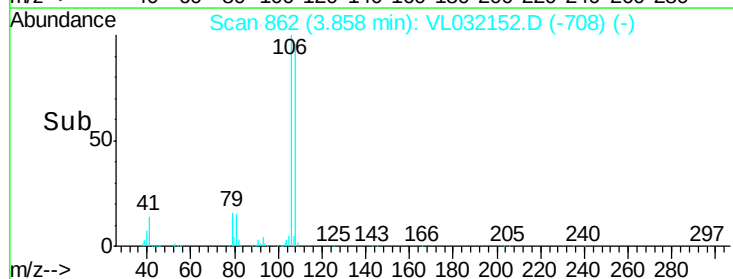
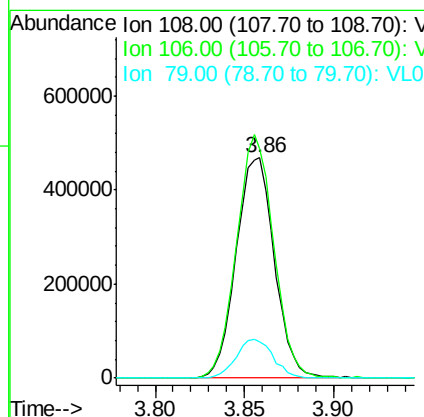
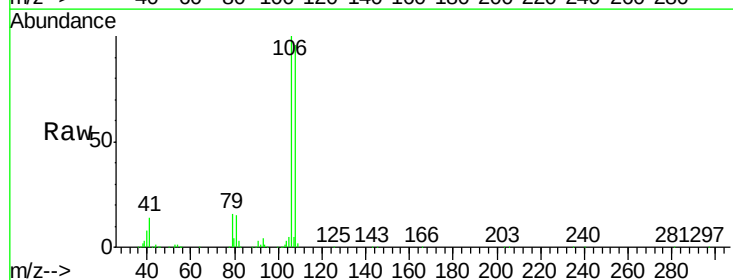
Manual Integrations  
APPROVED

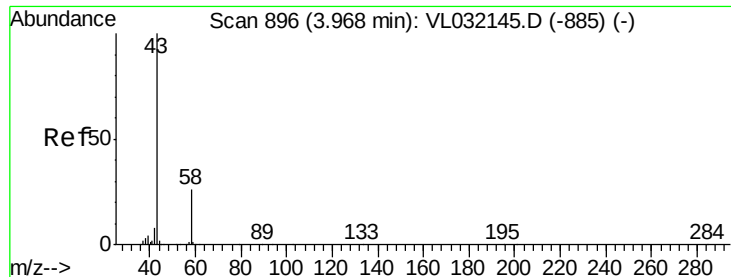
MMDadoda  
7/3/2018 5:16:30 PM



#14  
Bromoethene  
Concen: 9.88 ppbv  
RT: 3.86 min Scan# 862  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

| Tgt Ion | 108 | 106   | 79   | Ratio | Lower | Upper |
|---------|-----|-------|------|-------|-------|-------|
| 703100  | 100 | 107.3 | 17.4 |       | 86.3  | 129.5 |
|         |     |       |      |       | 12.7  | 19.1  |





#15

Acetone

Concen: 9.47 ppbv

RT: 3.97 min Scan# 897

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 43 Resp: 1745249

Ion Ratio Lower Upper

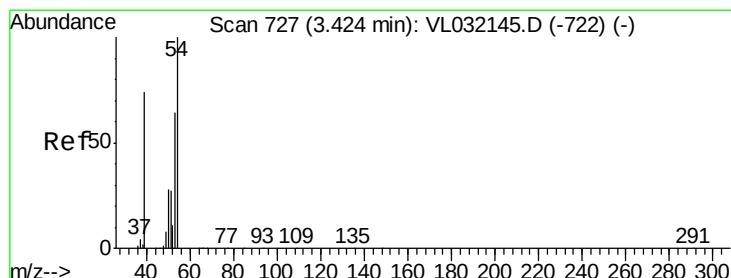
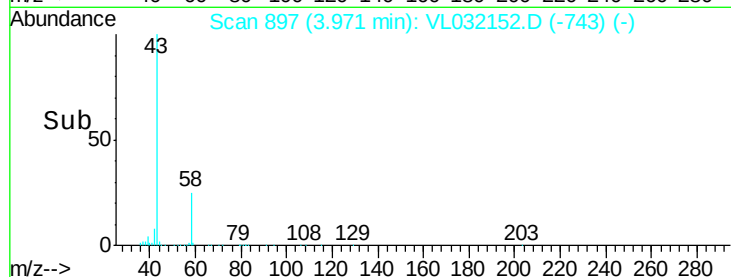
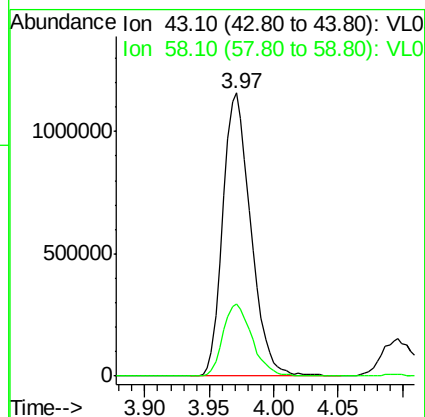
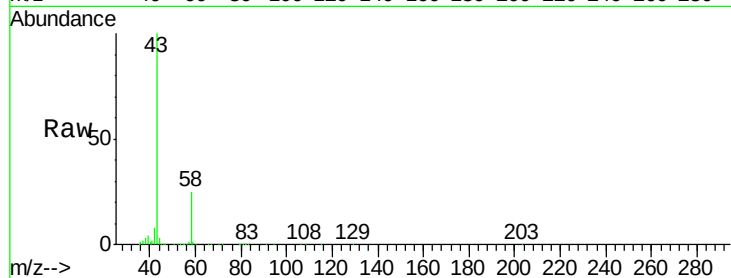
43 100

58 26.5 21.4 32.0

Manual Integrations  
APPROVED

MMDadoda

7/3/2018 5:16:30 PM



#16

1,3-Butadiene

Concen: 9.85 ppbv

RT: 3.42 min Scan# 727

Delta R.T. -0.01 min

Lab File: VL032152.D

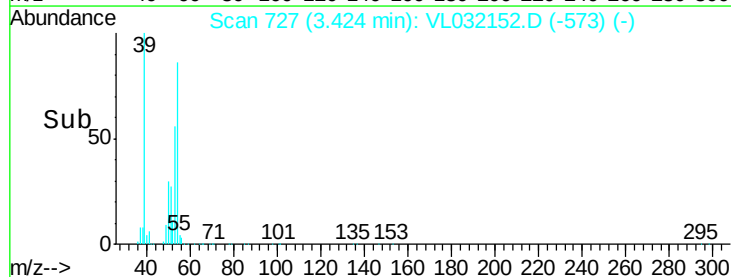
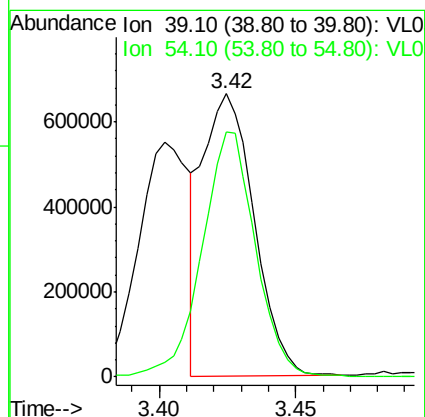
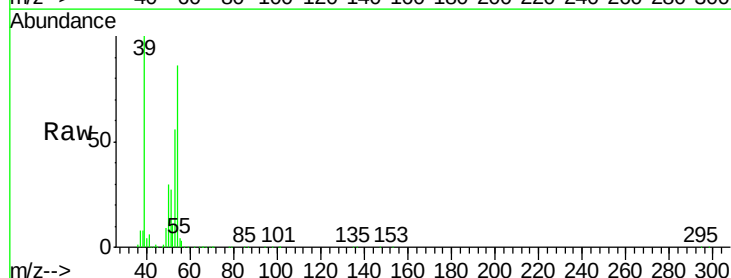
Acq: 29 Jun 2018 23:11

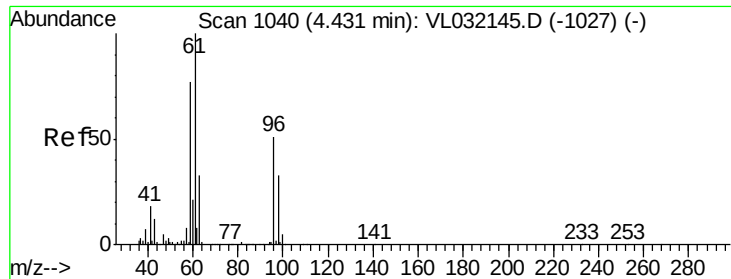
Tgt Ion: 39 Resp: 866040

Ion Ratio Lower Upper

39 100

54 91.1 75.8 113.6





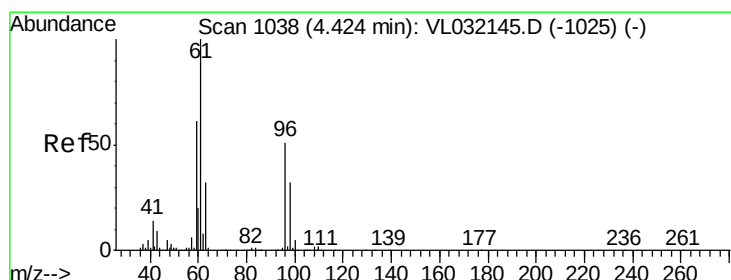
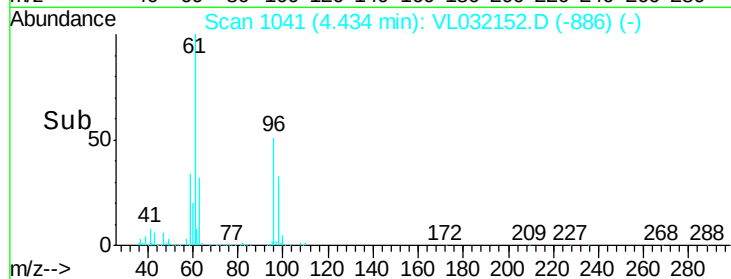
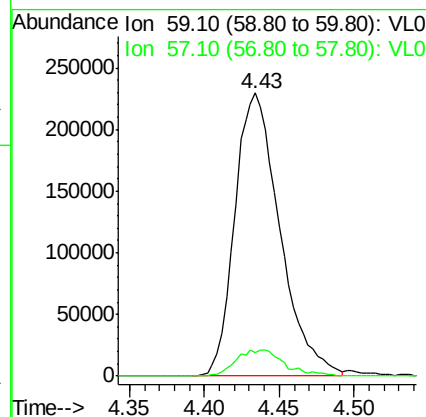
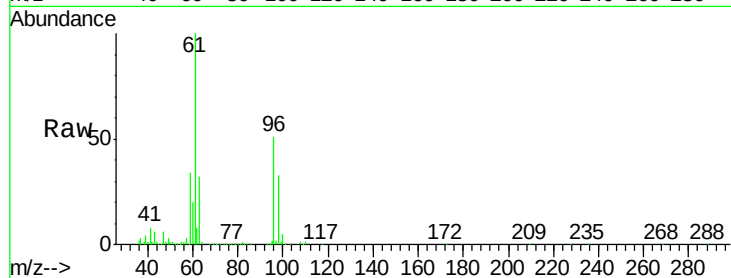
#17  
 tert-Butyl alcohol  
 Concen: 4.09 ppbv  
 RT: 4.43 min Scan# 1041  
 Delta R.T. -0.00 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 ICVVL062918

Tot Ion: 59 Resp: 480098  
 Ion Ratio Lower Upper  
 59 100  
 57 10.3 8.2 12.2

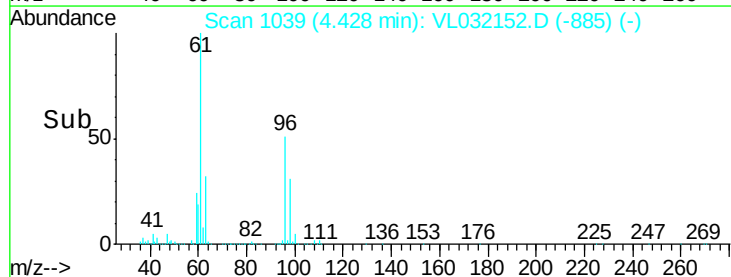
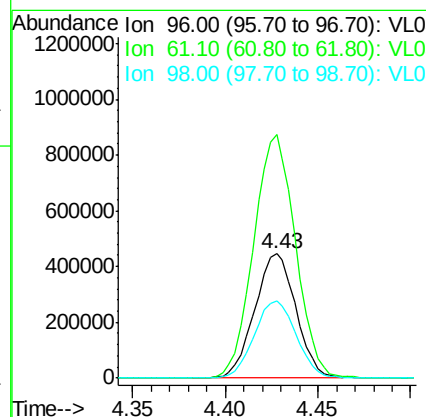
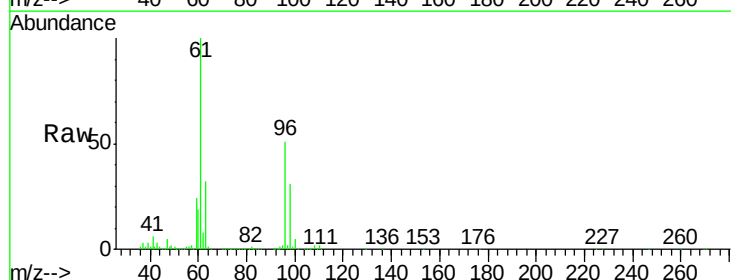
Manual Integrations  
 APPROVED

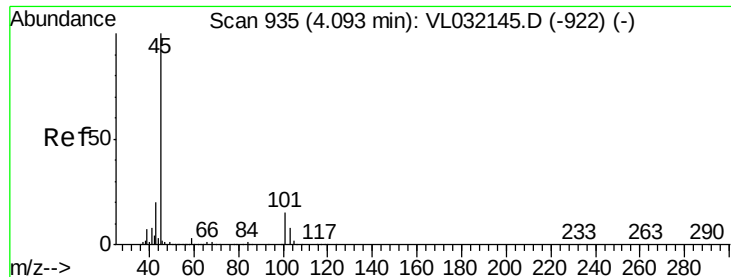
MMDadoda  
 7/3/2018 5:16:30 PM



#18  
 1,1-Dichloroethene  
 Concen: 9.61 ppbv  
 RT: 4.43 min Scan# 1039  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Tgt Ion: 96 Resp: 686978  
 Ion Ratio Lower Upper  
 96 100  
 61 196.0 154.1 231.1  
 98 61.7 50.3 75.5





#19

Isopropyl Alcohol

Concen: 7.73 ppbv

RT: 4.09 min Scan# 935

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 45 Resp: 1183406

Ion Ratio Lower Upper

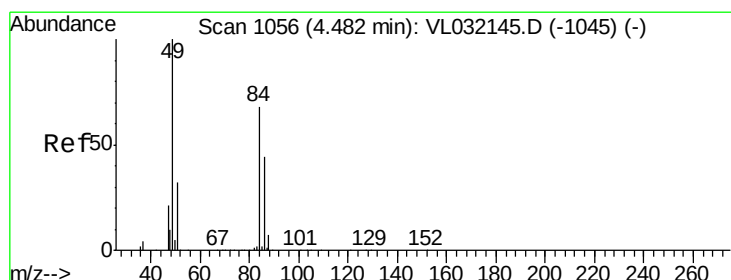
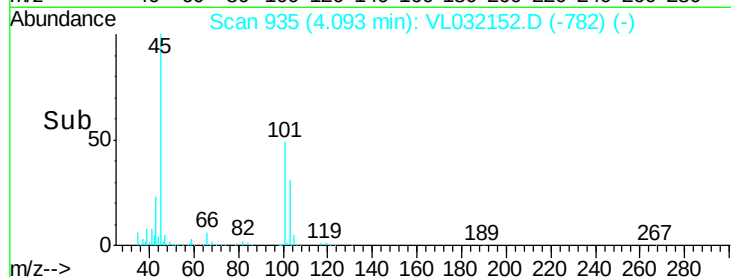
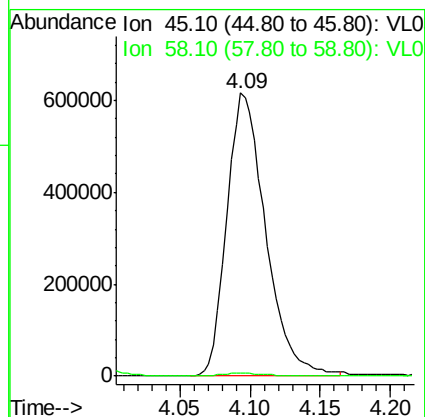
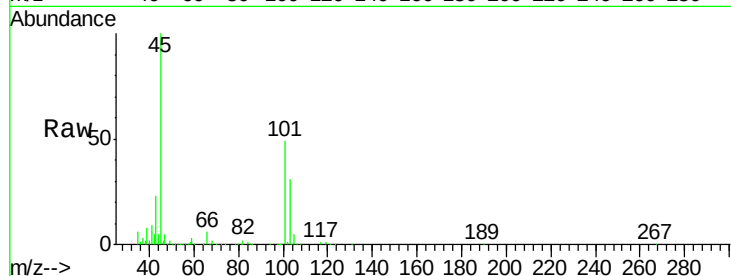
45 100

58 1.3 29.4 44.0#

Manual Integrations  
APPROVED

MMDadoda

7/3/2018 5:16:30 PM



#20

Methylene Chloride

Concen: 9.14 ppbv

RT: 4.48 min Scan# 1056

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Tgt Ion: 84 Resp: 615162

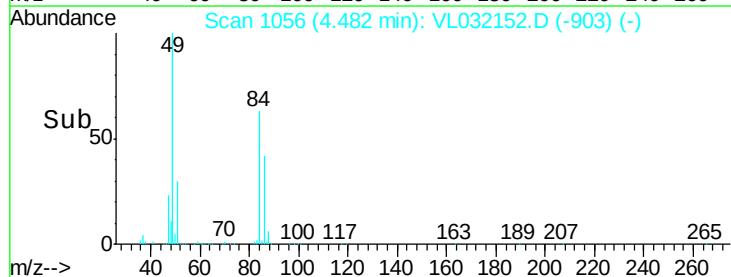
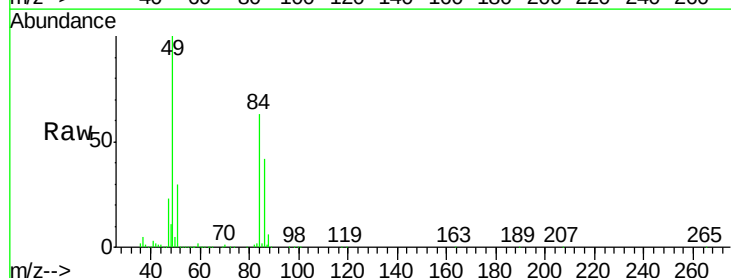
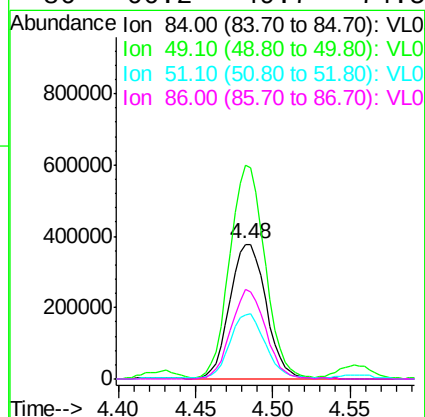
Ion Ratio Lower Upper

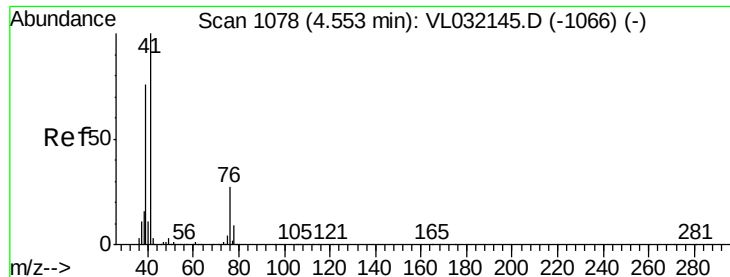
84 100

49 157.3 119.6 179.4

51 46.9 36.3 54.5

86 66.2 49.7 74.5





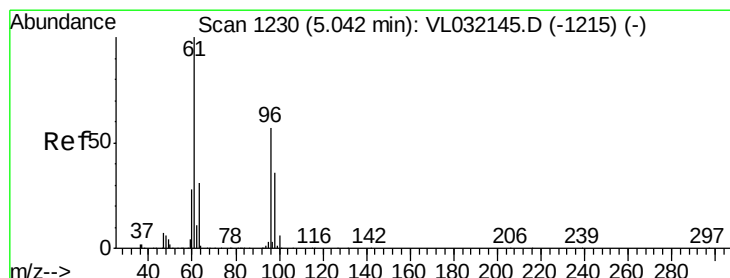
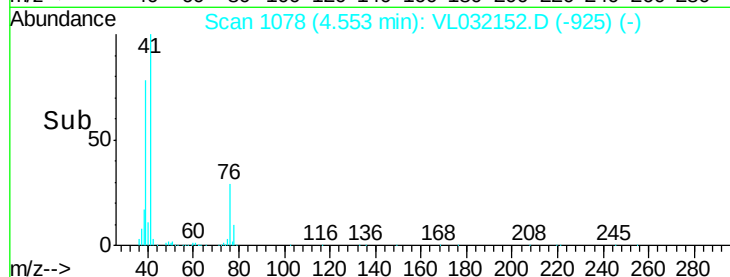
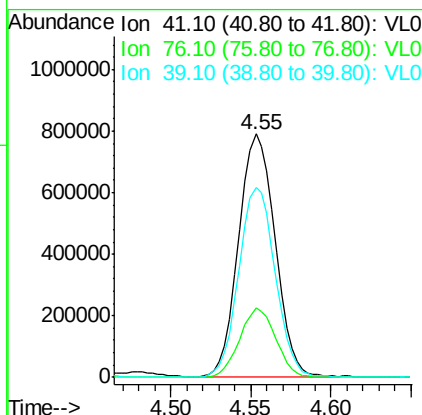
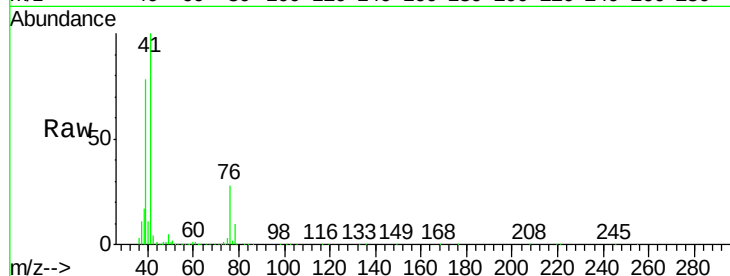
#21  
Allvl Chloride  
Concen: 9.71 ppbv  
RT: 4.55 min Scan# 1078  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 28.5  | 22.5  | 33.7  |
| 39      | 78.8  | 60.5  | 90.7  |

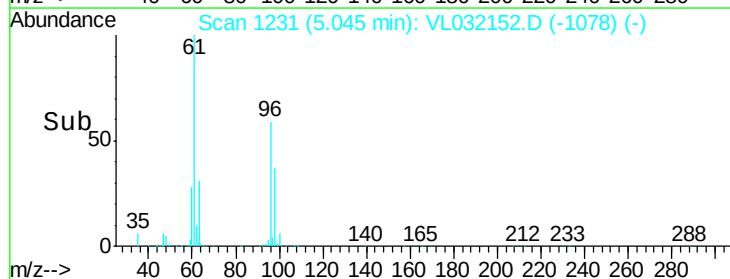
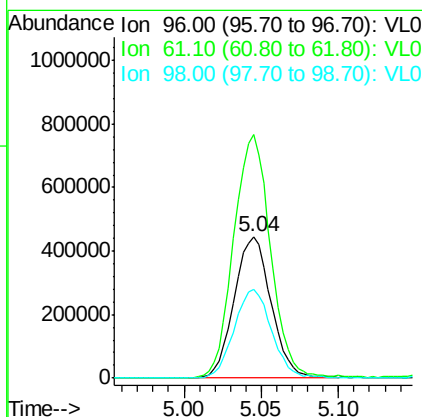
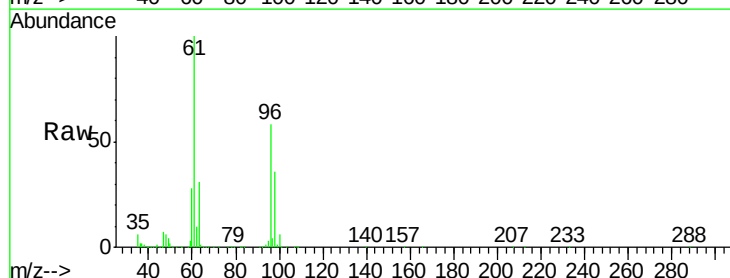
Manual Integrations  
APPROVED

