

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL060118\  
 Data File : VL032045.D  
 Acq On : 2 Jun 2018 8:26  
 Operator : SY/AP  
 Sample : VL0601ABS01  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 6/4/2018 3:36:02 PM

Quant Time: Jun 03 14:16:42 2018  
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jun 0  
 QLast Update : Fri Jun 01 02:31:35 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.86  | 49   | 1385945  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.41  | 114  | 2502298  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.36 | 117  | 2590377  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.70  | 95    | 1907304  | 9.53     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 95.30% |

| Target Compounds               |      |     |         |       |        | Ovalue |
|--------------------------------|------|-----|---------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.15 | 85  | 1076443 | 6.46  | ppbv   | 98     |
| 3) Chlorodifluoromethane       | 3.08 | 51  | 1273977 | 9.77  | ppbv   | 98     |
| 4) Chloromethane               | 3.24 | 50  | 671959  | 10.16 | ppbv   | 100    |
| 5) Vinyl Chloride              | 3.37 | 62  | 706304  | 9.62  | ppbv   | 99     |
| 6) Bromomethane                | 3.59 | 94  | 494173  | 9.79  | ppbv   | 96     |
| 7) Chloroethane                | 3.68 | 64  | 290660  | 9.30  | ppbv   | 97     |
| 8) Dichlorotetrafluoroethane   | 3.29 | 85  | 1620191 | 8.92  | ppbv   | 99     |
| 9) Propene                     | 3.11 | 41  | 508336  | 11.93 | ppbv   | 99     |
| 10) Heptane                    | 8.36 | 43  | 1583086 | 10.48 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.09 | 101 | 1966184 | 7.66  | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.65 | 101 | 1609126 | 9.14  | ppbv   | 99     |
| 13) Ethanol                    | 3.73 | 45  | 158337  | 9.52  | ppbv   | 100    |
| 14) Bromoethene                | 3.87 | 108 | 564764  | 9.13  | ppbv   | 98     |
| 15) Acetone                    | 3.98 | 43  | 1408650 | 8.43  | ppbv   | 99     |
| 16) 1,3-Butadiene              | 3.44 | 39  | 611982  | 10.03 | ppbv   | 90     |
| 17) tert-Butyl alcohol         | 4.45 | 59  | 722232  | 9.01  | ppbv   | 99     |
| 18) 1,1-Dichloroethene         | 4.44 | 96  | 600422  | 7.85  | ppbv   | 93     |
| 19) Isopropyl Alcohol          | 4.11 | 45  | 979563  | 8.85  | ppbv # | 99     |
| 20) Methylene Chloride         | 4.50 | 84  | 547285  | 7.21  | ppbv   | 97     |
| 21) Allyl Chloride             | 4.57 | 41  | 1213972 | 10.31 | ppbv   | 98     |
| 22) trans-1,2-Dichloroethene   | 5.06 | 96  | 937136  | 11.39 | ppbv   | 96     |
| 23) Vinyl Acetate              | 5.25 | 43  | 2798200 | 12.37 | ppbv   | 98     |
| 24) 1,1-Dichloroethane         | 5.19 | 63  | 2457670 | 11.16 | ppbv   | 100    |
| 25) Ethyl Acetate              | 5.87 | 43  | 3412102 | 10.31 | ppbv   | 100    |
| 26) Hexane                     | 5.88 | 57  | 1609405 | 10.46 | ppbv   | 99     |
| 27) Carbon Disulfide           | 4.71 | 76  | 2055586 | 10.20 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.21 | 73  | 2427527 | 12.75 | ppbv   | 99     |
| 29) Chloroform                 | 5.95 | 83  | 2511600 | 9.68  | ppbv   | 100    |
| 30) Cyclohexane                | 7.36 | 84  | 976802  | 10.75 | ppbv   | 96     |
| 31) cis-1,2-Dichloroethene     | 5.74 | 61  | 1522326 | 10.99 | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 6.73 | 97  | 1978440 | 9.35  | ppbv   | 99     |
| 34) 2-Butanone                 | 5.43 | 43  | 2526666 | 12.84 | ppbv   | 100    |
| 35) Carbon Tetrachloride       | 7.25 | 117 | 1969307 | 9.23  | ppbv   | 99     |
| 36) Benzene                    | 7.12 | 78  | 2374266 | 10.80 | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.52 | 62  | 2005605 | 12.64 | ppbv   | 99     |
| 38) Trichloroethene            | 8.08 | 130 | 977027  | 11.58 | ppbv   | 98     |
| 39) 1,2-Dichloropropane        | 7.85 | 63  | 862175  | 10.64 | ppbv   | 97     |
| 40) 1,4-Dioxane                | 8.07 | 88  | 364845  | 10.46 | ppbv # | 1      |
| 41) Tetrahydrofuran            | 6.25 | 42  | 1098013 | 12.99 | ppbv   | 98     |
| 42) Bromodichloromethane       | 8.04 | 83  | 2016658 | 10.18 | ppbv   | 100    |
| 43) Methyl Methacrylate        | 8.25 | 69  | 901016  | 11.77 | ppbv   | 99     |

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 Data File : VL032045.D  
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 Operator : SY/AP  
 Sample : VL0601ABS01  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

Manual Integrations  
 APPROVED

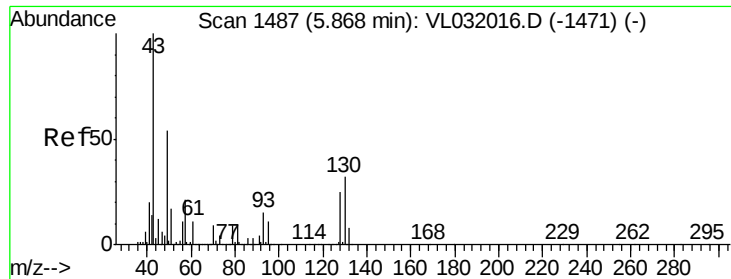
MMDadoda  
 6/4/2018 3:36:02 PM

Quant Time: Jun 03 14:16:42 2018  
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jun 0  
 QLast Update : Fri Jun 01 02:31:35 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 8.11  | 57   | 4019696  | 10.68 | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.53  | 75   | 1304200  | 12.60 | ppbv   | 96       |
| 46) cis-1,3-Dichloropropene   | 8.95  | 75   | 1611450  | 12.25 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 9.74  | 97   | 1025128  | 10.24 | ppbv   | 99       |
| 48) Dibromochloromethane      | 10.58 | 129  | 1752404  | 10.57 | ppbv   | 100      |
| 49) Bromoform                 | 13.33 | 173  | 1383204  | 10.63 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.99  | 43   | 2148752  | 11.23 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.39 | 43   | 1989126  | 11.59 | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.50 | 164  | 929255   | 10.65 | ppbv   | 98       |
| 53) Toluene                   | 10.07 | 91   | 2889666  | 11.75 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.88 | 107  | 1583245  | 10.80 | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.40 | 131  | 1212629  | 9.70  | ppbv   | 96       |
| 57) Chlorobenzene             | 12.43 | 112  | 2230881  | 9.43  | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.99 | 91   | 4019977  | 11.04 | ppbv   | 97       |
| 59) m/p-Xylene                | 13.28 | 91   | 6718335m | 21.04 | ppbv   |          |
| 60) o-Xylene                  | 13.98 | 91   | 3338554  | 10.43 | ppbv   | 100      |
| 61) Styrene                   | 13.81 | 104  | 805323   | 13.01 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.95 | 105  | 4169261  | 10.21 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.96 | 83   | 2173802  | 8.76  | ppbv   | 99       |
| 64) n-propylbenzene           | 15.85 | 120  | 1041920  | 10.22 | ppbv   | 99       |
| 65) tert-Butylbenzene         | 17.03 | 119  | 3623667  | 10.15 | ppbv   | 100      |
| 66) Benzyl Chloride           | 17.28 | 91   | 387536   | 9.77  | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.58 | 105  | 5104045  | 9.85  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.94 | 119  | 3963296  | 9.88  | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.84 | 91   | 3970037  | 9.60  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 15.75 | 91   | 3196619  | 10.65 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 16.13 | 105  | 3487353  | 10.95 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.29 | 105  | 3098597  | 10.54 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 17.05 | 105  | 3331715  | 10.06 | ppbv   | 95       |
| 75) 1,3-Dichlorobenzene       | 17.30 | 146  | 2111483  | 9.28  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.43 | 146  | 2117451  | 9.76  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 18.12 | 146  | 1890698  | 8.78  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.66 | 225  | 693150   | 8.11  | ppbv   | 99       |
| 79) Naphthalene               | 22.56 | 128  | 2265491  | 12.07 | ppbv   | 100      |
| 80) Naphthalene, 2-methyl-    | 25.21 | 142  | 1265373  | 27.34 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 22.28 | 180  | 1198678  | 10.89 | ppbv   | 100      |

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





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.86 min Scan# 1486

Delta R.T. -0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 49 Resp: 1385945

Ion Ratio Lower Upper

49 100

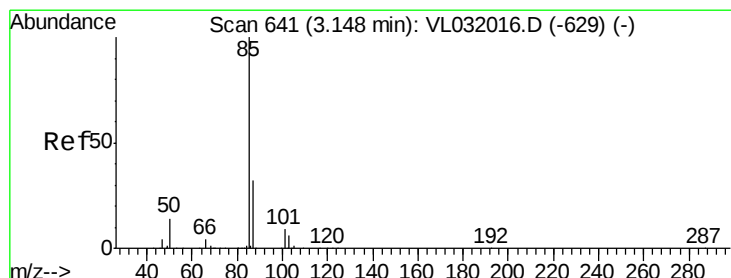
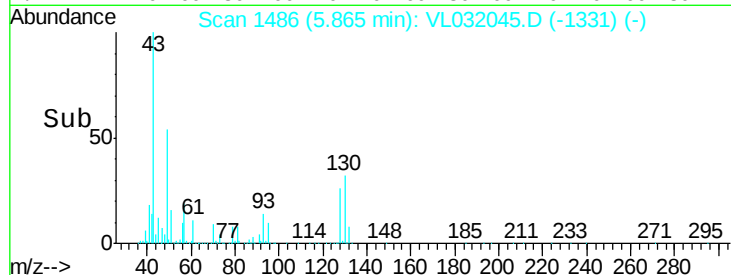
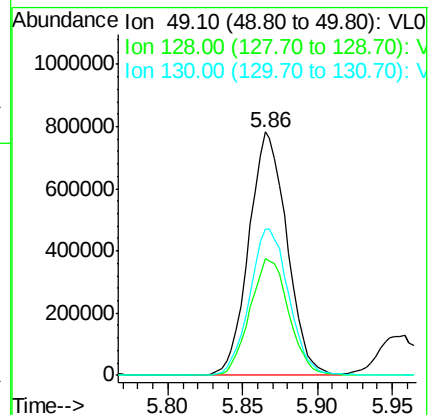
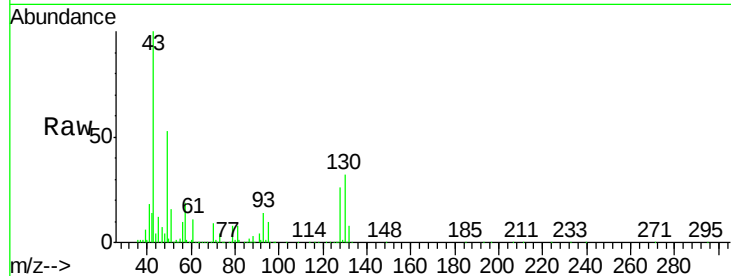
128 49.2 24.1 72.3

130 62.0 30.9 92.8

Manual Integrations  
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#2

Dichlorodifluoromethane

Concen: 6.46 ppbv

RT: 3.15 min Scan# 641

Delta R.T. 0.00 min

Lab File: VL032045.D

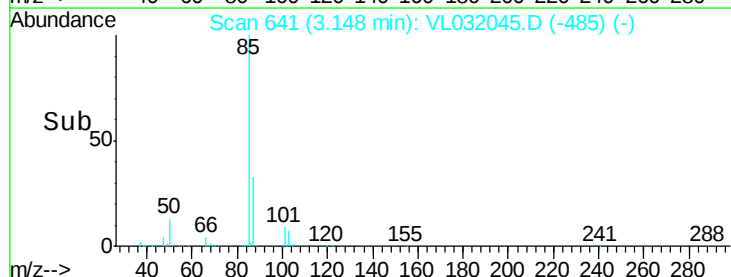
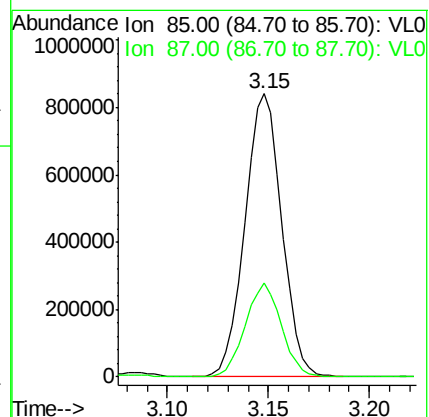
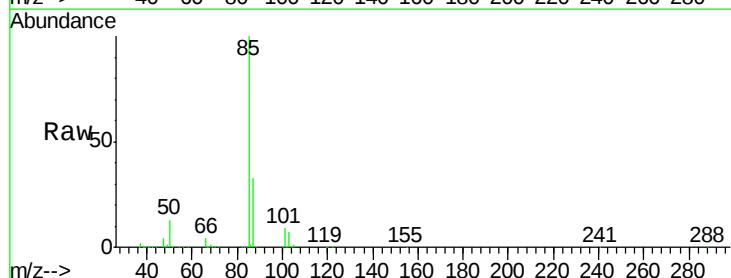
Acq: 2 Jun 2018 8:26

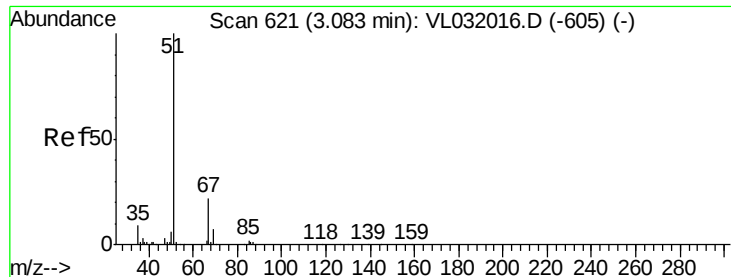
Tgt Ion: 85 Resp: 1076443

Ion Ratio Lower Upper

85 100

87 33.0 25.5 38.3





#3

Chlorodifluoromethane

Concen: 9.77 ppbv

RT: 3.08 min Scan# 621

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 51 Resp: 1273977

Ion Ratio Lower Upper

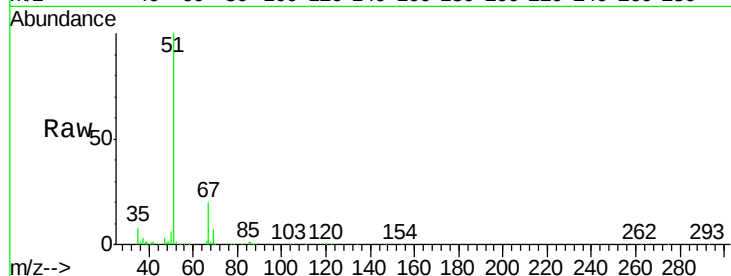
51 100

67 20.4 17.2 25.8

Manual Integrations  
APPROVED

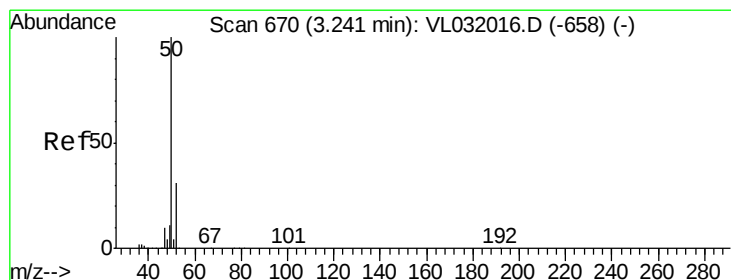
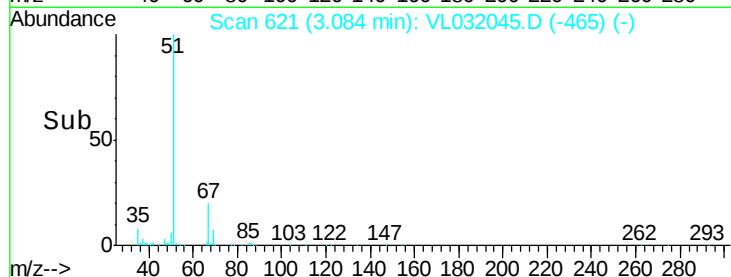
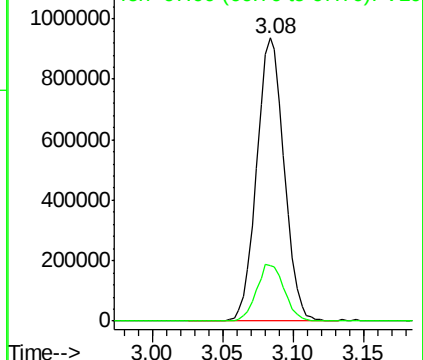
MMDadoda

6/4/2018 3:36:02 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 10.16 ppbv

RT: 3.24 min Scan# 671

Delta R.T. 0.00 min

Lab File: VL032045.D

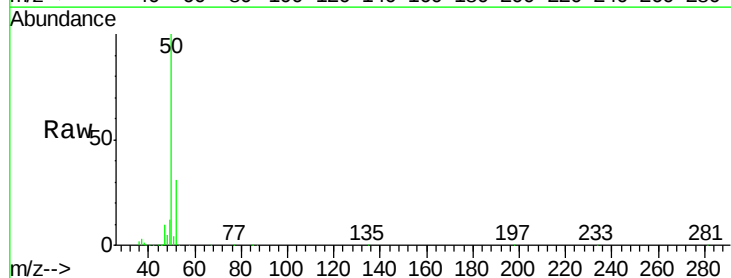
Acq: 2 Jun 2018 8:26

Tgt Ion: 50 Resp: 671959

Ion Ratio Lower Upper

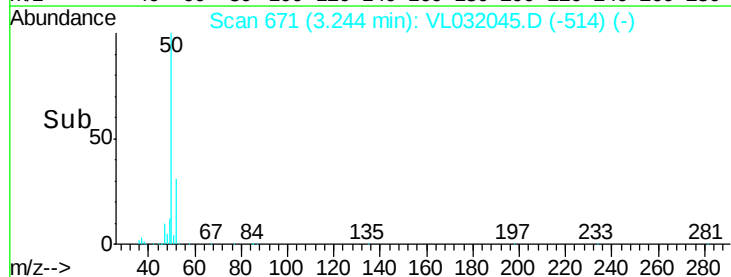
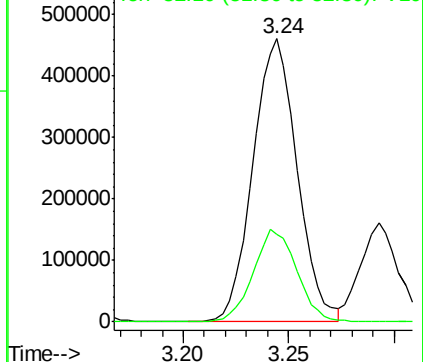
50 100

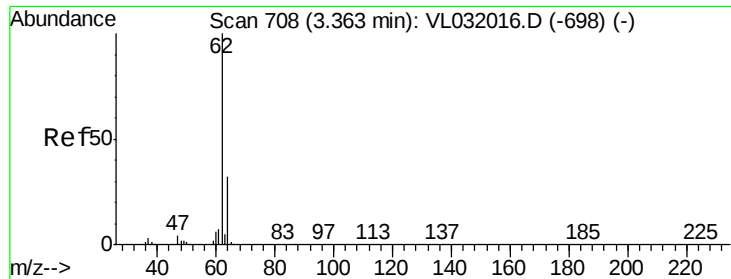
52 31.1 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 9.62 ppbv

RT: 3.37 min Scan# 709

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 62 Resp: 706304

Ion Ratio Lower Upper

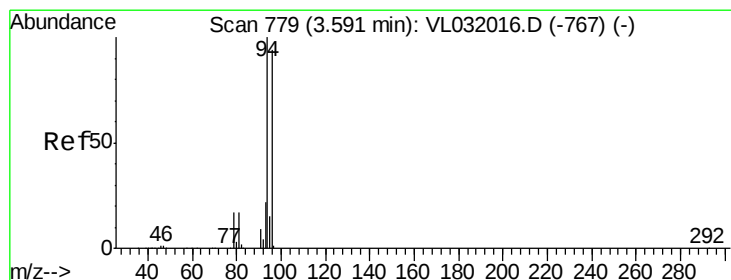
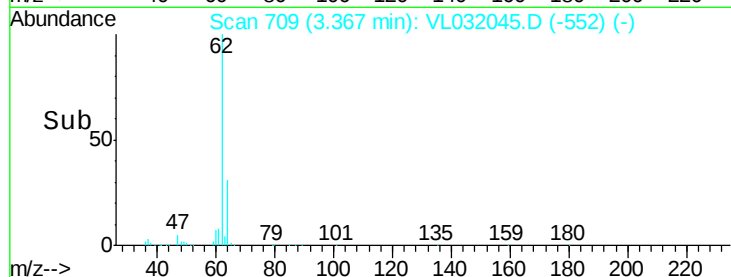
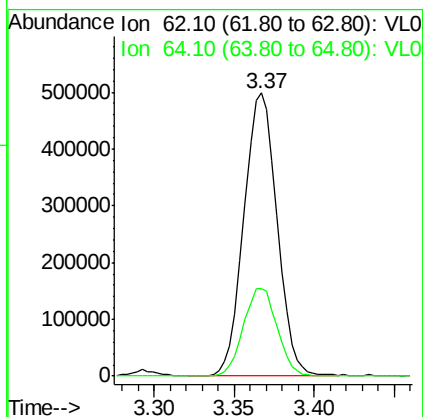
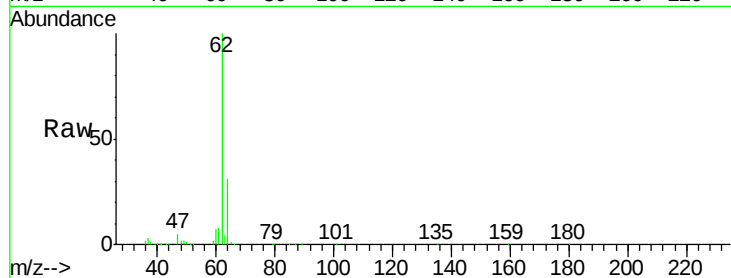
62 100

64 31.0 25.2 37.8

Manual Integrations  
APPROVED

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6/4/2018 3:36:02 PM



#6

Bromomethane

Concen: 9.79 ppbv

RT: 3.59 min Scan# 779

Delta R.T. 0.00 min

Lab File: VL032045.D

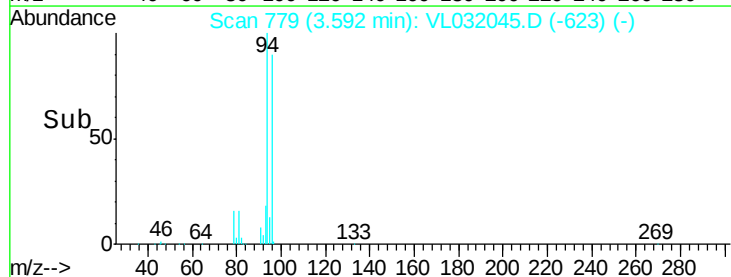
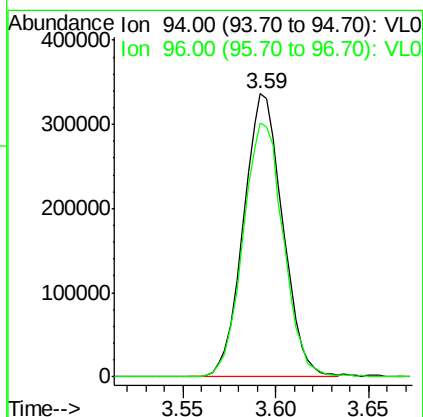
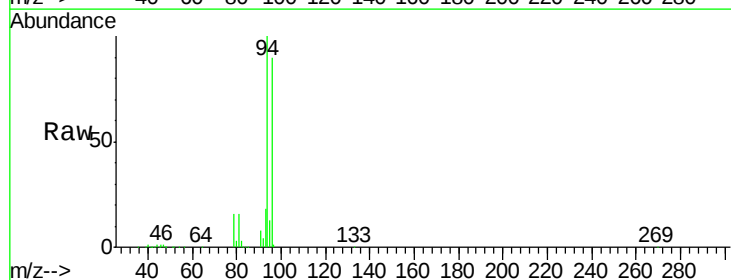
Acq: 2 Jun 2018 8:26

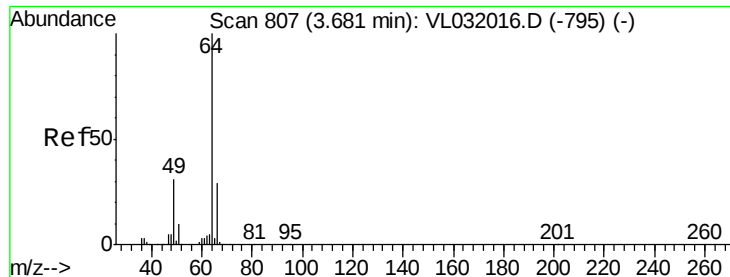
Tgt Ion: 94 Resp: 494173

Ion Ratio Lower Upper

94 100

96 89.8 75.1 112.7





#7

Chloroethane

Concen: 9.30 ppbv

RT: 3.68 min Scan# 807

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 64 Resp: 290660

Ion Ratio Lower Upper

64 100

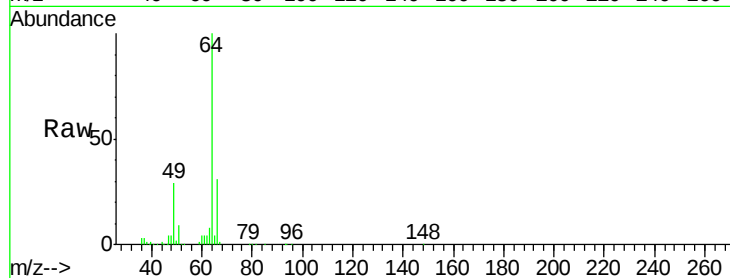
66 31.0 23.4 35.2

Manual Integrations

APPROVED

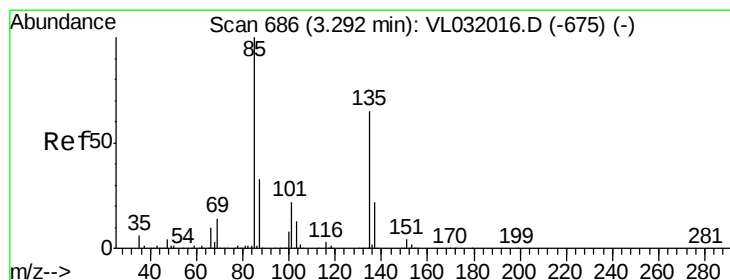
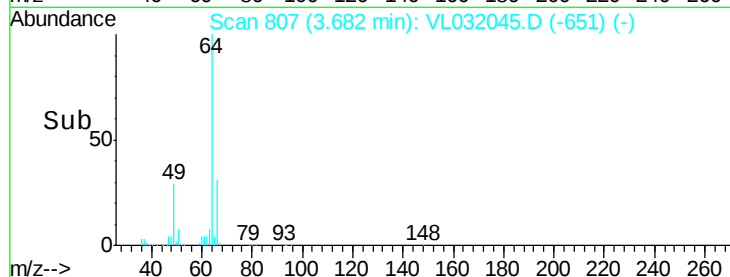
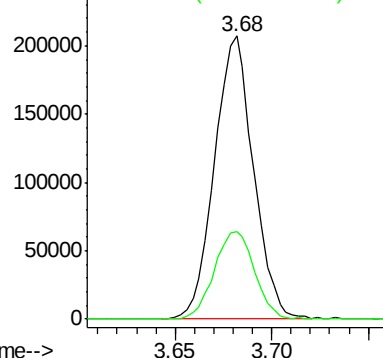
MMDadoda

6/4/2018 3:36:02 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 8.92 ppbv

RT: 3.29 min Scan# 686

Delta R.T. 0.00 min

Lab File: VL032045.D

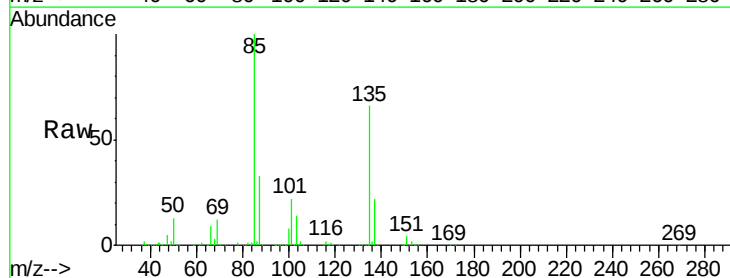
Acq: 2 Jun 2018 8:26

Tgt Ion: 85 Resp: 1620191

Ion Ratio Lower Upper

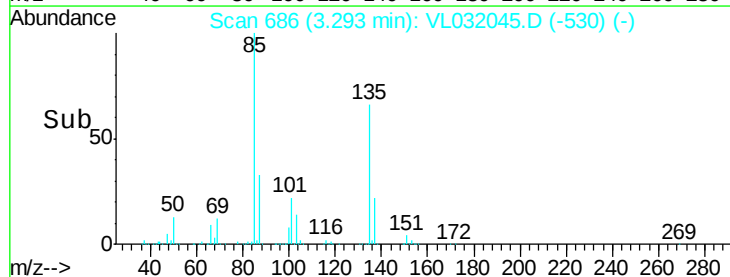
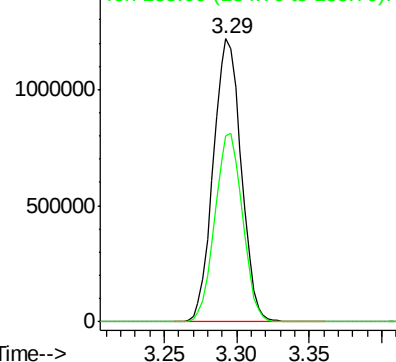
85 100

