

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL071318\  
 Data File : VL032246.D  
 Acq On : 13 Jul 2018 13:34  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

apatel  
 7/16/2018 8:07:53 AM

Quant Time: Jul 13 15:19:30 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL071218AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jul 13 2018  
 QLast Update : Fri Jul 13 04:25:14 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.84  | 49   | 1661148  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.38  | 114  | 3949805  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.34 | 117  | 4788310m | 10.00 | ppbv  | 0.00     |

## System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.67  | 95    | 3448007  | 9.30     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 93.00% |

## Target Compounds

|                                |      |     |         |        |        | Qvalue |
|--------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.13 | 85  | 1777452 | 7.432  | ppbv   | 98     |
| 3) Chlorodifluoromethane       | 3.06 | 51  | 1812671 | 8.880  | ppbv   | 100    |
| 4) Chloromethane               | 3.22 | 50  | 968307  | 8.339  | ppbv   | 98     |
| 5) Vinyl Chloride              | 3.34 | 62  | 927002  | 8.103  | ppbv   | 98     |
| 6) Bromomethane                | 3.57 | 94  | 517692  | 8.128  | ppbv   | 100    |
| 7) Chloroethane                | 3.66 | 64  | 328558  | 8.339  | ppbv   | 94     |
| 8) Dichlorotetrafluoroethane   | 3.27 | 85  | 1983037 | 7.549  | ppbv   | 99     |
| 9) Propene                     | 3.09 | 41  | 802519  | 9.222  | ppbv   | 99     |
| 10) Heptane                    | 8.33 | 43  | 2429290 | 9.830  | ppbv   | 100    |
| 11) Trichlorofluoromethane     | 4.07 | 101 | 1998565 | 8.735  | ppbv   | 97     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.62 | 101 | 1261658 | 8.634  | ppbv   | 100    |
| 13) Ethanol                    | 3.71 | 45  | 194492  | 7.743  | ppbv   | 97     |
| 14) Bromoethene                | 3.85 | 108 | 612775  | 8.889  | ppbv   | 100    |
| 15) Acetone                    | 3.96 | 43  | 1505871 | 7.812  | ppbv   | 100    |
| 16) 1,3-Butadiene              | 3.42 | 39  | 772295  | 7.929  | ppbv   | 94     |
| 17) tert-Butyl alcohol         | 4.42 | 59  | 757039  | 8.411  | ppbv   | 99     |
| 18) 1,1-Dichloroethene         | 4.42 | 96  | 612603  | 9.008  | ppbv   | 94     |
| 19) Isopropyl Alcohol          | 4.09 | 45  | 1335075 | 10.548 | ppbv   | 99     |
| 20) Methylene Chloride         | 4.48 | 84  | 548187  | 8.392  | ppbv   | 97     |
| 21) Allyl Chloride             | 4.55 | 41  | 1089760 | 9.656  | ppbv   | 100    |
| 22) trans-1,2-Dichloroethene   | 5.04 | 96  | 655354  | 10.124 | ppbv   | 96     |
| 23) Vinyl Acetate              | 5.23 | 43  | 3127160 | 9.755  | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.17 | 63  | 2077430 | 9.229  | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.85 | 43  | 3612514 | 9.470  | ppbv   | 100    |
| 26) Hexane                     | 5.86 | 57  | 1651012 | 9.488  | ppbv   | 99     |
| 27) Carbon Disulfide           | 4.69 | 76  | 1542426 | 9.907  | ppbv   | 100    |
| 28) Methyl tert-Butyl Ether    | 5.19 | 73  | 2713267 | 9.907  | ppbv   | 99     |
| 29) Chloroform                 | 5.93 | 83  | 2463827 | 9.171  | ppbv   | 97     |
| 30) Cyclohexane                | 7.33 | 84  | 1537946 | 10.016 | ppbv   | 100    |
| 31) cis-1,2-Dichloroethene     | 5.72 | 61  | 1751052 | 10.084 | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 6.70 | 97  | 2543527 | 9.758  | ppbv   | 100    |
| 34) 2-Butanone                 | 5.40 | 43  | 2602113 | 9.669  | ppbv   | 100    |
| 35) Carbon Tetrachloride       | 7.22 | 117 | 2620968 | 9.805  | ppbv   | 100    |
| 36) Benzene                    | 7.09 | 78  | 3739454 | 9.526  | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.49 | 62  | 2124729 | 9.887  | ppbv   | 100    |
| 38) Trichloroethene            | 8.05 | 130 | 1215158 | 9.025  | ppbv   | 99     |
| 39) 1,2-Dichloropropane        | 7.83 | 63  | 1511314 | 9.688  | ppbv   | 98     |
| 40) 1,4-Dioxane                | 8.04 | 88  | 520387  | 9.728  | ppbv # | 94     |
| 41) Tetrahydrofuran            | 6.23 | 42  | 1517026 | 10.073 | ppbv   | 99     |
| 42) Bromodichloromethane       | 8.01 | 83  | 2931648 | 9.580  | ppbv   | 98     |
| 43) Methyl Methacrylate        | 8.22 | 69  | 1540985 | 10.159 | ppbv   | 99     |

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 Acq On : 13 Jul 2018 13:34  
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 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

apatel  
 7/16/2018 8:07:53 AM

Quant Time: Jul 13 15:19:30 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL071218AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jul 13 2018  
 QLast Update : Fri Jul 13 04:25:14 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|-------|------|----------|--------|-------|----------|
| 44) 2,2,4-Trimethylpentane    | 8.08  | 57   | 6380467  | 9.451  | ppbv  | 100      |
| 45) t-1,3-Dichloropropene     | 9.50  | 75   | 2301701  | 12.741 | ppbv  | 97       |
| 46) cis-1,3-Dichloropropene   | 8.93  | 75   | 2597351  | 10.540 | ppbv  | 98       |
| 47) 1,1,2-Trichloroethane     | 9.71  | 97   | 1383244  | 7.939  | ppbv  | 96       |
| 48) Dibromochloromethane      | 10.55 | 129  | 2535121  | 9.780  | ppbv  | 99       |
| 49) Bromoform                 | 13.30 | 173  | 2044108  | 9.837  | ppbv  | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.96  | 43   | 4519345  | 9.707  | ppbv  | 99       |
| 51) 2-Hexanone                | 10.36 | 43   | 3807096  | 9.791  | ppbv  | 100      |
| 52) Tetrachloroethene         | 11.47 | 164  | 1203619  | 8.298  | ppbv  | 99       |
| 53) Toluene                   | 10.04 | 91   | 4108538  | 8.853  | ppbv  | 99       |
| 54) 1,2-Dibromoethane         | 10.85 | 107  | 2345517  | 9.118  | ppbv  | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.38 | 131  | 1764882  | 8.485  | ppbv  | 100      |
| 57) Chlorobenzene             | 12.40 | 112  | 3277895  | 8.099  | ppbv  | 98       |
| 58) Ethyl Benzene             | 12.96 | 91   | 6223751  | 8.926  | ppbv  | 100      |
| 59) m/p-Xylene                | 13.25 | 91   | 9881438m | 17.224 | ppbv  |          |
| 60) o-Xylene                  | 13.95 | 91   | 4783477  | 8.450  | ppbv  | 100      |
| 61) Styrene                   | 13.78 | 104  | 3955243  | 9.324  | ppbv  | 99       |
| 62) Isopropylbenzene          | 14.92 | 105  | 6728789  | 8.477  | ppbv  | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.94 | 83   | 3564309  | 7.740  | ppbv  | 99       |
| 64) n-propylbenzene           | 15.82 | 120  | 1734154  | 8.630  | ppbv  | 96       |
| 65) tert-Butylbenzene         | 17.00 | 119  | 5516285  | 8.296  | ppbv  | 100      |
| 66) Benzyl Chloride           | 17.25 | 91   | 3773393  | 11.214 | ppbv  | 99       |
| 67) sec-Butylbenzene          | 17.55 | 105  | 8246469  | 8.488  | ppbv  | 100      |
| 69) p-Isopropyltoluene        | 17.91 | 119  | 6620641  | 8.752  | ppbv  | 100      |
| 70) n-Butylbenzene            | 18.81 | 91   | 7405212  | 8.862  | ppbv  | 100      |
| 71) 2-Chlorotoluene           | 15.72 | 91   | 5463965  | 8.746  | ppbv  | 99       |
| 72) 4-Ethyltoluene            | 16.10 | 105  | 5754753  | 9.060  | ppbv  | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.25 | 105  | 5449388  | 9.226  | ppbv  | 100      |
| 74) 1,2,4-Trimethylbenzene    | 17.03 | 105  | 5285714  | 8.752  | ppbv  | 98       |
| 75) 1,3-Dichlorobenzene       | 17.27 | 146  | 2894705  | 8.034  | ppbv  | 100      |
| 76) 1,4-Dichlorobenzene       | 17.41 | 146  | 2989006  | 8.471  | ppbv  | 99       |
| 77) 1,2-Dichlorobenzene       | 18.09 | 146  | 2923216  | 8.164  | ppbv  | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.63 | 225  | 894749   | 8.017  | ppbv  | 99       |
| 79) Naphthalene               | 22.53 | 128  | 5156859  | 12.719 | ppbv  | 99       |
| 80) Naphthalene,2-methyl-     | 25.19 | 142  | 2651742  | 20.472 | ppbv  | 100      |
| 81) 1,2,4-Trichlorobenzene    | 22.25 | 180  | 2340938  | 11.538 | ppbv  | 100      |

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

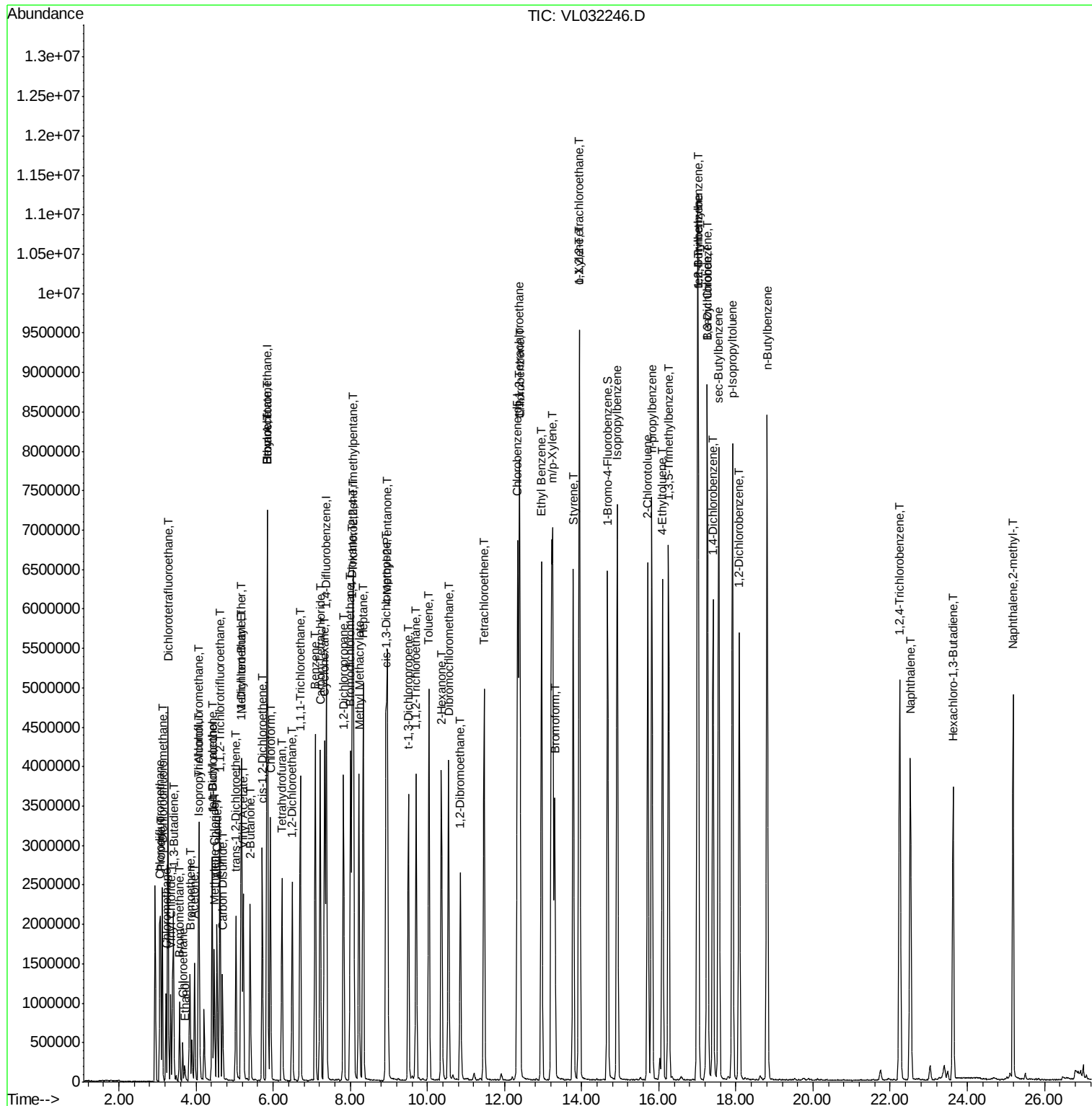
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Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL071318\  
Data File : VL032246.D  
Acq On    : 13 Jul 2018   13:34  
Operator  : SY/AP  
Sample    : VSTDCCC010  
Misc      : 400ml/MSVOA_L  
ALS Vial  : 1    Sample Multiplier: 1
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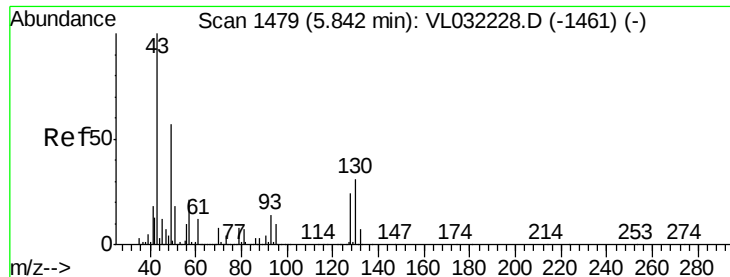
**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VSTDCCC010

## Manual Integrations

apatel  
7/16/2018 8:07:53 AM

Quant Time: Jul 13 15:19:30 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL071218AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Jul  
QLast Update : Fri Jul 13 04:25:14 2018  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.84 min Scan# 1479

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 49 Resp: 1661148

Ion Ratio Lower Upper

49 100

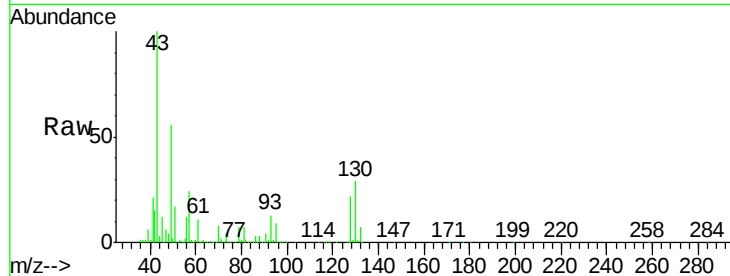
128 40.6 20.9 62.8

130 51.1 27.0 81.0

Manual Integrations  
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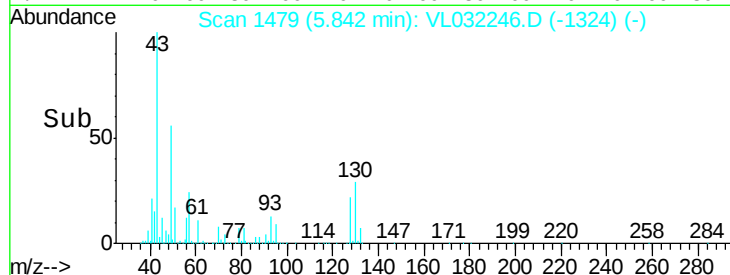


Abundance Ion 49.10 (48.80 to 49.80): VL0

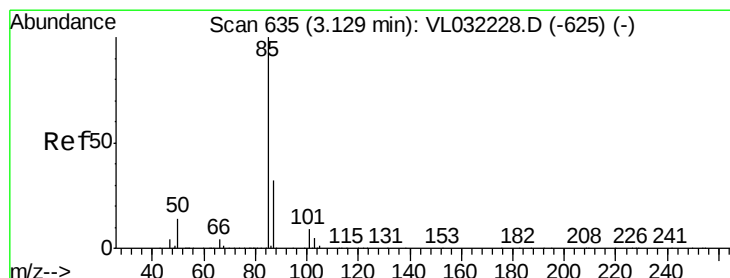
Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

Time-->



Time-->



#2

Dichlorodifluoromethane

Concen: 7.432 ppbv

RT: 3.13 min Scan# 635

Delta R.T. -0.00 min

Lab File: VL032246.D

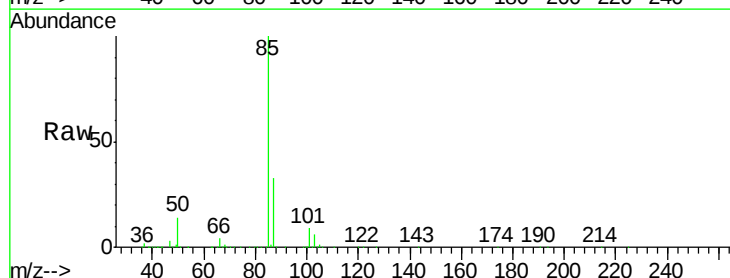
Acq: 13 Jul 2018 13:34

Tgt Ion: 85 Resp: 1777452

Ion Ratio Lower Upper

85 100

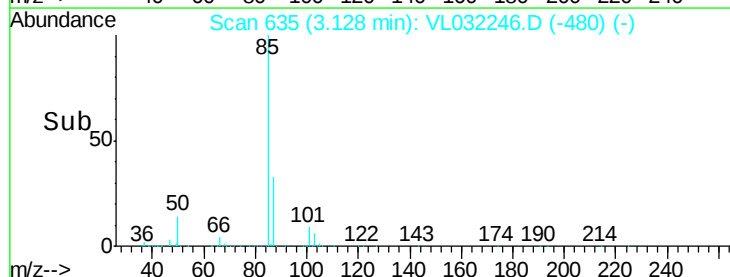
87 33.1 25.8 38.6



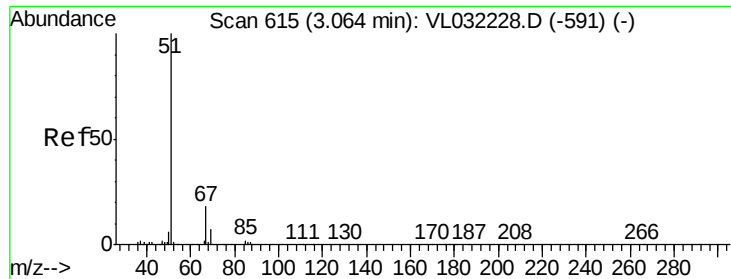
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

Time-->



Time-->



#3

Chlorodifluoromethane

Concen: 8.880 ppbv

RT: 3.06 min Scan# 615

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Tgt Ion: 51 Resp: 1812671

Ion Ratio Lower Upper

51 100

67 18.3 14.6 22.0

Instrument :

MSVOA\_L

ClientSampleId :

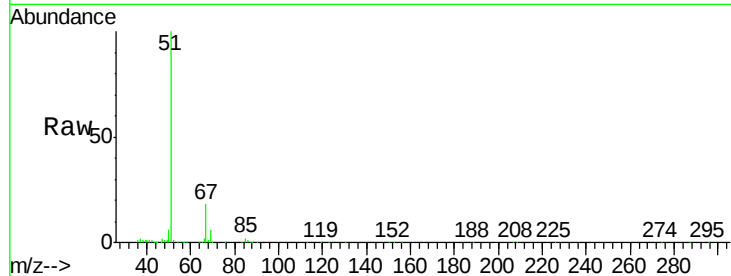
VSTDCCC010

Manual Integrations

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.06

1500000

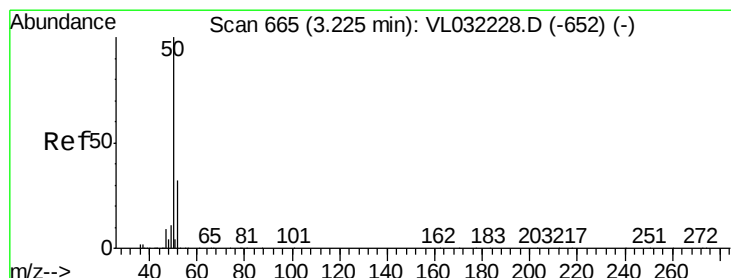
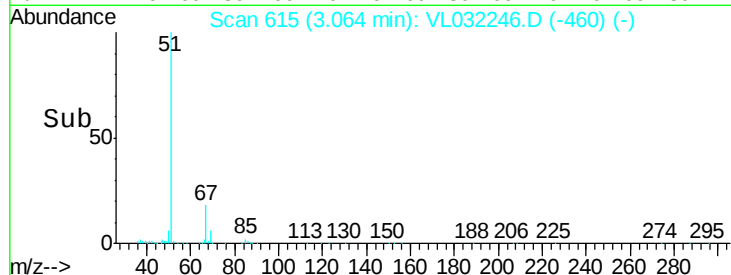
1000000

500000

0

Time-->

3.00 3.05 3.10 3.15



#4

Chloromethane

Concen: 8.339 ppbv

RT: 3.22 min Scan# 664

Delta R.T. -0.00 min

Lab File: VL032246.D

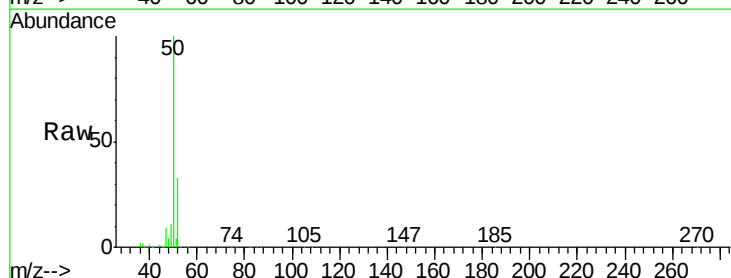
Acq: 13 Jul 2018 13:34

Tgt Ion: 50 Resp: 968307

Ion Ratio Lower Upper

50 100

52 33.0 25.7 38.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.22

600000

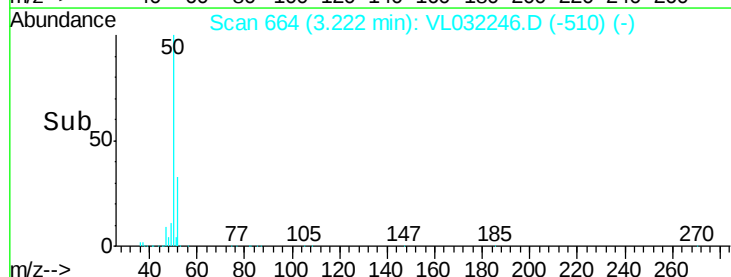
400000

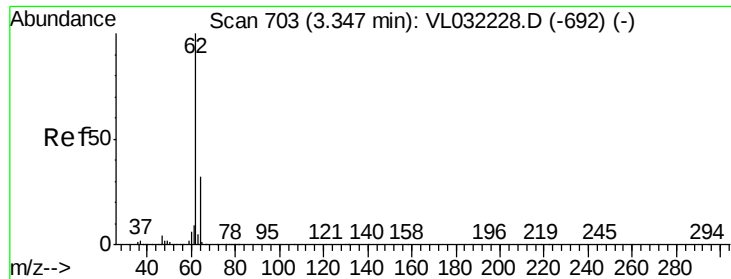
200000

0

Time-->

3.15 3.20 3.25





#5

Vinyl Chloride

Concen: 8.103 ppbv

RT: 3.34 min Scan# 702

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 62 Resp: 927002

Ion Ratio Lower Upper

62 100

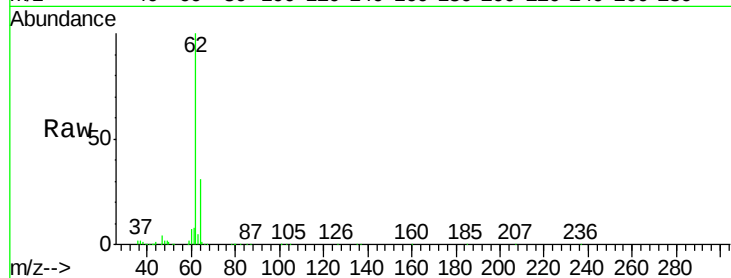
64 31.2 25.8 38.6

Manual Integrations

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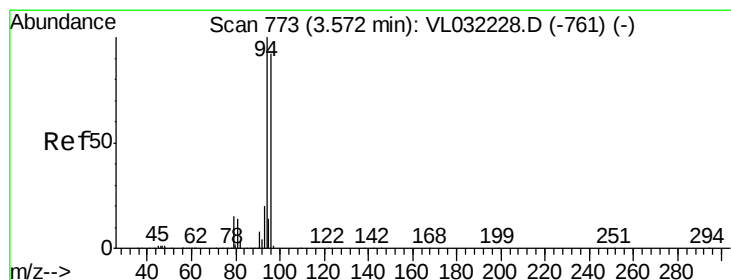
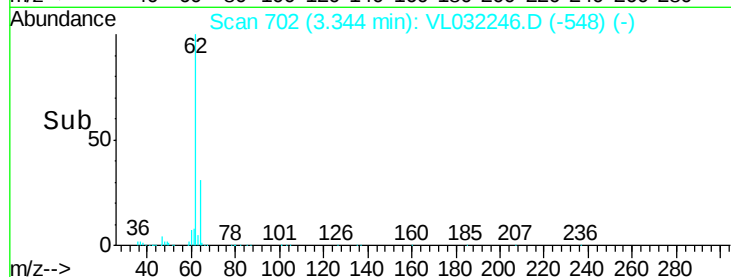
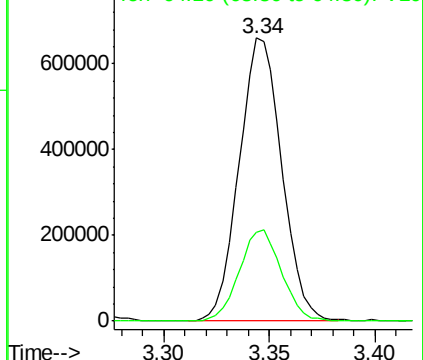
apatel

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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 8.128 ppbv

RT: 3.57 min Scan# 773

Delta R.T. -0.00 min

Lab File: VL032246.D

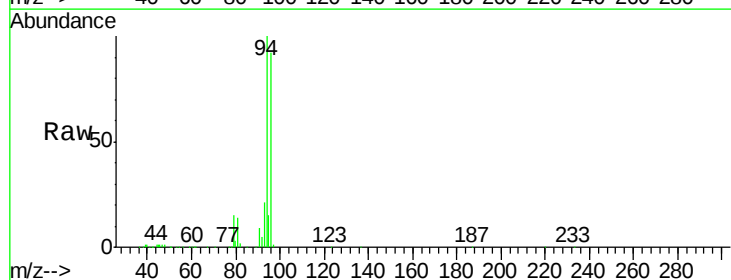
Acq: 13 Jul 2018 13:34

Tgt Ion: 94 Resp: 517692

Ion Ratio Lower Upper

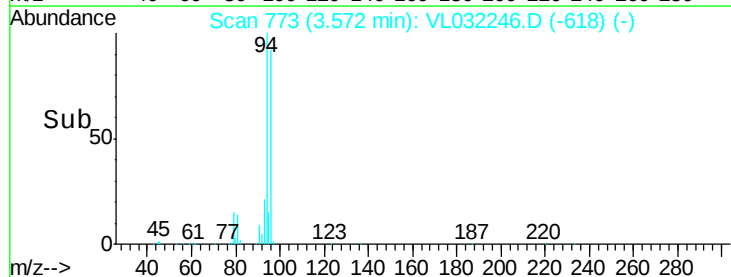
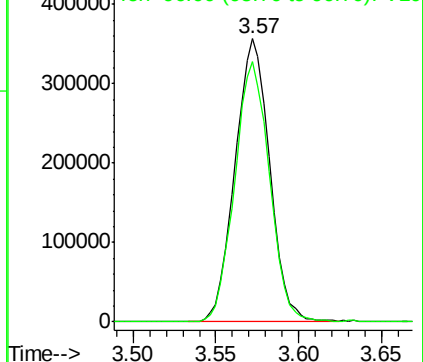
94 100