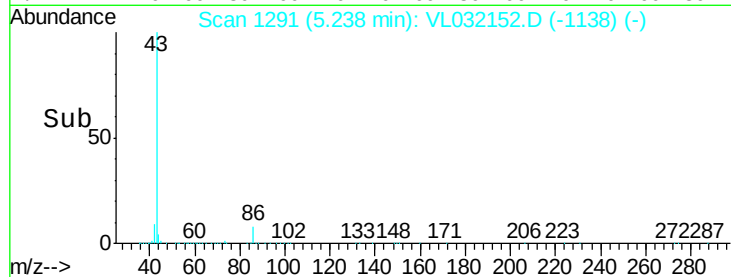
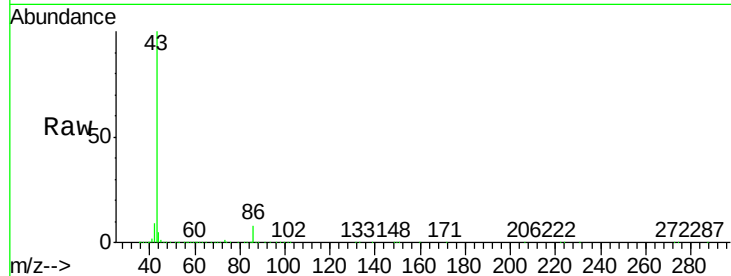
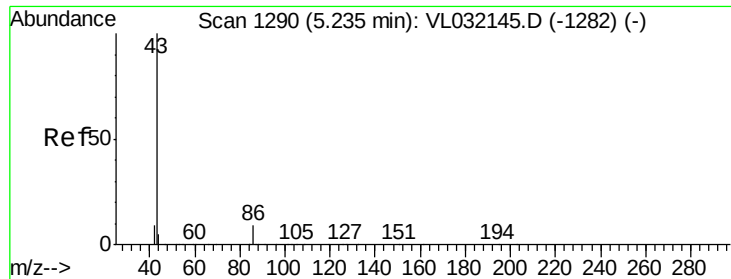
MMDadoda  
7/3/2018 5:16:30 PM



#22  
trans-1,2-Dichloroethene  
Concen: 9.86 ppbv  
RT: 5.04 min Scan# 1231  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

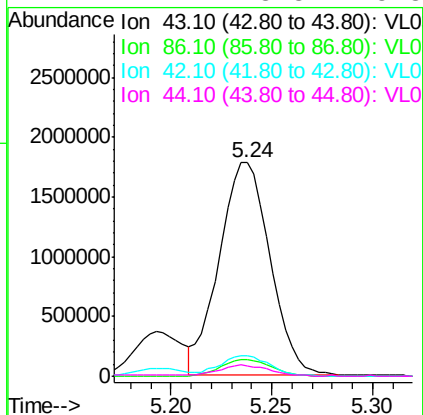
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 171.7 | 135.2 | 202.8 |
| 98      | 62.7  | 49.7  | 74.5  |





#23  
 Vinyl Acetate  
 Concen: 9.36 ppbv  
 RT: 5.24 min Scan# 1291  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

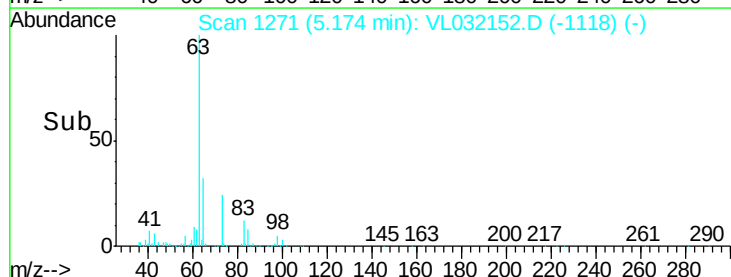
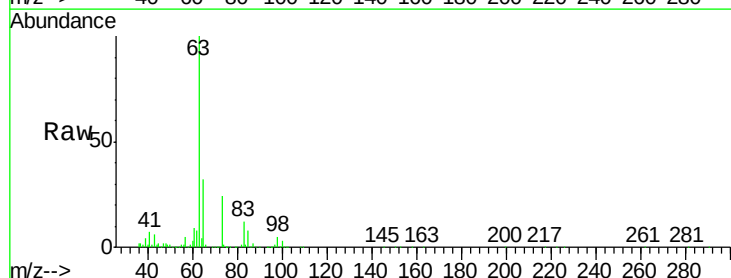
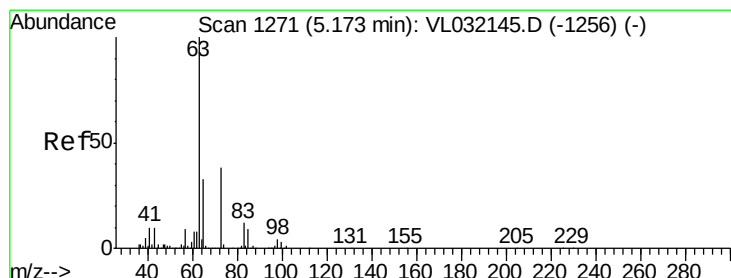
| Tot Ion | 43    | Resp  | 3129080 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 43      | 100   |       |         |
| 86      | 7.9   | 6.2   | 9.4     |
| 42      | 9.4   | 6.9   | 10.3    |
| 44      | 4.7   | 3.8   | 5.8     |



Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

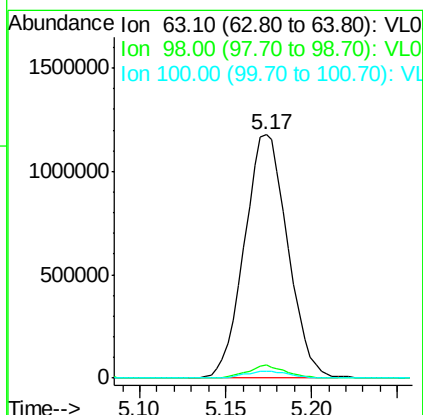
Manual Integrations  
 APPROVED

MMDadoda  
 7/3/2018 5:16:30 PM

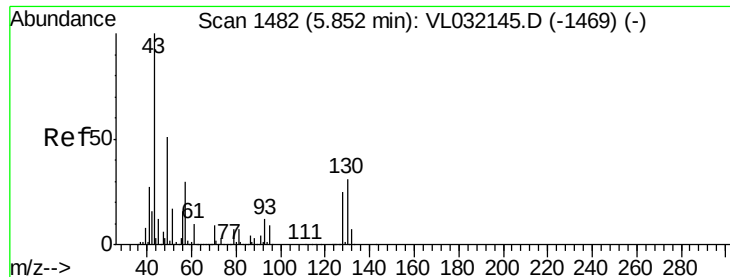


#24  
 1,1-Dichloroethane  
 Concen: 9.60 ppbv  
 RT: 5.17 min Scan# 1271  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

| Tgt Ion | 63    | Resp  | 2055222 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 63      | 100   |       |         |
| 98      | 5.2   | 2.4   | 7.2     |
| 100     | 3.0   | 1.7   | 5.0     |







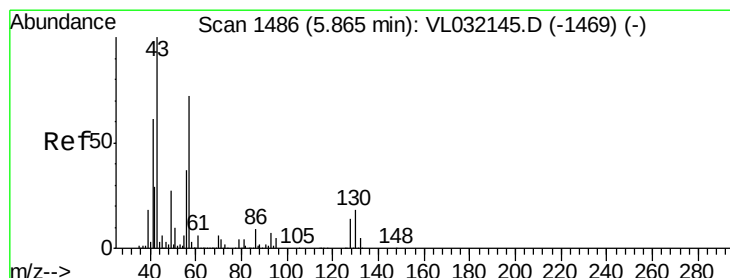
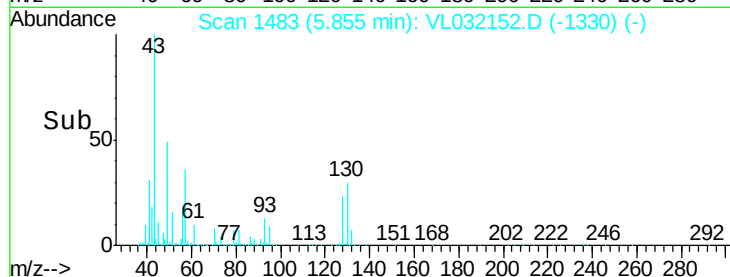
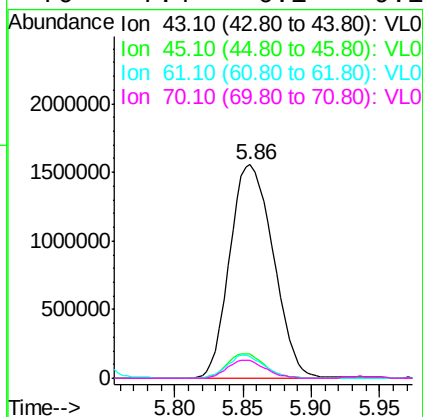
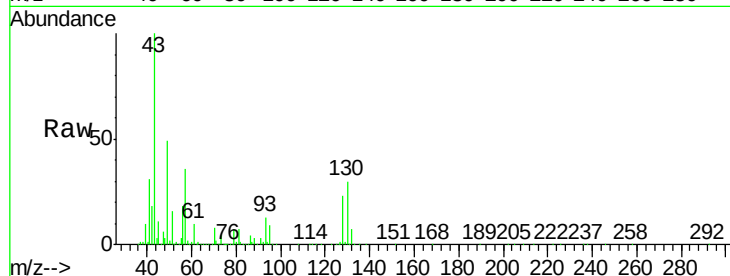
#25  
Ethyl Acetate  
Concen: 9.05 ppbv  
RT: 5.86 min Scan# 1483  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion: 43 Resp: 3450043  
Ion Ratio Lower Upper  
43 100  
45 10.0 7.8 11.8  
61 9.5 7.4 11.0  
70 7.4 6.1 9.1

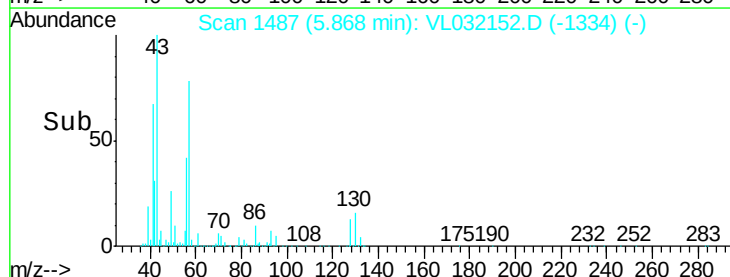
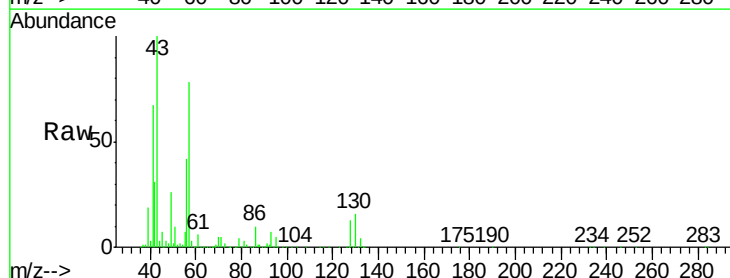
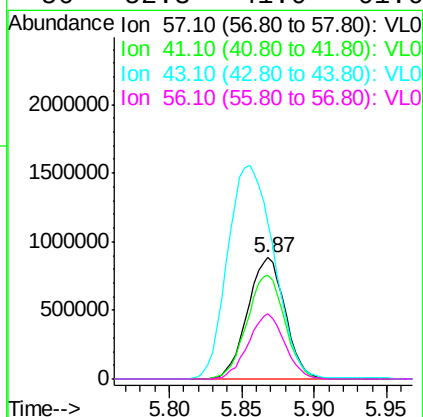
Manual Integrations  
APPROVED

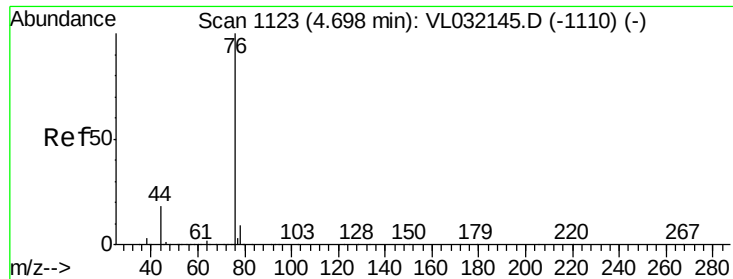
MMDadoda  
7/3/2018 5:16:30 PM



#26  
Hexane  
Concen: 9.09 ppbv  
RT: 5.87 min Scan# 1487  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion: 57 Resp: 1596149  
Ion Ratio Lower Upper  
57 100  
41 86.2 68.6 103.0  
43 217.6 168.6 252.8  
56 52.3 41.0 61.6





#27

Carbon Disulfide

Concen: 9.79 ppbv

RT: 4.70 min Scan# 1123

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

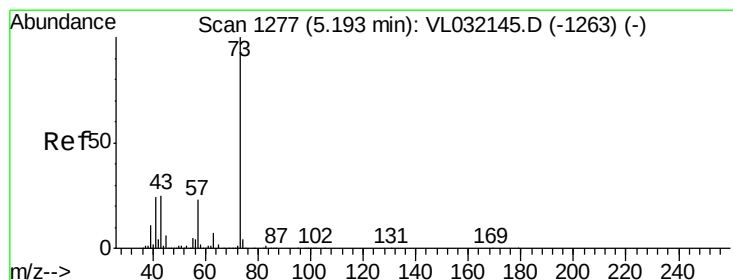
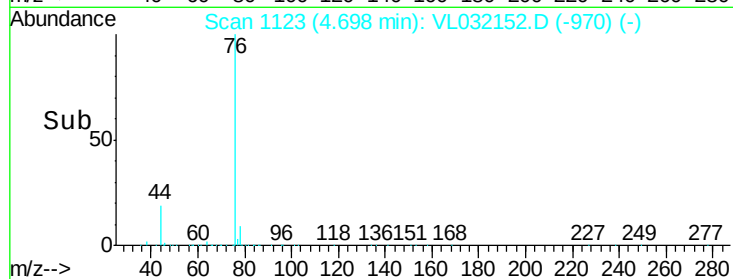
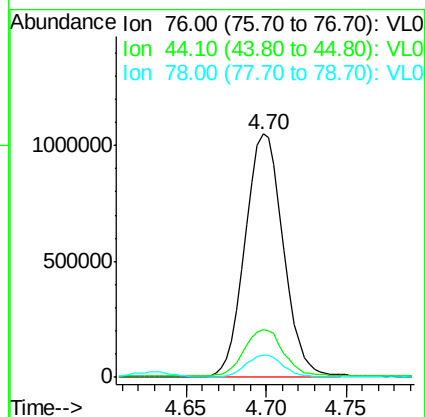
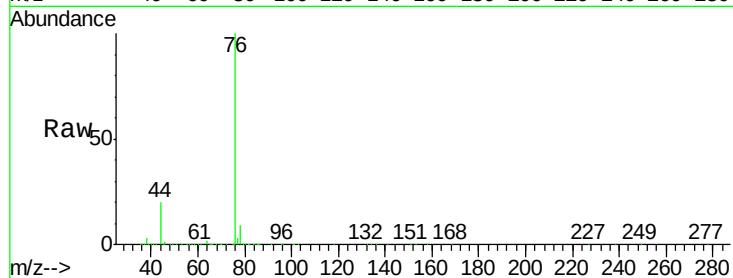
ClientSampleId :

ICVVL062918

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 76    | Resp: | 1708640 |
| Ion      | Ratio | Lower | Upper   |
| 76       | 100   |       |         |
| 44       | 19.8  | 15.1  | 22.7    |
| 78       | 9.1   | 7.2   | 10.8    |

Manual Integrations  
APPROVED

MMDadoda  
7/3/2018 5:16:30 PM



#28

Methyl tert-Butyl Ether

Concen: 8.82 ppbv

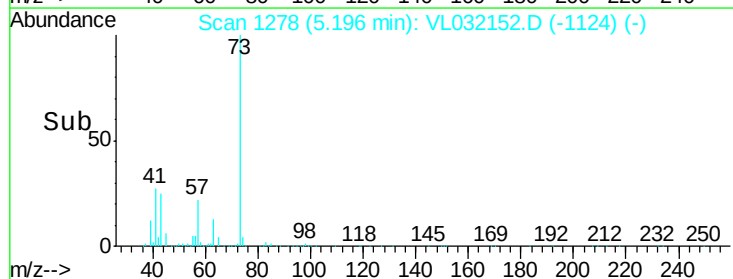
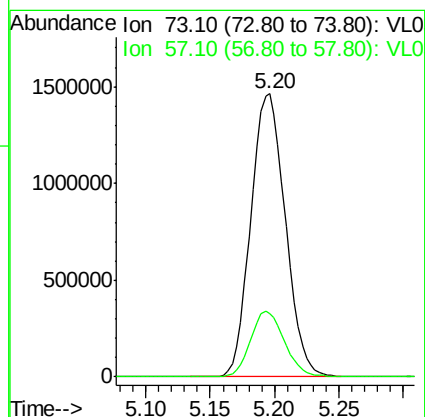
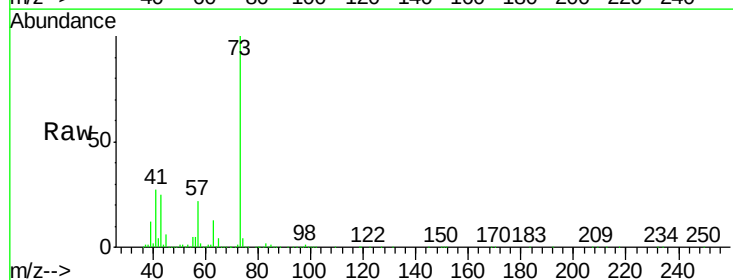
RT: 5.20 min Scan# 1278

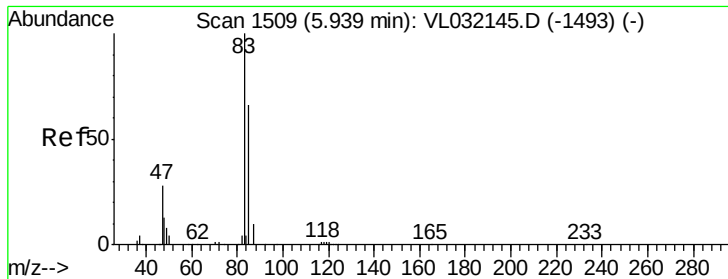
Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 73    | Resp: | 2737594 |
| Ion      | Ratio | Lower | Upper   |
| 73       | 100   |       |         |
| 57       | 22.9  | 18.6  | 27.8    |





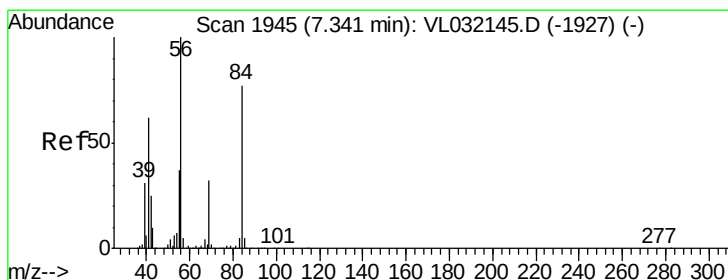
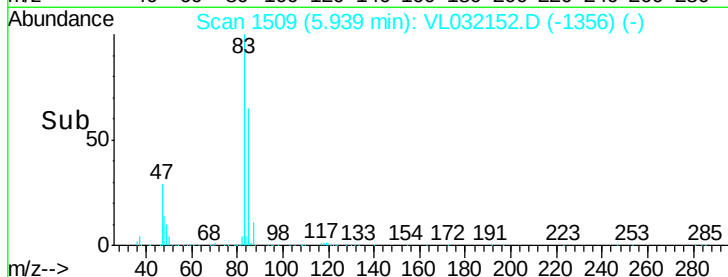
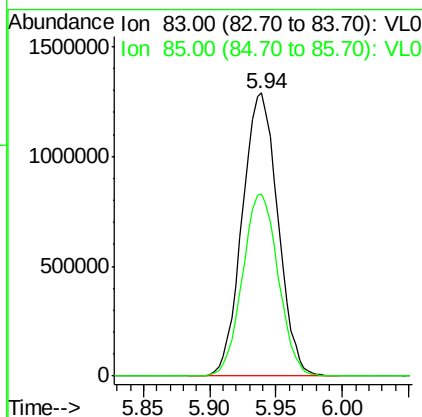
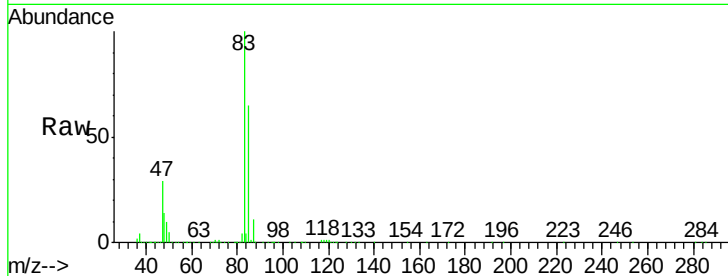
#29  
Chloroform  
Concen: 9.43 ppbv  
RT: 5.94 min Scan# 1509  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion: 83 Resp: 2410765  
Ion Ratio Lower Upper  
83 100  
85 64.4 51.6 77.4

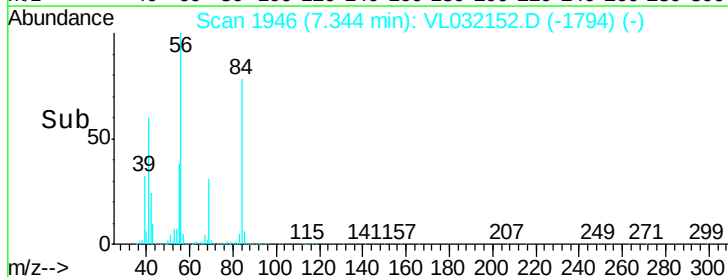
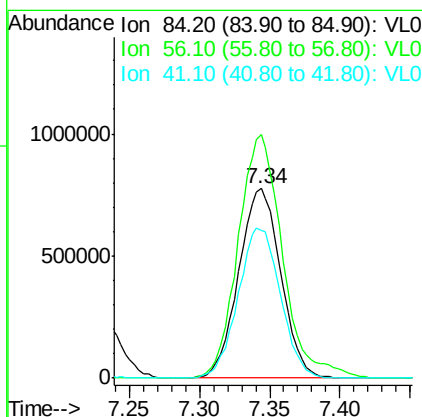
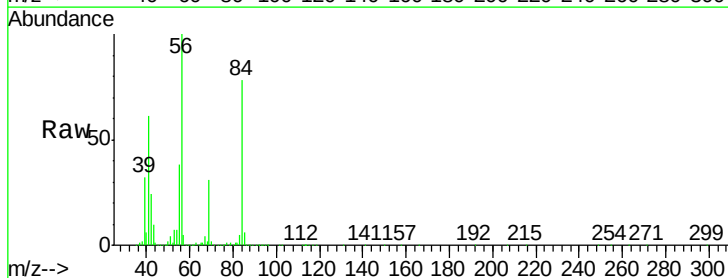
Manual Integrations  
APPROVED

