

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060719\  
 Data File : VL033883.D  
 Acq On : 7 Jun 2019 8:31  
 Operator : SY/AP  
 Sample : VL0607ABS01  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0607ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 6/11/2019 9:18:56 AM

Quant Time: Jun 07 09:34:47 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jun 0  
 QLast Update : Fri Jun 07 06:23:16 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.75  | 49   | 1017390  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.28  | 114  | 2357885  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.23 | 117  | 2456104m | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.57  | 95    | 1985711  | 9.84     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 98.40% |

| Target Compounds               |      |     |         |        | Ovalue   |
|--------------------------------|------|-----|---------|--------|----------|
| 2) Dichlorodifluoromethane     | 3.07 | 85  | 1280473 | 7.756  | ppbv 98  |
| 3) Chlorodifluoromethane       | 3.00 | 51  | 1047032 | 8.742  | ppbv 100 |
| 4) Chloromethane               | 3.16 | 50  | 597418  | 8.745  | ppbv 99  |
| 5) Vinyl Chloride              | 3.28 | 62  | 610161  | 9.626  | ppbv 99  |
| 6) Bromomethane                | 3.51 | 94  | 387950  | 9.212  | ppbv 93  |
| 7) Chloroethane                | 3.59 | 64  | 231972  | 9.253  | ppbv 97  |
| 8) Dichlorotetrafluoroethane   | 3.21 | 85  | 1595989 | 9.046  | ppbv 100 |
| 9) Propene                     | 3.03 | 41  | 431352  | 9.625  | ppbv 99  |
| 10) Heptane                    | 8.24 | 43  | 1281295 | 11.311 | ppbv 100 |
| 11) Trichlorofluoromethane     | 3.99 | 101 | 2127220 | 9.986  | ppbv 98  |
| 12) 1,1,2-Trichlorotrifluoroet | 4.54 | 101 | 1416609 | 9.840  | ppbv 100 |
| 13) Ethanol                    | 3.64 | 45  | 109223  | 6.974  | ppbv 98  |
| 14) Bromoethene                | 3.78 | 108 | 516661  | 9.631  | ppbv 98  |
| 15) Acetone                    | 3.89 | 43  | 1321809 | 8.908  | ppbv 100 |
| 16) 1,3-Butadiene              | 3.35 | 39  | 546178  | 9.671  | ppbv 100 |
| 17) tert-Butyl alcohol         | 4.35 | 59  | 1298093 | 11.191 | ppbv 100 |
| 18) 1,1-Dichloroethene         | 4.34 | 96  | 616653  | 10.141 | ppbv 99  |
| 19) Isopropyl Alcohol          | 4.01 | 45  | 980131  | 11.563 | ppbv 99  |
| 20) Methylene Chloride         | 4.40 | 84  | 521083  | 9.005  | ppbv 99  |
| 21) Allyl Chloride             | 4.47 | 41  | 908758  | 10.781 | ppbv 99  |
| 22) trans-1,2-Dichloroethene   | 4.95 | 96  | 642768  | 10.028 | ppbv 97  |
| 23) Vinyl Acetate              | 5.15 | 43  | 1894027 | 10.982 | ppbv 99  |
| 24) 1,1-Dichloroethane         | 5.08 | 63  | 1346626 | 10.039 | ppbv 98  |
| 25) Ethyl Acetate              | 5.76 | 43  | 2314258 | 10.241 | ppbv 100 |
| 26) Hexane                     | 5.77 | 57  | 1019250 | 9.907  | ppbv 99  |
| 27) Carbon Disulfide           | 4.61 | 76  | 1560927 | 10.920 | ppbv 99  |
| 28) Methyl tert-Butyl Ether    | 5.10 | 73  | 1782973 | 11.460 | ppbv 100 |
| 29) Chloroform                 | 5.84 | 83  | 1772591 | 10.059 | ppbv 97  |
| 30) Cyclohexane                | 7.24 | 84  | 844091  | 11.611 | ppbv 100 |
| 31) cis-1,2-Dichloroethene     | 5.63 | 61  | 1035346 | 11.475 | ppbv 99  |
| 32) 1,1,1-Trichloroethane      | 6.61 | 97  | 1839215 | 10.820 | ppbv 100 |
| 34) 2-Butanone                 | 5.32 | 43  | 1496695 | 11.252 | ppbv 99  |
| 35) Carbon Tetrachloride       | 7.12 | 117 | 1954500 | 10.729 | ppbv 97  |
| 36) Benzene                    | 6.99 | 78  | 2066406 | 11.473 | ppbv 99  |
| 37) 1,2-Dichloroethane         | 6.40 | 62  | 1371381 | 10.295 | ppbv 99  |
| 38) Trichloroethene            | 7.95 | 130 | 862946  | 12.305 | ppbv 95  |
| 39) 1,2-Dichloropropane        | 7.72 | 63  | 765154  | 11.007 | ppbv 97  |
| 40) 1,4-Dioxane                | 7.94 | 88  | 341805  | 12.055 | ppbv 99  |
| 41) Tetrahydrofuran            | 6.14 | 42  | 805155  | 11.925 | ppbv 99  |
| 42) Bromodichloromethane       | 7.91 | 83  | 1905693 | 10.705 | ppbv 97  |
| 43) Methyl Methacrylate        | 8.13 | 69  | 840295  | 12.474 | ppbv 99  |

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Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0607ABS01

Manual Integrations  
 APPROVED

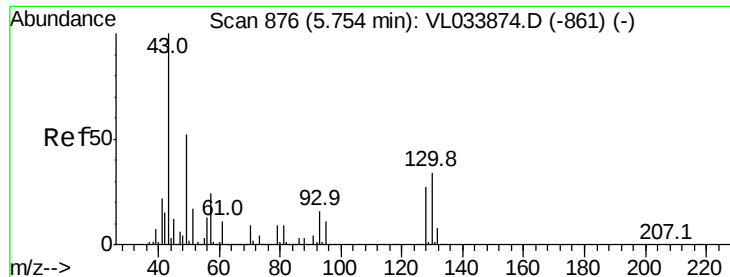
MMDadoda  
 6/11/2019 9:18:56 AM

Quant Time: Jun 07 09:34:47 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jun 0  
 QLast Update : Fri Jun 07 06:23:16 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| -----                         |       |      |          |        |        |          |
| 44) 2,2,4-Trimethylpentane    | 7.98  | 57   | 3540301  | 11.053 | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 9.40  | 75   | 1148355  | 12.992 | ppbv   | 98       |
| 46) cis-1,3-Dichloropropene   | 8.82  | 75   | 1288123  | 12.720 | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 9.60  | 97   | 884113   | 10.669 | ppbv   | 95       |
| 48) Dibromochloromethane      | 10.44 | 129  | 1675852  | 11.253 | ppbv   | 99       |
| 49) Bromoform                 | 13.19 | 173  | 1507289  | 11.465 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.86  | 43   | 2289654  | 11.543 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.26 | 43   | 1864665  | 12.038 | ppbv # | 100      |
| 52) Tetrachloroethene         | 11.36 | 164  | 818921   | 12.921 | ppbv   | 96       |
| 53) Toluene                   | 9.93  | 91   | 2454472  | 12.314 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.75 | 107  | 1419178  | 11.361 | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.27 | 131  | 1126465  | 10.499 | ppbv   | 97       |
| 57) Chlorobenzene             | 12.29 | 112  | 1927491  | 10.478 | ppbv   | 97       |
| 58) Ethyl Benzene             | 12.85 | 91   | 3421615  | 12.356 | ppbv   | 98       |
| 59) m/p-Xylene                | 13.14 | 91   | 5773974m | 22.929 | ppbv   |          |
| 60) o-Xylene                  | 13.84 | 91   | 2939743  | 11.307 | ppbv   | 100      |
| 61) Styrene                   | 13.67 | 104  | 2131460  | 12.668 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.81 | 105  | 3957886  | 11.295 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.82 | 83   | 2066050  | 10.557 | ppbv   | 100      |
| 64) n-propylbenzene           | 15.71 | 120  | 1034494  | 11.528 | ppbv   | 97       |
| 65) tert-Butylbenzene         | 16.90 | 119  | 3729748  | 11.503 | ppbv   | 100      |
| 66) Benzyl Chloride           | 17.15 | 91   | 1988614  | 12.102 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.44 | 105  | 5227705  | 11.493 | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.80 | 119  | 4342316  | 11.473 | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.70 | 91   | 4533712  | 10.937 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 15.60 | 91   | 3010136  | 11.660 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.99 | 105  | 3535852  | 11.951 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.15 | 105  | 3367536  | 11.555 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.91 | 105  | 3635968  | 10.825 | ppbv   | 98       |
| 75) 1,3-Dichlorobenzene       | 17.15 | 146  | 2114051  | 10.050 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.30 | 146  | 2059018  | 10.660 | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.98 | 146  | 1981911  | 10.210 | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.53 | 225  | 1191873  | 7.861  | ppbv   | 99       |
| 79) Naphthalene               | 22.40 | 128  | 2620695  | 9.761  | ppbv   | 100      |
| 80) Naphthalene, 2-methyl-    | 25.10 | 142  | 766056   | 7.151  | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 22.12 | 180  | 1562600  | 9.219  | ppbv   | 100      |
| -----                         |       |      |          |        |        |          |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 876

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 49 Resp: 1017390

Ion Ratio Lower Upper

49 100

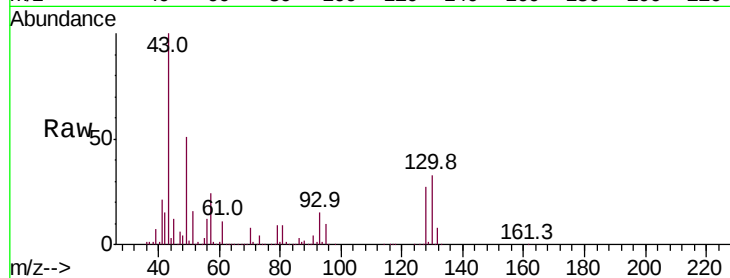
128 50.2 25.5 76.5

130 65.5 32.5 97.4

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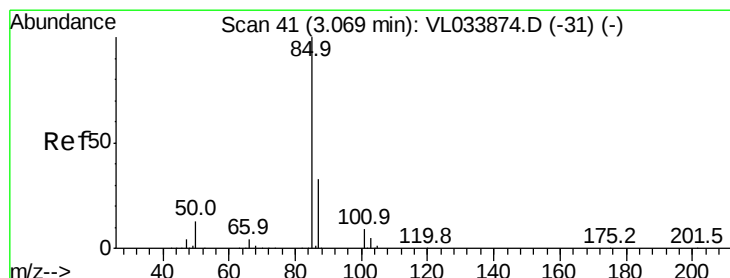
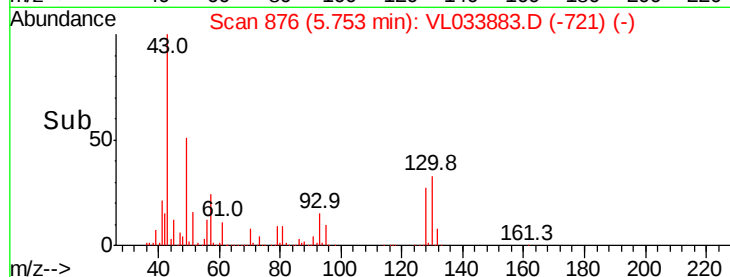
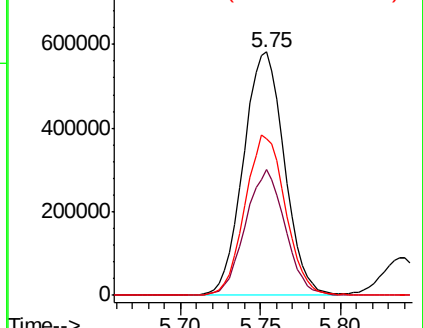
6/11/2019 9:18:56 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 7.756 ppbv

RT: 3.07 min Scan# 41

Delta R.T. -0.00 min

Lab File: VL033883.D

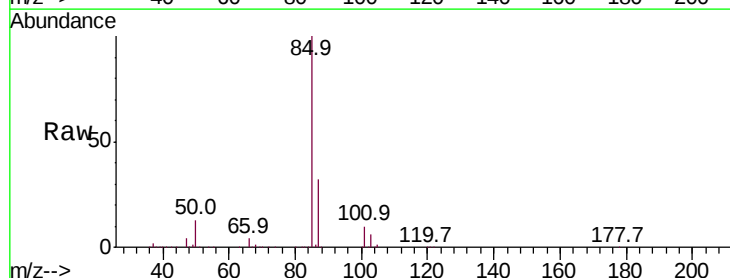
Acq: 7 Jun 2019 8:31

Tgt Ion: 85 Resp: 1280473

Ion Ratio Lower Upper

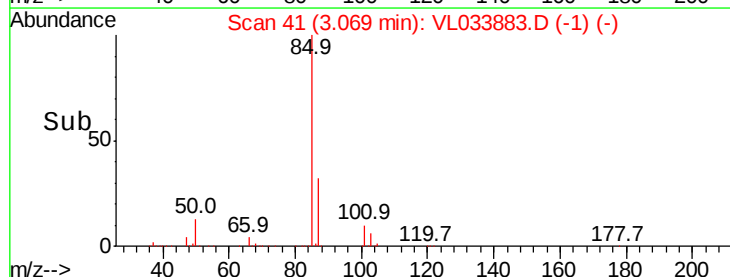
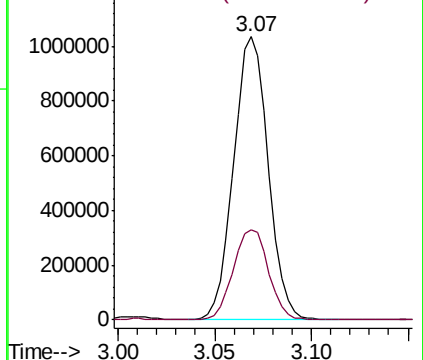
85 100

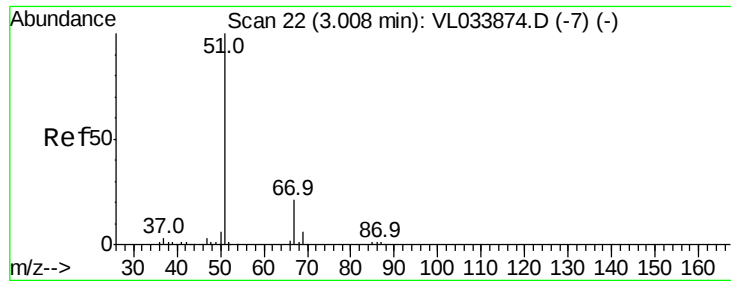
87 32.0 26.6 40.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 8.742 ppbv

RT: 3.00 min Scan# 21

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 51 Resp: 1047032

Ion Ratio Lower Upper

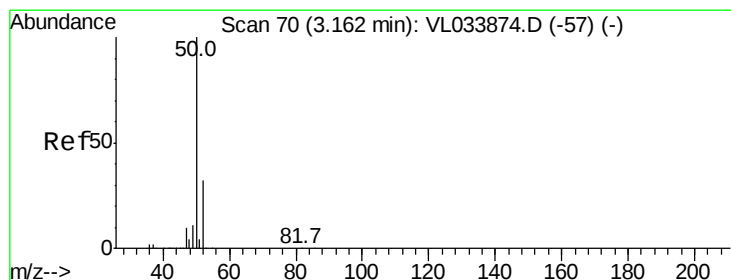
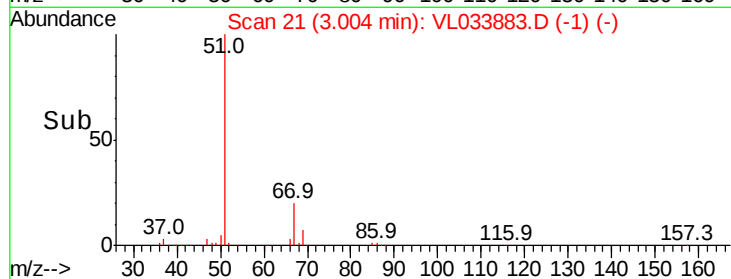
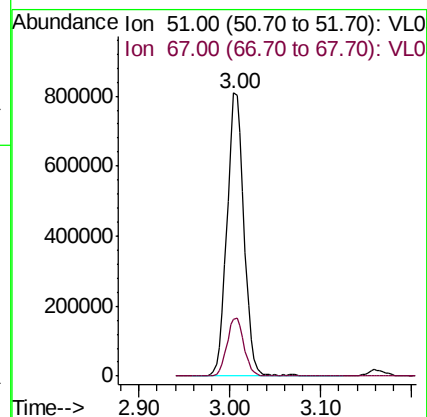
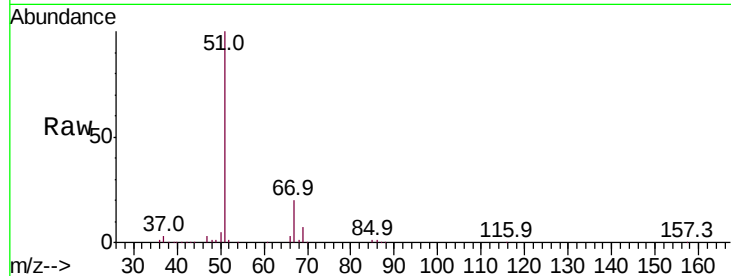
51 100

67 20.6 16.4 24.6

Manual Integrations  
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#4

Chloromethane

Concen: 8.745 ppbv

RT: 3.16 min Scan# 70

Delta R.T. -0.00 min

Lab File: VL033883.D

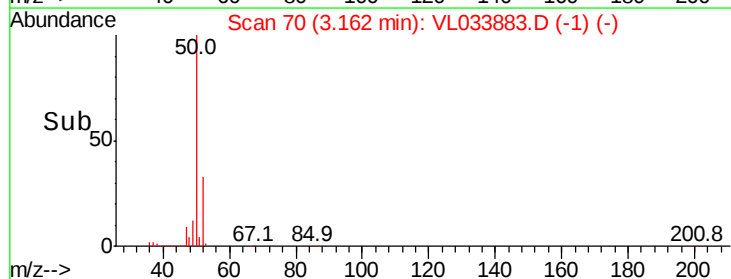
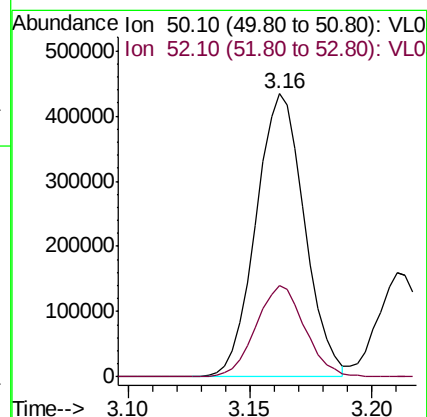
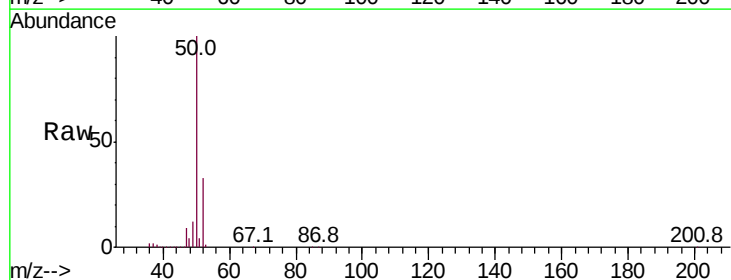
Acq: 7 Jun 2019 8:31

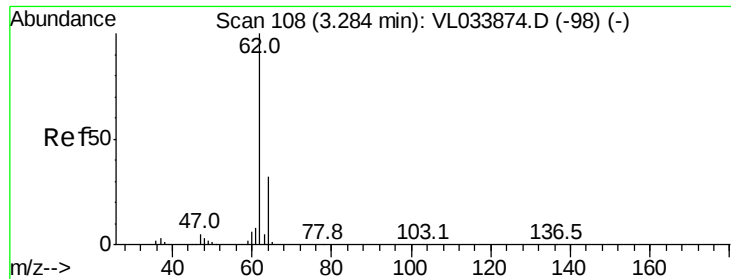
Tgt Ion: 50 Resp: 597418

Ion Ratio Lower Upper

50 100

52 32.5 25.4 38.0





#5

Vinyl Chloride

Concen: 9.626 ppbv

RT: 3.28 min Scan# 108

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 62 Resp: 610161

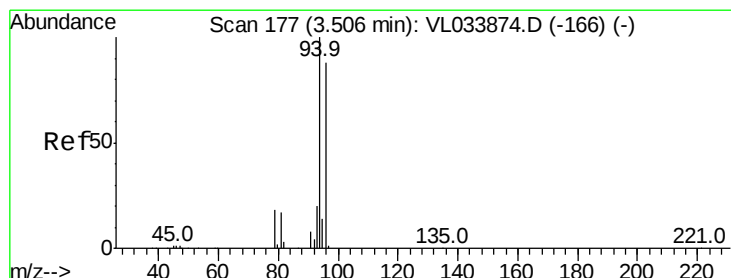
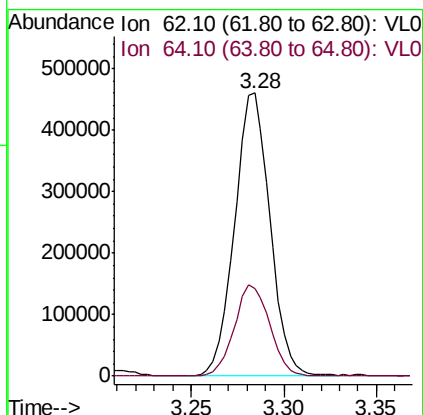
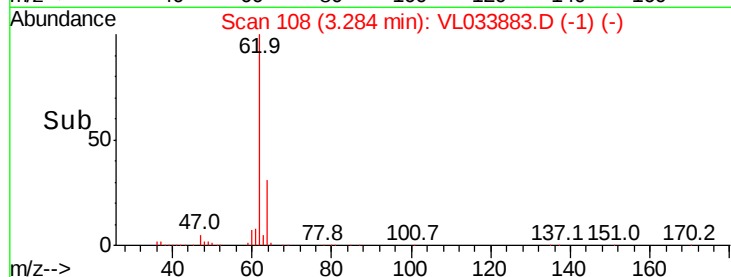
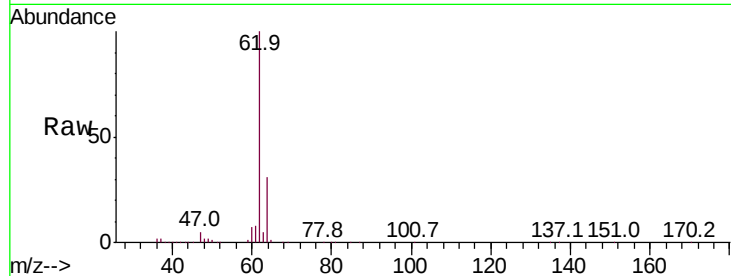
Ion Ratio Lower Upper

62 100

64 30.9 25.2 37.8

Manual Integrations  
APPROVED

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6/11/2019 9:18:56 AM



#6

Bromomethane

Concen: 9.212 ppbv

RT: 3.51 min Scan# 177

Delta R.T. -0.00 min

Lab File: VL033883.D

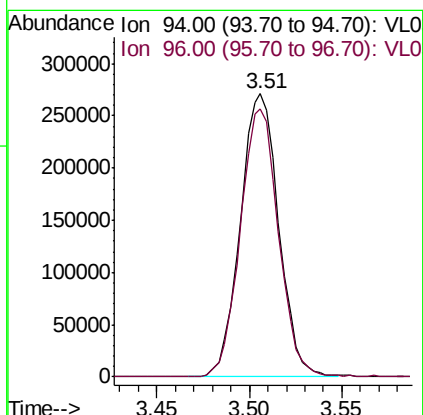
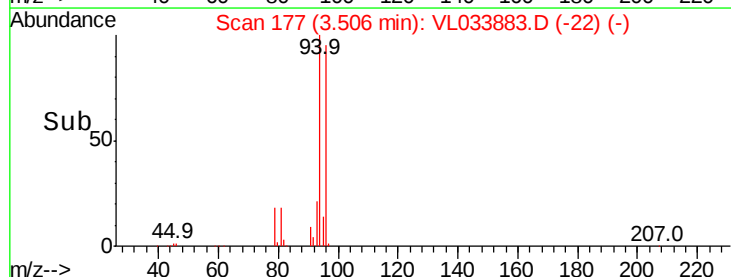
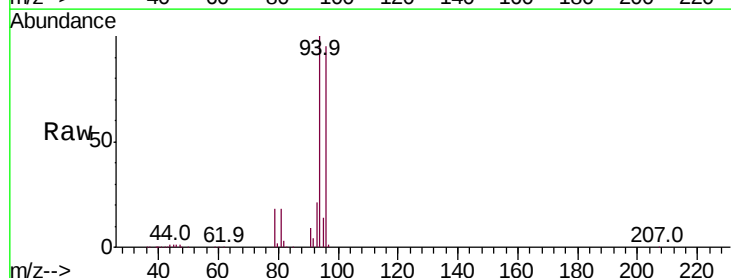
Acq: 7 Jun 2019 8:31

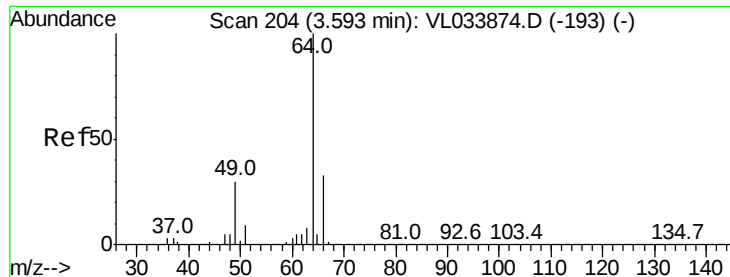
Tgt Ion: 94 Resp: 387950

Ion Ratio Lower Upper

94 100

96 94.6 70.2 105.2





#7

Chloroethane

Concen: 9.253 ppbv

RT: 3.59 min Scan# 203

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 64 Resp: 231972

Ion Ratio Lower Upper

64 100

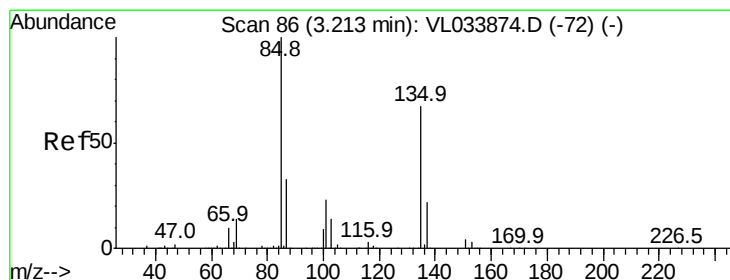
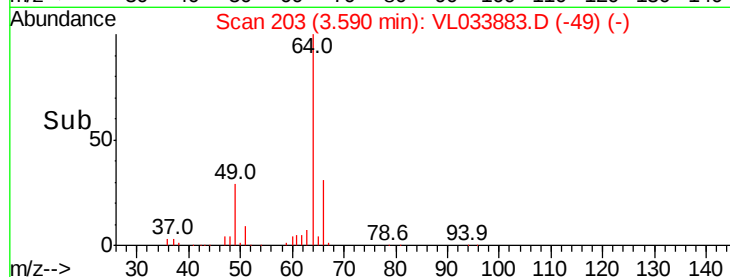
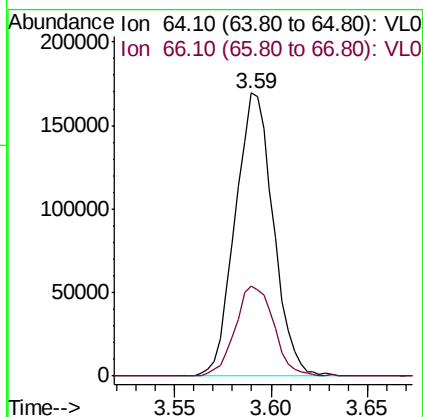
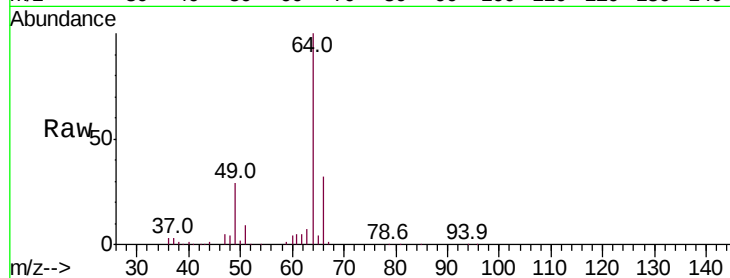
66 31.7 26.7 40.1