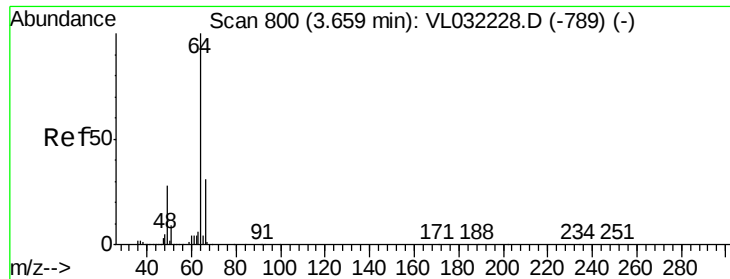
96 92.0 73.5 110.3



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 8.339 ppbv

RT: 3.66 min Scan# 800

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 64 Resp: 328558

Ion Ratio Lower Upper

64 100

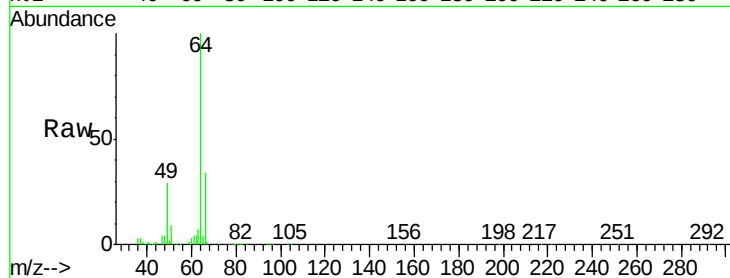
66 33.8 24.4 36.6

Manual Integrations

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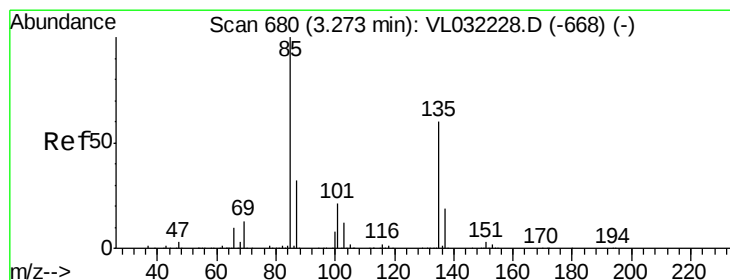
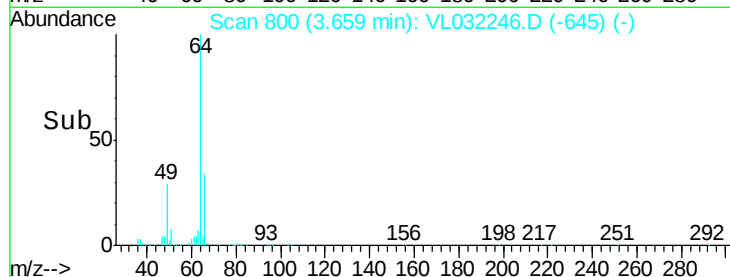
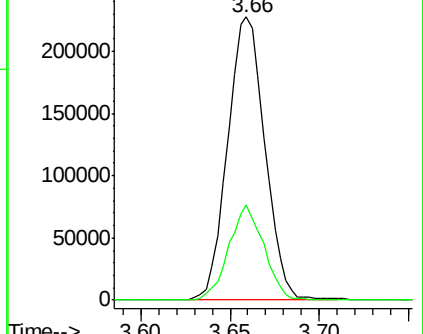
apatel

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Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 7.549 ppbv

RT: 3.27 min Scan# 680

Delta R.T. -0.00 min

Lab File: VL032246.D

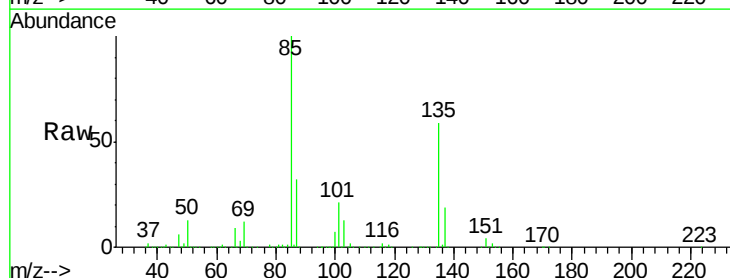
Acq: 13 Jul 2018 13:34

Tgt Ion: 85 Resp: 1983037

Ion Ratio Lower Upper

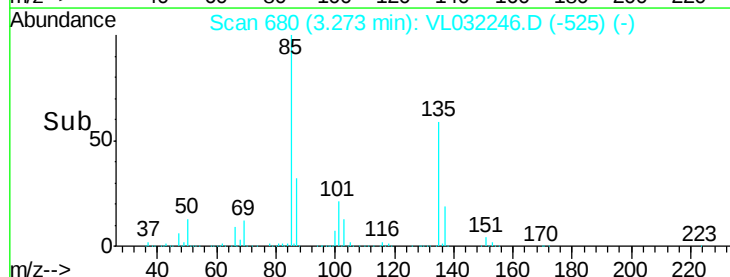
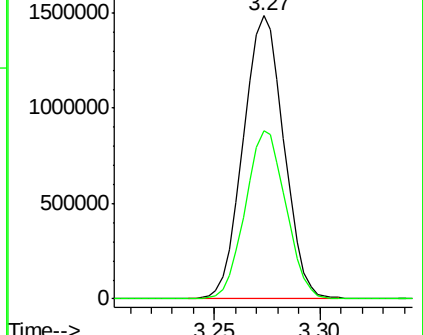
85 100

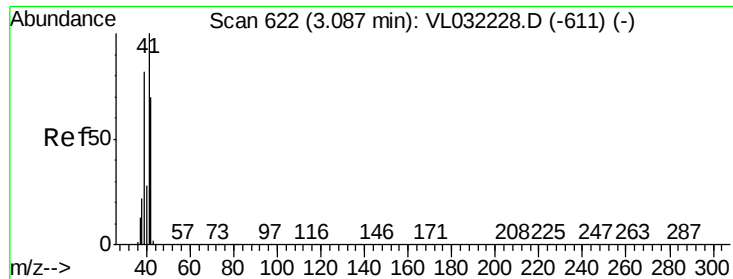
135 59.6 48.6 72.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 9.222 ppbv

RT: 3.09 min Scan# 622

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 41 Resp: 802519

Ion Ratio Lower Upper

41 100

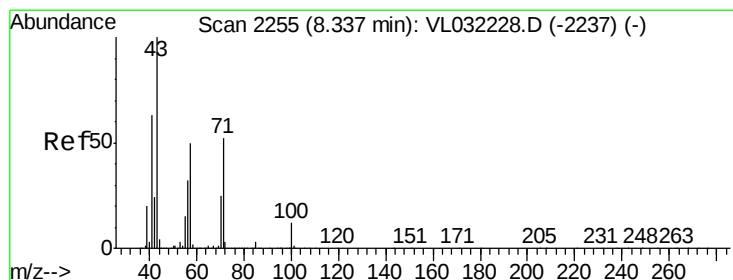
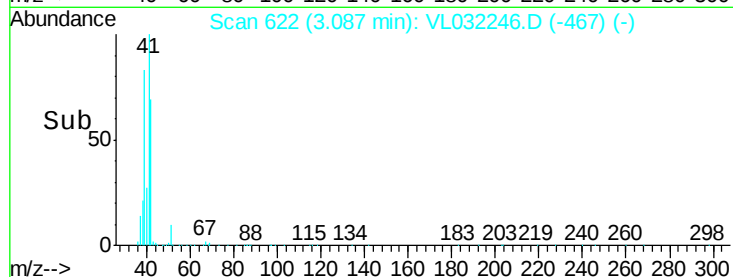
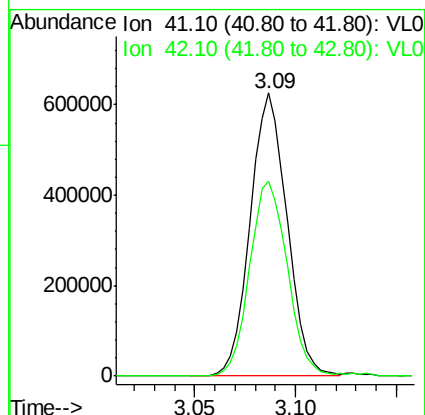
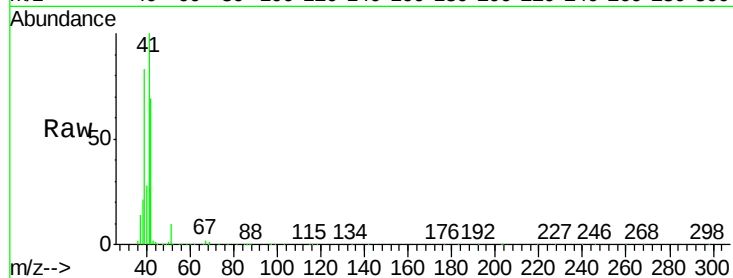
42 71.3 56.2 84.4

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#10

Heptane

Concen: 9.830 ppbv

RT: 8.33 min Scan# 2254

Delta R.T. -0.00 min

Lab File: VL032246.D

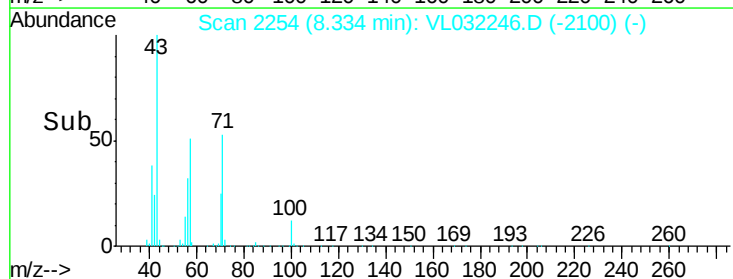
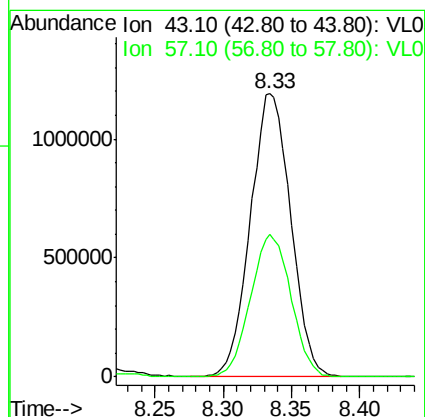
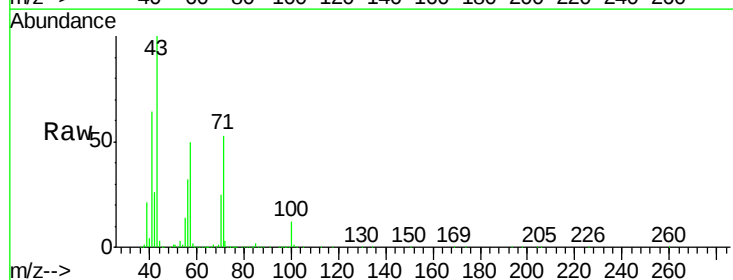
Acq: 13 Jul 2018 13:34

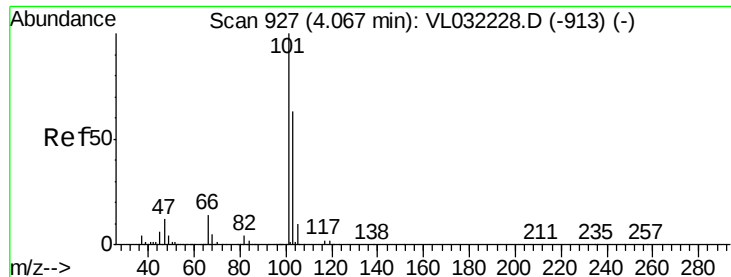
Tgt Ion: 43 Resp: 2429290

Ion Ratio Lower Upper

43 100

57 50.6 40.7 61.1





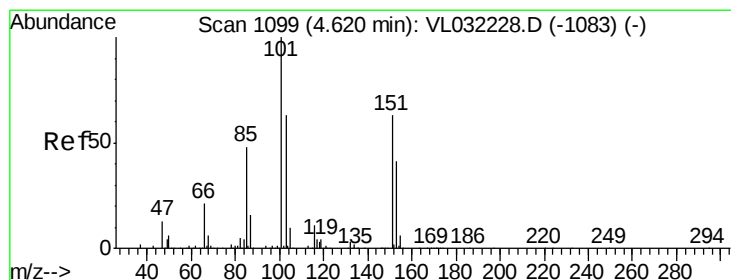
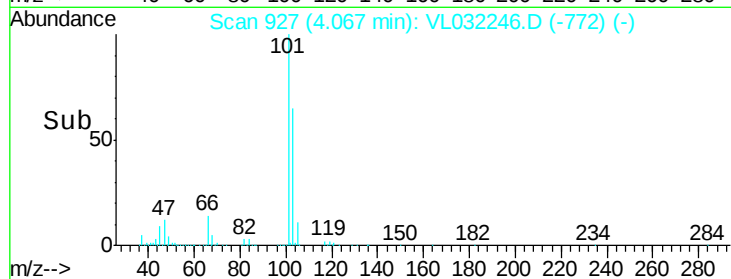
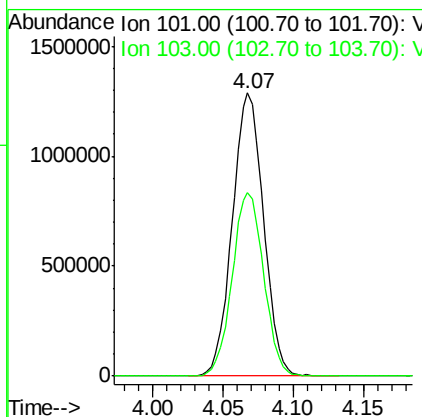
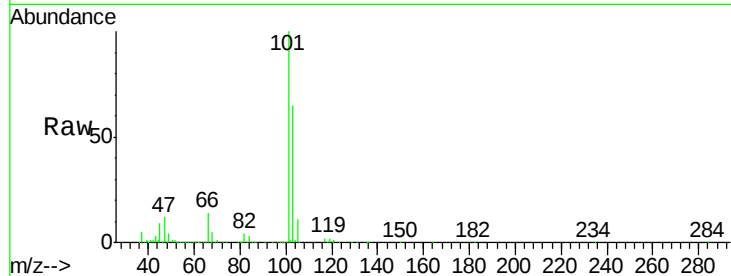
#11  
 Trichlorofluoromethane  
 Concen: 8.735 ppbv  
 RT: 4.07 min Scan# 927  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion:101 Resp: 1998565  
 Ion Ratio Lower Upper  
 101 100  
 103 64.7 50.2 75.2

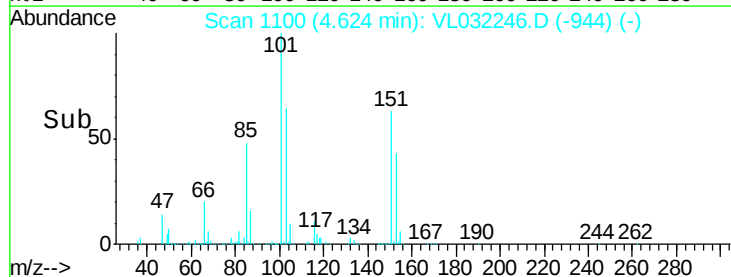
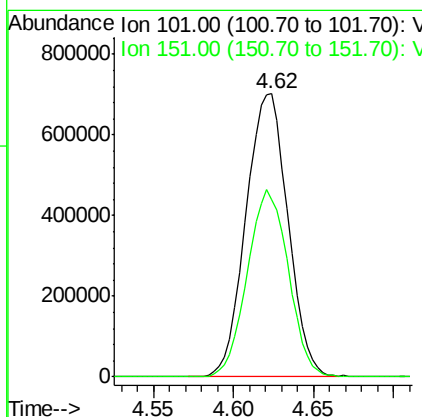
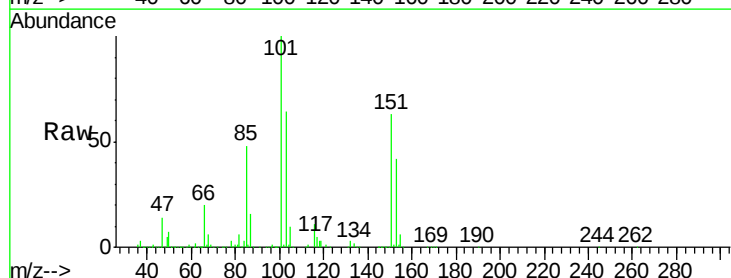
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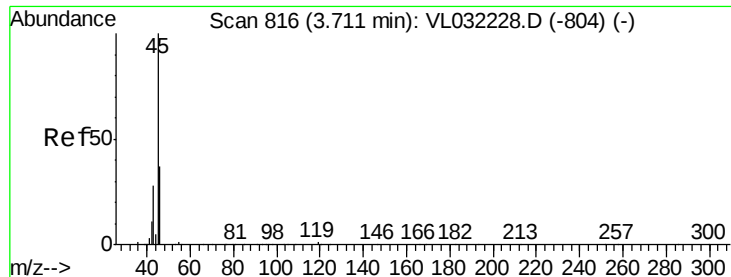
apatel  
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#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 8.634 ppbv  
 RT: 4.62 min Scan# 1100  
 Delta R.T. 0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion:101 Resp: 1261658  
 Ion Ratio Lower Upper  
 101 100  
 151 64.9 52.2 78.2





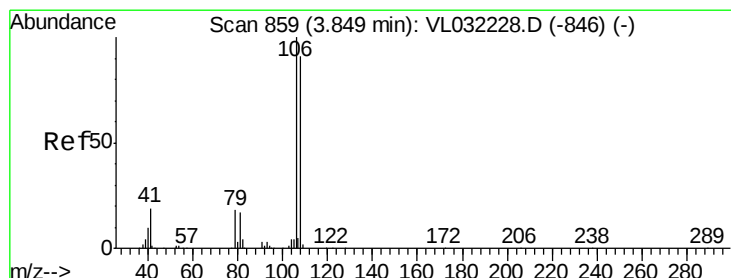
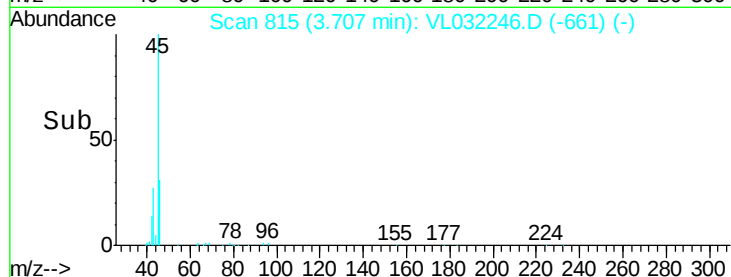
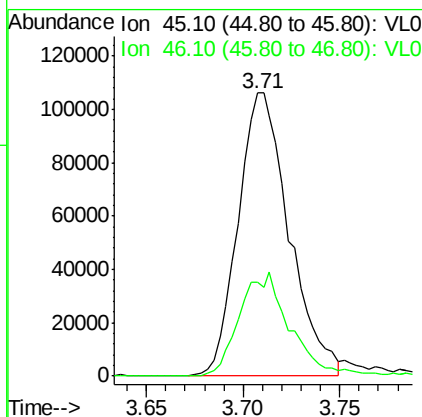
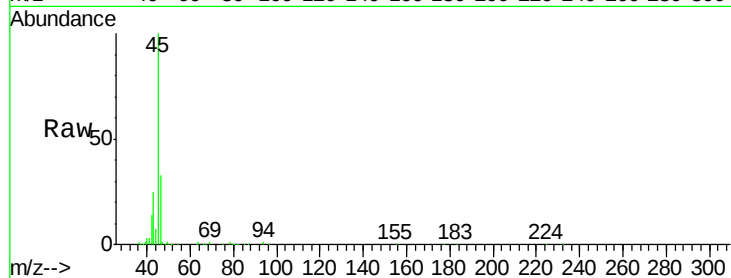
#13  
Ethanol  
Concen: 7.743 ppbv  
RT: 3.71 min Scan# 815  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 45 Resp: 194492  
Ion Ratio Lower Upper  
45 100  
46 36.7 15.5 61.9

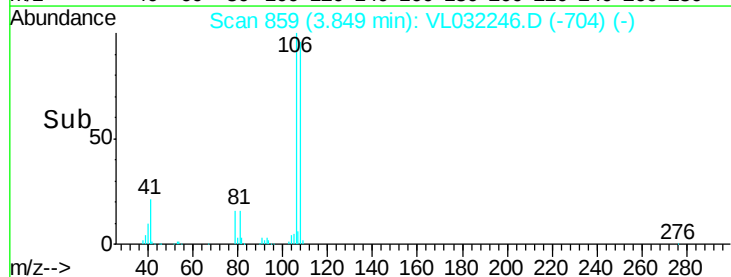
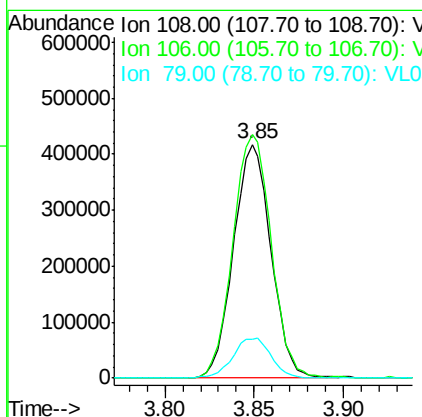
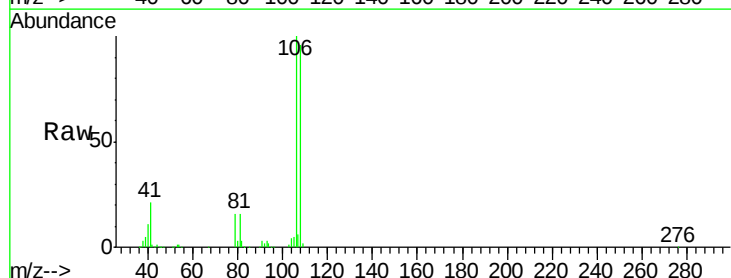
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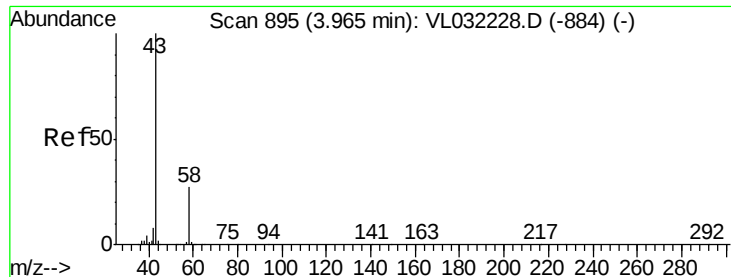
apatel  
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#14  
Bromoethene  
Concen: 8.889 ppbv  
RT: 3.85 min Scan# 859  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Tgt Ion: 108 Resp: 612775  
Ion Ratio Lower Upper  
108 100  
106 107.3 85.5 128.3  
79 17.7 14.2 21.4





#15

Acetone

Concen: 7.812 ppbv

RT: 3.96 min Scan# 894

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 43 Resp: 1505871

Ion Ratio Lower Upper

43 100

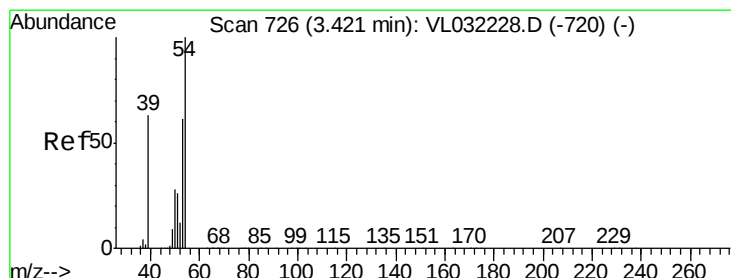
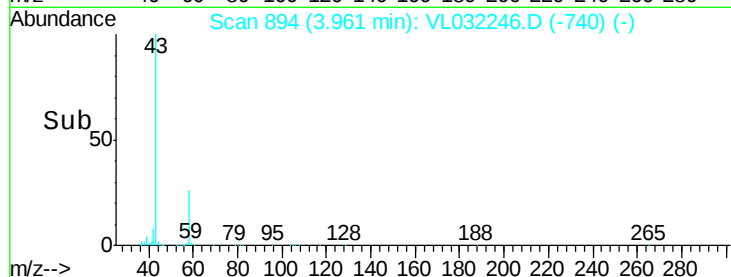
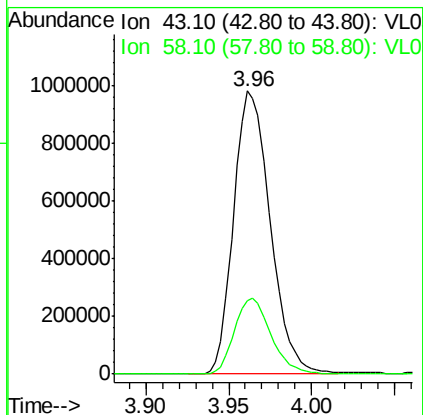
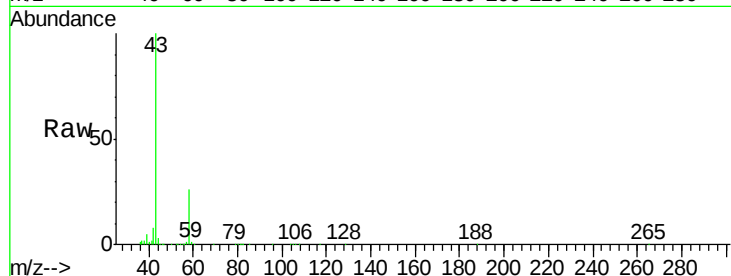
58 26.9 21.5 32.3

Manual Integrations

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#16

1,3-Butadiene

Concen: 7.929 ppbv

RT: 3.42 min Scan# 725

Delta R.T. -0.00 min

Lab File: VL032246.D

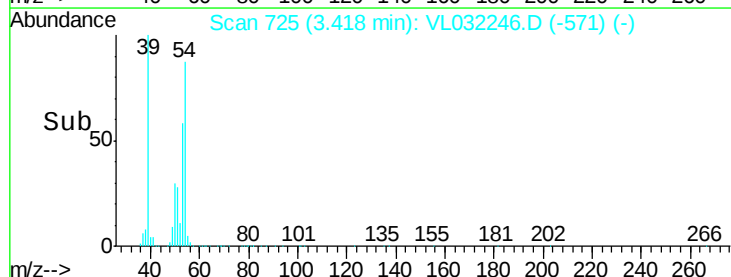
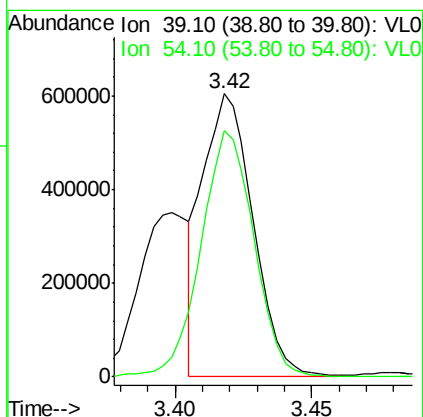
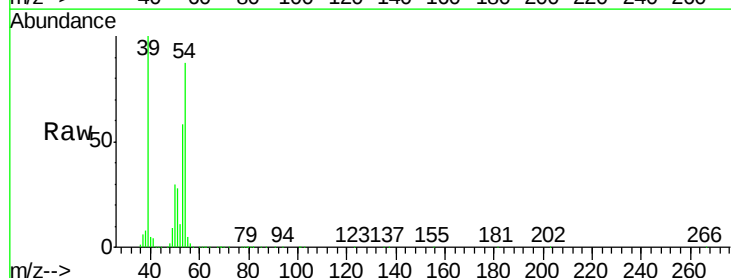
Acq: 13 Jul 2018 13:34

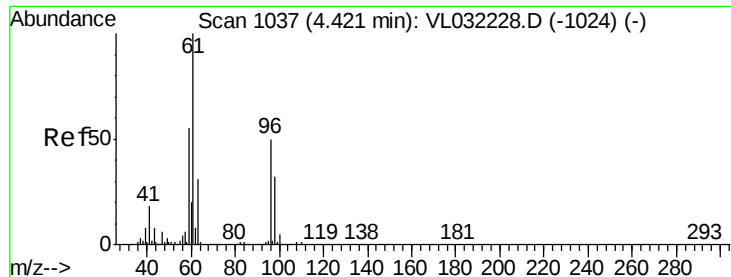
Tgt Ion: 39 Resp: 772295

Ion Ratio Lower Upper

39 100

54 92.7 70.0 105.0





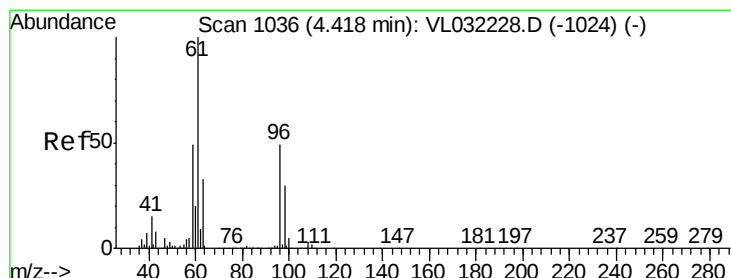
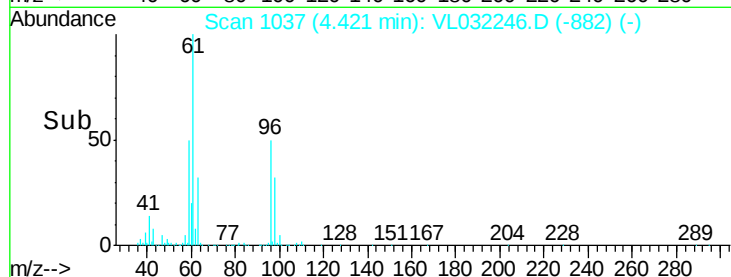
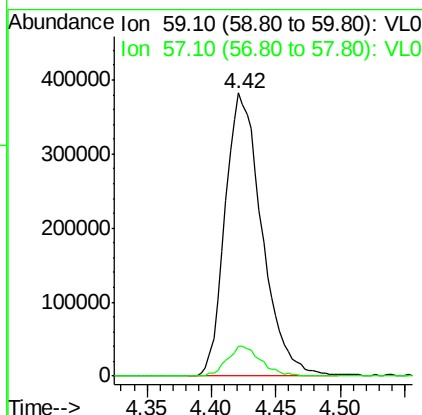
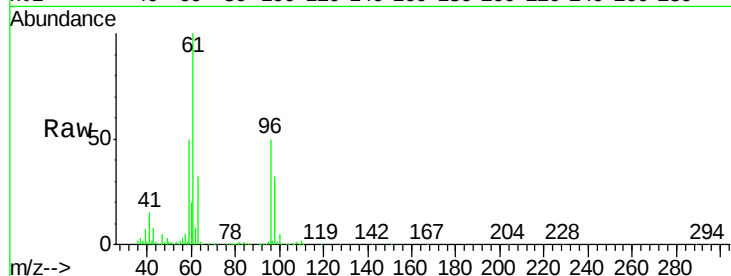
#17  
 tert-Butyl alcohol  
 Concen: 8.411 ppbv  
 RT: 4.42 min Scan# 1037  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 59 Resp: 757039  
 Ion Ratio Lower Upper  
 59 100  
 57 10.1 8.4 12.6