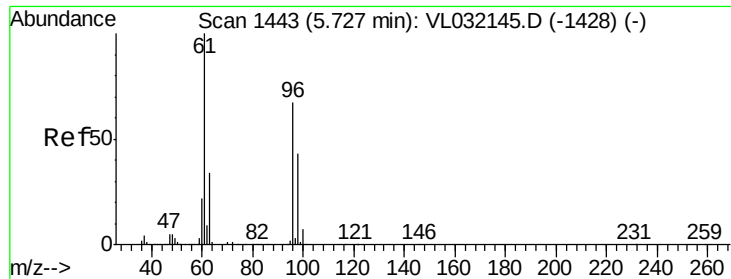
MMDadoda  
7/3/2018 5:16:30 PM



#30  
Cyclohexane  
Concen: 9.78 ppbv  
RT: 7.34 min Scan# 1946  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion: 84 Resp: 1618884  
Ion Ratio Lower Upper  
84 100  
56 135.8 109.1 163.7  
41 80.0 64.6 96.8





#31

cis-1,2-Dichloroethene

Concen: 9.79 ppbv

RT: 5.72 min Scan# 1442

Delta R.T. -0.02 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

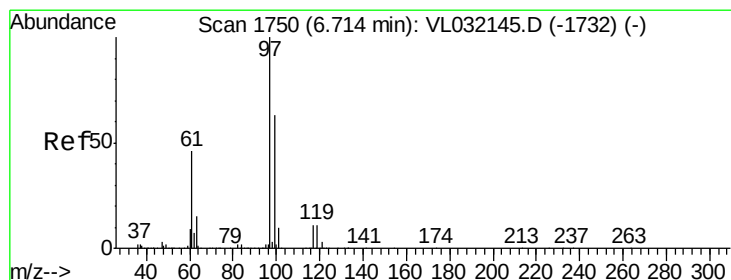
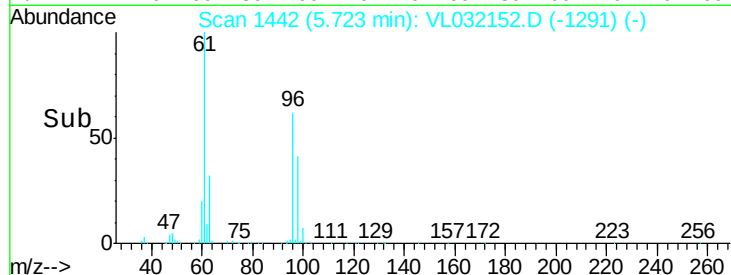
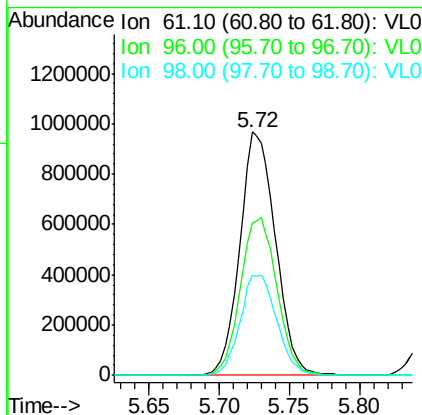
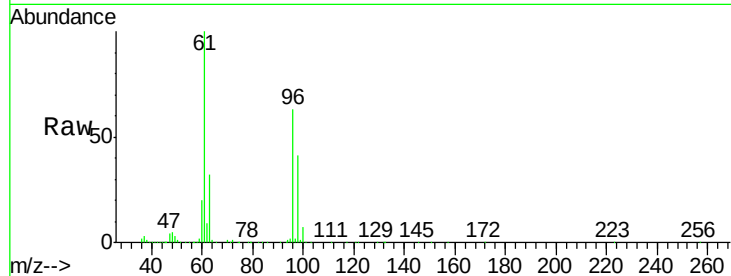
ClientSampleId :

ICVVL062918

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 61    | Resp: | 1717444 |
| Ion      | Ratio | Lower | Upper   |
| 61       | 100   |       |         |
| 96       | 62.4  | 54.2  | 81.4    |
| 98       | 41.3  | 34.6  | 52.0    |

Manual Integrations  
APPROVED

MMDadoda  
7/3/2018 5:16:30 PM



#32

1,1,1-Trichloroethane

Concen: 9.87 ppbv

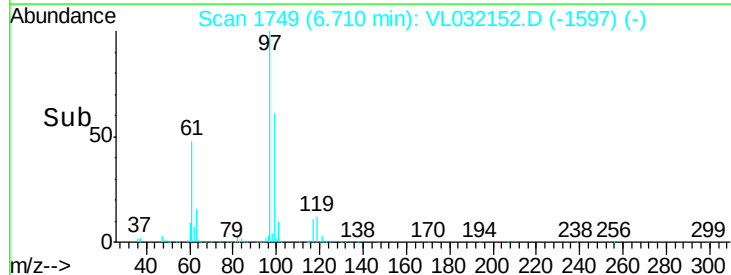
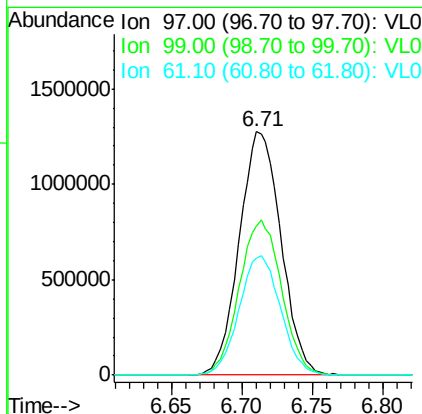
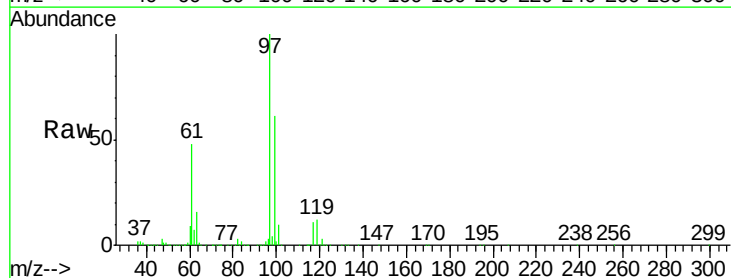
RT: 6.71 min Scan# 1749

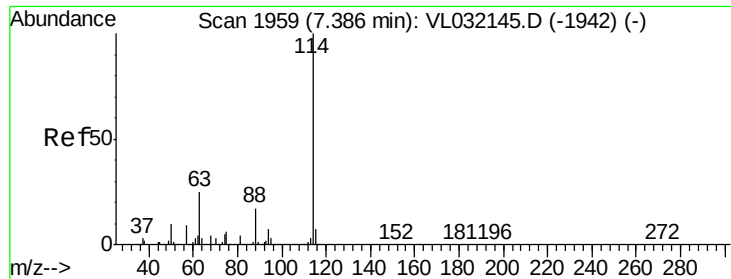
Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 97    | Resp: | 2642882 |
| Ion      | Ratio | Lower | Upper   |
| 97       | 100   |       |         |
| 99       | 64.6  | 51.3  | 76.9    |
| 61       | 48.7  | 38.4  | 57.6    |





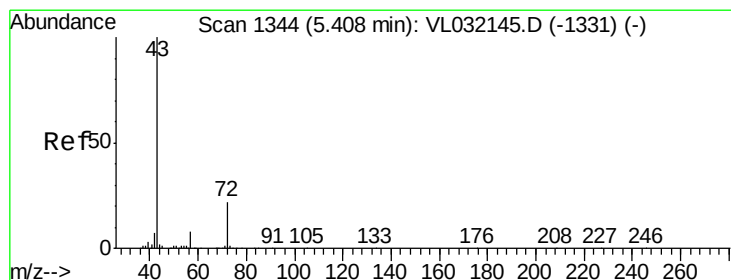
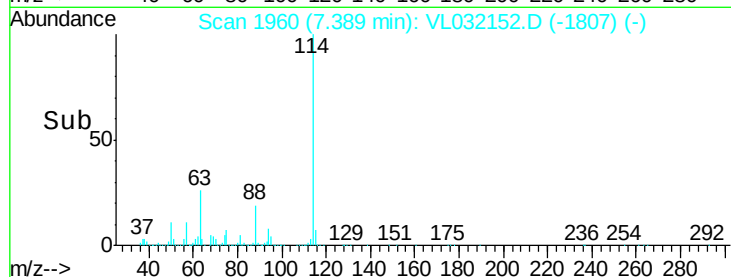
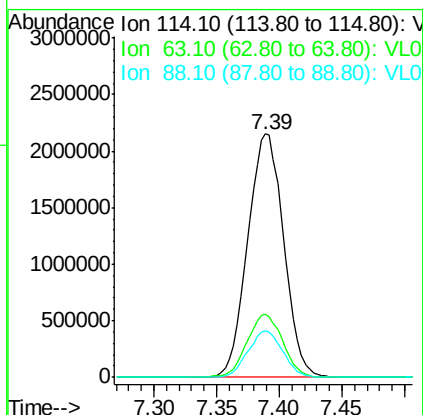
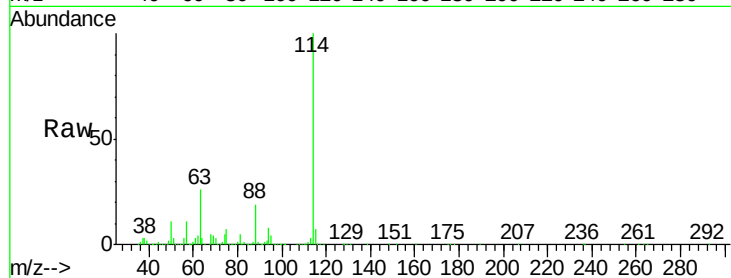
#33  
 1,4-Difluorobenzene  
 Concen: 10.00 ppbv  
 RT: 7.39 min Scan# 1960  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 26.0  | 19.1  | 28.7  |
| 88      | 18.5  | 13.9  | 20.9  |

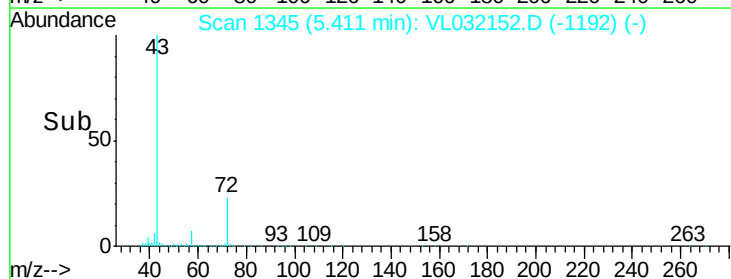
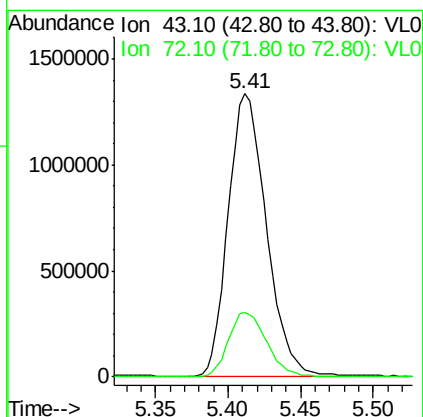
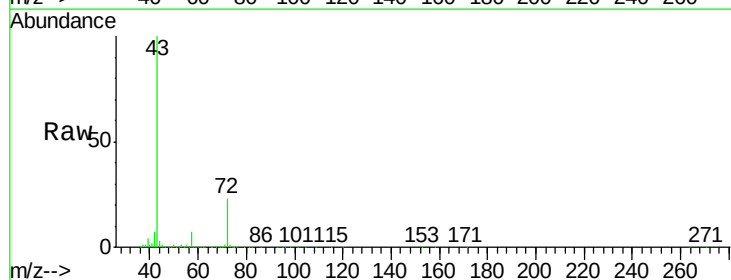
Manual Integrations  
 APPROVED

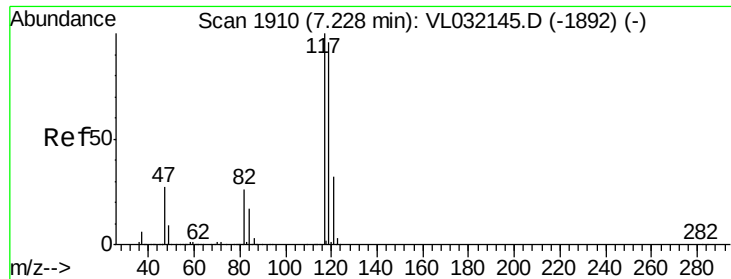
MMDadoda  
 7/3/2018 5:16:30 PM



#34  
 2-Butanone  
 Concen: 8.91 ppbv  
 RT: 5.41 min Scan# 1345  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 23.2  | 18.4  | 27.6  |





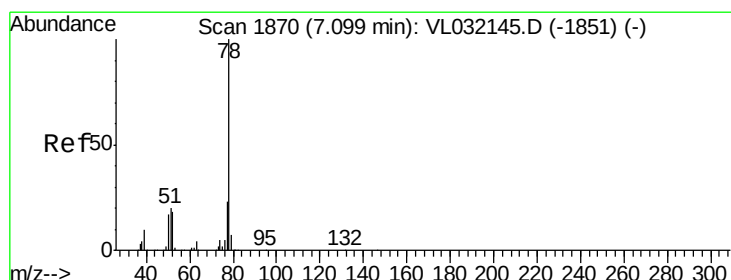
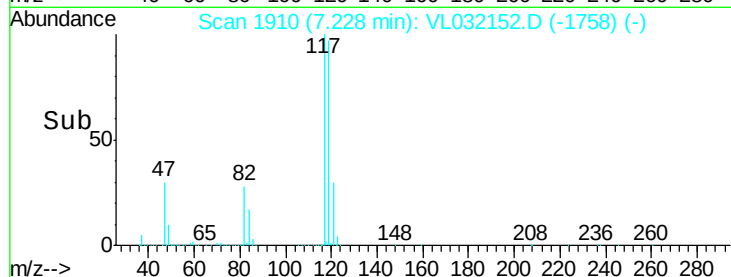
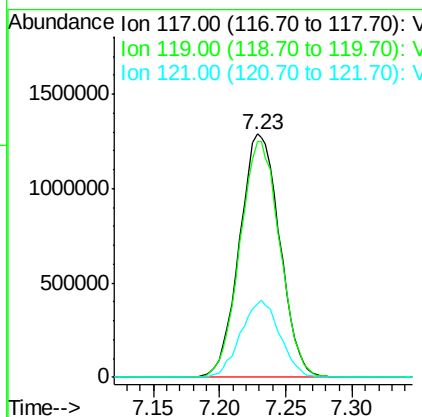
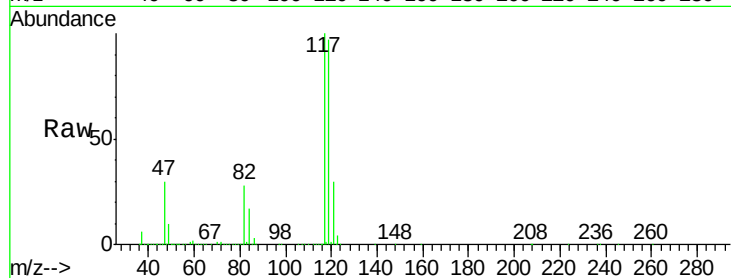
#35  
Carbon Tetrachloride  
Concen: 9.25 ppbv  
RT: 7.23 min Scan# 1910  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion:117 Resp: 2721455  
Ion Ratio Lower Upper  
117 100  
119 96.6 74.8 112.2  
121 30.4 24.0 36.0

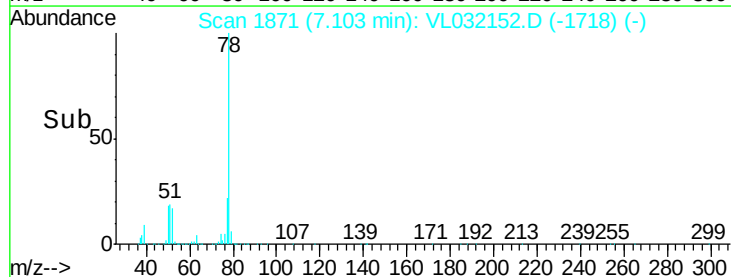
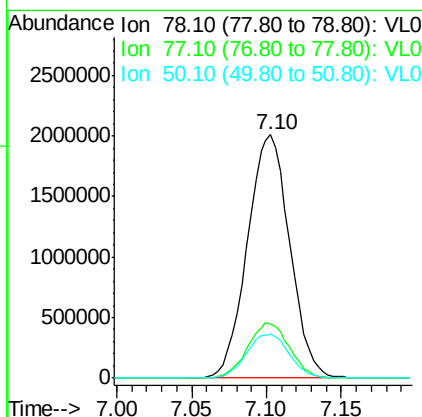
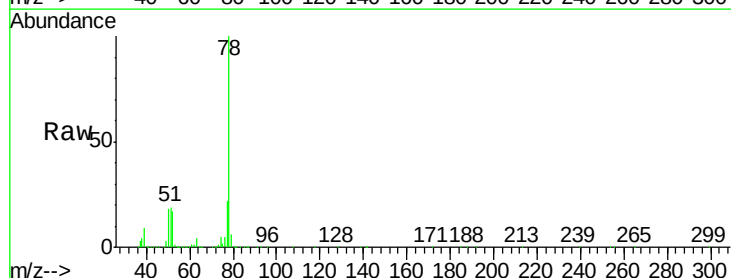
Manual Integrations  
APPROVED

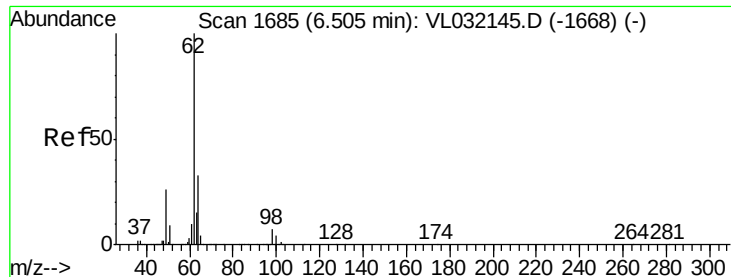
MMDadoda  
7/3/2018 5:16:30 PM



#36  
Benzene  
Concen: 9.49 ppbv  
RT: 7.10 min Scan# 1871  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion: 78 Resp: 3947885  
Ion Ratio Lower Upper  
78 100  
77 22.4 17.7 26.5  
50 18.3 14.0 21.0





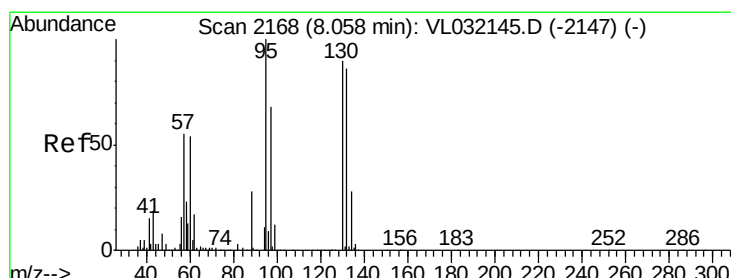
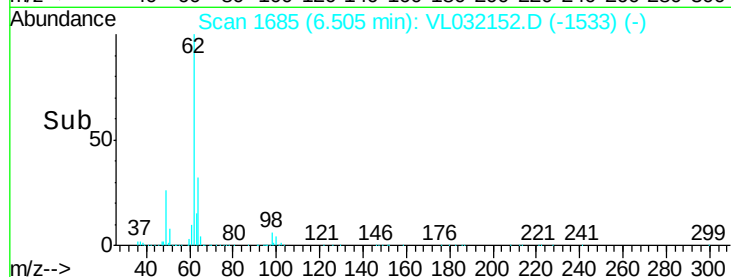
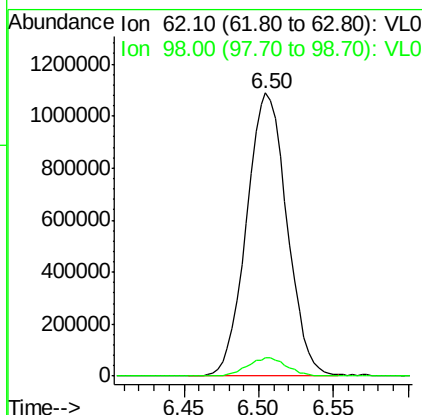
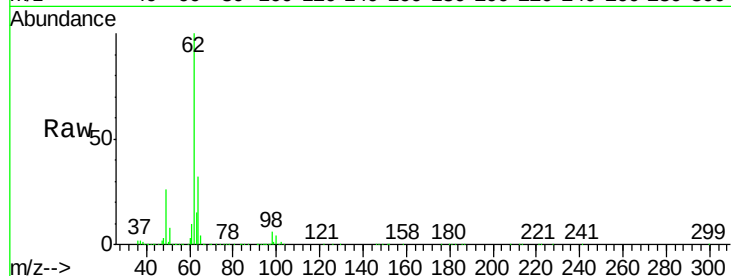
#37  
 1,2-Dichloroethane  
 Concen: 9.87 ppbv  
 RT: 6.50 min Scan# 1685  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 62      | 100   |       |       |
| 98      | 6.5   | 5.8   | 8.6   |

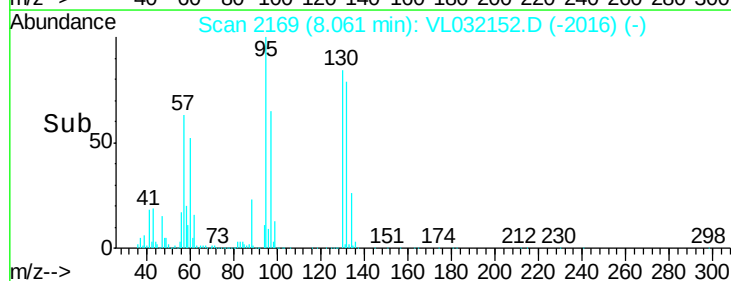
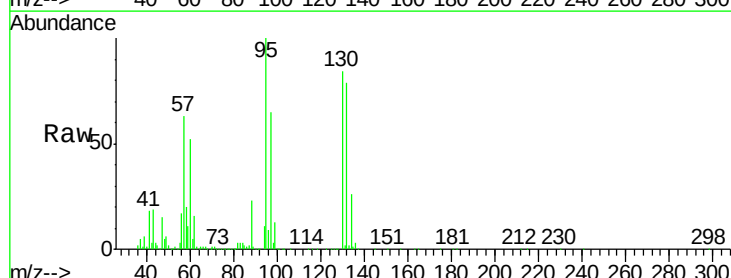
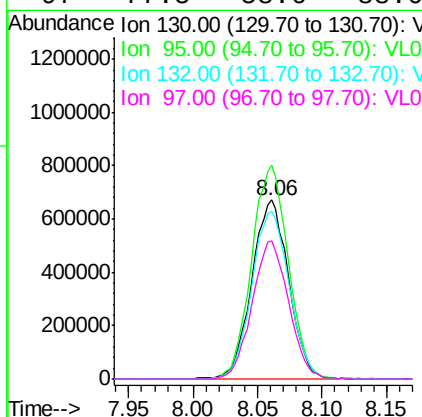
Manual Integrations  
 APPROVED

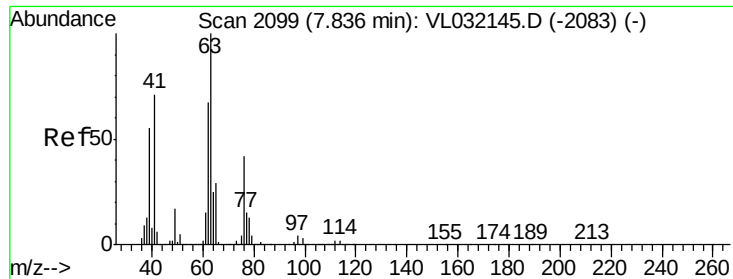
MMDadoda  
 7/3/2018 5:16:30 PM



#38  
 Trichloroethene  
 Concen: 8.21 ppbv  
 RT: 8.06 min Scan# 2169  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 130     | 100   |       |       |
| 95      | 119.7 | 88.1  | 132.1 |
| 132     | 94.2  | 74.6  | 112.0 |
| 97      | 77.5  | 58.6  | 88.0  |





