

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL090518\  
 Data File : VL032479.D  
 Acq On : 6 Sep 2018 9:07  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

MMDadoda  
 9/7/2018 10:46:13 AM

Quant Time: Sep 06 14:56:48 2018

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL083118AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 31

QLast Update : Fri Aug 31 21:33:46 2018

Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.80  | 49   | 1404237  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.34  | 114  | 2998773  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.29 | 117  | 2992793m | 10.00 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.63  | 95    | 2185390  | 9.84     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 98.40% |

#### Target Compounds

|                                |      |     |         |       |        | Ovalue |
|--------------------------------|------|-----|---------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.10 | 85  | 1057868 | 5.89  | ppbv   | 99     |
| 3) Chlorodifluoromethane       | 3.04 | 51  | 1259835 | 9.91  | ppbv   | 99     |
| 4) Chloromethane               | 3.19 | 50  | 741920  | 9.64  | ppbv   | 100    |
| 5) Vinyl Chloride              | 3.32 | 62  | 708184  | 9.32  | ppbv   | 100    |
| 6) Bromomethane                | 3.54 | 94  | 378539  | 9.49  | ppbv   | 100    |
| 7) Chloroethane                | 3.63 | 64  | 248075  | 9.43  | ppbv   | 99     |
| 8) Dichlorotetrafluoroethane   | 3.24 | 85  | 1484764 | 9.31  | ppbv   | 97     |
| 9) Propene                     | 3.06 | 41  | 608074  | 11.86 | ppbv   | 99     |
| 10) Heptane                    | 8.29 | 43  | 2159429 | 11.74 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.04 | 101 | 1412868 | 8.72  | ppbv   | 99     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.59 | 101 | 1109827 | 10.11 | ppbv   | 97     |
| 13) Ethanol                    | 3.68 | 45  | 153493  | 9.60  | ppbv   | 95     |
| 14) Bromoethene                | 3.82 | 108 | 466304  | 10.03 | ppbv   | 100    |
| 15) Acetone                    | 3.93 | 43  | 1125406 | 8.90  | ppbv   | 97     |
| 16) 1,3-Butadiene              | 3.39 | 39  | 617585  | 10.38 | ppbv   | 88     |
| 17) tert-Butyl alcohol         | 4.39 | 59  | 206183  | 10.60 | ppbv # | 100    |
| 18) 1,1-Dichloroethene         | 4.38 | 96  | 473895  | 9.45  | ppbv   | 97     |
| 19) Isopropyl Alcohol          | 4.05 | 45  | 917260  | 11.06 | ppbv # | 98     |
| 20) Methylene Chloride         | 4.44 | 84  | 401544  | 8.33  | ppbv   | 96     |
| 21) Allyl Chloride             | 4.51 | 41  | 925949  | 11.02 | ppbv   | 97     |
| 22) trans-1,2-Dichloroethene   | 5.00 | 96  | 454567  | 8.35  | ppbv   | 98     |
| 23) Vinyl Acetate              | 5.19 | 43  | 2566142 | 12.24 | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.13 | 63  | 1713428 | 9.92  | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.81 | 43  | 3191194 | 10.69 | ppbv   | 99     |
| 26) Hexane                     | 5.82 | 57  | 1450395 | 10.85 | ppbv   | 97     |
| 27) Carbon Disulfide           | 4.65 | 76  | 1353297 | 10.96 | ppbv   | 98     |
| 28) Methyl tert-Butyl Ether    | 5.15 | 73  | 1979686 | 12.06 | ppbv   | 99     |
| 29) Chloroform                 | 5.89 | 83  | 2061752 | 10.11 | ppbv   | 97     |
| 30) Cyclohexane                | 7.29 | 84  | 1205978 | 12.32 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene     | 5.68 | 61  | 1452738 | 12.00 | ppbv   | 96     |
| 32) 1,1,1-Trichloroethane      | 6.66 | 97  | 1954389 | 10.28 | ppbv   | 98     |
| 34) 2-Butanone                 | 5.36 | 43  | 2214461 | 11.12 | ppbv   | 99     |
| 35) Carbon Tetrachloride       | 7.18 | 117 | 1928976 | 9.57  | ppbv   | 99     |
| 36) Benzene                    | 7.05 | 78  | 2912531 | 11.41 | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.45 | 62  | 1560966 | 9.98  | ppbv   | 99     |
| 38) Trichloroethene            | 8.01 | 130 | 952476  | 9.83  | ppbv   | 98     |
| 39) 1,2-Dichloropropane        | 7.78 | 63  | 1136857 | 10.41 | ppbv   | 98     |
| 40) 1,4-Dioxane                | 8.00 | 88  | 382653  | 11.68 | ppbv   | 78     |
| 41) Tetrahydrofuran            | 6.19 | 42  | 1337632 | 12.34 | ppbv   | 99     |
| 42) Bromodichloromethane       | 7.96 | 83  | 2169106 | 10.06 | ppbv   | 99     |
| 43) Methyl Methacrylate        | 8.18 | 69  | 1199128 | 11.08 | ppbv   | 96     |

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 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

MMDadoda  
 9/7/2018 10:46:13 AM

Quant Time: Sep 06 14:56:48 2018

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL083118AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 31

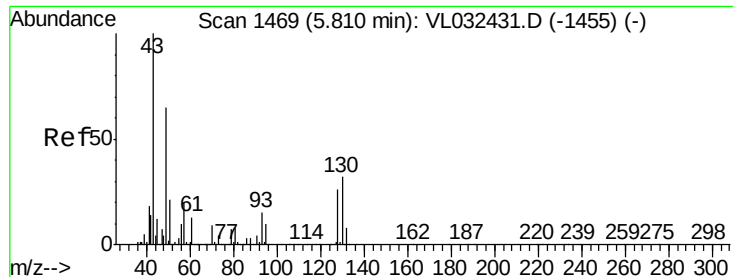
QLast Update : Fri Aug 31 21:33:46 2018

Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 8.04  | 57   | 4981127  | 10.10 | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.46  | 75   | 1577833  | 13.62 | ppbv   | 98       |
| 46) cis-1,3-Dichloropropene   | 8.88  | 75   | 1884169  | 12.73 | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 9.66  | 97   | 1199243  | 10.33 | ppbv   | 99       |
| 48) Dibromochloromethane      | 10.50 | 129  | 1725721  | 10.73 | ppbv   | 100      |
| 49) Bromoform                 | 13.25 | 173  | 1395336  | 9.98  | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.91  | 43   | 3330748  | 11.10 | ppbv   | 100      |
| 51) 2-Hexanone                | 10.31 | 43   | 2470175  | 12.78 | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.42 | 164  | 837943   | 10.59 | ppbv   | 98       |
| 53) Toluene                   | 9.99  | 91   | 3271208  | 12.26 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.81 | 107  | 1626998  | 10.44 | ppbv   | 97       |
| 56) 1,1,1,2-Tetrachloroethane | 12.33 | 131  | 1239708  | 9.19  | ppbv # | 61       |
| 57) Chlorobenzene             | 12.35 | 112  | 2277951  | 9.52  | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.91 | 91   | 4221582  | 11.79 | ppbv   | 100      |
| 59) m/p-Xylene                | 13.20 | 91   | 6768447m | 21.20 | ppbv   |          |
| 60) o-Xylene                  | 13.90 | 91   | 3297240  | 10.51 | ppbv   | 99       |
| 61) Styrene                   | 13.74 | 104  | 2551869  | 12.57 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.88 | 105  | 4747999  | 10.77 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.88 | 83   | 2455491  | 8.76  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.77 | 120  | 1235623  | 10.72 | ppbv   | 97       |
| 65) tert-Butylbenzene         | 16.96 | 119  | 3997004  | 10.52 | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.21 | 91   | 2396734  | 11.32 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.51 | 105  | 6036817  | 10.57 | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 17.86 | 119  | 4804547  | 10.85 | ppbv   | 99       |
| 70) n-Butylbenzene            | 18.76 | 91   | 5270949  | 10.50 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 15.67 | 91   | 3774857  | 11.21 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 16.05 | 105  | 3960274  | 11.57 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.21 | 105  | 3768122  | 10.98 | ppbv   | 95       |
| 74) 1,2,4-Trimethylbenzene    | 16.98 | 105  | 3741790  | 9.98  | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 17.21 | 146  | 2074836  | 9.32  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.36 | 146  | 2098196  | 10.16 | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 18.04 | 146  | 2097432  | 9.77  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.59 | 225  | 1260646  | 15.71 | ppbv   | 100      |
| 79) Naphthalene               | 22.47 | 128  | 3571342  | 11.71 | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.15 | 142  | 1413004  | 17.41 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 22.19 | 180  | 1694569  | 11.03 | ppbv   | 100      |

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





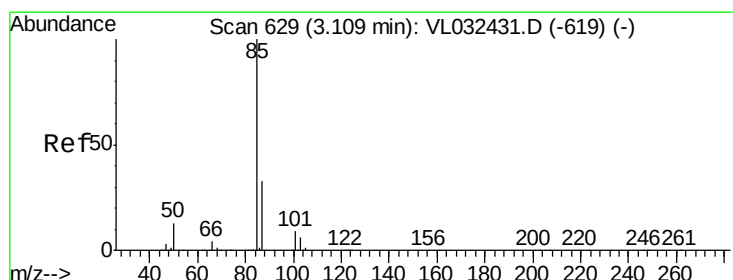
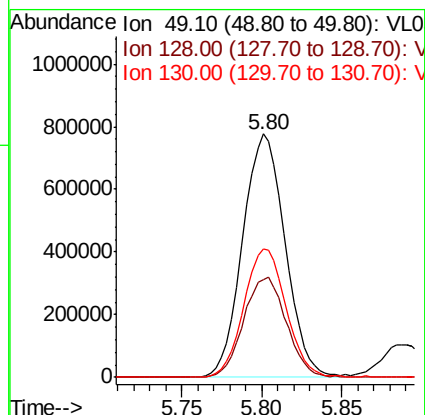
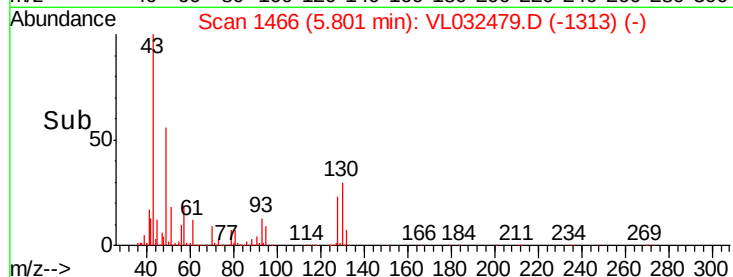
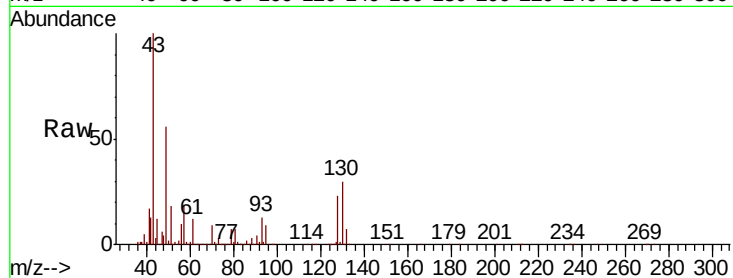
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 Bromochloromethane  
 Concen: 10.00 ppbv  
 RT: 5.80 min Scan# 1466  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion: 49 Resp: 1404237  
 Ion Ratio Lower Upper  
 49 100  
 128 41.6 20.7 62.1  
 130 53.0 26.6 79.7

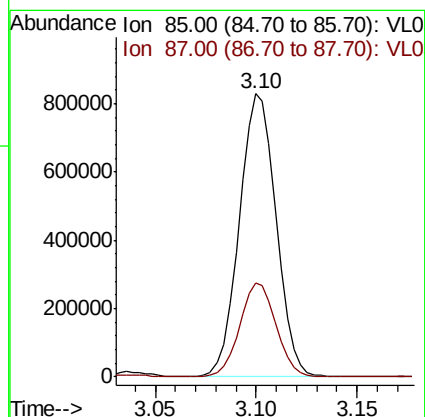
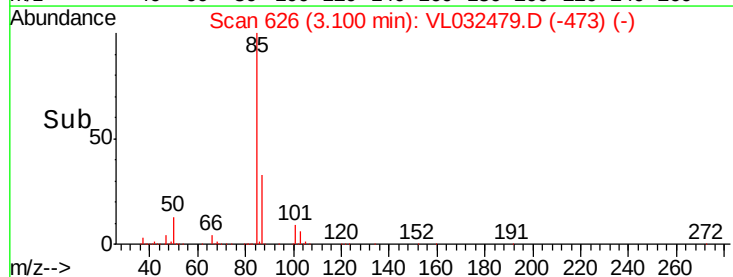
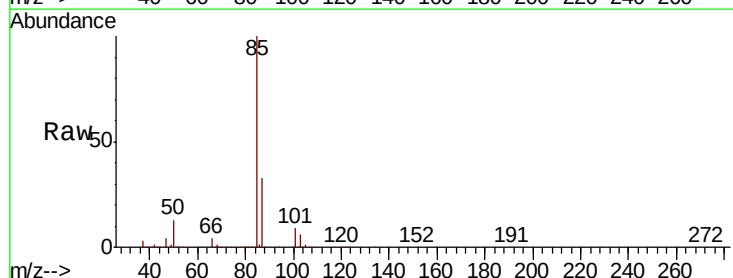
Manual Integrations  
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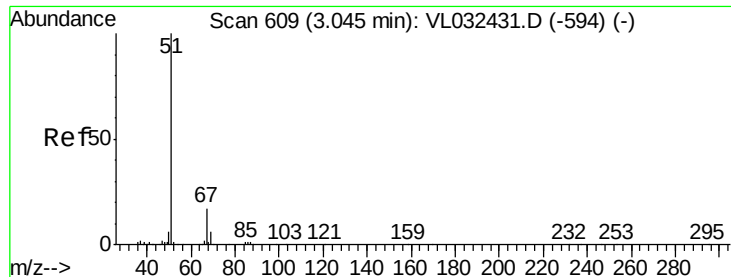
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#2  
 Dichlorodifluoromethane  
 Concen: 5.89 ppbv  
 RT: 3.10 min Scan# 626  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Tgt Ion: 85 Resp: 1057868  
 Ion Ratio Lower Upper  
 85 100  
 87 33.1 26.2 39.4





#3

Chlorodifluoromethane

Concen: 9.91 ppbv

RT: 3.04 min Scan# 607

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Tot Ion: 51 Resp: 1259835

Ion Ratio Lower Upper

51 100

67 16.7 13.8 20.8

Instrument :

MSVOA\_L

ClientSampleId :

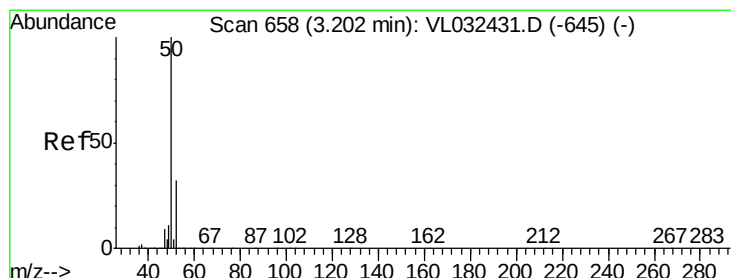
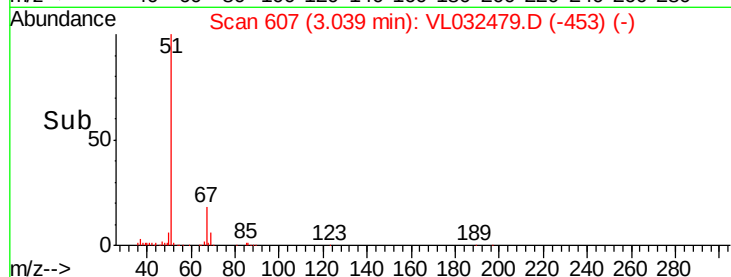
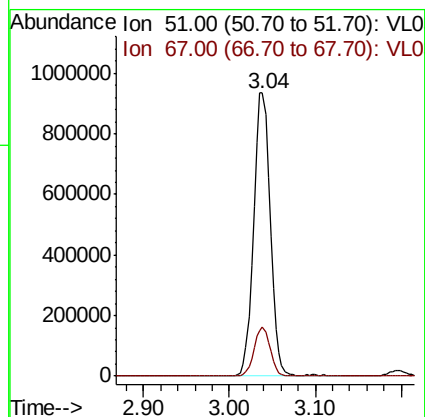
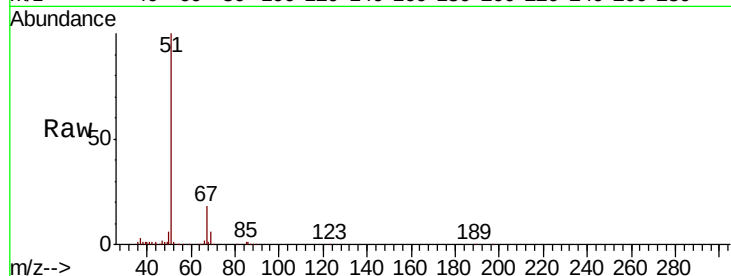
VSTDCCC010EC

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#4

Chloromethane

Concen: 9.64 ppbv

RT: 3.19 min Scan# 655

Delta R.T. -0.01 min

Lab File: VL032479.D

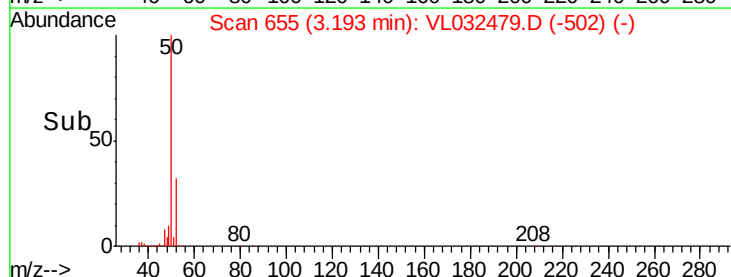
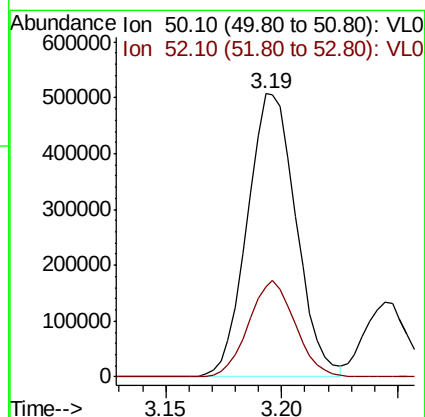
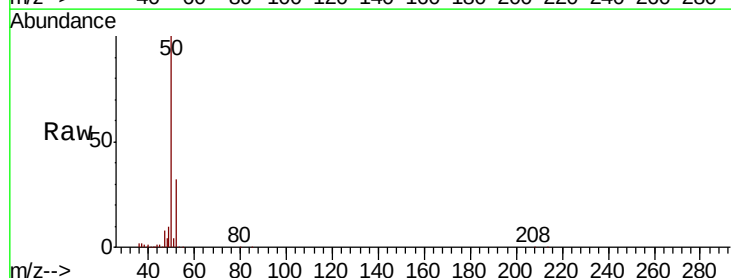
Acq: 6 Sep 2018 9:07

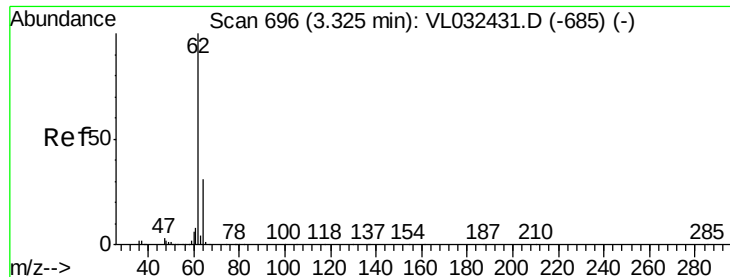
Tgt Ion: 50 Resp: 741920

Ion Ratio Lower Upper

50 100

52 31.8 25.6 38.4





#5

Vinyl Chloride

Concen: 9.32 ppbv

RT: 3.32 min Scan# 693

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 708184

Ion Ratio Lower Upper

62 100

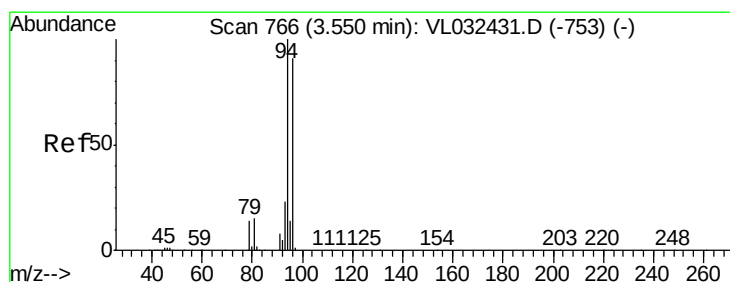
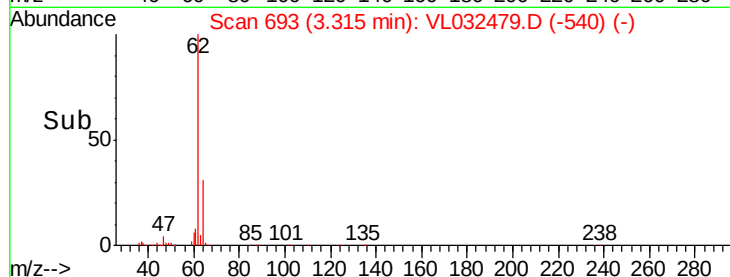
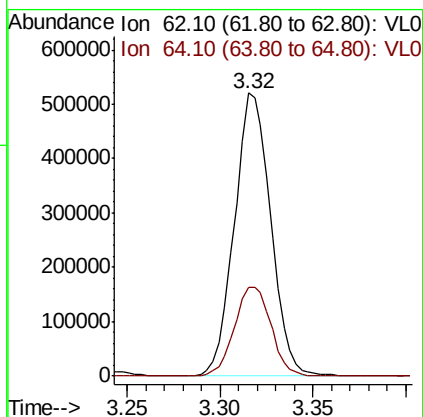
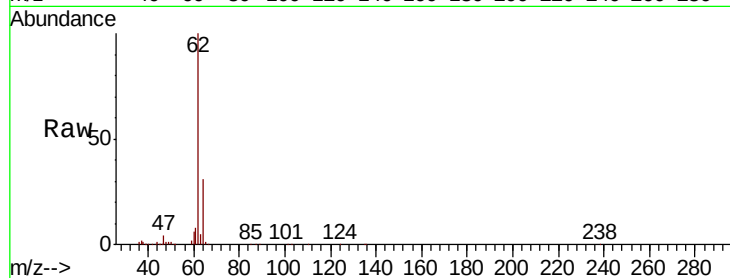
64 31.4 25.0 37.6

Manual Integrations

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#6

Bromomethane

Concen: 9.49 ppbv

RT: 3.54 min Scan# 763

Delta R.T. -0.01 min

Lab File: VL032479.D

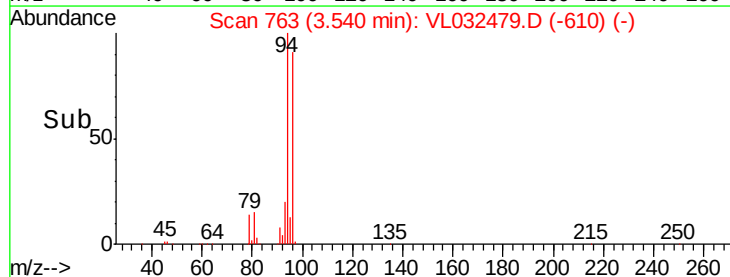
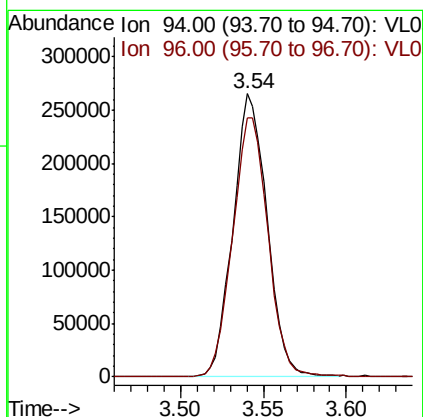
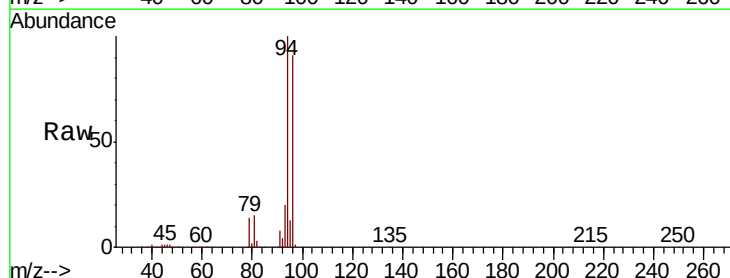
Acq: 6 Sep 2018 9:07

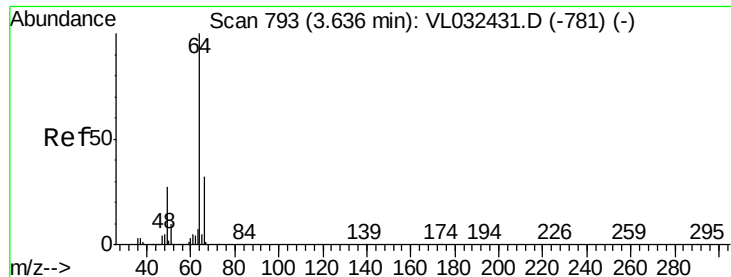
Tgt Ion: 94 Resp: 378539

Ion Ratio Lower Upper

94 100

96 91.4 72.8 109.2





#7

Chloroethane

Concen: 9.43 ppbv

RT: 3.63 min Scan# 791

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 64 Resp: 248075

Ion Ratio Lower Upper

64 100

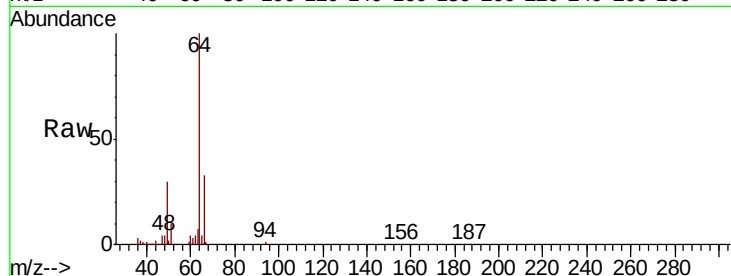
66 32.7 25.8 38.6

Manual Integrations

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Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

200000

150000

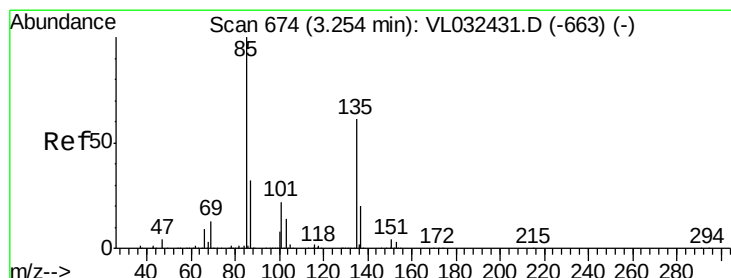
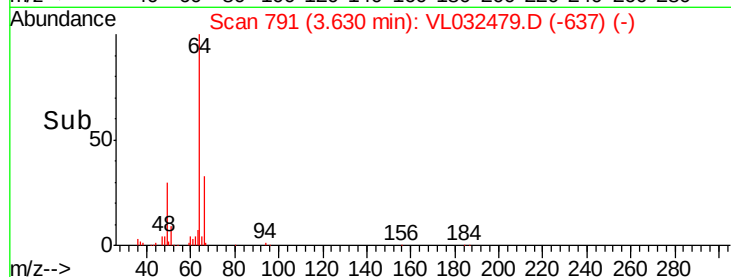
100000