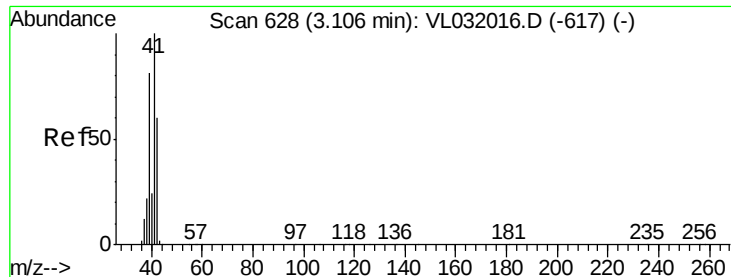
135 66.3 52.6 79.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 11.93 ppbv

RT: 3.11 min Scan# 628

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 41 Resp: 508336

Ion Ratio Lower Upper

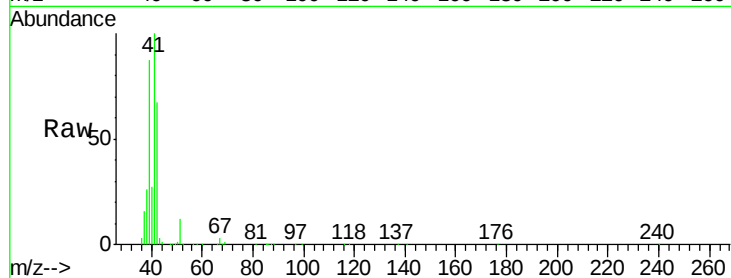
41 100

42 68.7 54.4 81.6

Manual Integrations  
APPROVED

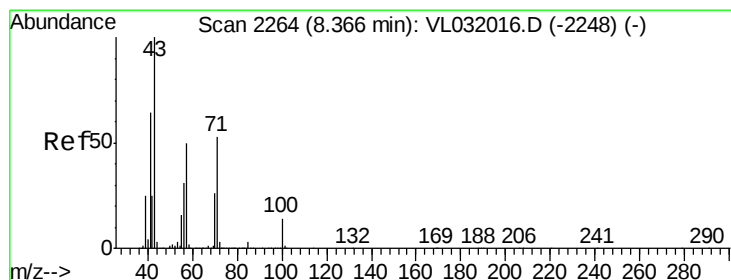
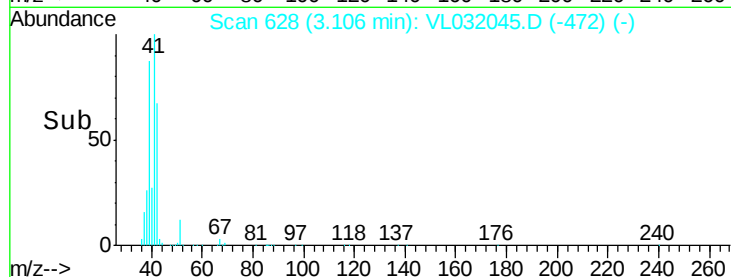
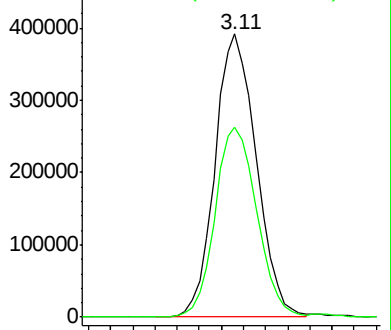
MMDadoda

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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 10.48 ppbv

RT: 8.36 min Scan# 2263

Delta R.T. -0.00 min

Lab File: VL032045.D

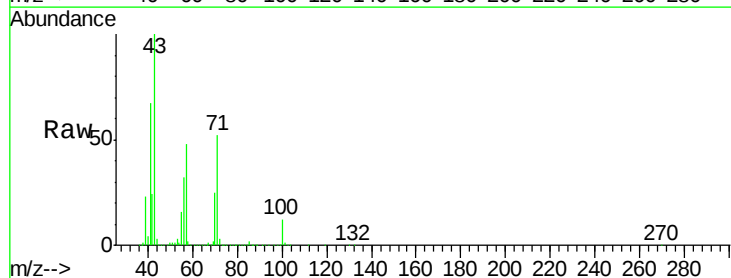
Acq: 2 Jun 2018 8:26

Tgt Ion: 43 Resp: 1583086

Ion Ratio Lower Upper

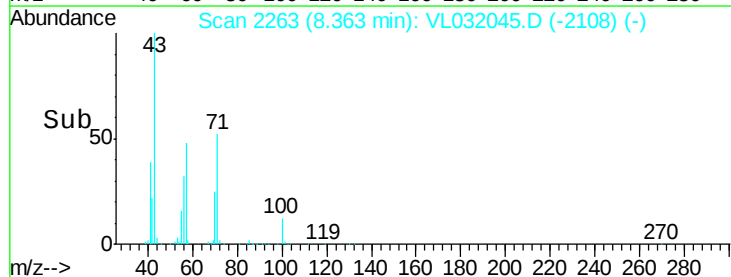
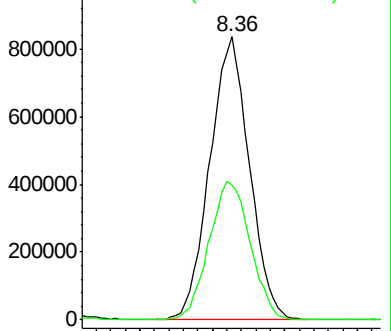
43 100

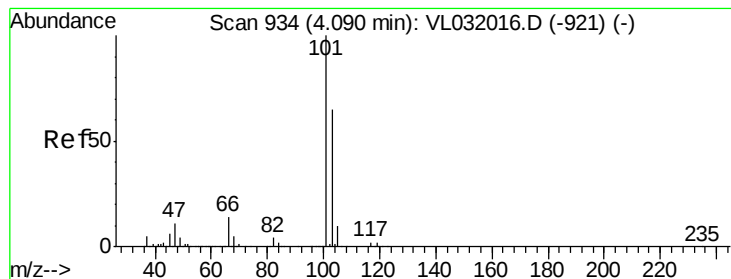
57 51.1 41.7 62.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#11

Trichlorofluoromethane

Concen: 7.66 ppbv

RT: 4.09 min Scan# 934

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion:101 Resp: 1966184

Ion Ratio Lower Upper

101 100

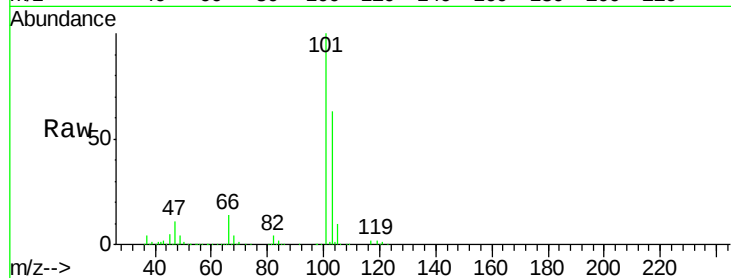
103 63.0 52.0 78.0

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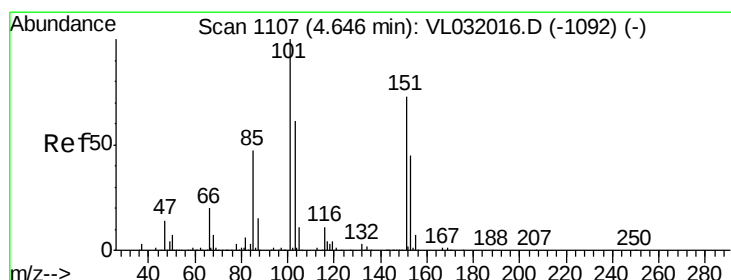
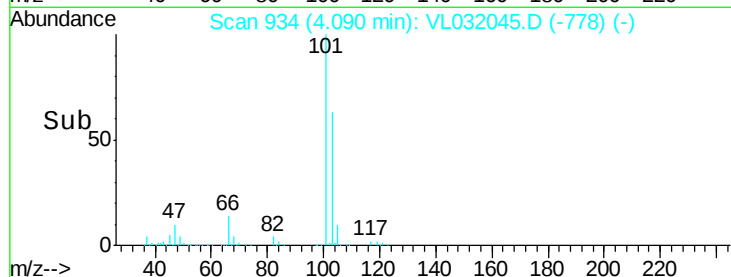
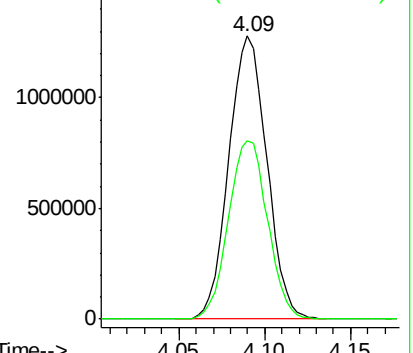
MMDadoda

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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 9.14 ppbv

RT: 4.65 min Scan# 1107

Delta R.T. 0.00 min

Lab File: VL032045.D

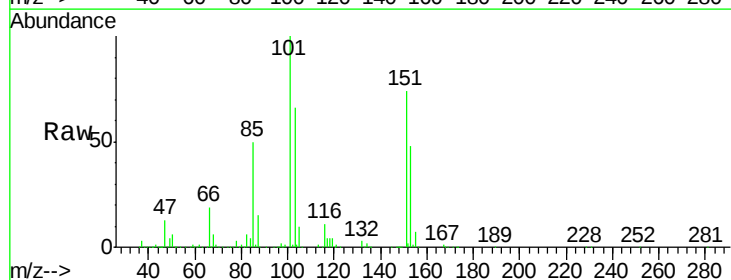
Acq: 2 Jun 2018 8:26

Tgt Ion:101 Resp: 1609126

Ion Ratio Lower Upper

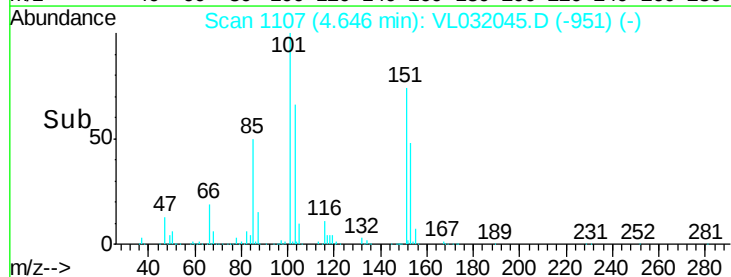
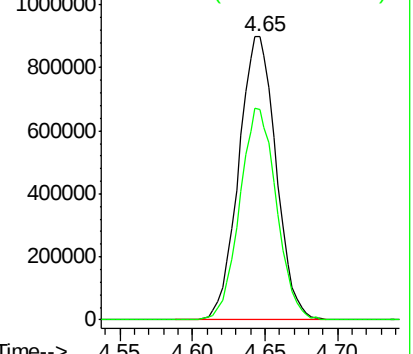
101 100

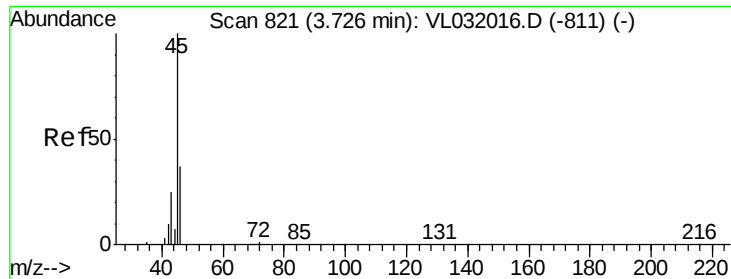
151 73.7 58.2 87.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





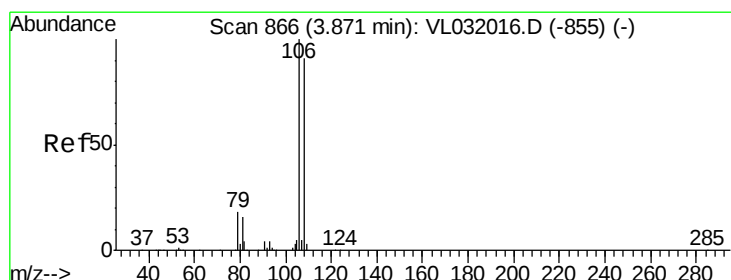
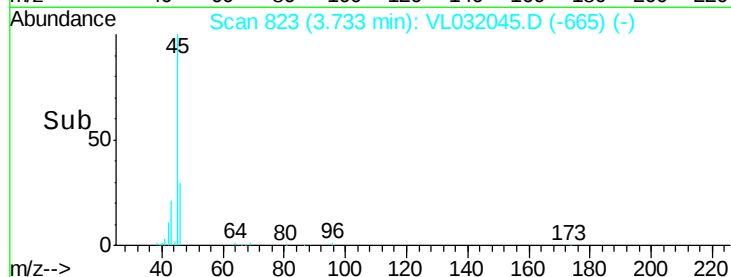
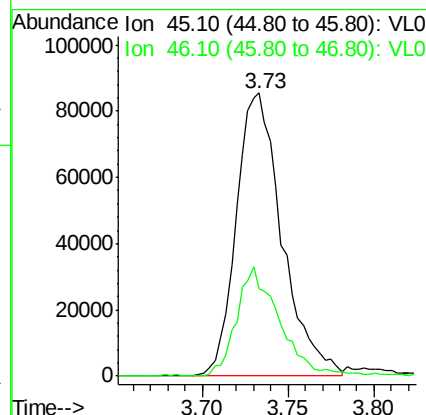
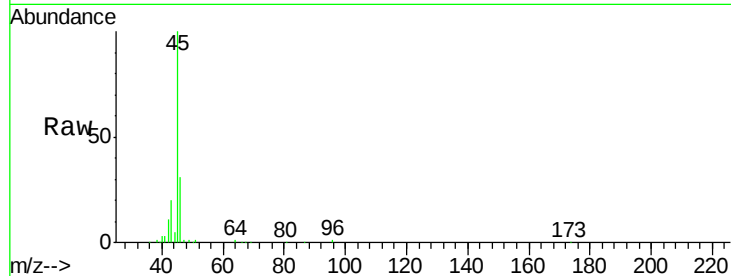
#13  
Ethanol  
Concen: 9.52 ppbv  
RT: 3.73 min Scan# 823  
Delta R.T. 0.01 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

| Tot Ion   | 45   | Resp  | 158337 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 45        | 100  |       |        |
| 46        | 37.0 | 14.9  | 59.5   |

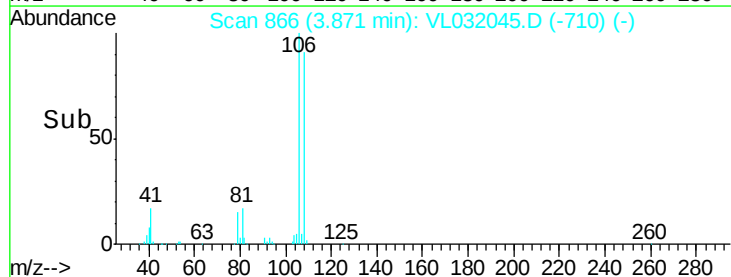
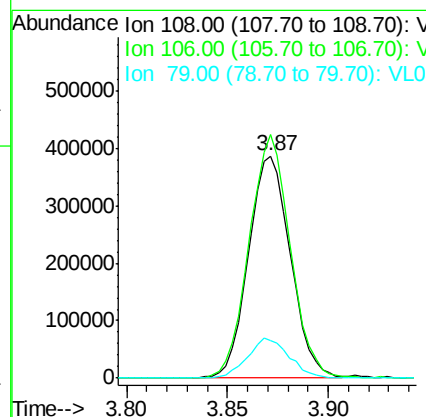
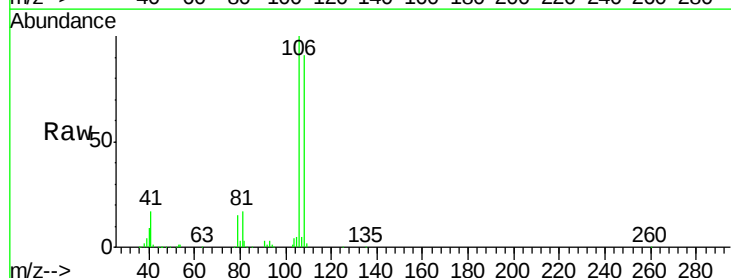
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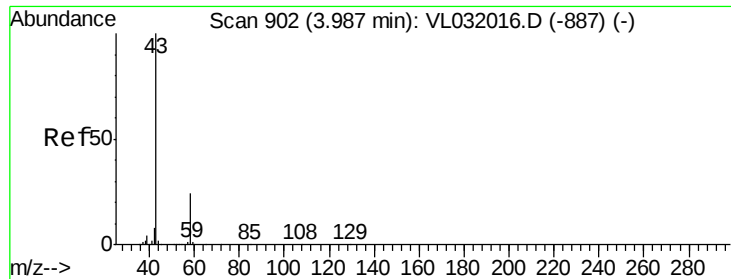
MMDadoda  
6/4/2018 3:36:02 PM



#14  
Bromoethene  
Concen: 9.13 ppbv  
RT: 3.87 min Scan# 866  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion   | 108   | Resp  | 564764 |
|-----------|-------|-------|--------|
| Ion Ratio | 100   | Lower | Upper  |
| 108       | 100   |       |        |
| 106       | 108.0 | 85.1  | 127.7  |
| 79        | 18.1  | 15.2  | 22.8   |





#15

Acetone

Concen: 8.43 ppbv

RT: 3.98 min Scan# 901

Delta R.T. -0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Tot Ion: 43 Resp: 1408650

Ion Ratio Lower Upper

43 100

58 26.5 20.7 31.1

Instrument :

MSVOA\_L

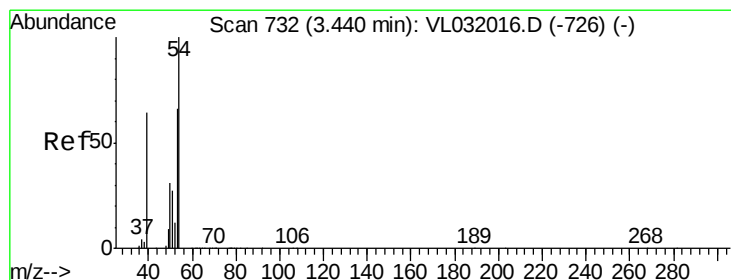
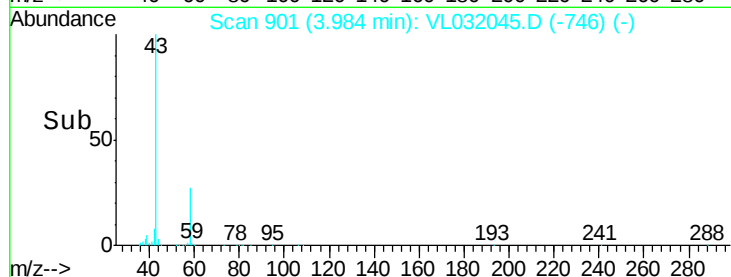
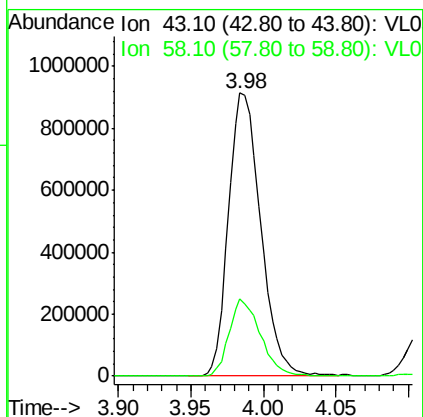
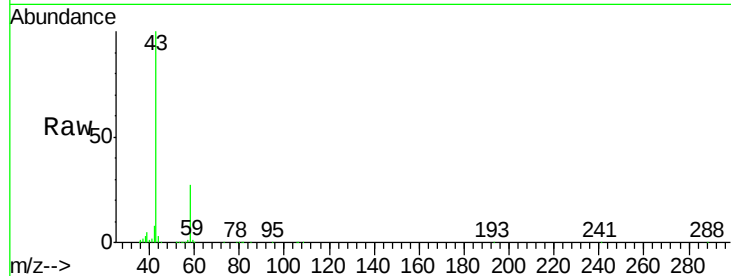
ClientSampleId :

VL0601ABS01

Manual Integrations  
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#16

1,3-Butadiene

Concen: 10.03 ppbv

RT: 3.44 min Scan# 732

Delta R.T. 0.00 min

Lab File: VL032045.D

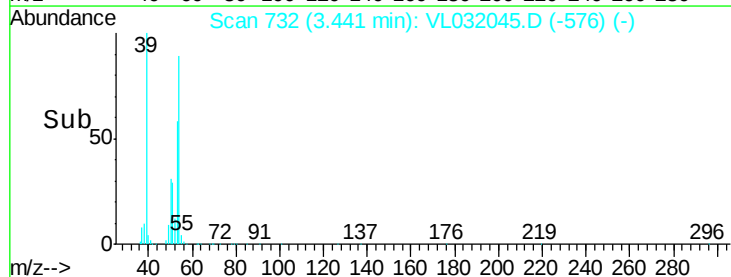
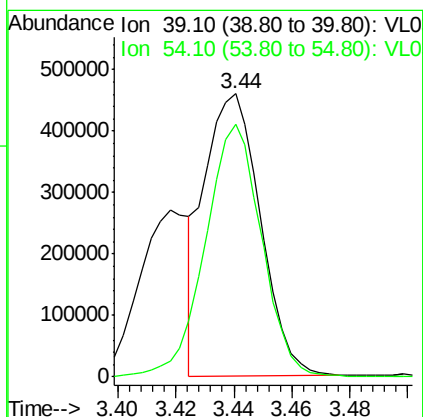
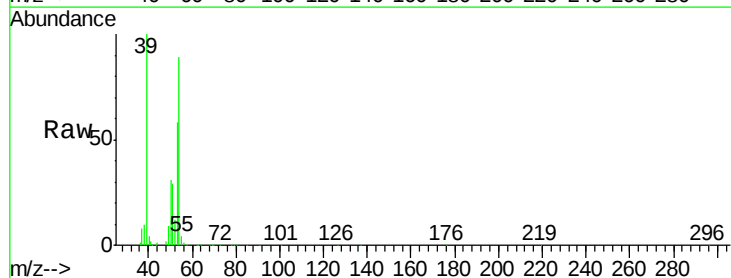
Acq: 2 Jun 2018 8:26

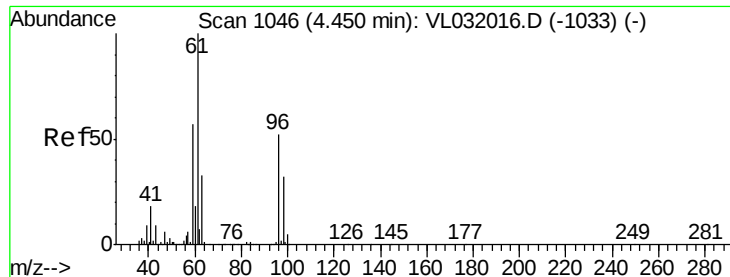
Tgt Ion: 39 Resp: 611982

Ion Ratio Lower Upper

39 100

54 91.2 65.7 98.5





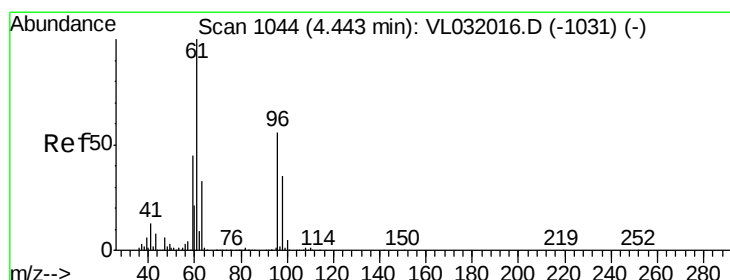
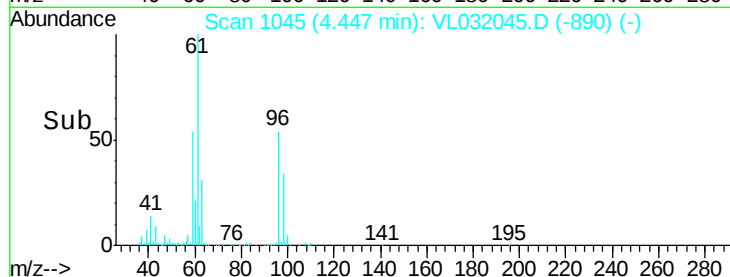
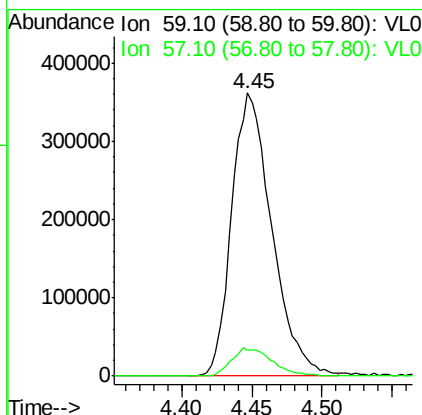
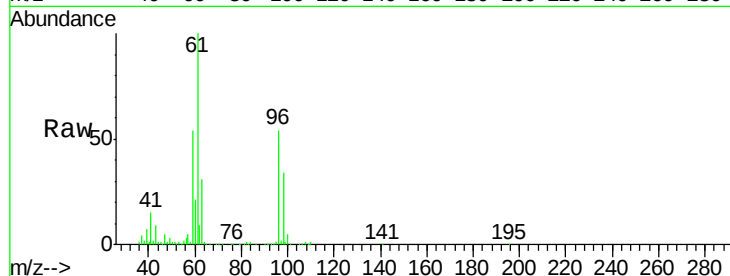
#17  
 tert-Butyl alcohol  
 Concen: 9.01 ppbv  
 RT: 4.45 min Scan# 1045  
 Delta R.T. -0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 10.2  | 8.3   | 12.5  |

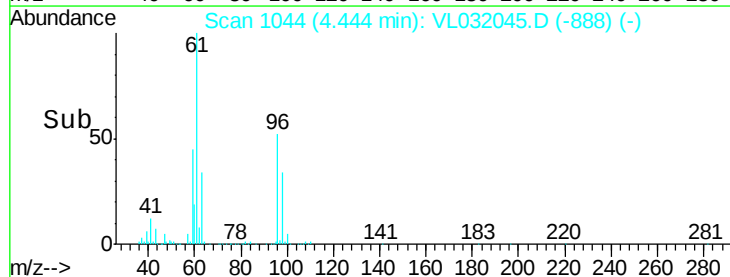
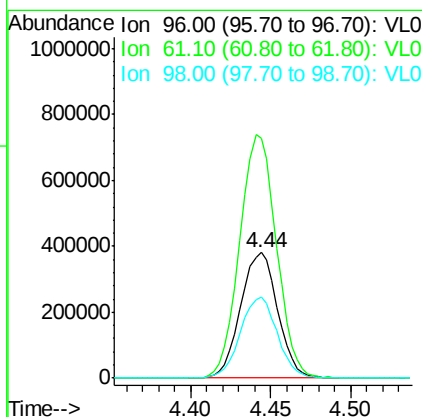
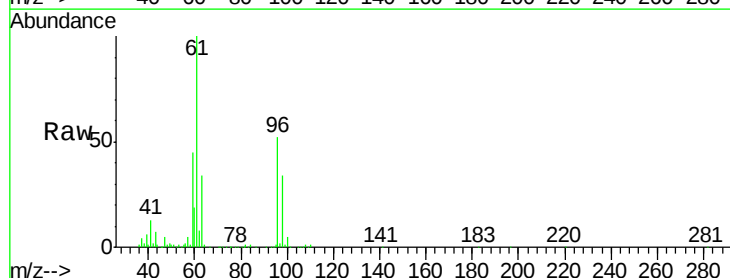
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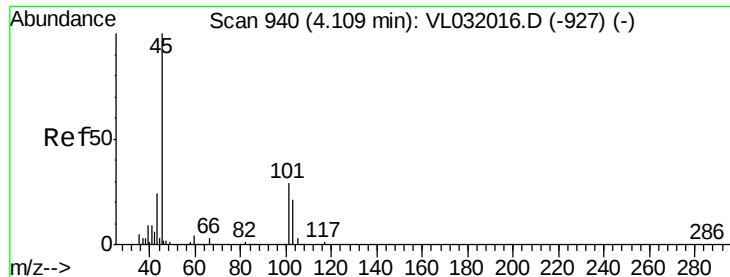
MMDadoda  
 6/4/2018 3:36:02 PM



#18  
 1,1-Dichloroethene  
 Concen: 7.85 ppbv  
 RT: 4.44 min Scan# 1044  
 Delta R.T. 0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 191.5 | 143.5 | 215.3 |
| 98      | 64.7  | 50.0  | 75.0  |