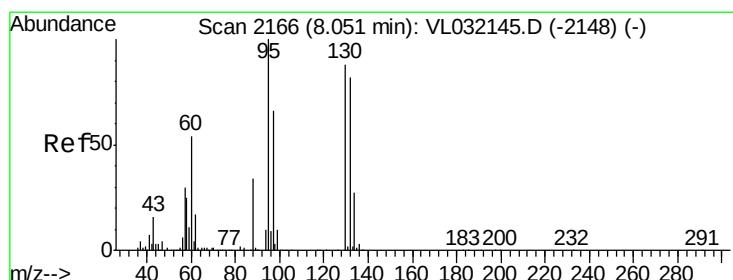
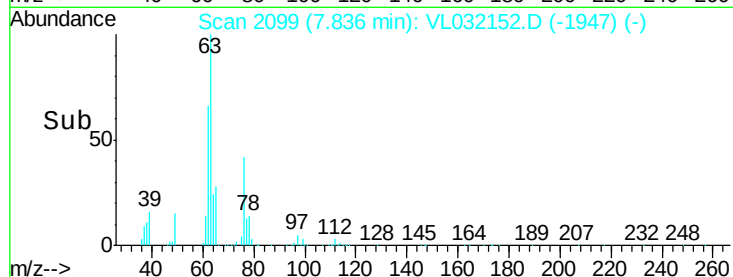
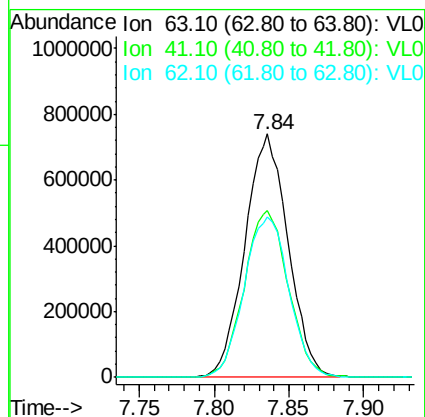
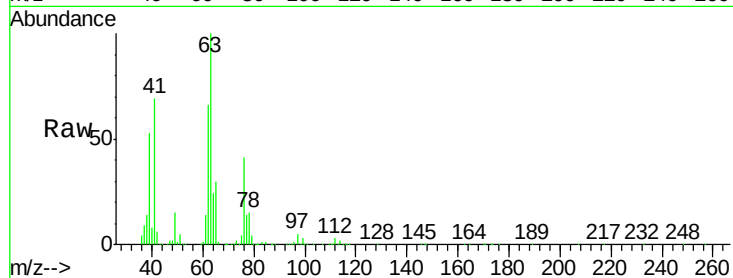
#39  
 1,2-Dichloropropane  
 Concen: 9.06 ppbv  
 RT: 7.84 min Scan# 2099  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

| Tot Ion | 63    | Resp  | 1486131 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 63      | 100   |       |         |
| 41      | 68.7  | 53.3  | 79.9    |
| 62      | 65.8  | 54.8  | 82.2    |

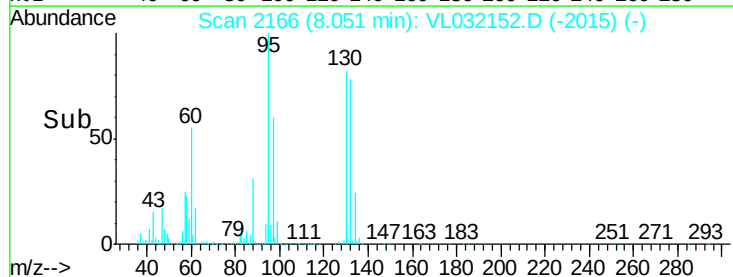
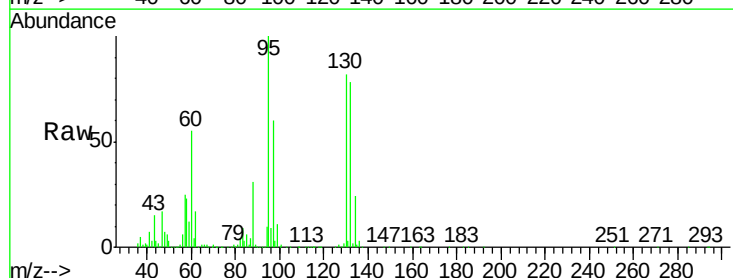
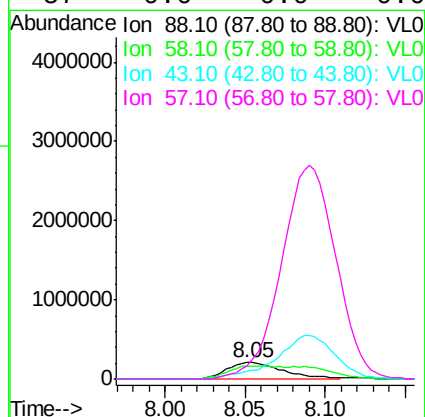
Manual Integrations  
 APPROVED

MMDadoda  
 7/3/2018 5:16:30 PM

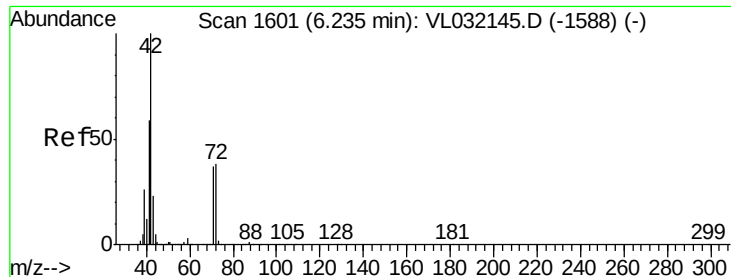


#40  
 1,4-Dioxane  
 Concen: 7.73 ppbv  
 RT: 8.05 min Scan# 2166  
 Delta R.T. -0.02 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

| Tgt Ion | 88    | Resp  | 497392 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 88      | 100   |       |        |
| 58      | 136.7 | 47.4  | 71.0#  |
| 43      | 0.0   | 0.0   | 0.0    |
| 57      | 0.0   | 0.0   | 0.0    |







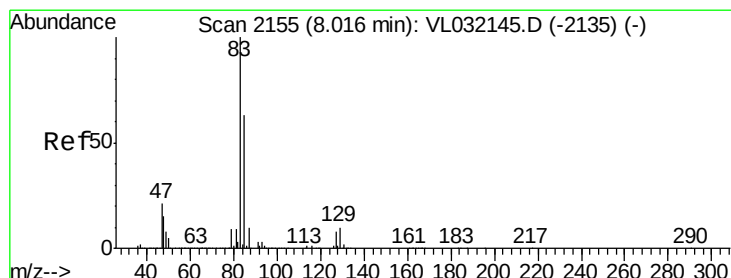
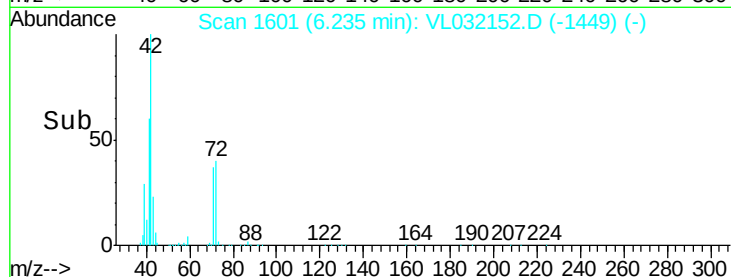
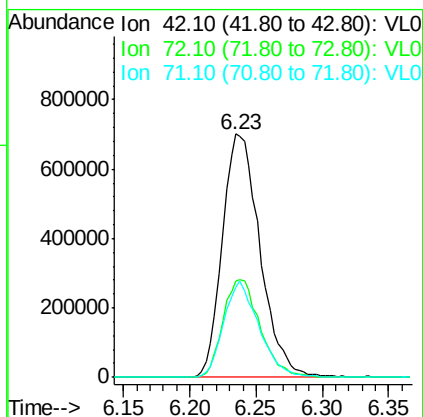
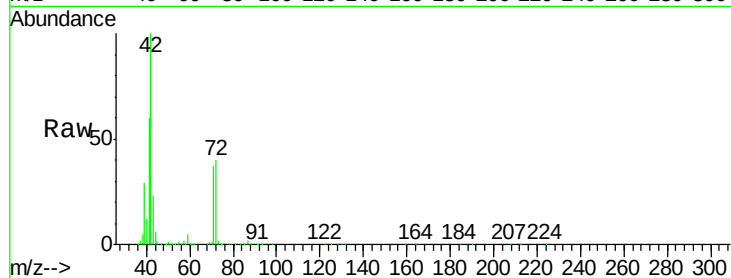
#41  
Tetrahydrofuran  
Concen: 8.41 ppbv  
RT: 6.23 min Scan# 1601  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 40.3  | 31.1  | 46.7  |
| 71      | 37.4  | 29.5  | 44.3  |

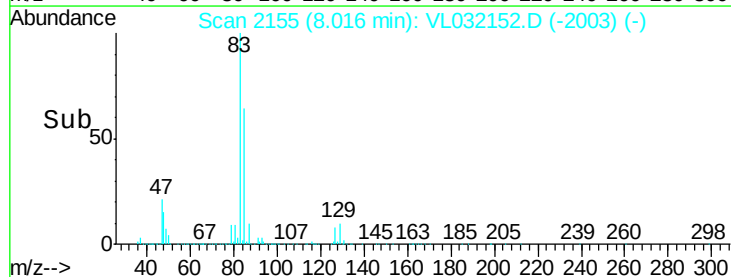
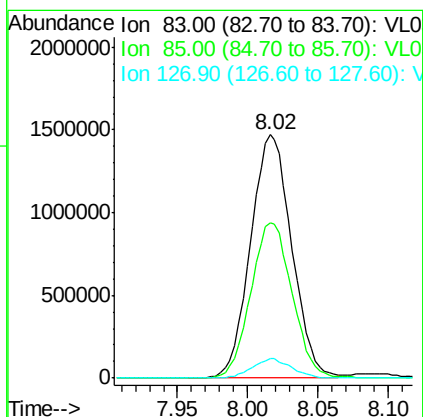
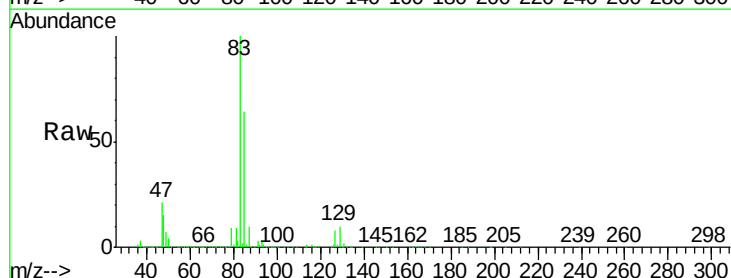
Manual Integrations  
APPROVED

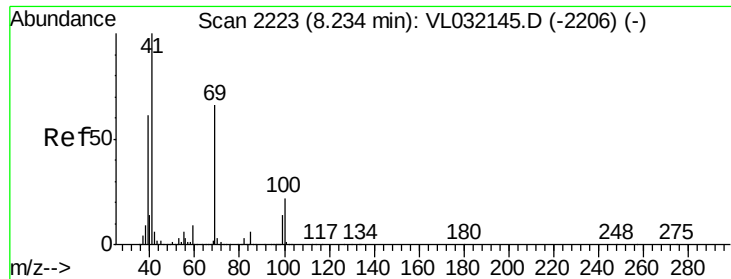
MMDadoda  
7/3/2018 5:16:30 PM



#42  
Bromodichloromethane  
Concen: 9.22 ppbv  
RT: 8.02 min Scan# 2155  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 64.0  | 52.6  | 79.0  |
| 127     | 8.2   | 6.5   | 9.7   |





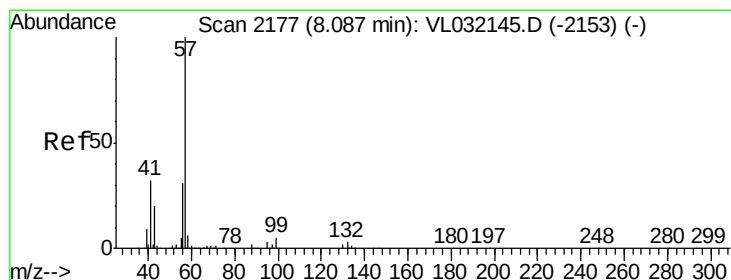
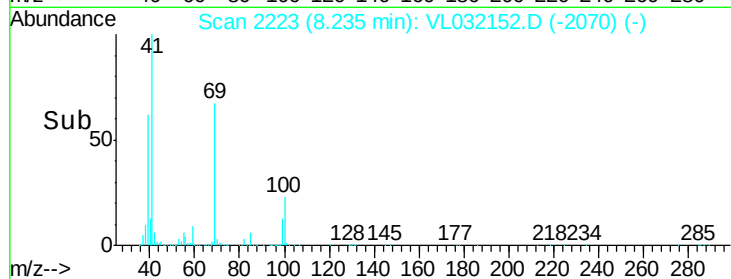
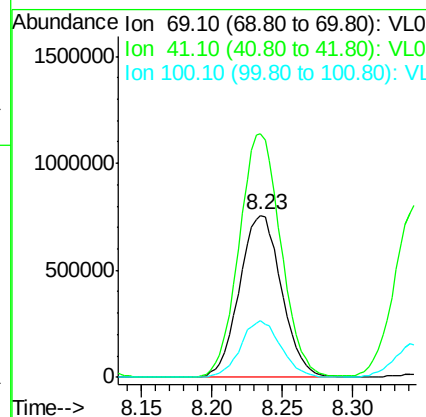
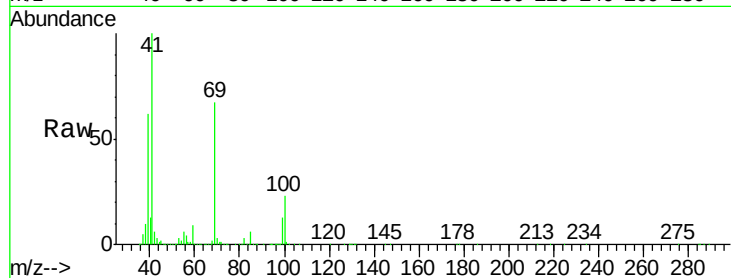
#43  
Methyl Methacrylate  
Concen: 9.16 ppbv  
RT: 8.23 min Scan# 2223  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion: 69 Resp: 1577896  
Ion Ratio Lower Upper  
69 100  
41 149.2 118.2 177.4  
100 33.7 27.4 41.2

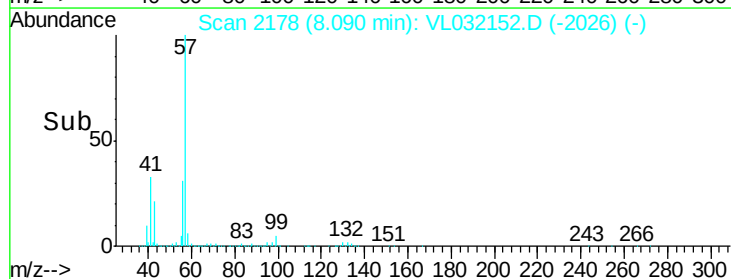
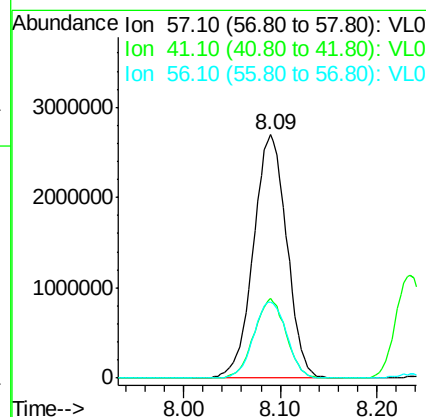
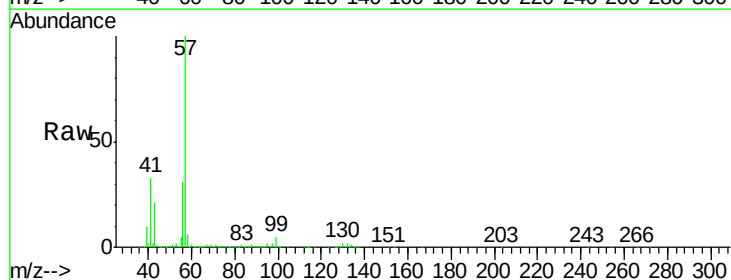
Manual Integrations  
APPROVED

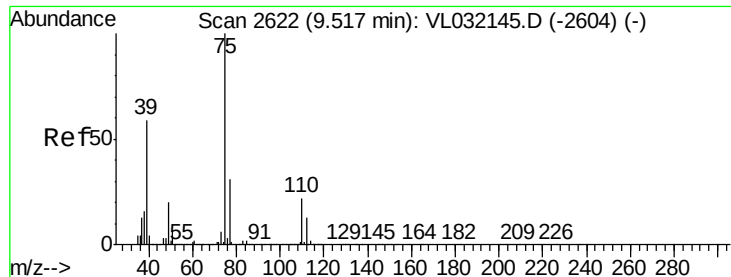
MMDadoda  
7/3/2018 5:16:30 PM



#44  
2,2,4-Trimethylpentane  
Concen: 8.84 ppbv  
RT: 8.09 min Scan# 2178  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion: 57 Resp: 6430377  
Ion Ratio Lower Upper  
57 100  
41 31.3 24.3 36.5  
56 31.2 25.1 37.7





#45

t-1,3-Dichloropropene

Concen: 9.92 ppbv

RT: 9.52 min Scan# 2622

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 75 Resp: 2117577

Ion Ratio Lower Upper

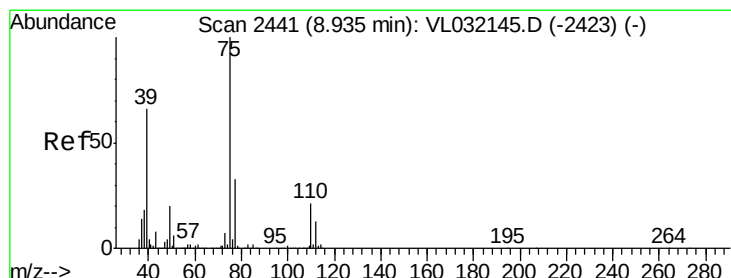
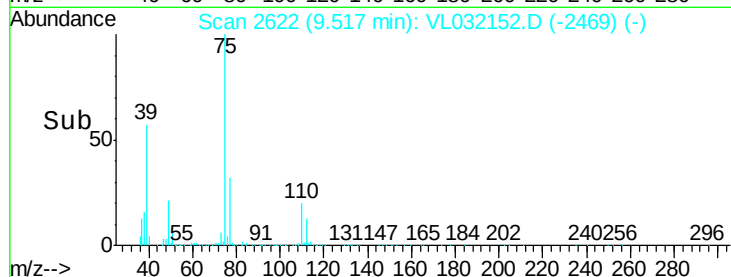
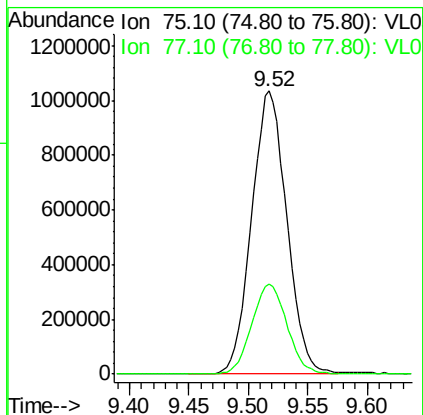
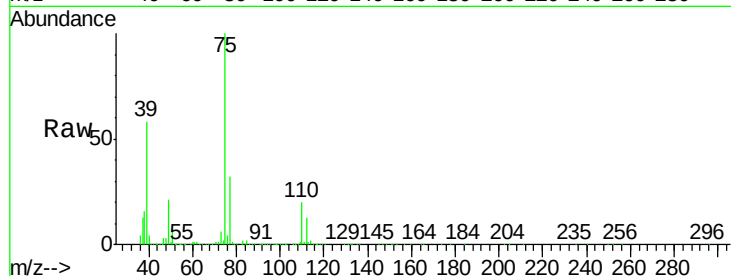
75 100

77 31.8 25.6 38.4

Manual Integrations  
APPROVED

MMDadoda

7/3/2018 5:16:30 PM



#46

cis-1,3-Dichloropropene

Concen: 9.67 ppbv

RT: 8.94 min Scan# 2441

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

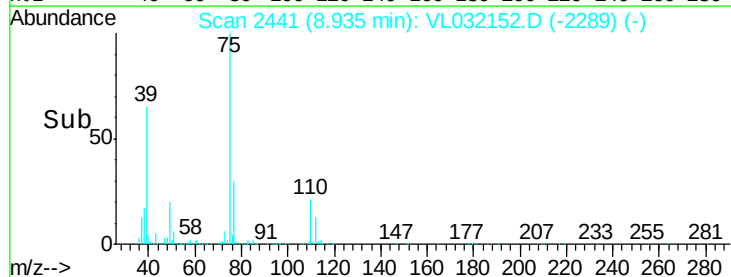
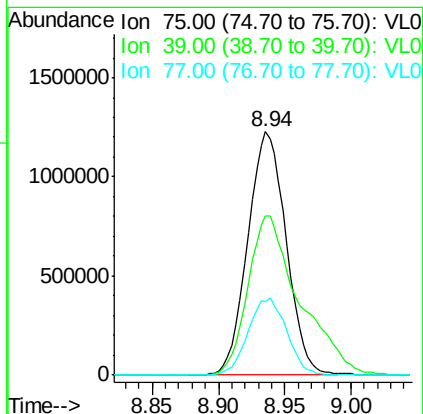
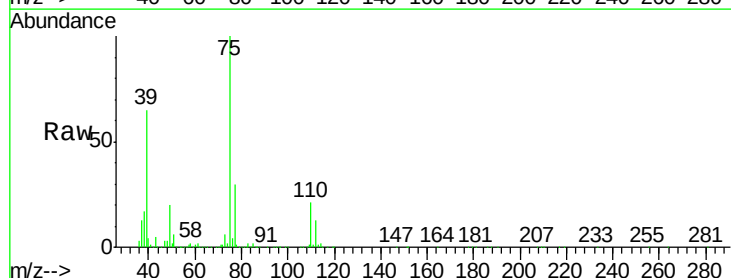
Tgt Ion: 75 Resp: 2466920

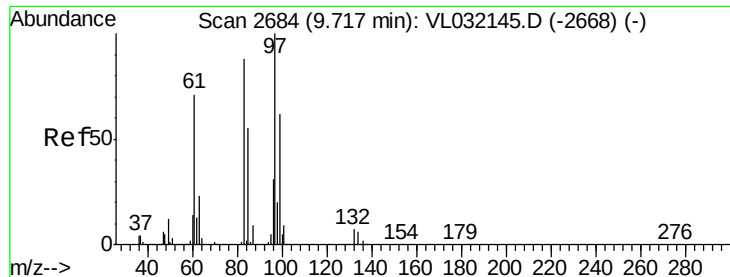
Ion Ratio Lower Upper

75 100

39 65.2 51.9 77.9

77 30.4 24.3 36.5





#47

1,1,2-Trichloroethane

Concen: 8.93 ppbv

RT: 9.72 min Scan# 2684

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 97 Resp: 1522443

Ion Ratio Lower Upper

97 100

83 90.7 71.0 106.4

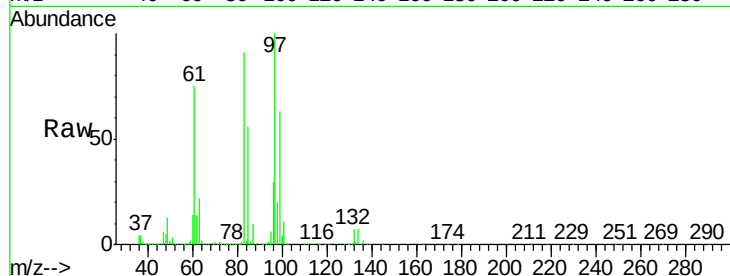
85 55.1 44.2 66.4

99 62.8 49.2 73.8

Manual Integrations  
APPROVED

MMDadoda

7/3/2018 5:16:30 PM

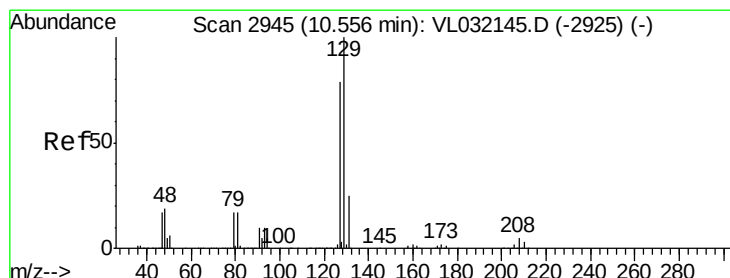
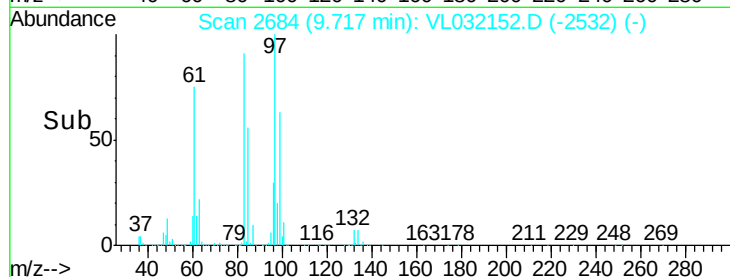
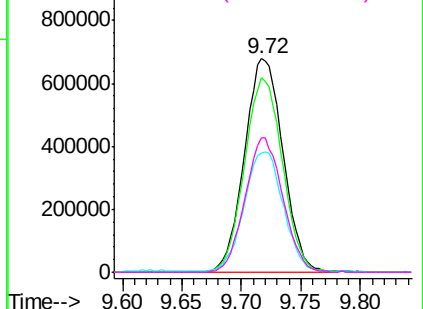