50000

0

3.60 3.65

Time-->



#8

Dichlorotetrafluoroethane

Concen: 9.31 ppbv

RT: 3.24 min Scan# 671

Delta R.T. -0.01 min

Lab File: VL032479.D

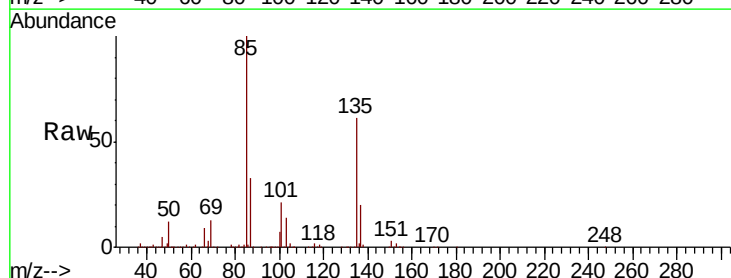
Acq: 6 Sep 2018 9:07

Tgt Ion: 85 Resp: 1484764

Ion Ratio Lower Upper

85 100

135 62.6 48.6 72.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

1200000

1000000

800000

600000

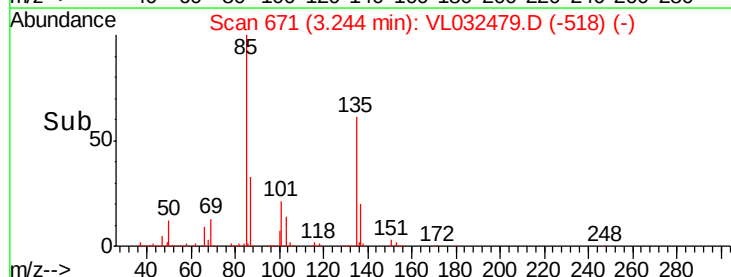
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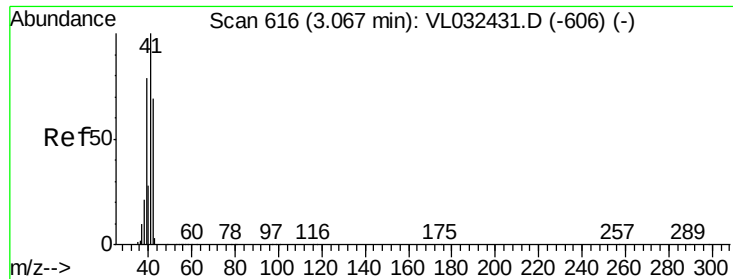
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3.20 3.25 3.30

Time-->







#9

Propene

Concen: 11.86 ppbv

RT: 3.06 min Scan# 614

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 41 Resp: 608074

Ion Ratio Lower Upper

41 100

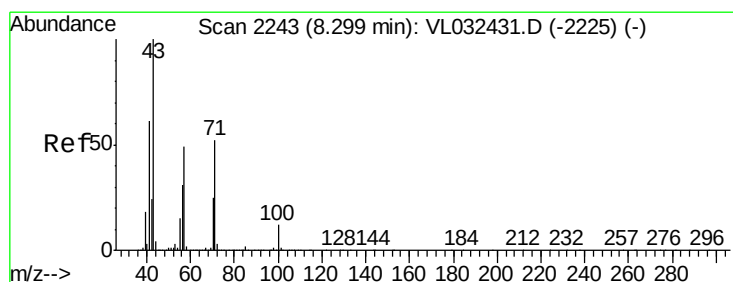
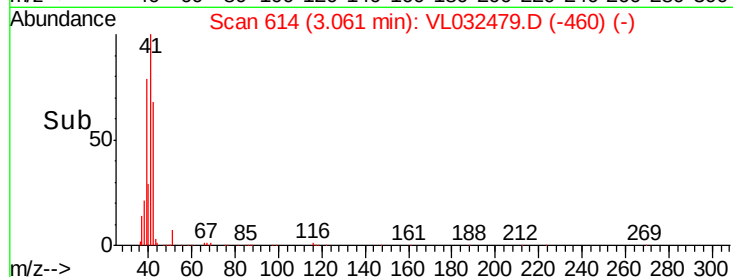
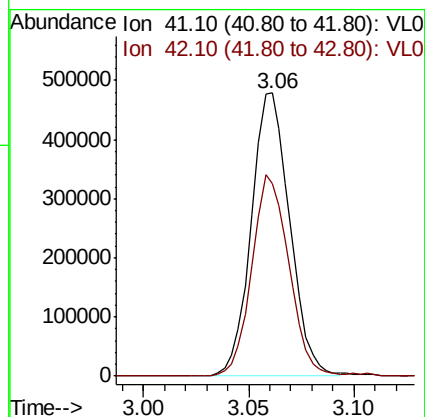
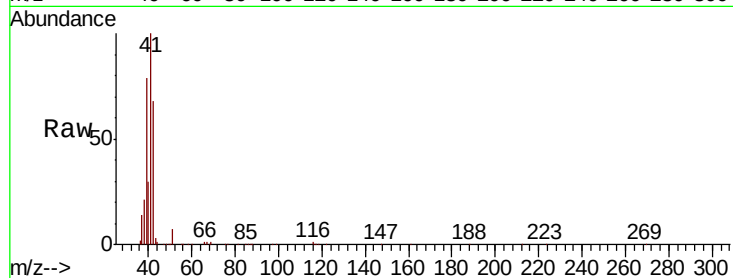
42 69.7 56.6 84.8

Manual Integrations

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9/7/2018 10:46:13 AM



#10

Heptane

Concen: 11.74 ppbv

RT: 8.29 min Scan# 2240

Delta R.T. -0.01 min

Lab File: VL032479.D

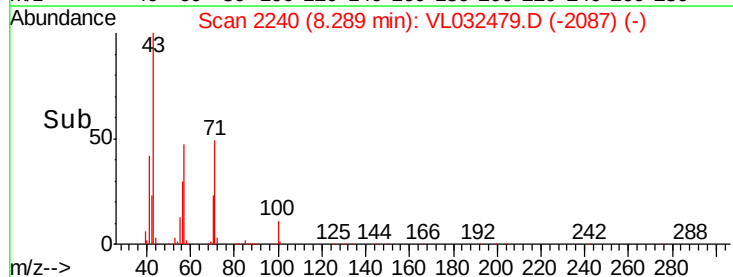
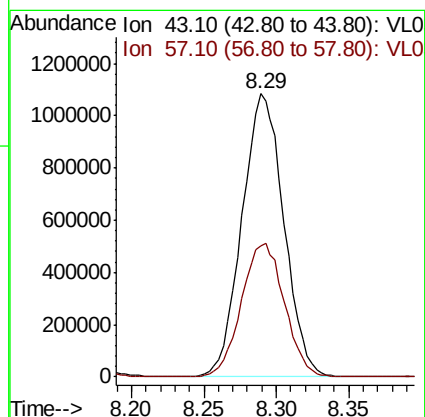
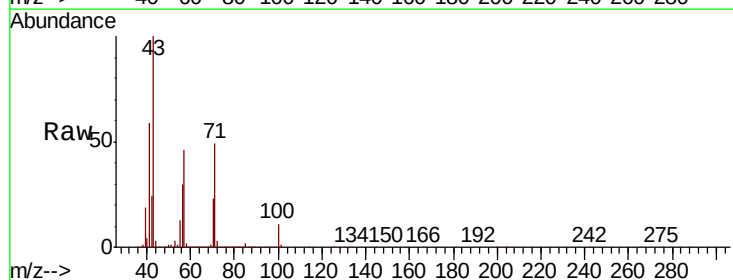
Acq: 6 Sep 2018 9:07

Tgt Ion: 43 Resp: 2159429

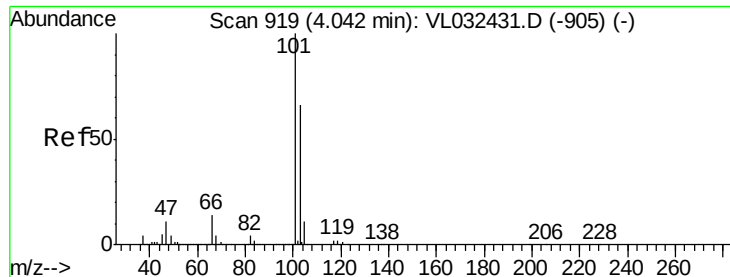
Ion Ratio Lower Upper

43 100

57 48.5 39.6 59.4







#11

Trichlorofluoromethane

Concen: 8.72 ppbv

RT: 4.04 min Scan# 917

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:101 Resp: 1412868

Ion Ratio Lower Upper

101 100

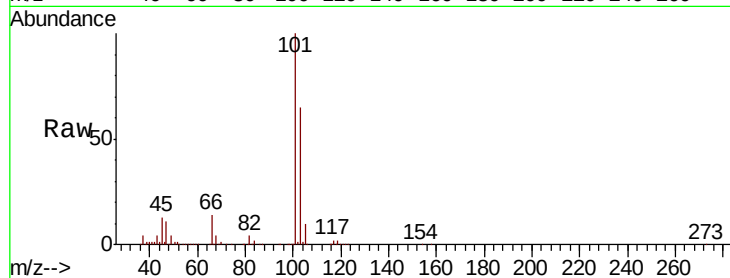
103 64.8 52.8 79.2

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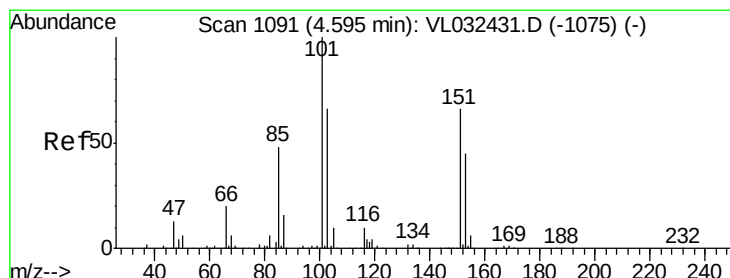
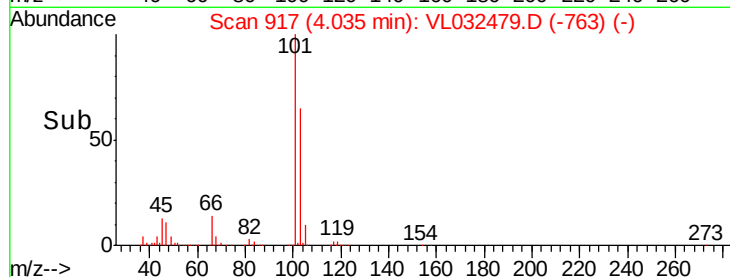
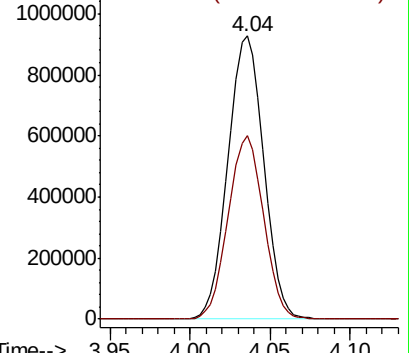
MMDadoda

9/7/2018 10:46:13 AM



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 10.11 ppbv

RT: 4.59 min Scan# 1088

Delta R.T. -0.01 min

Lab File: VL032479.D

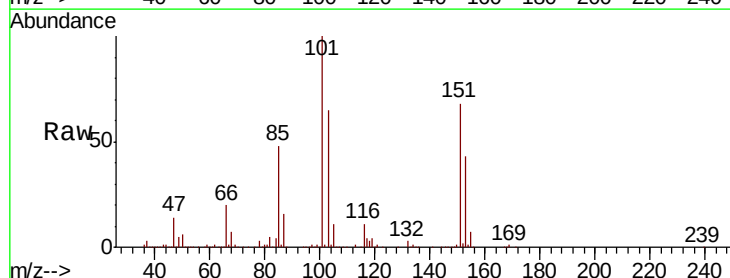
Acq: 6 Sep 2018 9:07

Tgt Ion:101 Resp: 1109827

Ion Ratio Lower Upper

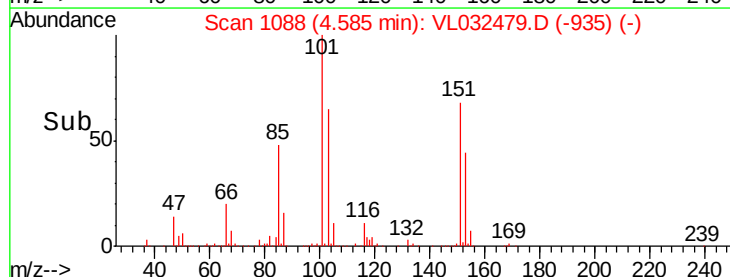
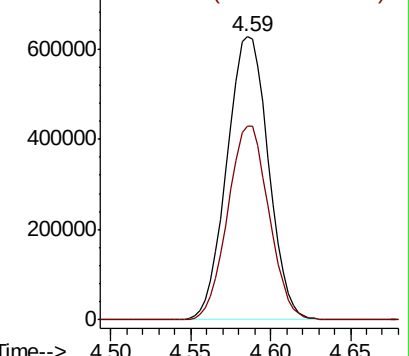
101 100

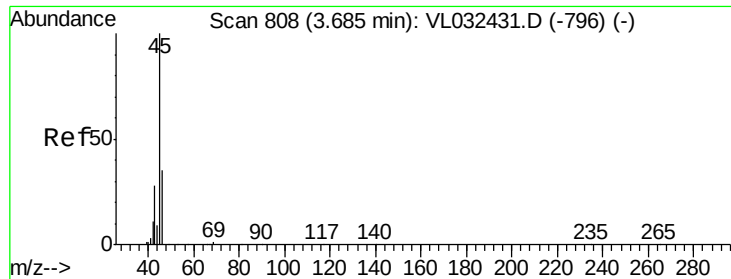
151 68.0 52.6 78.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





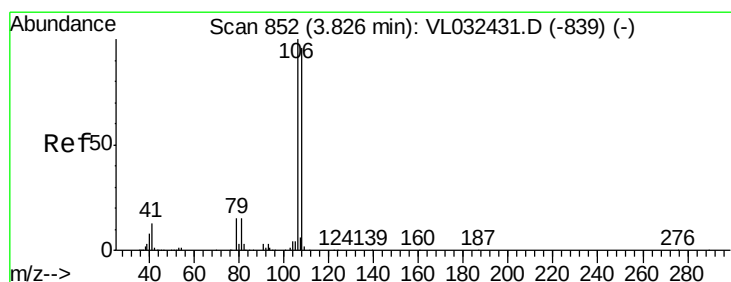
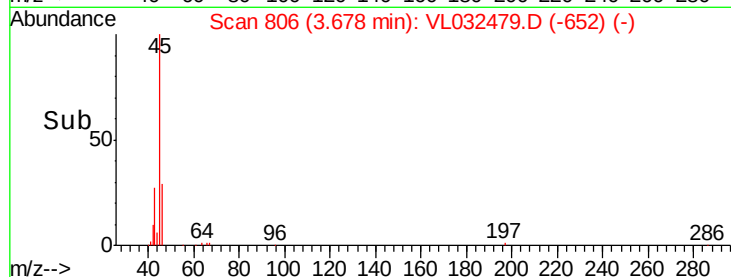
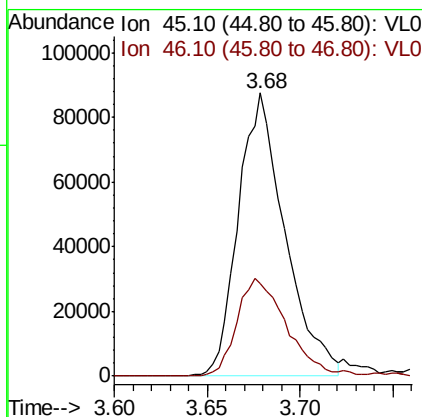
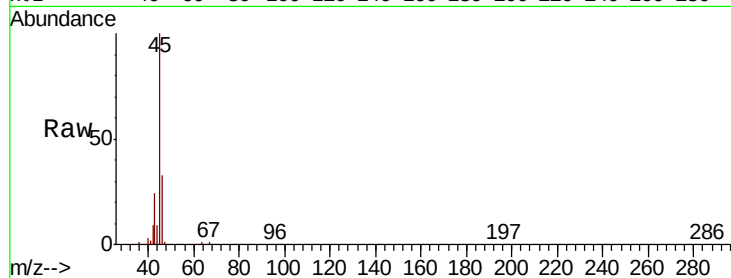
#13  
Ethanol  
Concen: 9.60 ppbv  
RT: 3.68 min Scan# 806  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion   | 45   | Resp  | 153493 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 45        | 100  |       |        |
| 46        | 38.4 | 14.2  | 56.8   |

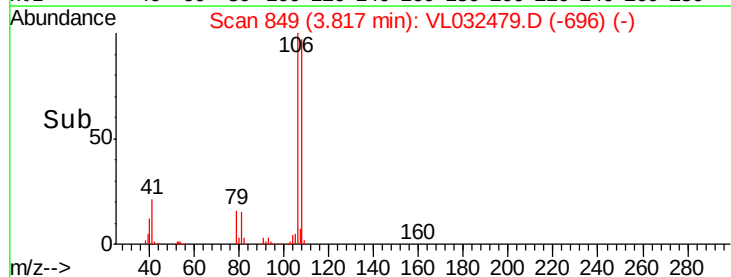
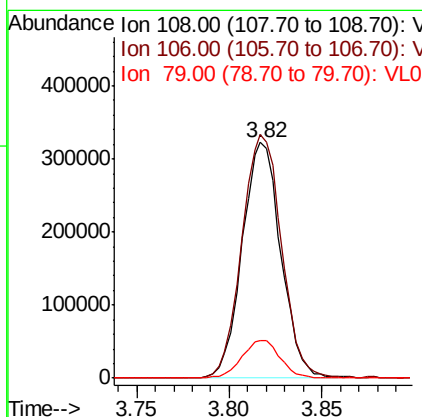
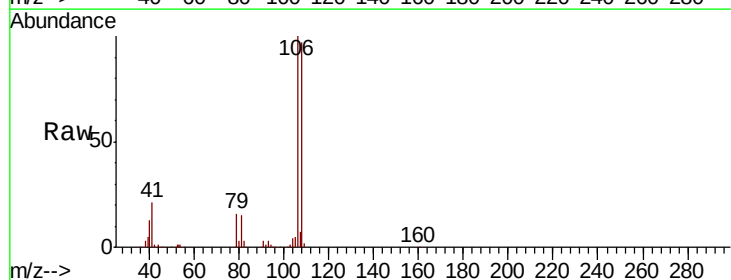
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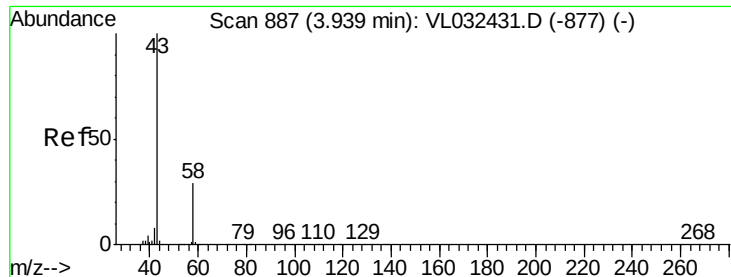
MMDadoda  
9/7/2018 10:46:13 AM



#14  
Bromoethene  
Concen: 10.03 ppbv  
RT: 3.82 min Scan# 849  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

| Tgt Ion   | 108   | Resp  | 466304 |
|-----------|-------|-------|--------|
| Ion Ratio | 100   | Lower | Upper  |
| 108       | 100   |       |        |
| 106       | 106.9 | 85.5  | 128.3  |
| 79        | 16.4  | 13.0  | 19.6   |





#15

Acetone

Concen: 8.90 ppbv

RT: 3.93 min Scan# 884

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1125406

Ion Ratio Lower Upper

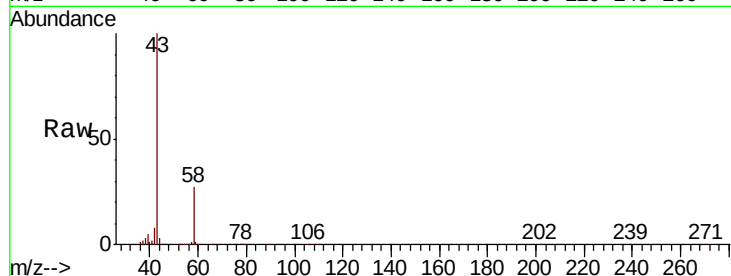
43 100

58 26.8 22.6 33.8

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.93

800000

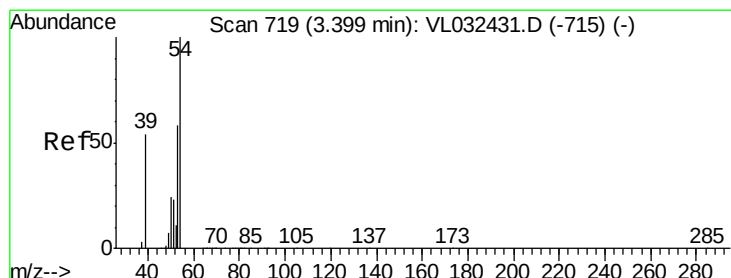
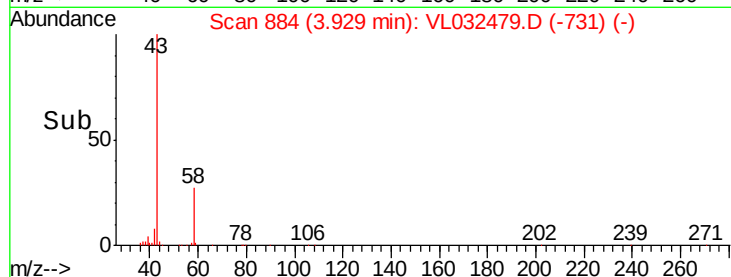
600000

400000

200000

0

Time-->



#16

1,3-Butadiene

Concen: 10.38 ppbv

RT: 3.39 min Scan# 716

Delta R.T. -0.01 min

Lab File: VL032479.D

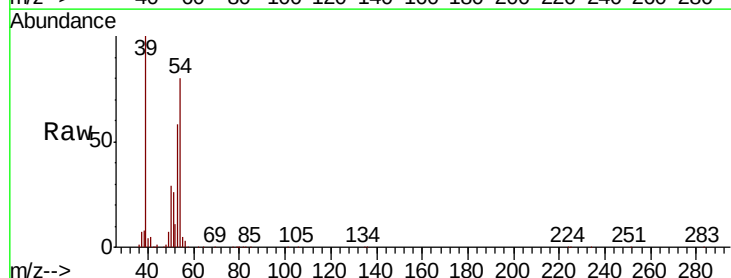
Acq: 6 Sep 2018 9:07

Tgt Ion: 39 Resp: 617585

Ion Ratio Lower Upper

39 100

54 89.1 80.8 121.2



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

3.39

500000

400000

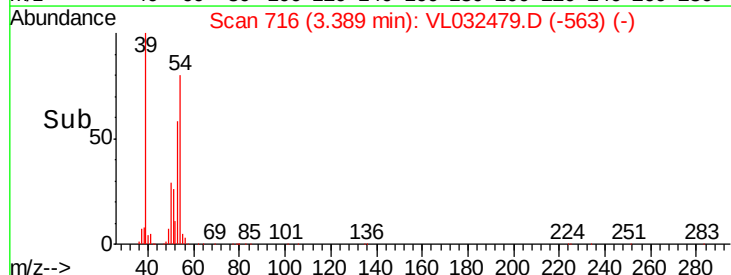
300000

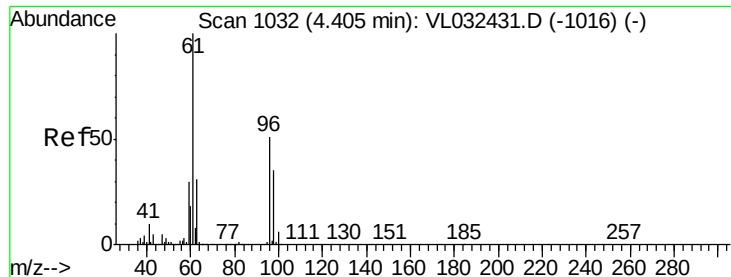
200000

100000

0

Time-->





#17

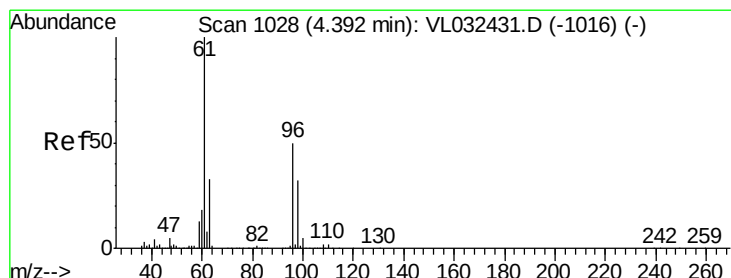
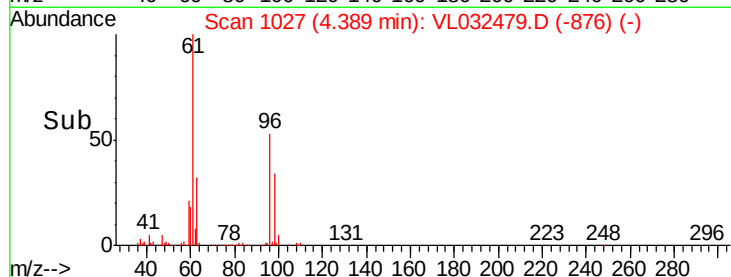
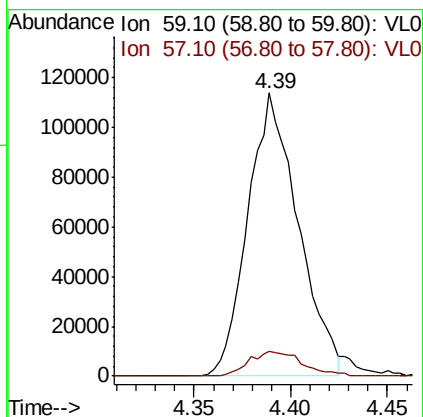
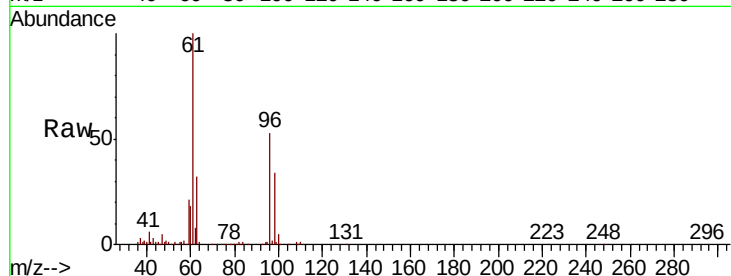
tert-Butyl alcohol  
Concen: 10.60 ppbv  
RT: 4.39 min Scan# 1027  
Delta R.T. -0.02 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 9.5   | 0.0   | 0.0#  |

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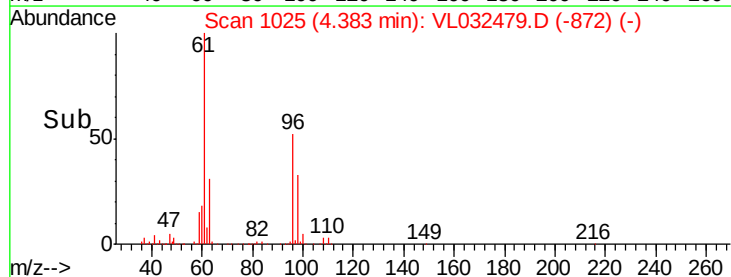
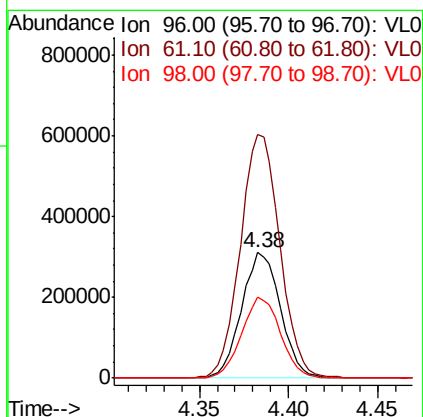
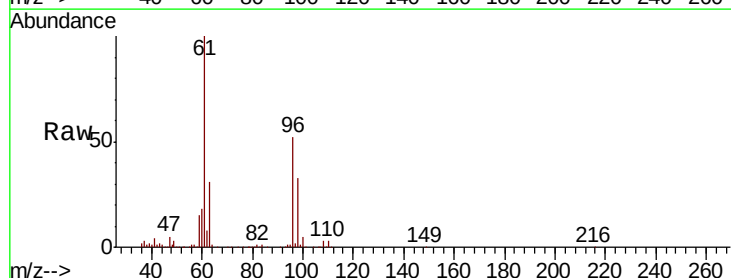
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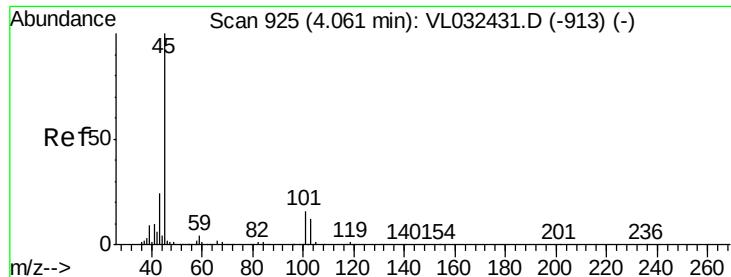


#18

1,1-Dichloroethene  
Concen: 9.45 ppbv  
RT: 4.38 min Scan# 1025  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 193.6 | 159.2 | 238.8 |
| 98      | 64.0  | 51.0  | 76.4  |