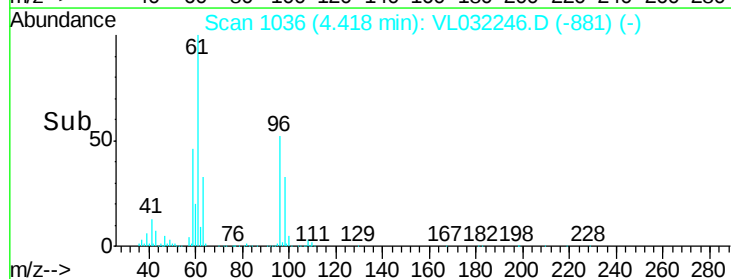
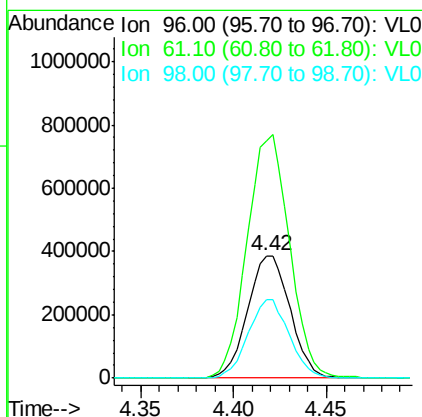
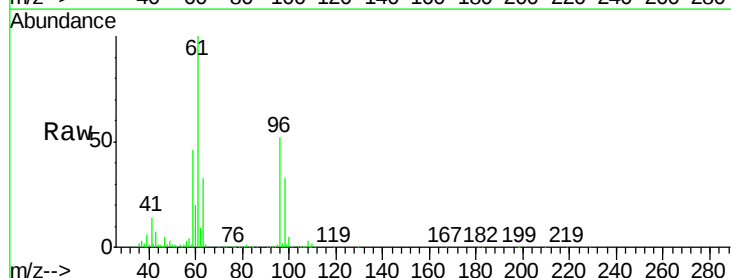
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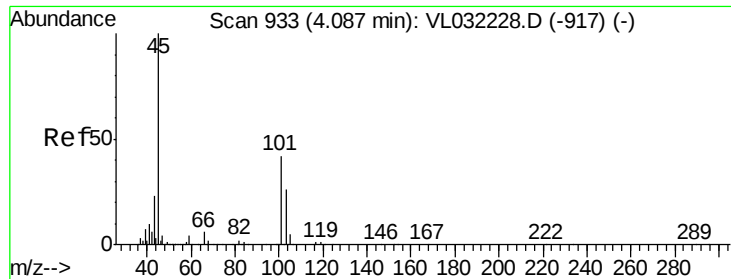
apatel  
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#18  
 1,1-Dichloroethene  
 Concen: 9.008 ppbv  
 RT: 4.42 min Scan# 1036  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 96 Resp: 612603  
 Ion Ratio Lower Upper  
 96 100  
 61 193.5 163.0 244.4  
 98 64.0 48.5 72.7





#19

Isopropyl Alcohol

Concen: 10.548 ppbv

RT: 4.09 min Scan# 933

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 45 Resp: 1335075

Ion Ratio Lower Upper

45 100

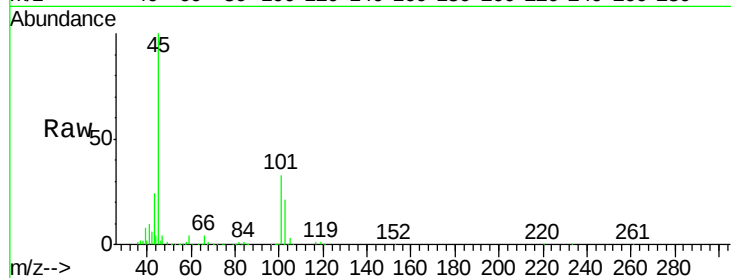
58 1.3 1.3 1.9

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.09

800000

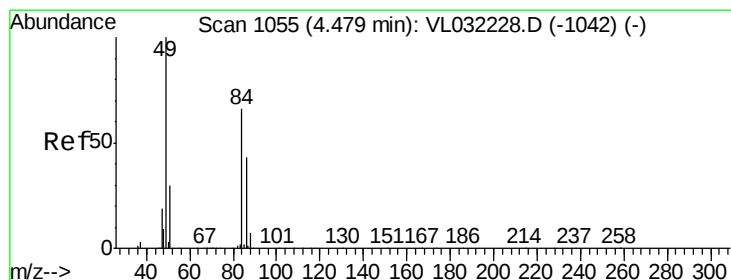
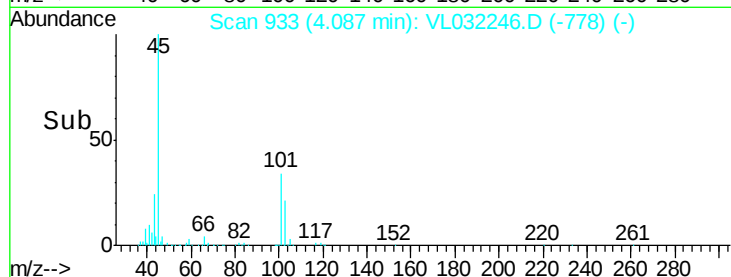
600000

400000

200000

0

Time--> 4.00 4.05 4.10 4.15



#20

Methylene Chloride

Concen: 8.392 ppbv

RT: 4.48 min Scan# 1054

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Tgt Ion: 84 Resp: 548187

Ion Ratio Lower Upper

84 100

49 156.2 121.8 182.6

51 46.5 36.3 54.5

86 62.7 52.1 78.1

Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

800000

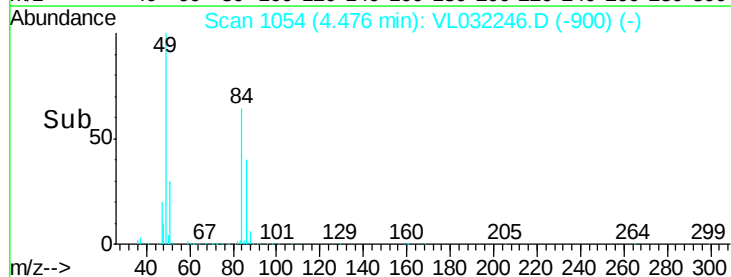
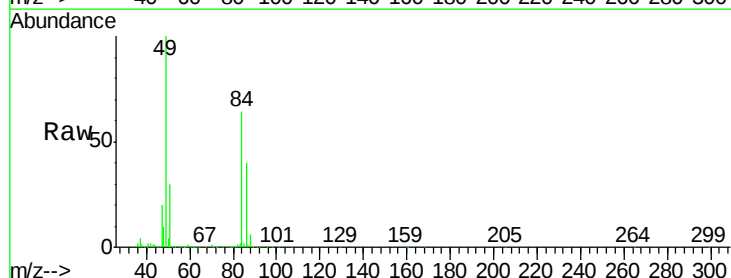
600000

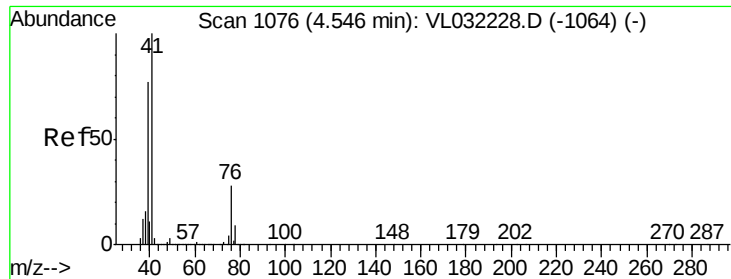
400000

200000

0

Time--> 4.45 4.50





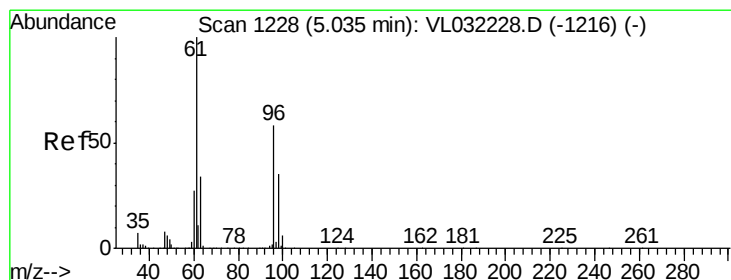
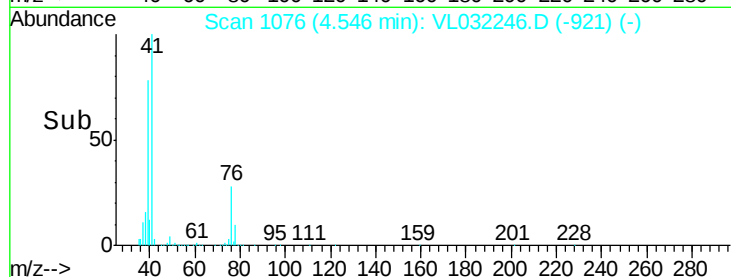
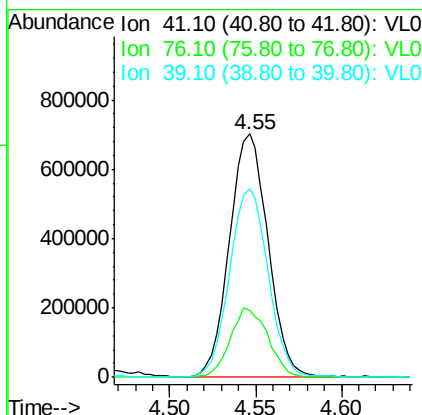
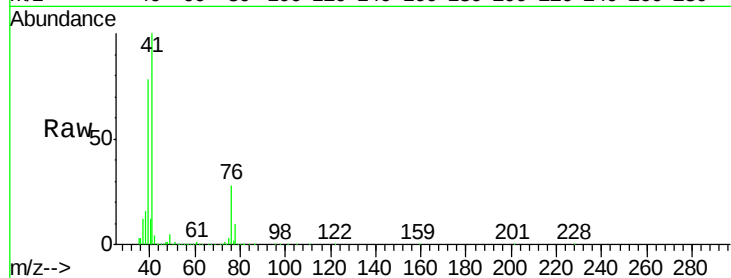
#21  
 Allyl Chloride  
 Concen: 9.656 ppbv  
 RT: 4.55 min Scan# 1076  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 41 Resp: 1089760  
 Ion Ratio Lower Upper  
 41 100  
 76 28.1 22.9 34.3  
 39 77.8 62.3 93.5

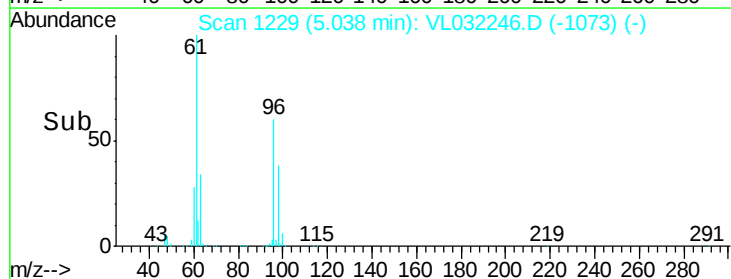
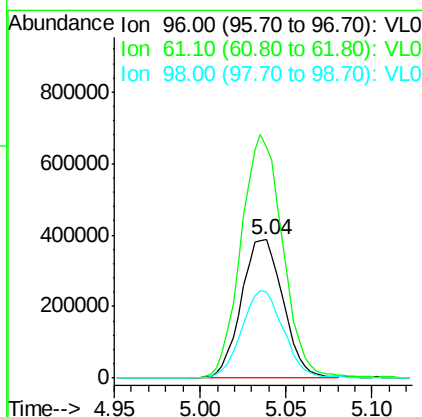
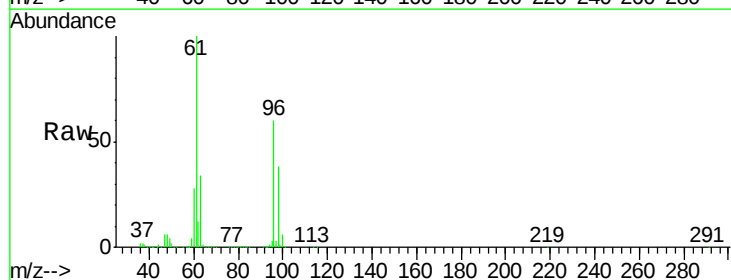
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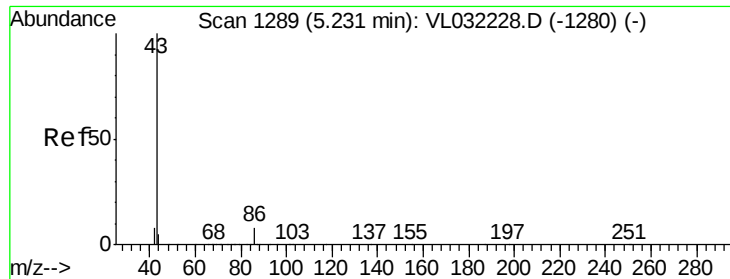
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#22  
 trans-1,2-Dichloroethene  
 Concen: 10.124 ppbv  
 RT: 5.04 min Scan# 1229  
 Delta R.T. 0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 96 Resp: 655354  
 Ion Ratio Lower Upper  
 96 100  
 61 167.1 139.1 208.7  
 98 62.7 48.4 72.6





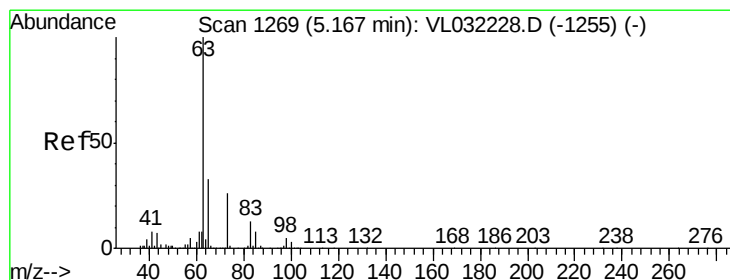
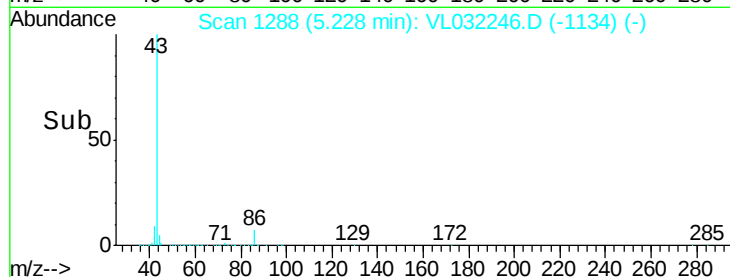
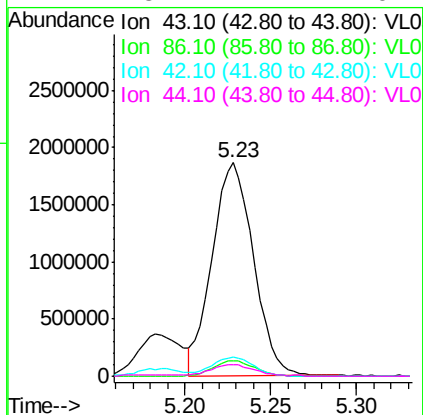
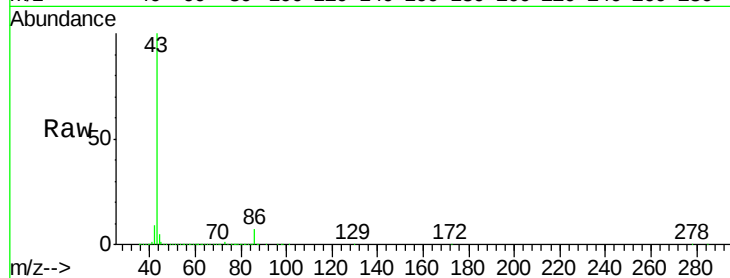
#23  
 Vinyl Acetate  
 Concen: 9.755 ppbv  
 RT: 5.23 min Scan# 1288  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 86      | 7.3   | 5.9   | 8.9   |
| 42      | 9.1   | 7.0   | 10.6  |
| 44      | 5.1   | 4.2   | 6.2   |

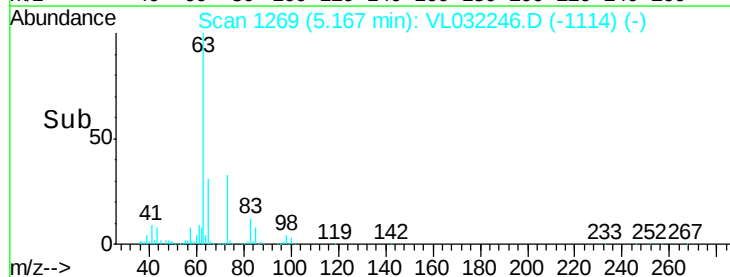
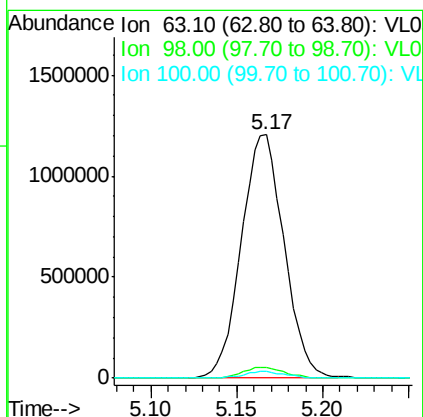
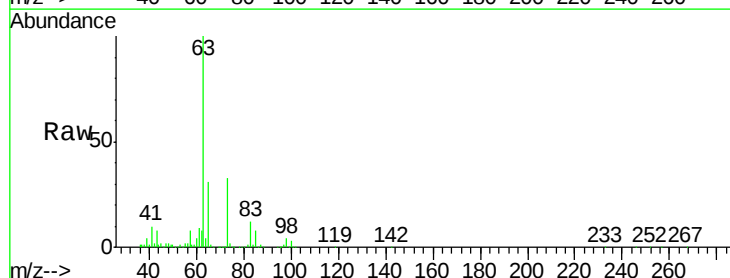
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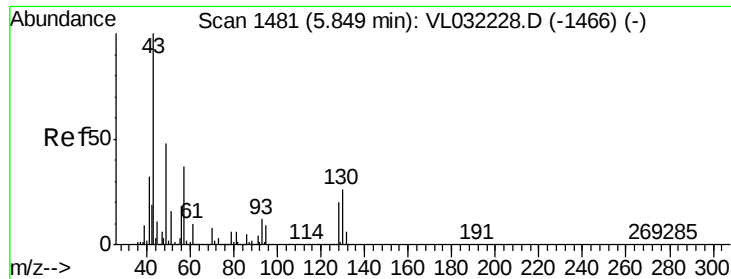
apatel  
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#24  
 1,1-Dichloroethane  
 Concen: 9.229 ppbv  
 RT: 5.17 min Scan# 1269  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 98      | 4.1   | 2.4   | 7.1   |
| 100     | 2.6   | 1.5   | 4.4   |





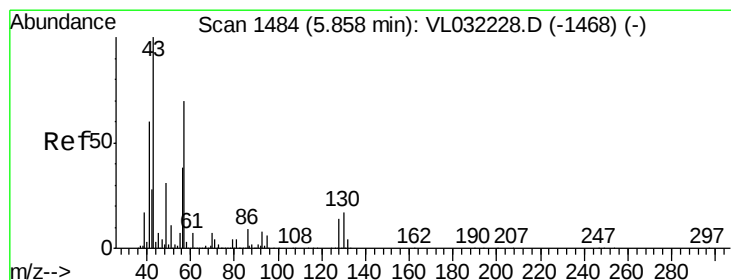
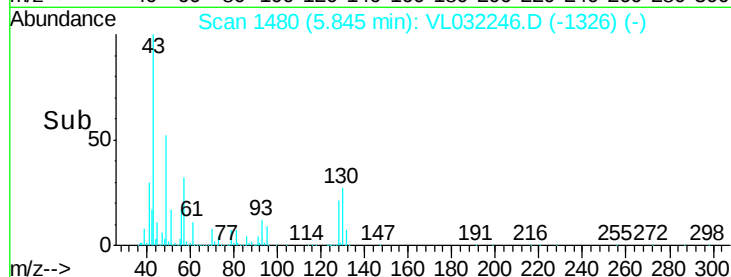
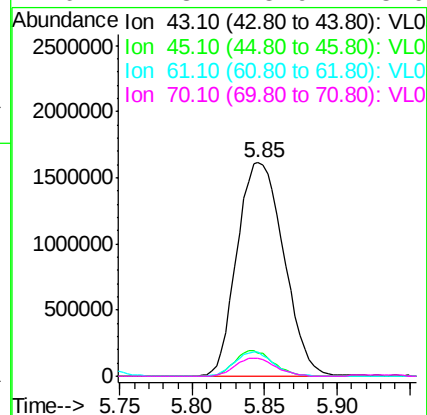
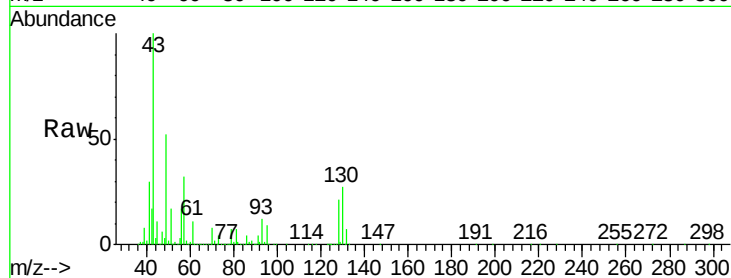
#25  
Ethyl Acetate  
Concen: 9.470 ppbv  
RT: 5.85 min Scan# 1480  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 10.0  | 8.0   | 12.0  |
| 61      | 9.4   | 7.7   | 11.5  |
| 70      | 7.3   | 5.9   | 8.9   |

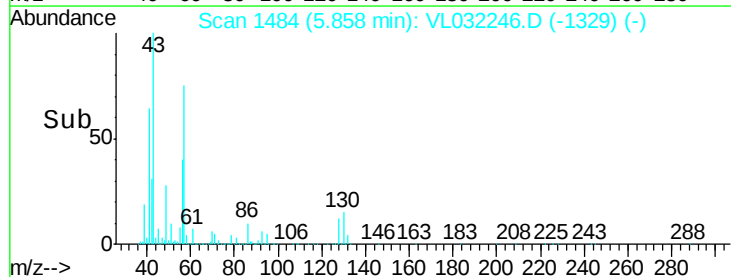
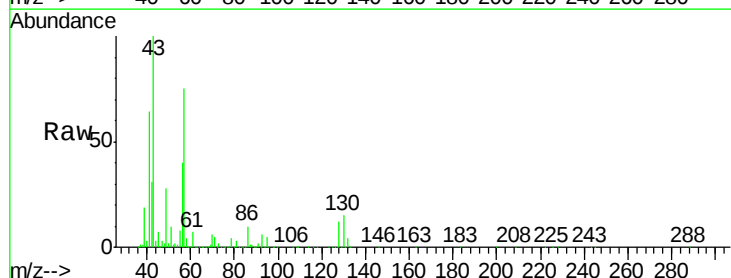
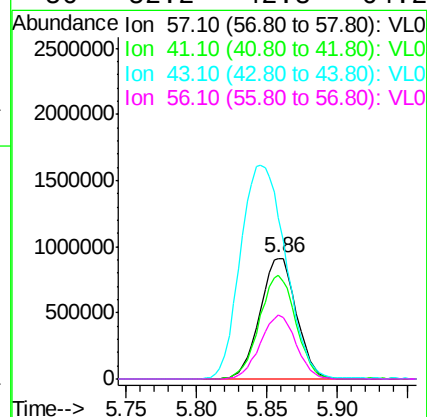
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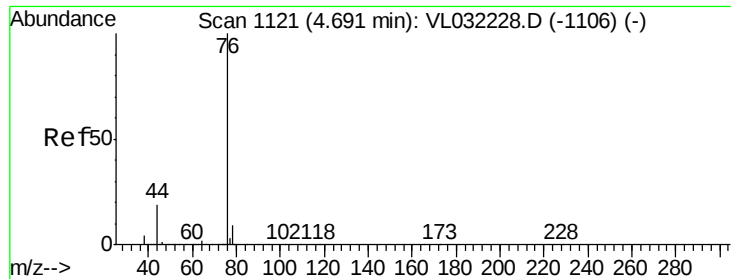
apatel  
7/16/2018 8:07:53 AM



#26  
Hexane  
Concen: 9.488 ppbv  
RT: 5.86 min Scan# 1484  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 85.6  | 68.7  | 103.1 |
| 43      | 220.7 | 176.2 | 264.2 |
| 56      | 52.2  | 42.8  | 64.2  |





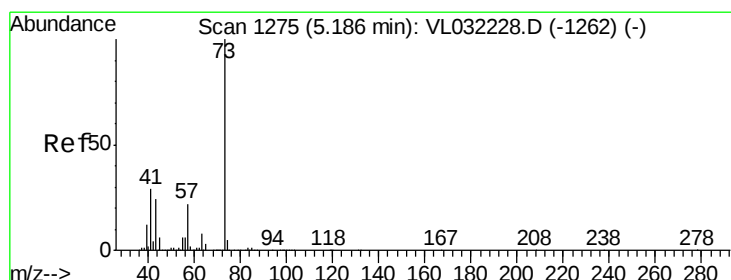
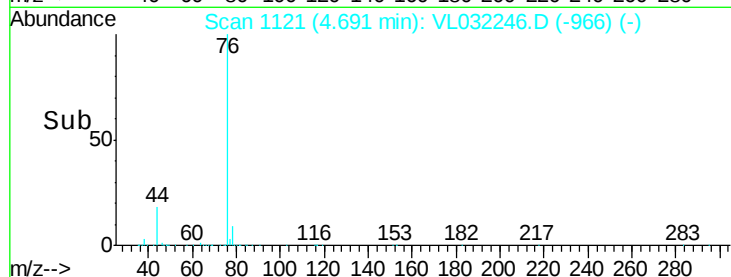
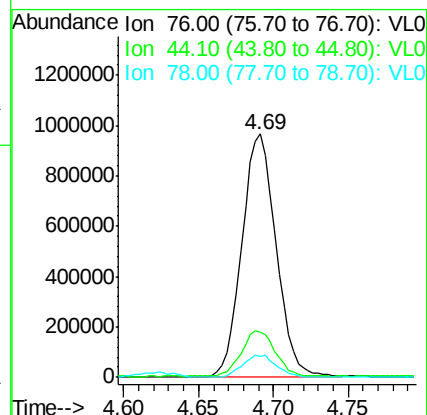
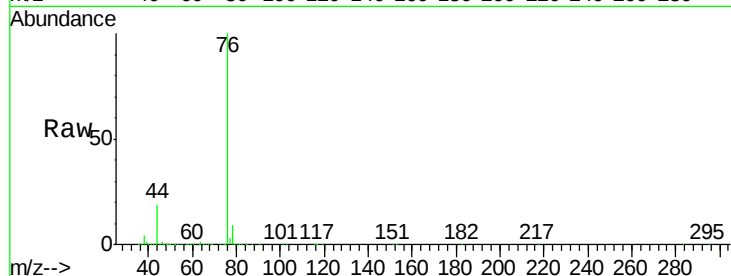
#27  
Carbon Disulfide  
Concen: 9.907 ppbv  
RT: 4.69 min Scan# 1121  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 76 Resp: 1542426  
Ion Ratio Lower Upper  
76 100  
44 19.0 15.1 22.7  
78 8.9 7.4 11.0

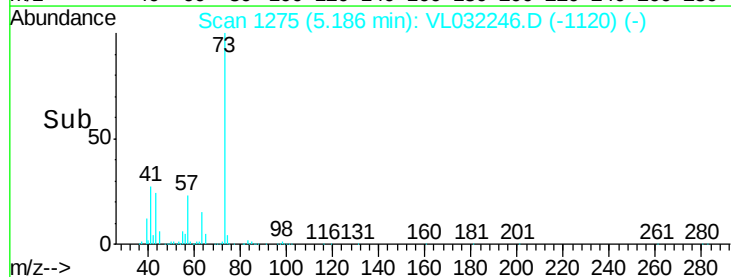
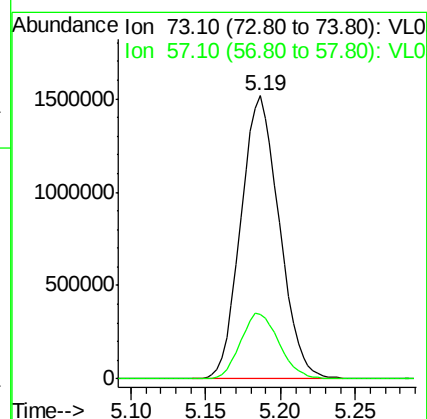
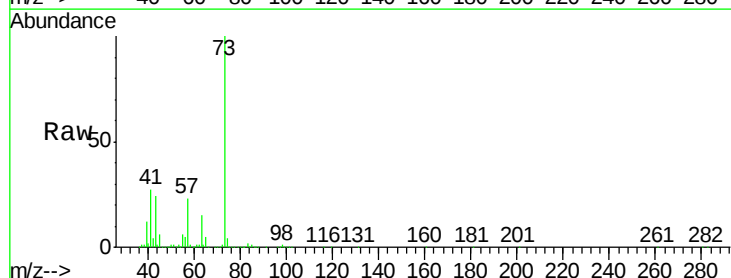
Manual Integrations  
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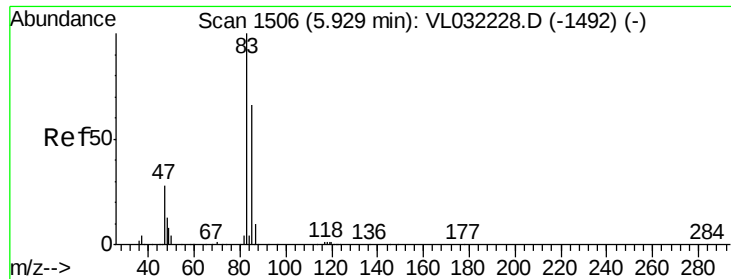
apatel  
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#28  
Methyl tert-Butyl Ether  
Concen: 9.907 ppbv  
RT: 5.19 min Scan# 1275  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Tgt Ion: 73 Resp: 2713267  
Ion Ratio Lower Upper  
73 100  
57 23.5 18.6 27.8