#19

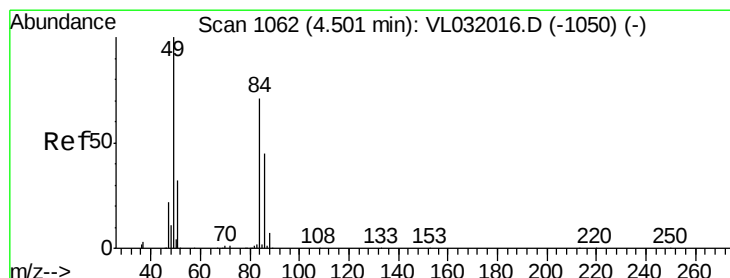
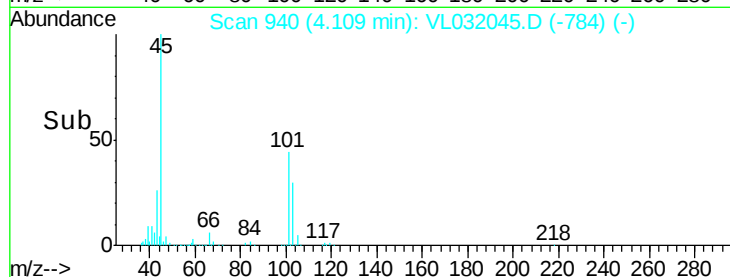
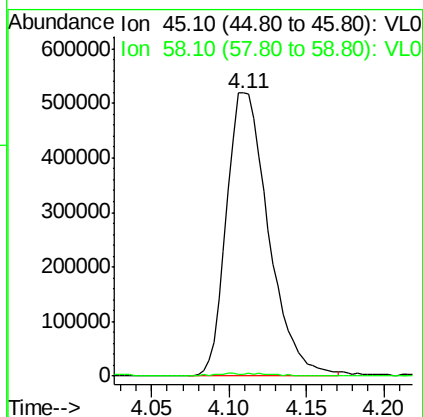
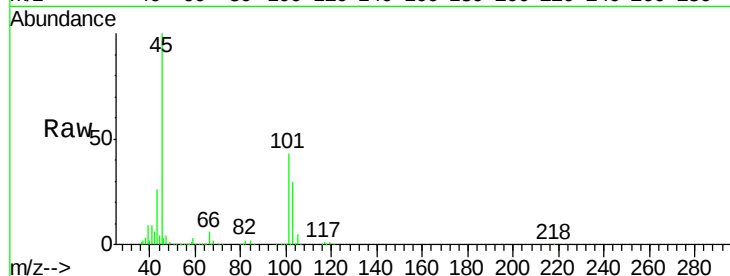
Isopropyl Alcohol  
 Concen: 8.85 ppbv  
 RT: 4.11 min Scan# 940  
 Delta R.T. 0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 58      | 1.4   | 1.5   | 2.3#  |

Manual Integrations  
 APPROVED

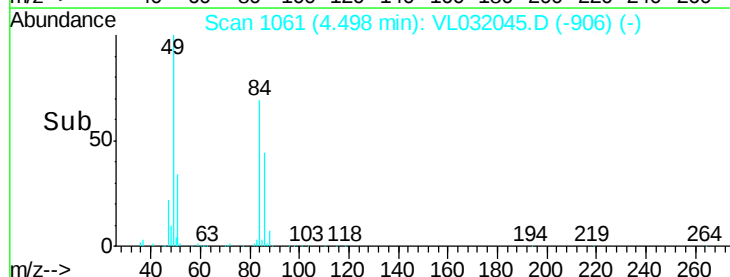
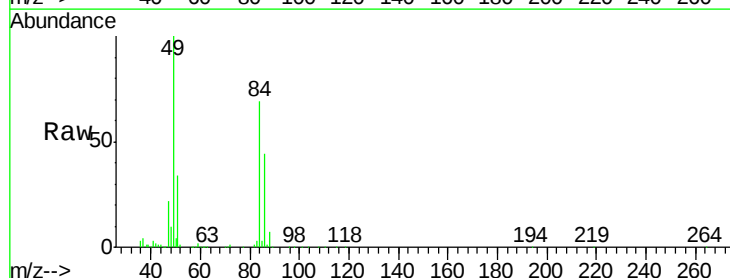
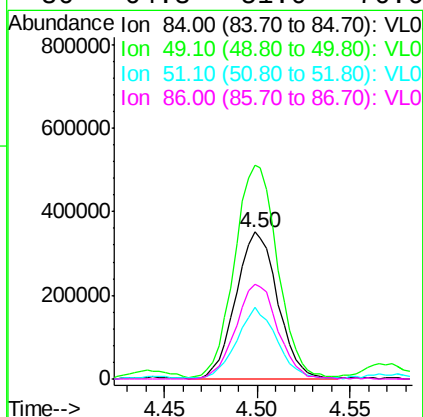
MMDadoda  
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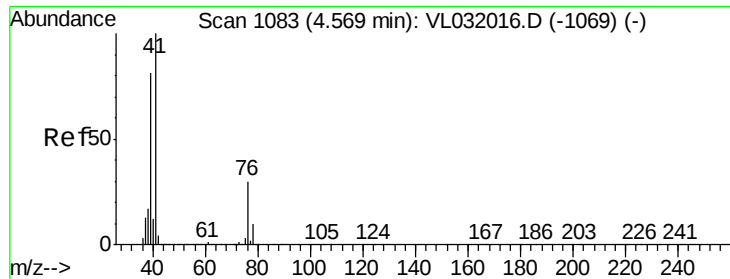


#20

Methylene Chloride  
 Concen: 7.21 ppbv  
 RT: 4.50 min Scan# 1061  
 Delta R.T. -0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 49      | 145.1 | 113.0 | 169.4 |
| 51      | 48.5  | 36.4  | 54.6  |
| 86      | 64.3  | 51.0  | 76.6  |





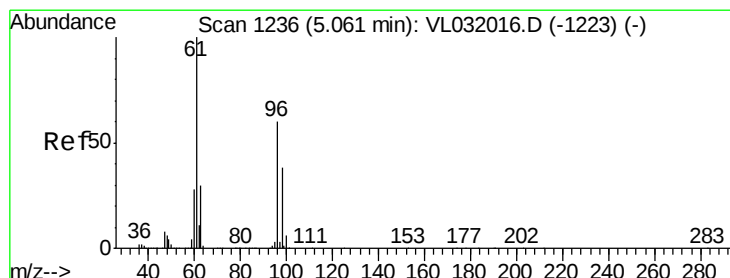
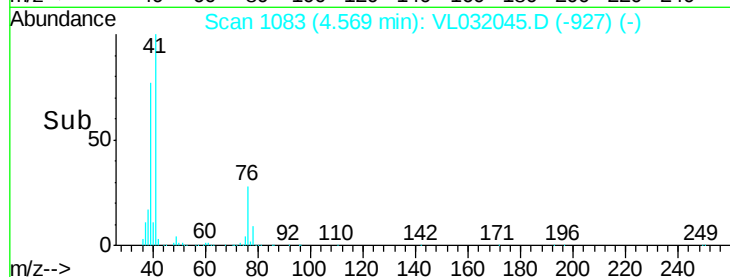
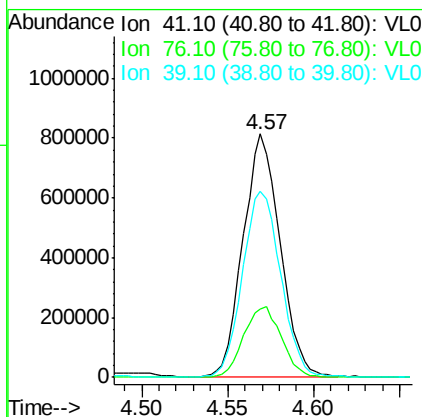
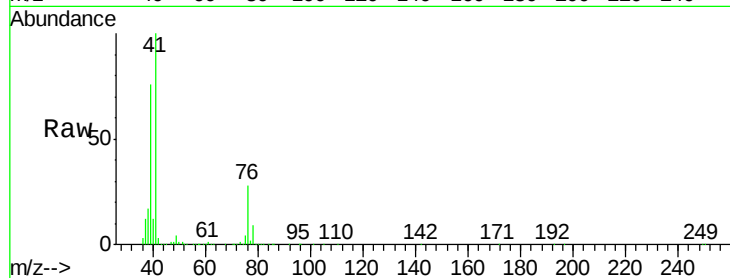
#21  
Allvl Chloride  
Concen: 10.31 ppbv  
RT: 4.57 min Scan# 1083  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

Tot Ion: 41 Resp: 1213972  
Ion Ratio Lower Upper  
41 100  
76 29.8 23.9 35.9  
39 79.4 65.9 98.9

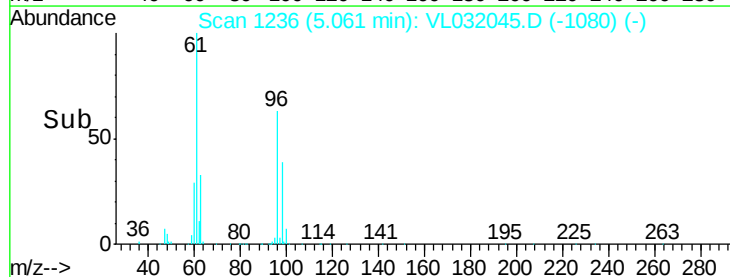
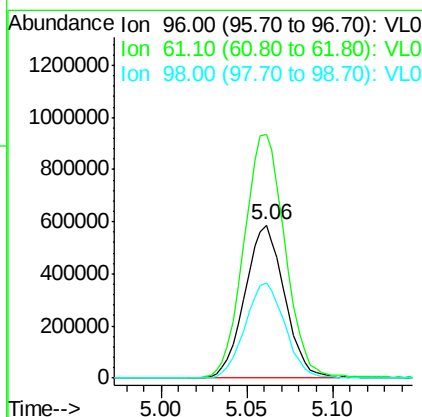
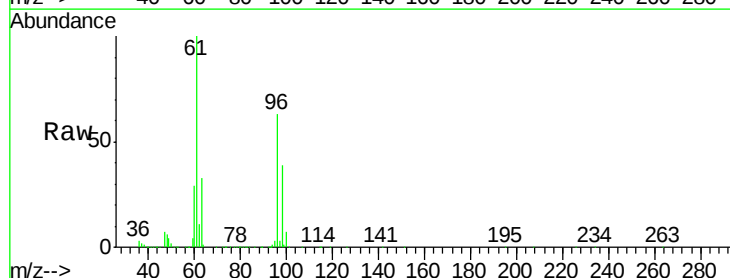
Manual Integrations  
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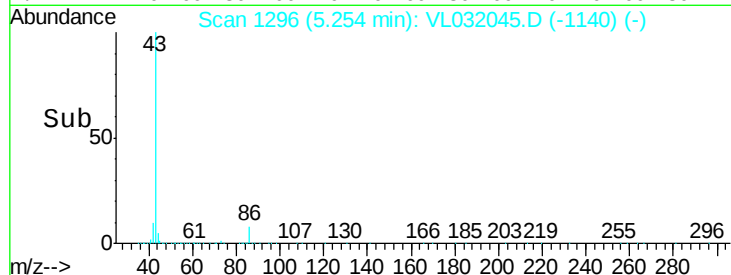
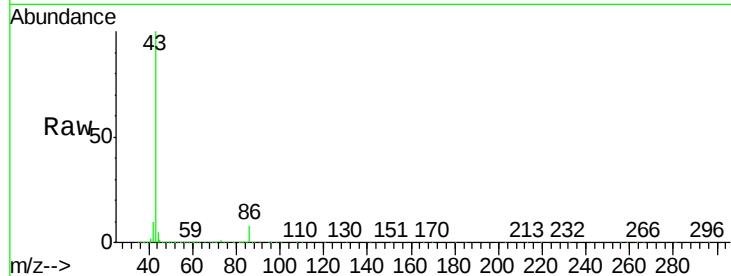
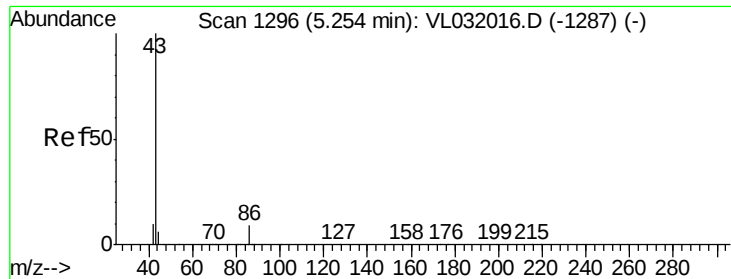
MMDadoda  
6/4/2018 3:36:02 PM



#22  
trans-1,2-Dichloroethene  
Concen: 11.39 ppbv  
RT: 5.06 min Scan# 1236  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Tgt Ion: 96 Resp: 937136  
Ion Ratio Lower Upper  
96 100  
61 159.4 133.3 199.9  
98 62.3 51.0 76.4





#23

Vinyl Acetate

Concen: 12.37 ppbv

RT: 5.25 min Scan# 1296

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Tot Ion: 43 Resp: 2798200

Ion Ratio Lower Upper

43 100

86 7.8 6.2 9.4

42 9.7 8.7 13.1

44 5.2 4.6 6.8

Instrument :

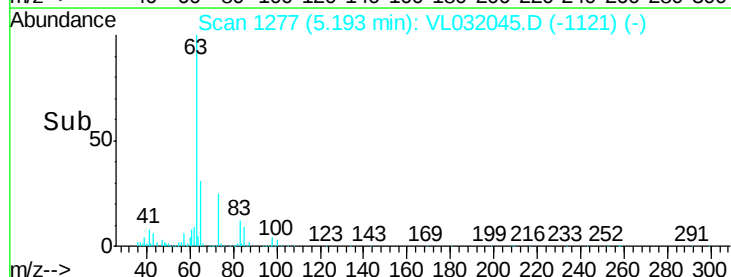
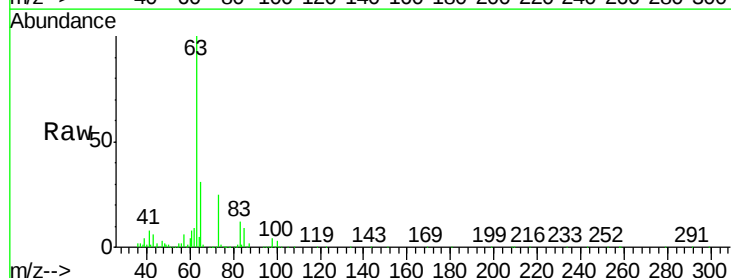
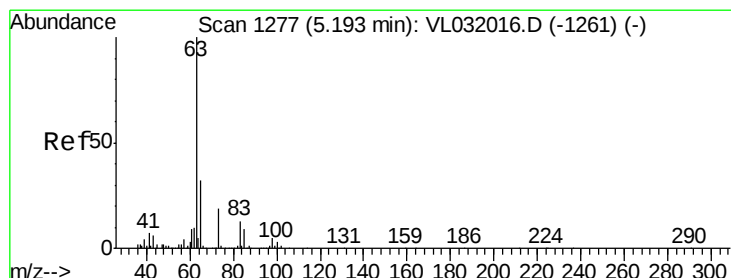
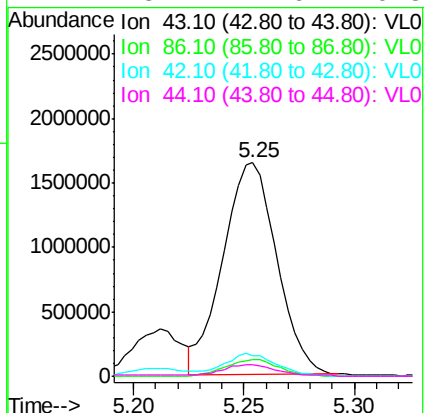
MSVOA\_L

ClientSampleId :

VL0601ABS01

Manual Integrations  
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MMDadoda  
6/4/2018 3:36:02 PM



#24

1,1-Dichloroethane

Concen: 11.16 ppbv

RT: 5.19 min Scan# 1277

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

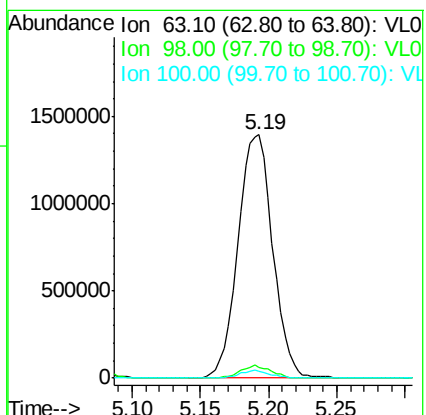
Tgt Ion: 63 Resp: 2457670

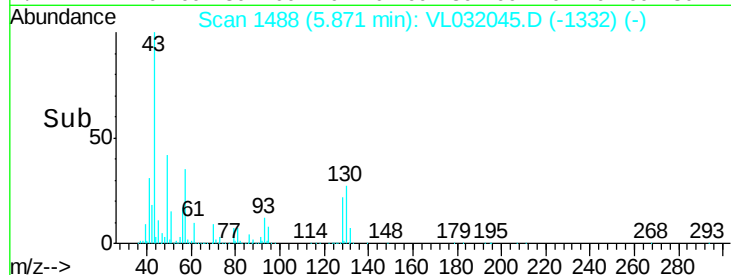
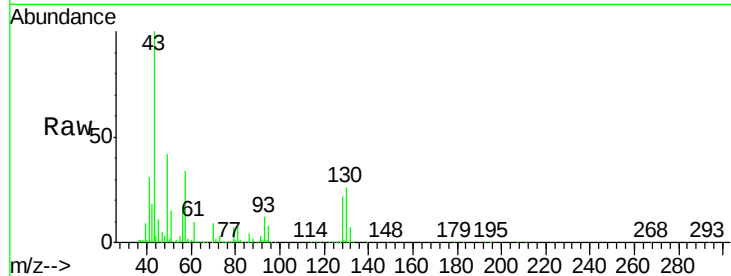
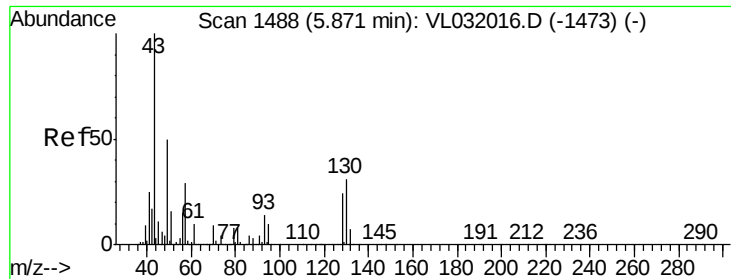
Ion Ratio Lower Upper

63 100

98 4.5 2.4 7.1

100 3.0 1.5 4.5





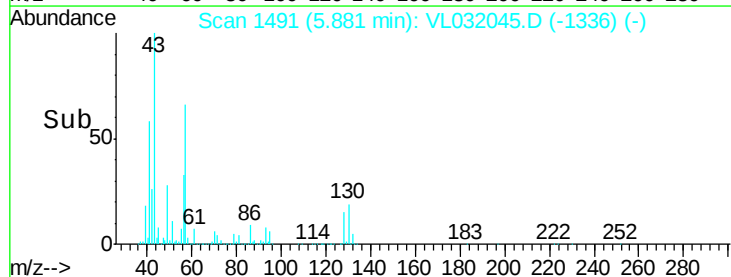
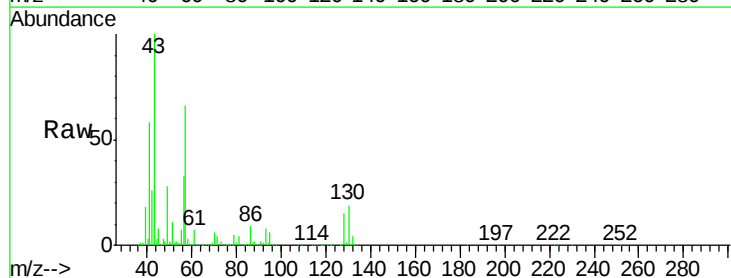
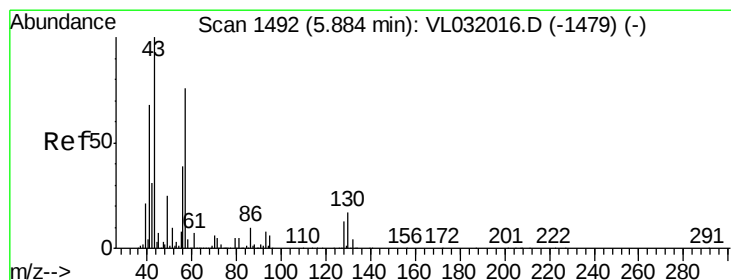
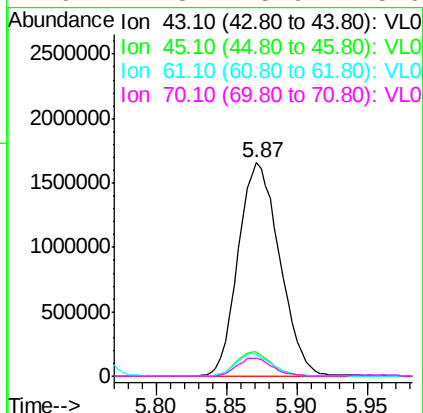
#25  
Ethyl Acetate  
Concen: 10.31 ppbv  
RT: 5.87 min Scan# 1488  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tot Ion | 43    | Resp  | 3412102 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 43      | 100   |       |         |
| 45      | 9.8   | 7.8   | 11.6    |
| 61      | 9.4   | 7.4   | 11.2    |
| 70      | 7.3   | 5.9   | 8.9     |

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

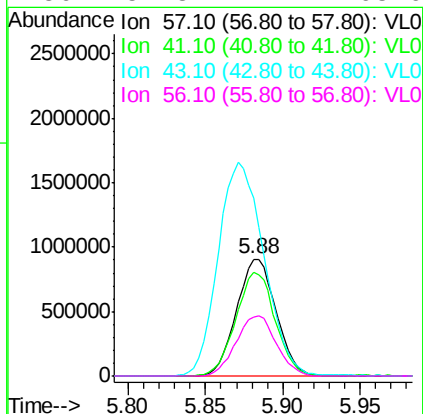
Manual Integrations  
APPROVED

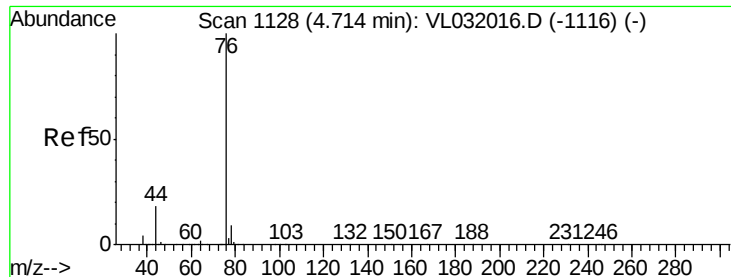
MMDadoda  
6/4/2018 3:36:02 PM



#26  
Hexane  
Concen: 10.46 ppbv  
RT: 5.88 min Scan# 1491  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion | 57    | Resp  | 1609405 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 57      | 100   |       |         |
| 41      | 88.9  | 71.4  | 107.2   |
| 43      | 212.9 | 168.6 | 252.8   |
| 56      | 52.8  | 42.4  | 63.6    |





#27

Carbon Disulfide

Concen: 10.20 ppbv

RT: 4.71 min Scan# 1128

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 76 Resp: 2055586

Ion Ratio Lower Upper

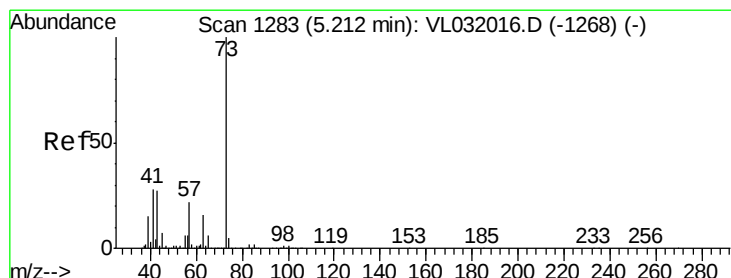
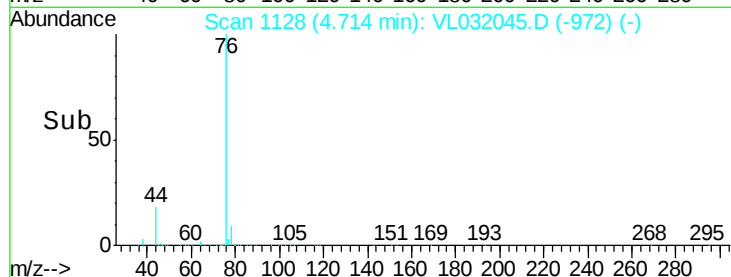
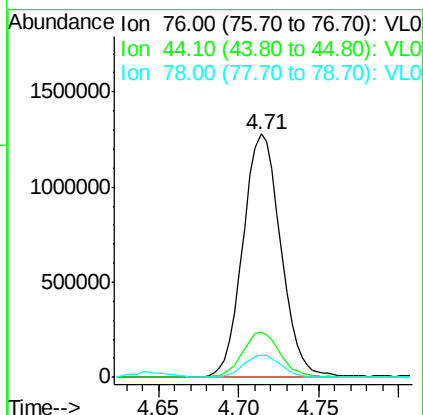
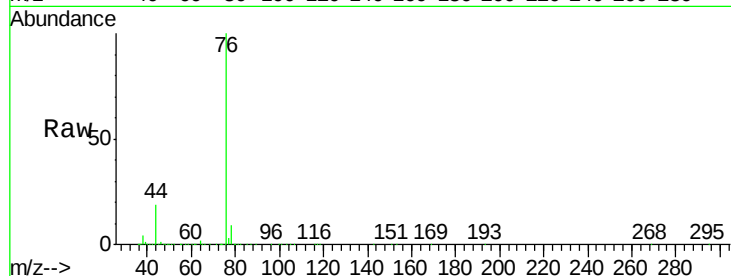
76 100

44 17.9 14.9 22.3

78 9.1 7.6 11.4

Manual Integrations  
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MMDadoda  
6/4/2018 3:36:02 PM



#28

Methyl tert-Butyl Ether

Concen: 12.75 ppbv

RT: 5.21 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VL032045.D

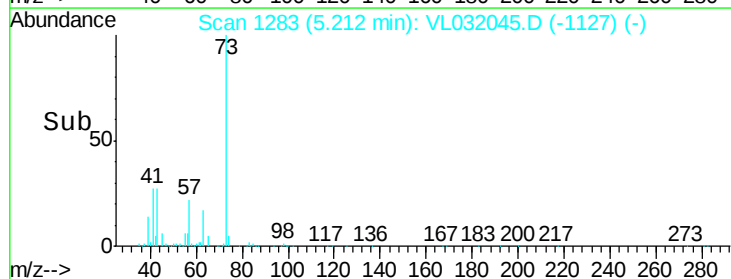
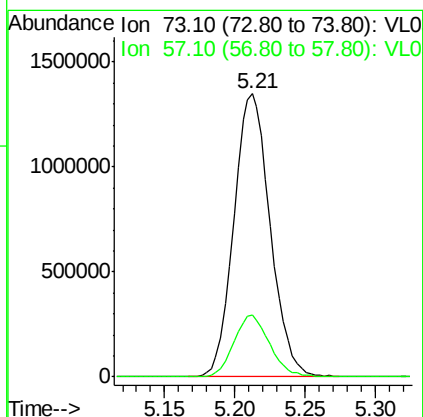
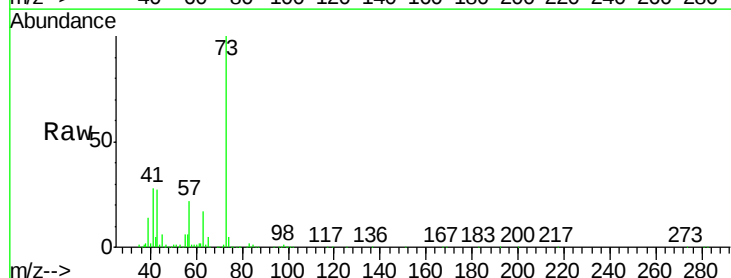
Acq: 2 Jun 2018 8:26