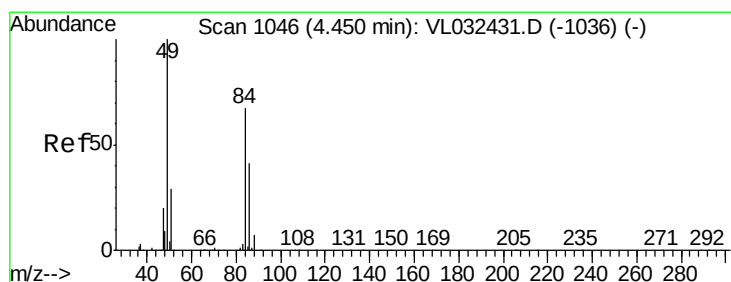
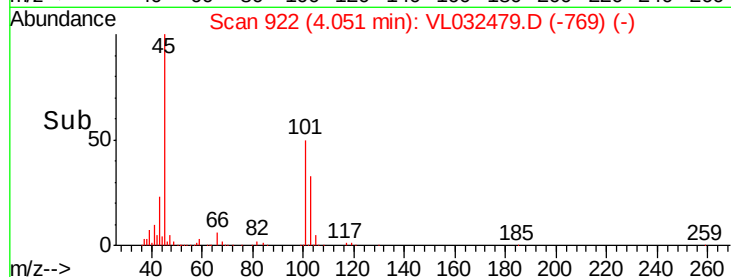
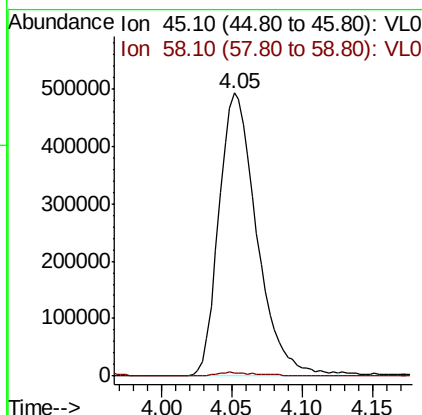
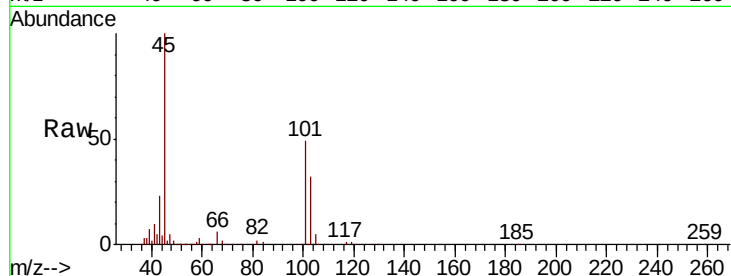
#19  
Isopropyl Alcohol  
Concen: 11.06 ppbv  
RT: 4.05 min Scan# 922  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 45 Resp: 917260  
Ion Ratio Lower Upper  
45 100  
58 1.9 2.0 3.0#

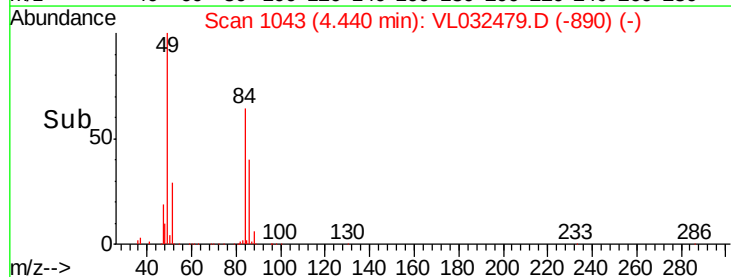
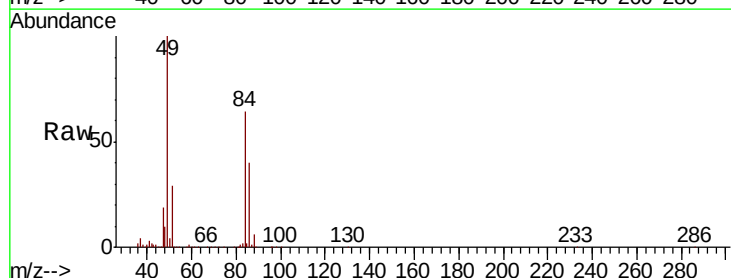
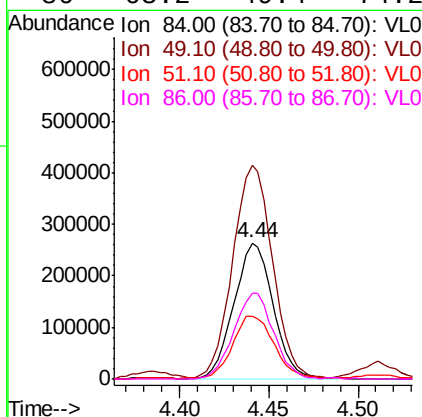
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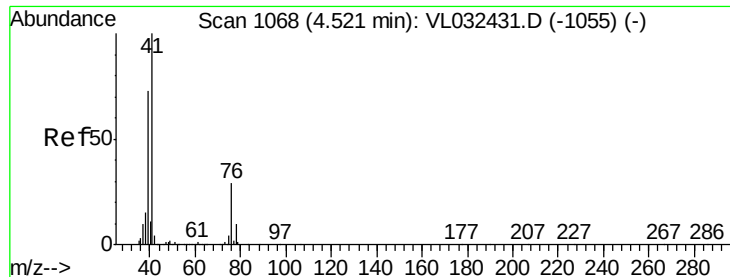
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9/7/2018 10:46:13 AM



#20  
Methylene Chloride  
Concen: 8.33 ppbv  
RT: 4.44 min Scan# 1043  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Tgt Ion: 84 Resp: 401544  
Ion Ratio Lower Upper  
84 100  
49 156.2 119.1 178.7  
51 45.4 35.2 52.8  
86 63.2 49.4 74.2





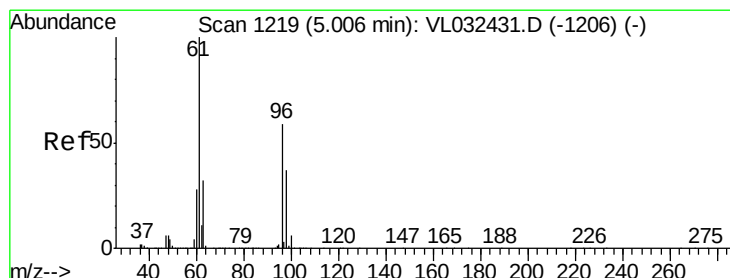
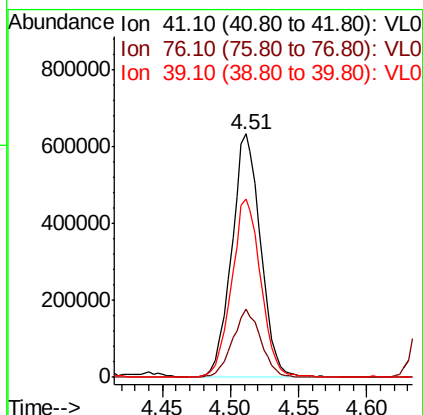
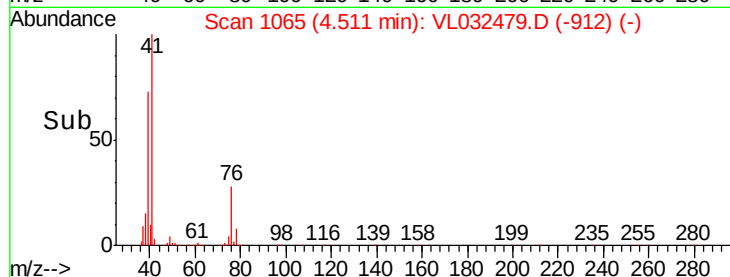
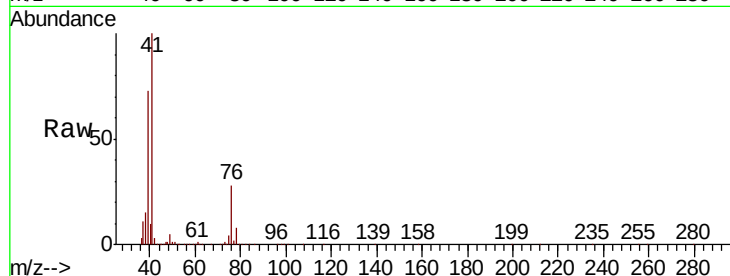
#21  
Allvl Chloride  
Concen: 11.02 ppbv  
RT: 4.51 min Scan# 1065  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 27.5  | 23.6  | 35.4  |
| 39      | 73.8  | 57.7  | 86.5  |

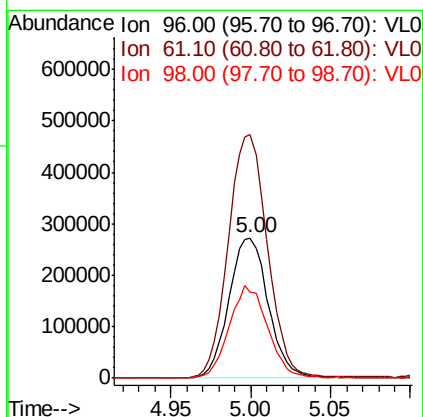
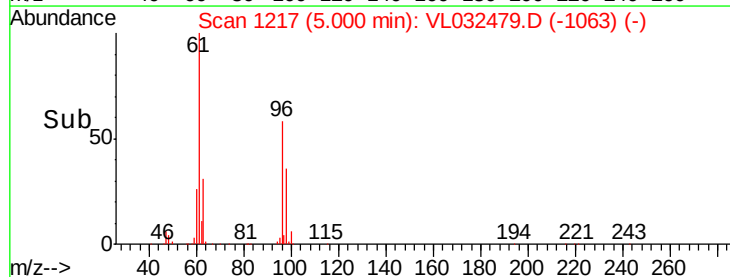
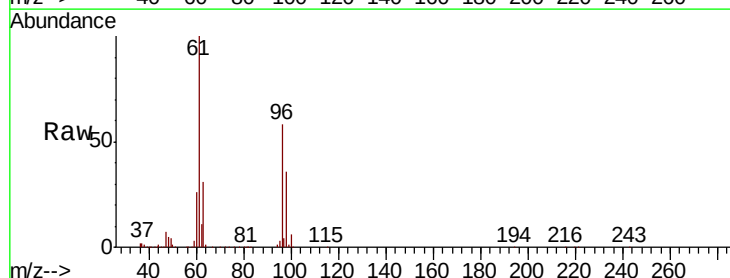
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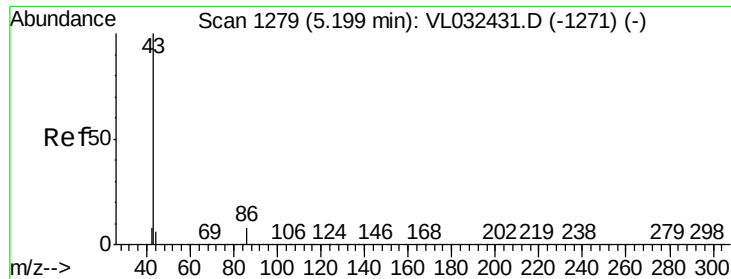
MMDadoda  
9/7/2018 10:46:13 AM



#22  
trans-1,2-Dichloroethene  
Concen: 8.35 ppbv  
RT: 5.00 min Scan# 1217  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 173.3 | 136.2 | 204.4 |
| 98      | 61.5  | 50.4  | 75.6  |





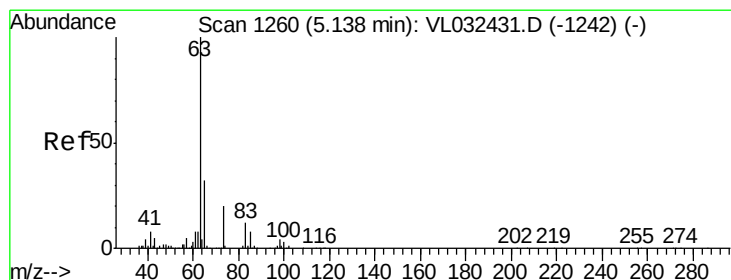
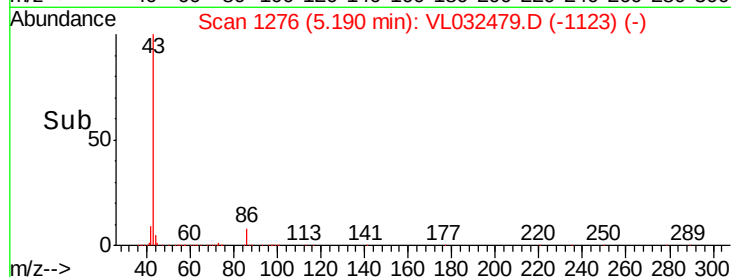
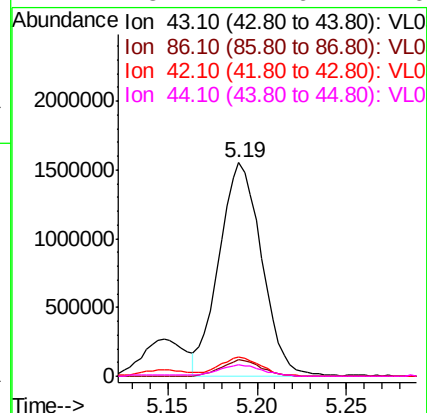
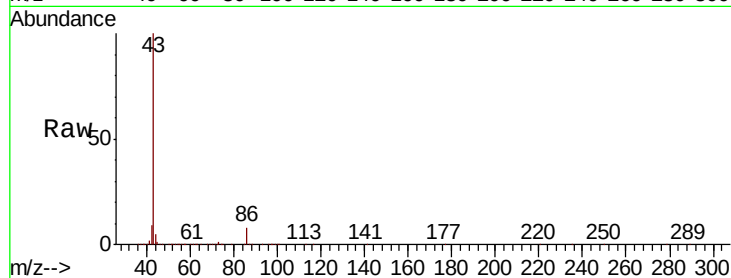
#23  
 Vinyl Acetate  
 Concen: 12.24 ppbv  
 RT: 5.19 min Scan# 1276  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 43      | 100 |       |       |       |
| 86      | 7.6 | 5.9   | 8.9   |       |
| 42      | 8.7 | 6.9   | 10.3  |       |
| 44      | 5.1 | 4.6   | 7.0   |       |

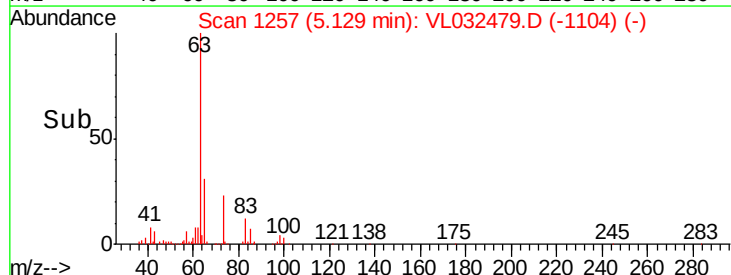
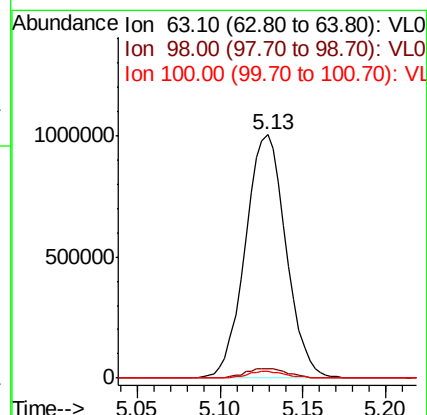
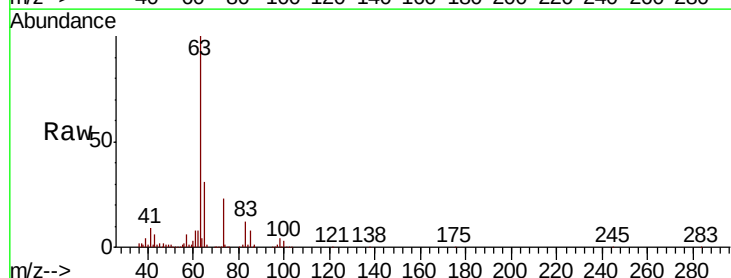
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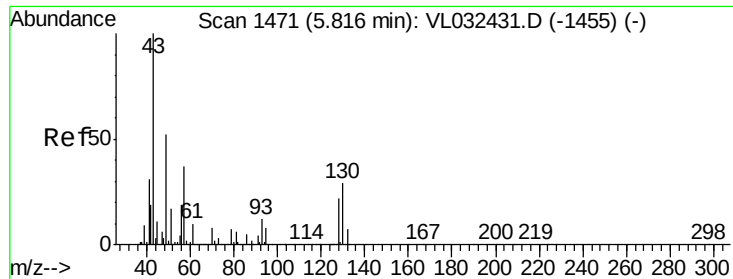


#24  
 1,1-Dichloroethane  
 Concen: 9.92 ppbv  
 RT: 5.13 min Scan# 1257  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

| Tgt Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 63      | 100 |       |       |       |
| 98      | 4.0 | 2.1   | 6.5   |       |
| 100     | 2.8 | 1.5   | 4.4   |       |







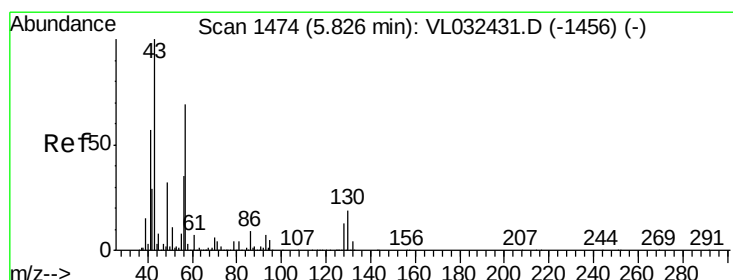
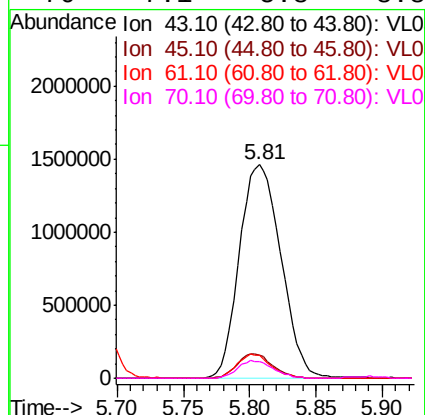
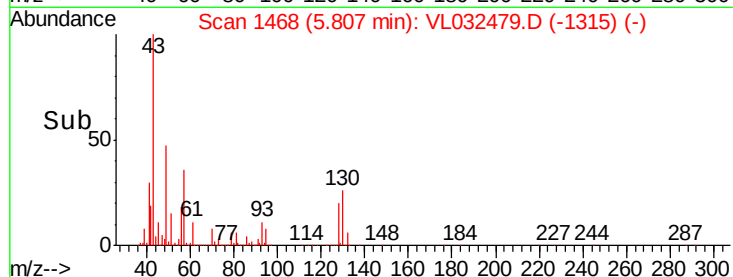
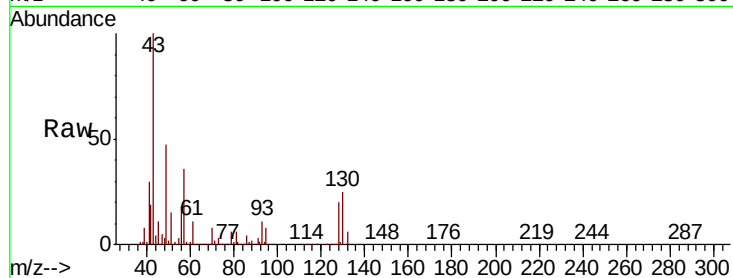
#25  
Ethyl Acetate  
Concen: 10.69 ppbv  
RT: 5.81 min Scan# 1468  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 43      | 100 |       |       |       |
| 45      | 9.8 | 8.0   | 12.0  |       |
| 61      | 9.3 | 7.6   | 11.4  |       |
| 70      | 7.1 | 5.8   | 8.8   |       |

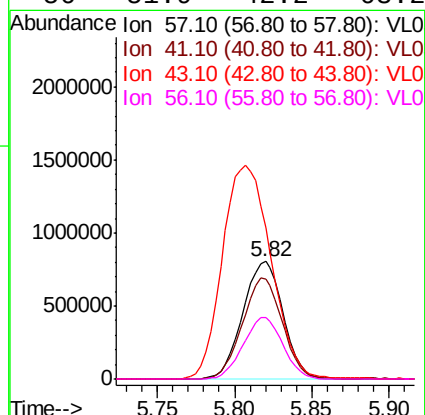
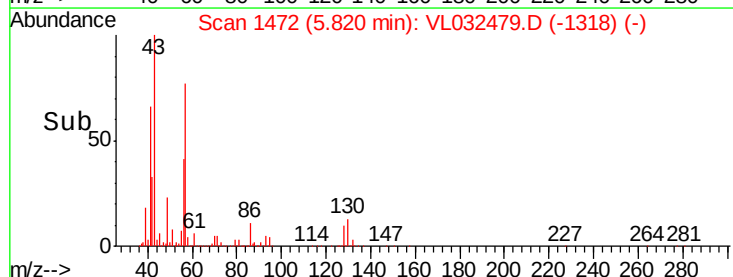
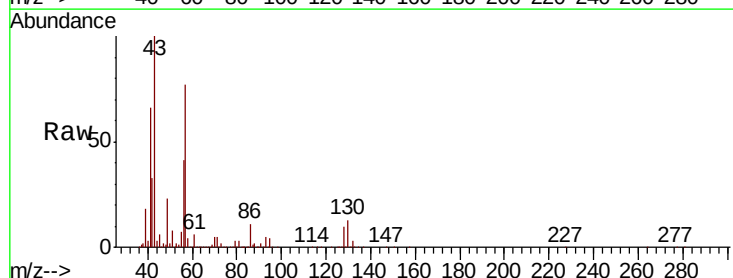
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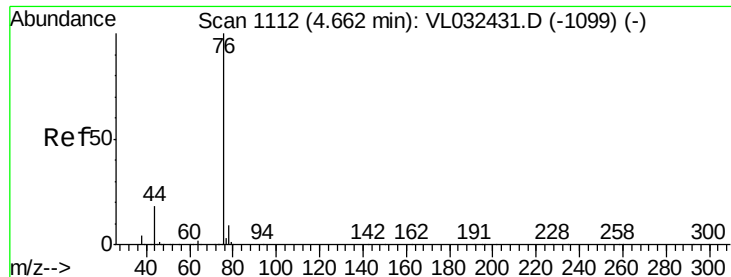
MMDadoda  
9/7/2018 10:46:13 AM



#26  
Hexane  
Concen: 10.85 ppbv  
RT: 5.82 min Scan# 1472  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

| Tgt Ion | Ion   | Ratio | Lower | Upper |
|---------|-------|-------|-------|-------|
| 57      | 100   |       |       |       |
| 41      | 85.7  | 69.0  | 103.4 |       |
| 43      | 221.1 | 172.1 | 258.1 |       |
| 56      | 51.9  | 42.2  | 63.2  |       |





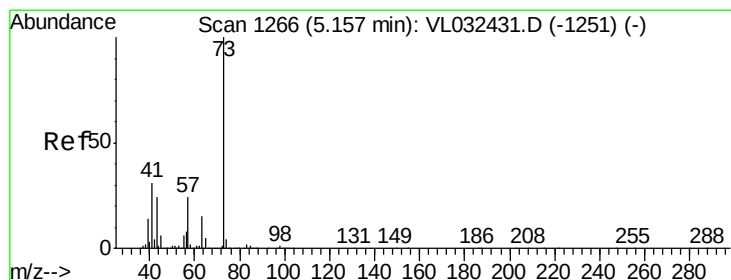
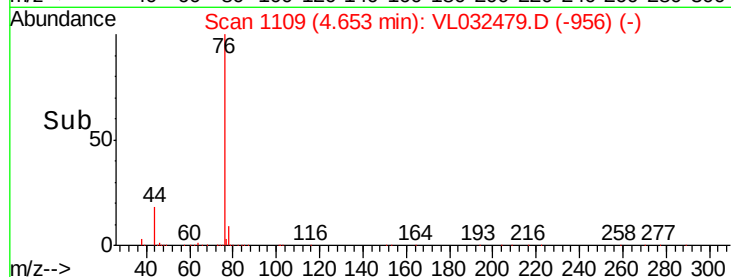
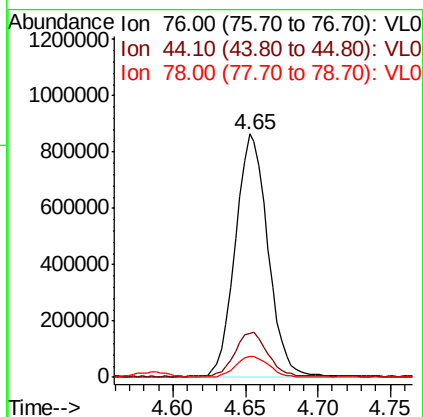
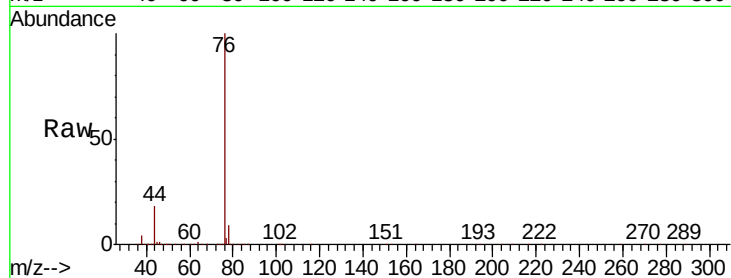
#27  
Carbon Disulfide  
Concen: 10.96 ppbv  
RT: 4.65 min Scan# 1109  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 76      | 100   |       |       |
| 44      | 18.6  | 14.0  | 21.0  |
| 78      | 9.0   | 7.5   | 11.3  |

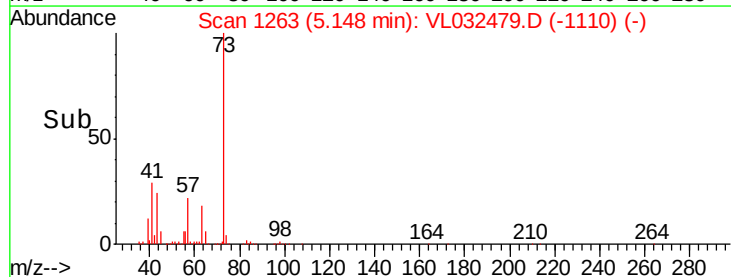
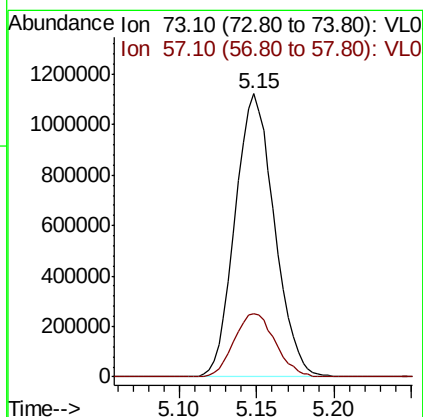
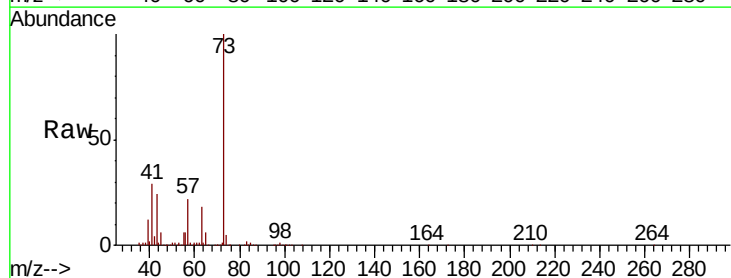
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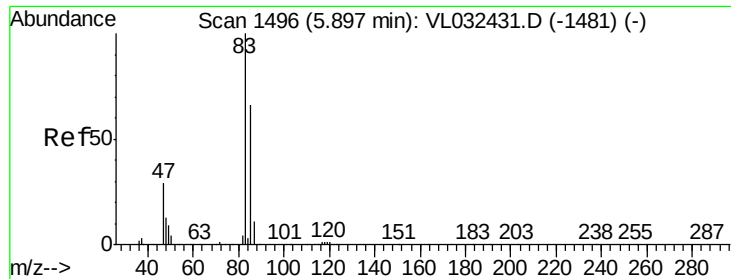
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#28  
Methyl tert-Butyl Ether  
Concen: 12.06 ppbv  
RT: 5.15 min Scan# 1263  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 57      | 23.6  | 19.3  | 28.9  |