Manual Integrations

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#8

Dichlorotetrafluoroethane

Concen: 9.046 ppbv

RT: 3.21 min Scan# 85

Delta R.T. -0.00 min

Lab File: VL033883.D

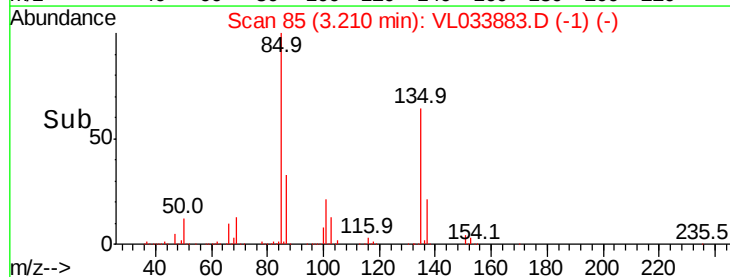
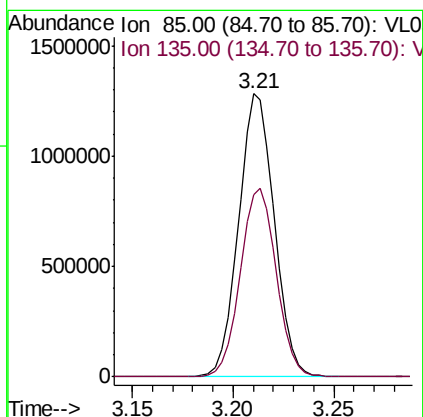
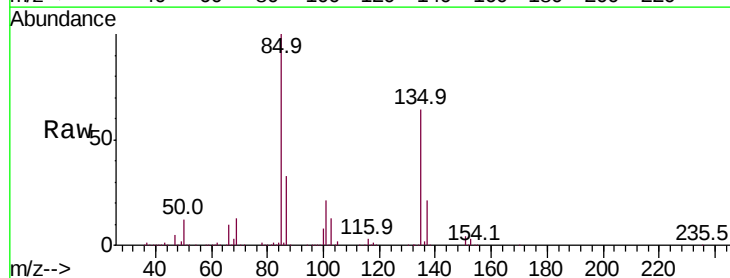
Acq: 7 Jun 2019 8:31

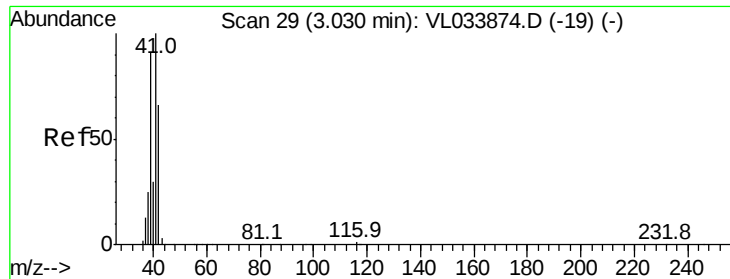
Tgt Ion: 85 Resp: 1595989

Ion Ratio Lower Upper

85 100

135 67.2 53.7 80.5





#9

Propene

Concen: 9.625 ppbv

RT: 3.03 min Scan# 28

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 41 Resp: 431352

Ion Ratio Lower Upper

41 100

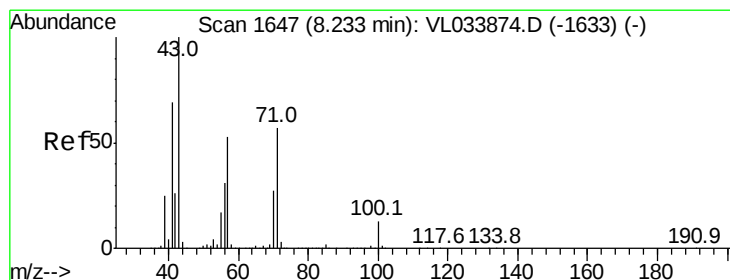
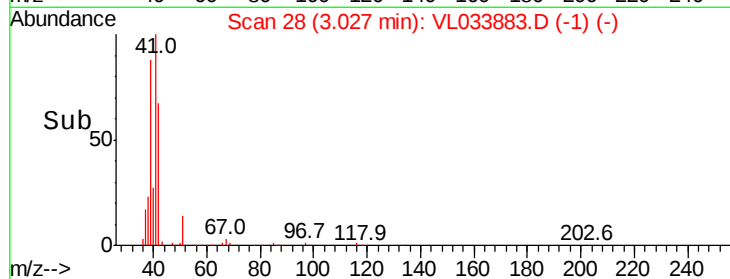
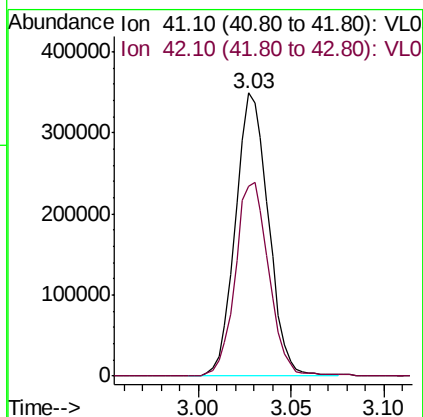
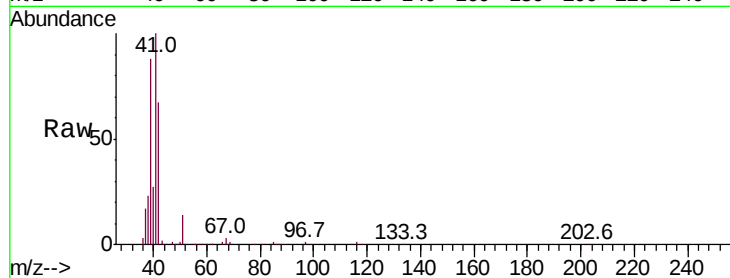
42 69.9 56.3 84.5

Manual Integrations

APPROVED

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#10

Heptane

Concen: 11.311 ppbv

RT: 8.24 min Scan# 1648

Delta R.T. 0.00 min

Lab File: VL033883.D

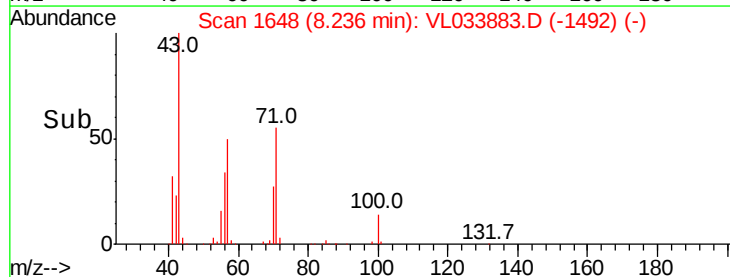
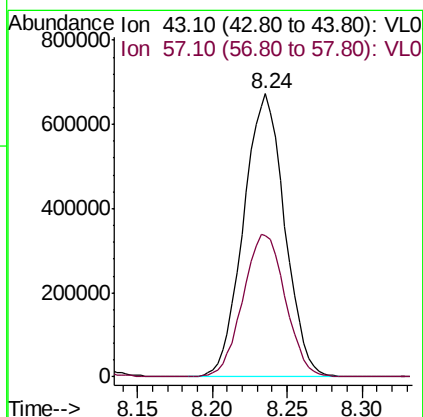
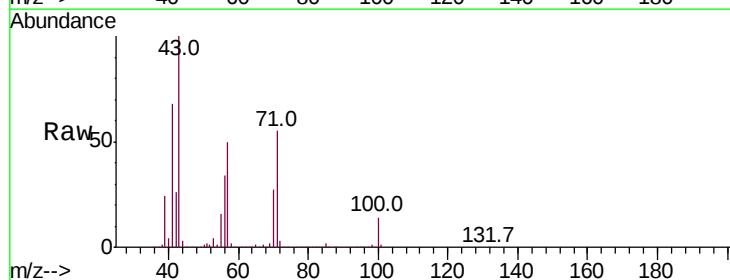
Acq: 7 Jun 2019 8:31

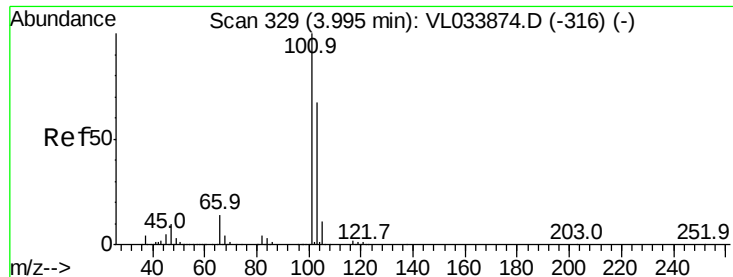
Tgt Ion: 43 Resp: 1281295

Ion Ratio Lower Upper

43 100

57 51.9 41.7 62.5





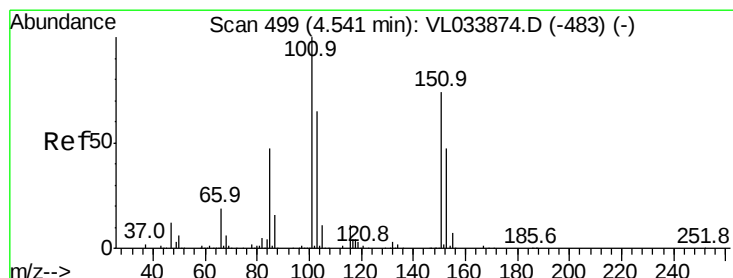
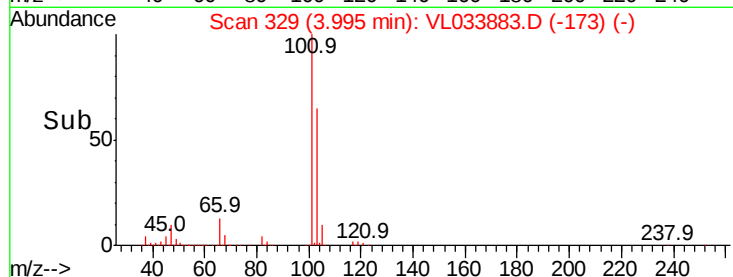
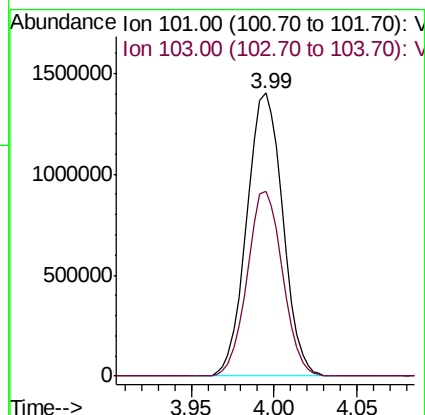
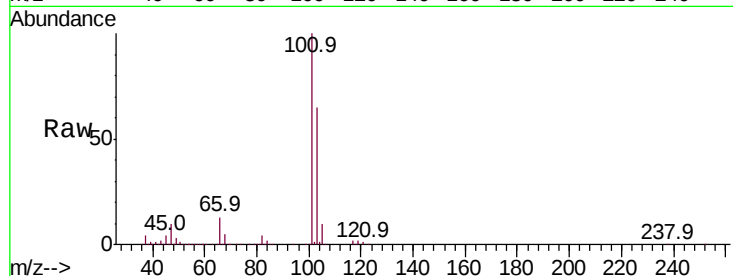
#11  
 Trichlorofluoromethane  
 Concen: 9.986 ppbv  
 RT: 3.99 min Scan# 329  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0607ABS01

Tot Ion:101 Resp: 2127220  
 Ion Ratio Lower Upper  
 101 100  
 103 65.3 53.6 80.4

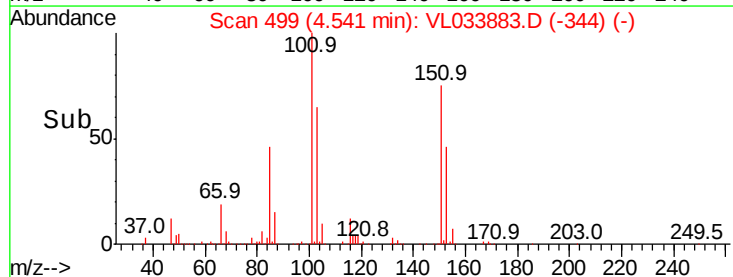
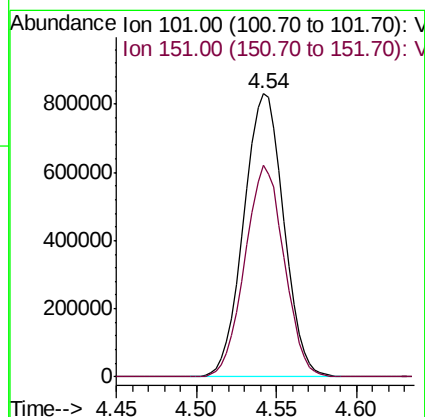
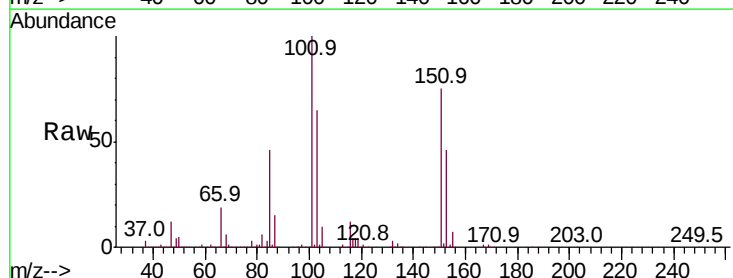
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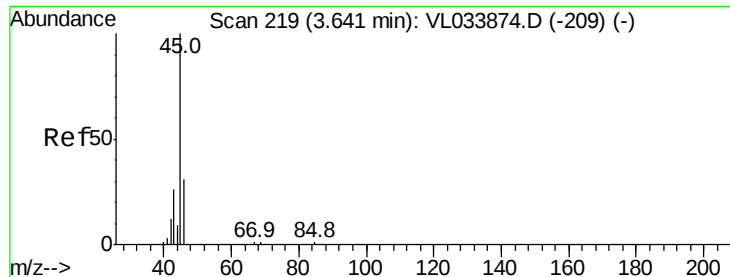
MMDadoda  
 6/11/2019 9:18:56 AM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 9.840 ppbv  
 RT: 4.54 min Scan# 499  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

Tgt Ion:101 Resp: 1416609  
 Ion Ratio Lower Upper  
 101 100  
 151 73.5 58.6 87.8





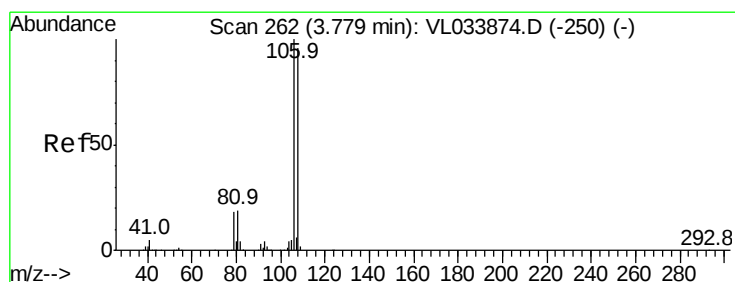
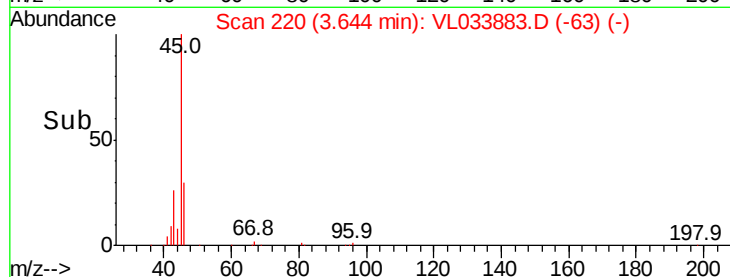
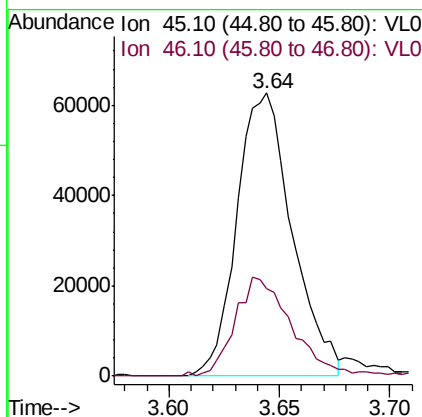
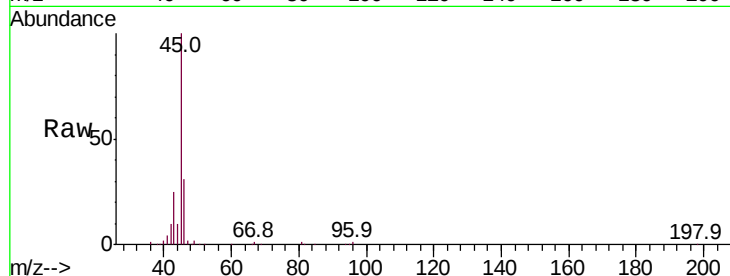
#13  
Ethanol  
Concen: 6.974 ppbv  
RT: 3.64 min Scan# 220  
Delta R.T. 0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 46      | 37.1  | 15.3  | 61.1  |

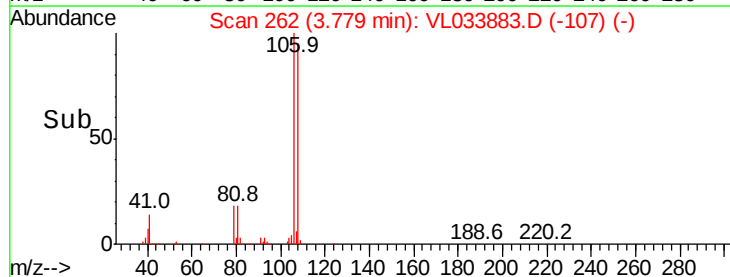
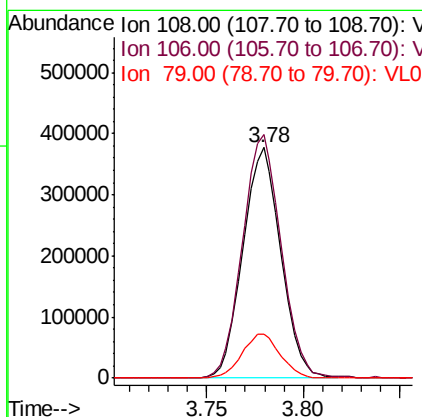
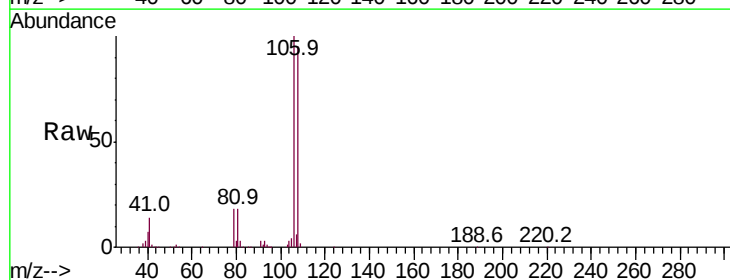
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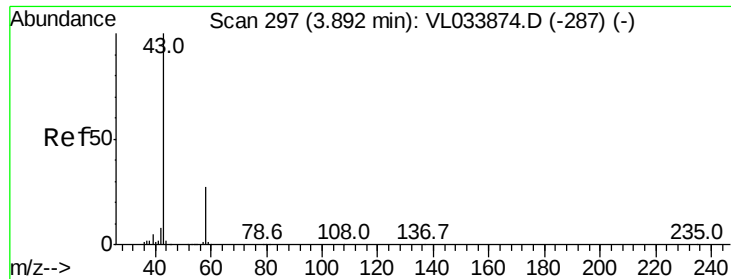
MMDadoda  
6/11/2019 9:18:56 AM



#14  
Bromoethene  
Concen: 9.631 ppbv  
RT: 3.78 min Scan# 262  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 108     | 100   |       |       |
| 106     | 108.1 | 84.9  | 127.3 |
| 79      | 19.7  | 15.4  | 23.0  |





#15

Acetone

Concen: 8.908 ppbv

RT: 3.89 min Scan# 297

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 43 Resp: 1321809

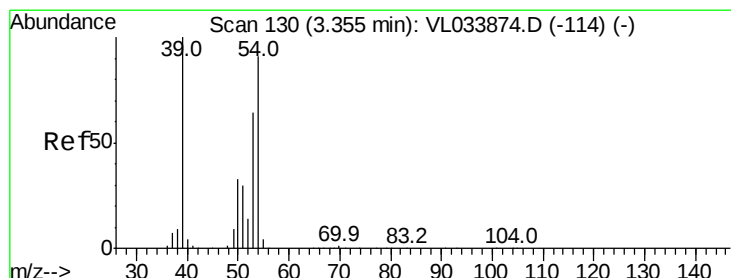
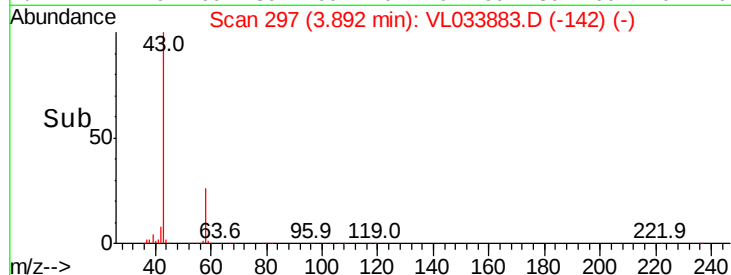
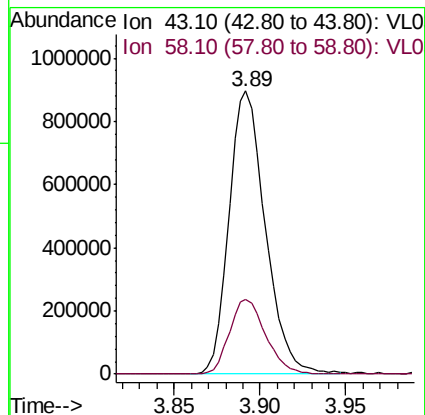
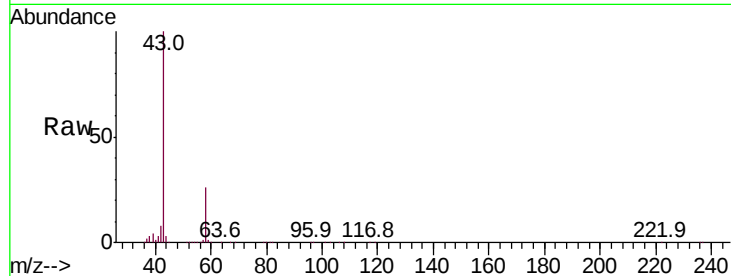
Ion Ratio Lower Upper

43 100

58 26.4 21.3 31.9

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#16

1,3-Butadiene

Concen: 9.671 ppbv

RT: 3.35 min Scan# 130

Delta R.T. -0.00 min

Lab File: VL033883.D

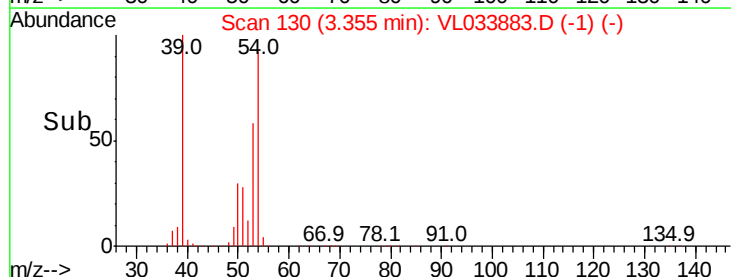
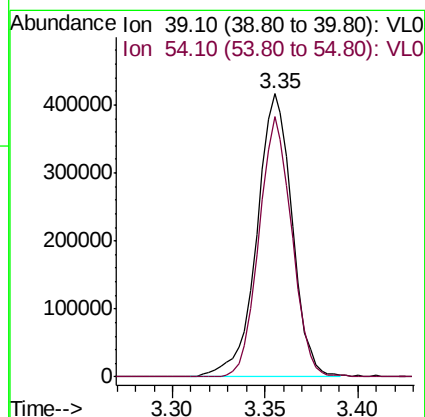
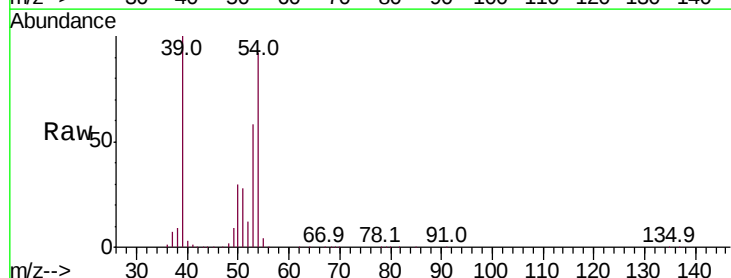
Acq: 7 Jun 2019 8:31

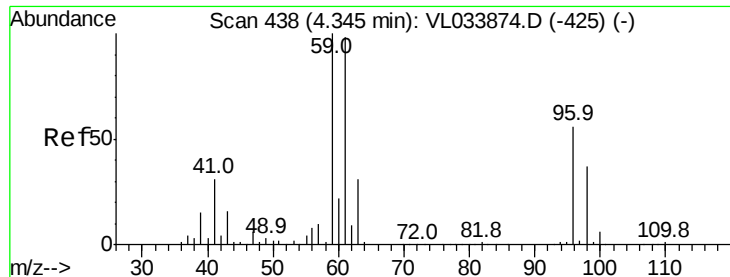
Tgt Ion: 39 Resp: 546178

Ion Ratio Lower Upper

39 100

54 86.0 68.6 103.0





#17

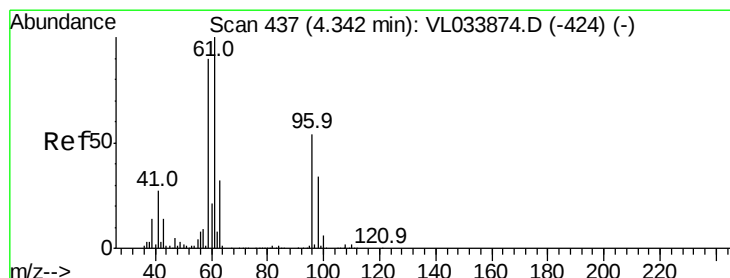
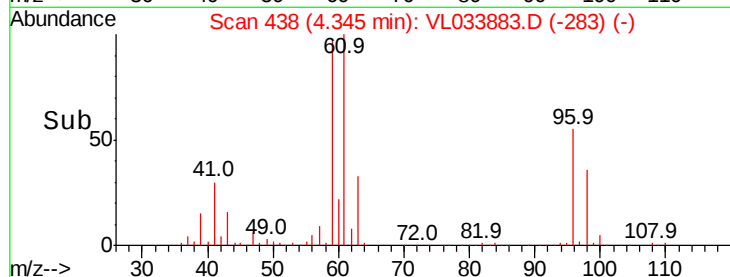
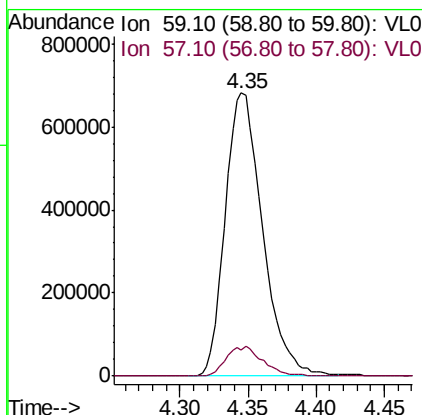
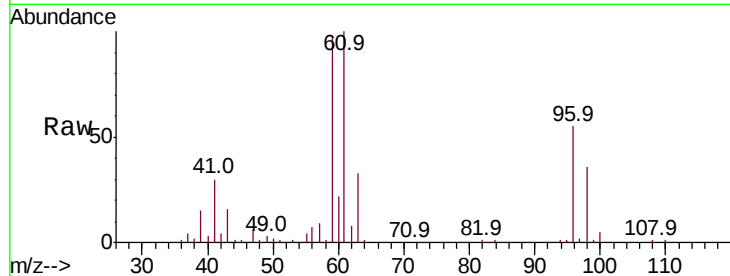
tert-Butyl alcohol  
 Concen: 11.191 ppbv  
 RT: 4.35 min Scan# 438  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0607ABS01

Tot Ion: 59 Resp: 1298093  
 Ion Ratio Lower Upper  
 59 100  
 57 10.4 8.4 12.6

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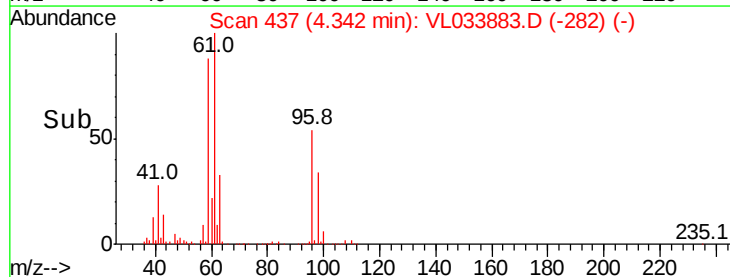
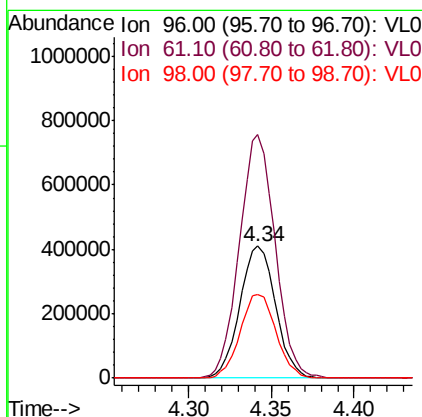
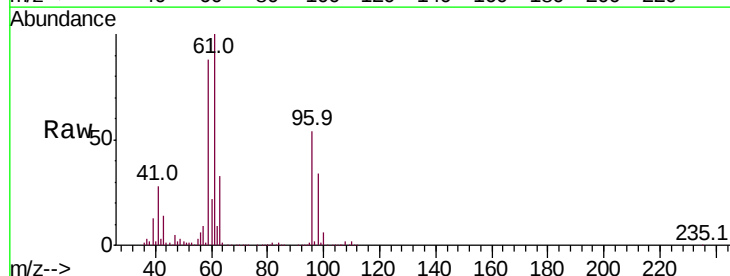
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 6/11/2019 9:18:56 AM