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48

Dibromochloromethane

Concen: 8.96 ppbv

RT: 10.56 min Scan# 2946

Delta R.T. -0.01 min

Lab File: VL032152.D

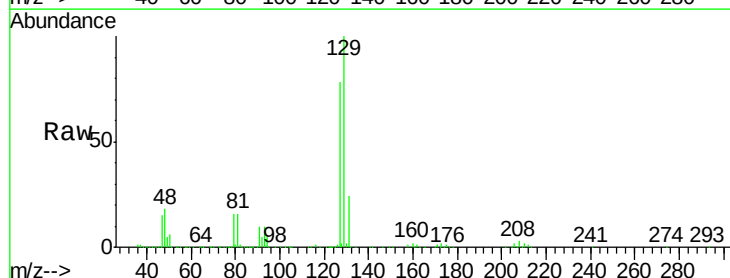
Acq: 29 Jun 2018 23:11

Tgt Ion: 129 Resp: 2365488

Ion Ratio Lower Upper

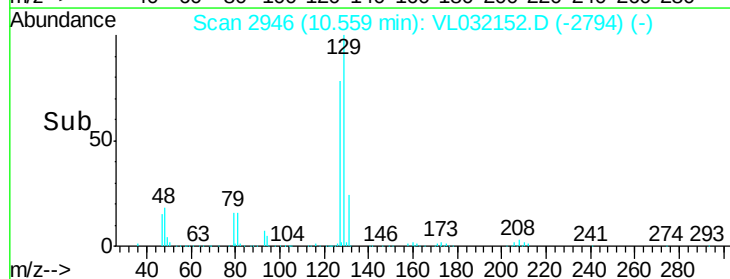
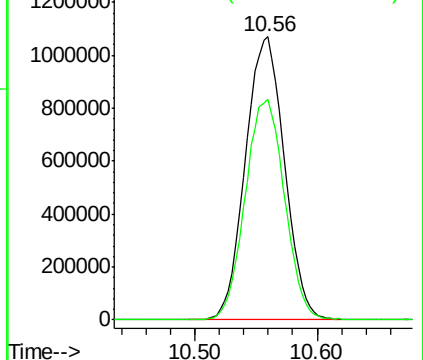
129 100

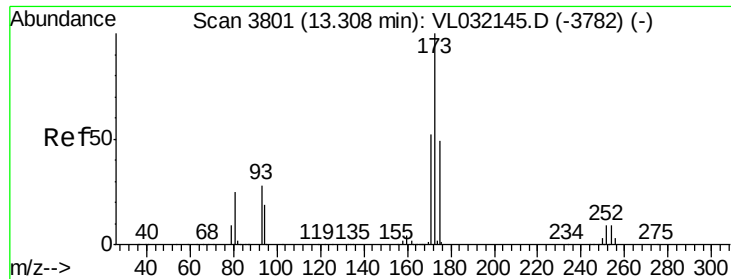
127 78.7 39.1 117.5



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





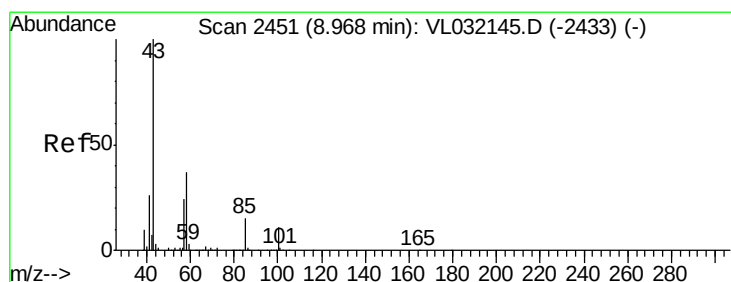
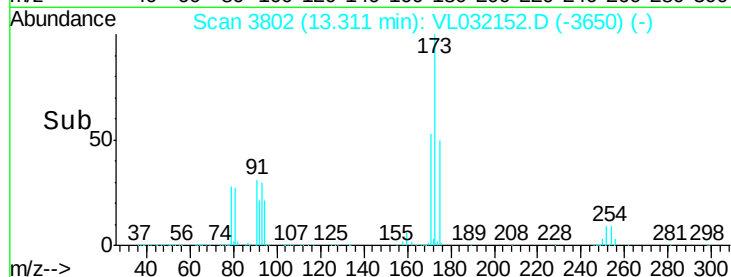
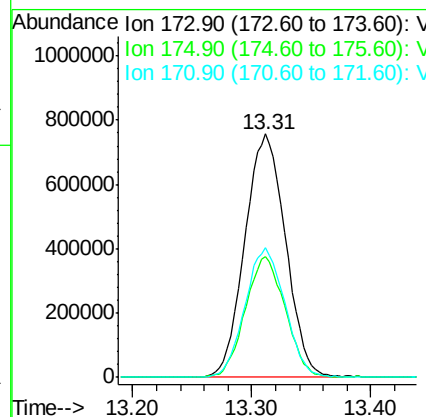
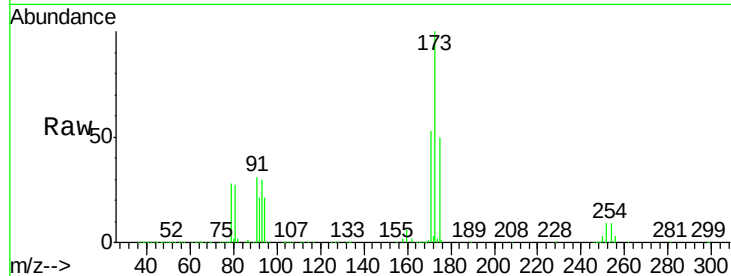
#49  
Bromoform  
Concen: 8.11 ppbv  
RT: 13.31 min Scan# 3802  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion:173 Resp: 1791459  
Ion Ratio Lower Upper  
173 100  
175 48.8 39.4 59.0  
171 52.2 41.8 62.8

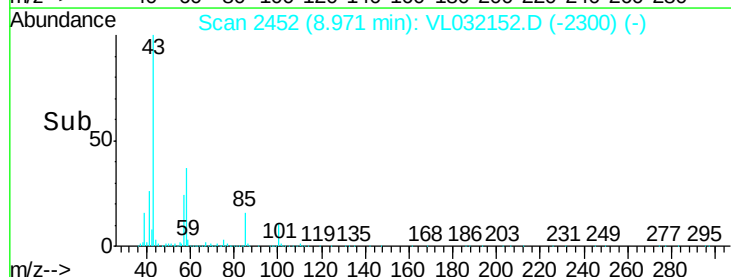
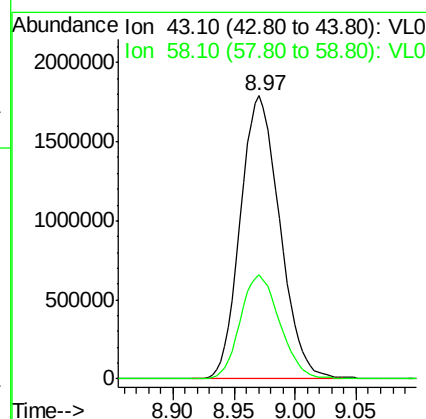
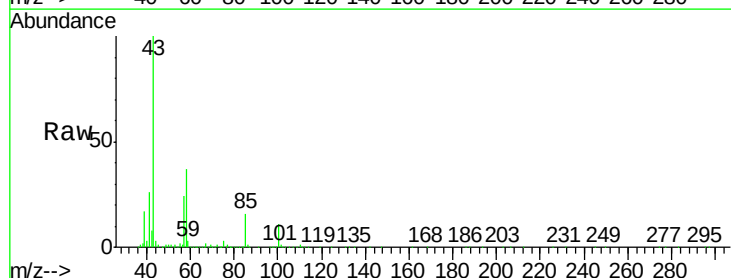
Manual Integrations  
APPROVED

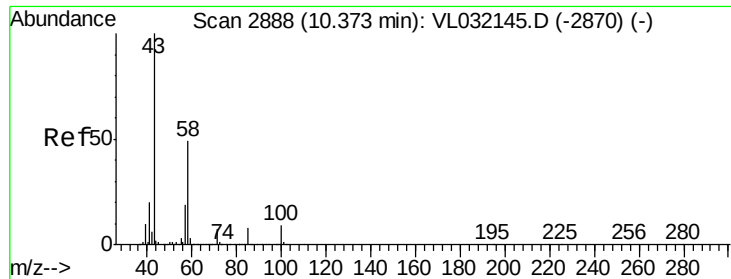
MMDadoda  
7/3/2018 5:16:30 PM



#50  
4-Methyl-2-Pentanone  
Concen: 8.98 ppbv  
RT: 8.97 min Scan# 2452  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion: 43 Resp: 4010582  
Ion Ratio Lower Upper  
43 100  
58 36.9 29.8 44.6





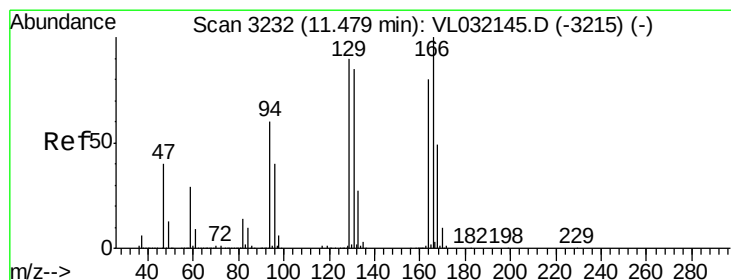
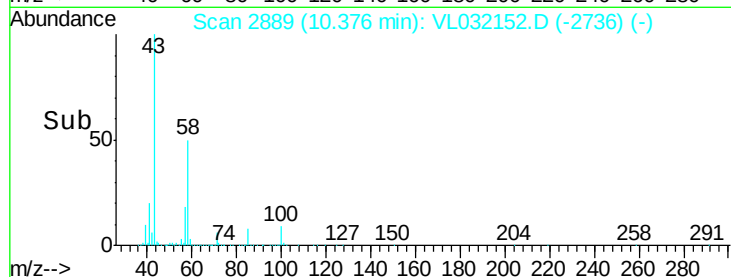
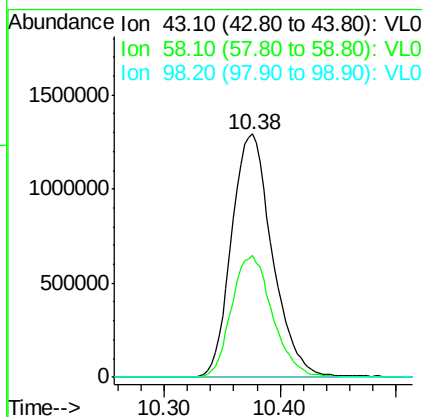
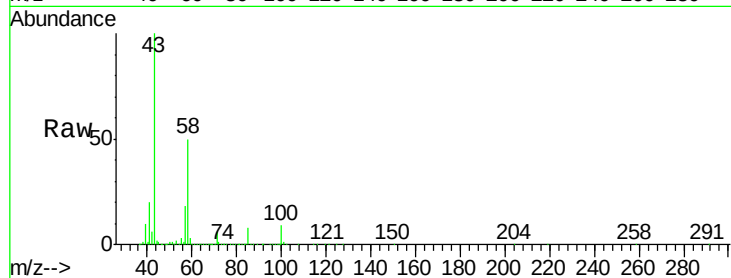
#51  
2-Hexanone  
Concen: 8.51 ppbv  
RT: 10.38 min Scan# 2889  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 50.7  | 40.6  | 60.8  |
| 98      | 0.1   | 0.1   | 0.1#  |

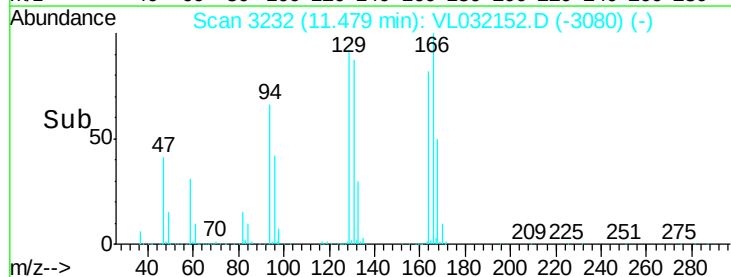
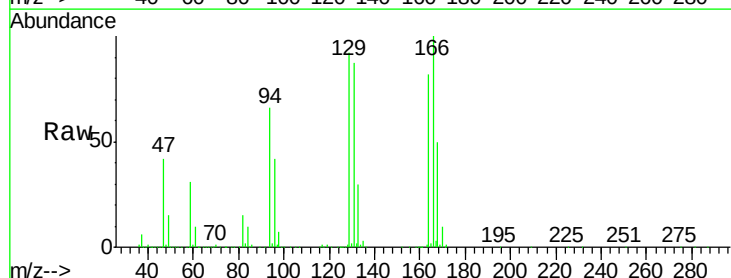
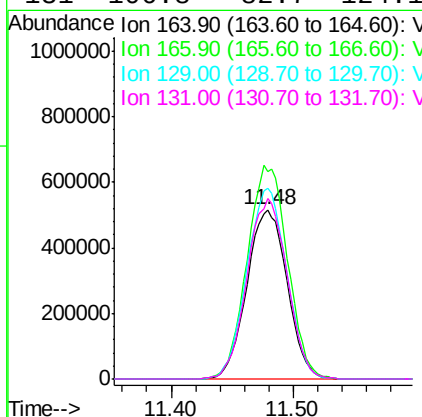
Manual Integrations  
APPROVED

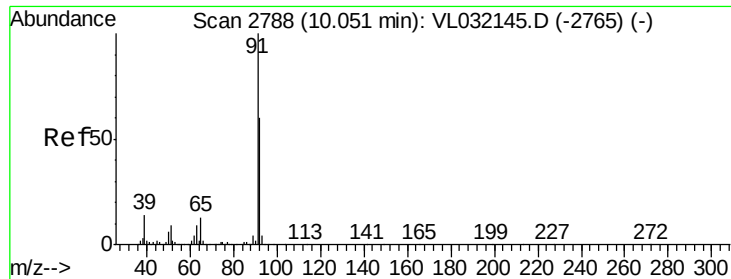
MMDadoda  
7/3/2018 5:16:30 PM



#52  
Tetrachloroethene  
Concen: 7.77 ppbv  
RT: 11.48 min Scan# 3232  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 166     | 122.4 | 100.6 | 151.0 |
| 129     | 112.5 | 84.0  | 126.0 |
| 131     | 106.8 | 82.7  | 124.1 |





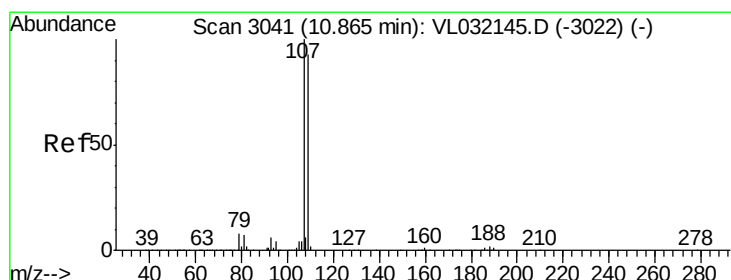
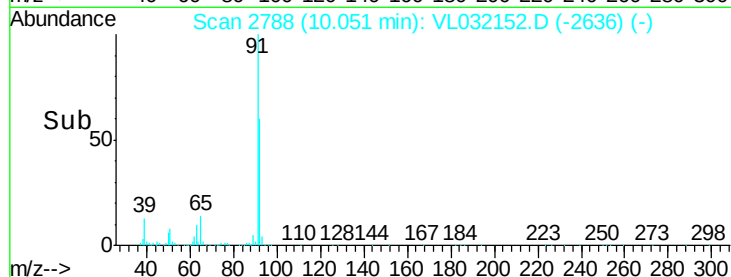
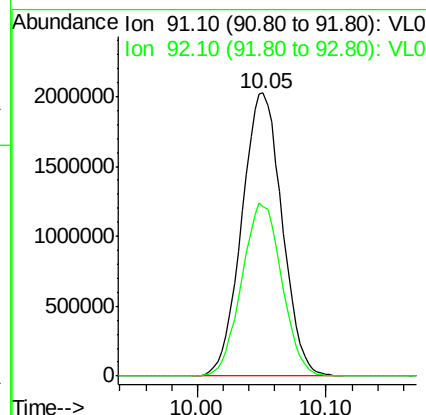
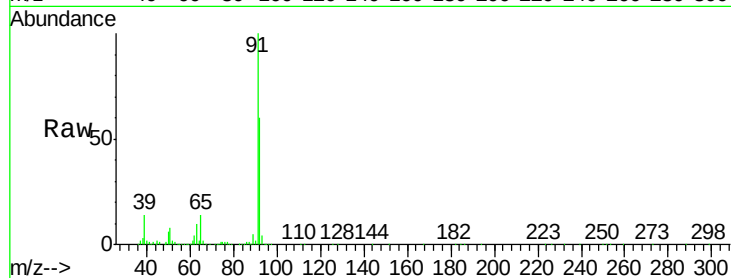
#53  
Toluene  
Concen: 8.75 ppbv  
RT: 10.05 min Scan# 2788  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion: 91 Resp: 4395986  
Ion Ratio Lower Upper  
91 100  
92 61.0 49.2 73.8

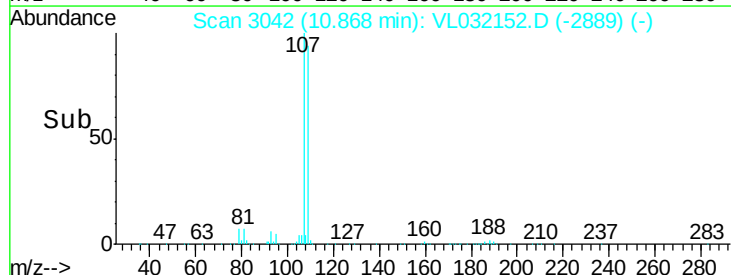
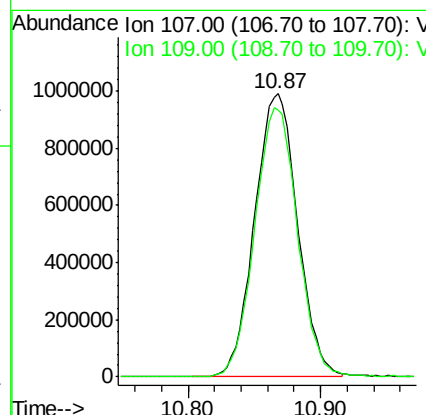
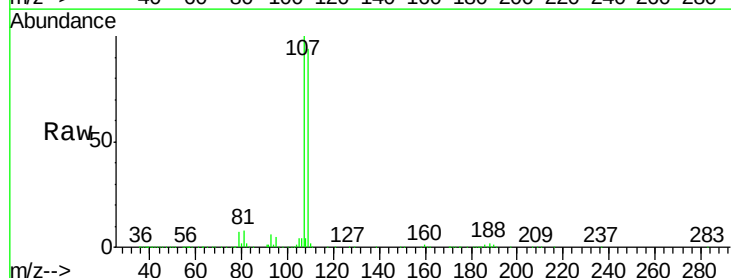
Manual Integrations  
APPROVED

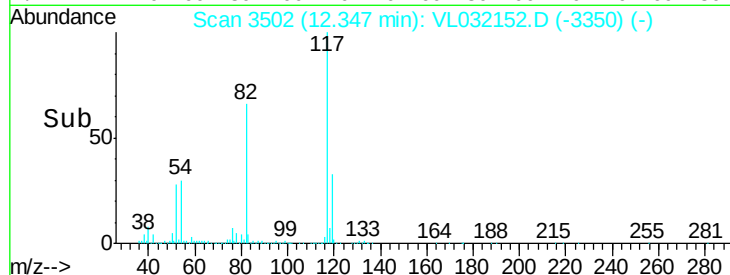
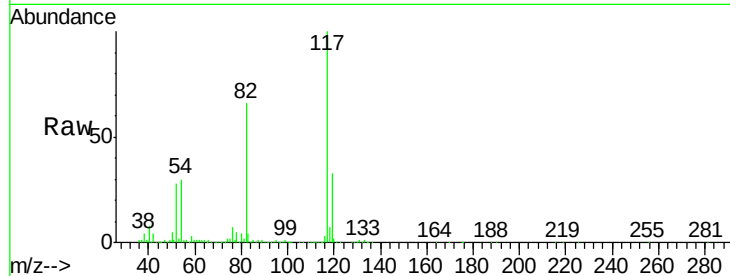
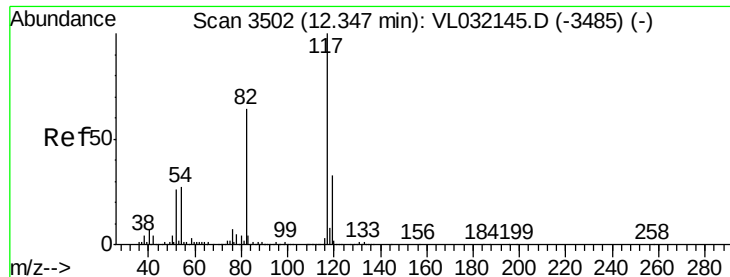
MMDadoda  
7/3/2018 5:16:30 PM



#54  
1,2-Dibromoethane  
Concen: 8.73 ppbv  
RT: 10.87 min Scan# 3042  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion: 107 Resp: 2235828  
Ion Ratio Lower Upper  
107 100  
109 94.2 75.0 112.4