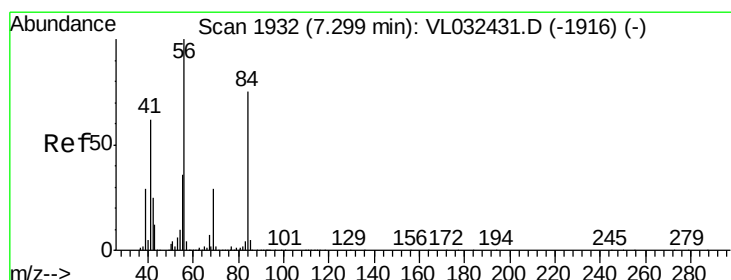
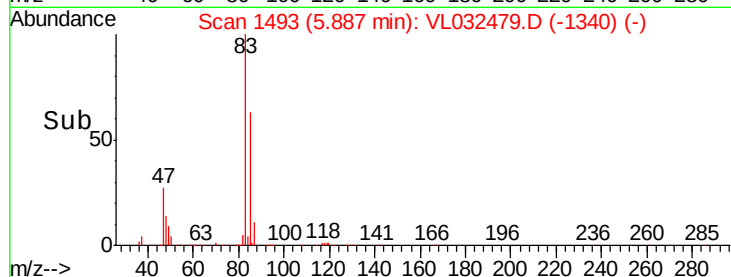
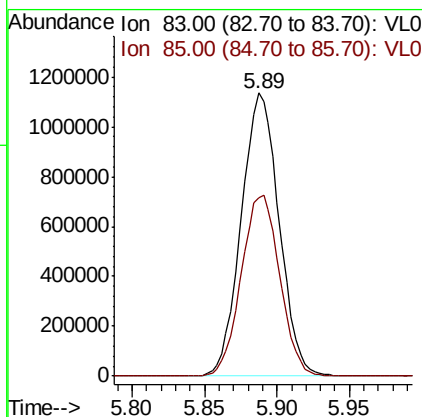
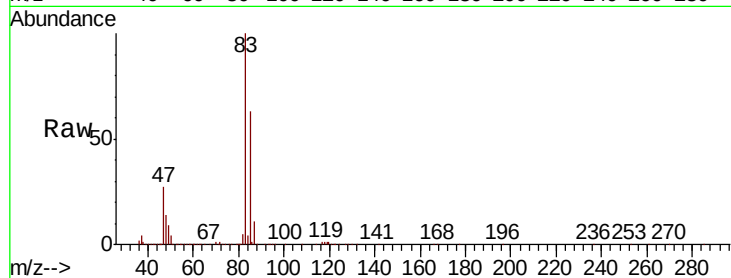
#29  
Chloroform  
Concen: 10.11 ppbv  
RT: 5.89 min Scan# 1493  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 83 Resp: 2061752  
Ion Ratio Lower Upper  
83 100  
85 62.9 52.5 78.7

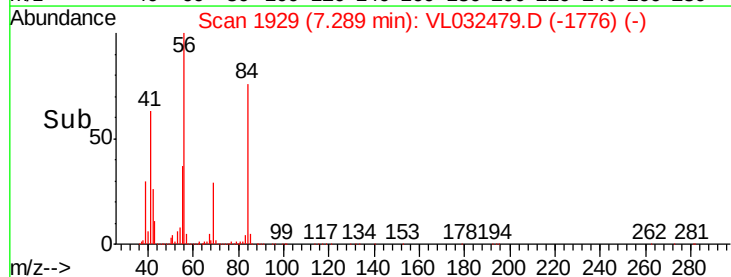
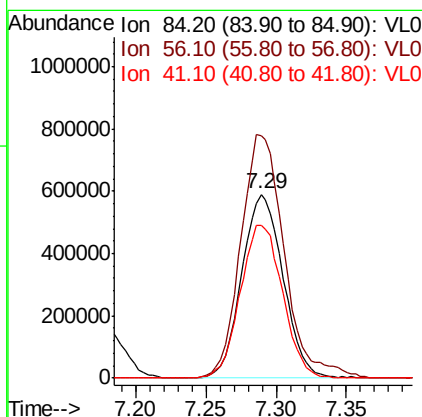
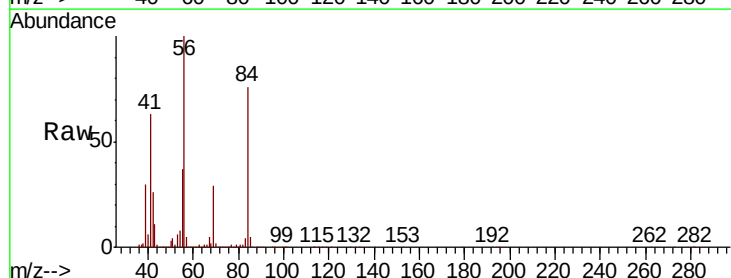
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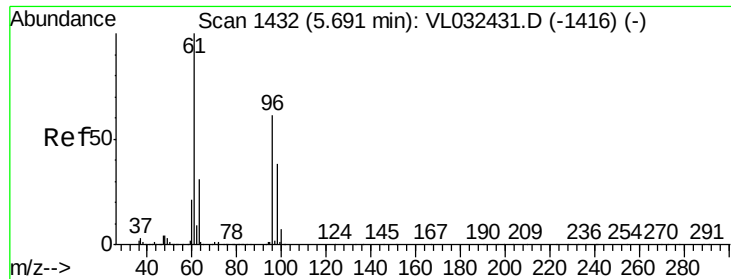
MMDadoda  
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#30  
Cyclohexane  
Concen: 12.32 ppbv  
RT: 7.29 min Scan# 1929  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Tgt Ion: 84 Resp: 1205978  
Ion Ratio Lower Upper  
84 100  
56 140.6 113.5 170.3  
41 85.3 68.1 102.1





#31

cis-1,2-Dichloroethene

Concen: 12.00 ppbv

RT: 5.68 min Scan# 1428

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 61 Resp: 1452738

Ion Ratio Lower Upper

61 100

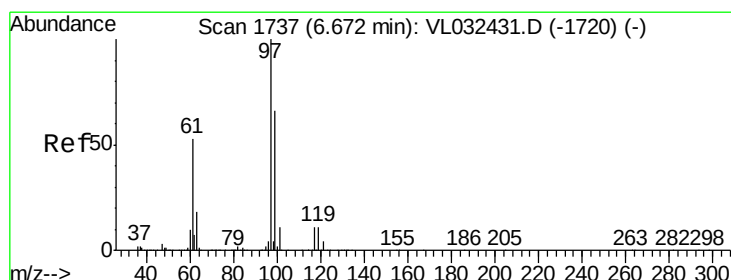
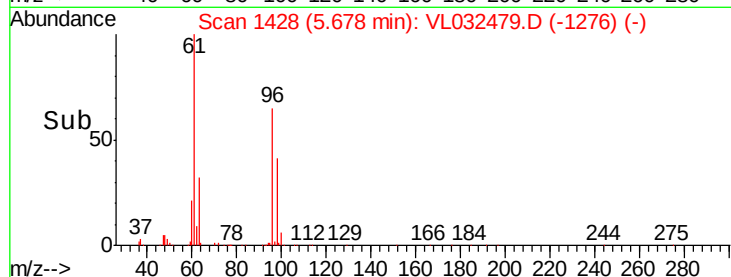
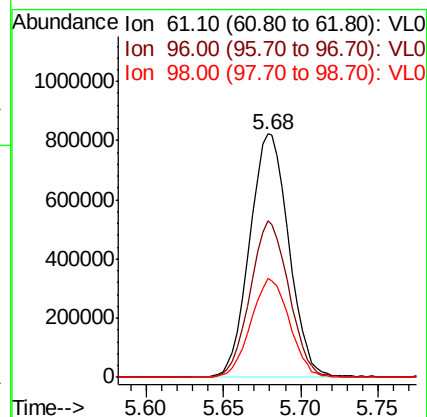
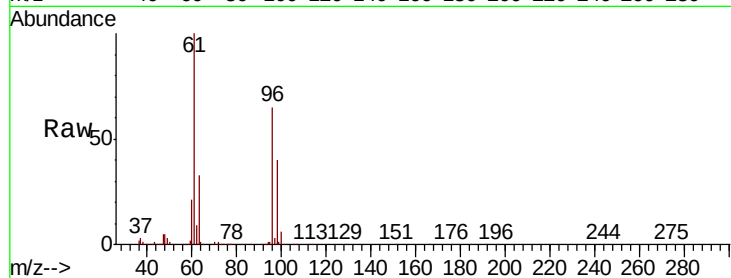
96 64.5 49.2 73.8

98 40.5 30.7 46.1

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#32

1,1,1-Trichloroethane

Concen: 10.28 ppbv

RT: 6.66 min Scan# 1733

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

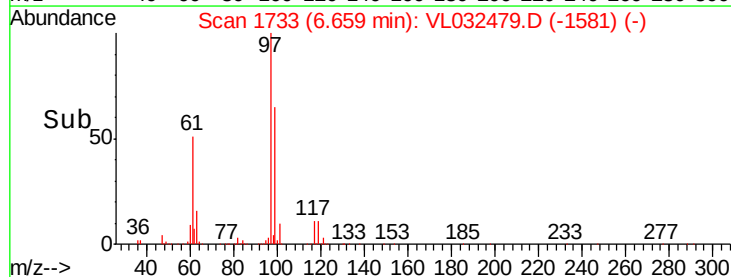
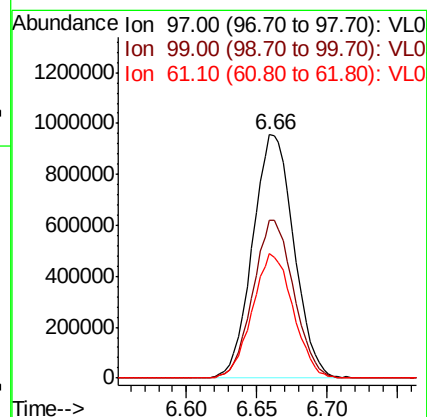
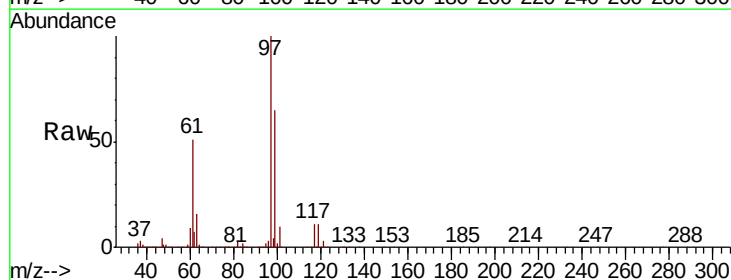
Tgt Ion: 97 Resp: 1954389

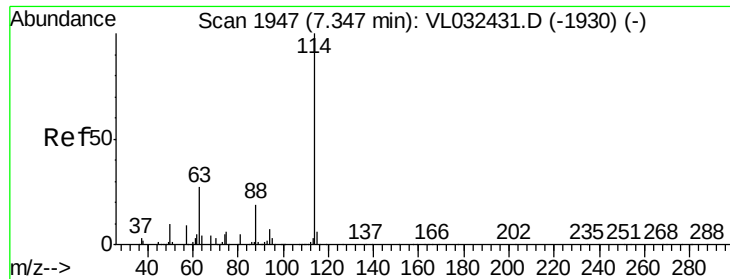
Ion Ratio Lower Upper

97 100

99 64.2 52.1 78.1

61 50.6 42.5 63.7





#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.34 min Scan# 1944

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:114 Resp: 2998773

Ion Ratio Lower Upper

114 100

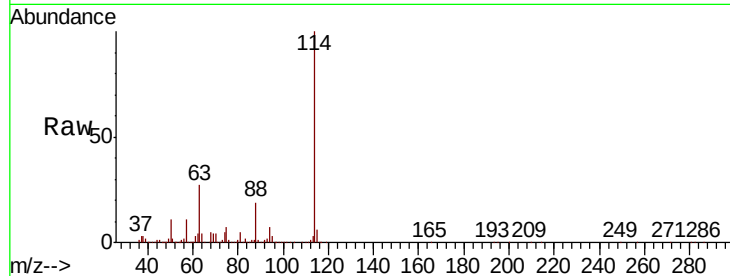
63 27.1 22.2 33.4

88 18.8 15.0 22.4

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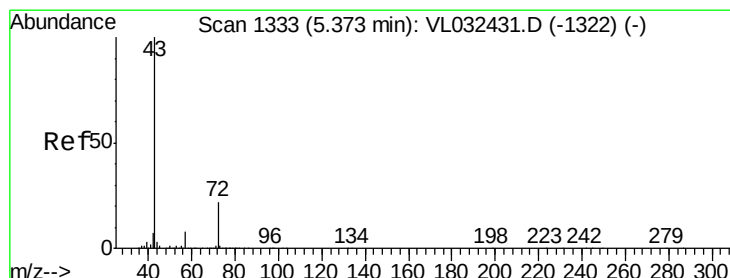
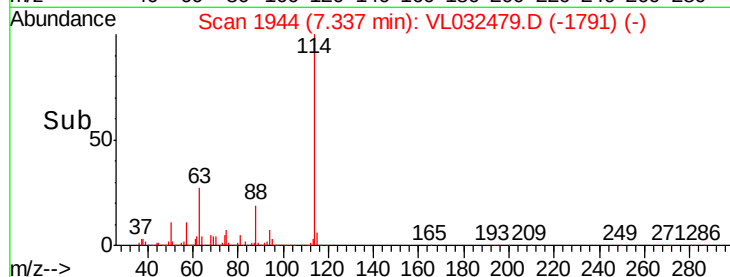
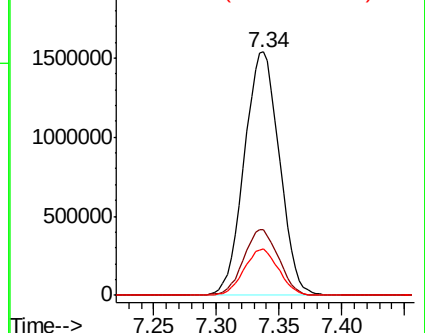
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Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 11.12 ppbv

RT: 5.36 min Scan# 1330

Delta R.T. -0.01 min

Lab File: VL032479.D

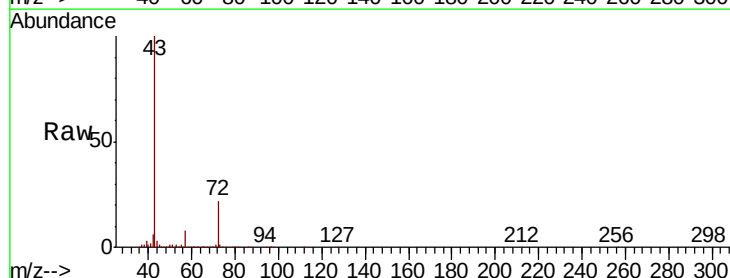
Acq: 6 Sep 2018 9:07

Tgt Ion: 43 Resp: 2214461

Ion Ratio Lower Upper

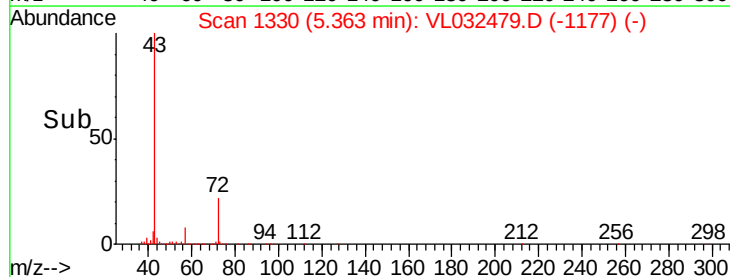
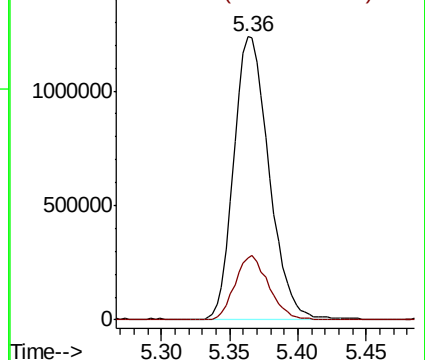
43 100

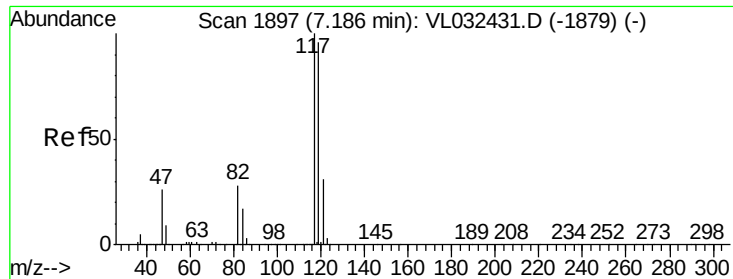
72 21.8 17.8 26.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 9.57 ppbv

RT: 7.18 min Scan# 1894

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:117 Resp: 1928976

Ion Ratio Lower Upper

117 100

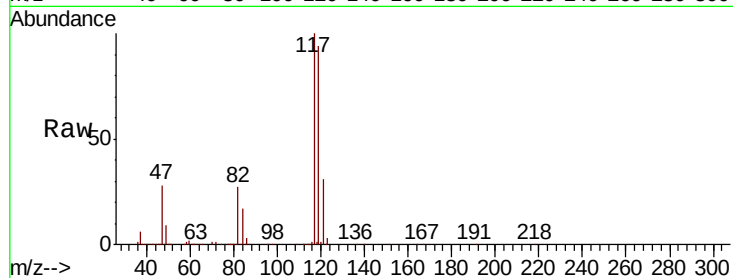
119 94.0 76.6 115.0

121 30.8 24.6 36.8

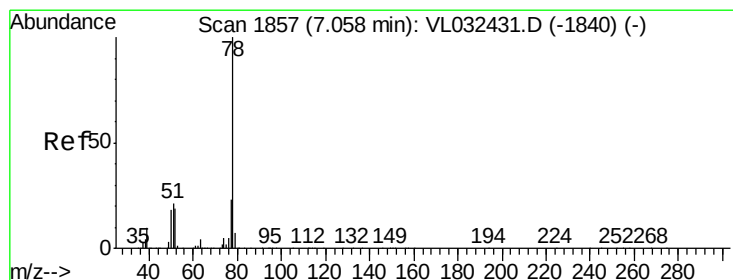
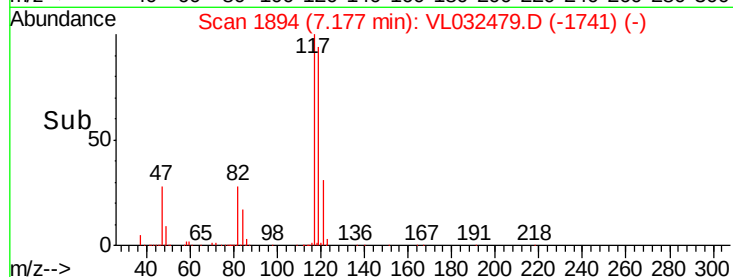
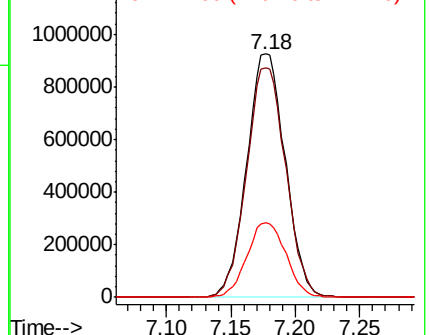
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Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 119.00 (118.70 to 119.70): V  
Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 11.41 ppbv

RT: 7.05 min Scan# 1854

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

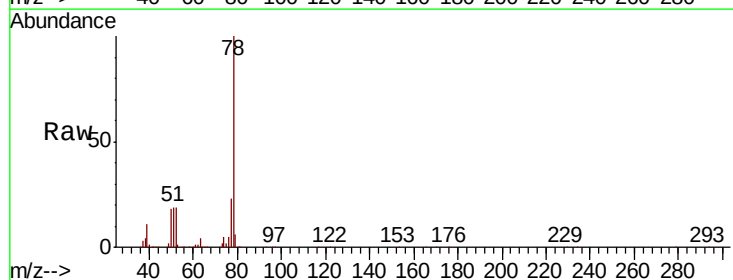
Tgt Ion: 78 Resp: 2912531

Ion Ratio Lower Upper

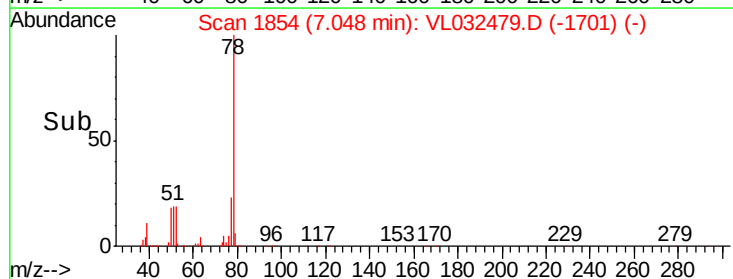
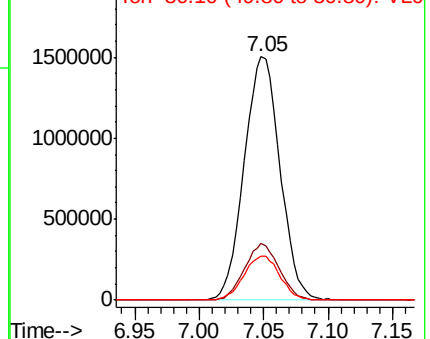
78 100

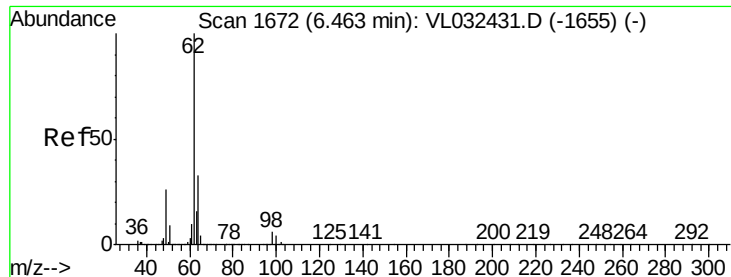
77 23.4 18.4 27.6

50 18.1 14.4 21.6



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: 9.98 ppbv

RT: 6.45 min Scan# 1669

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 1560966

Ion Ratio Lower Upper

62 100

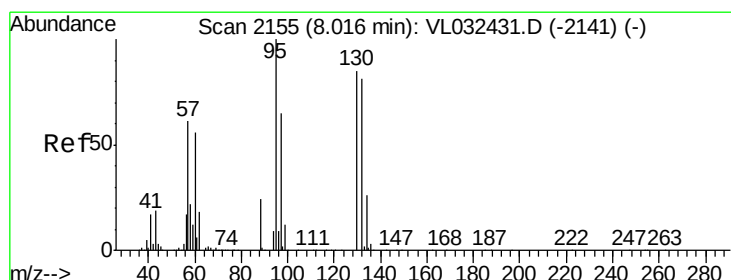
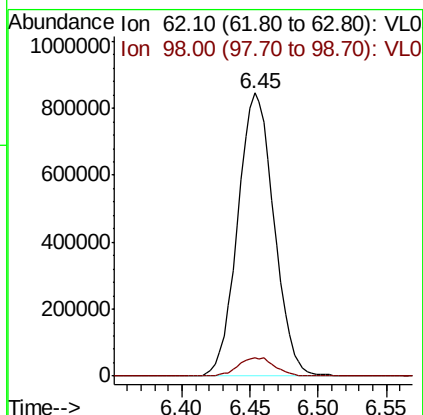
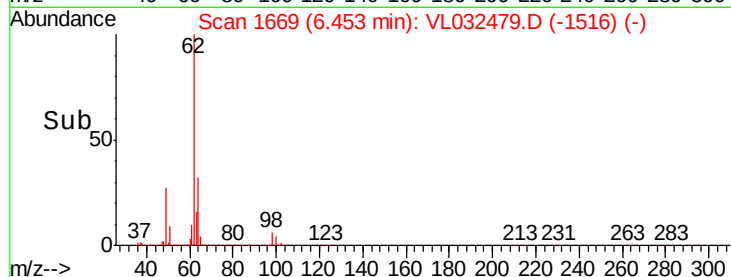
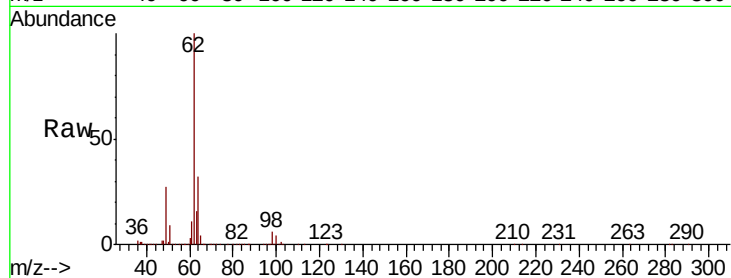
98 6.7 5.0 7.6

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#38

Trichloroethene

Concen: 9.83 ppbv

RT: 8.01 min Scan# 2152

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Tgt Ion: 130 Resp: 952476

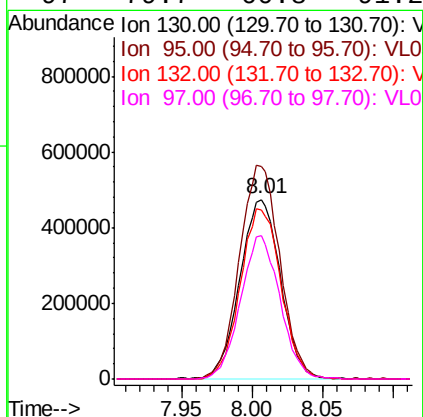
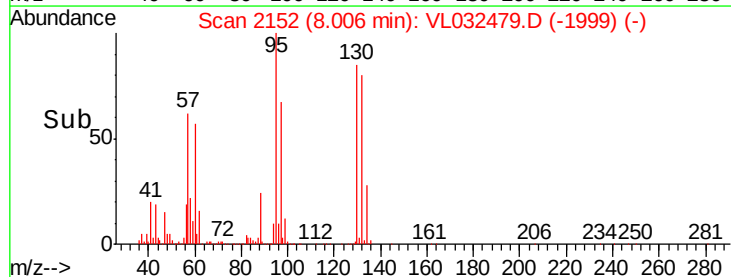
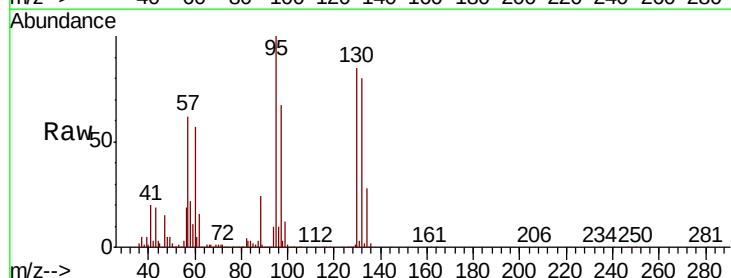
Ion Ratio Lower Upper

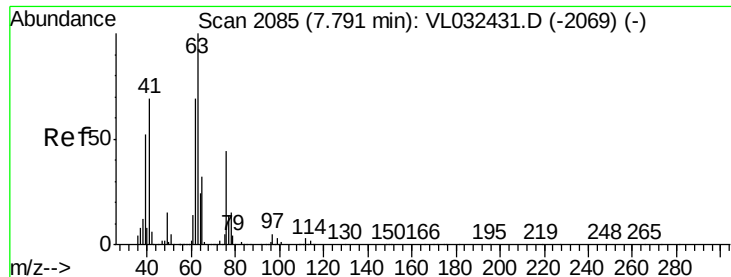
130 100

95 118.4 94.2 141.4

132 94.3 76.2 114.4

97 79.7 60.8 91.2





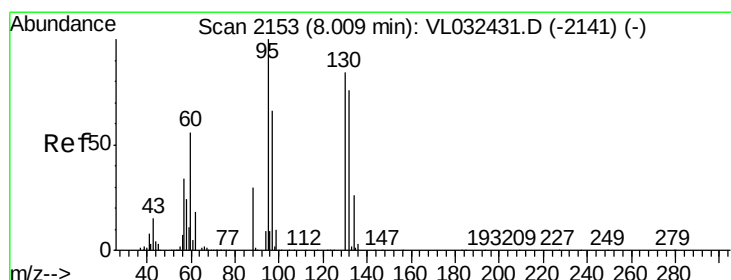
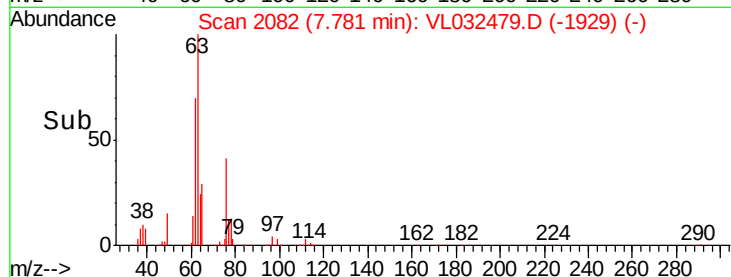
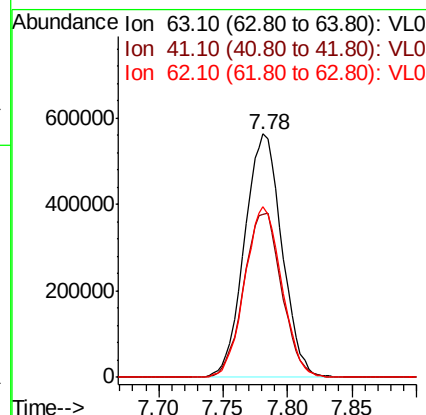
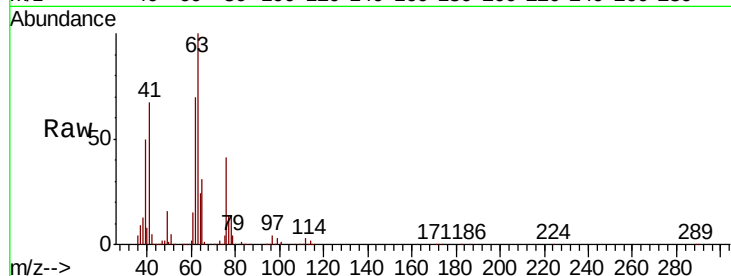
#39  
 1,2-Dichloropropane  
 Concen: 10.41 ppbv  
 RT: 7.78 min Scan# 2082  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 66.8  | 55.4  | 83.0  |
| 62      | 69.9  | 55.4  | 83.0  |