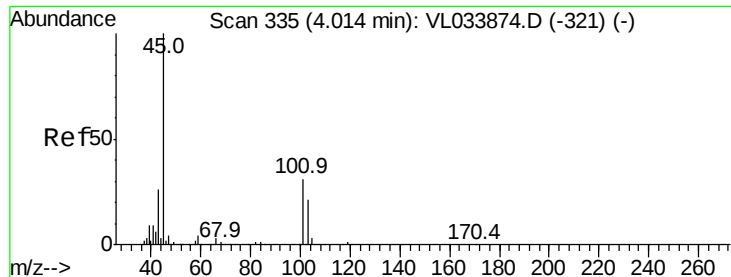


#18

1,1-Dichloroethene  
 Concen: 10.141 ppbv  
 RT: 4.34 min Scan# 437  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

Tgt Ion: 96 Resp: 616653  
 Ion Ratio Lower Upper  
 96 100  
 61 184.2 147.0 220.6  
 98 62.9 49.4 74.0





#19

Isopropyl Alcohol

Concen: 11.563 ppbv

RT: 4.01 min Scan# 335

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Tot Ion: 45 Resp: 980131

Ion Ratio Lower Upper

45 100

58 2.4 1.8 2.6

Instrument :

MSVOA\_L

ClientSampleId :

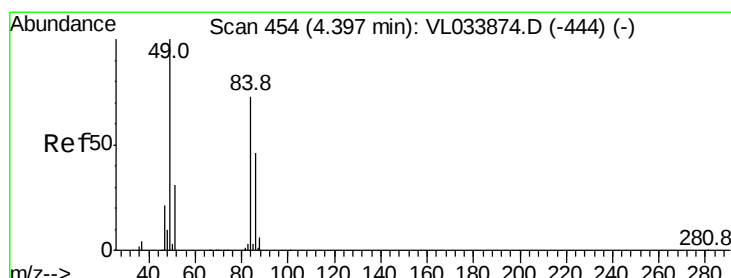
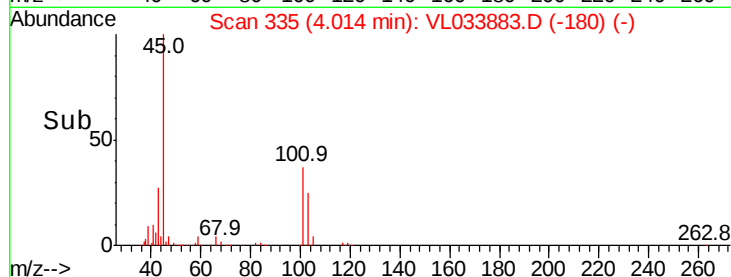
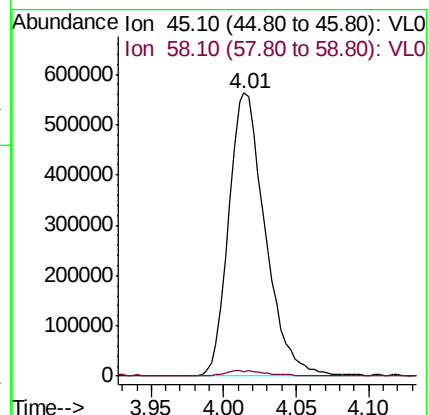
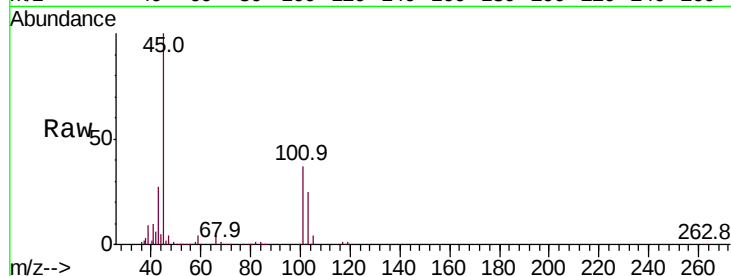
VL0607ABS01

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#20

Methylene Chloride

Concen: 9.005 ppbv

RT: 4.40 min Scan# 455

Delta R.T. 0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Tgt Ion: 84 Resp: 521083

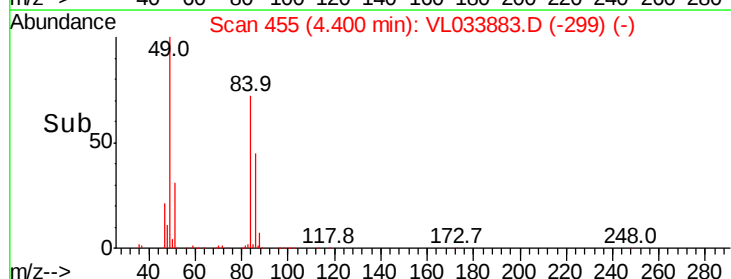
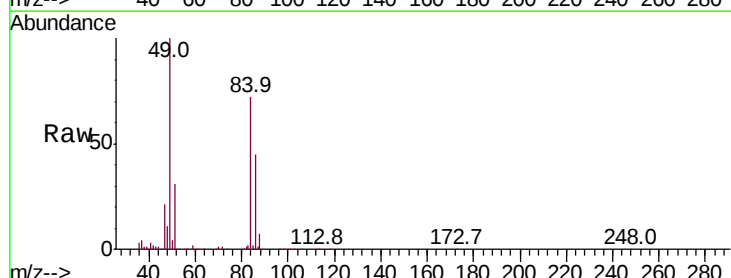
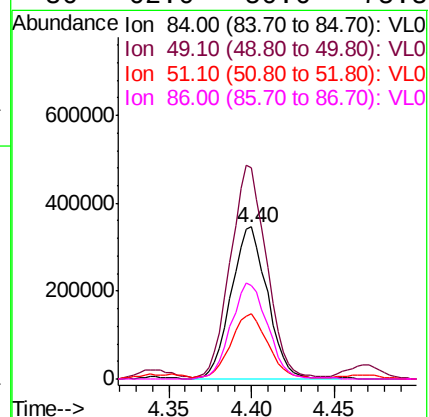
Ion Ratio Lower Upper

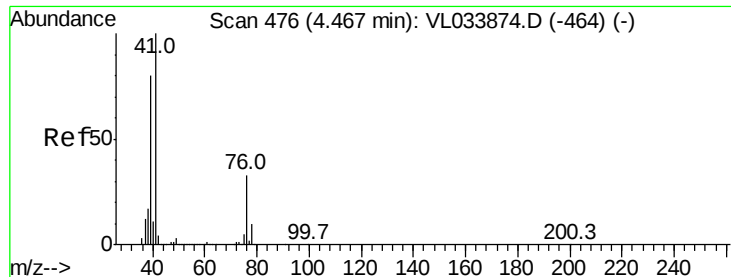
84 100

49 138.3 110.0 165.0

51 42.0 34.6 51.8

86 62.0 50.6 75.8





#21

Allvl Chloride

Concen: 10.781 ppbv

RT: 4.47 min Scan# 476

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

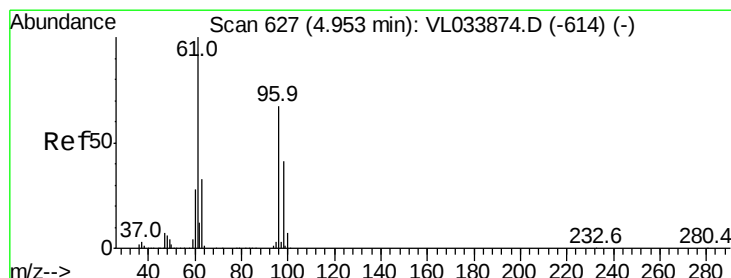
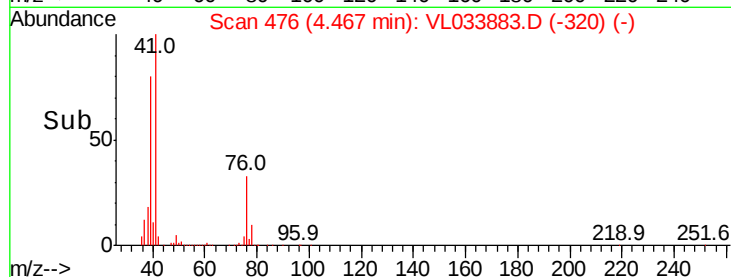
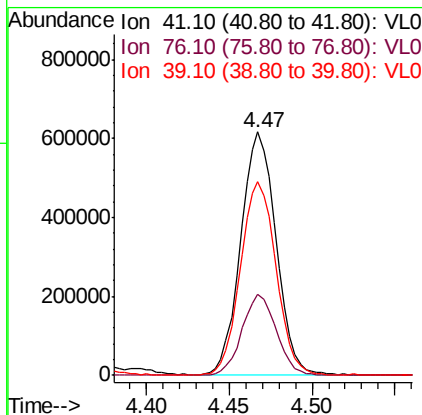
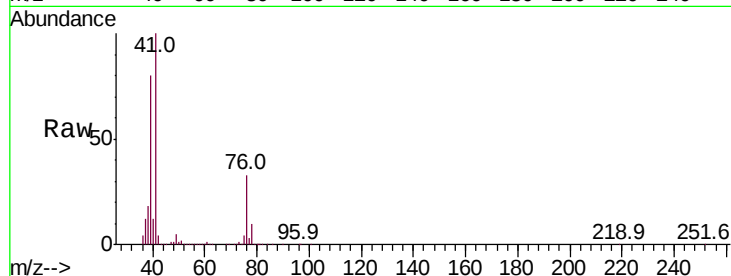
ClientSampleId :

VL0607ABS01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 41    | Resp: | 908758 |
| Ion Ratio | Lower | Upper |        |
| 41        | 100   |       |        |
| 76        | 32.5  | 26.6  | 39.8   |
| 39        | 81.1  | 65.2  | 97.8   |

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#22

trans-1,2-Dichloroethene

Concen: 10.028 ppbv

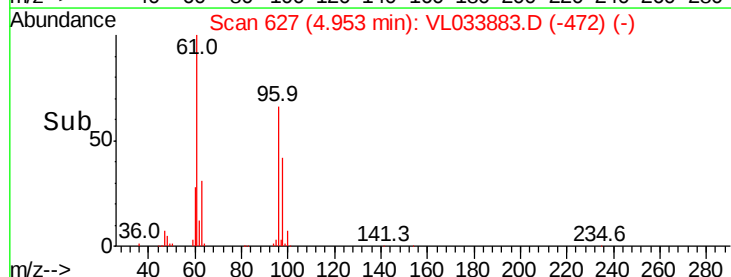
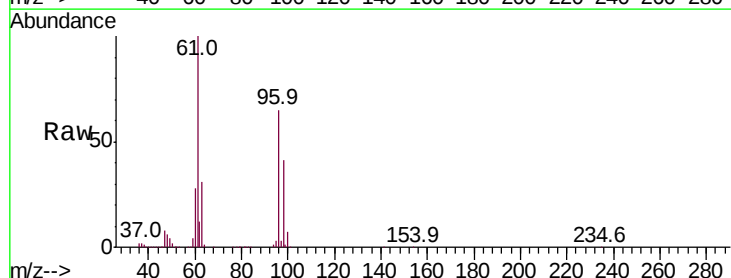
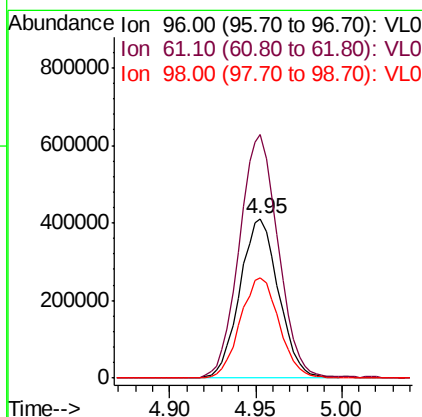
RT: 4.95 min Scan# 627

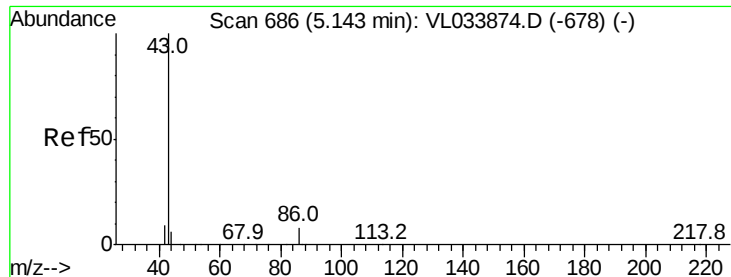
Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 96    | Resp: | 642768 |
| Ion Ratio | Lower | Upper |        |
| 96        | 100   |       |        |
| 61        | 152.8 | 119.0 | 178.6  |
| 98        | 63.3  | 48.3  | 72.5   |





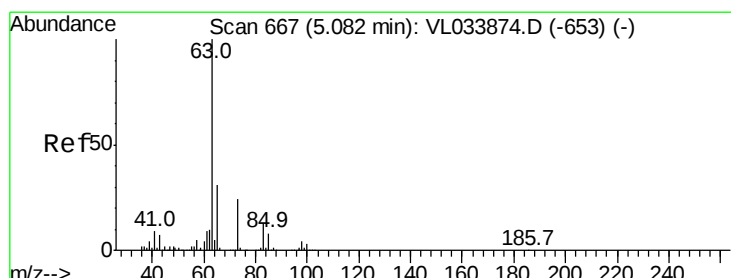
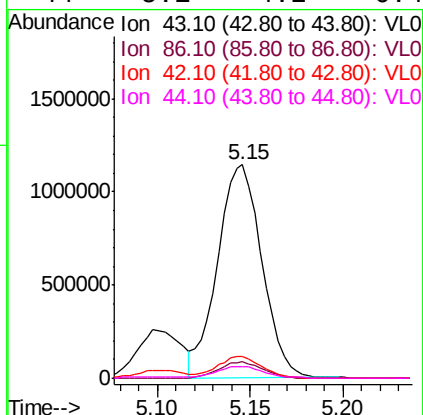
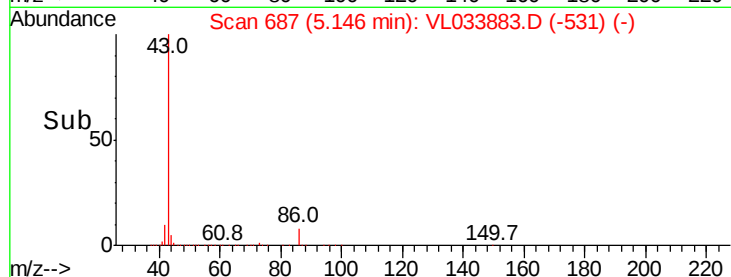
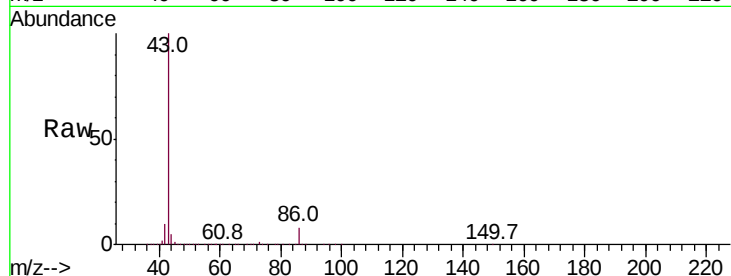
#23  
 Vinyl Acetate  
 Concen: 10.982 ppbv  
 RT: 5.15 min Scan# 687  
 Delta R.T. 0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0607ABS01

| Tot Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 43      | 100 |       |       |       |
| 86      | 7.9 | 5.8   | 8.8   |       |
| 42      | 9.9 | 7.8   | 11.8  |       |
| 44      | 5.1 | 4.2   | 6.4   |       |

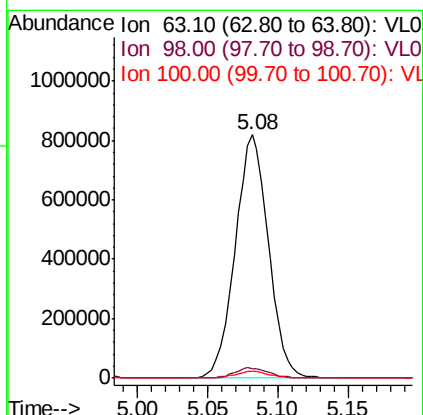
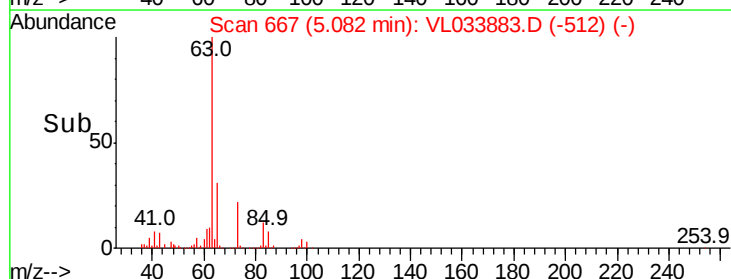
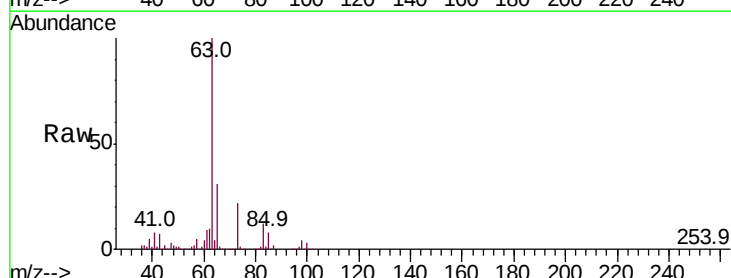
Manual Integrations  
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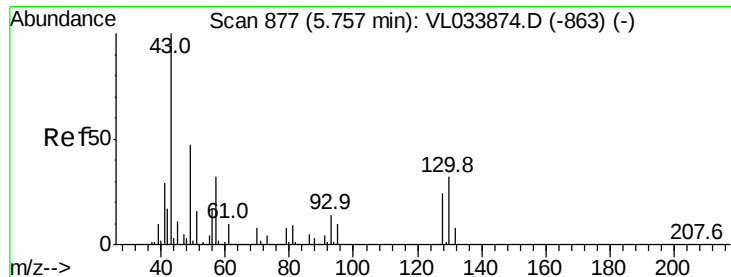
MMDadoda  
 6/11/2019 9:18:56 AM



#24  
 1,1-Dichloroethane  
 Concen: 10.039 ppbv  
 RT: 5.08 min Scan# 667  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

| Tgt Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 63      | 100 |       |       |       |
| 98      | 3.7 | 2.2   | 6.6   |       |
| 100     | 2.7 | 1.3   | 3.8   |       |





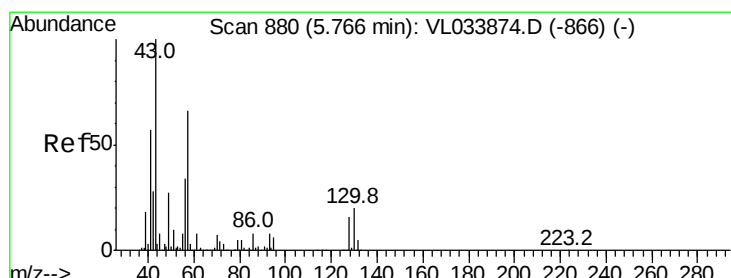
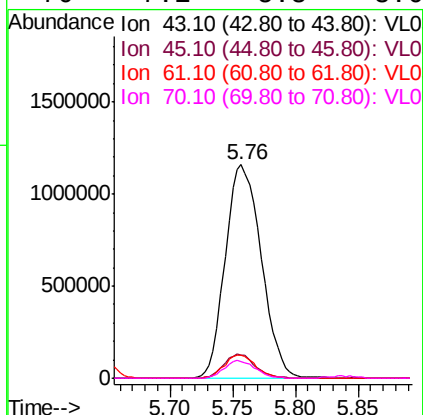
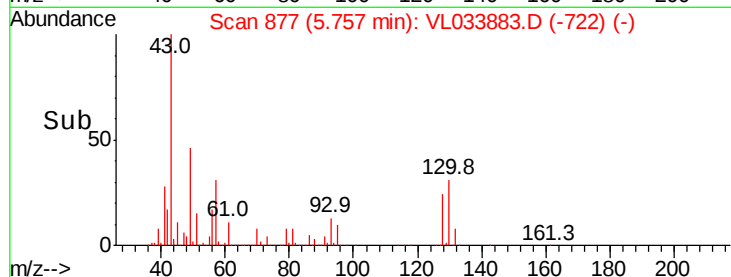
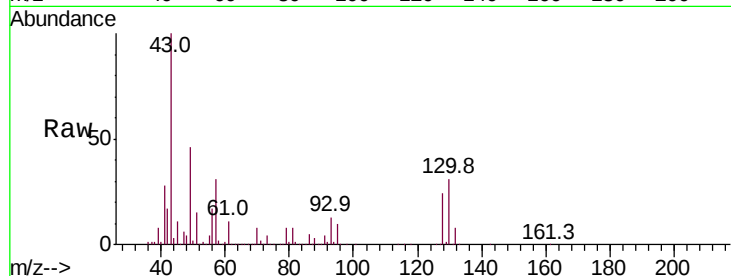
#25  
Ethyl Acetate  
Concen: 10.241 ppbv  
RT: 5.76 min Scan# 877  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 9.9   | 7.9   | 11.9  |
| 61      | 9.7   | 7.8   | 11.6  |
| 70      | 7.1   | 5.8   | 8.6   |

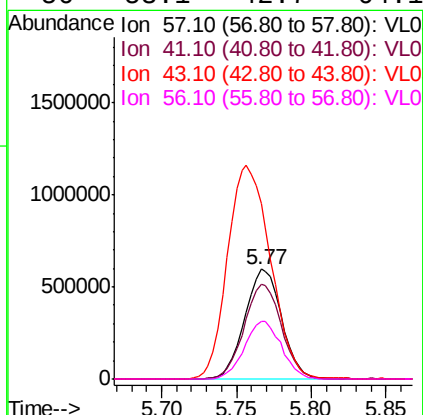
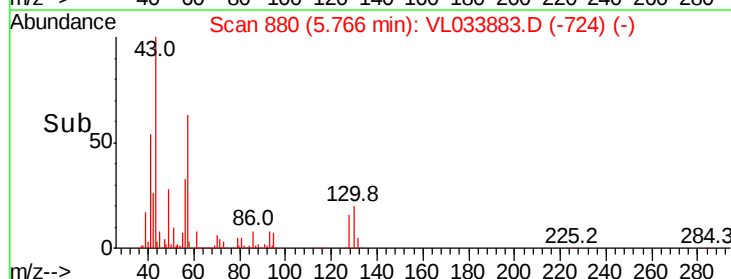
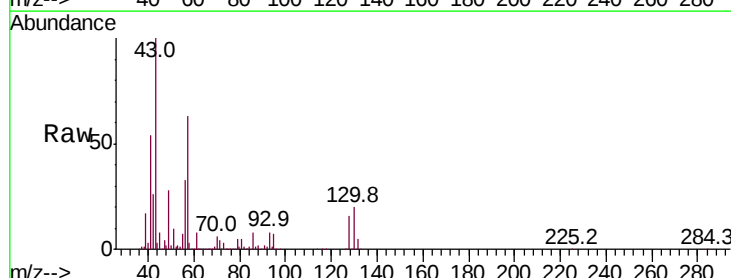
Manual Integrations  
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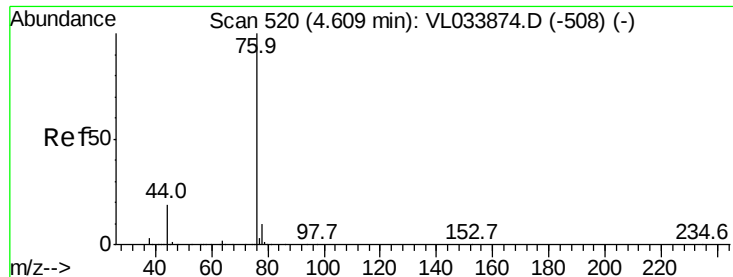
MMDadoda  
6/11/2019 9:18:56 AM



#26  
Hexane  
Concen: 9.907 ppbv  
RT: 5.77 min Scan# 880  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 88.2  | 71.4  | 107.2 |
| 43      | 227.5 | 183.7 | 275.5 |
| 56      | 53.1  | 42.7  | 64.1  |





#27

Carbon Disulfide

Concen: 10.920 ppbv

RT: 4.61 min Scan# 520

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 76 Resp: 1560927

Ion Ratio Lower Upper

76 100

44 17.2 14.4 21.6

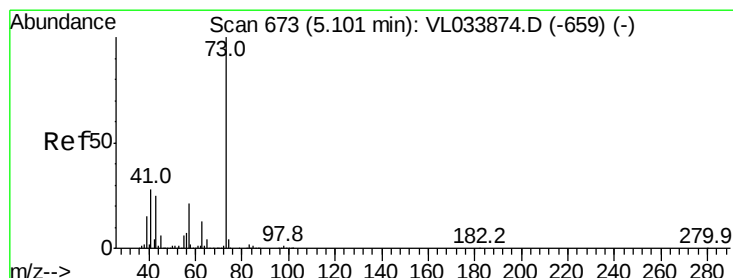
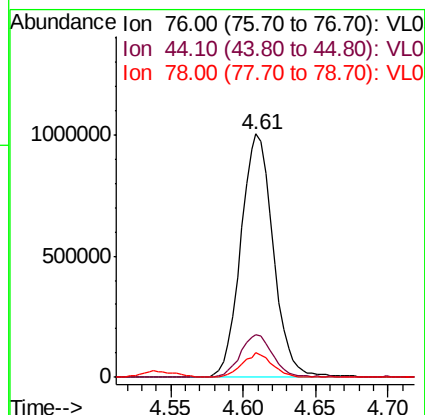
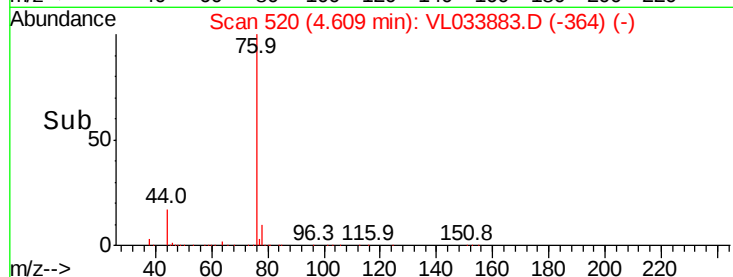
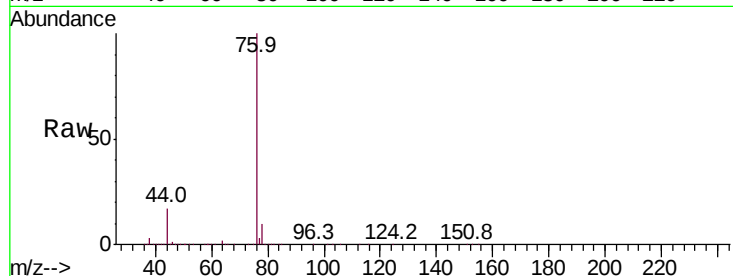
78 9.4 7.5 11.3

Manual Integrations

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#28

Methyl tert-Butyl Ether

Concen: 11.460 ppbv

RT: 5.10 min Scan# 673

Delta R.T. -0.00 min

Lab File: VL033883.D

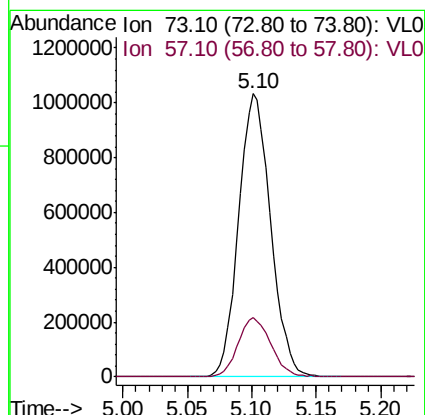
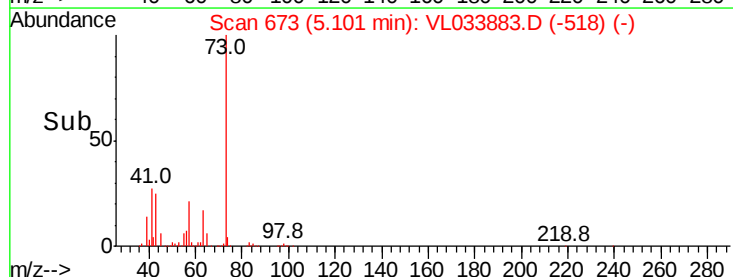
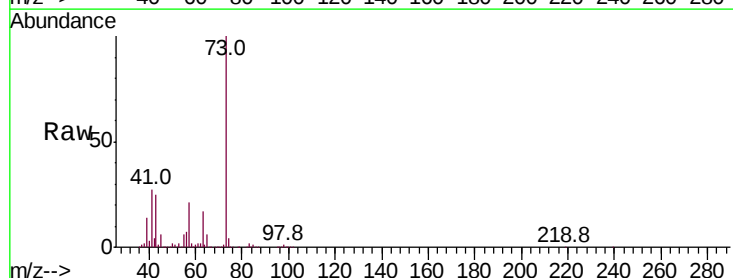
Acq: 7 Jun 2019 8:31