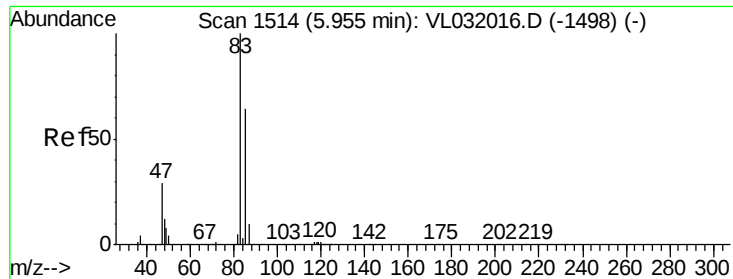
Tgt Ion: 73 Resp: 2427527

Ion Ratio Lower Upper

73 100

57 21.8 17.8 26.8





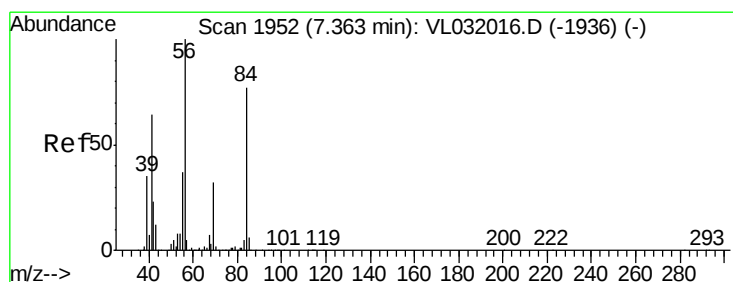
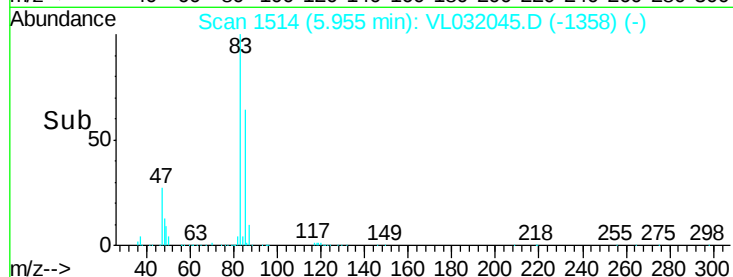
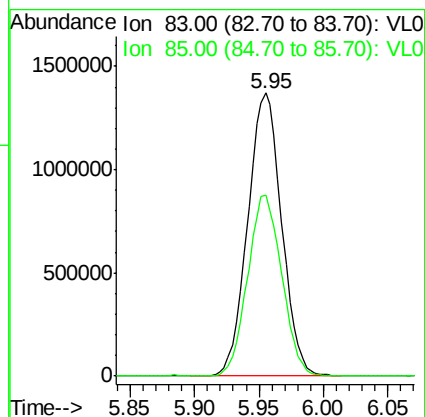
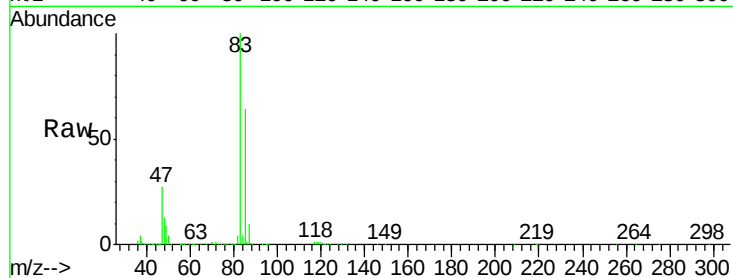
#29  
Chloroform  
Concen: 9.68 ppbv  
RT: 5.95 min Scan# 1514  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

Tot Ion: 83 Resp: 2511600  
Ion Ratio Lower Upper  
83 100  
85 63.9 50.9 76.3

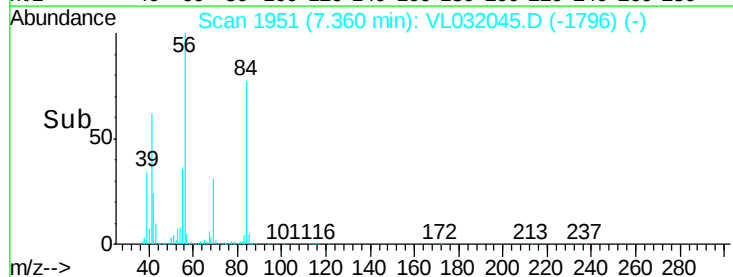
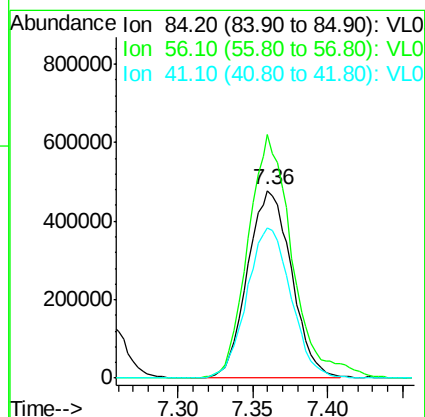
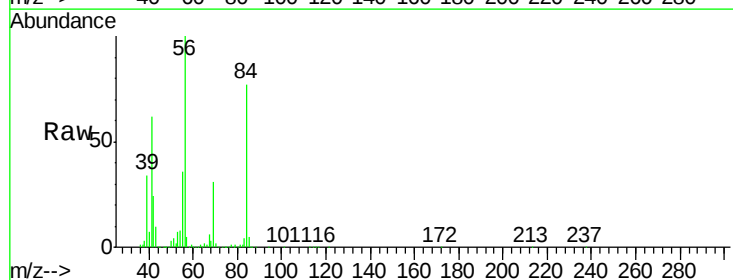
Manual Integrations  
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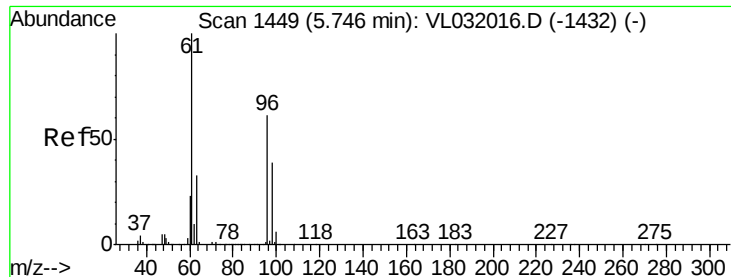
MMDadoda  
6/4/2018 3:36:02 PM



#30  
Cyclohexane  
Concen: 10.75 ppbv  
RT: 7.36 min Scan# 1951  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Tgt Ion: 84 Resp: 976802  
Ion Ratio Lower Upper  
84 100  
56 131.0 108.6 162.8  
41 80.5 66.8 100.2





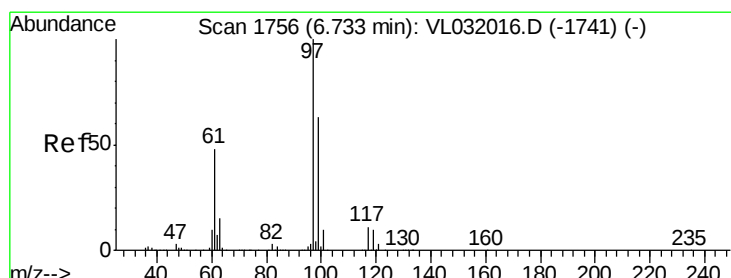
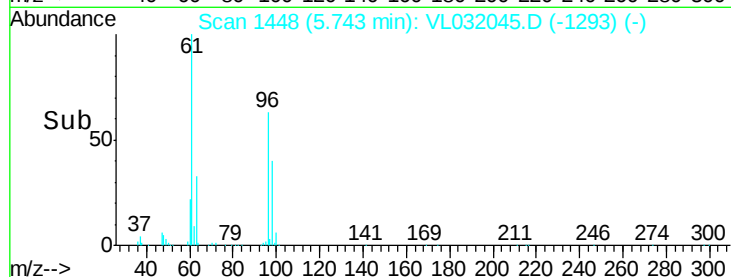
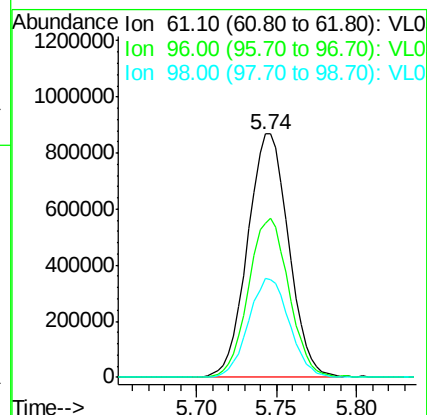
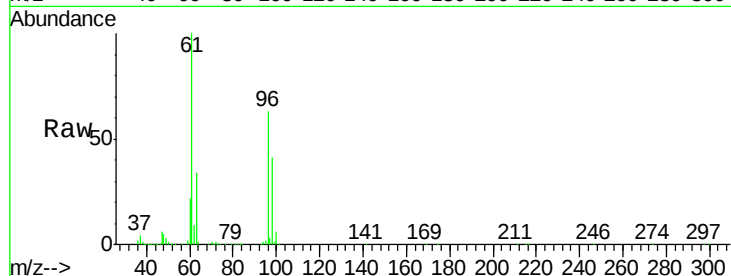
#31  
 cis-1,2-Dichloroethene  
 Concen: 10.99 ppbv  
 RT: 5.74 min Scan# 1448  
 Delta R.T. -0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 63.0  | 49.0  | 73.6  |
| 98      | 40.5  | 31.2  | 46.8  |

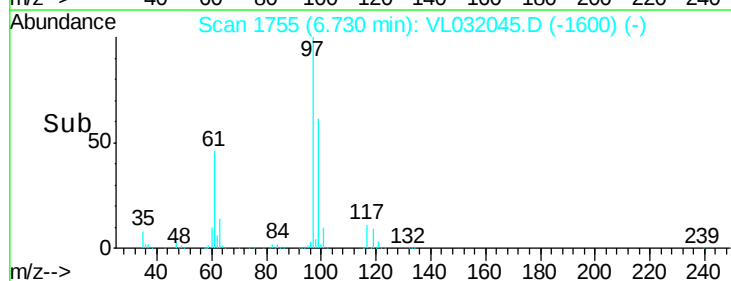
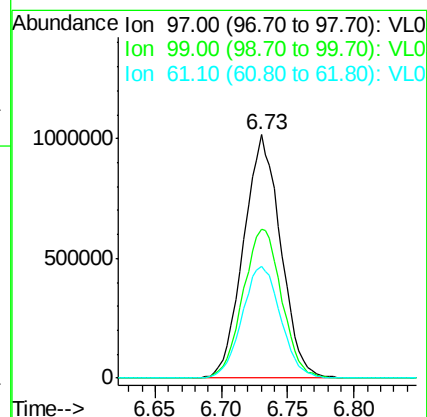
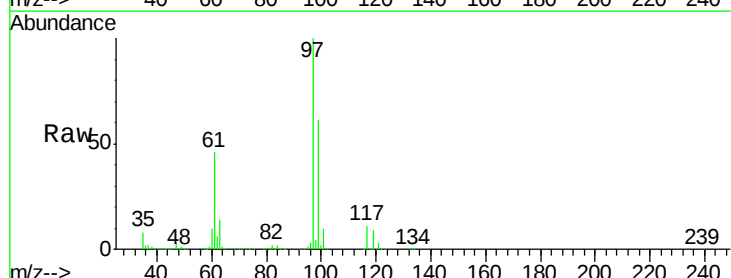
Manual Integrations  
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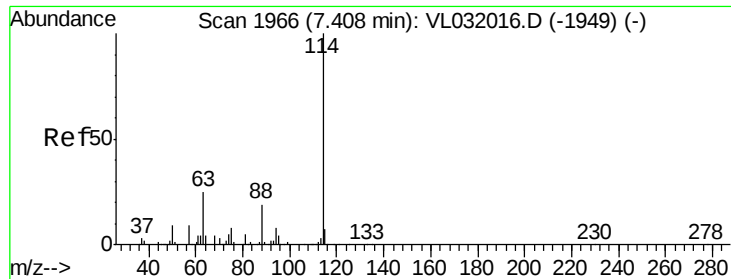
MMDadoda  
 6/4/2018 3:36:02 PM



#32  
 1,1,1-Trichloroethane  
 Concen: 9.35 ppbv  
 RT: 6.73 min Scan# 1755  
 Delta R.T. -0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 63.9  | 51.5  | 77.3  |
| 61      | 47.9  | 39.4  | 59.2  |





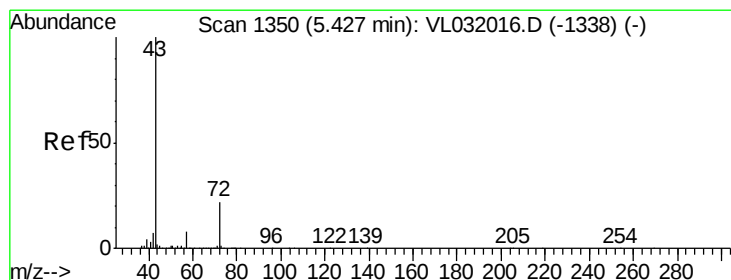
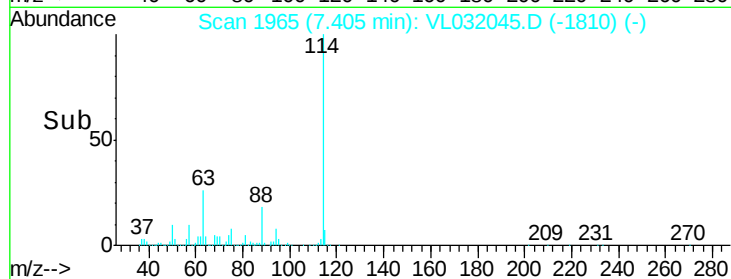
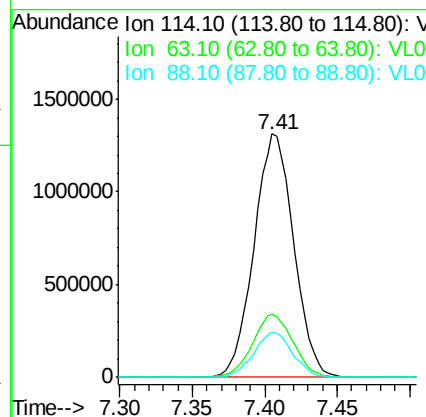
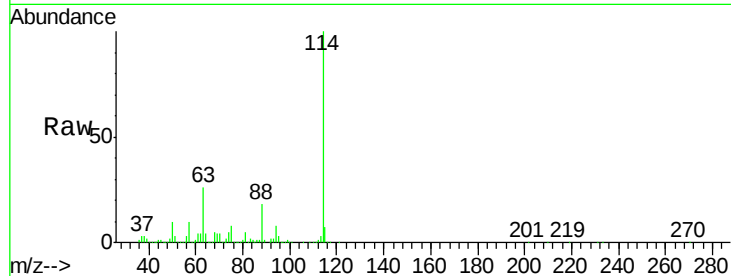
#33  
 1,4-Difluorobenzene  
 Concen: 10.00 ppbv  
 RT: 7.41 min Scan# 1965  
 Delta R.T. -0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 26.8  | 21.1  | 31.7  |
| 88      | 18.1  | 14.8  | 22.2  |

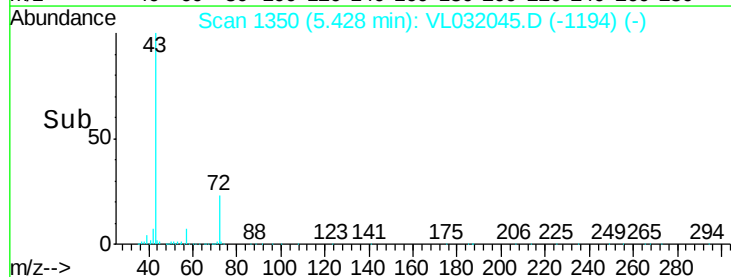
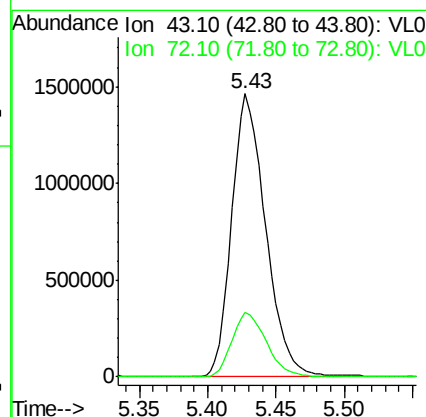
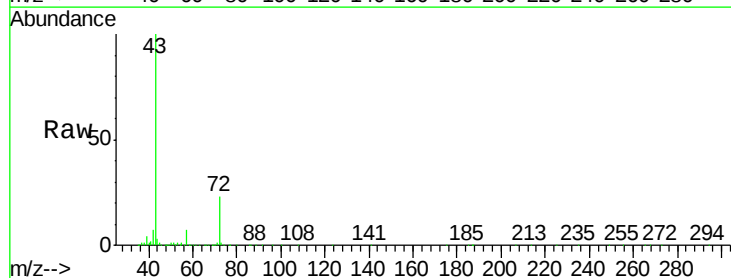
Manual Integrations  
 APPROVED

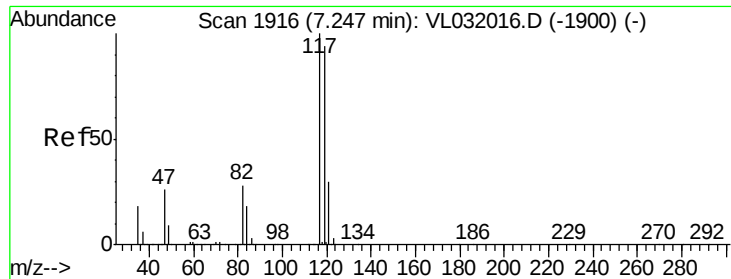
MMDadoda  
 6/4/2018 3:36:02 PM



#34  
 2-Butanone  
 Concen: 12.84 ppbv  
 RT: 5.43 min Scan# 1350  
 Delta R.T. 0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 23.3  | 18.6  | 27.8  |





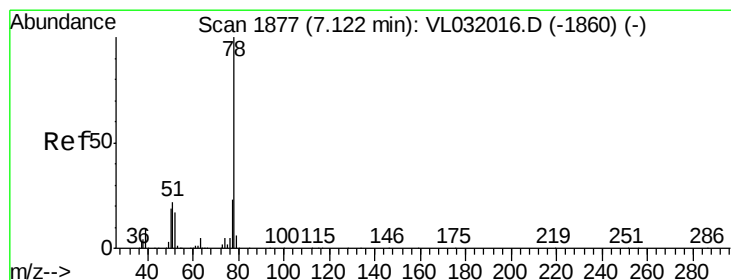
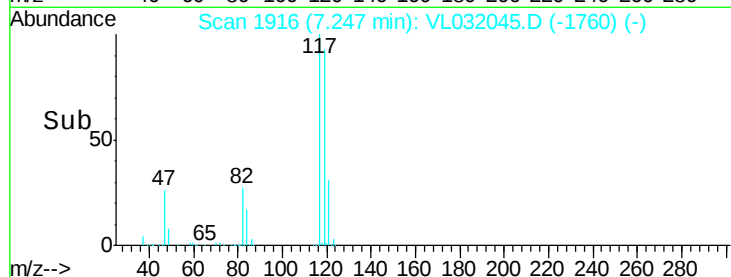
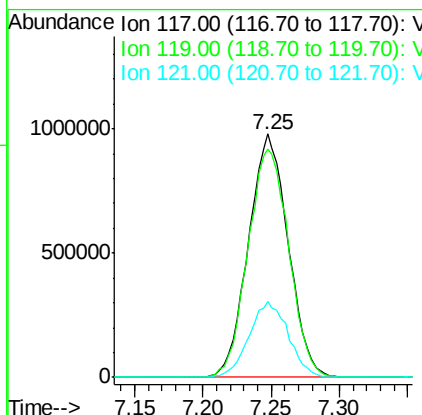
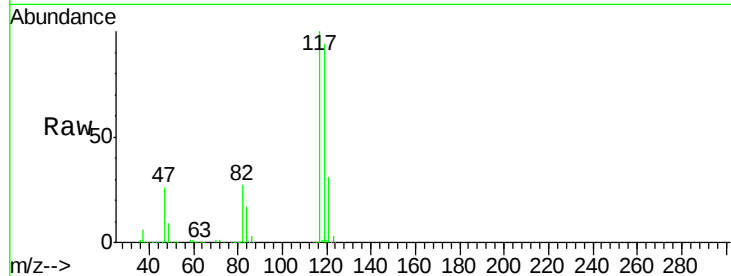
#35  
Carbon Tetrachloride  
Concen: 9.23 ppbv  
RT: 7.25 min Scan# 1916  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 119     | 93.9  | 75.3  | 112.9 |
| 121     | 31.4  | 24.1  | 36.1  |

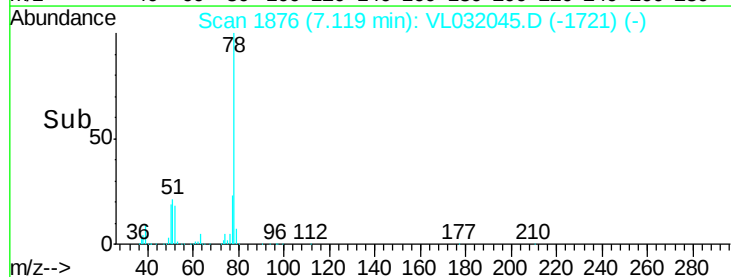
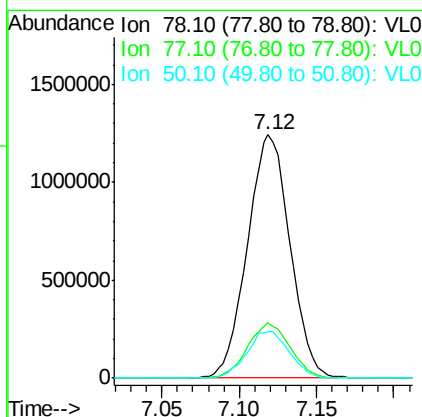
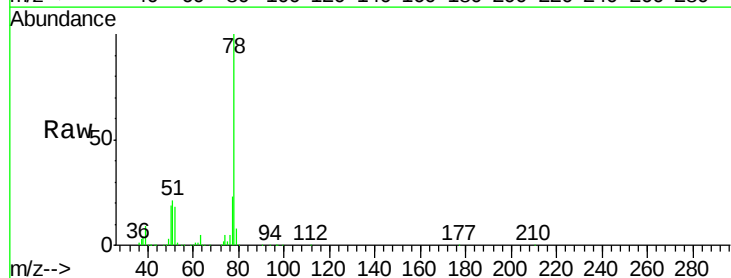
Manual Integrations  
APPROVED

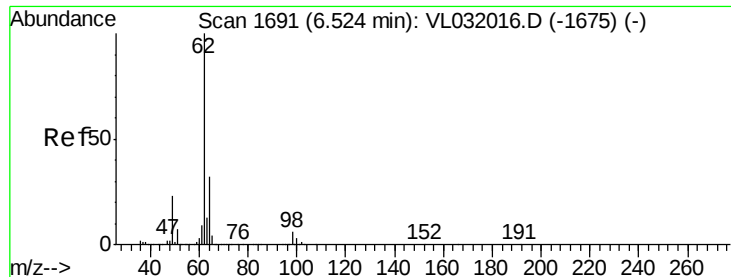
MMDadoda  
6/4/2018 3:36:02 PM



#36  
Benzene  
Concen: 10.80 ppbv  
RT: 7.12 min Scan# 1876  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 22.7  | 18.1  | 27.1  |
| 50      | 19.2  | 14.9  | 22.3  |





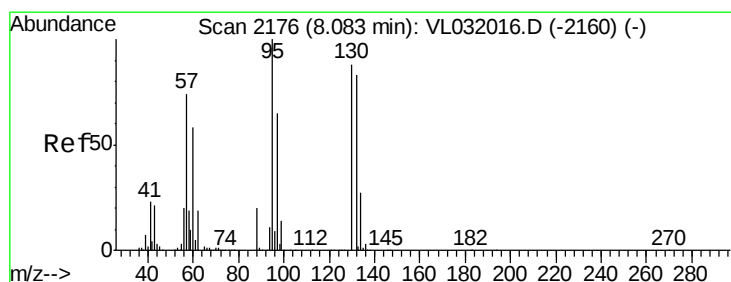
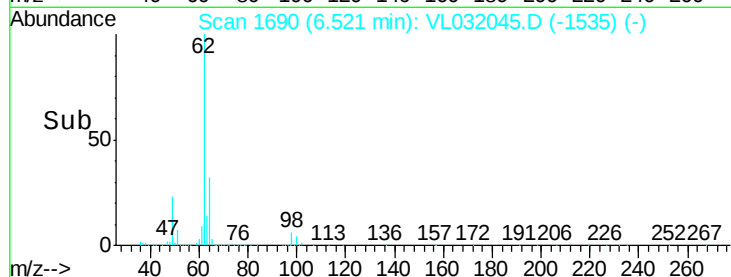
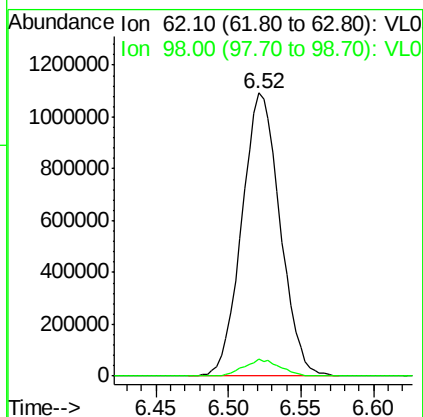
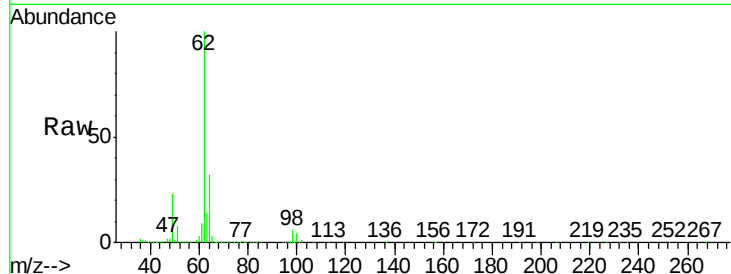
#37  
 1,2-Dichloroethane  
 Concen: 12.64 ppbv  
 RT: 6.52 min Scan# 1690  
 Delta R.T. -0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 62      | 100   |       |       |
| 98      | 5.6   | 4.2   | 6.4   |

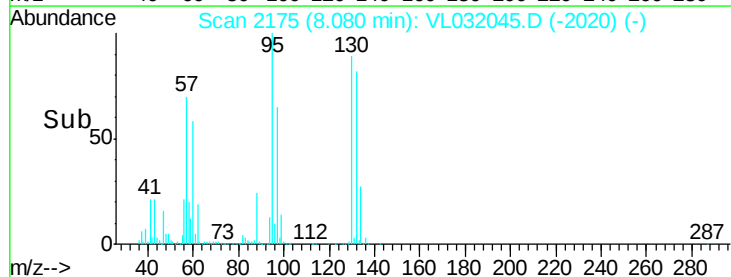
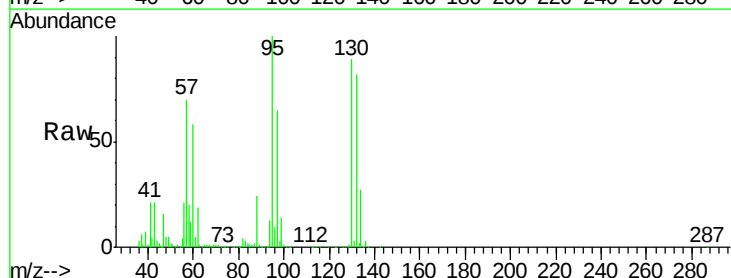
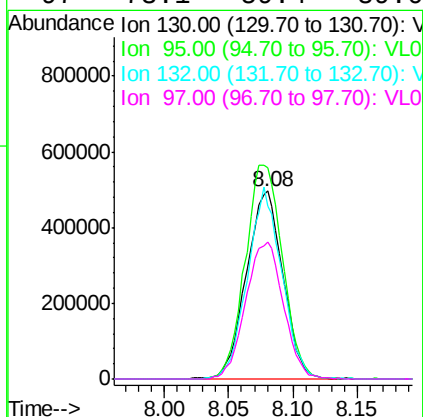
Manual Integrations  
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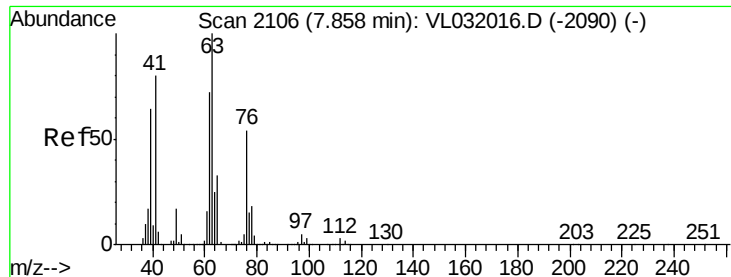
MMDadoda  
 6/4/2018 3:36:02 PM



#38  
 Trichloroethene  
 Concen: 11.58 ppbv  
 RT: 8.08 min Scan# 2175  
 Delta R.T. -0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 130     | 100   |       |       |
| 95      | 112.2 | 90.7  | 136.1 |
| 132     | 92.3  | 75.6  | 113.4 |
| 97      | 73.1  | 59.4  | 89.0  |





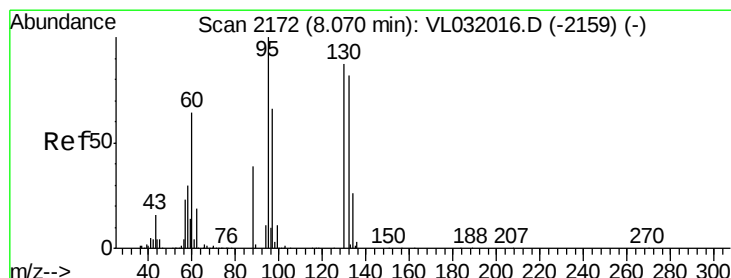
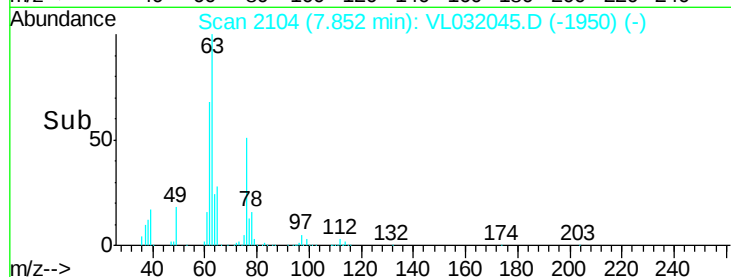
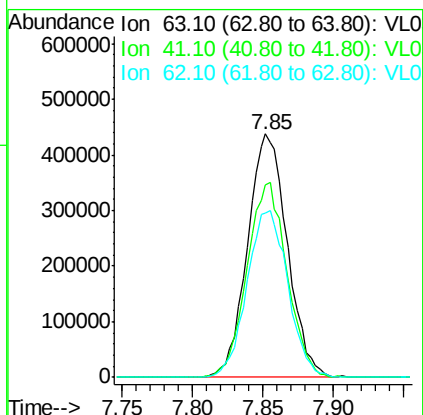
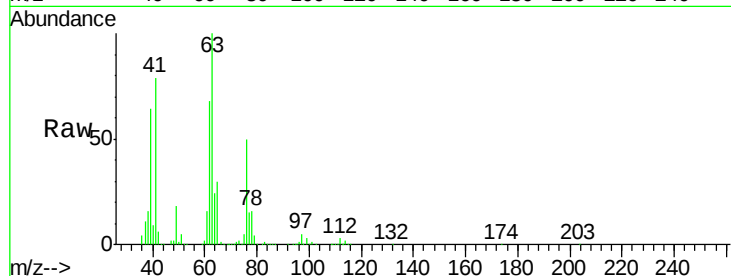
#39  
 1,2-Dichloropropane  
 Concen: 10.64 ppbv  
 RT: 7.85 min Scan# 2104  
 Delta R.T. -0.01 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 78.9  | 64.0  | 96.0  |
| 62      | 67.6  | 57.6  | 86.4  |