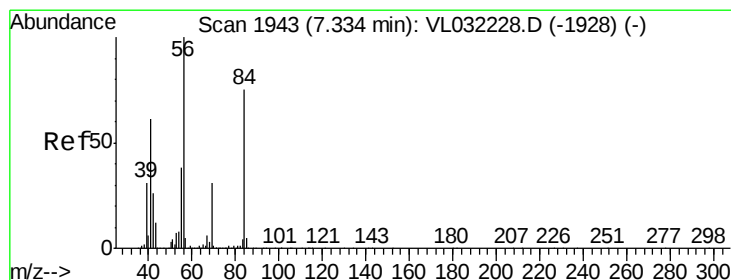
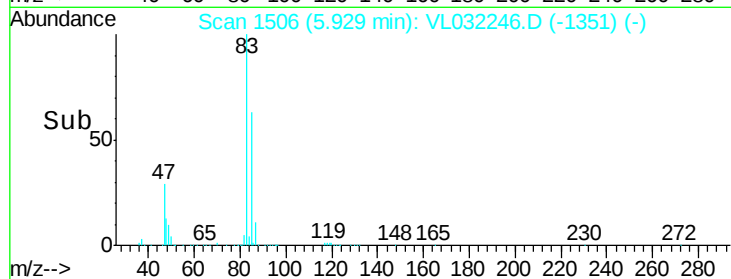
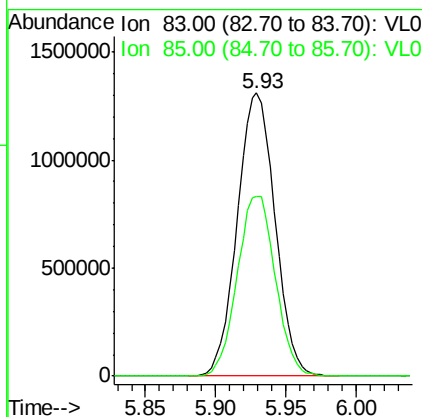
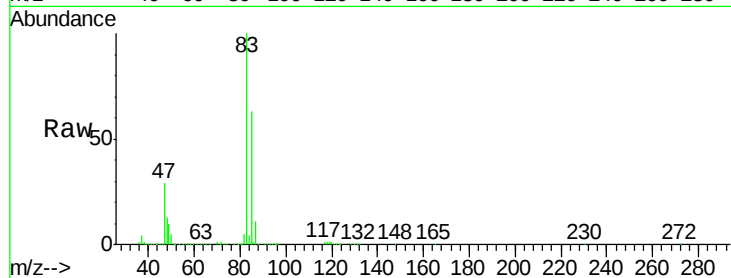
#29  
Chloroform  
Concen: 9.171 ppbv  
RT: 5.93 min Scan# 1506  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 83 Resp: 2463827  
Ion Ratio Lower Upper  
83 100  
85 63.4 52.7 79.1

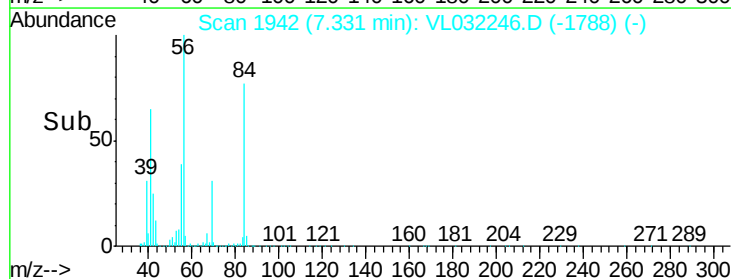
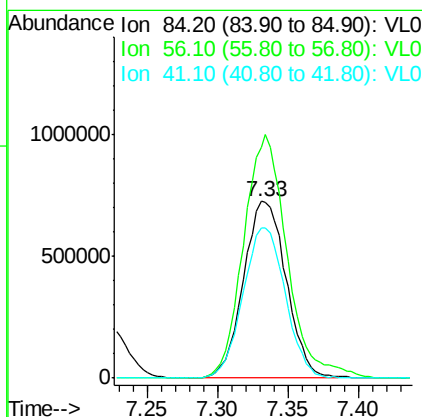
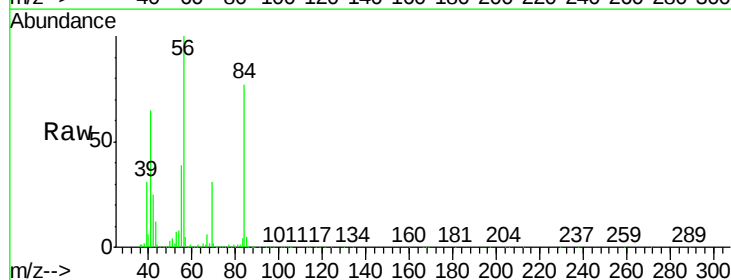
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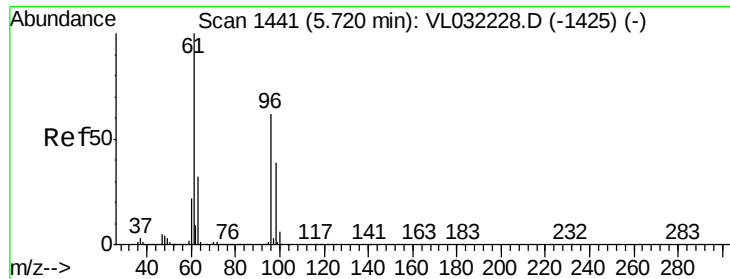
apatel  
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#30  
Cyclohexane  
Concen: 10.016 ppbv  
RT: 7.33 min Scan# 1942  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Tgt Ion: 84 Resp: 1537946  
Ion Ratio Lower Upper  
84 100  
56 140.8 112.6 168.8  
41 84.4 67.0 100.6





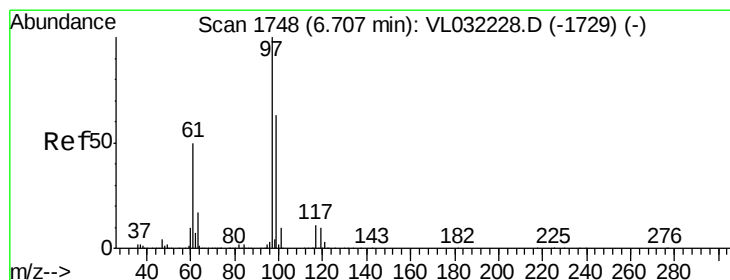
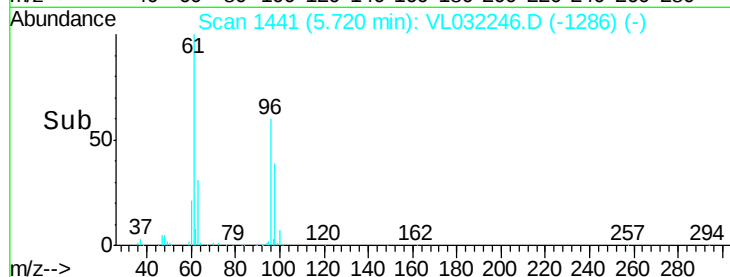
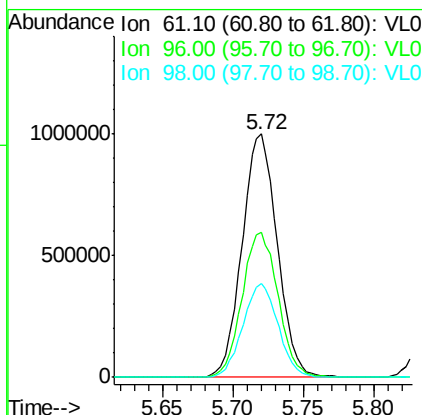
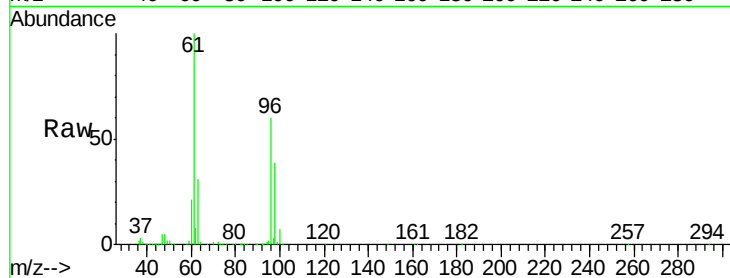
#31  
 cis-1,2-Dichloroethene  
 Concen: 10.084 ppbv  
 RT: 5.72 min Scan# 1441  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 61 Resp: 1751052  
 Ion Ratio Lower Upper  
 61 100  
 96 59.8 49.8 74.8  
 98 38.7 31.4 47.2

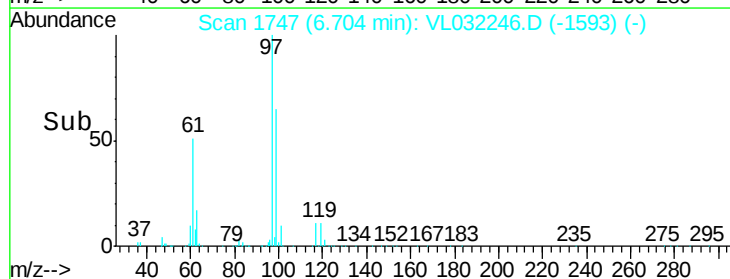
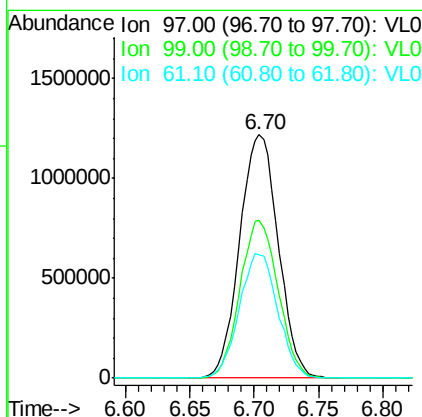
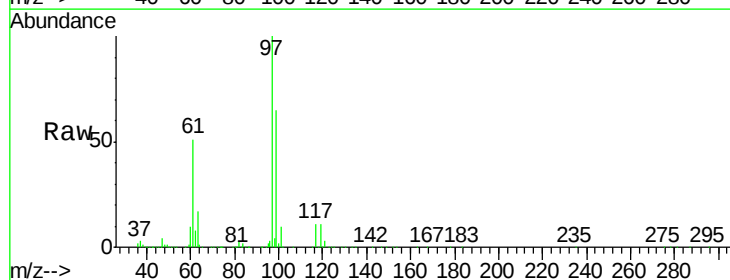
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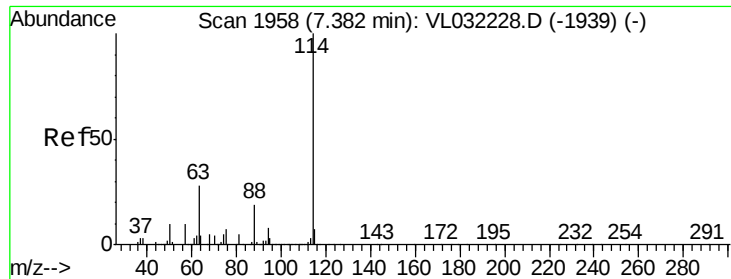
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#32  
 1,1,1-Trichloroethane  
 Concen: 9.758 ppbv  
 RT: 6.70 min Scan# 1747  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 97 Resp: 2543527  
 Ion Ratio Lower Upper  
 97 100  
 99 64.3 51.2 76.8  
 61 51.3 41.3 61.9





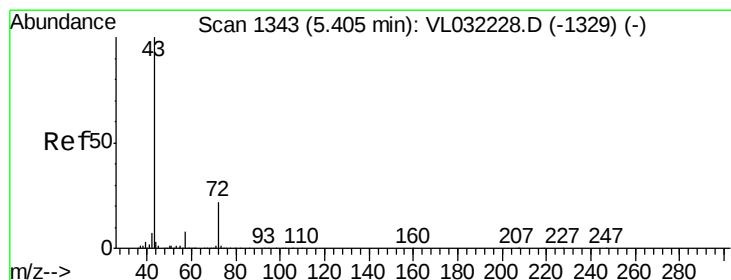
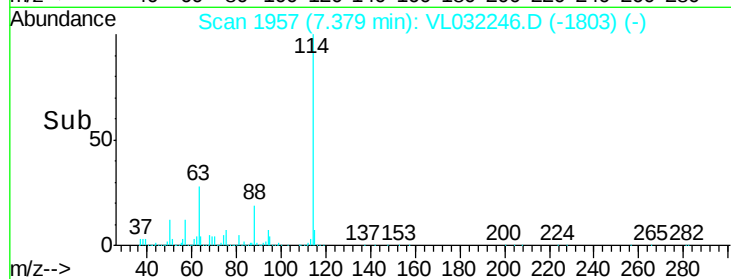
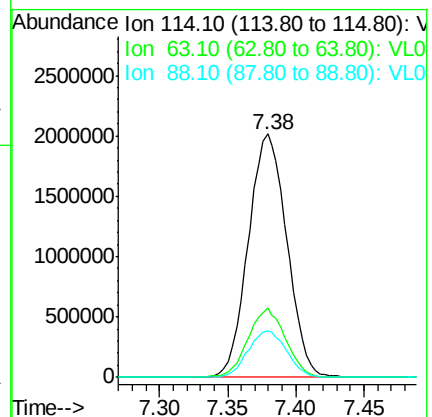
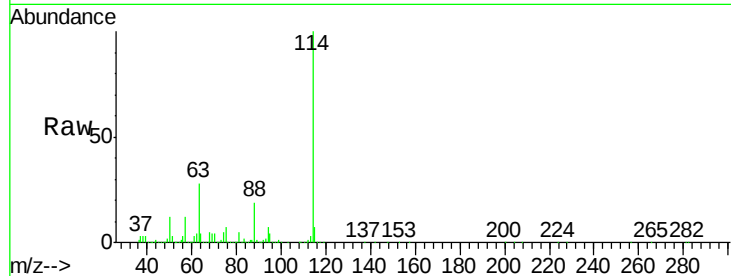
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.38 min Scan# 1957  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 28.0  | 22.5  | 33.7  |
| 88      | 19.3  | 15.4  | 23.0  |

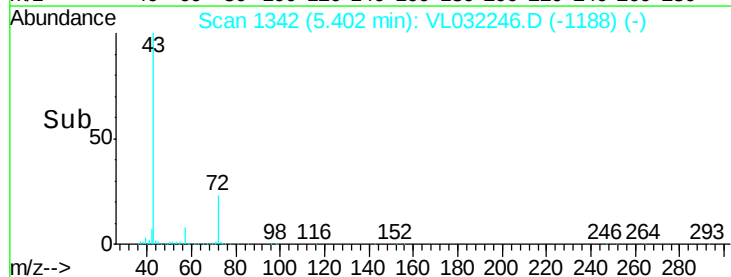
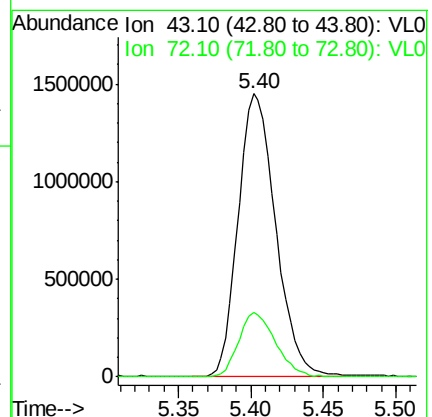
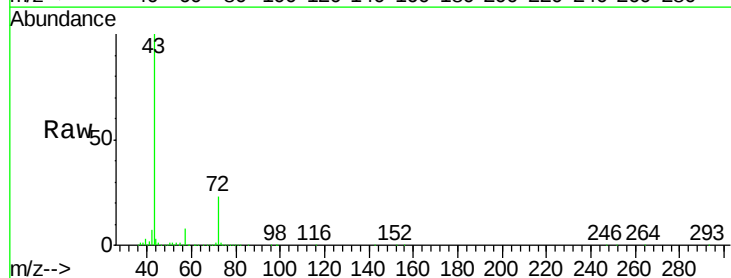
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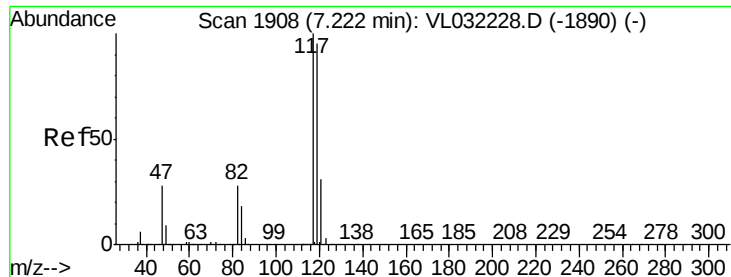
apatel  
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#34  
 2-Butanone  
 Concen: 9.669 ppbv  
 RT: 5.40 min Scan# 1342  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 22.6  | 18.1  | 27.1  |





#35

Carbon Tetrachloride

Concen: 9.805 ppbv

RT: 7.22 min Scan# 1908

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 117 Resp: 2620968

Ion Ratio Lower Upper

117 100

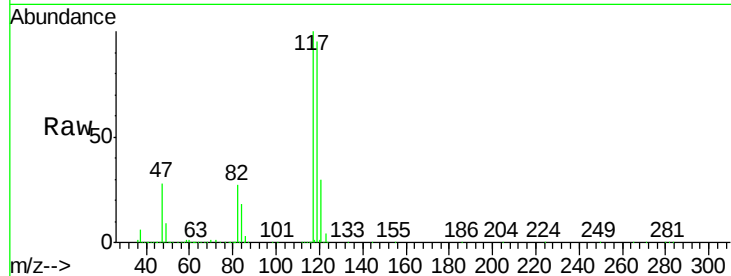
119 94.6 75.7 113.5

121 29.9 24.6 37.0

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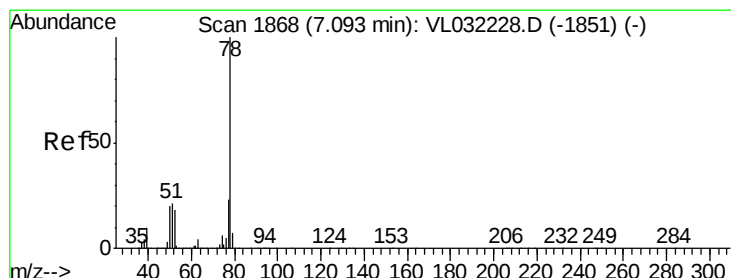
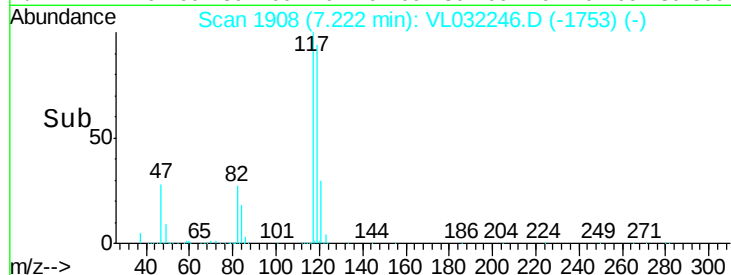
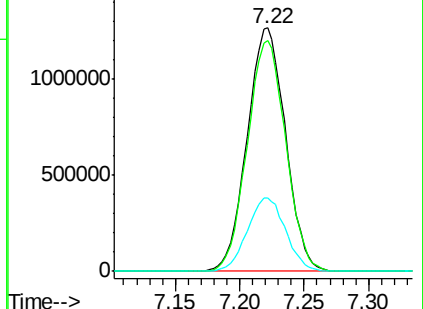
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Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 9.526 ppbv

RT: 7.09 min Scan# 1868

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

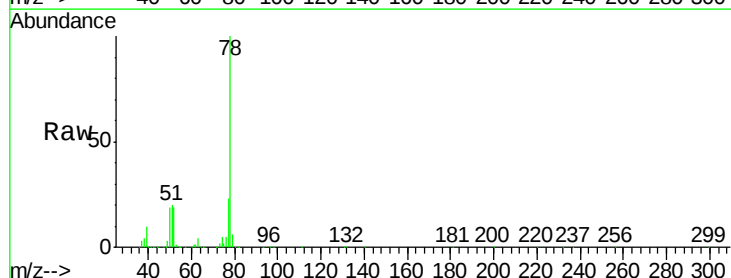
Tgt Ion: 78 Resp: 3739454

Ion Ratio Lower Upper

78 100

77 22.6 18.0 27.0

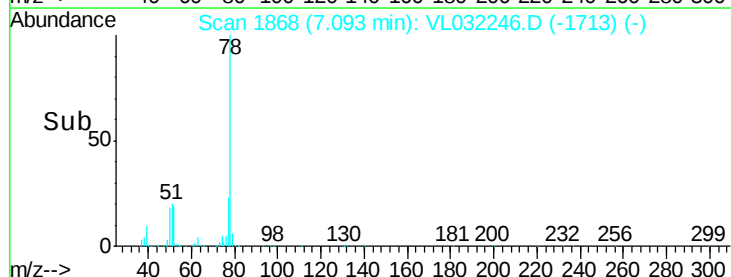
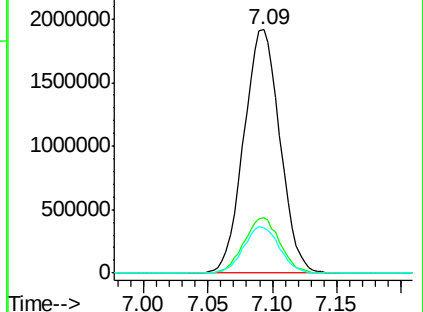
50 18.5 15.8 23.8

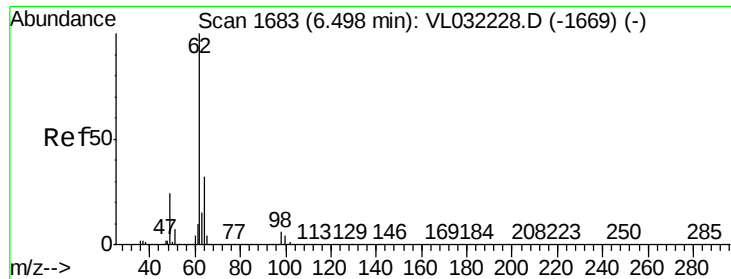


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





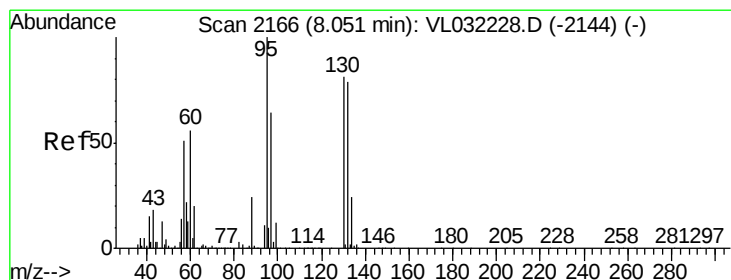
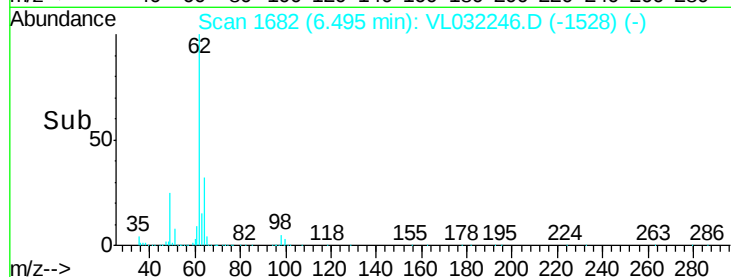
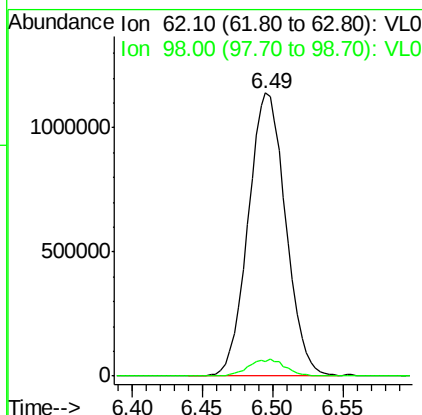
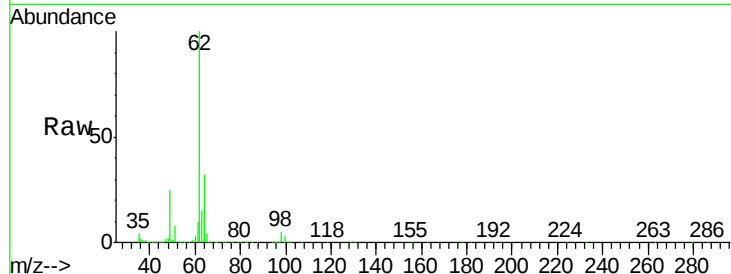
#37  
 1,2-Dichloroethane  
 Concen: 9.887 ppbv  
 RT: 6.49 min Scan# 1682  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 62 Resp: 2124729  
 Ion Ratio Lower Upper  
 62 100  
 98 5.9 4.6 7.0

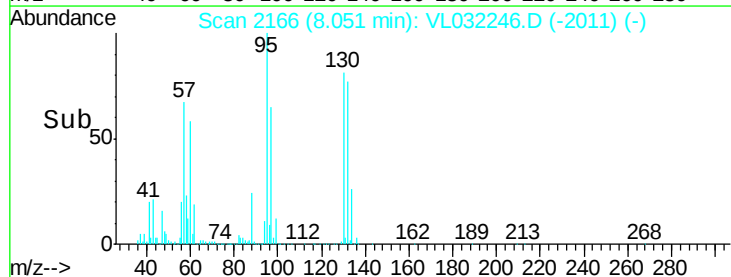
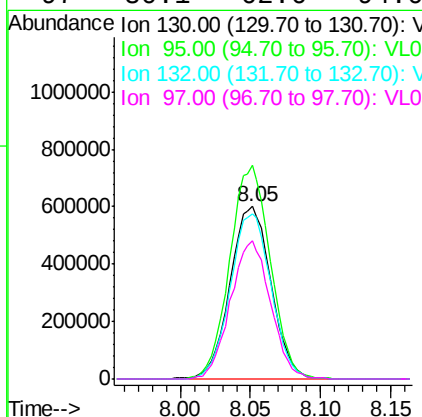
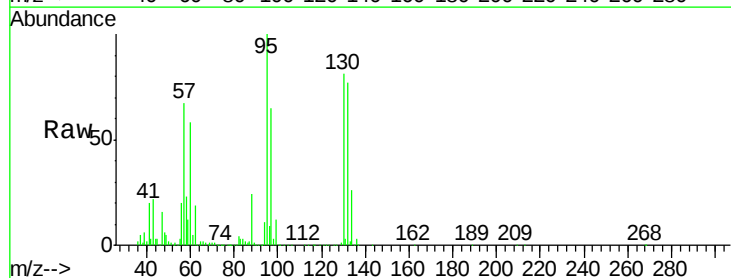
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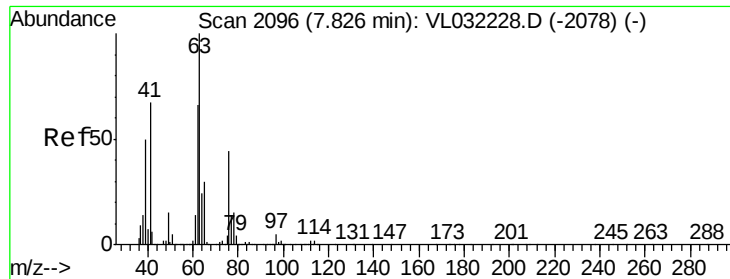
apatel  
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#38  
 Trichloroethene  
 Concen: 9.025 ppbv  
 RT: 8.05 min Scan# 2166  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 130 Resp: 1215158  
 Ion Ratio Lower Upper  
 130 100  
 95 123.4 98.3 147.5  
 132 95.7 78.1 117.1  
 97 80.1 62.6 94.0