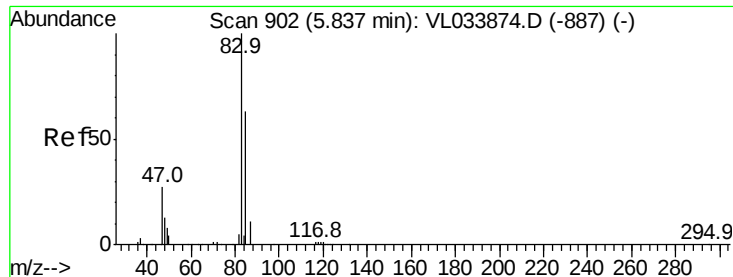
Tgt Ion: 73 Resp: 1782973

Ion Ratio Lower Upper

73 100

57 21.6 17.2 25.8





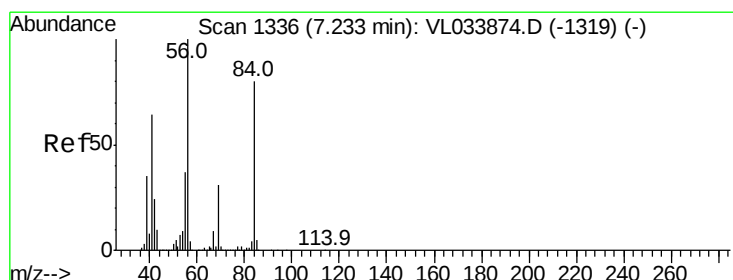
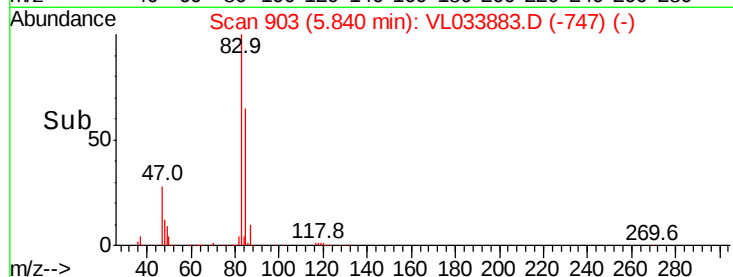
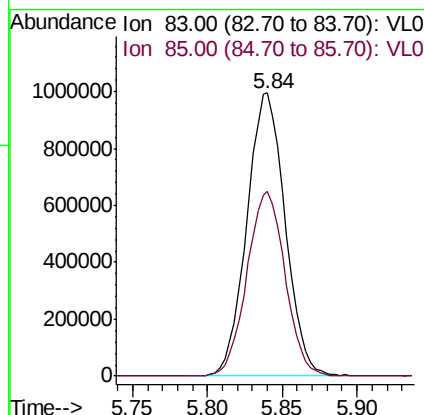
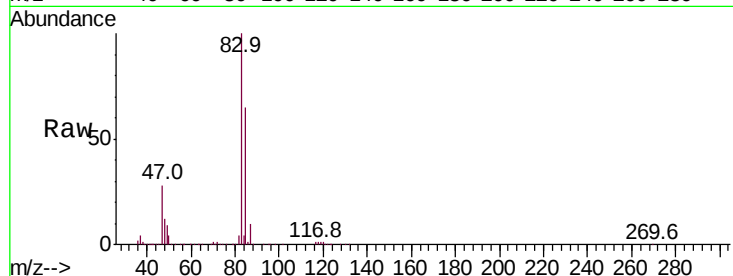
#29  
Chloroform  
Concen: 10.059 ppbv  
RT: 5.84 min Scan# 903  
Delta R.T. 0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0607ABS01

Tot Ion: 83 Resp: 1772591  
Ion Ratio Lower Upper  
83 100  
85 65.2 50.5 75.7

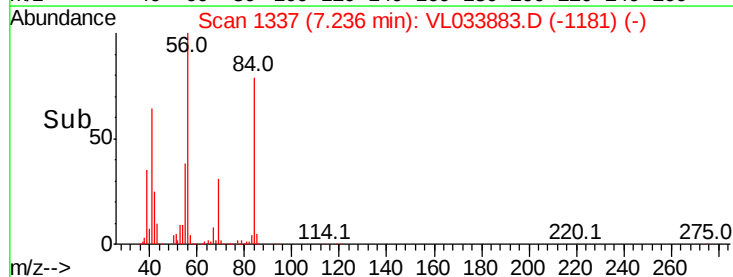
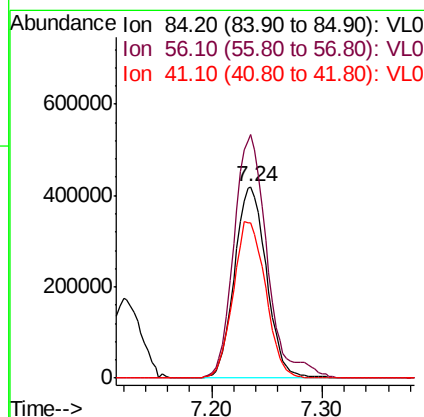
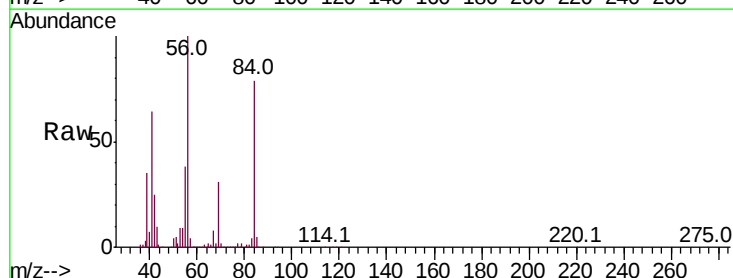
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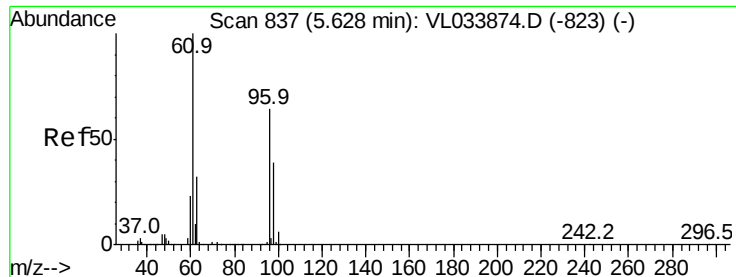
MMDadoda  
6/11/2019 9:18:56 AM



#30  
Cyclohexane  
Concen: 11.611 ppbv  
RT: 7.24 min Scan# 1337  
Delta R.T. 0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Tgt Ion: 84 Resp: 844091  
Ion Ratio Lower Upper  
84 100  
56 132.4 105.8 158.8  
41 82.8 65.7 98.5





#31

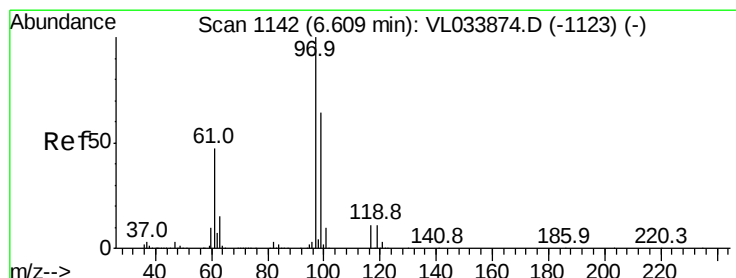
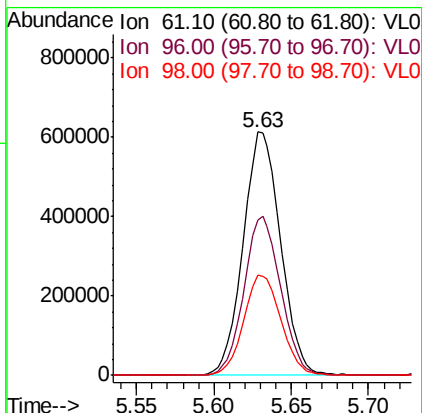
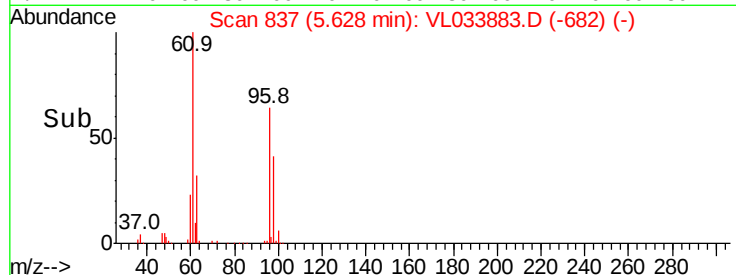
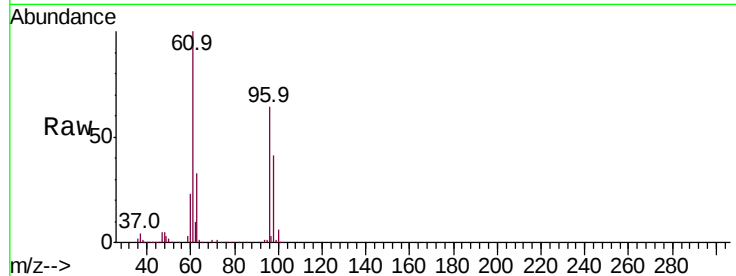
cis-1,2-Dichloroethene  
Concen: 11.475 ppbv  
RT: 5.63 min Scan# 837  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 63.6  | 50.9  | 76.3  |
| 98      | 41.1  | 31.4  | 47.2  |

Manual Integrations  
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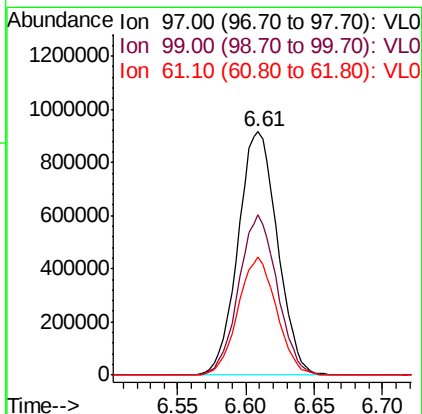
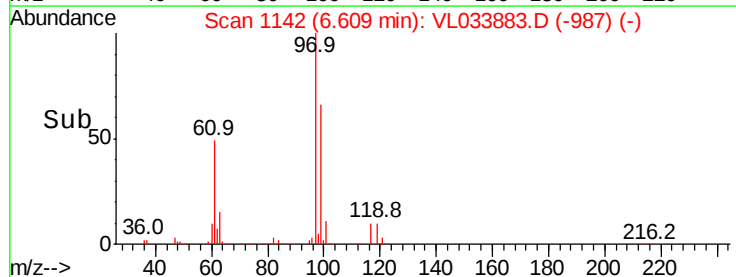
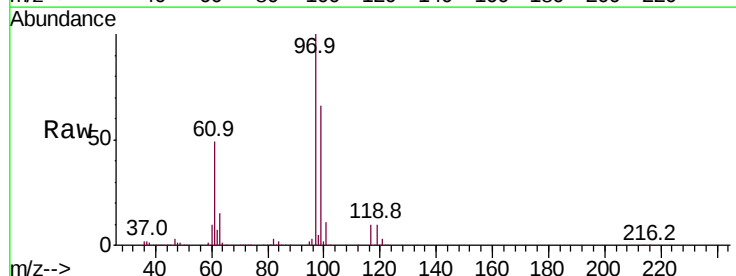
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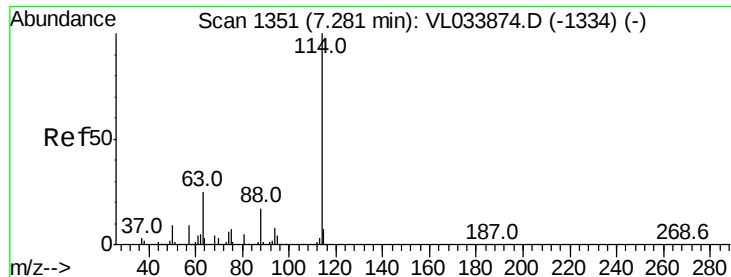


#32

1,1,1-Trichloroethane  
Concen: 10.820 ppbv  
RT: 6.61 min Scan# 1142  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.2  | 51.7  | 77.5  |
| 61      | 47.4  | 37.7  | 56.5  |





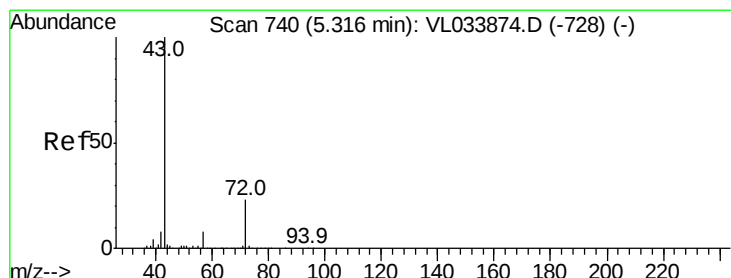
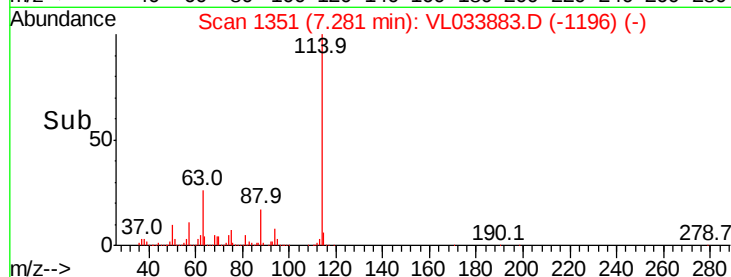
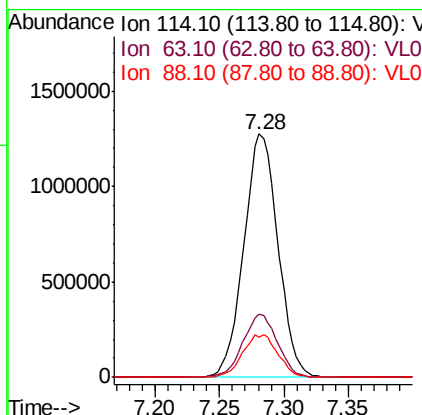
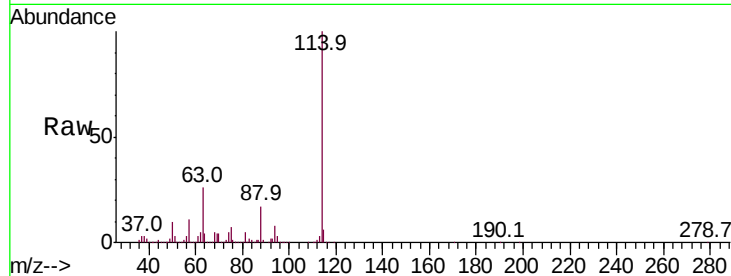
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.28 min Scan# 1351  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 26.5  | 21.1  | 31.7  |
| 88      | 18.0  | 14.2  | 21.4  |

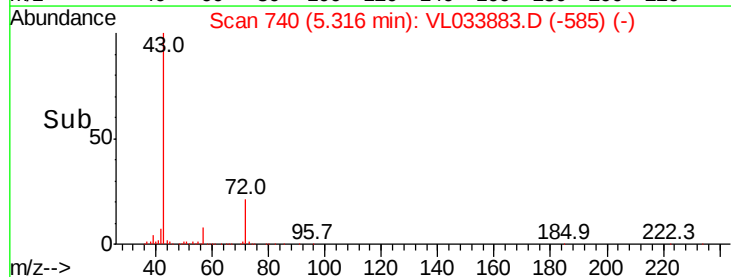
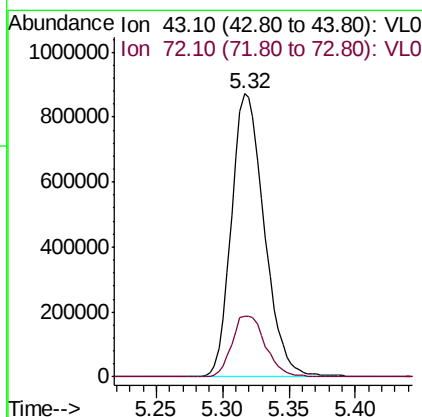
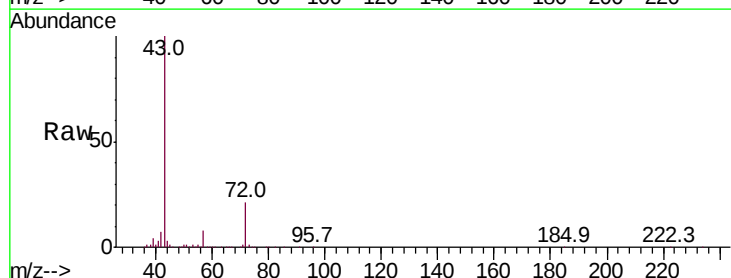
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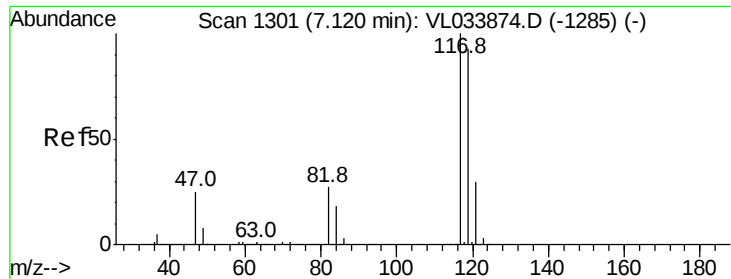
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#34  
 2-Butanone  
 Concen: 11.252 ppbv  
 RT: 5.32 min Scan# 740  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 22.1  | 17.9  | 26.9  |





#35

Carbon Tetrachloride

Concen: 10.729 ppbv

RT: 7.12 min Scan# 1301

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:117 Resp: 1954500

Ion Ratio Lower Upper

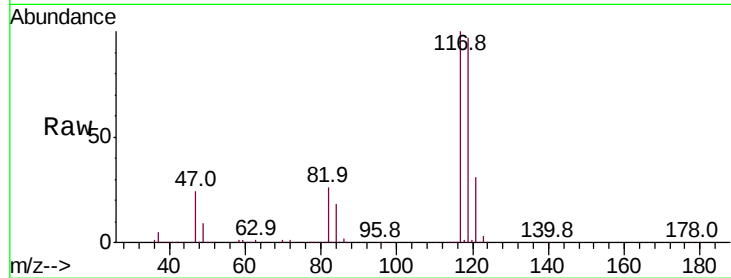
117 100

119 96.8 74.6 111.8

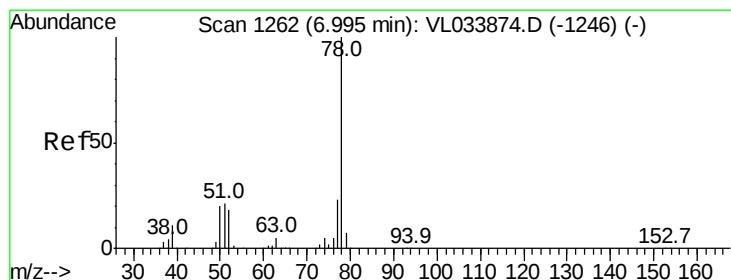
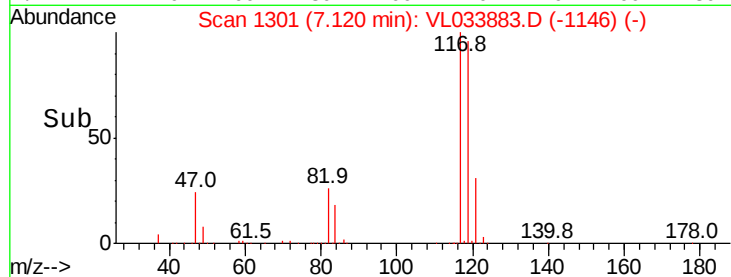
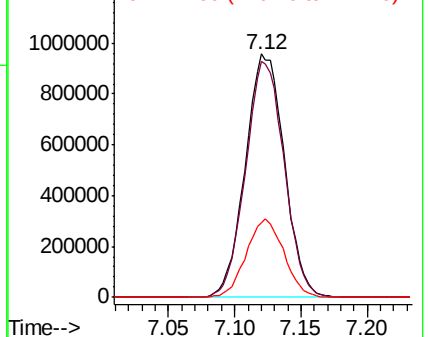
121 30.6 24.0 36.0

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



#36

Benzene

Concen: 11.473 ppbv

RT: 6.99 min Scan# 1262

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

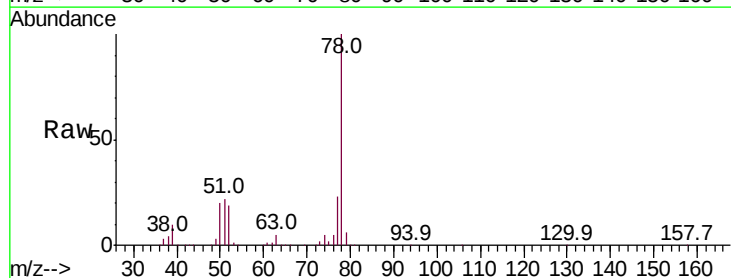
Tgt Ion: 78 Resp: 2066406

Ion Ratio Lower Upper

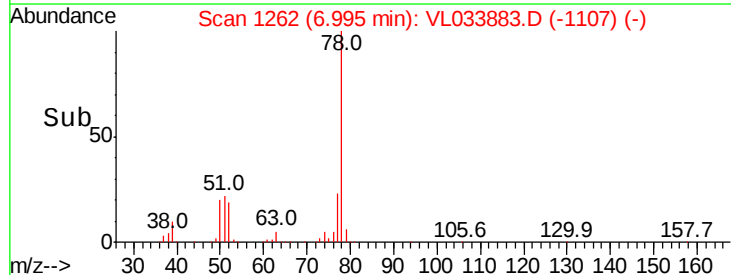
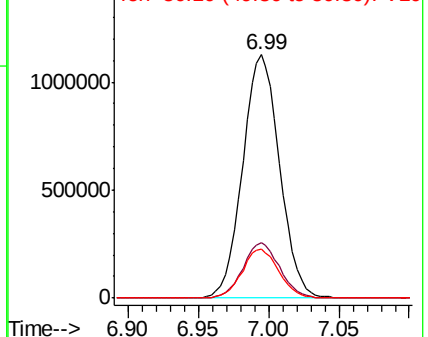
78 100

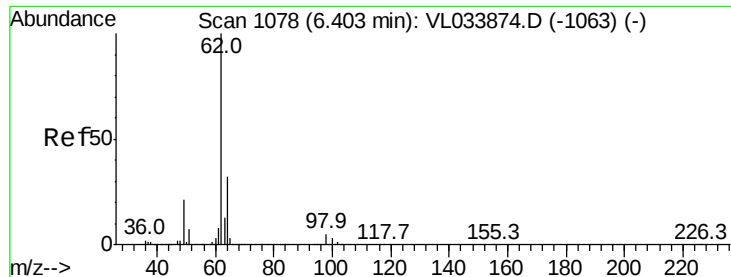
77 22.8 18.2 27.2

50 20.2 15.9 23.9



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





#37

1,2-Dichloroethane

Concen: 10.295 ppbv

RT: 6.40 min Scan# 1078

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 62 Resp: 1371381

Ion Ratio Lower Upper

62 100

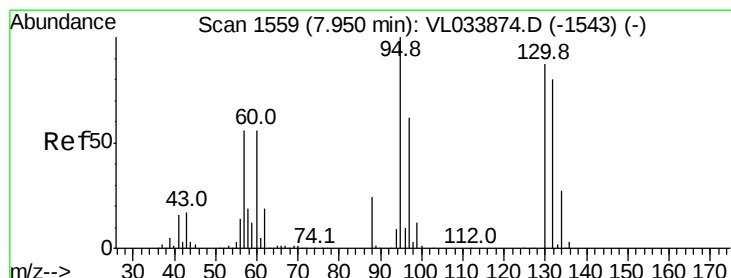
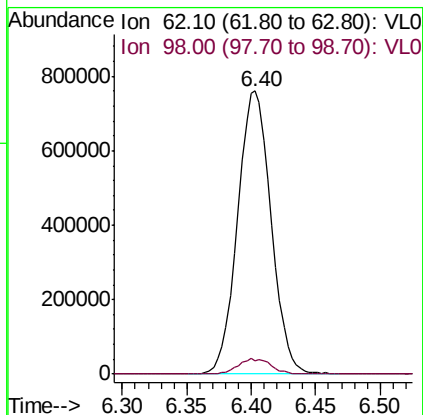
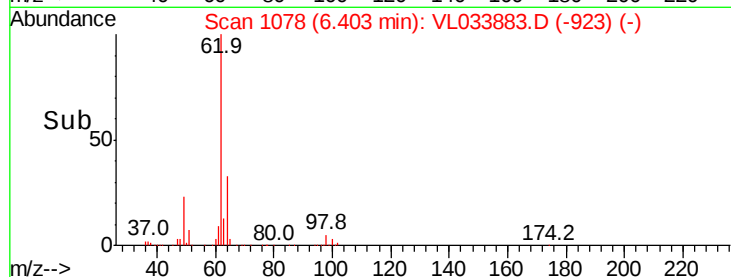
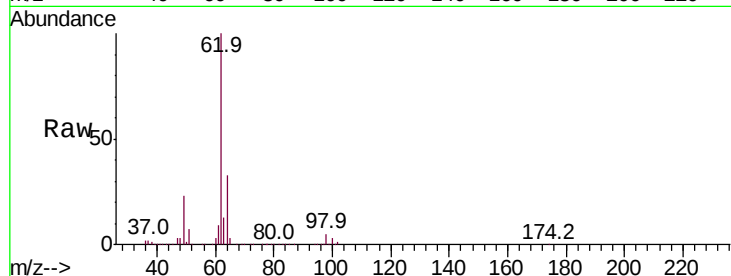
98 5.4 4.0 6.0

Manual Integrations

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#38

Trichloroethene

Concen: 12.305 ppbv

RT: 7.95 min Scan# 1559

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Tgt Ion:130 Resp: 862946

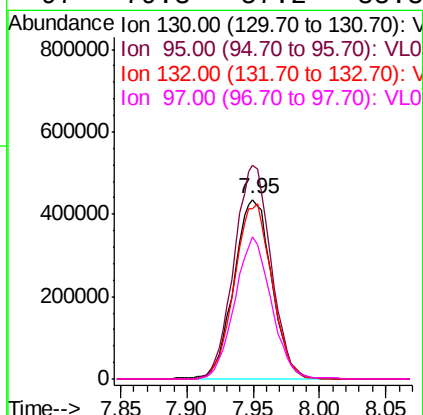
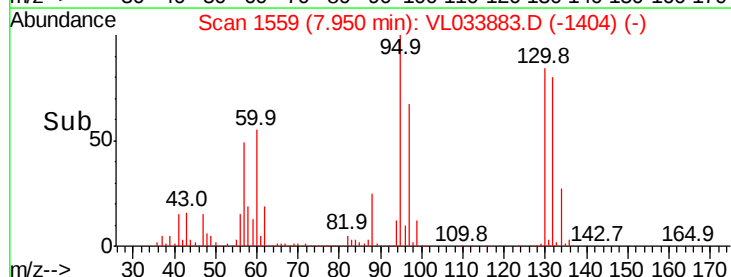
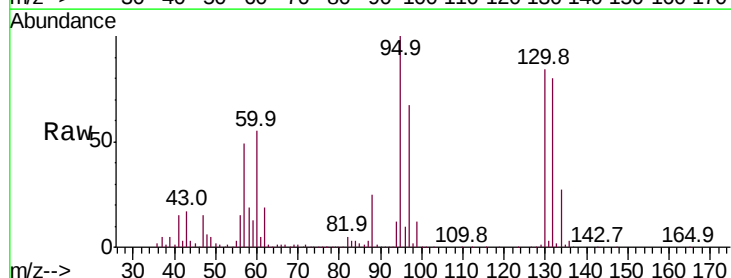
Ion Ratio Lower Upper