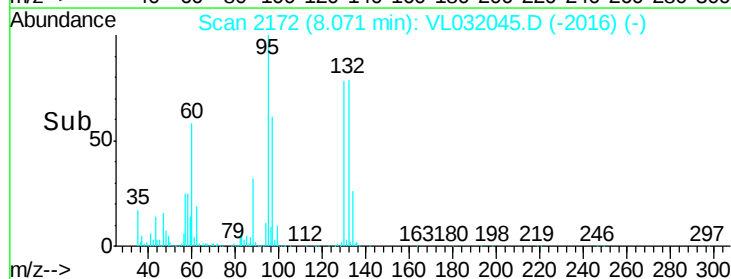
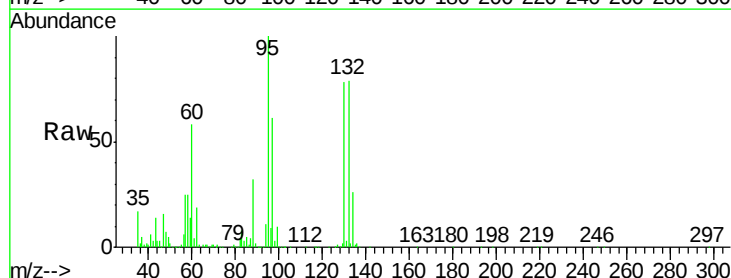
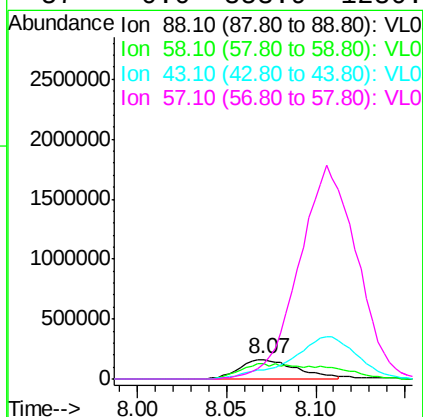
Manual Integrations  
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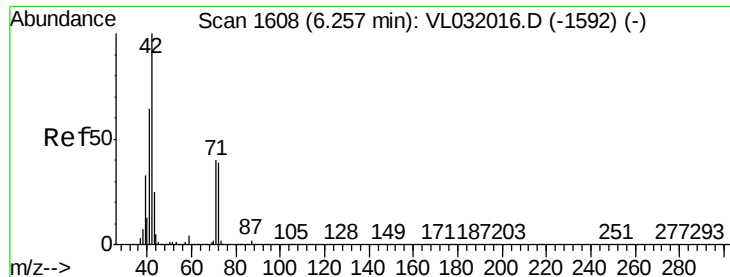
MMDadoda  
 6/4/2018 3:36:02 PM



#40  
 1,4-Dioxane  
 Concen: 10.46 ppbv  
 RT: 8.07 min Scan# 2172  
 Delta R.T. 0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper   |
|---------|-------|-------|---------|
| 88      | 100   |       |         |
| 58      | 128.3 | 100.5 | 150.7   |
| 43      | 0.0   | 193.8 | 290.6#  |
| 57      | 0.0   | 853.9 | 1280.9# |





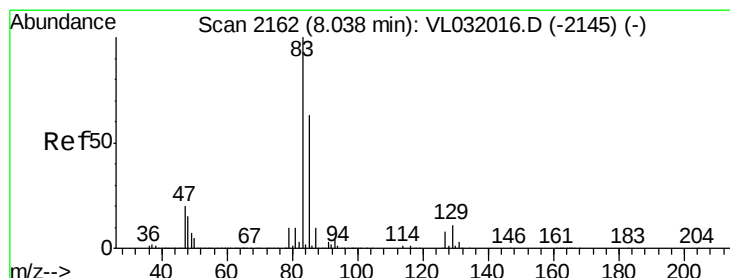
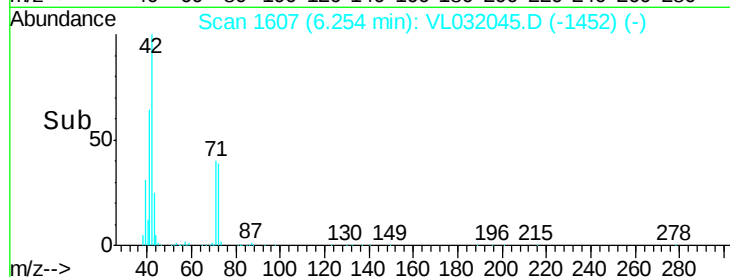
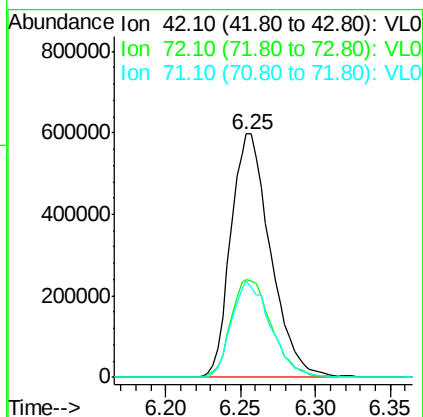
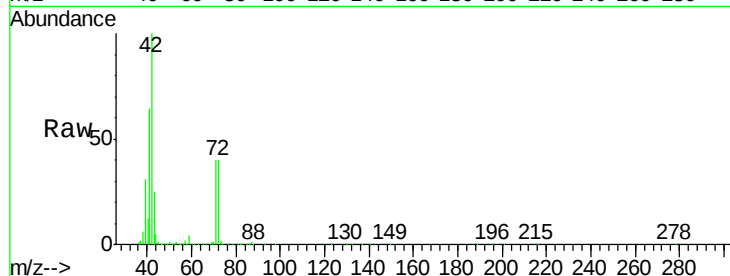
#41  
Tetrahydrofuran  
Concen: 12.99 ppbv  
RT: 6.25 min Scan# 1607  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 41.6  | 32.3  | 48.5  |
| 71      | 39.4  | 32.3  | 48.5  |

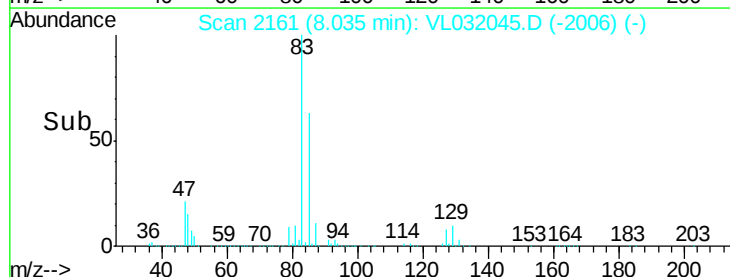
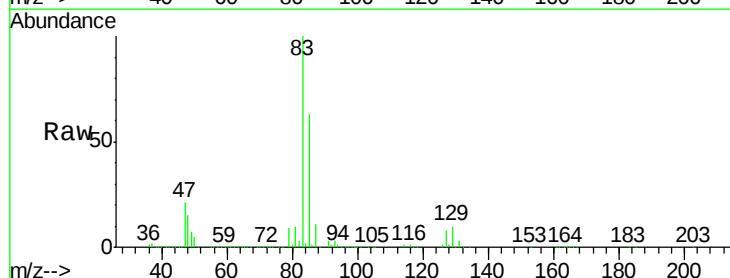
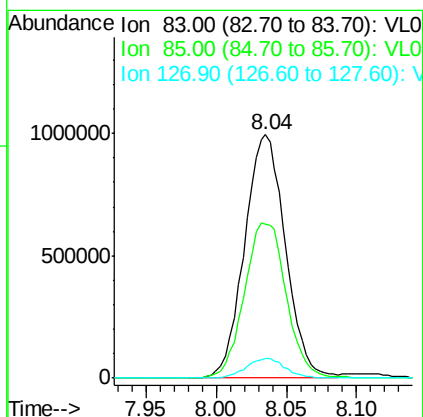
Manual Integrations  
APPROVED

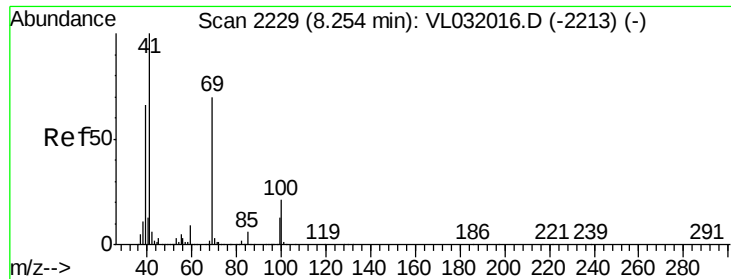
MMDadoda  
6/4/2018 3:36:02 PM



#42  
Bromodichloromethane  
Concen: 10.18 ppbv  
RT: 8.04 min Scan# 2161  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 63.2  | 50.3  | 75.5  |
| 127     | 8.0   | 6.6   | 9.8   |





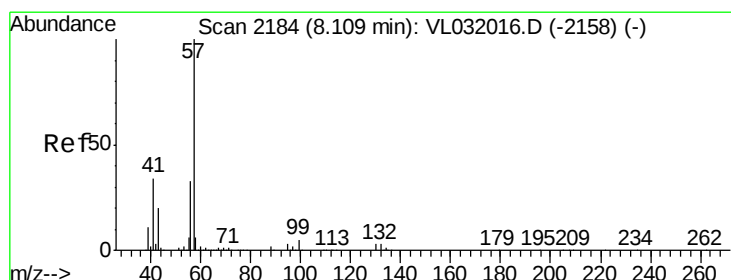
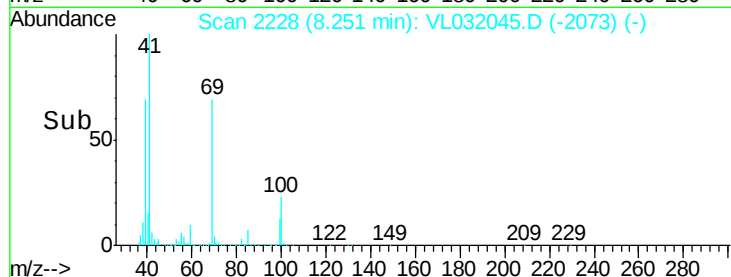
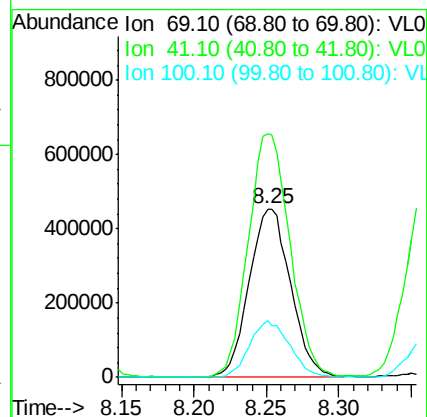
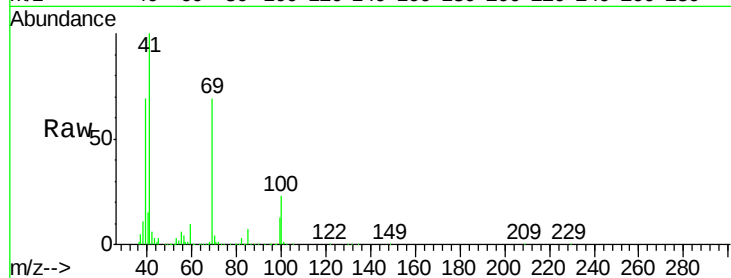
#43  
Methvl Methacrylate  
Concen: 11.77 ppbv  
RT: 8.25 min Scan# 2228  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

| Tot Ion | Ion   | Ratio | Lower | Upper |
|---------|-------|-------|-------|-------|
| 69      | 100   |       |       |       |
| 41      | 145.9 | 115.5 | 173.3 |       |
| 100     | 32.6  | 25.4  | 38.0  |       |

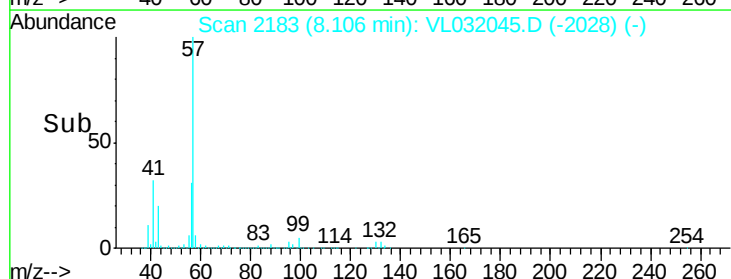
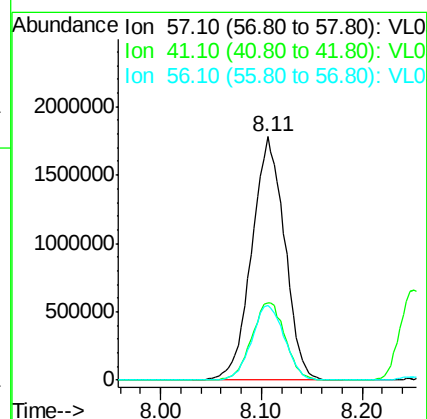
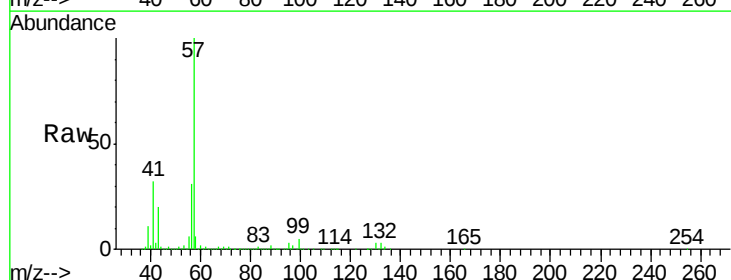
Manual Integrations  
APPROVED

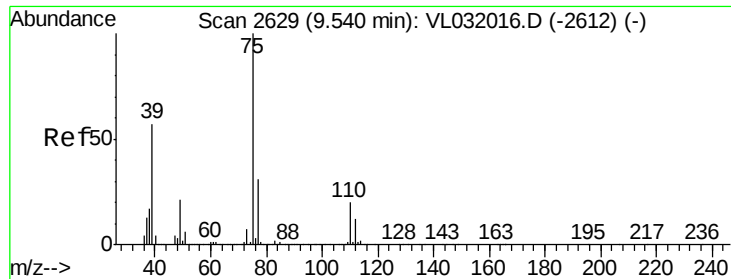
MMDadoda  
6/4/2018 3:36:02 PM



#44  
2,2,4-Trimethylpentane  
Concen: 10.68 ppbv  
RT: 8.11 min Scan# 2183  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 57      | 100  |       |       |       |
| 41      | 32.4 | 26.6  | 40.0  |       |
| 56      | 30.7 | 24.9  | 37.3  |       |





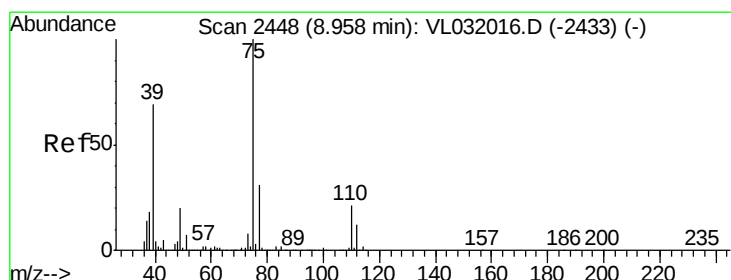
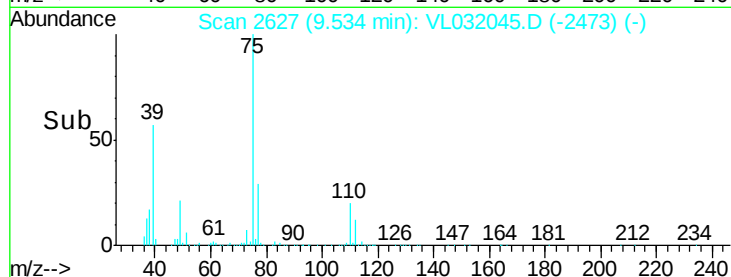
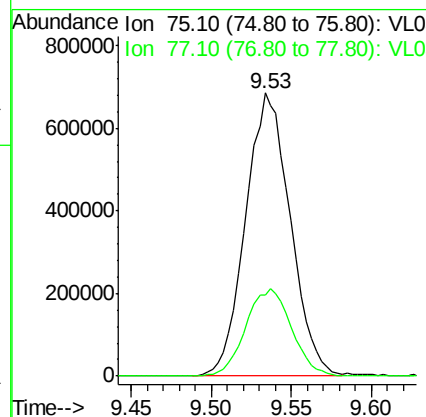
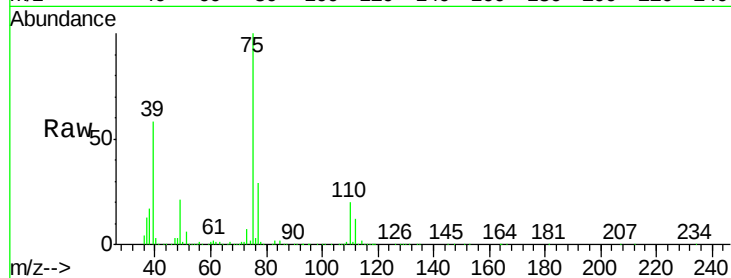
#45  
t-1,3-Dichloropropene  
Concen: 12.60 ppbv  
RT: 9.53 min Scan# 2627  
Delta R.T. -0.01 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

Tot Ion: 75 Resp: 1304200  
Ion Ratio Lower Upper  
75 100  
77 28.8 25.0 37.4

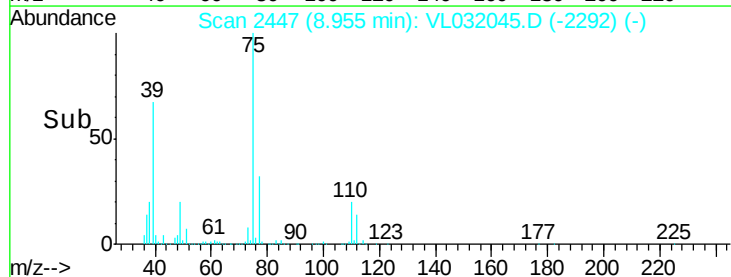
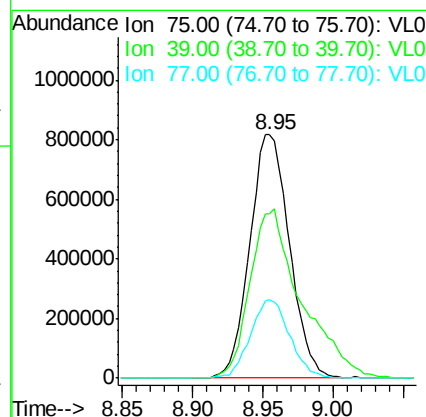
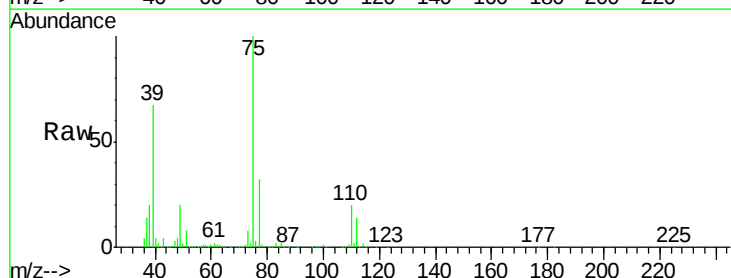
Manual Integrations  
APPROVED

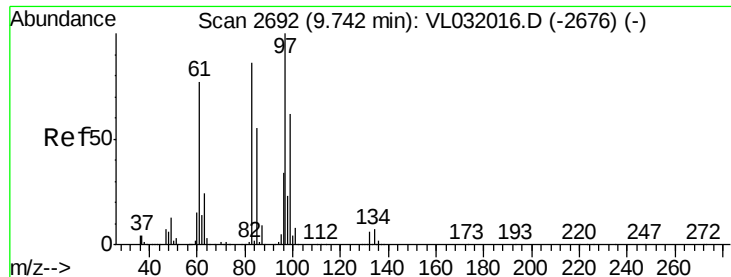
MMDadoda  
6/4/2018 3:36:02 PM



#46  
cis-1,3-Dichloropropene  
Concen: 12.25 ppbv  
RT: 8.95 min Scan# 2447  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Tgt Ion: 75 Resp: 1611450  
Ion Ratio Lower Upper  
75 100  
39 67.3 55.0 82.6  
77 32.1 25.0 37.6





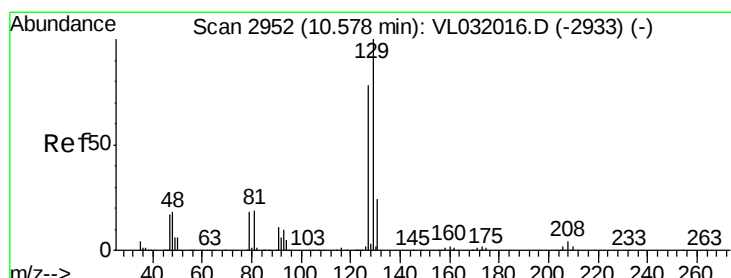
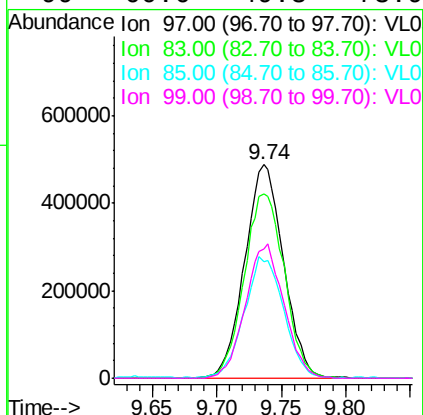
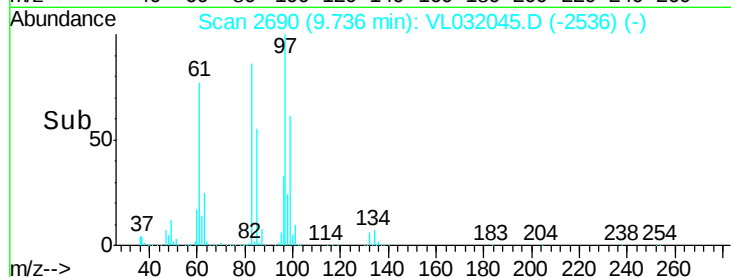
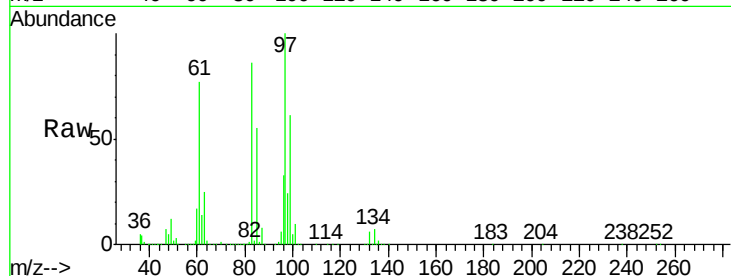
#47  
 1,1,2-Trichloroethane  
 Concen: 10.24 ppbv  
 RT: 9.74 min Scan# 2690  
 Delta R.T. -0.01 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 83      | 86.1  | 69.1  | 103.7 |
| 85      | 54.3  | 44.5  | 66.7  |
| 99      | 60.6  | 49.3  | 73.9  |

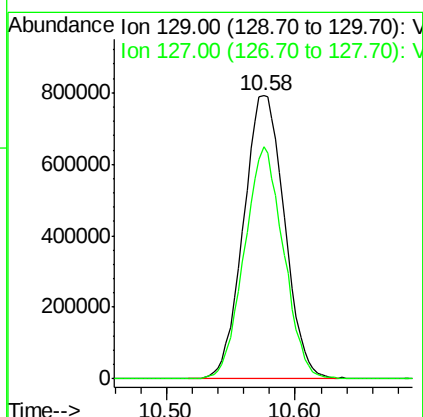
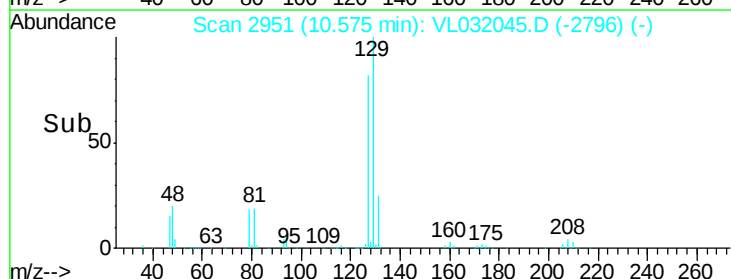
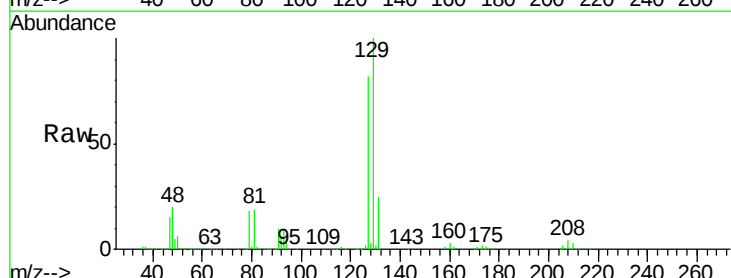
Manual Integrations  
 APPROVED

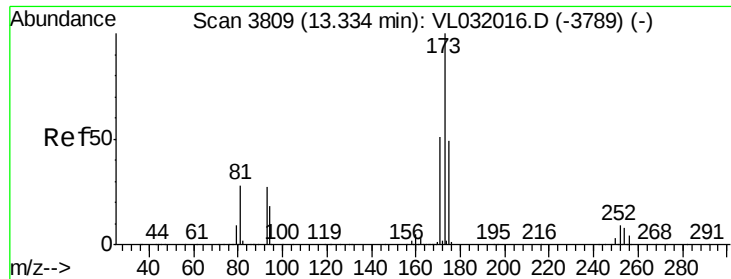
MMDadoda  
 6/4/2018 3:36:02 PM



#48  
 Dibromochloromethane  
 Concen: 10.57 ppbv  
 RT: 10.58 min Scan# 2951  
 Delta R.T. -0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 78.5  | 39.3  | 117.9 |





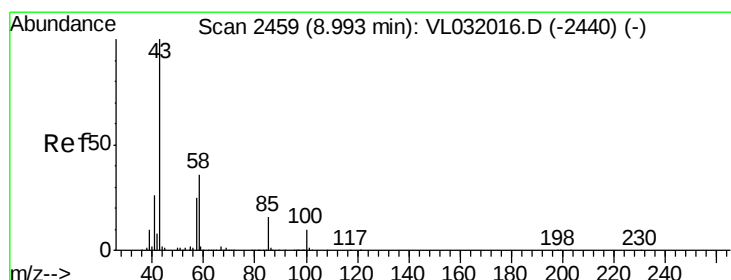
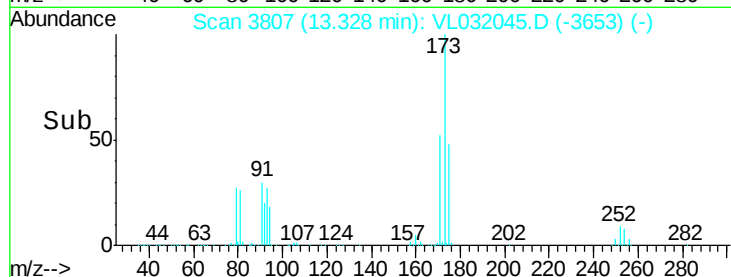
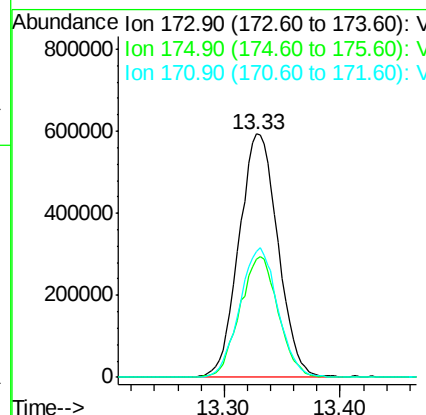
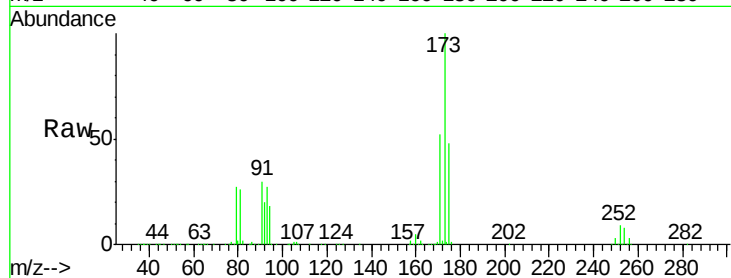
#49  
Bromoform  
Concen: 10.63 ppbv  
RT: 13.33 min Scan# 3807  
Delta R.T. -0.01 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