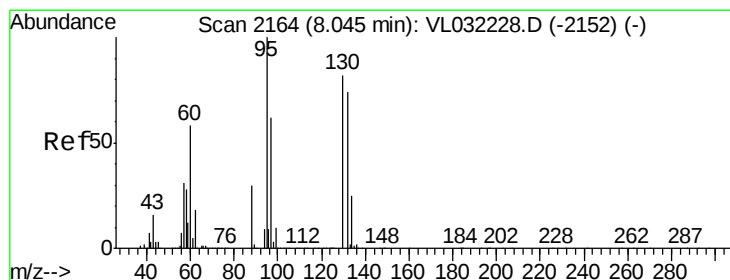
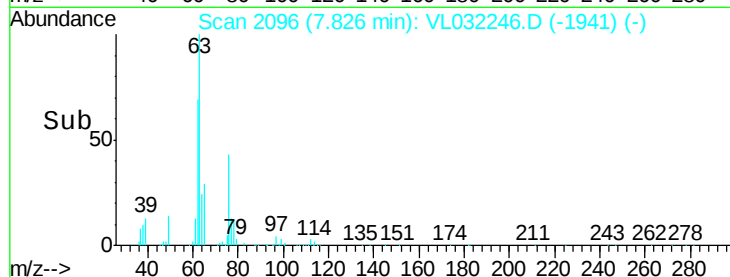
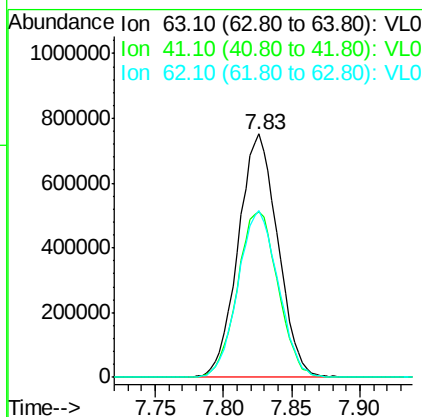
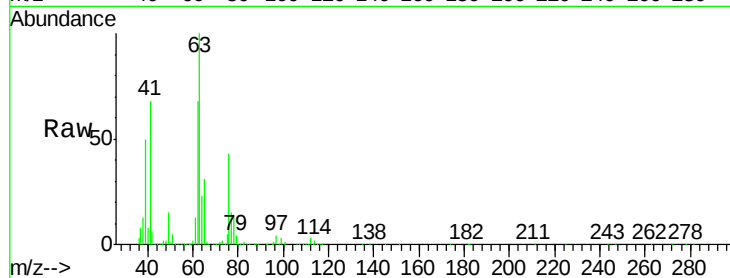
#39  
 1,2-Dichloropropane  
 Concen: 9.688 ppbv  
 RT: 7.83 min Scan# 2096  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 68.3  | 53.8  | 80.6  |
| 62      | 68.5  | 53.1  | 79.7  |

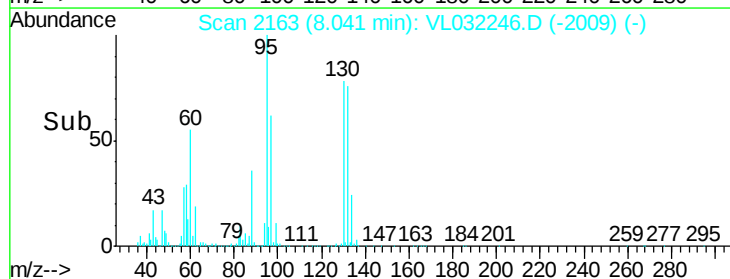
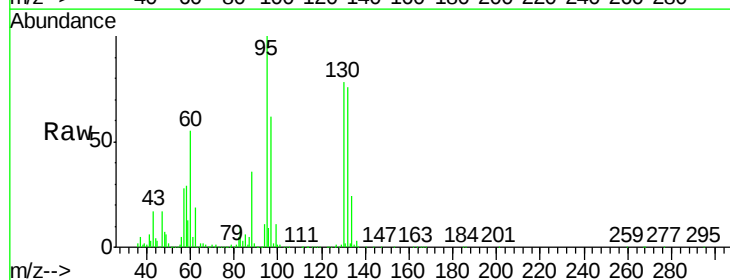
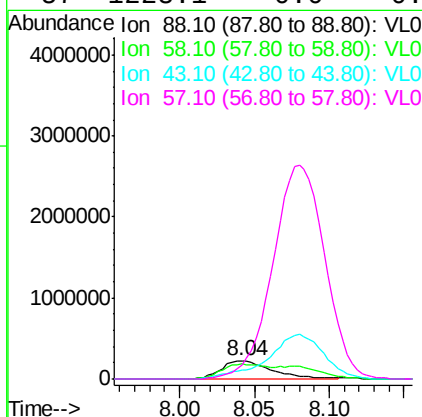
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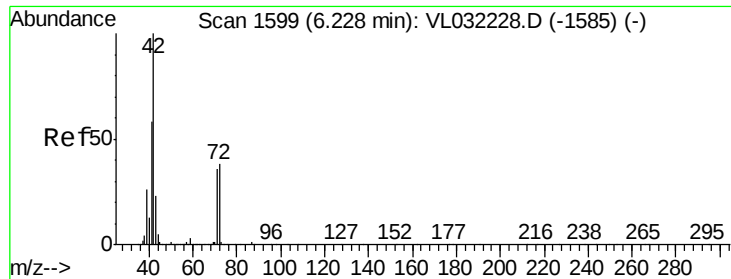
apatel  
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#40  
 1,4-Dioxane  
 Concen: 9.728 ppbv  
 RT: 8.04 min Scan# 2163  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

| Tgt Ion | Ratio  | Lower | Upper |
|---------|--------|-------|-------|
| 88      | 100    |       |       |
| 58      | 139.5  | 117.4 | 176.2 |
| 43      | 272.8  | 0.0   | 0.0#  |
| 57      | 1228.1 | 0.0   | 0.0#  |





#41

Tetrahydrofuran

Concen: 10.073 ppbv

RT: 6.23 min Scan# 1599

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 42 Resp: 1517026

Ion Ratio Lower Upper

42 100

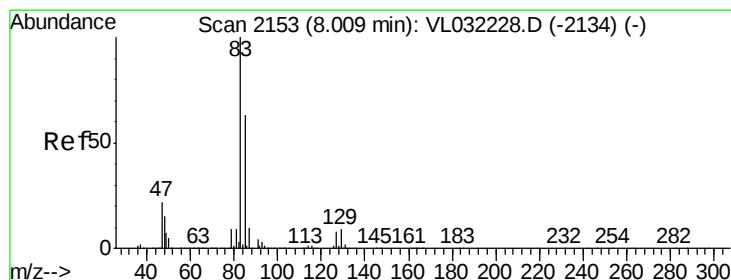
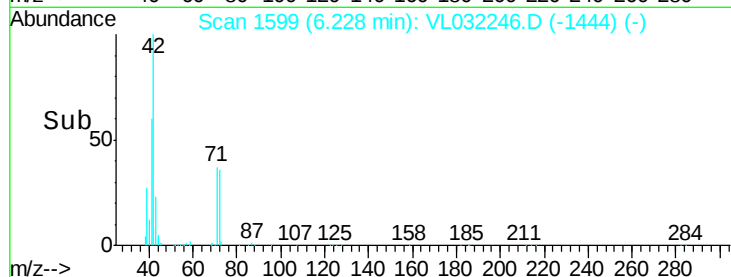
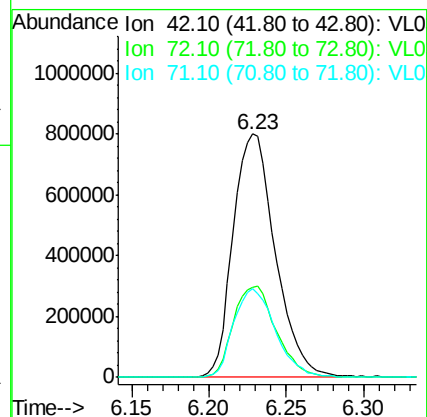
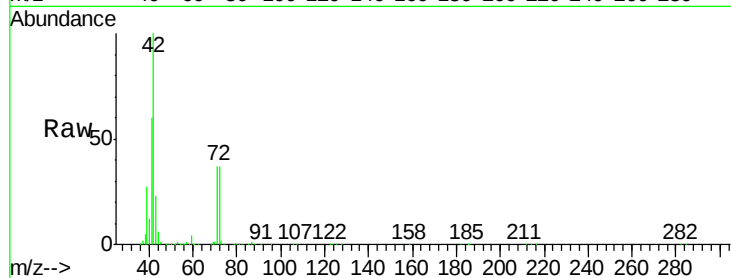
72 38.1 30.6 45.8

71 36.2 29.7 44.5

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#42

Bromodichloromethane

Concen: 9.580 ppbv

RT: 8.01 min Scan# 2152

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

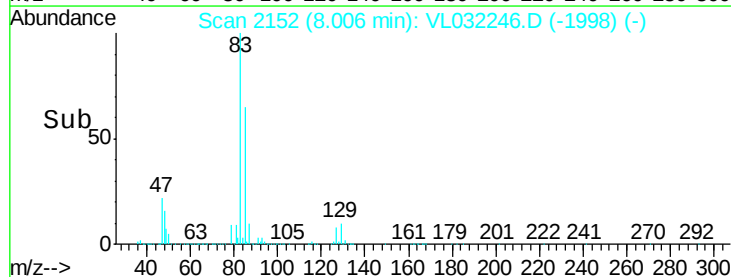
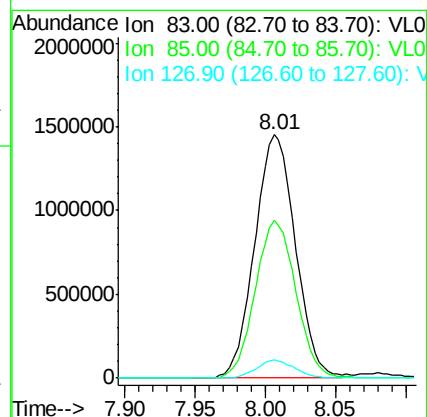
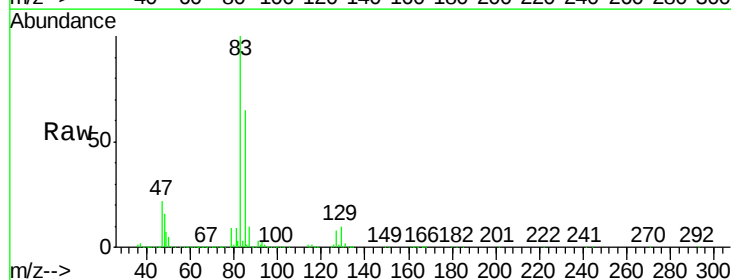
Tgt Ion: 83 Resp: 2931648

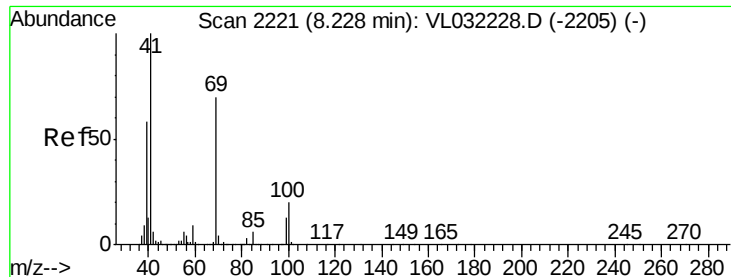
Ion Ratio Lower Upper

83 100

85 64.8 50.6 76.0

127 7.7 6.1 9.1





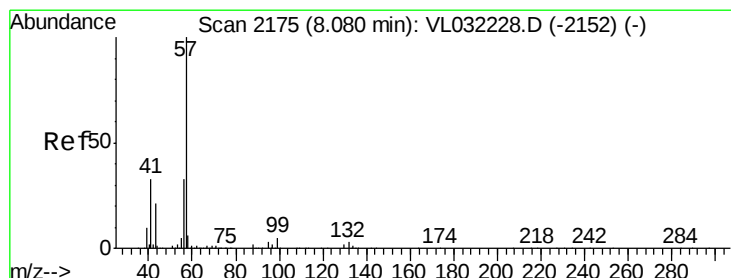
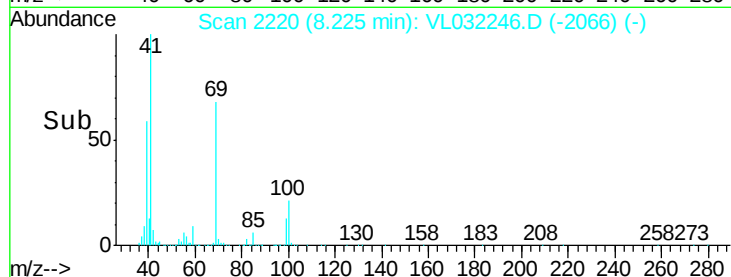
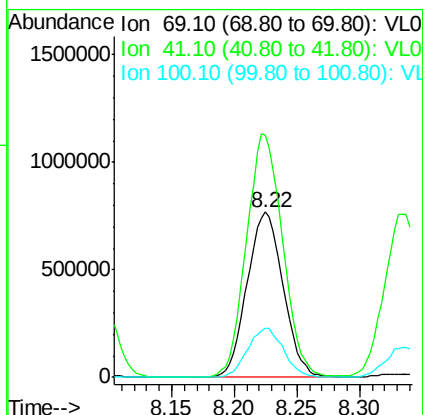
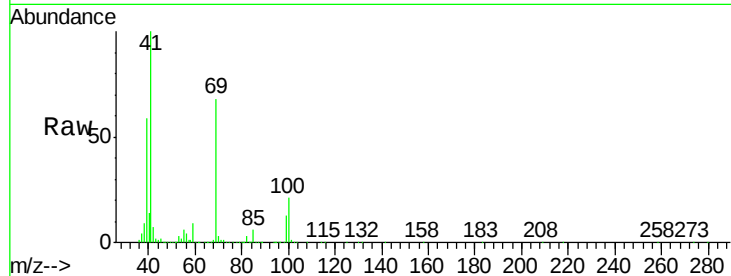
#43  
Methyl Methacrylate  
Concen: 10.159 ppbv  
RT: 8.22 min Scan# 2220  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 69 Resp: 1540985  
Ion Ratio Lower Upper  
69 100  
41 147.6 116.3 174.5  
100 29.7 23.8 35.8

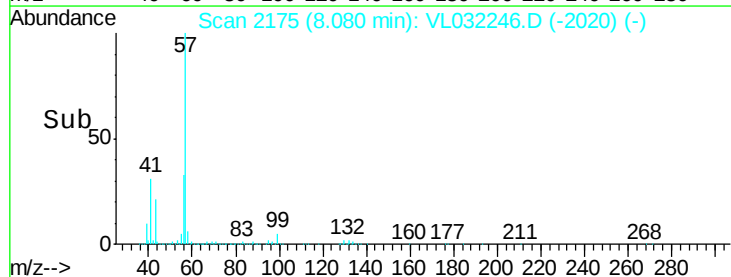
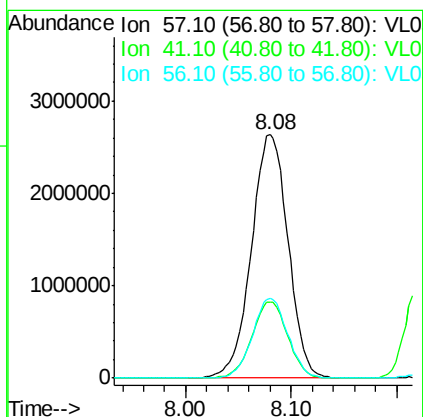
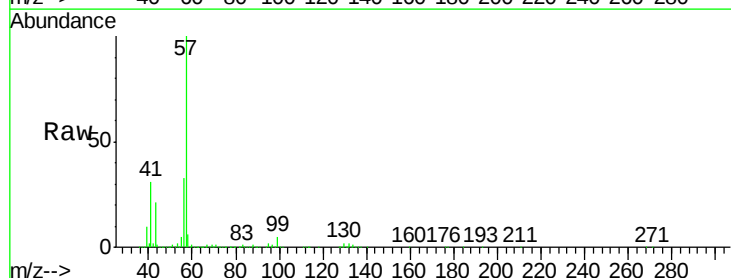
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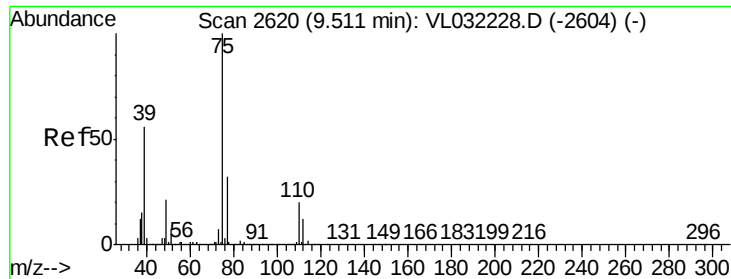
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#44  
2,2,4-Trimethylpentane  
Concen: 9.451 ppbv  
RT: 8.08 min Scan# 2175  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Tgt Ion: 57 Resp: 6380467  
Ion Ratio Lower Upper  
57 100  
41 30.7 24.7 37.1  
56 31.5 25.4 38.0





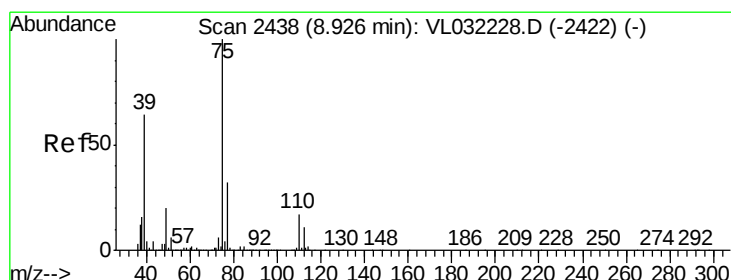
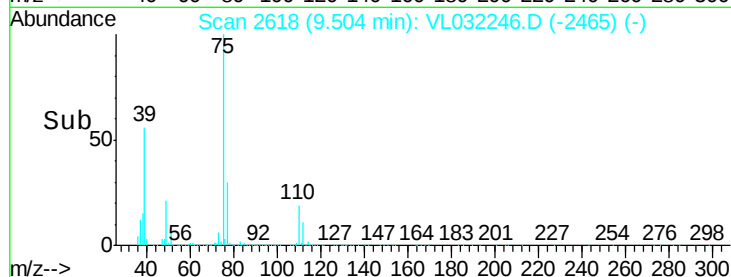
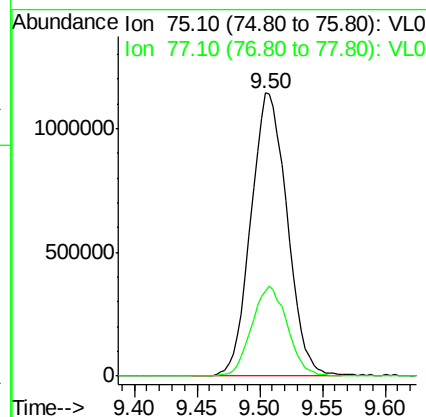
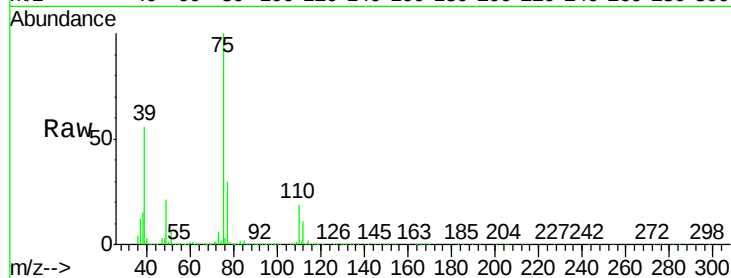
#45  
t-1,3-Dichloropropene  
Concen: 12.741 ppbv  
RT: 9.50 min Scan# 2618  
Delta R.T. -0.01 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 75 Resp: 2301701  
Ion Ratio Lower Upper  
75 100  
77 30.2 25.5 38.3

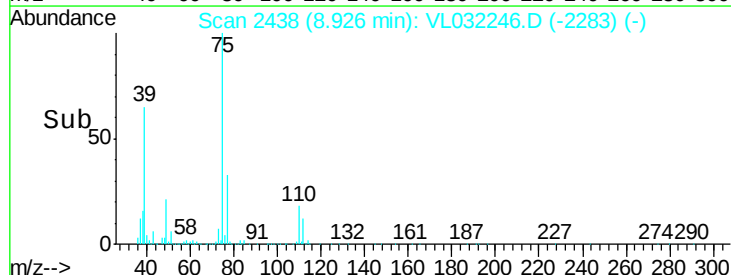
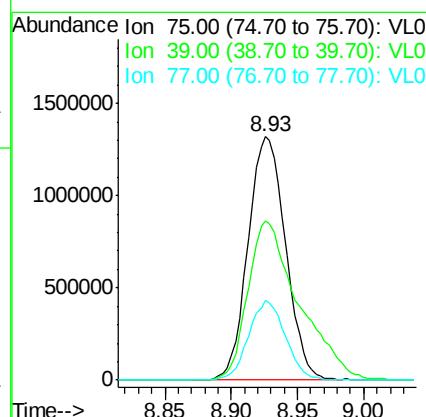
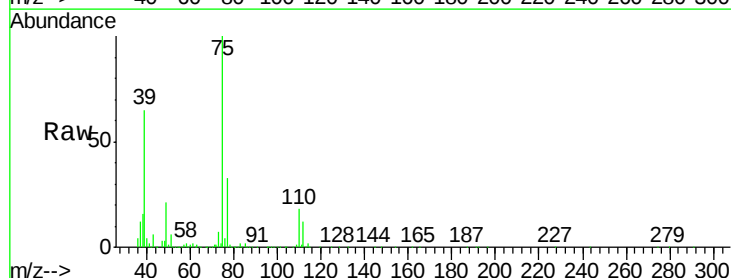
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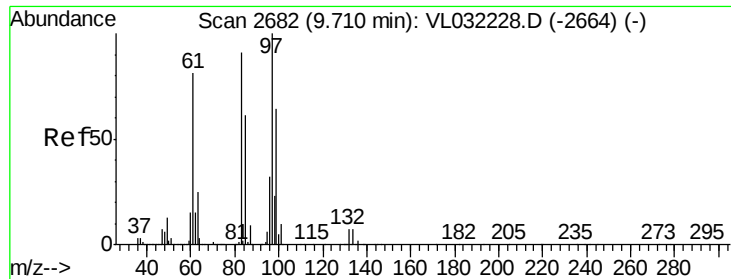
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#46  
cis-1,3-Dichloropropene  
Concen: 10.540 ppbv  
RT: 8.93 min Scan# 2438  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Tgt Ion: 75 Resp: 2597351  
Ion Ratio Lower Upper  
75 100  
39 65.4 50.9 76.3  
77 32.7 25.3 37.9





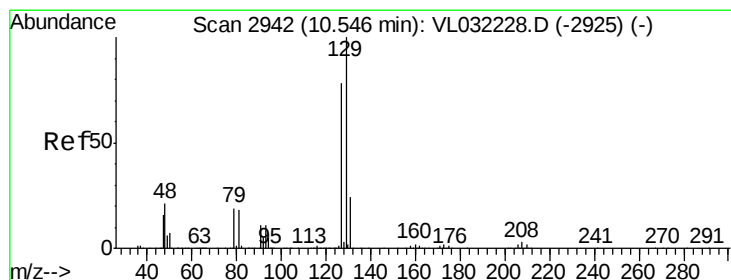
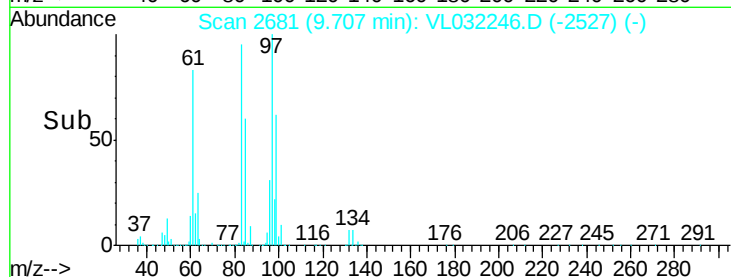
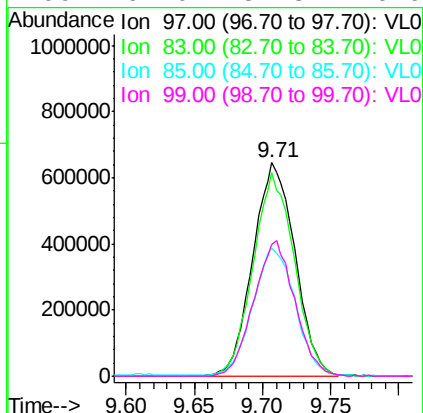
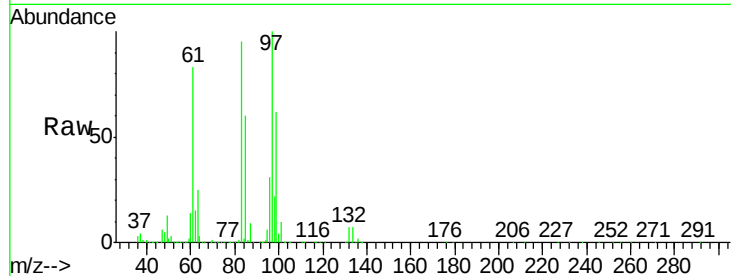
#47  
 1,1,2-Trichloroethane  
 Concen: 7.939 ppbv  
 RT: 9.71 min Scan# 2681  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 97 Resp: 1383244  
 Ion Ratio Lower Upper  
 97 100  
 83 95.4 72.9 109.3  
 85 59.2 49.3 73.9  
 99 62.0 51.3 76.9

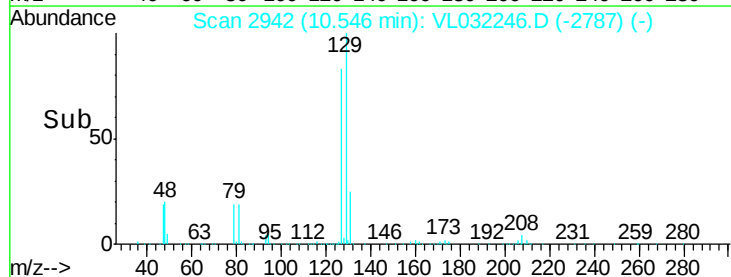
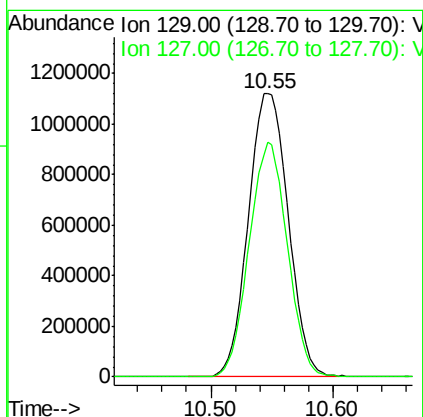
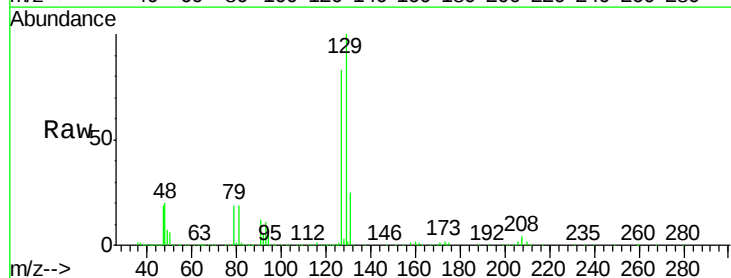
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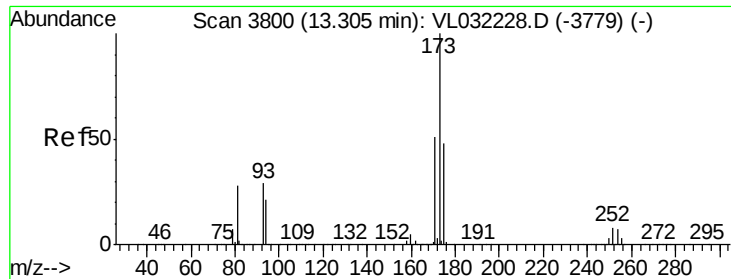
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#48  
 Dibromochloromethane  
 Concen: 9.780 ppbv  
 RT: 10.55 min Scan# 2942  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 129 Resp: 2535121  
 Ion Ratio Lower Upper  
 129 100  
 127 79.3 39.3 117.9





#49

Bromoform

Concen: 9.837 ppbv

RT: 13.30 min Scan# 3799

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion:173 Resp: 2044108

Ion Ratio Lower Upper

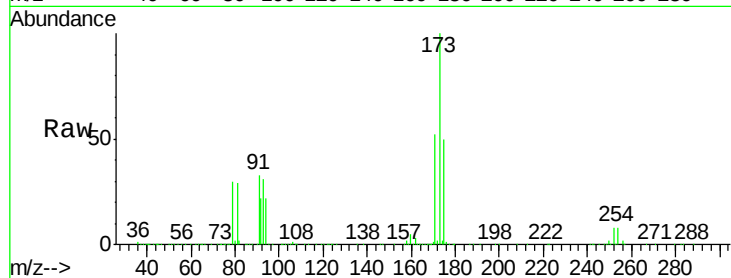
173 100

175 49.0 39.4 59.2

171 52.1 41.8 62.6

Manual Integrations  
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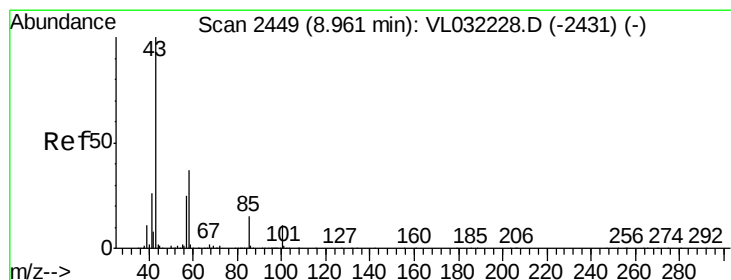
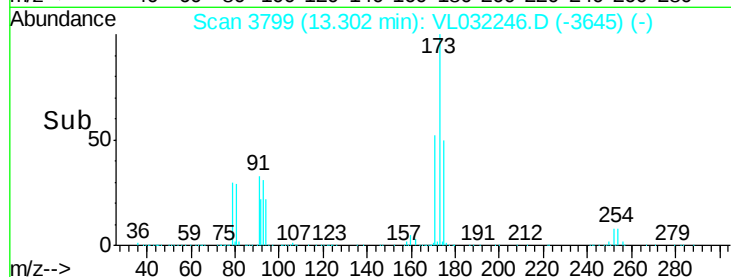
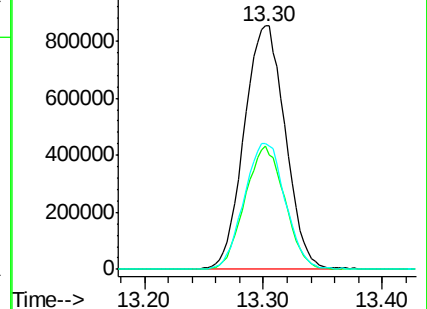
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Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 9.707 ppbv