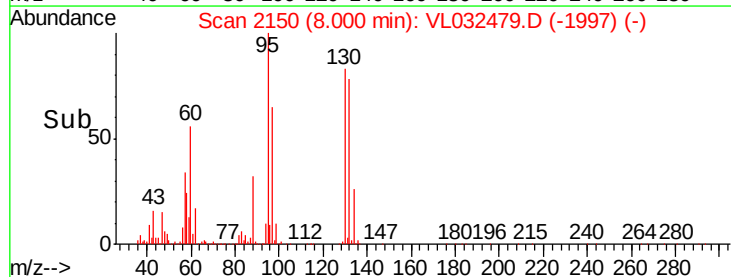
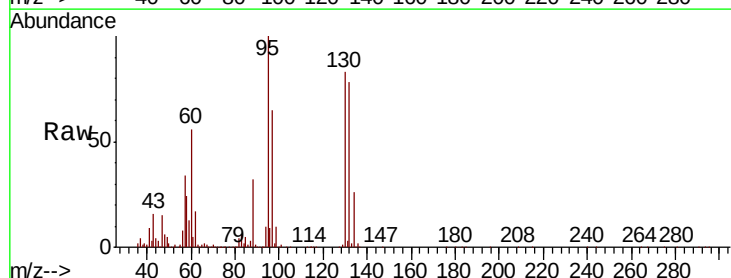
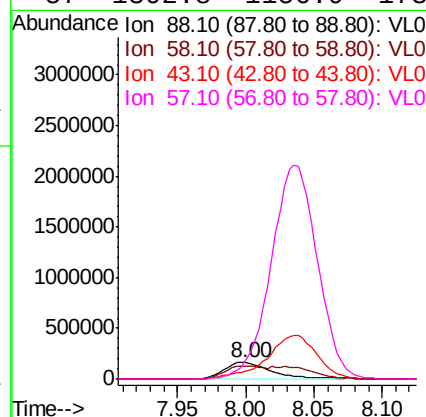
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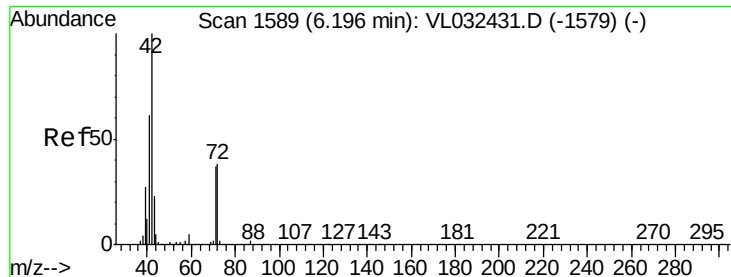


#40  
 1,4-Dioxane  
 Concen: 11.68 ppbv  
 RT: 8.00 min Scan# 2150  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio  | Lower  | Upper  |
|---------|--------|--------|--------|
| 88      | 100    |        |        |
| 58      | 138.9  | 119.7  | 179.5  |
| 43      | 288.1  | 253.0  | 379.4  |
| 57      | 1302.8 | 1156.9 | 1735.3 |







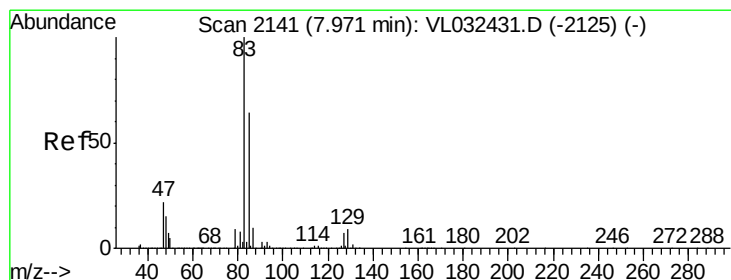
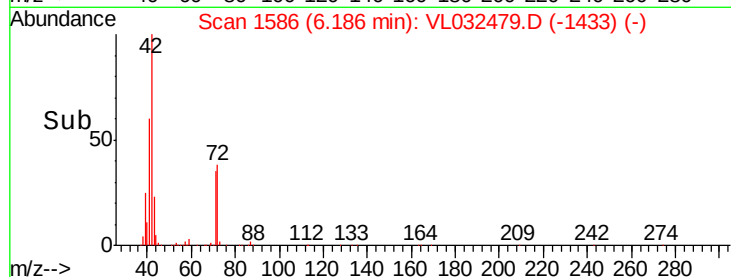
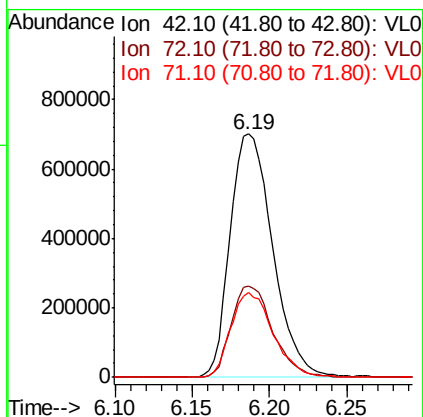
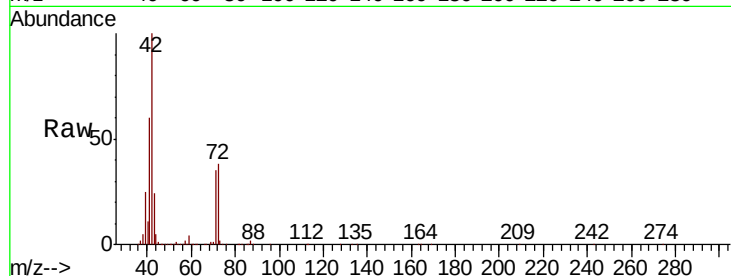
#41  
Tetrahydrofuran  
Concen: 12.34 ppbv  
RT: 6.19 min Scan# 1586  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 36.8  | 29.5  | 44.3  |
| 71      | 34.9  | 28.3  | 42.5  |

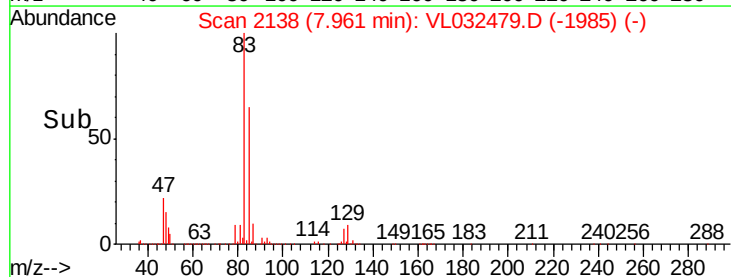
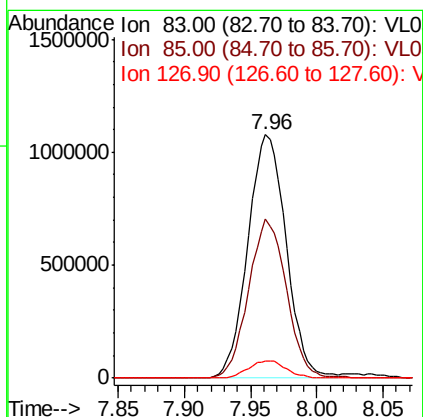
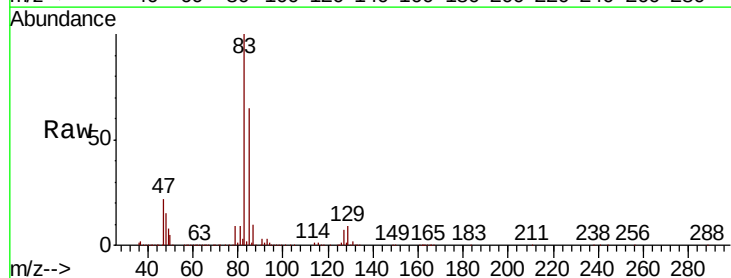
Manual Integrations  
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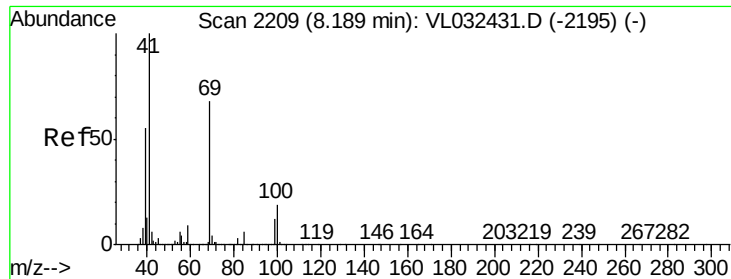
MMDadoda  
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#42  
Bromodichloromethane  
Concen: 10.06 ppbv  
RT: 7.96 min Scan# 2138  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 65.1  | 51.1  | 76.7  |
| 127     | 7.0   | 5.8   | 8.8   |





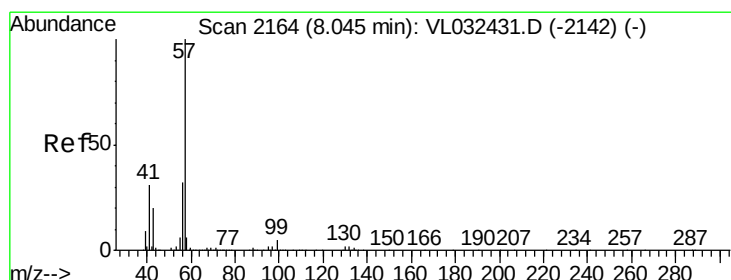
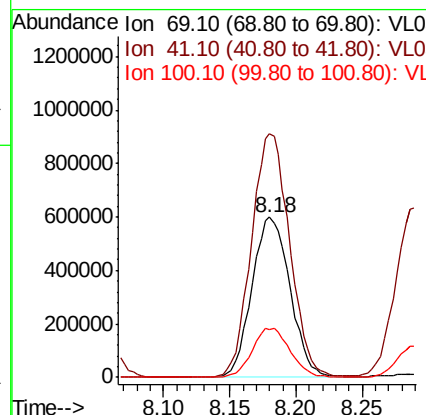
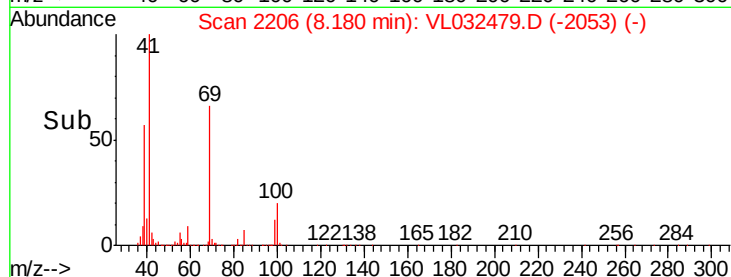
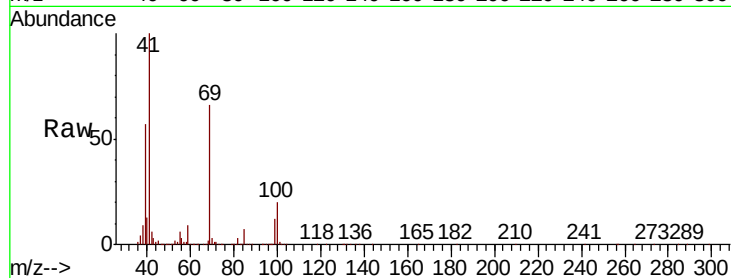
#43  
Methyl Methacrylate  
Concen: 11.08 ppbv  
RT: 8.18 min Scan# 2206  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 69 Resp: 1199128  
Ion Ratio Lower Upper  
69 100  
41 151.8 117.1 175.7  
100 30.3 23.4 35.2

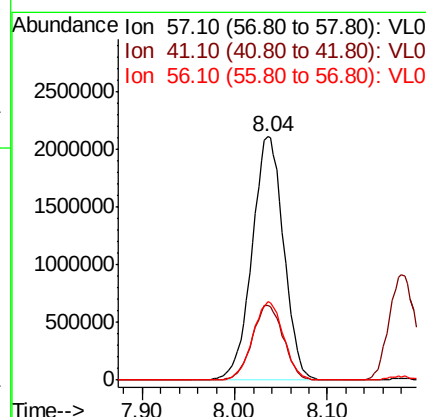
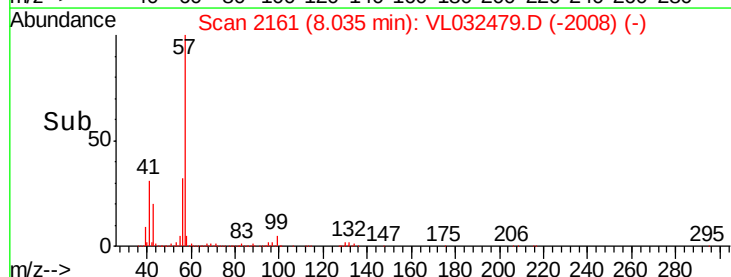
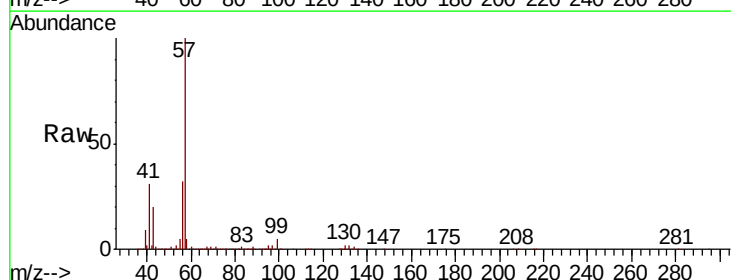
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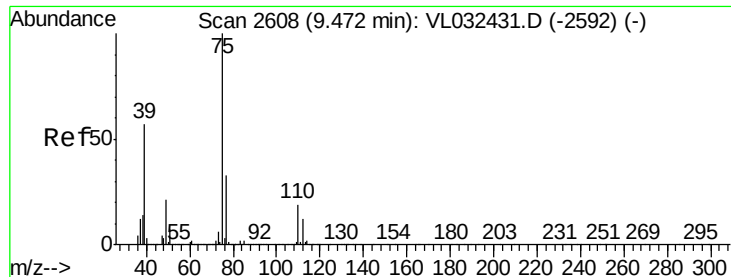
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#44  
2,2,4-Trimethylpentane  
Concen: 10.10 ppbv  
RT: 8.04 min Scan# 2161  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Tgt Ion: 57 Resp: 4981127  
Ion Ratio Lower Upper  
57 100  
41 30.2 24.4 36.6  
56 31.6 25.7 38.5





#45

t-1,3-Dichloropropene

Concen: 13.62 ppbv

RT: 9.46 min Scan# 2604

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Tot Ion: 75 Resp: 1577833

Ion Ratio Lower Upper

75 100

77 31.6 26.2 39.2

Instrument :

MSVOA\_L

ClientSampleId :

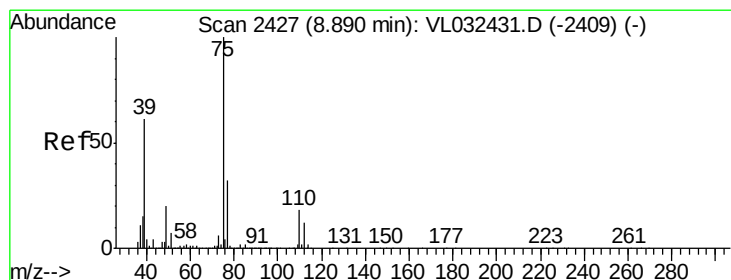
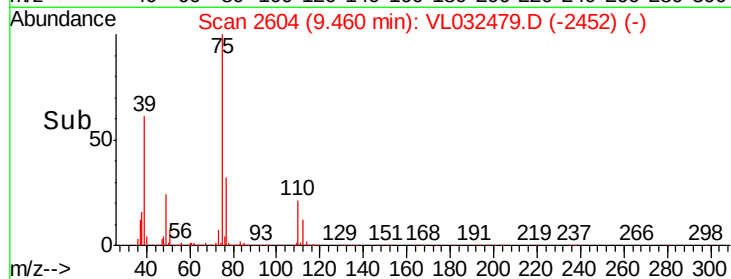
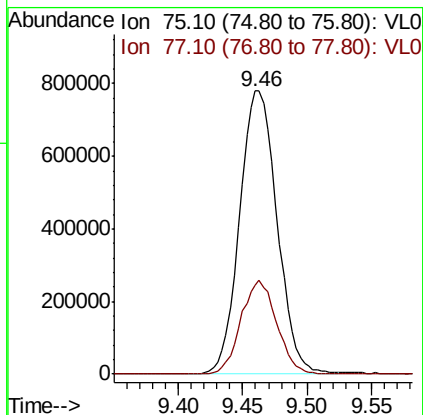
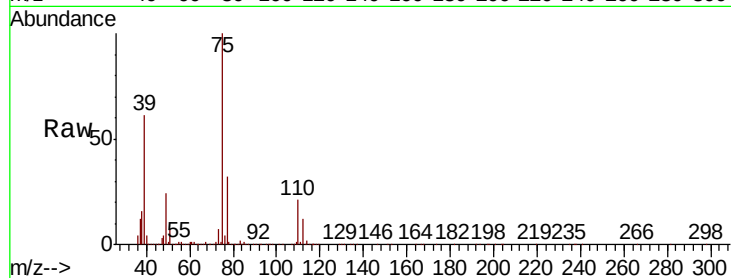
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#46

cis-1,3-Dichloropropene

Concen: 12.73 ppbv

RT: 8.88 min Scan# 2424

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

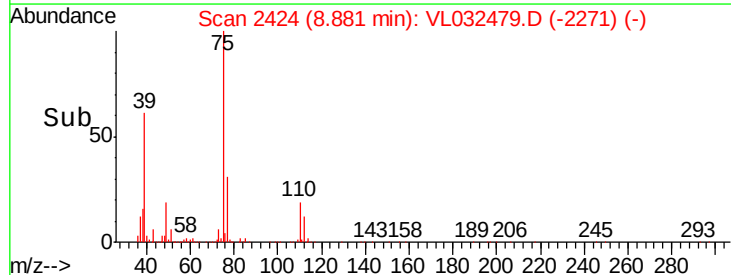
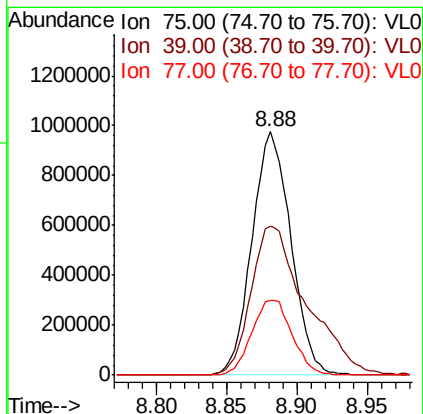
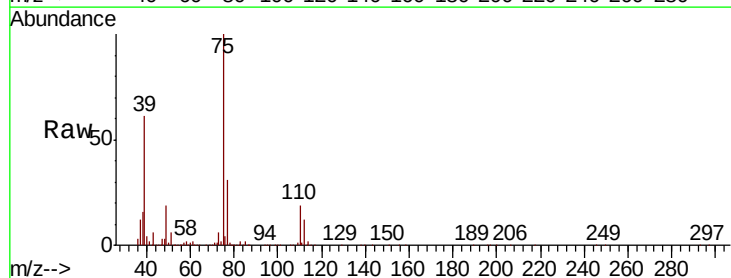
Tgt Ion: 75 Resp: 1884169

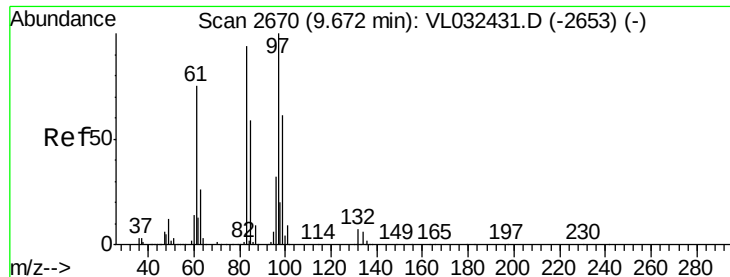
Ion Ratio Lower Upper

75 100

39 61.1 48.9 73.3

77 30.8 25.4 38.0





#47

1,1,2-Trichloroethane

Concen: 10.33 ppbv

RT: 9.66 min Scan# 2666

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 97 Resp: 1199243

Ion Ratio Lower Upper

97 100

83 92.8 75.0 112.4

85 56.9 47.5 71.3

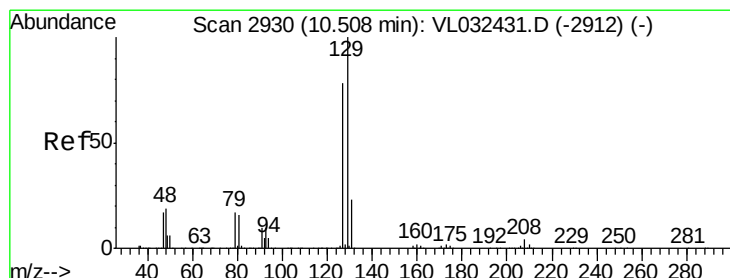
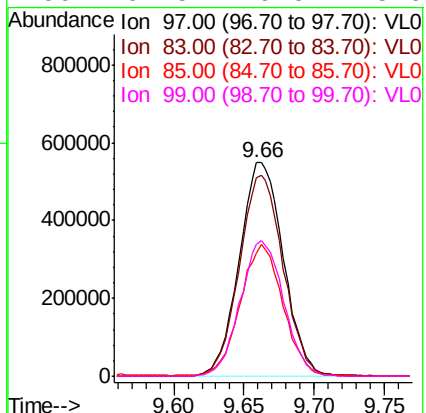
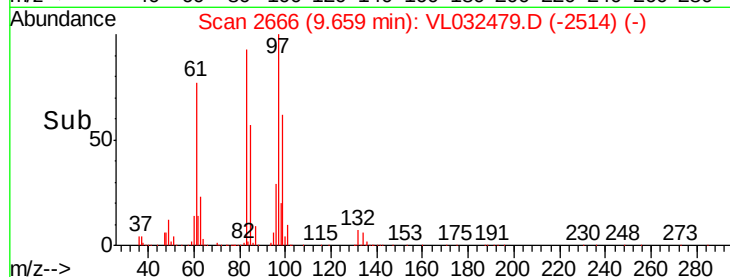
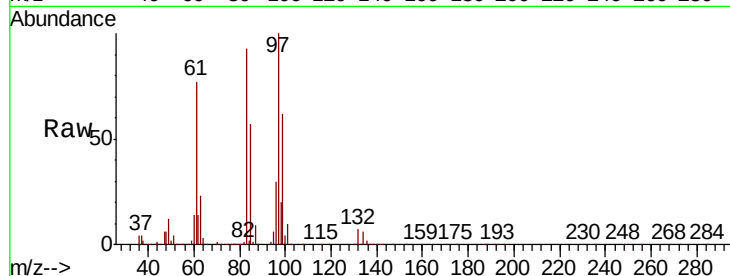
99 61.5 49.0 73.6

Manual Integrations

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#48

Dibromochloromethane

Concen: 10.73 ppbv

RT: 10.50 min Scan# 2927

Delta R.T. -0.01 min

Lab File: VL032479.D

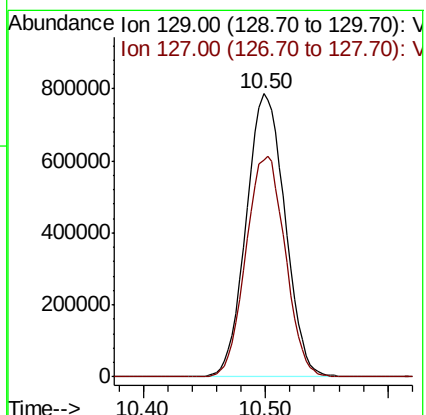
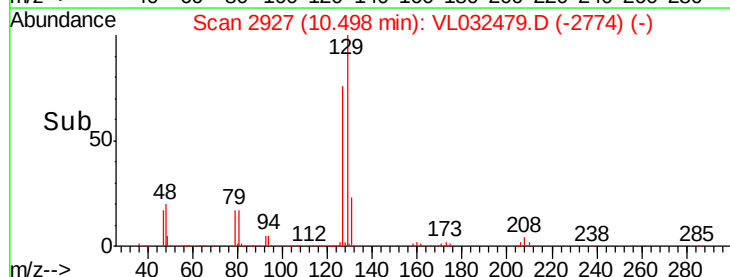
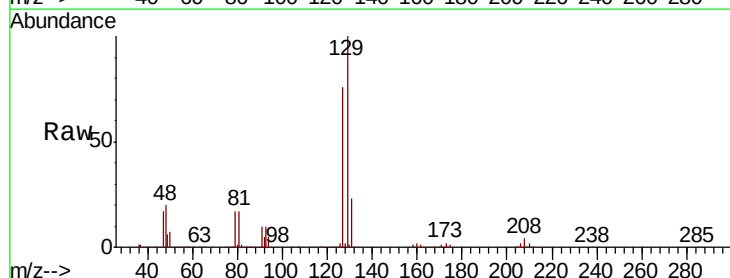
Acq: 6 Sep 2018 9:07

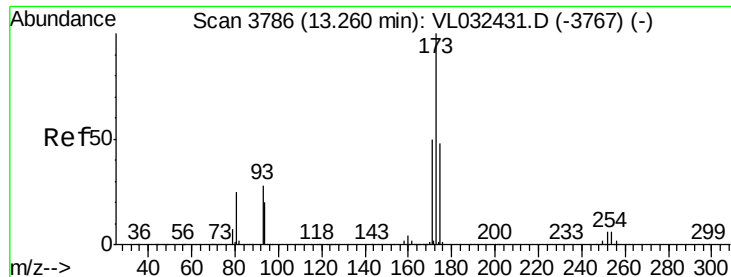
Tgt Ion: 129 Resp: 1725721

Ion Ratio Lower Upper

129 100

127 79.1 39.5 118.3





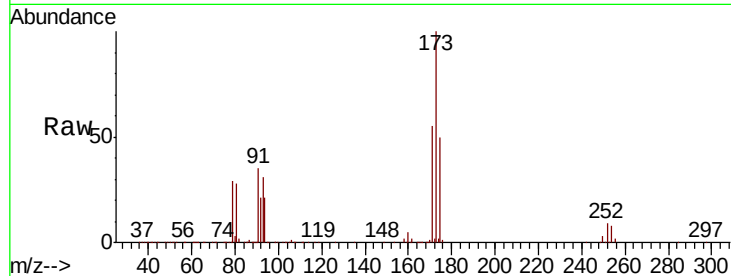
#49  
Bromoform  
Concen: 9.98 ppbv  
RT: 13.25 min Scan# 3783  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 173     | 100   |       |       |
| 175     | 48.7  | 38.9  | 58.3  |
| 171     | 52.4  | 41.6  | 62.4  |

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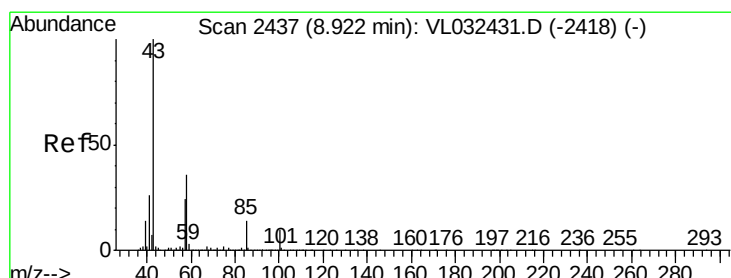
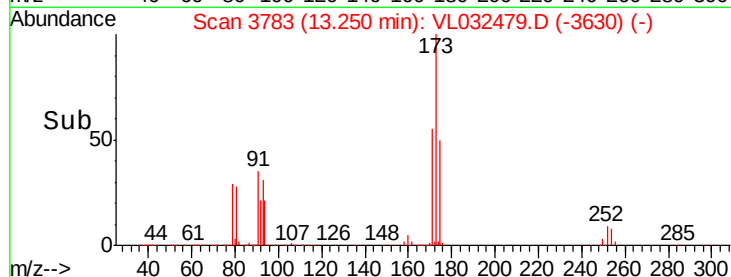
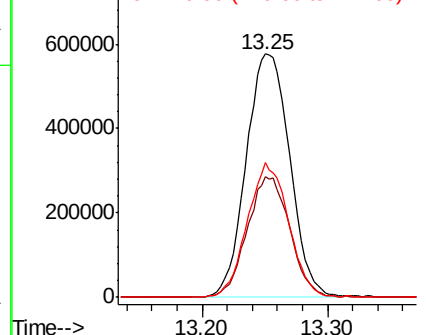