Tot Ion:173 Resp: 1383204  
Ion Ratio Lower Upper  
173 100  
175 49.1 39.8 59.8  
171 52.3 41.7 62.5

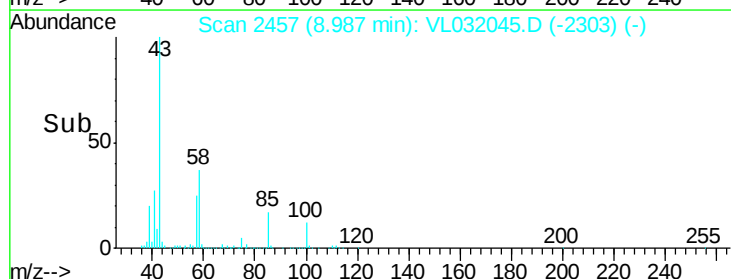
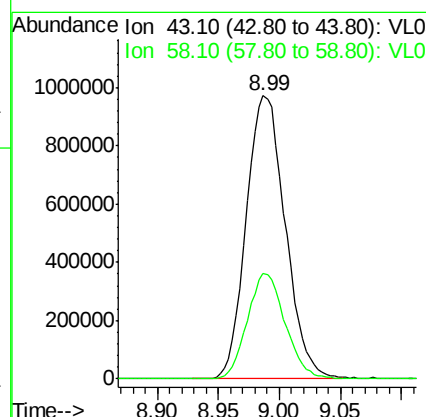
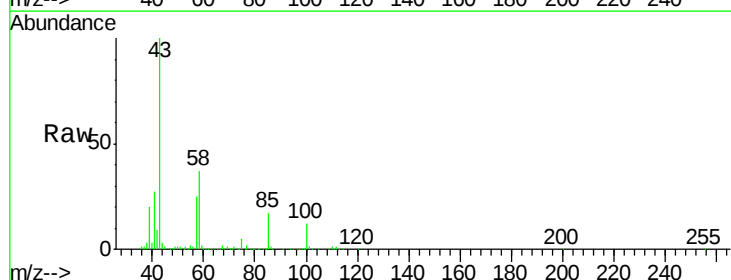
Manual Integrations  
APPROVED

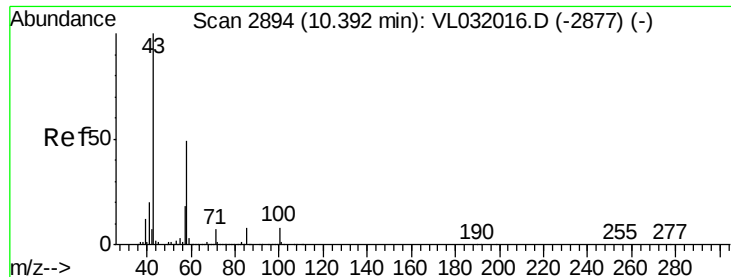
MMDadoda  
6/4/2018 3:36:02 PM



#50  
4-Methyl-2-Pentanone  
Concen: 11.23 ppbv  
RT: 8.99 min Scan# 2457  
Delta R.T. -0.01 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Tgt Ion: 43 Resp: 2148752  
Ion Ratio Lower Upper  
43 100  
58 36.1 29.1 43.7





#51

2-Hexanone

Concen: 11.59 ppbv

RT: 10.39 min Scan# 2893

Delta R.T. -0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 43 Resp: 1989126

Ion Ratio Lower Upper

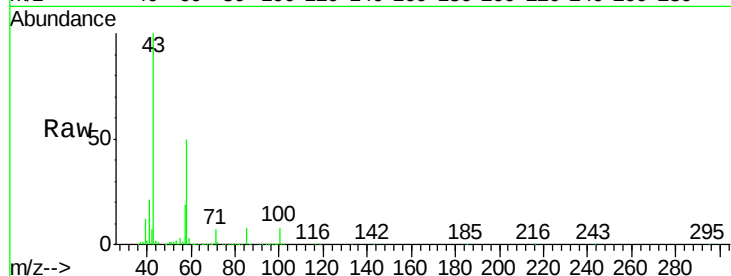
43 100

58 49.2 39.0 58.6

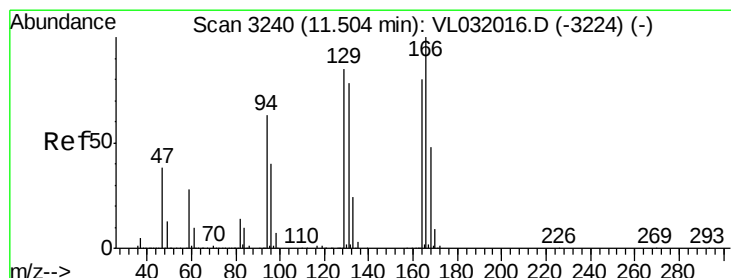
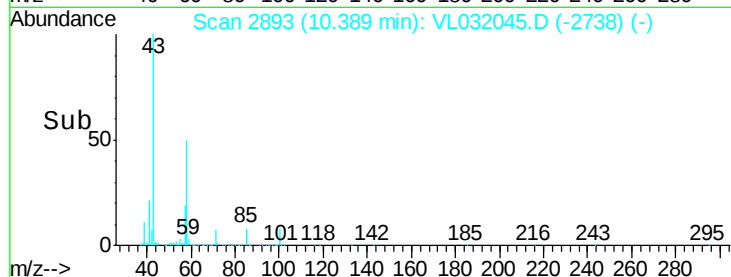
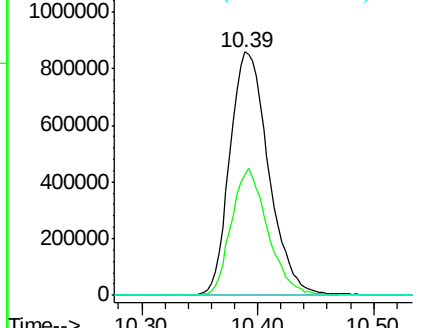
98 0.4 0.4 0.6#

Manual Integrations  
APPROVED

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6/4/2018 3:36:02 PM



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



#52

Tetrachloroethene

Concen: 10.65 ppbv

RT: 11.50 min Scan# 3238

Delta R.T. -0.01 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Tgt Ion: 164 Resp: 929255

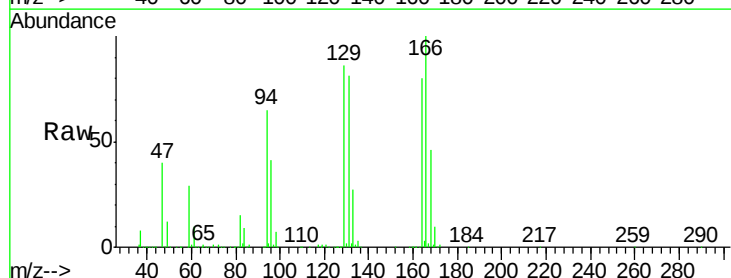
Ion Ratio Lower Upper

164 100

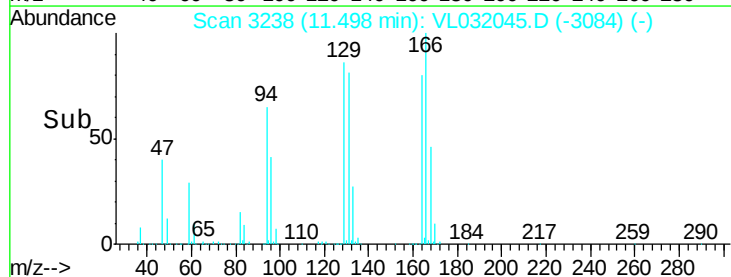
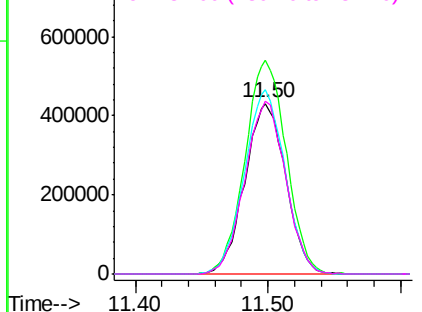
166 125.0 100.2 150.2

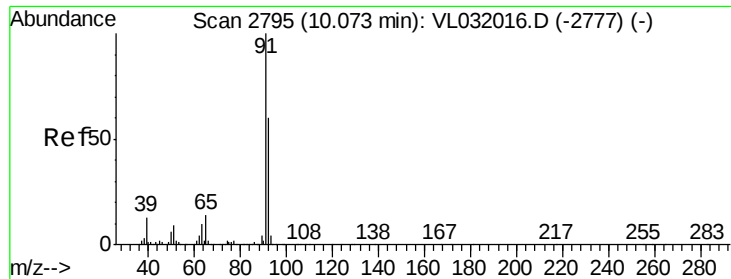
129 107.8 85.4 128.0

131 101.4 78.0 117.0



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





#53

Toluene

Concen: 11.75 ppbv

RT: 10.07 min Scan# 2794

Delta R.T. -0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 91 Resp: 2889666

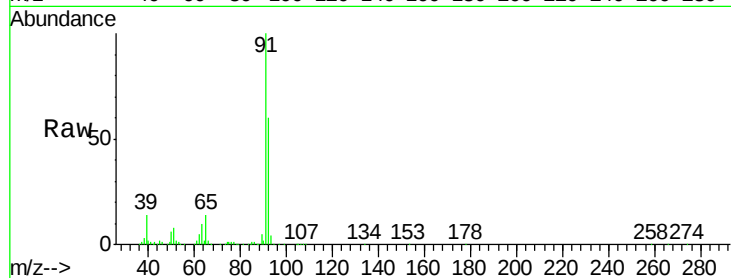
Ion Ratio Lower Upper

91 100

92 59.9 48.2 72.2

Manual Integrations  
APPROVED

MMDadoda  
6/4/2018 3:36:02 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

10.07

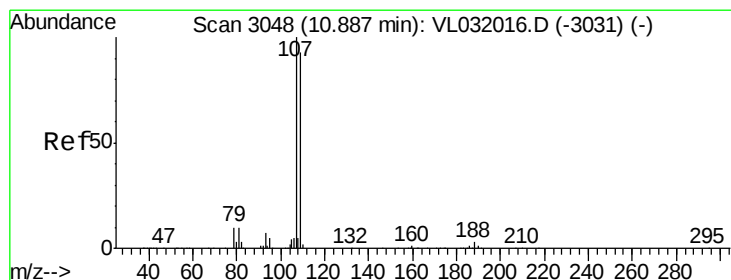
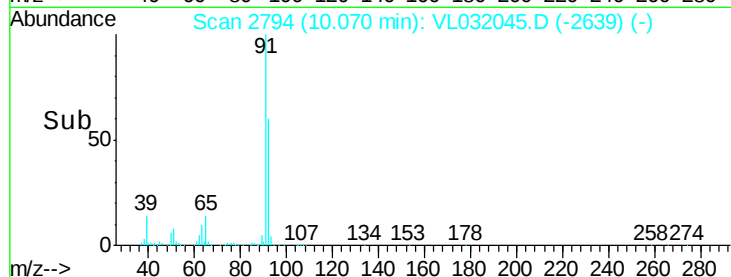
1500000

1000000

500000

0

Time-->



#54

1,2-Dibromoethane

Concen: 10.80 ppbv

RT: 10.88 min Scan# 3047

Delta R.T. -0.00 min

Lab File: VL032045.D

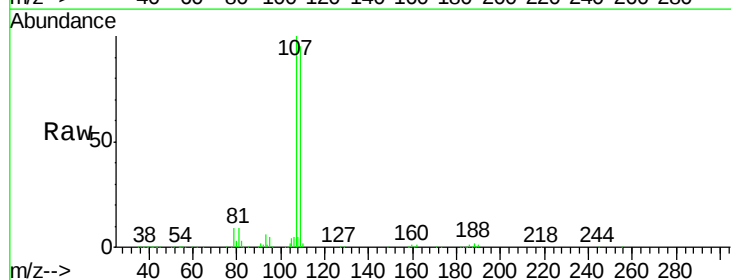
Acq: 2 Jun 2018 8:26

Tgt Ion: 107 Resp: 1583245

Ion Ratio Lower Upper

107 100

109 95.1 74.6 111.8



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

10.88

800000

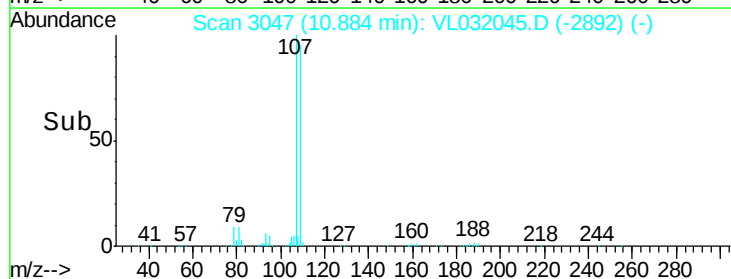
600000

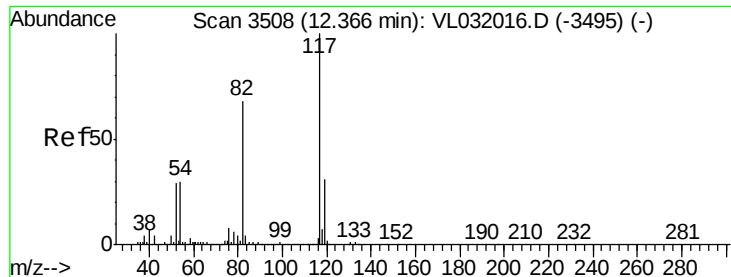
400000

200000

0

Time-->





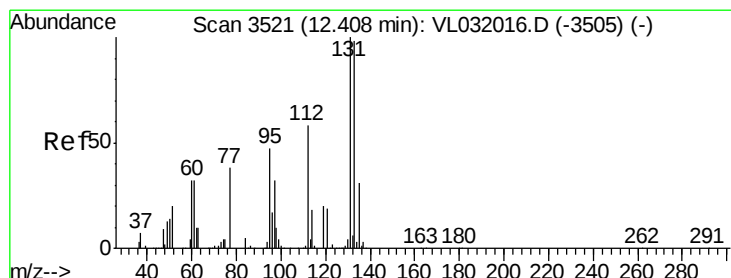
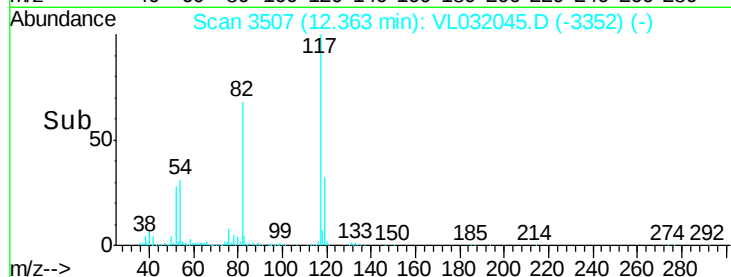
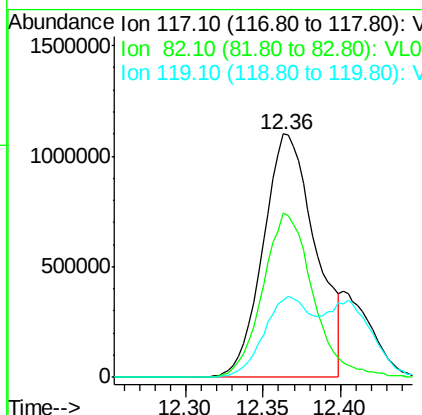
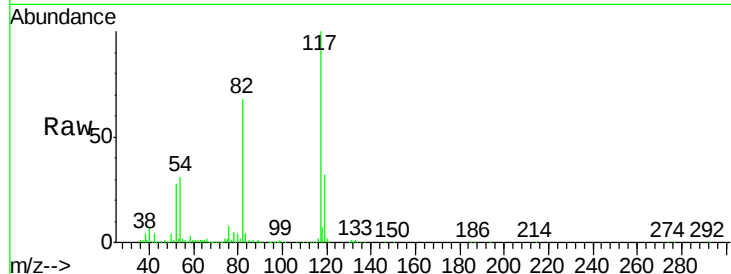
#55  
Chlorobenzene-d5  
Concen: 10.00 ppbv  
RT: 12.36 min Scan# 3507  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 65.1  | 52.7  | 79.1  |
| 119     | 28.4  | 25.5  | 38.3  |

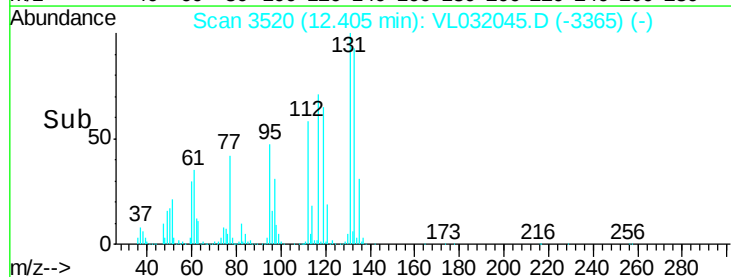
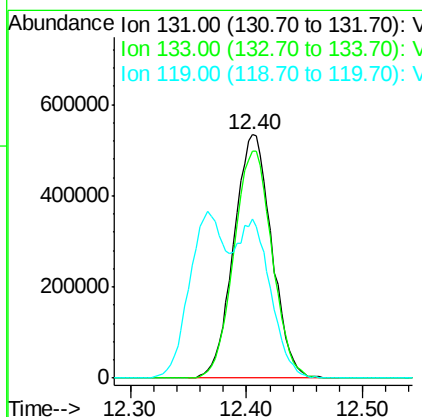
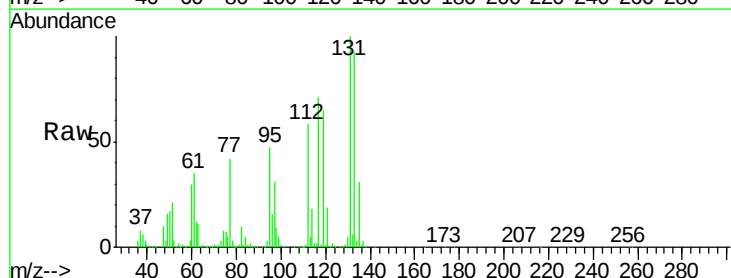
Manual Integrations  
APPROVED

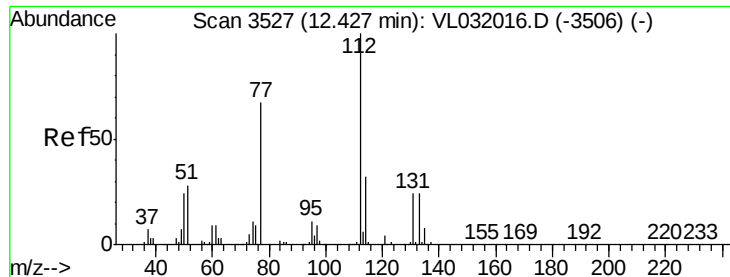
MMDadoda  
6/4/2018 3:36:02 PM



#56  
1,1,1,2-Tetrachloroethane  
Concen: 9.70 ppbv  
RT: 12.40 min Scan# 3520  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 131     | 100   |       |       |
| 133     | 94.1  | 76.7  | 115.1 |
| 119     | 55.0  | 49.2  | 73.8  |





#57

Chlorobenzene

Concen: 9.43 ppbv

RT: 12.43 min Scan# 3528

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion:112 Resp: 2230881

Ion Ratio Lower Upper

112 100

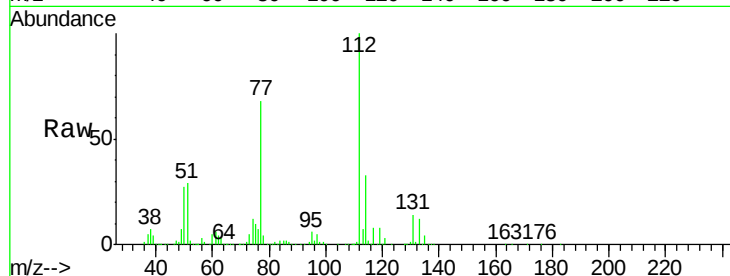
77 67.0 54.3 81.5

114 32.8 28.6 35.0

Manual Integrations  
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MMDadoda

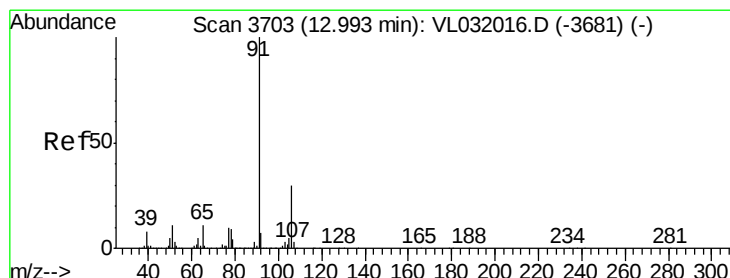
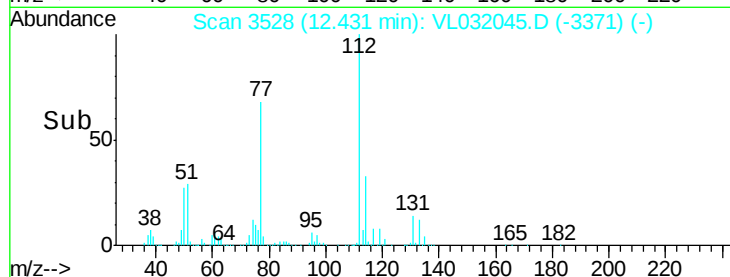
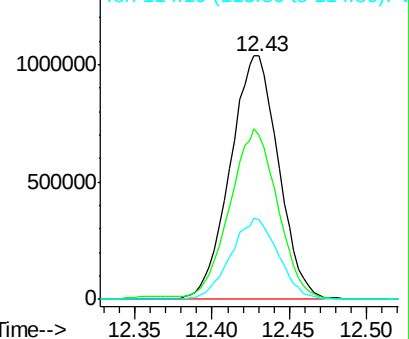
6/4/2018 3:36:02 PM



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: 11.04 ppbv

RT: 12.99 min Scan# 3703

Delta R.T. 0.00 min

Lab File: VL032045.D

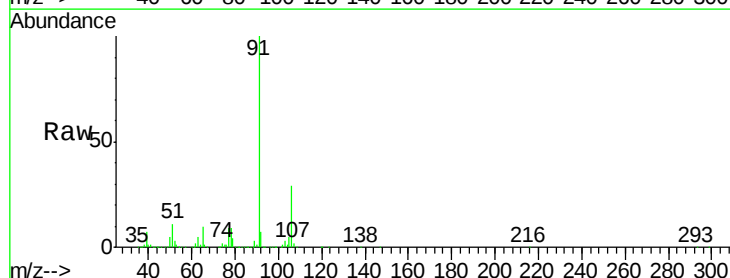
Acq: 2 Jun 2018 8:26

Tgt Ion: 91 Resp: 4019977

Ion Ratio Lower Upper

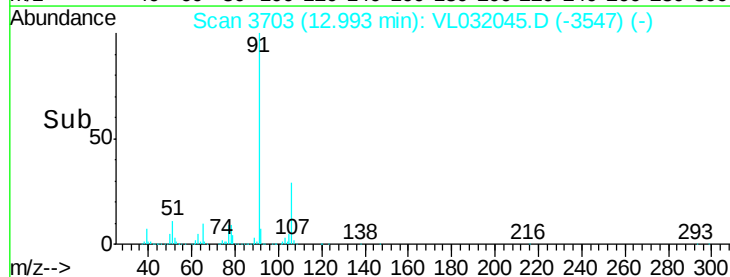
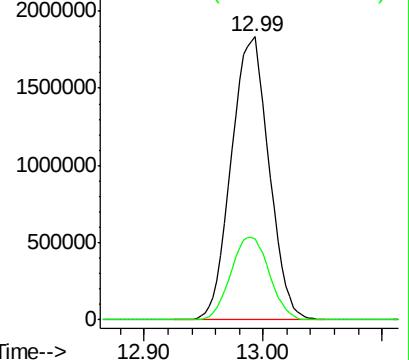
91 100

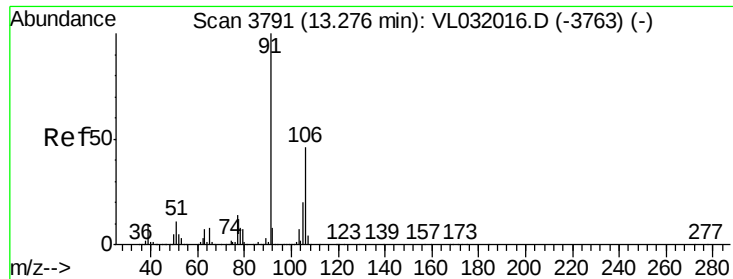
106 28.8 24.2 36.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 21.04 ppbv m

RT: 13.28 min Scan# 3791

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 91 Resp: 6718335

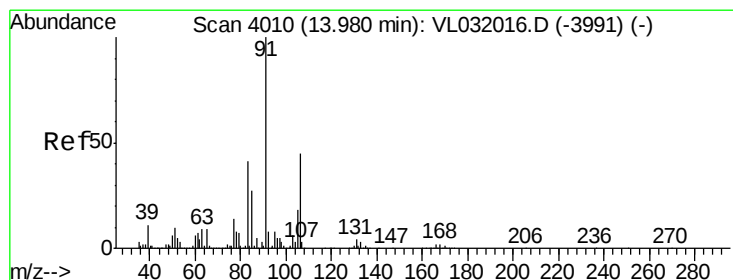
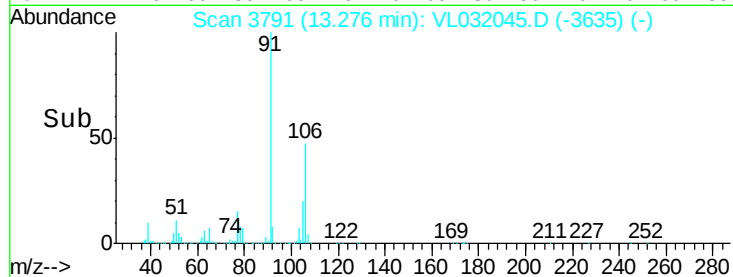
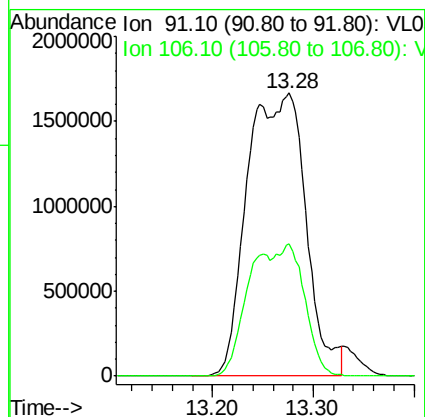
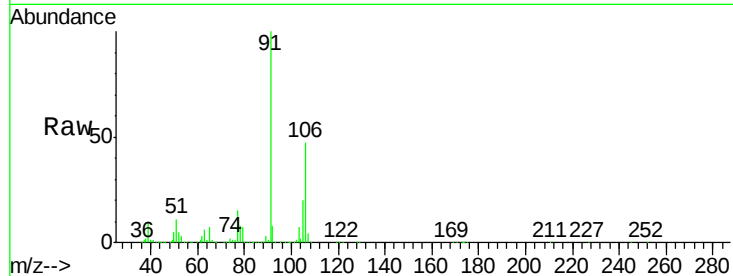
Ion Ratio Lower Upper

91 100

106 44.1 35.7 53.5

Manual Integrations  
APPROVED

MMDadoda  
6/4/2018 3:36:02 PM



#60

o-Xylene

Concen: 10.43 ppbv

RT: 13.98 min Scan# 4009

Delta R.T. -0.00 min

Lab File: VL032045.D

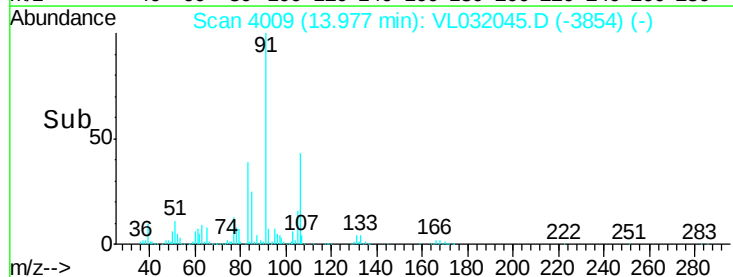
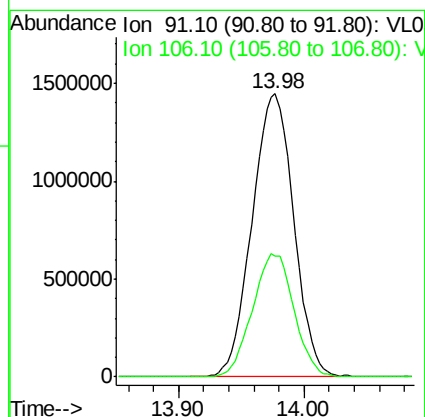
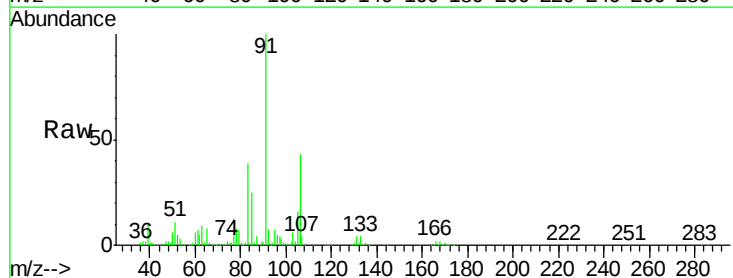
Acq: 2 Jun 2018 8:26