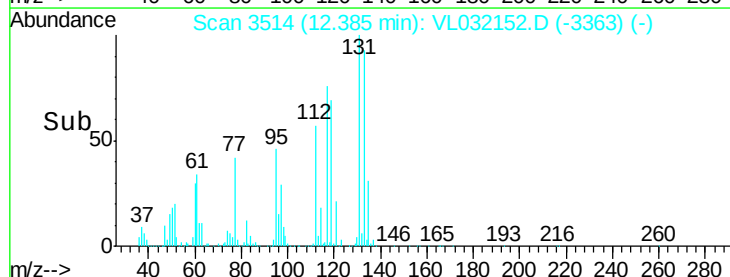
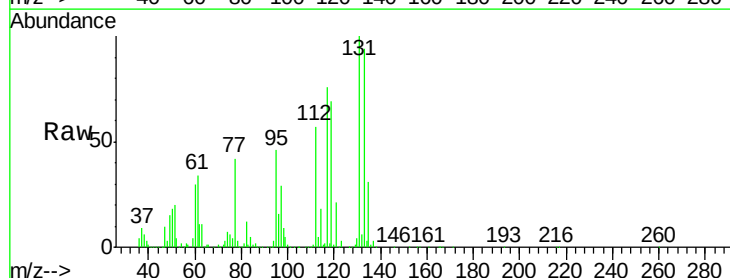
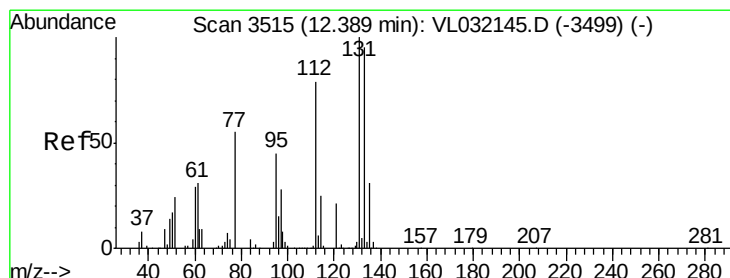
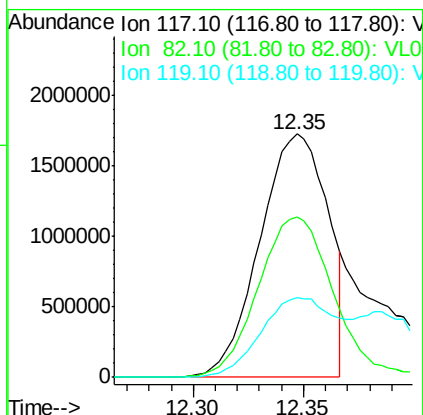
#55  
Chlorobenzene-d5  
Concen: 10.00 ppbv m  
RT: 12.35 min Scan# 3502  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion:117 Resp: 3697320  
Ion Ratio Lower Upper  
117 100  
82 73.5 47.8 71.8#  
119 62.4 43.3 64.9

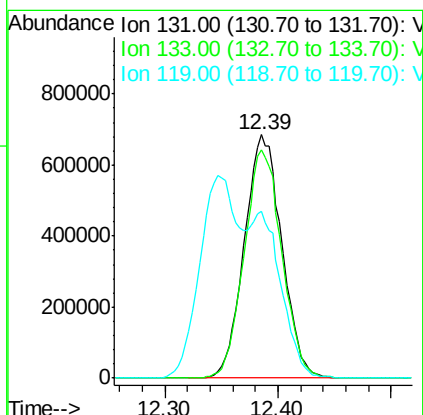
Manual Integrations  
APPROVED

MMDadoda  
7/3/2018 5:16:30 PM

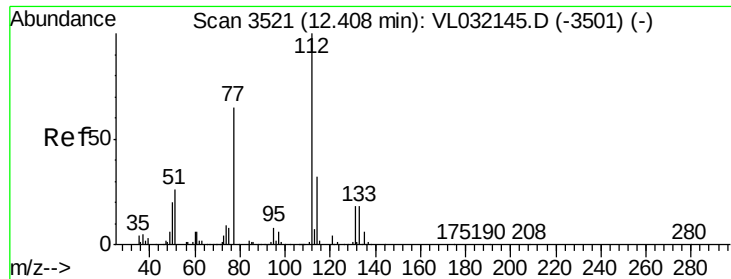


#56  
1,1,1,2-Tetrachloroethane  
Concen: 9.52 ppbv  
RT: 12.39 min Scan# 3514  
Delta R.T. -0.02 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion:131 Resp: 1570776  
Ion Ratio Lower Upper  
131 100  
133 94.5 75.5 113.3  
119 146.7 118.4 177.6







#57

Chlorobenzene

Concen: 9.47 ppbv

RT: 12.41 min Scan# 3521

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion:112 Resp: 3031180

Ion Ratio Lower Upper

112 100

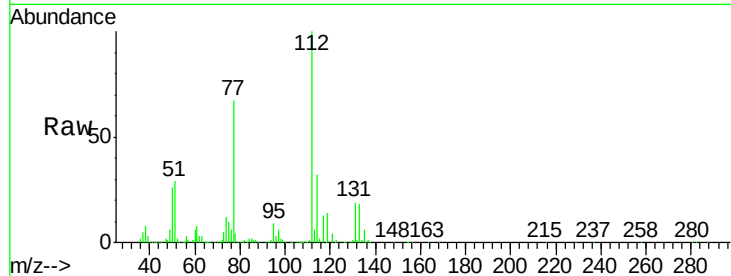
77 66.8 52.6 78.8

114 31.6 27.9 34.1

Manual Integrations  
APPROVED

MMDadoda

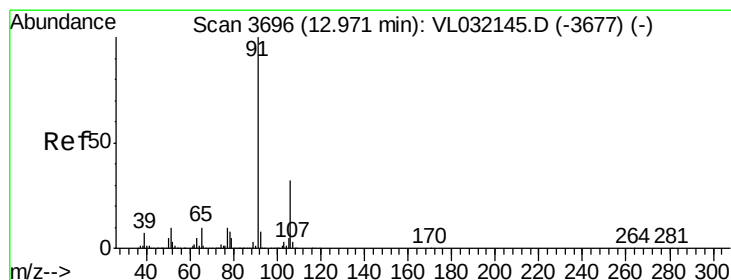
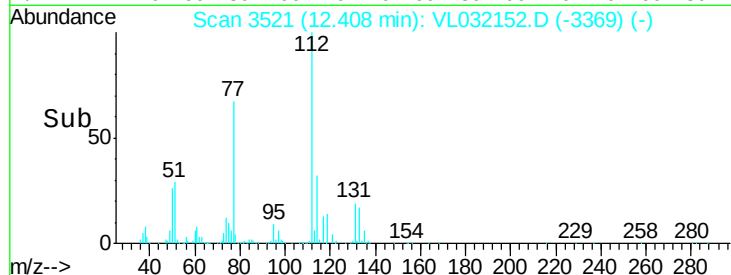
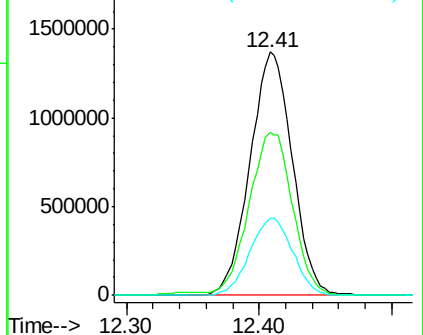
7/3/2018 5:16:30 PM



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 9.61 ppbv

RT: 12.97 min Scan# 3696

Delta R.T. -0.01 min

Lab File: VL032152.D

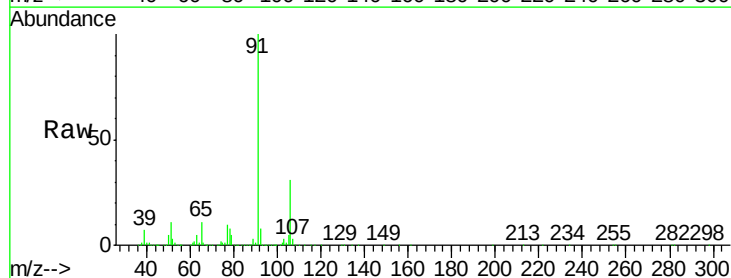
Acq: 29 Jun 2018 23:11

Tgt Ion: 91 Resp: 5724526

Ion Ratio Lower Upper

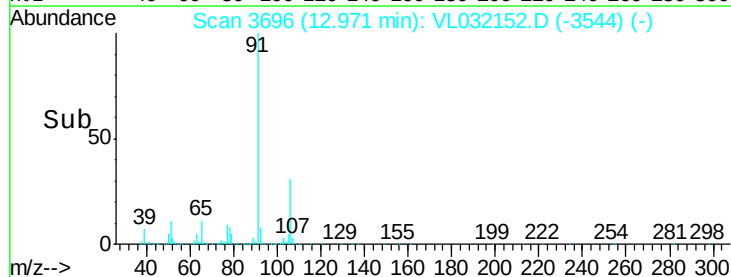
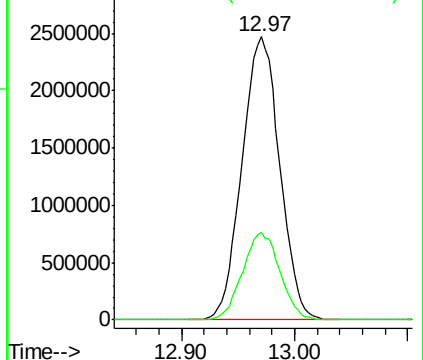
91 100

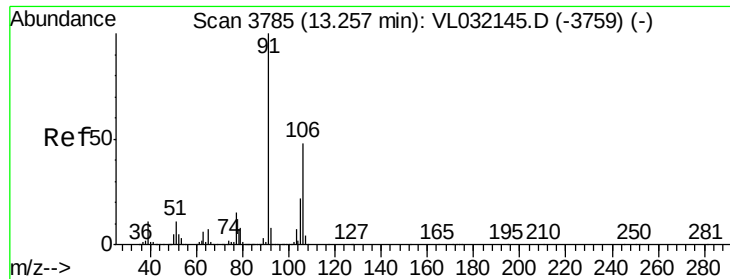
106 30.9 26.5 39.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





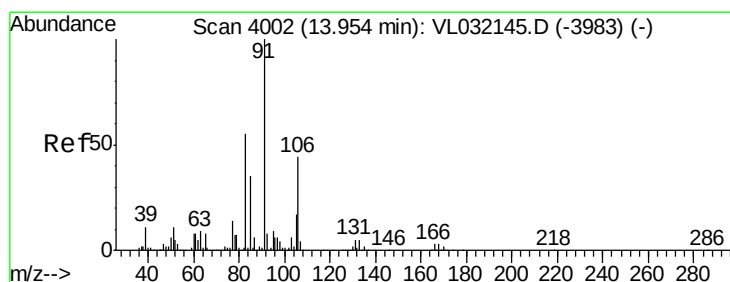
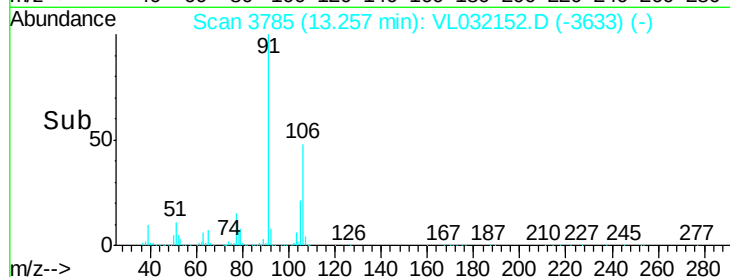
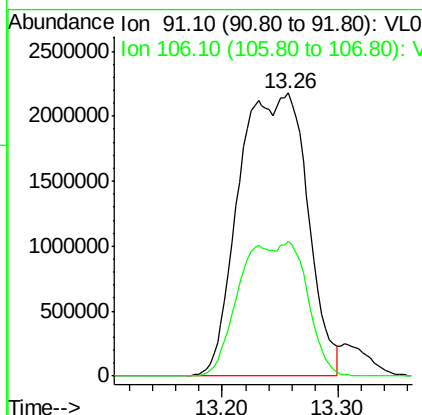
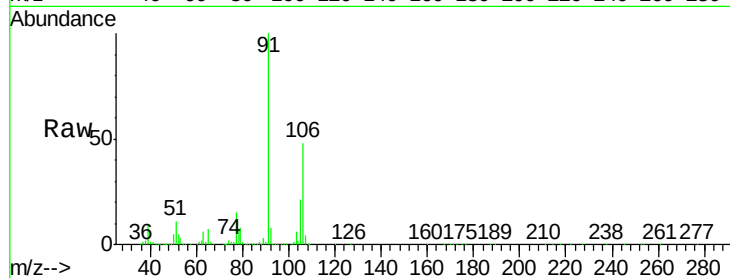
#59  
m/p-Xylene  
Concen: 18.67 ppbv m  
RT: 13.26 min Scan# 3785  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion: 91 Resp: 8918166  
Ion Ratio Lower Upper  
91 100  
106 46.8 38.6 58.0

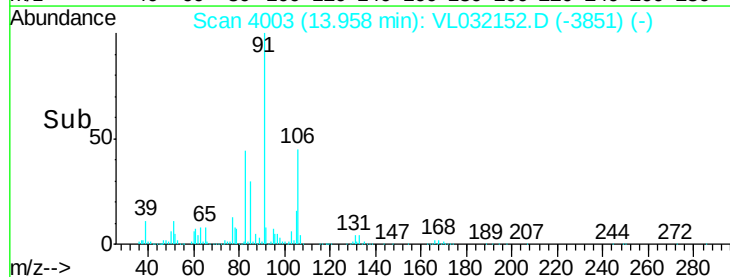
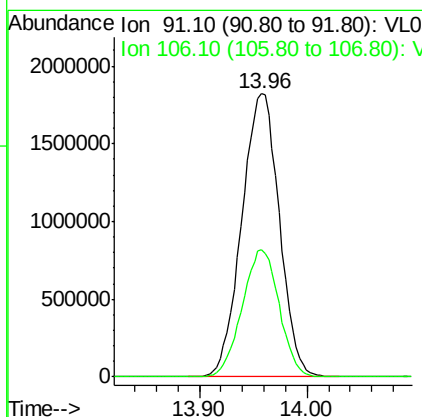
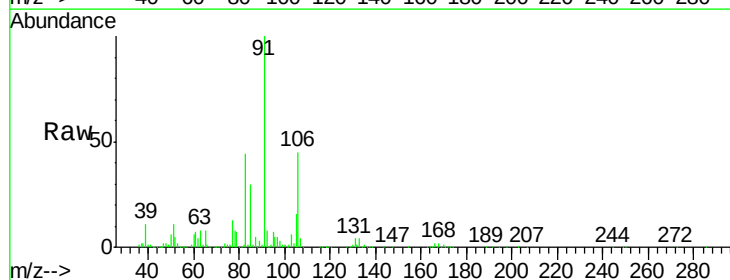
Manual Integrations  
APPROVED

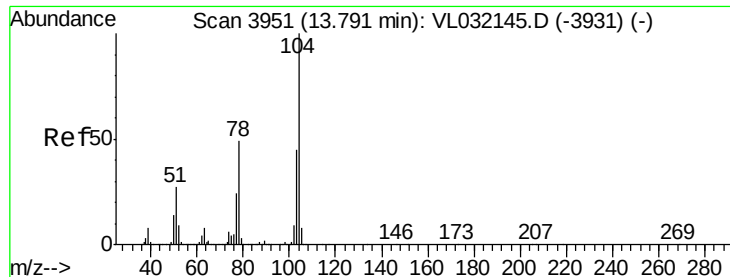
MMDadoda  
7/3/2018 5:16:30 PM



#60  
o-Xylene  
Concen: 9.27 ppbv  
RT: 13.96 min Scan# 4003  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion: 91 Resp: 4414208  
Ion Ratio Lower Upper  
91 100  
106 44.4 23.3 69.8





#61

Stvrene

Concen: 9.13 ppbv

RT: 13.79 min Scan# 3951

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion:104 Resp: 3566189

Ion Ratio Lower Upper

104 100

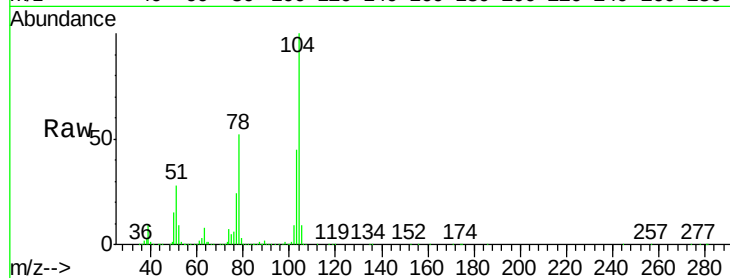
78 51.6 37.9 56.9

103 47.3 36.6 55.0

Manual Integrations  
APPROVED

MMDadoda

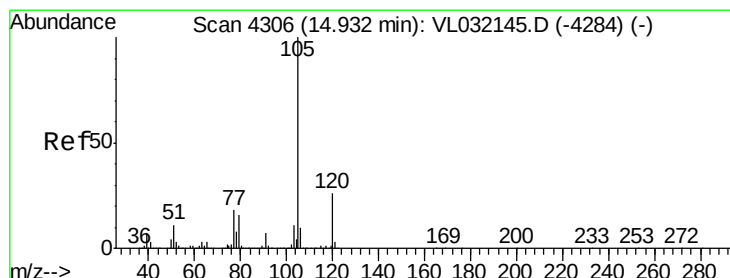
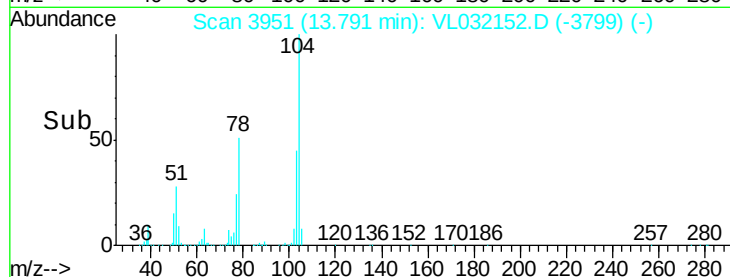
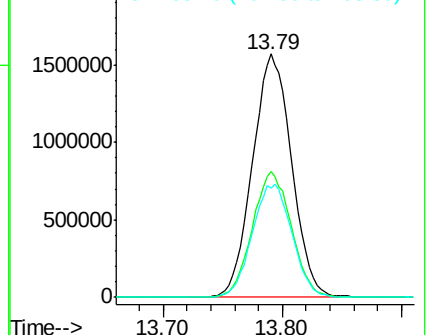
7/3/2018 5:16:30 PM



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 8.54 ppbv

RT: 14.93 min Scan# 4306

Delta R.T. -0.02 min

Lab File: VL032152.D

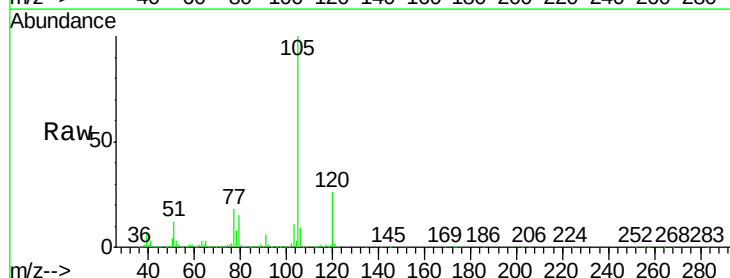
Acq: 29 Jun 2018 23:11

Tgt Ion:105 Resp: 6257366

Ion Ratio Lower Upper

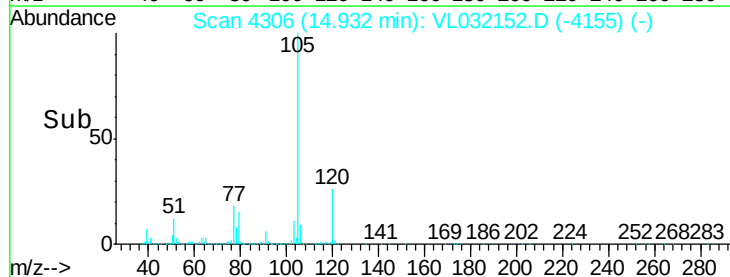
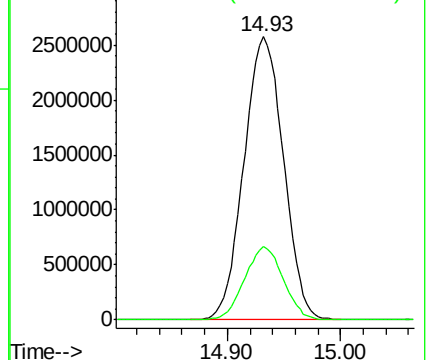
105 100

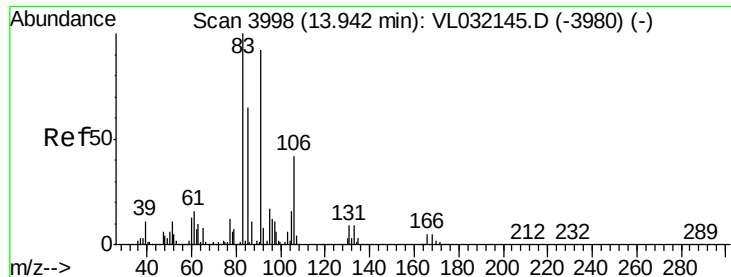
120 25.3 21.0 31.4



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 7.86 ppbv

RT: 13.94 min Scan# 3999

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 83 Resp: 2897737

Ion Ratio Lower Upper

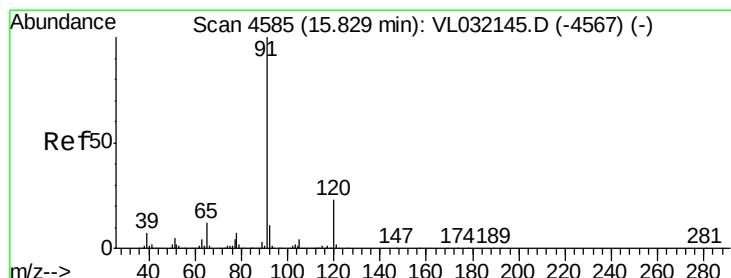
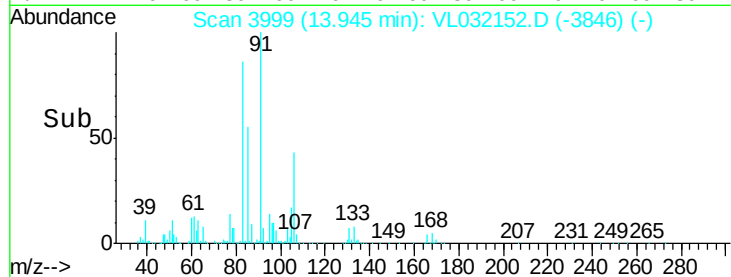
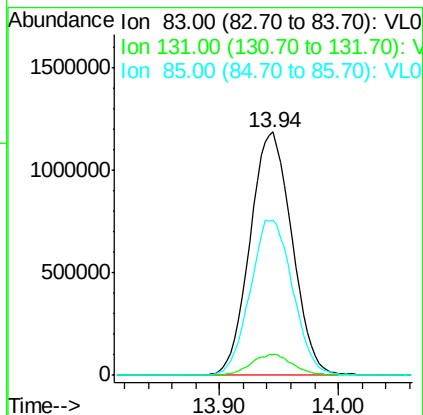
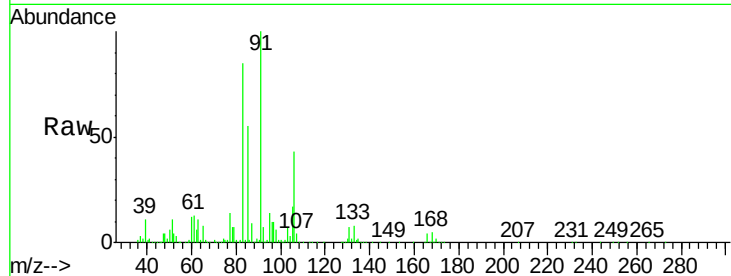
83 100

131 8.6 4.6 13.8

85 64.9 32.4 97.2

Manual Integrations  
APPROVED

MMDadoda  
7/3/2018 5:16:30 PM



#64

n-propylbenzene

Concen: 8.54 ppbv

RT: 15.83 min Scan# 4584

Delta R.T. -0.02 min

Lab File: VL032152.D

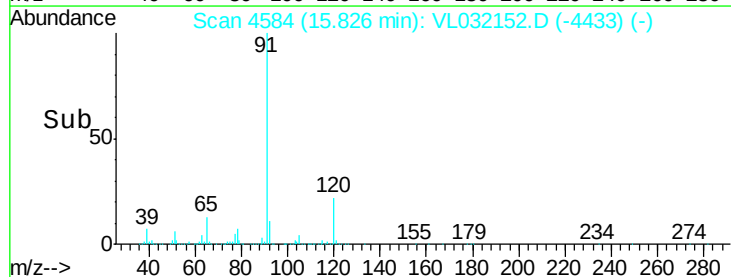
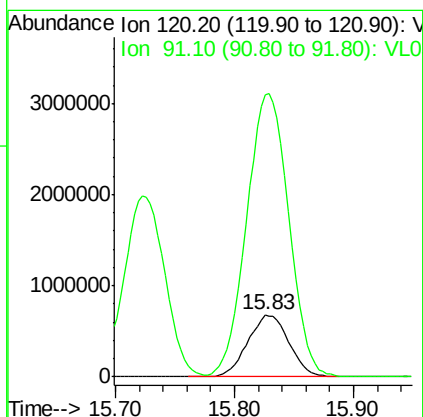
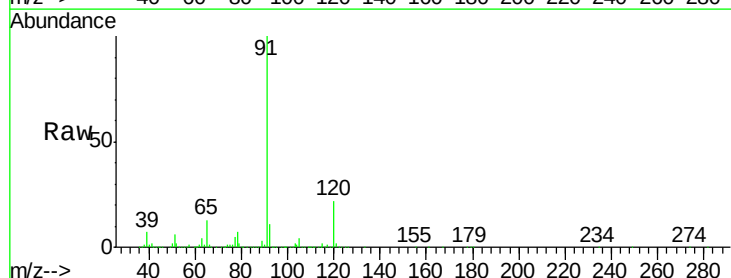
Acq: 29 Jun 2018 23:11