RT: 8.96 min Scan# 2448

Delta R.T. -0.00 min

Lab File: VL032246.D

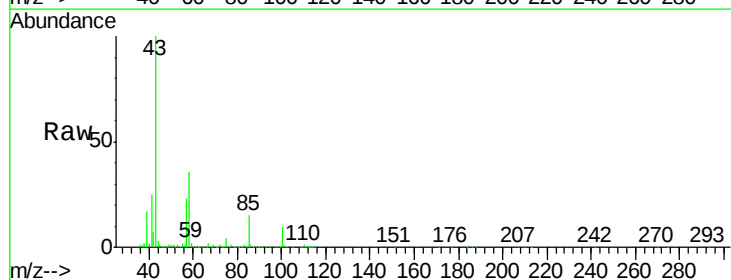
Acq: 13 Jul 2018 13:34

Tgt Ion: 43 Resp: 4519345

Ion Ratio Lower Upper

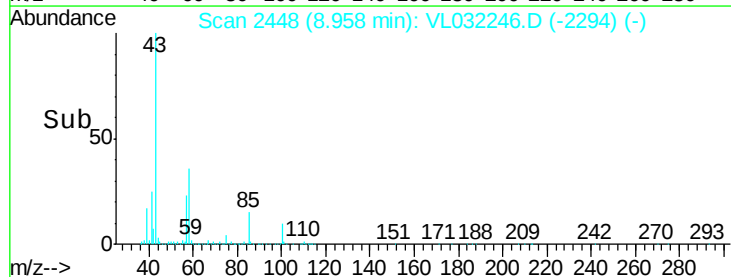
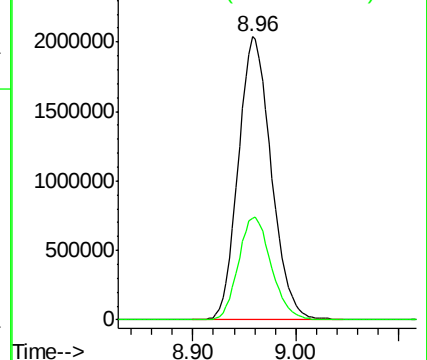
43 100

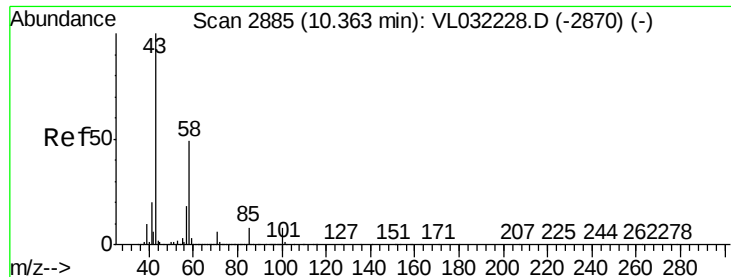
58 36.4 29.5 44.3



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





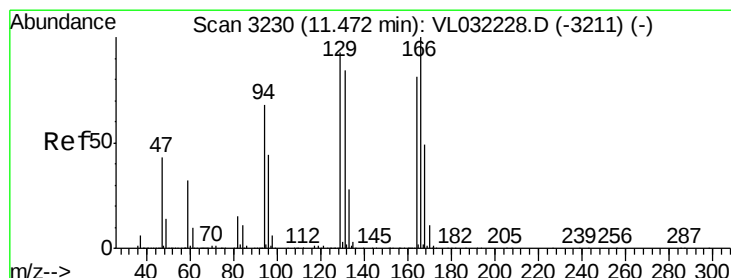
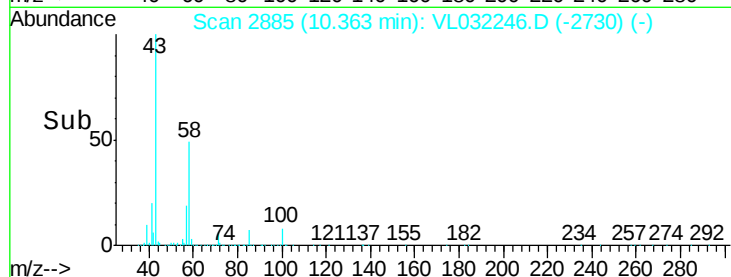
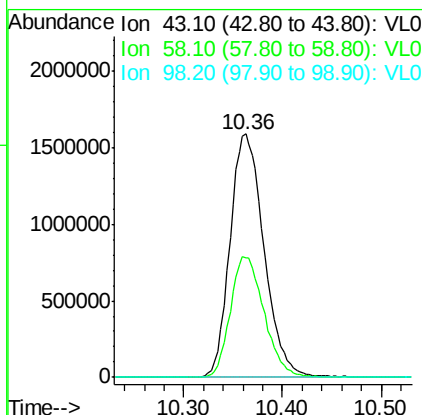
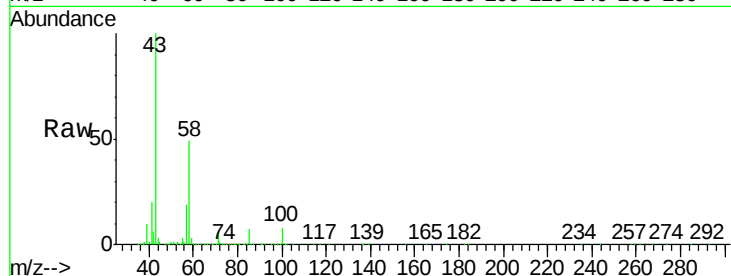
#51  
 2-Hexanone  
 Concen: 9.791 ppbv  
 RT: 10.36 min Scan# 2885  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 43 Resp: 3807096  
 Ion Ratio Lower Upper  
 43 100  
 58 49.6 39.9 59.9  
 98 0.2 0.2 0.4

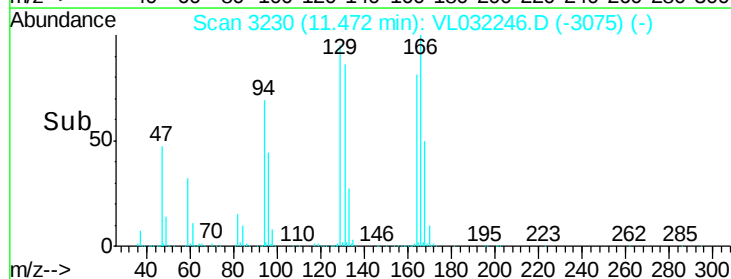
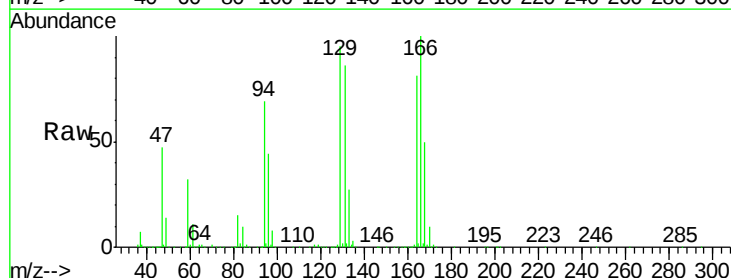
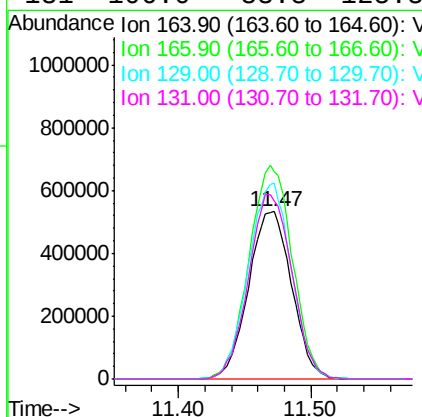
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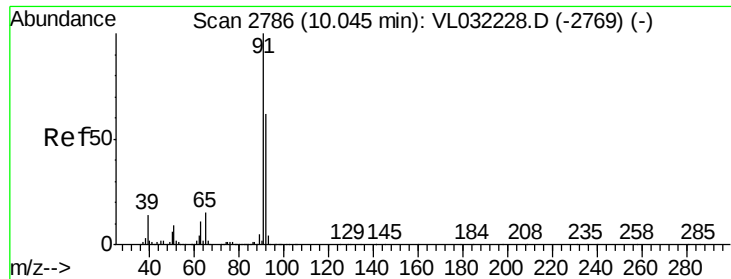
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#52  
 Tetrachloroethene  
 Concen: 8.298 ppbv  
 RT: 11.47 min Scan# 3230  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 164 Resp: 1203619  
 Ion Ratio Lower Upper  
 164 100  
 166 123.6 99.3 148.9  
 129 117.0 92.0 138.0  
 131 106.0 83.8 125.8





#53

Toluene

Concen: 8.853 ppbv

RT: 10.04 min Scan# 2784

Delta R.T. -0.01 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 91 Resp: 4108538

Ion Ratio Lower Upper

91 100

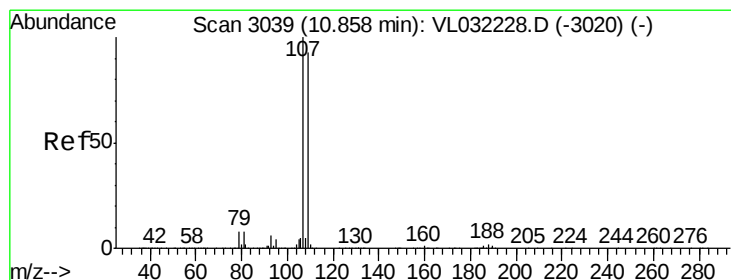
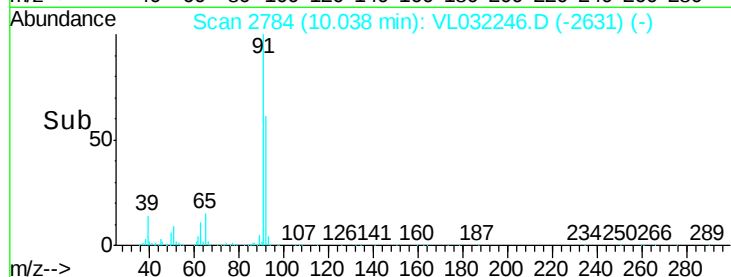
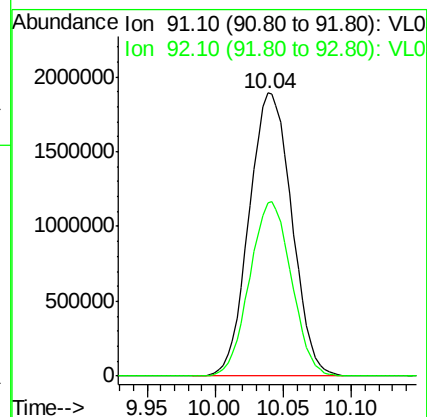
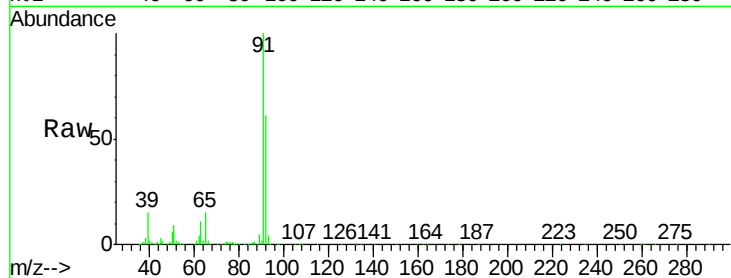
92 60.4 49.0 73.4

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#54

1,2-Dibromoethane

Concen: 9.118 ppbv

RT: 10.85 min Scan# 3038

Delta R.T. -0.00 min

Lab File: VL032246.D

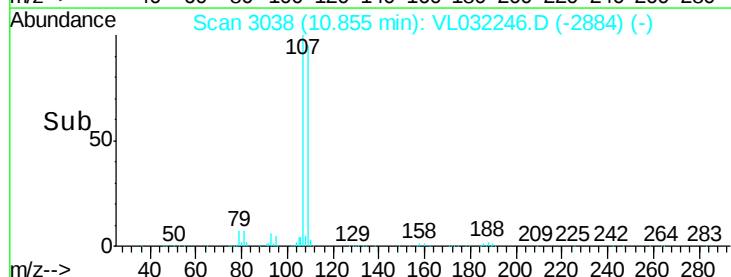
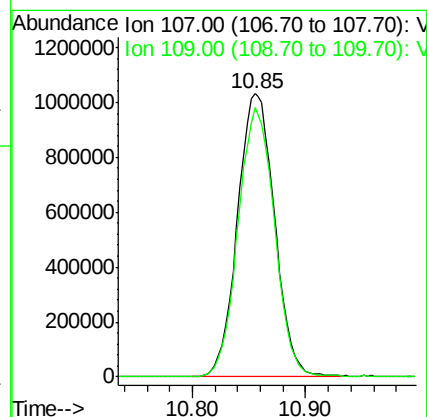
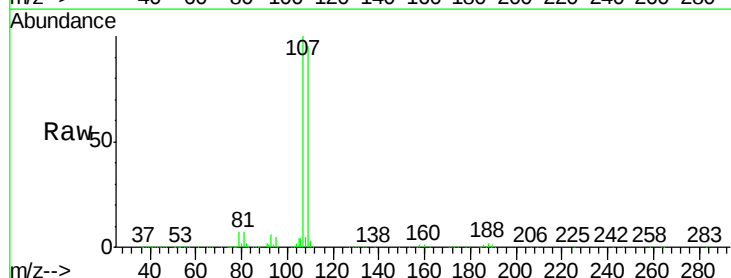
Acq: 13 Jul 2018 13:34

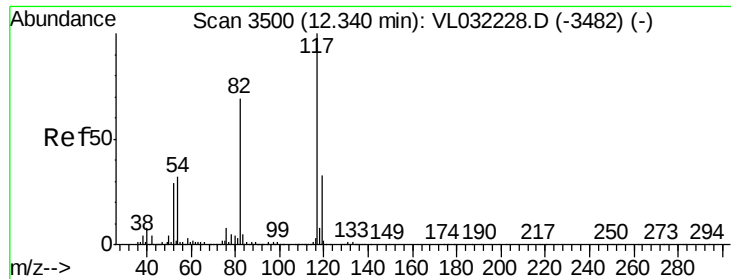
Tgt Ion: 107 Resp: 2345517

Ion Ratio Lower Upper

107 100

109 95.0 74.3 111.5





#55

Chlorobenzene-d5

Concen: 10.000 ppbv m

RT: 12.34 min Scan# 3499

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion:117 Resp: 4788310

Ion Ratio Lower Upper

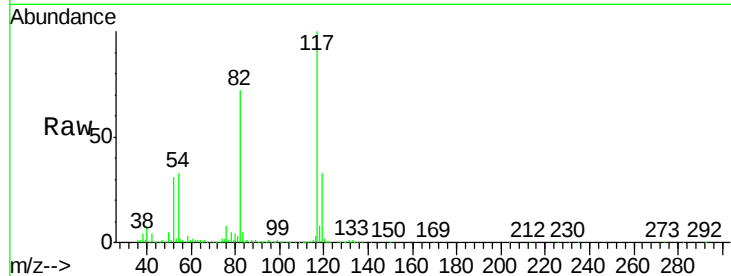
117 100

82 64.1 53.2 79.8

119 52.5 43.9 65.9

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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V

2500000

2000000

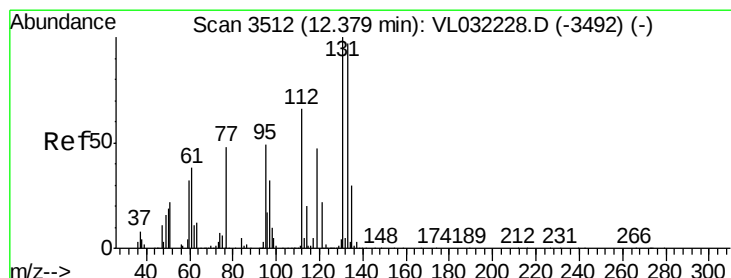
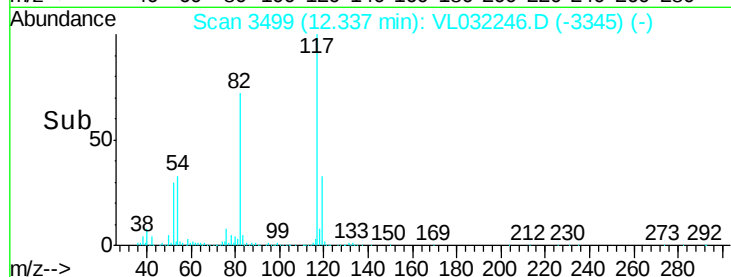
1500000

1000000

500000

0

Time--> 12.25 12.30 12.35 12.40



#56

1,1,1,2-Tetrachloroethane

Concen: 8.485 ppbv

RT: 12.38 min Scan# 3511

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

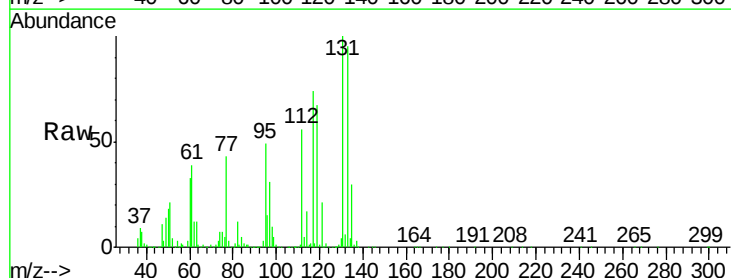
Tgt Ion:131 Resp: 1764882

Ion Ratio Lower Upper

131 100

133 94.4 75.2 112.8

119 142.6 113.9 170.9



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

1000000

800000

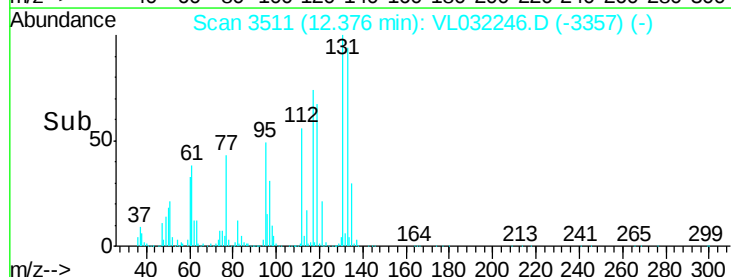
600000

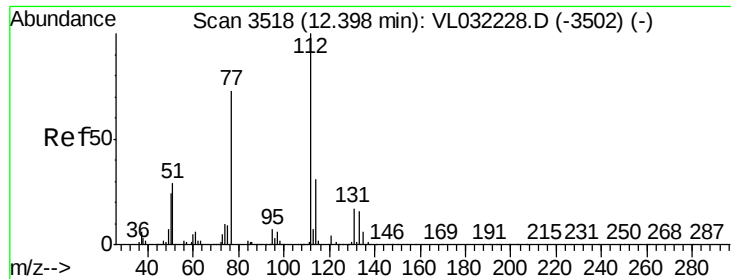
400000

200000

0

Time--> 12.30 12.40





#57

Chlorobenzene

Concen: 8.099 ppbv

RT: 12.40 min Scan# 3519

Delta R.T. 0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

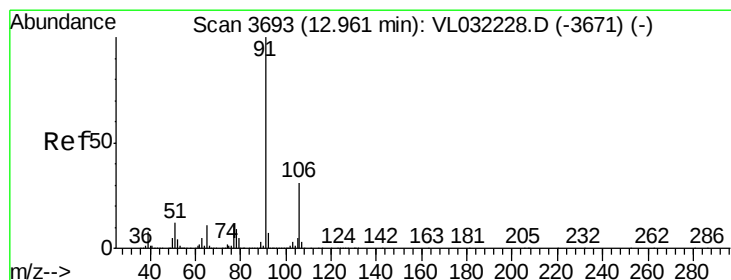
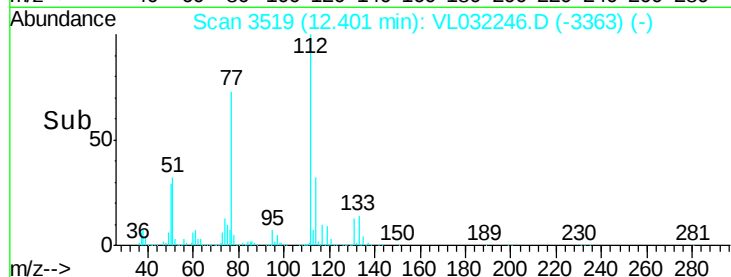
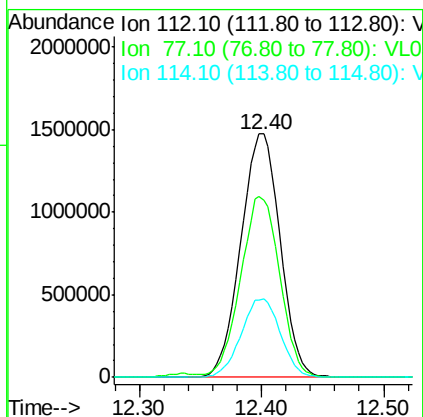
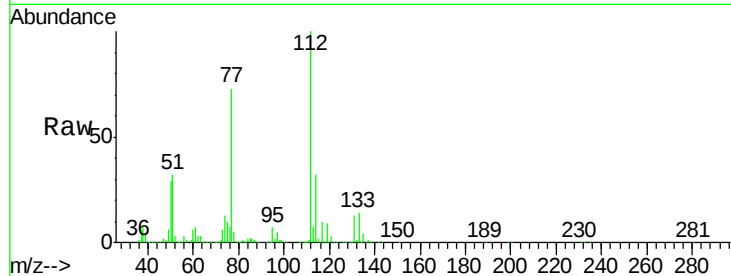
ClientSampleId :

VSTDCCC010

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 72.5  | 58.8  | 88.2  |
| 114     | 32.2  | 27.9  | 34.1  |

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#58

Ethyl Benzene

Concen: 8.926 ppbv

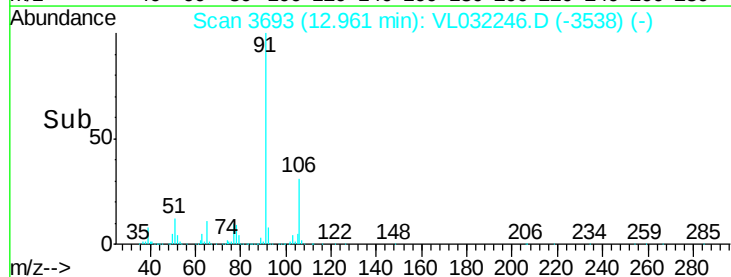
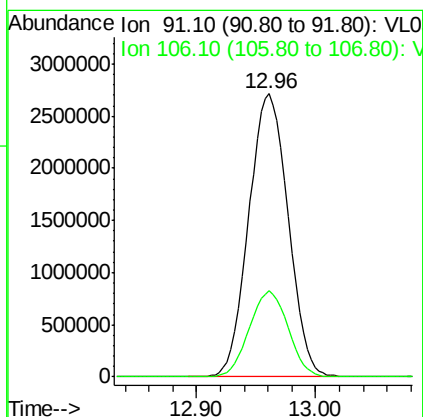
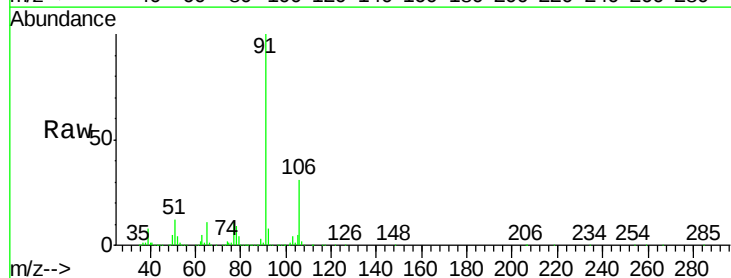
RT: 12.96 min Scan# 3693

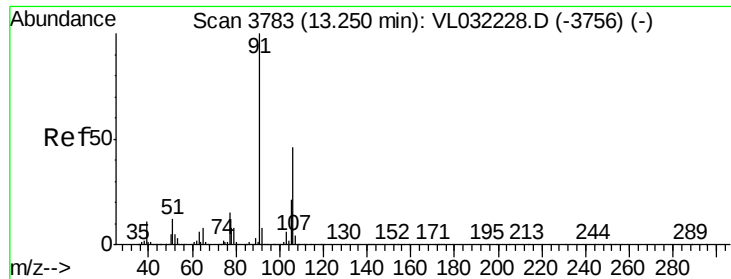
Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 30.6  | 24.5  | 36.7  |





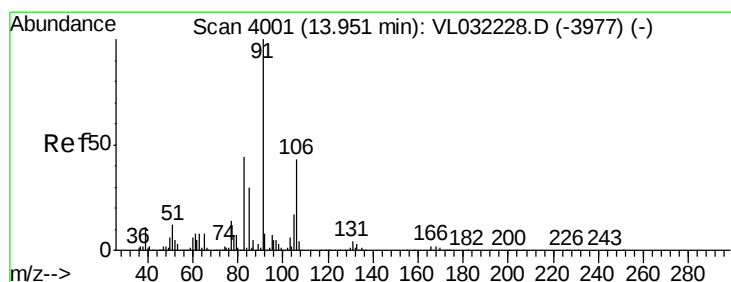
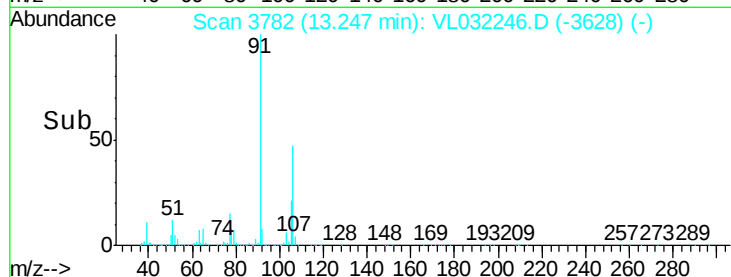
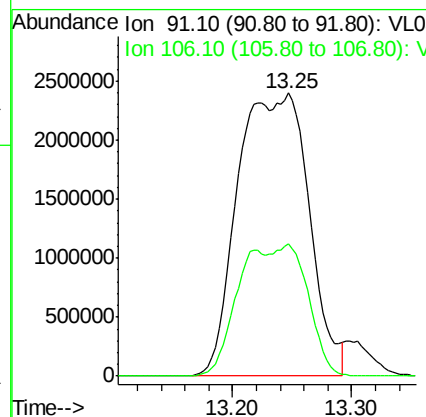
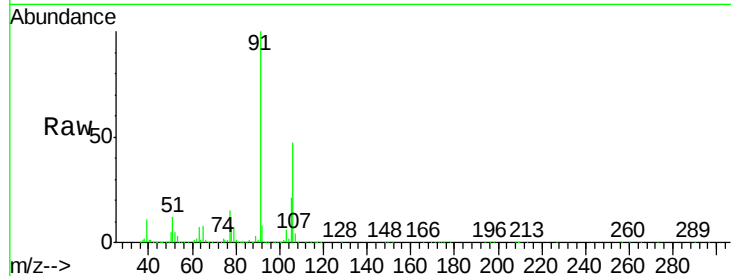
#59  
m/p-Xylene  
Concen: 17.224 ppbv m  
RT: 13.25 min Scan# 3782  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 91 Resp: 9881438  
Ion Ratio Lower Upper  
91 100  
106 45.0 36.4 54.6