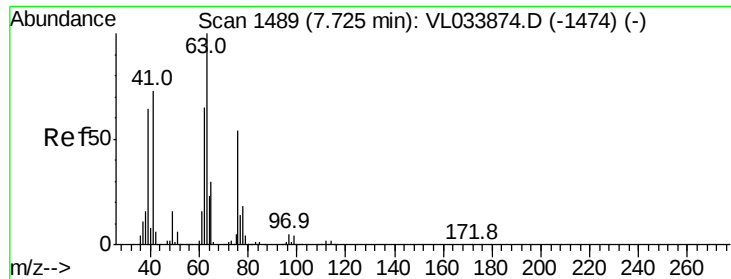
130 100

95 119.1 92.0 138.0

132 94.8 73.8 110.8

97 79.3 57.2 85.8





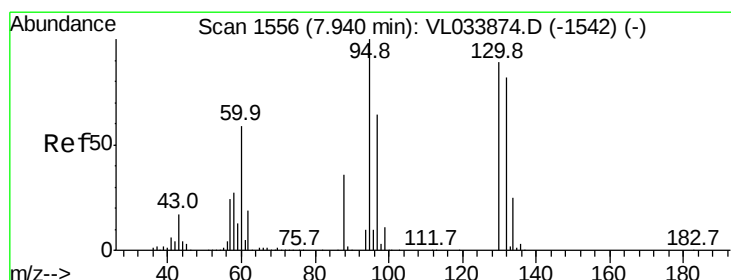
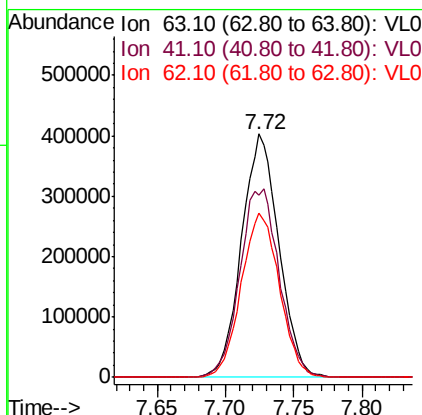
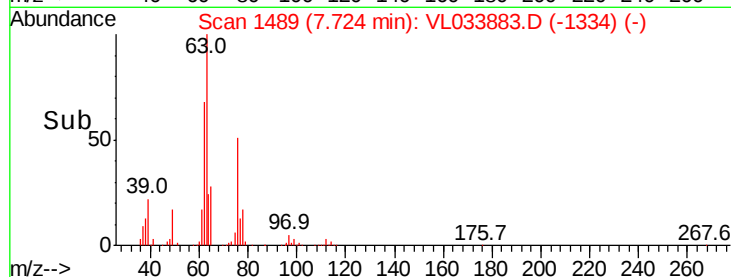
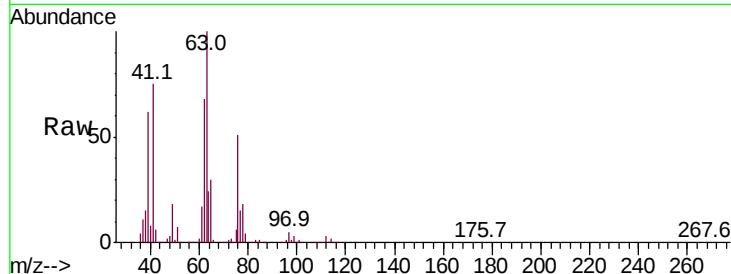
#39  
 1,2-Dichloropropane  
 Concen: 11.007 ppbv  
 RT: 7.72 min Scan# 1489  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 75.0  | 58.7  | 88.1  |
| 62      | 67.6  | 51.9  | 77.9  |

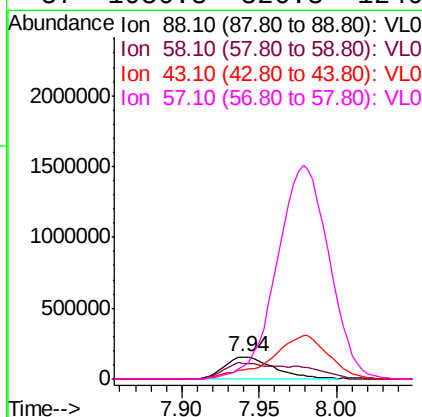
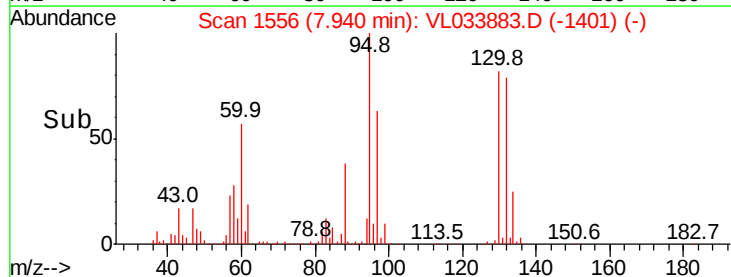
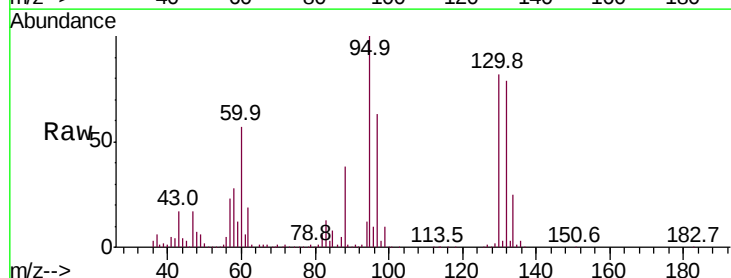
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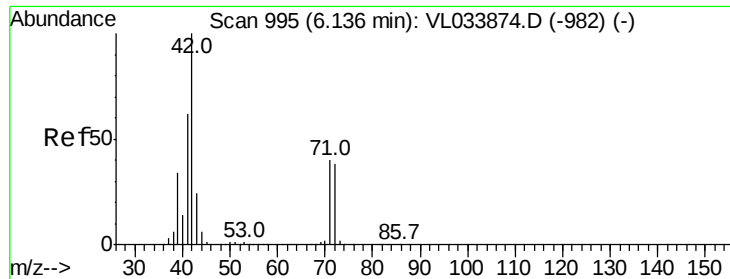
MMDadoda  
 6/11/2019 9:18:56 AM



#40  
 1,4-Dioxane  
 Concen: 12.055 ppbv  
 RT: 7.94 min Scan# 1556  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

| Tgt Ion | Ratio  | Lower | Upper  |
|---------|--------|-------|--------|
| 88      | 100    |       |        |
| 58      | 121.9  | 100.0 | 150.0  |
| 43      | 234.1  | 184.7 | 277.1  |
| 57      | 1036.3 | 826.8 | 1240.2 |





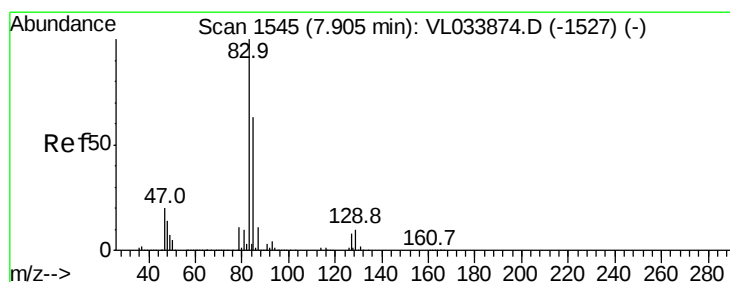
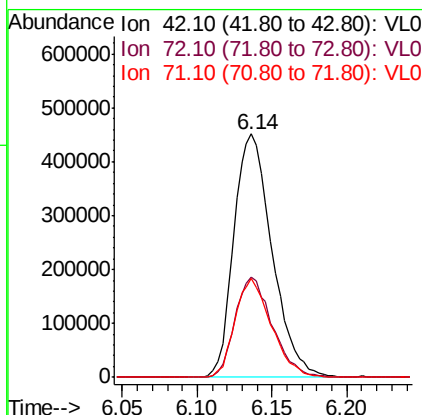
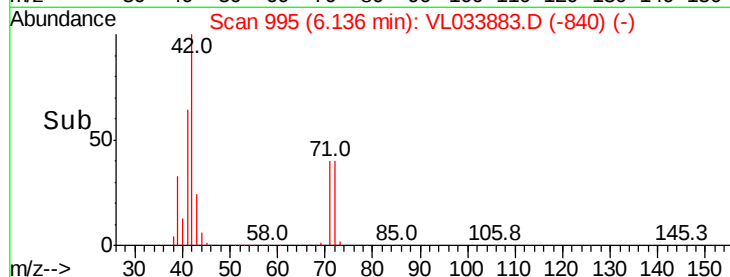
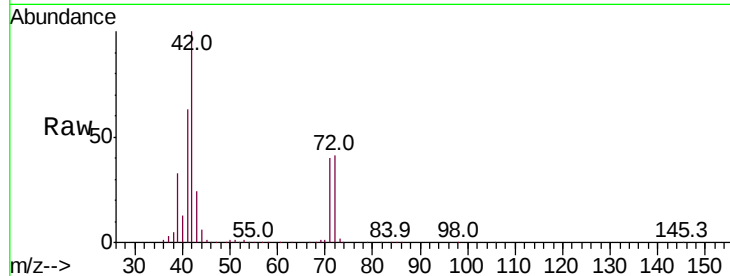
#41  
Tetrahydrofuran  
Concen: 11.925 ppbv  
RT: 6.14 min Scan# 995  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 40.2  | 32.2  | 48.4  |
| 71      | 38.8  | 31.7  | 47.5  |

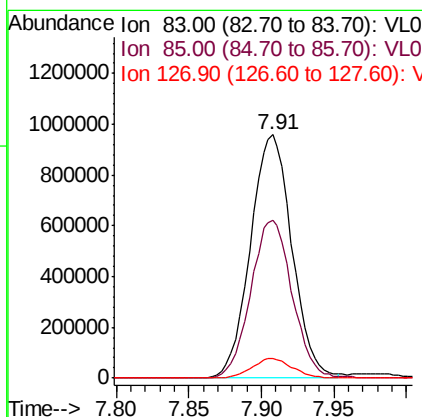
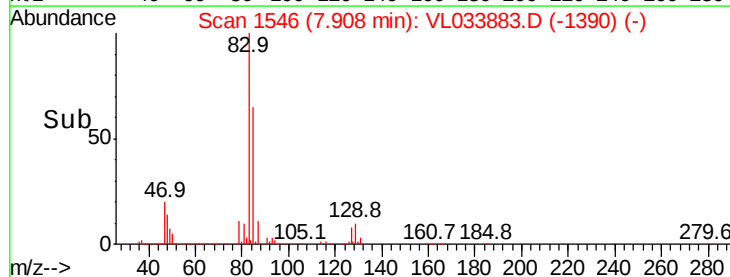
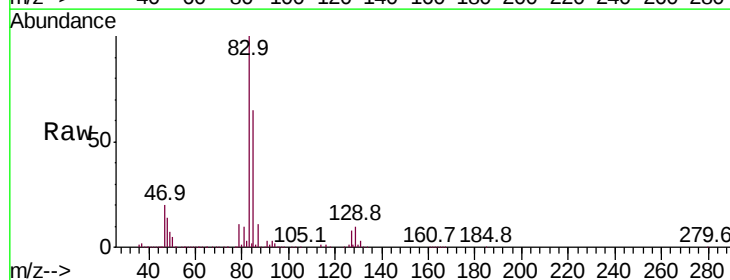
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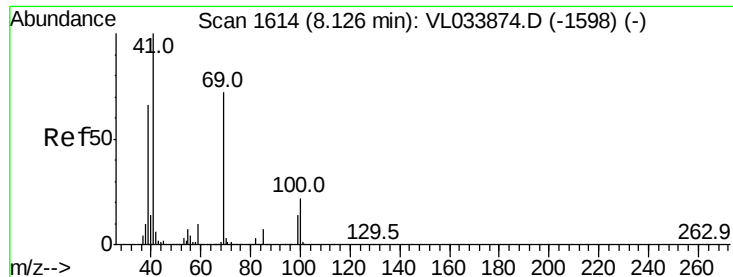
MMDadoda  
6/11/2019 9:18:56 AM



#42  
Bromodichloromethane  
Concen: 10.705 ppbv  
RT: 7.91 min Scan# 1546  
Delta R.T. 0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 65.1  | 50.2  | 75.2  |
| 127     | 8.3   | 6.5   | 9.7   |





#43

Methyl Methacrylate

Concen: 12.474 ppbv

RT: 8.13 min Scan# 1614

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

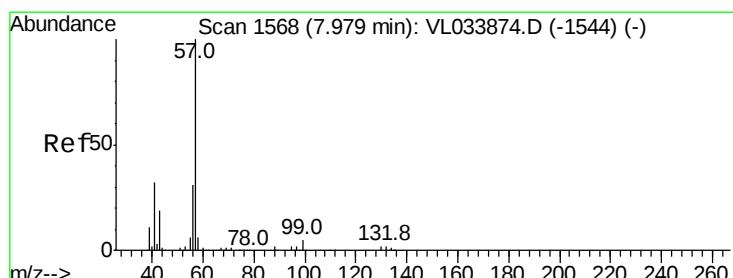
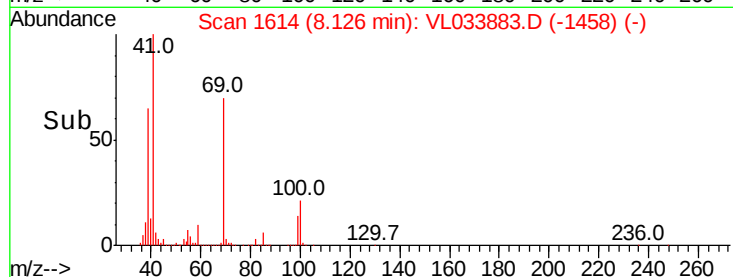
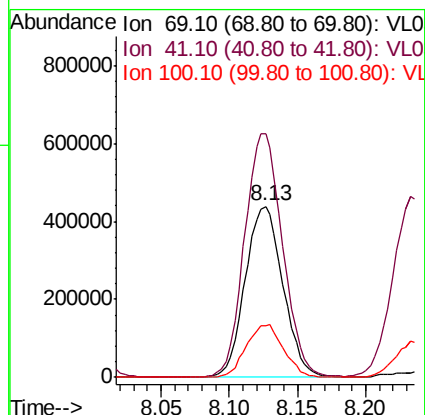
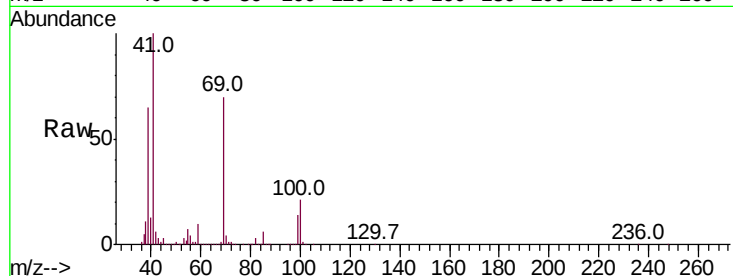
Instrument :  
MSVOA\_L

ClientSampleId :  
VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 69      | 100   |       |       |
| 41      | 143.8 | 114.3 | 171.5 |
| 100     | 30.7  | 24.8  | 37.2  |

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#44

2,2,4-Trimethylpentane

Concen: 11.053 ppbv

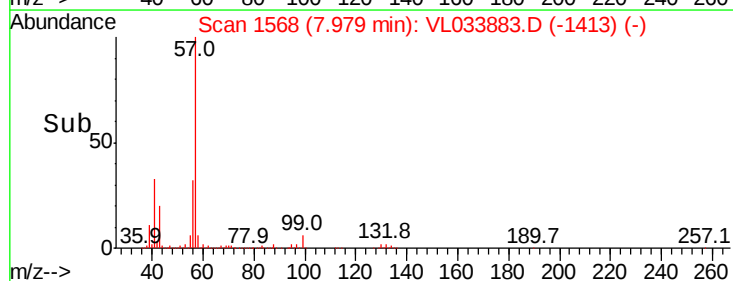
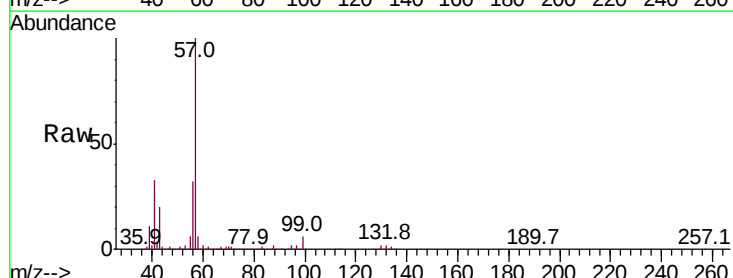
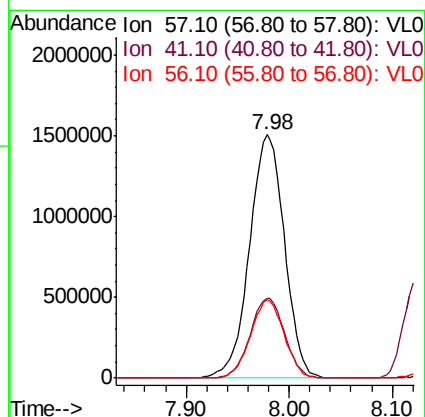
RT: 7.98 min Scan# 1568

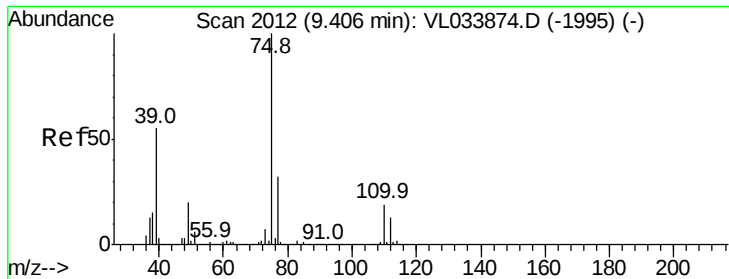
Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 32.6  | 26.1  | 39.1  |
| 56      | 31.0  | 24.6  | 36.8  |





#45

t-1,3-Dichloropropene

Concen: 12.992 ppbv

RT: 9.40 min Scan# 2011

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L

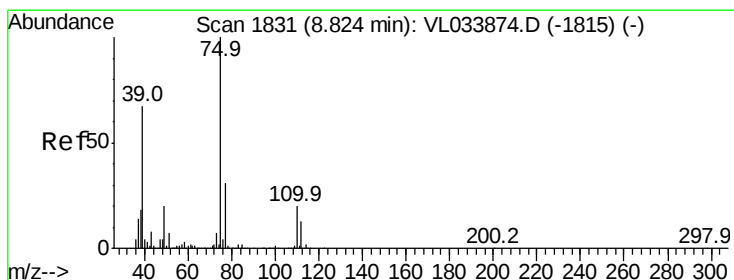
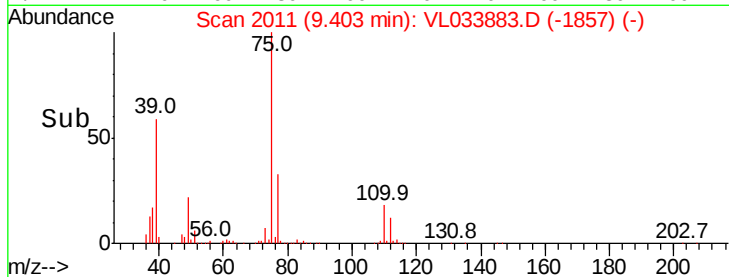
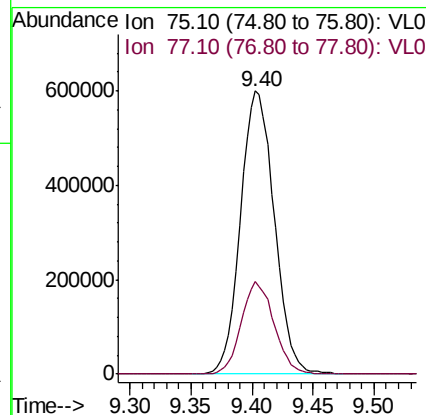
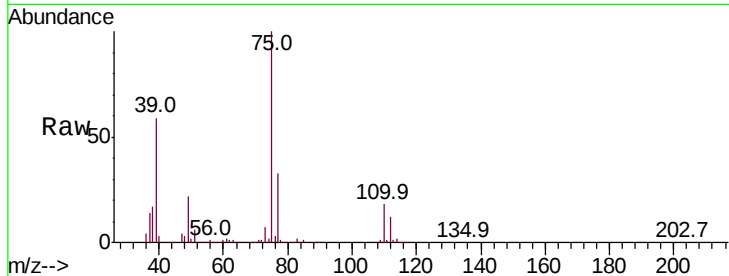
ClientSampleId :  
VL0607ABS01

Tot Ion: 75 Resp: 1148355

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 75  | 100   |       |       |
| 77  | 32.7  | 25.4  | 38.2  |

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#46

cis-1,3-Dichloropropene

Concen: 12.720 ppbv

RT: 8.82 min Scan# 1831

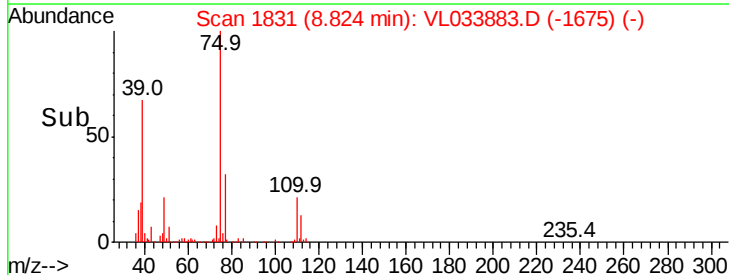
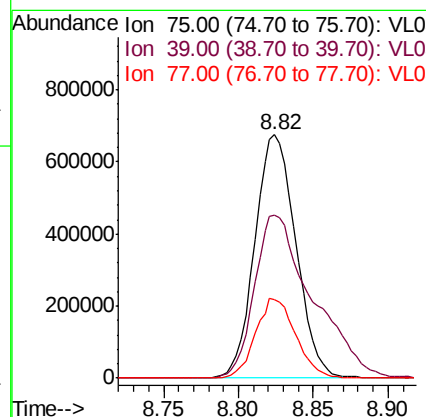
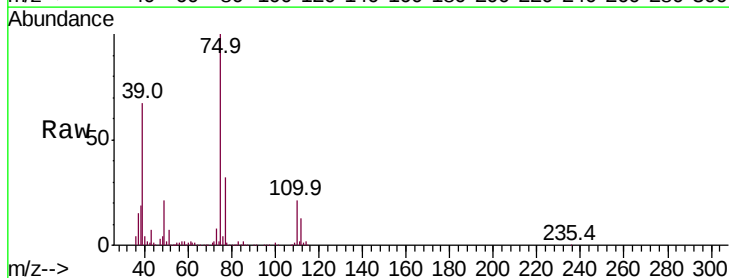
Delta R.T. -0.00 min

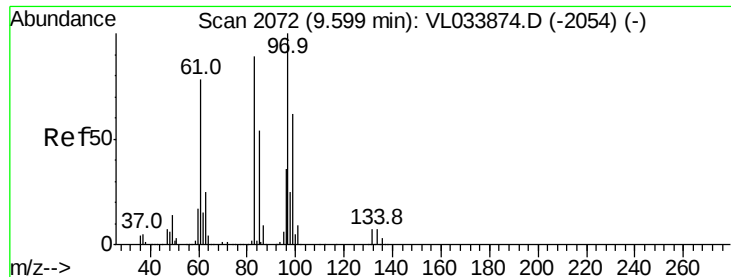
Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Tgt Ion: 75 Resp: 1288123

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 75  | 100   |       |       |
| 39  | 66.8  | 53.8  | 80.8  |
| 77  | 32.0  | 24.6  | 36.8  |





#47

1,1,2-Trichloroethane

Concen: 10.669 ppbv

RT: 9.60 min Scan# 2073

Delta R.T. 0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 97 Resp: 884113

Ion Ratio Lower Upper

97 100

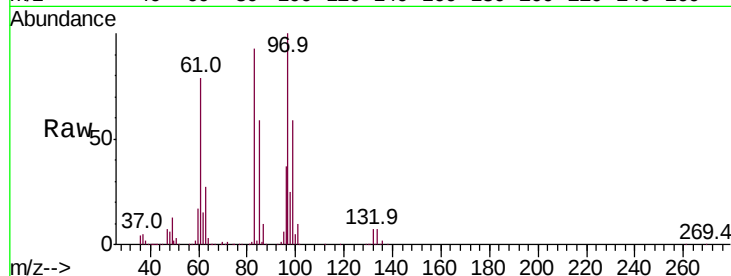
83 92.7 70.9 106.3

85 58.5 43.0 64.6

99 58.8 49.3 73.9

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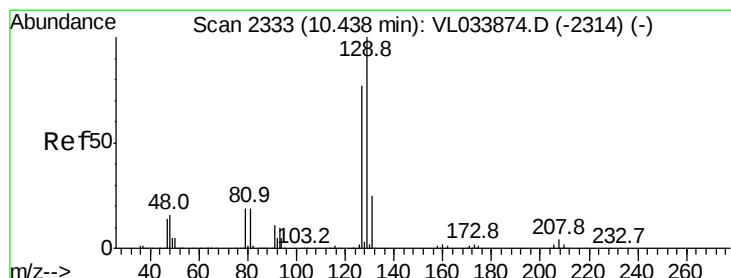
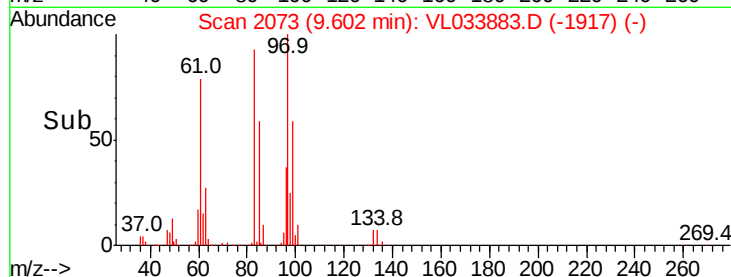
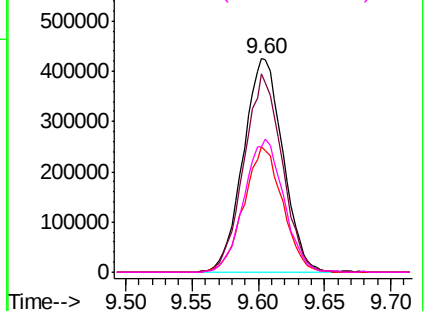


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48

Dibromochloromethane

Concen: 11.253 ppbv

RT: 10.44 min Scan# 2334

Delta R.T. 0.00 min

Lab File: VL033883.D

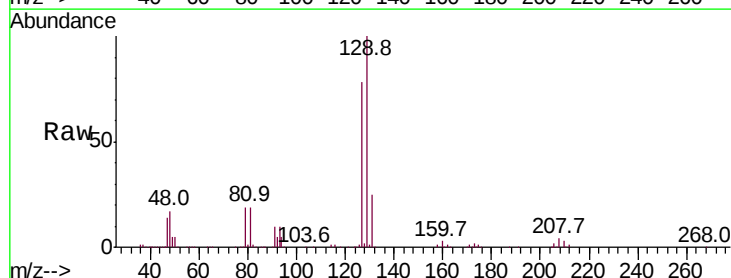
Acq: 7 Jun 2019 8:31

Tgt Ion:129 Resp: 1675852

Ion Ratio Lower Upper

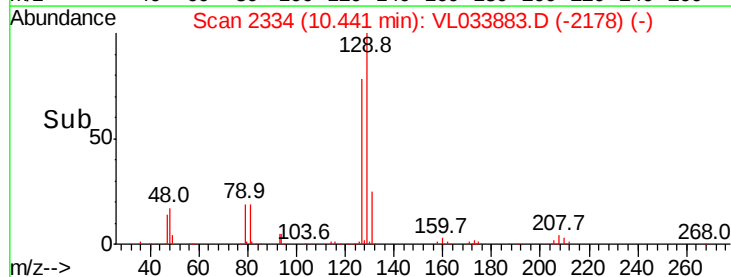
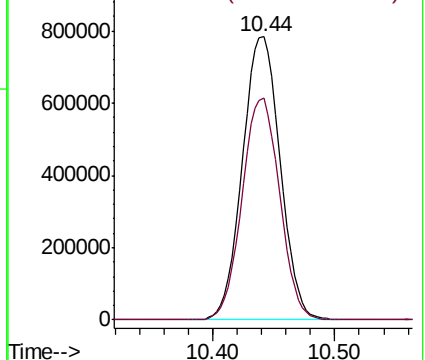
129 100

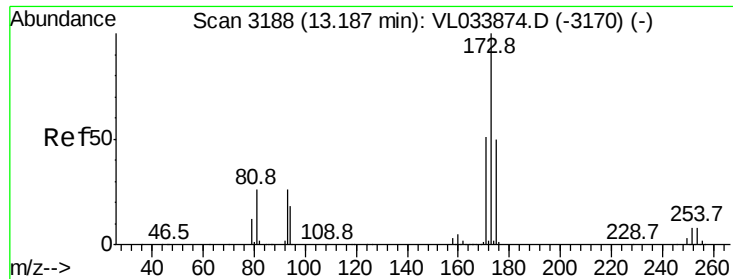
127 78.0 38.6 115.7



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 11.465 ppbv

RT: 13.19 min Scan# 3188

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:173 Resp: 1507289

Ion Ratio Lower Upper

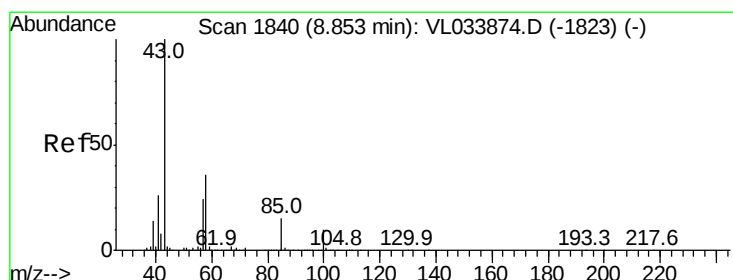
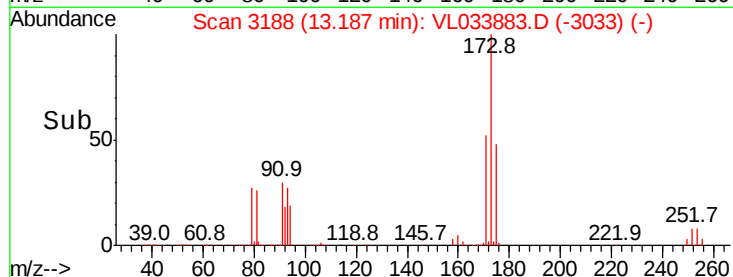
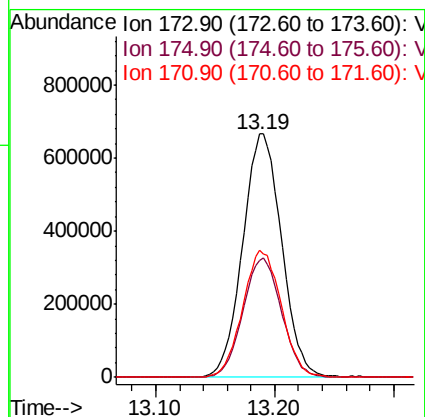
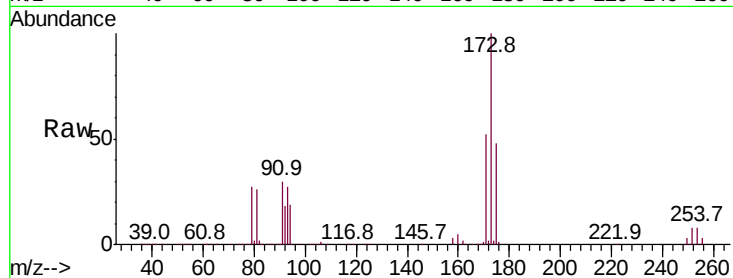
173 100