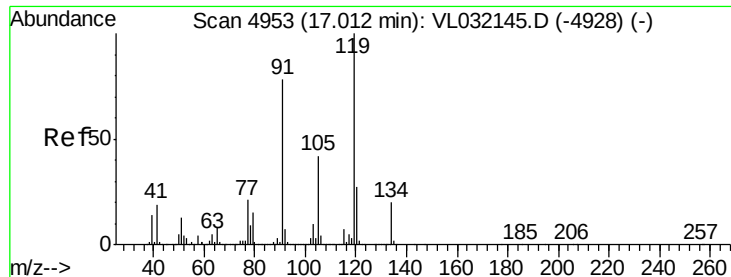
Tgt Ion: 120 Resp: 1619054

Ion Ratio Lower Upper

120 100

91 471.6 357.4 536.0





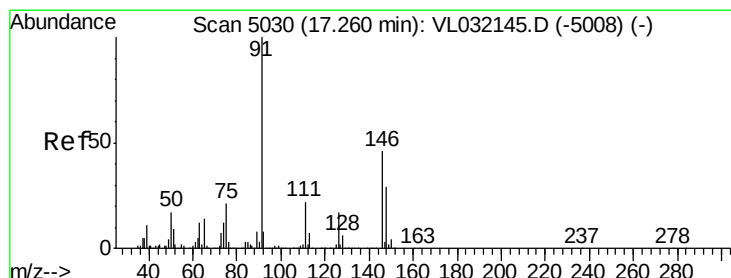
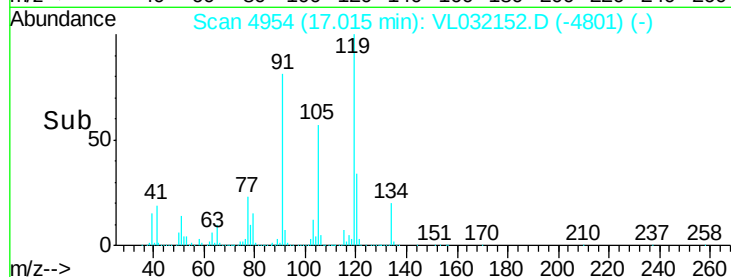
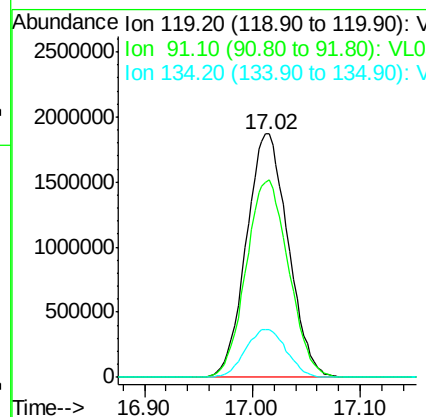
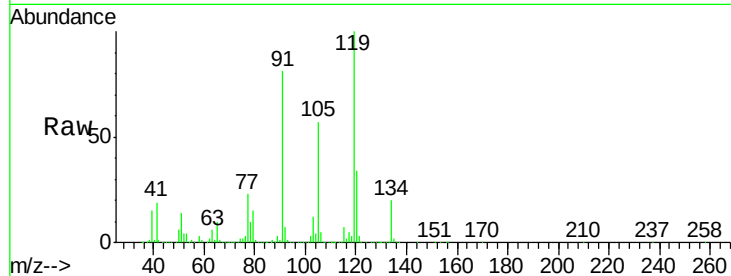
#65  
tert-Butylbenzene  
Concen: 7.80 ppbv  
RT: 17.02 min Scan# 4954  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
ICVVL062918

Tot Ion: 119 Resp: 5022046  
Ion Ratio Lower Upper  
119 100  
91 82.5 62.2 93.2  
134 19.4 16.2 24.2

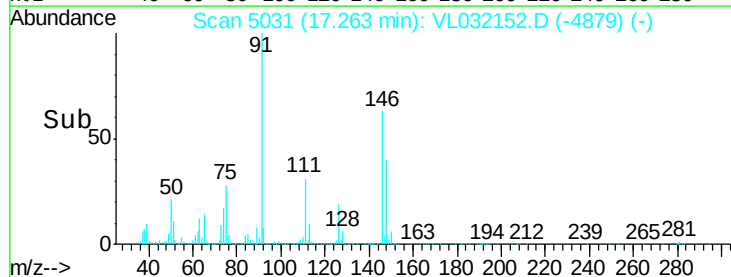
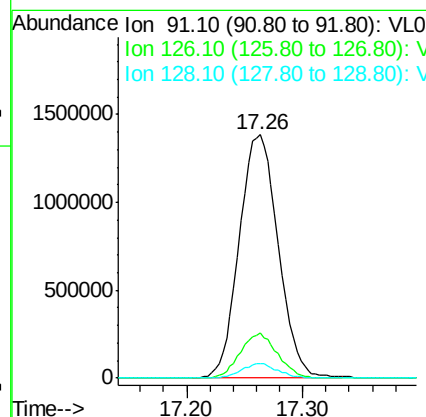
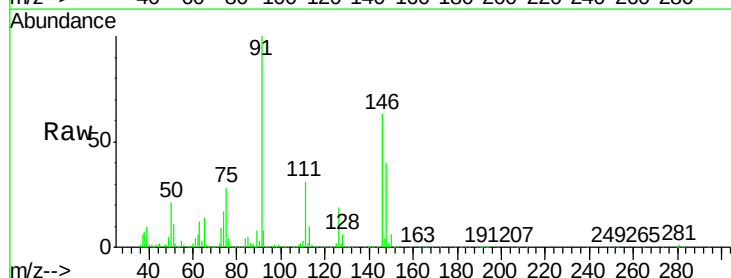
Manual Integrations  
APPROVED

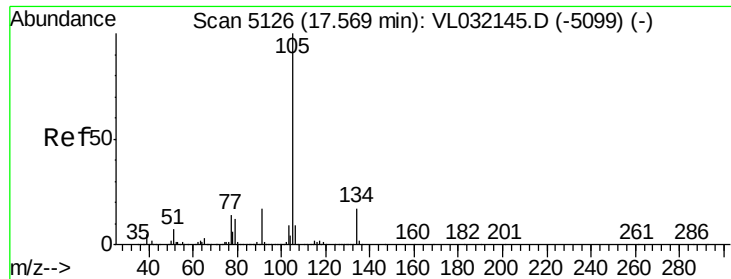
MMDadoda  
7/3/2018 5:16:30 PM



#66  
Benzyl Chloride  
Concen: 8.15 ppbv  
RT: 17.26 min Scan# 5031  
Delta R.T. -0.01 min  
Lab File: VL032152.D  
Acq: 29 Jun 2018 23:11

Tgt Ion: 91 Resp: 3237908  
Ion Ratio Lower Upper  
91 100  
126 17.8 15.7 23.5  
128 5.6 5.2 7.8





#67

sec-Butylbenzene

Concen: 7.72 ppbv

RT: 17.57 min Scan# 5125

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion:105 Resp: 7279650

Ion Ratio Lower Upper

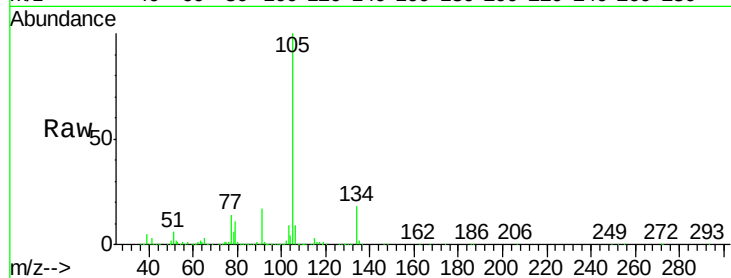
105 100

134 17.4 14.7 22.1

Manual Integrations  
APPROVED

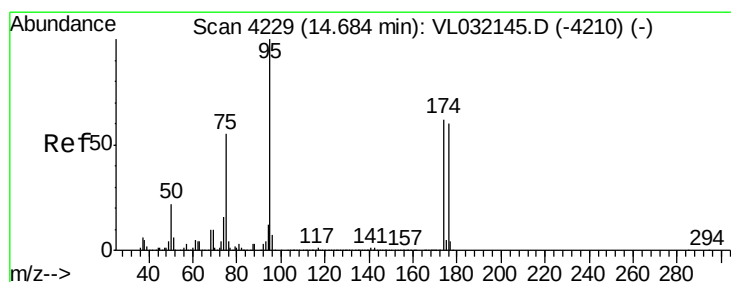
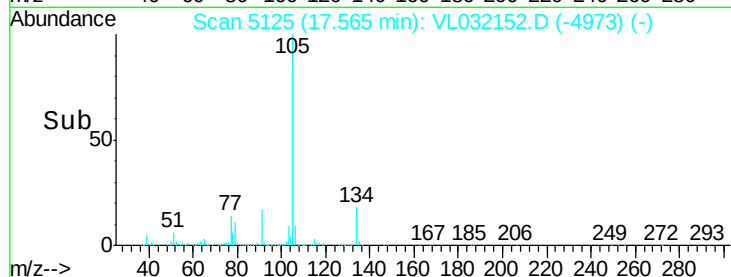
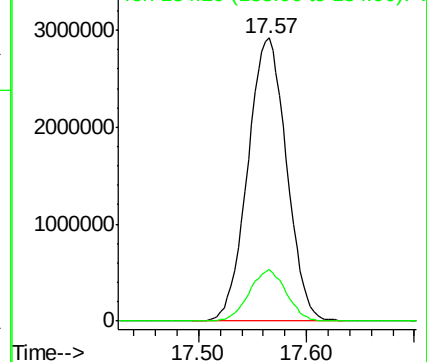
MMDadoda

7/3/2018 5:16:30 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.83 ppbv

RT: 14.68 min Scan# 4228

Delta R.T. -0.02 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

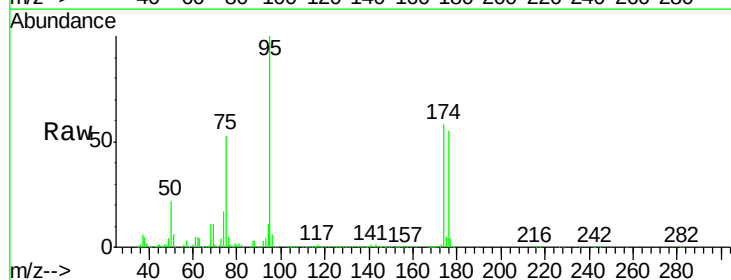
Tgt Ion: 95 Resp: 3060160

Ion Ratio Lower Upper

95 100

174 58.4 52.1 78.1

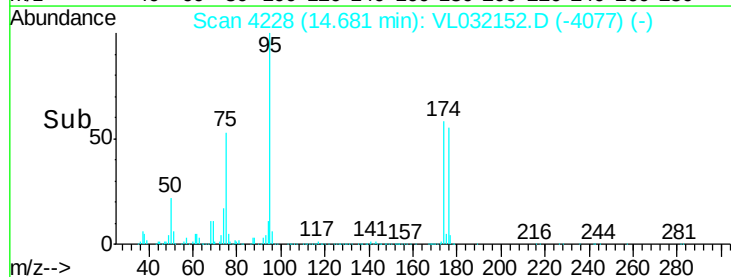
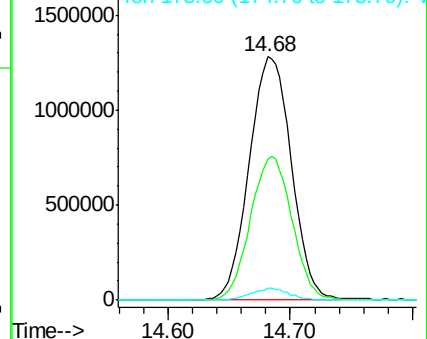
175 4.4 4.0 6.0

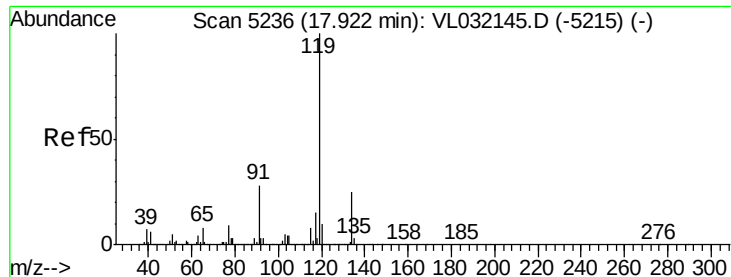


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





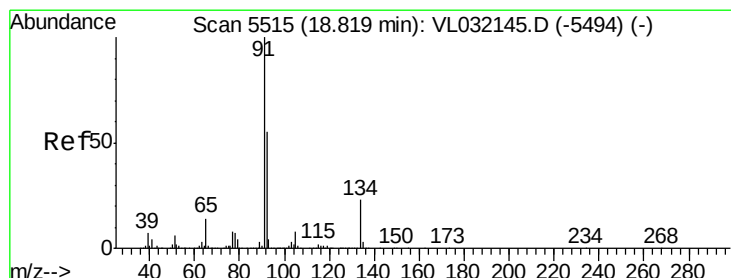
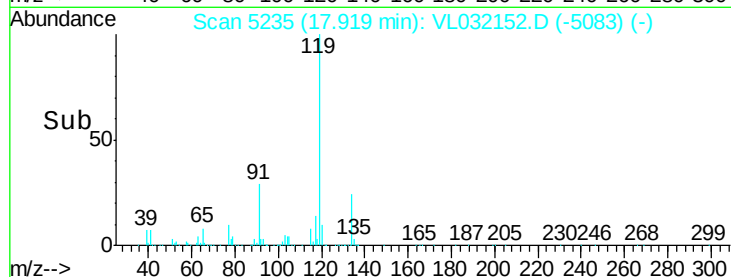
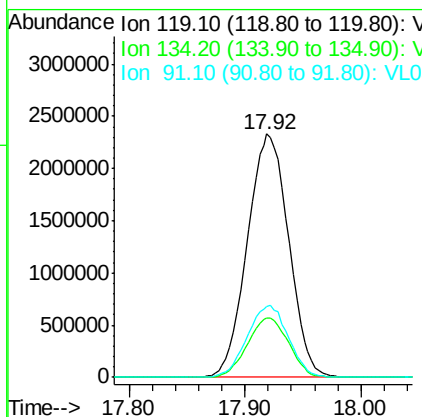
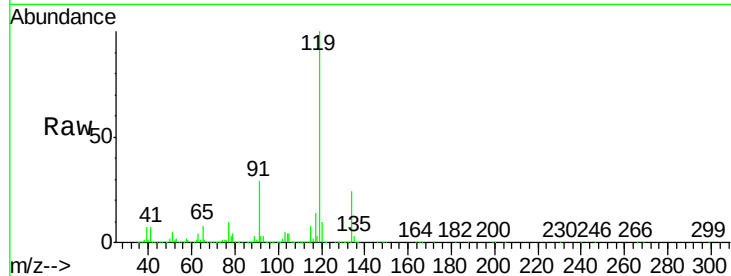
#69  
 p-Isopropyltoluene  
 Concen: 7.63 ppbv  
 RT: 17.92 min Scan# 5235  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 24.5  | 20.7  | 31.1  |
| 91      | 29.4  | 21.8  | 32.8  |

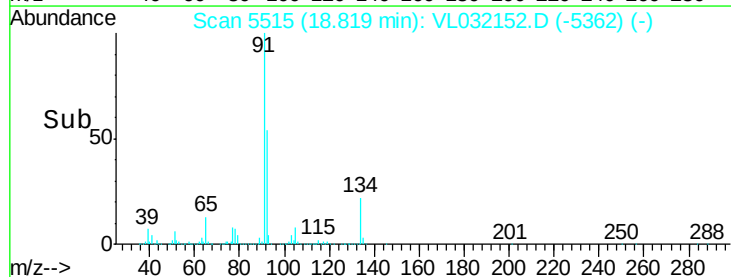
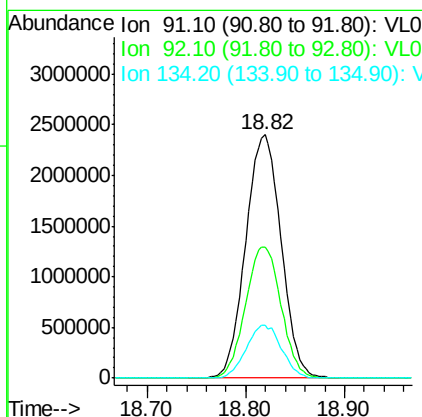
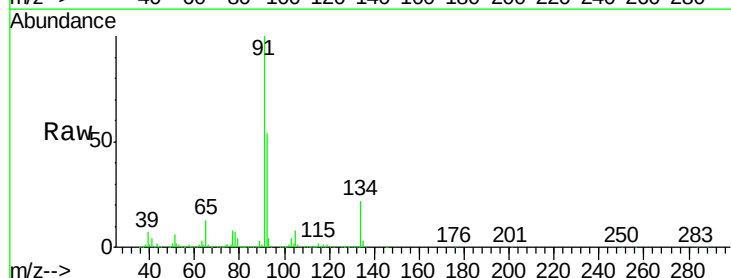
Manual Integrations  
 APPROVED

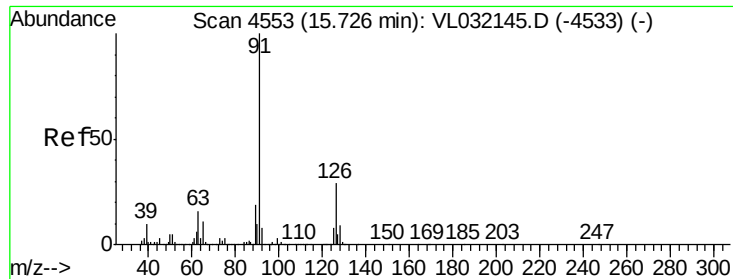
MMDadoda  
 7/3/2018 5:16:30 PM



#70  
 n-Butylbenzene  
 Concen: 7.51 ppbv  
 RT: 18.82 min Scan# 5515  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 54.3  | 43.7  | 65.5  |
| 134     | 21.8  | 18.9  | 28.3  |





#71

2-Chlorotoluene

Concen: 8.54 ppbv

RT: 15.72 min Scan# 4552

Delta R.T. -0.02 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion: 91 Resp: 4814944

Ion Ratio Lower Upper

91 100

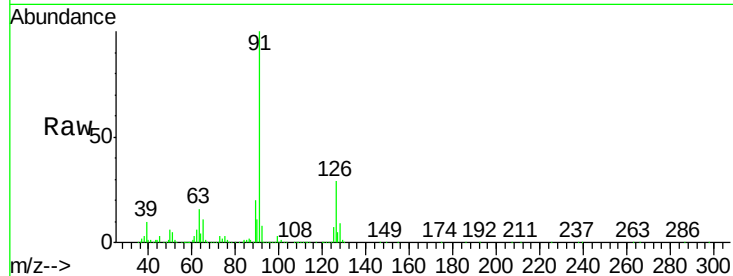
126 29.4 12.8 51.0

Manual Integrations

APPROVED

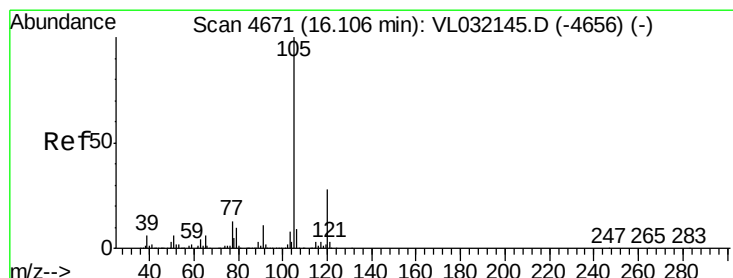
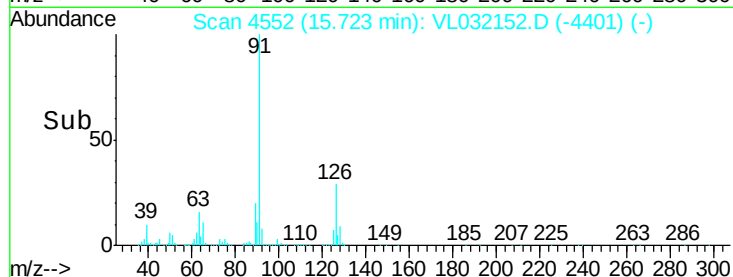
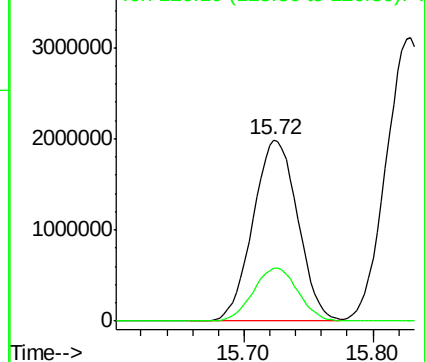
MMDadoda

7/3/2018 5:16:30 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 8.53 ppbv

RT: 16.11 min Scan# 4671

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Tgt Ion:105 Resp: 5250806

Ion Ratio Lower Upper

105 100

120 29.2 24.3 36.5

91 12.4 9.4 14.0

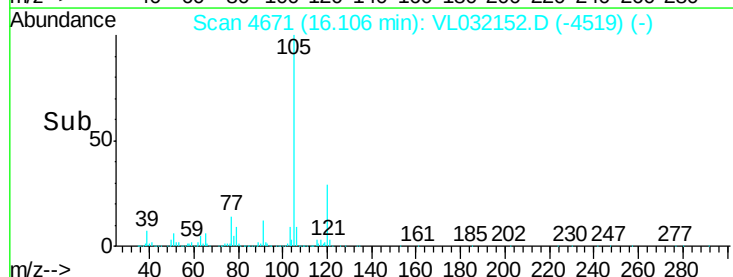
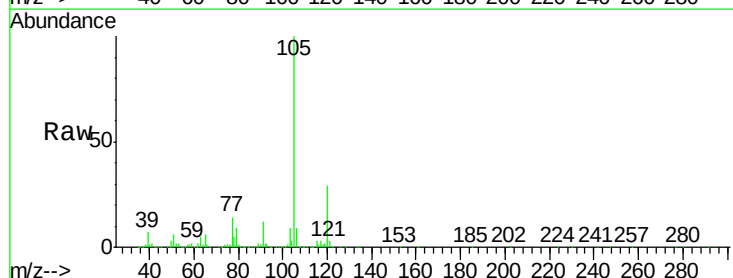
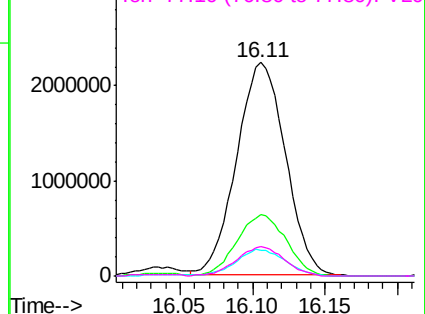
77 13.4 10.2 15.2

Abundance Ion 105.10 (104.80 to 105.80): V

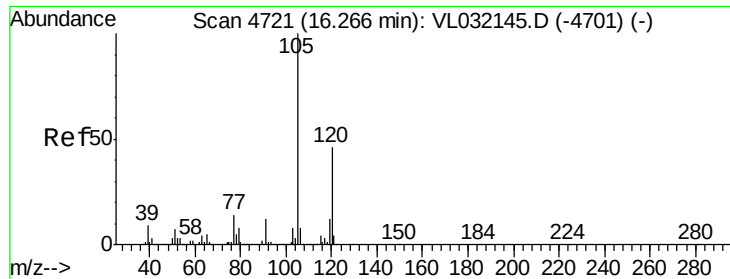
Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0