Abundance

Ion 172.90 (172.60 to 173.60): V

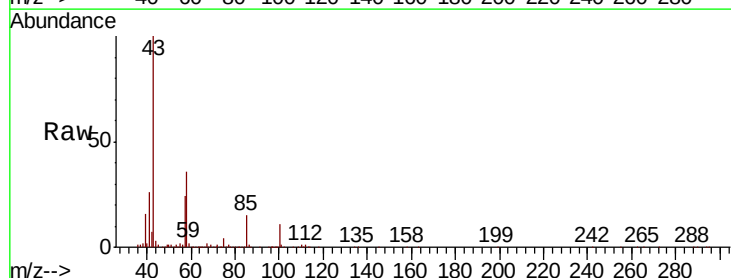
Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50  
4-Methyl-2-Pentanone  
Concen: 11.10 ppbv  
RT: 8.91 min Scan# 2434  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

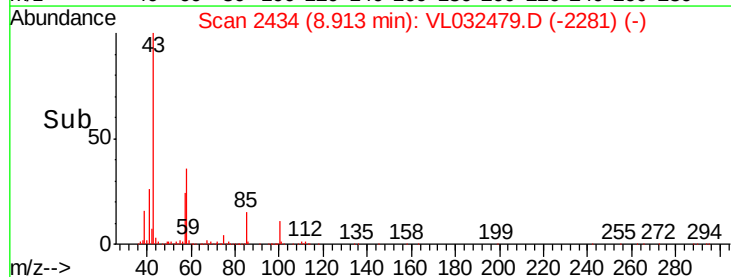
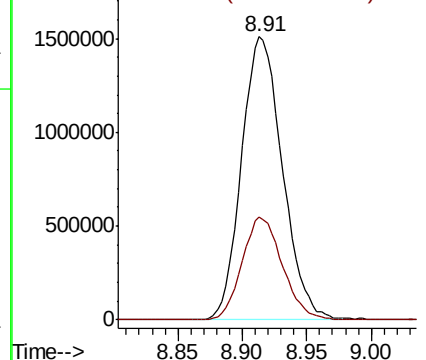
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 36.0  | 29.0  | 43.4  |

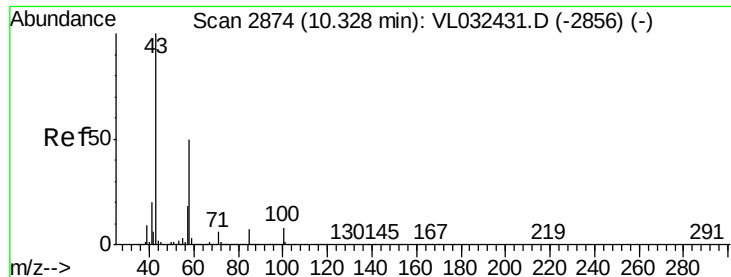


Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 12.78 ppbv

RT: 10.31 min Scan# 2870

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 2470175

Ion Ratio Lower Upper

43 100

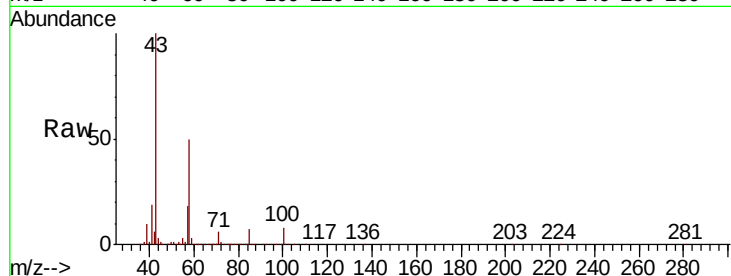
58 49.4 39.2 58.8

98 0.2 0.4 0.6#

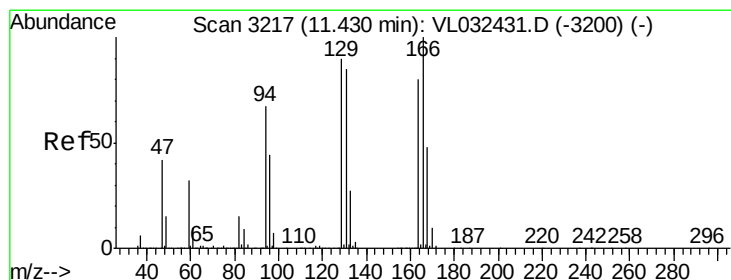
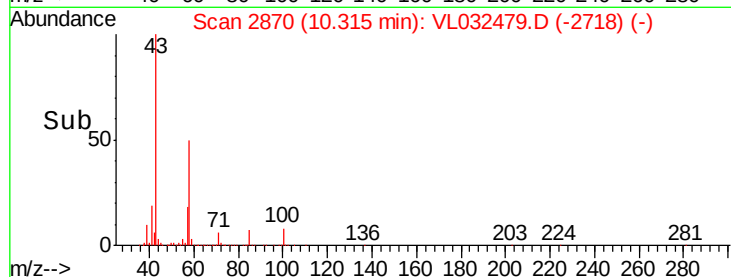
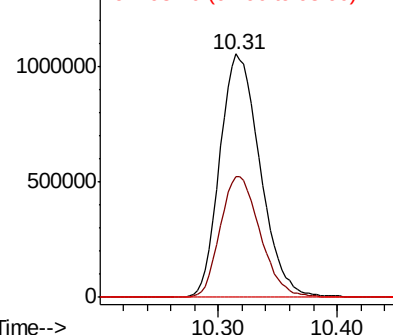
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Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 58.10 (57.80 to 58.80): VL0  
Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 10.59 ppbv

RT: 11.42 min Scan# 3213

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Tgt Ion: 164 Resp: 837943

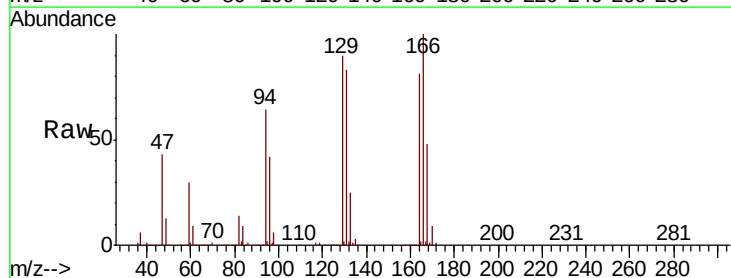
Ion Ratio Lower Upper

164 100

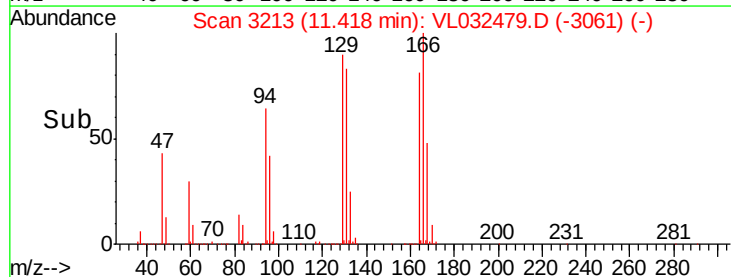
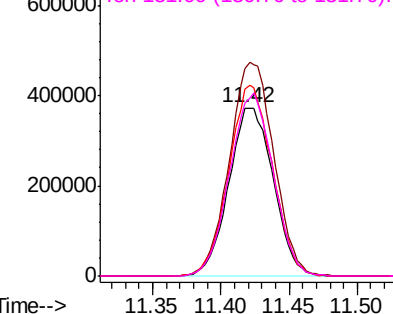
166 123.9 100.6 150.8

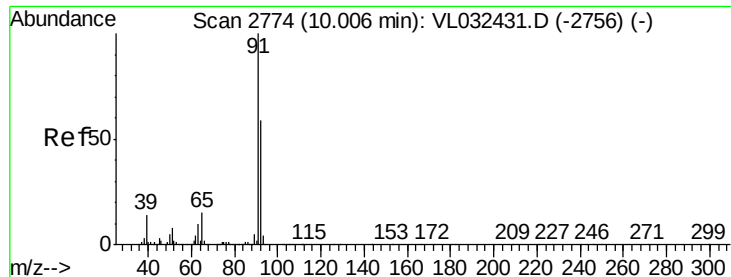
129 111.7 89.9 134.9

131 103.4 85.9 128.9



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





#53

Toluene

Concen: 12.26 ppbv

RT: 9.99 min Scan# 2769

Delta R.T. -0.02 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Tot Ion: 91 Resp: 3271208

Ion Ratio Lower Upper

91 100

92 60.2 48.1 72.1

Instrument :

MSVOA\_L

ClientSampleId :

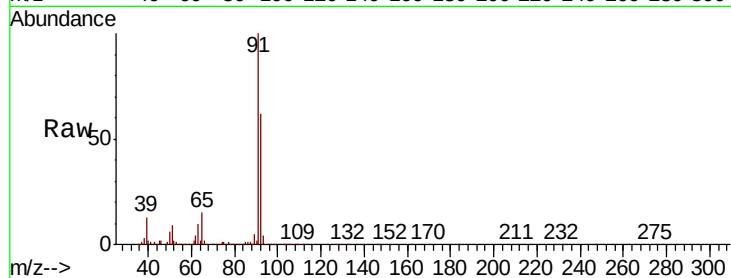
VSTDCCC010EC

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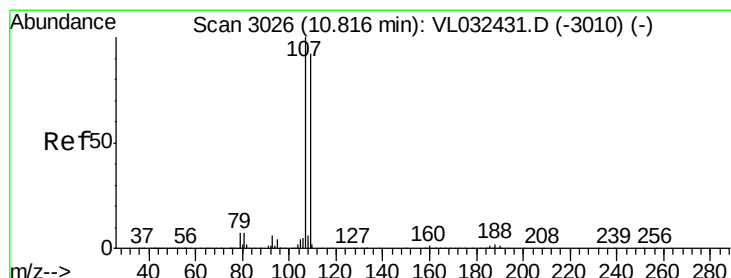
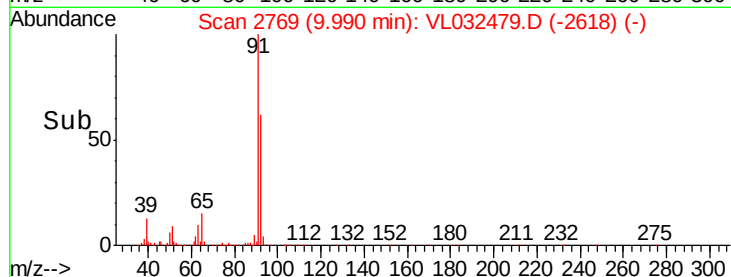
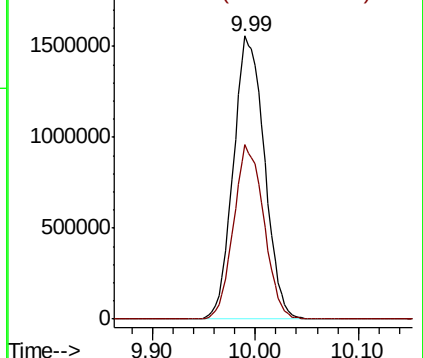
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#54

1,2-Dibromoethane

Concen: 10.44 ppbv

RT: 10.81 min Scan# 3024

Delta R.T. -0.01 min

Lab File: VL032479.D

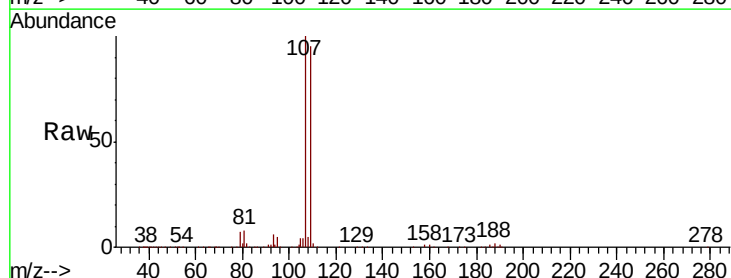
Acq: 6 Sep 2018 9:07

Tgt Ion:107 Resp: 1626998

Ion Ratio Lower Upper

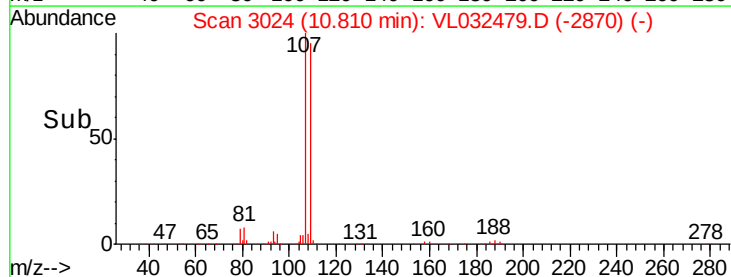
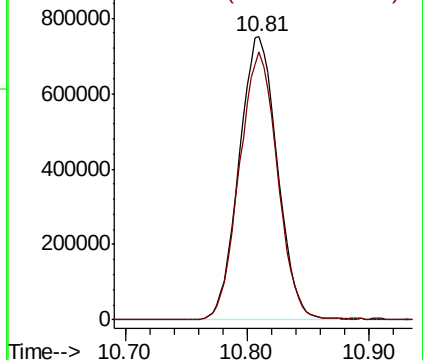
107 100

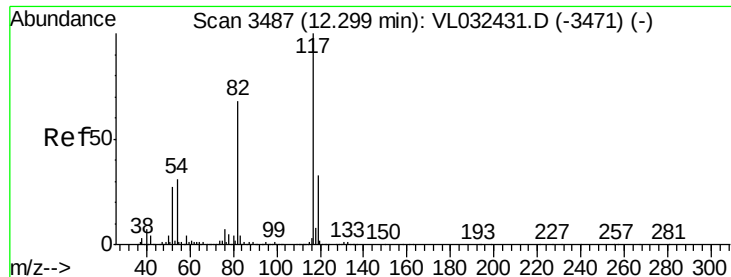
109 94.8 73.9 110.9



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V





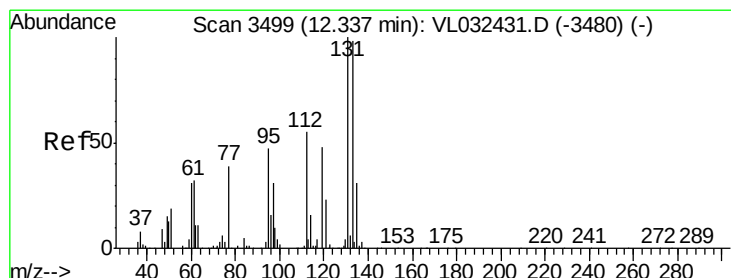
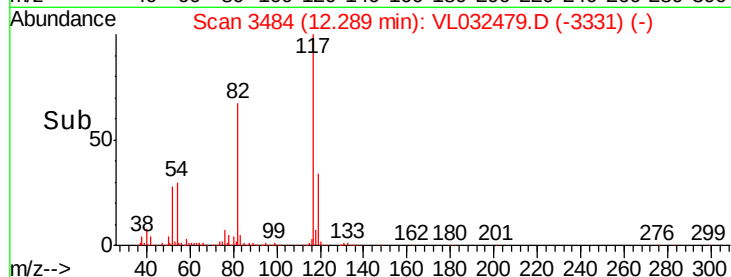
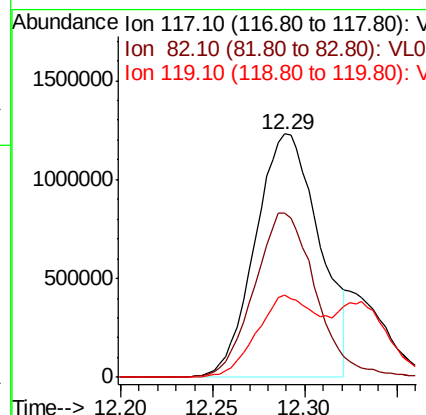
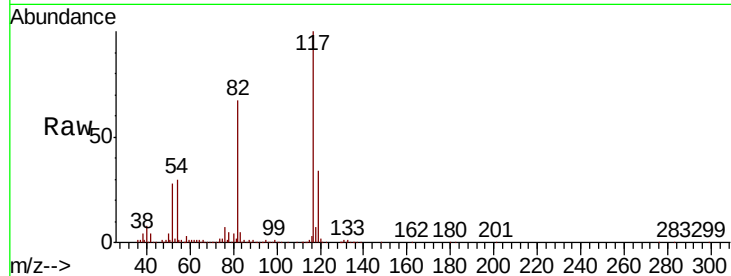
#55  
Chlorobenzene-d5  
Concen: 10.00 ppbv m  
RT: 12.29 min Scan# 3484  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 65.2  | 53.0  | 79.6  |
| 119     | 33.6  | 45.9  | 68.9# |

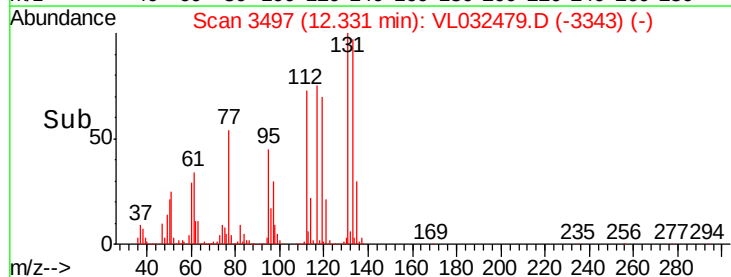
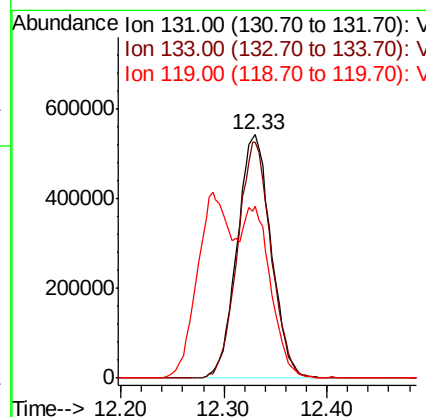
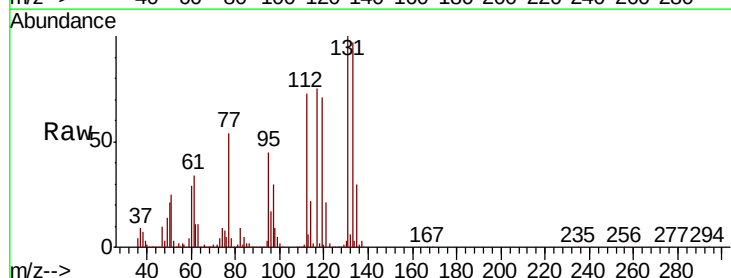
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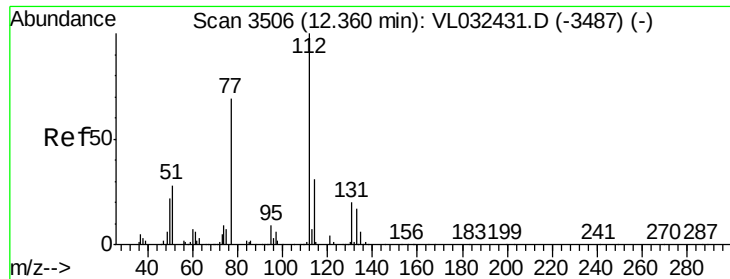


#56  
1,1,1,2-Tetrachloroethane  
Concen: 9.19 ppbv  
RT: 12.33 min Scan# 3497  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 131     | 100   |       |        |
| 133     | 96.2  | 77.0  | 115.4  |
| 119     | 62.3  | 114.2 | 171.2# |







#57

Chlorobenzene

Concen: 9.52 ppbv

RT: 12.35 min Scan# 3504

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

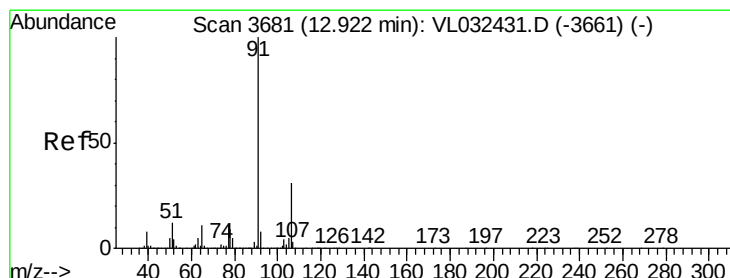
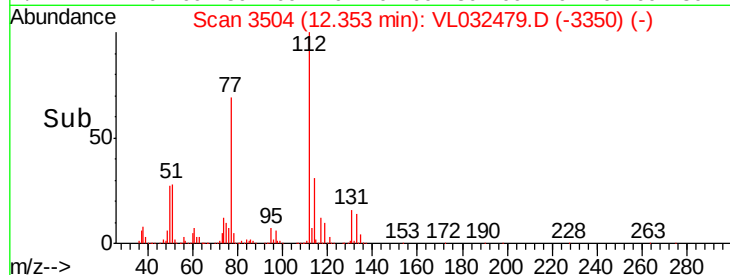
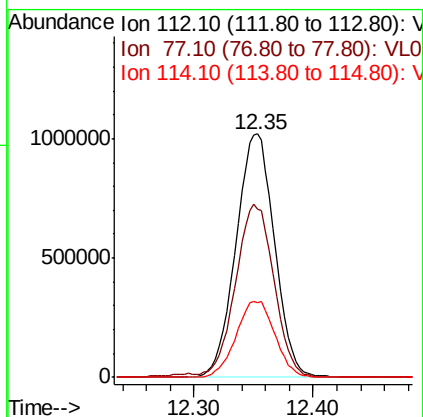
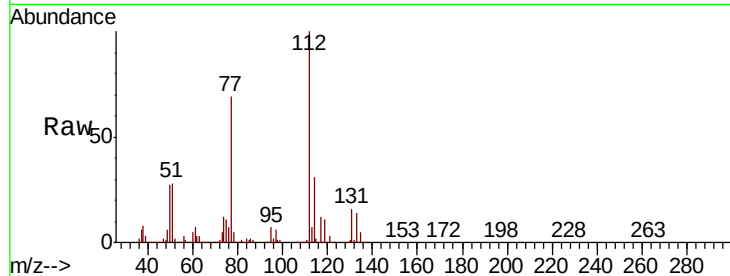
ClientSampleId :

VSTDCCC010EC

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 112   | Resp: | 2277951 |
| Ion      | Ratio | Lower | Upper   |
| 112      | 100   |       |         |
| 77       | 68.8  | 56.1  | 84.1    |
| 114      | 30.8  | 27.8  | 34.0    |

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#58

Ethyl Benzene

Concen: 11.79 ppbv

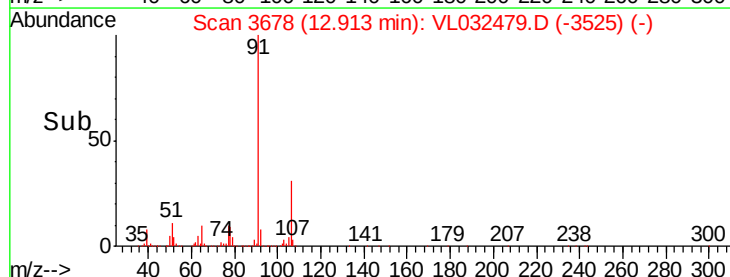
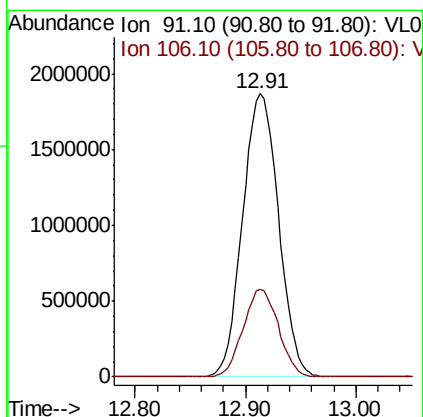
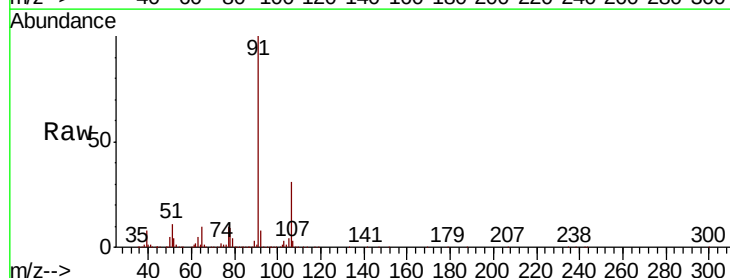
RT: 12.91 min Scan# 3678

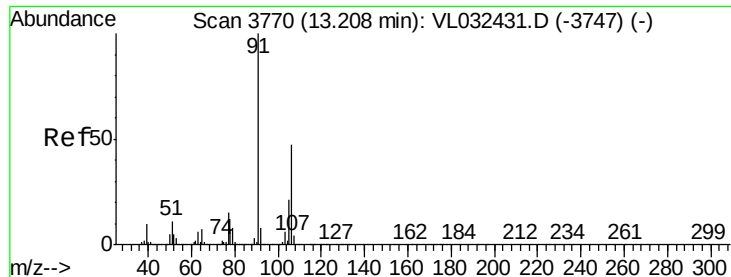
Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 91    | Resp: | 4221582 |
| Ion      | Ratio | Lower | Upper   |
| 91       | 100   |       |         |
| 106      | 31.1  | 24.8  | 37.2    |





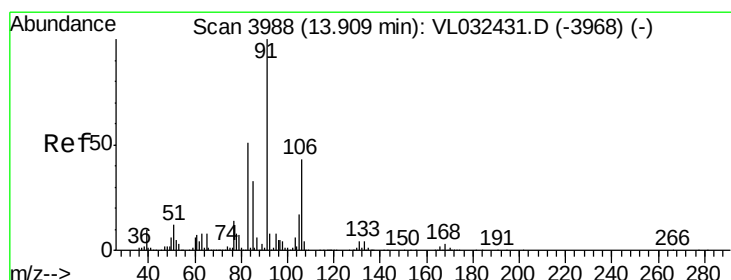
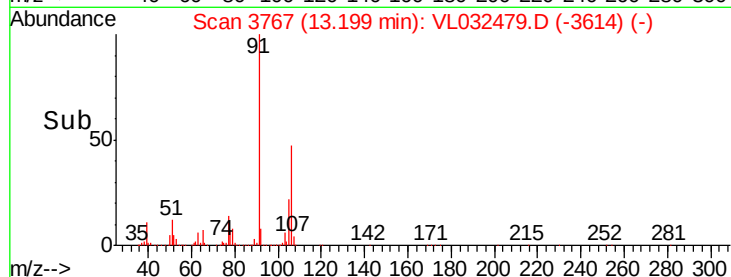
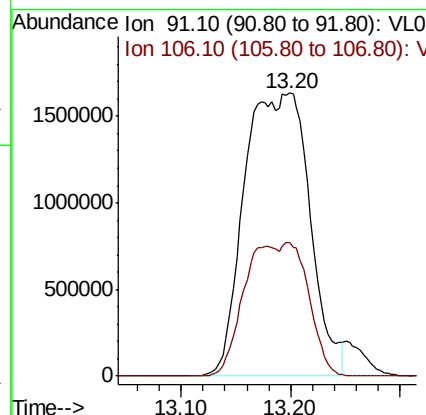
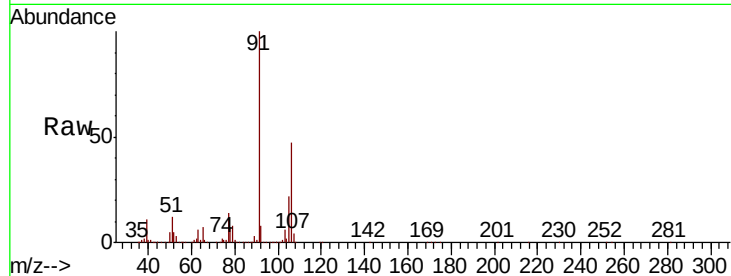
#59  
m/p-Xylene  
Concen: 21.20 ppbv m  
RT: 13.20 min Scan# 3767  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 91 Resp: 6768447  
Ion Ratio Lower Upper  
91 100  
106 45.7 36.6 55.0

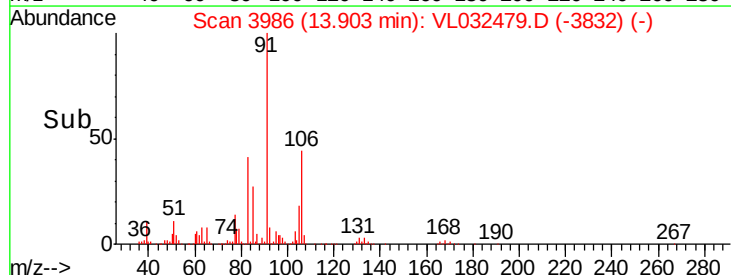
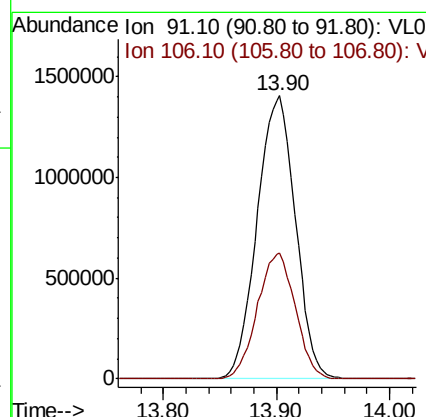
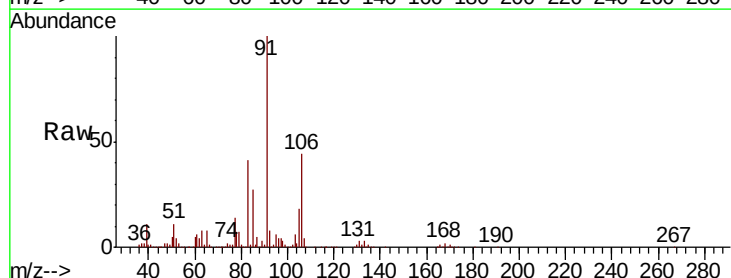
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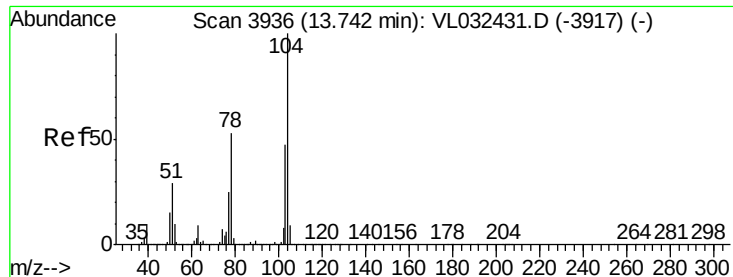
MMDadoda  
9/7/2018 10:46:13 AM