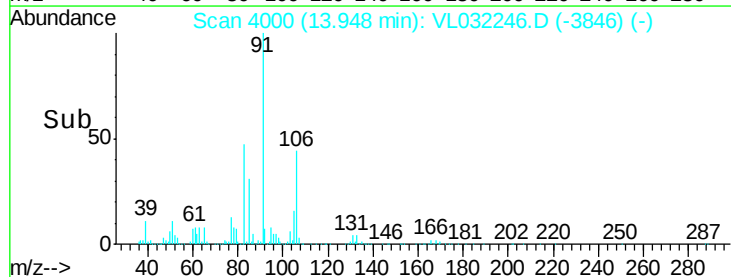
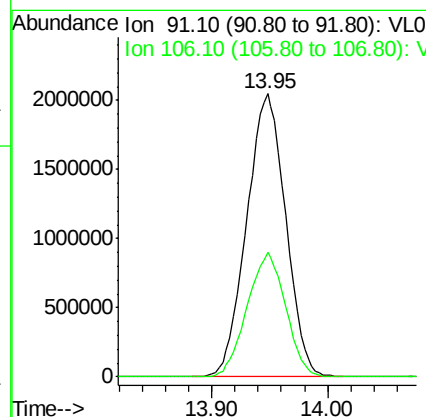
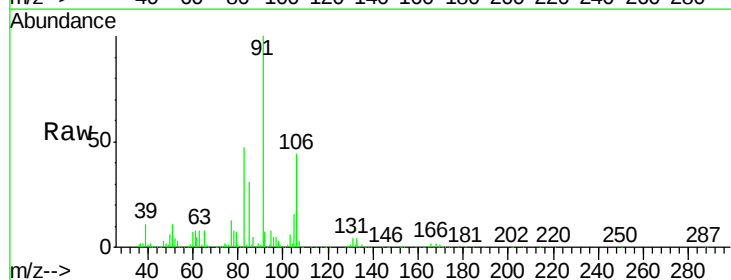
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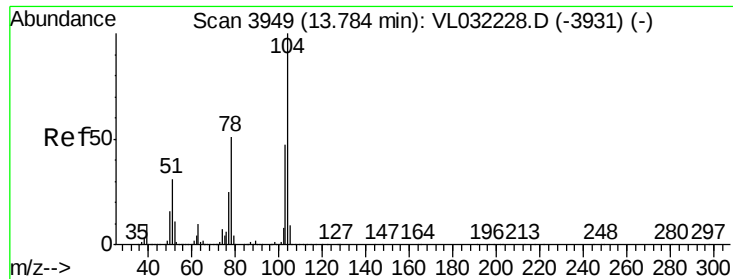
apatel  
7/16/2018 8:07:53 AM



#60  
o-Xylene  
Concen: 8.450 ppbv  
RT: 13.95 min Scan# 4000  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Tgt Ion: 91 Resp: 4783477  
Ion Ratio Lower Upper  
91 100  
106 43.5 21.9 65.5





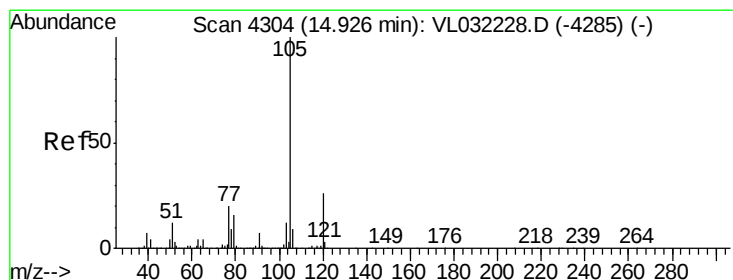
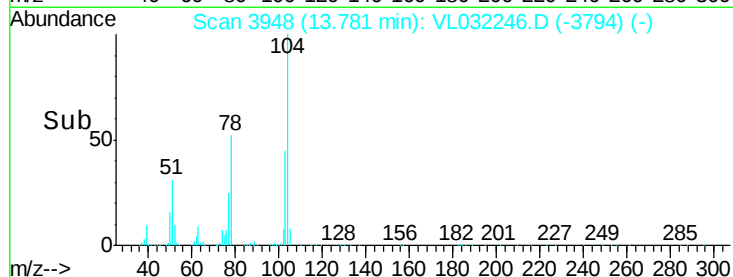
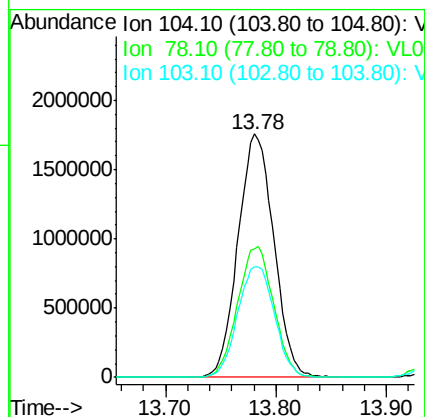
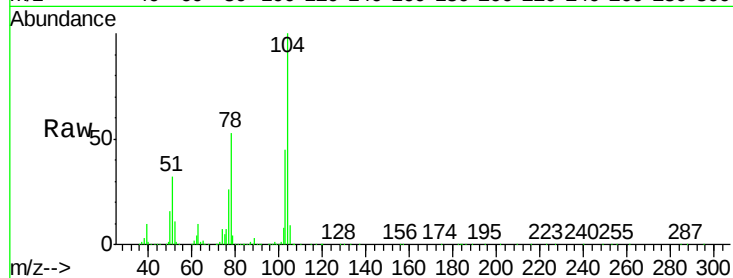
#61  
Styrene  
Concen: 9.324 ppbv  
RT: 13.78 min Scan# 3948  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion:104 Resp: 3955243  
Ion Ratio Lower Upper  
104 100  
78 54.0 43.4 65.0  
103 46.9 38.0 57.0

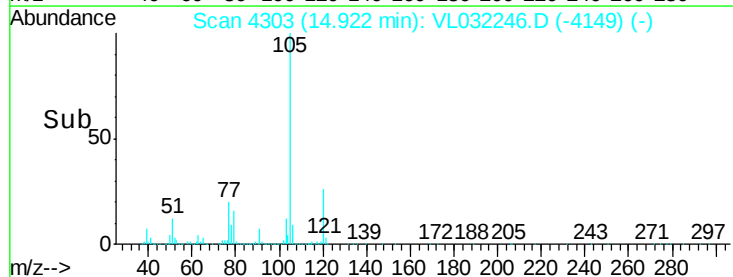
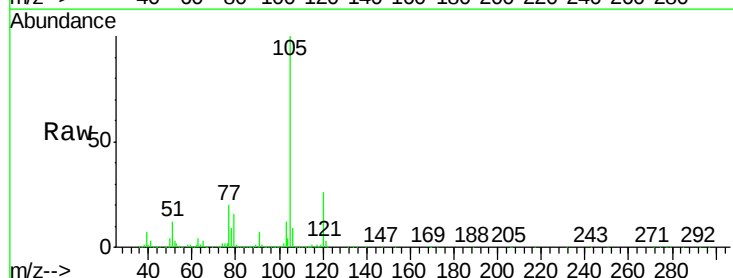
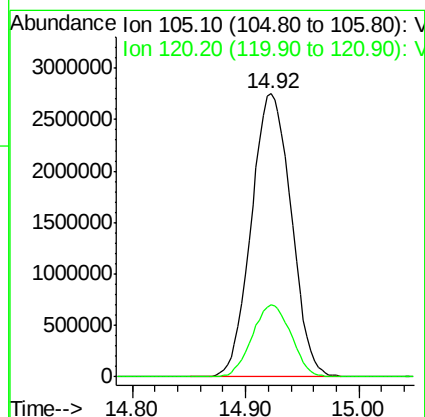
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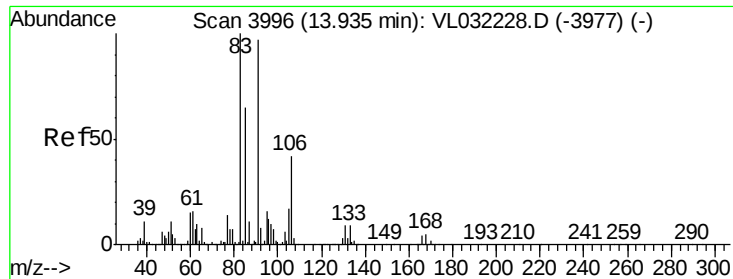
apatel  
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#62  
Isopropylbenzene  
Concen: 8.477 ppbv  
RT: 14.92 min Scan# 4303  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Tgt Ion:105 Resp: 6728789  
Ion Ratio Lower Upper  
105 100  
120 25.1 20.2 30.2





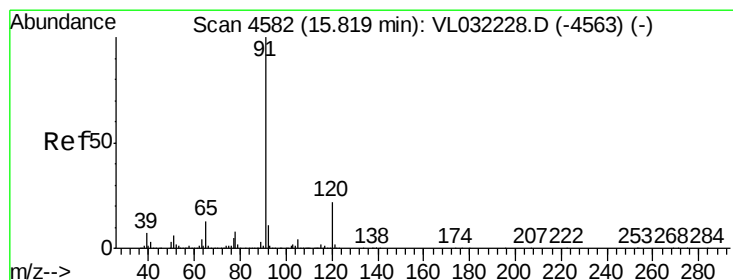
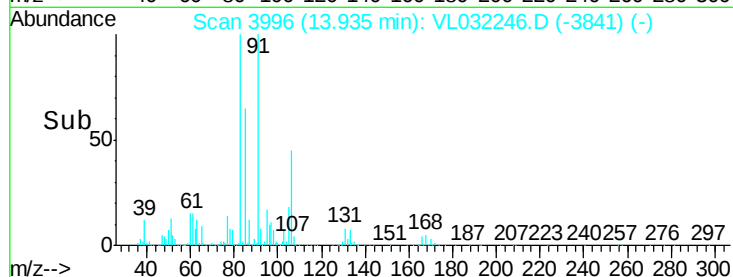
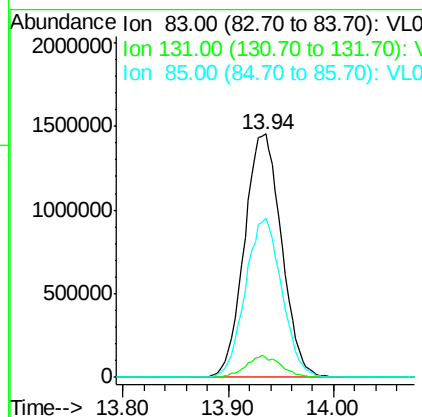
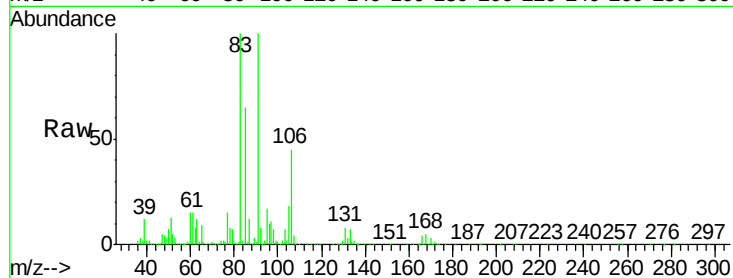
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 7.740 ppbv  
 RT: 13.94 min Scan# 3996  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 83 Resp: 3564309  
 Ion Ratio Lower Upper  
 83 100  
 131 8.4 4.3 12.8  
 85 64.4 32.5 97.5

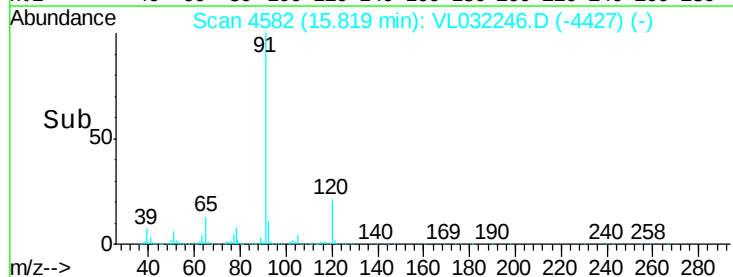
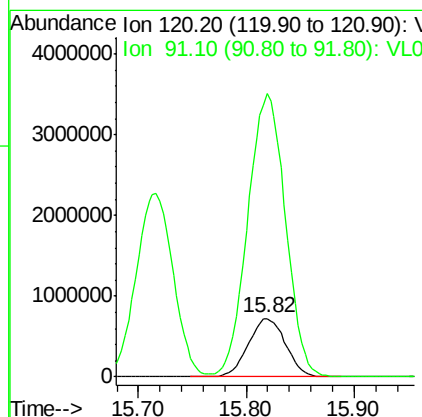
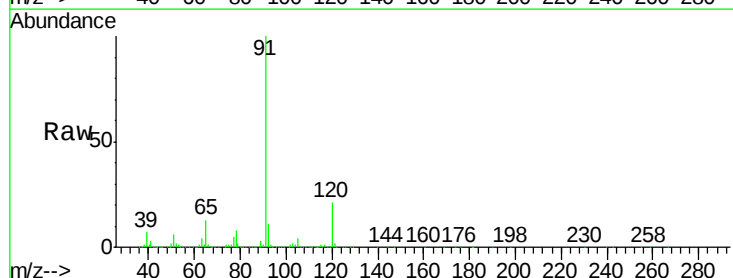
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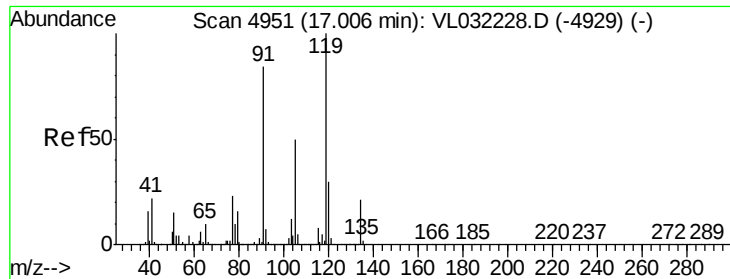
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#64  
 n-propylbenzene  
 Concen: 8.630 ppbv  
 RT: 15.82 min Scan# 4582  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 120 Resp: 1734154  
 Ion Ratio Lower Upper  
 120 100  
 91 490.7 385.0 577.4





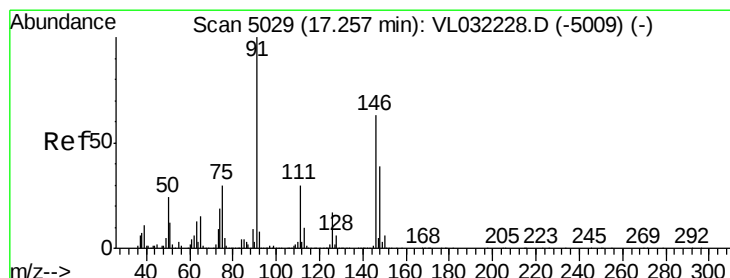
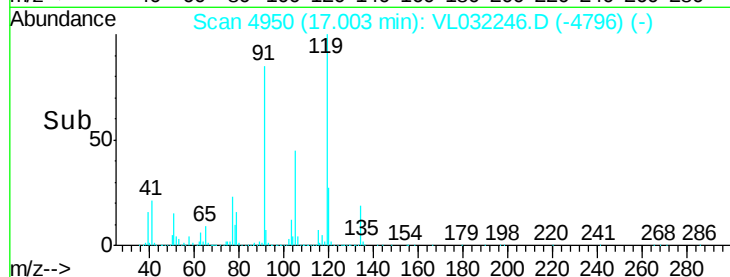
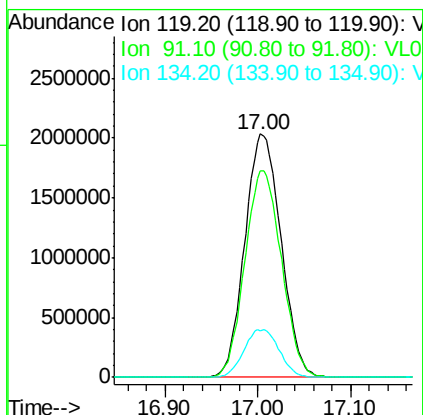
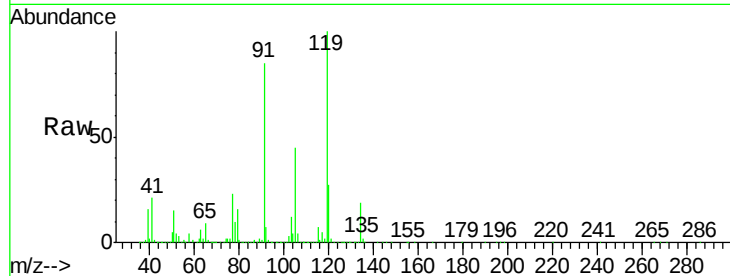
#65  
 tert-Butylbenzene  
 Concen: 8.296 ppbv  
 RT: 17.00 min Scan# 4950  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 119 Resp: 5516285  
 Ion Ratio Lower Upper  
 119 100  
 91 86.1 68.6 102.8  
 134 19.2 15.4 23.2

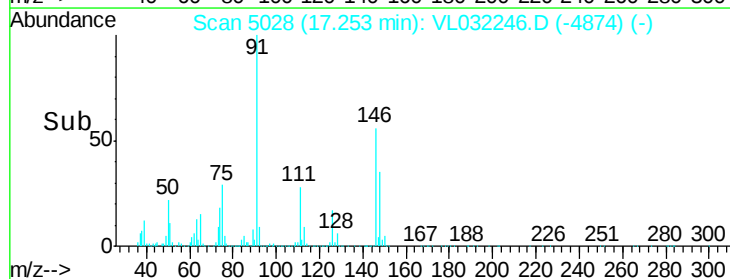
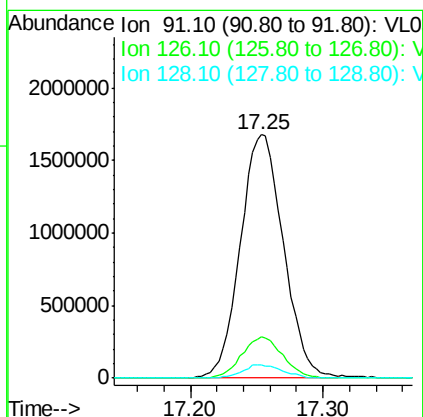
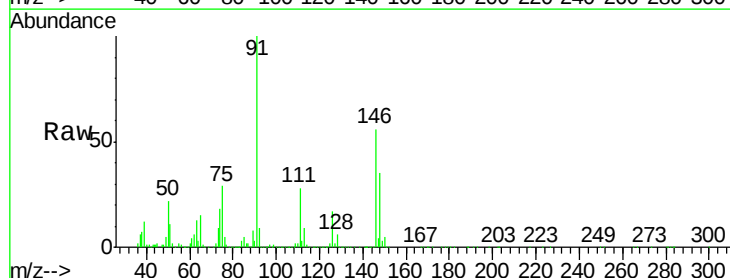
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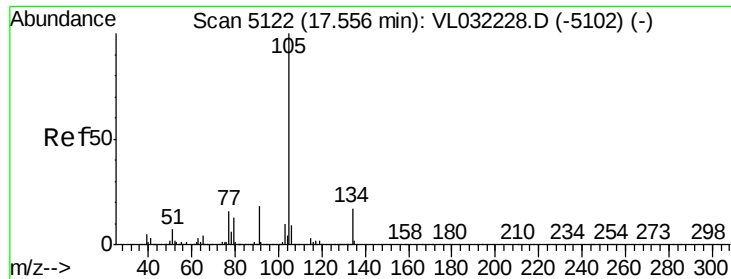
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#66  
 Benzyl Chloride  
 Concen: 11.214 ppbv  
 RT: 17.25 min Scan# 5028  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 91 Resp: 3773393  
 Ion Ratio Lower Upper  
 91 100  
 126 16.3 13.4 20.0  
 128 5.3 4.5 6.7





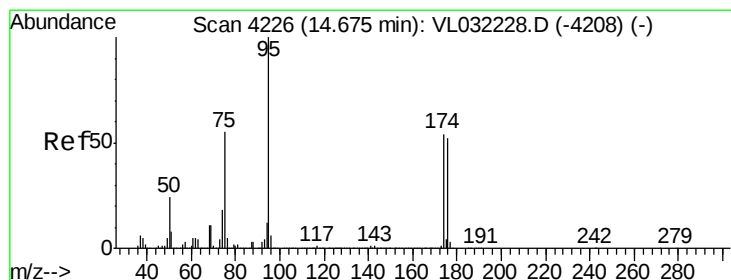
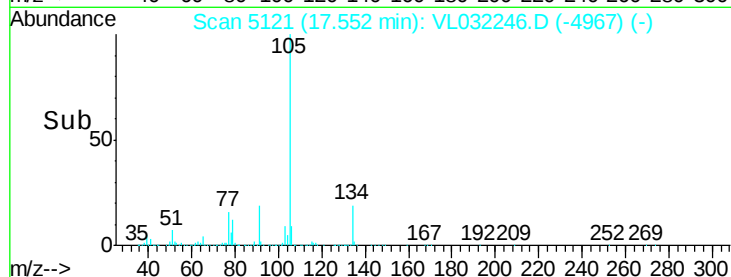
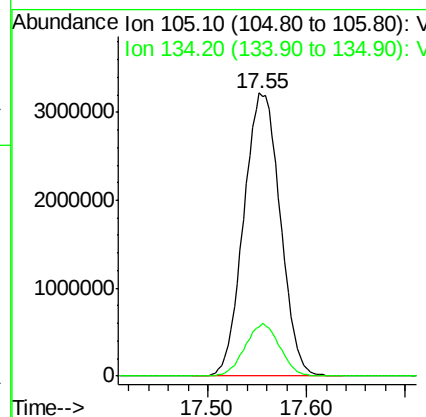
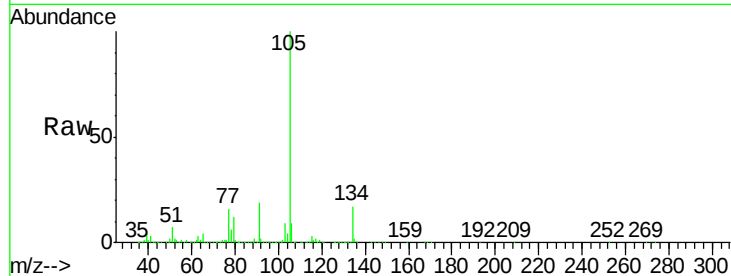
#67  
 sec-Butylbenzene  
 Concen: 8.488 ppbv  
 RT: 17.55 min Scan# 5121  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion: 105 Resp: 8246469  
 Ion Ratio Lower Upper  
 105 100  
 134 17.7 14.2 21.2

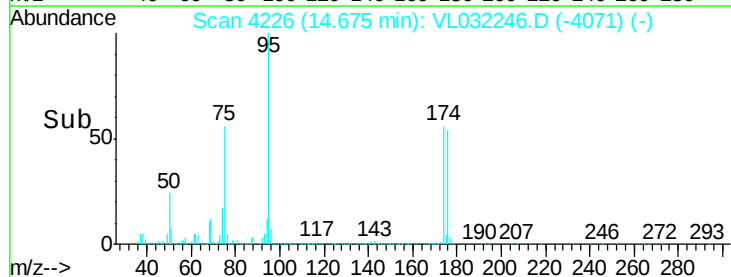
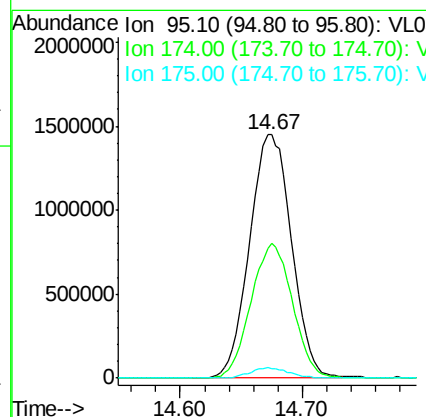
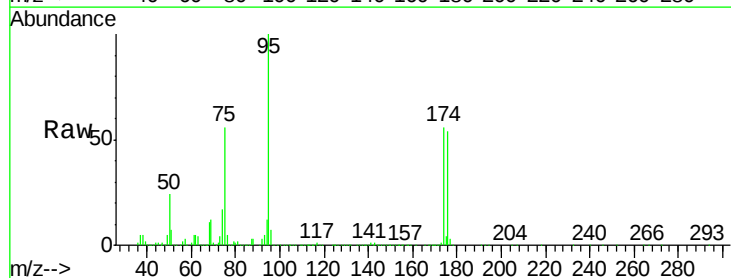
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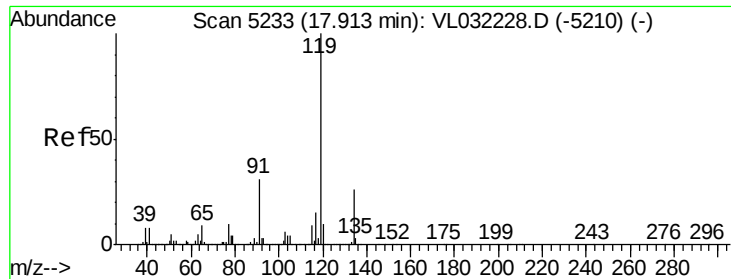
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#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 9.302 ppbv  
 RT: 14.67 min Scan# 4226  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion: 95 Resp: 3448007  
 Ion Ratio Lower Upper  
 95 100  
 174 55.1 44.6 67.0  
 175 4.0 3.3 4.9





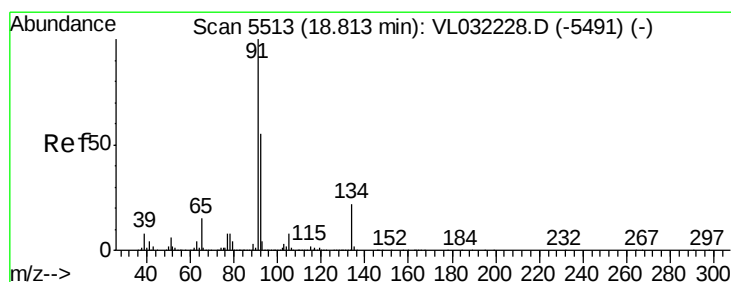
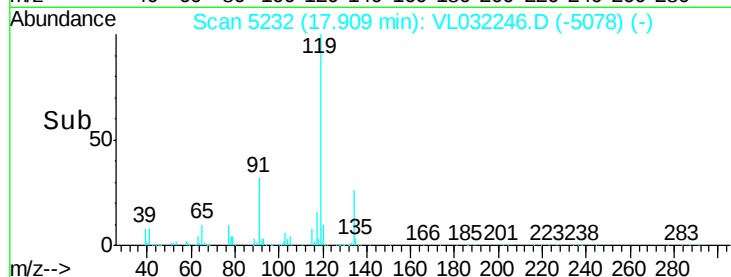
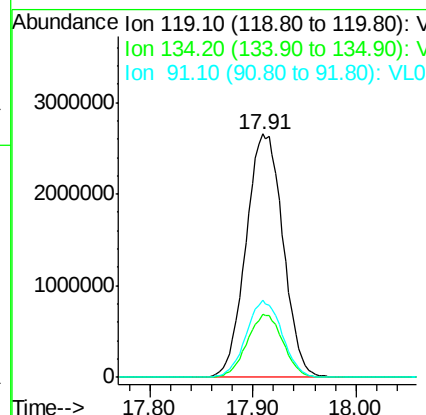
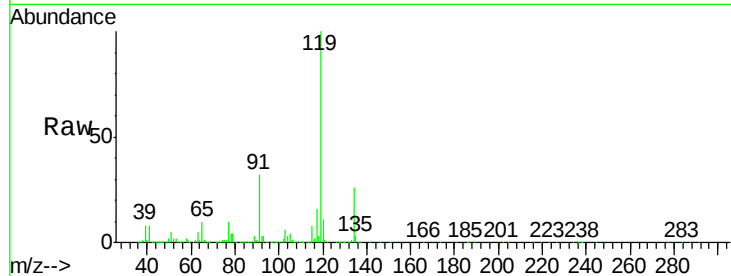
#69  
p-Isopropyltoluene  
Concen: 8.752 ppbv  
RT: 17.91 min Scan# 5232  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tgt Ion: 119 Resp: 6620641  
Ion Ratio Lower Upper  
119 100  
134 25.0 20.1 30.1  
91 30.6 24.2 36.2

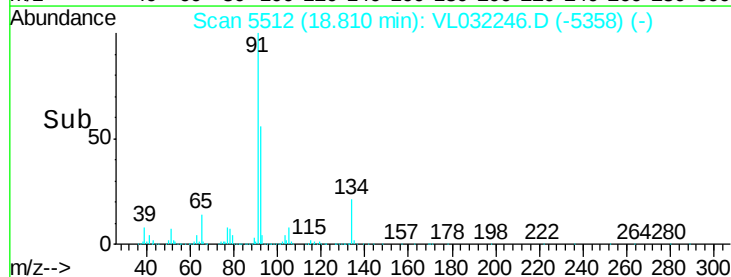
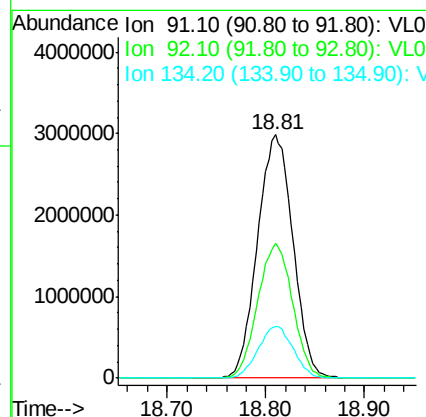
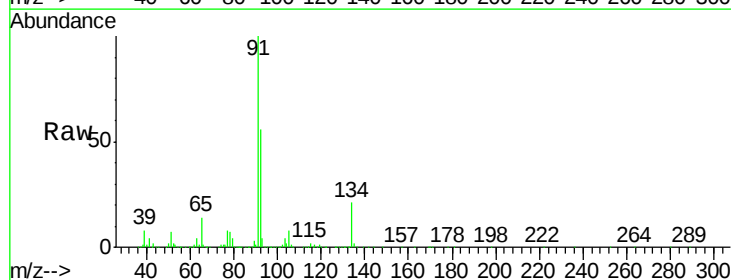
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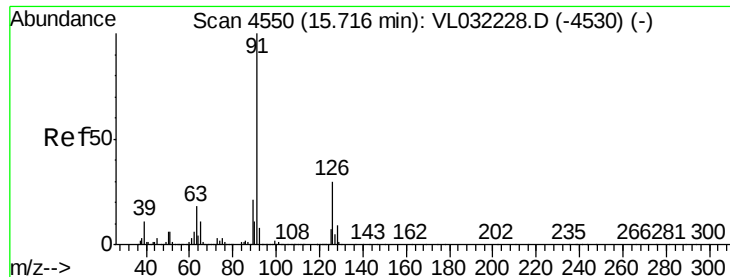
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#70  
n-Butylbenzene  
Concen: 8.862 ppbv  
RT: 18.81 min Scan# 5512  
Delta R.T. -0.00 min  
Lab File: VL032246.D  
Acq: 13 Jul 2018 13:34