#73

1,3,5-Trimethylbenzene

Concen: 8.48 ppbv

RT: 16.26 min Scan# 4720

Delta R.T. -0.02 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion:105 Resp: 4913988

Ion Ratio Lower Upper

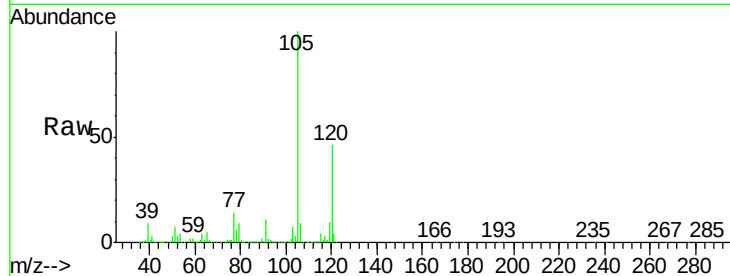
105 100

120 45.9 38.6 57.8

Manual Integrations  
APPROVED

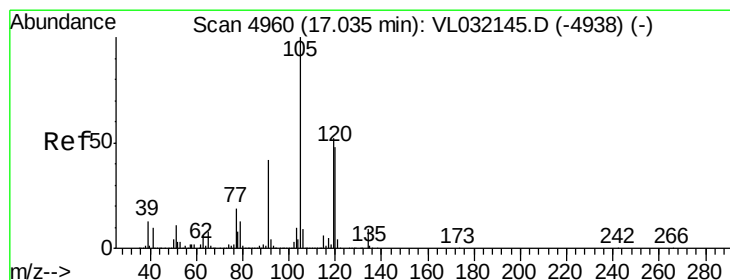
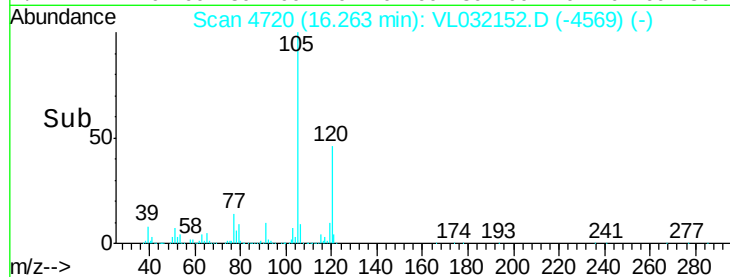
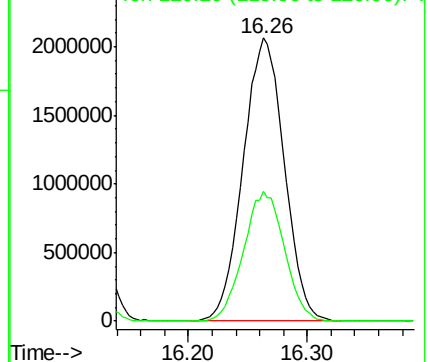
MMDadoda

7/3/2018 5:16:30 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 7.96 ppbv

RT: 17.03 min Scan# 4959

Delta R.T. -0.02 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Tgt Ion:105 Resp: 4656778

Ion Ratio Lower Upper

105 100

120 46.5 38.8 58.2

91 48.9 33.6 50.4

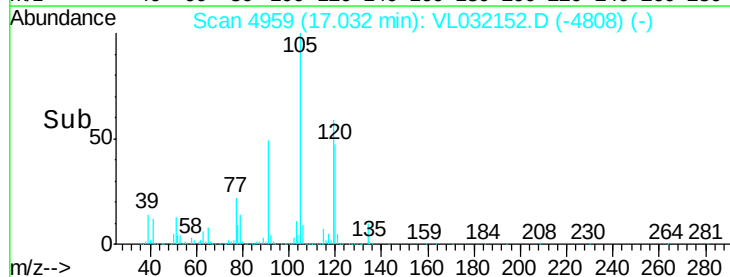
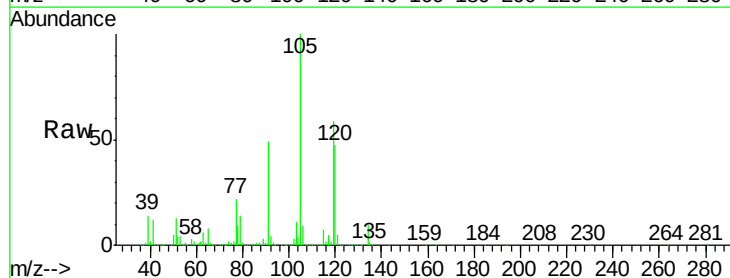
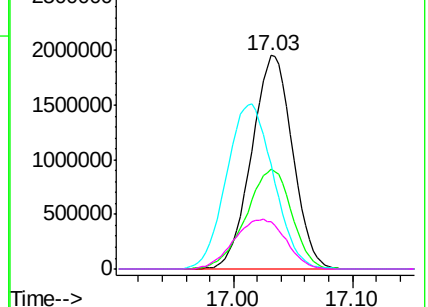
77 22.2 16.0 24.0

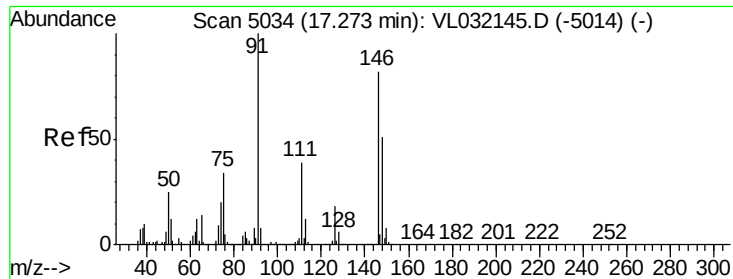
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





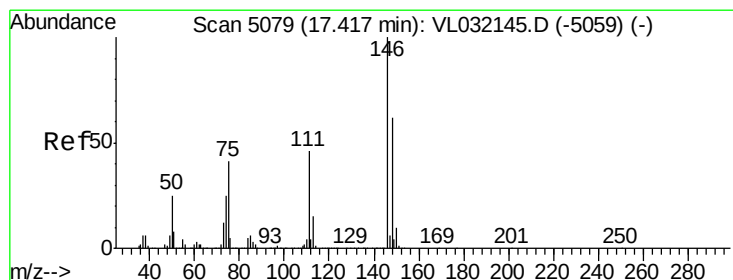
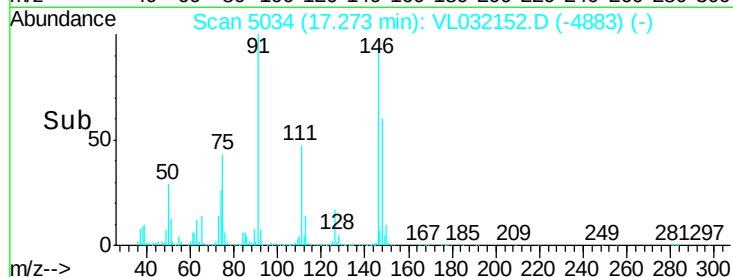
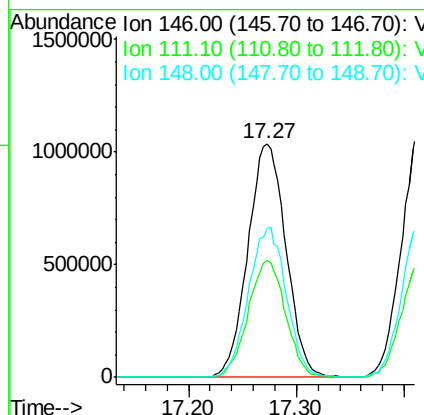
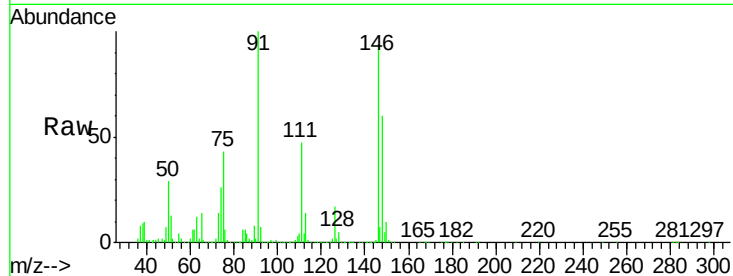
#75  
 1,3-Dichlorobenzene  
 Concen: 7.64 ppbv  
 RT: 17.27 min Scan# 5034  
 Delta R.T. -0.02 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 49.2  | 22.9  | 68.8  |
| 148     | 64.0  | 31.7  | 95.1  |

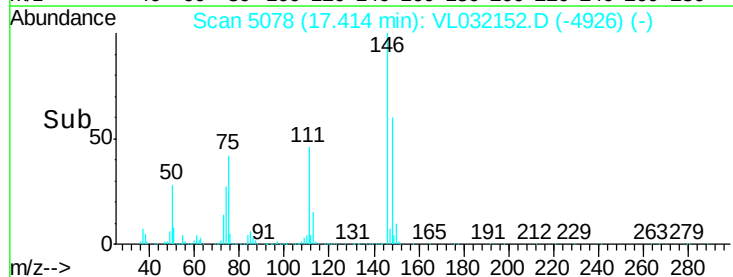
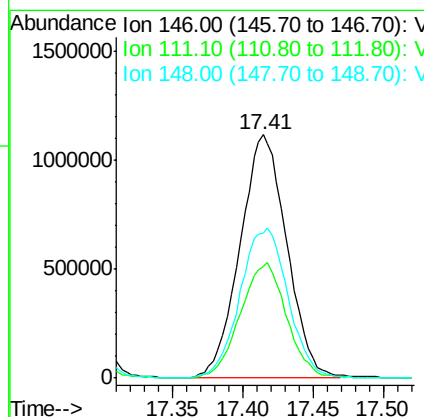
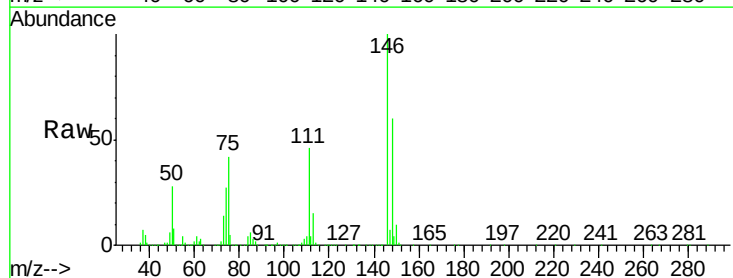
Manual Integrations  
 APPROVED

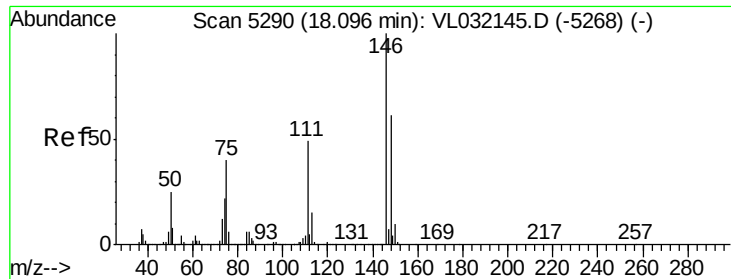
MMDadoda  
 7/3/2018 5:16:30 PM



#76  
 1,4-Dichlorobenzene  
 Concen: 7.58 ppbv  
 RT: 17.41 min Scan# 5078  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 47.5  | 21.9  | 65.8  |
| 148     | 64.3  | 32.1  | 96.5  |





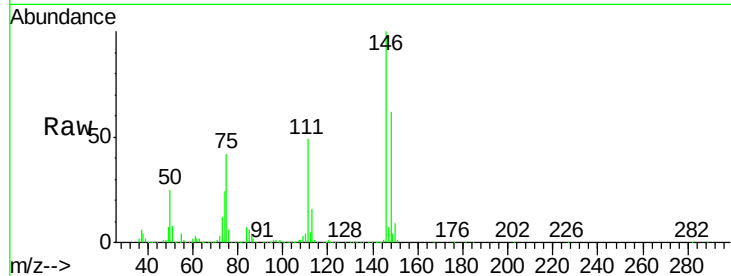
#77  
 1,2-Dichlorobenzene  
 Concen: 7.26 ppbv  
 RT: 18.10 min Scan# 5290  
 Delta R.T. -0.01 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

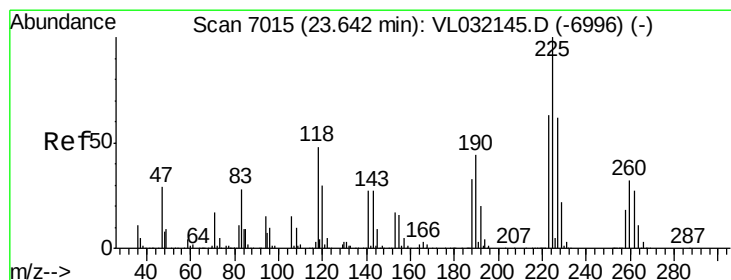
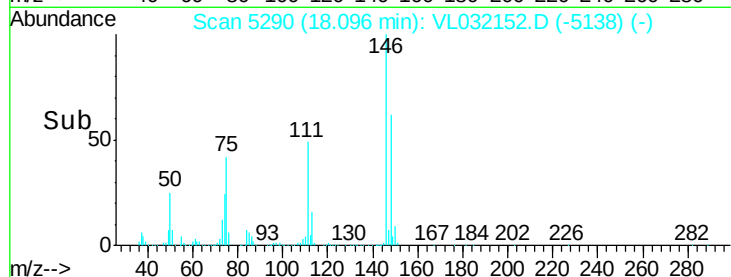
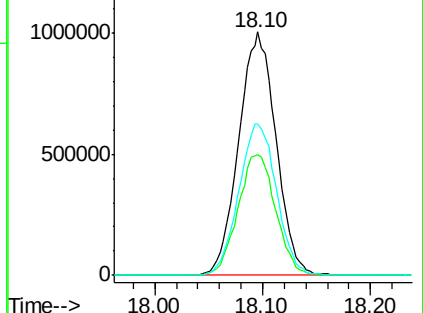
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 50.4  | 23.4  | 70.3  |
| 148     | 63.2  | 32.0  | 96.0  |

Manual Integrations  
 APPROVED

MMDadoda  
 7/3/2018 5:16:30 PM

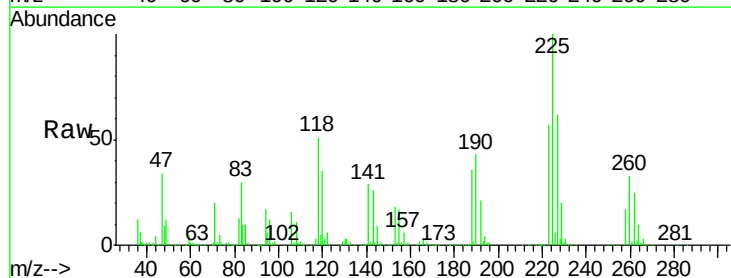


Abundance Ion 146.00 (145.70 to 146.70): V  
 Ion 111.10 (110.80 to 111.80): V  
 Ion 148.00 (147.70 to 148.70): V

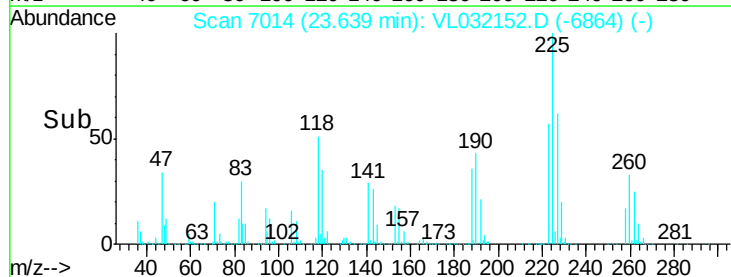
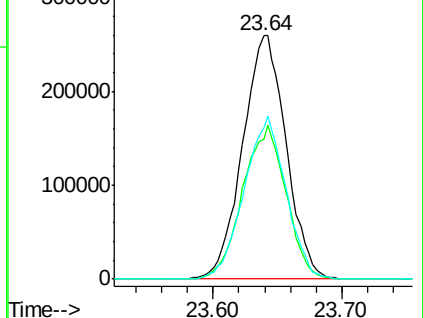


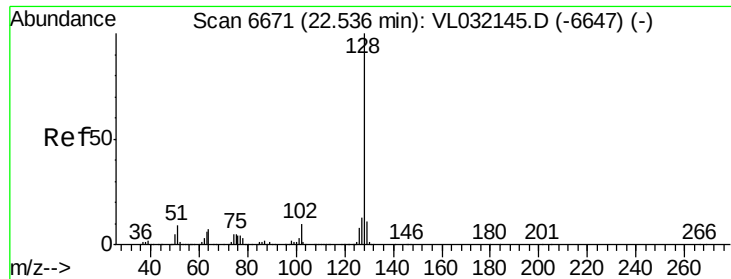
#78  
 Hexachloro-1,3-Butadiene  
 Concen: 5.25 ppbv  
 RT: 23.64 min Scan# 7014  
 Delta R.T. -0.02 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 62.8  | 51.0  | 76.4  |
| 227     | 64.5  | 51.4  | 77.0  |



Abundance Ion 224.90 (224.60 to 225.60): V  
 Ion 222.90 (222.60 to 223.60): V  
 Ion 226.90 (226.60 to 227.60): V





#79

Naphthalene

Concen: 6.63 ppbv

RT: 22.53 min Scan# 6669

Delta R.T. -0.02 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

ICVVL062918

Tot Ion:128 Resp: 3525924

Ion Ratio Lower Upper

128 100

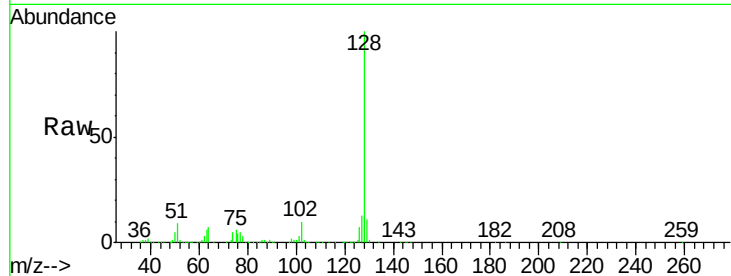
127 12.7 10.5 15.7

129 11.0 9.0 13.6

Manual Integrations  
APPROVED

MMDadoda

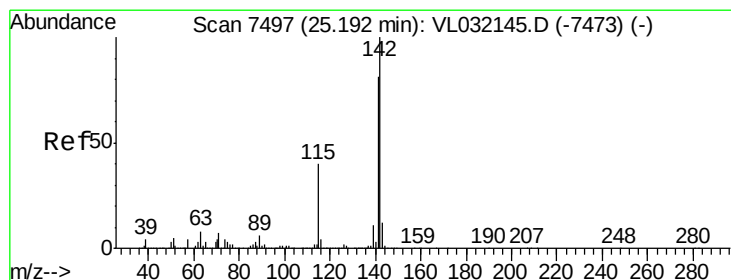
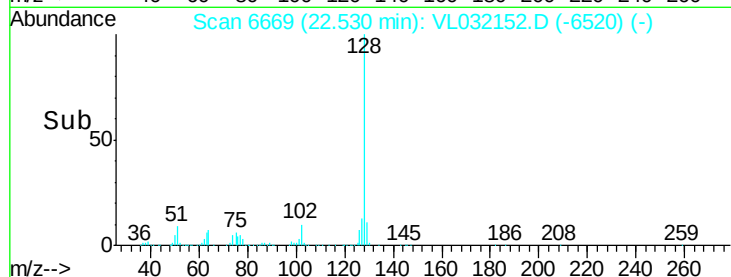
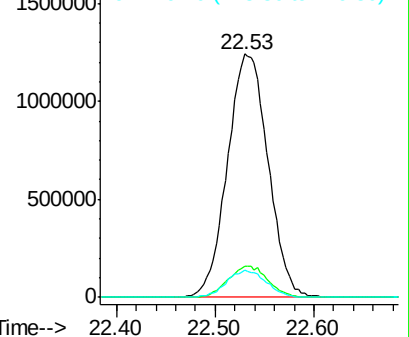
7/3/2018 5:16:30 PM



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: 11.98 ppbv

RT: 25.19 min Scan# 7497

Delta R.T. -0.01 min

Lab File: VL032152.D

Acq: 29 Jun 2018 23:11

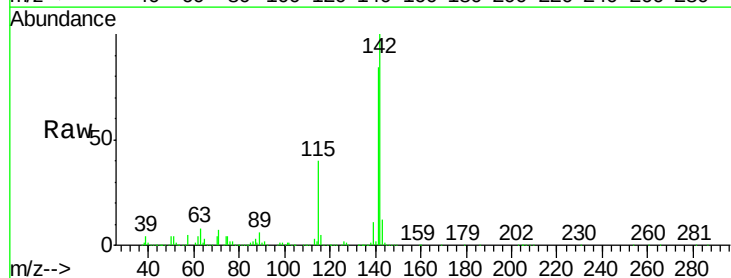
Tgt Ion:142 Resp: 2299861

Ion Ratio Lower Upper

142 100

141 83.9 65.8 98.6

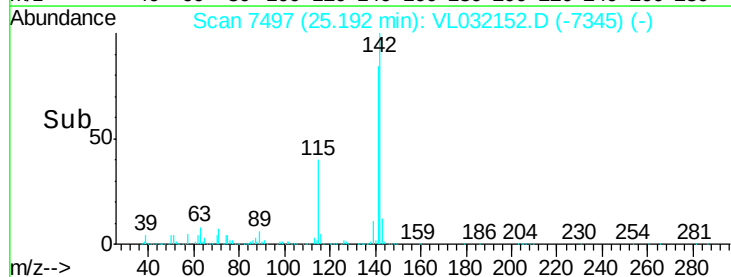
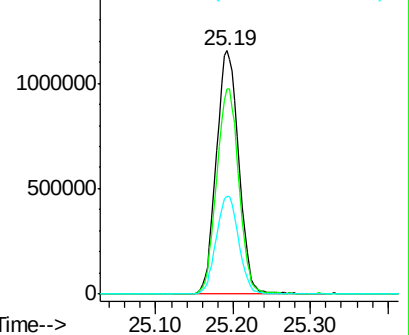
115 40.3 29.4 44.0

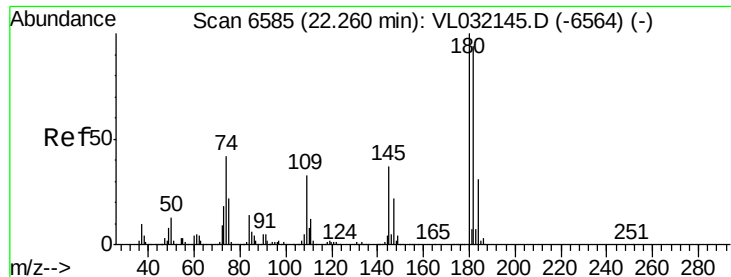


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V





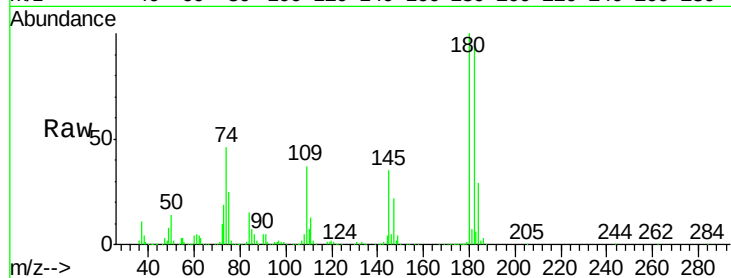
#81  
 1,2,4-Trichlorobenzene  
 Concen: 7.02 ppbv  
 RT: 22.26 min Scan# 6584  
 Delta R.T. -0.02 min  
 Lab File: VL032152.D  
 Acq: 29 Jun 2018 23:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL062918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.9  | 76.2  | 114.4 |
| 184     | 30.3  | 24.4  | 36.6  |

Manual Integrations  
 APPROVED

MMDadoda  
 7/3/2018 5:16:30 PM



Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