#60  
o-Xylene  
Concen: 10.51 ppbv  
RT: 13.90 min Scan# 3986  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Tgt Ion: 91 Resp: 3297240  
Ion Ratio Lower Upper  
91 100  
106 44.2 21.9 65.7





#61

Stvrene

Concen: 12.57 ppbv

RT: 13.74 min Scan# 3934

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:104 Resp: 2551869

Ion Ratio Lower Upper

104 100

78 52.0 41.8 62.8

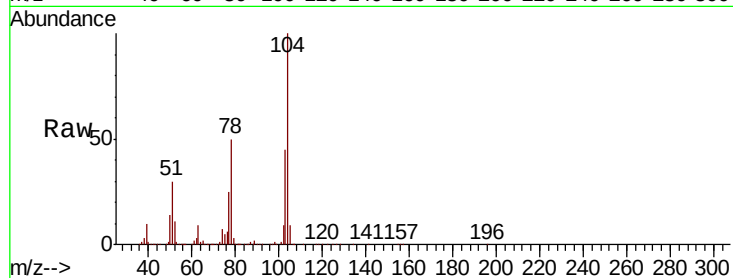
103 46.9 38.0 57.0

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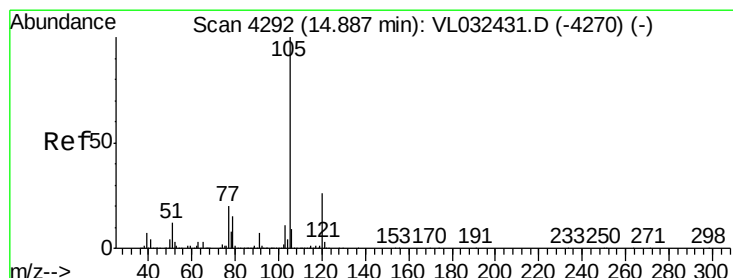
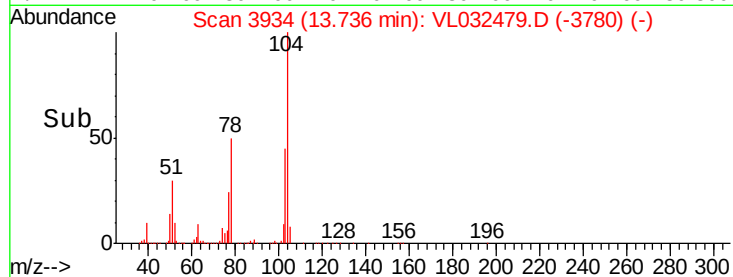
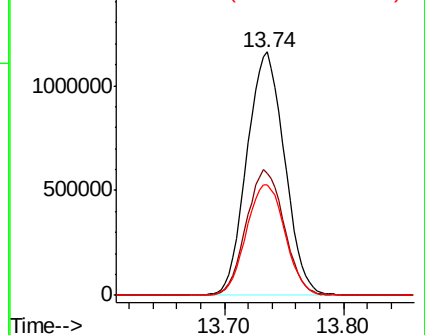
9/7/2018 10:46:13 AM



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 10.77 ppbv

RT: 14.88 min Scan# 4289

Delta R.T. -0.01 min

Lab File: VL032479.D

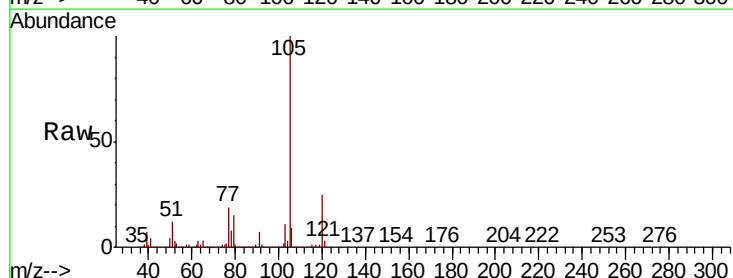
Acq: 6 Sep 2018 9:07

Tgt Ion:105 Resp: 4747999

Ion Ratio Lower Upper

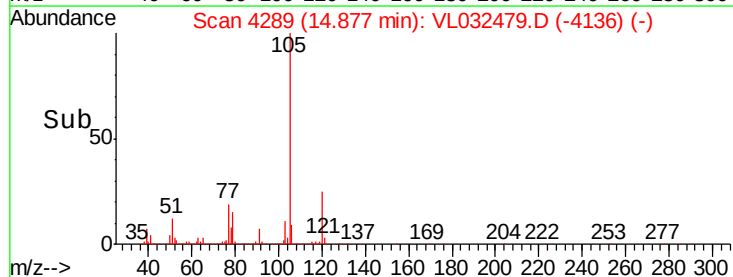
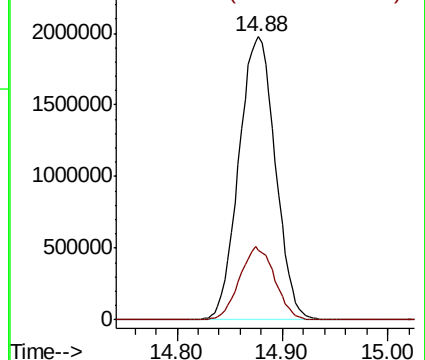
105 100

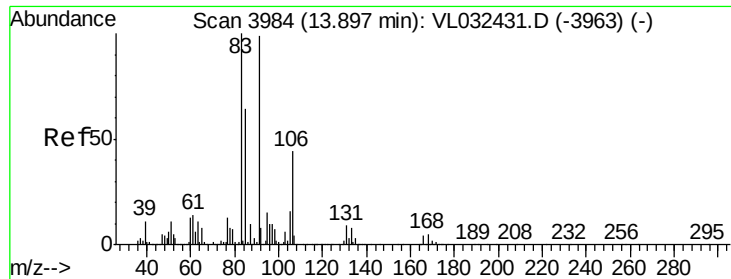
120 25.1 20.6 31.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 8.76 ppbv

RT: 13.88 min Scan# 3980

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

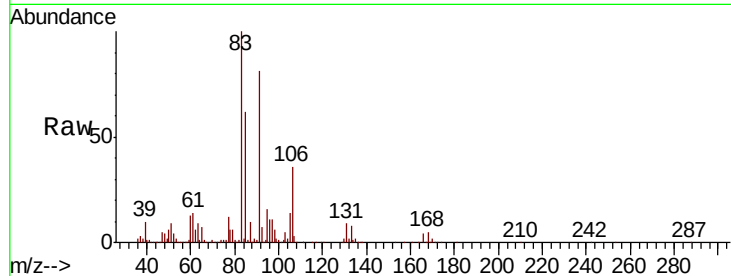
ClientSampleId :

VSTDCCC010EC

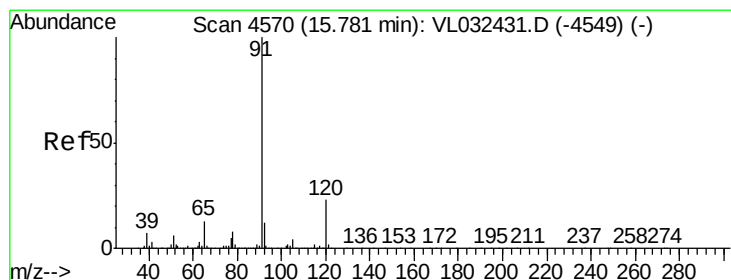
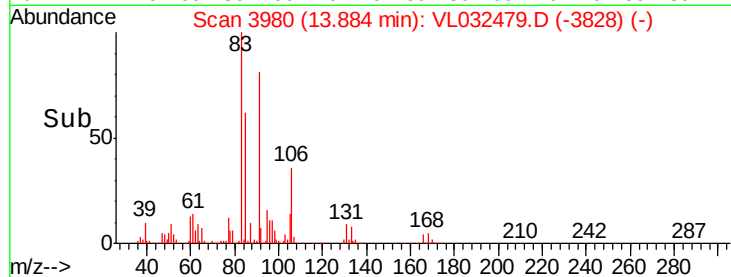
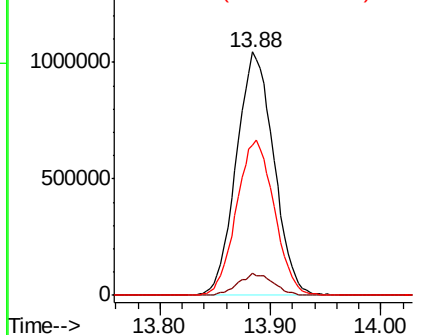
|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 83    | Resp: | 2455491 |
| Ion      | Ratio | Lower | Upper   |
| 83       | 100   |       |         |
| 131      | 8.5   | 4.3   | 12.8    |
| 85       | 64.6  | 32.3  | 96.8    |

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



#64

n-propylbenzene

Concen: 10.72 ppbv

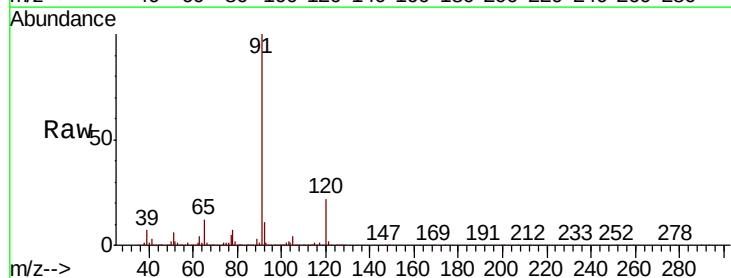
RT: 15.77 min Scan# 4567

Delta R.T. -0.01 min

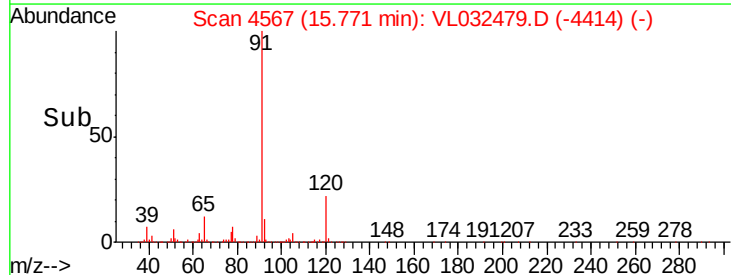
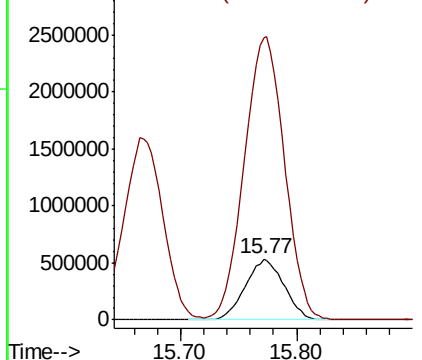
Lab File: VL032479.D

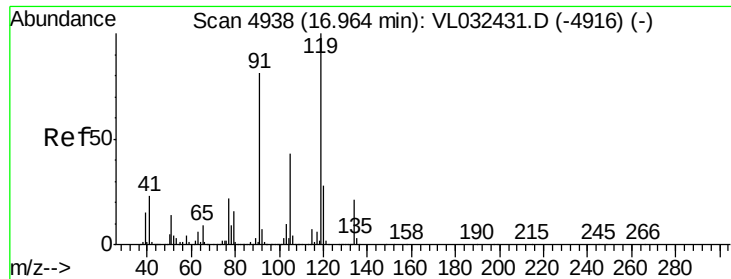
Acq: 6 Sep 2018 9:07

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 120   | Resp: | 1235623 |
| Ion      | Ratio | Lower | Upper   |
| 120      | 100   |       |         |
| 91       | 485.7 | 381.8 | 572.6   |



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





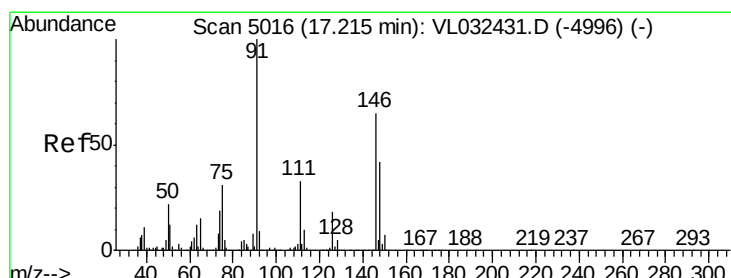
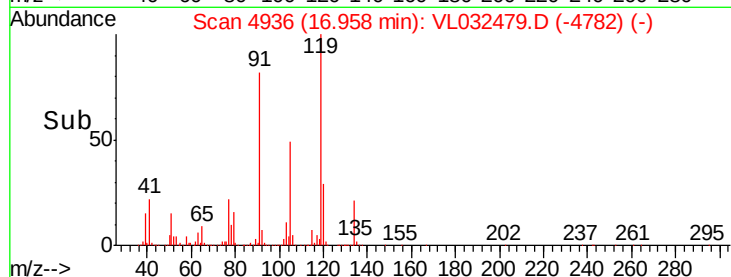
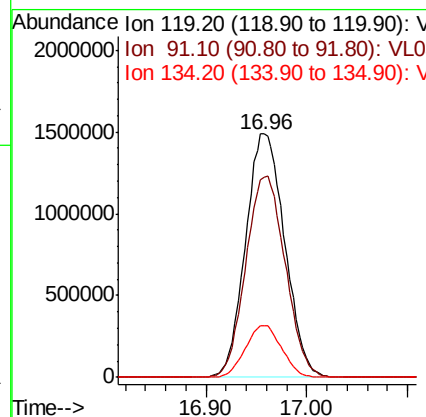
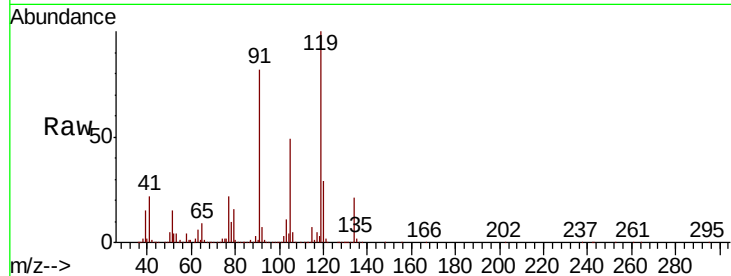
#65  
tert-Butylbenzene  
Concen: 10.52 ppbv  
RT: 16.96 min Scan# 4936  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 91      | 83.6  | 66.5  | 99.7  |
| 134     | 19.8  | 16.0  | 24.0  |

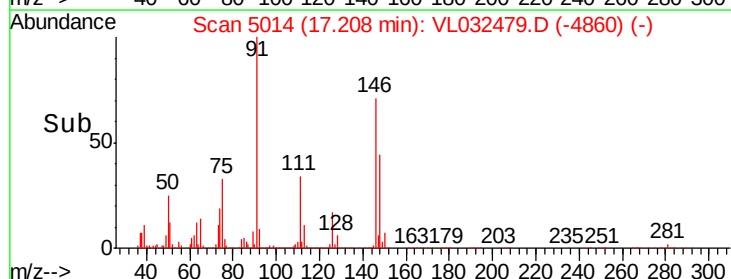
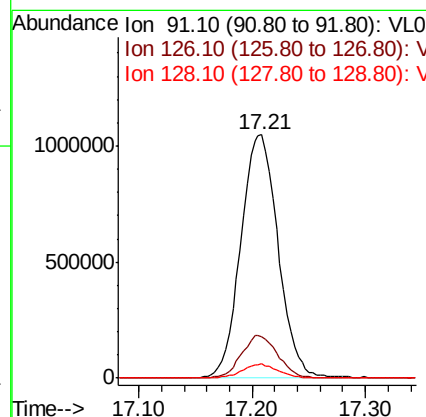
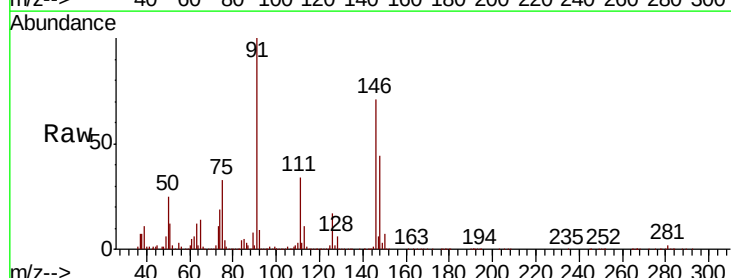
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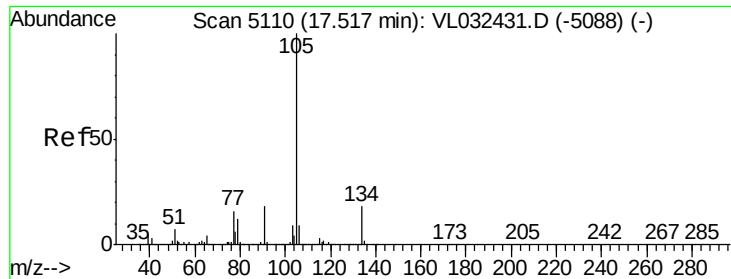
MMDadoda  
9/7/2018 10:46:13 AM



#66  
Benzyl Chloride  
Concen: 11.32 ppbv  
RT: 17.21 min Scan# 5014  
Delta R.T. -0.01 min  
Lab File: VL032479.D  
Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 126     | 17.3  | 13.8  | 20.8  |
| 128     | 5.4   | 4.4   | 6.6   |





#67

sec-Butylbenzene

Concen: 10.57 ppbv

RT: 17.51 min Scan# 5108

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 105 Resp: 6036817

Ion Ratio Lower Upper

105 100

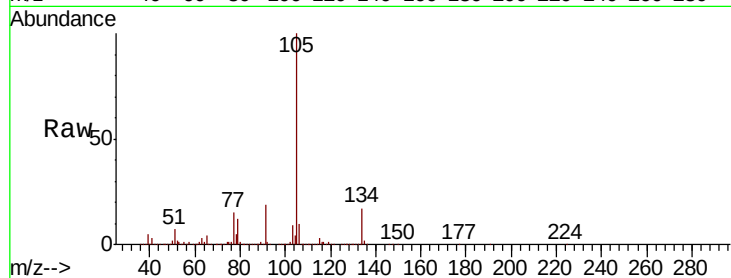
134 17.3 14.4 21.6

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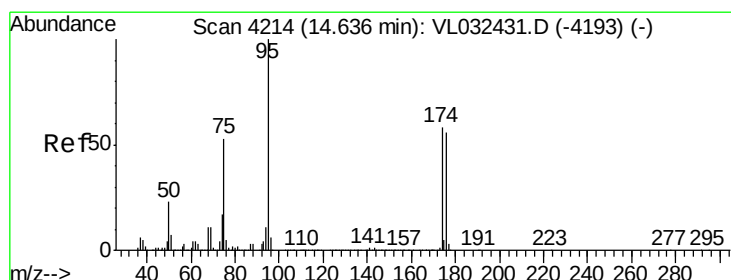
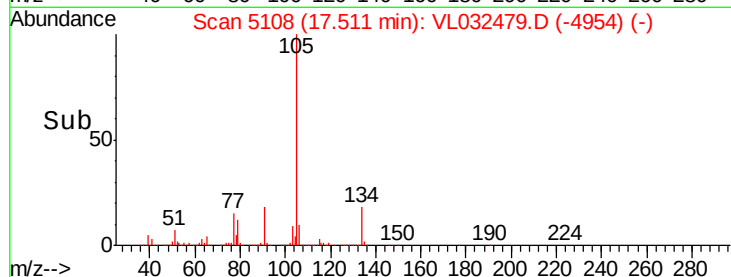
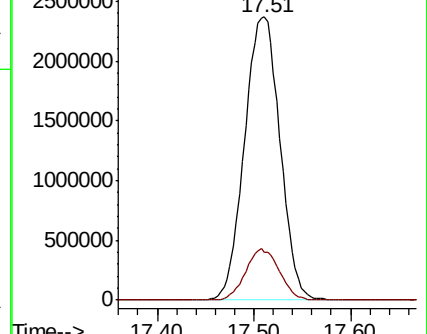
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.84 ppbv

RT: 14.63 min Scan# 4211

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

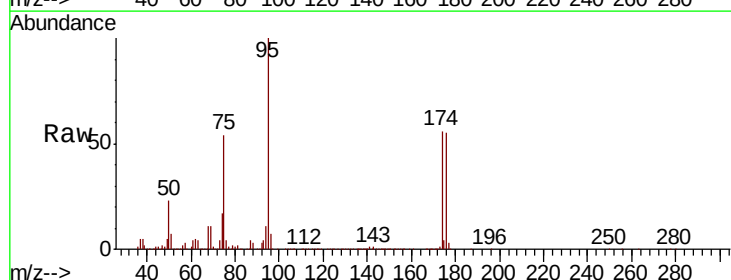
Tgt Ion: 95 Resp: 2185390

Ion Ratio Lower Upper

95 100

174 57.0 46.3 69.5

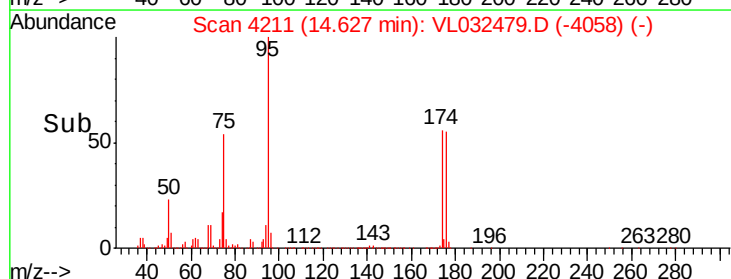
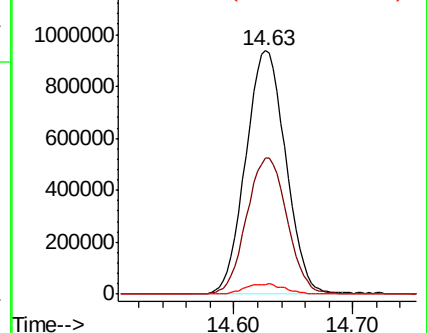
175 4.2 3.4 5.0

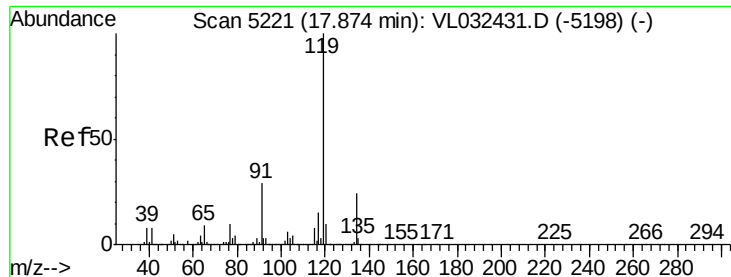


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





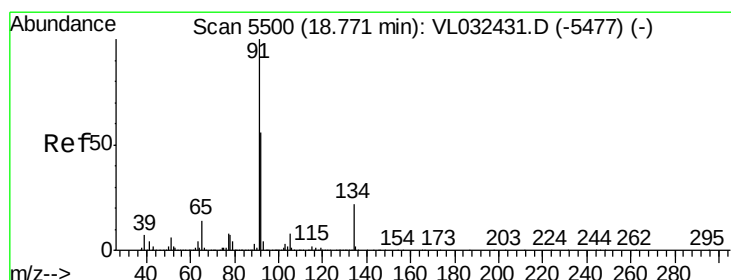
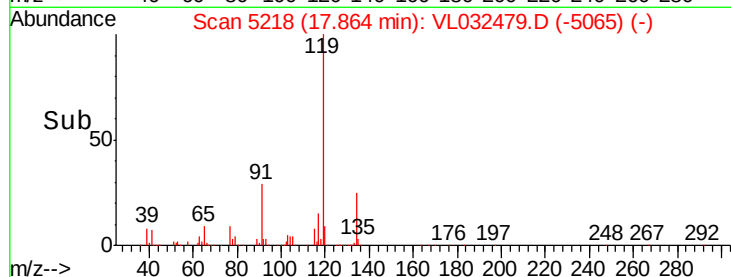
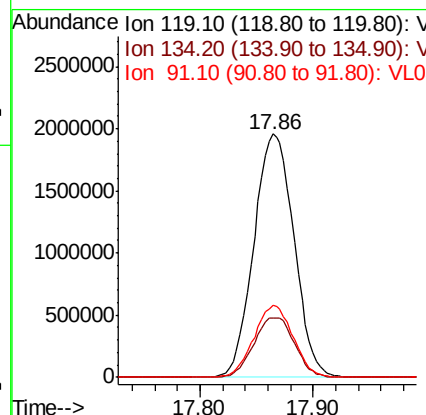
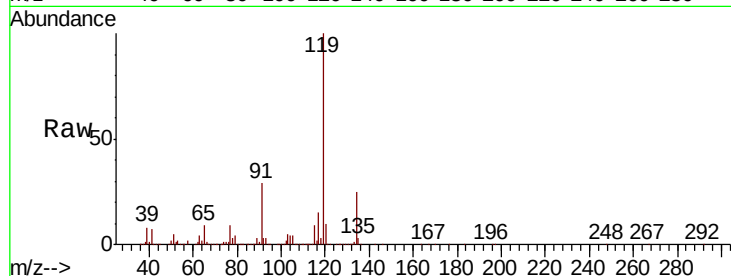
#69  
 p-Isopropyltoluene  
 Concen: 10.85 ppbv  
 RT: 17.86 min Scan# 5218  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 25.0  | 20.4  | 30.6  |
| 91      | 29.0  | 23.4  | 35.2  |

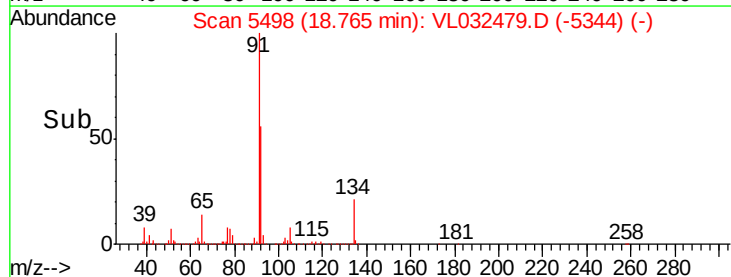
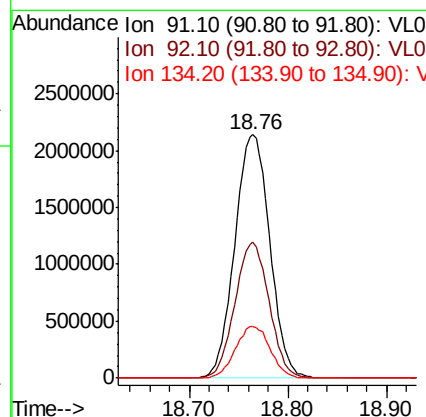
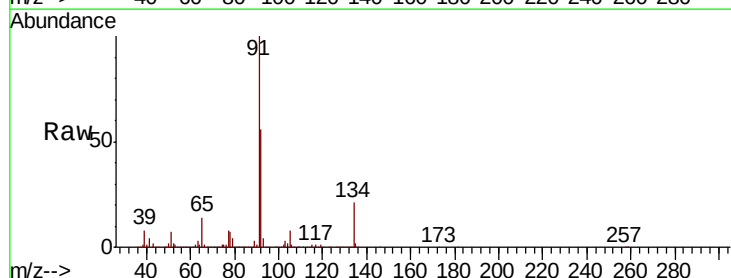
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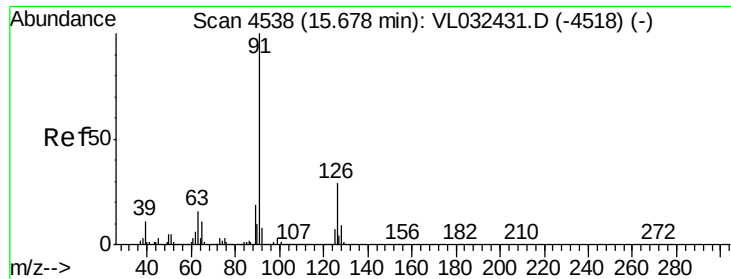
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 9/7/2018 10:46:13 AM