175 48.8 39.6 59.4

171 52.2 41.8 62.8

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#50

4-Methyl-2-Pentanone

Concen: 11.543 ppbv

RT: 8.86 min Scan# 1841

Delta R.T. 0.00 min

Lab File: VL033883.D

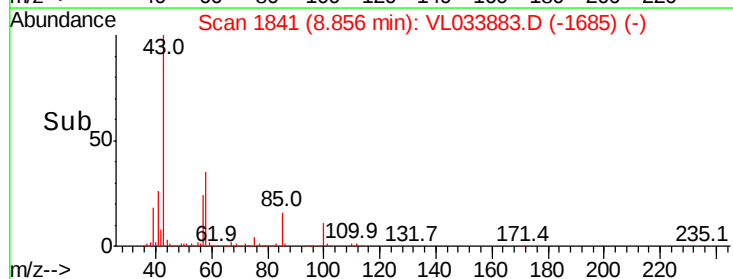
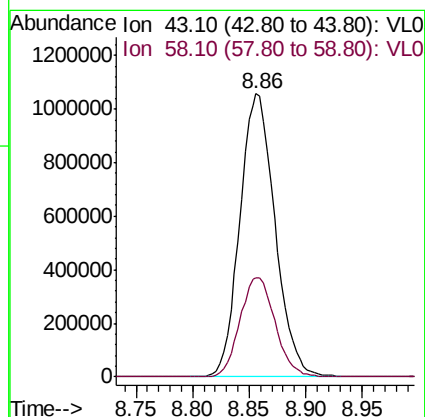
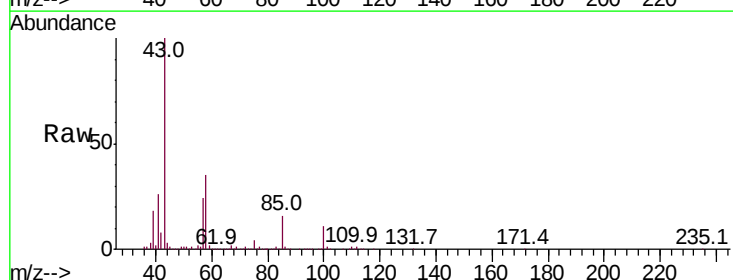
Acq: 7 Jun 2019 8:31

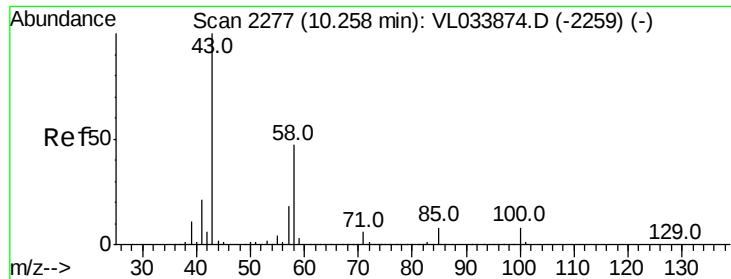
Tgt Ion: 43 Resp: 2289654

Ion Ratio Lower Upper

43 100

58 35.3 28.6 42.8





#51

2-Hexanone

Concen: 12.038 ppbv

RT: 10.26 min Scan# 2277

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleID :

VL0607ABS01

Tot Ion: 43 Resp: 1864665

Ion Ratio Lower Upper

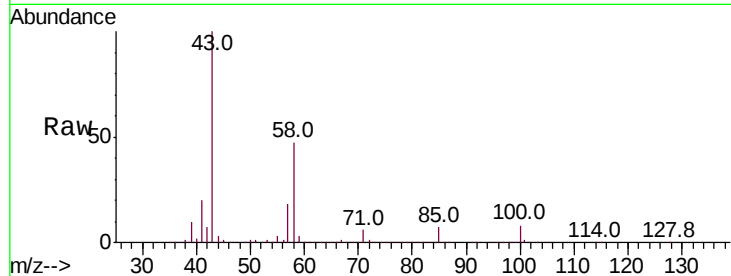
43 100

58 47.7 38.2 57.4

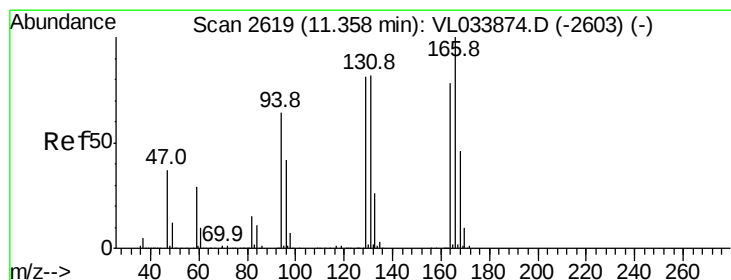
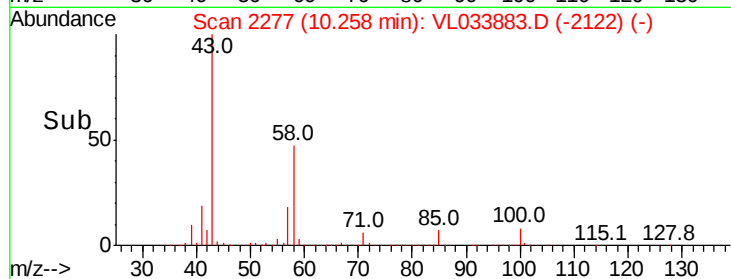
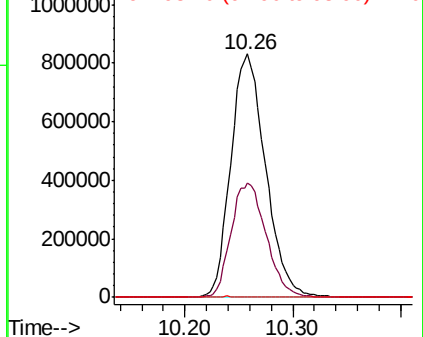
98 0.5 0.2 0.2#

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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: 12.921 ppbv

RT: 11.36 min Scan# 2620

Delta R.T. 0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Tgt Ion:164 Resp: 818921

Ion Ratio Lower Upper

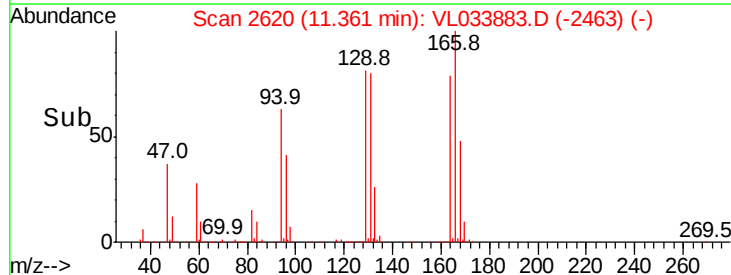
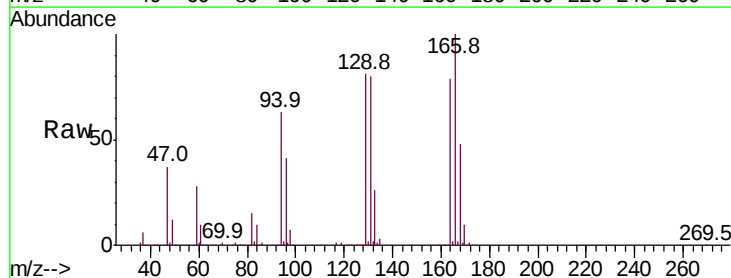
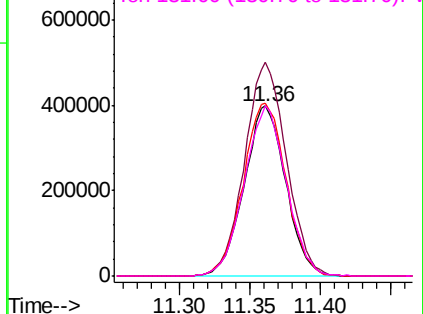
164 100

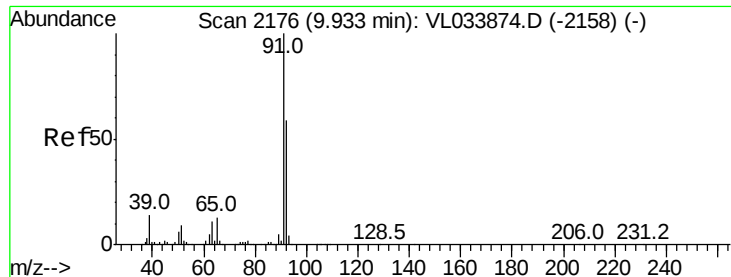
166 125.8 103.1 154.7

129 102.0 83.9 125.9

131 100.4 85.1 127.7

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: 12.314 ppbv

RT: 9.93 min Scan# 2176

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 91 Resp: 2454472

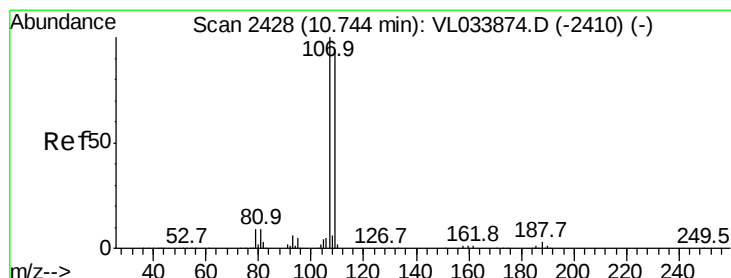
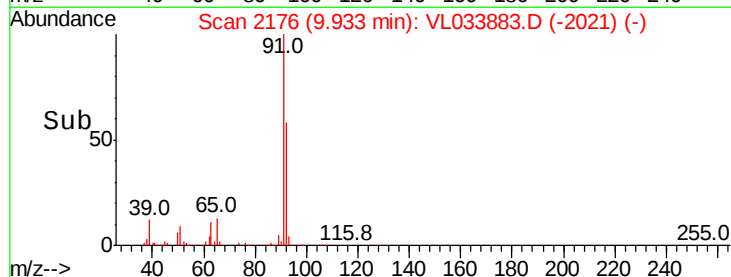
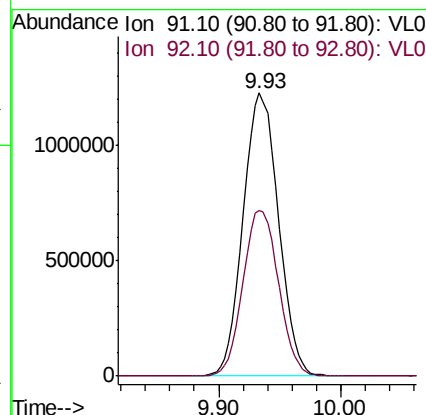
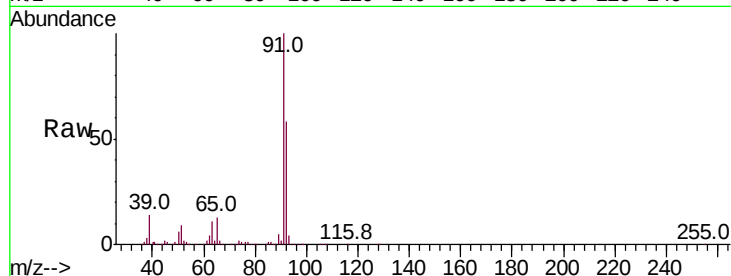
Ion Ratio Lower Upper

91 100

92 59.0 47.0 70.6

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#54

1,2-Dibromoethane

Concen: 11.361 ppbv

RT: 10.75 min Scan# 2429

Delta R.T. 0.00 min

Lab File: VL033883.D

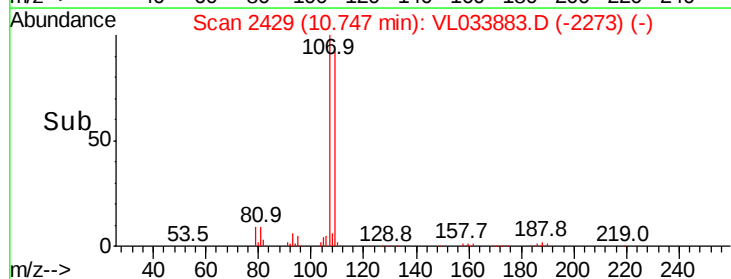
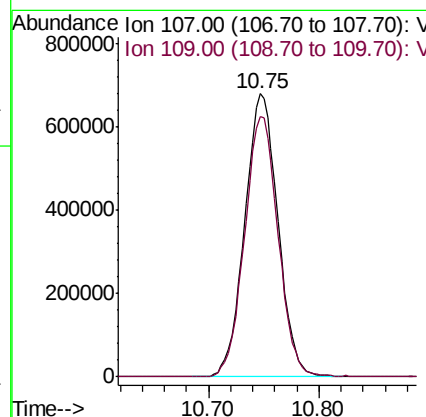
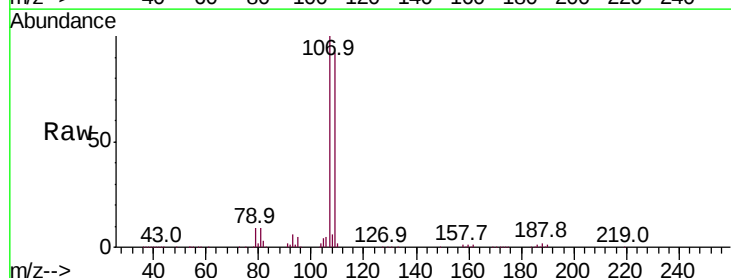
Acq: 7 Jun 2019 8:31

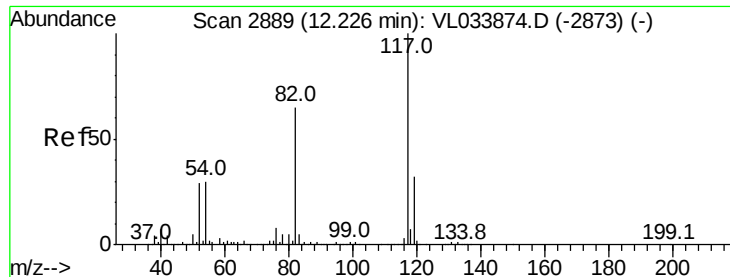
Tgt Ion: 107 Resp: 1419178

Ion Ratio Lower Upper

107 100

109 91.9 74.9 112.3





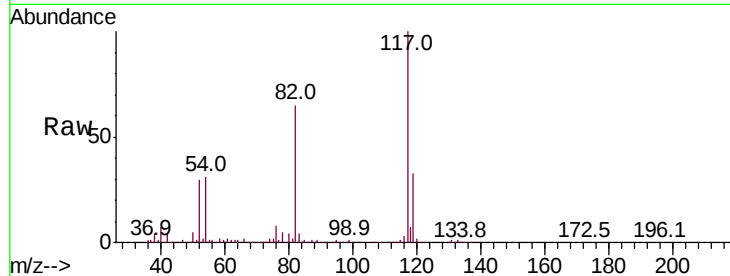
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv m  
RT: 12.23 min Scan# 2889  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0607ABS01

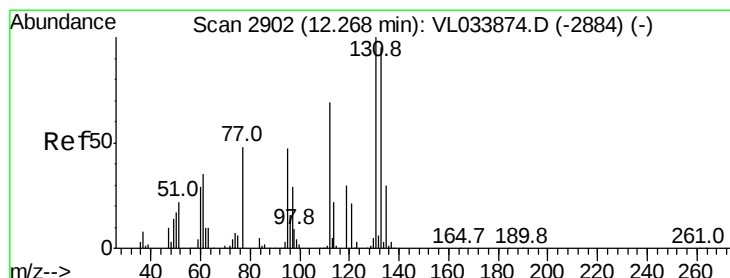
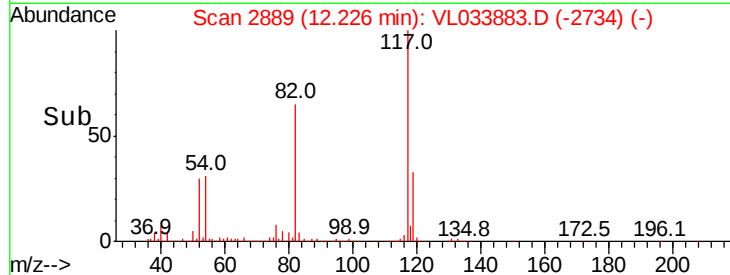
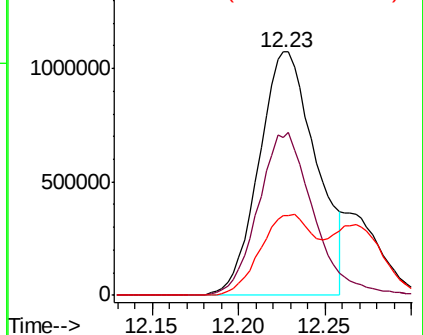
Tot Ion:117 Resp: 2456104  
Ion Ratio Lower Upper  
117 100  
82 65.2 50.2 75.2  
119 29.7 24.8 37.2

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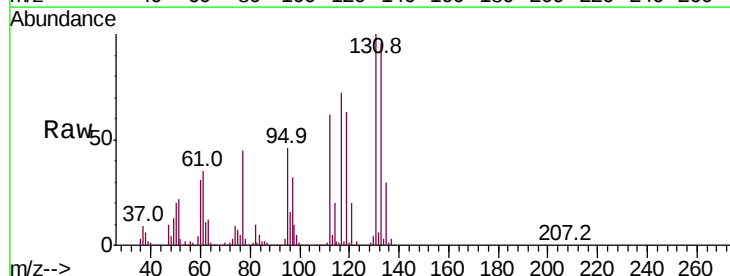


Abundance Ion 117.10 (116.80 to 117.80): V  
Ion 82.10 (81.80 to 82.80): VL0  
Ion 119.10 (118.80 to 119.80): V

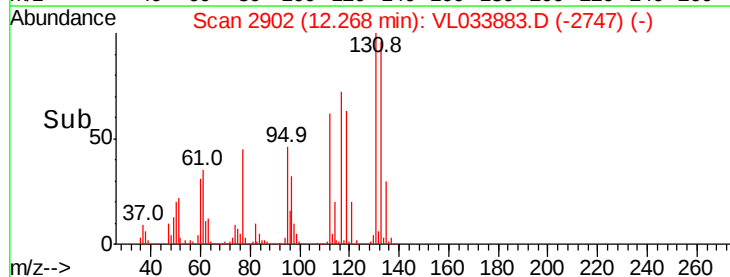
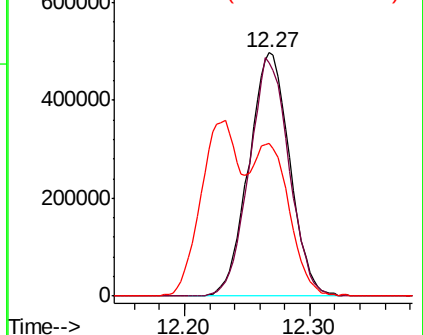


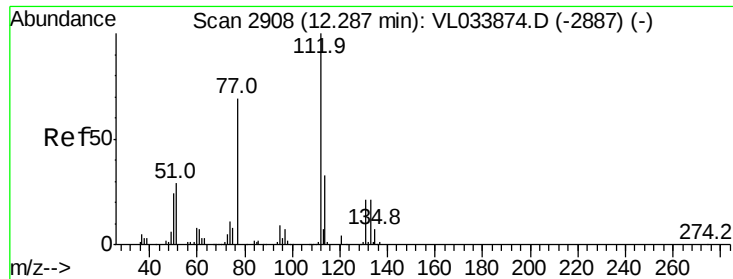
#56  
1,1,1,2-Tetrachloroethane  
Concen: 10.499 ppbv  
RT: 12.27 min Scan# 2902  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Tgt Ion:131 Resp: 1126465  
Ion Ratio Lower Upper  
131 100  
133 95.7 76.5 114.7  
119 58.6 42.6 64.0



Abundance Ion 131.00 (130.70 to 131.70): V  
Ion 133.00 (132.70 to 133.70): V  
Ion 119.00 (118.70 to 119.70): V





#57

Chlorobenzene

Concen: 10.478 ppbv

RT: 12.29 min Scan# 2908

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:112 Resp: 1927491

Ion Ratio Lower Upper

112 100

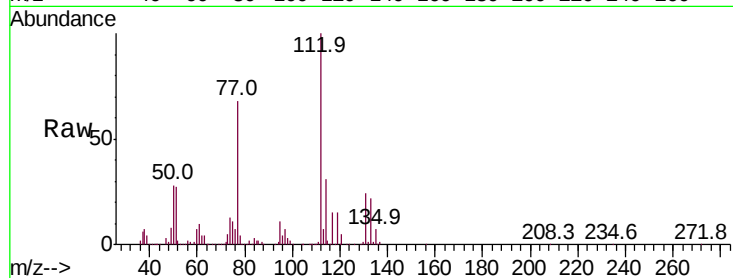
77 67.8 55.8 83.6

114 31.1 29.8 36.4

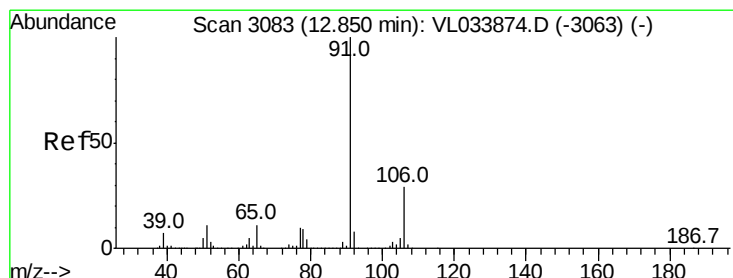
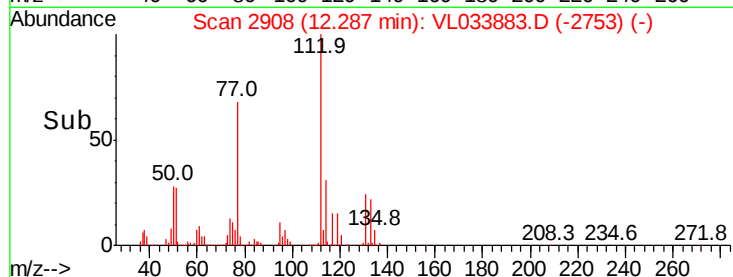
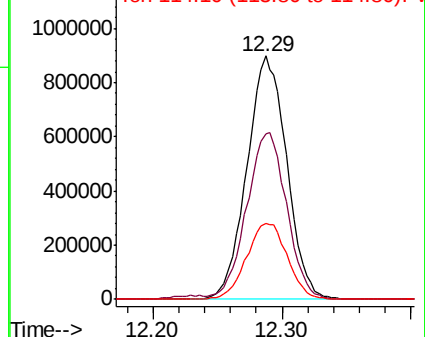
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Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 77.10 (76.80 to 77.80): VL0  
Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 12.356 ppbv

RT: 12.85 min Scan# 3083

Delta R.T. -0.00 min

Lab File: VL033883.D

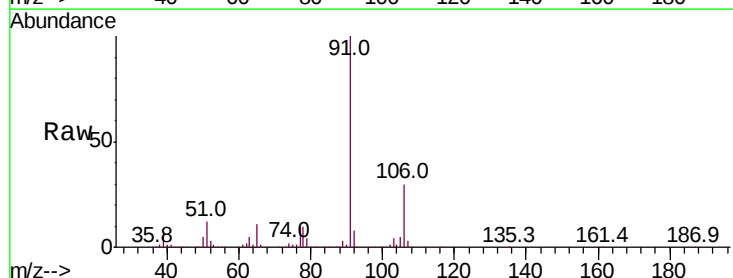
Acq: 7 Jun 2019 8:31

Tgt Ion: 91 Resp: 3421615

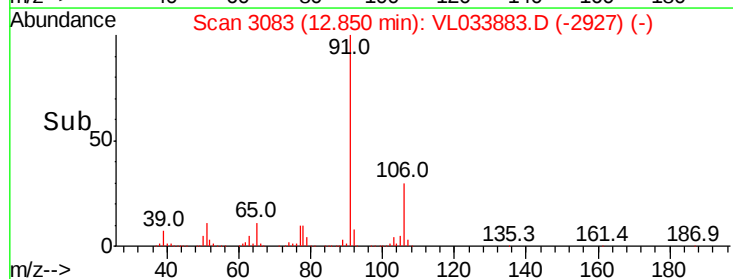
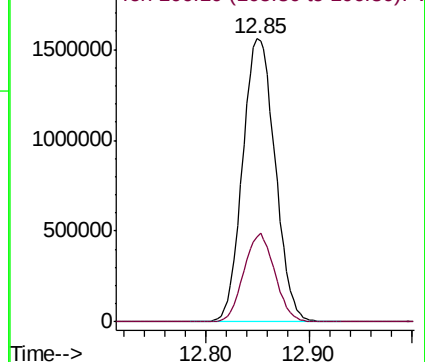
Ion Ratio Lower Upper

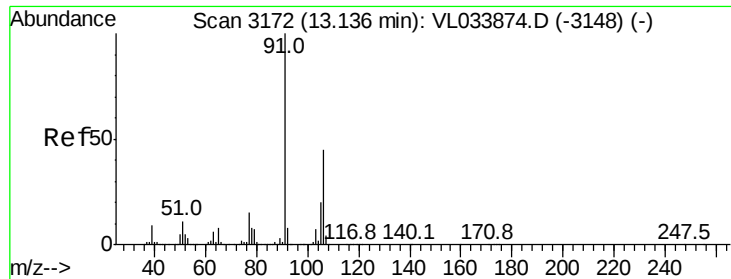
91 100

106 30.0 23.0 34.6



Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 106.10 (105.80 to 106.80): V





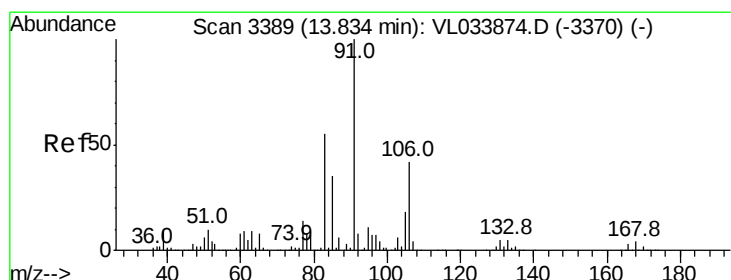
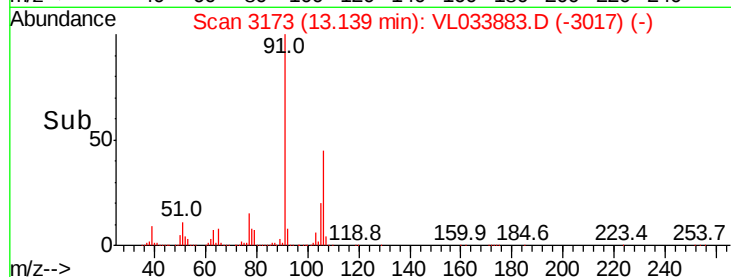
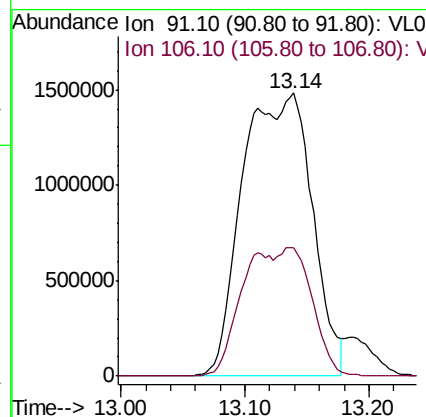
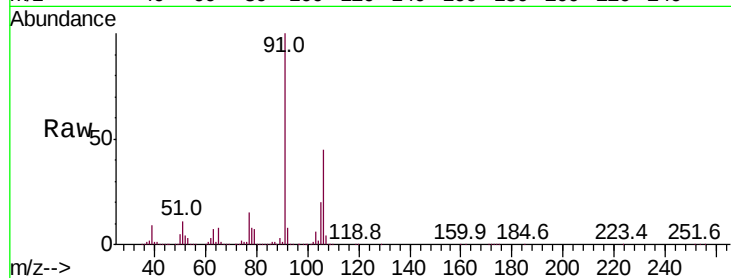
#59  
m/p-Xylene  
Concen: 22.929 ppbv m  
RT: 13.14 min Scan# 3173  
Delta R.T. 0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0607ABS01