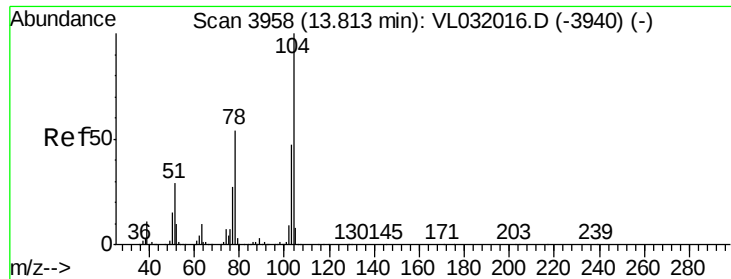
Tgt Ion: 91 Resp: 3338554

Ion Ratio Lower Upper

91 100

106 43.5 21.9 65.5





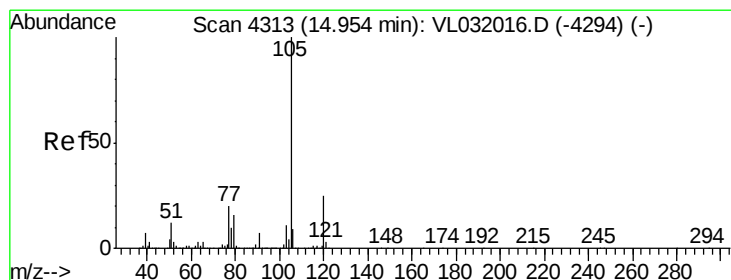
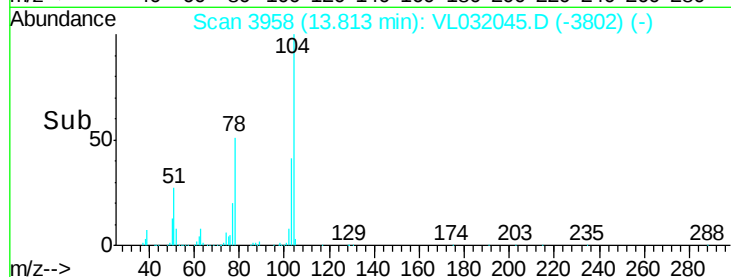
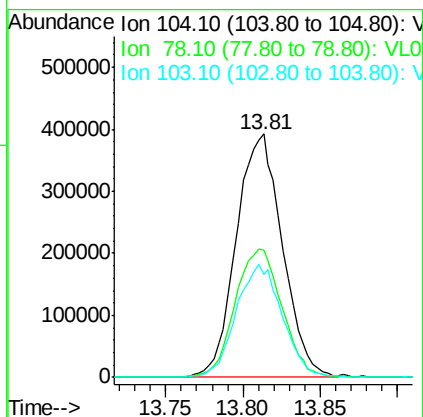
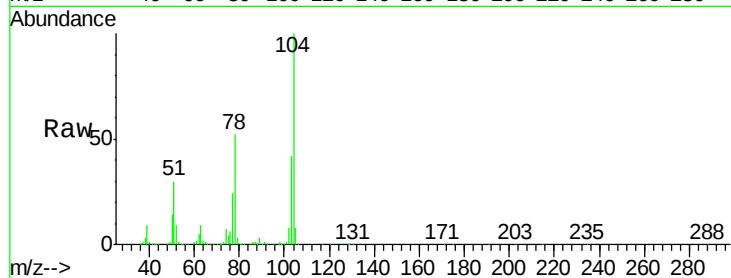
#61  
Stvrene  
Concen: 13.01 ppbv  
RT: 13.81 min Scan# 3958  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 104     | 100   |       |       |
| 78      | 54.4  | 43.0  | 64.4  |
| 103     | 46.9  | 37.4  | 56.2  |

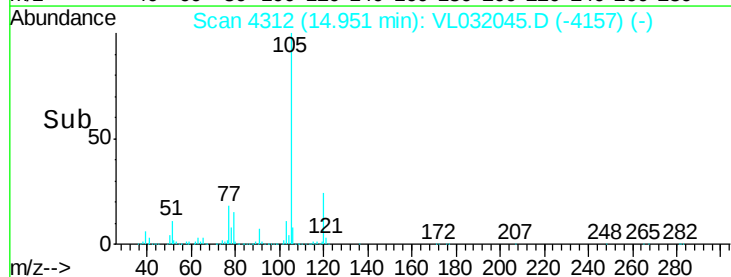
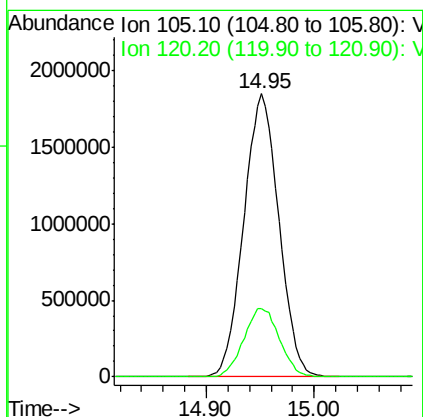
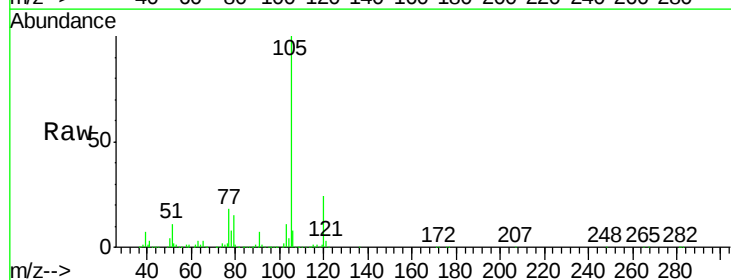
Manual Integrations  
APPROVED

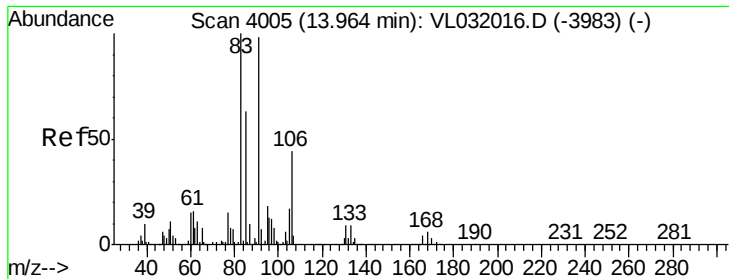
MMDadoda  
6/4/2018 3:36:02 PM



#62  
Isopropylbenzene  
Concen: 10.21 ppbv  
RT: 14.95 min Scan# 4312  
Delta R.T. -0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 24.8  | 19.8  | 29.8  |





#63

1,1,2,2-Tetrachloroethane

Concen: 8.76 ppbv

RT: 13.96 min Scan# 4004

Delta R.T. -0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 83 Resp: 2173802

Ion Ratio Lower Upper

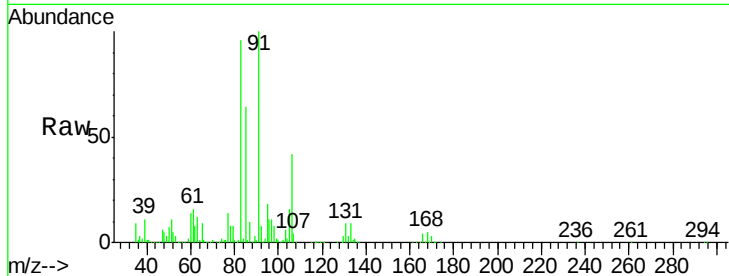
83 100

131 9.7 4.7 14.0

85 65.6 32.2 96.6

Manual Integrations  
APPROVED

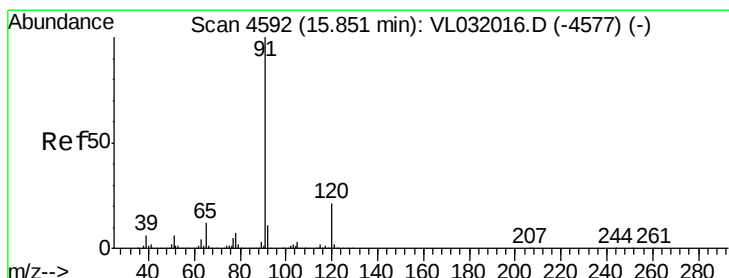
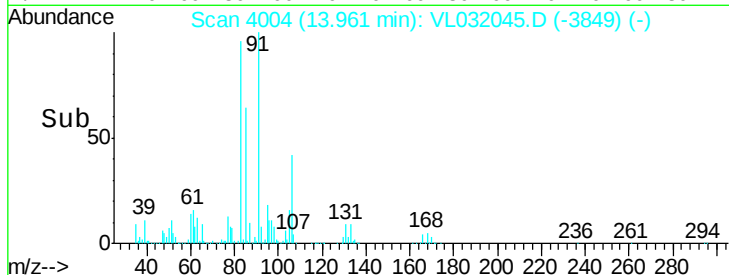
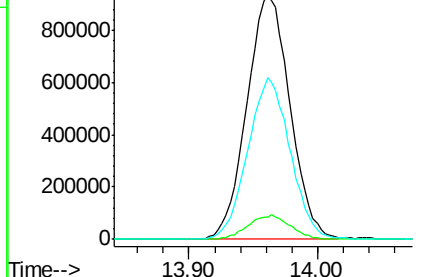
MMDadoda  
6/4/2018 3:36:02 PM



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VL0



#64

n-propylbenzene

Concen: 10.22 ppbv

RT: 15.85 min Scan# 4591

Delta R.T. -0.00 min

Lab File: VL032045.D

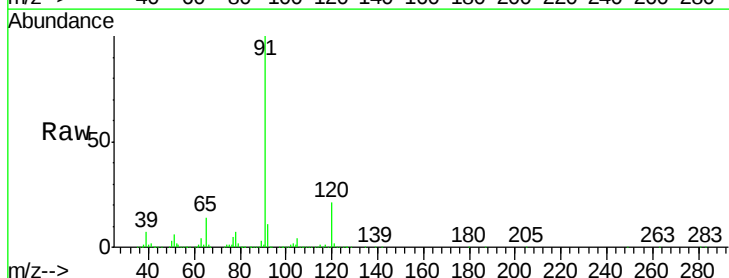
Acq: 2 Jun 2018 8:26

Tgt Ion:120 Resp: 1041920

Ion Ratio Lower Upper

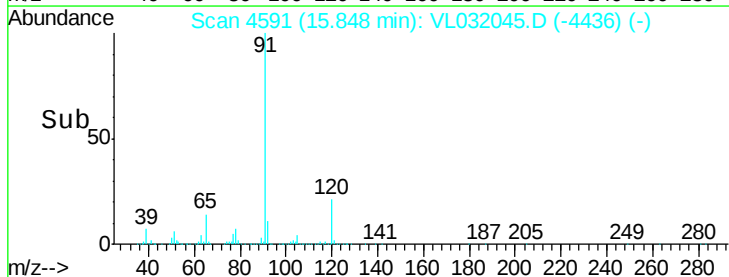
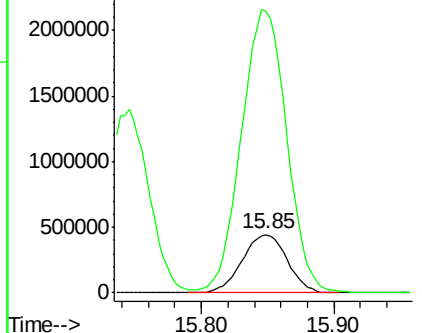
120 100

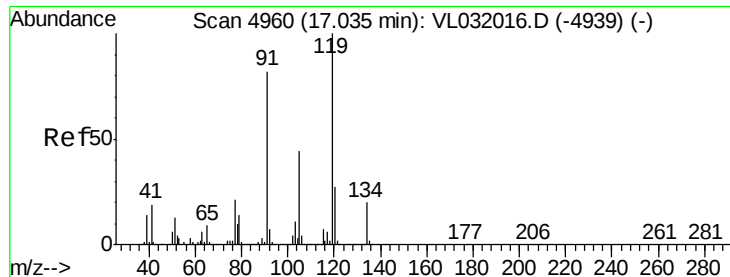
91 492.8 391.1 586.7



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0





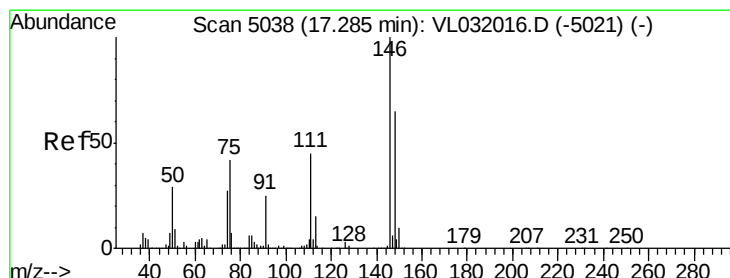
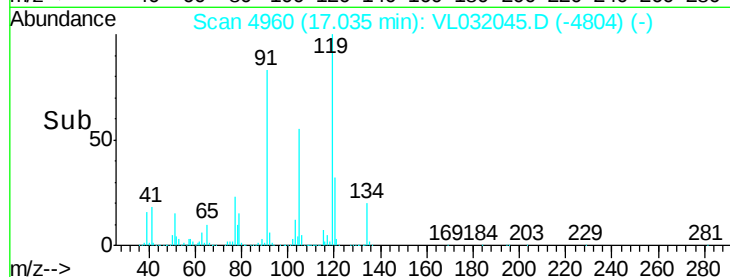
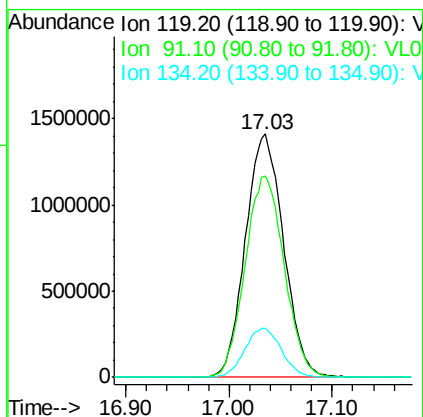
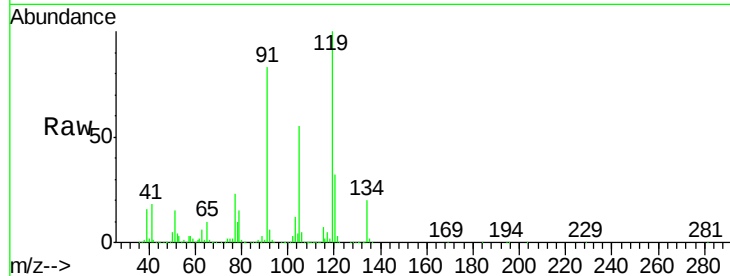
#65  
tert-Butylbenzene  
Concen: 10.15 ppbv  
RT: 17.03 min Scan# 4960  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 91      | 85.0  | 68.2  | 102.4 |
| 134     | 19.4  | 15.6  | 23.4  |

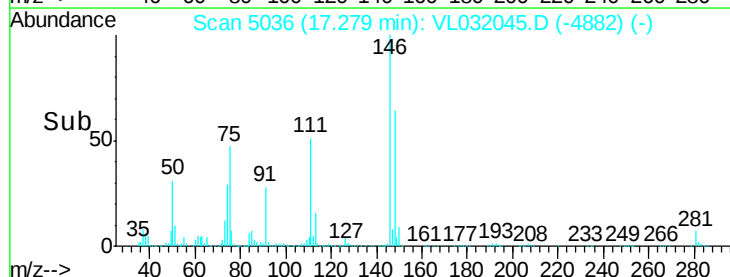
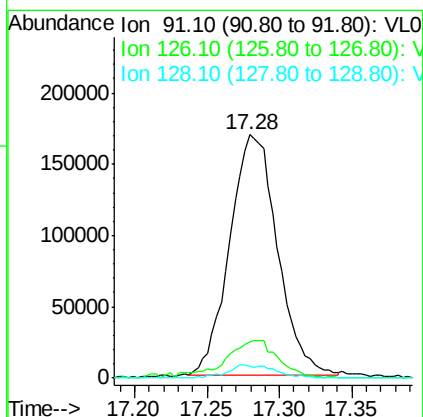
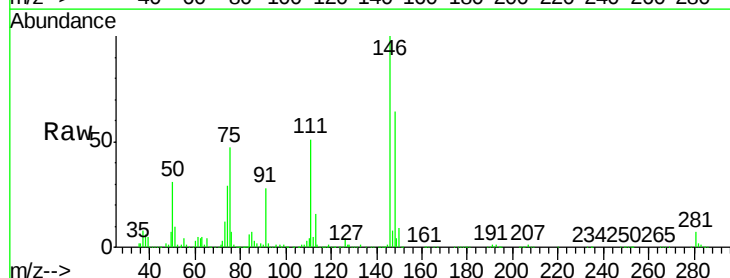
Manual Integrations  
APPROVED

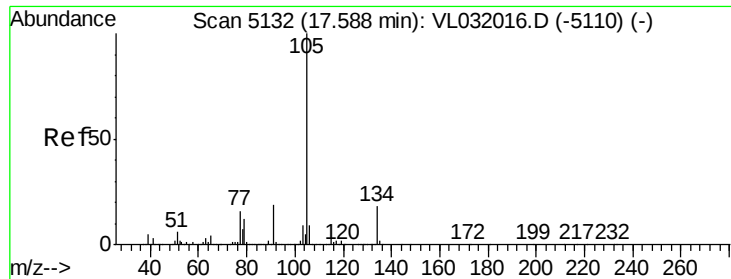
MMDadoda  
6/4/2018 3:36:02 PM



#66  
Benzyl Chloride  
Concen: 9.77 ppbv  
RT: 17.28 min Scan# 5036  
Delta R.T. -0.01 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 126     | 18.4  | 14.2  | 21.2  |
| 128     | 5.7   | 4.5   | 6.7   |





#67

sec-Butylbenzene

Concen: 9.85 ppbv

RT: 17.58 min Scan# 5131

Delta R.T. -0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion: 105 Resp: 5104045

Ion Ratio Lower Upper

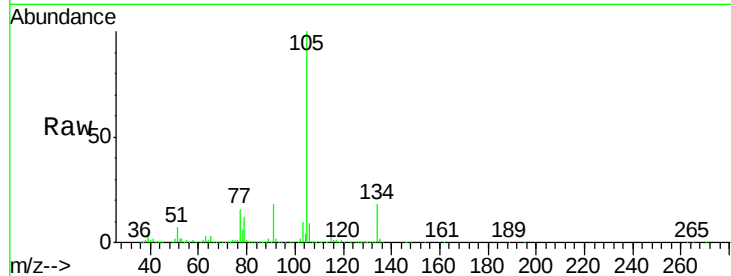
105 100

134 17.8 14.4 21.6

Manual Integrations  
APPROVED

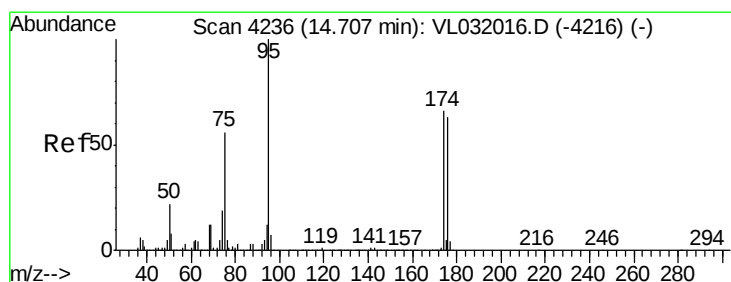
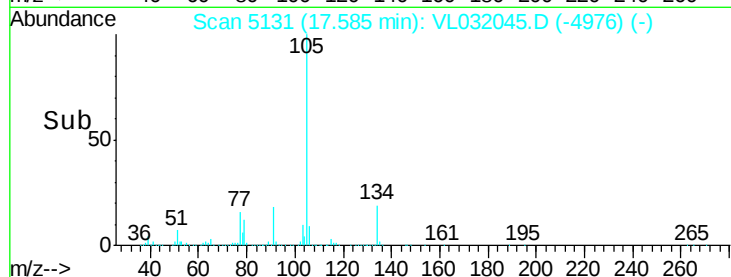
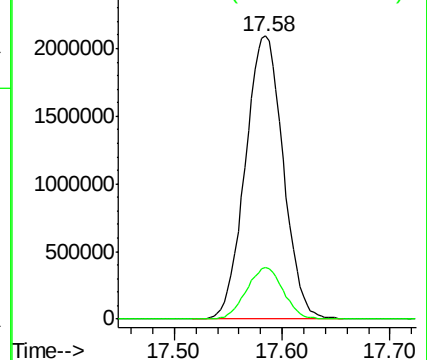
MMDadoda

6/4/2018 3:36:02 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: 9.53 ppbv

RT: 14.70 min Scan# 4234

Delta R.T. -0.01 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

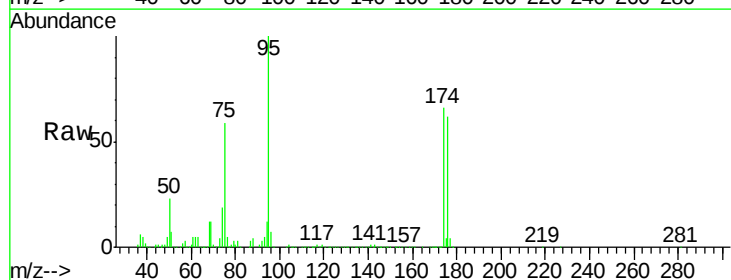
Tgt Ion: 95 Resp: 1907304

Ion Ratio Lower Upper

95 100

174 66.1 53.2 79.8

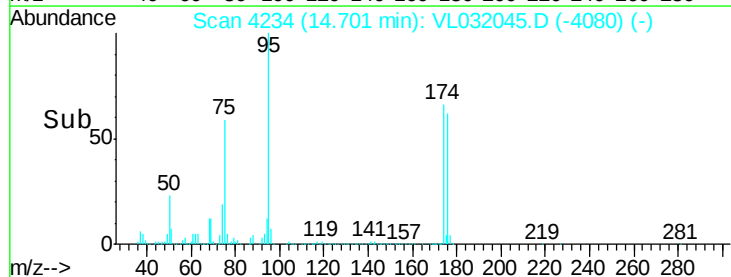
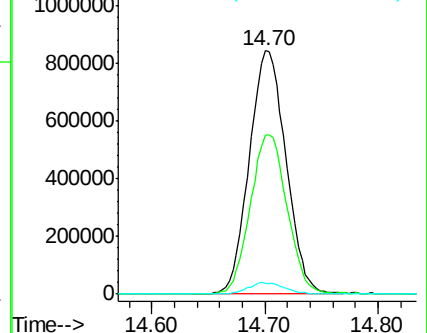
175 4.8 3.7 5.5

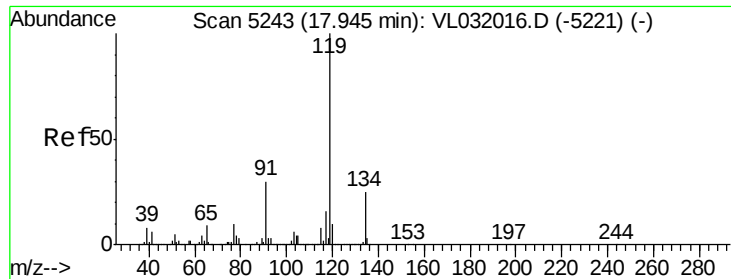


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





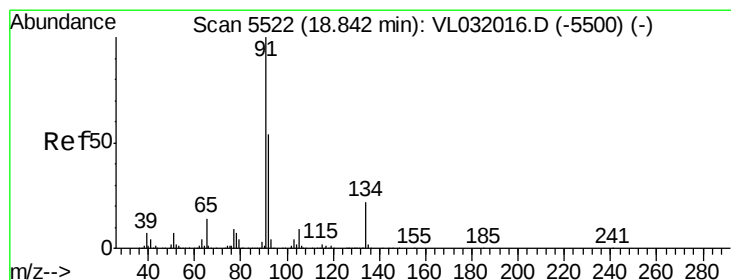
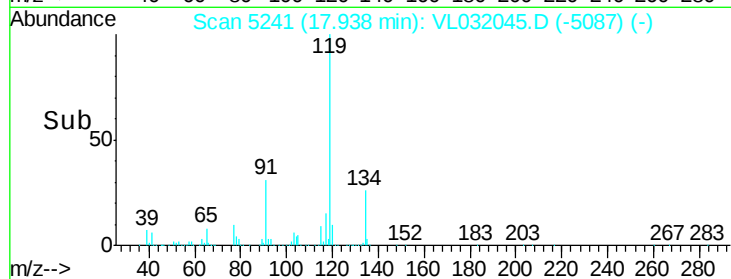
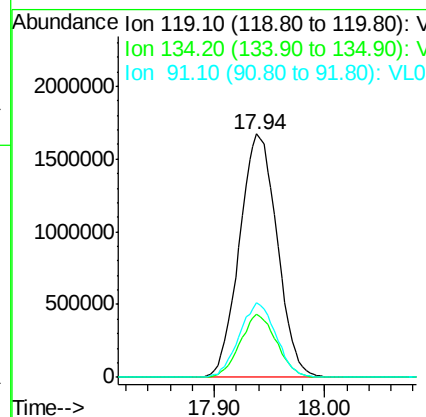
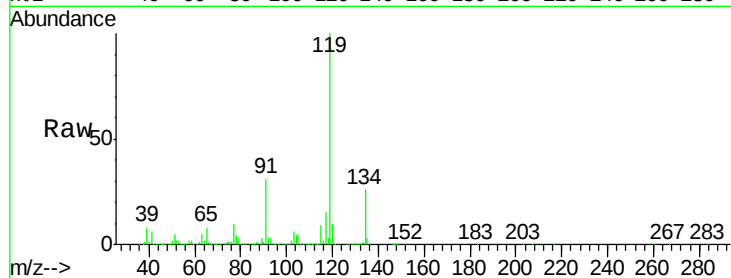
#69  
p-Isopropyltoluene  
Concen: 9.88 ppbv  
RT: 17.94 min Scan# 5241  
Delta R.T. -0.01 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 24.9  | 19.9  | 29.9  |
| 91      | 29.9  | 24.1  | 36.1  |

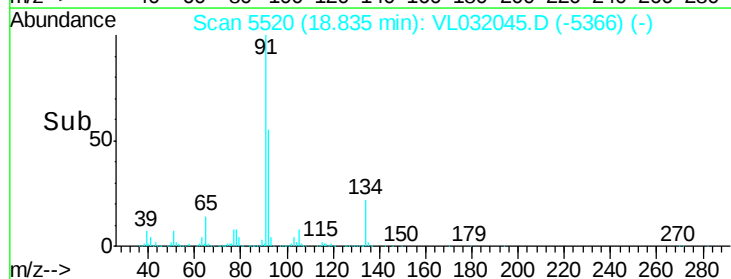
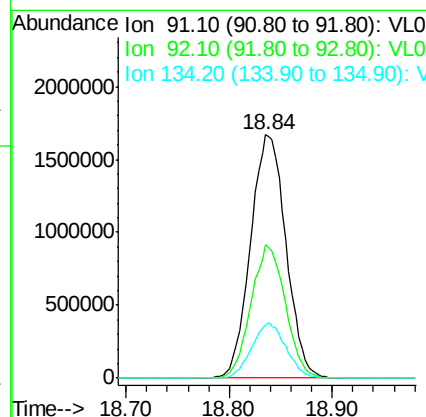
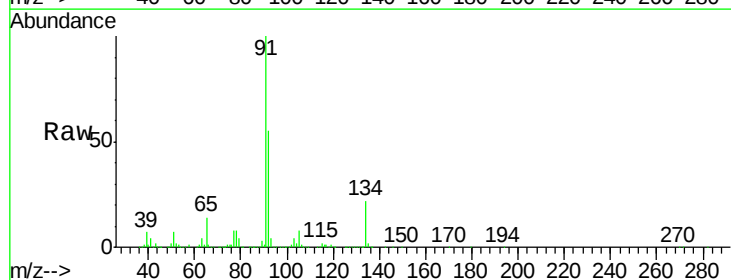
Manual Integrations  
APPROVED

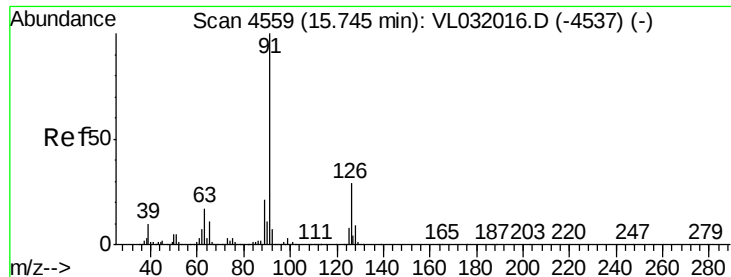
MMDadoda  
6/4/2018 3:36:02 PM



#70  
n-Butylbenzene  
Concen: 9.60 ppbv  
RT: 18.84 min Scan# 5520  
Delta R.T. -0.01 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 53.0  | 42.5  | 63.7  |
| 134     | 21.9  | 17.4  | 26.2  |