#70  
 n-Butylbenzene  
 Concen: 10.50 ppbv  
 RT: 18.76 min Scan# 5498  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 54.6  | 43.8  | 65.8  |
| 134     | 21.2  | 17.4  | 26.0  |





#71

2-Chlorotoluene

Concen: 11.21 ppbv

RT: 15.67 min Scan# 4534

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 3774857

Ion Ratio Lower Upper

91 100

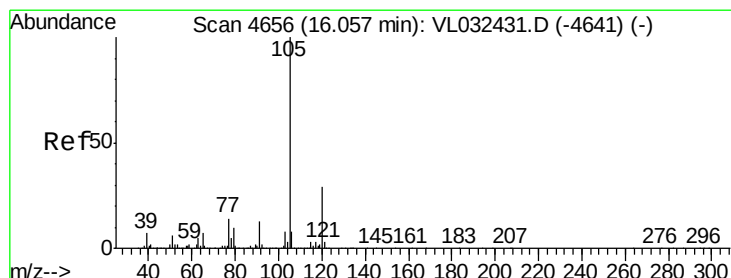
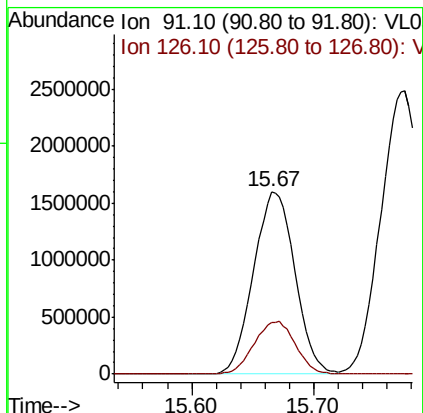
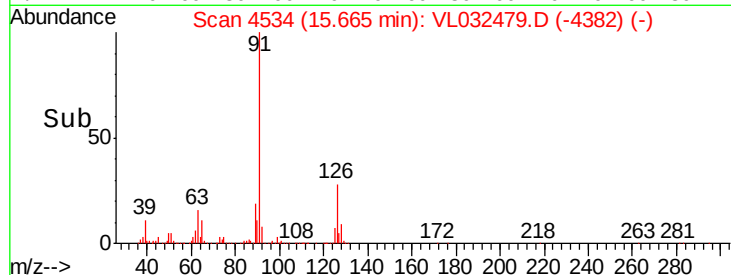
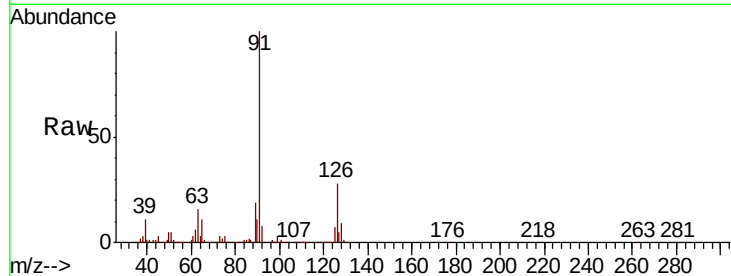
126 29.0 11.9 47.7

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#72

4-Ethyltoluene

Concen: 11.57 ppbv

RT: 16.05 min Scan# 4654

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Tgt Ion: 105 Resp: 3960274

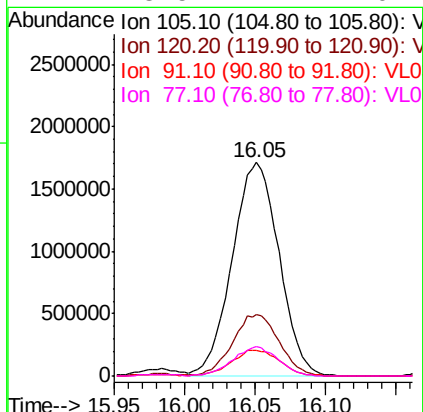
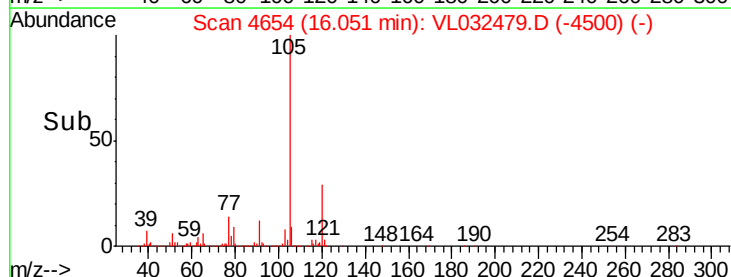
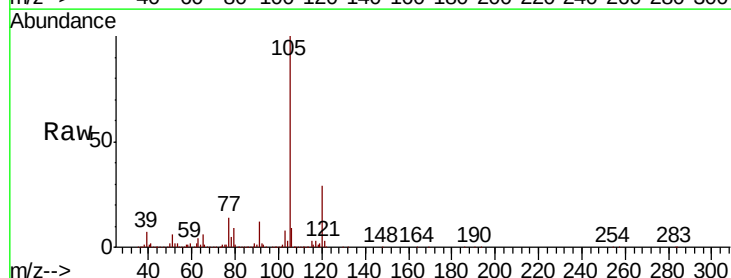
Ion Ratio Lower Upper

105 100

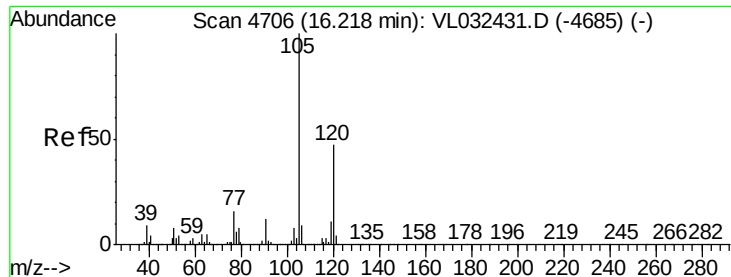
120 28.8 23.5 35.3

91 12.4 10.2 15.2

77 13.5 11.1 16.7







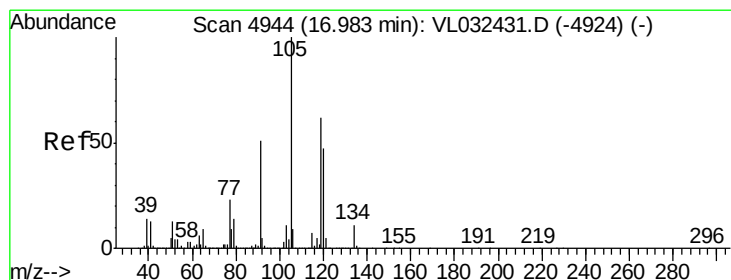
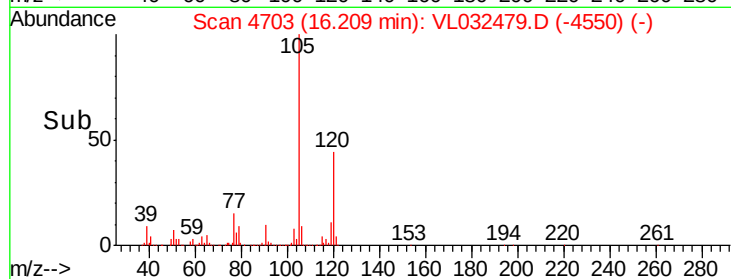
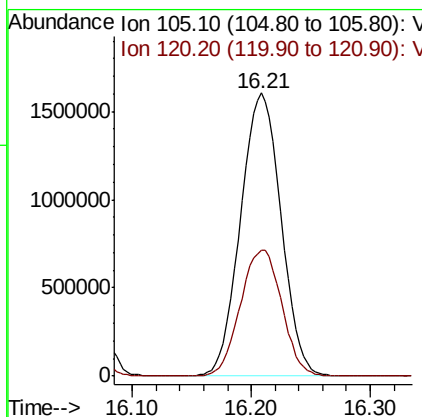
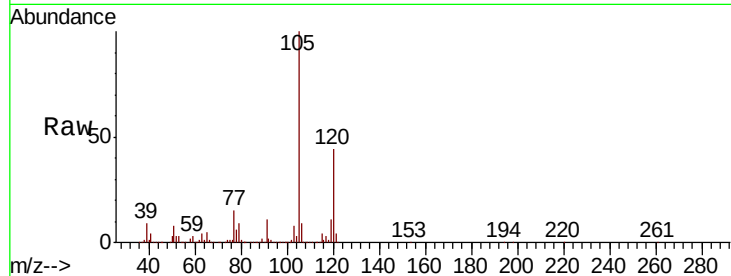
#73  
 1,3,5-Trimethylbenzene  
 Concen: 10.98 ppbv  
 RT: 16.21 min Scan# 4703  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion:105 Resp: 3768122  
 Ion Ratio Lower Upper  
 105 100  
 120 44.4 37.9 56.9

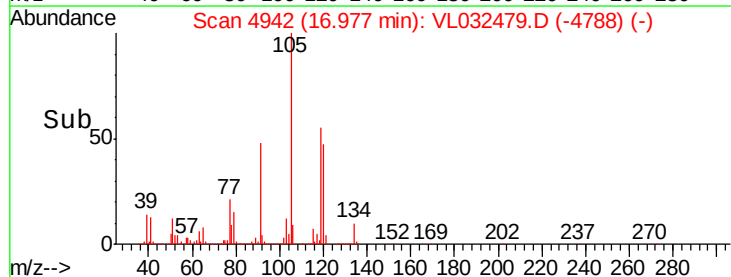
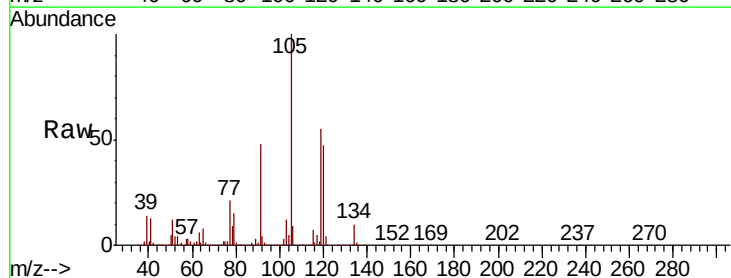
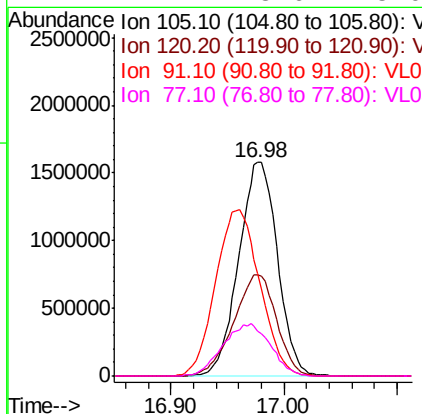
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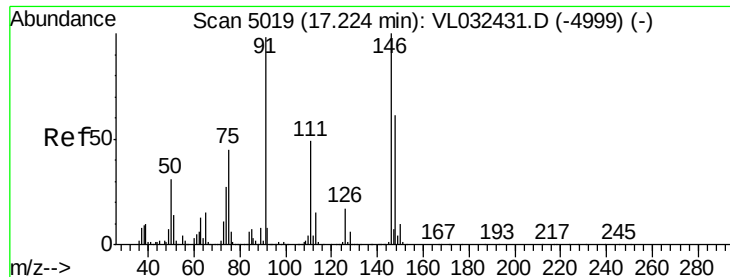
MMDadoda  
 9/7/2018 10:46:13 AM



#74  
 1,2,4-Trimethylbenzene  
 Concen: 9.98 ppbv  
 RT: 16.98 min Scan# 4942  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Tgt Ion:105 Resp: 3741790  
 Ion Ratio Lower Upper  
 105 100  
 120 47.3 37.8 56.8  
 91 47.8 41.4 62.0  
 77 21.2 18.6 28.0





#75

1,3-Dichlorobenzene

Concen: 9.32 ppbv

RT: 17.21 min Scan# 5016

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:146 Resp: 2074836

Ion Ratio Lower Upper

146 100

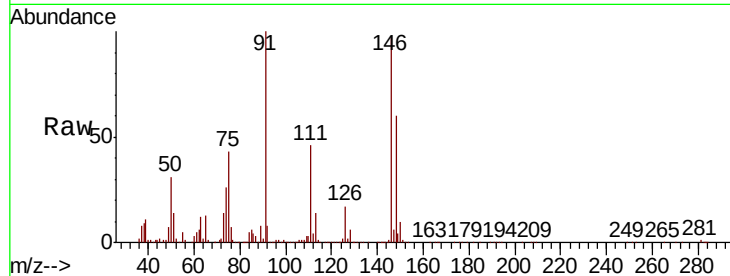
111 49.1 24.5 73.5

148 63.8 32.0 96.2

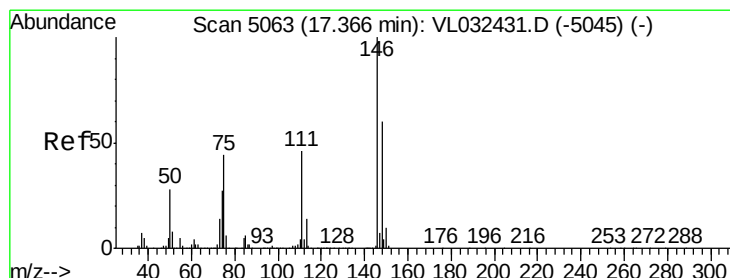
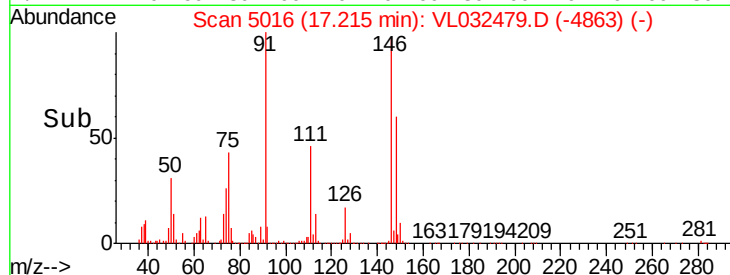
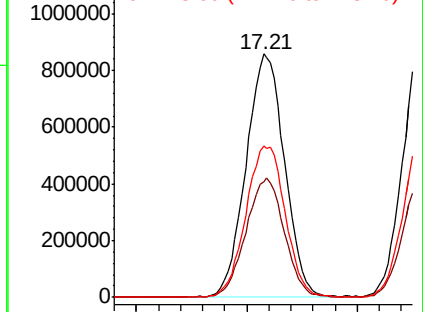
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Abundance Ion 146.00 (145.70 to 146.70): V  
Ion 111.10 (110.80 to 111.80): V  
Ion 148.00 (147.70 to 148.70): V



#76

1,4-Dichlorobenzene

Concen: 10.16 ppbv

RT: 17.36 min Scan# 5061

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

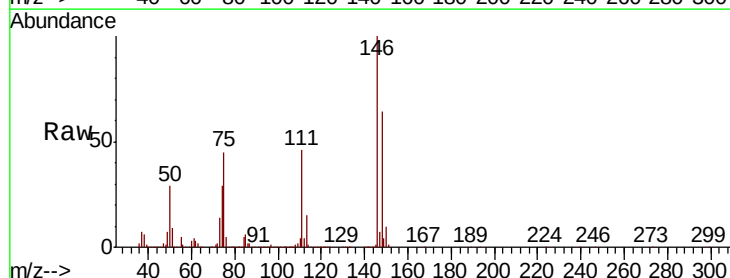
Tgt Ion:146 Resp: 2098196

Ion Ratio Lower Upper

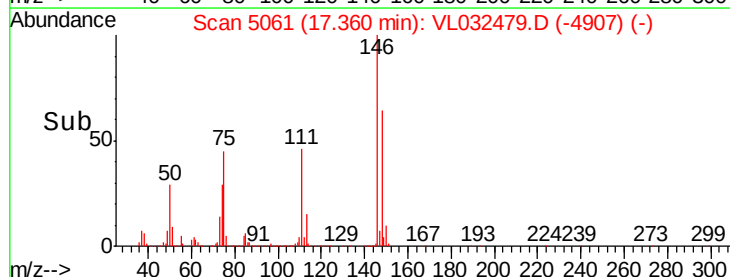
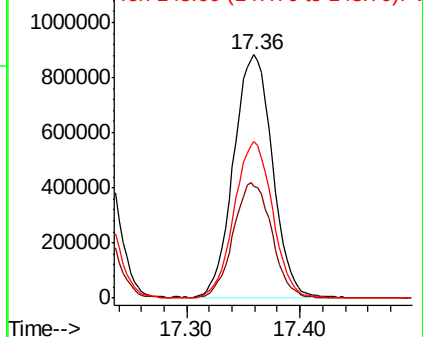
146 100

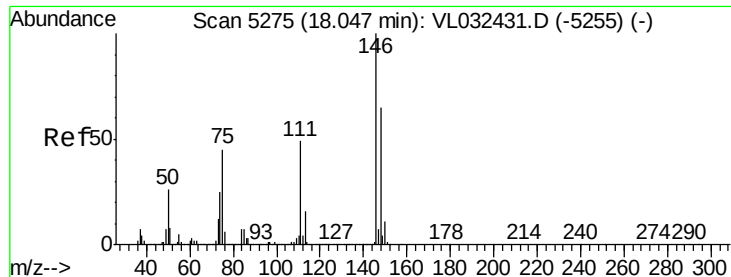
111 47.3 23.4 70.2

148 63.9 32.0 96.2



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





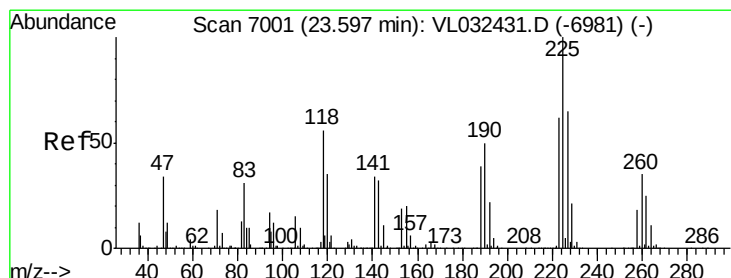
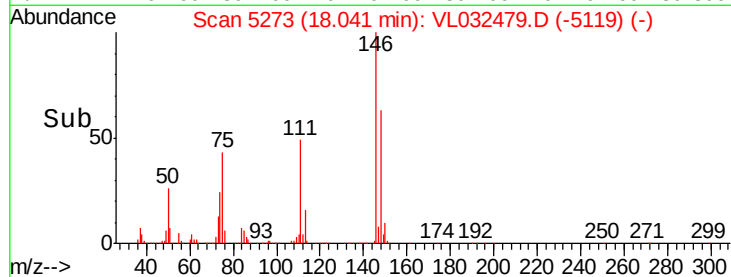
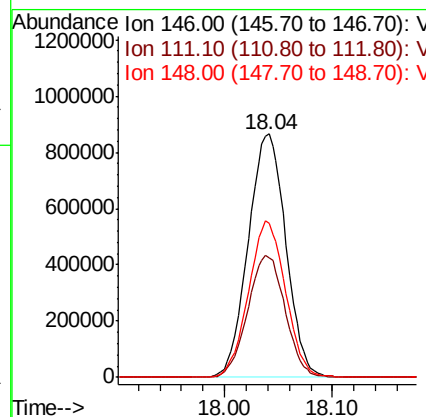
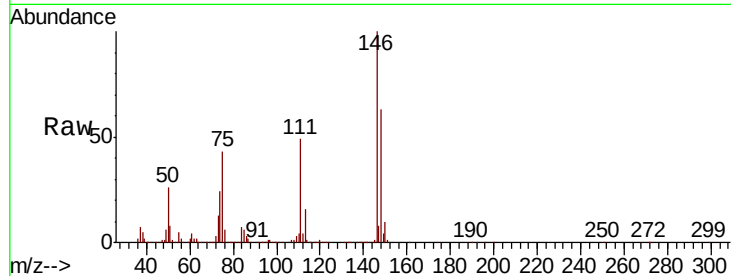
#77  
 1,2-Dichlorobenzene  
 Concen: 9.77 ppbv  
 RT: 18.04 min Scan# 5273  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 49.9  | 24.9  | 74.8  |
| 148     | 63.3  | 32.0  | 96.0  |

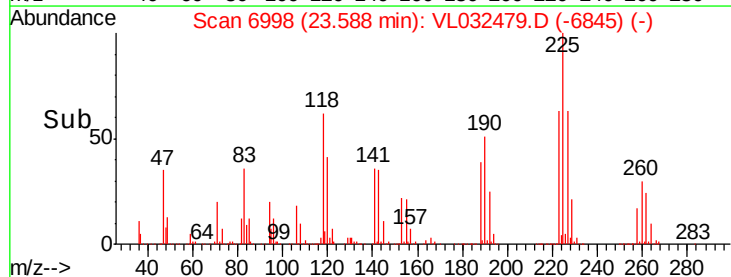
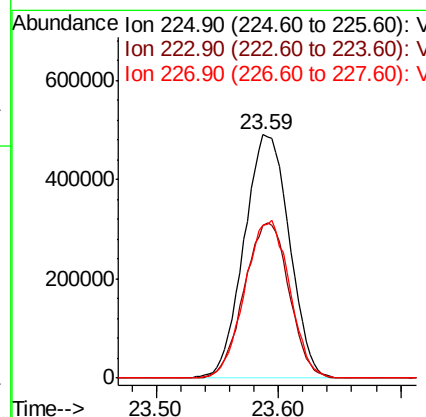
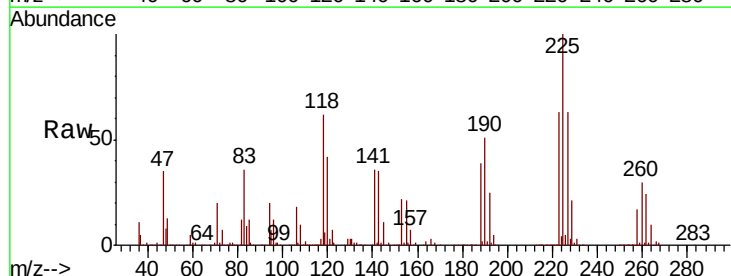
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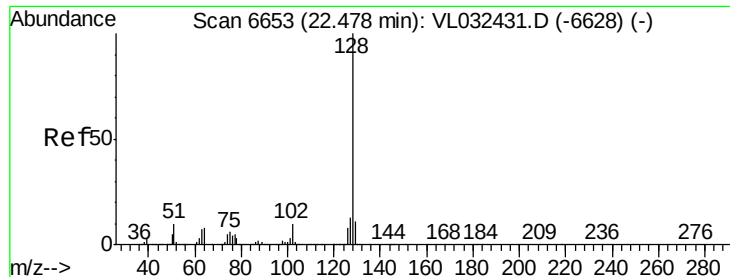
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 15.71 ppbv  
 RT: 23.59 min Scan# 6998  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 63.3  | 50.6  | 76.0  |
| 227     | 64.0  | 51.2  | 76.8  |





#79

Naphthalene

Concen: 11.71 ppbv

RT: 22.47 min Scan# 6651

Delta R.T. -0.01 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:128 Resp: 3571342

Ion Ratio Lower Upper

128 100

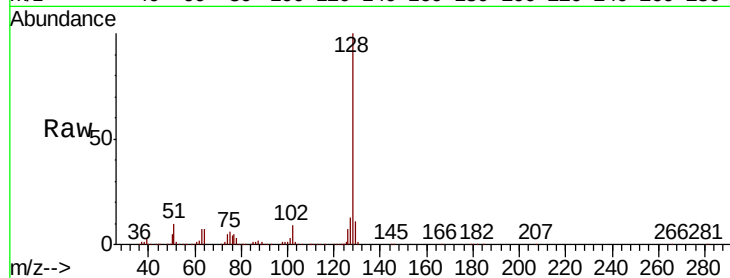
127 12.7 10.2 15.2

129 11.0 8.5 12.7

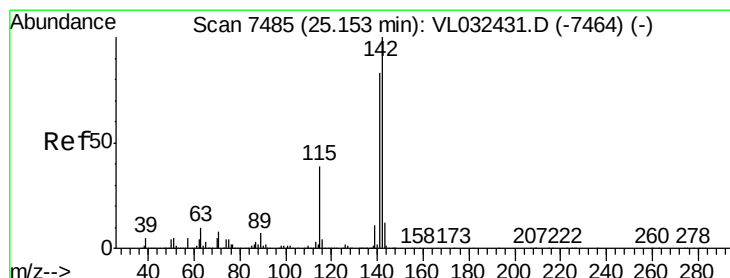
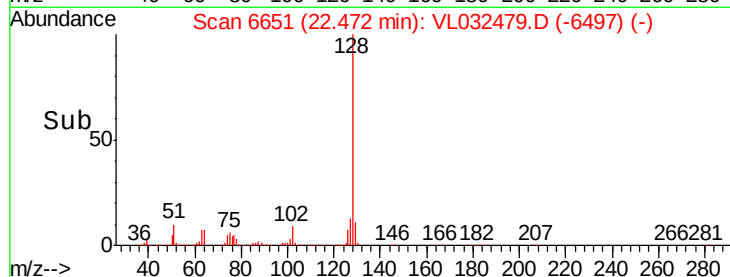
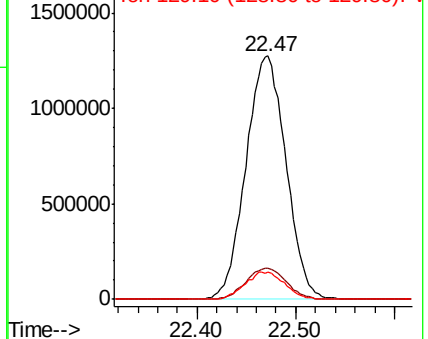
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Abundance Ion 128.10 (127.80 to 128.80): V  
Ion 127.10 (126.80 to 127.80): V  
Ion 129.10 (128.80 to 129.80): V



#80

Naphthalene, 2-methyl-

Concen: 17.41 ppbv

RT: 25.15 min Scan# 7484

Delta R.T. -0.00 min

Lab File: VL032479.D

Acq: 6 Sep 2018 9:07

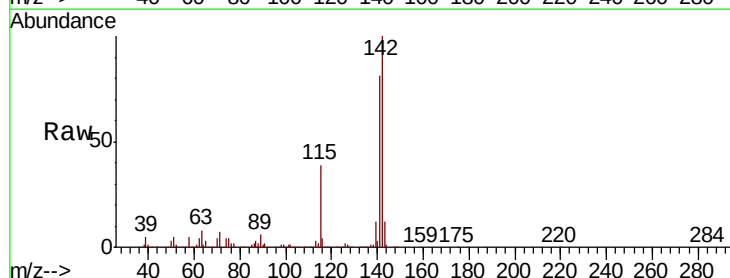
Tgt Ion:142 Resp: 1413004

Ion Ratio Lower Upper

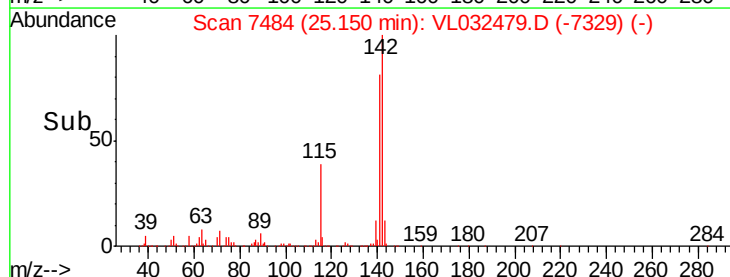
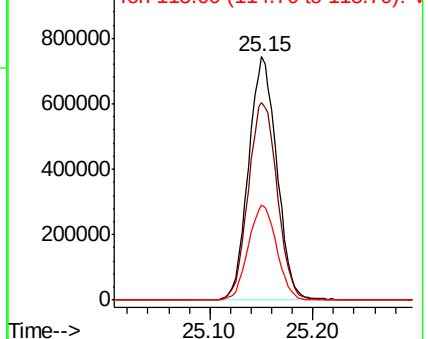
142 100

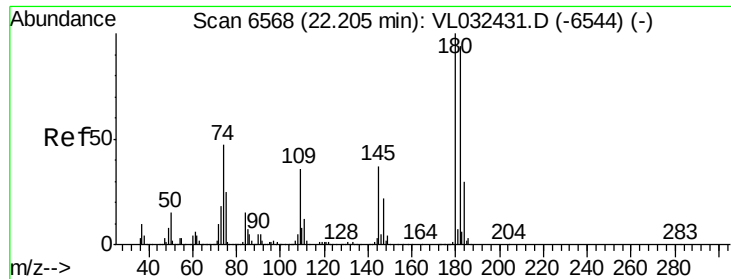
141 83.6 67.0 100.6

115 39.4 31.3 46.9



Abundance Ion 142.00 (141.70 to 142.70): V  
Ion 141.00 (140.70 to 141.70): V  
Ion 115.00 (114.70 to 115.70): V





#81  
 1,2,4-Trichlorobenzene  
 Concen: 11.03 ppbv  
 RT: 22.19 min Scan# 6564  
 Delta R.T. -0.01 min  
 Lab File: VL032479.D  
 Acq: 6 Sep 2018 9:07

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.0  | 76.1  | 114.1 |
| 184     | 30.3  | 23.8  | 35.8  |

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