Tgt Ion: 91 Resp: 7405212  
Ion Ratio Lower Upper  
91 100  
92 54.4 43.6 65.4  
134 21.0 17.1 25.7





#71

2-Chlorotoluene

Concen: 8.746 ppbv

RT: 15.72 min Scan# 4550

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 91 Resp: 5463965

Ion Ratio Lower Upper

91 100

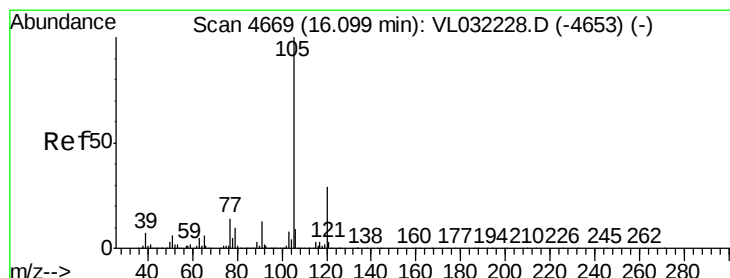
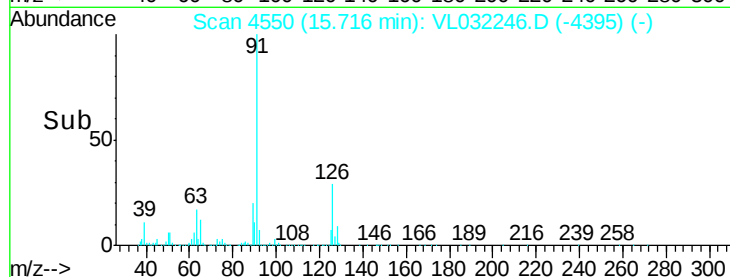
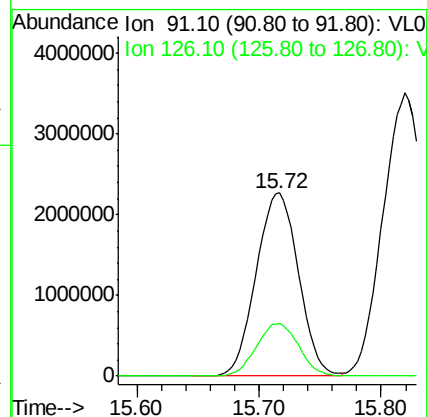
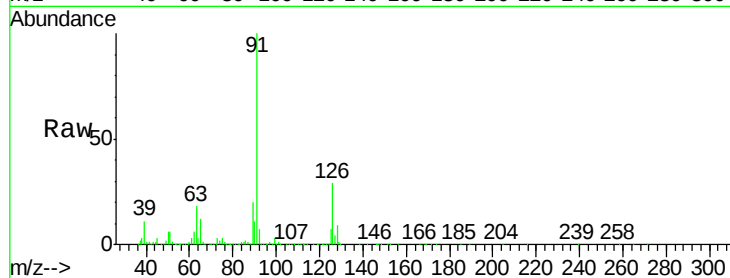
126 28.7 11.7 46.7

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#72

4-Ethyltoluene

Concen: 9.060 ppbv

RT: 16.10 min Scan# 4668

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Tgt Ion: 105 Resp: 5754753

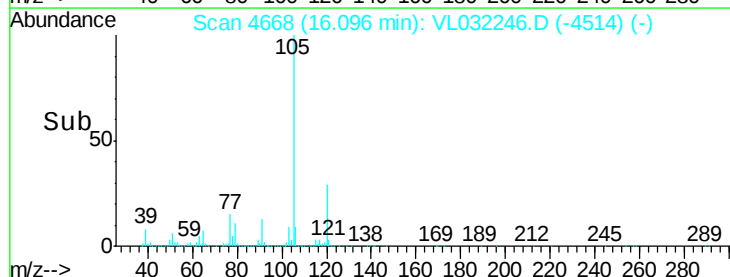
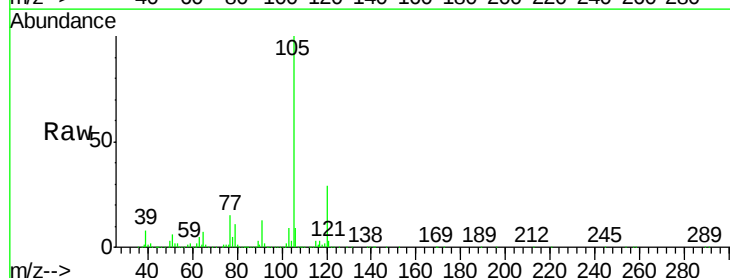
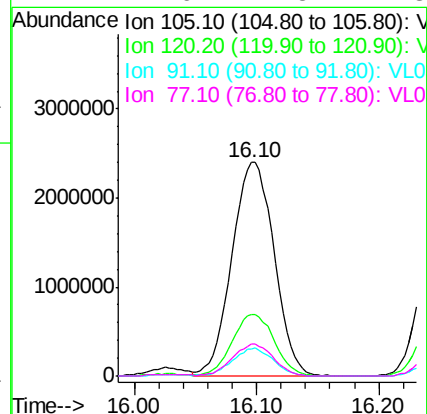
Ion Ratio Lower Upper

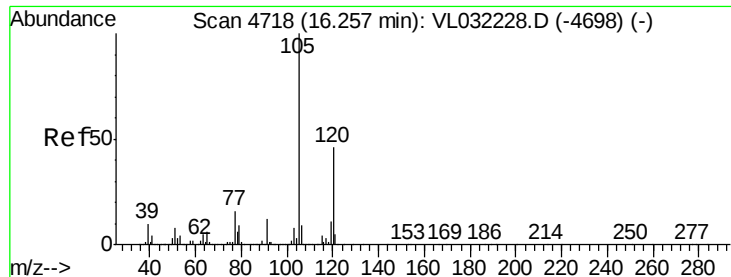
105 100

120 28.8 23.3 34.9

91 12.7 10.3 15.5

77 14.6 11.5 17.3





#73

1,3,5-Trimethylbenzene

Concen: 9.226 ppbv

RT: 16.25 min Scan# 4717

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tgt Ion:105 Resp: 5449388

Ion Ratio Lower Upper

105 100

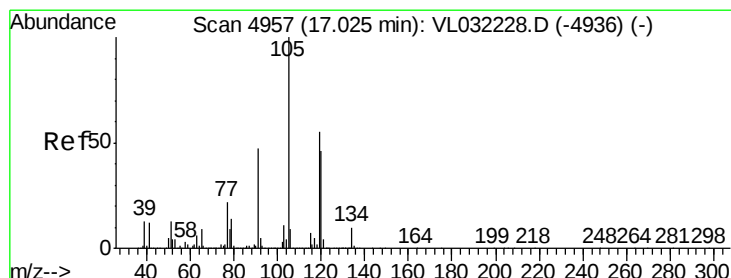
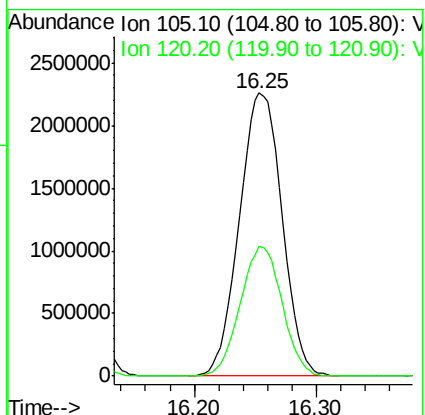
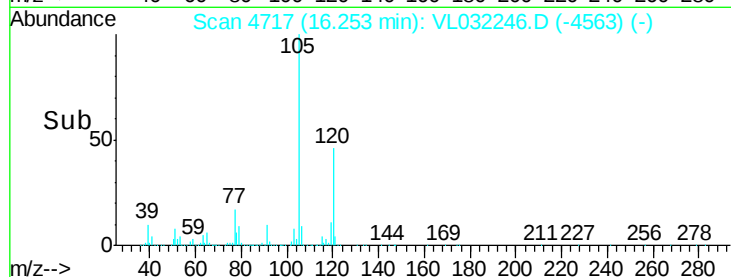
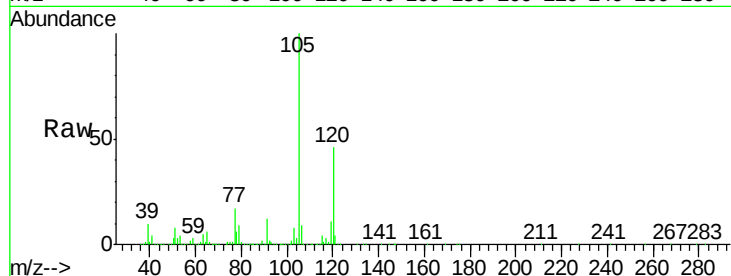
120 46.0 36.6 54.8

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#74

1,2,4-Trimethylbenzene

Concen: 8.752 ppbv

RT: 17.03 min Scan# 4957

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Tgt Ion:105 Resp: 5285714

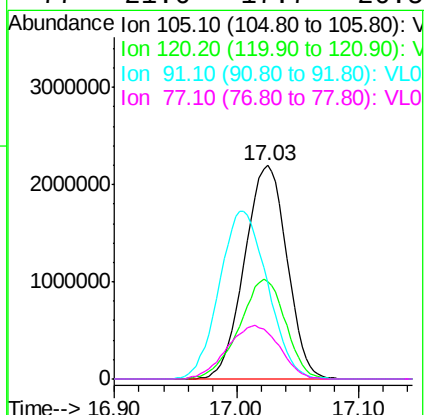
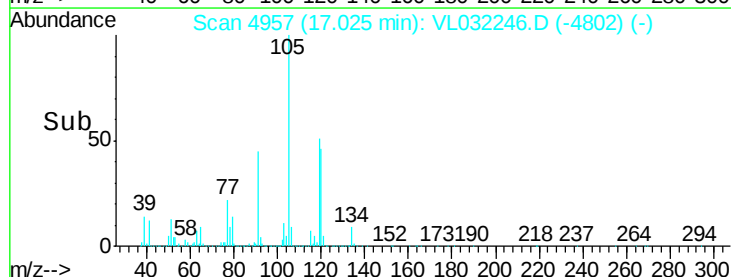
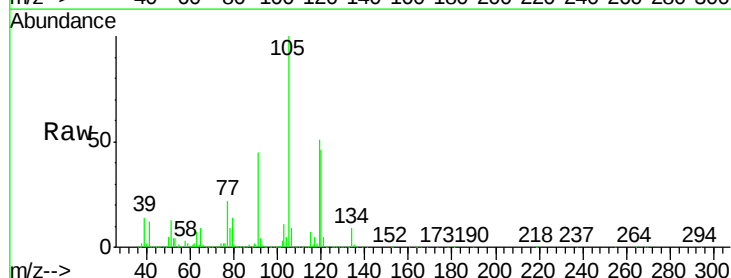
Ion Ratio Lower Upper

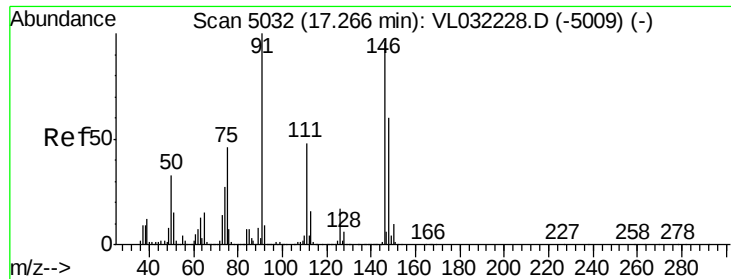
105 100

120 45.7 37.0 55.4

91 44.8 38.2 57.2

77 21.6 17.7 26.5





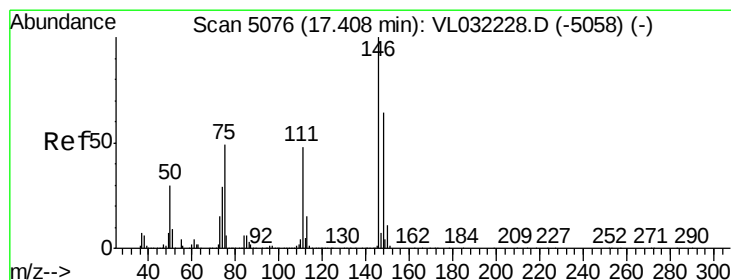
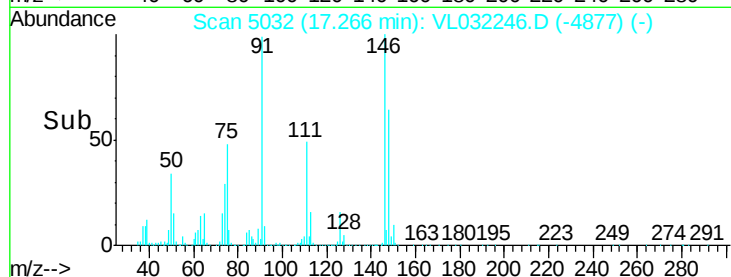
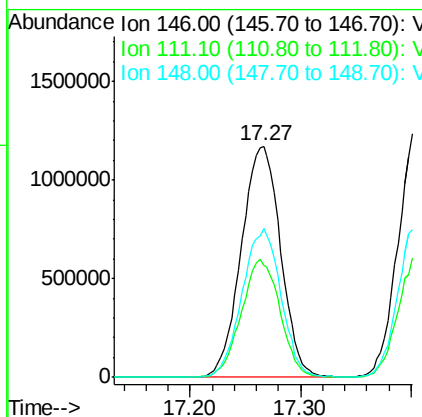
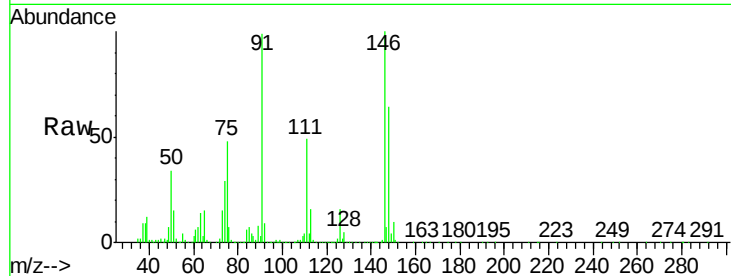
#75  
 1,3-Dichlorobenzene  
 Concen: 8.034 ppbv  
 RT: 17.27 min Scan# 5032  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion:146 Resp: 2894705  
 Ion Ratio Lower Upper  
 146 100  
 111 50.4 24.9 74.7  
 148 63.8 31.9 95.5

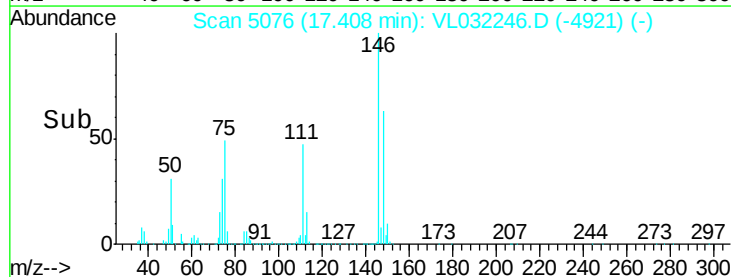
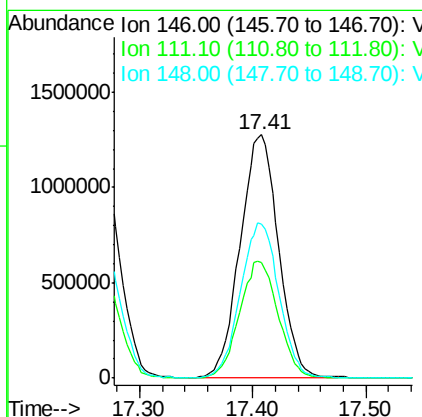
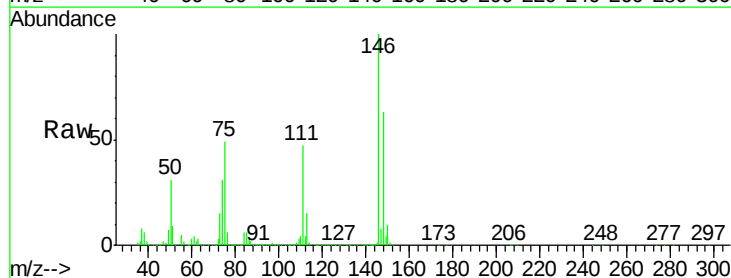
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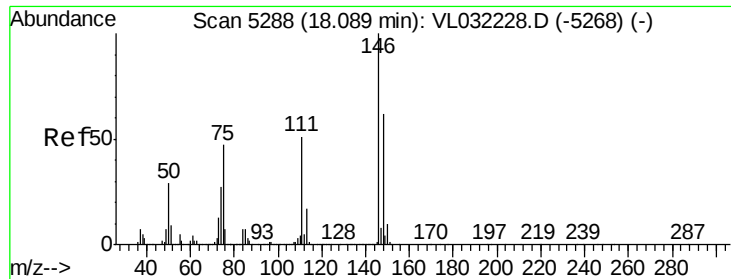
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#76  
 1,4-Dichlorobenzene  
 Concen: 8.471 ppbv  
 RT: 17.41 min Scan# 5076  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion:146 Resp: 2989006  
 Ion Ratio Lower Upper  
 146 100  
 111 48.4 24.6 73.6  
 148 64.2 32.3 96.9





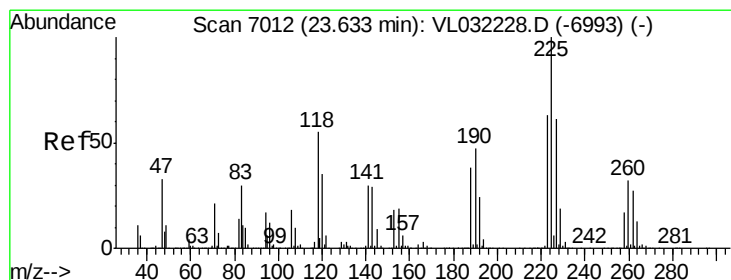
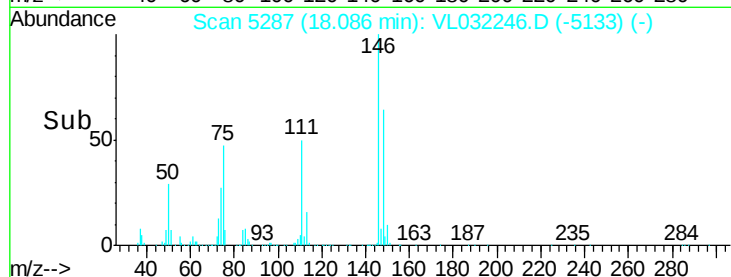
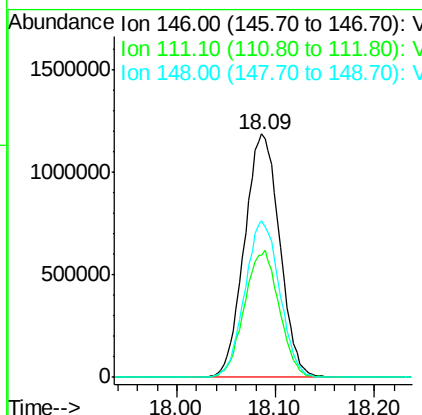
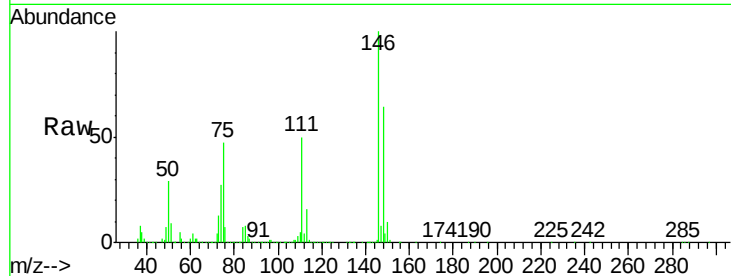
#77  
 1,2-Dichlorobenzene  
 Concen: 8.164 ppbv  
 RT: 18.09 min Scan# 5287  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tgt Ion:146 Resp: 2923216  
 Ion Ratio Lower Upper  
 146 100  
 111 51.4 26.1 78.3  
 148 63.7 32.0 96.0

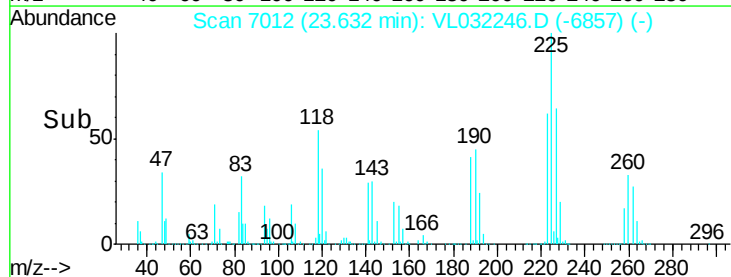
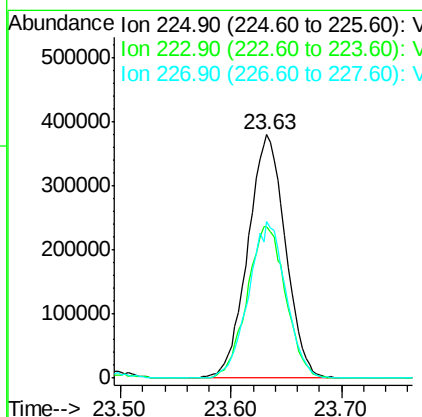
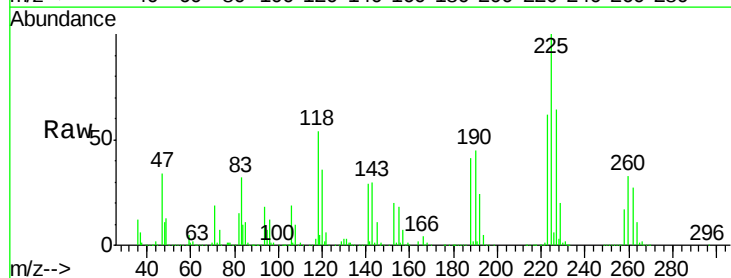
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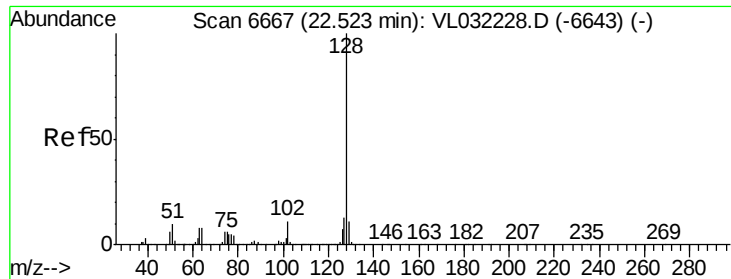
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 8.017 ppbv  
 RT: 23.63 min Scan# 7012  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Tgt Ion:225 Resp: 894749  
 Ion Ratio Lower Upper  
 225 100  
 223 64.0 50.3 75.5  
 227 64.0 50.9 76.3





#79

Naphthalene

Concen: 12.719 ppbv

RT: 22.53 min Scan# 6668

Delta R.T. 0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA\_L

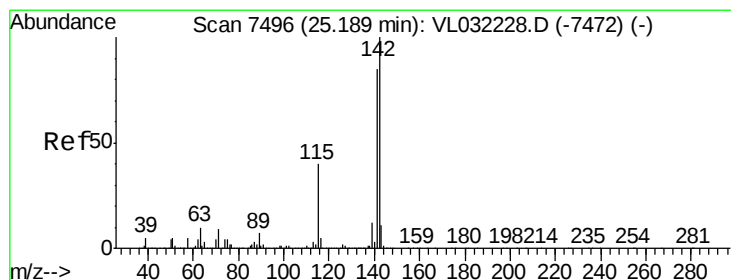
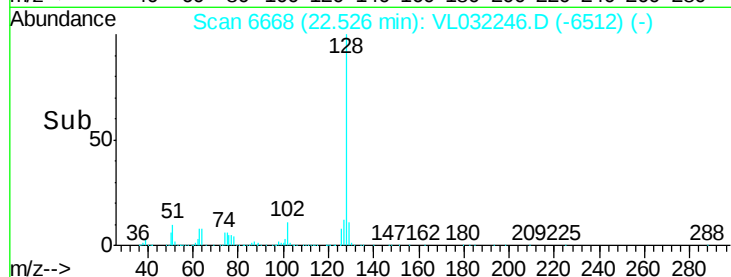
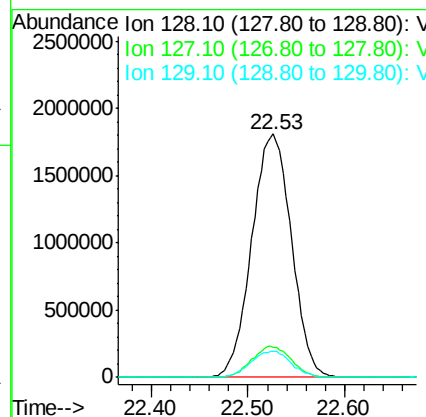
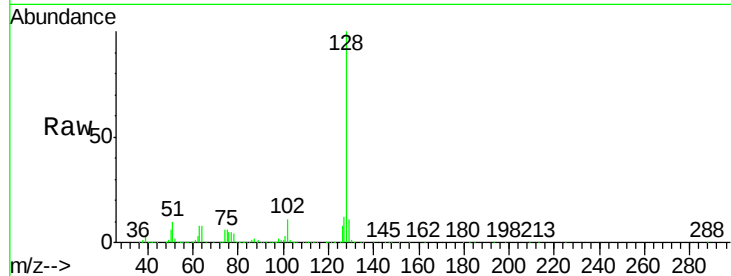
ClientSampleId :

VSTDCCC010

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 128   | Resp: | 5156859 |
| Ion      | Ratio | Lower | Upper   |
| 128      | 100   |       |         |
| 127      | 12.4  | 10.0  | 15.0    |
| 129      | 10.7  | 9.0   | 13.4    |

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#80

Naphthalene, 2-methyl-

Concen: 20.472 ppbv

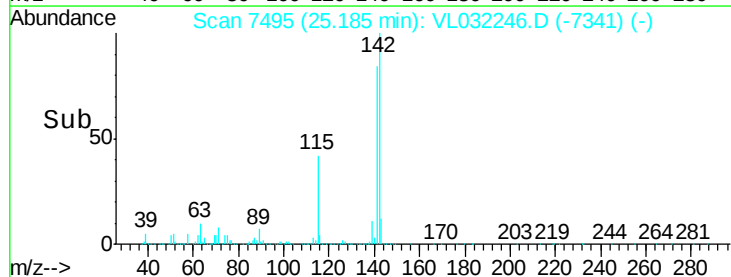
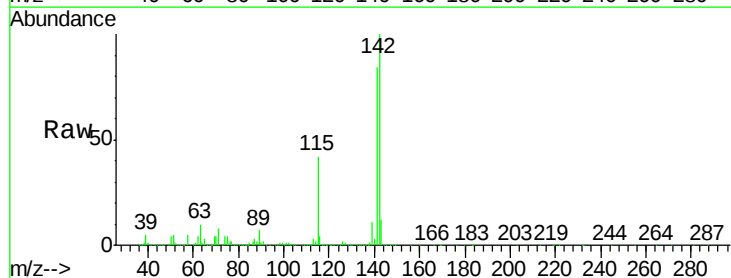
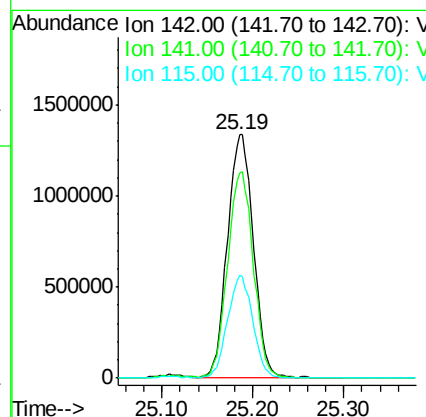
RT: 25.19 min Scan# 7495

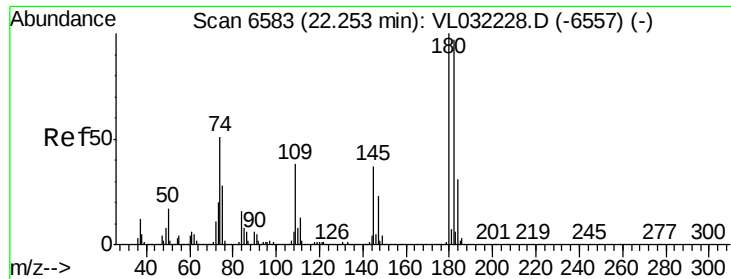
Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 142   | Resp: | 2651742 |
| Ion      | Ratio | Lower | Upper   |
| 142      | 100   |       |         |
| 141      | 84.0  | 67.0  | 100.6   |
| 115      | 41.1  | 32.6  | 49.0    |





#81  
 1,2,4-Trichlorobenzene  
 Concen: 11.538 ppbv  
 RT: 22.25 min Scan# 6582  
 Delta R.T. -0.00 min  
 Lab File: VL032246.D  
 Acq: 13 Jul 2018 13:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.3  | 76.1  | 114.1 |
| 184     | 30.6  | 24.2  | 36.4  |

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