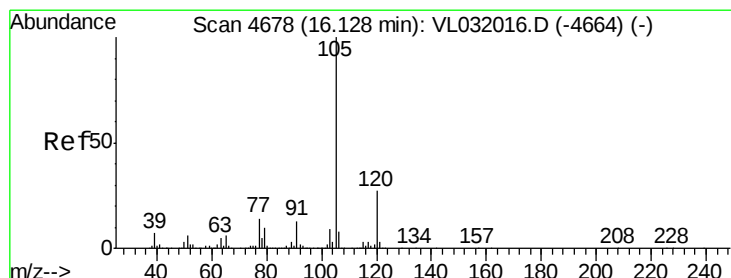
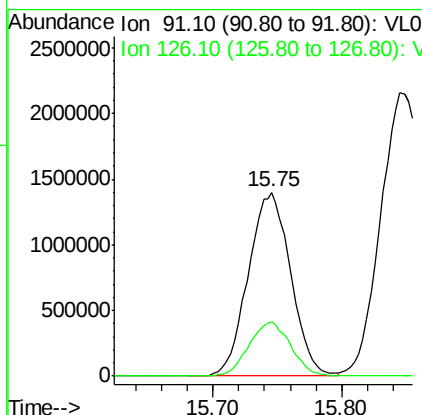
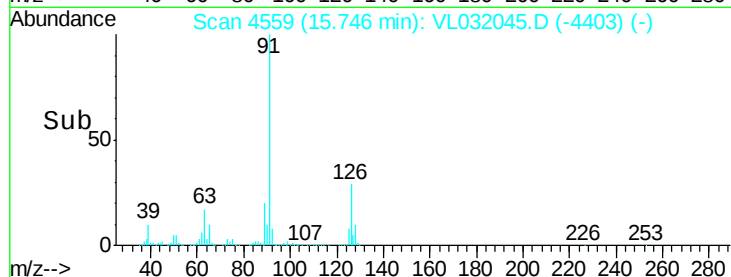
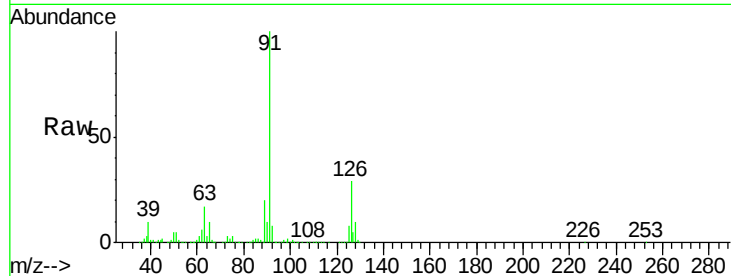
#71  
2-Chlorotoluene  
Concen: 10.65 ppbv  
RT: 15.75 min Scan# 4559  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0601ABS01

Tot Ion: 91 Resp: 3196619  
Ion Ratio Lower Upper  
91 100  
126 29.3 11.7 46.7

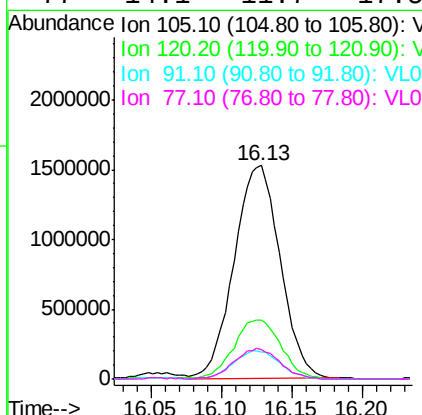
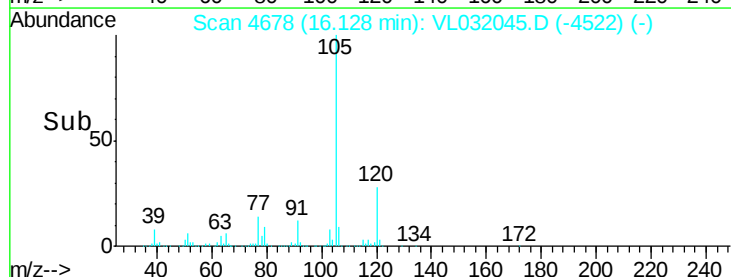
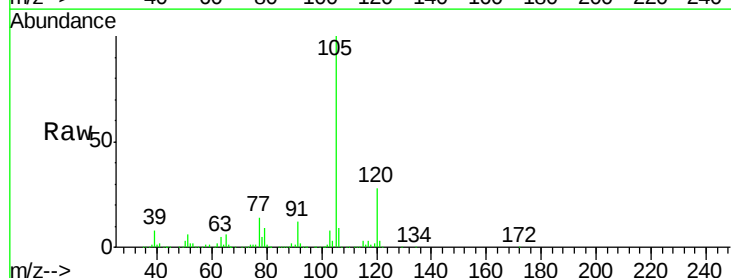
Manual Integrations  
APPROVED

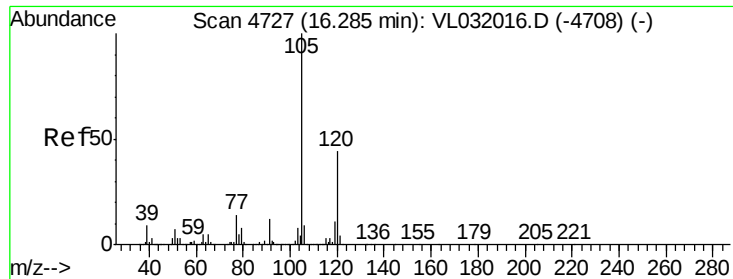
MMDadoda  
6/4/2018 3:36:02 PM



#72  
4-Ethyltoluene  
Concen: 10.95 ppbv  
RT: 16.13 min Scan# 4678  
Delta R.T. 0.00 min  
Lab File: VL032045.D  
Acq: 2 Jun 2018 8:26

Tgt Ion: 105 Resp: 3487353  
Ion Ratio Lower Upper  
105 100  
120 28.5 23.4 35.0  
91 13.4 10.7 16.1  
77 14.1 11.7 17.5





#73

1,3,5-Trimethylbenzene

Concen: 10.54 ppbv

RT: 16.29 min Scan# 4727

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

ClientSampleId :

VL0601ABS01

Tot Ion:105 Resp: 3098597

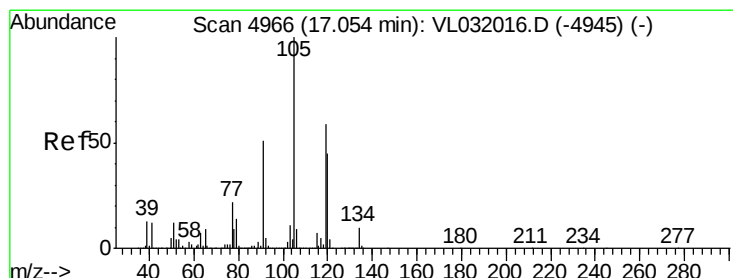
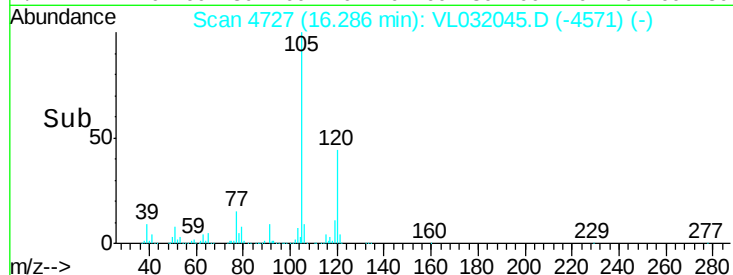
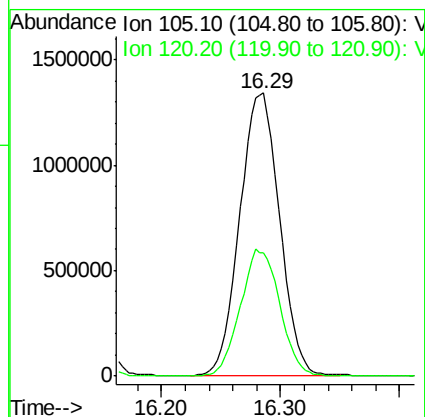
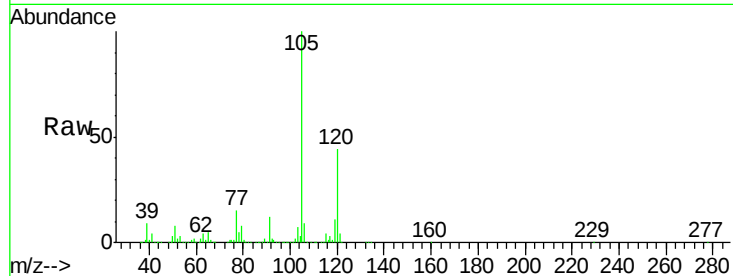
Ion Ratio Lower Upper

105 100

120 43.8 35.0 52.4

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#74

1,2,4-Trimethylbenzene

Concen: 10.06 ppbv

RT: 17.05 min Scan# 4966

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Tgt Ion:105 Resp: 3331715

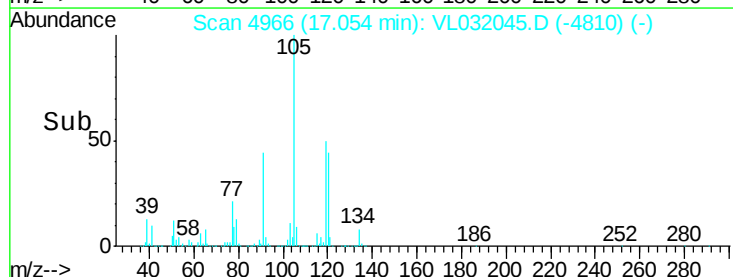
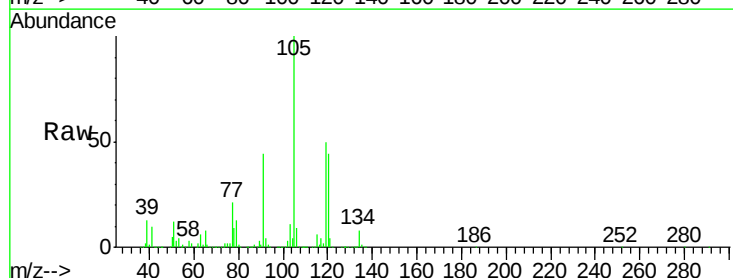
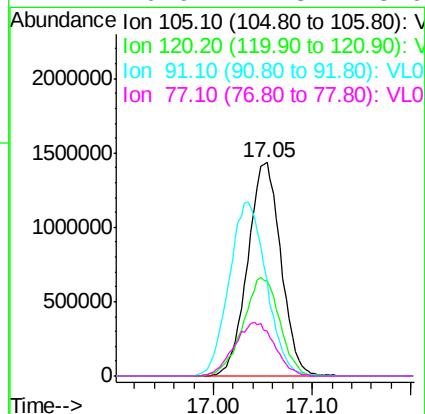
Ion Ratio Lower Upper

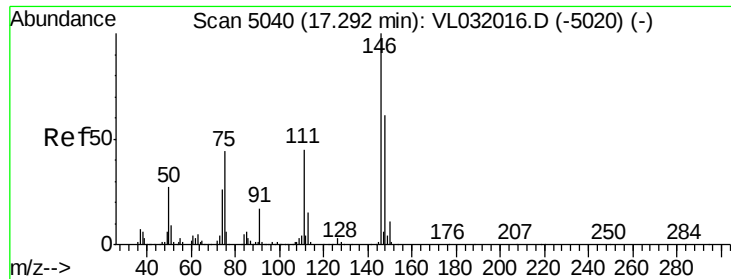
105 100

120 44.4 36.0 54.0

91 44.3 41.4 62.0

77 20.9 17.3 25.9





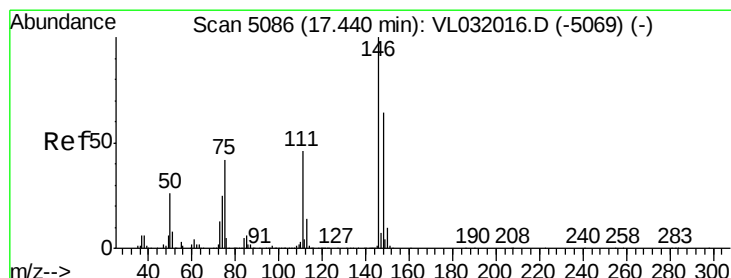
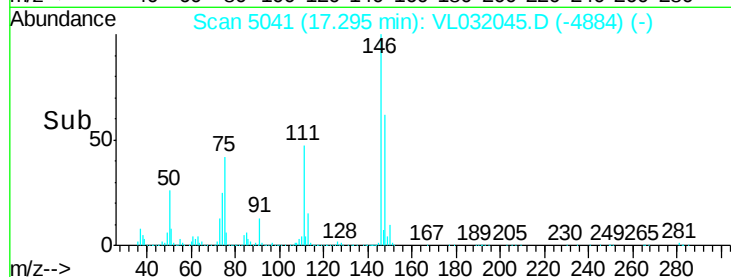
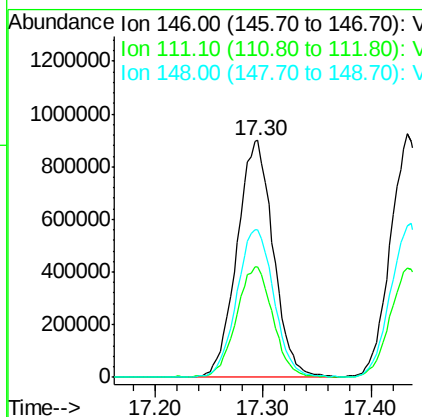
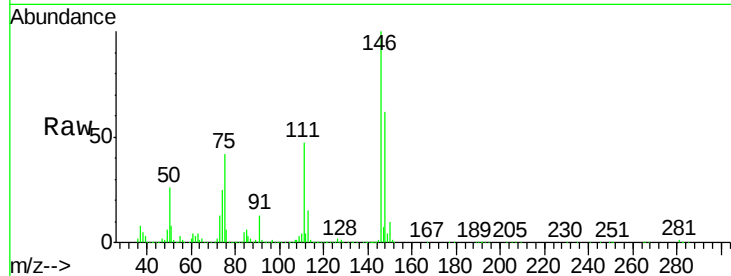
#75  
 1,3-Dichlorobenzene  
 Concen: 9.28 ppbv  
 RT: 17.30 min Scan# 5041  
 Delta R.T. 0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

Tot Ion:146 Resp: 2111483  
 Ion Ratio Lower Upper  
 146 100  
 111 47.1 23.7 71.1  
 148 64.1 32.1 96.5

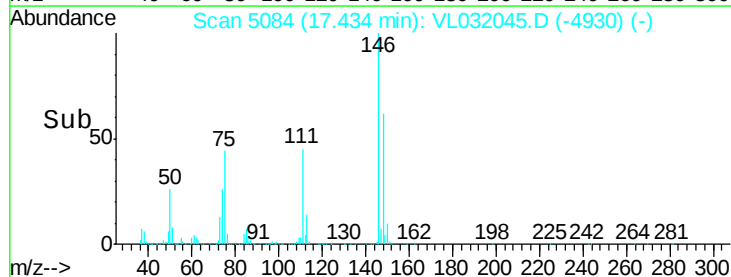
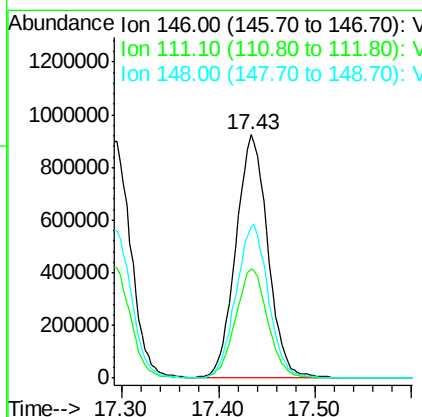
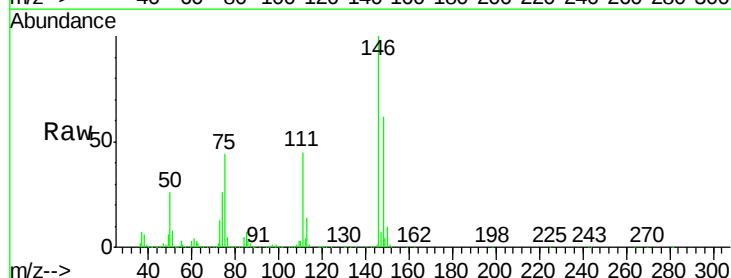
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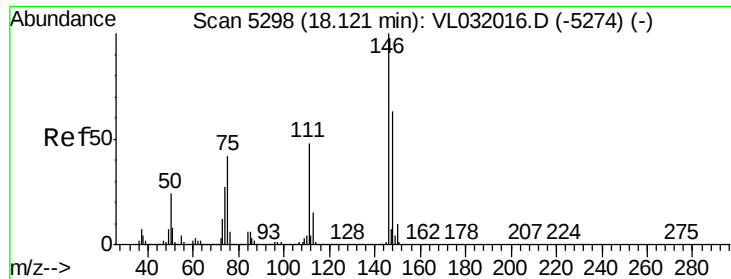
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#76  
 1,4-Dichlorobenzene  
 Concen: 9.76 ppbv  
 RT: 17.43 min Scan# 5084  
 Delta R.T. -0.01 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Tgt Ion:146 Resp: 2117451  
 Ion Ratio Lower Upper  
 146 100  
 111 45.2 22.4 67.0  
 148 64.2 32.1 96.3





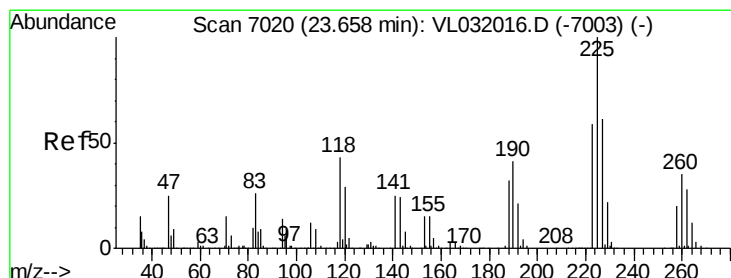
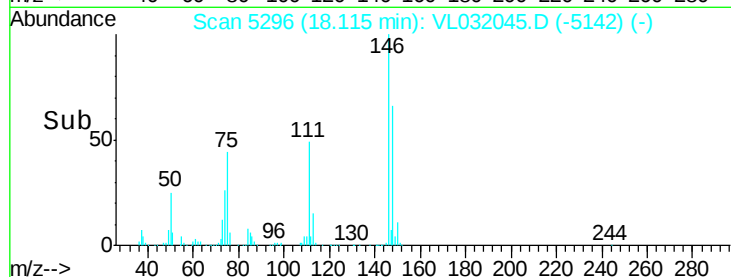
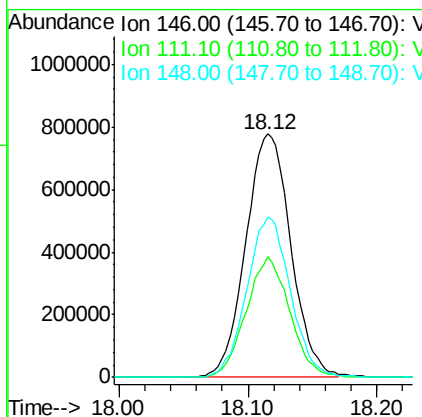
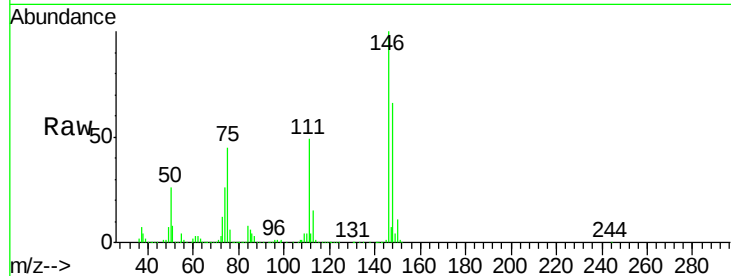
#77  
 1,2-Dichlorobenzene  
 Concen: 8.78 ppbv  
 RT: 18.12 min Scan# 5296  
 Delta R.T. -0.01 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampled :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 48.0  | 24.2  | 72.6  |
| 148     | 64.0  | 32.0  | 96.2  |

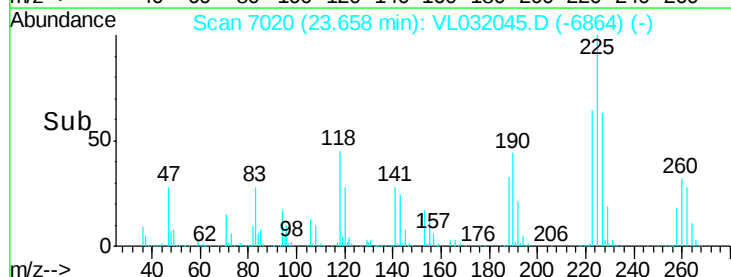
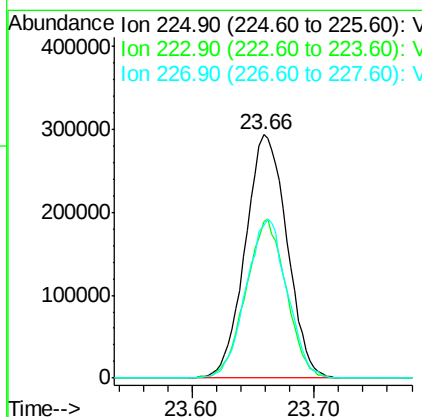
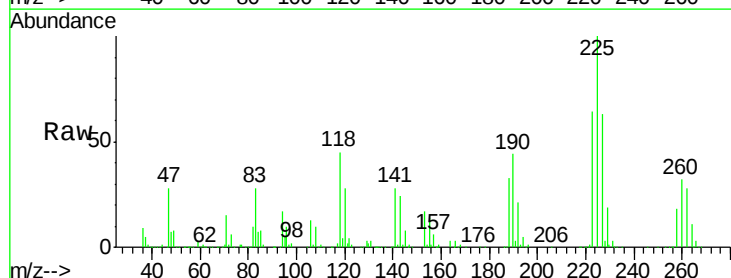
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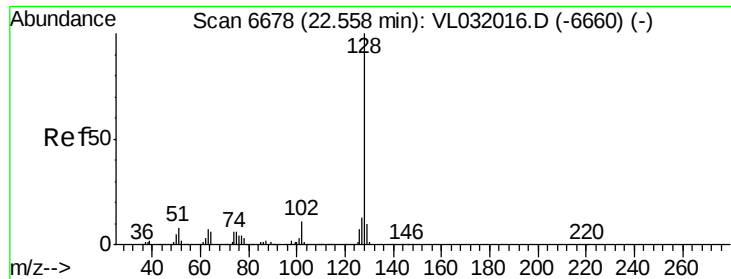
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 8.11 ppbv  
 RT: 23.66 min Scan# 7020  
 Delta R.T. 0.00 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 63.3  | 49.4  | 74.2  |
| 227     | 64.4  | 51.2  | 76.8  |





#79

Naphthalene

Concen: 12.07 ppbv

RT: 22.56 min Scan# 6678

Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

Instrument :

MSVOA\_L

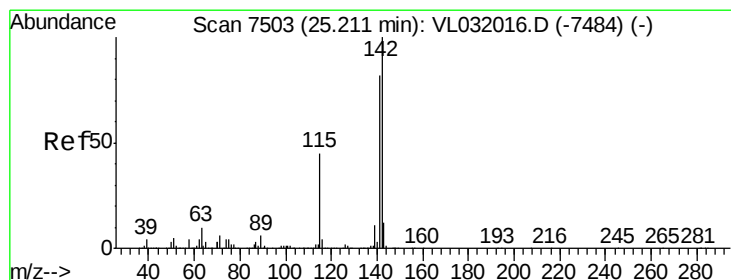
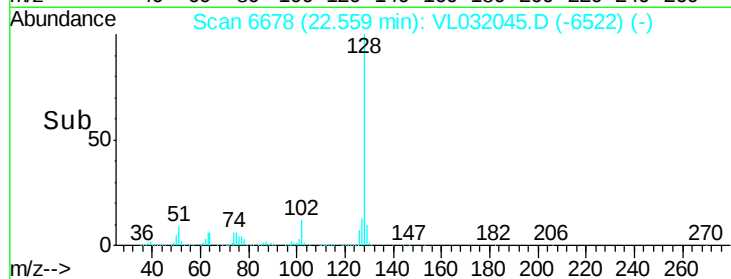
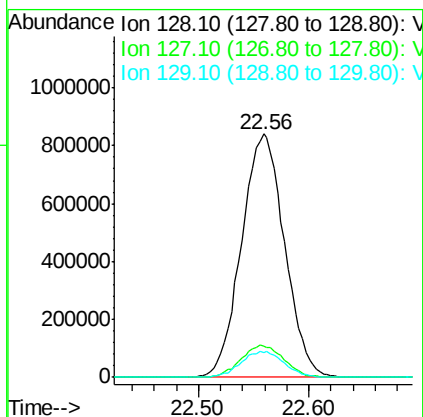
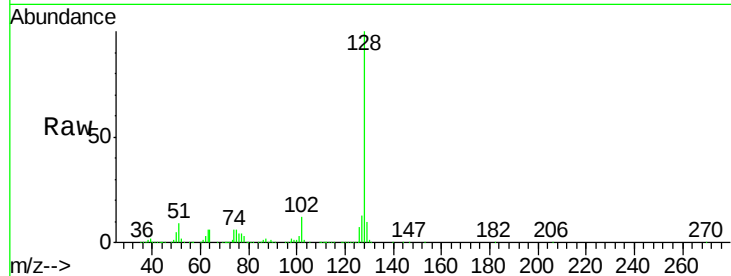
ClientSampleId :

VL0601ABS01

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 128   | Resp: | 2265491 |
| Ion      | Ratio | Lower | Upper   |
| 128      | 100   |       |         |
| 127      | 12.6  | 10.2  | 15.2    |
| 129      | 10.3  | 8.2   | 12.2    |

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#80

Naphthalene, 2-methyl-

Concen: 27.34 ppbv

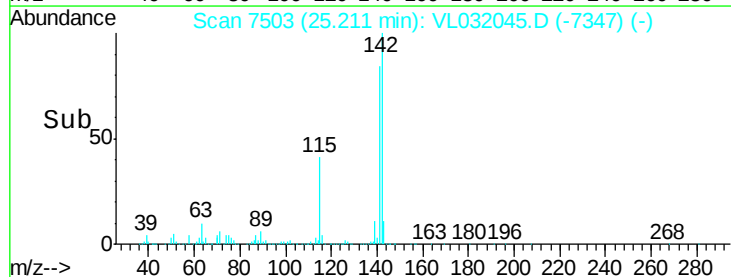
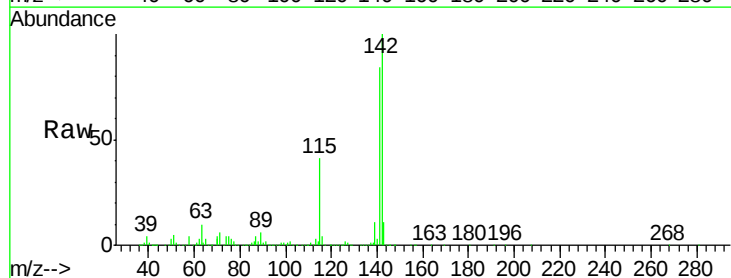
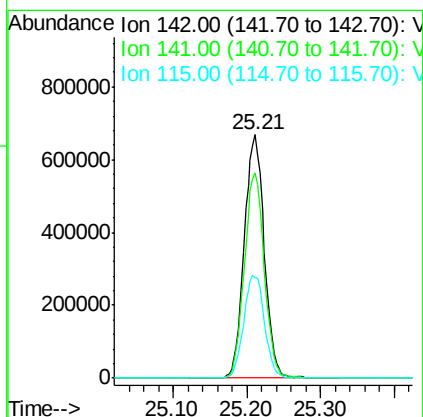
RT: 25.21 min Scan# 7503

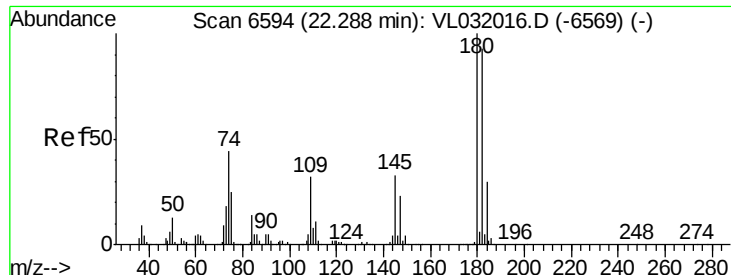
Delta R.T. 0.00 min

Lab File: VL032045.D

Acq: 2 Jun 2018 8:26

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 142   | Resp: | 1265373 |
| Ion      | Ratio | Lower | Upper   |
| 142      | 100   |       |         |
| 141      | 84.0  | 67.4  | 101.2   |
| 115      | 44.1  | 35.3  | 52.9    |





#81  
 1,2,4-Trichlorobenzene  
 Concen: 10.89 ppbv  
 RT: 22.28 min Scan# 6592  
 Delta R.T. -0.01 min  
 Lab File: VL032045.D  
 Acq: 2 Jun 2018 8:26

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0601ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 97.5  | 77.8  | 116.6 |
| 184     | 30.7  | 24.9  | 37.3  |

Manual Integrations  
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