Tot Ion: 91 Resp: 5773974  
Ion Ratio Lower Upper  
91 100  
106 45.0 35.8 53.8

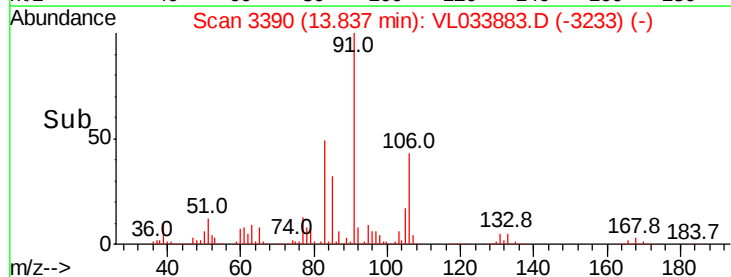
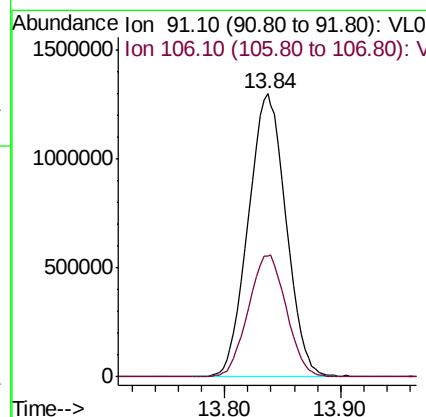
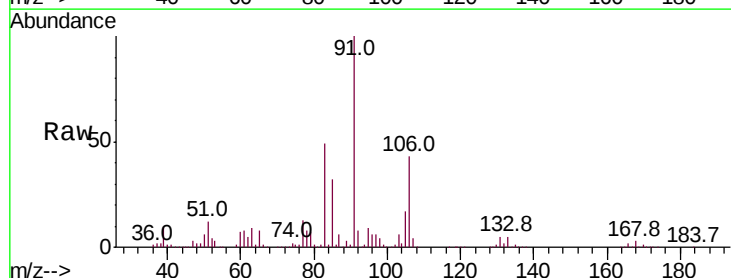
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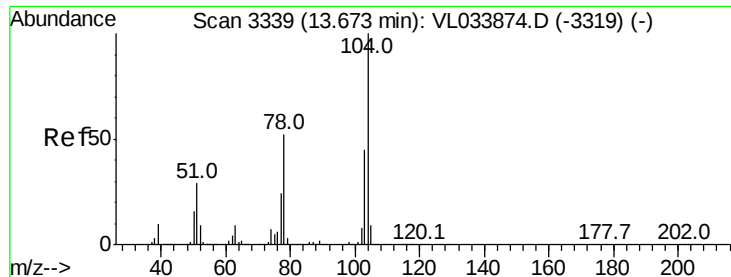
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6/11/2019 9:18:56 AM



#60  
o-Xylene  
Concen: 11.307 ppbv  
RT: 13.84 min Scan# 3390  
Delta R.T. 0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Tgt Ion: 91 Resp: 2939743  
Ion Ratio Lower Upper  
91 100  
106 43.6 21.7 65.1





#61

Stvrene

Concen: 12.668 ppbv

RT: 13.67 min Scan# 3339

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:104 Resp: 2131460

Ion Ratio Lower Upper

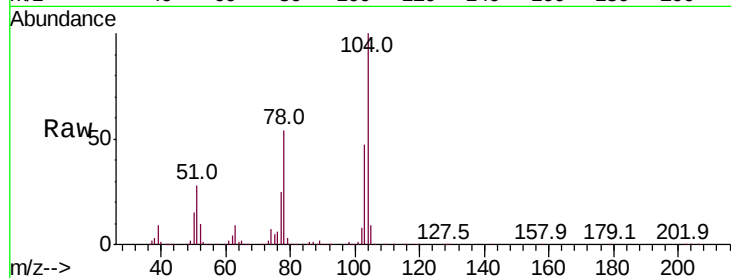
104 100

78 54.8 43.4 65.0

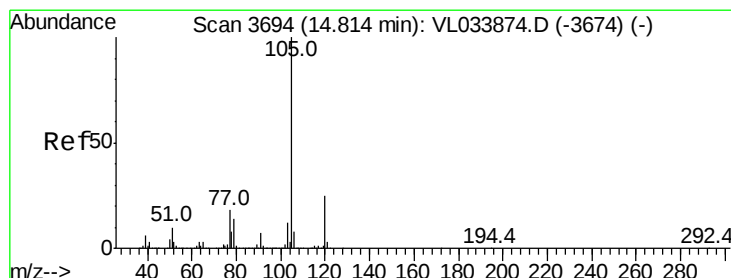
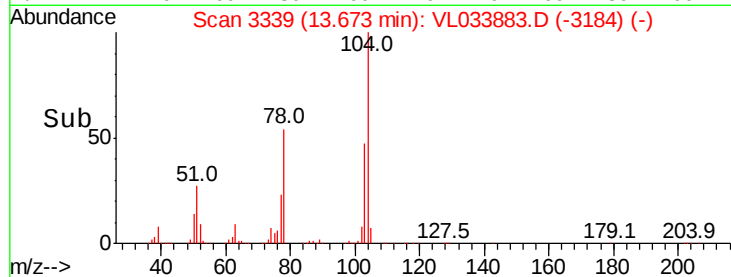
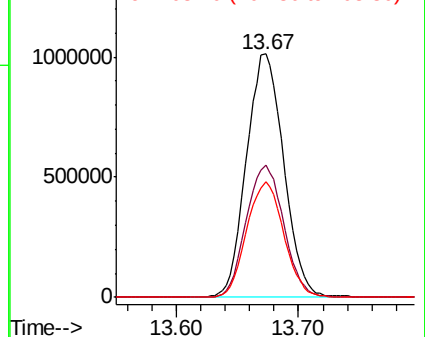
103 47.4 37.6 56.4

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Abundance Ion 104.10 (103.80 to 104.80): V  
Ion 78.10 (77.80 to 78.80): VL0  
Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 11.295 ppbv

RT: 14.81 min Scan# 3694

Delta R.T. -0.00 min

Lab File: VL033883.D

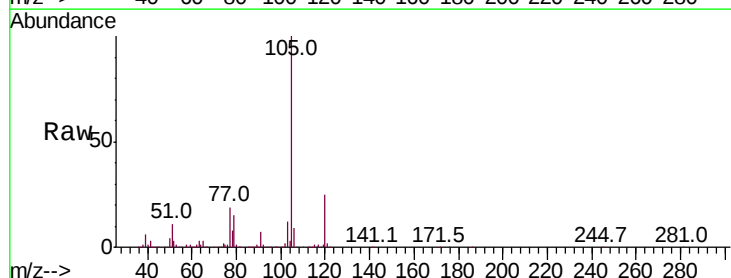
Acq: 7 Jun 2019 8:31

Tgt Ion:105 Resp: 3957886

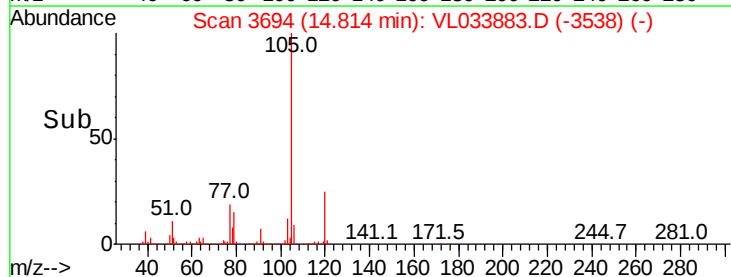
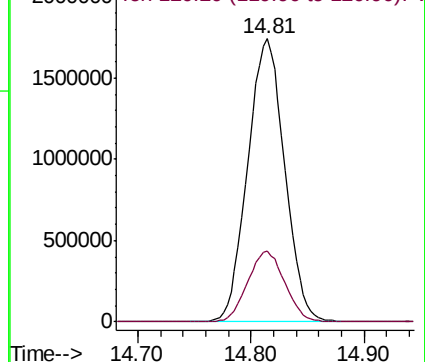
Ion Ratio Lower Upper

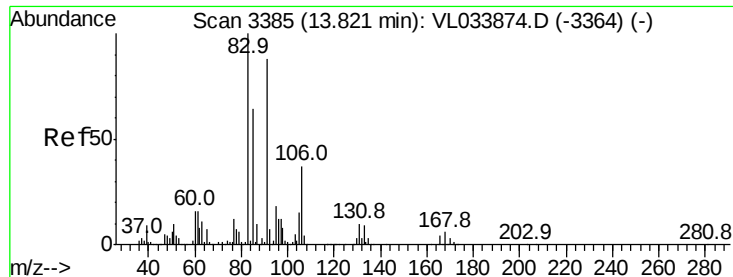
105 100

120 25.1 20.3 30.5



Abundance Ion 105.10 (104.80 to 105.80): V  
Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 10.557 ppbv

RT: 13.82 min Scan# 3386

Delta R.T. 0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 83 Resp: 2066050

Ion Ratio Lower Upper

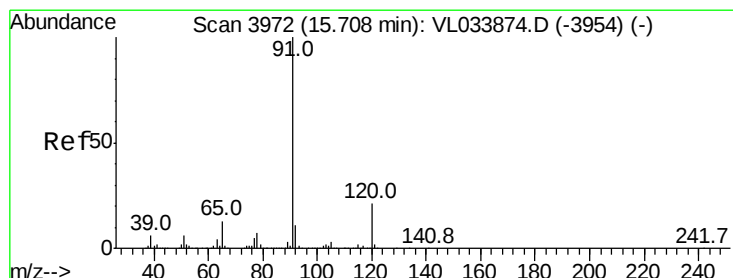
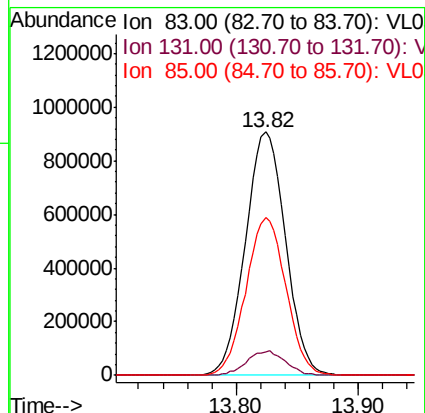
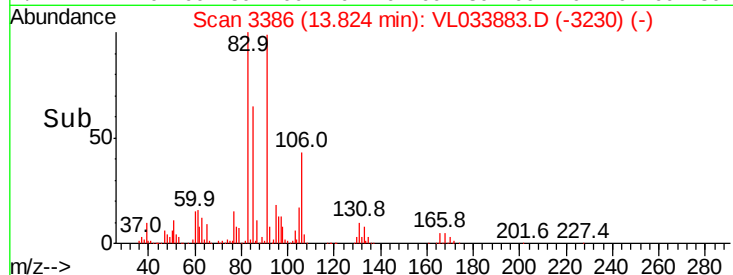
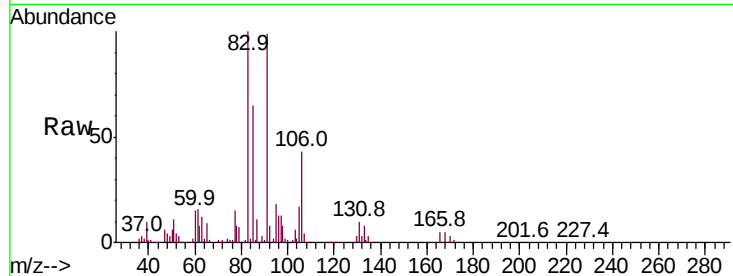
83 100

131 9.7 4.8 14.4

85 64.5 32.1 96.3

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#64

n-propylbenzene

Concen: 11.528 ppbv

RT: 15.71 min Scan# 3973

Delta R.T. 0.00 min

Lab File: VL033883.D

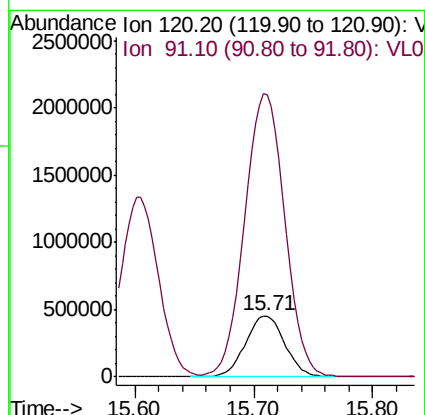
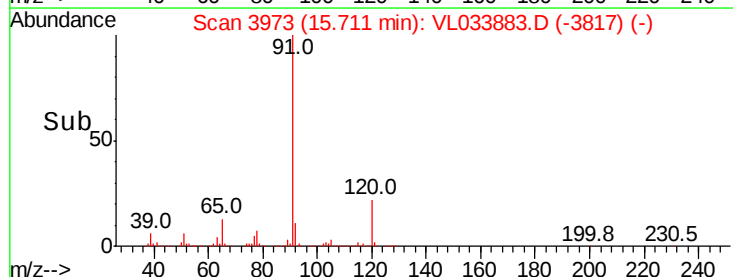
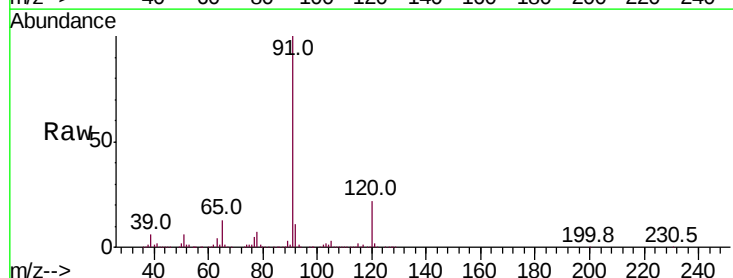
Acq: 7 Jun 2019 8:31

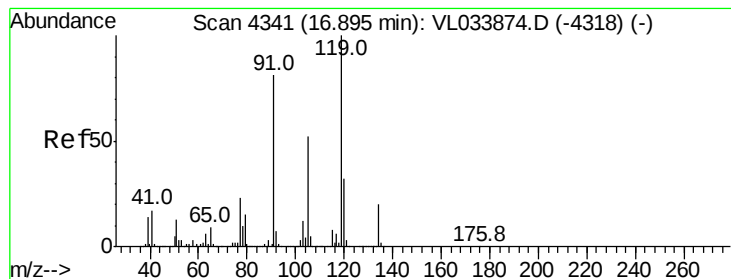
Tgt Ion:120 Resp: 1034494

Ion Ratio Lower Upper

120 100

91 476.2 387.0 580.6





#65

tert-Butylbenzene

Concen: 11.503 ppbv

RT: 16.90 min Scan# 4342

Delta R.T. 0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:119 Resp: 3729748

Ion Ratio Lower Upper

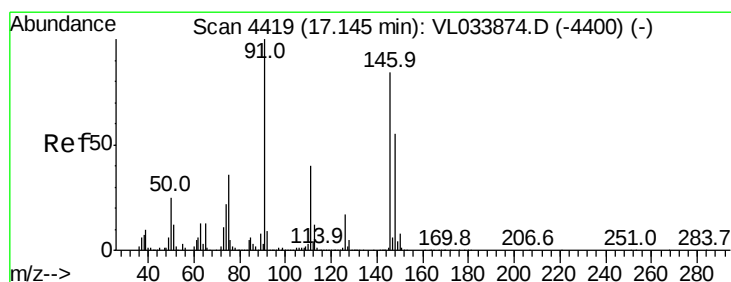
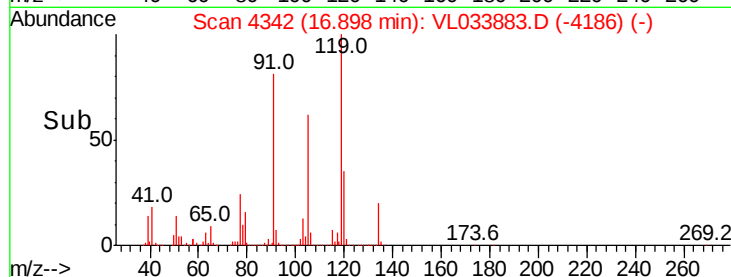
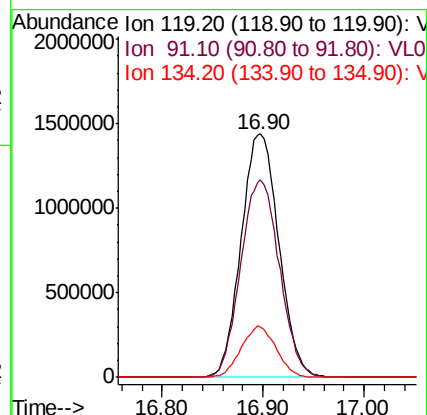
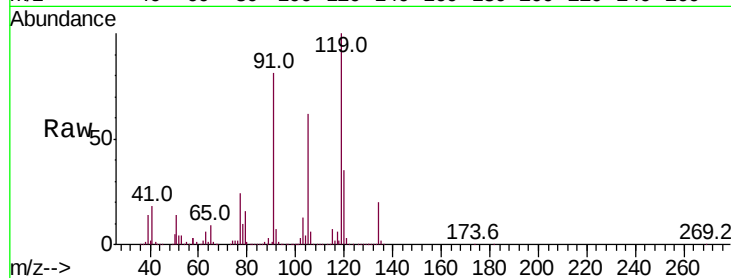
119 100

91 83.5 66.6 100.0

134 19.5 15.5 23.3

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#66

Benzyl Chloride

Concen: 12.102 ppbv

RT: 17.15 min Scan# 4419

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

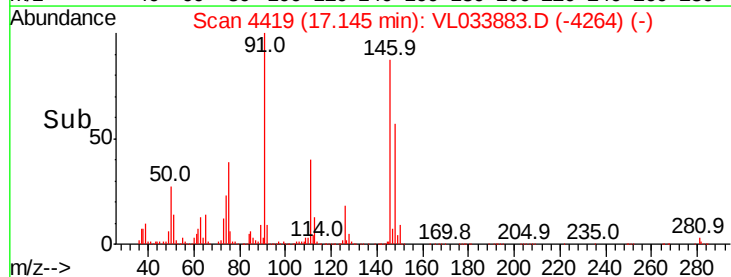
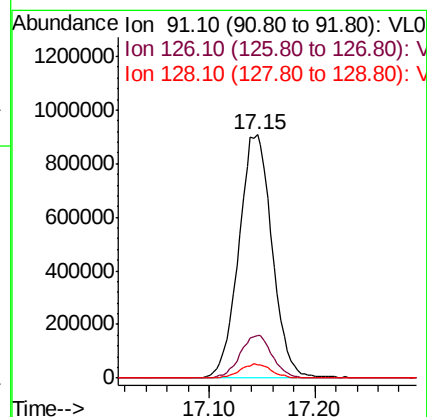
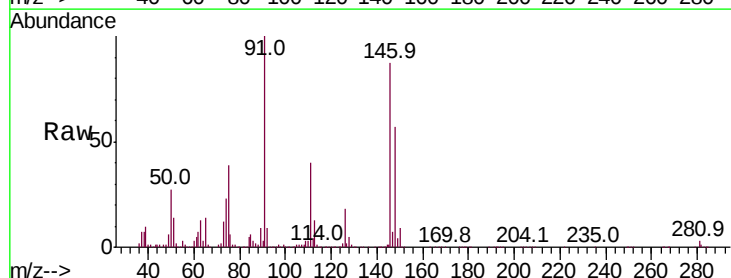
Tgt Ion: 91 Resp: 1988614

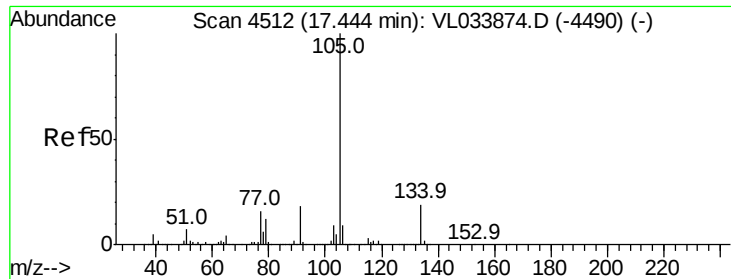
Ion Ratio Lower Upper

91 100

126 17.1 13.8 20.6

128 5.5 4.4 6.6





#67

sec-Butylbenzene

Concen: 11.493 ppbv

RT: 17.44 min Scan# 4512

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:105 Resp: 5227705

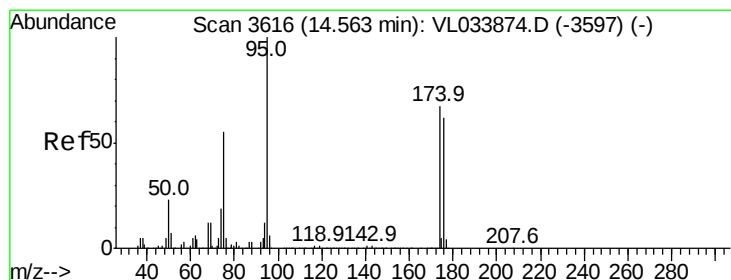
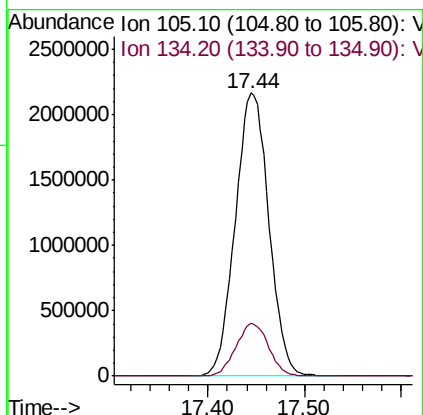
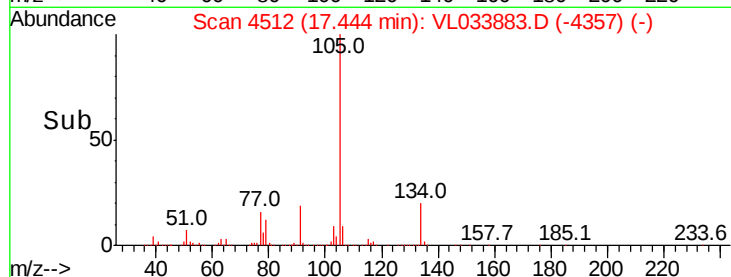
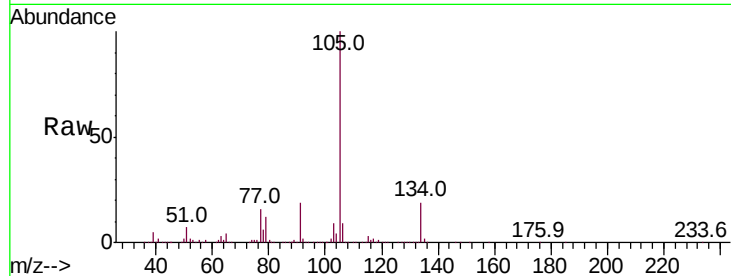
Ion Ratio Lower Upper

105 100

134 18.2 14.6 22.0

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#68

1-Bromo-4-Fluorobenzene

Concen: 9.843 ppbv

RT: 14.57 min Scan# 3617

Delta R.T. 0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

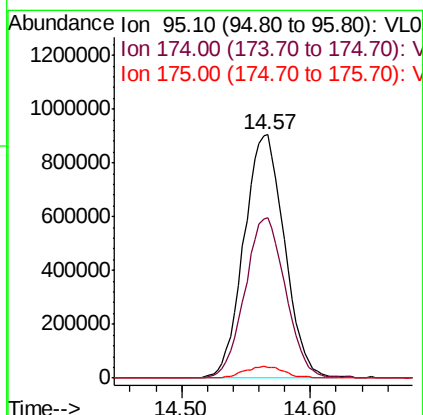
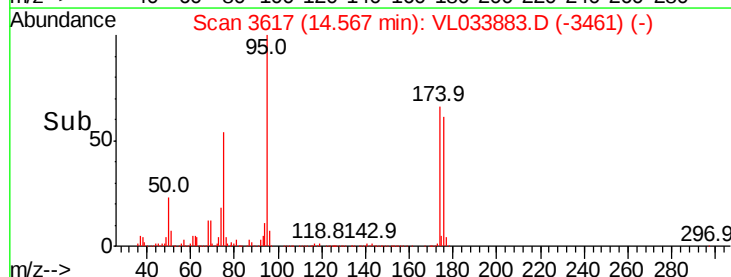
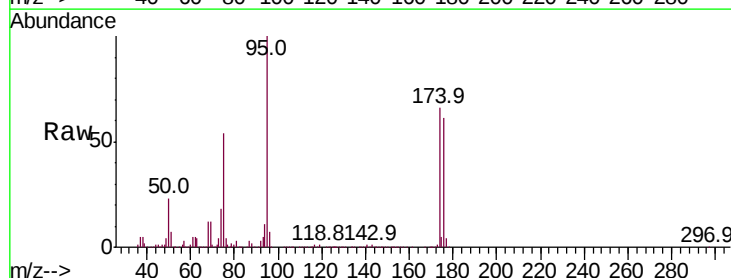
Tgt Ion: 95 Resp: 1985711

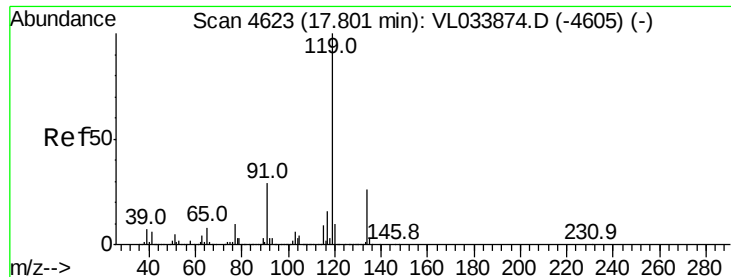
Ion Ratio Lower Upper

95 100

174 66.6 54.0 81.0

175 4.8 3.8 5.8





#69

p-Isopropyltoluene

Concen: 11.473 ppbv

RT: 17.80 min Scan# 4624

Delta R.T. 0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:119 Resp: 4342316

Ion Ratio Lower Upper

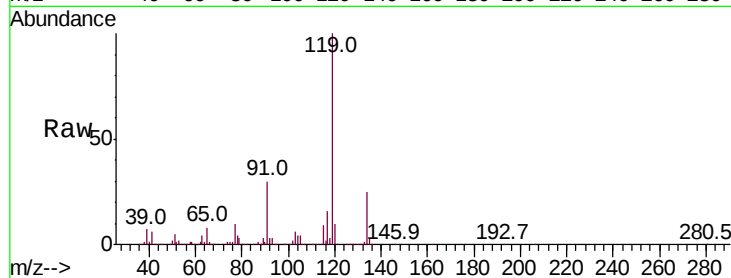
119 100

134 25.3 20.3 30.5

91 29.6 23.8 35.6

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Abundance Ion 119.10 (118.80 to 119.80): V

Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): V

2500000

2000000

1500000

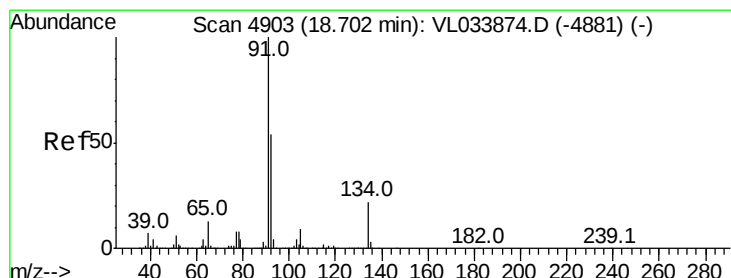
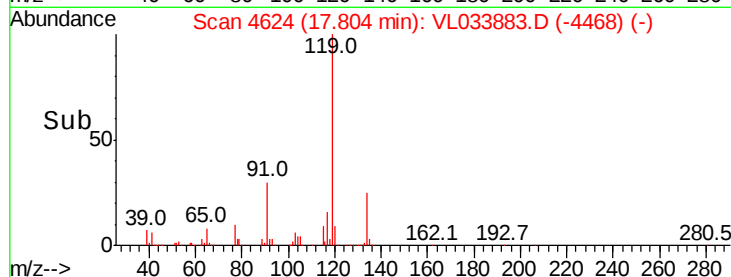
1000000

500000

0

17.70 17.80 17.90

Time-->



#70

n-Butylbenzene

Concen: 10.937 ppbv

RT: 18.70 min Scan# 4903

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

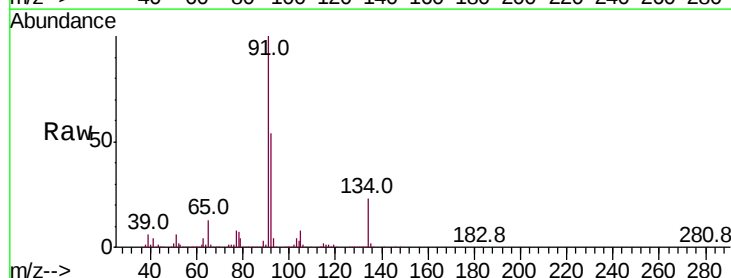
Tgt Ion: 91 Resp: 4533712

Ion Ratio Lower Upper

91 100

92 52.7 42.5 63.7

134 22.3 17.8 26.6



Abundance Ion 91.10 (90.80 to 91.80): V

Ion 92.10 (91.80 to 92.80): V

Ion 134.20 (133.90 to 134.90): V

2500000

2000000

1500000

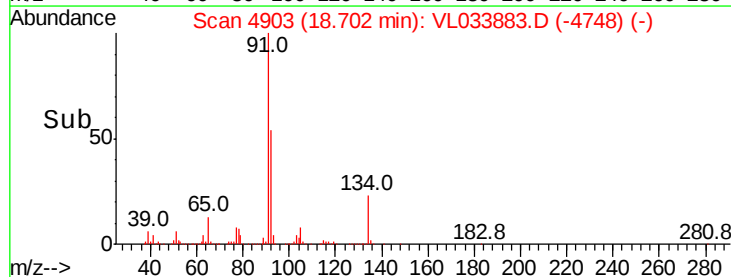
1000000

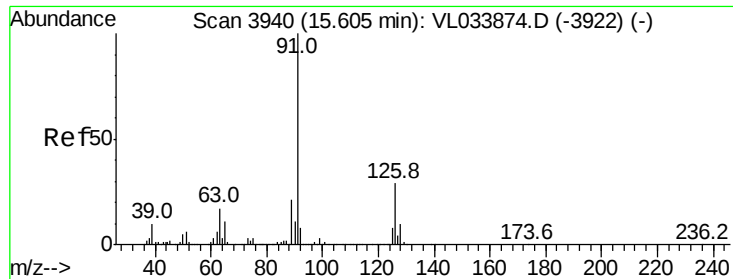
500000

0

18.60 18.70 18.80

Time-->





#71

2-Chlorotoluene

Concen: 11.660 ppbv

RT: 15.60 min Scan# 3939

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion: 91 Resp: 3010136

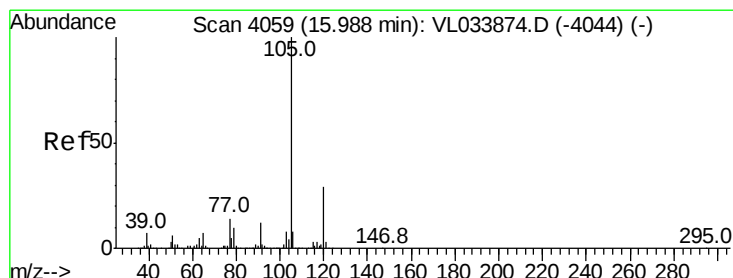
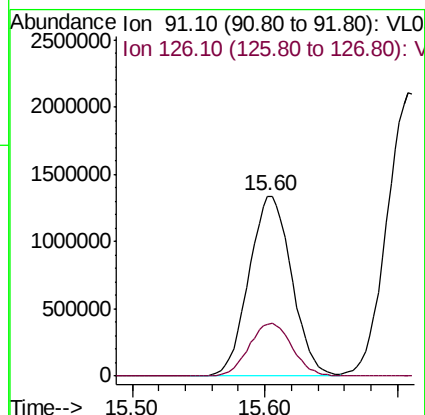
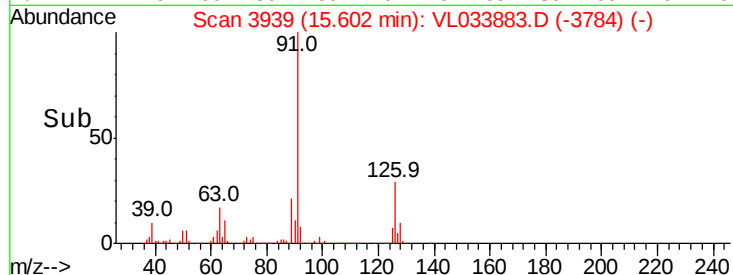
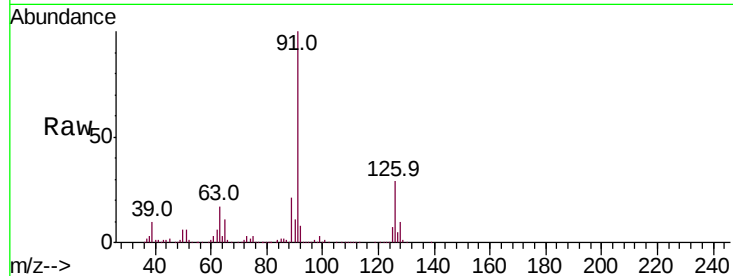
Ion Ratio Lower Upper

91 100

126 29.6 12.0 48.2

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#72

4-Ethyltoluene

Concen: 11.951 ppbv

RT: 15.99 min Scan# 4059

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Tgt Ion: 105 Resp: 3535852

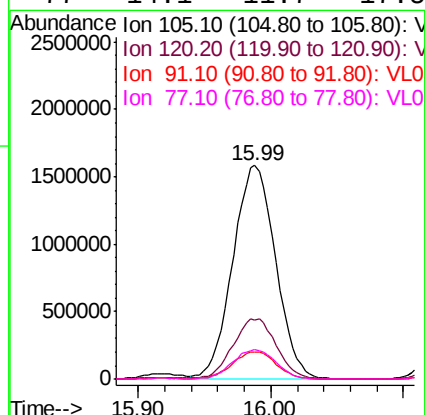
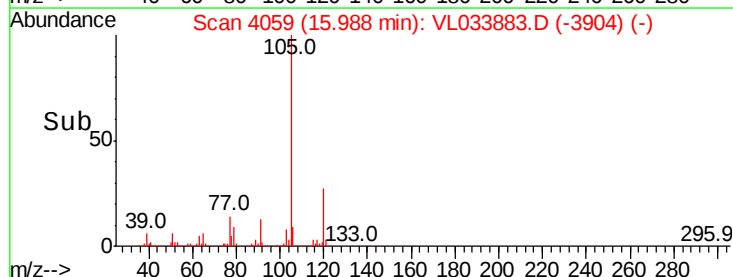
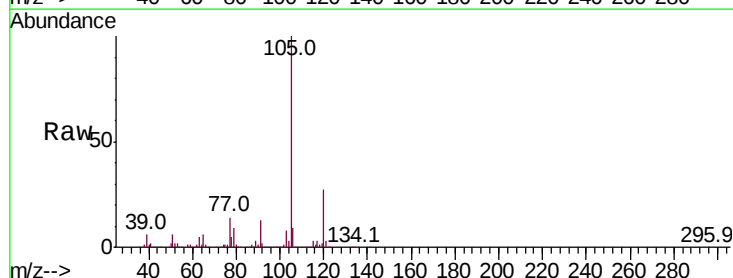
Ion Ratio Lower Upper

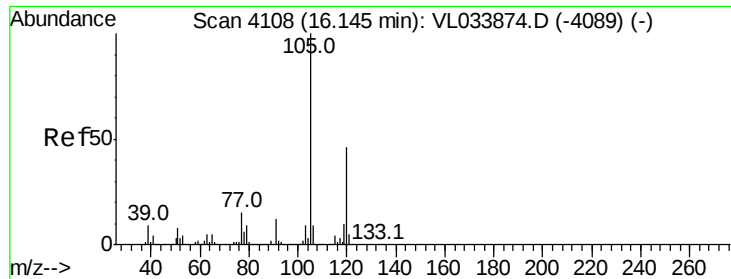
105 100

120 28.5 23.5 35.3

91 13.1 10.4 15.6

77 14.1 11.7 17.5





#73

1,3,5-Trimethylbenzene

Concen: 11.555 ppbv

RT: 16.15 min Scan# 4108

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:105 Resp: 3367536

Ion Ratio Lower Upper

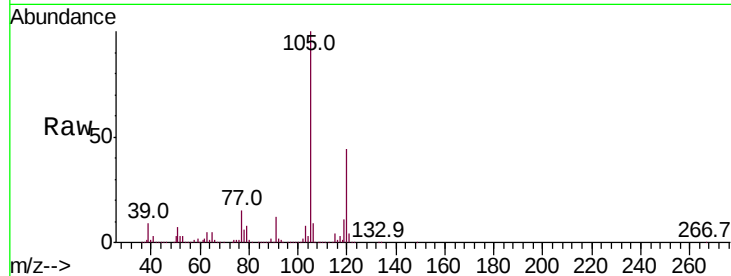
105 100

120 44.4 37.1 55.7

Manual Integrations  
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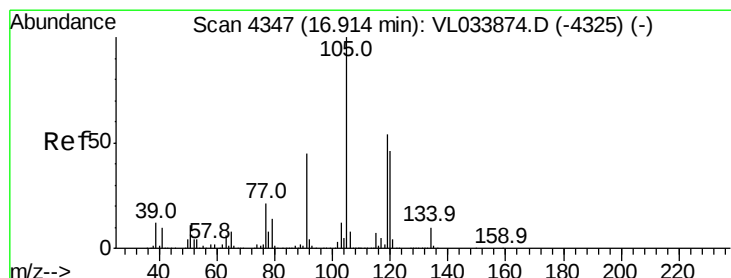
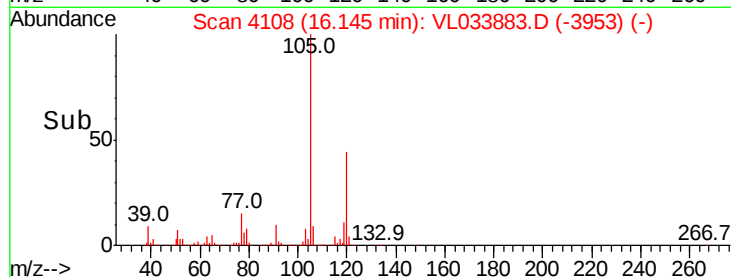
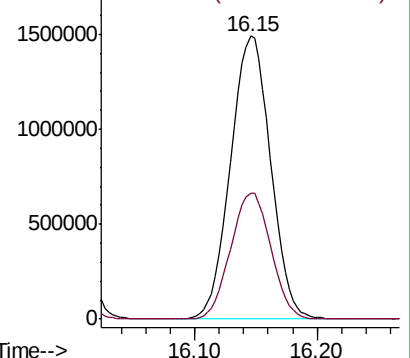
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 10.825 ppbv

RT: 16.91 min Scan# 4347

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Tgt Ion:105 Resp: 3635968

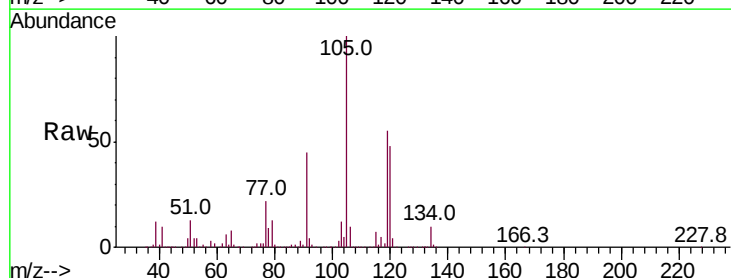
Ion Ratio Lower Upper

105 100

120 47.9 36.7 55.1

91 45.3 35.8 53.8

77 22.2 16.9 25.3

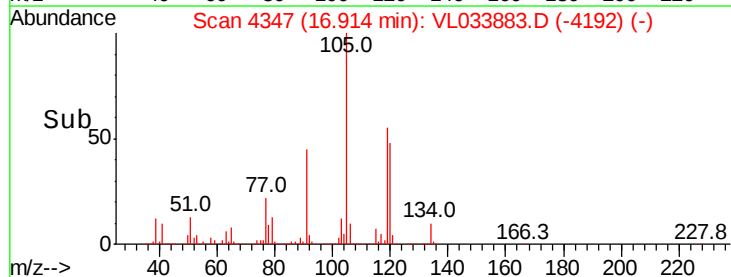
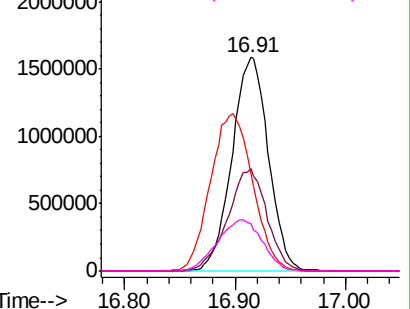


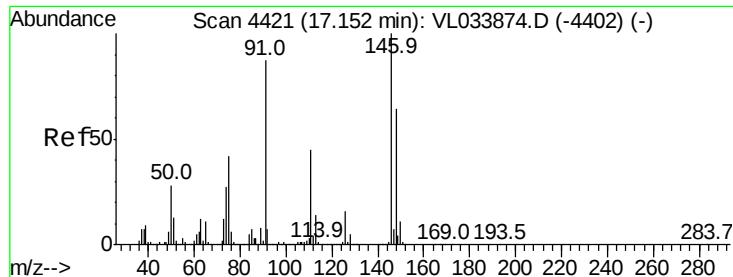
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#75

1,3-Dichlorobenzene

Concen: 10.050 ppbv

RT: 17.15 min Scan# 4421

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:146 Resp: 2114051

Ion Ratio Lower Upper

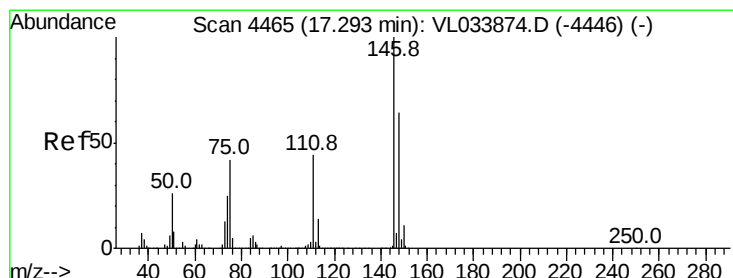
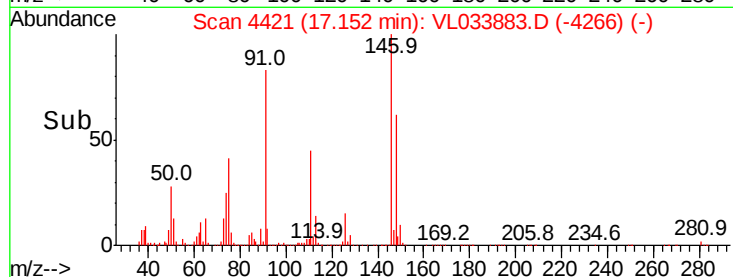
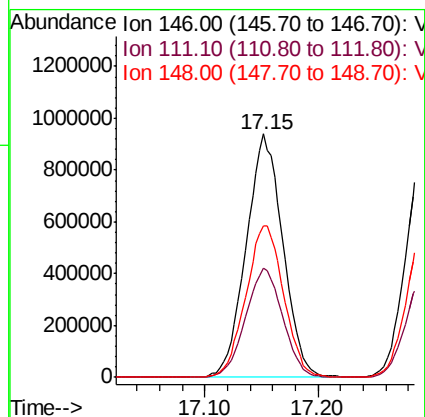
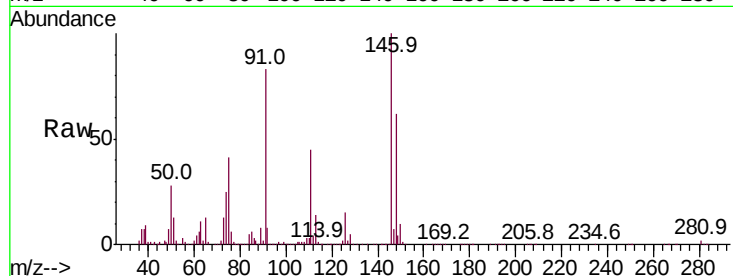
146 100

111 45.5 22.8 68.3

148 64.2 32.2 96.6

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#76

1,4-Dichlorobenzene

Concen: 10.660 ppbv

RT: 17.30 min Scan# 4466

Delta R.T. 0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

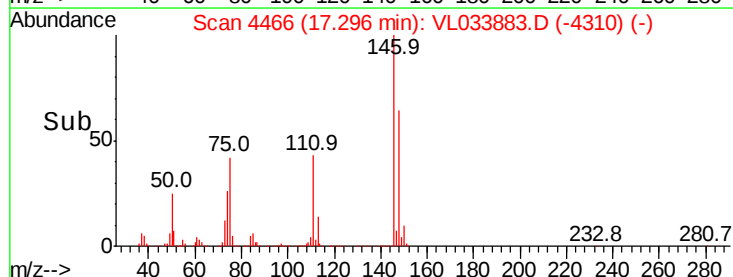
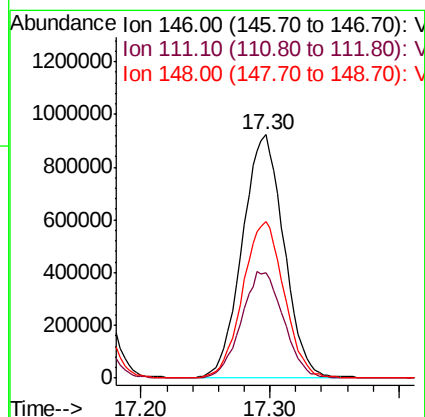
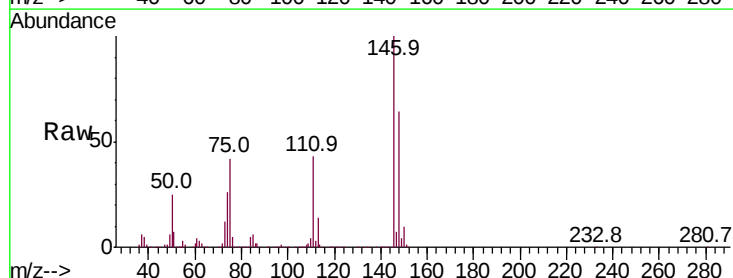
Tgt Ion:146 Resp: 2059018

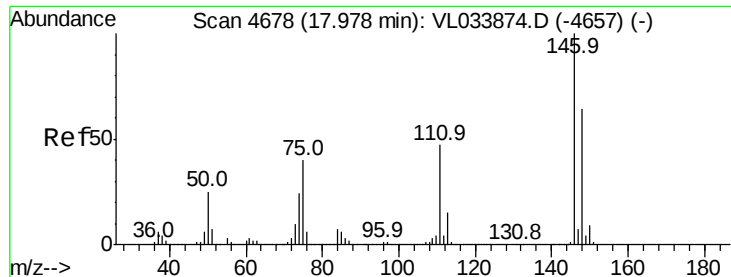
Ion Ratio Lower Upper

146 100

111 44.6 22.1 66.5

148 64.6 32.4 97.0





#77

1,2-Dichlorobenzene

Concen: 10.210 ppbv

RT: 17.98 min Scan# 4678

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

Instrument :

MSVOA\_L

ClientSampleId :

VL0607ABS01

Tot Ion:146 Resp: 1981911

Ion Ratio Lower Upper

146 100

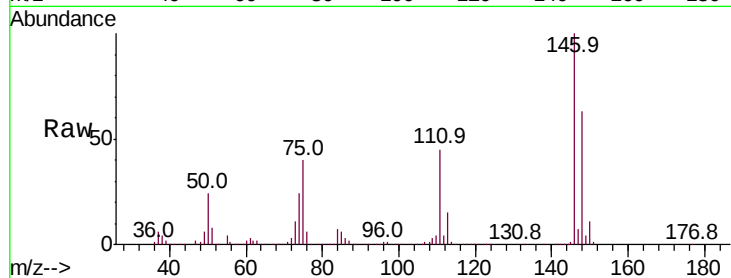
111 47.3 23.4 70.0

148 63.9 31.8 95.4

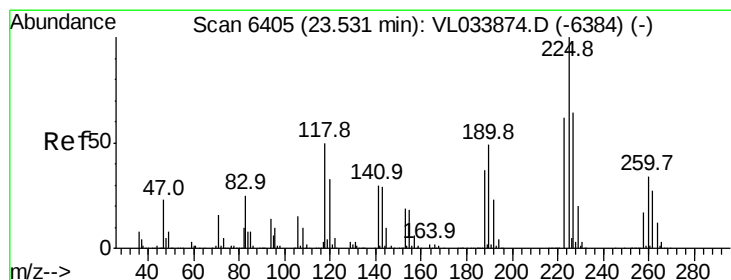
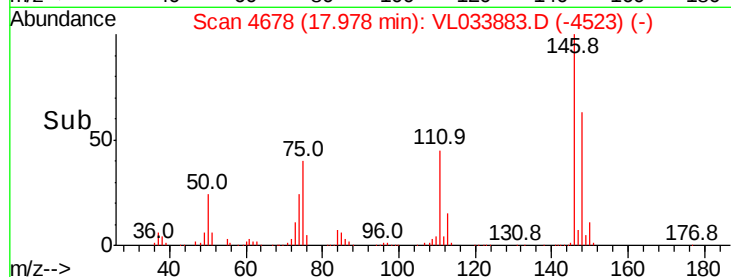
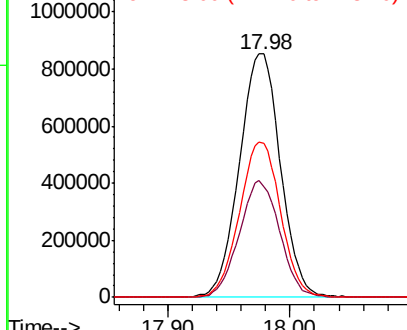
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Abundance Ion 146.00 (145.70 to 146.70): V  
Ion 111.10 (110.80 to 111.80): V  
Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 7.861 ppbv

RT: 23.53 min Scan# 6405

Delta R.T. -0.00 min

Lab File: VL033883.D

Acq: 7 Jun 2019 8:31

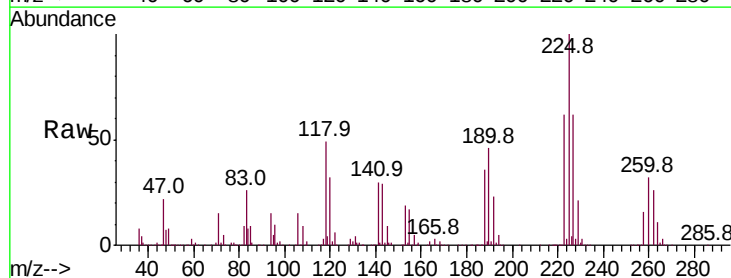
Tgt Ion:225 Resp: 1191873

Ion Ratio Lower Upper

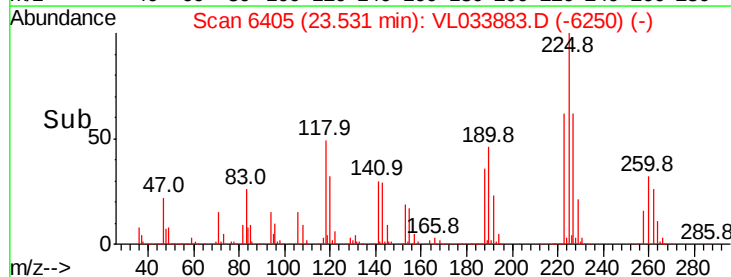
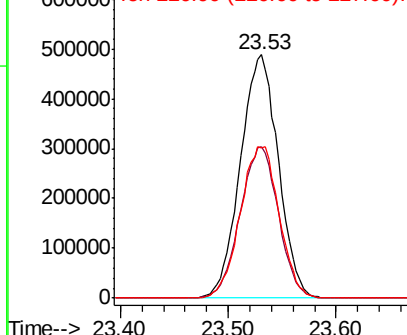
225 100

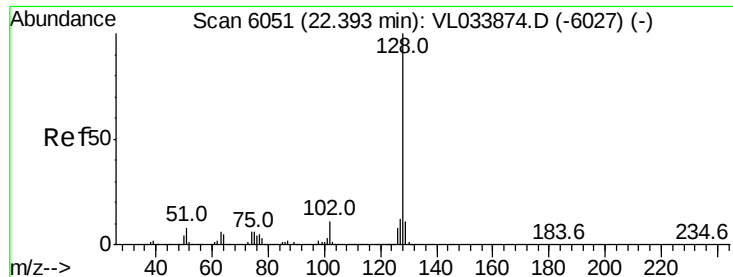
223 62.9 50.8 76.2

227 64.0 51.8 77.6



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





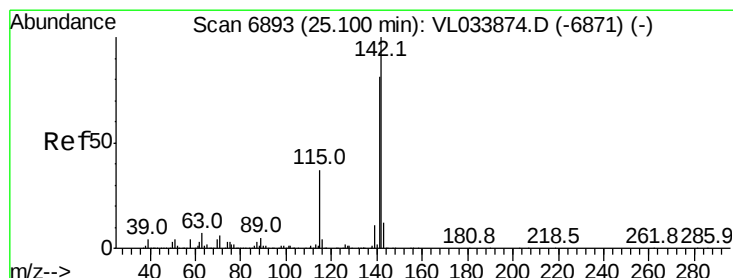
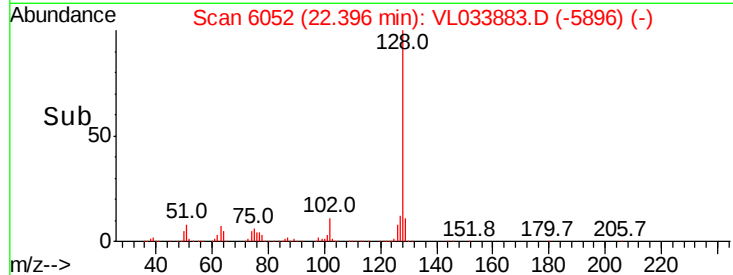
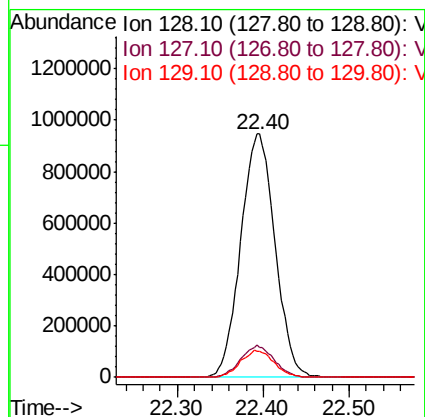
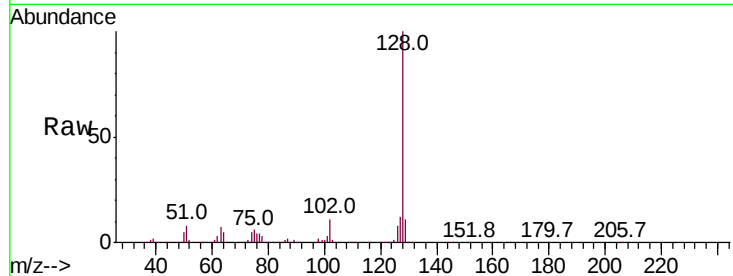
#79  
Naphthalene  
Concen: 9.761 ppbv  
RT: 22.40 min Scan# 6052  
Delta R.T. 0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 12.3  | 9.7   | 14.5  |
| 129     | 10.6  | 8.6   | 12.8  |

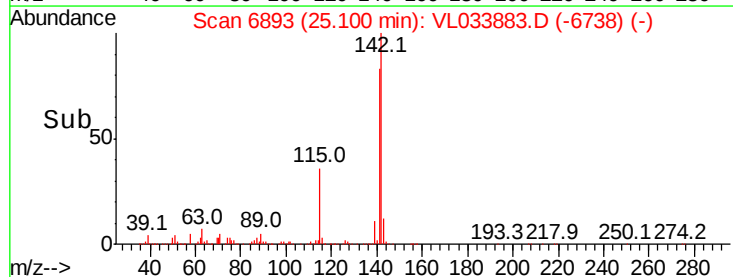
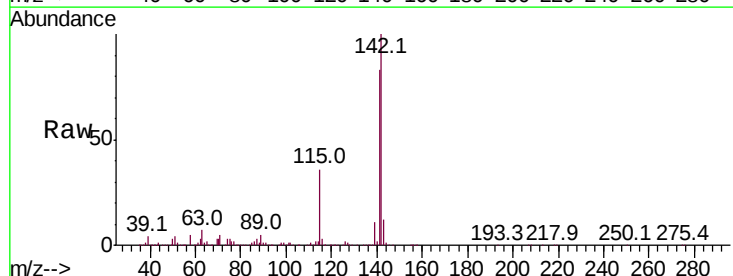
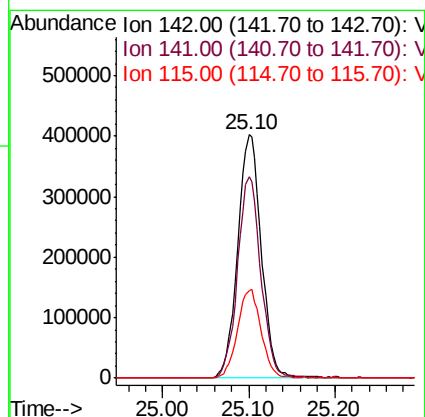
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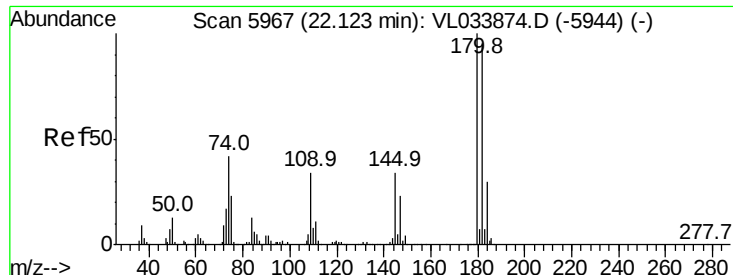
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#80  
Naphthalene, 2-methyl-  
Concen: 7.151 ppbv  
RT: 25.10 min Scan# 6893  
Delta R.T. -0.00 min  
Lab File: VL033883.D  
Acq: 7 Jun 2019 8:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 82.0  | 65.7  | 98.5  |
| 115     | 37.0  | 28.9  | 43.3  |





#81  
 1,2,4-Trichlorobenzene  
 Concen: 9.219 ppbv  
 RT: 22.12 min Scan# 5966  
 Delta R.T. -0.00 min  
 Lab File: VL033883.D  
 Acq: 7 Jun 2019 8:31

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0607ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.1  | 76.9  | 115.3 |
| 184     | 30.8  | 24.5  | 36.7  |

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